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with sailors on a prolonged cruise] Pogorelov IA, et al. **Voen Med Zh** 1988 Jul;(7):57–8 **(Rus)**

[Characteristics of psychoprophylactic and mental hygiene work in the navy] Shinskiĭ SE. **Voen Med Zh** 1989 Apr; (4):55–8 **(Rus)**

[The importance of the polarographic study of oxygen tension in the tissues in assessing body functional state in sailors] Tiunov LA, et al. **Voen Med Zh** 1989 Mar;(3):47–9 **(Rus)**

[Medical support for diving operations in the Far North using a drifting ice floe] Zhukov VG, et al. **Voen Med Zh** 1988 Oct;(10):56–7 **(Rus)**

EDUCATION

[The training of medical personnel for the naval forces of the USA] Konovalov VD, et al. **Voen Med Zh** 1989 Mar; (3):72–4 (12 ref.) **(Rus)**

[Experience in teaching military naval therapy] Sukhanova GI, et al. **Voen Med Zh** 1989 Apr;(4):33–4 **(Rus)**

HISTORY

Medical aspects of Arctic exploration. 4. A brave assault on the Northwest Passage: W. Edward Parry (1819–20). Fortuine R. **Arctic Med Res** 1988 Jul;47(3):144–7

Death on the Argus: American medical malpractice versus British chauvinism in the War of 1812. Estes JW, et al. **J Hist Med Allied Sci** 1989 Apr;44(2):179–95

'My story'—sinking of HMS Gurkha January 17 1942. Brown WM. **J R Nav Med Serv** 1988 Winter;74(3):137–9

The Royal Navy and the spread of vaccination. Jones RW. **J R Nav Med Serv** 1987 Winter;73(3):204–6

The First Fleet surgeons [letter] **Med J Aust** 1989 Apr 3; 150(7):412

Gentlemen of the faculty: a synopsis of the First Fleet surgeons. Comparisons and contrasts of the personalities who were the founders of medicine in Australia. Pearn J. **Med J Aust** 1988 Dec 5–19;149(11–12):639–43

Medical aspects of the voyage of the First Fleet. Royle HG, et al. **Med J Aust** 1988 Dec 5–19;149(11–12):625–30

[Dr. Walter Weisspfennig, the murderer of shipwrecked men] Sterkowicz S. **Przegl Lek** 1989;46(1):141–3 **(Pol)**

[Organization, activities and scientific problems of the Department of Tropical Parasitology of the Institute of Naval and Tropical Medicine in Gdynia] Wegner Z. **Wiad Parazytol** 1988;34(3):358–66 **(Pol)**

[50th anniversary of the Department of the Organization and Tactics of the Naval Medical Service] Konoplin AS. **Voen Med Zh** 1989 Apr;(4):66–8 **(Rus)**

[The scientific work of physicians of the Black Sea Fleet] Ugulava SN, et al. **Voen Med Zh** 1988 Jul;(7):74–6 **(Rus)**

INSTRUMENTATION

[A portable ENT kit for the ship's physician] Revskoĭ IuK, et al. **Voen Med Zh** 1988 Dec;(12):49–50 **(Rus)**

LEGISLATION & JURISPRUDENCE

[International legal aspects of rendering medical care at sea] Markov VIu, et al. **Voen Med Zh** 1988 Jun;(6):49–50 **(Rus)**

ORGANIZATION & ADMINISTRATION

Shipboard medical information systems: familiarity and receptivity. Blood CG, et al. **J Med Syst** 1988 Jun; 12(3):147–52

Pacific is far-flung region for US military but medical care spans the vast distances [news] Cowart VS. **JAMA** 1989 May 19;261(19):2788, 2792–3

[The work organization of a temporary office for neurofunctional diagnosis at a naval hospital] Nozdrunov LM, et al. **Voen Med Zh** 1988 Oct;(10):61–2 **(Rus)**

STANDARDS

[Effect of relative air humidity on the results of sanitaro-chemical studies of polymer materials] Antonenkov AG, et al. **Gig Sanit** 1989 May;(5):90 **(Rus)**

[Specific work processes in sailors of the Arctic navy at "ice moorages" and their effect on various body systems] Bychikhin NP, et al. **Gig Sanit** 1989 May;(5):22–4 (Eng. Abstr.) **(Rus)**

[Physiologic and hygienic evaluation of the work of river transport workers during the navigation period] Evstaf'ev VN. **Gig Sanit** 1988 Nov;(11):83–5 **(Rus)**

[Study of the microflora of fish and fish products on ships] Potravnova RS, et al. **Gig Sanit** 1988 Sep;(9):86–7 **(Rus)**

[Improving mass screening of the personnel of marine transportation ships] Vasil'eva TV. **Gig Sanit** 1989 May; (5):90–2 **(Rus)**

[Experimental complex for studying the biological effect of exposure to ultrahigh frequency irradiation at a ship's radar station] Grigorenko AV, et al. **Gig Tr Prof Zabol** 1989; (5):49–50 **(Rus)**

[Hygienic evaluation of working conditions of operators of floating hydraulic equipment] Kuratov LE. **Gig Tr Prof Zabol** 1988 Aug;(8):54–5 **(Rus)**

[Characteristics of morbidity among sailors] Netudykhatka Olu. **Gig Tr Prof Zabol** 1989;(5):16–8 (Eng. Abstr.) **(Rus)**

[New standards for the procurement of medical stores] Il'in GI. **Voen Med Zh** 1988 Nov;(11):47–50 **(Rus)**

STATISTICS & NUMERICAL DATA

[Multiple injuries among sailors on ships] Shapovalov KA. **Ortop Travmatol Protez** 1988 Dec;(12):44–5 **(Rus)**

TRENDS

[The results of the work of the medical service of the Armed Forces in 1988 and tasks for the new academic year] **Voen Med Zh** 1989 Jan;(1):3–9 **(Rus)**

[The main trends in the further improvement of sanatorium-health resort support in the Army and the Navy] Sinopal'nikov IV, et al. **Voen Med Zh** 1988 Jul; (7):3–7 **(Rus)**

NAVAL SCIENCE see **MILITARY SCIENCE**

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NEBULIZERS AND VAPORIZERS

see related
AEROSOLS
ANESTHESIA, INHALATION
RESPIRATORY THERAPY

Inhaler technique and elderly patients [letter] Connolly MJ. **Age Ageing** 1989 Jan;18(1):67

PEP-spacer: an adaptation for administration of MDI to infants [letter] Bisgaard H, et al. **Allergy** 1989 Jul; 44(5):363–4

Cool ultrasonic humidifiers for lowering fever [letter] Schneiderman H, et al. **Am Fam Physician** 1989 Feb; 39(2):39

Experience with a metered-dose inhaler with a spacer in the pediatric emergency department. Benton G, et al. **Am J Dis Child** 1989 Jun;143(6):678–81

The efficacy and safety of home nebulizer therapy for children with asthma. Zimo DA, et al. **Am J Dis Child** 1989 Feb;143(2):208–11

Protection against exercise-induced bronchoconstriction by nebulized disodium cromoglycate [letter] **Am Rev Respir Dis** 1989 Feb;139(2):570–1

The drawover Boyle's machine—a safe alternative [letter] **Anaesthesia** 1988 Nov;43(11):993–4

Long-term performance of Tec vaporizers. Basis for a rational maintenance policy. Carter KB, et al. **Anaesthesia** 1988 Dec;43(12):1042–6

Dependence of the output of a halothane vaporizer on thymol concentration. Gray WM. **Anaesthesia** 1988 Dec; 43(12):1047–9

An unexpected cause of total expiratory obstruction [letter] Stewart KG, et al. **Anaesthesia** 1988 Sep;43(9):810–1

An anesthetic adapter for all metered dose inhalers that is readily available to all [letter] Koska AJ 3d, et al. **Anesth Analg** 1989 Aug;69(2):266–7

Vaporizer for volatile anesthetics during high-frequency jet ventilation. Mazloomdoost M, et al. **Anesthesiology** 1989 Jul;71(1):150–3

Potentially lethal failure of the vapor exclusion system. Silvasi DL, et al. **Anesthesiology** 1989 Aug;71(2):289–91

2 year old asthmatics can learn to operate a tube spacer by copying their mothers. Croft RD. **Arch Dis Child** 1989 May;64(5):742–3

Aerosol bronchodilator delivery methods. Relative impact on pulmonary function and cost of respiratory care. Summer W, et al. **Arch Intern Med** 1989 Mar;149(3):618–23

Improvement of inhaler technique. Galak M. **Aust Fam Physician** 1989 Jul;18(7):850

Alternatives to chlorofluorocarbons [letter] Ellmers S. **BMJ** 1989 Apr 22;298(6680):1100–1

Spacer device with face mask attachment for giving bronchodilators to infants with asthma. O'Callaghan C, et al. **BMJ** 1989 Jan 21;298(6667):160–1

Systemic beta-adrenoceptor responses to salbutamol given by metered-dose inhaler alone and with pear shaped spacer attachment: comparison of electrocardiographic, hypokalaemic and haemodynamic effects. Lipworth BJ, et al. **Br J Clin Pharmacol** 1989 Jun;27(6):837–42

Nebuhaler or nebulizer for high dose bronchodilator therapy in chronic bronchitis: a comparison. Allen MB, et al. **Br J Dis Chest** 1988 Oct;82(4):368–73

Nebuhaler technique. Gleeson JG, et al. **Br J Dis Chest** 1988 Apr;82(2):172–4

Bronchodilatory therapy with nebuhaler: how important is the delay between firing the dose and inhaling? Newman SP, et al. **Br J Dis Chest** 1988 Jul;82(3):262–7

Safe vaporizers [letter] Coleshill GG. **Can J Anaesth** 1988 Nov;35(6):667–8

Vigorous cleaning of Inspirease Reservoir Devices [letter] French CL, et al. **Chest** 1989 Jun;95(6):1366

Delivery of albuterol and ipratropium bromide from two nebulizer systems in chronic stable asthma. Efficacy and pulmonary deposition. Johnson MA, et al. **Chest** 1989 Jul; 96(1):6–10

Comparison of beta-adrenergic agents delivered by nebulizer vs metered dose inhaler with InspirEase in hospitalized asthmatic patients. Morley TF, et al. **Chest** 1988 Dec; 94(6):1205–10

Aerosol deposition in the human lung: effect of high-frequency oscillation on the deposition characteristics of an inhaled nebulized aerosol. Thomas SH, et al. **Clin Sci** 1988 Nov;75(5):535–42

Evaluation of the combination inhaler of salbutamol and beclomethasone dipropionate in the management of asthma. McDonald C, et al. **Curr Med Res Opin** 1988;11(2):116–22

Extender device adaptability with metered-dose inhalers [letter] Madrazo G, et al. **DICP** 1989 Apr;23(4):341–2

An objective method of compliance assessment with metered-dose inhalers. Nemec MA, et al. **DICP** 1989 Feb; 23(2):128–32

The stability of 99mTc-DTPA and 99mTc-HIDA following ultrasonic nebulisation. Durovic N, et al. **Eur J Nucl Med** 1988;14(7–8):400–2

Inaccurate calculation of drug output from nebulisers. O'Callaghan C, et al. **Eur J Pediatr** 1989 Feb;148(5):473–4

Breath-actuated inhalers: comparison of terbutaline Turbohaler with salbutamol Rotahaler. Anani A, et al. **Eur Respir J** 1989 Jul;2(7):640–2

New inhalation devices [editorial] Crompton GK. **Eur Respir J** 1988 Aug;1(8):679–80

Methods of testing nonspecific bronchial hyperresponsiveness. Eiser N. **Eur Respir J** 1988 May; 1(5):482–3 (10 ref.)

Optimal inhalation technique with terbutaline Turbuhaler. Hansen OR, et al. **Eur Respir J** 1989 Jul;2(7):637–9

Room temperature influences output from the Wright jet nebulizer. Kongerud J, et al. **Eur Respir J** 1989 Jul; 2(7):681–4

Deposition and clinical efficacy of terbutaline sulphate from Turbuhaler, a new multi-dose powder inhaler. Newman SP, et al. **Eur Respir J** 1989 Mar;2(3):247–52

A new multiple dose powder inhaler, (Turbuhaler), compared with a pressurized inhaler in a study of terbutaline in asthmatics. Persson G, et al. **Eur Respir J** 1988 Aug; 1(8):681–4

The bronchodilator response from inhaled terbutaline is influenced by the mass of small particles: a study on a dry powder inhaler (Turbuhaler). Persson G, et al. **Eur Respir J** 1989 Mar;2(3):253–6

Aerosol treatment of asthma. Singh M, et al. **Indian Pediatr** 1988 Apr;25(4):361–7 (25 ref.)

Medicated aerosol delivery. McGowan JE, et al. **Iowa Med** 1989 Feb;79(2):78–80

Comparison of ipratropium solution, fenoterol solution, and their combination administered by nebulizer and face mask to children with acute asthma. Watson WT, et al. **J Allergy Clin Immunol** 1988 Dec;82(6):1012–8

Evaluation report: heated humidifiers. **J Med Eng Technol** 1988 Nov–Dec;12(6):282–6

Which inhaler is best? [editorial] Holmes B. **J R Soc Med** 1989 Feb;82(2):64

Nebulised budesonide in severe childhood asthma [letter] **Lancet** 1989 Feb 18;1(8634):379–80

Measurement of exhaled chlorofluorocarbons. Coady TJ, et al. **Lancet** 1988 Dec 3;2(8623):1286–7

Differences in relative efficiency of nebulisers for pentamidine administration. O'Doherty MJ, et al. **Lancet** 1988 Dec 3;2(8623):1283–6

Preservatives in bronchodilator nebuliser solutions [letter] Summers Q, et al. **Lancet** 1989 Sep 23;2(8665):740–1

A comparative bronchodilator study of salbutamol and salbutamol sulphate that were administered by metered-dose inhalers. Ruffin RE, et al. **Med J Aust** 1989 Mar 6;150(5):274–5, 277

The Viralizer for the common cold. **Med Lett Drugs Ther** 1989 Jan 27;31(784):8

Cooling of metered-dose inhalers decreases pressure output from canisters [letter] Hampson NB, et al. **N Engl J Med** 1989 Feb 2;320(5):321

Patient use of metered dose inhalers [letter] Nakao MA. **N Y State J Med** 1988 Sep;88(9):504

Reliable salbutamol administration in 6- to 36-month-old children by means of a metered dose inhaler and Aerochamber with mask. Conner WT, et al. **Pediatr Pulmonol** 1989;6(4):263–7

A trial of metaproterenol by metered-dose inhaler and two spacers in preschool asthmatics. König P, et al. **Pediatr Pulmonol** 1988;5(4):247–51

An inexpensive spacer for use with metered-dose bronchodilators in young asthmatic children. Teo J, et al. **Pediatr Pulmonol** 1988;5(4):244–6

High-versus low-dose, frequently administered, nebulized albuterol in children with severe, acute asthma. Schuh S, et al. **Pediatrics** 1989 Apr;83(4):513–8

Optimized inhalation aerosols. I. The effects of spherical baffle size and position upon the output of several pressurized nonaqueous suspension formulations. Byron PR, et al. **Pharm Res** 1989 Mar;6(3):225–9

Turbuhaler: a new powder inhaler for administration of drugs to the airways. Wetterlin K. **Pharm Res** 1988 Aug; 5(8):506–8

Metered dose inhalers: the value of instruction. Smith D. **Practitioner** 1988 May 9;232(1448):507, 510

Deposition pattern of nasal sprays in man. Newman SP, et al. **Rhinology** 1988 Jun;26(2):111–20

Methacholine bronchial challenge using a dosimeter with controlled tidal breathing. Nieminen MM, et al. **Thorax** 1988 Nov;43(11):896–900

[A mistake in the filling of a vaporizer detected by an infrared

analyser of halogenated anesthetic agents] Baras E, et al. **Ann Fr Anesth Reanim** 1989;8(2):128–30 (Eng. Abstr.) **(Fre)**

[Humidification of the respiratory tract in anesthesia] d'Athis F, et al. **Ann Fr Anesth Reanim** 1988;7(5):393–400 (Eng. Abstr.) **(Fre)**

[Effect of warm air inhalation on the nasal ciliated epithelium] Deitmer T, et al. **HNO** 1989 Jul;37(7):299–302 (Eng. Abstr.) **(Ger)**

[Bronchospasmolytic tests with and without a nebulizer] Kirsten D, et al. **Z Erkr Atmungsorgane** 1988;171(3):243–6 (Eng. Abstr.) **(Ger)**

[Mass flow anesthesia delivery system and its application] Takahashi M, et al. **Iyodenshi To Seitai Kogaku** 1989 Mar; 27(1):19–25 (Eng. Abstr.) **(Jpn)**

[Measurement of size of aerosols produced by different aerosol generators and effect of physical factors on aerosol size] Anazawa Y, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1988 Aug; 26(8):863–7 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Risks of placing one-way valves in ventilator circuits [letter] Demers B, et al. **Am J Dis Child** 1989 Apr;143(4):444

Aerosolised pentamidine [letter] Simonds AK, et al. **Lancet** 1989 Jan 28;1(8631):221–2

Irritant contact facial dermatitis due to nebulizer therapy. Eedy DJ, et al. **Postgrad Med J** 1988 Apr;64(750):306–7

[Aspects of bronchoalveolar lavage cells in 7 cases with farmer's lung and home humidifier lung] Amaya M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Dec; 26(12):1235–42 (Eng. Abstr.) **(Jpn)**

[Danger in tipping of anesthetic vaporizers] Sjølie K. **Tidsskr Nor Laegeforen** 1989 Mar 30;109(9):966–7 (Eng. Abstr.) **(Nor)**

HISTORY

The development of the anaesthetic vaporizer. The contribution of A.G. Levy. Zuck D. **Anaesthesia** 1988 Sep; 43(9):773–5

The Alcock chloroform vaporizer. An early calibrated temperature-compensated plenum apparatus in its historical context. Zuck D. **Anaesthesia** 1988 Nov;43(11):972–80

STANDARDS

Importance of evaporative water losses during standardized nebulized inhalation provocation tests. Cockcroft DW, et al. **Chest** 1989 Sep;96(3):505–8

Particle size study of nine metered dose inhalers, and their deposition probabilities in the airways. Bouchikhi A, et al. **Eur Respir J** 1988 Jun;1(6):547–52

Sites of deposition of aqueous aerosols: a study of efficiency of delivery systems for lung ventilation imaging in man. Woolman PS, et al. **Nucl Med Commun** 1989 Mar; 10(3):171–80

[Reliability of low-output isoflurane vaporizers] Bachour K, et al. **Cah Anesthesiol** 1988 Nov;36(7):541–4 **(Fre)**

VETERINARY

A new, simple aerosol immunization technique against Newcastle disease. Tamási G, et al. **Acta Vet Hung** 1988; 36(3–4):185–93

NECATOR

DRUG EFFECTS

[Histological and histochemical effects of tribendimidine on Necator americanus] Yang YQ, et al.
Chung Kuo Yao Li Hsueh Pao 1988 May;9(3):264–7 (Eng. Abstr.) **(Chi)**

GROWTH & DEVELOPMENT

Light, long-lasting Necator infection in a volunteer. Beaver PC. **Am J Trop Med Hyg** 1988 Oct;39(4):369–72

IMMUNOLOGY

Acquired resistance to the human hookworm Necator americanus in mice. Wells C, et al. **Parasite Immunol** 1988 Sep;10(5):493–505

Necator americanus in neonatally infected hamsters. The time-course of infection and antibody response to the surface antigens of L4 and adult worms. Behnke JM, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):967–72

ISOLATION & PURIFICATION

A simple method for the collection of Necator americanus larvae. Mueller J, et al. **J Helminthol** 1989 Mar;63(1):77–8

METABOLISM

The action of a mast cell protease on the cuticular collagens of Necator americanus. McKean PG, et al.
Parasite Immunol 1989 May;11(3):293–7

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NECATORIASIS

Hookworm disease in children. Hotez PJ.
Pediatr Infect Dis J 1989 Aug;8(8):516–20 (58 ref.)

EPIDEMIOLOGY

Hookworm infection in a rural community in south India and its association with haemoglobin levels. Srinivasan V, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):973–7

HISTORY

Hookworm and pellagra: exemplary diseases in the new south. Kunitz SJ. **J Health Soc Behav** 1988 Jun;29(2):139–48

IMMUNOLOGY

Acquired resistance to the human hookworm Necator americanus in mice. Wells C, et al. **Parasite Immunol** 1988 Sep;10(5):493–505

Necator americanus in neonatally infected hamsters. The time-course of infection and antibody response to the surface antigens of L4 and adult worms. Behnke JM, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):967–72

PARASITOLOGY

Light, long-lasting Necator infection in a volunteer. Beaver PC. **Am J Trop Med Hyg** 1988 Oct;39(4):369–72

NECK

Advances in electromyographic monitoring and biofeedback in the treatment of chronic cervical and low back pain. Middaugh SJ, et al. **Adv Clin Rehabil** 1987;1:137–72 (80 ref.)

The influence of cephalostatic ear rods on the positions of the head and neck during postural recordings. Greenfield B, et al. **Am J Orthod Dentofacial Orthop** 1989 Apr; 95(4):312–8

Skeletal geometry underlying head movements. Vidal PP, et al. **Ann N Y Acad Sci** 1988;545:228–38 (37 ref.)

Cervical ranulas. Batsakis JG, et al.
Ann Otol Rhinol Laryngol 1988 Sep–Oct;97(5 Pt 1):561–2 (8 ref.)

Extracranial carotid artery aneurysm: an unusual neck mass in a young adult. Cunningham MJ, et al.
Ann Otol Rhinol Laryngol 1989 May;98(5 Pt 1):396–9

Cervical wound hematoma after carotid endarterectomy. Welling RE, et al. **Ann Vasc Surg** 1989 Jul;3(3):229–31

Modern presentations of Bezold's abscess. Smouha EE, et al. **Arch Otolaryngol Head Neck Surg** 1989 Sep; 115(9):1126–9

The "neck sign" in scleroderma. Barnett AJ.
Arthritis Rheum 1989 Feb;32(2):209–11

Laboratory diagnosis of fungal diseases of the head and neck. Alleva M, et al. **Ear Nose Throat J** 1988 Nov;67(11):796, 799, 803 (7 ref.)

Mycotic diseases of the neck. Pincus RL.
Ear Nose Throat J 1988 Nov;67(11):846–51 (33 ref.)

Histoplasmosis of the head and neck. Werber JL.
Ear Nose Throat J 1988 Nov;67(11):841–2, 844–5

Emergency tracheotomy in patients with massive neck swelling. Simon RR. **Emerg Med Clin North Am** 1989 Feb; 7(1):95–101

Infectious syndromes of the head and neck.
Infect Dis Clin North Am 1988 Mar;2(1):1–283

Vaccines for prevention of head and neck infections. Scheifele DW. **Infect Dis Clin North Am** 1988 Mar; 2(1):85–98 (37 ref.)

Does node location affect the incidence of distant metastases in head and neck squamous cell carcinoma? Ellis ER, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug;17(2):293–7

Nuchal cord: an unusual manifestation. Grimm TW, et al. **J Am Board Fam Pract** 1988 Jul–Sep;1(3):218–9

Cervical echinococcal hydatid cyst. Fradis M, et al.
J Laryngol Otol 1989 Apr;103(4):435–7

Failure of clinical tests to predict cerebral ischemia before neck manipulation. Bolton PS, et al.
J Manipulative Physiol Ther 1989 Aug;12(4):304–7

Risk factors in the psychosocial work environment for neck and shoulder pain in secretaries. Linton SJ, et al.
J Occup Med 1989 Jul;31(7):609–13

Extra-mastoid cholesteatoma with upper neck extension. Sinanan EG. **J Otolaryngol** 1988 Oct;17(6):308–10

Head and neck manifestations of histiocytosis-X in children. DiNardo LJ, et al. **Laryngoscope** 1989 Jul;99(7 Pt 1):721–4

Metronidazole in the management of anaerobic neck infection in acute leukemia. Barrett AP.
Oral Surg Oral Med Oral Pathol 1988 Sep;66(3):287–9

An improved head-and-neck phantom for radiation dosimetry. Brand JW, et al.
Oral Surg Oral Med Oral Pathol 1989 Mar;67(3):338–46 (21 ref.)

Bilobed flap in the release of postburn mentosternal contracture. Aranmolate S, et al. **Plast Reconstr Surg** 1989 Feb;83(2):356–61

Neck pain: considerations for the GP. Million R.
Practitioner 1988 Nov 8;232(1458):1208–11 (1 ref.)

Role of ultrasonography in the differential diagnostics of neck masses. Gönczi J, et al. **Rontgenblatter** 1988 Nov; 41(11):452–7

Neck and shoulder symptoms among men in machine operating, dynamic physical work and sedentary work. Tola S, et al. **Scand J Work Environ Health** 1988 Oct; 14(5):299–305

The cervical zygapophysial joints as a source of neck pain. Bogduk N, et al. **Spine** 1988 Jun;13(6):610–7

Langerhan cell histiocytosis of the head and neck. Rizzo KA, et al. **Trans Pa Acad Ophthalmol Otolaryngol** 1988;40:761–5 (18 ref.)

Use of intraoperative ultrasonography to identify a cervical foreign body. A case report. Adams R, et al. **Vet Surg** 1987 Sep–Oct;16(5):384–8

[Electromyographic study of contractions irradiating from the level of the cervical muscles] Urbin-Choffray D, et al. **Acta Belg Med Phys** 1988 Jul–Sep;11(3):125–8 **(Fre)**

[Congenital cysts and fistulae of the face and the neck] Beauvillain de Montreuil C, et al.
Ann Dermatol Venereol 1988;115(8):855–8 **(Fre)**

[Postoperative cervicofacial subcutaneous emphysema] Menguy E, et al. **Cah Anesthesiol** 1988 Jun–Jul;36(4):323–6 (Eng. Abstr.) **(Fre)**

[Congenital fistula of the neck. Technical notes apropos of 20 cases] Stoll D, et al.
Rev Laryngol Otol Rhinol (Bord) 1988;109(3):281–2 (Eng. Abstr.) **(Fre)**

[Serious cervicofacial infections of dental origin] Scheffer P, et al. **Rev Stomatol Chir Maxillofac** 1989;90(2):115–8 (Eng. Abstr.) **(Fre)**

[Diffuse gangrenous cervicofacial cellulitis of stomatologic origin in 7 patients with HIV-1 infection] Vuillecard E, et al. **Rev Stomatol Chir Maxillofac** 1989;90(4):268–73 (Eng. Abstr.) **(Fre)**

[Diagnostic imaging of neck masses] Gualdi GF, et al.
Clin Ter 1988 Jan 31;124(2):149–53 **(Ita)**

[Changes in blood kallikrein-kinin system in odontogenic diffuse phlegmons of the face and neck] Chirkova LD, et al. **Sov Med** 1989;(3):28–31 (Eng. Abstr.) **(Rus)**

[Chronic suppurative mesoepitympanitis complicated by phlegmon of the neck and paralysis of the left side of the larynx] Enin IP, et al. **Vestn Otorinolaringol** 1988 May–Jun; (3):76–7 **(Rus)**

[Congenital cysts and fistulas of the neck] Sierra García A. **An R Acad Nac Med (Madr)** 1989;106(1):81–100 **(Spa)**

ABNORMALITIES

Digital subtraction angiography of right cervical aortic arch. Magherini A, et al. **G Ital Cardiol** 1988 Apr;18(4):339–41

Iniencephaly. Anand R, et al. **Indian Pediatr** 1988 Jul; 25(7):692–4

[Congenital midline cervical cleft] Breton P, et al.
Ann Chir Plast Esthet 1989;34(1):73–6 (Eng. Abstr.) **(Fre)**

[Sonographic detection of hygroma colli in the fetus] Friese K, et al. **Ultraschall Med** 1989 Feb;10(1):25–8 (Eng. Abstr.) **(Ger)**

[An enlarged neck fold: a sonographic marker of Down's syndrome] Weisner D, et al. **Z Geburtshilfe Perinatol** 1988 May–Jun;192(3):142–4 (Eng. Abstr.) **(Ger)**

[Surgical correction of pterygium colli in children with hereditary pathology] Doletskiĭ SIa, et al.
Khirurgiia (Mosk) 1988 Jul;(7):37–41 (Eng. Abstr.) **(Rus)**

[Hereditary syndromes accompanied by pronounced deformity of the spine] Semiachkina AN, et al.
Pediatriia 1989;(1):104–5 **(Rus)**

ANATOMY & HISTOLOGY

Intersex differences in craniocervical morphology and posture in southern Chinese and British Caucasians. Cooke MS, et al. **Am J Phys Anthropol** 1988 Sep;77(1):43–51

Thyroidectomy under local analgesia: the anatomical basis of cervical blocks. Yerzingatsian KL.
Ann R Coll Surg Engl 1989 Jul;71(4):207–10

Anatomic basis of head and neck infections. Thadepalli H, et al. **Infect Dis Clin North Am** 1988 Mar;2(1):21–34

Evaluating anatomical factors affecting endotracheal intubation. Rhee KJ, et al. **J Emerg Med** 1988 May–Jun; 6(3):209–11

MRI of the neck and larynx. Govoni AF.
Radiol Diagn (Berl) 1988;29(5):657–67

BLOOD SUPPLY

A twelve-year survey of cervicothoracic vascular injuries. Bladergroen M, et al. **Am J Surg** 1989 May;157(5):483–6

Value and limits of "critical auscultation" of neck bruits. Floriani M, et al. **Angiology** 1988 Nov;39(11):967–72

Venous thrombosis in the neck. The role of real time ultrasound. Williams CE, et al. **Eur J Radiol** 1989 Feb; 9(1):32–6

Anomalous origin of the occipital artery from the cervical internal carotid artery. Benson MT, et al. **J Vasc Surg** 1988 Nov;8(5):643–5

[The cervical vertebral venous plexus and anastomoses with the cranial venous sinuses] Zouaoui A, et al.
Bull Assoc Anat (Nancy) 1987 Mar;71(212):7–13 (Eng. Abstr.) **(Fre)**

[The effect of a modified blood supply on the craniofacial growth of rabbits. 1. Vascular casts] Brehmer A, et al.
Anat Anz 1989;168(3):229–36 (Eng. Abstr.) **(Ger)**

[Surgical anatomy of the anastomotic branch between the occipital and vertebral arteries] Mansone AIa.
Arkh Anat Gistol Embriol 1988 Jul;95(7):38–41 (Eng. Abstr.) **(Rus)**

[Surgical approach to the distal extracranial part of the internal carotid artery at the base of the skull] Pauliukas PA. **Khirurgiia (Mosk)** 1989 Mar;(3):35–40 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Normal sonographic appearance of the fetal neck late in the first trimester: the pseudomembrane. Hertzberg BS, et al. **Radiology** 1989 May;171(2):427–9

INJURIES

Anthropomorphic dummy neck modeling and injury considerations. Deng YC. **Accid Anal Prev** 1989 Feb; 21(1):85–100

Cerebral embolism after gunshot wounds. Hayes E, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S77

Strangulation. A conceptual approach for courtroom presentation. Taff ML, et al. **Am J Forensic Med Pathol** 1989 Sep;10(3):216–20

Venous air embolism from head and neck wounds. Adams VI, et al. **Arch Pathol Lab Med** 1989 May;113(5):498–502 (32 ref.)

An evaluation of proposed causal mechanisms for "ejection associated" neck injuries. Guill FC, et al. **Aviat Space Environ Med** 1989 Jul;60(7 Pt 2):A26–47

A comparative study of G-induced neck injury in pilots of the F/A-18, A-7, and A-4. Knudson R, et al. **Aviat Space Environ Med** 1988 Aug;59(8):758–60

Neck sprains after car accidents [letter] Hodgson SP, et al. **BMJ** 1989 May 27;298(6685):1452

Neck sprains after car accidents [letter] Pearce JM. **BMJ** 1989 Jun 10;298(6687):1581

Stab wounds of the neck—observations on management. Shotton JC. **Clin Otolaryngol** 1988 Oct;13(5):335–9

Management of maxillofacial and neck soft-tissue injuries. White MJ, et al. **Clin Sports Med** 1989 Jan;8(1):11–23 (3 ref.)

Blunt traumatic rupture of cervical trachea. Beg MH, et al. **Indian J Chest Dis Allied Sci** 1988 Oct–Dec;30(4):291–4

An attempt at self-decapitation: case report. Rosenfeld JV, et al. **Injury** 1988 Mar;19(2):115–6

Rugby and neck injuries [letter] Silver JR. **Injury** 1988 Jul; 19(4):298

Shot in the neck in Spain (a rare cause of an isolated Horner's syndrome). Singh P, et al. **Injury** 1987 Nov;18(6):407–8

Sudden death of a young wrestler during competition. Rontoyannis GP, et al. **Int J Sports Med** 1988 Oct; 9(5):353–5

ECG of the month. Sinus arrhythmia and second degree atrioventricular block. French W. **J Am Vet Med Assoc** 1989 Jul 1;195(1):57

Fatal thrombosis of internal carotid artery following minor blunt trauma to the neck. An TL. **J Forensic Sci** 1989 May; 34(3):699–702

Airgun pellet injuries of the neck. Cook JA, et al. **J Laryngol Otol** 1989 Apr;103(4):432–4

Post-traumatic cervical syndrome. Lenhart LJ. **J Manipulative Physiol Ther** 1988 Oct;11(5):409–15

Two cases of near fatal airgun injury [letter] Paraskevaides EC, et al. **J R Coll Gen Pract** 1988 Jun;38(311):274

The "repetitive strain injury syndrome" is referred pain from the neck [letter] Miller MH, et al. **J Rheumatol** 1989 Jul; 16(7):1007

Cervical spine immobilization of penetrating neck wounds in a hostile environment. Arishita GI, et al. **J Trauma** 1989 Mar;29(3):332–7

Penetrating neck injuries: recommendations for selective management. Wood J, et al. **J Trauma** 1989 May; 29(5):602–5

Nine-ball neck [letter] Smith RD. **JAMA** 1989 Feb 10; 261(6):866

Injuries related to all-terrain vehicular accidents: a closer look at head and neck trauma. Friedman R, et al. **Laryngoscope** 1988 Nov;98(11):1251–4

Rugby must be safer: preventive programmes and rule changes [letter] Taylor TK, et al. **Med J Aust** 1988 Aug 15;149(4):224

Topically applied tetracaine, adrenalin, and cocaine in the repair of traumatic wounds of the head and neck. Cannon CR, et al. **Otolaryngol Head Neck Surg** 1989 Jan; 100(1):78–9

Stab wounds to the neck: role of angiography. Hartling RP, et al. **Radiology** 1989 Jul;172(1):79–82

Blunt traumatic carotid dissection with delayed symptoms. Pozzati E, et al. **Stroke** 1989 Mar;20(3):412–6

[How can neck, shoulder and upper arm problems be reduced in the workplace?] Viikari-Juntura E, et al. **Duodecim** 1989; 105(2):129–36 (60 ref.) **(Fin)**

[Atlanto-occipital luxation and syringomyelia: 2 rare complications of cervical injury. Diagnostic and therapeutic effects. Apropos of a case] Colnet G, et al. **Neurochirurgie** 1989;35(1):58–63 (27 ref.) (Eng. Abstr.) **(Fre)**

[Unusual suicide caused by a stab wound in the neck] Klose W, et al. **Arch Kriminol** 1989 May–Jun;183(5–6):157–62 (Eng. Abstr.) **(Ger)**

[Strangulation marks in homicides caused by choking ? On an irritant blood stain picture] Metter D. **Arch Kriminol** 1988 Jul–Aug;182(1–2):43–51 (Eng. Abstr.) **(Ger)**

[Mechanisms of injuries of cut and stab wounds of the neck] Bernemann D, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Aug;67(8):382–4 (Eng. Abstr.) **(Ger)**

[Hemorrhage of the head and neck in death by burning] Maxeiner H. **Z Rechtsmed** 1988;101(2):61–80 (42 ref.) (Eng. Abstr.) **(Ger)**

[Two autopsy cases with a kitchen knife protruding from the victim's body] Kita T, et al. **Igaku Kenkyu** 1988 Dec; 58(6):439–41 (Eng. Abstr.) **(Jpn)**

[Foreign body penetrating to the larynx] Szymczyk K, et al. **Otolaryngol Pol** 1988;42(5):372–4 (Eng. Abstr.) **(Pol)**

[The role of otorhinolaryngologists in treating severe craniocervicofacial injuries] Costaş V, et al. **Rev Chir [Otorinolaringol]** 1988 Oct–Dec;33(4):289–92 (Eng. Abstr.) **(Rum)**

[Surgical procedures in penetrating wounds of the neck] Aliev SA. **Klin Khir** 1988;(10):38–40 (Eng. Abstr.) **(Rus)**

[Knife wound of the neck with injury of the carotid artery] Kabanchuk IN, et al. **Klin Khir** 1989;(4):70 **(Rus)**

[A case of combined gunshot injuries of the maxillofacial and cervical regions] Pugachev AD, et al. **Klin Khir** 1989; (4):69 **(Rus)**

[Injuries to the sublingual nerve during surgical treatment of neck wounds] Bezrukov VM, et al. **Vestn Khir** 1989 Jan;142(1):124–5 **(Rus)**

[Reconstructive surgery in post-traumatic lesions of the thyreohyoid membrane] Tsvetkov EA, et al. **Vestn Otorinolaringol** 1989 May–Jun;(3):53–6 (Eng. Abstr.) **(Rus)**

[Characteristics of the work organization of a specialized military field surgical hospital for head, neck and spinal wounds] Khil'ko VA, et al. **Voen Med Zh** 1988 Sep;(9):11–3 **(Rus)**

[The outcome of neck wounds from being shot with a flare gun] Sibirskiĭ BI, et al. **Voen Med Zh** 1989 May;(5):63–4 **(Rus)**

[Non-fatal firearm injuries of the head and neck] Castro C, et al. **An Otorrinolaringol Ibero Am** 1989;16(3):257–70 (Eng. Abstr.) **(Spa)**

INNERVATION

Cervical receptors and the direction of body sway. Holtmann S, et al. **Arch Otorhinolaryngol** 1989;246(1):61–4

Trigemino-cervical reflex in pathology of the brain stem and of the first cervical cord segments. Rossi B, et al. **Electromyogr Clin Neurophysiol** 1989 Mar;29(2):67–71

Response of vestibular neurons to head rotations in vertical planes. II. Response to neck stimulation and vestibular-neck interaction. Kasper J, et al. **J Neurophysiol** 1988 Nov;60(5):1765–78

[Cervical magnetic stimulation. A new method of bilateral phrenic nerve stimulation for use in clinical practice] Similowski T, et al. **Rev Mal Respir** 1988;5(6):609–14 (Eng. Abstr.) **(Fre)**

[Effect of novocaine block of the neural structures of the neck on external respiration after operations on the abdominal organs] Miftakhov GM, et al. **Vestn Khir** 1988 May;140(5):95–6 **(Rus)**

[Methodologic bases of the study of the oculomotor reflex of the neck] Likhachev SA, et al. **Vestn Otorinolaringol** 1988 Nov–Dec;(6):8–10 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

[Lobomycosis] Arrese Estrada J, et al. **Ann Pathol** 1988; 8(4–5):325–7 (Eng. Abstr.) **(Fre)**

PATHOLOGY

Preliminary clinical results with low flip angle spin-echo MR imaging of the head and neck. Chisin R, et al. **AJNR** 1989 Jul–Aug;10(4):719–24

MR imaging of ossification of the posterior longitudinal ligament [letter] Widder DJ. **AJR Am J Roentgenol** 1989 Jul;153(1):194–5

Effect of BANS location on the prognosis of clinical stage I melanoma: new data and meta-analysis. Weinstock MA, et al. **Br J Dermatol** 1988 Nov;119(5):559–65

Kikuchi's disease—apparent malignancy of a neck mass. Buckley JG, et al. **J Laryngol Otol** 1988 Oct;102(10):941–4

The relationship between cervical cysts and tonsillar carcinoma in adults. Granström G, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):16–20

Magnetic resonance imaging of the head and neck region. Present status and future potential. Council on Scientific Affairs. Report of the Panel on Magnetic Resonance Imaging. **JAMA** 1988 Dec 9;260(22):3313–26 (82 ref.)

The neck. Mancuso AA, et al. **Radiol Clin North Am** 1989 Mar;27(2):407–34 (31 ref.)

[Echography of the soft tissues of the neck] Anderegg A. **Ther Umsch** 1989 Mar;46(3):178–84 (Eng. Abstr.) **(Fre)**

[Sonography in cystoid cervical space occupying lesions] Gritzmann N. **Ultraschall Med** 1988 Aug;9(4):148–54 (Eng. Abstr.) **(Ger)**

[Necrosis of the tissues of the retromandibular and retroauricular areas and the lateral surface of the neck as a consequence of the self-treatment of lymphadenitis] Khar'kov LV, et al. **Stomatologiia (Mosk)** 1989 May–Jun; 68(3):83–4 **(Rus)**

PHYSIOLOGY

Avian cranio-cervical systems. Part III: Robot kinematics for cervical systems. Elshoud GC, et al. **Acta Morphol Neerl Scand** 1987;25(4):235–59

Effect of head or neck cooling used with a liquid-conditioned vest during simulated aircraft sorties. Cohen JB, et al. **Aviat Space Environ Med** 1989 Apr;60(4):315–20

Lateralization of headache: possible role of an upper cervical trigger point. Boquet J, et al. **Cephalalgia** 1989 Mar; 9(1):15–24

"Bottoms up" dissection [letter] Trosch RM, et al. **N Engl J Med** 1989 Jun 8;320(23):1564–5

Convergence and interaction of neck and macular vestibular inputs on locus coeruleus and subcoeruleus neurons. Manzoni D, et al. **Pflugers Arch** 1989 Apr;413(6):580–98

Influence of head-neck rotation on static elbow flexion force of paretic side in patients with hemiparesis. Bohannon RW, et al. **Phys Ther** 1989 Feb;69(2):135–7

Cervical orthoses. Beavis A. **Prosthet Orthot Int** 1989 Apr; 13(1):6–13

PHYSIOPATHOLOGY

Nocturnal neck movements and sleep apnea in headache. Biber MP. **Headache** 1988 Nov;28(10):673–4

Acute neck pain due to tendonitis of the longus colli: CT and MRI findings. Artenian DJ, et al. **Neuroradiology** 1989; 31(2):166–9 (10 ref.)

Physical findings in patients with chronic intractable benign pain of the neck and/or back. Rosomoff HL, et al. **Pain** 1989 Jun;37(3):279–87

Neck pain. Goodman BW Jr. **Prim Care** 1988 Dec; 15(4):689–708 (70 ref.)

RADIATION EFFECTS

Hyperparathyroidism after neck irradiation. Christmas TJ, et al. **Br J Surg** 1988 Sep;75(9):873–4

Early changes in parathyroid function after high-dose irradiation of the neck. Holten I, et al. **Cancer** 1988 Oct 15;62(8):1476–8

Hyperthyroidism with low radioiodine uptake after head and neck irradiation for Hodgkin's disease. Petersen M, et al. **J Nucl Med** 1989 Feb;30(2):255–7

RADIOGRAPHY

The subclavian triangle: CT analysis. Wechsler RJ, et al. **AJR** 1989 Feb;152(2):313–7

Computed tomography of cervical epidermoid cysts. Li YP, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):164–6

Cephalometric and cineradiographic study of deviant resonance in hearing-impaired speakers. Subtelny J, et al. **J Speech Hear Disord** 1989 May;54(2):249–63

Radiological investigations of the chest, breast, head & neck. Bury R. **Practitioner** 1987 Nov 9;231(1438):1503–6, 1509 (3 ref.)

RADIONUCLIDE IMAGING

201 thallium-chloride use in the radioisotopic pre-operative study of the lymphnodes of the neck. Modica V, et al. **Riv Eur Sci Med Farmacol** 1987 Jun;9(2):193–6

SURGERY

Free gastroomental flap for head and neck reconstruction: assessment in an animal model. Moran WJ, et al. **Am J Otolaryngol** 1989 Jan–Feb;10(1):55–60

Reconstruction of posterior neck and skull with vertical trapezius musculocutaneous flap. Mathes SJ, et al. **Am J Surg** 1988 Oct;156(4):248–51

A significant new contribution to radical head and neck surgery. The argon beam coagulator as an effective means of limiting blood loss. Ward PH, et al. **Arch Otolaryngol Head Neck Surg** 1989 Aug;115(8):921–3

Pterygium colli: surgical treatment. Rossillon D, et al. **Br J Plast Surg** 1989 Mar;42(2):178–83

Superior laryngeal nerve injury: an overlooked entity in the surgery of the head and neck. Bevan K, et al. **Br J Surg** 1988 Aug;75(8):817

Cross-match requirements in head and neck surgery. Dempster JH. **Clin Otolaryngol** 1989 Apr;14(2):147–50

Wound amylase estimation and the prediction of pharyngocutaneous fistulae. Fielder CP, et al. **Clin Otolaryngol** 1989 Apr;14(2):101–5

Cheek and neck sculpturing: simultaneous buccal fat pad removal and subcutaneous cheek and neck lipoplasty. Guerrerosantos J, et al. **Clin Plast Surg** 1989 Apr; 16(2):343–53

Application of the neodymium: YAG and KTP532 lasers in head and neck surgery. Fried MP, et al. **Conn Med** 1988 Aug;52(8):455–8

Enterostomal hydrocolloid materials [letter] Krugman ME, et al. **Ear Nose Throat J** 1988 Sep;67(9):696

Clinical implications of metronidazole antianaerobic prophylaxis in major head and neck surgical procedures. Sawyer R. **Ear Nose Throat J** 1988 Sep;67(9):655–6, 658, 660–2

Role of aerobic gram-negative rods, anaerobes, and fungi in wound infection after head and neck surgery: implications for antibiotic prophylaxis. Johnson JT, et al. **Head Neck** 1989 Jan–Feb;11(1):27–9

Electrosurgical dissection to reduce blood loss in head and neck surgery. Weber RS, et al. **Head Neck** 1989 Jul–Aug; 11(4):318–24

Postoperative monitoring of microsurgical free tissue transfers for head and neck reconstruction. Jones NF. **Microsurgery** 1988;9(2):159–64 (60 ref.)

The role of microvascular surgery in head and neck reconstruction. Swartz WM. **Microsurgery** 1988;9(2):115

Submental-submandibular suction lipectomy: indications and surgical technique. O'Ryan F, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):117–25

(23 ref.)
Goals and mechanisms for training otolaryngologists in the area of geriatric medicine. Johns M, et al. **Otolaryngol Head Neck Surg** 1989 Apr;100(4):262-5
En bloc cervical lipectomy for treatment of the problem neck in facial rejuvenation surgery. Robbins LB, et al. **Plast Reconstr Surg** 1989 Jan;83(1):53-60
A contribution to the study of the accessory nerve: surgical implications. Caliot P, et al. **Surg Radiol Anat** 1989; 11(1):11-5
[Reconstruction of large facial and neck defects with skin-muscle flaps] Anastasov K, et al. **Khirurgiia (Sofiia)** 1989;42(1):64-8 (Eng. Abstr.) **(Bul)**
[Combined transposition of the latissimus dorsi and serratus anterior muscles in cervical and thoracic reconstructive surgery. Results of 40 anatomical dissections and clinical applications in 21 cases] Guédon C, et al. **Ann Chir Plast Esthet** 1988;33(4):321-8 (Eng. Abstr.) **(Fre)**
[The aging neck--plastic surgery possibilities for esthetic indications] Stellmach R. **Fortschr Kiefer Gesichtschir** 1989; 34:4-7 **(Ger)**
[Complications and dangers in face and neck lifting] Voy ED, et al. **Fortschr Kiefer Gesichtschir** 1989;34:14-6 **(Ger)**
[A sub-pectoral gliding flap for covering the lateral triangle of the neck] Millesi W, et al. **Handchir Mikrochir Plast Chir** 1989 Jan;21(1):26-8 (Eng. Abstr.) **(Ger)**
[Cervical cutaneous expansion: treatment of post-burn keloids. Personal cases] Monti M, et al. **Ann Ital Chir** 1987; 59(1-6):285-92 (Eng. Abstr.) **(Ita)**
[The use of hyperbaric oxygenation for the prevention of complications in local plastic operations on the face and neck] Rud'ko VF, et al. **Stomatologiia (Mosk)** 1989 Mar-Apr;68(2):33-4 (Eng. Abstr.) **(Rus)**

NECK MUSCLES see under **MUSCLES**

NECK NEOPLASMS see **HEAD AND NECK NEOPLASMS**

NECROBACILLOSIS see **FUSOBACTERIUM INFECTIONS**

NECROBIOSIS LIPOIDICA

COMPLICATIONS

Aggressive ulcerative necrobiosis lipoidica associated with venous insufficiency, giant-cell phlebitis and arteritis. Markey AC, et al. **Clin Exp Dermatol** 1988 May;13(3):183-6
Granuloma annulare, necrobiosis lipoidica, and diabetic disease. Binazzi M, et al. **Int J Dermatol** 1988 Oct; 27(8):576-9

DIAGNOSIS

[Transcutaneous measurement of oxygen and carbon dioxide pressure in necrobiosis lipoidica] Brüngger A. **Hautarzt** 1989 Apr;40(4):231-2 (Eng. Abstr.) **(Ger)**
[Skin lesions in diabetes mellitus] Skripkin IuK, et al. **Vestn Akad Med Nauk SSSR** 1989;(5):54-7 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Necrobiosis lipoidica diabeticorum: platelet survival and response to platelet inhibitors. Quimby SR, et al. **Cutis** 1989 Mar;43(3):213-6
Healing of necrobiotic ulcers with antiplatelet therapy. Correlation with plasma thromboxane levels. Heng MC, et al. **Int J Dermatol** 1989 Apr;28(3):195-7
[Clofazimine--therapeutic alternative in necrobiosis lipoidica and granuloma anulare] Mensing H. **Hautarzt** 1989 Feb; 40(2):99-103 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Anti-collagen antibodies in granuloma annulare and necrobiosis lipoidica. Evans CD, et al. **Clin Exp Dermatol** 1988 Jul;13(4):252-4

PATHOLOGY

[Necrobiosis lipoidica--clinical aspects and therapy in 20 cases] Straube R. **Dermatol Monatsschr** 1988;174(11):681-5 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Skin blood flow in necrobiosis lipoidica during treatment with low-dose acetylsalicylic acid. Beck HI, et al. **Acta Derm Venereol (Stockh)** 1988;68(4):364-5

NECROSIS

see related
TUMOR NECROSIS FACTOR

Tumor necrosis treatment of ME-180 human cervical carcinoma model with 131I-labeled TNT-1 monoclonal antibody. Chen FM, et al. **Cancer Res** 1989 Aug 15; 49(16):4578-85
Apoptosis [letter] Smith CA, et al. **Nature** 1989 Mar 2; 338(6210):10
Subcutaneous fat necrosis in infancy. Lusk RP, et al. **Otolaryngol Head Neck Surg** 1988 Nov;99(5):520-3

CHEMICALLY INDUCED

Coumarin skin necrosis in a patient with heparin-induced thrombocytopenia--a case report. Celoria GM, et al. **Angiology** 1988 Oct;39(10):915-20
Ultrastructure of an arterial lesion induced in rats by fenoldopam mesylate, a dopaminergic vasodilator. Bugelski PJ, et al. **Br J Exp Pathol** 1989 Apr;70(2):153-65
Isoniazid-rifampicin-induced submassive hepatic necrosis. Kasantikul V. **J Med Assoc Thai** 1989 Jan;72(1):56-8
Amineptine, a tricyclic antidepressant, inhibits the mitochondrial oxidation of fatty acids and produces microvesicular steatosis of the liver in mice. Le Dinh T, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):745-50
Halothane induced hepatic necrosis in rats: the role of in vivo lipid peroxidation. Knights KM, et al. **Pharmacol Toxicol** 1988 Nov;63(5):327-32
[Aseptic skin necrosis after subcutaneous injection of alpha interferon] Rasokat H, et al. **Dtsch Med Wochenschr** 1989 Mar 24;114(12):458-60 (Eng. Abstr.) **(Ger)**
[Atenolol-induced skin necrosis (letter)] Almagro P, et al. **Med Clin (Barc)** 1988 Nov 19;91(17):676 **(Spa)**

COMPLICATIONS

Ulnar neuropathy caused by fat necrosis with cystic myxoid degeneration at the upper forearm: case report. Segal R, et al. **Neurosurgery** 1988 Nov;23(5):669-71

DIAGNOSIS

Immune-mediated panniculitis, mimicking pancreatic-disease-associated fat necrosis. Hainaut P, et al. **Clin Rheumatol** 1988 Dec;7(4):522-6
[What is your diagnosis? Neonatal cytosteatonecrosis] Taïeb A, et al. **Ann Dermatol Venereol** 1989;116(1):47-9 **(Fre)**

ETIOLOGY

Zoster-related bilateral acute retinal necrosis syndrome as presenting sign in AIDS. Chess J, et al. **Ann Ophthalmol** 1988 Nov;20(11):431-5, 438
To stitch or not to stitch the fat? Ferris BD, et al. **Ann R Coll Surg Engl** 1989 Mar;71(2):115-6
Tumor necrosis factor/cachectin. Induction of hemorrhagic necrosis in normal tissue requires the fifth component of complement (C5). Rothstein JL, et al. **J Exp Med** 1988 Dec 1;168(6):2007-21
Subcapsular steatonecrosis in response to peritoneal insulin delivery: a clue to the pathogenesis of steatonecrosis in obesity. Wanless IR, et al. **Mod Pathol** 1989 Mar;2(2):69-74
Intraosseous fat necrosis associated with acute pancreatitis: MR imaging. Haller J, et al. **Radiology** 1989 Oct; 173(1):193-5
[Polymyositis and subcutaneous fat necrosis, manifestations of toxoplasmosis origin (letter)] Couzineau P, et al. **Presse Med** 1989 May 20;18(20):1035 **(Fre)**
[Subcutaneous fat necroses, arthritis and vasculitis of small skin vessels in chronic pancreatitis] Mayet WJ, et al. **Z Gastroenterol** 1989 Jan;27(1):1-5 (Eng. Abstr.) **(Ger)**
[Acute pancreatitis: physiopathogenic hypothesis of fat necrosis] Tiscornia OM, et al. **Medicina (B Aires)** 1988; 48(5):530-42 (98 ref.) **(Spa)**

PATHOLOGY

Nodular-cystic fat necrosis. A reevaluation of the so-called mobile encapsulated lipoma. Hurt MA, et al. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 1):493-8 (24 ref.)
Tumor necrosis factor can induce both apoptic and necrotic forms of cell lysis. Laster SM, et al. **J Immunol** 1988 Oct 15;141(8):2629-34
[Acute disseminated multinodular non-recurrent fat necrosis in children] Labeille B, et al. **Ann Dermatol Venereol** 1988; 115(11):1134-5 **(Fre)**
[Primary multinodular panniculitis or fat necrosis in children] Larbre F, et al. **Pediatrie** 1989;44(3):193-6 (Eng. Abstr.) **(Fre)**
[Necrotizing panniculitis in pancreatitis] Schumacher B, et al. **Z Gastroenterol** 1989 Jan;27(1):6-9 (Eng. Abstr.) **(Ger)**

PREVENTION & CONTROL

Angiotropin treatment prevents flap necrosis and enhances dermal regeneration in rabbits. Höckel M, et al. **Arch Surg** 1989 Jun;124(6):693-8
The protective effect of Allium sativum and crataegus on isoprenaline-induced tissue necroses in rats. Ciplea AG, et al. **Arzneimittelforschung** 1988 Nov;38(11):1583-92
Pre- and post-ischemic administration of dizocilpine (MK-801) reduces cerebral necrosis in the rat. Rod MR, et al. **Can J Neurol Sci** 1989 Aug;16(3):340-4

RADIONUCLIDE IMAGING

A novel method for the detection of necrotic lesions in human cancers. Epstein AL, et al. **Cancer Res** 1988 Oct 15; 48(20):5842-8

SURGERY

Delayed débridement and external drainage of massive pancreatic or peripancreatic necrosis. Howard JM. **Surg Gynecol Obstet** 1989 Jan;168(1):25-9

THERAPY

Disseminated fat necrosis: a rehabilitation challenge. Schwartz GS, et al. **Arch Phys Med Rehabil** 1989 May; 70(5):404-7

VETERINARY

Efficacy of isoprothiolane for the treatment of fat necrosis in cattle. Oka A, et al. **Br Vet J** 1988 Sep-Oct;144(5):507-14
Therapeutic effect of isoprothiolane on bovine fat necrosis. Shimada Y, et al. **Nippon Juigaku Zasshi** 1988 Oct; 50(5):1017-24

NECROSIS, ASEPTIC, OF BONE see **OSTEONECROSIS**

NECROSIS, AVASCULAR, OF BONE see **OSTEONECROSIS**

NECROTIZING ARTERITIS see **PERIARTERITIS NODOSA**

NECROTIZING PYELONEPHRITIS see **KIDNEY PAPILLARY NECROSIS**

NECROTIZING SCLERITIS see **SCLERITIS**

NECTURUS

Physiological and pharmacological analysis of suppressive rod-cone interaction in Necturus retina [corrected] [published erratum appears in J Neurophysiol 1989 Jun;61(6):following Table of Contents] Eysteinsson T, et al. **J Neurophysiol** 1989 Apr;61(4):866-77

ANATOMY & HISTOLOGY

Ultrastructure of taste cells and synapses in the mudpuppy Necturus maculosus. Delay RJ, et al. **J Comp Neurol** 1988 Nov 8;277(2):268-80
Measurement of the effective thickness of the mucosal unstirred layer in Necturus gallbladder epithelium. Cotton CU, et al. **J Gen Physiol** 1989 Apr;93(4):631-47

METABOLISM

Acetylcholinesterase activity in the adrenal chromaffin vesicles of Urodela. Mastrolia L, et al. **Cell Mol Biol** 1989; 35(3):247-53
The presence and possible role of a galanin-like peptide in the mudpuppy heart. Parsons RL, et al. **Neuroscience** 1989; 29(3):749-59

PHYSIOLOGY

Electrophysiological effects of mucosal Cl- removal in Necturus gallbladder epithelium. Stoddard JS, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):C568-78
Effects of barium and bicarbonate on glial cells of Necturus optic nerve. Studies with microelectrodes and voltage-sensitive dyes. Astion ML, et al. **J Gen Physiol** 1989 Apr;93(4):731-44
Osmotic water permeability of Necturus gallbladder epithelium. Cotton CU, et al. **J Gen Physiol** 1989 Apr; 93(4):649-79
Ca2+-activated K+ channels in the apical membrane of Necturus choroid plexus. Brown PD, et al. **J Membr Biol** 1988 Nov;105(3):207-19
Ca2+-activated K+ currents in Necturus choroid plexus. Loo DD, et al. **J Membr Biol** 1988 Nov;105(3):221-31
Distribution of ion channels on taste cells and its relationship to chemosensory transduction. Roper SD, et al. **J Membr Biol** 1989 Jul;109(1):29-39
Kinetics of voltage- and Ca2+ activation and Ba2+ blockade of a large-conductance K+ channel from Necturus enterocytes. Sheppard DN, et al. **J Membr Biol** 1988 Oct;105(1):65-75
Voltage- and time dependence of apical membrane conductance during current clamp in Necturus gallbladder epithelium. Stoddard JS, et al. **J Membr Biol** 1988 Jul; 103(2):191-204
Characteristics of the galanin-induced depolarization of mudpuppy parasympathetic postganglionic neurons. Konopka LM, et al. **Neurosci Lett** 1989 Apr 24; 99(1-2):142-6

NECTURUS MACULOSUS see under **NECTURUS**

NEEDLES

Ventricle puncture for external CSF drainage and pressure measurement using a modified puncture needle. Hassler W, et al. **Acta Neurochir (Wien)** 1988;94(1-2):93-5
Evaluation of needle exchange in central London: behaviour change and anti-HIV status over one year. Hart GJ, et al. **Aids** 1989 May;3(5):261-5
Needle sharing and other behaviours related to HIV spread among intravenous drug users [letter] Rezza G, et al. **Aids** 1989 Apr;3(4):247-8
Outpatient myelography with fine-needle technique: an appraisal. Vezina JL, et al. **AJNR** 1989 May-Jun; 10(3):615-7
The blunt needle: a new percutaneous access device. Akins

EW, et al. **AJR** 1989 Jan;152(1):181–2
Preoperative imaging-guided needle placement and localization of clinically occult breast lesions. Kopans DB, et al. **AJR** 1989 Jan;152(1):1–9 (28 ref.)
Outpatient myelography with fine-needle technique: an appraisal. Vezina JL, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):383–5
Ear acupuncture using semi-permanent needles: acceptability, prospects and problems in Nigeria. Umeh B. **Am J Chin Med** 1988;16(1–2):67–70
Transthoracic pacemaker insertion failure caused by needle lumen obstruction [letter] Ma FH. **Am J Emerg Med** 1989 Jan;7(1):124–5
Compliance with needle disposal policies [letter] Coiner C. **Am J Infect Control** 1989 Feb;17(1):44–5
Needlestick injuries and needle disposal in Minnesota physicians' offices. Thurn J, et al. **Am J Med** 1989 May; 86(5):575–9
An alternative needle for frontalis suspension. Caputo AR, et al. **Am J Ophthalmol** 1989 Aug 15;108(2):208–9
Controlled delivery of perfluorocarbon liquids. Chang S, et al. **Am J Ophthalmol** 1989 Mar 15;107(3):299–300
Needle sharing among IVDUs at risk for AIDS [letter] Des Jarlais DC, et al. **Am J Public Health** 1988 Nov; 78(11):1498–9
Needle exchange programs: a medical or a policy dilemma? [editorial] Ginzburg HM. **Am J Public Health** 1989 Oct; 79(10):1350–1
Determinants of needle sharing among intravenous drug users. Magura S, et al. **Am J Public Health** 1989 Apr; 79(4):459–62
Risk reduction among intravenous drug users in Amsterdam under the influence of AIDS. van den Hoek JA, et al. **Am J Public Health** 1989 Oct;79(10):1353–7
Risk reduction among intravenous drug users in Amsterdam under the influence of AIDS. van den Hoek JA, et al. **Am J Public Health** 1989 Oct;79(10):1355–7
Surgical needle sharpness. Thacker JG, et al. **Am J Surg** 1989 Mar;157(3):334–9
Failure to demonstrate transmission of enzootic bovine leukemia virus infection from cows to sheep by use of common injection needles. Weber AF, et al. **Am J Vet Res** 1988 Nov;49(11):1814–6
Raja pleural biopsy needle. A comparison with the Abrams needle in experimental pleural effusion. Ogirala RG, et al. **Am Rev Respir Dis** 1989 Apr;139(4):984–7
Fluid flow through dural puncture sites. An in vitro comparison of needle point types. Cruickshank RH, et al. **Anaesthesia** 1989 May;44(5):415–8
Postdural puncture headache. A comparison between 26- and 29-gauge needles in young patients. Flaatten H, et al. **Anaesthesia** 1989 Feb;44(2):147–9
Insulation of needles [letter] Pither CE. **Anaesthesia** 1988 Nov;43(11):991
Postspinal headache in young and elderly patients. Two randomised, double-blind studies that compare 20- and 25-gauge needles. Rasmussen BS, et al. **Anaesthesia** 1989 Jul;44(7):571–3
Spinal needles [letter] Palleiko MA, et al. **Anesth Analg** 1989 Apr;68(4):545–6
Spinal needle determinants of rate of transdural fluid leak. Ready LB, et al. **Anesth Analg** 1989 Oct;69(4):457–60
Inability to thread epidural catheter through epidural needle [letter] Seitman DT, et al. **Anesth Analg** 1989 Aug; 69(2):267–8
The needle tilt test: an aid to epidural needle insertion [letter] Brandstater B. **Anesthesiology** 1989 Feb;70(2):366–7
Spinal anesthesia with extremely fine needles [letter] Dittman M, et al. **Anesthesiology** 1989 Jun;70(6):1035–6
Minimizing dead space, air embolism, and needle-stick risk [letter] Kempen PM. **Anesthesiology** 1989 Jun;70(6):1034–5
Needle bevel direction and headache after inadvertent dural puncture. Norris MC, et al. **Anesthesiology** 1989 May; 70(5):729–31
A new double-armed microsuture. Hallock GG, et al. **Ann Plast Surg** 1988 Aug;21(2):183–5
In-room sharps disposal reduces needlesticks. **AORN J** 1988 Dec;48(6):1164
Evacuation/cautery vitreous needle. Davidorf FH, et al. **Arch Ophthalmol** 1989 Apr;107(4):607
A modified fascia needle. Liu D. **Arch Ophthalmol** 1989 May; 107(5):769
A combined needle holder and scissors. Patel BC, et al. **Arch Ophthalmol** 1988 Oct;106(10):1472
Monopolar needle stimulation: safety considerations. Pease WS, et al. **Arch Phys Med Rehabil** 1989 May;70(5):412–4
Prevention of human immunodeficiency virus infection among intravenous drug users in New South Wales, Australia: the needles and syringes distribution programme through retail pharmacies. Tsai R, et al. **Asia Pac J Public Health** 1988;2(4):245–51
A simple technique for localizing a broken dental needle in the pterygomandibular region. Ho KH. **Aust Dent J** 1988 Aug;33(4):308–9
Transmission of infection by needlesticks, sharps and splashes. Spelman D. **Aust Fam Physician** 1988 Aug;17(8):681–2, 719 (3 ref.)
Acuity of biopsy needles. von Fraunhofer JA, et al. **Biomaterials** 1989 Jan;10(1):68–70
Sharps disposal [letter] Woodhead CM. **Br Dent J** 1988 Sep 10;165(5):160
Central embolization of needle fragment following intravenous drug abuse. Gyrtrup HJ, et al. **Br J Addict** 1989 Jan;84(1):103–5
Variations in needle sharing practices among intravenous drug users in Possil (Glasgow). Rahman MZ, et al. **Br J Addict** 1989 Aug;84(8):923–7
Needle holder with gap joints [letter] Mackintosh GI, et al. **Br J Ophthalmol** 1989 Jul;73(7):581
Positioning the Verres needle. Gupta SP. **Br J Surg** 1989 Apr;76(4):381
Combined spinal-epidural needle (CSEN) [letter] Eldor J, et al. **Can J Anaesth** 1988 Sep;35(5):537–9
Avoiding nosocomial infection in anaesthesia [letter] Kempen PM. **Can J Anaesth** 1989 Mar;36(2):254–5
Combined spinal-epidural needle [letter] Torrieri A, et al. **Can J Anaesth** 1989 Jul;36(4):483
Use of a double-needle technique for safer entry into an abdominal abscess. Teitelbaum GP. **Cardiovasc Intervent Radiol** 1988 Dec;11(6):354–6
Control of sheath back bleeding [letter] Hart J. **Cathet Cardiovasc Diagn** 1988;15(2):135
Breakage and detachment of an Abrams needle in the pleural cavity during performance of a pleural biopsy. Fité E, et al. **Chest** 1989 Apr;95(4):928–9
Utility of the Wang 18-gauge transbronchial histology needle in the staging of bronchogenic carcinoma. Schenk DA, et al. **Chest** 1989 Aug;96(2):272–4
Transbronchial needle biopsy for histology specimens [editorial] Wang KP. **Chest** 1989 Aug;96(2):226–7
Sharing blood-borne viruses and illicit drug users [editorial] Novick A. **Conn Med** 1988 Dec;52(12):736–7
Rupture of needle during infusion with portable insulin pump in children [letter] Wieliczko MC, et al. **Diabetes Care** 1989 Jun;12(6):440
CT-assisted chemonucleolysis. Stadnik TW, et al. **Eur J Radiol** 1988 Nov;8(4):249–52
Clinical use of a nonferromagnetic needle for magnetic resonance-guided biopsy. Mueller PR, et al. **Gastrointest Radiol** 1989 Winter;14(1):61–4
Design features and surgical use of a cannulated extrusion needle. Flynn HW, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(4):304–8
In vivo characteristics of needle-type glucose sensor--measurements of subcutaneous glucose concentrations in human volunteers. Shichiri M, et al. **Horm Metab Res Suppl** 1988;20:17–20
The glucose enzyme electrode: is simple peroxide detection at a needle sensor acceptable? Vadgama P, et al. **Horm Metab Res Suppl** 1988;20:20–2
An amperometric glucose sensor with combined enzyme layers. Weiss T, et al. **Horm Metab Res Suppl** 1988;20:23–5
Role of percutaneous needle biopsy by Cope's needle in the diagnosis of pleural diseases. Raj B, et al. **Indian J Chest Dis Allied Sci** 1988 Apr–Jun;30(2):88–92
Needle tip echogenicity. A study with real time ultrasound. Bondestam S, et al. **Invest Radiol** 1989 Jul;24(7):555–60
The diabetic student and needle disposal: a hidden health problem. Garling J, et al. **J Am Coll Health** 1989 Sep; 38(2):97–8
Needle localization of foreign bodies using computed tomography. A case report. Goldenberg RA, et al. **J Am Podiatr Med Assoc** 1988 Dec;78(12):629–31
Biomechanics of curved surgical needle bending. Abidin MR, et al. **J Biomed Mater Res** 1989 Apr;23(A1 Suppl):129–43
Needle exchange and the prevention of AIDS [editorial] Imperato PJ. **J Community Health** 1989 Summer;14(2):61–3
The kind of the cut [editorial] Rosen P. **J Emerg Med** 1988 Nov–Dec;6(6):543
Influence of cutting edge configuration on surgical needle penetration forces. Towler MA, et al. **J Emerg Med** 1988 Nov–Dec;6(6):475–81
Choice of needle for ovum pickup. Haines CJ, et al. **J In Vitro Fert Embryo Transf** 1989 Apr;6(2):111–2
A prospective randomized comparison of single- and double-lumen needles for transvaginal follicular aspiration. Scott RT, et al. **J In Vitro Fert Embryo Transf** 1989 Apr; 6(2):98–100
Needlestick and needleshare--the difference [letter] Hoffman PN, et al. **J Infect Dis** 1989 Sep;160(3):545–6
Needle localization of occult breast cancer for surgical biopsy. Puyau FA. **J La State Med Soc** 1988 Aug; 140(8):33–6
Efficacy of various methods of sterilization of acupuncture needles [letter] Jacobs GE. **J Manipulative Physiol Ther** 1988 Oct;11(5):442
Reuse of disposable insulin syringes and needles in diabetic children. Panamonta O, et al. **J Med Assoc Thai** 1989 Jun; 72(6):314–6
Needle for use during percutaneous compression of gasserian ganglion for trigeminal neuralgia. Technical note. Gerber AM. **J Neurosurg** 1989 Sep;71(3):455
Safe disposal of contaminated syringe needles. Firtell DN. **J Prosthet Dent** 1988 Aug;60(2):259
Intraosseous crystalloid and blood infusion in a swine model. Schoffstall JM, et al. **J Trauma** 1989 Mar;29(3):384–7
Simple method to sterilize syringes and needles [letter] Ramachandran CR. **J Trop Pediatr** 1988 Oct;34(5):261–2
Will bleach decontaminate needles during cocaine binges in shooting galleries? [letter] Friedman SR, et al. **JAMA** 1989 Sep 15;262(11):1467
A new needle and technique for MRI-guided aspiration cytology of the head and neck. Trapp T, et al. **Laryngoscope** 1989 Jan;99(1):105–8
HIV-infected needles [news] **Minn Med** 1989 Mar;72(3):175
"The needle and the damage done"? Responding to a needle stick. Becherer P, et al. **N C Med J** 1989 May;50(5):281–3
Needle-stick injury [letter] Mezitis NH. **N Engl J Med** 1989 Feb 2;320(5):316
Changes in needle sharing and syringe cleaning among San Francisco drug abusers [letter] Sorensen JL, et al. **N Engl J Med** 1989 Mar 23;320(12):807
Occupational HIV risk [letter] Goldwater PN. **N Z Med J** 1989 May 10;102(867):231
Transvaginal needle bladder neck suspension procedures for stress urinary incontinence: a comprehensive review. Karram MM, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):906–14 (57 ref.)
Doctor exposed to AIDS [news] **Occup Health Saf** 1989 Mar; 58(3):16–7
Needlestick injuries in ophthalmology. Mansour AM. **Ophthalmic Surg** 1989 May;20(5):367–9
Modified Spigelman technique [letter] Maza CE, et al. **Ophthalmic Surg** 1989 Jan;20(1):74
Changing needles: a dangerous custom without foundation [letter] Walterspiel JN. **Pediatr Infect Dis J** 1988 Sep; 7(9):675–6
Optimum needle length for diphtheria-tetanus-pertussis inoculation of infants. Hick JF, et al. **Pediatrics** 1989 Jul; 84(1):136–7
Adverse reactions to diphtheria, tetanus, pertussis-polio vaccination at 18 months of age: effect of injection site and needle length. Ipp MM, et al. **Pediatrics** 1989 May; 83(5):679–82
Needle injuries among pediatric housestaff physicians in New York City. Melzer SM, et al. **Pediatrics** 1989 Aug; 84(2):211–4
Removing broken needles and other foreign objects. Marks MW, et al. **Postgrad Med** 1989 Feb 1;85(2):234, 236
Free needles: a public health hazard [letter] Newgreen DB. **Postgrad Med** 1989 Apr;85(5):46
Coaxial needles for repeated biopsy sampling. Frederick PR, et al. **Radiology** 1989 Jan;170(1 Pt 1):273–4
Amniocentesis needle with improved sonographic visibility. Hurwitz SR, et al. **Radiology** 1989 May;171(2):576–7
New universal precaution aspiration tray. Mueller PR, et al. **Radiology** 1989 Oct;173(1):278–9
Needles that kill: modeling human immunodeficiency virus transmission via shared drug injection equipment in shooting galleries [published erratum appears in Rev Infect Dis 1989 Jul–Aug;11(4):672] Kaplan EH. **Rev Infect Dis** 1989 Mar–Apr;11(2):289–98
The Chiba needle for percutaneous lung biopsy. Chin WS, et al. **Singapore Med J** 1988 Aug;29(4):371–3
New injection needle NM-4L/NM-9L. **Surg Endosc** 1987; 1(3):186
Comparison between the 21-gauge Urocut needle and the 21-gauge Surecut needle in echo-guided percutaneous biopsy of neoplastic liver lesions. Solmi L, et al. **Surg Endosc** 1989;3(1):38–41
Modified Deschamps needle for securing dorsal vein complex and urethra during radical retropubic prostatectomy. Goldwasser B, et al. **Urology** 1989 Apr;33(4):324–6
[A new technic of hepatectomy using peroperative echography and intraparenchymatous guide needles. The geometer technic] Hasegawa H, et al. **J Chir (Paris)** 1988 Oct;125(10):593–6 (Eng. Abstr.) **(Fre)**
[Atraumatic lumbar puncture using very fine needles (letter)] Corcos A, et al. **Presse Med** 1989 Apr 1;18(13):686 **(Fre)**
[Special cannulas for the puncture of implanted catheter port systems] Haindl H, et al. **Biomed Tech (Berlin)** 1989 Apr; 34(4):79–84 (Eng. Abstr.) **(Ger)**
[AIDS in the drug scene. Less needle sharing (news)] **Fortschr Med** 1989 Aug 10;107(23):16 **(Ger)**
[An atraumatic needle for the puncture of ports and pumps] Haindl H, et al. **Klin Wochenschr** 1988 Oct 17;66(20):1006–9 (Eng. Abstr.) **(Ger)**
[The relief of postspinal headache using the Whitacre cannula. Experimental studies] Kreuscher H, et al. **Reg Anaesth** 1989 May;12(3):43–5 (Eng. Abstr.) **(Ger)**
[The relief of postspinal headache using the Whitacre cannula. A clinical study] Kreuscher H, et al. **Reg Anaesth** 1989 May;12(3):46–9 (Eng. Abstr.) **(Ger)**
[Bladder calculus in a child caused by encrusted foreign body] Estel S. **Z Urol Nephrol** 1988 Aug;81(8):521–3 (Eng. Abstr.) **(Ger)**
[Subarachnoid anesthesia using a 25-gauge ultra-thin needle] Reggio S, et al. **Minerva Anestesiol** 1988 Jan–Feb; 54(1–2):9–12 (Eng. Abstr.) **(Ita)**
[The incidence of postural headache in in- and outpatients following lumbar myelography (needles of different gauges and headache)] Urso S, et al. **Radiol Med (Torino)** 1989 Mar;77(3):165–70 (Eng. Abstr.) **(Ita)**
[A method and clinical use of percutaneous drainage procedures using Chiba needle] Klamut M, et al. **Pol Przegl Radiol (Warszawa)** 1988 Jul–Oct;52(4–5):231–3 (Eng. Abstr.) **(Pol)**
[Modification of a needle for punctures of the arteries and central veins] Arengauz NM, et al. **Anesteziol Reanimatol** 1988 Nov–Dec;(6):65–6 **(Rus)**
[An injection needle for the endoscope] Solomatin AD, et al. **Khirurgiia (Mosk)** 1989 Feb;(2):114–5 **(Rus)**
[A needle for puncture of the central vein] Bitunov VA, et al. **Klin Khir** 1989;(1):71–2 **(Rus)**
[A puncture needle for simultaneous administration of drugs

and oxygen] Glivenko IuA. **Klin Khir** 1989;(1):69 **(Rus)**
[Development of airaumatic microneedles for use in ophthalmology] Frenkel' AG, et al. **Vestn Oftalmol** 1989 Jan-Feb;105(2):27-9 (Eng. Abstr.) **(Rus)**
[Treatment protocol for accidental puncture with syringe needles used by parenteral drug addicts] Elorza Arizmendi JF, et al. **An Esp Pediatr** 1989 Mar;30(3):201-5 **(Spa)**

ADVERSE EFFECTS

Avoiding needle-stick injuries [letter] Duffy B, et al. **Anaesth Intensive Care** 1989 Aug;17(3):385-6
Iatrogenic needle-induced peroneal neuropathy in the foot. Preston D, et al. **Ann Intern Med** 1988 Dec 1;109(11):921-2
Eliminating needle stick injuries [letter] Kempen PM. **Can J Anaesth** 1989 May;36(3 Pt 1):361-2
Needlesticks and HIV infection [editorial] Van Demark RE Sr. **S D J Med** 1989 Mar;42(3):15
[The Huber needle as a special cannula for the puncture of implanted ports and pumps--a mistake in multiple variations] Müller H, et al. **Klin Wochenschr** 1988 Oct 3; 66(19):963-9 (Eng. Abstr.) **(Ger)**

STANDARDS

A new quantitative measurement for surgical needle ductility. Abidin MR, et al. **Ann Emerg Med** 1989 Jan;18(1):64-8
Leakage from a caesium-137 needle [letter] Clarkson DG. **Br J Radiol** 1989 Jan;62(733):94
Use of a modified needle in antegrade transfemoral arterial approach for diagnostic and interventional procedures. Oestmann JW, et al. **Eur J Radiol** 1988 Nov;8(4):261-2
Ovarian stimulation with pure follicle-stimulating hormone/human menopausal gonadotropin and improved laparoscopic aspiration needles influence the success of an in vitro fertilization program. Eisermann J, et al. **Fertil Steril** 1989 Jan;51(1):112-6
Needlecaps with special provisions to prevent needlestick injuries [letter] Walterspiel JN. **Infect Control Hosp Epidemiol** 1988 Dec;9(12):529
Bacterial contamination of re-usable and disposable syringes and needles. Danchaivijitr S, et al. **J Med Assoc Thai** 1989 Jul;72 Suppl 2:26-8

SUPPLY & DISTRIBUTION

US cities struggle to implement needle exchanges despite apparent success in European cities [news] Raymond CA. **JAMA** 1988 Nov 11;260(18):2620-1

NEFA see **FATTY ACIDS, NONESTERIFIED**

NEFOPAM see under **OXAZOCINES**

NEGATIVE CONTRAST RADIOGRAPHY see **PNEUMORADIOGRAPHY**

NEGATIVE REINFORCEMENT see **REINFORCEMENT (PSYCHOLOGY)**

NEGATIVISM see under **DEFENSE MECHANISMS**

NEGATRONS see **ELECTRONS**

NEGROES see **BLACKS**

NEGROID RACE

Adolescent pregnancy and infant mortality: isolating the effects of race. Davis RA. **Adolescence** 1988 Winter; 23(92):899-908
Plasma levels of digitalis-like substance in Nigerians with essential hypertension. Osotimehin B, et al. **Afr J Med Med Sci** 1988 Dec;17(4):231-5
Chronologic aging in black skin. Herzberg AJ, et al. **Am J Dermatopathol** 1989 Aug;11(4):319-28
Racial differences in young children's blood pressure. Responses to dynamic exercise. Treiber FA, et al. **Am J Dis Child** 1989 Jun;143(6):720-3
Heightened risk of hypertension among black males: the masking effects of covariables. Winkleby MA, et al. **Am J Epidemiol** 1988 Nov;128(5):1075-83
Analysis of DNA polymorphism haplotypes linked to the cystic fibrosis locus in North American black and Caucasian families supports the existence of multiple mutations of the cystic fibrosis gene. Cutting GR, et al. **Am J Hum Genet** 1989 Mar;44(3):307-18
Genetic studies of human apolipoproteins. VII. Population distribution of polymorphisms of apolipoproteins A-I, A-II, A-IV, C-II, E, and H in Nigeria. Sepehrnia B, et al. **Am J Hum Genet** 1988 Dec;43(6):847-53
Differences of Ca2+ regulation between fibroblasts from blacks and whites. Nakamura A, et al. **Am J Hypertens** 1989 Feb;2(2 Pt 1):105-7
Renal disease in hypertensive adults: effect of race and type II diabetes mellitus. Tierney WM, et al. **Am J Kidney Dis** 1989 Jun;13(6):485-93
Prazosin versus hydrochlorothiazide as initial antihypertensive therapy in black versus white patients. Batey DM, et al. **Am J Med** 1989 Jan 23;86(1B):74-8
Temporal arteritis in blacks. Bielory L, et al. **Am J Med** 1989 Jun;86(6 Pt 1):707-8
Race and gender factors omitted from results [letter] Ansbacher R. **Am J Obstet Gynecol** 1989 Aug;161(2):502-3
Data sought to link adverse pregnancy outcome with maternal serum alpha-fetoprotein levels in black gravid women [letter] Lenke RR. **Am J Obstet Gynecol** 1989 Jul; 161(1):254-5
A cephalometric study of 32 North American black patients with anterior open bite. Jones OG. **Am J Orthod Dentofacial Orthop** 1989 Apr;95(4):289-96
Integumental profile changes after surgical orthodontic correction of bimaxillary dentoalveolar protrusion in black patients. O'Reilly MT. **Am J Orthod Dentofacial Orthop** 1989 Sep;96(3):242-8
Vertical dimensional changes of the lips in the North American black patient after four first-premolar extractions. Park S, et al. **Am J Orthod Dentofacial Orthop** 1989 Aug;96(2):152-60
The effect of a pattern in palmar interdigital III on a-b ridge count in black and white Down syndrome cases and controls. Davee MA, et al. **Am J Phys Anthropol** 1989 Mar; 78(3):439-47
Morphological and metrical comparison of San and Central Sotho dentitions from southern Africa. Haeussler AM, et al. **Am J Phys Anthropol** 1989 Jan;78(1):115-22
Small tooth sizes in a nineteenth century South Carolina plantation slave series. Harris EF, et al. **Am J Phys Anthropol** 1989 Mar;78(3):411-20
Tooth scaling and evolutionary dwarfism: an investigation of allometry in human pygmies. Shea BT, et al. **Am J Phys Anthropol** 1988 Sep;77(1):117-32
Breast cancer incidence in young women by estrogen receptor status and race. Stanford JL, et al. **Am J Public Health** 1989 Jan;79(1):71-3
Selected cephalometric angular norms in Kikuyu children. Kapila S. **Angle Orthod** 1989 Summer;59(2):139-44
Inherited patterned lentiginosis in blacks. O'Neill JF, et al. **Arch Dermatol** 1989 Sep;125(9):1231-5 (22 ref.)
Cutaneous responses to topical methyl nicotinate in black, oriental, and caucasian subjects. Gean CJ, et al. **Arch Dermatol Res** 1989;281(2):95-8
Focal segmental glomerulosclerosis. A common entity in nephrotic black adults. Bakir AA, et al. **Arch Intern Med** 1989 Aug;149(8):1802-4
Plasma lipids in patients with type I diabetes mellitus. Influence of race, gender, and plasma glucose control: lipids do not correlate with glucose control in black women. Semenkovich CF, et al. **Arch Intern Med** 1989 Jan; 149(1):51-6
Fuchs' heterochromic iridocyclitis in blacks. Tabbut BR, et al. **Arch Ophthalmol** 1988 Dec;106(12):1688-90
Platelet aggregations, fatty acids, clotting factors and serum lipids in rural and urban blacks, and urban whites in South Africa. Chetty N, et al. **Artery** 1988;15(5):234-49
Skin cancer in the North Solomons. Foster HM, et al. **Aust N Z J Surg** 1988 May;58(5):397-401
Bone mass, skin color and body size among black and white women. Nelson DA, et al. **Bone Miner** 1988 Jul;4(3):257-64
Alpha-L-fucosidase as a serum marker of hepatocellular carcinoma in southern African blacks. Bukofzer S, et al. **Br J Cancer** 1989 Mar;59(3):417-20
Bimaxillary proclination in patients of Afro-Caribbean origin. Carter NE, et al. **Br J Orthod** 1988 Aug;15(3):175-84 (37 ref.)
Zinc and cadmium concentrations in indigenous blacks with normal, hypertrophic, and malignant prostate. Ogunlewe JO, et al. **Cancer** 1989 Apr 1;63(7):1388-92
Racial differences in cancer incidence: the significance of age-specific patterns. Satariano WA, et al. **Cancer** 1988 Dec 15;62(12):2640-53 (36 ref.)
The prevalence of target organ damage in black hospitalized patients with severe hypertension--a retrospective study. Chikobvu EZ, et al. **Cent Afr J Med** 1988 Jan;34(1):1-4
Ulcerative proctocolitis in black Zimbabweans. Muguti GI. **Cent Afr J Med** 1989 Jan;35(1):300-3
Use of 86Rb and 22Na in assaying active and cotransport activities in human erythrocytes in a biracial population. Sharma C, et al. **Clin Chim Acta** 1988 Aug 31;176(2):133-42
Pigmentary disorders in black skin. Kenney JA Jr. **Clin Dermatol** 1989 Apr-Jun;7(2):1-10 (30 ref.)
The effect of hypertension, sodium, and race on isoproterenol sensitivity. Dimsdale J, et al. **Clin Exp Hypertens [A]** 1988; 10(5):747-56 (15 ref.)
Albinism and skin cancer in Southern Africa. Kromberg JG, et al. **Clin Genet** 1989 Jul;36(1):43-52
The pattern of leucocyte response to surgical trauma in the African Negro. Kehinde MO, et al. **Clin Lab Haematol** 1988;10(3):285-93
Effect of source of population data on phenytoin dosage predictions in black patients. Miller R, et al. **Clin Pharm** 1989 Jan;8(1):56-9
Basal cell carcinoma of the scalp in a black patient. Haber RS, et al. **Cutis** 1989 Jul;44(1):59-60
Tinea versicolor of the face in black children in a temperate region. Pontasch MJ, et al. **Cutis** 1989 Jan;43(1):81-4
Dermatology in black patients. **Dermatol Clin** 1988 Jul; 6(3):343-496
Contact dermatitis in blacks. Berardesca E, et al. **Dermatol Clin** 1988 Jul;6(3):363-8 (43 ref.)
Sexually transmitted diseases in blacks. Buntin DM. **Dermatol Clin** 1988 Jul;6(3):443-56 (59 ref.)
Pseudofolliculitis barbae and related disorders. Halder RM. **Dermatol Clin** 1988 Jul;6(3):407-12 (21 ref.)
Skin cancer in blacks in the United States. Halder RM, et al. **Dermatol Clin** 1988 Jul;6(3):397-405 (40 ref.)
Requirements in cosmetics for black skin. Johnson BA. **Dermatol Clin** 1988 Jul;6(3):489-92
Keloids. Kelly AP. **Dermatol Clin** 1988 Jul;6(3):413-24 (120 ref.)
Vitiligo. Kenney JA Jr. **Dermatol Clin** 1988 Jul;6(3):425-34
Cutaneous infections in blacks. Kpea NT, et al. **Dermatol Clin** 1988 Jul;6(3):475-88 (54 ref.)
Structure and function of the skin. Are there differences between black and white skin? McDonald CJ. **Dermatol Clin** 1988 Jul;6(3):343-7 (23 ref.)
Pediatric dermatology in black patients. McLaurin CI. **Dermatol Clin** 1988 Jul;6(3):457-73 (169 ref.)
AIDS in black patients. Penneys NS. **Dermatol Clin** 1988 Jul;6(3):435-42 (43 ref.)
Cosmetic surgery of black skin. Pierce HE Jr. **Dermatol Clin** 1988 Jul;6(3):377-85 (14 ref.)
Sebaceous gland activity in black skin. Pochi PE, et al. **Dermatol Clin** 1988 Jul;6(3):349-51
Disorders of the hair and scalp in blacks. Scott DA. **Dermatol Clin** 1988 Jul;6(3):387-95 (74 ref.)
Photosensitivity reactions in black skin. Willis I. **Dermatol Clin** 1988 Jul;6(3):369-75 (24 ref.)
Trans-racial studies implicate HLA-DQ as a component of genetic susceptibility to type 1 (insulin-dependent) diabetes. Fletcher J, et al. **Diabetologia** 1988 Dec;31(12):864-70
Moderate potassium supplementation: ineffective in black normotensives. Poulter NR, et al. **East Afr Med J** 1986 Dec;63(12):798-802
Schistosoma mansoni and other intestinal parasites in the Blue Nile Valley of Western Ethiopia. Gundersen SG, et al. **Ethiop Med J** 1988 Oct;26(4):157-65
Spirometric reference values in Senegalese black adults. Dufétel P, et al. **Eur Respir J** 1989 Apr;2(4):352-8
Morphology of the gastrocnemius muscle of the calf in men representing the white and black races. Klimek W, et al. **Folia Morphol (Warsz)** 1987;46(1-2):31-7
Ethnic variation in estrogen and progesterone receptor concentration in leiomyoma and normal myometrium. Sadan O, et al. **Gynecol Endocrinol** 1988 Dec;2(4):275-82
Psychophysiological reactivity to mental arithmetic stress in black and white normotensive men. Morell MA, et al. **Health Psychol** 1988;7(5):479-96
Hemoglobin variants in Mozambique. Colombo B, et al. **Hemoglobin** 1988;12(4):415-22
Hb F-Austell or alpha 2G gamma (2)40(C6)Arg-----Lys. Kutlar A, et al. **Hemoglobin** 1988;12(4):409-11
The association of hemoglobin SC disease and haptoglobin phenotypes. Ostrowski RS, et al. **Hemoglobin** 1988; 12(4):387-90
The role of membranous obstruction of the inferior vena cava in the etiology of hepatocellular carcinoma in Southern African blacks. Kew MC, et al. **Hepatology** 1989 Jan; 9(1):121-5
BamHI and SacI RFLPs of the human immunoglobulin IGHG genes with reference to the Gm polymorphism in African people. Evidence for a major polymorphism. Ghanem N, et al. **Hum Genet** 1989 Aug;83(1):37-44
Metoprolol alpha-hydroxylation polymorphism in the San Bushmen of southern Africa. Sommers DK, et al. **Hum Toxicol** 1989 Jan;8(1):39-43
Impact of race on treatment response and cardiovascular disease among hypertensives. Ooi WL, et al. **Hypertension** 1989 Sep;14(3):227-34
Influence of race, sex, and blood pressure on erythrocyte sodium transport in humans. Smith JB, et al. **Hypertension** 1988 Sep;12(3):251-8
Salt sensitivity in blacks. Salt intake and natriuretic substances. Sowers JR, et al. **Hypertension** 1988 Nov; 12(5):485-90
Controlling hypertensive disease and its complications among black Americans. Current challenges. Stamler J. **Hypertension** 1989 Sep;14(3):235-7
Spectrum of treadmill exercise responses in Africans with normotension, essential hypertension and hypertensive heart failure. Balogun MO, et al. **Int J Cardiol** 1988 Dec; 21(3):293-300
The relation of the true conjugate to maternal height and obstetric performance in Ghanaians. Adadevoh SW, et al. **Int J Gynaecol Obstet** 1989 Mar;28(3):243-51
Accuracy of prediction of gestational age by ultrasound measurement of biparietal diameter in Nigerian women. Okonofua FE, et al. **Int J Gynaecol Obstet** 1989 Mar; 28(3):217-9
Argon laser trabeculoplasty in primary open-angle glaucoma--results in black Jamaican population. Moriarty BJ, et al. **Int Ophthalmol** 1988;12(4):217-21
San people (bushmen) from the central Kalahari desert found free of antibodies to HIV-1 and HIV-2 [letter] Ebbesen P, et al. **J Acquir Immune Defic Syndr** 1989;2(4):415-6
Basal cell carcinoma at the base of the penis in a black patient. Greenbaum SS, et al. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 2):317-9
Evidence that obesity does not influence the vitamin D-endocrine system in blacks. Epstein S, et al. **J Bone Miner Res** 1986 Apr;1(2):181-4
Differences of Ca2+ regulation in skin fibroblasts from blacks and whites. Nakamura A, et al. **J Cell Physiol** 1989 Feb;138(2):367-74
Radial and vertebral bone density in white and black women: evidence for racial differences in premenopausal bone homeostasis. Luckey MM, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):762-70

A familial risk of chronic renal failure among blacks on dialysis? Ferguson R, et al. **J Clin Epidemiol** 1988; 41(12):1189–96

Inflammatory bowel disease in 64 black patients: analysis of course, complications, and surgery. Simsek H, et al. **J Clin Gastroenterol** 1989 Jun;11(3):294–8

Mannose-resistant hemagglutination of human erythrocytes by enterotoxigenic Escherichia coli with colonization factor antigen II. Evans DJ Jr, et al. **J Clin Microbiol** 1988 Sep;26(9):1626–9

The antihypertensive response to lisinopril: the effect of age in a predominantly black population. Cummings DM, et al. **J Clin Pharmacol** 1989 Jan;29(1):25–32

Differences in the Symptom Check List-90 profiles of black and white methadone patients. Platt JJ, et al. **J Clin Psychol** 1989 Mar;45(2):342–5

Hypertension in blacks: psychosocial and biological perspectives. Anderson NB, et al. **J Hypertens** 1989 Mar; 7(3):161–72 (123 ref.)

Varying responses to hypotensive agents in different racial groups: black versus white differences. Seedat YK. **J Hypertens** 1989 Jul;7(7):515–8

Visual evoked potentials in Negro carriers of the gene for tyrosinase positive oculocutaneous albinism. Castle D, et al. **J Med Genet** 1988 Dec;25(12):835–7

Highlights of a symposium. Hypertension: treatment factors in the management of the black patient. Los Angeles, California, July 29, 1988. **J Natl Med Assoc** 1989 Apr;81 Suppl:1–47

An ethnomedical analysis of hypertension among Detroit Afro-Americans. Bailey EJ. **J Natl Med Assoc** 1988 Oct; 80(10):1105–12

Anger expression and life stress among blacks: their role in physical health. Broman CL, et al. **J Natl Med Assoc** 1988 Dec;80(12):1329–34

Who and what is a black and why? [letter] Broomes EL. **J Natl Med Assoc** 1988 Feb;80(2):129

Red cell sodium and potassium in hypertension among blacks. Cooper R, et al. **J Natl Med Assoc** 1989 Apr;81(4):365–70

Racial differences in the etiology of dementia and frequency of Alzheimer lesions in the brain. de la Monte SM, et al. **J Natl Med Assoc** 1989 Jun;81(6):644–52

New Joint National Committee recommendations as they affect black hypertensive patients. Ferdinand KC. **J Natl Med Assoc** 1989 Apr;81 Suppl:31–40

Immunogenetic and racial determinants of gold toxicity in rheumatoid arthritis. Fraser PA, et al. **J Natl Med Assoc** 1988 Feb;80(2):162–5

Overweight and obesity in black women: a review of published data from the National Center for Health Statistics. Gillum RF. **J Natl Med Assoc** 1987 Aug; 79(8):865–71

Heart rate of black and white youths aged 12–17 years: associations with blood pressure and other cardiovascular risk factors. Gillum RF. **J Natl Med Assoc** 1988 Sep; 80(9):953–60

Assessment of potential for cancer control by Golden State Medical Association physicians. Glazer ER, et al. **J Natl Med Assoc** 1989 Apr;81(4):437–46

Glaucoma in the black population: a problem of blindness. Greenidge KC, et al. **J Natl Med Assoc** 1988 Dec; 80(12):1305–9

AIDS in the black community: public health implications. Joseph SC. **J Natl Med Assoc** 1988 Nov;80(11):1173–8

Variation in hypertension prevalence in elderly blacks in the United States: the effect of mortality trends. Kelly EL, et al. **J Natl Med Assoc** 1989 Feb;81(2):143–52

Community programs to increase hypertension control. Kong BW. **J Natl Med Assoc** 1989 Apr;81 Suppl:13–6

Management of essential hypertension in the black patient: profiling as the initial approach to treatment. Messerli FH. **J Natl Med Assoc** 1989 Jan;81(1):17–23 (63 ref.)

Infection with Trichomonas vaginalis in a black population. Miller JM, et al. **J Natl Med Assoc** 1989 Jun;81(6):701–2

Pattern of urolithiasis in Benin City, Nigeria. Monu JU. **J Natl Med Assoc** 1989 Jun;81(6):695–8

Coronary artery disease in black Americans 1920–1960: the shaping of medical opinion. Peniston RL, et al. **J Natl Med Assoc** 1989 May;81(5):591–5, 598–600 (56 ref.)

Diabetes mellitus in the African-American population [editorial] Peter SA. **J Natl Med Assoc** 1989 Feb; 81(2):115–6

Cystic fibrosis in blacks in Washington, DC: fifteen years' experience. Prapphal N, et al. **J Natl Med Assoc** 1989 Mar; 81(3):263–7

Epidemiologic factors in the management of hypertension. Saunders E. **J Natl Med Assoc** 1989 Apr;81 Suppl:5–11 (12 ref.)

Status of dental health in black and white Americans. Sinkford JC. **J Natl Med Assoc** 1988 Oct;80(10):1127–8, 1130–1

Failure of the cold pressor test to predict hypertension in black physicians: the Meharry Cohort Study. Thomas J, et al. **J Natl Med Assoc** 1988 Nov;80(11):1185–8

Investigational drugs for treatment use: an avenue of hope for minority populations. Veiga RV, et al. **J Natl Med Assoc** 1989 May;81(5):507–12 (22 ref.)

Physical activity and high-density lipoprotein cholesterol and subfractions among young black adults. Washburn RA, et al. **J Natl Med Assoc** 1987 Aug;79(8):843–8

Racial differences in the management of hypertension. Watkins LO. **J Natl Med Assoc** 1989 Apr;81 Suppl:17–24 (14 ref.)

Sociodemographic and health factors influencing black and Hispanic use of the hospital emergency room. White-Means SI, et al. **J Natl Med Assoc** 1989 Jan; 81(1):72–80

Treatment of hypercholesterolemia in black patients. Wright JT Jr, et al. **J Natl Med Assoc** 1988 Sep;80(9):961–9 (56 ref.)

Cephalometric norms for orthognathic surgery in black American adults. Flynn TR, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):30–9

Low body weight as a risk factor for hip fracture in both black and white women. Pruzansky ME, et al. **J Orthop Res** 1989;7(2):192–7

Effects of race and periodontal status on antibody reactive with Actinobacillus actinomycetemcomitans strain Y4. Gunsolley JC, et al. **J Periodont Res** 1988 Sep;23(5):303–7

The Yoruba contribution to our understanding of the twinning process. Creinin M, et al. **J Reprod Med** 1989 Jun;34(6):379–87 (34 ref.)

Increased frequencies of Sm and nRNP autoantibodies in American blacks compared to whites with systemic lupus erythematosus. Arnett FC, et al. **J Rheumatol** 1988 Dec; 15(12):1773–6

Cardiolipin antibodies and null alleles of C4 in black Americans with systemic lupus erythematosus. Wilson WA, et al. **J Rheumatol** 1988 Dec;15(12):1768–72

Complete C4B deficiency in black Americans with systemic lupus erythematosus. Wilson WA, et al. **J Rheumatol** 1988 Dec;15(12):1855–8

Spontaneous speaking fundamental frequency of 6-year-old black children. Wheat MC, et al. **J Speech Hear Res** 1988 Dec;31(4):723–5

Research seeks to reduce toll of hypertension, other cardiovascular diseases in black population [news] Kirn TF. **JAMA** 1989 Jan 13;261(2):195

Are racial differences in the prevalence of diabetes in adults explained by differences in obesity? O'Brien TR, et al. **JAMA** 1989 Sep 15;262(11):1485–8

Glaucoma and race [letter] Poinoosawmy D, et al. **Lancet** 1989 May 20;1(8647):1134

Low levels of high-affinity growth hormone-binding protein in African pygmies. Baumann G, et al. **N Engl J Med** 1989 Jun 29;320(26):1705–9

Differences in interleukin-2 production in blacks and whites [letter] Ganguli R, et al. **N Engl J Med** 1989 Feb 9; 320(6):399

Diminished rates of bone formation in normal black adults. Weinstein RS, et al. **N Engl J Med** 1988 Dec 29; 319(26):1698–701

IgA nephropathy in blacks and Indians of Natal. Seedat YK, et al. **Nephron** 1988;50(2):137–41

Stroke in the Lehigh Valley: racial/ethnic differences. Friday G, et al. **Neurology** 1989 Sep;39(9):1165–8

New TaqI RFLPs at the DXS52 (St14) locus in the black population. Barjon P, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2149

Diet, nutritional status, and cancer risk in American blacks. Hargreaves MK, et al. **Nutr Cancer** 1989;12(1):1–28 (102 ref.)

Breast lesions in black women. Kovi J, et al. **Pathol Annu** 1989;24 Pt 1:199–218 (71 ref.)

Primary vesicoureteral reflux in blacks with posterior urethral valves: does it occur? Nancarrow PA, et al. **Pediatr Radiol** 1988;19(1):31–5

Cleft lip with and without cleft palate in blacks: an analysis of 81 patients. Sullivan WG. **Plast Reconstr Surg** 1989 Sep; 84(3):406–8

Physician induced and patient induced utilization of early cancer detection practices among black Americans. Bloom JR, et al. **Prog Clin Biol Res** 1989;293:279–96

Race and platelet MAO activity in schizophrenic patients [letter] Meltzer HY. **Psychiatry Res** 1988 Dec;26(3):337

Predicting home and work blood pressure measurements from resting baselines and laboratory reactivity in black and white Americans. Ironson GH, et al. **Psychophysiology** 1989 Mar;26(2):174–84

Comparison of survival of black and white patients in each stage of Hodgkin's disease during 1970–1980. Routh A, et al. **Radiat Med** 1989 Jan-Feb;7(1):28–31

HLA and malaria in four Colombian ethnic groups. Restrepo M, et al. **Rev Inst Med Trop Sao Paulo** 1988 Sep-Oct; 30(5):323–31

Motor neuron disease in blacks. Epidemiological observations in Natal. Cosnett JE, et al. **S Afr Med J** 1989 Aug 19; 76(4):155–7

Systemic lupus erythematosus in black South Africans. Dessein PH, et al. **S Afr Med J** 1988 Oct 15;74(8):387–9 (25 ref.)

Incidence and causes of hyperthyroidism in blacks. Kalk WJ, et al. **S Afr Med J** 1989 Feb 4;75(3):114–7 (34 ref.)

Electrocardiograms of Bushman soldiers—the unusual is commonplace [letter] Kloppers PJ, et al. **S Afr Med J** 1989 Apr 1;75(7):351–2

Malignant hypertension and its renal complications in black South Africans. Milne FJ, et al. **S Afr Med J** 1989 Aug 19;76(4):164–7 (24 ref.)

Haematological reference values in adult blacks at sea level [letter] Morris CD, et al. **S Afr Med J** 1989 Jan 7;75(1):35–6

Hypertension, alcohol and cations in urban black and coloured South Africans. Touyz RM, et al. **S Afr Med J** 1989 Feb 4;75(3):109–13

Conjugated bile acid and cholesterol levels in pregnant Africans and Caucasians. Ekeke GI. **Scand J Gastroenterol Suppl** 1986;124:129–35

Dose response studies of gastric acid secretion in Nigerians using pentagastrin stimulation. Orjioke CJ, et al. **Scand J Gastroenterol Suppl** 1986;124:67–9

Risk factors for hepatitis B virus infection in black female attendees of a sexually transmitted disease clinic. Baddour LM, et al. **Sex Transm Dis** 1988 Jul-Sep;15(3):174–6

Health, apartheid and the frontline states. **Soc Sci Med** 1988; 27(7):661–745

Apartheid and health in the 1980s. Andersson N, et al. **Soc Sci Med** 1988;27(7):667–81 (72 ref.)

Health as a target: South Africa's destabilization of Mozambique. Cliff J, et al. **Soc Sci Med** 1988;27(7):717–22

The consequences of health service privatisation for equality and equity in health care in South Africa. Price M. **Soc Sci Med** 1988;27(7):703–16 (58 ref.)

Tuberculosis in the Western Cape health region of South Africa. Yach D. **Soc Sci Med** 1988;27(7):683–9 (27 ref.)

Health, apartheid and the Frontline States. Zwi A, et al. **Soc Sci Med** 1988;27(7):661–5 (20 ref.)

Hypertension: variations in prevalence in the black population. Kelly E, et al. **South Med J** 1989 Mar; 82(3):296–9

Infrequency of blacks among patients having carotid endarterectomy. Maxwell JG, et al. **Stroke** 1989 Jan; 20(1):22–6

Extracranial carotid atherosclerosis in black and white patients with transient ischemic attacks. Ryu JE, et al. **Stroke** 1989 Sep;20(9):1133–7

Renal transplant experience in black African patients, with special reference to early survival rates, donor availability and cytomegalovirus. Bauling PC, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2008–9

Renal transplantation in black South Africans: the Baragwanath experience. Modiba MC, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2010–1

Organ donation in three major US cities by race/ethnicity. Perez LM, et al. **Transplant Proc** 1988 Oct;20(5):815

[Transplacental passage of toxoplasma antibodies. The difference between African and European mothers] Richard-Lenoble D, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3):365–8 (Eng. Abstr.) **(Fre)**

[Georges Cuvier (1769–1832), his facial angle and the Hottentot Venus] Gysel C. **Orthod Fr** 1987;58 Pt 2:573–90 (Eng. Abstr.) **(Fre)**

[New ideas on the Ivory Coast typology] Roux H, et al. **Orthod Fr** 1987;58 Pt 2:543–7 **(Fre)**

[A matched study of Chagas' cardiopathy in Rio Grande do Sul, Brazil. Behavior of electrocardiographic changes according to the skin color] Baruffa G, et al. **Mem Inst Oswaldo Cruz** 1987 Jul-Sep;82(3):399–406 (Eng. Abstr.) **(Por)**

[Structure of the epidermis in people of various races (light and electron microscopic research)] Semkin VI, et al. **Izv Akad Nauk SSSR [Biol]** 1988 Jul-Aug;(4):517–23 (Eng. Abstr.) **(Rus)**

[Physico-chemical properties of head hair of people of European and Negroid races] Nikolaeva SS, et al. **Sud Med Ekspert** 1989 Apr-Jun;32(2):17–20 (Eng. Abstr.) **(Rus)**

[Study of transverse sections and pigment granules of the hair of persons of various nationalities] Pavlov IuV. **Sud Med Ekspert** 1989 Jan-Mar;32(1):35–6 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

Allocation and discrimination based on human odontometric data. Kieser JA, et al. **Am J Phys Anthropol** 1989 Jul; 79(3):331–7

GENETICS

Alpha-globin gene cluster haplotypes in the Kalahari San and southern African Bantu-speaking blacks. Ramsay M, et al. **Am J Hum Genet** 1988 Oct;43(4):527–33

Genetic studies on the Senegal population. I. Mitochondrial DNA polymorphisms. Scozzari R, et al. **Am J Hum Genet** 1988 Oct;43(4):534–44

Fragile X syndrome: linkage analysis in black and white populations. Schwartz CE, et al. **Am J Med Genet** 1988 May-Jun;30(1–2):531–42

Association of HLA-linked factor B with gestational diabetes mellitus in black women. Budowle B, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):805–6

Migration pattern and genetic marker distribution of the Afro-American population of Bluefields, Nicaragua. Biondi G, et al. **Ann Hum Biol** 1988 Nov-Dec;15(6):399–412

Cutaneous reaction patterns in blacks. McLaurin CI. **Dermatol Clin** 1988 Jul;6(3):353–62 (59 ref.)

Genetic studies of human apolipoproteins. VI. Common polymorphism of apolipoprotein E in blacks. Kamboh MI, et al. **Dis Markers** 1989 Jan-Mar;7(1):49–55

Genetic studies of low-abundance human plasma proteins. X. Coagulation factor XIIIB variants in blacks. Kamboh MI, et al. **Electrophoresis** 1989 Jan;10(1):53–7

Cystic fibrosis DNA markers in Alabama blacks. Martin RK, et al. **Genomics** 1988 Nov;3(4):385–8

BamHI and SacI RFLPs of the human immunoglobulin IGHG genes with reference to the Gm polymorphism in African people. Evidence for a major polymorphism.

Ghanem N, et al. **Hum Genet** 1989 Aug;83(1):37–44

The factor IX BamHI polymorphism: T–to–G transversion at the nucleotide sequence –561. The BamHI/MSPI haplotypes in blacks and Caucasians. Zhang M, et al. **Hum Genet** 1989 Jun;82(3):283–4

Further studies of the plasma alpha 1 B–glycoprotein polymorphism: two new alleles and allele frequencies in Caucasians and in American blacks. Juneja RK, et al. **Hum Hered** 1988;38(5):267–72

C4A gene deletion and HLA associations in black Americans with systemic lupus erythematosus. Olsen ML, et al. **Immunogenetics** 1989;30(1):27–33

Genotypes of the group–specific component protein in black intravenous drug abusers [letter] Levine B, et al. **J Infect Dis** 1989 Jan;159(1):147–8

Racial differences in stress–induced cardiovascular reactivity and hypertension: current status and substantive issues. Anderson NB. **Psychol Bull** 1989 Jan;105(1):89–105 (167 ref.)

Race, parental history of hypertension, and patterns of cardiovascular reactivity in women. Anderson NB, et al. **Psychophysiology** 1989 Jan;26(1):39–47

Lack of an association between carcinoma of the stomach and the major histocompatibility complex (HLA) in Cape Coloureds. Martell RW, et al. **Tissue Antigens** 1988 Sep; 32(3):150–4

HLA–DR3, DQ heterogeneity in American blacks is associated with susceptibility and resistance to insulin dependent diabetes mellitus. Dunston GM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):653–5

[Distribution of blood groups and hemoglobin S (sickle) as indices of negroid mixture in Diaguitas Indians of the Elqui and Limarí rivers valleys] Etcheverry R, et al. **Rev Med Chil** 1988 Jul;116(7):607–11 (Eng. Abstr.) **(Spa)**

[Abnormal hemoglobins in Negroid Ecuadorian populations] Jara NO, et al. **Sangre (Barc)** 1989 Feb;34(1):10–3 (Eng. Abstr.) **(Spa)**

HISTORY

Khoikhoi susceptibility to virgin soil epidemics in the 18th century. Smith AB. **S Afr Med J** 1989 Jan 7;75(1):25–6

NEIGHBORHOOD HEALTH CENTERS see **COMMUNITY HEALTH CENTERS**

NEISSERIA

Neisseria sicca pneumonia and bronchiectasis. Gris P, et al. **Eur Respir J** 1989 Jul;2(7):685–7

CLASSIFICATION

Unified nomenclature for pathogenic Neisseria species. Hitchcock PJ. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S64–5

Historical perspectives and identification of Neisseria and related species. Knapp JS. **Clin Microbiol Rev** 1988 Oct; 1(4):415–31 (106 ref.)

The phenotypic relationship of Neisseria polysaccharea to commensal and pathogenic Neisseria spp. Cann KJ, et al. **J Med Microbiol** 1989 Aug;29(4):251–4

[Neonatal meningitis caused by Neisseria subflava] Martínez Tallo E, et al. **An Esp Pediatr** 1988 Dec;29(6):475–6 **(Spa)**

DRUG EFFECTS

Tetracycline resistance and TetM in oral anaerobic bacteria and Neisseria perflava–N. sicca. Roberts MC, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1271–3

[Tetracycline resistance and beta–lactamase production in pharyngeal commensal Neisseria] Prère MF, et al. **Pathol Biol (Paris)** 1988 Jun;36(5 Pt 2):643–6 (Eng. Abstr.) **(Fre)**

ENZYMOLOGY

Neisseria perflava amylosucrase: characterization of its product polysaccharide and a study of its inhibition by sucrose derivatives. Tao BY, et al. **Carbohydr Res** 1988 Oct 1;181:163–74

GENETICS

Transfer of beta–lactamase plasmids from Neisseria gonorrhoeae to Neisseria meningitidis and commensal Neisseria species by the 25.2–megadalton conjugative plasmid. Roberts MC, et al. **Antimicrob Agents Chemother** 1988 Sep;32(9):1430–2

Beta–lactamase plasmids and chromosomally mediated antibiotic resistance in pathogenic Neisseria species. Dillon JA, et al. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S125–33 (81 ref.)

Plasmids of Neisseria gonorrhoeae and other Neisseria species. Roberts MC. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S18–23 (43 ref.)

Cloning, purification and characterization of the M.NdeI methyltransferase from Neisseria denitrificans. Silber KR, et al. **Gene** 1988 Dec 25;74(1):43–4

GROWTH & DEVELOPMENT

Selective medium for Branhamella catarrhalis with acetazolamide as a specific inhibitor of Neisseria spp. Vaneechoutte M, et al. **J Clin Microbiol** 1988 Dec; 26(12):2544–8

IMMUNOLOGY

Animal models for pathogenic Neisseria species. Arko RJ. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S56–9 (53 ref.)

Conserved lipoproteins of pathogenic Neisseria species bearing the H.8 epitope: lipid–modified azurin and H.8 outer membrane protein. Cannon JG. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S1–4 (31 ref.)

Genetic mechanisms and biological implications of phase variation in pathogenic neisseriae. Meyer TF, et al. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S139–45 (63 ref.)

Neisseria lactamica and Neisseria meningitidis share lipooligosaccharide epitopes but lack common capsular and class 1, 2, and 3 protein epitopes. Kim JJ, et al. **Infect Immun** 1989 Feb;57(2):602–8

Detection of antibodies to common antigens of pathogenic and commensal Neisseria species. Cann KJ, et al. **J Med Microbiol** 1989 Sep;30(1):23–31

Characterization of the neisserial lipid–modified azurin bearing the H.8 epitope. Woods JP, et al. **Mol Microbiol** 1989 May;3(5):583–91

ISOLATION & PURIFICATION

More attention to meningococci. Koukalová D, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;119:269–74

A case of polymicrobial infective endocarditis involving Neisseria mucosa occurring in an intravenous drug abuser. Giles MW, et al. **Aust N Z J Med** 1988 Dec;18(7):874–6

Bartholin's gland abscess caused by Neisseria sicca. Berger SA, et al. **J Clin Microbiol** 1988 Aug;26(8):1589

Isolation of Neisseria canis in mixed culture from a patient after a cat bite. Guibourdenche M, et al. **J Clin Microbiol** 1989 Jul;27(7):1673–4

Identification of Neisseria spp., Haemophilus spp., and other fastidious gram–negative bacteria with the MicroScan Haemophilus–Neisseria identification panel. Janda WM, et al. **J Clin Microbiol** 1989 May;27(5):869–73

METABOLISM

Microcalorimetric determination of the kinetics of substrate utilisation by non–growing suspensions of Neisseria sicca. Nafi BM, et al. **Microbios** 1988;54(218):15–21

PATHOGENICITY

Virulence functions and antigen variation in pathogenic Neisseriae. Meyer TF, et al. **Antonie Van Leeuwenhoek** 1988;54(5):421–30 (40 ref.)

Endocarditis due to Neisseria mucosa complicated by myocardial abscess [letter] Fernández–Guerrero ML, et al. **J Infect** 1989 May;18(3):294–5

A potential role for the major iron–regulated protein expressed by pathogenic Neisseria species. Morse SA, et al. **Rev Infect Dis** 1988 Jul–Aug;10 Suppl 2:S306–10 (32 ref.)

[Pathogenic neisseriae—model of bacterial virulence and genetic flexibility] Meyer TF. **Immun Infekt** 1989 Aug; 17(4):113–23 (95 ref.) (Eng. Abstr.) **(Ger)**

ULTRASTRUCTURE

Structure and function of pili of pathogenic Neisseria species. Heckels JE. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S66–73 (75 ref.)

Lipooligosaccharides: the principal glycolipids of the neisserial outer membrane. Griffiss JM, et al. **Rev Infect Dis** 1988 Jul–Aug;10 Suppl 2:S287–95 (46 ref.)

NEISSERIA GONORRHOEAE

ANALYSIS

Purification of outer membrane proteins of the gram–negative bacterium Neisseria gonorrhoeae. Judd RC. **Anal Biochem** 1988 Sep;173(2):307–16

The application of high resolution two–dimensional polyacrylamide gel electrophoresis to the identification and purification of a protein, NG8.4, present in Neisseria gonorrhoea and the subsequent development of a radioimmunoassay. Jackson P, et al. **Electrophoresis** 1989 Jul;10(7):456–63

Purification of protein IA from Neisseria gonorrhoeae using monoclonal antibody affinity chromatography. Schmitt S, et al. **Microb Pathog** 1987 Sep;3(3):221–5

Surface immunolabeling of Neisseria gonorrhoeae employing monoclonal antibodies to proteins IA and IB. Layh G, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Jul; 269(1):34–42

CLASSIFICATION

Molecular epidemiology of gonorrhea. Sarafian SK, et al. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S49–55 (75 ref.)

Sampling methods for monitoring changes in gonococcal populations. Bindayna KM, et al. **Epidemiol Infect** 1989 Aug;103(1):203–9

Characterisation by plasmid profiles, serogroups, and auxotypes of Neisseria gonorrhoeae from Harare, Zimbabwe. Mason PR, et al. **Genitourin Med** 1988 Oct; 64(5):303–7

Serological classification in relation to auxotypes, plasmid contents, and susceptibilities to antimicrobials of PPNG and non–PPNG strains isolated in Greece. Tzanakaki G, et al. **Genitourin Med** 1989 Jun;65(3):171–6

Associations between serotype and susceptibility to antibiotics of Neisseria gonorrhoeae. Woodford N, et al. **Genitourin Med** 1989 Apr;65(2):86–91

Epidemiologic evidence for the development of serovar–specific immunity after gonococcal infection. Plummer FA, et al. **J Clin Invest** 1989 May;83(5):1472–6

Comparison of isolates of Neisseria gonorrhoeae causing meningitis and report of gonococcal meningitis in a patient with C8 deficiency. Del Rio C, et al. **J Clin Microbiol** 1989 May;27(5):1045–9

Genital gonorrhoea in women: a serovar correlation with concomitant rectal infection. Coghill DV, et al. **J Infect** 1989 Mar;18(2):131–41

Laboratory methods for the detection and phenotypic characterization of Neisseria gonorrhoeae strains resistant to antimicrobial agents. Knapp JS. **Sex Transm Dis** 1988 Oct–Dec;15(4):225–33 (86 ref.)

Monoclonal antibodies to protein I for serotyping of Neisseria gonorrhoeae: correlation of serotype with bactericidal activity. Kohl PK, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Mar; 270(4):517–26

[Lectin typing as an efficient epidemiological marker system for Neisseria gonorrhoeae infections] Korting HC, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(4):506–12 (Eng. Abstr.) **(Ger)**

DRUG EFFECTS

Antimicrobial susceptibility testing of Haemophilus influenzae, Branhamella catarrhalis, and Neisseria gonorrhoeae. Doern GV, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1747–53 (68 ref.)

Susceptibility to cephalosporins of penicillin–susceptible and penicillin–resistant strains of Neisseria gonorrhoeae from Philadelphia. Fekete T, et al. **Antimicrob Agents Chemother** 1989 Feb;33(2):164–6

Comparison of broth microdilution and agar dilution for susceptibility testing of Neisseria gonorrhoeae. Geers TA, et al. **Antimicrob Agents Chemother** 1989 Feb;33(2):233–4

The in vitro activity of norfloxacin, ofloxacin and ciprofloxacin and other antibiotics in current use against Neisseria gonorrhoeae. Melby K, et al. **APMIS** 1989 Apr; 97(4):347–50

Influence of various concentrations of cefotiam and ceftizoxime on the phagocytosis of gonococci by polymorphonuclear granulocytes. Korting HC, et al. **Arzneimittelforschung** 1989 Apr;39(4):428–31

Bactericidal effect of cefodizime against beta–lactamase–producing Neisseria gonorrhoeae in vitro. A comparison of level profiles in serum and tissue after intramuscular and intravenous administration in man. Korting HC, et al. **Arzneimittelforschung** 1989 Jan; 39(1):31–3

Survey of antimicrobial susceptibility in Neisseria gonorrhoeae in a non–STD population in Ontario. Loo VG, et al. **Can Dis Wkly Rep** 1989 Feb 18;15(7):33–4 **(Eng, Fre)**

Emergence of spectinomycin–resistant strains of penicillinase–producing Neisseria gonorrhoeae (PPNG) – Quebec. Rousseau D, et al. **Can Dis Wkly Rep** 1989 May 13;15(19):101–2; discussion 102–3 **(Eng, Fre)**

Activity of Ro 236240, Ro 158074 and Ro 195247 against resistant gonococci. Easmon CS, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):156

ATB MIC API system for Neisseria gonorrhoeae. Prère M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):9–11

In vitro activity of six quinolone derivatives against Neisseria gonorrhoeae. Lefèvre JC, et al. **Chemotherapy** 1988; 34(4):315–7

Antimicrobial agent resistance in Neisseria gonorrhoeae in St. Paul Minnesota. Lally RT, et al. **Diagn Microbiol Infect Dis** 1988 May;10(1):49–55

Comparative in vitro activity of norfloxacin against resistant Neisseria gonorrhoeae. Ponticas S, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jul;8(7):626–8

In vitro activity of eight antimicrobial agents against non–penicillinase–producing gonococci isolated in Munich. Abeck D, et al. **Genitourin Med** 1988 Aug;64(4):233–4

Decreased in vitro susceptibility of penicillinase producing Neisseria gonorrhoeae to spectinomycin in Hong Kong [letter] Fung HW, et al. **Genitourin Med** 1989 Apr;65(2):129

Media constituents affecting colony morphology in Neisseria gonorrhoeae. Saikh KU, et al. **Indian J Med Res** 1988 Jun; 87:565–9

Tetracycline–resistant Neisseria gonorrhoeae. Heritage J, et al. **J Antimicrob Chemother** 1988 Nov;22(5):575–9 (40 ref.)

In–vitro activity of ofloxacin against isolates of Neisseria gonorrhoeae. McEwen A, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:21–5

The effect of media on antimicrobial susceptibility testing of Neisseria gonorrhoeae. Woodford N, et al. **J Antimicrob Chemother** 1988 Oct;22(4):463–71

Rapid chemiluminescent nucleic acid assays for detection of TEM–1 beta–lactamase–mediated penicillin resistance in Neisseria gonorrhoeae and other bacteria. Sanchez–Pescador R, et al. **J Clin Microbiol** 1988 Oct; 26(10):1934–8

Susceptibility testing of Neisseria gonorrhoeae to penicillin and spectinomycin in a diagnostic laboratory. Gill MJ, et

al. **J Clin Pathol** 1988 Sep;41(9):978–82

Lipopolysaccharide masking of gonococcal outer-membrane proteins modulates binding of bacterial cathepsin G to gonococci. Shafer WM. **J Gen Microbiol** 1988 Mar;134 (Pt 3):539–45

Determinants of emergence of antibiotic-resistant Neisseria gonorrhoeae. Hook EW 3d, et al. **J Infect Dis** 1989 May; 159(5):900–7

Predominance of vancomycin-sensitive strains of Neisseria gonorrhoeae in Djibouti [letter] Haberberger RL Jr, et al. **Lancet** 1989 Sep 16;2(8664):683

The biochemical basis for growth inhibition by L-phenylalanine in Neisseria gonorrhoeae. Bhatnagar RK, et al. **Mol Microbiol** 1989 Mar;3(3):429–35

Tetracycline-resistant Neisseria gonorrhoeae. **N Y State J Med** 1988 Dec;88(12):665–6

High-level penicillin-resistant gonococcal infections in Port Elizabeth. Meiring JA, et al. **S Afr Med J** 1989 Feb 4; 75(3):118–9

Ciprofloxacin versus amoxycillin and probenecid in the treatment of uncomplicated gonorrhoea. Lassus A, et al. **Scand J Infect Dis Suppl** 1989;60:58–61

Antimicrobial susceptibility of Neisseria gonorrhoeae isolates from a military population in San Diego. Papadimos TJ, et al. **Sex Transm Dis** 1988 Oct-Dec;15(4):196–9

Trends in resistance of Neisseria gonorrhoeae to antimicrobial agents in the United States. Whittington WL, et al. **Sex Transm Dis** 1988 Oct-Dec;15(4):202–10 (69 ref.)

[Surveillance of Neisseria gonorrhoeae strains isolated in Toulouse. In vitro antibiotic sensitivity and plasmid content] Lefevre JC, et al. **Pathol Biol (Paris)** 1988 Jun; 36(5 Pt 2):635–8 (Eng. Abstr.) **(Fre)**

[In vitro sensitivity of Neisseria gonorrhoeae to 10 antibiotics and response of gonococcal urethritis to rifampicin] Alessi E, et al. **G Ital Dermatol Venereol** 1988 Oct;123(10):505–7 (Eng. Abstr.) **(Ita)**

[In vitro effect of nonoxynol-9 on herpes virus 1 and 2 and on other sexually transmitted micro-organisms] Del Piano M, et al. **Minerva Ginecol** 1988 Dec;40(12):709–14 (Eng. Abstr.) **(Ita)**

[Overcoming the penicillin resistance of the causative agent of gonorrhea] Glozman VN. **Vestn Dermatol Venerol** 1988; (10):57–8 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

DNA restriction and modification systems in Neisseria gonorrhoeae. Davies JK. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S78–82 (25 ref.)

Multiple restriction-modification systems in Neisseria gonorrhoeae. Duff MK, et al. **Gene** 1988 Dec 25; 74(1):227–8 (7 ref.)

Neisseria gonorrhoeae M.Ngo AI DNA methyltransferase: physical and catalytic properties of the homogeneous enzyme. Piekarowicz A, et al. **Gene** 1988 Dec 25;74(1):93–7

Identification of subunits of gonococcal RNA polymerase by immunoblot analysis: evidence for multiple sigma factors. Klimpel KW, et al. **J Bacteriol** 1989 Jul; 171(7):3713–8

Analysis of an outbreak of penicillinase-producing Neisseria gonorrhoeae in Rhode Island, 1987. Debuono BA, et al. **J Clin Microbiol** 1989 Sep;27(9):2125–7

Production and isolation of neissereal IgA proteases. Plaut AG. **Methods Enzymol** 1988;165:117–20

A cluster of cases of penicillinase-producing Neisseria gonorrhoeae in an adolescent detention center. Alcabes P, et al. **N Y State J Med** 1988 Sep;88(9):495–6

Characterization of a restriction enzyme from a strain of Neisseria gonorrhoea which recognizes 5'G/CCGGC3', an isoschizomer of NaeI. Hammond AW, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3320

Characterization of NgoAIII, an isoschizomer of SstII from a strain of Neisseria gonorrhoea. Hammond AW, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6750

Identification of a new restriction endonuclease, R.NgoBI, from Neisseria gonorrhoeae. Piekarowicz A, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9868

Penicillinase-producing Neisseria gonorrhoeae in various seaport cities of Latin America. Escamilla J, et al. **Sex Transm Dis** 1988 Jul-Sep;15(3):141–3

A penicillinase test incorporated in the rapid carbohydrate fermentation method for rapid detection of beta-lactamase producing Neisseria gonorrhoeae. Lesmana M, et al. **Southeast Asian J Trop Med Public Health** 1989 Mar; 20(1):147–51

[Penicillinase-producing Neisseria gonorrhoeae isolated in Lisbon 1982–1987] Vaz Pato MV, et al. **Pathol Biol (Paris)** 1988 Jun;36(5 Pt 2):639–42 (Eng. Abstr.) **(Fre)**

[Transport Na+,K+-ATPase of gonococci and neutrophilic leukocytes] Dmitriev GA, et al. **Izv Akad Nauk SSSR [Biol]** 1988 Jul-Aug;(4):622–5 (Eng. Abstr.) **(Rus)**

[Beta-lactamase-producing Neisseria gonorrhoeae and its antimicrobial susceptibility in Valdivia] Otth L, et al. **Rev Med Chil** 1987 Oct;115(10):956–9 (Eng. Abstr.) **(Spa)**

GENETICS

Differential effects of DNA gyrase inhibitors on the genetic transformation of Neisseria gonorrhoeae. Parham C, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1788–92

Transfer of beta-lactamase plasmids from Neisseria gonorrhoeae to Neisseria meningitidis and commensal Neisseria species by the 25.2-megadalton conjugative plasmid. Roberts MC, et al. **Antimicrob Agents Chemother** 1988 Sep;32(9):1430–2

Mutation in a locus linked to penB-nmp causes suppression of the Mtr phenotype of Neisseria gonorrhoeae [published erratum appears in Antimicrob Agnets Chemother 1988 Nov;32(11):1746] Shinners EN, et al. **Antimicrob Agents Chemother** 1988 Jul;32(7):971–7

Genetics of surface protein variation in Neisseria gonorrhoeae. Murphy GL, et al. **Bioessays** 1988 Jul; 9(1):7–11 (30 ref.)

Phase variation of gonococcal protein II: regulation of gene expression by slipped-strand mispairing of a repetitive DNA sequence. Murphy GL, et al. **Cell** 1989 Feb 24; 56(4):539–47

Gene transfer in Neisseria gonorrhoeae. Biswas GD, et al. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S24–8 (45 ref.)

Plasmids of Neisseria gonorrhoeae and other Neisseria species. Roberts MC. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S18–23 (43 ref.)

Introduction of cloned genes into Neisseria gonorrhoeae. Stein DC. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S146–9 (33 ref.)

Genetic loci and linkage associations in Neisseria gonorrhoeae and Neisseria meningitidis. West SE, et al. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S92–103 (126 ref.)

Pilin expression in Neisseria gonorrhoeae is under both positive and negative transcriptional control. Taha MK, et al. **EMBO J** 1988 Dec 20;7(13):4367–78

Plasmid content, serotypes, and antimicrobial susceptibility of Neisseria gonorrhoeae strains isolated in Munich in 1987–88. Abeck D, et al. **Eur J Epidemiol** 1989 Jun; 5(2):170–2

Genotypes and phenotypes of beta lactamase producing strains of Neisseria gonorrhoeae from African countries. Falk ES, et al. **Genitourin Med** 1988 Aug;64(4):226–32

Cloning and DNA sequence of the omc gene encoding the outer membrane protein-macromolecular complex from Neisseria gonorrhoeae. Tsai WM, et al. **Infect Immun** 1989 Sep;57(9):2653–9

A novel gonococcal beta-lactamase plasmid. Brett M. **J Antimicrob Chemother** 1989 Apr;23(4):653–4

Conjugal transfer of penicillin resistance plasmids to proline-citrulline-uracil dependent strains of Neisseria gonorrhoeae. Mavrommati L, et al. **J Antimicrob Chemother** 1989 Mar;23(3):335–9

Transformation-deficient mutants of piliated Neisseria gonorrhoeae. Biswas GD, et al. **J Bacteriol** 1989 Feb; 171(2):657–64

Cloning and organization of seven arginine biosynthesis genes from Neisseria gonorrhoeae. Picard FJ, et al. **J Bacteriol** 1989 Mar;171(3):1644–51

The construction and characterization of Neisseria gonorrhoeae lacking protein III in its outer membrane. Wetzler LM, et al. **J Exp Med** 1989 Jun 1;169(6):2199–209

Isolation of a species-specific DNA probe for Neisseria gonorrhoeae using a novel technique particularly suitable for use with closely related species displaying high levels of DNA homology. Donegan JJ, et al. **Mol Cell Probes** 1989 Mar;3(1):13–26

The specificity of pilin DNA sequences for the detection of pathogenic Neisseria. Kolberg JA, et al. **Mol Cell Probes** 1989 Mar;3(1):59–72

Nucleotide sequence and genetic organization of the NgoPII restriction-modification system of Neisseria gonorrhoeae. Sullivan KM, et al. **Mol Gen Genet** 1989 Apr; 216(2-3):380–7

The virulence-associated gonococcal H.8 gene encodes 14 tandemly repeated pentapeptides. Baehr W, et al. **Mol Microbiol** 1989 Jan;3(1):49–55

Expression and phase variation of gonococcal P.II genes in Escherichia coli involves ribosomal frameshifting and slipped-strand mispairing. Belland RJ, et al. **Mol Microbiol** 1989 Jun;3(6):777–86

Penicillin-binding protein 2 genes of non-beta-lactamase-producing, penicillin-resistant strains of Neisseria gonorrhoeae. Dowson CG, et al. **Mol Microbiol** 1989 Jan;3(1):35–41

Expression of gonococcal protein II in Escherichia coli by translational fusion. Palmer L, et al. **Mol Microbiol** 1989 May;3(5):663–71

Nucleotide sequence of the structural gene for class I pilin from Neisseria meningitidis: homologies with the pilE locus of Neisseria gonorrhoeae. Potts WJ, et al. **Mol Microbiol** 1988 Sep;2(5):647–53

Three copies of a single protein II-encoding sequence in the genome of Neisseria gonorrhoeae JS3: evidence for gene conversion and gene duplication. van der Ley P. **Mol Microbiol** 1988 Nov;2(6):797–806

Conserved lipoprotein H.8 of pathogenic Neisseria consists entirely of pentapeptide repeats. Woods JP, et al. **Mol Microbiol** 1989 Jan;3(1):43–8

Reassortment of pilin genes in Neisseria gonorrhoeae occurs by two distinct mechanisms. Gibbs CP, et al. **Nature** 1989 Apr 20;338(6217):651–2

DNA transformation leads to pilin antigenic variation in Neisseria gonorrhoeae. Seifert HS, et al. **Nature** 1988 Nov 24;336(6197):392–5

Nucleotide sequence of the penicillin-binding protein 2 gene of Neisseria meningitidis. Zhang QY, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5383

Construction of miniplasmids from the 7.2-kb and 5.1-kb penicillinase-producing plasmids of Neisseria gonorrhoeae reveals two replication regions. Yeung KH, et al. **Plasmid** 1988 Nov;20(3):232–40

Antibiotic resistance in Neisseria gonorrhoeae: genetics and mechanisms of resistance. Johnson SR, et al. **Sex Transm Dis** 1988 Oct-Dec;15(4):217–24 (67 ref.)

Frequency in the United States of non-beta-lactamase-producing strains of Neisseria gonorrhoeae possessing the 24.5-Mdal conjugative plasmid. Knapp JS, et al. **Sex Transm Dis** 1989 Apr-Jun;16(2):79–83

Transfer frequency of various 25.2 Mdal tetracycline resistance plasmids in Neisseria gonorrhoeae. Roberts MC, et al. **Sex Transm Dis** 1989 Apr-Jun;16(2):91–4

Penicillinase-producing Neisseria gonorrhoeae in Dade County, Florida: phenotypic characterization of isolates from 1983, 1984, and 1986. Zenilman JM, et al. **Sex Transm Dis** 1988 Jul-Sep;15(3):158–63

GROWTH & DEVELOPMENT

Competition between Neisseria gonorrhoeae and Staphylococcus epidermidis during iron-limited or replete continuous culture. Keevil CW, et al. **FEMS Microbiol Lett** 1989 May;50(1-2):83–6

Effects of amino acids on colony phenotype of Neisseria gonorrhoeae. Saikh KU, et al. **J Clin Microbiol** 1989 May; 27(5):1090–4

[New procedure for transport and enrichment for improving the culture evidence of Neisseria gonorrhoeae] Gernand K, et al. **Z Med Lab Diagn** 1988;29(5):291–2 **(Ger)**

IMMUNOLOGY

Interaction of complement with Neisseria meningitidis and Neisseria gonorrhoeae. Densen P. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S11–7 (52 ref.)

Interactions of Neisseria gonorrhoeae with human neutrophils. Rest RF, et al. **Clin Microbiol Rev** 1989 Apr; 2 Suppl:S83–91 (136 ref.)

Molecular basis for serum resistance in Neisseria gonorrhoeae. Rice PA. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S112–7 (63 ref.)

Interaction of Neisseria gonorrhoeae with classical complement components, C1-inhibitor, and a monoclonal antibody directed against the Neisserial H.8 antigen. Schweinle JE, et al. **J Clin Invest** 1989 Feb;83(2):397–403

Serum antibody response to the 70,000-molecular-weight neisserial common antigen in humans infected by Neisseria gonorrhoeae. Aoun L, et al. **J Clin Microbiol** 1988 Sep; 26(9):1898–900

Class specific antibody response to gonococcal infection. Miettinen A, et al. **J Clin Pathol** 1989 Jan;42(1):72–6

Characterization and specificity of antibodies to protein I of Neisseria gonorrhoeae produced by injection with various protein I-adjuvant preparations. Wetzler LM, et al. **J Exp Med** 1988 Nov 1;168(5):1883–97

The production and characterization of monoclonal antibodies against the protein III of Neisseria gonorrhoeae. Copley CG, et al. **J Gen Microbiol** 1988 Apr;134 (Pt 4):1005–8

Antibodies to the C epitope of Neisseria gonorrhoeae are present in patients with gonorrhoea and absent in normal sera. Demarco de Hormaeche R, et al. **J Gen Microbiol** 1988 May;134 (Pt 5):1289–97

Nonbactericidal antibodies against Neisseria gonorrhoeae: evaluation of their blocking effect on bactericidal antibodies directed against outer membrane antigens. Virji M, et al. **J Gen Microbiol** 1988 Oct;134 (Pt 10):2703–11

Resistance of mice to genital infection with Neisseria gonorrhoeae. Johnson AP, et al. **J Med Microbiol** 1989 Sep;30(1):33–6

Presence of antibodies to the major anaerobically induced gonococcal outer membrane protein in sera from patients with gonococcal infections. Clark VL, et al. **Microb Pathog** 1988 Nov;5(5):381–90

Gonococcal variants selected by growth in vivo or in vitro have antigenically different LPS. Demarco de Hormaeche R, et al. **Microb Pathog** 1988 Apr;4(4):289–97

Structural and functional modulation of gonococcal surface proteins. Gibbs C, et al. **Microb Pathog** 1988 Jun;4(6):393–9 (32 ref.)

Complement binding on serum-sensitive and serum-resistant transformants of Neisseria gonorrhoeae: effect of presensitization with a non-bactericidal monoclonal antibody. Joiner KA, et al. **Microb Pathog** 1989 May; 6(5):343–50

Cytidine 5'-monophospho-N-acetyl neuraminic acid and a low molecular weight factor from human blood cells induce lipopolysaccharide alteration in gonococci when conferring resistance to killing by human serum. Parsons NJ, et al. **Microb Pathog** 1988 Oct;5(4):303–9

Immunization of guinea pigs with epitope C-rich lipopolysaccharide from Neisseria gonorrhoea; in vivo selection of gonococcal variants. Senior KE, et al. **Microb Pathog** 1989 Apr;6(4):251–64

Ultrastructural localization of gonococcal antigens in infected epithelial cells as visualized by post-embedding immuno-electronmicroscopy. Weel JF, et al. **Microb Pathog** 1988 Mar;4(3):213–22

Epitope expression of gonococcal lipooligosaccharide (LOS). Importance of the lipoidal moiety for expression of an

epitope that exists in the oligosaccharide moiety of LOS. Yamasaki R, et al. **Mol Immunol** 1988 Aug;25(8):799–809
Topographical alterations in proteins I of Neisseria gonorrhoeae correlated with lipooligosaccharide variation. Judd RC, et al. **Mol Microbiol** 1989 May;3(5):637–43
Probing the surface of Neisseria gonorrhoeae: immunoelectron microscopic studies to localize cyanogen bromide fragment 2 in gonococcal pili. Robinson EN Jr, et al. **Mol Microbiol** 1989 Jan;3(1):57–64
Structure and heterogeneity of the oligosaccharides from the lipopolysaccharides of a pyocin-resistant Neisseria gonorrhoeae. Gibson BW, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):17–21
[Increased phagocytosis of N. gonorrhoeae by human granulocytes in vitro after addition of cervicovaginal secretions or serum from patients with gonorrhoea] Koch HJ, et al. **Allerg Immunol (Leipz)** 1988;34(4):261–7 (Eng. Abstr.) **(Ger)**
[Studies on the detection of antibodies to Neisseria gonorrheae using pilus antigen] Ziems KD, et al. **Dermatol Monatsschr** 1989;175(3):163–9 (Eng. Abstr.) **(Ger)**
[Detection of antibodies to Neisseria gonorrhoeae in cervicovaginal secretion and in serum] Koch HJ, et al. **Z Hautkr** 1988 Nov 15;63(11):897–8, 905–6 (Eng. Abstr.) **(Ger)**
[Immunobiologic aspects of Neisseria gonorrhoeae] Kohl PK. **Z Hautkr** 1989 Mar 15;64(3):218–22 (17 ref.) (Eng. Abstr.) **(Ger)**

ISOLATION & PURIFICATION

Emergence of spectinomycin-resistant strains of penicillinase-producing Neisseria gonorrhoeae in Quebec. **Can Med Assoc J** 1989 Sep 1;141(5):423–4
Application of a rapid non-radioisotopic nucleic acid analysis system to the detection of sexually transmitted disease-causing organisms and their associated antimicrobial resistances. Urdea MS, et al. **Clin Chem** 1989 Aug;35(8):1571–5
Identification of Neisseria gonorrhoeae with the ORTHOProbe DNA probe test. Kuritza AP, et al. **Diagn Microbiol Infect Dis** 1989 Mar–Apr;12(2):129–32
Rising incidence of penicillinase producing Neisseria gonorrhoeae in Paris, France, in 1985–7 [letter] Lassau F, et al. **Genitourin Med** 1989 Jan;65(1):60
Non-radioactive DNA probe to identify Neisseria gonorrhoeae [letter] Sprott MS, et al. **Genitourin Med** 1989 Jan;65(1):60–1
Comparison of dot blot with in-situ hybridization for the detection of Neisseria gonorrhoeae in urethral exudate. Schoone GJ, et al. **J Appl Bacteriol** 1989 May;66(5):401–5
Serologic confirmation of Neisseria gonorrhoeae by monoclonal antibody-based coagglutination procedures. Anand CM, et al. **J Clin Microbiol** 1988 Nov;26(11):2283–6
Evaluation of a prototype DNA probe test for the noncultural diagnosis of gonorrhea. Granato PA, et al. **J Clin Microbiol** 1989 Apr;27(4):632–5
Evaluation of a method for rapid detection of penicillinase-producing Neisseria gonorrhoeae in urethral exudates. Herve VM, et al. **J Clin Microbiol** 1989 Jan; 27(1):227–8
Direct detection of Neisseria gonorrhoeae with monoclonal antibodies characterized by serotyping reagents. Rajasekariah GR, et al. **J Clin Microbiol** 1989 Jul; 27(7):1700–3
Comparison of GC-Lect and modified Thayer-Martin media for isolation of Neisseria gonorrhoeae. Reichart CA, et al. **J Clin Microbiol** 1989 May;27(5):808–11
Fluorescent-antibody-negative penicillinase-producing Neisseria gonorrhoeae. Walton DT. **J Clin Microbiol** 1989 Aug;27(8):1885–6
Enzyme immunoassay (EIA) in the rapid diagnosis of gonorrhoea. Hossain A, et al. **J Hyg Epidemiol Microbiol Immunol** 1988;32(4):425–31
Fluorescent monoclonal antibody test for the confirmation of Neisseria gonorrhoeae. Moyes A, et al. **Med Lab Sci** 1989 Jan;46(1):6–10
Comparison of the QuadFERM+ 2-hr identification system with conventional carbohydrate degradation tests for confirmatory identification of Neisseria gonorrhoeae. Gradus MS, et al. **Sex Transm Dis** 1989 Apr–Jun;16(2):57–9
[Occurrence of Chlamydia trachomatis and Neisseria gonorrhoeae among asymptomatic soldiers (letter)] Hoverak A, et al. **Tidsskr Nor Laegeforen** 1989 May 10; 109(13):1429 **(Nor)**

METABOLISM

Protein III: structure, function, and genetics. Blake MS, et al. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S60–3 (23 ref.)
Protein I: structure, function, and genetics. Judd RC. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S41–8 (79 ref.)
Molecular analysis of lipooligosaccharide biosynthesis in Neisseria gonorrhoeae. Petricoin EF 3d, et al. **Infect Immun** 1989 Sep;57(9):2847–52
Interaction of non-piliated Neisseria gonorrhoeae strain 7122 and protein IA with an epithelial cell monolayer. Layh-Schmitt G, et al. **Int J Med Microbiol** 1989 Jul; 271(2):158–70
DNA-binding proteins in cells and membrane blebs of Neisseria gonorrhoeae. Dorward DW, et al. **J Bacteriol** 1989 Aug;171(8):4196–201
Export and intercellular transfer of DNA via membrane blebs of Neisseria gonorrhoeae [published erratum appears in J Bacteriol 1989 Jul;171(7):4104] Dorward DW, et al. **J Bacteriol** 1989 May;171(5):2499–505
Expression of outer membrane protein II by gonococci in experimental gonorrhea. Swanson J, et al. **J Exp Med** 1988 Dec 1;168(6):2121–9
Preferential uptake of restriction fragments from a gonococcal cryptic plasmid by competent Neisseria gonorrhoeae. Burnstein KL, et al. **J Gen Microbiol** 1988 Mar;134 (Pt 3):547–57
Protein changes associated with induced resistance of Neisseria gonorrhoeae to killing by human serum are relatively minor. Patel PV, et al. **J Gen Microbiol** 1988 Feb;134 (Pt 2):499–507
Rapid damage to membranes of Neisseria gonorrhoeae caused by human neutrophil granule extracts. Rock JP, et al. **J Gen Microbiol** 1988 Feb;134 (Pt 2):509–19
Outer membrane protein III of Neisseria gonorrhoeae: variations in biological properties of antibodies directed against different epitopes. Virji M, et al. **J Gen Microbiol** 1987 Dec;133 (Pt 12):3393–401
Assembly of the membrane attack complex promotes decay of the alternative pathway C3 convertase on Neisseria gonorrhoeae. Densen P, et al. **J Immunol** 1988 Dec 1; 141(11):3902–9
Identification and comparative analysis of the lactoferrin and transferrin receptors among clinical isolates of gonococci. Lee BC, et al. **J Med Microbiol** 1989 Mar;28(3):199–204
Specificity of the lactoferrin and transferrin receptors in Neisseria gonorrhoeae. Lee BC, et al. **Mol Microbiol** 1988 Nov;2(6):827–9

PATHOGENICITY

Gonococcal and meningococcal pathogenesis as defined by human cell, cell culture, and organ culture assays. Stephens DS. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S104–11 (72 ref.)
Antigenic variation. Modulating bacterial virulence [news] Saunders JR. **Nature** 1989 Apr 20;338(6217):622–3
[The role of the variability of gonococci in the development of therapeutic-prophylactic measures in gonorrhea] Mavrov II, et al. **Mikrobiol Zh** 1987 Jul–Aug;49(4):62–4 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Physiology and metabolism of Neisseria gonorrhoeae and Neisseria meningitidis: implications for pathogenesis. Chen CY, et al. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S35–40 (68 ref.)
The interaction between Neisseria gonorrhoeae and the human cornea in organ culture. An electron microscopic study. Tjia KF, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(4):341–5
Oxidant stress in Neisseria gonorrhoeae: adaptation and effects on L-(+)-lactate dehydrogenase activity. Fu HS, et al. **Infect Immun** 1989 Jul;57(7):2173–8
Energy is required for maximal adherence of Neisseria gonorrhoeae to phagocytic and nonphagocytic cells. Weber RD, et al. **Infect Immun** 1989 Mar;57(3):785–90

ULTRASTRUCTURE

Accessibility of gonococcal and meningococcal surface antigens: immunogold labeling for quantitative electron microscopy. Pâques M, et al. **Infect Immun** 1989 Feb; 57(2):582–9
Understanding the structure and antigenicity of gonococcal pili. Getzoff ED, et al. **Rev Infect Dis** 1988 Jul–Aug;10 Suppl 2:S296–9 (12 ref.)

NEISSERIA MENINGITIDIS

Evaluation of performance parameters of a membrane-based dot immunoassay for meningococcal polysaccharide. Oprandy JJ, et al. **J Clin Microbiol** 1989 Jan;27(1):74–7
Complement activation and endotoxin levels in systemic meningococcal disease. Brandtzaeg P, et al. **J Infect Dis** 1989 Jul;160(1):58–65
Urethritis caused by Neisseria meningitidis group B: a case report. Hartmann AA, et al. **Sex Transm Dis** 1988 Jul–Sep; 15(3):150–1
[Meningococcal arthritis (serogroup A) contracted during a pilgrimage to Mecca] Trylesinski A, et al. **Pathol Biol (Paris)** 1989 Mar;37(3):213–4 (Eng. Abstr.) **(Fre)**

ANALYSIS

Endotoxin liberation studied by biological and chemical methods. Chemical characterization of six meningococcal lipopolysaccharides. Bryn K, et al. **APMIS** 1989 May; 97(5):429–35
Purification, cyanogen bromide cleavage, and amino terminus sequencing of class 1 and class 3 outer membrane proteins of meningococci. Poolman JT, et al. **Infect Immun** 1989 Mar;57(3):1005–7
Restoration of antibody binding to blotted meningococcal outer membrane proteins using various detergents. Wedege E, et al. **J Immunol Methods** 1988 Oct 4;113(1):51–9
Neisseria meningitidis: heterogenicity in the outer membrane proteins released into the growth medium. Jascolt E, et al. **Microbios** 1989;59(238):37–45

CLASSIFICATION

Clonal and variable properties of Neisseria meningitidis isolated from cases and carriers during and after an epidemic in The Gambia, West Africa. Crowe BA, et al. **J Infect Dis** 1989 Apr;159(4):686–700
Complement deficiencies in patients over ten years old with meningococcal disease due to uncommon serogroups. Fijen CA, et al. **Lancet** 1989 Sep 9;2(8663):585–8
Meningococcal serogroups in New South Wales, 1977–1987. Munro R, et al. **Med J Aust** 1988 Oct 3;149(7):360–2
Neisseria meningitidis group B serosubtyping using monoclonal antibodies in whole-cell ELISA. Abdillahi H, et al. **Microb Pathog** 1988 Jan;4(1):27–32
Comparison of clonal analysis and DNA restriction analysis for typing of Neisseria meningitidis. Olyhoek T, et al. **Microb Pathog** 1988 Jan;4(1):45–51
[Meningococcal disease in The Netherlands] Spanjaard L, et al. **Ned Tijdschr Geneeskd** 1989 Jan 21;133(3):100–3 **(Dut)**
[The prospects for a study of meningococcal infection caused by serogroup B today] Demina AA. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Dec;(12):111–7 (35 ref.) **(Rus)**

DRUG EFFECTS

Rifampin-resistant meningococcal infection in a patient given rifampin chemoprophylaxis. Berkey P, et al. **Am J Infect Control** 1988 Dec;16(6):250–2
Sulfonamide resistance in Neisseria meningitidis isolates of clones of the ET-5 complex. Caugant DA, et al. **APMIS** 1989 May;97(5):425–8
Bacteriostatic and bactericidal effect of ceftriaxone on Hemophilus, Neisseria meningitidis, and Proteus. Boisivon A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):83–4
Neisseria meningitidis storage identification and MIC determination. Hafiz S, et al. **JPMA** 1989 Jul;39(7):177–9
[Neisseria meningitidis with low sensitivity to penicillin] Sanfeliú Sala I, et al. **An Esp Pediatr** 1988 Aug;29(2):113–6 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Pyrimidine 5'-nucleosidase in Neisseria meningitidis. An enzyme specific for uridine 5'-monophosphate. Jyssum S. **APMIS** 1989 Apr;97(4):343–6
[Sepsis caused by Neisseria meningitidis resistant to penicillin and beta lactamase producer (letter)] Fontanals D, et al. **Med Clin (Barc)** 1989 Apr 1;92(12):477 **(Spa)**

GENETICS

Transfer of beta-lactamase plasmids from Neisseria gonorrhoeae to Neisseria meningitidis and commensal Neisseria species by the 25.2-megadalton conjugative plasmid. Roberts MC, et al. **Antimicrob Agents Chemother** 1988 Sep;32(9):1430–2
Genetic loci and linkage associations in Neisseria gonorrhoeae and Neisseria meningitidis. West SE, et al. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S92–103 (126 ref.)
Sequence of the structural gene (rmpM) for the class 4 outer membrane protein of Neisseria meningitidis, homology of the protein to gonococcal protein III and Escherichia coli OmpA, and construction of meningococcal strains that lack class 4 protein. Klugman KP, et al. **Infect Immun** 1989 Jul;57(7):2066–71
Genetic diversity of penicillin G-resistant Neisseria meningitidis from Spain. Mendelman PM, et al. **Infect Immun** 1989 Apr;57(4):1025–9
Cloning and characterization of the structural gene for the class 2 protein of Neisseria meningitidis. Murakami K, et al. **Infect Immun** 1989 Aug;57(8):2318–23
Characterization of a silent pilin gene locus from Neisseria meningitidis strain FAM18. Aho EL, et al. **Microb Pathog** 1988 Nov;5(5):391–8
Cloning of an outer membrane protein of Neisseria meningitidis in Escherichia coli. Tarkka E, et al. **Microb Pathog** 1987 Dec;3(6):445–53
The class 1 outer membrane protein of Neisseria meningitidis: gene sequence and structural and immunological similarities to gonococcal porins. Barlow AK, et al. **Mol Microbiol** 1989 Feb;3(2):131–9
Nucleotide sequence of the structural gene for class I pilin from Neisseria meningitidis: homologies with the pilE locus of Neisseria gonorrhoeae. Potts WJ, et al. **Mol Microbiol** 1988 Sep;2(5):647–53
Conserved lipoprotein H.8 of pathogenic Neisseria consists entirely of pentapeptide repeats. Woods JP, et al. **Mol Microbiol** 1989 Jan;3(1):43–8
Molecular characterization and expression in Escherichia coli of the gene complex encoding the polysaccharide capsule of Neisseria meningitidis group B. Frosch M, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1699–73
[Meningococcal plasmids] Khetsuriani KG, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Mar;(3):27–30 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Interaction of complement with Neisseria meningitidis and Neisseria gonorrhoeae. Densen P. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S11–7 (52 ref.)
Serological study of meningococcal isolates in Switzerland and France 1980–1986. Calain P, et al.

Eur J Clin Microbiol Infect Dis 1988 Dec;7(6):788–91

Immune response to tetravalent meningococcal vaccine: opsonic and bactericidal functions of normal and properdin deficient sera. Söderström C, et al.
Eur J Clin Microbiol Infect Dis 1989 Mar;8(3):220–4

Neisseria lactamica and Neisseria meningitidis share lipooligosaccharide epitopes but lack common capsular and class 1, 2, and 3 protein epitopes. Kim JJ, et al.
Infect Immun 1989 Feb;57(2):602–8

Immune responses in mice to different noncovalent complexes of meningococcal B polysaccharide and outer membrane proteins. Lifely MR, et al. **Infect Immun** 1988 Dec;56(12):3221–7

Human immune response to meningococcal outer membrane protein epitopes after natural infection or vaccination. Mandrell RE, et al. **Infect Immun** 1989 May;57(5):1590–8

Meningococcal phenotypic and genotypic characteristics and human antibody levels. Kristiansen BE, et al.
J Clin Microbiol 1988 Oct;26(10):1988–92

Antibody responses to serogroup B meningococcal outer membrane antigens after vaccination and infection. Rosenqvist E, et al. **J Clin Microbiol** 1988 Aug;26(8):1543–8

Human IgA1 initiates complement-mediated killing of Neisseria meningitidis. Jarvis GA, et al. **J Immunol** 1989 Sep 1;143(5):1703–9

Unique intermolecular bactericidal epitope involving the homosialopolysaccharide capsule on the cell surface of group B Neisseria meningitidis and Escherichia coli K1. Jennings HJ, et al. **J Immunol** 1989 May 15;142(10):3585–91

Murine immune response to the Neisseria meningitidis group C capsular polysaccharide. I. Ontogeny. Rubinstein LJ, et al. **J Immunol** 1988 Dec 15;141(12):4352–6

Murine immune response to the Neisseria meningitidis group C capsular polysaccharide. II. Specificity. Rubinstein LJ, et al. **J Immunol** 1988 Dec 15;141(12):4357–62

Flow cytometric assay for the measurement of serum opsonins to Neisseria meningitidis serogroup B, serotype 15. Sjursen H, et al. **J Immunol Methods** 1989 Jan 17; 116(2):235–43

Control of an outbreak of group C meningococcal meningitis with a polysaccharide vaccine. Masterton RG, et al.
J Infect 1988 Sep;17(2):177–82

Antibody response of adults to an aluminum hydroxide-adsorbed Neisseria meningitidis serotype 2b protein-group B polysaccharide vaccine. Frasch CE, et al. **J Infect Dis** 1988 Oct;158(4):710–8

Detection of antibodies to common antigens of pathogenic and commensal Neisseria species. Cann KJ, et al.
J Med Microbiol 1989 Sep;30(1):23–31

Meningococcal meningitis [editorial] [published erratum appears in Lancet 1989 Apr 1;1(8640):742] **Lancet** 1989 Mar 25;1(8639):647–8

Protective efficacy of mouse serum to the N-propionyl derivative of meningococcal group B polysaccharide. Ashton FE, et al. **Microb Pathog** 1989 Jun;6(6):455–8

Protective efficacy of monoclonal antibodies to class 1 and class 3 outer membrane proteins of Neisseria meningitidis B:15:P1.16 in infant rat infection model: new prospects for vaccine development. Saukkonen K, et al.
Microb Pathog 1987 Oct;3(4):261–7

Antibody production to a meningococcal outer membrane protein cloned into liv Salmonella typhimurium aroA vaccine strain. Tarkka E, et al. **Microb Pathog** 1989 May; 6(5):327–35

Interaction of meningococcal group B monoclonal antibody and its Fab fragment with alpha 2-8-linked sialic acid polymers: requirement of a long oligosaccharide segment for binding. Häyrinen J, et al. **Mol Immunol** 1989 Jun; 26(6):523–9

Serum opsonins to serogroup B meningococci in meningococcal disease. Halstensen A, et al.
Scand J Infect Dis 1989;21(3):267–76

Another Swedish family with complete properdin deficiency: association with fulminant meningococcal disease in one male family member. Söderström C, et al.
Scand J Infect Dis 1989;21(3):259–65

Local reactions of Zwittergent-containing meningococcal vaccine after intramuscular injection in rats: comparison with the effect of diphtheria-pertussis-tetanus-polio vaccine. Speijers GJ, et al. **Vaccine** 1988 Oct;6(5):419–22

[Studies on serum meningococcal antibodies in patients with meningococcal meningitis and a healthy population] Pang HM. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Jul; 22(4):233–5 (Eng. Abstr.) **(Chi)**

[The efficacy of counterimmunoelectrophoresis and coagglutination in detecting bacterial antigens in meningitis] Rusu V, et al.
Arch Roum Pathol Exp Microbiol 1983 Jan–Mar;42(1):5–14 (Eng. Abstr.) **(Fre)**

[Diagnostic meningococcal sera and their quality] Andreeva ZM, et al. **Lab Delo** 1989;(5):74–6 (Eng. Abstr.) **(Rus)**

[A modified method of latex agglutination in capillaries for the detection of meningococcal antigens] Samsonova IM, et al. **Lab Delo** 1989;(6):50–2 (Eng. Abstr.) **(Rus)**

[Experience with the immunoprophylaxis of meningococcal infection in military collectives] Efimov EI.
Voen Med Zh 1989 Apr;(4):49 **(Rus)**

[The protective activity of the detoxified lipopolysaccharide of Neisseria meningitidis serogroup A in in vivo experiments] Del'vig AA, et al.
Zh Mikrobiol Epidemiol Immunobiol 1989 May;(5):69–73 (Eng. Abstr.) **(Rus)**

[The composition of immune sera against Neisseria meningitidis studied by high-performance liquid chromatography] Filatova TN, et al.
Zh Mikrobiol Epidemiol Immunobiol 1988 Oct;(10):52–5 (Eng. Abstr.) **(Rus)**

[A field trial with the liquid multicomponent meningococcal vaccine ABC] Levina LA, et al.
Zh Mikrobiol Epidemiol Immunobiol 1988 Nov;(11):62–4 (Eng. Abstr.) **(Rus)**

[Antibodies to meningococcal lipopolysaccharide in different forms of meningococcal infection] Martynov IuV, et al.
Zh Mikrobiol Epidemiol Immunobiol 1989 May;(5):55–60 (Eng. Abstr.) **(Rus)**

[Immunity against Neisseria meningitidis in different population groups] Pauste Ruiz H, et al.
Rev Cubana Med Trop 1989 Jan–Apr;41(1):135–47 (Eng. Abstr.) **(Spa)**

ISOLATION & PURIFICATION

More attention to meningococci. Koukal'ová D, et al.
Acta Univ Palacki Olomuc Fac Med 1988;119:269–74

C-reactive protein and bacterial meningitis. Cuevas LE, et al. **Ann Trop Paediatr** 1988 Dec;8(4):230–3

Association of serotypes 2A and 2B with meningococcal disease in Canada. Ashton FE, et al.
Can Dis Wkly Rep 1989 Mar 18;15(11):63–5 **(Eng, Fre)**

Spontaneous peritonitis caused by Neisseria meningitidis serogroup B [letter] Bella Cueto F, et al.
Eur J Clin Microbiol Infect Dis 1988 Oct;7(5):695

Penicillin-resistant beta-lactamase producing Neisseria meningitidis in Spain [letter] Fontanals D, et al.
Eur J Clin Microbiol Infect Dis 1989 Jan;8(1):90–1

Acute urethritis due to Neisseria meningitidis group A acquired by orogenital contact: case report. Wilson AP, et al. **Genitourin Med** 1989 Apr;65(2):122–3

Detection of Neisseria meningitidis and Yersinia pestis with a novel silicon-based sensor. Libby JM, et al.
J Clin Microbiol 1989 Jul;27(7):1456–9

Poor performance of BACTEC NR 730 blood culture system in early detection of Neisseria meningitidis. Schnur ER, et al. **J Clin Microbiol** 1989 Apr;27(4):654–6

ACP Broadsheet 121: June 1989. Investigation of meningococcal disease. Cartwright KA, et al.
J Clin Pathol 1989 Jun;42(6):634–9

Primary meningococcal arthritis [letter] Travis S, et al.
J Infect 1989 Jul;19(1):79–80

Intercontinental spread of an epidemic group A Neisseria meningitidis strain. Moore PS, et al. **Lancet** 1989 Jul 29; 2(8657):260–3

Isolation by streptonigrin enrichment and characterization of a transferrin-specific iron uptake mutant of Neisseria meningitidis. Dyer DW, et al. **Microb Pathog** 1987 Nov; 3(5):351–63

[Neonatal meningitis caused by Neisseria subflava] Martínez Tallo E, et al. **An Esp Pediatr** 1988 Dec;29(6):475–6 **(Spa)**

[Recent isolation of Neisseria meningitidis with decreased sensitivity to penicillin] Fernández Viladrich P.
Med Clin (Barc) 1988 Sep 10;91(7):261–3 **(Spa)**

[Recent isolation of Neisseria meningitidis with decreased sensitivity to penicillin] Latorre C, et al.
Med Clin (Barc) 1988 Sep 10;91(7):241–3 (Eng. Abstr.) **(Spa)**

METABOLISM

Loss of transferrin receptor activity in Neisseria meningitidis correlates with inability to use transferrin as an iron source. Tsai J, et al. **Infect Immun** 1988 Dec;56(12):3132–8

PATHOGENICITY

A reference procedure to study chemiluminescence induced in polymorphonuclear leukocytes by Neisseria meningitidis. Fredlund H, et al. **APMIS** 1988 Oct;96(10):941–9

Gonococcal and meningococcal pathogenesis as defined by human cell, cell culture, and organ culture assays. Stephens DS. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S104–11 (72 ref.)

Failure of adherence to buccal cells and surface hydrophobicity as virulence markers in Neisseria meningitidis. Criado MT, et al.
Med Microbiol Immunol (Berl) 1989;178(1):53–9

Antigenic variation. Modulating bacterial virulence [news] Saunders JR. **Nature** 1989 Apr 20;338(6217):622–3

[Interaction of Neisseria meningitidis with eukaryotic cells in a mixed infection in vitro] Gorokhova LV, et al.
Zh Mikrobiol Epidemiol Immunobiol 1988 Sep;(9):47–51 (Eng. Abstr.) **(Rus)**

[Adhesion in meningococcus] Mironova TK, et al.
Zh Mikrobiol Epidemiol Immunobiol 1989 Jan;(1):9–14 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Physiology and metabolism of Neisseria gonorrhoeae and Neisseria meningitidis: implications for pathogenesis. Chen CY, et al. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S35–40 (68 ref.)

Changes in surface hydrophobicity and charge in Neisseria meningitidis and their correlation with the association to phagocytic cells. Ferreirós CM, et al. **Rev Esp Fisiol** 1989 Jun;45(2):105–9

ULTRASTRUCTURE

Accessibility of gonococcal and meningococcal surface antigens: immunogold labeling for quantitative electron microscopy. Pâques M, et al. **Infect Immun** 1989 Feb; 57(2):582–9

[Microcapsule formation in the cells of Neisseria meningitidis group B] Reshilov LN, et al.
Zh Mikrobiol Epidemiol Immunobiol 1989 May;(5):20–6 (Eng. Abstr.) **(Rus)**

NEISSERIACEAE

ANALYSIS

Cellular fatty acid composition of Kingella species, Cardiobacterium hominis, and Eikenella corrodens. Wallace PL, et al. **J Clin Microbiol** 1988 Aug;26(8):1592–4

GENETICS

Differentiation of some species of Neisseriaceae and other bacterial groups by DNA–DNA hybridization. Tønjum T, et al. **APMIS** 1989 May;97(5):395–405

ISOLATION & PURIFICATION

Bone and joint infections caused by Kingella kingae: six cases and review of the literature. de Groot R, et al.
Rev Infect Dis 1988 Sep–Oct;10(5):998–1004 (36 ref.)

METABOLISM

Comparative analysis of the transferrin and lactoferrin binding proteins in the family Neisseriaceae. Schryvers AB, et al. **Can J Microbiol** 1989 Mar;35(3):409–15

PATHOGENICITY

Empyema caused by Kingella denitrificans and Peptostreptococcus spp. in a patient with bronchogenic carcinoma. Molina R, et al. **Eur Respir J** 1988 Oct; 1(9):870–1

NELSON SYNDROME see under **PITUITARY NEOPLASMS**

NEMATOCIDES see **ANTINEMATODAL AGENTS**

NEMATODA

ANATOMY & HISTOLOGY

Granulinema gen. n. a new dracunculoid genus with two new species (G. carcharhini sp. n. and G. simile sp. n.) from the bull shark, Carcharhinus leucas (Valenciennes), from Louisiana, USA. Moravec F, et al.
Folia Parasitol (Praha) 1988;35(2):113–20

Rhabdochona longleyi sp. n. (Nematoda: Rhabdochonidae) from blind catfishes, Trogloglanis pattersoni and Satan eurystomus (Ictaluridae) from the subterranean waters of Texas. Moravec F, et al. **Folia Parasitol (Praha)** 1988; 35(3):235–43

Nematodirus abnormalis (May, 1920) in sheep in the south-western part of the Cape Province. Louw JP.
Onderstepoort J Vet Res 1989 Jun;56(2):141–2

[A parasitic infections probably contracted through eating of imported trout (letter)] van Thiel PH, et al.
Ned Tijdschr Geneeskd 1988 Dec 24;132(52):2372 **(Dut)**

[Cucculanus bioccai n. sp. (nematoda: cucullanidae), parasite of Mugil cephalus L.] Orecchia P, et al. **Parassitologia** 1987 Apr;29(1):71–4 (Eng. Abstr.) **(Ita)**

CLASSIFICATION

A new computer program for nematode identification. Zullini A, et al. **Comput Appl Biosci** 1989 Jul;5(3):243–4

Revision of the genus Anguillicola Yamaguti, 1935 (Nematoda: Anguillicolidae) of the swimbladder of eels, including descriptions of two new species, A. novaezelandiae sp. n. and A. papernai sp. n. Moravec F, et al. **Folia Parasitol (Praha)** 1988;35(2):125–46

[Nematoda of birds of prey and owls (Falconiformes and Strigiformes) of the Lower Silesia] Okulewicz A.
Wiad Parazytol 1988;34(2):137–49 (Eng. Abstr.) **(Pol)**

[Nematoda of the gastrointestinal system of Gavia stellata and Gavia arctica (Gaviidae)] Okulewicz A.
Wiad Parazytol 1989;35(1):35–42 (Eng. Abstr.) **(Pol)**

[Nematoda of starlings (Sturnus vulgaris L.) of Lower Silesia] Okulewicz A. **Wiad Parazytol** 1988;34(3):307–18 (Eng. Abstr.) **(Pol)**

DRUG EFFECTS

Effects of precocene analogs on the nematode Caenorhabditis remanei (var. Bangaloreiensis). I. Structure/activity relations. Fodor A, et al. **Gen Comp Endocrinol** 1989 Apr; 74(1):18–31

Effects of precocene analogs on the nematode Caenorhabditis remanei (var. Bangaloreiensis). II. Competitions with a juvenile hormone analog (Methoprene). Fodor A, et al. **Gen Comp Endocrinol** 1989 Apr;74(1):32–44

In vitro effect of ivermectin on Pseudoterranova decipiens survival. Manley KM, et al. **J Helminthol** 1989 Mar; 63(1):72–4

[Studies on prophylaxis against anisakiasis—a screening of

killing effects of extracts from foods on the larvae] Kasuya S, et al. **Kansenshogaku Zasshi** 1988 Dec;62(12):1152–6 (Eng. Abstr.) **(Jpn)**

ENZYMOLOGY

Serine proteases from nematode and protozoan parasites: isolation of sequence homologs using generic molecular probes. Sakanari JA, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4863–7

GENETICS

Role of sequence amplification in the generation of nematode mitochondrial DNA polymorphism. Beck JL, et al. **Curr Genet** 1988 Dec;14(6):627–36

Presence of the Caenorhabditis elegans spliced leader on different mRNAs and in different genera of nematodes. Bektesh S, et al. **Genes Dev** 1988 Oct;2(10):1277–83

Genome sequencing: the flatworm's turn [news] Ezzell C. **Nature** 1989 Jun 29;339(6227):648

A related moderately repetitive DNA family in the nematodes Ascaris lumbricoides and Panagrellus silusiae. Warren T, et al. **Nucleic Acids Res** 1988 Nov 25; 16(22):10833–47

GROWTH & DEVELOPMENT

Nutritional factors and conditions for the axenic culture of free-living nematodes. Rothstein M, et al. **Comp Biochem Physiol [B]** 1978;61(1):99–104

Steinernema feltiae (= Neoaplectana carpocapsae): effect of sterols and hypolipidemic agents on development. Ritter KS. **Exp Parasitol** 1988 Dec;67(2):257–67

Population evolution of the free-living stage of goat gastrointestinal nematodes on herbage under tropical conditions in Guadeloupe (French West Indies). Aumont G, et al. **Int J Parasitol** 1989 Aug;19(5):539–46

Pasture populations of cattle nematode larvae in Guadeloupe (French West Indies). Aumont G, et al. **Int J Parasitol** 1989 Aug;19(5):547–54

Effects of irrigation on appearance and survival of infective larvae of goat gastro-intestinal nematodes in Guadeloupe (French West Indies). Gruner L, et al. **Int J Parasitol** 1989 Jul;19(4):409–15

Early cuticle formation in an adenophorean nematode. Platzer A, et al. **Int J Parasitol** 1988 Sep;18(6):793–801

The experimental receptivity of Helicella (Helicella) itala and Cepaea nemoralis (Mollusca, Helicidae) to larvae of Muellerius sp. and Neostrongylus linearis (Nematoda, Protostrongylidae) from chamois (Rupicapra rupicapra). Diez-Baños P, et al. **Parasitol Res** 1989;75(6):488–94

Larval development test for detection of anthelmintic resistant nematodes. Coles GC, et al. **Res Vet Sci** 1988 Jul; 45(1):50–3

Control of cell fates within equivalence groups in C. elegans. Sternberg PW. **Trends Neurosci** 1988 Jun;11(6):259–64 (30 ref.)

The relation between the natural worm burden of steers and the faecal egg count differentiated to species. Bryan RP, et al. **Vet Parasitol** 1989 Mar;30(4):327–34

Effect of ovine urine and some of its components on viability of nematode eggs and larvae in sheep faeces. Helle O, et al. **Vet Parasitol** 1989 Aug 1;32(4):349–54

Development and survival of free-living stages of gastrointestinal nematodes of sheep and goats on pasture in the Nigerian derived savanna. Chiejina SN, et al. **Vet Res Commun** 1989;13(2):103–12

[A rare etiology of acute occlusion of the small intestine: anisakiasis. Review of the literature apropos of a case] Morlier D, et al. **Ann Gastroenterol Hepatol (Paris)** 1989 May;25(3):99–103 (46 ref.) (Eng. Abstr.) **(Fre)**

[Skrjabinelazia galliardi (Nematoda, Seuratoidea): morphologic complements and biological cycle] Chabaud AG, et al. **Ann Parasitol Hum Comp** 1988;63(4):278–84 (Eng. Abstr.) **(Fre)**

[In vitro effect of ivermectin on the eggs of Lagochilascaris minor Leiper, 1909] Campos DM, et al. **Rev Inst Med Trop Sao Paulo** 1988 Jul–Aug;30(4):305–9 (Eng. Abstr.) **(Por)**

IMMUNOLOGY

Serological differentiation of the potato-cyst nematodes Globodera pallida and G. rostochiensis: II. Preparation and characterization of species specific monoclonal antibodies. Schots A, et al. **Hybridoma** 1989 Aug;8(4):401–13

Physicochemical characterization and monoclonal and polyclonal antibody recognition of Baylisascaris procyonis larval excretory–secretory antigens. Boyce WM, et al. **J Parasitol** 1989 Aug;75(4):540–8

The secreted and somatic antigens of the third stage larva of Anisakis simplex, and antigenic relationship with Ascaris suum, Ascaris lumbricoides, and Toxocara canis. Kennedy MW, et al. **Mol Biochem Parasitol** 1988 Oct;31(1):35–46

Immunodiagnosis of human anisakiasis by use of larval excretory–secretory antigen. Poggensee U, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Mar; 270(4):503–10

[Recent progress on clinical immunology. 1. Eosinophils] Torisu M. **Fukuoka Igaku Zasshi** 1988 Oct;79(10):701–5 **(Jpn)**

ISOLATION & PURIFICATION

Dioctophyme larva in the subcutaneous tissues of a woman in Ohio. Gutierrez Y, et al. **Am J Surg Pathol** 1989 Sep; 13(9):800–2

Intestinal perforation caused by larval Eustrongylides (Nematoda: Dioctophymatoidae) in New Jersey. Eberhard ML, et al. **Am J Trop Med Hyg** 1989 Jun;40(6):648–50

Heleidomermis sp. (Nematoda: Mermithidae) infecting Culicoides variipennis (Diptera: Ceratopogonidae) in Alabama. Hribar LJ, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):332

Recovery of nematode eggs and larvae in deer: evaluation of fecal preservation methods. Foreyt WJ. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1065–7

The occurrence of Rhabditis (Rhabditella) axei in the faeces of a chicken in Egypt. el-Azazy OM, et al. **J Helminthol** 1988 Sep;62(3):219–20

Prevalence of larval Anisakis simplex in pen-reared and wild-caught salmon (Salmonidae) from Puget Sound, Washington. Deardorff TL, et al. **J Wildl Dis** 1989 Jul; 25(3):416–9

Prevalence of Parelaphostrongylus tenuis in a sample of hunter-harvested white-tailed deer from a tri-county area in northeastern Wisconsin. Dew TL. **J Wildl Dis** 1988 Oct; 24(4):720–1

The grazing behaviour of cattle in relation to the sampling of infective nematode larvae on pasture. Bryan RP, et al. **Vet Parasitol** 1988 Nov;30(1):73–82

[Anisakids and human anisakiasis. 2. Investigation of the anisakids of commercial fish in the district of Paris] Huang WY. **Ann Parasitol Hum Comp** 1988;63(3):197–208 (Eng. Abstr.) **(Fre)**

METABOLISM

Determination of guanosine 3',5'-cyclic-monophosphate in tissues of the free living nematode, Panagrellus redivivus. Willett JD, et al. **Comp Biochem Physiol [B]** 1978; 61(2):243–6

Determination of adenosine 3',5'-cyclic monophosphate levels in tissues of the free living nematode, Panagrellus redivivus. Willett JD, et al. **Comp Biochem Physiol [B]** 1978;60(4):403–5

Glutamine and asparagine synthesis in the nematodes Heligmosomoides polygyrus and Panagrellus redivivus. Grantham BD, et al. **J Parasitol** 1988 Dec;74(6):1052–3

PATHOGENICITY

Acid phosphatase typing for breeding nematode-resistant tomatoes by isoelectric focusing with an ultranarrow immobilized pH gradient. Günther S, et al. **Electrophoresis** 1988 Sep;9(9):618–20

PHYSIOLOGY

An improved method for light- and electron microscopial studies of nematode/fungal interactions. Veenhuis M, et al. **Antonie Van Leeuwenhoek** 1989;55(4):361–8

Anisakiasis. Sakanari JA, et al. **Clin Microbiol Rev** 1989 Jul; 2(3):278–84 (77 ref.)

The influence of infection with Steinernema feltiae Filipjev on the haemocyte picture of the cotton leaf worm (Spodoptera littoralis Boisduval). Ghally SE, et al. **J Egypt Soc Parasitol** 1989 Dec;19(2):483–91

Natural dehydration regimes as a prerequisite for the successful induction of anhydrobiosis in the nematode Rotylenchulus reniformis. Womersley C, et al. **J Exp Biol** 1989 May;143:359–72

Romanomermis culicivorax: penetration of larval mosquitoes. Shamseldean MM, et al. **J Invertebr Pathol** 1989 Sep; 54(2):191–9

Evidence for genetic control of nematode egg-shedding rates in calves. Leighton EA, et al. **J Parasitol** 1989 Aug; 75(4):498–504

Biological effects of magnetic fields: chronic exposure of the nematode Panagrellus redivivus. Peeling J, et al. **Magn Reson Imaging** 1988 Nov–Dec;6(6):655–60

Actions of potent cholinergic anthelmintics (morantel, pyrantel and levamisole) on an identified insect neurone reveal pharmacological differences between nematode and insect acetylcholine receptors. Pinnock RD, et al. **Neuropharmacology** 1988 Aug;27(8):843–8

Predisposition of mice to Heligmosomoides polygyrus and Aspiculuris tetraptera (Nematoda). Scott ME. **Parasitology** 1988 Aug;97 (Pt 1):101–14

The application of biochemical criteria to the assessment of macrofilarial viability. Comley JC, et al. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:456–9 (14 ref.)

Factors affecting the survival and migration of the free-living stages of gastrointestinal nematode parasites of cattle in central Queensland. Bryan RP, et al. **Vet Parasitol** 1989 Mar;30(4):315–26

[Aging in nematodes] Suzuki K. **Tanpakushitsu Kakusan Koso** 1989 Apr;34(4):334–6 **(Jpn)**

RADIATION EFFECTS

Morphological variations in nematode parasites after a radioactive fall out: preliminary results. Genchi C, et al. **Parassitologia** 1987 Apr;29(1):75–8

ULTRASTRUCTURE

Studies on the surface coat (glycocalyx) of the dauer larva of Anguina agrostis. Bird AF, et al. **Int J Parasitol** 1989 May;19(3):235–40

NEMATODE INFECTIONS

Human gnathostomiasis. Dow C, et al. **J Infect** 1988 Sep; 17(2):147–9

Angiostrongylus (Parastrongylus) eosinophilic meningitis. Koo J, et al. **Rev Infect Dis** 1988 Nov–Dec;10(6):1155–62 (71 ref.)

[Radiculomyeloencephalitis caused by Angiostrongylus cantonensis in children] Scemama M, et al. **Arch Fr Pediatr** 1988 Jun–Jul;45(6):417–9 (Eng. Abstr.) **(Fre)**

[A case of eosinophilic meningitis due to Angiostrongylus cantonensis] Fukuhara T, et al. **Nippon Naika Gakkai Zasshi** 1988 Jul;77(7):1067–71 (12 ref.) **(Jpn)**

[Abdominal angiostrogyliasis. A public health problem?] Morera P. **Rev Soc Bras Med Trop** 1988 Apr–Jun;21(2):81–3 (0 ref.) **(Por)**

BLOOD

Circumoval and larval microprecipitation reactions in experimental and human gnathostomiasis. Rojekittikhun W, et al. **Southeast Asian J Trop Med Public Health** 1989 Mar; 20(1):81–6

CEREBROSPINAL FLUID

Ultrastructural and morphometric analyses of eosinophils from the cerebrospinal fluid of the mouse and guinea-pig infected with Angiostrongylus cantonensis. Yoshimura K, et al. **Parasite Immunol** 1988 Jul;10(4):411–23

COMPLICATIONS

Angiostrongyliasis: a rare cause of gastrointestinal hemorrhage. Silvera CT, et al. **Am J Gastroenterol** 1989 Mar;84(3):329–32

The dynamics of eosinophilia in concurrent infections with Trichinella spiralis Owen, 1835 and Toxascaris leonina Linstow, 1909. Figallová V, et al. **Folia Parasitol (Praha)** 1988;35(4):365–9

Angiostrongylus cantonensis and eosinophilic meningitis [letter] Alicata JE. **Lancet** 1988 Dec 10;2(8624):1367–8

Antibody to interleukin-5 inhibits helminth-induced eosinophilia in mice. Coffman RL, et al. **Science** 1989 Jul 21;245(4915):308–10

[A rare etiology of acute occlusion of the small intestine: anisakiasis. Review of the literature apropos of a case] Morlier D, et al. **Ann Gastroenterol Hepatol (Paris)** 1989 May;25(3):99–103 (46 ref.) (Eng. Abstr.) **(Fre)**

[A patient with gnathostomiasis exhibiting myocardial infarction due to coronary vasospasms] Matsuda S, et al. **Nippon Naika Gakkai Zasshi** 1987 Nov;76(11):1719–24 **(Jpn)**

DIAGNOSIS

Is the case of presumed imported gnathostomiasis in The Netherlands a peculiar autochthonous case of anisakiasis? [letter] van Thiel PH, et al. **Acta Leiden** 1988;57(1):75–7

Diagnosis of a fourth reported case of intestinal anisakiasis in the United States? [letter] Kingston S, et al. **Am J Clin Pathol** 1989 Aug;92(2):256

Serological investigations of a suspected case of human angiostrongyliasis. Limaye LS, et al. **Indian J Pathol Microbiol** 1988 Jul;31(3):248–50

The first record of a confirmed human case of Gnathostoma doloresi infection. Nawa Y, et al. **J Parasitol** 1989 Feb; 75(1):166–9

The worm has turned: cysticercus to anisakis [letter] Ash LR. **Pediatr Infect Dis J** 1989 Jul;8(7):478

Serodiagnosis of human gnathostomiasis. Maleewong W, et al. **Southeast Asian J Trop Med Public Health** 1988 Jun; 19(2):201–5

Immunodiagnosis of human anisakiasis by use of larval excretory–secretory antigen. Poggensee U, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Mar; 270(4):503–10

[Human gnathostomiasis manifested by cutaneous larva migrans syndrome. Apropos of a case] Chabasse D, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3):326–31 (Eng. Abstr.) **(Fre)**

[Abdominal angiostrongyloidiasis. 6 cases observed in Paraná and in Santa Catarina, Brazil] Ayala MA. **Mem Inst Oswaldo Cruz** 1987 Jan–Mar;82(1):29–36 (Eng. Abstr.) **(Por)**

DRUG THERAPY

Activity of commercial Bacillus thuringiensis preparations against Trichostrongylus colubriformis and Nippostrongylus brasiliensis. Bone LW. **J Invertebr Pathol** 1989 Mar;53(2):276–7

Effect of selected anthelmintics on three common helminths in the brown pelican (Pelecanus occidentalis). Grimes J, et al. **J Wildl Dis** 1989 Jan;25(1):139–42

In vivo efficacy of levamisole against larval stages of Angiostrongylus cantonensis and A. costaricensis. Ishii AI, et al. **Southeast Asian J Trop Med Public Health** 1989 Mar; 20(1):109–17

Factors affecting the efficacy of ivermectin against

Heligmosomoides polygyrus (Nematospiroides dubius) in mice. Wahid FN, et al. **Vet Parasitol** 1989 Aug 1; 32(4):325–40

[Clinical trial of the treatment of various nematode infections of the digestive tract with albendazole] Kuźmicki R, et al. **Wiad Parazytol** 1988;34(2):209–12 (Eng. Abstr.) **(Pol)**

[Comparative effectiveness of mebendazole, medamine and pyrantel pamoate and their combination with fenasal in nippostrongylosis and hymenolepiasis in white mice] Kulieva NS. **Med Parazitol (Mosk)** 1988 Sep–Oct;(5):68–72 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Intestinal infection with Nematospiroides dubius selectively increases lactase expression by mouse jejunal enterocytes. Smith MW, et al. **Clin Sci** 1989 Aug;77(2):139–44

Fluctuations in rat liver alanine–amino–transferase activity during experimental nippostrongylosis. Robertson LJ. **Parasitology** 1989 Apr;98 Pt 2:301–6

EPIDEMIOLOGY

Gnathostomiasis in The Netherlands [letter] Dietrich M. **Acta Leiden** 1988;57(1):75

Epidemiology of human anisakiasis: incidence and sources in France. Hubert B, et al. **Am J Trop Med Hyg** 1989 Mar; 40(3):301–3

The first human case of angiostrongyliasis cantonensis in the mainland of China. Yang SQ, et al. **Chin Med J [Engl]** 1988 Nov;101(11):783–6

Some common human intestinal nematodes at the Wonji/Shoa Sugar Estate: a five-year study. Tedla S, et al. **East Afr Med J** 1987 Aug;64(8):527–32

Abdominal angiostrongyliasis—an under–diagnosed disease. Graeff–Teixeira C, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:353–4

[Epidemiological survey of the focus of human angiostrongyliasis as first case in mainland of China] Ding BL. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1988 Oct; 9(5):261–4 (Eng. Abstr.) **(Chi)**

ETIOLOGY

Promptly fillet and keep the doctor away [editorial] Monroe LS. **Gastrointest Endosc** 1989 Jul–Aug;35(4):349–50

Anisakiasis: revenge of the sushi parasite [letter] McKerrow JH, et al. **N Engl J Med** 1988 Nov 3;319(18):1228–9

The dangers of eating raw fish [editorial] Schantz PM. **N Engl J Med** 1989 Apr 27;320(17):1143–5

Eustrongylidiasis—a parasitic infection acquired by eating sushi. Wittner M, et al. **N Engl J Med** 1989 Apr 27; 320(17):1124–6

[Human lagochilascariasis in Venezuela: description of a fatal case] Orihuela R, et al. **Rev Soc Bras Med Trop** 1987 Oct–Dec;20(4):217–21 (22 ref.) (Eng. Abstr.) **(Spa)**

GENETICS

Nematospiroides dubius: two H-2–linked genes influence levels of resistance to infection in mice. Enriquez FJ, et al. **Exp Parasitol** 1988 Dec;67(2):221–6

HISTORY

Historical summary of angiostrongyliasis cantonensis as a new parasitic disease of man. Alicata JE.
Bull Soc Pathol Exot Filiales 1988;81(4):766–8 **(Eng, Fre)**

IMMUNOLOGY

Local antibody production and immune complex formation in rats experimentally infected with Angiostrongylus cantonensis. Kanbara T, et al. **Am J Trop Med Hyg** 1988 Oct;39(4):353–60

Nematospiroides dubius: genetic control of immunity to infections of mice. Enriquez FJ, et al. **Exp Parasitol** 1988 Oct;67(1):12–9

Nematospiroides dubius: influence of adjuvants on immunity in mice vaccinated with antigens isolated by affinity chromatography from adult worms. Monroy FG, et al. **Exp Parasitol** 1989 Jan;68(1):67–73

Angiostrongylus cantonensis: role of eosinophils in the neurotoxic syndrome (Gordon–like phenomenon). Perez O, et al. **Exp Parasitol** 1989 May;68(4):403–13

Nippostrongylus brasiliensis: radioresistant IgE antibody–forming cells in infected rats. Watanabe N, et al. **Exp Parasitol** 1989 Feb;68(2):216–22

Suppression of heterologous immunity by Nematospiroides dubius antigens in vitro. Crawford C, et al.
Int J Parasitol 1989 Feb;19(1):29–34

Immune expulsion of parasitic nematodes from the alimentary tract. Rothwell TL. **Int J Parasitol** 1989 Apr;19(2):139–68 (346 ref.)

Bronchoalveolar eosinophilia in guinea pigs harboring inapparent infections of Paraspidodera uncinata. Conder GA, et al. **J Parasitol** 1989 Feb;75(1):144–6

The influence of protein deficiency on immunity to Heligmosomoides polygyrus (Nematoda) in mice. Slater AF, et al. **Parasite Immunol** 1988 Sep;10(5):507–22

The effect of antioxidants on the rejection of Nippostrongylus brasiliensis. Smith NC, et al. **Parasite Immunol** 1989 Mar; 11(2):161–7

Proteins of Nippostrongylus brasiliensis analyzed by immunoblotting. Dorzok U, et al. **Parasitol Res** 1989; 75(6):482–7

Characterization of the antigens that induce the production of antibodies in mice immediately after infection with Angiostrongylus cantonensis. Fujii T. **Parasitol Res** 1989; 75(8):636–40

Total and specific IgE in serum and cerebrospinal fluid of rats and guinea pigs infected with Angiostrongylus cantonensis. Pérez O, et al. **Parasitol Res** 1989;75(6):476–81

The role of free oxygen radicals in the expulsion of primary infections of Nippostrongylus brasiliensis. Smith NC.
Parasitol Res 1989;75(6):423–38 (218 ref.)

Immunological relationships during primary infection with Heligmosomoides polygyrus (Nematospiroides dubius): dose–dependent expulsion of adult worms. Robinson M, et al. **Parasitology** 1989 Feb;98 (Pt 1):115–24

Effect of repeated anthelmintic treatment on ability to detect predisposition of mice to Heligmosomoides polygyrus and Aspiculuris tetraptera (Nematoda) infections. Scott ME. **Parasitology** 1988 Dec;97 (Pt 3):453–8

Immunological relationships during primary infection with Heligmosomoides polygyrus (Nematospiroides dubius): expulsion of adult worms from fast responder syngeneic and hybrid strains of mice. Wahid FN, et al.
Parasitology 1989 Jun;98 Pt 3:459–69

Antibody responses in human gnathostomiasis. Nopparatana C, et al. **Southeast Asian J Trop Med Public Health** 1988 Jun;19(2):219–24

[Recent progress on clinical immunology. 1. Eosinophils] Torisu M. **Fukuoka Igaku Zasshi** 1988 Oct;79(10):701–5 **(Jpn)**

METABOLISM

Immunofluorescent localization of eosinophil granule major basic protein in fatal human cases of Baylisascaris procyonis infection. Hamann KJ, et al. **Am J Trop Med Hyg** 1989 Mar;40(3):291–7

Identification of oversulphated galactosaminoglycans in intestinal–mucosal mast cells of rats infected with the nematode worm Nippostrongylus brasiliensis. Kusche M, et al. **Biochem J** 1988 Aug 1;253(3):885–93

The Pasteur effect in rat jejunum and the influence of nematode infections. Scofield AM.
Comp Biochem Physiol [B] 1978;59(4):295–8

Free radical generation during primary infections with Nippostrongylus brasiliensis. Smith NC, et al.
Parasite Immunol 1989 Mar;11(2):147–60

PARASITOLOGY

Intestinal perforation caused by larval Eustrongylides (Nematoda: Dioctophymatoidae) in New Jersey. Eberhard ML, et al. **Am J Trop Med Hyg** 1989 Jun;40(6):648–50

Human gnathostomiasis: infection with an immature male Gnathostoma spinigerum. Hira PR, et al.
Am J Trop Med Hyg 1989 Jul;41(1):91–4

Intestinal capillariasis in Egypt: a case report. Youssef FG, et al. **Am J Trop Med Hyg** 1989 Feb;40(2):195–6

Experimental infection in a monkey with Gnathostoma hispidum larvae obtained from loaches. Koga M, et al.
Ann Trop Med Parasitol 1988 Aug;82(4):383–8

Anisakiasis. Sakanari JA, et al. **Clin Microbiol Rev** 1989 Jul; 2(3):278–84 (77 ref.)

Predisposition of mice to Heligmosomoides polygyrus and Aspiculuris tetraptera (Nematoda). Scott ME.
Parasitology 1988 Aug;97 (Pt 1):101–14

[A parasitic infections probably contracted through eating of imported trout (letter)] van Thiel PH, et al.
Ned Tijdschr Geneeskd 1988 Dec 24;132(52):2372 **(Dut)**

[Natural infection of fresh water fishes with third stage larvae of Gnathostoma spinigerum and its dynamics of transmission to man. First report in Ecuador and America] Wenceslao Ollague L, et al. **Med Cutan Ibero Lat Am** 1988; 16(4):291–4 (Eng. Abstr.) **(Spa)**

[Experimental infection of an adult domestic cat with third stage larvae of Gnathostoma spinigerum isolated from a fresh water fish] Wenceslao Ollague L, et al.
Med Cutan Ibero Lat Am 1988;16(4):295–7 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Dioctophyme larva in the subcutaneous tissues of a woman in Ohio. Gutierrez Y, et al. **Am J Surg Pathol** 1989 Sep; 13(9):800–2

Kinetics and staining properties of mast cells proliferating in rat small intestine tunica muscularis and subserosa following infection with Nippostrongylus brasiliensis. Arizono N, et al. **APMIS** 1988 Nov;96(11):964–70

Intestinal mucosal injury is associated with mast cell activation and leukotriene generation during Nippostrongylus–induced inflammation in the rat. Perdue MH, et al. **Dig Dis Sci** 1989 May;34(5):724–31

Suppression of phytohemagglutinin induced splenocyte proliferation during concurrent infection with Eimeria nieschulzi and Nippostrongylus brasiliensis. Bristol JR, et al. **Experientia** 1989 Aug 15;45(8):762–3

The histopathology of Scomber japonicus infection by Nematobothrium scombri (Trematoda:Didymozoidae) and of larval anisakid nematode infections in the liver of Pagrus pagrus. Eiras JC, et al. **Mem Inst Oswaldo Cruz** 1987 Apr–Jun;82(2):155–9

Testing the hypothesis that crypt cell hyperplasia inhibits lactase expression by mouse jejunal enterocytes. Smith MW, et al. **Q J Exp Physiol** 1988 Sep;73(5):777–80

[Intestinal anisakiasis (herring worm disease). Report of 8 acute disease courses] Lorenz G, et al. **Pathologe** 1988 Jul; 9(4):199–203 **(Ger)**

PHYSIOPATHOLOGY

Effect of Strongyloides ratti on small bowel function in normal and immunosuppressed host rats. Weesner RE, et al. **Dig Dis Sci** 1988 Oct;33(10):1316–21

PREVENTION & CONTROL

Immunity in mice vaccinated with a molecular weight 60,000 glycoprotein secreted by adult Nematospiroides dubius. Monroy FG, et al. **Int J Parasitol** 1989 Feb;19(1):71–6

Chemoprophylactic action of a substituted methyl benzimidazole carbamate against experimental nematode infections. Srivastava JK, et al. **Trop Med Parasitol** 1988 Dec;39(4):325–7

[Studies on prophylaxis against anisakiasis—a screening of killing effects of extracts from foods on the larvae] Kasuya S, et al. **Kansenshogaku Zasshi** 1988 Dec;62(12):1152–6 (Eng. Abstr.) **(Jpn)**

SURGERY

Nine cases of acute gastric anisakiasis. Ikeda K, et al.
Gastrointest Endosc 1989 Jul–Aug;35(4):304–8

[Ileus of the small intestine caused by intestinal anisakiasis (herring worm disease)] Lorenz D, et al. **Chirurg** 1988 Aug; 59(8):552–4 (Eng. Abstr.) **(Ger)**

TRANSMISSION

The influence of dietary protein on the experimental epidemiology of Heligmosomoides polygyrus (Nematoda) in the laboratory mouse. Slater AF.
Proc R Soc Lond [Biol] 1988 Jul 22;234(1275):239–54

Theiazia callipaeda (Nematoda: Spirurida): transmission by flies from dogs to children in Hubei, China. Shi YE, et al. **Trans R Soc Trop Med Hyg** 1988;82(4):627

VETERINARY

Economical losses associated with nematode infections in cattle. Nansen P. **Acta Vet Scand Suppl** 1988;84:390–3 (4 ref.)

Efficacy of an in–feed ivermectin formulation against gastrointestinal helminths, lungworms, and sarcoptic mites in swine. Alva–Valdes R, et al. **Am J Vet Res** 1989 Aug; 50(8):1392–5

Prophylactic efficacy of an ivermectin sustained–release bolus against challenge exposure with gastrointestinal and pulmonary nematode infective larvae in calves. Alva–Valdes R, et al. **Am J Vet Res** 1988 Oct;49(10):1726–8

Use of the sustained–release morantel bolus in stocker calves in southern United States. Craig TM, et al.
Am J Vet Res 1988 Oct;49(10):1729–32

Evaluation of ivermectin for larvicidal effect in experimentally induced Parascaris equorum infections in pony foals. DiPietro JA, et al. **Am J Vet Res** 1988 Nov; 49(11):1983–5

Efficacy of ivermectin in oral drench and paste formulation against migrating larvae of experimentally inoculated Parascaris equorum. French DD, et al. **Am J Vet Res** 1989 Jul;50(7):1071–3

Efficacy of febantel against naturally acquired gastrointestinal nematodes in calves, and recognition of Oesophagostomum venulosum in Oregon cattle. Hoberg EP, et al.
Am J Vet Res 1988 Sep;49(9):1540–2

Controlled test of anthelmintic activity of a macrocyclic lactone (compound F28249–alpha) in lambs. Lyons ET, et al. **Am J Vet Res** 1989 Jun;50(6):975–7

Efficacy of morantel sustained–release bolus in control of gastrointestinal nematodes of weaned calves during the autumn–winter grazing season. Stuedemann JA, et al.
Am J Vet Res 1988 Dec;49(12):2090–3

Anthelmintic efficacies of fenbendazole, ivermectin, and levamisole against Nematodirus battus infections in lambs. Zimmerman GL, et al. **Am J Vet Res** 1988 Dec; 49(12):2094–5

Haematological and cerebrospinal fluid findings in canine neural angiostrongylosis. Mason KV. **Aust Vet J** 1989 May; 66(5):152–4

Laryngeal streptocariasis causing death from asphyxiation in ducks. Mason RW. **Aust Vet J** 1988 Oct;65(10):335–6

Survey of internal parasites in Western Australian pig herds. 2. Relationship to anthelmintic usage and parasite control practices. Mercy AR, et al. **Aust Vet J** 1989 Jan;66(1):6–9

Cecal and hepatic granulomas in chickens associated with Heterakis gallinarum infection. Riddell C, et al.
Avian Dis 1988 Oct–Dec;32(4):836–8

Ventriculus worm infection in the pigeon (Columba livia domestica). Farah MO. **Br Vet J** 1988 Nov–Dec; 144(6):596–601

Aspects of the epidemiology of nematode infections in a cow–calf herd in Ontario. Slocombe JO, et al.
Can J Vet Res 1989 Jul;53(3):336–9

An assessment of residual ovine nematodes on pasture under maritime conditions. Smith HJ, et al. **Can J Vet Res** 1989 Jul;53(3):340–2

Immunopathogenesis of canine angistrongylosis: pulmonary effects of infection. Caruso JP, et al.
Comp Immunol Microbiol Infect Dis 1988;11(2):85–92

The epidemiological control of nematodes in New England lambs. Tritschler JP 2d, et al. **Cornell Vet** 1989 Oct; 79(4):327–38

Distribution of adult and larval cyathostomes in helminth-naive foals after primary infection. Reinemeyer CR, et al. **Equine Vet J** 1988 Jul;20(4):296–7

Revision of the genus Anguillicola Yamaguti, 1935 (Nematoda: Anguillicolidae) of the swimbladder of eels, including descriptions of two new species, A. novaezelandiae sp. n. and A. papernai sp. n. Moravec F, et al. **Folia Parasitol (Praha)** 1988;35(2):125–46

Granulinema gen. n. a new dracunculoid genus with two new species (G. carcharhini sp. n. and G. simile sp. n.) from the bull shark, Carcharhinus leucas (Valenciennes), from Louisiana, USA. Moravec F, et al. **Folia Parasitol (Praha)** 1988;35(2):113–20

The parasite Trichospirura leptostoma associated with wasting disease in a colony of common marmosets, Callithrix jacchus. Beglinger R, et al. **Folia Primatol (Basel)** 1988;51(1):45–51

Pasture populations of cattle nematode larvae in Guadeloupe (French West Indies). Aumont G, et al. **Int J Parasitol** 1989 Aug;19(5):547–54

Population evolution of the free-living stage of goat gastrointestinal nematodes on herbage under tropical conditions in Guadeloupe (French West Indies). Aumont G, et al. **Int J Parasitol** 1989 Aug;19(5):539–46

Absence of pre-natal or milk-borne infection of kids with the lungworm Muellerius capillaris. Cabaret J. **Int J Parasitol** 1988 Dec;18(8):1105–6

The relationship between ovine lymphocyte antigens and parasitological and production parameters in Romney sheep. Douch PG, et al. **Int J Parasitol** 1989 Feb; 19(1):35–41

Patterns of caudal papillae in Contracaecum osculatum (Nematoda) and some related species from different regions of the world. Fagerholm HP. **Int J Parasitol** 1988 Dec; 18(8):1039–51

Effects of irrigation on appearance and survival of infective larvae of goat gastro-intestinal nematodes in Guadeloupe (French West Indies). Gruner L, et al. **Int J Parasitol** 1989 Jul;19(4):409–15

Selection of mice for survival following an acute Nematospiroides dubius infection. Overend DJ, et al. **Int J Parasitol** 1988 Jul;18(5):633–8

Efficacy of febantel paste against naturally acquired gastrointestinal nematodes of cattle. Courtney CH, et al. **J Am Vet Med Assoc** 1988 Sep 15;193(6):665–7

Physalopterine larvae in muscles of blue grouse and a chukar partridge. Foreyt WJ. **J Am Vet Med Assoc** 1986 Nov 1; 189(9):1114–5

Aortitis caused by Ophidascaris papuanus in a python. Hamir AN. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1129–30

Cerebrospinal nematodiasis in a goat herd. Kopcha M, et al. **J Am Vet Med Assoc** 1989 May 15;194(10):1439–42

Ivermectin treatment of ocular nematodiasis in birds. Thomas-Baker B, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1113

Occurrence of the lungworms Capillaria and Crenosoma spp. in British hedgehogs (Erinaceus europaeus). Majeed SK, et al. **J Comp Pathol** 1989 Jan;100(1):27–36

Micronema deletrix-induced granulomatous osteoarthritis in a lame horse. Simpson RM, et al. **J Comp Pathol** 1988 Oct; 99(3):347–51

In vitro effect of ivermectin on Pseudoterranova decipiens survival. Manley KM, et al. **J Helminthol** 1989 Mar; 63(1):72–4

Mammomonogamus laryngeus (Railliet, 1899) infections in cattle from Sri Lanka. Van Aken D, et al. **J Helminthol** 1989 Mar;63(1):47–52

Nematode infestation of fillets from Atlantic cod, Gadus morhua, off eastern Canada. Chandra CV, et al. **J Parasitol** 1988 Dec;74(6):1038–40

Evidence for genetic control of nematode egg-shedding rates in calves. Leighton EA, et al. **J Parasitol** 1989 Aug; 75(4):498–504

Cerebrospinal fluid changes in two horses with central nervous system nematodiasis (Micronema deletrix). Darien BJ, et al. **J Vet Intern Med** 1988 Oct–Dec;2(4):201–5

Histological aspects of natural eustrongyloid infections of the northern water snake, Nerodia sipedon. Bursey CR. **J Wildl Dis** 1986 Oct;22(4):527–32

Fatal lungworm infection in an opossum. Duncan RB Jr, et al. **J Wildl Dis** 1989 Apr;25(2):266–9

Observations on the lungworm, Pneumostrongylus calcaratus, in impala (Aepyceros melampus) from Swaziland. Gallivan GJ, et al. **J Wildl Dis** 1989 Jan; 25(1):76–82

Studies on the prevalence and the transmission of lung and stomach nematodes of the wild boar (Sus scrofa) in France. Humbert JF, et al. **J Wildl Dis** 1989 Jul;25(3):335–41

Prevalence and pathology of nematode infections in the lungs of ringed seals (Phoca hispida) of the western arctic of Canada. Onderka DK. **J Wildl Dis** 1989 Apr;25(2):218–24

Parasites of prairie rattlesnakes (Crotalus viridis viridis) and gopher snakes (Pituophis melanoleucus sayi) from the eastern high plains of New Mexico. Pfaffenberger GS, et al. **J Wildl Dis** 1989 Apr;25(2):305–6

Identification of dorsal-spined larvae from free-ranging wapiti (Cervus elaphus) in southwestern Manitoba, Canada. Pybus MJ, et al. **J Wildl Dis** 1989 Apr;25(2):291–3

New information on the location of Capillaria procyonis (Nematoda: Trichuroidea) in the tongue of a raccoon (Procyon lotor). Snyder DE. **J Wildl Dis** 1989 Apr; 25(2):294–6

Parelaphostrongylus tenuis in New Brunswick: the parasite in terrestrial gastropods. Upshall SM, et al. **J Wildl Dis** 1986 Oct;22(4):582–5

Helminth parasites of the Japanese monkey, Macaca fuscata fuscata in Ehime Prefecture, Japan. Itoh K, et al. **Jpn J Vet Res** 1988 Oct;36(3–4):235–47

Mebendazole for worming mice: effectiveness and side effects. Baskerville M, et al. **Lab Anim** 1988 Jul;22(3):263–8

The use of repeated treatment with Ivomec and Neguvon spray in the control of murine fur mites and oxyurid worms. Baumans V, et al. **Lab Anim** 1988 Jul;22(3):246–9

Nematodirus abnormalis (May, 1920) in sheep in the south-western part of the Cape Province. Louw JP. **Onderstepoort J Vet Res** 1989 Jun;56(2):141–2

The experimental receptivity of Helicella (Helicella) itala and Cepaea nemoralis (Mollusca, Helicidae) to larvae of Muellerius sp. and Neostrongylus linearis (Nematoda, Protostrongylidae) from chamois (Rupicapra rupicapra). Diez-Baños P, et al. **Parasitol Res** 1989;75(6):488–94

Incubation in rats of a nematodal larva from cod to establish its specific identity: Contracaecum osculatum, (Rudolphi). Fagerholm HP. **Parasitol Res** 1988;75(1):57–63

Models to assess the potential of Capillaria hepatica to control population outbreaks of house mice. McCallum HI, et al. **Parasitology** 1989 Jun;98 Pt 3:425–37

Gastrointestinal nematode parasites and the stability and productivity of intensive ruminant grazing systems. Grenfell BT. **Philos Trans R Soc Lond [Biol]** 1988 Oct 31; 321(1207):541–63 (54 ref.)

Nematodirus infection in lambs on an alternate grazing system of husbandry. Coop RL, et al. **Res Vet Sci** 1988 Jul;45(1):62–7

Effects of endoparasites on the growth rate of Sudanese sheep and cattle. Abdalla HS. **Trop Anim Health Prod** 1989 Feb; 21(1):3

Seasonal prevalence of protostrongylid and Dictyocaulus species of lungworms in Awassi sheep in north-west Syria. Thomson EF, et al. **Trop Anim Health Prod** 1988 Aug; 20(3):187–9

In vivo activation of equine eosinophils and neutrophils by experimental Strongylus vulgaris infections. Dennis VA, et al. **Vet Immunol Immunopathol** 1988 Dec;20(1):61–74

Genetic resistance of hosts and its influence on epidemiology. Barger IA. **Vet Parasitol** 1989 Jul 1;32(1):21–35 (46 ref.)

Factors affecting the survival and migration of the free-living stages of gastrointestinal nematode parasites of cattle in central Queensland. Bryan RP, et al. **Vet Parasitol** 1989 Mar;30(4):315–26

The relation between the natural worm burden of steers and the faecal egg count differentiated to species. Bryan RP, et al. **Vet Parasitol** 1989 Mar;30(4):327–34

Seasonal prevalence of gastrointestinal nematodes of goats in Pernambuco State, Brazil. Charles TP. **Vet Parasitol** 1989 Mar;30(4):335–43

Epidemiological patterns of gastrointestinal and lung helminth infections in grazing calves in The Netherlands. Eysker M, et al. **Vet Parasitol** 1988 Jul;29(1):29–39

Small strongyle infections in donkeys from the highveld in Zimbabwe. Eysker M, et al. **Vet Parasitol** 1989 Mar; 30(4):345–9

Efficacy of ivermectin against mange and gastrointestinal nematodes of buffalo (Bubalus bubalis). Gill BS, et al. **Vet Parasitol** 1989 May;31(2):141–7

Prevalence and pathology of helminth parasites in domestic ducks of Bangladesh. Islam MR, et al. **Vet Parasitol** 1988 Jul;29(1):73–7

Strongylus vulgaris in donkeys (Equus asinus) from the highveld of Zimbabwe. Pandey VS, et al. **Vet Parasitol** 1989 Jul 15;32(2–3):173–9

Control of gastrointestinal parasitism with an oxfendazole pulse-release anthelmintic device. Thomas RJ, et al. **Vet Parasitol** 1988 Jul;29(1):19–28

An epidemiological study of parasitic gastroenteritis in sheep under an intensive grazing system. Uriarte J, et al. **Vet Parasitol** 1989 Apr;31(1):71–81

Nematode parasite infections of domestic pigs in a sub-tropical and high-rainfall area of India. Yadav AK, et al. **Vet Parasitol** 1989 May;31(2):133–9

Parasites of the stomach in donkeys of the highveld of Zimbabwe. Pandey VS, et al. **Vet Q** 1988 Oct;10(4):246–8

Efficacy of early season anthelmintic treatment against gastrointestinal nematodes. Vercruysse J, et al. **Vet Q** 1988 Oct;10(4):225–9

Control of naturally acquired bovine parasitic bronchitis and gastroenteritis with an oxfendazole pulse release device. Armour J, et al. **Vet Rec** 1988 Oct 29;123(18):460–4

Comparison of two early season anthelmintic programmes on a commercial beef farm. Caldow GL, et al. **Vet Rec** 1989 Feb 4;124(5):111–4

Interaction between coccidia and Nematodirus battus in lambs on pasture. Catchpole J, et al. **Vet Rec** 1989 Jun 10;124(23):603–5

Elaphostrongylus cervi in Danish wild red deer (Cervus elaphus). Eriksen L, et al. **Vet Rec** 1989 Feb 4;124(5):124

Performance of lambs on a clean grazing system compared with lambs on a traditional system. Fawcett AR, et al. **Vet Rec** 1988 Nov 19;123(21):545–6

Influence of an OPRB on immunity to gastrointestinal nematodes: a field study. Jacobs DE, et al. **Vet Rec** 1989 May 13;124(19):510

Strategic use of anthelmintics for parasitic nematodes in cattle and sheep [published erratum appears in Vet Rec 1988 Dec 3;123(23):594] McKellar QA. **Vet Rec** 1988 Nov 5; 123(19):483–7 (47 ref.)

Heartworm infection death in a young dog [letter] Martin M. **Vet Rec** 1989 Apr 29;124(17):470

Efficacy of flubendazole against gastrointestinal and lung nematodes in pigs. Vanparijs O, et al. **Vet Rec** 1988 Sep 24;123(13):337–9

Development and survival of free-living stages of gastrointestinal nematodes of sheep and goats on pasture in the Nigerian derived savanna. Chiejina SN, et al. **Vet Res Commun** 1989;13(2):103–12

Field evaluation of an experimental albendazole pulse release bolus in the control of parasitic gastroenteritis in first-season grazing calves. Dorny P, et al. **Vet Res Commun** 1988;12(4–5):335–42

Experimental infection of sheep and goats with Muellerius capillaris (Protostrongylidae, Nematoda). Sauerländer R. **Zentralbl Veterinarmed [B]** 1988 Aug;35(7):525–48

[Differences in growth in young cattle caused by worm infections. Greater loss in yearlings and cows than in calves (news)] **Tijdschr Diergeneeskd** 1989 Jun 1;114(11):632–3 **(Dut)**

[A persistent case of kennel cough caused by Filaroides osleri] Boersema JH, et al. **Tijdschr Diergeneeskd** 1989 Jan 1;114(1):10–3 (Eng. Abstr.) **(Dut)**

[Anisakids and human anisakiasis. 2. Investigation of the anisakids of commercial fish in the district of Paris] Huang WY. **Ann Parasitol Hum Comp** 1988;63(3):197–208 (Eng. Abstr.) **(Fre)**

[Capillaria brochieri n. sp. (Nematoda: Capillariinae) intestinal parasite of the chimpanzee (Pan paniscus) in Zaire] Justine JL. **Ann Parasitol Hum Comp** 1988; 63(6):420–38 (44 ref.) (Eng. Abstr.) **(Fre)**

[Fecal surveys in pastured sheep and the occurrence of Cysticercus tenuicollis in slaughtered sheep] Hasslinger MA, et al. **Angew Parasitol** 1988 Nov;29(4):227–34 (Eng. Abstr.) **(Ger)**

[Benzimidazole resistance in small strongylids (Cyathostominae): distribution in horse stock in Northrhine-Westphalia] Ullrich D, et al. **Berl Munch Tierarztl Wochenschr** 1988 Dec 1;101(12):406–8 (Eng. Abstr.) **(Ger)**

[Micronema deletrix as the cause of a granulomatous nephritis in a horse] Liebler EM, et al. **DTW** 1989 Apr;96(4):223–4 (Eng. Abstr.) **(Ger)**

[Infection with Nematodirus battus (Crofton and Thomas, 1951) and pasture eimeriosis in lambs in Germany (case report)] Bauer C. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul–Aug;96(7):382–4 (Eng. Abstr.) **(Ger)**

[The effectiveness of the new morantel sustained-release trilaminate bolus against gastrointestinal nematode infections in cattle in their first grazing period] Pfister K, et al. **Schweiz Arch Tierheilkd** 1989;131(3):143–50 (Eng. Abstr.) **(Ger)**

[What is your diagnosis? Which therapeutic action do you recommend? Capillaria plica infection] Spillmann SK, et al. **Schweiz Arch Tierheilkd** 1989;131(4):213–4 **(Ger)**

[A survey of the prevalence of Anatrichosoma sp. in nasal cavities of cynomolgus monkeys] Takenaka T, et al. **Jikken Dobutsu** 1989 Jan;38(1):93–6 (Eng. Abstr.) **(Jpn)**

[Experimental infection of 2 species of laboratory rodents with invasive larvae of Elaphostrongylus cervi (Nematoda, Metastrongyloidea)] Demiaszkiewicz AW. **Wiad Parazytol** 1989;35(2):115–9 (Eng. Abstr.) **(Pol)**

[Experimental infection of poikilothermic vertebrates with stages I and III larvae of Elaphostrongylus cervi Cameron, 1931] Demiaszkiewicz AW. **Wiad Parazytol** 1988; 34(2):131–5 (Eng. Abstr.) **(Pol)**

[Evaluation of drugs used for the control of Nematoda and ectoparasites of animals] Grzywiński L. **Wiad Parazytol** 1988;34(4–6):557–9 **(Pol)**

[The problem of gastrointestinal Nematode infections in heifers in industrial animal husbandry] Nowosad B, et al. **Wiad Parazytol** 1988;34(3):279–93 (Eng. Abstr.) **(Pol)**

[Nematoda of the gastrointestinal system of Gavia stellata and Gavia arctica (Gaviidae)] Okulewicz A. **Wiad Parazytol** 1989;35(1):35–42 (Eng. Abstr.) **(Pol)**

[Intestinal parasites of Anthropoidea from the Wrocław Zoo] Okulewicz A, et al. **Wiad Parazytol** 1988;34(3):301–5 (Eng. Abstr.) **(Pol)**

[Nematoda of starlings (Sturnus vulgaris L.) of Lower Silesia] Okulewicz A. **Wiad Parazytol** 1988;34(3):307–18 (Eng. Abstr.) **(Pol)**

[Anisakiasis in the Caspian seal] Popov VN, et al. **Parazitologiia** 1989 Mar–Apr;23(2):178–81 (Eng. Abstr.) **(Rus)**

NEMATOMORPHA see **HELMINTHS**

NEMATOMORPHA INFECTIONS see under **HELMINTHIASIS**

NEMATOSPIROIDES DUBIUS see under **HELIGMOSOMATOIDEA**

NEOCARZINOSTATIN see under **ANTIBIOTICS, ANTINEOPLASTIC**

NEODYMIUM

Neodymium:YAG laser damage of intraocular lenses. Smith SG, et al. **J Cataract Refract Surg** 1988 Nov;14(6):660–3

An investigation of two rare earth magnetic systems by measuring grip force and reseating force. Lewandowski JA, et al. **J Prosthet Dent** 1988 Dec;60(6):705–11

TOXICITY

Effect of methionine supplementation on lanthanum chloride and neodymium chloride induced alterations in enzymes of the antioxidant defence system and gamma-glutamyl cycle in chick liver. Ghosh N, et al. **Indian J Biochem Biophys** 1988 Aug;25(4):336–40

NEOMYCIN

Binding of neomycin to phosphatidylinositol 4,5-bisphosphate (PIP2). Gabev E, et al. **Biochim Biophys Acta** 1989 Feb 13;979(1):105–12

Neomycin resistance as a dominantly selectable marker for transformation of the zygomycete Absidia glauca. Wöstemeyer J, et al. **Curr Genet** 1987;12(8):625–7

Development of neomycin-resistant WEHI-3B D+ murine cells as an in vivo model of acute nonlymphocytic leukemia. Gamba-Vitalo C, et al. **Exp Hematol** 1989 Feb; 17(2):130–7

Unnecessary addition of ethylenediamine hydrochloride to "generic" nystatin creams. Fisher AA. **J Am Acad Dermatol** 1989 Jan;20(1):129–30

Production of hybrid hybridomas based on HAT(s)-neomycin(r) double mutants. De Lau WB, et al. **J Immunol Methods** 1989 Feb 8;117(1):1–8

A neomycin resistance gene cassette selectable in a single copy state in the Bacillus subtilis chromosome. Itaya M, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4410

ADMINISTRATION & DOSAGE

The efficacy of oral antimicrobials in reducing aerobic and anaerobic colonic mucosal flora. Groner JI, et al. **Arch Surg** 1989 Mar;124(3):281–4

Systemic versus systemic plus oral chemoprophylaxis in elective colorectal surgery. Peruzzo L, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):601–3

Evaluation of the effect of ototopical neomycin on spiral ganglion cell density in the guinea pig. Zappia JJ, et al. **Hear Res** 1989 Jun 15;40(1–2):29–37

Topical mupirocin versus topical neosporin in the treatment of cutaneous infections. Wilkinson RD, et al. **Int J Dermatol** 1988 Sep;27(7):514–5

[Efficacy and tolerance of a preparation containing triamcinolone acetonide, nystatin and neomycin] Flati G, et al. **Clin Ter** 1987 Nov 15;123(3):185–9 (Eng. Abstr.) **(Ita)**

ADVERSE EFFECTS

Sensitization to gentamicin alone. van Ketel WG, et al. **Contact Dermatitis** 1989 Apr;20(4):303–4

The nephrotoxic potential of neomycin in the horse. Edwards DJ, et al. **Equine Vet J** 1989 May;21(3):206–10

Genital contact dermatitis. Abdul Gaffoor PM. **Indian J Dermatol** 1987 Oct;32(4):102–3

Ototoxicity of ear drops in patients suffering from chronic otitis media. Podoshin L, et al. **J Laryngol Otol** 1989 Jan; 103(1):46–50

[Ototoxicity of neomycin] Handrick W, et al. **Kinderarztl Prax** 1988 Jun;56(6):283–7 (Eng. Abstr.) **(Ger)**

ANALYSIS

Microbiological determination of neomycin in feeds: collaborative study. Stahl GL, et al. **J Assoc Off Anal Chem** 1989 Mar-Apr;72(2):237–41

BIOSYNTHESIS

Strain improvement studies for neomycin production by Streptomyces marinensis. Ellaiah P, et al. **Indian J Exp Biol** 1988 Jul;26(7):562–3

DIAGNOSTIC USE

Separation of liposome populations differing in phosphoinositide content by chromatography on immobilized neomycin. Riaz M, et al. **J Pharm Sci** 1989 Feb;78(2):172–5

GENETICS

pYAC-4 Neo, a yeast artificial chromosome vector which codes for G418 resistance in mammalian cells. Cooke H, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11817

METABOLISM

Aminoglycoside-binding sites in Staphylococcus aureus as revealed by neomycin-gold labeling. Morioka H, et al. **J Electron Microsc (Tokyo)** 1988;37(3):141–9

PHARMACOLOGY

Microflora-derived polyamines modulate obstruction-induced colonic mucosal hypertrophy. Osborne DL, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):G1049–57

Kinetics of cell-free activation of neutrophil NADPH oxidase. Effects of neomycin and guanine nucleotides. Aviram I, et al. **Biochem J** 1989 Jul 15;261(2):477–82

Effect of pertussis toxin and neomycin on G-protein-regulated polyphosphoinositide phosphodiesterase. A comparison between HL60 membranes and permeabilized HL60 cells. Cockcroft S, et al. **Biochem J** 1988 Dec 1;256(2):343–50

Rapid kinetic analysis of the calcium-release channels of skeletal muscle sarcoplasmic reticulum: the effect of inhibitors. Calviello G, et al. **Biochemistry** 1989 Feb 7; 28(3):1301–6

The effect of (a) neomycin and lactulose treatment on systemic and portal serum GABA levels in rats and (b) pH changes on [3H] GABA binding to isolated rat hepatocytes. Minuk GY, et al. **Clin Invest Med** 1988 Oct; 11(5):373–6

Neomycin inhibits platelet functions and inositol phospholipid metabolism upon stimulation with thrombin, but not with ionomycin or 12-O-tetradecanoyl-phorbol 13-acetate. Tysnes OB, et al. **Eur J Biochem** 1988 Oct 15; 177(1):219–23

Phorbol ester and neomycin dissociate bradykinin receptor-mediated arachidonic acid release and polyphosphoinositide hydrolysis in Madin-Darby canine kidney cells. Evidence that bradykinin mediates noninterdependent activation of phospholipases A2 and C. Slivka SR, et al. **J Biol Chem** 1988 Oct 15;263(29):14640–7

Porcine intestinal ammonia liberation. Influence of food intake, lactulose and neomycin treatment. van Berlo CL, et al. **J Hepatol** 1988 Oct;7(2):250–7

Construction of mouse A9 clones containing a single human chromosome tagged with neomycin-resistance gene via microcell fusion. Koi M, et al. **Jpn J Cancer Res** 1989 May; 80(5):413–8

Neomycin and ruthenium red antagonism of monoaminergic depression of cerebral cortical neurones. Phillis JW. **Life Sci** 1974 Jul 15;15(2):213–22

Mutagen-induced recombination between stably integrated neo gene fragments in CHO and EM9 cells. Hellgren D, et al. **Mutat Res** 1989 May;226(1):1–8

Responsiveness of slowly adapting cutaneous mechanoreceptors after close arterial infusion of neomycin in cats. Baumann KI, et al. **Prog Brain Res** 1988;74:43–9

Construction of microcell hybrid panel containing different neo gene insertions in mouse chromosome 17 used for chromosome-mediated gene transfer. Sidén TS, et al. **Somat Cell Mol Genet** 1989 May;15(3):245–53

[Antibiotic sensitivity of Campylobacter jejuni and Campylobacter coli strains with special reference to sensitivity to erythromycin and neomycin] Richter U, et al. **Padiatr Grenzgeb** 1989;28(1):57–60 (Eng. Abstr.) **(Ger)**

[Transposon-like DNA sequence encoding neomycin resistance in Streptomyces lividans 66] Danilenko VN, et al. **Dokl Akad Nauk SSSR** 1989 Jan-Feb;304(1):201–5 **(Rus)**

[Location of determinants of stability to neomycin and kanamycin as well as DNA segments, responsible for amplification in Streptomyces plasmids pSU3 and pSU10] Starodubtseva LI, et al. **Mol Biol (Mosk)** 1989 Jan-Feb; 23(1):193–203 (Eng. Abstr.) **(Rus)**

STANDARDS

Withdraw of product licences [letter] Mackinnon JD. **Vet Rec** 1989 Jul 8;125(2):49

Withdrawal of product licences [letter] Watson JO. **Vet Rec** 1989 Jul 29;125(5):116

THERAPEUTIC USE

Oral prophylaxis with neomycin and erythromycin in colorectal surgery. More proof for efficacy than failure. Kling PA, et al. **Arch Surg** 1989 Jun;124(6):705–7

Furazolidone toxicity in neomycin-treated turkey poults. Czarnecki CM. **Avian Dis** 1989 Jul-Sep;33(3):466–72

A double-blind comparative study to compare the efficacy of Locoid C with Tri-Adcortyl in children with infected eczema. Meenan FO. **Br J Clin Pract** 1988 May;42(5):200–2

Acanthamoeba keratitis associated with contact lenses: six consecutive cases of successful management. Moore MB, et al. **Br J Ophthalmol** 1989 Apr;73(4):271–5

Is neomycin necessary for bowel preparation in surgery of the colon? Oral neomycin plus erythromycin versus erythromycin-metronidazole. Lewis RT, et al. **Can J Surg** 1989 Jul;32(4):265–70

Antibiotic prophylaxis in neurosurgery. A clinical study. Conzen M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):566

Metronidazole vs. erythromycin, neomycin, and cefazolin in prophylaxis for colonic surgery. Khubchandani IT, et al. **Dis Colon Rectum** 1989 Jan;32(1):17–20

Time of separation of the umbilical cord: a comparative study of treatment with alcohol and Rikospray. Naor N, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Aug;32(2):89–93

[Antagonistic effects of 6 drugs on myopathy induced by soman intoxication] Yuan BL, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Mar;9(2):111–5 (Eng. Abstr.) **(Chi)**

[Lactitol and neomycin: monotherapy or combined therapy in the prevention and treatment of hepatic encephalopathy?] Scevola D, et al. **Clin Ter** 1989 Apr 30; 129(2):105–11 (Eng. Abstr.) **(Ita)**

[Preoperative topical antibiotics in patients subjected to short term prophylaxis for colorectal surgery] Di Palo S, et al. **Minerva Chir** 1989 Mar 31;44(6):1029–31 (Eng. Abstr.) **(Ita)**

[Clinical-therapeutic evaluation of a new dermatologic preparation for topical use with a base of alcyonide and neomycin] Cappelletti E, et al. **Riv Eur Sci Med Farmacol** 1987 Sep;9(3):335–40 (Eng. Abstr.) **(Ita)**

TOXICITY

Effect of orally administered neomycin on uterine growth in young mice and rats. Rao SB. **Vet Hum Toxicol** 1988 Dec;30(6):571–2

NEOMYCIN A see **NEOMYCIN**

NEOMYCIN B see **FRAMYCETIN**

NEOMYCIN E see **PAROMOMYCIN**

NEON

Radiation chemistry of high-energy carbon, neon, and argon ions: molecular hydrogen yields. Appleby A, et al. **Radiat Res** 1989 Jun;118(3):401–8

NEONATAL ABSTINENCE SYNDROME

Maternal substance use and neonatal drug withdrawal. **J Perinatol** 1988 Fall;8(4):387–92

Naloxone hazard in infant of opioid abuser [letter] Gibbs J, et al. **Lancet** 1989 Jul 15;2(8655):159–60

Perinatal cocaine intoxication: a precaution [editorial] Tudehope DI. **Med J Aust** 1989 Mar 20;150(6):290–1

Newborn infants with drug withdrawal symptoms. Chasnoff IJ. **Pediatr Rev** 1988 Mar;9(9):273–7 (11 ref.)

[Psychotropics and pregnancy. Apropos of 2 case reports: the dose of triazolam] Attallah A, et al. **Rev Fr Gynecol Obstet** 1989 Jan;84(1):47–51 (Eng. Abstr.) **(Fre)**

CHEMICALLY INDUCED

Effects of transplacental exposure to cocaine and methamphetamine on the neonate. Dixon SD. **West J Med** 1989 Apr;150(4):436–42

[Clinical characteristics of the progeny of mothers with narcotic dependence] Moskalenko VD. **Sov Med** 1988; (10):63–6 (25 ref.) **(Rus)**

DIAGNOSIS

[Diagnosis and treatment of narcotic dependence in pregnant women and the neonatal abstinence syndrome in newborn infants] Rabe-Jabłońska J. **Pol Tyg Lek** 1988 Nov 7; 43(45):1427–9 (Eng. Abstr.) **(Pol)**

ETIOLOGY

Methadone maintenance has a tragic price [news] Scherer P. **Am J Nurs** 1988 Dec;88(12):1630, 1632

Effects of maternal cocaine abuse on the neonatal auditory system. Shih L, et al. **Int J Pediatr Otorhinolaryngol** 1988 Sep;15(3):245–51

Withdrawal emergent syndrome in an infant associated with maternal haloperidol therapy. Sexson WR, et al. **J Perinatol** 1989 Jun;9(2):170–2

Perinatal cocaine intoxication. Collins E, et al. **Med J Aust** 1989 Mar 20;150(6):331–2, 334

Drug use in pregnancy: parameters of risk. Chasnoff IJ. **Pediatr Clin North Am** 1988 Dec;35(6):1403–12 (37 ref.)

[Benzodiazepines in pregnancy] Glaeske G. **Med Monatsschr Pharm** 1989 Feb;12(2):62–5 **(Ger)**

PHYSIOPATHOLOGY

Behavior and development patterns in children born to heroin-addicted and methadone-addicted mothers. Hayford SM, et al. **J Natl Med Assoc** 1988 Nov; 80(11):1197–200 (11 ref.)

PREVENTION & CONTROL

Clinical and legal perspectives on prenatal drug and alcohol use: guidelines for individual and community response. Jessup M, et al. **Med Law** 1988;7(4):377–89 (54 ref.)

Easing drug withdrawal [news] **Ohio Med** 1988 Jun;84(6):427

PSYCHOLOGY

Neurobehavioral functioning in children exposed to narcotics in utero. Davis DD, et al. **Addict Behav** 1988;13(3):275–83

THERAPY

Neonatal pentazocine withdrawal syndrome—a case report of conservative treatment. Wu WH, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;42(3):229–32

NEONATAL CALF DIARRHEA VIRUS see **ROTAVIRUSES**

NEONATAL IMMUNITY, MATERNALLY-ACQUIRED see IMMUNITY, MATERNALLY-ACQUIRED

NEONATAL INTENSIVE CARE UNITS see INTENSIVE CARE UNITS, NEONATAL

NEONATOLOGY

see related
INFANT, NEWBORN

The challenge for neonatology in Canada [letter] Robertson WJ. **Can Med Assoc J** 1989 Sep 1;141(5):377
Ethical dilemmas of neonatal--perinatal surgery. Rostain AL, et al. **Clin Perinatol** 1989 Mar;16(1):275-302 (62 ref.)
Current neonatology and some results of research in Czechoslovakia. Houštěk J, et al. **Czech Med** 1989; 12(2):65-7
Proceedings of the Broadmoor Symposium: The uses, benefits, and limitations of pulse oximetry in neonatal medicine. November 12-14, 1986, Colorado Springs, Colorado. **J Perinatol** 1987 Fall;7(4):305-49
Medico-legal consultation: an expanded role of the tertiary neonatologist. Donn SM, et al. **J Perinatol** 1987 Summer; 7(3):238-41
Pain, the neonate, and the neonatologist. Kaplan M. **J Perinatol** 1988 Fall;8(4):354-5
Changing attitudes of neonatologists toward ventilator support. Pomerance JJ, et al. **J Perinatol** 1988 Summer; 8(3):232-41
Dilemmas in the neonatal management of extremely low birth weight babies. Forsyth JS. **Scott Med J** 1988 Dec; 33(6):356-7
Neonatology in the developing world. Part 1. Brewster D. **Trop Doct** 1989 Jul;19(3):100-4 contd
Neonatal-perinatal medicine--a model subspecialty [letter] Stevenson DK. **West J Med** 1989 Feb;150(2):213-4
[Magnetic resonance in pediatric research and clinical practice. I. What can we expect from this new method?] Martin E, et al. **Helv Paediatr Acta** 1988 Aug;43(1-2):53-74 (49 ref.) (Eng. Abstr.) (Ger)

ECONOMICS

A review of the economics of care for sick newborn infants [letter] Mugford M. **Community Med** 1988 Nov;10(4):363

EDUCATION

Maternal-infant competencies for new nurses. A joint effort by educators and practitioners. Sherwen LN. **J Perinatol** 1989 Jun;9(2):173-7

HISTORY

Neonatal pediatrics at the century mark. Silverman WA. **Perspect Biol Med** 1989 Winter;32(2):159-70
[Measures regarding the prevention of blindness in newborn infants] Biadala E. **Wiad Lek** 1988 Sep 1;41(17):1189-91 (Eng. Abstr.) (Pol)

INSTRUMENTATION

Effect of electromagnetic interference by neonatal transport equipment on aircraft operation. Nish WA, et al. **Aviat Space Environ Med** 1989 Jun;60(6):599-600

METHODS

Development of a neonatal case-mix classification. Forbes JF, et al. **Med Care** 1988 Nov;26(11):1033-45

STANDARDS

Advances in neonatal care [letter] Frader J. **Am J Dis Child** 1989 Apr;143(4):441
Medical care for the newborn [letter] Hoffenberg R, et al. **Lancet** 1988 Dec 24-31;2(8626-8627):1492
Management of pregnancy and childbirth in England and Wales and in France. Kaminski M, et al. **Paediatr Perinat Epidemiol** 1988 Jan;2(1):13-24 (45 ref.)
[Ways to improve the work of a neonatal hospital at the current stage] Levin AN. **Pediatriia** 1988;(10):80-2 (Rus)

STATISTICS & NUMERICAL DATA

[Evaluation of the incidence of congenital developmental defects in newborn infants based on an analysis of archival documentation] Nikolaeva IV, et al. **Gig Sanit** 1989 Mar; (3):38-41 (Eng. Abstr.) (Rus)

TRENDS

Fumes from the spleen. **Paediatr Perinat Epidemiol** 1988 Jul; 2(3):208-10
[Ways of improving neonatal hospital services] Levin AN, et al. **Sov Zdravookhr** 1988;(8):9-11 (Eng. Abstr.) (Rus)

NEOPLASM ANTIBODIES see ANTIBODIES, NEOPLASM

NEOPLASM ANTIGENS see ANTIGENS, NEOPLASM

NEOPLASM ANTIGENS, VIRAL see ANTIGENS, VIRAL, TUMOR

NEOPLASM CIRCULATING CELLS

Subacute cor pulmonale due to tumor embolization to the lungs. He XW, et al. **Angiology** 1989 Jan;40(1):11-7
Left atrial tumor embolization during pulmonary resection: review of literature and report of two cases. Mansour KA, et al. **Ann Thorac Surg** 1988 Oct;46(4):455-6
Subacute cor pulmonale due to tumor cell pulmonary embolization [letter] Cheng TO. **Arch Intern Med** 1989 Jun; 149(6):1459, 1462
Cor pulmonale due to tumor cell microemboli. Report of a case with occult gastric carcinoma. Hirata K, et al. **Arch Intern Med** 1988 Oct;148(10):2287-9
Clinical response to deoxycoformycin in chronic lymphoid neoplasms and biochemical changes in circulating malignant cells in vivo. Ho AD, et al. **Blood** 1988 Dec; 72(6):1884-90
Microscopic tumour embolism: an unusual cause of ventilation-perfusion mismatch. Rawlinson J, et al. **Br J Radiol** 1988 Oct;61(730):956-7
Strokes in tuberous sclerosis: are rhabdomyomas a cause? Gomez MR. **Brain Dev** 1989;11(1):14-9 (32 ref.)
Platelet-tumor cell interaction: effect of prostacyclin and a synthetic analog on metastasis formation. Costantini V, et al. **Cancer Chemother Pharmacol** 1988;22(4):289-93
Tumor cell dissemination patterns and metastasis of murine mammary carcinoma. Juacaba SF, et al. **Cancer Res** 1989 Feb 1;49(3):570-5
Use of pulmonary capillary wedge aspirates for the antemortem diagnosis of pulmonary microvascular tumor. Safian RD, et al. **Cathet Cardiovasc Diagn** 1989 Jun; 17(2):112-5
Effectiveness of chemoembolization therapy for metastatic right atrial tumor thrombus associated with hepatocellular carcinoma. Dazai Y, et al. **Chest** 1989 Aug;96(2):434-6
B16 melanoma spontaneous brain metastasis: occurrence and development within leptomeninges blood vessels. Alterman AL, et al. **Clin Exp Metastasis** 1989 Jan-Feb;7(1):15-23
Differential tumor growth of blood-borne B16 melanoma variants in cerebral dura mater is related to tumor-host cell reactions. Kawaguchi T, et al. **Clin Exp Metastasis** 1989 Jan-Feb;7(1):1-14
Biomechanical destruction of cancer cells in skeletal muscle: a rate-regulator for hematogenous metastasis. Weiss L. **Clin Exp Metastasis** 1989 Sep-Oct;7(5):483-91
Demonstration of tumor microembolism by lung perfusion imaging. Davis PS, et al. **Clin Nucl Med** 1988 Jul;13(7):543
Arterial occlusion reduces tumour cell lodgement in the rat liver. Blomqvist G, et al. **Eur J Cancer Clin Oncol** 1988 Oct;24(10):1573-8
A safe surgical technique for the infradiaphragmatic removal of caval tumor thrombus complicating renal cell carcinoma. Moskovitz B, et al. **Eur Urol** 1989;16(1):67-8
Survival and experimental metastatic potential of tumor cells circulated in vitro under conditions of high-speed fluid flow. Kawaguchi T, et al. **Fukushima J Med Sci** 1987 Jun; 33(1):47-54
Extrahepatic portal venous obstruction of different pathogenesis in pancreatic diseases: reports of 4 autopsy cases with chronic pancreatitis and pancreatic carcinoma. Terada T, et al. **Gastroenterol Jpn** 1989 Aug;24(4):414-20
Imaging diagnosis of portal tumor thrombus secondary to gastric cancer. Takayasu K, et al. **Gastrointest Radiol** 1989 Spring;14(2):161-3
Endolymphatic stromal myosis: surgical and hormonal therapy for extensive venous recurrence. Montag TW, et al. **Gynecol Oncol** 1989 May;33(2):255-60
Perfusion of human umbilical veins. A new approach to study the interactions of circulating malignant cells with vascular wall and their modulations. Castronovo V, et al. **Invasion Metastasis** 1988;8(6):332-50
Biomechanical destruction of cancer cells in the heart: a rate regulator for hematogenous metastasis. Weiss L. **Invasion Metastasis** 1988;8(4):228-37
Multiple tumor emboli after lung resection. Schneiderman J, et al. **J Cardiovasc Surg (Torino)** 1989 May-Jun; 30(3):496-8
Effects of nitrogen dioxide and ozone on blood-borne cancer cell colonization of the lungs. Richters A. **J Toxicol Environ Health** 1988;25(3):383-90
Cardiovascular evaluation before circulatory arrest for removal of vena caval extension of renal carcinoma. Belis JA, et al. **J Urol** 1989 Jun;141(6):1302-7
Total replacement of the suprarenal inferior vena cava with an expanded polytetrafluoroethylene tube graft in 2 patients with tumor thrombi from renal cell carcinoma. Okada Y, et al. **J Urol** 1989 Jan;141(1):111-4
Vascular embolization of a vertebral chordoma in a Fischer 344 rat. Wimberly HC. **Lab Anim Sci** 1988 Oct;38(5):614-5
Hepatocellular carcinoma with tumor thrombus in inferior vena cava [clinical conference] Close P, et al. **Med Pediatr Oncol** 1989;17(3):232-5
Pulmonary microvascular cytology in the diagnosis of lymphangitic carcinomatosis. Masson RG, et al. **N Engl J Med** 1989 Jul 13;321(2):71-6
Tumor embolism in tuberous sclerosis [letter] Kandt RS. **Pediatr Neurol** 1986 Sep-Oct;2(5):316
General case of the day. Massive pulmonary microtumor embolism. VanZandt TF, et al. **Radiographics** 1989 Mar; 9(2):355-8
Pulmonary embolism in renal cell carcinoma with vena cava extension. Henriksson C, et al. **Scand J Urol Nephrol** 1988; 22(3):215-8
Saddle embolus as first presentation of left atrial myxoma in a 14-year-old girl. Leach WJ, et al. **Scott Med J** 1988 Oct;33(5):340-1
Fragments of lipoma ascending to the brain. Cohen AR, et al. **Surg Neurol** 1989 Mar;31(3):215-9
Fibrin formation and tumour growth. O'Meara RA. **Thromb Diath Haemorrh Suppl** 1968;28:137-42; discussion 143-68 (17 ref.)
Enhanced cancer metastasis after monocrotaline-induced lung injury. Vincic L, et al. **Toxicol Appl Pharmacol** 1989 Sep 1;100(2):259-70
The effect of storage on the metastatic potential of tumor cells collected in autologous blood. An animal model. Lane TA. **Transfusion** 1989 Jun;29(5):418-20
Renal cell carcinoma presenting as Budd-Chiari syndrome. Nakajima Y, et al. **Urol Int** 1989;44(3):173-6
High energy shock waves do not affect either primary tumor growth or metastasis of prostate carcinoma, R3327-MatLyLu. Geldof AA, et al. **Urol Res** 1989; 17(1):9-12
[Multiple micropulmonary neoplastic emboli and subacute pulmonary heart disease] He XW. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Feb; 16(1):28-9, 1 (Chi)
[Nonbacterial thrombotic endocarditis: a clinico-pathologic study] Li LY, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Aug;27(8):469-71, 518 (Eng. Abstr.) (Chi)
[Neoplastic pulmonary embolism. Apropos of a case diagnosed by transbronchial pulmonary biopsy] Prévost JN, et al. **Rev Mal Respir** 1988;5(5):529-30 (Eng. Abstr.) (Fre)
[Metastasis and blood coagulation] Gastpar H. **Thromb Diath Haemorrh Suppl** 1968;28:119-36; discussion 143-68 (94 ref.) (Ger)
[Thrombophilic and hemorrhagic diatheses in cancer] Marx R. **Thromb Diath Haemorrh Suppl** 1968;28:101-17; discussion 143-68 (43 ref.) (Ger)
[The value of high resolution ultrasound in the assessment of tumorous vascular infiltrations of the large cervical vessels] Helmer M, et al. **Vasa Suppl** 1988;26:22-4 (Ger)
[Intravenous leiomyomatosis. Presentation of 5 cases and a review of the literature] Bianchini E, et al. **Pathologica** 1989 Mar-Apr;81(1072):151-62 (51 ref.) (Eng. Abstr.) (Ita)
[A histopathological investigation of metastatic liver tumors--the classification of their histological patterns and metastatic pathways taking into account the microscopic metastatic foci] Shibata H. **Gan No Rinsho** 1989 Feb; 35(3):335-7 (Eng. Abstr.) (Jpn)
[Systemic tumor emboli from primary bronchogenic carcinoma] Misawa Y, et al. **Kyobu Geka** 1989 Feb; 42(2):108-14 (13 ref.) (Eng. Abstr.) (Jpn)
[Prediction of the hematogenic metastasis and local recurrence of rectal cancer by quantification of the clinico-pathological factors] Kotanagi H, et al. **Nippon Geka Gakkai Zasshi** 1988 Jul;89(7):1022-7 (Eng. Abstr.) (Jpn)
[Successful case report concerning removal of right atrial tumor of malignant thymoma--review of right atrial tumor thrombus via the superior or inferior vena cava] Ikeda T, et al. **Nippon Naika Gakkai Zasshi** 1988 Jul;77(7):1025-30 (19 ref.) (Jpn)
[A case of gastric cancer forming a tumor embolus in the portal vein] Ozeki Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Oct;85(10):2255-60 (16 ref.) (Jpn)
[A case report of hepatocellular carcinoma with tumor thrombus in the pulmonary artery demonstrated by MRI] Harada M, et al. **Rinsho Hoshasen** 1988 Aug;33(8):907-10 (Eng. Abstr.) (Jpn)
[A case of hepatoma suspected pulmonary emboli following transcatheter arterial embolization] Ozaki M, et al. **Rinsho Hoshasen** 1989 Jan;34(1):165-7 (Eng. Abstr.) (Jpn)
[Tumor-like endothelial proliferation in the thrombosed pulmonary trunk] Nesterov EN. **Arkh Patol** 1988; 50(11):70-3 (Eng. Abstr.) (Rus)
[A case of coronary artery embolism due to tumor cells] Shkliar MB, et al. **Klin Med (Mosk)** 1988 Jun;66(6):115-7 (Rus)
[Tumors of the heart and arterial embolisms] Vodrážka M, et al. **Bratisl Lek Listy** 1989 Jun;90(6):399-405 (Eng. Abstr.) (Slo)
[Cancer of the kidney with tumor thrombosis of the inferior vena cava and right atrium] González Martín M, et al. **Arch Esp Urol** 1988 May;41(4):291-6 (35 ref.) (Eng. Abstr.) (Spa)

COMPLICATIONS

[Lymphedema of the lower limbs secondary to neoplastic lymphangitis caused by mucin-producing adenocarcinoma of the stomach. 2 case reports] Arcuri V, et al. **Minerva Chir** 1988 Dec 31;43(23-24):2103-6 (Eng. Abstr.) (Ita)

DIAGNOSIS

Pulmonary tumour emboli mimicking pulmonary thromboemboli in a young woman. Jennings AM, et al. **Br J Hosp Med** 1989 Jan;41(1):82-3

PATHOLOGY

Necrosis of portal tumor embolus of hepatocellular carcinoma by lipiodol transcatheter chemo-embolization. A case report. Wakasa K, et al. **Acta Pathol Jpn** 1988 Oct; 38(10):1363-7

Angiotropic large cell lymphoma (ALCL): morphological, immunohistochemical and genotypic studies with analysis of previous reports. Domizio P, et al. **Hematol Oncol** 1989 May-Jun;7(3):195-206 (32 ref.)

NEOPLASM INVASIVENESS

Interactions of invasive cells with native and modified extracellular matrix in vitro. Bracke M, et al. **Adv Exp Med Biol** 1988;233:171-8

Proteolytic mechanisms operating at the surface of invasive cells. Pöllänen J, et al. **Adv Exp Med Biol** 1988;233:187-99 (87 ref.)

Heparan sulfate degradation in tumor cell invasion and angiogenesis. Vlodavsky I, et al. **Adv Exp Med Biol** 1988; 233:201-10 (24 ref.)

In vitro studies on the invasion of blood vessel wall by choriocarcinoma cells. Chew EC, et al. **Anticancer Res** 1989 Jan-Feb;9(1):133-9

Cellular events during invasion by tumor cells of chick embryo skin. Katoh A, et al. **Anticancer Res** 1989 Jan-Feb; 9(1):125-8

Transforming growth factors in the regulation of malignant cell growth and invasion. Keski-Oja J, et al. **Cancer Invest** 1988;6(6):705-24 (206 ref.)

Quantitative in vitro assay for tumor cell invasion through extracellular matrix or into protein gels. Erkell LJ, et al. **Cancer Res** 1988 Dec 1;48(23):6933-7

Inhibition by retinoic acid of type IV collagenolysis and invasion through reconstituted basement membrane by metastatic rat mammary adenocarcinoma cells. Nakajima M, et al. **Cancer Res** 1989 Apr 1;49(7):1698-706

Tumor cell invasion of three-dimensional matrices of defined composition: evidence for a specific role for heparan sulfate in rodent cell lines. Robertson NP, et al. **Cancer Res** 1989 Apr 1;49(7):1816-23

Differential regulation of growth and invasiveness of MCF-7 breast cancer cells by antiestrogens. Thompson EW, et al. **Cancer Res** 1988 Dec 1;48(23):6764-8

Blocking of collagenase secretion by estramustine during in vitro tumor cell invasion. Wang M, et al. **Cancer Res** 1988 Nov 15;48(22):6262-71

Tumour progression and metastasis. **Cancer Surv** 1988; 7(4):551-710

The in vitro invasiveness and interactions with laminin of K-1735 melanoma cells. Evidence for different laminin-binding affinities in high and low metastatic variants. Albini A, et al. **Clin Exp Metastasis** 1989 Jul-Aug; 7(4):437-51

Decreased fucose incorporation in cell surface carbohydrates is associated with inhibition of invasion. Bolscher JG, et al. **Clin Exp Metastasis** 1989 Sep-Oct;7(5):557-69

Mechanisms of invasion and lymphatic penetration in human colorectal cancer. Carr I, et al. **Clin Exp Metastasis** 1989 Sep-Oct;7(5):507-16

Effects of RA 233 treatment on the adhesive, invasive and metastatic properties of 13762NF rat mammary tumor cells. Lichtner RB, et al. **Clin Exp Metastasis** 1989 Mar-Apr; 7(2):175-86

Tumor cell settling and early invasion of the peritoneum. van de Molengraft F, et al. **Clin Exp Metastasis** 1989 Mar-Apr;7(2):187-99

Effect of dipyridamole on invasion of five types of malignant cells in organ culture. Van Larebeke N, et al. **Clin Exp Metastasis** 1989 Nov-Dec;7(6):645-57

Dual effects of pertussis toxin on in vitro invasive behavior of metastatic lymphoma variants. Verschueren H, et al. **Clin Exp Metastasis** 1989 Sep-Oct;7(5):541-55

Reactive changes in the mandible in the presence of squamous cell carcinoma. McGregor AD, et al. **Head Neck Surg** 1988 Jul-Aug;10(6):378-86

Routes of entry of squamous cell carcinoma to the mandible. McGregor AD, et al. **Head Neck Surg** 1988 May-Jun; 10(5):294-301

Invasive bladder cancer. Strategies for cure and bladder preservation. Boileau MA, et al. **Hematol Oncol Clin North Am** 1988 Sep;2(3):447-55 (32 ref.)

Use of the Membrane Invasion Culture System (MICS) as a screen for anti-invasive agents. Welch DR, et al. **Int J Cancer** 1989 Mar 15;43(3):449-57

International Symposium on Cancer Progression and Metastasis. Proceedings of the 8th Sapporo Cancer Seminar. July 6-9, 1988, Sapporo. **Invasion Metastasis** 1989; 9(2):73-148

Potentiation and inhibition of tumor cell invasion by host cells and mediators. Akedo H, et al. **Invasion Metastasis** 1989;9(2):134-48

Invasiveness in vitro of mixed aggregates composed of two human mammary cell lines MCF-7 and HBL-100. De Bruyne GK, et al. **Invasion Metastasis** 1988;8(5):253-65

A new long-term in vitro invasion assay using fibrous connective tissue matrices maintaining architectural characteristics of connective tissue. Nabeshima K, et al. **Invasion Metastasis** 1988;8(5):301-16

Increased contraenvironmental-pressure cell division capability: a decisive force in metastasis and invasion of mouse lung adenocarcinoma cell lines. Saiga T, et al. **Invasion Metastasis** 1989;9(4):254-68

The in vitro invasive behavior of human myelomonocytic cell lines is modulated by HuIFN-gamma and pertussis toxin. Verhaegen S, et al. **J Biol Response Mod** 1989 Feb; 8(1):97-107

Normal nonmetastatic human trophoblast cells share in vitro invasive properties of malignant cells. Yagel S, et al. **J Cell Physiol** 1988 Sep;136(3):455-62

Qualitative and quantitative analysis of tumour invasion in vivo and in vitro. Mareel MM, et al. **J Cell Sci Suppl** 1987; 8:141-63 (104 ref.)

What's new in the ultrastructure of tumor invasion in vivo? Dingemans KP. **Pathol Res Pract** 1988 Nov;183(6):792-808 (183 ref.)

In vitro galactosylation of a 110-kDa glycoprotein by an endogenous cell surface galactosyltransferase correlates with the invasiveness of adrenal carcinoma cells. Penno MB, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(16):6057-61

[The distal spread of cancer of the rectum: study of fragments surgically obtained during radical exeresis] Di Matteo G, et al. **Ann Ital Chir** 1987;59(1-6):7-20 (Eng. Abstr.) (Ita)

DIAGNOSIS

Evaluation of intrahepatic tumour extent and prediction of resection size in liver tumours by computed tomography, ultrasonography and angiography. Tidebrant G, et al. **Acta Radiol** 1989 Jul-Aug;30(4):395-9

GENETICS

Genetic analysis of invasion and metastasis. Collard JG, et al. **Cancer Surv** 1988;7(4):691-710 (112 ref.)

PATHOLOGY

The relationship of nuclear staining density and mode of stromal invasion with axillary metastases and hormone receptor status in human breast cancer. Bell CD, et al. **Am J Clin Pathol** 1989 Apr;91(4):377-85

Tumour motility factors. Liotta LA, et al. **Cancer Surv** 1988; 7(4):631-52 (70 ref.)

Adhesion mechanisms in embryogenesis and in cancer invasion and metastasis. Thiery JP, et al. **Ciba Found Symp** 1988;141:48-74 (55 ref.)

Restored invasion of mouse MO4 cells into chick heart in vitro through mutual conditioning at reduced temperature. Bruyneel EA, et al. **Clin Exp Metastasis** 1989 May-Jun; 7(3):361-71

Comparison of tumor cell invasion assays: human amnion versus reconstituted basement membrane barriers. Hendrix MJ, et al. **Invasion Metastasis** 1989;9(5):278-97

A new in vitro assay for quantitating tumor cell invasion. Repesh LA. **Invasion Metastasis** 1989;9(3):192-208

Mouse L cells expressing human prourokinase-type plasminogen activator: effects on extracellular matrix degradation and invasion. Cajot JF, et al. **J Cell Biol** 1989 Aug;109(2):915-25

Mechanisms of cellular invasiveness: a comparison of amnion invasion in vitro and metastatic behavior in vivo. Yagel S, et al. **J Natl Cancer Inst** 1989 May 10;81(10):768-75

Experimental study of invasion and metastasis of cancer cells and establishment of the morphological pattern in the process of invasion and metastatic models of cancer cells. Gao J. **Sci Sin [B]** 1988 Jun;31(6):719-25

Squamous cell carcinoma infiltrating a pancreatic pseudocyst. Morgan J, et al. **South Med J** 1989 Sep;82(9):1161-4

PHYSIOPATHOLOGY

Biochemical mechanisms of tumor invasion and metastases. Liotta LA, et al. **Adv Exp Med Biol** 1988;233:161-9 (25 ref.)

Functional role of specific secreted and cell surface molecules in tumour cell invasion and metastasis. Quigley JP, et al. **Ciba Found Symp** 1988;141:22-47 (25 ref.)

Inhibitors of collagenase IV and cell adhesion reduce the invasive activity of malignant tumour cells. Reich R, et al. **Ciba Found Symp** 1988;141:193-210 (24 ref.)

The role of laminin in cancer invasion and metastasis. Hunt G. **Exp Cell Biol** 1989;57(3):165-76 (46 ref.)

PREVENTION & CONTROL

Flavonoids inhibit malignant tumor invasion in vitro. Bracke ME, et al. **Prog Clin Biol Res** 1988;280:219-33

ULTRASTRUCTURE

The flavonoid tangeretin inhibits invasion of MO4 mouse cells into embryonic chick heart in vitro. Bracke ME, et al. **Clin Exp Metastasis** 1989 May-Jun;7(3):283-300

NEOPLASM METASTASIS

Galactose-residues on glycans of metastatic cells positively correlate with the recognition by host non-specific effectors. Timár J, et al. **Acta Paediatr Hung** 1988-89; 29(1-2):59-62

Homing receptors and metastasis. Sher BT, et al. **Adv Cancer Res** 1988;51:361-90 (120 ref.)

Cancer metastasis. Biological and biochemical mechanisms and clinical aspects. Proceedings of the international congress. May 13-15, 1987, Bologna, Italy. **Adv Exp Med Biol** 1988;233:1-490

Detection of deregulated tyrosine-kinases in experimental and human metastatic tumors. Comoglio PM, et al. **Adv Exp Med Biol** 1988;233:303-8

Potential of monoclonal antibodies for localisation and treatment of disseminated disease: studies in syngeneic rat tumour systems. Eccles SA, et al. **Adv Exp Med Biol** 1988; 233:329-39

Do oncogenes play a role in tumor metastasis? Eisenbach L, et al. **Adv Exp Med Biol** 1988;233:281-91

Control of MHC genes that regulate the metastatic phenotype of tumor cells. Feldman M, et al. **Adv Exp Med Biol** 1988; 233:109-17

Eradication of cancer metastasis by tumoricidal macrophages. Fidler IJ. **Adv Exp Med Biol** 1988;233:415-23

Type IV collagenolytic activity linkage with the metastatic phenotype induced by ras transfection. Garbisa S, et al. **Adv Exp Med Biol** 1988;233:179-86

Role of host responses in the drug treatment of metastasis. Giraldi T, et al. **Adv Exp Med Biol** 1988;233:351-60

Immunological and structural profile of a 96 kD human melanoma associated antigen with preferential distribution in metastases. Graf LH Jr, et al. **Adv Exp Med Biol** 1988; 233:341-9

Modification of tumor cells and its application to immunotherapy of tumor metastasis. Kobayashi H. **Adv Exp Med Biol** 1988;233:97-108

C-heterochromatin variation and transposition in tumor progression. Larizza L, et al. **Adv Exp Med Biol** 1988; 233:309-18 (30 ref.)

Interferon-mediated modulation of metastasis and MHC antigens. Lollini PL, et al. **Adv Exp Med Biol** 1988; 233:129-39

Genetic basis of metastases. McMenamin MM, et al. **Adv Exp Med Biol** 1988;233:269-79

Maturational agents alone or in combination with cytotoxic agents in therapy of tumor metastases. Milas L, et al. **Adv Exp Med Biol** 1988;233:377-83

Potential therapeutic use of autologous human lymphocytes in metastatic melanoma: in vivo interleukin 2-activated peripheral blood lymphocytes and in vitro activated peripheral blood and tumor-infiltrating lymphocytes. Parmiani G, et al. **Adv Exp Med Biol** 1988;233:453-8

Proteolytic mechanisms operating at the surface of invasive cells. Pöllänen J, et al. **Adv Exp Med Biol** 1988;233:187-99 (87 ref.)

Postoperative activation of tumor specific T cells by immunization with virus-modified tumor cells and effects on metastasis. Schirrmacher V, et al. **Adv Exp Med Biol** 1988;233:91-6

Tumor cathepsin B and its endogenous inhibitors in metastasis. Sloane BF, et al. **Adv Exp Med Biol** 1988; 233:259-68 (31 ref.)

The complex clinical model of metastasis. Sugarbaker EV. **Adv Exp Med Biol** 1988;233:405-13

Therapeutic potential of cytokines. Talmadge JE, et al. **Adv Exp Med Biol** 1988;233:395-403

Pattern-matched therapy for metastases from colonic carcinoma. Weiss L. **Adv Exp Med Biol** 1988;233:425-32

Prevention of second primary cancers in head and neck cancer patients: new perspectives. de Vries N, et al. **Am J Otolaryngol** 1988 Jul-Aug;9(4):151-4

Axillary dissection for breast carcinoma. The myth of skip metastasis. Lloyd LR, et al. **Am Surg** 1989 Jun;55(6):381-4

Use of antiadhesive peptide and swainsonine to inhibit metastasis. Olden K, et al. **Ann N Y Acad Sci** 1988; 551:421-41; discussion 441-2 (157 ref.)

Interaction of tumor cells and immune system in the metastatic process. Gorelik E, et al. **Biochem Cell Biol** 1988 Jun;66(6):617-25 (85 ref.)

Molecular aspects of the metastatic cascade. Hart IR, et al. **Biochim Biophys Acta** 1989 Jul 28;989(1):65-84 (312 ref.)

Cancer metastasis: tumor cell and host organ properties important in metastasis to specific secondary sites. Nicolson GL. **Biochim Biophys Acta** 1988 Nov 15;948(2):175-224 (418 ref.)

Inhibition of pulmonary metastases and enhancement of natural killer cell activity by methionine-enkephalin. Faith RE, et al. **Brain Behav Immun** 1988 Jun;2(2):114-22

Biology of metastasis. Brentani RR, et al. **Braz J Med Biol Res** 1988;21(1):1-7 (13 ref.)

Metastatic patterns in histologic variants of ovarian cancer. An autopsy study. Rose PG, et al. **Cancer** 1989 Oct 1; 64(7):1508-13

Chemoimmunotherapy with cyclophosphamide and bestatin in experimental metastasis in mice. Abe F, et al. **Cancer Immunol Immunother** 1989;29(4):231-6

Altered methionine metabolism in metastatic variants of a human melanoma cell line. Liteplo RG. **Cancer Lett** 1989 Jan;44(1):23-31

Altered responsiveness of metastatic versus non-metastatic fibroblasts to heparin-binding growth factors. Schwarz LC, et al. **Cancer Lett** 1988 Nov;42(3):193-7

International symposium. Critical determinants in cancer progression and metastasis. A centennial celebration of Dr. Stephen Paget's 'seed and soil' hypothesis. March 6-10, 1989, Houston, Texas. Abstracts. **Cancer Metastasis Rev** 1989 Aug;8(2):93-197

A model to account for the effects of oncogenes, TPA, and retinoic acid on the regulation of genes involved in metastasis. Pohl J, et al. **Cancer Metastasis Rev** 1988 Dec;

7(4):347–56 (102 ref.)
Postpromotional effects of dietary marine or safflower oils on large bowel or pulmonary implants of CT–26 in mice. Cannizzo F Jr, et al. **Cancer Res** 1989 Aug 1;49(15):4289–94
Loss of metastatic and primary tumor factor X activator capabilities by Lewis lung carcinoma cells cultured in vitamin K–dependent protein deficient serum. Fasco MJ, et al. **Cancer Res** 1988 Nov 15;48(22):6504–9
Presence of a growth–stimulating factor in serum following primary tumor removal in mice. Fisher B, et al. **Cancer Res** 1989 Apr 15;49(8):1996–2001
Abolishment of metastasis formation by murine tumor cells transfected with "foreign" H–2K genes. Gelber C, et al. **Cancer Res** 1989 May 1;49(9):2366–73
Inhibition of experimental metastasis and extracellular matrix degradation by butanol extracts from B16–F1 murine melanoma. Keren Z, et al. **Cancer Res** 1989 Jan 15; 49(2):295–300
Possible involvement of Ca2+ mobilization and protein kinase C activation in the induction of spontaneous metastasis by mouse mammary adenocarcinoma cells. Korczak B, et al. **Cancer Res** 1989 May 15;49(10):2597–602
Antigenic differences between metastatic and nonmetastatic BSp73 rat tumor variants characterized by monoclonal antibodies. Matzku S, et al. **Cancer Res** 1989 Mar 1; 49(5):1294–9
Influence of organ environment on the growth, selection, and metastasis of human colon carcinoma cells in nude mice. Morikawa K, et al. **Cancer Res** 1988 Dec 1; 48(23):6863–71
In vitro clonogenic growth and metastatic potential of human operable breast cancer. Nomura Y, et al. **Cancer Res** 1989 Oct 1;49(19):5288–93
Poorly metastatic tumor cell variants as primary targets of syngeneic antibody responses against murine melanoma. Parratto NP, et al. **Cancer Res** 1989 Jul 15;49(14):3722–8
Early cell motility changes associated with an increase in metastatic ability in rat prostatic cancer cells transfected with the v–Harvey–ras oncogene. Partin AW, et al. **Cancer Res** 1988 Nov 1;48(21):6050–3
Metastatic potential of cloned murine melanoma cells transfected with activated c–Ha–ras. Price JE, et al. **Cancer Res** 1989 Aug 1;49(15):4274–81
Ligand–induced phosphorylation of a murine tumor surface protein (TSP–180) associated with metastatic phenotype. Sacchi A, et al. **Cancer Res** 1989 May 15;49(10):2615–20
Enhanced antimetastatic activity of lymphokine–activated killer cells purified and expanded by their adherence to plastic. Schwarz RE, et al. **Cancer Res** 1989 Mar 15; 49(6):1441–6
Altered expression of NM23, a gene associated with low tumor metastatic potential, during adenovirus 2 Ela inhibition of experimental metastasis. Steeg PS, et al. **Cancer Res** 1988 Nov 15;48(22):6550–4
Genetic evidence for progressive selection and overgrowth of primary tumors by metastatic cell subpopulations. Waghorne C, et al. **Cancer Res** 1988 Nov 1;48(21):6109–14
Suppression by cathepsin L inhibitors of the invasion of amnion membranes by murine cancer cells. Yagel S, et al. **Cancer Res** 1989 Jul 1;49(13):3553–7
Tumour progression and metastasis. **Cancer Surv** 1988; 7(4):551–710
Biomechanical interactions of cancer cells with the microvasculature during metastasis. Weiss L, et al. **Cell Biophys** 1989 Apr;14(2):187–215 (111 ref.)
Anti–metastatic effect by in vivo administration of concanavalin A through augmentation of T–derived activated killer activity: efficacy to B16 melanoma expressed MHC antigen. Taniguchi K, et al. **Cell Immunol** 1989 May;120(2):460–9
Metastasis. **Ciba Found Symp** 1988;141:1–255
The in vitro invasiveness and interactions with laminin of K–1735 melanoma cells. Evidence for different laminin–binding affinities in high and low metastatic variants. Albini A, et al. **Clin Exp Metastasis** 1989 Jul–Aug; 7(4):437–51
Correlation between Ha–ras gene amplification and spontaneous metastasis in NIH 3T3 cells transfected with genomic DNA from human skin cancers. Ananthaswamy HN, et al. **Clin Exp Metastasis** 1989 May–Jun;7(3):301–13
Hypomethylation of the human HLA–DR alpha gene in breast carcinomas and autologous metastases. Barbieri R, et al. **Clin Exp Metastasis** 1989 Jul–Aug;7(4):417–26
Studies on the expression of H–2 antigens in non–metastatic and highly metastatic Friend erythroleukemia cells: correlation with the in vivo behaviour of tumor cells. Ferrantini M, et al. **Clin Exp Metastasis** 1989 Nov–Dec; 7(6):609–25
Detection of metastasis–associated differences for receptors of glycoconjugates (lectins) in histomorphologically unchanged xenotransplants from primary and metastatic lesions of human colon adenocarcinomas. Gabius HJ, et al. **Clin Exp Metastasis** 1989 Sep–Oct;7(5):571–84
Transformed NIH 3T3 cells expressing human melanoma N–ras oncogene metastasize to lymph node in nude mice. Jouanneau J, et al. **Clin Exp Metastasis** 1989 Jul–Aug; 7(4):391–403
Modulation of metastatic ability by inhibition of cholesterol synthesis. Kort WJ, et al. **Clin Exp Metastasis** 1989 Sep–Oct;7(5):517–23
Effects of RA 233 treatment on the adhesive, invasive and metastatic properties of 13762NF rat mammary tumor cells. Lichtner RB, et al. **Clin Exp Metastasis** 1989 Mar–Apr; 7(2):175–86
Laminin–mediated adhesion in metastatic rat rhabdomyosarcoma cell lines involves prominent interactions with the laminin E8 fragment. Lissitzky JC, et al. **Clin Exp Metastasis** 1989 Jul–Aug;7(4):469–80
In vivo selection of human renal cell carcinoma cells with high metastatic potential in nude mice. Naito S, et al. **Clin Exp Metastasis** 1989 Jul–Aug;7(4):381–9
Demonstration of the organ preference of liver selected 'high metastatic' Lewis lung tumor cell line. Paku S, et al. **Clin Exp Metastasis** 1989 Nov–Dec;7(6):599–607
Organ distribution of experimental metastases of a human colorectal carcinoma injected in nude mice. Price JE, et al. **Clin Exp Metastasis** 1989 Jan–Feb;7(1):55–68
Antimetastatic action of the prostacyclin analog iloprost in the mouse. Sava G, et al. **Clin Exp Metastasis** 1989 Nov–Dec;7(6):671–8
Changes in adhesive properties of tumor cells do not necessarily influence metastasizing capacity. Zöller M, et al. **Clin Exp Metastasis** 1989 Mar–Apr;7(2):227–42
Autoradiographic characterization of newly developed melanoic cell group different from the melanoic tumor piece embedded into a liver lobe of mice. Momose Y, et al. **Eur J Drug Metab Pharmacokinet** 1988 Oct–Dec; 13(4):285–94
Estrogen receptors in fine–needle aspirates from metastatic lesions of gynecologic tumors. Tani E, et al. **Gynecol Oncol** 1989 Mar;32(3):365–7
Difference in cell surface 5'–nucleotidase activity, protein iodination and membrane properties between mouse lymphoma and rat adenocarcinoma cell variants with low and high–metastatic potential. Haeffner EW, et al. **Int J Biochem** 1988;20(9):929–35
Lectin–resistant variants and revertants of mouse melanoma cells: differential expression of a fucosylated cell–surface antigen and altered metastasizing capacity. Finne J, et al. **Int J Cancer** 1989 Feb 15;43(2):300–4
Relationship between cellular adhesiveness and metastatic activity in polyomavirus–transformed FR3T3 rat cell lines. Leung–Tack J, et al. **Int J Cancer** 1988 Dec 15;42(6):946–51
Development and characterization of a syngeneic monoclonal antibody to a rat mammary tumor metastasis–associated mucin–like cell–surface antigen (gp580). North SM, et al. **Int J Cancer** 1988 Oct 15;42(4):607–14
Reduced cell adhesion to fibronectin and laminin is associated with altered glycosylation of beta 1 integrins in a weakly metastatic glycosylation mutant. Oz OK, et al. **Int J Cancer** 1989 Aug 15;44(2):343–7
Mechanism of mechanical trauma to Ehrlich ascites tumor cells in vitro and its relationship to rapid intravascular death during metastasis. Weiss L, et al. **Int J Cancer** 1989 Jul 15;44(1):143–8
Monoclonal antibodies against individual cytokeratins in the detection of metastatic spread. Kovařík J, et al. **Int J Cancer Suppl** 1988;3:50–5
International Symposium on Cancer Progression and Metastasis. Proceedings of the 8th Sapporo Cancer Seminar. July 6–9, 1988, Sapporo. **Invasion Metastasis** 1989; 9(2):73–148
Noncorrelation between implantation and growth of tumor cells for their final metastatic efficiency. Barberá–Guillem E, et al. **Invasion Metastasis** 1988;8(5):266–84
Solubilization of immobilized protein substrates by metastatic tumor cells. Chen L, et al. **Invasion Metastasis** 1989; 9(1):27–45
Spontaneous sister chromatid exchange in metastatic variants of the murine B16 melanoma and human astrocytomas in culture. Lakshmi MS, et al. **Invasion Metastasis** 1988; 8(4):205–16
Adhesive, invasive, and growth properties of selected metastatic variants of a murine large–cell lymphoma. Nicolson GL, et al. **Invasion Metastasis** 1989;9(2):102–16
Tumorigenicity and dissemination of primary and metastatic human melanomas implanted into different sites in athymic nude mice. Rodolfo M, et al. **Invasion Metastasis** 1988; 8(6):317–31
Increased contraenvironmental–pressure cell division capability: a decisive force in metastasis and invasion of mouse lung adenocarcinoma cell lines. Saiga T, et al. **Invasion Metastasis** 1989;9(4):254–68
Influence of implantation site on growth, antigen expression and metastatic potential of human colonic cancer HT29 and 5583 xenografts in nude mice. Sekikawa K, et al. **Invasion Metastasis** 1988;8(4):238–52
Cell surface biochemical and metastatic properties of Lens culinaris hemagglutinin–binding variants of a murine large cell lymphoma. Tressler RJ, et al. **Invasion Metastasis** 1988; 8(6):351–63
Prevention of metastatic spread by postoperative immunotherapy with virally modified autologous tumor cells. III. Postoperative activation of tumor–specific CTLP from mice with metastases requires stimulation with the specific antigen plus additional signals. von Hoegen P, et al. **Invasion Metastasis** 1989;9(2):117–33
Depression of nonadaptive immunity after surgical stress: influence on metastatic spread. Zöller M, et al. **Invasion Metastasis** 1989;9(1):46–68
Metastases from squamous cell carcinoma of the skin and lip. An analysis of twenty–seven cases. Dinehart SM, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 1):241–8
Antimetastatic effect of bromelain with or without its proteolytic and anticoagulant activity. Batkin S, et al. **J Cancer Res Clin Oncol** 1988;114(5):507–8
Metastatic patterns of renal carcinoma: an analysis of 687 necropsies. Weiss L, et al. **J Cancer Res Clin Oncol** 1988; 114(6):60[illegible]–12
Dissecting tumor cell invasion: epithelial cells acquire invasive properties after the loss of uvomorulin–mediated cell–cell adhesion. Behrens J, et al. **J Cell Biol** 1989 Jun; 108(6):2435–47
In vivo invasion of modified chorioallantoic membrane by tumor cells: the role of cell surface–bound urokinase. Ossowski L. **J Cell Biol** 1988 Dec;107(6 Pt 1):2437–45
Nitrogen dioxide (NO2) inhalation, formation of microthrombi in lungs and cancer metastasis. Richters A, et al. **J Environ Pathol Toxicol Oncol** 1989;9(1):45–51
Tumorigenic and metastatic ability of SV40–transformed BALB/c cell lines and MHC antigen expression. De Giovanni C, et al. **J Immunogenet** 1989 Feb;16(1):45–51
Attachment of neuroblastoma cells to extracellular matrix: correlation with metastatic capacity. Hutchinson R, et al. **J Lab Clin Med** 1989 May;113(5):561–8
Promotion of micrometastasis proliferation in a rat rhabdomyosarcoma model by epidermal growth factor. Breillout F, et al. **J Natl Cancer Inst** 1989 May 3; 81(9):702–5
Correlation of growth capacity of human tumor cells in hard agarose with their in vivo proliferative capacity at specific metastatic sites. Li L, et al. **J Natl Cancer Inst** 1989 Sep 20;81(18):1406–12
Swainsonine inhibition of spontaneous metastasis. Newton SA, et al. **J Natl Cancer Inst** 1989 Jul 5;81(13):1024–8
Insulin and insulin–like growth factor 1 stimulate proliferation of metastatic variants of colon carcinoma 26. Koenuma M, et al. **Jpn J Cancer Res** 1989 Jan;80(1):51–8
Enhanced liver metastatic potential of alpha–fetoprotein–producing human gastric carcinoma after carbon tetrachloride–induced liver damage in nude mice. Sawada H, et al. **Jpn J Cancer Res** 1989 Apr; 80(4):341–7
Metastatic fundamentals [editorial] **Lancet** 1989 May 13; 1(8646):1052–4
The therapeutic effect of human recombinant macrophage colony stimulating factor (CSF–1) in experimental murine metastatic melanoma. Hume DA, et al. **Lymphokine Res** 1989 Spring;8(1):69–77
The effects of oxygen radical––mediated pulmonary endothelial damage on cancer metastasis [published erratum appears in Mol Cell Biochem 1989 Mar 16;86(1):97] Orr FW, et al. **Mol Cell Biochem** 1988 Dec;84(2):189–98
Glioma recurrence after interstitial irradiation [letter] Selker RG. **Neurosurgery** 1988 Jul;23(1):128
Oncogenes conferring metastatic potential induce increased branching of Asn–linked oligosaccharides in rat2 fibroblasts. Dennis JW, et al. **Oncogene** 1989 Jul;4(7):853–60
Metastatic conversion of factor–dependent lung fibroblasts (CCL39) requires over–expression of oncogenes which induce high rate of autonomous replication. Lagarde AE. **Oncogene** 1989 Jul;4(7):889–95
Establishment of transplantable rat fibrosarcoma and selection of a highly metastatic tumor cell line. Li DJ, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(3):175–8
Hypoxia induces DNA overreplication and enhances metastatic potential of murine tumor cells. Young SD, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9533–7
The role of tumor–induced platelet aggregation, platelet adhesion and adhesive proteins in tumor metastasis. Karpatkin S, et al. **Prog Clin Biol Res** 1988;283:585–606
What makes a tumor cell metastatic? Feldman M, et al. **Sci Am** 1988 Nov;259(5):60–5, 68, 85
How cancer cells spread in the body [news] Marx JL. **Science** 1989 Apr 14;244(4901):147–8
Salvage surgery for renal cell carcinoma. Pontes JE, et al. **Semin Surg Oncol** 1989;5(4):282–5 (11 ref.)
A role of the cancer cell membrane fluidity in the cancer metastases: an ESR study. Nakazawa I, et al. **Tohoku J Exp Med** 1989 Mar;157(3):193–8
Establishment of highly metastatic clones without tumorigenicity derived from Dunn osteosarcoma. Chigira M, et al. **Tumour Biol** 1988;9(6):293–300
Comparison of the growth and metastasis of four human intestinal tumor cell line xenografts. Joshi SS, et al. **Tumour Biol** 1989;10(3):117–25
Intra–abdominal metastatic malignant teratoma. Metastatic malignant teratoma (carcinosarcoma), primary in the retroperitoneum. Dardick I, et al. **Ultrastruct Pathol** 1989 Mar–Jun;13(2–3):291–300
[Metastatic characteristics of SY86B human gastric carcinoma in athymic nude mice] Li H. **Chung Hua Chung Liu Tsa Chih** 1988 Nov;10(6):421–3 (Eng. Abstr.) **(Chi)**
[Incidence of metastases and their distribution pattern in bronchial carcinoma. Autopsy findings during 5 decades (1935 to 1984)] Notter M, et al. **Dtsch Med Wochenschr** 1989 Mar 3;114(9):343–9 (80 ref.) **(Ger)**
[Oral anticoagulants and platelet anti–aggregants in the prevention of metastases: state of the art and perspectives of a combined therapy] Finzi G, et al. **Recenti Prog Med** 1989 Jan;80(1):28–32 (49 ref.) (Eng. Abstr.) **(Ita)**
[The process of neoplastic metastasis and its possible control] Baroni CD. **Ric Clin Lab** 1976 Jan–Mar;6 Suppl 1:79–81

(0 ref.) (Ita)
[Influence of radiation doses in local radiotherapy on anti-tumor immunity and tumor metastasis] Mizukoshi T. **Hokkaido Igaku Zasshi** 1988 Nov;63(6):875–81 (Eng. Abstr.) (Jpn)
[Plasminogen activators in malignant tissues and lungs of mice during metastatic spreading and administration of various pharmacological agents] Chubinskaia SG, et al. **Eksp Onkol** 1988;10(5):46–9 (Eng. Abstr.) (Rus)
[Transitional infiltrating carcinoma of the bladder. Local recurrence and metastases. Analysis of 175 cases treated with radical cystectomy] Escudero Barrilero A, et al. **Arch Esp Urol** 1989 May;42(4):337–44 (Eng. Abstr.) (Spa)
[Analysis of metastasis in a series of 210 oncology patients admitted to a general internal medicine service (letter)] Fuentes Verdera M, et al. **Rev Clin Esp** 1989 May; 184(9):497–8 (Spa)

BLOOD

Double antibody radioimmunoassay for monitoring metastatic breast cancer. Schecter RL, et al. **Br J Cancer** 1988 Sep;58(3):362–7
[Metastasis and blood coagulation] Gastpar H. **Thromb Diath Haemorrh Suppl** 1968;28:119–36; discussion 143–68 (94 ref.) (Ger)

DIAGNOSIS

Detection of malignant cells in histologically normal bone marrow using culture techniques. Joshi SS, et al. **Bone Marrow Transplant** 1987 Feb;1(3):303–10
Follow-up after treatment of primary breast cancer. Rutgers EJ, et al. **Br J Surg** 1989 Feb;76(2):187–90
The value of acid phosphatase measurements in predicting extraprostatic cancer growth before radical prostatectomy. Salo JO, et al. **Br J Urol** 1988 Nov;62(5):439–42
Influence of early diagnosis on prognosis of recurrent breast cancer. Stierer M, et al. **Cancer** 1989 Sep 1;64(5):1128–31
High-dose contrast-enhanced computed tomography (CECT) with iopamidol in the detection of cerebral metastases. Tolerance of the contrast agent. Leonardi M, et al. **Neuroradiology** 1989;31(2):148–50
[Observing the navel in oncology: remember Sister Mary Joseph] Wereldsma JC, et al. **Ned Tijdschr Geneeskd** 1989 Apr 29;133(17):857–9 (Dut)
[The significance of screening studies for the early detection of metastases in curatively operated breast carcinoma] Fenner D, et al. **Schweiz Med Wochenschr** 1988 Feb 4; 119(5):156–9 (Eng. Abstr.) (Ger)

DRUG THERAPY

The role of pharmacokinetics in the clinical treatment of metastases. Pannuti F, et al. **Adv Exp Med Biol** 1988; 233:443–52
Phase II study of lonidamine in metastatic breast cancer. Pronzato P, et al. **Br J Cancer** 1989 Feb;59(2):251–3
Proceedings of UICC International Symposium on the Status of Treatment of Metastatic Renal Cell Carcinoma. Vienna, Austria: Part II. **Semin Surg Oncol** 1988;4(3):149–209
[Misteltoe therapy of metastasizing kidney cancer. A phase II study (letter)] Heinzer I. **Ugeskr Laeger** 1988 Sep 26; 150(39):2352–4 (Dan)

ENZYMOLOGY

Gelatinases of murine metastatic tumor cells. Yamagata S, et al. **Biochem Biophys Res Commun** 1989 Jan 16; 158(1):228–34
Activity of porphobilinogen deaminase in peripheral blood mononuclear cells of patients with metastatic cancer. Leibovici L, et al. **Cancer** 1988 Dec 1;62(11):2297–300
Involvement of heparanase in tumor metastasis and angiogenesis. Vlodavsky I, et al. **Isr J Med Sci** 1988 Sep–Oct;24(9–10):464–70
Glycolytic enzyme activities in breast cancer metastases. Hennipman A, et al. **Tumour Biol** 1988;9(5):241–8
[Macro-creatine kinase: not all increased CK-MB activity signifies a heart infarct] Reichert LJ, et al. **Ned Tijdschr Geneeskd** 1989 Jun 24;133(25):1278–81 (Eng. Abstr.) (Dut)

ETIOLOGY

The 1917 New York biopsy controversy: a question of surgical incision and the promotion of metastases. Wright JR Jr. **Bull Hist Med** 1988 Winter;62(4):546–62
Oncogene induction of metastases. Liotta LA. **Ciba Found Symp** 1988;141:94–108 (28 ref.)

GENETICS

Oncogene transformation and the metastatic phenotype. Chambers AF, et al. **Anticancer Res** 1988 Sep–Oct; 8(5A):861–71 (120 ref.)
Genetic analysis of invasion and metastasis. Collard JG, et al. **Cancer Surv** 1988;7(4):691–710 (112 ref.)
Genes controlling the metastatic phenotype. Feldman M, et al. **Cancer Surv** 1988;7(4):555–72 (29 ref.)
Clonal dominance of primary tumours by metastatic cells: genetic analysis and biological implications. Kerbel RS, et al. **Cancer Surv** 1988;7(4):597–629 (79 ref.)
Genetic aspects of tumour metastasis. Pickford I, et al. **Cancer Surv** 1988;7(2):351–71 (87 ref.)
The reversal of the metastatic phenotype by gene transfer. Feldman M, et al. **Ciba Found Symp** 1988;141:170–92 (29 ref.)
Molecular genetics of metastasis. Tarin D. **Ciba Found Symp** 1988;141:149–69 (35 ref.)
Isolation and characterization of a gene specifically expressed in different metastatic cells and whose deduced gene product has a high degree of homology to a Ca2+-binding protein family. Ebralidze A, et al. **Genes Dev** 1989 Jul; 3(7):1086–93
Co-regulation of metastatic and transforming activity of normal and mutant ras genes. Egan SE, et al. **Int J Cancer** 1989 Mar 15;43(3):443–8
Induction of the metastatic phenotype by transfection of the nuclear oncogene p53: increases in cytoplasmic diacylglycerol levels and reduction in class I major histocompatibility antigen expression are not sufficient to explain the changes in metastatic capacities. Pohl J, et al. **J Cancer Res Clin Oncol** 1989;115(2):145–7
Generation of metastatic variants in populations of mutator and amplificator mutants. Damen JE, et al. **J Natl Cancer Inst** 1989 Apr 19;81(8):628–31

HISTORY

The distribution of secondary growths in cancer of the breast. 1889 [classical article] Paget S. **Cancer Metastasis Rev** 1989 Aug;8(2):98–101
Stephen Paget, M.D., F.R.C.S., (1855–1926). A retrospective. Poste G, et al. **Cancer Metastasis Rev** 1989 Aug;8(2):93–7

IMMUNOLOGY

Natural host resistance and in vivo selection of malignant tumour cells. Deichman GI. **Cancer Surv** 1988;7(4):675–90 (67 ref.)
Inhibition of tumor metastasis by carrageenan-induced granulomas. Kort WJ, et al. **Clin Exp Metastasis** 1989 Jan–Feb;7(1):117–25

METABOLISM

Linoleic acid metabolism in metastatic and nonmetastatic murine mammary tumor cells. Chapkin RS, et al. **Cancer Res** 1989 Sep 1;49(17):4724–8
Asn-linked oligosaccharide processing and malignant potential. Dennis JW. **Cancer Surv** 1988;7(4):573–95 (114 ref.)
Conformation of the metastasis-inhibiting laminin pentapeptide. Brandt-Rauf PW, et al. **J Protein Chem** 1989 Feb;8(1):149–57

PATHOLOGY

Histogenesis of metastatic tumours: lectin reactive substances and intermediate filament proteins. Pajor L, et al. **Acta Morphol Hung** 1988;36(1–2):101–20
The pattern of metastases in human breast cancer. Influence of systemic adjuvant therapy and impact on survival. Kamby C, et al. **Acta Oncol** 1988;27(6A):715–9
Preferential growth of blood-borne cancer cells at sites of trauma—a growth promoting role of macrophages. Alexander P, et al. **Adv Exp Med Biol** 1988;233:245–51
Changes in metastasis formation and distinct cell surface molecules in adhesion variants of a metastatic murine tumor. Altevogt P, et al. **Adv Exp Med Biol** 1988;233:253–8
Cell adhesion systems: molecular structure and function in embryogenesis and metastasis. Boyer B, et al. **Adv Exp Med Biol** 1988;233:235–44 (14 ref.)
Tumor-associated macrophages in metastasizing tumors. Chen ZG, et al. **Adv Exp Med Biol** 1988;233:61–71 (61 ref.)
The nude mouse for the study of human colorectal carcinoma. Giavazzi R, et al. **Adv Exp Med Biol** 1988; 233:39–47
Induction of differentiation as a means of modifying metastatic behaviour. Hart IR, et al. **Adv Exp Med Biol** 1988;233:361–5
Glycosaminoglycan (GAG) metabolism as a potential target to prevent metastasis formation. Kopper L, et al. **Adv Exp Med Biol** 1988;233:367–75
Pseudosarcomatous stromal reaction in primary and metastatic urothelial carcinoma. A source of diagnostic difficulty. Mahadevia PS, et al. **Am J Surg Pathol** 1989 Sep;13(9):782–90
Metastases from carcinomas of the pancreas simulating primary mucinous tumors of the ovary. A report of seven cases. Young RH, et al. **Am J Surg Pathol** 1989 Sep; 13(9):748–56
Flow cytometric DNA analysis combined with fine needle aspiration biopsy in the diagnosis of palpable metastases. Joensuu H, et al. **Anal Quant Cytol Histol** 1988 Aug; 10(4):256–60
Doxorubicin treatment increases metastasis of prostate tumor (R3327-MatLyLu). Geldof AA, et al. **Anticancer Res** 1988 Nov–Dec;8(6):1335–9
Purging breast cancer cells in preparation for autologous bone marrow transplantation. Morecki S, et al. **Bone Marrow Transplant** 1987 Apr;1(4):357–63
The dedifferentiation of metastatic prostate carcinoma. Brawn PN, et al. **Br J Cancer** 1989 Jan;59(1):85–8
Metastatic pattern in recurrent breast cancer. Special reference to intrathoracic recurrences. Kamby C, et al. **Cancer** 1988 Nov 15;62(10):2226–33
The pathogenesis of splenic extramedullary hematopoiesis in metastatic carcinoma. O'Keane JC, et al. **Cancer** 1989 Apr 15;63(8):1539–43
Clonal growth of tumors on tissue-specific biomatrices and correlation with organ site specificity of metastases. Doerr R, et al. **Cancer Res** 1989 Jan 15;49(2):384–92
Directed migration of murine and human tumor cells to collagenases and other proteases. Terranova VP, et al. **Cancer Res** 1989 Sep 1;49(17):4835–41
The cell interaction sites of fibronectin in tumour metastasis. Humphries MJ, et al. **Ciba Found Symp** 1988;141:75–93 (30 ref.)
Clonal changes in tumours during growth and progression evaluated by southern gel analysis of random integrations of foreign DNA. Kerbel RS, et al. **Ciba Found Symp** 1988; 141:123–48 (29 ref.)
Adhesive properties of metastasizing tumour cells. Raz A. **Ciba Found Symp** 1988;141:109–22 (21 ref.)
Inhibitors of collagenase IV and cell adhesion reduce the invasive activity of malignant tumour cells. Reich R, et al. **Ciba Found Symp** 1988;141:193–210 (24 ref.)
Adhesion mechanisms in embryogenesis and in cancer invasion and metastasis. Thiery JP, et al. **Ciba Found Symp** 1988;141:48–74 (55 ref.)
Changes in the tumorigenic and metastatic properties of murine melanoma cells treated with a triazene derivative. Allegrucci M, et al. **Clin Exp Metastasis** 1989 May–Jun; 7(3):329–41
Low-molecular-weight membrane component inhibits the metastatic phenotype of B16-F10 melanoma. Keren Z, et al. **Clin Exp Metastasis** 1989 May–Jun;7(3):315–28
Dynamic heterogeneity: experimental metastasis studies with RIF-1 fibrosarcoma. Korycka BM, et al. **Clin Exp Metastasis** 1989 Jan–Feb;7(1):107–16
Loss of spontaneous metastasizing potential in mouse mammary tumors. Vaage J. **Clin Exp Metastasis** 1989 May–Jun;7(3):373–8
The relationship between lymphogenous and hematogenous metastasis in rats bearing the MT-100-TC mammary carcinoma. Ward PM, et al. **Clin Exp Metastasis** 1989 May–Jun;7(3):253–64
Interactions between cancer cells and the microvasculature: a rate-regulator for metastasis. Weiss L, et al. **Clin Exp Metastasis** 1989 Mar–Apr;7(2):127–67 (256 ref.)
Fine-needle aspiration cytology of superficial lymph nodes. Cardillo MR. **Diagn Cytopathol** 1989;5(2):166–73
Fine-needle aspiration of metastatic atrial myxoma. Moriarty AT, et al. **Diagn Cytopathol** 1988;4(3):250–3
In adequate tumor surgery of chemically induced soft tissue sarcomas—an experimental approach for induction of metastasis formation? Katenkamp D, et al. **Exp Pathol** 1988; 34(4):209–15
A survey of in vivo growth characteristics and spontaneous metastasizing potentials of C3H mouse mammary tumors. Vaage J. **Int J Cancer** 1989 May 15;43(5):910–4
Metastatic patterns in autopsy cases of cutaneous melanoma. Akslen LA, et al. **Invasion Metastasis** 1988;8(4):193–204
The role of intratumor environment in determining spontaneous metastatic activity of a B16 melanoma clone. Alterman AL, et al. **Invasion Metastasis** 1989;9(4):242–53
Human rhabdomyosarcoma cells in nude mice as a model for metastasis and differentiation. Nanni P, et al. **Invasion Metastasis** 1989;9(4):231–41
Selection of highly malignant tumour cells using reconstituted basement membrane matrix. Tullberg K, et al. **Invasion Metastasis** 1989;9(1):15–26
Origin of cancer metastases and its implications for therapy. Fidler IJ. **Isr J Med Sci** 1988 Sep–Oct;24(9–10):456–63 (79 ref.)
Isolation and characterization of low- and high-metastatic clones from murine RCT (Radiological, Chiba, and Toyama) sarcoma. Matsui H, et al. **J Cancer Res Clin Oncol** 1989;115(1):9–16
Mechanisms of tumour cell metastasis. Parish RW, et al. **J Cell Sci Suppl** 1987;8:181–97 (69 ref.)
Mechanisms of cellular invasiveness: a comparison of amnion invasion in vitro and metastatic behavior in vivo. Yagel S, et al. **J Natl Cancer Inst** 1989 May 10;81(10):768–75
Possible role of tumour stem-end cell cooperation in metastasis. Rak J. **Med Hypotheses** 1989 May;29(1):17–9
Fluid state of malignant choroidal melanoma growth presenting as exudative retinal detachment. Wolter JR. **Ophthalmologica** 1989;199(1):34–40
Growth regulation of cancer metastases by their host organ. Sargent NS, et al. **Proc Natl Acad Sci U S A** 1988 Oct; 85(19):7251–5
Experimental study of invasion and metastasis of cancer cells and establishment of the morphological pattern in the process of invasion and metastatic models of cancer cells. Gao J. **Sci Sin [B]** 1988 Jun;31(6):719–25
The biology of tumor metastasis. Killion JJ, et al. **Semin Oncol** 1989 Apr;16(2):106–15 (95 ref.)
Relationship between primary tumor volume and lung metastasis in Lewis lung carcinoma (1). Assay for time course of development of metastasis. Ohizumi Y, et al. **Tokai J Exp Clin Med** 1987 Nov;12(4):229–35
Cellular DNA content and metastasis pattern in colorectal carcinomas. Rübe C, et al. **Virchows Arch [A]** 1988; 413(5):419–24
[Second neoplasms in malignant hemopathies] Ziumbiuleva M, et al. **Vutr Boles** 1988;27(4):103–5 (Eng. Abstr.) (Bul)

[Metastatic routes in lung cancer] Károlyi P. **Orv Hetil** 1988 Aug 21;129(34):1805–6, 1809–10 (Eng. Abstr.) **(Hun)**

[Simultaneous occurrence of breast cancer, causing disseminated metastases after 32 years verified by immunohistochemistry, and cured malignant melanoma] Nádasdy T, et al. **Orv Hetil** 1988 Dec 18;129(51):2743–6 (34 ref.) (Eng. Abstr.) **(Hun)**

[The clinicopathologic analysis of autopsied breast cancer] Takashima S, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–3):1941–6 (Eng. Abstr.) **(Jpn)**

[Removal of surface antigens and changes in metastatic potential of transplantable rat rhabdomyosarcoma RA–2 cells] Guzhova IV, et al. **Eksp Onkol** 1988;10(5):31–2 (Eng. Abstr.) **(Rus)**

[Significance of morphologic signs of primary tumor for the prognosis of metastases of renal cell carcinoma] Vlodavskii EA. **Urol Nefrol (Mosk)** 1989 Mar–Apr;(2):25–7 (Eng. Abstr.) **(Rus)**

[Spinocellular epithelioma. Risk factors in the occurrence of metastasis. Study of 650 cases] Soto Ferrando PP, et al. **Med Cutan Ibero Lat Am** 1988;16(4):277–80 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

"In vitro" models for studying the malignant phenotype: chemotaxis and chemoinvasion. Allavena G, et al. **Adv Exp Med Biol** 1988;233:215–26

Influence of gangliosides on the metastatic process. Gullino PM. **Adv Exp Med Biol** 1988;233:211–4

Glycoconjugates and tumor metastasis. Irimura T, et al. **Adv Exp Med Biol** 1988;228:677–704 (95 ref.)

Biochemical mechanisms of tumor invasion and metastases. Liotta LA, et al. **Adv Exp Med Biol** 1988;233:161–9 (25 ref.)

Actin organization, cell motility, and metastasis. Raz A. **Adv Exp Med Biol** 1988;233:227–33 (52 ref.)

Promotion of metastasis by a specific complex of coagulation factors may be independent of fibrin formation. McCulloch P, et al. **Br J Cancer** 1988 Aug;58(2):158–62

Macrophage therapy of cancer metastasis. Fidler IJ. **Ciba Found Symp** 1988;141:211–22 (25 ref.)

Functional role of specific secreted and cell surface molecules in tumour cell invasion and metastasis. Quigley JP, et al. **Ciba Found Symp** 1988;141:22–47 (25 ref.)

Experimental metastasis. Dissemination and growth of lymphoma cells in mice. Gjedde SB. **Dan Med Bull** 1988 Aug;35(4):365–79 (256 ref.)

The role of laminin in cancer invasion and metastasis. Hunt G. **Exp Cell Biol** 1989;57(3):165–76 (46 ref.)

Clonal variation in the impact of ethyl methanesulfonate and 5–azacytidine on the metastatic phenotype of human prostatic tumor cells in athymic nude mice. Ware JL. **Exp Cell Biol** 1988;56(5):270–6

Survival and experimental metastatic potential of tumor cells circulated in vitro under conditions of high–speed fluid flow. Kawaguchi T, et al. **Fukushima J Med Sci** 1987 Jun; 33(1):47–54

New variants of B16 mouse melanoma: differentiation and metastatic properties. Aubert C, et al. **Pigment Cell Res** 1989 Jan–Feb;2(1):17–25

Fourier analysis of cell motility: correlation of motility with metastatic potential. Partin AW, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1254–8

The role of eicosanoids in tumor metastasis. Fulton AM. **Prostaglandins Leukot Essent Fatty Acids** 1988;34(3):229–37 (74 ref.)

[The significance of lectins for tumor metastases and bacterial infections] Beuth J, et al. **Med Klin** 1988 Oct 14; 83(20):682–6 (29 ref.) **(Ger)**

[Blood coagulation and metastasis] Niitsu Y, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):1223–32 (Eng. Abstr.) **(Jpn)**

[Tumor metastasis and the fibrinolytic system] Yamamura M, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):1246–54 (Eng. Abstr.) **(Jpn)**

[Hemostasis and cancer] González–Barón M, et al. **Rev Clin Esp** 1989 Feb;184(2):84–7 (49 ref.) (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

Drug treatments for metastasis of the Lewis lung carcinoma: lack of correlation between inhibition of lung metastasis and survival. Merriman RL, et al. **Cancer Res** 1989 Aug 15;49(16):4509–16

Inhibition of the metastasis of murine malignant melanoma by synthetic polymeric peptides containing core sequences of cell–adhesive molecules. Saiki I, et al. **Cancer Res** 1989 Jul 15;49(14):3815–22

Clinical aspects of metastases. Peckham M. **Ciba Found Symp** 1988;141:223–43 (35 ref.)

Use of the Membrane Invasion Culture System (MICS) as a screen for anti–invasive agents. Welch DR, et al. **Int J Cancer** 1989 Mar 15;43(3):449–57

The potential immunoregulation of metastases: the use of transfection to produce immunogenic tumor cells. Itaya T, et al. **Prog Clin Biol Res** 1989;288:271–9

[The metastatic tumor and immunotherapy] Fuchimoto S, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):1260–5 (Eng. Abstr.) **(Jpn)**

[Intraoperative prevention of metastases during enucleation of the eye with malignant tumor of the choroid] Krwawicz L. **Klin Oczna** 1988 Oct;90(10):357–8 (Eng. Abstr.) **(Pol)**

[Suppression of Lewis carcinoma metastasis in mice by an interferon–inducing vasodilator curantil] Fedorovskaia EO, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):83–5 (Eng. Abstr.) **(Rus)**

[Decrease in the antimetastatic effect of vinblastine administered in liposomes] Kaledin VI, et al. **Eksp Onkol** 1988;10(5):43–6 (Eng. Abstr.) **(Rus)**

[Effect of GMDP encapsulated into liposomes on metastatic spread of Lewis lung carcinoma] Umanskiĭ VIu, et al. **Eksp Onkol** 1988;10(5):40–3 (Eng. Abstr.) **(Rus)**

[Effect of hyperthermia and ionizing radiation separately or in combination on tumor metastasis] Kurpeshev OK. **Med Radiol (Mosk)** 1988 Dec;33(12):34–40 (Eng. Abstr.) **(Rus)**

[Possible immunologic prevention of recurrences and metastases of gastric cancer after its radical surgical treatment] Ageenko AI, et al. **Sov Med** 1988;(10):27–30 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Frequency of extrathoracic metastases from bronchogenic carcinoma in patients with normal–sized hilar and mediastinal lymph nodes on CT. Sider L, et al. **AJR** 1988 Nov;151(5):893–5

RADIOTHERAPY

State of the art: effective palliative radiotherapy and quality of life. Zablow AI. **N J Med** 1988 Oct;85(10):825–7 (16 ref.)

SECONDARY

Coincident systemic malignant disease in uveal melanoma patients. Kindy–Degnan N, et al. **Can J Ophthalmol** 1989 Aug;24(5):204–6

SURGERY

Metastasectomy for soft tissue sarcoma. Further evidence for efficacy and prognostic indicators. Jablons D, et al. **J Thorac Cardiovasc Surg** 1989 May;97(5):695–705

THERAPY

Ibuprofen causes reduced toxic effects of interleukin 2 administration in patients with metastatic cancer. Eberlein TJ, et al. **Arch Surg** 1989 May;124(5):542–7

Embolization of liver metastases. Allison DJ. **Br J Hosp Med** 1989 Jan;41(1):60–1

Periodate and recombinant interleukin–2–activated autologous leukocytes can induce regression of metastases of renal cancer. Walle AJ, et al. **Cancer Detect Prev** 1988; 12(1–6):395–411

Dosimetry models for radioimmunotherapy. Langmuir VK, et al. **Med Phys** 1988 Nov–Dec;15(6):867–73

Virus modified tumor cell vaccines for active specific immunotherapy of micrometastases: expansion and activation of tumor–specific T cells. Schirrmacher V, et al. **Prog Clin Biol Res** 1989;288:391–9

[Cell biology principles of metastasis and strategies for immunotherapy] Schirrmacher V. **Z Gastroenterol [Verh]** 1989 Jul;24:15–7 (16 ref.) **(Ger)**

NEOPLASM METASTASIS, UNKNOWN PRIMARY see **NEOPLASMS, UNKNOWN PRIMARY**

NEOPLASM PROTEINS

Chemical and biochemical properties of human angiogenin. Vallee BL, et al. **Adv Exp Med Biol** 1988;234:41–53 (41 ref.)

Inhibition of neuroglandular antigen (NGA) glycosylation by phorbol ester in human melanoma cells. Feyles V, et al. **Biochem Biophys Res Commun** 1989 Feb 15; 158(3):837–43

The complete amino acid sequence of bovine milk angiogenin. Maes P, et al. **FEBS Lett** 1988 Dec 5; 241(1–2):41–5

[Primary structure of human protein pS2] Rio MC, et al. **C R Acad Sci [III]** 1988;307(19):825–31 (Eng. Abstr.) **(Fre)**

[Turns in protein: their possible roles as recognition and control sites in proteins] Murakami M. **Tanpakushitsu Kakusan Koso** 1988 Oct;33(13):2382–7 (41 ref.) **(Jpn)**

ADMINISTRATION & DOSAGE

[Comment on the contribution by F. Ehring: Regression of over 150 skin metastases of malignant melanoma by homeopathic complex therapy] Grond K. **Hautarzt** 1989 Jul;40(7):464 **(Ger)**

ANALYSIS

Immunological and structural profile of a 96 kD human melanoma associated antigen with preferential distribution in metastases. Graf LH Jr, et al. **Adv Exp Med Biol** 1988; 233:341–9

Immunohistochemistry of gross cystic disease fluid protein (GCDFP–15) in 65 benign sweat gland tumors of the skin. Mazoujian G, et al. **Am J Dermatopathol** 1988 Feb; 10(1):28–35

Medullary thyroid carcinomas express chromogranin A and a novel neuroendocrine protein recognized by monoclonal antibody HISL–19. Deftos LJ, et al. **Am J Med** 1988 Dec; 85(6):780–4

An in vitro binding assay for angiogenin using placental ribonuclease inhibitor. Bond MD. **Anal Biochem** 1988 Aug 15;173(1):166–73

Purification of a human milk protein closely similar to tumor–secreted phosphoproteins and osteopontin. Senger DR, et al. **Biochim Biophys Acta** 1989 Jun 13;996(1–2):43–8

Analysis of cancer–associated colonic mucin by ion–exchange chromatography: evidence for a mucin species of lower molecular charge and weight in cancer. Shimamoto C, et al. **Biochim Biophys Acta** 1989 May 31; 991(2):284–95

Isolation and sequencing of a new biologically active peptide from human lung carcinoma. Hsi KL, et al. **Biomed Chromatogr** 1986 Jun;1(3):119–22

Human plasma extrinsic pathway inhibitor activity: I. Standardization of assay and evaluation of physiologic variables. Warr TA, et al. **Blood** 1989 Jul;74(1):201–6

N–myc gene expression and oncoprotein characterisation in medulloblastoma. Garson JA, et al. **Br J Cancer** 1989 Jun; 59(6):889–94

Estramustine binding protein and anti–proliferative effect of estramustine in human glioma cell lines. von Schoultz E, et al. **Br J Cancer** 1988 Sep;58(3):326–9

Expression of ras oncogene p21 protein in early gastric carcinoma and adjacent gastric epithelia. Czerniak B, et al. **Cancer** 1989 Oct 1;64(7):1467–73

Expression of ras oncogene p21 protein in relation to regional spread of human breast carcinomas. Czerniak B, et al. **Cancer** 1989 May 15;63(10):2008–13

Expression of GCDFP–15 in breast carcinomas. Relationship to pathologic and clinical factors. Mazoujian G, et al. **Cancer** 1989 Jun 1;63(11):2156–61

Association of sorcin with drug resistance in L1210 cells. Roberts D, et al. **Cancer Chemother Pharmacol** 1989; 23(1):19–25

Heterogeneous expression of keratin, involucrin, and extracellular matrix among subpopulations of a poorly differentiated human cervical carcinoma: possible relationships to patterns of invasion. Auersperg N, et al. **Cancer Res** 1989 Jun 1;49(11):3007–14

Production of hepatocellular carcinoma by oval cells: cell cycle expression of c–myc and p53 at different stages of oval cell transformation. Braun L, et al. **Cancer Res** 1989 Mar 15;49(6):1554–61

Study of estrogen receptor, progesterone receptor, and the estrogen–regulated Mr 24,000 protein in patients with carcinomas of the endometrium and cervix. Ciocca DR, et al. **Cancer Res** 1989 Aug 1;49(15):4298–304

Structural heterogeneity of a human melanoma–associated antigen. Gruters RA, et al. **Cancer Res** 1989 Jan 15; 49(2):459–65

Monoclonal antiidiotypic antibodies related to the p97 human melanoma antigen. Kahn M, et al. **Cancer Res** 1989 Jun 15;49(12):3157–62

Characterization of monoclonal antibodies recognizing a Mr 180,000 P–glycoprotein: differential expression of the Mr 180,000 and Mr 170,000 P–glycoproteins in multidrug–resistant human tumor cells. Meyers MB, et al. **Cancer Res** 1989 Jun 15;49(12):3209–14

Analysis of the antigenic profile of uveal melanoma lesions with anti–cutaneous melanoma–associated antigen and anti–HLA monoclonal antibodies. Natali PG, et al. **Cancer Res** 1989 Mar 1;49(5):1269–74

Gastrin in human bronchogenic carcinomas: constant expression but variable processing of progastrin. Rehfeld JF, et al. **Cancer Res** 1989 Jun 1;49(11):2840–3

Characterization of a melanoma antigen with a mouse–specific epitope recognized by a monoclonal antibody with antimetastatic ability. Sakiyama H, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7173–8

Secreted and cellular polypeptide patterns of MCF–7 human breast cancer cells following either estrogen stimulation or v–H–ras transfection. Worland PJ, et al. **Cancer Res** 1989 Jan 1;49(1):51–7

Separation and characterization of the subunits of the laminin of EHS sarcoma. Arumugham RG, et al. **Connect Tissue Res** 1988;18(2):135–47

Immunohistological demonstration of osteonectin in normal bone tissue and in bone tumors. Schulz A, et al. **Curr Top Pathol** 1989;80:31–54

Ras oncogene and the acquisition of metastasizing properties by rectal adenocarcinoma. Michelassi F, et al. **Dis Colon Rectum** 1989 Aug;32(8):665–8

Immunocytochemical determination of the estrogen–regulated protein Mr 24,000 in primary breast cancer and response to endocrine therapy. Andersen J, et al. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):641–3

IgE–producing low–grade non–Hodgkin lymphoma. Sundström C, et al. **Eur J Haematol** 1988 Oct;41(4):388–95

Variations in WGA–binding proteins in tumours growing in different implantation sites. Chan WS, et al. **Exp Cell Biol** 1989;57(1):11–8

Gross cystic disease fluid protein–15 as a marker for breast cancer: immunohistochemical analysis of 690 human neoplasms and comparison with alpha–lactalbumin. Wick MR, et al. **Hum Pathol** 1989 Mar;20(3):281–7

Molecular profile, tissue distribution and prognostic

evaluation of a human melanoma-carcinoma antigen recognized by the murine monoclonal antibody B1.1. Natali PG, et al. **Int J Biol Markers** 1988 Oct-Dec;3(4):211-20

Changes in antigen expression on human FME melanoma cells after exposure to hypoxia and acidic pH, alone or in combination. Davies CL, et al. **Int J Cancer** 1989 Feb 15;43(2):350-5

Evidence of enhancement of the ras oncogene protein product (p21) in a spectrum of human tumors. De Biasi F, et al. **Int J Cancer** 1989 Mar 15;43(3):431-5

The intracellular association of B700 and B50 murine melanoma antigens and their role in tumor rejection. Gersten DM, et al. **Int J Cancer** 1989 Mar 15;43(3):497-500

Melanoma antigen expression and metastatic ability of mutant B16 melanoma clones. Nozue M, et al. **Int J Cancer** 1988 Nov 15;42(5):734-8

Expression of 7F7-antigen, a human adhesion molecule identical to intercellular adhesion molecule-1 (ICAM-1) in human carcinomas and their stromal fibroblasts. Vogetseder W, et al. **Int J Cancer** 1989 May 15; 43(5):768-73

Parathyroid hormone-related protein: immunohistochemical localization in cancers and in normal skin. Danks JA, et al. **J Bone Miner Res** 1989 Apr;4(2):273-8

Frequency and partial characterization of adenylate cyclase-stimulating activity in tumors associated with humoral hypercalcemia of malignancy. Stewart AF, et al. **J Bone Miner Res** 1986 Jun;1(3):267-76

High-performance concanavalin A affinity chromatography of liver and hepatoma membrane proteins. Josić D, et al. **J Chromatogr** 1988 Jul 1;444:29-39

Detection of a tumor-associated glycoprotein antigen in serum and urine of melanoma patients by murine monoclonal antibody (AD1-40F4) in enzyme immunoassay. Euhus DM, et al. **J Clin Lab Anal** 1989; 3(3):184-90

Drug-resistance in multiple myeloma and non-Hodgkin's lymphoma: detection of P-glycoprotein and potential circumvention by addition of verapamil to chemotherapy. Dalton WS, et al. **J Clin Oncol** 1989 Apr;7(4):415-24

Cytotoxic T lymphocyte clones from peripheral blood and from tumor site detect intratumor heterogeneity of melanoma cells. Analysis of specificity and mechanisms of interaction. Anichini A, et al. **J Immunol** 1989 May 15; 142(10):3692-701

Leukemia cell specific protein of the bivalve mollusc Mya arenaria [published erratum appears in J Invertebr Pathol 1989 Jul;54(1):137] Miosky DL, et al. **J Invertebr Pathol** 1989 Jan;53(1):32-40

Multiple forms of parathyroid hormone-like proteins in a human tumour. Docherty HM, et al. **J Mol Endocrinol** 1989 Jan;2(1):11-20

Transfected mouse melanoma lines that express various levels of human melanoma-associated antigen p97. Estin CD, et al. **J Natl Cancer Inst** 1989 Mar 15;81(6):445-8

Immunohistochemical staining for vimentin filaments and S-100 protein in myxoma of the jaws. Lombardi T, et al. **J Oral Pathol** 1988 Apr;17(4):175-7

Expression of parathyroid hormone related protein in normal skin and in tumours of skin and skin appendages. Hayman JA, et al. **J Pathol** 1989 Aug;158(4):293-6

Immunocytochemical identification and localization of the Mr 22,000 calcium-binding protein (sorcin) in an adriamycin-resistant myelogenous leukemia cell line. Sugawara I, et al. **Jpn J Cancer Res** 1989 May;80(5):469-74

Cellular and tissue distribution of MRK20 murine monoclonal antibody-defined 85-kDa protein in adriamycin-resistant cancer cell lines. Sugawara I, et al. **Jpn J Cancer Res** 1988 Oct;79(10):1101-10

Heterogeneity in protein patterns of cells from terminal blast crisis in chronic granulocytic leukemia: discrimination between lymphatic and myeloid lineages. Doxiadis I, et al. **Leukemia** 1988 Dec;2(12 Suppl):57S-62S

Phosphotyrosine phosphatase activity prevents the detection of P210bcr/abl protein in mature cells in chronic myelogenous leukemia even by an immunoblotting technique. Shibata K, et al. **Leukemia** 1989 Sep;3(9):615-9

In situ localization of melanotransferrin (melanoma-associated antigen P97) in human liver. A light- and electronmicroscopic immunohistochemical study. Sciot R, et al. **Liver** 1989 Apr;9(2):110-9

Two distinct tumor-derived, parathyroid hormone-like peptides result from alternative ribonucleic acid splicing. Mangin M, et al. **Mol Endocrinol** 1988 Nov;2(11):1049-55

A novel interferon-gamma regulated human melanoma-associated antigen, gp33-38, defined by monoclonal antibody Me14-D12. II. Molecular cloning of a genomic probe. Audette M, et al. **Mol Immunol** 1989 Jun;26(6):515-22

p53 is associated with a 35 kD protein in cells transformed by simian virus 40. Milner J, et al. **Oncogene** 1989 May; 4(5):665-8

Modulation of the c-myb, c-myc and p53 mRNA and protein levels during induced murine erythroleukemia cell differentiation. Richon VM, et al. **Oncogene** 1989 Feb; 4(2):165-73

Analysis of the c-src gene product structure, abundance, and protein kinase activity in human neuroblastoma and glioblastoma cells. O'Shaughnessy J, et al. **Oncogene Res** 1987;2(1):1-18

Expression of intermediate filaments and stromal proteins in granular cell tumor of the tongue. Ophir D, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec;66(6):689-96

Demonstration of B700 cross-reactive antigens on human and other animal melanomas. Gersten DM, et al. **Pigment Cell Res** 1988;1(6):434-8

Localization of mRNA for the oncotrophoblastic protein oncomodulin during implantation and early placentation in the rat. Brewer LM, et al. **Placenta** 1989 Jul-Aug; 10(4):359-75

High levels of a parathyroid hormone-like protein in milk. Budayr AA, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(18):7183-5

Isolation and primary structure of tumor-derived peptides related to human pancreastatin and chromogranin A. Schmidt WE, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(21):8231-5

Labeling monoclonal antibodies and F(ab')2 fragments with the alpha-particle-emitting nuclide astatine-211: preservation of immunoreactivity and in vivo localizing capacity. Zalutsky MR, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7149-53

The chemical composition of specific antigenic protein of Guerin epithelioma. Pałka JA, et al. **Rocz Akad Med Bialymstoku** 1984-85;29-30:3-8

Assay of GCDFP-15 by ELISA: an available method for in vitro studies of functional differentiation in human breast cancer. Revillion-Carette F, et al. **Tumori** 1988 Dec 31; 74(6):669-74

Tyrosine-rich crystalloids in pleomorphic adenoma: SEM findings and partial biochemical characterization. Valente PT, et al. **Ultrastruct Pathol** 1988 Nov-Dec;12(6):613-20

Immunohistochemistry of ovarian granulosa cell tumours. The value of tissue specific proteins and tumour markers. Chadha S, et al. **Virchows Arch [A]** 1989;414(5):439-45

[Checkout of cancer-specific proteins and application in diagnosis of lung cancer] Zhang QH, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Sep;27(9):541-3, 586-7 (Eng. Abstr.) **(Chi)**

[A study of an immunosuppressive acidic protein (IAP) in patients with a bone tumor] Mori O, et al. **Gan No Rinsho** 1988 Oct;34(12):1690-2 (Eng. Abstr.) **(Jpn)**

[A correlation between the evaluation of assay results of immuno-suppressive substance (IS) in the blood and other parameters in patients with gastric cancer] Tanaka T, et al. **Gan No Rinsho** 1988 Nov;34(14):1969-73 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of serum basic fetoprotein--comparative study of serum immunosuppressive acid protein] Gohji K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 May; 80(5):711-8 (Eng. Abstr.) **(Jpn)**

[Serum levels of IAP, CEA and CA19-9 in patients with urological malignancies] Iizumi T, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Aug;79(8):1448-52 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of immunosuppressive factors (IAP-immunosuppressive acidic protein, IS-immunosuppressive substance) in head and neck cancer] Saito T, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Apr; 92(4):588-96 (Eng. Abstr.) **(Jpn)**

[Clinical application of immunosuppressive acidic protein] Sato T, et al. **Rinsho Byori** 1988 Nov;Spec No 79:101-7 **(Jpn)**

[Embryonic prealbumin as a tumor marker] Tatarinov IuS. **Vopr Onkol** 1989;35(3):259-63 (31 ref.) **(Rus)**

[B-type lymphoma with a mixed kappa-lambda component as a diagnostic entity for AIDS in a heroin-addicted patient] Romero MS, et al. **Sangre (Barc)** 1988 Oct; 33(5):387-90 (Eng. Abstr.) **(Spa)**

ANTAGONISTS & INHIBITORS

In vitro and in vivo antagonists against parathyroid hormone-related protein. Nagasaki K, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):1036-42

Clinical trials of agents that reverse multidrug-resistance. Gottesman MM, et al. **J Clin Oncol** 1989 Apr;7(4):409-11

BIOSYNTHESIS

Lipoxygenase regulation of membrane expression of tumor cell glycoproteins and subsequent metastasis. Honn KV, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989;19:439-43

Cyclopentenone prostaglandins block cell cycle progression in the G1 phase and induce the G1-specific proteins in HeLa S3 cells. Narumiya S, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:411-4

Human and rat malignant-tumor-associated mRNAs encode stromelysin-like metalloproteinases. Nicholson R, et al. **Biochemistry** 1989 Jun 13;28(12):5195-203

Chorionic gonadotropin synthesis by human tumor cell lines: examination of subunit accumulation, steady-state levels of mRNA, and gene structure. Cosgrove DE, et al. **Biochim Biophys Acta** 1989 Jan 23;1007(1):44-54

Growth related changes in protein synthesis and in a 25 kDa protein of Ehrlich ascites tumor cells. Bielka H, et al. **Biomed Biochim Acta** 1988;47(7):557-63

Relationship between changes in antigen expression and protein synthesis in human melanoma cells after hyperthermia and photodynamic treatment. Davies CL, et al. **Br J Cancer** 1988 Sep;58(3):306-13

Mr 85,000 membrane protein specifically expressed in adriamycin-resistant human tumor cells. Hamada H, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7082-7

Hormonal regulation of synthesis and secretion of pS2 protein relevant to growth of human breast cancer cells (MCF-7). Kida N, et al. **Cancer Res** 1989 Jul 1;49(13):3494-8

Paraneoplastic syndrome of hypercalcemia and leukocytosis caused by squamous carcinoma cells (T3M-1) producing parathyroid hormone-related protein, interleukin 1 alpha, and granulocyte colony-stimulating factor. Sato K, et al. **Cancer Res** 1989 Sep 1;49(17):4740-6

Expression of the tumor-specific and calcium-binding protein oncomodulin during chemical transformation of rat fibroblasts. Sommer EW, et al. **Cancer Res** 1989 Feb 15; 49(4):899-905

Establishment of a cell line producing bone morphogenetic protein from a human osteosarcoma. Takaoka K, et al. **Clin Orthop** 1989 Jul;(244):258-64

Inhibition of biosynthetic processes in P388 and Ehrlich ascites cells by cloturin. Miko M, et al. **Drugs Exp Clin Res** 1988;14(9):575-80

N-myc is frequently activated by proviral insertion in MuLV-induced T cell lymphomas. van Lohuizen M, et al. **EMBO J** 1989 Jan;8(1):133-6

Expression and secretion of gro/MGSA by stimulated human endothelial cells. Wen DZ, et al. **EMBO J** 1989 Jun; 8(6):1761-6

Protein content and thyroid hormone release in vitro by differentiated thyroid cancer cells in the presence of estradiol, dehydroepiandrosterone, polypeptidic hormones and pesticides. Ghinea E, et al. **Endocrinologie** 1988 Jul-Sep;26(3):165-71

Molecular cloning, sequencing and expression in Escherichia coli of the 25-kDa growth-related protein of Ehrlich ascites tumor and its homology to mammalian stress proteins. Gaestel M, et al. **Eur J Biochem** 1989 Jan 15; 179(1):209-13

Post-translational addition of chondroitin sulfate glycosaminoglycans. Role of N-linked oligosaccharide addition, trimming, and processing. Spiro RC, et al. **J Biol Chem** 1989 Jan 25;264(3):1779-86

Human peripheral lymphocyte growth regulation and response to phorbol esters is linked to synthesis and phosphorylation of the cytosolic protein, prosolin. Cooper HL, et al. **J Immunol** 1989 Aug 1;143(3):956-63

Adult T leukemia cells produce a lymphokine that augments interleukin 2 receptor expression. Teshigawara K, et al. **J Mol Cell Immunol** 1985;2(1):17-26

Pro-opiomelanocortin gene expression in human phaeochromocytomas. de Keyzer Y, et al. **J Mol Endocrinol** 1989 May;2(3):175-81

Intrathecal synthesis of immunosuppressive acidic protein (IAP) in patients with multiple sclerosis and other inflammatory neurological diseases. Seki H, et al. **J Neurol Sci** 1988 Jul;85(3):259-66

Cellular gene expression in papillomas of the choroid plexus from transgenic mice that express the simian virus 40 large T antigen. Marks JR, et al. **J Virol** 1989 Feb;63(2):790-7

Production of parathyroid hormone-related protein in adult T-cell leukemia cells. Honda S, et al. **Jpn J Cancer Res** 1988 Dec;79(12):1264-8

Primary screening and inhibition of macromolecular biosynthesis by benfluron metabolites in vitro. Miko M, et al. **Neoplasma** 1989;36(1):91-101

Baculovirus expression of functional P210 BCR-ABL oncogene product. Pendergast AM, et al. **Oncogene** 1989 Jun;4(6):759-66

Overexpression of normal human p53 in established fibroblasts leads to their tumorigenic conversion. Tuck SP, et al. **Oncogene Res** 1989;4(2):81-96

Effect of helenalin and bis(helenalinyl)malonate on nucleic acid and protein synthesis in human KB carcinoma cells. Hall IH, et al. **Pharm Res** 1987 Dec;4(6):509-14

Inhibition of tyrosinase activity and protein synthesis in melanoma cells by calcium ionophore A23187. Fuller BB. **Pigment Cell Res** 1987;1(3):176-80

Studies of the factor Xa-dependent inhibitor of factor VIIa/tissue factor (extrinsic pathway inhibitor) from cell supernates of cultured human umbilical vein endothelial cells. Warn-Cramer BJ, et al. **Thromb Haemost** 1989 Feb 28;61(1):101-5

[Stimulation with triiodothyronine of the synthesis of DNA, total proteins, nuclear proteins and nuclear matrix proteins in cultured cells of hepatoma Morris 7777] Adylova AT, et al. **Vopr Med Khim** 1988 Nov-Dec;34(6):113-7 (Eng. Abstr.) **(Rus)**

BLOOD

Interferon production in myelo- and lymphoproliferative diseases. I. Spontaneous interferon production in acute and chronic leukaemias. Szabó B, et al. **Acta Microbiol Hung** 1988;35(3):295-300

Relation between the activity of poly(A)polymerase and the levels of protein synthesis in the lymphocytes of patients with chronic lymphocytic leukemia. Gounaris A, et al. **Blut** 1988 Nov;57(5):293-6

Detection of P-glycoprotein in human leukemias using monoclonal antibodies. Mattern J, et al. **Blut** 1989 Apr; 58(4):215-7

Double antibody radioimmunoassay for monitoring metastatic breast cancer. Schecter RL, et al. **Br J Cancer** 1988 Sep;58(3):362-7

Serum lactate dehydrogenase is an important risk determinant

in acute lymphocytic leukemia. Fanin R, et al. **Haematologica (Pavia)** 1989 Mar-Apr;74(2):161-5

Comparative analysis of CEA and SCC serum markers with IAP in human lung cancer. Castelli M, et al. **Int J Biol Markers** 1989 Jan-Mar;4(1):45-50

Tumors of the parathyroid gland and circulating parathyroid hormone-related protein associated with persistent hypercalcemia. Rosol TJ, et al. **Toxicol Pathol** 1989; 17(2):346-56 (48 ref.)

[Clinical evaluation of immunosuppressive factors (IAP-immunosuppressive acidic protein, IS-immunosuppressive substance) in head and neck cancer] Saito T, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Apr; 92(4):588-96 (Eng. Abstr.) **(Jpn)**

[Hypercalcemia of malignancy] Tomita A. **Rinsho Byori** 1989 Feb;37(2):138-42 **(Jpn)**

[Vitamin A and vitamin A-binding protein levels in the blood serum of women with cervical cancer] Sieroń G, et al. **Ginekol Pol** 1988 Dec;59(12):719-23 (Eng. Abstr.) **(Pol)**

[Incidence of monoclonal components in lymphoproliferative syndromes. Apropos of 234 cases] Giraldo MP, et al. **Sangre (Barc)** 1989 Apr;34(2):112-6 (Eng. Abstr.) **(Spa)**

CHEMICAL SYNTHESIS

Synthetic parathyroid hormone-like protein-(1-74): biochemical and physiological characterization. Stewart AF, et al. **Endocrinology** 1989 Feb;124(2):642-8

DEFICIENCY

Decreased expression of Ii-derived p25 and of P67/69 in hairy leukemic cells. Yao XR, et al. **Leuk Res** 1988; 12(10):787-94

GENETICS

Expression of Met-(-1) angiogenin in Escherichia coli: conversion to the authentic less than Glu-1 protein. Shapiro R, et al. **Anal Biochem** 1988 Dec;175(2):450-61

Gene for parathyroid hormone-like peptide is on rat chromosome 2. Hendy GN, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):558-62

Expression of human angiogenin in cultured baby hamster kidney cells. Kurachi K, et al. **Biochemistry** 1988 Aug 23; 27(17):6557-62

The phosphoprotein p53 is down-regulated post-transcriptionally during embryogenesis in vertebrates. Louis JM, et al. **Biochim Biophys Acta** 1988 Sep 7; 950(3):395-402

Detection of the molecular abnormality in chronic myeloid leukemia by use of the polymerase chain reaction. Dobrovic A, et al. **Blood** 1988 Dec;72(6):2063-5

Absence of alternative splicing in bcr-abl mRNA in chronic myeloid leukemia cell lines. Hermans A, et al. **Blood** 1988 Dec;72(6):2066-9

Detection by enzymatic amplification of bcr-abl mRNA in peripheral blood and bone marrow cells of patients with chronic myelogenous leukemia. Lange W, et al. **Blood** 1989 May 1;73(6):1735-41

Expression of messenger RNA species coding for a Mr 43,000 peptide associated with ferritin in human leukemia-K562 cells and its down regulation during differentiation. Shterman N, et al. **Cancer Res** 1989 Sep 15;49(18):5033-6

The 5' flanking region of the pS2 gene contains a complex enhancer region responsive to oestrogens, epidermal growth factor, a tumour promoter (TPA), the c-Ha-ras oncoprotein and the c-jun protein. Nunez AM, et al. **EMBO J** 1989 Mar;8(3):823-9

Synthesis of a gene encoding parathyroid hormone-like protein-(1-141): purification and biological characterization of the expressed protein. Thorikay M, et al. **Endocrinology** 1989 Jan;124(1):111-8

Tumor promoter 12-O-tetradecanoylphorbol 13-acetate inhibits mas/angiotensin receptor-stimulated inositol phosphate production and intracellular Ca2+ elevation in the 401L-C3 neuronal cell line. Jackson TR, et al. **FEBS Lett** 1989 Jul 17;251(1-2):27-30

A variation in the structure of the protein-coding region of the human p53 gene. Buchman VL, et al. **Gene** 1988 Oct 30;70(2):245-52

Structure of the 5' flanking region of the gene encoding human parathyroid-hormone-related protein (PTHrP). Suva LJ, et al. **Gene** 1989 Apr 15;77(1):95-105

Isolation and characterization of a gene specifically expressed in different metastatic cells and whose deduced gene product has a high degree of homology to a Ca2+-binding protein family. Ebralidze A, et al. **Genes Dev** 1989 Jul; 3(7):1086-93

Lack of rearrangements of p53 tumor antigen gene locus in human hematological malignancies. Venturelli D, et al. **Haematologica (Pavia)** 1988 Jul-Aug;73(4):259-64

Molecular cloning and characterization of the human folate-binding protein cDNA from placenta and malignant tissue culture (KB) cells. Elwood PC. **J Biol Chem** 1989 Sep 5;264(25):14893-901

Transcriptional regulation of the parathyroid hormone-related peptide gene by glucocorticoids and vitamin D in a human C-cell line. Ikeda K, et al. **J Biol Chem** 1989 Sep 25;264(27):15743-6

The platelet-derived growth factor-inducible KC gene encodes a secretory protein related to platelet alpha-granule proteins. Oquendo P, et al. **J Biol Chem** 1989 Mar 5;264(7):4133-7

Characterization of the human parathyroid hormone-like peptide gene. Functional and evolutionary aspects. Yasuda T, et al. **J Biol Chem** 1989 May 5;264(13):7720-5

Molecular cloning of a novel human leukemia-associated gene. Evidence of conservation in animal species. Zhu XX, et al. **J Biol Chem** 1989 Aug 25;264(24):14556-60

Induction of the metastatic phenotype by transfection of the nuclear oncogene p53: increases in cytoplasmic diacylglycerol levels and reduction in class I major histocompatibility antigen expression are not sufficient to explain the changes in metastatic capacities. Pohl J, et al. **J Cancer Res Clin Oncol** 1989;115(2):145-7

Retroviral long terminal repeat is the promoter of the gene encoding the tumor-associated calcium-binding protein oncomodulin in the rat. Banville D, et al. **J Mol Biol** 1989 Jun 5;207(3):481-90

Integration of Friend murine leukemia virus into both alleles of the p53 oncogene in an erythroleukemic cell line. Hicks GG, et al. **J Virol** 1988 Dec;62(12):4752-5

Mutation is required to activate the p53 gene for cooperation with the ras oncogene and transformation. Hinds P, et al. **J Virol** 1989 Feb;63(2):739-46

Activation of Ha-ras in human chronic granulocytic and chronic myelomonocytic leukaemia. Gow J, et al. **Leuk Res** 1988;12(10):805-10

The six amino-terminal amino acids of p60src are sufficient to cause myristylation of p21v-ras. Buss JE, et al. **Mol Cell Biol** 1988 Sep;8(9):3960-3

Use of a cloned multidrug resistance gene for coamplification and overproduction of major excreted protein, a transformation-regulated secreted acid protease. Kane SE, et al. **Mol Cell Biol** 1988 Aug;8(8):3316-21

Early retinoic acid-induced F9 teratocarcinoma stem cell gene ERA-1: alternate splicing creates transcripts for a homeobox-containing protein and one lacking the homeobox. LaRosa GJ, et al. **Mol Cell Biol** 1988 Sep; 8(9):3906-17

Characterization of mutant p53-hsp72/73 protein-protein complexes by transient expression in monkey COS cells. Stürzbecher HW, et al. **Mol Cell Biol** 1988 Sep;8(9):3740-7

Characterization of the human p53 gene promoter. Tuck SP, et al. **Mol Cell Biol** 1989 May;9(5):2163-72

The human FGF-5 oncogene encodes a novel protein related to fibroblast growth factors. Zhan X, et al. **Mol Cell Biol** 1988 Aug;8(8):3487-95

Regulation of cathepsin-D and pS2 gene expression by growth factors in MCF7 human breast cancer cells. Cavailles V, et al. **Mol Endocrinol** 1989 Mar;3(3):552-8

Expression of messenger ribonucleic acids encoding a parathyroid hormone-like peptide in normal human and animal tissues with abnormal expression in human parathyroid adenomas. Ikeda K, et al. **Mol Endocrinol** 1988 Dec;2(12):1230-6

Inhibitory effect of estrogens on GCDFP-15 mRNA levels and secretion in ZR-75-1 human breast cancer cells. Simard J, et al. **Mol Endocrinol** 1989 Apr;3(4):694-702

Cloning of murine alpha and beta retinoic acid receptors and a novel receptor gamma predominantly expressed in skin. Zelent A, et al. **Nature** 1989 Jun 29;339(6227):714-7

TaqI and RsaI RFLP's at the prolactin inducible protein (PIP) locus on chromosome 7. Myal Y, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5879

The human osteonectin gene (OSN) has TaqI and MspI polymorphisms. Naylor SL, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6753

Nucleotide sequence of a cDNA encoding the chicken p53 nuclear oncoprotein. Scussi T, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11383

Nucleotide sequence of a cDNA encoding the rat p53 nuclear oncoprotein. Soussi T, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11384

Meth A fibrosarcoma cells express two transforming mutant p53 species. Eliyahu D, et al. **Oncogene** 1988 Sep; 3(3):313-21

Molecular lesions involved in the progression of a human breast cancer. Liu E, et al. **Oncogene** 1988 Sep;3(3):323-7

Expression, methylation and chromatin structure of the p53 gene in untransformed and human T-cell leukemia virus type I-transformed human T-lymphocytes. Lübbert M, et al. **Oncogene** 1989 May;4(5):643-51

Two promoters that map to 5'-sequences of the human p53 gene are differentially regulated during terminal differentiation of human myeloid leukemic cells. Reisman D, et al. **Oncogene** 1989 Aug;4(8):945-53

The retinoblastoma gene is frequently altered leading to loss of expression in primary breast tumours. Varley JM, et al. **Oncogene** 1989 Jun;4(6):725-9

The retinoblastoma susceptibility gene product: a characteristic pattern in normal cells and abnormal expression in malignant cells. Xu HJ, et al. **Oncogene** 1989 Jun;4(6):807-12

High frequency of mas oncogene activation detected in the NIH3T3 tumorigenicity assay. van 't Veer LJ, et al. **Oncogene Res** 1988;3(3):247-54

Estrogen-responsive element of the human pS2 gene is an imperfectly palindromic sequence. Berry M, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1218-22

Retinoid receptor antisense DNAs inhibit alkaline phosphatase induction and clonogenicity in malignant keratinocytes. Cope FO, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5590-4

Transformation of an interleukin 3-dependent hematopoietic cell line by the chronic myelogenous leukemia-specific P210bcr/abl protein. Daley GQ, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9312-6

Localization of preferential sites of rearrangement within the BCR gene in Philadelphia chromosome-positive acute lymphoblastic leukemia. Denny CT, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4254-8

Mutagenesis of aspartic acid-116 enhances the ribonucleolytic activity and angiogenic potency of angiogenin. Harper JW, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7139-43

Unexpected heterogeneity of BCR-ABL fusion mRNA detected by polymerase chain reaction in Philadelphia chromosome-positive acute lymphoblastic leukemia. Hooberman AL, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4259-63

Isolation and characterization of the human parathyroid hormone-like peptide gene. Mangin M, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2408-12

Chromosome 17 deletions and p53 gene mutations in colorectal carcinomas. Baker SJ, et al. **Science** 1989 Apr 14;244(4901):217-21

Growth factors regulate transin gene expression by c-fos-dependent and c-fos-independent pathways. Kerr LD, et al. **Science** 1988 Dec 9;242(4884):1424-7

Expression of a calcium-mobilizing parathyroid hormone-like peptide in lactating mammary tissue. Thiede MA, et al. **Science** 1988 Oct 14;242(4876):278-80

The gene for prolactin-inducible protein (PIP), uniquely expressed in exocrine organs, maps to chromosome 7. Myal Y, et al. **Somat Cell Mol Genet** 1989 May;15(3):265-70

[Specific expression of human pS2 gene in breast cancer] Rio MC, et al. **Biochimie** 1988 Jul;70(7):961-8 (Eng. Abstr.) **(Fre)**

[Chemico-enzymatic synthesis and cloning of human angiogenin gene in M13mp8 phage] Kovalenko SP, et al. **Bioorg Khim** 1988 Jul;14(7):910-5 (Eng. Abstr.) **(Rus)**

[Bacterial expression of human oncogene p53 in the form of a fused protein] Maimets TO. **Dokl Akad Nauk SSSR** 1988;302(6):1501-3 **(Rus)**

[Two allelic genes of human p53 code for proteins differing with respect to amino acid sequence] Bukhman VL, et al. **Genetika** 1988 Dec;24(12):2101-9 (Eng. Abstr.) **(Rus)**

[Exon-intron structure and organization of the 5'-terminal region of the human p53 gene] Bukhman VL, et al. **Genetika** 1988 Nov;24(11):1909-17 (Eng. Abstr.) **(Rus)**

[Antisense RNA p53 inhibits proliferation of normal and transformed cells] Prasolov VS, et al. **Mol Biol (Mosk)** 1988 Sep-Oct;22(5):1371-80 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Anti-peptide antibodies to oncoproteins: the predetermined specificity and detection of gene products predicted by nucleotide sequence analyses. Tanaka T, et al. **Adv Biotechnol Processes** 1988;10:61-80 (36 ref.)

In vitro production of the general transformation antibody related to survival in human cancer patients: antimalignin antibody. Bogoch S, et al. **Cancer Detect Prev** 1988; 12(1-6):313-20

Cell surface glycoprotein associated with human lung tumors that is similar to but distinct from the epidermal growth factor receptor. Chen FA, et al. **Cancer Res** 1989 Jul 1; 49(13):3642-9

Pharmacokinetics and tumor localization of 131I-labeled anti-tenascin monoclonal antibody 81C6 in patients with gliomas and other intracranial malignancies. Zalutsky MR, et al. **Cancer Res** 1989 May 15;49(10):2807-13

Cyclophosphamide potentiates the antitumor activity of v-p97NY. Estin CD, et al. **Cell Immunol** 1989 Apr 15; 120(1):126-31

Colon carcinoma-associated glycoproteins recognized by monoclonal antibodies CO-029 and GA22-2. Sela BA, et al. **Hybridoma** 1989 Aug;8(4):481-91

Short-term effects of i.v. injected murine 99MTc-F(ab')2 fragments of an anti-melanoma antibody (HMW-MAA 225.28 S) on haemato-immunological parameters in patients with melanoma. Castello G, et al. **Int J Biol Markers** 1988 Apr-Jun;3(2):140-4

Autoimmune expression of a cytoplasmic protein p60 in mice bearing metastasizing SV40-transformed tumors. Manneck HE, et al. **Int J Cancer** 1988 Dec 15;42(6):906-12

Antibodies to parathyroid hormone-related protein lower serum calcium in athymic mouse models of malignancy-associated hypercalcemia due to human tumors. Kukreja SC, et al. **J Clin Invest** 1988 Nov; 82(5):1798-802

Antibody recognition of the tumor-specific bcr-abl joining region in chronic myeloid leukemia. van Denderen J, et al. **J Exp Med** 1989 Jan 1;169(1):87-98

Blocking of lymphokine activated killer (LAK) cell mediated cytotoxicity by cell-sized beads bearing tumor cell proteins. Chong AS, et al. **J Immunol** 1988 Dec 15;141(12):4418-24

Comparison of transforming growth factor-beta and a macrophage- deactivating polypeptide from tumor cells. Differences in antigenicity and mechanism of action. Tsunawaki S, et al. **J Immunol** 1989 May 15;142(10):3462-8

Melanoma targeting with a cocktail of monoclonal antibodies to distinct determinants of the human HMW-MAA. Matzku S, et al. **J Nucl Med** 1989 Mar;30(3):390-7

Monoclonal antibody against a melanosomal protein in melanotic and amelanotic human melanoma cells. McEwan M, et al. **Pigment Cell Res** 1989 Jan-Feb;2(1):1-7

Characterization of a human-mouse chimeric antibody reactive with a human melanoma associated antigen. Marchitto KS, et al. **Prog Clin Biol Res** 1989;288:101-5

DU-PAN-2, mucin type differentiation antigen of normal and malignant pancreatic ductal cells. Metzgar RS, et al. **Prog Clin Biol Res** 1989;288:53-61

[Immunoscintigraphy with 99mTc marked melanoma antibody in patients with malignant melanoma] Rentsch M, et al. **Helv Chir Acta** 1989 Jun;56(1-2):11-3 (Eng. Abstr.) **(Ger)**

ISOLATION & PURIFICATION

Purification of the growth-related protein p25 of the Ehrlich ascites tumor and analysis of its isoforms. Benndorf R, et al. **Biochem Int** 1988 Aug;17(2):225-34

Isolation of bovine angiogenin using a placental ribonuclease inhibitor binding assay [published erratum appears in Biochemistry 1989 Feb 21;28(4):1930] Bond MD, et al. **Biochemistry** 1988 Aug 23;27(17):6282-7

Resistance of cultured hepatoma cells to copper toxicity. Purification and characterization of the hepatoma metallothionein. Freedman JH, et al. **Biochim Biophys Acta** 1989 Aug 18;992(2):145-54

Clinical significance of mucin-like high molecular weight glycoprotein originated from lung cancer as tumor marker. Imokawa M, et al. **Clin Chim Acta** 1989 Mar 15; 180(1):45-58

Steroidogenesis activator polypeptide may be a product of glucose regulated protein 78 (GRP78). Mertz LM, et al. **Endocr Res** 1989;15(1-2):101-15

Isolation of 16,000-dalton parathyroid hormone-like proteins from two animal tumors causing humoral hypercalcemia of malignancy. Weir EC, et al. **Endocrinology** 1988 Dec; 123(6):2744-51

Malignancy-related cell surface mucin-type glycoproteins. Bhavanandan VP. **Indian J Biochem Biophys** 1988 Feb-Apr;25(1-2):36-42 (39 ref.)

Purification and characterization of recombinant human parathyroid hormone-related protein. Hammonds RG Jr, et al. **J Biol Chem** 1989 Sep 5;264(25):14806-11

Human ovarian tumor-associated trypsin. Its purification and characterization from mucinous cyst fluid and identification as an activator of pro-urokinase. Koivunen E, et al. **J Biol Chem** 1989 Aug 25;264(24):14095-9

Characterization of a novel glycoprotein isolated from the basement membrane matrix of the Engelbreth-Holm-Swarm tumor. Robinson LK, et al. **J Biol Chem** 1989 Mar 25;264(9):5141-7

Purification and partial primary sequence of a chemotactic protein for polymorphonuclear leukocytes derived from human lung giant cell carcinoma LU65C cells. Suzuki K, et al. **J Exp Med** 1989 Jun 1;169(6):1895-901

A novel IFN-gamma regulated human melanoma associated antigen gp33-38 defined by monoclonal antibody Me14/D12. I. Identification and immunochemical characterization. Giuffré L, et al. **J Immunol** 1988 Sep 15; 141(6):2072-8

A novel heteromorphic human cell surface alloantigen, gp60, defined by a human monoclonal antibody. Schadendorf D, et al. **J Immunol** 1989 Mar 1;142(5):1621-5

Isolation and reconstitution of furosemide-binding proteins from Ehrlich ascites tumor cells. Jessen F, et al. **J Membr Biol** 1989 May;108(2):139-51

A Ph1 chromosome positive B cell line expresses the fusion protein P 210. Munker R, et al. **Nouv Rev Fr Hematol** 1989; 31(1):39-43

[Detection of factors of differentiation in human malignant melanoma] Zeĭshchikova TA, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):478-80 (Eng. Abstr.) **(Rus)**

METABOLISM

Effects of systemic inhibition of prostaglandin production on protein metabolism in tumor-bearing rats. Strelkov AB, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C261-9

Dissociation of cellular protein and DNA content in mild and moderate dysplasia as a reflection of the degree of aneuploidy in cancer. Sennerstam R, et al. **Anal Quant Cytol Histol** 1989 Aug;11(4):255-60

Parathyroid hormone-related protein in adult T-cell leukemia-lymphoma. Motokura T, et al. **Ann Intern Med** 1989 Sep 15;111(6):484-8

A tumor-secreted protein associated with human hypercalcemia of malignancy. Biology and molecular biology. Rosenblatt M, et al. **Ann N Y Acad Sci** 1988; 548:137-45

Identification of the two types of specific receptor for activin/EDF expressed on Friend leukemia and embryonal carcinoma cells. Kondo S, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1267-72

Sites of modification of human angiogenin by bromoacetate at pH 5.5. Shapiro R, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):530-6

Release of soluble resident as well as secretory proteins from HepG2 cells by partial permeabilization of rough-endoplasmic-reticulum membranes. Strous GJ, et al. **Biochem J** 1989 Jan 1;257(1):159-63

Structural changes induced in the sugar chains of glycoproteins by malignant transformation of producing cells and their clinical application. Kobata A. **Biochimie** 1988 Nov;70(11):1575-85

Hepatic clearance and metabolism in the rat of a human breast cancer associated glycoprotein (GCDFP-15). Toth CA, et al. **Breast Cancer Res Treat** 1988 Oct;12(2):235-43

Identification and characterization of X-ray-induced proteins in human cells. Boothman DA, et al. **Cancer Res** 1989 Jun 1;49(11):2871-8

Modulation by interferons of HLA antigen, high-molecular-weight melanoma associated antigen, and intercellular adhesion molecule 1 expression by cultured melanoma cells with different metastatic potential. Maio M, et al. **Cancer Res** 1989 Jun 1;49(11):2980-7

Differential effects of diacylglycerols and 12-O-tetradecanoylphorbol-13-acetate on protein phosphorylation and cell proliferation of tumor promoter-dependent leukemia cell line A65T. Yamamoto S, et al. **Carcinogenesis** 1988 Oct;9(10):1857-62

An N-terminal transformation-governing sequence of SV40 large T antigen contributes to the binding of both p110Rb and a second cellular protein, p120. Ewen ME, et al. **Cell** 1989 Jul 28;58(2):257-67

Malignant cell glycoproteins and glycolipids. Alhadeff JA. **CRC Crit Rev Oncol Hematol** 1989;9(1):37-107 (515 ref.)

Flow cytofluorimetric determination of protein distribution throughout the cell cycle. Khochbin S, et al. **Cytometry** 1989 Jul;10(4):484-9

Correlation of DNA content, p53, T antigen, and V antigen in simian virus 40-infected human diploid cells. Laffin J, et al. **Cytometry** 1989 Mar;10(2):205-13

ATL-derived factor (ADF), an IL-2 receptor/Tac inducer homologous to thioredoxin; possible involvement of dithiol-reduction in the IL-2 receptor induction. Tagaya Y, et al. **EMBO J** 1989 Mar;8(3):757-64

Binding of nidogen and the laminin-nidogen complex to basement membrane collagen type IV. Aumailley M, et al. **Eur J Biochem** 1989 Sep 1;184(1):241-8

Effects of the cellular p53 protein on Simian-virus-40-T-antigen-catalyzed DNA unwinding in vitro. Kienzle H, et al. **Eur J Biochem** 1989 Sep 1; 184(1):181-6

Coupled induction of exocrine proteins and intracellular compartments involved in the secretory pathway in AR4-2J cells by glucocorticoids. Swarovsky B, et al. **Eur J Cell Biol** 1988 Oct;47(1):101-11

Characterization of cytoplasmic and nuclear polypeptides induced by interferon-gamma in a murine pre-B cell leukemia. Franco A, et al. **Eur J Immunol** 1989 Jul; 19(7):1171-6

Deficiency of a 42-kilodalton protein in tumor-derived fibroblastic cells in neurofibromatosis. Maruyama E, et al. **Exp Cell Biol** 1988;56(3):153-8

Early events in murine erythroleukemia cells induced to differentiate: variation of the cell cycle parameters in relation to p53 accumulation. Khochbin S, et al. **Exp Cell Res** 1988 Dec;179(2):565-74

Effects of centrifugation on the degradation of short-lived proteins in exponentially growing cultured cells. Knecht E, et al. **Exp Cell Res** 1989 Jun;182(2):307-20

Stimulation of transcription from accurate initiation sites by purified S-II. Hirai H, et al. **FEBS Lett** 1988 Sep 26; 238(1):119-22

Evidence of a warfarin-sensitive cancer procoagulant in V2 carcinoma. Roncaglioni MC, et al. **Haematologica (Pavia)** 1989 Mar-Apr;74(2):143-7

Specific phosphorylation by calcium-EGTA complex of a 75 kDa human tumor plasma membrane protein (pp75). Ziai MR, et al. **Int J Biochem** 1989;21(7):731-8

Immunocytochemical detection of the onco-developmental protein oncomodulin in pre-neoplastic and neoplastic hepatocellular lesions during hepatocarcinogenesis in rats. Bernaert D, et al. **Int J Cancer** 1989 Apr 15;43(4):719-27

The relationship between radiation response of human squamous carcinoma cells and specific metabolic changes induced by chronic hypoxia. Kwok TT, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1301-5

Characterization of cellular receptors for erythroid diff.:rentiation factor on murine erythroleukemia cells. Hino M, et al. **J Biol Chem** 1989 Jun 15;264(17):10309-14

Binding of hexabrachions to heparin and DNA. Marton LS, et al. **J Biol Chem** 1989 Aug 5;264(22):13145-9

The kinetics of steroidogenesis activator polypeptide in the rat adrenal cortex. Effects of adrenocorticotropin, cyclic adenosine 3':5'-monophosphate, cycloheximide, and circadian rhythm. Mertz LM, et al. **J Biol Chem** 1989 Sep 15;264(26):15274-9

Characterization of canine renal receptors for the parathyroid hormone-like protein associated with humoral hypercalcemia of malignancy. Orloff JJ, et al. **J Biol Chem** 1989 Apr 15;264(11):6097-103

Interaction of human parathyroid hormone-related peptide with parathyroid hormone receptors in clonal rat osteosarcoma cells. Shigeno C, et al. **J Biol Chem** 1988 Dec 5;263(34):18369-77

Identification of a specific receptor for erythroid differentiation factor on follicular granulosa cell. Sugino H, et al. **J Biol Chem** 1988 Oct 25;263(30):15249-52

Identification of a tumor cell receptor for VGVAPG, an elastin-derived chemotactic peptide. Blood CH, et al. **J Cell Biol** 1988 Nov;107(5):1987-93

Stimulation of a MR 80,000 protein phosphorylation by EGF in EGF receptor-hyperproducing human tumor cells. Hirai M, et al. **J Cell Physiol** 1989 Apr;139(1):9-17

Autoregulation of MeWo metastatic melanoma cell growth: characterization of intracellular (FGF, MGSA) and secreted (PDGF) growth factors. Pichon F, et al. **J Cell Physiol** 1989 Aug;140(2):344-58

Autoantibodies to the insulin receptor (B-10) can stimulate tyrosine phosphorylation of the beta-subunit of the insulin receptor and a 185,000 molecular weight protein in rat hepatoma cells. Takayama-Hasumi S, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):787-95

Calcitonin gene-related peptide and calcitonin secretion from a human medullary thyroid carcinoma cell line: effects of ionomycin, phorbol ester and forskolin. Haller-Brem S, et al. **J Endocrinol** 1988 Oct;119(1):147-52

Production of parathyroid hormone-like peptide in a human osteosarcoma cell line: stimulation by phorbol esters and epidermal growth factor. Rodan SB, et al. **J Endocrinol** 1989 Jul;122(1):219-27

Oligomerization of oncoprotein p53. Kraiss S, et al. **J Virol** 1988 Dec;62(12):4737-44

Evolutionary conservation of the biochemical properties of p53: specific interaction of Xenopus laevis p53 with simian virus 40 large T antigen and mammalian heat shock proteins 70. Soussi T, et al. **J Virol** 1989 Sep;63(9):3894-901

Properties of a simian virus 40 mutant T antigen substituted in the hydrophobic region: defective ATPase and oligomerization activities and altered phosphorylation accompany an inability to complex with cellular p53. Tack LC, et al. **J Virol** 1989 Aug;63(8):3362-7

p145, a protein with associated tyrosine kinase activity in a human gastric carcinoma cell line. Giordano S, et al. **Mol Cell Biol** 1988 Aug;8(8):3510-7

Phosphorylation of a C-SRC-related protein in macrophages activated in vitro with lymphokine. Soong MM, et al. **Mol Immunol** 1988 Dec;25(12):1251-60

Enhancement of the phosphorylation of membrane bound myosin light chain by antigen stimulation in rat basophilic leukemia cells. Teshima R, et al. **Mol Immunol** 1989 Jul; 26(7):641-8

Cooperation of SV40 large T antigen and the cellular protein p53 in maintenance of cell transformation. Deppert W, et al. **Oncogene** 1989 Sep;4(9):1103-10

Two different protein-protein interactions in oligomeric complexes of SV40 large T antigen with the cellular oncoprotein p53. Montenarh M, et al. **Oncogene** 1989 Mar; 4(3):379-82

Viral growth, origin binding, and p53 binding properties of simian virus 40 large T antigen transformation and replication mutants. Rutila JE, et al. **Oncogene Res** 1989; 4(4):303-10

Release of protein bound sialic acid from fibrosarcoma cells after cis-dichlorodiammine platinum (II) treatment: the possible role in tumor regression. Sarna S, et al. **Pol J Pharmacol Pharm** 1988 May-Jun;40(3):295-302

In vitro galactosylation of a 110-kDa glycoprotein by an endogenous cell surface galactosyltransferase correlates with the invasiveness of adrenal carcinoma cells. Penno MB, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(16):6057-61

Cellular proteins specifically bind single- and double-stranded DNA and RNA from the initiation site of a transcript that crosses the origin of DNA replication of herpes simplex virus 1. Roller RJ, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6518-22

Binding properties of progesterone-binding Cyst protein, PBCP. Lea OA. **Steroids** 1988 Oct;52(4):337-8

Modifications of extrinsic pathway inhibitor (EPI) and factor Xa that affect their ability to interact and to inhibit factor VIIa/tissue factor: evidence for a two-step model of inhibition. Warn-Cramer BJ, et al. **Thromb Haemost** 1988 Dec 22;60(3):453-6

Mutants with changes within or near a hydrophobic region of simian virus 40 large tumor antigen are defective for binding cellular protein p53. Peden KW, et al. **Virology** 1989 Jan;168(1):13-21

[Changes of protein and RNA content in accumulated G1 cells by delta12-PGJ2] Ishikawa H, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 1):405-10 (Eng. Abstr.) **(Jpn)**

[Characteristics of the regulation of the process of protein phosphorylation on tumor cell membranes] Kaz'min SD. **Eksp Onkol** 1989;11(3):39-43 (Eng. Abstr.) **(Rus)**

[Diastereomers of nonionic analogs of nucleic acids. V. Alkylation of nucleic acids in the living cells by ethylated derivatives of oligonucleotides containing the residue of nitrous yperite. The effect of the phosphotriester fragment configuration] Abramova TV, et al. **Mol Biol (Mosk)** 1988 Sep-Oct;22(5):1285-92 (Eng. Abstr.) **(Rus)**

[Content of fatty acids bound to proteins and of cholesterol in neuroblastoma C1300 N18 cells during differentiation] Klimashevsk'kiĭ VM, et al. **Ukr Biokhim Zh** 1989 May-Jun; 61(3):80-4 (Eng. Abstr.) **(Ukr)**

PHARMACOKINETICS

Uptake and degradation in vivo and in vitro of laminin and nidogen by rat liver cells. Smedsrød B, et al. **Biochem J** 1989 Jul 1;261(1):37-42

PHARMACOLOGY

Effect of synthetic tumoral PTH-related peptide on cAMP production and Na-dependent Pi transport. Pizurki L, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):F957-61

Induction of follicle stimulating hormone receptor by

erythroid differentiation factor on rat granulosa cell. Hasegawa Y, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):668–74

Parathyroid hormone (PTH) and PTH-like protein (PLP) stimulate interleukin-6 production by osteogenic cells: a possible role of interleukin-6 in osteoclastogenesis. Löwik CW, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1546–52

Identification and partial purification of a novel tumor-derived protein that induces tissue factor on cultured human endothelial cells. Noguchi M, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):222–7

Angiogenin abolishes cell-free protein synthesis by specific ribonucleolytic inactivation of 40S ribosomes. St. Clair DK, et al. **Biochemistry** 1988 Sep 20;27(19):7263–8

Human fibroblast tissue factor is inhibited by lipoprotein-associated coagulation inhibitor and placental anticoagulant protein but not by apolipoprotein A-II. Gramzinski RA, et al. **Blood** 1989 Mar;73(4):983–9

Inhibition by tumor necrosis factor of induction of ectopic bone formation by osteosarcoma-derived bone-inducing substance. Yoshikawa H, et al. **Bone** 1988;9(6):391–6

Effects of human PTH-related peptide and human PTH on cyclic AMP production and cytosolic free calcium in an osteoblastic cell clone. Yamada H, et al. **Bone Miner** 1989 Apr;6(1):45–54

The murine p53 protein blocks replication of SV40 DNA in vitro by inhibiting the initiation functions of SV40 large T antigen. Wang EH, et al. **Cell** 1989 May 5;57(3):379–92

Parathyroid hormone (PTH)-related protein is a potent stimulator of osteoclast-like multinucleated cell formation to the same extent as PTH in mouse marrow cultures. Akatsu T, et al. **Endocrinology** 1989 Jul;125(1):20–7

Parathyroid hormone-related protein modulates the effect of transforming growth factor-beta on deoxyribonucleic acid and collagen synthesis in fetal rat bone cells. Centrella M, et al. **Endocrinology** 1989 Jul;125(1):199–208

Parathyroid hormone-related peptide transiently increases cytosolic calcium in osteoblast-like cells: comparison with parathyroid hormone. Civitelli R, et al. **Endocrinology** 1989 Sep;125(3):1204–10

Human parathyroid hormone (PTH)-related protein and human PTH: comparative biological activities on human bone cells and bone resorption. Fukayama S, et al. **Endocrinology** 1988 Dec;123(6):2841–8

Hypotension and cardiac stimulation due to the parathyroid hormone-related protein, humoral hypercalcemia of malignancy factor. Nickols GA, et al. **Endocrinology** 1989 Aug;125(2):834–41

Influence of the amino-terminus on in vitro and in vivo biological activity of synthetic parathyroid hormone-like peptides of malignancy. Rabbani SA, et al. **Endocrinology** 1988 Dec;123(6):2709–16

Parathyroid hormone-related protein and interleukin-1 alpha synergistically stimulate bone resorption in vitro and increase the serum calcium concentration in mice in vivo. Sato K, et al. **Endocrinology** 1989 May;124(5):2172–8

Parathyroid hormone-related protein relaxes rat gastric smooth muscle and shows cross-desensitization with parathyroid hormone. Mok LL, et al. **J Bone Miner Res** 1989 Jun;4(3):433–9

Effects of infusion of human parathyroid hormone-related protein-(1–40) in nude mice: histomorphometric and biochemical investigations. Rosol TJ, et al. **J Bone Miner Res** 1988 Dec;3(6):699–706

Native and a synthetic analogue of the malignancy-associated parathyroid hormone-like protein have in vitro transforming growth factor-like properties. Insogna KL, et al. **J Clin Invest** 1989 Mar;83(3):1057–60

Actions of synthetic parathyroid hormone-related protein(1–34) on the isolated rat kidney. Ebeling PR, et al. **J Endocrinol** 1989 Jan;120(1):45–50

Actions of parathyroid hormone-related protein on the rat kidney in vivo. Zhou H, et al. **J Endocrinol** 1989 Jul; 122(1):229–35

Augmentation of human cytotoxic T lymphocytes against autologous tumor by a factor released from human monocytic leukemia cell line. Maeda N, et al. **Jpn J Cancer Res** 1989 Jun;80(6):537–45

Tumoral synthetic parathyroid hormone related peptide inhibits amiloride-sensitive sodium transport in cultured renal epithelia. Caverzasio J, et al. **Pflugers Arch** 1988 Nov; 413(1):96–8

Angiogenin stimulates endothelial cell prostacyclin secretion by activation of phospholipase A2. Bicknell R, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1573–7

Modulation of mitogenic stimuli by angiogenin correlates with in vitro phosphatidylinositol bisphosphate synthesis. Heath WF Jr, et al. **Proc Natl Acad Sci U S A** 1989 Apr; 86(8):2718–22

Parathyroid hormone and parathyroid hormone-related protein inhibit phasic contraction of pig duodenal smooth muscle. Mok LL, et al. **Proc Soc Exp Biol Med** 1989 Sep; 191(4):337–40

PHYSIOLOGY

Neutrophil maturation and hypersegmentation promoted in normal bone marrow by a carcinoma-elaborated protein factor. Bailey SC, et al. **Am J Hematol** 1989 Jul; 31(3):159–65

Characterization of a parathyroid hormonelike peptide secreted by human keratinocytes. Insogna KL, et al. **Ann N Y Acad Sci** 1988;548:146–59

Cross-linking of T-cell receptors is insufficient to induce IL-2 responsiveness (activation) in resting Lyt-2+ T cells. IL-4 or RIF are essential as second signal. Wagner H, et al. **Ann N Y Acad Sci** 1988;532:128–35

Humoral hypercalcemia of malignancy. Martin TJ. **Bone Miner** 1988 Apr;4(1):83–9 (40 ref.)

The p53 proto-oncogene can act as a suppressor of transformation. Finlay CA, et al. **Cell** 1989 Jun 30; 57(7):1083–93

Humoral hypercalcemia of malignancy. The role of parathyroid hormone-related protein. Insogna KL. **Endocrinol Metab Clin North Am** 1989 Sep;18(3):779–94 (58 ref.)

Identification of cellular proteins required for simian virus 40 DNA replication. Wold MS, et al. **J Biol Chem** 1989 Feb 15;264(5):2801–9

Multidrug resistance. P-glycoprotein and its allies—the elusive foes. Chabner BA, et al. **J Natl Cancer Inst** 1989 Jun 21;81(12):910–3

Multidrug resistance: molecular biology and clinical relevance. Rothenberg M, et al. **J Natl Cancer Inst** 1989 Jun 21;81(12):907–10

Ability of p53 and the adenovirus E1b 58-kilodalton protein to form a complex is determined by p53. Braithwaite AW, et al. **J Virol** 1989 Apr;63(4):1792–9

The p53 complex from monkey cells modulates the biochemical activities of simian virus 40 large T antigen. Tack LC, et al. **J Virol** 1989 Mar;63(3):1310–7

Functional significance of the Kunitz-type inhibitory domains of lipoprotein-associated coagulation inhibitor. Girard TJ, et al. **Nature** 1989 Apr 6;338(6215):518–20

Cell biology. Motility factors on the march [news] Warn RM, et al. **Nature** 1989 Jul 20;340(6230):186–7

Abrogation of the requirements for added growth factors in 3T3 cells constitutively expressing the p53 and IGF-1 genes. Gai XX, et al. **Oncogene Res** 1988;3(4):377–86

bcr-abl oncogene renders myeloid cell line factor independent: potential autocrine mechanism in chronic myeloid leukemia. Hariharan IK, et al. **Oncogene Res** 1988; 3(4):387–99

Human melanoma cell attachment involves an Arg-Gly-Asp-directed adhesion receptor and the disialoganglioside GD2. Cheresh DA. **Prog Clin Biol Res** 1989;288:3–24

[Humoral bone resorbing factor(s) produced by cancer] Nagata N. **Rinsho Byori** 1988 Dec;36(12):1393–8 **(Jpn)**

[The effect of SSB-protein from Ehrlich ascites carcinoma cells on activity of various enzymes of DNA replication and repair] Koterov AN, et al. **Biokhimiia** 1988 Aug; 53(8):1278–87 (Eng. Abstr.) **(Rus)**

[Acute phase proteins and their significance in clinical oncology] Aleshkin VA, et al. **Sov Med** 1988;(7):51–5 (45 ref.) **(Rus)**

SECRETION

Humoral hypercalcemia of malignancy: involvement of a novel hormone. Martin TJ, et al. **Aust N Z J Med** 1988 May;18(3):287–95 (70 ref.)

Interferon alters the pattern of secreted proteins from Ehrlich ascites-tumour cells. Tominaga S, et al. **Biochem J** 1989 Jul 1;261(1):57–61

Platelets secrete a coagulation inhibitor functionally and antigenically similar to the lipoprotein associated coagulation inhibitor. Novotny WF, et al. **Blood** 1988 Dec; 72(6):2020–5

Secretion of Mr 46,000 protein from human hepatoma cells treated with tumor promotors is regulated by c-myc gene expression. Miwatani H, et al. **Cell Struct Funct** 1989 Apr; 14(2):183–92

PTHrP secretion is stimulated by CT and inhibited by CgA peptides. Deftos LJ, et al. **Endocrinology** 1989 Jul; 125(1):563–5

Origin of the soluble interleukin-2 receptor in the serum of patients with hairy cell leukemia. Semenzato G, et al. **Leukemia** 1988 Dec;2(12):788–92

Expression pattern of a gene for a secreted metalloproteinase during late stages of tumor progression. Ostrowski LE, et al. **Mol Carcinog** 1988;1(1):13–9

Regulation of the secretion of proteins synthesized by the human breast cancer cell line, MCF-7. Lykkesfeldt AE, et al. **Mol Cell Endocrinol** 1989 Apr;62(2):287–96

The parathyroid hormone-related protein associated with malignancy is secreted by neuroendocrine tumors. Deftos LJ, et al. **Mol Endocrinol** 1989 Mar;3(3):503–8

Suppression of primary and secondary peptides with somatostatin analog in the therapy of functional endocrine tumors. Woltering EA, et al. **Surg Gynecol Obstet** 1988 Dec;167(6):453–62

THERAPEUTIC USE

Ethylchlorformate polymerized tumor protein immunotherapy of the murine bladder tumor. Mori K, et al. **Cancer** 1989 Feb 15;63(4):667–70

Human high molecular weight-melanoma associated antigen as a target for active specific immunotherapy—a phase I clinical trial with murine antiidiotypic monoclonal antibodies. Ferrone S, et al. **J Dermatol (Tokyo)** 1988 Dec; 15(6):457–65

URINE

Urinary gonadotrophin peptide--isolation and purification, and its immunohistochemical distribution in normal and neoplastic tissues. Kardana A, et al. **Br J Cancer** 1988 Sep; 58(3):281–6

NEOPLASM RECURRENCE, LOCAL

Effect of perioperative blood transfusion on recurrence and death after mastectomy for breast cancer. Eickhoff JH, et al. **Acta Chir Scand** 1988 Jul-Aug;154(7–8):425–8

Relationship between estrogen receptor status in the primary tumor and its regional and distant metastases. An immunohistochemical study in human breast cancer. Andersen J, et al. **Acta Oncol** 1988;27(6A):761–5

DNA ploidy and S-phase fraction in primary breast carcinomas in relation to prognostic factors and survival for premenopausal patients at high risk for recurrent disease. Lykkesfeldt AE, et al. **Acta Oncol** 1988; 27(6A):749–56

CO2 laser for treating glottic carcinoma. Hirano M, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;458:154–7

Left ventricular recurrence of a resected left atrial myxoma. Pavlides GS, et al. **Am Heart J** 1989 Jun;117(6):1390–2

Does blood transfusion predispose to cancer recurrence? Tartter PI. **Am J Clin Oncol** 1989 Apr;12(2):169–72 (51 ref.)

Recurrence after negative second-look laparotomy for ovarian cancer: analysis of risk factors. Rubin SC, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1094–8

Implantation metastasis as a cause of local recurrence of colorectal carcinoma. Long RT, et al. **Am J Surg** 1989 Feb;157(2):194–201

Multivariate analysis of recurrence after anterior resection for colorectal carcinoma. Rinnert-Gongora S, et al. **Am J Surg** 1989 Jun;157(6):573–6

Sulindac for polyposis of the colon. Waddell WR, et al. **Am J Surg** 1989 Jan;157(1):175–9

Local recurrence after sphincter-saving resection for rectal adenocarcinoma. Warneke J, et al. **Am J Surg** 1989 Jul; 158(1):3–5

Blood transfusions and recurrence in head and neck cancer. Jackson RM, et al. **Ann Otol Rhinol Laryngol** 1989 Mar; 98(3):171–3

Blood transfusions and recurrence in head and neck cancer [letter] Reed HT. **Ann Otol Rhinol Laryngol** 1989 Sep; 98(9):753

Pathological features of invasive breast cancer associated with a high risk of local recurrence after tumour excision and radical radiotherapy. Bulman AS, et al. **Ann R Coll Surg Engl** 1988 Sep;70(5):289–92

Recurrence and survival following resection of bronchioloalveolar carcinoma of the lung—The Lung Cancer Study Group experience. Grover FL, et al. **Ann Surg** 1989 Jun;209(6):779–90

Hepatic resection of metastasis from colorectal carcinoma. Morbidity, mortality, and pattern of recurrence. Holm A, et al. **Ann Surg** 1989 Apr;209(4):428–34

Perioperative blood transfusions are associated with decreased time to recurrence and decreased survival after resection of colorectal liver metastases. Stephenson KR, et al. **Ann Surg** 1988 Dec;208(6):679–87

Surgical margin and recurrence after resection of hepatocellular carcinoma in patients with cirrhosis. Further evaluation of limited hepatic resection. Yoshida Y, et al. **Ann Surg** 1989 Mar;209(3):297–301

Noncontiguous local recurrence of posterior uveal melanoma after cobalt 60 episcleral plaque therapy. Duker JS, et al. **Arch Ophthalmol** 1989 Jul;107(7):1019–22

An orbital hemangiopericytoma recurrent after 33 years. Rice CD, et al. **Arch Ophthalmol** 1989 Apr;107(4):552–6

Influence of estrogen receptors on survival and recurrence in patients with breast cancer without lymph node metastases. Maki HS, et al. **Arch Surg** 1989 Mar; 124(3):377–80

An unusual late recurrence of unicystic ameloblastoma. Punnia-Moorthy A. **Br J Oral Maxillofac Surg** 1989 Jun; 27(3):254–9

The significance of an isolated central nervous system relapse, occurring as first relapse in children with acute lymphoblastic leukemia. Behrendt H, et al. **Cancer** 1989 May 15;63(10):2066–72

Local recurrence after breast-conserving surgery and radiotherapy. Frequency, time course, and prognosis. Kurtz JM, et al. **Cancer** 1989 May 15;63(10):1912–7

Radiotherapy results in laparotomy-staged Hodgkin's disease. Verger E, et al. **Clin Radiol** 1988 Jul;39(4):428–31

Early infective complications and late recurrent cancer in stapled colonic anastomoses. Sauven P, et al. **Dis Colon Rectum** 1989 Jan;32(1):33–5 (18 ref.)

Acute myelogenous leukemia in first relapse treated with two consecutive autologous bone marrow transplantations: a pilot study. Meloni G, et al. **Eur J Haematol** 1989 May; 42(5):441–4

Breast cancer: risk of axillary recurrence in node-negative patients following partial dissection of the axilla. Graversen HP, et al. **Eur J Surg Oncol** 1988 Oct;14(5):407–12

Management of the urethra in patients undergoing radical cystectomy for bladder carcinoma. Baron JC, et al. **Eur Urol** 1989;16(4):283–5

The significance of bladder quadrant biopsies in patients with primary superficial bladder carcinoma. Flamm J, et al.

Eur Urol 1989;16(2):81–5
Incidence and pattern of bladder tumor recurrence following combined suprapubic prostatectomy and excision of a bladder tumor. Golomb J, et al. **Eur Urol** 1989;16(2):86–8
Impact of the category of early tumor recurrence on tumor progression in bladder tumors treated by transurethral resection. Lundbeck F, et al. **Eur Urol** 1989;16(4):291–4
Endoscopic laser treatment for rectosigmoid villous adenoma: factors affecting the results. Brunetaud JM, et al. **Gastroenterology** 1989 Aug;97(2):272–7
Ciliary body neurilemoma recurring after 15 years. Hufnagel TJ, et al. **Graefes Arch Clin Exp Ophthalmol** 1988; 226(5):443–6
Determinants of increased risk for recurrence in patients undergoing radical hysterectomy for stage IB and IIA carcinoma of the cervix. Fuller AF Jr, et al. **Gynecol Oncol** 1989 Apr;33(1):34–9
Prognostic significance of endometrial extension in carcinoma of the cervix. Grimard L, et al. **Gynecol Oncol** 1988 Oct;31(2):301–9
Low rectal resection and anastomosis at the time of pelvic exenteration. Hatch KD, et al. **Gynecol Oncol** 1988 Oct; 31(2):262–7
Endolymphatic stromal myosis: surgical and hormonal therapy for extensive venous recurrence. Montag TW, et al. **Gynecol Oncol** 1989 May;33(2):255–60
Results of a phase II trial with neoadjuvant chemotherapy in carcinoma of the cervix uteri. Sardi JE, et al. **Gynecol Oncol** 1988 Oct;31(2):256–61
Is routine second-look laparotomy for ovarian cancer justified? Sonnendecker EW. **Gynecol Oncol** 1988 Oct; 31(2):249–55 (25 ref.)
Recurrent form of hepatocellular carcinoma after partial hepatic resection. Ezaki T, et al. **Hepatogastroenterology** 1989 Jun;36(3):164–7
Patterns of intrahepatic recurrence after curative resection of hepatocellular carcinoma. Matsumata T, et al. **Hepatology** 1989 Mar;9(3):457–60
Nuclear DNA, serum sialic acid and measured depth in malignant melanoma for predicting disease recurrence and survival. Silver HK, et al. **Int J Cancer** 1989 Jul 15; 44(1):31–4
Rectal cancer: factors influencing the development of local recurrence after radical anterior resection. Feil W, et al. **Int J Color Dis** 1988 Nov;3(4):195–200
The predictors of distant relapse following conservative surgery and radiotherapy for early breast cancer are similar to those following mastectomy. Epstein AH, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct;17(4):755–60
Prognostic factors of breast recurrence in the conservative management of early breast cancer: a 25-year follow-up. Fourquet A, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct; 17(4):719–25
Conservative surgery and radiation therapy in breast carcinoma: local recurrence and prognostic implications. Haffty BG, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct; 17(4):727–32
The effect of dose on local control of prostate cancer. Hanks GE, et al. **Int J Radiat Oncol Biol Phys** 1988 Dec; 15(6):1299–305
Prognosis following local or regional recurrence after conservative surgery and radiotherapy for early stage breast carcinoma. Recht A, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):3–9
Premenopausal breast cancer patients treated with conservative surgery, radiotherapy and adjuvant chemotherapy have a low risk of local failure. Rose MA, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct;17(4):711–7
Patterns of failure following treatment for glioblastoma multiforme and anaplastic astrocytoma. Wallner KE, et al. **Int J Radiat Oncol Biol Phys** 1989 Jun;16(6):1405–9
Local recurrence of rectal cancer: anterior resection versus abdomino-perineal resection. Terranova O, et al. **Int Surg** 1989 Apr–Jun;74(2):111–3
Soft tissue recurrence of osteoclastoma. Exarchou E, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):432–3
Epithelioid hemangioendothelioma of the liver following contact with vinyl chloride. Recurrence after orthotopic liver transplantation. Gelin M, et al. **J Hepatol** 1989 Jan; 8(1):99–106
The prediction of recurrence in meningiomas. A flow cytometric study of paraffin-embedded archival material. May PL, et al. **J Neurosurg** 1989 Sep;71(3):347–51
Granular cell odontogenic cyst: a unicystic ameloblastoma with late recurrence as follicular ameloblastoma. Abaza NA, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):168–75
Prognostic evaluation of ameloblastoma based on histologic and radiographic typing. Ueno S, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):11–5
Malignant retro-peritoneal teratoma (a case report). Sood S, et al. **J Postgrad Med** 1988 Jul;34(3):185–7 (10 ref.)
Adnexal recurrence of stage IB squamous cell cervical carcinoma after radical surgery and oophoropexy. A case report. Atamdede F, et al. **J Reprod Med** 1989 Mar; 34(3):244–6
Perioperative blood transfusion and colorectal cancer recurrence: a review. Tartter PI. **J Surg Oncol** 1988 Nov; 39(3):197–200 (34 ref.)
Local recurrence after curative resection of rectal cancer: a comparison of low anterior resection and abdominoperineal resection. Vlasak JW, et al. **J Surg Oncol** 1989 Aug;41(4):236–9
Cellular congenital mesoblastic nephroma: what are the options. Gormley TS, et al. **J Urol** 1989 Aug;142(2 Pt 2):479–83; discussion 489 (35 ref.)
Comparison of transurethral resection to radical therapies for stage B bladder tumors. Henry K, et al. **J Urol** 1988 Nov;140(5):964–7
Prognostic factors for recurrence and followup policies in the treatment of superficial bladder cancer: report from the British Medical Research Council Subgroup on Superficial Bladder Cancer (Urological Cancer Working Party). Parmar MK, et al. **J Urol** 1989 Aug;142(2):284–8
Computed tomography in childhood acute lymphoblastic leukaemia [letter] Katz JA, et al. **Lancet** 1989 Mar 4; 1(8636):507
Expression of epidermal growth factor receptors associated with lack of response to endocrine therapy in recurrent breast cancer. Nicholson S, et al. **Lancet** 1989 Jan 28; 1(8631):182–5
Comparison of local tumor recurrence following excision with the CO2 laser, Nd:YAG laser, and Argon Beam Coagulator. Lanzafame RJ, et al. **Lasers Surg Med** 1988; 8(5):515–20
Squamous carcinoma of the cervix complicating pregnancy: recurrence in episiotomy after vaginal delivery. Gordon AN, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):850–2
Repetitive complete and partial hydatidiform mole. Rice LW, et al. **Obstet Gynecol** 1989 Aug;74(2):217–9
Factors influencing local recurrence after curative surgery for rectal cancer. Secco GB, et al. **Oncology** 1989; 46(1):10–3
Malignant melanoma. A multivariate analysis of prognostic factors. Vollmer RT. **Pathol Annu** 1989;24 Pt 1:383–407 (70 ref.)
Recurrent brain tumors in children. Friedman HS, et al. **Pediatr Neurosci** 1987;13(5):233–41 (63 ref.)
Bladder tumors invading the lamina propria (stage T1): influence of endovesical BCG therapy on recurrence and progression. Boccon-Gibod L, et al. **Prog Clin Biol Res** 1989;310:161–9
Suspected recurrent rectosigmoid carcinoma after abdominoperineal resection: MR imaging and histopathologic findings. de Lange EE, et al. **Radiology** 1989 Feb;170(2):323–8
Recurrence of colorectal tumors: PET evaluation. Strauss LG, et al. **Radiology** 1989 Feb;170(2):329–32
Is elective neck treatment indicated for T2N0 squamous cell carcinoma of the glottic larynx? Mendenhall WM, et al. **Radiother Oncol** 1989 Mar;14(3):199–202
Patterns of breast relapse after local excision +/- radiotherapy for early stage breast cancer. Price P, et al. **Radiother Oncol** 1988 Sep;13(1):53–60
Recurrent polyposis nasi. Plenary session, held during the 12th Congress of the European Rhinologic Society, including the VIIth I.S.I.A.N. Amsterdam (The Netherlands), June 1988. **Rhinology** 1989;Suppl 8:1–64
Gene signals relapse of breast, ovarian cancers [news] Marx JL. **Science** 1989 May 12;244(4905):654–5
Gadolinium-DTPA enhancement of a recurrent intramedullary ependymoma: a case report. Baldwin H, et al. **Surg Neurol** 1989 Mar;31(3):220–3
Persistence and not recurrence when a tumor appears at the site of resection [letter] Evans RA. **Surgery** 1989 Sep; 106(3):578–9
Local recurrence in papillary thyroid carcinoma: is extent of surgical resection important? Grant CS, et al. **Surgery** 1988 Dec;104(6):954–62
Recurrence or persistence [letter] Lick SD. **Surgery** 1989 Sep; 106(3):578
Recurrence or persistence? [letter] Miller JM. **Surgery** 1988 Nov;104(5):936
Mesenchymoma of the lung [letter] Watson DC, et al. **Thorax** 1988 Nov;43(11):946–7
Recurrence of colon carcinoma after curative resection and blood transfusion: proposal for a prospective study. Harford FJ, et al. **Transplant Proc** 1988 Dec;20(6):1130–4 (42 ref.)
Blood transfusion and tumor growth. Tartter PI, et al. **Transplant Proc** 1988 Dec;20(6):1108–11 (16 ref.)
Bladder carcinoma in patients less than 40 years of age. Witjes JA, et al. **Urol Int** 1989;44(2):81–3
Late recurrence of mature teratoma in nonseminomatous testicular tumors after PVB chemotherapy and surgery. Gelderman WA, et al. **Urology** 1989 Jan;33(1):10–4
[Recurrence of primary carcinoma of the liver in liver allotransplantation] Černý E, et al. **Cas Lek Cesk** 1988 Jul 15;127(29):916–7 (Eng. Abstr.) **(Cze)**
[Local recurrence of cancer of the rectum. Factors influencing its incidence and treatment] Dozois RR, et al. **Ann Chir** 1989;43(4):261–4 (27 ref.) **(Fre)**
[Analysis of 64 second primary cancers of the bronchi] Roeslin N, et al. **Ann Chir** 1989;43(2):125–9 (Eng. Abstr.) **(Fre)**
[Digestive hemorrhage disclosing recurrence of hypernephroma (letter)] Colin JF, et al. **Gastroenterol Clin Biol** 1989;13(2):228–9 **(Fre)**
[Role of abdominoperineal resection in the surgical treatment of cancer of the rectum] Liguori G, et al. **J Chir (Paris)** 1989 Jun-Jul;126(6-7):374–8 (23 ref.) (Eng. Abstr.) **(Fre)**
[Pleomorphic adenoma of the salivary glands. Impact of the myxoid component on the prognosis] Goudot P, et al. **Rev Stomatol Chir Maxillofac** 1989;90(2):119–22 (Eng. Abstr.) **(Fre)**
[Improved treatment of thoracic esophageal cancer based on a retrospective study of recurrence following resection] Fujita H, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep; 89(9):1471–4 (Eng. Abstr.) **(Jpn)**
[Surgical treatment of intrathoracic esophageal carcinoma] Kabuto T, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep; 89(9):1458–60 (Eng. Abstr.) **(Jpn)**
[Two cases of adult Wilm's tumor showing repeated multiple recurrences in the abdomen] Takai K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Apr;79(4):719–25 (Eng. Abstr.) **(Jpn)**
[Recurrent meningioma with malignant changes and extracranial multiple metastases] Mori H, et al. **No Shinkei Geka** 1988 Jun;16(7):899–902 (Eng. Abstr.) **(Jpn)**
[Salvage radiotherapy of recurrent breast cancer] Iida K, et al. **Rinsho Hoshasen** 1989 Apr;34(4):481–7 (Eng. Abstr.) **(Jpn)**
[Internal mammary lymph node metastases and parasternal recurrences in breast cancer] Kikuchi A. **Rinsho Hoshasen** 1989 Apr;34(4):471–9 (Eng. Abstr.) **(Jpn)**
[Recurrence of multiple hamartomas of the lung] Dzhugostran VIa, et al. **Grudn Khir** 1988 Nov-Dec;(6):90–1 **(Rus)**
[Diagnosis and treatment of recurrences of cancer of the stomach] Chernyĭ VA, et al. **Khirurgiia (Mosk)** 1989 May; (5):29–32 (Eng. Abstr.) **(Rus)**
[Prognostic factors in superficial bladder carcinoma. Analysis of 250 cases] Salinas Sánchez AS, et al. **Actas Urol Esp** 1989 May-Jun;13(3):177–80 (Eng. Abstr.) **(Spa)**
[Neoplastic infiltration of the resection border in supraglottic surgery. Its prognostic importance] Segarra P, et al. **An Otorrinolaringol Ibero Am** 1988;15(5):539–46 (Eng. Abstr.) **(Spa)**
[Transitional infiltrating carcinoma of the bladder. Local recurrence and metastases. Analysis of 175 cases treated with radical cystectomy] Escudero Barrilero A, et al. **Arch Esp Urol** 1989 May;42(4):337–44 (Eng. Abstr.) **(Spa)**
[Risk factors for the recurrence of spinocellular epithelioma. Study of 650 cases] Soto Ferrando PP, et al. **Med Cutan Ibero Lat Am** 1988;16(2):128–32 (9 ref.) (Eng. Abstr.) **(Spa)**
[Mucinous adenocarcinoma, primary of the skin] Goodhue WW Jr, et al. **Rev Med Panama** 1988 May;13(2):69–75 (Eng. Abstr.) **(Spa)**

BLOOD

Plasma vitamin A, retinol-binding protein, and prealbumin in postoperative breast cancer patients. Basu TK, et al. **Int J Vitam Nutr Res** 1988;58(3):281–3
Prediction of clinical course and recurrence of human ovarian cancer by several serum tumor markers. Kikuchi Y, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jan;41(1):69–76
[CEA (carcinoembryonic antigen): its value as an early indicator of recurrence of neoplastic disease in carcinoma of the colon and rectum] Lacatena M, et al. **Minerva Chir** 1989 Jun 15;44(11):1597–9 (Eng. Abstr.) **(Ita)**
[Studies of fibronectin levels in recurrences of proliferative diseases of the hematopoietic system in children] Matysiak M, et al. **Pediatr Pol** 1988 Nov;63(11):723–7 (Eng. Abstr.) **(Pol)**
[Immunoglobulins and the complement system in colorectal cancer] Codina Cazador A, et al. **Rev Esp Enferm Apar Dig** 1989 Feb;75(2):143–8 (Eng. Abstr.) **(Spa)**
[Efficacy of follow-up in colorectal cancer: second look guided by carcinoembryonic antigen (CEA) and secondary neoplasms] Marcuello Gaspar E, et al. **Rev Esp Enferm Apar Dig** 1988 Nov;74(5):535–9 (Eng. Abstr.) **(Spa)**

CLASSIFICATION

[Radiomorphologic classification of central chondrosarcomas] Reuther G, et al. **ROFO** 1989 Jan; 150(1):1–7 (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Intestinal obstruction in patients with gynaecological malignancies. Soo KC, et al. **Ann Acad Med Singapore** 1988 Jan;17(1):72–5
The value of the flow-volume loop in diagnosing upper airway obstruction. Williams J, et al. **J Tenn Med Assoc** 1989 Jan;82(1):11–2
Evaluation of syncope from head and neck cancer. Papay FA, et al. **Laryngoscope** 1989 Apr;99(4):382–8
Multiple recurrence and foreign-body granuloma after total removal of falx meningioma—case report. Tanaka A, et al. **Neurol Med Chir (Tokyo)** 1988 Oct;28(10):1001–4
Intracranial aneurysms in a child with recurrent atrial myxoma. Bobo H, et al. **Pediatr Neurol** 1987 Jul–Aug; 3(4):230–2
[Crural amyotrophy. A sign indicative of a pelvic tumor (letter)] Iriarte García-Baquero LM, et al. **Rev Clin Esp** 1988 Jun;183(1):49–50 **(Spa)**

DIAGNOSIS

Fine needle aspiration cytology of clinically suspected local recurrences in breast cancer [letter] Ciatto S, et al. **Acta Cytol** 1989 Jan-Feb;33(1):140-1

The recurrence of supratentorial meningiomas after surgery. Beks JW, et al. **Acta Neurochir (Wien)** 1988;95(1-2):3-5

Positron emission tomography and computed tomography in differential diagnosis between recurrent or residual glioma and treatment-induced brain lesions. Lilja A, et al. **Acta Radiol** 1989 Mar-Apr;30(2):121-8

Recurrent occult medullary thyroid carcinoma detected by MR imaging. Crow JP, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1255-6

Value of a routine follow-up endoscopy program for the detection of recurrent colorectal carcinoma. Barkin JS, et al. **Am J Gastroenterol** 1988 Dec;83(12):1355-60

Magnetic resonance imaging in recurrent carcinoma of the cervix. Williams MP, et al. **Br J Radiol** 1989 Jun; 62(738):544-50

Follow-up after treatment of primary breast cancer. Rutgers EJ, et al. **Br J Surg** 1989 Feb;76(2):187-90

Circulating CA 15-3 levels in the postsurgical follow-up of breast cancer patients and in non-malignant diseases. Colomer R, et al. **Breast Cancer Res Treat** 1989 Mar; 13(2):123-33

Comment on 'new lumps in the breast following conservation treatment for early breast cancer' [letter] Locker AP, et al. **Breast Cancer Res Treat** 1988 Dec;12(3):319

Tests for detecting recurrent disease in the follow-up of patients with breast cancer. Mansi JL, et al. **Breast Cancer Res Treat** 1988 Jul;11(3):249-54

The detection of recurrent and metastatic malignant disease in the pelvis using MRI. Goddard P, et al. **Bristol Med Chir J** 1988 May;103(2):32-3

Influence of early diagnosis on prognosis of recurrent breast cancer. Stierer M, et al. **Cancer** 1989 Sep 1;64(5):1128-31

Relative importance of estrogen and progesterone receptor assays as prognostic indicators in primary breast cancer: a short-term study. Brocklehurst D, et al. **Clin Chem** 1989 Feb;35(2):238-40

Steroid-induced complete remission in a case of primary cerebral non-Hodgkin's lymphoma. Pohl P, et al. **Clin Neurol Neurosurg** 1989;91(3):247-50

The value of follow-up in FIGO stage IB carcinoma of the uterine cervix. Kunkler IH, et al. **Clin Radiol** 1989 May; 40(3):299-301

Immunofluorescent localization of cytokeratin intermediate filaments as a means of defining the presence of recurrent basal cell carcinoma. Ronnen M, et al. **Cutis** 1988 Oct; 42(4):359-62

Recurrent spinal meningioma presenting as a neck mass diagnosed by fine-needle aspiration biopsy [letter] Nguyen GK, et al. **Diagn Cytopathol** 1988;4(4):361-2

Tumor antigen TA-4: an aid in detecting post-operative recurrences of esophageal carcinoma. Sugimachi K, et al. **Dis Markers** 1987 Jun;5(2):67-73

Transrectal ultrasound in the diagnosis and staging of local disease after I125 seed implantation for prostate cancer. Lee F, et al. **Int J Radiat Oncol Biol Phys** 1988 Dec; 15(6):1453-9

An improved sensitive assay method for the heterogeneity of alpha-foetoprotein: possible application for early differential diagnosis. Ohkawa K, et al. **J Clin Chem Clin Biochem** 1989 May;27(5):337-41

Follow up of bladder cancer--the use of screening tests in predicting asymptomatic recurrence [letter] Moran BJ, et al. **J R Coll Gen Pract** 1988 Sep;38(314):422

Is long-term follow-up of all colorectal cancer necessary? Hulton NR, et al. **J R Coll Surg Edinb** 1989 Feb;34(1):21-4

Sonographic detection and fine-needle aspiration biopsy of nonpalpable recurrent or metastatic melanoma in subcutaneous tissues. Fornage BD, et al. **J Ultrasound Med** 1989 Aug;8(8):421-4

Risk indicators in stage I testicular teratoma [letter] Klepp O. **Lancet** 1989 Mar 4;1(8636):506

Duct carcinoma-in-situ: can we predict recurrence after surgery? [letter] Price P, et al. **Lancet** 1989 Sep 16; 2(8664):671-2

Post-pneumonectomy evaluation of the chest: a prospective comparative study of MRI with CT. Laissy JP, et al. **Magn Reson Imaging** 1989 Jan-Feb;7(1):55-60

Recurrent brain tumors in children. Friedman HS, et al. **Pediatr Neurosci** 1987;13(5):233-41 (63 ref.)

Recurrence of ovarian and uterine neoplasms: diagnosis with transrectal US. Squillaci E, et al. **Radiology** 1988 Nov; 169(2):355-8

Detection and treatment of local recurrence. Liavåg I. **Scand J Gastroenterol Suppl** 1988;149:163-5

CA 125 reliability in predicting ovarian cancer recurrence. Zanaboni F, et al. **Tumori** 1989 Feb 28;75(1):69-71

Flow cytometric study comparing paired bladder washing and voided urine for bladder cancer detection. Konchuba AM, et al. **Urology** 1989 Feb;33(2):89-96

[Fiber gastroscopy in the diagnosis of gastroduodenal diseases and of primary cancer of the gastric stump in particular] Dimitrova V, et al. **Khirurgiia (Sofiia)** 1989;42(1):14-8 (Eng. Abstr.) **(Bul)**

[The value of routine check-ups of patients after radical surgery of colonic cancer or rectal cancer] Clausen HV, et al. **Ugeskr Laeger** 1989 Feb 27;151(9):562-3 (Eng. Abstr.) **(Dan)**

[The benefit of colonoscopic control after radical surgery of colorectal cancer] Mollerup CL, et al. **Ugeskr Laeger** 1988 Nov 14;150(46):2821-2 (Eng. Abstr.) **(Dan)**

[Surveillance elements of pneumonectomy spaces. Comparison of MRI and x-ray CT] Laissy JP, et al. **Ann Chir** 1988;42(8):602-5 (Eng. Abstr.) **(Fre)**

[Difficulties of the X-ray computed tomographic diagnosis of pelvic tumor recurrence: comparison with other medical imaging techniques (ultrasonography, immunoscintigraphy)] Tournemaine N, et al. **Ann Radiol (Paris)** 1988;31(7-8):426-32 (Eng. Abstr.) **(Fre)**

[Colonoscopic surveillance of patients operated on in colorectal cancer. Retrospective evaluation of 269 tests in 125 patients] Aubert A, et al. **J Chir (Paris)** 1989 Apr; 126(4):225-8 (30 ref.) (Eng. Abstr.) **(Fre)**

[MRI in the diagnosis of recurrent cholesteatoma of the petrous bone] Doyon D, et al. **J Radiol** 1989 Mar; 70(3):151-7 (Eng. Abstr.) **(Fre)**

[Validity of Gynaegnost in the follow-up of patients treated for ovarian cancer] Cerejeira L, et al. **Rev Fr Gynecol Obstet** 1989 Apr;84(4):347-9 (Eng. Abstr.) **(Fre)**

[General and specific laboratory parameters within the scope of tumor after-care in gynecologic malignancies and breast cancer] Kreienberg R. **Gynakologe** 1989 Feb;22(1):55-62 (30 ref.) **(Ger)**

[Breast saving therapy: diagnostic problems in after care] Walther E, et al. **Helv Chir Acta** 1989 Apr;55(6):909-15 (Eng. Abstr.) **(Ger)**

[Effect of serial CEA determination on diagnosis, therapy and prognosis of recurrent colorectal cancer] Mentges B. **Langenbecks Arch Chir** 1988;373(4):227-34 (Eng. Abstr.) **(Ger)**

[The value of tumor markers in colorectal cancer] Peters KM, et al. **Leber Magen Darm** 1989 Jan;19(1):18-25 (Eng. Abstr.) **(Ger)**

[Follow-up EEG analysis as a diagnostic instrument in the after-care of patients with astrocytoma] Szuwart U, et al. **Nervenarzt** 1989 Jan;60(1):55-60 **(Ger)**

[Ultrasonic tomography in the diagnosis of recurrences of rectal cancer] Balter SA, et al. **Radiol Diagn (Berl)** 1989; 30(1):21-6 (Eng. Abstr.) **(Ger)**

[Loco-regional recurrence following surgery of breast carcinoma: prognostic factors and therapeutic consequences] Brunner KW, et al. **Schweiz Med Wochenschr** 1988 Dec 31;118(52):1976-81 (Eng. Abstr.) **(Ger)**

[After care in colorectal cancer] Brunner H. **Wien Med Wochenschr** 1988 Jun 30;138(11-12):261-3 (Eng. Abstr.) **(Ger)**

[After-care of melanoma. 8 years' experience using the Mainz model] Schramm P. **Z Hautkr** 1988 Oct 15;63(10):816-21 (Eng. Abstr.) **(Ger)**

[The value of CA 125 determination in the serum of patients with ovarian cancer] Bartel U, et al. **Zentralbl Gynakol** 1989;111(5):301-9 (Eng. Abstr.) **(Ger)**

[Endoluminal echography in the preoperative evaluation of the patient with cancer of the rectum and early diagnosis of local recurrence] Mascagni D, et al. **Ann Ital Chir** 1987; 59(1-6):223-31 **(Ita)**

[Follow-up of carcinoma of the breast: ultrasonic diagnosis in post-operative locoregional control] Poma S, et al. **Ann Ostet Ginecol Med Perinat** 1989;Spec No:95-100 **(Ita)**

[The accuracy of CT and tumor markers in the detection of a recurrent ovarian carcinoma] Wakabayashi Y, et al. **Gan No Rinsho** 1989 Sep;35(10):1127-31 (Eng. Abstr.) **(Jpn)**

[Prediction of the hematogenic metastasis and local recurrence of rectal cancer by quantification of the clinico-pathological factors] Kotanagi H, et al. **Nippon Geka Gakkai Zasshi** 1988 Jul;89(7):1022-7 (Eng. Abstr.) **(Jpn)**

[Recurrence of cancer of the rectum] Odariuk TS, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):58-61 **(Rus)**

[The complex diagnosis of nonorganic neoplasms of the small pelvis] Kononenko NG, et al. **Vopr Onkol** 1989;35(1):69-76 (Eng. Abstr.) **(Rus)**

[Recurrent nonorganic tumors of the lesser pelvis] Stoliarov VI, et al. **Vopr Onkol** 1988;34(9):1105-8 (Eng. Abstr.) **(Rus)**

[Transabdominal ultrasonography and urinary cytology in the follow-up of superficial bladder tumors] Mián Ortiz JL, et al. **Actas Urol Esp** 1988 Sep-Oct;12(5):411-4 (Eng. Abstr.) **(Spa)**

[New protocol in the follow-up of superficial bladder carcinoma] Oliver F, et al. **Actas Urol Esp** 1988 Sep-Oct; 12(5):415-8 (Eng. Abstr.) **(Spa)**

[Diagnosis using monoclonal antibodies of an abdominal recurrence causing an anemic syndrome, after surgery for cecal cancer] Lamiquiz Vallejo A, et al. **Rev Esp Enferm Apar Dig** 1988 Aug;74(2):165-8 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Primary non-Hodgkin lymphoma treated with liver resection. Case report. Søndenaa K, et al. **Acta Chir Scand** 1988 Nov-Dec;154(11-12):681-2

Phase II studies of bleomycin, ifosfamide and cis-platinum in advanced and recurrent cervical carcinoma. Buxton EJ, et al. **Acta Oncol** 1988;27(5):545-9

The effect of sequential methotrexate and 5-fluorouracil in patients with recurrent head and neck cancer. Lindeløv B, et al. **Acta Oncol** 1989;28(2):227-30

Phase II trial of spirogermanium and vindesine in malignant glioma. Alavi JB, et al. **Am J Clin Oncol** 1989 Feb; 12(1):8-10

Evaluation of fludarabine phosphate in patients with recurrent glioma. Cascino TL, et al. **Am J Clin Oncol** 1988 Oct;11(5):586-8

Phase II study of iproplatin (CHIP) in previously treated small-cell lung cancer. Granfortuna JM, et al. **Am J Clin Oncol** 1989 Aug;12(4):355-7

Phase II trial of high-dose cytosine arabinoside and cisplatin in recurrent squamous carcinoma of the head and neck. A Piedmont Oncology Association Study. Powell BL, et al. **Am J Clin Oncol** 1988 Oct;11(5):550-2

Anti-hormone treatment for prostate cancer relapsing after treatment with flutamide and castration. Addition of aminoglutethimide and low dose hydrocortisone to combination therapy. Labrie F, et al. **Br J Urol** 1989 Jun; 63(6):634-8

Phase II study of carboplatin in recurrent ovarian cancer: severe hematologic toxicity in previously treated patients. Colombo N, et al. **Cancer Chemother Pharmacol** 1989; 23(5):323-8

High-dose ifosfamide with mesna uroprotection in Ewing's sarcoma. Jürgens H, et al. **Cancer Chemother Pharmacol** 1989;24 Suppl 1:S40-4

Phase II study of combination 4'-epidoxorubicin and mitomycin C in recurrent epithelial ovarian cancer. Redman C, et al. **Cancer Chemother Pharmacol** 1989; 23(1):51-3

Treatment of refractory and relapsed non-Hodgkin's lymphoma with ifosfamide, methotrexate and etoposide. Sangster G, et al. **Cancer Chemother Pharmacol** 1989; 23(4):263-5

Phase II study of ifosfamide as a single drug for relapsed paediatric patients. Schwartzman E, et al. **Cancer Chemother Pharmacol** 1989;24 Suppl 1:S11-2

A phase II study of ifosfamide in the treatment of relapses in Wilms' tumor. Tournade MF. **Cancer Chemother Pharmacol** 1989;24 Suppl 1:S31-3

Antiblastic treatment of advanced cervical carcinoma and its recurrences: assessment of four different polychemotherapies used for a decade. Rigano A, et al. **Eur J Gynaecol Oncol** 1989;10(4):271-6

Tourniquet infusion chemotherapy of the lower extremities--clinical and pharmacokinetic results. Ingvar C, et al. **Eur J Surg Oncol** 1989 Aug;15(4):375-9

Cis-platin-Mecy as salvage chemotherapy in recurrent advanced ovarian carcinoma. Belli M, et al. **G Ital Oncol** 1989 Jan-Mar;9(1):31-3

Efficacy of sequential cyclical hormonal therapy in endometrial cancer and its correlation with steroid hormone receptor status. Ayoub J, et al. **Gynecol Oncol** 1988 Oct;31(2):327-37

Weekly cisplatin induction chemotherapy in the treatment of recurrent cervical carcinoma. Lele SB, et al. **Gynecol Oncol** 1989 Apr;33(1):6-8

Tamoxifen therapy in advanced/recurrent endometrial carcinoma. Quinn MA, et al. **Gynecol Oncol** 1989 Jan; 32(1):1-3

Treatment of advanced and recurrent endometrial carcinoma: correlation of patient response to hormonal and cytotoxic chemotherapy and the response predicted by the subrenal capsule chemosensitivity assay. Stratton JA, et al. **Gynecol Oncol** 1989 Jan;32(1):55-9

Phase II trial of cisplatin as first-line chemotherapy in patients with advanced or recurrent endometrial carcinoma: a Gynecologic Oncology Group Study. Thigpen JT, et al. **Gynecol Oncol** 1989 Apr;33(1):68-70

A randomized study of CCNU with and without benznidazole in the treatment of recurrent grades 3 and 4 astrocytoma. Report to the Medical Research Council by the Brain Tumor Working Party. Bleehen NM, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1077-81

Local adriamycin treatment for prevention of recurrence of superficial bladder tumours. Kondás J, et al. **Int Urol Nephrol** 1988;20(6):611-5

Phase II trials of 5-day vinblastine infusion (NSC 49842), L-alanosine (NSC 153353), acivicin (NSC 163501), and aminothiadiazole (NSC 4728) in patients with recurrent or metastatic renal cell carcinoma. Elson PJ, et al. **Invest New Drugs** 1988 Jun;6(2):97-103

A phase II study of cisplatin therapy in recurrent childhood brain tumors. A report from the Childrens Cancer Study Group. Bertolone SJ, et al. **J Neurooncol** 1989 May; 7(1):5-11

The potential role of lonidamine (LND) in the treatment of malignant glioma. Phase II study. Carapella CM, et al. **J Neurooncol** 1989 May;7(1):103-8

A phase I/II study of 24 hour intravenous AZQ in recurrent primary brain tumors. Chamberlain MC, et al. **J Neurooncol** 1988 Dec;6(4):319-23

Systemic gamma-interferon therapy for recurrent gliomas. Mahaley MS Jr, et al. **J Neurosurg** 1988 Dec;69(6):826-9

Efficacy of intravesical mitomycin C in the treatment of superficial transitional cell carcinoma of the urinary bladder. Pavlotsky A, et al. **J Surg Oncol** 1989 May; 41(1):9-11

Intravesical mitomycin C instillation as a prophylactic treatment of superficial bladder tumor. Kim HH, et al.

J Urol 1989 Jun;141(6):1337–9; discussion 1339–40

Chemotherapy of a patient because of spuriously elevated alpha-fetoprotein levels. Identification of the responsible factor. Dahlmann N, et al. **Klin Wochenschr** 1989 Apr 3; 67(7):408–12

Carboplatin. **Med Lett Drugs Ther** 1989 Sep 8;31(800):83–4

Successful combination chemotherapy (cisplatinum, vinblastine, and bleomycin) in the treatment of medulloblastoma disseminated by cerebrospinal fluid: case report. Asai A, et al. **Neurosurgery** 1989 Mar;24(3):439–43

Ifosfamide, adriamycin and cisplatin (IAP) plus bleomycin (B) combination chemotherapy in patients with recurrent cancer of the uterine cervix. Nishida T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 May;41(5):590–4

Re-treatment of patients with recurrent epithelial ovarian cancer with cisplatin-based chemotherapy. Gershenson DM, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):798–802

VM-26-vincristine-cisplatin combination chemotherapy in the treatment of primary advanced and recurrent endometrial carcinoma. Sorbe B, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):343–8

Influence of adjuvant chemotherapy for operable breast cancer on results of treatment at relapse. Noguchi S, et al. **Oncology** 1989;46(2):69–73

Impact of initial therapy on survival in recurrent breast cancer. Shiba E, et al. **Oncology** 1989;46(2):74–7

ABLETOP, a well-tolerated, effective regimen for relapsing Hodgkin's disease. Swiss Group for Clinical Cancer Research (SAKK). Obrist R, et al. **Onkologie** 1989 Apr; 12(2):99–101

Carboplatin in refractory epithelial ovarian cancer. Kavanagh JJ, et al. **Semin Oncol** 1989 Apr;16(2 Suppl 5):45–8 (14 ref.)

Late recurrence of operated adrenocortical carcinoma: atrial natriuretic factor before and after treatment with mitotane. Donckier JE, et al. **Surgery** 1989 May;105(5):690–2

Intra-arterial infusion of 5-fluorouracil for recurrent adenocarcinoma of bladder. Hatch TR, et al. **Urology** 1989 Apr;33(4):311–2

Study of intravesical mitomycin C in patients with multiple prior occurrences of superficial bladder cancer. Schwarzman MI, et al. **Urology** 1988 Oct;32(4):335–8

[Topical chemotherapy in the surgical treatment of recurrent skin carcinoma] Dušková M. **Rozhl Chir** 1988 Nov; 67(11):764–7 (Eng. Abstr.) **(Cze)**

[Tolerance of intraoperative, intraperitoneal chemotherapy in advanced gynecologic malignancies] Werner A, et al. **Geburtshilfe Frauenheilkd** 1988 Aug;48(8):574–8 (Eng. Abstr.) **(Ger)**

[Experiences with the combination carboplatin/VP 16 in the treatment of recurrent tumors in children] Calaminus G, et al. **Klin Padiatr** 1989 Jul–Aug;201(4):311–5 (Eng. Abstr.) **(Ger)**

[Adjuvant 5-fluorouracil lacquer administration for reducing the rate of recurrence of condylomata acuminata following laser surgery treatment] Erpenbach K, et al. **Urologe [A]** 1989 May;28(3):158–62 (Eng. Abstr.) **(Ger)**

[Short-term versus long-term chemoprevention of recurrence with Epodyl following transurethral resection of superficial urinary bladder cancer] Flamm J, et al. **Urologe [A]** 1989 Mar;28(2):99–102 (Eng. Abstr.) **(Ger)**

[Intra-arterial chemotherapy of local recurrences of gastrointestinal tumors] Heim ME. **Z Gastroenterol [Verh]** 1989 Jul;24:194–5 **(Ger)**

[Therapy monitoring of regional chemotherapy by magnetic resonance spectroscopy] Semmler W, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:202–3 **(Ger)**

[Intra-arterial chemotherapy with methotrexate and 5-fluorouracil in extensive locoregional recurrences of cervix cancer] Dziambor U, et al. **Zentralbl Gynakol** 1988; 110(18):1138–44 (Eng. Abstr.) **(Ger)**

[Vincristine-bleomycin-methotrexate in the treatment of recurrence of ORL carcinoma] Airoldi M, et al. **Acta Otorhinolaryngol Ital** 1988 Mar–Apr;8(2):125–31 (Eng. Abstr.) **(Ita)**

[Combination of 5-fluorouracil and high doses of folinic acid in the treatment of recurrent and persistent spinocellular carcinoma of the head and neck. A phase II study] Bacigalupo A, et al. **Acta Otorhinolaryngol Ital** 1988 Nov–Dec;8(6):575–80 (Eng. Abstr.) **(Ita)**

[Clinical effect of combined chemotherapy with UFT, MMC and OK-432 in recurring or advanced cancer of the digestive organs] Aoki Y, et al. **Gan To Kagaku Ryoho** 1989 Feb;16(2):225–34 (Eng. Abstr.) **(Jpn)**

[A case of recurrent endometrial cancer (clear cell adenocarcinoma) remarkably responsive to combination chemotherapy containing cisplatin] Kitayama S, et al. **Gan To Kagaku Ryoho** 1989 May;16(5):2099–101 (Eng. Abstr.) **(Jpn)**

[A case of recurrent uterine cervical cancer successfully treated with etoposide] Kobayashi H, et al. **Gan To Kagaku Ryoho** 1989 Sep;16(9):3279–82 (Eng. Abstr.) **(Jpn)**

[Effects of intra-arterial infusion chemotherapy in local recurrence of anal cancer] Mieno K, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):3007–10 (Eng. Abstr.) **(Jpn)**

[Clinical trial of 5'-DFUR in patients with recurrent breast cancer] Morimoto T, et al. **Gan To Kagaku Ryoho** 1988 Oct;15(10):2983–9 (Eng. Abstr.) **(Jpn)**

[Combination chemotherapy of CPM-MTX-5-FU in non-resectable and recurrent cancer patients] Saeki T, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 1):827–31 (Eng. Abstr.) **(Jpn)**

[Clinical effectiveness of arterial infusion chemotherapy in advanced and recurrent gastric cancer] Sato M, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2927–31 (Eng. Abstr.) **(Jpn)**

[Intra-arterial infusion chemotherapy of locally advanced and recurrent breast cancer] Shimizu T, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2707–11 (Eng. Abstr.) **(Jpn)**

[Vincristine, adriamycin, mitomycin-C and UFT (VAM-UFT) therapy in progressive or recurrent breast cancer] Yasutake K, et al. **Gan To Kagaku Ryoho** 1989 Jul;16(7):2373–9 (Eng. Abstr.) **(Jpn)**

[Successful treatment of a patient with recurrent ovarian cancer by lentinan combined with intraarterial 5FU] Shimizu Y, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Mar 20;24(3):647–51 (Eng. Abstr.) **(Jpn)**

[Preliminary evaluation of the treatment of recurrences of acute lymphoblastic leukemia by the BFM (Henze) method] Ochocka M, et al. **Pediatr Pol** 1988 Nov;63(11):716–22 (Eng. Abstr.) **(Pol)**

[Testicular recurrence of acute lymphoblastic leukemia in children treated by BFM 81 83 protocol. Report of the Polish Group for the Treatment of Leukemia and Other Lymphatic Diseases in Children] Koehler M, et al. **Pol Tyg Lek** 1988 Dec 12;43(50):1615–8 **(Pol)**

[Long-term survival after the second and subsequent chemotherapies in 2 cases of Hodgkin's disease] Balwierz W, et al. **Przegl Lek** 1988;45(4):412–5 **(Pol)**

[Treatment of children with recurrent acute lymphoblastic leukemia] Sotnikova NI. **Pediatriia** 1989;(4):62–5 **(Rus)**

EPIDEMIOLOGY

Cervical carcinoma in situ after incomplete conisation [see comments] Ueki M, et al. **Asia Oceania J Obstet Gynaecol** 1988 Jun;14(2):147–53. **Comment in:** Asia Oceania J Obstet Gynaecol 1989 Mar;15(1):108–9

Changing character of cervical cancer in young women. Elliott PM, et al. **BMJ** 1989 Feb 4;298(6669):288–90

Local recurrence of colorectal cancer. A District General Hospital's experience. Habib NA, et al. **Br J Clin Pract** 1988 Jun;42(6):225–7

The incidence of late recurrence (greater than 10 years); an analysis of 536 consecutive cases of cutaneous melanoma. Callaway MP, et al. **Br J Plast Surg** 1989 Jan;42(1):46–9

Uncontrolled local recurrence after treatment of breast cancer with breast conservation. Barr LC, et al. **Cancer** 1989 Sep 15;64(6):1203–7

Using permutation tests and bootstrap confidence limits to analyze repeated events data from clinical trials. Freedman L, et al. **Controlled Clin Trials** 1989 Jun;10(2):129–41

Results of a rigorous follow-up system in colorectal cancer. Wenzl E, et al. **Int J Color Dis** 1988 Aug;3(3):176–80

[Local recurrence after colo-rectal surgery: clinical study] Martinelli V, et al. **Ann Ital Chir** 1987;59(1–6):205–11 (Eng. Abstr.) **(Ita)**

[A retrospective study of recurrent breast cancer following radical mastectomy] Nishimura Y, et al. **Rinsho Hoshasen** 1989 Apr;34(4):449–53 (Eng. Abstr.) **(Jpn)**

[The incidence of recurrences and metastases of cancer of the corpus uteri and the reasons for their occurrence] Smakhtina OL, et al. **Vopr Onkol** 1989;35(4):473–7 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Perioperative blood transfusions and prostate cancer recurrence and survival. Heal JM, et al. **Am J Surg** 1988 Nov;156(5):374–80

Perioperative blood transfusion and solid tumour recurrence. Blumberg N, et al. **Blood Rev** 1987 Dec;1(4):219–29 (107 ref.)

Stress and relapse of breast cancer [letter; comment] Israël L. **BMJ** 1989 Apr 15;298(6679):1032. **Comment on:** BMJ 1989 Feb 4;298(6669):291–3

Stress and relapse of breast cancer [see comments] Ramirez AJ, et al. **BMJ** 1989 Feb 4;298(6669):291–3. **Comment in:. Comment in:** BMJ 1989 Apr 8;298(6678):962–3 BMJ 1989 Apr 15;298(6679):1032

Stress and relapse of breast cancer [letter; comment] Wood J, et al. **BMJ** 1989 Apr 8;298(6678):962–3. **Comment on:** BMJ 1989 Feb 4;298(6669):291–3

Anastomotic suture materials and implantation metastasis: an experimental study [published erratum appears in Br J Surg 1989 Jun;76(6):655] McGregor JR, et al. **Br J Surg** 1989 Apr;76(4):331–4

Local recurrence after low anterior resection using the EEA stapling device. Ziv Y, et al. **Dis Colon Rectum** 1988 Dec; 31(12):945–7

Paget's disease of the nipple occurring after wide local excision and radiotherapy for carcinoma of the breast. Menzies D, et al. **Eur J Surg Oncol** 1989 Jun;15(3):271–3

Clinical experience with transitional cell carcinoma of the bladder with special reference to smoking. Carpenter AA. **J Urol** 1989 Mar;141(3):527–8

Breast cancer: the dilemma of local recurrence. Evans RA. **Med Hypotheses** 1989 Jul;29(3):151–3

Reasons for enucleation after plaque radiotherapy for posterior uveal melanoma. Clinical findings. Shields CL, et al. **Ophthalmology** 1989 Jun;96(6):919–23; discussion 924

The influence of the surgical wound on local tumor recurrence. Baker DG, et al. **Surgery** 1989 Sep; 106(3):525–32

[Factors influencing postoperative recurrence of bladder cancer] Wang GY. **Chung Hua Wai Ko Tsa Chih** 1988 Apr; 26(4):208–10, 254 (Eng. Abstr.) **(Chi)**

[Local recurrence—surgically avoidable or a biological characteristic?] Hermanek P. **Dtsch Med Wochenschr** 1989 Sep 8;114(36):1380–2 **(Ger)**

[Evaluation of failures in the surgical treatment of laryngeal cancer] Semczuk B, et al. **Otolaryngol Pol** 1988;42(5):342–9 (Eng. Abstr.) **(Pol)**

[Childhood leukemia from the perspective of 15 years of its intensive treatment] Radwańska U. **Pediatr Pol** 1988 Nov; 63(11):689–92 **(Pol)**

GENETICS

Separate karyotypic features in a local recurrence and a metastasis of a fibrosarcoma [letter] Mandahl N, et al. **Cancer Genet Cytogenet** 1989 Jan;37(1):139–40

Recurrent uterine myomata in three sisters—an uncommon occurrence. Kulenthran A, et al. **Int J Gynaecol Obstet** 1988 Oct;27(2):289–91

IMMUNOLOGY

Immunophenotyping to detect and characterize acute lymphocytic leukemia in testicular biopsies. Verdi CJ, et al. **Pediatr Pathol** 1989;9(2):117–30

[Immunologic factors in the recurrence of glioma] Ogashiwa M, et al. **Neurol Med Chir (Tokyo)** 1988 May;28(5):467–72 (Eng. Abstr.) **(Jpn)**

METABOLISM

Histological and immunohistochemical findings in experimental rhabdomyosarcomas. Comparisons between original tumors, tumor recurrences and allotransplants in nude mice. Kosmehl H, et al. **Exp Pathol** 1989;36(2):81–8

[Concentration of ACNU in a branch of middle cerebral artery, femoral vein and brain tissue by intracarotid or intravenous administration in a patient with recurrent glioblastoma] Nakagawa H, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 1):2667–9 **(Jpn)**

MORTALITY

The effect of packed cells and whole blood transfusions on survival after curative resection for colorectal carcinoma. Wobbes T, et al. **Dis Colon Rectum** 1989 Sep;32(9):743–8

Analysis of failures in patients with cervical carcinoma treated by radical surgery and external pelvic irradiation. Fioretti P, et al. **Eur J Gynaecol Oncol** 1988;9(6):452–6

The effect of local recurrence on survival time in adult high-grade soft tissue sarcomas. Emrich LJ, et al. **J Clin Epidemiol** 1989;42(2):105–10

Recurrence of posterior uveal melanoma after 60Co episcleral plaque therapy. Karlsson UL, et al. **Ophthalmology** 1989 Mar;96(3):382–8

[Rate of local recurrence and survival in patients with breast reconstruction following mastectomy] Kaufmann M, et al. **Geburtshilfe Frauenheilkd** 1988 Jul;48(7):524–7 (Eng. Abstr.) **(Ger)**

[Classification and evaluation of oncologic prognosis and risk factors] Seifart W. **Zentralbl Chir** 1989;114(10):629–38 (Eng. Abstr.) **(Ger)**

PATHOLOGY

Tumour recurrence vs radionecrosis: an indication for multitrajectory serial stereotactic biopsies. Zamorano L, et al. **Acta Neurochir Suppl (Wien)** 1989;46:90–3

Recurrent primary leptomeningeal astrocytoma of the lumbosacral spinal cord resembling schwannoma. A case report. Saitoh A, et al. **Acta Pathol Jpn** 1988 Dec; 38(12):1591–9

Factors predictive of recurrence of basal cell carcinoma. Dixon AY, et al. **Am J Dermatopathol** 1989 Jun; 11(3):222–32

Dedifferentiation of recurrent chondrosarcoma of the mandible. Robinson ML, et al. **Ann Dent** 1988 Summer; 47(1):27–30

The role of liver transplantation in hepatobiliary malignancy. A retrospective analysis of 95 patients with particular regard to tumor stage and recurrence. Ringe B, et al. **Ann Surg** 1989 Jan;209(1):88–98

Prognostic factors in cervical carcinoma: a multivariate approach. Haas J, et al. **Baillieres Clin Obstet Gynaecol** 1988 Dec;2(4):829–37

Prognostic factors for risk of recurrence in stages Ib and IIa cervical cancer. Hoskins WJ. **Baillieres Clin Obstet Gynaecol** 1988 Dec;2(4):817–28 (32 ref.)

Quantitative cytophotometric analysis as an aid to the detection of recurrent oral cancer. Ogden GR, et al. **Br J Oral Maxillofac Surg** 1989 Jun;27(3):224–8

Aggressive calcifying odontogenic cyst—a possible variant of ameloblastoma. Scott J, et al. **Br J Oral Maxillofac Surg** 1989 Feb;27(1):53–9

Experimental model for locally recurring mammary tumors. Development, morphology, karyotype, growth kinetics, and experimental metastatic potential. Estrada J, et al.

Cancer 1989 Apr 1;63(7):1353–62

Late regrowth of pituitary adenomas after irradiation and/or surgery. Hazard function analysis. Grigsby PW, et al. **Cancer** 1989 Apr 1;63(7):1308–12

Mammary fibromatosis. A benign spindle-cell tumor with significant risk for local recurrence. Rosen PP, et al. **Cancer** 1989 Apr 1;63(7):1363–9

Biopsy results of new calcifications in the postirradiated breast. Solin LJ, et al. **Cancer** 1989 May 15;63(10):1956–61

Recurrent intracranial and spinal meningiomas: clinical and histological features. Baird M, et al. **Clin Neuropathol** 1989 Jan–Feb;8(1):41–4

Sebaceous gland carcinoma of the eyelids in Hawaii. Parsa FD. **Hawaii Med J** 1989 May;48(5):165–6, 168

Secretory carcinoma of the breast in adults: emphasis on late recurrence and metastasis. Krausz T, et al. **Histopathology** 1989 Jan;14(1):25–36

Impetiginous lesions in recurrent AML. Morris DJ, et al. **Hosp Pract [Off]** 1989 Mar 30;24(3A):153–6

Squamous papillary neoplasia of the adult upper aerodigestive tract. Crissman JD, et al. **Hum Pathol** 1988 Dec; 19(12):1387–96

Second-look laparoscopy in the treatment of endometriosis. Fedele L, et al. **Int J Fertil** 1988 Jul–Aug;33(4):237–40

Late loco-regional recurrences after radical resection for mandibular ameloblastoma. Demeulemeester LJ, et al. **Int J Oral Maxillofac Surg** 1988 Oct;17(5):310–5

Recurrences of ameloblastoma in bone grafts. Report of 4 cases. Zachariades N. **Int J Oral Maxillofac Surg** 1988 Oct; 17(5):316–8

Prognostic factors for children with recurrent Wilms' tumor: results from the Second and Third National Wilms' Tumor Study. Grundy P, et al. **J Clin Oncol** 1989 May;7(5):638–47

Acinous cell carcinoma of the larynx. Kallis S, et al. **J Laryngol Otol** 1989 Jun;103(6):638–41 (8 ref.)

Immature teratomas: identification of patients at risk for malignant recurrence. Malogolowkin MH, et al. **J Natl Cancer Inst** 1989 Jun 7;81(11):870–4

Recurrent osteoblastoma of the mandible: report of a case. Colm SJ, et al. **J Oral Maxillofac Surg** 1988 Oct; 46(10):881–5

Regrowth patterns of glioblastoma multiforme related to planning of interstitial brachytherapy radiation fields. Bashir R, et al. **Neurosurgery** 1988 Jul;23(1):27–30

A uterine tumor that resembled ovarian sex-cord tumors: a low-grade sarcoma. Malfetano JH, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):489–91

Retroconversion of malignancy of ovarian immature teratoma. Lian LJ, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(2):79–83

Recurrent cholangiocarcinoma in the biliary tree after liver transplantation. Herbener T, et al. **Radiology** 1988 Dec; 169(3):641–2

Fine needle aspiration cytology in the diagnosis and classification of recurrent and metastatic gynaecological malignancies. Lee WH, et al. **Singapore Med J** 1988 Aug; 29(4):375–8

An extra-adrenal pheochromocytoma with spontaneous remission and recurrence: report of a case. Chang JT, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Dec;87(12):1224–8

[Sarcomatous recurrence of leiomyoma of the inferior vena cava] Pezet D, et al. **Presse Med** 1988 Oct 15;17(35):1793–6 (Eng. Abstr.) **(Fre)**

[Recurrences and metastases of cystosarcoma phylloides (phylloid tumor, WHO). On the 150th birthday of a controversial diagnostic concept] Bässler R, et al. **Geburtshilfe Frauenheilkd** 1989 Jan;49(1):1–10 (Eng. Abstr.) **(Ger)**

[The immunohistochemical growth fraction (Ki-67) of breast cancers: relations to tumor spread, tumor morphology and receptor testing] Weikel W, et al. **Geburtshilfe Frauenheilkd** 1989 Mar;49(3):277–82 (Eng. Abstr.) **(Ger)**

[Local recurrent centroblastic lymphoma of the skin] Eckert F, et al. **Hautarzt** 1988 Dec;39(12):791–4 (Eng. Abstr.) **(Ger)**

[Local recurrence and metastasis of thin malignant melanomas (less than or equal to 1mm)] Garbe C, et al. **Hautarzt** 1989 Jun;40(6):337–43 (Eng. Abstr.) **(Ger)**

[How great is the risk of cancer and recurrence following benign breast biopsy?] Ris HB, et al. **Helv Chir Acta** 1989 Jan;55(5):541–4 (Eng. Abstr.) **(Ger)**

[DNA impulse cytophotometry measurements in head and neck tumors. Initial results of a correlation with clinical stage, therapeutic response and pattern of recurrence] Fietkau R, et al. **HNO** 1989 Feb;37(2):62–6 (Eng. Abstr.) **(Ger)**

[Recurrence of acute lymphoblastic leukemia after 12 years of complete remission] Seidl P, et al. **Klin Padiatr** 1988 Nov–Dec;200(6):448–50 (Eng. Abstr.) **(Ger)**

[Recurrence after surgery of breast cancer or a secondary disease?] Wöhlke G, et al. **Pathologe** 1989 Mar;10(2):93–6 **(Ger)**

[Long-term results of radical prostatectomy] Grups JW. **Urologe [A]** 1988 Nov;27(6):348–51 (19 ref.) (Eng. Abstr.) **(Ger)**

[Malignant neoplasms of the rectum. Evaluation of predictive parameters of recurrence] Bortolani E, et al. **Minerva Chir** 1988 Nov 30;43(22):1923–8 (Eng. Abstr.) **(Ita)**

[Recurrence of an ameloblastoma in the context of the parotid. Report of a case] Belladonna M, et al. **Minerva Stomatol** 1988 Apr;37(4):265–8 (Eng. Abstr.) **(Ita)**

[Early carcinoma of the gastric remnant: pathological features relating to the interval between the initial and second surgery] Hosokawa O, et al. **Gan No Rinsho** 1989 Apr;35(5):587–96 (Eng. Abstr.) **(Jpn)**

[Surgical problems encountered in cases of S0 (serosal invasion-free) gastric cancers] Matsusaka T, et al. **Gan No Rinsho** 1988 Nov;34(14):1943–50 (Eng. Abstr.) **(Jpn)**

[Clinicopathological studies of the recurrence of esophageal squamous cell cancer--with special reference to the mode of recurrence and operative procedure] Baba M, et al. **Nippon Geka Gakkai Zasshi** 1988 Nov;89(11):1769–79 (Eng. Abstr.) **(Jpn)**

[Surgical therapeutic problems of thoracic esophageal carcinoma with special reference to the postoperative recurrent type] Sasaki K, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1475–8 (Eng. Abstr.) **(Jpn)**

[Postoperative recurrence of noninvasive thymomas (stage 1)] Yoshitake T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug;36(8):1326–32 (Eng. Abstr.) **(Jpn)**

[Merkel cell cancer] Parshikova SM, et al. **Arkh Patol** 1988; 50(10):43–8 (Eng. Abstr.) **(Rus)**

[Evaluation of the radicalness of the removal of craniopharyngioma of the 3d ventricle in children and the possible sources of their continued growth and recurrence] Konovalov AN, et al. **Zh Vopr Neirokhir** 1988 Nov–Dec; (6):7–12 (Eng. Abstr.) **(Rus)**

[Melanoma of female distal urethra: apropos of a case] Sanz Velez JI, et al. **Actas Urol Esp** 1989 Jan–Feb;13(1):63–4 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

[Growth characteristics of adenocarcinoma 755 recurrences in C57Bl/6 and (DBA/2 X C57Bl/6) F1 mouse strains] Soliakova TI, et al. **Eksp Onkol** 1988;10(6):32–4 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

A phase II study of the efficacy of diamminedichloroplatinum (cisplatin) for the control of locally recurrent and intransit malignant melanoma of the extremities using tourniquet outflow-occlusion techniques. Bland KI, et al. **Ann Surg** 1989 Jan;209(1):73–80

Breast cancer: the role of postoperative radiotherapy. Morgan G, et al. **Aust N Z J Surg** 1989 Feb;59(2):105–13 (67 ref.)

Breast cancer: role of postoperative radiotherapy [editorial] Russell IS. **Aust N Z J Surg** 1989 Feb;59(2):101–2

Frozen section control of excision of eyelid basal cell carcinomas: 8 1/2 years' experience. Frank HJ. **Br J Ophthalmol** 1989 May;73(5):328–32

Recurrence of superficial bladder carcinoma after intravesical instillation of mitomycin-C. Comparison of exposure times. Giesbers AA, et al. **Br J Urol** 1989 Feb;63(2):176–9

Intravesical Bacillus Calmette-Guérin treatment for superficial bladder tumours. Shinka T, et al. **Br J Urol** 1989 Jun;63(6):610–5

The safe and effective use of postoperative radiation therapy in modified Astler Coller Stage C3 rectal cancer. Devereux DF, et al. **Cancer** 1989 Jun 15;63(12):2393–6

Postoperative adjuvant chemotherapy inhibits early recurrence of early gastric carcinoma. Okamura T, et al. **Cancer Chemother Pharmacol** 1989;23(5):319–22

Effects of local chemotherapy and immunotherapy on the recurrence and progression of superficial bladder cancer. Novak R, et al. **Eur Urol** 1988;14(5):367–70

Local-regional recurrence in breast cancer after mastectomy and adriamycin-based adjuvant chemotherapy: evaluation of the role of postoperative radiotherapy. Sykes HF, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):641–7

Metaphylactic effect of mitomycin C with and without hyaluronidase after transurethral resection of bladder cancer: randomized trial. Maier U, et al. **J Urol** 1989 Mar; 141(3):529–30

Effect of methotrexate on relapse after bone-marrow transplantation for acute lymphoblastic leukaemia. International Bone Marrow Transplant Registry. **Lancet** 1989 Mar 11;1(8637):535–7

Adjuvant tamoxifen in early breast cancer: occurrence of new primary cancers. Fornander T, et al. **Lancet** 1989 Jan 21;1(8630):117–20

Biologic complexity in mathematical modeling. Ellwein LB, et al. **Med Decis Making** 1989 Jan–Mar;9(1):38–9

Efficient scheduling of cystoscopies in monitoring for recurrent bladder cancer. Kent DL, et al. **Med Decis Making** 1989 Jan–Mar;9(1):26–37

Immunotherapy in acute myelogeneous leukemia (AML)--a tool for maintaining remission? Laursen ML. **Med Hypotheses** 1988 Aug;26(4):221–5 (24 ref.)

Epirubicin in treatment and recurrence prophylaxis of patients with superficial bladder cancer. Burk K, et al. **Prog Clin Biol Res** 1989;303:423–34

Chemoimmune prophylaxis of superficial bladder carcinoma with cyclophosphamide and BCG. Jaeger N, et al. **Prog Clin Biol Res** 1989;303:393–9

Postoperative adjuvant irradiation of rectal and rectosigmoid cancer. Kumar PP, et al. **Radiat Med** 1988 Nov–Dec; 6(6):289–96

Low dose postoperative adjuvant radiation therapy for rectal cancer is ineffective. Feigen M, et al. **Radiother Oncol** 1988 Nov;13(3):181–6

Perioperative radiotherapy in rectal carcinoma. Påhlman L, et al. **Scand J Gastroenterol Suppl** 1988;149:82–9 (48 ref.)

Drug availability is an issue for cancer patients, too [news] Marx JL. **Science** 1989 Jul 28;245(4916):346–7

Isolated limb perfusion for stage I melanoma of the extremity: a comparison of melphalan and dacarbazine (DTIC). Edwards MJ, et al. **South Med J** 1989 Aug;82(8):985–7, 989

Mechanisms of reduction of tumor recurrence with carbon dioxide laser in experimental mammary tumors. Lanzafame RJ, et al. **Surg Gynecol Obstet** 1988 Dec;167(6):493–6

Lack of intrahepatic recurrence of hepatocellular carcinoma by temporary portal venous embolization with starch microspheres. Matsumata T, et al. **Surgery** 1989 Feb;105(2 Pt 1):188–91

[The significance of blood transfusion in recurrence after colorectal cancer surgery] Nielsen J, et al. **Ugeskr Laeger** 1988 Dec 19;150(51):3182–5 (30 ref.) (Eng. Abstr.) **(Dan)**

[Perioperative blood transfusion and recurrence after surgery of colorectal cancer] Werner C, et al. **Ugeskr Laeger** 1988 Dec 19;150(51):3185–6 (Eng. Abstr.) **(Dan)**

[Prevention of recurrence in urinary bladder cancer--quo vadis? (editorial)] Kriegmair M. **Fortschr Med** 1989 Mar 15;107(8):14–5 **(Ger)**

[A surgical procedure aimed at reducing the risk factors of local recurrence] Tagliacozzo S. **Minerva Chir** 1989 Feb 28;44(4):731–5 (23 ref.) **(Ita)**

[Retinoids in recurrence of superficial bladder tumors] Tenaglia R, et al. **Minerva Urol Nefrol** 1988 Jul–Sep; 40(3):163–6 (Eng. Abstr.) **(Ita)**

[Intravesical ectopic recurrence of bladder tumors] Iwamuro S, et al. **Hinyokika Kiyo** 1988 Jun;34(6):967–74 (Eng. Abstr.) **(Jpn)**

[A randomized controlled study to compare bladder instillation therapy of anticancer agents and combination therapy with OK-432 injection in prevention of post-TUR recurrence of bladder cancer] Nishio S, et al. **Hinyokika Kiyo** 1988 Nov;34(11):2053–7 (Eng. Abstr.) **(Jpn)**

[Studies of progressive factors of stage A prostatic cancer] Suzuki T, et al. **Hinyokika Kiyo** 1989 Feb;35(2):259–63 (Eng. Abstr.) **(Jpn)**

[Improvement of treatment of carcinoma of the thoracic esophagus, especially in reference to the transition in postoperative combined therapy] Nishihira T, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1479–82 (Eng. Abstr.) **(Jpn)**

[Intravesical bacillus Calmette-Guerin (BCG) in the treatment of superficial bladder tumors. Ablative and prophylactic effects of intravesical BCG on papillary tumors] Hagiwara M, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Mar;79(3):521–6 (Eng. Abstr.) **(Jpn)**

[Possible immunologic prevention of recurrences and metastases of gastric cancer after its radical surgical treatment] Ageenko AI, et al. **Sov Med** 1988;(10):27–30 (Eng. Abstr.) **(Rus)**

[Tamoxifen in the treatment of cancer of the uterine body] Chulkova OV, et al. **Sov Med** 1989;(5):118 **(Rus)**

[Preliminary results of a multicenter study with mitomycin C in superficial bladder tumors (Ta, T1)] Allona Moncada A, et al. **Actas Urol Esp** 1988 Sep–Oct;12(5):424–9 (Eng. Abstr.) **(Spa)**

[Chemoprophylaxis of superficial tumors of the bladder with thiotepa: long-term results] Durán R, et al. **Actas Urol Esp** 1989 Jan–Feb;13(1):19–23 (Eng. Abstr.) **(Spa)**

[Directed chemotherapy in superficial carcinoma conditioned by the knowledge of relapse factors] Oliver F, et al. **Actas Urol Esp** 1988 Sep–Oct;12(5):419–23 (Eng. Abstr.) **(Spa)**

[Directed chemotherapy in superficial carcinoma of the bladder conditioned by the knowledge of recurrence factors] Oliver F, et al. **Actas Urol Esp** 1989 Jan–Feb; 13(1):41–3 (Eng. Abstr.) **(Spa)**

[Comparative study of adriamycin and thiotepa in the chemoprophylaxis of superficial bladder tumors] Salinas Sánchez AS, et al. **Actas Urol Esp** 1989 Mar–Apr; 13(2):99–102 (Eng. Abstr.) **(Spa)**

[Oral chemoprophylaxis with ftorafur against the recurrence of superficial bladder tumors] Lancina Martín JA, et al. **Arch Esp Urol** 1988 Jul–Aug;41(6):431–3 (Eng. Abstr.) **(Spa)**

PSYCHOLOGY

The relationship of uncertainty, control, commitment, and threat of recurrence to coping strategies used by women diagnosed with breast cancer. Hilton BA. **J Behav Med** 1989 Feb;12(1):39–54

Survival hazards analysis in first recurrent breast cancer patients: seven-year follow-up. Levy SM, et al. **Psychosom Med** 1988 Sep–Oct;50(5):520–8

[Assessment of the quality of life of patients with incurable head-neck tumors] Seifert E, et al. **Laryngorhinootologie** 1989 May;68(5):285–9 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Two cases of periosteal chondroma. Mora R, et al. **Acta Orthop Scand** 1988 Dec;59(6):723–7

The use of computed tomography in assessing oral cancer recurrence after flap reconstruction. Brown DH, et al. **Am J Otolaryngol** 1989 May–Jun;10(3):161–4

Stump neuroma masquerading as recurrent malignancy on chest roentgenogram. Donnal JF, et al. **Chest** 1989 Mar; 95(3):684–5

The value of CT in the diagnosis of recurrent carcinoma of the cervix. Heron CW, et al. **Clin Radiol** 1988 Sep; 39(5):496–501

CT appearance of primary pleural lymphoma. Malatskey A, et al. **Comput Med Imaging Graph** 1989 Mar–Apr; 13(2):165–7

Inability of computed tomography appearance of recurrent malignant astrocytoma to predict survival following reoperation. Wallner KE, et al. **J Clin Oncol** 1989 Oct; 7(10):1492–6

Recurrent esophageal carcinoma at thoracotomy incisions: diagnostic contributions of CT. Recht MP, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):58–60

Correlation between cranial computed tomographic scans at diagnosis in children with acute lymphoblastic leukaemia and central nervous system relapse. Jankovic M, et al. **Lancet** 1988 Nov 26;2(8622):1212–4

The mammographic features of the postlumpectomy, postirradiation breast. Harris KM, et al. **Radiographics** 1989 Mar;9(2):253–68

Suture calcification mimicking recurrence in the irradiated breast: a potential pitfall in mammographic evaluation. Davis SP, et al. **Radiology** 1989 Jul;172(1):247–8

Recurrent polyposis nasi. Documentation. Clement PA, et al. **Rhinology** 1989;Suppl 8:5–14

New bone formation in nasal polyps. de Vries N. **Rhinology** 1988 Sep;26(3):217–9

Benign solitary schwannoma of the retroperitoneum: CT features. Ghiatas AA, et al. **South Med J** 1989 Jun; 82(6):801–2 (10 ref.)

Intrathoracic granular cell myoblastoma. Robinson JM, et al. **South Med J** 1988 Nov;81(11):1453–7 (31 ref.)

[X-ray computed tomography in surveillance of colorectal cancers treated by radical surgery] Bruneton JN, et al. **J Radiol** 1988 Aug–Sep;69(8–9):501–7 (47 ref.) (Eng. Abstr.) **(Fre)**

[Cavernoma in the child. Apropos of a neonatal form with recurrence in childhood] Sabatier J, et al. **Neurochirurgie** 1989;35(2):109–10 **(Fre)**

[Computed tomographic features of cerebral malignant glioma following treatment and regrowth. Tumor response to radiochemotherapy] Sato I, et al. **Neurol Med Chir (Tokyo)** 1988 Nov;28(11):1065–72 (Eng. Abstr.) **(Jpn)**

[Computed tomographic features of cerebral malignant glioma following treatment and regrowth. Growth patterns of recurrent tumors] Sato I, et al. **Neurol Med Chir (Tokyo)** 1988 Nov;28(11):1073–80 (Eng. Abstr.) **(Jpn)**

[Computed tomographic appearance of the recurrent patterns of oropharyngeal and oral cavity squamous cell carcinomas] Sasaki F, et al. **Rinsho Hoshasen** 1988 Oct; 33(10):1071–7 (Eng. Abstr.) **(Jpn)**

[Advances in the diagnosis of early recurrences of maxillary neoplasms and various problems of the CT diagnosis of nasopharyngeal lesions] Mlosek K, et al. **Pol Przegl Radiol (Warszawa)** 1988 May–Jun;52(3):149–55 (Eng. Abstr.) **(Pol)**

RADIONUCLIDE IMAGING

Scar or recurrent rectal cancer. Positron emission tomography is more helpful for diagnosis than immunoscintigraphy. Schlag P, et al. **Arch Surg** 1989 Feb; 124(2):197–200

The value of immunoscintigraphy for the operative retreatment of colorectal cancer. Limitations of a new diagnostic method. Hölting T, et al. **Cancer** 1989 Aug 15; 64(4):830–3

Immunoscintigraphy with indium–111 labeled monoclonal antibodies: the importance of a good display method. Liehn JC, et al. **Clin Nucl Med** 1989 Mar;14(3):187–91

Histological correlation of 17 prospective immunoscintigraphies of recurrences of colorectal carcinomas using indium–111–labeled anti–cea and(or) 19–9 monoclonal antibodies. Chetanneau A, et al. **Eur J Nucl Med** 1989;15(6):302–6

A prospective study of the use of 111In–labelled monoclonal antibody against carcino–embryonic antigen in colorectal cancer and of some biological factors affecting its uptake. Granowska M, et al. **Int J Color Dis** 1989;4(2):97–108

Use of gallium citrate Ga 67 scintigraphy in recurrent Merkel cell tumor. Manfredi OL, et al. **N Y State J Med** 1989 Jun;89(6):356–8

99Tcm–labelled anti–CEA monoclonal antibody for tumour immunoscintigraphy: first clinical results. Baum RP, et al. **Nucl Med Commun** 1989 May;10(5):345–52

[Immunoscintigraphy of a colorectal tumor recurrence using a 99mTc–labeled anti–CEA–antibody] Rilinger N, et al. **Rontgenpraxis** 1989 Jul;42(7):245–7 **(Ger)**

RADIOTHERAPY

Fast neutron radiation for inoperable and recurrent salivary gland cancers. Koh WJ, et al. **Am J Clin Oncol** 1989 Aug; 12(4):316–9 (30 ref.)

Reirradiation of recurrent tumors in the head and neck. Pomp J, et al. **Am J Clin Oncol** 1988 Oct;11(5):543–9

Re–irradiation of astrocytoma of the brain. Rostom AY, et al. **Br J Radiol** 1989 Feb;62(734):173–4

Treatment of persistent and recurrent nasopharyngeal carcinoma by brachytherapy. Sham JS, et al. **Br J Radiol** 1989 Apr;62(736):355–61

Recurrent bronchial carcinoid tumor. Bernstein C, et al. **Chest** 1989 Mar;95(3):693–4

Treatment of locoregional recurrence of carcinoma of the cervix by radiotherapy after primary surgery. Jobsen JJ, et al. **Gynecol Oncol** 1989 Jun;33(3):368–71

Radiation therapy in recurrent pleomorphic adenoma of the parotid. Dawson AK. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):819–21

Effect of dose rate on local control and complications in the reirradiation of head and neck tumors with interstitial iridium–192. Fontanesi J, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug;17(2):365–9

Results of radiotherapy in recurrent endometrial carcinoma: a retrospective analysis of 51 patients. Kuten A, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):29–34

The reverse hockey stick technique: postmastectomy radiation therapy for breast cancer patients with locally advanced tumor presentation or extensive loco–regional recurrence. Pezner RD, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):191–7

Combined intracavitary and external beam irradiation for superficial transitional cell carcinoma of the bladder: an alternative to cystectomy for patients with recurrence after intravesical chemotherapy. Russell KJ, et al. **J Urol** 1989 Jan;141(1):30–2

Displacement of small bowel from pelvic radiation field. Cole H. **Lancet** 1988 Dec 10;2(8624):1341–2

Microwave hyperthermia radiosensitized iridium–192 for recurrent brain malignancy. Borok TL, et al. **Med Dosim** 1988 Mar;13(1):29–36

Intraoperative cobalt–60 treatment of glioblastoma multiforme. Kumar PP, et al. **Radiat Med** 1988 Sep–Oct; 6(5):219–28

Intraoperative radiotherapy for recurrent and/or residual colorectal cancer. Calvo FA, et al. **Radiother Oncol** 1989 Jun;15(2):133–40

Combined neutron–photon–therapy of locally recurrent rectosigmoidal tumors. Engenhart R, et al. **Strahlenther Onkol** 1989 Apr;165(4):327–9

Intraoperative radiation therapy for biliary tract carcinoma: results of a 5–year experience. Busse PM, et al. **Surgery** 1989 Jun;105(6):724–33

[Radiotherapy using photons and neutrons in recurrences of colorectal tumors] Kimmig B, et al. **Rontgenblatter** 1989 Jan;42(1):47–50 (Eng. Abstr.) **(Ger)**

[Radiation sensitivity studies of inoperable and recurrent rectal carcinomas] Rhomberg W, et al. **Strahlenther Onkol** 1989 Jan;165(1):28–33 (Eng. Abstr.) **(Ger)**

[Carcinomatous neuropathy in recurrent rectal carcinoma. The results of radiotherapy and the role of CT] Gaeta M, et al. **Radiol Med (Torino)** 1989 Jul–Aug;78(1–2):89–93 (Eng. Abstr.) **(Ita)**

[Clinical results of thermoradiotherapy of locally advanced and recurrent breast cancers—comparison of results with radiotherapy alone] Masunaga S, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Mar 25; 49(3):304–13 (Eng. Abstr.) **(Jpn)**

SECRETION

Recurrent pancreatoblastoma with inappropriate adrenocorticotrophic hormone secretion. Passmore SJ, et al. **Arch Dis Child** 1988 Dec;63(12):1494–6

[Metastatic neuroblastoma with secondary hypersecretion of vasoactive intestinal peptide] Brunet J, et al. **Pediatrie** 1988; 43(5):415–7 (Eng. Abstr.) **(Fre)**

SURGERY

Papillary thyroid cancer with unusually aggressive behaviour. Case report. Di Saverio G, et al. **Acta Chir Scand** 1989;155(1):57–8

Treatment and recurrences in 135 pituitary adenomas. Vlahovitch B, et al. **Acta Neurochir Suppl (Wien)** 1988; 42:120–3

Operative treatment of recurrent cancer of the uterine cervix after radiotherapy. Ibsen TB, et al. **Acta Obstet Gynecol Scand** 1988;67(5):389–93

Surgical techniques of the parotid tumor. Unno T. **Acta Otolaryngol Suppl (Stockh)** 1988;458:139–43

Signet–ring squamous cell carcinoma. Cramer SF, et al. **Am J Clin Pathol** 1989 Apr;91(4):488–91

Desmoid tumors of the head and neck. Fasching MC, et al. **Am J Surg** 1988 Oct;156(4):327–31

The role of surgery in advanced carcinoma of the breast. Bennett RC, et al. **Ann Acad Med Singapore** 1988 Jan; 17(1):29–35

CEA directed second–look surgery for colon and rectal cancer. Minton J, et al. **Ann Chir Gynaecol** 1989;78(1):32–7 (33 ref.)

Necrotizing sialometaplasia masquerading as residual cancer of the lip. Granick MS, et al. **Ann Plast Surg** 1988 Aug; 21(2):152–4

Patterns of relapse in 1001 consecutive patients with melanoma nodal metastases. Calabro A, et al. **Arch Surg** 1989 Sep;124(9):1051–5

Local recurrent mammary carcinoma failing multimodality therapy. A solution. McCormack PM, et al. **Arch Surg** 1989 Feb;124(2):158–61

Surgical treatment of recurrent colorectal cancer. Five–year follow–up. Mäkelä J, et al. **Arch Surg** 1989 Sep; 124(9):1029–32

Intra–abdominal recurrence of colorectal cancer detected by radioimmunoguided surgery (RIGS system). Sardi A, et al. **Arch Surg** 1989 Jan;124(1):55–9

Adult periorbital fibromatosis. Smoot CN, et al. **Br J Ophthalmol** 1989 May;73(5):373–5

Management of screen detected ductal carcinoma in situ of the female breast. Carpenter R, et al. **Br J Surg** 1989 Jun; 76(6):564–7

Salvage surgery for advanced local recurrence of breast cancer. Flook D, et al. **Br J Surg** 1989 May;76(5):512–4

Enucleated parotid tumours. Maynard JD. **Br J Surg** 1988 Aug;75(8):764–6

Tubulovillous neoplasms of the duodenum [letter] Muir IM, et al. **Br J Surg** 1988 Aug;75(8):829

Omental transposition in the treatment of locally advanced and recurrent breast cancer. Williams RJ, et al. **Br J Surg** 1989 Jun;76(6):559–63

Flow cytometric analysis of nuclear DNA content in esophageal cancer. Aneuploidy as an index for highly malignant potential. Kaketani K, et al. **Cancer** 1989 Aug 15;64(4):887–91

Surgical management of recurrent cervical cancer. Ng HT, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Apr;41(4):251–4

Chondroma of the cervical spine. Palaoglu S, et al. **Clin Neurol Neurosurg** 1988;90(3):253–5

Recurrent squamous–cell carcinoma arising in pilonidal sinus tract—multiple flap reconstructions. Report of a case. Fasching MC, et al. **Dis Colon Rectum** 1989 Feb; 32(2):153–8

The place of pelvic exenteration in surgical management of advanced and recurrent pelvic tumors. D'Addato F, et al. **Eur J Gynaecol Oncol** 1988;9(5):420–3

Secondary cytoreductive surgery for recurrent epithelial ovarian cancer. Morris M, et al. **Gynecol Oncol** 1989 Sep; 34(3):334–8

Recurrent squamous cell carcinoma of the lower lip. Fazekas–May M, et al. **Head Neck** 1989 Mar–Apr; 11(2):188–90

Squamous cell carcinoma of the head and neck treated with radiotherapy: does planned neck dissection reduce the change for successful surgical management of subsequent local recurrence? Mendenhall WM, et al. **Head Neck Surg** 1988 May–Jun;10(5):302–4

Local recurrence after breast–conserving surgery and radiotherapy. Kurtz JM, et al. **Helv Chir Acta** 1989 Apr; 55(6):837–42

Alveolar soft part sarcoma of the head and neck. A disease of children and young adults. Simmons WB, et al. **Int J Pediatr Otorhinolaryngol** 1989 May;17(2):139–53

Aggressive osteoblastoma. A case previously reported as a recurrent osteoid osteoma. Morton KS, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):428–31

Neoplasms of the conchal bowl: treatment with Mohs micrographic surgery. Clark DP, et al. **J Dermatol Surg Oncol** 1988 Nov;14(11):1223–8 (30 ref.)

Mohs surgery is the treatment of choice for recurrent (previously treated) basal cell carcinoma. Rowe DE, et al. **J Dermatol Surg Oncol** 1989 Apr;15(4):424–31

Nonvascularized fibular autograft to treat recurrent giant cell tumor of the distal radius. Van Demark RE Jr, et al. **J Hand Surg [Am]** 1988 Sep;13(5):671–5

Surgical salvage for recurrent "early" glottic cancers. Maipang T, et al. **J Surg Oncol** 1989 Jan;40(1):32–3

Reconstruction of sigmoid vagina and conduit in total pelvic exenteration for recurrent cervical carcinoma. Shiromizu K, et al. **Jpn J Clin Oncol** 1989 Jun;19(2):170–2

Chest wall resection and reconstruction for locoregionally advanced or recurrent breast cancer. Izuo M, et al. **Jpn J Surg** 1988 Nov;18(6):687–93

Surgical management of recurrent nasopharyngeal carcinoma after radiation failure at the primary site. Fee WE Jr, et al. **Laryngoscope** 1988 Nov;98(11):1220–6

Epidermoid tumor of unusual expansion at the skull base. Malorny M, et al. **Neurosurg Rev** 1987;10(4):299–303

Treatment of recurrent gliomas with 1,3–bis(2–chloroethyl)–1–nitrosourea and alpha–difluoromethylornithine. Prados M, et al. **Neurosurgery** 1989 Jun;24(6):806–9

Clinical and histopathologic factors predicting recurrence and survival after pelvic exenteration for cancer of the cervix. Shingleton HM, et al. **Obstet Gynecol** 1989 Jun; 73(6):1027–34

Locating cut medial canaliculi by direct injection of sodium hyaluronate into the lacrimal sac. Seiff SR, et al. **Ophthalmic Surg** 1989 Mar;20(3):176–8

Radical resection of the shoulder girdle for a malignant tumor: four case reports. Di XY, et al. **Orthopedics** 1989 Jul;12(7):1017–22

Tracheostomal reconstruction with the latissimus dorsi myocutaneous flap. Granick MS, et al. **Otolaryngol Head Neck Surg** 1988 Oct;99(4):427–9

Salvage prostatectomy. Pontes JE. **Prog Clin Biol Res** 1989; 303:307–13

Recurrence of nasal polyps after surgical treatment. Jäntti-Alanko S, et al. **Rhinology** 1989;Suppl 8:59–64
Treatment of nasal polyps—medication or surgery and which technique. Tos M, et al. **Rhinology** 1989;Suppl 8:45–9
Microsurgical treatment of recurrent nasal polyposis. Wigand ME, et al. **Rhinology** 1989;Suppl 8:25–9
Hydraulic bedscale lift for retracting and holding large lesions. Morris DM, et al. **South Med J** 1989 Jun; 82(6):796–7
Local control of rectal cancer with the Nd-YAG laser. Barr H, et al. **Surg Endosc** 1988;2(1):44–6
Second look operation in managing carcinoma of the pancreas and periampullary region. Hashimi H, et al. **Surg Gynecol Obstet** 1989 Mar;168(3):224–6
Repeat hepatectomy for recurrent malignant tumors of the liver. Lange JF, et al. **Surg Gynecol Obstet** 1989 Aug; 169(2):119–26 (38 ref.)
Translumbar amputation for cancer of the bladder [letter] Mackenzie AR. **Surgery** 1989 Jun;105(6):811
Diathermy resection and radioactive gold grains for palliation of obstruction due to recurrence of bronchial carcinoma after external irradiation. Ledingham SJ, et al. **Thorax** 1989 Jan;44(1):48–51
Human fibroblast interferon adjuvant to CO2 laser in the treatment of recurrent juvenile laryngeal papillomatosis: experience with 7 cases. Chiesa F, et al. **Tumori** 1989 Jun 30;75(3):259–62
[Salvage surgery for cervical residual and recurrent lesions of nasopharyngeal carcinoma after radiotherapy] Ma DB. **Chung Hua Chung Liu Tsa Chih** 1988 Jul;10(4):296–8 (Eng. Abstr.) **(Chi)**
[Management of recurrent acoustic neuromas] Zhou LF. **Chung Hua Wai Ko Tsa Chih** 1988 Aug;26(8):491–3, 511 (Eng. Abstr.) **(Chi)**
[The surgical treatment of recurrent breast carcinoma of the axilla (letter)] Welvaart K. **Ned Tijdschr Geneeskd** 1989 Jan 21;133(3):130–1 **(Dut)**
[Second primary cancers of the bronchi treated surgically (recurrence excluded). Results of a national survey (1987)] Levasseur P, et al. **Ann Chir** 1989;43(2):130–2 (Eng. Abstr.) **(Fre)**
[Surgical treatment of recurrences of colorectal cancers (amputations excluded)] Houry S. **Ann Gastroenterol Hepatol (Paris)** 1989 Jun–Sep; 25(4):155–7 **(Fre)**
[Is conservative treatment legitimate in recurrent liposarcoma of the limbs?] Fourrier P, et al. **Chirurgie** 1988;114(4):344–6 (Eng. Abstr.) **(Fre)**
[Problems and results of reinterventions on the adrenal gland] Menzel J, et al. **Acta Med Austriaca** 1988;15(4):112–5 (Eng. Abstr.) **(Ger)**
[Locoregional recurrence following rectum resection and rectum excision] Häring R, et al. **Chirurg** 1988 Oct; 59(10):634–8 (15 ref.) **(Ger)**
[Urachus cancer—a rare malignant form of urachus abnormality] Laqua D, et al. **Chirurg** 1989 May; 60(5):368–70 **(Ger)**
[Long-term experiences with histologic control of the incision margin (3-D histology)] Breuninger H, et al. **Hautarzt** 1989 Jan;40(1):14–8 (Eng. Abstr.) **(Ger)**
[Schwannoma and neurofibroma of the neck] Decurtins C, et al. **HNO** 1988 Nov;36(11):437–44 (Eng. Abstr.) **(Ger)**
[The lateral forehead flap in the management of defects of the exterior aspect of the nose] Rauchfuss A. **Laryngol Rhinol Otol (Stuttg)** 1988 Nov;67(11):590–2 (Eng. Abstr.) **(Ger)**
[Malignant fibrous histiocytoma of the lung] Ditzen W, et al. **Med Klin** 1989 Jun 15;84(6):314–8 (38 ref.) **(Ger)**
[Urethral tumor recurrence following radical cystoprostatectomy—an indication for primary cystoprostato-urethrectomy?] Gökcebay E, et al. **Urologe [A]** 1989 Jul;28(4):199–203 (Eng. Abstr.) **(Ger)**
[Local recurrence after colorectal cancer] Fritsch A, et al. **Wien Med Wochenschr** 1988 Jul 15;138(13):313–6 (Eng. Abstr.) **(Ger)**
[What does after care in colorectal cancer accomplish? A prospective study over an 8-year period] Schiessel R, et al. **Wien Med Wochenschr** 1988 Jun 30;138(11–12):263–6 (Eng. Abstr.) **(Ger)**
[Giant cell tumor of bone] Wuisman P, et al. **Z Orthop** 1989 Jan–Feb;127(1):89–97 (Eng. Abstr.) **(Ger)**
[Cystadenoma of the liver and bile ducts with ovarian stroma] Jakschik J, et al. **Zentralbl Chir** 1989;114(1):45–8 **(Ger)**
[Anastomotic recurrence following colorectal cancer] Lange V, et al. **Zentralbl Chir** 1988;113(22):1445–52 (Eng. Abstr.) **(Ger)**
[Controversies in the after-care of colon cancer] Mentges B. **Zentralbl Chir** 1988;113(17):1087–92 (Eng. Abstr.) **(Ger)**
[The therapeutic value of second-look laparotomy in advanced ovarian carcinoma] Schneider J, et al. **Zentralbl Gynakol** 1988;110(22):1443–8 (Eng. Abstr.) **(Ger)**
[Salvage surgery after unsuccessful radiotherapy of cancer of the larynx] Spriano G, et al. **Acta Otorhinolaryngol Ital** 1989 Mar–Apr;9(2):161–8 (Eng. Abstr.) **(Ita)**
[Surgical treatment of a plurirecurrent case of Masson hemangioendothelioma] Busanelli T, et al. **Chir Organi Mov** 1988 Jul–Sep;73(3):269–72 (Eng. Abstr.) **(Ita)**
[Long-term results of surgical therapy of prolactin-secreting hypophysis macroadenomas] Candrino R, et al. **Medicina (Firenze)** 1988 Oct–Dec;8(4):434–6 (Eng. Abstr.) **(Ita)**
[Pelviperineal recurrence after abdominoperineal amputation of the rectum in cancer] Guernelli N, et al. **Minerva Chir** 1989 Feb 28;44(4):723–5 (6 ref.) **(Ita)**
[Case report of a second resection of rectal leiomyosarcoma due to recurrence after 10 years] Tachibana S, et al. **Gan No Rinsho** 1989 Mar;35(4):528–32 (16 ref.) (Eng. Abstr.) **(Jpn)**
[Gastric remnant cancer—physical and laboratory examination and results of treatment] Ishibiki K, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–2):1299–302 (Eng. Abstr.) **(Jpn)**
[Significance of total hysterectomy in uterine cervical cancer of local recurrence in the cervix after radiotherapy] Nakayama K, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Oct 20;23(10):2611–7 (Eng. Abstr.) **(Jpn)**
[Reoperations in adenomas of the bronchus] Biriukov IuV, et al. **Khirurgiia (Mosk)** 1989 May;(5):3–7 (Eng. Abstr.) **(Rus)**
[Microsurgical autograft of the omentum majus for closing a defect in the integument of the skull] Shilov BL, et al. **Khirurgiia (Mosk)** 1988 Aug;(8):132–3 **(Rus)**
[Osteogenic sarcoma of the breast] Shirin DF, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):134–5 **(Rus)**
[Long-term recurrent course of basalioma with metastasis to the lung] Ryndin VD, et al. **Klin Med (Mosk)** 1988 Dec; 66(12):101–3 **(Rus)**
[Recurrent carcinoma of the gallbladder. Report of a case treated by extensive right hepatectomy] Roesch F, et al. **Rev Invest Clin** 1967 Jul–Sep;19(3):285–90 (Eng. Abstr.) **(Spa)**
[Microscopically controlled surgery of complicated skin cancer] Stenquist B, et al. **Lakartidningen** 1988 Oct 19; 85(42):3471–3 (Eng. Abstr.) **(Swe)**

THERAPY

Complete remission of recurrent glioblastoma multiforme following local infusions of lymphokine activated killer cells. Case report. Naganuma H, et al. **Acta Neurochir (Wien)** 1989;99(3–4):157–60
Interstitial thermoradiotherapy for recurrent head and neck cancer. Petrovich Z, et al. **Am J Otolaryngol** 1989 Jul–Aug; 10(4):257–60
Hyperthermia with radiotherapy. Tan BC, et al. **Ann Acad Med Singapore** 1988 Oct;17(4):603–6
Clinical hyperthermia, alone or with radiation therapy: results of a preliminary study on recurrences of cancers. Gabriele P, et al. **Arch Geschwulstforsch** 1989;59(3):177–81
Clinical trial with surgery and intraperitoneal hyperthermic perfusion for peritoneal recurrence of gastrointestinal cancer. Fujimoto S, et al. **Cancer** 1989 Jul 1;64(1):154–60
Transcatheter arterial embolization therapy in cases of recurrent and advanced gynecologic cancer. Harima Y, et al. **Cancer** 1989 May 15;63(10):2077–81
Hyperthermia and radiation therapy in the treatment of recurrent Merkel cell tumors. Knox SJ, et al. **Cancer** 1988 Oct 15;62(8):1479–86 (33 ref.)
Immunoprophylaxis with Calmette-Guérin bacillus in recurrent superficial bladder tumors. Llopis B, et al. **Eur Urol** 1989;16(1):28–30
Conservative treatment of uveal melanoma: local recurrence after proton beam therapy. Munzenrider JE, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):493–8
Low dose reirradiation in combination with hyperthermia: a palliative treatment for patients with breast cancer recurring in previously irradiated areas. van der Zee J, et al. **Int J Radiat Oncol Biol Phys** 1988 Dec;15(6):1407–13
Local superficial hyperthermia in combination with low-dose radiation therapy for palliation of locally recurrent breast carcinoma. Dragovic J, et al. **J Clin Oncol** 1989 Jan; 7(1):30–5
Relapse of acute leukemia after marrow transplantation: natural history and results of subsequent therapy [published erratum appears in J Clin Oncol 1989 Apr;7(4):545] Mortimer J, et al. **J Clin Oncol** 1989 Jan;7(1):50–7
Juvenile laryngeal papillomatosis and epidermoid carcinoma. Chaput M, et al. **J Pediatr** 1989 Feb;114(2):269–72
Hyperthermia improves local tumour control in locally advanced breast cancer. Wiedemann G, et al. **Klin Wochenschr** 1988 Oct 17;66(20):1034–8
Modulation of immunity in cancer patients by prostaglandin antagonists. Braun DP, et al. **Prog Clin Biol Res** 1989; 288:439–48
Interferon-gamma in the treatment of superficial and recurrent bladder carcinoma. Phase one study. Fo.tana G, et al. **Prog Clin Biol Res** 1989;303:479–80
Recurrent tumors of the head and neck, pelvis, and chest wall: treatment with hyperthermia and brachytherapy. Rafla S, et al. **Radiology** 1989 Sep;172(3):845–50
Isolated local-regional recurrence following mastectomy for adenocarcinoma of the breast treated with radiation therapy alone or combined with surgery and/or chemotherapy. Mendenhall NP, et al. **Radiother Oncol** 1988 Jul;12(3):177–85
Results of hyperthermia, alone or combined with irradiation, in chest wall recurrences of breast cancer. Sannazzari GL, et al. **Tumori** 1989 Jun 30;75(3):284–8
[Postoperative interferon hydrogel treatment. A method for the successful therapy of chronic persistent giant condylomas in an immunologically deficient patient with Hodgkin's disease] Gross G, et al. **Hautarzt** 1988 Oct; 39(10):684–7 (Eng. Abstr.) **(Ger)**
[Hyperthermo-radiotherapy of recurrences of rectal cancer] Goldobenko GV, et al. **Radiobiol Radiother (Berl)** 1988; 29(4):463–7 (Eng. Abstr.) **(Ger)**
[Value of sonographically controlled ascites puncture in patients with advanced ovarian cancers] Giers H, et al. **Z Arztl Fortbild (Jena)** 1989;83(9):459–61 **(Ger)**
[Clinical and therapeutic considerations on a case of hemangiopericytoma of the cheek] Gabriele P, et al. **Minerva Stomatol** 1989 Jan;38(1):27–9 (Eng. Abstr.) **(Ita)**
[A case of recurrent hepatocellular carcinoma successfully treated by arterial chemoembolization in combination with local hyperthermia] Kawano K, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2957–60 (Eng. Abstr.) **(Jpn)**
[Intravesical bacillus Calmette-Guerin in the treatment of recurrent superficial bladder tumors] Nakano M, et al. **Hinyokika Kiyo** 1988 Jun;34(6):983–6 (Eng. Abstr.) **(Jpn)**
[Intravesical bacillus Calmette-Guerin instillation therapy of recurrent superficial bladder carcinomas resistant to intravesical anti-cancer chemotherapy] Takeuchi S, et al. **Hinyokika Kiyo** 1989 Apr;35(4):577–81 (Eng. Abstr.) **(Jpn)**
[Transcatheter arterial embolization in cases of recurrent and/or advanced gynecologic cancer] Harima Y. **Nippon Gan Chiryo Gakkai Shi** 1988 Apr 20;23(4):879–88 (Eng. Abstr.) **(Jpn)**
[Combined chemoradio (CVPR) therapy in the treatment of inoperable and recurrent esophageal cancer] Saito T, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jun 20;23(6):1283–9 (Eng. Abstr.) **(Jpn)**
[Postoperative therapy of recurrent esophageal squamous cell carcinoma] Takagi I, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1483–6 (Eng. Abstr.) **(Jpn)**
[An individualized approach to the treatment of recurrences of cancer of the stomach] Shchepotin IB, et al. **Klin Khir** 1989;(5):17–9 (Eng. Abstr.) **(Rus)**
[The treatment of relapses of non-Hodgkin's lymphomas] Kindzel'skii LP, et al. **Vrach Delo** 1989 Jan;(1):56–8 (Eng. Abstr.) **(Rus)**

URINE

Difficulties in evaluating urinary specimens after local mitomycin therapy of bladder cancer. Koshikawa T, et al. **Diagn Cytopathol** 1989;5(2):117–21
The predictive value of repeated urine cell culture in soft agar for recurrences of transitional cell carcinoma. Kirkels WJ, et al. **J Urol** 1989 Aug;142(2):422–4

VETERINARY

Reirradiation of tumors in cats and dogs. Turrel JM, et al. **J Am Vet Med Assoc** 1988 Aug 15;193(4):465–9
Response to radiation therapy of recurrent lymphangioma in a dog. Turrel JM, et al. **J Am Vet Med Assoc** 1988 Dec 1;193(11):1432–4

NEOPLASM REGRESSION, SPONTANEOUS

Congenital leukemia: persistent spontaneous regression in a patient with an acquired abnormal karyotype. Sansone R, et al. **Acta Haematol (Basel)** 1989;81(1):48–50 (8 ref.)
Spontaneous resolution of a cystic neck mass in a fetus with normal karyotype. Distell BM, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):380–2
Acute monoblastic leukemia with osteosclerosis and extensive myelofibrosis. Janin A, et al. **Am J Pediatr Hematol Oncol** 1988 Winter;10(4):319–22
Spontaneous regression of congenital epulis of the newborn. Jenkins HR, et al. **Arch Dis Child** 1989 Jan;64(1):145–7
A case of infantile digital fibromatosis showing spontaneous regression. Ishii N, et al. **Br J Dermatol** 1989 Jul; 121(1):129–33 (18 ref.)
Unexplained spontaneous regression and alpha-interferon as treatment for metastatic renal carcinoma. Oliver RT, et al. **Br J Urol** 1989 Feb;63(2):128–31
Spontaneous regression of subcutaneous and pulmonary metastases from renal carcinoma. Thomas PJ, et al. **Br J Urol** 1989 Jan;63(1):102–3
Spontaneous regression of squamous cell lung carcinoma with adrenal metastasis. Sperduto P, et al. **Chest** 1988 Oct; 94(4):887–9
Regression of flat warts and common warts. Tagami H, et al. **Clin Dermatol** 1985 Oct–Dec;3(4):170–8
Miraculous cures in gynaecology. Lammes FB. **Eur J Obstet Gynecol Reprod Biol** 1988 Nov;29(3):191–5
Spontaneous regression of a hepatocellular carcinoma—a case report. Suzuki M, et al. **Hepatogastroenterology** 1989 Jun;36(3):160–3
Epigenetic changes may contribute to the formation and spontaneous regression of retinoblastoma. Greger V, et al. **Hum Genet** 1989 Sep;83(2):155–8
Spontaneous complete remission in acute non-lymphoblastic leukemia. Rajni A, et al. **Indian J Cancer** 1988 Sep; 25(3):151–6
Regression of locally recurrent squamous cell carcinoma of the skin following excision of a metastasis: with review of the literature. Roseman JM. **J Surg Oncol** 1988 Nov; 39(3):213–4

Spontaneous regression of extramedullary plasmacytoma--a case report. Arunabh, et al. **Jpn J Surg** 1988 Jul;18(4):455–9
Spontaneous remission in hypoplastic acute leukemia. Kizaki M, et al. **Keio J Med** 1988 Sep;37(3):299–307
Malignant transformation of spontaneously regressed retinoblastoma, retinoma/retinocytoma variant. Eagle RC Jr, et al. **Ophthalmology** 1989 Sep;96(9):1389–95
Spontaneous resolution of a giant congenital melanocytic nevus. Hogan DJ, et al. **Pediatr Dermatol** 1988 Aug; 5(3):170–2
Congenital self-healing reticulohistiocytosis: report of a patient with a strikingly large tumor mass. Timpatanapong P, et al. **Pediatr Dermatol** 1989 Mar;6(1):28–32
Pigmentary regression in a giant nevocellular nevus: a case report and a review of the subject. Zack LD, et al. **Pediatr Dermatol** 1988 Aug;5(3):178–83 (42 ref.)
Spontaneous regression of choroidal melanoma over 8 years. Chong CA, et al. **Retina** 1989;9(2):136–8
Resolution of an apparent choroidal melanoma. Williams DF, et al. **Retina** 1989;9(2):131–5
Spontaneous regression of cerebral and pulmonary metastases in renal cell carcinoma. Omland H, et al. **Scand J Urol Nephrol** 1989;23(2):159–60
An extra-adrenal pheochromocytoma with spontaneous remission and recurrence: report of a case. Chang JT, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Dec;87(12):1224–8
Spontaneous regression of pulmonary metastases from renal cell carcinoma. Davis SD, et al. **Urology** 1989 Feb; 33(2):141–4
Spontaneous regression of bovine cutaneous leukosis. Okada K, et al. **Vet Pathol** 1989 Mar;26(2):136–43
Histopathological observations on regression of skin lymphosarcoma in five cows. Ishino S, et al. **Zentralbl Veterinarmed [A]** 1988 Sep;35(8):578–85
[Spontaneous regression of lung metastasis in renal cell carcinoma with expectoration of a part of the metastasis] Eissler M. **Med Klin** 1989 Feb 15;84(2):118–9 **(Ger)**
[Spontaneous regression of lung metastasis of renal cell carcinoma: a case report] Yoshino S, et al. **Hinyokika Kiyo** 1988 Dec;34(12):2167–9 (Eng. Abstr.) **(Jpn)**
[Spontaneous regression of intracranial malignant lymphoma. Case report] Kojo N, et al. **Neurol Med Chir (Tokyo)** 1988 May;28(5):498–503 (34 ref.) (Eng. Abstr.) **(Jpn)**
[Spontaneous regression of a meningioma in Meckel's cave. Case report] Matsumoto M, et al. **Neurol Med Chir (Tokyo)** 1988 Sep;28(9):925–9 (Eng. Abstr.) **(Jpn)**
[Spontaneous transient remission in adult acute myeloid leukemia] Tsukada T, et al. **Rinsho Ketsueki** 1989 Feb; 30(2):227–31 (21 ref.) (Eng. Abstr.) **(Jpn)**
[Clinico-morphologic manifestations of the regression of a primary focus of malignant melanoma of the skin] Naleskina LA, et al. **Klin Khir** 1989;(5):24–7 (Eng. Abstr.) **(Rus)**
[Hemangioma of the larynx in children] Shuster MA, et al. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):28–31 (Eng. Abstr.) **(Rus)**
[Spontaneous regression of pulmonary metastases in renal adenocarcinoma and a second neoplasm (adenocarcinoma of the lung) (letter)] Orbuch SJ, et al. **Medicina (B Aires)** 1985;45(1):89–90 **(Spa)**

NEOPLASM REMISSION, SPONTANEOUS see **NEOPLASM REGRESSION, SPONTANEOUS**

NEOPLASM SEEDING

Recurrent hyperparathyroidism due to peroperative seeding of neoplastic or hyperplastic parathyroid tissue. Case report. Akerström G, et al. **Acta Chir Scand** 1988 Sep; 154(9):549–52
Iatrogenic cutaneous implantation metastasis from exfoliated rectal adenocarcinoma cells. Case report. Bisgaard C, et al. **Acta Chir Scand** 1989 Feb;155(2):137–8
Gliomatosis peritonei associated with a ventriculoperitoneal shunt. Lovell MA, et al. **Am J Clin Pathol** 1989 Apr; 91(4):485–7
Implantation metastasis as a cause of local recurrence of colorectal carcinoma. Long RT, et al. **Am J Surg** 1989 Feb;157(2):194–201
Is this scrub necessary? [editorial] Morgenstern L. **Am J Surg** 1988 Nov;156(5):335
Viable intraluminal tumour cells and local/regional tumour growth in experimental colon cancer. O'Dwyer PJ, et al. **Ann R Coll Surg Engl** 1989 Jan;71(1):54–6
Tumor seeding from percutaneous biliary catheters. Chapman WC, et al. **Ann Surg** 1989 Jun;209(6):708–13; discussion 713–5 (41 ref.)
Hazards of transthoracic needle biopsy of the lung. Lillington GA. **Ann Thorac Surg** 1989 Aug;48(2):163–4
Chest wall implantation of lung cancer after thin-needle aspiration biopsy. Seyfer AE, et al. **Ann Thorac Surg** 1989 Aug;48(2):284–6
Implantation of colon cancer cells onto renal pelvic mucosa. A case report. Shiraishi T, et al. **APMIS** 1989 Feb; 97(2):181–4
Anastomotic suture materials and implantation metastasis: an experimental study [published erratum appears in Br J Surg 1989 Jun;76(6):655] McGregor JR, et al. **Br J Surg** 1989 Apr;76(4):331–4
Mediastinoscopy incision site metastasis. Implications for radiotherapeutic treatment. Rate WR, et al. **Cancer** 1989 Jan 1;63(1):68–9
Presumptive subcutaneous surgical transplantation of a urinary bladder transitional cell carcinoma in a dog. Anderson WI, et al. **Cornell Vet** 1989 Jul;79(3):263–6
Percutaneous transthoracic needle aspiration biopsy: a case report of implantation metastasis. Sacchini V, et al. **Eur J Surg Oncol** 1989 Apr;15(2):179–83
Adenocarcinoma cell invasion of an obturator artery aneurysm. Scott DJ, et al. **Eur J Surg Oncol** 1989 Feb; 15(1):83–4
Incidence and pattern of bladder tumor recurrence following combined suprapubic prostatectomy and excision of a bladder tumor. Golomb J, et al. **Eur Urol** 1989;16(2):86–8
Tumor recurrence in prostatic urethra following simultaneous resection of bladder tumor and prostate. Vicente J, et al. **Eur Urol** 1988;15(1–2):40–2
Dissemination of endometrial cells at laparoscopy and chromotubation--a preliminary report. Kulenthran A, et al. **Int J Fertil** 1989 Jul–Aug;34(4):256–8
Optimal coverage of peritoneal surface in whole abdominal radiation for ovarian neoplasms. LaRouere J, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):607–13
Recurrent esophageal carcinoma at thoracotomy incisions: diagnostic contributions of CT. Recht MP, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):58–60
Ruptured hepatocellular carcinoma evokes risk of implanted metastases. Sonoda T, et al. **J Surg Oncol** 1989 Jul; 41(3):183–6
The risk of distant metastases after transurethral resection of the prostate versus needle biopsy in patients with localized prostate cancer. Meacham RB, et al. **J Urol** 1989 Aug;142(2):320–5
Risk factors for perineal seeding of prostate cancer after needle biopsy. Moul JW, et al. **J Urol** 1989 Jul;142(1):86–8
Is fine-needle aspiration of tumours harmless? [letter] [see comments] Glaser KS, et al. **Lancet** 1989 Mar 18; 1(8638):620. **Comment in:** Lancet 1989 Jun 17;1(8651):1384–5
Fine-needle aspiration of tumours [letter; comment] Owen ER, et al. **Lancet** 1989 Jun 17;1(8651):1384–5. **Comment on:** Lancet 1989 Mar 18;1(8638):620
Breast tumor seeding along localization guide wire tracks [letter] Fajardo LL. **Radiology** 1988 Nov;169(2):580–1
High energy shock waves do not affect either primary tumor growth or metastasis of prostate carcinoma, R3327-MatLyLu. Geldof AA, et al. **Urol Res** 1989; 17(1):9–12
Late appearance of perineal implantation of prostatic carcinoma after perineal needle biopsy. Greenstein A, et al. **Urology** 1989 Jan;33(1):59–60
Delayed implantation of prostatic cancer after perineal needle biopsy [letter] Haddad FS. **Urology** 1989 Apr;33(4):351
Implantation of prostatic cancer after perineal needle biopsy [letter] Zablow AI. **Urology** 1989 May;33(5):449
[Late intramedullary metastases of a medulloblastoma with primary extramedullary seeded metastases--magnetic resonance tomographic detection using gadolinium-DTPA] Glathe S, et al. **Rontgenblatt** 1988 Dec;41(12):484–7 (Eng. Abstr.) **(Ger)**
[Metastases caused by fine needle puncture?] Weiss H. **Ultraschall Med** 1989 Jun;10(3):147–51 (47 ref.) (Eng. Abstr.) **(Ger)**
[Cytodiagnosis using fine needle aspiration in otorhinolaryngologic pathology] Marzetti F. **Acta Otorhinolaryngol Ital** 1986;6 Suppl 12:4–8 (44 ref.) **(Ita)**
[Intraoperative chemotherapy against peritoneal dissemination of gastric cancer with intraperitoneal activated carbon particles adsorbing mitomycin C] Hagiwara A, et al. **Gan To Kagaku Ryoho** 1989 Feb; 16(2):187–92 (Eng. Abstr.) **(Jpn)**
[Extended treatment for gastric cancer patients with peritoneal seeding] Fujimoto S, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1524–7 (Eng. Abstr.) **(Jpn)**
[Carcinoma peritoneal dissemination and milky spots of the greater omentum: preliminary report] Shimotsuma M, et al. **Nippon Geka Gakkai Zasshi** 1988 Dec;89(12):2032 **(Jpn)**
[Intraoperative prevention of metastases during enucleation of the eye with malignant tumor of the choroid] Krwawicz L. **Klin Oczna** 1988 Oct;90(10):357–8 (Eng. Abstr.) **(Pol)**

NEOPLASM STAGING

Trephine needle bone marrow biopsy in the initial staging of Hodgkin disease: sensitivity and specificity of the Ann Arbor staging procedure criteria. Ellis ME, et al. **Am J Hematol** 1989 Mar;30(3):115–20
Cancer staging and survival rates: an analysis. Spencer RP. **Anticancer Res** 1988 Jul–Aug;8(4):685–7 (10 ref.)
Staging renal carcinoma. What is sufficient? Benson MA, et al. **Arch Surg** 1989 Jan;124(1):71–3
How useful is pre-operative computerized tomography scanning in staging rectal cancer? Chapuis P, et al. **Aust N Z J Surg** 1989 Jan;59(1):31–4
Is grade or stage of primary importance in determining the outcome after radical prostatectomy for disease clinically confined to the prostate? Paulson DF, et al. **Br J Urol** 1989 Mar;63(3):301–5
Pretreatment staging of cancer. Beahrs OH. **Cancer** 1989 Jul 1;64(1 Suppl):275–8; discussion 282–4
Urology and the TNM classification [letter] Hall RR, et al. **Lancet** 1988 Nov 12;2(8620):1145–6
Comparison of the (A, B, C) staging and the Rai's staging from a large prospective series (935 patients). French Cooperative Group on Chronic Lymphocytic Leukemia. **Nouv Rev Fr Hematol** 1988;30(5–6):363–7
Cystosonography: a diagnostic adjunct for the staging of advanced gynecologic malignancies. Koelbl H, et al. **Obstet Gynecol** 1988 Dec;72(6):951–4
Value of computed tomography in the staging of testicular tumors. Strohmeyer T, et al. **Urol Int** 1988;43(4):198–200
[Anatomopathologic staging of colorectal cancer] Bogomoletz WV. **Gastroenterol Clin Biol** 1989 Jan; 13(1):38–44 (65 ref.) **(Fre)**
[The accuracy of computerized tomography in the staging of bladder carcinoma] Goebel N, et al. **Helv Chir Acta** 1988 Jul;55(3):329–32 (Eng. Abstr.) **(Ger)**
[Staging of gastric carcinoma] de Manzoni G, et al. **Minerva Chir** 1989 Apr 15;44(7):1061–6 (Eng. Abstr.) **(Ita)**
[Unification of the TNM system] Okayasu T, et al. **Nippon Rinsho** 1989 Mar;47(3):700–4 (5 ref.) **(Jpn)**

METHODS

Analysis of proliferative grade using anti-PCNA/cyclin monoclonal antibodies in fixed, embedded tissues. Comparison with flow cytometric analysis. Garcia RL, et al. **Am J Pathol** 1989 Apr;134(4):733–9
A comparison of methods to measure the percentage hepatic replacement with colorectal metastases. Hunt TM, et al. **Ann R Coll Surg Engl** 1989 Jan;71(1):11–3
Staging of renal cancer: CT versus angiography. Ruoppolo M, et al. **Arch Ital Urol Nefrol Androl** 1987 Dec;59(2):79–83
Box diagram to express tumour extent: basis of a new staging system in carcinoma of the cervix? Ashby M. **Australas Radiol** 1989 Feb;33(1):23–5
Primary orbital lymphoma: staging by computed tomographic scanning. Mills P, et al. **Br J Radiol** 1989 Mar; 62(735):287–9
The value of intravesical echography combined with double-surface coil magnetic resonance imaging in staging bladder cancer. Hendrikx AJ, et al. **Br J Urol** 1989 May; 63(5):469–75
Management of localised prostatic carcinoma. Inglis JA, et al. **Br J Urol** 1989 Jul;64(1):66–8
Efficacy of computed tomography of the thorax and upper abdomen and whole-body gallium scintigraphy for staging of lung cancer. MacMahon H, et al. **Cancer** 1989 Oct 1; 64(7):1404–8
Staging of carcinoma of the uterine cervix: MRI-surgical correlation. Greco A, et al. **Clin Radiol** 1989 Jul;40(4):401–5
Bone scintigraphy--an update. Merrick MV. **Clin Radiol** 1989 May;40(3):231–2 (13 ref.)
Follow-up study of 232 patients with stage Ia1 and 411 patients with stage Ia2 squamous cell carcinoma of the cervix (microinvasive carcinoma). Kolstad P. **Gynecol Oncol** 1989 Jun;33(3):265–72
Substaging of stage III Hodgkin's disease. Farah R, et al. **Hematol Oncol Clin North Am** 1989 Jun;3(2):277–86 (20 ref.)
The staging of Hodgkin's disease. Moormeier JA, et al. **Hematol Oncol Clin North Am** 1989 Jun;3(2):237–51 (41 ref.)
Moving towards a uniform staging for human immunodeficiency virus-associated Kaposi's sarcoma [editorial] Volberding PA. **J Clin Oncol** 1989 Sep; 7(9):1184–5
A surgical perspective on the current staging in neuroblastoma--the International Neuroblastoma Staging System proposal. Smith EI, et al. **J Pediatr Surg** 1989 Apr; 24(4):386–90
Carcinoma of the nasopharynx--comparison of the UICC and Ho clinical staging systems. Roth SL, et al. **Klin Wochenschr** 1989 Jan 20;67(2):74–85
An attempt to use a common staging system in rhabdomyosarcoma: a report of an international workshop initiated by the International Society of Pediatric Oncology (SIOP). Rodary C, et al. **Med Pediatr Oncol** 1989; 17(3):210–5
Staging techniques and biopsy of bone tumors. Heare TC, et al. **Orthop Clin North Am** 1989 Jul;20(3):273–85 (29 ref.)
Comparison between ^{99m}Tc-DTPA renal scan and excretory urography in the clinical staging of invasive cancer of the uterine cervix. Rodari A, et al. **Rays** 1988 May–Aug;13(2):33–8
Axillary metastasis in breast cancer: when, how, and why? Hartveit F. **Semin Surg Oncol** 1989;5(2):126–36 (55 ref.)
[Proposal on T staging of maxillary sinus cancer] Ye M, et al. **Chung Hua Chung Liu Tsa Chih** 1988 Mar;10(2):129–31 (Eng. Abstr.) **(Chi)**
[Current aspects of a new staging classification of colorectal cancer and its clinical consequences] Hermanek P. **Chirurg** 1989 Jan;60(1):1–7 **(Ger)**
[Current aspects of a new staging classification of pancreatic cancer and its clinical consequences] Rothmund M, et al. **Chirurg** 1989 Jan;60(1):24–8 **(Ger)**
[The new TNM classification and its effect on surgical treatment of stomach cancer] Schlag P, et al. **Chirurg** 1989 Jan;60(1):8–15 **(Ger)**
[Current aspects of a new staging classification of bronchial cancer and its clinical consequences] Vogt-Moykopf I, et

al. **Chirurg** 1989 Jan;60(1):16–23 (Ger)
[The value of computed tomography for the pretherapeutic staging of esophageal cancer] Rotte KH, et al. **Radiol Diagn (Berl)** 1989;30(2):111–7 (Eng. Abstr.) (Ger)
[The clinical value of computed tomography in the pretherapeutic T-staging of orofacial tumors] Lenz M, et al. **ROFO** 1989 Aug;151(2):138–44 (Eng. Abstr.) (Ger)
[CT staging of laryngeal carcinoma] Traxler M, et al. **ROFO** 1988 Nov;149(5):473–5 (Eng. Abstr.) (Ger)
[Cost–benefit analysis of thoracic computerized tomography as exemplified in the N-staging of bronchial carcinoma] Keller R, et al. **Schweiz Med Wochenschr** 1988 Sep 24; 118(38):1366–70 (Eng. Abstr.) (Ger)
[TNM classification in staging of tumors] Badellino F, et al. **Minerva Chir** 1989 Jan 31;44(1–2):71–3 (9 ref.) (Ita)
[Informatics criteria in staging of cancer of the rectum] Del Grande G, et al. **Minerva Chir** 1989 Feb 28;44(4):571–4 (Ita)
[New approaches to the staging of solid neoplasms] Galassi G, et al. **Minerva Chir** 1989 Jan 31;44(1–2):79–81 (Ita)
[Magnetic resonance imaging in staging prostatic cancer; correlation with pathological stage] Fujino A, et al. **Kaku Igaku** 1988 Dec;25(12):1417–23 (Eng. Abstr.) (Jpn)
[Accuracy of computed tomography in the staging of renal cell carcinoma] Masuda F, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Feb;80(2):192–6 (Eng. Abstr.) (Jpn)
[Mediastinoscopy by a pre-scalenic route as an alternative for staging of neoplasms of the upper lobe of the left lung] Bongiovani HL, et al. **Rev Paul Med** 1988 Jul–Aug; 106(4):235–7 (Eng. Abstr.) (Por)

STANDARDS

Value of the new TNM staging system for lung cancer. Mountain CF. **Chest** 1989 Jul;96(1 Suppl):47S–49S
Kaposi's sarcoma in the acquired immune deficiency syndrome: a proposal for uniform evaluation, response, and staging criteria. AIDS Clinical Trials Group Oncology Committee. Krown SE, et al. **J Clin Oncol** 1989 Sep; 7(9):1201–7

NEOPLASM TRANSPLANTATION

Experimental transplantation gliomas in the adult cat brain. 1. Experimental model and neuropathology. Wechsler W, et al. **Acta Neurochir (Wien)** 1989;98(1–2):77–89
Immunogenicity of cyclophosphamide-treated tumor cells. Kawalec M, et al. **Arch Immunol Ther Exp (Warsz)** 1988; 36(3):345–50
Transplantable mouse 16/C mammary adenocarcinoma as a model in experimental cancer therapy. I. Kinetics of growth and spread. Rak J, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(3):325–34
Progressive growth of a human pleural mesothelioma xenografted to athymic rats and mice. Lindén CJ, et al. **Br J Cancer** 1988 Nov;58(5):614–8
Transplantation of B16/C3 melanoma cells into the brains of rats and mice. Freed WJ, et al. **Brain Res** 1989 Apr 24;485(2):349–62
Is the proportion of hypoxic cells in a solid tumour dependent on the host (mouse or rat)? Guichard M, et al. **Bull Cancer (Paris)** 1989;76(4):367–71
Augmentation of release of cytotoxin from murine bone marrow and peritoneal macrophages by tumor transplantation. Yamazaki M, et al. **Cancer Res** 1989 Jan 15;49(2):352–6
Quantitative studies on the transplantability of murine and human tumors into the brain and subcutaneous tissues of NCr/Sed nude mice. Zietman AL, et al. **Cancer Res** 1988 Nov 15;48(22):6510–6
Comparison of S-phase fractions measured by flow cytometry and autoradiography in human transplant tumors. Feichter G, et al. **Cytometry** 1988 Nov;9(6):605–11
Development of neomycin-resistant WEHI-3B D+ murine cells as an in vivo model of acute nonlymphocytic leukemia. Gamba-Vitalo C, et al. **Exp Hematol** 1989 Feb; 17(2):130–7
Effect of intracerebrally injected Corynebacterium parvum on implanted brain tumor in mice. Kennedy JD, et al. **J Neurooncol** 1989 May;7(1):89–101
Phenotypic analysis of four human medulloblastoma cell lines and transplantable xenografts. He XM, et al. **J Neuropathol Exp Neurol** 1989 Jan;48(1):48–68
Regional monoamine and metabolite levels in a feline brain tumor model. Bayens-Simmonds J, et al. **Mol Chem Neuropathol** 1989 Apr;10(2):63–75
Immunohistochemistry of human malignant astrocytoma cells xenografted to rat brain: apolipoprotein E. Bernstein JJ, et al. **Neurosurgery** 1989 Apr;24(4):541–6
Suppression of splenic natural killer cell activity in rats with brain tumors. Imaya H, et al. **Neurosurgery** 1988 Jul; 23(1):23–6
Morphologic characteristics of a transplantable tumor derived from a spontaneous malignant fibrous histiocytoma in the rat. Yamate J, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):587–96
Host endocrine responses during tumor growth. Besedovsky H, et al. **Prog Clin Biol Res** 1989;288:203–13
Failure to induce neoplasia in nude mice by injection of disrupted cells from continuous cell lines. Wood GW, et al. **Res Vet Sci** 1989 Mar;46(2):286–7
The vascular system of xenotransplanted tumors—scanning electron and light microscopic studies. Konerding MA, et al. **Scanning Microsc** 1989 Mar;3(1):327–35; discussion 335–6
Nude mice in oncology 1987. **Strahlenther Onkol** 1989 Jul; 165(7):481–569
Nude mice in oncology 1987: workshop guide-lines for establishment and characterisation of human xenografted tumor lines. Bamberg M, et al. **Strahlenther Onkol** 1989 Jul;165(7):481–2
Establishment and characterization of human tumours in nu/nu-mice. Budach V, et al. **Strahlenther Onkol** 1989 Jul; 165(7):500–1
Combined in vitro/in vivo test procedure with human tumor xenografts for anticancer drug development. Fiebig HH, et al. **Strahlenther Onkol** 1989 Jul;165(7):522–4
The influence of endogenous and exogenous factors on the course and the results of experimental work with human tumor tissue on athymic nude rodents. Fortmeyer HP. **Strahlenther Onkol** 1989 Jul;165(7):483–4
Establishment of a human gastrinoma in nude mice. Upp JR Jr, et al. **Surgery** 1988 Dec;104(6):1037–45
Transmission of cancer with donor organs. Penn I. **Transplant Proc** 1988 Oct;20(5):739–40
Impairment of allograft tumor immunity by isotype-like suppression of antigen-specific T cell factors. Van Loveren H, et al. **Transplantation** 1989 Mar;47(3):504–12
[Differentiation, growth, stability, and experimental treatment of human tumors after transplantation to athymic nude mice] Klöppel G, et al. **Verh Dtsch Ges Pathol** 1988; 72:188–203 (54 ref.) (Eng. Abstr.) (Ger)
[Effect of cyclosporin on tumor xenotransplantation under the renal capsule in mice] Viadro MM, et al. **Antibiot Khimioter** 1989 Apr;34(4):280–2 (Eng. Abstr.) (Rus)

METHODS

Heterotransplantation of malignant human gliomas in neonatal rats. Tamargo RJ, et al. **J Neurosurg** 1988 Dec; 69(6):928–33

NEOPLASMS

see related
DNA, NEOPLASM
ONCOGENIC VIRUSES
PRECANCEROUS CONDITIONS
RNA, NEOPLASM

Papers presented at ECCO–4. 4th European Conference on Clinical Oncology and Cancer Nursing. Madrid, Nover 1–4, 1987. **Acta Oncol** 1988;27(5):465–589
Abstracts of the Second International Conference of Anticancer Research. October 11–15, 1988, Saronis, Greece. **Anticancer Res** 1988;8(5B):1043–152
Abstracts of the Second International Conference of Anticancer Research. October 11–15, 1988. Saronis, Greece. **Anticancer Res** 1988 Nov–Dec;8(6):1435–40
Cancer prevention, treatment and research in Denmark. Kieler J. **Arch Geschwulstforsch** 1988;58(6):465–8
Elevation of glycosylated hemoglobin in a severe crisis situation—cancer in a close relative. Theorell T, et al. **Behav Med** 1988 Fall;14(3):125–8
Future of children with cancer. Malpas JS. **Biomed Pharmacother** 1988;42(4):237–41
Annual spring meeting of the Osterreichische Gesellschaft für Hämatologie und Onkologie. Vienna, March 17, 1989. Abstracts. **Blut** 1989 Aug;59(2):189–98
BACUP—the first two years: evaluation of a national cancer information service [published erratum appears in BMJ 1988 Oct 15;297(6654):970] Slevin ML, et al. **BMJ** 1988 Sep 10;297(6649):669–72
Twenty-ninth annual meeting of the British Association for Cancer Research in conjunction with the third annual meeting of the Association of Cancer Physicians. March 21–24, 1988, Norwich, U.K. Abstracts [published erratum appears in Br J Cancer 1988 Nov;58(5):689] **Br J Cancer** 1988 Aug;58(2):223–77
Third meeting of the British Oncological Association. York, 3–5 July, 1988. Abstracts. **Br J Cancer** 1988 Oct; 58(4):518–48
3rd International Symposium on Immunobiology in Clinical Oncology. Symposium on Cancer in Patients with AIDS. 7th International Symposium on Prevention and Detection of Cancer. Program and abstracts. Nice, Cote D'Azur, April 9–15, 1989. **Cancer Detect Prev** 1989;14(1):1–190
Biostatistics in basic cancer research. Litwin S. **Cancer Invest** 1988;6(5):533–40
The Delaware State Tumor Registry. Topham A. **Del Med J** 1988 Dec;60(12):707
Abstracts: first annual meeting of the Danish Society for Cancer Research. 15 April 1988. **Eur J Cancer Clin Oncol** 1988 Sep;24(9):1541–55
Some fields of progress within haematology and oncology. In honour of Nis Iversen Nissen on the occasion of his sixtieth birthday. **Eur J Haematol Suppl** 1988;48:1–95
Intensive chemotherapy or chemoradiotherapy with autologous marrow support as treatment for patients with solid tumors. Appelbaum FR. **Hematol Oncol Clin North Am** 1988 Sep;2(3):345–52 (20 ref.)
An assessment of reliability and completeness of Bombay Cancer Registry data (1963 – 1985). Yeole BB, et al. **Indian J Cancer** 1988 Sep;25(3):177–90
Childhood cancer: the significant issues. Venkatesh A. **Indian Pediatr** 1988 Jul;25(7):605–6
A brief guide to the practice of radioimmunoscintigraphy and radioimmunotherapy in cancer. Report of the European Association of Nuclear Medicine Task Group on the clinical utility of labelled antibodies. Britton KE, et al. **Int J Biol Markers** 1989 Apr–Jun;4(2):106–18
In vivo diagnosis and therapy of human tumors with monoclonal antibodies. Part I. Proceedings of a symposium. Naples, Italy, 16–19 March 1988. **Int J Rad Appl Instrum [B]** 1989;16(2):103–185
Scientific proceedings. Fifth symposium of the Section of Experimental Cancer Research (SEK) of the German Cancer Society. Heidelberg, 10–12 April, 1989. Abstracts. **J Cancer Res Clin Oncol** 1989;115 Suppl:S1–70
18th annual UCLA symposium. Abstracts: Growth regulation of cancer–II. **J Cell Biochem Suppl** 1989; 13B:73–159
Keeping up with the cancer literature—PDQ ACCESS. Perry DJ, et al. **J Clin Oncol** 1988 Oct;6(10):1649–52
Gonadal neoplasms in hard shell clams Mercenaria spp., from the Indian River, Florida: occurrence, prevalence, and histopathology. Hesselman DM, et al. **J Invertebr Pathol** 1988 Nov;52(3):436–46
Pediatric oncology update. Carter DL, et al. **J Med Assoc Ga** 1989 Jan;78(1):51–2
Cancer and AIDS groups push for changes in drug approval process [news] Anderson LF. **J Natl Cancer Inst** 1989 Jun 7;81(11):829–31
Cancer-related legislation. II. The 101st Congress. Knipmeyer MC, et al. **J Natl Cancer Inst** 1989 Sep 6; 81(17):1286–9
Cancer sweepstakes [letter] Lough J. **J Natl Cancer Inst** 1989 Mar 15;81(6):459
GM awards: five scientists cited for cancer research [news] Mahaney FX Jr. **J Natl Cancer Inst** 1989 Jun 21; 81(12):890–2
Cancer charities agree to halt sweepstakes mailings—refunds offered [news] Ruddon K. **J Natl Cancer Inst** 1989 Sep 6;81(17):1274–6
Black Americans' perceptions of cancer. A study utilizing the Health Belief Model. Price JH, et al. **J Natl Med Assoc** 1988 Dec;80(12):1297–304
Application of MR spectroscopy to the study of tumor biology. Boddie AW Jr, et al. **J Surg Res** 1989 Jan; 46(1):90–7 (63 ref.)
Note on my stay in the Research Institute of the National Cancer Center; now and 15 years ago [letter] Shall S. **Jpn J Cancer Res** 1988 Sep;79(9):1062–4
Some propositions to the Japanese Journal of Cancer Research [letter] Tokudome S. **Jpn J Cancer Res** 1989 Jun; 80(6):597–8
Peptide regulatory factors and malignancy. Steel CM. **Lancet** 1989 Jul 1;2(8653):30–4 (41 ref.)
Health-care interpreters and cancer [letter] **Med J Aust** 1989 Jul 3;151(1):56
International Society of Pediatric Oncology. SIOP XXI meeting. Prague, Czechoslovakia, September 18–22, 1989. Abstracts. **Med Pediatr Oncol** 1989;17(4):275–360
Spatial light distribution in tumors: phantom measurements. Lenz P. **Med Phys** 1989 May–Jun;16(3):326–32
UK cancer fund finds new ways of making money [news] McGourty C. **Nature** 1989 Apr 27;338(6218):695
Control of pain in cancer patients. Belgrade MJ. **Postgrad Med** 1989 Mar;85(4):319–23, 326–9
The pain of cancer. Control in the hospice setting [published erratum appears in Postgrad Med 1988 Nov 15;84(7):26] Wener SW. **Postgrad Med** 1988 Oct;84(5):79–83, 86, 89–92 (23 ref.)
The advanced cancer patient—a clinical profile. Brescia F, et al. **Prog Clin Biol Res** 1988;278:137–46
Cancer in the elderly. **Semin Oncol** 1989 Feb;16(1):1–88
The biology of cancer, Part 2. **Semin Oncol** 1989 Jun; 16(3):169–262
The new biology of cancer: future clinical applications. Yarbro JW. **Semin Oncol** 1989 Jun;16(3):254–9 (47 ref.)
Management of minimal residual malignancy in man. **Suppl J Med Oncol Tumor Pharmacother** 1988;1:1–102
The Northern Ireland Cancer Registry. Gavin A, et al. **Ulster Med J** 1988 Oct;57(2):129–36
[8th Forum on Cancerology. Paris, 6–7 June 1988. Abstracts] **Bull Cancer (Paris)** 1988;75(7):585–738 (Fre)
[9th Forum on Cancerology. Paris, 6–7 June 1989. Abstracts] **Bull Cancer (Paris)** 1989;76(5):441–565 (Fre)
[Quality of life of cancer patients and the education of nursing personnel] Hoerni B. **Bull Cancer (Paris)** 1988; 75(10):957–61 (Fre)
[Evaluation of the transfer of Algerian children with cancer to the Léon-Bérard center (1984–1987)] Meziane F, et al. **Pediatrie** 1988;43(8):683–90 (Eng. Abstr.) (Fre)
[Results in Pediatric Oncology 12. Proceedings of the Society of Pediatric Oncology and the German Working Group on Leukemia Research and Treatment in Childhood] **Klin Padiatr** 1988 May–Jun;200(3):155–282 (Ger)
[Results in Pediatric Oncology 13. Proceedings of the Society of Pediatric Oncology and the German Working Group on Leukemia Research and Treatment in Childhood] **Klin Padiatr** 1989 Jul–Aug;201(4):217–354 (Ger)
[Predictive tests for improving the prognosis and therapy of human tumors] Streffer C. **Radiobiol Radiother (Berl)** 1988;29(4):377–86 (18 ref.) (Eng. Abstr.) (Ger)

[Radiologic diagnosis and therapy in oncology. Symposium on the occasion of the retirement of Prof. Karl zum Winkel. Heidelberg, 26 March 1988. Proceedings] **Rontgenblatter** 1989 Jan;42(1):1–59 **(Ger)**

[The knowledge of cancer patients about their disease] Sack H, et al. **Strahlenther Onkol** 1988 Oct;164(10):581–92 (Eng. Abstr.) **(Ger)**

[11th National Congress of the Italian Cancer Society. Rome, 20–23 November 1988. Abstracts] **Tumori** 1988 Aug 31;74 Suppl 4:5–116 **(Ita)**

[6th National Congress of Experimental and Clinical Oncology. Rome, 20–23 November 1988. Abstracts] **Tumori** 1988 Aug 31;74 Suppl 4:1–340 **(Ita)**

[14th scientific meeting of the Italian Association of Medical Oncology. Rome, 20–23 November 1988. Abstracts] **Tumori** 1988 Aug 31;74 Suppl 4:117–318 **(Ita)**

[A manual of the diagnosis and treatment of cancer] **Gan No Rinsho** 1989 Jan;Spec No:1–755 **(Jpn)**

[Research on the development of common basic technologies for cancer research] Soga K. **Gan No Rinsho** 1989 Jan; 35(2):127–31 (Eng. Abstr.) **(Jpn)**

[Clinical application of cancer-associated carbohydrate antigens in the diagnosis and therapy of human cancers] Kannagi R, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):1157–66 (24 ref.) (Eng. Abstr.) **(Jpn)**

[Complaints from cancer patients. Complaints and ways of complaining] Melsom H, et al. **Tidsskr Nor Laegeforen** 1989 Jan 30;109(3):365–7 **(Nor)**

[Presentations and communications presented at the All-Union Symposium on "Cellular and Molecular Mechanisms of Carcinogenesis and Anti-carcinogenesis" (Leningrad, 18–20 October 1988)] **Tsitologiia** 1988 Sep; 30(9):1122–52 **(Rus)**

[2d Basque World Congress. Symposium on pediatric oncology. 9th annual meeting of the Section on Pediatric Oncology of the Spanish Association of Pediatrics. Bilbao, October 1987. Proceedings] **An Esp Pediatr** 1988 Oct;29 Suppl 34:1–171 **(Spa)**

ANALYSIS

Histochemical demonstration of lectin binding sites in neuroendocrine tumors. Höfler H, et al. **Acta Histochem Suppl (Jena)** 1988;36:273–6

Regulatory peptides as tumour markers. Theodorsson E. **Acta Oncol** 1989;28(3):319–24 (26 ref.)

Interleukin-6 immunoreactivity in human tumors. Tabibzadeh SS, et al. **Am J Pathol** 1989 Sep;135(3):427–33

Immunohistochemical evaluation of intermediate filament expression in canine and feline neoplasms. Moore AS, et al. **Am J Vet Res** 1989 Jan;50(1):88–92

Development of an assay for the estimation of N10-propargyl-5,8-dideazafolic acid polyglutamates in tumor cells. Sikora E, et al. **Anal Biochem** 1988 Aug 1; 172(2):344–55

Lectins in cancer cells. Lotan R, et al. **Ann N Y Acad Sci** 1988;551:385–96; discussion 396–8 (67 ref.)

Coexpression of cytokeratin and vimentin. McGuire LJ, et al. **Appl Pathol** 1989;7(2):73–84 (113 ref.)

DNA content in human cancer. Application in pathology and clinical medicine. Seckinger D, et al. **Arch Pathol Lab Med** 1989 Jun;113(6):619–26 (76 ref.)

Presence of dopamine D-2 receptors in human tumoral cell lines. Sokoloff P, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):575–82

Urinary gonadotrophin peptide--isolation and purification, and its immunohistochemical distribution in normal and neoplastic tissues. Kardana A, et al. **Br J Cancer** 1988 Sep; 58(3):281–6

Distribution of acid stable trypsin inhibitor immunoreactivity in normal and malignant human tissues. Yoshida E, et al. **Cancer** 1989 Aug 15;64(4):860–9

A yeast-derived ras-gene-related protein expressed in human tumor cells. I. Detection by polyclonal antibodies. Shalitin C, et al. **Cancer Invest** 1988;6(6):687–94

Discriminant analysis of trace element distribution in normal and malignant human tissues. Drake EN 2d, et al. **Cancer Res** 1989 Aug 1;49(15):4210–5

Expression of anionic glutathione-S-transferase and P-glycoprotein genes in human tissues and tumors. Moscow JA, et al. **Cancer Res** 1989 Mar 15;49(6):1422–8

Clinical applications of the bromodeoxyuridine/DNA assay. Waldman FM, et al. **Cytometry Suppl** 1988;3:65–72 (15 ref.)

Evidence of enhancement of the ras oncogene protein product (p21) in a spectrum of human tumors. De Biasi F, et al. **Int J Cancer** 1989 Mar 15;43(3):431–5

Parathyroid hormone-related protein: immunohistochemical localization in cancers and in normal skin. Danks JA, et al. **J Bone Miner Res** 1989 Apr;4(2):273–8

Frequency and partial characterization of adenylate cyclase-stimulating activity in tumors associated with humoral hypercalcemia of malignancy. Stewart AF, et al. **J Bone Miner Res** 1986 Jun;1(3):267–76

A tumor-associated fibronectin isoform generated by alternative splicing of messenger RNA precursors. Carnemolla B, et al. **J Cell Biol** 1989 Mar;108(3):1139–48

Quantitative determination of chromium and nickel in tumour and tumour-free human tissue. Raithel HJ, et al. **J Environ Pathol Toxicol Oncol** 1989 Mar-Apr;9(2):115–26

Evolutionary conservation in various mammalian species of the human proliferation-associated epitope recognized by the Ki-67 monoclonal antibody. Falini B, et al. **J Histochem Cytochem** 1989 Oct;37(10):1471–8

Chromogranin A and B messenger ribonucleic acids in pituitary and other normal and neoplastic human endocrine tissues. Lloyd RV, et al. **Lab Invest** 1989 Apr;60(4):548–56

Cellular RNA content, a feature correlated with cell kinetics and tumor prognosis. Darzynkiewicz Z. **Leukemia** 1988 Dec;2(12):777–87 (91 ref.)

The occurrence of pancreastatin in tumours of the diffuse neuroendocrine system. Bishop AE, et al. **Mol Cell Probes** 1988 Sep;2(3):225–35

Hormone-negative, chromogranin A-positive endocrine tumors. Sobol RE, et al. **N Engl J Med** 1989 Feb 16; 320(7):444–7

Comparative immunohistochemical reactivity of monoclonal and polyclonal antibodies to H-ras p21 in normal and neoplastic tissues of rodents and humans. Ward JM, et al. **Oncogene** 1989 Feb;4(2):203–13

Growth factors in human tumors. Krušlin B, et al. **Res Exp Med (Berl)** 1989;189(2):91–9

Increased level of soluble interleukin-2 receptor in advanced solid tumors: a preliminary study. Rovelli F, et al. **Tumori** 1988 Dec 31;74(6):633–7

[Immunoradiometric assay for tumor associated antigen CA-50] Chen ZZ. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Aug; 10(4):262–5 (Eng. Abstr.) **(Chi)**

[Molecular biology of keratins and their significance in the clinical diagnosis of tumors] Jensen PK. **Ugeskr Laeger** 1989 Mar 13;151(11):680–6 (Eng. Abstr.) **(Dan)**

[The value of DNA flow cytometry in solid tumors] Rodenburg CJ, et al. **Ned Tijdschr Geneeskd** 1989 Apr 22; 133(16):814–8 **(Dut)**

[Nucleolar organizers: value in pathologic anatomy and in clinical cytology (editorial)] Adnet JJ. **Ann Pathol** 1989; 9(1):3–6 **(Fre)**

[Plasma, renal and tumor determination of total platinum during predictive tests of chemosensitivity of human tumor implants in the renal capsule in syngeneic mice] Favre R, et al. **Pathol Biol (Paris)** 1988 Dec;36(10):1199–203 (Eng. Abstr.) **(Fre)**

[Specificity of CA 125 tumor marker. A study of 328 cases of internal medicine] Le Thi Huong Du, et al. **Presse Med** 1988 Dec 3;17(43):2287–91 (Eng. Abstr.) **(Fre)**

[X-ray fluorescent analytic determination of extracellular fluid in malignant tumors and adiposity] Berdov BA, et al. **Radiobiol Radiother (Berl)** 1988;29(4):475–80 (Eng. Abstr.) **(Ger)**

[Coexpression of cytokeratin, desmin, and neurofilaments in malignant tumors] Düe W, et al. **Verh Dtsch Ges Pathol** 1988;72:233–6 (Eng. Abstr.) **(Ger)**

[Technics in molecular biology in cancer research. Immunochemical analyses with antipeptide antibody] Fujiki Y, et al. **Gan To Kagaku Ryoho** 1989 May; 16(5):2121–6 **(Jpn)**

[Technics in molecular biology in cancer research. DNA blot . hybridization] Takada S, et al. **Gan To Kagaku Ryoho** 1989 Jan;16(1):143–8 **(Jpn)**

BLOOD

Proton nuclear magnetic resonance spectroscopy of plasma lipoproteins in malignancy. Nabholtz JM, et al. **Acta Oncol** 1988;27(5):479–82

Lucigenin-enhanced chemiluminescence in blood is increased in cancer. Trulson A, et al. **Am J Clin Pathol** 1989 Apr; 91(4):441–5

Relationship of serum antibiotic concentrations to nephrotoxicity in cancer patients receiving concurrent aminoglycoside and vancomycin therapy. Cimino MA, et al. **Am J Med** 1987 Dec;83(6):1091–7

Cisplatin binding to plasma proteins and hemoglobin in cancer patients. Mustonen R, et al. **Arch Toxicol Suppl** 1989; 13:262–4

Plasma cholesterol, coronary heart disease, and cancer [letter] **BMJ** 1989 May 20;298(6684):1380–2

Serum hyaluronic acid levels in cancer. Cooper EH, et al. **Br J Cancer** 1988 Nov;58(5):668–9

Clinical investigation on serum ceruloplasmin levels in tumors of the hematopoietic organs. Ohyabu H, et al. **Bull Osaka Med Sch** 1987 Jul;33(1):65–70

Serum lipid-bound sialic acid as a tumoral marker in minimal residual tumors. Musset M, et al. **Bull Soc Sci Med Grand Duche Luxemb** 1989 Mar-Apr; 126(1):17–20

Relationship between carotenoids and cancer. The Multiple Risk Factor Intervention Trial (MRFIT) Study. Connett JE, et al. **Cancer** 1989 Jul 1;64(1):126–34

Serum levels of tumor markers and presence of human antimouse antibodies: implications for diagnosis and treatment with radiolabeled monoclonal antibodies. Bouvier JF, et al. **Cancer Detect Prev** 1988;13(3–4):251–62

Characterization of two similar differential tumor markers based on phosphofructokinase activity arising from the influence of cancer patient serum. Nakamura K, et al. **Cancer Detect Prev** 1988;13(3–4):239–50

Decrease of serum buffering capacity associated with malignant neoplasms. Nakamura K, et al. **Cancer Detect Prev** 1988;13(3–4):175–87

Detection of a circulating tumor-associated antigen with a murine monoclonal antibody, LISA 101, selected by reversed indirect enzyme-linked immunosorbent assay. Kohno N, et al. **Cancer Res** 1989 Jun 15;49(12):3412–9

Altered protein binding of etoposide in patients with cancer. Stewart CF, et al. **Clin Pharmacol Ther** 1989 Jan; 45(1):49–55

Cancer plasma effects on skeletal muscle metabolism. Mitchell LA, et al. **Curr Surg** 1988 Nov-Dec;45(6):469–70

Copper distribution among serum proteins in paediatric liver disorders and malignancies. Barrow L, et al. **Eur J Clin Invest** 1988 Dec;18(6):555–60

Lymphocyte surface ferritin in malignant and inflammatory diseases. Steinhoff G, et al. **Haematologia (Budap)** 1988; 21(4):199–203

Determination of cisplatin in blood compartments of cancer patients. Mustonen R, et al. **IARC Sci Publ** 1988;(89):329–32

Fluctuations of plasma beta 2-microglobulin, soluble interleukin 2 receptor and interferon-gamma concentrations after adoptive immunotherapy with high-dose interleukin 2 and lymphokine-activated killer cells. Giannella G, et al. **Immunobiology** 1989 Feb; 178(4–5):305–15

Leucocytic variations in neoplastic disorders. Rani S, et al. **Indian J Cancer** 1988 Mar;25(1):16–21

Serum levels of melatonin in cancer patients and their relation to body sizes. Barni S, et al. **Int J Biol Markers** 1988 Jul-Sep;3(3):193–6

Interleukin-1 and tumor necrosis factor production by tumor-associated mononuclear leukocytes and peripheral mononuclear leukocytes in cancer patients. Economou JS, et al. **Int J Cancer** 1988 Nov 15;42(5):712–4

Elevated apolipoprotein(a) levels in cancer patients. Wright LC, et al. **Int J Cancer** 1989 Feb 15;43(2):241–4

Variations in alpha-2-HS glycoprotein level in neoplastic disease with and without involvement of bone. Barbieri D, et al. **Ital J Orthop Traumatol** 1987 Dec;13(4):535–9

Blood histamine and solid malignant tumors. Moriarty CM, et al. **J Cancer Res Clin Oncol** 1988;114(6):588–92

Induction of circulating tumor necrosis factor (TNF alpha) as the mechanism for the febrile response to interleukin-2 (IL-2) in cancer patients. Mier JW, et al. **J Clin Immunol** 1988 Nov;8(6):426–36

IL-6/IFN-beta-2 as a circulating hormone. Induction by cytokine administration in humans. Jablons DM, et al. **J Immunol** 1989 Mar 1;142(5):1542–7

Plasma sialic acid alterations in neoplastic diseases. Dwivedi C, et al. **J Med** 1987;18(5-6):323–32

A gas chromatographic mass spectrometric assay for the determination of aphidicolin in plasma of cancer patients. Rotondo S, et al. **J Pharm Sci** 1989 May;78(5):399–401

Extreme elevation of the erythrocyte sedimentation rate in patients admitted to a general medical ward in Harare, Zimbabwe. Stein CM, et al. **J Trop Med Hyg** 1989 Aug; 92(4):259–62

In vitro augmentation of natural killer activity of peripheral blood cells from cancer patients by a DNA fraction from Mycobacterium bovis BCG. Mashiba H, et al. **Jpn J Med Sci Biol** 1988 Oct-Dec;41(5–6):197–202

Lutein, cholesterol, and risk of cancer [letter] Thurnham DI. **Lancet** 1989 Aug 19;2(8660):441–2

1H NMR studies on human plasma lipids from newborn infants, healthy adults, and adults with tumors. Eskelinen S, et al. **Magn Reson Med** 1989 Jan;9(1):35–8

Alpha 1-antitrypsin (alpha 1-proteinase inhibitor) concentration in the patients with neoplastic disease. Bialek E, et al. **Mater Med Pol** 1988 Jul-Sep;20(3):180–3

Serum urate level and cancer. Lickl E, et al. **Med Hypotheses** 1989 Mar;28(3):193–5

Neoplastic characteristics of the DNA found in the plasma of cancer patients. Stroun M, et al. **Oncology** 1989; 46(5):318–22

Low serum cholesterol levels in neoplastic patients. Giardina MG, et al. **Panminerva Med** 1988 Jul-Sep;30(3):177–80

Plasma levels of slow release morphine in advanced cancer patients. Anzalone R, et al. **Pharmacol Res** 1989 Jan-Feb; 21(1):107–8

Determinants of serum alpha-tocopherol in Finnish adults. Knekt P, et al. **Prev Med** 1988 Nov;17(6):725–35

Platelet function abnormalities following plasma perfusion over protein A-silica in cancer patients. Ciavarella D, et al. **Prog Clin Biol Res** 1988;283:607–9

Coagulation disorders associated with neoplastic disease. Steingart RH. **Recent Results Cancer Res** 1988;108:37–43 (14 ref.)

Correlation between white blood cell count and neutrophil count after chemotherapy administration at a day hospital. Germa Lluch JR, et al. **Rev Esp Oncol** 1985;32(4):627–32

Fibrin formation and tumour growth. O'Meara RA. **Thromb Diath Haemorrh Suppl** 1968;28:137–42; discussion 143–68 (17 ref.)

Clotting activation and impairment of fibrinolysis in malignancy. Rocha E, et al. **Thromb Res** 1989 Jun 15; 54(6):699–707

Immunological and functional determination of the protease inhibitors, protein C and antithrombin III, in liver cirrhosis and in neoplasia. Zurborn KH, et al. **Thromb Res** 1988 Nov 15;52(4):325–36

Albumin and the unique pattern of inhibitors of cortisol catabolism by lymphocytes in serum of cancer patients. Klein A, et al. **Tumour Biol** 1989;10(3):149–52

Effect of ethanol extract of cancer patients' serum on the vulnerability of lymphocytes to cortisol. Klein A, et al. **Tumour Biol** 1988;9(5):233–40

[Anemia in malignant tumor diseases. V. The relation of

tumor-induced hypotransferrinemia and the degree of anemia] Aulbert E, et al. **Onkologie** 1989 Apr;12(2):81-9 (Eng. Abstr.) **(Ger)**

[Evaluation of T lymphocytes and lymphocyte subpopulations in patients with pleural effusion] D'Andrea A, et al. **Arch Monaldi Mal Torace** 1987 Nov-Dec; 42(6):555-61 (Eng. Abstr.) **(Ita)**

[Cancer and blood coagulation disorders] Koshiro M. **Gan No Rinsho** 1989 Jan;Spec No:695-703 **(Jpn)**

[Leukemoid reactions] Mitani K. **Gan No Rinsho** 1989 Jan; Spec No:672-9 **(Jpn)**

[Change of blood lentinan level in patients with advanced cancers] Yajima Y, et al. **Gan To Kagaku Ryoho** 1989 Aug; 16(8 Pt 1):2633-8 (Eng. Abstr.) **(Jpn)**

[OK 432-induced production of IFN-gamma in peripheral mononuclear cells from healthy subjects and patients with cancer] Matsumoto H, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Apr 20;24(4):751-8 (Eng. Abstr.) **(Jpn)**

[Changes in the plasma levels of plasminogen activator in various tumors] Soma M, et al. **Rinsho Ketsueki** 1988 Nov; 29(11):2024-8 (Eng. Abstr.) **(Jpn)**

[Disorders of blood coagulation and fibrinolysis in neoplasms] Ponahajba A. **Pneumonol Pol** 1988 Sep;56(9):393-7 **(Pol)**

[Erythrocyte sedimentation--its clinical usefulness (90th anniversary of Biernacki's reaction] Judkiewicz L, et al. **Pol Tyg Lek** 1988 Aug 22;43(34):1102-4 (29 ref.) **(Pol)**

[Elevated agglutinability of erythrocytes in cancer patients] Chernitskii EA, et al. **Eksp Onkol** 1988;10(5):35-7 (Eng. Abstr.) **(Rus)**

[Immunomodulators and hemopoietic system in malignant growth] Sanin AV, et al. **Eksp Onkol** 1988;10(5):8-15 (50 ref.) (Eng. Abstr.) **(Rus)**

[Blood serum galactosyltransferase in oncologic diseases] Mikhailov AD, et al. **Med Radiol (Mosk)** 1989 Mar; 34(3):31-4 (Eng. Abstr.) **(Rus)**

[Quantitative and qualitative composition of porphyrins in erythrocytes of cancer patients] Gurinovich IF, et al. **Vopr Med Khim** 1988 Sep-Oct;34(5):34-7 (Eng. Abstr.) **(Rus)**

[Relations between antioxidant activity and lipid state of blood as an indicator of the effect of tumor on the body] Kal'nova NIu. **Vopr Onkol** 1989;35(7):795-801 (Eng. Abstr.) **(Rus)**

[Spontaneous adhesion of blood leukocytes in cancer patients and healthy subjects] Zherbin EA, et al. **Vopr Onkol** 1988; 34(12):1443-8 (Eng. Abstr.) **(Rus)**

[Coagulation inhibitors in patients with neoplasms] Páramo JA, et al. **Med Clin (Barc)** 1989 Feb 11;92(5):164-6 (Eng. Abstr.) **(Spa)**

[Usefulness of sialic acid as a tumor marker] Feliú J, et al. **Rev Clin Esp** 1989 May;184(8):401-3 (Eng. Abstr.) **(Spa)**

BLOOD SUPPLY

Intratumour factors influencing the access of antibody to tumour cells. Cobb LM. **Cancer Immunol Immunother** 1989; 28(4):235-40 (72 ref.)

Biomechanical interactions of cancer cells with the microvasculature during metastasis. Weiss L, et al. **Cell Biophys** 1989 Apr;14(2):187-215 (111 ref.)

Transient finite element analysis of thermal methods used to estimate SAR and blood flow in homogeneously and nonhomogeneously perfused tumour models. Wong TZ, et al. **Int J Hyperthermia** 1988 Nov-Dec;4(6):571-92

[Angiogenesis in oncology] Cariou R, et al. **Presse Med** 1988 Nov 26;17(42):2219-21 **(Fre)**

[Neoplastic angiogenesis factors] Boratyński J, et al. **Postepy Hig Med Dosw** 1988 Jul-Aug;42(4):444-58 (76 ref.) (Eng. Abstr.) **(Pol)**

CHEMICALLY INDUCED

Carcinogenic drugs. Diggle GE. **Adverse Drug React Acute Poisoning Rev** 1988 Autumn; 7(3):147-52 (20 ref.)

Cancer and the adjudicative process: the interface of environmental protection and toxic tort law. Schwartzbauer EJ, et al. **Am J Law Med** 1988;14(1):1-67 (0 ref.)

Sport fish consumption advisories and projected cancer risks in the Great Lakes basin. Foran JA, et al. **Am J Public Health** 1989 Mar;79(3):322-5

Cadmium and cancer: the current position. Report of an international meeting in London, September 1988. Sullivan K, et al. **Ann Occup Hyg** 1988;32(4):557-60

Alcohol and carcinogenesis. Seitz HK, et al. **Annu Rev Nutr** 1988;8:99-119 (146 ref.)

Trends in carcinogenesis and experimental pathology. In honorem Professor Olav Hilmar Iversen 1923-1988. **APMIS Suppl** 1988;2:1-268

Atherogenicity and carcinogenicity of high-arsenic artesian well water. Multiple risk factors and related malignant neoplasms of blackfoot disease. Chen CJ, et al. **Arteriosclerosis** 1988 Sep-Oct;8(5):452-60

Cancer risk and occupational exposure to aflatoxins in Denmark. Olsen JH, et al. **Br J Cancer** 1988 Sep; 58(3):392-6

Hormone replacement therapy and cancer. Baber RJ, et al. **Br J Hosp Med** 1989 Feb;41(2):142, 144-6, 148-9 (79 ref.)

Risk of cancer from the use of tar bitumen in road works. Knecht U, et al. **Br J Ind Med** 1989 Jan;46(1):24-30

Mortality and incidence of cancer among oil exposed workers in a Norwegian cable manufacturing company. Part I. Exposure conditions 1920-79. Rønneberg A, et al. **Br J Ind Med** 1988 Sep;45(9):589-94

Studies and prospectives of the protein kinase c family for cellular regulation. Nishizuka Y. **Cancer** 1989 May 15; 63(10):1892-903

Steroid hormones and medications that alter cancer risks. Thomas DB. **Cancer** 1988 Oct 15;62(8 Suppl):1755-67 (71 ref.)

Genetic toxicology--an introduction. Sharma AK. **Cell Biol Toxicol** 1988 Dec;4(4):451-2

Formaldehyde. AMA Council on Scientific Affairs. **Conn Med** 1989 Apr;53(4):229-35 (44 ref.)

Aflatoxin exposure in human populations: measurements and relationship to cancer. Groopman JD, et al. **CRC Crit Rev Toxicol** 1988;19(2):113-45 (60 ref.)

Oncogene activation in spontaneous and chemically induced rodent tumors: implications for risk analysis. Reynolds SH, et al. **Environ Health Perspect** 1988 Jun;78:175-7

Cancer downwind from sour gas refineries: the perception and the reality of an epidemic. Schechter MT, et al. **Environ Health Perspect** 1989 Feb;79:283-90

Comparison of potency of human carcinogens: vinyl chloride, chloromethylmethyl ether and bis(chloromethyl)ether. Van Duuren BL. **Environ Res** 1989 Aug;49(2):143-51 (41 ref.)

Therapy-related malignancies: a review. Pedersen-Bjergaard J, et al. **Eur J Haematol Suppl** 1988;48:39-47 (56 ref.)

Phenoxy herbicides and cancer: insufficient epidemiologic evidence for a causal relationship. Bond GG, et al. **Fundam Appl Toxicol** 1989 Jan;12(1):172-88 (63 ref.)

Inhibition of some spontaneous tumors by 4-hexylresorcinol in F344/N rats and B6C3F1 mice. Chhabra RS, et al. **Fundam Appl Toxicol** 1988 Nov;11(4):685-90

Exact statistical tests for any carcinogenic effect in animal bioassays. Farrar DB, et al. **Fundam Appl Toxicol** 1988 Nov; 11(4):652-63

In vivo carcinogenesis assay of L-alpha-acetylmethadol.HCl in rodents. Rosenkrantz H, et al. **Fundam Appl Toxicol** 1988 Nov;11(4):626-39

In vivo carcinogenesis assay of DL-methadone.HCl in rodents. Rosenkrantz H, et al. **Fundam Appl Toxicol** 1988 Nov;11(4):640-51

Extrahepatic malignancy following long-term immunosuppressive therapy of severe hepatitis B surface antigen-negative chronic active hepatitis. Wang KK, et al. **Hepatology** 1989 Jul;10(1):39-43

Carcinogenicity of chemicals: the weight of evidence. Carter RL. **Hum Toxicol** 1988 Sep;7(5):411-8 (40 ref.)

Occupational exposures in petroleum refining; crude oil and major petroleum fuels. IARC Working Group on the Evaluation of Carcinogenic Risks to Humans. **IARC Monogr Eval Carcinog Risks Hum** 1989;45:1-322 (592 ref.)

Role of oncogenes in chemical carcinogenesis: extrapolation from rodents to humans. Anderson MW, et al. **IARC Sci Publ** 1988;(89):477-85 (46 ref.)

Epidemiological studies on ethylene oxide and cancer: an updating. Hogstedt LC. **IARC Sci Publ** 1988;(89):265-70

Estimation of the cancer risk of genotoxic chemicals by the rad-equivalence approach. Kolman A, et al. **IARC Sci Publ** 1988;(89):258-64

Prospective detection and assessment of genotoxic hazards: a critical appreciation of the contribution of L. Ehrenberg. Wright AS, et al. **IARC Sci Publ** 1988;(89):237-48 (45 ref.)

What are the major carcinogens in the etiology of human cancer? Environmental pollution, natural carcinogens, and the causes of human cancer: six errors. Ames BN. **Important Adv Oncol** 1989;:237-47 (66 ref.)

What are the major carcinogens in the etiology of human cancer? Industrial carcinogens. Perera FP, et al. **Important Adv Oncol** 1989;:249-65 (152 ref.)

Mortality and cancer morbidity in workers exposed to sulphur dioxide in a sulphuric acid plant. Englander V, et al. **Int Arch Occup Environ Health** 1988;61(3):157-62

Cancer risks due to occupational exposure to formaldehyde: results of a multi-site case-control study in Montreal. Gérin M, et al. **Int J Cancer** 1989 Jul 15;44(1):53-8

A cohort study on mortality of "Yusho" patients: a preliminary report. Kuratsune M, et al. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:61-6

Multidrug resistance during chemical carcinogenesis: a mechanism revealed? [editorial] Gottesman MM. **J Natl Cancer Inst** 1988 Nov 2;80(17):1352-3

Cancer and coal tar epoxy resins [letter] **J Occup Med** 1989 Jul;31(7):582-3

Update of mortality among chemical workers with potential exposure to the higher chlorinated dioxins. Bond GG, et al. **J Occup Med** 1989 Feb;31(2):121-3

Don't close the door: some observations on cancer cluster investigation [letter] Kipen H, et al. **J Occup Med** 1988 Aug;30(8):661-2

A case-control study of cancer among du pont employees with potential for exposure to dimethylformamide. Walrath J, et al. **J Occup Med** 1989 May;31(5):432-8

Metronidazole and cancer [letter] Friedman GD, et al. **JAMA** 1989 Feb 10;261(6):866

Cancer risks of oral contraception [editorial] **Lancet** 1989 Jan 7;1(8628):21-2

Plasma cholesterol, coronary heart disease, and cancer [letter] **Lancet** 1989 Sep 23;2(8665):736-7

Carcinogenicity of exposure to industrial chemicals. Misconceptions and realities. McMichael AJ. **Med Toxicol Adverse Drug Exp** 1988 Nov-Dec;3(6):425-9

Iron nutriture and risk of cancer. **Nutr Rev** 1989 Jun; 47(6):176-8 (11 ref.)

Correlation between carcinogenic potency of chemicals in animals and humans. Allen BC, et al. **Risk Anal** 1988 Dec; 8(4):531-44

Additive and multiplicative models and multistage carcinogenesis theory. Brown CC, et al. **Risk Anal** 1989 Mar;9(1):99-105

Science policy choices and the estimation of cancer risk associated with exposure to TCDD. Gough M. **Risk Anal** 1988 Sep;8(3):337-42

Expert scientific judgment and cancer risk assessment: a pilot study of pharmacokinetic data. Hawkins NC, et al. **Risk Anal** 1988 Dec;8(4):615-25

Carcinogenic risk assessment with time-dependent exposure patterns. Murdoch DJ, et al. **Risk Anal** 1988 Dec; 8(4):521-30

Malignant neoplasms among residents who drank well water contaminated by arsenic from a king's yellow factory. Tsuda T, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20; 11 Suppl:289-301

Cancer risk in a cohort of licensed pesticide users. Corrao G, et al. **Scand J Work Environ Health** 1989 Jun;15(3):203-9

Cancer incidence in an occupational cohort exposed to bitumen fumes. Hansen ES. **Scand J Work Environ Health** 1989 Apr;15(2):101-5

Risky business. Beardsley TM. **Sci Am** 1989 May;260(5):35-6

Pesticides, risk, and applesauce [letter] Ames BN, et al. **Science** 1989 May 19;244(4906):755-7

Alar in apples [letter] Groth E 3d. **Science** 1989 May 19; 244(4906):755

Alar and apples [letter] Jukes TH. **Science** 1989 May 5; 244(4904):515

EPA sets new policy on pesticide cancer risks [news] Norman C. **Science** 1988 Oct 21;242(4877):366-7

Is risk assessment conservative? [news] Roberts L. **Science** 1989 Mar 24;243(4898):1553

Applicability of cancer risk assessment techniques to other toxic effects. Gaylor DW. **Toxicol Ind Health** 1988 Dec; 4(4):453-9

Carcinogenic risk assessment in proper perspective. Upton AC. **Toxicol Ind Health** 1988 Dec;4(4):443-52 (22 ref.)

Pharmacokinetics, biochemical mechanism and mutation accumulation: a comprehensive model of chemical carcinogenesis. Conolly RB, et al. **Toxicol Lett** 1988 Oct; 43(1-3):189-200

[The genotoxic effect of epichlorohydrin and epoxy resins] Bittersohl G, et al. **Arch Geschwulstforsch** 1989;59(3):171-5 (32 ref.) (Eng. Abstr.) **(Ger)**

[Second tumors in hemoblastosis and malignant lymphoma] Raderecht C, et al. **Folia Haematol (Leipz)** 1989;116(1):81-5 **(Ger)**

[The problem of carcinogenic N-nitroso compounds--30 years old] Mueller RL. **Off Gesundheitswes** 1989 Apr; 51(4):182-5 (32 ref.) (Eng. Abstr.) **(Ger)**

[Tar, bitumen, benzopyrene--an assessment of health risk at the work site] Bleichert J, et al. **Z Gesamte Hyg** 1988 Oct; 34(10):567-9 (Eng. Abstr.) **(Ger)**

[Biochemistry of the physiopathologic and clinical aspects of free radicals in the effects of carcinogens and antineoplastic agents] Kodama M. **Nippon Rinsho** 1988 Oct; 46(10):2257-61 **(Jpn)**

[Role of active oxygen species in carcinogenesis] Kodama M. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):3136-43 **(Jpn)**

[Cancer--occupational exposure and genetics] Haugen A, et al. **Tidsskr Nor Laegeforen** 1989 May 20;109(14):1529-34 (Eng. Abstr.) **(Nor)**

[Carcinogenic metals] Norseth T. **Tidsskr Nor Laegeforen** 1989 May 30;109(15):1638-41 (Eng. Abstr.) **(Nor)**

[Cancer in Pasvik. Pollution from Nikeli. A connection?] Sunde HG, et al. **Tidsskr Nor Laegeforen** 1989 Jun 10; 109(16):1762-4 (Eng. Abstr.) **(Nor)**

[Exposure to beta-naphthylamine in the Polish industry] Gromiec JP, et al. **Med Pr** 1988;39(5):359-64 (Eng. Abstr.) **(Pol)**

[Carcinogenic, genotoxic and mutagenic effects of formaldehyde (letter)] Rucińska M. **Przegl Lek** 1988; 45(11):814 **(Pol)**

[Deterioration of the natural environment in the macroregion of southwestern Poland and its effect on human health] Jarosz A, et al. **Rocz Panstw Zakl Hig** 1988;39(3):169-75 (Eng. Abstr.) **(Pol)**

[Pollution of the natural environment in the Rzeszów province and its effect on human health] Jarosz A, et al. **Rocz Panstw Zakl Hig** 1988;39(5):374-8 (Eng. Abstr.) **(Pol)**

[Modified effect of ethanol on blastomogenesis induced by carcinogenic substances] Krasil'schikov DG, et al. **Gig Sanit** 1989 Apr;(4):59-61 (18 ref.) **(Rus)**

[The role of various pesticides in nitrosamine-induced carcinogenesis] Ponomareva LA, et al. **Gig Sanit** 1989 May; (5):7-9 **(Rus)**

[A probability approach to evaluating the results of epidemiologic research in the hygienic regulation of chemical carcinogens (the example of vinyl chloride)] Fedotova IV, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):10-3 (Eng. Abstr.) **(Rus)**

[Carcinogenic and nonspecific harmful factors in the rubber industry] Solenova LG, et al. **Gig Tr Prof Zabol** 1989;

(5):25–8 (Eng. Abstr.) (Rus)
[Evaluation of the carcinogenic hazard in the manufacture of graphite articles] Kasparov AA, et al. **Vopr Onkol** 1989; 35(4):445–50 (Eng. Abstr.) (Rus)

CLASSIFICATION

Rhabdoid tumor. An entity or a phenotype? Weeks DA, et al. **Arch Pathol Lab Med** 1989 Feb;113(2):113–4
Diagnosis of major tumor categories in fine-needle aspirates is more accurate when light microscopy is combined with intermediate filament typing. A study of 403 cases. Domagala W, et al. **Cancer** 1989 Feb 1;63(3):504–17
Immunohistochemical phenotyping of human solid tumors with monoclonal antibodies in devising biotherapeutic strategies. Liao SK, et al. **Cancer Immunol Immunother** 1989;28(2):77–86
The classification of childhood tumours. Marsden HB. **IARC Sci Publ** 1988;(87):9–16
A classification scheme for childhood cancer [letter] Silcocks P, et al. **Int J Cancer** 1988 Oct 15;42(4):642–4

COMPLICATIONS

Acute febrile neutrophilic dermatosis—a marker of malignancy? Clemmensen OJ, et al. **Acta Derm Venereol (Stockh)** 1989;69(1):52–8
Erythroderma, seborrheic keratoses and Leser-Trélat sign [letter] Holdiness MR. **Acta Derm Venereol (Stockh)** 1989; 69(3):273–4
Empiric antimicrobial therapy for febrile granulocytopenic cancer patients. Lessons from four EORTC trials. Klastersky J. **Acta Oncol** 1988;27(5):497–502
Electrolyte abnormalities in cancer. Martinez-Maldonado M, et al. **Adv Exp Med Biol** 1989;252:135–45 (37 ref.)
Malignancies in anti-HIV-positive patients [letter] de Lalla F, et al. **Aids** 1988 Dec;2(6):485–6
Dietary deficiency of phylloquinone and reduced serum levels in febrile neutropenic cancer patients. Conly J, et al. **Am J Clin Nutr** 1989 Jul;50(1):109–13
Late effects of childhood cancer [editorial] Miller DR. **Am J Dis Child** 1988 Nov;142(11):1147
Recent advances in pathophysiology and treatment of hypercalcemia of malignancy. Mundy GR, et al. **Am J Kidney Dis** 1989 Jul;14(1):2–12 (82 ref.)
Is there an association between neoplasia and primary or secondary hyperparathyroidism? Kopple JD, et al. **Am J Nephrol** 1988;8(6):437–48 (99 ref.)
Comparative effects of mezlocillin and carbenicillin on platelet function and thromboxane generation in patients with cancer. Mehta P, et al. **Am J Pediatr Hematol Oncol** 1989 Fall;11(3):286–91
Peritoneovenous shunt (PVS) for malignant ascites. An analysis of outcome. Smith DA, et al. **Am Surg** 1989 Jul; 55(7):445–9
Transcatheter thoracic epidural neurolysis using ethyl alcohol. Korevaar WC. **Anesthesiology** 1988 Dec; 69(6):989–93
Fungal infections in cancer patients. Bodey GP. **Ann N Y Acad Sci** 1988;544:431–42 (30 ref.)
Tissue concentrations and bioactivity of amphotericin B in cancer patients treated with amphotericin B-deoxycholate. Collette N, et al. **Antimicrob Agents Chemother** 1989 Mar; 33(3):362–8
Interactive effects of antifungal and antineoplastic agents on yeasts commonly prevalent in cancer patients. Ghannoum MA, et al. **Antimicrob Agents Chemother** 1989 May; 33(5):726–30
Cutaneous Rhizopus and Aspergillus infections in five patients with cancer. Khardori N, et al. **Arch Dermatol** 1989 Jul;125(7):952–6 (31 ref.)
Neoplastic fever. A proposal for diagnosis. Chang JC. **Arch Intern Med** 1989 Aug;149(8):1728–30
Haemophilus species bacteremia in patients with cancer. A 13-year experience. Fainstein V, et al. **Arch Intern Med** 1989 Jun;149(6):1341–5
Influence of underlying disease process on the utility of cellulitis needle aspirates. Kielhofner MA, et al. **Arch Intern Med** 1988 Nov;148(11):2451–2
The medical course of cancer patients with fever and neutropenia. Clinical identification of a low-risk subgroup at presentation. Talcott JA, et al. **Arch Intern Med** 1988 Dec;148(12):2561–8
Solid and hematologic malignancies in 60 patients with systemic mast cell disease. Travis WD, et al. **Arch Pathol Lab Med** 1989 Apr;113(4):365–8
Treatment of malignancy-associated hypercalcemia with norethisterone: a case report. Anderson CS, et al. **Aust N Z J Med** 1989 Feb;19(1):51–4
Treatment of cancer pain with orally and spinally administered opioids. Cousins MJ, et al. **Aust N Z J Surg** 1989 Apr;59(4):307–15 (23 ref.)
Skin signs of internal malignancy. Callen JP. **Australas J Dermatol** 1987 Dec;28(3):106–14 (9 ref.)
The aetiology and management of weight loss and malnutrition in cancer patients. von Meyenfeldt MF, et al. **Baillieres Clin Gastroenterol** 1988 Oct;2(4):869–85 (100 ref.)
Hypercalcaemia in malignancy. Heath DA. **BMJ** 1989 Jun 3;298(6686):1468–9 (23 ref.)
Hypercalcaemia in malignancy [letter] Ralston SH. **BMJ** 1989 Jul 15;299(6692):181–2
Bone and renal components in hypercalcemia of malignancy and responses to a single infusion of clodronate. Bonjour JP, et al. **Bone** 1988;9(3):123–30
Secondary myelodysplasia/leukemia complex. Papa G, et al. **Bone Marrow Transplant** 1989 Jan;4 Suppl 1:141–2 (7 ref.)
The use of dichloromethylene bisphosphonate and aminobutane bisphosphonate in hypercalcemia of malignancy. Adami S, et al. **Bone Miner** 1987 Aug; 2(5):395–404
Humoral hypercalcemia of malignancy. Martin TJ. **Bone Miner** 1988 Apr;4(1):83–9 (40 ref.)
Malignancy-associated hypercalcaemia: relationship between mechanisms of hypercalcaemia and response to antihypercalcaemic therapy. Ralston SH, et al. **Bone Miner** 1987 May;2(3):227–42
Role of Propionibacterium acnes in cancer risk [letter] Rampen FH. **Br J Dermatol** 1989 Aug;121(2):279–80
The use of fine bore silastic catheters to drain carcinomatous pleural effusions. Shand J, et al. **Br J Dis Chest** 1988 Oct; 82(4):394–7
Narcotics and cancer pain control. Hill CS Jr. **CA** 1988 Nov-Dec;38(6):322–6
Practical aspects of pain control in the patient with cancer. Portenoy RK. **CA** 1988 Nov-Dec;38(6):327–52 (123 ref.)
Intrapericardial instillation of platin in malignant pericardial effusion. Fiorentino MV, et al. **Cancer** 1988 Nov 1; 62(9):1904–6
Symptoms potentially influencing weight loss in a cancer population. Correlations with primary site, nutritional status, and chemotherapy administration. Grosvenor M, et al. **Cancer** 1989 Jan 15;63(2):330–4
Listeriosis in the setting of malignant disease. Changing issues in an unusual infection. Hantel A, et al. **Cancer** 1989 Jul 15;64(2):516–20
Deep vein thrombosis of the arm associated with malignancy. Hung SS. **Cancer** 1989 Jul 15;64(2):531–5
Single high-dose (45 mg) infusions of aminohydroxypropylidene diphosphonate for severe malignant hypercalcemia. Mannix KA, et al. **Cancer** 1989 Sep 15;64(6):1358–61
Small bore catheter drainage and sclerotherapy for malignant pleural effusions. Parker LA, et al. **Cancer** 1989 Sep 15; 64(6):1218–21
Risk factors for varicella zoster disseminated infection among adult cancer patients with localized zoster. Rusthoven JJ, et al. **Cancer** 1988 Oct 15;62(8):1641–6
Muscle cramps in cancer patients. Steiner I, et al. **Cancer** 1989 Feb 1;63(3):574–7
Malignant tumors other than lymphoma and Kaposi's sarcoma in association with HIV infection. Tirelli U, et al. **Cancer Detect Prev** 1988;12(1–6):267–72
Hypercalcaemia of malignancy. Kelly PJ, et al. **Cancer Metastasis Rev** 1989 Jun;8(1):23–52 (190 ref.)
Use of Omiderm in treatment of low-degree pressure sores in terminally ill cancer patients. Goren D. **Cancer Nurs** 1989 Jun;12(3):165–9
Septic shock in the oncology patient. Hartnett S. **Cancer Nurs** 1989 Aug;12(4):191–201 (44 ref.)
Validity and reliability of the Constipation Assessment Scale. McMillan SC, et al. **Cancer Nurs** 1989 Jun;12(3):183–8
Signs and symptoms associated with malignancy-induced hypercalcemia. Mahon SM. **Cancer Nurs** 1989 Jun; 12(3):153–60
Symptomatic pericardial effusion in cancer patients. Huang CH, et al. **Chang Keng I Hsueh** 1988 Jun;11(2):99–106
Oral complications in cancer patients. Bodey GP, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):731–3
Cefoperazone for infections in cancer patients. Bodey P, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):400–2
Chemoprophylaxis of bacterial infections in granulocytopenic cancer patients using norfloxacin. Casali A, et al. **Chemioterapia** 1988 Oct;7(5):327–9
Monotherapy with pefloxacin in neutropenic febrile patients. Daniels-Bosman MS, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):410
Nosocomial urinary tract infections in neoplastic and non-neoplastic diseases. Giongo F, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):503–4
Efficacy and safety of azlocillin and ticarcillin in febrile neutropenic children with cancer: a comparative study. Kosmidis H, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):396–8
Treatment of infections in non-neutropenic patients with cancer, AIDS, or renal transplant using ciprofloxacin. Maggiolo F, et al. **Chemioterapia** 1988 Jun;7(3):164–8
Aztreonam plus cefazolin: a double beta-lactam combination as empirical therapy in febrile cancer patients with or without granulocytopenia. Menichetti F, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):403–5
Varicella-zoster infection in patients with neoplastic diseases. Panagos G, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):748–50
Fever in malignant disease. Kataria YP. **Chic Med Sch Q** 1971;30(2–4):78–85 (31 ref.)
Cardiac manifestations of noncardiac tumors. Part II: Direct effects. Weinberg BA, et al. **Clin Cardiol** 1989 Jun; 12(6):347–54 (123 ref.)
Emerging role of quinolones in the prevention of gram-negative bacteremia in neutropenic cancer patients and in the treatment of enteric infections. Bow EJ, et al. **Clin Invest Med** 1989 Feb;12(1):61–8 (65 ref.)
Use and abuse of drug pumps in cancer pain. Penn RD. **Clin Neurosurg** 1989;35:409–21
Physicians' attitudes and knowledge about the management of cancer-related pain. Schauer PK, et al. **Conn Med** 1988 Dec;52(12):705–7
Critical care of the cancer patient. **Crit Care Clin** 1988 Jan; 4(1):1–213
Critical cardiologic considerations in the cancer patient. Ewer MS, et al. **Crit Care Clin** 1988 Jan;4(1):41–60 (47 ref.)
Acute respiratory failure. Ingbar DH, et al. **Crit Care Clin** 1988 Jan;4(1):11–40 (192 ref.)
Shock as a complication of cancer. Kahn RC. **Crit Care Clin** 1988 Jan;4(1):129–45 (96 ref.)
Life-threatening fluid and electrolyte abnormalities associated with cancer. Kopec IC, et al. **Crit Care Clin** 1988 Jan;4(1):81–105 (71 ref.)
Hemorrhagic and thrombotic abnormalities of cancer. Schwartzberg LS, et al. **Crit Care Clin** 1988 Jan;4(1):107–28 (120 ref.)
Humoral hypercalcemia of malignancy. The role of parathyroid hormone-related protein. Insogna KL. **Endocrinol Metab Clin North Am** 1989 Sep;18(3):779–94 (58 ref.)
Hypercalcemic factors other than parathyroid hormone-related protein. Mundy GR. **Endocrinol Metab Clin North Am** 1989 Sep;18(3):795–806 (68 ref.)
Isolation of 16,000-dalton parathyroid hormone-like proteins from two animal tumors causing humoral hypercalcemia of malignancy. Weir EC, et al. **Endocrinology** 1988 Dec; 123(6):2744–51
Psychopathology and aggressive behaviour in cancer pain perception. Orsolini GC, et al. **Funct Neurol** 1989 Apr-Jun; 4(2):185–8
Treatment of impotence in cancer patients. Lue TF, et al. **Important Adv Oncol** 1989;:193–203 (61 ref.)
Cancer pain syndromes. Evans WO. **Indiana Med** 1989 Mar; 82(3):192–5
Psychological, social and physical interventions for cancer pain. Evans WO. **Indiana Med** 1989 Jul;82(7):524–5
Differentiating depression in medically ill children and adolescents. Heiligenstein E, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Nov;27(6):716–9
On the classification of the sign of Leser-Trélat. Holdiness MR. **J Am Acad Dermatol** 1988 Oct;19(4):754–7
The sign of Leser-Trélat: does it exist? Rampen HJ, et al. **J Am Acad Dermatol** 1989 Jul;21(1):50–5 (51 ref.)
In-vitro activity of PD 117558, a new quinolone against bacterial isolates from cancer patients. Rolston KV, et al. **J Antimicrob Chemother** 1989 Mar;23(3):363–71
Serum osteocalcin (BGP) in tumor-associated hypercalcemia. Body JJ, et al. **J Bone Miner Res** 1986 Dec;1(6):523–7
Contrasting mechanisms of hypercalcemia in patients with early and advanced humoral hypercalcemia of malignancy. Ralston SH, et al. **J Bone Miner Res** 1989 Feb;4(1):103–11
A single-day treatment of tumor-induced hypercalcemia by intravenous amino-hydroxypropylidene bisphosphonate. Thiébaud D, et al. **J Bone Miner Res** 1986 Dec;1(6):555–62
Value of semiquantitative cultures of blood drawn through catheter hubs for estimating the risk of catheter tip colonization in cancer patients. Andremont A, et al. **J Clin Microbiol** 1988 Nov;26(11):2297–9
Prevalence of pulmonary embolism at necropsy in patients with cancer. Svendsen E, et al. **J Clin Pathol** 1989 Aug; 42(8):805–9
A double-blind parallel evaluation of the efficacy and safety of a single dose of ketoprofen in cancer pain. Stambaugh J, et al. **J Clin Pharmacol** 1988 Dec;28(12 Suppl):S34–9
Analgesic efficacy of ketoprofen in postpartum, general surgery, and chronic cancer pain. Sunshine A, et al. **J Clin Pharmacol** 1988 Dec;28(12 Suppl):S47–54 (11 ref.)
Management of pain in patients with malignancy. Brena SF, et al. **J Med Assoc Ga** 1989 Aug;78(8):567–71
Encephalomyelitis and demyelinating diseases in patients with extracerebral malignant tumors. Peiffer J. **J Neuroimmunol** 1988 Dec;20(2–3):253–7
Influenza in children with cancer. Kempe A, et al. **J Pediatr** 1989 Jul;115(1):23–9
The recognition of psychiatric morbidity on a medical oncology ward. Hardman A, et al. **J Psychosom Res** 1989; 33(2):235–9
Nephrotic syndrome as the marker for underlying malignancy [letter; comment] Gabriel R. **J R Soc Med** 1989 Jan;82(1):59. **Comment on:** J R Soc Med 1988 Jul;81(7):416–7
Neoplasia in rheumatoid arthritis. Symmons DP. **J Rheumatol** 1988 Sep;15(9):1319–22 (55 ref.)
Concomitant abdominal aortic aneurysm and malignant disease: a difficult management problem. Morris DM, et al. **J Surg Oncol** 1988 Oct;39(2):122–5
Pulmonary embolism and cancer: predisposition to venous thrombosis and embolism as a paraneoplastic syndrome. Sons HU. **J Surg Oncol** 1989 Feb;40(2):100–6 (82 ref.)
Sonographic relationship between gallbladder wall thickness and the etiology of ascites. Marti-Bonmati L, et al. **JCU** 1989 Sep;17(7):497–501
Central venous thrombosis related to the silastic Hickman-Broviac catheter in an oncologic population. Moss JF, et al. **JPEN J Parenter Enteral Nutr** 1989 Jul-Aug;13(4):397–400
Peritoneovenous shunting for intractable cirrhotic and cancerous ascites using different types of shunting tubes. Akimaru K, et al. **Jpn J Surg** 1988 Sep;18(5):502–8
Renal phosphate threshold and response to pamidronate in humoral hypercalcaemia of malignancy. Gurney H, et al.

Lancet 1989 Jul 29;2(8657):241–4

Has the incidence of Pneumocystis carinii pneumonia in cancer patients increased with the AIDS epidemic? [letter] Haron E, et al. **Lancet** 1988 Oct 15;2(8616):904–5

Subdural hematoma in patients with systemic cancer. Minette SE, et al. **Mayo Clin Proc** 1989 Jun;64(6):637–42

Dermatomyositis and malignancy. Richardson JB, et al. **Med Clin North Am** 1989 Sep;73(5):1211–20 (72 ref.)

Spinal bupivacaine for the pain of cancer [letter] Hunt R, et al. **Med J Aust** 1989 Mar 20;150(6):350

Bacteremia caused by non-sporulating anaerobes in cancer patients. A 12-year experience. Fainstein V, et al. **Medicine (Baltimore)** 1989 May;68(3):151–62

Temporal association of polymyositis–dermatomyositis with malignancy: methodologic and clinical considerations. Masi AT, et al. **Mt Sinai J Med (NY)** 1988 Nov;55(6):471–8 (40 ref.)

Antibiotics for the treatment of febrile children with neutropenia and cancer [letter] Rubin M, et al. **N Engl J Med** 1989 Apr 6;320(14):939

Vancomycin, ticarcillin, and amikacin compared with ticarcillin–clavulanate and amikacin in the empirical treatment of febrile, neutropenic children with cancer. Shenep JL, et al. **N Engl J Med** 1988 Oct 20;319(16):1053–8

Bone physiology. Hypercalcaemia of malignancy [news] Meikle MC. **Nature** 1988 Nov 24;336(6197):311

Neurologic pain syndromes in patients with cancer. Elliott K, et al. **Neurol Clin** 1989 May;7(2):333–60 (94 ref.)

Distinction between neoplastic and radiation-induced brachial plexopathy, with emphasis on the role of EMG. Harper CM Jr, et al. **Neurology** 1989 Apr;39(4):502–6

A paraneoplastic syndrome of hypercalcemia and leukocytosis associated with solid tumors: production of interleukin 1 alpha (IL-1 alpha) and granulocyte colony-stimulating factor (G-CSF) by clonal squamous cell carcinoma cells. Sato K. **Nippon Naibunpi Gakkai Zasshi** 1988 Dec 20;64(12):1223–7

Histologic effects of cyclophotocoagulation [letter] March WF, et al. **Ophthalmology** 1989 Jun;96(6):925

Computed tomographic features of nonthyroid extraocular muscle enlargement. Patrinely JR, et al. **Ophthalmology** 1989 Jul;96(7):1038–47

The dimensions of pain: a multidimensional scaling comparison of cancer patients and healthy volunteers. Clark WC, et al. **Pain** 1989 Apr;37(1):23–32

Fear, alexithymia and cancer pain. Dalton JA, et al. **Pain** 1989 Aug;38(2):159–70

Does intravenous methadone provide longer lasting analgesia than intravenous morphine? A randomized, double-blind study. Grochow L, et al. **Pain** 1989 Aug;38(2):151–7

Transdermal fentanyl for pain control in patients with cancer. Miser AW, et al. **Pain** 1989 Apr;37(1):15–21

The use of next-of-kin to estimate pain in cancer patients. O'Brien J, et al. **Pain** 1988 Nov;35(2):171–8

Transfusion therapy in pediatric oncology. Greenbaum BH, et al. **Pediatr Ann** 1988 Nov;17(11):687–93 (31 ref.)

Management of infections in the neutropenic child with cancer. Mitchell CD. **Pediatr Ann** 1988 Nov;17(11):677–8, 680–6 (29 ref.)

The treatment of cancer pain in children. Miser AW, et al. **Pediatr Clin North Am** 1989 Aug;36(4):979–99 (52 ref.)

Varicella in children with cancer: Seventy-seven cases. Feldman S, et al. **Pediatrics** 1975 Sep;56(3):388–97

Social competence and behavioral adjustment of children who are long-term survivors of cancer. Mulhern RK, et al. **Pediatrics** 1989 Jan;83(1):18–25

NSAID test to distinguish between infectious and neoplastic fever in cancer patients. Chang JC. **Postgrad Med** 1988 Dec;84(8):71–2

Intracerebroventricular morphinotherapy for control of chronic cancer pain. Lazorthes Y, et al. **Prog Brain Res** 1988;77:395–405 (56 ref.)

Malignant versus nonmalignant retroperitoneal fibrosis: differentiation with MR imaging. Arrivé L, et al. **Radiology** 1989 Jul;172(1):139–43

Pathophysiological aspects and therapeutic approaches of tumoral osteolysis and hypercalcemia. Bonjour JP, et al. **Recent Results Cancer Res** 1989;116:29–39 (33 ref.)

Nutritional management of the ambulatory patient. Hartlapp JH. **Recent Results Cancer Res** 1988;108:194–7

Managing fungal and viral infection in the immunocompromised host. Jehn U. **Recent Results Cancer Res** 1988;108:61–70 (24 ref.)

Empirical antimicrobial therapy for febrile granulocytopenic cancer patients: lessons from four EORTC trials. Klastersky J. **Recent Results Cancer Res** 1988;108:53–60 (12 ref.)

Use of clodronate and calcitonin in hypercalcemia due to malignancy. Ljunghall S. **Recent Results Cancer Res** 1989; 116:40–5 (36 ref.)

Indications for and results of nutritional therapy in cancer patients. Ollenschläger G, et al. **Recent Results Cancer Res** 1988;108:172–84 (36 ref.)

Nutritional management of the childhood cancer patient. Rossi MR, et al. **Recent Results Cancer Res** 1988; 108:198–204 (6 ref.)

Aspects of infections in children with cancer. Viscoli C. **Recent Results Cancer Res** 1988;108:71–81 (35 ref.)

Treatment of tumor hypercalcemia with clodronate. Ziegler R, et al. **Recent Results Cancer Res** 1989;116:46–53

New spectrum of fungal infections in patients with cancer. Anaissie E, et al. **Rev Infect Dis** 1989 May–Jun;11(3):369–78

Nocardial infection in patients with neoplastic disease. Berkey P, et al. **Rev Infect Dis** 1989 May–Jun;11(3):407–12

Coexistence of sarcoidosis and malignant disease: causality or coincidence? Brincker H. **Sarcoidosis** 1989 Mar; 6(1):31–43 (111 ref.)

Cancer in autoimmune diseases. Sela O, et al. **Semin Arthritis Rheum** 1988 Nov;18(2):77–87 (110 ref.)

Pain in terminal cancer: its incidence and treatment in a general hospital. Jayaratnam FJ, et al. **Singapore Med J** 1988 Dec;29(6):557–64

Necrotizing gas-forming infections in cancer patients. Chu DZ, et al. **South Med J** 1989 Jul;82(7):860–3

Clinical cancer: 31. Barriers to the management of cancer pain: the roles of patient and family. Cleeland CS. **Wis Med J** 1988 Nov;87(11):13–5

[Experience with analgesic therapy with pirprofen in oncology patients] Klener P, et al. **Cas Lek Cesk** 1988 Aug 19;127(34):1080–2 (Eng. Abstr.) **(Cze)**

[Therapy of tumor pain] Polák J, et al. **Sb Lek** 1988 Nov; 90(11–12):358–63 (Eng. Abstr.) **(Cze)**

[Surgical treatment of obstructive icterus of malignant etiology (clinical analysis of material from the last 5 years)] Voženílek J. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(2):271–82 (Eng. Abstr.) **(Cze)**

[The pathogenesis of the humoral hypercalcemia syndrome in patients with solid tumors] Naafs MA, et al. **Ned Tijdschr Geneeskd** 1989 May 27;133(21):1065–9 (50 ref.) **(Dut)**

[Infectious endocarditis in the cancer patient] Ries F, et al. **Bull Soc Sci Med Grand Duche Luxemb** 1988;125(2):25–30 (Eng. Abstr.) **(Fre)**

[Can psychosis of neurons explain the low frequency of cancer in mental disease? Maybe] Merle H. **J Chir (Paris)** 1988 Oct;125(10):601–9 **(Fre)**

[Biochemical markers of the tumor origin of ascites] Romette J, et al. **Pathol Biol (Paris)** 1989 Jun;37(6):720–4 (Eng. Abstr.) **(Fre)**

[Chronic atrophic polychondritis associated with cancer (letter)] Jouanique C, et al. **Presse Med** 1989 May 27; 18(21):1080 **(Fre)**

[Prevention using pefloxacin of infections in cancer patients with granulocytopenia] Leleux A, et al. **Presse Med** 1989 Jan 7–14;18(1):21–4 (Eng. Abstr.) **(Fre)**

[Anatomo-clinical conference. Non-bacterial thrombotic endocarditis. Coagulation disorders and neoplastic pathology] Longree L, et al. **Rev Med Liege** 1989 May 1;44(9):334–41 **(Fre)**

[Therapy of cancer pain—a comprehensive therapy concept] Tontschev G. **Anaesthesiol Reanim** 1989;14(3):155–66 (44 ref.) (Eng. Abstr.) **(Ger)**

[Therapy of cancer pain—a comprehensive therapy concept] Tontschev G. **Arch Geschwulstforsch** 1989;59(1):53–63 (37 ref.) (Eng. Abstr.) **(Ger)**

[Retard morphine in the long-term therapy of severe tumor pain] Zenz M, et al. **Dtsch Med Wochenschr** 1989 Jan 13; 114(2):43–7 (Eng. Abstr.) **(Ger)**

[Prevention of fungal infections with ketoconazole in cancer patients receiving cytostatic therapy] König HJ, et al. **Mycoses** 1988 Jun;31(6):324–9 (Eng. Abstr.) **(Ger)**

[Thrombophilic and hemorrhagic diatheses in cancer] Marx R. **Thromb Diath Haemorrh Suppl** 1968;28:101–17; discussion 143–68 (43 ref.) **(Ger)**

[Varicellas and herpes zoster in children with oncologic diseases. 1: Clinical characteristics] Heidl M, et al. **Z Arztl Fortbild (Jena)** 1989;83(3):133–5 **(Ger)**

[Varicellas and herpes zoster in children with oncologic diseases. 2: Prevention and therapy] Heidl M, et al. **Z Arztl Fortbild (Jena)** 1989;83(3):136–8 **(Ger)**

[5-(2-bromovinyl)-2'-deoxyuridine therapy of herpes zoster diseases in patients with malignant primary diseases] Wutzler P, et al. **Z Gesamte Inn Med** 1988 Dec 1; 43(23):677–80 (Eng. Abstr.) **(Ger)**

["Tertiary" lymphedema—procedures in lymph drainage therapy] Einfeldt H, et al. **Z Lymphol** 1989 Jul;13(1):57–61 (Eng. Abstr.) **(Ger)**

[Management of malignant pericardial effusion] Ben Yosef R, et al. **Harefuah** 1988 Sep;115(5–6):138–41 (31 ref.) **(Heb)**

[Cancer and rheumatoid arthritis] Buskila D, et al. **Harefuah** 1989 Feb 15;116(4):221–3 (36 ref.) **(Heb)**

[Hypo-osmolar syndrome: relation to neoplastic pathology] Taliani U, et al. **G Clin Med** 1988 Apr;69(4):289–94 (34 ref.) **(Ita)**

[Emergencies in oncology] Tirelli U, et al. **G Clin Med** 1989 Mar;70(3):163–77 (18 ref.) **(Ita)**

[Evaluation of lactate dehydrogenase isoenzyme patterns in patients with pleural effusion with and without neoplasms] Ricci F, et al. **Medicina (Firenze)** 1988 Jul–Sep;8(3):323–6 (Eng. Abstr.) **(Ita)**

[Infections in neutropenic children with neoplasms. Case series contribution] Giacchino M, et al. **Minerva Pediatr** 1988 Jun;40(6):339–44 (Eng. Abstr.) **(Ita)**

[Candida and Aspergillus infections in children with neoplasms, neutropenia and fever: serological diagnosis] Giacchino M, et al. **Minerva Pediatr** 1988 Jul;40(7):419–23 (Eng. Abstr.) **(Ita)**

[Bacterial and mycotic infections in immunosuppressed patients: studies during antineoplastic therapy] Montagna MT, et al. **Nuovi Ann Ig Microbiol** 1987 Jan–Apr; 38(1–2):107–15 (Eng. Abstr.) **(Ita)**

[Thrombocytosis and solid tumors] Malacarne P, et al. **Recenti Prog Med** 1988 Sep;79(9):351–5 (Eng. Abstr.) **(Ita)**

[A clinical study of amino acid metabolism in cancerous hypoproteinemia—the role of branched chain amino acids (BCAA) and appropriate compositions of BCAA in parenteral nutrition] Fukui S, et al. **Gan No Rinsho** 1989 May;35(6):709–16 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetics of cisplatin and vindesine in a patient with chronic renal failure undergoing hemodialysis] Ayabe H, et al. **Gan To Kagaku Ryoho** 1989 Sep;16(9):3283–5 (Eng. Abstr.) **(Jpn)**

[Infection and immunosuppression in cancer patients] Kitahara T, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):1108–14 (Eng. Abstr.) **(Jpn)**

[Studies on an appropriate intra thoracic administration of cisplatin and sodium thiosulfate in malignant pleural effusion] Kitajima K, et al. **Gan To Kagaku Ryoho** 1988 Dec;15(12):3253–9 (Eng. Abstr.) **(Jpn)**

[Clinical efficacy of two-route chemotherapy with CDDP and STS in patients with peritonitis carcinomatosa] Kuwahara A, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2752–5 (Eng. Abstr.) **(Jpn)**

[Treatment of malignant pleural effusion] Takada M, et al. **Gan To Kagaku Ryoho** 1989 Feb;16(2):165–72 (42 ref.) (Eng. Abstr.) **(Jpn)**

[Feasibility of CHOP chemotherapy—with special reference to age, diabetes mellitus, liver cirrhosis and obesity] Kuribayashi T, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Jan 20;24(1):109–16 (Eng. Abstr.) **(Jpn)**

[A clinico-pathological study of the mode of evolution of lymphangitis carcinomatosa of the lung] Satoh T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Dec; 26(12):1243–8 (Eng. Abstr.) **(Jpn)**

[Relationship between collagen disease and malignancy] Takashina N, et al. **Nippon Naika Gakkai Zasshi** 1989 Jan; 78(1):30–4 **(Jpn)**

[Hypercalcemia in malignant diseases. Physiopathology and treatment] Aasarød K, et al. **Tidsskr Nor Laegeforen** 1989 Apr 30;109(12):1293–6 (Eng. Abstr.) **(Nor)**

[Stomatologic care of children with proliferative diseases with special reference to changes in the mouth mucosa] Wójciak L, et al. **Wiad Lek** 1988 May 15;41(10):681–5 (Eng. Abstr.) **(Pol)**

[Antiarrhythmic therapy in extreme conditions of artificial whole-body hyperthermia and artificial hyperglycemia in cancer patients] Nodel'son SE, et al. **Anesteziol Reanimatol** 1989 Mar–Apr;(2):21–4 (Eng. Abstr.) **(Rus)**

[Pleurodesis as a palliative method in the treatment of pleural effusions of malignant etiology] Sikimić S, et al. **Plucne Bolesti** 1988 Jan–Jun;40(1–2):13–7 (Eng. Abstr.) **(Scr)**

[Infections in the oncologic patient. Prevention and treatment] Cubellos J. **An Esp Pediatr** 1988 Sep;29 Suppl 33:178–81 (15 ref.) **(Spa)**

[Nutrition and cancer in pediatrics. A complex interaction] Fleta Zaragozano J, et al. **An Esp Pediatr** 1989 May; 30(5):333–9 (59 ref.) **(Spa)**

[Delay in the diagnosis of spinal cord neurological complications in patients with cancer] Alfaro A. **Med Clin (Barc)** 1988 Sep 24;91(9):338–40 **(Spa)**

[Neoplasms associated with chronic myeloid leukemia. Incidence in a series of 288 patients] Cervantes F, et al. **Med Clin (Barc)** 1988 Nov 19;91(17):663–4 (Eng. Abstr.) **(Spa)**

[Lumbosacral plexopathy in patients with cancer] Dalmau J, et al. **Med Clin (Barc)** 1988 Sep 24;91(9):344–8 (Eng. Abstr.) **(Spa)**

[Hemostasis and cancer] González-Barón M, et al. **Rev Clin Esp** 1989 Feb;184(2):84–7 (49 ref.) (Eng. Abstr.) **(Spa)**

[Neoplasms associated with inappropriate or ectopic hormonal secretion syndromes] Valverde CM. **Rev Invest Clin** 1969 Apr–Jun;21(2):239–47 (61 ref.) **(Spa)**

[Hypercalcemia and skeletal engagement in malignancy—development and therapeutic possibilities] Ljunghall S, et al. **Lakartidningen** 1989 May 24; 86(21):1991–3 **(Swe)**

CONGENITAL

Neonatal tumours. Stevens MC. **Arch Dis Child** 1988 Oct; 63(10 Spec No):1122–5 (32 ref.)

DIAGNOSIS

Diagnostic accuracy of the immunocytochemical study of body fluids. Li CY, et al. **Acta Cytol** 1989 Sep–Oct; 33(5):667–73

Intermediate filament typing in tumour diagnostics—an aid in histogenetic classification? Langbein L, et al. **Acta Morphol Hung** 1988;36(3–4):215–25 (81 ref.)

Ultrasonography in oncology. A review. Dalla Palma L, et al. **Acta Oncol** 1989;28(2):157–62 (52 ref.)

Diagnostic significance of serum proteinase activity ("cathepsin B-like" activity) testing by amino acid derivatives of 7-amino-4-methylcoumarine. Kolář Z, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;119:161–72

Monoclonal antibodies in cancer diagnosis and therapy. Epstein N, et al. **Adv Biotechnol Processes** 1989;11:305–33 (177 ref.)

Glutathione transferases as markers of preneoplasia and

neoplasia. Sato K. **Adv Cancer Res** 1989;52:205–55 (367 ref.)

Oncologic imaging: state of the art and research priorities [letter] Goldfarb R, et al. **Am J Clin Oncol** 1989 Apr; 12(2):178

Diagnostic significance of levamisole-resistant alkaline phosphatase in cytochemistry and immunocytochemistry. Yam LT, et al. **Am J Clin Pathol** 1989 Jan;91(1):31–6

Differentiation of benign from malignant neoplasms by silhouette. Ackerman AB. **Am J Dermatopathol** 1989 Aug; 11(4):297–300 (23 ref.)

Assessing the value of identifying the presence of malignant disease in human plasma by proton nuclear magnetic resonance spectroscopy. Buchthal SD, et al. **Am J Med** 1988 Oct;85(4):528–32

Pulmonary and pleural involvements at initial diagnosis in children with malignant neoplasm. Ishii E, et al. **Am J Pediatr Hematol Oncol** 1989 Fall;11(3):281–5

Cancer detection and the community pharmacist. Lum BL, et al. **Am Pharm** 1989 Jul;NS29(7):54–9

Molecular genetic analysis in the diagnosis of lymphoma in fine needle aspiration biopsies. II. Lymphomas versus nonlymphoid malignant tumors. Lubiński J, et al. **Anal Quant Cytol Histol** 1988 Dec;10(6):399–404

Clinical value of tumor markers. **Ann Chir Gynaecol** 1989; 78(1):6–82

The clinical use of human tumour markers. Neville AM. **Ann Chir Gynaecol** 1989;78(1):7–12 (19 ref.)

Antikeratin antibodies in routine diagnostic pathology. A comparison of 10 different commercial antikeratins. Mygind H, et al. **APMIS** 1988 Nov;96(11):1009–22

The contribution of immunohistochemistry to the differential diagnosis of primary and metastatic neoplasma of the central nervous system (CNS). Markaki S, et al. **Arch Anat Cytol Pathol** 1989;37(3):93–8

Brain metastases from undiagnosed systemic neoplasms. Merchut MP. **Arch Intern Med** 1989 May;149(5):1076–80

Molecular biology diagnosis in oncology. Bignon YJ, et al. **Biomed Pharmacother** 1988;42(10):653–9

Initial presentation of malignant disease to accident and emergency departments. Han KH, et al. **Br J Clin Pract** 1987 Dec;41(12):1056–8

The stir sequence in MRI of neoplastic lesions. Goddard P, et al. **Bristol Med Chir J** 1988 May;103(2):26

The monitoring of minimal residual disease in patients with malignant tumors. Reizenstein P. **Bull Soc Sci Med Grand Duche Luxemb** 1989 Mar–Apr; 126(1):5–15 (48 ref.)

Quality assurance. The use of endoscopy in cancer care. Beart RW Jr. **Cancer** 1989 Jul 1;64(1 Suppl):266–8; discussion 269–71

Advances in imaging. Hricak H, et al. **Cancer** 1988 Oct 15; 62(8 Suppl):1865–70 (27 ref.)

Cancer screening. Degrees of proof and practical application. Hulka BS. **Cancer** 1988 Oct 15;62(8 Suppl):1776–80 (18 ref.)

Cytology. Accuracy of diagnosis. Koss LG. **Cancer** 1989 Jul 1;64(1 Suppl):249–52; discussion 253–7

Diagnostic value of ferritin in malignant pleural and peritoneal effusions. Yinnon A, et al. **Cancer** 1988 Dec 15; 62(12):2564–8

Magnetic resonance spectroscopy of tumors and potential in vivo clinical applications: a review. Daly PF, et al. **Cancer Res** 1989 Feb 15;49(4):770–9 (116 ref.)

Clinical biochemistry of neuron specific enolase. Kaiser E, et al. **Clin Chim Acta** 1989 Jul 31;183(1):13–31 (162 ref.)

Radioimmunodetection of cancer with monoclonal antibodies: current status, problems, and future directions. Murray JL, et al. **CRC Crit Rev Oncol Hematol** 1988; 8(3):227–53 (163 ref.)

Detection of tumours with nuclear magnetic resonance spectroscopy of plasma. Berger S, et al. **Eur J Cancer Clin Oncol** 1989 Mar;25(3):535–43

Commentary on 'Detection of Tumors with Nuclear Magnetic Resonance Spectroscopy of Plasma' by S. Berger, K.-H. Pflüger, W.A. Etzel, J. Fischer. Fossel ET. **Eur J Cancer Clin Oncol** 1989 Jun;25(6):925–7

Cytophotometry. Auer G, et al. **Hum Pathol** 1989 Jun; 20(6):518–27 (53 ref.)

Flow cytometric measurements of DNA and other cell components in human tumors: a critical appraisal. Koss LG, et al. **Hum Pathol** 1989 Jun;20(6):528–48 (214 ref.)

Diagnostic value of carcinoembryonic antigen assay of pleural & peritoneal effusions in malignancy. Gandhi AK, et al. **Indian J Med Res** 1989 Feb;90:22–6

Fine needle aspiration cytology in pediatric oncology. Verma K, et al. **Indian J Pediatr** 1988 May–Jun;55(3):403–7

ROC analysis of diagnostic performance utilizing serum antiproteases in cancer patients. Millán J, et al. **Int J Biol Markers** 1988 Jul–Sep;3(3):203–5

Side-effects of monoclonal antibody infusions for the diagnosis and treatment of cancer. van der Linden EF, et al. **Int J Biol Markers** 1988 Jul–Sep;3(3):147–53 (78 ref.)

Serum levels of carcinomedin (1-keto-24-methyl-25-hydroxycholecalciferol) as an indicator of the progression of cancer. Preliminary results of a prospective study. Rougereau A, et al. **Int J Vitam Nutr Res** 1988;58(4):381–6

Should the patient with generalized pruritus be evaluated for malignancy? Lober CW. **J Am Acad Dermatol** 1988 Aug;19(2 Pt 1):350–2 (25 ref.)

Production of GAWK (chromogranin-B 420–493)-like immunoreactivity by endocrine tumors and its possible diagnostic value. Sekiya K, et al. **J Clin Invest** 1989 Jun; 83(6):1834–42

Use of basement membrane markers in tumour diagnosis. d'Ardenne AJ. **J Clin Pathol** 1989 May;42(5):449–57 (113 ref.)

Morphometric diagnosis of serous effusions: refinement of differences between benign and malignant cases by use of outlying values and larger sample size. Scott N, et al. **J Clin Pathol** 1989 Jun;42(6):607–12

Electromagnetic energy and its application to human including detection of cancer. Paul JC. **J Indian Med Assoc** 1989 Jan;87(1):17–8

Cooperative group evaluating diagnostic imaging techniques [news] Antoine F. **J Natl Cancer Inst** 1989 Sep 20; 81(18):1347–9

Three different types of alpha-fetoprotein in the diagnosis of malignant solid tumors: use of a sensitive lectin-affinity immunoelectrophoresis. Tsuchida Y, et al. **J Pediatr Surg** 1989 Apr;24(4):350–5

High contrast fluorescence imaging using two-wavelength laser excitation and image processing. Baumgartner R, et al. **J Photochem Photobiol [B]** 1987 Sep;1(1):130–2

Differentiation of human tumors from nonmalignant tissue by natural-abundance 13C NMR spectroscopy. Halliday KR, et al. **Magn Reson Med** 1988 Aug;7(4):384–411

Proton relaxation times in cancer diagnosis. Santhana Mariappan SV, et al. **Magn Reson Med** 1988 Oct; 8(2):119–28

Application of a T2-filtered COSY experiment to identify the origin of slowly relaxing species in normal and malignant tissue. Williams PG, et al. **Magn Reson Med** 1988 Aug;7(4):463–71

Biting the magic bullet. Radiolabelled monoclonal antibodies: the next great step forward in the diagnosis and treatment of cancer? Persaud RD. **Med Hypotheses** 1988 Nov; 27(3):245–51

The treacherous biopsy. Berrey BH Jr. **Milit Med** 1989 Apr; 154(4):171–4

A plea for compulsiveness [editorial] Ruffin WK. **Milit Med** 1988 Dec;153(12):655

Approaches to radiolabeling of antibodies for diagnosis and therapy of cancer. Fritzberg AR, et al. **Pharm Res** 1988 Jun;5(6):325–34 (90 ref.)

Fine-needle aspiration biopsy. Diagnosis of cancerous masses in the office. Stanley MW. **Postgrad Med** 1989 Jan; 85(1):163–6, 171–2

Serum tyrosine kinase activity and neoplastic disease. Lee PL, et al. **Recent Results Cancer Res** 1989;113:32–40

Diagnostic value of ascitic fluid cholesterol levels in the prediction of malignancy. Mortensen PB, et al. **Scand J Gastroenterol** 1988 Nov;23(9):1085–8

Current and future aspects of cancer diagnosis with PET. Matsuzawa T. **Sci Rep Res Inst Tohoku Univ [Med]** 1988 Dec;35(1–4):1–14

DNA flow cytometry in solid tumors: practical aspects and clinical applications. Dressler LG, et al. **Semin Diagn Pathol** 1989 Feb;6(1):55–82 (120 ref.)

Identification and assessment of prognostic factors. George SL. **Semin Oncol** 1988 Oct;15(5):462–71

Early detection of cancer. **Semin Surg Oncol** 1989; 5(3):151–218

The role of tumor markers in the early detection of cancer. Humphrey PA. **Semin Surg Oncol** 1989;5(3):186–93 (71 ref.)

Serum lipid-bound sialic acid as a tumoral marker in minimal residual tumors. Musset M, et al. **Suppl J Med Oncol Tumor Pharmacother** 1988;1:17–20

The monitoring of minimal residual disease in patients with malignant tumors. Reizenstein P. **Suppl J Med Oncol Tumor Pharmacother** 1988;1:5–15 (48 ref.)

Detection of bone marrow involvement in patients with cancer. Federico M, et al. **Tumori** 1989 Apr 30;75(2):90–6

Electron microscopy in an oncologic institution. Diagnostic usefulness in surgical pathology. Lombardi L, et al. **Tumori** 1988 Oct 31;74(5):531–5

New techniques in diagnosing malignancy: morphology and beyond. Kornstein MJ. **Va Med** 1989 Jun;116(6):274–7 (12 ref.)

Progress symposium—Progress in cancer screening. **World J Surg** 1989 Jan–Feb;13(1):1–83

Quantitative approaches to the evaluation of screening programs. Day NE. **World J Surg** 1989 Jan–Feb;13(1):3–8 (16 ref.)

Screening for cancer: state of the art and prospects for the future. Miller AB. **World J Surg** 1989 Jan–Feb;13(1):79–83 (22 ref.)

[The diagnostic value of carcinoembryonic antigen (CEA) and tissue polypeptide antigen (TPA) in pleural effusion] Chen TM, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Oct; 40(4):375–82 (Eng. Abstr.) **(Chi)**

[The present state of cytodiagnosis. Experience with cytological evaluation in a group of 50 patients] Coufal L. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(2):99–109 (Eng. Abstr.) **(Cze)**

[Remission with antineoplastic agents? (letter)] Ersbøll J. **Ugeskr Laeger** 1989 Jul 17;151(29):1885–6 **(Dan)**

[Physical, psychological and social conditions of patients with cancer as parameters in clinical examinations] Klee MC, et al. **Ugeskr Laeger** 1989 Jul 3;151(27):1735–8 (Eng. Abstr.) **(Dan)**

[Initial immunolabelling in the diagnosis of solid tumors undergoing cytologic studies (cytopuncture and imprints)] Chosia M, et al. **Arch Anat Cytol Pathol** 1989;37(3):99–108 (49 ref.) (Eng. Abstr.) **(Fre)**

[Diagnosis of cancers. Role of socio-psychological factors] Hoerni B. **Bull Cancer (Paris)** 1988;75(8):807–12 (22 ref.) (Eng. Abstr.) **(Fre)**

[H-NMR spectroscopy of plasma cannot be used for cancer screening] Tran Dinh S, et al. **Bull Cancer (Paris)** 1988; 75(8):795–800 (Eng. Abstr.) **(Fre)**

[Recent technologic developments facilitating the diagnosis of surgical endocrine lesions] Proye C. **Helv Chir Acta** 1989 Apr;55(6):769–75 (12 ref.) **(Fre)**

[Tuberculosis simulating cancer. An autopsy study of 12 cases presenting diagnostic difficulties in clinical practice] Chastonay P. **Schweiz Med Wochenschr** 1988 Nov 5; 118(44):1612–5 (Eng. Abstr.) **(Fre)**

[Diagnostic applications of immunohistochemical methods in tumor pathology] Dellagi K, et al. **Tunis Med** 1988 Oct; 66(10):655–62 (34 ref.) (Eng. Abstr.) **(Fre)**

[In vivo 31 phosphorus spectroscopy of tumors: pre-, intra- and post-therapy] Semmler W, et al. **ROFO** 1988 Oct; 149(4):369–77 (Eng. Abstr.) **(Ger)**

[How does the oncology internist use pathology reports on tumor differentiation and heterogeneity?] Nagel GA, et al. **Verh Dtsch Ges Pathol** 1988;72:204–13 (73 ref.) (Eng. Abstr.) **(Ger)**

[Future prospects for the use of tumor markers] Grunicke H. **Wien Klin Wochenschr** 1989 Jul 14;101(14):472–5 (24 ref.) (Eng. Abstr.) **(Ger)**

[Clinical relevance of tumor markers] Lamerz R. **Wien Klin Wochenschr** 1989 Jul 14;101(14):464–72 (113 ref.) (Eng. Abstr.) **(Ger)**

[What are tumor markers, and what is their value?] von Kleist S. **Wien Klin Wochenschr** 1989 Jul 14;101(14):459–63 (33 ref.) (Eng. Abstr.) **(Ger)**

[Tumor markers—serologic parameters for monitoring and therapeutic control of cancer patients] Birkmayer J. **Wien Med Wochenschr** 1988 Jun 30;138(11–12):276–8 (Eng. Abstr.) **(Ger)**

[Clinical use of magnetic resonance spectroscopy and positron emission tomography in oncology] Schlag P, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:162–3 **(Ger)**

[Clinical use of magnetic resonance spectroscopy in tumor patients] Semmler W, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:158–61 **(Ger)**

[The behavior of C-reactive protein in tumor patients] Strauch W, et al. **Z Med Lab Diagn** 1989;30(5):269–72 (Eng. Abstr.) **(Ger)**

[A comparative evaluation of tumor markers (TPA and CEA) in various malignant neoplasms at an advanced stage] Meregalli M, et al. **Minerva Med** 1989 Apr;80(4):345–7 (Eng. Abstr.) **(Ita)**

[Monoclonal antibodies in the diagnosis and therapy of tumors] Baldwin RW, et al. **Ric Clin Lab** 1988;18 Suppl 1:51–61 (47 ref.) **(Ita)**

[Ultrasonic diagnosis of early cancer] Fukuda M. **Gan No Rinsho** 1988 Aug;34(10):1525–33 **(Jpn)**

[Diagnostic imaging of cancer] Iio M. **Gan No Rinsho** 1989 Jan;Spec No:19–24 **(Jpn)**

[Immunologic diagnosis of cancer—tumor markers] Kawai T. **Gan No Rinsho** 1989 Jan;Spec No:13–8 **(Jpn)**

[Oncogenes and differential diagnosis among non-neoplastic, precancerous lesions and early and advances cancers] Kitagawa T. **Gan No Rinsho** 1988 Aug;34(10):1259–63 (Eng. Abstr.) **(Jpn)**

[Diagnosis of cancer with magnetic resonance imaging (MRI)] Takahashi M, et al. **Gan No Rinsho** 1988 Aug; 34(10):1237–46 (Eng. Abstr.) **(Jpn)**

[Serodiagnosis: tumor marker] Yoneshima M, et al. **Gan No Rinsho** 1988 Aug;34(10):1209–15 (Eng. Abstr.) **(Jpn)**

[Cancer diagnosis by medical images with reference to medical physics] Iinuma TA. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-1):1204–9 (0 ref.) (Eng. Abstr.) **(Jpn)**

[Basic and clinical evaluation of an immunoradiometric competitive inhibition assay for 2—6 sialyl Lewis a antigen—2. Evaluation of clinical significance] Imura H, et al. **Gan To Kagaku Ryoho** 1989 Jun;16(6):2203–12 (Eng. Abstr.) **(Jpn)**

[MRI and MRS in the diagnosis of cancer] Itai Y. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 2):639–45 (15 ref.) (Eng. Abstr.) **(Jpn)**

[NMR spectroscopy of tumors] Itoh M, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-1):1167–72 (6 ref.) (Eng. Abstr.) **(Jpn)**

[Radioimmunoassay of plasma calcitonin gene-related peptide (CGRP) levels in patients with endocrine tumor] Takami H, et al. **Gan To Kagaku Ryoho** 1989 Jun; 16(6):2219–25 (Eng. Abstr.) **(Jpn)**

[Clinical application of anti-idiotypic antibody] Yachi A, et al. **Gan To Kagaku Ryoho** 1989 Jul;16(7):2313–20 (20 ref.) (Eng. Abstr.) **(Jpn)**

[New application of monoclonal antibody for cancer diagnosis] Yachi A. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 2):632–8 (Eng. Abstr.) **(Jpn)**

[Clinical application of flow cytometry in lung cancer] Miyamoto H, et al. **Kokyu To Junkan** 1988 Dec; 36(12):1291–8 **(Jpn)**

[Early detection of cancers by serum and histological diagnosis using monoclonal antibodies] Kannagi R, et al. **Nippon Rinsho** 1989 May;47(5):1079–94 **(Jpn)**

[Recent advances in the diagnosis of early cancers by tumor marker analysis] Ohkura H, et al. **Nippon Rinsho** 1989 May;

47(5):1072–8 (Jpn)
[Imaging diagnosis of early cancer: prospect and problems of present investigation] Sakuma S, et al. **Nippon Rinsho** 1989 May;47(5):983–9 (Jpn)
[Detectability of the small cancers by using MR imaging] Yoshikawa K, et al. **Nippon Rinsho** 1989 May;47(5):1044–50 (Jpn)
[Usefulness of tumor markers of glycoprotein] Ishii M. **Rinsho Byori** 1988 Nov;Spec No 79:69–77 (Jpn)
[The usefulness of discriminant function for diagnosis of malignant disease] Kimura S, et al. **Rinsho Byori** 1988 Aug; 36(8):913–7 (Jpn)
[Clinical application of immunosuppressive acidic protein] Sato T, et al. **Rinsho Byori** 1988 Nov;Spec No 79:101–7 (Jpn)
[Diagnostic discrepancies in cases of malignant neoplasms detected on the basis of the analysis of autopsy specimens at the Institute of Pathological Anatomy, Medical Academy, in Białystok 1975–1984] Kemona A, et al. **Pol Tyg Lek** 1988 May 30;43(22):702–5 (Eng. Abstr.) (Pol)
[Glycosaminoglycans in the serum and urine and their significance in clinical diagnosis] Wlad H. **Pol Tyg Lek** 1988 Aug 22;43(34):1075–8 (Pol)
[Production of monoclonal antibodies and their use] Jędrzejowska-Szypułka H, et al. **Postepy Hig Med Dosw** 1988 Mar–Apr;42(2):125–39 (Eng. Abstr.) (Pol)
[Physicians' understanding of the mechanisms of adapting to the diagnosis in oncology] Delgado GL, et al. **Rev Paul Med** 1988 Jul–Aug;106(4):209–14 (Eng. Abstr.) (Por)
[Cancerous diseases in children (II)] Nicolau S. **Rev Pediatr Obstet Ginecol [Pediatr]** 1988 Jul–Sep; 37(3):215–23 (0 ref.) (Rum)
[Detection and treatment of patients with malignant neoplasms of the female genital organs] Gulaia VI, et al. **Akush Ginekol (Mosk)** 1988 Nov;(11):21–3 (Rus)
[Monoclonal antibodies in the diagnosis of human tumors] Romanenko AM. **Arkh Patol** 1989;51(4):79–85 (51 ref.) (Eng. Abstr.) (Rus)
[Diagnostic errors in the practice of rural public health and approaches to their assessment] Shmurun RI. **Arkh Patol** 1988;50(10):78–81 (Rus)
[ICO–63 monoclonal antibodies to the differentiation antigen of hemopoietic cells suitable for immunophenotyping of human solid tumors] Baryshnikov AIu, et al. **Eksp Onkol** 1989;11(4):41–4 (Eng. Abstr.) (Rus)
[Can the presence of an RNA–lipoprotein complex in human blood serum give evidence of a cancerous disease?] Bazanova NV, et al. **Eksp Onkol** 1989;11(2):37–9 (Eng. Abstr.) (Rus)
[Monoclonal antibodies of the ICO series] Baryshnikov AIu. **Gematol Transfuziol** 1988 Dec;33(12):15–20 (Eng. Abstr.) (Rus)
[Active detection of preneoplastic and neoplastic diseases at an endoscopic center] Ambartsumian AM. **Khirurgiia (Mosk)** 1988 Nov;(11):61–4 (Eng. Abstr.) (Rus)
[Laparoscopic diagnosis of neoplastic diseases in ambulatory patients] Mazurov ST, et al. **Khirurgiia (Mosk)** 1989 May; (5):69–71 (Eng. Abstr.) (Rus)
[Urgent intraoperative cytologic diagnosis in oncology patients] Agamova KA, et al. **Lab Delo** 1988;(12):37–9 (Eng. Abstr.) (Rus)
[Ultrasonic diagnosis of tumors] Pletnev SD, et al. **Sov Med** 1989;(3):31–4 (Eng. Abstr.) (Rus)
[Current problems of the early diagnosis of oncological diseases] Denisov LE, et al. **Ter Arkh** 1988;60(9):9–13 (Rus)
[The differential diagnostic potentials of echography in oncology] Lipovko PO. **Vopr Onkol** 1989;35(3):270–9 (70 ref.) (Rus)
[Comparison of clinical and autopsy diagnoses in 2 periods: from 1962 to 1965 and from 1982 to 1985] Oberman B, et al. **Lijec Vjesn** 1988 Dec;110(12):410–2 (Eng. Abstr.) (Scr)
[Early diagnosis of cancer in children] Esquembre Menor CT, et al. **An Esp Pediatr** 1988 Sep;29 Suppl 33:181–7 (0 ref.) (Spa)
[Laboratory diagnosis of cancer] Vela E. **An Esp Pediatr** 1988 Sep;29 Suppl 32:96–100 (Spa)
[Monoclonal antibodies in oncology, a new hope for an unsolved problem] Colnaghi MI, et al. **Medicina (B Aires)** 1987;47(6):667–72 (34 ref.) (Spa)

DIET THERAPY

Revici Method. **CA** 1989 Mar–Apr;39(2):119–22
Dietary anticarcinogens and cancer prevention [editorial] Mukhtar H, et al. **Cleve Clin J Med** 1988 Nov–Dec; 55(6):507–8
Organic food in cancer therapy. Bishop B. **Nutr Health** 1988; 6(2):105–9
Unproven dietary methods of treatment of oncology patients. Hunter M. **Recent Results Cancer Res** 1988;108:235–8

DRUG THERAPY

Phase I clinical trial of oral menogaril administered on three consecutive days. Dodion P, et al. **Acta Oncol** 1988; 27(5):517–20
Levamisole or placebo after effective chemotherapy for remission and survival prolongation in advanced human solid tumors—a double-blind randomized trial. Focan C, et al. **Acta Oncol** 1989;28(1):105–6
Phase I study of 4-demethoxydaunorubicin by oral route in patients with advanced cancer. Krarup-Hansen A, et al. **Acta Oncol** 1988;27(5):521–5
Betamethasone-dixyrazine versus metoclopramide as antiemetic treatment in cancer chemotherapy. Sorbe B, et al. **Acta Oncol** 1988;27(4):357–60
Practising physicians' experiences of treating patients with cancer pain. Vainio A. **Acta Oncol** 1989;28(2):177–82
The role of parent-adolescent concordance in compliance with cancer chemotherapy. Tebbi CK, et al. **Adolescence** 1988 Fall;23(91):599–611
Chemotherapeutic potential of methotrexate peptides. Kuefner U, et al. **Adv Enzyme Regul** 1988;27:3–13 (20 ref.)
The expanding role of folates and fluoropyrimidines in cancer chemotherapy. Proceedings of an international symposium. April 28–29, 1988, Buffalo, New York. **Adv Exp Med Biol** 1988;244:1–336
5-Fluorouracil and 5-formyltetrahydrofolate in advanced malignancies. Becher R, et al. **Adv Exp Med Biol** 1988; 244:225–32
Role of host responses in the drug treatment of metastasis. Giraldi T, et al. **Adv Exp Med Biol** 1988;233:351–60
Overview: rational basis for development of fluoropyrimidine/5-formyltetrahydrofolate combination chemotherapy. Huennekens FM, et al. **Adv Exp Med Biol** 1988;244:1–11 (35 ref.)
Drug information cards for cancer patients [letter] Wissmann C. **Am J Hosp Pharm** 1989 Jan;46(1):70
Providing clinical pharmacy services in an AIDS—oncology ambulatory-care clinic. Wong RJ, et al. **Am J Hosp Pharm** 1988 Nov;45(11):2351–4
Autologous bone marrow transplantation. Current status and future directions. Cheson BD, et al. **Ann Intern Med** 1989 Jan 1;110(1):51–65 (170 ref.)
Mathematical models in high-dose chemotherapy. Souhami RL, et al. **Antibiot Chemother** 1988;41:21–8
Idarubicin: an evaluation of cardiac toxicity in 77 patients with solid tumors. Bertelli G, et al. **Anticancer Res** 1988 Jul–Aug;8(4):645–6
4'-O-tetrahydropyranyladriamycin has greater antineoplastic activity than adriamycin in various human tumours in vitro. Maehara Y, et al. **Anticancer Res** 1989 Mar–Apr;9(2):387–9
A possible role for cyclosporins in cancer chemotherapy. Twentyman PR. **Anticancer Res** 1988 Sep–Oct; 8(5A):985–93 (77 ref.)
Cancer treatment protocols. Who gets chosen? Goodwin JS, et al. **Arch Intern Med** 1988 Oct;148(10):2258–60
Superiority of selective bolus infusion and simultaneous rapid removal of anticancer agents by charcoal hemoperfusion in cancer treatment. Kihara T, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):581–4
Nutritional pharmacology in the treatment of neoplastic disease. Fearon KC. **Baillieres Clin Gastroenterol** 1988 Oct; 2(4):941–9 (50 ref.)
Relationship between the antioxidant enzyme DT-diaphorase and tumor response to mitomycin C treatment. Pritsos CA, et al. **Basic Life Sci** 1988;49:713–6
Recombinant human granulocyte colony stimulating factors: therapeutic application in the prevention of chemotherapy-induced neutropenia. Gabrilove JL, et al. **Behring Inst Mitt** 1988 Aug;(83):299–33
Yeast-expressed granulocyte-macrophage colony-stimulating factor in cancer patients: a phase ib clinical study. Herrmann F, et al. **Behring Inst Mitt** 1988 Aug;(83):107–18
The effects of recombinant human granulocyte-macrophage colony-stimulating factor on phagocyte kinetics in man. Linch DC, et al. **Behring Inst Mitt** 1988 Aug;(83):320–3
Clinical studies with granulocyte colony stimulating factor (G-CSF) in patients receiving cytotoxic chemotherapy. Morstyn G, et al. **Behring Inst Mitt** 1988 Aug;(83):234–9
A phase I study of therapy with recombinant granulocyte-macrophage colony-stimulating factor administered by IV bolus or continuous infusion. Rifkin RM, et al. **Behring Inst Mitt** 1988 Aug;(83):125–33
Phase I study of recombinant DNA granulocyte macrophage colony stimulating factor. Steward WP, et al. **Behring Inst Mitt** 1988 Aug;(83):324–6
Phase I study of recombinant human granulocyte-macrophage colony-stimulating factor in patients with bone marrow failure and malignancy. Vadhan-Raj S, et al. **Behring Inst Mitt** 1988 Aug; (83):119–24
Effect of various oxygenation conditions and fluosol-DA on cancer chemotherapeutic agents. Teicher BA, et al. **Biomater Artif Cells Artif Organs** 1988;16(1–3):533–46
Vinca alkaloids. Freireich EJ. **Bone Marrow Transplant** 1989 Jan;4 Suppl 1:56
Photodynamic therapy—achievements and prospects. Ash D, et al. **Br J Cancer** 1989 Aug;60(2):151–2 (8 ref.)
The multidrug resistance phenotype. Kaye SB. **Br J Cancer** 1988 Dec;58(6):691–4 (41 ref.)
Recombinant human granulocyte macrophage colony stimulating factor (rhGM-CSF) given as daily short infusions—a phase I dose-toxicity study. Steward WP, et al. **Br J Cancer** 1989 Jan;59(1):142–5
A phase 1 and pharmacokinetic study of didox: a ribonucleotide reductase inhibitor. Veale D, et al. **Br J Cancer** 1988 Jul;58(1):70–2
On the value of response criteria in therapeutic research. Devita VT Jr. **Bull Cancer (Paris)** 1988;75(9):863–9 (8 ref.)
Ethical problems in clinical trials concerning minimal residual tumors. Dion S, et al. **Bull Soc Sci Med Grand Duche Luxemb** 1989 Mar–Apr; 126(1):99–102
Adjuvant chemotherapy and the kinetic refractoriness of minimal residual tumors. Reizenstein P, et al. **Bull Soc Sci Med Grand Duche Luxemb** 1989 Mar–Apr; 126(1):57–8
Revici Method. **CA** 1989 Mar–Apr;39(2):119–22
Advances in folate chemotherapy: status of 5-fluorouracil/leucovorin in advanced malignancies. August 3, 1988, Cleveland, Ohio. Proceedings. **Cancer** 1989 Mar 15;63(6 Suppl):995–1053
A phase I clinical trial of combined fluoropyrimidines with leucovorin in a 14-day infusion. Demonstration of biochemical modulation. Anderson N, et al. **Cancer** 1989 Jan 15;63(2):233–7
New vistas for leucovorin in cancer chemotherapy. Bleyer WA. **Cancer** 1989 Mar 15;63(6 Suppl):995–1007 (37 ref.)
High-dose cyclophosphamide in the treatment of refractory lymphomas and solid tumor malignancies. Collins C, et al. **Cancer** 1989 Jan 15;63(2):228–32
Phase I study of recombinant leukocyte A interferon (IFN-alpha 2A, Roferon-A) with doxorubicin in advanced malignant disease. Creagan ET, et al. **Cancer** 1989 Sep 1; 64(5):1034–7
Combined floxuridine and cisplatin in a fourteen day infusion. Phase I study. Lokich J, et al. **Cancer** 1988 Dec 1; 62(11):2309–12
A prospective, randomized double-blind trial comparing metoclopramide alone with metoclopramide plus dexamethasone in preventing emesis induced by high-dose cisplatin. Parikh PM, et al. **Cancer** 1988 Nov 15; 62(10):2263–6
The case for a name change from neoadjuvant chemotherapy to induction chemotherapy [editorial] Stephens FO. **Cancer** 1989 Apr 1;63(7):1245–6
Ifosfamide in the treatment of pediatric malignancies. 4th European Conference on Clinical Oncology and Cancer Nursing. Madrid, November 1987. Proceedings. **Cancer Chemother Pharmacol** 1989;24 Suppl 1:S1–51
Phase I clinical and pharmacokinetic study of LY 195448. Cassidy J, et al. **Cancer Chemother Pharmacol** 1989; 24(4):233–7
Phase I study of methylacetylenic putrescine, an inhibitor of polyamine biosynthesis. Cornbleet MA, et al. **Cancer Chemother Pharmacol** 1989;23(6):348–52
Experience with ifosfamide in paediatric tumours. de Kraker J, et al. **Cancer Chemother Pharmacol** 1989;24 Suppl 1:S28–9
CGP 6809—a new nitrosoureido-sugar derivative with activity in human tumor xenografts. Fiebig HH, et al. **Cancer Chemother Pharmacol** 1989;23(6):337–40
Pharmacokinetics of tauromustine in cancer patients. Phase I studies. Gunnarsson PO, et al. **Cancer Chemother Pharmacol** 1989;23(3):176–80
Phase I trial of combined therapy with bleomycin and the calmodulin antagonist, trifluoperazine. Hait WN, et al. **Cancer Chemother Pharmacol** 1989;23(6):358–62
Oral dipyridamole and methotrexate in human solid tumors: a toxicity trial. Higano CS, et al. **Cancer Chemother Pharmacol** 1989;23(4):259–62
Phase I clinical and pharmacologic trial of trimetrexate in combination with 5-fluorouracil. Hudes GR, et al. **Cancer Chemother Pharmacol** 1989;24(2):117–22
GR38032F, a 5HT3 receptor antagonist, in the prophylaxis of acute cisplatin-induced nausea and vomiting. Marty M, et al. **Cancer Chemother Pharmacol** 1989;23(6):389–91
Effect of cancer chemotherapy on dapsone N-acetylation in man. Philip PA, et al. **Cancer Chemother Pharmacol** 1989; 23(6):395–6
A phase II study of ifosfamide in paediatric solid tumours. Pinkerton CR, et al. **Cancer Chemother Pharmacol** 1989;24 Suppl 1:S13–5
Ifosfamide in pediatric malignant solid tumors. Pratt CB, et al. **Cancer Chemother Pharmacol** 1989;24 Suppl 1:S24–7
Tallysomycin S10b—a phase I trial. Sørensen PG, et al. **Cancer Chemother Pharmacol** 1989;24(2):113–6
High-dose melphalan dosage adjustment: possibility of using a test-dose. Tranchand B, et al. **Cancer Chemother Pharmacol** 1989;23(2):95–100
Abstracts. Chemotherapy Foundation Symposium VIII. Innovative cancer chemotherapy for tomorrow. November 16, 17, 18, 1988, New York. **Cancer Invest** 1988;6(5):541–79
ADR-529 (ICRF-187). **Cancer Invest** 1989;7(1):101
Bropirimine. **Cancer Invest** 1989;7(1):105
Carboplatin. **Cancer Invest** 1989;7(1):107
A phase I trial of chlorambucil administered in short pulses in patients with advanced malignancies. Blumenreich MS, et al. **Cancer Invest** 1988;6(4):371–5
Antitumoral activity of a xanthate compound. I. Cytotoxicity studies with neoplastic cell lines in vitro. Schick HD, et al. **Cancer Lett** 1989 Jul 15;46(2):143–7
Assessment of renal function in the patient receiving chemotherapy. Lydon J. **Cancer Nurs** 1989 Jun; 12(3):133–43
Phase I clinical and pharmacokinetic trial of Brequinar sodium (DuP 785; NSC 368390). Arteaga CL, et al. **Cancer Res** 1989 Aug 15;49(16):4648–53
Phase I trial using adaptive control dosing of hexamethylene

bisacetamide (NSC 95580). Conley BA, et al. **Cancer Res** 1989 Jun 15;49(12):3436–40

Dose escalation study of recombinant human granulocyte–colony–stimulating factor (KRN8601) in patients with advanced malignancy. Eguchi K, et al. **Cancer Res** 1989 Sep 15;49(18):5221–4

Phase I clinical study of N–[(4–chlorophenyl)amino]carbonyl–2,3–dihydro–1H–indene–5–sulfonamide (LY186641). Hainsworth JD, et al. **Cancer Res** 1989 Sep 15;49(18):5217–20

Phase I trial of the amsacrine analogue 9–[(2–methoxy–4–[(methylsulfonyl)amino]–phenyl]amino)–N,5–dimethyl–4– acridinecarboxamide (CI–921). Hardy JR, et al. **Cancer Res** 1988 Nov 15;48(22):6593–6

Phase I and pharmacokinetic evaluation of thiotepa in the cerebrospinal fluid and plasma of pediatric patients: evidence for dose–dependent plasma clearance of thiotepa. Heideman RL, et al. **Cancer Res** 1989 Feb 1;49(3):736–41

Phase I trial and pharmacokinetics of trimelamol (N2,N4,N6–trihydroxymethyl–N2,N4,N6–trimethylmelamine). Judson IR, et al. **Cancer Res** 1989 Oct 1;49(19):5475–9

Oncological applications of somatostatin analogues [published erratum appears in Cancer Res 1989 Mar 15;49(6):1618] Schally AV. **Cancer Res** 1988 Dec 15;48(24 Pt 1):6977–85 (127 ref.)

Response of solid tumors to chemotherapy monitored by in vivo 31P nuclear magnetic resonance spectroscopy: a review. Steen RG. **Cancer Res** 1989 Aug 1;49(15):4075–85 (102 ref.)

Phase I study of combination therapy with interleukin 2 and beta–interferon in patients with advanced malignancy. Tamura T, et al. **Cancer Res** 1989 Feb 1;49(3):730–5

Phase I and clinical pharmacology study of intravenous flavone acetic acid (NSC 347512). Weiss RB, et al. **Cancer Res** 1988 Oct 15;48(20):5878–82

Methotrexate and dipyridamole combination chemotherapy based upon inhibition of nucleoside salvage in humans. Willson JK, et al. **Cancer Res** 1989 Apr 1;49(7):1866–70

Phase I trial and clinical pharmacological evaluation of hexamethylene bisacetamide administration by ten–day continuous intravenous infusion at twenty–eight–day intervals. Young CW, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7304–9

Importance of the DNA repair enzyme O6–alkyl guanine alkyltransferase (AT) in cancer chemotherapy. D'Incalci M, et al. **Cancer Treat Rev** 1988 Dec;15(4):279–92 (99 ref.)

Somatostatin and somatostatin analogues in oncology. Parmar H, et al. **Cancer Treat Rev** 1989 Jun;16(2):95–115 (136 ref.)

Non–chemotherapeutic agents that potentiate chemotherapy efficacy. Stewart DJ, et al. **Cancer Treat Rev** 1989 Mar; 16(1):1–40 (434 ref.)

A progress report of a phase I study of interferon–gamma and interleukin–2 and some comments on the mechanism of the toxicity due to interleukin–2. Wagstaff J, et al. **Cancer Treat Rev** 1989 Jun;16 Suppl A:105–9

Hypersensitivity of human tumor xenografts lacking O6–alkylguanine–DNA alkyltransferase to the anti–tumor agent 1–(4–amino–2–methyl–5–pyrimidinyl)methyl–3–(2–chloroethyl)–3–nitros ourea. Fujio C, et al. **Carcinogenesis** 1989 Feb;10(2):351–6

Caries incidence and prevalence in children receiving antineoplastic therapy. Pajari U, et al. **Caries Res** 1988; 22(5):318–20

Artificial intelligence techniques for the control of cancer cells. Nicolini C, et al. **Cell Biophys** 1989 Apr;14(2):117–27

The effect of chemotherapy on the gastrointestinal tract. Ghazi CM, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):728–30

Assessment of the oral condition of cancer patients submitted to chemotherapeutic treatment. Hamza M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):733–5

High–dose chemotherapy. Selby P. **Chemioterapia** 1987 Jun; 6(2 Suppl):675–7 (1 ref.)

In vitro sensitivity of various human tumors to 1–beta–D–arabinofuranosylcytosine and N4–behenoyl–1–beta–D–arabinofuranosylcytosine. Maehara Y, et al. **Chemotherapy** 1989;35(3):181–6

Mitoxantrone: a novel anthracycline derivative. Koeller J, et al. **Clin Pharm** 1988 Aug;7(8):574–81 (53 ref.)

Clinical, pharmacologic, and immunologic effects of 2'–deoxycoformycin. Cummings FJ, et al. **Clin Pharmacol Ther** 1988 Nov;44(5):501–9

Practical aspects of pain management in cancer patients. Schauer PK, et al. **Conn Med** 1989 Apr;53(4):211–5

Assessing new cancer treatments: regarding T. M. Morgan's "Analysis of Duration of Response" [letter] Dixon DO. **Controlled Clin Trials** 1989 Jun;10(2):231–5

Optimal two–stage designs for phase II clinical trials. Simon R. **Controlled Clin Trials** 1989 Mar;10(1):1–10

Acute renal failure and dialysis in cancer patients. Flombaum CD. **Crit Care Clin** 1988 Jan;4(1):61–79 (78 ref.)

Life–threatening toxicity of cancer therapy. Mittelman A. **Crit Care Clin** 1988 Jan;4(1):1–9 (55 ref.)

Pain control comment [letter] [published erratum appears in Dimens Health Serv 1989 Feb;66(1):7] Gannon M, et al. **Dimens Health Serv** 1988 Sep;65(6):7, 37

Tamoxifen. A reappraisal of its pharmacodynamic and pharmacokinetic properties, and therapeutic use. Buckley MM, et al. **Drugs** 1989 Apr;37(4):451–90 (190 ref.)

Carboplatin. A preliminary review of its pharmacodynamic and pharmacokinetic properties and therapeutic efficacy in the treatment of cancer. Wagstaff AJ, et al. **Drugs** 1989 Feb;37(2):162–90 (131 ref.)

Medical therapy of endocrine tumors. **Endocrinol Metab Clin North Am** 1989 Jun;18(2):259–600

Gonadal function following radiation and cytotoxic chemotherapy in childhood. Shalet SM. **Ergeb Inn Med Kinderheilkd** 1989;58:1–21 (70 ref.)

Intralesional application of recombinant human tumor necrosis factor alpha induces local tumor regression in patients with advanced malignancies. Bartsch HH, et al. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):287–91

Phase I clinical and pharmacokinetic investigation of didemnin B, a cyclic depsipeptide. Dorr FA, et al. **Eur J Cancer Clin Oncol** 1988 Nov;24(11):1699–706

After Goldie–Coldman—where now? Green JA. **Eur J Cancer Clin Oncol** 1989 May;25(5):913–6 (34 ref.)

Improving the therapeutic index of intra–arterial cisplatin chemotherapy [comment] Howell SB. **Eur J Cancer Clin Oncol** 1989 May;25(5):775–6 (10 ref.). **Comment on:** Eur J Cancer Clin Oncol 1988 Oct;24(10):1671–4

Phase I study of intratumoral application of recombinant human tumor necrosis factor. Pfreundschuh MG, et al. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):379–88

Phase I studies of rodorubicin single bolus and daily times five, once every three weeks in patients with advanced solid tumors. Verweij J, et al. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):627–32

Optimal control analysis of a cancer chemotherapy problem. Swan GW. **IMA J Math Appl Med Biol** 1987;4(2):171–84

General applications of optimal control theory in cancer chemotherapy. Swan GW. **IMA J Math Appl Med Biol** 1988;5(4):303–16

Individual human tumors in short–term micro–organ cultures: chemosensitivity testing by fluorescent cytoprinting. Rotman B, et al. **In Vitro Cell Dev Biol** 1988 Nov;24(11):1137–46

Antitumor, nerve blocks and neuroablative therapies for cancer pain. Evans WO. **Indiana Med** 1989 Jun;82(6):446–8 (20 ref.)

Adjuvant medications for cancer pain. Evans WO. **Indiana Med** 1989 May;82(5):370–2

Immunotherapy of patients with terminal–stage malignant tumors with an immunopotentiator OK–432—a comparison of SU–PS test–responding and –nonresponding patients. Yagi Y, et al. **Int J Immunopharmacol** 1988;10(4):451–61

Clinical trials of WR–2721 and cis–platinum. Glover D, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1201–4

Improving the use of anticancer drugs: clinical pharmacokinetic approaches. Collins JM. **Isr J Med Sci** 1988 Sep–Oct;24(9–10):483–7

Vitamin A derivatives in the prevention and treatment of human cancer. Lippman SM, et al. **J Am Coll Nutr** 1988 Aug;7(4):269–84 (133 ref.)

Effects of coumarin (1,2–benzopyrone) and cimetidine on peripheral blood lymphocytes, natural killer cells, and monocytes in patients with advanced malignancies. Marshall ME, et al. **J Biol Response Mod** 1989 Feb; 8(1):62–9

Should i.m. injections be avoided during cancer chemotherapy? Kellokumpu–Lehtinen P, et al. **J Cancer Res Clin Oncol** 1988;114(5):531–2

Drug resistance in cancer: an overview of the clinical aspects. Periti P, et al. **J Chemother** 1989 Feb;1(1):5–9 (43 ref.)

Effects of framing and level of probability on patients' preferences for cancer chemotherapy. O'Connor AM. **J Clin Epidemiol** 1989;42(2):119–26

A phase I trial of recombinant human tumor necrosis factor and interferon–gamma: effects of combination cytokine administration in vivo. Demetri GD, et al. **J Clin Oncol** 1989 Oct;7(10):1545–53

A pharmacokinetic study of high–dose continuous infusion cisplatin in children with solid tumors. Dominici C, et al. **J Clin Oncol** 1989 Jan;7(1):100–7

A phase I pharmacokinetic study of 21–day continuous infusion mitoxantrone. Greidanus J, et al. **J Clin Oncol** 1989 Jun;7(6):790–7

Phase I trial of intramuscularly administered tumor necrosis factor in patients with advanced cancer. Jakubowski AA, et al. **J Clin Oncol** 1989 Mar;7(3):298–303

Cancer chemotherapy: ethics and practice [letter] Omura GA. **J Clin Oncol** 1989 Aug;7(8):1176–7

The influence of symptoms of disease and side effects of treatment on compliance with cancer therapy. Richardson JL, et al. **J Clin Oncol** 1988 Nov;6(11):1746–52

The systemic administration of intravenous melphalan. Sarosy G, et al. **J Clin Oncol** 1988 Nov;6(11):1768–82 (103 ref.)

Hearing loss in children and young adults receiving cisplatin with or without prior cranial irradiation. Schell MJ, et al. **J Clin Oncol** 1989 Jun;7(6):754–60

Computerized telephone assessment of the "concrete" needs of chemotherapy outpatients: a feasibility study. Siegel K, et al. **J Clin Oncol** 1988 Nov;6(11):1760–7

The reporting of clinical trials: counting is not easy [editorial] Zelen M. **J Clin Oncol** 1989 Jul;7(7):827–8

Phase I study of a combination of recombinant tumor necrosis factor–alpha and recombinant interferon–gamma in cancer patients. Kurzrock R, et al. **J Interferon Res** 1989 Aug; 9(4):435–44

Numerical simulation of a stochastic model for cancerous cells submitted to chemotherapy. Abundo M, et al. **J Math Biol** 1989;27(1):81–90

Rationale for treatment of cancer with calcium antagonists. A review. Zacharski LR. **J Med** 1988;19(3–4):145–77 (166 ref.)

Synthesis, DNA–binding properties, and antitumor activity of novel distamycin derivatives. Arcamone FM, et al. **J Med Chem** 1989 Apr;32(4):774–8

Synthesis and biological properties of purine and pyrimidine 5'–deoxy–5'–(dihydroxyphosphinyl)–beta–D–ribofuranosyl analogues of AMP, GMP, IMP, and CMP. Raju N, et al. **J Med Chem** 1989 Jun;32(6):1307–13

Multidrug resistance: P–glycoprotein and its allies—the elusive foes. Chabner BA, et al. **J Natl Cancer Inst** 1989 Jun 21;81(12):910–3

Targeted toxin therapy for the treatment of cancer. FitzGerald D, et al. **J Natl Cancer Inst** 1989 Oct 4; 81(19):1455–63 (85 ref.)

Phase I trial of trimetrexate glucuronate on a five–day bolus schedule: clinical pharmacology and pharmacodynamics. Grochow LB, et al. **J Natl Cancer Inst** 1989 Jan 18; 81(2):124–30

Clinical and pharmacologic reappraisal of dichloromethotrexate. Hantel A, et al. **J Natl Cancer Inst** 1988 Dec 7;80(19):1547–53

Does P–glycoprotein predict response to chemotherapy? [editorial] Ling V. **J Natl Cancer Inst** 1989 Jan 18; 81(2):84–5

Cisplatin in the treatment of solid tumors: effect of dose and schedule. Livingston RB. **J Natl Cancer Inst** 1989 May 10;81(10):724–5 (18 ref.)

Emergence of the drug–resistant phenotype in tumor subpopulations: a hybrid model. Michelson S, et al. **J Natl Cancer Inst** 1989 Sep 20;81(18):1392–401

Hydroxyurea and etoposide: in vitro synergy and phase I clinical trial. Ratain MJ, et al. **J Natl Cancer Inst** 1988 Nov 2;80(17):1412–6

Multidrug resistance: molecular biology and clinical relevance. Rothenberg M, et al. **J Natl Cancer Inst** 1989 Jun 21;81(12):907–10

Symposium on the expanding role of folates and fluoropyrimidines in cancer chemotherapy. Rustum YM, et al. **J Natl Cancer Inst** 1988 Dec 7;80(19):1524–5

Reversal of 5–fluorouracil–induced myelosuppression by prolonged administration of high–dose uridine. van Groeningen CJ, et al. **J Natl Cancer Inst** 1989 Jan 18; 81(2):157–62

Neuropsychological test performance of pediatric cancer patients at diagnosis and one year later. Copeland DR, et al. **J Pediatr Psychol** 1988 Jun;13(2):183–96

Pharmacokinetics and toxicity of continuous infusion amphotericin B in cancer patients. Chabot GG, et al. **J Pharm Sci** 1989 Apr;78(4):307–10

Delivery systems for hydrophobic drugs. Garbo GM, et al. **J Photochem Photobiol –B–** 1988 May;1(4):494–5

What makes a good photosensitizer for photodynamic therapy? [news] Gomer CJ. **J Photochem Photobiol –B–** 1988 Mar;1(3):376–8

Mechanisms of tumor necrosis induced by photodynamic therapy. Zhou CN. **J Photochem Photobiol [B]** 1989 Jun; 3(3):299–318 (148 ref.)

Adjustment to illness and dropout of chemotherapy. Gilbar O, et al. **J Psychosom Res** 1989;33(1):1–5

Implantable catheter system for long–term intravenous chemotherapy. Hall P, et al. **J Surg Oncol** 1989 May; 41(1):39–41

Photodynamic therapy. **Lancet** 1989 Jul 8;2(8654):81–2 (18 ref.)

Molecular, cellular, and tissue responses following photodynamic therapy. Gomer CJ, et al. **Lasers Surg Med** 1988;8(5):450–63 (74 ref.)

Leukaemia Research Fund international research symposium on cytotoxic drug resistance in leukemia and other malignancies. **Leukemia** 1989 Jun;3(6):461–7

Phase I clinical and pharmacologic study of deoxycytidine [letter] Bhalla K, et al. **Leukemia** 1988 Oct;2(10):709–10

Chemotherapy of malignant tumors—a self–defeating form of immunotherapy? Laursen ML. **Med Hypotheses** 1989 May;29(1):9–15 (37 ref.)

The availability of heroin [letter] **Med J Aust** 1989 Jun 5; 150(11):666–7

The availability of heroin [letter] Doran KE. **Med J Aust** 1989 Mar 6;150(5):288

International Society of Pediatric Oncology. SIOP XX meeting. Trondheim, Norway, August 22–26, 1988. Abstracts. **Med Pediatr Oncol** 1988;16(6):384–453

Mitoxantrone and high–dose ara–C in refractory malignancies: a phase I trial. Smith WJ, et al. **Med Pediatr Oncol** 1989;17(2):159–63

Inhalation marijuana as an antiemetic for cancer chemotherapy. Vinciguerra V, et al. **N Y State J Med** 1988 Oct;88(10):525–7

Transport proteins. Export–import family expands [news] Higgins C. **Nature** 1989 Aug 3;340(6232):342

Mortality [letter] Nishihara T. **Nature** 1989 Jul 20; 340(6230):180

Drug resistant gene, resistant protein and their implication for therapy. Tsuruo T. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec;51(8):1327–31

Chlorpromazine and dexamethasone versus high–dose metoclopramide and dexamethasone in patients receiving cancer chemotherapy, particularly cis–platinum: a prospective randomized crossover study. Gez E, et al.

Oncology 1989;46(3):150–4
Double-blind randomized cross-over trial of dexamethasone and prochlorperazine as anti-emetics for cancer chemotherapy. Goldstein D, et al. Oncology 1989; 46(2):105–8
Nutritional monitoring and counselling for cancer patients during chemotherapy. Henquin N, et al. Oncology 1989; 46(3):173–7
Passive immunization against varicella in children receiving cancer chemotherapy [letter] Artico M. Pediatrics 1988 Dec;82(6):953–4
Immunoconjugates: applications in targeted drug delivery for cancer therapy. Ram BP, et al. Pharm Res 1987 Jun; 4(3):181–8 (98 ref.)
Continuous infusion of low-dose doxorubicin, epirubicin and mitoxantrone in cancer chemotherapy: a review. Greidanus J, et al. Pharm Weekbl [Sci] 1988 Dec 9;10(6):237–45 (74 ref.)
Clinical trials of WR-2721 prior to alkylating agent chemotherapy and radiotherapy. Glover D, et al. Pharmacol Ther 1988;39(1–3):3–7
Enhancement of 5-fluorouracil's anticancer activity by dipyridamole. Grem JL, et al. Pharmacol Ther 1989; 40(3):349–71 (126 ref.)
Enhancement of the antitumor activity of 5-fluorouracil by uridine rescue. Klubes P, et al. Pharmacol Ther 1989; 41(1–2):289–302 (98 ref.)
A method for in vivo analysis of platinum after chemotherapy with cisplatin. Jonson R, et al. Phys Med Biol 1988 Jul; 33(7):847–57
Criteria for the validity of clinical trials of treatments of cohorts of cancer patients based on the Hardin Jones principle. Pauling L, et al. Proc Natl Acad Sci U S A 1989 Sep;86(18):6835–7
A preliminary report on the efficacy of hypnosis to control anticipatory nausea and vomiting caused by cancer chemotherapy. Axelrod A, et al. Prog Clin Biol Res 1988; 278:147–50
The 6-day subrenal capsule assay (SRCA): its criticism, biology and review of assay/clinical correlations. Bogden AE, et al. Prog Clin Biol Res 1988;276:139–204 (35 ref.)
Purposes, benefits and techniques of cancer treatment predictive tests. Hall TC. Prog Clin Biol Res 1988;276:1–9
Fundamental problems and future possibilities for treatment predictor systems. Hall TC. Prog Clin Biol Res 1988; 276:295–8
Subrenal capsule assay (SRCA) in human tumors. Kangas L, et al. Prog Clin Biol Res 1988;276:205–12
Photodynamic therapy of malignant tumors. McCaughan JS Jr. Prog Clin Biol Res 1988;278:163–9
Inhibition of DNA synthesis in selection of anticancer therapy. Silvestrini R, et al. Prog Clin Biol Res 1988; 276:93–103
Etiology and treatment of the psychological side effects associated with cancer chemotherapy: a critical review and discussion. Carey MP, et al. Psychol Bull 1988 Nov; 104(3):307–25 (104 ref.)
Corticosteroids as antiemetics. Aapro MS. Recent Results Cancer Res 1988;108:102–11 (48 ref.)
Hypnotherapy as antiemetic treatment in cancer chemotherapy. Fortuin AA. Recent Results Cancer Res 1988;108:112–6 (4 ref.)
Controlling emesis in patients receiving cancer chemotherapy. Gralla RJ, et al. Recent Results Cancer Res 1988;108:89–101 (50 ref.)
Estimating the magnitude of benefits from adjuvant therapy. Henderson IC. Recent Results Cancer Res 1988;111:82–6
Fighting alopecia in cancer chemotherapy. Joss RA, et al. Recent Results Cancer Res 1988;108:117–26 (32 ref.)
Statistical standards for protocols and protocol deviations. Lewis JA. Recent Results Cancer Res 1988;111:27–33
Psychotherapy in support of patients undergoing antineoplastic chemotherapy. Schwarz R, et al. Recent Results Cancer Res 1988;108:271–6 (13 ref.)
Vitamins and cancer. Stähelin HB. Recent Results Cancer Res 1988;108:227–34 (35 ref.)
Quality of life for patients receiving chemotherapy and hormonal therapy. Tiffany R. Recent Results Cancer Res 1988;108:316–8
Biochemical modulation of anticancer drugs. Kanamaru R, et al. Sci Rep Res Inst Tohoku Univ [Med] 1988 Dec; 35(1–4):18–28 (41 ref.)
Photodynamic therapy in the treatment of malignancies. Gomer CJ. Semin Hematol 1989 Jan;26(1):27–34 (66 ref.)
From research to approved treatment: overcoming the obstacles. Wittes RE. Semin Hematol 1988 Jul;25(3 Suppl 3):38–42
Cisplatin: contemporary treatment approaches. Semin Oncol 1989 Aug;16(4 Suppl 6):1–128
Current developments and future direction with ifosfamide. Proceedings of a satellite symposium of the European Society of Medical Oncology. October 31, 1988, Lugano, Switzerland. Semin Oncol 1989 Feb;16(1 Suppl 3):1–101
Carboplatin (JM-8, CBDCA). A new platinum compound. Semin Oncol 1989 Apr;16(2 Suppl 5):1–48
Navelbine: a new step in cancer therapy? Armand JP, et al. Semin Oncol 1989 Apr;16(2 Suppl 4):41–5 (0 ref.)
Selection of patients for clinical trials. Begg CB. Semin Oncol 1988 Oct;15(5):434–40 (38 ref.)
P-glycoprotein and multidrug resistance in cancer chemotherapy. Deuchars KL, et al. Semin Oncol 1989 Apr; 16(2):156–65 (83 ref.)
Quantitation of tumor response to anti-neoplastic therapy. Grossman SA, et al. Semin Oncol 1988 Oct;15(5):441–54 (124 ref.)
Ifosfamide in pediatric malignancies. Jürgens H, et al. Semin Oncol 1989 Feb;16(1 Suppl 3):46–50 (19 ref.)
Clinical trials in pediatric oncology. Leventhal BG, et al. Semin Oncol 1988 Oct;15(5):482–7 (23 ref.)
An overview of clinical trials in oncology. Leventhal BG. Semin Oncol 1988 Oct;15(5):414–22 (41 ref.)
Future of cancer chemotherapy with cisplatin. Muggia FM, et al. Semin Oncol 1989 Aug;16(4 Suppl 6):123–8 (52 ref.)
Clinical studies of ifosfamide/mesna at St Jude Children's Research Hospital, 1983–1988. Pratt CB, et al. Semin Oncol 1989 Feb;16(1 Suppl 3):51–5
Cancer chemotherapy in the elderly. Walsh SJ, et al. Semin Oncol 1989 Feb;16(1):66–75 (53 ref.)
Photodynamic therapy—new approaches. Dougherty TJ. Semin Surg Oncol 1989;5(1):6–16 (78 ref.)
The bias of the sample proportion following a group sequential phase II clinical trial. Chang MN, et al. Stat Med 1989 May;8(5):563–70
Surrogate endpoints in clinical trials: cancer. Ellenberg S, et al. Stat Med 1989 Apr;8(4):405–13
The impact that group sequential tests would have made on ECOG clinical trials. Rosner GL, et al. Stat Med 1989 Apr;8(4):505–16
Ethical problems in clinical trials concerning minimal residual tumors. Dion S, et al. Suppl J Med Oncol Tumor Pharmacother 1988;1:99–102 (16 ref.)
Adjuvant chemotherapy and the kinetic refractoriness of minimal residual tumors. Reizenstein P, et al. Suppl J Med Oncol Tumor Pharmacother 1988;1:57–8
The medical management of malignant disease. Smith I. Trans Med Soc Lond 1986–87;103:18–20
Unwarranted pessimism in cancer chemotherapy. Hickman J. Trends Pharmacol Sci 1989 May;10(5):167–9 (7 ref.)
A phase II study of mitoxantrone. Cartei G, et al. Tumori 1988 Oct 31;74(5):579–83
Phase II study of divided-dose vinblastine in advanced cancer patients. Giaccone G, et al. Tumori 1989 Jun 30; 75(3):248–51
A preliminary clinical study of cyclophosphamide with reduced glutathione as uroprotector. Nobile MT, et al. Tumori 1989 Jun 30;75(3):257–8
[Prevention and treatment of cancer by integrated traditional and Western medicine methods] Wang JM. Chung Hsi I Chieh Ho Tsa Chih 1989 Jun;9(6):368–9 (Chi)
[High-dose methotrexate with citrovorum factor rescue (HD-MTX-CFR) in the treatment of malignant solid tumors—clinical analysis of 62 patients] Wang QL, et al. Chung Hua Chung Liu Tsa Chih 1988 Mar;10(2):152–4 (Eng. Abstr.) (Chi)
[Phototherapy and photodiagnosis of malignant tumors] Jirsa M. Cas Lek Cesk 1988 Dec 2;127(49):1505–7 (Eng. Abstr.) (Cze)
[Personal experience with isolated regional hyperthermic perfusion of cytostatic agents in tumors of the extremities] Bříza J, et al. Rozhl Chir 1989 Feb;68(2):113–6 (Eng. Abstr.) (Cze)
[Permanent central venous catheter in pediatric oncology] Nielsen PA, et al. Ugeskr Laeger 1989 Jun 5;151(23):1470–2 (Eng. Abstr.) (Dan)
[High-dose epidural opioid treatment of malignant pain] Sjøgren P, et al. Ugeskr Laeger 1989 Jan 2;151(1):25–8 (Eng. Abstr.) (Dan)
[Oncolytic agents (published erratum appears in Ned Tijdschr Geneeskd 1988 Nov 12;132(46):2136)] Engelsman E. Ned Tijdschr Geneeskd 1988 Aug 20;132(34):1563–6 (Dut)
[Curability of human cancers with drugs. A new concept: therapeutic implications] Jasmin C. An Esp Pediatr 1988 Oct;29 Suppl 34:160–71 (60 ref.) (Fre)
[Resistance, the cause of failure in antineoplastic chemotherapies] Israel L. Pathol Biol (Paris) 1989 Feb; 37(2):125–7 (Fre)
[Advances in intercalating drugs] Pouillart P, et al. Pathol Biol (Paris) 1989 Feb;37(2):159–60 (Fre)
[Chemosensitivity testing and the drug resistance of human tumors] Ludwig C. Dtsch Med Wochenschr 1989 Sep 8; 114(36):1375–9 (36 ref.) (Eng. Abstr.) (Ger)
[Calcium antagonists in the cytostatic therapy of malignant tumors] Menke H, et al. Dtsch Med Wochenschr 1988 Nov 4;113(44):1728–32 (52 ref.) (Ger)
[Antimetabolites of nucleic acid synthesis in the treatment of malignant tumors, autoimmune diseases and infections. The 1988 Nobel Prize for Medicine] Wilmanns W. Dtsch Med Wochenschr 1989 Jan 13;114(2):73–5 (Ger)
[Postoperative course in children with malignant tumors following preoperative chemotherapy] Angerpointner TA, et al. Klin Padiatr 1989 May-Jun;201(3):209–12 (Eng. Abstr.) (Ger)
[Continuous doxorubicin infusions. A pilot study in young patients] Bode U, et al. Klin Padiatr 1988 May-Jun; 200(3):271–3 (Eng. Abstr.) (Ger)
[Experiences with the combination carboplatin/VP 16 in the treatment of recurrent tumors in children] Calaminus G, et al. Klin Padiatr 1989 Jul-Aug;201(4):311–5 (Eng. Abstr.) (Ger)
[Ototoxicity of cisplatin in children with malignant diseases] Hadjilaskari P, et al. Klin Padiatr 1989 Jul-Aug; 201(4):316–21 (Eng. Abstr.) (Ger)
[Experiences with completely implantable central venous catheter systems] Schmidt A, et al. Klin Padiatr 1989 May-Jun;201(3):189–94 (Eng. Abstr.) (Ger)
[Initial clinical experiences with the administration of new amino acid derivatives in the treatment of malignant tumors] Eder J, et al. Krebsarzt 1969;24(6):364–9 (Eng. Abstr.) (Ger)
[Cytostatic drugs. 1: Platinum compounds, alkylating and intercalating cytostatic drugs] Bauch HJ. Med Monatsschr Pharm 1989 Jan;12(1):8–20 (17 ref.) (Ger)
[Prevention of extravasation necroses as a complication following intravenous cytostatic drug therapy. Results of an open pilot study] Kolarić K, et al. Onkologie 1988 Oct; 11(5):238–40 (Eng. Abstr.) (Ger)
[Empirical antimicrobial therapy of infection and fever episodes in children and adolescents with neutropenia caused by cytotoxic chemotherapy] Fink FM, et al. Padiatr Padol 1989;24(1):33–42 (Eng. Abstr.) (Ger)
[Serial determination of anthracycline poisoning in children] Stein JI, et al. Wien Klin Wochenschr 1989 Jan 6;101(1):45–8 (Eng. Abstr.) (Ger)
[Hyaluronidase—an effective substance in the treatment of malignant disease? 6th workshop of the Boltzmann Institute of Hematology and Leukemia Research. Vienna, 11–13 February 1988. Abstracts] Wien Klin Wochenschr Suppl 1988;178:1–23 (Ger)
[Are requirements for increased safety in dealing with antineoplastic drugs exaggerated?] Kusch N, et al. Z Gesamte Hyg 1988 Dec;34(12):734–6 (Eng. Abstr.) (Ger)
[Increased secretion of vasopressin and edema formation in high dosage methotrexate therapy] Frahm H, et al. Z Gesamte Inn Med 1988 Aug 1;43(15):411–4 (Eng. Abstr.) (Ger)
[Echocardiography with angiotensin administration in the diagnosis of adriamycin-induced cardiomyopathy] Göldel N, et al. Z Kardiol 1989 May;78(5):320–7 (Eng. Abstr.) (Ger)
[Oncolytic action and pulmonary toxicity of bleomycin revisited] Lauta VM, et al. Clin Ter 1988 Mar 31; 124(6):465–82 (49 ref.) (Eng. Abstr.) (Ita)
[Treatment of cancer pain with buprenorphine. Personal experience] Trombatore G, et al. G Ital Oncol 1988 Jul-Dec;8(3–4):113–5 (Eng. Abstr.) (Ita)
[Costs and benefits in post-surgical chemotherapy and follow-up] Zilli L. Minerva Chir 1989 Feb 28;44(4):813–7 (Ita)
[Race against time in the fight against AIDS and cancer: research on rare plants] Gandolfi A. Minerva Stomatol 1988 Nov;37(11):IX (Ita)
[Second malignancies and cancer chemotherapy] Horikoshi N. Gan No Rinsho 1989 Jan;Spec No:720–6 (Jpn)
[A molecular basis for multidrug resistance and reversal of the resistance] Akiyama S, et al. Gan To Kagaku Ryoho 1989 Apr;16(4 Pt 2-1):1266–72 (Eng. Abstr.) (Jpn)
[Problems in evaluating the effects of cancer chemotherapy] Furue H. Gan To Kagaku Ryoho 1989 Mar;16(3 Pt 1):297–301 (17 ref.) (Eng. Abstr.) (Jpn)
[Intra-arterial infusion chemotherapy: clinical applications and current status of therapeutic effects on various malignant tumors] Itsubo M, et al. Gan To Kagaku Ryoho 1989 Feb;16(2):199–206 (32 ref.) (Eng. Abstr.) (Jpn)
[Antiemetic efficacy of betamethasone versus betamethasone combined with metoclopramide in cisplatin-treated cancer patients] Kagami Y, et al. Gan To Kagaku Ryoho 1989 Apr; 16(4 Pt 1):807–10 (Eng. Abstr.) (Jpn)
[Summary of problems in evaluating effects of cancer chemotherapy] Majima H. Gan To Kagaku Ryoho 1989 Mar;16(3 Pt 1):323–5 (Jpn)
[A method of cisplatin administration with the aid of high-dose bismuth subnitrate, and their pharmacokinetics] Morikawa T, et al. Gan To Kagaku Ryoho 1989 Apr;16(4 Pt 2-1):1094–8 (Eng. Abstr.) (Jpn)
[Continuous arterial infusion chemotherapy in cancer cases followed as outpatients] Ohya K, et al. Gan To Kagaku Ryoho 1989 Aug;16(8 Pt 2):3000–2 (Eng. Abstr.) (Jpn)
[Combination chemotherapy of CPM-MTX-5-FU in non-resectable and recurrent cancer patients] Saeki T, et al. Gan To Kagaku Ryoho 1989 Apr;16(4 Pt 1):827–31 (Eng. Abstr.) (Jpn)
[Drug resistance and a strategy to eradicate resistant malignant cells] Shimoyama M. Gan To Kagaku Ryoho 1989 Apr;16(4 Pt 2-1):1280–2 (Eng. Abstr.) (Jpn)
[Overview on the behalf of the Society for Arterial Infusion Chemotherapy Research] Taguchi T. Gan To Kagaku Ryoho 1989 Apr;16(4 Pt 2-1):919–22 (Eng. Abstr.) (Jpn)
[Role of autologous bone marrow transplantation in cancer chemotherapy] Tajima T, et al. Gan To Kagaku Ryoho 1988 Nov;15(11):3018–24 (Eng. Abstr.) (Jpn)
[Antiemetic efficacy of intravenous timiperone in emesis induced by a 5-day-course of cisplatin] Tsujii T, et al. Gan To Kagaku Ryoho 1989 Sep;16(9):3307–9 (Jpn)
[Therapeutic approaches for multidrug resistance] Tsuruo T. Gan To Kagaku Ryoho 1988 Oct;15(10):2848–52 (Eng. Abstr.) (Jpn)
[The multidrug-resistance gene MDR1] Ueda K, et al. Gan To Kagaku Ryoho 1988 Oct;15(10):2858–62 (Eng.

Abstr.) (Jpn)
[Application of immunotoxin in cancer therapy; its usefulness and problems in the future] Yamaguchi T, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-1):1152-6 (Eng. Abstr.) (Jpn)
[Targeting chemotherapy of cancer] **Nippon Gan Chiryo Gakkai Shi** 1988 Apr 20;23(4):970-82 (Jpn)
[Studies on clinical pharmacology of cis-diamminedichloroplatinum (CDDP) in children with malignant neoplasm: pharmacokinetics of free and total CDDP] Murakami T, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Aug 20;23(8):1672-80 (Eng. Abstr.) (Jpn)
[Studies of clinical pharmacology of cis-diamminedichloroplatinum (CDDP) in children with malignant neoplasm: clinical toxicities of CDDP] Murakami T, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Aug 20;23(8):1681-90 (Eng. Abstr.) (Jpn)
[Targeting to tumor site by the conjugate of antitumor drug with synthetic polymer] Hirano T, et al. **Nippon Rinsho** 1989 Jun;47(6):1412-6 (Jpn)
[The efficient therapeutic effect of monoclonal antibody conjugated liposomes containing ADM] Konno H, et al. **Nippon Rinsho** 1989 Jun;47(6):1396-401 (Jpn)
[Targeting of magnetically responsive drug carriers to cancer] Morimoto Y, et al. **Nippon Rinsho** 1989 Jun; 47(6):1432-6 (Jpn)
[Clinical application and significance of drug delivery systems in cancer chemotherapy] Tsukagoshi S. **Nippon Rinsho** 1989 Jun;47(6):1295-301 (Jpn)
[Targeting effect of transferrin-neocarzinostatin conjugate by receptor-mediated endocytosis] Urushizaki I. **Nippon Rinsho** 1989 Jun;47(6):1423-31 (Jpn)
[Targeting therapy of cancer using monoclonal antibody-antitumor drug conjugate] Yachi A, et al. **Nippon Rinsho** 1989 Jun;47(6):1391-5 (Jpn)
[Release of peripheral blood stem cells following chemotherapy in childhood malignancies] Fukuda M, et al. **Rinsho Ketsueki** 1989 Mar;30(3):303-8 (Eng. Abstr.) (Jpn)
[Effect of antineoplastic chemotherapy on the visual system of children] Jochan K, et al. **Klin Oczna** 1988 Jul; 90(7):252-3 (Eng. Abstr.) (Pol)
[Local toxicity of cytostatics] Karnicka-Młodkowska H, et al. **Pol Tyg Lek** 1988 Aug 15;43(33):1066-8 (5 ref.) (Pol)
[Control of hematologic adverse effects of antineoplastic drugs] Wiktor-Jędrzejczak W. **Pol Tyg Lek** 1988 Aug 15; 43(33):1043-6 (Pol)
[Topoisomerase II as a cellular receptor of various antineoplastic drugs] Szmigiero L. **Postepy Biochem** 1988; 34(3):147-52 (31 ref.) (Pol)
[Sensitivity of human tumor heterografts to a spin-labelled rubomycin derivative] Konovalova NP, et al. **Eksp Onkol** 1988;10(4):54-9 (Eng. Abstr.) (Rus)
[Photodynamic therapy of cancer patients] Nasedkin AN. **Sov Med** 1988;(8):37-9 (34 ref.) (Rus)
[Experience in the use of Soviet-made drug delivery systems in the chemotherapy of malignant tumors] Perevodchikova NI, et al. **Sov Med** 1988;(9):28-31 (Eng. Abstr.) (Rus)
[Cisplatin (platidiam) and the prospects for using complex platinum compounds in the clinical chemotherapy of malignant tumors] Gorbunova VA. **Vopr Onkol** 1989; 35(3):325-30 (Eng. Abstr.) (Rus)
[Results of a cooperative clinical study of the Russian antineoplastic antibiotic bleomycetin] Sokolov IuN, et al. **Vopr Onkol** 1988;34(11):1348-55 (Eng. Abstr.) (Rus)
[Angiogenesis as a target for antitumor actions] Ushmorov AG, et al. **Vopr Onkol** 1989;35(3):263-70 (58 ref.) (Rus)
[Progress in chemotherapy. Secondary effects] Bezanilla Regato JL. **An Esp Pediatr** 1988 Sep;29 Suppl 32:93-5 (Spa)
[Chemotherapy in ambulatory care] Muñoz Villa A. **An Esp Pediatr** 1988 Sep;29 Suppl 33:174-6 (6 ref.) (Spa)

ECONOMICS

The ethical problems of philanthropic cancer-research foundations. Meyer G. **Biomed Pharmacother** 1988; 42(3):187-8
Community participation or community manipulation? A case study of the Illawarra Cancer Appeal-a-thon. Short SD. **Community Health Stud** 1989;13(1):34-8
ACS reports on cancer and the poor [news] Corliss J. **J Natl Cancer Inst** 1989 Aug 16;81(16):1206-7
"We need help"—testimony at hearing on cancer and the poor [news] Wittenberg CK. **J Natl Cancer Inst** 1989 Aug 16;81(16):1207-9
Hospital costs, cancer patients, and surgical diagnostic related groups. Muñoz E, et al. **J Surg Oncol** 1989 May;41(1):47-51
Financial viability of in-patient admissions from rural oncology outreach clinics. Guy JF, et al. **Prog Clin Biol Res** 1988;278:219-25
Reimbursement issues in clinical oncology. Vogelzang NJ, et al. **Semin Oncol** 1988 Dec;15(6 Suppl 6):34-43
[Evaluation of health expenditures in the first 6 months after the diagnosis of cancer using a population register] Belon-Leneutre M, et al. **Rev Epidemiol Sante Publique** 1988;36(4-5):318-24 (Eng. Abstr.) (Fre)
[Cost aspects of oncologic chemotherapy] Knüsli C, et al. **Schweiz Rundsch Med Prax** 1989 May 2;78(18):515-9 (Eng. Abstr.) (Ger)
[Prediction of medical costs and the outcome through the utilization of the National Health Insurance Reimbursement Claim System. A study of stroke and cancer patients] Takahashi T. **Nippon Ika Daigaku Zasshi** 1988 Oct; 55(5):478-90 (Eng. Abstr.) (Jpn)
[Insurance and cancer. Low utilization of contributions] Melsom H, et al. **Tidsskr Nor Laegeforen** 1989 Jan 10; 109(1):27-8 (Nor)
[Economic criteria in assessing the efficacy of the fight against cancer] Diatchenko OT, et al. **Vopr Onkol** 1988; 34(12):1411-21 (71 ref.) (Rus)

EMBRYOLOGY

Prenatal carcinogenesis. Tomatis L. **IARC Sci Publ** 1988; (92):121-32 (60 ref.)

ENZYMOLOGY

Proceedings of the Twenty-seventh Symposium on Regulation of Enzyme Activity and Synthesis in Normal and Neoplastic Tissues. Indianapolis, Indiana, October 5 and 6, 1987. **Adv Enzyme Regul** 1988;27:1-502
Enzymatic mechanisms of resistance to alkylating agents in tumor cells and normal tissues. Colvin M, et al. **Adv Enzyme Regul** 1988;27:211-21 (27 ref.)
Methylenetetrahydrofolate dehydrogenases in normal and transformed mammalian cells. MacKenzie RE, et al. **Adv Enzyme Regul** 1988;27:31-9
Methylthioadenosine (MeSAdo) phosphorylase deficiency in malignancy. Carson DA, et al. **Adv Exp Med Biol** 1988; 250:179-85 (15 ref.)
Pancreatic secretory trypsin inhibitor in cancer. Ogawa M, et al. **Adv Exp Med Biol** 1988;240:547-53 (25 ref.)
Methods for thymidylate synthase pharmacodynamics: serial biopsy, free and total TS, FdUMP and dUMP, and H4PteGlu and CH2-H4PteGlu assays. Spears CP, et al. **Adv Exp Med Biol** 1988;244:97-106
The role of mitochondrial hexokinase in neoplastic phenotype and its sensitivity to lonidamine. Paggi MG, et al. **Ann N Y Acad Sci** 1988;551:358-60
Visualization of time-dependent inactivation of human tumor cathepsin B isozymes by a peptidyl fluoromethyl ketone using a fluorescent print technique. Smith RE, et al. **Anticancer Res** 1988 Jul-Aug;8(4):525-9
Enzymatically active cathepsin B dissociating from its inhibitor complexes is elevated in blood plasma of patients with septic shock and some malignant tumors. Assfalg-Machleidt I, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:263-9
Purification and characterization of two different precursor forms of the cathepsin B-like proteinase from human malignant ascitic fluid. Keppler D, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:185-90
Characterization of a tumor-associated serine protease. Stenman UH, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:9-14
Decreased serum aldolase B levels in patients with malignant tumors. Asaka M, et al. **Cancer** 1988 Dec 15;62(12):2554-7
Elevation of the placental glutathione S-transferase form (GST-pi) in tumor tissues and the levels in sera of patients with cancer. Tsuchida S, et al. **Cancer Res** 1989 Sep 15; 49(18):5225-9
Adenosine diphosphate ribosyl transferase responses to a standardized dose of hydrogen peroxide in the mononuclear leukocytes of patients with a diagnosis of cancer. Pero RW, et al. **Carcinogenesis** 1989 Sep;10(9):1657-64
Lactate dehydrogenase isoenzyme pattern in sera of patients with malignant diseases. Giannoulaki EE, et al. **Clin Chem** 1989 Mar;35(3):396-9
Glutathione-related enzyme activities in testis of patients with malignant diseases. Aceto A, et al. **Clin Chim Acta** 1989 Jul 31;183(1):83-6
Degradation of laminin by human tumor cathepsin B. Lah TT, et al. **Clin Exp Metastasis** 1989 Jul-Aug;7(4):461-8
Is alcohol intolerance in cancer patients explained by tumour production of alcohol dehydrogenase? [letter] Rees GJ. **Eur J Cancer Clin Oncol** 1989 Jul;25(7):1123
Lactate dehydrogenase isoenzyme patterns in serous effusions. Nevin GB, et al. **Ir J Med Sci** 1988 Aug; 157(8):256-7
Inhibition of trypsin-like enzymes on cells with rhodamine-aprotinin. Steven FS, et al. **J Enzym Inhib** 1989; 2(4):295-303
Serum proteinase inhibitors and glutamyl transferase in patients suffering from cancer of the gastrointestinal tract, lung, breast and cervix. Pongpaew P, et al. **J Med Assoc Thai** 1988 Jun;71(6):310-3
Significance of the isoenzyme BB of creatine kinase (CK-BB) in various neoplastic pathologies. Brianzoni E, et al. **Quad Sclavo Diagn** 1987 Sep;23(3):257-61
Polyamine oxidase activity in serum of cancer patients and healthy subjects. Romano M, et al. **Tumori** 1988 Aug 31; 74(4):397-9
Activities of phosphohexose isomerase and other glycolytic enzymes in normal and tumor tissue of patients with neoplastic diseases: comparison with serum activities and correlation to tumor staging and grading. Baumann M, et al. **Tumour Biol** 1988;9(6):281-6
[Some enzyme disturbances in cancer patients undergoing polychemotherapy] Violante A, et al. **G Ital Oncol** 1988 Jan-Mar;8(1):14-32 (Eng. Abstr.) (Ita)
[Lysozyme activities in plasma and neutrophilic granulocytes] Kabutomori O, et al. **Rinsho Byori** 1989 Apr; 37(4):445-6 (Jpn)
[Increased complexes between protease and protease inhibitor in the plasma from patients with neoplasm] Okadome T, et al. **Rinsho Ketsueki** 1988 Dec;29(12):2283-6 (Eng. Abstr.) (Jpn)
[Cancer-associated-changes in gamma-glutamyl transpeptidase] Taniguchi N, et al. **Tanpakushitsu Kakusan Koso** 1988 Jul;33(9):1529-35 (29 ref.) (Jpn)
[Neoplasms, enzymes and enzymatic markers] Rokicki M, et al. **Wiad Lek** 1988 Sep 15;41(18):1218-23 (81 ref.) (Pol)

EPIDEMIOLOGY

Cancer risk after evaluation for infertility. Brinton LA, et al. **Am J Epidemiol** 1989 Apr;129(4):712-22
Sex differentials in morbidity and mortality risks examined by age and cause in the same cohort. Wingard DL, et al. **Am J Epidemiol** 1989 Sep;130(3):601-10
Cancer morbidity in lamp manufacturing workers. Shannon HS, et al. **Am J Ind Med** 1988;14(3):281-90
Critical review of cancer epidemiology in petroleum industry employees, with a quantitative meta-analysis by cancer site. Wong O, et al. **Am J Ind Med** 1989;15(3):283-310
Neoplasms in dialysis patients: a population-based study. Port FK, et al. **Am J Kidney Dis** 1989 Aug;14(2):119-23
The development of a comprehensive, institution-based patient risk evaluation program: II. Validity and reliability of questionnaire data. Spitz MR, et al. **Am J Prev Med** 1988 Jul-Aug;4(4):188-93
The development of a comprehensive, institution-based patient risk evaluation program: I. Development, content, and data management. Spitz MR, et al. **Am J Prev Med** 1988 Jul-Aug;4(4):183-7
Physical activity and risk of cancer in the NHANES I population. Albanes D, et al. **Am J Public Health** 1989 Jun;79(6):744-50
Childhood malignant tumours in Papua New Guinea. Tefuarani N, et al. **Ann Trop Paediatr** 1988 Dec;8(4):201-6
Neonatal tumours: Glasgow 1955-86. Davis CF, et al. **Arch Dis Child** 1988 Sep;63(9):1075-8
Cumulative damage models in cancer epidemiology: application to human incidence and mortality data. Becker N. **Arch Environ Health** 1989 Jul-Aug;44(4):260-6
Cancer in Finland. Saxén EA. **Arch Geschwulstforsch** 1989; 59(2):157-8
Organization of cancer care in the German Democratic Republic. Tanneberger S. **Arch Geschwulstforsch** 1989; 59(1):69-72
An evaluation of the existing evidence on the carcinogenic potential of extremely low frequency magnetic fields. Delpizzo V. **Australas Phys Eng Sci Med** 1989 Jun; 12(2):55-68 (97 ref.)
The longitudinal study and the social distribution of cancer [editorial] Kinlen LJ. **BMJ** 1988 Oct 29;297(6656):1070
The completeness of cancer registration in England: an assessment from the Oxford-FPA contraceptive study. Villard-Mackintosh L, et al. **Br J Cancer** 1988 Oct; 58(4):507-11
Why women should not be given hormone replacement therapy [letter] [published erratum appears in Br J Hosp Med 1989 Aug;42(2):159] Grant EC. **Br J Hosp Med** 1989 Jun;41(6):590
Disability, mortality, and incidence of cancer among Geneva painters and electricians: a historical prospective study. Gubéran E, et al. **Br J Ind Med** 1989 Jan;46(1):16-23
Cancer and other mortality patterns among United States furniture workers. Miller BA, et al. **Br J Ind Med** 1989 Aug;46(8):508-15
Incidence of cancer and mortality among employees in the asbestos cement industry in Denmark. Raffn E, et al. **Br J Ind Med** 1989 Feb;46(2):90-6
Cancer incidence and mortality among Swedish smelter workers. Sandström AI, et al. **Br J Ind Med** 1989 Feb; 46(2):82-9
Sewage hardness and mortality from cancer and cardiovascular disease. Sung JF, et al. **Bull Environ Contam Toxicol** 1988 Oct;41(4):489-95
Cancer statistics [letter] Rodes ND. **CA** 1989 Jul-Aug; 39(4):254-5
Cancer statistics, 1989. Silverberg E, et al. **CA** 1989 Jan-Feb; 39(1):3-20
Cancer cluster investigation: toward a more rational approach [editorial] Leech JA. **Can Med Assoc J** 1989 Jul 15;141(2):105-6
Cancer in the economically disadvantaged. Freeman HP. **Cancer** 1989 Jul 1;64(1 Suppl):324-34; discussion 342-5
Cancer risk in male veterans utilizing the Veterans Administration medical system. Harris RE, et al. **Cancer** 1989 Sep 1;64(5):1160-8
Racial differences in cancer incidence: the significance of age-specific patterns. Satariano WA, et al. **Cancer** 1988 Dec 15;62(12):2640-53 (36 ref.)
Comparative epidemiology of cancer between the United States and Italy. La Vecchia C, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7285-93
Cancer in Costa Rica. Sierra R, et al. **Cancer Res** 1989 Feb 1;49(3):717-24
Glucose-6-phosphate dehydrogenase deficiency and cancer in a Sardinian male population: a case-control study. Cocco

P, et al. **Carcinogenesis** 1989 May;10(5):813–6
Epidemiology of genetically determined cancer. Knudson AG Jr. **Ciba Found Symp** 1989;142:3–12; discussion 12–9 (24 ref.)
Pattern of hand tumours in Lagos. Adeyemi-Doro HO. **East Afr Med J** 1988 Apr;65(4):271–7
Malignant disease in Sudanese children. Hussain MA, et al. **East Afr Med J** 1988 Aug;65(8):507–13
The status of status inconsistency. Vernon SW, et al. **Epidemiol Rev** 1988;10:65–86 (79 ref.)
Cancer in The Netherlands. From scenarios to health policy. Schaapveld K, et al. **Eur J Cancer Clin Oncol** 1989 Apr; 25(4):767–71
Comparison of cancer incidence among similar geographic areas: a better source of etiologic hypotheses? Filippazzo MG, et al. **Eur J Epidemiol** 1989 Mar;5(1):101–5
Cancer incidence after cholecystectomy—a cohort study with 30 years follow-up. Gudmundsson S, et al. **Eur J Surg Oncol** 1989 Apr;15(2):113–7
Experience and prospects in the study of regional geography of malignant tumours in Ukraine. Guslitser LN, et al. **Geogr Med** 1989;19:75–6
Cancer, population density and environmental radiation in India [letter] Archer VE. **Health Phys** 1988 Nov; 55(5):824–7
International incidence of childhood cancer. **IARC Sci Publ** 1988;(87):1–401
Directory of on-going research in cancer epidemiology. Coleman M, et al. **IARC Sci Publ** 1988;(93):1–662
Measurement error in epidemiological studies of human papillomavirus and cancer. Kaldor JM. **IARC Sci Publ** 1989;(94):125–33 (12 ref.)
Epidemiological studies on ingested mineral fibres: gastric and other cancers. Kanarek MS. **IARC Sci Publ** 1989; (90):428–37
Geographical and ethnic differences in the occurrence of childhood cancer. Miller RW. **IARC Sci Publ** 1988;(87):3–7 (26 ref.)
Childhood cancers in greater Bombay (1973–1984). Jussawalla DJ, et al. **Indian J Cancer** 1988 Dec; 25(4):197–206
Incidence and pattern of cancer in Amritsar (Punjab) (a ten year retrospective study 1974–1983). Prabhakar BR, et al. **Indian J Pathol Microbiol** 1988 Apr;31(2):8–15
Cancer incidence among urban bus drivers in Denmark. Netterstrøm B. **Int Arch Occup Environ Health** 1988; 61(3):217–21
Cancer among New York men at risk of acquired immunodeficiency syndrome. Biggar RJ, et al. **Int J Cancer** 1989 Jun 15;43(6):979–85
Cancer among 1,348 offspring of survivors of childhood cancer. Hawkins MM, et al. **Int J Cancer** 1989 Jun 15; 43(6):975–8
The changing incidence of cancer in adults in New South Wales. McCredie M, et al. **Int J Cancer** 1988 Nov 15; 42(5):667–71
The international incidence of childhood cancer. Parkin DM, et al. **Int J Cancer** 1988 Oct 15;42(4):511–20
Use of surveillance systems for occupational cancer: data from the Danish National system. Lynge E, et al. **Int J Epidemiol** 1988 Sep;17(3):493–500
Case-control studies of cancer in New Zealand electrical workers. Pearce N, et al. **Int J Epidemiol** 1989 Mar; 18(1):55–9
Keynote lecture. Etiologic insights from cancer mapping. Fraumeni JF Jr. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:13–25 (43 ref.)
Investigation of cancer case clusters: possibilities and limitations. Heath CW Jr. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:27–35 (17 ref.)
Nakahara memorial lecture. Rare events and cancer epidemiology. Miller RW. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:3–12 (36 ref.)
Epidemiologic similarities leading to etiologic hypotheses. Newell GR, et al. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:173–80
Epidemiology and the prevention of cancer: some recent developments. Doll R. **J Cancer Res Clin Oncol** 1988; 114(5):447–58 (27 ref.)
An investigation of a reported cancer cluster in Randolph, Massachusetts. Day R, et al. **J Clin Epidemiol** 1989; 42(2):137–50
Aging and cancer. Kennedy BJ. **J Clin Oncol** 1988 Dec; 6(12):1903–11 (66 ref.)
The Inter-Regional Epidemiological Study of Childhood Cancer (IRESCC): past medical history in children with cancer. Hartley AL, et al. **J Epidemiol Community Health** 1988 Sep;42(3):235–42
Report of the Georgia State Cancer Registry, 1975–1985. Greenberg RS, et al. **J Med Assoc Ga** 1988 Dec; 77(12):895–900
Many factors contribute to racial differences in cancer experience. Chemaly P Jr. **J Natl Cancer Inst** 1989 May 3;81(9):660–2
Cancer among epileptic patients exposed to anticonvulsant drugs. Olsen JH, et al. **J Natl Cancer Inst** 1989 May 10; 81(10):803–8
Cancer rate differentials between blacks and whites of three metropolitan areas. Haynes MA, et al. **J Natl Med Assoc** 1989 Mar;81(3):237–41
Cancer incidence of workers exposed to dimethylformamide and/or acrylonitrile. Chen JL, et al. **J Occup Med** 1988 Oct;30(10):813–8
Modernization and occupational cancer [editorial] Christiani DC. **J Occup Med** 1988 Dec;30(12):975–6
Degree of confounding bias related to smoking, ethnic group, and socioeconomic status in estimates of the associations between occupation and cancer. Siemiatycki J, et al. **J Occup Med** 1988 Aug;30(8):617–25
A survey of the neoplastic lesions in the north west region of Pakistan—II [letter] Ahmad F, et al. **JPMA** 1989 Mar; 39(3):78–9
An epidemiological study on marital status and cancer incidence. Kato I, et al. **Jpn J Cancer Res** 1989 Apr; 80(4):306–11
Cancer incidence and incidence rates in Japan in 1984—estimates based on data from eight cancer registries—Research Group for Population-based Cancer Registration in Japan. **Jpn J Clin Oncol** 1989 Mar; 19(1):82–5
A review of malignancies at the Pathology Department, General Hospital, Kuala Lumpur (1981–1985). Thanaletchimy N, et al. **Malays J Pathol** 1988 Aug; 10:51–60
Lower prevalence of non-reproductive system cancers among female former college athletes. Frisch RE, et al. **Med Sci Sports Exerc** 1989 Jun;21(3):250–3
The Chicago AIDS autopsy study: opportunistic infections, neoplasms, and findings from selected organ systems with a comparison to national data. Chicago Associated Pathologists. Miller-Catchpole R, et al. **Mod Pathol** 1989 Jul;2(4):277–94 (174 ref.)
Cancer incidence in five continents. **N Y State J Med** 1989 Jul;89(7):432–3
Cancer registration and confidentiality [letter] Cooke KR, et al. **N Z Med J** 1989 Apr 26;102(866):197
National Cancer Registry [letter] Dervan W, et al. **N Z Med J** 1989 Apr 12;102(865):168
Cancer registration and confidentiality [letter] Steele E. **N Z Med J** 1989 Jun 14;102(869):297
Inquiry into Pasteur deaths [news] Coles P. **Nature** 1989 Apr 20;338(6217):607
Comparative study on cancer incidence in neighboring regions of Hungary, Austria, Yugoslavia and Czechoslovakia in 1969–1980. Pannonian Tumor Epidemiology Study Group. **Neoplasma** 1989;36(4):377–86
Epidemiological aspects of childhood cancer incidence in Czech regions. Augustin J, et al. **Neoplasma** 1989; 36(4):387–92
Trends and patterns in cancer incidence in Czechoslovakia, 1968–1985. Dimitrova E, et al. **Neoplasma** 1989; 36(2):245–55
Descriptive epidemiology of childhood malignancies in Slovakia. Pleško I, et al. **Neoplasma** 1989;36(2):233–43
Serum vitamin E and risk of cancer in Finland. **Nutr Rev** 1988 Oct;46(10):342–3 (8 ref.)
Geophysical variables and behavior: LIII. Epidemiological considerations for incidence of cancer and depression in areas of frequent UFO reports. Persinger MA. **Percept Mot Skills** 1988 Dec;67(3):799–803 (22 ref.)
Clinical trials in diet and cancer. Byar DP, et al. **Prev Med** 1989 Mar;18(2):203–19
Biostatistical analysis of mortality data for cohorts of cancer patients. Pauling L. **Proc Natl Acad Sci U S A** 1989 May; 86(10):3466–8
Can we achieve 100% ascertainment in cancer registration? Silcocks PB, et al. **Public Health** 1989 Jan;103(1):23–30
Cancer incidence following exposure to drinking water with asbestos leachate. Howe HL, et al. **Public Health Rep** 1989 May–Jun;104(3):251–6
Assuring the quality of cancer registration in Rhode Island. Evaluation of early returns indicates future measures for enhancing reliability. Fulton JP, et al. **R I Med J** 1988 Sep;71(9):337–46
The Rhode Island Cancer Registry [editorial] Simeone FA. **R I Med J** 1988 Sep;71(9):331–2
The evaluation of negative epidemiologic studies: the importance of all available evidence in risk characterization. Buffler PA. **Regul Toxicol Pharmacol** 1989 Feb;9(1):34–43 (15 ref.)
The role of "negative" epidemiology data in the evaluation of risk. Cook RR. **Regul Toxicol Pharmacol** 1989 Feb; 9(1):44–52 (15 ref.)
A note on the role of background tumor incidence in risk assessment for carcinogens. Kodell RL, et al. **Regul Toxicol Pharmacol** 1989 Apr;9(2):141–6
Cancer balance sheet—bad news and good news [editorial] [published erratum appears in S Afr Med J 1989 Sep 16;76(6):286] Walker AR. **S Afr Med J** 1989 Aug 19; 76(4):133–5
Cancer incidence among Danish stone workers. Guénel P, et al. **Scand J Work Environ Health** 1989 Aug;15(4):265–70
Cancer incidence of workers in a Finnish sawmill. Jäppinen P, et al. **Scand J Work Environ Health** 1989 Feb;15(1):18–23
Cancer risks among New Zealand meat workers. Reif JS, et al. **Scand J Work Environ Health** 1989 Feb;15(1):24–9
Pesticide use related to cancer incidence as studied in a rural district of Hungary. Páldy A, et al. **Sci Total Environ** 1988 Jul 15;73(3):229–44
Cancer and age. Newell GR, et al. **Semin Oncol** 1989 Feb; 16(1):3–9 (26 ref.)
Physical activity and cancer. An epidemiological perspective. Kohl HW, et al. **Sports Med** 1988 Oct;6(4):222–37 (45 ref.)
Malignant neoplasms in children: analysis of 642 cases. Hung IJ, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Jun; 87(6):626–32
Clinical cancer: 32. Follow-up of the "cured" cancer patient. Witte RS. **Wis Med J** 1988 Nov;87(11):15–7
Retrospective cohort study of cancer morbidity in furniture makers exposed to wood dust. Barthel E, et al. **Z Gesamte Hyg** 1989 May;35(5):279–81
[Cancer in young adults] Brinckner H. **Ugeskr Laeger** 1988 Oct 10;150(41):2439 **(Dan)**
[Occurrence of cancer among users of antiulcer agents (letter)] Møller H, et al. **Ugeskr Laeger** 1989 May 29; 151(22):1405–6 **(Dan)**
[The public health status of occupational cancer in Finland] Sankila R, et al. **Duodecim** 1988;104(21):1699–704 **(Fin)**
[Statistical use of a database (Bull-SOPRA-ADICAP system). Application in the study of cancers in women] Bocquet L. **Ann Pathol** 1989;9(1):62–7 (Eng. Abstr.) **(Fre)**
[Cancer incidence in the hospital of Katana, Kivu, East Zaire, 1983–1986] Bourdeaux L, et al. **Ann Soc Belg Med Trop** 1988 Jun;68(2):141–56 (Eng. Abstr.) **(Fre)**
[Case-control survey methodology in the epidemiology of cancer. I. Principles, planning and conduct of the surveys] Jamart J, et al. **Arch Belg** 1988;46(3–4):168–92 (Eng. Abstr.) **(Fre)**
[Case-control survey methodology in the epidemiology of cancer. II. Statistical analysis and interpretation of results] Jamart J, et al. **Arch Belg** 1988;46(3–4):193–211 (Eng. Abstr.) **(Fre)**
[Childhood cancer registries in France] L'Huillier MC, et al. **Rev Epidemiol Sante Publique** 1988;36(4–5):301–8 (Eng. Abstr.) **(Fre)**
[Registration and monitoring of tumors in children (from 0 to 14 years of age) in the Umbria region] Zucchetti P, et al. **Epidemiol Prev** 1987 Jun;9(31):53–6 (Eng. Abstr.) **(Ita)**
[Probably thousands rather than tens (letter)] **Med Lav** 1988 Mar–Apr;79(2):161–72 **(Ita)**
[Searching for lost tumors: continuation of the discussion (letter)] **Med Lav** 1988 Sep–Oct;79(5):411–21 **(Ita)**
[Research on "lost" tumors (letter)] Gaffuri E. **Med Lav** 1988 Jan–Feb;79(1):82 **(Ita)**
[Japan children's cancer registry and strategy for children's cancer epidemiology] **Gan No Rinsho** 1989 Jan;35(2):239–47 (Eng. Abstr.) **(Jpn)**
[Predictions of the incidence of cancer in Japan in the year 2000] Fujimoto I, et al. **Gan No Rinsho** 1988 Nov; 34(14):1911–6 (Eng. Abstr.) **(Jpn)**
[Epidemiology and cancer control under the health services for the aged] Matsubara R. **Gan No Rinsho** 1989 Jan; 35(2):141–4 (Eng. Abstr.) **(Jpn)**
[A new approach to hospital-based cancer epidemiology] Tajima K. **Gan No Rinsho** 1989 Jan;35(2):234–8 (Eng. Abstr.) **(Jpn)**
[Health center and epidemiological research of cancer] Takizawa S. **Gan No Rinsho** 1989 Jan;35(2):145–50 (Eng. Abstr.) **(Jpn)**
[Epidemiology of cancer and its problems] Tominaga S. **Gan No Rinsho** 1989 Jan;Spec No:1–12 **(Jpn)**
[Epidemiological study using molecular biologic markers] Tsugane S. **Gan No Rinsho** 1989 Jan;35(2):229–33 (Eng. Abstr.) **(Jpn)**
[Descriptive epidemiology of cancers in children] Kato I, et al. **Gan To Kagaku Ryoho** 1988 Oct;15(10):2937–46 (Eng. Abstr.) **(Jpn)**
[The characteristics of cancer discovered during mass examination] **Nippon Gan Chiryo Gakkai Shi** 1988 Apr 20; 23(4):944–53 **(Jpn)**
[The general population as a reference group. A discussion of the concept of the healthy worker effect] Melkild A. **Tidsskr Nor Laegeforen** 1989 Feb 10;109(4):470–1 (Eng. Abstr.) **(Nor)**
[Malignant neoplasms in children and adolescents up to 18 years of age] Sulkowski S, et al. **Wiad Lek** 1988 Aug 1; 41(15):1001–4 (Eng. Abstr.) **(Pol)**
[Total incidence of malignant neoplasms among men and women in the Katowice province 1975–1985] Zemla B, et al. **Wiad Lek** 1988 Aug 15;41(16):1069–76 (Eng. Abstr.) **(Pol)**
[Epidemiologic assessment of the cancer risk in the manufacture of graphite goods] Gurvich EB. **Gig Tr Prof Zabol** 1988 Jul;(7):16–8 (Eng. Abstr.) **(Rus)**
[Characteristics of cancer morbidity among workers engaged in the manufacture of hot-laid asphalt concrete] Povarov AV, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):13–5 (Eng. Abstr.) **(Rus)**
[Statistical information data from the State Committee on Statistics of the USSR] **Vopr Onkol** 1988;34(9):1049–50 **(Rus)**
[Methodological approaches to studying the influence of parental occupation on the development of malignant neoplasms in children] Beliakova SV, et al. **Vopr Onkol** 1989;35(1):12–6 **(Rus)**
[Morbidity of the population of the USSR due to malignant neoplasms (1981–1985)] Dvoirin VV, et al. **Vopr Onkol** 1988;34(11):1301–34 **(Rus)**
[A trial using cancer registries in epidemiologic research]

Gurvich EB, et al. **Vopr Onkol** 1989;35(3):280–5 **(Rus)**
[Results of the census of cancer patients receiving treatment in Leningrad hospitals in 1982] Merabishvili VM, et al. **Vopr Onkol** 1988;34(10):1237–45 **(Rus)**
[The epidemiology of cancer in the Province of Neuquén, Argentina] Kremer A, et al. **Medicina (B Aires)** 1987; 47(5):471–6 (Eng. Abstr.) **(Spa)**
[Tumors registered in Hospital del Mar (Barcelona). Descriptive analysis from 1978 to 1986] Planas Domingo J, et al. **Rev Clin Esp** 1988 Sep;183(4):175–9 (Eng. Abstr.) **(Spa)**
[Etiology and epidemiology of cancer] Valladares Y. **Rev Esp Oncol** 1985;32(4):741–55 (0 ref.) **(Spa)**
[Trends in cancer epidemiology] Adami HO, et al. **Lakartidningen** 1988 Sep 21;85(38):3047–52 **(Swe)**
[Cancer, aging and death from an epidemiologic point of view] Adami HO. **Lakartidningen** 1989 May 3; 86(18):1678–9 **(Swe)**
[Cancer epidemiology in Denmark] Ewertz M, et al. **Ugeskr Laeger** 1989 Jan 9;151(2):119–24 **(Swe)**

ETHNOLOGY

Classification of Chinese cancer patients by dialect group: is it still valid? Lee HP, et al. **Ann Acad Med Singapore** 1988 Jul;17(3):431–3
Plasma cholesterol, coronary heart disease and cancer [letter] Walker AR, et al. **BMJ** 1989 Jul 1;299(6690):52
Contribution of socioeconomic status to black/white differences in cancer incidence. McWhorter WP, et al. **Cancer** 1989 Mar 1;63(5):982–7
Cancer surveillance in a northeastern native American population. Mahoney MC, et al. **Cancer** 1989 Jul 1; 64(1):191–5
Cancer incidence among native Americans of western Washington. Norsted TL, et al. **Int J Epidemiol** 1989 Mar; 18(1):22–7
Cancer mortality of Chinese in Canada. Wang ZJ, et al. **Int J Epidemiol** 1989 Mar;18(1):17–21
Cancer incidence among migrant populations in South Australia. McMichael AJ, et al. **Med J Aust** 1989 Apr 17; 150(8):417–20
Diet, nutritional status, and cancer risk in American blacks. Hargreaves MK, et al. **Nutr Cancer** 1989;12(1):1–28 (102 ref.)

ETIOLOGY

Environmental cancer risk factors. A review. Tomatis L. **Acta Oncol** 1988;27(5):465–72 (31 ref.)
Unusual malignant tumours in 49 patients with HIV infection. Monfardini S, et al. **Aids** 1989 Jul;3(7):449–52
Cancer causation beliefs in an Alaskan village. Sprott JE. **Alaska Med** 1988 Sep–Oct;30(5):155–8
Methodologic considerations in investigating the diet–cancer link [letter] Hegsted DM. **Am J Clin Nutr** 1988 Dec; 48(6):1522–5
Diet and cancer [letter] Kritchevsky D. **Am J Clin Nutr** 1988 Dec;48(6):1522–4
A study of the accuracy of cancer risk factor information reported to a central registry compared with that obtained by interview. Brownson RC, et al. **Am J Epidemiol** 1989 Mar;129(3):616–24
Response to Mogadam on cancer and nutrition [letter] Kallman B. **Am J Gastroenterol** 1989 Sep;84(9):1128–9
Fragile X expression in Martin–Bell syndrome, intellectually normal individuals, and neoplasia, interpreted by a viral hypothesis. Shabtai F, et al. **Am J Med Genet** 1988 May–Jun;30(1–2):697–702
Membrane in cancer cells. Conference in honor of Dr. Britton Chance and to commemorate his 75th birthday. Perugia, Italy, June 13–16, 1988. Proceedings. **Ann N Y Acad Sci** 1988;551:1–455
Dietary fat and cancer risk: evidence and research needs. Pariza MW. **Annu Rev Nutr** 1988;8:167–83 (71 ref.)
Genetic susceptibility, somatic mosaicisms and predisposition to human cancer. Pathak S, et al. **Anticancer Res** 1989 Jan–Feb;9(1):17–9
Dependence of susceptibility to carcinogenesis on species life span. Anisimov VN. **Arch Geschwulstforsch** 1989; 59(3):205–13 (52 ref.)
Deep venous thrombosis and the risk of cancer [letter] McKenna MT. **Arch Intern Med** 1989 Apr;149(4):966, 969
Who killed Cock Robin? Causal relationships in occupational cancer. Christie D. **Asia Pac J Public Health** 1989;3(1):7–10
The estimation and modification of risk in general practice. Part two. Leeder SR. **Aust Fam Physician** 1988 Sep; 17(9):779–80, 782–3
Environmental cancer, phagocytic oxidant stress and nutritional interactions. Evans PH, et al. **Bibl Nutr Dieta** 1989;(43):313–26 (86 ref.)
Extra-pulmonary tumors caused by smoking. Mathé G, et al. **Biomed Pharmacother** 1988;42(2):87–8
Cancer after transplantation [letter] Aravot D, et al. **BMJ** 1988 Aug 20–27;297(6647):559
Cancer risk following pernicious anaemia. Brinton LA, et al. **Br J Cancer** 1989 May;59(5):810–3
Tea consumption and cancer. Kinlen LJ, et al. **Br J Cancer** 1988 Sep;58(3):397–401
Serum cholesterol and subsequent risk of cancer: results from the BUPA study. Wald NJ, et al. **Br J Cancer** 1989 Jun; 59(6):936–8
Oncogenes and the pathogenesis of human cancers: implications for cancer diagnosis and management. Cline MJ. **Br J Clin Pract Symp Suppl** 1988 Mar;62:2–4 (10 ref.)
UFOs and cancer? [letter] Rutkowski CA, et al. **Can Med Assoc J** 1989 Jun 1;140(11):1258–9
Trends in smoking, cancer risk, and cigarette promotion. Current priorities for reducing tobacco exposure. Ernster VL. **Cancer** 1988 Oct 15;62(8 Suppl):1702–12
Diet and nutrition research. Kritchevsky D. **Cancer** 1988 Oct 15;62(8 Suppl):1839–43
Personal risk factors. What do they mean? Newell GR, et al. **Cancer** 1988 Oct 15;62(8 Suppl):1695–701
Secondary neoplasms as a consequence of transplantation and cancer therapy. Penn I. **Cancer Detect Prev** 1988; 12(1–6):39–57 (118 ref.)
Cancer risk in relation to serum copper levels. Coates RJ, et al. **Cancer Res** 1989 Aug 1;49(15):4353–6
U.S.–Japan Cooperative Cancer Research Program Conference. Glutathione S-transferase and carcinogenesis. Pitot HC, et al. **Cancer Res** 1988 Nov 1;48(21):6249–51
Interrelationship between autoimmunity and B-lymphoid cell oncogenesis in humans. Bataille R, et al. **Clin Exp Rheumatol** 1989 May–Jun;7(3):319–28 (137 ref.)
Asbestos-related malignancy. Talcott JA, et al. **Curr Probl Cancer** 1988 May–Jun;12(3):135–78 (179 ref.)
Multistage models for carcinogenesis. Freedman DA, et al. **Environ Health Perspect** 1989 May;81:169–88 (74 ref.)
Positive and negative control of carcinogenesis. Philipson L. **Eur J Haematol** 1988 Oct;41(4):305–16 (13 ref.)
A study on the carcinogenicity of human diets in rats: the influence of heating and the addition of vegetables and fruit. Alink GM, et al. **Food Chem Toxicol** 1989 Jul;27(7):427–36
Educating older adults about their increased cancer risk. Keintz MK, et al. **Gerontologist** 1988 Aug;28(4):487–90
Depressed neutrophil-mediated tumor cell cytotoxicity in subjects affected by hereditary myeloperoxidase deficiency and secondary neoplasia. Lanza F, et al. **Haematologica (Pavia)** 1988 Sep–Oct;73(5):355–8
Alcohol drinking. IARC Working Group, Lyon, 13–20 October 1987. **IARC Monogr Eval Carcinog Risks Hum** 1988;44:1–378
Methods for detecting DNA damaging agents in humans: applications in cancer epidemiology and prevention. Proceedings of a symposium. Espoo, Finland, 2–4 September 1987. **IARC Sci Publ** 1988;(89):1–518
Measuring oxidative damage in humans: relation to cancer and ageing. Ames BN. **IARC Sci Publ** 1988;(89):407–16
Mineral fibre carcinogenesis: experimental data relating to the importance of fibre type, size, deposition, dissolution and migration. Davis JM. **IARC Sci Publ** 1989;(90):33–45 (38 ref.)
Dose monitoring and cancer risk. Ehrenberg L. **IARC Sci Publ** 1988;(89):23–31 (48 ref.)
Epidemiological studies of the relationship between carcinogenicity and DNA damage. Kaldor J, et al. **IARC Sci Publ** 1988;(89):460–8 (29 ref.)
Fibre carcinogenesis and environmental hazards. Peto J. **IARC Sci Publ** 1989;(90):457–70 (21 ref.)
Looking ahead: algebraic thinking about genetics, cell kinetics and cancer. Thilly WG. **IARC Sci Publ** 1988; (89):486–92
Search for unknown adducts: increase of sensitivity through preselection by biochemical parameters. Törnqvist M. **IARC Sci Publ** 1988;(89):378–83
Detection of DNA damage in studies on cancer etiology and prevention. Wogan GN. **IARC Sci Publ** 1988;(89):32–51 (52 ref.)
Oncogenes and the mitogenic signal pathway. Fisher RJ, et al. **Important Adv Oncol** 1989;:3–27 (216 ref.)
Sensitivity to genotoxic effects of bleomycin in humans: possible relationship to environmental carcinogenesis. Hsu TC, et al. **Int J Cancer** 1989 Mar 15;43(3):403–9
Parental age and cancer risk in offspring [letter] Neutel I, et al. **Int J Epidemiol** 1988 Dec;17(4):928–9
Is 'the causes of cancer' a miasma theory for the end of the twentieth century? Vandenbroucke JP. **Int J Epidemiol** 1988 Dec;17(4):708–9 (14 ref.)
Unusual occurrences as clues to cancer etiology. Proceedings of the 18th International Symposium of the Princess Takamatsu Cancer Research Fund. Tokyo, 1987. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:1–304
Frequency of food use data and the multidimensionality of diet. Randall E, et al. **J Am Diet Assoc** 1989 Aug; 89(8):1070–5
Malignancy and joint replacement: the tip of an iceberg? [editorial] Apley AG. **J Bone Joint Surg [Br]** 1989 Jan; 71(1):1
Foetal-to-adult transitions in fibroblast phenotype: their possible relevance to the pathogenesis of cancer. Schor SL, et al. **J Cell Sci Suppl** 1987;8:165–80 (62 ref.)
Epidemiologic evidence of perinatal influence in the etiology of adult cancers. Janerich DT, et al. **J Clin Epidemiol** 1989; 42(2):151–7
Malignant tumors in patients with human immunodeficiency virus infection: a report of 580 cases [letter] Tirelli U, et al. **J Clin Oncol** 1989 Oct;7(10):1582–3
Cell proliferation kinetics and multistage cancer risk models. Bogen KT. **J Natl Cancer Inst** 1989 Feb 15;81(4):267–77
Establishment of an association between a virus and a human cancer [editorial] Henderson BE. **J Natl Cancer Inst** 1989 Mar 1;81(5):320–1
Factors associated with the development of neoplasia. Boyd NM, et al. **J Oral Pathol** 1988 May;17(5):202–7 (64 ref.)
Depressive symptoms and risk of cancer [editorial] Fox BH. **JAMA** 1989 Sep 1;262(9):1231
Depression as a risk for cancer morbidity and mortality in a nationally representative sample. Zonderman AB, et al. **JAMA** 1989 Sep 1;262(9):1191–5
Somatic mutation in peripheral lymphocytes of former workers at the Okunojima poison gas factory. Yanagida J, et al. **Jpn J Cancer Res** 1988 Dec;79(12):1276–83
Dietary and nutritional influences on cancer: a review of epidemiologic and experimental data. Rogers AE, et al. **Lab Invest** 1988 Dec;59(6):729–59 (344 ref.)
Carcinoid tumours and endocrine cell hyperplasia [editorial] **Lancet** 1989 Apr 29;1(8644):940
Low cholesterol and increased risk [letter; comment] Oliver MF. **Lancet** 1989 Jul 15;2(8655):163. **Comment on:** Lancet 1989 Jun 24;1(8652):1423–5
Human endogenous retroviruses. Hehlmann R, et al. **Leukemia** 1988 Dec;2(12 Suppl):167S–177S
Electronic biology and its relation to cancer. Szent-Györgyi A. **Life Sci** 1974 Sep 1;15(5):863–75 (18 ref.)
The phenomenon of latent pregnancy and cancer. Jirava E, et al. **Med Hypotheses** 1989 Jul;29(3):171–2
Carcinogenesis as the result of the deficiency of some essential trace elements. Marczynski B. **Med Hypotheses** 1988 Aug;26(4):239–49 (89 ref.)
Displacement of nutritional receptors on cell membrane as an initiation factor in carcinogenesis. Narasimhan P, et al. **Med Hypotheses** 1988 Aug;26(4):275–80
Proto-oncogenes II. Rosen P. **Med Hypotheses** 1988 Dec; 27(4):289–90
Diet and cancer. **Med J Malaysia** 1988 Dec;43(4):348–9
27th Maude Abbott lecture. Cancer development as viewed by a pathologist: a different perspective. Farber E. **Mod Pathol** 1988 Jan;1(1):2–3
Childhood cancer and malignancies other than lung cancer related to passive smoking. Pershagen G. **Mutat Res** 1989 Feb;222(2):129–35 (49 ref.)
Body iron stores and the risk of cancer [letter] **N Engl J Med** 1989 Apr 13;320(15):1012–4
Body iron stores and the risk of cancer. Stevens RG, et al. **N Engl J Med** 1988 Oct 20;319(16):1047–52
Secondary cancers after bone marrow transplantation for leukemia or aplastic anemia. Witherspoon RP, et al. **N Engl J Med** 1989 Sep 21;321(12):784–9
Epstein–Barr virus. Synthesis for a complex role [news] Sugden B. **Nature** 1989 May 18;339(6221):179–80
Smokeless tobacco: association with increased cancer risk. Mattson ME, et al. **NCI Monogr** 1989;(8):13–6 (31 ref.)
Foetal risks following antenatal radionuclide administration. Mountford PJ. **Nucl Med Commun** 1989 Feb;10(2):79–81
Errors of measurement [editorial] Hegsted DM. **Nutr Cancer** 1989;12(2):105–7
Long-term (24-year) recall reliability in cancer cases and controls using a 21-item food frequency questionnaire. Lindsted KD, et al. **Nutr Cancer** 1989;12(2):135–49
Human cancer and the food chain: an alternative etiologic perspective. Mozar HN, et al. **Nutr Cancer** 1989;12(1):29–42 (142 ref.)
Childhood cancers and their association with pregnancy drugs and illnesses. Gilman EA, et al. **Paediatr Perinat Epidemiol** 1989 Jan;3(1):66–94 (34 ref.)
Smoking-related disease in a VA hospital. Allen A. **Prev Med** 1988 Jul;17(4):440–8
Ethanol, immunomodulation and cancer. Watson RR. **Prog Food Nutr Sci** 1988;12(2):189–209 (91 ref.)
AIDS-related neoplasias. Workshop of the Swiss Group for Clinical Cancer Research. 1988. **Recent Results Cancer Res** 1988;112:1–97
AIDS-related neoplasias in Switzerland. Schmid L. **Recent Results Cancer Res** 1988;112:69–74
The etiology of AIDS and its relevance for AIDS-related neoplasias. Schüpbach J. **Recent Results Cancer Res** 1988; 112:6–16 (52 ref.)
Malignancy in ulcerative colitis. Kvist N, et al. **Scand J Gastroenterol** 1989 May;24(4):497–506
A review of the epidemiologic literature on magnetic fields and cancer. Ahlbom A. **Scand J Work Environ Health** 1988 Dec;14(6):337–43 (36 ref.)
How DNA viruses may cause cancer [news] Marx JL. **Science** 1989 Feb 24;243(4894 Pt 1):1012–3
Age-related mechanisms of susceptibility to carcinogenesis. Anisimov VN. **Semin Oncol** 1989 Feb;16(1):10–9 (75 ref.)
Quantitative assessment of cancer risk. Lippman SM, et al. **Tex Med** 1988 Oct;84(10):48–53 (38 ref.)
Blood transfusion and tumor growth. Tartter PI, et al. **Transplant Proc** 1988 Dec;20(6):1108–11 (16 ref.)
Viral infections and cancer in the tropics. Epstein MA. **Trop Geogr Med** 1988 Jul;40(3):S52–60 (64 ref.)
Time dependency in human cancer. Hayes RB, et al. **Tumori** 1989 Jun 30;75(3):189–95
Cancer as risk indicator of cardiovascular disease. The role of nutrition. Joossens JV, et al. **Verh K Acad Geneeskd Belg** 1988;50(5):397–428 (58 ref.)
[Thrombocyte growth factor—its participation in normal and malignant development, atherosclerosis and other pathological states] Mitev V, et al. **Eksp Med Morfol** 1988; 27(2):55–61 (14 ref.) **(Bul)**
[Nutrition and neoplasms] Chen RB. **Sheng Li Ko Hsueh Chin Chan** 1988 Oct;19(4):373–6 (14 ref.) **(Chi)**
[Thyroid function and cancer] Lemaire M, et al.

Ann Endocrinol (Paris) 1989;50(1):16–25 (116 ref.) (Eng. Abstr.) (Fre)
[Natural history of tumors in carcinogenesis after ureterosigmoidostomy. I—Clinical approach] Daher N, et al. **J Urol (Paris)** 1989;95(2):97–102 (93 ref.) (Eng. Abstr.) (Fre)
[Determination of the risk of a 2d cancer in patients treated for a first cancer] Boivin JF, et al. **Rev Epidemiol Sante Publique** 1988;36(4–5):292–300 (Eng. Abstr.) (Fre)
[Determinants of human tumors and trends in prevention] La Vecchia C. **Rev Med Suisse Romande** 1989 Apr; 109(4):299–314 (Fre)
[Dietary aspects of cancer diseases] Jungi WF. **Internist (Berlin)** 1988 Jul;29(7):492–8 (65 ref.) (Ger)
[Dangers due to smoking and passive smoking] Schmidt F. **Onkologie** 1988 Dec;11(6):250–3 (15 ref.) (Eng. Abstr.) (Ger)
[Communication disorders as illness factors. Observations of a pathologist] Seifert G. **Pathologe** 1989 Mar;10(2):76–86 (Ger)
[Vitamins and cancer: results of a Basel study] Stähelin HB. **Soz Praventivmed** 1989;34(2):75–7 (Eng. Abstr.) (Ger)
[Cancer in residents of heavy traffic areas] Ippen M, et al. **Versicherungsmedizin** 1989 Mar 1;41(2):39–42 (Eng. Abstr.) (Ger)
[Late industrial damage: closed access for obtaining compensation?] Woitowitz HJ. **Versicherungsmedizin** 1989 Jul 1;41(4):111–6 (Eng. Abstr.) (Ger)
[Systems theory in medicine and biology] Feigl W, et al. **Wien Med Wochenschr** 1989 Mar 15;139(5):87–91 (40 ref.) (Eng. Abstr.) (Ger)
[Alcohol and cancer] Seitz HK, et al. **Z Gastroenterol** 1988 Oct;26 Suppl 3:106–19 (149 ref.) (Ger)
[Recent biochemical viewpoints on the development of tumors and the effect of nutrition] Kolb E. **Z Gesamte Inn Med** 1989 Jan 1;44(1):1–6 (59 ref.) (Eng. Abstr.) (Ger)
[Exposure to electromagnetic fields with extremely low frequency and occurrence of tumors in man: evaluation of epidemiologic studies] Gamberale F, et al. **Epidemiol Prev** 1988 Mar;10(34):8–11 (22 ref.) (Ita)
[Recent findings on the role of oncogenes in neoplasms] Pogliani EM, et al. **Recenti Prog Med** 1989 May; 80(5):276–80 (22 ref.) (Eng. Abstr.) (Ita)
[DNA damage by oxygen radicals and carcinogenesis] Kasai H. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 2):459–65 (24 ref.) (Eng. Abstr.) (Jpn)
[Tumorigenesis by herpesvirus family] Kinoshita T, et al. **Nippon Rinsho** 1989 Feb;47(2):277–84 (Jpn)
[The role of oncogenes in carcinogenesis] Ratajczak MZ, et al. **Pol Tyg Lek** 1988 Nov 21;43(47):1519–23 (39 ref.) (Eng. Abstr.) (Pol)
[The role of selenium in the development of neoplasms] Pawłowicz Z, et al. **Wiad Lek** 1988 Mar 1;41(5):295–9 (26 ref.) (Eng. Abstr.) (Pol)
[Aspects of pathogenesis of tumor-like and tumor processes of viral etiology in secondary immunodeficient states (facts and hypotheses)] Kazantseva IA, et al. **Arkh Patol** 1988; 50(6):61–4 (Eng. Abstr.) (Rus)
[Carcinogenic activity of asbestos cement dust] Pylev LN, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):55–7 (Rus)
[Cancer risk factors and cancer in workers in the rubber industry] Korosteleva TA, et al. **Vopr Onkol** 1989; 35(5):536–44 (74 ref.) (Rus)
[Chronic herpesvirus infections and their relation to oncogenesis] Rajčáni J. **Bratisl Lek Listy** 1988 Oct; 89(10):733–47 (121 ref.) (Eng. Abstr.) (Slo)
[Recent advances in pediatric oncology: introduction] Cruz M. **An Esp Pediatr** 1988 Sep;29 Suppl 32:83–6 (Spa)
[The etiology of cancer: from mouse to man. A 25-year experience in virological and immunological studies of experimental oncology] Pasqualini CD. **Medicina (B Aires)** 1985;45(1):65–76 (111 ref.) (Spa)
[Second neoplasms in Hodgkin's disease] Cebreiros I, et al. **Rev Clin Esp** 1989 Mar;184(5):247–8 (Eng. Abstr.) (Spa)
[Ischemic heart disease, neoplasms and risk factors: ecological correlation] Cayuela Domínguez A, et al. **Rev Esp Cardiol** 1989 Feb;42(2):84–9 (Eng. Abstr.) (Spa)
[Organic saturation of iron as a cause of cancer (editorial)] Arias Vallejo E. **Rev Esp Enferm Apar Dig** 1989 Mar; 75(3):271 (Spa)
[Chronic myelomonocytic leukemia and solid neoplasms: is it a causal or a fortuitous association?] Rovira M, et al. **Sangre (Barc)** 1989 Jun;34(3):207–9 (Eng. Abstr.) (Spa)
[CMR–70—a new cancer-environment registry available for research] **Lakartidningen** 1989 Aug 9;86(32–33):2661–2 (Swe)
[Alcohol and cancer—a connection proved only for some forms of cancer] Adami HO, et al. **Lakartidningen** 1988 Sep 14;85(37):2961–4 (Swe)
[Cancer—a part of natural aging] Fichtelius KE. **Lakartidningen** 1989 Apr 12;86(15):1353–4 (Swe)
[Food and cancer—a methodological problem in population studies] Norell S. **Lakartidningen** 1988 Oct 12;85(41):3378–9 (Swe)
[Hormones and risk of cancer] Olsson H. **Lakartidningen** 1988 Oct 5;85(40):3263, 3265 (Swe)
[Cancer—a part of the natural environment but not of natural aging] Rylander R. **Lakartidningen** 1989 Jun 28; 86(26–27):2442 (Swe)

GENETICS

Oncogenes and tumor suppressor genes. Klein G. **Acta Oncol** 1988;27(4):427–37 (123 ref.)
DNA studies in 109 malignant tumors in children. Nakagome Y, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Aug; 29(4):542–5
Primary chromosome abnormalities in human neoplasia. Heim S, et al. **Adv Cancer Res** 1989;52:1–43 (129 ref.)
Do oncogenes play a role in tumor metastasis? Eisenbach L, et al. **Adv Exp Med Biol** 1988;233:281–91
Control of MHC genes that regulate the metastatic phenotype of tumor cells. Feldman M, et al. **Adv Exp Med Biol** 1988; 233:109–17
Genomic instability, tumor heterogeneity and progression. Kendal WS, et al. **Adv Exp Med Biol** 1988;233:1–4 (15 ref.)
C-heterochromatin variation and transposition in tumor progression. Larizza L, et al. **Adv Exp Med Biol** 1988; 233:309–18 (30 ref.)
Genetic basis of metastases. McMenamin MM, et al. **Adv Exp Med Biol** 1988;233:269–79
Cancer in relatives of leukemic patients with chromosomal rearrangements at rare (heritable) fragile-site locations in their malignant cells. Mules EH, et al. **Am J Hum Genet** 1989 Jun;44(6):811–9
Fragile X syndrome and neoplasia. Phelan MC, et al. **Am J Med Genet** 1988 May–Jun;30(1–2):77–82
Monitoring of genetic instability in subjects with increased risk of cancer. Nuzzo F, et al. **Ann Ist Super Sanita** 1989; 25(1):81–9
Dissecting multistep tumorigenesis in transgenic mice. Hanahan D. **Annu Rev Genet** 1988;22:479–519 (106 ref.)
Onco-suppressor genes and their involvement in cancer (review). Anderson ML, et al. **Anticancer Res** 1988 Sep–Oct;8(5A):873–9 (79 ref.)
Proto-oncogenes, growth factor genes, receptor genes, differentiation genes and structural rearrangements in human cancer. De Braekeleer M. **Anticancer Res** 1988 Nov–Dec;8(6):1325–8
Possible role of the first intron of c-H-ras in gene expression: anti-cancer elements in oncogenes. Hashimoto-Gotoh T, et al. **Anticancer Res** 1988 Sep–Oct;8(5A):851–9 (40 ref.)
PA-1, a human cell model for multistage carcinogenesis: oncogenes and other factors. Tainsky MA, et al. **Anticancer Res** 1988 Sep–Oct;8(5A):899–913 (65 ref.)
Cytogenetic investigations of solid tumours of children. Pearson AD, et al. **Arch Dis Child** 1988 Sep;63(9):1012–5
Flow cytometric analysis of oncogene expression in human neoplasias. Stewart CC. **Arch Pathol Lab Med** 1989 Jun; 113(6):634–40 (112 ref.)
DNA-mediated transfection as a model for oncogenesis. Moyer MP, et al. **Biochem Cell Biol** 1988 Jun;66(6):594–616 (137 ref.)
Molecular cloning of cDNA for the catalytic subunit of rat liver type 2A protein phosphatase, and detection of high levels of expression of the gene in normal and cancer cells. Kitagawa Y, et al. **Biochim Biophys Acta** 1988 Nov 10; 951(1):123–9
Genetic principles of tumor suppression. Schwab M. **Biochim Biophys Acta** 1989 Jul 28;989(1):49–64 (79 ref.)
Genetic susceptibility to environmental mutagens and carcinogens. **Birth Defects** 1989;25(2):1–93
Current knowledge of heritable tumors. Cavenee WK. **Birth Defects** 1989;25(2):29–43 (56 ref.)
The genetic predisposition to cancer. Knudson AG Jr. **Birth Defects** 1989;25(2):15–27 (41 ref.)
Epidemiologic studies of the molecular genetics of cancer. Taylor JA. **Birth Defects** 1989;25(2):83–93 (49 ref.)
ABC of clinical genetics. Genetics of cancer. Kingston HM. **BMJ** 1989 Apr 22;298(6680):1086–9 (0 ref.)
A regional register for inherited cancers. Littler M, et al. **BMJ** 1989 Jun 24;298(6689):1689–91
Tumour suppressor genes. Vile R. **BMJ** 1989 May 20; 298(6684):1335–6 (17 ref.)
Recessive mechanisms of malignancy. Green AR. **Br J Cancer** 1988 Aug;58(2):115–21 (115 ref.)
Genes in development and cancer. Proceedings of the John Paul Symposium. Glasgow, 22 March 1988. **Br J Cancer Suppl** 1988 Dec;9:1–108
Recessive mutations and chromosome deletions leading to cancer. Berne J, et al. **Br J Surg** 1989 Apr;76(4):327–30 (46 ref.)
Recessive mutation, chromosome deletion and cancer [letter] Thompson AM, et al. **Br J Surg** 1989 Jul;76(7):765
Hereditary cancers disclose a class of cancer genes. Knudson AG Jr. **Cancer** 1989 May 15;63(10):1888–91
Mutagen sensitivity and cancer susceptibility. Report of a cancer-prone family. Liang JC, et al. **Cancer** 1989 Oct 1; 64(7):1474–9
First European Workshop on Cytogenetics and Molecular Genetics of Human Solid Tumors. Dijon, France, October 13–15, 1988. Abstracts. **Cancer Genet Cytogenet** 1989 Apr; 38(2):145–204
The Third International Workshop on Chromosomes in Solid Tumors (IWCST). Tucson, Arizona, February 26–28, 1989. Abstracts. **Cancer Genet Cytogenet** 1989 Sep;41(2):207–94
Solid tumor cytogenetics. Progress since 1979. Atkin NB. **Cancer Genet Cytogenet** 1989 Jul 1;40(1):3–12 (81 ref.)
Robertsonian chromosome recombinants are rare in cancer. Hecht F, et al. **Cancer Genet Cytogenet** 1988 Oct 1; 35(1):79–81
Immunophenotyping of aneuploid cells. Knuutila S, et al. **Cancer Genet Cytogenet** 1989 Aug;41(1):1–17 (43 ref.)
Malformation syndrome with t(2;22) in a cancer family with chromosome instability. Magnani I, et al. **Cancer Genet Cytogenet** 1989 Apr;38(2):223–7
The chromosomal analysis of human solid tumors. A triple challenge. Teyssier JR. **Cancer Genet Cytogenet** 1989 Jan; 37(1):103–25 (224 ref.)
Increased bleomycin-induced chromosome damage in lymphocytes of patients with common variable immunodeficiency indicates an involvement of chromosomal instability in their cancer predisposition. Vorechovsky I, et al. **Cancer Immunol Immunother** 1989; 29(4):303–6
ras oncogenes in human cancer: a review. Bos JL. **Cancer Res** 1989 Sep 1;49(17):4682–9 (98 ref.)
Genetic convergence and divergence in tumor progression. Heim S, et al. **Cancer Res** 1988 Nov 1;48(21):5911–6 (75 ref.)
Detection of drug resistance in human tumors by in vitro enzymatic amplification [published erratum appears in Cancer Res 1989 Sep 1;49(17):4946] Kashani-Sabet M, et al. **Cancer Res** 1988 Oct 15;48(20):5775–8
Consistent involvement of only 71 of the 329 chromosomal bands of the human genome in primary neoplasia-associated rearrangements. Mitelman F, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7115–9
Cancer as a disease of DNA organization and dynamic cell structure. Pienta KJ, et al. **Cancer Res** 1989 May 15; 49(10):2525–32 (168 ref.)
Association among DNA/chromosome break rejoining rates, chromatin structure alterations, and radiation sensitivity in human tumor cell lines. Schwartz JL, et al. **Cancer Res** 1989 Sep 15;49(18):5054–7
Model for the genetic evolution of human solid tumors. Shackney SE, et al. **Cancer Res** 1989 Jun 15;49(12):3344–54
Tumour progression and metastasis. **Cancer Surv** 1988; 7(4):551–710
Somatic cell genetics and cancer. Dedicated to Guido Pontecorvo on his 80th birthday. **Cancer Surv** 1988; 7(2):223–375
Somatic cell genetics and cancer. Bodmer W. **Cancer Surv** 1988;7(2):239–50 (35 ref.)
Mutation rates and mutational spectra in tumorigenic cell lines. Sager R. **Cancer Surv** 1988;7(2):325–33 (32 ref.)
Genetic analysis of human malignancy using somatic cell hybrids and monochromosome transfer. Stanbridge EJ. **Cancer Surv** 1988;7(2):317–24 (38 ref.)
DNA repair and cancer: speculations based on studies with xeroderma pigmentosum, Cockayne's syndrome and trichothiodystrophy. Lehmann AR, et al. **Carcinogenesis** 1989 Aug;10(8):1353–6
DNA repair synthesis in individuals with and without a family history of cancer. Pero RW, et al. **Carcinogenesis** 1989 Apr;10(4):693–7
Regulation of the activity of a new inhibitor of angiogenesis by a cancer suppressor gene. Rastinejad F, et al. **Cell** 1989 Feb 10;56(3):345–55
Transforming growth factor-beta: a negative regulator. **Ciba Found Symp** 1989;142:112–6
Methods for isolating genes that act in a recessive manner in tumorigenesis. **Ciba Found Symp** 1989;142:131–3
Loss of genetic information in cancer. Cavenee WK, et al. **Ciba Found Symp** 1989;142:79–88; discussion 88–92
A genetic basis for tumour suppression. Stanbridge EJ. **Ciba Found Symp** 1989;142:149–59; discussion 159–65
Loss of heterozygosity in stages of malignancy. Cavenee WK. **Clin Chem** 1989 Jul;35(7 Suppl):B48–52 (23 ref.)
Bloom's syndrome. XII. Report from the Registry for 1987. German J et al. **Clin Genet** 1989 Jan;35(1):57–69 (65 ref.)
Report of the committee on structural chromosome changes in neoplasia. Bloomfield CD, et al. **Cytogenet Cell Genet** 1987;46(1–4):344–66
Report of the committee on structural chromosome changes in neoplasia. Trent JM, et al. **Cytogenet Cell Genet** 1988; 49(1–3):236–53
The relevance of plasminogen activators to neoplastic growth. A review of recent literature. Markus G. **Enzyme** 1988;40(2–3):158–72 (74 ref.)
The role of heterochromatin in the origin of isochromosome 1 in neoplastic cells. Verma RS, et al. **Eur J Cancer Clin Oncol** 1988 May;24(5):821–3 (14 ref.)
Some methods and applications of flow cytometric DNA analysis clinical and experimental oncology. Vindeløv LL, et al. **Eur J Haematol Suppl** 1988;48:69–76
Chromosomal approaches to oncogenes and oncogenesis. Nowell PC, et al. **FASEB J** 1988 Dec;2(15):3054–60 (40 ref.)
Do mitochondrial DNA fragments promote cancer and aging? Richter C. **FEBS Lett** 1988 Dec 5;241(1–2):1–5
Oncogenes: molecular probes for clinical application in malignant diseases. Ascione R, et al. **Gene Amplif Anal** 1986;4:253–77 (117 ref.)
Estimating the age-at-onset function using life-table methods. Chidambaram A, et al. **Genet Epidemiol** 1988; 5(4):255–63
Familial risk of cancer among randomly selected cancer probands. Sellers TA, et al. **Genet Epidemiol** 1988; 5(6):381–91
Analysis of somatic mutations at human minisatellite loci in tumors and cell lines. Armour JA, et al. **Genomics** 1989 Apr;4(3):328–34
Familial occurrence of cancer and heteromorphism of the heterochromatic segment of chromosome 1. Köpf I, et al.

Hereditas 1989;110(1):79–83
Tumour suppressor genes: oncogenesis update. Paul J. **Histopathology** 1989 Jul;15(1):1–9 (33 ref.)
Chromosomal lesions and solid tumors. Sandberg AA. **Hosp Pract [Off]** 1988 Oct 15;23(10):93–100, 105–6
Surnames and cancer genes. Cleek RK. **Hum Biol** 1989 Apr; 61(2):195–211
Increased spindle resistance to antimicrotubule agents in cells prone to chromosomal nondisjunction. Avivi L, et al. **Hum Genet** 1989 Sep;83(2):165–70
Cell differentiation, genes and cancer. Proceedings of a symposium. Osaka, 24–26 February 1987. **IARC Sci Publ** 1988;(92):1–203
The Fine Page: antioncogenes and familial cancer. Fine RM. **Int J Dermatol** 1989 Jun;28(5):311–2
Family history of autoimmune disorders and cancer in multiple myeloma. Linet MS, et al. **Int J Epidemiol** 1988 Sep;17(3):512–3
Factors affecting and significance of G2 chromatin radiosensitivity in predisposition to cancer. Sanford KK, et al. **Int J Radiat Biol** 1989 Jun;55(6):963–81
Strategies to control cancer through genetics. Berg K. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:283–94 (49 ref.)
Chromosomes and cancer families. Harnden DG. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:233–42 (33 ref.)
Prince Takamatsu memorial lecture. Rare cancers: clues to genetic mechanisms. Knudson AG Jr. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:221–31 (28 ref.)
18th annual UCLA symposium. Abstracts: Genetic mechanisms in carcinogenesis and tumor progression. **J Cell Biochem Suppl** 1989;13B:1–72
The role of the ras oncogene in the formation of tumours. Gilbert PX, et al. **J Cell Sci** 1988 Jul;90 (Pt 3):433–46
Competitive ELISA for detection of native ras gene–related products in sera of cancer patients. Epelbaum R, et al. **J Clin Lab Anal** 1989;3(4):209–14
The role of heredity in cancer. Levine EG, et al. **J Clin Oncol** 1989 Apr;7(4):527–40 (130 ref.)
Perspective: what makes a cell run wild? [news] Blume E. **J Natl Cancer Inst** 1989 Jan 18;81(2):91–3
Expression of a multidrug resistance gene in human cancers. Goldstein LJ, et al. **J Natl Cancer Inst** 1989 Jan 18; 81(2):116–24
The search for oncogene targets. Racker E. **J Natl Cancer Inst** 1989 Feb 15;81(4):247–51 (37 ref.)
Specific genetic change in tumors associated with von Hippel–Lindau disease. Tory K, et al. **J Natl Cancer Inst** 1989 Jul 19;81(14):1097–101
Oncogenes and onco–suppressor genes: their involvement in cancer. Spandidos DA, et al. **J Pathol** 1989 Jan;157(1):1–10 (70 ref.)
Childhood cancer survivors and their offspring studied through a postal survey of general practitioners: preliminary results. Hawkins MM, et al. **J R Coll Gen Pract** 1988 Mar;38(308):102–5
Detection of genes of interest in tissues and cells by in situ hybridization. Seibel NL, et al. **J Virol Methods** 1988 Sep; 21(1–4):171–7 (18 ref.)
The Japan Society of Human Genetics award lecture. Cytogenetic aspects of cancer–predisposing genes. Sasaki MS. **Jinrui Idengaku Zasshi** 1989 Mar;34(1):1–16 (67 ref.)
A simple and useful method for simultaneous screening of elevated levels of expression of a variety of oncogenes in malignant cells. Nakamori S, et al. **Jpn J Cancer Res** 1988 Dec;79(12):1311–7
Amplification of N–myc oncogene in various childhood cancers. Jinbo T, et al. **Jpn J Exp Med** 1989 Feb;59(1):43–6
Molecular mechanisms of oncogenesis. Seemayer TA, et al. **Lab Invest** 1989 May;60(5):585–99 (199 ref.)
Malignancy may contribute to rapid evolution. Fischer K. **Med Hypotheses** 1989 Jan;28(1):35–8
Origin of mutation in neoplasia. Morris SA. **Med Hypotheses** 1988 Nov;27(3):209–14
Endogenous DNA damage as related to cancer and aging. Ames BN. **Mutat Res** 1989 Sep;214(1):41–6 (34 ref.)
Constitutional chromosome instability and cancer risk. Heim S, et al. **Mutat Res** 1989 Jul;221(1):39–51 (104 ref.)
Effects of CCNU therapy on human chromosomes. Vyas RC, et al. **Mutat Res** 1988 Oct;206(2):163–6
Carcinogenesis. Is imprinting to blame? [news] Ponder B. **Nature** 1989 Jul 27;340(6231):264
Cancer genetics. Genomic imprinting and embryonal tumours [news] Reik W, et al. **Nature** 1989 Mar 9;338(6211):112–3
Defective DNA repair in a large family having a high occurrence of cancer. Kovacs E, et al. **Oncology** 1988; 45(6):444–7
Application of DA/DAPI technique in cancer cytogenetics. Macera MJ, et al. **Oncology** 1989;46(1):61–2
Genes, syndromes, and cancer. Miller RW. **Pediatr Rev** 1986 Nov;8(5):153–8 (25 ref.)
Oncogenes and growth factors. Shooter EM. **Proc Annu Meet Med Sect Am Counc Life Insur** 1988;:9–27
Use of variable number of tandem repeat (VNTR) sequences for monitoring chromosomal instability. Kraemer PM, et al. **Prog Nucleic Acid Res Mol Biol** 1989;36:187–204
Mutation in ras proto–oncogenes and malignancy. Marshall CJ. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:398–405
General tumour biology. Pontén J. **Scand J Urol Nephrol Suppl** 1988;110:13–4
The biology of cancer, Part 1. **Semin Oncol** 1989 Apr; 16(2):89–168
Chromosomal and molecular clues to tumor progression. Nowell PC. **Semin Oncol** 1989 Apr;16(2):116–27 (72 ref.)
The emerging genetics of cancer. Skinner MA, et al. **Surg Gynecol Obstet** 1989 Apr;168(4):371–9 (89 ref.)
Oncogenes and tumor suppressor genes. Weinberg RA. **Trans Stud Coll Physicians Phila** 1988 Dec;10(1–4):83–94 (20 ref.)
Chromosome error propagation and cancer. Holliday R. **Trends Genet** 1989 Feb;5(2):42–5 (39 ref.)
[Basic cancer biology] Danø K, et al. **Ugeskr Laeger** 1989 Jan 2;151(1):45–50 **(Dan)**
[The value of screening and the national registration of hereditary tumors] Vasen HF, et al. **Ned Tijdschr Geneeskd** 1988 Aug 27;132(35):1609–12 **(Dut)**
[Is DNA aneuploidy a marker of malignant growth?] Klemi PJ, et al. **Duodecim** 1988;104(7):504–9 (38 ref.) **(Fin)**
[The clinical significance of oncogenes] Lehtola L, et al. **Duodecim** 1988;104(22):1847–63 (85 ref.) **(Fin)**
[Genomic changes and oncogenesis. Present functional theories. Anti–oncogenes] Grandjouan S, et al. **Ann Med Interne (Paris)** 1988;139(4):258–64 (24 ref.) **(Fre)**
[Genes of hereditary diseases that predispose to tumors] Thomas G. **Bull Cancer (Paris)** 1988;75(9):871–8 (Eng. Abstr.) **(Fre)**
[FGF gene family and their role in human tumors] de Lapeyrière O, et al. **Pathol Biol (Paris)** 1988 Sep; 36(7):863–5 (15 ref.) **(Fre)**
[Chromosomes and cancer. Facts and hypotheses] Dutrillaux B. **Pathol Biol (Paris)** 1989 Feb;37(2):120–1 **(Fre)**
[Tumor cytogenetics: between molecular genetics and clinical oncology] Rudolph G. **Dtsch Med Wochenschr** 1989 Aug 18;114(33):1253–9 (56 ref.) **(Ger)**
[What is the contribution of yeast genetics to tumor biology and tumor diagnosis?] Breitenbach M, et al. **Wien Klin Wochenschr** 1989 Aug 4;101(15):495–504 (64 ref.) (Eng. Abstr.) **(Ger)**
[Genetics and cancer] Witkowski R. **Z Arztl Fortbild (Jena)** 1988;82(22):1149–51 **(Ger)**
[Chromosome abnormalities in early cancers] Maeda S, et al. **Gan No Rinsho** 1988 Aug;34(10):1264–72 (Eng. Abstr.) **(Jpn)**
[Antioncogene] Akiyama T. **Gan To Kagaku Ryoho** 1989 May;16(5):1969–75 (22 ref.) (Eng. Abstr.) **(Jpn)**
[Recessive oncogene and loss of heterozygosity] Sasaki M, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 2):624–31 (11 ref.) (Eng. Abstr.) **(Jpn)**
[Techniques in molecular biology for cancer research. RNA blot hybridization and S1 mapping] Shirakata Y, et al. **Gan To Kagaku Ryoho** 1989 Feb;16(2):281–6 **(Jpn)**
[Flow cytometric analysis of oncogene products] Tsuchiya H. **Gan To Kagaku Ryoho** 1989 Jul;16(7):2352–9 (Eng. Abstr.) **(Jpn)**
[Is MDR 1 gene responsible for multidrug–resistance in cancer cells?] Ueda K. **Tanpakushitsu Kakusan Koso** 1988 Jul;33(8):1287–99 (58 ref.) **(Jpn)**
[Tumors in transgenic mice] Ermilov AN, et al. **Eksp Onkol** 1988;10(5):3–8 (47 ref.) (Eng. Abstr.) **(Rus)**
[Chromosome changes and human malignant tumors] Polishchuk LZ. **Tsitol Genet** 1988 Jul–Aug;22(4):65–72 (87 ref.) (Eng. Abstr.) **(Rus)**
[Molecular analysis of DNA and malignant processes] Sršeň S. **Cesk Pediatr** 1988 Sep;43(9):538–41 **(Slo)**
[Carcinogenic genes and antitumoral genes (editorial)] Arias Vallejo E. **Rev Esp Enferm Apar Dig** 1988 Dec;74(6):651 **(Spa)**
[Many good reasons for Sweden to have an interest in tumor markers] Björklund B. **Lakartidningen** 1988 Sep 7; 85(36):2837–8 **(Swe)**

HISTORY

Neutron brachytherapy for the treatment of malignant neoplasia. Maruyama Y. **Int J Radiat Oncol Biol Phys** 1988 Dec;15(6):1415–29
[The etiologic problem of cancer. 1908 (classical article)] Borrel M. **Bull Cancer (Paris)** 1989;76(1):2–15 **(Fre)**
[Cancer in the works of l'Ecole de Paris 1800–1850] Ackerknecht EH. **Clio Med** 1985–86;20(1–4):125–34 **(Fre)**

IMMUNOLOGY

HLA system and some neoplastic diseases. Abrahámová J, et al. **Acta Univ Carol [Med Monogr] (Praha)** 1988;123:1–80 (243 ref.)
Tumor–associated blood group antigen expressions and immunoglobulins associated with tumors. Anderson B, et al. **Adv Exp Med Biol** 1988;228:601–56 (191 ref.)
MHC class I and II gene expression on human tumors. Ruiz–Cabello F, et al. **Adv Exp Med Biol** 1988;233:119–28 (23 ref.)
Expression of the common acute lymphoblastic leukemia antigen (CD10) in mesenchymal tumors. Mechtersheimer G, et al. **Am J Pathol** 1989 May;134(5):961–5
New immunologic markers for monitoring of cancer. Virji MA, et al. **Ann Chir Gynaecol** 1989;78(1):13–26 (54 ref.)
Antineuronal autoantibodies in neurologic paraneoplastic syndromes. Anderson NE, et al. **Ann N Y Acad Sci** 1988; 540:440–1
CD5 positive B lymphocytes: a link between autoimmunity and B–cell oncogenesis. Bataille R, et al. **Anticancer Res** 1988 Jul–Aug;8(4):707–10 (43 ref.)
Optimal immunosuppression conditions with ALS for grafting human tumoral cell line in mice. Haraga L, et al. **Arch Roum Pathol Exp Microbiol** 1987 Oct–Dec; 46(4):347–56
The flip side of tumor immunity. Prehn RT, et al. **Arch Surg** 1989 Jan;124(1):102–6
Lack of cytokine–induced skin reaction correlates with acute physiology score and mortality in patients receiving intensive care. Puyana JC, et al. **Arch Surg** 1988 Dec; 123(12):1474–6
Natural killer cells and cancer: a review. Burton RC. **Aust N Z J Surg** 1988 Oct;58(10):761–5 (38 ref.)
Recognition and destruction of neoplastic cells by activated macrophages: discrimination of altered self. Fidler IJ, et al. **Biochim Biophys Acta** 1988 Nov 15;948(2):151–73 (190 ref.)
An evaluation of serum CA 50 levels in cancer using a time–resolved fluoroimmunoassay. Cooper EH, et al. **Biomed Pharmacother** 1988;42(3):189–96
Circulating CA 15–3 antigen levels in non–mammary malignancies. Colomer R, et al. **Br J Cancer** 1989 Feb; 59(2):283–6
Monoclonal antibodies for imaging and therapy. Epenetos AA, et al. **Br J Cancer** 1989 Feb;59(2):152–5 (53 ref.)
Identification of normal B–cell counterparts of neoplastic cells which secrete cold agglutinins of anti–I and anti–i specificity. Stevenson FK, et al. **Br J Haematol** 1989 May; 72(1):9–15
Natural killer cells in children with malignant solid tumors. Effect of recombinant interferon–alpha and interleukin–2 on natural killer cell function against tumor cell lines. Alvarado CS, et al. **Cancer** 1989 Jan 1;63(1):83–9
Changes in serum levels of Forssman–like antibody in patients with gastric cancer. Hirayama R, et al. **Cancer** 1989 Apr 15;63(8):1528–33
Immune restoration and/or augmentation of local graft versus host reaction by traditional Chinese medicinal herbs. Sun Y, et al. **Cancer** 1983 Jul 1;52(1):70–3
Immune dysfunctions in cancer and AIDS. Selected reports: Second International Symposium on Immunobiology in Clinical Oncology and Immune Dysfunctions. Nice, France. **Cancer Detect Prev** 1988;12(1–6):1–669
In vitro production of the general transformation antibody related to survival in human cancer patients: antimalignin antibody. Bogoch S, et al. **Cancer Detect Prev** 1988; 12(1–6):313–20
Role of interleukin–2 (IL–2) in cancer–related immune deficiency: in vitro response to IL–2, production of IL–2, and IL–2 receptor expression in patients with advanced cancer. Mantovani G, et al. **Cancer Detect Prev** 1988; 12(1–6):149–59
Infiltration of interleukin–2–inducible killer cells in ascitic fluid and pleural effusions of advanced cancer patients. Blanchard DK, et al. **Cancer Res** 1988 Nov 15; 48(22):6321–7
Preferential clonogenic deficit of CD8–positive T–lymphocytes infiltrating human solid tumors. Miescher S, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):6992–8
Tissue distribution and cellular location of the antigens recognized by human monoclonal antibodies 16.88 and 28A32. Starling JJ, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7273–8
Involvement of both Tac and non–Tac interleukin 2–binding peptides in the interleukin 2–dependent proliferation of human tumor–infiltrating lymphocytes. Yagita M, et al. **Cancer Res** 1989 Mar 1;49(5):1154–9
The immunobiology of human malignant disease. Ritz RG. **Chic Med Sch Q** 1972;31(1–4):40–4 (26 ref.)
Solving the problem of antibody interference in commercial "sandwich"–type immunoassays of carcinoembryonic antigen. Hansen HJ, et al. **Clin Chem** 1989 Jan;35(1):146–51
Phenotypic expression of histocompatibility antigens in human primary tumours and metastases. Ruiz–Cabello F, et al. **Clin Exp Metastasis** 1989 Mar–Apr;7(2):213–26
TMCHB: a possible alternative to DNCB in skin testing for immune competence. Takanami I, et al. **Contact Dermatitis** 1988 Aug;19(2):81–3
Immune complexes in solid tumours precipitable by 3.5% polyethylene glycol: analysis of some nonspecific components. Guidi L, et al. **Diagn Clin Immunol** 1988; 5(6):284–8
Immunological characterization and clinical significance of low mobility cells appearing in the peripheral blood mononuclear cells of cancer patients. Mori T, et al. **Eur J Cancer Clin Oncol** 1988 Sep;24(9):1463–9
Evidence for the non–reactive nature of lymphoid elements in serous effusions from patients with cancer [letter] Rathmell A, et al. **Eur J Cancer Clin Oncol** 1988 Sep; 24(9):1531–3
Immunological and genetic factors influencing development and susceptibility to cancer. Gill TJ 3d. **Genetica** 1987 Aug 31;73(1–2):15–24 (39 ref.)
Hyaluronectin: detection with monoclonal antibodies in human tumors. Girard N, et al. **Hybridoma** 1988 Aug; 7(4):333–40
Neutrophil function tests in disseminated malignancies. Gomathinayagam D, et al. **Indian J Pathol Microbiol** 1987 Oct;30(4):397–400

Neuroimmunomodulation in cancer patients: correlations between melatonin and beta-endorphin blood levels and T helper/suppressor ratio. Barni S, et al. **Int J Biol Markers** 1988 Apr-Jun;3(2):82-6

Serum levels of soluble interleukin-2 receptors and their relation to CD4/CD8 ratio in patients with advanced solid tumors [letter] Tancini G, et al. **Int J Biol Markers** 1989 Apr-Jun;4(2):123-4

Human tumor-infiltrating lymphocyte (TIL) cytotoxicity facilitated by anti-T-cell receptor antibody. Schoof DD, et al. **Int J Cancer** 1989 Aug 15;44(2):219-24

Determination of antigen concentration and distribution in human tumors: the quantitative autoradiographic approach. Del Vecchio S, et al. **Int J Rad Appl Instrum [B]** 1989; 16(2):143-5

Problems of immune surveillance over the cytodifferentiation state and some cellular mechanisms of natural antitumor resistance. Fel'VYa, et al. **Int Rev Cytol** 1988;110:157-203 (206 ref.)

Do naturally occurring antibodies play a role in the progression and proliferation of tumor cells? Witz IP, et al. **Int Rev Immunol** 1988 Mar;3(1-2):133-45 (45 ref.)

Induction of lymphokine-activated killer-like cells by cancer chemotherapy. Kiyohara T, et al. **J Exp Med** 1988 Dec 1;168(6):2355-60

A quantitative nitrocellulose enzyme immunoassay and its application to the screening of hybridomas for the detection of uncharacterized tumor-associated antigens in sera of cancer patients. Liu YS, et al. **J Immunoassay** 1988; 9(3-4):335-48

Targeting of complement to tumor cells by heteroconjugates composed of antibodies and of the complement component C3b. Reiter Y, et al. **J Immunol** 1989 Apr 15;142(8):2771-7

Phorbol ester-induced loss of membrane sialic acid: implications for tumor cytolysis by natural killer cells. Nabi ZF, et al. **J Leukoc Biol** 1989 Mar;45(3):183-8

Flow cytometric screening of monoclonal antibodies for drug or toxin targeting to human cancer. Durrant LG, et al. **J Natl Cancer Inst** 1989 May 3;81(9):688-96

Generation of cytotoxic factor by human large granular lymphocytes during interaction with autologous tumor cells: lysis of fresh human tumor cells. Uchida A, et al. **J Natl Cancer Inst** 1988 Nov 2;80(17):1398-403

Augmentation of human cytotoxic T lymphocytes against autologous tumor by a factor released from human monocytic leukemia cell line. Maeda N, et al. **Jpn J Cancer Res** 1989 Jun;80(6):537-45

A correlation between the expression of CD 8 antigen and specific cytotoxicity of tumor-infiltrating lymphocytes. Okada Y, et al. **Jpn J Cancer Res** 1989 Mar;80(3):249-56

Antigenic variations of retrovirus in Japanese cancer patients. Maruyama K, et al. **Leukemia** 1989 Apr;3(4):277-81

Measles and rubella antibody status in previously vaccinated children with cancer. Feldman S, et al. **Med Pediatr Oncol** 1988;16(5):308-11

Increased expression of Fc gamma receptor in cancer patients and tumor bearing mice. Ran M, et al. **Mol Immunol** 1988 Nov;25(11):1159-67

Immunocytometric characteristics of a monoclonal antibody (Bra55) recognizing the leukocyte common antigen (LCA). Chorváth B, et al. **Neoplasma** 1988;35(5):495-501

Human immunological response to mouse monoclonal antibodies in the treatment or diagnosis of malignant diseases. Van Kroonenburgh MJ, et al. **Nucl Med Commun** 1988 Nov;9(11):919-30 (61 ref.)

Application of multiparameter DNA content and immunofluorescence analysis in the investigation of human neoplasia. Bauer KD. **Pathol Immunopathol Res** 1988; 7(5):371-80

The role of ultraviolet radiation-induced cross-reactive tumor antigens in tumor immunity. Seilstad KH, et al. **Pathol Immunopathol Res** 1987;6(5-6):400-18 (98 ref.)

Immunohistologic heterogeneity of malignant tumors. Denk H. **Pathol Res Pract** 1988 Nov;183(6):693-7 (18 ref.)

Principles of tumor immunology. Den Otter W. **Postepy Hig Med Dosw** 1988 Mar-Apr;42(2):117-24 (33 ref.)

Selective changes in expression of HLA class I polymorphic determinants in human solid tumors. Natali PG, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6719-23

Immunity to cancer II. Proceedings of the Second Conference on Immunity to Cancer. Williamsburg, Virginia, November 9-11, 1987. **Prog Clin Biol Res** 1989; 288:1-520

Contrasuppression, tolerance, and tumor immunity. Green DR, et al. **Prog Clin Biol Res** 1989;288:245-58 (43 ref.)

Considerations on the role of the plasminogen activators/plasmin system in the generation of conditions for more efficient interaction of malignant cells with large granular lymphocytes. Juranić Z, et al. **Res Immunol** 1989 Mar-Apr;140(3):281-3

Transfusion and host defenses against cancer recurrence and infection. Blumberg N, et al. **Transfusion** 1989 Mar-Apr; 29(3):236-45 (126 ref.)

Disparate activities of human natural killer cell clones against allogeneic bone marrow and tumor cell targets. Christmas SE. **Transplantation** 1989 May;47(5):905-8

Epstein-Barr virus (EBV). X. Incidence of EBV antibodies in patients with malignant tumors. Baetoniu A, et al. **Virologie** 1989 Apr-Jun;40(2):147-9

[Immunosuppression using blood transfusion] Genetet B, et al. **Bull Soc Sci Med Grand Duche Luxemb** 1988; 125(2):55-61 (34 ref.) (Fre)

[Interferons and their effects] Giese M, et al. **Onkologie** 1988 Aug;11(4):151-4 (15 ref.) (Eng. Abstr.) (Ger)

[New radiopharmaceuticals for oncologic diagnosis and therapy: developments in radioimmunoscintigraphy and radioimmunotherapy] Eisenhut M, et al. **Rontgenblatter** 1989 Jan;42(1):24-7 (16 ref.) (Eng. Abstr.) (Ger)

[Immunocomplex nephropathies in malignant tumors] Kun L, et al. **Morphol Igazsagugyi Orv Sz** 1988 Oct;28(4):255-61 (34 ref.) (Eng. Abstr.) (Hun)

[Soluble factors with immunosuppressive activity in human neoplasms] Baroni R, et al. **Minerva Med** 1988 Oct; 79(10):839-44 (29 ref.) (Eng. Abstr.) (Ita)

[A study of the clinical usefulness of the CA15-3 radioimmunoassay kit] Abe Y, et al. **Gan No Rinsho** 1988 Oct;34(12):1672-6 (Eng. Abstr.) (Jpn)

[Cancer and immunodeficiency] Yada J. **Gan No Rinsho** 1989 Jan;Spec No:680-6 (Jpn)

[Identification and characterization of effector lymphocytes lysing autologous tumor cells] Kumagai K, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-2):1462-8 (21 ref.) (Eng. Abstr.) (Jpn)

[Analysis of tumor cell surface antigens] Nakahara K. **Gan To Kagaku Ryoho** 1989 Jul;16(7):2321-8 (Eng. Abstr.) (Jpn)

[Usefulness of a CA 130 kit based on IRMA (immunoradiometric assay)] Fujii T, et al. **Kaku Igaku** 1988 Nov;25(11):1283-90 (Jpn)

[Immunomodulating capacity of monocyte-macrophage system in cancer patients] Umesaki N, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Aug 20;23(8):1638-44 (Eng. Abstr.) (Jpn)

[Anti-idiotypic antibodies in tumor immunity] Miura K. **Nippon Rinsho** 1988 Dec;46(12):2778-85 (16 ref.) (Jpn)

[Results of the antiviral treatment of chickenpox and herpes zoster in children with neoplasms] Jankowska H, et al. **Pediatr Pol** 1988 Sep;63(9):574-80 (Eng. Abstr.) (Pol)

[Cytotoxic NK cells: their role and function in the body. IV. The role of the NK cells in antiviral and antitumor immunity and the pathologic proliferation of the NK cells] Frydecka I. **Przegl Lek** 1988;45(6):539-42 (Pol)

[Mast cells and antitumor resistance] Nikol'skiĭ IS, et al. **Eksp Onkol** 1988;10(5):15-9,75 (27 ref.) (Eng. Abstr.) (Rus)

[Immunohistochemical and radiologic study of the accumulation of antibodies to the beta-1-MA antigen in human tumors transplanted into athymic mice] Pugachev KK, et al. **Eksp Onkol** 1989;11(1):50-3 (Eng. Abstr.) (Rus)

[The state of the complement system in infectious and neoplastic processes (review of the literature)] Martynova VA, et al. **Lab Delo** 1989;(2):4-9 (41 ref.) (Rus)

[Simultaneous determination of the level of immune complexes and immunoglobulins for characterization of the pathologic process] Vel'bri SK, et al. **Lab Delo** 1988; (5):7-11 (Eng. Abstr.) (Rus)

[Types of cellular antitumor cytotoxicity] Lomakin MS, et al. **Vopr Onkol** 1988;34(12):1422-32 (65 ref.) (Rus)

[Early antigens induced by cytomegalovirus in human tumor and leukemia cells] Pavliuchenkova RP, et al. **Vopr Virusol** 1988 Nov-Dec;33(6):707-11 (Eng. Abstr.) (Rus)

[Protein A: an immunomodulator in cancer patients] Subirá ML, et al. **Rev Med Univ Navarra** 1988 Jul-Sep;32(3):163-8 (45 ref.) (Eng. Abstr.) (Spa)

METABOLISM

Value of demonstration of cytokeratin and leukocyte common antigen in poorly differentiated malignant tumors in fine needle aspirates. Rajasekhar A, et al. **Acta Cytol** 1989 May-Jun;33(3):385-9

Aberrant glycosylation in tumors and tumor-associated carbohydrate antigens. Hakomori S. **Adv Cancer Res** 1989; 52:257-331 (358 ref.)

Transvascular and interstitial transport in tumors. Jain RK. **Adv Exp Med Biol** 1988;242:215-20 (21 ref.)

Nutrient intake and nitrogen metabolism in cancer patients during oncological chemotherapy. Ollenschlaeger G, et al. **Am J Clin Nutr** 1989 Sep;50(3):454-9

Expression of the cell-cell adhesion glycoprotein cell-CAM 120/80 in normal human tissues and tumors. Eidelman S, et al. **Am J Pathol** 1989 Jul;135(1):101-10

Oxidative stress-induced plasma membrane blebbing and cytoskeletal alterations in normal and cancer cells. Bellomo G, et al. **Ann N Y Acad Sci** 1988;551:128-30

Optical and nuclear magnetic resonance studies of hypoxia in human tissue and tumors. Chance B, et al. **Ann N Y Acad Sci** 1988;551:1-16

Tumour necrosis factor alpha (cachectin) mimics some of the effects of tumour growth on the disposal of a [14C]lipid load in virgin, lactating and litter-removed rats. Evans RD, et al. **Biochem J** 1988 Dec 15;256(3):1055-8

Pathogenesis of tumor stroma generation: a critical role for leaky blood vessels and fibrin deposition. Nagy JA, et al. **Biochim Biophys Acta** 1989 Feb;948(3):305-26 (131 ref.)

Relative bioavailability of controlled release morphine tablets (MST continus) in cancer patients. Poulain P, et al. **Br J Anaesth** 1988 Nov;61(5):569-74

Production of transforming growth factor-alpha in human tumour cell lines. Imanishi K, et al. **Br J Cancer** 1989 May; 59(5):761-5

The distribution of porphyrins with different tumour localising ability among human plasma proteins. Kongshaug M, et al. **Br J Cancer** 1989 Feb;59(2):184-8

The concentration of bleomycin labeled with Co-57 in primary and metastatic tumors. Front D, et al. **Cancer** 1989 Sep 1;64(5):988-93

Alkylating activity in serum, urine, and CSF following high-dose ifosfamide in children. Ninane J, et al. **Cancer Chemother Pharmacol** 1989;24 Suppl 1:S2-6; discussion S7

Altered tryptophan and neopterin metabolism in cancer patients treated with recombinant interleukin 2. Brown RR, et al. **Cancer Res** 1989 Sep 1;49(17):4941-4

Mechanisms of heterogeneous distribution of monoclonal antibodies and other macromolecules in tumors: significance of elevated interstitial pressure. Jain RK, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7022-32

Noninvasive monitoring of drug biodistribution and metabolism: studies with intraarterial Pt-195m-cisplatin in humans. Shani J, et al. **Cancer Res** 1989 Apr 1;49(7):1877-81

Acid pH in tumors and its potential for therapeutic exploitation. Tannock IF, et al. **Cancer Res** 1989 Aug 15; 49(16):4373-84

Effect of dose, molecular size, affinity, and protein binding on tumor uptake of antibody or ligand: a biomathematical model. Thomas GD, et al. **Cancer Res** 1989 Jun 15; 49(12):3290-6

Proceedings of the Cell Kinetics Society, twelfth annual meeting. 23-26 March 1988, Omaha, Nebraska, U.S.A. Abstracts. **Cell Tissue Kinet** 1988 Jan;21(1):51-63

Fibronectin is unsuitable as a tumor marker in pleural effusions. Delpuech P, et al. **Clin Chem** 1989 Jan; 35(1):166-8

A prospective evaluation of optimal sampling theory in the determination of the steady-state pharmacokinetics of piperacillin in febrile neutropenic cancer patients. Drusano GL, et al. **Clin Pharmacol Ther** 1989 Jun;45(6):635-41

Malignant cell glycoproteins and glycolipids. Alhadeff JA. **CRC Crit Rev Oncol Hematol** 1989;9(1):37-107 (515 ref.)

Effect of thyrotropin releasing hormone injection on blood growth hormone (GH), TSH and growth hormone releasing hormone (GHRH) concentrations in cancer patients. Kamijo K, et al. **Endocrinol Jpn** 1988 Dec; 35(6):827-31

Pharmacokinetics and metabolism of pirarubicin in advanced cancer patients. Robert J, et al. **Eur J Cancer Clin Oncol** 1988 Aug;24(8):1289-94

Monocytic production and plasma bioactivities of interleukin-1 and tumour necrosis factor in human cancer. Moldawer LL, et al. **Eur J Clin Invest** 1988 Oct; 18(5):486-92

Vitamin D metabolism in tumoral calcinosis [letter] Steinherz R. **Eur J Pediatr** 1989 Feb;148(5):475

Correlation between oxygen tension and spin-lattice relaxation rate in tumors. Akber SF. **Eur J Radiol** 1989 Feb;9(1):56-9

DNA adducts of cisplatin and carboplatin in tissues of cancer patients. Poirier MC, et al. **IARC Sci Publ** 1988;(89):313-20

Opioid receptors in human neoplasms: growth hormone and prolactin response to morphine, met-enkephalin and buprenorphine in cancer patients. Lissoni P, et al. **Int J Biol Markers** 1989 Jan-Mar;4(1):55-6

In vitro testing of chemotherapeutic combinations in a rapid thymidine incorporation assay. Sondak VK, et al. **Int J Cell Cloning** 1988 Nov;6(6):378-91

Comparison of an antimetabolic assay and an antiproliferative assay, both using 3H-thymidine incorporation, to test drug sensitivity of human tumors. Zaffaroni N, et al. **Int J Cell Cloning** 1988 Nov;6(6):392-403

Evidence for the tumor necrosis factor/cachectin production in cancer. Fine RM. **Int J Dermatol** 1988 Jul-Aug; 27(6):379-80

The uptake of the radiosensitizing compound Ro 03-8799 (Pimonidazole) in human tumors. Dische S, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1089-92

Quantitation of hypoxia in multicellular spheroids by video image analysis. Miller GG, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):949-52

Temperature dependence of binding of a fluorescent hypoxia probe. Olive PL. **Int J Radiat Oncol Biol Phys** 1989 Jun; 16(6):1565-70

Alterations of serum and urinary carnitine profiles in cancer patients: hypothesis of possible significance. Dodson WL, et al. **J Am Coll Nutr** 1989 Apr;8(2):133-42

Foetal and cancer patient fibroblasts produce an autocrine migration-stimulating factor not made by normal adult cells. Schor SL, et al. **J Cell Sci** 1988 Jul;90 (Pt 3):391-9

Effects of artificial nutrition on the nutritional status of cancer patients. Bozzetti F. **JPEN J Parenter Enteral Nutr** 1989 Jul-Aug;13(4):406-20 (118 ref.)

Iron nutrition in childhood malignancy. Garcia ME, et al. **JPEN J Parenter Enteral Nutr** 1989 Mar-Apr;13(2):162-7

Relationship between glucose oxidation and FFA concentration in septic cancer-bearing patients. Sauerwein HP, et al. **Metabolism** 1988 Nov;37(11):1045-50

The metabolic environment of cancer. Argilés JM, et al. **Mol Cell Biochem** 1988 May;81(1):3-17 (118 ref.)

Variable modes of proopiomelanocortin gene transcription in human tumors. de Keyzer Y, et al. **Mol Endocrinol** 1989 Jan;3(1):215-23

Liver vitamin A concentration in patients who died of cancer. Ostrowski J, et al. **Neoplasma** 1989;36(3):353-5

An evidence for human tumor cell lines producing different

carcinoembryonic and/or its related antigens. Sugii S. **Nippon Juigaku Zasshi** 1989 Feb;51(1):222–4

Analysis of monoclonal antibody uptake in tumours. Cornelius EA. **Nucl Med Commun** 1988 Nov;9(11):907–18

What's new in the importance of receptors in pathology? Dietel M, et al. **Pathol Res Pract** 1988 Dec;184(1):116–27 (51 ref.)

Pharmacokinetics of platinum in cancer patients treated with carboplatin in combination with high-dose methotrexate. el-Yazigi A, et al. **Pharm Res** 1989 Jun;6(6):492–6

Clinical metabolic studies in cancer research. Taylor PR, et al. **Prev Med** 1989 Mar;18(2):194–202 (16 ref.)

The functions of oncogene products. Hunter T. **Prog Clin Biol Res** 1989;288:25–34 (7 ref.)

Pharmacokinetics and metabolism of Navelbine. Krikorian A, et al. **Semin Oncol** 1989 Apr;16(2 Suppl 4):21–5 (9 ref.)

New tumor localizers: advances in the use of low density lipoproteins (LDL). Kahl SB, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):137–9

Organization of lipids in the plasma membranes of malignant and stimulated cells: a new model. Mountford CE, et al. **Trends Biochem Sci** 1988 May;13(5):172–7

[Fundamentals and technical aspects of magnetic resonance spectroscopy in relation to patients] Gückel F, et al. **Radiologe** 1989 Jul;29(7):322–9 (33 ref.) (Eng. Abstr.) **(Ger)**

[Application of multinuclear in vivo magnetic resonance spectroscopy in oncology] Semmler W, et al. **Radiologe** 1989 Jul;29(7):330–5 (40 ref.) (Eng. Abstr.) **(Ger)**

[Positron emitters for the study of tumor metabolism] Strauss LG. **Radiologe** 1989 Jul;29(7):318–21 (0 ref.) (Eng. Abstr.) **(Ger)**

[Diagnosis of tumor metabolism using positron emission tomography and magnetic resonance spectroscopy (editorial)] van Kaick G. **Radiologe** 1989 Jul;29(7):313–4 **(Ger)**

[On the relations between 67Ga uptake in tumor or liver and blood chemistry data in patients with malignant tumors] Kubota M. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Aug 25; 48(8):1013–23 (Eng. Abstr.) **(Jpn)**

[Influence of the diameter of the drug carriers for accumulation to tumors] Murota H, et al. **Nippon Rinsho** 1989 Jun;47(6):1363–8 **(Jpn)**

[Induced hypertension chemotherapy by angiotensin II for solid tumor] Wakui A, et al. **Nippon Rinsho** 1989 Jun; 47(6):1437–43 **(Jpn)**

[Humoral bone resorbing factor(s) produced by cancer] Nagata N. **Rinsho Byori** 1988 Dec;36(12):1393–8 **(Jpn)**

[Control of membrane permeability by external adenosine triphosphate in animal cells and its application to chemotherapy] Kitagawa T. **Yakugaku Zasshi** 1988 Jul; 108(7):604–12 (36 ref.) (Eng. Abstr.) **(Jpn)**

[New types of analyses in clinical cytology improve diagnosis and treatment of tumors] Stenkvist B. **Lakartidningen** 1989 Aug 9;86(32–33):2653 **(Swe)**

MICROBIOLOGY

Mechanisms of tumor induction by human retroviruses. Ferdinand FJ. **Arzneimittelforschung** 1989 Jun;39(6):737–40 (44 ref.)

Papillomaviruses in anogenital cancer as a model to understand the role of viruses in human cancers. zur Hausen H. **Cancer Res** 1989 Sep 1;49(17):4677–81 (56 ref.)

In vitro activity of fleroxacin (Ro23–6240), a new fluorinated 4-quinolone against isolates from cancer patients. Rolston K, et al. **Chemotherapy** 1988;34(6):448–54

In vitro activity of trospectomycin (U-63366F), a novel spectinomycin analog, against gram-positive isolates from cancer patients. Rolston K, et al. **Eur J Clin Microbiol Infect Dis** 1989 Mar;8(3):254–60

Comparative in vitro activity of the new difluoro-quinolone temafloxacin (A-62254) against bacterial isolates from cancer patients. Rolston KV, et al. **Eur J Clin Microbiol Infect Dis** 1988 Oct;7(5):684–6

Comparative in vitro activity of the two new 4-quinolones S-25930 and S-25932 against gram-positive bacteria isolated from cancer patients. Rolston KV, et al. **Eur J Clin Microbiol Infect Dis** 1988 Oct;7(5):681–3

Role of Broviac catheters in infections in children with cancer. Viscoli C, et al. **Pediatr Infect Dis J** 1988 Aug; 7(8):556–60

Production of haemolysin, aerobactin and enterobactin by strains of Escherichia coli causing bacteraemia in cancer patients, and their resistance to human serum. Aumont P, et al. **Res Microbiol** 1989 Jan;140(1):21–6

MORTALITY

An overview of Alabama cancer mortality among whites. 1950 to 1980. Lee JY, et al. **Ala J Med Sci** 1988 Oct; 25(4):375–82

Mortality by license class in amateur radio operators [letter] Milham S Jr. **Am J Epidemiol** 1988 Nov;128(5):1175–6

The international comparability of cancer mortality data. Results of an international death certificate study. Percy C, et al. **Am J Epidemiol** 1989 May;129(5):934–46

Minnesota Highway Maintenance Worker Study: cancer mortality. Bender AP, et al. **Am J Ind Med** 1989; 15(5):545–56

Occupational cancer mortality in Illinois white and black males, 1979–1984, for seven cancer sites. Mallin K, et al. **Am J Ind Med** 1989;15(6):699–717 (97 ref.)

Comparison of death certificate occupation and industry data with lifetime occupational histories obtained by interview: variations in the accuracy of death certificate entries. Schade WJ, et al. **Am J Ind Med** 1988;14(2):121–36

A prospective follow-up study of cancer mortality in relation to serum DDT. Austin H, et al. **Am J Public Health** 1989 Jan;79(1):43–6

A study of the mortality patterns of taxi drivers in Singapore. Koh D, et al. **Ann Acad Med Singapore** 1988 Oct; 17(4):579–82

Cancer staging and survival rates: an analysis. Spencer RP. **Anticancer Res** 1988 Jul-Aug;8(4):685–7 (10 ref.)

Long term survival and cure after childhood cancer. Hawkins MM. **Arch Dis Child** 1989 Jun;64(6):798–807

Mortality among forest and soil conservationists. Alavanja MC, et al. **Arch Environ Health** 1989 Mar-Apr;44(2):94–101

Cancer mortality in U.S. counties with hazardous waste sites and ground water pollution. Griffith J, et al. **Arch Environ Health** 1989 Mar-Apr;44(2):69–74

Predicting life span for applicants to inpatient hospice. Forster LE, et al. **Arch Intern Med** 1988 Dec; 148(12):2540–3

The terminal cancer syndrome [letter] Schonwetter RS, et al. **Arch Intern Med** 1989 Apr;149(4):965–6

Cancer "cures" in children, adolescents and young adults versus general cancer cure failure after 50 years of age. Mathé G. **Biomed Pharmacother** 1988;42(4):227–36

Plasma cholesterol, coronary heart disease, and cancer in the Renfrew and Paisley survey [see comments] Isles CG, et al. **BMJ** 1989 Apr 8;298(6678):920–4. **Comment in: BMJ** 1989 Apr 29;298(6681):1176

Interpretation of England and Wales cancer mortality data: the effect of enquiries to certifiers for further information. Swerdlow AJ. **Br J Cancer** 1989 May;59(5):787–91

Further results from a census based mortality study of fertiliser manufacturers. Fraser P, et al. **Br J Ind Med** 1989 Jan;46(1):38–42

Cancer mortality in the asphalt industry: a ten year follow up of an occupational cohort. Hansen ES. **Br J Ind Med** 1989 Aug;46(8):582–5

Mortality in the British rubber industry 1946–85. Sorahan T, et al. **Br J Ind Med** 1989 Jan;46(1):1–10

Cancer mortality in a cohort of United Kingdom steel foundry workers: 1946–85. Sorahan T, et al. **Br J Ind Med** 1989 Feb;46(2):74–81

Implications of survival curve slopes on the interpretation of adjuvant therapy results. Eriguchi M, et al. **Bull Soc Sci Med Grand Duche Luxemb** 1989 Mar-Apr; 126(1):93–7

Trends in years of life lost to cancer: 1970 to 1985. Mettlin C. **CA** 1989 Jan-Feb;39(1):33–9

Cancer patient survival rates: SEER program results for 10 years of follow-up. Myers MH, et al. **CA** 1989 Jan-Feb; 39(1):21–32

Cancer mortality in a northeastern native American population. Mahoney MC, et al. **Cancer** 1989 Jul 1; 64(1):187–90

The National Mortality Survey of China: implications for cancer control and prevention. King H, et al. **Cancer Detect Prev** 1988;13(3-4):157–66

Cancer mortality and mortality trends in Henan, China, 1974–1985. Lu JB, et al. **Cancer Detect Prev** 1988; 13(3-4):167–73

Cancer morbidity and mortality in phosphate workers. Block G, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7298–303

A retrospective cohort mortality study on workers of two thermoelectric power plants: fourteen-year follow-up results. Petrelli G, et al. **Eur J Epidemiol** 1989 Mar; 5(1):87–9

Cancer mortality risk among the major immigrant and ethnic groups in Canada: from 1969 to 1973. Thouez JP, et al. **Geogr Med** 1988;18:27–46

Differentials in mortality. Carstairs V. **Health Bull (Edinb)** 1988 Jul;46(4):226–36

Cancer mortality around La Hague nuclear facilities. Dousset M. **Health Phys** 1989 Jun;56(6):875–84

Study on mortality from cancer diseases in an urban community. Mukhopadhyaya SP, et al. **Indian J Public Health** 1987 Oct-Dec;31(4):248–53

Mortality study of cancer risk among oil refinery workers. Bertazzi PA, et al. **Int Arch Occup Environ Health** 1989; 61(4):261–70

Radon-222 concentration in groundwater and cancer mortality in North Carolina. Collman GW, et al. **Int Arch Occup Environ Health** 1988;61(1-2):13–8

Time trends in cancer mortality in the Federal Republic of Germany: progress against cancer? Becker N, et al. **Int J Cancer** 1989 Feb 15;43(2):245–9

Socioeconomic groups and cancer risk at death in the Swiss Canton of Vaud. Levi F, et al. **Int J Epidemiol** 1988 Dec; 17(4):711–7

Investigation of the geographical distribution of female cancer patterns in Belgium using pattern recognition techniques. Thielemans A, et al. **Int J Epidemiol** 1988 Dec; 17(4):724–31

A review of the evidence concerning the impact of medical measures on recent mortality and morbidity in the United States. McKinlay JB, et al. **Int J Health Serv** 1989; 19(2):181–208 (74 ref.)

Survival after cancer surgery of elderly patients in New Mexico, 1969–1982. Becker TM, et al. **J Am Geriatr Soc** 1989 Feb;37(2):155–9

Increased suicide rate in cancer patients. A cohort study based on the Swedish Cancer-Environment Register. Allebeck P, et al. **J Clin Epidemiol** 1989;42(7):611–6

Body Mass Index at the age of 18 and its effects on 32-year-mortality from coronary heart disease and cancer. A nested case-control study among the entire 1932 Dutch male birth cohort. Hoffmans MD, et al. **J Clin Epidemiol** 1989;42(6):513–20

Psychosocial correlates of cancer survival: a subsequent report 3 to 8 years after cancer diagnosis. Cassileth BR, et al. **J Clin Oncol** 1988 Nov;6(11):1753–9

Years of potential life lost: evaluating premature cancer death in men. Friman PC, et al. **J Community Health** 1989 Summer;14(2):101–6

Incidence and survival rates for cancer in Atlanta, 1975–1985. Greenberg RS, et al. **J Med Assoc Ga** 1988 Sep;77(9):712–9

Mortality in pediatric phase I clinical trials [letter] Furman WL, et al. **J Natl Cancer Inst** 1989 Aug 2;81(15):1193–4

Mortality study of workers exposed to dimethylformamide and/or acrylonitrile. Chen JL, et al. **J Occup Med** 1988 Oct;30(10):819–21

Update to vinyl chloride mortality study. Dahar WS, et al. **J Occup Med** 1988 Aug;30(8):648–9

A prospective study of mortality and morbidity among carpenters in the Honolulu Heart Program Cohort. Miller FD, et al. **J Occup Med** 1988 Nov;30(11):879–82

The "hazardous" environment—a commentary. Shindell S. **J Occup Med** 1981 Mar;23(3):198–201

Patterns of mortality in pulp and paper workers. Solet D, et al. **J Occup Med** 1989 Jul;31(7):627–30

Occupational cancer epidemiology in the People's Republic of China. Wu WA. **J Occup Med** 1988 Dec;30(12):968–74 (18 ref.)

Cohort and case-control analyses of workers exposed to vinyl chloride: an update. Wu WA, et al. **J Occup Med** 1989 Jun;31(6):518–23

Changes in the cancer spectrum at autopsy: 1975–1984. Karwinski B, et al. **J Pathol** 1989 Feb;157(2):117–25

Leads from the MMWR. Years of potential life lost due to cancer—United States, 1968–1985. **JAMA** 1989 Jan 13; 261(2):209

Childhood cancers' improved survival rates can exact a price in late effects of therapy [news] Raymond CA. **JAMA** 1988 Dec 16;260(23):3400, 3405

A piece of my mind. Food for thought. Wassersug JD. **JAMA** 1988 Nov 25;260(20):3000

The number of cancer deaths and age-specific cancer mortality rates by site in Japan in 1987. The Bureau of Vital Statistics, Ministry of Health and Welfare. **Jpn J Clin Oncol** 1989 Jun;19(2):181–93

Improvement in the treatment of childhood cancer: analysis of survival data from the National Children's Hospital (1965–1987). Tsunematsu Y, et al. **Jpn J Clin Oncol** 1988 Dec;18(4):309–20

Workshop for the evaluation of survival trends for cancer patients. Watanabe S, et al. **Jpn J Clin Oncol** 1989 Jun; 19(2):178–80

Epidemiology of childhood cancer in Zaire [letter] Massabi M, et al. **Lancet** 1989 Aug 26;2(8661):501

Years of potential life lost due to cancer—United States, 1968–1985. **MMWR** 1988 Dec 9;37(48):747–9

Cancer mortality among Native Americans in New York State. **N Y State J Med** 1988 Dec;88(12):666–7

Differences in cancer mortality rates in Ohio communities with respect to uraniferous geology. Dzik AJ. **Ohio Med** 1989 Jul;85(7):566–8

Mortality of auto mechanics. A ten-year follow-up. Hansen ES. **Scand J Work Environ Health** 1989 Feb;15(1):43–6

Cancer mortality in Switzerland, 1951–1984: effects of age, birth cohort and period of death. Levi F, et al. **Schweiz Med Wochenschr Suppl** 1988;26: 7–85 **(Eng, Ger, Fre)**

The application of trend surface models to the analysis of time factors in Swiss cancer mortality. Cislaghi C, et al. **Soz Praventivmed** 1988;33(7):359–73

Sex differentials in Swiss cancer mortality. La Vecchia C, et al. **Soz Praventivmed** 1988;33(3):140–3

Living in a chemical world: actions and reactions to industrial carcinogens. Infante PF, et al. **Teratogenesis Carcinog Mutagen** 1988;8(4):225–49

Blood transfusions and survival after resection of cancers of the breast, colon, and lung: the need for prospective randomized trials. Foster RS Jr, et al. **Transplant Proc** 1988 Dec;20(6):1125–7

Cancer mortality in Italy, 1983. Decarli A, et al. **Tumori** 1989 Jun 30;75(3):196–201

Cancer mortality in Italy, 1982. Decarli A, et al. **Tumori** 1988 Dec 31;74(6):623–32

Cancer survival from the incident cases of the Registry of Vaud, Switzerland. Levi F, et al. **Tumori** 1989 Apr 30; 75(2):83–9

Proportions of cancer deaths attributable to cigarette smoking in women. Stellman SD, et al. **Women Health** 1989; 15(2):19–28

[Mortality rate of malignant tumors in Yangzhong County] Zhang ZL, et al. **Chung Hua Chung Liu Tsa Chih** 1988 Mar;10(2):102–4 (Eng. Abstr.) **(Chi)**

[Transfusions and survival after cancer surgery] Veyrieres M, et al. **Pathol Biol (Paris)** 1989 Feb;37(2):174–5 **(Fre)**

[Prognostic factors in survival after cancer: epidemiological model] Raymond L, et al. **Soz Praventivmed** 1988;

Neuroimmunomodulation in cancer patients: correlations between melatonin and beta-endorphin blood levels and T helper/suppressor ratio. Barni S, et al. **Int J Biol Markers** 1988 Apr-Jun;3(2):82-6

Serum levels of soluble interleukin-2 receptors and their relation to CD4/CD8 ratio in patients with advanced solid tumors [letter] Tancini G, et al. **Int J Biol Markers** 1989 Apr-Jun;4(2):123-4

Human tumor-infiltrating lymphocyte (TIL) cytotoxicity facilitated by anti-T-cell receptor antibody. Schoof DD, et al. **Int J Cancer** 1989 Aug 15;44(2):219-24

Determination of antigen concentration and distribution in human tumors: the quantitative autoradiographic approach. Del Vecchio S, et al. **Int J Rad Appl Instrum [B]** 1989; 16(2):143-5

Problems of immune surveillance over the cytodifferentiation state and some cellular mechanisms of natural antitumor resistance. Fel'VYa, et al. **Int Rev Cytol** 1988;110:157-203 (206 ref.)

Do naturally occurring antibodies play a role in the progression and proliferation of tumor cells? Witz IP, et al. **Int Rev Immunol** 1988 Mar;3(1-2):133-45 (45 ref.)

Induction of lymphokine-activated killer-like cells by cancer chemotherapy. Kiyohara T, et al. **J Exp Med** 1988 Dec 1;168(6):2355-60

A quantitative nitrocellulose enzyme immunoassay and its application to the screening of hybridomas for the detection of uncharacterized tumor-associated antigens in sera of cancer patients. Liu YS, et al. **J Immunoassay** 1988; 9(3-4):335-48

Targeting of complement to tumor cells by heteroconjugates composed of antibodies and of the complement component C3b. Reiter Y, et al. **J Immunol** 1989 Apr 15;142(8):2771-7

Phorbol ester-induced loss of membrane sialic acid: implications for tumor cytolysis by natural killer cells. Nabi ZF, et al. **J Leukoc Biol** 1989 Mar;45(3):183-8

Flow cytometric screening of monoclonal antibodies for drug or toxin targeting to human cancer. Durrant LG, et al. **J Natl Cancer Inst** 1989 May 3;81(9):688-96

Generation of cytotoxic factor by human large granular lymphocytes during interaction with autologous tumor cells: lysis of fresh human tumor cells. Uchida A, et al. **J Natl Cancer Inst** 1988 Nov 2;80(17):1398-403

Augmentation of human cytotoxic T lymphocytes against autologous tumor by a factor released from human monocytic leukemia cell line. Maeda N, et al. **Jpn J Cancer Res** 1989 Jun;80(6):537-45

A correlation between the expression of CD 8 antigen and specific cytotoxicity of tumor-infiltrating lymphocytes. Okada Y, et al. **Jpn J Cancer Res** 1989 Mar;80(3):249-56

Antigenic variations of retrovirus in Japanese cancer patients. Maruyama K, et al. **Leukemia** 1989 Apr;3(4):277-81

Measles and rubella antibody status in previously vaccinated children with cancer. Feldman S, et al. **Med Pediatr Oncol** 1988;16(5):308-11

Increased expression of Fc gamma receptor in cancer patients and tumor bearing mice. Ran M, et al. **Mol Immunol** 1988 Nov;25(11):1159-67

Immunocytometric characteristics of a monoclonal antibody (Bra55) recognizing the leukocyte common antigen (LCA). Chorváth B, et al. **Neoplasma** 1988;35(5):495-501

Human immunological response to mouse monoclonal antibodies in the treatment or diagnosis of malignant diseases. Van Kroonenburgh MJ, et al. **Nucl Med Commun** 1988 Nov;9(11):919-30 (61 ref.)

Application of multiparameter DNA content and immunofluorescence analysis in the investigation of human neoplasia. Bauer KD. **Pathol Immunopathol Res** 1988; 7(5):371-80

The role of ultraviolet radiation-induced cross-reactive tumor antigens in tumor immunity. Seilstad KH, et al. **Pathol Immunopathol Res** 1987;6(5-6):400-18 (98 ref.)

Immunohistologic heterogeneity of malignant tumors. Denk H. **Pathol Res Pract** 1988 Nov;183(6):693-7 (18 ref.)

Principles of tumor immunology. Den Otter W. **Postepy Hig Med Dosw** 1988 Mar-Apr;42(2):117-24 (33 ref.)

Selective changes in expression of HLA class I polymorphic determinants in human solid tumors. Natali PG, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6719-23

Immunity to cancer II. Proceedings of the Second Conference on Immunity to Cancer. Williamsburg, Virginia, November 9-11, 1987. **Prog Clin Biol Res** 1989; 288:1-520

Contrasuppression, tolerance, and tumor immunity. Green DR, et al. **Prog Clin Biol Res** 1989;288:245-58 (43 ref.)

Considerations on the role of the plasminogen activators/plasmin system in the generation of conditions for more efficient interaction of malignant cells with large granular lymphocytes. Juranić Z, et al. **Res Immunol** 1989 Mar-Apr;140(3):281-3

Transfusion and host defenses against cancer recurrence and infection. Blumberg N, et al. **Transfusion** 1989 Mar-Apr; 29(3):236-45 (126 ref.)

Disparate activities of human natural killer cell clones against allogeneic bone marrow and tumor cell targets. Christmas SE. **Transplantation** 1989 May;47(5):905-8

Epstein-Barr virus (EBV). X. Incidence of EBV antibodies in patients with malignant tumors. Baetoniu A, et al. **Virologie** 1989 Apr-Jun;40(2):147-9

[Immunosuppression using blood transfusion] Genetet B, et al. **Bull Soc Sci Med Grand Duche Luxemb** 1988; 125(2):55-61 (34 ref.) **(Fre)**

[Interferons and their effects] Giese M, et al. **Onkologie** 1988 Aug;11(4):151-4 (15 ref.) (Eng. Abstr.) **(Ger)**

[New radiopharmaceuticals for oncologic diagnosis and therapy: developments in radioimmunoscintigraphy and radioimmunotherapy] Eisenhut M, et al. **Rontgenblatter** 1989 Jan;42(1):24-7 (16 ref.) (Eng. Abstr.) **(Ger)**

[Immunocomplex nephropathies in malignant tumors] Kun L, et al. **Morphol Igazsagugyi Orv Sz** 1988 Oct;28(4):255-61 (34 ref.) (Eng. Abstr.) **(Hun)**

[Soluble factors with immunosuppressive activity in human neoplasms] Baroni R, et al. **Minerva Med** 1988 Oct; 79(10):839-44 (29 ref.) (Eng. Abstr.) **(Ita)**

[A study of the clinical usefulness of the CA15-3 radioimmunoassay kit] Abe Y, et al. **Gan No Rinsho** 1988 Oct;34(12):1672-6 (Eng. Abstr.) **(Jpn)**

[Cancer and immunodeficiency] Yada J. **Gan No Rinsho** 1989 Jan;Spec No:680-6 **(Jpn)**

[Identification and characterization of effector lymphocytes lysing autologous tumor cells] Kumagai K, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-2):1462-8 (21 ref.) (Eng. Abstr.) **(Jpn)**

[Analysis of tumor cell surface antigens] Nakahara K. **Gan To Kagaku Ryoho** 1989 Jul;16(7):2321-8 (Eng. Abstr.) **(Jpn)**

[Usefulness of a CA 130 kit based on IRMA (immunoradiometric assay)] Fujii T, et al. **Kaku Igaku** 1988 Nov;25(11):1283-90 **(Jpn)**

[Immunomodulating capacity of monocyte-macrophage system in cancer patients] Umesaki N, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Aug 20;23(8):1638-44 (Eng. Abstr.) **(Jpn)**

[Anti-idiotypic antibodies in tumor immunity] Miura K. **Nippon Rinsho** 1988 Dec;46(12):2778-85 (16 ref.) **(Jpn)**

[Results of the antiviral treatment of chickenpox and herpes zoster in children with neoplasms] Jankowska H, et al. **Pediatr Pol** 1988 Sep;63(9):574-80 (Eng. Abstr.) **(Pol)**

[Cytotoxic NK cells: their role and function in the body. IV. The role of the NK cells in antiviral and antitumor immunity and the pathologic proliferation of the NK cells] Frydecka I. **Przegl Lek** 1988;45(6):539-42 **(Pol)**

[Mast cells and antitumor resistance] Nikol'skii IS, et al. **Eksp Onkol** 1988;10(5):15-9,75 (27 ref.) (Eng. Abstr.) **(Rus)**

[Immunohistochemical and radiologic study of the accumulation of antibodies to the beta-1-MA antigen in human tumors transplanted into athymic mice] Pugachev KK, et al. **Eksp Onkol** 1989;11(1):50-3 (Eng. Abstr.) **(Rus)**

[The state of the complement system in infectious and neoplastic processes (review of the literature)] Martynova VA, et al. **Lab Delo** 1989;(2):4-9 (41 ref.) **(Rus)**

[Simultaneous determination of the level of immune complexes and immunoglobulins for characterization of the pathologic process] Vel'bri SK, et al. **Lab Delo** 1988; (5):7-11 (Eng. Abstr.) **(Rus)**

[Types of cellular antitumor cytotoxicity] Lomakin MS, et al. **Vopr Onkol** 1988;34(12):1422-32 (65 ref.) **(Rus)**

[Early antigens induced by cytomegalovirus in human tumor and leukemia cells] Pavliuchenkova RP, et al. **Vopr Virusol** 1988 Nov-Dec;33(6):707-11 (Eng. Abstr.) **(Rus)**

[Protein A: an immunomodulator in cancer patients] Subirá ML, et al. **Rev Med Univ Navarra** 1988 Jul-Sep;32(3):163-8 (45 ref.) (Eng. Abstr.) **(Spa)**

METABOLISM

Value of demonstration of cytokeratin and leukocyte common antigen in poorly differentiated malignant tumors in fine needle aspirates. Rajasekhar A, et al. **Acta Cytol** 1989 May-Jun;33(3):385-9

Aberrant glycosylation in tumors and tumor-associated carbohydrate antigens. Hakomori S. **Adv Cancer Res** 1989; 52:257-331 (358 ref.)

Transvascular and interstitial transport in tumors. Jain RK. **Adv Exp Med Biol** 1988;242:215-20 (21 ref.)

Nutrient intake and nitrogen metabolism in cancer patients during oncological chemotherapy. Ollenschlaeger G, et al. **Am J Clin Nutr** 1989 Sep;50(3):454-9

Expression of the cell-cell adhesion glycoprotein cell-CAM 120/80 in normal human tissues and tumors. Eidelman S, et al. **Am J Pathol** 1989 Jul;135(1):101-10

Oxidative stress-induced plasma membrane blebbing and cytoskeletal alterations in normal and cancer cells. Bellomo G, et al. **Ann N Y Acad Sci** 1988;551:128-30

Optical and nuclear magnetic resonance studies of hypoxia in human tissue and tumors. Chance B, et al. **Ann N Y Acad Sci** 1988;551:1-16

Tumour necrosis factor alpha (cachectin) mimics some of the effects of tumour growth on the disposal of a [14C]lipid load in virgin, lactating and litter-removed rats. Evans RD, et al. **Biochem J** 1988 Dec 15;256(3):1055-8

Pathogenesis of tumor stroma generation: a critical role for leaky blood vessels and fibrin deposition. Nagy JA, et al. **Biochim Biophys Acta** 1989 Feb;948(3):305-26 (131 ref.)

Relative bioavailability of controlled release morphine tablets (MST continus) in cancer patients. Poulain P, et al. **Br J Anaesth** 1988 Nov;61(5):569-74

Production of transforming growth factor-alpha in human tumour cell lines. Imanishi K, et al. **Br J Cancer** 1989 May; 59(5):761-5

The distribution of porphyrins with different tumour localising ability among human plasma proteins. Kongshaug M, et al. **Br J Cancer** 1989 Feb;59(2):184-8

The concentration of bleomycin labeled with Co-57 in primary and metastatic tumors. Front D, et al. **Cancer** 1989 Sep 1;64(5):988-93

Alkylating activity in serum, urine, and CSF following high-dose ifosfamide in children. Ninane J, et al. **Cancer Chemother Pharmacol** 1989;24 Suppl 1:S2-6; discussion S7

Altered tryptophan and neopterin metabolism in cancer patients treated with recombinant interleukin 2. Brown RR, et al. **Cancer Res** 1989 Sep 1;49(17):4941-4

Mechanisms of heterogeneous distribution of monoclonal antibodies and other macromolecules in tumors: significance of elevated interstitial pressure. Jain RK, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7022-32

Noninvasive monitoring of drug biodistribution and metabolism: studies with intraarterial Pt-195m-cisplatin in humans. Shani J, et al. **Cancer Res** 1989 Apr 1;49(7):1877-81

Acid pH in tumors and its potential for therapeutic exploitation. Tannock IF, et al. **Cancer Res** 1989 Aug 15; 49(16):4373-84

Effect of dose, molecular size, affinity, and protein binding on tumor uptake of antibody or ligand: a biomathematical model. Thomas GD, et al. **Cancer Res** 1989 Jun 15; 49(12):3290-6

Proceedings of the Cell Kinetics Society, twelfth annual meeting. 23-26 March 1988, Omaha, Nebraska, U.S.A. Abstracts. **Cell Tissue Kinet** 1988 Jan;21(1):51-63

Fibronectin is unsuitable as a tumor marker in pleural effusions. Delpuech P, et al. **Clin Chem** 1989 Jan; 35(1):166-8

A prospective evaluation of optimal sampling theory in the determination of the steady-state pharmacokinetics of piperacillin in febrile neutropenic cancer patients. Drusano GL, et al. **Clin Pharmacol Ther** 1989 Jun;45(6):635-41

Malignant cell glycoproteins and glycolipids. Alhadeff JA. **CRC Crit Rev Oncol Hematol** 1989;9(1):37-107 (515 ref.)

Effect of thyrotropin releasing hormone injection on blood growth hormone (GH), TSH and growth hormone releasing hormone (GHRH) concentrations in cancer patients. Kamijo K, et al. **Endocrinol Jpn** 1988 Dec; 35(6):827-31

Pharmacokinetics and metabolism of pirarubicin in advanced cancer patients. Robert J, et al. **Eur J Cancer Clin Oncol** 1988 Aug;24(8):1289-94

Monocytic production and plasma bioactivities of interleukin-1 and tumour necrosis factor in human cancer. Moldawer LL, et al. **Eur J Clin Invest** 1988 Oct; 18(5):486-92

Vitamin D metabolism in tumoral calcinosis [letter] Steinherz R. **Eur J Pediatr** 1989 Feb;148(5):475

Correlation between oxygen tension and spin-lattice relaxation rate in tumors. Akber SF. **Eur J Radiol** 1989 Feb;9(1):56-9

DNA adducts of cisplatin and carboplatin in tissues of cancer patients. Poirier MC, et al. **IARC Sci Publ** 1988;(89):313-20

Opioid receptors in human neoplasms: growth hormone and prolactin response to morphine, met-enkephalin and buprenorphine in cancer patients. Lissoni P, et al. **Int J Biol Markers** 1989 Jan-Mar;4(1):55-6

In vitro testing of chemotherapeutic combinations in a rapid thymidine incorporation assay. Sondak VK, et al. **Int J Cell Cloning** 1988 Nov;6(6):378-91

Comparison of an antimetabolic assay and an antiproliferative assay, both using 3H-thymidine incorporation, to test drug sensitivity of human tumors. Zaffaroni N, et al. **Int J Cell Cloning** 1988 Nov;6(6):392-403

Evidence for the tumor necrosis factor/cachectin production in cancer. Fine RM. **Int J Dermatol** 1988 Jul-Aug; 27(6):379-80

The uptake of the radiosensitizing compound Ro 03-8799 (Pimonidazole) in human tumors. Dische S, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1089-92

Quantitation of hypoxia in multicellular spheroids by video image analysis. Miller GG, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):949-52

Temperature dependence of binding of a fluorescent hypoxia probe. Olive PL. **Int J Radiat Oncol Biol Phys** 1989 Jun; 16(6):1565-70

Alterations of serum and urinary carnitine profiles in cancer patients: hypothesis of possible significance. Dodson WL, et al. **J Am Coll Nutr** 1989 Apr;8(2):133-42

Foetal and cancer patient fibroblasts produce an autocrine migration-stimulating factor not made by normal adult cells. Schor SL, et al. **J Cell Sci** 1988 Jul;90 (Pt 3):391-9

Effects of artificial nutrition on the nutritional status of cancer patients. Bozzetti F. **JPEN J Parenter Enteral Nutr** 1989 Jul-Aug;13(4):406-20 (118 ref.)

Iron nutrition in childhood malignancy. Garcia ME, et al. **JPEN J Parenter Enteral Nutr** 1989 Mar-Apr;13(2):162-7

Relationship between glucose oxidation and FFA concentration in septic cancer-bearing patients. Sauerwein HP, et al. **Metabolism** 1988 Nov;37(11):1045-50

The metabolic environment of cancer. Argilés JM, et al. **Mol Cell Biochem** 1988 May;81(1):3-17 (118 ref.)

Variable modes of proopiomelanocortin gene transcription in human tumors. de Keyzer Y, et al. **Mol Endocrinol** 1989 Jan;3(1):215-23

Liver vitamin A concentration in patients who died of cancer. Ostrowski J, et al. **Neoplasma** 1989;36(3):353-5

An evidence for human tumor cell lines producing different

carcinoembryonic and/or its related antigens. Sugii S. **Nippon Juigaku Zasshi** 1989 Feb;51(1):222–4

Analysis of monoclonal antibody uptake in tumours. Cornelius EA. **Nucl Med Commun** 1988 Nov;9(11):907–18

What's new in the importance of receptors in pathology? Dietel M, et al. **Pathol Res Pract** 1988 Dec;184(1):116–27 (51 ref.)

Pharmacokinetics of platinum in cancer patients treated with carboplatin in combination with high-dose methotrexate. el-Yazigi A, et al. **Pharm Res** 1989 Jun;6(6):492–6

Clinical metabolic studies in cancer research. Taylor PR, et al. **Prev Med** 1989 Mar;18(2):194–202 (16 ref.)

The functions of oncogene products. Hunter T. **Prog Clin Biol Res** 1989;288:25–34 (7 ref.)

Pharmacokinetics and metabolism of Navelbine. Krikorian A, et al. **Semin Oncol** 1989 Apr;16(2 Suppl 4):21–5 (9 ref.)

New tumor localizers: advances in the use of low density lipoproteins (LDL). Kahl SB, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2–3):137–9

Organization of lipids in the plasma membranes of malignant and stimulated cells: a new model. Mountford CE, et al. **Trends Biochem Sci** 1988 May;13(5):172–7

[Fundamentals and technical aspects of magnetic resonance spectroscopy in relation to patients] Gückel F, et al. **Radiologe** 1989 Jul;29(7):322–9 (33 ref.) (Eng. Abstr.) **(Ger)**

[Application of multinuclear in vivo magnetic resonance spectroscopy in oncology] Semmler W, et al. **Radiologe** 1989 Jul;29(7):330–5 (40 ref.) (Eng. Abstr.) **(Ger)**

[Positron emitters for the study of tumor metabolism] Strauss LG. **Radiologe** 1989 Jul;29(7):318–21 (0 ref.) (Eng. Abstr.) **(Ger)**

[Diagnosis of tumor metabolism using positron emission tomography and magnetic resonance spectroscopy (editorial)] van Kaick G. **Radiologe** 1989 Jul;29(7):313–4 **(Ger)**

[On the relations between 67Ga uptake in tumor or liver and blood chemistry data in patients with malignant tumors] Kubota M. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Aug 25; 48(8):1013–23 (Eng. Abstr.) **(Jpn)**

[Influence of the diameter of the drug carriers for accumulation to tumors] Murota H, et al. **Nippon Rinsho** 1989 Jun;47(6):1363–8 **(Jpn)**

[Induced hypertension chemotherapy by angiotensin II for solid tumor] Wakui A, et al. **Nippon Rinsho** 1989 Jun; 47(6):1437–43 **(Jpn)**

[Humoral bone resorbing factor(s) produced by cancer] Nagata N. **Rinsho Byori** 1988 Dec;36(12):1393–8 **(Jpn)**

[Control of membrane permeability by external adenosine triphosphate in animal cells and its application to chemotherapy] Kitagawa T. **Yakugaku Zasshi** 1988 Jul; 108(7):604–12 (36 ref.) (Eng. Abstr.) **(Jpn)**

[New types of analyses in clinical cytology improve diagnosis and treatment of tumors] Stenkvist B. **Lakartidningen** 1989 Aug 9;86(32–33):2653 **(Swe)**

MICROBIOLOGY

Mechanisms of tumor induction by human retroviruses. Ferdinand FJ. **Arzneimittelforschung** 1989 Jun;39(6):737–40 (44 ref.)

Papillomaviruses in anogenital cancer as a model to understand the role of viruses in human cancers. zur Hausen H. **Cancer Res** 1989 Sep 1;49(17):4677–81 (56 ref.)

In vitro activity of fleroxacin (Ro23–6240), a new fluorinated 4-quinolone against isolates from cancer patients. Rolston K, et al. **Chemotherapy** 1988;34(6):448–54

In vitro activity of trospectomycin (U-63366F), a novel spectinomycin analog, against gram-positive isolates from cancer patients. Rolston K, et al. **Eur J Clin Microbiol Infect Dis** 1989 Mar;8(3):254–60

Comparative in vitro activity of the new difluoro-quinolone temafloxacin (A-62254) against bacterial isolates from cancer patients. Rolston KV, et al. **Eur J Clin Microbiol Infect Dis** 1988 Oct;7(5):684–6

Comparative in vitro activity of the two new 4-quinolones S-25930 and S-25932 against gram-positive bacteria isolated from cancer patients. Rolston KV, et al. **Eur J Clin Microbiol Infect Dis** 1988 Oct;7(5):681–3

Role of Broviac catheters in infections in children with cancer. Viscoli C, et al. **Pediatr Infect Dis J** 1988 Aug; 7(8):556–60

Production of haemolysin, aerobactin and enterobactin by strains of Escherichia coli causing bacteraemia in cancer patients, and their resistance to human serum. Aumont P, et al. **Res Microbiol** 1989 Jan;140(1):21–6

MORTALITY

An overview of Alabama cancer mortality among whites. 1950 to 1980. Lee JY, et al. **Ala J Med Sci** 1988 Oct; 25(4):375–82

Mortality by license class in amateur radio operators [letter] Milham S Jr. **Am J Epidemiol** 1988 Nov;128(5):1175–6

The international comparability of cancer mortality data. Results of an international death certificate study. Percy C, et al. **Am J Epidemiol** 1989 May;129(5):934–46

Minnesota Highway Maintenance Worker Study: cancer mortality. Bender AP, et al. **Am J Ind Med** 1989; 15(5):545–56

Occupational cancer mortality in Illinois white and black males, 1979–1984, for seven cancer sites. Mallin K, et al. **Am J Ind Med** 1989;15(6):699–717 (97 ref.)

Comparison of death certificate occupation and industry data with lifetime occupational histories obtained by interview: variations in the accuracy of death certificate entries. Schade WJ, et al. **Am J Ind Med** 1988;14(2):121–36

A prospective follow-up study of cancer mortality in relation to serum DDT. Austin H, et al. **Am J Public Health** 1989 Jan;79(1):43–6

A study of the mortality patterns of taxi drivers in Singapore. Koh D, et al. **Ann Acad Med Singapore** 1988 Oct; 17(4):579–82

Cancer staging and survival rates: an analysis. Spencer RP. **Anticancer Res** 1988 Jul-Aug;8(4):685–7 (10 ref.)

Long term survival and cure after childhood cancer. Hawkins MM. **Arch Dis Child** 1989 Jun;64(6):798–807

Mortality among forest and soil conservationists. Aiavanja MC, et al. **Arch Environ Health** 1989 Mar-Apr;44(2):94–101

Cancer mortality in U.S. counties with hazardous waste sites and ground water pollution. Griffith J, et al. **Arch Environ Health** 1989 Mar-Apr;44(2):69–74

Predicting life span for applicants to inpatient hospice. Forster LE, et al. **Arch Intern Med** 1988 Dec; 148(12):2540–3

The terminal cancer syndrome [letter] Schonwetter RS, et al. **Arch Intern Med** 1989 Apr;149(4):965–6

Cancer "cures" in children, adolescents and young adults versus general cancer cure failure after 50 years of age. Mathé G. **Biomed Pharmacother** 1988;42(4):227–36

Plasma cholesterol, coronary heart disease, and cancer in the Renfrew and Paisley survey [see comments] Isles CG, et al. **BMJ** 1989 Apr 8;298(6678):920–4. **Comment in:** BMJ 1989 Apr 29;298(6681):1176

Interpretation of England and Wales cancer mortality data: the effect of enquiries to certifiers for further information. Swerdlow AJ. **Br J Cancer** 1989 May;59(5):787–91

Further results from a census based mortality study of fertiliser manufacturers. Fraser P, et al. **Br J Ind Med** 1989 Jan;46(1):38–42

Cancer mortality in the asphalt industry: a ten year follow up of an occupational cohort. Hansen ES. **Br J Ind Med** 1989 Aug;46(8):582–5

Mortality in the British rubber industry 1946–85. Sorahan T, et al. **Br J Ind Med** 1989 Jan;46(1):1–10

Cancer mortality in a cohort of United Kingdom steel foundry workers: 1946–85. Sorahan T, et al. **Br J Ind Med** 1989 Feb;46(2):74–81

Implications of survival curve slopes on the interpretation of adjuvant therapy results. Eriguchi M, et al. **Bull Soc Sci Med Grand Duche Luxemb** 1989 Mar-Apr; 126(1):93–7

Trends in years of life lost to cancer: 1970 to 1985. Mettlin C. **CA** 1989 Jan-Feb;39(1):33–9

Cancer patient survival rates: SEER program results for 10 years of follow-up. Myers MH, et al. **CA** 1989 Jan-Feb; 39(1):21–32

Cancer mortality in a northeastern native American population. Mahoney MC, et al. **Cancer** 1989 Jul 1; 64(1):187–90

The National Mortality Survey of China: implications for cancer control and prevention. King H, et al. **Cancer Detect Prev** 1988;13(3–4):157–66

Cancer mortality and mortality trends in Henan, China, 1974–1985. Lu JB, et al. **Cancer Detect Prev** 1988; 13(3–4):167–73

Cancer morbidity and mortality in phosphate workers. Block G, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7298–303

A retrospective cohort mortality study on workers of two thermoelectric power plants: fourteen-year follow-up results. Petrelli G, et al. **Eur J Epidemiol** 1989 Mar; 5(1):87–9

Cancer mortality risk among the major immigrant and ethnic groups in Canada: from 1969 to 1973. Thouez JP, et al. **Geogr Med** 1988;18:27–46

Differentials in mortality. Carstairs V. **Health Bull (Edinb)** 1988 Jul;46(4):226–36

Cancer mortality around La Hague nuclear facilities. Dousset M. **Health Phys** 1989 Jun;56(6):875–84

Study on mortality from cancer diseases in an urban community. Mukhopadhyaya SP, et al. **Indian J Public Health** 1987 Oct-Dec;31(4):248–53

Mortality study of cancer risk among oil refinery workers. Bertazzi PA, et al. **Int Arch Occup Environ Health** 1989; 61(4):261–70

Radon-222 concentration in groundwater and cancer mortality in North Carolina. Collman GW, et al. **Int Arch Occup Environ Health** 1988;61(1–2):13–8

Time trends in cancer mortality in the Federal Republic of Germany: progress against cancer? Becker N, et al. **Int J Cancer** 1989 Feb 15;43(2):245–9

Socioeconomic groups and cancer risk at death in the Swiss Canton of Vaud. Levi F, et al. **Int J Epidemiol** 1988 Dec; 17(4):711–7

Investigation of the geographical distribution of female cancer patterns in Belgium using pattern recognition techniques. Thielemans A, et al. **Int J Epidemiol** 1988 Dec; 17(4):724–31

A review of the evidence concerning the impact of medical measures on recent mortality and morbidity in the United States. McKinlay JB, et al. **Int J Health Serv** 1989; 19(2):181–208 (74 ref.)

Survival after cancer surgery of elderly patients in New Mexico, 1969–1982. Becker TM, et al. **J Am Geriatr Soc** 1989 Feb;37(2):155–9

Increased suicide rate in cancer patients. A cohort study based on the Swedish Cancer-Environment Register. Allebeck P, et al. **J Clin Epidemiol** 1989;42(7):611–6

Body Mass Index at the age of 18 and its effects on 32-year-mortality from coronary heart disease and cancer. A nested case-control study among the entire 1932 Dutch male birth cohort. Hoffmans MD, et al. **J Clin Epidemiol** 1989;42(6):513–20

Psychosocial correlates of cancer survival: a subsequent report 3 to 8 years after cancer diagnosis. Cassileth BR, et al. **J Clin Oncol** 1988 Nov;6(11):1753–9

Years of potential life lost: evaluating premature cancer death in men. Friman PC, et al. **J Community Health** 1989 Summer;14(2):101–6

Incidence and survival rates for cancer in Atlanta, 1975–1985. Greenberg RS, et al. **J Med Assoc Ga** 1988 Sep;77(9):712–9

Mortality in pediatric phase I clinical trials [letter] Furman WL, et al. **J Natl Cancer Inst** 1989 Aug 2;81(15):1193–4

Mortality study of workers exposed to dimethylformamide and/or acrylonitrile. Chen JL, et al. **J Occup Med** 1988 Oct;30(10):819–21

Update to vinyl chloride mortality study. Dahar WS, et al. **J Occup Med** 1988 Aug;30(8):648–9

A prospective study of mortality and morbidity among carpenters in the Honolulu Heart Program Cohort. Miller FD, et al. **J Occup Med** 1988 Nov;30(11):879–82

The "hazardous" environment—a commentary. Shindell S. **J Occup Med** 1981 Mar;23(3):198–201

Patterns of mortality in pulp and paper workers. Solet D, et al. **J Occup Med** 1989 Jul;31(7):627–30

Occupational cancer epidemiology in the People's Republic of China. Wu WA. **J Occup Med** 1988 Dec;30(12):968–74 (18 ref.)

Cohort and case-control analyses of workers exposed to vinyl chloride: an update. Wu WA, et al. **J Occup Med** 1989 Jun;31(6):518–23

Changes in the cancer spectrum at autopsy: 1975–1984. Karwinski B, et al. **J Pathol** 1989 Feb;157(2):117–25

Leads from the MMWR. Years of potential life lost due to cancer—United States, 1968–1985. **JAMA** 1989 Jan 13; 261(2):209

Childhood cancers' improved survival rates can exact a price in late effects of therapy [news] Raymond CA. **JAMA** 1988 Dec 16;260(23):3400, 3405

A piece of my mind. Food for thought. Wassersug JD. **JAMA** 1988 Nov 25;260(20):3000

The number of cancer deaths and age-specific cancer mortality rates by site in Japan in 1987. The Bureau of Vital Statistics, Ministry of Health and Welfare. **Jpn J Clin Oncol** 1989 Jun;19(2):181–93

Improvement in the treatment of childhood cancer: analysis of survival data from the National Children's Hospital (1965–1987). Tsunematsu Y, et al. **Jpn J Clin Oncol** 1988 Dec;18(4):309–20

Workshop for the evaluation of survival trends for cancer patients. Watanabe S, et al. **Jpn J Clin Oncol** 1989 Jun; 19(2):178–80

Epidemiology of childhood cancer in Zaire [letter] Massabi M, et al. **Lancet** 1989 Aug 26;2(8661):501

Years of potential life lost due to cancer—United States, 1968–1985. **MMWR** 1988 Dec 9;37(48):747–9

Cancer mortality among Native Americans in New York State. **N Y State J Med** 1988 Dec;88(12):666–7

Differences in cancer mortality rates in Ohio communities with respect to uraniferous geology. Dzik AJ. **Ohio Med** 1989 Jul;85(7):566–8

Mortality of auto mechanics. A ten-year follow-up. Hansen ES. **Scand J Work Environ Health** 1989 Feb;15(1):43–6

Cancer mortality in Switzerland, 1951–1984: effects of age, birth cohort and period of death. Levi F, et al. **Schweiz Med Wochenschr Suppl** 1988;26: 7–85 **(Eng, Ger, Fre)**

The application of trend surface models to the analysis of time factors in Swiss cancer mortality. Cislaghi C, et al. **Soz Praventivmed** 1988;33(7):359–73

Sex differentials in Swiss cancer mortality. La Vecchia C, et al. **Soz Praventivmed** 1988;33(3):140–3

Living in a chemical world: actions and reactions to industrial carcinogens. Infante PF, et al. **Teratogenesis Carcinog Mutagen** 1988;8(4):225–49

Blood transfusions and survival after resection of cancers of the breast, colon, and lung: the need for prospective randomized trials. Foster RS Jr, et al. **Transplant Proc** 1988 Dec;20(6):1125–7

Cancer mortality in Italy, 1983. Decarli A, et al. **Tumori** 1989 Jun 30;75(3):196–201

Cancer mortality in Italy, 1982. Decarli A, et al. **Tumori** 1988 Dec 31;74(6):623–32

Cancer survival from the incident cases of the Registry of Vaud, Switzerland. Levi F, et al. **Tumori** 1989 Apr 30; 75(2):83–9

Proportions of cancer deaths attributable to cigarette smoking in women. Stellman SD, et al. **Women Health** 1989; 15(2):19–28

[Mortality rate of malignant tumors in Yangzhong County] Zhang ZL, et al. **Chung Hua Chung Liu Tsa Chih** 1988 Mar;10(2):102–4 (Eng. Abstr.) **(Chi)**

[Transfusions and survival after cancer surgery] Veyrieres M, et al. **Pathol Biol (Paris)** 1989 Feb;37(2):174–5 **(Fre)**

[Prognostic factors in survival after cancer: epidemiological model] Raymond L, et al. **Soz Praventivmed** 1988;

33(6):269–73 (Eng. Abstr.) (Fre)
[Sector related inner city distribution of total cancer mortality in Hamburg] Thiele W. **Off Gesundheitswes** 1988 Oct; 50(10):584–8 (Eng. Abstr.) (Ger)
[Trends in cancer mortality in Switzerland (1951–1984) and implications for the future (editorial)] Gutzwiller F, et al. **Schweiz Med Wochenschr Suppl** 1988;26:5–6 (Ger)
[Incidence of malignant neoplasms and mortality risk following kidney transplantation] Grundmann R. **Versicherungsmedizin** 1988 Sep 1;40(5):119–24 (Eng. Abstr.) (Ger)
[Arteriosclerosis and cancer—fats or carbohydrates?] Lutz W. **Wien Klin Wochenschr** 1989 Jun 9;101(12):429–33 (22 ref.) (Eng. Abstr.) (Ger)
[Epidemiologic diversity] Izsàk J. **Z Gesamte Hyg** 1989 Apr; 35(4):223–4 (Eng. Abstr.) (Ger)
[The most severe chronic organ findings in official public health autopsies—a medico-sociologic contribution] Bauer G, et al. **Z Rechtsmed** 1988;100(4):259–64 (Eng. Abstr.) (Ger)
[Carcinogenic risk for resin producers exposed to formaldehyde: extension of follow-up] Bertazzi PA, et al. **Med Lav** 1989 Mar–Apr;80(2):111–22 (Eng. Abstr.) (Ita)
[Problems in using survival data of cancer patients as a method of gauging the effectiveness of cancer control efforts] Oshima A. **Gan No Rinsho** 1988 Oct;34(12):1637–41 (Eng. Abstr.) (Jpn)
[Future prediction of cancer deaths in Japan] Tominaga S, et al. **Gan To Kagaku Ryoho** 1989 Jan;16(1):101–11 (Eng. Abstr.) (Jpn)
[Analysis of social and economical indices affecting mortality rates in cancers by sex—application of the database for the regional health information system in Hyogo prefecture] Tokeshi S, et al. **Nippon Eiseigaku Zasshi** 1988 Jun;43(2):679–87 (Eng. Abstr.) (Jpn)
[Hazard ratio estimated from a proportional hazard model including two strongly correlated prognostic factors] Hamajima N, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 May 20;24(5):1015–9 (Eng. Abstr.) (Jpn)
[Socioeconomic aspects of malignant neoplasms in children] Aksel' EM, et al. **Pediatriia** 1988;(4):71–4 (Rus)
[Trends in the survival of cancer patients: is there progress in the anticancer fight] Berëzin DP, et al. **Vopr Onkol** 1989; 35(5):545–59 (Rus)
[The relative 5-year survival of patients with basic forms of malignant neoplasms] Berëzkin DP, et al. **Vopr Onkol** 1989;35(5):583–5 (Eng. Abstr.) (Rus)
[Mortality in malignant neoplasms in children] Dobren'kiĭ MN, et al. **Vopr Onkol** 1989;35(7):787–9 (Rus)
[The basic patterns of mortality from malignant neoplasms in the population of the USSR] Napalkov NP, et al. **Vopr Onkol** 1989;35(6):649–57 (Rus)
[Detection of cases exclusively by means of the death certificate in the Cancer Registry of Tarragona] Borràs J, et al. **Gac Sanit** 1987 Nov–Dec;1(3):106–12 (Spa, Cat)
[Uses of the death certificate in a population-based cancer registry] Navarro Sánchez C, et al. **Gac Sanit** 1988 Jul–Aug; 2(7):197–202 (Eng. Abstr.) (Spa)
[Methodology for the study of prognostic factors in oncology (letter)] Palmer Pol A, et al. **Med Clin (Barc)** 1988 Nov 5;91(15):597–8 (Spa)
[WHO-statistics in Europe: cancer deaths down by nearly 15 per cent] Petersson PO. **Lakartidningen** 1988 Nov 2; 85(44):3656 (Swe)

NURSING

Experiences in home care of cancer patients. A new approach in cancer nursing. Ophof J, et al. **Acta Oncol** 1989; 28(1):35–8
Managing nutrition problems in advanced cancer. D'Agostino NS. **Am J Nurs** 1989 Jan;89(1):50–6
Quality assurance issues in oncology nursing. Miaskowski C. **Cancer** 1989 Jul 1;64(1 Suppl):285–9; discussion 298–301
Perceived home care needs of cancer patients and their caregivers. Blank JJ, et al. **Cancer Nurs** 1989 Apr; 12(2):78–84
A comparison of nurses' recorded assessments of pain with perceptions of pain as described by cancer patients. Camp LD. **Cancer Nurs** 1988 Aug;11(4):237–43
Increasing severity of illness among patients undergoing phase I trials. Implications for nursing resources. Garre PP, et al. **Cancer Nurs** 1989 Apr;12(2):107–11
Cancer nursing for the elderly. A target for research. Given B, et al. **Cancer Nurs** 1989 Apr;12(2):71–7 (27 ref.)
The family with cancer. Nursing interventions throughout the course of living with cancer. Lewandowski W, et al. **Cancer Nurs** 1988 Dec;11(6):313–21
Caregiving demands and appraisal of stress among family caregivers. Oberst MT, et al. **Cancer Nurs** 1989 Aug; 12(4):209–15
Development of a consultancy service in The Netherlands. Poelhuis EH, et al. **Cancer Nurs** 1988 Dec;11(6):348–51
A description of the needs of noninstitutionalized cancer patients and their primary care givers. Wingate AL, et al. **Cancer Nurs** 1989 Aug;12(4):216–25
Assessment of nurses' attitudes towards cancer: a critical review of research methods. Corner JL. **J Adv Nurs** 1988 Sep;13(5):640–8 (44 ref.)
Quality of terminal care: salient indicators identified by families. Kristjanson LJ. **J Palliat Care** 1989 Mar;5(1):21–30
Home care for advanced and very advanced cancer patients: the Bologna experience. Pannuti F, et al. **J Palliat Care** 1988 Sep;4(3):54–7
Planning for cancer patient care and teaching to enhance the oncology product line. Blauvelt N, et al. **Prog Clin Biol Res** 1988;278:211–8
[Terminal care of cancer patients. 3. Problems and suggestions for improvement] Svendsen I, et al. **Ugeskr Laeger** 1989 Feb 20;151(8):499–502 (Eng. Abstr.) (Dan)
[Terminal care of cancer patients. 2. Communication and cooperation] Svendsen I, et al. **Ugeskr Laeger** 1989 Feb 20;151(8):495–9 (Eng. Abstr.) (Dan)
[Terminal care of cancer patients. 1. Frequency and clinical problems] Svendsen I, et al. **Ugeskr Laeger** 1989 Feb 20; 151(8):492–5 (Eng. Abstr.) (Dan)
[Home care of terminal patients with cancer (letter)] **Ned Tijdschr Geneeskd** 1989 May 13;133(19):999–1000 (Dut)

PATHOLOGY

Tumor cell proliferation kinetics and tumor growth rate. Tubiana M. **Acta Oncol** 1989;28(1):113–21 (21 ref.)
Inhibitors of topoisomerase II: structure-activity relationships and mechanism of action of podophyllin congeners. Long BH, et al. **Adv Enzyme Regul** 1988; 27:223–56
"In vitro" models for studying the malignant phenotype: chemotaxis and chemoinvasion. Allavena G, et al. **Adv Exp Med Biol** 1988;233:215–26
Tumor-associated macrophages in metastasizing tumors. Chen ZG, et al. **Adv Exp Med Biol** 1988;233:61–71 (61 ref.)
Detection of deregulated tyrosine-kinases in experimental and human metastatic tumors. Comoglio PM, et al. **Adv Exp Med Biol** 1988;233:303–8
Host inflammatory cells and generation of tumor cell diversity. Fulton A, et al. **Adv Exp Med Biol** 1988;233:15–20
The role of pharmacokinetics in the clinical treatment of metastases. Pannuti F, et al. **Adv Exp Med Biol** 1988; 233:443–52
Tumor cathepsin B and its endogenous inhibitors in metastasis. Sloane BF, et al. **Adv Exp Med Biol** 1988; 233:259–68 (31 ref.)
The complex clinical model of metastasis. Sugarbaker EV. **Adv Exp Med Biol** 1988;233:405–13
Inhibition of macrophage chemotaxis by supernatant fluid from malignant cell lines. Otu AA. **Afr J Med Med Sci** 1988 Dec;17(4):215–20
Use of colloidal gold cytochemistry in the study of the basic cell biology of cancer. Willingham MC. **Am J Anat** 1989 Jun–Jul;185(2–3):109–27
Application of a quick immunoenzymatic labeling as an adjunct to frozen-section diagnosis. Tabibzadeh SS, et al. **Am J Clin Pathol** 1989 Jan;91(1):63–6
The absurd notion of "moderately well-differentiated" neoplasms [letter] Marcus PB. **Am J Dermatopathol** 1987 Apr;9(2):181–2
Malignant tumors found during medicolegal postmortem examinations [letter] Segerberg-Konttinen M. **Am J Forensic Med Pathol** 1988 Dec;9(4):357
Intranodal hemorrhagic spindle-cell tumor with "amianthoid" fibers. Report of six cases of a distinctive mesenchymal neoplasm of the inguinal region that stimulates Kaposi's sarcoma. Suster S, et al. **Am J Surg Pathol** 1989 May;13(5):347–57
Palisaded myofibroblastoma. A benign mesenchymal tumor of lymph node. Weiss SW, et al. **Am J Surg Pathol** 1989 May;13(5):341–6
Intramuscular myxoma. Jaser NA, et al. **Ann Chir Gynaecol** 1988;77(2):78–80 (11 ref.)
Localization of bombesin-like peptides in tumors. Polak JM, et al. **Ann N Y Acad Sci** 1988;547:322–35
Tumor necrosis, cachexia, shock, and inflammation: a common mediator. Beutler B, et al. **Annu Rev Biochem** 1988;57:505–18 (118 ref.)
Effects of radiotherapy and chemotherapy on tumor bed stroma. Milas L. **Antibiot Chemother** 1988;41:48–56 (12 ref.)
Arterial resistance to neoplastic invasion. Kolin A, et al. **Anticancer Res** 1989 Mar–Apr;9(2):409–11
The histological grading of neoplasms. Henson DE. **Arch Pathol Lab Med** 1988 Nov;112(11):1091–6
Lymph node hemangioma. Kasznica J, et al. **Arch Pathol Lab Med** 1989 Jul;113(7):804–7 (8 ref.)
Asparagine-linked oligosaccharides in malignant tumour growth. Dennis JW, et al. **Biochem Soc Trans** 1989 Feb; 17(1):29–31
Effects of recombinant human granulocyte colony-stimulating factor on hematopoietic progenitor cells in cancer patients. Dührsen U, et al. **Blood** 1988 Dec; 72(6):2074–81
Detection of minimal malignant cell infiltration in the bone marrow of patients with solid tumours, non-Hodgkin lymphomas and leukaemias. Favrot MC, et al. **Bone Marrow Transplant** 1987 Aug;2(2):117–22
A model system illustrating the isolation and enrichment of a rare population of tumour cells in bone marrow. Gibson FM, et al. **Bone Marrow Transplant** 1988 Nov;3(6):567–76
Measurement of cell kinetics in human tumours in vivo using bromodeoxyuridine incorporation and flow cytometry. Wilson GD, et al. **Br J Cancer** 1988 Oct;58(4):423–31
Radiobiological assessment of permanent implants using tumour repopulation factors in the linear-quadratic model. Dale RG. **Br J Radiol** 1989 Mar;62(735):241–4
Pretreatment staging of cancer. Beahrs OH. **Cancer** 1989 Jul 1;64(1 Suppl):275–8; discussion 282–4
Special communication. The Cooperative Human Tissue Network. Clausen KP, et al. **Cancer** 1989 Apr 1; 63(7):1452–5
Quality assurance in cancer care. Pathology. Hutter RV. **Cancer** 1989 Jul 1;64(1 Suppl):244–8; discussion 253–7
Clinical applications of carcinoembryonic antigen. Sikorska H, et al. **Cancer Detect Prev** 1988;12(1–6):321–55 (314 ref.)
Patterns of methionine auxotrophy in normal and neoplastic cells: the methionine independence of lymphocyte mitogenesis and low frequency of the methionine-dependent phenotype in human tumors. Judde JG, et al. **Cancer Res** 1988 Dec 1;48(23):6775–9
Chemotactic activity of endothelial cell-derived interleukin 1 for human tumor cells. Orr FW, et al. **Cancer Res** 1988 Dec 1;48(23):6758–63
Cell kinetics in human malignancies studied with in vivo administration of bromodeoxyuridine and flow cytometry. Riccardi A, et al. **Cancer Res** 1988 Nov 1;48(21):6238–45
Requirement of the Na+/H+ exchanger for tumor growth. Rotin D, et al. **Cancer Res** 1989 Jan 1;49(1):205–11
Effects of human bone marrow stroma on the growth of human tumor cells. Strobel ES, et al. **Cancer Res** 1989 Feb 15;49(4):1001–7
The encapsulation of tumours. Barr LC. **Clin Exp Metastasis** 1989 May–Jun;7(3):277–82 (22 ref.)
Tumors of the nail and nail bed. Donohue LH, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):373–87 (31 ref.)
A history of aspiration biopsy with special attention to prostate biopsy. Johenning PW. **Diagn Cytopathol** 1988; 4(3):265–8
The value of autopsy in modern oncology. Landefeld CS, et al. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):607–9 (15 ref.)
On the yield of new information from the selective requesting of post mortem examinations in oncology patients. McKay MJ, et al. **Eur J Cancer Clin Oncol** 1988 Nov; 24(11):1707–14
The pathologist and the clinical oncologist: a new effective partnership in assessing tumor prognosis. Saccani Jotti G, et al. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):585–98 (93 ref.)
Expert system for pathologists to generate an image analysis program for tumor grading. Hufnagl P, et al. **Exp Pathol** 1988;34(1):29–34
Granulocytosis associated with malignant neoplasms: a clinicopathologic study and demonstration of colony-stimulating activity in tumor extracts. Kitamura H, et al. **Hum Pathol** 1989 Sep;20(9):878–85
Application of fine needle aspiration biopsy to pediatrics. Wakely PE Jr, et al. **Hum Pathol** 1988 Dec;19(12):1383–6
Relations between pH, oxygen partial pressure and growth in cultured cell spheroids. Carlsson J, et al. **Int J Cancer** 1988 Nov 15;42(5):715–20
Expression of 7F7-antigen, a human adhesion molecule identical to intercellular adhesion molecule-1 (ICAM-1) in human carcinomas and their stromal fibroblasts. Vogetseder W, et al. **Int J Cancer** 1989 May 15; 43(5):768–73
The use of a monoclonal antibody against a proliferating cell nuclear matrix antigen in the study of solid human tumors. Yankulov KY, et al. **Int J Cancer** 1989 May 15;43(5):800–4
The initial slope of human tumor cell survival curves: its modification by the oxic cell sensitizer beta-arabinofuranosyladenine. Chavaudra N, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1267–71
Fibroblasts from cancer patients display a mixture of both foetal and adult-like phenotypic characteristics. Schor SL, et al. **J Cell Sci** 1988 Jul;90 (Pt 3):401–7
In situ demonstration of tissue proliferative activity using anti-bromo-deoxyuridine monoclonal antibody. Veronese S, et al. **J Clin Pathol** 1989 Aug;42(8):820–6
Tumor cell societies [editorial] Heppner GH. **J Natl Cancer Inst** 1989 May 3;81(9):648–9
How should we count AgNORS? Proposals for a standardized approach. Crocker J, et al. **J Pathol** 1989 Jul; 158(3):185–8
Differential staining of mitoses in tissue sections and cultured cells by a modified methenamine-silver method. Busch C, et al. **Lab Invest** 1988 Dec;59(6):876–8
Stem cells in neoplasia. **Lancet** 1989 Apr 1;1(8640):701–2
Ultrasound-guided core biopsy. Jennings PE, et al. **Lancet** 1989 Jun 17;1(8651):1369–71
Fine-needle aspiration of tumours [letter; comment] Owen ER, et al. **Lancet** 1989 Jun 17;1(8651):1384–5. **Comment on:** Lancet 1989 Mar 18;1(8638):620
Availability of glutamine from peptides and acetylglutamine for human tumor-cell cultures. Ollenschläger G, et al. **Metabolism** 1989 Aug;38(8 Suppl 1):40–2
The presence of stage II melanosomes (premelanosomes) in neoplasms other than melanomas. Szpak CA, et al. **Mod Pathol** 1988 Jan;1(1):35–43
Some approaches to the perfection of histooncological diagnoses. Bednář B. **Neoplasma** 1988;35(6):729–34
Clinicopathologic review of 142 cases of lacrimal gland lesions. Shields CL, et al. **Ophthalmology** 1989 Apr; 96(4):431–5
The Edmonton staging system for cancer pain: preliminary report. Bruera E, et al. **Pain** 1989 May;37(2):203–9
Advances in formal pathogenesis: allometry and allied comparative methods of stereology for recognizing relative

growth in proliferative lesions. Pesce CM, et al. **Pathol Immunopathol Res** 1989;8(2):95–103 (48 ref.)

Flow cytometric analysis of stemline heterogeneity. Mellin W, et al. **Pathol Res Pract** 1988 Dec;184(1):6–10

Heterogeneity of the response to inducers of differentiation and to cytostatics of tumor cell populations. Pályi I. **Pathol Res Pract** 1988 Dec;184(1):11–7

A contemporary view of neoplasms in children. The pathologist's perspective. Dehner LP. **Pediatr Clin North Am** 1989 Feb;36(1):113–37 (100 ref.)

The development of hypoxic tumor cell cytotoxic agents. Kirkpatrick DL. **Pharmacol Ther** 1989;40(3):383–99 (74 ref.)

Identification and quantification of subsets of mononuclear inflammatory cells in melanocytic and other human tumors. Nestor MS, et al. **Pigment Cell Res** 1987;1(1):22–7

A general native-state method for determination of proliferation capacity of human normal and tumor tissues in vitro. Hoffman RM, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2013–7

Cell proliferation kinetics in human solid tumors: relation to probability of metastatic dissemination and long-term survival. Tubiana M, et al. **Radiother Oncol** 1989 May; 15(1):1–18 (146 ref.)

Therapeutic implications of tumor heterogeneity. Heppner GH, et al. **Semin Oncol** 1989 Apr;16(2):91–105 (181 ref.)

Possible consequences of vitamin B6 responsive growth in certain malignant tumors of human origin. Fortmeyer HP. **Strahlenther Onkol** 1989 Jul;165(7):563–4

Tissue characterisation. Taylor KJ, et al. **Ultrasound Med Biol** 1989;15(5):421–8 (50 ref.)

Endovesical ultrasonography of urachal carcinoma. Wishnow KI. **Urol Radiol** 1989;11(1):53–4

Alpha-smooth muscle actin is expressed in a subset of bone marrow stromal cells in normal and pathological conditions. Schmitt-Gräff A, et al. **Virchows Arch [B]** 1989; 57(5):291–302

The use of fine-needle aspiration biopsy in children. Cohen MB, et al. **West J Med** 1989 Jun;150(6):665–7

Neoplastic disease in a medicolegal autopsy material. A retrospective study in northern Sweden. Gezelius C, et al. **Z Rechtsmed** 1988;101(2):115–30

[Tumor of the psoas muscle; an anatomo-clinical entity. 3 cases and review of the literature] Pelissier E, et al. **Chirurgie** 1988;114(4):319–26 (23 ref.) (Eng. Abstr.) **(Fre)**

[Monoclonal antibodies in diagnosis in tumoral pathology] Delsol G, et al. **Pathol Biol (Paris)** 1989 Feb;37(2):96–7 **(Fre)**

[Collagenases and cancers] Hérédia A, et al. **Pathol Biol (Paris)** 1988 Nov;36(9):1147–50 (32 ref.) (Eng. Abstr.) **(Fre)**

[Can the metachromatic index be of help in cancer diagnosis?] Störmer U, et al. **Acta Histochem (Jena)** 1988;84(1):31–9 (Eng. Abstr.) **(Ger)**

[General tumor pathology and pathophysiology] Hermanek P. **Langenbecks Arch Chir** 1988;Suppl 2:95–9 (15 ref.) (Eng. Abstr.) **(Ger)**

[The value of DNA analysis of solid tumors. A review for the clinically active pathologist] Steinbeck R, et al. **Pathologe** 1989 May;10(3):171–6 (27 ref.) **(Ger)**

[Metastases caused by fine needle puncture?] Weiss H. **Ultraschall Med** 1989 Jun;10(3):147–51 (47 ref.) (Eng. Abstr.) **(Ger)**

[Tumor cell heterogeneity—receptors, tumor-associated antigens, drug sensitivity and drug resistance] Dietel M. **Verh Dtsch Ges Pathol** 1988;72:128–36 (Eng. Abstr.) **(Ger)**

[Induction of differentiation in malignant tumors] Gabbert H, et al. **Verh Dtsch Ges Pathol** 1988;72:115–27 (69 ref.) (Eng. Abstr.) **(Ger)**

[Differentiation in malignant tumors and its significance to diagnosis] Hübner K. **Verh Dtsch Ges Pathol** 1988; 72:137–49 (101 ref.) (Eng. Abstr.) **(Ger)**

[Differentiation, growth, stability, and experimental treatment of human tumors after transplantation to athymic nude mice] Klöppel G, et al. **Verh Dtsch Ges Pathol** 1988; 72:188–203 (54 ref.) (Eng. Abstr.) **(Ger)**

[Morphological equivalents of differentiation status in epithelial tumors and lymphomas] Mattfeldt T, et al. **Verh Dtsch Ges Pathol** 1988;72:343–8 (Eng. Abstr.) **(Ger)**

[Cell differentiation as a factor in cytopathology] Pfitzer P. **Verh Dtsch Ges Pathol** 1988;72:164–73 (100 ref.) (Eng. Abstr.) **(Ger)**

[Cloning of solid tumors in double agar (human tumor stem cell assay] Dobrowsky E, et al. **Wien Klin Wochenschr** 1988 Oct 21;100(20):684–7 (Eng. Abstr.) **(Ger)**

[Immunoperoxidase reactions in cytological aspiration smears previously stained with hematoxylin-eosin] Sápi Z, et al. **Morphol Igazsagugyi Orv Sz** 1988 Oct;28(4):308–11 (Eng. Abstr.) **(Hun)**

[Principal prognostic factors to guide the follow-up of cancer patients] Saccani Jotti G. **G Ital Oncol** 1987 Oct–Dec; 7(4):175–85 (31 ref.) (Eng. Abstr.) **(Ita)**

[New approaches to the staging of solid neoplasms] Galassi G, et al. **Minerva Chir** 1989 Jan 31;44(1-2):79–81 **(Ita)**

[Clinical aspects and morphology of endometriosis. Study of 38 cases] Caruso ML, et al. **Minerva Ginecol** 1988 May; 40(5):311–6 (26 ref.) (Eng. Abstr.) **(Ita)**

[Cancer and skin manifestations] Ishihara K, et al. **Gan No Rinsho** 1989 Jan;Spec No:628–36 **(Jpn)**

[Metastatic calcification associated with malignancy] Mine Y, et al. **Gan No Rinsho** 1988 Dec;34(15):2044–51 (Eng. Abstr.) **(Jpn)**

[Detection of early stage cancer: pathological aspect with special reference to differential diagnosis] Tanaka N. **Gan No Rinsho** 1988 Aug;34(10):1255–8 (Eng. Abstr.) **(Jpn)**

[Implication of hydroxyl radical production in the killing of tumor cells by recombinant human tumor necrosis factor] Kuriyama H, et al. **Gan To Kagaku Ryoho** 1988 Oct; 15(10):2967–74 (Eng. Abstr.) **(Jpn)**

[The role of autopsy from the viewpoint of pathologists at medical schools] Ohnishi Y, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-3):1925–30 (Eng. Abstr.) **(Jpn)**

[Comparison of succinic dehydrogenase inhibition test with adenosine triphosphate inhibition assay for human solid tumors as in vitro chemosensitivity tests] Saeki T, et al. **Gan To Kagaku Ryoho** 1989 May;16(5):2025–30 (Eng. Abstr.) **(Jpn)**

[Flow cytometric analysis of cell proliferation kinetics using the anti-BrdUrd antibody] Sasaki K, et al. **Gan To Kagaku Ryoho** 1989 Jul;16(7):2338–44 (Eng. Abstr.) **(Jpn)**

[Detection of multidrug resistant cells in human malignant diseases by monoclonal antibodies and strategy to eradicate resistant malignant cells] Shimoyama M, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 2):611–6 (Eng. Abstr.) **(Jpn)**

[Histological take rates of fresh human tumors in the subrenal capsular space of cyclosporin A treated mice] Yamada H. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 1):2613–9 (Eng. Abstr.) **(Jpn)**

[Cell kinetic study of human carcinomas using bromodeoxyuridine and immunohistochemistry] Kikuyama S. **Nippon Geka Gakkai Zasshi** 1989 Mar;90(3):355–63 (Eng. Abstr.) **(Jpn)**

[Clinical concept and definition of early cancer] Ichikawa H. **Nippon Rinsho** 1989 May;47(5):969–72 **(Jpn)**

[Unification of the TNM system] Okayasu T, et al. **Nippon Rinsho** 1989 Mar;47(3):700–4 (5 ref.) **(Jpn)**

[Early cancer from the standpoint of morphology: with reference to factors related to metastasis] Shimosato Y. **Nippon Rinsho** 1989 May;47(5):973–7 **(Jpn)**

[Interpretation of terms indicating uncertainty in pathologic diagnoses] Helseth A, et al. **Tidsskr Nor Laegeforen** 1988 Dec 10;108(34–36):3236–7 (Eng. Abstr.) **(Nor)**

[Metastases of malignant neoplasms to the eyes in children] Jochan K, et al. **Klin Oczna** 1988 Jul;90(7):248–9 (Eng. Abstr.) **(Pol)**

[Value of histopathologic examination in the diagnosis of neoplasm metastases to the bone marrow] Kemona A, et al. **Pol Tyg Lek** 1988 May 30;43(22):699–701 (Eng. Abstr.) **(Pol)**

[Fibroblasts and morphogenesis of tissue components of tumor stroma] Petrov SB. **Arkh Patol** 1989;51(3):39–43 (Eng. Abstr.) **(Rus)**

[Use of monoclonal antibodies against cytoskeletal proteins and extracellular matrix in basic and applied oncological research] Vasil'ev IuM. **Gematol Transfuziol** 1988 Dec; 33(12):3–7 (20 ref.) (Eng. Abstr.) **(Rus)**

[Histocompatibility antigen expression in tumor growth] Govallo VI. **Vestn Akad Med Nauk SSSR** 1988;(7):52–7 (44 ref.) (Eng. Abstr.) **(Rus)**

[Benign pleural effusions in cancer patients. Frequency and etiopathogenic mechanism in a series of autopsy cases] Rodríguez-Panadero F, et al. **Rev Clin Esp** 1988 Oct; 183(6):311–2 (Eng. Abstr.) **(Spa)**

[Validity of rapid biopsy as an intraoperative diagnosis of cancer at the Pathological Anatomy Service of the Hospital Salvador during 1983] Villavicencio G, et al. **Rev Med Chil** 1987 Dec;115(12):1161–5 (Eng. Abstr.) **(Spa)**

[Malignant diseases as secondary findings in forensic autopsies] Segerberg-Konttinen M. **Nord Med** 1989; 104(1):23–4, 29 (Eng. Abstr.) **(Swe)**

PHYSIOPATHOLOGY

CT-guided percutaneous cordotomy. Kanpolat Y, et al. **Acta Neurochir Suppl (Wien)** 1989;46:67–8

Analgesic effect and bioavailability of oral ketogan given as tablets or mixture to patients with chronic pain of malignant origin. Kjaer M, et al. **Acta Oncol** 1988; 27(5):583–9

Hypnotic versus active cognitive strategies for alleviation of procedural distress in pediatric oncology patients. Wall VJ, et al. **Am J Clin Hypn** 1989 Jan;31(3):181–91

Narcotics plus methylphenidate (Ritalin) for advanced cancer pain. Bruera E, et al. **Am J Nurs** 1988 Nov;88(11):1555–6

Epidural morphine delivered by a percutaneous epidural catheter for outpatient treatment of cancer pain. Downing JE, et al. **Anesth Analg** 1988 Dec;67(12):1159–61

Selective IL-1-mediated pancreatic islet beta-cell damage in tumour cachexia: a hypothesis [letter] Di Guardo G. **Ann Inst Pasteur Immunol** 1988 Sep–Oct;139(5):587–8

Surviving adult cancers. Part 1: Physiologic effects. Loescher LJ, et al. **Ann Intern Med** 1989 Sep 1;111(5):411–32 (285 ref.)

Hemopoietins: roles in inflammation, allergy and neoplasia. Schrader JW. **Ann N Y Acad Sci** 1988;548:291–8

Thyroid function in survivors of cancer. Abusrewil SS, et al. **Arch Dis Child** 1989 May;64(5):709–12

Pain relief in active patients with cancer [letter] **BMJ** 1989 Feb 18;298(6671):461

Pain relief in active patients with cancer: analgesic drugs are the foundation of management. Baines M. **BMJ** 1989 Jan 7;298(6665):36, 38 (8 ref.)

Pain relief in active patients with cancer: the early use of nerve blocks improves the quality of life. Lipton S. **BMJ** 1989 Jan 7;298(6665):37–8 (9 ref.)

Management of cancer pain. Fort Lauderdale, Florida, April 14–17, 1988. **Cancer** 1989 Jun 1;63(11 Suppl):2257–386

Psychiatric management of cancer pain. Breitbart W. **Cancer** 1989 Jun 1;63(11 Suppl):2336–42 (49 ref.)

Continuity of care for the cancer patient with chronic pain. Coyle N. **Cancer** 1989 Jun 1;63(11 Suppl):2289–93

Evaluation of a cancer pain model for the testing of long-acting analgesics. The effect of MS Contin in a double-blind, randomized crossover design. Cundiff D, et al. **Cancer** 1989 Jun 1;63(11 Suppl):2355–9

Quality of life as an outcome variable in the management of cancer pain. Ferrell BR, et al. **Cancer** 1989 Jun 1;63(11 Suppl):2321–7

Anesthetic techniques for the management of cancer pain. Ferrer-Brechner T. **Cancer** 1989 Jun 1;63(11 Suppl):2343–7 (25 ref.)

Controversies in cancer pain. Medical perspectives. Foley KM. **Cancer** 1989 Jun 1;63(11 Suppl):2257–65 (76 ref.)

Analgesic response to single and multiple doses of controlled-release morphine tablets and morphine oral solution in cancer patients. Goughnour BR, et al. **Cancer** 1989 Jun 1;63(11 Suppl):2294–7

Controlled-release morphine (MST Contin) in advanced cancer. The European experience. Hanks GW. **Cancer** 1989 Jun 1;63(11 Suppl):2378–82 (31 ref.)

Pain management in a drug-oriented society. Hill CS Jr. **Cancer** 1989 Jun 1;63(11 Suppl):2383–6

Management of cancer pain. Pharmacology and principles of management. Inturrisi CE. **Cancer** 1989 Jun 1;63(11 Suppl):2308–20 (51 ref.)

Integration of pain management into comprehensive cancer care. Levy MH. **Cancer** 1989 Jun 1;63(11 Suppl):2328–35

Cancer pain. Anatomy, physiology, and pharmacology. Payne R. **Cancer** 1989 Jun 1;63(11 Suppl):2266–74 (75 ref.)

Oral controlled-release morphine sulfate. Analgesic efficacy and side effects of a 100-mg tablet in cancer pain patients. Portenoy RK, et al. **Cancer** 1989 Jun 1;63(11 Suppl):2284–8

Cancer pain. Epidemiology and syndromes. Portenoy RK. **Cancer** 1989 Jun 1;63(11 Suppl):2298–307 (69 ref.)

Neurosurgery in the treatment of cancer pain. Sundaresan N, et al. **Cancer** 1989 Jun 1;63(11 Suppl):2365–77 (84 ref.)

Pharmacokinetics and clinical efficacy of oral morphine solution and controlled-release morphine tablets in cancer patients. Thirlwell MP, et al. **Cancer** 1989 Jun 1;63(11 Suppl):2275–83

Evaluation of dosing guidelines for the use of oral controlled-release morphine (MS Contin tablets). Warfield CA. **Cancer** 1989 Jun 1;63(11 Suppl):2360–4

Guidelines for use of controlled-release oral morphine in cancer pain management. Correlation with clinical experience. Lapin J, et al. **Cancer Nurs** 1989 Aug; 12(4):202–8

Behavioral techniques in pain modification. McKee MG. **Cleve Clin J Med** 1989 Jul–Aug;56(5):502–8 (45 ref.)

Enterohepatic circulation of opioid drugs. Is it clinically relevant in the treatment of cancer patients? Hanks GW, et al. **Clin Pharmacokinet** 1989 Aug;17(2):65–8 (34 ref.)

Prostaglandins and surgical diseases: Part I. Jaffe BM, et al. **Curr Probl Surg** 1988 Oct;25(10):673–706 (119 ref.)

Effect of epidural clonidine on somatosensory evoked potentials to dermatomal stimulation. Lund C, et al. **Eur J Anaesthesiol** 1989 May;6(3):207–13

Therapeutic opportunities involving cellular oncogenes: novel approaches fostered by biotechnology. Huber BE. **FASEB J** 1989 Jan;3(1):5–13 (42 ref.)

Growth and development in children treated for cancer. 27th annual meeting of the European Society for Paediatric Endocrinology. Copenhagen, June 26–29, 1988. Proceedings. **Horm Res** 1988;30(2-3):51–128

The nature and evaluation of cancer pain. Evans WO. **Indiana Med** 1989 Feb;82(2):120–2

The use of analgesics for cancer pain. Evans WO. **Indiana Med** 1989 Apr;82(4):274–7 (18 ref.)

Ouabain sensitizes tumor cells but not normal cells to radiation. Lawrence TS. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):953–8

Determination of morphine in plasma by gas chromatography using a macrobore column and thermoionic detection after Extrelut column extraction: application to follow-up morphine treatment in cancer patients. Wasels R, et al. **J Chromatogr** 1989 Apr 14;489(2):411–18

Multiple forms of immunoreactive growth hormone-releasing hormone in human plasma, hypothalamus, and tumor tissues. Sasaki A, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):180–5

A rational approach to cancer pain management [editorial] Black DJ. **J Fam Pract** 1989 Mar;28(3):267–8

Principles of cancer pain management. Use of long-acting oral morphine. Brooks I, et al. **J Fam Pract** 1989 Mar; 28(3):275–80

Platelet-derived growth factor: structural and functional aspects. Westermark B, et al. **J Intern Med** 1989 Jan; 225(1):55–8

Assessing the quality of cancer pain management. Mohide

EA, et al. **J Palliat Care** 1988 Sep;4(3):9–15
Clinical applicability of current pharmacokinetic models: splanchnic elimination of 5–fluorouracil in cancer patients. Robinson PJ, et al. **J Pharmacokinet Biopharm** 1988 Jun; 16(3):229–49
A preliminary study of long–term epidural morphine for cancer pain via a subcutaneously implanted reservoir. Liew E, et al. **Ma Tsui Hsueh Tsa Chi** 1989 Mar;27(1):5–12
Chaos in cancer. Andrey L. **Med Hypotheses** 1989 Mar; 28(3):143–4
Cholesterol and cancer: comparative biochemistry and selective toxicity. Paola F. **Med Hypotheses** 1989 Feb; 28(2):115–20
Educational achievement of long–term survivors of childhood and adolescent cancer. Kelaghan J, et al. **Med Pediatr Oncol** 1988;16(5):320–6
Transport of fluid and macromolecules in tumors. I. Role of interstitial pressure and convection. Baxter LT, et al. **Microvasc Res** 1989 Jan;37(1):77–104 (58 ref.)
Mechanisms of inhibition of free–radical processes in mutagenesis and carcinogenesis. Simic MG. **Mutat Res** 1988 Dec;202(2):377–86 (48 ref.)
Morphine: immediate release vs. controlled release. Homesley HD. **N C Med J** 1989 Jul;50(7):390–4
Continuing care: a major issue in cancer pain management. Ventafridda V. **Pain** 1989 Feb;36(2):137–43
Clinical assessment and pharmacologic treatment of pain in children: cancer as a model for the management of chronic or persistent pain. Zeltzer LK, et al. **Pediatrician** 1989; 16(1–2):64–70
An essay on basement membranes and their involvement in cancer. Van den Hooff A. **Perspect Biol Med** 1989 Spring; 32(3):401–13
Regulatory peptides and amines during ontogeny and in non–endocrine cancers: occurrence and possible functional significance. Larsson LI. **Prog Histochem Cytochem** 1988; 17(4):1–222 (926 ref.)
Symptom management in the home–based terminal cancer patient. Martin EW, et al. **R I Med J** 1989 Jul;72(7):243–52 (58 ref.)
Is it possible to plan the radiation treatment of cancer pain in order to make it complementary to other therapeutic methods? Basso–Ricci S, et al. **Rays** 1988 Sep–Dec; 13(3):123–8
Multidisciplinary intervention in the control of cancer pain. Botturi M, et al. **Rays** 1988 Sep–Dec;13(3):137–43
Differential diagnosis of pain in cancer patients. Adler RH, et al. **Recent Results Cancer Res** 1988;108:1–8 (11 ref.)
Treatment of pain in the cancer patient: the role of the nurse. Dicks B. **Recent Results Cancer Res** 1988;108:33–6 (8 ref.)
Electrostimulation and neurosurgical measures in cancer pain. Siegfried J. **Recent Results Cancer Res** 1988;108:28–32 (8 ref.)
Optimal pharmacological control of chronic cancer pain. Twycross RG. **Recent Results Cancer Res** 1988;108:9–17 (12 ref.)
Epidural opiates and nerve blocks. Zenz M. **Recent Results Cancer Res** 1988;108:18–27 (24 ref.)
Clinical evidence for a change in tumor aggressiveness with age. Holmes FF. **Semin Oncol** 1989 Feb;16(1):34–40 (54 ref.)
The change in tumor aggressiveness with age: lessons from experimental animals. Kaesberg PR, et al. **Semin Oncol** 1989 Feb;16(1):28–33 (58 ref.)
Growth factors, oncogenes and anti–oncogenes in cancer. Dickson RB. **Trends Pharmacol Sci** 1989 Apr;10(4):125–7 (0 ref.)
Analgesia with epidural calcitonin in cancer patients. Miseria S, et al. **Tumori** 1989 Apr 30;75(2):183–4
A study of thyroid function in cancer cachexia. Tancini G, et al. **Tumori** 1989 Apr 30;75(2):185–8
Effects of music in patients who had chronic cancer pain. Zimmerman L, et al. **West J Nurs Res** 1989 Jun; 11(3):298–309
[The role of prostanoids in malignant diseases] Navrátil L, et al. **Cas Lek Cesk** 1989 Jan 6;128(2):37–40 (Eng. Abstr.) **(Cze)**
[Continuous intrathecal opiate therapy with a portable drug pump in cancer pain] Motsch J, et al. **Anasth Intensivther Notfallmed** 1988 Oct;23(5):271–5 (Eng. Abstr.) **(Ger)**
[Hormones, growth factors and their receptors during differentiation and dedifferentiation—paraneoplastic hormone secretion in malignant tumors. Report of the 32nd Symposium of the German Society of Endocrinology] Dietel M, et al. **Dtsch Med Wochenschr** 1988 Sep 30; 113(39):1528–33 **(Ger)**
[Cancer pain—a solvable problem] Ilias W. **Gynakol Rundsch** 1988;28(4):234–43 **(Ger)**
[Nerve block procedures in cancer pain] Porges P. **Gynakol Rundsch** 1988;28(4):244–7 **(Ger)**
[Need for standardized pain therapy in pediatric oncology patients] Richter R, et al. **Klin Padiatr** 1989 Jul–Aug; 201(4):330–2 (Eng. Abstr.) **(Ger)**
[Use of strong opioids in the treatment of cancer pain in adults and children] Sorge J. **Klin Padiatr** 1989 Jul–Aug; 201(4):333–6 (Eng. Abstr.) **(Ger)**
[Oncogene expression as prognostic factor in malignant tumors] Höfler H. **Verh Dtsch Ges Pathol** 1988;72:174–87 (62 ref.) (Eng. Abstr.) **(Ger)**
[Carcinomatous neuropathy] Izumo S, et al. **Gan No Rinsho** 1989 Jan;Spec No:687–94 **(Jpn)**
[Pain treatment in terminal cancer] Takeda F. **Gan No Rinsho** 1989 Jan;Spec No:49–56 **(Jpn)**
[Cancer pain management] Takeda F. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):1031–7 (Eng. Abstr.) **(Jpn)**
[Pain control in terminal cancer] Tsuneto S, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 1):759–66 (Eng. Abstr.) **(Jpn)**
[Kidney function test using sodium orthoiodohippuric acid: its use in oncological practice] Kozłowicz–Gudzińska I, et al. **Nowotwory** 1988 Apr–Jun;38(2):95–100 (Eng. Abstr.) **(Pol)**
[Reaction of the respiratory and circulatory systems to short–term normobaric hypoxic hypoxia in cancer patients] Kassil' VL, et al. **Fiziol Zh** 1988 Jul–Aug;34(4):50–3 (Eng. Abstr.) **(Rus)**
[Acute phase proteins and their significance in clinical oncology] Aleshkin VA, et al. **Sov Med** 1988;(7):51–5 (45 ref.) **(Rus)**
[Trans–sacral neurolytic block for the treatment of chronic perineal pain of oncologic origin] Miralles Pardo FS, et al. **Rev Esp Anestesiol Reanim** 1988 May–Jun;35(3):130–5 (Eng. Abstr.) **(Spa)**
[3–step pharmacologic treatment of pain in cancer. Preliminary experience in Chile] Paredes H, et al. **Rev Med Chil** 1988 May;116(5):433–8 (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

Dehydroepiandrosterone and structural analogs: a new class of cancer chemopreventive agents. Schwartz AG, et al. **Adv Cancer Res** 1988;51:391–424 (115 ref.)
Vaccines against tumor antigens. Arlinghaus RB. **Adv Vet Sci Comp Med** 1989;33:377–95 (70 ref.)
Cancer risk factors [letter] Ruffin MT 4th. **Am Fam Physician** 1989 Jan;39(1):57–8
A prospective analysis of physical activity and cancer. Severson RK, et al. **Am J Epidemiol** 1989 Sep;130(3):522–9
Diet and cancer. Jenkins DJ, et al. **Am J Gastroenterol** 1988 Dec;83(12):1352–4
Cancer and nutritional misconceptions: a perspective [published erratum appears in Am J Gastroenterol 1989 Mar;84(3):344] Mogadam M. **Am J Gastroenterol** 1988 Dec; 83(12):1346–51 (71 ref.)
Carcinogens in Belgium [letter] Degreve J, et al. **Am J Ind Med** 1988;14(2):251–2
Vitamin C, vitamin E and cancer (review). Chen LH, et al. **Anticancer Res** 1988 Jul–Aug;8(4):739–48 (137 ref.)
The puzzling role of vitamin A in cancer prevention (review). De Vet HC. **Anticancer Res** 1989 Jan–Feb;9(1):145–51 (61 ref.)
Organization of cancer control in the USSR. Trapeznikov NN, et al. **Arch Geschwulstforsch** 1989;59(3):221–3
Promoting cancer screening. A randomized, controlled trial of three interventions. McPhee SJ, et al. **Arch Intern Med** 1989 Aug;149(8):1866–72
The ethics, the risks and the benefits of screening. Miller AB. **Biomed Pharmacother** 1988;42(7):439–42
Screening: potential for cancer prevention. Newell GR. **Biomed Pharmacother** 1988;42(7):435–7
Selenium and cancer. Willett WC, et al. **BMJ** 1988 Sep 3; 297(6648):573–4 (29 ref.)
First clinical case–report (1980–88) of cancer chemoprevention with beta–carotene plus canthaxanthin supplemented to patients after radical treatment. Santamaria L, et al. **Boll Chim Farm** 1988 Apr; 127(4):57S–61S
American Cancer Society: Second National Conference on Cancer Prevention and Detection. June 25–27, 1987, Seattle, Washington. Proceedings. **Cancer** 1988 Oct 15;62(8 Suppl):1673–879
Diet and cancer. Any progress in the interim? Byers T. **Cancer** 1988 Oct 15;62(8 Suppl):1713–24 (54 ref.)
The National Cancer Institute's intervention trials. Cullen JW. **Cancer** 1988 Oct 15;62(8 Suppl):1851–64
Principles of changing health behavior. Eriksen MP, et al. **Cancer** 1988 Oct 15;62(8 Suppl):1768–75
Problems of detection and referral. Eyre HJ. **Cancer** 1989 Jul 1;64(1 Suppl):272–4; discussion 282–4
Cancer development and its natural history. A cancer prevention perspective. Farber E. **Cancer** 1988 Oct 15;62(8 Suppl):1676–9
Nursing's role in cancer prevention and detection. Vital contributions to attainment of the Year 2000 Goal. Frank–Stromborg M. **Cancer** 1988 Oct 15;62(8 Suppl):1833–8
Opportunities for cancer prevention and early detection among children. Hammond D. **Cancer** 1988 Oct 15;62(8 Suppl):1829–32
Reflections on disease prevention. LeMaistre CA. **Cancer** 1988 Oct 15;62(8 Suppl):1673–5
Community models for cancer prevention and detection. Love RR, et al. **Cancer** 1988 Oct 15;62(8 Suppl):1815–20
Report from the workshop on the community and cancer prevention and detection. McKenna RJ, et al. **Cancer** 1988 Oct 15;62(8 Suppl):1808–14
Descriptive and analytic epidemiology. Bridges to cancer control. Mettlin C. **Cancer** 1988 Oct 15;62(8 Suppl):1680–7
A cancer education and prevention center. A community program. Schweitzer RJ. **Cancer** 1988 Oct 15;62(8 Suppl):1821–2
Cancer prevention in the workplace and natural environment. A review of etiology, research design, and methods of risk reduction. Swanson GM. **Cancer** 1988 Oct 15;62(8 Suppl):1725–46 (116 ref.)
Rocket research and Pony Express delivery. Wizenberg MJ. **Cancer** 1989 Jun 15;63(12):2387–92
The elderly population. Opportunities for cancer prevention and detection. Yancik R, et al. **Cancer** 1988 Oct 15;62(8 Suppl):1823–8
Prospects for cancer prevention through genetics: family studies and population screening. Carter CL, et al. **Cancer Detect Prev** 1988;13(1):13–22 (61 ref.)
A fight worth fighting: reflections on the National Cancer Program. Ultmann JE. **Cancer Invest** 1988;6(3):357–60
Cancer prevention and HMOs. Wagner EH, et al. **Cancer Invest** 1988;6(4):453–9
Statistical issues in the planning of prevention studies. Zelen M. **Cancer Invest** 1988;6(5):615–20
Cancer prevention and detection course for nurses in developing countries. Ash CR, et al. **Cancer Nurs** 1988 Aug;11(4):230–6
Workshop report from the Division of Cancer Etiology, National Cancer Institute, National Institutes of Health. Protease inhibitors as cancer chemopreventive agents. **Cancer Res** 1989 Jan 15;49(2):499–502
Reducing avoidable cancer mortality through prevention and early detection regimens. Lerman C, et al. **Cancer Res** 1989 Sep 15;49(18):4955–62
The National Cancer Institute's Smoking, Tobacco, and Cancer Program. Cullen JW. **Chest** 1989 Jul;96(1 Suppl):9S–13S
Perspective on cancer prevention and control in the United States and the Republic of China. Chlebowski RT. **Chung Hua I Hsueh Tsa Chih** 1988 Apr;41(4):317–22
Development of strategies for evaluating a community intervention programme for cancer prevention through dietary change. Sanderson C, et al. **Community Med** 1988 Nov;10(4):289–97
Prevention of cancer: restriction of nutritional energy intake (joules). Hocman G. **Comp Biochem Physiol [A]** 1988; 91(2):209–20 (57 ref.)
Prevention of cancer: vegetables and plants. Hocman G. **Comp Biochem Physiol [B]** 1989;93(2):201–12 (69 ref.)
Cancer risk assessment and prevention: where do we stand? Whittemore AS. **Environ Health Perspect** 1989 May; 81:95–101 (46 ref.)
Is natural infection with M. tuberculosis protective against cancer? Fragoulia A, et al. **Eur J Epidemiol** 1989 Jun; 5(2):234–8
Malignancy in coeliac disease—effect of a gluten free diet. Holmes GK, et al. **Gut** 1989 Mar;30(3):333–8
Vitamin A: its role in the chemoprevention and chemotherapy of cancer. Halter SA. **Hum Pathol** 1989 Mar; 20(3):205–9 (64 ref.)
Chemoprevention of cancer: phenolic antioxidants (BHT, BHA). Hocman G. **Int J Biochem** 1988;20(7):639–51 (65 ref.)
On cancer screening in the elderly [editorial] Barry P, et al. **J Am Geriatr Soc** 1989 Sep;37(9):913–4
Measuring progress against cancer. Møller H, et al. **J Cancer Res Clin Oncol** 1988;114(6):613–7
The Cancer Information Service: the national picture [news] Hallett CD. **J Natl Cancer Inst** 1989 Aug 2;81(15):1130–1
Community–based strategies for cancer prevention in an urban area: the Stockholm Cancer Prevention Program. Holm LE, et al. **J Natl Cancer Inst** 1989 Jan 18;81(2):103–6
Cancer–related legislation. I. The 100th Congress. Knipmeyer MC. **J Natl Cancer Inst** 1989 Apr 5;81(7):482–4
Fighting cancer with cigarette taxes [news] Mahaney FX Jr. **J Natl Cancer Inst** 1989 May 10;81(10):726–8
Alaskan teenagers receive awards for work to counter chew and snuff [news] Mahaney FX Jr. **J Natl Cancer Inst** 1989 Jun 21;81(12):894–6
Chemoprevention strategies utilizing combinations of inhibitors of carcinogenesis [editorial] Malone WF, et al. **J Natl Cancer Inst** 1989 Jun 7;81(11):824
Evolution of Cancer Prevention and Control Program at the Arizona Cancer Center. Meyskens FL Jr. **J Natl Cancer Inst** 1988 Dec 21;80(20):1595–8
Thinking about cancer causality and chemoprevention. Meyskens FL Jr. **J Natl Cancer Inst** 1988 Oct 19; 80(16):1278–81
Many state health departments begin major cancer control efforts [news] Newman ME. **J Natl Cancer Inst** 1989 Jul 19;81(14):1053–5
The trials of prevention trials [news] Smigel K. **J Natl Cancer Inst** 1989 Aug 2;81(15):1123–6
Breast–feeding linked to decreased cancer risk for mother, child [news] Smigel KL. **J Natl Cancer Inst** 1988 Nov 2; 80(17):1362–3
William Tipping leads American Cancer Society into 1990s [interview by Adele Paroni] Tipping WM. **J Natl Cancer Inst** 1989 Mar 1;81(5):327–32
Personal action needed to win cancer war, NCAB says [news] Vanchieri C. **J Natl Cancer Inst** 1989 Feb 15; 81(4):252–3
A day in its life: the Cancer Information Service in Miami [news] Wittenberg CK. **J Natl Cancer Inst** 1989 Aug 2; 81(15):1128–30
Are primary cancer prevention trials feasible? Zelen M. **J Natl Cancer Inst** 1988 Nov 16;80(18):1442–4
Assessment of potential for cancer control by Golden State Medical Association physicians. Glazer ER, et al.

J Natl Med Assoc 1989 Apr;81(4):437–46
Dietary fiber, vegetables and cancer. Potter JD. J Nutr 1988 Dec;118(12):1591–2
A review of epidemiologic evidence that carotenoids reduce the risk of cancer. Ziegler RG. J Nutr 1989 Jan; 119(1):116–22 (26 ref.)
Diffusion of cancer education into schools. Anderson DM, et al. J Sch Health 1989 May;59(5):214–7
Risk reduction through comprehensive cancer education: the American Cancer Society Plan for Youth Education. Corcoran RD, et al. J Sch Health 1989 May;59(5):199–204
Making the case for cancer prevention in the schools. D'Onofrio CN. J Sch Health 1989 May;59(5):225–31
Changing the course: a school nutrition and cancer education curriculum developed by the American Cancer Society and the National Cancer Institute. Light L, et al. J Sch Health 1989 May;59(5):205–9 (20 ref.)
Cancer knowledge and related practices: results from the National Adolescent Student Health Survey. Portnoy B, et al. J Sch Health 1989 May;59(5):218–24
Multiple school health interventions: a key to successful cancer education and prevention. Seffrin JR. J Sch Health 1989 May;59(5):179–80
Hearings focus on cancer prevention among poor [news] Gunby P. JAMA 1989 Apr 28;261(16):2306
Effects of the intake of selected vitamins and minerals on cancer prevention. Birt DF. Magnesium 1989;8(1):17–30 (103 ref.)
Survey of cancer control attitudes among Missouri state legislators. Davis JR, et al. Mo Med 1989 Feb;86(2):95–8
Role and mechanisms of inhibitors in prevention of mutation and cancer. Mutat Res 1988 Dec;202(2):277–446
Inhibitors of endogenous nitrosation. Mechanisms and implications in human cancer prevention. Bartsch H, et al. Mutat Res 1988 Dec;202(2):307–24 (126 ref.)
Problems and prospects in antimutagenesis and anticarcinogenesis. De Flora S. Mutat Res 1988 Dec; 202(2):279–83 (24 ref.)
Mechanisms of inhibitors of mutagenesis and carcinogenesis. Classification and overview. De Flora S, et al. Mutat Res 1988 Dec;202(2):285–306 (175 ref.)
Dietary inhibitors of mutagenesis and carcinogenesis. Hayatsu H, et al. Mutat Res 1988 Dec;202(2):429–46 (188 ref.)
The nature of oxidants and antioxidant systems in the inhibition of mutation and cancer. Hochstein P, et al. Mutat Res 1988 Dec;202(2):363–75 (110 ref.)
Protective role of glutathione and glutathione transferases in mutagenesis and carcinogenesis. Ketterer B. Mutat Res 1988 Dec;202(2):343–61 (129 ref.)
Strategies for inhibiting multistage carcinogenesis based on signal transduction pathways. Weinstein IB. Mutat Res 1988 Dec;202(2):413–20 (82 ref.)
Losing the battle against cancer [see comments] Skegg DC. N Z Med J 1989 May 10;102(867):214–5. Comment in: N Z Med J 1989 Jun 14;102(869):297
Possibilities and limitations in cancer prevention. Schmähl D. Naturwissenschaften 1988 Jul;75(7):334–40
Food, additives, and cancer. What can we tell our patients? Byers T. Postgrad Med 1988 Oct;84(5):275–6, 279–81
Cancer screening in the office. Can it be a cost–effective lifesaver? Davis JM. Postgrad Med 1989 Aug;86(2):213–20, 223–4 (20 ref.)
Advances in cancer control. Innovations and research. Proceedings of the sixth annual meeting. A combined meeting of the Association of Community Cancer Centers/Association of American Cancer Institutes. Washington, D.C., March 15–16, 1988. Prog Clin Biol Res 1989;293:1–407
Advances in cancer control: cancer control research and the emergence of the oncology product line. Proceedings of the 5th annual meeting on Advances in Cancer Control—a combined meeting of the Association of Community Cancer Centers/Association of American Cancer Institutes. Washington, D.C., March 11–15, 1987. Prog Clin Biol Res 1988;278:1–253
The experience of cancer warning signs in a general population and its implications for public education. Balshem AM, et al. Prog Clin Biol Res 1988;278:77–89
Physician induced and patient induced utilization of early cancer detection practices among black Americans. Bloom JR, et al. Prog Clin Biol Res 1989;293:279–96
Methodologic issues in the design of primary prevention trials. Buring JE, et al. Prog Clin Biol Res 1989;293:41–9
Cancer control in the Illinois State Cancer Plan. Cairns NU. Prog Clin Biol Res 1988;278:105–9
Reaching towards 2000: development and evaluation of a community education program on diet and cancer prevention. Fleisher L, et al. Prog Clin Biol Res 1988; 278:91–100
Barriers to cancer control in rural Oahu. Goodman MJ. Prog Clin Biol Res 1989;293:331–8
Potential benefits of quitting smoking as calculated from a new cancer risk assessment algorithm. Hill GB, et al. Prog Clin Biol Res 1989;293:243–55
Cancer programs in Changchun, Jilin province, People's Republic of China. Nathanson L. Prog Clin Biol Res 1988; 278:119–29
Cancer control research in the Eastern Cooperative Oncology Group (ECOG). Pandya KJ. Prog Clin Biol Res 1988;278:111–7
Discussion of diffusion of medical innovations. Sondik EJ. Prog Clin Biol Res 1989;293:35–9
The implementation and applications of a cancer patient risk evaluation questionnaire. Spitz MR, et al. Prog Clin Biol Res 1989;293:263–70
Cancer control in a defined population: results of the "Beat the Odds" education campaign. Workman S, et al. Prog Clin Biol Res 1988;278:55–64
Cancer screening services for the elderly. Weisman CS, et al. Public Health Rep 1989 May–Jun;104(3):209–14
The design of cancer prevention trials. Byar DP. Recent Results Cancer Res 1988;111:34–48
Critical assessment of carcinogenic risk policy. Flamm WG. Regul Toxicol Pharmacol 1989 Jun;9(3):216–24
New directions for regulating carcinogenic risks. Kolbye AC Jr. Regul Toxicol Pharmacol 1989 Jun;9(3):212–5
Epidemiological and experimental applications to occupational cancer prevention. Vainio H, et al. Sangyo Ika Daigaku Zasshi 1989 Mar 20;11 Suppl:323–45 (55 ref.)
Mapping of the "intervention channels" as a part of the community diagnosis process of the Stockholm Cancer Prevention Program (SCPP). Haglund BJ, et al. Scand J Prim Health Care Suppl 1988;1:65–72
Cost–benefit impact on cancer screening. Humphrey LJ. Semin Surg Oncol 1989;5(3):205–10 (21 ref.)
Cancer prevention and detection centers: an overview and critique. Humphrey LJ, et al. Semin Surg Oncol 1989; 5(3):211–8
Retinoids and cancer prevention. Stadnyk AN, et al. Tex Med 1988 Nov;84(11):56–9 (24 ref.)
Experience of the National Cancer Institute. Ringen K. Toxicol Ind Health 1989 Jul;5(4):97–101; discussion 111–4
Progress in cancer prevention and control. Sondik EJ. Trans Stud Coll Physicians Phila 1988 Dec;10(1–4):111–31 (6 ref.)
[Screening of cancer, advantages and disadvantages] Kronborg O. Ugeskr Laeger 1989 Jan 23;151(4):260–3 (Dan)
[NMR research on blood plasma for tumor detection—a method for mass screening?] Fritzsche H, et al. Arch Geschwulstforsch 1989;59(2):129–33 (Eng. Abstr.) (Ger)
[Europe against cancer. Thoughts on prevention] Goerttler K. Dtsch Med Wochenschr 1989 Sep 1;114(35):1336–42 (Ger)
[Does selenium reduce the cancer risk in man? (editorial)] Voigtmann R. Dtsch Med Wochenschr 1989 Apr 14; 114(15):573–4 (Ger)
[Cancer prevention by health education. Ways for promoting healthy behavior—no surplus of information] Affemann R. Fortschr Med 1989 Jan 20;107(2):64 (Ger)
[Regional differences in the utilization of early cancer screening 1985] Berghof B, et al. Off Gesundheitswes 1989 Feb;51(2):75–7 (Eng. Abstr.) (Ger)
[Studies on the possibility of immunoprophylaxis of carcinoma] Denk W, et al. Osterr Z Erforsch Bekampf Krebskr 1970;25(1):30–9 (Eng. Abstr.) (Ger)
[Incidence of somatic mutations of the lymphocytes in subjects working in an environment with cancer risk] Tompa A, et al. Orv Hetil 1989 Jul 23;130(30):1603–7 (Eng. Abstr.) (Hun)
[The nature of tumors and violins (editorial)] Berrino F. Epidemiol Prev 1988 Jun;10(35):1–3 (Ita)
[Recommendations for screening in oncology] Maltoni G, et al. Epidemiol Prev 1988 Sep;10(36):29–36 (18 ref.) (Ita)
[Secondary prevention may also be true prevention (editorial)] Terracini B. Epidemiol Prev 1988 Sep; 10(36):12–3 (Ita)
[Oral anticoagulants and platelet anti-aggregants in the prevention of metastases: state of the art and perspectives of a combined therapy] Finzi G, et al. Recenti Prog Med 1989 Jan;80(1):28–32 (49 ref.) (Eng. Abstr.) (Ita)
[Primary cancer prevention by life style modification] Hirayama T. Gan No Rinsho 1989 Jan;35(2):163–70 (Eng. Abstr.) (Jpn)
[An alternative theory and practice on preventive medicine with special emphasis on total cancer studies] Maruchi N, et al. Gan No Rinsho 1989 Jan;35(2):156–62 (Eng. Abstr.) (Jpn)
[The development of health risk appraisal for Japanese as a new health educational tool] Nakamura M, et al. Gan No Rinsho 1989 Jan;35(2):177–81 (Eng. Abstr.) (Jpn)
[Evaluation of cancer screening from the epidemiologic point of view] Oshima A. Gan No Rinsho 1989 Jan;35(2):253–7 (Eng. Abstr.) (Jpn)
[Comprehensive 10-year strategy for cancer control] Sawa H. Gan No Rinsho 1989 Jan;35(2):132–9 (Eng. Abstr.) (Jpn)
[New strategy for cancer control] Watanabe S. Gan No Rinsho 1989 Jan;35(2):151–5 (Eng. Abstr.) (Jpn)
[The concept and strategy of secondary prevention for cancer] Fukao A, et al. Nippon Rinsho 1989 May; 47(5):978–82 (Jpn)
[Diagnostic sensitivity and specificity and positive predictive value in the mass screening for cancer] Ohkawa J. Rinsho Byori 1988 Jul;36(7):781–6 (Jpn)
[Mass screening programs for cancer in Japan] Hisamichi S. Rinsho Hoshasen 1988 Nov;33(12):1513–21 (25 ref.) (Eng. Abstr.) (Jpn)
[Vegetables and prevention of cancer. Carrots are still good for you] Jacobsen BK. Tidsskr Nor Laegeforen 1988 Oct 30;108(30):2744–6 (Eng. Abstr.) (Nor)
[Cytotoxic NK cells: their role and function in the body. I. Origin of NK cells, their morphological characteristics, location, genetic control and the methods of evaluation of their activity] Frydecka I. Przegl Lek 1988;45(6):527–30 (Pol)
[The role of ascorbic acid, tocopherol and retinol in the processes of carcinogenesis] Wartanowicz M, et al. Wiad Lek 1988 Apr 15;41(8):507–13 (36 ref.) (Eng. Abstr.) (Pol)
[Increase in the longevity and decrease in the tumor incidence in mice given polypeptide thymus and epiphysis factors at different age] Anisimov VN, et al. Dokl Akad Nauk SSSR 1988;302(2):473–6 (Rus)
[Oncohygienic evaluation of the possibility of using active sludge] Baranova LN, et al. Gig Sanit 1988 Dec;(12):31–2 (Eng. Abstr.) (Rus)
[Problems of the prevention of non-infectious diseases] Oganov RT. Klin Med (Mosk) 1989 Mar;67(3):4–10 (Rus)
[The role of tests for polyenuria in mass screening of the population] Gritsman Iulia, et al. Sov Med 1988;(5):49–51 (Rus)
[Evaluation of the effectiveness of screening programs as a method of detection of malignant neoformations] Tseshkovskii MS. Vopr Onkol 1988;34(10):1160–5 (Rus)
[Europe against cancer. Clinical conference] Estapé J. Med Clin (Barc) 1989 Mar 11;92(9):351–6 (Spa)

PSYCHOLOGY

Adolescents dying from cancer. Papadatou D. Acta Oncol 1988;27(6b):837–9
Camp Rap-A-Hope: meeting a challenge side by side. Rhyne M. Ala Med 1988 Aug;58(2):31–2
Evaluation of a camp program for siblings of children with cancer. Sahler OJ, et al. Am J Dis Child 1989 Jun; 143(6):690–6
The role of self-understanding in resilient individuals: the development of a perspective. Beardslee WR. Am J Orthopsychiatry 1989 Apr;59(2):266–78
After treatment ends: psychosocial sequelae in pediatric cancer survivors. Fritz GK, et al. Am J Orthopsychiatry 1988 Oct;58(4):552–61
Self-reported depression in adolescent cancer patients. Tebbi CK, et al. Am J Pediatr Hematol Oncol 1988 Fall; 10(3):185–90
Childhood cancer survivors' knowledge of their diagnosis and treatment. Byrne J, et al. Ann Intern Med 1989 Mar 1;110(5):400–3
Surviving adult cancers. Part 2: Psychosocial implications. Welch-McCaffrey D, et al. Ann Intern Med 1989 Sep 15; 111(6):517–24 (58 ref.)
Coping with cancer: the spouse's perspective. Kalayjian AS. Arch Psychiatr Nurs 1989 Jun;3(3):166–72
Associations between selected life events and cancer. Scherg H, et al. Behav Med 1988 Fall;14(3):119–24
Communicating with cancer patients [letter] Dennison JA. BMJ 1988 Nov 5;297(6657):1192
Communicate with cancer patients: 1. Handling bad news and difficult questions. Maguire P, et al. BMJ 1988 Oct 8;297(6653):907–9
Communicate with cancer patients: 2. Handling uncertainty, collusion, and denial. Maguire P, et al. BMJ 1988 Oct 15; 297(6654):972–4
Communicating with cancer patients [letter] Maguire P, et al. BMJ 1988 Dec 17;297(6663):1610
Cancer support groups—who joins and why? Deans G, et al. Br J Cancer 1988 Nov;58(5):670–4
Can psychological therapy improve the quality of life of patients with cancer? Greer S. Br J Cancer 1989 Feb; 59(2):149–51 (16 ref.)
Cancer patients' perceptions of their disease and its treatment. Mackillop WJ, et al. Br J Cancer 1988 Sep;58(3):355–8
Getting it taped: the 'bad news' consultation with cancer patients. Hogbin B, et al. Br J Hosp Med 1989 Apr; 41(4):330–3
Body image problems in cancer patients. Hopwood P, et al. Br J Psychiatry 1988 Jul;153 Suppl 2:47–50 (20 ref.)
A longitudinal analysis of psychological adaptation among survivors of cancer. Ell K, et al. Cancer 1989 Jan 15; 63(2):406–13
Emotions and cancer. New perspectives on an old question. Redd WH, et al. Cancer 1988 Oct 15;62(8 Suppl):1871–9 (100 ref.)
A family—systems approach to the patient with cancer. Rait DS. Cancer Invest 1989;7(1):77–81
Personal control and the needs for hope and information among adults diagnosed with cancer. Brockopp DY, et al. Cancer Nurs 1989 Apr;12(2):112–6
Pain relief for cancer patients. Dalton JA, et al. Cancer Nurs 1988 Dec;11(6):322–8
Shared life space and sibling bereavement responses. Davies B. Cancer Nurs 1988 Dec;11(6):339–47
Informational needs of recently diagnosed cancer patients. Part II. Method and description. Derdiarian A. Cancer Nurs 1987 Jun;10(3):156–63
An evaluation of selected "I Can Cope" programs by registered participants. Diekmann JM. Cancer Nurs 1988 Oct;11(5):274–82

Adolescents with cancer. Sexual and reproductive issues. Heiney SP. **Cancer Nurs** 1989 Apr;12(2):95–101

Identification of problems and strengths of the hospice client by clients, caregivers, and nurses. Implications for nursing. Masters M, et al. **Cancer Nurs** 1989 Aug;12(4):226–35

The development of a method for determining oncology patients' emotional distress using linear analogue scales. Sutherland HJ, et al. **Cancer Nurs** 1988 Oct;11(5):303–8

Living with cancer. Family experiences. Woods NF, et al. **Cancer Nurs** 1989 Feb;12(1):28–33

Malignancy as it affects the patient. Kushner H. **Clin Neurosurg** 1989;35:336–48

Psychological correlates of survival in nursing home cancer patients. Stein S, et al. **Gerontologist** 1989 Apr;29(2):224–8

Loosening the bonds of cancer: how feasible? Eardley A. **Int Disabil Stud** 1988;10(3):119–22

Use of a modified symptom distress scale in assessment of the cancer patient. Holmes S. **Int J Nurs Stud** 1989; 26(1):69–79

Three wishes of a child with cancer. Martinson IM, et al. **Int Nurs Rev** 1988 Sep–Oct;35(5):143–6

Adjustment to cancer: who is the patient—the husband or the wife? Baider L, et al. **Isr J Med Sci** 1988 Sep–Oct; 24(9–10):631–6

Group therapy with adolescent cancer patients. Baider L, et al. **J Adolesc Health Care** 1989 Jan;10(1):35–8

Issues of adolescent development for survivors of childhood cancer. Fritz GK, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Nov;27(6):712–5

Palliative care in the cancer patient [letter] Fernandez F, et al. **J Am Geriatr Soc** 1988 Oct;36(10):961

Psychoneuroimmunology: blaming the victim? [editorial] McGoldrick KE. **J Am Med Wom Assoc** 1989 Sep–Oct; 44(5):134

The psychological care of children with malignant disease. Lansdown R, et al. **J Child Psychol Psychiatry** 1988 Sep; 29(5):555–67 (56 ref.)

A comparison of problems reported by persons with cancer and their same sex siblings. Houts PS, et al. **J Clin Epidemiol** 1988;41(9):875–81

Measuring the quality of life of cancer patients: psychometric properties of instruments. van Knippenberg FC, et al. **J Clin Epidemiol** 1988;41(11):1043–53 (67 ref.)

Measuring quality of life in cancer patients. Donovan K, et al. **J Clin Oncol** 1989 Jul;7(7):959–68 (82 ref.)

Now we tell—but how well? [editorial] Holland JC. **J Clin Oncol** 1989 May;7(5):557–9

Telling the diagnosis of cancer. Lind SE, et al. **J Clin Oncol** 1989 May;7(5):583–9

Psychosocial factors and cancer: analytic strategies that bias to the null [letter] Schwartz C. **J Clin Oncol** 1989 Apr; 7(4):541–2

Anxiety in medical situations: adult cancer patients. Schag CA, et al. **J Clin Psychol** 1989 Jan;45(1):20–7

Psychological treatment of distress, pain, and anxiety for young children with cancer. Kuttner L, et al. **J Dev Behav Pediatr** 1988 Dec;9(6):374–81

Ethics of cancer management from the patient's perspective. Jolley MG. **J Med Ethics** 1988 Dec;14(4):188–90

Cancerphobia: an emerging theory of compensable damages. Maskin A. **J Occup Med** 1989 May;31(5):427–31

Psychologic functioning in 8- to 16-year-old cancer survivors and their parents. Greenberg HS, et al. **J Pediatr** 1989 Mar;114(3):488–93

Families of young adolescents who have survived cancer: social–emotional adjustment, adaptability, and social support. Kazak AE, et al. **J Pediatr Psychol** 1989 Jun; 14(2):175–91

Rationality and antiemotionality as a risk factor for cancer: concept differentiation. van der Ploeg HM, et al. **J Psychosom Res** 1989;33(2):217–25

Cancer patients: their desire for information and participation in treatment decisions. Sutherland HJ, et al. **J R Soc Med** 1989 May;82(5):260–3

Fate of childhood cancer survivors comes under increasing scrutiny [news] Raymond CA. **JAMA** 1988 Dec 9; 260(22):3246–7

Terminal care: where does it fit in oncology? Alexander C. **Md Med J** 1989 Mar;38(3):211

Depression in cancer patients. Diagnostic and treatment considerations. Evans DL, et al. **N C Med J** 1988 Oct; 49(10):546–8 (22 ref.)

Measuring cancer patients' quality of life [letter] Sinnreich M. **N Y State J Med** 1988 Nov;88(11):603

CanTeen: the New Zealand teenage cancer patients society—a new direction in psychosocial oncology? Carr-Gregg M. **N Z Med J** 1989 Apr 12;102(865):163–5

Hopefulness and the self-sustaining process in adolescents with cancer. Hinds PS, et al. **Nurs Res** 1988 Nov–Dec; 37(6):336–40

Cancerphobia liability: will this be "tort of the decade" in the '90s? Willmore RL. **Occup Health Saf** 1989 Jan;58(1):18

Behavioral distress in pediatric patients with cancer receiving chemotherapy. Dolgin MJ, et al. **Pediatrics** 1989 Jul; 84(1):103–10

Dimensions of disease and health promotion implications: comparing images of cancer and heart disease in a blue collar community. Amsel Z, et al. **Prog Clin Biol Res** 1988; 278:43–54

Satisfaction among cancer outpatients. Davis SW, et al. **Prog Clin Biol Res** 1988;278:227–32

Cancer survivors: is there a need for group support? Laufman L, et al. **Prog Clin Biol Res** 1988;278:233–41

Stress-relieving relaxation audio-tape for supportive care of cancer patients: developmental studies. Presant CA, et al. **Prog Clin Biol Res** 1988;278:151–8

Vulnerability and the psychological disturbances of cancer patients. Weisman AD. **Psychosomatics** 1989 Winter; 30(1):80–5

The Greek cancer patient's knowledge and attitudes towards his diagnosis and prognosis. Lavrentiadis G, et al. **Psychother Psychosom** 1988;49(3–4):171–8

Psychosocial issues for patients with AIDS-related cancers. Christ H. **Recent Results Cancer Res** 1988;112:84–92

Psychosocial support of cancer patients: a training program for oncology staff. Hürny C. **Recent Results Cancer Res** 1988;108:295–300

Cancer: a family disruption. Johnson J. **Recent Results Cancer Res** 1988;108:306–10 (6 ref.)

Liaison psychiatry on an oncology ward. Meerwein F. **Recent Results Cancer Res** 1988;108:239–42

Music therapy in support of cancer patients. Porchet-Munro S. **Recent Results Cancer Res** 1988;108:289–94

Psychological and social support of cancer patients: report on a program of the radiotherapy department, Erlangen. Sauer R, et al. **Recent Results Cancer Res** 1988;108:311–5

Preferences for treatment control among adults with cancer. Degner LF, et al. **Res Nurs Health** 1988 Dec;11(6):367–74

The severity of depression in cancer patients. Petersen HN, et al. **Scand J Psychol** 1988;29(2):126–8

What should we tell patients with cancer? Reid A, et al. **Scott Med J** 1988 Jun;33(3):260

Information and decision-making preferences of hospitalized adult cancer patients. Blanchard CG, et al. **Soc Sci Med** 1988;27(11):1139–45

Emotional expression in cancer onset and progression. Gross J. **Soc Sci Med** 1989;28(12):1239–48 (80 ref.)

Immediate effectiveness of brief psychological training for health professionals dealing with terminally ill cancer patients: a controlled study. Razavi D, et al. **Soc Sci Med** 1988;27(4):369–75

Three conflicts as a result of causal attributions. ten Kroode H, et al. **Soc Sci Med** 1989;28(1):93–7

Clinical cancer: 27. The psycho-social aspects of cancer. Prendergast E. **Wis Med J** 1988 Sep;87(9):27–8

[100 cases of investigations on the psychological needs of in-patients] Liu XH. **Chung Hua Hu Li Tsa Chih** 1989 Apr; 24(4):221–2 **(Chi)**

[The oncology patient from the viewpoint of the psychologist] Bendová M, et al. **Cesk Gynekol** 1989 Feb; 54(1):47–50 **(Cze)**

[Psychological aspects associated with the diagnosis and treatment of cancer] Razavi D, et al. **Acta Psychiatr Belg** 1988 Jan–Feb;88(1):60–79 (46 ref.) (Eng. Abstr.) **(Fre)**

[Psychological implications of cancer. I. Psychological consequences of the disease] Zittoun R, et al. **Bull Cancer (Paris)** 1988;75(10):943–8 (Eng. Abstr.) **(Fre)**

[Psychological implications of cancer. II. Consequences of treatment and modality of adaptation] Zittoun R, et al. **Bull Cancer (Paris)** 1988;75(10):949–55 (Eng. Abstr.) **(Fre)**

[Exemplary tumor after-care. Clinic talkshows as psycho-oncologic management—20 years of the Bad Trissl clinic] Gericke D. **Fortschr Med** 1989 Mar 20;107(9):66 **(Ger)**

[Integration of psychosocial services into the management of the child with cancer] Janssen F. **Klin Padiatr** 1989 Jul–Aug;201(4):346–9 (Eng. Abstr.) **(Ger)**

[Psychological management of children with cancer and their families] Wittmeyer H, et al. **Klin Padiatr** 1989 Jul–Aug; 201(4):350–4 (Eng. Abstr.) **(Ger)**

[Suicide and cancer] Stiefel F, et al. **Schweiz Med Wochenschr** 1989 Jun 24;119(25):891–5 (38 ref.) (Eng. Abstr.) **(Ger)**

[The physician's response to refusal of chemotherapy by cancer patients] Gilbar O. **Harefuah** 1988 Dec 1; 115(11):321–4 (Eng. Abstr.) **(Heb)**

[Informing advanced cancer patients of the terminal nature of their disease and how this influenced their mental state] Okazaki N, et al. **Gan No Rinsho** 1989 Feb;35(3):331–4 (Eng. Abstr.) **(Jpn)**

[Telling the patient the diagnosis of cancer] Doi T. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):1025–30 (Eng. Abstr.) **(Jpn)**

[Personality, cancer and myocardial infarction—new research results] Gråwe RW, et al. **Tidsskr Nor Laegeforen** 1989 May 30;109(15):1662–4 (Eng. Abstr.) **(Nor)**

[Personality and cancer (letter)] Kaasa S, et al. **Tidsskr Nor Laegeforen** 1989 Aug 20;109(23):2345–7 **(Nor)**

[Psychosomatic aspects of neoplasms] Czubalski K. **Nowotwory** 1988 May–Jun;38(3):204–10 (Eng. Abstr.) **(Pol)**

[Defense reactions and coping with stress in patients with cancer] Losiak W. **Przegl Lek** 1989;46(3):334–7 (Eng. Abstr.) **(Pol)**

[Psychosomatics and cancer] Delgado Martín ME, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 May–Jun;17(3):169–75 (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

State-of-the-art assessment. Diagnostic oncologic imaging. Bragg DG. **Cancer** 1989 Jul 1;64(1 Suppl):261–5; discussion 269–71

Three select subungual pathologies: subungual exostosis, subungual osteochondroma, and subungual hematoma. Grisafi PJ, et al. **Clin Podiatr Med Surg** 1989 Apr; 6(2):355–64 (35 ref.)

Use of routine chest radiography in the evaluation of fever in neutropenic pediatric oncology patients. Feusner J, et al. **J Clin Oncol** 1988 Nov;6(11):1699–702

Quantitation of ellipsoid tumor areas using a circumferential measuring device. Dorr RT, et al. **Med Oncol Tumor Pharmacother** 1988;5(4):249–51

Lumbar epidurography and epidural analgesia in cancer patients. Sjøgren P, et al. **Pain** 1989 Mar;36(3):305–9

Time and disease: the fourth dimension of radiology. Dwyer AJ. **Radiology** 1989 Oct;173(1):17–21

[Measurement of tumor volume by x-ray computed tomography in evaluating the response to treatment] Lérier O, et al. **J Radiol** 1988 Nov;69(11):651–6 (Eng. Abstr.) **(Fre)**

[The role of tomodensitometry in the study of superficial metastases: description of clinical cases] Lagala R, et al. **Tunis Med** 1988 Jun–Jul;66(6–7):509–13 (Eng. Abstr.) **(Fre)**

[Quantitative serial computed tomography. Kidney and tumors] Jeschke G, et al. **Digitale Bilddiagn** 1988 Sep; 8(3):141–6 (Eng. Abstr.) **(Ger)**

[Digital subtraction angiography in oncologic diagnosis] Hermann HJ. **Rontgenblatter** 1989 Jan;42(1):3–5 (Eng. Abstr.) **(Ger)**

[Differential diagnosis of the early cancer: imaging diagnosis "CT"] Tada S, et al. **Gan No Rinsho** 1988 Aug; 34(10):1223–6 (Eng. Abstr.) **(Jpn)**

[Recent advances in angiography for the diagnosis of early cancers] Matsui O, et al. **Nippon Rinsho** 1989 May; 47(5):1057–65 **(Jpn)**

[Xeroradiographic scanning in clinical oncology] Valutskas KK. **Med Radiol (Mosk)** 1989 Feb;34(2):28–34 (Eng. Abstr.) **(Rus)**

[The potentials and importance of xeroradiography in examining patients with cancer] Vintergal'ter SF. **Vopr Onkol** 1989;35(1):87–94 (63 ref.) **(Rus)**

[Computerized tomography in pediatric oncology] Lucaya J, et al. **An Esp Pediatr** 1988 Sep;29 Suppl 32:87–8 **(Spa)**

RADIONUCLIDE IMAGING

Radiation detector probes for tumor localization using tumor-seeking radioactive tracers. Woolfenden JM, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):35–9 (36 ref.)

Mechanism of tumor transport of 99mTc-DL-homocysteine, a possible tumor-imaging agent. Takeda A, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2570–5

MABDOS: a generalized program for internal radionuclide dosimetry. Johnson TK. **Comput Methods Programs Biomed** 1988 Sep–Oct; 27(2):159–67

Quantitative considerations supporting the irrelevance of circulating serum CEA for the immunoscintigraphic visualization of CEA expressing carcinomas. Bosslet K, et al. **Eur J Nucl Med** 1988;14(11):523–8

No-carrier-added synthesis of 3-[18F]fluoro-1-(2-nitro-1-imidazolyl)-2-propanol. A potential PET agent for detecting hypoxic but viable tissues. Hwang DR, et al. **Int J Rad Appl Instrum [A]** 1989; 40(2):117–26

Monitoring the in vivo behaviour of immunoglobulins with radiotracers: imaging approaches and data processing techniques. Britton KE, et al. **Int J Rad Appl Instrum [B]** 1989;16(2):105–9 (18 ref.)

Tumor targeting with monoclonal antibody B72.3. Schlom J, et al. **Int J Rad Appl Instrum [B]** 1989;16(2):137–42 (27 ref.)

Localization of indium-111 leukocytes in noninfected neoplasms. Lamki LM, et al. **J Nucl Med** 1988 Dec; 29(12):1921–6

Radiolabelled photosensitizers for tumour imaging and photodynamic therapy. Wilson BC, et al. **J Photochem Photobiol [B]** 1989 Jun;3(3):459–63

Innovations in monoclonal antibody tumor targeting. Diagnostic and therapeutic implications [clinical conference] Schlom J. **JAMA** 1989 Feb 3;261(5):744–6

Localisation of endocrine-related tumours with radioiodinated analogue of somatostatin. Krenning EP, et al. **Lancet** 1989 Feb 4;1(8632):242–4

Rubor, dolor calor, tumor, and radionuclide scans [editorial:comment] Gardner P, et al. **N Engl J Med** 1989 Oct 5;321(14):970–2. **Comment on:** N Engl J Med 1989 Oct 5;321(14):935–40

Prospects for radioimmunoimaging and radioimmunotherapy in oncology? Pauwels EK, et al. **Nucl Med Commun** 1988 Nov;9(11):867–9

Iodine-131 and indium-111 labelled avidin and streptavidin for pre-targetted immunoscintigraphy with biotinylated anti-tumour monoclonal antibody. Pimm MV, et al. **Nucl Med Commun** 1988 Nov;9(11):931–41

Utilization of tumour-sensitized ('educated') and radiolabelled lymphocytes for tumour localization. Spencer RP, et al. **Nucl Med Commun** 1988 Oct;9(10):783–6

Comparison of in vivo scintillation probes and gamma cameras for detection of small, deep tumours. Barber HB, et al. **Phys Med Biol** 1989 Jun;34(6):727–39

Imaging and therapy of cancer with radiolabeled monoclonal antibodies. Goldenberg DM. **Prog Clin Biol Res** 1989; 288:413–27 (39 ref.)

A practical SPECT technique for quantitation of drug delivery to human tumors and organ absorbed radiation dose. Iosilevsky G, et al. **Semin Nucl Med** 1989 Jan; 19(1):33–46 (48 ref.)

[Immunoscintigraphy of tumors in clinical practice] Dvořák P. **Cas Lek Cesk** 1988 Dec 2;127(49):1508–11 (Eng. Abstr.) **(Cze)**

[Immunoscintigraphy and immunotherapy (letter)] Biersack HJ, et al. **Dtsch Med Wochenschr** 1989 Mar 24;114(12):480 **(Ger)**

[Clinical use of positron emission tomography in tumor patients] Schober O, et al. **Z Gastroenterol [Verh]** 1989 Jul; 24:152–4 (58 ref.) **(Ger)**

[Image diagnosis: nuclear medicine] Hisada K, et al. **Gan No Rinsho** 1988 Aug;34(10):1247–54 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of radioimmunoscintigraphy using a I-131 anti CEA and CA 19-9 monoclonal antibodies cocktail (IMACIS-1)] Takahashi T, et al. **Gan No Rinsho** 1989 Jun;35(7):828–33 (Eng. Abstr.) **(Jpn)**

[Study on liver uptake changes in serial 67Ga scintigraphy] Kobayashi H, et al. **Kaku Igaku** 1989 Feb;26(2):139–44 (Eng. Abstr.) **(Jpn)**

[Application of new imaging technics in the diagnosis of cancer] **Nippon Gan Chiryo Gakkai Shi** 1988 Apr 20; 23(4):927–31 **(Jpn)**

[Tumor imaging in nuclear medicine] Uno K, et al. **Nippon Rinsho** 1989 May;47(5):1051–6 **(Jpn)**

[Radioimmunoscintigraphy] Izumi M, et al. **Rinsho Hoshasen** 1988 Jun;33(6):635–42 (Eng. Abstr.) **(Jpn)**

[Radionuclide studies in the diagnosis of malignant tumors] Chibisov VA, et al. **Voen Med Zh** 1988 Aug;(8):33–5 **(Rus)**

[Radioimmunolocalization is a new aid used in the diagnosis of tumors] **Lakartidningen** 1988 Nov 16;85(46):3969 **(Swe)**

RADIOTHERAPY

High dose rate brachytherapy treatment of malignant tumors. Cotter GW, et al. **Ala Med** 1988 Dec;58(6):13–5

Fast neutron therapy clinical trials in the United States. Zink S, et al. **Am J Clin Oncol** 1989 Aug;12(4):277–82

Neutron therapy for nonresectable radioresistant tumors. Cohen L, et al. **Arch Surg** 1989 Mar;124(3):294–300 (15 ref.)

Utilisation review of radiation oncology practice. Shepherd J, et al. **Aust Clin Rev** 1988 Sep;8(30):131–8

Clinical aspects of neutron capture therapy. Proceedings of a workshop. February 1–2, 1988, Upton, New York. **Basic Life Sci** 1989;50:1–370

Dose rate and therapeutic gain. Fairchild RG. **Basic Life Sci** 1989;50:1–7

Some thoughts on tolerance, dose, and fractionation in boron neutron capture therapy. Gahbauer R, et al. **Basic Life Sci** 1989;50:81–5

Implications of genotypic and microenvironmental heterogeneity for the cure of solid tumors by neutron capture therapy. Rockwell S. **Basic Life Sci** 1989;50:311–7 (28 ref.)

Research on neutron capture therapy in the USSR. Ryabukhin Y. **Basic Life Sci** 1989;50:27–38

Working group on optimization of radiation dose delivery. Wambersie A, et al. **Basic Life Sci** 1989;50:277–84; discussion 284–97

Perfluorochemical emulsions as adjuncts to radiotherapy. Rockwell S. **Biomater Artif Cells Artif Organs** 1988; 16(1–3):519–31 (33 ref.)

Radiotherapy's second setback [letter] **BMJ** 1989 Mar 11; 298(6674):671–2

Radiotherapy's second setback [letter] **BMJ** 1989 Feb 11; 298(6670):383–4

Radiotherapy's second setback [editorial] Smith R. **BMJ** 1988 Dec 24–31;297(6664):1625–6

Continuous, hyperfractionated, accelerated radiotherapy (CHART). Dische S, et al. **Br J Cancer** 1989 Mar; 59(3):325–6 (20 ref.)

Pregnancies after childhood cancer. Smith RA, et al. **Br J Obstet Gynaecol** 1989 Apr;96(4):378–80 (19 ref.)

Paediatric brachytherapy. I. The role of brachytherapy in the multidisciplinary therapy of localized cancers. Plowman PN, et al. **Br J Radiol** 1989 Mar;62(735):218–22

The use of neutron beam therapy in the management of locally advanced nonresectable radioresistant tumors. Hendrickson FR. **CA** 1988 Nov–Dec;38(6):353–61 (23 ref.)

Quality assurance in radiation oncology in the United States 1988. Hanks GE. **Cancer** 1989 Jul 1;64(1 Suppl):223–5; discussion 240–3

Cytogenetic effects of radiotherapy. Breakpoint distribution in induced chromosome aberrations. Barrios L, et al. **Cancer Genet Cytogenet** 1989 Aug;41(1):61–70

Experimental and clinical studies alternating chemotherapy and radiotherapy. Looney WB, et al. **Cancer Metastasis Rev** 1989 Jun;8(1):53–79 (39 ref.)

Predictors of self-care in cancer patients receiving radiotherapy. Hanucharurnkul S. **Cancer Nurs** 1989 Feb; 12(1):21–7

Abstracts of papers: Royal College of Radiologists, annual scientific meeting. 7–10 September 1988, Devon. **Clin Radiol** 1988 Nov;39(6):673–89

The promise of a new technology: knowledge-based systems in radiation oncology and diagnostic radiology. Zink S. **Comput Med Imaging Graph** 1989 May–Jun;13(3):281–93 (71 ref.)

Gonadal function following radiation and cytotoxic chemotherapy in childhood. Shalet SM. **Ergeb Inn Med Kinderheilkd** 1989;58:1–21 (70 ref.)

Status of clinical trials with neutron irradiation. Griffin TW. **Important Adv Oncol** 1989;:221–34 (77 ref.)

Pregnancy outcomes in childhood cancer survivors: probable effects of abdominal irradiation. Hawkins MM, et al. **Int J Cancer** 1989 Mar 15;43(3):399–402

Comparison of bone marrow dosimetry and toxic effect of high dose 131I-labeled monoclonal antibodies administered to man. Larson SM, et al. **Int J Rad Appl Instrum [B]** 1989; 16(2):153–8

The combination of radiotherapy and chemotherapy: a review. Tubiana M. **Int J Radiat Biol** 1989 Apr; 55(4):497–511 (51 ref.)

The Shanghai International Conference in Radiation Oncology (SICRO). Shanghai, China, May 1987. Selected presentations. **Int J Radiat Oncol Biol Phys** 1989 Feb; 16(2):291–368

Issue dedicated to Juan A. del Regato, M.D. **Int J Radiat Oncol Biol Phys** 1988 Dec;15(6):1261–483

Proceedings of the American Society for Therapeutic Radiology and Oncology, 31st annual meeting. October 1–6, 1989, San Francisco, California. Abstracts. **Int J Radiat Oncol Biol Phys** 1989;17 Suppl 1:1–251

Keynote address: hypoxic cell radiosensitizers: where next? Brown JM. **Int J Radiat Oncol Biol Phys** 1989 Apr; 16(4):987–93 (43 ref.)

The utilization of I-125 seeds as a substitute for Ir-192 seeds in temporary interstitial implants: an overview and a description of the William Beaumont Hospital technique. Clarke DH, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct; 15(4):1027–33

Initial results of a phase I trial of continuous infusion SR 2508 (etanidazole): a radiation therapy oncology group study. Coleman CN, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1085–7

Carcinogenic effects of scattered dose associated with radiation therapy. Cumberlin RL, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):623–9

Keynote address: hypoxic cell sensitizers: clinical developments. Dische S. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1057–60 (29 ref.)

Sequencing radiation and adriamycin exposures in spheroids to maximize therapeutic gain. Durand RE, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug;17(2):345–50

Radiotherapy in China today. Fu LT. **Int J Radiat Oncol Biol Phys** 1989 Feb;16(2):293–5

A new calculational method to assess the therapeutic potential of Auger electron emission. Humm JL, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug;17(2):351–60

Potentiation of radiation effects on multicellular tumor spheroids (MTS) of HeLa cells by lonidamine. Kim JH, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1277–80

Increasing patients' knowledge of radiation therapy. Mood DW, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct; 15(4):989–93

Dose prescription dilemma [letter] Narayanan CS. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):1050

Treatment planning for permanent and temporary percutaneous implants with custom made templates. Osian AD, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan; 16(1):219–23

The current and potential role of hyperthermia in radiotherapy. Overgaard J. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):535–49 (131 ref.)

A non-docking intraoperative electron beam applicator system. Palta JR, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug;17(2):411–7

An appraisal of particle radiation therapy research. Parker RG. **Int J Radiat Oncol Biol Phys** 1988 Dec;15(6):1435–9 (35 ref.)

Semi-automated radiotherapy treatment planning with a mathematical model to satisfy treatment goals. Powlis WD, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):271–6

Single high dose-large field irradiation for palliation of advanced malignancies. Reed RC, et al. **Int J Radiat Oncol Biol Phys** 1988 Nov;15(5):1243–6

Three-dimensional display techniques in radiation therapy treatment planning. Rosenman J, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):263–9

Potential impact of improvements in radiation therapy on quality of life and survival. Suit HD, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):891–5

The 1987 Franz Buschke lecture: the role of radiotherapy in the treatment of chemosensitive tumors. Tubiana M. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):763–74 (94 ref.)

The effect of patient-to-patient variability on the accuracy of predictive assays of tumor response to radiotherapy: a theoretical evaluation. Tucker SL, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):145–57

TDF and L-Q formulations used for hyperfractionated treatments [letter] Yaes RJ. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):1049–50

Patient age as a factor in radiotherapy. Data from the patterns of care study. Steinfeld AD, et al. **J Am Geriatr Soc** 1989 Apr;37(4):335–8

Estimating the risk of second primary tumors following cancer treatment [editorial] Harris JR, et al. **J Clin Oncol** 1989 Jan;7(1):5–6

Proton beam therapy—cost vs. benefit [news] Antoine FS. **J Natl Cancer Inst** 1989 Apr 19;81(8):559–62

Development of a stable radioiodinating reagent to label monoclonal antibodies for radiotherapy of cancer. Wilbur DS, et al. **J Nucl Med** 1989 Feb;30(2):216–26

Clinical manifestations after acute complex radiation injuries. Ye WX. **J Tongji Med Univ** 1988;8(2):94–7

Manual 3-D treatment planning. Johnston SA. **Med Dosim** 1988 Sep;13(3):137–41

Radiation contamination and leakage assessment of intraoperative electron applicators. Bagne FR, et al. **Med Phys** 1988 Jul–Aug;15(4):530–7

Radiation therapy and clinical physics practices in the midwest (1982–1986). DeWerd LA, et al. **Med Phys** 1989 Jul–Aug;16(4):648–52

Macroscopic dosimetry for radioimmunotherapy: nonuniform activity distributions in solid tumors. Howell RW, et al. **Med Phys** 1989 Jan–Feb;16(1):66–74

Mössbauer cancer therapy doubts [letter] Brenner DJ, et al. **Nature** 1989 May 18;339(6221):185–6

Cancer. Therapy by photon activation? [news] Humm J. **Nature** 1988 Dec 22–29;336(6201):710–1

UK cancer committee protests against cyclotron grant [news] McGourty C. **Nature** 1988 Oct 13;335(6191):578

A novel cancer therapy using a Mössbauer-isotope compound. Mills RL, et al. **Nature** 1988 Dec 22–29; 336(6201):787–9

MIRAGE or no mirage? [letter] Mills RL, et al. **Nature** 1989 Jul 20;340(6230):193–4

Restorative effect of MDP-Lys (L18) on leukopenia of cancer patient treated with radiotherapy. Okawa T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Apr 25; 48(4):514–22

'Never give up,' radiation oncologist says. Hogg PL. **Pa Med** 1989 Feb;92(2):40–2

Clinical trials of WR-2721 prior to alkylating agent chemotherapy and radiotherapy. Glover D, et al. **Pharmacol Ther** 1988;39(1–3):3–7

Radioprotectors in treatment therapy to reduce risk in secondary tumor induction. Grdina DJ, et al. **Pharmacol Ther** 1988;39(1–3):21–5 (22 ref.)

Problems of radiation therapy in developing countries. Lyimo R, et al. **Radiobiol Radiother (Berl)** 1988;29(6):699–703

Results of clinical pilot studies of hypoxyradiotherapy. Neumeister K, et al. **Radiobiol Radiother (Berl)** 1988; 29(4):399–408 (32 ref.)

Radiation treatment planning. The physician's role. Hendrickson FR. **Radiographics** 1988 Sep;8(5):987–91

Incidence and latency of radiation reactions [letter] Bentzen SM, et al. **Radiother Oncol** 1989 Mar;14(3):261–2

Can we compare systems for interstitial therapy? Dutreix A. **Radiother Oncol** 1988 Oct;13(2):127–35

Regaud lecture perspectives on the history of radiotherapy. Fletcher GH. **Radiother Oncol** 1988 Aug;12(4):iii–v, 253–71

What to do with neutrons in radiotherapy: a suggestion [letter] Fowler JF. **Radiother Oncol** 1988 Nov;13(3):233–5

Uniform analysis of dose distribution in interstitial brachytherapy dosimetry systems. Paul JM, et al. **Radiother Oncol** 1988 Oct;13(2):105–25

Why are some human tumours more radiosensitive than others? Steel GG, et al. **Radiother Oncol** 1989 May; 15(1):63–72

A new model of proliferative response to fractionated irradiation [editorial] Thames HD. **Radiother Oncol** 1988 Dec;13(4):311–3

Somatic sequelae from radiotherapy: remedial possibilities. I. Sequelae of the soft tissues, bone segments, upper aerodigestive tract, lungs and pleura, digestive and genitourinary tracts. Basso-Ricci S. **Rays** 1988 Jan–Apr; 13(1):61–73 (70 ref.)

Oncological radiotherapy—family medicine. Botturi M, et al. **Rays** 1988 Jan–Apr;13(1):89–99

Clinical trials in oncology: some data collection features. Valentini V, et al. **Rays** 1988 Sep–Dec;13(3):145–50

Malnutrition and the role of nutritional support for radiation therapy patients. Thiel HJ, et al. **Recent Results Cancer Res** 1988;108:205–26 (84 ref.)

Modification of radiotherapy by radiosensitizers and cancer chemotherapy agents. I. Radiosensitizers. Coleman CN. **Semin Oncol** 1989 Jun;16(3):169–75 (70 ref.)

Biologic and clinical developments of cisplatin combined with radiation: concepts, utility, projections for new trials, and the emergence of carboplatin. Coughlin CT, et al. **Semin Oncol** 1989 Aug;16(4 Suppl 6):31–43 (99 ref.)

Proceedings of the EORTC-Heavy Particles Therapy Group meeting. European Organization for Research on Treatment of Cancer. Munich, October 16th–17th, 1987. **Strahlenther Onkol** 1989 Apr;165(4):259–356

Third International Symposium on Neutron Capture Therapy. Bremen, 31 May–3 June 1988. Proceedings. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):65–257

Boronated compounds for neutron capture therapy. Alam F, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):121–3

Neutron capture therapy with gadolinium-157. Allen BJ, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):156-8

Method of in situ dosimetry in boron neutron capture therapy. Blue J, et al. **Strahlenther Onkol** 1989 Feb-Mar; 165(2-3):109-12

Cytometry, a possible tool for assessment of tumor response. Burger G. **Strahlenther Onkol** 1989 Apr;165(4):291-3 **(Eng, Ger)**

The physical tests for realization of neutron capture therapy in Czechoslovakia. Burian J. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):72-5

Neutron therapy at Hammersmith Hospital 1970 to 1985. A re-examination of results. Catterall M. **Strahlenther Onkol** 1989 Apr;165(4):298-301

Harwell research on beams for neutron capture therapy. Constantine G, et al. **Strahlenther Onkol** 1989 Feb-Mar; 165(2-3):92-5

Radiation field for BNCT experiments. Csom G, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):78-81

Fractionation and other clinical considerations in boron neutron capture therapy. Durrant KR, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):231-3

Optimization of an epithermal beam for NCT at the Brookhaven Medical Research Reactor (BMRR). Fairchild RG, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):84-6

Neutron beams for neutron capture therapy at the MIT Research Reactor. Harling OK, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):90-2

An overview: radiation sources, beam quality, dosimetry and spectroscopy in neutron capture therapy. Kanda K. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):67-9

Measurement and analysis on neutron flux distributions in a heavy water phantom using the KUR neutron guide tube for BNCT. Kobayashi T, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):101-3

Reactor moderated intermediate energy neutron beams for neutron capture therapy. Less TJ, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):87-90

Development of dose measuring system for thermal neutron capture therapy. Matsumoto T, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):112-5

Biological effects of intermediate-energy neutrons and their relevance to boron neutron capture therapy. Mill AJ. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):193-6

Comparison of iron/aluminium/sulphur and aluminium/sulphur/argon filtered neutron beams. Perks CA, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):95-8

Optimization of fast neutron spectra available for neutron capture therapy. Pfister G, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):107-9

Electron irradiation of tumors on nude mice. Rave-Fränk M, et al. **Strahlenther Onkol** 1989 Jul;165(7):511

First experiences with fission neutrons in the radiation therapy of cancer patients. Ries G, et al. **Strahlenther Onkol** 1989 Apr;165(4):302-5

The United States BNCT program. Robertson JS, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):249-51

Integrated approach in the planning of neutron capture therapy. Ryabukhin YS. **Strahlenther Onkol** 1989 Feb-Mar; 165(2-3):158-62

A method for selective evaluation of the effectiveness of fast neutrons in radiotherapy. Satoh S, et al. **Strahlenther Onkol** 1989 Apr;165(4):337-9

Research reactor adaptation project for neutron capture therapy. Sauer IL, et al. **Strahlenther Onkol** 1989 Feb-Mar; 165(2-3):81-3

Neutron capture therapy using a fast neutron beam: clinical considerations and physical aspects. Sauerwein W, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):208-10

A review of neutron therapy trials. Schmitt G, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):205-8 (29 ref.)

Present status of fast neutron therapy in Asian countries. Tsunemoto H, et al. **Strahlenther Onkol** 1989 Apr; 165(4):330-6

Fast neutrons for BNCT. Wagner FM, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):115-7

The role of radiation therapy in cancer therapy in the year 2000. Wambersie A. **Strahlenther Onkol** 1989 May; 165(5):357-9

Clinical implementation in BNCT (boron neutron capture therapy): fractionated versus protracted low dose rate irradiation. Wambersie A, et al. **Strahlenther Onkol** 1989 May;165(5):407-11

A design study of an accelerator-based epithermal neutron source for boron neutron capture therapy. Wang CK, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):75-8

Reactor physics design for an epithermal neutron beam at the Power Burst reactor Facility. Wheeler FJ, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):69-71

Analytical modeling for neutron capture therapy. Wheeler FJ, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):186-8

Monte Carlo treatment planning and high-resolution alpha-track autoradiography for neutron capture therapy. Zamenhof RG, et al. **Strahlenther Onkol** 1989 Feb-Mar; 165(2-3):188-92

Clinical cancer: 30. Curative radiation therapy for the primary physician. Richards MJ, et al. **Wis Med J** 1988 Nov;87(11):10-3 (5 ref.)

[Ultrastructure of the respiratory tract epithelium in patients after irradiation or after administration of cytostatics] Konrádová V, et al. **Cesk Pediatr** 1988 Oct;43(10):581-3 (Eng. Abstr.) **(Cze)**

[Hypofractionated irradiation and its indications] Baillet F. **Pathol Biol (Paris)** 1989 Feb;37(2):171-3 **(Fre)**

[Peroperative open-air radiotherapy in 1988] Maylin C, et al. **Pathol Biol (Paris)** 1989 Feb;37(2):152-3 **(Fre)**

[Radio-oncology: current status and future trends] Haefliger JM. **Rev Med Suisse Romande** 1988 Dec;108(12):1011-6 **(Fre)**

[Lung function following irradiation in pediatric cancer patients] Huber A, et al. **Dtsch Med Wochenschr** 1989 Sep 8;114(36):1367-70 (Eng. Abstr.) **(Ger)**

[Indications for intraoperative radiotherapy] Breit A, et al. **Langenbecks Arch Chir** 1988;373(6):377-82 **(Ger)**

[Plastic surgery reconstruction following irradiation] Exner K, et al. **Langenbecks Arch Chir** 1988;Suppl 2:471-4 (Eng. Abstr.) **(Ger)**

[Intraoperative radiotherapy] Sauerwein W, et al. **Med Klin** 1989 Jan 15;84(1):32-9 (69 ref.) **(Ger)**

[Advances in radiotherapy of malignant tumors] Kärcher KH. **Osterr Z Erforsch Bekampf Krebskr** 1970;25(2):73-80 **(Ger)**

[Graduated optimization of fractionation using a 2-component model] Afanasjev BP, et al. **Radiobiol Radiother (Berl)** 1989;30(2):131-5 (Eng. Abstr.) **(Ger)**

[Optimal fractionation from the radiobiological viewpoint] Kummermehr J. **Radiobiol Radiother (Berl)** 1989; 30(3):181-92 (21 ref.) (Eng. Abstr.) **(Ger)**

[Radiotherapy with increased efficacy] Silberbauer F. **Radiologe** 1989 Jan;29(1):48-9 (Eng. Abstr.) **(Ger)**

[The present status of neutron therapy from the point of view of physics] Hess A, et al. **Rontgenpraxis** 1988 Dec; 41(12):437-44 **(Ger)**

[Clinical results of neutron therapy. Limitations and possibilities of a specialized management technic in present-day cancer therapy] Schwarz R, et al. **Rontgenpraxis** 1989 Feb;42(2):58-69 (93 ref.) **(Ger)**

[Computer-assisted tumor documentation, after-care and medical correspondence in radiotherapy] Leitner H, et al. **Strahlenther Onkol** 1989 May;165(5):369-74 (Eng. Abstr.) **(Ger)**

[Individual collimators as an aid in improving the accuracy of positioning, the reproducibility of irradiation and the sparing of critical organs] Thiel HJ, et al. **Strahlenther Onkol** 1988 Dec;164(12):734-45 (Eng. Abstr.) **(Ger)**

[Arterial occlusions following therapeutic radiation therapy] Bertuch H, et al. **Vasa** 1988;17(4):267-72 (Eng. Abstr.) **(Ger)**

[Arterial obstructions following therapeutic radiation therapy] Bertuch H, et al. **Vasa Suppl** 1988;26:185-8 (Eng. Abstr.) **(Ger)**

[Radiobiology of injuries of the pelvic structures] Magno L. **Arch Ital Urol Nefrol Androl** 1988 Dec;60(4):353-5 (Eng. Abstr.) **(Ita)**

[Integration of time-volume parameters in the evaluation of response to oncologic radiotherapy] Grillo Ruggieri F. **Medicina (Firenze)** 1988 Jan-Mar;8(1):51-3 (Eng. Abstr.) **(Ita)**

[Pion therapy at SIN--7 years' experience] Karasawa K. **Gan No Rinsho** 1988 Oct;34(13):1845-51 (Eng. Abstr.) **(Jpn)**

[Second cancer following radiation treatment] Kinoshita T, et al. **Gan No Rinsho** 1989 Jan;Spec No:713-9 **(Jpn)**

[Proton beam therapy of cancer in deep-seated organs] Kitagawa T. **Gan No Rinsho** 1988 Oct;34(13):1839-44 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of biological response modifiers (BRMs) combined with radiotherapy] Mitsuhashi N, et al. **Gan No Rinsho** 1988 Oct;34(13):1816-20 (Eng. Abstr.) **(Jpn)**

[A clinical study of the radiosensitization of aclarubicin] Miyamoto T, et al. **Gan No Rinsho** 1989 Mar;35(4):472-6 (Eng. Abstr.) **(Jpn)**

[The role of radiotherapy in hospice care] Nishimura T, et al. **Gan No Rinsho** 1989 Jan;35(2):286-91 (Eng. Abstr.) **(Jpn)**

[Fast neutron therapy in the National Institute of Radiological Sciences; 10 years' experience and future study] Tsunemoto H. **Gan No Rinsho** 1988 Oct; 34(13):1833-8 (Eng. Abstr.) **(Jpn)**

[Clinical application of flow cytometric analysis to predict results of radiation therapy] Nomura K. **Gan To Kagaku Ryoho** 1989 Jul;16(7):2345-51 (Eng. Abstr.) **(Jpn)**

[Analysis of tumor curability in terms of cellular radiosensitivity and its application to physico-chemical therapy modes] Okada S. **Gan To Kagaku Ryoho** 1989 Apr; 16(4 Pt 2-2):1432-7 (Eng. Abstr.) **(Jpn)**

[Basis of radiotherapy for improved tumor control and preservation of normal function] Suzuki N. **Gan To Kagaku Ryoho** 1989 Sep;16(9):3099-104 (Eng. Abstr.) **(Jpn)**

[Proton therapy] Inada T. **Radioisotopes** 1989 Jan;38(1):28-39 (11 ref.) **(Jpn)**

[The influence of glutathione on radiotherapy and chemotherapy] Nishidai T. **Tanpakushitsu Kakusan Koso** 1988 Jul;33(9):1632-8 (40 ref.) **(Jpn)**

[Use of biological isodoses "isobioGy-2" in evaluating the response of tumor and normal tissues to fractionated irradiation] Maciejewski B, et al. **Nowotwory** 1988 Oct-Dec;38(4):241-50 (Eng. Abstr.) **(Pol)**

[Dosimetric properties of gamma Co-60 radiation compared with X radiation from Neptun 10P accelerators] Szymczyk W, et al. **Nowotwory** 1988 May-Jun;38(3):193-201 (Eng. Abstr.) **(Pol)**

[Use of low-energy laser radiation in experimental and clinical oncology] Stadnik VIa, et al. **Eksp Onkol** 1989; 11(1):12-7 (50 ref.) (Eng. Abstr.) **(Rus)**

[Hypoxic radiotherapy of malignant tumors (review)] Barkanov AI, et al. **Med Radiol (Mosk)** 1988 Nov; 33(11):60-4 (28 ref.) **(Rus)**

[Nontraditional fractionation of doses of ionizing radiation in clinical practice] Kiseleva ES, et al. **Med Radiol (Mosk)** 1989 Apr;34(4):3-10 (Eng. Abstr.) **(Rus)**

[Efficient parameters of grid diaphragms for the radiation therapy of malignant tumors] Klepper LIa. **Med Radiol (Mosk)** 1989 Jul;34(7):63-7 (Eng. Abstr.) **(Rus)**

[The use of a time-dose-fractionation model for stepwise control of radiotherapy of malignant tumors] Lisin VA, et al. **Med Radiol (Mosk)** 1989 Apr;34(4):63-7 (Eng. Abstr.) **(Rus)**

[Large-field irradiation of patients with a disseminated tumor process] Moroz GS, et al. **Med Radiol (Mosk)** 1989 May; 34(5):51-3 (Eng. Abstr.) **(Rus)**

[Potentials and outlook for radiation therapy of cancer patients on an outpatient basis] Nivinskaia MM, et al. **Med Radiol (Mosk)** 1989 Feb;34(2):86-8 (Eng. Abstr.) **(Rus)**

[A system of automated analysis of the efficacy of radiation therapy] Osipova TT. **Med Radiol (Mosk)** 1988 Nov; 33(11):23-6 **(Rus)**

[Systematization of mistakes and errors of irradiation in radiotherapy] Valnberg MSh. **Med Radiol (Mosk)** 1989 Aug;34(8):64-7 (Eng. Abstr.) **(Rus)**

[The theory of optimal radiation treatment of tumors] Tsyb AF, et al. **Vestn Akad Med Nauk SSSR** 1988;(8):59-64 **(Rus)**

[The use of computers for optimizing the radiation treatment of patients with malignant tumors using Soviet radiotherapy apparatus] Vagner RI, et al. **Vestn Akad Med Nauk SSSR** 1988;(8):65-9 (Eng. Abstr.) **(Rus)**

[Ambulatory radiation therapy of malignant tumors in children] Goldobenko GV, et al. **Vopr Onkol** 1989; 35(4):457-60 (Eng. Abstr.) **(Rus)**

REHABILITATION

Psychological considerations in rehabilitation of the cancer patient. Grzesiak RC. **Adv Clin Rehabil** 1987;1:268-88 (46 ref.)

Physical rehabilitation of the cancer patient. Pelensky JM. **Adv Clin Rehabil** 1987;1:232-67 (245 ref.)

Pain management in cancer rehabilitation. Wu WH. **Adv Clin Rehabil** 1987;1:289-317 (68 ref.)

Long-term vocational adjustment of cancer patients diagnosed during adolescence. Tebbi CK, et al. **Cancer** 1989 Jan 1;63(1):213-8

The nurse's role in cancer rehabilitation. Review of the literature. Anderson JL. **Cancer Nurs** 1989 Apr;12(2):85-94 (64 ref.)

Sexual rehabilitation of the cancer patient. Smith DB. **Cancer Nurs** 1989 Feb;12(1):10-5

Negotiating concrete needs: short-term training for high-risk cancer patients. Wool MS, et al. **Health Soc Work** 1989 Aug;14(3):184-95 (31 ref.)

[Inpatient rehabilitation treatment of malignant neoplasm--an epidemiologic study] Neumann G. **Off Gesundheitswes** 1988 Nov;50(11):613-25 (Eng. Abstr.) **(Ger)**

[Quality of life in cancer patients] Takeda F. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 1):752-8 (Eng. Abstr.) **(Jpn)**

[The quality of life of cancer patients after radical treatment] Blinov NN, et al. **Vopr Onkol** 1989;35(6):643-8 (38 ref.) **(Rus)**

[Methods of evaluating work capacity rehabilitation of cancer patients] Donskaia LV, et al. **Vopr Onkol** 1988; 34(10):1199-205 (Eng. Abstr.) **(Rus)**

SECONDARY

Imaging pattern of previously in vitro sensitized and interleukin-2 expanded autologous lymphocytes in human cancer. Mukherji B, et al. **Int J Rad Appl Instrum [B]** 1988; 15(4):419-27

Cancer chemotherapy: ethical dilemmas [letter] Van Scoy-Mosher MB. **J Clin Oncol** 1989 May;7(5):687

Effect of unlabelled monoclonal antibody (MoAb) on biodistribution of 111indium labelled (MoAb). Lamki LM, et al. **Nucl Med Commun** 1988 Aug;9(8):553-64

[Solid tumors as secondary neoplasms in patients treated for Hodgkin's disease] Lalowicz I, et al. **Pol Tyg Lek** 1988 Jul 11;43(28):903-5 (Eng. Abstr.) **(Pol)**

SECRETION

Chromogranins--new sensitive markers for neuroendocrine tumors. Eriksson B, et al. **Acta Oncol** 1989;28(3):325-9

Growth hormone-releasing hormone-producing tumors: clinical, biochemical, and morphological manifestations. Sano T, et al. **Endocr Rev** 1988 Aug;9(3):357-73 (106 ref.)

Secretion of pancreatic secretory trypsin inhibitor by cultured human carcinoma cells. Ogawa M, et al. **J Med** 1988;19(1):13-9

Seven lessons from seven renin secreting tumors. Corvol P, et al. **Kidney Int Suppl** 1988 Sep;25:S38–44 (37 ref.)
Insulin–like growth factor II and the riddle of tumor–induced hypoglycemia [editorial] Axelrod L, et al. **N Engl J Med** 1988 Dec 1;319(22):1477–9

SURGERY

Bone marrow autotransplantation. Armitage JO, et al. **Am J Med** 1989 Feb;86(2):203–6 (47 ref.)
Adjustment to amputation among adolescent oncology patients. Tebbi CK, et al. **Am J Pediatr Hematol Oncol** 1989 Fall;11(3):276–80
Surgical oncology. **Ann Acad Med Singapore** 1988 Jan; 17(1):1–155
Surgical oncology [editorial] Nambiar R. **Ann Acad Med Singapore** 1988 Jan;17(1):1–2
Does transfusion modify the outcome of cancer resections? [editorial] Kirschner PA. **Ann Thorac Surg** 1989 Mar; 47(3):336–7
The decision in pediatrics to go ahead with bone marrow transplant for a pediatric malignancy. Trigg ME. **Bone Marrow Transplant** 1986 Dec;1(2):111–4 (0 ref.)
The future of lasers in cancer therapy [editorial] Bown SG. **Br J Hosp Med** 1988 Sep;40(3):161
Surgical considerations in the management of the immunocompromised patient. Kaiser LR, et al. **Crit Care Clin** 1988 Jan;4(1):193–208 (56 ref.)
Surgically implanted subcutaneous venous access devices in cancer patients. Repelaer van Driel OJ, et al. **Neth J Surg** 1988 Jun;40(4):97–9
Microvascular applications in limb sparing tumor surgery. Hausman M. **Orthop Clin North Am** 1989 Jul;20(3):427–37 (52 ref.)
Pediatric surgical oncology. **Prog Pediatr Surg** 1989;22:1–180
Tumour related lower limb amputation: a 23 year experience. Jain AS, et al. **Prosthet Orthot Int** 1989 Aug;13(2):82–5
Principles and potential of palliative surgery in patients with advanced cancer. Forbes JF. **Recent Results Cancer Res** 1988;108:134–42 (6 ref.)
Surgical supportive care in pediatric oncology. Plaschkes J. **Recent Results Cancer Res** 1988;108:148–53 (9 ref.)
Surgical issues in geriatric oncology. Patterson WB. **Semin Oncol** 1989 Feb;16(1):57–65 (44 ref.)
State of the art of lasers in oncologic surgery. Aronoff BL. **Semin Surg Oncol** 1989;5(1):3–5
[Omentoplasty in oncologic surgery] Zaloudík J, et al. **Rozhl Chir** 1988 Dec;67(12):797–803 (Eng. Abstr.) **(Cze)**
[Oncologic surgery; the role of the surgeon in the treatment of the patient with cancer] Hoekstra HJ, et al. **Ned Tijdschr Geneeskd** 1988 Nov 26;132(48):2211–4 **(Dut)**
[Recent technologic developments facilitating the treatment of surgical endocrine lesions] Proye C. **Helv Chir Acta** 1989 Apr;55(6):777–81 (8 ref.) **(Fre)**
[Practical goals of data processing in tumor surgery] Hermanek P, et al. **Chirurg** 1989 Feb;60(2):78–82 (10 ref.) **(Ger)**
[The surgical treatment of patients treated with cytostatic chemotherapy] Schlag P, et al. **Chirurg** 1989 Apr; 60(4):295–300 (21 ref.) (Eng. Abstr.) **(Ger)**
[New technics in cancer surgery (editorial)] Schreiber HW. **Laryngorhinootologie** 1989 May;68(5):271 **(Ger)**
[Proceedings of the Surgical Oncology Section of the East German Society of Surgery. 1st meeting. 6 November 1987, Rostock] **Zentralbl Chir** 1988;113(16):1072–9 **(Ger)**
[Northwest German Surgery Association. 140 meeting. 3–5 December 1987, Hamburg. Abstracts] **Zentralbl Chir** 1988; 113(17):1116–35 **(Ger)**
[Classification and evaluation of oncologic prognosis and risk factors] Seifart W. **Zentralbl Chir** 1989;114(10):629–38 (Eng. Abstr.) **(Ger)**
[Increases in the modified surgery in early cancers] Kasai N, et al. **Gan No Rinsho** 1988 Aug;34(10):1508–10 (Eng. Abstr.) **(Jpn)**
[Modified surgical treatment of tumors] Nishi M. **Gan No Rinsho** 1988 Aug;34(10):1505–7 (Eng. Abstr.) **(Jpn)**
[On the activity of the Japanese Research Society for Surgical Cancer Immunology] Orita K. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):912–8 (Eng. Abstr.) **(Jpn)**
[Surgical stress and immunosuppression in cancer patients] Toge T, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):1115–21 (Eng. Abstr.) **(Jpn)**
[Effect of anesthesia and surgery on immunity in patients with benign and malignant diseases] Hosokawa T, et al. **Masui** 1989 Mar;38(3):343–9 (Eng. Abstr.) **(Jpn)**
[Evaluation of reduction surgery] **Nippon Gan Chiryo Gakkai Shi** 1988 Apr 20;23(4):932–9 **(Jpn)**
[Delayed primary operation of solid tumors in children] Ohnuma N, et al. **Nippon Geka Gakkai Zasshi** 1988 Nov; 89(11):1914–9 (Eng. Abstr.) **(Jpn)**
[Surgical treatment of malignant neoplasms in children] Sawaguchi S, et al. **Nippon Geka Gakkai Zasshi** 1988 Nov; 89(11):1763–8 (10 ref.) **(Jpn)**
[Emergency surgery in oncology practice] Davydov MI, et al. **Klin Med (Mosk)** 1988 Oct;66(10):89–91 **(Rus)**
[Methodological aspects of the combined treatment of malignant tumors] Trapeznikov NN, et al. **Vestn Akad Med Nauk SSSR** 1988;(6):4–8 (Eng. Abstr.) **(Rus)**
[Effect of ketalar on the hypophyseo–adrenal system and glucose–insular homeostasis in children with malignant neoplasms] Iagubov RS. **Vestn Khir** 1987 Dec;139(12):63–6 (Eng. Abstr.) **(Rus)**
[Damage to the major vessels during surgical interventions in patients with cancer] Vasiutkov VIa. **Vopr Onkol** 1988; 34(12):1485–9 (Eng. Abstr.) **(Rus)**
[Principles of surgery in childhood neoplasms] Morales J, et al. **An Esp Pediatr** 1988 Sep;29 Suppl 32:89–92 **(Spa)**

THERAPY

Immunosuppressive effects of blood transfusion in anaesthesia and surgery. Salo M. **Acta Anaesthesiol Scand Suppl** 1988; 89:26–34 (82 ref.)
Interferons. Alm GV. **Acta Chir Scand Suppl** 1989;549:35–9 (39 ref.)
Immunotherapy of tumors with monoclonal antibodies. Lindholm L. **Acta Chir Scand Suppl** 1989;549:46–9 (0 ref.)
Interactions of cytokines in the host. Lundholm K. **Acta Chir Scand Suppl** 1989;549:31–4 (38 ref.)
Stereotactic mesencephalic tractotomy in the treatment of chronic cancer pain. Frank F, et al. **Acta Neurochir (Wien)** 1989;99(1–2):38–40
Intraoperative radiotherapy in the multidisciplinary treatment of pediatric tumors. A preliminary report on initial results. Calvo FA, et al. **Acta Oncol** 1989;28(2):257–60
Clinical effects of interferon therapy with special emphasis on antitumor efficacy. Strander HA. **Acta Oncol** 1989; 28(3):355–62 (70 ref.)
Monoclonal antibodies as new antitumor agents. Griffin TW, et al. **Adv Biotechnol Processes** 1989;11:335–58 (81 ref.)
Immunotoxins: monoclonal antibody–toxin conjugates—a new approach to cancer therapy. Lord JM, et al. **Adv Biotechnol Processes** 1989;11:193–211
Eradication of cancer metastasis by tumoricidal macrophages. Fidler IJ. **Adv Exp Med Biol** 1988;233:415–23
Treatment of malignant disease in AIDS patients. Volberding P. **Aids** 1988;2 Suppl 1:S169–75 (75 ref.)
Cardiopulmonary toxicity of adoptive immunotherapy. Glauser FL, et al. **Am J Med Sci** 1988 Dec;296(6):406–12 (75 ref.)
Totally implantable central venous access for cancer patients in Singapore. Tan YO, et al. **Ann Acad Med Singapore** 1988 Jan;17(1):142–4
Integrating modalities in cancer management. Tattersall MH. **Ann Acad Med Singapore** 1988 Jan;17(1):120–3 (11 ref.)
Interleukin–2 and lymphokine activated killer cells: promises and cautions. Glassman AB. **Ann Clin Lab Sci** 1989 Jan–Feb;19(1):51–5 (12 ref.)
Understanding the biology of non–mhc–restricted cytotoxicity: toward new approaches in the treatment of cancer? Michon JM, et al. **Ann Inst Pasteur Immunol** 1988 Jul–Aug;139(4):433–5
Parenteral nutrition in patients receiving cancer chemotherapy. American College of Physicians. **Ann Intern Med** 1989 May 1;110(9):734–6 (25 ref.)
Monoclonal antibodies for treating cancer. Dillman RO. **Ann Intern Med** 1989 Oct 1;111(7):592–603 (235 ref.)
Effects of bacterially synthesized recombinant human granulocyte–macrophage colony–stimulating factor in patients with advanced malignancy. Lieschke GJ, et al. **Ann Intern Med** 1989 Mar 1;110(5):357–64
In vivo biologic activities of recombinant human granulocyte–macrophage colony–stimulating factor. Vadhan–Raj S, et al. **Ann N Y Acad Sci** 1989;554:231–40
The combination of radiotherapy and chemotherapy. Tubiana M. **Antibiot Chemother** 1988;41:1–10 (37 ref.)
Active immunization of human cancer with tumor cell–associated carbohydrate antigen. Adachi M, et al. **Anticancer Res** 1989 Mar–Apr;9(2):309–12
Viral oncolysates in cancer treatment: immunological mechanisms of action (review). Ioannides CG, et al. **Anticancer Res** 1989 May–Jun;9(3):535–44 (92 ref.)
A new regimen of interleukin 2 and lymphokine–activated killer cells. Efficacy without significant toxicity. Eberlein TJ, et al. **Arch Intern Med** 1988 Dec;148(12):2571–6
Plasma ultrafiltration as cancer therapy. Wile A. **Arch Surg** 1989 Feb;124(2):222–4
Modifications of plasma lipids, lipoproteins and apolipoproteins in advanced cancer patients treated with recombinant interleukin–2 and autologous lymphokine–activated killer cells. Malmendier CL, et al. **Atherosclerosis** 1988 Oct;73(2–3):173–80
Role of monoclonal antibodies in the therapy of solid tumours. Tjandra JJ, et al. **Aust N Z J Surg** 1988 Nov; 58(11):843–9 (45 ref.)
Therapeutic decision–making in clinical oncology: a matter of perspective. Kearsley JH. **Australas Radiol** 1989 Feb; 33(1):4–7
Bone marrow transplantation: major advance in cancer therapy. Leff RS, et al. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 2):A83–6 (31 ref.)
Expression of messenger RNA for GM–CSF by blood mononuclear cells after allogeneic bone marrow transplantation. Atkinson K, et al. **Behring Inst Mitt** 1988 Aug;(83):330–4
How much progress has been achieved in cancer therapy? Helson L. **Biomed Pharmacother** 1988;42(10):629–34
Isolation and storage of peripheral blood hematopoietic stem cells for autotransplantation into children with cancer. Takaue Y, et al. **Blood** 1989 Sep;74(4):1245–51
Therapeutic uses of interleukin–2 and lymphokine–activated killer (LAK) cells. Richards JM. **Blood Rev** 1989 Jun; 3(2):110–9 (109 ref.)
Conventional and complementary treatment for cancer [letter] **BMJ** 1989 Jun 10;298(6687):1583
Terminal care at home for children with cancer. Chambers EJ, et al. **BMJ** 1989 Apr 8;298(6678):937–40
Conventional and complementary treatment for cancer. Cosh J, et al. **BMJ** 1989 May 6;298(6682):1200–1
Counselling for patients with cancer. Fallowfield LJ. **BMJ** 1988 Sep 17;297(6650):727–8
Consensus on cancer therapy [letter] [published erratum appears in 1988 Nov 5;297(6657):1199] Newling D. **BMJ** 1988 Oct 8;297(6653):919–20
Consensus on overtreating cancer [editorial] Smith T. **BMJ** 1988 Aug 13;297(6646):438 (0 ref.)
Cost versus benefit in non–surgical management of patients with cancer. Timothy AR, et al. **BMJ** 1988 Aug 13; 297(6646):471–2 (4 ref.)
Veno–occlusive disease of the liver following high–dose chemotherapy and autologous bone marrow transplantation in children with solid tumors: incidence, clinical course and outcome. Brugieres L, et al. **Bone Marrow Transplant** 1988 Jan;3(1):53–8
Harvesting marrow for autologous transplantation from patients with malignancies. Kessinger A, et al. **Bone Marrow Transplant** 1987 Jun;2(1):15–8
CFU–GEMM correlate with neutrophil and platelet recovery in patients receiving autologous marrow transplantation after high–dose melphalan chemotherapy. Roodman GD, et al. **Bone Marrow Transplant** 1987 Aug; 2(2):165–73
Peripheral blood stem cell autotransplantation in treatment of childhood cancer. Watanabe T, et al. **Bone Marrow Transplant** 1989 May;4(3):261–5
The size of clinical trials in cancer research—what are the current needs? Medical Research Council Cancer Therapy Committee. Freedman LS. **Br J Cancer** 1989 Mar; 59(3):396–400
Clinical trials in cancer: the role of surrogate patients in defining what constitutes an ethically acceptable clinical experiment. Mackillop WJ, et al. **Br J Cancer** 1989 Mar; 59(3):388–95
The clinical potential of interleukin–2. Oliver RT. **Br J Cancer** 1988 Oct;58(4):405–9 (82 ref.)
Survival, response and immune effects in a prospectively randomized study of dose strategy for alpha–N1 interferon. Silver HK, et al. **Br J Cancer** 1988 Dec;58(6):783–7
Interferon therapy—molecular mechanisms and clinical applications. Proceedings of a satellite symposium held at the 4th European Conference on Clinical Oncology and Cancer Nursing. Madrid, Spain, 1st–4th November 1987. **Br J Clin Pract Symp Suppl** 1988 Mar;62:1–26
Adjuvant treatment of minimal residual tumors. A comparison of chemotherapy and immunotherapy. Mathé G, et al. **Bull Soc Sci Med Grand Duche Luxemb** 1989 Mar–Apr;126(1):75–92 (193 ref.)
Macrobiotic diets for the treatment of cancer. **CA** 1989 Jul–Aug;39(4):248–51
Unproven methods of cancer management. International Association of Cancer Victors and Friends, Inc. **CA** 1989 Jan–Feb;39(1):58–9
Unorthodox cancer medicine [letter] **CA** 1989 Jan–Feb; 39(1):62–3
Quality assurance in the care of the cancer patient [editorial] Holleb AI. **CA** 1989 Jul–Aug;39(4):197–200
Unorthodox cancer medicine of early osteopathic medicine [letter] Schnier MS. **CA** 1989 Jan–Feb;39(1):63–4
Hyperalimentation in cancer. Souba WW, et al. **CA** 1989 Mar–Apr;39(2):105–14 (42 ref.)
Assuring quality cancer care in an evolving health care delivery system. Winchester DP. **CA** 1989 Jul–Aug; 39(4):201–5
American College of Surgeons/American Cancer Society Workshop on Quality Assurance in Cancer Care. Chicago, Illinois, August 25–27, 1988. Proceedings. **Cancer** 1989 Jul 1;64(1 Suppl):205–347
Interleukin–2 enhances biopterins and catecholamines production during adoptive immunotherapy for various cancers. Baker H, et al. **Cancer** 1989 Sep 15;64(6):1226–31
Patient evaluation studies of the Commission on Cancer of the American College of Surgeons. Cady B. **Cancer** 1989 Jul 1;64(1 Suppl):226–39; discussion 240–3
The social implications of questionable cancer therapies. Cassileth BR. **Cancer** 1989 Apr 1;63(7):1247–50
Continuity of care issues for cancer patients and families. Conkling VK. **Cancer** 1989 Jul 1;64(1 Suppl):290–4; discussion 298–301
A phase I clinical trial of recombinant human tumor necrosis factor. Creagan ET, et al. **Cancer** 1988 Dec 15; 62(12):2467–71
Pain experience and pain management among hospitalized cancer patients. A clinical study. Dorrepaal KL, et al. **Cancer** 1989 Feb 1;63(3):593–8
A model for oncology clinical indicators. Enck RE. **Cancer** 1989 Jul 1;64(1 Suppl):306–9; discussion 314–6
Favorable cytogenetic abnormalities in secondary leukemia. Fenaux P, et al. **Cancer** 1989 Jun 15;63(12):2505–8
Multidisciplinary treatment planning. Tumor boards. Fleming ID. **Cancer** 1989 Jul 1;64(1 Suppl):279–81; discussion 282–4
Therapy: state–of–the–art assessment of quality. The National Cancer Institute perspective. Ford LG. **Cancer** 1989 Jul 1;64(1 Suppl):219–222; discussion 240–3

Third party concerns. Hertenstein RD. **Cancer** 1989 Jul 1; 64(1 Suppl):319; discussion 320–3
Medical staff enforcement. Dilemmas and decisions. McAfee RE. **Cancer** 1989 Jul 1;64(1 Suppl):317–8; discussion 320–3
Lung function following treatment of malignant tumors with surgery, radiotherapy, or cyclophosphamide in childhood. A follow-up study after 11 to 27 years. Mäkipernaa A, et al. **Cancer** 1989 Feb 15;63(4):625–30
Joint Commission plans for clinical indicator development for oncology. Marder RJ. **Cancer** 1989 Jul 1;64(1 Suppl):310–3; discussion 314–6
Methodologic approaches to quality care evaluation. Miransky LJ. **Cancer** 1989 Jul 1;64(1 Suppl):302–5; discussion 314–6
A phase I study of interleukin-2 in children with cancer and evaluation of clinical and immunologic status during therapy. A Pediatric Oncology Group Study. Nasr S, et al. **Cancer** 1989 Aug 15;64(4):783–8
Patients' perception of their care. Ouellette Kobasa SC. **Cancer** 1989 Jul 1;64(1 Suppl):295–7; discussion 298–301
Scope of quality of care for cancer patients. Wells SA Jr. **Cancer** 1989 Jul 1;64(1 Suppl):216–8; discussion 240–3
Caring for elderly cancer patients. Quality assurance considerations. Yancik R, et al. **Cancer** 1989 Jul 1;64(1 Suppl):335–41; discussion 342–5
A phase I clinical trial of recombinant human tumor necrosis factor given daily for five days. Creaven PJ, et al. **Cancer Chemother Pharmacol** 1989;23(3):186–91
Pharmacokinetics of cisplatin in patients receiving interleukin-2-containing treatment regimens. Gandara DR, et al. **Cancer Chemother Pharmacol** 1989;24(2):135–6
High-dose combination cyclophosphamide, cisplatin, and melphalan with autologous bone marrow support. A clinical and pharmacologic study. Peters WP, et al. **Cancer Chemother Pharmacol** 1989;23(6):377–83
Recent advances in the preclinical and clinical immunopharmacology of interleukin-2: emphasis on IL-2 as an immunorestorative agent. Hadden JW. **Cancer Detect Prev** 1988;12(1–6):537–52 (121 ref.)
Biological response modifiers in cancer therapeutics: potentialities and limitations. Mihich E. **Cancer Detect Prev** 1988;12(1–6):531–5 (13 ref.)
Augmentation of the generation of lymphokine-activated killer cells after a single dose of mitomycin C in cancer patients. Nanbara S, et al. **Cancer Immunol Immunother** 1989;29(4):237–41
Interleukin-2. **Cancer Invest** 1989;7(1):103
Susceptibility of human and murine drug-resistant tumor cells to the lytic activity of rIL2-activated lymphocytes (LAK). Gambacorti-Passerini C, et al. **Cancer Metastasis Rev** 1988 Dec;7(4):335–45 (27 ref.)
PDQ—a database of clinical trials and cancer treatment information. Perry DJ, et al. **Cancer Metastasis Rev** 1988 Nov;7(3):209–21 (7 ref.)
Establishing a cancer caregivers program. An interdisciplinary approach. Cawley MM, et al. **Cancer Nurs** 1988 Oct;11(5):267–73 (14 ref.)
Phase I study of difluoromethylornithine in combination with recombinant alpha 2a-interferon [published erratum appears in Cancer Res 1989 Feb 15;49(4):1073] Edmonson JH, et al. **Cancer Res** 1988 Nov 15;48(22):6584–6
Appearance and phenotypic characterization of circulating Leu 19+ cells in cancer patients receiving recombinant interleukin 2. Ellis TM, et al. **Cancer Res** 1988 Nov 15; 48(22):6597–602
Biological response modifiers: the new immunotherapy. Foon KA. **Cancer Res** 1989 Apr 1;49(7):1621–39 (321 ref.)
Activation of tumoricidal properties in monocytes from cancer patients following intravenous administration of liposomes containing muramyl tripeptide phosphatidylethanolamine. Kleinerman ES, et al. **Cancer Res** 1989 Aug 15;49(16):4665–70
Cytokine gene expression during the generation of human lymphokine-activated killer cells: early induction of interleukin 1 beta by interleukin 2. Kovacs EJ, et al. **Cancer Res** 1989 Feb 15;49(4):940–4
High-dose cyclophosphamide or melphalan with escalating doses of mitoxantrone and autologous bone marrow transplantation for refractory solid tumors. Mulder PO, et al. **Cancer Res** 1989 Aug 15;49(16):4654–8
Phase I trial of human lymphoblastoid interferon with whole body hyperthermia in advanced cancer. Robins HI, et al. **Cancer Res** 1989 Mar 15;49(6):1609–15
Phase I trial of lonidamine with whole body hyperthermia in advanced cancer. Robins HI, et al. **Cancer Res** 1988 Nov 15;48(22):6587–92
Influence of schedule of interleukin 2 administration on therapy with interleukin 2 and lymphokine activated killer cells. Thompson JA, et al. **Cancer Res** 1989 Jan 1; 49(1):235–40
Enhancement of human lymphokine-activated killer cell cytoiysis and a method for increasing lymphokine-activated killer cell yields to cancer patients. Yannelli JR, et al. **Cancer Res** 1988 Oct 15;48(20):5696–700
Growth factors as novel therapeutic targets in neoplastic disease. Greig R, et al. **Cancer Surv** 1988;7(4):653–74 (118 ref.)
Proceedings of the First Interleukin-2 International Symposium. Amsterdam, The Netherlands, 11–12 November 1988. **Cancer Treat Rev** 1989 Jun;16 Suppl A:1–176
IL-2: a review of current knowledge. Oldham RK, et al. **Cancer Treat Rev** 1989 Jun;16 Suppl A:5–13 (20 ref.)
Immunotherapy with interleukin-2 by constant infusion with and without adoptive cell transfer and with weekly doxorubicin. Paciucci PA, et al. **Cancer Treat Rev** 1989 Jun;16 Suppl A:67–81
Clinical immunotherapy studies in the Surgery Branch of the U.S. National Cancer Institute: brief review. Rosenberg SA. **Cancer Treat Rev** 1989 Jun;16 Suppl A:115–21 (12 ref.)
Continuous infusion recombinant interleukin-2 (rIL-2) in adoptive cellular therapy of renal carcinoma and other malignancies. West WH. **Cancer Treat Rev** 1989 Jun;16 Suppl A:83–9
A proposition for a rational nomenclature of tumor evolution for rational treatment steps: past results work-up of so-called "adjuvant therapies" and rational perspectives. Mathé G. **Chemioterapia** 1987 Jun;6(2 Suppl):708–9
Thrombosis: the major Hickman catheter complication in patients with solid tumor. Anderson AJ, et al. **Chest** 1989 Jan;95(1):71–5
Clinical trials for clinicians. Gelber RD, et al. **Chest** 1989 Jul;96(1 Suppl):97S–101S
Effects of interleukin-2 on oxygen delivery and consumption in patients with advanced malignancy. Silverman HJ, et al. **Chest** 1988 Oct;94(4):816–21
Tumor-derived activated cells: preliminary laboratory and clinical results. Oldham RK, et al. **Clin Chem** 1989 Aug; 35(8):1576–80
Has hyperthermia a place in cancer treatment? Dunlop PR, et al. **Clin Radiol** 1989 Jan;40(1):76–82 (79 ref.)
Therapeutic properties of biological response modifiers. A discussion of preclinical and clinical studies. Talmadge JE. **Contrib Gynecol Obstet** 1989;17:49–62 (49 ref.)
The cellular immunotherapy of cancer: current and potential uses of interleukin-2. Sondel PM, et al. **CRC Crit Rev Oncol Hematol** 1989;9(2):125–47 (200 ref.)
Admitting cancer patients to the intensive care unit. Carlon GC. **Crit Care Clin** 1988 Jan;4(1):183–91 (38 ref.)
Drug-monoclonal antibody conjugates for cancer therapy: potentials and limitations. Pimm MV. **Crit Rev Ther Drug Carrier Syst** 1988;5(3):189–227 (173 ref.)
Microbial agents in cancer treatment. Clark JW. **Curr Probl Dermatol** 1989;18:277–82 (9 ref.)
Interventional radiology in oncology. Delcour CP, et al. **Eur J Cancer Clin Oncol** 1988 May;24(5):815–9 (51 ref.)
Adoptive immunotherapy of cancer with macrophages: current approaches and further prospects. Keller R. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):599–601 (11 ref.)
Doxorubicin-anti-carcinoembryonic antigen immunoconjugate activity in vitro. Richardson VJ, et al. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):633–40
Tolerance and effectiveness of recombinant interleukin-2 (r-met Hu IL-2 [ala-125]) and lymphokine-activated killer cells in patients with metastatic solid tumors. Stahel RA, et al. **Eur J Cancer Clin Oncol** 1989 Jun;25(6):965–72
The relationship between the unmodified initial tissue pH of human tumours and the response to combined radiotherapy and local hyperthermia treatment. van den Berg AP, et al. **Eur J Cancer Clin Oncol** 1989 Jan;25(1):73–8
Hyperthermia in cancer therapy. Otte J. **Eur J Pediatr** 1988 Aug;147(6):560–9 (126 ref.)
Oncogene-associated tumor antigens as targets for immunotherapy. Hellström KE, et al. **FASEB J** 1989 Apr; 3(6):1715–22 (65 ref.)
Bleeding prophylaxis in autologous bone marrow transplantation for solid tumors. Comparison of cryopreserved autologous and fresh allogeneic single-donor platelets. Mulder PO, et al. **Haemostasis** 1989; 19(2):120–4
Rapid and complete hemopoietic reconstitution following combined transplantation of autologous blood and bone marrow cells. A changing role for high dose chemo-radiotherapy? Gianni AM, et al. **Hematol Oncol** 1989 Mar-Apr;7(2):139–48
Curative strategies for advanced solid tumors. **Hematol Oncol Clin North Am** 1988 Sep;2(3):337–493
The use of liposomes as drug carriers in the immunotherapy of cancer. Fidler IJ. **Horiz Biochem Biophys** 1989;9:213–48 (75 ref.)
Trends in paediatric oncology and potential endocrine sequelae. Morris Jones PH. **Horm Res** 1988;30(2–3):121–3
SAR distributions for 915 MHz interstitial microwave antennas used in hyperthermia for cancer therapy. Jones KM, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):851–7
Local immunotherapy of cancer with interleukin 2. Bubeník J. **Immunol Lett** 1989 Jun 15;21(4):267–73 (38 ref.)
Pinocchio cells: morphologically atypical immunologically heterogeneous lymphocytes induced by treatment with interleukin 2. Paciucci PA, et al. **Immunol Lett** 1988 Dec; 19(4):313–20
The dilemmas of immunotherapy. Vaage J. **Immunol Lett** 1989 Jun 15;21(4):275
Immunotherapy of cancer using interleukin 2: current status and future prospects. Rosenberg SA. **Immunol Today** 1988 Feb;9(2):58–62 (68 ref.)
Immunotherapy with lymphokine combinations. Mulé JJ, et al. **Important Adv Oncol** 1989;:99–126 (156 ref.)
Secondary acute leukemia—review of 15 cases. Venugopal P, et al. **Indian J Cancer** 1988 Dec;25(4):251–60
Cancer corner. Dugan WM Jr. **Indiana Med** 1988 Dec; 81(12):1046
Clinical application of cascade filtration combined with glassbead adsorbents in cancer patients. Shiozaki S, et al. **Int J Artif Organs** 1989 Jun;12(6):400–4
Side-effects of monoclonal antibody infusions for the diagnosis and treatment of cancer. van der Linden EF, et al. **Int J Biol Markers** 1988 Jul–Sep;3(3):147–53 (78 ref.)
In vitro thermo-chemosensitivity screening of spontaneous human tumors: significant potentiation for cisplatin but not adriamycin. Calabro A, et al. **Int J Cancer** 1989 Mar 15; 43(3):385–90
Advances in the applications of monoclonal antibodies in clinical oncology. Proceedings of the 5th international meeting. London, UK, 25–27 May 1988. **Int J Cancer Suppl** 1988;3:1–103
Effect of immunopotentialization on rate of vaginal smear normalization according to appearance of cervical intraepithelial neoplasia. Klimek R, et al. **Int J Gynaecol Obstet** 1989 Jan;28(1):41–4
Stability of temperatures during hyperthermia treatments. Engler MJ, et al. **Int J Hyperthermia** 1989 Jan–Feb; 5(1):59–67
A phase I/II study of combined cisplatin and hyperthermia treatment for refractory malignancy. Green DM, et al. **Int J Hyperthermia** 1989 Jan–Feb;5(1):13–21
Quality assurance guidelines for ESHO protocols. Hand JW, et al. **Int J Hyperthermia** 1989 Jul–Aug;5(4):421–8
Noninvasive microwave phased arrays for local hyperthermia: a review. Magin RL, et al. **Int J Hyperthermia** 1989 Jul–Aug;5(4):429–50 (94 ref.)
Practical interstitial method of heating operating at 27.12 MHz. Marchal C, et al. **Int J Hyperthermia** 1989 Jul–Aug; 5(4):451–66
A concept of thermal dose is urgently needed for the clinical application of hyperthermia [letter] Roizin-Towle L. **Int J Hyperthermia** 1989 Jul–Aug;5(4):557–9
Treatment of malignant ascites and pleurisy by a streptococcal preparation OK-432 with fresh frozen plasma—a mechanism of polymorphonuclear leukocyte (PMN) accumulation. Kato H, et al. **Int J Immunopharmacol** 1989;11(2):117–28
Chemical modifiers of cancer treatment. Part 2. Paris, France, 21–25 March 1988. Proceedings of the 6th international congress. **Int J Radiat Oncol Biol Phys** 1989 May; 16(5):1125–345
Chemical modifiers of cancer treatment. Part I. Paris, France, 21–25 March 1988. Proceedings of the 6th international congress. **Int J Radiat Oncol Biol Phys** 1989 Apr; 16(4):885–1122
Chemical manipulations of tissue oxygenation for therapeutic benefit. Guichard M. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1125–30 (55 ref.)
Energy as well as applicator size and shape utilized in over 200 intraoperative electron beam procedures. McCullough EC, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct; 15(4):1041–2
Glutathione modulation in cancer treatment: will it work? Mitchell JB, et al. **Int J Radiat Oncol Biol Phys** 1989 May; 16(5):1289–95 (44 ref.)
The multi-dose clinical tolerance and pharmacokinetics of the combined radiosensitizers, Ro 03–8799 (pimonidazole) and SR 2508 (etanidazole). Newman HF, et al. **Int J Radiat Oncol Biol Phys** 1988 Nov;15(5):1073–83
If we can't define the quality, can we assure it? [editorial] Oleson JR. **Int J Radiat Oncol Biol Phys** 1989 Mar; 16(3):879
Improved coupling of ultrasound hyperthermia applicators to patients. Oleson JR, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):609–12
Tumor temperature distributions predict hyperthermia effect. Oleson JR, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar; 16(3):559–70
Quality assurance problems in clinical hyperthermia and their impact on therapeutic outcome: a Report by the Radiation Therapy Oncology Group. Perez CA, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):551–8
Reply to editorial by James Oleson, M.D., PH.D. [letter] Perez CA. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):881
Regional hyperthermia for advanced tumors: a clinical study of 353 patients. Petrovich Z, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):601–7
Interaction of bleomycin and hyperthermia--results of a clinical pilot study. Pilepich MV, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):211–3
A proposed standard data file format for hyperthermia treatments. Sapareto SA, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):613–27
Scanned focussed ultrasound hyperthermia: initial clinical results. Shimm DS, et al. **Int J Radiat Oncol Biol Phys** 1988 Nov;15(5):1203–8
Hyperthermia quality assurance guidelines. Shrivastava P, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):571–87
Optimization of the absorbed power distribution for an annular phased array hyperthermia system. Strohbehn JW, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):589–99
Important prognostic factors influencing outcome of combined radiation and hyperthermia. Valdagni R, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):959–72 (75 ref.)
A general ICU in an anticancer institute: does it work? [letter] Fassoulaki A, et al. **Intensive Care Med** 1988;15(1):63–4
5-Fluorouracil radiation sensitization—a brief review. Byfield JE. **Invest New Drugs** 1989 Apr;7(1):111–6 (21 ref.)
Monoclonal antibodies for cancer therapy. Catane R, et al.

Isr J Med Sci 1988 Sep-Oct;24(9-10):471-6 (50 ref.)
Management and supportive care of ambulatory cancer patients. Rosenbaum EH, et al. **Isr J Med Sci** 1988 Sep-Oct; 24(9-10):628-30
Therapy related malignancies [letter] Saikia TK, et al. **J Assoc Physicians India** 1988 Oct;36(10):621-2
Therapeutic murine monoclonal antibodies developed for individual cancer patients. Avner BP, et al. **J Biol Response Mod** 1989 Feb;8(1):25-36
Phase I study of recombinant gamma-interferon (rIFN-gamma). Boman BM, et al. **J Biol Response Mod** 1988 Oct;7(5):438-46
Phase I trial of recombinant interleukin-2 and recombinant beta-interferon in refractory neoplastic diseases. Paolozzi F, et al. **J Biol Response Mod** 1989 Apr;8(2):122-39
Systemic administration of recombinant methionyl human interleukin-2 (Ala 125) to cancer patients: clinical results. Sarna GP, et al. **J Biol Response Mod** 1989 Feb;8(1):16-24
A phase I trial of interferon-alpha-2a plus cyclophosphamide, vincristine, prednisone, and doxorubicin. Schiller JH, et al. **J Biol Response Mod** 1989 Jun;8(3):252-61
Therapeutic applications of antiidiotypic antibodies. Sikorska HM. **J Biol Respor.se Mod** 1988 Aug;7(4):327-58 (287 ref.)
Phase I study of 24-hour continuous intravenous infusion of recombinant human tumor necrosis factor. Steinmetz T, et al. **J Biol Response Mod** 1988 Oct;7(5):417-23
Phase I study of the combination of alpha-2 interferon and cisplatinum. Walsh C, et al. **J Biol Response Mod** 1989 Feb;8(1):11-5
Transient decrease in IL-2-responsive lymphocytes 24 hours after initiation of continuous IL-2 infusion in cancer patients. Weil-Hillman G, et al. **J Biol Response Mod** 1988 Oct;7(5):424-37
Effector characteristics of the IgG3 murine monoclonal antibody 113F1. Weiner LM, et al. **J Biol Response Mod** 1989 Jun;8(3):227-37
Immunotherapy: basic research and clinical outlook. Atzpodien J. **J Cancer Res Clin Oncol** 1988;114(6):653-4
Evaluation of natural killer and lymphokine-activated killer (LAK) cell activity in vivo in patients treated with high-dose interleukin-2 and adoptive transfer of autologous LAK cells. Walewski J, et al. **J Cancer Res Clin Oncol** 1989;115(2):170-4
The neuroendocrine effects of interleukin-2 treatment. Denicoff KD, et al. **J Clin Endocrinol Metab** 1989 Aug; 69(2):402-10
Phase II trial of outpatient interleukin-2 in malignant lymphoma, chronic lymphocytic leukemia, and selected solid tumors. Allison MA, et al. **J Clin Oncol** 1989 Jan; 7(1):75-80
Hemorrhagic cystitis following high-dose chemotherapy and bone marrow transplantation in children with malignancies: incidence, clinical course, and outcome. Brugieres L, et al. **J Clin Oncol** 1989 Feb;7(2):194-9
A phase I clinical trial of recombinant interleukin-2 by periodic 24-hour intravenous infusions. Creekmore SP, et al. **J Clin Oncol** 1989 Feb;7(2):276-84
Hemopoietins in oncology: factoring out myelosuppression. Griffin JD. **J Clin Oncol** 1989 Feb;7(2):151-5 (38 ref.)
Interleukin-2 therapy of human cancer: potential benefits versus toxicity. Herberman RB. **J Clin Oncol** 1989 Jan; 7(1):1-4
Hematopoietic responses in patients with advanced malignancy treated with recombinant human granulocyte-macrophage colony-stimulating factor. Herrmann F, et al. **J Clin Oncol** 1989 Feb;7(2):159-67
Cardiorespiratory effects of immunotherapy with interleukin-2. Lee RE, et al. **J Clin Oncol** 1989 Jan; 7(1):7-20
A prospective study of Hickman/Broviac catheters and implantable ports in pediatric oncology patients. Mirro J Jr, et al. **J Clin Oncol** 1989 Feb;7(2):214-22
Recombinant interleukin-2 by continuous infusion and adoptive transfer of recombinant interleukin-2-activated cells in patients with advanced cancer. Paciucci PA, et al. **J Clin Oncol** 1989 Jul;7(7):869-78
Human tumor infiltrating lymphocytes. Analysis of lymphokine mRNA expression and relevance to cancer immunotherapy. Belldegrun A, et al. **J Immunol** 1989 Jun 15;142(12):4520-6
Activation of eosinophils in cancer patients treated with IL-2 and IL-2-generated lymphokine-activated killer cells. Silberstein DS, et al. **J Immunol** 1989 Mar 15;142(6):2162-7
Biological approaches to cancer therapy. Thomas H, et al. **J Int Med Res** 1989 May-Jun;17(3):191-204 (56 ref.)
Enhancement of indoleamine 2,3-dioxygenase activity in cancer patients receiving interferon-beta Ser. Carlin JM, et al. **J Interferon Res** 1989 Apr;9(2):167-73
A phase I study of human natural interferon-beta in cancer patients. Liberati AM, et al. **J Interferon Res** 1989 Jun; 9(3):339-48
Induced proteins in human peripheral mononuclear cells over a range of clinically tolerable doses of interferon-gamma. Paulnock DM, et al. **J Interferon Res** 1989 Aug;9(4):457-73
What's new in cancer therapy. KMA annual meeting. September 26-29, Lexington. Program and abstracts. **J Ky Med Assoc** 1988 Aug;86(8):449-79
Childhood cancer clinical trials and regional tumor registries. Bertolone SJ, et al. **J Ky Med Assoc** 1988 Aug;86(8):415-7
Electric field distributions of waveguide arrays for local tumor hyperthermia. Becerra C, et al. **J Microw Power Electromagn Energy** 1988;23(4):247-54
Do we need a new end point in clinical trials today? [letter] **J Natl Cancer Inst** 1989 Jul 19;81(14):1105-7
Gene transfer trial approved [news] Antoine F, et al. **J Natl Cancer Inst** 1989 Feb 15;81(4):257-8
Hypodermoclysis for the administration of fluids and narcotic analgesics in patients with advanced cancer [letter] Bruera E, et al. **J Natl Cancer Inst** 1989 Jul 19;81(14):1108-9
Human biologic response modification by interferon in the absence of measurable serum concentrations: a comparative trial of subcutaneous and intravenous interferon-beta serine. Goldstein D, et al. **J Natl Cancer Inst** 1989 Jul 19; 81(14):1061-8
Use of prophylactic antibiotics for prevention of intravascular catheter-related infections in interleukin-2-treated patients. Hartmann LC, et al. **J Natl Cancer Inst** 1989 Aug 2; 81(15):1190-3
Delivery of novel therapeutic agents in tumors: physiological barriers and strategies. Jain RK. **J Natl Cancer Inst** 1989 Apr 19;81(8):570-6 (33 ref.)
Clinical use of recombinant human hematopoietic growth factors. Laver J, et al. **J Natl Cancer Inst** 1989 Sep 20; 81(18):1370-82 (118 ref.)
Combining chemotherapy with biological response modifiers in treatment of cancer. Mitchell MS. **J Natl Cancer Inst** 1988 Nov 16;80(18):1445-50 (48 ref.)
Quality of life end points in cancer clinical trials: review and recommendations. Moinpour CM, et al. **J Natl Cancer Inst** 1989 Apr 5;81(7):485-95 (94 ref.)
Quality of life assessment in cancer clinical trials--it's time to catch up [editorial] Skeel RT. **J Natl Cancer Inst** 1989 Apr 5;81(7):472-3
Studies confirm value of IL-2/LAK treatment [news] Wittenberg C. **J Natl Cancer Inst** 1989 May 10;81(10):732-3
Growth factors, act II: movement into and through clinical trials [news] Ziegler J. **J Natl Cancer Inst** 1989 Jun 21; 81(12):888-90
The application of preoperative radiation therapy for unresectable malignancies. Ashayeri E, et al. **J Natl Med Assoc** 1988 Aug;80(8):883-8
Immune therapy of cancer. Calhoon EL. **J Okla State Med Assoc** 1988 Nov;81(11):679-82
Cancer pain control in China. Chen ML. **J Palliat Care** 1989 Jun;5(2):29-31
Cancer: present challenges. Epp J. **J Palliat Care** 1989 Jun; 5(2):26-8
Volunteers and patient support. Fraser R, et al. **J Palliat Care** 1989 Jun;5(2):52-5
The four essentials. McCorkle R. **J Palliat Care** 1988 May; 4(1-2):59-61
Pain management. MacDonald N. **J Palliat Care** 1989 Jun; 5(2):40-7
Family dynamics in the achievement of symptom control. McWhinney IR. **J Palliat Care** 1989 Jun;5(2):37-9
Cancer pain control in Africa (state of the art). Minja BM. **J Palliat Care** 1989 Jun;5(2):31-4
Cancer care: toward a global ethics [editorial] Roy DJ. **J Palliat Care** 1989 Jun;5(2):3-5
Ethical issues in the treatment of cancer patients. Roy DJ. **J Palliat Care** 1989 Jun;5(2):56-61
Cancer pain control in Canada: the Montebello strategy. Scott JF, et al. **J Palliat Care** 1989 Jun;5(2):34-7
The therapeutic equivalence of oral and subcutaneous/intramuscular morphine sulphate in cancer patients. Twycross RG. **J Palliat Care** 1988 May; 4(1-2):67-8
How it can be done: a pilot project in comprehensive home cancer treatment. Vinciguerra V. **J Palliat Care** 1988 May; 4(1-2):53-5
Measuring symptoms in terminal cancer: are pain and dyspnoea controlled? Higginson I, et al. **J R Soc Med** 1989 May;82(5):264-7
New intraoperative brachytherapy techniques for positive or close surgical margins. Nori D, et al. **J Surg Oncol** 1989 Sep;42(1):54-9
Thermal dose-response of magnetic-induction thermoradiotherapy. Storm FK, et al. **J Surg Oncol** 1988 Oct;39(2):79-83
Whole-body hyperthermia. Rationale and potential use for cancer treatment. Page RL, et al. **J Vet Intern Med** 1987 Jul-Sep;1(3):110-20 (56 ref.)
Gene-transfer study approval awaits more data [news] Marwick C. **JAMA** 1988 Nov 18;260(19):2783
The clinical efficacy of intratumoral OK-432 administration in advanced cancer patients. Toge T, et al. **Jpn J Surg** 1988 Nov;18(6):668-74
Cardiopulmonary resuscitation in cases of malignant disease [letter] Hendrick JM, et al. **Lancet** 1988 Dec 24-31; 2(8626-8627):1501
ICRF appeals [letter] Price LA. **Lancet** 1988 Dec 17; 2(8625):1429
Cancer immunotherapy: current status of treatment with interleukin 2 and lymphokine-activated killer cells. van Haelst-Pisani CM, et al. **Mayo Clin Proc** 1989 Apr; 64(4):451-65 (111 ref.)
Autolymphocyte therapy. Osband M, et al. **Med Hypotheses** 1988 Aug;26(4):259-62
Successful whole body hyperthermia for cancer. Rosen P. **Med Hypotheses** 1989 May;29(1):45-6
The importance of splenectomy for the adoptive immunotherapy of cancer. Schwarz RE, et al. **Med Hypotheses** 1989 Mar;28(3):165-8
Clinical applications of tumour markers. Newlands ES. **Med Lab Sci** 1987 Oct;44(4):361-70 (28 ref.)
Rational use of biological response modifiers in cancer and related diseases. Transactions from the sixth international San Rocco Cancer Symposium. Pavia, Italy, 11-22 September 1988. **Med Oncol Tumor Pharmacother** 1989; 6(1):1-113
Role of biological response modifiers in the treatment of tumors [editorial] Reizenstein P. **Med Oncol Tumor Pharmacother** 1989;6(1):1
Clinical evaluation of treatment with interferon. Strander H. **Med Oncol Tumor Pharmacother** 1989;6(1):87-91 (21 ref.)
Malignancy in the neonate. Crom DB, et al. **Med Pediatr Oncol** 1989;17(2):101-4
Dosimetry models for radioimmunotherapy. Langmuir VK, et al. **Med Phys** 1988 Nov-Dec;15(6):867-73
Targeted cytotoxic cells as a novel form of cancer immunotherapy. Segal DM, et al. **Mol Immunol** 1988 Nov; 25(11):1099-103
Recombinant GM-CSF in myelosuppression of chemotherapy [letter] **N Engl J Med** 1989 Jan 26; 320(4):253-4
Hypothyroidism and tumor regression [letter] Hercbergs A. **N Engl J Med** 1988 Nov 17;319(20):1351-2
Teenage cancer patients [letter] Carr-Gregg M. **N Z Med J** 1989 Jun 28;102(870):324
Medical research: who minds the minders? [letter] Poutasi KO. **N Z Med J** 1989 Feb 22;102(862):86
Cancer and the young adult [letter] Starr A. **N Z Med J** 1989 Jun 28;102(870):324
Marilyn Finkler Symposium on Future Trends in Research on AIDS, Cancer and Therapies. Israel, July 1-2, 1987. Proceedings. **Nat Immun Cell Growth Regul** 1988; 7(3):128-92
New clinical trials with interleukin-2: rationale for regional administration. Roth AD, et al. **Nat Immun Cell Growth Regul** 1989;8(3):153-64 (48 ref.)
Human gene therapy now on the way [news] Ezzell C. **Nature** 1988 Dec 15;336(6200):611
US scepticism about big new cancer research campaign [news] Palca J. **Nature** 1988 Oct 13;335(6191):578
Biological approaches to the treatment of cancer. Goey SH, et al. **Neth J Med** 1988 Aug;33(1-2):41-7 (34 ref.)
Incidence and effects of herpes simplex virus infection after autologous bone marrow transplantation for solid tumours. Mulder PO, et al. **Neth J Med** 1989 Apr;34(3-4):126-31
English abstracts of proceedings of the twenty-sixth Congress of the Japan Society for Cancer Therapy. Niigata, Sept. 29, 30, Oct. 1, 1988. **Nippon Gan Chiryo Gakkai Shi** 1989 Feb 20;24(2):149-577
The mathematical framework essential for magneto-therapy in the treatment of genomic and associated disorders, including cancer, AIDS, and CNS regeneration. Jacobson JI. **Panminerva Med** 1989 Jan-Mar;31(1):1-7
Monoclonal antibodies in cancer therapy. Favrot MC, et al. **Pathol Biol (Paris)** 1989 Feb;37(2):99-100
Treatment of malignancy with unmodified antibody. Badger CC, et al. **Pathol Immunopathol Res** 1987;6(5-6):419-34 (114 ref.)
Adoptive therapies: quo vadis? Clark JW, et al. **Pathol Immunopathol Res** 1988;7(6):442-58 (79 ref.)
Immunological effects of adoptive immunotherapy with IL-2: an overview. Kradin R, et al. **Pathol Immunopathol Res** 1988;7(6):434-41 (36 ref.)
Toxicity of immunotherapy with interleukin-2 and lymphokine-activated killer cells. Mier JW, et al. **Pathol Immunopathol Res** 1988;7(6):459-76 (67 ref.)
Dental management of children with cancer. Berkowitz RJ, et al. **Pediatr Ann** 1988 Nov;17(11):715-25 (52 ref.)
Adoptive cancer immunotherapy utilizing lymphokine activated killer cells and gamma interferon activated killer monocytes. Lacerna LV Jr, et al. **Pharmacol Ther** 1988; 38(3):453-65 (89 ref.)
Hyperthermic oncology: current biology, physics and clinical results. Meyer JL, et al. **Pharmacol Ther** 1989;42(2):251-88 (178 ref.)
What can we do for the child with malignant disease? Craft A. **Practitioner** 1988 May 23;232(1449):584-9
Cancer treatment--what's new? Sikora K, et al. **Practitioner** 1988 Oct 22;232(1456 (Pt 2)):1146-50 (7 ref.)
Hybrid antibodies for therapy. Clark M, et al. **Prog Allergy** 1988;45:31-49 (57 ref.)
Growth factor receptors as targets for antitumor therapy with monoclonal antibodies. Mendelsohn J. **Prog Allergy** 1988;45:147-60 (58 ref.)
Transferrin receptor as a potential therapeutic target. Trowbridge IS. **Prog Allergy** 1988;45:121-46 (103 ref.)
Prediction of response to cancer therapy. Proceedings of a symposium held at the XVth International Chemotherapy Congress. Istanbul, Turkey, July 19-24, 1987. Proceedings. **Prog Clin Biol Res** 1988;276:1-309
The cancer program product line: can primary diagnosis be used as an estimate. Baum HM, et al. **Prog Clin Biol Res** 1988;278:203-10
Thymic hormone in the treatment of cancer. Dardeene M, et al. **Prog Clin Biol Res** 1989;288:363-82 (77 ref.)
The use of clinical data to predict response to therapy. Freireich EJ. **Prog Clin Biol Res** 1988;276:227-35
Fundamentals of active specific immunotherapy of cancer using BCG-tumor cell vaccines. Hanna MG Jr, et al. **Prog Clin Biol Res** 1989;310:51-65 (26 ref.)
Experimental and clinical studies with active specific

immunotherapy. Livingston PO. **Prog Clin Biol Res** 1989; 288:309–21 (58 ref.)

Cancer control research in the North Central Cancer Treatment Group (NCCTG). Loprinzi CL, et al. **Prog Clin Biol Res** 1989;293:345–53

The cancer program product line emerges. Mortenson LE. **Prog Clin Biol Res** 1988;278:199–202

A research nurse: enhancing participation in clinical trials. O'Halloran LJ, et al. **Prog Clin Biol Res** 1989;293:355–60

"Lymphokine activated killing" as treatment for human cancer: clinical extrapolations from laboratory studies with interleukin-2 expanded leukocytes. Sondel PM, et al. **Prog Clin Biol Res** 1989;288:151–60 (23 ref.)

Current status of interferon therapy in oncology. Roth MS, et al. **Prog Hematol** 1987;15:19–38 (139 ref.)

Vascular access. Holmes SJ, et al. **Prog Pediatr Surg** 1989; 22:133–9

Definitive treatment for the elderly person with cancer [editorial] Aronson SM. **R I Med J** 1988 Oct;71(10):373–4

The Brown University Cancer and Aging Study: a statewide cooperative investigation. Study provides insights into the appropriate management of cancer in the elderly. Mor V, et al. **R I Med J** 1988 Oct;71(10):379–86

Practical aspects of ferromagnetic thermoseed hyperthermia. Brezovich IA, et al. **Radiol Clin North Am** 1989 May; 27(3):589–602 (28 ref.)

Interstitial thermoradiotherapy. Coughlin CT, et al. **Radiol Clin North Am** 1989 May;27(3):577–88 (48 ref.)

Historical aspects of hyperthermia in cancer therapy. Hornback NB. **Radiol Clin North Am** 1989 May;27(3):481–8

Clinical experience with thermotron RF-8 capacitive heating for bulky tumors: University of Minnesota experience. Lee CK, et al. **Radiol Clin North Am** 1989 May;27(3):543–58

Advanced ultrasonic techniques for local tumor hyperthermia. Lele PP. **Radiol Clin North Am** 1989 May; 27(3):559–75 (22 ref.)

Microwave hyperthermia. Principles and quality assurance. Paliwal BR, et al. **Radiol Clin North Am** 1989 May; 27(3):489–97 (19 ref.)

Clinical trials with local (external and interstitial) irradiation and hyperthermia. Current and future perspectives. Perez CA, et al. **Radiol Clin North Am** 1989 May;27(3):525–42 (53 ref.)

Whole body hyperthermia in the treatment of neoplastic disease. Robins HI, et al. **Radiol Clin North Am** 1989 May; 27(3):603–10 (53 ref.)

Clinical considerations in the use of external microwaves for local hyperthermia. Steeves RA. **Radiol Clin North Am** 1989 May;27(3):519–24 (18 ref.)

Clinical hyperthermia and chemotherapy. Storm FK. **Radiol Clin North Am** 1989 May;27(3):621–7 (33 ref.)

AIDS: incidence and management of malignant disease. Munro AJ, et al. **Radiother Oncol** 1989 Feb;14(2):121–31 (47 ref.)

Supportive care in cancer patients. St. Gallen, Switzerland, February 18–21, 1987. Proceedings. **Recent Results Cancer Res** 1988;108:1–342

Preclinical hyperthermia. **Recent Results Cancer Res** 1988; 109:1–261

Cancer clinical trials: a critical appraisal. Third Heidelberg Symposium. February 1987, Freiburg. Proceedings. **Recent Results Cancer Res** 1988;111:1–272

A modular approach to quality-of-life assessment in cancer clinical trials. Aaronson NK, et al. **Recent Results Cancer Res** 1988;111:231–49

Statistical properties and use of sequential methods in randomized clinical trials when the response criterion is censored. Bénichou J, et al. **Recent Results Cancer Res** 1988;111:207–15

The use of data bases and historical controls in treatment comparisons. Byar DP. **Recent Results Cancer Res** 1988; 111:95–8

Individual cases and the scientific method—a conflict? Legal aspects of cancer clinical trials in the Federal Republic of Germany. Eberbach WH. **Recent Results Cancer Res** 1988;111:185–90

Preclinical hyperthermia in human tumors: introductory remarks. Engelhardt R. **Recent Results Cancer Res** 1988; 109:170–2

Therapeutic benefit from combined heat and radiation. Hill SA, et al. **Recent Results Cancer Res** 1988;109:28–34

Intrinsic thermosensitivity of various human tumors. Hinkelbein W, et al. **Recent Results Cancer Res** 1988; 109:198–202

The value of small clinical trials. MacRae KD. **Recent Results Cancer Res** 1988;111:191–4 (8 ref.)

Limitations and advantages of meta-analysis in clinical trials. Rockette HE, et al. **Recent Results Cancer Res** 1988; 111:99–104

Treatment by protocol: assessment of gains and losses. Scheurlen H. **Recent Results Cancer Res** 1988;111:87–94

Statistical tools for subset analysis in clinical trials. Simon R. **Recent Results Cancer Res** 1988;111:55–66 (11 ref.)

A critical assessment of approaches to improving the efficiency of cancer clinical trials. Simon R. **Recent Results Cancer Res** 1988;111:18–26 (19 ref.)

A predictive approach to selecting the size of a clinical trial, based on subjective clinical opinion. Spiegelhalter DJ, et al. **Recent Results Cancer Res** 1988;111:195–206

The role of traditional Chinese medicine in supportive care of cancer patients. Sun Y. **Recent Results Cancer Res** 1988; 108:327–34 (8 ref.)

Public information and professional education about cancer. van der Linde F. **Recent Results Cancer Res** 1988; 108:319–26

Microcirculatory and pH alterations in isotransplanted rat and xenotransplanted human tumors associated with hyperthermia. Vaupel P, et al. **Recent Results Cancer Res** 1988;109:173–82

Subjective theories on etiology and treatment of cancer. Verres R. **Recent Results Cancer Res** 1988;111:179–84

Supportive care in pediatric oncology. Wagner HP. **Recent Results Cancer Res** 1988;108:301–5 (9 ref.)

Labeled therapy. A gene-transfer experiment may improve a cancer treatment. Beardsley TM. **Sci Am** 1989 Feb; 260(2):24–5

Bloodless coup. Inhibiting blood vessel growth could starve solid tumors. Beardsley TM. **Sci Am** 1989 Aug;261(2):18–9

Gene transfer test: so far, so good [news] Culliton BJ. **Science** 1989 Sep 22;245(4924):1325

Fighting cancer with designer cells [news] Culliton BJ. **Science** 1989 Jun 23;244(4911):1430–3

Cancer vaccines show promise at last [news] Marx JL. **Science** 1989 Aug 25;245(4920):813–5

Protein A immunotherapy in the treatment of cancer: an update. Messerschmidt GL, et al. **Semin Hematol** 1989 Apr; 26(2 Suppl 1):19–24

Photodynamic therapy and bone marrow transplantation. Sieber F, et al. **Semin Hematol** 1989 Jan;26(1):35–9 (33 ref.)

The biological therapy of cancer: a clinical symposium. Dana Point, California, April 8th and 9th, 1988. Proceedings. **Semin Oncol** 1988 Oct;15(5 Suppl 5):1–57

Issues in clinical research. **Semin Oncol** 1988 Oct;15(5):411–90

Recent advances in medical oncology. Proceedings of a symposium. May 20, 1988. New Orleans, Louisiana. **Semin Oncol** 1988 Dec;15(6 Suppl 6):1–43

Biotherapy with interferon—1988. Figlin RA. **Semin Oncol** 1988 Dec;15(6 Suppl 6):3–9 (61 ref.)

Overview of advances in the use of biological proteins in human cancer. Gutterman J. **Semin Oncol** 1988 Oct;15(5 Suppl 5):2–6 (11 ref.)

Serotherapy of cancer. Harris DT, et al. **Semin Oncol** 1989 Jun;16(3):180–98 (167 ref.)

Modification of radiotherapy by radiosensitizers and cancer chemotherapeutic agents. II. Cancer chemotherapeutic agents. Looney WB, et al. **Semin Oncol** 1989 Jun; 16(3):176–9 (26 ref.)

Interleukin-2 in cancer therapy. Parkinson DR. **Semin Oncol** 1988 Dec;15(6 Suppl 6):10–26 (97 ref.)

Principles of biotherapy and its application to the treatment of disseminated renal cancer. O'Connor TE, et al. **Semin Surg Oncol** 1988;4(3):155–60 (27 ref.)

Cancer care—a stress for health professionals. Delvaux N, et al. **Soc Sci Med** 1988;27(2):159–66 (70 ref.)

Challenges for social work as a core profession in cancer services. Black RB. **Soc Work Health Care** 1989;14(1):1–14 (32 ref.)

Comparing the effects of different durations of the same therapy. Freedman LS, et al. **Stat Med** 1988 Oct; 7(10):1013–21

Adjuvant treatment of minimal residual tumors. A comparison of chemotherapy and immunotherapy. Mathé G, et al. **Suppl J Med Oncol Tumor Pharmacother** 1988; 1:75–92 (193 ref.)

The management of advanced malignant disease. Westbury G. **Trans Med Soc Lond** 1986–87;103:16–7

Prospects for the drug treatment of cancer. Chabner BA, et al. **Trans Stud Coll Physicians Phila** 1988 Dec; 10(1–4):103–9

Adoptive immunotherapy in the treatment of malignant disease. Klein HG, et al. **Transfusion** 1989 Feb;29(2):170–8 (60 ref.)

A new procedure for large scale production and freezing of lymphokine activated killer (LAK) cells to be used in adoptive immunotherapy of cancer. Gambacorti-Passerini C, et al. **Tumori** 1988 Oct 31;74(5):523–30

Immunological approaches to cancer treatment [clinical conference] Murgo AJ. **W V Med J** 1989 Jun;85(6):233–8

Clinical cancer: 33. Clinical applications and research advances in marrow transplantation. Ash RC, et al. **Wis Med J** 1988 Nov;87(11):17–21

Clinical cancer: 26. Interventional radiology in cancer. Crummy AB, et al. **Wis Med J** 1988 Sep;87(9):23–6

Clinical cancer: 34. Supportive care of the incurable cancer patient. Kwong RW. **Wis Med J** 1988 Nov;87(11):21–4

Natural killer cells and tumor immunity: 1987. Hiserodt JC, et al. **Year Immunol** 1989;4:201–7 (21 ref.)

[Interleukin and interferon—hope or disappointment?] Vaněček K. **Cesk Pediatr** 1988 Oct;43(10):607–9 (4 ref.) (Eng. Abstr.) **(Cze)**

[Medical treatment of cancer—an elucidating report] Dombernowsky P, et al. **Ugeskr Laeger** 1988 Sep 5; 150(36):2106–13 (Eng. Abstr.) **(Dan)**

[Cancer treatment] Rørth M, et al. **Ugeskr Laeger** 1989 Jan 30;151(5):325–9 **(Dan)**

[Home care for terminal cancer patients (letter)] Peeters-Udding LM. **Ned Tijdschr Geneeskd** 1989 May 20; 133(20):1045 **(Dut)**

[Side effects of monoclonal antibodies in diagnostic and therapeutic applications in cancer] van der Linden EF, et al. **Ned Tijdschr Geneeskd** 1988 Nov 5;132(45):2049–52 (70 ref.) **(Dut)**

[Home care of terminal patients with cancer] van Weel C. **Ned Tijdschr Geneeskd** 1989 Mar 25;133(12):625–7 **(Dut)**

[Interleukin 2, killer cells and cancer] Timonen T. **Duodecim** 1988;104(9):685–9 (30 ref.) **(Fin)**

[Bioethics and cancer research (editorial)] Bernard J. **Bull Cancer (Paris)** 1988;75(8):743–4 **(Fre)**

[Interferons in the treatment of solid tumors. A general review] Dorval T, et al. **Bull Cancer (Paris)** 1988; 75(9):885–8 (Eng. Abstr.) **(Fre)**

[Principles of treatment with cells called "LAK" cells] Hercend T, et al. **Bull Cancer (Paris)** 1988;75(9):879–84 (Eng. Abstr.) **(Fre)**

[Interferons in cancerology. Focus in 1988] Boiron M. **Pathol Biol (Paris)** 1989 Feb;37(2):92–3 **(Fre)**

[Hyperthermia and treatment of cancers] Jasmin C, et al. **Pathol Biol (Paris)** 1989 Feb;37(2):179–80 **(Fre)**

[Intensive chemotherapy and autograft of bone marrow in solid tumors in adults] Maraninchi D, et al. **Pathol Biol (Paris)** 1989 Feb;37(2):170 **(Fre)**

[Radiotherapy and chemotherapy synergy] Reboul F. **Pathol Biol (Paris)** 1989 Feb;37(2):150–1 **(Fre)**

[10 years' experience in ambulatory and hospital consultation in oncology at the Monthey hospital] Wildhaber D. **Rev Med Suisse Romande** 1988 Nov;108(11):941–7 **(Fre)**

[Temperature, pH value, acid load and filtrability of normal human erythrocytes: in vitro studies—possible significance for hyperthermic hyperacidotic tumor therapy] Barnikol WK. **Arch Geschwulstforsch** 1989;59(1):11–7 (Eng. Abstr.) **(Ger)**

[Tumor patients and alternative medicine. Attempt at characterizing users of alternative treatment methods in oncology] Berger DP, et al. **Dtsch Med Wochenschr** 1989 Mar 3;114(9):323–30 (Eng. Abstr.) **(Ger)**

[Oncologic therapy at home: a trial model] Frohmüller S, et al. **Dtsch Med Wochenschr** 1989 Jul 7;114(27):1055–8 (Eng. Abstr.) **(Ger)**

[Home parenteral feeding in advanced tumor diseases] Schauder P, et al. **Dtsch Med Wochenschr** 1989 Sep 8; 114(36):1358–62 (Eng. Abstr.) **(Ger)**

[Treatment of otherwise incurable tumor diseases in childhood using whole-body hyperthermia and chemotherapy] Willnow U, et al. **Dtsch Med Wochenschr** 1989 Feb 10;114(6):208–13 (Eng. Abstr.) **(Ger)**

[Immunologic cancer treatment (letter)] Zeller F. **Dtsch Med Wochenschr** 1989 May 12;114(19):771 **(Ger)**

[Artificial nutrition at home as supportive and palliative tumor therapy] Kolb S, et al. **Fortschr Med** 1988 Jun 30; 106(19):396–9 (Eng. Abstr.) **(Ger)**

[The activation of natural killer cells. A new approach to adoptive immunotherapy of tumors] Schwarz R. **Fortschr Med** 1988 Oct 10;106(29):579–80 **(Ger)**

[Diagnosis: cancer. Age of the patient: 3 years. Parent initiatives in active support of therapeutic efforts] Seidl K. **Fortschr Med** 1989 Jun 20;107(18):88 **(Ger)**

[Interferons—a new treatment principle in oncology?] von Wussow P, et al. **Fortschr Med** 1988 Nov 30;106(34):679–83 (19 ref.) **(Ger)**

[Cytokines in clinical use] Meyer P, et al. **Internist (Berlin)** 1988 Nov;29(11):717–26 (127 ref.) **(Ger)**

[Analysis of oncology patients at a university pediatric clinic—exclusive malignant systemic diseases and brain tumors] Grigo B, et al. **Kinderarztl Prax** 1989 Mar; 57(3):117–22 (Eng. Abstr.) **(Ger)**

[Autologous peripheral stem cell transplantation in children] Emminger W, et al. **Klin Padiatr** 1989 Jul-Aug; 201(4):299–303 (Eng. Abstr.) **(Ger)**

[Indications for autologous bone marrow transplantation in pediatric oncology. Results of the 5th meeting of experts of the Kind-Philipp Foundation, Riesensburg, November 1988] Klingebiel T, et al. **Klin Padiatr** 1989 Jul-Aug; 201(4):304–10 (Eng. Abstr.) **(Ger)**

[Family therapy approach by the pediatric oncology treatment team] Wirsching M. **Klin Padiatr** 1988 May-Jun; 200(3):279–82 (Eng. Abstr.) **(Ger)**

[Alternative tumor therapy] Dold U. **Langenbecks Arch Chir** 1988;Suppl 2:269–74 (0 ref.) (Eng. Abstr.) **(Ger)**

[Update oncology '88: the age of biological factors] Pfreundschuh M. **Med Klin** 1988 Aug 12;83(16):532–8 (0 ref.) **(Ger)**

[Systemic versus local therapy with recombinant tumor necrosis factor-alpha (r-TNF-alpha) in patients with advanced tumors] Bartsch HH, et al. **Onkologie** 1989 Jun; 12(3):136–41 (Eng. Abstr.) **(Ger)**

[A tumor after-care schedule: information content—use—optimization] Hölzel D, et al. **Onkologie** 1988 Oct;11(5):202–10 (28 ref.) (Eng. Abstr.) **(Ger)**

[Transmission of Dusseldorf Integrated Medical Documentation data by a personal computer. A new concept in the flexibility of the Dusseldorf Integrated Medical Documentation system] Paassen A, et al. **Onkologie** 1988 Oct;11(5):242–6 (Eng. Abstr.) **(Ger)**

[Bone marrow transplantation at the Essen University Clinic] Schaefer UW. **Onkologie** 1988;11 Suppl 2:3–8 (Eng. Abstr.) **(Ger)**

[Evaluation of the results of therapy taking into consideration life table methods] Kriester A, et al. **Radiobiol Radiother (Berl)** 1988;29(6):669–74 (Eng. Abstr.) **(Ger)**

[Procedures for the after-care of cancer patients] Schertel L, et al. **Rontgenpraxis** 1989 Apr;42(4):124–9 **(Ger)**

[Autologous bone marrow transfusion in the treatment of

adults with hematologic neoplasms. Experiences from Bern] Brun del Re GP, et al. **Schweiz Med Wochenschr** 1989 Jun 24;119(25):902–10 (Eng. Abstr.) **(Ger)**

[Immunotherapy of tumors using interleukin-2 and lymphokine-activated killer cells] Jost LM, et al. **Schweiz Med Wochenschr** 1988 Feb 4;119(5):137–43 (Eng. Abstr.) **(Ger)**

[Targetted cancer therapy using immunotoxins and receptor-directed toxic drugs] Eberle AN. **Schweiz Rundsch Med Prax** 1989 May 2;78(18):513–4 **(Ger)**

[Compilation and brief summary of the documentation of unproven methods in cancer therapy of the American Cancer Society (ACS) from 1962 to 1985. Document No. 11 (the original of this document is in French)] Jallut O. **Schweiz Rundsch Med Prax** 1989 May 2;78(18):524–31 (Eng. Abstr.) **(Ger)**

[Radiation and hyperthermia in the treatment of superficial and semi-deep tumors: heat profile, heat doses, tumor remission] Feldmann HJ, et al. **Strahlenther Onkol** 1988 Oct;164(10):602–9 (Eng. Abstr.) **(Ger)**

[Computed tomography guided positioning of catheters for temperature measurement in hyperthermia of malignant tumors] Müller RD, et al. **Strahlenther Onkol** 1988 Oct; 164(10):593–601 (Eng. Abstr.) **(Ger)**

[Methods and clinical results of interstitial thermoradiotherapy] Seegenschmiedt MH, et al. **Strahlenther Onkol** 1989 May;165(5):360–8 (25 ref.) (Eng. Abstr.) **(Ger)**

[Hyperthermia in cancer research. Historical development, current status of research, future perspectives and differentiation from alternative medical procedures] Issels R, et al. **Versicherungsmedizin** 1989 Mar 1;41(2):48–53 (Eng. Abstr.) **(Ger)**

[New immunologic methods in cancer therapy] Schumacher K. **Versicherungsmedizin** 1989 Mar 1;41(2):42–8 (67 ref.) (Eng. Abstr.) **(Ger)**

[Interferon therapy in hematologic neoplasms] Schwarzinger I, et al. **Wien Klin Wochenschr** 1988 Aug 5;100(15):497–504 (115 ref.) (Eng. Abstr.) **(Ger)**

[Computer assisted clinical cancer documentation and its use in a multidisciplinary oncologic center] Schott G, et al. **Z Arztl Fortbild (Jena)** 1988;82(11):517–22 **(Ger)**

[Supportive therapy in onco-hematology] István L. **Orv Hetil** 1988 Nov 27;129(48):2559–68 (40 ref.) (Eng. Abstr.) **(Hun)**

[Immunotherapy with high-dose thymostimulin in patients with advanced neoplasms] Marcellino LR, et al. **G Ital Oncol** 1988 Jan–Mar;8(1):45–7 (Eng. Abstr.) **(Ita)**

[Immunotherapy of parenchymal tumors. Recent progress and theoretical considerations] Marincola F, et al. **Minerva Chir** 1988 Jul 31;43(13–14):1111–31 (273 ref.) (Eng. Abstr.) **(Ita)**

[Massive therapy and transplant of autologous bone marrow in childhood lymphomas and solid tumors. State of the art and perspectives] de Terlizzi M, et al. **Pediatr Med Chir** 1988 Jul–Aug;10(4):359–64 (53 ref.) (Eng. Abstr.) **(Ita)**

[Monoclonal antibodies in the diagnosis and therapy of tumors] Baldwin RW, et al. **Ric Clin Lab** 1988;18 Suppl 1:51–61 (47 ref.) **(Ita)**

[The process of neoplastic metastasis and its possible control] Baroni CD. **Ric Clin Lab** 1976 Jan–Mar;6 Suppl 1:79–81 (0 ref.) **(Ita)**

[Hyperthermic therapy of cancer] Egawa S. **Gan No Rinsho** 1989 Jan;Spec No:34–41 **(Jpn)**

[Biological basis for combined radio-chemotherapy in radioresistant tumors] Sasaki T, et al. **Gan No Rinsho** 1988 Oct;34(13):1877–86 (Eng. Abstr.) **(Jpn)**

[Biological response modifiers and cancer treatment] Urushizaki I. **Gan No Rinsho** 1989 Jan;Spec No:25–33 **(Jpn)**

[The 26th Japan Society for Cancer Therapy Symposium] **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):873–1282 **(Jpn)**

[The 26th Japan Society for Cancer Therapy Symposium] **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–2):1283–552 **(Jpn)**

[The 26th Japan Society for Cancer Therapy Symposium] **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–3):1553–967 **(Jpn)**

[Effect of recombinant human granulocyte colony stimulating factor (rhG-CSF) in patients receiving chemotherapy--phase I study] Fukutani H, et al. **Gan To Kagaku Ryoho** 1989 May;16(5):2005–12 (Eng. Abstr.) **(Jpn)**

[Current status of hyperthermia for deep-seated tumors] Hiraoka M, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 1):289–96 (34 ref.) (Eng. Abstr.) **(Jpn)**

[On the behalf of the Japanese Society of Biological Response Modifiers] Ishihara K. **Gan To Kagaku Ryoho** 1989 Apr; 16(4 Pt 2–1):906–11 (Eng. Abstr.) **(Jpn)**

[Information systems to support cancer treatment] Kaihara S, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):873–9 (Eng. Abstr.) **(Jpn)**

[The quality of life of the terminally ill cancer patient—from hospice experience] Kashiwagi T. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):1038–43 (Eng. Abstr.) **(Jpn)**

[Basic and clinical study of adoptive immunotherapy using cytotoxic T lymphocyte (CTL) against cancers] Kitsukawa K. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–2):1448–54 (Eng. Abstr.) **(Jpn)**

[Clinical efficacy of intratumoral administration of BRM in advanced cancer and their mechanism of actions] Kuninobu H, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2769–73 (Eng. Abstr.) **(Jpn)**

[A study to overcome drug resistance using high-dose chemotherapy with autologous bone marrow transplantation] Mukaiyama T, et al. **Gan To Kagaku Ryoho** 1989 May;16(5):2013–8 (Eng. Abstr.) **(Jpn)**

[Cancer treatment in terminal stage] Murakami K, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 1):740–5 (Eng. Abstr.) **(Jpn)**

[Cultivation of human tumor infiltrating lymphocytes for use in adoptive immunotherapy] Sekine T, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–2):1469–73 (Eng. Abstr.) **(Jpn)**

[Evaluation of cancer treatment by autopsy] Sugiyama T, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–3):1937–40 (Eng. Abstr.) **(Jpn)**

[Autologous bone marrow transplantation as a measure against myelosuppression in cancer chemotherapy] Tajima T, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):1085–93 (Eng. Abstr.) **(Jpn)**

[A phase I study of recombinant interleukin 2 (S6820)] Takaku F. **Gan To Kagaku Ryoho** 1988 Dec;15(12):3271–6 (Eng. Abstr.) **(Jpn)**

[Recent trends in cancer treatment using cytokines] Urushizaki I. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):897–905 (41 ref.) (Eng. Abstr.) **(Jpn)**

[The significance and outlook of cytokines in cancer therapy] **Nippon Gan Chiryo Gakkai Shi** 1988 Apr 20;23(4):907–15 **(Jpn)**

[26th meeting of the Japan Society for Cancer Therapy, Niigata, 29 September–1 October 1988. Abstracts] **Nippon Gan Chiryo Gakkai Shi** 1988 Sep 1;23(9 Pt 2):1991–2497 **(Jpn)**

[Abstracts of the 26th meeting of the Japan Society for Cancer Therapy] **Nippon Gan Chiryo Gakkai Shi** 1989 May 20;24(5):1075–222 **(Jpn)**

[Abstracts of the 26th meeting of the Japan Society for Cancer Therapy] **Nippon Gan Chiryo Gakkai Shi** 1989 Mar 20;24(3):653–749 **(Jpn)**

[Abstracts of the twenty-sixth meeting of the Japan Society for Cancer Therapy] **Nippon Gan Chiryo Gakkai Shi** 1989 Apr 20;24(4):827–189 **(Jpn)**

[26th meeting of the Japan Society of Cancer Therapy. Niigata, 29 September–1 October 1988. Program] **Nippon Gan Chiryo Gakkai Shi** 1988 Sep 1;23(9 Pt 1):1807–990 **(Jpn)**

[Hematopoietic recovery after autologous bone marrow transplantation in high-dose chemotherapy of cancer patients] Tokuda Y, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Jan 20;24(1):57–62 (Eng. Abstr.) **(Jpn)**

[Immunotherapy of cancer and immunodeficiency] Aoki T. **Nippon Hinyokika Gakkai Zasshi** 1987 Dec;78(13):2257–8 **(Jpn)**

[Microwave interstitial hyperthermia—fundamental experiments for clinical applications] Aoyagi Y, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jun 25; 48(6):735–48 (Eng. Abstr.) **(Jpn)**

[A clinical investigation of RF inductive hyperthermia with an inductive aperture-type applicator] Furukawa M, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Dec 25; 48(12):1569–71 (Eng. Abstr.) **(Jpn)**

[Symposium on diagnosis and treatment of cancer. Recent progress. II. Treatment of cancer 3. Hyperthermia] Egawa S. **Nippon Naika Gakkai Zasshi** 1987 Nov;76(11):1669–73 (7 ref.) **(Jpn)**

[Symposium on diagnosis and treatment of cancer. Recent progress. II. Treatment of cancer 2. Recent advance in immunotherapy] Urushizaki I. **Nippon Naika Gakkai Zasshi** 1987 Nov;76(11):1663–8 (37 ref.) **(Jpn)**

[Cancer therapy manual (1)] **Nippon Rinsho** 1988 Oct;46 Suppl:1–1072 **(Jpn)**

[Cancer therapy manual (2)] **Nippon Rinsho** 1989 Jan;47 Suppl:3–1285 **(Jpn)**

[Drug delivery system of anticancer agent entrapped in temperature-sensitive liposomes combined with local hyperthermia] Takahashi T, et al. **Nippon Rinsho** 1989 Jun; 47(6):1408–11 **(Jpn)**

[Clinical experience of hyperthermia in malignant tumors] Nakama M, et al. **Rinsho Hoshasen** 1989 Feb;34(2):237–42 (Eng. Abstr.) **(Jpn)**

[Hyperthermia in superficial and shallow seated tumors] Tsukiyama I, et al. **Rinsho Hoshasen** 1988 Dec; 33(13):1653–8 (Eng. Abstr.) **(Jpn)**

[Insurance and cancer] Sundby P. **Tidsskr Nor Laegeforen** 1989 Jan 10;109(1):22 **(Nor)**

[The use of interferon in neoplastic diseases] Cieślińska A. **Pol Tyg Lek** 1988 Jul 11;43(28):923–5 (21 ref.) **(Pol)**

[Use of interleukin 2-activated lymphocytes (LAK cells) in adoptive immunotherapy of neoplasms] Robak T. **Pol Tyg Lek** 1988 Nov 21;43(47):1491–5 **(Pol)**

[Interferon as an antineoplastic drug] Robak T. **Pol Tyg Lek** 1988 Jul 11;43(28):899–902 **(Pol)**

[Use of monoclonal antibodies in the immunotherapy of neoplasms] Robak T. **Przegl Lek** 1989;46(4):420–6 (45 ref.) **(Pol)**

[Use of autologous bone marrow transplants in the treatment of neoplasms] Nieborowska-Skórska M, et al. **Wiad Lek** 1988 Mar 15;41(6):383–9 (13 ref.) (Eng. Abstr.) **(Pol)**

[The cure of cancer: new advances] Pasternak J. **AMB Rev Assoc Med Bras** 1988 Sep–Oct;34(5):147–8 **(Por)**

[Problems related to the treatment of malignant diseases in children] Popescu V, et al. **Rev Pediatr Obstet Ginecol [Pediatr]** 1988 Jul–Sep; 37(3):271–88 (32 ref.) (Eng. Abstr.) **(Rum)**

[Current state of the problem of local hyperthermia in Japan] Matsuda T. **Med Radiol (Mosk)** 1988 Dec;33(12):20–5 (Eng. Abstr.) **(Rus)**

[Engineering aspects of electromagnetic hyperthermia] Saito M. **Med Radiol (Mosk)** 1988 Dec;33(12):14–20 (Eng. Abstr.) **(Rus)**

[Development of a radiofrequency device for heating superficial and deep-seated tumors] Sugahara T. **Med Radiol (Mosk)** 1988 Dec;33(12):10–4 (Eng. Abstr.) **(Rus)**

[Clinical experience in the combined use of hyperthermia and radiotherapy] Takahashi M, et al. **Med Radiol (Mosk)** 1988 Dec;33(12):25–31 (Eng. Abstr.) **(Rus)**

[Ways of solving the problems of the control of malignant neoplasms in the RSFSR] Chissov VI, et al. **Sov Med** 1989; (4):58–61 **(Rus)**

[Biological response modification: a non-alternative approach to the treatment of neoplastic processes of hematopoietic tissue] Svirnovskiĭ AI. **Vestn Akad Med Nauk SSSR** 1989;(4):89–94 (67 ref.) **(Rus)**

[Mechanisms of the antineoplastic action of viruses and the problem of the immunotherapy of tumors] Ferdat AK, et al. **Vopr Onkol** 1988;34(11):1291–300 (68 ref.) **(Rus)**

[Modification of the biologic effects of antineoplastic drugs] Kulik GI. **Vopr Onkol** 1989;35(7):778–86 (52 ref.) **(Rus)**

[Interleukin-2 and cancer immunotherapy] Ogarkov VI, et al. **Vopr Onkol** 1989;35(2):141–50 (40 ref.) **(Rus)**

[The results and prospects of the automated follow-up of the dispensary care of cancer patients] Okeanov AE. **Vopr Onkol** 1988;34(12):1433–8 **(Rus)**

[Thymus hormones in the immunotherapy of malignant neoplasms (a review of the literature)] Nikol'skiĭ IS. **Vrach Delo** 1988 Aug;(8):77–82 (20 ref.) **(Rus)**

[Thyroid function in children treated for malignant diseases] Janić D, et al. **Srp Arh Celok Lek** 1988 Apr;116(4):297–304 (Eng. Abstr.) **(Sec)**

[Bone marrow transplantation in pediatric oncology] Ortega Aramburu JJ. **An Esp Pediatr** 1988 Sep;29 Suppl 32:101–11 **(Spa)**

[Therapeutic perspectives in acquired immunodeficiency syndrome] Liras Martín A. **Med Clin (Barc)** 1988 Jun 4; 91(2):66–70 (26 ref.) **(Spa)**

[The role of medical oncology as a subspecialty of internal medicine in the management of cancer (letter)] Gallardo J, et al. **Rev Med Chil** 1988 Apr;116(4):386–8 **(Spa)**

[Ischemic treatment of cancer—a break-through?] Bengmark S, et al. **Lakartidningen** 1989 May 31;86(22):2087–9 **(Swe)**

[Parenteral nutrition at home as an alternative to hospital care of patients with cancer] Drott C, et al. **Lakartidningen** 1989 Mar 1;86(9):740–3 **(Swe)**

[Treatment of malignant diseases—how should the new methods be tested?] Reizenstein P. **Lakartidningen** 1989 Jul 12;86(28–29):2510 **(Swe)**

TRANSMISSION

Transmission of cancer with donor organs. Penn I. **Transplant Proc** 1988 Oct;20(5):739–40

ULTRASTRUCTURE

Selective use of electron microscopy in fine needle aspiration cytology. Dabbs DJ, et al. **Acta Cytol** 1988 Nov–Dec; 32(6):880–4

Distribution of silver-stained interphase nucleolar organizer regions as a parameter to distinguish neoplastic from nonneoplastic reactive cells in human effusions. Derenzini M, et al. **Acta Cytol** 1989 Jul–Aug;33(4):491–8

Application of Grimelius argyrophil staining to the study of tumour ultrastructure. III. Effects of osmium tetroxide. Soranzo L, et al. **Acta Histochem (Jena)** 1989;86(1):1–14

Application of the AgNOR method to cell imprints [letter] Rüschoff J, et al. **J Pathol** 1989 Aug;158(4):333

Histopathologists, malignancies, and undefined high-power fields [letter] Sadler DW, et al. **Lancet** 1989 Apr 8; 1(8641):785–6

Ultrapath IV (part 1). Ullensvang, Norway, autumn 1988. Proceedings. **Ultrastruct Pathol** 1989 Mar–Jun; 13(2–3):97–339

Cellular junctions in nonepithelial tumors (UP12:389–405, 1988) [letter] Carstens PH. **Ultrastruct Pathol** 1989 Jan–Feb;13(1):90–1

Cytoskeletal proteins including myofilaments in human tumors. Erlandson RA. **Ultrastruct Pathol** 1989 Mar–Jun; 13(2–3):155–86 (220 ref.)

[Nuclear size and differentiation status in normal tissue, preneoplastic lesions, and malignant tumors. Karyometric comparisons with regard to collecting and processing tissue] Borchard F, et al. **Verh Dtsch Ges Pathol** 1988; 72:333–7 (Eng. Abstr.) **(Ger)**

[Possible determination of cell cycle parameters by

Feulgen-DNA cytophotometry from cell nuclei isolated from paraffin-embedded tumor tissue] Szentirmay Z, et al. **Morphol Igazsagugyi Orv Sz** 1988 Jul;28(3):216-24 (Eng. Abstr.) **(Hun)**

[Regions of the nucleolar organizer in cytological and histological diagnosis of malignant neoplasms] Derenzini M, et al. **Recenti Prog Med** 1988 Nov;79(11):463-6 (Eng. Abstr.) **(Ita)**

[Ultrastructural diagnosis of early neoplasia in man] Maruyama K, et al. **Gan No Rinsho** 1988 Aug; 34(10):1273-82 (Eng. Abstr.) **(Jpn)**

URINE

Significant increases in urinary dolichol levels in bacterial infections, malignancies and pregnancy but not in other clinical conditions. Roine R, et al. **Ann Med** 1989 Feb; 21(1):13-6

Increased urinary excretion of cortisol and catecholami-NES in malnourished cancer patients. Drott C, et al. **Ann Surg** 1988 Nov;208(5):645-50

Detection of elevated amounts of urinary pseudouridine in cancer patients by use of a monoclonal antibody. Itoh K, et al. **Clin Chim Acta** 1989 May 31;181(3):305-15

Preparation of a monoclonal antibody specific for 1-methyladenosine and its application for the detection of elevated levels of 1-methyladenosine in urines from cancer patients. Itoh K, et al. **Jpn J Cancer Res** 1988 Oct; 79(10):1130-8

Urinary polyamines in malignancies. Umeki S, et al. **Med Lab Sci** 1988 Jul;45(3):250-4

[The clinical significance of pseudouridine determination of the urine in children and adolescents] Graf N, et al. **Klin Padiatr** 1989 May-Jun;201(3):154-62 (Eng. Abstr.) **(Ger)**

[Inhibition of the antigenicity of a common enterobacterial hapten by the urine of children with cancer] Carrillo J, et al. **Bol Med Hosp Infant Mex** 1988 Sep;45(9):593-9 (Eng. Abstr.) **(Spa)**

VETERINARY

Fibronectin in neoplastic peritoneal effusions in dogs. Feldman BF, et al. **Acta Vet Scand** 1988;29(3-4):273-9

The companion animal as a sentinel for environmentally related human diseases. Garbe PL. **Acta Vet Scand Suppl** 1988;84:290-2

Companion animal epidemiology: its contribution to human medicine. Thrusfield M. **Acta Vet Scand Suppl** 1988; 84:57-65 (35 ref.)

Immunohistochemical staining and radionuclide imaging of canine tumors, using a monoclonal antibody recognizing a synthetic carbohydrate antigen. Haines DM, et al. **Am J Vet Res** 1989 Jun;50(6):875-81

Modulation of receptor levels in canine breast tumors by administration of tamoxifen and etretinate either alone or in combination. Cappelletti V, et al. **Anticancer Res** 1988 Nov-Dec;8(6):1297-301

Anterior pituitary function in female dogs with spontaneous mammary tumors: I. Growth hormone. Rutteman GR, et al. **Anticancer Res** 1989 Jan-Feb;9(1):235-9

Anterior pituitary function in female dogs with mammary tumors: II. Prolactin. Rutteman GR, et al. **Anticancer Res** 1989 Jan-Feb;9(1):241-5

Oestrogen (ER) and progestin receptors (PR) in mammary tissue of the female dog: different receptor profile in non-malignant and malignant states. Rutteman GR, et al. **Br J Cancer** 1988 Nov;58(5):594-9

Histopathologic and dietary prognostic factors for canine mammary carcinoma. Shofer FS, et al. **Breast Cancer Res Treat** 1989 Jan;13(1):49-60

Transmission of hemic neoplasia in the bay mussel, Mytilus edulis, using whole cells and cell homogenate. Elston RA, et al. **Dev Comp Immunol** 1988 Fall;12(4):719-27

Primary teat neoplasia in two yearling heifers. Ford TS, et al. **J Am Vet Med Assoc** 1989 Jul 15;195(2):238-9

Uses of vincristine and vinblastine in dogs and cats. Golden DL, et al. **J Am Vet Med Assoc** 1988 Nov 1;193(9):1114-7 (20 ref.)

Use of radionuclide imaging to identify malignant mammary tumor bone metastases in dogs. Ogilvie GK, et al. **J Am Vet Med Assoc** 1989 Jul 15;195(2):220-2

Studies of animal oncology with relevance to biomedical advances. Theilen GH. **J Am Vet Med Assoc** 1988 Nov 1;193(9):1124-30 (72 ref.)

Oestrogen and progesterone receptors and their relationship to histological grades of epithelial tumours of the magnum region of the oviduct of the domestic fowl. Anjum AD, et al. **J Comp Pathol** 1989 Apr;100(3):275-86

Neoplasia in ferrets: eleven cases with a review. Dillberger JE, et al. **J Comp Pathol** 1989 Feb;100(2):161-76 (39 ref.)

Cisplatin therapy in 41 dogs with malignant tumors. Knapp DW, et al. **J Vet Intern Med** 1988 Jan-Mar;2(1):41-6

Efficacy and toxicity of doxorubicin and cyclophosphamide used in the treatment of selected malignant tumors in 23 cats. Mauldin GN, et al. **J Vet Intern Med** 1988 Apr-Jun; 2(2):60-5

Opening of the Comparative Cancer Center (CCC) [letter] Theilen GH. **J Vet Intern Med** 1989 Jul-Sep;3(3):190

Neoplasms in NIH type II athymic (nude) mice. Sadoff DA, et al. **Lab Anim Sci** 1988 Aug;38(4):407-12

The phenomenon of latent pregnancy and cancer. Jivara E, et al. **Med Hypotheses** 1989 Apr;28(4):215-6

Colonization of a squamous cell carcinoma in the bovine horn core by Aspergillus terreus. Pal M. **Mycoses** 1989 Apr; 32(4):197-9

Participation of myofibroblasts in feline mammary carcinoma. Tateyama S, et al. **Nippon Juigaku Zasshi** 1988 Oct; 50(5):1048-54

Advances in the treatment of cancer. **Semin Vet Med Surg (Small Anim)** 1986 Feb;1(1):1-90

Psychosocial aspects of veterinary clinical oncology. Crow SE. **Semin Vet Med Surg (Small Anim)** 1986 Feb;1(1):84-90

Cancer therapy: radiation and hyperthermia. Gillette EL. **Semin Vet Med Surg (Small Anim)** 1986 Feb;1(1):21-4

Veterinary oncology: what does the future hold? Hardy WD Jr. **Semin Vet Med Surg (Small Anim)** 1986 Feb;1(1):1-4

Prognostic factors in canine mammary tumors. Kurzman ID, et al. **Semin Vet Med Surg (Small Anim)** 1986 Feb; 1(1):25-32

Current concepts in cancer therapy: biologic therapy and chemotherapy. MacEwen EG. **Semin Vet Med Surg (Small Anim)** 1986 Feb;1(1):5-16 (89 ref.)

Surgical oncology: old and new ideas. Withrow SJ. **Semin Vet Med Surg (Small Anim)** 1986 Feb;1(1):17-20

Canine mammary tumour disease: role of hormones in pathogenesis and treatment. Rutteman GR, et al. **Tijdschr Diergeneeskd** 1989 Apr;114 Suppl 1:34S-35S

Mortality, major cause of moribundity, and spontaneous tumors in CD-1 mice. Maita K, et al. **Toxicol Pathol** 1988; 16(3):340-9

Spontaneous tumors in aging (C57BL/6N x C3H/HeN)F1 (B6C3F1) mice. Tamano S, et al. **Toxicol Pathol** 1988; 16(3):321-6

Noninfectious diseases, metabolic diseases, toxicities, and neoplastic diseases of South American camelids. Smith JA. **Vet Clin North Am [Food Anim Pract]** 1989 Mar;5(1):101-43 (78 ref.)

Diagnosis and treatment of cancer in aged animals. Morrison WB. **Vet Clin North Am [Small Anim Pract]** 1989 Jan; 19(1):137-54 (74 ref.)

The impact of pharmacokinetics on cancer chemotherapy. Rosenthal RC. **Vet Clin North Am [Small Anim Pract]** 1988 Nov;18(6):1133-9 (35 ref.)

Sir William Weipers commemorative lecture. Cancer and AIDS; the contribution of comparative medicine. Jarrett WF. **Vet Rec** 1988 Jul 2;123(1):34-6

The combination of surgery and radiation in the treatment of cancer. A review. McLeod DA, et al. **Vet Surg** 1989 Jan-Feb;18(1):1-6 (36 ref.)

Intraoperative irradiation of 16 spontaneously occurring canine neoplasms. Withrow SJ, et al. **Vet Surg** 1989 Jan-Feb;18(1):7-11

Spontaneous tumours of the European hamster (Cricetus cricetus L.). Ernst H, et al. **Z Versuchstierkd** 1989; 32(2):87-96

[Variation of glycosaminoglycan in the growth of transplantable tumors derived from a spontaneous ddY mouse mammary tumor] Yamamoto H, et al. **Jikken Dobutsu** 1989 Jan;38(1):75-9 (Eng. Abstr.) **(Jpn)**

[Spontaneous tumors in monkeys] Beniashvili DSh. **Eksp Onkol** 1989;11(4):9-15 (78 ref.) (Eng. Abstr.) **(Rus)**

[Genetic and oncologic characteristics of CBA/CaLacSto mice] Khar'kovskaia NA, et al. **Eksp Onkol** 1989; 11(4):29-33 (Eng. Abstr.) **(Rus)**

[Spontaneous tumors in mongrel breeding-stock mice and rats from the vivarium of the R. E. Kavetskiĭ Institute for Oncology Problems of the Academy of Sciences of the Ukrainian SSR] Tsapenko VF, et al. **Eksp Onkol** 1988; 10(4):39-43 (Eng. Abstr.) **(Rus)**

NEOPLASMS, CONNECTIVE TISSUE

[Cartilaginous tumors in children] Dumontier C, et al. **Chir Pediatr** 1989;30(2):91-7 (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Primary tumors of the foot: MR imaging. Keigley BA, et al. **Radiology** 1989 Jun;171(3):755-9

EPIDEMIOLOGY

Epidemiology of cancer of the connective tissue in Canada during the period 1950-1985. Ayiomamitis A. **Cancer Detect Prev** 1988;13(3-4):149-56

METABOLISM

Immunohistochemical detection of the c-erbB-2 proto-oncogene product in normal, benign and malignant cartilage tissues. Wrba F, et al. **Histopathology** 1989 Jul; 15(1):71-6

PATHOLOGY

Hypophosphatemic oncogenic osteomalacia: report of three new cases. Papotti M, et al. **Tumori** 1988 Oct 31; 74(5):599-607

NEOPLASMS, DENTAL TISSUE see **ODONTOGENIC TUMORS**

NEOPLASMS, EMBRYONAL AND MIXED

Malignant mixed müllerian tumor of the cervix in a 12-year-old girl. Rodriguez-Escudero FJ, et al. **Eur J Gynaecol Oncol** 1988;9(5):365-9

Extragonadal germ cell tumours. Horňák M, et al. **Int Urol Nephrol** 1988;20(4):395-401

Pulmonary blastoma in a neonate. Jetley NK, et al. **J Pediatr Surg** 1988 Nov;23(11):1009-10

Small round cell tumors. Pritchard DJ. **Orthop Clin North Am** 1989 Jul;20(3):367-75 (23 ref.)

Germ cell tumors of the testicle or 'orchidomata'. Haddad FS, et al. **Urol Int** 1989;44(1):20-4 (66 ref.)

[Malignant mixed müllerian tumor of uterus--report of 3 cases] Chang SY, et al. **Chang Keng I Hsueh** 1988 Jun; 11(2):128-33 (Eng. Abstr.) **(Chi)**

[Malignant mixed müllerian tumor of the fallopian tube--a case report] Chen CJ, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Jul;42(1):75-80 (Eng. Abstr.) **(Chi)**

[Diagnosis and therapy of neuroectodermal tumors] Adolph J, et al. **Radiologe** 1989 Jan;29(1):32-42 (Eng. Abstr.) **(Ger)**

[Mixed müllerian malignant tumors of the endometrium (MMMT). Clinico-pathologic study of 14 cases] Franchi M, et al. **Ann Ostet Ginecol Med Perinat** 1988 Sep-Oct; 109(5):265-71 (35 ref.) (Eng. Abstr.) **(Ita)**

[Extragonadal tumors. Considerations on extragonadal germinal tumors and a description of 1 case] Mencoboni M, et al. **G Clin Med** 1989 Mar;70(3):187-93 (29 ref.) (Eng. Abstr.) **(Ita)**

[A case of chondrosarcoma developing within the metastasis of germ cell tumor of the testis] Turrin A, et al. **Radiol Med (Torino)** 1989 Jun;77(6):711-3 **(Ita)**

[A clinical study of testicular tumors] Matsuki H, et al. **Hinyokika Kiyo** 1988 Oct;34(10):1757-65 (Eng. Abstr.) **(Jpn)**

[A germ cell tumor of an ectopic testis in polyorchidism] Gonchar MA, et al. **Klin Khir** 1989;(5):64-5 **(Rus)**

ANALYSIS

Immunohistochemical demonstration of pancreatic secretory trypsin inhibitor in gynecologic tumors. Ueda G, et al. **Gynecol Oncol** 1989 Jan;32(1):37-40

Monoclonal antibody MB2: a potential marker for Ewing's sarcoma and primitive neuroectodermal tumor. Kahn HJ, et al. **Pediatr Pathol** 1989;9(2):153-62

Malignant round cell tumor of bone with neural differentiation (neuroectodermal tumor). Steiner GC, et al. **Ultrastruct Pathol** 1988 Sep-Oct;12(5):505-12

BLOOD

Carcinoembryonic antigen levels in germ cell tumours. Hitchins RN, et al. **Int J Biol Markers** 1989 Jan-Mar; 4(1):31-4

The diagnostic value of alpha-fetoprotein in an infant with sacrococcygeal teratoma. Johnston PW. **J Pediatr Surg** 1988 Sep;23(9):862-3

COMPLICATIONS

Malignant mixed germ cell tumor of the ovary in a young woman with Smith-Lemli-Opitz syndrome. Patsner B, et al. **Gynecol Oncol** 1989 Jun;33(3):386-8

Extragonadal germ cell tumor in the retrovesical region associated with Klinefelter's syndrome: a case report and review of the literature. Gohji K, et al. **J Urol** 1989 Jan; 141(1):133-6 (14 ref.)

Thromboembolic events during combination chemotherapy for germ cell malignancy [letter] Hall MR, et al. **Lancet** 1988 Nov 26;2(8622):1259

Thromboembolic events and germ cell malignancy [letter] Robinson BA, et al. **Lancet** 1988 Dec 10;2(8624):1372

Testicular malignancy associated with massive inguinal adenopathy and life threatening hemorrhage. Lichtman SM, et al. **N Y State J Med** 1989 Aug;89(8):482-3

[A seldom occurring cause of severe backache in young adult men] Keizer HJ, et al. **Ned Tijdschr Geneeskd** 1988 Oct 1;132(40):1825-6 **(Dut)**

CONGENITAL

Primitive neuroectodermal tumor of the brain associated with malignant rhabdoid tumor of the liver: a histologic, immunohistochemical, and electron microscopic study. Chang CH, et al. **Pediatr Pathol** 1989;9(3):307-19

Congenital pancreatoblastoma in Beckwith-Wiedemann syndrome: an emerging association. Drut R, et al. **Pediatr Pathol** 1988;8(3):331-9 (35 ref.)

DIAGNOSIS

Malignant mixed germ cell tumor of the testis mimicking a hematocele [letter] Sanders LM, et al. **AJR** 1988 Dec; 151(6):1253

Immunohistochemistry of germ cell tumors of the testis. Matoška J. **Arch Geschwulstforsch** 1988;58(6):441-4 (12 ref.)

Disseminated primitive neuroectodermal tumor: diagnosis using immunocytochemistry, electron microscopy, and molecular probes. Pappo AS, et al. **Cancer** 1989 Jun 15; 63(12):2515-21

Echographic aspects of the mixed müllerian tumor of the

endometrium. Mastrantonio P, et al. **Eur J Gynaecol Oncol** 1989;10(1):43–8

MR findings on primitive neuroectodermal tumors. Figeroa RE, et al. **J Comput Assist Tomogr** 1989 Sep–Oct; 13(5):773–8

Intratubular malignant germ cells in testicular biopsies: clinical course and identification by staining for placental alkaline phosphatase. Burke AP, et al. **Mod Pathol** 1988 Nov;1(6):475–9

Bilateral germ cell tumors involving the basal ganglia and thalamus. Kobayashi T, et al. **Neurosurgery** 1989 Apr; 24(4):579–83

Clinical and radiologic analysis of 13 cases of primary neuroectodermal tumors of bone. Rousselin B, et al. **Skeletal Radiol** 1989;18(2):115–20

CT and MR imaging of malignant germ cell tumor of the undescended testis. Lorigan JG, et al. **Urol Radiol** 1989; 11(2):113–7

[Pulmonary blastoma] Anavi B, et al. **Khirurgiia (Sofiia)** 1988; 41(6):19–23 (16 ref.) (Eng. Abstr.) **(Bul)**

[Mixed Müllerian tumors. Apropos of a new case with a review of the literature] Zhiri MA, et al. **Rev Fr Gynecol Obstet** 1989 May;84(5):447–50 (14 ref.) (Eng. Abstr.) **(Fre)**

[Gonadotropin, as a tumor marker, in body fluid and tumor tissues of germ cell tumors] Kurisaka M, et al. **No To Shinkei** 1989 Apr;41(4):353–9 (Eng. Abstr.) **(Jpn)**

DRUG THERAPY

EDTA clearance in monitoring cisplatin dose escalation in patients with bulky metastatic germ cell tumors of the testis. Jelić S, et al. **Acta Oncol** 1988;27(5):541–3

Phase II trial of ifosfamide and mesna in mixed mesodermal tumors of the uterus (a Gynecologic Oncology Group study). Sutton GP, et al. **Am J Obstet Gynecol** 1989 Aug; 161(2):309–12

Cisplatin, vinblastine, and bleomycin in advanced and recurrent ovarian germ-cell tumors. A trial of the Gynecologic Oncology Group. Williams SD, et al. **Ann Intern Med** 1989 Jul 1;111(1):22–7

The effect of intensity of administered treatment on the outcome of germ cell tumours treated with POMB/ACE chemotherapy. Crawford SM, et al. **Br J Cancer** 1989 Feb; 59(2):243–6

Treatment of disseminated germ cell tumours of the testis. Athanassiou A, et al. **Br J Urol** 1989 May;63(5):525–30

Chemotherapy for poor risk germ cell tumours. An independent evaluation of the POMB/ACE regime. Cullen MH, et al. **Br J Urol** 1988 Nov;62(5):454–60

Cisplatin-based chemotherapy does not eliminate the risk of a second testicular cancer. Fosså SD, et al. **Br J Urol** 1989 May;63(5):531–4

Thymic hyperplasia following chemotherapy of a testicular germ cell tumor. Immunohistological evidence for a simple rebound phenomenon. Düe W, et al. **Cancer** 1989 Feb 1; 63(3):446–9

Results of adjuvant chemotherapy for low-stage nonseminomatous germ cell tumors of the testis with vascular invasion. Sandeman TF, et al. **Cancer** 1988 Oct 15;62(8):1471–5

Phase II trial of carboplatin in patients with advanced germ-cell testicular tumors and transitional cell carcinomas of the urinary tract. Akaza H, et al. **Cancer Chemother Pharmacol** 1989;23(3):181–5

Combination chemotherapy in malignant non-seminomatous germ-cell tumors: results of a cooperative study of the German Society of Pediatric Oncology (MAKEI 83). Gobel U, et al. **Cancer Chemother Pharmacol** 1989;24 Suppl 1:S34–9

Effects of antineoplastic treatment of HIV-positive patients with testicular cancer. Damstrup L, et al. **Eur J Cancer Clin Oncol** 1989 Jun;25(6):983–6

Enhanced pulmonary toxicity in smokers with germ-cell cancer treated with cis-platinum, vinblastine and bleomycin: a long-term follow-up. Hansen SW, et al. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):733–6

Intensive induction chemotherapy for poor risk non-seminomatous germ cell tumours. Horwich A, et al. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):177–84

Dose intensity and outcome with combination chemotherapy for germ cell carcinoma. Australasian Germ Cell Trial Group. Levi JA, et al. **Eur J Cancer Clin Oncol** 1989 Jul; 25(7):1073–7

Single agent activity of methotrexate in advanced non-seminomatous testicular germ cell tumours. Smith DB, et al. **Eur J Cancer Clin Oncol** 1988 Nov;24(11):1779–81

Malignant mixed mesodermal tumour of the peritoneum with a complete response to cyclophosphamide. Ohno S, et al. **Eur J Surg Oncol** 1989 Jun;15(3):287–91

Early and long-term toxicity in the management of advanced germ cell testicular tumors. Strohmeyer T, et al. **Eur Urol** 1988;15(3-4):205–8

Platinum-based combination chemotherapy for malignant mixed mesodermal tumors of the ovary. Andersen WA, et al. **Gynecol Oncol** 1989 Mar;32(3):319–22

Tumour markers and POMB/ACE chemotherapy in the management of ovarian germ cell tumours (GCTs). Newlands ES, et al. **Int J Biol Markers** 1988 Jul–Sep; 3(3):185–92

Evaluation of optimal duration of chemotherapy in favorable-prognosis disseminated germ cell tumors: a Southeastern Cancer Study Group protocol. Einhorn LH, et al. **J Clin Oncol** 1989 Mar;7(3):387–91

Raynaud's phenomenon in patients treated with cisplatin, vinblastine, and bleomycin for germ cell cancer: measurement of vasoconstrictor response to cold. Hansen SW, et al. **J Clin Oncol** 1989 Jul;7(7):940–2

Long-term effects on renal function and blood pressure of treatment with cisplatin, vinblastine, and bleomycin in patients with germ cell cancer. Hansen SW, et al. **J Clin Oncol** 1988 Nov;6(11):1728–31

Combination chemotherapy with cisplatin and etoposide for malignant intracranial germ-cell tumors. An experimental and clinical study. Kobayashi T, et al. **J Neurosurg** 1989 May;70(5):676–81

Chemotherapy of a patient because of spuriously elevated alpha-fetoprotein levels. Identification of the responsible factor. Dahlmann N, et al. **Klin Wochenschr** 1989 Apr 3; 67(7):408–12

Thromboembolic events during combination chemotherapy for germ cell-malignancy [letter] Cantwell BM, et al. **Lancet** 1988 Nov 5;2(8619):1086–7

Phase II trial with etoposide (VP16) plus ifosfamide plus high-dose cisplatin (VIhP regimen) in refractory germ cell tumors. Droz JP, et al. **Prog Clin Biol Res** 1989;303:739–47

Ambulatory infusion of bleomycin in patients receiving chemotherapy for germ cell tumors. Green JA, et al. **Sel Cancer Ther** 1989;5(2):93–5

Ifosfamide in testicular cancer: the Indiana University experience. Loehrer PJ Sr, et al. **Semin Oncol** 1989 Feb; 16(1 Suppl 3):96–101

Disseminated testicular cancer: current chemotherapy strategies. Williams SD, et al. **Semin Oncol** 1989 Aug;16(4 Suppl 6):105–9 (18 ref.)

[Role of VP 16 in the treatment of non-seminomatous germ cell tumors of the testis] Bassoulet J, et al. **Therapie** 1988 Jun–Jul;43(4):279–84 (31 ref.) (Eng. Abstr.) **(Fre)**

[Non-testicular germ cell tumors: analysis of the therapy study MAKEI 83/86 anc changes in the protocol for the follow-up study] Göbel U, et al. **Klin Padiatr** 1989 Jul–Aug;201(4):247–60 (Eng. Abstr.) **(Ger)**

[Intracranial germ cell tumors: analysis of the therapy study MAKEI 83/86 and changes in protocol for the follow-up study] Göbel U, et al. **Klin Padiatr** 1989 Jul–Aug; 201(4):261–8 (Eng. Abstr.) **(Ger)**

[Results of the cooperative Malignant Testicular Tumors 82 Study of the German Society of Pediatric Oncology on the therapy of malignant germ cell tumors in childhood] Haas RJ, et al. **Klin Padiatr** 1988 May–Jun;200(3):230–5 (Eng. Abstr.) **(Ger)**

[Primary intracranial, AFP and/or HCG producing tumors with special reference to results of the treatment] Sakai N, et al. **Gan To Kagaku Ryoho** 1988 Dec;15(12):3297–300 **(Jpn)**

[A case report of advanced malignant mixed germ cell tumor of parasellar origin indicating marked efficacy of a salvage combined chemotherapy of CDDP and etoposide and subsequent chemotherapy using oral etoposide] Yuki K, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 1):2651–4 (Eng. Abstr.) **(Jpn)**

[Five cases of primary intracranial germ cell tumor treated by combination chemotherapy with cisplatin] Miyamachi K, et al. **No Shinkei Geka** 1988 Aug;16(9):1053–8 (Eng. Abstr.) **(Jpn)**

ENZYMOLOGY

Elevated lactate dehydrogenase isoenzyme 1 as a tumour marker in patients with germ cell testicular tumours. Winkle DC, et al. **Aust N Z J Surg** 1988 Sep;58(9):737–41

Alkaline phosphatase isozymes in human testicular germ cell tumors, their precancerous stage, and three related cell lines. Hofmann MC, et al. **Cancer Res** 1989 Sep 1; 49(17):4696–700

Serum lactate dehydrogenase isoenzyme 1 as a marker of testicular germ cell tumor. von Eyben FE, et al. **J Urol** 1988 Nov;140(5):986–90

EPIDEMIOLOGY

Testis cancer: post-natal hormonal factors, sexual behaviour and fertility. Swerdlow AJ, et al. **Int J Cancer** 1989 Apr 15;43(4):549–53

The increasing trend in Japan of müllerian mixed tumor of endometrium. Kato T, et al. **Jpn J Clin Oncol** 1988 Dec; 18(4):303–8

[A clinico-statistical study of testicular tumors—a reevaluation of 90 cases at the Nagasaki University Hospital and affiliated hospitals] Nomata K, et al. **Gan No Rinsho** 1988 Aug;34(9):1115–20 (Eng. Abstr.) **(Jpn)**

ETIOLOGY

Embryonal neuroepithelial tumors induced by human adenovirus type 12 in rodents. 2. Tumor induction in the central nervous system. Ogawa K. **Acta Neuropathol (Berl)** 1989;78(3):232–44

Embryonal neuroepithelial tumors induced by human adenovirus type 12 in rodents. 1. Tumor induction in the peripheral nervous system. Ogawa K. **Acta Neuropathol (Berl)** 1989;77(3):244–53

Primitive neuroectodermal tumor presenting as a delayed sequela to cranial irradiation and intrathecal methotrexate. Barasch ES, et al. **Pediatr Neurol** 1988 Nov–Dec;4(6):375–8

GENETICS

Characterization of rearranged Y chromosomes in human testicular tumor cell lines. Arnemann J, et al. **Cancer Genet Cytogenet** 1989 Feb;37(2):141–51

Cytogenetic study of a combined germ cell tumor of the testis. Castedo SM, et al. **Cancer Genet Cytogenet** 1988 Oct 15;35(2):159–65

i(12p)-negative testicular germ cell tumors. A different group? Castedo SM, et al. **Cancer Genet Cytogenet** 1988 Oct 15;35(2):171–8

Chromosome 12q heterozygosity is retained in i(12p)-positive testicular germ cell tumor cells. Geurts van Kessel A, et al. **Cancer Genet Cytogenet** 1989 Jul 1;40(1):129–34

Karyotyping and DNA flow cytometry of an orchidoblastoma. Oosterhuis JW, et al. **Cancer Genet Cytogenet** 1988 Nov;36(1):7–11

HLA typing in familial testicular cancer. Dieckmann KP, et al. **Eur Urol** 1989;16(5):361–5 (44 ref.)

N-myc amplification and neuron-specific enolase production of a neuroblastoma cell line and germ cell tumor cell lines. Ishiwata I, et al. **Gynecol Oncol** 1989 Jun;33(3):356–9

Oncogene expression in small-cell lung cancer cell lines and a testicular germ-cell tumor: activation of the N-myc gene and decreased RB mRNA. Saksela K, et al. **Int J Cancer** 1989 Jul 15;44(1):182–5

Ploidy of primary germ cell tumors of the testis. Pathogenetic and clinical relevance. Oosterhuis JW, et al. **Lab Invest** 1989 Jan;60(1):14–21

Malignant testicular germ cell tumor in father and son: a case report. Crispino S, et al. **Tumori** 1989 Apr 30; 75(2):177–80

[Testicular mixed germ-cell tumors in 2 non-twin brothers: report of a case and review of the literature] Sousa Escandón A, et al. **Actas Urol Esp** 1988 Nov–Dec; 12(6):575–9 (30 ref.) (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Monoclonal antibodies against human germ cell tumors: usefulness as tumor markers and differentiation markers. Hata J, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Aug; 29(4):557–60

Characterization of a human endocrine tissue and tumor-associated Ewing's sarcoma antigen. Hamilton G, et al. **Cancer Res** 1988 Nov 1;48(21):6127–31

Monoclonal antibodies M340 and UJ181.4 recognize antigens associated with primitive neuroectodermal tumours/tissues. Bourne S, et al. **Hybridoma** 1989 Aug;8(4):415–26

METABOLISM

Alpha-fetoprotein in germ cell tumors. An immunohistochemical study. Chaudhary RK, et al. **Indian J Pathol Microbiol** 1989 Jul;32(3):167–73

Pulmonary blastomas. Immunohistochemical investigations of three cases. Dienemann D, et al. **Pathol Res Pract** 1989 Mar;184(3):306–11

[Retroperitoneal germ cell tumors with high level of serum and urine hCG in an adult: a case report] Nakajima Y, et al. **Hinyokika Kiyo** 1989 Feb;35(2):301–5 (Eng. Abstr.) **(Jpn)**

MORTALITY

Prognosis of testicular tumour since the introduction of complex therapy. Frang D, et al. **Int Urol Nephrol** 1989; 21(1):81–9

Gender and survival in neuroblastoma [letter] Brewin TB. **Lancet** 1989 Apr 22;1(8643):909

Parity as prognostic factor for malignant mixed müllerian tumours [letter] Marth C, et al. **Lancet** 1989 Apr 29; 1(8644):957

PATHOLOGY

Malignant melanotic neuroectodermal tumor arising from the pineal body. Ogata A, et al. **Acta Neuropathol (Berl)** 1989; 77(6):654–8

Carcinofibroma—a rare variant of mixed müllerian tumor. Engdahl E, et al. **Acta Obstet Gynecol Scand** 1988; 67(1):85–8

Malignant pleomorphic adenoma (malignant mixed tumor) of the trachea. Report of a case. Hemmi A, et al. **Acta Pathol Jpn** 1988 Sep;38(9):1215–26

Müllerian adenosarcomas of the uterus with sex cord-like elements. A clinicopathologic analysis of eight cases. Clement PB, et al. **Am J Clin Pathol** 1989 Jun;91(6):664–72

A clinical-pathologic study of mixed müllerian tumors of the uterus over a 16-year period—the Medical College of Georgia experience. Gallup DG, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):533–8; discussion 538–9

Hepatoblastoma: an analysis of the relationship between morphologic subtypes and prognosis. Dehner LP, et al. **Am J Pediatr Hematol Oncol** 1988 Winter;10(4):301–7 (23 ref.)

Mediastinal germ cell tumor and acute megakaryoblastic leukemia [letter] Domingo A, et al. **Ann Intern Med** 1989 Sep 15;111(6):539

Angiomyxoma of the umbilical cord with massive cystic degeneration of Wharton's jelly. Yavner DL, et al. **Arch Pathol Lab Med** 1989 Aug;113(8):935–7

Leydig cell mitoses in human testes bearing early germ cell tumors. Lauke H, et al. **Cell Tissue Res** 1989 Mar;

255(3):475–9
Malignant mixed müllerian tumor of uterine corpus. Han CP, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Jul;42(1):53–8
Primitive neuroectodermal tumors of the cerebrum: a histological and immunohistochemical study of 10 cases. Grant JW, et al. **Clin Neuropathol** 1988 Sep–Oct; 7(5):228–33
Neuroectodermal tumor versus Ewing's sarcoma—immunohistochemical and electron microscopic observations. Steiner GC. **Curr Top Pathol** 1989;80:1–29 (79 ref.)
Malignant mixed müllerian tumor of the endometrium. Report of a case with cytological diagnosis. Barbazza R, et al. **Eur J Gynaecol Oncol** 1988;9(5):381–5
Cytology of malignant mixed mesodermal tumour of the uterus: experience of 10 cases. Tenti P, et al. **Eur J Gynaecol Oncol** 1989;10(2):125–8
Carcinoma in situ of the testis in the presence of contralateral germ cell tumor. Kleinschmidt K, et al. **Eur Urol** 1989; 16(1):74–7
Solid teratomas and mixed müllerian tumors of the ovary: a clinical, histological, and immunocytochemical comparative study. Calame JJ, et al. **Gynecol Oncol** 1989 May;33(2):212–21
Mullerian adenosarcoma of the cervix with heterologous elements: diagnostic and therapeutic approach. Gast MJ, et al. **Gynecol Oncol** 1989 Mar;32(3):381–4
Peritoneal cytology in malignant mixed müllerian tumors of the uterus. Kanbour AI, et al. **Gynecol Oncol** 1989 Apr; 33(1):91–5
Mesodermal mixed tumor primary in the fallopian tube. Kinoshita M, et al. **Gynecol Oncol** 1989 Mar;32(3):331–5
Carcinosarcomas and mixed Müllerian tumors of the fallopian tube. Muntz HG, et al. **Gynecol Oncol** 1989 Jul;34(1):109–15
Clinicopathologic analysis of uterine malignant mixed müllerian tumors. Nielsen SN, et al. **Gynecol Oncol** 1989 Sep;34(3):372–8
Clinicopathologic features of ovarian mixed mesodermal tumors and carcinosarcomas. Terada KY, et al. **Gynecol Oncol** 1989 Feb;32(2):228–32
Carcinoma of the uterine cervix with variegated histological patterns and calcitonin production. Tsukamoto N, et al. **Gynecol Oncol** 1989 Jun;33(3):395–9
Trophoblastic differentiation in a malignant mixed mesodermal tumor of the ovary. Barua R, et al. **Hum Pathol** 1988 Oct;19(10):1235–6
Characteristics of "embryoid body" in human gonadal germ cell tumors. Nakashima N, et al. **Hum Pathol** 1988 Oct; 19(10):1144–54
Malignant mixed tumour of the lacrimal gland. Dube MK, et al. **Indian J Pathol Microbiol** 1988 Apr;31(2):73–4
Extrauterine pelvic malignant mixed mesodermal tumors. A study of 10 cases with immunohistochemistry. Deligdisch L, et al. **Int J Gynecol Pathol** 1988;7(4):361–72
Malignant mixed müllerian tumor of the uterus with neuroectodermal differentiation. Gersell DJ, et al. **Int J Gynecol Pathol** 1989;8(2):169–78
Melanotic neuroectodermal tumor of infancy: a case report. Clarós P, et al. **Int J Pediatr Otorhinolaryngol** 1989 Feb; 17(1):65–73
Primary malignant mediastinal germ cell tumors: a study of eleven cases and a review of the literature. Kiffer JD, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct;17(4):835–41 (63 ref.)
Multiple mixed tumor (pleomorphic adenoma): a clinicopathological study. Nakamura S, et al. **J Dermatol (Tokyo)** 1988 Jun;15(3):268–72
Melanotic neuroectodermal tumor of the epididymis in infancy: a case report. Murayama T, et al. **J Urol** 1989 Jan;141(1):105–6
Mesodermal mixed tumor of the uterine cervix associated with retroperitoneal lymph node metastasis. Senoh D, et al. **JCU** 1989 Sep;17(7):527–32
Extragenital malignant mixed Müllerian tumor: a case report. Nishida T, et al. **Kurume Med J** 1988;35(4):201–5
Is seminoma a relative or a precursor of embryonal carcinoma? [editorial] Damjanov I. **Lab Invest** 1989 Jan; 60(1):1–3
Malignant germ cell tumors of the head and neck in childhood. Stephenson JA, et al. **Laryngoscope** 1989 Jul; 99(7 Pt 1):732–5
Lectin histochemistry of human testicular germ cell tumors. Kosmehl H, et al. **Neoplasma** 1989;36(1):29–39
So-called intracranial germ cell tumours: personal experiences and a theory of their pathogenesis. Sano K, et al. **Neurol Res** 1989 Jun;11(2):118–26 (39 ref.)
Mixed müllerian tumors of the uterus: a clinicopathologic study. Dinh TV, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):388–92
Melanotic neuroectodermal tumor of infancy: evidence for multicentricity. Steinberg B, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec;66(6):666–9
Teratomas and allied germ cell tumors: common origin and diverging paths of differentiation. Pesce CM, et al. **Pathol Immunopathol Res** 1988;7(3):208–24 (96 ref.)
Case 2. Desmoplastic small cell tumor with divergent differentiation. Gerald WL, et al. **Pediatr Pathol** 1989; 9(2):177–83
So-called primitive neuroectodermal tumor in aborted previable fetuses. Kalousek DK, et al. **Pediatr Pathol** 1988; 8(5):503–11
So-called primitive neuroectodermal tumor in macerated fetuses: a confusing artifact. van Noort G, et al. **Pediatr Pathol** 1988;8(4):359–65
Developments in histopathology of testicular germ cell tumors. Mostofi FK, et al. **Semin Urol** 1988 Aug; 6(3):171–88
Growth and chemotherapy of a human germ-cell tumour line (GCT 27). Schlappack OK, et al. **Strahlenther Onkol** 1989 Jul;165(7):541
Melanotic neuroectodermal tumor of infancy occurring in the left thigh of a 6-month-old female infant. Scheck O, et al. **Ultrastruct Pathol** 1989 Jan–Feb;13(1):23–33
Simultaneous bilateral testicular germ cell tumors with dissimilar histology. Case report and review of the literature. Dieckmann KP, et al. **Urol Int** 1988;43(5):305–9 (46 ref.)
Tumor volume, CT scan, lymphography, sonography, intravenous pyelography, and tumor markers in testis tumors. Wilbert DM, et al. **Urol Int** 1989;44(1):15–9
[Malignant mesodermal mixed tumor of the ovary with neuro-ectodermic differentiation] Fetissof F, et al. **Ann Pathol** 1989;9(3):204–8 (21 ref.) (Eng. Abstr.) **(Fre)**
[Anatamo-pathological aspects of malignant ovarian tumors in children. Apropos of 16 cases] Makni MK, et al. **Arch Inst Pasteur Tunis** 1988 Jan–Apr;65(1–2):87–98 (Eng. Abstr.) **(Fre)**
[A case of mixed mesodermal tumor localized in the urinary bladder] Tomasino RM, et al. **Pathologica** 1988 Jul–Aug; 80(1068):489–99 (Eng. Abstr.) **(Fre)**
[Melanotic progonoma in an infant. Apropos of a case] Marrakchi R, et al. **Rev Stomatol Chir Maxillofac** 1988; 89(5):316–9 (26 ref.) (Eng. Abstr.) **(Fre)**
[Malignant mixed Müllerian tumors of the uterus. Clinical, morphologic and immunohistochemical findings] Falk S, et al. **Geburtshilfe Frauenheilkd** 1989 Jul;49(7):630–4 (Eng. Abstr.) **(Ger)**
[Occurrence of germ cells in a cryptorchism testis in the adult] Blumer CF, et al. **Pathologe** 1989 Jan;10(1):3–11 **(Ger)**
[Differentiation of human testicular tumors in the nude mouse] Wittekind C, et al. **Verh Dtsch Ges Pathol** 1988; 72:317–9 (Eng. Abstr.) **(Ger)**
[Clinicopathological study of malignant ovarian germ cell tumor] Kataoka A, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun; 41(6):695–701 (Eng. Abstr.) **(Jpn)**
[Müllerian adenosarcoma of the uterus] Paĭkova LV, et al. **Arkh Patol** 1988;50(8):57–61 (Eng. Abstr.) **(Rus)**
[Melanotic progonoma] Shendereva TS, et al. **Arkh Patol** 1989;51(2):70–2 (Eng. Abstr.) **(Rus)**
[Müllerian adenosarcoma of the uterus] Paĭkova LV, et al. **Vopr Onkol** 1989;35(3):359–61 **(Rus)**
[Malignant mixed tumor of the liver. Presentation of a case and review of the literature] Hernández E, et al. **Rev Esp Enferm Apar Dig** 1988 Nov;74(5):565–8 (19 ref.) (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Germ cell function and hormonal status in patients with testicular cancer. Hansen PV, et al. **Cancer** 1989 Aug 15; 64(4):956–61

PREVENTION & CONTROL

Re: Bilateral testicular germ cell tumours: an increasing incidence and prevention by chemotherapy [letter] Dieckmann KP. **Br J Urol** 1989 Apr;63(4):445–6
Bilateral testicular germ cell tumours: an increasing incidence and prevention by chemotherapy. Thompson J, et al. **Br J Urol** 1988 Oct;62(4):374–6

RADIOGRAPHY

CT of pineal tumors and intracranial germ-cell tumors. Chang T, et al. **AJNR** 1989 Sep–Oct;10(5):1039–44
Are lymphangiograms necessary before placing patients with nonseminomatous testicular tumors on surveillance? Wishnow KI, et al. **J Urol** 1989 May;141(5):1133–5
[Pulmonary blastoma. A childhood case report and review of the literature] Talenti E, et al. **Radiol Med (Torino)** 1989 May;77(5):549–51 (15 ref.) **(Ita)**

RADIONUCLIDE IMAGING

Clinical value of imaging using antibody to alpha fetoprotein in germ cell tumours. Hitchins RN, et al. **Nuklearmedizin** 1989 Feb;28(1):29–33

SECONDARY

Gd-DTPA-enhanced MR detection of diffuse leptomeningeal metastases [letter] Cooley PA, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):888
Long-term outcome in patients with germ cell tumours treated with POMB/ACE chemotherapy: comparison of commonly used classification systems of good and poor prognosis. Hitchins RN, et al. **Br J Cancer** 1989 Feb; 59(2):236–42
Germ cell tumour chemotherapy. Horwich A. **Br J Cancer** 1989 Feb;59(2):156–9 (52 ref.)
The role of surgery in metastatic testicular germ cell tumours (GCT). Newlands ES, et al. **Br J Cancer** 1989 Jun; 59(6):837–9 (11 ref.)
Radical retroperitoneal node dissection after chemotherapy for testicular tumours. Williams SN, et al. **Br J Urol** 1989 Jun;63(6):641–3
Computed tomographic appearances of treated metastatic testicular tumours. Carey BM, et al. **Clin Radiol** 1989 Jul; 40(4):406–12
Computed tomography scanning and post-lymphangiogram radiography in the follow-up of patients with metastatic testicular cancer. Williams MP, et al. **Clin Radiol** 1989 Jan; 40(1):47–50
Involvement of the caval vein lumen by a metastasis of a non-seminomatous testicular tumor. Jacqmin D, et al. **Eur Urol** 1989;16(3):233–4
Massive hemorrhage secondary to metastatic testicular carcinoma. Cunningham LN, et al. **J Am Osteopath Assoc** 1989 Mar;89(3):341–4
Disease relapse in patients with stage I nonseminomatous germ cell tumor of the testis on active surveillance. Thompson PI, et al. **J Clin Oncol** 1988 Oct;6(10):1597–603
Multidisciplinary treatment of metastatic germ cell tumor: clinical summary and discussion [letter] Pritchard J, et al. **Med Pediatr Oncol** 1989;17(3):179–80
Pulmonary nodules simulating metastasis of germ cell tumor after aggressive chemotherapy. Habuchi T, et al. **Urol Int** 1988;43(4):248–52
Detection of AFP and HCG in metastatic testicular cancer after treatment with chemotherapy or radiation therapy. Fowler JE Jr, et al. **Urology** 1989 Jan;33(1):74–7
[Germinal tumors: misleading clinical presentations (undifferentiated metastatic tumors of undetermined origin)] Joggi J. **Rev Med Brux** 1988 Dec;9(10):467–72 (Eng. Abstr.) **(Fre)**
[Temporary transsection of the inferior vena cava for complete removal of a retroperitoneal metastatic testicular tumor] Kumada K, et al. **Chirurg** 1988 Oct;59(10):676–8 **(Ger)**
[Pneumothorax associated with pulmonary metastasis of germinal neoplasms] Menor F, et al. **Arch Esp Urol** 1988 Jul–Aug;41(6):427–30 (Eng. Abstr.) **(Spa)**

SURGERY

Resection of a tumor of the psoas muscle. Shamberger RC, et al. **J Pediatr Surg** 1989 Sep;24(9):933–5
The place of surgery in the management of germ cell tumours in childhood. Barrett A. **Prog Pediatr Surg** 1989;22:106–12
Significance of salvage lymphadenectomy in the therapeutical concept of advanced nonseminomatous germ cell tumors. Staehler G, et al. **Urol Int** 1989;44(2):84–6
Use of limited retroperitoneal lymphadenectomy in nonseminomatous germ cell tumors. Sherlag AP, et al. **Urology** 1989 May;33(5):355–7
[Iterative surgery in germ cell tumor] Merlini M, et al. **Helv Chir Acta** 1989 Jan;55(5):549–52 (Eng. Abstr.) **(Fre)**
[Retroperitoneal lymphadenectomy in testicular tumors] Mast GJ, et al. **Chirurg** 1989 Mar;60(3):148–52 (15 ref.) **(Ger)**
[Risk and benefit of the treatment of bulky retroperitoneal teratoid tumors] Jaeger N, et al. **Urologe [A]** 1988 Sep; 27(5):283–6 (Eng. Abstr.) **(Ger)**
[Retroperitoneal lymphadenectomy in non-seminomatous stage I, IIa and IIb testicular tumors] Jaeger P, et al. **Urologe [A]** 1988 Sep;27(5):251–5 (Eng. Abstr.) **(Ger)**
[Inguinal metastasis of stage I testicular tumors] van Ahlen H, et al. **Urologe [A]** 1988 Sep;27(5):275–8 (Eng. Abstr.) **(Ger)**
[Germ cell tumors in childhood] Hager J, et al. **Z Kinderchir** 1989 Feb;44(1):25–9 (Eng. Abstr.) **(Ger)**
[Treatment of patients with stage I non-seminomatous testicular tumors with general orchiectomy] Horňák M, et al. **Z Urol Nephrol** 1988 Sep;81(9):541–5 (Eng. Abstr.) **(Ger)**

THERAPY

Results of the United Kingdom Children's Cancer Study Group's malignant germ cell tumor studies. Mann JR, et al. **Cancer** 1989 May 1;63(9):1657–67
The pediatric oncologist facing the gynaecological cancers in teenagers. Mann JR. **Eur J Gynaecol Oncol** 1989; 10(3):185–6
Management of malignant, mixed mesodermal tumors of the uterus. Podczaski ES, et al. **Gynecol Oncol** 1989 Feb; 32(2):240–4
Dose-intensive chemotherapy in refractory germ cell cancer—a phase I/II trial of high-dose carboplatin and etoposide with autologous bone marrow transplantation. Nichols CR, et al. **J Clin Oncol** 1989 Jul;7(7):932–9
Two decades of experience with testicular tumors in children at St Jude Children's Research Hospital. Fernandes ET, et al. **J Pediatr Surg** 1989 Jul;24(7):677–81; discussion 682
Stage I/II nonseminomatous germ cell tumors of the testis: an analysis of treatment options in patients with low volume retroperitoneal disease. Socinski MA, et al. **J Urol** 1988 Dec;140(6):1437–41
Response to Drs. Pritchard and Pinkerton [letter] Willoughby ML. **Med Pediatr Oncol** 1989;17(4):257
[Germinal neoplasm of the testis] Chen SJ, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1988 Dec; 4(12):682–7 (Eng. Abstr.) **(Chi)**
[Treatment of malignant intracranial germ-cell tumors in children. 7 cases] Deméocq F, et al. **Presse Med** 1988 Nov 19;17(41):2183–5 (Eng. Abstr.) **(Fre)**
[A case of primary intrasellar malignant germ cell tumor]

Yuki K, et al. **Gan No Rinsho** 1988 Dec;34(15):2091–5 (Eng. Abstr.) **(Jpn)**

[Treatment of patients with retroperitoneal metastases of nonseminoma tumors of the testis] Matveev BP, et al. **Vopr Onkol** 1988;34(12):1493–7 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Immunocytochemical and ultrastructural studies of the histogenesis of Ewing's sarcoma and putatively related tumors. Ushigome S, et al. **Cancer** 1989 Jul 1;64(1):52–62

Ultrastructure of four human germ cell tumor–derived cell lines: effect of 12–O–tetradecanoyl phorbol–13–acetate. Hiraoka A, et al. **Cancer Invest** 1988;6(4):393–402

Ultrastructural study of nuclear evagination in neoplastic cells of a cerebral primitive neuroectodermal tumor. Ho KL. **Clin Neuropathol** 1989 May–Jun;8(3):142–6

Melanotic neuroectodermal tumour of infancy (MNTI). Immunohistochemical and ultrastructural study of a case. Melissari M, et al. **J Craniomaxillofac Surg** 1988 Oct; 16(7):330–6

Extrauterine müllerian adenosarcoma of the peritoneal mesothelium: a clinicopathologic and electron microscopic study. Kerner H, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 2):510–3

[Transmission electron microscopy in the differential diagnosis of soft tissue and bone sarcomas and germinal tumors using fine needle aspirates] Lubiński J, et al. **Patol Pol** 1988 Oct–Dec;39(4):229–43 (Eng. Abstr.) **(Pol)**

NEOPLASMS, EXPERIMENTAL

see related
NEOPLASM TRANSPLANTATION
TUMOR VIRUS INFECTIONS

UKCCCR guidelines for the welfare of animals in experimental neoplasia. **Br J Cancer** 1988 Jul;58(1):109–13

Twenty–ninth annual meeting of the British Association for Cancer Research in conjunction with the third annual meeting of the Association of Cancer Physicians. March 21–24, 1988, Norwich, U.K. Abstracts [published erratum appears in Br J Cancer 1988 Nov;58(5):689] **Br J Cancer** 1988 Aug;58(2):223–77

UKCCCR guidelines for the welfare of animals in experimental neoplasia. **Cancer Metastasis Rev** 1989 Jun; 8(1):82–8

Establishment, characteristics, and utilization of a new in vivo–in vitro system. Sun JR, et al. **Int J Radiat Oncol Biol Phys** 1989 Feb;16(2):353–6

Scientific proceedings. Fifth symposium of the Section of Experimental Cancer Research (SEK) of the German Cancer Society. Heidelberg, 10–12 April, 1989. Abstracts. **J Cancer Res Clin Oncol** 1989;115 Suppl:S1–70

UKCCCR guidelines for the welfare of animals in experimental neoplasia. Workman P, et al. **Lab Anim** 1988 Jul;22(3):195–201

Abstracts: 1989 annual meeting of the Beijing, China Section of the Society for Experimental Biology and Medicine. Beijing, China, February 25, 1989. **Proc Soc Exp Biol Med** 1989 Sep;191(4):428–33

ANALYSIS

Variations in WGA–binding proteins in tumours growing in different implantation sites. Chan WS, et al. **Exp Cell Biol** 1989;57(1):11–8

Use of monochlorobimane for glutathione measurements in hamster and human tumor cell lines. Cook JA, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1321–4

Demonstration of tumor–selective retention of fluorinated nitroimidazole probes by 19F magnetic resonance spectroscopy in vivo. Maxwell RJ, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):925–9

The levels and relations of prostaglandins in pregnant and non–pregnant tumor–bearing mice. Mujagić H, et al. **J Cancer Res Clin Oncol** 1989;115(4):383–7

Comparative immunohistochemical reactivity of monoclonal and polyclonal antibodies to H–ras p21 in normal and neoplastic tissues of rodents and humans. Ward JM, et al. **Oncogene** 1989 Feb;4(2):203–13

Fibrinolytic inhibitors from the experimental rat epithelioma. Mirowski M, et al. **Thromb Res** 1989 Jun 1;54(5):457–65

BLOOD

Amino acid profiles in tumor–bearing and pair–fed nontumor–bearing malnourished rats. Kurzer M, et al. **Cancer** 1988 Oct 15;62(8):1492–6

[An experimental analysis of the interrelation of the kinetics of spontaneous blood serum chemiluminescence and of the kinetics of the tumor process] Baraboĭ VA, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):224–6 (Eng. Abstr.) **(Rus)**

[Investigation of cancer with unicellular algae] Doetsch H, et al. **Rev Esp Oncol** 1985;32(4):613–6 (Eng. Abstr.) **(Spa)**

BLOOD SUPPLY

Identification and characterization of the blood vessels of solid tumors that are leaky to circulating macromolecules. Dvorak HF, et al. **Am J Pathol** 1988 Oct;133(1):95–109

Use of a carbocyanine dye as a marker of functional vasculature in murine tumours. Trotter MJ, et al. **Br J Cancer** 1989 May;59(5):706–9

Intratumour factors influencing the access of antibody to tumour cells. Cobb LM. **Cancer Immunol Immunother** 1989; 28(4):235–40 (72 ref.)

Differences in the response of the microcirculation to hyperthermia in five different tumours. Reinhold HS, et al. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):611–8

The kinetics of vascular thermotolerance in SCK tumors of A/J mice. Song CW, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct;17(4):799–802

The use of fluorescent probes to identify regions of transient perfusion in murine tumors. Trotter MJ, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):931–4

Histological evidence for nonperfused vasculature in a murine tumor following hydralazine administration. Trotter MJ, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct; 17(4):785–9

Reduction of tumor blood flow by flavone acetic acid: a possible component of therapy. Bibby MC, et al. **J Natl Cancer Inst** 1989 Feb 1;81(3):216–20

Hydralazine–induced tumor hypoxia: a potential target for cancer chemotherapy. Chaplin DJ. **J Natl Cancer Inst** 1989 Apr 19;81(8):618–22

Cryospectrophotometric determination of tumor intravascular oxyhemoglobin saturations: dependence on vascular geometry and tumor growth. Fenton BM, et al. **J Natl Cancer Inst** 1988 Dec 21;80(20):1612–9

Blood flow failure as a major determinant in the antitumor action of flavone acetic acid. Zwi LJ, et al. **J Natl Cancer Inst** 1989 Jul 5;81(13):1005–13

Angiogenesis. Successful growth of tumours [news] Ross R. **Nature** 1989 May 4;339(6219):16–7

Study on angiogenesis induced by SP2/0 and HeLa tumor cells. Xiu RJ, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(1):26–32

The vascular system of xenotransplanted tumors—scanning electron and light microscopic studies. Konerding MA, et al. **Scanning Microsc** 1989 Mar;3(1):327–35; discussion 335–6

CHEMICALLY INDUCED

Carcinogen bioassay of isoflurane in mice. Baden JM, et al. **Anesthesiology** 1988 Nov;69(5):750–3

The mechanism of malignant tumor induction by nickel subsulfide. Lumb G, et al. **Ann Clin Lab Sci** 1988 Sep–Oct; 18(5):353–66

Trends in carcinogenesis and experimental pathology. In honorem Professor Olav Hilmar Iversen 1923–1988. **APMIS Suppl** 1988;2:1–268

Tumour induction in mice following exposure to aristolochic acid. Mengs U. **Arch Toxicol** 1988;61(6):504–5

N–nitrosocimetidine as a modifier of chemically–initiated tumors in mice [published erratum appears in Cancer Lett 1989 Mar;44(3):233] Anderson LM, et al. **Cancer Lett** 1988 Nov;42(3):159–67

Carcinogenesis by nitrosobis–(2–oxopropyl)amine labeled with deuterium and by nitroso–2–hydroxypropyl–2–oxopropylamine in rats and hamsters. Lijinsky W, et al. **Cancer Lett** 1988 Sep–Oct; 42(1–2):37–41

Modification by sodium L–ascorbate, butylated hydroxytoluene, phenobarbital and pepleomycin of lesion development in a wide–spectrum initiation rat model. Thamavit W, et al. **Cancer Lett** 1989 May;45(2):93–101

Comparative carcinogenesis by nitrosomethylalkylamines in Syrian hamsters. Lijinsky W, et al. **Cancer Res** 1988 Dec 1;48(23):6648–52

Influence of mouse major histocompatibility complex (H–2) on N–ethyl–N–nitrosourea–induced tumor formation in various organs. Oomen LC, et al. **Cancer Res** 1988 Dec 1;48(23):6634–41

Promotion by bombesin of gastric carcinogenesis induced by N–methyl–N'–nitro–N–nitrosoguanidine in Wistar rats. Tatsuta M, et al. **Cancer Res** 1989 Oct 1;49(19):5254–7

Aflatoxin B1 carcinogenesis and its relation to DNA adduct formation and adduct persistence in sensitive and resistant salmonid fish. Bailey GS, et al. **Carcinogenesis** 1988 Nov; 9(11):1919–26

Comparative tumorigenicity of 6–nitrochrysene and its metabolites in newborn mice. el–Bayoumy K, et al. **Carcinogenesis** 1989 Feb;10(2):369–72

Quantitative inter–relationships between aflatoxin B1 carcinogen dose, indole–3–carbinol anti–carcinogen dose, target organ DNA adduction and final tumor response. Dashwood RH, et al. **Carcinogenesis** 1989 Jan;10(1):175–81

The impact of toxicity on carcinogenicity studies: implications for risk assessment. Hoel DG, et al. **Carcinogenesis** 1988 Nov;9(11):2045–52 (16 ref.)

Carcinogenicity of N–nitroso(2–hydroxypropyl)(2–oxopropyl)amine, N–nitrosobis(2–hydroxypropyl)amine and cis–N–nitroso–2,6–dimethylmorpholine administered continuously in the Syrian hamster, and the effect of dietary protein on N–nitroso(2–hydroxypropyl)(2–oxopropyl)amine carcinogenesis. Kokkinakis DM, et al. **Carcinogenesis** 1989 Apr;10(4):699–704

Carcinogenicity studies of masheri, a pyrolysed product of tobacco. Kulkarni JR, et al. **Carcinogenesis** 1988 Nov; 9(11):2137–8

1,2–Dimethylhydrazine carcinogenesis in neonatally androgenized CBA mice. Smirnova IO, et al. **Carcinogenesis** 1988 Nov;9(11):1927–9

Concerning experimental animal tumors associated with silicone gel. Dow Corning Corporation. **Colo Med** 1988 Dec 1;85(22):486

Interspecies extrapolation in carcinogenesis: prediction between rats and mice. Gold LS, et al. **Environ Health Perspect** 1989 May;81:211–9

Oncogene activation in spontaneous and chemically induced rodent tumors: implications for risk analysis. Reynolds SH, et al. **Environ Health Perspect** 1988 Jun;78:175–7

Individual and strain differences in patterns of long–term persistence of urethane–induced sister chromatid exchanges (SCEs) in mouse lymphocytes and their relation to carcinogen susceptibility. Endo A, et al. **Environ Mol Mutagen** 1988;12(4):375–83

A view of the relation between carcinogenesis and mutagenesis. Lijinsky W. **Environ Mol Mutagen** 1989;14 Suppl 16:78–84 (29 ref.)

Carcinogenicity and toxicity study of m–phenylenediamine administered in the drinking–water to (C57BL/6 x C3H/He)F1 mice. Amo H, et al. **Food Chem Toxicol** 1988 Nov–Dec;26(11–12):893–7

Carcinogenicity of quinoline, 4– and 8–methylquinoline and benzoquinolines in newborn mice and rats. LaVoie EJ, et al. **Food Chem Toxicol** 1988 Jul;26(7):625–9

Chronic toxicity/carcinogenicity studies of gentian violet in Fischer 344 rats: two–generation exposure. Littlefield NA, et al. **Food Chem Toxicol** 1989 Apr;27(4):239–47

Two–year carcinogenicity study on three aromatic epoxy resins applied cutaneously to CF1 mice. Peristianis GC, et al. **Food Chem Toxicol** 1988 Jul;26(7):611–24

Di(2–ethylhexyl) phthalate [letter] Schmezer P. **Food Chem Toxicol** 1989 Apr;27(4):275

A comparison of the carcinogenicity of N–nitrosodiethylamine and N–nitrosodimethylamine after intratracheal instillation into Syrian golden hamsters. Tanaka A, et al. **Food Chem Toxicol** 1988 Oct;26(10):847–50

Transplacental initiation of liver, lung, neurogenic, and connective tissue tumors by N–nitroso compounds in mice. Anderson LM, et al. **Fundam Appl Toxicol** 1989 Apr; 12(3):604–20

Influence of viral infections on body weight, survival, and tumor prevalence of B6C3F1 (C57BL/6N x C3H/HeN) mice in carcinogenicity studies. Rao GN, et al. **Fundam Appl Toxicol** 1989 Jul;13(1):156–64

Effect of age on dose–response relationship in carcinogenesis induced by single administration of N–nitrosomethylurea in female rats. Anisimov VN. **J Cancer Res Clin Oncol** 1988;114(6):628–35

Experimental investigations into the carcinogenic effect of antitumor and immunosuppressive agents. Brock N, et al. **J Cancer Res Clin Oncol** 1989;115(4):309–28

Carcinogenicity and organ specificity of N–trimethylsilylmethyl–N–nitrosourea (TMS–MNU), N–neopentyl–N–nitrosourea (neoPNU), and N–methyl–N–nitrosourea (MNU) in rats. Maekawa A, et al. **J Cancer Res Clin Oncol** 1988;114(5):473–6

Carcinogenicity of captan. Reuber MD. **J Environ Pathol Toxicol Oncol** 1989 Mar–Apr;9(2):127–43

Environment: peculiar pigment cell neoplasm in fish. Kimura I, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):248S–254S

Lack of carcinogenicity of quercetin in F344/DuCrj rats. Ito N, et al. **Jpn J Cancer Res** 1989 Apr;80(4):317–25

Chemical carcinogenesis in analbuminemic rats. Kakizoe T, et al. **Jpn J Cancer Res** 1988 Jul;79(7):775–84 (40 ref.)

Effects of age on multiple organ carcinogenesis induced by 3,2'–dimethyl–4–aminobiphenyl in rats, with particular reference to the prostate. Shirai T, et al. **Jpn J Cancer Res** 1989 Apr;80(4):312–6

Hormonal influence on carcinogenicity of methylmercury in mice. Hirano M, et al. **Nippon Juigaku Zasshi** 1988 Aug; 50(4):886–93

Chemopreventive effect of N–homocysteine thiolactonyl retinamido cobalamin on carcinogenesis by ethyl carbamate in mice. McCully KS, et al. **Proc Soc Exp Biol Med** 1989 Sep;191(4):346–51

Apparent synergism between radiation and the carcinogen 1,2–dimethylhydrazine in the induction of colonic tumors in rats. Sharp JG, et al. **Radiat Res** 1989 Feb;117(2):304–17

Correlation between carcinogenic potency of chemicals in animals and humans. Allen BC, et al. **Risk Anal** 1988 Dec; 8(4):531–44

One–hit models of carcinogenesis: conservative or not? Bailar JC 3d, et al. **Risk Anal** 1988 Dec;8(4):485–97

Biologically motivated two–stage model for cancer risk assessment. Moolgavkar SH. **Toxicol Lett** 1988 Oct; 43(1–3):139–50

Comparative carcinogenicity of two structurally similar phenylenediamine dyes (HC blue no. 1 and HC blue no. 2) in F344/N rats and B6C3F1 mice. Kari FW, et al. **Toxicology** 1989 Jun 1;56(2):155–65

A review of the toxicity and carcinogenicity of anthraquinone derivatives. Sendelbach LE. **Toxicology** 1989 Aug;57(3):227–40 (50 ref.)

[DNA modification and carcinogenesis—early events caused by a heterocyclic aromatic amine, Glu–P–1] Shudo K, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 2):445–50 (12 ref.) (Eng. Abstr.) **(Jpn)**

[The effect of disorders of the estrous function in female rats on the realization of multigenerational carcinogenic

effect of N-nitrosomethylurea] Popovich IG, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):339-41 (Eng. Abstr.) (Rus)

[The carcinogenic activity of N-nitrosodipropylamine administered perorally to C57Bl mice] Gritsiute LA, et al. **Eksp Onkol** 1989;11(3):10-1 (Eng. Abstr.) (Rus)

[Carcinogenic properties of silicon carbide whiskers] Vasil'eva LA, et al. **Eksp Onkol** 1989;11(2):13-5 (Eng. Abstr.) (Rus)

[The dependence of the carcinogenic effect on the concentration of N-nitrosodimethylamine in (CBA x C57Bl/6)F1 mice and noninbred mice] Voronin VM, et al. **Eksp Onkol** 1989;11(4):20-3 (Eng. Abstr.) (Rus)

[Natural killer activity of the splenocytes in C3HA strain mice during 20-methylcholanthrene-induced carcinogenesis] Pogodina ON, et al. **Tsitologiia** 1989 Feb; 31(2):220-5 (Eng. Abstr.) (Rus)

[The dependence of the carcinogenic effect on the concentration of N-nitrosodiethylamine] Voronin VM, et al. **Vopr Onkol** 1989;35(6):685-9 (Eng. Abstr.) (Rus)

COMPLICATIONS

Conversion of xanthine dehydrogenase to xanthine oxidase as a possible marker for hypoxia in tumours and normal tissues. Anderson RF, et al. **Br J Cancer** 1989 Aug; 60(2):193-7

Possible role of ammonia in experimental cancer anorexia. Chance WT, et al. **Brain Res** 1989 May 8;486(2):316-24

Suppression of serum 1,25-dihydroxyvitamin D in humoral hypercalcemia of malignancy is caused by elaboration of a factor that inhibits renal 1,25-dihydroxyvitamin D3 production. Fukumoto S, et al. **Endocrinology** 1989 May; 124(5):2057-62

DIAGNOSIS

Tumour localization using monoclonal antibodies. II. Biodistribution of A5B7/111indium chelates. Barnett P, et al. **Int J Cancer Suppl** 1988;3:34-7

[Experimental verification of the reliability of biochemical diagnostic methods during tumor growth. I. Changes in proteins and glycoproteins in the blood of rats] Polívková J, et al. **Sb Lek** 1988 Sep;90(8-9):234-43 (Eng. Abstr.) (Cze)

[Experimental verification of the reliability of biochemical diagnostic methods during tumor growth. II. Changes in the activity of lactate dehydrogenase and nonspecific esterase in the blood of rats] Polívková J, et al. **Sb Lek** 1988 Sep;90(8-9):244-51 (Eng. Abstr.) (Cze)

[Gd-DTPA-supported magnetic resonance tomographic perfusion follow-up of shockwave-treated tumors] Naegele M, et al. **ROFO** 1989 May;150(5):602-5 (Eng. Abstr.) (Ger)

DIET THERAPY

Inhibition of tumor growth by dairy products. Tsuru S, et al. **J Clin Lab Immunol** 1988 Apr;25(4):177-83

DRUG THERAPY

Osmotic opening of the blood-brain barrier. Rapoport SI. **Ann Neurol** 1988 Nov;24(5):677-84 (26 ref.)

Potential anti-tumour 2,5-bis (1-aziridinyl)-1,4-benzoquinones: relationship between cytotoxicity against DNA-repair deficient E. coli, inactivation of bacteriophage M13mp19, and in vitro and in vivo anti-tumour activity. Lusthof KJ, et al. **Anticancer Drug Des** 1988 Dec;3(3):147-55

Vinblastine-C4 alkyl maleoyl and amino acid maleoyl derivatives. II. Experimental antitumor activity against leukemias and human tumor xenografts. Collard MP, et al. **Anticancer Res** 1989 May-Jun;9(3):625-30

In vivo inhibitory effect of a conjugate of immunoglobulin G and melphalan, K18, on human tumors transplanted in nude mice. Imai S, et al. **Anticancer Res** 1989 Mar-Apr; 9(2):453-9

Immunogenicity of cyclophosphamide-treated tumor cells. Kawalec M, et al. **Arch Immunol Ther Exp (Warsz)** 1988; 36(3):345-50

Assessment of the preclinical activity of budotitane in three different transplantable tumor systems, its lack of mutagenicity, and first results of clinical phase I studies. Keppler BK, et al. **Arzneimittelforschung** 1989 Jun; 39(6):706-9

Tumor inhibition by ferricenium complexes. Activity against some solid experimental tumors. Köpf-Maier P, et al. **Arzneimittelforschung** 1989 Mar;39(3):369-71

Antitumor activity of an ionic titanocene tetrachloroferrate derivative against some solid experimental tumors. Köpf-Maier P, et al. **Arzneimittelforschung** 1989 Apr; 39(4):488-90

Activity of N-(2-hydroxypropyl)methacrylamide copolymers containing daunomycin against a rat tumour model. Cassidy J, et al. **Biochem Pharmacol** 1989 Mar 15; 38(6):875-9

Relationships between tumor responsiveness, vincristine pharmacokinetics and arrest of mitosis in human tumor xenografts. Horton JK, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3995-4000

Altered production of the active oxygen species is involved in enhanced cytotoxic action of acylated derivatives of ascorbate to tumor cells. Miwa N, et al. **Biochim Biophys Acta** 1988 Nov 18;972(2):144-51

Tumoricidal effect of controlled-release polymeric needle devices containing adriamycin HCl in tumor-bearing mice. Lin SY, et al. **Biomater Artif Cells Artif Organs** 1989; 17(2):189-203

Analysis of multiple tumor data from a rodent carcinogenicity experiment. Finkelstein DM, et al. **Biometrics** 1989 Mar;45(1):219-30

In vivo activity on murine tumors of a novel antitumor compound, N-beta-dimethylaminoethyl 9-carboxy-5-hydroxy-10-methoxybenzo[a]phenazine-6-carboxamide sodium salt (NC-190). Nakaike S, et al. **Cancer Chemother Pharmacol** 1989;23(3):135-9

CGP 6809, a sugar-containing nitrosourea derivative: pharmacological and physicochemical properties. Schleweck K, et al. **Cancer Chemother Pharmacol** 1989; 23(6):341-7

Advanced Lewis lung carcinoma cured by tiazofurin as a system to study delayed hemopoietic effects of cancer. Balducci L, et al. **Cancer Invest** 1988;6(6):681-6

Tetra-n-propylporphycene as a tumour localizer: pharmacokinetic and phototherapeutic studies in mice. Guardiano M, et al. **Cancer Lett** 1989 Jan;44(1):1-6

Antitumoral activity of a xanthate compound. II. Therapeutic studies in murine leukemia and tumor models in vivo. Schick HD, et al. **Cancer Lett** 1989 Jul 15;46(2):149-52

Cyclophosphamide-induced immunologically mediated regression of a cyclophosphamide-resistant murine tumor: a consequence of eliminating precursor L3T4+ suppressor T-cells. Awwad M, et al. **Cancer Res** 1989 Apr 1; 49(7):1649-54

Antitumor activity of 2-chloroethyl (methylsulfonyl)methanesulfonate (clomesone, NSC 33847) against selected tumor systems in mice. Dykes DJ, et al. **Cancer Res** 1989 Mar 1;49(5):1182-6

MX2, a morpholino anthracycline, as a new antitumor agent against drug-sensitive and multidrug-resistant human and murine tumor cells. Watanabe M, et al. **Cancer Res** 1988 Dec 1;48(23):6653-7

Fractionation and antitumor activity of the water-insoluble residue of Agaricus blazei fruiting bodies. Kawagishi H, et al. **Carbohydr Res** 1989 Mar 15;186(2):267-73

Protective effect of reduced glutathione against cisplatin-induced renal and systemic toxicity and its influence on the therapeutic activity of the antitumor drug. Zunino F, et al. **Chem Biol Interact** 1989;70(1-2):89-101

Isolation of galactosaminoglycan moiety (CO-N) from protein-bound polysaccharide of Cordyceps ophioglossoides and its effects against murine tumors. Ohmori T, et al. **Chem Pharm Bull (Tokyo)** 1989 Apr; 37(4):1019-22

Component analysis of protein-bound polysaccharide (SN-C) from Cordyceps ophioglossoides and its effects on syngeneic murine tumors. Ohmori T, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4505-11

Inhibition of protein synthesis, pulmonary localization and pulmonary tumour formation by drug-treated tumour cells as a means of predicting their chemosensitivity. Lai T, et al. **Clin Exp Metastasis** 1989 Jul-Aug;7(4):427-36

Enhancement of cytocidal and antitumor effect of cisplatin by caffeine in human osteosarcoma. Tomita K, et al. **Clin Ther** 1989;11(1):43-52

Multifactorial analysis of parameters influencing chemosensitivity of human cancer xenografts in nude mice. Fujita F, et al. **Int J Cancer** 1989 Apr 15;43(4):637-44

Inhibitory effect of Toxoplasma lysate antigen on the multiplication of transplanted tumor in mice. Saito A, et al. **Int J Med Microbiol** 1989 May;271(1):114-26

Enhancement of the anti-tumor effect of melphalan in experimental mice by some vaso-active agents. Adams GE, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1137-9

Potentiation of the tumor cytotoxicity of melphalan by vasodilating drugs. Chaplin DJ, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1131-5

5-Fluorouracil containing combinations in murine tumor systems. Corbett TH, et al. **Invest New Drugs** 1989 Apr; 7(1):37-49 (27 ref.)

In vivo antitumor activity of sparsomycin and its analogues in eight murine tumor models. Zylicz Z, et al. **Invest New Drugs** 1988 Dec;6(4):285-92

Investigations on the antitumor efficacy of liposome-associated doxorubicin in murine tumor models [published erratum appears in Isr J Med Sci 1988 Nov;24(11):following 696] Gabizon A, et al. **Isr J Med Sci** 1988 Sep-Oct;24(9-10):512-7

A new antitumor antibiotic, FR900840. III. Antitumor activity against experimental tumors. Nishimura M, et al. **J Antibiot (Tokyo)** 1989 Apr;42(4):553-7

Antitumor effect of systemic administration of novel recombinant tumor necrosis factor (rTNF-S) with less toxicity than conventional rTNF-alpha in vivo. Gatanaga T, et al. **J Biol Response Mod** 1989 Jun;8(3):278-86

Preclinical trials using an immunoconjugate of T101 and methotrexate in an athymic mouse/human T-cell tumor model. Shawler DL, et al. **J Biol Response Mod** 1988 Dec; 7(6):608-18

Enhanced activity of anticancer drugs in murine tumours by co-administration with 3-amino-pyrrolidine-2,5-dione-N-mustard derivative. Ambaye RY, et al. **J Cancer Res Clin Oncol** 1989; 115(4):379-82

Antimicrobial and anticancer activity of tetrahedral, chelated, diphosphine silver(I) complexes: comparison with copper and gold. Berners-Price SJ, et al. **J Inorg Biochem** 1988 Aug;33(4):285-95

2'-Fluorinated isonucleosides. 1. Synthesis and biological activity of some methyl 2'-deoxy-2'-fluoro-2'-pyrimidinyl-D-arabinopyranosides. Bobek M, et al. **J Med Chem** 1989 Apr;32(4):799-807

Synthesis of congeners and prodrugs. 3. Water-soluble prodrugs of taxol with potent antitumor activity. Deutsch HM, et al. **J Med Chem** 1989 Apr;32(4):788-92

Synthesis and antitumor activity of fused tetracyclic quinoline derivatives. 1. Yamato M, et al. **J Med Chem** 1989 Jun;32(6):1295-300

The effect of liposome-entrapped specific cell growth inhibitor (chalone) on tumour cell proliferation. Bogoeva MV, et al. **J Microencapsul** 1988 Jan-Mar;5(1):59-64

An experimental study of the antitumour effect of bleomycin hydrochloride microcapsules. Lin SY, et al. **J Microencapsul** 1986 Oct-Dec;3(4):283-91

Individuality in solid tumor animal models [letter] Demicheli R, et al. **J Natl Cancer Inst** 1988 Nov 2;80(17):1423-4

Therapeutic index: a vital component in selection of anticancer agents for clinical trial. Double JA, et al. **J Natl Cancer Inst** 1989 Jul 5;81(13):988-94 (67 ref.)

Murine studies with 5-fluorouracil and leucovorin [letter] Weiss AJ. **J Natl Cancer Inst** 1989 Mar 15;81(6):459-61

Antiandrogen effects in models of androgen responsive cancer. Shain SA, et al. **J Steroid Biochem** 1988 Oct; 31(4B):711-8 (53 ref.)

Selective effect of doxorubicin suspended in lipiodol on VX2 carcinoma in rabbits. Furuta T, et al. **J Surg Oncol** 1988 Dec;39(4):229-34

Antitumor activities of a novel 9-aminoanthracycline (SM-5887) against mouse experimental tumors and human tumor xenografts. Morisada S, et al. **Jpn J Cancer Res** 1989 Jan;80(1):69-76

Differential neutralizing effect of tiopronin on the toxicity of neocarzinostatin and SMANCS: a new rescue cancer chemotherapy. Oda T, et al. **Jpn J Cancer Res** 1989 Apr; 80(4):394-9

Antitumor activity of quinocarmycin citrate (KW-2152) against human tumor xenografts serially transplanted into nude mice. Inoue S, et al. **Keio J Med** 1988 Dec; 37(4):355-64

Cyclophosphamide and melphalan as immunopotentiating agents in cancer therapy. Dray S, et al. **Med Oncol Tumor Pharmacother** 1989;6(1):77-85 (22 ref.)

Substances with antineoplastic activity. XCVI. Some pharmacological properties and therapeutic synergism of 6-purinyl-N-(2-chloroethyl)thiocarbamate with cytosine arabinoside. Mělka M, et al. **Neoplasma** 1989;36(4):419-25

Treatment with Krestin combined with mitomycin C, and effect on immune response. Fujii T, et al. **Oncology** 1989; 46(1):49-53

The clinical usefulness of human xenografts in nude mice. Kubota T, et al. **Prog Clin Biol Res** 1988;276:213-25

Interaction of platinum(II) tetrachlorodianion (Fast Black)2 with superhelical DNA and with radiation in vitro and in vivo. Teicher BA, et al. **Radiat Res** 1989 Jul; 119(1):134-44

The effect of photodynamic therapy (PDT) on glucose levels within the SMT-F mouse tumor. Musser DA. **Res Commun Chem Pathol Pharmacol** 1988 Jun;60(3):361-9

Experimental antitumor activity of Navelbine. Cros S, et al. **Semin Oncol** 1989 Apr;16(2 Suppl 4):15-20

[Study on antidotes of homoharringtonine] Chen RT, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Sep;9(5):477-80 (Eng. Abstr.) (Chi)

[In vivo and in vitro antitumor activities of Aclacinomycin A made in China] Yang JL, et al. **Yao Hsueh Hsueh Pao** 1988 May;23(5):321-6 (Eng. Abstr.) (Chi)

[The effect of recombinant human tumor necrosis factor alpha on malignant tumors in vivo. Physiopathologic basis for clinical oncology] Kallinowski F, et al. **Arzneimittelforschung** 1989 Mar;39(3):410-4 (Eng. Abstr.) (Ger)

[Antitumor effects of 5-fluorouracil-bound organic silicon compound] Fukushima K. **Gan To Kagaku Ryoho** 1989 Sep; 16(9):3243-50 (Eng. Abstr.) (Jpn)

[Characteristics in antitumor effects of organic silicon related compounds] Fukushima K. **Gan To Kagaku Ryoho** 1989 Jun;16(6):2173-81 (Eng. Abstr.) (Jpn)

[Combined effect of intraperitoneally administered OK-432 and recombinant interleukin (rIL-2) against mouse tumors] Fujioka T, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 May 20;24(5):948-56 (Eng. Abstr.) (Jpn)

[Synthesis and antitumor properties of 3'-desamino-dimethylformamidine doxorubicin] Ul'ianova LA, et al. **Antibiot Khimioter** 1989 Feb;34(2):105-8 (Eng. Abstr.) (Rus)

[Action of doxorubicin and a doxorubicin-heparin complex on the growth and metastasis of experimental tumors and the hemostatic system indices] Kalishevskaia TM, et al. **Eksp Onkol** 1988;10(4):59-62 (Eng. Abstr.) (Rus)

[Comparative study of platinum complexes in athymic mice with human tumors] Bukharov IK, et al. **Vopr Onkol** 1988; 34(9):1084-7 (Eng. Abstr.) (Rus)

[The antineoplastic activity of testiphenon] Lagova ND, et al. **Vopr Onkol** 1988;34(11):1363-8 (Eng. Abstr.) (Rus)

[Angiogenesis as a target for antitumor actions] Ushmorov AG, et al. **Vopr Onkol** 1989;35(3):263-70 (58 ref.) (Rus)

[Clinico-morphological comparisons of the results of the combined treatment of tumors with platinum derivatives] Shalimov SA, et al. **Vrach Delo** 1988 Jul;(7):79-82 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Purification and characterization of a novel calcium-dependent serine proteinase secreted from malignant hamster embryo fibroblast Nil2C2. Sakiyama H, et al. **Biochim Biophys Acta** 1989 Feb 24;990(2):156-61

Macrophage and lymphocyte potentiation of syngeneic tumor cell and host fibroblast collagenolytic activity in rats. Dabbous MK, et al. **Cancer Res** 1988 Dec 1;48(23):6832-6

Superoxide dismutase in normal and malignant tissues in different species. Van Balgooy JN, et al. **Comp Biochem Physiol [B]** 1979;62(3):263-8

N-acetylglucosaminyltransferase III, IV and V activities in Novikoff ascites tumour cells, mouse lymphoma cells and hen oviduct. Application of a sensitive and specific assay by use of high-performance liquid chromatography. Koenderman AH, et al. **Eur J Biochem** 1989 May 15; 181(3):651-5

Evidence of a warfarin-sensitive cancer procoagulant in V2 carcinoma. Roncaglioni MC, et al. **Haematologica (Pavia)** 1989 Mar-Apr;74(2):143-7

In vivo invasion of modified chorioallantoic membrane by tumor cells: the role of cell surface-bound urokinase. Ossowski L. **J Cell Biol** 1988 Dec;107(6 Pt 1):2437-45

Glucocorticoid regulation of amidating enzyme in a neoplastic C-cell line. Birnbaum RS, et al. **Mol Cell Endocrinol** 1989 Jan;61(1):109-16

EPIDEMIOLOGY

A simple statistical procedure for testing tumour rates in animal carcinogenicity experiments. Hothorn L. **Arch Toxicol Suppl** 1989;13:265-8

Two-stage models of tumor incidence for historical control animals in the National Toxicology Program's carcinogenicity experiments. Portier CJ, et al. **J Toxicol Environ Health** 1989;27(1):21-45

ETIOLOGY

Let us forget "tumour promotion" and start thinking about mechanisms of non-genotoxic carcinogenicity. Roe FJ. **APMIS Suppl** 1988;2:91-9

Suppression of tumorigenicity in human cell hybrids derived from cell lines expressing different activated ras oncogenes. Geiser AG, et al. **Cancer Res** 1989 Mar 15;49(6):1572-7

Tumor-specific antigens as altered growth factor receptors. Prehn RT. **Cancer Res** 1989 Jun 1;49(11):2823-6

Tumorigenicity testing of various cell substrates for production of biologicals. Furesz J, et al. **Dev Biol Stand** 1989;70:233-43

Radiation carcinogenesis in experimental animals. Broerse JJ, et al. **Experientia** 1989 Jan 15;45(1):60-9 (36 ref.)

Recent results of carcinogenicity bioassays of fibres and other particulate materials. Maltoni C, et al. **IARC Sci Publ** 1989; (90):46-53

Carcinogenicity of Indian bidi and cigarette smoke condensate in Swiss albino mice. Pakhale SS, et al. **J Cancer Res Clin Oncol** 1988;114(6):647-9

Oncogenicity of human N-ras oncogene and proto-oncogene introduced into retroviral vectors. Souyri M, et al. **J Virol** 1989 Sep;63(9):3944-53

The difference in tumorigenicity between Epstein-Barr virus (EBV) genome-positive and genome-negative epithelial hybrid cell lines derived from the human nasopharynx. Takimoto T, et al. **Laryngoscope** 1988 Dec;98(12):1334-8

The membrane potential theory of carcinogenesis. Beech JA. **Med Hypotheses** 1989 Jun;29(2):101-4 (12 ref.)

A threshold effect in the induction of tumorigenicity of an established human cell line by v-mos. O'Hara BM, et al. **Oncogene** 1988 Sep;3(3):295-9

Enhanced ras oncogene mediated cell transformation and tumorigenesis by adenovirus 2 mutants lacking the C-terminal region of E1a protein. Subramanian T, et al. **Oncogene** 1989 Apr;4(4):415-20

Ha-Ras-1 oncogene dosage differentially affects Balb/3T3 cells' growth factor requirement and tumorigenicity. Kovary K, et al. **Oncogene Res** 1989;4(1):55-64

Carcinogenic effect of biscuits made of flour infested with Tribolium castaneum in Bufo regularis. el-Mofty MM, et al. **Oncology** 1989;46(1):63-5

Blood transfusion and tumor growth. Tartter PI, et al. **Transplant Proc** 1988 Dec;20(6):1108-11 (16 ref.)

[Thrombocyte growth factor--its participation in normal and malignant development, atherosclerosis and other pathological states] Mitev V, et al. **Eksp Med Morfol** 1988; 27(2):55-61 (14 ref.) **(Bul)**

[Carcinogenic activity of asbestos cement dust] Pylev LN, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):55-7 **(Rus)**

GENETICS

Dissecting multistep tumorigenesis in transgenic mice. Hanahan D. **Annu Rev Genet** 1988;22:479-519 (106 ref.)

Nonrandom karyotypic changes in immortal and tumorigenic Syrian hamster cells induced by diethylstilbestrol. Ozawa N, et al. **Cancer Genet Cytogenet** 1989 Apr;38(2):271-82

Use of transgenic animals to study human retroviruses. Hinrichs SH, et al. **Cancer Metastasis Rev** 1988 Dec; 7(4):311-20 (53 ref.)

Critical events in tumour suppression. **Ciba Found Symp** 1989; 142:234-41

General models for the generation and suppression of malignancy. **Ciba Found Symp** 1989;142:242-7

The biology of tumour suppression. Harris H. **Ciba Found Symp** 1989;142:199-208; discussion 208-13

Molecular basis for the regulation of cell fate by the lethal (2) giant larvae tumour suppressor gene of Drosophila melanogaster. Mechler BM, et al. **Ciba Found Symp** 1989; 142:166-78; discussion 178-80

Cell differentiation and tumour suppression. Sachs L. **Ciba Found Symp** 1989;142:217-31; discussion 231-3

Transgenic mouse models for hematopoietic tumorigenesis. Harris AW, et al. **Curr Top Microbiol Immunol** 1988; 141:82-93

Comparison of S-phase fractions measured by flow cytometry and autoradiography in human transplant tumors. Feichter G, et al. **Cytometry** 1988 Nov;9(6):605-11

Some methods and applications of flow cytometric DNA analysis clinical and experimental oncology. Vindeløv LL, et al. **Eur J Haematol Suppl** 1988;48:69-76

Transgenic mouse models and peptide producing endocrine tumours: morpho-functional aspects. Rindi G, et al. **Experientia Suppl** 1989;56:210-9 (42 ref.)

Transgenic mice in cancer research. Jenkins NA, et al. **Important Adv Oncol** 1989;:61-77 (119 ref.)

Is cancer adaptation gone awry? [news] Merz B. **JAMA** 1989 Aug 11;262(6):733-4

Overexpression and amplification of the c-myc gene in mouse tumors induced by chemicals and radiations. Niwa O, et al. **Jpn J Cancer Res** 1989 Mar;80(3):212-8

Comparison of three recombinant murine leukemia viruses carrying the v-src oncogene of avian sarcoma virus: differences in in vitro transformation and in vivo pathogenicity. Feuerman MH, et al. **Mol Carcinog** 1988; 1(1):57-66

High incidence of lung, bone, and lymphoid tumors in transgenic mice overexpressing mutant alleles of the p53 oncogene. Lavigueur A, et al. **Mol Cell Biol** 1989 Sep; 9(9):3982-91

Tumorigenicity of simian virus 40-hepatocyte cell lines: effect of in vitro and in vivo passage on expression of liver-specific genes and oncogenes. Woodworth CD, et al. **Mol Cell Biol** 1988 Oct;8(10):4492-501

bcr-abl oncogene renders myeloid cell line factor independent: potential autocrine mechanism in chronic myeloid leukemia. Hariharan IK, et al. **Oncogene Res** 1988; 3(4):387-99

Developmental study of SV40 large T antigen expression in transgenic mice with choroid plexus neoplasia. Messing A, et al. **Oncogene Res** 1988;3(1):87-97

Amplification of the proto-neu oncogene facilitates oncogenic activation by a single point mutation. Hung MC, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2545-8

Metastatic hibernomas in transgenic mice expressing an alpha-amylase-SV40 T antigen hybrid gene. Fox N, et al. **Science** 1989 Apr 28;244(4903):460-3

[The patented oncomouse. Transgenic animals in medical research--knowledge and risks] Hobom B. **Fortschr Med** 1989 Jun 10;107(17):100-2 **(Ger)**

[Technics in molecular biology in cancer research. DNA transfection in mammalian cells] Hayashi Y, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 1):867-72 **(Jpn)**

[Transgenic mice and their use in cancer study] Yamamura K. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 1):733-9 (12 ref.) (Eng. Abstr.) **(Jpn)**

[Isolation of cDNA clones which are specifically transcribed in metastatic and nonmetastatic murine tumors] Ebralidze AK, et al. **Genetika** 1989 May;25(5):932-6 (Eng. Abstr.) **(Rus)**

[Nonrandom karyotype changes in chemically induced tumors of the Djungarian hamster] Sokova OI, et al. **Genetika** 1988 Nov;24(11):1955-64 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Kinetics of in vivo tumor cell destruction after specific immunization. Orbach-Arbouys S, et al. **Anticancer Res** 1989 Jan-Feb;9(1):97-101

Enhanced activity of peritoneal cells after aclacinomycin injection: effect of pretreatment with superoxide dismutase on aclacinomycin-induced cytological alterations and antitumoral activity. Bravo-Cuellar A, et al. **Cancer Res** 1989 Mar 15;49(6):1578-86

Abolishment of metastasis formation by murine tumor cells transfected with "foreign" H-2K genes. Gelber C, et al. **Cancer Res** 1989 May 1;49(9):2366-73

Acquisition by the murine host of responsiveness toward various neoplastic cell lines, but not toward self, through adoptive transfer of a helper T-lymphocyte clone with antiself specificity. Grooten J, et al. **Cancer Res** 1989 Jul 15;49(14):3872-8

Role of tumor necrosis factor and interleukin 1 in gamma-interferon-promoted activation of mouse tumoricidal macrophages. Hori K, et al. **Cancer Res** 1989 May 15;49(10):2606-14

Specificity of antigens on UV radiation-induced antigenic tumor cell variants measured in vitro and in vivo. Hostetler LW, et al. **Cancer Res** 1989 Mar 1;49(5):1207-13

Generation of antigenic variants from a nonantigenic murine tumor cell line by transfection with a gene encoding a novel tumor-specific transplantation antigen. Kaba DS, et al. **Cancer Res** 1989 Jan 1;49(1):38-43

Modification of host antitumor defense mechanisms in mice by progressively growing tumor. Maccubbin DL, et al. **Cancer Res** 1989 Aug 1;49(15):4216-24

Antigenic differences between metastatic and nonmetastatic BSp73 rat tumor variants characterized by monoclonal antibodies. Matzku S, et al. **Cancer Res** 1989 Mar 1; 49(5):1294-9

Penetration and binding of antibodies in experimental human solid tumors grown in mice. Ong GL, et al. **Cancer Res** 1989 Aug 1;49(15):4264-73

Immune regulation of the L5178Y murine tumor-dormant state: induction of cell- and soluble factor-mediated inhibition of tumor cell growth by tumor necrosis factor and gamma-interferon. Suzuki Y, et al. **Cancer Res** 1989 Apr 15;49(8):2028-33

Cooperation between early acting delayed-type hypersensitivity T-cells and cultured effector cells in tumor rejection. Trial J. **Cancer Res** 1988 Nov 1;48(21):5922-6

Overcoming suppression of antitumor immune reactivity in tumor-bearing rats by treatment with bleomycin. Xu ZY, et al. **Cancer Res** 1988 Dec 1;48(23):6658-63

Effects of fish oil and corn oil diets on prostaglandin-dependent and myelopoiesis-associated immune suppressor mechanisms of mice bearing metastatic Lewis lung carcinoma tumors. Young MR, et al. **Cancer Res** 1989 Apr 15;49(8):1931-6

Reduction of immunosuppression in UV-irradiated mice by dietary retinyl palmitate plus canthaxanthin. Gensler HL. **Carcinogenesis** 1989 Jan;10(1):203-7

Highly immunogenic regressor tumor cells can prevent development of postsurgical tumor immunity. Mullen CA, et al. **Cell Immunol** 1989 Mar;119(1):101-13

Biological response modifier as antigen: OK432-specific T-cell clone as an anti-tumor effector cell. Ozaki S, et al. **Cell Immunol** 1989 May;120(2):477-81

Tumor surveillance revisited: natural cytotoxic (NC) activity deters tumorigenesis. Patek PQ, et al. **Cell Immunol** 1988 Oct 1;116(1):240-9

Combined effects of host antitumor immune responses and chemotherapy. Studies with hexamethylmelamine. Tricarico M, et al. **Chemioterapia** 1988 Jun;7(3):203-7

Modulation of cellular anti-tumour responses by tumour-specific T suppressor lymphocytes. Haubeck HD, et al. **Clin Exp Immunol** 1988 Oct;74(1):47-52

TNF-alpha mediated selection of macrophage-resistant gene-regulatory tumor variants. Remels L, et al. **Clin Exp Metastasis** 1989 Sep-Oct;7(5):493-506

Expression of hamster MHC class I antigens in transformed cells and tumours induced by human adenoviruses. Ackrill AM, et al. **Eur J Cancer Clin Oncol** 1988 Nov; 24(11):1745-50

Individually distinct transplantation antigens of chemically induced mouse tumors. Srivastava PK, et al. **Immunol Today** 1988 Mar;9(3):78-83 (41 ref.)

Different class I antigen oligosaccharides on a murine tumor and a lectin-resistant variant are not responsible for the differential recognition of the tumors by CTL. Degen E, et al. **Int J Cancer** 1989 May 15;43(5):828-36

Discrepancy in the abilities of lymphokines and bacteria to mediate tumor protection in vivo and/or tumoricidal activity by macrophages in vitro. Keller R, et al. **Int J Cancer** 1989 Sep 15;44(3):512-7

Laminin receptor expression on murine tumor cells: correlation with sensitivity to natural cell-mediated cytotoxicity. Laybourn KA, et al. **Int J Cancer** 1989 Apr 15;43(4):737-42

Autoimmune expression of a cytoplasmic protein p60 in mice bearing metastasizing SV40-transformed tumors. Manneck HE, et al. **Int J Cancer** 1988 Dec 15;42(6):906-12

Localization of monoclonal antibody AUA1 and its F(ab')2 fragments in human tumour xenografts: an autoradiographic and immunohistochemical study. Pervez S, et al. **Int J Cancer Suppl** 1988;3:23-9

Localization of biotinylated monoclonal antibody in nude mice bearing subcutaneous and intraperitoneal human tumour xenografts. Pervez S, et al. **Int J Cancer Suppl** 1988; 3:30-3

Cell-mediated immunity to chemically xenogenized tumors--III. Generation of monoclonal antibodies interfering with reactivity to novel antigens. Grohmann U, et al. **Int J Immunopharmacol** 1988;10(7):803-9

Monoclonal antibody internalization by tumor cells: an experimental model for potential radioimmunotherapy applications. Mariani G, et al. **Int J Rad Appl Instrum [B]** 1989;16(2):147-50

The occurrence, structural and functional properties of immunoglobulin Fc receptors on murine neoplastic cells. Neauport-Sautes C, et al. **Int Rev Immunol** 1986 Jul; 1(3-4):237-71 (151 ref.)

Role of alveolar macrophages in tumor-bearing rats: tumoricidal properties of carrageenan-activated macrophages. Bijma AM, et al. **Invasion Metastasis** 1988; 8(6):364-73

Depression of nonadaptive immunity after surgical stress: influence on metastatic spread. Zöller M, et al. **Invasion Metastasis** 1989;9(1):46-68

Tumor-infiltrating lymphocytes cultured in recombinant interleukin-2: enhancement of growth, cytotoxicity, and phenotypic expression of cytotoxic T-cell antigens by cyclophosphamide given intravenously prior to tumor

harvest. Lafreniere R, et al. **J Biol Response Mod** 1989 Jun;8(3):238–51

Synergistic interactions between IFN-gamma and IFN-beta in priming murine macrophages for tumor cell killing. Pace JL. **J Leukoc Biol** 1988 Dec;44(6):514–20

Prostaglandin E2-mediated inactivation of various killer lineage cells by tumor-bearing host macrophages. Parhar RS, et al. **J Leukoc Biol** 1988 Dec;44(6):474–84

Differential induction of hematopoiesis and immune suppressor cells in the bone marrow versus in the spleen by Lewis lung carcinoma variants. Young MR, et al. **J Leukoc Biol** 1989 Mar;45(3):262–73

A synthetic adjuvant effective in inducing antitumor immunity. Kataoka T, et al. **Jpn J Cancer Res** 1988 Jul; 79(7):817–20

The induction of enhanced antitumor effect against a nonimmunogenic tumor by highly immunogenic variants obtained by mutagen treatment. Sainouchi R, et al. **Jpn J Cancer Res** 1988 Nov;79(11):1247–53

Selective suppression of the generation of anti-tumor L3T4+ but not of Lyt-2+ T cell-mediated immunity in the tumor-bearing state. Sano H, et al. **Jpn J Cancer Res** 1988 Jul;79(7):857–65

Cytolytic heterogeneity of polymorphonuclear leukocytes in killing of murine tumor cells. Yamazaki M, et al. **Jpn J Cancer Res** 1988 Nov;79(11):1217–23

Natural killer cells in inflammatory lesions and transplanted tumors in mouse skin. Nahar L, et al. **Nagoya J Med Sci** 1989 Mar;51(1–4):25–34

Idiotype network theory and its implications in anti-tumor immunity. Bona CA. **Prog Clin Biol Res** 1989;288:215–21

Specific lipoxygenase inhibition reverses macrophage cytotasis towards P815 tumor cells in vitro induced by the calcium ionophore A23187. Van Hilten JA, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Dec; 34(3):187–92

Transfusion-induced T suppressor cell activity and experimental tumor growth. Lenhard V, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):580–3

The immune response to tumors. North RJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):575–7 (19 ref.)

[Possible involvement of immunologic factors in radiotherapy of mouse MM46 tumors (I). Modifying effects of radiation response using cyclophosphamide] Kunugita N, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Nov 25; 48(11):1459–66 (Eng. Abstr.) **(Jpn)**

[The "immunologic portrait" and tumorigenicity of neoplastic cells induced in mice by 3-methylcholanthrene] Iaroslavtseva OA, et al. **Eksp Onkol** 1988;10(6):26–9 (Eng. Abstr.) **(Rus)**

[Cytostatic action of the peritoneal cells of Syrian hamsters to transformed and tumor cells in vitro and its suppression by prostaglandin E2] Lavnikova NA, et al. **Eksp Onkol** 1989;11(1):57–9 (Eng. Abstr.) **(Rus)**

[In vivo lysis of tumor cells of varying degrees of immune resistance] Viksler VKh, et al. **Eksp Onkol** 1989;11(3):55–60 (Eng. Abstr.) **(Rus)**

[Types of cellular antitumor cytotoxicity] Lomakin MS, et al. **Vopr Onkol** 1988;34(12):1422–32 (65 ref.) **(Rus)**

[Regulation of the immune response mediated by cellular interactions. Its relation to anti-tumor immunity] Hajos SE. **Rev Argent Microbiol** 1987 Apr–Jun;19(2):81–90 (46 ref.) **(Spa)**

METABOLISM

Incorporation of cis-dichlorobiscyclopentylamineplatinum (II) into liposomes enhances its uptake by ADJ/PC6A tumour cells: comparative effects of the free and liposome-incorporated drug on the cyclic 3'-5' nucleotide phosphodiesterase activity. Deliconstantinos G. **Anticancer Res** 1988 Nov–Dec;8(6):1275–8

Biodistribution of radioactive epidermal growth factor in normal and tumor bearing mice. Mateo de Acosta C, et al. **Anticancer Res** 1989 Jan–Feb;9(1):87–92

In vitro release and depot effect after intratumoral application of metrizamide-containing liposomes. Mentrup E, et al. **Arzneimittelforschung** 1989 Apr;39(4):421–3

Differential calmodulin gene expression in fetal, adult, and neoplastic tissues of rodents. MacManus JP, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):278–82

Metabolic binding of misonidazole to mouse tissues. Comparison between labels on the ring and side chain, and the production of tritiated water. Franko AJ, et al. **Biochem Pharmacol** 1989 Feb 15;38(4):665–70

Assimilation of LDL by experimental tumours in mice. Lombardi P, et al. **Biochim Biophys Acta** 1989 Jun 28; 1003(3):301–6

Oxygenation effect of fluosol-DA on hypoxic tumor tissue and retention of PFCs in the tumor-bearing rats. Watanabe M, et al. **Biomater Artif Cells Artif Organs** 1988; 16(1–3):547–56

Opioid antagonist modulation of murine neuroblastoma: a profile of cell proliferation and opioid peptides and receptors. Zagon IS, et al. **Brain Res** 1989 Feb 20; 480(1–2):16–28

Effect of dexamethasone on monoamine and metabolite levels in a brain-tumor model. Bayens-Simmonds J, et al. **Brain Res Bull** 1989 Feb;22(2):187–90

Tumor and serum tamoxifen concentrations in the athymic nude mouse. DeGregorio MW, et al. **Cancer Chemother Pharmacol** 1989;23(2):68–70

Biodistribution and tumour localisation of a daunomycin–monoclonal antibody conjugate in nude mice with human tumour xenografts. Pimm MV, et al. **Cancer Immunol Immunother** 1988;27(3):267–71

Effect of L-histidinol on the metabolism of 5-fluorouracil in the BALB/c x DBA/8 F1 murine tumor system. Sawyer RC, et al. **Cancer Res** 1988 Dec 1;48(23):6664–8

Effect of cancer on the in vivo energy state of rat liver and skeletal muscle. Schneeberger AL, et al. **Cancer Res** 1989 Mar 1;49(5):1160–4

Stimulation by localized tumor hyperthermia of reductive bioactivation of 2-nitroimidazole benznidazole in mice. Walton MI, et al. **Cancer Res** 1989 May 1;49(9):2351–5

Down-regulation of an abundant cellular protein associated with tumor progression. Lawson S, et al. **Carcinogenesis** 1988 Nov;9(11):2129–32

Comparative study on Lewis lung tumour lines with 'low' and 'high' metastatic capacity. III. Glycosaminoglycan synthesis, transport and degradation in cell lines. Pogány G, et al. **Clin Exp Metastasis** 1989 Nov–Dec;7(6):659–69

Inhibition of biosynthetic processes in P388 and Ehrlich ascites cells by cloturin. Miko M, et al. **Drugs Exp Clin Res** 1988;14(9):575–80

Induction of vimentin synthesis in a murine myeloma cell line by TPA is strongly dependent on the composition of the cell culture medium. Giese G, et al. **Eur J Cell Biol** 1988 Dec;47(2):291–9

Biodistributions of radioactive alkaline metals in tumor bearing animals: comparison with 201Tl. Ando A, et al. **Eur J Nucl Med** 1988;14(7–8):352–7

Divalent cations modulate 5-HT3 receptor-induced currents in N1E-115 neuroblastoma cells. Peters JA, et al. **Eur J Pharmacol** 1988 Jul 14;151(3):491–5

Induction of tumour hypoxia by a vasoactive agent. A combined NMR and radiobiological study. Dunn JF, et al. **FEBS Lett** 1989 Jun 5;249(2):343–7

Different effects of bacterial lipopolysaccharide on superoxide anion production by macrophages from normal and tumor-bearing rats. Altavilla D, et al. **Immunopharmacology** 1989 Mar–Apr;17(2):99–106

A comparison of the rate of clearance of xenon (133Xe) and pertechnetate ion (99mTcO4–) in murine tumors and normal leg muscles. Brown SL, et al. **Int J Rad Appl Instrum [B]** 1988;15(4):381–90

Induction of severe tumor hypoxia by modifiers of the oxygen affinity of hemoglobin. Adams GE, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1179–82

Keynote address: cellular reduction of nitroimidazole drugs: potential for selective chemotherapy and diagnosis of hypoxic cells. Chapman JD, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):911–7 (45 ref.)

Importance of tumor affinity of nitroazoles in hypoxic radiosensitization. Kagiya T, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1033–7

Ro 03-8799: preferential relative uptake in human tumor xenografts compared to a murine tumor: comparison with SR-2508. Lespinasse F, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1105–9

Evaluation of tumor energy metabolism and microvascular blood flow after glucose or mannitol administration using 31P nuclear magnetic resonance spectroscopy and laser Doppler flowmetry. Okunieff P, et al. **Int J Radiat Oncol Biol Phys** 1989 Jun;16(6):1493–500

Biodistribution of misonidazole and 1,3-bis(2-chloroethyl)-1-nitrosourea (BCNU) in rats bearing unclamped and clamped 9L subcutaneous tumors. Wong KH, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul; 17(1):135–43

Microphar macokinetics of chemical modifiers. Workman P. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):897–906 (52 ref.)

The role of oxidant injury in tumor cell sensitivity to recombinant human tumor necrosis factor in vivo. Implications for mechanisms of action. Zimmerman RJ, et al. **J Immunol** 1989 Feb 15;142(4):1405–9

Interactions between endogenous glucocorticoids and inflammatory responses in normal and tumor-bearing mice: role of T cells. Normann S, et al. **J Leukoc Biol** 1988 Dec; 44(6):551–8

Local induction of a tumor necrosis factor (TNF)-like cytotoxic factor in murine tissues with tumorous and nontumorous inflammation after systemic administration of antitumor polysaccharides. Takahashi K, et al. **J Pharmacobiodyn** 1988 Jul;11(7):472–8

Increased intratumor concentration of fluorescein-isothiocyanate-labeled neocarzinostatin in rats under angiotensin-induced hypertension. Abe I, et al. **Jpn J Cancer Res** 1988 Jul;79(7):874–9

Involvement of the kinin-generating cascade in enhanced vascular permeability in tumor tissue. Matsumura Y, et al. **Jpn J Cancer Res** 1988 Dec;79(12):1327–34

Iron-binding proteins and 67Ga accumulation by tumor cells. Anghileri LJ, et al. **Nuklearmedizin** 1989 Jun;28(3):105–9

Evaluation of L6, an anti-carcinoma murine monoclonal antibody, in tumor-bearing nude mice. Lavie E, et al. **Radiother Oncol** 1989 Jul;15(3):295–305

GTP gamma S binding activities were reduced in heavy membrane fraction during desensitization by Ca-mobilizing agonists in human astrocytoma cells. Nakahata N, et al. **Res Commun Chem Pathol Pharmacol** 1989 May; 64(2):179–92

Influence of L-methionine-deprived total parenteral nutrition on the tumor tissue and plasma amino acids fraction and the host metabolism: experimental study with Sato lung carcinoma-bearing rats. Goseki N, et al. **Tohoku J Exp Med** 1989 Mar;157(3):251–60

Metabolism of a new radioprotector; S-acetyl-N-glycyl cysteamine. I. Absorption, distribution and excretion metabolites in mice bearing EMT6 tumours. Maurizis JC, et al. **Xenobiotica** 1988 Oct;18(10):1119–28

[Mechanism of tumor promotion] Nishino H. **C R Soc Biol (Paris)** 1988;182(4):439–44 (Eng. Abstr.) **(Fre)**

[Radiosensitizer: hypoxic cell radiosensitizer] Mori T. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-2):1399–404 (15 ref.) (Eng. Abstr.) **(Jpn)**

[Oncogenic alterations of glycosphingolipids and their monoclonal antibodies] Taki T, et al. **Seikagaku** 1989 Mar; 61(3):177–93 (96 ref.) **(Jpn)**

[Plasminogen activators in malignant tissues and lungs of mice during metastatic spreading and administration of various pharmacological agents] Chubinskaia SG, et al. **Eksp Onkol** 1988;10(5):46–9 (Eng. Abstr.) **(Rus)**

[Release of active forms of oxygen by blood neutrophils of Syrian hamsters with primary and transplanted tumors] Kashkina LM, et al. **Eksp Onkol** 1988;10(5):73–5 (Eng. Abstr.) **(Rus)**

[Interaction of the ligand molecules with the membrane receptors of tumor cells] Kaz'min SD. **Eksp Onkol** 1989; 11(2):25–8 (Eng. Abstr.) **(Rus)**

[Changes in oxygen tension in tumor during induced hyperglycemia] Teplitskiĭ MG, et al. **Eksp Onkol** 1988; 10(5):66–8 (Eng. Abstr.) **(Rus)**

[Effect of the prostaglandin E produced by tumor cells on the enzymatic activity of adenosine metabolism and on human natural killer cytotoxic activity] Umanskiĭ VIu, et al. **Eksp Onkol** 1989;11(3):60–3 (Eng. Abstr.) **(Rus)**

[Binding of alcian blue by the outer perimembrane layers of cells in the liver, thymus and transplantable tumors] Slivinskiĭ GG. **Tsitologiia** 1988 Jun;30(6):672–7 (Eng. Abstr.) **(Rus)**

[Polyamines of lymphocytes in animals in an experimental tumor process] Zaletok SP, et al. **Vopr Med Khim** 1989 Jan–Feb;35(1):22–6 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Lymphotropic papovavirus early region is specifically regulated transgenic mice and efficiently induces neoplasia. Chen JD, et al. **J Virol** 1989 May;63(5):2204–14

The middle T proteins of high and low tumor strains of polyomavirus function equivalently in tumor induction. Freund R, et al. **Virology** 1988 Dec;167(2):657–9

Mutations in polyomavirus middle T antigen affecting tumorigenesis. Gelinas C, et al. **Virology** 1989 May; 170(1):193–200

MORTALITY

Effects of short-term dietary restriction on survival of mammary ascites tumor-bearing rats. Siegel I, et al. **Cancer Invest** 1988;6(6):677–80

An illustration of dangers of ignoring survival differences in carcinogenic data. Bailer AJ, et al. **J Appl Toxicol** 1988 Jun;8(3):185–9

PATHOLOGY

Experimental transplantation gliomas in the adult cat brain. 1. Experimental model and neuropathology. Wechsler W, et al. **Acta Neurochir (Wien)** 1989;98(1–2):77–89

Preferential growth of blood-borne cancer cells at sites of trauma--a growth promoting role of macrophages. Alexander P, et al. **Adv Exp Med Biol** 1988;233:245–51

Detection of deregulated tyrosine-kinases in experimental and human metastatic tumors. Comoglio PM, et al. **Adv Exp Med Biol** 1988;233:303–8

Host inflammatory cells and generation of tumor cell diversity. Fulton A, et al. **Adv Exp Med Biol** 1988;233:15–20

Modification of tumor cells and its application to immunotherapy of tumor metastasis. Kobayashi H. **Adv Exp Med Biol** 1988;233:97–108

Accessory cell neoplasia as a result of the breakdown of immunological regulation? Wallis V, et al. **Adv Exp Med Biol** 1988;237:907–12

Animal models of human disease. Pathology and molecular biology of spontaneous neoplasms occurring in transgenic mice carrying and expressing activated cellular oncogenes. Pattengale PK, et al. **Am J Pathol** 1989 Jul;135(1):39–61 (74 ref.)

Effects of T-2 mycotoxin on tumor susceptibility in mice. Corrier DE, et al. **Am J Vet Res** 1988 Dec;49(12):2147–50

Histopathology of nude mice induced by granulocyte-macrophage colony-stimulating factor. Takanari H, et al. **Ann Clin Lab Sci** 1988 Nov–Dec; 18(6):468–75

The gastrointestinal tract as polyamine source for tumor growth. Sarhan S, et al. **Anticancer Res** 1989 Jan–Feb; 9(1):215–23

Gelatinases of murine metastatic tumor cells. Yamagata S, et al. **Biochem Biophys Res Commun** 1989 Jan 16; 158(1):228–34

Differentiation, cancer, and anticancer activity. Tzen CY, et al. **Biochem Cell Biol** 1988 Jun;66(6):478–89 (109 ref.)

Competitive exclusion of clonal subpopulations in heterogeneous tumours after stromal injury. Leith JT, et

al. **Br J Cancer** 1989 Jan;59(1):22–7

Relationship between tumour cell morphology, gap junctions and susceptibility to cytolysis by tumour necrosis factor. Matthews N, et al. **Br J Cancer** 1989 Feb;59(2):189–93

Reduction of tumour bed effect after angiogenic stimulation. Penhaligon M, et al. **Br J Radiol** 1988 Dec;61(732):1168–71

Red alert [editorial] Taylor RM, et al. **Br J Surg** 1988 Nov; 75(11):1049–50

Determination of subcutaneous tumor size in athymic (nude) mice. Tomayko MM, et al. **Cancer Chemother Pharmacol** 1989;24(3):148–54

Comparative carcinogenicity of N-nitrosobis(2-oxopropyl)-amine and N-nitrosomethyl(2-oxopropyl)amine following subcutaneous or oral administration to rats. Pour PM, et al. **Cancer Lett** 1989 Apr;45(1):49–57

Altered responsiveness of metastatic versus non-metastatic fibroblasts to heparin-binding growth factors. Schwarz LC, et al. **Cancer Lett** 1988 Nov;42(3):193–7

Occurrence and relevance of chemically induced benign neoplasms in long-term carcinogenicity studies. Huff JE, et al. **Cancer Metastasis Rev** 1989 Jun;8(1):1–22 (77 ref.)

Loss of metastatic and primary tumor factor X activator capabilities by Lewis lung carcinoma cells cultured in vitamin K-dependent protein deficient serum. Fasco MJ, et al. **Cancer Res** 1988 Nov 15;48(22):6504–9

Effect of glucocorticoid replacement on tumor growth after adrenalectomy in mice. Maehara Y, et al. **Cancer Res** 1989 Apr 15;49(8):2048–51

Production of a more aggressive tumor cell variant by spontaneous fusion of two mouse tumor subpopulations. Miller FR, et al. **Cancer Res** 1989 Aug 1;49(15):4316–21

Comparative tumorigenicity of N-nitroso-2-hydroxymorpholine, N-nitrosodiethanolamine and N-nitrosomorpholine in A/J mice and F344 rats. Hecht SS, et al. **Carcinogenesis** 1989 Aug;10(8):1475–7

Effects of dietary sinigrin or indole-3-carbinol on O6-methylguanine-DNA-transmethylase activity and 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone-induced DNA methylation and tumorigenicity in F344 rats. Morse MA, et al. **Carcinogenesis** 1988 Oct;9(10):1891–5

Carcinogenic activity of endogenously synthesized N-nitrosobis(2-hydroxypropyl)amine in rats administered bis(2-hydroxypropyl)amine and sodium nitrite. Yamamoto K, et al. **Carcinogenesis** 1989 Sep;10(9):1607–11

A modification of the grain count halving method for detailed analysis of cell kinetic parameters. Bassukas ID, et al. **Cell Tissue Kinet** 1987 Nov;20(6):527–37

Proportions of mitotic and apoptotic cells in a range of untreated experimental tumours. Sarraf CE, et al. **Cell Tissue Kinet** 1988 Jan;21(1):45–9

Tumor cell settling and early invasion of the peritoneum. van de Molengraft F, et al. **Clin Exp Metastasis** 1989 Mar-Apr;7(2):187–99

Changes in adhesive properties of tumor cells do not necessarily influence metastasizing capacity. Zöller M, et al. **Clin Exp Metastasis** 1989 Mar-Apr;7(2):227–42

Effects of soyabean and ascorbic acid on experimental carcinogenesis. Fitzsimons JT, et al. **Comp Biochem Physiol [A]** 1989;93(1):285–90

Spontaneous tumors in NMRI mice from carcinogenicity studies. Bomhard E, et al. **Exp Pathol** 1989;36(3):129–45

Problems of experimental tumourigenesis by fibrous dusts, especially by asbestos (with regard to stanton's hypothesis). Kühne W, et al. **Exp Pathol** 1988;34(4):191–6 (51 ref.)

The recursion formula of the Gompertz function: a simple method for the estimation and comparison of tumor growth curves. Bassukas ID, et al. **Growth Dev Aging** 1988 Autumn; 52(3):113–22

Automated selective dissociation of cells from different regions of multicellular spheroids. Freyer JP, et al. **In Vitro Cell Dev Biol** 1989 Jan;25(1):9–19

Relations between pH, oxygen partial pressure and growth in cultured cell spheroids. Carlsson J, et al. **Int J Cancer** 1988 Nov 15;42(5):715–20

Relationship between cellular adhesiveness and metastatic activity in polyomavirus-transformed FR3T3 rat cell lines. Leung-Tack J, et al. **Int J Cancer** 1988 Dec 15;42(6):946–51

Enhanced growth of tumour cells in healing colonic anastomoses and laparotomy wounds. Skipper D, et al. **Int J Color Dis** 1989 Aug;4(3):172–7

The proportion of stem cells in murine tumors. Hill RP, et al. **Int J Radiat Oncol Biol Phys** 1989 Feb;16(2):513–8

The growth and cell kinetics of a secondary tumor after radiation or surgical treatment of the primary tumor. Ramsay J, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct; 17(4):809–13

Device for intracellular increase of oxygen free radicals and inhibition of MethA tumour cell proliferation: in vitro and in vivo studies. Mashiba H, et al. **Int J Tissue React** 1988; 10(5):273–80

Influence of dispase and angiogenesis factors on the growth of human xenografts. Köpf-Maier P, et al. **J Cancer Res Clin Oncol** 1988;114(6):547–52

Flow cytometric DNA histograms and type of growth. Taubert G, et al. **J Cancer Res Clin Oncol** 1988; 114(6):559–64

Characterization of tumors produced by signal peptide-basic fibroblast growth factor-transformed cells. Rogelj S, et al. **J Cell Biochem** 1989 Jan;39(1):13–23

Dissecting tumor cell invasion: epithelial cells acquire invasive properties after the loss of uvomorulin-mediated cell-cell adhesion. Behrens J, et al. **J Cell Biol** 1989 Jun; 108(6):2435–47

In vivo invasion of modified chorioallantoic membrane by tumor cells: the role of cell surface-bound urokinase. Ossowski L. **J Cell Biol** 1988 Dec;107(6 Pt 1):2437–45

Autocrine growth and tumorigenicity of interleukin 2-dependent helper T cells transfected with IL-2 gene. Karasuyama H, et al. **J Exp Med** 1989 Jan 1;169(1):13–25

Tumorigenic and metastatic ability of SV40-transformed BALB/c cell lines and MHC antigen expression. De Giovanni C, et al. **J Immunogenet** 1989 Feb;16(1):45–51

Functional analysis of mononuclear cells infiltrating into tumors. V. A. soluble factor involved in the regulation of cytotoxic/suppressor T cell infiltration into tumors. Shijubo N, et al. **J Immunol** 1989 Apr 15;142(8):2961–7

Microvascular injury in pathogenesis of interferon-induced necrosis of subcutaneous tumors in mice. Dvorak HF, et al. **J Natl Cancer Inst** 1989 Apr 5;81(7):497–502

Genotypic and phenotypic evidence of clonal interactions in murine tumor cells. Itaya T, et al. **J Natl Cancer Inst** 1989 May 3;81(9):664–8

The effects of a highly branched beta-1,3-glucan, SSG, obtained from Sclerotinia sclerotiorum IFO 9395 on the growth of syngeneic tumors in mice. Suzuki I, et al. **J Pharmacobiodyn** 1988 Aug;11(8):527–32

Changes in lymphocyte subsets following multiple administration of recombinant interleukin-2 plus recombinant interferon-beta or -gamma in tumor-bearing mice. Iigo M, et al. **Jpn J Cancer Res** 1989 Jun;80(6):554–61

Two distinct mechanisms involved in the infiltration of lymphocytes into tumors. Shijubo N, et al. **Jpn J Cancer Res** 1988 Oct;79(10):1111–8

Human bronchial epithelial cells neoplastically transformed by v-Ki-ras: altered response to inducers of terminal squamous differentiation. Reddel RR, et al. **Oncogene Res** 1988;3(4):401–8

Animal models of human pituitary tumors. Trouillas J, et al. **Pathol Res Pract** 1988 Sep;183(5):638–41

Environmental stress induced by the tumor bed effect leads to subpopulation exclusion within heterogeneous neoplasms: modeling studies. Michelson S, et al. **Radiat Res** 1988 Sep;115(3):533–42

What makes a tumor cell metastatic? Feldman M, et al. **Sci Am** 1988 Nov;259(5):60–5, 68, 85

Experimental study of invasion and metastasis of cancer cells and establishment of the morphological pattern in the process of invasion and metastatic models of cancer cells. Gao J. **Sci Sin [B]** 1988 Jun;31(6):719–25

Spontaneous nephroblastoma in a strain CE/J mouse. A case report. Liebelt AG, et al. **Toxicol Pathol** 1989;17(1 Pt 1):57–61

Transplantation studies of preputial gland and epithelial skin neoplasms derived from benzidine-based dye carcinogenicity assays in Fischer 344 male rats. Ulland BM, et al. **Toxicol Pathol** 1989;17(1 Pt 1):50–6

[The effect of fungal glycoprotein A on tumor growth and survival of C3H strain mice with methylcholanthrene-induced tumors] Zák M, et al. **Sb Lek** 1988 Sep;90(8–9):252–9 (Eng. Abstr.) **(Cze)**

[Cellular modification during acquisition of drug-resistance to anticancer agents] Kohno K, et al. **Gan To Kagaku Ryoho** 1988 Oct;15(10):2853–7 (Eng. Abstr.) **(Jpn)**

[Experimental approach to the investigation of tumor progression] Okada F, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-1):1210–8 (Eng. Abstr.) **(Jpn)**

[Research on antineoplastic drugs from natural sources. Especially from higher plants] Itokawa H. **Yakugaku Zasshi** 1988 Sep;108(9):824–41 (52 ref.) (Eng. Abstr.) **(Jpn)**

[Interaction of the plasma membranes of the cells of tumors metastastic to the lungs with the target organ] Zolotareva AG, et al. **Eksp Onkol** 1989;11(1):39–43 (Eng. Abstr.) **(Rus)**

[Activity of adenosine metabolism enzymes and spontaneous chemiluminescence in macrophages in the tumor growth process] Umanskiĭ VIu, et al. **Ukr Biokhim Zh** 1989 Mar-Apr;61(2):109–11 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Comparison between tumor pH and cell sensitivity to heat in RIF-1 tumors. Hiraoka M, et al. **Cancer Res** 1989 Jul 15;49(14):3734–6

Blood flow, metabolism, cellular microenvironment, and growth rate of human tumor xenografts. Kallinowski F, et al. **Cancer Res** 1989 Jul 15;49(14):3759–64

Regulation of tumor-induced myelopoiesis and the associated immune suppressor cells in mice bearing metastatic Lewis lung carcinoma by prostaglandin E2. Young MR, et al. **Cancer Res** 1988 Dec 1;48(23):6826–31

3H-misonidazole labeling and viability of hypoxic cells in the sandwich system, an in vitro tumor analogue. Hlatky L, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):143–53

Effects of hydralazine on in vivo tumor energy metabolism, hematopoietic radiation sensitivity, and cardiovascular parameters. Okunieff P, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1145–8

The change in tumor aggressiveness with age: lessons from experimental animals. Kaesberg PR, et al. **Semin Oncol** 1989 Feb;16(1):28–33 (58 ref.)

Absence of acquired thermotolerance in murine tumors unable to increase the expression of heat shock proteins following stress stimuli. Mattei E, et al. **Tumori** 1988 Oct 31;74(5):513–7

[The role of protein kinase C in tumor growth] Khodosova IA, et al. **Eksp Onkol** 1989;11(3):3–9 (54 ref.) (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Inhibition of the development of tumors or leukemia in mice and rats after reduction of food intake. Possible implications for humans. Gross L. **Cancer** 1988 Oct 15;62(8):1463–5

Modification by sodium L-ascorbate, butylated hydroxytoluene, phenobarbital and pepleomycin of lesion development in a wide-spectrum initiation rat model. Thamavit W, et al. **Cancer Lett** 1989 May;45(2):93–101

Inhibitory action of alpha-difluoromethylornithine on N-butyl-N-(4-hydroxybutyl)nitrosamine-induced rat urinary bladder carcinogenesis. Uchida K, et al. **Cancer Res** 1989 Oct 1;49(19):5249–53

Protease inhibitors interfere with the necessary factors of carcinogenesis. Troll W. **Environ Health Perspect** 1989 May;81:59–62 (19 ref.)

Carotenoids and cancer in animal models. Krinsky NI. **J Nutr** 1989 Jan;119(1):123–6 (15 ref.)

Comparative aspects of carotenoids and retinoids as chemopreventive agents for cancer. Moon RC. **J Nutr** 1989 Jan;119(1):127–34 (60 ref.)

Anticarcinogenesis mechanisms, as evaluated in the multistage mouse skin model. Rotstein JB, et al. **Mutat Res** 1988 Dec;202(2):421–7 (41 ref.)

Current ideas on selenium as a chemopreventive agent. Medina D, et al. **Pathol Immunopathol Res** 1988;7(3):187–99 (82 ref.)

[Correlation of the rates of singlet oxygen inactivation by phenols and their efficacy in the inhibition of neoplasms induced by benzo(a)pyrene] Bensasson RV, et al. **C R Acad Sci [III]** 1988;307(18):807–10 (Eng. Abstr.) **(Fre)**

RADIOGRAPHY

Localization by hand-held gamma probe of tumor labeled with antibody "cocktail". Sardi A, et al. **J Surg Res** 1989 Sep;47(3):227–34

RADIONUCLIDE IMAGING

A novel method for the detection of necrotic lesions in human cancers. Epstein AL, et al. **Cancer Res** 1988 Oct 15; 48(20):5842–8

2-Deoxy-2-[18F]fluoro-D-galactose as an in vivo tracer for imaging galactose metabolism in tumors with positron emission tomography. Ishiwata K, et al. **Int J Rad Appl Instrum [B]** 1989;16(3):247–54

Radioiodinated rhodamine-123: preparation and preliminary evaluation as an agent for tumor scintigraphy. Thakur ML, et al. **Int J Rad Appl Instrum [B]** 1988;15(5):517–24

High specific activity [samarium-153] EDTA for imaging of experimental tumor models. Tse JW, et al. **J Nucl Med** 1989 Feb;30(2):202–8

Whole-body autoradiography of tumor-bearing hamsters with a new tumor imaging agent, indium-111-labeled porphyrin. Yamazaki K, et al. **Jpn J Cancer Res** 1988 Jul; 79(7):880–4

[Radiopharmacokinetics of endolymphatically administered 125I-liposomes in rabbits. IV] Chačirov DG, et al. **Radiol Diagn (Berl)** 1988;29(5):791–6 (Eng. Abstr.) **(Ger)**

RADIOTHERAPY

Cinnarizine and flunarizine as radiation sensitisers in two murine tumours. Wood PJ, et al. **Br J Cancer** 1988 Dec; 58(6):742–5

Experimental intra-arterial administration of SR-2508 in the rabbit V2 carcinoma model. Coldwell DM, et al. **Br J Radiol** 1989 Mar;62(735):234–6

Experimental and clinical studies alternating chemotherapy and radiotherapy. Looney WB, et al. **Cancer Metastasis Rev** 1989 Jun;8(1):53–79 (39 ref.)

Optimization of perfluorochemical levels with radiation therapy in mice. Teicher BA, et al. **Cancer Res** 1989 May 15;49(10):2693–7

A physicochemical aspect of radioprotection and sensitized cancer radiotherapy. Kagiya VT, et al. **Free Radic Res Commun** 1989;6(2–3):191–4

The effect of artificially induced hyperglycemia on the radiation response of the Lewis lung and EMT6 tumor models. Chaplin DJ, et al. **Int J Radiat Biol** 1988 Nov; 54(5):803–11

Induction of tumour hypoxia post-irradiation: a method for increasing the sensitizing efficiency of misonidazole and RSU 1069 in vivo. Stratford IJ, et al. **Int J Radiat Biol** 1989 Mar;55(3):411–22

Modification of tumour response by calcium antagonists in the SCVII/St tumour implanted at two different sites. Wood PJ, et al. **Int J Radiat Biol** 1989 Sep;56(3):355–67

Protection of bone marrow by WR-2721 after fractionated irradiation [letter] Coia LR, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct;17(4):908–9

Chlorophenoxy acetic acid derivatives as hemoglobin modifiers and tumor radiosensitizers. Hirst DG, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1183–6

The effect of glutathione (GSH) depletion in vivo by

buthionine sulfoximine (BSO) on the radiosensitization of SR 2508. Kramer RA, et al.
Int J Radiat Oncol Biol Phys 1989 May;16(5):1325–9

31P NMR spectroscopy and HbO2 cryospectrophotometry in prediction of tumor radioresistance caused by hypoxia. Rofstad EK, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr; 16(4):919–23

Variation in tumor response to fluosol-DA (20%). Sasai K, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1149–52

Characteristics of fluorinated nitroazoles as hypoxic cell radiosensitizers. Shibamoto Y, et al.
Int J Radiat Oncol Biol Phys 1989 Apr;16(4):1045–8

Phosphorus-31 magnetic resonance spectroscopy and blood perfusion of the RIF-1 tumor following X-irradiation. Tozer GM, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan; 16(1):155–64

Calcium antagonists as radiation modifiers: site specificity in relation to tumor response. Wood PJ, et al.
Int J Radiat Oncol Biol Phys 1989 May;16(5):1141–4

Acute effects of low-dose cranial irradiation on regional capillary permeability in experimental brain tumors. Delattre JY, et al. **J Neurol Sci** 1989 Apr;90(2):147–53

Direct dose confirmation of quantitative autoradiography with micro-TLD measurements for radioimmunotherapy. Griffith MH, et al. **J Nucl Med** 1988 Nov;29(11):1795–809

Radioprotectors in tumor radiotherapy: factors and settings determining therapeutic ratio. Milas L, et al.
Pharmacol Ther 1988;39(1–3):179–87 (34 ref.)

Experimental bases of hypoxyradiotherapy. Neumeister K, et al. **Radiobiol Radiother (Berl)** 1988;29(4):387–98 (52 ref.)

Biological effectiveness of neutrons and pi-mesons in gut, bone, and transplantable tumours. Kummermehr J, et al.
Strahlenther Onkol 1989 Apr;165(4):276–82

[Combined radiotherapy/hyperthermia in malignant tumors] Willich N. **Fortschr Med** 1988 Sep 20;106(27):557 **(Ger)**

[Radiosensitizing effects of perfluorochemicals] Hasegawa T, et al. **Gan No Rinsho** 1988 Oct;34(13):1864–8 (Eng. Abstr.) **(Jpn)**

[Development of new hypoxic cell radiosensitizer in Japan] Mori T, et al. **Gan No Rinsho** 1988 Oct;34(13):1869–74 (Eng. Abstr.) **(Jpn)**

[Mechanism of action and molecular design of hypoxic cell sensitizer] Nishimoto S, et al. **Gan No Rinsho** 1988 Oct; 34(13):1853–8 (Eng. Abstr.) **(Jpn)**

[Biological effects of particle radiation] Sakamoto K.
Gan No Rinsho 1988 Oct;34(13):1823–31 (Eng. Abstr.) **(Jpn)**

[Developments in the experimental methods of evaluating hypoxic cell sensitizers] Shibamoto Y, et al.
Gan No Rinsho 1988 Oct;34(13):1859–63 (Eng. Abstr.) **(Jpn)**

[Present status of radiation sensitizers—hypoxic cell radiosensitizer] Murayama C, et al.
Gan To Kagaku Ryoho 1989 Jun;16(6):2135–41 (33 ref.) (Eng. Abstr.) **(Jpn)**

[Radioresistance of solid tumors and its modification by combined chemotherapy] Sasaki T.
Kokubyo Gakkai Zasshi 1988 Dec;55(4):515–24 (35 ref.) **(Jpn)**

[Experimental study of the antitumor effect of Z-100 in the treatment of MM46 tumor transplanted in C3H/He mice. 2. Effect of the combination therapy of radiation and long term administration of Z-100] Ogawa Y, et al.
Nippon Gan Chiryo Gakkai Shi 1989 Jan 20;24(1):51–6 (Eng. Abstr.) **(Jpn)**

[Selectivity of the effect of laser radiation on biological tissues] Ivanov AV, et al. **Dokl Akad Nauk SSSR** 1989; 305(3):736–9 **(Rus)**

[Use of low-energy laser radiation in experimental and clinical oncology] Stadnik VIa, et al. **Eksp Onkol** 1989; 11(1):12–7 (50 ref.) (Eng. Abstr.) **(Rus)**

SECONDARY

Absence of t-PA in spontaneous metastatic lesions induced by a newly established cell line. Inufusa H, et al.
Thromb Res 1989 Feb 15;53(4):395–400

[A new drug delivery system in metastatic foci of cancer] Suzuki M, et al. **Gan To Kagaku Ryoh** 1989 Apr;16(4 Pt 2–1):1219–22 (Eng. Abstr.) **(Jpn)**

SECRETION

[Secretion of type-E prostaglandin by tumor cells of different degrees of malignancy when in contact with effectors of natural resistance] Kliucharev TE, et al. **Eksp Onkol** 1989; 11(1):53–6 (Eng. Abstr.) **(Rus)**

SURGERY

Presence of a growth-stimulating factor in serum following primary tumor removal in mice. Fisher B, et al.
Cancer Res 1989 Apr 15;49(8):1996–2001

The influence of the surgical wound on local tumor recurrence. Baker DG, et al. **Surgery** 1989 Sep; 106(3):525–32

THERAPY

Antitumor effects of interferon. Gresser I. **Acta Oncol** 1989; 28(3):347–53 (67 ref.)

Current approaches to the adoptive immunotherapy of cancer. Yang JC, et al. **Adv Exp Med Biol** 1988;233:459–67

A mathematical and computer-based model of alternating chemotherapy and radiation therapy in experimental neoplasms. Goldie JH, et al. **Antibiot Chemother** 1988; 41:11–20

Some remarks on application of macrophages in tumor therapy. Kos FJ. **Arch Geschwulstforsch** 1988;58(6):387–93 (46 ref.)

Immunotherapy of cancer: experimental approach with activated macrophages proliferating in culture. Bartholeyns J, et al. **Cancer Detect Prev** 1988;12(1–6):413–20

Chemoimmunotherapy with cyclophosphamide and bestatin in experimental metastasis in mice. Abe F, et al.
Cancer Immunol Immunother 1989;29(4):231–6

In vivo and in vitro synergistic antitumor effect of interleukin-2-cultured tumor-bearer spleen cells and immune fresh spleen cells. Kan N, et al.
Cancer Immunol Immunother 1989;28(4):260–6

Chemo-immunotherapy of murine tumors using interleukin-2 (IL-2) and cyclophosphamide. IL-2 can facilitate or inhibit tumor growth depending on the sequence of treatment and the tumor type. Kedar E, et al.
Cancer Immunol Immunother 1989;29(1):74–8

Helper strategy in tumor immunology: expansion of helper lymphocytes and utilization of helper lymphokines for experimental and clinical immunotherapy. Forni G, et al.
Cancer Metastasis Rev 1988 Dec;7(4):289–309 (104 ref.)

Antitumor effects of recombinant human interleukin 1 alpha in RIF-1 and Panc02 solid tumors. Braunschweiger PG, et al. **Cancer Res** 1988 Nov 1;48(21):6011–6

Effect of local or systemic treatment prior to primary tumor removal on the production and response to a serum growth-stimulating factor in mice. Fisher B, et al.
Cancer Res 1989 Apr 15;49(8):2002–4

Nature of the bifunctional chelating agent used for radioimmunotherapy with yttrium-90 monoclonal antibodies: critical factors in determining in vivo survival and organ toxicity. Kozak RW, et al. **Cancer Res** 1989 May 15;49(10):2639–44

Combination cytokine immunotherapy with tumor necrosis factor alpha, interleukin 2, and alpha-interferon and its synergistic antitumor effects in mice. McIntosh JK, et al.
Cancer Res 1989 Mar 15;49(6):1408–14

Combined modality therapy with bleomycin, hyperthermia, and radiation. Teicher BA, et al. **Cancer Res** 1988 Nov 15;48(22):6291–7

Enhancement of the effectiveness of Lyt-2+ T-cells for adoptive chemoimmunotherapy by short-term exposure of tumor-bearer spleen cells to polyethylene glycol and/or melphalan. Wise JA, et al. **Cancer Res** 1989 Jul 1; 49(13):3613–9

In vivo antitumor activity of anti-CD3-induced activated killer cells. Yun YS, et al. **Cancer Res** 1989 Sep 1; 49(17):4770–4

Potential role of anti-idiotype antibodies in active tumor immunotherapy. Raychaudhuri S, et al.
CRC Crit Rev Oncol Hematol 1989;9(2):109–24 (40 ref.)

Establishment of tumor-specific immunotherapy model utilizing vaccinia virus-reactive helper T cell activity. Shimizu Y, et al. **Eur J Immunol** 1988 Nov;18(11):1773–8

Animal models in interferon research: some current trends. Schellekens H. **Experientia** 1989 Jun 15;45(6):558–62 (45 ref.)

Intratumour therapy of solid tumours with ricin-antibody conjugates. Kanellos J, et al. **Immunol Cell Biol** 1989 Apr; 67 (Pt 2):89–99

In vivo studies of whole ricin monoclonal antibody immunoconjugates for the treatment of murine tumours. Kanellos J, et al. **Immunol Cell Biol** 1988 Oct-Dec;66 (Pt 5–6):403–15

Local administration of cells containing an inserted IL-2 gene and producing IL-2 inhibits growth of human tumours in nu/nu mice. Bubenik J, et al. **Immunol Lett** 1988 Dec; 19(4):279–82

Tumor immunotherapy [letter] Manson LA.
Immunol Today 1989 Feb;10(2):36

Interleukin-1 beta induces tumor necrosis and early morphologic and metabolic changes in transplantable mouse tumors. Similarities with the anti-tumor effects of tumor necrosis factor alpha or beta. Belardelli F, et al.
Int J Cancer 1989 Jul 15;44(1):116–23

Mouse monoclonal antibodies for experimental immunotherapy promotes killing of tumor cells. Larson LN, et al. **Int J Cancer** 1988 Dec 15;42(6):877–82

The effect of the administration of ethanol to rats on the thermal sensitivity of transplantable tumours. Barker CJ, et al. **Int J Hyperthermia** 1989 Jul-Aug;5(4):543–56

Chemical manipulations of tissue oxygenation for therapeutic benefit. Guichard M. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1125–30 (55 ref.)

Effect of the manipulation of oxyhemoglobin status by BW12C on tumor thermosensitivity and on blood flow in tumor and normal tissues in mice. Honess DJ, et al.
Int J Radiat Oncol Biol Phys 1989 May;16(5):1187–90

Efficacy of antibodies to epidermal growth factor receptor against KB carcinoma in vitro and in nude mice. Aboud-Pirak E, et al. **J Natl Cancer Inst** 1988 Dec 21; 80(20):1605–11

Reduction by anti-antibody administration of the radiotoxicity associated with 131I-labeled antibody to carcinoembryonic antigen in cancer radioimmunotherapy. Blumenthal RD, et al. **J Natl Cancer Inst** 1989 Feb 1; 81(3):194–9

Sequence dependence of administration of human recombinant tumor necrosis factor and interleukin-2 in murine tumor therapy. Zimmerman RJ, et al.
J Natl Cancer Inst 1989 Feb 1;81(3):227–31

Morphologic and morphometric studies on tumor necrosis produced by radiotherapy, and hyperthermia singly and in combination. Patrício MB, et al. **J Surg Oncol** 1989 Sep; 42(1):5–10

Antitumor effect of interleukin-1 beta in the double grafted tumor system. Ebina T, et al. **Jpn J Cancer Res** 1989 Jun; 80(6):570–6

Radiation, hyperthermia, and their combination in treatment of chemically induced autochthonous tumors in mice. Sato S, et al. **Jpn J Cancer Res** 1988 Dec;79(12):1359–63

Immunological mechanisms of antitumor activity of some kinds of Chinese herbs: Meth A-induced delayed type hypersensitivity. Mori H, et al. **Jpn J Pharmacol** 1988 Sep; 48(1):37–46

Successful whole body hyperthermia for cancer. Rosen P.
Med Hypotheses 1989 May;29(1):45–6

Anticancer potential of Viva-Natural, a dietary seaweed extract, on Lewis lung carcinoma in comparison with chemical immunomodulators and on cyclosporine-accelerated AKR leukemia. Furusawa E, et al. **Oncology** 1989;46(5):343–8

Application of thermal dilution measurements for thermal treatment planning. Higgins PD, et al. **Phys Med Biol** 1989 Jun;34(6):651–8

Inhibition of human tumor growth in nude mice by a conjugate of doxorubicin with monoclonal antibodies to epidermal growth factor receptor. Aboud-Pirak E, et al.
Proc Natl Acad Sci U S A 1989 May;86(10):3778–81

Interleukin 1 protects against the lethal effects of irradiation of mice but has no effect on tumors in the same animals. Dorie MJ, et al. **Proc Soc Exp Biol Med** 1989 May; 191(1):23–9

Animal modeling and thermal dose. Dewhirst MW.
Radiol Clin North Am 1989 May;27(3):509–18 (23 ref.)

Biologic rationale for hyperthermia. Hetzel FW.
Radiol Clin North Am 1989 May;27(3):499–508 (54 ref.)

Laserthermia. A new method of interstitial local hyperthermia using the contact Nd:YAG laser. Joffe SN, et al. **Radiol Clin North Am** 1989 May;27(3):611–20

Hyperthermia and microcirculatory effects of heat in animal tumors. Endrich B. **Recent Results Cancer Res** 1988; 109:96–108 (49 ref.)

Thermal enhancement of the cell killing effect of X-irradiation in mammalian cells in vitro and in a transplantable mouse tumor: influence of pH, thermotolerance, hypoxia, or misonidazole. Haveman J, et al. **Recent Results Cancer Res** 1988;109:149–60 (44 ref.)

Effects of hyperthermic treatments on malignant cells and animal tumors: introductory remarks. Streffer C.
Recent Results Cancer Res 1988;109:89–95 (22 ref.)

In vivo administration of anti-CD3 prevents malignant progressor tumor growth. Ellenhorn JD, et al. **Science** 1988 Oct 28;242(4878):569–71

[The interleukin-2-LAK system in cancerology] Fridman WH. **Pathol Biol (Paris)** 1989 Feb;37(2):94–5 (6 ref.) **(Fre)**

[Future perspectives on tumor-specific immunotherapy using hapten-reactive T cell activity] Hamaoka T.
Gan To Kagaku Ryoho 1989 Apr;16(4 Pt 2–1):886–96 (Eng. Abstr.) **(Jpn)**

[Chemoembolization with microsphere of silicon-adriamycin composite] Yanagiya K, et al. **Nippon Rinsho** 1989 Jun; 47(6):1373–8 **(Jpn)**

[Use of monoclonal antibodies in the immunotherapy of neoplasms] Robak T. **Przegl Lek** 1989;46(4):420–6 (45 ref.) **(Pol)**

[Temperature distribution in normal and tumor tissues of animals subjected to local SHF-hyperthermia] Rudakov NP, et al. **Eksp Onkol** 1988;10(5):69–70 (Eng. Abstr.) **(Rus)**

[Effect of hyperthermia and ionizing radiation separately or in combination on tumor metastasis] Kurpeshev OK.
Med Radiol (Mosk) 1988 Dec;33(12):34–40 (Eng. Abstr.) **(Rus)**

[Interleukin-2 and cancer immunotherapy] Ogarkov VI, et al. **Vopr Onkol** 1989;35(2):141–50 (40 ref.) **(Rus)**

[The action of tularemia vaccine on DMBA-induced tumors in rats] Zil'lian VN, et al. **Vopr Onkol** 1989;35(4):484–5 **(Rus)**

ULTRASTRUCTURE

A role of the cancer cell membrane fluidity in the cancer metastases: an ESR study. Nakazawa I, et al.
Tohoku J Exp Med 1989 Mar;157(3):193–8

The use of electron microscopy and immunocytochemistry to characterise spontaneously-arising, transplantable rat tumors. Kamel HM, et al. **Virchows Arch [B]** 1989; 57(1):11–8

[Ultrastructural studies of tumors transplanted into nude mice using the TTK-1 cell lines derived from normal human early decidual tissue] Tateyama I, et al.
Nippon Sanka Fujinka Gakkai Zasshi 1989 Mar; 41(3):265–72 (Eng. Abstr.) **(Jpn)**

NEOPLASMS, GLANDULAR EPITHELIAL

PATHOLOGY

Neuroendocrine differentiation: a prognostic feature of non-small-cell lung cancer? [editorial] Baylin SB. **J Clin Oncol** 1989 Oct;7(10):1375-6

[Glandular mural hamartoma of the Bauhin valve: a new entity? Apropos of 1 case associated to a diaphragm of the transverse colon] Ben Rejeb A, et al. **Arch Anat Cytol Pathol** 1988;36(3):104-7 (Eng. Abstr.) (Fre)

SURGERY

Influence of secondary cytoreduction at the time of second-look laparotomy on the survival of patients with epithelial ovarian carcinoma. Hoskins WJ, et al. **Gynecol Oncol** 1989 Sep;34(3):365-71

NEOPLASMS, HORMONE-DEPENDENT

Hormone dependency of meningiomas [letter] **Lancet** 1989 Jun 17;1(8651):1381-2

[Androgen-dependent carcinoma] Shimazaki J, et al. **Rinsho Byori** 1988 Dec;36(12):1379-85 (Jpn)

[Papilloma of the larynx as a dyshormonal tumor] Shadyev KhD, et al. **Vestn Otorinolaringol** 1988 Nov-Dec;(6):54-6 (Rus)

[Hormone-dependent tumors: current concepts] Ciocca DR. **Medicina (B Aires)** 1988;48(1):87-94 (54 ref.) (Spa)

ANALYSIS

Correlation of estrogen, progesterone, and androgen receptors in breast cancer. Ellis LM, et al. **Am J Surg** 1989 Jun;157(6):577-80; discussion 581

Characterization of prolactin receptors and their distribution among American and Israeli women with breast cancer: implications for prediction of hormonal dependency and treatment. Ben-David M, et al. **Biomed Pharmacother** 1988; 42(2):101-9

Coexistence of cytoplasmic and nuclear estrogen receptors. A histochemical study on human mammary cancer and rabbit uterus. Lee SH. **Cancer** 1989 Oct 1;64(7):1461-6

A cytoplasmatic estrogen receptor related protein (ER-D5 Ag) in breast cancer. Nardelli GB, et al. **Eur J Gynaecol Oncol** 1989;10(2):141-3

Proteinase-like peptidase activities and oestrogen receptor levels in breast cancer tissue. Vasishta A, et al. **J Cancer Res Clin Oncol** 1989;115(1):89-92

A monoclonal antibody to a 48 K antigen in oestrogen-dependent human breast cancer cells. Lewis JG, et al. **J Steroid Biochem** 1989 Aug;33(2):171-8

Hormone receptor modulation in xenotransplanted endocrine related human breast cancer. Michel RT, et al. **Strahlenther Onkol** 1989 Jul;165(7):497-8

Proliferation characteristics and receptor concentrations in two gynecological carcinomas serially passaged into female nude mice or castrated males. Vering A, et al. **Strahlenther Onkol** 1989 Jul;165(7):498-9

DIAGNOSIS

Predictors of hormone response for patients with ER-unknown breast tumours. Hug V, et al. **Br J Cancer** 1989 Mar;59(3):421-5

[Initial experiences with a monoclonal antibody to the progesterone receptor complex] Neis KJ, et al. **Geburtshilfe Frauenheilkd** 1989 Feb;49 Suppl 1:109-14 (Eng. Abstr.) (Ger)

DRUG THERAPY

Nitrosoureas. Modes of action and perspectives in the use of hormone receptor affinity carrier molecules. Eisenbrand G, et al. **Acta Oncol** 1989;28(2):203-11 (46 ref.)

Hormonal therapy trials in prostatic cancer. An EORTC Genitourinary Group study. Bollack C, et al. **Am J Clin Oncol** 1988;11 Suppl 2:S156-9

New endocrine agents, guidelines for future development. Judson IR. **Br J Cancer** 1989 Aug;60(2):153-4 (5 ref.)

Hormonal therapy for breast cancer. Dunne CF. **Cancer Nurs** 1988 Oct;11(5):288-94

Effects of the aromatase inhibitor 7 alpha-(4'-amino)phenylthio-4-androstene-3,17-dione on 7,12-dimethylbenz(a)anthracene-induced mammary carcinoma in rats. Brueggemeier RW, et al. **Cancer Res** 1988 Dec 1;48(23):6808-10

Antioestrogens in the management of hormone-dependent cancer. Litherland S, et al. **Cancer Treat Rev** 1988 Sep; 15(3):183-94 (68 ref.)

Aromatase inhibitors in the treatment of advanced breast cancer. Miller WR. **Cancer Treat Rev** 1989 Jun;16(2):83-93 (65 ref.)

Estrogen priming in advanced breast cancer. Maghsoodnia M, et al. **Drug Intell Clin Pharm** 1988 Sep;22(9):672-5 (27 ref.)

Endocrine therapy of breast and prostate cancer. Manni A. **Endocrinol Metab Clin North Am** 1989 Jun;18(2):569-92 (147 ref.)

The control of hormone-dependent breast cancer growth--are we talking about estrogen alone? Jordan VC. **Eur J Cancer Clin Oncol** 1988 Aug;24(8):1245-8 (27 ref.)

Antitumor activity of the progesterone antagonists ZK 98.299 and RU 38.486 in the hormone-dependent MXT mammary tumor model of the mouse and the DMBA- and the MNU-induced mammary tumor models of the rat. Schneider MR, et al. **Eur J Cancer Clin Oncol** 1989 Apr; 25(4):691-701

Changes in receptor status after treatment with tamoxifen in endometrial cancer. Oriana S, et al. **Int J Biol Markers** 1988 Oct-Dec;3(4):233-6

Chlorocarbamate-mustard-linked 1,1,2-triphenylbut-1-enes with a selective antitumor activity on mammary tumors containing estrogen receptors. Schneider MR, et al. **J Cancer Res Clin Oncol** 1988;114(6):583-7

Rapid rise of serum testosterone following discontinuation of long term treatment of prostate carcinoma with an LHRH-agonist. Kreis W, et al. **Onkologie** 1988 Dec; 11(6):292-3

Inhibition of aromatase activity and of endocrine-responsive tumor growth by 10-propargylestr-4-ene-3, 17-dione and its 17-propionate derivative. Zimniski SJ, et al. **Steroids** 1987 Jul-Sep;50(1-3):135-46

Droloxifene--a novel antiestrogen in endocrine dependent human tumors xenotransplanted into nude mice. Stelzer P, et al. **Strahlenther Onkol** 1989 Jul;165(7):559-60

Can neo-adjuvant chemotherapy prevent residual tumors? Bourut C, et al. **Suppl J Med Oncol Tumor Pharmacother** 1988;1:59-63

[Animal experimental models of breast cancer for therapeutic testing of hormones and antihormones] Naundorf H. **Arch Geschwulstforsch** 1988;58(5):345-56 (112 ref.) (Eng. Abstr.) (Ger)

[New possibilities for differentiated therapy of leiomyoma of the uterus using the GnRH agonist zoladex] Gesenhues T, et al. **Geburtshilfe Frauenheilkd** 1989 Feb;49 Suppl 1:96-8 (Eng. Abstr.) (Ger)

[Hormone dependence of malignant ovarian tumors--an in vitro model] Schieder K, et al. **Geburtshilfe Frauenheilkd** 1989 May;49(5):437-41 (Eng. Abstr.) (Ger)

[Effect of cytostatic therapy on bone metabolism] Heytmanek G, et al. **Gynakol Rundsch** 1988;28 Suppl 2:193-5 (Ger)

[Clinical model concept of the evolution of malignant tumors: implication for hormone therapy of breast cancer] Nagel GA, et al. **Onkologie** 1989 Apr;12(2):69-80 (107 ref.) (Eng. Abstr.) (Ger)

GENETICS

Gene expression during the early phases of regression of the androgen-dependent Shionogi mouse mammary carcinoma. Rennie PS, et al. **Cancer Res** 1988 Nov 15; 48(22):6309-12

Cytogenetic characterization of several androgen responsive and unresponsive sublines of the human prostatic carcinoma cell line LNCaP. König JJ, et al. **Urol Res** 1989;17(2):79-86

METABOLISM

Progestin inhibition of estrogen-dependent proliferation in ZR-75-1 human breast cancer cells: antagonism by insulin. Poulin R, et al. **Breast Cancer Res Treat** 1989 Jul; 13(3):265-76

Hormonal control of gastric and colorectal cancer in man. Morris DL, et al. **Gut** 1989 Apr;30(4):425-9 (48 ref.)

[Cancer of the breast, mechanism of action of anti-estrogens] Pasqualini JR, et al. **Pathol Biol (Paris)** 1988 Oct; 36(8):979-82 (Eng. Abstr.) (Fre)

PATHOLOGY

Polyamine involvement in the growth of hormone-responsive and -resistant human breast cancer cells in culture. Glikman P, et al. **Cancer Res** 1989 Mar 15;49(6):1371-6

Progression and selection in heterogeneous tumor composed of androgen-responsive Shionogi carcinoma 115 and its autonomous subline (Chiba subline 2). Ichikawa T, et al. **Cancer Res** 1989 Jan 15;49(2):367-71

Effect of androgen on proliferation of estrogen-responsive transformed mouse Leydig cells in serum-free culture. Nishizawa Y, et al. **Cancer Res** 1989 Mar 15;49(6):1377-82

Antiestrogenic action of toremifene on hormone-dependent, -independent, and heterogeneous breast tumor growth in the athymic mouse. Robinson SP, et al. **Cancer Res** 1989 Apr 1;49(7):1758-62

The paracrine stimulation of MCF-7 cells by MDA-MB-231 cells: possible role in antiestrogen failure. Robinson SP, et al. **Eur J Cancer Clin Oncol** 1989 Mar;25(3):493-7

Effects of gastrin, proglumide, and somatostatin on growth of human colon cancer. Smith JP, et al. **Gastroenterology** 1988 Dec;95(6):1541-8

[Flow cytophotometry parameters, hormone receptors and axillary lymph node status as prognostic factors in primary breast cancer] Kaufmann M, et al. **Geburtshilfe Frauenheilkd** 1988 Oct;48(10):705-9 (Eng. Abstr.) (Ger)

[Proliferation index, axillary lymph node status, hormone receptors and age as prognostic factors in primary breast cancer] Kaufmann M, et al. **Geburtshilfe Frauenheilkd** 1989 Feb;49 Suppl 1:104-8 (Eng. Abstr.) (Ger)

[Preoperative immunocytochemical estrogen receptor determination in fine needle aspirates in breast cancer using monoclonal antibodies] Kübler HC, et al. **Geburtshilfe Frauenheilkd** 1988 Nov;48(11):763-7 (Eng. Abstr.) (Ger)

[Biological significance of estrogen receptor status in axillary lymph node metastases of invasive ductal breast cancers] Horst HA, et al. **Klin Wochenschr** 1988 Dec 1;66(23):1160-6 (Eng. Abstr.) (Ger)

[Hormone receptor determination in breast cancer using the dextran- coated charcoal method and monoclonal antibodies: correlation with cytomorphologic grading] Schenck U, et al. **Onkologie** 1988 Oct;11(5):211-5 (Eng. Abstr.) (Ger)

[Comparison of the receptor content and growth fraction of breast cancers and their axillary lymph node metastases] Fleige B, et al. **Pathologe** 1989 Jan;10(1):12-5 (Ger)

[The hormone receptor content of breast cancers. Comparison of morphologic and biochemical methods of determination] Neumann K, et al. **Pathologe** 1989 May; 10(3):160-4 (Ger)

PHYSIOPATHOLOGY

Relationship of androgen receptors to the growth and regression of the prostate. Rennie PS, et al. **Am J Clin Oncol** 1988;11 Suppl 2:S13-7 (15 ref.)

Androgen-dependent human prostate cancer in nude mice. The PC-82 tumor model. van Steenbrugge GJ, et al. **Am J Clin Oncol** 1988;11 Suppl 2:S8-12

Reproductive events, occurring in adolescence at the time of development of reproductive organs and at the time of tumour initiation, have a bearing on growth characteristics and reproductive hormone regulation in normal and tumour tissue investigated decades later--a hypothesis. Olsson H. **Med Hypotheses** 1989 Feb;28(2):93-7

Changing strategies in the treatment of hormone-dependent breast cancer. Dao TL. **Semin Surg Oncol** 1989;5(2):111-7 (38 ref.)

[The role of protein kinase C in the adenylate cyclase activation by estradiol in the plasma membranes of estradiol-dependent tumors] Morozova TM, et al. **Dokl Akad Nauk SSSR** 1989 Jan-Feb;304(1):224-7 (Rus)

RADIOTHERAPY

Bromine-80m radiotoxicity and the potential for estrogen receptor-directed therapy with auger electrons. DeSombre ER, et al. **Cancer Res** 1988 Oct 15;48(20):5805-9

SECONDARY

Alveolar soft-part sarcoma: a hormone-sensitive tumour? Pang JA, et al. **Postgrad Med J** 1988 May;64(751):386-8

THERAPY

How to define hormone-resistance. de Voogt HJ, et al. **Prog Clin Biol Res** 1989;303:325-9

Management of hormone-resistant prostate cancer. Gibbons RP. **Prog Clin Biol Res** 1989;303:337-45 (35 ref.)

Do we continue hormonal treatment after hormone resistance? Jones WG. **Prog Clin Biol Res** 1989;303:331-6 (11 ref.)

Management of hormone resistant stage C and D prostatic cancer. Khoury S. **Prog Clin Biol Res** 1989;303:347-52 (0 ref.)

[Endocrine therapy of breast cancer. Status and perspectives] Jänicke F. **Geburtshilfe Frauenheilkd** 1988 Oct; 48(10):677-86 (79 ref.) (Eng. Abstr.) (Ger)

[Treatment of hormone-dependent cancer--recent progress and problems] **Nippon Gan Chiryo Gakkai Shi** 1988 Apr 20;23(4):940-3 (Jpn)

NEOPLASMS, MULTIPLE ENDOCRINE

see related

ZOLLINGER-ELLISON SYNDROME

Neurofibromatosis associated with somatostatinoma: a report of two patients. Swinburn BA, et al. **Clin Endocrinol (Oxf)** 1988 Apr;28(4):353-9

A case of multiple endocrine neoplasia (MEN) type 1; the immunohistochemical and ultrastructural studies of its tumors and the analysis of hormones in tumor extracts. Ishii H, et al. **Endocrinol Jpn** 1989 Feb;36(1):37-45

Multiple endocrine neoplasia type II with Zollinger-Ellison syndrome caused by a solitary pancreatic gastrinoma. Maton PN, et al. **JAMA** 1989 Jul 28;262(4):535-7

Familial multiple endocrine neoplasia type I. Aurbach GD, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Dec 20; 64(12):1209-13

[Malignant adrenocortical tumor as a part of Wermer's syndrome. Apropos of a case] Houdelette P, et al. **J Chir (Paris)** 1989 Jun-Jul;126(6-7):385-7 (12 ref.) (Eng. Abstr.) (Fre)

[Multiple endocrine neoplasia] Miyauchi A, et al. **Gan No Rinsho** 1989 Jan;Spec No:663-71 (Jpn)

[Type 2 multiple endocrine neoplasm (letter)] Herrera Pombo JL, et al. **Rev Clin Esp** 1989 Mar;184(5):269 (Spa)

BLOOD

Serum pepsinogen I in familial multiple endocrine neoplasia type I. Lamers CB, et al. **Dig Dis Sci** 1988 Oct; 33(10):1274-6

Hypercalcemia in the multiple endocrine neoplasia

syndromes. Fitzpatrick LA.
Endocrinol Metab Clin North Am 1989 Sep;18(3):741–52 (49 ref.)

COMPLICATIONS

Hyperprealbuminemia, euthyroid hyperthyroxinemia, Zollinger–Ellison–like syndrome and hypercorticism in a pancreatic endocrine tumour. Maye P, et al.
Acta Endocrinol (Copenh) 1989 Jan;120(1):87–91

Valvular prolapse and great vessel dilatation in multiple endocrine neoplasia type 2B. Dulaney JJ, et al.
Am Heart J 1989 Jan;117(1):198–201

Hereditary localized pruritus in affected members of a kindred with multiple endocrine neoplasia type 2A (Sipple's syndrome). Nunziata V, et al. **Clin Endocrinol (Oxf)** 1989 Jan;30(1):57–63

Cushing's syndrome due to ectopic ACTH secretion by bilateral pheochromocytomas in multiple endocrine neoplasia type 2A [letter] Mendonça BB, et al.
N Engl J Med 1988 Dec 15;319(24):1610–1

DIAGNOSIS

MR, CT, and ultrasound findings of metastatic vipoma in pancreas. Tjon A Tham RT, et al.
J Comput Assist Tomogr 1989 Jan–Feb;13(1):142–4

Pentagastrin stimulation of calcitonin in pheochromocytoma does not always indicate multiple endocrine neoplasia type II. Hein MD, et al. **J Endocrinol Invest** 1989 Apr; 12(4):265–7

Screening for multiple endocrine neoplasia type 2a with DNA–polymorphism analysis [see comments] Sobol H, et al. N **Engl J Med** 1989 Oct 12;321(15):996–1001. **Comment in:** N Engl J Med 1989 Oct 12;321(15):996–1001

Family screening in medullary thyroid carcinoma presenting without a family history. Ponder BA, et al. **Q J Med** 1988 Apr;67(252):299–308

[Type 2b multiple endocrine adenomatosis] Lehnert H, et al. **Schweiz Rundsch Med Prax** 1989 Jun 27;78(26):741–4 (Eng. Abstr.) **(Ger)**

[Endocrine neoplasms of the pancreas. Diagnostic aspects and treatment results] Purri P, et al. **Minerva Med** 1989 Jul;80(7):665–7 **(Ita)**

[The multiple endocrine neoplasm type–IIb syndrome] Kazeev KN, et al. **Probl Endokrinol (Mosk)** 1988 Nov–Dec; 34(6):45–7 **(Rus)**

ETIOLOGY

Simultaneous presentation of parathyroid, thyroid and parotid tumours 44 years after neck irradiation. Delbridge L, et al. **Aust N Z J Surg** 1989 Feb;59(2):187–90

GENETICS

Multiple endocrine neoplasia type 1 (MEN–1). Clinical, biochemical and genetical investigations. Oberg K, et al. **Acta Oncol** 1989;28(3):383–7 (16 ref.)

The clinical and screening age–at–onset distribution for the MEN–2 syndrome. Easton DF, et al. **Am J Hum Genet** 1989 Feb;44(2):208–15

Localization of the genetic defect in multiple endocrine neoplasia type 1 within a small region of chromosome 11. Nakamura Y, et al. **Am J Hum Genet** 1989 May;44(5):751–5

Long–term follow–up of a kindred with multiple endocrine neoplasia type IIA. Munn SR, et al. **Aust N Z J Surg** 1989 Sep;59(9):683–9

Multiple endocrine syndrome type I. Clinical, laboratory findings, and management in five families. Samaan NA, et al. **Cancer** 1989 Aug 1;64(3):741–52

Ring chromosome in a patient with MEN IIA S. Temperani P, et al. **Cancer Genet Cytogenet** 1989 Jan;37(1):23–7

Fragile sites and high–resolution chromosome studies in multiple endocrine neoplasia type 2A. Wurster–Hill DH, et al. **Cancer Genet Cytogenet** 1988 Oct 15;35(2):273–7

Low incidence of loss of chromosome 10 in sporadic and hereditary human medullary thyroid carcinoma. Nelkin BD, et al. **Cancer Res** 1989 Aug 1;49(15):4114–9

Loss of the same alleles of HRAS1 and D11S151 in two independent pancreatic cancers from a patient with multiple endocrine neoplasia type 1. Yoshimoto K, et al. **Cancer Res** 1989 May 15;49(10):2716–21

Linkage analysis of multiple endocrine neoplasia type 1 with INT2 and other markers on chromosome 11 [published erratum appears in Genomics 1989 Jul;5(1):166] Bale SJ, et al. **Genomics** 1989 Apr;4(3):320–2

Development of multiple endocrine neoplasia type 2A does not involve substantial deletions of chromosome 10. Landsvater RM, et al. **Genomics** 1989 Apr;4(3):246–50

Cytogenetical investigations in patients with primary hyperparathyroidism and multiple endocrine neoplasia type 1. Benson L, et al. **Hereditas** 1988;108(2):227–9

Close linkage of MEN2A with RBP3 locus in Japanese kindreds. Yamamoto M, et al. **Hum Genet** 1989 Jun; 82(3):287–8

Mucosal neuromata syndrome (MEN type IIb (III)). Fryns JP, et al. **J Med Genet** 1988 Oct;25(10):703–6 (51 ref.)

Myotonic dystrophy and hyperparathyroidism: association with neurofibromatosis and multiple endocrine adenomatosis type 2A. Rosenberg NL, et al.
J Neurol Neurosurg Psychiatry 1988 Dec;51(12):1578–80

Effects of age, sex and multiple endocrine neoplasia type–II on silver stained nucleolar organizer regions. Butler MG, et al. **Mech Ageing Dev** 1989 Jan;47(1):17–24

Clonality of parathyroid tumors in familial multiple endocrine neoplasia type 1. Friedman E, et al. **N Engl J Med** 1989 Jul 27;321(4):213–8

The molecular biology of Laron dwarfism and medullary thyroid cancer [editorial: comment] Jackson CE, et al. **N Engl J Med** 1989 Oct 12;321(15):1039–40. **Comment on:. Comment on:** N Engl J Med 1989 Oct 12;321(15):989–95 N Engl J Med 1989 Oct 12;321(15):996–1001

Association of parathyroid tumors in multiple endocrine neoplasia type 1 with loss of alleles on chromosome 11. Thakker RV, et al. **N Engl J Med** 1989 Jul 27;321(4):218–24

The oncogene associated with human papillary thyroid carcinoma (PTC) is assigned to chromosome 10 q11–q12 in the same region as multiple endocrine neoplasia type 2A (MEN2A). Donghi R, et al. **Oncogene** 1989 Apr; 4(4):521–3

[A family with type 2a multiple endocrine neoplasms] Haak HR, et al. **Ned Tijdschr Geneeskd** 1988 Sep 3;132(36):1660–4 (Eng. Abstr.) **(Dut)**

PATHOLOGY

Morphology of the adrenal medulla indicating multiple neuroectodermal abnormalities in pheochromocytoma patients. Jansson S, et al. **Acta Med Austriaca** 1988; 15(4):99–100

Multiple nonfunctional pancreatic islet cell tumor in multiple endocrine neoplasia type I. A case report. Takahashi H, et al. **Acta Pathol Jpn** 1988 May;38(5):667–82

Multiple endocrine neoplasia (MEN) type II b: report of a case observed at autopsy with immunohistochemical study of mucosal neuromas. Lesourd A, et al.
Clin Neuropathol 1988 Sep–Oct;7(5):238–43

PHYSIOPATHOLOGY

Gastrin cell function in familial multiple endocrine neoplasia type I. Lamers CB, et al. **Gut** 1988 Oct;29(10):1358–63

RADIOGRAPHY

Sipple syndrome [letter] Vaughan KD.
Can Assoc Radiol J 1989 Feb;40(1):63–4

RADIONUCLIDE IMAGING

Zona fasciculata cortical adenoma and adrenal medullary hyperplasia in MEN II patient: unique concurrent presentation. Krubsack AJ, et al. **Clin Nucl Med** 1988 Oct; 13(10):730–3

Methodology and dosimetry in adrenal medullary imaging with iodine–131 MIBG. Lindberg S, et al. **J Nucl Med** 1988 Oct;29(10):1638–43

SECRETION

[A case of multiple endocrine neoplasia, type 1, with parathyroid adenoma, multinodular adrenal cortical hyperplasia, islet cell tumor and hyperplasia of thyroid with concomitant hypersecretion of gastrin and total glucagon–like immunoreactivity] Shigematsu S, et al.
Nippon Naika Gakkai Zasshi 1989 Mar;78(3):357–62 **(Jpn)**

SURGERY

Cardiomyopathy in phaeochromocytoma: a case report. Villani A, et al. **Eur J Anaesthesiol** 1989 May;6(3):233–6

The progressive Zollinger–Ellison syndrome in multiple endocrine neoplasia. Luttwak EM, et al.
Surg Gynecol Obstet 1988 Nov;167(5):415–9

Multiple neuroectodermal abnormalities in pheochromocytoma patients. Jansson S, et al.
World J Surg 1988 Oct;12(5):710–7

[Subtotal adrenalectomy versus autotransplantation of the adrenal cortex—an alternative procedure in bilateral adrenalectomy in MEN II?] Klempa I, et al. **Chirurg** 1989 Apr;60(4):266–71; discussion 271–2 (Eng. Abstr.) **(Ger)**

[Multiple endocrine neoplasia of the II B type] Schickedanz H, et al. **Z Kinderchir** 1989 Jun;44(3):181–5 (Eng. Abstr.) **(Ger)**

[An operative case of multiple endocrine neoplasia type 1 (MEN type 1) with insulinoma] Soyama N, et al.
Nippon Shokakibyo Gakkai Zasshi 1988 Jun;85(6):1312–6 **(Jpn)**

[Type IIa multiple endocrine neoplasia with asymptomatic pheochromocytoma (published erratum appears in Rev Esp Anestesiol Reanim 1989 Mar–Apr;36(2):76)] Garcia Ferrando V, et al. **Rev Esp Anestesiol Reanim** 1988 Nov–Dec;35(6):323–5 (Eng. Abstr.) **(Spa)**

THERAPY

Treatment of the pancreatic disease of multiple endocrine neoplasia type 1 (MEN 1). Tisell LE, et al. **Acta Oncol** 1989;28(3):415–7

NEOPLASMS, MULTIPLE PRIMARY

Triple synchronous malignant tumors. Hepatic leiomyosarcoma, splenic hemangiosarcoma and sigmoid colon cancer. Case report. Kinoshita A, et al.
Acta Chir Scand 1988 Jul–Aug;154(7–8):477–9

Coexistence of bilateral adrenocortical adenomas and right sided adrenal pheochromocytoma. Koršić M, et al. **Acta Med Iugosl** 1988;42(5):407–18

Acute leukemia in multiple myeloma [letter] Feliu J, et al. **Acta Oncol** 1988;27(6b):864

Unusual association of renal carcinoma and transitional cell carcinoma of the contralateral pelvis. Diagnostic aspects and therapeutical management. Porena M, et al.
Acta Urol Belg 1988;56(4):489–94

Warthin's tumor with malignant lymphoma. DNA analysis of paraffin–embedded tissue. Bunker ML, et al.
Am J Clin Pathol 1989 Mar;91(3):341–4

Dual carcinoid tumors of Meckel's diverticulum presenting as metastasis in an inguinal hernia sac: case report with literature review. Dixon AY, et al. **Am J Gastroenterol** 1988 Nov;83(11):1283–8 (66 ref.)

Malignant melanoma with metastasis to a colonic polyp. Grignon DJ, et al. **Am J Gastroenterol** 1988 Nov; 83(11):1298–300 (13 ref.)

Gallbladder carcinoma arising in adenomyomatosis [letter] Paraf F, et al. **Am J Gastroenterol** 1988 Dec;83(12):1439

Endoscopic diagnosis of lymphangioma of the small intestine. Shigematsu A, et al. **Am J Gastroenterol** 1988 Nov; 83(11):1289–93

Hepatocellular and cholangiocellular carcinoma, double cancer of the liver: report of two cases resected synchronously and metachronously. Takayasu K, et al.
Am J Gastroenterol 1989 May;84(5):544–7

Hepatocellular carcinoma in a case of familial polyposis coli [letter] Van Steenbergen W, et al. **Am J Gastroenterol** 1989 Sep;84(9):1120–1

Malignant diathesis from jejunal–ileal carcinoids. Zucker KA, et al. **Am J Gastroenterol** 1989 Feb;84(2):182–6 (39 ref.)

Seven cases of trilateral retinoblastoma. Pesin SR, et al.
Am J Ophthalmol 1989 Feb 15;107(2):121–6

Extramammary Paget's disease of the oral mucosa with in situ carcinoma of minor salivary gland ducts. Theaker JM.
Am J Surg Pathol 1988 Nov;12(11):890–5

Bilateral breast cancer. Pomerantz RA, et al. **Am Surg** 1989 Jul;55(7):441–4

Hyperplastic colon polyps—are they markers? [editorial] Waye JD. **Ann Intern Med** 1988 Dec 1;109(11):851–2

Borderline spindle cell nevus of the ciliary body as a second primary melanoma—a clinicopathologic case. Kremer I, et al. **Ann Ophthalmol** 1989 Jun;21(6):217–21

Congenital stenosis of the lower esophagus associated with leiomyoma and leiomyosarcoma of the gastrointestinal tract. Cohen SR, et al. **Ann Otol Rhinol Laryngol** 1988 Sep–Oct;97(5 Pt 1):454–9 (24 ref.)

Multiple cutaneous plexiform schwannomas with tumors of the central nervous system [letter] Rongioletti F, et al.
Arch Dermatol 1989 Mar;125(3):431–2

Bowen's disease and internal malignant disease [letter] Thestrup–Pedersen K. **Arch Dermatol** 1989 Jan; 125(1):131–2

Clinical observation regarding laser surgery for early glottic cancer [letter] Chandler JR.
Arch Otolaryngol Head Neck Surg 1989 Sep;115(9):1134

A remarkable history [letter] Ikin T. **Aust Fam Physician** 1989 Apr;18(4):424

Bilateral testicular and adrenal malignant lymphoma of pre B–cell type. Coventry BJ, et al. **Aust N Z J Surg** 1989 Jan;59(1):79–83

Carney's triad. McLaughlin SJ, et al. **Aust N Z J Surg** 1988 Aug;58(8):679–81 (10 ref.)

Future of children with cancer. Malpas JS.
Biomed Pharmacother 1988;42(4):237–41

Prognosis in bilateral breast cancer. Effects of time interval between first and second primary tumours. Holmberg L, et al. **Br J Cancer** 1988 Aug;58(2):191–4

Hodgkin's disease: subsequent primary cancers in relation to treatment. Prior P, et al. **Br J Cancer** 1988 Oct;58(4):512–7

Patients with ampullary carcinoma are prone to other malignant tumours. Robertson JF, et al. **Br J Cancer** 1988 Aug;58(2):216–8

Endometrioid carcinoma of the ovary: a retrospective study. Tidy J, et al. **Br J Obstet Gynaecol** 1988 Nov;95(11):1165–9

Scleroderma and breast carcinoma [letter] Papasavvas G, et al. **Br J Rheumatol** 1989 Aug;28(4):366–7

Pre–operative or postoperative colonic examination for synchronous lesions in colorectal cancer. Tate JJ, et al.
Br J Surg 1988 Oct;75(10):1016–8

Bilateral testicular metastases of pulmonary small cell carcinoma: a rare incidental finding following orchiectomy for prostatic carcinoma. Stein A, et al. **Br J Urol** 1989 May;63(5):552

Primary synchronous bilateral breast cancer: epidemiological approach. Kelmendi de Ustarán J, et al.
Breast Cancer Res Treat 1988 Dec;12(3):311–4

Coexisting pheochromocytomas and adrenocortical tumour discovered incidentally. Ooi TC, et al.
Can Med Assoc J 1988 Nov 1;139(9):869–71

Concomitant chronic lymphocytic leukemia, acute myeloid leukemia, and thrombosis with protein C deficiency. Case report and review of the literature. Conlan MG, et al.
Cancer 1989 Apr 1;63(7):1398–401 (41 ref.)

Breast masses associated with adenocarcinoma of the prostate. Moldwin RM, et al. **Cancer** 1989 Jun 1; 63(11):2229–33

Cancer superimposed on adult T–cell leukemia. Ono K, et al. **Cancer** 1989 Aug 1;64(3):635–40

Acute promyelocytic leukemia following treatment of non–Hodgkin's lymphoma. Raiker A, et al. **Cancer** 1989 Apr 1;63(7):1402–6 (17 ref.)

Mammary fibromatosis. A benign spindle-cell tumor with significant risk for local recurrence. Rosen PP, et al. **Cancer** 1989 Apr 1;63(7):1363–9

Esophageal squamous cell carcinoma associated with gastric adenocarcinoma. Souquet JC, et al. **Cancer** 1989 Feb 15; 63(4):786–90

Clinical aspects of multiple primary neoplasms. Robinson E, et al. **Cancer Detect Prev** 1989;13(5–6):287–92 (31 ref.)

Adenosquamous cell carcinoma of the liver—report of two cases. **Hu TJ, et al. Chang Keng I Hsueh** 1988 Jun; 11(2):152–9

Congenital central hypoventilation syndrome associated with multiple ganglioneuromas. Swaminathan S, et al. **Chest** 1989 Aug;96(2):423–4

Combined primary squamous cell carcinoma and tubular carcinoma of the breast. Lai CR, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Nov;42(5):391–4

The desmoid (Reitamo) syndrome: etiology, manifestations, pathogenesis, and treatment. Häyry P, et al. **Curr Probl Surg** 1988 Apr;25(4):225–320 (157 ref.)

Cholangiocarcinoma associated with multiple bile-duct hamartomas of the liver. Dekker A, et al. **Dig Dis Sci** 1989 Jun;34(6):952–8

Recurrent breast cancer and an adenocarcinoma of the lung occurring in one patient: c-myc oncogene amplification and K-ras codon 12 point mutation as tumour markers [letter] Slebos RJ, et al. **Eur J Cancer Clin Oncol** 1988 Sep;24(9):1529–30

Chronic myelomonocytic leukemia with chromosomal changes involving 1p36 and hepatocellular carcinoma in a case of Fanconi's anemia. Bessho F, et al. **Eur J Haematol** 1989 May;42(5):492–5

Extranervous localization of a presumed suprasellar and pineal germinoma. Metastasis or multifocal origin? Ferraresi S, et al. **Eur Neurol** 1989;29(3):171–3

Vaginal adenocarcinoma developing in residual pelvic endometriosis: a clinical dilemma. Orr JW Jr, et al. **Gynecol Oncol** 1989 Apr;33(1):96–8

A case report of three synchronous stage I malignant neoplasms. Ringler GE, et al. **Gynecol Oncol** 1989 Apr; 33(1):116–20

Minute carcinoid arising in gastric tubular adenoma. Ito H, et al. **Histopathology** 1989 Jul;15(1):96–9

Simultaneous occurrence of medullary and follicular carcinoma in the same thyroid lobe. Tanaka T, et al. **Hum Pathol** 1989 Jan;20(1):83–6

Carcinoma of breast and acute myeloid leukemia in the same patient: report of a case and review of literature. Venu Gopal P, et al. **Indian J Cancer** 1988 Mar;25(1):33–6 (18 ref.)

Extramedullary leukemia with central facial palsy originated from poorly differentiated abdominal lymphoma. Kilinç Y, et al. **Int J Pediatr Otorhinolaryngol** 1989 Jul;17(3):281–6

Histiocytoid hemangioma: a disease spectrum. Report of a case with simultaneous cutaneous and bone involvement limited to one extremity. Dannaker C, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 2):404–9

Bilateral pheochromocytoma with papilloedema. Pushpakumari P, et al. **J Assoc Physicians India** 1988 Dec; 36(12):738–9

Adenocarcinoma of the jejunum in association with celiac sprue. Straker RJ, et al. **J Clin Gastroenterol** 1989 Jun; 11(3):320–3

Combined small-cell and non-small-cell lung cancer. Mangum MD, et al. **J Clin Oncol** 1989 May;7(5):607–12

Increased risk of lung cancer, non-Hodgkin's lymphoma, and leukemia following Hodgkin's disease. van Leeuwen FE, et al. **J Clin Oncol** 1989 Aug;7(8):1046–58

A double nidus osteoid osteoma in a finger. Allieu Y, et al. **J Hand Surg [Am]** 1989 May;14(3):538–41

Second primary tumour following retinoblastoma. Berridge DC, et al. **J Laryngol Otol** 1989 Jul;103(7):690–1

Multiple synchronous carcinoma of the aero-digestive tract. McCombe A, et al. **J Laryngol Otol** 1989 Aug;103(8):794–5

Squamous carcinoma arising within a Warthin's tumour of the parotid gland. Morrison GA, et al. **J Laryngol Otol** 1988 Dec;102(12):1189–91 (5 ref.)

Redundant colon and carcinoma of the right colon. Perry-Thornton E, et al. **J Natl Med Assoc** 1989 Jun; 81(6):711–2, 716

Multiple functioning paraganglioma associated with polycythemia. Imai T, et al. **J Surg Oncol** 1988 Dec; 39(4):279–82

One of 8 women with bladder neoplasia may have concomitant gastrointestinal pathology, including cancer. Hartveit F, et al. **J Urol** 1989 Sep;142(3):716–8

Testicular carcinoma in situ associated with rhabdomyosarcoma of the spermatic cord. Nistal M, et al. **J Urol** 1989 Aug;142(2):358–60

Secondary cancers after bone marrow transplantation for leukemia or aplastic anemia. Witherspoon RP, et al. **N Engl J Med** 1989 Sep 21;321(12):784–9

A patient with a metastasizing jejunal carcinoma 17 years after colectomy for familial polyposis coli. Zuidema MF, et al. **Neth J Med** 1989 Jun;34(5–6):317–21 (10 ref.)

Occurrence of both neurofibromatoses 1 and 2 in the same individual with a rapidly progressive course. Sadeh M, et al. **Neurology** 1989 Feb;39(2 Pt 1):282–3

Relationship between immunophenotype and the development of second primary neoplasms in patients with non-Hodgkin's lymphoma. Shimizu K, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Feb;52(1):71–9

Cowden disease in a young girl: gynecologic and immunologic overview in a case and in the literature. Guérin V, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):890–2 (27 ref.)

Incidence of second neoplasms in patients with bilateral retinoblastoma. Roarty JD, et al. **Ophthalmology** 1988 Nov; 95(11):1583–7

Chondroma and osteochondroma of the tongue. Landini G, et al. **Oral Surg Oral Med Oral Pathol** 1989 Aug; 68(2):206–9

Multiple agminate Spitz nevi. Renfro L, et al. **Pediatr Dermatol** 1989 Jun;6(2):114–7

Systemic sclerosis in association with multiple primary pulmonary malignancy—a marker of internal malignancy? Goodfield MJ, et al. **Postgrad Med J** 1988 Nov; 64(757):886–8

Second primary tumours in children. Kingston JE. **Prog Pediatr Surg** 1989;22:113–20

Multiple pilomatrixomas and myotonic dystrophy: a case report. Salerni E, et al. **Riv Neurol** 1988 May-Jun; 58(3):124–6

Case report 505: Malignant fibrous histiocytoma of thigh and liposarcoma in same lower extremity (synchronous lesions). Kuhlman JE, et al. **Skeletal Radiol** 1988;17(7):518–21

Granulomatous myocarditis with unusual histologic features. Agosti SJ, et al. **South Med J** 1989 Sep;82(9):1180–3

The association of carcinoma of the breast with meningioma. Rubinstein AB, et al. **Surg Gynecol Obstet** 1989 Oct; 169(4):334–6 (16 ref.)

Surgical management of multiple lung metastases of different origin. Vaghei R, et al. **Surgery** 1989 Jun;105(6):797–800

Radio-induced sarcomas in survivors of Ewing's sarcoma. Boriani S, et al. **Tumori** 1988 Oct 31;74(5):543–51

Morphologic, immunologic, and cytogenetic characteristics of secondary acute unclassifiable leukemia in Hodgkin's disease. Orazi A, et al. **Tumori** 1988 Aug 31;74(4):439–50

Intravesical bacillus Calmette-Guérin and second primary malignancies. Guinan P, et al. **Urology** 1989 May; 33(5):380–1

[Surface ultrastructure of familial gastrointestinal adenomatosis] Li L. **Chung Hua Chung Liu Tsa Chih** 1989 Jan;11(1):34–6 (Eng. Abstr.) **(Chi)**

[Primary carcinomas of the lung and upper respiratory tract] Jeng GJ, et al. **Chung Hua I Hsueh Tsa Chih** 1988 May; 41(5):363–6 (Eng. Abstr.) **(Chi)**

[Adenosquamous carcinoma of colon. A case report and review of the literature] Wang JS, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Oct;40(4):401–4 (Eng. Abstr.) **(Chi)**

[Malignant genitourinary tumor accompany with multiorgan primary malignant tumors: report of 15 cases] Hong BF, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Feb;26(2):105–6, 126 (Eng. Abstr.) **(Chi)**

[Carcinoid of the duodenum in neurofibromatosis] Skála J, et al. **Vnitr Lek** 1989 Jan;35(1):74–8 (Eng. Abstr.) **(Cze)**

[A patient with an immunodeficiency and consecutively 3 primary malignancies] Groot-Loonen JJ, et al. **Tijdschr Kindergeneeskd** 1989 Apr;57(2):67–70 (Eng. Abstr.) **(Dut)**

[Association of angiolipoma and renal adenocarcinoma in a patient with Bourneville's tuberous sclerosis] Biquet P, et al. **Acta Urol Belg** 1988;56(3):447–52 (Eng. Abstr.) **(Fre)**

[Associated cancers of bronchi and upper airways. Apropos of 91 cases] Renella J, et al. **Ann Chir** 1988;42(8):591–6 (8 ref.) (Eng. Abstr.) **(Fre)**

[Analysis of 64 second primary cancers of the bronchi] Roeslin N, et al. **Ann Chir** 1989;43(2):125–9 (Eng. Abstr.) **(Fre)**

[Double gastric leiomyosarcoma revealed by a hemoperitoneum] Chad B, et al. **Ann Gastroenterol Hepatol (Paris)** 1989 May;25(3):105–7 (34 ref.) (Eng. Abstr.) **(Fre)**

[A malignant schwannoma of the jejunum associated with multiple neurofibromas and a primary adenoma of the parathyroid] Godlewski G, et al. **Ann Gastroenterol Hepatol (Paris)** 1989 Jan–Feb;25(1):13–7 (Eng. Abstr.) **(Fre)**

[2 cases of malignant papillomatosis of the bile ducts] Rambaud S, et al. **Ann Gastroenterol Hepatol (Paris)** 1988 Dec;24(7):355–6 (Eng. Abstr.) **(Fre)**

[Bronchial cancer associated with upper respiratory and digestive tract cancers] Etienne G, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(4):219–24 (Eng. Abstr.) **(Fre)**

[Multiple cancers: a case with 5 different tumors] Seniuta P, et al. **Arch Anat Cytol Pathol** 1989;37(3):115–6 (Eng. Abstr.) **(Fre)**

[Multiple cancers. Apropos of a case with triple localization, one of which was in the eye] Karray H, et al. **Bull Soc Ophtalmol Fr** 1988 Feb;88(2):239–42 (Eng. Abstr.) **(Fre)**

[Pulmonary leiomyosarcoma. Apropos of a case of systemic disease of the vascular muscle cell localized in the lung (letter)] Gullino D, et al. **J Chir (Paris)** 1988 Aug–Sep; 125(8–9):537–9 **(Fre)**

[Gallbladder adenoma with carcinoma in situ. Apropos of a case] Pradines P, et al. **J Radiol** 1988 Oct;69(10):621–3 (24 ref.) (Eng. Abstr.) **(Fre)**

[Urothelial carcinoma of the prostate with or without bladder involvement] Dohm G. **J Urol (Paris)** 1988;94(8):397 **(Fre)**

[A case of simultaneous development of leiomyomas of the labia majora and the uterine corpus] Zlatkov V, et al. **Rev Fr Gynecol Obstet** 1989 Apr;84(4):351–3 (Eng. Abstr.) **(Fre)**

[Malignant non-Hodgkin's lymphoma of tracheo-bronchial sites] Roden S, et al. **Rev Pneumol Clin** 1988;44(3):132–5 (9 ref.) (Eng. Abstr.) **(Fre)**

[Undifferentiated epithelioma of the parotid and cystadenolymphoma. Apropos of a case] Chomette G, et al. **Rev Stomatol Chir Maxillofac** 1989;90(4):293–6 (Eng. Abstr.) **(Fre)**

[Carcinoid tumor of the liver] Ito H, et al. **Dtsch Med Wochenschr** 1989 Apr 21;114(16):623–7 (Eng. Abstr.) **(Ger)**

[Metachronous double carcinoma of the large intestine] Schütter FW, et al. **Dtsch Med Wochenschr** 1988 Oct 21; 113(42):1626, 1628–9 (Eng. Abstr.) **(Ger)**

[Wilms' tumor in adults after curative treatment of Hodgkin's disease] Theissig F, et al. **Zentralbl Allg Pathol** 1988; 134(3):293–6 (Eng. Abstr.) **(Ger)**

[Villous adenoma of the stomach] Barzilai A, et al. **Harefuah** 1988 Nov 15;115(10):278–80 (Eng. Abstr.) **(Heb)**

[A tumor metastasizing into another tumor] Zalatnai A. **Orv Hetil** 1988 Nov 20;129(47):2535–6, 2539 (Eng. Abstr.) **(Hun)**

[Early diagnosis of pulmonary tumors in patients treated for laryngeal cancer] Croce A, et al. **Acta Otorhinolaryngol Ital** 1989 Mar–Apr;9(2):139–47 (46 ref.) (Eng. Abstr.) **(Ita)**

[Primary mixed cell renal adenocarcinoma following spinocellular carcinoma of the lung. Report of a rare case] Legramandi C, et al. **Arch Ital Urol Nefrol Androl** 1988 Mar;60(1):99–102 (Eng. Abstr.) **(Ita)**

[Benign reactive proliferating angioendotheliomatosis] Amantea A, et al. **G Ital Dermatol Venereol** 1988 May; 123(5):245–8 (Eng. Abstr.) **(Ita)**

[An association of cancer arising in a polyp and simultaneous colorectal carcinoma. Incidence, histopathologic, therapeutic and prognostic data] Pisano G, et al. **Minerva Chir** 1988 May 15;43(9):743–50 (Eng. Abstr.) **(Ita)**

[A case of chondrosarcoma developing within the metastasis of germ cell tumor of the testis] Turrin A, et al. **Radiol Med (Torino)** 1989 Jun;77(6):711–3 **(Ita)**

[Gastric leiomioblastoma associated with adenocarcinoma of the rectum. Personal observation] Lupattelli R, et al. **Riv Eur Sci Med Farmacol** 1987 Mar;9(1):83–6 (Eng. Abstr.) **(Ita)**

[A mucin-producing cystadenoma, borderline malignancy, of the renal pelvis and ureter: a case report] Arakawa M, et al. **Gan No Rinsho** 1989 Mar;35(4):499–504 (7 ref.) (Eng. Abstr.) **(Jpn)**

[An autopsied case of esophageal cancer metastasizing to primary hepatocellular carcinoma] Doihara H, et al. **Gan No Rinsho** 1989 Mar;35(4):516–22 (14 ref.) (Eng. Abstr.) **(Jpn)**

[A case of synchronous double primary malignant neoplasms (malignant astrocytoma, and lung cancer) diagnosed by autopsy] Hashimoto H, et al. **Gan No Rinsho** 1989 Apr; 35(5):639–45 (Eng. Abstr.) **(Jpn)**

[Double primary malignant tumors involving a lung cancer] Hayakawa K, et al. **Gan No Rinsho** 1989 Apr;35(5):560–3 (Eng. Abstr.) **(Jpn)**

[Hepatocellular carcinoma treated with a curative segmentectomy five years after complete remission of acute myeloblastic leukemia] Hirota Y, et al. **Gan No Rinsho** 1989 Aug;35(9):1073–6 (Eng. Abstr.) **(Jpn)**

[A clinicopathological study of multiple thyroid carcinomas] Ishikita T, et al. **Gan No Rinsho** 1988 Nov;34(14):1917–21 (Eng. Abstr.) **(Jpn)**

[A retroperitoneal leiomyosarcoma—a case of non-concurrent double cancers with kidney cancer] Kashizuka T, et al. **Gan No Rinsho** 1989 Aug;35(9):1087–92 (14 ref.) (Eng. Abstr.) **(Jpn)**

[Evaluation of double cancers of the lung and stomach] Kishimoto T, et al. **Gan No Rinsho** 1988 Sep;34(11):1565–7 (Eng. Abstr.) **(Jpn)**

[Evaluation of primary multiple cancer manifesting exposure to asbestos] Kishimoto T, et al. **Gan No Rinsho** 1989 Jun; 35(7):825–7 (Eng. Abstr.) **(Jpn)**

[A carcinoma of the right breast arising after a mastectomy in primary malignant lymphoma of the left breast] Kobayashi R, et al. **Gan No Rinsho** 1989 Aug;35(9):1077–80 (Eng. Abstr.) **(Jpn)**

[Multiple cancer syndromes] Kobayashi Y, et al. **Gan No Rinsho** 1989 Jan;Spec No:704–12 **(Jpn)**

[A case of quartet cancer—a carcinoma of the breast followed by three synchronous cancers (kidney, thyroid and colon)] Kurihara T, et al. **Gan No Rinsho** 1989 Jul;35(8):955–62 (22 ref.) (Eng. Abstr.) **(Jpn)**

[A case of signet-ring cell type cancer of the colon] Maruyama C, et al. **Gan No Rinsho** 1988 Sep;34(11):1603–6 (Eng. Abstr.) **(Jpn)**

[A case of small cell carcinoma of the prostate] Murao T, et al. **Gan No Rinsho** 1988 Sep;34(11):1624–8 (Eng. Abstr.) **(Jpn)**

[Simultaneously diagnosed triple primary neoplasms—a case report] Murate T, et al. **Gan No Rinsho** 1989 May; 35(6):741–7 (Eng. Abstr.) **(Jpn)**

[Synchronous double cancers in the ovary and kidney—a case report] Myoga H, et al. **Gan No Rinsho** 1988 Nov; 34(14):2007–14 (Eng. Abstr.) **(Jpn)**

[An autopsied case of double carcinomata consisting of hepatocellular and renal cell carcinoma associated with adrenocortical adenoma] Nagaoka H, et al. **Gan No Rinsho** 1989 Feb;35(3):404–10 (Eng. Abstr.) **(Jpn)**

[Primary carcinoma of the jejunum combined with colon polyp—report of a case] Ogawa Y, et al. **Gan No Rinsho** 1989 May;35(6):761–6 (Eng. Abstr.) **(Jpn)**

[A case of superficial squamous cell carcinoma of the esophagus showing multicentric development] Saitoh Y, et al. **Gan No Rinsho** 1989 Aug;35(9):1050–60 (Eng. Abstr.) **(Jpn)**

[A case of early stage double carcinomas arising in the duodenum and stomach] Shimizu T, et al. **Gan No Rinsho** 1989 Jun;35(7):845–50 (Eng. Abstr.) **(Jpn)**

[A case of duodenal carcinoid associated with early gastric carcinoma] Tanahashi Y, et al. **Gan No Rinsho** 1989 Jan; 35(2):316–22 (11 ref.) (Eng. Abstr.) **(Jpn)**

[The pathogenesis of adenocarcinoma of the stomach after successful radiotherapy of squamous cell carcinoma of the lower intrathoracic esophagus—case report] Tomonari K, et al. **Gan No Rinsho** 1988 Aug;34(9):1185–9 (Eng. Abstr.) **(Jpn)**

[An autopsy study of immunoblastic lymphadenopathy (IBL)–like T-cell lymphoma in a patient previously treated with chemotherapy in colon cancer] Tsuji M, et al. **Gan No Rinsho** 1989 Jan;35(2):323–7 (Eng. Abstr.) **(Jpn)**

[A case of AFP-producing gastric cancer accompanied with testicular tumor] Watanabe M, et al. **Gan No Rinsho** 1988 Dec;34(15):2131–7 (Eng. Abstr.) **(Jpn)**

[A glomus tumor of the stomach associated with a lipoma] Yamada Y, et al. **Gan No Rinsho** 1988 Dec;34(15):2096–101 (Eng. Abstr.) **(Jpn)**

[A case of ipsilateral pelvic transitional cell carcinoma and renal cell carcinoma] Araki T, et al. **Hinyokika Kiyo** 1989 Feb;35(2):291–3 (Eng. Abstr.) **(Jpn)**

[Synchronously occurring transitional cell carcinoma of the ureter with adrenocortical carcinoma] Hikichi Y, et al. **Hinyokika Kiyo** 1988 Nov;34(11):2025–30 (18 ref.) (Eng. Abstr.) **(Jpn)**

[A case report of extragonadal germ cell tumor with special reference to VAB-6 therapy] Iwasaki M, et al. **Hinyokika Kiyo** 1988 May;34(5):883–8 (11 ref.) (Eng. Abstr.) **(Jpn)**

[A case of von Hippel-Lindau disease associated with bilateral renal cell carcinoma] Komatsu K, et al. **Hinyokika Kiyo** 1988 Sep;34(9):1621–5 (27 ref.) (Eng. Abstr.) **(Jpn)**

[A case of double cancer: renal pelvic transitional cell carcinoma and lung squamous cell carcinoma] Kubota M, et al. **Hinyokika Kiyo** 1988 May;34(5):866–9 (13 ref.) (Eng. Abstr.) **(Jpn)**

[A clinical survey of renal pelvic and ureteral tumors associated with bladder tumor] Matsuki H, et al. **Hinyokika Kiyo** 1989 Feb;35(2):239–46 (Eng. Abstr.) **(Jpn)**

[A case of transitional cell carcinoma of the bladder with heterotopic bone formation] Nakachi K, et al. **Hinyokika Kiyo** 1988 Sep;34(9):1651–5 (11 ref.) (Eng. Abstr.) **(Jpn)**

[Pre-existing disorders of primary lung cancer: background analysis of multiple primary lung cancer—what are the initiation factors of carcinogenesis?] Nukiwa T, et al. **Kokyu To Junkan** 1988 Oct;36(10):1040–50 (88 ref.) **(Jpn)**

[A case of bilateral multiple lung cancer resected by synchronous bilateral thoracotomy] Minami H, et al. **Kyobu Geka** 1989 Mar;42(3):195–8 (Eng. Abstr.) **(Jpn)**

[Adult T-cell leukemia associated with cancer] Morishita R, et al. **Nippon Hifuka Gakkai Zasshi** 1989 Jan;99(1):37–43 (12 ref.) (Eng. Abstr.) **(Jpn)**

[A case of neurilemmomatosis] Takano Y, et al. **Nippon Hifuka Gakkai Zasshi** 1989 Jan;99(1):67–71 (Eng. Abstr.) **(Jpn)**

[A case of thymoma associated with prostatic cancer] Isurugi K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Jan; 80(1):100–3 (Eng. Abstr.) **(Jpn)**

[A case report of renal cancer detected unexpectedly by X-ray CT during observations in the clinical course of cervical carcinoma] Mikata N, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Apr;80(4):596–601 (Eng. Abstr.) **(Jpn)**

[Relief from hemodialysis after combined chemotherapy and left-nephrectomy. A case of stage IIB, non-seminomatous testicular tumor] Uchida T, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Jun;79(6):1114–8 (Eng. Abstr.) **(Jpn)**

[A case of benign metastasizing leiomyoma with pulmonary metastases] Kondo K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep;36(9):2131–5 (Eng. Abstr.) **(Jpn)**

[Pulmonary psuedolymphoma combined with malignant lymphoma of the parotid gland] Hashimoto A, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Apr;26(4):421–5 (Eng. Abstr.) **(Jpn)**

[A case of thymic carcinoma (undifferentiated carcinoma)] Takekawa H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 May; 26(5):541–4 (Eng. Abstr.) **(Jpn)**

[Primary hepatocellular carcinoma growing in the complete remission of malignant lymphoma treated with curative segmentectomy] Maekawa T, et al. **Nippon Naika Gakkai Zasshi** 1988 Jun;77(6):808–13 **(Jpn)**

[Association of adenocarcinoma and endocrine cell carcinoma in the gallbladder—a case report] Adachi K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jun; 85(6):1308–11 **(Jpn)**

[Early gallbladder carcinoma associated with adenomyomatosis of the gallbladder: report of a case] Fujita N, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Aug; 85(8):1536–41 **(Jpn)**

[A case of synchronous Borrmann 4 type cancer of the stomach and early cancer of papilla Vateri associated with acanthosis nigricans] Saka M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Apr;86(4):926–30 **(Jpn)**

[An operative case of multiple endocrine neoplasia type 1 (MEN type 1) with insulinoma] Soyama N, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jun;85(6):1312–6 **(Jpn)**

[A case of ulcerative colitis with multiple colon cancers] Tanaka S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Apr;86(4):931–6 (30 ref.) **(Jpn)**

[A case of anaplastic astrocytoma associated with pituitary adenoma] Ezura M, et al. **No Shinkei Geka** 1988 Dec; 16(13):1505–9 (Eng. Abstr.) **(Jpn)**

[Multiple neurinoma of the spinal cord: case report] Hida K, et al. **No Shinkei Geka** 1988 Dec;16(13):1489–93 (22 ref.) (Eng. Abstr.) **(Jpn)**

[Multifocal gliomas in cerebral hemisphere associated with von Recklinghausen's disease: case report] Mukai K, et al. **No Shinkei Geka** 1989 Feb;17(2):197–202 (Eng. Abstr.) **(Jpn)**

[A case of blue rubber bleb nevus syndrome with splenic hemangioma] Hasegawa T, et al. **Rinsho Hoshasen** 1988 Oct;33(10):1143–6 (12 ref.) (Eng. Abstr.) **(Jpn)**

[A case report of intralobar multifocal nephroblastomatosis] Ishii K, et al. **Rinsho Hoshasen** 1988 Aug;33(8):939–42 (Eng. Abstr.) **(Jpn)**

[A case of calcified metastatic brain tumors in breast cancer associated with meningioma] Mori S, et al. **Rinsho Hoshasen** 1988 Jun;33(6):711–4 (Eng. Abstr.) **(Jpn)**

[Regional distribution of perfusion and ventilation in hamartoangiomyomatosis of the lung] Tominaga S, et al. **Rinsho Hoshasen** 1989 Jan;34(1):147–52 (Eng. Abstr.) **(Jpn)**

[A case of ectopic insulinoma] Yamauchi T, et al. **Rinsho Hoshasen** 1988 Oct;33(10):1141–2 (Eng. Abstr.) **(Jpn)**

[Bladder carcinoma in a case of multiple myeloma IgG (kappa) treated with cyclophosphamide: review of literature] Iwabuchi A, et al. **Rinsho Ketsueki** 1988 Aug; 29(8):1272–6 (18 ref.) (Eng. Abstr.) **(Jpn)**

[von Recklinghausen's disease associated with malignant lymphoma] Matsuzaki M, et al. **Rinsho Ketsueki** 1989 Mar; 30(3):382–6 (9 ref.) (Eng. Abstr.) **(Jpn)**

[Double neoplasms of non-Hodgkin's lymphoma and thyroid cancer associated with sicca syndrome: a case report] Saito M, et al. **Rinsho Ketsueki** 1988 Sep;29(9):1460–4 (Eng. Abstr.) **(Jpn)**

[IBL-like T cell lymphoma associated with early gastric cancer: a case report] Seki Y, et al. **Rinsho Ketsueki** 1989 Jan;30(1):111–5 (Eng. Abstr.) **(Jpn)**

[Five cases of adult T-cell leukemia complicated by other malignancies] Shimamoto Y, et al. **Rinsho Ketsueki** 1988 May;29(5):723–7 (Eng. Abstr.) **(Jpn)**

[Gastric cancer and sigmoid colon cancer in a patient with chronic B-cell leukemia] Tagami T, et al. **Rinsho Ketsueki** 1988 Aug;29(8):1244–9 (19 ref.) (Eng. Abstr.) **(Jpn)**

[Acute myelomonocytic leukemia with inv(16) (p13q22) developed in a case of ovarian cancer] Yaguchi M, et al. **Rinsho Ketsueki** 1988 Aug;29(8):1282–6 (Eng. Abstr.) **(Jpn)**

[Richter's syndrome presenting with an abdominal mass] Yamane T, et al. **Rinsho Ketsueki** 1988 Aug;29(8):1263–6 (Eng. Abstr.) **(Jpn)**

[Neurofibroma and meningioma of the spinal canal] Araszkiewicz H, et al. **Neurol Neurochir Pol** 1988 May–Jun; 22(3):264–7 (Eng. Abstr.) **(Pol)**

[Coexistence of endometrioid carcinoma of the ovary and adenocarcinoma of the uterine body as a case of systemic cancer] Brodziński W, et al. **Wiad Lek** 1988 May 1; 41(9):580–3 (Eng. Abstr.) **(Pol)**

[Bifocal malignant lymphoma of the stomach] Pasierbski JJ, et al. **Wiad Lek** 1988 Apr 15;41(8):518–9 (Eng. Abstr.) **(Pol)**

[A case of bifocal cancer] Szymczyk K, et al. **Wiad Lek** 1988 Apr 15;41(8):520–1 (Eng. Abstr.) **(Pol)**

[Desmoid fibromas in patients with diffuse polyposis of the large intestine (a review of the literature)] Nikitin AM, et al. **Khirurgiia (Mosk)** 1988 Nov;(11):131–6 (88 ref.) **(Rus)**

[A combination of a nodular uterine fibromyoma and a carcinoid of the vermiform process] Bragin VV, et al. **Klin Khir** 1989;(5):63–4 **(Rus)**

[Polyneoplasia of the stomach and intestines] Kharaberiush VA, et al. **Klin Khir** 1989;(5):56 **(Rus)**

[Primary multiple metachronous cancer of the small and large intestines] Reziapkin VV, et al. **Klin Khir** 1989;(5):60–1 **(Rus)**

[Carcinoid of the accessory pancreas] Veligotskiĭ NN, et al. **Klin Khir** 1988;(11):59 **(Rus)**

[A combination of sarcoma of the breast and cancer of the female genital organs] Kachanov IP, et al. **Sov Med** 1988; (11):120–1 **(Rus)**

[Left atrial myxoma in a 47-year-old patient with a retroperitoneal tumor removed at 11 years of age] Akhmedzhanov MIu, et al. **Ter Arkh** 1989;61(3):105–7 **(Rus)**

[Bladder lymphoma associated with papillary carcinoma] Sánchez García A, et al. **Arch Esp Urol** 1988 May; 41(4):317–8 (Eng. Abstr.) **(Spa)**

[Astrocytoma of the cervical spinal medulla continuous with a bulbar hemangioblastoma] Olvera-Rabiela JE, et al. **Gac Med Mex** 1988 Mar–Apr;124(3–4):131–3 **(Spa)**

[Disseminated pigmented nevus syndrome] Cabrera HN, et al. **Med Cutan Ibero Lat Am** 1988;16(2):101–5 (Eng. Abstr.) **(Spa)**

[Spontaneous regression of pulmonary metastases in renal adenocarcinoma and a second neoplasm (adenocarcinoma of the lung) (letter)] Orbuch SJ, et al. **Medicina (B Aires)** 1985;45(1):89–90 **(Spa)**

[Second neoplasms in Hodgkin's disease] Cebreiros I, et al. **Rev Clin Esp** 1989 Mar;184(5):247–8 (Eng. Abstr.) **(Spa)**

[Double primary osteosarcoma of bone metastasis] Caballero JL, et al. **Rev Med Panama** 1988 May;13(2):121–5 (Eng. Abstr.) **(Spa)**

[Chronic myelomonocytic leukemia and solid neoplasms: is it a causal or a fortuitous association?] Rovira M, et al. **Sangre (Barc)** 1989 Jun;34(3):207–9 (Eng. Abstr.) **(Spa)**

ANALYSIS

Co-existent anaplastic and well differentiated thyroid carcinomas: a nuclear DNA study. Wallin G, et al. **Eur J Surg Oncol** 1989 Feb;15(1):43–8

BLOOD

[Factor V inhibitor with double cancer] Okajima A, et al. **Rinsho Ketsueki** 1989 Apr;30(4):514–9 (Eng. Abstr.) **(Jpn)**

[A case of hypoglycemia originating outside the pancreas] Dowiacka-Okruszko D, et al. **Pol Arch Med Wewn** 1985 Apr;73(4):256–8 (Eng. Abstr.) **(Pol)**

CHEMICALLY INDUCED

Experimental model of tumors associated with neurofibromatosis. Cardesa A, et al. **Cancer** 1989 May 1; 63(9):1737–49

Lung cancer in chromate workers: high-risk group for multiple lung cancer. Uyama T, et al. **J Surg Oncol** 1989 Aug;41(4):213–8

Exposure to chemotherapeutic agents and the risk of a second breast cancer: preliminary findings. Horn PL, et al. **Yale J Biol Med** 1988 May–Jun;61(3):223–31

[Multiple primary cancers in blackfoot endemic area: report of a case] Chen KS, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Nov;87(11):1125–8 (Eng. Abstr.) **(Chi)**

[Basal cell epitheliomatosis of the face in a man who had handled pitch] Sassolas B, et al. **Ann Dermatol Venereol** 1988;115(12):1281–4 (22 ref.) **(Fre)**

[Multiple squamous cell cancer as a late effect following arsenic treatment of psoriasis] Scholz S, et al. **Z Arztl Fortbild (Jena)** 1988;82(23):1201–3 **(Ger)**

[Development of multiple precancerous conditions and malignant skin tumors in immunosuppressive therapy] Krickeberg H. **Z Hautkr** 1988 Sep 15;63(9):773–5 (Eng. Abstr.) **(Ger)**

CLASSIFICATION

Schwannomatosis. An unusual variant of neurofibromatosis or a distinct clinical entity? Purcell SM, et al. **Arch Dermatol** 1989 Mar;125(3):390–3

Six primary cancers in individuals [letter] Shah IA. **Cancer** 1989 Jul 15;64(2):566–7

COMPLICATIONS

Juvenile hyaline fibromatosis. A case report and review of musculoskeletal manifestations. O'Neill DB, et al. **J Bone Joint Surg [Am]** 1989 Jul;71(6):941–4 (26 ref.)

Cerebral embolism resulting from an intracardiac tumor in tuberous sclerosis. Konkol RJ, et al. **Pediatr Neurol** 1986 Mar–Apr;2(2):108–10

[Multiple tumors in the midline of the brain with endocrine dysfunction] Crapé A, et al. **Ned Tijdschr Geneeskd** 1989 Mar 4;133(9):452–5 (Eng. Abstr.) **(Dut)**

[Secondary paraneoplastic polycythemia of testicular cancer] Sachot JL, et al. **Ann Urol (Paris)** 1989;23(2):153–5 (Eng. Abstr.) **(Fre)**

[Denny-Brown sensory neuropathy disclosing a bilateral ovarian adenocarcinoma] Humbert P, et al. **Rev Fr Gynecol Obstet** 1988 Nov;83(11):723–6 (Eng. Abstr.) **(Fre)**

[Unrecognized primary hyperparathyroidism in simultaneous presence of insulin-dependent diabetes mellitus. Joint occurrence of parathyroid adenoma, type I diabetes mellitus, Basedow disease, pernicious anemia and stomach carcinoid] Ollenschläger G, et al. **Med Klin** 1988 Dec 9; 83(24):844–5, 854 **(Ger)**

[Miliary cystomatosis and disseminated alopecia] Lańcucki

J, et al. **Przegl Dermatol** 1988 May–Jun;75(3):194–8 (Eng. Abstr.) (Pol)
[Bilateral parathyroid adenoma] Dadan J, et al. **Wiad Lek** 1989 Jan 1;42(1):48–52 (Eng. Abstr.) (Pol)
[A syndrome of arterial hypertension caused by a combination of 2 adrenal gland tumors] Komissarenko IV, et al. **Klin Khir** 1988;(12):55–6 (Rus)

CONGENITAL

Management of ankle deformities in multiple hereditary osteochondromata. Snearly WN, et al. **J Pediatr Orthop** 1989 Jul–Aug;9(4):427–32
Infantile myofibromatosis. Salamah MM, et al. **J Pediatr Surg** 1988 Oct;23(10):975–7
[Multiple cutaneous and hepatic angioma in a newborn infant] Lorette G, et al. **Ann Dermatol Venereol** 1988; 115(11):1132–3 (Fre)

DIAGNOSIS

Nine pheochromocytomas in the same patient. Final mapping with ultrasound and angiography. Nolsøe CP, et al. **Acta Radiol** 1988 Sep–Oct;29(5):515–8
Bilateral atrial myxomas detected by transesophageal two-dimensional echocardiography. Dittmann H, et al. **Am Heart J** 1989 Jul;118(1):172–3
Gadolinium-enhanced facial nerves: accompanying bilateral acoustic tumors in patient with neurofibromatosis. Dolan KD, et al. **Ann Otol Rhinol Laryngol** 1989 Sep;98(9):747–8
Detection of multiple cardiac papillary fibroelastomas using transesophageal echocardiography. de Virgilio C, et al. **Ann Thorac Surg** 1989 Jul;48(1):119–21
Rationale for aggressive colonoscopy in patients with colorectal neoplasia. Dasmahapatra KS, et al. **Arch Surg** 1989 Jan;124(1):63–6
Disseminated primitive neuroectodermal tumor: diagnosis using immunocytochemistry, electron microscopy, and molecular probes. Pappo AS, et al. **Cancer** 1989 Jun 15; 63(12):2515–21
Usefulness of frequent skin examination for the early detection of second primary cutaneous melanoma. Titus-Ernstoff L, et al. **Cancer Detect Prev** 1989; 13(5–6):317–21
Magnetic resonance imaging and computed tomography findings in a patient with lymphomatoid granulomatosis. Mendelson DS, et al. **Clin Imaging** 1989 Jun;13(2):130–3
Carcinoma in-situ of the testis diagnosed on semen cytology. Howard GC, et al. **Clin Radiol** 1989 May;40(3):323–4
Pituitary adenoma and meningioma in the same patient. Report of three cases. Zentner J, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(3):144–8
Proteus syndrome versus Bannayan–Zonana syndrome: a problem in differential diagnosis. Bialer MG, et al. **Eur J Pediatr** 1988 Nov;148(2):122–5
CT and MR imaging in cystic abdominal lymphangiomatosis. Cutillo DP, et al. **J Comput Assist Tomogr** 1989 May–Jun; 13(3):534–6
Multiple glomus tumors: a role for magnetic resonance imaging in patient evaluation? Benedict LM, et al. **J Dermatol Surg Oncol** 1989 Jul;15(7):731–3
Coincidental angiomyolipoma and renal cell carcinoma—report of 1 case and review of literature. Huang JK, et al. **J Urol** 1988 Dec;140(6):1516–8
Multiple distinct intracranial tumors: association of pinealoma and craniopharyngioma. Case report. Hazen S, et al. **Surg Neurol** 1989 May;31(5):381–6
[Diagnosis and treatment of esophageal carcinoma with multiple primary malignant lesions] Wei GQ, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Mar;26(3):167–9, 191 (Eng. Abstr.) (Chi)
[Is skin cancer a marker of internal cancer?] Thestrup-Pedersen K, et al. **Ugeskr Laeger** 1988 Jan 18; 150(3):161–2 (Eng. Abstr.) (Dut)
[Ileus symptoms due to 3 distinctively differentiated small intestine carcinomas in nontropical sprue] Grün M, et al. **Dtsch Med Wochenschr** 1989 May 5;114(18):709–11 (Eng. Abstr.) (Ger)
[Neurocutaneous melanosis] Husstedt IW, et al. **Fortschr Neurol Psychiatr** 1989 Jun;57(6):250–4 (Eng. Abstr.) (Ger)
[Sonography of the larynx in children. New perspectives due to the use of computerized sonography: 2: Sonographic findings in a case of laryngeal papillomatosis] Grunert D, et al. **Klin Padiatr** 1989 May–Jun;201(3):206–8 (Eng. Abstr.) (Ger)
[Angiomyolipomatosis of the kidneys—possibilities and limitations of imaging procedures] Schnepper U, et al. **Rontgenblatter** 1989 Feb;42(2):85–8 (Eng. Abstr.) (Ger)
[Importance of prevention and early detection of second primary neoplasms (editorial)] Robinson E. **Harefuah** 1988 Dec 1;115(11):346–7 (Heb)
[Retroperitoneal desmoid tumor and familial polyposis coli] Shapira O, et al. **Harefuah** 1989 Jan 15;116(2):98–101 (Eng. Abstr.) (Heb)
[Clinical analysis of 26 cases of multiple primary cancer] Noguchi M, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 May 20;24(5):990–8 (Eng. Abstr.) (Jpn)
[A case report of diffuse splenic hemangiomatosis] Inoue K, et al. **Rinsho Hoshasen** 1988 Aug;33(8):931–4 (Eng. Abstr.) (Jpn)
[4 cases of multilocular cystic nephroma] Murakami T, et al. **Rinsho Hoshasen** 1988 Aug;33(8):935–8 (Eng. Abstr.) (Jpn)
[Multifocal Bowen's disease of the vulva coexistent with pre-invasive cancer of the cervix uteri as a case of systemic cancer] Brodziński W, et al. **Wiad Lek** 1988 Sep 1; 41(17):1171–4 (Eng. Abstr.) (Pol)
[A case of isolated pigmented nevus of the skin with limited dysfunction of the nervous system] Kawiak W, et al. **Wiad Lek** 1989 Dec 1;41(23):1618–20 (Eng. Abstr.) (Pol)
[Bilateral testicular neoplasms] Sosnowski M, et al. **Wiad Lek** 1989 Jan 1;42(1):53–5 (Eng. Abstr.) (Pol)
[Fibrosarcomatosis of the small intestine mesentery] Zvezdin VP, et al. **Klin Khir** 1989;(5):57 (Rus)
[Diagnosis of multiple primary cancer of the colon] Knysh VI, et al. **Klin Med (Mosk)** 1988 Jul;66(7):118–22 (Rus)
[Diagnosis and treatment of lung cancer in patients with multiple primary malignant tumors] Machaladze ZO, et al. **Klin Med (Mosk)** 1988 Dec;66(12):65–9 (Rus)
[Peutz-Jeghers syndrome] Timerbulatov VM, et al. **Klin Med (Mosk)** 1989 May;67(5):137–8 (Rus)
[Multiple primary cancer of the large intestine] Vladanov IP, et al. **Klin Med (Mosk)** 1989 Feb;67(2):125–6 (Rus)
[Clinical picture, diagnosis, treatment and prognosis of multiple primary cancer of the colon] Vladanov IP, et al. **Sov Med** 1988;(9):54–60 (65 ref.) (Rus)
[The first case of acquired immunodeficiency syndrome in an USSR citizen] Pokrovskiĭ VI, et al. **Ter Arkh** 1988; 60(7):10–4 (Rus)
[Adenomatosis and papillomatosis of the major bile ducts] Artem'eva NN, et al. **Vestn Khir** 1989 Mar;142(3):53–4 (Rus)
[Clinical picture, diagnosis and treatment of multiple primary synchronous cancer of the large intestine] Koshchug SD, et al. **Vopr Onkol** 1989;35(3):352–8 (Eng. Abstr.) (Rus)
[Simultaneous bilateral Wilms tumor] López Alvarez-Buhilla P, et al. **An Esp Pediatr** 1989 Apr;30(4):293–5 (Eng. Abstr.) (Spa)

DRUG THERAPY

Analysis of multiple tumor data from a rodent carcinogenicity experiment. Finkelstein DM, et al. **Biometrics** 1989 Mar;45(1):219–30
Lymphomatoid granulomatosis. A case for aggressive therapy. Jenkins TR, et al. **Cancer** 1989 Sep 15;64(6):1362–5
Prinzmetal's angina during cyclophosphamide therapy. Stefenelli T, et al. **Eur Heart J** 1988 Oct;9(10):1155–7
Photodynamic therapy for multiple skin cancers. Pennington DG, et al. **Plast Reconstr Surg** 1988 Dec;82(6):1067–71
[Multicenter reticulohistiocytosis. A contribution to clinical aspects and therapy] Schulze P, et al. **Dermatol Monatsschr** 1989;175(6):353–8 (Eng. Abstr.) (Ger)
[A case of mesopharyngeal carcinoma that showed a complete response to induction chemotherapy] Tsuruta Y, et al. **Gan No Rinsho** 1988 Oct;34(12):1693–8 (Eng. Abstr.) (Jpn)
[Treatment of multiple leiomyomata with nifedipine] Grudzińska-Staniewska D, et al. **Przegl Dermatol** 1988 May–Jun;75(3):186–9 (Eng. Abstr.) (Pol)

ENZYMOLOGY

Increased mucosal ornithine decarboxylase activity in large bowel with multiple tumors, adenocarcinoma, and adenoma. Narisawa T, et al. **Cancer** 1989 Apr 15; 63(8):1572–6

EPIDEMIOLOGY

Multiple primary malignant tumours of patients treated for colorectal carcinoma (clinical analysis of 61 cases). Tóth A, et al. **Acta Chir Hung** 1989;30(2):163–9
Contralateral breast cancers following treatment for initial breast cancers in women. Parker RG, et al. **Am J Clin Oncol** 1989 Jun;12(3):213–6
Other cancers in uveal melanoma patients and their families. Turner BJ, et al. **Am J Ophthalmol** 1989 Jun 15; 107(6):601–8
Small polyps found during fiberoptic sigmoidoscopy in asymptomatic patients. Achkar E, et al. **Ann Intern Med** 1988 Dec 1;109(11):880–3
Colon polyps in asymptomatic persons [letter] Varner DR Jr, et al. **Ann Intern Med** 1989 Jul 15;111(2):187
Neoplasms of the central nervous system in Norway. V. Meningioma and cancer of other sites. An analysis of the occurrence of multiple primary neoplasms in meningioma patients in Norway from 1955 through 1986. Helseth A, et al. **APMIS** 1989 Aug;97(8):738–44
Long-term risk of second malignant neoplasm after a cancer in childhood. de Vathaire F, et al. **Br J Cancer** 1989 Mar; 59(3):448–52
Subsequent primary cancers in relation to treatment of ovarian cancer. Prior P, et al. **Br J Cancer** 1989 Mar; 59(3):453–9
Risk of second malignancy after cutaneous T-cell lymphoma. Kantor AF, et al. **Cancer** 1989 Apr 15;63(8):1612–5
Synchronicity, multicentricity, and metachronicity of head and neck cancer. Shaha AR, et al. **Head Neck Surg** 1988 Mar–Apr;10(4):225–8
The role of yearly chest radiography in the early detection of lung cancer following oral cancer. Stalpers LJ, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):99–103
Second malignancies in patients who have head and neck cancer: incidence, effect on survival and implications based on the RTOG experience. Cooper JS, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):449–56 (25 ref.)
Carcinogenic effects of scattered dose associated with radiation therapy. Cumberlin RL, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):623–9
Multiple primary cancer in patients with cancer of the head and neck: second cancer of the head and neck, esophagus, and lung. Licciardello JT, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):467–76 (44 ref.)
Second malignant tumors in head and neck squamous cell carcinoma: the overshadowing threat for patients with early-stage disease. Lippman SM, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):691–4 (28 ref.)
Second malignant tumors in patients with laryngeal carcinoma: diagnosis, treatment, and prevention. McDonald S, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):457–65 (45 ref.)
Aggressive management of second primary tumors in survivors of hereditary retinoblastoma. Smith LM, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):499–505
Frequency of multiple primary cancers and risk factors for lung and breast cancer patients. Watanabe S, et al. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:275–82
Synchronous large bowel cancer: a series of 47 cases. Fegiz G, et al. **Ital J Surg Sci** 1989;19(1):23–8
Multiple primary cancers in squamous cell cancer of the head and neck. Kotwall C, et al. **J Surg Oncol** 1989 Feb; 40(2):97–9
Multiple primary malignant neoplasms in the genitourinary tract: occurrence and etiology. Matzkin H, et al. **J Urol** 1989 Jul;142(1):1–12 (246 ref.)
Multiple primary malignant neoplasms of the head and neck. Okawa T, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 May 20;24(5):957–65
[Multiple primary tumors in cancer of the vulva] Karag'ozov A. **Akush Ginekol (Sofiia)** 1988;27(5):54–7 (15 ref.) (Eng. Abstr.) (Bul)
[The incidence of multi-organ involvement in urothelial malignancies] Gu FL, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Mar;69(3):147–9, 12 (Eng. Abstr.) (Chi)
[The risk of additional cancers in breast cancer patients] Sankila R, et al. **Duodecim** 1989;105(6):521–8 (Fin)
[Metachronous primary cancers in the course of operated bronchial cancer] Roeslin N, et al. **Ann Chir** 1988; 42(8):597–601 (17 ref.) (Eng. Abstr.) (Fre)
[Multiple primary neoplasms in gynecology] Michalica W, et al. **Krebsarzt** 1969;24(6):384–8 (Eng. Abstr.) (Ger)
[Metachronous polyps after the excision of colorectal carcinoma] Briccoli A, et al. **Minerva Med** 1989 Jul; 80(7):701–2 (Ita)
[Multiple primary tumors: the association between colorectal neoplasms and extracolonic neoplasms] Saviano MS, et al. **Minerva Med** 1989 Jul;80(7):721–4 (Ita)
[Tumor multiplicity in subjects with malignant neoplasms of the tongue] Silvestri F, et al. **Pathologica** 1988 Nov–Dec; 80(1070):659–64 (Eng. Abstr.) (Ita)
[The relative risk of a multiple primary cancer occurrence] Okamoto N, et al. **Gan No Rinsho** 1989 Feb;35(3):348–54 (Eng. Abstr.) (Jpn)
[Multiple primary digestive cancers] Strat V, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Oct–Dec; 92(4):699–702 (Eng. Abstr.) (Rum)

ETIOLOGY

Eruptive dysplastic nevi associated with human immunodeficiency virus infection. Duvic M, et al. **Arch Dermatol** 1989 Mar;125(3):397–401
Role of radiotherapy and chemotherapy in the risk of second malignant neoplasms after cancer in childhood. de Vathaire F, et al. **Br J Cancer** 1989 May;59(5):792–6
An exceptional 18-year follow-up after cardiac transplantation. How can malignancies occur during immunosuppressive therapy? Xerri L, et al. **Cancer** 1989 May 1;63(9):1697–9
Localized fibrous mesothelioma of pleura following external ionizing radiation therapy. Bilbey JH, et al. **Chest** 1988 Dec; 94(6):1291–2
Two atypical fibroxanthomas arising separately in X-irradiated skin. Kemmett D, et al. **Clin Exp Dermatol** 1988 Nov;13(6):382–4
Ten-year nodular sclerosis Hodgkin's disease and second malignancies. Zulian GB, et al. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):659–65
Second neoplasms in Hodgkin's disease: current controversies. Zarrabi MH, et al. **Hematol Oncol Clin North Am** 1989 Jun;3(2):303–18 (65 ref.)
Therapy related malignancies [letter] Saikia TK, et al. **J Assoc Physicians India** 1988 Oct;36(10):621–2
Multifocal adenocarcinoma of the proximal small intestine in a patient with celiac sprue. Dannenberg A, et al. **J Clin Gastroenterol** 1989 Feb;11(1):73–6
Fetus in fetu or not? Ouimet A, et al. **J Pediatr Surg** 1989 Sep;24(9):926–7
Multiple brown tumors in a patient with nutritional secondary hyperparathyroidism. Mergenthaler HG, et al. **Klin Wochenschr** 1989 Jan 4;67(1):42–6

Multiple primary malignant neoplasms in patients with adult T-cell leukaemia [letter] Imamura N, et al. **Lancet** 1989 Jan 28;1(8631):219

Radiation dose and second cancer risk in patients treated for cancer of the cervix. Boice JD Jr, et al. **Radiat Res** 1988 Oct;116(1):3–55

Second malignant tumors after childhood cancer. Faulkner K. **Radiol Technol** 1989 Jan–Feb;60(3):260–2 (10 ref.)

The impact of stage and treatment modality on the likelihood of second malignancies and hematopoietic disorders in Hodgkin's disease. Mendenhall NP, et al. **Radiother Oncol** 1989 Mar;14(3):219–29

[Breast cancer following treatment of Hodgkin disease. Apropos of 2 case reports] Brasseur P, et al. **J Belge Radiol** 1988;71(4):483–7 (Eng. Abstr.) **(Fre)**

[Determination of the risk of a 2d cancer in patients treated for a first cancer] Boivin JF, et al. **Rev Epidemiol Sante Publique** 1988;36(4–5):292–300 (Eng. Abstr.) **(Fre)**

[Materno-fetal complications in pregnancies with multiple myomas] Rosati P, et al. **Zentralbl Gynakol** 1988; 110(19):1213–7 (Eng. Abstr.) **(Ger)**

[Anatomico-clinical aspects of a case of squamous cell carcinoma arising from a lateral cyst of the neck] Oddi G, et al. **Minerva Med** 1989 Feb;80(2):173–5 (6 ref.) (Eng. Abstr.) **(Ita)**

[A case of asbestosis complicated with double cancer of the stomach and colon] Kishimoto T, et al. **Gan No Rinsho** 1989 Feb;35(3):417–20 (Eng. Abstr.) **(Jpn)**

[Multiple primary malignant tumors and pulmonary tuberculosis] Kalinichev GA, et al. **Probl Tuberk** 1988; (9):71–2 **(Rus)**

[Gaucher's disease associated with peritoneal leiomyomatosis] Bykov SA, et al. **Sov Med** 1989;(5):115–6 **(Rus)**

[Development of multiple spinocellular cancer of the skin in a patient with psoriasis] Rubins Ala, et al. **Vestn Dermatol Venerol** 1989;(3):72–4 (Eng. Abstr.) **(Rus)**

[Sarcoma of soft tissues induced by radiation. Presentation of a case and review of the literature] Caballero JL, et al. **Rev Med Panama** 1989 May;14(2):116–9 (6 ref.) (Eng. Abstr.) **(Spa)**

GENETICS

Exacerbation of familial renal lymphangiomatosis during pregnancy. Meredith WT, et al. **AJR** 1988 Nov; 151(5):965–6

Tuberous sclerosis and the relation with renal angiomyolipoma. A genetic study on the clinical aspects. van Baal JG, et al. **Clin Genet** 1989 Mar;35(3):167–73

The Muir-Torre syndrome: a disease of sebaceous and colonic neoplasms. Schwartz RA, et al. **Dermatologica** 1989;178(1):23–8

Turcot's syndrome. A review. Jarvis L, et al. **Dis Colon Rectum** 1988 Nov;31(11):907–14

Brain tumors in familial adenomatous polyposis. Kropilak M, et al. **Dis Colon Rectum** 1989 Sep;32(9):778–82 (51 ref.)

Radionuclide angiography and surgery for familial bilateral chemodectomas. Hamilton JR, et al. **Eur J Vasc Surg** 1987 Apr;1(2):97–105

Relationship of epithelial ovarian cancer to other malignancies within families. Schildkraut JM, et al. **Genet Epidemiol** 1988;5(5):355–67

Familial multiple naevi flammei. Schmid M, et al. **Helv Paediatr Acta** 1989 Jun;43(5–6):491–2

Cytogenetic studies on three pheochromocytomas derived from patients with von Hippel–Lindau syndrome. Kiechle-Schwarz M, et al. **Hum Genet** 1989 May; 82(2):127–30

Tissue-specific expression of a constitutional 3;6 translocation: development of multiple bilateral renal–cell carcinomas. Kovacs G, et al. **Int J Cancer** 1989 Mar 15; 43(3):422–7

Periampullary, colorectal and gastric cancer in two siblings. Schlossberg D, et al. **Int J Cancer** 1988 Dec 15;42(6):839–41

Analysis of epidermal growth factor receptor gene in a case of multiple Bowen's disease. Tanaka M, et al. **J Dermatol (Tokyo)** 1988 Oct;15(5):397–9

Giant cavernous hemangioma of the liver and multiple primary malignant tumors in a patient with suspected familial inhibition of natural killer cell activity—a case report. Tomiyama T, et al. **Jpn J Surg** 1989 Mar; 19(2):216–22

Small-cell lung cancer after retinoblastoma [letter] Leonard RC, et al. **Lancet** 1988 Dec 24–31;2(8626–8627):1503

Multicentric familial squamous odontogenic tumor. Leider AS, et al. **Oral Surg Oral Med Oral Pathol** 1989 Aug; 68(2):175–81 (25 ref.)

[Autosomal dominant genetic dermatoses and their association with internal cancers] Burgdorf WH, et al. **Hautarzt** 1988 Jul;39(7):413–8 (51 ref.) (Eng. Abstr.) **(Ger)**

[Diffuse stomach cancer in the minor form of familial adenomatosis coli. Correlation or coincidence?] Polensky A, et al. **Z Gastroenterol** 1988 Dec;26(12):737–43 (Eng. Abstr.) **(Ger)**

[Cowden's syndrome. Apropos of 2 familial cases] Barba A, et al. **G Ital Dermatol Venereol** 1988 May;123(5):233–5 (Eng. Abstr.) **(Ita)**

IMMUNOLOGY

Multiple malignancies in immunocompetent patients. Seggev JS, et al. **South Med J** 1988 Dec;81(12):1563–5

[The unusually favorable prognosis of multiple primary bronchial carcinoma—the consequence of natural killer cell elevation and increased interleukin 2 receptor expression?] Plat U, et al. **Z Erkr Atmungsorgane** 1989;172(2):150–4 (Eng. Abstr.) **(Ger)**

[Carcinoembryonic antigen in multiple primary cancer of the colon] Vladanov IP, et al. **Med Radiol (Mosk)** 1988 Dec; 33(12):5–9 (Eng. Abstr.) **(Rus)**

METABOLISM

Leydig cell tumor of the ovary associated with endometrial carcinoma and containing 17 beta-hydroxysteroid dehydrogenase. Ichinohasama R, et al. **Int J Gynecol Pathol** 1989;8(1):64–71

MORTALITY

Carcinoma of the lung. Evaluation of satellite nodules as a factor influencing prognosis after resection. Deslauriers J, et al. **J Thorac Cardiovasc Surg** 1989 Apr;97(4):504–12

PATHOLOGY

Multiple eccrine poromas arising in chronic radiation dermatitis. Ullah K, et al. **Acta Derm Venereol (Stockh)** 1989;69(1):70–3

Adenocarcinoma of Bartholin's gland associated with extramammary Paget's disease of the vulva. Hastrup N, et al. **Acta Obstet Gynecol Scand** 1988;67(4):375–7

Human papillomavirus type 11 DNA in squamous cell carcinomas and pre-existing multiple laryngeal papillomas. Lindeberg H, et al. **Acta Otolaryngol (Stockh)** 1989 Jan–Feb;107(1–2):141–9

A case of ovarian granulosa cell tumor with invasive adenocarcinoma of the endometrium. A case report and review of the Japanese literature. Nakamura S, et al. **Acta Pathol Jpn** 1988 Jul;38(7):947–51 (13 ref.)

Müllerian adenosarcomas of the uterus with sex cord-like elements. A clinicopathologic analysis of eight cases. Clement PB, et al. **Am J Clin Pathol** 1989 Jun;91(6):664–72

Heterogenous expression of endothelial cell markers in infantile hemangioendothelioma. Immunohistochemical study of two solitary cases and one multiple one. Yasunaga C, et al. **Am J Clin Pathol** 1989 Jun;91(6):673–81

Nevus sebaceus is associated with unusual neoplasms. An atlas. Alessi E, et al. **Am J Dermatopathol** 1988 Apr; 10(2):116–27

Skin tumor of T accessory cells (interdigitating reticulum cells) with high content of T lymphocytes. Hui PK, et al. **Am J Dermatopathol** 1987 Apr;9(2):129–37 (43 ref.)

Malignant dermal cylindroma in a patient with multiple dermal cylindromas, trichoepitheliomas, and bilateral dermal analogue tumors of the parotid gland. Rockerbie N, et al. **Am J Dermatopathol** 1989 Aug;11(4):353–9

Cutaneous malignant melanoma in a black patient with neurofibromatosis (von Recklinghausen's disease). Silverman JF, et al. **Am J Dermatopathol** 1988 Dec; 10(6):536–40 (16 ref.)

Squamous-cell carcinoma of the scalp arising in lesions of discoid lupus erythematosus. Sulica VI, et al. **Am J Dermatopathol** 1988 Apr;10(2):137–41

Sweat gland carcinoma ex eccrine spiradenoma. Wick MR, et al. **Am J Dermatopathol** 1987 Apr;9(2):90–8

Liver cell adenoma: diagnosis and treatment of a rare hepatic neoplastic process. Brophy CM, et al. **Am J Gastroenterol** 1989 Apr;84(4):429–32

Granular cell tumor of the stomach coincident with two early gastric carcinomas. Yamaguchi K, et al. **Am J Gastroenterol** 1989 Jun;84(6):656–9

Unsuspected Cushing's disease in a patient with fatal staphylococcal bacteremia and multiple pituitary adenomas. Dunlap NE, et al. **Am J Med** 1989 Feb;86(2):217–21

Secondary leukemia following successful treatment of Wilms' tumor. Moss TJ, et al. **Am J Pediatr Hematol Oncol** 1989 Summer;11(2):158–61

Squamous cell carcinoma arising in mature cystic teratoma of the ovary. Clinicopathologic and topographic analysis. Hirakawa T, et al. **Am J Surg Pathol** 1989 May; 13(5):397–405

Multiple lymphomatous polyposis of the gastrointestinal tract. A clinicopathologically distinctive form of non-Hodgkin's lymphoma of B-cell centrocytic type. O'Briain DS, et al. **Am J Surg Pathol** 1989 Aug;13(8):691–9 (52 ref.)

Simultaneous nodular lymphocyte predominance Hodgkin's disease (N-LPHD) and large-cell lymphoma (LCL) [letter] Whittaker M, et al. **Am J Surg Pathol** 1989 Aug;13(8):715–6

Endocrine cell carcinoma (carcinoid) of the gallbladder. Yamamoto M, et al. **Am J Surg Pathol** 1989 Apr; 13(4):292–302 (43 ref.)

Carcinoma of the large bowel in Singapore—a pathological study. Lee YS. **Ann Acad Med Singapore** 1988 Jan; 17(1):55–65

Nephrogenic adenoma of the bladder. Lukkarinen O, et al. **Ann Chir Gynaecol** 1988;77(1):45–6

Dedifferentiation of recurrent chondrosarcoma of the mandible. Robinson ML, et al. **Ann Dent** 1988 Summer; 47(1):27–30

Mediastinal germ cell tumor and acute megakaryoblastic leukemia [letter] Domingo A, et al. **Ann Intern Med** 1989 Sep 15;111(6):539

Sinus histiocytosis with massive lymphadenopathy: bilateral orbital involvement spanning 17 years. Marion JR, et al. **Ann Ophthalmol** 1989 Feb;21(2):55–8

Bilateral granular cell tumors of the posterior mediastinum. Aisner SC, et al. **Ann Thorac Surg** 1988 Dec;46(6):688–9

Multiple hamartomas of the breast. Altermatt HJ, et al. **Appl Pathol** 1989;7(2):145–8

Reactive glioma in intracranial sarcoma ('sarcoglioma'). Histology, electron microscopy and immunohistochemistry of two additional cases. Pettinato G, et al. **Appl Pathol** 1989;7(3):192–200

Oligosymptomatic form of Klippel-Trenaunay-Weber syndrome associated with giant nevus spilus [letter] Sigg C, et al. **Arch Dermatol** 1989 Sep;125(9):1284–5

Breast carcinoma metastatic to a meningioma. Case report and review of the literature. Zon LI, et al. **Arch Intern Med** 1989 Apr;149(4):959–62 (20 ref.)

Neurofibromatosis type II of the head and neck. Costantino PD, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar; 115(3):380–3

Collision of malignant lymphoma and multiple early adenocarcinomas of the stomach. Noda T, et al. **Arch Pathol Lab Med** 1989 Apr;113(4):419–22

Ganglioneuromatous proliferation associated with juvenile polyposis coli. Pham BN, et al. **Arch Pathol Lab Med** 1989 Jan;113(1):91–4

Nonpalpable in situ ductal carcinoma of the breast. Predictors of multicentricity and microinvasion and implications for treatment. Schwartz GF, et al. **Arch Surg** 1989 Jan; 124(1):29–32

Multicentric neoplasia of the lower female genital tract—a case report of neoplastic change at an unusual site. Ngan HY, et al. **Aust N Z J Obstet Gynaecol** 1988 Aug; 28(3):236–8

Cystadenoma of the common bile-duct with malignant transformation. Coulter GN, et al. **Aust N Z J Surg** 1989 Mar;59(3):291–4

Terminal transformation in B-cell chronic lymphocytic leukaemia. Galton DA. **Bone Marrow Transplant** 1989 Jan; 4 Suppl 1:156–7 (15 ref.)

Cervical intraepithelial neoplasia in lymphoma patients: a cytological and colposcopic study. Hughes RG, et al. **Br J Cancer** 1989 Apr;59(4):594–9

Changes in mammographically normal contralateral breast in cases of breast carcinoma. Prasad A, et al. **Br J Cancer** 1989 Aug;60(2):235

Multiple infundibular tumours of the head and neck. Findlay GH. **Br J Dermatol** 1989 May;120(5):633–8

Multiple basal cell carcinomas arising in port-wine haemangiomas. Magaña-García M, et al. **Br J Dermatol** 1988 Sep;119(3):393–6

Primary malignant melanoma of the orbit arising in a cellular blue naevus. Löffler KU, et al. **Br J Ophthalmol** 1989 May; 73(5):388–93

Synchronous tumours of the parotid gland with different histology. Goh PM, et al. **Br J Oral Maxillofac Surg** 1989 Jun;27(3):198–202 (18 ref.)

Bilateral acinic cell carcinoma of the parotid. Millar BG, et al. **Br J Oral Maxillofac Surg** 1989 Jun;27(3):192–7 (26 ref.)

Focal dermal hypoplasia syndrome with incomplete transverse facial cleft and tumour of the lips. Mizuno A, et al. **Br J Oral Maxillofac Surg** 1989 Feb;27(1):71–6

Florid cemento-osseous dysplasia (gigantiform cementoma) in a Caucasian woman. Wolf J, et al. **Br J Oral Maxillofac Surg** 1989 Feb;27(1):46–52

A clinicopathological study of synchronous multiple gastric cancer. Mitsudomi T, et al. **Br J Surg** 1989 Mar; 76(3):237–40

Multiple primary retroperitoneal tumours: a unique case. Patel JJ, et al. **Br J Surg** 1989 Aug;76(8):819–20

Immunohistologic diagnosis of multiple carcinomas. The role of monoclonal antibodies against carcinoembryonic antigen. Guiot MC, et al. **Can J Surg** 1989 Jul;32(4):279–82

Hodgkin's disease complicating non-Hodgkin's lymphoma [see comments] Shumak SL, et al. **Can Med Assoc J** 1988 Dec 15;139(12):1157–9. **Comment in:** Can Med Assoc J 1989 Jun 1;140(11):1262, 1265

Hodgkin's disease complicating non-Hodgkin's lymphoma [letter; comment] Trimble GX. **Can Med Assoc J** 1989 Jun 1;140(11):1262, 1265. **Comment on:** Can Med Assoc J 1988 Dec 15;139(12):1157–9

Composite carcinoid-adenocarcinoma of the stomach associated with multiple gastric carcinoids and nonantral gastric atrophy. Caruso ML, et al. **Cancer** 1989 Oct 1; 64(7):1534–9

Synchronous tumors arising in a single major salivary gland. Gnepp DR, et al. **Cancer** 1989 Mar 15;63(6):1219–24

Concomitant occurrence of an adrenal ganglioneuroma and a contralateral pheochromocytoma in a patient with von Recklinghausen's neurofibromatosis. An immunocytochemical study. Jansson S, et al. **Cancer** 1989 Jan 15;63(2):324–9

Coexistence of intraepithelial carcinoma and glandular differentiation in esophageal squamous cell carcinoma. Kuwano H, et al. **Cancer** 1988 Oct 15;62(8):1568–72

Multiple simultaneous inverted papillomas of the upper urinary tract. A case report with a review of ureteral and renal pelvic inverted papillomas. Kyriakos M, et al. **Cancer** 1989 Jan 15;63(2):368–80 (50 ref.)

Intratubular germ cell neoplasia in testicular teratomas and epidermoid cysts. Correlation with prognosis and possible biologic significance. Manivel JC, et al. **Cancer** 1989 Aug 1;64(3):715–20

Endodermal sinus tumor and mucinous cystadenofibroma of the ovary. Occurrence in an 82–year–old woman. Mazur MT, et al. **Cancer** 1988 Nov 1;62(9):2011–5

Cervical adenocarcinoma in women with nasopharyngeal carcinoma (NPC). Singh P, et al. **Cancer** 1989 Sep 1; 64(5):1152–5

Adenoid cystic carcinoma of the prostate. Nkanza NK. **Cent Afr J Med** 1988 Jul;34(7):166–8

Multicentricity of adenocarcinoma of the lung. McElvaney G, et al. **Chest** 1989 Jan;95(1):151–4

Disseminated melanomatosis of the central nervous system and other organs: a case report. Iglesias–Rozas JR, et al. **Clin Neuropathol** 1989 Jan–Feb;8(1):11–5

Medullary and papillary carcinomas occurring as a collision tumor: report of a case. Gero MJ, et al. **Clin Nucl Med** 1989 Mar;14(3):171–4

Ectopic ACTH and adrenal myelolipoma. Sieber SC, et al. **Conn Med** 1989 Jan;53(1):7–10 (21 ref.)

Multiple connective tissue nevi. DePadova–Elder S, et al. **Cutis** 1988 Sep;42(3):222–4

Widespread oral papillomatosis due to chronic buccal trauma. Mosovich B, et al. **Cutis** 1989 Mar;43(3):254–7

Basal cell carcinoma surrounded by lentigo maligna. Sina B, et al. **Cutis** 1989 Jul;44(1):81–2

Multiple clustered dermatofibromas. Evolution over 20 years. Berbis P, et al. **Dermatologica** 1988;177(3):185–8

Primary anaplastic large cell lymphoma of the skin. Berti E, et al. **Dermatologica** 1989;178(4):225–7

Metastatic malignant melanoma arising from a common blue nevus in a patient with subacute cutaneous lupus erythematosus. Modly C, et al. **Dermatologica** 1989; 178(3):171–5 (19 ref.)

Mucinous breast carcinoma and mixed mucinous–infiltrating ductal carcinoma: a comparative cytologic study. Stanley MW, et al. **Diagn Cytopathol** 1989;5(2):134–8

Spatial clustering of multiple hyperplastic, adenomatous, and malignant colonic polyps in individual patients. Cappell MS, et al. **Dis Colon Rectum** 1989 Aug;32(8):641–52

The possible presence of a separate disease entity in nonfamilial polyposis of the large intestine. Itoh H, et al. **Dis Colon Rectum** 1989 Mar;32(3):240–2

Lymphangioma of the large intestine. Report of a case. Kuramoto S, et al. **Dis Colon Rectum** 1988 Nov; 31(11):900–5 (30 ref.)

Choriocarcinoma and transitional cell carcinoma of the bladder—a case report and review of the clinical evolution of disease in reported cases. Abratt RP, et al. **Eur J Surg Oncol** 1989 Apr;15(2):149–53 (10 ref.)

Clinicopathological analysis of synchronous multiple gastric carcinoma. Honmyo U, et al. **Eur J Surg Oncol** 1989 Aug; 15(4):316–21

Carcinoma in situ of the testis in the presence of contralateral germ cell tumor. Kleinschmidt K, et al. **Eur Urol** 1989; 16(1):74–7

Synchronous primary neoplasms of the female reproductive tract. Eisner RF, et al. **Gynecol Oncol** 1989 Jun;33(3):335–9

Adenocarcinoma of the endometrium and endometrioid carcinoma of the ovary associated with pregnancy. Hoffman MS, et al. **Gynecol Oncol** 1989 Jan;32(1):82–5

Synchronous adenocarcinoma and carcinoid of the uterine cervix: immunohistochemical study of a case and review of literature. Husain AN, et al. **Gynecol Oncol** 1989 Apr; 33(1):125–8 (19 ref.)

Synchronous carcinomas of endometrium and ovary. Piura B, et al. **Gynecol Oncol** 1989 May;33(2):261–4

Synchronous unilateral parotid neoplasms of different histologic types. Schilling JA, et al. **Head Neck** 1989 Mar–Apr;11(2):179–83 (25 ref.)

A fallopian tube lesion of borderline malignancy associated with pseudo–myxoma peritonei. McCarthy JH, et al. **Histopathology** 1988 Aug;13(2):223–5

Unsuspected bilateral ureteral transitional carcinoma. Culkin DJ, et al. **IMJ** 1988 Aug;174(2):95–7

Hemangioendothelioma following chronic granulocytic leukemia—a case report. Gupta R, et al. **Indian J Cancer** 1987 Dec;24(4):196–201

Intracranial space occupying lesions in treated Hodgkin's disease: pathological diversity. Saikia TK, et al. **Indian J Cancer** 1988 Jun;25(2):84–8

Gliomatosis peritonei: a rare complication of malignant ovarian teratoma. Vijayaraghavan M, et al. **Indian J Pathol Microbiol** 1987 Oct;30(4):383–6

Keratitis, ichthyosis, and deafness syndrome with development of multiple cutaneous neoplasms. Hazen PG, et al. **Int J Dermatol** 1989 Apr;28(3):190–1

Richter's syndrome presenting as a solitary cutaneous nodule. Novice FM, et al. **Int J Dermatol** 1989 Jan–Feb;28(1):36–7

Multiple focal extraovarian serous carcinoma. August CZ, et al. **Int J Gynecol Pathol** 1985;4(1):11–23

The second carcinoma of the anterior two–thirds of the tongue after successful radiotherapy to the tongue. Ono I, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct;17(4):773–8

The growth and cell kinetics of a secondary tumor after radiation or surgical treatment of the primary tumor. Ramsay J, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct; 17(4):809–13

Unilateral linear basal cell nevus associated with diffuse osteoma cutis, unilateral anodontia, and abnormal bone mineralization. Aloi FG, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 2):973–8

Basal cell carcinomas and lymphoma: biologic behavior and associated factors in sixty–three patients. Parnes R, et al. **J Am Acad Dermatol** 1988 Dec;19(6):1017–23

Melanocytic nevus counts and melanoma [letter] Swerdlow AJ, et al. **J Am Acad Dermatol** 1989 Mar;20(3):522–3

In situ malignant melanoma arising in a speckled lentiginous nevus. Wagner RF Jr, et al. **J Am Acad Dermatol** 1989 Jan;20(1):125–6

Exophytic mass of the floor of the mouth. Whitt JC, et al. **J Am Dent Assoc** 1989 Sep;119(3):425–7

Diffuse papillomatosis of gall bladder. Arunabh, et al. **J Assoc Physicians India** 1988 Mar;36(3):228–9

Non Hodgkin's lymphoma of stomach in a case of Hodgkin's disease. Mohandas KM, et al. **J Assoc Physicians India** 1988 Jul;36(7):456–7

Pilomatricoma associated with epidermoid cyst. Benharroch D, et al. **J Cutan Pathol** 1989 Feb;16(1):40–3

Multiple eccrine spiradenoma: case report and review. Revis P, et al. **J Cutan Pathol** 1988 Aug;15(4):226–9 (21 ref.)

Five primary disparate melanomas: a case report (the spectrum of melanoma). Shapiro MA. **J Dermatol Surg Oncol** 1988 Dec;14(12):1378–85

Giant nevus lipomatosus superficialis associated with cavernous hemangioma. Hann SK, et al. **J Dermatol (Tokyo)** 1988 Dec;15(6):543–5

Squamous carcinoma of the sphenoid sinus in association with inverted papillomatosis. Dempster JH, et al. **J Laryngol Otol** 1988 Oct;102(10):938–40

Carcinomas ex monomorphic adenoma of salivary glands. Luna MA, et al. **J Laryngol Otol** 1989 Aug;103(8):756–9

Synchronous extra–parotid Warthin's tumour. Nishikawa H, et al. **J Laryngol Otol** 1989 Aug;103(8):792–3

Co–existent inverted papilloma and squamous carcinoma of the nasal septum. Sim DW. **J Laryngol Otol** 1989 Aug; 103(8):774–5

Two malignant melanomas in skin and tonsil during consecutive pregnancies. Walsted A, et al. **J Laryngol Otol** 1989 Aug;103(8):780–2

Diffuse cerebrospinal gliomatosis presenting as motor neuron disease for two years. Schmidbauer M, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):275–8

Hemangiopericytoma arising in a solitary plexiform neurofibroma: report of a case and review of the literature. Aduana V, et al. **J Oral Maxillofac Surg** 1988 Dec; 46(12):1106–9 (22 ref.)

Cowden syndrome: clinical and pathological considerations in two new cases. Bagan JV, et al. **J Oral Maxillofac Surg** 1989 Mar;47(3):291–4

Embryonal rhabdomyosarcoma arising in the masseter muscle as a second malignant neoplasm. Chemello PD, et al. **J Oral Maxillofac Surg** 1988 Oct;46(10):899–905 (17 ref.)

Basal cell nevus syndrome with squamous cell carcinoma of the maxilla: report of a case. Hasegawa K, et al. **J Oral Maxillofac Surg** 1989 Jun;47(6):629–33 (28 ref.)

Adenocarcinoma in a mature cystic teratoma. A case report. Malviya VK, et al. **J Reprod Med** 1989 Feb;34(2):183–6

Renal angiomyolipoma associated with lymph node involvement and renal cell carcinoma in patients with tuberous sclerosis. Taylor RS, et al. **J Urol** 1989 Apr; 141(4):930–2

Synchronous adenocarcinoma of the transverse colon, the gallbladder and the vermiform appendix. Schmid KW, et al. **Klin Wochenschr** 1988 Nov 1;66(21):1093–6

Centroblastic lymphoma of the thyroid supervening long–lasting chronic lymphocytic leukemia (B–CLL) demonstration of biclonality by immunohistochemical and gene rearrangement analysis. Trümper L, et al. **Klin Wochenschr** 1988 Aug 15;66(16):736–42

Juvenile polyposis. Not always a benign, self–limiting disease. Shemesh EI, et al. **Mo Med** 1987 Apr;84(4):190–2

Coexistence of two malignant lymphomas in the same patient. A morphological analysis of four cases. Leahu S. **Morphol Embryol (Bucur)** 1988 Oct–Dec;34(4):249–54

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 15–1989. A 52–year–old man with neurofibromatosis and jaundice. **N Engl J Med** 1989 Apr 13;320(15):996–1004

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 13–1989. A 76–year–old woman with multiple bone lesions and thrombocytopenia. **N Engl J Med** 1989 Mar 30;320(13):854–60

Multiple, primary multifocal brain astrocytoma. Case report. Godlewski A, et al. **Neuropatol Pol** 1988;26(1):111–22

Cowden's disease. Bardenstein DS, et al. **Ophthalmology** 1988 Aug;95(8):1038–41 (28 ref.)

Melanotic neuroectodermal tumor of infancy: evidence for multicentricity. Steinberg B, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec;66(6):666–9

Kaposi's sarcoma of the parotid gland in acquired immunodeficiency syndrome. Yeh CK, et al. **Oral Surg Oral Med Oral Pathol** 1989 Mar;67(3):308–12

Muir–Torre's syndrome. Report of a case with a long follow–up. Bonetti M, et al. **Pathologica** 1987 Sep–Oct; 79(1063):647–53

Synchronous multiple primary malignant neoplasm of the gastro intestinal tract: carcinoid of the midgut and adenocarcinoma of the ascending colon. Sacchi G, et al. **Pathologica** 1988 Sep–Oct;80(1069):583–93 (25 ref.)

Melanomas arising in large congenital nevocytic nevi: a prospective study. Gari LM, et al. **Pediatr Dermatol** 1988 Aug;5(3):151–8

Gastric adenocarcinoma associated with adenomyoma of the stomach. Chapple CR, et al. **Postgrad Med J** 1988 Oct; 64(756):801–3

Villous adenomas and carcinoma of the duodenum in Gardner's syndrome. Sinha J, et al. **Postgrad Med J** 1988 Nov;64(757):899–902 (28 ref.)

Prevention of bilateral testicular cancer: significance of detection and treatment of carcinoma in situ. Skakkebaek NE, et al. **Prog Clin Biol Res** 1989;303:779–89 (29 ref.)

Malignant neoplasms arising in cystic hamartomas of the lung in childhood. Hedlund GL, et al. **Radiology** 1989 Oct; 173(1):77–9

Tumoural associations in chronic granulocytic leukemia. Popa G, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Apr–Jun;92(2):369–72

Metachronous sarcomas in a patient with bilateral retinoblastomas. A case report. Cohen R. **S Afr Med J** 1989 Aug 5;76(3):117–8

Multiple cutaneous granular cell tumors in childhood. Kyler JR, et al. **South Med J** 1988 Dec;81(12):1583–6 (25 ref.)

A forme fruste of von Hippel–Lindau disease: a combination of adrenal pheochromocytoma and ipsilateral renal cell carcinoma—a case report. Horbach JM, et al. **Surgery** 1989 Mar;105(3):436–41 (27 ref.)

Synchronous pulmonary carcinoid tumour and non–Hodgkin's lymphoma: report of two cases. Juettner FM, et al. **Thorax** 1989 Jun;44(6):516–8

Pheochromocytoma combined with malignant schwannoma: unusual neoplasm of the adrenal medulla. Miettinen M, et al. **Ultrastruct Pathol** 1988 Sep–Oct;12(5):513–27

Simultaneous bilateral testicular germ cell tumors with dissimilar histology. Case report and review of the literature. Dieckmann KP, et al. **Urol Int** 1988;43(5):305–9 (46 ref.)

Granulocytic sarcoma of testis preceding acute myelocytic leukemia. Kawashima H, et al. **Urol Int** 1988;43(5):310–2

Association of renal cell carcinoma and angiomyolipoma in the same kidney. Morita T, et al. **Urol Int** 1988;43(5):297–8

Adenocarcinoma of the renal pelvis. Report of two cases, one with simultaneous transitional cell carcinoma of the bladder. Stein A, et al. **Urol Int** 1988;43(5):299–301

Inverted papilloma of renal pelvis associated with transitional cell carcinoma of the bladder. Yamaguchi K, et al. **Urol Int** 1988;43(5):302–4

Late recurrence of mature teratoma in nonseminomatous testicular tumors after PVB chemotherapy and surgery. Gelderman WA, et al. **Urology** 1989 Jan;33(1):10–4

Intravesical BCG and second primary malignancies [letter] Khanna OP. **Urology** 1989 Aug;34(2):113

Gastric glandular cysts—investigations into their genesis and relationship to colorectal epithelial tumors. Eidt S, et al. **Z Gastroenterol** 1989 Apr;27(4):212–7

Synchronous carcinoid tumors of the colon—a case report. Schmidt G, et al. **Z Gastroenterol** 1989 Apr;27(4):218–20

[Malignant pheochromocytoma of both adrenals combined with sympathetic nervous system tumors of the small intestine] Iakimov A, et al. **Khirurgiia (Sofiia)** 1988; 41(6):49–53 (Eng. Abstr.) **(Bul)**

[Basal cell nevus syndrome and medulloblastoma] Chevrant–Breton J, et al. **Ann Dermatol Venereol** 1988; 115(11):1115–7 **(Fre)**

[Malignant intestinal leiomyoblastoma with double localization. Apropos of a case and review of the literature (letter)] Aubry P, et al. **Ann Med Interne (Paris)** 1989; 140(1):72–4 (12 ref.) **(Fre)**

[Adenocarcinoma and primary osteosarcoma of the prostate. An unusual association] Dauge MC, et al. **Ann Pathol** 1989; 9(2):115–7 (Eng. Abstr.) **(Fre)**

[Detection of a prostatic adenocarcinoma in the cysto–prostatectomy specimens of an invasive tumor of the bladder] Baron JC, et al. **Ann Urol (Paris)** 1989;23(2):119–22 (Eng. Abstr.) **(Fre)**

[Kaposi's sarcoma of the uterine cervix associated with atypical condyloma in a female patient with cardiac transplantation (during the post–partum period)] Audouin AF, et al. **Arch Anat Cytol Pathol** 1988;36(5–6):226–8 (Eng. Abstr.) **(Fre)**

[Apropos of a case of malignant schwannoma with rhabdomyoblastic components. Malignant Triton tumor] Ben Nasr R, et al. **Arch Anat Cytol Pathol** 1988;36(4):175–7 (Eng. Abstr.) **(Fre)**

[Intramedullary mature teratoma associated with an attached cord and an intradural lipoma. Apropos of a surgically treated case. Review of the literature] Pelissou–Guyotat I, et al. **Neurochirurgie** 1988;34(3):205–9 (24 ref.) (Eng. Abstr.) **(Fre)**

[Giant nerve–sheath fibroma. Apropos of a case associated with hepatorenal polycystosis] Satge D, et al. **Pathologica** 1987 Nov–Dec;79(1064):761–72 (Eng. Abstr.) **(Fre)**

[Mirror–image osteosarcoma of the radius. A case] Baranzelli MC, et al. **Presse Med** 1989 Jun 24;18(25):1245–8 (Eng. Abstr.) **(Fre)**

[Basal–cell nevomatosis associated with multifocal fetal rhabdomyoma. A case] Klijanienko J, et al. **Presse Med** 1988 Nov 26;17(42):2247–50 (10 ref.) (Eng. Abstr.) **(Fre)**

[Phyllodes tumor associated with in–situ lobular carcinoma. Apropos of a case] Brochard–Le–Douarin LA, et al. **Rev Fr Gynecol Obstet** 1989 Jan;84(1):41–3 (Eng. Abstr.) **(Fre)**

[Metachronous primary pulmonary cancers. Apropos of a

new case report] Piperno D, et al. **Rev Mal Respir** 1989; 6(1):79–81 (Eng. Abstr.) (Fre)

[Bi-auricular myxoma. A complete review of the literature] Khiari F, et al. **Tunis Med** 1988 Dec;66(12):877–82 (17 ref.) (Eng. Abstr.) (Fre)

[Multilocular gastrointestinal lymphoma of the Burkitt type in AIDS] Felcht H, et al. **Chirurg** 1988 Sep;59(9):614–7 (Ger)

[Buschke–Löwenstein giant condylomata acuminata. A case report] Berowa N, et al. **Dermatol Monatsschr** 1989; 175(4):247–50 (Eng. Abstr.) (Ger)

[Simultaneous occurrence of perianal condylomata acuminata and anal cancer in a male homosexual patient—coincidental finding or increased risk of illness?] Birkigt HG, et al. **Dermatol Monatsschr** 1988;174(8):480–4 (Eng. Abstr.) (Ger)

[Angiosarcoma of the scalp and face in the elderly] Schulze P, et al. **Dermatol Monatsschr** 1988;174(10):649–54 (Eng. Abstr.) (Ger)

[Dermal fibrous histiocytoma with inductive formation of a partially pigmented basalioma of the trichoepitheliomatous type] Zahradka W. **Dermatol Monatsschr** 1989;175(5):286–9 (Eng. Abstr.) (Ger)

[Disseminated peritoneal leiomyomatosis. A rare disease picture] Dallenbach C, et al. **Geburtshilfe Frauenheilkd** 1989 Feb;49(2):201–4 (Eng. Abstr.) (Ger)

[Plexiform tumor of the uterus] Dressler W, et al. **Geburtshilfe Frauenheilkd** 1989 Feb;49(2):205–6 (Eng. Abstr.) (Ger)

[Multiple cancers in gynecologic oncology] Schröcksnadel H, et al. **Geburtshilfe Frauenheilkd** 1988 Oct;48(10):710–4 (Eng. Abstr.) (Ger)

[Multiple primary melanomas of the hair follicles—a special form of malignant melanoma of the skin] Sigg C, et al. **Hautarzt** 1988 Jul;39(7):447–51 (Eng. Abstr.) (Ger)

[Congestive lymphostatic papillomatosis] Stöberl C, et al. **Hautarzt** 1988 Jul;39(7):441–6 (Eng. Abstr.) (Ger)

[Eccrine sweat gland nevus—immunohistochemical demonstration of MAM-3 and MAM-6 antigens] Wätzig V, et al. **Hautarzt** 1989 Mar;40(3):164–6 (Eng. Abstr.) (Ger)

[Progressive circumscript lentiginosis—phakomatosis pigmentovascularis III/A] Zahorcsek Z, et al. **Hautarzt** 1988 Aug;39(8):519–23 (Eng. Abstr.) (Ger)

[Multifocal presentation of cystadenolymphoma (Warthin tumor) in the parotid gland and larynx] Loennecken I. **Laryngorhinootologie** 1989 Apr;68(4):212–5 (Eng. Abstr.) (Ger)

[The branchiogenic cyst in the oncologic context] Swoboda H, et al. **Laryngorhinootologie** 1989 Jun;68(6):337–41 (Eng. Abstr.) (Ger)

[Acute pancreatitis in adenoma and carcinoma of Vater's papilla] Foth B, et al. **Med Klin** 1988 Nov 25;83(23):809–12 (Ger)

[Multifocal, multilocular, multiple or multicentric gliomas?] Hildebrandt G, et al. **Nervenarzt** 1988 Sep;59(9):539–44 (Ger)

[Diffuse cerebral gliomatosis. Clinical, nuclear magnetic resonance tomography and pathologic findings] Neuhold A, et al. **Nervenarzt** 1989 Jul;60(7):437–40 (Ger)

[Immunohistologic studies of 2 sarcomatoid differentiated renal cell cancers. A contribution to differential diagnosis] Krech RH, et al. **Pathologe** 1988 Sep;9(5):288–94 (Ger)

[Recurrence after surgery of breast cancer or a secondary disease?] Wöhlke G, et al. **Pathologe** 1989 Mar;10(2):93–6 (Ger)

[Multiple pulmonary coin lesions, disseminated adenofibroleiomyomatosis—a case report] Velcovsky HG. **Prax Klin Pneumol** 1988 Aug;42(8):675–8 (Eng. Abstr.) (Ger)

[Pheochromocytoma and adrenal gland hyperplasia in a remaining atrophic kidney] Winter P, et al. **Urologe [A]** 1989 Jan;28(1):54–7 (Eng. Abstr.) (Ger)

[Stewart–Treves syndrome of the edematous arm following breast cancer operation] Gregi A, et al. **Z Lymphol** 1988 Dec;12(2):66–83 (186 ref.) (Eng. Abstr.) (Ger)

[Detection of human papillomavirus in a cervix precancerous condition. Initial report] Kiwitt A, et al. **Zentralbl Gynakol** 1988;110(18):1166–9 (Eng. Abstr.) (Ger)

[Simultaneous occurrence of bronchogenic carcinoma and bronchioloalveolar dysplasia] Károlyi P, et al. **Morphol Igazsagugyi Orv Sz** 1988 Oct;28(4):282–6 (Eng. Abstr.) (Hun)

[Neoplasm of the liver and spleen. A clinical case] Pozzato G, et al. **G Clin Med** 1989 Mar;70(3):225–6 (Ita)

[Leiomyoblastoma of the small intestine] Sacco R, et al. **G Ital Oncol** 1989 Apr–Sep;9(2–3):81–6 (Eng. Abstr.) (Ita)

[Leiomyoblastoma of the small intestine. Considerations on a case with multiple jejunal localizations] Ammaturo C, et al. **Minerva Chir** 1988 Jun 30;43(12):1069–74 (Eng. Abstr.) (Ita)

[Adenocarcinoma of the appendix. Presentation of a case] Arlandini A, et al. **Minerva Chir** 1988 Jun 30;43(12):1083–5 (Eng. Abstr.) (Ita)

[The onset of double metachronous neoplasms 29 years after the diagnosis of Hodgkin's disease] Bisi D, et al. **Minerva Med** 1989 May;80(5):511–4 (Eng. Abstr.) (Ita)

[A new case of simultaneous bilateral seminoma of the testicle] Di Sandro L, et al. **Minerva Urol Nefrol** 1988 Jan–Mar;40(1):49–51 (Eng. Abstr.) (Ita)

[Granulosa cell tumor with multiple localizations] Abrate M, et al. **Pathologica** 1988 Jul–Aug;80(1068):483–8 (Eng. Abstr.) (Ita)

[Epithelioid sarcoma. A rare case of synchronous bifocal lesions] Bartolini M, et al. **Pathologica** 1988 Sep–Oct; 80(1069):619–26 (Eng. Abstr.) (Ita)

[A case of tuberous sclerosis: anatomo-pathologic description] Fontanini G, et al. **Pathologica** 1989 Mar–Apr; 81(1072):195–202 (Eng. Abstr.) (Ita)

[Multiple biliary microhamartomas (von Meyenburg's complex). Description of 4 cases] Mauri MF, et al. **Pathologica** 1988 Jan–Feb;80(1065):91–6 (Eng. Abstr.) (Ita)

[Anatomo-clinical considerations on an unusual case of breast disease: intraductal papilloma associated with controlateral carcinoma] Scarpellini M, et al. **Pathologica** 1988 May–Jun; 80(1067):353–62 (Eng. Abstr.) (Ita)

[Unusual case of thyroid tumor: follicular carcinoma with associated areas of squamous carcinoma] Torchio B, et al. **Pathologica** 1988 Nov–Dec;80(1070):717–22 (Eng. Abstr.) (Ita)

[Multicentric papillary and follicular carcinomas of the thyroid] Kodate C, et al. **Gan No Rinsho** 1988 Aug; 34(9):1147–51 (Eng. Abstr.) (Jpn)

[A case of coexistent adenocarcinoma and primary malignant lymphoma of the stomach] Kojima H, et al. **Gan No Rinsho** 1989 Feb;35(3):411–6 (Eng. Abstr.) (Jpn)

[Multiple neurilemmomas of the chest wall] Matsubara M, et al. **Kyobu Geka** 1988 Aug;41(9):764–7 (Eng. Abstr.) (Jpn)

[Clinical significance of the presence of squamous cell carcinoma in transitional cell carcinoma of the urinary bladder] Takai K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Nov;79(11):1837–47 (Eng. Abstr.) (Jpn)

[Cutaneous plasmacytoma with eventual development into multiple myeloma] Kanoh T, et al. **Nippon Naika Gakkai Zasshi** 1987 Nov;76(11):1706–9 (Jpn)

[Primary intracranial malignant melanoma associated with nevus of Ota: a case report] Kabuto M, et al. **No Shinkei Geka** 1988 Jun;16(7):875–80 (32 ref.) (Eng. Abstr.) (Jpn)

[Asynchronous quadruplicate malignancies: cancer of the stomach, breast and uterus and acute leukemia] Suzuki A, et al. **Rinsho Ketsueki** 1989 Apr;30(4):553–7 (8 ref.) (Eng. Abstr.) (Jpn)

[A case of neoplastic angioendotheliosis with B cell lymphoma] Nakamura M, et al. **Rinsho Shinkeigaku** 1988 Nov;28(11):1290–7 (Eng. Abstr.) (Jpn)

[Malignant lymphoma of the testis] Jarczok K, et al. **Pol Tyg Lek** 1988 May 30;43(22):723–4 (Eng. Abstr.) (Pol)

[Malignant uveal melanoma and cutaneous pigmented nevi] Talea L. **Rev Chir [Oftalmol]** 1988 Jul–Sep;32(3):217–20 (Eng. Abstr.) (Rum)

[Primary multiple malignant tumors of the eyelids] Poluéktov YuA. **Oftalmol Zh** 1988;(8):467–9 (Eng. Abstr.) (Rus)

[Multiple lung hamartomas (a case report)] Adamian AA, et al. **Vopr Onkol** 1989;35(2):227–9 (Rus)

[Multiple primary malignant tumors in esophageal cancer] Samsonov VA, et al. **Vopr Onkol** 1989;35(3):362–4 (Rus)

[Oat cell carcinoma of the esophagus. Apropos of a case] Fleischer I, et al. **Acta Gastroenterol Latinoam** 1988; 18(1):53–5 (Eng. Abstr.) (Spa)

[Is the bladder localization of urothelial transitional carcinoma a nosologic entity different from tumors appearing in the upper urinary tract?] Escudero Barrilero A, et al. **Arch Esp Urol** 1989 Jan–Feb;42(1):33–8 (24 ref.) (Eng. Abstr.) (Spa)

[Meningeal melanocytoma. Presentation of a case and review of the literature] Córdoba A, et al. **Arch Neurobiol (Madr)** 1989 Mar–Apr;52(2):93–9 (26 ref.) (Eng. Abstr.) (Spa)

[Multiple glomangioma] Alos Ribera JL, et al. **Med Cutan Ibero Lat Am** 1989;17(3):183–5 (Eng. Abstr.) (Spa)

[Multiple hamartoma syndrome] Pujol RM, et al. **Med Cutan Ibero Lat Am** 1988;16(4):322–7 (Eng. Abstr.) (Spa)

[Eruptive and progressive cutaneous leiomyomatosis associated with cerebrovascular abnormalities and osteoma of the petrous bone] Sangüeza P, et al. **Med Cutan Ibero Lat Am** 1989;17(3):169–73 (Eng. Abstr.) (Spa)

[Adult T-cell lymphoblastic lymphoma associated with quiescent multiple myeloma] Obeso Fernández G, et al. **Rev Clin Esp** 1989 Apr;184(7):367–70 (Eng. Abstr.) (Spa)

[Metachronic carcinoma of the colon associated with previous gastric carcinoma] López Zaborras J, et al. **Rev Esp Enferm Apar Dig** 1988 Nov;74(5):553–5 (Eng. Abstr.) (Spa)

[Anatomoclinical case. A 40-year-old man with thoraco-abdominal giant hemangioma, history of infracondylar amputation of legs, loss of weight, abdominal pain and ascites] Manffrini Madrid F, et al. **Rev Invest Clin** 1988 Oct–Dec;40(4):433–8 (Spa)

PHYSIOPATHOLOGY

False-negative brainstem auditory evoked potential recordings in a case of multiple acoustic neuroma. Buettner UW, et al. **Eur Arch Psychiatry Neurol Sci** 1988 Sep; 237(6):343–6

RADIOGRAPHY

Multiple schwannomas presenting as a mass of the lateral chest wall [letter] Murray RJ, et al. **AJR** 1988 Dec; 151(6):1250–1

Clinical radiology quiz. Warthin's tumors. Som PM. **Am J Otolaryngol** 1989 Jul–Aug;10(4):291–3

Gastro-oesophageal leiomyoblastomas and multiple pulmonary chondromas: an incomplete variant of Carney's triad. Mazas-Artasona L, et al. **Br J Radiol** 1988 Dec; 61(732):1181–4

Endobronchial hamartoma associated with bronchioloalveolar cell carcinoma. Mompoint D, et al. **Chest** 1988 Nov;94(5):1094–6

The value of a barium enema in the investigation of patients with rectal carcinoma. Isabel-Martinez L, et al. **Clin Radiol** 1988 Sep;39(5):531–3

Radiological evidence for the polyp/cancer sequence in the colon. Rawlinson J, et al. **Clin Radiol** 1989 Jul;40(4):386–8

Esophageal carcinoma multiplex with gastric metastasis. Davis M, et al. **Gastrointest Radiol** 1989 Winter;14(1):6–8

Posterior mediastinal teratoma involving the esophagus. Vade A, et al. **Gastrointest Radiol** 1989 Spring;14(2):106–8

Computed tomography detection of small daughter nodules in hepatocellular carcinoma after iodized oil infusion into the hepatic artery. Ohishi H, et al. **J Comput Tomogr** 1988 Apr;12(2):129–34

Two meningiomas and an astrocytoma of the third ventricle in the same patient. Report of a case with review of the literature. Gaudio R, et al. **J Neurosurg Sci** 1988 Oct–Dec; 32(4):183–8

Primary malignant lymphoma of the brain—clinical and pathological investigations. Kitagawa Y, et al. **Jpn J Med** 1989 Jan–Feb;28(1):2–7

Triple primary lung cancer: a case report [letter] Barnes DJ, et al. **Med J Aust** 1989 Aug 21;151(4):236–7

Case report 556: Multiple non-ossifying fibromas of long bones in a patient with neurofibromatosis. Gross ML, et al. **Skeletal Radiol** 1989;18(5):389–91

Case report 514: Hamartomatous disorder (newly described). Guy GE, et al. **Skeletal Radiol** 1989;17(8):603–6

Case report 503: Giant cell tumor of sacrum; fibrous histiocytoma of ischium (benign); fibrous histiocytoma of tibia (benign). Wuisman P, et al. **Skeletal Radiol** 1989; 17(8):592–7

[The role of mammography in the diagnosis of simultaneous second cancers in the contralateral breast] Ronay G, et al. **Geburtshilfe Frauenheilkd** 1988 Aug;48(8):579–83 (Eng. Abstr.) (Ger)

[Renal space-occupying lesion of uncertain tumor status in metastatic testicular tumor] Engelhard K, et al. **Rontgenblatter** 1988 Jul;41(7):301–3 (Eng. Abstr.) (Ger)

[CT diagnosis of synchronous multiple primary lung carcinomas] Kuriyama K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jun 25; 48(6):687–93 (Eng. Abstr.) (Jpn)

RADIONUCLIDE IMAGING

I-131 metaiodobenzylguanidine uptake in a parathyroid adenoma. Hayward RS, et al. **Clin Nucl Med** 1988 Sep; 13(9):632–4

RADIOTHERAPY

Late pericardial tamponade following radiation therapy for bilateral breast carcinoma. Tuso PJ, et al. **Conn Med** 1988 Sep;52(9):518–20

Effect of dose rate on local control and complications in the reirradiation of head and neck tumors with interstitial iridium-192. Fontanesi J, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug;17(2):365–9

Occasional case reports/communications from the international radiation oncology community [letter] Furong Z. **Int J Radiat Oncol Biol Phys** 1989 Jun;16(6):1655–6

Bilateral breast carcinoma treated with definitive irradiation. Solin LJ, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug; 17(2):263–71

SECRETION

Multiple extra-adrenal paragangliomas associated with catecholamine cardiomyopathy. Behrana AJ, et al. **Eur Heart J** 1989 Feb;10(2):182–5

SURGERY

Bilateral renal tumours with reference to the reoperation of a solitary kidney resected for tumour. Zana J, et al. **Acta Chir Hung** 1988;29(2):187–95

Intracerebral malignant fibrous histiocytoma at site of a previously excised low grade glioma. Paulus W, et al. **Acta Neurochir (Wien)** 1989;99(3–4):161–5

Conservative surgery in solitary and bilateral renal tumors. Giannotti P, et al. **Acta Urol Belg** 1988;56(3):453–7

Synchronous carcinoma of the colon and rectum: prognostic and therapeutic implications. Adloff M, et al. **Am J Surg** 1989 Mar;157(3):299–302

Synchronous hepatocellular carcinoma and adenocarcinoma

of the colon. Mainwaring RD, et al. **Am Surg** 1989 Aug; 55(8):528–32

Synchronous primary hepatocellular carcinoma and multiple early gastric cancer—a case report. Ng BL, et al. **Ann Acad Med Singapore** 1988 Jan;17(1):101–3

Leiomyomatosis peritonealis disseminata. Poulsen TD. **Ann Chir Gynaecol** 1988;77(1):41–4 (22 ref.)

En bloc excision of lower ureter and internal iliac vessels for locally advanced upper rectal and rectosigmoid cancer. Use of ileal segment for ureteral repair. Moriya Y, et al. **Dis Colon Rectum** 1988 Nov;31(11):872–8

Operations for forearm deformity caused by multiple osteochondromas. Masada K, et al. **J Bone Joint Surg [Br]** 1989 Jan;71(1):24–9

Treatment of multiple apocrine hidrocystomas with the carbon dioxide (CO_2) laser. Bickley LK, et al. **J Dermatol Surg Oncol** 1989 Jun;15(6):599–602

Treatment of multiple dermal cylindromas with the carbon dioxide laser. Stoner MF, et al. **J Dermatol Surg Oncol** 1988 Nov;14(11):1263–7

Surgical management of bilateral carotid body tumors with carotid artery stenosis. Cromartie RS 3d, et al. **J Fla Med Assoc** 1988 Sep;75(9):587–9

Treatment of a case of asynchronous bilateral renal cell carcinomas with inferior vena caval thrombus and hepatic metastases. Takai K, et al. **Jpn J Clin Oncol** 1988 Dec; 18(4):379–85

The occurrence of different types of spinal tumours in one patient. A case report and review of the literature. Nishiura I, et al. **Neurochirurgia (Stuttg)** 1989 Mar;32(2):52–5 (21 ref.)

Trochlear nerve meningioma in von Recklinghausen's disease. Tada T, et al. **Neurochirurgia (Stuttg)** 1988 Nov; 31(6):226–7

Cerebral and two spinal meningiomas removed from the same patient: case report. Kandel E, et al. **Neurosurgery** 1989 Sep;25(3):447–50

Recent advances in the surgical treatment of bilateral Wilms' tumor. Hanash KA. **Prog Clin Biol Res** 1989;303:635–52 (35 ref.)

Surgical treatment of multiple primary lung cancers. Verhagen AF, et al. **Thorac Cardiovasc Surg** 1989 Apr; 37(2):107–11

[Crohn's disease combined with a malignant villous tumor of the rectum and sigmoid] Derdzhoan A. **Khirurgiia (Sofiia)** 1988;41(6):83–4 (Eng. Abstr.) **(Bul)**

[A case of post-mastectomy lymphangiosarcoma] Coster B, et al. **Acta Chir Belg** 1988 Nov–Dec;88(6):381–3 (Eng. Abstr.) **(Dut)**

[Second primary cancers of the bronchi treated surgically (recurrence excluded). Results of a national survey (1987)] Levasseur P, et al. **Ann Chir** 1989;43(2):130–2 (Eng. Abstr.) **(Fre)**

[Surgical excision in solitary lung by midline sternotomy. Apropos of an original case] Wihlm JM, et al. **Ann Chir** 1988;42(8):571–3 (11 ref.) (Eng. Abstr.) **(Fre)**

[Urethral tumor recurrence following radical cystoprostatectomy—an indication for primary cystoprostato-urethrectomy?] Gökcebay E, et al. **Urologe [A]** 1989 Jul;28(4):199–203 (Eng. Abstr.) **(Ger)**

[Involvement of the urogenital system in non-Hodgkin lymphoma (primary and secondary involvement)] Lehmann HD. **Urologe [A]** 1988 Jul;27(4):234–9 (Eng. Abstr.) **(Ger)**

[Cancer of the transposed ovary following Wertheimer operation] Leitsmann H, et al. **Z Arztl Fortbild (Jena)** 1988; 82(11):501–3 **(Ger)**

[A 12-year report of follow-up after surgical treatment of bilateral hypernephroid kidney cancer and subsequent diffuse metastatic breast cancer] Weber T. **Z Urol Nephrol** 1988 Nov;81(11):681–4 (Eng. Abstr.) **(Ger)**

[Psychosocial aspects of bilateral subcutaneous reduction mastectomy in breast cancer] De Wilde R, et al. **Zentralbl Gynakol** 1989;111(9):604–8 (Eng. Abstr.) **(Ger)**

[Malignant fibrous histiocytoma of the breast] Sulyok Z, et al. **Orv Hetil** 1989 Jul 16;130(29):1557–9 (Eng. Abstr.) **(Hun)**

[Synchronous and metachronous carcinoma of the large intestine] Lago TF, et al. **Chir Ital** 1988 Apr;40(2):93–103 (Eng. Abstr.) **(Ita)**

[A case of pulmonary lymphangiomyomatosis associated with renal angiomyolipoma] Suzuki T, et al. **Kyobu Geka** 1988 May;41(6):525–8 (Eng. Abstr.) **(Jpn)**

[Multiple primary cancers in surgically resected lung cancer patients] Nishiyama H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jan;37(1):56–61 (Eng. Abstr.) **(Jpn)**

[A case report of multiple pulmonary leiomyofibroadenomatous hamartomas] Sawada K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Oct; 26(10):1033–8 (8 ref.) (Eng. Abstr.) **(Jpn)**

[Coexistence of leiomyosarcoma and carcinoma planoepitheliale of the larynx] Zak A, et al. **Wiad Lek** 1988 Oct 15;41(20):1387–9 (Eng. Abstr.) **(Pol)**

[Recurrence of multiple hamartomas of the lung] Dzhugostran V1a, et al. **Grudn Khir** 1988 Nov–Dec;(6):90–1 **(Rus)**

[Microsurgical autograft of the omentum majus for closing a defect in the integument of the skull] Shilov BL, et al. **Khirurgiia (Mosk)** 1988 Aug;(8):132–3 **(Rus)**

[Surgical tactics in multiple primary intracranial tumors] Romodanov SA, et al. **Klin Khir** 1988;(12):12–5 (Eng. Abstr.) **(Rus)**

[Multiple primary cancer of the epididymis and cecum] Alekseenko AN. **Vestn Khir** 1988 Oct;141(10):53–5 **(Rus)**

[Single-stage surgical intervention in cancer of the major duodenal papilla, ascending colon and rectum] Fedorov VD, et al. **Vestn Khir** 1988 Sep;141(9):56–7 **(Rus)**

[Surgical treatment of multiple carcinomas of the colon and rectum] Potić D, et al. **Srp Arh Celok Lek** 1988 Jun; 116(6):501–7 (Eng. Abstr.) **(Scc)**

THERAPY

Second neoplasm: a complication of cancer treatment. Franchi M, et al. **Eur J Gynaecol Oncol** 1989;10(2):115–6

Simultaneous appearance of ovarian and endometrial carcinoma: a therapeutic challenge. Montoya F, et al. **Eur J Gynaecol Oncol** 1989;10(2):135–9

Results of conservative surgery and radiation therapy for multiple synchronous cancers of one breast. Leopold KA, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):11–6

Adenocarcinoma of lung and sigmoid colon. Phillips JR, et al. **J Arkansas Med Soc** 1988 Jul;85(2):105–6

Randomized clinical trial comparing systemic interferon with diathermocoagulation in primary multiple and widespread anogenital condyloma. Benedetti Panici P, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):393–7

[Second primary tumors: the role of the head and neck surgeon] Cernea CR, et al. **Rev Paul Med** 1988 Jul–Aug; 106(4):201–4 (13 ref.) (Eng. Abstr.) **(Por)**

VETERINARY

Multiple primary neoplasms in an opossum. Barrie MT, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1160–1

Renal adenoma in a cat. Clark WR, et al. **J Am Vet Med Assoc** 1988 Dec 15;193(12):1557–9

Seminoma and parathyroid adenoma in a snow leopard (Panthera unica). Doster AR, et al. **J Comp Pathol** 1989 May;100(4):475–80

Testicular teratoma and seminoma in a woodchuck. Anderson WI, et al. **Vet Pathol** 1988 Sep;25(5):400

Multicentric schwannoma in a mature Holstein cow. Johnson RC, et al. **Vet Rec** 1988 Dec 17;123(25):649–50

NEOPLASMS, MUSCLE TISSUE

DIAGNOSIS

[The generation of antimyoglobin serum and its use in the diagnosis of rhabdomyosarcoma] Dong XJ. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Sep;17(3):204–6 (Eng. Abstr.) **(Chi)**

[Cytomorphologic features and possibilities of cytologic diagnosis of muscle tissue tumors] Arzumanian GA, et al. **Lab Delo** 1988;(12):39–44 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Alveolar soft part sarcoma: immunological evidence of rhabdomyoblastic differentiation. Foschini MP, et al. **Histopathology** 1988 Jul;13(1):101–8

PATHOLOGY

Culture of human neoplastic gastrointestinal smooth muscle cells. Sas DF, et al. **In Vitro Cell Dev Biol** 1989 Aug; 25(8):730–6

VETERINARY

Spontaneous rhabdomyosarcoma in a rhesus monkey. Blanchard JL, et al. **J Comp Pathol** 1988 Jul;99(1):109–13

NEOPLASMS, NERVOUS TISSUE

BLOOD

Rapid radioimmunoassay of circulating chromogranin A: in vitro stability, exploration of the neuroendocrine character of neoplasia, and assessment of the effects of organ failure. O'Connor DT, et al. **Clin Chem** 1989 Aug;35(8):1631–7

GENETICS

The molecular biology of human glial tumors. Martuza RL, et al. **Trends Neurosci** 1988 Jan;11(1):22–7 (40 ref.)

IMMUNOLOGY

Central nervous system lymphomas and immunodeficiency. Maiuri F. **Neurol Res** 1989 Mar;11(1):2–5 (48 ref.)

METABOLISM

Nerve growth factor receptor immunoreactivity in human benign peripheral nerve sheath tumor. Yasuda T, et al. **Acta Neuropathol (Berl)** 1989;77(6):591–8

PATHOLOGY

Flow cytometric study on cell kinetics of brain tumours and their cultured cells. Kawamoto K, et al. **Acta Neurochir (Wien)** 1989;97(3–4):150–7

Immature neural elements in immature teratomas. An immunohistochemical and ultrastructural study. Vance RP, et al. **Am J Clin Pathol** 1988 Oct;90(4):397–411

[Combination cytologic and histologic diagnosis by extemporaneous peroperative examination of 700 central nervous system tumors] Loosli H, et al. **Rev Med Suisse Romande** 1989 Mar;109(3):217–24 **(Fre)**

RADIONUCLIDE IMAGING

Imaging neural crest tumours with 123I-metaiodobenzylguanidinc and X-ray computed tomography: a comparative study. Bomanji J, et al. **Clin Radiol** 1988 Sep;39(5):502–6

SURGERY

Surgery of brain neoplasms using 32-P tumour marker. Reinhardt H. **Acta Neurochir (Wien)** 1989;97(3–4):89–94

Subdural fluid collections following transcortical approach to intra- or paraventricular tumours. Tanaka Y, et al. **Acta Neurochir (Wien)** 1989;99(1–2):20–5

Lipofibromatous hamartoma of the ulnar nerve at the elbow: brief report. Gouldesbrough DR, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):331–2

[A case of the successful surgical treatment of mediastinal giant neurogenic tumor, and the chest wall reconstruction by the autologous ribs] Ishikawa S, et al. **Kyobu Geka** 1989 Mar;42(3):244–8 (Eng. Abstr.) **(Jpn)**

THERAPY

Brain tumors in children. Kadota RP, et al. **J Pediatr** 1989 Apr;114(4 Pt 1):511–9 (93 ref.)

ULTRASTRUCTURE

Primitive neuroectodermal tumours of the central nervous system—an electron microscopic & immunohistochemical study. Sarkar C, et al. **Indian J Med Res** 1989 Apr; 90:91–102

NEOPLASMS, OCCULT PRIMARY see **NEOPLASMS, UNKNOWN PRIMARY**

NEOPLASMS, RADIATION-INDUCED

Non melanoma skin cancer of the scalp. On the etiology. Frentz G, et al. **Acta Derm Venereol (Stockh)** 1989; 69(2):142–6

Diagnostic radiography in children. Russell JG. **Arch Dis Child** 1988 Sep;63(9):1005–6

Malignant glioma of the optic chiasm eight years after radiotherapy for prolactinoma. Hufnagel TJ, et al. **Arch Ophthalmol** 1988 Dec;106(12):1701–5

Radiation-induced sarcoma of the thyroid. Griem KL, et al. **Arch Otolaryngol Head Neck Surg** 1989 Aug; 115(8):991–3

Squamous cell carcinoma arising in previously burned or irradiated skin. Edwards MJ, et al. **Arch Surg** 1989 Jan; 124(1):115–7

Intracranial meningiomas after high-dose irradiation. Soffer D, et al. **Cancer** 1989 Apr 15;63(8):1514–9 (41 ref.)

Epidemiology of human malignant skin tumors with special reference to natural and artificial ultraviolet radiation exposures. Elwood JM, et al. **Carcinog Compr Surv** 1989; 11:55–84 (94 ref.)

PUVA and the induction of skin cancer. Stern RS. **Carcinog Compr Surv** 1989;11:85–101 (64 ref.)

Post-radiation glioma in a child. Case report and review of the literature. Palma L, et al. **Childs Nerv Syst** 1988 Oct; 4(5):296–301 (51 ref.)

Radiation carcinogenesis in the male breast. Eldar S, et al. **Eur J Surg Oncol** 1989 Jun;15(3):274–8 (25 ref.)

Post-irradiation angiosarcoma of the greater omentum. Westenberg AH, et al. **Eur J Surg Oncol** 1989 Apr; 15(2):175–8

Radiation carcinogenesis in experimental animals. Broerse JJ, et al. **Experientia** 1989 Jan 15;45(1):60–9 (36 ref.)

Radiation and cutaneous neoplasms [letter] Kaczmarek RG. **Health Phys** 1989 Jul;57(1):206–7

Peer review and scientific consensus in radiation cancer assessment [letter] Moghissi AA, et al. **Health Phys** 1989 Jun;56(6):959–60

The effect of low-level radiation [letter] Morgan KZ. **Health Phys** 1989 Jun;56(6):964–5

Radiation cancer risks: who is ordained to speak for science? [letter] Nussbaum RH. **Health Phys** 1989 Jun;56(6):958–9

New data inconsistent with 'scientific consensus' on low-level radiation cancer risks [letter] Nussbaum RH. **Health Phys** 1989 Jun;56(6):961–2

Effects of external irradiation on the thyroid gland in childhood. Barnes ND. **Horm Res** 1988;30(2–3):84–9 (39 ref.)

Radon-222 concentration in groundwater and cancer mortality in North Carolina. Collman GW, et al. **Int Arch Occup Environ Health** 1988;61(1–2):13–8

Radiation induced thyroid neoplasms 1920 to 1987: a vanishing problem? Mehta MP, et al. **Int J Radiat Oncol Biol Phys** 1989 Jun;16(6):1471–5 (30 ref.)

The effect of hyperthermia on the early- and late-appearing mouse foot reactions and on radiation carcinogenesis: Part II. Effect on radiation carcinogenesis (thermal enhancement and oxygen enhancement). Urano M, et al. **Int J Radiat Oncol Biol Phys** 1989 Feb;16(2):437–42

Postirradiation Merkel cell carcinoma. Tuneu A, et al. **J Am Acad Dermatol** 1989 Mar;20(3):505–7

Postradiation astrocytoma. Report of two cases. Kitanaka C, et al. **J Neurosurg** 1989 Mar;70(3):469–74 (33 ref.)
The dose–response relationship for tumourigenesis by UV radiation in the region 311–312 nm. Sterenborg HJ, et al. **J Photochem Photobiol [B]** 1988 Sep;2(2):179–94
Tumor induction in B6C3F1 mice by Californium–252. Takahashi T, et al. **J Radiat Res (Tokyo)** 1988 Dec; 29(4):220–8
The contributions of medical physicists to radiation phobia [editorial] Yalow RS. **Med Phys** 1989 Mar–Apr; 16(2):159–61
Radiation Risk Assessment for Military Space Crews [letter] Reeves GI. **Milit Med** 1989 Feb;154(2):104
Tumors of the brain and nervous system after radiotherapy in childhood. Ron E, et al. **N Engl J Med** 1988 Oct 20; 319(16):1033–9
Radiation–induced sarcoma of the skull: a case report. Garner FT, et al. **Otolaryngol Head Neck Surg** 1988 Sep; 99(3):326–9
Ultraviolet radiation—induced malignant melanoma in Monodelphis domestica. Ley RD, et al. **Photochem Photobiol** 1989 Jul;50(1):1–5
Topical urocanic acid enhances UV–induced tumour yield and malignancy in the hairless mouse. Reeve VE, et al. **Photochem Photobiol** 1989 Apr;49(4):459–64
The effect of hyperthermia on radiation–induced carcinogenesis. Baker DG, et al. **Radiat Res** 1988 Sep; 115(3):448–60
The dose–response relationships for myeloid leukemia and malignant lymphoma in BC3F1 mice. Covelli V, et al. **Radiat Res** 1989 Sep;119(3):553–61
Comments on "It is Time to Reopen the Question of Thresholds in Radiation Exposure Responses" by J. R. Totter [letter] Delpla M. **Radiat Res** 1989 Sep; 119(3):578–81
Dose–rate effects of mammary tumor development in female Sprague–Dawley rats exposed to X and gamma radiation. Johnson JR, et al. **Radiat Res** 1989 Jun;118(3):545–58
Lung carcinomas in Sprague–Dawley rats after exposure to low doses of radon daughters, fission neutrons, or gamma rays. Lafuma J, et al. **Radiat Res** 1989 May;118(2):230–45
Fission fragment RBE for bone sarcoma induction. Mays CW, et al. **Radiat Res** 1989 Sep;119(3):432–42
One hundred percent tumor induction in mouse skin after repeated beta irradiation in a limited dose range. Ootsuyama A, et al. **Radiat Res** 1988 Sep;115(3):488–94
The threshold question and the search for answers [letter] Rossi HH. **Radiat Res** 1989 Sep;119(3):576–8
Apparent synergism between radiation and the carcinogen 1,2–dimethylhydrazine in the induction of colonic tumors in rats. Sharp JG, et al. **Radiat Res** 1989 Feb;117(2):304–17
Radiation enhancement of lung nodule formation in mice is not potentiated by treatment with a perfluorochemical emulsion and carbogen. Rockwell S, et al. **Radiother Oncol** 1989 Jan;14(1):49–53
Radiation therapy–associated invasive bladder tumors. Sella A, et al. **Urology** 1989 Mar;33(3):185–8
[The effect of radiation on thyroid gland function] Goláň T, et al. **Cas Lek Cesk** 1989 Jan 13;128(3):65–7 (Eng. Abstr.) (Cze)
[Chondrosarcoma of the soft parts of the thoracic wall. Apropos of a case after surgery and irradiation of breast adenocarcinoma] Steiner E, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(4):496–9 (Eng. Abstr.) (Fre)
[Post–radiation osteosarcoma following Hodgkin's disease. Apropos of a case and review of the literature] Travers V, et al. **Rev Chir Orthop** 1989;75(1):40–4 (15 ref.) (Eng. Abstr.) (Fre)
[Second cancer following radiation treatment] Kinoshita T, et al. **Gan No Rinsho** 1989 Jan;Spec No:713–9 (Jpn)
[Roentgenologic evaluation of intrahepatic redistribution after thorotrast administration] Sasaki F, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Nov 25; 48(11):1333–41 (Eng. Abstr.) (Jpn)
[Role of active oxygen species in carcinogenesis] Kodama M. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):3136–43 (Jpn)
[Lung cancer and related environmental factors] Tokuoka S, et al. **Yakugaku Zasshi** 1988 Nov;108(11):1013–22 (30 ref.) (Eng. Abstr.) (Jpn)
[Various theoretical and practical aspects of radon therapy] Rudnicki T, et al. **Pol Przegl Radiol (Warszawa)** 1988 May–Jun;52(3):170–3 (Pol)
[Somatic effects of radiation] Jaśkowski J, et al. **Wiad Lek** 1988 Sep 15;41(18):1252–9 (Pol)

ANALYSIS

A novel form of GD1c ganglioside IV3 (NeuAc alpha 2–8 NeuGc)Gg4Cer from murine X–ray induced thymoma. Pacuszka T, et al. **Acta Biochim Pol** 1988;35(4):387–93
DNA content in radiation–associated thyroid cancer. Komorowski RA, et al. **Surgery** 1988 Dec;104(6):992–6

COMPLICATIONS

Hemoptysis as the presenting manifestation of thyroid carcinoma. A case report. Weiland JE, et al. **Arch Intern Med** 1989 Jul;149(7):1693–4
Seizures and hemiparesis in a young woman 24 years after treatment of astrocytoma [clinical conference] Mazziotta JC, et al. **West J Med** 1989 Feb;150(2):180–6

DRUG THERAPY

Inhibition of radiogenic mammary carcinoma in rats by estriol or tamoxifen. Lemon HM, et al. **Cancer** 1989 May 1;63(9):1685–92
Tretinoin therapy for precancerous skin. Papa CM. **N J Med** 1989 May;86(5):361–5
Oxygen limitation of direct tumor cell kill during photodynamic treatment of a murine tumor model. Henderson BW, et al. **Photochem Photobiol** 1989 Mar; 49(3):299–304

EPIDEMIOLOGY

Studies of cancer among the Japanese A–bomb survivors. Beebe GW. **Cancer Invest** 1988;6(4):417–26
Some recent issues in low–exposure radiation epidemiology. MacMahon B. **Environ Health Perspect** 1989 May;81:131–5 (42 ref.)
Radiation epidemiology: old and new challenges. Shore RE. **Environ Health Perspect** 1989 May;81:153–6
Incidence of salivary gland cancer in the United States relative to ultraviolet radiation exposure. Spitz MR, et al. **Head Neck Surg** 1988 May–Jun;10(5):305–8
Estimating Rn–induced lung cancer in the United States. Lubin JH, et al. **Health Phys** 1989 Sep;57(3):417–27
Carcinogenic effects of scattered dose associated with radiation therapy. Cumberlin RL, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):623–9
The risks of induced carcinogenesis after irradiation at small doses: the uncertainties which remain after the 1988 UNSCEAR report. Latarjet R, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):237–40
Radiation–induced cancer and its modifying factor among A–bomb survivors. Kato H. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:117–24
Cancer incidence after radiotherapy for skin hemangioma: a retrospective cohort study in Sweden. Fürst CJ, et al. **J Natl Cancer Inst** 1988 Nov 2;80(17):1387–92
Cancer risk in population examined with diagnostic doses of 131I. Holm LE, et al. **J Natl Cancer Inst** 1989 Feb 15; 81(4):302–6
Radon and lung cancer. Samet JM. **J Natl Cancer Inst** 1989 May 10;81(10):745–57 (91 ref.)
Skin cancer among atom bomb survivors [letter] Sadamori N, et al. **Lancet** 1989 Jun 3;1(8649):1267
What can we learn from the clustering of cases of cancer? Mathews JD. **Med J Aust** 1988 Aug 15;149(4):169–71 (21 ref.)
Tumourigenesis by partial body X–irradiation in mice. Sato F, et al. **Nippon Juigaku Zasshi** 1988 Dec;50(6):1161–8
Radiobiologic risk estimation from dental radiology. Part II. Cancer incidence and fatality. Underhill TE, et al. **Oral Surg Oral Med Oral Pathol** 1988 Aug;66(2):261–7
[Once more on the effects of the Chernobyl accident] Liniecki J, et al. **Pol Przegl Radiol (Warszawa)** 1987 Nov–Dec;51(6):285–9 (Eng. Abstr.) (Pol)
[Dependence of the incidence of the occurrence of ovarian and uterine tumors in rats on the irradiation dosage from accelerated particles and gamma rays] Fedorenko BS, et al. **Eksp Onkol** 1989;11(1):24–7 (Eng. Abstr.) (Rus)

ETIOLOGY

Potentiating and inhibiting effects of steroid hormones on the incidence of 90Sr induced osteosarcoma. Haraldsson I, et al. **Acta Oncol** 1988;27(4):393–8
Odontogenic sarcoma following radiation treatment of tongue cancer—a case report [letter] Monzen Y, et al. **Acta Oncol** 1988;27(6b):858–9
Cancer risk associated with therapeutic irradiation of skin. Burns FJ. **Arch Dermatol** 1989 Jul;125(7):979–81 (20 ref.)
Prior x–ray therapy for acne related to tumors of the parotid gland. Preston–Martin S. **Arch Dermatol** 1989 Jul; 125(7):921–4
The carcinogenic risks of modern tanning equipment: is UV–A safer than UV–B? van Weelden H, et al. **Arch Dermatol Res** 1988;280(5):300–7
Simultaneous presentation of parathyroid, thyroid and parotid tumours 44 years after neck irradiation. Delbridge L, et al. **Aust N Z J Surg** 1989 Feb;59(2):187–90
Role of radiotherapy and chemotherapy in the risk of second malignant neoplasms after cancer in childhood. de Vathaire F, et al. **Br J Cancer** 1989 May;59(5):792–6
Cancer caused by radioactive gold rings [letter] Callary EM. **Can Med Assoc J** 1989 Sep 15;141(6):507
Postradiation soft tissue sarcomas. An analysis of 53 cases. Laskin WB, et al. **Cancer** 1988 Dec 1;62(11):2330–40
Cutaneous malignant melanoma and ultraviolet radiation: a review. Longstreth J. **Cancer Metastasis Rev** 1988 Dec; 7(4):321–33 (67 ref.)
Breast cancer after multiple chest fluoroscopies: second follow–up of Massachusetts women with tuberculosis. Hrubec Z, et al. **Cancer Res** 1989 Jan 1;49(1):229–34
Ozone depletion and its consequences for the fluence of carcinogenic sunlight. Moan J, et al. **Cancer Res** 1989 Aug 1;49(15):4247–50
Induction of osteosarcomas in mouse lumbar vertebrae by repeated external beta–irradiation. Ootsuyama A, et al. **Cancer Res** 1989 Mar 15;49(6):1562–4
Lung cancer in women and type of dwelling in relation to radon exposure. Svensson C, et al. **Cancer Res** 1989 Apr 1;49(7):1861–5
Radiation–induced cancer in rat skin. Burns FJ, et al. **Carcinog Compr Surv** 1989;11:293–319 (41 ref.)
Ultraviolet radiation–induced skin cancer. Fry RJ, et al. **Carcinog Compr Surv** 1989;11:321–37 (67 ref.)
Localized fibrous mesothelioma of pleura following external ionizing radiation therapy. Bilbey JH, et al. **Chest** 1988 Dec; 94(6):1291–2
Two atypical fibroxanthomas arising separately in X–irradiated skin. Kemmett D, et al. **Clin Exp Dermatol** 1988 Nov;13(6):382–4
Shortcomings in risk projection. Harley NH. **Environ Health Perspect** 1989 May;81:137–8
Comparison of anamnestic history, alcohol intake and smoking, nutritional status, and liver dysfunction between thorotrast patients who developed primary liver cancer and those who did not. Kiyosawa K, et al. **Environ Res** 1989 Aug;49(2):166–72
Correlation of lung dose with Rn concentration, potential alpha–energy concentration and daughter surface deposition: a Monte Carlo analysis. Bierma TJ, et al. **Health Phys** 1989 Sep;57(3):429–37
Carcinogenesis—a synopsis of human experience with external exposure in medicine. Boice JD Jr. **Health Phys** 1988 Oct;55(4):621–30 (83 ref.)
Cancer mortality around La Hague nuclear facilities. Dousset M. **Health Phys** 1989 Jun;56(6):875–84
Correction to BEIR IV report [letter] Ellett WH. **Health Phys** 1989 Feb;56(2):257
Cigarettes, Rn, cancer and health physics [letter] Hickey RJ. **Health Phys** 1988 Nov;55(5):821–4
Postradiation sarcomas of bone. Huvos AG, et al. **Health Phys** 1988 Oct;55(4):631–6
Alpha–particle–induced cancer in humans. Mays CW. **Health Phys** 1988 Oct;55(4):637–52 (90 ref.)
Radon progeny exposure and lung cancer risk in New Mexico U miners: a case–control study. Samet JM, et al. **Health Phys** 1989 Apr;56(4):415–21
Radiation–induced malignant tumors of bone in patients with Hodgkin's disease. Woodard HQ, et al. **Health Phys** 1988 Oct;55(4):615–20
Radon. **IARC Monogr Eval Carcinog Risks Hum** 1988; 43:173–259 (372 ref.)
Radiation dose and breast cancer risk in patients treated for cancer of the cervix. Boice JD Jr, et al. **Int J Cancer** 1989 Jul 15;44(1):7–16
Bone necrosis and tumor induction following experimental intraoperative irradiation. Powers BE, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):559–67
Screening mammography. A risk versus risk decision. Ritenour ER, et al. **Invest Radiol** 1989 Jan;24(1):17–9 (19 ref.)
Grenz ray–induced nonmelanoma skin cancer. Frentz G. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 1):475–8 (9 ref.)
Human melanocytic neoplasms and their etiologic relationship with sunlight. Elder DE. **J Invest Dermatol** 1989 May;92(5 Suppl):297S–303S (73 ref.)
Radiogenic cancer induction associated with spinal radiography: a quantitative analysis [see comments] Fickel TE. **J Manipulative Physiol Ther** 1988 Aug;11(4):255–60. **Comment in:** J Manipulative Physiol Ther 1989 Feb;12(1):60–2
Intrasellar meningioma after radiotherapy for prolactinoma. Kasantikul V, et al. **J Med Assoc Thai** 1988 Sep;71(9):524–7
Risk of thyroid cancer after diagnostic doses of radioiodine [letter; comment] Archer VE. **J Natl Cancer Inst** 1989 May 3;81(9):713–5. **Comment on:** J Natl Cancer Inst 1988 Sep 21;80(14):1132–8
Uncertainties abound in radon research: lung cancer risk hard to quantify [news] Smigel K. **J Natl Cancer Inst** 1989 May 10;81(10):728–31
Swedish thyroid cancer risk from Chernobyl? [letter] Holm LE, et al. **J Nucl Med** 1989 May;30(5):721–2
Three Mile Island—ten years later. No health consequences seen, but studies continue to assess potential effects. Tilyou S. **J Nucl Med** 1989 Apr;30(4):427–30
The debate over radon continues [news] Tilyou SM. **J Nucl Med** 1989 Jun;30(6):987–91, 996
Ozone depletion and skin cancer. van der Leun JC. **J Photochem Photobiol –B–** 1988 May;1(4):493–4
Radiation–induced leiomyosarcoma of the small intestine. McCue LJ, et al. **J R Coll Surg Edinb** 1988 Jun;33(3):162–4
Childhood cancers' improved survival rates can exact a price in late effects of therapy [news] Raymond CA. **JAMA** 1988 Dec 16;260(23):3400, 3405
Mutation and cancer in relation to the atomic–bomb radiation effects. Kondo S. **Jpn J Cancer Res** 1988 Jul;79(7):785–99 (68 ref.)
A highly suspected radiation–associated thyroid cancer: report of 1 case. Lian SL, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Jun; 5(6):357–9
Increased risk of breast cancer after low–dose irradiation [letter] Forbes JF. **Lancet** 1989 May 6;1(8645):1012–3
Increased risk of breast cancer after low–dose irradiation [published erratum appears in Lancet 1989 Apr 22;1(8643):916] Modan B, et al. **Lancet** 1989 Mar 25; 1(8639):629–31
Evidence of recombinant ecotropic provirus integration in thymic lymphomas induced by direct or indirect radiation effects. Baylac–Kalabokias H, et al. **Leuk Res** 1989; 13(2):131–43
Internal ultraviolet luminescence—internal carcinomas.

Illingworth JE. **Med Hypotheses** 1988 Dec;27(4):313–6

Probability of causation for cancers potentially induced by ionizing radiation. Wagner LK, et al. **Med Phys** 1989 May–Jun;16(3):406–13

Mesothelial papillary proliferation of the pleura associated with radiation therapy: does it have a role in the pathogenesis of mesothelioma? Jagirdar J, et al. **Mt Sinai J Med** 1989 Mar;56(2):147–9

Indoor radon and lung cancer. Samet JM, et al. **N Engl J Med** 1989 Mar 2;320(9):591–4

Juvenile cutaneous angiosarcoma following radiotherapy of a haemangioma. Sironi M, et al. **Pathologica** 1988 Mar–Apr; 80(1066):235–41 (22 ref.)

UV mutagenic photoproducts in Escherichia coli and human cells: a molecular genetics perspective on human skin cancer. Brash DE. **Photochem Photobiol** 1988 Jul; 48(1):59–66

The risk of skin cancer from occupational exposure to ultraviolet radiation in hospitals. Diffey BL. **Phys Med Biol** 1988 Oct;33(10):1187–93

Follicular carcinoma of the thyroid following radioactive iodine treatment for Graves' disease. Staffurth JS, et al. **Postgrad Med J** 1988 Nov;64(757):878–80

Non-ionizing electromagnetic radiation and cancer—is there a relationship? Salvatore JR, et al. **R I Med J** 1989 Jan; 72(1):15–21 (59 ref.)

Radiation dose and second cancer risk in patients treated for cancer of the cervix. Boice JD Jr, et al. **Radiat Res** 1988 Oct;116(1):3–55

The BEIR IV report [letter] Ellett WH. **Radiat Res** 1988 Oct;116(1):173–4

Promotion of pulmonary carcinogenesis by plutonium particle aggregation following inhalation of 239PuO2. Sanders CL, et al. **Radiat Res** 1988 Dec;116(3):393–405

Radon: is it a problem? Hart BL, et al. **Radiology** 1989 Sep; 172(3):593–9 (39 ref.)

Neoplastic risk from radiation use in clinical practice: risk–benefit assessment. Bock E, et al. **Rays** 1988 Sep–Dec; 13(3):33–42

"Radiation-induced" cancer [letter] Cember H. **Science** 1989 Sep 8;245(4922):1031–2

Solar considerations in the development of cutaneous melanoma. Loggie BW, et al. **Semin Oncol** 1988 Dec; 15(6):494–9

Radiation-induced lymphomas developing during cyclosporine treatment. Hooghe R, et al. **Transplantation** 1989 Aug;48(2):342–4

Radio-induced sarcomas in survivors of Ewing's sarcoma. Boriani S, et al. **Tumori** 1988 Oct 31;74(5):543–51

Neurogenic fibrosarcoma following radiation therapy for seminoma. O'Brien WM, et al. **Urology** 1989 May; 33(5):420–3

Lightning may strike twice. Huvos AG. **West J Med** 1989 Feb;150(2):203–5

[Radiation-induced thyroid cancer] Lemaire M, et al. **Acta Otorhinolaryngol Belg** 1988;42(5):606–11 (Eng. Abstr.) **(Fre)**

[Breast cancer following treatment of Hodgkin disease. Apropos of 2 case reports] Brasseur P, et al. **J Belge Radiol** 1988;71(4):483–7 (Eng. Abstr.) **(Fre)**

[Ionizing radiation—(a) cause of malignant melanoma?] Zschunke E. **Dermatol Monatsschr** 1989;175(2):69–75 (54 ref.) (Eng. Abstr.) **(Ger)**

[Danger of cancer development by small doses of radiation is not appreciated enough. Linear dose–response relation is confirmed—sensitivity to small doses—limit values too high by a factor of 10] Kuni H. **Fortschr Med** 1988 Oct 10;106(29):76–7 **(Ger)**

[Lung injury caused by the inhalation of radioactive substances] Köhler D. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:263–6 (Eng. Abstr.) **(Ger)**

[Radiation exposure and radiation risk of the patient in mammography] Hasert V. **Radiol Diagn (Berl)** 1988; 29(4):605–9 (Eng. Abstr.) **(Ger)**

[Radiation injuries] Hohenberg JK. **Strahlenschutz Forsch Prax** 1988;30:151–67 **(Ger)**

[A new assessment of the data from Hiroshima and Nagasaki] Kellerer AM. **Strahlenschutz Forsch Prax** 1988;30:63–91 **(Ger)**

[Risk of leukemia and cancer in persons occupationally exposed to radiation] Streffer C. **Strahlenschutz Forsch Prax** 1988;30:93–120 (18 ref.) **(Ger)**

[Can the risk of melanoma be calculated?] Jung EG. **Z Hautkr** 1988 Jul 15;63(7):559–62 (10 ref.) (Eng. Abstr.) **(Ger)**

[Relationships between the immune system, ultraviolet light and skin cancer] Alcalary J, et al. **Harefuah** 1989 Mar 1; 116(5):287–9 **(Heb)**

[Postirradiation malignant fibrous histiocytoma following mastectomy in breast cancer] Inui K, et al. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1722–5 (24 ref.) (Eng. Abstr.) **(Jpn)**

[Diagnostic imaging of thorotrast associated cholangiocarcinoma and mixed hepatocellular and cholangiocellular carcinoma] Sasaki F, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Aug 25; 48(8):948–54 (Eng. Abstr.) **(Jpn)**

[A case of radiation-induced intracranial fibrosarcoma with repeated episodes of intratumoral hemorrhage] Yamamoto A, et al. **No Shinkei Geka** 1989 Feb;17(2):193–6 (Eng. Abstr.) **(Jpn)**

[Ozone depletion, ultraviolet rays and skin cancer] Moan J, et al. **Tidsskr Nor Laegeforen** 1988 Nov 10;108(31):2838–40 (Eng. Abstr.) **(Nor)**

[Radon and risk of cancer] Rootwelt K. **Tidsskr Nor Laegeforen** 1988 Sep 10;108(25):2026–30 (Eng. Abstr.) **(Nor)**

[Indoor radon exposure and risk of lung cancer] Sanner T, et al. **Tidsskr Nor Laegeforen** 1988 Sep 10;108(25):2023–5 (Eng. Abstr.) **(Nor)**

[Cytogenetic and blastomogenic effects of 45Ca and 131I administered to rats] Monakhov AS. **Eksp Onkol** 1988; 10(4):27–30 (Eng. Abstr.) **(Rus)**

[Radiation injuries of the bones during treatment of uterine cancer] Gun'ko RI, et al. **Vopr Onkol** 1988;34(10):1188–95 (Eng. Abstr.) **(Rus)**

[Cesium-137 in food products] Vasilenko IIa. **Vopr Pitan** 1988 Jul–Aug;(4):4–11 (38 ref.) **(Rus)**

[Medullary carcinoma of the thyroid gland associated with previous cervical radiotherapy (letter)] Couget JI, et al. **Med Clin (Barc)** 1989 Mar 11;92(9):357 **(Spa)**

[Sarcoma of soft tissues induced by radiation. Presentation of a case and review of the literature] Caballero JL, et al. **Rev Med Panama** 1989 May;14(2):116–9 (6 ref.) (Eng. Abstr.) **(Spa)**

[Ultraviolet rays are not cytotoxic] Berg M. **Lakartidningen** 1989 Mar 8;86(10):842 **(Swe)**

GENETICS

Radiation sensitivity of cell strains from families with genetic disorders predisposing to radiation-induced cancer. Little JB, et al. **Cancer Res** 1989 Sep 1;49(17):4705–14

Multiple stages in radiation carcinogenesis of rat skin. Burns FJ, et al. **Environ Health Perspect** 1989 May;81:67–72 (24 ref.)

Radiation and chemical activation of ras oncogenes in different mouse strains. Newcomb EW, et al. **Environ Health Perspect** 1989 May;81:33–7 (20 ref.)

An important step in radiation carcinogenesis may be inactivation of cellular genes. Weichselbaum RR, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):277–82 (62 ref.)

Resistance of STS/A mice to lymphoma induction by X-irradiation. Okumoto M, et al. **J Radiat Res (Tokyo)** 1989 Mar;30(1):135–9

Overexpression and amplification of the c-myc gene in mouse tumors induced by chemicals and radiations. Niwa O, et al. **Jpn J Cancer Res** 1989 Mar;80(3):212–8

Molecular analysis of DNA isolated from the different stages of x-ray–induced transformation in vitro. Krolewski B, et al. **Mol Carcinog** 1989;2(1):27–33

Xeroderma pigmentosum. Lambert WC. **N J Med** 1989 May; 86(5):383–6 (6 ref.)

Expression of cellular oncogenes: unrearranged c-myc gene but altered promoter usage in radiation-induced thymoma. Bandyopadhyay SK, et al. **Oncogene Res** 1989;4(4):311–8

cDNA clones from autocrine thymic lymphoma cells encode two mitogenic proteins, a serine protease and a truncated T-cell receptor beta-chain. Bogenberger J, et al. **Oncogene Res** 1988;3(4):301–12

Differential gene expression in skin tumors initiated by ionizing radiation or chemical carcinogens. Bowden GT, et al. **Prog Clin Biol Res** 1989;298:147–64

HISTORY

The Helen Q. Woodard symposium on radiation carcinogenesis and associated dosimetry. Laughlin JS. **Health Phys** 1988 Oct;55(4):601–3

[The history of the knowledge of radiation damage] Schüttmann W. **Z Gesamte Hyg** 1988 Dec;34(12):674–80 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Radiostrontium-induced oncogenesis and the role of immunosuppression. I. Influence of 90Sr dose, adult thymectomy and antilymphocyteglobulin treatment on the development of neoplastic and preneoplastic lesions in the skeleton of CBA mice. Bierke P, et al. **Acta Oncol** 1989; 28(1):87–102

Ultraviolet radiation, Langerhans' cells, and skin cancer. Conspiracy and failure. Cruz PD Jr, et al. **Arch Dermatol** 1989 Jul;125(7):975–9 (54 ref.)

Differential extraction of tumor-specific antigens from two ultraviolet light–induced murine fibrosarcomas with the use of 1-butanol. Simcik WJ, et al. **Cancer Res** 1988 Dec 15; 48(24 Pt 1):7004–8

Immunology of murine skin cancers. Kripke ML. **Carcinog Compr Surv** 1989;11:273–91 (90 ref.)

The tumor-rejection antigens of the 1591 ultraviolet fibrosarcoma. Potential origin and evolutionary implications. Linsk R, et al. **J Exp Med** 1989 Mar 1; 169(3):1043–58

Tumor antigens defined by cloned immunological probes are highly polymorphic and are not detected on autologous normal cells. Ward PL, et al. **J Exp Med** 1989 Jul 1; 170(1):217–32

Anti-idiotypic antibodies against UV-induced tumor-specific CTL clones. Preparation in syngeneic combination. Kuribayashi K, et al. **J Immunol** 1988 Dec 1; 141(11):4074–80

Relationship between inducible H-2 expression and the immunogenicity of murine skin neoplasms. I. Evidence that the immunogenicity of ultraviolet radiation–chemically induced tumors is associated with their susceptibility to gamma-interferon–mediated enhancement of H-2Kk expression. Burnham DK, et al. **Transplantation** 1989 Mar; 47(3):533–42

[The significance of epidermal cytokines in UV-induced immune suppression] Schwarz T. **Hautarzt** 1988 Oct; 39(10):642–6 (0 ref.) (Eng. Abstr.) **(Ger)**

MICROBIOLOGY

Measurement of binding specificity between T cell lymphomas and murine leukemia viruses. O'Neill HC, et al. **J Immunol Methods** 1989 Aug 15;122(1):79–90

MORTALITY

Re: "Increased mortality in amateur radio operators due to lymphatic and hematopoietic malignancies" [letter] Kurt TL. **Am J Epidemiol** 1988 Dec;128(6):1384–5

Re: "Radiation doses and cause-specific mortality among workers at a nuclear materials fabrication plant" [letter; comment] Mole RH. **Am J Epidemiol** 1989 Mar; 129(3):639–40. **Comment on:** Am J Epidemiol 1988 Feb;127(2):255–66

Cancer mortality among a group of fluorspar miners exposed to radon progeny. Morrison HI, et al. **Am J Epidemiol** 1988 Dec;128(6):1266–75

Mortality of workers at the Hanford site: 1945–1981. Gilbert ES, et al. **Health Phys** 1989 Jan;56(1):11–25

Comments on 'Alternatives to the BEIR relative risk model for explaining atomic bomb survivor cancer mortality' [letter] Nambi KS, et al. **Health Phys** 1988 Sep;55(3):579–80

Studies of the mortality of A-bomb survivors. 9. Mortality, 1950–1985: Part 1. Comparison of risk coefficients for site-specific cancer mortality based on the DS86 and T65DR shielded kerma and organ doses. Shimizu Y, et al. **Radiat Res** 1989 Jun;118(3):502–24

Radiation risk of Japanese and Chinese low dose-repeatedly irradiated population. Aoyama T. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:432–42

Lung cancer risks of underground miners: cohort and case-control studies. Archer VE. **Yale J Biol Med** 1988 May–Jun;61(3):183–93 (36 ref.)

Models for the analysis of radon-exposed populations. Lubin JH. **Yale J Biol Med** 1988 May–Jun;61(3):195–214 (58 ref.)

PATHOLOGY

Multiple eccrine poromas arising in chronic radiation dermatitis. Ullah K, et al. **Acta Derm Venereol (Stockh)** 1989;69(1):70–3

Granular cell leiomyosarcoma of the skin. Suster S, et al. **Am J Dermatopathol** 1988 Jun;10(3):234–9

Characterization of a dermal derived malignant mesenchymal tumor arising in ultraviolet irradiated mice. Phelps RG, et al. **Am J Pathol** 1989 Jul;135(1):149–59

Mediastinal osteosarcoma with extension to lungs in a patient treated for Hodgkin's disease. Catanese J, et al. **Cancer** 1988 Nov 15;62(10):2252–7 (28 ref.)

Alterations in Langerhans cells and Thy-1+ dendritic epidermal cells in murine epidermis during the evolution of ultraviolet radiation–induced skin cancers. Alcalay J, et al. **Cancer Res** 1989 Aug 15;49(16):4591–6

Postirradiation angiosarcoma of the breast—a case report. Shaikh NA, et al. **Eur J Surg Oncol** 1988 Oct;14(5):449–51

Radiation-induced soft tissue osteogenic sarcoma of the scalp. Reyes CV. **Int J Dermatol** 1989 Jan–Feb;28(1):38–9

Epithelioid haemangioendothelioma of terminal ileum after therapeutic irradiation [letter] Akosa AB, et al. **J Clin Pathol** 1989 Aug;42(8):889–90

Study of stomach cancer in atomic bomb survivors. Report 1. Histological findings and prognosis. Ito C, et al. **J Radiat Res (Tokyo)** 1989 Jun;30(2):164–75

Pathomorphological characteristics of thorotrast-related cholangiocarcinoma. Ito Y. **Kurume Med J** 1988;35(2):63–9

Laterality of breast cancer associated with repeated chest fluoroscopies [letter] Tekkel M, et al. **Lancet** 1989 Mar 25; 1(8639):677–8

Radiation-induced schwannomas. Rubinstein AB, et al. **Neurosurgery** 1989 Jun;24(6):929–32

The characterization of squamous cell carcinoma induced by ultraviolet irradiation in hairless mice. Canfield PJ, et al. **Pathology** 1988 Apr;20(2):109–17

Primitive neuroectodermal tumor presenting as a delayed sequela to cranial irradiation and intrathecal methotrexate. Barasch ES, et al. **Pediatr Neurol** 1988 Nov–Dec;4(6):375–8

Enhancement of UV-induced skin carcinogenesis by azathioprine: role of photochemical sensitisation. Kelly GE, et al. **Photochem Photobiol** 1989 Jan;49(1):59–65

Influence of dietary menhaden oil upon carcinogenesis and various cutaneous responses to ultraviolet radiation. Orengo IF, et al. **Photochem Photobiol** 1989 Jan;49(1):71–7

Effect of dietary lipid on UV light carcinogenesis in the hairless mouse. Reeve VE, et al. **Photochem Photobiol** 1988 Nov;48(5):689–96

The genesis of Thy-1-lymphomas in NFS mice exposed to X irradiation. Mori N, et al. **Radiat Res** 1989 Jan; 117(1):35–46

[Experimental animal model and cell model of osteosarcoma induced by radiation] Wang YM. **Chung Hua I Hsueh Tsa Chih** 1988 Apr;68(4):208–11, 16 (Eng. Abstr.) **(Chi)**

[Urothelial carcinoma of the kidney pelvis 51 years after

retrograde ureteropyelography with Thorotrast. An autoradiography study] Bachor R, et al. **Med Klin** 1988 Oct 4;83(19):652–4 **(Ger)**

PREVENTION & CONTROL

Role of childhood in the development of skin cancer. Marks R. **Aust Paediatr J** 1988 Dec;24(6):337–8

Electromagnetic radiations and cancer. Cause and prevention. Shore RE. **Cancer** 1988 Oct 15;62(8 Suppl):1747–54 (66 ref.)

N-acyl dehydroalanines protect from radiation toxicity and inhibit radiation carcinogenesis in mice. Buc-Calderon P, et al. **Carcinogenesis** 1989 Sep;10(9):1641–4

Rare earth screens: prevention of radiogenic cancers versus local budgets [letter] Matthews IP, et al. **Clin Radiol** 1988 Jul;39(4):464

Comment on 'A histologic study of the influence of cigarette smoking in suppressing Rn daughter carcinogenesis in dogs' [letter] Archer VE. **Health Phys** 1989 Feb;56(2):255–6

Radiogenic cancer induction associated with spinal radiography: a quantitative analysis [letter; comment] Maurer EL. **J Manipulative Physiol Ther** 1989 Feb; 12(1):60–2. **Comment on:** J Manipulative Physiol Ther 1988 Aug;11(4):255–60

Cancer risk estimate for radiation, 1988 [letter] Russell Jones R. **Lancet** 1988 Dec 24–31;2(8626–8627):1494

Tumor necrosis factor and interferon gamma inhibit the development of radiation-induced thymic lymphomas in C57BL/Ka mice. Boniver J, et al. **Leukemia** 1989 Aug; 3(8):611–3

"The healthy tan": a modern misnomer [editorial] Thomas JR. **Mo Med** 1989 Jun;86(6):327–8

Sun protection and skin cancer. Berger RS. **N J Med** 1989 May;86(5):348–50

Radioprotectors in treatment therapy to reduce risk in secondary tumor induction. Grdina DJ, et al. **Pharmacol Ther** 1988;39(1–3):21–5 (22 ref.)

Effects of oral retinoid (vitamin A and etretinate) therapy on photocarcinogenesis in hairless mice. Kelly GE, et al. **Photochem Photobiol** 1989 Aug;50(2):213–5

Prevention of radiogenic cancers through changes in procedure. Matthews IP, et al. **Radiography** 1988 Jan–Feb; 54(613):3–8

[Sunburn. Irradiation, pathogenesis, therapy, prevention] Niedner R. **Med Monatsschr Pharm** 1989 May;12(5):141–6 (7 ref.) **(Ger)**

RADIOGRAPHY

Radiation-induced sarcoma of bone: CT findings in 19 cases. Lorigan JG, et al. **AJR Am J Roentgenol** 1989 Oct; 153(4):791–4

Post-radiation cranial malignant fibrous histiocytoma studied by CT. Romero FJ, et al. **Comput Med Imaging Graph** 1989 Mar–Apr;13(2):191–4

SURGERY

Morphologic changes in the thyroid after irradiation for Hodgkin's and non-Hodgkin's lymphoma. Carr RF, et al. **Cancer** 1989 Aug 15;64(4):825–9

[Pneumonectomy of lung cancer diagnosed 21 years after irradiation of 6000 rads for hilar lymphadenopathy] Morota N, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Dec; 36(12):2655–61 (Eng. Abstr.) **(Jpn)**

THERAPY

Suppressive therapy of thyroid nodules in patients with previous radiotherapy to the head and neck. Razack MS, et al. **Am J Surg** 1988 Oct;156(4):290–3

NEOPLASMS, UNKNOWN PRIMARY

Melanophagic dermatitis and panniculitis. A condition revealing an occult metastatic malignant melanoma. Piérard GE. **Am J Dermatopathol** 1988 Apr;10(2):133–6

Metastatic carcinoma of unknown primary: complete response to second-line treatment with plicamycin. Hescock H Jr, et al. **Am J Med Sci** 1989 Jul;298(1):34–7

Peritoneal carcinomatosis of unknown primary site in women. A distinctive subset of adenocarcinoma. Strnad CM, et al. **Ann Intern Med** 1989 Aug 1;111(3):213–7

Metastatic squamous cell carcinoma of an unknown primary localized to the neck. Advantages of an aggressive treatment. de Braud F, et al. **Cancer** 1989 Jul 15;64(2):510–5

Malignant ascites of unknown origin. Ringenberg QS, et al. **Cancer** 1989 Aug 1;64(3):753–5

Metastasis of unknown origin. Haskell CM, et al. **Curr Probl Cancer** 1988 Jan–Feb;12(1):5–58 (146 ref.)

Phase II trial of methotrexate-FAM (m-FAM) in adenocarcinoma of unknown primary. Treat J, et al. **Eur J Cancer Clin Oncol** 1989 Jul;25(7):1053–5

Metastatic bone disease from occult carcinoma: a profile. Nottebaert M, et al. **Int Orthop** 1989;13(2):119–23

Exophytic mass of the floor of the mouth. Whitt JC, et al. **J Am Dent Assoc** 1989 Sep;119(3):425–7

Metastatic squamous cell carcinoma of the neck with an occult primary source. Williamson A 3d, et al. **J La State Med Soc** 1988 Dec;140(12):17–9

Metastatic carcinoma of the mandibular condyle presenting as temporomandibular joint syndrome. Rubin MM, et al. **J Oral Maxillofac Surg** 1989 May;47(5):507–10

Rhabdomyosarcoma, presenting as disseminated malignancy from an unknown primary site: a retrospective study of ten pediatric cases. Etcubanas E, et al. **Med Pediatr Oncol** 1989;17(1):39–44

Cancer of unknown primary site. Robinson B. **N Z Med J** 1988 Nov 23;101(858):787–8 (20 ref.)

Occult medullary carcinoma of the thyroid presenting as neck and parapharyngeal metastases. Pearlman SJ, et al. **Otolaryngol Head Neck Surg** 1988 Nov;99(5):509–12

Hepatic metastases due to choriocarcinoma. Alveyn CG, et al. **Postgrad Med J** 1988 Dec;64(758):941–2

The management of patients with adenocarcinoma and poorly differentiated carcinoma of unknown primary site. Greco FA, et al. **Semin Oncol** 1989 Aug;16(4 Suppl 6):116–22 (19 ref.)

Case report 493: Neuroblastoma of the left ilium with disseminated bony metastasis. Roberts JL, et al. **Skeletal Radiol** 1988;17(5):375–7

Cancers of unknown primary site: an enigmatic syndrome. Anand AC, et al. **Trop Gastroenterol** 1988 Apr–Jun; 9(2):57–67 (57 ref.)

Adenocarcinoma of unknown primary site. Jubelirer SJ. **W V Med J** 1989 Jan;85(1):9–12

Cancer of the unknown primary site. Diggs CH. **Wis Med J** 1988 Oct;87(10):18–20

[Occult adenocarcinoma of the parotid. Apropos of 2 cases] Romain P, et al. **Rev Stomatol Chir Maxillofac** 1989; 90(2):123–30 (31 ref.) (Eng. Abstr.) **(Fre)**

[Occult cancer of the thyroid gland] Negro G, et al. **Minerva Chir** 1989 Feb 28;44(4):647–51 **(Ita)**

[A case of metastasis of a melanocarcinoma of unknown primary origin to the kidney pelvis] Pamich G, et al. **Minerva Urol Nefrol** 1988 Jan–Mar;40(1):45–8 (Eng. Abstr.) **(Ita)**

ANALYSIS

Oestrogen-receptor assays [letter] Orr KB. **Med J Aust** 1989 May 1;150(9):542

DIAGNOSIS

Brain metastases from undiagnosed systemic neoplasms. Merchut MP. **Arch Intern Med** 1989 May;149(5):1076–80

Occult lung carcinoma presenting with dysphagia. The value of computed tomography. Heater K, et al. **Clin Imaging** 1989 Jun;13(2):122–6

Use of selected combinations of monoclonal antibodies to tumor associated antigens in the diagnosis of neoplastic effusions of unknown origin. Mottolese M, et al. **Eur J Cancer Clin Oncol** 1988 Aug;24(8):1277–84

Diagnostic imaging in clinical cancer management. Metastases from unknown primary tumors. Kagan AR, et al. **Invest Radiol** 1988 Jul;23(7):545–7 (18 ref.)

Generalized melanosis in occult primary melanoma. Sexton M, et al. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 1):261–6

Cancer of unknown primary site. Deciding how far to carry evaluation. Diggs CH. **Postgrad Med** 1989 Aug; 86(2):186–91 (18 ref.)

Adenocarcinoma of unknown primary site (ACUPS) presenting as a psoas abscess. Stewart IC, et al. **Scott Med J** 1989 Jun;34(3):470

Cases of brain metastasis presenting as the first sign of systemic cancer. Chee CP, et al. **Singapore Med J** 1988 Jun;29(3):252–6

[Germinal tumors: misleading clinical presentations (undifferentiated metastatic tumors of undetermined origin)] Joggi J. **Rev Med Brux** 1988 Dec;9(10):467–72 (Eng. Abstr.) **(Fre)**

[An immunohistological study of metastatic adenocarcinoma of the lymph node: is it useful in diagnosing a primary tumor?] Hamaya K, et al. **Gan No Rinsho** 1988 Nov; 34(14):1956–60 (Eng. Abstr.) **(Jpn)**

[Carcinoma of unknown origin. Diagnostic study of 48 cases and its clinical yield] Romeu J, et al. **Med Clin (Barc)** 1989 Feb 18;92(6):201–6 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

cis-platinum, a treatment for refractory rheumatoid arthritis? [letter] Sanchez-Burson J, et al. **Br J Rheumatol** 1989 Aug; 28(4):358

Fluorouracil, doxorubicin, cisplatin and altretamine in the treatment of metastatic carcinoma of unknown primary. Bécouarn Y, et al. **Eur J Cancer Clin Oncol** 1989 May; 25(5):861–5

Combination chemotherapy in metastatic tumors of unknown origin. 5-Fluorouracil, adriamycin and mitomycin C for adenocarcinomas and adriamycin, vinblastine and mitomycin C for anaplastic carcinomas. Sulkes A, et al. **Isr J Med Sci** 1988 Sep–Oct;24(9–10):604–10

Suppression of ectopic adrenocorticotropin secretion by the long-acting somatostatin analog octreotide. Bertagna X, et al. **J Clin Endocrinol Metab** 1989 May;68(5):988–91

Treatment and prognosis of metastatic carcinoma of unknown primary: analysis of 100 patients. Alberts AS, et al. **Med Pediatr Oncol** 1989;17(3):188–92

PATHOLOGY

Treatable carcinoma of unknown origin. Guthrie TH Jr. **Am J Med Sci** 1989 Aug;298(2):74–8 (43 ref.)

Occult tumor cells in lymph nodes [letter; comment] Kern WH. **Am J Surg Pathol** 1989 May;13(5):430–2. **Comment on:** Am J Surg Pathol 1988 Aug;12(8):612–8

Immunohistological studies in five patients with unknown primary carcinomas and poorly differentiated neoplasms. Greenberg BR. **Ann Clin Lab Sci** 1989 May–Jun; 19(3):175–83

Unknown primary tumors: establishment of cell lines, identification of chromosomal abnormalities, and implications for a second type of tumor progression. Bell CW, et al. **Cancer Res** 1989 Aug 1;49(15):4311–5

Metastatic melanoma of unknown origin at autopsy. Akslen LA, et al. **Eur J Surg Oncol** 1988 Oct;14(5):379–82

Fine needle aspiration cytology in superficial lymph nodes: an analysis of 266 cases. Martelli G, et al. **Eur J Surg Oncol** 1989 Feb;15(1):13–6

Normal-sized ovary carcinoma syndrome. Feuer GA, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):786–92

Trophoblastic neoplasms: occult disease. Pattillo RA. **Obstet Gynecol Clin North Am** 1988 Sep;15(3):577–85 (13 ref.)

Balloon cell melanoma mimicking clear cell carcinoma. Akslen LA, et al. **Pathol Res Pract** 1989 May;184(5):548–50; discussion 551–3

Not all "occult" papillary carcinomas are "minimal". Allo MD, et al. **Surgery** 1988 Dec;104(6):971–6

Krukenberg tumor of testis [letter] Shetty MR. **Urology** 1989 Apr;33(4):351

[Lymph node metastasis of a "squamous cell carcinoma" as a manifestation of occult breast cancer] Ronay G, et al. **Pathologe** 1988 Sep;9(5):309–12 **(Ger)**

[Malignant neoplasms of unknown primary site with metastases to the bone marrow] Lalowicz I. **Pol Tyg Lek** 1988 May 30;43(22):715–7 (Eng. Abstr.) **(Pol)**

THERAPY

[Therapy of metastatic carcinoid with the somatostatin analog octreotide and with recombinant interferon alfa 2b] Linkesch M, et al. **Wien Klin Wochenschr** 1989 Jun 23; 101(13):455–7 (Eng. Abstr.) **(Ger)**

[Metastatic cancer of unknown primary site] Okawa T, et al. **Gan No Rinsho** 1988 Aug;34(10):1499–502 (Eng. Abstr.) **(Jpn)**

NEOPLASMS, VASCULAR TISSUE

[Vascular tumors of the jaw. Analysis] Reychler H, et al. **Rev Stomatol Chir Maxillofac** 1989;90(4):281–6 (39 ref.) (Eng. Abstr.) **(Fre)**

COMPLICATIONS

Tumor-induced osteomalacia and rickets. Nuovo MA, et al. **Am J Surg Pathol** 1989 Jul;13(7):588–99 (63 ref.)

CONGENITAL

Congenital neck masses. Drumm AJ, et al. **Am Fam Physician** 1989 Jan;39(1):159–63 (10 ref.)

PATHOLOGY

Primary undifferentiated sarcoma of the thoracic aorta. Herzberg AJ, et al. **Histopathology** 1988 Nov;13(5):571–4

Cavernous hemangioma of the incus (an incidental finding). Rutka J, et al. **J Otolaryngol** 1989 Apr;18(3):94–5

[Hamartomas and cutaneous vascular neoplasms] Piérard GE, et al. **Rev Med Liege** 1988 Nov 1;43(21):685–97 (22 ref.) **(Fre)**

SECONDARY

Cavernous sinus syndrome as the presentation of malignant lymphoma: case report and review of the literature. Delpassand ES, et al. **Neurosurgery** 1988 Oct;23(4):501–4 (19 ref.)

SURGERY

Sapphire tip technology for YAG laser excisions in plastic surgery. Apfelberg DB, et al. **Plast Reconstr Surg** 1989 Aug;84(2):273–9

NEOPLASTIC CELLS, CULTURED see **TUMOR CELLS, CULTURED**

NEOPLASTIC ENDOCRINE-LIKE SYNDROMES

see related
HORMONES, ECTOPIC

Ectopic production of renin by ileal carcinoma. Saito T, et al. **Endocrinol Jpn** 1989 Feb;36(1):117–24

Ectopic production of parathyroid hormone by small cell lung cancer in a patient with hypercalcemia. Yoshimoto K, et al. **J Clin Endocrinol Metab** 1989 May;68(5):976–81

Pathology of growth hormone excess. Kovacs K. **Pathol Res Pract** 1988 Sep;183(5):565–8 (32 ref.)

[Glucagonoma syndrome] Baptista AP, et al. **Acta Med Port** 1988 Mar–Apr;1(2):141–4 (Eng. Abstr.) **(Por)**

[Glucagonoma syndrome] Tellechea O, et al. **Acta Med Port** 1988 Mar–Apr;1(2):149–52 (57 ref.) (Eng. Abstr.) **(Por)**

BLOOD

Humoral hypercalcemia in Hodgkin's disease. Clinical and laboratory evaluation. Jacobson JO, et al. **Cancer** 1989 Mar 1;63(5):917–23 (40 ref.)

Increased insulin-like growth factor II production and consequent suppression of growth hormone secretion: a dual mechanism for tumor-induced hypoglycemia. Ron D, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):701–6

Cushing's syndrome due to ACTH-production of an ovarian carcinoid. Schlaghecke R, et al. **Klin Wochenschr** 1989 Jun 15;67(12):640–4

[Effect of sex steroids on the lipoprotein profile] Prömpeler HJ, et al. **Geburtshilfe Frauenheilkd** 1988 Nov;48(11):785–7 (Eng. Abstr.) (Ger)

COMPLICATIONS

Humoral hypercalcemia of malignancy: involvement of a novel hormone. Martin TJ, et al. **Aust N Z J Med** 1988 May;18(3):287–95 (70 ref.)

[A case of adenocarcinoma of the nasal cavity associated with syndrome of inappropriate secretion of antidiuretic hormone(SIADH)] Tatemoto K, et al. **Gan No Rinsho** 1989 Sep;35(10):1153–9 (Eng. Abstr.) (Jpn)

[Malignant carcinoid tumor of the lungs secreting ectopic ACTH and secondary Cushing's syndrome in a 9-year-old boy] Kogan MB, et al. **Pediatriia** 1989;(2):89–90 (Rus)

CONGENITAL

Adrenocortical tumors in childhood: a report of four cases. Morales L, et al. **J Pediatr Surg** 1989 Mar;24(3):276–81

DIAGNOSIS

Pancreatic insuloma causing Cushing's syndrome. Torriani F, et al. **J Endocrinol Invest** 1989 May;12(5):313–9

Ectopic adrenocorticotropic hormone syndrome: localization studies in 28 patients. Doppman JL, et al. **Radiology** 1989 Jul;172(1):115–24

[Occult ectopic Cushing's syndrome] Reincke M, et al. **Dtsch Med Wochenschr** 1988 Oct 7;113(40):1561–5 (37 ref.) (Ger)

[Tumor markers in endocrinology (without gynecology and urology)] Riccabona G. **Wien Klin Wochenschr** 1989 Jul 14;101(14):479–82 (Eng. Abstr.) (Ger)

[Clinical symptoms and duration of anamnesis in patients with hypophyseal tumors] Dietel P, et al. **Z Gesamte Inn Med** 1989 May 15;44(10):293–6 (Eng. Abstr.) (Ger)

[Tumors of the adrenal glands in children] Pavlovskiĭ MP, et al. **Vestn Khir** 1988 Jun;140(6):70–4 (Eng. Abstr.) (Rus)

DRUG THERAPY

Suppression of ectopic adrenocorticotropin secretion by the long-acting somatostatin analog octreotide. Bertagna X, et al. **J Clin Endocrinol Metab** 1989 May;68(5):988–91

Inhibition of human adrenal androgen secretion by ketoconazole. Weber MM, et al. **Klin Wochenschr** 1989 Jul 17;67(14):707–12

ETIOLOGY

Glucagonoma syndrome and bronchial carcinoma. Hunstein W, et al. **Ann Intern Med** 1988 Dec 1;109(11):920–1

Ectopic ACTH syndrome due to Grawitz tumor. Watanobe H, et al. **Horm Metab Res** 1988 Jul;20(7):453–6

Pro-opiomelanocortin gene expression in human phaeochromocytomas. de Keyzer Y, et al. **J Mol Endocrinol** 1989 May;2(3):175–81

[Malignant aldosteronoma in the differential diagnosis of Conn syndrome] Ludvik B, et al. **Acta Med Austriaca** 1988; 15(4):117–20 (Eng. Abstr.) (Ger)

[A 61-year-old patient with Cushing syndrome and pronounced hirsutism] Weber MM, et al. **Internist (Berlin)** 1989 Jul;30(7):451–4 (Ger)

[Hyperthyroidism caused by a hormone-producing follicular thyroid cancer] Scherübl H, et al. **Klin Wochenschr** 1989 Mar 1;67(5):304–7 (Eng. Abstr.) (Ger)

[Diagnostic problems in ectopic Cushing syndrome] Reincke M, et al. **Med Klin** 1988 Sep 2;83(17):559–64 (Eng. Abstr.) (Ger)

[A case of hypoglycemia originating outside the pancreas] Dowiacka-Okruszko D, et al. **Pol Arch Med Wewn** 1985 Apr;73(4):256–8 (Eng. Abstr.) (Pol)

[Tumor of the pancreas as the cause of Cushing's syndrome (clinical study)] German SV, et al. **Sov Med** 1988; (10):118–20 (Rus)

[Neoplasms associated with inappropriate or ectopic hormonal secretion syndromes] Valverde CM. **Rev Invest Clin** 1969 Apr-Jun;21(2):239–47 (61 ref.) (Spa)

GENETICS

Pro-opiomelanocortin mRNA size heterogeneity in ACTH-dependent Cushing's syndrome. Clark AJ, et al. **J Mol Endocrinol** 1989 Jan;2(1):3–9

METABOLISM

Parathyroid hormone-related protein in adult T-cell leukemia-lymphoma. Motokura T, et al. **Ann Intern Med** 1989 Sep 15;111(6):484–8

Hypercalcemia and vitamin D metabolism in Hodgkin's disease. Is there an underlying immunoregulatory relationship? Rieke JW, et al. **Cancer** 1989 May 1; 63(9):1700–7 (104 ref.)

[Ectopic hormone production by neoplasms] Yamaji T. **Rinsho Byori** 1988 Dec;36(12):1386–92 (Jpn)

PATHOLOGY

Ectopic ACTH and adrenal myelolipoma. Sieber SC, et al. **Conn Med** 1989 Jan;53(1):7–10 (21 ref.)

[Case report on the differential diagnosis of hyperandrogenism: adrenal or ovarian origin?] Saeger W. **Pathologe** 1988 Nov;9(6):345–50 (Ger)

[The functional pathology of hypophyseal adenomas] Kovacs K, et al. **Z Gesamte Inn Med** 1988 Aug 1;43(15):405–7 (12 ref.) (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

The parathyroid hormone-related protein associated with malignancy is secreted by neuroendocrine tumors. Deftos LJ, et al. **Mol Endocrinol** 1989 Mar;3(3):503–8

NEOPLASTIC SYNDROMES, HEREDITARY

Familial breast cancer: where the clinician and basic scientist interface. Organ CH Jr. **Ann Acad Med Singapore** 1988 Jan;17(1):36–41 (24 ref.)

Do human renal cell carcinomas arise by a double-loss mechanism? Erlandsson R, et al. **Cancer Genet Cytogenet** 1988 Dec;36(2):197–202

Gastrointestinal polyposis syndromes. Finan MC, et al. **Dermatol Clin** 1989 Jul;7(3):419–34 (123 ref.)

Segregation and linkage analysis of nine Utah breast cancer pedigrees. Bishop DT, et al. **Genet Epidemiol** 1988; 5(3):151–69

COMPLICATIONS

Hereditary carcinoma syndromes associated with benign head and neck tumors. Smith DB, et al. **Head Neck** 1989 May-Jun;11(3):247–51

DIAGNOSIS

Breast cancer diagnosis in a putative obligate gene carrier. A family study. Lynch HT, et al. **Cancer Genet Cytogenet** 1988 Dec;36(2):205–10

EPIDEMIOLOGY

Epidemiology of genetically determined cancer. Knudson AG Jr. **Ciba Found Symp** 1989;142:3–12; discussion 12–9 (24 ref.)

GENETICS

Familial cancer. A review on hereditary cancer traits with special regard to colorectal carcinoma. Järvinen HJ. **Acta Oncol** 1988;27(6b):783–6 (22 ref.)

On the possibility of pleiotropic monogenic control of hereditary polyposis and primary cancer of the colon. Ginsburg EK, et al. **Am J Hum Genet** 1989 Feb;44(2):191–7

The ninth Gordon Hamilton-Fairley memorial lecture. Hereditary cancers: clues to mechanisms of carcinogenesis. Knudson AG Jr. **Br J Cancer** 1989 May;59(5):661–6 (64 ref.)

Spontaneous and 4-nitroquinoline 1-oxide-induced G2 chromosome aberrations in lymphoblasts from familial melanoma patients. Lu GH, et al. **Cancer Genet Cytogenet** 1989 Jun;39(2):233–43

Familial aggregation of tumors in the three-year experience of a population-based colorectal cancer registry. Ponz de Leon M, et al. **Cancer Res** 1989 Aug 1;49(15):4344–8

Re: Michael A. Bender et al., Normal G2 Chromosomal Radiosensitivity and Cell Survival in the Cancer Family Syndrome [letter] Sanford KK, et al. **Cancer Res** 1989 Aug 15;49(16):4671–3

Tumor suppressor genes and inherited predisposition to malignancy. Skuse GR, et al. **Semin Oncol** 1989 Apr; 16(2):128–37 (107 ref.)

[Cancer family syndrome] Hirayama R, et al. **Gan No Rinsho** 1989 Jan;Spec No:645–50 (Jpn)

NEOPLASTIC TRANSFORMATION, CELL see **CELL TRANSFORMATION, NEOPLASTIC**

NEOPRENE see under **POLYENES**

NEORICKETTSIA see **RICKETTSIACEAE**

NEOSTIGMINE

ADMINISTRATION & DOSAGE

Morphogenesis of nuclear inclusions in the soleplate region of rat skeletal muscle fibers following chronic daily administration of neostigmine. Kawabuchi M, et al. **Cell Tissue Res** 1989 Apr;256(1):137–44

Hypertension following intrathecal injection of cholinergic agonists in conscious rats: role of endogenous acetylcholine. Magrí V, et al. **J Auton Nerv Syst** 1988 Nov;25(1):69–77

Rectosigmoid motility response to sham feeding in irritable bowel syndrome. Evidence of a cephalic phase. Jepsen JM, et al. **Scand J Gastroenterol** 1989 Jan;24(1):53–6

ADVERSE EFFECTS

Neostigmine after spontaneous recovery from neuromuscular blockade. Effect on depth of blockade monitored with train-of-four and tetanic stimuli. Goldhill DR, et al. **Anaesthesia** 1989 Apr;44(4):293–9

Complete heart block following glycopyrronium/neostigmine mixture [letter] Lonsdale M, et al. **Anaesthesia** 1989 May;44(5):448–9

Epidural anaesthesia and postoperative colorectal motility--a possible hazard to a colorectal anastomosis. Carlstedt A, et al. **Int J Color Dis** 1989 Aug;4(3):144–9

Dehiscence of intestinal anastomoses and anaesthesia. Olivieri L, et al. **Ital J Surg Sci** 1988;18(3):217–21

ANTAGONISTS & INHIBITORS

Atropine-neostigmine mixture: a dose-response study. Naguib M, et al. **Can J Anaesth** 1989 Jul;36(4):412–7

PHARMACOLOGY

Neostigmine and edrophonium as antagonists of atracurium and pancuronium. Sanfilippo M, et al. **Acta Anaesthesiol Scand** 1988 Aug;32(6):437–40

Relative contributions of the nervous system and hormones to CNS-mediated hyperglycemia. Iguchi A, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):E920–7

Effects of distention and neostigmine on jejunal vascular resistance, oxygen uptake, and intraluminal pressure changes in ponies. Parks AH, et al. **Am J Vet Res** 1989 Jan;50(1):54–8

Effects of xylazine and/or butorphanol or neostigmine on myoelectric activity of the cecum and right ventral colon in female ponies. Rutkowski JA, et al. **Am J Vet Res** 1989 Jul;50(7):1096–101

Annulate lamellae-soleplate nuclei associations in skeletal muscle fibers of rats during chronic high-dose exposure to neostigmine. Kawabuchi M, et al. **Anat Rec** 1989 Sep; 225(1):1–10

Dose-response relationships for edrophonium and neostigmine as antagonists of moderate and profound atracurium blockade. Donati F, et al. **Anesth Analg** 1989 Jan;68(1):13–9

Dose-response relationships for edrophonium and neostigmine as antagonists of atracurium and vecuronium neuromuscular blockade. Smith CE, et al. **Anesthesiology** 1989 Jul;71(1):37–43

Antagonism of moderate degrees of vecuronium-induced neuromuscular block by small doses of neostigmine. Johnson RA, et al. **Br J Anaesth** 1989 May;62(5):483–7

Antagonism of blockade produced by atracurium or vecuronium with low doses of neostigmine. Jones JE, et al. **Br J Anaesth** 1988 Nov;61(5):560–4

Influence of neostigmine on postoperative vomiting. King MJ, et al. **Br J Anaesth** 1988 Oct;61(4):403–6

Inhibition by isoproterenol and neostigmine of experimental carcinogenesis in rat colon by azoxymethane. Tatsuta M, et al. **Br J Cancer** 1988 Nov;58(5):619–20

Reversals of the neostigmine-induced tetanic fade and endplate potential run-down with respect to the autoregulation of transmitter release. Chang CC, et al. **Br J Pharmacol** 1988 Dec;95(4):1255–61

Vagally mediated insulin secretion by stimulation of brain cholinergic neurons with neostigmine in bilateral adrenalectomized rats. Gotoh M, et al. **Brain Res** 1989 Jul 24;493(1):97–102

"Priming" with neostigmine: failure to accelerate reversal of single twitch and train-of-four responses. Donati F, et al. **Can J Anaesth** 1989 Jan;36(1):30–4

Central nervous system-mediated glucagon secretion is enhanced by alpha 2-adrenoreceptor activation. Iguchi A, et al. **Endocrinology** 1989 Sep;125(3):1581–6

Effect of neostigmine on metoclopramide-induced aldosterone secretion in man. Sommers DK, et al. **Eur J Clin Pharmacol** 1989;36(4):411–3

Inhibition by neostigmine and isoproterenol and promotion by atropine of experimental carcinogenesis in rat stomach by N-methyl-N'-nitro-N-nitrosoguanidine [letter] Tatsuta M, et al. **Int J Cancer** 1989 Jul 15;44(1):188–9

Evidence for a postsynaptic action of neostigmine on muscarinic receptors in the anococcygeus muscle of the rat. Smith JA, et al. **J Pharm Pharmacol** 1989 Apr; 41(4):231–5

Evaluation of glycopyrrolate and atropine in a mixture with neostigmine for reversal of neuromuscular blockage in geriatric patient. Sit KF, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Dec;26(4):369–74

The role of M2 muscarinic receptors in the posterior hypothalamus in the pressor response to intracerebroventricularly-injected neostigmine. Xiao YF, et al. **Neuropharmacology** 1988 Oct;27(10):1061–5

[Role of rostral ventrolateral medulla in the pressor response to intracerebroventricular injection of neostigmine] Xia QG, et al. **Sheng Li Hsueh Pao** 1989 Feb;41(1):19–29 (Eng. Abstr.) (Chi)

[A case of a complete paraplegic fathering a girl following artificial insemination after an intrathecal neostigmine injection] Hazama M, et al. **Hinyokika Kiyo** 1988 Jun; 34(6):1047–50 (12 ref.) (Eng. Abstr.) (Jpn)

THERAPEUTIC USE

Cortisol responses to cholinergic drugs in Alzheimer's disease. Kumar V, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Oct;26(10):471–6

TOXICITY

Origin of true intranuclear inclusions in the soleplate region of rat skeletal muscle fibers following chronic daily administration of neostigmine. Kawabuchi M, et al. **Fukuoka Igaku Zasshi** 1988 Jun;79(6):440–3

NEOSYNEPHRINE see PHENYLEPHRINE

NEOTOMA see CRICETIDAE

NEOVASCULARIZATION

Capillary ultrastructure and microcirculatory function of malignant tumors. Endrich B, et al. **Adv Exp Med Biol** 1988;242:205–14 (30 ref.)

Changing sensitivity to H1 and H2 receptor antagonists in the growing vasculature. Smaje LH, et al. **Adv Exp Med Biol** 1988;242:145–50

Heparan sulfate degradation in tumor cell invasion and angiogenesis. Vlodavsky I, et al. **Adv Exp Med Biol** 1988; 233:201–10 (24 ref.)

Contact lens–related deep stromal neovascularization [letter] Chayet J. **Am J Ophthalmol** 1989 May 15;107(5):571–2

Peripheral retinal neovascularization associated with hemoglobin C beta zero thalassemia. Duker JS, et al. **Am J Ophthalmol** 1989 Sep 15;108(3):328–9

Angiogenesis in the postovulatory primate endometrium: the coiled arteriolar system. Kaiserman–Abramof IR, et al. **Anat Rec** 1989 Aug;224(4):479–89

Neovascularized free cutaneous cartilage flap transfer with microsurgical anastomosis: an experimental model in the rabbit. Hirasé Y, et al. **Ann Plast Surg** 1988 Oct;21(4):342–7

Age–dependent mast–cell–mediated angiogenesis. Norrby K, et al. **APMIS Suppl** 1988;2:251–61

Modulatory effect of sera from scleroderma patients on lymphocyte–induced angiogenesis. II. Effector cells for the enhancing effect of acroscleroderma patients' sera. Polakowski IJ, et al. **Arch Dermatol Res** 1988;280(7):395–8

Lymphocyte–induced angiogenesis assay—in cutaneous malignancies and cutaneous and genital warts. Szmurło A, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(1):85–7

Persistent and recurrent neovascularization after krypton laser photocoagulation for neovascular lesions of ocular histoplasmosis. Macular Photocoagulation Study Group [see comments] **Arch Ophthalmol** 1989 Mar;107(3):344–52 . **Comment in:** Arch Ophthalmol 1989 Jul;107(7):955–6

Sympathetic ophthalmia and choroidal neovascularization. Case report. Chew EY, et al. **Arch Ophthalmol** 1988 Nov; 106(11):1507–8

Partial ablation of neovascular membranes involving the fovea [letter; comment] Tornambe PE, et al. **Arch Ophthalmol** 1989 Jul;107(7):955–6. **Comment on:** Arch Ophthalmol 1989 Mar;107(3):344–52

Inhibition of in vitro vascular endothelial cell proliferation and in vivo neovascularization by low–dose methotrexate. Hirata S, et al. **Arthritis Rheum** 1989 Sep;32(9):1065–73

Transforming growth factor–beta (TGF beta) is chemotactic for human monocytes and induces their expression of angiogenic activity. Wiseman DM, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):793–800

Sex linked juvenile retinoschisis with optic disc and peripheral retinal neovascularisation. Pearson R, et al. **Br J Ophthalmol** 1989 Apr;73(4):311–3

Photocoagulation of raised new vessels by long–duration low–energy argon laser photocoagulation—a preliminary study. Zeki SM, et al. **Br J Ophthalmol** 1988 Nov; 72(11):837–40

Creation of neovascularised free flaps using vein grafts as pedicles: a preliminary report on experimental models. Hirasé Y, et al. **Br J Plast Surg** 1989 Mar;42(2):216–22

Vascularization of small liver metastases. Archer SG, et al. **Br J Surg** 1989 Jun;76(6):545–8

Vascularization of fetal cell suspension grafts in the excitotoxically lesioned adult rat thalamus. Dusart I, et al. **Brain Res Dev Brain Res** 1989 Aug 1;48(2):215–28

Angiogenesis on the optic tectum of albino Xenopus laevis tadpoles. Rovainen CM, et al. **Brain Res Dev Brain Res** 1989 Aug 1;48(2):197–213

Intrinsic vascularization of granuloma in experimental paracoccidioidomycosis. Lenzi HL, et al. **Braz J Med Biol Res** 1988;21(5):945–7

Angiogenic activity of rat mammary carcinomas induced by 7,12–dimethylbenz[a]anthracene and its inhibition by medroxyprogesterone acetate: possible involvement of antiangiogenic action of medroxyprogesterone acetate in its tumor growth inhibition. Oikawa T, et al. **Cancer Lett** 1988 Dec 1;43(1–2):85–92

Factors influencing blood supply in wound granuloma quantitated by a new in vivo technique. Mahadevan V, et al. **Cancer Res** 1989 Jan 15;49(2):415–9

The chick chorioallantoic membrane assay: an improved technique for the study of angiogenic activity. Peek MJ, et al. **Exp Pathol** 1988;34(1):35–40

A contribution to studies on the mechanism of lymphocyte–induced angiogenesis: human peripheral blood mononuclear leucocytes with highest angiogenic activity. Polakowski IJ, et al. **Folia Biol (Praha)** 1988;34(6):349–55

Identification of vascular endothelial cells in murine omentum using the lectin, Dolichos biflorus agglutinin: possible applications in the study of angiogenesis. Williams RJ, et al. **Histochem J** 1989 May;21(5):271–8

Do mast cells and their products play a role in AIDS–related angiogenesis and immune dysfunction? [letter] Manconi R. **Int J Biol Markers** 1989 Apr–Jun;4(2):121–2

The role of mast cells in wound healing. Trabucchi E, et al. **Int J Tissue React** 1988;10(6):367–72 (32 ref.)

Powerful antiangiogenic activity of herbimycin A (named angiostatic antibiotic). Oikawa T, et al. **J Antibiot (Tokyo)** 1989 Jul;42(7):1202–4

A new activity of herbimycin A: inhibition of angiogenesis. Yamashita T, et al. **J Antibiot (Tokyo)** 1989 Jun; 42(6):1015–7

Mechanochemical switching between growth and differentiation during fibroblast growth factor–stimulated angiogenesis in vitro: role of extracellular matrix. Ingber DE, et al. **J Cell Biol** 1989 Jul;109(1):317–30

Control of angiogenic activity in carcinogen–initiated and neoplastic hamster pouch keratinocytes and their hybrid cells. Polverini PJ, et al. **J Oral Pathol** 1988 Nov; 17(9–10):522–7

Angiogenesis in rat aorta ring explant cultures. Diglio CA, et al. **Lab Invest** 1989 Apr;60(4):523–31

Angiogenic properties of normal and psoriatic skin associate with epidermis, not dermis. Malhotra R, et al. **Lab Invest** 1989 Aug;61(2):162–5

Angiogenesis in normal and psoriatic skin. Wolf JE Jr. **Lab Invest** 1989 Aug;61(2):139–42 (64 ref.)

Suloctidil increases the rat brain cortex microvascular regeneration after a lesion. De Paermentier F, et al. **Life Sci** 1989;44(1):41–7

Induction of angiogenesis during the transition from hyperplasia to neoplasia. Folkman J, et al. **Nature** 1989 May 4;339(6219):58–61

Identification of angiogenic activity and the cloning and expression of platelet–derived endothelial cell growth factor. Ishikawa F, et al. **Nature** 1989 Apr 13; 338(6216):557–62

Angiogenesis. Successful growth of tumours [news] Ross R. **Nature** 1989 May 4;339(6219):16–7

Angiogenesis induced by the lipid fraction prepared from bovine follicular fluid. Sato E. **Nippon Juigaku Zasshi** 1987 Aug;50(4):930–2

Iris neovascularization associated with obstruction of the central retinal artery. Duker JS, et al. **Ophthalmology** 1988 Sep;95(9):1244–50

Induction of conjunctival transdifferentiation on vascularized corneas by photothrombotic occlusion of corneal neovascularization. Huang AJ, et al. **Ophthalmology** 1988 Feb;95(2):228–35

The rate of vascularization of coralline hydroxyapatite. Grenga TE, et al. **Plast Reconstr Surg** 1989 Aug; 84(2):245–9

Study on angiogenesis induced by SP2/0 and HeLa tumor cells. Xiu RJ, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(1):26–32

Mutagenesis of aspartic acid–116 enhances the ribonucleolytic activity and angiogenic potency of angiogenin. Harper JW, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7139–43

Induction of angiogenic response by chemically stable prostacyclin analogs. Ohtsu A, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Jul; 33(1):35–9

The effects of total lymphoid irradiation upon corneal vascularization in the rat following chemical cautery. Suvarnamani C, et al. **Radiat Res** 1989 Feb;117(2):259–72

Bloodless coup. Inhibiting blood vessel growth could starve solid tumors. Beardsley TM. **Sci Am** 1989 Aug;261(2):18–9

Control of angiogenesis with synthetic heparin substitutes. Folkman J, et al. **Science** 1989 Mar 17;243(4897):1490–3

Angiogenic properties of Kaposi's sarcoma–derived cells after long–term culture in vitro. Salahuddin SZ, et al. **Science** 1988 Oct 21;242(4877):430–3

[Experimental study of the neovascularization of a flap created from a vascular axial loop] Le Danvic M, et al. **Ann Chir Plast Esthet** 1988;33(4):377–81 (Eng. Abstr.) **(Fre)**

[A case of neovascular membrane in birdshot choroidopathy associated with sarcoidosis] Guigui A, et al. **Bull Soc Ophtalmol Fr** 1988 Jan;88(1):71–2, 74 **(Fre)**

[Solar radiation and choroidal neovascularization. An epidemiologic study] Gastro–Correia J, et al. **Ophtalmologie** 1988 Apr–Jun;2(2):177–9 (Eng. Abstr.) **(Fre)**

[Angiogenesis in oncology] Cariou R, et al. **Presse Med** 1988 Nov 26;17(42):2219–21 **(Fre)**

[Ultrastructural regularities of new growth of secondary micro blood vessels in the prenatal period of human morphogenesis] Bobrik II, et al. **Arkh Anat Gistol Embriol** 1989 Feb;96(2):23–6 (Eng. Abstr.) **(Rus)**

[Tumor necrotic factor as an inhibitor of angiogenesis] Sopotsinskaia EB, et al. **Patol Fiziol Eksp Ter** 1988 Sep–Oct;(5):62–4 (Eng. Abstr.) **(Rus)**

[Angiogenesis as a target for antitumor actions] Ushmorov AG, et al. **Vopr Onkol** 1989;35(3):263–70 (58 ref.) **(Rus)**

[Effect of a limitation of the food ration on macrophage functional activity and angiogenesis in mice with metastasizing tumors] Sopotsinskaia EB, et al. **Vopr Pitan** 1988 Nov–Dec;(6):48–50 (Eng. Abstr.) **(Rus)**

CHEMICALLY INDUCED

Effect of heparin on the angiogenic potency of basic and acidic fibroblast growth factors in the rabbit cornea assay. Herbert JM, et al. **Int J Tissue React** 1988;10(3):133–9

Interleukin–1 injected into mammalian brain stimulates astrogliosis and neovascularization. Giulian D, et al. **J Neurosci** 1988 Jul;8(7):2485–90

COMPLICATIONS

Macular subretinal neovascularization in choroidal tuberculosis. Chung YM, et al. **Ann Ophthalmol** 1989 Jun; 21(6):225–9

Vessel–like sprouts from "fibroblasts" in vitro: further evidence for angiogenic hypothesis of wound healing and fibrosis: a comment [letter] Franks LM. **Cell Biol Int Rep** 1988 Nov;12(11):987

Massive bilateral retinal vascular occlusion [letter] Singerman LJ. **Retina** 1989;9(2):154

[Serous detachment of retinal pigment epithelium and occult subretinal neovascularizations] Sahel J, et al. **Bull Soc Ophtalmol Fr** 1988 Mar;88(3):429–32 (10 ref.) (Eng. Abstr.) **(Fre)**

DIAGNOSIS

An immunohistochemical study of neovasculature in human brain tumors. Sawada T, et al. **Acta Pathol Jpn** 1988 Jun; 38(6):713–21

Diabetes as a risk factor for retinal neovascularization in retinal vein occlusion. Funderburk RL, et al. **Ann Ophthalmol** 1989 Feb;21(2):65–6

Clinical application of indocyanine green angiography to choroidal neovascularization. Hayashi K, et al. **Jpn J Ophthalmol** 1989;33(1):57–65

Sonographic hepatic arterialisation in newborns receiving parenteral nutrition. Sellier N, et al. **Pediatr Radiol** 1988; 18(6):471–3

[Clinical use of indocyanine green angiography in the diagnosis of choroidal neovascular diseases] Hasegawa Y, et al. **Fortschr Ophthalmol** 1988;85(4):410–2 (Eng. Abstr.) **(Ger)**

[Localization of occult choroid neovascularizations] Hasegawa Y. **Fortschr Ophthalmol** 1989;86(3):224–6 (Eng. Abstr.) **(Ger)**

[Principle and use of the simultaneous fluorescein angioscope] Jean B, et al. **Fortschr Ophthalmol** 1988;85(5):574–9 (Eng. Abstr.) **(Ger)**

[Clinical diagnosis of proliferative vitreoretinopathy] Koerner F. **Klin Monatsbl Augenheilkd** 1989 May; 194(5):383–8 (Eng. Abstr.) **(Ger)**

[Early lesion of choroidal neovascularization. 1. Senile disciform macular degeneration] Miyabe Y, et al. **Nippon Ganka Gakkai Zasshi** 1988 Jun;92(6):1037–43 (Eng. Abstr.) **(Jpn)**

DRUG THERAPY

Effect of the mast cell activator compound 48/80 and heparin on angiogenesis in the chick chorioallantoic membrane. Clinton M, et al. **Int J Microcirc Clin Exp** 1988 Nov; 7(4):315–26

ENZYMOLOGY

Involvement of heparanase in tumor metastasis and angiogenesis. Vlodavsky I, et al. **Isr J Med Sci** 1988 Sep–Oct;24(9–10):464–70

ETIOLOGY

Bilateral subretinal neovascularization after focal argon laser photocoagulation for diabetic macular edema. Berger AR, et al. **Am J Ophthalmol** 1989 Jul 15;108(1):88–90

Contact lens–related deep stromal neovascularization. Rozenman Y, et al. **Am J Ophthalmol** 1989 Jan 15; 107(1):27–32

Complications with silicone lens wear [letter] Holden BA, et al. **Am J Optom Physiol Opt** 1988 Sep;65(9):765

Sarcoidosis and peripheral neovascularization. Steahly LP. **Ann Ophthalmol** 1988 Nov;20(11):426–7, 430

Cellular mechanisms of iris neovascularization secondary to retinal vein occlusion. Nork TM, et al. **Arch Ophthalmol** 1989 Apr;107(4):581–6

Subretinal neovascularization associated with retinochoroidal colobomas. Maberley AL, et al. **Can J Ophthalmol** 1989 Jun;24(4):172–4

Effects of prednisolone and human epidermal growth factor on angiogenesis in granulation tissue of gastric ulcer induced by acetic acid. Hase S, et al. **Digestion** 1989; 42(3):135–42

Effect of endurance and "sprint" physical training on lymphocyte–induced angiogenesis in rats. Polakowski IJ, et al. **Folia Biol (Praha)** 1989;35(1):45–9

Subretinal neovascularization complicating laser photocoagulation of diabetic maculopathy. Lewen RM. **Ophthalmic Surg** 1988 Oct;19(10):734–7

Iatrogenic choroidal neovascularization after krypton red laser photocoagulation. Orth DH, et al. **Ophthalmic Surg** 1989 Apr;20(4):273–7

Cataract wound neovascularization. An often overlooked

cause of vitreous hemorrhage. Bene C, et al. **Ophthalmology** 1989 Jan;96(1):50–3

Neovascularization of the optic disc associated with obstruction of the central retinal artery. Duker JS, et al. **Ophthalmology** 1989 Jan;96(1):87–91

Subretinal neovascularization after focal argon laser for diabetic macular edema. Varley MP, et al. **Ophthalmology** 1988 May;95(5):567–73

Subfoveal neovascularization in the ocular histoplasmosis syndrome. A natural history study. Kleiner RC, et al. **Retina** 1988;8(4):225–9

[Subretinal neovessels caused by photocoagulation] Malthieu D, et al. **Bull Soc Ophtalmol Fr** 1988 May;88(5):645–6 **(Fre)**

METABOLISM

Transient expression of insulin-like growth factor I immunoreactivity by vascular cells during angiogenesis. Hansson HA, et al. **Exp Mol Pathol** 1989 Feb;50(1):125–38

Effect of inhibitors of arachidonic acid metabolism on corneal neovascularization in the rat. Haynes WL, et al. **Invest Ophthalmol Vis Sci** 1989 Jul;30(7):1588–93

PATHOLOGY

Neovascularization of pericellular fibrosis in alcoholic liver disease. Taguchi K, et al. **Acta Pathol Jpn** 1988 May; 38(5):615–26

Renin in glioblastoma multiforme and its role in neovascularization. Ariza A, et al. **Am J Clin Pathol** 1988 Oct;90(4):437–41

Idiopathic subretinal neovascularization. Chee C, et al. **Ann Acad Med Singapore** 1989 Mar;18(2):226–31

A new model of experimental choroidal neovascularization in the rat. Dobi ET, et al. **Arch Ophthalmol** 1989 Feb; 107(2):264–9

Leukotriene C4 stimulates angiogenesis in bovine carotid artery endothelial cells in vitro. Kanayasu T, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):572–8

Reduction of tumour bed effect after angiogenic stimulation. Penhaligon M, et al. **Br J Radiol** 1988 Dec;61(732):1168–71

Choroidal neovascularization and central serous chorioretinopathy. Gomolin JE. **Can J Ophthalmol** 1989 Feb;24(1):20–3

A model of subretinal neovascularization in the pigmented rat. Frank RN, et al. **Curr Eye Res** 1989 Mar;8(3):239–47

Retinovitreal neovascularization in the Royal College of Surgeons rat. Weber ML, et al. **Curr Eye Res** 1989 Jan; 8(1):61–74

Induction of angiogenesis by intraperitoneal injection of asbestos fibers. Branchaud RM, et al. **FASEB J** 1989 Apr; 3(6):1747–52

Factors influencing the results of vitreous surgery in diabetic retinopathy. I. Iris rubeosis and/or active neovascularization at the fundus. Oldendoerp J, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(1):1–8

The effect of transscleral laser cyclophotocoagulation on rabbit ciliary body vascularization. van der Zypen E, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(2):172–9

Morphology of intraretinal new vessels in the PETH rat. van Driel D, et al. **Graefes Arch Clin Exp Ophthalmol** 1988; 226(6):576–82

Abortive neovascular outgrowths discovered during vitrectomy for diabetic vitreous haemorrhage. Wong HC, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(3):237–40

Experimental subretinal neovascularization in the rabbit. Zhu ZR, et al. **Graefes Arch Clin Exp Ophthalmol** 1989; 227(3):257–62

Angioid streaks and sub-retinal neovascularisation. Pahwa V. **Indian J Ophthalmol** 1987;35(5–6):330

Histopathology of experimental preretinal neovascularization. de Juan E Jr, et al. **Invest Ophthalmol Vis Sci** 1989 Jul;30(7):1495–503

Angiogenic activity of the atherosclerotic carotid artery plaque. Alpern-Elran H, et al. **J Neurosurg** 1989 Jun; 70(6):942–5

The influence of postoperative vessel occlusion on the viability of free microvascular skin-fat flaps and island flaps in rats. Oswald P, et al. **J Reconstr Microsurg** 1988 Oct; 4(5):403–7

Ultrastructure of blood vessels newly formed during tumor angiogenesis. Zhou XJ, et al. **J Tongji Med Univ** 1988; 8(3):140–3

Origin of pericytes in neovascularization of rat cornea. Nakayasu K. **Jpn J Ophthalmol** 1988;32(2):105–12

Diabetic choroidal involvement: scanning electron microscopy study. Fryczkowski AW. **Klin Oczna** 1988 Apr–May;90(4–5):145–9

Induction of capillary neoformation in the heart and skeletal muscle. Ljungqvist A, et al. **Morphol Embryol (Bucur)** 1988 Oct–Dec;34(4):291–5

Inhibition of tumor angiogenesis activity in C3H mouse mammary tumor by medroxyprogesterone acetate. Fujimoto J, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jan;41(1):77–82

Indocyanine green videoangiography of choroidal neovascularization. Destro M, et al. **Ophthalmology** 1989 Jun;96(6):846–53

Parietal centripetal and centrifugal thickening neovascularization in the descending anterior coronary artery. Possible relations with the problem of collateral circulation. Desinan L, et al. **Virchows Arch [A]** 1989; 415(3):211–7

Two- and three-dimensional ultrastructural observation of two cell angiogenesis in human granulation tissue. Wakui S. **Virchows Arch [B]** 1988;56(2):127–39

[A morphometric analysis of ultrastructural features of capillary endothelial cells in tumour neovascularization] Zhou XJ, et al. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Dec;17(4):241–3 (Eng. Abstr.) **(Chi)**

[A case of multiple epitheliopathy associated with sub-retinal neovascularization] Espinasse-Berrod MA, et al. **J Fr Ophtalmol** 1988;11(2):191–4 (Eng. Abstr.) **(Fre)**

[Clinical study on retinal vein occlusion. Part 3: Retinal neovascularization outside the involved segment in branch retinal vein occlusion] Oshikiri M. **Nippon Ganka Gakkai Zasshi** 1988 May;92(5):715–20 (Eng. Abstr.) **(Jpn)**

[Implication of retinal pigment epithelium on experimental subretinal neovascularization in the developmental stage] Yamagishi K, et al. **Nippon Ganka Gakkai Zasshi** 1988 Oct; 92(10):1629–36 (Eng. Abstr.) **(Jpn)**

[Implication of retinal pigment epithelium on experimental subretinal neovascularization in the involutional stage] Yamagishi K, et al. **Nippon Ganka Gakkai Zasshi** 1988 Oct; 92(10):1618–28 (Eng. Abstr.) **(Jpn)**

[Morphological study of experimental corneal neovascularization after anterior uveal ischemia] Yamane A, et al. **Nippon Ganka Gakkai Zasshi** 1989 Mar; 93(3):315–21 (Eng. Abstr.) **(Jpn)**

[Histochemical study on enzymatic barrier of the newly formed vessels in infarcts] Sasaki O, et al. **No To Shinkei** 1988 Nov;40(11):1037–43 (Eng. Abstr.) **(Jpn)**

[Panphotocoagulation in simple and proliferative diabetic retinopathy] Mirkiewicz-Sieradzka B, et al. **Klin Oczna** 1988 Sep;90(9):317–9 (Eng. Abstr.) **(Pol)**

[The modifying action of tumor necrosis factor on angiogenesis] Lisniak IA, et al. **Eksp Onkol** 1989;11(3):50–2 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Capillary growth from reversed rat aortic segments cultured in collagen gel. Mori M, et al. **Acta Pathol Jpn** 1988 Dec; 38(12):1503–12

Matrix control of tumor angiogenesis. Reilly W, et al. **Adv Exp Med Biol** 1988;242:221–7

Vasomotor activity of moderately well-developed canine coronary collateral circulation. Hautamaa PV, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H890–7

Neovascularisation and its role in the osteoarthritic process. Brown RA, et al. **Ann Rheum Dis** 1988 Nov;47(11):881–5 (55 ref.)

Natural course of poorly defined choroidal neovascularization associated with macular degeneration. Bressler NM, et al. **Arch Ophthalmol** 1988 Nov; 106(11):1537–42

Retinal thinning and regression of neovascularization [letter] Campochiaro PA. **Arch Ophthalmol** 1988 Dec; 106(12):1646–7

Intraocular neovascularization and retinal energy metabolism [letter] Wilson DJ. **Arch Ophthalmol** 1989 Jul;107(7):953–4

Extraction of angiogenesis factor from chronic subdural haematomas. Significance in capsule formation and haematoma growth. Nakamura S, et al. **Brain Inj** 1989 Apr–Jun;3(2):129–36

Vascular response in a non-uterine site to implantation-stage embryos in the rat and guinea-pig: in vivo and ultrastructural studies. Rogers PA, et al. **Cell Tissue Res** 1988 Oct;254(1):217–24

Coronary angiogenesis during long-term hypertension and left ventricular hypertrophy in dogs. Tomanek RJ, et al. **Circ Res** 1989 Aug;65(2):352–9

Central retinal vein occlusion and iris neovascularization hemorrhage. Myers KJ, et al. **J Am Optom Assoc** 1988 Oct;59(10):787–90

Revascularization of nerve grafts: an experimental study. Penkert G, et al. **J Reconstr Microsurg** 1988 Jul;4(4):319–25

Do mast cells intervene in the vasoproliferative process of the rheumatoid synovitis? Ribatti D, et al. **J Submicrosc Cytol Pathol** 1988 Jul;20(3):635–7

Metabolism of tumor regression from angiogenesis inhibition: 31P magnetic resonance spectroscopy. Hoffer FA, et al. **Magn Reson Med** 1989 Aug;11(2):202–8

Proliferative sarcoid retinopathy. Duker JS, et al. **Ophthalmology** 1988 Dec;95(12):1680–6

Growth features of choroidal neovascular membranes in age-related macular degeneration. Klein ML, et al. **Ophthalmology** 1989 Sep;96(9):1416–9; discussion 1420–1

Growth rate of subretinal neovascularization in age-related macular degeneration. Vander JF, et al. **Ophthalmology** 1989 Sep;96(9):1422–6; discussion 1426–9

Rate of basement membrane biosynthesis as an index to angiogenesis. Maragoudakis ME, et al. **Tissue Cell** 1988; 20(4):531–9

Mast-cell secretion and angiogenesis, a quantitative study in rats and mice. Norrby K, et al. **Virchows Arch [B]** 1989; 57(4):251–6

[Macular degeneration related to age and cystoid macular edema. Apropos of 95 cases (100 eyes)] Soubrane G, et al. **J Fr Ophtalmol** 1988;11(11):711–20 (34 ref.) (Eng. Abstr.) **(Fre)**

[Effect of rubeosis iridis and active neovascularization of the fundus on vitreous surgery in diabetic retinopathy] Oldendoerp J, et al. **Klin Monatsbl Augenheilkd** 1988 Jun; 192(6):650–9 (Eng. Abstr.) **(Ger)**

[Experimental studies of the angiogenic activity of the detached retina] Prost M. **Klin Oczna** 1988 Sep; 90(9):299–301 (Eng. Abstr.) **(Pol)**

[Neoplastic angiogenesis factors] Boratyński J, et al. **Postepy Hig Med Dosw** 1988 Jul–Aug;42(4):444–58 (76 ref.) (Eng. Abstr.) **(Pol)**

[Revascularization of a free autologous transplant in correcting an extensive defect of the long bone by bilocal osteosynthesis using the Ilizarov method] Barabash AP, et al. **Ortop Travmatol Protez** 1988 Dec;(12):6–10 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Retinal pigment epithelial cells release an inhibitor of neovascularization. Glaser BM, et al. **Birth Defects** 1988; 24(1):121–7

The sulfated polysaccharide–peptidoglycan complex potently inhibits embryonic angiogenesis and tumor growth in the presence of cortisone acetate. Inoue K, et al. **Carbohydr Res** 1988 Oct 1;181:135–42

Regulation of the activity of a new inhibitor of angiogenesis by a cancer suppressor gene. Rastinejad F, et al. **Cell** 1989 Feb 10;56(3):345–55

Inhibition of tumor angiogenesis activity by medroxyprogesterone acetate in gynecologic malignant tumors. Fujimoto J, et al. **Invasion Metastasis** 1989; 9(5):269–77

RADIOGRAPHY

Angiogenesis and blood–brain barrier breakdown modulate CT contrast enhancement: an experimental study in a rabbit brain–tumor model. Zagzag D, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):141–6

RADIOTHERAPY

An iodine-125 applicator designed for irradiating blood vessels growing into the cornea of the eye. Hering ER, et al. **Br J Radiol** 1989 Mar;62(735):266–8

SURGERY

Retinal revascularization following laser photocoagulation treatment for choroidal neovascular membranes. Caskey PJ, et al. **Arch Ophthalmol** 1988 Nov;106(11):1528–32

Observations following laser treatment for choroidal neovascularization [editorial] Fine SL. **Arch Ophthalmol** 1988 Nov;106(11):1524–5 (6 ref.)

Extensive argon laser photocoagulation in the treatment of proliferative diabetic retinopathy. Aylward GW, et al. **Br J Ophthalmol** 1989 Mar;73(3):197–201

Laser treatment of subfoveal new vessels in senile macular degeneration. Jalkh AE. **Bull Soc Belge Ophtalmol** 1987; 223 Pt 2:59–62

Dye laser photocoagulation of macular subretinal neovascularization in pathological myopia. A randomized study of three different wavelengths. Brancato R, et al. **Int Ophthalmol** 1988 Feb;11(4):235–8

Argon green laser treatment of peripapillary choroidal neovascular membranes. Cialdini AP, et al. **Ophthalmic Surg** 1989 Feb;20(2):93–9

Foveal ablation for subfoveal choroidal neovascularization. Boldrey EE. **Ophthalmology** 1989 Sep;96(9):1430–5; discussion 1435–6

Clinicopathologic study of organic dye. Laser in the human fundus. Brooks HL Jr, et al. **Ophthalmology** 1989 Jun; 96(6):822–34

The efficacy of panretinal photocoagulation for neovascularization of the iris after central retinal artery obstruction. Duker JS, et al. **Ophthalmology** 1989 Jan; 96(1):92–5

Visual loss after successful photocoagulation of choroidal neovascularization. Han DP, et al. **Ophthalmology** 1988 Oct;95(10):1380–4

Regression of disc neovascularization by photocoagulation in the acute retinal necrosis syndrome. Han DP, et al. **Retina** 1988;8(4):244–6

Diagnosis and laser treatment of choroidal neovascularization in age-related macular degeneration (senile macular degeneration). Murphy RP. **Yen Ko Hsueh Pao** 1986 Mar; 2(1):58–62 (8 ref.)

[Treatment of prepapillary neovascularization in the absence of an angiographically visible ischemic area] Bonn G, et al. **Bull Soc Ophtalmol Fr** 1988 Nov;88(11):1273–6 (Eng. Abstr.) **(Fre)**

[Coagulation therapy of senile macular degeneration. II. Extrafoveal choroid neovascularization] Pauleikhoff D, et al. **Klin Monatsbl Augenheilkd** 1988 Sep;193(3):266–70 (Eng. Abstr.) **(Ger)**

[Retinal cryocoagulation in rubeosis iridis] Schildwächter A, et al. **Klin Monatsbl Augenheilkd** 1988 Aug;193(2):146–51 (Eng. Abstr.) **(Ger)**

[Therapy of parapapillary subretinal neovascularization] Stur M. **Klin Monatsbl Augenheilkd** 1988 Oct;193(4):407–11 (Eng. Abstr.) **(Ger)**

THERAPY

Current management of choroidal neovascularization. Singerman LJ. **Ann Ophthalmol** 1988 Nov;20(11):415–20, 423 (6 ref.)

Silicone oil for progressive anterior ocular neovascularization after failed diabetic vitrectomy [published erratum appears in Arch Ophthalmol 1989 Jul;107(7):1030] McCuen BW 2d, et al. **Arch Ophthalmol** 1989 May;107(5):677–82

[Treatment of an intravitreous bridle in sickle cell retinopathy] Comte P, et al. **Bull Soc Ophtalmol Fr** 1988 Feb;88(2):257–9 **(Fre)**

NEPHELOMETRY AND TURBIDIMETRY

INSTRUMENTATION

Evaluation of the new Behring Nephelometer in the measurement of M proteins. Vuorinen PI, et al. **Am J Clin Pathol** 1989 Jul;92(1):93–6

Critical evaluation of the TDx Turbo Nephelometry System. Renoe BW, et al. **Clin Chem** 1988 Dec;34(12):2524–7

Unsuitability of laser nephelometer in the evaluation of factor VIII antigen. Ruzza G, et al. **Folia Haematol (Leipz)** 1989; 116(2):269–75

[ABACTO-SCREEN: a new system for the rapid screening of bacteriuria. Evaluation of the precision versus the traditional methods and compared with the Abbott MS-2] Allocca F, et al. **Quad Sclavo Diagn** 1987 Sep;23(3):295–301 (Eng. Abstr.) **(Ita)**

[Use of the FEK-nephelometer in determining circulating immune complexes] Gudina RV. **Lab Delo** 1988;(7):67–8 **(Rus)**

[Laser nephelometry in clinical immunology (review of the literature)] Osipov SG, et al. **Lab Delo** 1988;(10):9–15 (38 ref.) **(Rus)**

METHODS

Measurement of microgram quantities of protein by a generally applicable turbidimetric procedure. Vera JC. **Anal Biochem** 1988 Oct;174(1):187–96

Vesiculation of bovine erythrocyte membranes: two methods of quantification. Gaczynska M, et al. **Cytobios** 1988; 55(220):17–20

Comparison of two commercial nephelometric methods for apoprotein A-I and apoprotein B with standardized apoprotein A-I and B radioimmunoassays. Adolphson JL, et al. **J Lipid Res** 1989 Apr;30(4):597–606

Measurement of urinary albumin excretion (UAE) in diabetic patients: immunonephelometry versus radioimmunoassay. Giampietro O, et al. **J Nucl Med Allied Sci** 1989 Jul–Sep; 33(3):252–7

A rapid laser immunonephelometric assay for serum amyloid A (SAA) and its application to the diagnosis of kidney allograft rejection. Hocke G, et al. **Klin Wochenschr** 1989 Apr 17;67(8):447–51

[Nephelometric measurement of rheumatoid factor: evaluation of cut off value as a screening test] Ohara T, et al. **Rinsho Byori** 1988 Dec;36(12):1413–6 **(Jpn)**

[Immuno turbidimetric assay of heparin cofactor II] Takahashi K, et al. **Rinsho Byori** 1988 Aug;36(8):947–51 **(Jpn)**

[Kinetic study on dissociation-association and conformational changes in proteins by stopped-flow X-ray scattering] Kihara H, et al. **Seikagaku** 1988 Dec;60(12):1371–6 **(Jpn)**

NEPHRECTOMY

Bilateral renal tumours with reference to the reoperation of a solitary kidney resected for tumour. Zana J, et al. **Acta Chir Hung** 1988;29(2):187–95

The solitary kidney: a model of chronic hyperfiltration in humans. Fotino S. **Am J Kidney Dis** 1989 Feb;13(2):88–98 (92 ref.)

Increased single-nephron protein excretion after renal ablation in nephrotic rats. Meyer TW, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):F1243–8

Endogenous ANP augments fractional excretion of Pi, Ca, and Na in rats with reduced renal mass. Ortola FV, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):F1091–7

Effect of dietary K+ and 75% nephrectomy on the morphology of principal cells in CCDs. Zalups RK. **Am J Physiol** 1989 Mar;256(3 Pt 2):F387–96

Plasma from uninephrectomized rats stimulates phospholipid methylation and arachidonic acid release in renal-cortical slices. Banfić H, et al. **Biochem J** 1989 Jun 1;260(2):365–9

Extracellular Ca2+ influences 1,2-diacylglycerol and inositol monophosphate formation in renal cortical slices stimulated with plasma obtained from uninephrectomized rats. Banfić H. **Biochim Biophys Acta** 1989 Apr 26; 1002(3):273–6

Pharmacokinetics of theophylline before and after nephrectomy in dogs. Brashear RE, et al. **Biopharm Drug Dispos** 1989 Jan–Feb;10(1):87–99

Nephrectomy in renal carcinoma with distant metastasis. Onishi T, et al. **Br J Urol** 1989 Jun;63(6):600–4

Allograft nephrectomy--a 16-year experience. Sharma DK, et al. **Br J Urol** 1989 Aug;64(2):122–4

Partial nephrectomy: an option in calculus disease? Timoney AG, et al. **Br J Urol** 1988 Dec;62(6):511–4

5-Bromodeoxyuridine-induced carcinogenesis and its modification by persistent estrus syndrome, unilateral nephrectomy, and X-irradiation in rats. Napalkov NP, et al. **Cancer Res** 1989 Jan 15;49(2):318–23

Treatment of urinary fistulas after resection of horseshoe kidneys by selective arterial embolization. Stefani P, et al. **Cardiovasc Intervent Radiol** 1989 Jan–Feb;12(1):18–21

Changes in glomerular filtration rate, lithium clearance and plasma protein clearances in the early phase after unilateral nephrectomy in living healthy renal transplant donors. Strandgaard S, et al. **Clin Sci** 1988 Dec;75(6):655–9

Multicystic renal dysplasia: nephrectomy versus conservative treatment. Lennert T, et al. **Contrib Nephrol** 1988;67:183–7 (6 ref.)

Regulation of renal 25-hydroxyvitamin D-1-hydroxylase activity in the mouse after uninephrectomy. Almond JR, et al. **Endocrinology** 1989 May;124(5):2118–21

Enzymes of the de novo and salvage pathways of purine synthesis in renal hypertrophy. Contrasting effects of early diabetes and unilateral nephrectomy. Beardsley SJ, et al. **Enzyme** 1988;40(4):231–7

Effect of volume expansion on hemodynamic variables in nephrectomized dogs. Tsunetoshi T, et al. **Eur J Appl Physiol** 1989;58(7):705–9

Endoscopic treatment of refluxing ureteric stump following nephrectomy with Tissucol and teflon injection. Carini M, et al. **Eur Urol** 1989;16(4):312–4

Superselective embolization of inoperable renal carcinoma in patients with solitary kidney. Deutz FJ, et al. **Eur Urol** 1988;15(1-2):134–8

Decreased adrenal medullary catecholamines in adrenal transplanted parkinsonian patients compared to nephrectomy patients. Stoddard SL, et al. **Exp Neurol** 1989 Jun;104(3):218–22

The influence of cisplatin and unilateral nephrectomy on the response of the rat kidney to irradiation. van Rongen E, et al. **Int J Radiat Biol** 1989 Apr;55(4):661–77

Psoas abscess and giant fistula twenty-one years after nephrectomy. van Heesewijk JP, et al. **J Belge Radiol** 1989 Feb;72(1):21–3

Effect of methylmercury body burden on kidney following unilateral nephrectomy. Chen WJ, et al. **J Environ Pathol Toxicol Oncol** 1988;8(7 Spec No):7–13

Effect of amiloride on the compensatory renal growth that follows uninephrectomy in mice. Grantham JJ, et al. **J Lab Clin Med** 1989 Aug;114(2):129–34

Sex vulnerability in the subtotal nephrectomy model of glomerulosclerosis in the rat. Lombet JR, et al. **J Lab Clin Med** 1989 Jul;114(1):66–74

Effect of protein intake on lifelong changes in renal function of rats unilaterally nephrectomized at young age. Provoost AP, et al. **J Lab Clin Med** 1989 Jul;114(1):19–26

Dietary protein and glomerular response to subtotal nephrectomy in the rat. Savin VJ, et al. **J Lab Clin Med** 1989 Jan;113(1):41–9

Alterations of iodine-131 MIBG biodistribution in an anephric patient: comparison to normal and impaired renal function. Tobes MC, et al. **J Nucl Med** 1989 Sep; 30(9):1476–82

Renal toxicity of interleukin-2 administration in patients with metastatic renal cell cancer: effect of pre-therapy nephrectomy. Belldegrun A, et al. **J Urol** 1989 Mar; 141(3):499–503

Renal loss following extracorporeal shock wave lithotripsy. Donahue LA, et al. **J Urol** 1989 Sep;142(3):809–11

Multicystic dysplastic kidney: is nephrectomy still appropriate? Gordon AC, et al. **J Urol** 1988 Nov;140(5 Pt 2):1231–4

Surgery for duplex kidneys with ectopic ureters: ipsilateral ureteroureterostomy versus polar nephrectomy. Smith FL, et al. **J Urol** 1989 Aug;142(2 Pt 2):532–4; discussion 542–3

Prognosis in renal cell carcinoma: analysis of clinical course following nephrectomy. Tobisu K, et al. **Jpn J Clin Oncol** 1989 Jun;19(2):142–8

A patient with advanced renal cell carcinoma managed by multimodal treatment including extensive surgery, interventional radiology and immunotherapy [clinical conference] Tazaki H, et al. **Keio J Med** 1988 Jun; 37(2):183–97

Effects of uninephrectomy and high protein feeding in cyclosporine nephropathy. Gillum DM, et al. **Kidney Int** 1989 Aug;36(2):194–200

Unilateral nephrectomy and glomerular solute transport in the dog. Henderson LW, et al. **Kidney Int** 1989 Feb; 35(2):589–94

Effect of heparin on the glomerular structure and function of remnant nephrons. Ichikawa I, et al. **Kidney Int** 1988 Nov;34(5):638–44

The effects of nephrectomy and probenecid on in vivo clearance of adenosine-3',5'-monophosphate from rat plasma. Coulson R, et al. **Life Sci** 1974 Sep 1;15(5):877–86

Prolonged blood pressure elevation after endothelin administration in bilaterally nephrectomized rats. Kohno M, et al. **Metabolism** 1989 Aug;38(8):712–3

Changes in lipoproteins induced by the remnant kidney tissue or binephrectomy in chronic uremic patients treated by hemodialysis. Robert D, et al. **Metabolism** 1989 Jun; 38(6):514–21

Amplification of the natriuretic response to acute unilateral nephrectomy by volume expansion. Chaves C, et al. **Miner Electrolyte Metab** 1988;14(5):277–82

Compensatory changes in calcium uptake and phospholipid composition in rat renal brush border membranes after unilateral nephrectomy. Ferrari C, et al. **Miner Electrolyte Metab** 1988;14(5):297–301

Partial purification and characterisation of a renal growth factor from plasma of uninephrectomised rats. Manzano F, et al. **Nephrol Dial Transplant** 1989;4(5):334–8

Tissue uptake of 125I-beta 2-microglobulin (beta 2-M) in anephric animals in the presence or absence of aluminium intoxication. Ureña P, et al. **Nephrol Dial Transplant** 1988; 3(5):632–6

Dialysis after bilateral nephrectomy. A case report [letter] Candela AM, et al. **Nephron** 1989;53(1):88

Acquired renal cysts in five-sixths nephrectomized rats: the roles of oxalate deposits in renal tubules and a renotropic factor. Ono K, et al. **Nephron** 1989;51(3):393–8

Body composition changes in the subtotally nephrectomized rat fed differing dietary proteins. Williams AJ, et al. **Nephron** 1989;51(3):384–7

Electrophysiology of rat distal colon after partial nephrectomy. Implications for K transport. Sandle GI, et al. **Pflugers Arch** 1988 Jul;412(1-2):172–82

Dose effect of captopril on renal hemodynamics and proteinuria in conscious, partially nephrectomized rats. Radin MJ, et al. **Proc Soc Exp Biol Med** 1989 Mar; 190(3):294–300

Lymphatic spread in renal cell carcinoma: have retroperitoneal lymph node dissection a therapeutic advantage? Gilloz A, et al. **Prog Clin Biol Res** 1989; 303:729–30

Recent advances in the surgical treatment of bilateral Wilms' tumor. Hanash KA. **Prog Clin Biol Res** 1989;303:635–52 (35 ref.)

Urological operations for solitary kidneys in children. Helmig FJ, et al. **Prog Pediatr Surg** 1989;23:42–50

Effects of antihypertensive drugs on renal function and atrial natriuretic polypeptide in spontaneously hypertensive rats with renal ablation. Yasujima M, et al. **Tohoku J Exp Med** 1989 May;158(1):85–94

Long-term renal, endocrine, and hematologic evaluation of kidney donors. Gonzalez R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1946–8

Evaluation of living-related kidney donors by intravenous digital subtraction angiography. Hosny MA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1949–50

Improved technique for organ harvesting. Kirste G, et al. **Transplant Proc** 1988 Oct;20(5):757

Harvesting techniques and right kidney effect. Pena JR, et al. **Transplant Proc** 1988 Oct;20(5):758–61

Procurement of kidneys with anomalies: long-term outcome. Rosenberg L, et al. **Transplant Proc** 1988 Oct;20(5):768–9

Results of living-donor nephrectomy: considerations for the donor and recipient. Streem SB, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1951–2

The use of horseshoe kidneys for transplantation. Vromen MA, et al. **Transplant Proc** 1988 Oct;20(5):765–6 (7 ref.)

Postnephrectomy evaluation of living related donors. Yadav RV, et al. **Transplant Proc** 1988 Oct;20(5):799

Indication for routine allograft nephrectomy in cases of irreversible rejection. Thomas PP, et al. **Transplantation** 1989 Jul;48(1):155

Methods and prognosis of the extirpation of pulmonary metastases following tumor nephrectomy. Schott G, et al. **Urol Int** 1988;43(5):272–4

Age factor in post-nephrectomy compensatory renal growth. Lu EX, et al. **Urol Res** 1989;17(2):135–9

[Effect of orally administered rhubarb extract on partial nephrectomy in rats] Huang SM, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Dec;27(12):734–7, 781 (Eng. Abstr.) **(Chi)**

[The medical treatment of renal cancer in adults] Sculier JP. **Rev Med Brux** 1989 May;10(5):190–6 (32 ref.) (Eng. Abstr.) **(Fre)**

[Laser micro-spectroanalytical determinations of aluminum in lumbar vertebrae of non-nephrectomized and 5/6 nephrectomized rats after application of dose- and time-dependent aluminum chloride solutions] Schmidt R, et al. **Acta Histochem (Jena)** 1989;85(2):175–86 (Eng. Abstr.) **(Ger)**

[Balloon catheter arterial occlusion before high-risk splenectomy and nephrectomy] Peitsch W, et al. **Dtsch Med Wochenschr** 1989 Sep 1;114(35):1316–9 (Eng. Abstr.) **(Ger)**

[Accomplishments of tumor surgery in pediatric nephroblastoma] Helmig FJ, et al. **Langenbecks Arch Chir** 1988;Suppl 2:515–8 (6 ref.) (Eng. Abstr.) **(Ger)**

[Causes, prevention and therapy of complications of lymphadenectomy following tumor nephrectomy] Fabricius PG, et al. **Urologe [A]** 1988 Jul;27(4):221–4 (Eng. Abstr.) **(Ger)**

[Pheochromocytoma and adrenal gland hyperplasia in a remaining atrophic kidney] Winter P, et al. **Urologe [A]** 1989 Jan;28(1):54–7 (Eng. Abstr.) **(Ger)**

[Solitary late thyroid metastasis of a surgically removed kidney cancer] Zahradka W, et al. **Z Gesamte Inn Med** 1988 Jul 15;43(14):398–9 (Eng. Abstr.) **(Ger)**

[Indications and limits of conservative and surgical organ preservation in kidney trauma] Käch K, et al. **Z Unfallchir Versicherungsmed Berufskr** 1988;81(3):205–12 **(Ger)**

[Kidney function in the course of compensatory hypertrophy following unilateral nephrectomy in the Wistar rat] Hagemann J, et al. **Z Urol Nephrol** 1989 Mar;82(3):143–50 (Eng. Abstr.) **(Ger)**

[A 12-year report of follow-up after surgical treatment of bilateral hypernephroid kidney cancer and subsequent diffuse metastatic breast cancer] Weber T.

Z Urol Nephrol 1988 Nov;81(11):681–4 (Eng. Abstr.) (Ger)

[Bilateral renal adenocarcinoma. A case treated by right tumor excision and left nephrectomy] Prencipe MG, et al. Minerva Urol Nefrol 1988 Apr–Jun;40(2):117–20 (Eng. Abstr.) (Ita)

[Anatomo–histopathologic correlations between needle biopsy diagnosis in transplanted kidney and renal explant] Sacchi G, et al. Pathologica 1988 Nov–Dec;80(1070):665–75 (Eng. Abstr.) (Ita)

[A partial nephrectomy in renal cell carcinoma] Masuda F, et al. Gan No Rinsho 1989 Aug;35(9):1025–9 (Eng. Abstr.) (Jpn)

[A case of polycystic kidney with bilateral nephrectomy] Iida T, et al. Hinyokika Kiyo 1988 May;34(5):862–5 (9 ref.) (Eng. Abstr.) (Jpn)

[Prolonged survival after right nephrectomy, excision of the inferior vena cava and ligation of the left renal vein: a case report] Asano T, et al. Nippon Hinyokika Gakkai Zasshi 1988 Dec;79(12):2027–30 (Eng. Abstr.) (Jpn)

[Effect of partial nephrectomy on calyceal and pelvic peristalsis in the isolated pig kidney] Ichikawa S. Nippon Hinyokika Gakkai Zasshi 1989 Mar;80(3):329–36 (Eng. Abstr.) (Jpn)

[Adrenal metastasis in renal cell carcinoma] Kurozumi T, et al. Nippon Hinyokika Gakkai Zasshi 1988 Oct; 79(10):1692–6 (Eng. Abstr.) (Jpn)

[Significance of transvascular embolization in radical nephrectomy] Kurozumi T, et al. Nippon Hinyokika Gakkai Zasshi 1988 Oct;79(10):1657–62 (Eng. Abstr.) (Jpn)

[Conservative surgery of renal cell carcinoma associated with renal (artery) aneurysm in solitary kidney—a case report] Takamizawa A, et al. Nippon Hinyokika Gakkai Zasshi 1989 Feb;80(2):274–8 (Eng. Abstr.) (Jpn)

[Relief from hemodialysis after combined chemotherapy and left–nephrectomy. A case of stage IIB, non–seminomatous testicular tumor] Uchida T, et al. Nippon Hinyokika Gakkai Zasshi 1988 Jun;79(6):1114–8 (Eng. Abstr.) (Jpn)

[The effects of nephrectomy and angiotensin converting enzyme inhibitor on production and clearance rates of angiotensinogen in dogs] Toyozaki N, et al. Nippon Naibunpi Gakkai Zasshi 1989 Feb 20;65(2):128–35 (Eng. Abstr.) (Jpn)

[Changes in quantitative characteristics of mitochondria of the cortical tubules of the kidneys with compensatory hypertrophy in the blocking of autonomic mediation] Barinov EF, et al. Fiziol Zh 1989 Mar–Apr;35(2):104–7 (Eng. Abstr.) (Rus)

[Simultaneous nephrectomy and lobectomy of the lung in cancer of the kidney] Orlov VA, et al. Urol Nefrol (Mosk) 1988 May–Jun;(3):63–4 (Rus)

[Perestroika in the surgery of renal tuberculosis and its scientific substantiation] Shapkin AG. Vestn Khir 1988 Oct; 141(10):3–7 (Eng. Abstr.) (Rus)

[Evaluation of residual renal function in children with unilateral nephrectomy] Pérez–Cortés G, et al. Bol Med Hosp Infant Mex 1988 Jun;45(6):353–8 (Eng. Abstr.) (Spa)

[Pulmonary atelectasis in bent lateral decubital position (nephrectomy). Apropos of a case] Jimeno Fernández MC, et al. Rev Esp Anestesiol Reanim 1989 Mar–Apr;36(2):114–6 (Eng. Abstr.) (Spa)

[Effect of age on the rate of renal hypertrophy after unilateral nephrectomy in rats] Díes F, et al. Rev Invest Clin 1969 Jul–Sep;21(3):275–86 (Eng. Abstr.) (Spa)

ADVERSE EFFECTS

No microalbuminuria or other adverse effects of long–standing hyperfiltration in humans with one kidney. Schmitz A, et al. Am J Kidney Dis 1989 Feb;13(2):131–6

Postnephrectomy arteriovenous fistula of the renal pedicle treated with detachable balloons: a case report. Courtheoux P, et al. Cardiovasc Intervent Radiol 1988 Dec;11(6):340–2 (12 ref.)

Flank incisional hernia noted on radionuclide dynamic/static images. Slavin JD Jr, et al. Clin Nucl Med 1989 Jul; 14(7):548

Lymphorrhea as postoperative complication of living donor nephrectomy: a case report. Fernandez A, et al. J Urol 1988 Dec;140(6):1514–5

Is donor nephrectomy a safe procedure in the elderly? Haberal M, et al. Transplant Proc 1988 Oct;20(5):791–3

Nephrotic–range proteinuria after donor nephrectomy and transplantation in a monozygous twin recipient. Paul LC, et al. Transplantation 1989 Aug;48(2):348–50

Initiation of vesicoureteral reflux after hemirephrectomy for ureterocele. Uehling DT, et al. Urology 1989 Apr; 33(4):302–4

[A case of a lesion of the pancreas during left–sided nephrectomy] Mandevski S. Khirurgiia (Sofiia) 1989; 42(2):93 (Bul)

[The antihypertensive effect of a high calcium diet in subtotally nephrectomized rats] Kimura M. Nippon Jinzo Gakkai Shi 1988 Aug;30(8):1039–46 (Eng. Abstr.) (Jpn)

[Hyperfiltration and hyperperfusion of kidney glomeruli: non–immunological factors initiating or accelerating the progression of nephropathy?] Kokot F, et al. Przegl Lek 1988;45(4):401–5 (69 ref.) (Pol)

METHODS

Partial nephrectomy in mice with milliwatt carbon dioxide laser and its influence on experimental metastasis. Ammirati M, et al. J Surg Oncol 1989 Jul;41(3):153–9

Flank donor nephrectomy: efficacy in the donor and recipient. Streem SB, et al. J Urol 1989 May; 141(5):1099–101

Medical nephrectomy: the use of metallic salts for treatment of end stage massive proteinuria and renal hypertension. Avram MM, et al. Life Support Syst 1983;1 Suppl 1:403–6

Parenchymal–sparing surgery for small renal cell cancer: are there any reasonable arguments? Brisset JM, et al. Prog Clin Biol Res 1989;303:153–9

Long–term results of conservative surgery for renal cell carcinoma: a 25–year experience. Chatelain C, et al. Prog Clin Biol Res 1989;303:731–8

Unilateral native nephrectomy carried out at the time of renal transplantation is effective in the treatment of dialysis–resistant hypertension. Abouna GM, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2028–30

Beneficial effect of bilateral native nephrectomy on long–term survival of living related kidney allografts. Yasumura T, et al. Transplant Proc 1989 Feb;21(1 Pt 2):1967–9

[Partial resection of the single kidney in hypernephroid carcinoma] Patrashkov T, et al. Khirurgiia (Sofiia) 1989; 42(2):39–41 (Bul)

[Our experiences using ureteral stripping in nephro–ureterectomy] Coulange C, et al. Ann Urol (Paris) 1988;22(5):355–6 (Eng. Abstr.) (Fre)

[A sure rapid technic of donor nephrectomy] Gubernatis G. Chirurg 1988 Jul;59(7):491–5 (Ger)

[Autotransplantation and extracorporeal repair of a renal vascular abnormality in a patient with a single kidney] Gross C, et al. Vasa 1988;17(3):225–8 (Eng. Abstr.) (Ger)

[Partial kidney resection in kidney tumors—indications and results] Ecke M, et al. Z Urol Nephrol 1989 Apr;82(4):173–9 (Eng. Abstr.) (Ger)

[Therapeutic tactics in polycystic kidney in children] dell' Agnola KA, et al. Urol Nefrol (Mosk) 1989 Mar–Apr; (2):12–3 (Rus)

[Ways of improving the surgical treatment of hydronephrosis] Karpenko VS. Urol Nefrol (Mosk) 1989 Mar–Apr;(2):8–11 (Eng. Abstr.) (Rus)

[Organ–sparing operation in echinococcosis and cancer of the kidney] Imamverdiev SB, et al. Vestn Khir 1988 Jun; 140(6):50–2 (Rus)

[Transthoracic approach in surgery of the kidneys] Shapkin AG. Vestn Khir 1988 Aug;141(8):139–42 (Eng. Abstr.) (Rus)

[Partial surgery and adenocarcinoma of the kidney] Escudero Barrilero A. Arch Esp Urol 1989 Mar;42(2):97–102, 104 (26 ref.) (Spa)

[Partial nephrectomy for tumor] Puigvert Gorro A, et al. Arch Esp Urol 1988 Sep;41(7):511–5 (26 ref.) (Eng. Abstr.) (Spa)

VETERINARY

Ectopic ureter managed by unilateral nephrectomy in two female horses. Sullins KE, et al. Equine Vet J 1988 Nov; 20(6):463–6

NEPHRITIS

Long–term outcome of Schönlein–Henoch nephritis in the adult. Fogazzi GB, et al. Clin Nephrol 1989 Feb;31(2):60–6 (25 ref.)

BLOOD

[The changes in serum TXB2 and 6–keto–PGF1 alpha in 62 cases with renal disease] Zhang ZF, et al. Chung Hua Nei Ko Tsa Chih 1989 Jan;28(1):25–7, 62 (Eng. Abstr.) (Chi)

CHEMICALLY INDUCED

Acute renal failure due to hypersensitivity interstitial nephritis induced by warfarin sodium. Volpi A, et al. Nephron 1989;52(2):196

[Acute hepatonephritis in a subject occupationally exposed to chloroform] Belotti L, et al. G Ital Med Lav 1988 Mar; 10(2):73–5 (Eng. Abstr.) (Ita)

[The effect of drugs to aminonucleoside–induced nephritis] Aihara Y. Nippon Jinzo Gakkai Shi 1988 Jul;30(7):895–904 (Eng. Abstr.) (Jpn)

COMPLICATIONS

Rifampin therapy in Henoch–Schönlein purpura nephritis accompanied by nephrotic syndrome. Kim PK, et al. Child Nephrol Urol 1988–89;9(1–2):50–6

Recurrence of Henoch Schoenlein purpura nephritis associated with tuberculous pleuritis. Washio M, et al. Nippon Jinzo Gakkai Shi 1988 Sep;30(9):1087–9

Glomerular eicosanoid production in acute serum sickness nephritis. Yamashita W, et al. Prostaglandins Leukot Essent Fatty Acids 1988 Dec; 34(3):161–6

Profile of crescentic glomerulonephritis in Natal—a clinicopathological assessment. Parag KB, et al. Q J Med 1988 Aug;68(256):629–36

Fate of renal grafts with recurrent Henoch–Schönlein purpura nephritis in children. Hasegawa A, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2130–3

[Effect of inflammatory changes of the kidneys in pregnant women on the incidence of premature labor] Krasomski G, et al. Przegl Lek 1988;45(12):858–9 (Pol)

DIAGNOSIS

Henoch–Schönlein nephritis [letter] Li Volti S, et al. Eur J Pediatr 1989 Jan;148(4):378–9

Contemporary imaging of renal inflammatory disease. Piccirillo M, et al. Infect Dis Clin North Am 1987 Dec; 1(4):927–64 (61 ref.)

[Acute focal bacterial nephritis] Masuda F, et al. Nippon Hinyokika Gakkai Zasshi 1988 Oct;79(10):1718–21 (Eng. Abstr.) (Jpn)

[Acute lobar nephritis: usefulness of ultrasonics for diagnosis (letter)] Iglesias Estevan F, et al. Rev Clin Esp 1989 Apr; 184(6):332 (Spa)

DRUG THERAPY

Controlled trial of dipyridamole and low–dose warfarin in patients with IgA nephritis with renal impairment [letter] Lee GS, et al. Clin Nephrol 1989 May;31(5):276

Amelioration by antihypertensive therapy in Dahl–salt sensitive rats with immune complex nephritis and hypertension. Yamashita W. Igaku Kenkyu 1988 Oct; 58(5):279–88

Clinical observation on treatment of renal function damage due to chronic nephritis with blood circulation invigorating and blood stasis reducing regimen. Hong SY, et al. J Tradit Chin Med 1989 Mar;9(1):18–20

Studies on antinephritic effect of TJ–8014, a new Japanese herbal medicine, and its mechanisms (1): Effects on original–type anti–GBM nephritis in rats and platelet aggregation. Hattori T, et al. Jpn J Pharmacol 1989 Aug; 50(4):477–85

[Effects of pokeweed antiviral protein on nephrotoxic serum nephritis accelerated by rabbit IgG in mice] Zhu Q, et al. Chung Kuo Yao Li Hsueh Pao 1988 Sep;9(5):474–7 (Eng. Abstr.) (Chi)

ETIOLOGY

Peroxidation of lipids and tissue damage by free oxygen radicals in the pathogenesis of inflammatory kidney diseases. Vel'tishchev JE. Contrib Nephrol 1988;67:28–30 (4 ref.)

Schistosomiasis and transient nephritis in children. Rashed SM, et al. J Egypt Soc Parasitol 1989 Dec;19(2):611–5

Antiglomerular basement membrane nephritis in the mouse. Study on the role of complement in the heterologous phase. Schrijver G, et al. Lab Invest 1988 Oct;59(4):484–91

Acute focal bacterial nephritis and renal abscess associated with vesicoureteral reflux. Report of a case. Sugao H, et al. Urol Int 1988;43(4):253–6

[Nephritis caused by ventriculo–atrial shunt: possible cure without reoperation of the valve?] Gourrier E, et al. Arch Fr Pediatr 1989 May;46(5):355–7 (Eng. Abstr.) (Fre)

[Acute focal bacterial nephritis (acute lobar nephronia) report of two cases] Ehara H, et al. Nippon Hinyokika Gakkai Zasshi 1989 Jan;80(1):95–9 (Eng. Abstr.) (Jpn)

[Acute focal bacterial nephritis of the left kidney] Aoki K, et al. Rinsho Hoshasen 1988 Sep;33(9):1001–2 (Jpn)

[The nephritogenic role of Streptococcus group C zooepidemicus, a recognized priority in Iaşi] Buiuc D. Rev Med Chir Soc Med Nat Iasi 1988 Apr–Jun;92(2):307–10 (Eng. Abstr.) (Rum)

[Disorders of purine metabolism as an etiological factor in renal pathology] Balkarov IM, et al. Ter Arkh 1988; 60(6):37–9 (Eng. Abstr.) (Rus)

[Nephropathy caused by ventriculo–atrial derivation (shunt nephritis)] Rodó Salas J, et al. An Esp Pediatr 1989 Jan; 30(1):8–10 (Eng. Abstr.) (Spa)

HISTORY

[Uremia and hypertensive encephalopathy in nephritis and essential hypertension. 1939 (classical article)] Fernós Isern A. Bol Asoc Med P R 1989 May;81(5):183–7 (Spa)

IMMUNOLOGY

Serial study of phagocytic function in rat bovine serum albumin (BSA) nephritis. Kawasaki K, et al. Br J Exp Pathol 1988 Aug;69(4):505–13

Kinetics of glomerular neutrophil influx after lipopolysaccharide in antibody–mediated injury. Savige JA, et al. Clin Exp Immunol 1988 Jul;73(1):134–8

Autoimmunity and nephritis. Peters DK. Contrib Nephrol 1989;70:128–34 (22 ref.)

Symposium on the pathogenetic mechanisms in nephritis. Rees AJ, et al. Kidney Int 1989 Apr;35(4):921–2

Anti–glomerular basement membrane antibody–mediated nephritis complicating transplantation in a patient with Alport's syndrome. Fleming SJ, et al. Transplantation 1988 Dec;46(6):857–9

[Two aspects of Masugi nephritis and nephritogenoside (published erratum appears in Arerugi 1988 Dec;37(12):1129)] Shibata S. Arerugi 1988 Apr;37(4):191–6 (25 ref.) (Jpn)

PATHOLOGY

Abnormalities of skin in hereditary nephritis [letter] Kashtan CE. **Nephron** 1989;52(4):363

[The kidney in Refsum's disease. Clinical, histologic and ultrastructural study of a case] D'Agrosa MC, et al. **Nephrologie** 1988;9(6):269–72 (Eng. Abstr.) (Fre)

PHYSIOPATHOLOGY

[Effects of tissue-type plasminogen activator from a culture of calf kidney cells on hemostasis and fibrinolysis in experimental nephritis] Andreenko GV, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):424–6 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Radiology case of the month. Focal nephritis. Harpole JH Jr, et al. **J Tenn Med Assoc** 1988 Oct;81(10):636

Acute focal bacterial nephritis: radiographic evaluation in children [letter] Traisman ES, et al. **Pediatr Infect Dis J** 1988 Dec;7(12):890–1

Bacterial renal infection: role of CT. Soulen MC, et al. **Radiology** 1989 Jun;171(3):703–7

Migratory lobar nephronia. Silverman SG, et al. **Urol Radiol** 1989;11(1):16–9

RADIONUCLIDE IMAGING

Acute radiation nephritis. Its evolution on sequential bone imaging. Palestro C, et al. **Clin Nucl Med** 1988 Nov; 13(11):789–91

SURGERY

[Treatment of renal abscesses by percutaneous puncture and drainage under ultrasonographic control] Milewski JB, et al. **Pol Przegl Radiol (Warszawa)** 1988 Mar–Apr;52(2):82–6 (Eng. Abstr.) (Pol)

THERAPY

[Clinical application of plasma cryoprecipitation] Yu YS, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Nov;27(11):673–6, 716 (Eng. Abstr.) (Chi)

VETERINARY

Brucella suis biotype 4: a case of granulomatous nephritis in a barren ground caribou (Rangifer tarandus groenlandicus L.) with a review of the distribution of rangiferine brucellosis in Canada. Tessaro SV, et al. **J Wildl Dis** 1986 Oct;22(4):479–83 (13 ref.)

Prevalence of avain nephritis virus in England. Nicholas RA, et al. **Vet Rec** 1988 Oct 8;123(15):398

[Micronema deletrix as the cause of a granulomatous nephritis in a horse] Liebler EM, et al. **DTW** 1989 Apr;96(4):223–4 (Eng. Abstr.) (Ger)

NEPHRITIS, FAMILIAL see NEPHRITIS, HEREDITARY

NEPHRITIS, HEREDITARY

Hereditary nephritis. Kashtan CE, et al. **Semin Nephrol** 1989 Jun;9(2):135–46 (129 ref.)

[Familial hematuria and Alport's syndrome] Janda J, et al. **Cesk Pediatr** 1989 Mar;44(3):162–6 (19 ref.) (Eng. Abstr.) (Cze)

[Alport's syndrome in Eastern Slovakia] Kluka V, et al. **Cesk Pediatr** 1986 Oct;41(10):569–73 (Eng. Abstr.) (Slo)

COMPLICATIONS

Retinal abnormalities in Alport's syndrome. Gelisken O, et al. **Acta Ophthalmol (Copenh)** 1988 Dec;66(6):713–7

Alport's syndrome: review and case report. Grondalski SJ, et al. **Optom Vis Sci** 1989 Jun;66(6):396–8

[Ophthalmologic manifestations in Alport's syndrome] Sirbat D, et al. **Bull Soc Ophtalmol Fr** 1988 Oct;88(10):1173–4, 1177 (Eng. Abstr.) (Fre)

[Two cases of Alport's syndrome with incomplete Fanconi's syndrome or with situs inversus viscerum totalis] Hamasaki T, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):410–1 (Jpn)

GENETICS

Fechtner syndrome: clinical and genetic aspects. Gershoni-Baruch R, et al. **Am J Med Genet** 1988 Oct; 31(2):357–67

Alport's syndrome: localization of the X-chromosomal gene and consequences for future investigations. Brunner H, et al. **Contrib Nephrol** 1988;67:200–5

Localization of the gene for classic Alport syndrome. Flinter FA, et al. **Genomics** 1989 Apr;4(3):335–8

Linkage studies in X-linked Alport's syndrome. Szpiro-Tapia S, et al. **Hum Genet** 1988 Dec;81(1):85–7

Alport's syndrome. Crawfurd MA. **J Med Genet** 1988 Sep; 25(9):623–7 (61 ref.)

Localization of the gene for X-linked Alport's syndrome. Brunner H, et al. **Kidney Int** 1988 Oct;34(4):507–10

Hereditary nephritis: immunoblotting studies of the glomerular basement membrane. Savage CO, et al. **Lab Invest** 1989 May;60(5):613–8

Genetics of classic Alport's syndrome. Flinter FA, et al. **Lancet** 1988 Oct 29;2(8618):1005–7 (49 ref.)

Familial thin basement membrane nephropathy in children with asymptomatic microhematuria. Gauthier B, et al. **Nephron** 1989;51(4):502–8

Prenatal diagnosis of congenital nephrotic syndrome of non Finnish type. Braga S, et al. **Prog Clin Biol Res** 1989; 305:199–203

Congenital and infantile nephrotic syndromes. Norio R, et al. **Prog Clin Biol Res** 1989;305:179–92 (45 ref.)

Familial hematuria: a clinical, ultrastructural and morphometric study. Schärer K, et al. **Prog Clin Biol Res** 1989;305:173–7

[Alport's syndrome: apropos of 8 Tunisian families] el Matri A, et al. **Tunis Med** 1988 May;66(5):453–7 (16 ref.) (Eng. Abstr.) (Fre)

[The genetics of Alport's syndrome] Kluka V, et al. **Cesk Pediatr** 1986 Oct;41(10):574–81 (Eng. Abstr.) (Slo)

[Chronic hereditary nephropathy with hypoacusia and ocular defects (study of a family)] Zavala C, et al. **Rev Invest Clin** 1969 Jul–Sep;21(3):369–82 (Eng. Abstr.) (Spa)

IMMUNOLOGY

Alport's syndrome--an autoaggressive immunopathy? Seyfert UT. **Child Nephrol Urol** 1988–89;9(3):127–9

Distribution of familial nephritis antigen in normal tissue and renal basement membranes of patients with homozygous and heterozygous Alport familial nephritis. Relationship of familial nephritis and Goodpasture antigens to novel collagen chains and type IV collagen. Kleppel MM, et al. **Lab Invest** 1989 Sep;61(3):278–89

Anti-glomerular basement membrane antibody-mediated nephritis complicating transplantation in a patient with Alport's syndrome. Fleming SJ, et al. **Transplantation** 1988 Dec;46(6):857–9

METABOLISM

The NC1 domain of collagen type IV in neonatal dog glomerular basement membranes. Significance in Samoyed hereditary glomerulopathy. Thorner P, et al. **Am J Pathol** 1989 May;134(5):1047–54

PATHOLOGY

Alport's syndrome and the eye. McCartney PJ, et al. **Aust N Z J Ophthalmol** 1989 May;17(2):165–8

Congenital macrothrombocytopenia, leucocyte inclusions, deafness and proteinuria: functional and electron microscopic observations on platelets and megakaryocytes. Heynen MJ, et al. **Br J Haematol** 1988 Dec;70(4):441–8

Hereditary nephritis in children with and without characteristic glomerular basement membrane alterations. Yoshikawa N, et al. **Clin Nephrol** 1988 Sep;30(3):122–7

Abnormalities of skin in hereditary nephritis [letter] Kashtan CE. **Nephron** 1989;52(4):363

SURGERY

Alport's syndrome: risk of glomerulonephritis induced by anti-glomerular-basement-membrane antibody after renal transplantation. Shah B, et al. **Nephron** 1988;50(1):34–8

VETERINARY

Abnormalities in the NC1 domain of collagen type IV in GBM in canine hereditary nephritis. Thorner P, et al. **Kidney Int** 1989 Mar;35(3):843–50

NEPHRITIS, INTERSTITIAL

Survival of the upper-urothelial-cancer patients from the Balkan nephropathy endemic and nonendemic areas. Janković S, et al. **Eur Urol** 1988;15(1–2):59–61

Some problems in the meanings of terms, as exemplified by tubulointerstitial and medullary cystic diseases of the kidneys. Landing BH. **Perspect Pediatr Pathol** 1988; 12:20–43 (34 ref.)

Allergic interstitial nephritis: clinical features and pathogenesis. Cameron JS. **Q J Med** 1988 Feb; 66(250):97–115 (165 ref.)

BLOOD

Oxalate retention in chronic renal failure: tubular vs glomerular diseases. Tomson CR, et al. **Clin Nephrol** 1989 Aug;32(2):87–95

CHEMICALLY INDUCED

Nephrogenic diabetes insipidus and tubulointerstitial nephritis during continuous therapy with rifampin. Quinn BP, et al. **Am J Kidney Dis** 1989 Sep;14(3):217–20

Acute granulomatous interstitial nephritis due to co-trimoxazole. Cryst C, et al. **Am J Nephrol** 1988; 8(6):483–8

Granulomatous interstitial nephritis after nonsteroidal anti-inflammatory drugs. Schwarz A, et al. **Am J Nephrol** 1988;8(5):410–6 (56 ref.)

Captopril-associated acute interstitial nephritis. Smith WR, et al. **Am J Nephrol** 1989;9(3):230–5 (22 ref.)

Different forms of mineral nitrogen in drinking water and the Balkan nephropathy. Radovanović Z, et al. **Arch Environ Contam Toxicol** 1988 Nov;17(6):813–5

Acute interstitial nephritis associated with vancomycin therapy. Bergman MM, et al. **Arch Intern Med** 1988 Oct; 148(10):2139–40

Occupational exposure to organic solvents causing chronic tubulointerstitial nephritis. Narvarte J, et al. **Arch Intern Med** 1989 Jan;149(1):154–8

Analgesic nephropathy. Kincaid-Smith P. **Aust N Z J Med** 1988 May;18(3):251–4 (27 ref.)

Ciprofloxacin-induced interstitial nephritis. Ying LS, et al. **Clin Pharm** 1989 Jul;8(7):518–21

FUO and eosinophiluria in a diabetic with arthritis. McCue JD, et al. **Hosp Pract [Off]** 1989 Aug 15;24(8):71–2

Experimental drug-induced allergic nephritis mediated by antihapten antibody. Joh K, et al. **Int Arch Allergy Appl Immunol** 1989;88(3):337–44

Chronic tubulointerstitial nephritis and renal insufficiency associated with long-term "subtherapeutic" gentamicin. Houghton DC, et al. **J Lab Clin Med** 1988 Dec; 112(6):694–703

Mefenamic acid nephropathy: an interstitial and mesangial lesion. Jenkins DA, et al. **Nephrol Dial Transplant** 1988; 3(2):217–20

Irreversible renal failure following mefenamic acid. Boletis J, et al. **Nephron** 1989;51(4):575–6

Interstitial nephritis induced by cloxacillin. Grimm PC, et al. **Nephron** 1989;51(2):285–6

Tubulointerstitial nephritis associated with pyrazinamide. Sanwikarja S, et al. **Neth J Med** 1989 Feb;34(1–2):40–6

Protracted systemic illness and interstitial nephritis due to minocycline. Wilkinson SP, et al. **Postgrad Med J** 1989 Jan;65(759):53–6

Aetiology of nephrotoxic damage to the renal interstitium and tubuli. Fillastre JP, et al. **Toxicol Lett** 1989 Mar; 46(1–3):45–54 (11 ref.)

Cyclosporin A: action and side-effects. Mihatsch MJ, et al. **Toxicol Lett** 1989 Mar;46(1–3):125–39 (52 ref.)

[The kidney and synthetic penicillins, Apropos of 62 cases. Cooperative evaluation of French drug surveillance centers] Castot A, et al. **Therapie** 1988 Aug–Sep; 43(5):399–403 (Eng. Abstr.) (Fre)

[Chronic interstitial nephritis after treatment with 5-aminosalicylic acid (letter)] Henning HV, et al. **Dtsch Med Wochenschr** 1989 Jul 7;114(27):1091 (Ger)

[Nephritis from 5-aminosalicylic acid (letter)] von Mühlendahl KE. **Dtsch Med Wochenschr** 1989 Feb 10; 114(6):236 (Ger)

[Acute interstitial nephritis caused by 5-aminosalicylic acid?] Ruf-Ballauf W, et al. **Internist (Berlin)** 1989 Apr; 30(4):262–4 (Ger)

[Acute interstitial nephritis following piperacillin] Dörner O, et al. **Klin Wochenschr** 1989 Jul 3;67(13):682–6 (Eng. Abstr.) (Ger)

[Two cases of acute interstitial nephritis due to cephem antibiotics] Shibasaki T, et al. **Nippon Jinzo Gakkai Shi** 1988 Oct;30(10):1197–201 (Eng. Abstr.) (Jpn)

[Two cases of various symptoms and renal dysfunction induced by longterm germanium intake] Obara K, et al. **Nippon Naika Gakkai Zasshi** 1988 Nov;77(11):1704–9 (Jpn)

[Interstitial nephritis developed during maintenance chemotherapy in a child with acute lymphocytic leukemia] Morioka Y, et al. **Rinsho Ketsueki** 1988 Nov;29(11):2127–31 (Eng. Abstr.) (Jpn)

[Can streptokinase produce renal changes? (letter)] Tubek S. **Wiad Lek** 1988 May 1;41(9):613–5 (Pol)

[A case of late diagnosis of analgesic nephropathy] Osokin SV, et al. **Ter Arkh** 1988;60(6):120–1 (Rus)

[Chronic drug-induced interstitial nephritis with a fatal outcome] Volgina GV, et al. **Ter Arkh** 1988;60(10):149–50 (Rus)

COMPLICATIONS

Bilateral anterior uveitis and interstitial nephritis [letter] BenEzra D. **Am J Ophthalmol** 1988 Dec 15;106(6):766–7

Idiopathic acute interstitial nephritis associated with anterior uveitis in adults. Cacoub P, et al. **Clin Nephrol** 1989 Jun; 31(6):307–10 (10 ref.)

Long-term prognosis of chronic idiopathic membranous glomerulonephritis. An analysis of 334 cases with particular regard to tubulo-interstitial changes. Wehrmann M, et al. **Clin Nephrol** 1989 Feb;31(2):67–76

Acute tubulo-interstitial nephritis with uveitis and favourable outcome after five months of continuous ambulatory peritoneal dialysis (CAPD). van Leusen R, et al. **Neth J Med** 1988 Oct;33(3–4):133–9

[Interstitial nephritis and uveitis coexisting in a school-aged child] Huttunen NP, et al. **Duodecim** 1988;104(16):1249–52 (Fin)

[A new syndrome: acute interstitial nephropathy with uveitis. Apropos of a case] Kenouch S, et al. **Ann Med Interne (Paris)** 1989;140(3):169–72 (25 ref.) (Eng. Abstr.) (Fre)

[Renal insufficiency disclosing granulomatous interstitial nephropathy of sarcoidosis (letter)] Bernheim J, et al. **Presse Med** 1989 Mar 4;18(9):496 (Fre)

[Differentiation of hematuria by phase contrast microscopy studies of urine erythrocytes] Müller V, et al. **Z Urol Nephrol** 1989 May;82(5):277–83 (Eng. Abstr.) (Ger)

ETIOLOGY

Acute interstitial nephritis associated with Yersinia pseudotuberculosis infection. Iijima K, et al.

Am J Nephrol 1989;9(3):236–40
Granulomatous interstitial nephritis after a jejunoileal bypass: an ultrastructural and histochemical study. Verani R, et al. **Am J Nephrol** 1989;9(1):51–5
Acute renal failure presenting as Fanconi syndrome with lambda light chain proteinuria and interstitial nephritis [letter] Yokota N, et al. **Clin Nephrol** 1989 May;31(5):277–8
Tubulo–interstitial nephritis: an unusual complication of typhoid fever. Abu–Romeh SH, et al. **Trop Doct** 1988 Oct; 18(4):153–4
[Less common causes of chronic tubulointerstitial nephritis complicated by acquired Fanconi syndrome] Horáčková M, et al. **Vnitr Lek** 1989 Feb;35(2):179–83 (Eng. Abstr.) **(Cze)**
[Crohn's enteritis and chronic tubulo–interstitial nephropathy in an adolescent] Larchet M, et al. **Arch Fr Pediatr** 1988 Nov;45(9):649–51 (12 ref.) (Eng. Abstr.) **(Fre)**
[Interstitial nephropathies in sarcoidosis. Effect of corticosteroid therapy and long–term evolution. Retrospective study of 22 cases] Guenel J, et al. **Nephrologie** 1988;9(6):253–7 (Eng. Abstr.) **(Fre)**
[Mechanisms of the development of chronic interstitial nephritis] Komandenko MS, et al. **Klin Med (Mosk)** 1989 Feb;67(2):60–3 (Eng. Abstr.) **(Rus)**
[Nephropathies with HBsAg deposition in the kidneys] Shishkin AN, et al. **Klin Med (Mosk)** 1989 Feb;67(2):70–3 (Eng. Abstr.) **(Rus)**
[Clinical aspects of metabolic nephropathies, interstitial nephritis and urolithiasis in calciphylaxis] Iur'eva EA, et al. **Pediatriia** 1989;(1):42–8 (Eng. Abstr.) **(Rus)**
[Etiology of tubulointerstitial nephritis] Komandenko MS, et al. **Ter Arkh** 1988;60(10):146–8 (Eng. Abstr.) **(Rus)**

GENETICS

Juvenile nephronophthisis associated with new skeletal abnormalities, tapetoretinal degeneration and liver fibrosis. Bianchi C, et al. **Helv Paediatr Acta** 1989 Jun; 43(5–6):449–55
Senior–Loken syndrome: ultrastructural features of heterozygous state associated with IgM nephropathy. Robinson G, et al. **Prog Clin Biol Res** 1989;305:167–72
[Nephronophtisis in a child whose father has isolated ocular involvement] Blanc P, et al. **Arch Fr Pediatr** 1989 Mar; 46(3):203–4 (10 ref.) (Eng. Abstr.) **(Fre)**

IMMUNOLOGY

Immunologically mediated interstitial nephritis: primary and secondary. Cameron JS. **Adv Nephrol** 1989;18:207–48 (228 ref.)
Immunologic studies in two patients with antitubular basement membrane nephritis. Brentjens JR, et al. **Am J Med** 1989 May;86(5):603–8
Murine interstitial nephritis. VIII. Characterization of Igh–V restriction determinants in the development of anti–idiotypic immunity using blocking antibodies. Hines WH, et al. **J Autoimmun** 1988 Apr;1(2):143–57
Characterization of a renal tubular epithelial cell line which secretes the autologous target antigen of autoimmune experimental interstitial nephritis. Haverty TP, et al. **J Cell Biol** 1988 Oct;107(4):1359–68
Protective modulation of class II MHC gene expression in tubular epithelium by target antigen–specific antibodies. Cell–surface directed down–regulation of transcription can influence susceptibility to murine tubulointerstitial nephritis. Haverty TP, et al. **J Immunol** 1989 Aug 15; 143(4):1133–41
Study of the immunopathogenesis of tubulointerstitial nephritis using model systems. Wilson CB. **Kidney Int** 1989 Apr;35(4):938–53 (263 ref.)
Interstitial nephritis related to nonsteroidal anti–inflammatory agents and beta–lactam antibiotics: a comparative study of the interstitial infiltrates using monoclonal antibodies. D'Agati VD, et al. **Mod Pathol** 1989 Jul;2(4):390–6
HLA–DR display by renal tubular epithelium and phenotype of infiltrate in interstitial nephritis. Cheng HF, et al. **Nephrol Dial Transplant** 1989;4(3):205–15

METABOLISM

Does alpha 1–acid glycoprotein reduce the unbound metabolic clearance of disopyramide in patients with renal impairment? Braun J, et al. **Eur J Clin Pharmacol** 1988; 35(3):313–7

PATHOLOGY

Renal parenchymal malakoplakia. Histologic spectrum and its relationship to megalocytic interstitial nephritis and xanthogranulomatous pyelonephritis. Esparza AR, et al. **Am J Surg Pathol** 1989 Mar;13(3):225–36
Immunohistochemical identification of infiltrating mononuclear cells in tubulointerstitial nephritis associated with Sjögren's syndrome. Matsumura R, et al. **Clin Nephrol** 1988 Dec;30(6):335–40
[Involvement of the renal interstitium in systemic diseases (I)] Kenouch S, et al. **Nephrologie** 1988;9(2):61–5 (0 ref.) (Eng. Abstr.) **(Fre)**
[Megalocytic interstitial nephritis associated with renal adenocarcinoma. A case (letter)] Schillinger F, et al. **Presse Med** 1988 Oct 8;17(34):1764 **(Fre)**
[Acute recurrent uveitis and idiopathic interstitial nephritis—a nosologic entity (tubulo–interstitial nephritis and uveitis)] Hausmann N, et al. **Klin Monatsbl Augenheilkd** 1988 Jul; 193(1):35–8 (Eng. Abstr.) **(Ger)**
[Correlations of homeostatic disorders of tubule function, type of clinical course of chronic glomerulonephritis and histologic changes in the diagnosis of tubulo–interstitial lesions] Ratner MY, et al. **Z Urol Nephrol** 1988 Jun; 81(6):367–77 (Eng. Abstr.) **(Ger)**
[Tubulointerstitial nephritis in Conn's syndrome] Sokolova RI, et al. **Arkh Patol** 1988;50(11):40–6 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Pathogenesis and therapy of interstitial nephritis [clinical conference] Neilson EG. **Kidney Int** 1989 May; 35(5):1257–70
Role of interstitial infiltration of leukocytes in glomerular diseases. D'Amico G. **Nephrol Dial Transplant** 1988; 3(5):596–600 (32 ref.)

RADIONUCLIDE IMAGING

Gallium–67 renal uptake in Sjogren's syndrome. Bennett M, et al. **Clin Nucl Med** 1988 Sep;13(9):669–70
Renal gallium scintigraphy and sarcoid nephritis [letter] Pagniez DC, et al. **Nephrol Dial Transplant** 1989;4(1):76

URINE

Eosinophiluria. Nolan CR 3d, et al. **Clin Lab Med** 1988 Sep; 8(3):555–65 (31 ref.)
Immunoperoxidase identification of nucleated cells in urine in glomerular and acute tubular disorders. Segasothy M, et al. **Clin Nephrol** 1989 Jun;31(6):281–91
Tamm–Horsfall protein determination in Balkan endemic nephropathy. Radonić M, et al. **Urol Res** 1988;16(5):377–80

VETERINARY

The prevalence of leptospirosis and its association with multifocal interstitial nephritis in swine at slaughter. Baker TF, et al. **Can J Vet Res** 1989 Jul;53(3):290–4
Visceral urate deposits in chicks inoculated with avian nephritis virus. Shirai J, et al. **Vet Rec** 1989 Jun 24; 124(25):658–61

NEPHRITIS, LUPUS see **LUPUS NEPHRITIS**

NEPHRITIS, TUBULOINTERSTITIAL see **NEPHRITIS, INTERSTITIAL**

NEPHROBLASTOMA

Rhabdoid tumours of the spermatic cord. Kawanishi Y, et al. **Br J Urol** 1989 Apr;63(4):439–40
Extrarenal Wilms' tumor. Fernandes ET, et al. **J Pediatr Surg** 1989 May;24(5):483–5 (26 ref.)
Wilms' tumour: trials and tribulation. Gough DC. **Prog Pediatr Surg** 1989;22:94–105
[Wilms tumor in adult: a case report] Kigure T, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Oct;79(10):1703–7 (Eng. Abstr.) **(Jpn)**
[A case report of intralobar multifocal nephroblastomatosis] Ishii K, et al. **Rinsho Hoshasen** 1988 Aug;33(8):939–42 (Eng. Abstr.) **(Jpn)**
[Multilocular cyst of the kidney: clinico–pathologic considerations] López Aramburo MA, et al. **Actas Urol Esp** 1989 Jan–Feb;13(1):1–9 (72 ref.) (Eng. Abstr.) **(Spa)**

ANALYSIS

Presence of the long chain form of polysialic acid of the neural cell adhesion molecule in Wilms' tumor. Identification of a cell adhesion molecule as an oncodevelopmental antigen and implications for tumor histogenesis. Roth J, et al. **Am J Pathol** 1988 Nov; 133(2):227–40
Renin in mesoblastic nephroma: an immunohistochemical study. Cook HT, et al. **Hum Pathol** 1988 Nov; 19(11):1347–51
Immunohistochemical localization of transport mediators in Wilms' tumor: comparison with fetal and mature human kidney. Hennigar RA, et al. **Lab Invest** 1989 Aug; 61(2):192–201
Identification of an acidic fibroblast growth factor–like activity in a mesoblastic nephroma. Witte DP, et al. **Lab Invest** 1989 Mar;60(3):353–9
Feulgen DNA values in Wilms' tumour in relation to prognosis. Oppedal BR, et al. **Pathol Res Pract** 1988 Nov; 183(6):756–60

BLOOD

Glutathione peroxidase activity, selenium and lipid peroxides levels in blood of cancer children. Gromadzinska J, et al. **Ann Clin Res** 1988;20(3):177–83
Sera of children with renal tumours contain low–molecular–mass hyaluronic acid. Kumar S, et al. **Int J Cancer** 1989 Sep 15;44(3):445–8

CHEMICALLY INDUCED

Transplacental induction of peripheral nervous tumor in the Syrian golden hamster by N–nitroso–N–ethylurea. A new animal model for von Recklinghausen's neurofibromatosis. Nakamura T, et al. **Am J Pathol** 1989 Aug;135(2):251–9
Induction of renal tumors in cynomolgus monkeys (Macaca fascicularis) by prenatal exposure to 1,2–dimethylhydrazine. Beniashvili DS. **J Natl Cancer Inst** 1989 Sep 6;81(17):1325–7
Rat renal mesenchymal tumor as an experimental model for human congenital mesoblastic nephroma: I. Induction. Hasgekar NN, et al. **Pediatr Pathol** 1989;9(2):131–9
Renal tumors induced transplacentally in the rat by n–ethylnitrosourea. Ohaki Y. **Pediatr Pathol** 1989; 9(1):19–33

COMPLICATIONS

A mesoblastic nephroma with hypercalcaemia. Woolfield NF, et al. **Aust Paediatr J** 1988 Oct;24(5):309–10
Spontaneous rupture of adult Wilms' tumor. Heyns CF, et al. **Cancer** 1989 Jul 1;64(1):173–7
Sporadic aniridia and Wilms' tumor: visual function evaluation of three cases. Harnois C, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(3):244–7
Unusual evolution of Wilms tumor in a patient with Wiedemann–Beckwith syndrome. Rey C, et al. **Helv Paediatr Acta** 1988 Aug;43(1–2):91–6
Hypertension in long–term survivors of childhood renal cancers. Kantor AF, et al. **J Clin Oncol** 1989 Jul;7(7):912–5
Budd–Chiari syndrome secondary to hepatic vein thrombus from Wilm's tumor. Case report and literature review. Jose B, et al. **J Ky Med Assoc** 1989 Apr;87(4):174–6 (7 ref.)
Congenital mesoblastic nephroma, renin production, and hypertension. Malone PS, et al. **J Pediatr Surg** 1989 Jun; 24(6):599–600
A report of 4 patients with the Drash syndrome and a review of the literature. Jensen JC, et al. **J Urol** 1989 May; 141(5):1174–6 (27 ref.)
Intracaval and atrial involvement with nephroblastoma: review of National Wilms Tumor Study–3. Ritchey ML, et al. **J Urol** 1988 Nov;140(5 Pt 2):1113–8
Cornelia de Lange syndrome associated with Wilms' tumour and infantile haemangioendothelioma of the liver: report of two autopsy cases. Maruiwa M, et al. **Virchows Arch [A]** 1988;413(5):463–8
[Wilms' tumor associated with membranous glomerulonephritis] López López JA, et al. **Arch Esp Urol** 1989 Mar;42(2):163–5 (Eng. Abstr.) **(Spa)**

CONGENITAL

Cellular congenital mesoblastic nephroma: what are the options. Gormley TS, et al. **J Urol** 1989 Aug;142(2 Pt 2):479–83; discussion 489 (35 ref.)
Hydramnios associated with congenital mesoblastic nephroma: case report. Ohmichi M, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):469–71
[Congenital mesoblastic nephroma in the adult] Bruet A, et al. **Ann Urol (Paris)** 1989;23(1):27–9 (Eng. Abstr.) **(Fre)**
[Ultrasound study of congenital mesoblastic nephroma] Zeilinger G, et al. **Klin Padiatr** 1988 Jul–Aug;200(4):321–3 (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Wilms tumor (nephroblastoma) in the adult patient: clinical and radiologic manifestations. Kioumehr F, et al. **AJR** 1989 Feb;152(2):299–302
General diagnosis case of the day. Multilocular cystic nephroma (MLCN). McClennan BL, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1321–2
Wilms tumours diagnosed by routine physical examinations [letter] Gutjahr P. **Eur J Pediatr** 1988 Nov;148(2):174
Extrarenal Wilms' tumor. Narasimharao KL, et al. **J Pediatr Surg** 1989 Feb;24(2):212–4
Autosomal dominant polycystic kidney disease in infants: asymmetric disease mimicking a unilateral renal mass. Strand WR, et al. **J Urol** 1989 May;141(5):1151–3
Multilocular cyst (multilocular cystic nephroma) of the kidney: a report of 2 cases with an unusual mode of presentation. Thijssen AM, et al. **J Urol** 1989 Aug;142(2):346–8
Fatty Wilms' tumor simulating teratoma; occurrence in a child with horseshoe kidney. Fernbach SK, et al. **Pediatr Radiol** 1988;18(5):424–6
Adult Wilms' tumor: US and CT features. Bighi S, et al. **Rays** 1988 Sep–Dec;13(3):71–5
MRI of multilocular cystic nephroma. Dikengil A, et al. **Urol Radiol** 1988;10(2):95–9
Evaluation of polysialic acid in the diagnosis of Wilms' tumor. A comparative study on urinary tract tumors and non–neuroendocrine tumors. Roth J, et al. **Virchows Arch [B]** 1988;56(2):95–102
Prenatal diagnosis of congenital mesoblastic nephroma in association with polyhydramnios. Burtner CD, et al. **W V Med J** 1988 Sep;84(9):393–4
[Diagnostic and therapeutic aspects of nephroblastomas in children. Apropos of 99 cases] Chaouachi B, et al. **Tunis Med** 1987 Oct;65(10):591–6 (Eng. Abstr.) **(Fre)**
[Renal and adrenal masses in childhood: the role of magnetic resonance] Gualdi GF, et al. **Clin Ter** 1988 Nov 15; 127(3):225–6 **(Ita)**
[Uncommon renal tumor in children] Ikoma N, et al. **Rinsho Hoshasen** 1989 Feb;34(2):219–25 (Eng. Abstr.) **(Jpn)**
[4 cases of multilocular cystic nephroma] Murakami T, et al. **Rinsho Hoshasen** 1988 Aug;33(8):935–8 (Eng. Abstr.)

(Jpn)
[Characteristics of the clinical course of nephroblastoma in children with atypical variants in the histological structure of the tumor] Bolchenko EI, et al. **Pediatriia** 1988;(6):72–4 (Rus)
[Diagnosis and treatment of nephroblastoma in children] Kushch NL, et al. **Pediatriia** 1988;(11):43–6 (Rus)
[Simultaneous bilateral Wilms tumor] López Alvarez-Buhilla P, et al. **An Esp Pediatr** 1989 Apr;30(4):293–5 (Eng. Abstr.) (Spa)

DRUG THERAPY

Regional chemotherapy in an experimental model of Wilms' tumor in rats. Andrews PM, et al. **Cancer Chemother Pharmacol** 1989;23(1):31–6
A phase II study of ifosfamide in the treatment of relapses in Wilms' tumor. Tournade MF. **Cancer Chemother Pharmacol** 1989;24 Suppl 1:S31–3
Self-regulation treatment to reduce the aversiveness of cancer chemotherapy. Kaufman KL, et al. **J Adolesc Health Care** 1989 Jul;10(4):323–7
Biological activities of novel recombinant tumor necrosis factor having N-terminal amino acid sequences derived from cytotoxic factors produced by THP-1 cells. Soma G, et al. **J Biol Response Mod** 1988 Dec;7(6):587–95
Update in cancer chemotherapy: genitourinary tract cancer, Part 2: Wilms' tumor and bladder cancer. Wright JC. **J Natl Med Assoc** 1988 Feb;80(2):169–81 (139 ref.)
Hepatotoxicity of actinomycin-D [letter] Pritchard J, et al. **Lancet** 1989 Jan 21;1(8630):168
[Veno-occlusive disease of the liver and nephroblastoma in children (role of the vincristine-actinomycin combination?] Chevallier B, et al. **Ann Pediatr (Paris)** 1988 Sep; 35(7):525–6 (Fre)
[Treatment of tumors in children] Hashito K. **Gan No Rinsho** 1989 Jan;Spec No:539–48 (Jpn)
[Adjuvant chemotherapy in the combined modality therapy of nephroblastoma in children] Badalian GKh, et al. **Vopr Onkol** 1988;34(11):1355–9 (Eng. Abstr.) (Rus)

EPIDEMIOLOGY

Wilms' tumour (nephroblastoma) in Zimbabwe. Nkrumah FK, et al. **Ann Trop Paediatr** 1989 Jun;9(2):89–92

ETIOLOGY

Parental occupation and Wilms' tumor: results of a case-control study. Bunin GR, et al. **Cancer Res** 1989 Feb 1;49(3):725–9

GENETICS

A deletion map of the WAGR region on chromosome 11. Gessler M, et al. **Am J Hum Genet** 1989 Apr;44(4):486–95
Familial Wiedemann-Beckwith syndrome and a second Wilms tumor locus both map to 11p15.5. Koufos A, et al. **Am J Hum Genet** 1989 May;44(5):711–9
Wilms' tumour and related syndromes. A unifying theory. Côté GB. **Ann Genet** 1989;32(2):69–72 (44 ref.)
Renal neoplasms in a family. Laurence VM, et al. **Br J Radiol** 1989 Jan;62(733):83–4
Molecular genetic evidence for common pathogenesis of childhood and adult Wilms' tumor. Kozman HM, et al. **Cancer Genet Cytogenet** 1989 Mar;38(1):121–5
Translocation 10;17 in clear cell sarcoma of the kidney. A first report. Punnett HH, et al. **Cancer Genet Cytogenet** 1989 Aug;41(1):123–8
Hyperdiploidy including trisomy 8 in a cystic partially differentiated nephroblastoma. Timmons CF, et al. **Cancer Genet Cytogenet** 1989 Aug;41(1):79–85
Long range physical map of the Wilms' tumor-aniridia region on human chromosome 11. Compton DA, et al. **Cell** 1988 Dec 2;55(5):827–36
Mitotic deletions of 11p15.5 in two different tumors indicate that the CALCA locus is distal to the PTH locus. Henry I, et al. **Cytogenet Cell Genet** 1989;50(2-3):155–7
Molecular definition of de novo and genetically transmitted WAGR-associated rearrangements of 11p13. Lavedan C, et al. **Cytogenet Cell Genet** 1989;50(2-3):70–4
Structural alteration of the insulin-like growth factor II-gene in Wilms tumour. Irminger JC, et al. **Eur J Pediatr** 1989 Jun;148(7):620–3 (36 ref.)
Avian nephroblastomas induced by a retrovirus (MAV-2) lacking oncogene. III. Presence of defective MAV-2 proviruses in tumour DNA. Pečenka V, et al. **Folia Biol (Praha)** 1988;34(4):215–32
Four new DNA markers are assigned to the WAGR region of 11p13: isolation and regional assignment of 112 chromosome 11 anonymous DNA segments. Davis LM, et al. **Genomics** 1988 Oct;3(3):264–71
Molecular mapping and cloning of the breakpoints of a chromosome 11p14.1-p13 deletion associated with the AGR syndrome. Gessler M, et al. **Genomics** 1988 Aug; 3(2):117–23
Homozygous deletion of a DNA marker from chromosome 11p13 in sporadic Wilms tumor. Lewis WH, et al. **Genomics** 1988 Jul;3(1):25–31
Rapid isolation of moderate and highly polymorphic DNA fragments mapping close to WT (Wilms' tumour) and AN2 (aniridia) on chromosome 11. Boyd PA, et al. **Hum Genet** 1989 Mar;81(4):349–52
The aniridia-Wilms' tumour association: molecular and genetic analysis of chromosome deletions on the short arm of chromosome 11. Cowell JK, et al. **Hum Genet** 1989 May; 82(2):123–6
Molecular nature of genetic changes resulting in loss of heterozygosity of chromosome 11 in Wilms' tumours. Mannens M, et al. **Hum Genet** 1988 Dec;81(1):41–8
Re: Wilms Tumor: Past, Present, Future [letter] Moldwin RM, et al. **J Urol** 1989 Jul;142(1):141
Maternal allele loss in Wilms' tumour [letter] Williams JC, et al. **Lancet** 1989 Feb 4;1(8632):283–4
Loss of allelic heterozygosity at a second locus on chromosome 11 in sporadic Wilms' tumor cells. Reeve AE, et al. **Mol Cell Biol** 1989 Apr;9(4):1799–803
Familial predisposition to Wilms' tumour does not map to the short arm of chromosome 11. Grundy P, et al. **Nature** 1988 Nov 24;336(6197):374–6
Lack of linkage of familial Wilms' tumour to chromosomal band 11p13. Huff V, et al. **Nature** 1988 Nov 24; 336(6197):377–8
Cytogenetic analysis of Wilms' tumor: evidence of a multistep process. Vekemans M, et al. **Oncology** 1989;46(5):306–9
Tumor-specific loss of 11p15.5 alleles in del11p13 Wilms tumor and in familial adrenocortical carcinoma. Henry I, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3247–51
[Cytogenetic findings in Wilms' tumor] Hohenfellner K, et al. **Klin Padiatr** 1989 Jul-Aug;201(4):293–8 (Eng. Abstr.) (Ger)

IMMUNOLOGY

Blastemal cells of nephroblastomatosis complex share an onco-developmental antigen with embryonic kidney and Wilms' tumor. An immunohistochemical study on polysialic acid distribution. Roth J, et al. **Am J Pathol** 1988 Dec;133(3):596–608
Expression of class I and II major histocompatibility complex antigens in Wilms' tumour and normal developing human kidney. Borthwick GM, et al. **Br J Cancer** 1988 Dec; 58(6):753–61
Lymphokine-activated killer cytotoxicity in neonatal mononuclear cells: in vitro responses to tumor cell lines from pediatric solid tumors. Chin T, et al. **Pediatr Res** 1989 Feb;25(2):156–60
Heterogeneity of Wilms' tumour blastema. An immunohistological study. Albeda FW, et al. **Virchows Arch [A]** 1989;414(3):263–71

METABOLISM

[Glycolipid alterations in human kidney carcinoma] Sakakibara N. **Hokkaido Igaku Zasshi** 1989 Jan;64(1):75–82 (Eng. Abstr.) (Jpn)
[Porphyrins in Wilms' tumors with different degree of morphological differentiation and in their native renal tissue] Zawirska B. **Patol Pol** 1988 Jul-Sep;39(3):197–203 (Eng. Abstr.) (Pol)

MICROBIOLOGY

Avian nephroblastomas induced by a retrovirus (MAV-2) lacking oncogene. I. Construction of MAV-1 and MAV-2 proviral restriction maps and preparation of specific proviral molecular subclones. Pečenka V, et al. **Folia Biol (Praha)** 1988;34(3):129–46
Avian nephroblastomas induced by a retrovirus (MAV-2) lacking oncogene. II. Search for common sites of proviral integration in tumour DNA. Pečenka V, et al. **Folia Biol (Praha)** 1988;34(3):147–69
Induction of nephroblastoma by myeloblastosis-associated virus type 1: state of proviral DNAs in tumor cells. Soret J, et al. **J Virol** 1989 Apr;63(4):1803–7

MORTALITY

Bilateral Wilms' tumor: long-term survival and some epidemiological features. Coppes MJ, et al. **J Clin Oncol** 1989 Mar;7(3):310–5

PATHOLOGY

Cytologic characteristics of Wilms' tumors in fine needle aspirates. A study of ten cases. Quijano G, et al. **Acta Cytol** 1989 Mar-Apr;33(2):263–6
Extrarenal Wilms' tumor in the adult patient. A case report and review of the world literature. Fukutomi Y, et al. **Am J Clin Pathol** 1988 Nov;90(5):618–22 (21 ref.)
Secondary leukemia following successful treatment of Wilms' tumor. Moss TJ, et al. **Am J Pediatr Hematol Oncol** 1989 Summer;11(2):158–61
Intracardiac extension of Wilms' tumor. Patel CC, et al. **Am J Pediatr Hematol Oncol** 1989 Spring;11(1):46–50
Müllerian adenosarcomas of the uterus with sarcomatous overgrowth. A clinicopathological analysis of 10 cases. Clement PB. **Am J Surg Pathol** 1989 Jan;13(1):28–38
Rhabdoid tumor of kidney. A report of 111 cases from the National Wilms' Tumor Study Pathology Center. Weeks DA, et al. **Am J Surg Pathol** 1989 Jun;13(6):439–58 (74 ref.)
Nephroblastomatosis. An overview [editorial] Bove KE. **Arch Pathol Lab Med** 1989 Jul;113(7):723–4
Anaplastic neuroblastomas [letter] Chatten J. **Arch Pathol Lab Med** 1989 Jan;113(1):9–10
Bilateral diffuse nephroblastomatosis, pancortical type. A case report with immunohistochemical investigations. Murata T, et al. **Arch Pathol Lab Med** 1989 Jul; 113(7):729–34
Atypical congenital mesoblastic nephroma. Report of a case with karyotypic and flow cytometric analysis. Varsa EW, et al. **Arch Pathol Lab Med** 1989 Sep;113(9):1078–80
Multilocular cyst of the kidney (cystic nephroma) and cystic, partially differentiated nephroblastoma. Terminology and criteria for diagnosis. Joshi VV, et al. **Cancer** 1989 Jul 15; 64(2):466–79
Human sarcomatous Wilms' tumor lines: evidence for epithelial differentiation in clear cell sarcoma of the kidney. Ishii E, et al. **Cancer Res** 1989 Oct 1;49(19):5392–9
Malignant renal rhabdoid tumour. Immunohistochemical and ultrastructural studies. Seo IS, et al. **Histopathology** 1988 Dec;13(6):657–66
Classical and cellular (atypical) congenital mesoblastic nephroma: a clinicopathologic, ultrastructural, immunohistochemical, and flow cytometric study. Pettinato G, et al. **Hum Pathol** 1989 Jul;20(7):682–90
Extrarenal Wilms' tumor: an analysis of four cases. Wakely PE Jr, et al. **Hum Pathol** 1989 Jul;20(7):691–5
Anaplasia in unilateral Wilms' tumor: a report from the National Wilms' Tumor Study Pathology Center. Zuppan CW, et al. **Hum Pathol** 1988 Oct;19(10):1199–209
Prognostic factors for children with recurrent Wilms' tumor: results from the Second and Third National Wilms' Tumor Study. Grundy P, et al. **J Clin Oncol** 1989 May;7(5):638–47
A monoclonal antibody stains blastemal but not tubular components of Wilms' tumour. Sarawar SR, et al. **J Pathol** 1988 Dec;156(4):319–24
Teratoid Wilms' tumor: the St Jude experience. Fernandes ET, et al. **J Pediatr Surg** 1988 Dec;23(12):1131–4
Pulmonary blastoma—report of a case. Deng BH, et al. **J Tongji Med Univ** 1988;8(1):56–9 (11 ref.)
Wilms tumorlet, nodular renal blastema and multicystic renal dysplasia. Dimmick JE, et al. **J Urol** 1989 Aug;142(2 Pt 2):484–5; discussion 489
Nodular renal blastema in the multicystic kidney. Noe HN, et al. **J Urol** 1989 Aug;142(2 Pt 2):486–8; discussion 489
Preservation of anaplastic features in Wilms' tumors after preoperative chemotherapy. Alvarez-Silvan AM, et al. **Med Pediatr Oncol** 1989;17(2):131–3
Malignant rhabdoid tumor. A morphological and flow cytometric study. Schmidt D, et al. **Pathol Res Pract** 1989 Feb;184(2):202–10
Growth characteristics of human Wilms' tumor in nude mice. Garvin AJ, et al. **Pediatr Pathol** 1988;8(6):599–615
Function within mesoblastic nephroma: imaging—pathologic correlation. Kirks DR, et al. **Pediatr Radiol** 1989; 19(2):136–9
Spontaneous nephroblastoma in a strain CE/J mouse. A case report. Liebelt AG, et al. **Toxicol Pathol** 1989;17(1 Pt 1):57–61
Nephroblastoma with neuroendocrine differentiation. Orazi A, et al. **Tumori** 1989 Apr 30;75(2):171–6
Wilms' tumor in an adult patient. Palou J, et al. **Urol Int** 1988;43(6):349–51
Clinicopathologic features of nephroblastomatosis. Hennigar RA, et al. **Urology** 1989 Apr;33(4):259–70 (56 ref.)
Adult Wilms' tumor—a case report. Jeong HJ, et al. **Yonsei Med J** 1989;30(1):88–94
[Differentiation in embryonal tumors] Altmannsberger M, et al. **Verh Dtsch Ges Pathol** 1988;72:150–63 (Eng. Abstr.) (Ger)
[Wilms' tumor in adults after curative treatment of Hodgkin's disease] Theissig F, et al. **Zentralbl Allg Pathol** 1988; 134(3):293–6 (Eng. Abstr.) (Ger)
[Benign multilocular cystic nephroma. Description of 1 case] Cevoli R, et al. **Minerva Urol Nefrol** 1989 Apr-Jun; 41(2):127–30 (Eng. Abstr.) (Ita)
[Adenocarcinoma of the uterus: presentation of 3 cases] De Rosa G, et al. **Pathologica** 1987 Nov-Dec;79(1064):751–9 (23 ref.) (Eng. Abstr.) (Ita)
[Nephroblastoma with intestinal differentiation] Sokolova IN. **Arkh Patol** 1988;50(11):66–70 (Eng. Abstr.) (Rus)
[Bilateral metachronous nephroblastoma. Apropos of a case] Montero Redondo A, et al. **An Esp Pediatr** 1988 May; 28(5):477–8 (Spa)
[Malignant rhabdoid tumor of the kidney: 2 cases and a review of the literature] Picazo García ML, et al. **An Esp Pediatr** 1988 Jun;28(6):540–4 (28 ref.) (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Functional receptors for nerve growth factor on Ewing's sarcoma and Wilm's tumor cells. Thomson TM, et al. **J Cell Physiol** 1989 Oct;141(1):60–4

RADIOGRAPHY

Nephroblastomatosis: missed diagnosis. Cormier PJ, et al. **Radiology** 1988 Dec;169(3):737–8
Malignant rhabdoid tumor of the kidney: radiologic features. Sisler CL, et al. **Radiology** 1989 Jul;172(1):211–2
[Neuroblastoma and Wilm's tumor. Computerized tomography study] Manenti A, et al. **Acta Urol Belg** 1988; 56(3):458–63 (Eng. Abstr.) (Fre)
[Diagnostic, staging and therapeutic problems in invasion of the abdominal vena cava in renal cancer] Proca E, et al. **Rev Chir [Chir]** 1989 Jan-Feb;38(1):1–17 (Eng. Abstr.) (Rum)
[Wilms' tumor in the adult. A new case and review of the literature] Allepuz Losa CA, et al. **Actas Urol Esp** 1989

Mar-Apr;13(2):129-33 (58 ref.) (Eng. Abstr.) (Spa)

RADIOTHERAPY

Diffuse interstitial pneumonitis after pulmonary irradiation for metastatic Wilms' tumor. A report from the National Wilms' Tumor Study. Green DM, et al. **Cancer** 1989 Feb 1;63(3):450-3

Acute toxicities associated with radiation in the second National Wilms' Tumor Study. Thomas PR, et al. **J Clin Oncol** 1988 Nov;6(11):1694-8

SECONDARY

Intrascrotal metastasis from Wilms' tumor [clinical conference] de Camargo B, et al. **Med Pediatr Oncol** 1988; 16(6):381-3

Metastatic Wilms' tumor to the liver with MR findings simulating cysts: case report emphasizing need for integrated imaging. Brody AS, et al. **Pediatr Radiol** 1989; 19(5):337-8

A case report of bone metastases in Wilms' tumor: diagnostic aspects and a review of the literature. Lupi L, et al. **Rays** 1987 Sep-Dec;12(3):61-5 (16 ref.)

[Bone metastases in a case of trimorphic Wilm's tumor] Lupi L, et al. **Ann Radiol (Paris)** 1988;31(3):189-92 (Eng. Abstr.) (Fre)

[Intracardiac Wilms' tumor diagnosed by two-dimensional echocardiography] Sánchez Ufarte C, et al. **Rev Esp Cardiol** 1988 Jun-Jul;41(6):373-5 (Eng. Abstr.) (Spa)

SURGERY

Combination chemotherapy and surgery in the treatment of Wilm's tumour: preliminary communication. Katongole-Mbidde E, et al. **East Afr Med J** 1988 Oct; 65(10):692-7

Actual approach to cystic nephroma. Billiet I, et al. **Eur Urol** 1988;14(4):280-6

Recent advances in the surgical treatment of bilateral Wilms' tumor. Hanash KA. **Prog Clin Biol Res** 1989;303:635-52 (35 ref.)

Surgical treatment of bilateral Wilms' tumours with special reference to second operations in metachronous disease. Pumberger W, et al. **Prog Pediatr Surg** 1989;23:96-103

[Accomplishments of tumor surgery in pediatric nephroblastoma] Helmig FJ, et al. **Langenbecks Arch Chir** 1988;Suppl 2:515-8 (6 ref.) (Eng. Abstr.) (Ger)

[Effective anticancer agents and the advance of surgical technics in tumors] Hashizume K, et al. **Gan No Rinsho** 1988 Aug;34(10):1515-8 (Eng. Abstr.) (Jpn)

[Preoperative infusion of glucose in the prevention of intraoperative hyperglycemia in children operated on for nephroblastoma] Kolomiiskii AIu, et al. **Vestn Akad Med Nauk SSSR** 1988;(9):61-4 (Eng. Abstr.) (Rus)

THERAPY

Progress in treatment of Wilms' tumor in Hungary. Kajtar PG, et al. **Am J Pediatr Hematol Oncol** 1988 Fall; 10(3):273-5

Wilms' tumour and genitourinary rhabdomyosarcoma. Gough DC. **Br J Urol** 1989 Feb;63(2):109-16 (28 ref.)

Treatment of Wilms' tumor. Results of the Third National Wilms' Tumor Study. D'Angio GJ, et al. **Cancer** 1989 Jul 15;64(2):349-60

Effectiveness of two methods of parenteral nutrition support in improving muscle mass of children with neuroblastoma or Wilms' tumor. A randomized study. Rickard KA, et al. **Cancer** 1989 Jul 1;64(1):116-25

Integration of nutrition support into oncologic treatment protocols for high and low nutritional risk children with Wilms' tumor. A prospective randomized study. Rickard KA, et al. **Cancer** 1989 Jul 15;64(2):491-509

Nephroblastoma: an example of cancer curable by appropriate intervention even in developing countries. Kasili EG, et al. **East Afr Med J** 1987 Dec;64(12):828-35

Mullerian adenosarcoma of the uterine cervix. Gal D, et al. **Gynecol Oncol** 1988 Nov;31(3):445-53 (30 ref.)

Treatment results among adults with childhood tumors: a 20-year experience. Prestidge BR, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):507-14

Reduced therapy for Wilms' tumor: analysis of treatment results from a single institution. Wilimas JA, et al. **J Clin Oncol** 1988 Oct;6(10):1630-5

Adult Wilms' tumor. Chang SY, et al. **J Surg Oncol** 1988 Dec;39(4):283-6

The treatment of Wilms' tumor: an update. Lemerle J, et al. **Prog Clin Biol Res** 1989;303:629-33 (12 ref.)

How to establish equivalence between treatments: a one-sided clinical trial in paediatric oncology. Rodary C, et al. **Stat Med** 1989 May;8(5):593-8

[Two cases of adult Wilm's tumor showing repeated multiple recurrences in the abdomen] Takai K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Apr;79(4):719-25 (Eng. Abstr.) (Jpn)

ULTRASTRUCTURE

Rat renal mesenchymal tumor as an experimental model for human congenital mesoblastic nephroma: II. Comparative pathology. Deshpande RB, et al. **Pediatr Pathol** 1989; 9(2):141-51

Anaplastic Wilms' tumor and other clinically aggressive childhood renal neoplasms: ultrastructural and immunocytochemical features. Mierau GW, et al. **Ultrastruct Pathol** 1989 Mar-Jun;13(2-3):225-48

VETERINARY

Renal neoplasia of snakes. Jacobson ER, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1134-6

Congenital mesoblastic nephroma in a dog: a benign variant of nephroblastoma. Takeda T, et al. **Vet Pathol** 1989 May; 26(3):281-2

NEPHROCALCINOSIS

CHEMICALLY INDUCED

Analgesic nephropathy: ultrasonic features. Puvaneswary M, et al. **Australas Radiol** 1988 May;32(2):247-50

COMPLICATIONS

Microscopic nephrocalcinosis in cystic fibrosis [letter] Couper R, et al. **N Engl J Med** 1989 Feb 2;320(5):318-9

DIAGNOSIS

Hypokalemia with nephrocalcinosis: a variant of Bartter's syndrome. Wang CW, et al. **Aust N Z J Med** 1989 Feb; 19(1):58-60

Ultrasound demonstration of nephrocalcinosis in William's syndrome. Jantarasami T, et al. **JCU** 1989 Sep;17(7):533-4

ETIOLOGY

Nephrocalcinosis in Shwachman's syndrome. D'Angio CT, et al. **Arch Dis Child** 1989 Apr;64(4):614-5

An in vitro model of nephrocalcinosis using rabbit inner medullary collecting tubular cell culture. Senior JC, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1169-74

Influence of dietary phosphorus restriction on calcium and phosphorus metabolism in rats. Schoenmakers AC, et al. **Int J Vitam Nutr Res** 1989;59(2):200-6

Influence of dietary calcium:phosphorus ratio on mineral excretion and nephrocalcinosis in female rats. Hoek AC, et al. **J Nutr** 1988 Oct;118(10):1210-6

Recurrence of nephrocalcinosis after renal transplantation in an adult patient with primary hyperoxaluria type I. Knols G, et al. **Nephrol Dial Transplant** 1989;4(2):137-9

[Nephrocalcinosis and pancreatic calcification after ablation of adrenal adenoma: the role of hypercortisolism?] Picaud JC, et al. **Pediatrie** 1989;44(2):103-7 (10 ref.) (Eng. Abstr.) (Fre)

[Acute flaccid quadriplegia disclosing Gougerot-Sjögren syndrome with renal tubular acidosis, nephrocalcinosis and osteomalacia] Karras D, et al. **Rev Rhum Mal Osteoartic** 1989 May;56(6):491-4 (Fre)

[Nephrocalcinosis] Puga F, et al. **Rev Chil Pediatr** 1987 Sep-Oct;58(5):397-401 (Eng. Abstr.) (Spa)

THERAPY

Combined treatment of medullary sponge kidney by EDTA potassium citrate and extracorporeal shock wave lithotripsy. Nakatsuka S, et al. **Eur Urol** 1988;14(4):339-42

NEPHROLOGY

see related
KIDNEY DISEASES

Editor's farewell. Kluthe R. **Clin Nephrol** 1989 Jul;32(1):1-4

Multicenter cooperative studies in pediatric nephrology. Brodehl J. **Contrib Nephrol** 1988;67:206-18

Ethics in nephrologic progress. Schreiner GE. **Contrib Nephrol** 1989;70:1-12

Computerized patient management in a nephrology department. Degoulet P, et al. **Minerva Urol Nefrol** 1989 Jan-Mar;41(1):55-8

Analysis of data in nephrology. VI. The generalised linear model. Appleton DR. **Nephrol Dial Transplant** 1988; 3(6):830-2

Analysis of data in nephrology. II. When to use the t-test. Appleton DR. **Nephrol Dial Transplant** 1988;3(2):225-7

[Experience of decentralized informatics at a nephrology unit of a general hospital] Marichal JF, et al. **Pathol Biol (Paris)** 1988 Dec;36(10):1227-31 (Eng. Abstr.) (Fre)

[Nephrologic care of children in Armenia] Iboian SR, et al. **Pediatriia** 1988;(11):75-6 (Rus)

EDUCATION

[Teaching nephrology at postgraduate courses for the head and leading therapists] Burtsev VI, et al. **Klin Med (Mosk)** 1989 May;67(5):142-4 (Rus)

HISTORY

Presidential address. American Society of Nephrology meeting. December 11, 1988. San Antonio, Texas. Ferris TF. **Am J Kidney Dis** 1989 May;13(5):357-64

Nephrology in the natural history of Pliny the Elder (23-79 A.D.). De Santo NG, et al. **Am J Nephrol** 1989;9(3):252-60

Origins of nephrology: Hippocrates, the father of clinical nephrology. Eknoyan G. **Am J Nephrol** 1988;8(6):498-507

The origins of nephrology—Galen, the founding father of experimental renal physiology. Eknoyan G. **Am J Nephrol** 1989;9(1):66-82

French and German nephrologists in the mid-19th century. The impact of Richard Bright on the continent. Ritz E, et al. **Am J Nephrol** 1989;9(2):167-72

Fifth annual John Peters award, American Society of Nephrology. Award recipients: Jacob Churg and Conrad Pirani. Cotran RS. **Kidney Int** 1988 Jul;34(1):121-3

[Contribution of Corresponding Member, Academy of Medical Sciences of the USSR, Prof. G. P. Kulakov to nephrology and the study of hemodialysis] Tsalenchuk IaP, et al. **Ter Arkh** 1988;60(6):151-2 (Rus)

MANPOWER

National Institutes of Health research support to manpower in pediatric nephrology: an overview. Hirschman GH, et al. **Semin Nephrol** 1989 Mar;9(1):2-4

METHODS

Poisoning: is the role of the nephrologist diminishing? Winchester JF. **Am J Kidney Dis** 1989 Mar;13(3):171-83 (141 ref.)

Back to basics: the urinalysis: a selected national survey and review. Cushner HM, et al. **Am J Med Sci** 1989 Mar; 297(3):193-6 (17 ref.)

ORGANIZATION & ADMINISTRATION

[The role of an automated medical information system in the organization of the work of a municipal nephrologic center] Diadyk AI, et al. **Klin Med (Mosk)** 1988 Nov; 66(11):96-8 (Eng. Abstr.) (Rus)

[Experience in organizing nephrologic and urologic care for the population of Orel Province] Iakovlev PA, et al. **Vrach Delo** 1988 Nov;(11):115-6 (Rus)

[Neurologic care in the public health system of the Ukrainian SSR] Pyrig LA. **Vrach Delo** 1989 Jan;(1):5-9 (Rus)

STANDARDS

[Improving the nephrological services] Polushin VI. **Sov Med** 1988;(7):59-61 (Rus)

TRENDS

Position paper on current status and future needs of pediatric nephrology: training and research. American Society of Pediatric Nephrology. **Am J Kidney Dis** 1989 Feb; 13(2):164-6

Renal disease epidemiology: an underdeveloped discipline. Hoy W, et al. **Am J Kidney Dis** 1988 Nov;12(5):454-7

Morphologic classification of renal disease and the realities of clinical nephrology: do we need a new approach? Solez K, et al. **APMIS Suppl** 1988;4:11-6 (37 ref.)

Educational implications of nephrology progress. Bonomini V. **Contrib Nephrol** 1989;70:13-21

Potential contribution of artificial intelligence to nephrology. Funck-Brentano JL. **Contrib Nephrol** 1989;70:22-9

Current status and future needs of pediatric nephrology. Position paper from American Society of Pediatric Nephrology. Chesney RW. **Pediatr Res** 1988 Dec; 24(6):657-62

[Results and prospects of nephrological research within the framework of interinstitutional cooperation of pediatric clinics in a number of socialist countries] Ignatova MS, et al. **Pediatriia** 1988;(5):5-10 (Rus)

[Perestroika in the surgery of renal tuberculosis and its scientific substantiation] Shapkin AG. **Vestn Khir** 1988 Oct; 141(10):3-7 (Eng. Abstr.) (Rus)

NEPHRONS

ANALYSIS

Aldosterone binding sites along nephron of Xenopus and rabbit. Gnionsahe A, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R87-95

Localisation of immunoreactive kininogen and tissue kallikrein in the human nephron. Figueroa CD, et al. **Histochemistry** 1988;89(5):437-42

B-cell markers in the human kidney. Fleming S, et al. **Nephrol Dial Transplant** 1989;4(2):85-91

BLOOD SUPPLY

Pressure-dependent contraction of rat juxtamedullary afferent arterioles. Sanchez-Ferrer CF, et al. **Circ Res** 1989 Apr;64(4):790-8

[The structure of organs around nephron—the shape of active microcirculatory vessels around nephron] Koike T. **Igaku Kenkyu** 1988 Jan;58(1):26-31 (Eng. Abstr.) (Jpn)

CYTOLOGY

A structural study of the rat proximal and distal nephron: effect of peptide and thyroid hormones. Koechlin N, et al. **Am J Physiol** 1989 May;256(5 Pt 2):814-22

DRUG EFFECTS

Micropuncture comparison of nephron function during acute and chronic ADH excess in the rat. Field MJ, et al. **Clin Exp Pharmacol Physiol** 1989 Feb;16(2):77-87

Differential nephrotoxicity of low molecular weight proteins

including Bence Jones proteins in the perfused rat nephron in vivo. Sanders PW, et al. **J Clin Invest** 1988 Dec; 82(6):2086–96

Alpha adrenoceptor agonist stimulation of oxygen consumption in rat proximal and distal nephrons. Gesek FA, et al. **J Pharmacol Exp Ther** 1989 May;249(2):529–34

Effects of aldosterone on NEM-sensitive ATPase in rabbit nephron segments. Garg LC, et al. **Kidney Int** 1988 Jul; 34(1):13–7

Evidence for a proximal and distal nephron action of atrial natriuretic factor in man. McMurray J, et al. **Nephron** 1989; 51(1):39–43

Nephrotoxicity assessment by measuring cellular ATP content. II. Intranephron site of ochratoxin A nephrotoxicity. Jung KY, et al. **Toxicol Appl Pharmacol** 1989 Sep 15;100(3):383–90

Detection of kidney damage by malathion impurities using a microdissection technique. Keadtisuke S, et al. **Toxicol Lett** 1989 Apr;47(1):53–9

[Localization of the action of furosemide and triamterene in the nephron by means of correlating their pharmacokinetics and pharmacodynamics] Lebedev AA, et al. **Farmakol Toksikol** 1989 Jan-Feb;52(1):44–7 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Human developing metanephric nephrons. Morphological, immunohistochemical and histochemical studies. De Martino C, et al. **Prog Clin Biol Res** 1989;295:173–9

ENZYMOLOGY

Distribution of vasoactive intestinal peptide-sensitive adenylate cyclase activity along the nephron. Edwards RM. **Eur J Pharmacol** 1988 Nov 22;157(2–3):227–30

Vanadate stimulates the N-ethylmaleimide-sensitive adenosine triphosphatase in rat nephron. Sabatini S, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):529–33

Function and control of Na-K-ATPase in single nephron segments of the mammalian kidney. Doucet A. **Kidney Int** 1988 Dec;34(6):749–60 (118 ref.)

IMMUNOLOGY

Expression of segment-specific antigens in the human nephron and in renal epithelial tumors. Holm-Nielsen P, et al. **APMIS Suppl** 1988;4:48–55

METABOLISM

Electrolyte, urea, and water transport in a two-nephron central core model of the renal medulla. Stephenson JL, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):F399–413

Substrate specificity to maintain cellular ATP along the mouse nephron. Uchida S, et al. **Am J Physiol** 1988 Nov; 255(5 Pt 2):F977–83

Immunocytochemical localization of intracellular acidic compartments: rat proximal nephron. Verlander JW, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):F454–62

Age-related changes in neuronal uptake of catecholamines. Avellar MC, et al. **Braz J Med Biol Res** 1988;21(3):553–5

Intranephron ammoniagenesis and its regulation by PGE2 in rats and mice. Endou H, et al. **Contrib Nephrol** 1988; 63:86–90

Electron microscopic immunohistochemical localization of components of Na+-cotransporters along the rat nephron. Haase W, et al. **Eur J Cell Biol** 1989 Apr;48(2):360–74

Enzymatic and binding effects of atrial natriuretic factor in glomeruli and nephrons. Kim JK, et al. **Kidney Int** 1989 Mar;35(3):799–805

Insulin receptors along the rat nephron: [125I] insulin binding in microdissected glomeruli and tubules. Butlen D, et al. **Pflugers Arch** 1988 Oct;412(6):604–12

[Indices of cell membrane destabilization of the erythrocytes and nephrons in glomerulopathies in children] Zhmurova VA, et al. **Pediatriia** 1988;(6):109–10 **(Rus)**

PATHOLOGY

Glomeruli and blood pressure. Less of one, more the other? Brenner BM, et al. **Am J Hypertens** 1988 Oct;1(4 Pt 1):335–47 (131 ref.)

Quantitative morphologic changes in nephron structures and urinary enzyme activity pattern in sodium-maleate-induced renal injury. Pfaller W, et al. **Renal Physiol Biochem** 1989 Jan-Feb;12(1):56–64

Effects of experimental obstructive hydronephrosis on the immature nephrons in newborn rats. Josephson S, et al. **Urol Int** 1989;44(2):61–5

[Familial nephropathy in cocker spaniels] Koeman JP, et al. **DTW** 1989 Apr;96(4):174–9 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Correlation between single nephron glomerular filtration rate and filtration area in superficial glomeruli of developing rats. Larsson L, et al. **Acta Physiol Scand** 1988 Mar; 132(3):413–7

Effects of charge on membrane processing in the proximal nephron. Peterson DR, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C304–9

Contribution of purine nucleotide cycle to intranephron ammoniagenesis in rats. Tamura K, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):F1122–7

Changes in glomerular filtration rate, lithium clearance and plasma protein clearances in the early phase after unilateral nephrectomy in living healthy renal transplant donors. Strandgaard S, et al. **Clin Sci** 1988 Dec;75(6):655–9

How much "new" bicarbonate is formed in the distal nephron in the process of net acid excretion? Halperin ML. **Kidney Int** 1989 Jun;35(6):1277–81 (17 ref.)

Activity of calcium-sensitive phospholipid-dependent protein kinase C following nephron loss. Hise MK, et al. **Kidney Int** 1989 Aug;36(2):216–21

Effect of heparin on the glomerular structure and function of remnant nephrons. Ichikawa I, et al. **Kidney Int** 1988 Nov;34(5):638–44

Single nephron comparison of the effect of loop of Henle flow on filtration rate and pressure in control and angiotensin II-infused rats. Schnermann J, et al. **Miner Electrolyte Metab** 1989;15(3):103–7

PHYSIOPATHOLOGY

Increased single-nephron protein excretion after renal ablation in nephrotic rats. Meyer TW, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):F1243–8

Effect of selective aldosterone deficiency on acidification in nephron segments of the rat inner medulla. DuBose TD Jr, et al. **J Clin Invest** 1988 Nov;82(5):1624–32

"Intact nephrons" as the primary origin of proteinuria in chronic renal disease. Study in the rat model of subtotal nephrectomy. Yoshioka T, et al. **J Clin Invest** 1988 Nov; 82(5):1614–23

On the renal basis for essential hypertension: nephron heterogeneity with discordant renin secretion and sodium excretion causing a hypertensive vasoconstriction-volume relationship. Sealey JE, et al. **J Hypertens** 1988 Oct; 6(10):763–77 (67 ref.)

Pathophysiology of glomerular hemodynamic adaptations to nephron loss. Pelayo JC, et al. **Semin Nephrol** 1989 Mar; 9(1):10–3 (29 ref.)

[Renal function before and after release of complete unilateral ureteral obstruction in young rats. Comparison with adult rats] Suzuki S, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Apr;79(4):660–5 (Eng. Abstr.) **(Jpn)**

[Glomerular and proximal tubular functions after release of complete unilateral ureteral obstruction in the rat] Suzuki S, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Apr; 79(4):654–9 (Eng. Abstr.) **(Jpn)**

[Factors in the progression of renal diseases] Bregman R, et al. **AMB Rev Assoc Med Bras** 1987 Nov-Dec; 33(11–12):237–40 (Eng. Abstr.) **(Por)**

ULTRASTRUCTURE

Ultrastructure of Amphiuma distal nephron: evidence for cellular heterogeneity. Biemesderfer D, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):C849–57

Ultrastructural markers of tubular transport within the rat nephron in experimental diabetes insipidus. Kidawa Z, et al. **Folia Histochem Cytobiol** 1988;26(4):217–24

Ultrastructure of the nephron of the one-humped camel, Camelus dromedarius. Safer AM, et al. **J Morphol** 1988 Dec;198(3):287–301

Lithium-induced structural changes in the cortical distal nephron localized by computer-assisted three-dimensional reconstruction. Dørup J, et al. **J Ultrastruct Mol Struct Res** 1988 Sep;100(3):212–23

NEPHROPATHY, IGA see **GLOMERULONEPHRITIS, IGA**

NEPHROPATHY, MEMBRANOUS see **GLOMERULONEPHRITIS, MEMBRANOUS**

NEPHROPATHY, MINIMAL CHANGE see **NEPHROSIS, LIPOID**

NEPHROSCLEROSIS

COMPLICATIONS

[Hypertrophic kidneys in utero and neonatal renal failure caused by diffuse mesangial sclerosis] Parchoux B, et al. **Pediatrie** 1988;43(3):219–22 (Eng. Abstr.) **(Fre)**

[Nephroangiosclerosis as a cause of uremia] Goia F, et al. **Minerva Urol Nefrol** 1988 Jul-Sep;40(3):219–22 **(Ita)**

ETIOLOGY

Long-term improvement in renal function after short-term strict blood pressure control in hypertensive nephrosclerosis. Pettinger WA, et al. **Hypertension** 1989 Jun;13(6 Pt 2):766–72

[Arterial hypertension, nephrosclerosis and calcium antagonists (editorial)] del Río A. **Med Clin (Barc)** 1989 Jan 28;92(3):98–101 **(Spa)**

PATHOLOGY

Evidence for the failure of the Laplace law as a sole explanation for wall thickening of arteries in hypertensive and aging normotensive kidneys. Tracy RS, et al. **Arch Pathol Lab Med** 1989 Apr;113(4):342–9

Necrotizing arteriolitis of ileum, as the initial manifestation of malignant hypertension in childhood. Chi JG, et al. **Child Nephrol Urol** 1988–89;9(1–2):112–5

A histometrical study on the development of three glomerulopathies. Oguma S. **Kidney Int** 1988 Jul; 34(1):102–8

Blood pressure, nephrosclerosis, and age autopsy findings from the Honolulu Heart Program. Tracy RE, et al. **Mod Pathol** 1988 Nov;1(6):420–7

[Malabsorption syndrome, fever and chronic renal insufficiency (clinical conference)] **Medicina (B Aires)** 1988; 48(4):409–15 **(Spa)**

PHYSIOPATHOLOGY

Role of hyperperfusion in different glomerular diseases. Bohle A, et al. **Blood Purif** 1988;6(4):258–63

URINE

Urinary excretion rate of guanidinoacetic acid as a new marker in hypertensive renal damage. Takano Y, et al. **Nephron** 1989;52(3):273–7

NEPHROSIS

BLOOD

Tissue-type plasminogen activator (t-PA) and dilute blood clot lysis time in nephrotic patients. Cucuianu MP, et al. **Thromb Haemost** 1989 Apr 25;61(2):270–4

CHEMICALLY INDUCED

Heterogeneity of glomerular barrier function in early adriamycin nephrosis of MWF rats. Soose M, et al. **Clin Physiol Biochem** 1988;6(6):310–5

Albumin charge in adriamycin nephrosis. Ginevri F, et al. **Contrib Nephrol** 1988;67:95–8

DRUG THERAPY

Effect of camostat mesilate on puromycin aminonucleoside nephrotic rats. Suzuki J, et al. **Fukushima J Med Sci** 1988 Jun;34(1):21–5

Immunosuppressive treatment in childhood idiopathic nephrosis. Broyer M, et al. **J Autoimmun** 1989 Jun; 2(3):207–17 (51 ref.)

Effect of 24R,25-dihydroxyvitamin D3 in experimental renal insufficiency. Katoh T, et al. **J Int Med Res** 1988 Jul-Aug; 16(4):294–9

Mechanisms of reduced effects of loop diuretics in healthy volunteers and in patients with renal disease. Sjöström P. **Scand J Urol Nephrol Suppl** 1988;111:1–66

IMMUNOLOGY

Immunohistochemical study of complement S protein (Vitronectin) in normal and diseased human kidneys: relationship to neoantigens of the C5b-9 terminal complex. Bariety J, et al. **Clin Exp Immunol** 1989 Jan;75(1):76–81

METABOLISM

Analysis of anionic charge of the glomerular basement membrane in aminonucleoside nephrosis. Kobayashi S, et al. **Kidney Int** 1989 Jun;35(6):1405–8

[Autoradiographic research on RNA biosynthesis in renal tissue in the early period of corrosive sublimate-induced necronephrosis] Andreev VP, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):632–5 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Pattern of glomerulonephritis in Singapore children--a renal biopsy perspective. Yap HK, et al. **Ann Acad Med Singapore** 1989 Jan;18(1):35–9

Focal segmental glomerulosclerosis. A common entity in nephrotic black adults. Bakir AA, et al. **Arch Intern Med** 1989 Aug;149(8):1802–4

Alterations in the glomerulus in aminonucleoside nephrosis in analbuminemic rats. Abe H, et al. **Nephron** 1988; 50(4):351–5

PHYSIOPATHOLOGY

Increased single-nephron protein excretion after renal ablation in nephrotic rats. Meyer TW, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):F1243–8

Plasma protein concentration and colloid osmotic pressure in nephrotic rats. Miller PL, et al. **Kidney Int** 1988 Aug; 34(2):220–3

URINE

Effect of mild charge modification of albumin on renal excretion in the rat. de Zeeuw D, et al. **Contrib Nephrol** 1988;68:121–7

VETERINARY

Early renal ultrasonographic findings in dogs with experimentally induced ethylene glycol nephrosis. Adams WH, et al. **Am J Vet Res** 1989 Aug;50(8):1370–6

NEPHROSIS, LIPOID

[Minimal change nephrotic syndrome in adults] Galicia Basart M, et al. **Med Clin (Barc)** 1989 Feb 25;92(7):250–3 (Eng. Abstr.) **(Spa)**

BLOOD

Studies of a glomerular permeability factor in patients with minimal-change nephrotic syndrome. Yoshizawa N, et al. **Nephron** 1989;51(3):370–6

[Lipoid nephrosis: changes in proteinemia and albuminemia after resolution of proteinuria] Bensman A, et al. **Ann Pediatr (Paris)** 1989 Mar;36(3):208–10 (Eng. Abstr.) **(Fre)**

CHEMICALLY INDUCED

Ibuprofen-associated lipoid nephrosis without interstitial nephritis. Morgenstern SJ, et al. **Am J Kidney Dis** 1989 Jul;14(1):50–2

Minimal change glomerulopathy associated with nonsteroidal antiinflammatory drugs. Warren GV, et al. **Am J Kidney Dis** 1989 Feb;13(2):127–30

[Development toward segmental and focal hyalinosis of a nephrotic syndrome with minimal glomerular lesions in a patient treated with sulindac (letter)] Pagniez D, et al. **Nephrologie** 1988;9(2):90–1 **(Fre)**

COMPLICATIONS

Haemophilus influenzae type b infection after nephrotic syndrome in a previously vaccinated child. Allen U, et al. **Can Med Assoc J** 1989 Aug 15;141(4):310–1

Minimal change disease with partial lipodystrophy. Jacob CK, et al. **Child Nephrol Urol** 1988–89;9(1–2):116–7

Behcet's syndrome associated with minimal change glomerulonephritis and renal vein thrombosis. Malik GH, et al. **Nephron** 1989;52(1):87–9

[A case of systemic sarcoidosis with nephrotic syndrome] Shingu T, et al. **Nippon Naika Gakkai Zasshi** 1988 Nov; 77(11):1740–1 **(Jpn)**

[Three cases of acute renal failure associated with minimal change nephrotic syndrome] Tsuji M, et al. **Nippon Naika Gakkai Zasshi** 1988 Jul;77(7):1031–6 **(Jpn)**

DRUG THERAPY

Ciclosporin in idiopathic nephrotic syndrome of children. Brodehl J, et al. **Am J Nephrol** 1989;9 Suppl 1:61–4

Minimal-change glomerulopathy of adulthood. Korbet SM, et al. **Am J Nephrol** 1988;8(4):291–7

Ciclosporin in the treatment of nephrosis. Minimal change disease and focal-segmental glomerulosclerosis. Meyrier A. **Am J Nephrol** 1989;9 Suppl 1:65–71 (39 ref.)

Steroid-sensitive minimal change nephrotic syndrome. Long-term follow-up. Lewis MA, et al. **Contrib Nephrol** 1988;67:226–8

Predicting the response to cytotoxic therapy for childhood nephrotic syndrome: superiority of response to corticosteroid therapy over histopathologic patterns. Schulman SL, et al. **J Pediatr** 1988 Dec;113(6):996–1001

Cyclosporin A treatment in children with minimal change nephrotic syndrome and focal segmental glomerulosclerosis. Brodehl J, et al. **Klin Wochenschr** 1988 Nov 15;66(22):1126–37

Long-term treatment of minimal-change nephrotic syndrome with cyclosporin: a control biopsy study. Clasen W, et al. **Nephrol Dial Transplant** 1988;3(6):733–7

Daily single-dose and daily reduced-dose prednisone therapy for children with the nephrotic syndrome. Warshaw BL, et al. **Pediatrics** 1989 May;83(5):694–9

ENZYMOLOGY

A kallikrein-like molecule and plasma vasoactivity in minimal change disease. Increased turnover in relapse versus remission. Bakker WW, et al. **Contrib Nephrol** 1988;67:31–6

ETHNOLOGY

Outcome of childhood minimal-change disease [letter] Coovadia HM, et al. **Lancet** 1989 May 27;1(8648):1199–200

ETIOLOGY

[Possibility of predicting the development of morphologic types of chronic glomerulonephritis based on clinico-functional data] Ratner MIa, et al. **Klin Med (Mosk)** 1988 Oct;66(10):119–25 **(Rus)**

GENETICS

Parent-child minimal change nephrotic syndrome [letter] Choi Y, et al. **Am J Dis Child** 1988 Nov;142(11):1140

Parent-child minimal change nephrotic syndrome [letter] Leung AK, et al. **Am J Dis Child** 1989 Apr;143(4):442–3

IMMUNOLOGY

Dysfunction of the monocyte-macrophage system in the idiopathic minimal change nephrotic syndrome. Estevez ME, et al. **Acta Paediatr Scand** 1989 Jan;78(1):87–93

Hypogammaglobulinaemia in nephrotic rats is attributable to hypercatabolism of IgG. Beaman M, et al. **Clin Exp Immunol** 1988 Dec;74(3):425–30

Effect of levamisole on T cell in minimal change nephrotic syndrome. Dayal R, et al. **Indian Pediatr** 1988 Dec; 25(12):1184–7

A transient monocyte defective function in idiopathic nephrotic syndrome (lipoid nephrosis). Branellec A, et al. **Int Urol Nephrol** 1988;20(4):421–8

IGM nephropathy in childhood--is it a distinct entity? Yap HK, et al. **J Singapore Paediatr Soc** 1988;30(3–4):145–9

The soluble immune response suppressor pathway in nephrotic syndrome. Schnaper HW. **Semin Nephrol** 1989 Mar;9(1):107–11 (38 ref.)

[Immunological analysis in primary renal disease and lupus nephritis] Ohtsuka H. **Fukuoka Igaku Zasshi** 1988 Sep; 79(9):668–73 (Eng. Abstr.) **(Jpn)**

METABOLISM

Decreased production of interleukin-1 by monocytes from patients with lipoid nephrosis. Matsumoto K. **Clin Nephrol** 1989 Jun;31(6):292–6

Hypercholesterolemia in relapse and remission of idiopathic nephrotic syndrome. Mehta KP, et al. **Indian Pediatr** 1988 Dec;25(12):1188–92

Effect of supernatants derived from T lymphocyte culture in minimal change nephrotic syndrome on rat kidney capillaries. Maruyama K, et al. **Nephron** 1989;51(1):73–6

[A clinical study on edema formation in nephrotic patients] Iwata J, et al. **Nippon Jinzo Gakkai Shi** 1988 Jun; 30(6):679–86 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Steroid-dependent nephrotic syndrome with minimal glomerular changes and mesangial IgA deposits. Gallego N, et al. **Child Nephrol Urol** 1988–89;9(1–2):98–100

Diagnostic and prognostic significance of glomerular epithelial cell vacuolization and podocyte effacement in children with minimal lesion nephrotic syndrome and focal segmental glomerulosclerosis: an ultrastructural study. Chiang ML, et al. **Clin Nephrol** 1988 Jul;30(1):8–14

Angiotropic large cell lymphoma (intravascular malignant lymphomatosis) of the kidney: presentation as minimal change disease. D'Agati V, et al. **Hum Pathol** 1989 Mar; 20(3):263–8

The primary nephrotic syndrome in children and histopathologic study. Kirdpon S, et al. **J Med Assoc Thai** 1989 Jan;72 Suppl 1:26–31

Distinguishing minimal-change disease from mesangial disorders [clinical conference] Border WA. **Kidney Int** 1988 Sep;34(3):419–34 (103 ref.)

Pure mesangial proliferative glomerulonephritis. A clinicomorphologic analysis and its possible role in morphologic transition of minimal change lesion. Andal A, et al. **Nephron** 1989;51(3):314–9

Immunoelectron microscopic localization of fibrin-related antigen in human glomerular diseases. Ono T, et al. **Nephron** 1989;52(3):238–43

Glomerulonephropathy of Laurence-Moon-Biedl syndrome. Cheng IK, et al. **Postgrad Med J** 1988 Aug;64(754):621–5

[Clinico-pathological study on the nephrotic patients in the elderly] Oda K, et al. **Igaku Kenkyu** 1988 Dec;58(6):411–6 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

[Effects of capitalized wilfordii, angelica and astragalus on glomerular permeability in rats with minimal change nephropathy] Wang HY. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;68(9):513–5 (Eng. Abstr.) **(Chi)**

THERAPY

[Recent ideas in the treatment of glomerular nephropathies in children] Bensman A, et al. **Ann Pediatr (Paris)** 1988 Nov;35(9):619–21 (9 ref.) **(Fre)**

[A case of angioimmunoblastic lymphadenopathy with dysproteinemia (AILD) associated with nephrotic syndrome which remitted after double filtration plasma pheresis (DFPP) therapy] Yoshie T, et al. **Nippon Naika Gakkai Zasshi** 1988 Sep;77(9):1440–5 **(Jpn)**

[Effects of plasma albumin infusion on minimal change nephrotic syndrome] Yoshimura A, et al. **Nippon Naika Gakkai Zasshi** 1988 Aug;77(8):1219–23 **(Jpn)**

NEPHROSTOMY, PERCUTANEOUS

A review of 500 percutaneous nephrolithotomies. Tailly G. **Acta Urol Belg** 1988;56(3):387–95 (3 ref.)

Results and complications of percutaneous nephrostomy. Vehmas T, et al. **Ann Clin Res** 1988;20(6):423–7

Percutaneous nephrostomy in the management of renal candidiasis. Ortiz O, et al. **Arch Surg** 1989 Jun; 124(6):739–40

Vascular absorption of irrigation solution in percutaneous nephro-ureterolithotomy [letter] Sugai K, et al. **Br J Anaesth** 1988 Oct;61(4):516–7

Percutaneous interventional uroradiology. Rickards D, et al. **Br J Radiol** 1989 Jul;62(739):573–81 (45 ref.)

Percutaneous surgery of the transplanted kidney. Bailey IS, et al. **Br J Urol** 1989 Mar;63(3):327–8

The use of noxythiolin (Noxyflex S') as an antiseptic irrigant in upper urinary tract drainage following percutaneous nephrolithotomy. Buck AC. **Br J Urol** 1988 Oct; 62(4):306–10

Percutaneous nephrolithotomy with electrohydraulic shock wave lithotripsy. Yin JH, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Oct;40(4):363–8

Diagnosis and management of complications of percutaneous nephrolithotomy. Moskowitz GW, et al. **CRC Crit Rev Diagn Imaging** 1989;29(1):1–12

Percutaneous upper urinary stone surgery. Mkony CA. **East Afr Med J** 1989 Jan;66(1):21–6

Percutaneous management of urolithiasis after kidney transplantation. Report of a case and review of the literature. Fahlenkamp D, et al. **Eur Urol** 1988;14(4):330–2 (19 ref.)

Percutaneous nephrolithotomy in patients with previous renal surgery. Netto Júnior N, et al. **Eur Urol** 1988;14(5):353–5

Interventional radiology. Hogg JI. **J R Nav Med Serv** 1987 Winter;73(3):192–8 (17 ref.)

Critical evaluation of treatment of staghorn calculi by percutaneous nephrolithotomy and extracorporeal shock wave lithotripsy. Schulze H, et al. **J Urol** 1989 Apr; 141(4):822–5

Priorities in urinary diversion following pyeloplasty. Wollin M, et al. **J Urol** 1989 Aug;142(2 Pt 2):576–8; discussion 603–5

Asynchronous cortical necrosis after bilateral nephrostomy. Sakemi T, et al. **Nephron** 1989;51(2):287–8

Ureteroscopic stone manipulation in the upper third of ureter and the pelvicaliceal system. Pedersen FM, et al. **Scand J Urol Nephrol** 1988;22(3):179–82

Percutaneous nephrostomy in an unusual case of ureteric obstruction. Deans GT, et al. **Ulster Med J** 1988 Oct; 57(2):212–4 (10 ref.)

Percutaneous nephrostomy in pyonephrosis. Camúñez F, et al. **Urol Radiol** 1989;11(2):77–81

Incidental extraction of double pigtail catheter during nephrostomy removal. Greenstein A, et al. **Urol Radiol** 1989;11(2):121–2

Treatment of renal calculus in inferior crossed renal ectopia. Culkin DJ, et al. **Urology** 1988 Nov;32(5):424–6

Renal effects of percutaneous stone removal. Eshghi M, et al. **Urology** 1989 Feb;33(2):120–4

Acute ureteral obstruction from candidal cystitis requiring bilateral percutaneous nephrostomies. Gerridzen RG, et al. **Urology** 1988 Nov;32(5):444–6

Management of cystine nephrolithiasis by endourologic methods and shock-wave lithotripsy. Hernandez-Graulau JM, et al. **Urology** 1989 Sep;34(3):139–43

Reverse lithotomy: modified prone position for simultaneous nephroscopic and ureteroscopic procedures in women. Lehman T, et al. **Urology** 1988 Dec;32(6):529–31

Management of simple renal cysts during percutaneous nephrostolithotomy. Surya BV, et al. **Urology** 1989 Jun; 33(6):472–4

[Percutaneous antegrade endoscopy in the removal of ureteral stones] Zhang JL. **Chung Hua Wai Ko Tsa Chih** 1988 Apr;26(4):197–8, 253 (Eng. Abstr.) **(Chi)**

[Anesthesia in percutaneous extraction of concretions from the kidney] Soukup F, et al. **Cas Lek Cesk** 1989 Apr 7; 128(15):469–70 (Eng. Abstr.) **(Cze)**

[Percutaneous extraction of concretions from the kidney] Vomáčka V, et al. **Cas Lek Cesk** 1989 Mar 3;128(10):306–10 (Eng. Abstr.) **(Cze)**

[Percutaneous nephrolithotomy] Chevalier C, et al. **Acta Urol Belg** 1988;56(3):376–9 (Eng. Abstr.) **(Fre)**

[Percutaneous nephrolithotomy. Analysis of 100 cases] Corroy JS, et al. **Acta Urol Belg** 1988;56(3):380–6 (Eng. Abstr.) **(Fre)**

[The value of antibiotic prophylaxis in percutaneous nephrolithotomy. Retrospective study of 81 patients] Corroy JS, et al. **Acta Urol Belg** 1988;56(3):400–2 (Eng. Abstr.) **(Fre)**

[Percutaneous and endoscopic treatment of pyonephrosis due to lithiasic obstruction of the upper urinary tract] Viville C, et al. **Acta Urol Belg** 1988;56(3):403–7 (Eng. Abstr.) **(Fre)**

[Percutaneous treatment of tumors of the upper urinary tract] Ballanger P. **Ann Urol (Paris)** 1988;22(4):282–6 (Eng. Abstr.) **(Fre)**

[Technical problems raised by renal puncture in the percutaneous extraction of coralliform calculi] Cornud F, et al. **Ann Urol (Paris)** 1989;23(1):65–73 (Eng. Abstr.) **(Fre)**

[Endoscopic and percutaneous treatment of purulent retention caused by obstructive calculi of the upper urinary tract. Observations apropos of 6 case reports] Viville C, et al. **J Urol (Paris)** 1988;94(7):317–8 (Eng. Abstr.) **(Fre)**

[Aspects of roentgen ray burden in endourologic surgery] Andersen C, et al. **Z Urol Nephrol** 1989 Jun;82(6):301–6 (Eng. Abstr.) **(Ger)**

[Local chemolysis of occluding uric acid calculi] Breuel F, et al. **Z Urol Nephrol** 1988 Oct;81(10):613–22 (Eng. Abstr.) **(Ger)**

[Percutaneous removal of kidney calculi and extracorporeal shockwave lithotripsy in patients with hemorrhagic diatheses] Kirschner P, et al. **Z Urol Nephrol** 1988 Jul; 81(7):425–30 (Eng. Abstr.) **(Ger)**

[Percutaneous nephrostomy. A 5-year experience] Benea G, et al. **Radiol Med (Torino)** 1988 Dec;76(6):534–40 (Eng. Abstr.) **(Ita)**

[Renal function assessed by 99mTc-DMSA scintigraphy before and after percutaneous nephrostolithotripsy (PNL)] Sakurai M, et al. **Kaku Igaku** 1988 Nov;25(11):1215–20 (Eng. Abstr.) **(Jpn)**

[A clinical study on localized renal damage from percutaneous nephroureterolithotomy] Chiba Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Nov;79(11):1751–60 (Eng. Abstr.) **(Jpn)**

[Study on the relationship between bacteria within stones and postoperative urinary tract infection in percutaneous nephrolithotomy] Nishimura T, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Feb;79(2):283–6 (Eng. Abstr.) **(Jpn)**

[Studies on the evaluation of renal function in hydronephrosis with 99mTc-DMSA renal uptake—effect of the relief of urinary tract obstruction] Takeda M, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Aug;79(8):1406–12 (Eng. Abstr.) **(Jpn)**

[Percutaneous nephrostomy of postrenal failure due to locally advanced uterine cervical cancer] Shimamoto T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep;40(9):1471–4 **(Jpn)**

[Prevention of infectious-inflammatory complications of percutaneous treatment of nephroureterolithiasis] Martov AG, et al. **Urol Nefrol (Mosk)** 1988 Jul–Aug;(4):21–5 (Eng. Abstr.) **(Rus)**

[Diagnostic and therapeutic value of puncture nephrostomy. Review of 45 cases] Moreno Avilés J, et al. **Arch Esp Urol** 1989 Mar;42(2):138–42 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Nephrocutaneous fistula following extracorporeal shock wave lithotripsy and percutaneous nephrolithotomy. Cecchi M, et al. **Acta Urol Belg** 1988;56(3):439–42

Radiation safety during percutaneous nephrolithotomy. Inglis JA, et al. **Br J Urol** 1989 Jun;63(6):591–3

Nonoperative management of complications of percutaneous renal nephrostomy. Goldberg SD, et al. **Can J Surg** 1989 May;32(3):192–5

Nephrocolic fistula complicating percutaneous nephrostolithotomy. Appel R, et al. **J Urol** 1988 Nov; 140(5):1007–8

Antibiotics and nephrostomy tube care: preliminary observations. Part I. Bacteriuria. Cronan JJ, et al. **Radiology** 1989 Sep;172(3 Pt 2):1041–2

Antibiotics and nephrostomy tube care: preliminary observations. Part II. Bacteremia. Cronan JJ, et al. **Radiology** 1989 Sep;172(3 Pt 2):1043–5

Unusual tubular calcification of a nephrostomy tract. Mirich DR, et al. **Urol Radiol** 1989;11(2):118–20

Impact of percutaneous renal stone removal on renal function: assessment by urinary lysozyme activity. Urivetsky M, et al. **Urology** 1989 Apr;33(4):305–8

[A study on acute renal damage from percutaneous nephrolithotomy assessed by urinary NAG and gamma-GTP activities] Kageyama Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Mar;80(3):343–8 (Eng. Abstr.) **(Jpn)**

ECONOMICS

A cost-effectiveness analysis of extracorporeal shock wave lithotripsy and percutaneous nephrolithotomy. Carlsson P, et al. **Scand J Urol Nephrol Suppl** 1989;122:44–51

HISTORY

Thomas Hillier and percutaneous nephrostomy. Bloom DA, et al. **Urology** 1989 Apr;33(4):346–50

INSTRUMENTATION

Perirenal hematoma following catheter removal. An unusual complication of percutaneous nephrostomy. Merine D, et al. **Clin Imaging** 1989 Mar;13(1):74–6

Effective intubation for percutaneous pyelolysis. Payne SR, et al. **Eur Urol** 1988;14(6):477–81

Pediatric nephroscope for percutaneous renal stone removal. Zattoni F, et al. **Urology** 1989 May;33(5):404–6

[Equipment for percutaneous drainage nephrostomy] Mangin P. **J Urol (Paris)** 1989;95(1):58–9 **(Fre)**

[Treatment of staghorn calculi. Strategies and results of the combined use of new technics] Eisenberger F, et al. **Urologe** [A] 1989 May;28(3):138–44 (Eng. Abstr.) **(Ger)**

METHODS

Ultrasound-guided percutaneous nephrostomy in the treatment of advanced gynecologic malignancy. Pedersen H, et al. **Acta Obstet Gynecol Scand** 1988;67(3):199–201

A new technique for complete temporary occlusion of the ureter. Castaneda F, et al. **AJR Am J Roentgenol** 1989 Jul; 153(1):81–2

Percutaneous procedures guided by color-flow Doppler sonography. McNamara MP Jr. **AJR Am J Roentgenol** 1989 May;152(5):1123–5

Percutaneous surgery for stones in pyelocaliceal diverticula. Hedelin H, et al. **Br J Urol** 1988 Sep;62(3):206–8

Percutaneous stone and stent removal from renal transplants. Gedroyc WM, et al. **Clin Radiol** 1989 Mar;40(2):174–7

Percutaneous transperitoneal nephrolithotomy. Figge M. **Eur Urol** 1988;14(5):414–6

Percutaneous nephrostomy under ultrasonographic control—experience from a 2-year material. Kovács A, et al. **Int Urol Nephrol** 1989;21(2):131–7

Percutaneous nephrostomy. A useful technique in patients with obstructive uropathy. Anwar K, et al. **J R Coll Surg Edinb** 1988 Oct;33(5):249–52

[Diagnostic problems and the potential for resolving them via percutaneous antegrade pyelography] Ganchev D. **Khirurgiia (Sofiia)** 1988;41(6):92–5 (Eng. Abstr.) **(Bul)**

[Transrenal percutaneous treatment of urinary fistula. Apropos of 19 cases] Billebaud T, et al. **Ann Urol (Paris)** 1988;22(4):287–90 (Eng. Abstr.) **(Fre)**

[Percutaneous nephrostomy: an easy and reliable technic for temporary drainage of the kidney (apropos of 17 cases)] Mosbah A, et al. **Tunis Med** 1987 Mar;65(3):211–7 (Eng. Abstr.) **(Fre)**

[Interventional measures under sonographic control for diagnosis and therapy] Otto RC. **Rontgenblatter** 1988 Oct; 41(10):419–25 (30 ref.) (Eng. Abstr.) **(Ger)**

[Renoscopy and ureteroscopy] Knönagel H. **Schweiz Med Wochenschr** 1989 Jun 17;119(24):872–4 (Eng. Abstr.) **(Ger)**

[Intrarenal percutaneous surgery in calyceal stones, infundibular stones, calyceal diverticuli and stenosis of the ureteropelvic junction] Janetschek G. **Urologe** [A] 1988 Sep;27(5):256–62 (Eng. Abstr.) **(Ger)**

[The staghorn calculus: anatrophic nephrolithotomy versus percutaneous litholapxy and extracorporeal shockwave therapy versus extracorporeal shockwave lithotripsy monotherapy. A report of over 6 years' experience] Recker F, et al. **Urologe** [A] 1989 May;28(3):152–7 (Eng. Abstr.) **(Ger)**

[Percutaneous catheter dilatation of benign ureteral stenoses: indications, technic, results] Thiel U, et al. **Z Urol Nephrol** 1988 Aug;81(8):499–508 (Eng. Abstr.) **(Ger)**

[A method and clinical use of percutaneous drainage procedures using Chiba needle] Klamut M, et al. **Pol Przegl Radiol (Warszawa)** 1988 Jul-Oct;52(4–5):231–3 (Eng. Abstr.) **(Pol)**

[Percutaneous nephrostomy under ultrasonic control] Mladenov D, et al. **Khirurgiia (Sofiia)** 1988;41(3):3–7 (Eng. Abstr.) **(Rus)**

VETERINARY

Percutaneous nephrostomy in short-term management of ureterolithiasis and renal dysfunction in a filly. Byars TD, et al. **J Am Vet Med Assoc** 1989 Aug 15;195(4):499–501

Percutaneous nephrolithotomy in the dog. An experimental study. Donner GS, et al. **Vet Surg** 1987 Nov-Dec; 16(6):411–7

NEPHROTIC SYNDROME

Nephrotic syndrome in Saudi infants in the first year of life. Abdurrahman MB, et al. **Ann Trop Paediatr** 1989 Sep; 9(3):140–6

Idiopathic nephrotic syndrome in children at Pramongkutklao Hospital. Chulamokha Y, et al. **J Med Assoc Thai** 1989 Jan;72 Suppl 1:32–4

[Idiopathic thrombocytopenic purpura and nephrotic syndrome in pregnancy. Results of treatment with intravenous immunoglobulins] Spinozzi F. **Medicina (Firenze)** 1988 Jan–Mar;8(1):60–1 (Eng. Abstr.) **(Ita)**

BLOOD

Insulinlike growth factors in patients with active nephrotic syndrome. Garin EH, et al. **Am J Dis Child** 1989 Jul; 143(7):865–7

Platelet vasopressin levels in childhood idiopathic nephrotic syndrome. Trachtman H, et al. **Am J Dis Child** 1988 Dec; 142(12):1313–6

Increase in proteinuria and reduction in number of anionic sites on the glomerular basement membrane in rabbits by infusion of human nephrotic plasma in vivo. Wilkinson AH, et al. **Clin Sci** 1989 Jul;77(1):43–8

A study of rabbit plasma progressive antithrombinic activity during acute phase inflammatory reaction and in experimental nephrotic syndrome. Lebreton de Vonne T, et al. **Comp Biochem Physiol [B]** 1979;64(2):241–4

Tryptophan availability in nephrotic syndrome. Fydryk J, et al. **Contrib Nephrol** 1988;67:103–6

Intraerythrocytary markers of peroxidative alteration in children with nephrotic syndrome. Gusmano R, et al. **Contrib Nephrol** 1988;67:99–102

Prognostic significance of serum cholesterol in childhood nephrotic syndrome. Okoro BA. **East Afr Med J** 1987 Dec; 64(12):845–8

Plasminogen activator in nephrotic syndrome. Andreenko GV, et al. **Folia Haematol (Leipz)** 1988;115(3):351–5

Mechanisms of the development of acquired antithrombin III deficiency in the experimental nephrotic syndromes. Bashkov GV, et al. **Folia Haematol (Leipz)** 1988; 115(3):324–8

Erythrocyte sedimentation in nephrotic syndrome. Eustace S, et al. **Ir J Med Sci** 1988 Dec;157(12):380–2

Hypocholesterolaemia in cases of nephrotic syndrome with secondary amyloidosis [letter] Singh UR, et al. **J Indian Med Assoc** 1988 Apr;86(4):114

Lipoprotein profile in childhood nephrotic syndrome: correlation with clinical severity. Yap HK, et al. **J Singapore Paediatr Soc** 1988;30(1–2):56–60

Plasma lipids and acyltransferase activities in experimental nephrotic syndrome. Sestak TL, et al. **Kidney Int** 1989 Aug; 36(2):240–8

Low density lipoprotein metabolism in rats with puromycin aminonucleoside-induced nephrotic syndrome. Joven J, et al. **Metabolism** 1989 May;38(5):491–5

Molecular markers of hemostasis activation in nephrotic syndrome. Sagripanti A, et al. **Nephron** 1989;51(1):25–8

High-density lipoprotein apolipoprotein AI and AII turnover in moderate and severe proteinuria. Saku K, et al. **Nephron** 1988;50(2):112–5

A study of fibrinogen and fibrinolysis in 10 adults with nephrotic syndrome. Gandrille S, et al. **Thromb Haemost** 1988 Jun 16;59(3):445–50

[Changes of laboratory hematologic indices in patients with chronic glomerulopathies following treatment with superhigh doses of cyclophosphamide] Tishkov I, et al. **Vutr Boles** 1989;28(1):82–6 (Eng. Abstr.) **(Bul)**

[Serum lipoprotein abnormalities in patients with nephrotic syndrome and effects of steroid therapy] Kohtoku N, et al. **Nippon Jinzo Gakkai Shi** 1989 Apr;31(4):335–44 (Eng. Abstr.) **(Jpn)**

[Features of thrombophilia in nephrotic syndrome in children] Serebrianyi VL, et al. **Pediatriia** 1989;(1):49–53 (Eng. Abstr.) **(Rus)**

[Morphology and aggregative properties of erythrocytes in patients with hemorrhagic fever with nephrotic syndrome] Davidovich IM. **Ter Arkh** 1989;61(2):70–2 (Eng. Abstr.) **(Rus)**

[Arterial hypertension and fatty acids of the blood in patients with chronic glomerulonephritis without the nephrotic syndrome] Neverov NI, et al. **Urol Nefrol (Mosk)** 1989 Jan–Feb;(1):59–63 (Eng. Abstr.) **(Rus)**

[Immunological and functional levels of protein C in nephrotic syndrome] Navarro I, et al. **Sangre (Barc)** 1988 Oct;33(5):352–6 (Eng. Abstr.) **(Spa)**

CHEMICALLY INDUCED

Oral low-dose methotrexate (MTX) to be efficient in refractory rheumatoid arthritis and adult-onset Still's disease [letter] Kenouch S, et al. **Am J Kidney Dis** 1989 Jul;14(1):76–7

Recurrence and specificity of nephrotic syndrome due to tolmetin. Tietjen DP. **Am J Med** 1989 Sep;87(3):354–5

Lithium-induced nephrotic syndrome. Wood IK, et al. **Am J Psychiatry** 1989 Jan;146(1):84–7 (10 ref.)

Glomerular basement membrane heparan sulfate glycosaminoglycan in aminonucleoside of puromycin nephrosis. Garin EH, et al. **Child Nephrol Urol** 1988–89; 9(3):121–6

Renal failure and nephrotic syndrome associated with sulindac. Champion de Crespigny PJ, et al. **Clin Nephrol** 1988 Jul;30(1):52–5

Aggravation of diabetic nephropathy by lithium: a case report and review of the literature. Pawel BR, et al. **J Clin Psychiatry** 1989 Mar;50(3):101–3 (15 ref.)

Bovine cartilage and marrow extract [letter] Berg PA, et al. **Lancet** 1989 Jun 3;1(8649):1275

Nephrotic syndrome after injections of bovine cartilage and marrow extract [letter] Dürk H, et al. **Lancet** 1989 Mar 18;1(8638):614

Nephrotic syndrome after injections of bovine cartilage and marrow extract [letter] Schacht E, et al. **Lancet** 1989 Apr 29;1(8644):963

Phenytoin-induced nephrotic syndrome [letter] Orlandini G, et al. **Nephron** 1989;52(1):109

[Acute renal failure and nephrotic syndrome caused by rifampicin: polymorphism of the nephrotoxicity of rifampicin (letter)] Lamy P, et al. **Ann Med Interne (Paris)** 1989;140(4):323–5 **(Fre)**

[A case of systemic lupus erythematosus after taking oral contraceptives] Kawai T, et al. **Nippon Naika Gakkai Zasshi** 1989 May;78(5):710–1 **(Jpn)**

CLASSIFICATION

[Nephrotic syndrome in children] Ignatova MS. **Pediatriia** 1989;(7):98–100 **(Rus)**

[Classification of nephrotic syndrome in children] Papaian AV, et al. **Pediatriia** 1988;(12):67–71 (29 ref.) **(Rus)**

COMPLICATIONS

Hyperlipidemia in the nephrotic syndrome. Kaysen GA. **Am J Kidney Dis** 1988 Dec;12(6):548–51

Systemic mastocytosis associated with membranous nephropathy and peripheral neuropathy. Lal SM, et al. **Am J Kidney Dis** 1988 Dec;12(6):538–43

Hemolytic uremic syndrome associated with glomerular disease. Siegler RL, et al. **Am J Kidney Dis** 1989 Feb; 13(2):144–7

Nephrotic syndrome and renal failure associated with a novel glycolipid storage disorder. Newsom GD, et al. **Am J Nephrol** 1988;8(4):316–21

Idiopathic nephrotic syndrome of the adult with asymptomatic thrombosis of the renal vein. Velasquez Forero F, et al. **Am J Nephrol** 1988;8(6):457–62

Hyperlipidemia in nephrotic syndrome. Wheeler DC, et al. **Am J Nephrol** 1989;9 Suppl 1:78–84 (64 ref.)

Beneficial effect of prostaglandin E1 in three cases of lupus nephritis with nephrotic syndrome. Nagayama Y, et al. **Ann Allergy** 1988 Oct;61(4):289–95

Empyema and mesangiocapillary glomerulonephritis with nephrotic syndrome. Frew AJ, et al. **Br J Dis Chest** 1988 Jan;82(1):93–6

Roentgenogram of the month. Pulmonary cavity in a patient with nephrotic syndrome and renal vein thrombosis. Schonfeld AD, et al. **Chest** 1988 Dec;94(6):1285–6

Rifampin therapy in Henoch-Schönlein purpura nephritis

accompanied by nephrotic syndrome. Kim PK, et al. **Child Nephrol Urol** 1988–89;9(1–2):50–6

IgA nephropathy: a clinicopathological study with emphasis on both nephrotic syndrome and complements. Ho YS, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Dec;40(6):523–36

Unconjugated hyperbilirubinemia due to ciclosporin administration in children with nephrotic syndrome. Edefonti A, et al. **Contrib Nephrol** 1988;67:121–4

Membranous nephropathy associated with ovarian tumour in a young girl: recovery after removal. Beauvais P, et al. **Eur J Pediatr** 1989 Jun;148(7):624–5 (23 ref.)

Treatment of nephrotic hyperlipoproteinemia with gemfibrozil. Groggel GC, et al. **Kidney Int** 1989 Aug; 36(2):266–71

Lipid-lowering drugs in treatment of hyperlipidaemia associated with nephrotic syndrome [letter] Joven J, et al. **Lancet** 1989 May 6;1(8645):1029

Prednisolone and chlorambucil treatment in idiopathic membranous nephropathy with deteriorating renal function. Mathieson PW, et al. **Lancet** 1988 Oct 15; 2(8616):869–72

Effects of simvastatin and cholestyramine on lipoprotein profile in hyperlipidaemia of nephrotic syndrome. Rabelink AJ, et al. **Lancet** 1988 Dec 10;2(8624):1335–8

Aortic thrombosis complicating the nephrotic syndrome. Cullen P, et al. **Nephron** 1989;52(3):287–8 (5 ref.)

Cerebrovascular complications in children with nephrotic syndrome. Igarashi M, et al. **Pediatr Neurol** 1988 Nov–Dec; 4(6):362–5 (16 ref.)

Fulminant hepatic failure in nephrotic syndrome related to withdrawal of immunosuppressive therapy. Onwubalili JK. **Postgrad Med J** 1988 Apr;64(750):325–7

Use of diuretics in salt-retaining states. Hura CE, et al. **Semin Nephrol** 1988 Dec;8(4):318–32 (144 ref.)

Renal tubular acidosis after prolonged remission of nephrotic syndrome in amyloidosis associated with astrocytoma. Friedman E, et al. **South Med J** 1989 Jun;82(6):765–8 (22 ref.)

Renal amyloidosis complicating sarcoidosis. Rainfray M, et al. **Thorax** 1988 May;43(5):422–3

Peritonitis in children with nephrotic syndrome. Mannenbach M, et al. **Wis Med J** 1988 Oct;87(10):21–3

[Rapidly progressing glomerulonephritis developing against a background of idiopathic nephrotic syndrome] Monova D, et al. **Vutr Boles** 1988;27(6):100–3 (Eng. Abstr.) **(Bul)**

[Exploration between shen and ear by auditory determination in patients with renal disease] Wang JX, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Feb;9(2):91–2, 69 (Eng. Abstr.) **(Chi)**

[Renal arterial thrombosis complicating nephrotic syndrome (letter)] Pochet JM, et al. **Presse Med** 1988 Nov 12; 17(40):2139 **(Fre)**

[Clinical case (nephrotic syndrome associated with thrombosis of the inferior vena cava)] Fornaciari M, et al. **G Clin Med** 1989 Apr;70(4):305–6, 308 **(Ita)**

[Thrombosis of the renal vein in nephrotic syndrome: clinico-diagnostic and therapeutic aspects] Zambon G, et al. **G Clin Med** 1989 Jun–Jul;70(6–7):457–64 (62 ref.) **(Ita)**

[Treatment of renal vein thrombosis associated with nephrotic syndrome] Funami M, et al. **Nippon Geka Gakkai Zasshi** 1988 Jun;89(6):952–6 (Eng. Abstr.) **(Jpn)**

[A case report of Cushing syndrome associated with nephrotic syndrome] Hiraiwa Y, et al. **Nippon Naika Gakkai Zasshi** 1988 Jul;77(7):1099–100 **(Jpn)**

[A case of psoriasis vulgaris associated with nephrotic syndrome histologically overlapping of membranous nephropathy and IgA nephropathy] Tani Y, et al. **Nippon Naika Gakkai Zasshi** 1988 Jul;77(7):1081–4 **(Jpn)**

[Prevention of rickets in premature infants and in children with various chronic disease] Otto-Buczkowska E, et al. **Pol Tyg Lek** 1988 Nov 28;43(48):1565–8 (50 ref.) **(Pol)**

[Pathogenesis of water-electrolyte imbalance in acute renal failure in patients with hemorrhagic fever with nephrotic syndrome] Bystrovskiĭ VF. **Klin Med (Mosk)** 1989 Feb; 67(2):44–8 (Eng. Abstr.) **(Rus)**

[Various current clinical aspects of the problem of "the kidney and the stomach"] Ryss ES, et al. **Klin Med (Mosk)** 1989 Jun;67(6):51–6 (Eng. Abstr.) **(Rus)**

[Bilateral pleural effusion] Krut'ko VS. **Probl Tuberk** 1989; (5):72–4 **(Rus)**

[Skin alternariosis in a patient with nephrotic syndrome] Maldonado López R, et al. **Med Cutan Ibero Lat Am** 1988; 16(6):466–8 (Eng. Abstr.) **(Spa)**

[Late-onset systemic lupus erythematosus] Pallarés L, et al. **Rev Clin Esp** 1988 Oct;183(5):253–4 (15 ref.) (Eng. Abstr.) **(Spa)**

CONGENITAL

Congenital nephrotic syndrome with focal segmental glomerular sclerosis, renal insufficiency and tubular dysfunction. Igarashi T, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Aug;29(4):614–8

Brain morphology in the Galloway syndrome. Kozlowski PB, et al. **Clin Neuropathol** 1989 Mar–Apr;8(2):85–91

Congenital nephrotic syndrome of Finnish type. Mittal BV, et al. **Indian J Pathol Microbiol** 1988 Oct;31(4):326–9

Gamma globulin deficiency in newborns with congenital nephrotic syndrome [letter] [published erratum appears in N Engl J Med 1989 May 4;320(18):1227] Mathias R, et al. **N Engl J Med** 1989 Feb 9;320(6):398–9

[The Finnish-type congenital nephrotic syndrome. Comments on 2 cases] Sabäu I, et al. **Rev Pediatr Obstet Ginecol [Pediatr]** 1989 Jan–Mar; 38(1):79–86 (Eng. Abstr.) **(Rum)**

DIAGNOSIS

Erythrocyte sedimentation rate in glomerular disease: association with urinary protein. Liverman PC, et al. **Am J Nephrol** 1988;8(5):363–7

Focal segmental glomerular tip lesions with IgM. A case report. Thomsen OF, et al. **APMIS Suppl** 1988;4:109–12

A mnemonic for the nephritic syndrome [letter] Baird JS. **Hosp Pract [Off]** 1989 Apr 15;24(4):23

Ultrasonographic pattern of congenital nephrotic syndrome of Finnish type. Alkrinawi S, et al. **JCU** 1989 Jul–Aug; 17(6):443–4

IgA nephropathy and nephrotic syndrome [letter] Chen A, et al. **Nephron** 1988;50(2):173–4

[Nephrotic syndrome in the first year of life] Kist-van Holthe tot Echten JE, et al. **Ned Tijdschr Geneeskd** 1988 Sep 10; 132(37):1695–9 (30 ref.) (Eng. Abstr.) **(Dut)**

[Errors in the diagnosis of hemorrhagic fever with nephrotic syndrome in surgical practice] Gantser ShKh, et al. **Klin Med (Mosk)** 1989 Feb;67(2):42–4 **(Rus)**

[Hormone-sensitive nephrotic syndrome in a child with Klippel-Trenaunay syndrome] Iaroshevskaia OI, et al. **Pediatriia** 1988;(8):85–8 **(Rus)**

DRUG THERAPY

Immunoregulation with levamisole in children with frequently relapsing steroid responsive nephrotic syndrome. Drachman R, et al. **Acta Paediatr Scand** 1988 Sep;77(5):721–6

Mechanism of the antiproteinuric effect of indomethacin in nephrotic humans. Golbetz H, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):F44–51

Low dose prednisolone in nephrotic syndrome. Choonara IA, et al. **Arch Dis Child** 1989 Apr;64(4):610–1

Cyclosporin A in the treatment of childhood glomerulonephritis. James RW, et al. **Aust N Z J Med** 1989 Jun;19(3):198–201

Levamisole in children's idiopathic nephrotic syndrome. La Manna A, et al. **Child Nephrol Urol** 1988–89;9(4):200–2

Clinical effects of selective thromboxane A2 synthetase inhibitor in patients with nephrotic syndrome. Niwa T, et al. **Clin Nephrol** 1988 Nov;30(5):276–81

Contrasting response to cyclosporin in refractory nephrotic syndrome. Zietse R, et al. **Clin Nephrol** 1989 Jan;31(1):22–5

Evaluation of prednisolone pulse therapy in steroid-resistant nephrotic syndrome. A multicenter collaborative study. Wyszynska T, et al. **Contrib Nephrol** 1988;67:229–32

Bolus injections of synthetic atrial natriuretic peptide in patients with chronic renal failure or nephrotic syndrome. Burnier M, et al. **J Cardiovasc Pharmacol** 1989 May; 13(5):682–90

In vitro evidence that urine composition affects the fraction of active furosemide in the nephrotic syndrome. Voelker JR, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):772–8

Effect of synthetic human atrial natriuretic peptide (102–126) in nephrotic syndrome. Zietse R, et al. **Kidney Int** 1988 Nov;34(5):717–24

Thrombocytosis after cyclosporin therapy in child with nephrotic syndrome [letter] Itami N, et al. **Lancet** 1988 Oct 29;2(8618):1018

A diet containing n-3 and n-6 fatty acids favorably alters the renal phospholipids, eicosanoid synthesis and plasma lipids in nephrotic rats. Barcelli UO, et al. **Lipids** 1988 Nov; 23(11):1059–63

Cyclosporin in the treatment of steroid-responsive and steroid-resistant nephrotic syndrome in adults. Maher ER, et al. **Nephrol Dial Transplant** 1988;3(6):728–32

Effects of physiological infusion of atrial natriuretic factor on healthy subjects and patients with the nephrotic syndrome. Woolf AS, et al. **Nephron** 1989;52(3):244–50

Linear growth of children with nephrotic syndrome: effect of alkylating agents. Padilla R, et al. **Pediatrics** 1989 Sep; 84(3):495–9

Use of diuretics in chronic renal insufficiency and nephrotic syndrome. Brater DC. **Semin Nephrol** 1988 Dec;8(4):333–41 (24 ref.)

[Cyclosporin A—mechanisms of its action and its potential in the treatment of idiopathic nephrotic syndrome] Robeva R. **Vutr Boles** 1988;27(6):1–4 (76 ref.) **(Bul)**

[C D-S mixture (Chinese herbal drugs) in the treatment of hyper-hemoviscosity state in nephrotic syndrome and analysis of its therapeutic effects] Zhu PJ. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Apr;8(4):207–9, 195 (Eng. Abstr.) **(Chi)**

[Effect of the angiotensin-converting enzyme inhibitor ramipril on proteinuria, blood pressure and kidney function in histologically confirmed glomerulonephritis with nephrotic syndrome] Götz R, et al. **Z Kardiol** 1988;77 Suppl 3:65–8 **(Ger)**

[Long-term outcome of nephrotic syndrome due to primary membranous nephropathy] Fujimoto S, et al. **Nippon Jinzo Gakkai Shi** 1988 Jun;30(6):687–93 (Eng. Abstr.) **(Jpn)**

[Lymphocyte subpopulations in children with steroid responsive nephrotic syndrome] Hirose H. **Nippon Jinzo Gakkai Shi** 1988 Nov;30(11):1293–304 (Eng. Abstr.) **(Jpn)**

[Effect of a specific antagonist of platelet-activating factor, FR-900452, on proteinuria and urinary thromboxane excretion in aminonucleoside nephrotic rats] Suzuki S, et al. **Nippon Jinzo Gakkai Shi** 1988 Aug;30(8):985–90 (Eng. Abstr.) **(Jpn)**

[Effects of a selective thromboxane A2 synthetase inhibitor, OKY-046, on proteinuria of aminonucleoside nephrotic rats] Suzuki S, et al. **Nippon Jinzo Gakkai Shi** 1988 Apr; 30(4):341–6 (Eng. Abstr.) **(Jpn)**

[Steroid-responsive nephrotic syndrome in an insulin-dependent diabetic patient] Tahara Y, et al. **Nippon Naika Gakkai Zasshi** 1988 Jun;77(6):858–62 **(Jpn)**

[Reduction of proteinuria by enalapril, in children with nephrotic syndrome resistant to prednisone] Pérez-Cortés G, et al. **Gac Med Mex** 1988 Sep–Oct;124(9–10):371–4 **(Spa)**

[Regression of nephrotic syndrome in amyloidosis secondary to familial Mediterranean fever during maintenance therapy using colchicine] Sirera G, et al. **Med Clin (Barc)** 1989 May 20;92(19):757 **(Spa)**

ENZYMOLOGY

Studies on urinary gamma-glutamyl transpeptidase in nephrotic syndrome patients. Rambabu K, et al. **Biochem Med Metab Biol** 1988 Aug;40(1):68–75

[Significance of urinary NAG isozyme excretion in PAN induced nephrotic rats] Shibazaki T, et al. **Nippon Jinzo Gakkai Shi** 1988 Jun;30(6):703–11 (Eng. Abstr.) **(Jpn)**

ETIOLOGY

Nephrotic syndrome in a child with cystic fibrosis. Roussey M, et al. **Acta Paediatr Scand** 1988 Nov;77(6):920–1

Resolution of nephrotic syndrome and lack of progression of heroin-associated renal amyloidosis. Crowley S, et al. **Am J Kidney Dis** 1989 Apr;13(4):333–5

Nephrotic syndrome, hematuria, and hypocomplementemia in a case of mesangial lupus nephritis evolving later to a membranous lesion. Bakir AA, et al. **Am J Med** 1989 May; 86(5):609–11

Micro-angiopathic haemolysis, thrombocytopenia and nephrotic syndrome associated with membranous nephropathy in a Vietnamese boy. McDonald DT, et al. **Aust Paediatr J** 1988 Oct;24(5):311–3

Bee sting and relapse of nephrotic syndrome. Cuoghi D, et al. **Child Nephrol Urol** 1988–89;9(1–2):82–3

Nephrotic syndrome associated with chronic lymphocytic leukemia: an immunological and pathological study. Touchard G, et al. **Clin Nephrol** 1989 Feb;31(2):107–16

Review article: immune nephritides due to malaria. Otieno LS, et al. **East Afr Med J** 1988 Jun;65(6):402–6 (36 ref.)

Steroid-dependent nephrotic syndrome in IgA nephropathy. Korzets A, et al. **Isr J Med Sci** 1989 Apr;25(4):230–2

Spectrum of nephrotic syndrome in adults in north India—a clinicopathologic study. Sharma BK, et al. **J Assoc Physicians India** 1988 Dec;36(12):707–10

Nephrotic syndrome as the marker for underlying malignancy [letter; comment] Gabriel R. **J R Soc Med** 1989 Jan;82(1):59. **Comment on:** J R Soc Med 1988 Jul;81(7):416–7

Renal amyloidosis with nephrotic syndrome in a Spanish subcutaneous heroin abuser. Campistol JM, et al. **Nephrol Dial Transplant** 1988;3(4):471–3

Renal involvement in leprosy. Ponce P, et al. **Nephrol Dial Transplant** 1989;4(2):81–4

Nephrotic syndrome associated with transitional cell carcinoma of the bladder. Rapoport J, et al. **Nephron** 1989; 52(1):36–9

Acute myelogenous leukemia treated with daunomycin associated with nephrotic syndrome. Thomson M, et al. **Nephron** 1989;51(2):261–4

Takayasu's arteritis and nephrotic syndrome in a patient with crossed renal ectopia. van der Meulen J, et al. **Neth J Med** 1989 Apr;34(3–4):142–7 (13 ref.)

Steroid-responsive nephrotic syndrome with glomerular IgA deposits: clinicopathological evaluation. Fukushi K, et al. **Nippon Jinzo Gakkai Shi** 1988 Mar;30(3):253–8

Clinico-pathological evaluation of IgA nephropathy associated with nephrotic syndrome. Fukushi K, et al. **Nippon Jinzo Gakkai Shi** 1988 Mar;30(3):247–51

Nephrotic syndrome and hepatitis in early syphilis. Tang AL, et al. **Postgrad Med J** 1989 Jan;65(759):14–5

Nephrotic syndrome following renal transplantation. Shabtai M, et al. **Transplant Proc** 1989 Aug;21(4):3733–7

Membranous glomerulonephritis and the nephrotic syndrome in a patient with Landry-Guillain-Barré-Strohl syndrome. Nicholson GD, et al. **West Indian Med J** 1989 Mar; 38(1):51–3

[Pathogenesis of the idiopathic nephrotic syndrome] Robeva R. **Vutr Boles** 1988;27(5):9–14 (67 ref.) **(Bul)**

[Cow's milk protein allergy, a new disease (letter)] van Isselt JW. **Ned Tijdschr Geneeskd** 1988 Sep 17;132(38):1763 **(Dut)**

[The nephrotic syndrome in kala-azar] Ayachi R, et al. **Arch Fr Pediatr** 1988 Aug–Sep;45(7):493–5 (Eng. Abstr.) **(Fre)**

[Idiopathic nephrotic syndrome and food hypersensitivity.

Value of an exclusion diet] Laurent J, et al. **Arch Fr Pediatr** 1988 Dec;45(10):815-9 (17 ref.) (Eng. Abstr.) **(Fre)**

[Pre-eclampsia and the nephrotic syndrome. Prognosis and management; apropos of a series of 23 cases] Criscuolo JL, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989; 18(1):82-92 (Eng. Abstr.) **(Fre)**

[Nephrotic syndrome with renal amyloidosis secondary to rheumatoid polyarthritis: symptomatic treatment with captopril] Proença R, et al. **Nephrologie** 1988;9(6):281-2 **(Fre)**

[Nephrotic syndrome after a medusa sting] Cochat P, et al. **Pediatrie** 1988;43(5):419-20 (Eng. Abstr.) **(Fre)**

[Nephrotic syndrome] **Orv Hetil** 1989 Jul 2;130(27):1447-8 **(Hun)**

[Decreased plasma alpha 1-proteinase inhibitor activity in idiopathic nephrotic syndrome] Asami T, et al. **Nippon Jinzo Gakkai Shi** 1989 Mar;31(3):301-7 (Eng. Abstr.) **(Jpn)**

[A case of nephrotic syndrome accompanied with cholesterol granuloma] Ikeda K, et al. **Nippon Jinzo Gakkai Shi** 1988 Apr;30(4):437-43 (Eng. Abstr.) **(Jpn)**

[A case study of repeated membranous nephropathy after two cadaveric renal transplantation using different immunosuppressive methods] Morozumi K, et al. **Nippon Jinzo Gakkai Shi** 1988 Apr;30(4):399-409 (Eng. Abstr.) **(Jpn)**

[A case of the oat cell carcinoma of the lung presenting as nephrotic syndrome and a review of literature in recent 20 years] Watanabe K, et al. **Nippon Naika Gakkai Zasshi** 1988 Sep;77(9):1421-7 (20 ref.) **(Jpn)**

[Nephrotic syndrome in a patient with chronic myeloid leukemia] Majdan M, et al. **Pol Tyg Lek** 1988 Dec 12; 43(50):1635-6 **(Pol)**

[The role of the renin-angiotensin system in the pathogenesis of nephrotic syndrome] Kutyrina IM, et al. **Ter Arkh** 1988; 60(6):32-4 (Eng. Abstr.) **(Rus)**

[Nephrotic syndrome (clinico-morphological, immunological and biochemical aspects)] Riabov SI, et al. **Ter Arkh** 1988; 60(6):24-8 (Eng. Abstr.) **(Rus)**

[Nephrotic syndrome in mesangioproliferative glomerulonephritis] Shishkin AN, et al. **Ter Arkh** 1988; 60(6):28-32 (Eng. Abstr.) **(Rus)**

[Nephrotic syndrome associated with ampulloma] López-Navidad A, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 2):691-3 (Eng. Abstr.) **(Spa)**

GENETICS

Prenatal diagnosis of congenital nephrotic syndrome of non Finnish type. Braga S, et al. **Prog Clin Biol Res** 1989; 305:199-203

Congenital nephrotic syndrome with congenital buphthalmos: a new genetic entity? Braga S, et al. **Prog Clin Biol Res** 1989;305:205-9

Congenital/infantile nephrotic syndrome with diffuse mesangial sclerosis: relationship with Drash syndrome. Habib R, et al. **Prog Clin Biol Res** 1989;305:193-7

Congenital and infantile nephrotic syndromes. Norio R, et al. **Prog Clin Biol Res** 1989;305:179-92 (45 ref.)

Congenital nephrotic syndrome and tracheoesophageal fistula with esophageal atresia (type IIIB). Stefanidis CJ, et al. **Prog Clin Biol Res** 1989;305:211-4

Familial focal segmental glomerulosclerosis in infancy. Bakkaloğlu A, et al. **Turk J Pediatr** 1988 Jan-Mar; 30(1):45-9

[Congenital nephrotic syndrome--Finnish nephrosis] Schwesinger G, et al. **Padiatr Grenzgeb** 1988;27(6):489-94 (Eng. Abstr.) **(Ger)**

[Familial nephrotic syndrome] Degtiareva EM, et al. **Pediatriia** 1989;(1):105-7 **(Rus)**

IMMUNOLOGY

IgG subclasses in children with nephrotic syndrome. Warshaw BL, et al. **Am J Clin Pathol** 1989 Jul;92(1):68-72

Hepatitis B surface antigen associated nephrotic syndrome. Elidrissy AT, et al. **Ann Trop Paediatr** 1988 Sep;8(3):157-61

High prevalence of hepatitis B surface antigenaemia in nephrotic syndrome in Hong Kong. Lai KN, et al. **Ann Trop Paediatr** 1989 Mar;9(1):45-8

Enhanced beta 2-microglobulin levels in lymphocyte culture supernatants from patients with idiopathic nephrotic syndrome: inhibition of lymphocyte activation by cyclosporine. Robeva R, et al. **Clin Nephrol** 1988 Oct; 30(4):211-5

A transient monocyte defective function in idiopathic nephrotic syndrome (lipoid nephrosis). Branellec A, et al. **Int Urol Nephrol** 1988;20(4):421-8

Pneumococcal polysaccharide immunization in patients with active nephrotic syndrome. Garin EH, et al. **Nephron** 1988; 50(4):383-8

Idiopathic nephrotic syndrome: the prognosis is not linked to the total serum IgE level. Laurent J, et al. **Nephron** 1989;52(3):283-4

Immunotactoid glomerulopathy with fingerprint immune deposits. A variant of lupus nephritis? Lai FM, et al. **Virchows Arch [A]** 1989;415(2):181-6

[Study of the relation of the typology of nephrotic syndrome and red cell C3b receptor, T cell function] Ding PZ, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Apr;9(4):218-9, 197 (Eng. Abstr.) **(Chi)**

[Relationship between proteinase inhibitory activity of plasma alpha 2-macroglobulin and depressed cell immunity in idiopathic nephrotic syndrome] Asami T, et al. **Nippon Jinzo Gakkai Shi** 1988 Aug;30(8):935-41 (Eng. Abstr.) **(Jpn)**

METABOLISM

Albumin metabolism in the nephrotic syndrome: the effect of dietary protein intake. Kaysen GA. **Am J Kidney Dis** 1988 Dec;12(6):461-80 (149 ref.)

Chylomicron synthesis in experimental nephrotic syndrome. Levy E, et al. **Biochim Biophys Acta** 1989 Sep 11; 1005(1):20-6

Abnormal sodium handling occurs in the isolated perfused kidney of the nephrotic rat. Firth JD, et al. **Clin Sci** 1989 Apr;76(4):387-95

Serum HDL-cholesterol & urinary cholesterol in nephrotic syndrome. Nayak SS, et al. **Indian J Med Res** 1988 Aug; 88:150-5

Apolipoproteins in human biopsied nephrotic kidneys. Saku K, et al. **Int Urol Nephrol** 1988;20(4):429-38

Chemical medullectomy does not prevent sodium retention in nephrotic rats. Keeler R. **Miner Electrolyte Metab** 1989; 15(4):241-5

Pathogenesis of sodium and water retention in high-output and low-output cardiac failure, nephrotic syndrome, cirrhosis, and pregnancy (2) [published erratum appears in N Engl J Med 1989 Mar 9;320(10):676] [see comments] Schrier RW. **N Engl J Med** 1988 Oct 27;319(17):1127-34 (59 ref.). **Comment in:** N Engl J Med 1989 Jun 8;320(23):1561-2

Pathogenesis of sodium and water retention in high-output and low-output cardiac failure, nephrotic syndrome, cirrhosis, and pregnancy (1) [published erratum appears in N Engl J Med 1989 Mar 9;320(10):676] Schrier RW. **N Engl J Med** 1988 Oct 20;319(16):1065-72 (94 ref.)

The kallikrein-kinin and renin-angiotensin systems in nephrotic syndrome. Cumming AD, et al. **Nephron** 1989; 51(2):185-91

Disappearance of glomerular IgA deposits in steroid-responsive nephrotic syndrome. Fukushi K, et al. **Nephron** 1989;51(4):553-4

Zinc metabolism in nephrotic syndrome [letter] Tümer N, et al. **Nephron** 1989;52(1):95

Membrane fatty acids and erythrocyte Li-Na countertransport in nephrotic syndrome and their relationship. Corrocher R, et al. **Ric Clin Lab** 1989 Apr-Jun;19(2):149-56

Plasma and urinary heparin cofactor II levels in patients with nephrotic syndrome. Grau E, et al. **Thromb Haemost** 1988 Oct 31;60(2):137-40

[Pharmacokinetics of cyclosporin A in patients with nephrotic syndrome] Moulin B, et al. **Nephrologie** 1989; 10(1):17-22 (Eng. Abstr.) **(Fre)**

[Lipid metabolism in daunomycin induced nephrotic rats. (Part 4)] Gomikawa S, et al. **Nippon Jinzo Gakkai Shi** 1988 Aug;30(8):999-1004 (Eng. Abstr.) **(Jpn)**

[Idiopathic nephrotic syndrome. I. Pathophysiology and treatment of nephrotic edema] Klinger M, et al. **Przegl Lek** 1989;46(5):474-9 **(Pol)**

MORTALITY

Prognostic indicators in patients presenting with the nephrotic syndrome. Hunt LP, et al. **Kidney Int** 1988 Sep; 34(3):382-8

NURSING

Nephrotic syndrome: a nursing care plan based on current pathophysiologic concepts. Johnson DL. **Heart Lung** 1989 Jan;18(1):85-93

PATHOLOGY

Mesangial deposits: is it a distinct pathological entity? [letter] Vilches AR, et al. **Am J Nephrol** 1988;8(4):346

Childhood nephrotic syndrome and heavy proteinuria in Taiwan. A retrospective clinicopathologic study. Chen WP, et al. **Child Nephrol Urol** 1988-89;9(1-2):57-64

Glomerular tip nephropathy [letter] Sessa A, et al. **Clin Nephrol** 1988 Sep;30(3):173

Angiotropic large cell lymphoma (intravascular malignant lymphomatosis) of the kidney: presentation as minimal change disease. D'Agati V, et al. **Hum Pathol** 1989 Mar; 20(3):263-8

Idiopathic nephrotic syndrome of childhood--ultrastructural immunohistologic and clinicopathologic correlation. Saxena S, et al. **Indian J Pathol Microbiol** 1988 Jul; 31(3):195-204

Mechanisms underlying transition from acute glomerular injury to late glomerular sclerosis in a rat model of nephrotic syndrome. Anderson S, et al. **J Clin Invest** 1988 Nov;82(5):1757-68

The primary nephrotic syndrome in children at Ramathibodi Hospital: clinical and clinicopathological study. Kashemsant C, et al. **J Med Assoc Thai** 1989 Jan;72 Suppl 1:18-25

Prolonged reversible acute renal failure in focal glomerulonephritis with severe nephrotic syndrome in an elderly patient. Harats D, et al. **Klin Wochenschr** 1989 May 2;67(9):502-5

Characteristics of mutant mice (ICGN) with spontaneous renal lesions: a new model for human nephrotic syndrome. Ogura A, et al. **Lab Anim** 1989 Apr;23(2):169-74

Anionic sites in the human kidney: ex vivo perfusion studies. Mahan JD, et al. **Mod Pathol** 1989 Mar;2(2):117-24

Light chain nephropathy: histological and clinical aspects in 15 cases. Confalonieri R, et al. **Nephrol Dial Transplant** 1988;3(2):150-6

A case of nephrotic syndrome with glomerular lipoprotein deposition with capillary ballooning and mesangiolysis. Watanabe Y, et al. **Nephron** 1989;51(2):265-70

[Urticaria, abdominal pain, arthritis, pseudotumor cerebri and nephrotic syndrome in a 20-year-old patient] Piper C, et al. **Internist (Berlin)** 1988 Dec;29(12):824-7 **(Ger)**

[Three elderly cases of endocapillary glomerulonephritis and nephrotic syndrome] Matsubara M, et al. **Nippon Jinzo Gakkai Shi** 1989 Mar;31(3):253-8 (Eng. Abstr.) **(Jpn)**

[A case of nephrotic syndrome with a peculiar glomerular lesion] Hara Y, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):379-86 **(Jpn)**

PHYSIOPATHOLOGY

The role of lymphatic flow in edema formation of nephrotic syndrome. Beach RE, et al. **Am J Med Sci** 1989 Jun; 297(6):339-42

Determination of blood volume in nephrotic patients. Olmer M, et al. **Am J Nephrol** 1989;9(3):211-4

Role of renal nerves in renal sodium retention of nephrotic syndrome. Herman PJ, et al. **Am J Physiol** 1989 May;256(5 Pt 2):F823-9

Kinetics of drug action in disease states. XXIX. Effect of experimental nephrotic syndrome on the pharmacodynamics of heptabarbital: implications of severe hypoalbuminemia. Hoffman A, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):117-22

Atrial natriuretic peptide and the renal response to hypervolemia in nephrotic humans. Peterson C, et al. **Kidney Int** 1988 Dec;34(6):825-31

Nephrotic syndrome: from toddlers to twenties [letter] Ingulli E, et al. **Lancet** 1989 Mar 25;1(8639):674

Nephrotic syndrome: from toddlers to twenties. Lewis MA, et al. **Lancet** 1989 Feb 4;1(8632):255-9

Renal nerves in renal sodium-retaining states: cirrhotic ascites, congestive heart failure, nephrotic syndrome. Zambraski EJ. **Miner Electrolyte Metab** 1989;15(1-2):88-96 (41 ref.)

Dietary protein manipulation in experimental nephrotic syndrome. Feehally J, et al. **Nephron** 1988;50(3):247-52

Endogenous albumin as a marker of renal selectivity in steroid-unresponsive nephrotic syndrome. Ginevri F, et al. **Nephron** 1989;52(2):133-8

Plasma volume in nephrotic patients showing chronic glomerulonephritis with normal kidney function. Onoyama K, et al. **Nippon Jinzo Gakkai Shi** 1988 Mar;30(3):259-64

Glomerular permeability: new concepts. Vernier RL, et al. **Pediatr Ann** 1988 Sep;17(9):590, 592-3, 596-600

Changes in renal haemodynamics in the nephrotic syndrome. Zabka J, et al. **Physiol Bohemoslov** 1989;38(1):51-4

[Effect of water immersion on kidney function in children with the nephrotic syndrome] Kovács L, et al. **Pediatriia** 1988;(5):38-41 **(Rus)**

RADIONUCLIDE IMAGING

Congenital nephrotic syndrome. Gallium-67 imaging. Trepashko DW, et al. **Clin Nucl Med** 1988 Nov;13(11):833

SURGERY

[Nephrotic syndrome in the first year of life (letter)] **Ned Tijdschr Geneeskd** 1988 Nov 19;132(47):2174-5 **(Dut)**

THERAPY

Modern management of nephrotic syndrome. Kher KK, et al. **Indian J Pediatr** 1988 Jul-Aug;55(4):527-40 (28 ref.)

Schistosoma mansoni-induced mesangiocapillary glomerulonephritis: influence of therapy. Martinelli R, et al. **Kidney Int** 1989 May;35(5):1227-33

Bacteremic Citrobacter freundii cellulitis associated with tub immersion in a patient with the nephrotic syndrome. Hicks CB, et al. **Milit Med** 1988 Aug;153(8):400-1

Possible therapeutic application of low density lipoprotein apheresis (LDL-A) in conjunction with double filtration plasmapheresis (DFPP) in drug-resistant nephrotic syndrome due to focal glomerular sclerosis (FGS). Tojo K, et al. **Nippon Jinzo Gakkai Shi** 1988 Sep;30(9):1153-60

Plasma exchange for recurrent nephrotic syndrome following renal transplantation. Laufer J, et al. **Transplantation** 1988 Oct;46(4):540-2

[Therapy of nephrotic syndrome in childhood] Brodehl J. **Dtsch Med Wochenschr** 1989 Mar 3;114(9):340-2 (11 ref.) **(Ger)**

[Evaluation of the effect of diet on selected parameters of protein and lipid metabolism in the blood serum of children with steroid-sensitive nephrotic syndrome] Zoch-Zwierz W, et al. **Pediatr Pol** 1988 Oct;63(10):616-22 (Eng. Abstr.) **(Pol)**

[Passive immunotherapy using anti-HLA antibodies in the treatment of patients with nephrotic syndrome] Savchenko NE, et al. **Klin Med (Mosk)** 1989 Feb;67(2):67-70 **(Rus)**

[Use of plasmapheresis in the nephrotic syndrome]

Kuznetsova OP, et al. **Ter Arkh** 1988;60(8):96–8 (Eng. Abstr.) **(Rus)**

NEPHROTIC SYNDROME, MINIMAL CHANGE see **NEPHROSIS, LIPOID**

NEPTUNIUM

The solubility and colloidal behaviour of neptunium (IV). Moriyama H, et al. **Sci Total Environ** 1989 Jul 15; 83(3):227–37

PHARMACOKINETICS

The biodistribution and toxicity of plutonium, americium and neptunium. Taylor DM. **Sci Total Environ** 1989 Jul 15; 83(3):217–25

NERVE BLOCK

Regional blockade vs analgesic therapy against postoperative pain. Wiklund L. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):63–6

Thoracic paravertebral block: a method of pain control. Gilbert J, et al. **Acta Anaesthesiol Scand** 1989 Feb; 33(2):142–5

Continuous interscalene brachial plexus block: clinical efficacy, technical problems and bupivacaine plasma concentrations. Tuominen M, et al. **Acta Anaesthesiol Scand** 1989 Jan;33(1):84–8

Bupivacaine for intercostal nerve blockade in patients on long-term beta-receptor blocking therapy. Pontén J, et al. **Acta Anaesthesiol Scand Suppl** 1982;76:70–7

Fetal neuromuscular blockade: effect on oxygen demand and placental transport. Wilkening RB, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H734–8

Saphenous nerve entrapment at the adductor canal. Romanoff ME, et al. **Am J Sports Med** 1989 Jul–Aug;17(4):478–81

An evaluation of eight peripheral nerve stimulators for monitoring neuromuscular blockade. Beemer GH, et al. **Anaesth Intensive Care** 1988 Nov;16(4):464–72

Interpleural administration of bupivacaine after cholecystectomy: a comparison with intercostal nerve block. Blake DW, et al. **Anaesth Intensive Care** 1989 Aug; 17(3):269–74

Dorsal nerve of penis block—anatomical and radiological studies. Brown TC, et al. **Anaesth Intensive Care** 1989 Feb; 17(1):34–8

A most unusual subdural block. Paech MJ. **Anaesth Intensive Care** 1988 Nov;16(4):488–90

Foot surgery in Vanuatu: results of combined tibial, common peroneal and saphenous nerve blocks in fifty-six adults. Sparks CJ, et al. **Anaesth Intensive Care** 1989 Aug; 17(3):336–9

Postoperative recovery after general anaesthesia with and without retrobulbar block in retinal detachment surgery. Chung F, et al. **Anaesthesia** 1988 Nov;43(11):943–6

Continuous blockade of the lumbar plexus after knee surgery—postoperative analgesia and bupivacaine plasma concentrations. A controlled clinical trial. Dahl JB, et al. **Anaesthesia** 1988 Dec;43(12):1015–8

Continuous lumbar plexus block after arthroplasty [letter] Dahl JB, et al. **Anaesthesia** 1988 Nov;43(11):989

Inadvertent paravertebral block [letter] Gilbert J, et al. **Anaesthesia** 1989 Jun;44(6):527–8

Neostigmine after spontaneous recovery from neuromuscular blockade. Effect on depth of blockade monitored with train-of-four and tetanic stimuli. Goldhill DR, et al. **Anaesthesia** 1989 Apr;44(4):293–9

Stellate ganglion block with bupivacaine. Minimum effective concentration of bupivacaine and the effect of added potassium. Hardy PA. **Anaesthesia** 1989 May;44(5):398–9

Rectus sheath block for diagnostic laparoscopy. Smith BE, et al. **Anaesthesia** 1988 Nov;43(11):947–8

Comparative motor-blocking effects of bupivacaine and ropivacaine, a new amino amide local anesthetic, in the rat and dog. Feldman HS, et al. **Anesth Analg** 1988 Nov; 67(11):1047–52

The long and the short of conduction block. Fink BR. **Anesth Analg** 1989 May;68(5):553–5

Blockade of sciatic nerve branches relieves sciatic radicular pain [letter] Kissin I, et al. **Anesth Analg** 1989 Aug; 69(2):262–3

Paravertebral somatic nerve block: a clinical, radiographic, and computed tomographic study in chronic pain patients. Purcell-Jones G, et al. **Anesth Analg** 1989 Jan;68(1):32–9

The role of length of nerve exposed to local anesthetics in impulse blocking action. Raymond SA, et al. **Anesth Analg** 1989 May;68(5):563–70

Clinical pharmacokinetics of carbonated local anesthetics. III: Interscalene brachial block model [published erratum appears in Anesth Analg 1989 Apr;68(4):550] Sukhani R, et al. **Anesth Analg** 1989 Feb;68(2):90–3

Pharmacokinetics of bupivacaine following intraoperative intercostal nerve block in neonates and in infants aged less than 6 months. Bricker SR, et al. **Anesthesiology** 1989 Jun; 70(6):942–7

Plasma bupivacaine concentrations following ilioinguinal–iliohypogastric nerve blockade in children. Epstein RH, et al. **Anesthesiology** 1988 Nov;69(5):773–6

Mechanisms of differential axial blockade in epidural and subarachnoid anesthesia. Fink BR. **Anesthesiology** 1989 May;70(5):851–8

Appropriate facilitation of intravenous regional techniques in RSD [letter] Foley K, et al. **Anesthesiology** 1989 Jan; 70(1):173

Effect of intercostal nerve blockade on respiratory mechanics and CO2 chemosensitivity at rest and exercise. Hecker BR, et al. **Anesthesiology** 1989 Jan;70(1):13–8

The diagnosis of phrenic nerve block on chest X-ray by a double-exposure technique. Hickey R, et al. **Anesthesiology** 1989 Apr;70(4):704–7

Tachyphylaxis to local anesthetics does not result from reduced drug effectiveness at the nerve itself. Lipfert P, et al. **Anesthesiology** 1989 Jan;70(1):71–5

Prevention of hypokalemia during axillary nerve block [letter] Lunn JJ, et al. **Anesthesiology** 1989 Feb;70(2):365–6

How should residual neuromuscular blockade be detected? [editorial] Miller RD. **Anesthesiology** 1989 Mar; 70(3):379–80

Bleeding after intercostal nerve block in a patient anticoagulated with heparin. Nielsen CH. **Anesthesiology** 1989 Jul;71(1):162–4

The long and short of differential block. Raymond SA, et al. **Anesthesiology** 1989 May;70(5):725–8

Femoral nerve blockade in children using bupivacaine. Ronchi L, et al. **Anesthesiology** 1989 Apr;70(4):622–4

Axillary block utilizing the pulse oximeter [letter] Sullivan MJ, et al. **Anesthesiology** 1989 Jul;71(1):166–7

Femoral nerve block for analgesia in fractures of the femoral neck. Finlayson BJ, et al. **Arch Emerg Med** 1988 Sep; 5(3):173–6

Pain relief in active patients with cancer [letter] **BMJ** 1989 Feb 18;298(6671):461

Pain relief in patients with active cancer [letter] Churcher M. **BMJ** 1989 Feb 4;298(6669):321

Pain relief in active patients with cancer: the early use of nerve blocks improves the quality of life. Lipton S. **BMJ** 1989 Jan 7;298(6665):37–8 (9 ref.)

Ilioinguinal nerve blockade for analgesia after caesarean section. Bunting P, et al. **Br J Anaesth** 1988 Dec;61(6):773–5

Paravertebral block for post-cholecystectomy pain relief [letter] Kumar CM. **Br J Anaesth** 1989 Jul;63(1):129

Evaluation of "3 in 1" lumbar plexus block in patients having muscle biopsy. Madej TH, et al. **Br J Anaesth** 1989 May; 62(5):515–7

Postoperative intercostal block [letter] Murphy DF. **Br J Anaesth** 1988 Sep;61(3):370–1

Postoperative paravertebral blocks for thoracic surgery [letter] Purcell-Jones G, et al. **Br J Anaesth** 1988 Sep; 61(3):369–70

Developments in local anaesthetic drugs and techniques for pain relief. Wildsmith JA. **Br J Anaesth** 1989 Aug; 63(2):159–64 (48 ref.)

Addition of hyaluronidase to lignocaine with adrenaline for retrobulbar anaesthesia in the surgery of senile cataract. Thomson I. **Br J Ophthalmol** 1988 Sep;72(9):700–2

Postoperative wound pain [letter] Eng JB, et al. **Br J Surg** 1989 Jan;76(1):101–2

Management of refractory detrusor instability by transvesical phenol injection. Cameron-Strange A, et al. **Br J Urol** 1988 Oct;62(4):323–5

Cholinergic 'blockade' as a model for cholinergic depletion. A comparison of the memory deficits with those of Alzheimer-type dementia and the alcoholic Korsakoff syndrome. Kopelman MD, et al. **Brain** 1988 Oct;111 (Pt 5):1079–110

Pain relief in burns—how we do it. Wilson GR, et al. **Burns Incl Therm Inj** 1988 Aug;14(4):331–2

Pulmonary function after extracorporeal shock wave lithotripsy—a comparison of general and regional anaesthesia. Kelly RE, et al. **Can J Anaesth** 1989 Mar; 36(2):137–40

Salt sensitivity in human essential hypertension: effect of renin-angiotensin and sympathetic nervous system blockade. Dichtchekenian V, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:379–87

Suxamethonium-induced facilitation of spontaneous frontal EMG activity. Tammisto T, et al. **Eur J Anaesthesiol** 1988 Nov;5(6):361–7

An electrophysiological study of ganglion blockade by paraquat and diquat. Webb DB, et al. **Hum Toxicol** 1988 Nov;7(6):563–5

Antitumor, nerve blocks and neuroablative therapies for cancer pain. Evans WO. **Indiana Med** 1989 Jun;82(6):446–8 (20 ref.)

Digital perfusion with tibial nerve block. A comparative study of eight local anesthetics. Green DR, et al. **J Am Podiatr Med Assoc** 1988 Oct;78(10):495–511

Thermographic evaluation of the autonomic effects of nerve blocks in the foot. Jacobs AM, et al. **J Am Podiatr Med Assoc** 1989 Mar;79(3):107–15

Pancreatitis following aneurysmectomy [letter] Floyd JB Jr. **J Ky Med Assoc** 1989 Feb;87(2):84

Impulse blockade by intraocular tetrodotoxin during optic regeneration in goldfish: HRP-EM evidence that the formation of normal numbers of optic synapses and the elimination of exuberant optic fibers is activity independent. Hayes WP, et al. **J Neurosci** 1989 Apr;9(4):1414–23

Effect of trigeminal subnucleus caudalis cold block on the cerebrovascular-evoked responses of rostral trigeminal complex neurons. Davis KD, et al. **Neurosci Lett** 1988 Dec 5;94(3):303–8

Pain relief by suprascapular nerve block in gleno-humeral arthritis. Brown DE, et al. **Scand J Rheumatol** 1988; 17(5):411–5

Intercostal blockade and pulmonary function after cholecystectomy. Ross WB, et al. **Surgery** 1989 Feb;105(2 Pt 1):166–9

[Inguinal and hip pain] Lindgren KA, et al. **Duodecim** 1988; 104(13):1001–3 **(Fin)**

[Use of 2 opioids in blocks of the brachial plexus] Gobeaux D, et al. **Cah Anesthesiol** 1988 Oct;36(6):437–40 **(Fre)**

[Does the development of methemoglobin in the newborn infant affect the suitability of prilocaine for pudendal anesthesia? A clinical study in the peripartum phase] Biscoping J, et al. **Reg Anaesth** 1989 May;12(3):50–2 (Eng. Abstr.) **(Ger)**

[Use of continuous block of the lumbar plexus ("3-in-1 block") for pain management in children (letter)] Dahl JB, et al. **Reg Anaesth** 1989 Jul;12(4):86 **(Ger)**

[The axillary brachial plexus block. A study of 178 patients] Hartung HJ, et al. **Reg Anaesth** 1989 Jan;12(1):21–4 (Eng. Abstr.) **(Ger)**

[Influence of minimum current for peripheral nerve stimulation on the latency and success rate of sciatic blockade] Kaiser H, et al. **Reg Anaesth** 1988 Oct;11(4):92–7 (Eng. Abstr.) **(Ger)**

[The single intercostal block—surgical and therapeutic indications] Niesel HC, et al. **Reg Anaesth** 1989 Jan; 12(1):1–12 (129 ref.) (Eng. Abstr.) **(Ger)**

[Supraclavicular plexus blockade using prilocaine in patients with chronic anemia] Wald-Oboussier G, et al. **Reg Anaesth** 1989 Mar;12(2):31–3 (Eng. Abstr.) **(Ger)**

[Treatment of trigeminal neuralgia with retrogasserian glycerol injection. Preliminary results] Orlandini G. **Minerva Anestesiol** 1988 Dec;54(12):525–6 (Eng. Abstr.) **(Ita)**

[Popliteal and gluteal block of the sciatic nerve in orthopedic surgery of the lower extremity] Rucci FS, et al. **Minerva Anestesiol** 1988 Jan–Feb;54(1–2):25–34 (Eng. Abstr.) **(Ita)**

[Effects of cervical epidural block and stellate ganglion block on auditory brainstem responses] Ohta S, et al. **Masui** 1988 Oct;37(10):1206–11 (Eng. Abstr.) **(Jpn)**

[A case of primary erythromelalgia (erythermalgia) treated with neural blockade] Takeda S, et al. **Masui** 1989 Mar; 38(3):388–93 (21 ref.) (Eng. Abstr.) **(Jpn)**

[Brachial plexus block] Yamamoto K. **Masui** 1989 Jan; 38(1):2–7 **(Jpn)**

[Safety and usefulness of intravenous regional anesthesia compared with axillary nerve plexus block] Yano M, et al. **Masui** 1988 Sep;37(9):1108–11 (Eng. Abstr.) **(Jpn)**

[Residual symptoms after microvascular decompression for trigeminal neuralgia previously treated by percutaneous nerve blocking] Niwa J, et al. **Neurol Med Chir (Tokyo)** 1988 Nov;28(11):1103–6 (Eng. Abstr.) **(Jpn)**

[The effect of bilateral vagal blockade on respiration] Nakada T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Feb; 27(2):119–28 (Eng. Abstr.) **(Jpn)**

[Changes in quantitative characteristics of mitochondria of the cortical tubules of the kidneys with compensatory hypertrophy in the blocking of autonomic mediation] Barinov EF, et al. **Fiziol Zh** 1989 Mar–Apr;35(2):104–7 (Eng. Abstr.) **(Rus)**

[Prevention of postoperative intestinal paresis in abdominal injuries] Korabel'nikov AI. **Klin Khir** 1989;(4):76 **(Rus)**

[Novocaine block of the round ligament of the liver in the treatment of various diseases of the abdominal organs] Melekhov PA, et al. **Vestn Khir** 1988 Oct;141(10):134–6 (Eng. Abstr.) **(Rus)**

[Effect of novocaine block of the neural structures of the neck on external respiration after operations on the abdominal organs] Miftakhov GM, et al. **Vestn Khir** 1988 May;140(5):95–6 **(Rus)**

[Selective endoscopic pharmacologic denervation of the stomach in the treatment of reflux esophagitis associated with duodenal ulcer] Sinĕv IuV, et al. **Vestn Khir** 1988 Sep;141(9):13–8 (Eng. Abstr.) **(Rus)**

[Obturator nerve block in transurethral surgery] Rubial Alvarez M, et al. **Actas Urol Esp** 1989 Mar–Apr;13(2):79–81 (16 ref.) (Eng. Abstr.) **(Spa)**

[Use of axillary perivascular blockage of the brachial plexus with a catheter as treatment in accidental intra-arterial injection of drugs] Camprubí Sociats I, et al. **Rev Esp Anestesiol Reanim** 1989 May–Jun;36(3):167–70 (Eng. Abstr.) **(Spa)**

[Possible subdural block after saline injection (letter)] Codina Ortego MF, et al. **Rev Esp Anestesiol Reanim** 1989 Mar–Apr;36(2):125 **(Spa)**

[Therapeutic application of anesthetic blocks in weever-fish stings] Linares del Río F, et al. **Rev Esp Anestesiol Reanim** 1989 Jan–Feb;36(1):57–9 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Paresthesias or no paresthesias? Nerve complications after neural blockades. Selander D. **Acta Anaesthesiol Belg** 1988; 39(3 Suppl 2):173–4

Diagnostic peripheral nerve block resulting in compartment syndrome [letter] Egert R. **Am J Phys Med Rehabil** 1988 Oct;67(5):230

Accidental femoral nerve block during local anaesthesia for inguinal hernia repair [letter] Berliner SD. **Anaesthesia** 1989 Mar;44(3):261

Bupivacaine and femoral nerve block [letter] Bradshaw E,

et al. **Anaesthesia** 1989 Feb;44(2):174
Femoral nerve block as a complication of ilio-inguinal nerve block [letter] Buist RJ, et al. **Anaesthesia** 1988 Sep;43(9):805
Respiratory arrest and retrobulbar block [letter] Crawford D. **Anaesthesia** 1989 Jul;44(7):614
Apnoea after retrobulbar block. Rigg JD, et al. **Anaesthesia** 1989 Jan;44(1):26-7
Acute bronchospasm complicating intercostal nerve block with phenol. Atkinson GL, et al. **Anesth Analg** 1989 Mar; 68(3):400-1
Cervical sympathetic blockade after thoracic intercostal injection of local anesthetic. Brown RH, et al. **Anesthesiology** 1989 Jun;70(6):1011-2
Safety of supplementing axillary brachial plexus blocks. Finucane BT, et al. **Anesthesiology** 1989 Mar;70(3):401-3
Horner's syndrome resulting from a lumbar sympathetic block [letter] Waldman SD. **Anesthesiology** 1989 May; 70(5):882
Less painful alcohol block [letter] Way DM. **Arch Ophthalmol** 1989 May;107(5):636
An allergy to local anesthetics? The consequences of a misdiagnosis. Doyle KA, et al. **ASDC J Dent Child** 1989 Mar-Apr;56(2):103-6
Hypotension and bradycardia following superior laryngeal nerve block. Wiles JR, et al. **Br J Anaesth** 1989 Jul; 63(1):125-7
Shivering following retrobulbar block [letter] Nicoll JM, et al. **Can J Anaesth** 1988 Nov;35(6):671
Temporary paralysis of cranial nerves III, IV, and VI after a Gow-Gates injection. Fish LR, et al. **J Am Dent Assoc** 1989 Jul;119(1):127-8, 130; discussion 129
Bupivacaine: a safe local anesthetic for wrist blocks. Nyström A, et al. **J Hand Surg [Am]** 1989 May;14(3):495-8
Postabortal paracervical abscess as a complication of paracervical block anesthesia. A case report. Mercado AO, et al. **J Reprod Med** 1989 Mar;34(3):247-9
Disadvantages of Nadbath facial nerve block [letter] Feibel RM. **Ophthalmic Surg** 1988 Aug;19(8):607
Respiratory distress after a Nadbath block. Koenig SB, et al. **Ophthalmology** 1988 Sep;95(9):1285-7
Hoarseness following brachial plexus block. Udit A, et al. **West Indian Med J** 1989 Jun;38(2):116-7
[Hemodynamic pulmonary edema after axillary plexus block] Larabi MS, et al. **Tunis Med** 1987 Aug-Sep;65(8-9):551-4 (Eng. Abstr.) **(Fre)**
[A rare complication of regional anesthesia] Vagner EA, et al. **Anesteziol Reanimatol** 1989 Mar-Apr;(2):64-6 (Eng. Abstr.) **(Rus)**
[Venous infarction of the small intestine after novocaine block of the mesenteric root] Mizaushev BA, et al. **Vestn Khir** 1988 Sep;141(9):133-5 **(Rus)**
[Unilateral pupillotonia after ipsilateral dental anesthesia] Amer Ferrer G, et al. **Arch Neurobiol (Madr)** 1988 Nov-Dec;51(6):349-51 (Eng. Abstr.) **(Spa)**

HISTORY

Robert E. Wright and the development of facial nerve akinesia. Feibel RM. **Surv Ophthalmol** 1989 May-Jun; 33(6):523-8

INSTRUMENTATION

A cryogenic device for reversibly blocking transmission through small regions of the spinal cord white matter. Apkarian AV, et al. **J Neurosci Methods** 1989 Aug; 29(2):93-106
[Initial experiences with a novel nerve stimulator for use in axillary plexus anesthesia] Bachmann-M B, et al. **Reg Anaesth** 1989 Jul;12(4):80-3 (Eng. Abstr.) **(Ger)**

METHODS

Pudendal block in vaginal deliveries. Mepivacaine with and without epinephrine. Schierup L, et al. **Acta Obstet Gynecol Scand** 1988;67(3):195-7
Obturator nerve block in preventing bladder perforation during endoscopic transurethral bladder surgery. Moulaert P, et al. **Acta Urol Belg** 1988;56(4):523-5
CT-guided nerve root block and ablation. Quinn SF, et al. **AJR** 1988 Dec;151(6):1213-6
Alkalinisation of bupivacaine for sciatic nerve blockade. Coventry DM, et al. **Anaesthesia** 1989 Jun;44(6):467-70
Fifty-seven years ago in Anesthesia & Analgesia. M. B. Greene, J. Kaufman: Anesthetic and therapeutic nerve block by three-dimensions X-ray localization method. Current Researches in Anesthesia and Analgesia: 1932;11:241-51. **Anesth Analg** 1989 Apr;68(4):435
Pain mechanisms in lumbar radiculopathy. Abram SE. **Anesth Analg** 1988 Dec;67(12):1135-7 (14 ref.)
Electrical localization of spinal roots for the treatment of spasticity by intrathecal alcohol injection. Chabal C, et al. **Anesth Analg** 1989 Apr;68(4):527-9
Penile block via the subpubic space in 100 children. Dalens B, et al. **Anesth Analg** 1989 Jul;69(1):41-5
Poststernotomy neuralgia: a new pain syndrome. Defalque RJ, et al. **Anesth Analg** 1989 Jul;69(1):81-2
Subclavian perivascular block: influence of location of paresthesia. Hickey R, et al. **Anesth Analg** 1989 Jun; 68(6):767-71
Continuous subpleural-paravertebral block in acute thoracic herpes zoster. Johnson LR, et al. **Anesth Analg** 1988 Nov; 67(11):1105-8
Extent of blockade with various approaches to the lumbar plexus. Parkinson SK, et al. **Anesth Analg** 1989 Mar; 68(3):243-8
Relief of sciatic radicular pain by sciatic nerve block. Xavier AV, et al. **Anesth Analg** 1988 Dec;67(12):1177-80
Topical nitroglycerin facilitates intravenous regional techniques in patients with reflex sympathetic dystrophy [letter] Foley K, et al. **Anesthesiology** 1988 Dec;69(6):1029
Transcatheter thoracic epidural neurolysis using ethyl alcohol. Korevaar WC. **Anesthesiology** 1988 Dec; 69(6):989-93
Mivacurium-induced neuromuscular blockade following single bolus doses and with continuous infusion during either balanced or enflurane anesthesia. Shanks CA, et al. **Anesthesiology** 1989 Sep;71(3):362-6
Thyroidectomy under local analgesia: the anatomical basis of cervical blocks. Yerzingatsian KL. **Ann R Coll Surg Engl** 1989 Jul;71(4):207-10
Continuous intercostal nerve block for pain relief after thoracotomy. Sabanathan S, et al. **Ann Thorac Surg** 1988 Oct;46(4):425-6
Motor point blocks in children. A technique to relieve spasticity using phenol injections. Morrison JE Jr, et al. **AORN J** 1989 May;49(5):1346-7, 1349-51, 1354 (6 ref.)
Comparison of continuous paravertebral and extradural infusions of bupivacaine for pain relief after thoracotomy. Matthews PJ, et al. **Br J Anaesth** 1989 Feb;62(2):204-5
Self-tuning, microprocessor-based closed-loop control of atracurium-induced neuromuscular blockade. Uys PC, et al. **Br J Anaesth** 1988 Dec;61(6):685-92
Regional anaesthesia for 12,000 cataract extraction and intraocular lens implantation procedures. Hamilton RC, et al. **Can J Anaesth** 1988 Nov;35(6):615-23
Interscalene brachial plexus blockade with lidocaine in chronic renal failure--a pharmacokinetic study. McEllistrem RF, et al. **Can J Anaesth** 1989 Jan;36(1):59-63
Anesthetic techniques for the management of cancer pain. Ferrer-Brechner T. **Cancer** 1989 Jun 1;63(11 Suppl):2343-7 (25 ref.)
Regional anesthesia in the emergency department. Murphy MF. **Emerg Med Clin North Am** 1988 Nov;6(4):783-810
Phenol block of the tibial nerve for spasticity: a long-term follow-up study. Petrillo CR, et al. **Int Disabil Stud** 1988; 10(3):97-100
Dorsal penile nerve block for circumcision [letter] Schoen EJ, et al. **JAMA** 1989 Feb 3;261(5):701-2
An alternative to the transpalatal maxillary nerve block. Taylor WE Jr, et al. **Laryngoscope** 1989 Jan;99(1):109-10
The percutaneous anterior approach to the celiac plexus using CT guidance. Montero Matamala A, et al. **Pain** 1988 Sep; 34(3):285-8
Epidural opiates and nerve blocks. Zenz M. **Recent Results Cancer Res** 1988;108:18-27 (24 ref.)
[Cross-transvertebral puncture in spinal ganglion block in the treatment of pain. Initial experience with a new percutaneous method] Kolařík J, et al. **Cesk Neurol Neurochir** 1988 Sep;51(5):323-7 (Eng. Abstr.) **(Cze)**
[Multiple laryngotracheal block for the biopsy of the base of the tongue and of the piriform sinuses during laryngoscopy] Mahiou P, et al. **Ann Fr Anesth Reanim** 1988; 7(4):333-5 (Eng. Abstr.) **(Fre)**
[Block of the cervical plexus for the unipolar exclusion of a gastroplasty after bronchial fistula] Sardin B, et al. **Ann Fr Anesth Reanim** 1988;7(4):343-5 (Eng. Abstr.) **(Fre)**
[Treatment of reflex algoneurodystrophies by sympathetic blockade with guanethidine] Jeandel P, et al. **Ann Med Interne (Paris)** 1989;140(3):166-8 (Eng. Abstr.) **(Fre)**
[Carotid endarterectomy under cervical plexus block] Parrot D, et al. **Cah Anesthesiol** 1988 Jun-Jul;36(4):255-9 **(Fre)**
[Paracervical block. A valuable alternative for ambulatory surgery] Barret P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(1):109-12 (Eng. Abstr.) **(Fre)**
[The celiac block test under x-ray computed tomography before possible surgical splanchnicectomy (letter)] Delassus P, et al. **Presse Med** 1989 Jun 3;18(22):1123 **(Fre)**
[Blockade of the suprascapular nerve in shoulder pain] Bruns J, et al. **Anasth Intensivther Notfallmed** 1989 Apr; 24(2):100-2 (Eng. Abstr.) **(Ger)**
[Nerve block procedures in cancer pain] Porges P. **Gynakol Rundsch** 1988;28(4):244-7 **(Ger)**
[Transvaginal conduction and infiltration anesthesias] von Matthiessen H. **Gynakologe** 1989 Apr;22(2):108-9 (12 ref.) **(Ger)**
[Possibilities of neural therapy in internal medicine] Becke H. **Z Gesamte Inn Med** 1988 Nov 15;43(22):643-5 (12 ref.) (Eng. Abstr.) **(Ger)**
[A subclavian perivascular technic in brachial plexus block. Results and side effects] Bonarelli S, et al. **Minerva Anestesiol** 1988 Mar;54(3):71-6 (Eng. Abstr.) **(Ita)**
[The administration of continuous epidural block under prone position with fluoroscopic guidance] Yamagami H, et al. **Masui** 1989 Feb;38(2):229-35 (Eng. Abstr.) **(Jpn)**
[Endoscopic pharmacologic denervation of the stomach in the treatment of duodenal ulcer] Sinev IuV, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):133-5 **(Rus)**

VETERINARY

A comparison of methods for proximal palmar metacarpal analgesia in horses. Ford TS, et al. **Vet Surg** 1989 Mar-Apr; 18(2):146-50
[The effect of udder nerve blocke on the temperature of the udder skin] Eichel H, et al. **Arch Exp Veterinarmed** 1988 May;42(3):378-82 (Eng. Abstr.) **(Ger)**

NERVE CELLS see **NEURONS**

NERVE COMPRESSION SYNDROMES

Anterior interosseous nerve paralysis: cubital tunnel (kiloh-nevin) syndrome [letter] Cramer SR. **J Manipulative Physiol Ther** 1988 Dec;11(6):517
Dimple sign in mail carrier's ulnar neuropathy. Massey EW. **Neurology** 1989 Aug;39(8):1132
[Musculo-cutaneous nerve syndrome in the foot. Apropos of 10 cases] Enjalbert M, et al. **Rev Rhum Mal Osteoartic** 1988 Nov;55(11):889-93 (Eng. Abstr.) **(Fre)**

CHEMICALLY INDUCED

Anterior interosseous nerve syndrome secondary to forearm thrombo-phlebitis [letter] Pavesi G, et al. **Ital J Neurol Sci** 1989 Apr;10(2):221

COMPLICATIONS

Recurrent facial palsies due to an anomalous posterior inferior cerebellar artery. Maiuri F, et al. **Acta Neurol (Napoli)** 1988 Dec;10(6):373-8
Hemicranial attacks or permanent hemicrania--a sequel of upper cervical root compression. Jansen J, et al. **Cephalalgia** 1989 Jun;9(2):123-30
Piriformis syndrome. Julsrud ME. **J Am Podiatr Med Assoc** 1989 Mar;79(3):128-31
Chiropractic distractive decompression in treating pelvic pain and multiple system pelvic organic dysfunction. Browning JE. **J Manipulative Physiol Ther** 1989 Aug;12(4):265-74
Edema formation in spinal nerve roots induced by experimental, graded compression. An experimental study on the pig cauda equina with special reference to differences in effects between rapid and slow onset of compression. Olmarker K, et al. **Spine** 1989 Jun; 14(6):569-73
[Iontophoretic administration of vinblastine in the control of refractory spinal root pain and postherpetic neuralgia] Opavský J, et al. **Cas Lek Cesk** 1989 May 5;128(19):590-4 (Eng. Abstr.) **(Cze)**
[Brachialgia of radicular origin aand its treatment] Markwalder TM. **Ther Umsch** 1988 Nov;45(11):757-62 (Eng. Abstr.) **(Ger)**
[Reflex scoliosis in backache syndrome] Kiwerski J. **Chir Narzadow Ruchu Ortop Pol** 1988;53(5):351-8 (Eng. Abstr.) **(Pol)**

DIAGNOSIS

The shoulder abduction relief sign in cervical radiculopathy. Fast A, et al. **Arch Phys Med Rehabil** 1989 May;70(5):402-3
Ulnar nerve entrapment at the elbow localized by short segment stimulation. Kanakamedala RV, et al. **Arch Phys Med Rehabil** 1988 Nov;69(11):959-63
Anatomic observations in carpal tunnel syndrome as they relate to the tethered median nerve stress test. LaBan MM, et al. **Arch Phys Med Rehabil** 1989 Jan;70(1):44-6
Rectus nerve entrapment causing abdominal pain. Hall PN, et al. **Br J Surg** 1988 Sep;75(9):917
Iatrogenic peripheral nerve lesions and acute compressive mononeuropathies--considerations on clinical course and EMG findings. Milić S, et al. **Electromyogr Clin Neurophysiol** 1988 Nov-Dec; 28(7-8):415-9
Sciatic nerve compression: diagnostic value of electromyography and computerized tomography. Palliyath S, et al. **Electromyogr Clin Neurophysiol** 1989 Jan-Feb;29(1):9-11
A comparison between computerized tomography and myelography in radicular lumbar syndromes. Zirattu G, et al. **Ital J Orthop Traumatol** 1988 Mar;14(1):127-32
Cauda equina syndrome complicating ankylosing spondylitis: MR features. Rubenstein DJ, et al. **J Comput Assist Tomogr** 1989 May-Jun;13(3):511-3
Magnetic stimulation in the diagnosis of lumbosacral radiculopathy. Chokroverty S, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):767-72
Magnetic resonance imaging of vascular compression in trigeminal neuralgia. Case report. Wong BY, et al. **J Neurosurg** 1989 Jan;70(1):132-4
AAEE case report #18: Ulnar neuropathy in the distal forearm. Campbell WW. **Muscle Nerve** 1989 May; 12(5):347-52
AAEE minimonograph #32: the electrophysiologic examination in patients with radiculopathies. Wilbourn AJ, et al. **Muscle Nerve** 1988 Nov;11(11):1099-114 (83 ref.)
Evaluation of thermography in the diagnosis of selected entrapment neuropathies [see comments] So YT, et al. **Neurology** 1989 Jan;39(1):1-5. **Comment in:** Neurology 1989 Jul;39(7):1003-5
Focal dystonia (occupational cramp) masquerading as nerve entrapment or hysteria. Fry H, et al. **Plast Reconstr Surg** 1988 Nov;82(5):908-10

The pseudoradicular syndrome. Lower extremity peripheral nerve entrapment masquerading as lumbar radiculopathy. Saal JA, et al. **Spine** 1988 Aug;13(8):926–30

Validity of clinical tests in the diagnosis of root compression in cervical disc disease. Viikari-Juntura E, et al. **Spine** 1989 Mar;14(3):253–7

[Superior gluteal nerve entrapment neuropathy] Plihal E, et al. **Schweiz Rundsch Med Prax** 1989 Mar 21;78(12):326–9 (Eng. Abstr.) (Fre)

[An experimental model for the evaluation of pathologic changes in the spinal canal] Wehling P, et al. **Biomed Tech (Berlin)** 1988 Jun;33(6):136–40 (Eng. Abstr.) (Ger)

[Somatosensory evoked potentials following dermatome stimulation in comparison with nerve root stimulation in the diagnosis of root lesions] Simić A. **Nervenarzt** 1988 Nov;59(11):672–4 (Ger)

[Diagnosis of lumbosacral nerve root lesions using H-, T-reflex and somatosensory evoked potentials] Matthes R, et al. **Psychiatr Neurol Med Psychol Beih** 1988;39:69–71 (Ger)

[Monoradicular syndrome caused by tumors in the differential diagnosis of herniated disk] Donati D. **Chir Organi Mov** 1988 Jan-Mar;73(1):75–7 (Eng. Abstr.) (Ita)

ETIOLOGY

Air CT cisternography in the diagnosis of vascular loop causing vestibular nerve dysfunction. Esfahani F, et al. **AJNR** 1989 Sep-Oct;10(5):1045–9

Hemorrhagic compression of the phrenic nerve after streptokinase infusion. Seaberg DC, et al. **Am J Emerg Med** 1989 Mar;7(2):185–6

Nerve entrapment after Pfannenstiel incision [letter] Piura B. **Am J Obstet Gynecol** 1989 Aug;161(2):499–500

Compressive optic neuropathy secondary to chronic sinusitis. Simpson DE, et al. **Am J Optom Physiol Opt** 1988 Sep; 65(9):757–62

Structural assessment of rat sciatic nerve following tourniquet compression and vascular manipulation. Nitz AJ, et al. **Anat Rec** 1989 Sep;225(1):67–76

Lumbar root compression secondary to epidural air. Kennedy TM, et al. **Anesth Analg** 1988 Dec;67(12):1184–6

Ulnar nerve palsy of unusual etiology [letter] Lee EM, et al. **Anesth Analg** 1988 Nov;67(11):1131

Lingual and buccal nerve neuropathy in a patient in the prone position: a case report. Winter R, et al. **Anesthesiology** 1989 Sep;71(3):452–4

Unilateral lumbar facet joint hypertrophy causing nerve root irritation. Wilde GP, et al. **Ann R Coll Surg Engl** 1988 Sep;70(5):307–10

Compression neuropathy of the radial nerve as a complication of elbow arthroscopy: a case report and review of the literature. Papilion JD, et al. **Arthroscopy** 1988;4(4):284–6 (4 ref.)

Posterior mediastinal lymphangioma presenting with thoracic inlet compression. Scholefield JH, et al. **Br J Hosp Med** 1989 Feb;41(2):183–4

Multiple peripheral nerve entrapment in Forestier's disease (diffuse idiopathic skeletal hyperostosis). Haskard DO, et al. **Br J Rheumatol** 1988 Oct;27(5):407–8

Distal sciatic nerve compression by a popliteal artery aneurysm. Beaudry Y, et al. **Can J Neurol Sci** 1989 Aug; 16(3):352–3

"Think nerve" in upper extremity reconstruction. Dellon AL. **Clin Plast Surg** 1989 Jul;16(3):617–27 (20 ref.)

Entrapment of the distal suprascapular nerve. An anatomical study. Kaspi A, et al. **Int Orthop** 1988;12(4):273–5

Late radial tunnel syndrome after excision of the radial head. A report of two cases. Crawford GP. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1416–8

Injury to the tibial and peroneal nerves due to hemorrhage in the popliteal fossa. Two case reports. Logigian EL, et al. **J Bone Joint Surg [Am]** 1989 Jun;71(5):768–70

Cauda equina syndrome after surgical treatment of lumbar spinal stenosis with application of free autogenous fat graft. A report of two cases. Mayer PJ, et al. **J Bone Joint Surg [Am]** 1989 Aug;71(7):1090–3

Meralgia paraesthetica of spinal origin: brief report. Jiang GX, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):843–4

Greenstick fracture of the forearm with median nerve entrapment. Genelin F, et al. **J Emerg Med** 1988 Sep-Oct; 6(5):381–5

Peripheral nerve mucoid degeneration of the upper extremity. Allieu PY, et al. **J Hand Surg [Am]** 1989 Mar; 14(2 Pt 1):189–94 (31 ref.)

Persistent median artery as a cause of pronator syndrome. Jones NF, et al. **J Hand Surg [Am]** 1988 Sep;13(5):728–32

Posterior interosseous nerve palsy caused by ganglions of the proximal radioulnar joint. McCollam SM, et al. **J Hand Surg [Am]** 1988 Sep;13(5):725–8

Ulnar compression neuropathy secondary to the anconeus epitrochlearis muscle. Masear VR, et al. **J Hand Surg [Am]** 1988 Sep;13(5):720–4

Palmar wrist pain caused by ulnar nerve entrapment in the flexor carpi ulnaris tendon. Zook EG, et al. **J Hand Surg [Am]** 1988 Sep;13(5):732–5

Ulnar nerve compression caused by a reversed palmaris longus muscle. Regan PJ, et al. **J Hand Surg [Br]** 1988 Nov;13(4):406–7

Views on microvascular compression [letter] **J Neurosurg** 1989 Sep;71(3):459–64

Microvascular compression: an alternative view and hypothesis. Adams CB. **J Neurosurg** 1989 Jan;70(1):1–12 (48 ref.)

Peripheral nerve entrapment at the wrist in pyrophosphate arthropathy. Pattrick MG, et al. **J Rheumatol** 1988 Aug; 15(8):1254–7

Sacral fracture with compression of cauda equina: surgical treatment. Fisher RG. **J Trauma** 1988 Dec;28(12):1678–80

Peroneal nerve palsy following sequential pneumatic compression [letter] Pittman GR. **JAMA** 1989 Apr 21; 261(15):2201–2

Cauda equina syndrome secondary to disseminated zygomycosis. Rozich J, et al. **JAMA** 1988 Dec 23–30; 260(24):3638–40

AAEE case report #15: ulnar neuropathy at or distal to the wrist. Olney RK, et al. **Muscle Nerve** 1988 Aug; 11(8):828–32

Handcuff neuropathy revisited. Scott TF, et al. **Muscle Nerve** 1989 Mar;12(3):219–20

Dorsal interrosseous nerve compression syndrome from the use of a Canadian crutch [letter] Siegel IM. **Muscle Nerve** 1988 Dec;11(12):1273–4

Vegas neuropathy [letter] Jarrell HR. **N Engl J Med** 1988 Dec 1;319(22):1487

Claw hand in a ropemaker—an occupational overuse syndrome [letter] Chew CK. **N Z Med J** 1988 Sep 28; 101(854):617

Subarachnoid haemorrhage with acute cauda symptom due to spinal tumour. Kulali A, et al. **Neurochirurgia (Stuttg)** 1989 May;32(3):87–90

Solitary sacral osteochondroma compressing the cauda equina—case report. Hanakita J, et al. **Neurol Med Chir (Tokyo)** 1988 Oct;28(10):1010–3 (14 ref.)

Femoral compression neuropathy from a mechanical pressure clamp. Massey EW, et al. **Neurology** 1989 Sep;39(9):1263

Compression syndromes due to hypertrophic nerve roots in hereditary motor sensory neuropathy type I. Rosen SA, et al. **Neurology** 1989 Sep;39(9):1173–7

Extended pterional decompression of the orbit: an alternative treatment in endocrine orbitopathy. Gilsbach JM, et al. **Neurosurg Rev** 1988;11(2):167–70

Pyriformis syndrome in a 10-year-old boy as a complication of operation with the patient in the sitting position. Brown JA, et al. **Neurosurgery** 1988 Jul;23(1):117–9

Dysthyroid optic neuropathy without extraocular muscle involvement. Anderson RL, et al. **Ophthalmic Surg** 1989 Aug;20(8):568–74

Bilateral compressive optic neuropathy secondary to bilateral sphenoethmoidal mucoceles. Newton N Jr, et al. **Ophthalmologica** 1989;198(1):13–9

Postsurgical epidural hematoma reproducing a lumbar radiculopathy. Earman WA, et al. **Orthop Rev** 1988 Dec; 17(12):1201–4

Ulnar tunnel syndrome caused by an accessory palmaris muscle. Robinson D, et al. **Orthop Rev** 1989 Mar; 18(3):345–7

Cherry pitter's thumb. Case report and review of the literature. Viegas SF, et al. **Orthop Rev** 1989 Mar; 18(3):336–8 (12 ref.)

Compression neuropathies. Shuman S, et al. **Semin Neurol** 1987 Mar;7(1):76–87 (56 ref.)

Non-osseous dural compression in rheumatoid atlanto-axial subluxation. Hotta Y, et al. **Spine** 1989 Feb;14(2):236–41 (37 ref.)

The role of spinal flexion and extension in changing nerve root compression in disc herniations. Schnebel BE, et al. **Spine** 1989 Aug;14(8):835–7

Cervical osteochondroma (C2 level) with vertebral artery occlusion and second cervical nerve root irritation. George B, et al. **Surg Neurol** 1989 Jun;31(6):459–64

Axillary compression syndrome with neurapraxia due to operative positioning. Nambisan RN, et al. **Surgery** 1989 Mar;105(3):449–54

Compressive optic neuropathy in dysthyroid eye disease. Wong D, et al. **Yen Ko Hsueh Pao** 1986 Dec;2(4):237–9

[Cauda equina syndrome developing during anticoagulant therapy] Nielsen HL, et al. **Ugeskr Laeger** 1989 Jul 31; 151(31):1989–90 (Eng. Abstr.) (Dan)

[A cheek without feeling] Nauta JM, et al. **Ned Tijdschr Geneeskd** 1989 Jun 3;133(22):1105–7 (Dut)

[An unusual expression of a complication following hysterectomy; the patient kneels in front of the doctor] van Vugt PJ. **Ned Tijdschr Geneeskd** 1989 Jan 28; 133(4):171–3 (Eng. Abstr.) (Dut)

[Compressive optic neuropathy and dysthyroidal ophthalmopathy. Therapeutic approach] Pelosse B, et al. **Bull Soc Ophtalmol Fr** 1988 Feb;88(2):201–3, 206 (Fre)

[Cauda equina syndrome caused by migration of a fat graft after laminoarthrectomy] Deburge A, et al. **Rev Chir Orthop** 1988;74(7):677–8 (Eng. Abstr.) (Fre)

[Cauda equina syndrome in ankylosing spondylitis] Pfister R, et al. **Dtsch Med Wochenschr** 1989 Jan 27;114(4):138–41 (Eng. Abstr.) (Ger)

[Compression of the femoral nerve caused by retroperitoneal hemorrhage resulting from femoral artery puncture] Bischoff C, et al. **Nervenarzt** 1989 Mar;60(3):181–3 (Ger)

[Clinical deterioration following chemonucleolysis. Sequestration or neurotoxic complication?] Wehling P, et al. **Neurochirurgia (Stuttg)** 1989 May;32(3):72–6 (Eng. Abstr.) (Ger)

[Selective paralysis of the infraspinatus muscle, caused by compression of the infraspinatus branch of the supraspinatus muscle] Jerosch J, et al. **Sportverletz Sportschaden** 1987 Dec;1(4):231–3 (Eng. Abstr.) (Ger)

[Diagnosis and differential diagnosis of spondylogenic cervical myelopathy] Matthes R, et al. **Z Arztl Fortbild (Jena)** 1989;83(9):467–70 (Ger)

[Forms of the compression syndrome in nodular and retrosternal struma in advanced age] Oravec D, et al. **Z Gesamte Inn Med** 1988 Aug 1;43(15):425–7 (Eng. Abstr.) (Ger)

[Cauda equina syndrome in lumbar disc herniation] Liebergall M, et al. **Harefuah** 1989 Mar 15;116(6):308–11 (Eng. Abstr.) (Heb)

[Femoral compression neuropathy caused by spontaneous hematoma during heparin therapy: description of a case] Papi L, et al. **G Ital Cardiol** 1988 Jul;18(7):622–3 (Eng. Abstr.) (Ita)

[Venous pressure in the vertebral venous plexus and its role in cauda equina claudication] Yazaki S, et al. **Nippon Seikeigeka Gakkai Zasshi** 1988 Aug;62(8):733–45 (Eng. Abstr.) (Jpn)

[Accessory nerve paralysis due to compression of the fenestrated vertebral artery] Kitagawa M, et al. **No Shinkei Geka** 1988 Sep;16(10):1173–7 (Eng. Abstr.) (Jpn)

[A case report of quadriparesis due to compression of the medulla oblongata by the elongated left vertebral artery] Maruyama K, et al. **Rinsho Shinkeigaku** 1989 Jan; 29(1):108–11 (Eng. Abstr.) (Jpn)

[Pathogenetic and clinical aspects of perineural Tarlov cysts] Kawiak W, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:69–73 (Eng. Abstr.) (Pol)

[Extraspinal sciatica] Doniec J, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(5):359–61 (Eng. Abstr.) (Pol)

[Paralysis of the left recurrent laryngeal nerve associated with patent ductus arteriosus. A case report] Maciel FM, et al. **Arq Bras Cardiol** 1987 Sep;49(3):177–9 (Eng. Abstr.) (Por)

[The left recurrent nerve compression syndrome during injury to the aorta in a patient with multiple trauma] Mikhelson MO, et al. **Klin Khir** 1988;(7):62–3 (Rus)

[Compression injury to the ulnar nerve in the wrist area and its surgical treatment] Dumbere RT. **Zh Vopr Neirokhir** 1989 Jan-Feb;(1):39–45 (Eng. Abstr.) (Rus)

[Crural amyotrophy. A sign indicative of a pelvic tumor (letter)] Iriarte Garcia-Baquero LM, et al. **Rev Clin Esp** 1988 Jun;183(1):49–50 (Spa)

PATHOLOGY

Proximal compressions of the upper limb neurovascular bundle. An anatomic research study. Poitevin LA. **Hand Clin** 1988 Nov;4(4):575–84 (24 ref.)

Effect of experimental root sheath compression on dura. Haughton VM, et al. **Invest Radiol** 1989 Mar;24(3):204–5

Malignant histiocytosis with clinical presentation of compression of cauda equina. Shuangshoti S, et al. **J Med Assoc Thai** 1988 Aug;71(8):461–5

Lumbar extradural arachnoid cyst presenting as a conus lesion in a man aged 77 years [letter] Winer JB, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):126

Resistance to axonal degeneration after nerve compression in experimental diabetes. Dyck PJ, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2103–6

PHYSIOPATHOLOGY

Peroneal nerve entrapment at the knee localized by short segment stimulation. Kanakamedala RV, et al. **Am J Phys Med Rehabil** 1989 Jun;68(3):116–22

Ulnar nerve entrapment [letter] Bilbao A. **Arch Phys Med Rehabil** 1989 Jun;70(6):495

Across-elbow ulnar nerve sensory conduction technique. Felsenthal G, et al. **Arch Phys Med Rehabil** 1989 Sep; 70(9):668–72

Electrophysiologic recovery of acute conduction block of rat tail nerve. Hong CZ, et al. **Arch Phys Med Rehabil** 1989 Mar;70(3):205–9

Somatosensory-evoked potentials in lumbar nerve root decompression. Gepstein R, et al. **Clin Orthop** 1989 Aug; (245):69–71

Peripheral nerve compression in the upper extremity. Morgan RF, et al. **Compr Ther** 1989 May;15(5):23–33 (10 ref.)

Multi-channel visual evoked potentials in early compressive lesions of the chiasm. Flanagan JG, et al. **Doc Ophthalmol** 1988 Jul;69(3):271–81

Identification of motor conduction block despite desynchronisation. A method. Roth G, et al. **Electromyogr Clin Neurophysiol** 1989 Jul-Aug;29(5):305–13

The H-reflex of the medial vastus muscle: a study in controls and patients with radiculopathy. Verhagen WI, et al. **Electromyogr Clin Neurophysiol** 1988 Nov-Dec; 28(7-8):421–5

Two neuropathies of the upper extremities. Stabile MJ, et al. **Hosp Pract [Off]** 1989 Sep 30;24(9A):62, 65–6

Compressive mononeuropathy of the deep palmar branch of the ulnar nerve in cyclists. Hankey GJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1588–90

Effects of excessive use of remaining muscle fibers in prior polio and LV lesion. Borg K, et al. **Muscle Nerve** 1988

Dec;11(12):1219–30
Sway of the center of gravity in patients with spinal canal stenosis. Hanai K, et al. **Spine** 1988 Nov;13(11):1303–7
Pressure increase in the dorsal root ganglion following mechanical compression. Closed compartment syndrome in nerve roots. Rydevik BL, et al. **Spine** 1989 Jun; 14(6):574–6
[Compression of the ulnar nerve at the wrist and hand] Van Roy J, et al. **Acta Belg Med Phys** 1989 Jan–Mar;12(1):23–7 **(Dut)**
[Alcock's canal syndrome and perineal neuralgia] Amarenco G, et al. **Rev Neurol (Paris)** 1988;144(8–9):523–6 (Eng. Abstr.) **(Fre)**
[Cervicogenic headache. An over- or underdiagnosed headache syndrome?] Pfaffenrath V. **Fortschr Med** 1989 Mar 15;107(8):189–93 (27 ref.) (Eng. Abstr.) **(Ger)**
[Anatomic variants as a rare cause of distal ulnar nerve compression] Starke W, et al. **Handchir Mikrochir Plast Chir** 1988 Nov;20(6):347–8 (Eng. Abstr.) **(Ger)**
[Pain and the spine. A review. I. On the pathophysiology of radicular pain syndromes. Current concepts explaining pain in nerve entrapment syndromes] Wehling P, et al. **Z Orthop** 1989 Mar–Apr;127(2):197–201 (54 ref.) (Eng. Abstr.) **(Ger)**
[Piriformis syndrome. A contribution to the differential diagnosis of lumbago and coccygodynia] Reichel G, et al. **Zentralbl Neurochir** 1988;49(3):178–84 (Eng. Abstr.) **(Ger)**
[Neurophysiologic study of lesions of the brachial root and brachial plexus] Jovičić A, et al. **Vojnosanit Pregl** 1988 Sep–Oct;45(5):334–9 (Eng. Abstr.) **(Scr)**

RADIOGRAPHY

Cauda equina syndrome with normal lumbar myelography. Tullberg T, et al. **Acta Orthop Scand** 1989 Jun;60(3):265–7
CT morphology of intrathecal lumbosacral nerve–root compression. Wilmink JT. **AJNR** 1989 Mar–Apr; 10(2):233–48
Vascular loop as a cause of incapacitating dizziness. McCabe BF, et al. **Am J Otol** 1989 Mar;10(2):117–20
Pelvic carcinomatous neuropathy: CT findings and implications for radiation treatment planning. Gaeta M, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):811–6
A giant spinal aneurysm with cord and root compression. el Mahdi MA, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):532–5
Combined contrast studies in lumbar spine diseases. Myelography (peridurography) and nerve root infiltration. Kikuchi S, et al. **Spine** 1988 Nov;13(11):1327–31
[Computerized tomography of the elbow in ulnar sulcus syndrome] Kessler C, et al. **Nervenarzt** 1989 Jul; 60(7):448–50 **(Ger)**
[The spontaneous course of disk prolapse in lumbar root compression syndrome. A CT-controlled prospective study] Schultz U, et al. **Nervenarzt** 1988 Nov;59(11):661–8 **(Ger)**
[Damage to the arm plexus caused by atypical callus formation following clavicular fracture] Jahn R, et al. **Unfallchirurg** 1989 May;92(5):227–8 (Eng. Abstr.) **(Ger)**

SURGERY

Microvascular decompression for trigeminal neuralgia. Dahle L, et al. **Acta Neurochir (Wien)** 1989;99(3–4):109–12
Anterolateral uncoforaminotomy for cervical spondylotic myeloradiculopathy. Manabe S, et al. **Acta Orthop Scand** 1988 Dec;59(6):669–74
Indications and results of neurovascular decompression of the eighth cranial nerve for vertigo, tinnitus and hearing disturbances. Ryu H, et al. **Adv Otorhinolaryngol** 1988; 42:280–3
Decompression of the posterior interosseous nerve for tennis elbow. Jalovaara P, et al. **Arch Orthop Trauma Surg** 1989; 108(4):243–5
Submuscular transposition of the ulnar nerve. Janes PC, et al. **Clin Orthop** 1989 Jan;(238):225–32
Lumbar spinal stenosis syndrome. Petropoulos BP. **Clin Orthop** 1989 Sep;(246):70–80
Posterior transpedicular Zielke instrumentation of the lumbar spine. Simmons EH, et al. **Clin Orthop** 1988 Nov; (236):180–91
Anterior cervical fractional interspace decompression for treatment of cervical radiculopathy. A review of the first 66 cases. Snyder GM, et al. **Clin Orthop** 1989 Sep; (246):92–9
Microvascular decompression for intractable trigeminal neuralgia. Shapiro SA, et al. **Indiana Med** 1988 Sep; 81(9):776–8
Entrapment of the superficial peroneal nerve. Diagnosis and results of decompression. Styf J. **J Bone Joint Surg [Br]** 1989 Jan;71(1):131–5
Transection of radial digital nerve of the thumb during trigger release. Carrozzella J, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):198–200
Ulnar neuropathy at the elbow: results of medial epicondylectomy. Goldberg BJ, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):182–8
Suprainguinal ligament approach for surgical treatment of meralgia paresthetica. Technical note. Aldrich EF, et al. **J Neurosurg** 1989 Mar;70(3):492–4
Thoracic dorsal ramus entrapment. Case report. González-Darder JM. **J Neurosurg** 1989 Jan;70(1):124–5
Surgery for ulnar nerve entrapment at the elbow. Bernhardt M, et al. **Kans Med** 1988 Sep;89(9):233–8
Transethmoidal decompression of the optic nerve in the case of craniocerebral trauma. Kolenda H, et al. **Neurosurg Rev** 1988;11(1):39–43
Pseudoaneurysm of the inferior gluteal artery presenting as sciatic nerve compression. Papadopoulos SM, et al. **Neurosurgery** 1989 Jun;24(6):926–8
Anterolateral uncoforaminotomy for cervical spondylotic monoradiculopathy. Manabe S, et al. **No Shinkei Geka** 1989 Feb;17(2):153–8
Indications for surgery in work-related compression neuropathies of the upper extremity. Harter BT Jr. **Occup Med** 1989 Jul–Sep;4(3):485–95 (27 ref.)
Pitfalls in the management of cubital tunnel syndrome. Jones JA. **Orthop Rev** 1989 Jan;18(1):36–44 (24 ref.)
Surgical therapy of neuralgia: vascular decompression procedures. Wilkins RH. **Semin Neurol** 1988 Dec;8(4):280–5 (35 ref.)
[Diagnosis and treatment of saphenous nerve entrapment] Yang DS. **Chung Hua Wai Ko Tsa Chih** 1988 Aug; 26(8):464–5, 509–10 (Eng. Abstr.) **(Chi)**
[A rare tunnel syndrome: paralysis of the posterior interosseous nerve. Apropos of 10 cases] Durandeau A, et al. **Rev Chir Orthop** 1988;74 Suppl 2:156–8 **(Fre)**
[The supinator syndrome. An anatomic and clinical study] Hong GX, et al. **Handchir Mikrochir Plast Chir** 1989 May; 21(3):147–52 (Eng. Abstr.) **(Ger)**
[Compression of the median nerve by chondrosarcoma of the hand] Steffens K, et al. **Handchir Mikrochir Plast Chir** 1988 Jul;20(4):220–2 (Eng. Abstr.) **(Ger)**
[Experiences with the "epigastric pain syndrome"] Meier W. **Helv Chir Acta** 1989 Jan;55(5):731–6 (Eng. Abstr.) **(Ger)**
[Clinical aspects and diagnosis of lumbosacral perineural cysts] Prestar FJ. **Neurochirurgia (Stuttg)** 1989 Jan; 32(1):21–4 (Eng. Abstr.) **(Ger)**
[Intraneural ganglion of the ulnar nerve. A case report] Hansis M, et al. **Unfallchirurg** 1988 Sep;91(9):405–7 (Eng. Abstr.) **(Ger)**
[Transpalpebral decompression operation in endocrine orbitopathy (exophthalmos)] Olivari N. **Wien Med Wochenschr** 1988 Sep 30;138(18):452–5 (Eng. Abstr.) **(Ger)**
[Experimental and clinical studies of the vascularized anterior transposition of the ulnar nerve for cubital tunnel syndrome] Sugawara M. **Nippon Seikeigeka Gakkai Zasshi** 1988 Aug;62(8):755–66 (Eng. Abstr.) **(Jpn)**
[Late results of the surgical treatment of spondylolisthesis complicated by injury of the cauda equina] Jarmundowicz W, et al. **Neurol Neurochir Pol** 1988 May–Jun;22(3):216–20 (Eng. Abstr.) **(Pol)**
[Surgical treatment of tunnel lesions of the nerves of the arm] Dumbere RT, et al. **Zh Vopr Neirokhir** 1988 Jul–Aug; (4):53–6 (51 ref.) **(Rus)**

THERAPY

Saphenous nerve entrapment at the adductor canal. Romanoff ME, et al. **Am J Sports Med** 1989 Jul–Aug;17(4):478–81
Treatment of abdominal nerve entrapment syndrome using a nerve stimulator [letter] Hall PN, et al. **Ann R Coll Surg Engl** 1988 Sep;70(5):337
Volume injection adhesiotomy. Grumbine NA, et al. **J Am Podiatr Med Assoc** 1989 Mar;79(3):121–3 (29 ref.)
Review of treatment results for ulnar nerve entrapment at the elbow. Dellon AL. **J Hand Surg [Am]** 1989 Jul; 14(4):688–700 (67 ref.)
Chiropractic distractive decompression in the treatment of pelvic pain and organic dysfunction in patients with evidence of lower sacral nerve root compression. Browning JE. **J Manipulative Physiol Ther** 1988 Oct;11(5):426–32
Percutaneous methods for the treatment of trigeminal neuralgia and other faciocephalic pain; comparison with microvascular decompression. Sweet WH. **Semin Neurol** 1988 Dec;8(4):272–9 (18 ref.)
Embolization of solitary spinal metastases from renal cell carcinoma: alternative therapy for spinal cord or nerve root compression. O'Reilly GV, et al. **Surg Neurol** 1989 Apr; 31(4):268–71

URINE

[Urinary excretion of hydroxyproline in patients with lesions of the peripheral nervous system] Krutul L. **Neurol Neurochir Pol** 1988 Jul–Aug;22(4):287–92 (Eng. Abstr.) **(Pol)**

VETERINARY

[Electromyography and spinal evoked potentials in cauda equina syndrome of dogs] Kornberg M, et al. **Schweiz Arch Tierheilkd** 1989;131(6):287–98 (Eng. Abstr.) **(Ger)**

NERVE CONDUCTION see **NEURAL CONDUCTION**

NERVE CRUSH

Ultrastructural study of reinnervation in a rat fast skeletal muscle. González de Milo N, et al. **Acta Cient Venez** 1988; 39(3):357–62
Sensory nerve crush and regeneration and the receptive fields and response properties of neurons in the primary somatosensory cerebral cortex of cats. Brandenberg GA, et al. **Exp Neurol** 1989 Mar;103(3):256–66
Assessment of peripheral nerve crush injury with cortical somatosensory evoked potentials in the cat. Kawakami Y, et al. **Exp Neurol** 1989 Feb;103(2):146–53
The demonstration of the cutaneous distribution of saphenous nerve C-fibres using a plasma extravasation technique in the normal rat and following nerve injury. Brenan A, et al. **J Anat** 1988 Apr;157:57–66
Regulation of UDP-galactose:ceramide galactosyltransferase and UDP-glucose:ceramide glucosyltransferase after crush and transection nerve injury. Costantino-Ceccarini E, et al. **J Neurochem** 1989 Jul;53(1):205–11
Sulfation of rat apolipoprotein E. Gebicke-Haerter PJ, et al. **J Neurochem** 1989 Sep;53(3):912–6
Investigations on the incorporation of a tritiated ganglioside, GM1, in the injured and intact sciatic nerves of the rat. Lang W, et al. **J Neurochem** 1989 Sep;53(3):929–34
Reinnervation of the mammalian spinal cord after neonatal dorsal root crush. Carlstedt T. **J Neurocytol** 1988 Jun; 17(3):335–50
Systemic effects of low-power laser irradiation on the peripheral and central nervous system, cutaneous wounds, and burns. Rochkind S, et al. **Lasers Surg Med** 1989; 9(2):174–82
Conduction studies in peripheral cat nerve using implanted electrodes: II. The effects of prolonged constriction on regeneration of crushed nerve fibers. Krarup C, et al. **Muscle Nerve** 1988 Sep;11(9):933–44
The distribution of slow myosin in rat muscles after neonatal nerve crush. Lowrie MB, et al. **Muscle Nerve** 1988 Oct; 11(10):1043–50

INSTRUMENTATION

Strain-gauged haemostatic forceps for clinical and experimental use. Nissan M, et al. **Med Biol Eng Comput** 1988 Jul;26(4):448–50

NERVE DEGENERATION

Degeneration of adrenergic nerves in the gall-bladder of cholecystitis patients. Qayyum MA, et al. **Acta Anat (Basel)** 1988;133(2):130–3
Ultrastructural study of reinnervation in a rat fast skeletal muscle. González de Milo N, et al. **Acta Cient Venez** 1988; 39(3):357–62
Transganglionic regulation of primary sensory neurons. Csillik B, et al. **Acta Morphol Hung** 1988;36(1–2):35–46
Competitive mechanisms of basic peptides inducing transganglionic degenerative atrophy. Tajti J, et al. **Acta Morphol Hung** 1988;36(1–2):7–14
Morphology of ventricular wall surfaces following neurotoxin induced degeneration of supraependymal afferents. Cupédo RN, et al. **Acta Morphol Neerl Scand** 1988–89;26(1):19–31
Formation of microglia-derived brain macrophages is blocked by adriamycin. Graeber MB, et al. **Acta Neuropathol (Berl)** 1989;78(4):348–58
Evidence for sequential degeneration of the neurons in the intermediate zone of the spinal cord in amyotrophic lateral sclerosis: a topographic and quantitative investigation. Oyanagi K, et al. **Acta Neuropathol (Berl)** 1989;77(4):343–9
Axonal degeneration and regeneration in sensory roots in a genital herpes model. Soffer D, et al. **Acta Neuropathol (Berl)** 1989;77(6):605–11
Neuronal degeneration in the brain of the brindled mouse. Histochemical demonstration of decreased cytochrome oxidase activity in the cerebellum and brain stem. Yoshimura N. **Acta Pathol Jpn** 1988 Jun;38(6):705–12
Accumulation dynamics of the agent of amyotrophic leukospongiosis and the development of degenerative changes in the central nervous system of guinea pigs. Kolomiets ND, et al. **Acta Virol (Praha)** 1988 Sep; 32(5):426–34
Wallerian degeneration and inflammation in rat peripheral nerve detected by in vivo MR imaging. Titelbaum DS, et al. **AJNR** 1989 Jul–Aug;10(4):741–6
An anti-organelle antibody in pathology. The chromatolytic reaction studied with a monoclonal antibody against the Golgi apparatus. Croul SE, et al. **Am J Pathol** 1988 Nov; 133(2):355–62
Degeneration of the primary snout sensory afferents in the cervical spinal cords following the infraorbital nerve transection in some mammals. Chang CM, et al. **Anat Anz** 1988;166(1–5):43–51
Degenerative changes of primary neurons following tooth extraction. Kubota K, et al. **Anat Anz** 1988;166(1–5):133–9
Cells proliferating in vitro to local brain injury are primarily of hematic origin and differ from those associated with anterograde degeneration. Katz IR, et al. **Ann N Y Acad Sci** 1988;540:413–5
Familial Alzheimer's disease with myoclonus and 'spongy change'. Duffy P, et al. **Arch Neurol** 1988 Oct; 45(10):1097–100
The post-injury changes that occur in transected foetal nerves; an experimental study in the rat. Rowsell AR. **Br J Plast Surg** 1989 May;42(3):296–300
Microglial response to 6-hydroxydopamine-induced substantia nigra lesions. Akiyama H, et al. **Brain Res** 1989 Jun 12;489(2):247–53

The rate of Wallerian degeneration in the absence of immunoglobulins. A study in chick and mouse peripheral nerve. Hann PG, et al. **Brain Res** 1988 Jun 7; 451(1-2):126-32

Organelle changes in cat thoracic alpha- and gamma-motoneurons following axotomy. Johnson IP, et al. **Brain Res** 1989 Jun 12;489(2):400-5

Loss of transmitter-associated enzyme staining following axotomy does not indicate death of brainstem cholinergic neurons. Lams BE, et al. **Brain Res** 1988 Dec 20; 475(2):401-6

Autoradiographic localization of insulin-like growth factor II receptors in cerebellar cortex of weaver and Purkinje cell degeneration mutant mice. Mendelsohn LG, et al. **Brain Res** 1988 Aug 23;458(2):361-6

Degeneration of optic axons induces the expression of major histocompatibility antigens. Rao K, et al. **Brain Res** 1989 May 29;488(1-2):332-5

Perineurial permeability and endoneurial edema during Wallerian degeneration of the frog peripheral nerve. Wadhwani KC, et al. **Brain Res** 1989 Jul 31;493(2):231-9

Neuronal loss in lumbar dorsal root ganglia after proximal compared to distal sciatic nerve resection: a quantitative study in the rat. Ygge J. **Brain Res** 1989 Jan 23;478(1):193-5

Degeneration of serotonin-specific neurons in the brain in experimental Trypanosoma brucei infection. Ormerod WE, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):480-1

Sensory neuron degeneration in familial Kugelberg-Welander disease [published erratum appears in **Can J Neurol Sci** 1989 May;16(2):223] Winder TR, et al. **Can J Neurol Sci** 1989 Feb;16(1):67-70

Chromatolysis of dorsal root ganglion cells studied by cryofixation. Meller K. **Cell Tissue Res** 1989;256(2):283-92

Neuronal degeneration in the pineal ganglion during the post-hatching development of the domestic fowl. Sato T, et al. **Cell Tissue Res** 1988 Oct;254(1):25-30

Striatonigral degeneration. A case report and a review of the literature. van Leeuwen RB, et al. **Clin Neurol Neurosurg** 1988;90(2):121-4 (35 ref.)

Intestinal neuronal degeneration in a patient with chronic idiopathic intestinal pseudoobstruction. Schuster R, et al. **Dig Dis Sci** 1989 Jan;34(1):123-8

3-Acetylpyridine-induced degeneration of the nigrostriatal dopamine system: an animal model of olivopontocerebellar atrophy-associated parkinsonism. Deutch AY, et al. **Exp Neurol** 1989 Jul;105(1):1-9

Morphological and biochemical analysis of ischaemically induced anterograde degeneration of some rabbit spinal cord tracts. Mechírová E, et al. **Folia Morphol (Praha)** 1988; 36(4):381-94

Experimental modifications of postnatal differentiation and fate of glial cells related to axo-glial relationships. Valat J, et al. **Int J Dev Neurosci** 1988;6(3):245-60

Infiltration of carbon-labelled monocytes into the dorsal motor nucleus following an intraneural injection of ricinus communis agglutinin-60 into the vagus nerve in rats. Ling EA, et al. **J Anat** 1988 Aug;159:207-18

A childhood neurodegeneration due to defective DNA repair: a novel concept of disease based on studies xeroderma pigmentosum. Robbins JH. **J Child Neurol** 1989 Apr;4(2):143-6 (37 ref.)

Changes in dorsal horn synaptic disc numbers following unilateral dorsal rhizotomy. Chung K, et al. **J Comp Neurol** 1989 May 22;283(4):568-77

Changes in the nuclei of dying neurons as studied with thymidine autoradiography. Clarke PG, et al. **J Comp Neurol** 1989 May 15;283(3):438-49

Endocytosis and autophagy in dying neurons: an ultrastructural study in chick embryos. Hornung JP, et al. **J Comp Neurol** 1989 May 15;283(3):425-37

Neurofilament phosphorylation in neuronal perikarya following axotomy: a study of rat spinal cord with ventral and dorsal root transection. Mansour H, et al. **J Comp Neurol** 1989 May 22;283(4):481-5

Degeneration and regeneration of peripheral nerve in the rat trigeminal system: III. Abnormal sensory reinnervation of rat guard hairs following nerve transection and crush. Munger BL, et al. **J Comp Neurol** 1989 May 8;283(2):169-76

Target dependence of hypoglossal motor neurons during development in maturity. Snider WD, et al. **J Comp Neurol** 1989 Jan 15;279(3):489-98

Light microscopic study of degenerating cobalt-filled optic axons in goldfish: role of microglia and radial glia in debris removal. Springer AD, et al. **J Comp Neurol** 1989 Apr 1;282(1):119-32

Ultrastructural and paraphenylene studies of degeneration in the primate visual system: degenerative remnants persist for much longer than expected. Johnson BM, et al. **J Electron Microsc Tech** 1988 Feb;8(2):179-83

Lipid metabolism during early stages of Wallerian degeneration in the rat sciatic nerve. White FV, et al. **J Neurochem** 1989 Apr;52(4):1085-92

Non-myelin-forming Schwann cells proliferate rapidly during Wallerian degeneration in the rat sciatic nerve. Clemence A, et al. **J Neurocytol** 1989 Apr;18(2):185-92

Leukocyte glutamate dehydrogenase activity in patients with degenerative neurological disorders. Aubby D, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):893-902

Clues to the mechanism underlying dopamine cell death in Parkinson's disease. Jenner P. **J Neurol Neurosurg Psychiatry** 1989 Jun;Suppl:22-8 (68 ref.)

Asymmetry of substantia nigra neuronal loss in Parkinson's disease and its relevance to the mechanism of levodopa related motor fluctuations. Kempster PA, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):72-6

Cerebellar degeneration in neuroleptic malignant syndrome: neuropathologic findings and review of the literature concerning heat-related nervous system injury. Lee S, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):387-91 (28 ref.)

Retrograde pyramidal tract degeneration in a patient with cervical haematomyelia. Yamamoto T, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):382-6

An investigation of possible transynaptic neuronal degeneration in human spinal cord injury. Kaelan C, et al. **J Neurol Sci** 1988 Sep;86(2-3):231-7

Immunoperoxidase labelling of rat brain sections with sera from patients with paraneoplastic cerebellar degeneration and systemic neoplasia. Greenlee JE, et al. **J Neuropathol Exp Neurol** 1988 Sep;47(5):561-71

Spontaneous spongy degeneration of the brain stem in SAM-P/8 mice, a newly developed memory-deficient strain. Yagi H, et al. **J Neuropathol Exp Neurol** 1989 Sep; 48(5):577-90

Wallerian degeneration of the descending tracts. CT and MRI features of the brain stem. Boucharebe M, et al. **J Neuroradiol** 1988;15(3):238-52 **(Eng, Fre)**

Roles for mitotic history in the generation and degeneration of hippocampal neuroarchitecture. Mattson MP, et al. **J Neurosci** 1989 Apr;9(4):1223-32

Macrophage function during Wallerian degeneration of rat optic nerve: clearance of degenerating myelin and Ia expression. Stoll G, et al. **J Neurosci** 1989 Jul;9(7):2327-35

Hippocampal damage associated with prolonged and fatal stress in primates. Uno H, et al. **J Neurosci** 1989 May; 9(5):1705-11

Quantification of retrograde degeneration in corticospinal tract fibers [letter; comment] Tator CH. **J Neurosurg** 1989 Apr;70(4):655-6. **Comment on:** J Neurosurg 1988 Jan;68(1):124-8

Reorganization of neuronal connections following CNS trauma: principles and experimental paradigms. Steward O. **J Neurotrauma** 1989;6(2):99-152 (190 ref.)

The role of potassium channels in Schwann cell proliferation in Wallerian degeneration of explant rabbit sciatic nerves. Chiu SY, et al. **J Physiol (Lond)** 1989;408:199-222

Electrophysiology of degenerating neurones in the vagal motor nucleus of the guinea-pig following axotomy. Laiwand R, et al. **J Physiol (Lond)** 1988 Oct;404:749-66

The degeneration and regeneration of cutaneous nerves in experimental flaps in rats. Chang CC, et al. **J Reconstr Microsurg** 1989 Apr;5(2):157-62

Projections of the nucleus accumbens in the cat. Nieto A, et al. **Jpn J Psychiatry Neurol** 1989 Mar;43(1):105-12

Cocaine, in contrast to D-amphetamine, does not cause axonal terminal degeneration in neostriatum and agranular frontal cortex of Long-Evans rats. Ryan LJ, et al. **Life Sci** 1988;43(17):1403-9

Axonal degeneration/necrosis: a possible ultrastructural marker for Crohn's disease. Steinhoff MM, et al. **Mod Pathol** 1988 May;1(3):182-7

Strategies for evaluating the child with suspected neurodegenerative disease. Menkes JH. **Monatsschr Kinderheilkd** 1989 May;137(5):254-6 (6 ref.)

Paraneoplastic degeneration of the substantia nigra with dystonia and parkinsonism. Golbe LI, et al. **Mov Disord** 1989;4(2):147-52

Mechanisms underlying neuronal degeneration in Parkinson's disease: an experimental and theoretical treatise. Langston JW. **Mov Disord** 1989;4 Suppl 1:S15-25 (42 ref.)

The blood-nerve barrier in Wallerian degeneration: a sequential long-term study. Seitz RJ, et al. **Muscle Nerve** 1989 Aug;12(8):627-35 (47 ref.)

Experimental models of age-related memory dysfunction and neurodegeneration. Papers from a workshop. August 30-September 2, 1987, Baltimore, MD. **Neurobiol Aging** 1988 Sep-Dec;9(5-6):443-780

Ultrastructure of axotomized alpha and gamma motoneurons in the cat thoracic spinal cord. Johnston IP, et al. **Neuropathol Appl Neurobiol** 1989 Mar-Apr;15(2):149-63

The role of astroglia in pathological processes characterized by myelin disintegration. II. Electron enzyme and immunocytochemistry of the astroglia in experimental injury to white matter. Goncerzewicz A. **Neuropatol Pol** 1988;26(2):127-49

Fetal cortical transplants reduce the thalamic atrophy induced by frontal cortical lesions in newborn rats. Sørensen JC, et al. **Neurosci Lett** 1989 Mar 13;98(1):33-8

Satellite cells surrounding axotomised rat dorsal root ganglion cells increase expression of a GFAP-like protein. Woodham P, et al. **Neurosci Lett** 1989 Mar 13;98(1):8-12

Transneuronal retrograde degeneration of retinal ganglion cells after damage to striate cortex in macaque monkeys: selective loss of P beta cells. Cowey A, et al. **Neuroscience** 1989;29(1):65-80

Protective effects of mossy fiber lesions against kainic acid-induced seizures and neuronal degeneration. Okazaki MM, et al. **Neuroscience** 1988 Sep;26(3):763-81

Monoclonal antibody immunohistochemistry of degenerative and renewal patterns in rabbit olfactory receptor neurons following unilateral olfactory bulbectomy. Onoda N. **Neuroscience** 1988 Sep;26(3):1013-22

De- and regeneration of axons after minor lesions in the rat sciatic nerve. Effects of microneurography electrode penetrations. Fried K, et al. **Pain** 1989 Jan;36(1):93-102

Resistance to axonal degeneration after nerve compression in experimental diabetes. Dyck PJ, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2103-6

Insertional mutation in a transgenic mouse allelic with Purkinje cell degeneration. Krulewski TF, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3709-12

Retrovirus-induced murine motor neuron disease: mapping the determinant of spongiform degeneration within the envelope gene. Paquette Y, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3896-900

Integration of grafted Purkinje cell into the host cerebellar circuitry in Purkinje cell degeneration mutant mouse. Sotelo C, et al. **Prog Brain Res** 1988;78:141-54 (35 ref.)

The importance of regressive changes in the development of the nervous system: towards a neurobiological theory of child development. Carlson M, et al. **Psychiatr Dev** 1988 Spring;6(1):1-22 (63 ref.)

Wallerian degeneration after cerebral infarction: evaluation with sequential MR imaging. Kuhn MJ, et al. **Radiology** 1989 Jul;172(1):179-82

Retrovirus induced motor neuron degeneration. Hoffman PM, et al. **Rev Neurol (Paris)** 1988;144(11):676-9

Degeneration and regrowth of adrenergic nerves after microvascular anastomosis. A fluorescence histochemical study on end-to-end anastomoses of femoral vessels in the rat. Waris T, et al. **Scand J Plast Reconstr Surg Hand Surg** 1988;22(3):211-6

[Degenerative changes of the myelin fibers of sciatic nerves in aged rats] Dolapchieva S, et al. **Eksp Med Morfol** 1989; 28(2):5-9 (Eng. Abstr.) **(Bul)**

[Value and limitations of the study of gamma-enolase in cerebrospinal fluid as evidence of neuronal degeneration] van den Doel EM, et al. **Rev Neurol (Paris)** 1988; 144(6-7):452-5 (Eng. Abstr.) **(Fre)**

[Degenerative neuropathies] Pisano F, et al. **Riv Neurol** 1988 Mar-Apr;58(2):50-5 (22 ref.) **(Ita)**

[Nerve degeneration in ischemic dog urinary bladders] Yokoyama O. **Nippon Hinyokika Gakkai Zasshi** 1988 Mar; 79(3):436-44 (Eng. Abstr.) **(Jpn)**

[Neuropathological studies of familial amyotrophic lateral sclerosis with special reference to systemic degeneration of dentato-rubral system and neuronal loss of Onuf's nuclei] Sakai M, et al. **Rinsho Shinkeigaku** 1988 Oct; 28(10):1197-205 (Eng. Abstr.) **(Jpn)**

[Peripheral denervation in the various clinical forms of Chagas' disease] DeFaria CR, et al. **Arq Neuropsiquiatr** 1988 Sep;46(3):225-37 (Eng. Abstr.) **(Por)**

[Antidromic cortical responses and neuronal retrograde degeneration during stimulation and dissection of the fibers of the corpus callosum] Samadashvili ZV, et al. **Fiziol Zh SSSR** 1988 Aug;74(8):1077-86 **(Rus)**

DRUG EFFECTS

Effect of dihydroergotoxine mesylate (Hydergine) on delayed neuronal death in the gerbil hippocampus. Izumiyama K, et al. **Acta Neurol Scand** 1988 Sep;78(3):214-20

Degeneration of neuronal processes in rats induced by a protease inhibitor, leupeptin. Takauchi S, et al. **Acta Neuropathol (Berl)** 1989;78(4):380-7

GM1 ganglioside protects against the 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-induced degeneration of nigrostriatal dopamine neurons in the black mouse. Janson AM, et al. **Acta Physiol Scand** 1988 Apr; 132(4):587-8

Chronic nicotine treatment partly protects against the 1-methyl-4-phenyl-2,3,6-tetrahydropyridine-induced degeneration of nigrostriatal dopamine neurons in the black mouse. Janson AM, et al. **Acta Physiol Scand** 1988 Apr; 132(4):589-91

Exogenous GM1 gangliosides protect against retrograde degeneration following posterior neocortex lesions in developing hamsters. Sabel BA, et al. **Brain Res** 1988 Sep 6;459(2):373-80

Transsynaptic degeneration of motoneurones caudal to spinal cord lesions. Eidelberg E, et al. **Brain Res Bull** 1989 Jan; 22(1):39-45

Ketamine and MK-801 prevent degeneration of thalamic neurons induced by focal cortical seizures. Clifford DB, et al. **Exp Neurol** 1989 Sep;105(3):272-9

The role of neuron death in the development of the gender difference in the number of neurons in the rat superior cervical ganglion. Wright LL, et al. **Int J Dev Neurosci** 1987;5(4):305-11

Neuroprotective effects of MK-801 in vivo: selectivity and evidence for delayed degeneration mediated by NMDA receptor activation. Foster AC, et al. **J Neurosci** 1988 Dec; 8(12):4745-54

MK-801 prevents hypobaric-ischemic neuronal degeneration in infant rat brain. Olney JW, et al. **J Neurosci** 1989 May; 9(5):1701-4

Cytological and cytochemical (RNA) studies on rubral neurons after unilateral rubrospinal tractotomy: the impact of GM1 ganglioside administration. Barron KD, et al. **J Neurosci Res** 1989 Mar;22(3):331-7

Treatment with polyamines can prevent monosodium glutamate neurotoxicity in the rat retina. Gilad GM, et al. **Life Sci** 1989;44(25):1963-9

The ultrastructure of rat hippocampal formation in organotypic tissue culture after exposure to quinolinic acid. Kida E, et al. **Neuropatol Pol** 1988;26(4):507-20

Quinolinic acid neurotoxicity: protection by intracerebral phenylisopropyladenosine (PIA) and potentiation by hypotension. Connick JH, et al. **Neurosci Lett** 1989 Jun 19;101(2):191–6

'Photo-degeneration' of neurones after extracellular dye application. Picaud S, et al. **Neurosci Lett** 1988 Dec 19; 95(1–3):24–30

Strychnine-enhanced transsynaptic degeneration of dorsal horn neurons in rats with an experimental painful peripheral neuropathy. Sugimoto T, et al. **Neurosci Lett** 1989 Mar 27;98(2):139–43

The time-course of trimethyltin-induced fiber and terminal degeneration in hippocampus. Whittington DL, et al. **Neurotoxicol Teratol** 1989 Jan–Feb;11(1):21–33

Disrupted retention of the classically conditioned nictitating membrane response in rabbits with aluminum-induced neurofibrillary degeneration. Solomon PR, et al. **Neurotoxicology** 1988 Summer;9(2):209–21

Biochemical and morphological validation of a rodent model of organophosphorus-induced delayed neuropathy. Padilla S, et al. **Toxicol Ind Health** 1988 Sep;4(3):361–71

[Morphological and immunohistochemical studies on degenerative changes of the retina and the optic nerve in neonatal rats injected with monosodium-L-glutamate] Azuma N, et al. **Nippon Ganka Gakkai Zasshi** 1989 Jan; 93(1):72–9 (Eng. Abstr.) **(Jpn)**

RADIATION EFFECTS

Temporal parameters of low energy laser irradiation for optimal delay of post-traumatic degeneration of rat optic nerve. Assia E, et al. **Brain Res** 1989 Jan 9;476(2):205–12

NERVE ENDINGS

see related
NEURAL TRANSMISSION
TASTE BUDS

Sensory innervation of soft tissues of the lumbar spine in the rat. Cavanaugh JM, et al. **J Orthop Res** 1989; 7(3):378–88

ANALYSIS

Membrane heterogeneity in sensory receptors of rat vibrissae: Merkel receptors differ from other nerve endings. Byers MR, et al. **Brain Res** 1988 Oct 4;461(2):397–402

Neurons in the medial cortex give rise to Timm-positive boutons in the cerebral cortex of lizards. Lopez-Garcia C, et al. **Brain Res** 1988 Nov 1;463(2):205–17

Immunocytochemical analysis of calcitonin gene-related peptide and vasoactive intestinal polypeptide in Merkel cells and cutaneous free nerve endings of cats. Alvarez FJ, et al. **Cell Tissue Res** 1988 Nov;254(2):429–37

Tissue norepinephrine concentration in spontaneously diabetic Chinese hamsters. Feldman JM, et al. **Horm Res** 1988;29(4):168–75

Organization of calcitonin gene-related peptide-immunoreactive terminals in the primate dorsal horn. Carlton SM, et al. **J Comp Neurol** 1988 Oct 22; 276(4):527–36

Heterogeneous distribution of GABA-immunoreactive nerve fibers and axon terminals in the superior cervical ganglion of adult rat. Kása P, et al. **Neuroscience** 1988 Aug; 26(2):635–44

Carbohydrates of the vestibular end organs detected by lectins. Takumida M, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(3):144–50

ANATOMY & HISTOLOGY

Nerve terminals associated with the central lacteal endothelial cells. Ichikawa S, et al. **Okajimas Folia Anat Jpn** 1989 May;66(1):57–9

CYTOLOGY

Distribution of neural elements in collateral ligaments of the rat knee joint—light and electron microscopic studies using silver impregnation method and cholinesterase histochemistry. Nakano K, et al. **Kobe J Med Sci** 1988 Oct; 34(5):201–14

DRUG EFFECTS

Evidence that alpha 2-agonists may inhibit sympathetic transmitter secretion by an effect 'upstream' of varicosities. Stjärne L, et al. **Acta Physiol Scand** 1988 Jul;133(3):433–4

Pertussis toxin prevents the inhibitory effect of adenosine and unmasks adenosine-induced excitation of mammalian motor nerve endings. Silinsky EM, et al. **Br J Pharmacol** 1989 May;97(1):16–8

Modulatory action of galanin on responses due to antidromic activation of peripheral terminals of capsaicin-sensitive sensory nerves. Giuliani S, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):91–6

Lack of presynaptic effects of ketanserin on cardiac noradrenergic nerve terminals in the SHR. Scalbert E, et al. **Fundam Clin Pharmacol** 1988;2(4):295–9

Fenfluramine selectively and differentially decreases the density of serotonergic nerve terminals in rat brain: evidence from immunocytochemical studies. Appel NM, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):928–43

[DSP 4, a neurotoxic agent that destroys noradrenergic endings, selectively increases "expectancy" in the cat] Tadjer D, et al. **C R Acad Sci [III]** 1988;307(11):647–52 (Eng. Abstr.) **(Fre)**

ENZYMOLOGY

Ultrastructural localization of carbonic anhydrase in the vestibular end organs of the guinea pig. Takumida M, et al. **Arch Otorhinolaryngol** 1989;246(1):56–60

Secretin and vasoactive intestinal peptide activate tyrosine hydroxylase in sympathetic nerve endings. Schwarzschild MA, et al. **J Neurosci** 1989 Jan;9(1):160–6

Enzyme translocation in the course of regeneration of central primary afferent terminals in the substantia gelatinosa of the adult rodent spinal cord. Knyihár-Csillik E, et al. **J Neurosci Res** 1989 Jan;22(1):74–82

Glutamate decarboxylase-immunoreactive neurons and terminals in the periaqueductal gray of the rat. Barbaresi P, et al. **Neuroscience** 1988 Oct;27(1):183–91

Ontogenesis of tyrosine hydroxylase-immunopositive structures in the rat hypothalamus. Fiber pathways and terminal fields. Ugrumov MV, et al. **Neuroscience** 1989; 29(1):157–66

Phosphorylation and associated translocation of the 87-kDa protein, a major protein kinase C substrate, in isolated nerve terminals. Wang JK, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2253–6

Immunohistochemical conditions for staining choline acetyltransferase-containing axon terminals in the rat. Ojima H, et al. **Stain Technol** 1988 May;63(3):137–43

Presence of calcium/calmodulin-dependent protein kinase II in nerve terminals of rat brain. Walaas SI, et al. **Synapse** 1989;3(4):356–62

GROWTH & DEVELOPMENT

Plasticity of acid phosphatase (FRAP) afferent terminal fields and of dorsal horn cell growth in the neonatal rat. Fitzgerald M, et al. **J Comp Neurol** 1985 Oct 22; 240(4):414–22

IMMUNOLOGY

Immunocytochemical evaluation of a cholinergic-specific ganglioside antigen (Chol-1) in the central nervous system of the rat. Obrocki J, et al. **Exp Brain Res** 1988;72(1):71–82

Somatostatin-like immunoreactivity in a subpopulation of nerve terminals in frog sympathetic ganglia. Bowers CW, et al. **J Auton Nerv Syst** 1988 Aug;23(2):103–10

INJURIES

[Role of vitamin E in muscle reinnervation after nerve injury: effect of its deficiency on multiple innervation] Bruno C, et al. **Boll Soc Ital Biol Sper** 1988 Sep;64(9):865–8 (Eng. Abstr.) **(Ita)**

METABOLISM

Immunohistochemical demonstration of neuroactive substances in the inner ear of rat and guinea pig. Ylikoski J, et al. **Acta Otolaryngol (Stockh)** 1989 May–Jun; 107(5–6):417–23

Dopaminergic terminals in the rat locus coeruleus: an immunocytochemical investigation. McRae-Degueurce A, et al. **Acta Physiol Scand** 1988 Aug;133(4):583–5

Identification of noradrenergic nerve terminals immunoreactive for neuropeptide Y and vasoactive intestinal peptide in the rat kidney. Knight DS, et al. **Am J Anat** 1989 Mar;184(3):190–204

Possible mechanism of acetaldehyde-induced noradrenaline release from sympathetic nerve terminals in isolated blood vessels. Chiba S, et al. **Br J Pharmacol** 1988 Sep; 95(1):177–82

Synaptology of the cerebello-olivary pathway. Double labelling with anterograde axonal tracing and GABA immunocytochemistry in the rat. Angaut P, et al. **Brain Res** 1989 Feb 13;479(2):361–5

Neuropeptide Y-containing neurons in the rat striatum: ultrastructure and cellular relations with tyrosine hydroxylase- containing terminals and with astrocytes. Aoki C, et al. **Brain Res** 1988 Sep 6;459(2):205–25

Functional damage of dopamine nerve terminals following intrastriatal kainic acid injection. Bonanno G, et al. **Brain Res** 1989 Feb 20;480(1–2):242–8

Nicotine infused into the nucleus accumbens increases synaptic dopamine as measured by in vivo microdialysis. Mifsud JC, et al. **Brain Res** 1989 Jan 30;478(2):365–7

Neuropeptide Y-like immunoreactivity in neurons of the solitary tract nuclei: vesicular localization and synaptic input from GABAergic terminals. Pickel VM, et al. **Brain Res** 1989 Jan 9;476(2):265–78

Involvement of protein kinase C in the Ca2+-dependent vesicular release of GABA from central and enteric neurons of the guinea pig. Shuntoh H, et al. **Brain Res** 1989 Apr 3;483(2):384–8

Serotonin innervation in adult rat neostriatum. II. Ultrastructural features: a radioautographic and immunocytochemical study. Soghomonian JJ, et al. **Brain Res** 1989 Feb 27;481(1):67–86

Presence of catecholaminergic axon-terminals containing beta-adrenergic receptor in the periventricular zone of the rat hypothalamus. Wanaka A, et al. **Brain Res** 1989 Feb 6;479(1):190–3

Functional kappa-opioid receptors on oxytocin and vasopressin nerve terminals isolated from the rat neurohypophysis. Zhao BG, et al. **Brain Res** 1988 Oct 11; 462(1):62–6

Terminal processes of serotonin neurons in the caudal spinal cord of the molly, Poecilia latipinna, project to the leptomeninges and urophysis. Cohen SL, et al. **Cell Tissue Res** 1989 Mar;255(3):619–25

Inhibition of transmitter release from sympathetic nerve endings by omega-conotoxin. Brock JA, et al. **Clin Exp Pharmacol Physiol** 1989 Apr;16(4):333–9

alpha-Methyldopa metabolism in central serotonergic nerve terminals: effects on serotonin levels, synthesis and release. Wolf WA, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):43–53

Two types of GABA-containing axon terminals in cerebellar glomeruli of cat: an immunogold-EM study. Hámori J, et al. **Exp Brain Res** 1989;74(3):471–9

Calcitonin gene-related peptide-like immunoreactivity in nerve fibers in the human skin. Relation to fibers containing substance P-, somatostatin- and vasocactive intestinalpolypeptide-like immunoreactivity. Dalsgaard CJ, et al. **Histochemistry** 1989;91(1):35–8

Preganglionic sympathetic neurones innervating the rat adrenal medulla: immunocytochemical evidence of synaptic input from nerve terminals containing substance P, GABA or 5-hydroxytryptamine. Bacon SJ, et al. **J Auton Nerv Syst** 1988 Sep;24(1–2):97–122 (110 ref.)

Distribution of [3H]deoxyglucose and [3H]dopamine in the adrenal medulla and nerve endings of the mouse. Hirano T. **J Auton Nerv Syst** 1988 Nov;25(1):79–82

Distribution of sympathetic preganglionic neurons and monoaminergic nerve terminals in the spinal cord of the rat. Anderson CR, et al. **J Comp Neurol** 1989 May 8; 283(2):269–84

Ultrastructural study of the GABAergic, cerebellar, and mesodiencephalic innervation of the cat medial accessory olive: anterograde tracing combined with immunocytochemistry. de Zeeuw CI, et al. **J Comp Neurol** 1989 Jun 1;284(1):12–35

Morphological characterization of substance P-like immunoreactive glomeruli in the superficial dorsal horn of the rat spinal cord and trigeminal subnucleus caudalis: a quantitative study. Ribeiro-da-Silva A, et al. **J Comp Neurol** 1989 Mar 22;281(4):497–15

Effects of cadmium on quantal transmitter release and ultrastructure of frog motor nerve endings. Molgó J, et al. **J Neural Transm** 1989;77(2–3):79–91

Characterization of the effect of monensin on gamma-amino-n-butyric acid release from isolated nerve terminals. Sitges M. **J Neurochem** 1989 Aug;53(2):442–7

Further characterization of phasic calcium influx in rat cerebrocortical synaptosomes: inferences regarding calcium channel type(s) in nerve endings. Suszkiw JB, et al. **J Neurochem** 1989 Apr;52(4):1260–9

Evaluation of the Ca2+ concentration in purified nerve terminals: relationship between Ca2+ homeostasis and synaptosomal preparation. Verhage M, et al. **J Neurochem** 1988 Dec;51(6):1667–74

Ultrastructural relationships of serotonin and GABA terminals in the rat suprachiasmatic nucleus. Evidence for a close interconnection between the two afferent systems. Bosler O. **J Neurocytol** 1989 Feb;18(1):105–13

Opiate and peptide inhibition of transmitter release in parasympathetic nerve terminals. Gray DB, et al. **J Neurosci** 1989 May;9(5):1683–92

A nerve terminal protein with a selective distribution in spinal cord and brain. Ritchie TC, et al. **J Neurosci** 1989 Aug; 9(8):2697–709

Flow cytometric analysis and isolation of permeabilized dopamine nerve terminals from rat striatum. Wolf ME, et al. **J Neurosci** 1989 Jan;9(1):106–14

Thiamine-like molecules in the cerebellar cortex of the rat: light and electron microscopic immunocytochemical investigation. Martínez-Rodriguez R, et al. **J Neurosci Res** 1989 Aug;23(4):447–53

Effect of lithium chloride on the neurotransmitter release from adrenergic nerve terminals of guinea-pig atria. Mantelli L, et al. **J Pharm Pharmacol** 1989 Mar;41(3):203–5

Inhibitory actions of captopril on norepinephrine release from adrenergic nerve endings in spontaneously hypertensive rats. Tsuda K, et al. **Jpn Heart J** 1988 Jul;29(4):475–83

Effects of withdrawal from chronic exposure to cigarette smoke on hypothalamic and preoptic catecholamine nerve terminal systems and on the secretion of pituitary hormones in the male rat. Andersson K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Apr; 339(4):387–96

Adrenergic neurons in the nucleus tractus solitarius receive GABAergic synapses. Demonstration by dual immunocytochemistry in the rat. Kachidian P, et al. **Neurosci Lett** 1989 May 22;100(1–3):65–70

Nerve endings from rat brain tissue release copper upon depolarization. A possible role in regulating neuronal excitability. Kardos J, et al. **Neurosci Lett** 1989 Aug 28; 103(2):139–44

Co-existence of TRH with mesotocin in the same axon terminals of the bullfrog pars nervosa as revealed by double labeling immunocytochemistry. Shioda S, et al. **Neurosci Lett** 1989 Mar 13;98(1):25–8

The bradykinin-induced release of substance P from nerve fibre endings in the rat saphenous nerve neuroma is not related to electrophysiological excitation. White DM, et al. **Neurosci Lett** 1988 Sep 23;92(1):108–13

Immunohistochemical analysis of the neurotoxic effects of

DSP-4 identifies two populations of noradrenergic axon terminals. Fritschy JM, et al. **Neuroscience** 1989; 30(1):181-97

Ultrastructural investigation of substance P-, leucine-enkephalin- and 5-hydroxytryptamine-like immunoreactive terminals in the area of cremaster motoneurons of the male rat. Wang BR, et al. **Neuroscience** 1989;28(3):711-23

Monoaminergic and GABAergic terminations in phrenic nucleus of rat identified by immunohistochemical labeling. Zhan WZ, et al. **Neuroscience** 1989;31(1):105-13

Selective cortical infarction reduces [3H]sulpiride binding in rat caudate-putamen: autoradiographic evidence for presynaptic D2 receptors on corticostriate terminals. Filloux F, et al. **Synapse** 1988;2(5):521-31

Quantitation of nerve terminal populations: synaptic vesicle-associated proteins as markers for synaptic density in the rat neostriatum. Walaas SI, et al. **Synapse** 1988; 2(5):516-20

[Opposite variations of extracellular concentrations of 5-hydroxyindoleacetic acid (5-HIAA) measured by voltammetry of axonal terminals and cell bodies of the dorsal raphe nucleus through the sleep-wake cycle] Cespuglio R, et al. **C R Acad Sci [III]** 1988;307(18):817-23 (Eng. Abstr.) **(Fre)**

[The effect of membrane protein methylation processes on the binding of [14C]-GABA by nerve endings in the brain of white rats] Vartanian AA, et al. **Dokl Akad Nauk SSSR** 1989;305(4):1003-6 **(Rus)**

PATHOLOGY

The nature of the cells comprising tactile corpuscle-like structures [letter] Cramer SF. **Am J Dermatopathol** 1989 Feb;11(1):94-5

Cutaneous nerve elimination following punch biopsy. Thompson PB, et al. **Cutis** 1989 Jul;44(1):50-2

Stimulation of afferent nerve endings by intragastric capsaicin protects against ethanol-induced damage of gastric mucosa. Holzer P, et al. **Neuroscience** 1988 Dec;27(3):981-7

PHYSIOLOGY

Optical recording of voltage changes in nerve terminals and in fine neuronal processes. Salzberg BM. **Annu Rev Physiol** 1989;51:507-26 (74 ref.)

The calcium channel antagonist omega-conotoxin inhibits secretion from peptidergic nerve terminals. Dayanithi G, et al. **Biochem Biophys Res Commun** 1988 Oct 14; 156(1):255-62

Postnatal maturation of primary afferent terminations in the substantia gelatinosa of the rat spinal cord. An electron microscopic study. Pignatelli D, et al. **Brain Res** 1989 Jul 3;491(1):33-44

Sympathetic terminal mediation of the acute cardiovascular response of gamma 2-MSH. Callahan MF, et al. **J Auton Nerv Syst** 1988 Sep;24(1-2):179-82

The sprouting of saphenous nerve terminals in the spinal cord following early postnatal sciatic nerve section in the rat. Fitzgerald M. **J Comp Neurol** 1985 Oct 22;240(4):407-13

Optical studies of the secretory event at vertebrate nerve terminals. Salzberg BM, et al. **J Exp Biol** 1988 Sep; 139:195-231 (97 ref.)

Quasielastic laser light scattering and laser Doppler electrophoresis as probes of synaptic and secretory terminal function. Sattelle DB. **J Exp Biol** 1988 Sep;139:233-52 (39 ref.)

Rapid remodeling of sensory endings in the corneas of living mice. Harris LW, et al. **J Neurosci** 1989 Jun;9(6):2210-4

Flow cytometric analysis of rat striatal nerve terminals. Wolf ME, et al. **J Neurosci** 1989 Jan;9(1):94-105

Function of smooth muscle and nerve after small intestinal transplantation in the rat: effect of storing donor bowel in Eurocollins. Taguchi T, et al. **J Pediatr Surg** 1989 Jul; 24(7):634-8

Termination patterns of identified group II and III afferent fibres from deep tissues in the spinal cord of the cat. Hoheisel U, et al. **Neuroscience** 1989;28(2):495-507

Long-term effect of antidepressant drugs and electroconvulsive shock (ECS) on cortical alpha 1-adrenoceptors following destruction of dopaminergic nerve terminals. Nowak G. **Pharmacol Toxicol** 1989 May; 64(5):469-70

In vivo electrochemical studies of the effects of cocaine on dopamine nerve terminals in the rat neostriatum. Gerhardt GA, et al. **Physiol Bohemoslov** 1988;37(3):249-57

In vivo electrochemical studies of the effects of N-methyl-D-aspartate (NMDA) on dopamine nerve terminals in the neostriatum of the anesthetized rat. Friedemann M, et al. **Proc West Pharmacol Soc** 1989; 32:143-7

Release-regulating GABAA receptors are present on noradrenergic nerve terminals in selective areas of the rat brain. Bonanno G, et al. **Synapse** 1987;1(3):254-7

SECRETION

Serotonin-glutamate interaction in rat cerebellum: involvement of 5-hydroxytryptamine receptor subtypes. Maura G, et al. **Ann Ist Super Sanita** 1988;24(3):389-95

Exocytotic release of neurotransmitter substances from nerve endings in the taste buds of rat circumvallate papillae. Endo Y. **Arch Histol Jpn** 1988 Dec;51(5):489-94

Release of neuropeptides does not only occur at nerve terminals. Nordmann JJ, et al. **Biosci Rep** 1988 Oct; 8(5):471-83

Release of glutamate, aspartate, and gamma-aminobutyric acid from isolated nerve terminals. Nicholls DG. **J Neurochem** 1989 Feb;52(2):331-41 (135 ref.)

[N-2-chloroethyl-N-ethyl-2-bromobenzylamine (DSP4) increases the liberation of 3H-noradrenaline produced by depolarization of the nerve ending] Landa ME, et al. **Acta Physiol Pharmacol Latinoam** 1988;38(2):167-80 (Eng. Abstr.) **(Spa)**

ULTRASTRUCTURE

Computer-aided serial section reconstruction of nerve endings on the outer hair cells of the cochlea. Semithin sections vs. ultrathin sections. Hashimoto S, et al. **Acta Otolaryngol (Stockh)** 1989 May-Jun;107(5-6):387-91

The ultrastructure of Ruffini endings in the periodontal ligament of rat incisors with special reference to the terminal Schwann cells (K-cells). Maeda T, et al. **Anat Rec** 1989 Jan;223(1):95-103

A further observation of multiaxonal nerve endings innervating intrafusal muscle fibers of the Chinese hamster. Desaki J, et al. **Arch Histol Jpn** 1988 Dec;51(5):453-7

The ultrastructure of somatostatin-immunoreactive cell bodies, nerve fibers and terminals in the dorsal horn of rat spinal cord. Mizukawa K, et al. **Arch Histol Jpn** 1988 Dec;51(5):443-52

Size-related differences in the branching pattern of the motor nerve terminals in triangularis sterni muscle of the mouse. Tomasi J, et al. **Biol Cell** 1989;65(3):271-80

An electron microscopic analysis of the morphology and connectivity of individual HRP-labeled slowly adapting vibrissa primary afferents in the adult rat. Renehan WE, et al. **Brain Res** 1988 Oct 18;462(2):396-400

Ultrastructural differences between pallidohabenular terminals and pallidothalamic terminals. Tokuno H, et al. **Brain Res** 1988 Dec 6;474(2):390-3

Mixed-junction axon terminals on identified principal abducens motoneurons in the monitor lizard. Wouterlood FG, et al. **Brain Res** 1988 Oct 25;463(1):198-203

Hypothalamic axons terminate on forebrain cholinergic neurons: an ultrastructural double-labeling study using PHA-L tracing and ChAT immunocytochemistry. Zaborszky L, et al. **Brain Res** 1989 Feb 6;479(1):177-84

Ultrastructural identification of synaptic terminals from cortical axons and from collateral axons of geniculo-cortical relay cells in the perigeniculate nucleus of the cat. Montero VM. **Exp Brain Res** 1989;75(1):65-72

The co-localisation of substance P and VIP in cholinergic-type terminals of the rat parotid gland. al-Hadithi BA, et al. **J Anat** 1988 Aug;159:83-92

Ultrastructural analysis of axosomatic contacts on functionally identified primate spinothalamic tract neurons. Carlton SM, et al. **J Comp Neurol** 1989 Mar 22; 281(4):555-66

Endbulbs of held and spherical bushy cells in cats: morphological correlates with physiological properties. Sento S, et al. **J Comp Neurol** 1989 Feb 22;280(4):553-62

EM autoradiographic study of the projections from the dorsal nucleus of the lateral lemniscus: a possible source of inhibitory inputs to the inferior colliculus. Shneiderman A, et al. **J Comp Neurol** 1989 Aug 1;286(1):28-47

Bouton ultrastructure and synaptic growth in a frog autonomic ganglion. Streichert LC, et al. **J Comp Neurol** 1989 Mar 1;281(1):159-68

Visualization of polyribosomes in the postsynaptic area of the squid giant synapse by electron spectroscopic imaging. Martin R, et al. **J Neurocytol** 1989 Feb;18(1):11-8

Regional heterogeneity in the distal motor axon: three zones with distinctive intrinsic components. Yee VC, et al. **J Neurocytol** 1988 Oct;17(5):649-56

Electron microscopic localization of cholinergic terminals in the rat substantia nigra: an immunocytochemical study. Martínez-Murillo R, et al. **Neurosci Lett** 1989 Jan 16; 96(2):121-6

Sensory nerve endings in the cat cruciate ligaments: a morphological investigation. Sjölander P, et al. **Neurosci Lett** 1989 Jul 17;102(1):33-8

Giant lateral-line afferent terminals in the electroreceptive dorsal nucleus of lampreys. Kishida R, et al. **Neurosci Res** 1988 Oct;6(1):83-7

Ultrastructural heterogeneity of spinal terminations in the cat inferior olive. Molinari HH. **Neuroscience** 1988 Nov; 27(2):425-35

Spatial distribution of pre- and postsynaptic sites of axon terminals in the dorsal horn of the frog spinal cord. Székely G, et al. **Neuroscience** 1989;29(1):175-88

Atypical olfactory glomeruli contain original olfactory axon terminals: an ultrastructural horseradish peroxidase study in the rat. Zheng LM, et al. **Neuroscience** 1988 Aug; 26(2):367-78

Glycocalyx and ciliary interconnections of the vestibular end organs: an investigation by high-resolution scanning electron microscopy. Takumida M. **ORL J Otorhinolaryngol Relat Spec** 1989;51(3):137-43

Fine structure of A: autonomic nerve fibers and terminals in human myocardium; and B: myocardial changes in congenital heart disease. Dastur DK, et al. **Ultrastruct Pathol** 1989 Jul-Aug;13(4):413-31

Fine structure of the lamellated corpuscles in the mouse hard palatine mucosa. Watanabe I, et al. **Z Mikrosk Anat Forsch** 1988;102(5):811-6

[Morphophysiological characteristics of bushy interoceptors] Malorov VN, et al. **Arkh Anat Gistol Embriol** 1988 Jul; 95(7):5-13 (84 ref.) (Eng. Abstr.) **(Rus)**

[Nonuniformity of the fine structure of various portions of the nerve terminal in frog somatic muscles as the basis for the variation in its efficiency] Kashapova LA, et al. **Tsitologiia** 1988 Jul;30(7):802-9 (Eng. Abstr.) **(Rus)**

[The ultrastructure of the individual nerve endings of the tonic fibers in the frog] Kashapova LA, et al. **Tsitologiia** 1989 Jan;31(1):103-8 (Eng. Abstr.) **(Rus)**

[Electron microscopic study of the interrelations of the bush-like receptor terminals with the tissue] Lukashin VG, et al. **Tsitologiia** 1989 May;31(5):535-8 (Eng. Abstr.) **(Rus)**

NERVE ENDINGS, SENSORY see **RECEPTORS, SENSORY**

NERVE FIBERS

Centrifugal fibers in the chick retina. A morphological study. Chmielewski CE, et al. **Anat Histol Embryol** 1988 Dec; 17(4):319-27

ANALYSIS

Immunohistochemical demonstration of serotonin-containing nerve fibers in the mammalian hippocampal formation. Ihara N, et al. **Acta Anat (Basel)** 1988;132(4):335-46

Peptide neuroanatomy of adjuvant-induced arthritic inflammation in rat. Weihe E, et al. **Agents Actions** 1988 Dec;25(3-4):255-9

Immunohistochemical demonstration of enkephalin-containing nerve fibers in guinea pig and rat lungs. Shimosegawa T, et al. **Am Rev Respir Dis** 1989 Aug; 140(2):441-8

Study of neuropeptide Y-containing nerve fibers in the human penis. Wespes E, et al. **Cell Tissue Res** 1988 Oct; 254(1):69-74

An increase of vasoactive intestinal polypeptide-, but not neuropeptide Y-, substance P- or catecholamine-containing nerves in the iris of the streptozotocin-induced diabetic rat. Crowe R, et al. **Exp Eye Res** 1988 Nov;47(5):751-9

Progressive changes in adrenergic, serotonergic, and peptidergic nerves in proximal colon of streptozotocin-diabetic rats. Belai A, et al. **Gastroenterology** 1988 Nov;95(5):1234-41

Calcitonin gene-related peptide (CGRP) immunoreactivity in the neuroendocrine Merkel cells and nerve fibres of pig and human skin. García-Caballero T, et al. **Histochemistry** 1989;92(2):127-32

Immunohistochemical localization of calcitonin gene-related peptide and bombesin/gastrin-releasing peptide in nerve fibers of the rat, guinea pig and pig female genital organs. Häppölä O, et al. **Histochemistry** 1989;92(3):211-8

Innervation of radicular and extraparenchymal arteries of spinal cord. Histochemical and immunohistochemical study in primate. Hegde SA, et al. **Histochemistry** 1988; 89(5):415-20

Immunohistochemical demonstration of neurotensin and tyrosine hydroxylase in iris nerves of the rabbit eye. Hernandez DE, et al. **Histochemistry** 1989;92(3):261-4

Neuropeptide Y-, tyrosine hydroxylase- and vasoactive intestinal polypeptide-immunoreactive nerves in bone and surrounding tissues. Bjurholm A, et al. **J Auton Nerv Syst** 1988 Dec;25(2-3):119-25

Distribution of enkephalin-immunoreactive nerve fibres and terminals in the region of the nucleus basalis magnocellularis of the rat: a light and electron microscopic study. Martínez-Murillo R, et al. **J Neurocytol** 1988 Jun; 17(3):361-76

Met5-enkephalin- and Met5-enkephalin-Arg6-Gly7-Leu8-immunoreactive nerve fibers in the pig female reproductive system. Häppölä O, et al. **Neurosci Lett** 1989 Jun 19;101(2):156-62

Fine structures of nerve fibers with corticotropin-releasing factor-like immunoreactivity in the rat lateral septum. Sakanaka M, et al. **Neurosci Lett** 1988 Oct 31;93(1):23-7

Heterogeneous distribution of GABA-immunoreactive nerve fibers and axon terminals in the superior cervical ganglion of adult rat. Kása P, et al. **Neuroscience** 1988 Aug; 26(2):635-44

Distribution and origin of peptide-containing nerve fibers in the celiac superior mesenteric ganglion of the guinea-pig. Lindh B, et al. **Neuroscience** 1988 Sep;26(3):1037-71

Presence of nerve fibers in the human umbilical cord--an electron microscopical histochemical proof. Matsubara S, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Nov; 40(11):1775-6

The distribution of luteinizing hormone-releasing hormone (LHRH) neurons and fibers in the Formosan rock-monkey. Sung WL, et al. **Proc Natl Sci Counc Repub China [B]** 1988 Jul;12(3):156-62

Neuropeptide Y and vasoactive intestinal peptide coexist in rat thyroid nerve fibers emanating from the thyroid ganglion. Grunditz T, et al. **Regul Pept** 1988 Nov; 23(2):193-208

ANATOMY & HISTOLOGY

Distribution of elastic system fibers in the peripheral nerves of mammals. Ferreira JM Jr, et al. **Acta Anat (Basel)** 1987;

130(2):168–73
Transformations of the retinal topography along the visual pathway of the chicken. Rager U, et al. **Anat Embryol (Berl)** 1988;179(2):135–48
Topographic organization of the corticonuclear fibers from the tuber vermis and paramedian lobule in the albino rat. Umetani T. **Brain Behav Evol** 1989;33(6):334–41
Distribution of conduction system fibers in the developing and adult rabbit heart revealed by an antineurofilament antibody. Gorza L, et al. **Circ Res** 1989 Aug;65(2):360–9
Zinc-containing fiber systems in the cochlear nuclei of the rat and mouse. Frederickson CJ, et al. **Hear Res** 1988 Nov; 36(2–3):203–11
The demonstration of the cutaneous distribution of saphenous nerve C-fibres using a plasma extravasation technique in the normal rat and following nerve injury. Brenan A, et al. **J Anat** 1988 Apr;157:57–66
An efficient sampling scheme for estimating fibre number from nerve cross sections: the fractionator. Mayhew TM. **J Anat** 1988 Apr;157:127–34
Retrograde tracing of nerve fibers to the rat middle cerebral artery with true blue: colocalization with different peptides. Edvinsson L, et al. **J Cereb Blood Flow Metab** 1989 Apr; 9(2):212–8
Correlations of the neuroretinal rim area with ocular and general parameters in normal eyes. Jonas JB, et al. **Ophthalmic Res** 1988;20(5):298–303
The effect of age on normal human optic nerve fiber number and diameter. Repka MX, et al. **Ophthalmology** 1989 Jan; 96(1):26–32
[Study on the innervation of guinea pig pineal gland—with the methods of fluorescence and acetylcholinesterase] Bao TR, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec; 19(4):354–8 (Eng. Abstr.) **(Chi)**
[Somatotopic representation of climbing fiber projections from limb cutaneous afferents to the paramedian lobule of the cat cerebellum] Inui N. **Nippon Seirigaku Zasshi** 1989;51(4):123–31 (Eng. Abstr.) **(Jpn)**

CYTOLOGY

The distribution of nerve fibers showing substance P-like immunoreactivity in the conduction system of the bovine heart: dense innervation in the atrioventricular bundle. Forsgren S. **Anat Embryol (Berl)** 1989;179(5):485–90
Pyloroplasty divides vagus nerve fibers to the greater curvature of the stomach. An axonal tracing study. Yoshida J, et al. **Ann Surg** 1988 Dec;208(6):708–13
Proximal trajectory of the brachium conjunctivum in rat fetuses and its early association with the parabrachial nucleus. A study combining in vitro HRP anterograde axonal tracing and immunocytochemistry. Cholley B, et al. **Brain Res Dev Brain Res** 1989 Feb 1;45(2):185–202
Age-dependence of the nerve fibre growth–promoting effects of hippocampus and exogenous nerve growth factor on cultured rat septum and superior cervical ganglion. Lahtinen T. **Cell Differ Dev** 1989 May;26(3):201–9
Increase in perivascular noradrenergic nerve density and decrease in acetylcholinesterase-positive sympathetic nerve density in the kidneys of spontaneously hypertensive rats. De Michele M, et al. **Clin Exp Hypertens [A]** 1988; 10(6):1031–49
Substance P-like immunoreactive nerve fibers of the human laryngeal mucosa—preliminary report. Frigo B, et al. **Ital J Neurol Sci** 1989 Feb;10(1):69–72
The retinal nerve fiber layer in normal eyes. Jonas JB, et al. **Ophthalmology** 1989 May;96(5):627–32

DRUG EFFECTS

Nerve fibers and inflammation. Proceedings of a symposium. Erlangen, FRG, March 13–16, 1988. **Agents Actions** 1988 Dec;25(3–4):209–406
Effects of clonidine and yohimbine on a C-fibre-evoked blood pressure reflex in the rat. Donnerer J, et al. **Br J Pharmacol** 1988 Jul;94(3):848–52
Primary sensory neurones and naloxone-precipitated morphine withdrawal. Donnerer J. **Br J Pharmacol** 1989 Apr;96(4):767–72
Effects of systemic morphine upon A delta- and C-fibre evoked activities of subnucleus reticularis dorsalis neurones in the rat medulla. Bing Z, et al. **Eur J Pharmacol** 1989 May 2;164(1):85–92
The extrasynaptic effect of gamma-aminobutyric acid and pentobarbital and the influence of temperature on the response of parallel fibres of the frog cerebellum in vitro. Bielik P, et al. **Physiol Bohemoslov** 1988;37(6):481–92
Diaphragmatic vasodilation elicited by pulmonary C-fiber stimulation. Coast JR, et al. **Respir Physiol** 1989 Mar; 75(3):279–88
Lack of effect of a neurotoxin from the scorpion Buthus martensi Karsch on nerve fibers of this scorpion. Terakawa S, et al. **Toxicon** 1989;27(5):569–78

ENZYMOLOGY

Nerve fibers showing immunoreactivities for thyrosine hydroxylase and dopamine-beta-hydroxylase re-appear in the guinea pig uvea after sympathectomy. Lehtosalo J, et al. **Acta Ophthalmol (Copenh)** 1988 Aug;66(4):419–26
Acetylcholinesterase fiber staining in the human hippocampus and parahippocampal gyrus. Green RC, et al. **J Comp Neurol** 1988 Jul 22;273(4):488–99
Distribution of reduced-nicotinamide-adenine-dinucleotide-phosphate diaphorase-positive cells and fibers in the cat central nervous system. Mizukawa K, et al. **J Comp Neurol** 1989 Jan 8;279(2):281–311
Intraepidermal neuron-specific enolase (NSE)-immunoreactive nerve fibres: evidence for sprouting in uremic patients on maintenance hemodialysis. Johansson O, et al. **Neurosci Lett** 1989 May 8;99(3):281–6

GROWTH & DEVELOPMENT

Effects of limited postnatal ethanol exposure on the development of myelin and nerve fibers in rat optic nerve. Phillips DE. **Exp Neurol** 1989 Jan;103(1):90–100
Rat CNS white matter, but not gray matter, is nonpermissive for neuronal cell adhesion and fiber outgrowth. Savio T, et al. **J Neurosci** 1989 Apr;9(4):1126–33
Cellular and molecular models of neuron-matrix adhesion in nerve fiber growth. Carbonetto S, et al. **Prog Brain Res** 1988;78:347–52 (38 ref.)
Laminin directs and facilitates migration and fiber growth of transplanted serotonin and norepinephrine neurons in adult brain. Zhou FC, et al. **Prog Brain Res** 1988;78:413–26

IMMUNOLOGY

Double labeling of the paravertebral sympathetic C system in the bullfrog with antisera to LHRH and NPY. Horn JP, et al. **J Auton Nerv Syst** 1988 Jun;23(1):17–24
Distribution of serotonin-like immunoreactive nerves in major cerebral arteries of rabbit: an immunohistochemical study. Dhall U, et al. **J Histochem Cytochem** 1989 Sep; 37(9):1383–6
Occurrence of FMRF amide-like immunoreactive nerve fibers in guinea pig small intestine. Fehér E, et al. **J Histochem Cytochem** 1989 Sep;37(9):1427–33
Ultrastructural analysis of substance P-immunoreactive nerve fibers in myenteric ganglia of guinea pig small intestine. Llewellyn-Smith IJ, et al. **J Neurosci** 1989 Jan;9(1):167–74
The presence of serotonin-immunoreactive nerve fibers in the optic nerve of the mouse. Mikkelsen JD. **Neurosci Lett** 1988 Dec 5;94(3):253–8

METABOLISM

Calcitonin gene-related peptide in nerves of the hamster cheek pouch. Ohlén A, et al. **Acta Physiol Scand** 1988 Dec; 134(4):579–80
Ca2+ transport in nerve fibers. DiPolo R, et al. **Biochim Biophys Acta** 1988 Oct 11;947(3):549–69 (110 ref.)
5-Hydroxytryptamine-containing fibers in cerebral arteries of the cat, rat and guinea pig. Yu JG, et al. **Blood Vessels** 1989;26(1):33–43
Substance P-like immunoreactive fibres in the ventromedial mesencephalic tegmentum of rat. Halliday G, et al. **Brain Res Bull** 1988 Oct;21(4):659–70
Vasoactive intestinal polypeptide (VIP)- and neuropeptide Y (NPY)-containing nerve fibres in the penile cavernous tissue of green monkeys (Cercopithecus aethiops). Schmalbruch H, et al. **Cell Tissue Res** 1989 Jun; 256(3):529–41
Why does the gastric oxyntic gland mucosa contain gastrin-releasing peptide nerve fibers? [editorial] Walsh JH. **Gastroenterology** 1989 Sep;97(3):793–5
Immunocytochemical demonstration of close relationships between neuropeptidergic nerve fibers and hormone-producing cell types in the adenohypophysis of the sea bass (Dicentrarchus labrax). Moons L, et al. **Gen Comp Endocrinol** 1989 Feb;73(2):270–83
Anatomical evidence for interaction of ACTH1-39 immunostained fibers and hypothalamic paraventricular neurons that project to the dorsal vagal complex. Hornby PJ, et al. **Histochemistry** 1988;90(3):201–6
CGRP-immunoreactive sensory nerve fibers in the submandibular gland of the rat. Soinila J, et al. **Histochemistry** 1989;91(6):455–60
Calcium efflux and intracellular exchangeable calcium in mammalian nonmyelinated nerve fibers. Jirounek P, et al. **J Membr Biol** 1988 Jul;103(2):121–34
Corticotropin-releasing factor in olivocerebellar climbing-fiber system of monkey (Saimiri sciureus and Macaca fascicularis): parasagittal and regional organization visualized by immunohistochemistry. Cha CI, et al. **J Neurosci** 1988 Nov;8(11):4121–37
Metabolic alterations in fiber layers of the CA 1 region of the gerbil hippocampus following short-term ischemia: high-energy phosphates, glucose-related metabolites, and amino acids. Yasumoto Y, et al. **Metab Brain Dis** 1988 Jun; 3(2):133–49
Galanin-like immunoreactive nerve elements in the small intestine of the rat. An electron microscopic immunocytochemical study. Fehér E, et al. **Neurosci Lett** 1988 Oct 5;92(2):137–42
5-Hydroxytryptamine-immunoreactive neurons and nerve fibers in the superior cervical ganglion of the rat. Häppölä O. **Neuroscience** 1988 Oct;27(1):301–7
Histamine-immunoreactive nerve fibers in the rat brain. Panula P, et al. **Neuroscience** 1989;28(3):585–610
Immunocytochemical localization of serotonergic fibers innervating the ocular circadian system of Aplysia. Takahashi JS, et al. **Neuroscience** 1989;28(1):139–47
Quantitative morphometric analysis of two types of serotonin-immunoreactive nerve fibres differentially responding to p-chlorophenylalanine treatment in the rat brain. Tohyama I, et al. **Neuroscience** 1988 Sep;26(3):971–91
Substance P-, CGRP- and NPY-immunoreactive nerve fibers in rat sciatic nerve-end neuromas. Fried K, et al. **Regul Pept** 1989 Apr;25(1):11–24

PATHOLOGY

The pathology of ligated nerves in relation to abnormal impulse generators. Tegnér R, et al. **Acta Physiol Scand** 1988 Aug;133(4):589–90
Severe destruction of esophageal nerves in a patient with achalasia secondary to gastric cancer. A possible role of eosinophil neurotoxic proteins. Fredens K, et al. **Dig Dis Sci** 1989 Feb;34(2):297–303
Nerve fibre bundle defects and their perimetric correlation. Menon V, et al. **Indian J Ophthalmol** 1987;35(5–6):448–52
Pattern-evoked potentials and optic nerve fiber loss in monocular laser-induced glaucoma. Johnson MA, et al. **Invest Ophthalmol Vis Sci** 1989 May;30(5):897–907
Nerve fibres in osteoid osteoma. Greco F, et al. **Ital J Orthop Traumatol** 1988 Mar;14(1):91–4
Measurement of relative nerve fiber layer surface height in glaucoma. Caprioli J, et al. **Ophthalmology** 1989 May; 96(5):633–39; discussion 639–41
Chronic human glaucoma causing selectively greater loss of large optic nerve fibers. Quigley HA, et al. **Ophthalmology** 1988 Mar;95(3):357–63
Pain fibers in osteoarthritis: a review. Konttinen YT, et al. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):35–40 (26 ref.)
Cortical angiopathy in Alzheimer's disease: the formation of dystrophic perivascular neurites is related to the exudation of amyloid fibrils from the pathological vessels. Peers MC, et al. **Virchows Arch [A]** 1988;414(1):15–20
[Deficits of the layer of retinal nerve fibers and glaucoma. Comparison with campimetry and control of the course] Chagnon A, et al. **J Fr Ophtalmol** 1989;12(1):33–9 (Eng. Abstr.) **(Fre)**
[The retinal nerve fiber layer in normal eyes and in glaucoma. I. Semiquantitative data of 398 eyes with glaucoma] Jonas JB, et al. **Klin Monatsbl Augenheilkd** 1989 Jun; 194(6):437–46 (Eng. Abstr.) **(Ger)**
[A histological study of striated muscle and nerve fiber in the human caused by a high voltage electric current] Morita M, et al. **Nippon Hoigaku Zasshi** 1989 Feb; 43(1):40–5 (Eng. Abstr.) **(Jpn)**
[Changes in the neural elements of lymphangiomas in children of various ages] Kushch NL, et al. **Klin Khir** 1989; (6):32–4 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Age-related changes in the recovery of noradrenaline content in sympathetic fibres after reserpine treatment. Paparelli A, et al. **Acta Histochem (Jena)** 1988;84(2):121–5
The quality and extension of nerve fibre regeneration in the centrocentral anastomosis of the peripheral nerve. Barberá J, et al. **Acta Neurochir Suppl (Wien)** 1988;43:205–9
Peripheral nerve autografts to the rat spinal cord: a study of the origin of regenerating fibres using fluorescent double labelling. Pallini R, et al. **Acta Neurochir Suppl (Wien)** 1988; 43:210–3
Effects of nerve compression or ischaemia on conduction properties of myelinated and non-myelinated nerve fibres. An experimental study in the rabbit common peroneal nerve. Dahlin LB, et al. **Acta Physiol Scand** 1989 May; 136(1):97–105
Intrafascicular multi-unit recordings from the human infra-orbital nerve. Nordin M, et al. **Acta Physiol Scand** 1989 Feb;135(2):139–48
Neurogenic inflammation in the skin of the rabbit. Lynn B, et al. **Agents Actions** 1988 Dec;25(3–4):228–30
Changes in dental blood flow following electrical tooth pulp stimulation—influences of capsaicin and guanethidine. Raab WH, et al. **Agents Actions** 1988 Dec;25(3–4):237–9
Afferent innervation of the guinea-pig's ureter. Sann H, et al. **Agents Actions** 1988 Dec;25(3–4):243–5
Studies of normal and expansive cutaneous innervation territories of intact and regenerating C-fibres in the hindlimb of the rat. Wiesenfeld-Hallin Z, et al. **Agents Actions** 1988 Dec;25(3–4):260–2
Stimulating somatic afferent fibers alters coronary arterial resistance. Pitetti KH, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1331–9
The pattern of distribution of serotoninergic fibers in the anterior horn of the chick spinal cord. Homma S, et al. **Anat Embryol (Berl)** 1988;179(1):25–31
The effect of temperature on a simulated systematically paranodally demyelinated nerve fiber. Stephanova DI. **Biol Cybern** 1988;60(1):73–7
Multinomial pulse-number distributions for neural spikes in primary auditory fibers: theory. Teich MC, et al. **Biol Cybern** 1988;59(2):91–102
Identification of multifiber neural spike trains by interval prediction and morphology. Lu JP, et al. **Biomed Sci Instrum** 1989;25:23–6
Analytical theory for extracellular electrical stimulation of nerve with focal electrodes. I. Passive unmyelinated axon. Rubinstein JT, et al. **Biophys J** 1988 Dec;54(6):975–81
Proportion of unmyelinated axons in rat molar and incisor tooth pulps following neonatal capsaicin treatment and/or sympathectomy. Fried K, et al. **Brain Res** 1988 Oct 25; 463(1):118–23

Buspirone, 8-OH-DPAT and ipsapirone: effects on hippocampal cerebellar and sciatic fiber excitability. Hiner BC, et al. **Brain Res** 1988 Sep 27;461(1):1-9

Intraspinal sprouting after administration of nerve growth factor antibodies to neonatal rats. Hulsebosch CE, et al. **Brain Res** 1988 Oct 4;461(2):322-7

Occurrence, ontogeny, ultrastructure and some plasticity of CGRP (calcitonin gene-related peptide)-immunoreactive nerves in the carotid body of rats. Kondo H, et al. **Brain Res** 1988 Nov 15;473(2):283-93

An increase in the expression of neuropeptidergic vasodilator, but not vasoconstrictor, cerebrovascular nerves in aging rats. Mione MC, et al. **Brain Res** 1988 Sep 13;460(1):103-13

Nerve section alters the interaction between C-fibre activity and intrathecal neuropeptides on the flexor reflex in rat. Wiesenfeld-Hallin Z. **Brain Res** 1989 Jun 5;489(1):129-36

Single fibre motor evoked potentials to brain, spinal roots and nerve stimulation. Comparisons of the 'central' and 'peripheral' response jitter to magnetic and electric stimuli. Zarola F, et al. **Brain Res** 1989 Aug 28;495(2):217-24

Afferent fibers in the reproductive system and pelvic viscera of female rats: anterograde tracing and immunocytochemical studies. Nance DM, et al. **Brain Res Bull** 1988 Oct;21(4):701-9

Changes in surviving nerve fibers associated with submucosal arteries following extrinsic denervation of the small intestine. Galligan JJ, et al. **Cell Tissue Res** 1988 Sep; 253(3):647-56

Role of vagosympathetic fibers in the control of adrenocorticotropic hormone, vasopressin, and renin responses to hemorrhage in fetal sheep. Wood CE, et al. **Circ Res** 1989 Mar;64(3):515-23

Effect of electrical stimulus parameters on the development and propagation of action potentials in short excitable fibres. Dimitrova NA, et al. **Electroencephalogr Clin Neurophysiol** 1988 Nov;70(5):453-9

Integral characteristics of extracellular single fibre action potentials. Dimitrov GV, et al. **Electromyogr Clin Neurophysiol** 1989 May-Jun; 29(4):195-201

Dependence of quantitative parameters of the extracellular potential power spectrum on propagation velocity, duration and asymmetry of action potentials. Lateva ZC. **Electromyogr Clin Neurophysiol** 1988 May;28(4):191-203

Sodium and potassium currents recorded during an action potential. de Haas V, et al. **Eur Biophys J** 1989;17(1):49-51

Schwann cell recruitment from intact nerve fibers. Bardosi A. **Exp Neurol** 1989 Feb;103(2):123-34

Additive feature of long-term potentiation and phorbol ester-induced synaptic enhancement in the mossy fiber-CA3 synapse. Kamiya H, et al. **Exp Neurol** 1988 Dec; 102(3):314-7

Eighth nerve fiber firing features in normal-hearing rabbits. Borg E, et al. **Hear Res** 1988 Nov;36(2-3):191-201

Effects of electrical stimulation of efferent olivocochlear neurons on cat auditory-nerve fibers. III. Tuning curves and thresholds at CF. Guinan JJ Jr, et al. **Hear Res** 1988 Dec;37(1):29-45

Physiological and psychophysical correlates of temporal processes in hearing. Javel E, et al. **Hear Res** 1988 Aug; 34(3):275-94 (54 ref.)

2-Amino-4-phosphonobutyric acid receptors are not involved in synaptic transmission from hair cells to auditory neurons. Puel JL, et al. **Hear Res** 1988 Dec;37(1):83-7

Intensity coding and the dynamic range problem. Viemeister NF. **Hear Res** 1988 Aug;34(3):267-74

Effects of contralateral sound on auditory-nerve responses. II. Dependence on stimulus variables. Warren EH 3d, et al. **Hear Res** 1989 Jan;37(2):105-21

Effects of contralateral sound on auditory-nerve responses. I. Contributions of cochlear efferents. Warren EH 3d, et al. **Hear Res** 1989 Jan;37(2):89-104

Single-tone intensity discrimination based on auditory-nerve rate responses in backgrounds of quiet, noise, and with stimulation of the crossed olivocochlear bundle. Winslow RL, et al. **Hear Res** 1988 Sep 15;35(2-3):165-89

In vitro life tests of faradaic neural stimulation electrodes at high current densities. Ballestrasse CL, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):870-4

A program for simulation of nerve equations with branching geometries. Hines M. **Int J Biomed Comput** 1989 Mar; 24(1):55-68

Synchrony-dependent autocorrelation in eighth-nerve-fiber response to rippled noise. ten Kate JH, et al. **J Acoust Soc Am** 1988 Dec;84(6):2092-102

Effect of stimulation of pulmonary C-fiber receptors on canine respiratory muscles. Haxhiu MA, et al. **J Appl Physiol** 1988 Sep;65(3):1087-92

Sympathetic nerve fibers in peripheral sensory and motor nerves in the face of the rat. Johansson K, et al. **J Auton Nerv Syst** 1988 Jun;23(1):83-6

Activation of gastric afferent fibers increases coronary arterial resistance in anesthetized dogs. Pitetti KH, et al. **J Auton Nerv Syst** 1988 Jun;23(1):25-34

Synaptic organization of serotonin-immunoreactive fibers in primary visual cortex of the macaque monkey. de Lima AD, et al. **J Comp Neurol** 1988 Aug 8;274(2):280-94

Development of the nerve fiber layer in the olfactory bulb of mouse embryos. Doucette R. **J Comp Neurol** 1989 Jul 22;285(4):514-27

Normal and regenerating optic fibers in goldfish tectum: HRP-EM evidence for rapid synaptogenesis and optic fiber-fiber affinity. Hayes WP, et al. **J Comp Neurol** 1988 Aug 22;274(4):516-38

Organization of histaminergic fibers in the rat brain. Inagaki N, et al. **J Comp Neurol** 1988 Jul 15;273(3):283-300

Giant fiber activation of flight muscles in Drosophila: asynchrony in latency of wing depressor fibers. Hummon MR, et al. **J Neurobiol** 1989 Sep;20(6):593-602

Cerebral cortical potentials to pure non-painful temperature stimulation: an objective technique for the assessment of small fibre pathway in man. Jamal GA, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):99-105

Temporal coding of resonances by low-frequency auditory nerve fibers: single-fiber responses and a population model. Carney LH, et al. **J Neurophysiol** 1988 Nov;60(5):1653-77

Acute effects of spinal transection on EPSPs produced by single homonymous Ia-fibers in soleus alpha-motoneurons in the cat [published erratum appears in J Neurophysiol 1989 Mar;61(3):following Table of Contents] Cope TC, et al. **J Neurophysiol** 1988 Nov;60(5):1678-94

Functional specialization of central projections from identified primary afferent fibers. Koerber HR, et al. **J Neurophysiol** 1988 Nov;60(5):1597-614

Responses to parallel fiber stimulation in the guinea pig dorsal cochlear nucleus in vitro. Manis PB. **J Neurophysiol** 1989 Jan;61(1):149-61

Characteristics of vagal esophageal tension-sensitive afferent fibers in the opossum. Sengupta JN, et al. **J Neurophysiol** 1989 May;61(5):1001-10

Spatial and temporal factors determining afferent fiber responses to a grating moving sinusoidally over the monkey's fingerpad. Goodwin AW, et al. **J Neurosci** 1989 Apr;9(4):1280-93

Depolarization of nonmyelinated fibers of the rat vagus nerve produced by activation of protein kinase C. Rang HP, et al. **J Neurosci** 1988 Jul;8(7):2606-17

Identification of afferents in a fine nerve strand by selective elimination of signals from C-fibers by electric current pulses. Revenko SV, et al. **J Neurosci Methods** 1988 Sep; 25(2):129-33

Stimulation of afferent fibres of the guinea-pig ureter evokes potentials in inferior mesenteric ganglion neurones. Amann R, et al. **J Physiol (Lond)** 1988 Aug;402:543-53

An electrophysiological and anatomical study of intestinal afferent fibres in the rat. Cervero F, et al. **J Physiol (Lond)** 1988 Jul;401:381-97

Cardiovascular responses to stimulation of pulmonary C fibres in the cat: their modulation by changes in respiration. Daly MD, et al. **J Physiol (Lond)** 1988 Aug;402:43-63

The dorsal column projection of muscle afferent fibres from the cat hindlimb. Fern R, et al. **J Physiol (Lond)** 1988 Jul; 401:97-113

The characteristics and regional distribution of afferent fibres in the chorda tympani of the cat. Robinson PP. **J Physiol (Lond)** 1988 Dec;406:345-57

Lung C-fibre receptor activation and defensive reflexes in anaesthetized cats. Tatar M, et al. **J Physiol (Lond)** 1988 Aug;402:411-20

In vitro studies on the control of nerve fiber growth by the extracellular matrix of the nervous system. Carbonetto S, et al. **J Physiol (Paris)** 1987;82(4):258-70 (85 ref.)

Development of a model for point source electrical fibre bundle stimulation. Altman KW, et al. **Med Biol Eng Comput** 1988 Sep;26(5):466-75

Preferential activation of muscle fibers with peripheral magnetic stimulation of the limb. Lotz BP, et al. **Muscle Nerve** 1989 Aug;12(8):636-9

Small nerve fiber dysfunction in diabetic neuropathy. Navarro X, et al. **Muscle Nerve** 1989 Jun;12(6):498-507

Axonal branching following crush lesions of peripheral nerves of rat. Toft PB, et al. **Muscle Nerve** 1988 Aug; 11(8):880-9

Intrinsic differences in the growth rate of early nerve fibres related to target distance. Davies AM. **Nature** 1989 Feb 9;337(6207):553-5

Dichotomizing unmyelinated afferents supplying pelvic viscera and perineum are rare in the sacral segments of the cat. Häbler HJ, et al. **Neurosci Lett** 1988 Nov 22; 94(1-2):119-24

Stimulation parameters influencing climbing fibre induced long-term depression of parallel fibre synapses. Ekerot CF, et al. **Neurosci Res** 1989 Feb;6(3):264-8

Enkephalin fibers synapse on cholinergic neurons in the rat sacral intermediolateral nucleus: a double-immunostaining at the light and electron microscopic levels. Kohno J, et al. **Neuroscience** 1989;28(2):487-94

ACE-inhibitor-induced enhancement of spontaneous and IgE-mediated histamine release from mast cells and basophilic leukocytes and the modulatory effect of capsaicin sensitive nerves. Lindgren BR, et al. **Pharmacol Toxicol** 1989 Feb;64(2):159-64

Functional characteristics of afferent C fibres from tooth pulp and periodontal ligament. Jyväsjärvi E, et al. **Prog Brain Res** 1988;74:237-45

The expression of sensory receptors on regenerating and regenerated cutaneous C fibres. Leah J, et al. **Prog Brain Res** 1988;74:341-8 (47 ref.)

The responses of chemoreceptors with medullated and non-medullated fibres to chemical substances and the mechanical hypothesis. Paintal AS. **Prog Brain Res** 1988; 74:161-8

Reinnervation of denervated skeletal muscle by central nerve fibers regenerating along replanted ventral roots. Smith KJ, et al. **Prog Brain Res** 1988;78:193-8

Involvement of perivascular neuropeptide Y nerve fibres in uterine arterial vasoconstriction in conjunction with pregnancy. Fallgren B, et al. **Regul Pept** 1989 Feb; 24(2):119-30

The effects of electrical stimulation of myelinated and non-myelinated vagal motor fibres on airway tone in the rabbit and the cat. Lama A, et al. **Respir Physiol** 1988 Dec; 74(3):265-74

[Spinal cord pathways mediating somatosensory cortical electrical responses evoked by C fiber inputs] Weng HR, et al. **Sheng Li Hsueh Pao** 1988 Aug;40(4):374-8 (Eng. Abstr.) **(Chi)**

[Influence of retinal basement membrane on growth of nerve fiber from retinal explant of chick embryo] Liu L. **Shih Yen Sheng Wu Hsueh Pao** 1988 Sep;21(3):295-309 (Eng. Abstr.) **(Chi)**

[Electric stimulation of auditory nerve fibers. Experimental study] Syka J, et al. **Cas Lek Cesk** 1989 Mar 10; 128(11):326-31 (Eng. Abstr.) **(Cze)**

[Changes in the response properties in the pulp nerve fibers to physical and chemical stimuli of high intensity] Ikeda H. **Kokubyo Gakkai Zasshi** 1988 Dec;55(4):570-84 (Eng. Abstr.) **(Jpn)**

[Analysis of nerve fiber deformation during excitation] Malev VV, et al. **Biofizika** 1988 May-Jun;33(3):485-9 (Eng. Abstr.) **(Rus)**

[Selective electric-current inhibition of signals from the C fibers in nerve fiber microbundles: a method for identifying A and C afferents] Revenko SV, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):395-6 (Eng. Abstr.) **(Rus)**

[Antidromic cortical responses and neuronal retrograde degeneration during stimulation and dissection of the fibers of the corpus callosum] Samadashvili ZV, et al. **Fiziol Zh SSSR** 1988 Aug;74(8):1077-86 **(Rus)**

[Correlation of the electrical and mechanical resonance frequencies of the cochlear hair cells of the auditory nerve fibers in the pigeon] Temchin AN. **Neirofiziologiia** 1988; 20(6):811-4 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Acute and chronic reactions of dental sensory nerve fibers to cavities and desiccation in rat molars. Byers MR, et al. **Anat Rec** 1988 Aug;221(4):872-83

An ipsilateral cochlear efferent loop protects the cochlea during intense sound exposure. Puel JL, et al. **Hear Res** 1988 Dec;37(1):65-9

The conduction velocities of peripheral nerve fibres conveying sensations of warming and cooling [letter] Fuller GN, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun; 52(6):810-2

Recovery of dopaminergic fibers in striatum of the 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-treated mouse is enhanced by grafts of adrenal medulla. Bohn MC, et al. **Prog Brain Res** 1988;78:535-42

[Peripheral neuropathy in multiple sclerosis. II. Determination of single fiber jitter] Bednařík J. **Cesk Neurol Neurochir** 1988 Sep;51(5):307-12 (Eng. Abstr.) **(Cze)**

SURGERY

Sutureless nerve repair at the fascicular level using a nerve coupler. Marshall DM, et al. **J Rehabil Res Dev** 1989 Summer;26(3):63-76 (37 ref.)

[An experimental study on nerve repair using carbon dioxide laser] Osedo M. **Nippon Seikeigeka Gakkai Zasshi** 1988 Jun; 62(6):653-63 (Eng. Abstr.) **(Jpn)**

TRANSPLANTATION

Extension of neuromuscular pedicles and direct nerve implants in the rabbit. Goding GS Jr, et al. **Arch Otolaryngol Head Neck Surg** 1989 Feb;115(2):217-23

ULTRASTRUCTURE

Qualitative investigation of the postnatal development of axon and nerve fiber calibers in the ventral roots of rats. Tonner P, et al. **Acta Anat (Basel)** 1988;132(4):284-96

Postnatal development of the annulospiral endings of Ia fibers in muscle spindles of the mouse temporal muscle. Osawa K, et al. **Anat Anz** 1988;167(4):253-7

Spatial and temporal correlation between early nerve fiber growth and neuroepithelial cell death in the chick embryo retina. Cuadros MA, et al. **Anat Embryol (Berl)** 1988; 178(6):543-51

Further observation on the intraepithelial nerve fibers of rabbit ocular ciliary epithelium. Yamada E. **Arch Histol Cytol** 1989 May;52(2):191-5

The ultrastructure of somatostatin-immunoreactive cell bodies, nerve fibers and terminals in the dorsal horn of rat spinal cord. Mizukawa K, et al. **Arch Histol Jpn** 1988 Dec;51(5):443-52

Histochemical, immunohistochemical, and ultrastructural characteristics of nerves in the Duvernoy's gland of the Japanese colubrid snake, Rhabdophis tigrinus. Yoshie S, et al. **Arch Histol Jpn** 1988 Dec;51(5):459-66

Hereditary motor and sensory neuropathy with optic atrophy. Ultrastructural and morphometric observations on nerve fibers, mitochondria, and dense-cored vesicles. Sommer C, et al. **Arch Neurol** 1989 Sep;46(9):973-7

Evidence for unmyelinated sensory fibres in the posterior columns in man. Briner RP, et al. **Brain** 1988 Oct;111 (Pt 5):999–1007

Distribution, possible origins and fine structure of neuropeptide Y-containing nerve fibers in the rat liver. Inoue N, et al. **Brain Res** 1989 Jul 24;493(1):87–96

Unmyelinated corticospinal axons in adult rat pyramidal tract. An electron microscopic tracer study. Joosten EA, et al. **Brain Res** 1988 Aug 30;459(1):173–7

Ipsilateral corticocortical projections of fibers which course within Probst's longitudinal bundle seen in the brains of mice with congenital absence of the corpus callosum: a study with the horseradish peroxidase technique. Ozaki HS, et al. **Brain Res** 1989 Jul 24;493(1):66–73

Centrifugal innervation of the lamprey retina. Light- and electron microscopic and electrophysiological investigations. Vesselkin NP, et al. **Brain Res** 1989 Jul 24; 493(1):51–65

Projection pathways, co-existence of peptides and synaptic organization of nerve fibers in the inferior mesenteric ganglion of the guinea-pig. Masuko S, et al. **Cell Tissue Res** 1988 Sep;253(3):507–16

Morphometry of unmyelinated nerve fibers. Gibbels E. **Clin Neuropathol** 1989 Jul–Aug;8(4):179–87

Mast cells are closely apposed to nerves in the human gastrointestinal mucosa. Stead RH, et al. **Gastroenterology** 1989 Sep;97(3):575–85

Number of parallel fiber synapses on an individual Purkinje cell in the cerebellum of the rat. Napper RM, et al. **J Comp Neurol** 1988 Aug 8;274(2):168–77

Ultrastructural features of functionally identified primary afferent neurons with C (unmyelinated) fibers of the guinea pig: classification of dorsal root ganglion cell type with reference to sensory modality. Sugiura Y, et al. **J Comp Neurol** 1988 Oct 8;276(2):265–78

Immunocytochemical study of substance P-like fibres and cell bodies in the cat diencephalon. Burgos C, et al. **J Hirnforsch** 1988;29(6):651–7

Nerve fibres with myelinated and unmyelinated portions in dorsal spinal roots. Pannese E, et al. **J Neurocytol** 1988 Oct;17(5):693–700

Characterization of luteinizing hormone-releasing hormone fibres in the mesencephalic central grey substance of the rat. Buma P. **Neuroendocrinology** 1989 Jun;49(6):623–30

Direct retinal projections to the lateroposterior thalamic nucleus (LP) in the mole. Kudo M, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):176–80

Substance P-like immunoreactive nerve fibers in the pars distalis of the adenohypophysis of macaque monkeys. Liu SJ, et al. **Neurosci Lett** 1988 Nov 22;94(1–2):1–4

Differences in the fiber composition of the pyramidal tract in two- and 14-month-old rats. Leenen LP, et al. **Neuroscience** 1989;28(3):635–43

Nerve fiber layer and optic disc fluorescein defects in glaucoma and ocular hypertension. Nanba K, et al. **Ophthalmology** 1988 Sep;95(9):1227–33

Morphological features of thin sensory afferent fibers: a new interpretation of 'nociceptor' function. Kruger L. **Prog Brain Res** 1988;74:253–7

Fine structure of A: autonomic nerve fibers and terminals in human myocardium; and B: myocardial changes in congenital heart disease. Dastur DK, et al. **Ultrastruct Pathol** 1989 Jul–Aug;13(4):413–31

A simple, reliable and inexpensive silver stain for nerve fibers in bleached skin. Fritzsch B, et al. **Z Naturforsch [C]** 1988 Jul–Aug;43(7–8):606–8

[Electron microscopic study of innervation of pineal gland of guinea pigs] Wu XF, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec;19(4):359–62 (Eng. Abstr.) **(Chi)**

[Morphometric study of variations related to human aging in pulp unmyelinated and myelinated axons] Matysiak M, et al. **J Biol Buccale** 1988 Jun;16(2):59–68 (Eng. Abstr.) **(Fre)**

NERVE FIBERS, MYELINATED

Centrifugal decrement in diameter of myelinated afferent fibres innervating frog taste organ. Sato T, et al. **Comp Biochem Physiol [A]** 1989;92(3):435–40

Nerve sheath tumors of the head and neck [letter] Hardingham M. **Ear Nose Throat J** 1989 Jan;68(1):67

ANALYSIS

Use of lead aspartate block staining in quantitative EM autoradiography of phospholipids: application to myelinating peripheral nerve. Gould RM, et al. **J Histochem Cytochem** 1989 Sep;37(9):1393–9

ANATOMY & HISTOLOGY

New technique for differential staining of myelinated fibers and nerve cells on paraffin sections. Tolivia J, et al. **Anat Rec** 1988 Dec;222(4):437–40

Junction between parent and daughter axons in regenerating myelinated nerve: properties of structure and rapid axonal transport. Chan H, et al. **J Comp Neurol** 1989 May 15; 283(3):391–404

[Preliminary data on the effects of vitamin E deficiency on the number of myelinic fibers of the sciatic nerve of rats] Cuppini R, et al. **Boll Soc Ital Biol Sper** 1988 Sep; 64(9):861–4 (Eng. Abstr.) **(Ita)**

DRUG EFFECTS

Interactions between molecules of a steroid anaesthetic (alphaxalone) and ionic channels of nodal membrane in voltage-clamped myelinated nerve fibre. Benoit E, et al. **Br J Pharmacol** 1988 Jul;94(3):635–46

Mechanism of action of a structural analog of alphaxalone on myelinated nerve fibre. Benoit E, et al. **Eur J Pharmacol** 1988 Dec 6;158(1–2):1–9

Effects of systemic morphine upon A delta- and C-fibre evoked activities of subnucleus reticularis dorsalis neurones in the rat medulla. Bing Z, et al. **Eur J Pharmacol** 1989 May 2;164(1):85–92

Tocainide blocks Na currents by accumulation of inactivated Na channels. Schwarz JR, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):267–70

Chronic access to endoneurial space using an arterial autograft. Kroin JS, et al. **J Neurosci Methods** 1989 Mar; 27(2):133–42

[Membrane currents and action potentials of myelinated nerve fibers and their modification by diphenylhydantoin and tocainide] Schwarz JR. **EEG EMG** 1988 Sep; 19(3):115–22 (Eng. Abstr.) **(Ger)**

[Mobility of the structures of live myelinated nerve fibers under the action of proteolytic enzymes] Sotnikov OS, et al. **Biull Eksp Biol Med** 1989 May;107(5):621–4 **(Rus)**

ENZYMOLOGY

Cytochemical demonstration of TPPase in myelinated fibers in the central and peripheral nervous system of the rat. Castellano B, et al. **Brain Res** 1989 Jul 17;492(1–2):203–10

GROWTH & DEVELOPMENT

Morphometric alteration of rat myelinated fibers with aging. Knox CA, et al. **J Neuropathol Exp Neurol** 1989 Mar; 48(2):119–39

METABOLISM

The apolipoprotein A-I gene is actively expressed in the rapidly myelinating avian peripheral nerve. LeBlanc AC, et al. **J Cell Biol** 1989 Sep;109(3):1245–56

A morphometric study of cytoskeletal reorganization in rat sciatic nerve axons following beta,beta'-iminodipropionitrile (IDPN) treatment. Nagele RG, et al. **Neurosci Lett** 1988 Oct 17;92(3):241–6

PATHOLOGY

Giant axonal neuropathy. A review. Ouvrier RA. **Brain Dev** 1989;11(4):207–14 (33 ref.)

Maternal exposure to 1,1,2-trichloroethylene affects myelin in the hippocampal formation of the developing rat. Isaacson LG, et al. **Brain Res** 1989 May 29;488(1–2):403–7

Clinical, CT and evoked potential manifestations in Wilson's disease with cerebral white matter involvement. Chu NS. **Clin Neurol Neurosurg** 1989;91(1):45–51

Aberrant myelinated neurites in the anterior horns of a patient with amyotrophic lateral sclerosis. Troost D, et al. **Clin Neuropathol** 1989 May–Jun;8(3):152–5

Toxic effects of triethyldodecylammoniumbromide (TEA-C12) on myelinated nerve fibers and blood-nerve barrier in the mouse [published erratum appears in Exp Brain Res 1989;75(3):669–70] Seitz RJ, et al. **Exp Brain Res** 1989;74(2):293–302

A fulminant case of Guillain-Barré syndrome: topographic and fibre size related analysis of demyelinating changes. Kanda T, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul; 52(7):857–64

Autosomal recessive motor and sensory neuropathy with excessive myelin outfolding. Ohnishi A, et al. **Muscle Nerve** 1989 Jul;12(7):568–75

Increased diameter of demyelinated axons in chronic multiple sclerosis of the spinal cord. Shintaku M, et al. **Neuropathol Appl Neurobiol** 1988 Nov–Dec;14(6):505–10

Varicosities in human fetal sciatic nerve fibres. Tomé FM, et al. **Neuropathol Appl Neurobiol** 1988 Nov–Dec; 14(6):495–504

Influence of aging on density of myelin fractions isolated from human brain white matter. Preliminary report. Niebrój-Dobosz I, et al. **Neuropatol Pol** 1988;26(1):19–25

PHYSIOLOGY

Effects of nerve compression or ischaemia on conduction properties of myelinated and non-myelinated nerve fibres. An experimental study in the rabbit common peroneal nerve. Dahlin LB, et al. **Acta Physiol Scand** 1989 May; 136(1):97–105

Extracellular potentials of a single myelinated nerve fiber in an unbounded volume conductor. Stephanova D, et al. **Biol Cybern** 1989;61(3):205–10

Model investigations of the temperature dependence of demyelinated and reorganized axonal membrane. Stephanova DI. **Biol Cybern** 1989;60(6):439–43

The action of pyrethroids on sodium channels in myelinated nerve fibres and spinal ganglion cells of the frog. de Weille JR, et al. **Brain Res** 1989 Mar 20;482(2):324–32

Sodium channels in single demyelinated mammalian axons. Shrager P. **Brain Res** 1989 Mar 27;483(1):149–54

Phenytoin and carbamazepine: potential- and frequency-dependent block of Na currents in mammalian myelinated nerve fibers. Schwarz JR, et al. **Epilepsia** 1989 May–Jun;30(3):286–94

Interaction between bradykinin and voltage-sensitive sodium channels in myelinated nerve fibers. Carratù MR, et al. **Experientia** 1989 Apr 15;45(4):346–9

Inconsistent sodium current records derived on Ranvier nodes with a commercially available potential clamp device according to Nonner. Koppenhöfer E, et al. **Gen Physiol Biophys** 1988 Dec;7(6):557–67

The inverse problem in electroneurography—I: Conceptual basis and mathematical formulation. Schoonhoven R, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):769–77

The inverse problem in electroneurography—II: Computational aspects and evaluation using simulated data. Stegeman DF, et al. **IEEE Trans Biomed Eng** 1988 Oct; 35(10):778–88

Influences of stimulation conditions on recruitment of myelinated nerve fibers: a model study. Veltink PH, et al. **IEEE Trans Biomed Eng** 1988 Nov;35(11):917–24

Double myelination of axons in the sympathetic nervous system of the mouse. II. Mechanisms of formation. Kidd GJ, et al. **J Neurocytol** 1988 Apr;17(2):263–76

Influence of autograft size on peripheral nerve regeneration in cats. Pover CM, et al. **J Neurol Sci** 1989 Apr; 90(2):179–85

An electrophysiological and histological study of myelinated axon regeneration after peripheral nerve injury and repair in the cat. Pover CM, et al. **J Neurol Sci** 1988 Jul; 85(3):281–91

Development of 4-AP and TEA sensitivities in mammalian myelinated nerve fibers. Eng DL, et al. **J Neurophysiol** 1988 Dec;60(6):2168–79

Leukotriene B4 decreases the mechanical and thermal thresholds of C-fiber nociceptors in the hairy skin of the rat. Martin HA, et al. **J Neurophysiol** 1988 Aug; 60(2):438–45

Real-time imaging of axonally transported subresolution organelles in vertebrate myelinated axons. Smith RS. **J Neurosci Methods** 1989 Jan;26(3):203–9

Ionic channels and signal conduction in single remyelinating frog nerve fibres. Shrager P. **J Physiol (Lond)** 1988 Oct; 404:695–712

Conduction velocity and fibre diameter of the peroneal nerve in normal and growth retarded fetal sheep. Rees S, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):157–63

Myelin formation in rat dorsal root ganglion cultured in a serum-free medium: influence of various culture media on myelin formation. Takahashi K, et al. **Neurosci Res** 1988 Dec;6(2):115–22

Termination patterns of identified group II and III afferent fibres from deep tissues in the spinal cord of the cat. Hoheisel U, et al. **Neuroscience** 1989;28(2):495–507

The distribution of potassium and leakage channels in rat myelinated axons. Bostock H. **Pflugers Arch** 1989;414 Suppl 1:S139

Voltage and temperature dependence of normal and chemically modified inactivation of sodium channels. Quantitative description by a cyclic three-state model. Schmidtmayer J. **Pflugers Arch** 1989 Jul;414(3):273–81

Single-channel recording in myelinated nerve fibers reveals one type of Na channel but different K channels. Jonas P, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7238–42

Myelinated axons in peripheral nerves of adult beagle dogs: morphometric and electrophysiological measurements. Illanes O, et al. **Res Vet Sci** 1988 Sep;45(2):181–5

The effects of electrical stimulation of myelinated and non-myelinated vagal motor fibres on airway tone in the rabbit and the cat. Lama A, et al. **Respir Physiol** 1988 Dec; 74(3):265–74

[Centrifugal inhibitory effect of stimulation of the sciatic nerve on A delta-mechanical nociceptors in rat] Hu SJ, et al. **Chen Tzu Yen Chiu** 1988;13(1):52–5, 16 (Eng. Abstr.) **(Chi)**

[Selective electric-current inhibition of signals from the C fibers in nerve fiber microbundles: a method for identifying A and C afferents] Revenko SV, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):395–6 (Eng. Abstr.) **(Rus)**

[Electrophysiological analysis of the spectrum of the fibers of the lateral olfactory tract in rats in vitro] Musiashchikova SS, et al. **Izv Akad Nauk SSSR [Biol]** 1989 May–Jun; (3):458–61 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Laser Doppler velocimetry in the measurement of neurovascular function. Westerman RA, et al. **Australas Phys Eng Sci Med** 1988 Apr–Jun;11(2):53–66

The intensive aspect of information processing in the intradental A-delta system in man—a psychophysiological analysis of sharp dental pain. Franzén OG, et al. **Behav Brain Res** 1989 May 1;33(1):1–11

ULTRASTRUCTURE

Freeze-fracture studies of reactive myelinated nerve fibres after diffuse axonal injury. Maxwell WL, et al. **Acta Neuropathol (Berl)** 1988;76(4):395–406

Myelinated neurons in the central nervous system of the hedgehog. Pospíšilová E, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;120:97–115

An image analysis morphometric method for the study of myelinated nerve fibers from mouse trigeminal root. Savy C, et al. **Anal Quant Cytol Histol** 1988 Oct;10(5):307–16

The use of tetracycline hydrochloride as a rapid fluorescent

stain for myelin membranes in vertebrates and invertebrates. Pereyra PM, et al. **Brain Res** 1988 Aug 23; 458(2):377–82

Congenital hypomyelination with axonopathy. Vital A, et al. **Eur J Pediatr** 1989 Feb;148(5):470–2

Role of glial cells in the differentiation and function of myelinated axons. Rosenbluth J. **Int J Dev Neurosci** 1988; 6(1):3–24

The onset and rate of myelination in six peripheral and autonomic nerves of the rat. Schäfer K, et al. **J Anat** 1988 Aug;159:181–95

Movements of the Schwann cell nucleus implicate progression of the inner (axon–related) Schwann cell process during myelination. Bunge RP, et al. **J Cell Biol** 1989 Jul;109(1):273–84

Dysmaturation neuromyopathy: correlation with minimal neuropathy in sural nerve biopsies. Verity MA, et al. **J Child Neurol** 1988 Oct;3(4):276–91

Morphometric and freeze–fracture studies on peripheral nerve in shiverer mice. Panagopoulos G, et al. **J Comp Neurol** 1989 Aug 15;286(3):337–44

Ultrastructure of rabbit retinal nerve fibre layer––neuro–glial relationships, myelination, and nerve fibre spectrum. Reichenbach A, et al. **J Hirnforsch** 1988;29(5):481–91

Double myelination of axons in the sympathetic nervous system of the mouse. I. Ultrastructural features and distribution. Kidd GJ, et al. **J Neurocytol** 1988 Apr; 17(2):245–61

There is no simple adequate sampling scheme for estimating the myelinated fibre size distribution in human peripheral nerve: a statistical ultrastructural study. Torch S, et al. **J Neurosci Methods** 1989 Mar;27(2):149–64

[Morphometric study of variations related to human aging in pulp unmyelinated and myelinated axons] Matysiak M, et al. **J Biol Buccale** 1988 Jun;16(2):59–68 (Eng. Abstr.) **(Fre)**

[Primary distal anomalies due to Schwann cell separation of human pulp myelinated axons] Matysiak M. **J Biol Buccale** 1988 Sep;16(3):179–83 (Eng. Abstr.) **(Fre)**

[Stages in the postnatal maturation of the optic nerve: morphometric changes during the critical period] Cuenca Navarro N, et al. **Arch Neurobiol (Madr)** 1989 Jan–Feb; 52(1):1–8 (Eng. Abstr.) **(Spa)**

NERVE GROWTH FACTORS

Novel neurotrophic factors, receptors, and oncogenes. Walicke PA. **Annu Rev Neurosci** 1989;12:103–26 (195 ref.)

Subunit structure of high molecular weight mouse nerve growth factor. Young M, et al. **Biochemistry** 1988 Sep 6; 27(18):6675–81

Nerve growth factor. Boyd LF, et al. **Life Sci** 1974 Oct 15; 15(8):1381–91 (41 ref.)

Alpha 1–acid glycoprotein promotes nerve growth in vitro. Liu HM, et al. **Prog Clin Biol Res** 1989;300:239–42

ADMINISTRATION & DOSAGE

Non–chromaffin tissue plus nerve growth factor reduces experimental parkinsonism in aged rats. Pezzoli G, et al. **Brain Res** 1988 Sep 6;459(2):398–403

An improved device for continuous intraventricular infusions prevents the introduction of pump–derived toxins and increases the effectiveness of NGF treatments. Vahlsing HL, et al. **Exp Neurol** 1989 Sep;105(3):233–43

Chronic administration of nerve growth factor and other neurotrophic factors to the brain. Hefti F, et al. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):689–90

ANALYSIS

Intracellular localization of nerve growth factor in PC12 cells. An immuno–gold electron microscopic approach. Corvaja N, et al. **Arch Ital Biol** 1988 Jun;126(3):165–78

Presence of nerve growth factor–like immunoreactivity in carcinoid tumour cells and induction of a neuronal phenotype in long–term culture. Ahlman H, et al. **Int J Cancer** 1989 May 15;43(5):949–55

Effects of gonadal steroids on nerve growth factor receptors in sympathetic and sensory ganglia of neonatal rats. Wright LL, et al. **Int J Dev Neurosci** 1988;6(3):217–22

Nerve growth factor receptor immunoreactive profiles in the normal, aged human basal forebrain: colocalization with cholinergic neurons. Mufson EJ, et al. **J Comp Neurol** 1989 Jul 8;285(2):196–217

Sex–dependent and sex–independent distribution of the beta–subunit of nerve growth factor in the central nervous and peripheral tissues of mice. Katoh–Semba R, et al. **J Neurochem** 1989 May;52(5):1559–65

Isolation and sequence of a cDNA clone of beta–nerve growth factor from the guinea pig prostate gland. Schwarz MA, et al. **J Neurochem** 1989 Apr;52(4):1203–9

Localization of nerve growth factor receptors in the normal human brain and in Alzheimer's disease. Hefti F, et al. **Neurobiol Aging** 1989 Jan–Feb;10(1):75–87

Nerve growth factor receptor and choline acetyltransferase remain colocalized in the nucleus basalis (Ch4) of Alzheimer's patients. Kordower JH, et al. **Neurobiol Aging** 1989 Jan–Feb;10(1):67–74

ANTAGONISTS & INHIBITORS

K–252a, a potent protein kinase inhibitor, blocks nerve growth factor–induced neurite outgrowth and changes in the phosphorylation of proteins in PC12h cells. Hashimoto S. **J Cell Biol** 1988 Oct;107(4):1531–9

BIOSYNTHESIS

Nerve growth factor synthesis in cultured rat iris: modulation by endogenous transmitter substances. Hellweg R, et al. **Exp Cell Res** 1988 Nov;179(1):18–30

Synthesis of chimeric mouse nerve growth factor precursor and human beta–nerve growth factor in Escherichia coli: immunological properties. Dicou E, et al. **J Neurosci Res** 1989 Jan;22(1):13–9

Chicken NGF and non–NGF trophic factor synthesis and release by sciatic nerves in vitro. Ferguson IA, et al. **J Neurosci Res** 1989 Apr;22(4):408–17

Production and characterization of biologically active recombinant human nerve growth factor. Bruce G, et al. **Neurobiol Aging** 1989 Jan–Feb;10(1):89–94

Regulation of nerve growth factor biosynthesis by beta–adrenergic receptor activation in astrocytoma cells: a potential role of c–Fos protein. Mocchetti I, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3891–5

Kallikreins, kinins and growth factor biosynthesis. Drinkwater CC, et al. **Trends Biochem Sci** 1988 May; 13(5):169–72 (35 ref.)

[Salivary glands of venomous and nonvenomous snakes synthesize and secrete the nerve growth factor] Paalme VA, et al. **Dokl Akad Nauk SSSR** 1988;301(3):754–6 **(Rus)**

BLOOD

In vitro evidence for a neurite growth–promoting activity in Trembler mouse serum. Koenig J, et al. **Int J Dev Neurosci** 1989;7(3):281–94

GENETICS

Directed expression of NGF to pancreatic beta cells in transgenic mice leads to selective hyperinnervation of the islets. Edwards RH, et al. **Cell** 1989 Jul 14;58(1):161–70

Regulation of nerve growth factor mRNA levels in developing rat heart ventricle is not altered by sympathectomy. Clegg DO, et al. **Dev Biol** 1989 Jul; 134(1):30–7

Catecholamines increase nerve growth factor mRNA content in both mouse astroglial cells and fibroblast cells. Furukawa Y, et al. **FEBS Lett** 1989 Apr 24;247(2):463–7

Molecular cloning of a cDNA encoding the nerve growth factor precursor from Mastomys natalensis. Fahnestock M, et al. **Gene** 1988 Sep 30;69(2):257–64

Expression of the cDNA for mouse beta–nerve growth factor protein in Escherichia coli. Hu GL, et al. **Gene** 1988 Oct 15;70(1):57–65

Two thyroid hormone regulated genes, the beta–subunits of nerve growth factor (NGFB) and thyroid stimulating hormone (TSHB), are located less than 310 kb apart in both human and mouse genomes. Dracopoli NC, et al. **Genomics** 1988 Aug;3(2):161–7

Stimulation of nerve growth factor mRNA content in C6 glioma cells by a beta–adrenergic receptor and by cyclic AMP. Schwartz JP. **GLIA** 1988;1(4):282–5

Interleukin 1 increases stability and transcription of mRNA encoding nerve growth factor in cultured rat fibroblasts. Lindholm D, et al. **J Biol Chem** 1988 Nov 5; 263(31):16348–51

Characterization of a partial cDNA clone for the NILE glycoprotein and identification of the encoded polypeptide domain. Prince JT, et al. **J Neurosci** 1989 Mar;9(3):876–83

Rat beta–nerve growth factor sequence and site of synthesis in the adult hippocampus. Whittemore SR, et al. **J Neurosci Res** 1988 Aug;20(4):403–10

In situ hybridization of nerve growth factor mRNA in the mouse submandibular gland. Salido EC, et al. **Lab Invest** 1988 Nov;59(5):625–30

Nerve growth factor regulates gene expression by several distinct mechanisms. Cho KO, et al. **Mol Cell Biol** 1989 Jan;9(1):135–43

Molecular cloning and expression of brain–derived neurotrophic factor. Leibrock J, et al. **Nature** 1989 Sep 14;341(6238):149–52

Increased expression of growth factor mRNAs accompanies viral transformation of rodent cells. Jakowlew SB, et al. **Oncogene Res** 1988;2(2):135–48

Two adjacent promoter elements mediate nerve growth factor activation of the c–fos gene and bind distinct nuclear complexes. Visvader J, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9474–8

Limbic seizures increase neuronal production of messenger RNA for nerve growth factor. Gall CM, et al. **Science** 1989 Aug 18;245(4919):758–61

HISTORY

[Nerve growth factor and the history of its discovery] Orts Llorca F. **An R Acad Nac Med (Madr)** 1988;105(4):483–8 **(Spa)**

IMMUNOLOGY

Antibody for nerve growth factor detected in patients with Alzheimer's disease. Roy BF, et al. **Ann N Y Acad Sci** 1988;540:398–400

Testicular atrophy and loss of nerve growth factor–immunoreactive germ cell line in rats exposed to n–hexane and a protective effect of simultaneous exposure to toluene or xylene. Nylén P, et al. **Arch Toxicol** 1989; 63(4):296–307

Intraspinal sprouting after administration of nerve growth factor antibodies to neonatal rats. Hulsebosch CE, et al. **Brain Res** 1988 Oct 4;461(2):322–7

Antibodies against mouse nerve growth factor interfere in vivo with the development of avian sensory and sympathetic neurones. Rohrer H, et al. **Development** 1988 Jul;103(3):545–52

Effects of injecting antibodies to mouse nerve growth factor into the chick embryo. Dimberg Y, et al. **Int J Dev Neurosci** 1988;6(6):513–23

Characterization of antibodies to synthetic nerve growth factor (NGF) and proNGF peptides. Ebendal T, et al. **J Neurosci Res** 1989 Mar;22(3):223–40

ISOLATION & PURIFICATION

The high molecular weight nerve growth factor complex from Mastomys natalensis differs from the murine nerve growth factor complex. Darling TL, et al. **Biochemistry** 1988 Sep 6;27(18):6686–92

Nerve growth factor of Horsfield's shrew, Crocidura horsfieldi. Nishiyama N, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug;36(8):3176–9

Isolation and characterization of a glycosylated form of beta nerve growth factor in mouse submandibular glands. Murphy RA, et al. **J Biol Chem** 1989 Jul 25;264(21):12502–9

METABOLISM

Impaired production of nerve growth factor in the submandibular gland of diabetic mice. Kasayama S, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):E400–4

Sustained elevation in hippocampal NGF–like biological activity following medial septal lesions in the rat. Collins F, et al. **Brain Res** 1989 Jun 26;490(2):355–60

Extracellular fluid conditioned during peripheral nerve regeneration stimulates Schwann cell adhesion, migration and proliferation. Le Beau JM, et al. **Brain Res** 1988 Aug 30;459(1):93–104

Neurotrophic action of Alzheimer's disease brain extract is due to the loss of inhibitory factors for survival and neurite formation of cerebral cortical neurons. Uchida Y, et al. **Brain Res** 1989 Feb 27;481(1):190–3

Electron microscopic immunocytochemical localization of nerve growth factor in developing mouse olfactory neurons. Williams R, et al. **Brain Res** 1988 Oct 25; 463(1):21–7

Spatial and temporal patterns of neurotrophic activities in rat adrenal medulla and cortex. Blottner D, et al. **Brain Res Dev Brain Res** 1989 Aug 1;48(2):243–53

Nerve growth factor receptor mRNA distribution in human brain: normal levels in basal forebrain in Alzheimer's disease. Goedert M, et al. **Brain Res Mol Brain Res** 1989 Jan;5(1):1–7

The in vitro processing of the NGF precursors by the gamma–subunit of the 7S NGF complex. Jongstra–Bilen J, et al. **Brain Res Mol Brain Res** 1989 Mar;5(2):159–69

Analysis of nerve growth factor receptor expression in human neuroblastoma and neuroepithelioma cell lines. Baker DL, et al. **Cancer Res** 1989 Aug 1;49(15):4142–6

Activation of masked neural determinants in amphibian eggs and embryos and their release from the inducing tissue. Born J, et al. **Cell Differ Dev** 1989 Jun;27(1):1–7

Wheat germ agglutinin, concanavalin A, and lens culinalis agglutinin block the inhibitory effect of nerve growth factor on cell–free phosphorylation of Nsp100 in PC12h cells. Hashimoto S, et al. **Cell Struct Funct** 1989 Feb; 14(1):87–93

Lipopolysaccharide–stimulated rat brain macrophages release NGF in vitro. Mallat M, et al. **Dev Biol** 1989 May; 133(1):309–11

A B–lymphocyte activation molecule related to the nerve growth factor receptor and induced by cytokines in carcinomas. Stamenkovic I, et al. **EMBO J** 1989 May; 8(5):1403–10

K+ potentiation of non–NGF mediated neurite outgrowth in sensory ganglia. Spoerri PE, et al. **Eur J Cell Biol** 1989 Feb;48(1):154–8

Localization of the nerve growth factor receptor on fetal human Schwann cells in culture. Assouline JG, et al. **Exp Cell Res** 1989 Jun;182(2):499–512

GABAergic and cholinergic neurons exhibit high–affinity nerve growth factor binding in rat basal forebrain. Dreyfus CF, et al. **Exp Neurol** 1989 May;104(2):181–5

Loss of nerve growth factor receptor–containing neurons in Alzheimer's disease: a quantitative analysis across subregions of the basal forebrain. Mufson EJ, et al. **Exp Neurol** 1989 Sep;105(3):221–32

Astroglia–released neurite growth–inducing activity for embryonic hippocampal neurons is associated with laminin bound in a sulfated complex and free fibronectin. Matthiessen HP, et al. **GLIA** 1989;2(3):177–88

Nerve growth factor receptors: structure and function. Eveleth DD. **In Vitro Cell Dev Biol** 1988 Dec; 24(12):1148–53 (82 ref.)

Modulation of neuronal choline acetyltransferase activity by factors derived from cultures of non–neuronal cells from the CNS. Alderson RF, et al. **Int J Dev Neurosci** 1989; 7(3):309–22

Identification, purification, and characterization of truncated forms of the human nerve growth factor receptor. Zupan AA, et al. **J Biol Chem** 1989 Jul 15;264(20):11714–20
Sensitive time-resolved fluoroimmunoassay of nerve growth factor and the disappearance of nerve growth factor from rat pheochromocytoma PC12 cell culture medium. Arumäe U, et al. **J Immunol Methods** 1989 Aug 15;122(1):59–65
Rapid and sensitive method to detect expression of growth factor receptors. Rakowicz-Szulczynska EM, et al. **J Immunol Methods** 1989 Jan 17;116(2):167–73
Selective expression of high-affinity nerve growth factor receptors on tyrosine hydroxylase-containing neuron-like cells in neural crest cultures. Bernd P. **J Neurosci** 1988 Oct;8(10):3549–55
Nerve growth factor binding in aged rat central nervous system: effect of acetyl-L-carnitine. Angelucci L, et al. **J Neurosci Res** 1988 Aug;20(4):491–6
CNS neuronal cell line-derived factors regulate gliogenesis in neonatal rat brain cultures. Bottenstein JE, et al. **J Neurosci Res** 1988 Jul;20(3):291–303
Interaction of nerve growth factor with murine alpha-macroglobulin. Koo PH, et al. **J Neurosci Res** 1989 Mar;22(3):247–61
Expression of nerve growth factor receptors by human peripheral blood mononuclear cells. Morgan B, et al. **J Neurosci Res** 1989 May;23(1):41–5
Factors influencing regeneration of retinal ganglion cell axons in adult mammals. Thanos S, et al. **Metab Brain Dis** 1989 Mar;4(1):67–72
Intracellular receptor binding and nuclear transport of nerve growth factor in intact cells and a cell-free system. Rakowicz-Szulczyńska EM, et al. **Mol Carcinog** 1989; 2(1):47–58
A constitutive promoter directs expression of the nerve growth factor receptor gene. Sehgal A, et al. **Mol Cell Biol** 1988 Aug;8(8):3160–7
Nerve growth factor increases in adult rat brain after hypoxic injury. Lorez H, et al. **Neurosci Lett** 1989 Apr 10; 98(3):339–44
Regulation of production by primary cultures of rat forebrain astrocytes of a trophic factor important for the development of cholinergic neurons. Patel AJ, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):223–8
Nerve growth factor-like activity in the rat pituitary intermediate lobe. Soinila S, et al. **Neurosci Res** 1988 Dec; 6(2):123–30
Biological demonstration of nerve growth factor in the rat pituitary gland. Lahtinen T, et al. **Neuroscience** 1989; 30(1):165–70
Two polymorphic TaqI sites at the human NGFR locus (17q12——17q22). Wright EC, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):824
A moderately frequent HindIII polymorphism at the human NGFR locus (17q12——17q22). Wright EC, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):825
Adrenalectomy decreases nerve growth factor in young adult rat hippocampus. Aloe L. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5636–40
Developmental appearance of nerve growth factor in the rat brain: significant deficits in the aged forebrain. Lärkfors L, et al. **Prog Brain Res** 1988;78:27–31
Central nervous system grafts of nerve growth factor-rich tissue as an alternative source of trophic support for axotomized cholinergic neurons. Springer JE, et al. **Prog Brain Res** 1988;78:401–7
[Interaction of cell growth factors and their receptors] Uchimura H, et al. **Rinsho Byori** 1988 Dec;36(12):1399–405 **(Jpn)**

PHARMACOLOGY

Regulation of differentiation of PC12 cells by nerve growth factor. Severin ES, et al. **Adv Enzyme Regul** 1988;27:357–70
In vitro studies on relationships between muscarinic receptors and somatostatin in the rat brain. Kito S, et al. **Adv Exp Med Biol** 1988;236:137–51
Selective effect of nerve growth factor on some Golgi and lysosomal enzyme activities of rat pheochromocytoma (PC12) cells. Rhodes CH, et al. **Arch Biochem Biophys** 1989 Jul;272(1):175–84
Nerve growth factor inhibits some acute experimental inflammations. Amico-Roxas M, et al. **Arch Int Pharmacodyn Ther** 1989 May-Jun;299:269–85
Antagonistic effect of PDGF and NGF on transcription of ribosomal DNA and tumor cell proliferation. Rakowicz-Szulczynska EM, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):649–56
Tissue-specific expression of a novel GTP-binding protein (smg p25A) mRNA and its increase by nerve growth factor and cyclic AMP in rat pheochromocytoma PC-12 cells. Sano K, et al. **Biochem Biophys Res Commun** 1989 Jan 31;158(2):377–85
Second-messenger control of catecholamine release from PC12 cells. Role of muscarinic receptors and nerve-growth-factor-induced cell differentiation. Meldolesi J, et al. **Biochem J** 1988 Nov 1;255(3):761–8
Effect of nerve growth factor and thyrotropin releasing hormone on cholinergic neurones in developing rat brain reaggregate cultures lesioned with ethylcholine mustard aziridinium. Atterwill CK, et al. **Biochem Pharmacol** 1989 May 15;38(10):1631–8
Specific effects of nerve growth factor on the differentiation pattern of mouse embryonic stem cells in vitro. Wobus AM, et al. **Biomed Biochim Acta** 1988;47(12):965–73
Epidermal growth factor has both growth-promoting and growth-inhibiting effects on physical and neurobehavioral development of neonatal mice. Calamandrei G, et al. **Brain Res** 1989 Jan 16;477(1–2):1–6
Interaction between nerve growth factor and GM1 monosialoganglioside in preventing cortical choline acetyltransferase and high affinity choline uptake decrease after lesion of the nucleus basalis. Di Patre PL, et al. **Brain Res** 1989 Feb 20;480(1–2):219–24
Death of sensory ganglion neurons after acute withdrawal of nerve growth factor in dissociated cell cultures. Eichler ME, et al. **Brain Res** 1989 Mar 20;482(2):340–6
Attenuation of nucleus basalis of Meynert lesion-induced cholinergic deficits by nerve growth factor. Haroutunian V, et al. **Brain Res** 1989 May 15;487(1):200–3
Transplantation of fetal and early postnatal rat septal cholinergic neurons cultured in serum-free and serum-containing medium with nerve growth factor. Hisanaga K, et al. **Brain Res** 1988 Dec 20;475(2):349–55
Differential actions of neurotrophic factors on lesion-induced damage of the serotonergic neurons projecting to the hippocampus. Lombardi G, et al. **Brain Res** 1988 Aug 23; 458(2):348–52
Substance P content in cultured neonatal rat vagal sensory neurons: the effect of nerve growth factor. MacLean DB, et al. **Brain Res** 1988 Aug 2;457(1):53–62
Differential regulation of calcitonin gene-related peptide and substance P in cultured neonatal rat vagal sensory neurons. MacLean DB, et al. **Brain Res** 1989 Jan 30;478(2):349–55
Intraventricular NGF infusion in the mature rat brain enhances sympathetic innervation of cerebrovascular targets but fails to elicit sympathetic ingrowth. Saffran BN, et al. **Brain Res** 1989 Jul 17;492(1–2):245–54
A convenient bioassay for NGF using a new subline of PC12 pheochromocytoma cells (PC12D). Sano M, et al. **Brain Res** 1988 Sep 6;459(2):404–6
Differential susceptibility of prevertebral and paravertebral sympathetic ganglia to experimental injury. Schmidt RE, et al. **Brain Res** 1988 Sep 20;460(2):214–26
Insulin-like growth factor (IGF-1) as a stimulator of regeneration in the freeze-injured rat sciatic nerve. Sjöberg J, et al. **Brain Res** 1989 Apr 17;485(1):102–8
Nerve growth factor and phorbol esters increase the number of choline acetyltransferase-positive cells in two morphologically distinct classes of basal forebrain neurons in primary cultures. Alderson RF, et al. **Brain Res Dev Brain Res** 1989 Aug 1;48(2):229–41
Nerve growth factor promotes survival of retrogradely labeled hippocampus-projecting neurons in the rat basal forebrain in vitro. Arimatsu Y, et al. **Brain Res Dev Brain Res** 1989 Feb 1;45(2):297–301
Levels of nerve growth factor secreted by rat primary fibroblasts and iris transplants are influenced by serum and glucocorticoids. Houlgatte R, et al. **Brain Res Dev Brain Res** 1989 Jun 1;47(2):171–9
Age-dependence of the nerve fibre growth-promoting effects of hippocampus and exogenous nerve growth factor on cultured rat septum and superior cervical ganglion. Lahtinen T. **Cell Differ Dev** 1989 May;26(3):201–9
The survival of early chick sympathetic neurons in vitro is dependent on a suitable substrate but independent of NGF. Ernsberger U, et al. **Dev Biol** 1989 Oct;135(2):250–62
Nerve growth factor and serum differentially regulate development of the embryonic otic vesicle and cochleovestibular ganglion in vitro. Represa J, et al. **Dev Biol** 1989 Jul;134(1):21–9
Cell-cell interactions modulate the responsiveness of PC12 cells to nerve growth factor. Doherty P, et al. **Development** 1987 Nov;101(3):605–15
NGF treatment promotes development of basal forebrain tissue grafts in the anterior chamber of the eye. Eriksdotter-Nilsson M, et al. **Exp Brain Res** 1989; 74(1):89–98
Rodent and primate adrenal medullary cells in vitro: phenotypic plasticity in response to coculture with C6 glioma cells or NGF. Notter MF, et al. **Exp Brain Res** 1989;76(1):38–46
IFN-gamma facilitates NGF-induced neuronal differentiation in PC12 cells. Improta T, et al. **Exp Cell Res** 1988 Nov;179(1):1–9
Facial nerve regeneration in the silicone chamber: the influence of nerve growth factor. Chen YS, et al. **Exp Neurol** 1989 Jan;103(1):52–60
Spatial learning in rats: correlation with cortical choline acetyltransferase and improvement with NGF following NBM damage. Mandel RJ, et al. **Exp Neurol** 1989 Jun; 104(3):208–17
Nerve growth factor enhances regeneration through silicone chambers. Rich KM, et al. **Exp Neurol** 1989 Aug; 105(2):162–70
The influence of nerve growth factor on the activities of adenylate cyclase and high-affinity GTPase in pheochromocytoma PC12 cell. Golubeva EE, et al. **FEBS Lett** 1989 Apr 24;247(2):232–4
Nerve growth factor increases the cyclic GMP level and activates the cyclic GMP phosphodiesterase in PC12 cells. Laasberg T, et al. **FEBS Lett** 1988 Nov 7;239(2):367–70
Intraocular herpes simplex virus injection in neonatal rats induces sympathetic nerve cell destruction: effect of nerve growth factor. Aloe L. **Int J Dev Neurosci** 1987;5(4):357–66
Stimulation of neurite outgrowth in vitro by a glycero-ganglioside. Cannella MS, et al. **Int J Dev Neurosci** 1988;6(4):319–26
Effects of nerve growth factor on sensory neurons in the chick embryo: a stereological study. Dimberg Y, et al. **Int J Dev Neurosci** 1987;5(3):207–13
Effects of nerve growth factor on autonomic neurons in the chick embryo: a stereological study. Dimberg Y, et al. **Int J Dev Neurosci** 1987;5(3):195–205
Nerve growth factor induces neurite outgrowth in a clone derived from an NGF-insensitive human neuroblastoma cell line. Reynolds CP, et al. **Int J Dev Neurosci** 1989; 7(2):125–32
Messenger RNAs of beta-amyloid precursor protein and prion protein are regulated by nerve growth factor in PC12 cells. Wion D, et al. **Int J Dev Neurosci** 1988;6(4):387–93
Age-dependent responses of ciliary ganglion neurons to conditioned media on cells at different stages of embryonic development. Alcain FJ. **Int J Neurosci** 1988 Dec; 43(3–4):189–93
Nerve growth factor enhances antigen and other secretagogue-induced histamine release from rat peritoneal mast cells in the absence of phosphatidylserine. Tomioka M, et al. **J Allergy Clin Immunol** 1988 Oct;82(4):599–607
Phosphorylation of the peripherin 58-kDa neuronal intermediate filament protein. Regulation by nerve growth factor and other agents. Aletta JM, et al. **J Biol Chem** 1989 Mar 15;264(8):4619–27
Dual regulation of GAP-43 gene expression by nerve growth factor and glucocorticoids. Federoff HJ, et al. **J Biol Chem** 1988 Dec 25;263(36):19290–5
Regulation of protein kinase C by nerve growth factor, epidermal growth factor, and phorbol esters in PC12 pheochromocytoma cells. Heasley LE, et al. **J Biol Chem** 1989 May 25;264(15):8646–52
Nerve growth factor, a differentiating agent, and epidermal growth factor, a mitogen, increase the activities of different S6 kinases in PC12 cells. Mutoh T, et al. **J Biol Chem** 1988 Nov 5;263(31):15853–6
The lack of a role for protein kinase C in neurite extension and in the induction of ornithine decarboxylase by nerve growth factor in PC12 cells. Reinhold DS, et al. **J Biol Chem** 1989 Feb 25;264(6):3538–44
Nerve growth factor induces the proto-oncogene c-jun in PC12 cells. Wu BY, et al. **J Biol Chem** 1989 May 25; 264(15):9000–3
Nerve growth factor-induced changes in the intracellular localization of the protein kinase C substrate B-50 in pheochromocytoma PC12 cells. Van Hooff CO, et al. **J Cell Biol** 1989 Mar;108(3):1115–25
Modulation of growth factor induced fiber outgrowth in rat pheochromocytoma (PC12) cells by a fibronectin receptor antibody. Schwarz MA, et al. **J Cell Physiol** 1989 Jan; 138(1):121–8
Functional receptors for nerve growth factor on Ewing's sarcoma and Wilm's tumor cells. Thomson TM, et al. **J Cell Physiol** 1989 Oct;141(1):60–4
Interaction of soluble and substratum-bound factors influences neurite elongation. Michler A, et al. **J Hirnforsch** 1989;30(2):197–202
Hippocampal membranes contain a neurotrophic activity that stimulates cholinergic properties of fetal rat septal neurons cultured under serum-free conditions. Emerit MB, et al. **J Neurochem** 1989 Mar;52(3):952–61
Selective inhibition of nerve growth factor-stimulated protein kinases by K-252a and 5'-S-methyladenosine in PC12 cells. Smith DS, et al. **J Neurochem** 1989 Sep; 53(3):800–6
Nerve growth factor potentiates the hormone-stimulated intracellular accumulation of inositol phosphates and Ca2+ in rat PC12 pheochromocytoma cells: comparison with the effect of epidermal growth factor. van Calker D, et al. **J Neurochem** 1989 Jan;52(1):38–45
Effect of NGF on the survival of rat retinal ganglion cells following optic nerve section. Carmignoto G, et al. **J Neurosci** 1989 Apr;9(4):1263–72
Nerve growth factors (NGF, BDNF) enhance axonal regeneration but are not required for survival of adult sensory neurons. Lindsay RM. **J Neurosci** 1988 Jul; 8(7):2394–405
Nerve growth factor enhances dendritic arborization of sympathetic ganglion cells in developing mammals. Snider WD. **J Neurosci** 1988 Jul;8(7):2628–34
Sprouting by intact Helisoma neurons: role for glutamate. Bulloch AG. **J Neurosci Res** 1989 Aug;23(4):384–95
Nerve growth factor rapidly stimulates arachidonate metabolism in PC12 cells: potential involvement in nerve fiber growth. DeGeorge JJ, et al. **J Neurosci Res** 1988 Oct-Dec;21(2–4):323–32
Comparison of nerve growth factor's effects on development of septum, striatum, and nucleus basalis cholinergic neurons in vitro. Hartikka J, et al. **J Neurosci Res** 1988 Oct–Dec; 21(2–4):352–64
Influence of laminin on the responsiveness of early chick embryo neural tube neurons to nerve growth factor. Heaton MB. **J Neurosci Res** 1989 Apr;22(4):390–6
Development of cholinergic pedunculopontine neurons in vitro: comparison with cholinergic septal cells and response to nerve growth factor, ciliary neuronotrophic factor, and retinoic acid. Knusel B, et al. **J Neurosci Res** 1988 Oct–Dec; 21(2–4):365–75
K-252a inhibits the increase in c-fos transcription and the increase in intracellular calcium produced by nerve growth

factor in PC12 cells. Lazarovici P, et al. **J Neurosci Res** 1989 May;23(1):1–8

Neurotrophic activity of monomeric glucophosphoisomerase was blocked by human immunodeficiency virus (HIV–1) and peptides from HIV–1 envelope glycoprotein. Mizrachi Y. **J Neurosci Res** 1989 Jun;23(2):217–24

Induction of morphological differentiation of human neuroblastoma cells is accompanied by induction of tissue–type plasminogen activator. Neuman T, et al. **J Neurosci Res** 1989 Jul;23(3):274–81

Basic fibroblast growth factor and nerve growth factor administered in gel foam rescue medial septal neurons after fimbria fornix transection. Otto D, et al. **J Neurosci Res** 1989 Jan;22(1):83–91

Effect of nerve growth factor on the elongation of neurites from axotomized rat embryonic septal–basal forebrain neurons: an in vitro analysis. Schinstine M, et al. **J Neurosci Res** 1989 Aug;23(4):371–83

Aged adrenal medullary tissue survives intraocular grafting, forms nerve fibers and responds to nerve growth factor. Strömberg I, et al. **J Neurosci Res** 1989 Jun;23(2):162–71

Peripheral motoneuron interactions with laminin and Schwann cell–derived neurite–promoting molecules: developmental regulation of laminin receptor function. Tomaselli KJ, et al. **J Neurosci Res** 1988 Oct–Dec; 21(2–4):275–85

Effect of nerve growth factor on the synthesis of amino acids in PC12 cells. Zielke HR, et al. **J Neurosci Res** 1989 Apr; 22(4):418–24

Effects of epidermal growth factor and nerve growth factor on isoproterenol–induced DNA synthesis in rat parotid and pancreas following removal of submandibular–sublingual glands. Schneyer CA, et al. **J Oral Pathol** 1988 May; 17(5):250–6

A reduced rate of bulky DNA adduct removal is coincident with differentiation of human neuroblastoma cells induced by nerve growth factor. Jensen L, et al. **Mol Cell Biol** 1988 Sep;8(9):3964–8

Detection of nerve growth factor and epidermal growth factor–regulated protein kinases in PC12 cells with synthetic peptide substrates. Heasley LE, et al. **Mol Pharmacol** 1989 Mar;35(3):331–8

Nerve growth factor regulates expression of neuropeptide genes in adult sensory neurons. Lindsay RM, et al. **Nature** 1989 Jan 26;337(6205):362–4

Use of tissue culture models to study neuronal regulatory trophic and toxic factors in the aged brain. Azmitia EC, et al. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):743–58 (184 ref.)

Dose– and time–dependent hippocampal cholinergic lesions induced by ethylcholine mustard aziridinium ion: effects of nerve growth factor, GM1 ganglioside, and vitamin E. Johnson GV, et al. **Neurochem Res** 1988 Aug;13(8):685–92

Effect of cerebral neurite–stimulating protein on morphogenesis of organotypical culture of spinal ganglia. Goncharova VP, et al. **Neurosci Behav Physiol** 1989 Mar–Apr;19(2):124–9

Effects of nerve growth factor and GM1 ganglioside on the number and size of cholinergic neurons in rats with unilateral lesion of the nucleus basalis. Casamenti F, et al. **Neurosci Lett** 1989 Aug 14;103(1):87–91

Factors controlling the expression of the NGF receptor in PC12 cells. Doherty P, et al. **Neurosci Lett** 1988 Oct 5; 92(2):222–7

K–252a specifically inhibits the survival and morphological differentiation of NGF–dependent neurons in primary cultures of human dorsal root ganglia. Doherty P, et al. **Neurosci Lett** 1989 Jan 2;96(1):1–6

Nerve growth factor (NGF)–treated nitrocellulose enhances and directs the regeneration of adult rat dorsal root axons through intraspinal neural tissue transplants. Houle JD, et al. **Neurosci Lett** 1989 Aug 14;103(1):17–23

Trophic effect of various neuropeptides on the cultured ventral spinal cord of rat embryo. Iwasaki Y, et al. **Neurosci Lett** 1989 Jul 3;101(3):316–20

Biological actions of 53 kDa nerve growth factor as studied by a blot and culture technique. Lakshmanan J, et al. **Neurosci Lett** 1989 May 8;99(3):263–7

Colchicine effect on B–50/GAP43 phosphoprotein localization in rat dorsal root ganglion explants. Schmidt–Michels M, et al. **Neurosci Lett** 1989 Feb 27; 97(3):285–90

Induction of the c–fos gene product in rat forebrain following cortical lesions and NGF injections. Sharp FR, et al. **Neurosci Lett** 1989 May 22;100(1–3):117–22

Nerve growth factor can influence growth of cortex cerebri and hippocampus: evidence from intraocular grafts. Eriksdotter–Nilsson M, et al. **Neuroscience** 1989; 30(3):755–66

Nerve growth factor effects on cholinergic neurons of neostriatum and nucleus accumbens in the adult rat. Hagg T, et al. **Neuroscience** 1989;30(1):95–103

The effects of nerve growth factor on the development of septal cholinergic neurons in reaggregate cell cultures. Hsiang J, et al. **Neuroscience** 1989;29(1):209–23

Effects of 5–chloro–7–iodo–8–hydroxyquinoline (clioquinol) and nerve growth factor on DNA, RNA and protein syntheses in neonatal rat superior cervical ganglia. Hori S, et al. **Pharmacol Toxicol** 1988 Oct;63(4):225–32

Nerve growth factor stimulates the hydrolysis of glycosylphosphatidylinositol in PC–12 cells: a mechanism of protein kinase C regulation. Chan BL, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1756–60

Structure of the NGFI–A gene and detection of upstream sequences responsible for its transcriptional induction by nerve growth factor. Changelian PS, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):377–81

Gangliosides potentiate in vivo and in vitro effects of nerve growth factor on central cholinergic neurons. Cuello AC, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2056–60

Role of Ca2+ channels in the ability of membrane depolarization to prevent neuronal death induced by trophic–factor deprivation: evidence that levels of internal Ca2+ determine nerve growth factor dependence of sympathetic ganglion cells. Koike T, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6421–5

Nerve growth factor increases mRNA levels for the prion protein and the beta–amyloid protein precursor in developing hamster brain. Mobley WC, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9811–5

Early gene regulation by nerve growth factor in PC12 cells: induction of an interferon–related gene. Tirone F, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2088–92

The influence of nerve growth factor treatment and endogenous growth factors on the survival of PC12 cells grafted to adult rat brain. Allen YS. **Prog Brain Res** 1988; 78:637–41

Effects of nerve growth factor on cholinergic brain neurons. Dreyfus CF. **Trends Pharmacol Sci** 1989 Apr;10(4):145–9 (38 ref.)

[Nerve growth factor induces rapid redistribution of f–actin in pheochromocytoma PC12 cells] Paves KhKh, et al. **Dokl Akad Nauk SSSR** 1988;303(5):1265–7 **(Rus)**

[Effect of the preparation baliz–2 on the growth of cultures of sympathetic ganglia from various strains of rats] Kozlova MV, et al. **Neirofiziologiia** 1988;20(4):539–46 (Eng. Abstr.) **(Rus)**

[The function of the cholinoreactive systems of the postsynaptic neuron under the action of nerve growth factor] Kaliunov VN, et al. **Nerv Sist** 1988;27:41–8 **(Rus)**

[The effect of nerve growth factor, guanethidine and their combined use on nuclease activity in animal tissues] Kaliunov VN, et al. **Vopr Med Khim** 1989 May–Jun; 35(3):117–20 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Brain "transplants", neurotrophic factors and behavior. Russell RW. **Alzheimer Dis Assoc Disord** 1988;2(2):77–95 (124 ref.)

Axonal growth–associated proteins. Skene JH. **Annu Rev Neurosci** 1989;12:127–56 (155 ref.)

Lower motoneuron trophic factors and lower motoneuron death: effects and mechanisms. Raju TR, et al. **Aust Paediatr J** 1988;24 Suppl 1:48–9 (12 ref.)

Neuropeptides, nerve growth factor, and mucosal immunity. Pezzati P, et al. **Brain Behav Immun** 1988 Dec;2(4):311–7 (26 ref.)

Intraventricular injection of antiserum to nerve growth factor delays the development of amygdaloid kindling. Funabashi T, et al. **Brain Res** 1988 Aug 16;458(1):132–6

A role for nerve growth factor in collateral reinnervation from sensory nerves in the guinea pig. Owen DJ, et al. **Brain Res** 1989 Jan 9;476(2):248–55

Modulation of nuclear rotation in neuronal interphase nuclei by nerve growth factor, by gamma–aminobutyric acid, and by changes in intracellular calcium. Fung LC, et al. **Cell Motil Cytoskeleton** 1988;10(3):363–73

Fate of intraocular chromaffin cell suspensions: role of initial nerve growth factor support. Strömberg I, et al. **Cell Tissue Res** 1988;254(3):487–97

Neurotrophic interactions in the development of spinal cord motoneurons. Oppenheim RW, et al. **Ciba Found Symp** 1988;138:152–71 (33 ref.)

Molecular analysis of the nerve growth factor receptor. Hempstead B, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:477–85

The trigeminal system: an advantageous experimental model for studying neuronal development. Davies AM. **Development** 1988;103 Suppl:175–83 (35 ref.)

Regulation of the differentiation of PC12 pheochromocytoma cells. Fujita K, et al. **Environ Health Perspect** 1989 Mar; 80:127–42 (249 ref.)

PC12 pheochromocytoma and sympathetic nervous system derived trophic factors augment growth of neuroblastoma. Chelmicka–Schorr E, et al. **Eur J Cancer Clin Oncol** 1989 Jul;25(7):1057–9

Detection of nerve growth factor and its mRNA by separate and combined immunohistochemistry and in situ hybridization in mouse salivary glands. Ayer–Le Lievre C, et al. **Histochem J** 1989 Jan;21(1):1–7

Sex differences in nerve growth factor levels in superior cervical ganglia and pineals [published erratum appears in Int J Dev Neurosci 1989;7(1):123] Wright LL, et al. **Int J Dev Neurosci** 1987;5(5–6):383–90

Adrenal grafting for Parkinson's disease: a role for substance P. Barker R. **Int J Neurosci** 1989 May;46(1–2):47–51 (27 ref.)

Ciliary neurotrophic factor induces cholinergic differentiation of rat sympathetic neurons in culture. Saadat S, et al. **J Cell Biol** 1989 May;108(5):1807–16

Development and plasticity of adrenal chromaffin cells: cues based on in vitro studies. Hofmann HD, et al. **J Electron Microsc Tech** 1989 Aug;12(4):397–407 (72 ref.)

Biological activities of nerve growth factor bound to nitrocellulose paper by Western blotting. Pettmann B, et al. **J Neurosci** 1988 Oct;8(10):3624–32

Nerve growth factor regulates gene expression by several distinct mechanisms. Cho KO, et al. **Mol Cell Biol** 1989 Jan;9(1):135–43

Glucocorticoid– and nerve growth factor–induced changes in chromogranin A expression define two different neuronal phenotypes in PC12 cells. Rausch DM, et al. **Mol Endocrinol** 1988 Oct;2(10):921–7

Nerve growth factor–mediated sexual differentiation of the rat hypothalamus. Yanase M, et al. **Neurosci Res** 1988 Dec; 6(2):181–5

A cell line producing recombinant nerve growth factor evokes growth responses in intrinsic and grafted central cholinergic neurons. Ernfors P, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4756–60

The role of trophic factors in behavioral recovery and integration of transplants. Cotman CW, et al. **Prog Brain Res** 1988;78:311–9 (28 ref.)

Multiple trophic influences which act on developing retinal ganglion cells: studies of retinal transplants. McLoon SC, et al. **Prog Brain Res** 1988;78:377–81 (27 ref.)

Grafting genetically modified cells to the damaged brain: restorative effects of NGF expression. Rosenberg MB, et al. **Science** 1988 Dec 16;242(4885):1575–8

Role of neurotrophic factors in development. Davies AM. **Trends Genet** 1988 May;4(5):139–43 (31 ref.)

What, if anything, is a neurotrophic factor? Barde YA. **Trends Neurosci** 1988 Aug;11(8):343–6 (31 ref.)

The emerging generality of the neurotrophic hypothesis [news] Davies AM. **Trends Neurosci** 1988 Jun;11(6):243–4 (19 ref.)

The neurotrophic theory and naturally occurring motoneuron death. Oppenheim RW. **Trends Neurosci** 1989 Jul;12(7):252–5 (37 ref.)

[Neuronal trophic factors in the central nervous system] Lu GW. **Sheng Li Ko Hsueh Chin Chan** 1989 Jan;20(1):8–11 (43 ref.) **(Chi)**

[Advances in the research on nerve growth factor] Yu ZY. **Sheng Li Ko Hsueh Chin Chan** 1988 Jul;19(3):226–30 (49 ref.) **(Chi)**

[Nerve growth factor (NGF)—the current state of knowledge] Dalseg AM, et al. **Nord Med** 1989;104(2):45–7 (Eng. Abstr.) **(Dan)**

[Nerve growth factors: a hypothesis on their role in the pathogenesis of infantile spinal amyotrophies] Henderson CE, et al. **Rev Neurol (Paris)** 1988;144(11):730–6 (Eng. Abstr.) **(Fre)**

[Recent topics on Alzheimer's disease. Nerve growth factors and Alzheimer's disease] Tomonaga M. **Nippon Rinsho** 1988 Jul;46(7):1600–6 **(Jpn)**

[Endogenous factors involved in synapse formation] Taniura H, et al. **Tanpakushitsu Kakusan Koso** 1988 Aug; 33(10):1658–66 (67 ref.) **(Jpn)**

[Structure and function of neurite outgrowth factor (NOF)] Miki N, et al. **Yakubutsu Seishin Kodo** 1988 Dec;8(4):471–3 **(Jpn)**

[Nerve growth factors] Vainiene M, et al. **Neurol Neurochir Pol** 1988 Sep–Oct;22(5):444–9 (24 ref.) **(Pol)**

[Nerve growth factor, its chemical structure and biological function] Sieroń A, et al. **Postepy Biochem** 1988; 34(3):173–82 (70 ref.) **(Pol)**

[Neurotrophic factors and nerve regeneration—an overview] Danielsen N. **Lakartidningen** 1989 May 31;86(22):2106–7 (15 ref.) **(Swe)**

[Regulation of the supply of nerve growth factor results in good development of neural graft] Ebendal T. **Lakartidningen** 1989 Mar 22;86(12):1074 **(Swe)**

SECRETION

Secreted peptides as regulators of neuron–glia and glia–glia interactions in the developing nervous system. Giulian D, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):487–500

Pituitary gland: neuropeptides, neurotransmitters and growth factors. Koenig JI. **Toxicol Pathol** 1989;17(2):256–65 (89 ref.)

THERAPEUTIC USE

Potential use of nerve growth factor to treat Alzheimer's disease. Phelps CH, et al. **Neurobiol Aging** 1989 Mar–Apr; 10(2):205–7 (28 ref.)

Potential use of nerve growth factor to treat Alzheimer's disease [letter] **Science** 1989 Jan 6;243(4887):11

NERVE NET see under **NERVOUS SYSTEM**

NERVE REGENERATION

Ultrastructural evidence of repair and neuronal survival after labyrinthectomy in the squirrel monkey. Fermin CD, et al. **Acta Anat (Basel)** 1989;135(1):62–70

Ultrastructural study of reinnervation in a rat fast skeletal muscle. González de Milo N, et al. **Acta Cient Venez** 1988; 39(3):357–62

Transganglionic regulation of primary sensory neurons. Csillik B, et al. **Acta Morphol Hung** 1988;36(1–2):35–46

The quality and extension of nerve fibre regeneration in the centrocentral anastomosis of the peripheral nerve. Barberá J, et al. **Acta Neurochir Suppl (Wien)** 1988;43:205–9

Peripheral nerve autografts to the rat spinal cord: a study of the origin of regenerating fibres using fluorescent double labelling. Pallini R, et al. **Acta Neurochir Suppl (Wien)** 1988; 43:210–3

Peripheral nerve regeneration through optic nerve grafts. Anderson PN, et al. **Acta Neuropathol (Berl)** 1989; 77(5):525–34

Axonal degeneration and regeneration in sensory roots in a genital herpes model. Soffer D, et al. **Acta Neuropathol (Berl)** 1989;77(6):605–11

Experimental in vivo regeneration of peripheral nerve axons and perineurium guided by resorbable collagen film. Takahashi M, et al. **Acta Pathol Jpn** 1988 Dec; 38(12):1489–502

Environmental factors contribute to the enhanced regeneration of frog sciatic sensory axons by a conditioning lesion. Edbladh M, et al. **Acta Physiol Scand** 1989 Feb; 135(2):169–72

Neurotropism in nerve regeneration: an immunohistochemical study. Nachemson AK, et al. **Acta Physiol Scand** 1988 Jun;133(2):139–48

Regeneration in the central nervous system: concepts and facts. Agnati LF, et al. **Adv Tech Stand Neurosurg** 1988; 16:3–50 (175 ref.)

Studies of normal and expansive cutaneous innervation territories of intact and regenerating C-fibres in the hindlimb of the rat. Wiesenfeld-Hallin Z, et al. **Agents Actions** 1988 Dec;25(3–4):260–2

Passive exercise and reinnervation of the rat denervated extensor digitorum longus muscle after nerve crush. Pachter BR, et al. **Am J Phys Med Rehabil** 1989 Aug; 68(4):179–82

The sensory potential of free flap donor sites. Brown CJ, et al. **Ann Plast Surg** 1989 Aug;23(2):135–40

Selection of the appropriate parameter to measure neural regeneration. Dellon AL, et al. **Ann Plast Surg** 1989 Sep; 23(3):197–202

Selection of optimal axon ratio for nerve regeneration. Mackinnon SE, et al. **Ann Plast Surg** 1989 Aug;23(2):129–34

Nerve endings in palm skin grafts. Wada H, et al. **Ann Plast Surg** 1989 Jun;22(6):461–6

The use of DC electric fields to promote regeneration in the mammalian nervous system. Zanakis MF. **ASAIO Trans** 1988 Oct–Dec;34(4):947–51 (38 ref.)

Cortical lesions interfere with behavioral recovery from unilateral substantia nigra lesions induced by brain grafts. Freed WJ, et al. **Behav Brain Res** 1989 Apr 1;32(3):279–88

The hopping response after two-stage cortical ablation in young and adult rabbits. Hobbelen JF, et al. **Behav Brain Res** 1988 Nov 1;31(1):97–102

The use of fetal neocortical transplants to treat the hyperactivity resulting from cortical suction lesions in adult rats. Justice A, et al. **Behav Brain Res** 1989 May 1; 33(1):97–104

Ontogeny of open field activity in rats after neonatal lesioning of the mesocortical dopaminergic projection. Kalsbeek A, et al. **Behav Brain Res** 1989 Mar 1;32(2):115–27

Extent and limits of cerebral adjustment to early section or congenital absence of the corpus callosum. Lassonde M, et al. **Behav Brain Res** 1988 Sep 15;30(2):165–81

Early rearing environment and dorsal hippocampal ibotenic acid lesions: long-term influences on spatial learning and alternation in the rat. Pacteau C, et al. **Behav Brain Res** 1989 Aug 1;34(1–2):79–96

Neonatal dopamine-rich grafts and 6-OHDA lesions independently provide partial protection from the adult nigrostriatal lesion syndrome. Rogers DC, et al. **Behav Brain Res** 1989 Aug 1;34(1–2):131–46

Frontal cortex grafts have opposite effects at different postoperative recovery times. Kolb B, et al. **Behav Neural Biol** 1988 Sep;50(2):193–206

Recovery of sensorimotor function after frontal cortex damage in rats: evidence that the serial lesion effect is due to serial recovery. de Castro JM, et al. **Behav Neurosci** 1988 Dec;102(6):843–51

The regeneration of adult rat retinal ganglion cell axons in vitro. Johnson AR, et al. **Biochem Soc Trans** 1988 Aug; 16(4):440–1

The influence of the mode of treatment of zygomatic bone fractures on the healing process of the infraorbital nerve. De Man K, et al. **Br J Oral Maxillofac Surg** 1988 Oct; 26(5):419–25

A comparison of immediate and delayed repair of peripheral nerves using freeze-thawed autologous skeletal muscle grafts—in the rat. Gattuso JM, et al. **Br J Plast Surg** 1989 May;42(3):306–13

The post-injury changes that occur in transected foetal nerves; an experimental study in the rat. Rowsell AR. **Br J Plast Surg** 1989 May;42(3):296–300

Transplanted eyes of foreign donors can reinstate the optically activated skin camouflage reactions in bilaterally enucleated salamanders (Ambystoma). Pietsch P, et al. **Brain Behav Evol** 1988;32(6):364–70

Aberrant growth of regenerating retinotectal axons subsequent to optic tract ablation in goldfish. Airhart MJ, et al. **Brain Res** 1988 Sep 20;460(2):383–8

Dependence of GAP43 (B50, F1) transport on axonal regeneration in rat dorsal root ganglion neurons. Bisby MA. **Brain Res** 1988 Aug 16;458(1):157–61

Conditioning lesion effects on rat sciatic nerve regeneration are influenced by electrical stimulation delivered to denervated muscles. Bondoux-Jahan M, et al. **Brain Res** 1989 Jun 26;490(2):350–4

Morphological changes in spinal motor neurons giving rise to long-term regenerated sciatic nerve axons. Bowe CM, et al. **Brain Res** 1988 Oct 25;463(1):69–77

De novo formation of axon-like processes from axotomized retinal ganglion cells which exhibit long distance growth in a peripheral nerve graft in adult hamsters. Cho EY, et al. **Brain Res** 1989 Apr 10;484(1–2):371–7

Enhanced axonal transport of glycosaminoglycans in regenerating goldfish optic nerve. Coughlin C, et al. **Brain Res** 1989 Jul 31;493(2):326–30

Motor recovery after cross-reinnervation of a forelimb nerve by the phrenic nerve in cats. Fujito Y, et al. **Brain Res** 1989 Jul 17;492(1–2):36–44

Conditioning lesions of peripheral nerves change regenerated axon numbers. Jenq CB, et al. **Brain Res** 1988 Aug 2; 457(1):63–9

Regeneration of frog sympathetic neurons is accompanied by sprouting and retraction of intraganglionic neurites. Kelly ME, et al. **Brain Res** 1989 Jan 16;477(1–2):363–8

Peripheral nerve injury causes transient expression of MHC class I antigens in rat motor neurons and skeletal muscles. Maehlen J, et al. **Brain Res** 1989 Mar 6;481(2):368–72

Fetal hypothalamic transplants promote survival and functional regeneration of axotomized adult supraoptic magnocellular neurons. Marciano FF, et al. **Brain Res** 1989 Mar 27;483(1):135–42

Effect of age on collateral reinnervation of sweat glands in the mouse. Navarro X, et al. **Brain Res** 1988 Oct 25; 463(1):174–81

Reciprocal regulation of tachykinin- and vasoactive intestinal peptide-gene expression in rat sensory neurones following cut and crush injury. Nielsch U, et al. **Brain Res** 1989 Feb 27;481(1):25–30

Morphological alteration of thalamic afferents in the excitotoxically lesioned striatum. Nothias F, et al. **Brain Res** 1988 Oct 4;461(2):349–54

A role for nerve growth factor in collateral reinnervation from sensory nerves in the guinea pig. Owen DJ, et al. **Brain Res** 1989 Jan 9;476(2):248–55

Tubulin messenger RNA: in situ hybridization reveals bilateral increases in hypoglossal and facial nuclei following nerve transection. Pearson RC, et al. **Brain Res** 1988 Nov 1;463(2):245–9

A preliminary description of the regeneration of optic nerve fibers in a reptile, Vipera aspis. Rio JP, et al. **Brain Res** 1989 Feb 6;479(1):151–6

A persistent defect in the blood–brain barrier after ventral funiculus lesion in adult cats: implications for CNS regeneration? Risling M, et al. **Brain Res** 1989 Aug 7; 494(1):13–21

The reinnervation of the tongue and salivary glands after lingual nerve injuries in cats. Robinson PP. **Brain Res** 1989 Apr 3;483(2):259–71

Comparison of nerve regeneration in vascularized and conventional grafts: nerve electrophysiology, norepinephrine, prostacyclin, malondialdehyde, and the blood–nerve barrier. Shupeck M, et al. **Brain Res** 1989 Jul 31;493(2):225–30

Stimulation of rat sciatic nerve regeneration with pulsed electromagnetic fields. Sisken BF, et al. **Brain Res** 1989 Apr 24;485(2):309–16

Polymer electret guidance channels enhance peripheral nerve regeneration in mice. Valentini RF, et al. **Brain Res** 1989 Feb 20;480(1–2):300–4

Incorporation of plasma [14C]palmitate into the hypoglossal nucleus following unilateral axotomy of the hypoglossal nerve in adult rat, with and without regeneration. Yamazaki S, et al. **Brain Res** 1989 Jan 16;477(1–2):19–28

Ganglioside synthesis and transport in regenerating sensory neurons of the rat sciatic nerve. Yates AJ, et al. **Brain Res** 1989 Feb 13;479(2):277–82

Nerve fibre regeneration across the PNS–CNS interface at the root–spinal cord junction. Carlstedt T, et al. **Brain Res Bull** 1989 Jan;22(1):93–102

Prospects for axonal regrowth in spinal cord injury. Collins GH, et al. **Brain Res Bull** 1989 Jan;22(1):89–92

Glial activity during axonal regrowth following cryogenic injury of rat spinal cord. Collins GH, et al. **Brain Res Bull** 1989 Jan;22(1):71–9

Early and late appearance of neurofilament phosphorylation events in nerve regeneration. Dahl D, et al. **Brain Res Bull** 1989 Feb;22(2):225–32

Formation of functional endplates by spinal axons regenerating through a peripheral nerve graft. A study in the adult rat. Horvat JC, et al. **Brain Res Bull** 1989 Jan; 22(1):103–14

Comparison of injury and development in the neuromuscular system. Gordon T, et al. **Ciba Found Symp** 1988;138:210–26 (47 ref.)

Scintigraphic and electrophysiological evidence of canine myocardial sympathetic denervation and reinnervation produced by myocardial infarction or phenol application. Minardo JD, et al. **Circulation** 1988 Oct;78(4):1008–19

The opiomelanocortin peptide family: neuronal expression and modulation of neural cellular development and regeneration in the central nervous system. Berry S, et al. **Comp Biochem Physiol [A]** 1989;93(1):267–72 (40 ref.)

Amphibian sympathetic ganglia as a model system for investigating regeneration in the vertebrate peripheral nervous system. Kelly ME, et al. **Comp Biochem Physiol [A]** 1989;93(1):133–40

Basic fibroblast growth factor induces retinal regeneration in vivo. Park CM, et al. **Dev Biol** 1989 Jul;134(1):201–5

Electrophysiological assessment of maturation of regenerating motor nerve fibres in infants with brachial plexus palsy. Kwast O. **Dev Med Child Neurol** 1989 Feb; 31(1):56–65

Divergent axon collaterals in the regenerating goldfish optic tract: a fluorescence double-label study. Becker DL, et al. **Development** 1988 Oct;104(2):317–20

Retinotopic refinement of the regenerating goldfish optic tract is not linked to activity-dependent refinement of the retinotectal map. Cook JE, et al. **Development** 1988 Oct; 104(2):321–9

Hyaluronate accumulation and nerve-dependent growth during regeneration of larval Ambystoma limbs. Mescher AL, et al. **Differentiation** 1988 Sep;38(3):161–8

Muscle activity and motor nerve sprouting: an electrophysiological study in man. Casabona A, et al. **Electromyogr Clin Neurophysiol** 1988 Nov–Dec; 28(7–8):391–5

The effect of collagen gel matrix on regeneration of severed rat sciatic nerve—electromyographical and morphological study. Ioku M, et al. **Electromyogr Clin Neurophysiol** 1988 Nov–Dec;28(7–8):369–72

In vitro regeneration of adult rat ganglion cell axons from retinal explants. Bähr M, et al. **Exp Brain Res** 1988; 73(2):393–401

Changes in microglial cell numbers in the spinal cord dorsal horn following brachial plexus transection in the adult rat. Cova JL, et al. **Exp Brain Res** 1988;73(1):61–8

Reinnervation of dopamine neurons by regenerating serotonin axons in the rat medial zona incerta. A combined radioautographic and immunocytochemical ultrastructural study. Frankfurt M, et al. **Exp Brain Res** 1988;72(3):473–80

Human amnion membrane matrix as a substratum for axonal regeneration in the central nervous system. Gage FH, et al. **Exp Brain Res** 1988;72(2):371–80

Spared-root deafferentation of a cat's hindlimb: hierarchical regulation of pathways mediating recovery of motor behavior. Goldberger ME. **Exp Brain Res** 1988; 73(2):329–42

Partial and complete deafferentation of cat hindlimb: the contribution of behavioral substitution to recovery of motor function. Goldberger ME. **Exp Brain Res** 1988;73(2):343–53

Expansion of innervation territory by afferents involved in plasma extravasation after nerve regeneration in adult and neonatal rats. Wiesenfeld-Hallin Z, et al. **Exp Brain Res** 1989;76(1):88–96

Presumptive neurons derived by differentiation of a human embryonal carcinoma cell line exhibit tetrodotoxin-sensitive sodium currents and the capacity for regenerative responses. Rendt J, et al. **Exp Cell Res** 1989 Feb;180(2):580–4

Schwann cell recruitment from intact nerve fibers. Bardosi A. **Exp Neurol** 1989 Feb;103(2):123–34

Sensory nerve crush and regeneration and the receptive fields and response properties of neurons in the primary somatosensory cerebral cortex of cats. Brandenberg GA, et al. **Exp Neurol** 1989 Mar;103(3):256–66

Reinnervation of long-term denervated rat muscle freely grafted into an innervated limb. Carlson BM, et al. **Exp Neurol** 1988 Oct;102(1):50–6

Bulbospinal and intraspinal connections in normal and regenerated salamander spinal cord. Davis BM, et al. **Exp Neurol** 1989 Jan;103(1):41–51

Adrenal medullary autografts into the basal ganglia of Cebus monkeys: injury-induced regeneration. Fiandaca MS, et al. **Exp Neurol** 1988 Oct;102(1):76–91

Astrocytes are important for sprouting in the septohippocampal circuit. Gage FH, et al. **Exp Neurol** 1988 Oct;102(1):2–13

Effect of neonatal denervation–reinnervation on the functional capacity of a 129ReJ dy/dy murine dystrophic muscle. Hermanson JW, et al. **Exp Neurol** 1988 Nov; 102(2):210–6

Sweat gland reinnervation by sudomotor regeneration after different types of lesions and graft repairs. Navarro X, et al. **Exp Neurol** 1989 Jun;104(3):229–34

Changes in the firing properties of neurons in the dentate gyrus with denervation and reinnervation: implications for behavioral recovery. Reeves TM, et al. **Exp Neurol** 1988 Oct;102(1):37–49

Snug tubular enclosures reduce extrafascicular axonal escape at peripheral nerve repair sites. Stensaas L, et al. **Exp Neurol** 1989 Feb;103(2):135–45

Ultracytochemical localization of adenylate cyclase and guanylate cyclase in crushed peripheral nerves. Rambotti MG, et al. **GLIA** 1988;1(4):260–74

Oligodendrocytes but not astrocytes express apolipoprotein E after injury of rat optic nerve. Stoll G, et al. **GLIA** 1989; 2(3):170–6

Increased glial fibrillary acidic protein synthesis in astrocytes during retrograde reaction of the rat facial nucleus. Tetzlaff W, et al. **GLIA** 1988;1(1):90–5

Innervation of regenerated spindles in muscle grafts of the rat. Walro JM, et al. **Histochemistry** 1989;92(1):1–13

Spatial distribution of glutamate, taurine and GABA in teleosts and mammals retina: in vivo and in vitro study. Lima L, et al. **Int J Dev Neurosci** 1989;7(3):295–300

Stimulation of choline acetyltransferase in spinal cord explants by limb mesenchyme. Muhlach WL, et al. **Int J Dev Neurosci** 1989;7(4):383–7

Innervation is required to stabilize and amplify creatine kinase activity in regenerated extensor digitorum longus muscles of rats. Rossi AM, et al. **Int J Dev Neurosci** 1987; 5(5–6):429–33

Corneal nerve regeneration. Correlation between morphology and restoration of sensitivity. de Leeuw AM, et al. **Invest Ophthalmol Vis Sci** 1989 Sep;30(9):1980–90

Reinnervation of sweat glands in the rat hind paw following peripheral nerve injury. Bharali LA, et al. **J Auton Nerv Syst** 1988 Aug;23(2):125–9

Spectral analysis of heart rate variability following human heart transplantation: evidence for functional reinnervation. Fallen EL, et al. **J Auton Nerv Syst** 1988 Sep;23(3):199–206

Expression of cytotactin in the normal and regenerating neuromuscular system. Daniloff JK, et al. **J Cell Biol** 1989 Feb;108(2):625–35

A role for apolipoprotein E, apolipoprotein A–I, and low density lipoprotein receptors in cholesterol transport during regeneration and remyelination of the rat sciatic nerve. Boyles JK, et al. **J Clin Invest** 1989 Mar;83(3):1015–31

Nerve growth factor receptor and choline acetyltransferase colocalization in neurons within the rat forebrain: response to fimbria–fornix transection. Batchelor PE, et al. **J Comp Neurol** 1989 Jun 8;284(2):187–204

Regenerated optic fibers in goldfish reestablish a crude sectoral order in the visual pathway. Bernhardt R, et al. **J Comp Neurol** 1988 Nov 15;277(3):403–19

Axonal pathfinding during the regeneration of the goldfish optic pathway. Bernhardt R. **J Comp Neurol** 1989 Jun 1; 284(1):119–34

Axons added to the regenerated visual pathway of goldfish establish a normal fiber topography along the age–axis. Bernhardt R, et al. **J Comp Neurol** 1988 Nov 15; 277(3):420–9

Junction between parent and daughter axons in regenerating myelinated nerve: properties of structure and rapid axonal transport. Chan H, et al. **J Comp Neurol** 1989 May 15; 283(3):391–404

Plasticity of acid phosphatase (FRAP) afferent terminal fields and of dorsal horn cell growth in the neonatal rat. Fitzgerald M, et al. **J Comp Neurol** 1985 Oct 22; 240(4):414–22

The sprouting of saphenous nerve terminals in the spinal cord following early postnatal sciatic nerve section in the rat. Fitzgerald M. **J Comp Neurol** 1985 Oct 22;240(4):407–13

Pathfinding and target selection of goldfish retinal axons regenerating under TTX-induced impulse blockade. Hartlieb E, et al. **J Comp Neurol** 1989 Jun 1;284(1):148–68

Regeneration of axons from the adult rat optic nerve: influence of fetal brain grafts, laminin, and artificial basement membrane. Hausmann B, et al. **J Comp Neurol** 1989 Mar 15;281(3):447–66

Normal and regenerating optic fibers in goldfish tectum: HRP–EM evidence for rapid synaptogenesis and optic fiber–fiber affinity. Hayes WP, et al. **J Comp Neurol** 1988 Aug 22;274(4):516–38

Optic synapse number but not density is constrained during regeneration onto surgically halved tectum in goldfish: HRP–EM evidence that optic fibers compete for fixed numbers of postsynaptic sites on the tectum. Hayes WP, et al. **J Comp Neurol** 1988 Aug 22;274(4):539–59

Prevention of optic nerve regeneration in the frog Hyla moorei transiently delays the death of some ganglion cells. Humphrey MF, et al. **J Comp Neurol** 1989 Jan 8; 279(2):187–98

Laminar histochemical and cytochemical localization of cytochrome oxidase in the goldfish retina and optic tectum in response to deafferentation and during regeneration. Kageyama GH, et al. **J Comp Neurol** 1988 Dec 22; 278(4):521–42

Regeneration of muscle axons in the frog is directed by diffusible factors from denervated muscle and nerve tubes. Kuffler DP. **J Comp Neurol** 1989 Mar 15;281(3):416–25

Expansion of spinal cord primary sensory afferent projection following combined sciatic nerve resection and saphenous nerve crush: a horseradish peroxidase study in the adult rat. Molander C, et al. **J Comp Neurol** 1988 Oct 15; 276(3):436–41

Degeneration and regeneration of peripheral nerve in the rat trigeminal system: III. Abnormal sensory reinnervation of rat guard hairs following nerve transection and crush. Munger BL, et al. **J Comp Neurol** 1989 May 8;283(2):169–76

On the asymmetry of the primary branching of vagal sensory axons: possible role of the supporting tissue. Serra M, et al. **J Comp Neurol** 1989 Jun 1;284(1):108–18

Axonal redirection at the dorsoventral intraretinal boundary. Springer AD, et al. **J Comp Neurol** 1989 May 15; 283(3):405–14

New growth elicited in adult leech mechanosensory neurones by peripheral axon damage. Bannatyne BA, et al. **J Exp Biol** 1989 May;143:419–34

A comparison of nerve regeneration across a sural nerve graft and a vascularized pseudosheath. Mackinnon SE, et al. **J Hand Surg [Am]** 1988 Nov;13(6):935–42

Autogenous vein and nerve grafts: a comparative study of nerve regeneration in the rat. Risitano G, et al. **J Hand Surg [Br]** 1989 Feb;14(1):102–4

Noradrenergic sprouting and beta-adrenergic receptor binding in the lateral geniculate nucleus of rats after unilateral visual cortex ablation. Aurich M, et al. **J Hirnforsch** 1988;29(6):659–67

Autoimmunity and central nervous system regeneration in urodele amphibians. Margotta V, et al. **J Hirnforsch** 1989; 30(1):99–106

Changes of DNA synthesis in brain cortical cells after transplantation of embryonic nervous tissue into the brain of rats after hypoxia. Polezhaev LV, et al. **J Hirnforsch** 1988;29(6):669–72

DNA synthesis and mitotic division of cortical neurons in adult rats upon intrabrain transplantation of embryonic nervous tissue. Polezhaev LV, et al. **J Hirnforsch** 1988; 29(6):673–81

Aberrant reinervation of the stapedius muscle following facial palsy. McFerran DJ, et al. **J Laryngol Otol** 1989 Feb; 103(2):205–6

Absence of competitive interactions among axon terminals of regenerating motor neurons. Denburg JL, et al. **J Neurobiol** 1988 Oct;19(7):656–65

Regenerative specificity of motor axons when reinnervation is partially suppressed. Farel PB, et al. **J Neurobiol** 1989 Mar;20(2):69–80

Neural attrition following limb loss and regeneration in juvenile lobsters. Govind CK, et al. **J Neurobiol** 1988 Dec; 19(8):667–80

Anatomical specificity of regenerated muscle sensory afferents in the spinal cord of the bullfrog. Peng YY, et al. **J Neurobiol** 1988 Dec;19(8):727–42

Transport of muscarinic cholinergic marker protein activities in regenerating sciatic nerve of rat. Gulya K, et al. **J Neurochem** 1989 Jul;53(1):179–82

Optic nerve regeneration in adult fish and apolipoprotein A–I. Harel A, et al. **J Neurochem** 1989 Apr;52(4):1218–28

Phosphorylation of superior cervical ganglion proteins during regeneration. Watterson JG, et al. **J Neurochem** 1989 Jun; 52(6):1700–7

Reinnervation of the mammalian spinal cord after neonatal dorsal root crush. Carlstedt T. **J Neurocytol** 1988 Jun; 17(3):335–50

A morphometric analysis of the somata and organelles of regenerating hypoglossal motoneurons from the rat. Hall LL, et al. **J Neurocytol** 1988 Dec;17(6):835–44

Ultrastructural and morphometric analysis of long-term peripheral nerve regeneration through silicone tubes. Le Beau JM, et al. **J Neurocytol** 1988 Apr;17(2):161–72

Reorganization of motor units in reinnervated muscles of the rat. Albani M, et al. **J Neurol Sci** 1988 Dec;88(1–3):195–206

Morphological and physiological properties of neurons after long-term axonal regeneration: observations on chronic and delayed sequelae of peripheral nerve injury. Bowe CM, et al. **J Neurol Sci** 1989 Jul;91(3):259–92

Influence of autograft size on peripheral nerve regeneration in cats. Pover CM, et al. **J Neurol Sci** 1989 Apr; 90(2):179–85

An electrophysiological and histological study of myelinated axon regeneration after peripheral nerve injury and repair in the cat. Pover CM, et al. **J Neurol Sci** 1988 Jul; 85(3):281–91

Remyelination of central nervous system lesions in experimental genital herpes simplex virus infection. Soffer D, et al. **J Neurol Sci** 1988 Aug;86(1):83–95

Effects of preventing reinnervation on axotomized spinal motoneurons in the cat. I. Motoneuron electrical properties. Pinter MJ, et al. **J Neurophysiol** 1989 Aug;62(2):311–24

Effects of preventing reinnervation on axotomized spinal motoneurons in the cat. II. Changes in group Ia synaptic function. Vanden Noven S, et al. **J Neurophysiol** 1989 Aug; 62(2):325–33

Contact-mediated loss of the nonsynaptic response to transmitter during reinnervation of an identified leech neuron in culture. Drapeau P, et al. **J Neurosci** 1989 Jul; 9(7):2502–8

Synaptic specificity in frog sympathetic ganglia during reinnervation, sprouting, and embryonic development. Feldman DH. **J Neurosci** 1988 Nov;8(11):4367–78

Sprouts emerging from the dendrites of axotomized lamprey central neurons have axonlike ultrastructure. Hall GF, et al. **J Neurosci** 1989 Feb;9(2):588–99

Normal numbers of retinotectal synapses during the activity-sensitive period of optic regeneration in goldfish: HRP–EM evidence implicating synapse rearrangement and collateral elimination during map refinement. Hayes WP, et al. **J Neurosci** 1989 Apr;9(4):1400–13

Impulse blockade by intraocular tetrodotoxin during optic regeneration in goldfish: HRP–EM evidence that the formation of normal numbers of optic synapses and the elimination of exuberant optic fibers is activity independent. Hayes WP, et al. **J Neurosci** 1989 Apr;9(4):1414–23

Expression of GAP–43, a rapidly transported growth-associated protein, and class II beta tubulin, a slowly transported cytoskeletal protein, are coordinated in regenerating neurons. Hoffman PN. **J Neurosci** 1989 Mar; 9(3):893–7

Relationship between phosphorylation and synthesis of goldfish optic nerve proteins during regeneration. Larrivee DC, et al. **J Neurosci** 1989 Feb;9(2):574–81

Guidance of regenerating motor axons in larval and juvenile bullfrogs. Lee MT, et al. **J Neurosci** 1988 Jul;8(7):2430–7

Transport of cytoskeletal elements from parent axons into regenerating daughter axons. McQuarrie IG, et al. **J Neurosci** 1989 Feb;9(2):436–46

Distribution and phosphorylation of the growth-associated protein GAP–43 in regenerating sympathetic neurons in culture. Meiri KF, et al. **J Neurosci** 1988 Jul;8(7):2571–81

Rapid induction of the major embryonic alpha-tubulin mRNA, T alpha 1, during nerve regeneration in adult rats. Miller FD, et al. **J Neurosci** 1989 Apr;9(4):1452–63

Changes in cytoskeletal gene expression affect the composition of regenerating axonal sprouts elaborated by dorsal root ganglion neurons in vivo. Oblinger MM, et al. **J Neurosci** 1989 Aug;9(8):2645–53

In vivo visualization of pre- and postsynaptic changes during synapse elimination in reinnervated mouse muscle. Rich MM, et al. **J Neurosci** 1989 May;9(5):1781–805

Axonal transport and localization of B-50/GAP-43-like immunoreactivity in regenerating sciatic and facial nerves of the rat. Tetzlaff W, et al. **J Neurosci** 1989 Apr; 9(4):1303–13

The location of cues promoting selective reinnervation of axolotl muscles. Wigston DJ, et al. **J Neurosci** 1988 Sep; 8(9):3451–8

Conditioned media of regenerating fish optic nerves modulate laminin levels in glial cells. Cohen A, et al. **J Neurosci Res** 1989 Mar;22(3):269–73

Increase of transferrin receptors and iron uptake in regenerating motor neurons. Graeber MB, et al. **J Neurosci Res** 1989 Jul;23(3):342–5

Differentiating astroglia in nervous tissue histogenesis/regeneration: studies in a model system of regenerating peripheral nerve. Kalderon N. **J Neurosci Res** 1988 Oct–Dec;21(2–4):501–12

Enzyme translocation in the course of regeneration of central primary afferent terminals in the substantia gelatinosa of the adult rodent spinal cord. Knyihár-Csillik E, et al. **J Neurosci Res** 1989 Jan;22(1):74–82

Adult retinal ganglion cells retain the ability to regenerate their axons up to several weeks after axotomy. Thanos S, et al. **J Neurosci Res** 1989 Feb;22(2):144–9

Axon regeneration through blood vessel allografts after cyclosporine treatment. Gulati AK. **J Neurosurg** 1989 Jan; 70(1):115–20

Regeneration in the rat optic nerve after cold injury. Murakami M, et al. **J Neurosurg** 1989 Aug;71(2):254–65

Reorganization of neuronal connections following CNS trauma: principles and experimental paradigms. Steward O. **J Neurotrauma** 1989;6(2):99–152 (190 ref.)

Effect of different surgical repair modalities on regeneration of the rabbit mandibular nerve. Eppley BL, et al. **J Oral Maxillofac Surg** 1989 Mar;47(3):257–76

Specificities of afferents reinnervating cat muscle spindles after nerve section. Banks RW, et al. **J Physiol (Lond)** 1989; 408:345–72

Membrane properties of primary sensory neurones of the cat after peripheral reinnervation. Belmonte C, et al. **J Physiol (Lond)** 1988 Nov;405:219–32

Activity-dependent and -independent synaptic interactions during reinnervation of partially denervated rat muscle. Ribchester RR. **J Physiol (Lond)** 1988 Jul;401:53–75

Molecular and cellular aspects of axon–glia interaction in CNS regeneration. Schwartz M, et al. **J Physiol (Paris)** 1987;82(4):314–21

Glial repair in an insect. Treherne JE, et al. **J Physiol (Paris)** 1987;82(4):239–47 (30 ref.)

Experimental repair of spinal cord lesions by grafting from CNS to PNS. Brunelli G, et al. **J Reconstr Microsurg** 1988 Jul;4(4):245–50

The degeneration and regeneration of cutaneous nerves in experimental flaps in rats. Chang CC, et al. **J Reconstr Microsurg** 1989 Apr;5(2):157–62

Comparative electrophysiologic evaluation of nerve grafts and autogenous vein grafts as nerve conduits: an experimental study. Chiu DT, et al. **J Reconstr Microsurg** 1988 Jul;4(4):303–9, 311–2

The effects of electrical stimulation on denervated muscle using implantable electrodes. Nemoto K, et al. **J Reconstr Microsurg** 1988 Jul;4(4):251–5, 257

Revascularization of nerve grafts: an experimental study. Penkert G, et al. **J Reconstr Microsurg** 1988 Jul;4(4):319–25

Neurotization of the remaining latissimus dorsi muscle following muscle flap transplant. Serra JM, et al. **J Reconstr Microsurg** 1988 Oct;4(5):415–20

Vein graft for repair of peripheral nerve gap. Suematsu N, et al. **J Reconstr Microsurg** 1988 Jul;4(4):313–8

Artificial nerve graft compared to autograft in a rat model. Rosen JM, et al. **J Rehabil Res Dev** 1989 Winter;26(1):1–14

Mammalian optic nerve regeneration following the application of electric fields. Politis MJ, et al. **J Trauma** 1988 Nov;28(11):1548–52

Nerve regeneration in cornea after penetrating keratoplasty in rabbit, with special reference to relationship between regenerating nerves and basal laminae. Cho H, et al. **Jpn J Ophthalmol** 1988;32(3):255–63

Regeneration of the eighth cranial nerve. III. Central projections of the primary afferent fibers from individual vestibular receptors in the bullfrog. Newman A, et al. **Laryngoscope** 1989 Feb;99(2):162–73

Biosynthesis of membrane cholesterol during peripheral nerve development, degeneration and regeneration. Yao JK. **Lipids** 1988 Sep;23(9):857–62

Neuron–glial relationship during regeneration of motorneurons. Kreutzberg GW, et al. **Metab Brain Dis** 1989 Mar;4(1):81–5 (35 ref.)

Optic nerve regeneration—new aspects. Solomon A, et al. **Metab Pediatr Syst Ophthalmol** 1988;11(1–2):31–2

Axonal regeneration through peripheral nerve grafts: the effect of proximo–distal orientation. Ansselin AD, et al. **Microsurgery** 1988;9(2):103–13

Regeneration of the rat sciatic nerve after different conditioning lesions: effects of the conditioning interval. Arntz C, et al. **Microsurgery** 1989;10(2):118–21

Experimental nerve reconnection: importance of initial repair. de Medinaceli L, et al. **Microsurgery** 1989; 10(1):56–70

Comparison of sciatic nerve regeneration through silicone tubes and nerve allografts. Gibson KL, et al. **Microsurgery** 1989;10(2):126–9

Comparison of regeneration across a vascularized versus conventional nerve graft: case report. Mackinnon SE, et al. **Microsurgery** 1988;9(4):226–34

Tubulation for peripheral nerve gap: its history and possibility. Suematsu N. **Microsurgery** 1989;10(1):71–4 (48 ref.)

Intracellular transport and neuronal activation of phospholipid and glycoprotein synthesis during axonal regeneration of cranio-spinal nerves. Alberghina M, et al. **Mol Chem Neuropathol** 1989 Jun;10(3):137–55

Brain reaggregate cultures in neurotoxicological investigations: adaptational and neuroregenerative processes following lesions. Atterwill CK. **Mol Toxicol** 1987–88 Fall;1(4):489–502

Therapeutic strategies in promoting peripheral nerve regeneration. Horowitz SH. **Muscle Nerve** 1989 Apr; 12(4):314–22 (71 ref.)

Conduction studies in peripheral cat nerve using implanted electrodes: II. The effects of prolonged constriction on regeneration of crushed nerve fibers. Krarup C, et al. **Muscle Nerve** 1988 Sep;11(9):933–44

Spontaneous reinnervation of a free muscle flap. Sardo MJ, et al. **Muscle Nerve** 1988 Sep;11(9):908–14

Axonal branching following crush lesions of peripheral nerves of rat. Toft PB, et al. **Muscle Nerve** 1988 Aug; 11(8):880–9

The third nerve transection and regeneration in rats with preliminary results on the sixth nerve transection and regeneration in guinea pigs. Fernandez E, et al. **Neurol Res** 1988 Dec;10(4):221–4

Nerve regeneration patterns after acute ischemic injury. Korthals JK, et al. **Neurology** 1989 Jul;39(7):932–7

Increased blood flow enhances axon regeneration after spinal transection. de la Torre JC, et al. **Neurosci Lett** 1988 Dec 5;94(3):269–73

Sprouting of frog motor nerve terminals after long-term paralysis by botulinum type A toxin. Diaz J, et al. **Neurosci Lett** 1989 Jan 16;96(2):127–32

Nerve growth factor (NGF)-treated nitrocellulose enhances and directs the regeneration of adult rat dorsal root axons through intraspinal neural tissue transplants. Houle JD, et al. **Neurosci Lett** 1989 Aug 14;103(1):17–23

The conditioning effect of optic nerve injury upon axonal regrowth from adult rat retinal ganglion cells explanted in vitro. Johnson AR, et al. **Neurosci Lett** 1989 Feb 13; 97(1–2):63–8

Mismatches between peripheral receptor type and central projections after peripheral nerve regeneration. Koerber HR, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):67–72

Lack of axon regeneration of isthmic neurons in juvenile Xenopus. McCart R, et al. **Neurosci Lett** 1988 Oct 5; 92(2):143–8

Axotomy induces MHC class I antigen expression on rat nerve cells. Maehlen J, et al. **Neurosci Lett** 1988 Sep 23; 92(1):8–13

Motoneurons reinnervate skeletal muscle after ventral root implantation into the spinal cord of the cat. Cullheim S, et al. **Neuroscience** 1989;29(3):725–33

Partial denervation of the rat soleus muscle at two different developmental stages. Fisher TJ, et al. **Neuroscience** 1989; 28(3):755–63

Developmental and regeneration-associated regulation of the limbic system associated membrane protein in explant cultures of the rat brain. Keller F, et al. **Neuroscience** 1989; 28(2):455–74

Monoclonal antibody immunohistochemistry of degenerative and renewal patterns in rabbit olfactory receptor neurons following unilateral olfactory bulbectomy. Onoda N. **Neuroscience** 1988 Sep;26(3):1013–22

Neurofilament elongation into regenerating facial nerve axons. Tetzlaff W, et al. **Neuroscience** 1989;29(3):659–66

Connectivity of striatal grafts implanted into the ibotenic acid-lesioned striatum—II. Cortical afferents. Wictorin K, et al. **Neuroscience** 1989;30(2):297–311

Monoclonal antibody G10 against microtubule-associated protein 1x distinguishes between growing and regenerating axons. Woodhams PL, et al. **Neuroscience** 1989;28(1):49–59

Degenerative and regenerative processes in the peripheral nerve after disconnection and reanastomosis using the Neodym Yag laser. Mewe R, et al. **Neurosurg Rev** 1989; 12(2):151–6

Direct nerve implantation vs. nerve-muscle pedicle: a comparative study of reinnervation in the rabbit. Broniatowski M, et al. **Otolaryngol Head Neck Surg** 1989 Feb;100(2):126–33

Excitation thresholds for nerve pedicles: a preliminary report. Broniatowski M, et al. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):578–82

Effects of fibrin glue on rat facial nerve regeneration. Medders G, et al. **Otolaryngol Head Neck Surg** 1989 Feb; 100(2):106–9

Destabilization of junctional ACh receptors by a reinnervating frog motor nerve. Aframian D, et al. **P R Health Sci J** 1988 Aug;7(2):80–6

Alteration of identified output synapses spared by axotomy. Titmus MJ, et al. **P R Health Sci J** 1988 Aug;7(2):181–2

De- and regeneration of axons after minor lesions in the rat sciatic nerve. Effects of microneurography electrode penetrations. Fried K, et al. **Pain** 1989 Jan;36(1):93–102

The mathematical framework essential for magneto-therapy in the treatment of genomic and associated disorders, including cancer, AIDS, and CNS regeneration. Jacobson JI. **Panminerva Med** 1989 Jan–Mar;31(1):1–7

Spinal cord regeneration: new experimental approach. Khalili AH, et al. **Paraplegia** 1988 Oct;26(5):310–6

Functional evaluation of complete sciatic, peroneal, and posterior tibial nerve lesions in the rat. Bain JR, et al. **Plast Reconstr Surg** 1989 Jan;83(1):129–38

An alternative to the classical nerve graft for the management of the short nerve gap. Dellon AL, et al. **Plast Reconstr Surg** 1988 Nov;82(5):849–56

Peripheral nerve damage facilitates functional innervation of brain grafts in adult sensory cortex. Ebner FF, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):730–4

The use of a semi-permeable tube as a guidance channel for a transected rabbit optic nerve. Aebischer P, et al. **Prog Brain Res** 1988;78:599–603

Reinnervation of skin by polymodal nociceptors in rats. Bharali LA, et al. **Prog Brain Res** 1988;74:247–51

Culture preparations of neuroglial cells useful for studies of myelin repair and axonal regeneration in the central nervous system. Bunge RP, et al. **Prog Brain Res** 1988; 78:321–6 (24 ref.)

Mammalian root-spinal cord regeneration. Carlstedt T, et al. **Prog Brain Res** 1988;78:225–9 (20 ref.)

Central nervous system regeneration: oligodendrocytes and myelin as non-permissive substrates for neurite growth. Caroni P, et al. **Prog Brain Res** 1988;78:363–70 (34 ref.)

Intraocular spinal cord grafts: a model system for morphological and functional studies of spinal regeneration. Henschen A, et al. **Prog Brain Res** 1988;78:187–91

Functional reinnervation of a denervated skeletal muscle of the adult rat by axons regenerating from the spinal cord through a peripheral nervous system graft. Horvat JC, et al. **Prog Brain Res** 1988;78:219–24

The expression of sensory receptors on regenerating and regenerated cutaneous C fibres. Leah J, et al. **Prog Brain Res** 1988;74:341–8 (47 ref.)

The site and distribution of mechanoreceptors in the periodontal ligament of the cat represented in the mesencephalic nucleus and their possible regeneration following tooth extraction. Linden RW, et al. **Prog Brain Res** 1988;74:231–6

The reinnervation of denervated skin. Munger BL. **Prog Brain Res** 1988;74:259–62 (22 ref.)

Fetal brain grafts promote axon regeneration and survival of adult rat retinal ganglion cells. Sievers J, et al. **Prog Brain Res** 1988;78:371–6

Reinnervation of denervated skeletal muscle by central nerve fibers regenerating along replanted ventral roots. Smith KJ, et al. **Prog Brain Res** 1988;78:193–8

Regeneration of retinal ganglion cell axons in adult mammals. So KF. **Prog Brain Res** 1988;74:277–83 (33 ref.)

Enhancement of adult dorsal root regeneration by embryonic spinal cord transplants. Tessler A, et al. **Prog Brain Res** 1988;78:213–8

Plasticity in the neocortex: mechanisms underlying recovery from early brain damage. Kolb B, et al. **Prog Neurobiol** 1989;32(4):235–76 (150 ref.)

Vagal gastric efferent activity and its reflex changes in conscious sheep. Dalal A, et al. **Q J Exp Physiol** 1989 May; 74(3):277–89

Neural consequences of partial toe amputation in chickens. Gentle MJ, et al. **Res Vet Sci** 1988 Nov;45(3):374–6

Critical periods in the development of motoneurons. Harris AJ. **Rev Neurol (Paris)** 1988;144(11):643–7

Peripheral nerve regeneration in Gore-tex chambers. Danielsen N, et al. **Scand J Plast Reconstr Surg Hand Surg** 1988;22(3):207–10

Axonal regeneration and growth direction in square-shaped mesothelial chambers. Nachemson AK. **Scand J Plast Reconstr Surg Hand Surg** 1988;22(3):199–206

The morphological sequences in man of de- and reinnervation in free muscle transfer with microneurovascular anastomoses. Oldfors A, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(1):35–42

Degeneration and regrowth of adrenergic nerves after microvascular anastomosis. A fluorescence histochemical study on end-to-end anastomoses of femoral vessels in the rat. Waris T, et al. **Scand J Plast Reconstr Surg Hand Surg** 1988;22(3):211–6

Adrenergic innervation of aortic patch-grafts in rats. Waris T, et al. **Scand J Plast Reconstr Surg Hand Surg** 1988; 22(3):217–21

Nerve regeneration. Selzer ME. **Semin Neurol** 1987 Mar; 7(1):88–96 (89 ref.)

End-structure of afferent axons injured in the peripheral and central nervous system. Fried K, et al. **Somatosens Mot Res** 1988;6(1):79–99

Development of Merkel cell populations with contrasting sensitivities to neonatal deafferentation in the rat whisker pad. Nurse CA, et al. **Somatosens Mot Res** 1988;6(2):141–62

Abnormal impulse discharge in primary afferent axons injured in the peripheral versus the central nervous system. Papir-Kricheli D, et al. **Somatosens Mot Res** 1988; 6(1):63–77

Spontaneous activity in afferent and efferent fibers after chronic axotomy: response to potassium channel blockade. Russell LC, et al. **Somatosens Mot Res** 1988;6(2):163–77

Ultrastructural changes in acetylcholinesterase activity in the deafferented spinal trigeminal nucleus. Wilson FR, et al. **Synapse** 1988;2(4):341–52

Behavioral recovery following spinal transection: functional regeneration in the lamprey CNS. Cohen AH, et al. **Trends Neurosci** 1988 May;11(5):227–31 (44 ref.)

Is there a correlation between continuous neurogenesis and directed axon regeneration in the vertebrate nervous system? [published erratum appears in Trends Neurosci 1988 Jun;11(6):277] Holder N, et al. **Trends Neurosci** 1988 Mar;11(3):94–9 (74 ref.)

Multiple modes and sites for the induction of axonal growth. Rotshenker S. **Trends Neurosci** 1988 Aug;11(8):363–6 (38 ref.)

Regeneration of sensory hair cells in the vertebrate inner ear [news] [published erratum appears in Trends Neurosci 1988 Oct;11(10):430] Swanson GJ. **Trends Neurosci** 1988 Aug;11(8):339–42 (26 ref.)

Retinal ganglion cell death is not prevented by application of tetrodotoxin during optic nerve regeneration in the frog Hyla moorei. Sheard PW, et al. **Vision Res** 1988; 28(4):461–70

Transplantation of human embryonic nerve tissue into a schizophrenic's brain. Kolařík J, et al. **Zentralbl Neurochir** 1988;49(3):147–50

[Acupuncture promote regeneration of rat's peripheral nerve] Wei YE, et al. **Chen Tzu Yen Chiu** 1988;13(4):358–61 (Eng. Abstr.) **(Chi)**

[Scanning electron microscopic observation on rat sciatic nerve during regeneration] Gan SD, et al. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Jun;17(2):130–2 (Eng. Abstr.) **(Chi)**

[Advances in the research on regenerative chemotropism of peripheral nerves] Zhao Q, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Aug;26(8):451–4 (30 ref.) **(Chi)**

[Toxic effect of fluid accumulated within silicone regeneration chambers on the survival and proliferation of fibroblasts of the heart of newborn rats] Hurtado H, et al. **C R Acad Sci [III]** 1988;307(3):129–32 (Eng. Abstr.) **(Fre)**

[Preliminary study on nerve regeneration through an autologous venous tube] Pirenne J, et al. **C R Soc Biol (Paris)** 1988;182(1):126–35 (Eng. Abstr.) **(Fre)**

[The effect of central and peripheral neuroglia on the regeneration of the optic nerve] Thanos S, et al. **Fortschr Ophthalmol** 1989;86(2):172–5 (Eng. Abstr.) **(Ger)**

[Results following primary nerve sutures] Mailänder P, et al. **Handchir Mikrochir Plast Chir** 1988 Nov;20(6):342–3 (Eng. Abstr.) **(Ger)**

[Animal experiment studies of collateral reinnervation of denervated laryngeal musculature] Martin F. **Laryngol Rhinol Otol (Stuttg)** 1989 Jan;68(1):57–61 (Eng. Abstr.) **(Ger)**

[Experimental studies in animals of the regeneration of peripheral nerves] Freund E, et al. **Z Exp Chir Transplant Kunstliche Organe** 1988;21(5):285–96 (Eng. Abstr.) **(Ger)**

[Age influence on the maturation process of the mechanism of spontaneous release of acetylcholine after nerve regeneration] Bruno C, et al. **Boll Soc Ital Biol Sper** 1988 Sep;64(9):841–3 **(Ita)**

[Role of vitamin E in muscle reinnervation after nerve injury: effect of its deficiency on multiple innervation] Bruno C, et al. **Boll Soc Ital Biol Sper** 1988 Sep;64(9):865–8 (Eng. Abstr.) **(Ita)**

[A clinical study on the morphological restoration of the spinal cord in cervical myelopathy by CT-myelography and ultrasonography] Kawakami N. **Nippon Seikeigeka Gakkai Zasshi** 1988 Nov;62(11):951–64 (Eng. Abstr.) **(Jpn)**

[Regeneration of the rat sciatic nerve after various experimental lesions (morphologic and morphometric analysis)] Miroshnikova ME, et al. **Arkh Anat Gistol Embriol** 1988 Oct;95(10):30–5 (Eng. Abstr.) **(Rus)**

[Neurolemmocytes and the problem of regenerating damaged nerves] Sotnikov OS, et al. **Arkh Anat Gistol Embriol** 1989 Jan;96(1):87–99 (123 ref.) **(Rus)**

[The role of reinnervation of the stomach in the development of recurrent ulcers] Savinskiĭ GA, et al. **Vestn Khir** 1989 Mar;142(3):38–40 (Eng. Abstr.) **(Rus)**

[Experimental basis for the reinnervation of the larynx with median stenoses] Antoniv VF, et al. **Vestn Otorinolaringol** 1988 Nov-Dec;(6):37–43 (Eng. Abstr.) **(Rus)**

[Regeneration of the rabbit sciatic nerve after its dissection and the use of various surgical methods] Akoev GN, et al. **Zh Vopr Neirokhir** 1988 Nov-Dec;(6):32–7 (Eng. Abstr.) **(Rus)**

[Neurovascular autoregulation of the regeneration of nerves in the upper extremities] Krupatkin AI. **Zh Vopr Neirokhir** 1989 Jan-Feb;(1):35–9 (Eng. Abstr.) **(Rus)**

[Neurotization with autoplasty of the ulnar nerve in simultaneous injuries of the brachial plexus and ulnar nerve]

Stashkevich A. **Zh Vopr Neirokhir** 1989 Jan-Feb;(1):56-7 **(Rus)**

[Neurotrophic factors and nerve regeneration—an overview] Danielsen N. **Lakartidningen** 1989 May 31;86(22):2106-7 (15 ref.) **(Swe)**

[Regulation of the supply of nerve growth factor results in good development of neural graft] Ebendal T. **Lakartidningen** 1989 Mar 22;86(12):1074 **(Swe)**

DRUG EFFECTS

Orthograde and retrograde axonal transport in the regenerating frog sciatic nerve show different sensitivities to vanadate. Edström A, et al. **Acta Physiol Scand** 1988 Nov;134(3):437-41

Influence of ganglioside treatment on acrylamide neuropathy in mice. A morphometric study. Stotzem CD, et al. **Arzneimittelforschung** 1988 Nov;38(11):1563-7

Effects of physostigmine and d-amphetamine on the behavior of rats with selective fimbria-fornix lesions and intrahippocampal fetal septal cell transplants. Cassel JC, et al. **Behav Neural Biol** 1988 Sep;50(2):229-39

Attenuation of nucleus basalis of Meynert lesion-induced cholinergic deficits by nerve growth factor. Haroutunian V, et al. **Brain Res** 1989 May 15;487(1):200-3

Insulin-like growth factor I (IGF-I) stimulates regeneration of the rat sciatic nerve. Kanje M, et al. **Brain Res** 1989 May 8;486(2):396-8

Effects of growth hormone treatment on the regeneration of rat sciatic nerve. Kanje M, et al. **Brain Res** 1988 Dec 20;475(2):254-8

Insulin-like growth factor (IGF-1) as a stimulator of regeneration in the freeze-injured rat sciatic nerve. Sjöberg J, et al. **Brain Res** 1989 Apr 17;485(1):102-8

Survival of motoneurons following axotomy is enhanced by lactation or by progesterone treatment. Yu WH. **Brain Res** 1989 Jul 10;491(2):379-82

Peripheral nerve regeneration in quail-chick spinal cord chimeras treated with oral ciclosporin. Uzman BG, et al. **Dev Neurosci** 1989;11(1):65-75

Ganglioside treatment and improved axonal regeneration capacity in experimental diabetic neuropathy. Triban C, et al. **Diabetes** 1989 Aug;38(8):1012-22

Effect of ethanol on the maturation of the spontaneous transmitter release by regenerated nerve endings. Cuppini R. **Drug Alcohol Depend** 1989 Jan;23(1):87-92

Antagonism by tubocurarine and verapamil of the regenerative acetylcholine release from mouse motor nerve. Hong SJ, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):11-7

Cobalt-complex ATP enhanced regeneration in the dorsal horn of the rat spinal cord. Ferencsik M, et al. **Exp Brain Res** 1989;76(2):409-16

Enhanced sprouting of retinotectal fibers after early superior colliculus lesions in hamsters treated with gangliosides. Sabel BA, et al. **Exp Brain Res** 1988;71(2):365-76

Facial nerve regeneration in the silicone chamber: the influence of nerve growth factor. Chen YS, et al. **Exp Neurol** 1989 Jan;103(1):52-60

Nerve growth factor enhances regeneration through silicone chambers. Rich KM, et al. **Exp Neurol** 1989 Aug; 105(2):162-70

Glucocorticoid suppression of lesion-induced synaptogenesis: effect of temporal manipulation of steroid treatment. Scheff SW, et al. **Exp Neurol** 1989 Sep;105(3):260-4

Experimental studies in animals on the use of a fibrin glue from the human plasma fraction Cohn I in nerve reconstruction. Hamm KD, et al. **Folia Haematol (Leipz)** 1988;115(1-2):208-12

Taurine effect on neuritic growth from goldfish retinal explants. Lima L, et al. **Int J Dev Neurosci** 1988;6(5):417-24

The interaction of substrate and taurine modulates the outgrowth from regenerating goldfish retinal explants. Lima L, et al. **Int J Dev Neurosci** 1989;7(4):375-82

Microencapsulated monosialoganglioside GM1: physical properties and in vivo effects. Maysinger D, et al. **J Microencapsul** 1989 Jan-Mar;6(1):35-42

Axonal sprouting after botulinum toxin does not elicit a histological axon reaction. Pamphlett R. **J Neurol Sci** 1988 Nov;87(2-3):175-85

Nerve growth factors (NGF, BDNF) enhance axonal regeneration but are not required for survival of adult sensory neurons. Lindsay RM. **J Neurosci** 1988 Jul; 8(7):2394-405

A new approach for the evaluation of recovery after peripheral nerve damage. van der Hoop RG, et al. **J Neurosci Methods** 1988 Dec;26(2):111-6

Basic fibroblast growth factor released from synthetic guidance channels facilitates peripheral nerve regeneration across long nerve gaps. Aebischer P, et al. **J Neurosci Res** 1989 Jul;23(3):282-9

Fibroblast growth factor effects on peripheral nerve regeneration in a silicone chamber model. Danielsen N, et al. **J Neurosci Res** 1988 Jul;20(3):320-30

Reversibility and prevention of intraspinal peptidergic loss caused by sciatic nerve lesions. Di Giulio AM, et al. **J Neurosci Res** 1989 Jan;22(1):92-6

Basic fibroblast growth factor and nerve growth factor administered in gel foam rescue medial septal neurons after fimbria fornix transection. Otto D, et al. **J Neurosci Res** 1989 Jan;22(1):83-91

Effect of nerve growth factor on the elongation of neurites from axotomized rat embryonic septal-basal forebrain neurons: an in vitro analysis. Schinstine M, et al. **J Neurosci Res** 1989 Aug;23(4):371-83

Pharmacologic enhancement of functional recovery in free muscle transfers. Klein HW, et al. **J Reconstr Microsurg** 1988 Jul;4(4):277-81, 283-4

Factors influencing regeneration of retinal ganglion cell axons in adult mammals. Thanos S, et al. **Metab Brain Dis** 1989 Mar;4(1):67-72

Enhancement of peripheral nerve regeneration by pharmacological activation of the cyclic AMP second messenger system. Klein HW, et al. **Microsurgery** 1989; 10(2):122-5 (26 ref.)

Org.2766 stimulates collateral sprouting in the soleus muscle of the rat following partial denervation. de Koning P, et al. **Muscle Nerve** 1989 May;12(5):353-9

Effects of L-carnitine, L-acetylcarnitine and gangliosides on the regeneration of the transected sciatic nerve in rats. Fernandez E, et al. **Neurol Res** 1989 Mar;11(1):57-62

Ability of adult rat ganglion cells to regrow axons in vitro can be influenced by fibroblast growth factor and gangliosides. Bähr M, et al. **Neurosci Lett** 1989 Jan 16; 96(2):197-201

Immunohistochemical and autoradiographic studies on retinal regeneration in teleost fish. Negishi K, et al. **Neurosci Res Suppl** 1988;8:S43-57

The peripheral nerve allograft: an assessment of regeneration across nerve allografts in rats immunosuppressed with cyclosporin A. Bain JR, et al. **Plast Reconstr Surg** 1988 Dec;82(6):1052-66

Acidic fibroblast growth factor enhances peripheral nerve regeneration in vivo. Cordeiro PG, et al. **Plast Reconstr Surg** 1989 Jun;83(6):1013-9; discussion 1020-1

Exogenous laminin induces regenerative changes in traumatized sciatic and optic nerve. Politis MJ. **Plast Reconstr Surg** 1989 Feb;83(2):228-35

Neuromuscular recovery using calcium protease inhibition after median nerve repair in primates. Badalamente MA, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5983-7

ACTH modulation of nerve development and regeneration. Strand FL, et al. **Prog Neurobiol** 1989;33(1):45-85 (289 ref.)

Neurite growth inhibition by CNS myelin proteins: a mechanism to confine fiber tracts? Chiquet M. **Trends Neurosci** 1989 Jan;12(1):1-3 (17 ref.)

[Effects of acetylcholinesterase inhibitors on the process of reinnervation of the mouse skeletal muscle] Balezina OP, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):490-2 (Eng. Abstr.) **(Rus)**

[The effect of the opioid peptide dalargin on the regeneration of the rat sciatic nerve] Akoev GN, et al. **Fiziol Zh SSSR** 1989 Jan;75(1):33-7 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

New biological phenomena associated with laser radiation. Belkin M, et al. **Health Phys** 1989 May;56(5):687-90 (25 ref.)

Systemic effects of low-power laser irradiation on the peripheral and central nervous system, cutaneous wounds, and burns. Rochkind S, et al. **Lasers Surg Med** 1989; 9(2):174-82

Effect of laser radiation on post-traumatic restoration of interneuronal connections of the sympathetic trunk. Rakhishev AR, et al. **Neurosci Behav Physiol** 1989 May-Jun;19(3):203-7

Effect of a high-intensity static magnetic field on sciatic nerve regeneration in the rat. Cordeiro PG, et al. **Plast Reconstr Surg** 1989 Feb;83(2):301-8

[The rate of repair of a radiation lesion of the central nervous system during protracted and fractionated irradiation] Malakhovskii VN, et al. **Radiobiologiia** 1989 May-Jun; 29(3):384-8 (Eng. Abstr.) **(Rus)**

NERVE TISSUE

ANALYSIS

Lipids from nerve tissues of the horseshoe crab, Limulus polyphemus. Lee RF, et al. **Comp Biochem Physiol [B]** 1979;64(4):375-9

Axolinin localization in the nervous tissue of squid revealed by monoclonal antibodies specific for axolinin: characterization of monoclonal antibodies against axolinin. Arai T, et al. **Hybridoma** 1988 Dec;7(6):583-93

In situ elemental analysis and visualization in cryofixed nervous tissues. X-ray microanalytical investigations of embryological and mature brain, inner ear, photoreceptors, muscle and muscle spindles. Comparison of preparation methods for analysis and visualization at cellular and subcellular levels. Wróblewski R. **J Microsc** 1989 Jul;155 (Pt 1):81-112 (67 ref.)

Possible involvement of polysialogangliosides in nerve sprouting and cell contact formation: an ultracytochemical in vitro study. Seybold V, et al. **J Neurochem** 1989 Jun; 52(6):1958-61

Neural cadherin: role in selective cell-cell adhesion. Miyatani S, et al. **Science** 1989 Aug 11;245(4918):631-5

ANATOMY & HISTOLOGY

The anatomic relationship between the long saphenous vein and the saphenous nerve. Relevance for radical varicose vein surgery. Holme JB, et al. **Acta Chir Scand** 1988 Nov-Dec;154(11-12):631-3

Delayed muscle fiber transformation after foreign-reinnervation of excessive muscle tissue. Käser L, et al. **Anat Rec** 1989 Mar;223(3):347-55

BLOOD SUPPLY

[Neurofunctional disturbances as related to cortical ischemia and white matter ischemia] Kataoka K, et al. **No To Shinkei** 1989 Feb;41(2):117-24 (Eng. Abstr.) **(Jpn)**

CYTOLOGY

Development and advantages of serum-free, chemically defined nutrient media for culturing of nerve tissue. Romijn HJ. **Biol Cell** 1988;63(3):263-8 (39 ref.)

Comparative aspects of cell osmoregulation and volume control. Gilles R. **Renal Physiol Biochem** 1988 May-Oct; 11(3-5):277-88 (73 ref.)

DRUG EFFECTS

The actions of neutral anaesthetics on ion conductances of nerve membranes. Elliott JR, et al. **Biochim Biophys Acta** 1989 May 9;988(2):257-86 (118 ref.)

EMBRYOLOGY

Human fetal dopamine neurons grafted into the striatum in two patients with severe Parkinson's disease. A detailed account of methodology and a 6-month follow-up. Lindvall O, et al. **Arch Neurol** 1989 Jun;46(6):615-31

Appearance and distribution of acetylcholinesterase activity in the developing nervous tissues in rat embryos. Gunawan A, et al. **Kobe J Med Sci** 1988 Dec;34(6):249-61

[The differentiation characteristics of neural derivatives in rat teratomas] Dyban PA. **Ontogenez** 1989 Mar-Apr; 20(2):204-8 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Immunodetection of Na,K-ATPase alpha 3-isoform in renal and nerve tissues. Arystarkhova EA, et al. **FEBS Lett** 1989 Jul 3;250(2):545-8

Neuropeptide-metabolizing peptidases of nervous tissue [letter] Camargo AC. **J Neurochem** 1989 Jul;53(1):315-6

GROWTH & DEVELOPMENT

N-cadherin: a cell adhesion molecule in neural development [news] Rutishauser U. **Trends Neurosci** 1989 Aug; 12(8):275-6

IMMUNOLOGY

F1-160. A surface antigen of Trypanosoma cruzi that mimics mammalian nervous tissue. Van Voorhis WC, et al. **J Exp Med** 1989 Mar 1;169(3):641-52

Localization of neural epitopes that bind to IgM monoclonal autoantibodies (M-proteins) from two patients with motor neuron disease. Thomas FP, et al. **J Neuroimmunol** 1989 Jan;21(1):31-9

METABOLISM

Comparative effects of chronic exposure to ethanol and calcium channel antagonists on calcium channel antagonist receptors in cultured neural (PC12) cells. Marks SS, et al. **J Neurochem** 1989 Jul;53(1):168-72

Structural specificity of sugar transport at the blood-nerve barrier. Rechthand E, et al. **J Neurochem** 1989 Jul; 53(1):119-23

Heparin and heparan sulfate partially inhibit induction of acetylcholine receptor accumulation by nerve in Xenopus culture. Hirano Y, et al. **J Neurosci** 1989 May;9(5):1555-61

[An external oxidation pathway in nerve tissue] Luk'ianova LD, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):431-3 **(Rus)**

[Disorders of nervous trophism and nerve cell plasticity as factors in the development and compensation of pathological processes in nervous system diseases] Gekht BM, et al. **Vestn Akad Med Nauk SSSR** 1988;(11):26-34 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Restoration and deterioration of function by brain grafts in the septohippocampal system. Buzsáki G, et al. **Prog Brain Res** 1988;78:69-77 (24 ref.)

Trophic effects of fibroblast growth factor on neural tissue. Walicke PA, et al. **Prog Brain Res** 1988;78:333-8 (26 ref.)

[The neurotrophic role of thiamine] Romanenko AV. **Usp Fiziol Nauk** 1988 Jul-Sep;19(3):99-110 (82 ref.) **(Rus)**

RADIATION EFFECTS

Distribution of phosphate-independent MAP2 epitopes revealed with monoclonal antibodies in microwave-denatured human nervous system tissues. Trojanowski JQ, et al. **J Neurosci Methods** 1989 Aug; 29(2):171-80

RADIOGRAPHY

Perineural spread of nasopharyngeal carcinoma: radiological and CT demonstration. Pandolfo I, et al. **Eur J Radiol** 1988 Nov;8(4):231-5

TRANSPLANTATION

Brain "transplants", neurotrophic factors and behavior. Russell RW. **Alzheimer Dis Assoc Disord** 1988;2(2):77–95 (124 ref.)

Brain transplantation in genetic analysis of experimental allergic encephalomyelitis. Lublin FD, et al. **Ann N Y Acad Sci** 1988;540:252–4

The overshoot effect of intracerebral transplants [letter] Cassel JC, et al. **Ann Neurol** 1988 Nov;24(5):695–6

Electrophysiological and pharmacological properties of neurons within solid basal forebrain transplants in the rat brain. Bassant MH, et al. **Brain Res** 1988 Sep 13;460(1):8–16

In vivo microscopy of the cerebral microcirculation using neonatal allografts in hamsters. Joyner WL, et al. **Circ Res** 1988 Oct;63(4):758–66

Fetal substantia nigra grafts. Effect on dopamine receptors in the rat corpus striatium. Korfali E, et al. **Cleve Clin J Med** 1989 May;56(3):259–62

CNS transplantation: a treatment for Parkinson's disease? Sweeney PJ. **Cleve Clin J Med** 1989 May;56(3):287–9 (12 ref.)

Treatment of Parkinson's disease in adult patients by transplantation of human fetal brain tissue obtained from elective abortions. Michejda M. **Fetal Ther** 1987; 2(3):129–34

Combined method of fluorescence tracer technique and PAP immunohistochemistry for discrimination of the transplanted cells. Tanabe T, et al. **Histochemistry** 1989; 91(3):191–4

Extension of the critical period for developmental plasticity of the corticospinal pathway. Bregman BS, et al. **J Comp Neurol** 1989 Apr 15;282(3):355–70

Implantation of rabbit embryo brain fragments into newborn mice: integration and survival of xenogeneic astrocytes. Suard IM, et al. **J Neurosci Res** 1989 Jun;23(2):172–9

Neural transplantation for Parkinson's disease [letter] Bakay RA, et al. **J Neurosurg** 1988 Nov;69(5):807–10

Implantation of tissue into the brain. An immunologic perspective. Gill TJ 3d, et al. **JAMA** 1989 May 12; 261(18):2674–6 (18 ref.)

Fetal brain transplantation for Parkinson's disease: technique for obtaining donor tissue [letter] Gustavii B. **Lancet** 1989 Mar 11;1(8637):565

Fetal brain tissue [letter] Hill DJ. **Lancet** 1989 Jun 10; 1(8650):1330

Fetal brain tissue [letter] Hitchcock ER, et al. **Lancet** 1989 Apr 15;1(8642):839

Hispanic registry of graft procedures for Parkinson's disease [letter] Madrazo I, et al. **Lancet** 1989 Sep 23;2(8665):751–2

Facial nerve function following irradiated cable grafts. McGuirt WF, et al. **Laryngoscope** 1989 Jan;99(1):27–34

Intracerebral neural grafting. Manole E. **Neurol Psychiatr (Bucur)** 1988 Jul–Sep;26(3):135–52

Transplantation of fetal brain tissue. Some possibilities for neurobehavioral toxicology. Woodruff ML. **Pavlov J Biol Sci** 1988 Oct–Dec;23(4):143–57 (79 ref.)

Transplantation into the mammalian CNS. Proceedings of the Schmitt Symposium. June 30–July 3, 1987, Rochester, New York. **Prog Brain Res** 1988;78:1–663

Delayed stereotactic transplantation technique in non–human primates. Bakay RA, et al. **Prog Brain Res** 1988;78:463–71

The role of trophic factors in behavioral recovery and integration of transplants. Cotman CW, et al. **Prog Brain Res** 1988;78:311–9 (28 ref.)

Immunologic response to intracerebral fetal neural allografts in the rhesus monkey. Fiandaca MS, et al. **Prog Brain Res** 1988;78:287–96

Immunocytochemical characterization of the cellular immune response to intracerebral xenografts of brain tissue. Finsen B, et al. **Prog Brain Res** 1988;78:261–70

Intraventricular brain allografts and xenografts: studies of survival and rejection with and without systemic sensitization. Freed WJ, et al. **Prog Brain Res** 1988; 78:233–41 (17 ref.)

Defining the mechanisms that govern immune acceptance or rejection of neural tissue. Lampson LA, et al. **Prog Brain Res** 1988;78:243–7

The protein F1/protein kinase C module and neurite growth: potential pathway for facilitating brain transplantation. Nelson RB, et al. **Prog Brain Res** 1988;78:339–45 (41 ref.)

A phenotypic analysis of T lymphocytes isolated from the brains of mice with allogeneic neural transplants. Nicholas MK, et al. **Prog Brain Res** 1988;78:249–59

Immunological implications of xenogeneic and allogeneic transplantation to neonatal rats. Rao K, et al. **Prog Brain Res** 1988;78:281–6 (31 ref.)

Blood–brain and blood–cerebrospinal fluid alterations following neural transplantation. Rosenstein JM, et al. **Prog Brain Res** 1988;78:297–302

Human fetal catecholamine-containing tissues grafted intraocularly and intracranially to immuno-compromised rodent hosts. Seiger A, et al. **Prog Brain Res** 1988;78:449–55

Fetal brain grafts promote axon regeneration and survival of adult rat retinal ganglion cells. Sievers J, et al. **Prog Brain Res** 1988;78:371–6

Fetal dopamine neural grafts: extended reversal of methylphenyltetrahydropyridine–induced parkinsonism in monkeys. Sladek JR Jr, et al. **Prog Brain Res** 1988; 78:497–506

Fetal brain tissue transplants and recovery of locomotion following damage to sensorimotor cortex in rats. Slavin MD, et al. **Prog Brain Res** 1988;78:33–8

Central nervous system grafts of nerve growth factor–rich tissue as an alternative source of trophic support for axotomized cholinergic neurons. Springer JE, et al. **Prog Brain Res** 1988;78:401–7

Immunological aspects of neural grafting in the mammalian central nervous system. Widner H, et al. **Prog Brain Res** 1988;78:303–7

An improved procedure for pressure–free insertion of tissue into the central nervous system. Wyatt RJ, et al. **Prog Brain Res** 1988;78:625–9

Caution continues over transplants [news] Lewin R. **Science** 1988 Dec 9;242(4884):1379

Central nervous system grafting in the treatment of parkinsonism. Bakay RA, et al. **Stereotact Funct Neurosurg** 1989;53(1):1–20 (52 ref.)

Toluene exposure during maturation of intraocular brain tissue transplants: alterations of host and graft cerebellar Purkinje neuron function and sensitivity to norepinephrine. Granholm AC, et al. **Toxicol Appl Pharmacol** 1988 Nov; 96(2):296–304

Neural transplantation in the cerebral ventricular system. Scott DE, et al. **Va Med** 1988 Nov;115(11):536–42

[Initial experience with clinical transplantation of embryonic tissue into the brain of recipients] Kolařík J, et al. **Cas Lek Cesk** 1988 Aug 19;127(34):1076–9 (Eng. Abstr.) (Cze)

[The first transplantation of embryonic nerve tissue into the brain in schizophrenia] Kolařík J, et al. **Cesk Neurol Neurochir** 1989 Mar;52(2):95–7 (Eng. Abstr.) (Cze)

[Stereotaxic transplantation of human embryonic nerve tissue into the brain in schizophrenia] Kolařík J, et al. **Cesk Psychiatr** 1988 Dec;84(6):361–4 (Eng. Abstr.) (Cze)

[Supplementation of neurohormone and neurotransmitter deficiency in CNS neural transplantation. The present state and perspectives] Pospíšilová B, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1988;31(4):477–87 (59 ref.) (Eng. Abstr.) (Cze)

[Transplantation of cells to the brain in the treatment of Parkinson's disease (letter)] Hogenesch RI, et al. **Ned Tijdschr Geneeskd** 1989 Apr 22;133(16):844 (Dut)

[Homografts in the human brain. Current data] Gautier JC. **Bull Acad Natl Med** 1989 Jan;173(1):17–22; discussion 23–5 (33 ref.) (Eng. Abstr.) (Fre)

[Recent progress in neurosurgery] Antunes JL. **Acta Med Port** 1988 Jul–Dec;1(4–6):285–90 (6 ref.) (Eng. Abstr.) (Por)

[Results of transplanting regions of the midbrain of human embryos into the brain of adult rats] Vasileshnikova IP, et al. **Arkh Anat Gistol Embriol** 1988 Jun;94(6):16–20 (Eng. Abstr.) (Rus)

[Normalization of RNA synthesis in the rat cerebral cortex after hypoxia by transplantation of embryonal nerve tissue] Polezhaev LV, et al. **Doki Akad Nauk SSSR** 1988; 300(6):147–81 (Rus)

[Quantitative and qualitative changes in protein biosynthesis induced by hypoxia and transplantation of embryonic nerve tissue into the brain of adult mammals] Vitvitskiĭ VN, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Mar–Apr;(2):285–90 (Eng. Abstr.) (Rus)

[Changes in the brain neurons of the recipient around an embryonic nerve tissue transplant] Kleshchinov VN. **Ontogenez** 1989 Mar–Apr;20(2):216–20 (Eng. Abstr.) (Rus)

[Electron microscopic research on the manifestations of transport–metabolic interactions in intraocular nerve tissue grafts] Zhuravleva ZN. **Tsitologiia** 1989 Jan;31(1):42–8 (Eng. Abstr.) (Rus)

[DNA and protein synthesis in the cells of the rat cerebral cortex after hypoxia and the transplantation of embryonic nerve tissue] Vitvitskiĭ VN. **Zh Obshch Biol** 1988 May–Jun; 49(3):355–64 (Eng. Abstr.) (Rus)

[Ethical aspects of the cellular treatment of Parkinson disease] Arlebrink J. **Lakartidningen** 1988 Sep 21;85(38):3073–4 (Swe)

[Regulation of the supply of nerve growth factor results in good development of neural graft] Ebendal T. **Lakartidningen** 1989 Mar 22;86(12):1074 (Swe)

ULTRASTRUCTURE

[Electron microscopic research on the manifestations of transport–metabolic interactions in intraocular nerve tissue grafts] Zhuravleva ZN. **Tsitologiia** 1989 Jan;31(1):42–8 (Eng. Abstr.) (Rus)

[A simplified method of preparing a nerve tissue culture for electron microscopy purposes] Buravlev VM, et al. **Zh Nevropatol Psikhiatr** 1988;88(7):85–6 (Eng. Abstr.) (Rus)

NERVE TISSUE PROTEIN S 100

The S100 protein family. Kligman D, et al. **Trends Biochem Sci** 1988 Nov;13(11):437–43 (37 ref.)

ANALYSIS

Heterogeneous expression of S–100 protein subunits alpha and beta in cystadenolymphomas of salivary glands. Hosaka M, et al. **Acta Histochem (Jena)** 1989;86(1):15–21

Immunohistochemical study of folliculo–stellate cells in human pituitary adenomas. Tachibana O, et al. **Acta Neuropathol (Berl)** 1988;76(5):458–64

Immunoelectron microscopic study of S–100 beta–positive human T–lymphocytes with special reference to double immunostaining. Ohtsuki Y, et al. **Acta Pathol Jpn** 1988 Sep;38(9):1167–73

Comparison of HMB–45 monoclonal antibody and S–100 protein in the immunohistochemical diagnosis of melanoma. Ordóñez NG, et al. **Am J Clin Pathol** 1988 Oct;90(4):385–90

Ficin in immunohistochemistry [letter] Taschini PA, et al. **Am J Clin Pathol** 1988 Dec;90(6):754–5

S–100 sensitivity as a marker for Langerhans' cells [letter; comment] Maddox PH, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):767–8. **Comment on:** Am J Obstet Gynecol 1987 Jul;157(1):213–5

Immunohistochemical localization of intermediate filament and S–100 proteins in several non–endocrine cells of the human pituitary gland. Marin F, et al. **Arch Histol Cytol** 1989 Jul;52(3):241–8

Immunohistochemical demonstration of Langerhans' cell in cholesteatoma using an antiserum against S–100 protein. Takahashi S, et al. **Arch Otorhinolaryngol** 1989;246(1):48–52

Mucoepidermoid carcinomas: immunohistochemical studies on keratin, S–100 protein, lactoferrin, lysozyme and amylase. Kumasa S, et al. **Basic Appl Histochem** 1988; 32(4):429–41

Tyrosine and tyrosinate fluorescence of S–100b. A time–resolved nanosecond fluorescence study. The effect of pH, Ca(II), and Zn(II). Turner RJ, et al. **Biochem Cell Biol** 1989 Apr–May;67(4–5):179–86

Alterations in calmodulin and S–100 protein content of hippocampal slices during long–term potentiation. Popov N, et al. **Biomed Biochim Acta** 1988;47(2):189–95

Long term neurotoxicity of styrene. A quantitative study of glial fibrillary acidic protein (GFA) and S–100. Rosengren LE, et al. **Br J Ind Med** 1989 May;46(5):316–20

Detection and quantification of S–100 protein in ocular tissues and fluids from patients with intraocular melanoma. Cochran AJ, et al. **Br J Ophthalmol** 1988 Nov;72(11):874–9

S–100 protein–positive dendritic cells in colorectal adenocarcinomas. Distribution and relation to the clinical prognosis. Ambe K, et al. **Cancer** 1989 Feb 1;63(3):496–503

Usefulness of S–100 protein in the histological diagnosis of soft tissue tumors. Feng BC, et al. **Chin Med J [Engl]** 1988 Jan;101(1):52–4

S–100ao protein in blood and urine during open–heart surgery. Usui A, et al. **Clin Chem** 1989 Sep;35(9):1942–4

One half of the CD11b+ human peripheral blood T lymphocytes coexpresses the S–100 protein. Ferrari C, et al. **Clin Exp Immunol** 1988 Jun;72(3):357–61

Primitive neuroectodermal tumors of the cerebrum: a histological and immunohistochemical study of 10 cases. Grant JW, et al. **Clin Neuropathol** 1988 Sep–Oct; 7(5):228–33

Positive S100 protein staining of neuroblastoma discovered by VMA mass screening [letter] Nakagawara A, et al. **Eur J Pediatr** 1988 Nov;148(2):171–2

Rat endomyocardial disease: a neural origin? Landes C, et al. **Exp Pathol** 1988;34(2):65–9

Identification of S–100 proteins and S–100–binding proteins in a detergent–resistant EDTA/KCl–extractable fraction from bovine brain membranes. Donato R, et al. **FEBS Lett** 1989 Apr 10;247(1):31–5

Ontogenetic development of the guinea pig uterine innervation. An immunohistochemical study of different neuronal markers, neuropeptides and S–100 protein. Alm P, et al. **Histochemistry** 1988;90(1):19–24

S–100 protein detection in "follicular macrophages" of mouse lymphoid organs by ABC immunoperoxidase method. Carbone A, et al. **Int J Biol Markers** 1988 Jan–Mar; 3(1):36–40

Analysis of the calcium–modulated proteins, S100 and calmodulin, and their target proteins during C6 glioma cell differentiation. Zimmer DB, et al. **J Cell Biol** 1989 Jan; 108(1):141–51

Granulocytic sarcoma: misleading immunohistological staining with MT1 and S100 protein antibodies. Elliott CJ, et al. **J Clin Pathol** 1989 Feb;42(2):188–90

Approaches to study the role of S100 proteins in calcium–dependent cellular responses. Van Eldik LJ, et al. **J Dairy Sci** 1988 Aug;71(8):2028–34

Improved detection of aneuploidy in malignant melanoma using multiparameter flow cytometry for S100 protein and DNA content. Kamino H, et al. **J Invest Dermatol** 1989 Sep;93(3):392–6

S–100 protein localization in minor salivary gland tumours: an aid to diagnosis. Campbell JB, et al. **J Laryngol Otol** 1988 Oct;102(10):905–8

Immunohistochemical staining for vimentin filaments and S–100 protein in myxoma of the jaws. Lombardi T, et al. **J Oral Pathol** 1988 Apr;17(4):175–7

S–100 antigen and calmodulin in human leukemic cells. Wada H, et al. **Leuk Res** 1989;13(1):65–9

Immunohistochemical study of intracranial cysts. Inoue T, et al. **Neurosurgery** 1988 Nov;23(5):576–81

Choroid plexus tumors in children: immunohistochemical and scanning–electron–microscopic features. Felix I, et al. **Pediatr Neurosci** 1987;13(5):263–9

Immunocytochemical evidence for the presence of S–100 protein in insulin–containing cells of cultured fetal rat islets. Leduque P, et al. **Regul Pept** 1989 Feb;24(2):143–53

S–100 protein in normal, osteoarthrotic, and arthritic cartilage. Mohr W, et al. **Rheumatol Int** 1985;5(6):273–7

Bronchial carcinoid with S–100 positive sustentacular cells.

Barbareschi M, et al. **Tumori** 1988 Dec 31;74(6):705–11

Malignant round cell tumor of bone with neural differentiation (neuroectodermal tumor). Steiner GC, et al. **Ultrastruct Pathol** 1988 Sep–Oct;12(5):505–12

Immunohistochemical localization of the alpha and beta subunits of S–100 protein in pleomorphic adenoma of the salivary glands. Ninomiya T, et al. **Virchows Arch [B]** 1989; 57(1):63–75

Immunohistochemical localization of S–100 protein and lysozyme in canine lymph nodes and lymphomas. Fondevila D, et al. **Zentralbl Veterinarmed [A]** 1989 Jan; 36(1):71–7

[Immunohistology and prognosis in thyroid cancer. Determination of the malignancy potential of papillary and medullary neoplasms by the detection of S–100 protein and Leu–M1 antigen] Schröder S, et al. **Acta Med Austriaca** 1989;16(1):2–5 (Eng. Abstr.) **(Ger)**

[Demonstration of S 100 protein in malignant melanoma of the skin. Pattern of distribution and significance for determination of tumor thickness] Flügge G, et al. **Hautarzt** 1989 May;40(5):290–5 (Eng. Abstr.) **(Ger)**

[Desmin and S 100 protein–positive malignant fibrous histiocytomas: practical and theoretical implications] Donhuijsen K, et al. **Pathologe** 1988 Sep;9(5):261–7 **(Ger)**

[The majority of suppressor T lymphocytes (CD4– CD8+ CD11+) expresses S–100 protein] Torresani C, et al. **Medicina (Firenze)** 1988 Jan–Mar;8(1):70–3 (Eng. Abstr.) **(Ita)**

[A case of S 100 protein–positive large cell carcinoma—its pathological study] Nakamura S, et al. **Gan No Rinsho** 1989 May;35(6):664–8 (Eng. Abstr.) **(Jpn)**

[Changes of S100a0 in plasma and in urine during open heart operation] Usui A, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jun;36(6):969–73 (Eng. Abstr.) **(Jpn)**

[Limited proteolysis of brain–specific protein S100. Isolation, physico–chemical and immunochemical characteristics of the neuropeptide AT–1–1] Poletaev AB, et al. **Biokhimiia** 1988 Jun;53(6):985–90 (Eng. Abstr.) **(Rus)**

[Granular cell tumor. Unusual location] Velasco Fernández C, et al. **Med Cutan Ibero Lat Am** 1988;16(4):319–21 (Eng. Abstr.) **(Spa)**

BIOSYNTHESIS

Induction of S100 protein in 3T3–L1 cells during differentiation to adipocytes and its liberating by lipolytic hormones. Kato K, et al. **Eur J Biochem** 1988 Nov 1; 177(2):461–6

CEREBROSPINAL FLUID

S–100 protein in cerebrospinal fluid after aneurysmal subarachnoid haemorrhage: relation to functional outcome, late CT and SPECT changes, and signs of higher cortical dysfunction. Hårdemark HG, et al. **Acta Neurochir (Wien)** 1989;99(3–4):135–44

S–100 protein in cerebrospinal fluid of patients with subarachnoid haemorrhage: a potential marker of brain damage. Persson L, et al. **Acta Neurochir (Wien)** 1988; 93(3–4):116–22

The S–100 protein in cerebrospinal fluid: a simple ELISA method. Aurell A, et al. **J Neurol Sci** 1989 Feb; 89(2–3):157–64

[Changes in cerebrospinal fluid neuron–specific enolase (NSE), S 100 protein and creatine kinase BB (CK–BB) levels in newborn infants with post hemorrhagic hydrocephalus] Sobajima H, et al. **No To Hattatsu** 1989 Jan;21(1):76–8 **(Jpn)**

DIAGNOSTIC USE

Comparison of peanut agglutinin and S100 stains in the paraffin tissue diagnosis of Langerhans cell histiocytosis. McLelland J, et al. **Br J Dermatol** 1988 Oct;119(4):513–9

GENETICS

Regulation of the S100 protein and GFAP genes is mediated by two common mechanisms in RT4 neuro–glial cell lines. Freeman MR, et al. **Exp Cell Res** 1989 Jun;182(2):370–83

[Molecular analysis of nervous system–specific genes] Takahashi Y, et al. **Tanpakushitsu Kakusan Koso** 1988 Aug; 33(10):1681–7 (30 ref.) **(Jpn)**

IMMUNOLOGY

Immunohistochemical identification of macrophages and various dendritic cells in paraffin–embedded biopsy material. Brandtzaeg P. **APMIS Suppl** 1988;2:136–59

Identification of cell types containing S–100b protein–like immunoreactivity in the islets of Langerhans of the guinea pig pancreas with light and electron microscopy. Uchida T, et al. **Cell Tissue Res** 1989 Feb;255(2):379–84

S–100 protein and neuron specific enolase immunoreactivity of normal, hyperplastic and neoplastic chondrocytes in relation to the composition of the extracellular matrix. Karabela–Bouropoulou V, et al. **Pathol Res Pract** 1988 Nov;183(6):761–6

[Comparative study of the effects of antibodies to S–100 protein and ouabain on neurons of Helix pomatia] Pozdniakova AL. **Biull Eksp Biol Med** 1988 Oct; 106(10):393–5 (Eng. Abstr.) **(Rus)**

[Restoration of potential–dependent anti–brain antibody–inhibited calcium current by cyclic adenosine monophosphate] Solntseva EI. **Neirofiziologiia** 1989; 21(2):247–52 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Cardiac S–100a0 protein: purification by a simple procedure and related immunocytochemical and immunochemical studies. Donato R, et al. **Cell Calcium** 1989 Feb–Mar; 10(2):81–92

Isolation of a new member of the S100 protein family: amino acid sequence, tissue, and subcellular distribution. Glenney JR Jr, et al. **J Cell Biol** 1989 Feb;108(2):569–78

METABOLISM

Innervation of the incisors and periodontal ligament in several rodents: an immunohistochemical study of neurofilament protein and glia–specific S–100 protein. Sato O, et al. **Acta Anat (Basel)** 1989;134(2):94–9

Juvenile chronic myeloid leukemia. A malignancy of S–100 protein–positive histiocytes. Ng CS, et al. **Am J Clin Pathol** 1988 Nov;90(5):575–82

S100 protein positive dendritic cells in primary biliary cirrhosis and other chronic inflammatory liver diseases. Relevance to pathogenesis? Demetris AJ, et al. **Am J Pathol** 1989 Apr;134(4):741–7

Analysis of S–100 protein positive folliculo–stellate cells in rat pituitary tissues. Lloyd RV, et al. **Am J Pathol** 1988 Nov;133(2):338–46

S–100 protein in white preadipocytes: an immunoelectronmicroscopic study. Cinti S, et al. **Anat Rec** 1989 Aug;224(4):466–72

S–100 protein–immunoreactive cells in the bovine ovary. Kamiya S, et al. **Anat Rec** 1989 Apr;223(4):384–6

Immunohistochemical analysis of the olfactory mucosa by use of antibodies to brain proteins and cytokeratin. Yamagishi M, et al. **Ann Otol Rhinol Laryngol** 1989 May; 98(5 Pt 1):384–8

Effects of Ca2+ and Zn2+ on trifluoperazine–S100 proteins interactions: induced circular dichroism and fluorescence spectra. Ogoma Y, et al. **Biochim Biophys Acta** 1989 Aug 31;997(3):188–92

Reactions of S–100–positive glia after injury of mouse cerebral cortex. Miyake T, et al. **Brain Res** 1989 Jun 5; 489(1):31–40

Immunocytochemical localization of S–100 protein in the hypophysis and saccus vasculosus of the elasmobranchs Mustelus manazo and Scyliorhinus torazame. Chiba A, et al. **Cell Tissue Res** 1989 Feb;255(2):255–60

Neuron–specific enolase and S–100 protein immunohistochemistry for defining the structure and topographical relationship of the different enteric nerve plexuses in the small intestine of the pig. Scheuermann DW, et al. **Cell Tissue Res** 1989 Apr;256(1):65–75

An immunohistological study of 66 ependymomas. Cruz–Sanchez FF, et al. **Histopathology** 1988 Oct; 13(4):443–54

Absence of S–100 protein in prostatic glands. Howat AJ, et al. **Histopathology** 1988 Oct;13(4):468–70

Epithelial membrane antigen expression by the perineurial cell: further studies of peripheral nerve lesions. Theaker JM, et al. **Histopathology** 1989 Jun;14(6):581–92

Malignant granular cell tumour of the neck: immunohistochemical and ultrastructural studies of a case. Thunold S, et al. **Histopathology** 1989 Jun;14(6):655–7

Satellite cells in developing spinal ganglia. An immunohistochemical study. Lauriola L, et al. **Int J Dev Neurosci** 1989;7(3):275–9

Clear cell hidradenoma with whorl formation of squamoid cells: immunohistochemical and electron microscopic studies. Satoh T, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 1):271–7

Ca2+–binding of S–100 protein in the presence of K+ and Mg2+. Matsuda S. **J Biochem (Tokyo)** 1988 Dec; 104(6):989–90

Immunocytochemical localization of S–100b protein in degenerating and regenerating rat sciatic nerves. Spreca A, et al. **J Histochem Cytochem** 1989 Apr;37(4):441–6

Molecular interaction of S–100 proteins with microtubule proteins in vitro. Donato R, et al. **J Neurochem** 1989 Aug; 53(2):566–71

Interaction between S–100 proteins and steady–state and taxol–stabilized microtubules in vitro. Donato R, et al. **J Neurochem** 1989 Apr;52(4):1010–7

Spectral studies of the Ca2+–dependent interaction of trifluoperazine with S100b. Pingerelli PL, et al. **J Protein Chem** 1989 Apr;8(2):183–96

Postembedding immunogold electron microscopy for S100, tubulin, and cytoskeletal proteins in an amelanotic malignant melanoma. Hearn SA, et al. **Mod Pathol** 1989 Jan;2(1):46–54

Myoepitheliomas and myoepithelial adenomas of salivary gland origin. Immunohistochemical evaluation of filament proteins, S–100 alpha and beta, glial fibrillary acidic proteins, neuron–specific enolase, and lactoferrin. Mori M, et al. **Pathol Res Pract** 1989 Feb;184(2):168–78

[Immunohistologic findings in paragangliomas in the area of the head and neck] Milewski C, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Aug;67(8):385–8 (Eng. Abstr.) **(Ger)**

[Extracellular release of S100 protein] Kato K. **Yakubutsu Seishin Kodo** 1988 Dec;8(4):483–90 **(Jpn)**

PHARMACOLOGY

S–100 protein stimulates cellular proliferation. Klein JR, et al. **Cancer Immunol Immunother** 1989;29(2):133–8

S–100a0 protein stimulates the basal (Mg2+–activated) adenylate cyclase activity associated with skeletal muscle membranes. Fanò G, et al. **FEBS Lett** 1989 May 8; 248(1–2):9–12

PHYSIOLOGY

S–100b protein regulates the activity of skeletal muscle adenylate cyclase in vitro. Fanò G, et al. **FEBS Lett** 1988 Nov 21;240(1–2):177–80

NERVE TISSUE PROTEINS

Polypeptide composition of paired helical filaments. Ihara Y, et al. **Ann Med** 1989;21(2):121–5 (34 ref.)

Further physicochemical characterization of the novel human brain protein h3. Bollengier F, et al. **J Neurochem** 1989 Apr;52(4):1123–6

Identification of globular mechanochemical heads of kinesin. Scholey JM, et al. **Nature** 1989 Mar 23;338(6213):355–7

ANALYSIS

Senile plaque neurites fail to demonstrate anti–paired helical filament and anti–microtubule–associated protein–tau immunoreactive proteins in the absence of neurofibrillary tangles in the neocortex. Probst A, et al. **Acta Neuropathol (Berl)** 1989;77(4):430–6

Chromogranins—new sensitive markers for neuroendocrine tumors. Eriksson B, et al. **Acta Oncol** 1989;28(3):325–9

Medullary thyroid carcinomas express chromogranin A and a novel neuroendocrine protein recognized by monoclonal antibody HISL–19. Deftos LJ, et al. **Am J Med** 1988 Dec; 85(6):780–4

Immunological studies on the occurrence and properties of chromogranin A and B and secretogranin II in endocrine tumors. Weiler R, et al. **Am J Surg Pathol** 1988 Nov; 12(11):877–84

Chromogranin– and somatostatin–containing neuroendocrine cells in the porcine uterus. An immunocytochemical study. Vittoria A, et al. **Anat Histol Embryol** 1989 Jun; 18(2):136–42

Immunocytochemical characterization of neurofibrillary tangles in amyotrophic lateral sclerosis and parkinsonism–dementia of Guam. Shankar SK, et al. **Ann Neurol** 1989 Feb;25(2):146–51

Alz 50 recognizes abnormal filaments in Alzheimer's disease and progressive supranuclear palsy. Tabaton M, et al. **Ann Neurol** 1988 Sep;24(3):407–13

Immunohistochemistry of chromogranin A and B, and secretogranin II in the canine endocrine pancreas. Grube D, et al. **Arch Histol Cytol** 1989 Jul;52(3):287–98

Structural proteins of the neonatal and adult lamina cribrosa. Morrison JC, et al. **Arch Ophthalmol** 1989 Aug; 107(8):1220–4

Expression of pan–neuroendocrine proteins in 53 neuroblastic tumors. An immunohistochemical study with neuron–specific enolase, chromogranin, and synaptophysin. Hachitanda Y, et al. **Arch Pathol Lab Med** 1989 Apr; 113(4):381–4

Chromogranins A and B and secretogranin II in hormonally identified endocrine cells of the gut and the pancreas. Buffa R, et al. **Basic Appl Histochem** 1988;32(4):471–84

Highly sensitive enzyme immunoassay system: determination of nervous system–related proteins at the level of single neurons. Kato K. **Biomed Biochim Acta** 1989; 48(2–3):S188–93

Accumulation of abnormally phosphorylated tau precedes the formation of neurofibrillary tangles in Alzheimer's disease. Bancher C, et al. **Brain Res** 1989 Jan 16; 477(1–2):90–9

Characterization of novel glycoprotein components of synaptic membranes and postsynaptic densities, gp65 and gp55, with a monoclonal antibody. Hill IE, et al. **Brain Res** 1988 Sep 27;461(1):27–43

A monoclonal antibody specific for the visual system of the goldfish. Sharma SC, et al. **Brain Res** 1988 Nov 15; 473(2):359–64

Identification of radial glial cells within the developing murine central nervous system: studies based upon a new immunohistochemical marker. Misson JP, et al. **Brain Res Dev Brain Res** 1988 Nov 1;44(1):95–108

Normal Merkel cells express a synaptophysin–like immunoreactivity. Ortonne JP, et al. **Dermatologica** 1988; 177(1):1–10

An actin–interacting heptapeptide in the cofilin sequence. Yonezawa N, et al. **Eur J Biochem** 1989 Jul 15;183(1):235–8

Identification of Nsp100 as elongation factor 2 (EF–2). Koizumi S, et al. **FEBS Lett** 1989 Aug 14;253(1–2):55–8

Identification of gastroenteropancreatic neuroendocrine cells in normal and neoplastic human tissue with antibodies against synaptophysin, chromogranin A, secretogranin I (chromogranin B), and secretogranin II. Wiedenmann B, et al. **Gastroenterology** 1988 Nov;95(5):1364–74

Organization of the guinea–pig uterine innervation. Distribution of immunoreactivities for different neuronal markers. Effects of chemical– and pregnancy–induced sympathectomy. Alm P, et al. **Histochem J** 1988 May; 20(5):290–300

The distribution of GAWK–like immunoreactivity in

neuroendocrine cells of the human gut, pancreas, adrenal and pituitary glands and its co-localisation with chromogranin B. Bishop AE, et al. **Histochemistry** 1989; 90(6):475–83

Co-localization of chromogranin A and B, secretogranin II and neuropeptide Y in chromaffin granules of rat adrenal medulla studied by electron microscopic immunocytochemistry. Steiner HJ, et al. **Histochemistry** 1989;91(6):473–7

Axolinin localization in the nervous tissue of squid revealed by monoclonal antibodies specific for axolinin: characterization of monoclonal antibodies against axolinin. Arai T, et al. **Hybridoma** 1988 Dec;7(6):583–93

An increased pool of secretory hormones and peptides in adrenal medulla of stroke-prone spontaneously hypertensive rats. Schober M, et al. **Hypertension** 1989 May;13(5):469–74

Synaptophysin in the developing cochlea. Gil-Loyzaga P, et al. **Int J Dev Neurosci** 1988;6(2):155–60

Agrin-related molecules are concentrated at acetylcholine receptor clusters in normal and aneural developing muscle. Fallon JR, et al. **J Cell Biol** 1989 Apr;108(4):1527–35

The mouse neuronal cell surface protein F3: a phosphatidylinositol-anchored member of the immunoglobulin superfamily related to chicken contactin. Gennarini G, et al. **J Cell Biol** 1989 Aug;109(2):775–88

The cytoskeletal architecture of the presynaptic terminal and molecular structure of synapsin 1. Hirokawa N, et al. **J Cell Biol** 1989 Jan;108(1):111–26

Motor neurons contain agrin-like molecules. Magill-Solc C, et al. **J Cell Biol** 1988 Nov;107(5):1825–33

Monoclonal antibodies to kinesin heavy and light chains stain vesicle-like structures, but not microtubules, in cultured cells. Pfister KK, et al. **J Cell Biol** 1989 Apr;108(4):1453–63

Nerve growth factor-induced changes in the intracellular localization of the protein kinase C substrate B-50 in pheochromocytoma PC12 cells. Van Hooff CO, et al. **J Cell Biol** 1989 Mar;108(3):1115–25

Separation of synthetic cardiodilatin/atrial natriuretic factor and related peptides by reversed-phase high-performance liquid chromatography. Dörner T, et al. **J Chromatogr** 1989 May 30;490(2):411–7

Production of GAWK (chromogranin-B 420–493)-like immunoreactivity by endocrine tumors and its possible diagnostic value. Sekiya K, et al. **J Clin Invest** 1989 Jun; 83(6):1834–42

The use of neuroendocrine immunoperoxidase markers to predict chemotherapy response in patients with non-small-cell lung cancer. Graziano SL, et al. **J Clin Oncol** 1989 Oct;7(10):1398–406

Biochemical and immunocytochemical characterization of olfactory marker protein in the rodent central nervous system. Baker H, et al. **J Comp Neurol** 1989 Jul 8; 285(2):246–61

Immunohistochemical distribution and colocalization of regulatory peptides in the carotid body. Heym C, et al. **J Electron Microsc Tech** 1989 Aug;12(4):331–42 (61 ref.)

Structural and biochemical evidence that scrapie-associated fibrils assemble in vivo. Somerville RA, et al. **J Gen Virol** 1989 Jan;70 (Pt 1):25–35

The molecular and cellular pathology of Alzheimer neurofibrillary lesions. Kosik KS. **J Gerontol** 1989 May; 44(3):B55–8 (42 ref.)

Axolinin localization in the nervous tissue of squid revealed by monoclonal antibodies specific for axolinin: cellular and subcellular localization of axolinin in the squid neuron. Arai T, et al. **J Neurochem** 1989 Jan;52(1):93–100

Highly basic 30- and 32-kilodalton proteins associated with synapse formation on polylysine-coated beads in enriched neuronal cell cultures. Burry RW, et al. **J Neurochem** 1989 Feb;52(2):551–60

Most synaptic vesicles isolated from rat brain carry three membrane proteins, SV2, synaptophysin, and p65. Floor E, et al. **J Neurochem** 1989 May;52(5):1433–7

Subcellular distribution of 65,000 calmodulin-binding protein (p65) and synaptophysin (p38) in adrenal medull.. Fournier S, et al. **J Neurochem** 1989 Oct;53(4):1043–9

Calcium/diacylglycerol-dependent protein kinase and its major 87-kilodalton protein substrate are differentially distributed in rat basal ganglia. Walaas SI, et al. **J Neurochem** 1989 Oct;53(4):1199–202

An immunochemical analysis of the distribution of a brain-specific polypeptide, PEP-19. Ziai MR, et al. **J Neurochem** 1988 Dec;51(6):1771–6

An immunohistochemical study of beta-protein in Alzheimer-type dementia brains. Arai H, et al. **J Neurol** 1989 May;236(4):214–7

Considerations in the quantitative analysis of autoradiograms from 2-dimensional gels. Lustig RH, et al. **J Neurosci Methods** 1989 Jul;29(1):17–26

Comprehensive polypeptide analysis of microdissected rat brain areas: combining 2-dimensional gel electrophoresis with 2-dimensional HPLC and immunoanalysis and sequencing procedures. Mobbs C, et al. **J Neurosci Methods** 1989 Jul;29(1):5–15

Tau protein immunoreactivity in dementia of the Alzheimer type: II. Electron microscopy and pathogenetic implications. Effects of fixation on the morphology of the Alzheimer's abnormal filaments. Papasozomenos SC. **Lab Invest** 1989 Mar;60(3):375–89

Tau protein immunoreactivity in dementia of the Alzheimer type. I. Morphology, evolution, distribution, and pathogenetic implications. Papasozomenos SC. **Lab Invest** 1989 Jan;60(1):123–37

Biochemical composition and dynamics of the axonal cytoskeleton in the corticospinal system of the adult hamster. Oblinger MM. **Metab Brain Dis** 1988 Mar; 3(1):49–65

Effects of aging and alcohol on the biochemical composition of histologically normal human brain. Wiggins RC, et al. **Metab Brain Dis** 1988 Mar;3(1):67–80

Amyloid A4 protein and its precursor in Down's syndrome and Alzheimer's disease. Rumble B, et al. **N Engl J Med** 1989 Jun 1;320(22):1446–52

Aging, amyloid, and Alzheimer's disease [editorial] Selkoe DJ. **N Engl J Med** 1989 Jun 1;320(22):1484–7

Hormone-negative, chromogranin A-positive endocrine tumors. Sobol RE, et al. **N Engl J Med** 1989 Feb 16; 320(7):444–7

Development of neuronal polarity: GAP-43 distinguishes axonal from dendritic growth cones. Goslin K, et al. **Nature** 1988 Dec 15;336(6200):672–4

Fibrils from brains of cows with new cattle disease contain scrapie-associated protein. Hope J, et al. **Nature** 1988 Nov 24;336(6197):390–2

Changes in expression of a synaptic vesicle antigen in aging sympathetic neurons. Greif KF, et al. **Neurobiol Aging** 1989 Jan-Feb;10(1):51–4

Pancreastatin-like immunoreactivity in epidermal Merkel cells of pig and man. Hartschuh W, et al. **Neurosci Lett** 1989 Apr 10;98(3):258–63

Immunohistochemical quantification of the synapse-related protein synaptophysin in Alzheimer disease. Masliah E, et al. **Neurosci Lett** 1989 Aug 28;103(2):234–9

Neurotypic and gliotypic proteins as biochemical markers of neurotoxicity. O'Callaghan JP. **Neurotoxicol Teratol** 1988 Sep-Oct;10(5):445–52

Ultrastructural localization of secretory granule constituent chromogranin and 7 B 2. Osamura RY, et al. **Pathol Res Pract** 1988 Sep;183(5):617–9

Striatal phosphoproteins in Parkinson disease and progressive supranuclear palsy. Girault JA, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2493–7

Identification and localization of a tau peptide to paired helical filaments of Alzheimer disease. Iqbal K, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5646–50

Dynamic properties of the Ca2+/calmodulin-dependent protein kinase in Drosophila: identification of a synapsin I-like protein. Mitschulat H. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5988–92

Isolation and primary structure of tumor-derived peptides related to human pancreastatin and chromogranin A. Schmidt WE, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(21):8231–5

The 43-kDa neuronal growth-associated protein (GAP-43) is present in plasma membranes of rat astrocytes. Vitković L, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(21):8296–300

Molecular biology of synaptic vesicle-associated proteins [news] Trimble WS, et al. **Trends Neurosci** 1988 Jun; 11(6):241–2 (18 ref.)

Primary cerebral neuroectodermal tumors: neuroblastoma, differentiated neuroblastoma, and composite neuroectodermal tumor. Dehner LP, et al. **Ultrastruct Pathol** 1988 Sep-Oct;12(5):479–94

[Synaptophysin, chromogranin A and neuron-specific enolase as tumor markers in neuroendocrine tumors of the gastrointestinal tract and lung. An immunohistochemical study] Eberlein-Gonska M, et al. **Pathologe** 1989 Jul; 10(4):228–33 **(Ger)**

[Immunocytochemical studies suggest the presence of non beta protein components in cerebrovascular and senile plaque core amyloid] Tamaoka A, et al. **Rinsho Shinkeigaku** 1988 Nov;28(11):1312–7 (Eng. Abstr.) **(Jpn)**

[Proteins and lipids in focal demyelinization in multiple sclerosis and chronic experimental allergic encephalomyelitis] Bukovský V, et al. **Bratisl Lek Listy** 1988 Oct;89(10):725–32 (Eng. Abstr.) **(Slo)**

BIOSYNTHESIS

Differential effects of methylmercury on the synthesis of protein species in dorsal root ganglia of the rat. Kasama H, et al. **Arch Toxicol** 1989;63(3):226–30

Effect of secretagogues on chromogranin A synthesis in bovine cultured chromaffin cells. Possible regulation by protein kinase C. Simon JP, et al. **Biochem J** 1989 Jun 15; 260(3):915–22

Insulin receptors mediate growth effects in cultured fetal neurons. I. Rapid stimulation of protein synthesis. Heidenreich KA, ..t al. **Endocrinology** 1989 Sep; 125(3):1451–7

Two-dimensional gel autoradiographic analysis of the acute effects of estradiol on protein synthesis in the female rat ventromedial nucleus in vivo. Lustig RH, et al. **Endocrinology** 1989 Apr;124(4):1863–9

Rates of protein synthesis in brain and other organs. Shahbazian FM, et al. **Int J Dev Neurosci** 1987;5(1):39–42

Biosynthesis of ependymins from goldfish brain. Königstorfer A, et al. **J Biol Chem** 1989 Aug 15;264(23):13689–92

Fibroblasts that proliferate near denervated synaptic sites in skeletal muscle synthesize the adhesive molecules tenascin(J1), N-CAM, fibronectin, and a heparan sulfate proteoglycan. Gatchalian CL, et al. **J Cell Biol** 1989 May; 108(5):1873–90

Induction of tenascin in healing wounds. Mackie EJ, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2757–67

Syndecan and tenascin expression is induced by epithelial-mesenchymal interactions in embryonic tooth mesenchyme. Vainio S, et al. **J Cell Biol** 1989 May; 108(5):1945–53

Estimation of local cerebral protein synthesis rates with L-[1-11C]leucine and PET: methods, model, and results in animals and humans. Hawkins RA, et al. **J Cereb Blood Flow Metab** 1989 Aug;9(4):446–60

In vivo cerebral protein synthesis rates with leucyl-transfer RNA used as a precursor pool: determination of biochemical parameters to structure tracer kinetic models for positron emission tomography. Keen RE, et al. **J Cereb Blood Flow Metab** 1989 Aug;9(4):429–45

Dexamethasone induces an increased biosynthesis of chromogranin A in rat pituitary gland. Fischer-Colbrie R, et al. **J Endocrinol** 1989 Jun;121(3):487–94

Human B cell proliferation in response to IL-4 is associated with enhanced production of B cell-derived growth factors. Tadmori W, et al. **J Immunol** 1989 Feb 1; 142(3):826–32

Recovery from edema and of protein synthesis differs between the cortex and caudate following transient focal cerebral ischemia in rats. Abe K, et al. **J Neurochem** 1988 Nov;51(5):1470–6

Inhibition of amino acid transport and protein synthesis by HgCl2 and methylmercury in astrocytes: selectivity and reversibility. Brookes N, et al. **J Neurochem** 1989 Oct; 53(4):1228–37

Divergent effects of acute depolarization on somatostatin release and protein synthesis in cultured fetal and neonatal rat brain cells. de los Frailes MT, et al. **J Neurochem** 1989 May;52(5):1333–9

Molecular characterization of an ependymin precursor from goldfish brain. Königstorfer A, et al. **J Neurochem** 1989 Jan;52(1):310–2

Transneuronal regulation of protein synthesis in the brain-stem auditory system of the chick requires synaptic activation. Hyson RL, et al. **J Neurosci** 1989 Aug; 9(8):2835–45

Relationship between phosphorylation and synthesis of goldfish optic nerve proteins during regeneration. Larrivee DC, et al. **J Neurosci** 1989 Feb;9(2):574–81

Evidence for the transneuronal regulation of cerebellin biosynthesis in developing Purkinje cells. Slemmon JR, et al. **J Neurosci** 1988 Dec;8(12):4603–11

Cerebral metabolism of L-[2-18F]fluorotyrosine, a new PET tracer of protein synthesis. Coenen HH, et al. **J Nucl Med** 1989 Aug;30(8):1367–72

Prion protein biosynthesis in scrapie-infected and uninfected neuroblastoma cells. Caughey B, et al. **J Virol** 1989 Jan; 63(1):175–81

Incorporation of 3H-lysine into a rapidly labelling neuronal protein fraction in visual cortex is suppressed in dark reared rats. Rose SP, et al. **Life Sci** 1974 Jul 15;15(2):223–30

Quantitative assessment of the synergistic and independent effects of estradiol and progesterone on ventromedial hypothalamic and preoptic-area proteins in female rat brain. Jones KJ, et al. **Metab Brain Dis** 1987 Dec; 2(4):271–81

Detection of drug effects on neurons: protein synthesis inhibition by low doses of amphetamine. Berninsone PM, et al. **Methods Find Exp Clin Pharmacol** 1989 Apr; 11(4):249–53

Similarity of an estrogen-induced protein and a luteinizing hormone releasing hormone-induced protein. Mobbs C, et al. **Mol Cell Endocrinol** 1989 Apr;62(2):297–306

Localization of cerebral protein synthesis alterations in response to water deprivation in rats. Lepetit P, et al. **Neuroendocrinology** 1988 Sep;48(3):271–9

Maintenance of long-term potentiation in rat dentate gyrus requires protein synthesis but not messenger RNA synthesis immediately post-tetanization. Otani S, et al. **Neuroscience** 1989;28(3):519–26

Measurement of local cerebral protein synthesis in vivo: influence of recycling of amino acids derived from protein degradation. Smith CB, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9341–5

A critical level of protein synthesis is required for long-term potentiation. Deadwyler SA, et al. **Synapse** 1987;1(1):90–5

[Malfunction of gene expression as a possible cause of delayed neuronal death] Sakaguchi T, et al. **No To Shinkei** 1988 Jul;40(7):629–35 (Eng. Abstr.) **(Jpn)**

[Behavioral characteristics and protein synthesis in the brain of rats receiving ethanol with the mother's milk] Maizelis MIa, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):657–60 (Eng. Abstr.) **(Rus)**

[Effect of 2-pyrrolidone and gamma-butyrolactone on the rate of 14C-leucine incorporation into the proteins of different brain structures and of their arterial tissues] Mirzoian SA, et al. **Biull Eksp Biol Med** 1988 Nov; 106(11):571–2 (Eng. Abstr.) **(Rus)**

[Quantitative and qualitative changes in protein biosynthesis induced by hypoxia and transplantation of embryonic nerve tissue into the brain of adult mammals] Vitvitskiĭ VN, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Mar-Apr;(2):285–90 (Eng. Abstr.) **(Rus)**

[Effect of the neurosensitization of female rats on the functional indices of the DNA-, RNA- and protein-synthesizing neuronal apparatus of the cerebral

cortex and of the immune system in their progeny] Kolomeets NS, et al. **Zh Nevropatol Psikhiatr** 1988; 88(7):80–4 (Eng. Abstr.) **(Rus)**

[DNA and protein synthesis in the cells of the rat cerebral cortex after hypoxia and the transplantation of embryonic nerve tissue] Vitvitskiĭ VN. **Zh Obshch Biol** 1988 May–Jun; 49(3):355–64 (Eng. Abstr.) **(Rus)**

BLOOD

Screening for neurotrophic disturbances in amyotrophic lateral sclerosis. Ebendal T, et al. **Acta Neurol Scand** 1989 Mar;79(3):188–93

Rapid radioimmunoassay of circulating chromogranin A: in vitro stability, exploration of the neuroendocrine character of neoplasia, and assessment of the effects of organ failure. O'Connor DT, et al. **Clin Chem** 1989 Aug;35(8):1631–7

Brain natriuretic peptide–like immunoreactivity is present in human plasma. Togashi K, et al. **FEBS Lett** 1989 Jul 3; 250(2):235–7

Effects of sandostatin on plasma chromogranin–A levels in neuroendocrine tumors. Moattari AR, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):902–5

GENETICS

The repeat region of microtubule–associated protein tau forms part of the core of the paired helical filament of Alzheimer's disease. Crowther T, et al. **Ann Med** 1989; 21(2):127–32 (23 ref.)

Cloning of cDNA for two large polypeptides found in myelinating oligodendrocytes. Gulcher JR, et al. **Ann N Y Acad Sci** 1988;540:405–6

Cloning and partial sequencing of a new rat brain specific cDNA. Marechal D, et al. **Arch Int Physiol Biochim** 1988 Dec;96(5):231–6

Alzheimer's disease amyloid peptide is encoded by two exons and shows similarity to soybean trypsin inhibitor. Johnstone EM, et al. **Biochem Biophys Res Commun** 1989 Sep 29; 163(3):1248–55

Cloning and sequence analysis of cDNA encoding a precursor for rat brain natriuretic peptide. Kojima M, et al. **Biochem Biophys Res Commun** 1989 Mar 31; 159(3):1420–6

Cloning and sequence analysis of cDNA encoding a precursor for porcine brain natriuretic peptide. Maekawa K, et al. **Biochem Biophys Res Commun** 1988 Nov 30; 157(1):410–6

Calcimedin, calelectrin: correlation of relatedness. Moore PB. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):193–8

A distinct form of tau is selectively incorporated into Alzheimer's paired helical filaments. Mori H, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1221–6

Cloning and sequence analysis of cDNA encoding a precursor for human brain natriuretic peptide. Sudoh T, et al. **Biochem Biophys Res Commun** 1989 Mar 31; 159(3):1427–34

The proteins and genes of Alzheimer's disease. Glenner GG. **Biomed Pharmacother** 1988;42(9):579–84 (47 ref.)

Molecular cloning of a cDNA for the developmentally regulated brain protein, drebrin. Shirao T, et al. **Brain Res** 1988 Aug;464(1):71–4

GAP–43 gene expression during development: persistence in a distinctive set of neurons in the mature central nervous system. De la Monte SM, et al. **Brain Res Dev Brain Res** 1989 Apr 1;46(2):161–8

Isolation of a novel retina–specific clone (MEKA cDNA) encoding a photoreceptor soluble protein. Kuo CH, et al. **Brain Res Mol Brain Res** 1989 Jul;6(1):1–10

Developmental patterns of gene expression of secreted proteins in brain and choroid plexus. Thomas T, et al. **Dev Biol** 1989 Jul;134(1):38–47

Cloning, characterization, and sequence of a porcine cDNA encoding a secreted neuronal and endocrine protein. Brayton KA, et al. **DNA** 1988 Dec;7(10):713–9

Homology between the cDNAs encoding phosphoprotein p19 and SCG10 reveals a novel mammalian gene family preferentially expressed in developing brain. Schubart UK, et al. **DNA** 1989 Jul–Aug;8(6):389–98

Cloning and sequencing of the cDNA encoding an isoform of microtubule–associated protein tau containing four tandem repeats: differential expression of tau protein mRNAs in human brain. Goedert M, et al. **EMBO J** 1989 Feb;8(2):393–9

The promoter of Alzheimer's disease amyloid A4 precursor gene. Salbaum JM, et al. **EMBO J** 1988 Sep;7(9):2807–13

Pancreastatin, a presumed product of chromogranin–A (secretory protein–I) processing, inhibits secretion from porcine parathyroid cells in culture. Fasciotto BH, et al. **Endocrinology** 1989 Sep;125(3):1617–22

A common amino acid sequence in 190–kDa microtubule–associated protein and tau for the promotion of microtubule assembly. Aizawa H, et al. **J Biol Chem** 1989 Apr 5;264(10):5885–90

A single cDNA encodes two isoforms of stathmin, a developmentally regulated neuron–enriched phosphoprotein. Doye V, et al. **J Biol Chem** 1989 Jul 25; 264(21):12134–7

Two vesicle–associated membrane protein genes are differentially expressed in the rat central nervous system. Elferink LA, et al. **J Biol Chem** 1989 Jul 5;264(19):11061–4

Dual regulation of GAP–43 gene expression by nerve growth factor and glucocorticoids. Federoff HJ, et al. **J Biol Chem** 1988 Dec 25;263(36):19290–5

Transmembrane topography and evolutionary conservation of synaptophysin. Johnston PA, et al. **J Biol Chem** 1989 Jan 15;264(2):1268–73

Cloning of a cDNA encoding porcine brain natriuretic peptide. Porter JG, et al. **J Biol Chem** 1989 Apr 25; 264(12):6689–92

The effects of forskolin and calcium ionophore A23187 on secretion and cytoplasmic RNA levels of Chromogranin–A and calcitonin. Murray SS, et al. **J Bone Miner Res** 1988 Aug;3(4):447–52

Expression of multiple tau isoforms and microtubule bundle formation in fibroblasts transfected with a single tau cDNA. Kanai Y, et al. **J Cell Biol** 1989 Sep;109(3):1173–84

Amyloid protein in Alzheimer's disease. Joachim CL, et al. **J Gerontol** 1989 Jul;44(4):B77–82 (69 ref.)

Chromogranin A and B messenger ribonucleic acids in pituitary and other normal and neoplastic human endocrine tissues. Lloyd RV, et al. **Lab Invest** 1989 Apr;60(4):548–56

Glucocorticoid– and nerve growth factor–induced changes in chromogranin A expression define two different neuronal phenotypes in PC12 cells. Rausch DM, et al. **Mol Endocrinol** 1988 Oct;2(10):921–7

Molecular cloning and expression of brain–derived neurotrophic factor. Leibrock J, et al. **Nature** 1989 Sep 14;341(6238):149–52

The secreted form of the Alzheimer's amyloid precursor protein with the Kunitz domain is protease nexin–II. Oltersdorf T, et al. **Nature** 1989 Sep 14;341(6238):144–7

Chromogranin A messenger RNA expression in the rat anterior pituitary is permissively regulated by the adrenal gland. Grino M, et al. **Neuroendocrinology** 1989 Jan; 49(1):107–10

Nucleotide sequence of cDNA encoding P400 protein in the mouse cerebellum. Furuichi T, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5385–6

Expression of the messenger RNA encoding the glial fibrillary acidic protein in rat basal forebrain following fimbria–fornix lesion. Cavicchioli L, et al. **Pharmacol Res Commun** 1988 Jul;20(7):609–10

Changes in brain gene expression shared by scrapie and Alzheimer disease. Duguid JR, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7260–4

Characterization of a cDNA encoding a 34–kDa Purkinje neuron protein recognized by sera from patients with paraneoplastic cerebellar degeneration. Furneaux HM, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2873–7

Cellular localization of 1B236/myelin–associated glycoprotein mRNA during rat brain development. Higgins GA, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2074–8

Molecular cloning of cDNA coding for brain–specific 14–3–3 protein, a protein kinase–dependent activator of tyrosine and tryptophan hydroxylases. Ichimura T, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7084–8

Molecular cloning of a neuron–specific transcript and its regulation during normal and aberrant cerebellar development. Sangameswaran L, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5651–5

Synapsins: mosaics of shared and individual domains in a family of synaptic vesicle phosphoproteins. Südhof TC, et al. **Science** 1989 Sep 29;245(4925):1474–80 (39 ref.)

Linkage of the gene for the scrapie–associated fibril protein (PrP) to the Sip gene in Cheviot sheep. Hunter N, et al. **Vet Rec** 1989 Apr 8;124(14):364–6

IMMUNOLOGY

An immunohistochemical study of the ontogeny of the horizontal cell in the rat retina using an antiserum against spot 35 protein, a novel Purkinje cell–specific protein, as a marker. Kondo H, et al. **Anat Rec** 1988 Sep;222(1):103–9

The reinterpretation of the immunochemical study of Alzheimer neurofibrillary tangles. Nukina N. **Ann Med** 1989;21(2):117–9 (19 ref.)

Selective expression of epitopes in multiphosphorylation repeats of the high and middle molecular weight neurofilament proteins in Alzheimer neurofibrillary tangles. Trojanowski JQ, et al. **Ann Med** 1989;21(2):113–6 (22 ref.)

Monoclonal antibodies against the P2 protein of peripheral myelin and d18 protein of PC 12 cells bind to antigen–presenting cells and inhibit T–cell activation. Dwyer DS, et al. **Ann N Y Acad Sci** 1988;540:452–4

A monoclonal antibody to a parasympathetic neurotrophic factor causes immunoparasympathectomy in mice. Hendry IA, et al. **Brain Res** 1988 Dec 13;475(1):160–3

The developmental regulation of the L2/HNK–1 and L3 carbohydrate epitopes in mouse brain. Evidence for separate control of lipid– and protein–bound epitopes. Breen KC. **FEBS Lett** 1989 Apr 10;247(1):36–40

Demonstration of immunochemical identity between the synaptic vesicle proteins synaptin and synaptophysin/p38. Gaardsvoll H, et al. **FEBS Lett** 1988 Dec 19;242(1):117–20

Developmental profile of chromogranin, hormonal peptides, and 5–hydroxytryptamine in gastrointestinal endocrine cells. Facer P, et al. **Gastroenterology** 1989 Jul;97(1):48–57

A novel tubulin–dependent protein kinase forming a paired helical filament epitope on tau. Ishiguro K, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):319–21

Inhibition of kinesin–driven microtubule motility by monoclonal antibodies to kinesin heavy chains. Ingold AL, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2657–67

Monoclonal antibody that inhibits biological activity of a mammalian ciliary neurotrophic factor. Watters D, et al. **J Neurosci Res** 1989 Jan;22(1):60–4

Post–mortem immunodiagnosis of scrapie and bovine spongiform encephalopathy. Farquhar CF, et al. **J Virol Methods** 1989 Apr–May;24(1–2):215–21

Serum antibodies to brain proteins in a patient with parkinsonism associated with IgM paraproteinemia. Tanaka K, et al. **Jpn J Med** 1988 Aug;27(3):300–4

Properties of antigenic determinants that distinguish neurofibrillary tangles in progressive supranuclear palsy and Alzheimer's disease. Schmidt ML, et al. **Lab Invest** 1988 Oct;59(4):460–6

Preparation and characterization of anti–human chromogranin A and chromogranin B (secretogranin I) monoclonal antibodies. Pelagi M, et al. **Mol Cell Probes** 1989 Mar;3(1):87–101

Immunoreactivity of neuronal lipofuscin with monoclonal antibodies to the amyloid beta–protein. Bancher C, et al. **Neurobiol Aging** 1989 Mar–Apr;10(2):125–32

Influenza viruses induce autoantibodies to a brain–specific 37–kDa protein in rabbit. Laing P, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1998–2002

[Identification of the neuronal protein with antigenic properties of latrotoxin] Tsygankova OM, et al. **Bioorg Khim** 1988 Nov;14(11):1570–2 (Eng. Abstr.) **(Rus)**

[Monoclonal antibodies to cytoplasmic tetrodotoxin–sensitive brain protein. The effect of veratrine on antibody binding to neuroblastoma cells] Pinchuk GV, et al. **Neirofiziologiia** 1988;20(6):794–800 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Ribonuclease inhibitor from pig brain: purification, characterization, and direct spectrophotometric assay. Cho SW, et al. **Anal Biochem** 1989 Jan;176(1):175–9

Diversity of rat brain cysteine proteinase inhibitors: isolation of low–molecular–weight cystatins and a higher–molecular weight T–kininogen–like glycoprotein. Marks N, et al. **Arch Biochem Biophys** 1988 Dec;267(2):448–58

Isolation and identification of rat brain natriuretic peptides in cardiac atrium. Aburaya M, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):226–32

Isolation and identification of a high molecular weight brain natriuretic peptide in porcine cardiac atrium. Minamino N, et al. **Biochem Biophys Res Commun** 1988 Nov 30; 157(1):402–9

Purification and characterization of the P–80 glycoprotein from human brain. Girgrah N, et al. **Biochem J** 1988 Dec 1;256(2):351–6

Identification of lung major GTP–binding protein as Gi2 and its distribution in various rat tissues determined by immunoassay. Asano T, et al. **Biochemistry** 1989 May 30; 28(11):4749–54

Protein associated with the sensory cell layer of the rainbow trout saccular macula. Drescher DG, et al. **Brain Res** 1989 Apr 24;485(2):225–35

Copurification of kinesin polypeptides with microtubule–stimulated Mg–ATPase activity and kinetic analysis of enzymatic properties. Wagner MC, et al. **Cell Motil Cytoskeleton** 1989;12(4):195–215

Isolation and characterization of gap junctions from Drosophila melanogaster. Ryerse JS. **Cell Tissue Res** 1989 Apr;256(1):7–16

Enzyme–linked immunosorbent assay for chromogranin A. Dillen L, et al. **Clin Chem** 1989 Sep;35(9):1934–8

A neurosecretory hyperglycemic hormone from the sinus gland of the Mexican crayfish Procambarus bouvieri (Ortmann)—II. Structural comparison of two isoforms of the hormone. Huberman A, et al. **Comp Biochem Physiol [B]** 1988;91(2):345–9

Electrophoretic characterization and immunoblot analysis of the proteins from the myelin–like light membrane fraction of shrimp ventral nerve (Penaeus duorarum). Waehneldt TV, et al. **Comp Biochem Physiol [B]** 1989;92(2):369–74

Identification of mouse brain proteins after two–dimensional electrophoresis and electroblotting by microsequence analysis and amino acid composition analysis. Eckerskorn C, et al. **Electrophoresis** 1988 Dec;9(12):830–8

Synaptobrevin: an integral membrane protein of 18,000 daltons present in small synaptic vesicles of rat brain. Baumert M, et al. **EMBO J** 1989 Feb;8(2):379–84

Purification of axonin–1, a protein that is secreted from axons during neurogenesis. Ruegg MA, et al. **EMBO J** 1989 Jan; 8(1):55–63

Inhibitors of protein phosphatase–1. Inhibitor–1 of bovine adipose tissue and a dopamine– and cAMP–regulated phosphoprotein of bovine brain are identical. Strålfors P, et al. **Eur J Biochem** 1989 Mar 1;180(1):143–8

A basic protein from bovine brain that co–precipitates with tubulin in vitro. Ohmori H, et al. **Experientia** 1989 Feb 15;45(2):163–5

Isolation and characterization of a fraction from brain that inhibits 1,4–[3H]dihydropyridine binding and L–type calcium channel current. Janis RA, et al. **FEBS Lett** 1988 Nov 7;239(2):233–6

Purification and characterization from bovine brain cytosol of two GTPase–activating proteins specific for smg p21, a GTP–binding protein having the same effector domain as c–ras p21s. Kikuchi A, et al. **J Biol Chem** 1989 Jun 5; 264(16):9133–6

Purification and partial characterization of the normal cellular homologue of the scrapie agent protein. Bendheim PE, et al. **J Infect Dis** 1988 Dec;158(6):1198–208

Oligosaccharide composition, localization, and developmental changes of a CNS-specific (F3-87-8) glycoprotein. Ripellino JA, et al. **J Neurochem** 1989 Oct; 53(4):1103-8

Purification and characterisation of cerebellins from human and porcine cerebellum. Yiangou Y, et al. **J Neurochem** 1989 Sep;53(3):886-9

Extraction of major acidic Ca2+ dependent phosphoproteins from synaptic membranes. Perrone-Bizzozero NI, et al. **J Neurosci Res** 1988 Jul;20(3):346-50

Purification and characterization of glia maturation factor beta: a growth regulator for neurons and glia. Lim R, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3901-5

METABOLISM

Early stages of late onset Alzheimer's disease. Diagnostic criteria, protein metabolism, precursor loading effects, neurochemical and neuropsychological applications. Forssell LG, et al. **Acta Neurol Scand Suppl** 1989;121:1-95

DARPP-32 as a marker for D-1 dopaminoceptive cells in the rat brain: prenatal development and presence in glial elements (tanycytes) in the basal hypothalamus. Hökfelt T, et al. **Adv Exp Med Biol** 1988;235:65-82 (38 ref.)

Dopamine-regulated protein phosphorylation in the basal ganglia. Ouimet CC, et al. **Adv Exp Med Biol** 1988;235:1-17 (32 ref.)

Increased tau accumulation in senile plaques as a hallmark in Alzheimer's disease. Shin RW, et al. **Am J Pathol** 1989 Jun;134(6):1365-71

Interaction of calcium with porcine adrenal chromogranin A (secretory protein-I) and chromogranin B (secretogranin I). Gorr SU, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):E247-54

Along the way to a neurofibrillary tangle: a look at the structure of tau. Kosik KS, et al. **Ann Med** 1989; 21(2):109-12 (32 ref.)

Relationships among the cerebral amyloid peptides and their precursors. Miller DL, et al. **Ann Med** 1989;21(2):83-7 (42 ref.)

Immunohistochemical analysis of the olfactory mucosa by use of antibodies to brain proteins and cytokeratin. Yamagishi M, et al. **Ann Otol Rhinol Laryngol** 1989 May; 98(5 Pt 1):384-8

Immunocytochemical localizations of neuron-specific proteins in the taste bud of the guinea pig. Yoshie S, et al. **Arch Histol Cytol** 1988 Oct;51(4):379-84

Differentiated neuroblastoma cells are more susceptible to aluminium toxicity than developing cells. Roll M, et al. **Arch Toxicol** 1989;63(3):231-7

Proteolysis of tau by calpain. Johnson GV, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1505-11

Phosphorylation of protein B-50 (GAP-43) from adult rat brain cortex by casein kinase II. Pisano MR, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1207-12

Kinetic analysis of the binding of guanine nucleotide to bovine brain smg p25A. Shoji I, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):273-81

Degradation of porcine brain natriuretic peptide (pBNP-26) by endoprotease-24.11 from kidney cortical membranes. Vogt-Schaden M, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1177-83

A role for repeated 18-amino-acid stretches in the sequence of synapsin I in tubulin binding? [letter] Baines AJ. **Biochem J** 1989 May 15;260(1):311-2

Characterization of a membrane protein from brain mediating the inhibition of inositol 1,4,5-trisphosphate receptor binding by calcium. Danoff SK, et al. **Biochem J** 1988 Sep 15;254(3):701-5

Inhibition of phosphorylation of the mitochondrial 34 kDa protein. A unique effect of vanadium ions? Krivanek J, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2713-7

Presence of the HNK-1 epitope on poly(N-acetyllactosaminyl) oligosaccharides and identification of multiple core proteins in the chondroitin sulfate proteoglycans of brain. Gowda DC, et al. **Biochemistry** 1989 May 16;28(10):4468-74

Structural and functional studies on the sodium- and chloride-coupled gamma-aminobutyric acid transporter: deglycosylation and limited proteolysis. Kanner BI, et al. **Biochemistry** 1989 May 2;28(9):3722-8

Methylglucamine orotate does not affect dopamine-stimulated fucosylation of rat hippocampal proteins. Pchalek V, et al. **Biomed Biochim Acta** 1988; 47(9):843-8

Calcium-binding and aggregation properties of parathyroid secretory protein-I (chromogranin A). Gorr SU, et al. **Bone Miner** 1988 Apr;4(1):17-25

Changes in CSF and brain soluble proteins following vigabatrin treatment in rats. Persson LI, et al. **Br J Clin Pharmacol** 1989;27 Suppl 1:73S-77S

Excitatory amino acids enhance dissociation of zinc from soluble protein in cytosol of rat hippocampus. Baba A, et al. **Brain Res** 1989 May 8;486(2):372-5

Dependence of GAP43 (B50, F1) transport on axonal regeneration in rat dorsal root ganglion neurons. Bisby MA. **Brain Res** 1988 Aug 16;458(1):157-61

Acceleration of anterograde axonal transport in cat sciatic nerve by diisopropyl phosphorofluoridate. Carrington CD, et al. **Brain Res** 1989 Jan 2;476(1):179-82

Long-term potentiation in the dentate gyrus of the anaesthetized rat is accompanied by an increase in protein efflux into push-pull cannula perfusates. Fazeli MS, et al. **Brain Res** 1988 Nov 8;473(1):51-9

Spatial relationship of the striatonigral and mesostriatal pathways: double-label immunocytochemistry for DARPP-32 and tyrosine hydroxylase. Gustafson EL, et al. **Brain Res** 1989 Jul 10;491(2):297-306

Hexanedione effects on protein phosphorylation in rat peripheral nerve. Horan KL, et al. **Brain Res** 1989 Jul 10; 491(2):366-70

Cycloheximide-sensitive [35S]methionine labeling of proteins in goldfish retinal ganglion cell axons in vitro. Koenig E. **Brain Res** 1989 Feb 27;481(1):119-23

NMDA receptor blockade prevents the increase in protein kinase C substrate (protein F1) phosphorylation produced by long-term potentiation. Linden DJ, et al. **Brain Res** 1988 Aug 16;458(1):142-6

Experimental studies on the olfactory marker protein. V. Olfactory marker protein in the olfactory neurons transplanted within the olfactory bulb. Monti Graziadei AG, et al. **Brain Res** 1989 Apr 10;484(1-2):157-67

Distribution and time course of protein extravasation in the rat spinal cord after contusive injury. Noble LJ, et al. **Brain Res** 1989 Mar 13;482(1):57-66

No evidence for a circadian rhythm of protein synthesis in the rat suprachiasmatic nuclei. Scammell TE, et al. **Brain Res** 1989 Aug. 7;494(1):155-8

Ontogenesis of chromogranin A and B and catecholamines in rat adrenal medulla. Schober M, et al. **Brain Res** 1989 Jan 23;478(1):41-6

Is the supply of axoplasmic proteins a burden for the cell body? Morphometry of sensory neurons and amino acid incorporation into their cell bodies. von Bernhardi R, et al. **Brain Res** 1989 Jan 30;478(2):301-8

Developmental changes in protein phosphorylation in chicken forebrain. I. cAMP-stimulated phosphorylation. Weinberger RP, et al. **Brain Res** 1988 Oct 1;471(2):249-57

Developmental changes in protein phosphorylation in chicken forebrain. II. Calmodulin stimulated phosphorylation. Weinberger RP, et al. **Brain Res** 1988 Oct 1;471(2):259-72

Detection of novel proteins associated with secondary amyloidosis and Alzheimer's disease by monoclonal antibody. Yamashita T, et al. **Brain Res** 1988 Dec 6; 474(2):309-15

Changes in the distribution of the neuron-specific B-50, neurofilament protein and glial fibrillary acidic proteins following an unilateral mesencephalic lesion in the rat. Oestreicher AB, et al. **Brain Res Bull** 1988 Nov; 21(5):713-22

Binding of kinesin to stress fibers in fibroblasts under condition of microtubule depolymerization. Okuhara K, et al. **Cell Motil Cytoskeleton** 1989;12(2):71-7

Electron-microscopic demonstration of olfactory-marker protein with protein G-gold in freeze-substituted, Lowicryl K11M-embedded rat olfactory-receptor cells. Menco BP. **Cell Tissue Res** 1989;256(2):275-81

Phospholipid metabolism and protein phosphorylation in sciatic nerve from genetically diabetic (db/db) mouse. Berti-Mattera LN, et al. **Diabetes** 1988 Dec;37(12):1703-7

p36, the major cytoplasmic substrate of src tyrosine protein kinase, binds to its p11 regulatory subunit via a short amino-terminal amphiphatic helix. Johnsson N, et al. **EMBO J** 1988 Aug;7(8):2435-42

Localization of 4.1 related proteins in cerebellar neurons. Yorifuji H, et al. **Eur J Cell Biol** 1989 Feb;48(1):104-15

Atrial and brain natriuretic peptides share binding sites in the kidney and heart. Oehlenschlager WF, et al. **Eur J Pharmacol** 1989 Feb 28;161(2-3):159-64

Brain natriuretic peptide interacts with atrial natriuretic peptide receptor in cultured rat vascular smooth muscle cells. Hirata Y, et al. **FEBS Lett** 1988 Oct 10;238(2):415-8

Calcium-dependence of chromogranin A-catecholamine interaction. Westermann R, et al. **FEBS Lett** 1988 Nov 7;239(2):203-6

The distribution of GAWK-like immunoreactivity in neuroendocrine cells of the human gut, pancreas, adrenal and pituitary glands and its co-localisation with chromogranin B. Bishop AE, et al. **Histochemistry** 1989; 90(6):475-83

Ontogeny of the dopamine and cyclic adenosine-3':5'-monophosphate-regulated phosphoprotein (DARPP-32) in the pre- and postnatal mouse central nervous system. Foster GA, et al. **Int J Dev Neurosci** 1988; 6(4):367-86

Regional protein patterns of the embryonic chick brain: developmental shifts and the effects of light stimulation. Zhang J, et al. **Int J Dev Neurosci** 1987;5(2):151-65

Lithium salts adopted for psychopharmacological use as the modulators of protein synthesis in the brain: analytical review. Kuznetsov DA. **Int J Neurosci** 1989 Mar; 45(1-2):1-6 (24 ref.)

Two separate 18-amino acid domains of tau promote the polymerization of tubulin. Ennulat DJ, et al. **J Biol Chem** 1989 Apr 5;264(10):5327-30

ARPP-21, a cyclic AMP-regulated phosphoprotein (Mr = 21,000) enriched in dopamine-innervated brain regions. Amino acid sequence of the site phosphorylated by cyclic AMP in intact cells and kinetic studies of its phosphorylation in vitro. Hemmings HC Jr, et al. **J Biol Chem** 1989 May 5;264(13):7726-33

Isolation of a 45-kDa fragment from the kinesin heavy chain with enhanced ATPase and microtubule-binding activities. Kuznetsov SA, et al. **J Biol Chem** 1989 Jan 5;264(1):589-95

Dephosphorylation of neuromodulin by calcineurin. Liu YC, et al. **J Biol Chem** 1989 Aug 5;264(22):12800-4

Binding of hexabrachions to heparin and DNA. Marton LS, et al. **J Biol Chem** 1989 Aug 5;264(22):13145-9

Dephosphorylation of cofilin accompanies heat shock-induced nuclear accumulation of cofilin. Ohta Y, et al. **J Biol Chem** 1989 Sep 25;264(27):16143-8

Characterization of synapsin I fragments produced by cysteine-specific cleavage: a study of their interactions with F-actin. Bähler M, et al. **J Cell Biol** 1989 May; 108(5):1841-9

Electrostatic and hydrophobic interactions of synapsin I and synapsin I fragments with phospholipid bilayers. Benfenati F, et al. **J Cell Biol** 1989 May;108(5):1851-62

Interactions of synapsin I with small synaptic vesicles: distinct sites in synapsin I bind to vesicle phospholipids and vesicle proteins. Benfenati F, et al. **J Cell Biol** 1989 May; 108(5):1863-72

The distribution, abundance and subcellular localization of kinesin. Hollenbeck PJ. **J Cell Biol** 1989 Jun;108(6):2335-42

The adhesive and neurite-promoting molecule p30: analysis of the amino-terminal sequence and production of antipeptide antibodies that detect p30 at the surface of neuroblastoma cells and of brain neurons. Rauvala H, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2293-305

Posttranslational membrane attachment and dynamic fatty acylation of a neuronal growth cone protein, GAP-43. Skene JH, et al. **J Cell Biol** 1989 Feb;108(2):613-24

Synaptophysin (p38) at the frog neuromuscular junction: its incorporation into the axolemma and recycling after intense quantal secretion. Valtorta F, et al. **J Cell Biol** 1988 Dec; 107(6 Pt 2):2717-27

Selective release from cultured mammalian cells of heat-shock (stress) proteins that resemble glia-axon transfer proteins. Hightower LE, et al. **J Cell Physiol** 1989 Feb; 138(2):257-66

Postnatal development and possible ligand function of the CNS-specific membrane glycoprotein CNSgp130. Flanagan BF, et al. **J Neurochem** 1989 May;52(5):1468-73

Protein phosphorylation in astrocytes mediated by protein kinase C: comparison with phosphorylation by cyclic AMP-dependent protein kinase. Harrison BC, et al. **J Neurochem** 1989 Oct;53(4):1245-51

Phosphorylation of tubulin by casein kinase II regulates its binding to a neuronal protein (NP 185) associated with brain coated vesicles. Kohtz DS, et al. **J Neurochem** 1989 Jan;52(1):285-95

Cyclic AMP-dependent protein phosphorylation in isolated neuronal growth cones from developing rat forebrain. Lockerbie RO, et al. **J Neurochem** 1989 Mar;52(3):786-96

Protein fatty acid acylation in developing cortical neurons. Perrone-Bizzozero NI, et al. **J Neurochem** 1989 Apr; 52(4):1149-55

Phosphorylation of superior cervical ganglion proteins during regeneration. Watterson JG, et al. **J Neurochem** 1989 Jun; 52(6):1700-7

A light and electron microscopical study of B-50 (GAP-43) in human intramuscular nerve and neuromuscular junctions during development. Hesselmans LF, et al. **J Neurol Sci** 1989 Feb;89(2-3):301-11

A developmentally regulated chicken neuronal protein associated with the cortical cytoskeleton. Allsopp TE, et al. **J Neurosci** 1989 Jan;9(1):13-24

Localization of the growth-associated phosphoprotein GAP-43 (B-50, F1) in the human cerebral cortex. Benowitz LI, et al. **J Neurosci** 1989 Mar;9(3):990-5

Selective distribution of the 57 kDa neural intermediate filament protein in the rat CNS. Brody BA, et al. **J Neurosci** 1989 Jul;9(7):2391-401

Rat astroglial somatomedin/insulin-like growth factor binding proteins: characterization and evidence of biologic function. Han VK, et al. **J Neurosci** 1988 Sep;8(9):3135-43

Proteolytic processing of human brain alpha spectrin (fodrin): identification of a hypersensitive site. Harris AS, et al. **J Neurosci** 1988 Jul;8(7):2640-51

Expression of GAP-43, a rapidly transported growth-associated protein, and class II beta tubulin, a slowly transported cytoskeletal protein, are coordinated in regenerating neurons. Hoffman PN. **J Neurosci** 1989 Mar; 9(3):893-7

Expression of two developmentally regulated brain-specific proteins is correlated with late outgrowth of the pyramidal tract. Kalil K, et al. **J Neurosci** 1988 Dec;8(12):4797-808

Early differentiation of retinal ganglion cells: an axonal protein expressed by premigratory and migrating retinal ganglion cells. McLoon SC, et al. **J Neurosci** 1989 Apr; 9(4):1424-32

Distribution and phosphorylation of the growth-associated protein GAP-43 in regenerating sympathetic neurons in culture. Meiri KF, et al. **J Neurosci** 1988 Jul;8(7):2571-81

Changes in rapidly transported proteins in developing hamster retinofugal axons. Moya KL, et al. **J Neurosci** 1988 Dec;8(12):4445-54

The two major phosphoproteins in growth cones are probably identical to two protein kinase C substrates correlated with persistence of long-term potentiation. Nelson RB, et al. **J Neurosci** 1989 Feb;9(2):381-9

A nerve terminal protein with a selective distribution in spinal cord and brain. Ritchie TC, et al. **J Neurosci** 1989 Aug; 9(8):2697-709

Binding characteristics of brain-derived neurotrophic factor to its receptors on neurons from the chick embryo.

Rodriguez-Tébar A, et al. **J Neurosci** 1988 Sep; 8(9):3337–42

Secretory function of the vestibular nerve calyx suggested by presence of vesicles, synapsin I, and synaptophysin. Scarfone E, et al. **J Neurosci** 1988 Dec;8(12):4640–5

Receptor specificity of a glucocorticoid- and stress-induced hippocampal protein. Schlatter LK, et al. **J Neurosci** 1989 Apr;9(4):1134–40

Axonal transport and localization of B-50/GAP-43-like immunoreactivity in regenerating sciatic and facial nerves of the rat. Tetzlaff W, et al. **J Neurosci** 1989 Apr; 9(4):1303–13

The expression of the growth associated protein B50/GAP43 in the olfactory system of neonatal and adult rats. Verhaagen J, et al. **J Neurosci** 1989 Feb;9(2):683–91

Novel astrocytic protein in multiple sclerosis plaques. Malhotra SK, et al. **J Neurosci Res** 1989 Jan;22(1):36–49

Secretion of newly synthesized proteins into the extracellular fluid of the rabbit hippocampus. Nyström B, et al. **J Neurosci Res** 1988 Sep;21(1):51–5

Protein synthesis by rat hippocampal slices maintained in vitro. Phillips LL, et al. **J Neurosci Res** 1988 Sep;21(1):6–17

Expression of monoclonal antibody Q113 immunoreactivity in the rat cerebral cortex: unique differential sublayering of layer I: staining of radial glia. Plioplys AV, et al. **J Neurosci Res** 1988 Jul;20(3):359–75

Porcine brain natriuretic peptide receptor in bovine adrenal cortex. Higuchi K, et al. **Life Sci** 1989;44(13):881–6

Different processing of chromogranin B into GAWK-immunoreactive fragments in the bovine adrenal medulla and pituitary gland. Iguchi H, et al. **Life Sci** 1988; 43(23):1945–52

Ca2+-mediated degradation of central nervous system (CNS) proteins: topographic and species variation. Banik NL, et al. **Metab Brain Dis** 1987 Jun;2(2):117–26

Growth-associated protein 43 is down-regulated in cultured astrocytes. Vitković L, et al. **Metab Brain Dis** 1989 Mar; 4(1):47–53

Arachidonic acid metabolites as intracellular modulators of the G protein-gated cardiac K+ channel [published erratum appears in Nature 1989 Mar 23;338(6213):360] Kurachi Y, et al. **Nature** 1989 Feb 9;337(6207):555–7

Selective decline in protein F1 phosphorylation in hippocampus of senescent rats. Barnes CA, et al. **Neurobiol Aging** 1988 Jul-Aug;9(4):393–8

Cell-specific fatty acylation of proteins in cultured cells of neuronal and glial origin. Byers DM, et al. **Neurochem Res** 1989 Jun;14(6):503–9

Release of proteins during long-term potentiation in the hippocampus of the anaesthetized rat. Charriaut-Marlangue C, et al. **Neurosci Lett** 1988 Sep 12;91(3):308–14

Impairment of protein ubiquitination may cause delayed neuronal death. Magnusson K, et al. **Neurosci Lett** 1989 Jan 30;96(3):264–70

Receptor autoradiographic evidence of specific brain natriuretic peptide binding sites in the porcine subfornical organ. Niwa M, et al. **Neurosci Lett** 1988 Dec 19; 95(1-3):113–8

Localization of calcitonin gene-related peptide (CGRP) at a neuronal nicotinic synapse. Peng HB, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):75–80

Brain natriuretic peptides: differential localization of a new family of neuropeptides. Saper CB, et al. **Neurosci Lett** 1989 Jan 2;96(1):29–34

Colchicine effect on B-50/GAP43 phosphoprotein localization in rat dorsal root ganglion explants. Schmidt-Michels M, et al. **Neurosci Lett** 1989 Feb 27; 97(3):285–90

Morphometrical evidence for a complex organization of tyrosine hydroxylase-, enkephalin- and DARPP-32-like immunoreactive patches and their codistribution at three rostrocaudal levels in the rat neostriatum. Agnati LF, et al. **Neuroscience** 1988 Dec;27(3):785–97

Calcitonin gene-related peptide and chromogranin A: presence and intra-axonal transport in lumbar motor neurons in the rat, a comparison with synaptic vesicle antigens in immunohistochemical studies. Bööj S, et al. **Neuroscience** 1989;30(2):479–501

DARPP-32, a dopamine- and cyclic AMP-regulated phosphoprotein in tanycytes of the mediobasal hypothalamus: distribution and relation to dopamine and luteinizing hormone-releasing hormone neurons and other glial elements. Meister B, et al. **Neuroscience** 1988 Nov; 27(2):607–22

Regional distribution of chromogranin B 420–493-like immunoreactivity in the pituitary gland and central nervous system of man, guinea-pig and rat. Salahuddin MJ, et al. **Neuroscience** 1989;30(1):231–40

The ventral striatopallidal complex: an immunocytochemical analysis of medium-sized striatal neurons and striatopallidal fibers in the basal forebrain of the rat. Walaas SI, et al. **Neuroscience** 1989;28(3):663–72

Dopamine-regulated phosphorylation of synaptic vesicle-associated proteins in rat neostriatum and substantia nigra. Walaas SI, et al. **Neuroscience** 1989;29(1):9–19

Microwave radiation, in the absence of hyperthermia, has no detectable effect on synapsin I levels or phosphorylation. Browning MD, et al. **Neurotoxicol Teratol** 1988 Sep-Oct;10(5):461–4

Immunohistochemical evidence for the existence of a dopamine- and cyclic AMP-regulated phosphoprotein (DARPP-32) in brown adipose tissue of pigs. Meister B, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8713–6

Muscarinic agonists and phorbol esters increase tyrosine phosphorylation of a 40-kilodalton protein in hippocampal slices. Stratton KR, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2498–501

Selective metabolic labeling of axonal proteins: an in vitro approach for the identification and characterization of axonal proteins and their role in health and disease. Sonderegger P. **Schweiz Arch Neurol Psychiatr** 1989; 140(1):21–5

Alzheimer's proteins. Burnham L. **Sci Am** 1988 Jan; 258(1):23–4

The EGF receptor kinase substrate p35 in the floor plate of the embryonic rat CNS. McKanna JA, et al. **Science** 1989 Mar 17;243(4897):1477–9

Quantitation of nerve terminal populations: synaptic vesicle-associated proteins as markers for synaptic density in the rat neostriatum. Walaas SI, et al. **Synapse** 1988; 2(5):516–20

Storage and degradation of secretory proteins in adenomatous and secondary hyperplastic parathyroid cells. An immunoelectron microscope study. Berger G, et al. **Virchows Arch [A]** 1989;415(4):305–16

[Effect of a cyclic enkephalin analog on the protein content in the hippocampal neurons of rats during the acquisition of a 2-way avoidance conditioned reflex] Segal OL, et al. **Biol Nauki** 1989;(5):59–64 (Eng. Abstr.) **(Rus)**

[Electrophysiological and neurochemical study of long-term sensitization in the snail] Beregovoĭ NA, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):259–61 (Eng. Abstr.) **(Rus)**

[Novel carboxypeptidase for processing of animal nerve tissue enkephalins] Gengin MT, et al. **Ukr Biokhim Zh** 1989 May-Jun;61(3):62–6 (Eng. Abstr.) **(Rus)**

[Ontogenetic characteristics of ascorbic acid binding by nerve tissue proteins] Sokolovskiĭ VV, et al. **Zh Evol Biokhim Fiziol** 1988 Jul-Aug;24(4):484–8 (Eng. Abstr.) **(Rus)**

[Characteristics of behavior and protein metabolism in the brain of second-generation animals whose mothers received ethanol during pregnancy] Maizelis MIa, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):112–7 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Effects of brain natriuretic peptide on renal nerve activity in conscious rabbits. Morita H, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):R792–6

Regulation of polyphosphoinositide synthesis in cardiac membranes. Quist E, et al. **Arch Biochem Biophys** 1989 May 15;271(1):21–32

Natriuretic and hypotensive effects of brain natriuretic peptide in anaesthetized DOCA-salt hypertensive rats. Kita T, et al. **Clin Exp Pharmacol Physiol** 1989 Mar;16(3):185–90

PTHrP secretion is stimulated by CT and inhibited by CgA peptides. Deftos LJ, et al. **Endocrinology** 1989 Jul; 125(1):563–5

Inhibition of glucose-stimulated insulin release in the perfused rat pancreas by parathyroid secretory protein-I (chromogranin-A). Greeley GH Jr, et al. **Endocrinology** 1989 Mar;124(3):1235–8

Effect of brain natriuretic peptide on cyclic GMP accumulation in a kidney epithelial cell line (LLC-PK1). Iwata T, et al. **Eur J Pharmacol** 1989 Jan 17;159(3):321–3

Hemodynamic responses to BNP in rats. Tang CS, et al. **Eur J Pharmacol** 1989 Jan 17;159(3):327–8

Prostatropin and acidic FGF also support proliferation of an EGF-dependent keratinocyte cell line. Miller-Davis S, et al. **Exp Cell Res** 1988 Dec;179(2):595–9

Induction of cytoskeletal alterations in C6 glioma by glia maturation factor. Ryken TC, et al. **Int J Dev Neurosci** 1987;5(3):215–25

Nerve growth factors (NGF, BDNF) enhance axonal regeneration but are not required for survival of adult sensory neurons. Lindsay RM. **J Neurosci** 1988 Jul; 8(7):2394–405

Agrin-induced specializations contain cytoplasmic, membrane, and extracellular matrix-associated components of the postsynaptic apparatus. Wallace BG. **J Neurosci** 1989 Apr;9(4):1294–302

Development of cholinergic pedunculopontine neurons in vitro: comparison with cholinergic septal cells and response to nerve growth factor, ciliary neuronotrophic factor, and retinoic acid. Knusel B, et al. **J Neurosci Res** 1988 Oct-Dec; 21(2-4):365–75

Natriuretic and hypotensive effects of brain natriuretic peptide (BNP) in spontaneously hypertensive rats. Kita T, et al. **Life Sci** 1989;44(21):1541–5

Sodium and potassium uptake in primary cultures of proliferating rat astroglial cells induced by short-term exposure to an astroglial growth factor. Latzkovits L, et al. **Neurochem Res** 1988 Sep;13(9):837–48

Intracerebroventricular injection of brain natriuretic peptide inhibits vasopressin secretion in conscious rats. Yamada T, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):223–8

G protein activation mechanisms of the cardiac K+ channel, iK.ACh. Clapham DE, et al. **Soc Gen Physiol Ser** 1989; 44:55–68 (19 ref.)

PHYSIOLOGY

Axonal growth-associated proteins. Skene JH. **Annu Rev Neurosci** 1989;12:127–56 (155 ref.)

Lower motoneuron trophic factors and lower motoneuron death: effects and mechanisms. Raju TR, et al. **Aust Paediatr J** 1988;24 Suppl 1:48–9 (12 ref.)

Brain natriuretic peptide is a novel cardiac hormone. Saito Y, et al. **Biochem Biophys Res Commun** 1989 Jan 31; 158(2):360–8

Neural cell recognition molecule F11: membrane interaction by covalently attached phosphatidylinositol. Wolff JM, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):931–8

Specific protein changes during memory acquisition and storage. Nelson TJ, et al. **Bioessays** 1989 Feb-Mar; 10(2-3):75–9 (34 ref.)

New suggestions for the physiological role of secretory protein-I. Gorr SU, et al. **Bone Miner** 1987 Jul;2(4):251–5 (26 ref.)

Classical conditioning leads to changes in extracellular concentrations of ependymin in goldfish brain. Shashoua VE, et al. **Brain Res** 1989 Apr 10;484(1-2):333–9

Head and tail. Schliwa M. **Cell** 1989 Mar 10;56(5):719–20 (19 ref.)

Possible antagonistic relationship between atrial natriuretic peptide (ANP)-brain natriuretic peptide (BNP) system and brain renin-angiotensin system in central control of body fluid and cardiovascular function. Nakao K, et al. **Clin Exp Hypertens [A]** 1988;10(6):1289–91

Molecular convergence of presynaptic inhibition and presynaptic facilitation on common substrate proteins of individual sensory neurons of Aplysia. Sweatt D, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:395–405

Basal lamina components are concentrated in premuscle masses and at early acetylcholine receptor clusters in chick embryo hindlimb muscles. Godfrey EW, et al. **Dev Biol** 1988 Dec;130(2):471–86

Developmental modulation of a glial cell-associated glycoprotein, 5B12, in an insect, Acheta domesticus. Meyer MR, et al. **Dev Biol** 1988 Nov;130(1):374–91

Heat-resistant inhibitors of protein kinase C from bovine brain. Pribilla I, et al. **Eur J Biochem** 1988 Nov 15; 177(3):657–64

PC12 pheochromocytoma and sympathetic nervous system derived trophic factors augment growth of neuroblastoma. Chelmicka-Schorr E, et al. **Eur J Cancer Clin Oncol** 1989 Jul;25(7):1057–9

Quantitative analysis of sea urchin egg kinesin-driven microtubule motility. Cohn SA, et al. **J Biol Chem** 1989 Mar 15;264(8):4290–7

Enzymes for microtubule-dependent motility. McIntosh JR, et al. **J Biol Chem** 1989 Apr 15;264(11):6001–4 (58 ref.)

Intracellular substrates for extracellular signaling. Characterization of a ubiquitous, neuron-enriched phosphoprotein (stathmin). Sobel A, et al. **J Biol Chem** 1989 Mar 5;264(7):3765–72

Sequence of contactin, a 130-kD glycoprotein concentrated in areas of interneuronal contact, defines a new member of the immunoglobulin supergene family in the nervous system. Ranscht B. **J Cell Biol** 1988 Oct;107(4):1561–73

Ciliary neurotrophic factor induces cholinergic differentiation of rat sympathetic neurons in culture. Saadat S, et al. **J Cell Biol** 1989 May;108(5):1807–16

The role of kinesin and other soluble factors in organelle movement along microtubules. Schroer TA, et al. **J Cell Biol** 1988 Nov;107(5):1785–92

Formation of membrane networks in vitro by kinesin-driven microtubule movement. Vale RD, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2233–41

Neuronal-derived factors regulating glial cell proliferation and maturation. Sensenbrenner M, et al. **J Physiol (Paris)** 1987;82(4):288–90

Chromogranin A—always a bridesmaid, never a bride? [editorial] **Lancet** 1989 Sep 2;2(8662):542

G-protein subunits. Who carries what message? Bourne HR. **Nature** 1989 Feb 9;337(6207):504 (21 ref.)

Differential activation of myotube nuclei following exposure to an acetylcholine receptor-inducing factor. Harris DA, et al. **Nature** 1989 Jan 12;337(6203):173–6

Cell motility. Dissecting a molecular motor [news] Hollenbeck P. **Nature** 1989 Mar 23;338(6213):294–5

G-protein beta gamma-subunits activate the cardiac muscarinic K+-channel via phospholipase A2. Kim D, et al. **Nature** 1989 Feb 9;337(6207):557–60

Identification of des-(Gly-Ile)-endozepine as an effector of corticotropin-dependent adrenal steroidogenesis: stimulation of cholesterol delivery is mediated by the peripheral benzodiazepine receptor. Besman MJ, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4897–901

Information storage in the nervous system of Aplysia: specific proteins affected by serotonin and cAMP. Eskin A, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2458–62

The protein F1/protein kinase C module and neurite growth: potential pathway for facilitating brain transplantation. Nelson RB, et al. **Prog Brain Res** 1988;78:339–45 (41 ref.)

In search of cellular mechanisms of memory. Matthies H. **Prog Neurobiol** 1989;32(4):277–349 (250 ref.)

Plasticity in brain development. Aoki C, et al. **Sci Am** 1988 Dec;259(6):56–64 (4 ref.)

Growth cone guidance in insects: fasciclin II is a member of the immunoglobulin superfamily. Harrelson AL, et al. **Science** 1988 Nov 4;242(4879):700–8

The neuronal growth-associated protein GAP-43 induces filopodia in non-neuronal cells. Zuber MX, et al. **Science** 1989 Jun 9;244(4909):1193–5

Identification of G protein–gated and G protein–modulated ionic channels. Molecular basis for G protein action. Birnbaumer L, et al. **Soc Gen Physiol Ser** 1989;44:17–54 (86 ref.)

New roles for PDGF and CNTF in controlling the timing of glial cell differentiation in the optic nerve. Anderson DJ. **Trends Neurosci** 1989 Mar;12(3):83–5 (20 ref.)

[The distribution, characteristics and effects of ir–BNP in central and peripheral tissues in rat] Tang JA, et al. **Sheng Li Hsueh Pao** 1989 Jun;41(3):215–22 (Eng. Abstr.) **(Chi)**

[Neuronal trophic factors in the central nervous system] Lu GW. **Sheng Li Ko Hsueh Chin Chan** 1989 Jan;20(1):8–11 (43 ref.) **(Chi)**

[Putative endogenous ligands for the benzodiazepine receptor] Song LC, et al. **Sheng Li Ko Hsueh Chin Chan** 1989 Jan;20(1):70–2 (27 ref.) **(Chi)**

[Nervous system–specific proteins] Wang R. **Sheng Li Ko Hsueh Chin Chan** 1988 Jul;19(3):231–6 (46 ref.) **(Chi)**

[Long–term interaction of nerve and muscle, and trophic substance] Miyata Y. **Nippon Ika Daigaku Zasshi** 1989 Jun; 56(3):211–7 (23 ref.) **(Jpn)**

[Recent advances in molecular pharmacology of cellular signalling mechanism] Nomura Y. **Nippon Yakurigaku Zasshi** 1989 Jun;93(6):321–31 (89 ref.) (Eng. Abstr.) **(Jpn)**

[Interaction between G–protein and rhodopsin] Tsuda M. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):546–56 **(Jpn)**

[Protein G as a "universal link" in signal transmission from the membrane receptors on their effectors—minireview] Kwiatkowska J. **Postepy Biochem** 1988;34(3):123–30 (41 ref.) **(Pol)**

[Effect of neurite–stimulating protein on the growth and proliferation of peripheral glia cells] Chumasov EI, et al. **Neirofiziologiia** 1989;21(3):416–20 (Eng. Abstr.) **(Rus)**

SECRETION

Stimulation of human neuronectin secretion by brain–derived growth factors. Rettig WJ, et al. **Brain Res** 1989 May 15; 487(1):171–7

Identification of proteins secreted from axons of embryonic dorsal–root–ganglia neurons. Stoeckli ET, et al. **Eur J Biochem** 1989 Mar 15;180(2):249–58

Human pituitary tumors secrete chromogranin–A. Deftos LJ, et al. **J Clin Endocrinol Metab** 1989 May;68(5):869–72

Release of endogenous excitatory amino acids and proteins by the mast cell degranulating peptide in the hippocampus. Aniksztejn L, et al. **Pflugers Arch** 1989;414 Suppl 1:S123–4

ULTRASTRUCTURE

Submolecular domains of bovine brain kinesin identified by electron microscopy and monoclonal antibody decoration. Hirokawa N, et al. **Cell** 1989 Mar 10;56(5):867–78

A three–domain structure of kinesin heavy chain revealed by DNA sequence and microtubule binding analyses. Yang JT, et al. **Cell** 1989 Mar 10;56(5):879–89

The molecular structure of adrenal medulla kinesin. Hisanaga S, et al. **Cell Motil Cytoskeleton** 1989;12(4):264–72

Amino acid sequence of a low molecular weight, high affinity calcium–binding protein from the optic lobe of the squid Loligo pealei. Head JF. **J Biol Chem** 1989 May 5; 264(13):7202–9

NERVE TRANSMISSION see **NEURAL TRANSMISSION**

NERVE TRANSMITTER SUBSTANCES see **NEUROREGULATORS**

NERVOUS MICE see **MICE, NEUROLOGIC MUTANTS**

NERVOUS SYSTEM

NERVTRACK—a neuroanatomical data bank. Spitzer K, et al. **Comput Biomed Res** 1989 Apr;22(2):181–9

Collective modes in neural networks. Parikh JC, et al. **Int J Neurosci** 1989 Feb;44(3–4):327–33

Predicting the secondary structure of globular proteins using neural network models. Qian N, et al. **J Mol Biol** 1988 Aug 20;202(4):865–84

Magnetism. A new method for stimulation of nerve and brain [clinical conference] Hallett M, et al. **JAMA** 1989 Jul 28; 262(4):538–41

ABNORMALITIES

Epidermal nevus syndrome with hemimegalencephaly: a clinical report of a case with acanthosis nigricans–like nevi on the face and neck, hemimegalencephaly, and hemihypertrophy of the body. Sakuta R, et al. **Brain Dev** 1989;11(3):191–4

[Diagnosis of early neurologic disorders and diseases in development] Nikolić V, et al. **Med Pregl** 1988; 41(5–6):241–5 (Eng. Abstr.) **(Scr)**

ANALYSIS

12–keto–eicosatetraenoic acid. A biologically active eicosanoid in the nervous system of Aplysia. Piomelli D, et al. **Ann N Y Acad Sci** 1989;559:208–18

Immunohistochemical and electrochemical detection of serotonin in the nervous system of Fasciola hepatica, a parasitic flatworm. Sukhdeo SC, et al. **Brain Res** 1988 Oct 25;463(1):57–62

Cell adhesion molecules in neural development. Linnemann D, et al. **Dev Neurosci** 1989;11(3):149–73 (177 ref.)

Morphological, cytochemical and neuropharmacological evidence for the presence of catecholamines in hydrozoan planulae. Kolberg KJ, et al. **Development** 1988 Jun; 103(2):249–58

Coexistence of peptides with classical neurotransmitters. Hökfelt T, et al. **Experientia Suppl** 1989;56:154–76 (150 ref.)

Serotoninlike immunoreactivity in the central and peripheral nervous system of the scale worm Harmothoe imbricata (Polychaeta). Miron MJ, et al. **J Comp Neurol** 1988 Sep 15;275(3):429–40

Monoclonal anti–conjugated acetylcholine antibody and immunohistochemical applications in rat nervous system. Chagnaud JL, et al. **J Neurochem** 1989 Aug;53(2):383–91

Monoclonal antibody detects embryonic epitope specific for nerve–derived transferrin. Festoff BW, et al. **J Neurosci Res** 1989 Apr;22(4):425–38

Distribution of a novel cardioactive neuropeptide (CCAP) in the nervous system of the shore crab Carcinus maenas. Stangier J, et al. **Peptides** 1988 Jul–Aug;9(4):795–800

Localization of transferrin within the developing vertebrate nervous system. Markelonis GJ, et al. **Rev Neurol (Paris)** 1988;144(11):648–55 (53 ref.)

ANATOMY & HISTOLOGY

The electromotor system of the electric eel investigated with horseradish peroxidase as a retrograde tracer. Bennett MV, et al. **Brain Res** 1989 May 29;488(1–2):22–30

Immunocytochemical applications in neuroanatomy. Demonstration of connections, transmitters and receptors. Luiten PG, et al. **Histochemistry** 1988;90(2):85–97 (66 ref.)

Nerves on magnetic resonance imaging. Collins JD, et al. **J Natl Med Assoc** 1989 Feb;81(2):129–34

Localization of neuropeptides and catecholamines in the nerve cord of the marine annelid Sabellastrate magnifica. Diaz L, et al. **P R Health Sci J** 1988 Aug;7(2):110–1

The central nervous system of Bulla gouldiana: peptide localization. Roberts MH, et al. **Peptides** 1988 Nov–Dec; 9(6):1323–34

[Studies of the nervous system of Brachylaimus fuscatus (Rud., 1819), (Trematoda, Brachylaimidae)] Okulewicz A. **Wiad Parazytol** 1988;34(2):125–9 (Eng. Abstr.) **(Pol)**

BLOOD SUPPLY

Nerve regeneration patterns after acute ischemic injury. Korthals JK, et al. **Neurology** 1989 Jul;39(7):932–7

Upper extremity ischemic monomelic neuropathy: a complication of vascular access procedures in uremic diabetic patients. Riggs JE, et al. **Neurology** 1989 Jul; 39(7):997–8

CYTOLOGY

The development of cholinergic neurons. Vaca K. **Brain Res** 1988 Nov;472(3):261–86 (347 ref.)

Role of interstitial cell migration in generating position–dependent patterns of nerve cell differentiation in Hydra. Fujisawa T. **Dev Biol** 1989 May;133(1):77–82

Localization of Drosophila neurons that contain choline acetyltransferase messenger RNA: an in situ hybridization study. Barber RP, et al. **J Comp Neurol** 1989 Feb 22; 280(4):533–43

Ganglion cell arrangement and axonal trajectories in the anterior lateral line nerve of the weakly electric fish Apteronotus leptorhynchus (Gymnotiformes). Lannoo MJ, et al. **J Comp Neurol** 1989 Feb 15;280(3):331–42

The emerging generality of the neurotrophic hypothesis [news] Davies AM. **Trends Neurosci** 1988 Jun;11(6):243–4 (19 ref.)

Analysing cell lineage with a recombinant retrovirus. Sanes JR. **Trends Neurosci** 1989 Jan;12(1):21–8 (34 ref.)

DRUG EFFECTS

The 1988 Ulf Euler Lecture. Substancce P: from extract to excitement. Lembeck F. **Acta Physiol Scand** 1988 Aug; 133(4):435–54 (113 ref.)

The effect of fentanyl anesthesia and intrathecal naloxone on neurologic outcome following spinal cord injury in the rat. Cole DJ, et al. **Anesthesiology** 1989 Sep;71(3):426–30

Neurotoxic actions of pyrethroid insecticides. Soderlund DM, et al. **Annu Rev Entomol** 1989;34:77–96 (118 ref.)

'Ecstasy': a human neurotoxin? [letter] Peroutka SJ. **Arch Gen Psychiatry** 1989 Feb;46(2):191

Effects of YM–14673, a new TRH analogue, on neurological deficits in rats with experimental cerebral hematoma. Yamamoto M, et al. **Arch Int Pharmacodyn Ther** 1989 May–Jun;299:55–64

Neurobehavioural effects of short duration exposures to acetone and methyl ethyl ketone. Dick RR, et al. **Br J Ind Med** 1989 Feb;46(2):111–21

Neuropharmacological properties of V–9–M, a putative neuropeptide derived from procholecystokinin, in the rat. Takashima A, et al. **Can J Physiol Pharmacol** 1989 Mar; 67(3):223–7

Effects of alpha–human atrial natriuretic peptide on the interrelationship of arterial pressure, aortic nerve activity, and aortic diameter. Hirooka Y, et al. **Circ Res** 1988 Dec; 63(6):987–96

Neurotoxicity of ethanol during prenatal development. Dow KE, et al. **Clin Neuropharmacol** 1987 Aug;10(4):330–41 (103 ref.)

Investigations of amitraz neurotoxicity in rats. III. Effects on motor activity and inhibition of monoamine oxidase. Moser VC, et al. **Fundam Appl Toxicol** 1989 Jan;12(1):12–22

Chronic neurological toxicity associated with exposure to volatile substances. Lolin Y. **Hum Toxicol** 1989 Jul; 8(4):293–300 (56 ref.)

Effect of hemoglobin on neurogenic responses and cholinergic parameters in porcine cerebral arteries. Linnik MD, et al. **J Cereb Blood Flow Metab** 1989 Apr;9(2):219–25

Anti–ricin antibody protects against systemic toxicity without affecting suicide transport. Wiley RG, et al. **J Neurosci Methods** 1989 Apr;27(3):203–9

Cross–sectional neurotoxicology study of lead–exposed cohort. Pasternak G, et al. **J Toxicol Clin Toxicol** 1989; 27(1–2):37–51

Progress in medical defense against nerve agents. Dunn MA, et al. **JAMA** 1989 Aug 4;262(5):649–52 (21 ref.)

Studies on the neuropsychopharmacological profile of fengabine (SL 79229) in mice. Aley KO, et al. **Methods Find Exp Clin Pharmacol** 1988 Sep;10(9):563–8

Neurobehavioral effects of intrathecal somatostatinergic treatment in subhuman primates. Leblanc R, et al. **Neurology** 1988 Dec;38(12):1887–90

Differentiating the effects of three benzodiazepines on non–REM sleep EEG spectra. A neural–network pattern classification analysis. Gevins AS, et al. **Neuropsychobiology** 1988;19(2):108–15

Endogenous and network bursts induced by N–methyl–D–aspartate and magnesium free medium in the CA3 region of the hippocampal slice. Neuman RS, et al. **Neuroscience** 1989;28(2):393–9

Atropine and DFP–induced delayed neurotoxicity. Kellner TP, et al. **Neurotoxicology** 1988 Summer;9(2):181–7

Cell specific enzyme markers as indicators of neurotoxicity: effects of acute exposure to methylmercury. Kung MP, et al. **Neurotoxicology** 1989 Spring;10(1):41–52

Cystine neurotoxicity is increased by taurine deficiency. Sturman JA, et al. **Neurotoxicology** 1989 Spring;10(1):15–28

Neuropharmacological activity of extracts from Passiflora incarnata. Speroni E, et al. **Planta Med** 1988 Dec; 54(6):488–91

Cyanide–induced neurotoxicity: mechanisms of attenuation by chlorpromazine. Maduh EU, et al. **Toxicol Appl Pharmacol** 1988 Oct;96(1):60–7

Testing programs for behavioral toxicity: test guidelines, methodologies and interpretation of data. Boston, November 4–5, 1987. Proceedings. **Toxicol Ind Health** 1989 Mar;5(2):157–260

Human neurobehavioral toxicology testing: current perspectives. Anger WK. **Toxicol Ind Health** 1989 Mar; 5(2):165–80

Critical assessment of motor activity as a screen for neurotoxicity. Maurissen JP, et al. **Toxicol Ind Health** 1989 Mar;5(2):195–202 (26 ref.)

Adoption of new guidelines and data requirements for more extensive neurotoxicity testing under FIFRA. Sette WF. **Toxicol Ind Health** 1989 Mar;5(2):181–94

Food and Drug Administration: approach to evaluating neurotoxicity. Sobotka TJ. **Toxicol Ind Health** 1989 Mar; 5(2):157–64

Design of a primary screen for developmental neurotoxicity. Walker RF, et al. **Toxicol Ind Health** 1989 Mar;5(2):231–45

2nd International Symposium on Neurotoxins in Neurobiology. December 1988, Solis, Uruguay. Abstracts. **Toxicon** 1989;27(8):831–40

Resistance of nerves from certain toxic crabs to paralytic shellfish poison and tetrodotoxin. Daigo K, et al. **Toxicon** 1988;26(5):485–90

Neurotoxicity caused by a high cyclosporine metabolite level. Kunzendorf U, et al. **Transplantation** 1989 Sep;48(3):531–2

[Behavior analysis based on neurochemical mechanisms of action of viloxazine and mianserin] Danchev N, et al. **Eksp Med Morfol** 1989;28(1):23–8 (Eng. Abstr.) **(Bul)**

[Pharmacologic studies of new derivatives of tetrahydropyridine and 7–acetyl–6–hydroxy–5–methoxy–3–methylbenzofurano–2–carboxylic acid] Jagiełło–Wójtowicz E, et al. **Acta Pol Pharm** 1988;45(3):280–7 (Eng. Abstr.) **(Pol)**

[Effectiveness of preliminary medical examinations in evaluating the status of the nervous system in persons to be exposed to organic solvents] Polakowska B. **Med Pr** 1988;39(6):429–33 (Eng. Abstr.) **(Pol)**

[Target points of antiparasitic drugs] Boczoń K. **Wiad Parazytol** 1988;34(4–6):529–43 (40 ref.) (Eng. Abstr.) **(Pol)**

[Lyophilized membranes as a test system for analyzing the properties of neuromediator receptors and activity of neurotropic agents] Evdokimenko SG, et al. **Biol Nauki** 1989;(5):24–9 (Eng. Abstr.) **(Rus)**

[Clinico–pharmacologic analysis of the neurotropic action of tranquilizers] Aleksandrovskii IuA, et al. **Farmakol Toksikol** 1989 Jan–Feb;52(1):104–10 (Eng. Abstr.) **(Rus)**

[The structural organization of interferon molecules as precursors of immuno– and neuroactive oligopeptides] Chipens GI, et al. **Fiziol Zh SSSR** 1989 May;75(5):638–45 (20 ref.) (Eng. Abstr.) **(Rus)**

[Experimental study of the biological effect of salts of

hydrofluosilicic acid] Rumiantsev GI, et al. **Gig Sanit** 1988 Nov;(11):80–2 **(Rus)**

[Izokorin--a new blockader of gamma-aminobutyric acid receptors in the mammalian nervous system] Valeev AE, et al. **Neirofiziologiia** 1988;20(6):820–3 (Eng. Abstr.) **(Rus)**

[Histochemical reaction to biogenic amines of the nervous system of the larval and mature cestode Microsomacanthus microskrjabini] Pospekhova NA, et al. **Parazitologiia** 1989 Jan–Feb;23(1):71–4 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Developmental neurotoxicity of nicotine, carbon monoxide, and other tobacco smoke constituents. Mactutus CF. **Ann N Y Acad Sci** 1989;562:105–22 (76 ref.)

Expression of glycoconjugates during development of the vertebrate nervous system. Schwarting GA, et al. **Bioessays** 1988 Jul;9(1):19–23 (27 ref.)

Spatial organization of microtubules in various types of cells in the embryonic tectal plate of mouse using immunofluorescence after PEG embedding. Meininger V, et al. **Biol Cell** 1988;64(3):301–8

Thyroid hormones and nervous system development. Timiras PS, et al. **Biol Neonate** 1989;55(6):376–85 (33 ref.)

daughterless, a Drosophila gene essential for both neurogenesis and sex determination, has sequence similarities to myc and the achaete-scute complex. Caudy M, et al. **Cell** 1988 Dec 23;55(6):1061–7

A deduced gene product from the Drosophila neurogenic locus, enhancer of split, shows homology to mammalian G-protein beta subunit. Hartley DA, et al. **Cell** 1988 Dec 2;55(5):785–95

Ectopic expression of the proto-oncogene int-1 in Xenopus embryos leads to duplication of the embryonic axis. McMahon AP, et al. **Cell** 1989 Sep 22;58(6):1075–84

Neural induction is mediated by cross-talk between the protein kinase C and cyclic AMP pathways. Otte AP, et al. **Cell** 1989 Aug 25;58(4):641–8

Cell and substrate adhesion molecules in embryonic and neural development. Crossin KL. **Clin Chem** 1989 May; 35(5):738–47 (80 ref.)

Axon outgrowth along segmental nerves in the leech. I. Identification of candidate guidance cells. Braun J, et al. **Dev Biol** 1989 Apr;132(2):471–85

Axon outgrowth along segmental nerves in the leech. II. Identification of actual guidance cells. Braun J, et al. **Dev Biol** 1989 Apr;132(2):486–501

Development of the enteric nervous system in the moth. I. Diversity of cell types and the embryonic expression of FMRFamide-related neuropeptides. Copenhaver PF, et al. **Dev Biol** 1989 Jan;131(1):70–84

Development of the enteric nervous system in the moth. II. Stereotyped cell migration precedes the differentiation of embryonic neurons. Copenhaver PF, et al. **Dev Biol** 1989 Jan;131(1):85–101

Drosophila embryonic neuroblasts in culture: autonomous differentiation of specific neurotransmitters. Huff R, et al. **Dev Biol** 1989 Jul;134(1):146–57

Cellular retinoic acid-binding protein and the role of retinoic acid in the development of the chick embryo. Maden M, et al. **Dev Biol** 1989 Sep;135(1):124–32

Developmental modulation of a glial cell-associated glycoprotein, 5B12, in an insect, Acheta domesticus. Meyer MR, et al. **Dev Biol** 1988 Nov;130(1):374–91

Development of the central nervous system of the larva of the ascidian, Ciona intestinalis L. I. The early lineages of the neural plate. Nicol D, et al. **Dev Biol** 1988 Dec; 130(2):721–36

Development of the central nervous system of the larva of the ascidian, Ciona intestinalis L. II. Neural plate morphogenesis and cell lineages during neurulation. Nicol D, et al. **Dev Biol** 1988 Dec;130(2):737–66

Origin of the dorsal surface of the neural tube by progressive delamination of epidermal ectoderm and neuroepithelium: implications for neurulation and neural tube defects. Martins-Green M. **Development** 1988 Aug;103(4):687–706

Membrane glycoproteins immunologically related to the human insulin receptor are associated with presumptive neuronal territories and developing neurones in Drosophila melanogaster. Piovant M, et al. **Development** 1988 May; 103(1):145–56

Preferential expression of cellular retinoic acid binding protein in a subpopulation of neural cells in the developing mouse embryo. Vaessen MJ, et al. **Differentiation** 1989 May;40(2):99–105

The molecular genetics of Enhancer of split, a gene required for embryonic neural development in Drosophila. Preiss A, et al. **EMBO J** 1988 Dec 1;7(12):3917–27

Motility in the fetus and young infant: implications for neurological development. Touwen BC. **Eur J Clin Nutr** 1989;43 Suppl 1:27–32 (19 ref.)

Extracellular materials and determination of neuroectoblast in amphibian gastrula. Sánchez SS, et al. **Exp Cell Biol** 1988;56(1-2):60–6

Structure and neural expression of a zebrafish homeobox sequence. Njølstad PR, et al. **Gene** 1988 Dec 15;73(1):33–46

Morphological aspects of neuronal development. Papers presented at the 6th International Meeting of the Society for Developmental Neuroscience. July 1986, Queretaro, Mexico. **Int J Dev Neurosci** 1988;6(1):1–102

Migration of Schwann cells and axons into developing chick forelimb muscles following removal of either the neural tube or the neural crest. Noakes PG, et al. **J Comp Neurol** 1988 Nov 8;277(2):214–33

Identification of a sulfoglycolipid epitope shared by cells of neuroectodermal and hematopoietic origin. Schriever F, et al. **J Neuroimmunol** 1989 Aug;23(3):233–40

Alterations in the neuroepithelial basal lamina in a neurological mutant with prenatal hydrocephalus. O'Shea KS, et al. **J Neuropathol Exp Neurol** 1988 Sep;47(5):507–15

Peripheral target choice by homologous neurons during embryogenesis of the medicinal leech. I. Segment-specific preferences of Retzius cells. Loer CM, et al. **J Neurosci** 1989 Feb;9(2):513–27

Peripheral target choice by homologous neurons during embryogenesis of the medicinal leech. II. Innervation of ectopic reproductive tissue by nonreproductive Retzius cells. Loer CM, et al. **J Neurosci** 1989 Feb;9(2):528–38

c-fos proto-oncogene expression in the nervous system during mouse development. Caubet JF. **Mol Cell Biol** 1989 May;9(5):2269–72

c-src and other proto-oncogenes implicated in neuronal differentiation. Ingraham CA, et al. **Mol Chem Neuropathol** 1989 Feb;10(1):1–14 (50 ref.)

Isolation of the Xenopus homolog of int-1/wingless and expression during neurula stages of early development. Noordermeer J, et al. **Nucleic Acids Res** 1989 Jan 11; 17(1):11–8

Gene expression in the embryonic nervous system of Xenopus laevis. Richter K, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8086–90

The Claude Bernard lecture, 1987. Embryonic chimeras: a tool for studying the development of the nervous and immune systems. Le Douarin NM. **Proc R Soc Lond [Biol]** 1988 Oct 22;235(1278):1–17 (39 ref.)

Cellular interactions during early neurogenesis of Drosophila melanogaster. Campos-Ortega JA. **Trends Neurosci** 1988 Sep;11(9):400–5 (37 ref.)

[Differentiation of the neural crest. Influence of growth factors] Le Douarin NM. **Ann Endocrinol (Paris)** 1988; 49(4-5):256–69 (44 ref.) (Eng. Abstr.) **(Fre)**

ENZYMOLOGY

Cytochemical demonstration of TPPase in myelinated fibers in the central and peripheral nervous system of the rat. Castellano B, et al. **Brain Res** 1989 Jul 17;492(1-2):203–10

2',3'-cyclic nucleotide 3'-phosphodiesterase, an oligodendrocyte-Schwann cell and myelin-associated enzyme of the nervous system. Sprinkle TJ. **Crit Rev Neurobiol** 1989;4(3):235–301 (505 ref.)

Phosphofructokinase in the rat nervous system: regional differences in activity and characteristics of axonal transport. Oblinger MM, et al. **J Neurosci Res** 1988 Sep; 21(1):25–34

The heterogeneity and differential expression of protein kinase C in nervous tissues. Kikkawa U, et al. **Philos Trans R Soc Lond [Biol]** 1988 Jul 26; 320(1199):313–24 (36 ref.)

Allelic variants of acetylcholinesterase: genetic evidence that all acetylcholinesterase forms in avian nerves and muscles are encoded by a single gene. Rotundo RL, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7805–9

GROWTH & DEVELOPMENT

Acid-base status at birth and neurodevelopmental outcome at four and one-half years. Dennis J, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):213–20

Epidermal growth factor has both growth-promoting and growth-inhibiting effects on physical and neurobehavioral development of neonatal mice. Calamandrei G, et al. **Brain Res** 1989 Jan 16;477(1-2):1–6

Effects of postnatal aluminum lactate exposure on neuromotor maturation in the rat. Bernuzzi V, et al. **Bull Environ Contam Toxicol** 1989 Mar;42(3):451–5

Nerve and muscle development in paralysé mutant mice. Blondet B, et al. **Dev Biol** 1989 Mar;132(1):153–66

Expression and function of the neurotransmitter serotonin during development of the Helisoma nervous system. Goldberg JI, et al. **Dev Biol** 1989 Feb;131(2):483–95

Neuromotor development of preterm and full-term infants. Gorga D, et al. **Early Hum Dev** 1988 Dec;18(2-3):137–49

Neurological outcome of twins dissimilar in size at birth. Ylitalo V, et al. **Early Hum Dev** 1988 Aug-Sep; 17(2-3):245–55

The refinement of invertebrate synapses during development. Lnenicka GA, et al. **J Neurobiol** 1989 Jul;20(5):339–55 (75 ref.)

Developmental study of myelin basic protein variants in various regions of pig nervous system. Sheng HZ, et al. **J Neurochem** 1989 Mar;52(3):736–40

Use of somatosensory evoked potentials in infants and children. Gilmore R. **Neurol Clin** 1988 Nov;6(4):839–59 (71 ref.)

Prognosis of newborn infants with hypoxic-ischemic brain injury assessed by phosphorus magnetic resonance spectroscopy. Azzopardi D, et al. **Pediatr Res** 1989 May; 25(5):445–51

Developmental effects of neuroactive drugs. Kellogg CK, et al. **Prog Clin Biol Res** 1988;281:265–77 (16 ref.)

ACTH modulation of nerve development and regeneration. Strand FL, et al. **Prog Neurobiol** 1989;33(1):45–85 (289 ref.)

Axon guidance and the patterning of neuronal projections in vertebrates. Dodd J, et al. **Science** 1988 Nov 4; 242(4879):692–9 (87 ref.)

Growth cone guidance in insects: fasciclin II is a member of the immunoglobulin superfamily. Harrelson AL, et al. **Science** 1988 Nov 4;242(4879):700–8

Segmentation and homeotic gene function in the developing nervous system of Drosophila. Doe CQ, et al. **Trends Neurosci** 1988 Mar;11(3):101–6 (70 ref.)

[Cellular interaction in neurogenesis: the role of receptor-like molecules] Takeichi M, et al. **Tanpakushitsu Kakusan Koso** 1988 Aug;33(10):1674–80 (28 ref.) **(Jpn)**

[Nerve growth factors] Vainiene M, et al. **Neurol Neurochir Pol** 1988 Sep-Oct;22(5):444–9 (24 ref.) **(Pol)**

[Semantics in neurology in the age of development] Nikolić V. **Neurologija** 1988;37(3-4):59–66 (Eng. Abstr.) **(Scr)**

IMMUNOLOGY

Advances in neuroimmunology. Proceedings of the Second International Congress of Neuroimmunology. Philadelphia, September 8–11, 1987. **Ann N Y Acad Sci** 1988;540:1–745

Enhanced antibody response to rabies virus in patients with neurologic complications following brain tissue-derived rabies vaccination. Hemachudha T, et al. **Asian Pac J Allergy Immunol** 1989 Jun;7(1):47–50

Developmental stage-specific antigens in the nervous system of the cockroach. Denburg JL, et al. **Dev Biol** 1989 Mar; 132(1):1–13

Neuropeptides with immunoregulatory functions: current status of investigations. Covelli V, et al. **Funct Neurol** 1988 Jul-Sep;3(3):253–61 (24 ref.)

Retrograde neuronal labelling and double-staining immunohistochemistry of tachykinin- and calcitonin gene-related peptide-immunoreactive pathways in the carotid sinus nerve of the guinea pig. Kummer W. **J Auton Nerv Syst** 1988 Aug;23(2):131–41

Immune system control of rat and rabbit colonic electrolyte transport. Role of prostaglandins and enteric nervous system. Bern MJ, et al. **J Clin Invest** 1989 Jun;83(6):1810–20

Monoclonal antibodies against species-specific antigens in the chick central nervous system: putative application as transplantation markers in the chick-quail chimera. Takagi S, et al. **J Histochem Cytochem** 1989 Feb;37(2):177–84

Neuron- and myelin-specific monoclonal antibodies recognizing cell-surface antigens of the central and peripheral nervous system. Patsavoudi E, et al. **Neuroscience** 1989;30(2):463–78

[Neuroantibodies: expression of specific monoclonal antibodies in cells of the nervous system] Cattaneo A. **Ann Ist Super Sanita** 1988;24(4):531–3 (Eng. Abstr.) **(Ita)**

[The nervous system and immunity] Korneva EA. **Vestn Akad Med Nauk SSSR** 1988;(11):76–85 (53 ref.) **(Rus)**

INJURIES

Preventing and anticipating neurologic injuries in sports. Lehman LB. **Am Fam Physician** 1988 Oct;38(4):181–4

The intensive care unit: who's in charge? Belzberg H. **Clin Neurosurg** 1989;35:63–7

The Sunnybrook Neurotrauma Assessment Record: improving trauma data collection. Kondziolka D, et al. **J Trauma** 1989 Jun;29(6):730–5

Steroid hormones and neurotrophism: relationship to nerve injury. Jones KJ. **Metab Brain Dis** 1988 Mar;3(1):1–18 (98 ref.)

Preventing nervous system sports injuries. Lehman LB. **Nurse Pract** 1989 Mar;14(3):42, 44–6 (25 ref.)

Neurologic aspects of the abused child syndrome. Lehman LB. **Postgrad Med** 1989 Apr;85(5):135–7

Injured Infants Act: study compares definition, newborn records. Brown BS, et al. **Va Med** 1989 Mar;116(3):114–9

[Neurological lesions in survivors of the Armero catastrophe] Mendoza J. **Bull Acad Natl Med (Paris)** 1988 Nov; 172(8):1167–9 **(Fre)**

[Medical rehabilitation of neurologic patients at a military sanatorium] Akimov GA, et al. **Voen Med Zh** 1988 Jul; (7):65–7 **(Rus)**

METABOLISM

Release of multiple tachykinins from capsaicin-sensitive sensory nerves in the lung by bradykinin, histamine, dimethylphenyl piperazinium, and vagal nerve stimulation. Saria A, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1330–5

Changes in peanut lectin binding sites on the neuroectoderm during neural tube formation in the bantam chick embryo. Takahashi H. **Anat Embryol (Berl)** 1988;178(4):353–8

Catecholamine-containing, dopamine-beta-hydroxylase-immunoreactive perivascular nerve specializations in the rat kidney. Knight DS, et al. **Anat Rec** 1989 Sep;225(1):77–86

G proteins in Aplysia: biochemical characterization and regional and subcellular distribution. Vogel SS, et al. **Brain Res** 1989 Jan 30;478(2):281–92

Cyclic nucleotides in nervous tissue. Wiegant VM. **Brain Res Bull** 1978 Nov-Dec;3(6):611–22 (192 ref.)

Immunohistochemical localization of microtubule-associated proteins in the nervous system of the small intestine of guinea pig. Murofushi H, et al. **Cell Tissue Res** 1989 Feb; 255(2):315–22

Immunocytochemical study of the postnatal development of 5-HT-containing neurons and fibers in the cerebroid ganglia of Cryptomphalus aspersa. Flores V, et al. **Int J Dev Neurosci** 1988;6(4):359-66

Identification and distribution of a proctolin-like neuropeptide in the nervous system of the gypsy moth, Lymantria dispar, and in other Lepidoptera. Davis NT, et al. **J Comp Neurol** 1989 May 1;283(1):71-85

Effects of cyclic nucleotides and calcium/calmodulin on protein phosphorylation in the CNS of Hirudo medicinalis. Garcia-Gil M, et al. **J Neurochem** 1989 Mar;52(3):699-704

Longitudinal studies of the neurobiology of vitamin E and other antioxidant systems, and neurological function in the vitamin E deficient rat. Goss-Sampson MA, et al. **J Neurol Sci** 1988 Oct;87(1):25-35

Potassium homeostasis in the nervous system of cephalopods and crustacea. Pichon Y, et al. **J Physiol (Paris)** 1987; 82(4):346-56

Ontogeny of dopaminergic D-2 receptors in the rat nervous system: characterization and detailed autoradiographic mapping with [125I]iodosulpride. Sales N, et al. **Neuroscience** 1989;28(3):673-700

The nicotinic receptors in the nervous system. Gotti C, et al. **Pharmacol Res Commun** 1988 Aug;20(8):637-62 (111 ref.)

[The development of the ideas of A. D. Speranskiĭ on the means for the realization of the trophic function of the nervous system] Azhipa IaI. **Vestn Akad Med Nauk SSSR** 1988;(11):4-14 (Eng. Abstr.) **(Rus)**

[Histochemical study of the nervous system of trematode cercariae] Nezlin LP, et al. **Zh Obshch Biol** 1988 Sep-Oct; 49(5):695-703 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Participation of reticuloendothelial system in the pathogenesis of experimental amyotrophic leukospongiosis. Kolomiets ND, et al. **Acta Virol (Praha)** 1988 Sep; 32(5):464-8

HIV—a neurotropic virus [editorial] Jeffries DJ. **Br J Hosp Med** 1988 Jul;40(1):13

The neurobiology of human immunodeficiency virus infections. Johnson RT, et al. **FASEB J** 1988 Nov; 2(14):2970-81 (63 ref.)

The role of the spleen in the neuroinvasion of scrapie in mice. Kimberlin RH, et al. **Virus Res** 1989 Mar;12(3):201-11

PARASITOLOGY

Spread of Trypanosoma brucei to the nervous system: early attack on circumventricular organs and sensory ganglia. Schultzberg M, et al. **J Neurosci Res** 1988 Sep;21(1):56-61

PATHOLOGY

Fragile X syndrome: neuropathology center. Brown WT, et al. **Am J Med Genet** 1988 May-Jun;30(1-2):201-5

Neuropathy in multiple symmetric lipomatosis. Madelung's disease. Pollock M, et al. **Brain** 1988 Oct;111 (Pt 5):1157-71

The role of perineural space invasion in the local spread of prostatic adenocarcinoma. Villers A, et al. **J Urol** 1989 Sep;142(3):763-8

Intraocular neurilemmoma arising from the posterior ciliary nerve in neurofibromatosis. Pathologic findings. Freedman SF, et al. **Ophthalmology** 1988 Nov;95(11):1559-64

The influence of factor XIII on the fibrosing of a nerve anastomosis in the rat. Herter T, et al. **Res Exp Med (Berl)** 1989;189(1):25-32

[Evolution of theories on diseases and degenerative processes in the nervous system] Dąmbska M. **Neuropatol Pol** 1988; 26(1):1-8 (Eng. Abstr.) **(Pol)**

[Neuromorphologic studies in pathologic anatomy] Konovalov GV. **Arkh Patol** 1989;51(2):3-8 (Eng. Abstr.) **(Rus)**

[Changes in the nervous system from combined exposure to vibration and hyperbaric oxygenation] Nenashev AA, et al. **Nerv Sist** 1988;27:87-92 **(Rus)**

[Clinico-pathomorphologic changes in the nervous system during overheating] Akimov GA, et al. **Sov Med** 1988; (6):20-4 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Different neurophysiological mechanisms underlying delayed reaction and trace conditioned reflex. Moiseeva LA, et al. **Act Nerv Super (Praha)** 1988 Dec;30(4):241-6

Inflammatory cells and the epithelium. Mast cell/nerve interactions in the lung in vitro and in vivo. Bienenstock J, et al. **Am Rev Respir Dis** 1988 Dec;138(6 Pt 2):S31-4

Nonadrenergic bronchodilation in normal subjects. Ichinose M, et al. **Am Rev Respir Dis** 1988 Jul;138(1):31-4

Neurophysiological monitoring [editorial] Prior PF. **Anaesthesia** 1989 Jul;44(7):545-6

Neuronal networks underlying the escape response in goldfish. General implications for motor control. Faber DS, et al. **Ann N Y Acad Sci** 1989;563:11-33 (70 ref.)

Emerging principles governing the operation of neural networks. Getting PA. **Annu Rev Neurosci** 1989;12:185-204 (86 ref.)

Extracellular matrix molecules that influence neural development. Sanes JR. **Annu Rev Neurosci** 1989; 12:491-516 (238 ref.)

Learned helplessness in the cockroach (Periplaneta americana). Brown GE, et al. **Behav Neural Biol** 1988 Sep; 50(2):246-50

Intracellular calcium receptor mechanisms in muscle and nerve. Grand RJ. **Biochem Soc Trans** 1988 Aug;16(4):520-3 (22 ref.)

Cell-cell adhesion in the nervous system--structural groups emerge. Faissner A. **Bioessays** 1989 Feb-Mar;10(2-3):79-81 (32 ref.)

Biochemistry of the nervous system. Autumn meeting of the Neurochemical Study Group of the GBCh. 73d Konferenz der Gesellschaft für Biologische Chemie. Göttingen, 10-11 November 1988. Abstracts. **Biol Chem Hoppe Seyler** 1988 Nov;369(11):1195-217

On the ability of neural networks to perform generalization by induction. Anshelevich VV, et al. **Biol Cybern** 1989; 61(2):125-8

Auto-association by multilayer perceptrons and singular value decomposition. Bourlard H, et al. **Biol Cybern** 1988; 59(4-5):291-4

On the behavior of some associative neural networks. Braham R, et al. **Biol Cybern** 1988;60(2):145-51

Maximum likelihood identification of neural point process systems. Chornoboy ES, et al. **Biol Cybern** 1988; 59(4-5):265-75

Neural-space generalization of a topological transformation. Josin G. **Biol Cybern** 1988;59(4-5):283-90

A modular analog neuron-model for research and teaching. Koch UT, et al. **Biol Cybern** 1988;59(4-5):303-12

Symmetry breaking in neural nets. Pessa E. **Biol Cybern** 1988; 59(4-5):277-81

The silicon synapse or, neural net computing. Frenger P. **Biomed Sci Instrum** 1989;25:267-73 (52 ref.)

Directionality of neural signals in central nervous system neural networks. Turbes CC, et al. **Biomed Sci Instrum** 1989;25:1-5

Etiology of the supernormal period. Stockbridge N. **Biophys J** 1988 Nov;54(5):777-80

Neural networks and REM sleep. Crick F. **Biosci Rep** 1988 Dec;8(6):531-5

Phase conjugation model for information transfer in the nervous system. Kosugi Y, et al. **Biosystems** 1989; 22(3):215-21

Neuroimmune interactions. Proceedings of an international conference. London, England, September 19-20, 1988. **Brain Behav Immun** 1988 Dec;2(4):275-358

Gravitational representation of simultaneously recorded brainstem respiratory neuron spike trains. Lindsey BG, et al. **Brain Res** 1989 Apr 3;483(2):373-8

Connectionist networks learn to transmit chaos. Mpitsos GJ, et al. **Brain Res Bull** 1988 Sep;21(3):539-46

Role of renal nerves in the potentiation of atriopeptin-induced natriuresis by vasopressin. Hartupee DA, et al. **Circ Res** 1989 Feb;64(2):370-5

Renal nerves in the pathogenesis of hypertension: a review. Baines AD. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:125-32 (28 ref.)

Domains in the neurosciences: a 3-dimensional view of the brain. Langfitt TW. **Clin Neurosurg** 1989;35:29-42

Neurophysiology of body fluid homeostasis. Leng G, et al. **Comp Biochem Physiol [A]** 1988;90(4):781-8 (68 ref.)

An improved electrode design for en passant recording from small nerves. Schmitz J, et al. **Comp Biochem Physiol [A]** 1988;91(4):769-72

Fetal neuroendocrinology. Jaffe RB. **Contrib Gynecol Obstet** 1989;17:104-10 (0 ref.)

Late sequelae of a non-optimal neonatal neurological condition in ERPs at the age of 11-13 years. De Sonneville LM, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jun; 72(6):491-8

Somatosensory evoked potentials elicited by dorsal penile and posterior tibial nerve stimulation. Fitzpatrick DF, et al. **Electroencephalogr Clin Neurophysiol** 1989 Mar-Apr; 74(2):95-104

Influences of transcutaneous electrical stimulation of cutaneous and mixed nerves on subcortical and cortical somatosensory evoked potentials. Nardone A, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jan-Feb; 74(1):24-35

Commentary on biomarkers of aging in the nervous system. Landfield PW. **Exp Gerontol** 1988;23(4-5):413-6

Cellular and molecular correlates of aging in the nervous system. Smith DO. **Exp Gerontol** 1988;23(4-5):399-412 (43 ref.)

Sensory nerve crush and regeneration and the receptive fields and response properties of neurons in the primary somatosensory cerebral cortex of cats. Brandenberg GA, et al. **Exp Neurol** 1989 Mar;103(3):256-66

Synaptic localization of a 66-kDa soluble protein from skeletal muscle: evidence for its developmental and neural regulation. Comella JX, et al. **Exp Neurol** 1989 Aug; 105(2):211-8

Neural regulation of mRNA for the alpha-subunit of acetylcholine receptors: role of neuromuscular transmission. Lipsky NG, et al. **Exp Neurol** 1989 Aug; 105(2):171-6

Origins of the short latency somatosensory evoked potentials in cat--with special reference to the sensory relay nuclei. Ryu H, et al. **Exp Neurol** 1988 Nov;102(2):177-84

Vitamin E and neurologic function in man. Sokol RJ. **Free Radic Biol Med** 1989;6(2):189-207 (131 ref.)

Pharmacological modulation of neurogenic inflammation. Schumann HH, et al. **Fundam Clin Pharmacol** 1989; 3(3):193-7

Neuroendocrinology 1988. 31st International Henri-Pierre Klotz Days of Clinical Endocrinology. Paris, May 26-27, 1988. **Horm Res** 1989;31(1-2):1-104

Integrated communication between the nervous, endocrine and immune systems. Kordon C, et al. **Horm Res** 1989; 31(1-2):100-4 (40 ref.)

Dynamical neural network organization of the visual pursuit system. Deno DC, et al. **IEEE Trans Biomed Eng** 1989 Jan;36(1):85-92

A neural network architecture for preattentive vision. Grossberg S, et al. **IEEE Trans Biomed Eng** 1989 Jan; 36(1):65-84

Studies with spike initiators: linearization by noise allows continuous signal modulation in neural networks. Yu XL, et al. **IEEE Trans Biomed Eng** 1989 Jan;36(1):36-43

Transferrin and the growth-promoting effect of nerves. Mescher AL, et al. **Int Rev Cytol** 1988;110:1-26 (157 ref.)

The neurobiology of N-acetylaspartylglutamate. Blakely RD, et al. **Int Rev Neurobiol** 1988;30:39-100 (238 ref.)

Neurogenic plasma extravasation: inhibition by morphine in guinea pig airways in vivo. Belvisi MG, et al. **J Appl Physiol** 1989 Jan;66(1):268-72

Expiratory neural activities in gasping. St. John WM, et al. **J Appl Physiol** 1989 Jan;66(1):223-31

Sympathetic nerve fibers in peripheral sensory and motor nerves in the face of the rat. Johansson K, et al. **J Auton Nerv Syst** 1988 Jun;23(1):83-6

Neurobehavioral contributions to cardiac arrhythmias during aversive pavlovian conditioning in the rabbit receiving digitalis. Markgraf CG, et al. **J Auton Nerv Syst** 1988 Jun; 23(1):35-46

Third annual meeting of the American Academy of Clinical Neurophysiology. July 14-17, 1988, Boston, Massachusetts. Abstracts. **J Clin Neurophysiol** 1989 Jul;6(3):287-96

Second annual meeting of the American Academy of Clinical Neurophysiology. June 18-21, 1987, Boston, Massachusetts. Abstracts. **J Clin Neurophysiol** 1988 Apr;5(2):187-204

Induced variation of serotonin in Drosophila melanogaster and its relation to learning performance. Vaysse G, et al. **J Comp Psychol** 1988 Sep;102(3):225-9

Depression of excitatory motoneurones by a single neurone in the leech central nervous system. Wadepuhl M. **J Exp Biol** 1989 May;143:509-27

Cybernetic model of psychophysiological pathways: I. Control functions. Leisman G, et al. **J Manipulative Physiol Ther** 1989 Apr;12(2):98-108 (37 ref.)

Compensation type algorithms for neural nets: stability and convergence. Cromme LJ, et al. **J Math Biol** 1989; 27(3):327-40

The use of hormonally induced mosaics to study alterations in the synaptic connections made by persistent sensory neurons during insect metamorphosis. Levine RB, et al. **J Neurobiol** 1989 Jul;20(5):326-38

Dissection of the neuron network in the catfish inner retina. III. Interpretation of spike kernels. Korenberg MJ, et al. **J Neurophysiol** 1989 Jun;61(6):1110-20

Dissection of the neuron network in the catfish inner retina. I. Transmission to ganglion cells. Sakai HM, et al. **J Neurophysiol** 1988 Nov;60(5):1549-67

Dissection of the neuron network in the catfish inner retina. II. Interactions between ganglion cells. Sakai HM, et al. **J Neurophysiol** 1988 Nov;60(5):1568-83

Corollary discharge inhibition and preservation of temporal information in a sensory nucleus of mormyrid electric fish. Bell CC, et al. **J Neurosci** 1989 Mar;9(3):1029-44

Physiological and anatomical consequences of infraorbital nerve transection in the trigeminal ganglion and trigeminal spinal tract of the adult rat. Renehan WE, et al. **J Neurosci** 1989 Feb;9(2):548-57

Effect of neonatal infraorbital nerve transection on substance P- and leucine enkephalin-like immunoreactivities in trigeminal subnucleus caudalis of the rat. Rhoades RW, et al. **J Neurosci** 1988 Jul;8(7):2234-47

Neural mechanisms in the control of blood glucose concentration. Niijima A. **J Nutr** 1989 Jun;119(6):833-40 (59 ref.)

Computational structure of a biological motion-detection system as revealed by local detector analysis in the fly's nervous system. Egelhaaf M, et al. **J Opt Soc Am [A]** 1989 Jul;6(7):1070-87

A model of jejunoileal in vivo neural isolation of the entire jejunoileum: transplantation and the effects on intestinal motility. Sarr MG, et al. **J Surg Res** 1989 Sep;47(3):266-72

Peptide regulatory factors in the nervous system. Hanley MR. **Lancet** 1989 Jun 17;1(8651):1373-6 (36 ref.)

Neural adaptation to resistance training. Sale DG. **Med Sci Sports Exerc** 1988 Oct;20(5 Suppl):S135-45 (107 ref.)

More ways with neural networks [news] Maddox J. **Nature** 1989 Feb 2;337(6206):403

American Academy of Neurology. 41st annual meeting program. Chicago, April 13-19, 1989. Abstracts. **Neurology** 1989 Mar;39(3 Suppl 1):1-479

Australian neuroscience proceedings. Abstracts of the ninth meeting of the Australian Neuroscience Society. Melbourne, Australia, February 6-8, 1989. **Neurosci Lett Suppl** 1989;34:S1-186

Abstracts of the third meeting of the Italian Society of Neuroscience. Bologna, Italy, November 27-30, 1988. **Neurosci Lett Suppl** 1988;33:S1-221

Abstracts of the twelfth annual meeting of the Japan

Neuroscience Society. Nagoya, Japan, December 7-9, 1988. **Neurosci Res Suppl** 1989;9:S1-196

Co-release of neuropeptide Y and noradrenaline from pig spleen in vivo: importance of subcellular storage, nerve impulse frequency and pattern, feedback regulation and resupply by axonal transport. Lundberg JM, et al. **Neuroscience** 1989;28(2):475-86

Specificity of synapse formation in the cockroach. Blagburn JM. **P R Health Sci J** 1988 Aug;7(2):171-6

Calcium channels and neurotransmitter release. Nicholls JG. **P R Health Sci J** 1988 Aug;7(2):177

An astable multivibrator model of binocular rivalry. Lehky SR. **Perception** 1988;17(2):215-28 (40 ref.)

Ion transport and enteric nervous system (ENS) in rat rectal colon: mechanical stretch causes electrogenic Cl-secretion via plexus Meissner and amiloride-sensitive electrogenic Na-absorption is not affected by intramural neurons. Schulzke JD, et al. **Pflugers Arch** 1989 Jun;414(2):216-21

Passive avoidance learning in the crab Chasmagnathus granulatus. Denti A, et al. **Physiol Behav** 1988;43(3):317-20

The Acomys cahirinus (spiny mouse) as a new model for biological and neurobehavioural studies. D'Udine B, et al. **Pol J Pharmacol Pharm** 1988 Sep-Oct;40(5):525-34 (11 ref.)

Individual microglia move rapidly and directly to nerve lesions in the leech central nervous system. McGlade-McCulloh E, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1093-7

Block of an insect central nervous system GABA receptor by cyclodiene and cyclohexane insecticides. Wafford KA, et al. **Proc R Soc Lond [Biol]** 1989 Jun 22;237(1286):53-61

Oxytocin: neurobiologic considerations and their implications for affective illness. Demitrack MA, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988;12 Suppl:S23-51 (137 ref.)

Perspectives on cognitive neuroscience. Churchland PS, et al. **Science** 1988 Nov 4;242(4879):741-5 (47 ref.)

Switching of a neuron from one network to another by sensory-induced changes in membrane properties. Hooper SL, et al. **Science** 1989 Jun 30;244(4912):1587-9

Behavioral neurophysiology: insights into seeing and grasping. Wise SP, et al. **Science** 1988 Nov 4; 242(4879):736-41

Examining the aging nervous system. Jenkyn LR. **Semin Neurol** 1989 Mar;9(1):82-7

Neurophysiology of aging. Smith MC. **Semin Neurol** 1989 Mar;9(1):68-81

Sensitivity and specificity of somatosensory and neurogenic-motor evoked potentials in animals and humans. Owen JH, et al. **Spine** 1988 Oct;13(10):1111-8

Is there a correlation between continuous neurogenesis and directed axon regeneration in the vertebrate nervous system? [published erratum appears in Trends Neurosci 1988 Jun;11(6):277] Holder N, et al. **Trends Neurosci** 1988 Mar;11(3):94-9 (74 ref.)

Genetic control of neuronal determination in insects [news] Jiménez F. **Trends Neurosci** 1988 Sep;11(9):378-80 (18 ref.)

The plasticity of ion channels: parallels between the nervous and immune systems. Lewis RS, et al. **Trends Neurosci** 1988 May;11(5):214-8 (45 ref.)

Neural prosthetic interfaces with the nervous system. Loeb GE. **Trends Neurosci** 1989 May;12(5):195-201

Logical neurons: the enigmatic legacy of Warren McCulloch. Perkel DH. **Trends Neurosci** 1988 Jan;11(1):9-12 (52 ref.)

Neuroprotective effects of adenosine. Dragunow M, et al. **Trends Pharmacol Sci** 1988 Jun;9(6):193-4 (25 ref.)

[Special meeting on the neurosciences. Association des Physiologistes. Marseilles, 24-25 March 1988. Proceedings] **Arch Int Physiol Biochim** 1988 Sep;96(4):A169-239 **(Fre)**

[The neurosciences. The Association of Physiologists. Toulouse, 17-18 September 1987. Proceedings] **Arch Int Physiol Biochim** 1988 Aug;96(3):A77-135 **(Fre)**

[Nervous control of intestinal motility] Minaire Y. **Presse Med** 1989 Feb 15;18(6):255-63 (Eng. Abstr.) **(Fre)**

[The concept of neuroimmunology and human neuropathology] Reznik M. **Rev Med Liege** 1989 Jun 15; 44(12):409-21 (63 ref.) **(Fre)**

[Proceedings of the fifth interregional meeting of sections of the Italian Society of Neurology. Bari, October 15, 1989] **Acta Neurol (Napoli)** 1989 Apr-Jun;11(2-3):79-215 **(Ita)**

[15th meeting of the Japan Endocrine Society, Neuroendocrine Section. Tsu, 6 November 1988. Abstract] **Nippon Naibunpi Gakkai Zasshi** 1988 Sep 20;64(9):901-1000 **(Jpn)**

[30th annual meeting of the Japanese Society of Child Neurology. June 9-11, 1988, Tokushima. Proceedings] **No To Hattatsu** 1989 Mar;21(2):97-195 **(Jpn)**

[Neurolinguistics] Peng FC. **No To Shinkei** 1989 Jan; 41(1):7-14 (16 ref.) **(Jpn)**

[Neurologic evaluation of the fitness for vocational training of students of the school of fashion. The qualifying criteria] Polakowska B. **Med Pr** 1988;39(4):276-81 (Eng. Abstr.) **(Pol)**

[Endogenous peptides of the central nervous system: enkephalins, endorphins and substance P. III. Their effect on various functions of the body (except pain reaction)] Finkiewicz-Murawiejska L. **Postepy Hig Med Dosw** 1988 Sep-Oct;42(5):543-59 (117 ref.) (Eng. Abstr.) **(Pol)**

[Neurohumoral means for realizing the trophic function of the nervous system (on the centenary of the birth of Academician A. D. Speranskii)] Azhipa IaI. **Fiziol Cheloveka** 1988 Jan-Feb;14(1):3-19 (96 ref.) **(Rus)**

[Dependence of lipid peroxidation on the typologic characteristics of the nervous system and their relation to the resistance of the body to exertion] Deviatkina TA, et al. **Fiziol Zh** 1989 Jan-Feb;35(1):55-9 (Eng. Abstr.) **(Rus)**

[Physiologic and hygienic evaluation of the work of river transport workers during the navigation period] Evstaf'ev VN. **Gig Sanit** 1988 Nov;(11):83-5 **(Rus)**

[A joint plenary session of the Scientific Council on Comprehensive Problems of Human and Animal Physiology of the USSR Academy of Sciences, and the Scientific Council on General Pathology of the USSR Academy of Medical Sciences. "Physiology and pathology of the nervous system and neural regulation". Dedicated to Academician A. D. Speranskii on the centenary of his birth. Moscow, 12-13 January 12-13 1988] **Vestn Akad Med Nauk SSSR** 1988;(11):1-92 **(Rus)**

PHYSIOPATHOLOGY

Role of renal nerves in renal sodium retention of nephrotic syndrome. Herman PJ, et al. **Am J Physiol** 1989 May;256(5 Pt 2):F823-9

Respiratory tract infections increase susceptibility to neurogenic inflammation in the rat trachea. McDonald DM. **Am Rev Respir Dis** 1988 Jun;137(6):1432-40

Interaction of HIV infection with nervous tissue may play a crucial role in the development of AIDS. Parisi G. **Ann Inst Pasteur Virol** 1988 Oct-Dec;139(4):467-76 (38 ref.)

Prediction of language and neurologic recovery after cerebral infarction with SPECT imaging using N-isopropyl-p-(I 123) iodoamphetamine. Bushnell DL, et al. **Arch Neurol** 1989 Jun;46(6):665-9

Neurological outcome after out-of-hospital cardiac arrest. Prediction by cerebrospinal fluid enzyme analysis. Roine RO, et al. **Arch Neurol** 1989 Jul;46(7):753-6

Studies on the neurochemistry and neurophysiology of experimental vitamin E deficiency. Goss-Sampson MA, et al. **Biochem Soc Trans** 1988 Aug;16(4):466-7

Recovery from acute experimental allergic encephalomyelitis in the Lewis rat. Early restoration of nerve conduction and repair by Schwann cells and oligodendrocytes. Pender MP. **Brain** 1989 Apr;112 (Pt 2):393-416

Developmental aspects of nociception. Hamm RJ, et al. **Brain Res Bull** 1988 Dec;21(6):933-46 (84 ref.)

Evolutionary and comparative aspects of nociception. Kavaliers M. **Brain Res Bull** 1988 Dec;21(6):923-31 (93 ref.)

Diagnosis and treatment of neuromuscular causes of acute respiratory failure. Bennett DA, et al. **Clin Neuropharmacol** 1988 Aug;11(4):303-47 (297 ref.)

The relative importance of nervous system and hormones to the 2-deoxy-D-glucose-induced hyperglycemia in fed rats. Matsunaga H, et al. **Endocrinology** 1989 Mar; 124(3):1259-64

Corneal nerve regeneration. Correlation between morphology and restoration of sensitivity. de Leeuw AM, et al. **Invest Ophthalmol Vis Sci** 1989 Sep;30(9):1980-90

Afferent and efferent nerve injury in vibration white fingers. Ekenvall L, et al. **J Auton Nerv Syst** 1988 Oct;24(3):261-6

Increasing intrathecal lymphocytosis and immunoglobulin G production in neurologically asymptomatic HIV-1 infection. Andersson MA, et al. **J Neuroimmunol** 1988 Oct; 19(4):291-304

Quantitative measures of neurological function in chronic neuromuscular diseases and ataxia. Fillyaw MJ, et al. **J Neurol Sci** 1989 Aug;92(1):17-36

Effect of vitamin E deficiency on neurologic function in patients with cystic fibrosis. Cynamon HA, et al. **J Pediatr** 1988 Oct;113(4):637-40

Mechanisms of clinical pain. Observations and speculations. Portenoy RK. **Neurol Clin** 1989 May;7(2):205-30 (142 ref.)

Patterns of neurologic involvement in multiple sclerosis. Kurtzke JF. **Neurology** 1989 Sep;39(9):1235-8

Colored hearing synesthesia: an investigation of neural factors. Rizzo M, et al. **Neurology** 1989 Jun;39(6):781-4

Neurologic findings in men with isolated hypogonadotropic hypogonadism. Schwankhaus JD, et al. **Neurology** 1989 Feb;39(2 Pt 1):223-6

Functional recovery after decompressive craniectomy for cerebral infarction. Kondziolka D, et al. **Neurosurgery** 1988 Aug;23(2):143-7

Angina pectoris. Clinical characteristics, neurophysiological and molecular mechanisms. Sylvén C. **Pain** 1989 Feb; 36(2):145-67 (164 ref.)

The natural history of neurological recovery in patients with traumatic tetraplegia. Kiwerski J. **Paraplegia** 1989 Feb; 27(1):41-5

The 21-aminosteroid U74006F reduces systemic lipid peroxidation, improves neurologic function, and reduces mortality after cardiopulmonary arrest in dogs. Natale JE, et al. **Prog Clin Biol Res** 1989;308:891-6

The aging neuromuscular system. Baker PC. **Semin Neurol** 1989 Mar;9(1):50-9

The neurological outcome following surgery for spinal fractures. Gertzbein SD, et al. **Spine** 1988 Jun;13(6):641-4

Experimental scoliosis in the rat. I. Methodology, anatomic features and neurologic characterization. Sarwark JF, et al. **Spine** 1988 May;13(5):466-71

Insulin administration protects neurologic function in cerebral ischemia in rats. LeMay DR, et al. **Stroke** 1988 Nov;19(11):1411-9

Effects of a novel calcium antagonist, KB-2796, on neurologic outcome and size of experimental cerebral infarction in rats. Harada K, et al. **Surg Neurol** 1989 Jul; 32(1):16-20

Neurologic function seven years after crowbar impalement of the brain. Ordia JI. **Surg Neurol** 1989 Aug;32(2):152-5

Arthritis and the nervous system. Fitzgerald M. **Trends Neurosci** 1989 Mar;12(3):86-7 (15 ref.)

[Schizophrenia and the theory of neural networks] Massing W. **Fortschr Neurol Psychiatr** 1989 Feb;57(2):70-3 (Eng. Abstr.) **(Ger)**

[Preoperative neurological status of elderly surgical patients with ruptured intracranial aneurysms] Suzuki A, et al. **Neurol Med Chir (Tokyo)** 1988 Dec;28(12):1152-6 (Eng. Abstr.) **(Jpn)**

[The problem of selective vulnerability in neuropathology: the historical discussion between C. and O. Vogt and W. Spielmeyer as seen today (review)] Schmidt-Kastner R. **No Shinkei Geka** 1989 Feb;17(2):109-16 (65 ref.) (Eng. Abstr.) **(Jpn)**

[Neurofunctional disturbances as related to cortical ischemia and white matter ischemia] Kataoka K, et al. **No To Shinkei** 1989 Feb;41(2):117-24 (Eng. Abstr.) **(Jpn)**

[Evaluation of electrophysiological neuromonitoring in the diagnosis of brain death: Part III. Compressed spectral arrays] Shiogai T. **No To Shinkei** 1989 Mar;41(3):309-18 (Eng. Abstr.) **(Jpn)**

[A neurophysiological study on CCU syndrome] Nakajima K, et al. **Seishin Shinkeigaku Zasshi** 1988;90(6):453-68 (Eng. Abstr.) **(Jpn)**

[Various determinants of arrhythmia] Tomaszewski R. **Wiad Lek** 1988 Dec 15;41(24):1684-9 **(Pol)**

[The problem of combined effects of noise and toxic substances] Para'nko NM. **Gig Sanit** 1989 May;(5):62-6 (75 ref.) **(Rus)**

[General pathophysiology of the nervous system. I. The general etiology and pathogenesis of nervous disorders] Kryzhanovskii GN. **Patol Fiziol Eksp Ter** 1988 May-Jun; (3):70-80 **(Rus)**

[General pathophysiology of the nervous system] Kryzhanovskii GN. **Patol Fiziol Eksp Ter** 1989 Mar-Apr; (2):63-71 **(Rus)**

[Function of the neuromuscular apparatus in children with rheumatoid arthritis and congenital hip dislocation] Iakovleva TA, et al. **Revmatologiia (Moskva)** 1988 Oct-Dec;(4):63-7 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

[Mechanisms of radiation action on the nervous system] Savchenko BN. **Nerv Sist** 1988;27:112-8 **(Rus)**

[Functional changes caused by low-intensity laser irradiation on the child's body] Pagava KI. **Pediatriia** 1989;(7):109-10 **(Rus)**

SURGERY

Proceedings of the 8th European Congress of Neurosurgery. Vol. 2: Spinal cord and spine pathologies. Basic research in neurosurgery. Barcelona, September 6-11, 1987. **Acta Neurochir Suppl (Wien)** 1988;43:1-213

Interactions between nimodipine and general anaesthesia—clinical investigations in 124 patients during neurosurgical operations. Müller H, et al. **Acta Neurochir Suppl (Wien)** 1988;45:29-35

Sufentanil pharmacokinetics in neurosurgical patients. Puig MM, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 May; 27(5):229-34

Artificial nerve graft compared to autograft in a rat model. Rosen JM, et al. **J Rehabil Res Dev** 1989 Winter;26(1):1-14

Neurosurgical treatment of persistent pain. Physiological and pathological mechanisms of human pain. Gybels JM, et al. **Pain Headache** 1989;11:1-402 (1158 ref.)

Electrostimulation and neurosurgical measures in cancer pain. Siegfried J. **Recent Results Cancer Res** 1988;108:28-32 (8 ref.)

[Venous air embolism during neurosurgery. Experimental study of its pathogenesis and prevention] Hikichi M. **Neurol Med Chir (Tokyo)** 1988 Aug;28(8):767-71 (Eng. Abstr.) **(Jpn)**

[Halogenated agents in neuroanesthesia (editorial)] Moral V. **Rev Esp Anestesiol Reanim** 1988 Jul-Aug;35(4):181 **(Spa)**

TRANSPLANTATION

Transplantation of human embryonic nerve tissue into a schizophrenic's brain. Kolařík J, et al. **Zentralbl Neurochir** 1988;49(3):147-50

ULTRASTRUCTURE

The lateral giant fibers of the tubificid worm, Branchiura sowerbyi: structural and functional asymmetry in a paired interneuronal system. Zoran MJ, et al. **J Comp Neurol** 1988 Sep 1;275(1):76-86

Avesicular intercellular junctions in the neuropil of ganglia of the subpharyngeal complex and in nerves of the snail. Berezhnaya LA. **Neurosci Behav Physiol** 1989 May-Jun; 19(3):208-11

NERVOUS SYSTEM DISEASES

First annual meeting of the Society for Experimental

Neuropathology. October 1, 1988, Philadelphia, PA. Abstracts. **Ann Neurol** 1988 Sep;24(3):471–82
Scientific meeting of The Netherlands Society of Neurology. Nijmegen, 28th May 1988. **Clin Neurol Neurosurg** 1988; 90(3):302–5
Scientific meetings of The Netherlands Society of Child Neurology. Abstracts. **Clin Neurol Neurosurg** 1988; 90(3):283–93
Lustrum scientific meeting of the Flemish Society of Neuro-Psychiatry. Knokke, 28th May 1988. Abstracts. **Clin Neurol Neurosurg** 1988;90(3):295–302
Third European meeting of neuropathology. Verona, September 27–29, 1988. Abstracts. **Clin Neuropathol** 1988 Jul–Aug;7(4):139–223
Neonatal neurology. **Clin Perinatol** 1989 Jun;16(2):311–582
Bibliography of Developmental Medicine and Child Neurology: selected books and articles received in 1988. **Dev Med Child Neurol Suppl** 1989 Apr;58:1–161
The nervous system of laboratory animals. International symposium and histopathology seminar. Nara City, Japan, 13th–16th April 1988. Abstracts. **Exp Pathol** 1989; 36(1):17–22
Third annual meeting of the American Academy of Clinical Neurophysiology. July 14–17, 1988, Boston, Massachusetts. Abstracts. **J Clin Neurophysiol** 1989 Jul;6(3):287–96
Second annual meeting of the American Academy of Clinical Neurophysiology. June 18–21, 1987, Boston, Massachusetts. Abstracts. **J Clin Neurophysiol** 1988 Apr;5(2):187–204
The POEMS (Crow–Fukase) syndrome: a case report. Witoonpanich R, et al. **J Med Assoc Thai** 1988 Jul; 71(7):406–12
Proceedings of the meeting of the Association of British Neurologists jointly with the Association of Soviet Neurologists. Leningrad, USSR, 25–28 May 1988. Abstracts. **J Neurol Neurosurg Psychiatry** 1989 Mar; 52(3):415–9
Retroviruses and diseases of the nervous system. Brown MM. **J R Soc Med** 1989 May;82(5):306–9
28th International Neuropsychiatric Symposium. Pula, 30th May–4th June, 1988. Abstracts. **Neurologija** 1988;37 Suppl 1:1–116
American Academy of Neurology. 41st annual meeting program. Chicago, April 13–19, 1989. Abstracts. **Neurology** 1989 Mar;39(3 Suppl 1):1–479
American Academy of Neurology. 41st annual meeting. Chicago, April 13–19, 1989. Abstract listing & general meeting information. **Neurology** 1989 Feb;39(2 Pt 2):1–41
Neurologic fragments. II. Remarks on anosognosia, confabulation, memory, and other topics; and an appendix on self-observation. Fisher CM. **Neurology** 1989 Jan; 39(1):127–32
Australian neuroscience proceedings. Abstracts of the ninth meeting of the Australian Neuroscience Society. Melbourne, Australia, February 6–8, 1989. **Neurosci Lett Suppl** 1989;34:S1–186
Abstracts of the third meeting of the Italian Society of Neuroscience. Bologna, Italy, November 27–30, 1988. **Neurosci Lett Suppl** 1988;33:S1–221
Abstracts of the twelfth annual meeting of the Japan Neuroscience Society. Nagoya, Japan, December 7–9, 1988. **Neurosci Res Suppl** 1989;9:S1–196
Neurocysticercosis: parasitology, clinical presentation, diagnosis, and recent advances in management. Cook GC. **Q J Med** 1988 Aug;68(256):575–83 (47 ref.)
Neurosarcoidosis. Graham E, et al. **Sarcoidosis** 1988 Sep; 5(2):125–31 (28 ref.)
Neuropathy. **Semin Neurol** 1987 Mar;7(1):1–118
The aging neuromuscular system. Baker PC. **Semin Neurol** 1989 Mar;9(1):50–9
[141st meeting of the Swiss Neurology Society. 30 June–2 July 1988, Lausanne, Switzerland. Abstracts] **Schweiz Arch Neurol Psychiatr** 1989;140(2):159–87 **(Ger)**
[Proceedings of the fifth interregional meeting of sections of the Italian Society of Neurology. Bari, October 15, 1989] **Acta Neurol (Napoli)** 1989 Apr–Jun;11(2–3):79–215 **(Ita)**
[30th annual meeting of the Japanese Society of Child Neurology. June 9–11, 1988, Tokushima. Proceedings] **No To Hattatsu** 1989 Mar;21(2):97–195 **(Jpn)**
[29th annual meeting of the Japanese Society of Neurology. Tokyo, 25–27 May 1988. Abstracts] **Rinsho Shinkeigaku** 1988 Dec;28(12):1145–606 **(Jpn)**
[13th Brazilian Congress on Neurology. 13th meeting of the Brazilian League Against Epilepsy. São Paulo, 24–29 September 1988. Abstracts] **Arq Neuropsiquiatr** 1988 Sep; 46 Suppl:426 abstracts **(Por)**
[A joint plenary session of the Scientific Council on Comprehensive Problems of Human and Animal Physiology of the USSR Academy of Sciences, and the Scientific Council on General Pathology of the USSR Academy of Medical Sciences. "Physiology and pathology of the nervous system and neural regulation". Dedicated to Academician A. D. Speranskii on the centenary of his birth. Moscow, 12–13 January 12–13 1988] **Vestn Akad Med Nauk SSSR** 1988;(11):1–92 **(Rus)**
[Evaluation of work capability in patients with neurologic diseases] Gavranović M. **Neurologija** 1988;37(3–4):105–18 (Eng. Abstr.) **(Scr)**

BLOOD

Zinc, copper and magnesium concentration in serum and CSF of patients with neurological disorders. Kapaki E, et al. **Acta Neurol Scand** 1989 May;79(5):373–8

CEREBROSPINAL FLUID

Diazepam binding inhibitor in brain and in cerebrospinal fluid of human. Ferrero P, et al. **Ann Ist Super Sanita** 1988; 24(3):443–59
Cerebrospinal fluid eicosanoids as an index of cerebrovascular status. White RP. **Ann N Y Acad Sci** 1989; 559:131–45 (70 ref.)
Cerebrospinal fluid immunoglobulin abnormalities in neurosarcoidosis. Borucki SJ, et al. **Arch Neurol** 1989 Mar; 46(3):270–3
Capillary-isotachophoretic determination of glutamine in cerebrospinal fluid of various neurological disorders. Hiraoka A, et al. **Clin Biochem** 1989 Aug;22(4):293–6
CSF fibronectin in Burkitt's lymphoma: an early marker for CNS involvement [letter] Rajantie J, et al. **Eur J Haematol** 1989 Mar;42(3):313–4
Cerebrospinal fluid normalities and abnormalities in individuals infected with human immunodeficiency virus. Hollander H. **J Infect Dis** 1988 Oct;158(4):855–8 (16 ref.)
Protein gradients in the cerebrospinal fluid and the calculation of intracerebral IgG synthesis. Wurster U. **J Neuroimmunol** 1988 Dec;20(2–3):233–5
Diazepam binding inhibitor-like immunoreactivity (DBI-LI) in human CSF. Correlations with neurological disorders. Ferrero P, et al. **J Neurol Sci** 1988 Nov;87(2–3):327–49
Intrathecal synthesis of immunosuppressive acidic protein (IAP) in patients with multiple sclerosis and other inflammatory neurological diseases. Seki H, et al. **J Neurol Sci** 1988 Jul;85(3):259–66
CSF acetylcholinesterase levels are reduced in multiple system atrophy with autonomic failure. Polinsky RJ, et al. **Neurology** 1989 Jan;39(1):40–4
CSF TRAP: a procedure to improve laboratory testing with myelography. Albright RE Jr, et al. **Neurosurgery** 1989 Jul;25(1):76–80

CHEMICALLY INDUCED

Seamen exposed to organic solvents. A cross-sectional study with special reference to the nervous system. Moen BE, et al. **Acta Neurol Scand** 1988 Aug;78(2):123–35
Drug-induced neurological disorders. Morrow JI, et al. **Adverse Drug React Acute Poisoning Rev** 1988 Autumn; 7(3):105–33 (147 ref.)
Cacosmia and neurobehavioral dysfunction associated with occupational exposure to mixtures of organic solvents. Ryan CM, et al. **Am J Psychiatry** 1988 Nov;145(11):1442–5
An unusual result with flumazenil [letter] Williams D, et al. **Anaesth Intensive Care** 1989 Aug;17(3):387
Oral acyclovir and neurotoxicity [letter] Swan SK, et al. **Ann Intern Med** 1989 Jul 15;111(2):188
Neurobehavioral estimation of children with life-long increased lead exposure. Benetou-Marantidou A, et al. **Arch Environ Health** 1988 Nov–Dec;43(6):392–5
Effect of venoruton on hypoxic stress-induced neurotoxicity in mice and oxygen free radical generation by human neutrophils. Shukla VK, et al. **Arch Int Pharmacodyn Ther** 1989 May–Jun;299:127–33
Neuropathology of vigabatrin. Graham D. **Br J Clin Pharmacol** 1989;27 Suppl 1:43S–45S
Carbamazepine–lithium toxicity in brain-damaged adolescents. Parmelee DX, et al. **Brain Inj** 1988 Oct–Dec; 2(4):305–8
Effect of exogenous pyruvate on acrylamide neuropathy in rats. Sabri MI, et al. **Brain Res** 1989 Mar 27;483(1):1–11
Lead brachial neuropathy in heroin addiction. A case report. Antonini G, et al. **Clin Neurol Neurosurg** 1989;91(2):167–70
Neurooocular side effects of carbamazepine and phenobarbital in epileptic patients as measured by saccadic eye movements analysis. Tedeschi G, et al. **Epilepsia** 1989 Jan–Feb;30(1):62–6
Glucocorticoids and 3,4-methylenedioxymethamphetamine (MDMA)-induced neurotoxicity. Johnson M, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):181–8
Differences between rats and mice in MDMA (methylenedioxymethylamphetamine) neurotoxicity. Logan BJ, et al. **Eur J Pharmacol** 1988 Aug 2;152(3):227–34
In vivo dopaminergic neurotoxicity of the 2-beta-methylcarbolinium ion, a potential endogenous MPP+ analog. Rollema H, et al. **Eur J Pharmacol** 1988 Aug 9;153(1):131–4
Neuromuscular effects of chronic exposure to fenthion in dogs and predictive value of electromyography. Tuler SM, et al. **Fundam Appl Toxicol** 1988 Jul;11(1):155–68
Implementation of a primary screen for developmental neurotoxicity. Wier PJ, et al. **Fundam Appl Toxicol** 1989 Jul;13(1):118–36
Sniffing of ethyl chloride—an uncommon form of abuse with serious mental and neurological symptoms. Nordin C, et al. **Int J Addict** 1988 Jun;23(6):623–7
Central nervous system side effects of antiviral drugs. Ricci S, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Aug; 26(8):400–8 (104 ref.)
Neurotoxicity of hydrosoluble iodine contrast media. Caillé JM, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S210–2 (14 ref.)
The association between high-dose cytarabine neurotoxicity and renal insufficiency. Damon LE, et al. **J Clin Oncol** 1989 Oct;7(10):1563–8
Long-term neurotoxicity in patients treated with cisplatin, vinblastine, and bleomycin for metastatic germ cell cancer. Hansen SW, et al. **J Clin Oncol** 1989 Oct;7(10):1457–61
Haldol decanoate and thyroid disease [letter] Jefferson JW. **J Clin Psychiatry** 1988 Nov;49(11):457–8
Severe lithium toxicity treated by hemodialysis: a case report. Paholpak S. **J Med Assoc Thai** 1989 Feb;72(2):112–6
Regional cerebral glucose metabolism and blood flow during the silent phase of methylmercury neurotoxicity in rats. Hargreaves RJ, et al. **J Neurochem** 1988 Nov;51(5):1350–5
Methylation deficiency causes vitamin B12–associated neuropathy in the pig. Weir DG, et al. **J Neurochem** 1988 Dec;51(6):1949–52
Cyclosporin neurotoxicity in cardiac transplant recipients. Lane RJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov; 51(11):1434–7
Lethal neurotoxicity associated to azidothymidine therapy [letter] Saracchini S, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):544–5
Misonidazole neuropathy. A prospective study. Melgaard B, et al. **J Neurooncol** 1988 Nov;6(3):227–30
Encephalopathy and polyneuropathy induced by organic solvents. Berstad J, et al. **J Oslo City Hosp** 1989 Jun–Jul; 39(6–7):81–6
Caffeine as a potential risk factor for theophylline neurotoxicity. Yasuhara M, et al. **J Pharm Sci** 1988 Sep; 77(9):745–7
Kinetics of drug action in disease states XXVIII: Effect of acute hypovolemia on theophylline-induced neurotoxicity in rats. Yasuhara M, et al. **J Pharm Sci** 1988 Aug; 77(8):729–30
Effect of age on neurotoxicity of theophylline. Yasuhara M, et al. **J Pharm Sci** 1988 Jul;77(7):645–6
Health effects among workers involved in the manufacture of hexachlorocyclohexane. Chattopadhyay P, et al. **J Soc Occup Med** 1988 Autumn;38(3):77–81
Survival after chloroquine ingestion in a child. Havens PL, et al. **J Toxicol Clin Toxicol** 1988;26(5–6):381–8
Warning against use of intrathecal mitoxantrone [letter] Hall C, et al. **Lancet** 1989 Apr 1;1(8640):734
Cyclosporin metabolites and neurotoxicity [letter] Trull AK, et al. **Lancet** 1989 Aug 19;2(8660):448
Prevalence of perhexiline maleate neurotoxicosis [letter] Myers JB. **Med J Aust** 1979 Oct 20;2(8):422
Ethanol and the nervous system. Charness ME, et al. **N Engl J Med** 1989 Aug 17;321(7):442–54 (192 ref.)
Taxol produces a predominantly sensory neuropathy. Lipton RB, et al. **Neurology** 1989 Mar;39(3):368–73
Dose-dependent expression of neuronopathy after experimental pyridoxine intoxication. Xu Y, et al. **Neurology** 1989 Aug;39(8):1077–83
Histopathological assessment of triphenyl phosphite neurotoxicity in the hen. Carrington CD, et al. **Neurotoxicology** 1988 Summer;9(2):223–33
Toxicological screening for organophosphorus-induced delayed neurotoxicity: complications in toxicity testing. Cherniack MG. **Neurotoxicology** 1988 Summer;9(2):249–71 (149 ref.)
Atropine and DFP-induced delayed neurotoxicity. Kellner TP, et al. **Neurotoxicology** 1988 Summer;9(2):181–7
The role of hypoxia in organophosphorus nerve agent intoxication. Millis RM, et al. **Neurotoxicology** 1988 Summer;9(2):273–85 (83 ref.)
Neurotoxic effects of the alpha-ethyl homologue of MDMA following subacute administration. Johnson MP, et al. **Pharmacol Biochem Behav** 1989 May;33(1):105–8
The syndrome of irreversible lithium-effectuated neurotoxicity (SILENT). Adityanjee. **Pharmacopsychiatry** 1989 Mar;22(2):81–3
Functional consequences following methamphetamine-induced neuronal damage. De Vito MJ, et al. **Psychopharmacology (Berlin)** 1989;97(4):432–5
Simple aliphatic diamines: acute neurotoxicity. Strain GM, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jun; 64(3):489–92
Breathing pattern, lung inflation reflex and airway tone in acrylamide neuropathy. Hersch MI, et al. **Respir Physiol** 1989 May;76(2):257–76
Neurological and electroneuromyographic assessment of the adverse effects of acrylamide on occupationally exposed workers. He FS, et al. **Scand J Work Environ Health** 1989 Apr;15(2):125–9
Toxic neuropathies. Sahenk Z. **Semin Neurol** 1987 Mar; 7(1):9–17 (62 ref.)
Catastrophic neurologic signs due to drug interaction: Tegretol and Darvon. Oles KS, et al. **Surg Neurol** 1989 Aug;32(2):144–51
Delayed neurotoxicity of triphenyl phosphite in hens: pharmacokinetic and biochemical studies. Konno N, et al. **Toxicol Appl Pharmacol** 1989 Sep 15;100(3):440–50
Behavioural, electroencephalographic and neuropathological effects of the intrahippocampal injection of the venom of the South American rattlesnake (Crotalus durissus terrificus). Mello LE, et al. **Toxicon** 1989;27(2):189–99
Increased free intracellular Ca2+ by toxic agents: an index of potential neurotoxicity? Komulainen H, et al. **Trends Pharmacol Sci** 1988 May;9(5):154–6 (22 ref.)
[The bases of MPTP neurotoxicity] Dostert P, et al. **Encephale** 1988 Nov–Dec;14(6):399–412 (145 ref.) (Eng. Abstr.) **(Fre)**
[Neurotoxic and teratogenic risks of vincristine in the rat] Barberi I, et al. **Boll Soc Ital Biol Sper** 1988 Jun; 64(6):577–81 (Eng. Abstr.) **(Ita)**
[The physiopathologic bases of the neurotoxicity of phosphorus chelating agents containing soluble aluminum

salts in patients with renal insufficiency] Savazzi GM, et al. **Recenti Prog Med** 1989 Apr;80(4):227–32 (39 ref.) (Eng. Abstr.) **(Ita)**

[A case of intoxication with thinner, Bond and Optalidon, showing various psychiatric symptoms and polyneuropathy] Tanaka M, et al. **Rinsho Shinkeigaku** 1975 Mar;15(3):116–23 (Eng. Abstr.) **(Jpn)**

[Determination of the exposure concentration of propylene oxide to produce neuropathy in rats] Ohnishi A, et al. **Sangyo Ika Daigaku Zasshi** 1988 Sep 1;10(3):277–81 (Eng. Abstr.) **(Jpn)**

[H2S poisoning and nervous system damage] Tvedt B, et al. **Tidsskr Nor Laegeforen** 1989 Jun 30;109(19–21):2007–11 (Eng. Abstr.) **(Nor)**

[Status of the nervous system and bioelectric activity of the brain in dry cleaning plant workers exposed to tetrachloroethylene] Sińczuk-Walczak H. **Med Pr** 1988; 39(2):91–9 (Eng. Abstr.) **(Pol)**

[Effect of vinyl chloride and its polymers on the nervous system] Kurzbauer H. **Neurol Neurochir Pol** 1988 Sep–Oct; 22(5):404–9 (Eng. Abstr.) **(Pol)**

[Phenytoin: a new look at its anti-epileptic mechanism and adverse effects] Szkilnik R, et al. **Neurol Neurochir Pol** 1988 May–Jun;22(3):246–51 (30 ref.) **(Pol)**

[Stages and prospects of the development of morphologic studies in the field of environmental health] Bonashevskaia TI. **Gig Sanit** 1989 Mar;(3):44–8 (Eng. Abstr.) **(Rus)**

[Adverse effects of anti-arrhythmia drugs: possibilities of their prevention and correction] Zamotaev IP, et al. **Kardiologiia** 1989 May;29(5):119–24 **(Rus)**

[Barbiturate dependence] Lukachev GIa, et al. **Sov Med** 1989; (4):112–6 **(Rus)**

[Oxygen balance of the brain in exogenous neurotoxicoses (review of the literature)] Kvitnitskiĭ-Ryzhov IuN, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):132–42 (160 ref.) **(Rus)**

CLASSIFICATION

The development of a disease classification system, based on the International Classification of Diseases, for use by neurologists. Wood VA, et al.
J Neurol Neurosurg Psychiatry 1989 Apr;52(4):449–58

COMPLICATIONS

Development of histidinemic patients: follow-up study of five cases with neuropsychological symptoms. Ishikawa M, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Jun;29(3):444–8

Histo- and immunopathological features of terminal AIDS. An autopsy case of a Japanese man with neurological signs as initial symptoms. Miyayama H, et al.
Acta Pathol Jpn 1988 Oct;38(10):1313–27

Neurogenic dysphagia: diagnostic assessment and rehabilitation of feeding disorders in the neurologically impaired. Bass NH. **Adv Clin Rehabil** 1988;2:186–228 (110 ref.)

Respiratory patterns associated with swallowing: Part 2. Neurologically impaired dysphagic patients. Selley WG, et al. **Age Ageing** 1989 May;18(3):173–6

Psychopathology in patients with Wilson's disease. Medalia A, et al. **Am J Psychiatry** 1989 May;146(5):662–4

Neurologic aspects of mitral valve prolapse. Heck AF. **Angiology** 1989 Aug;40(8):743–51 (108 ref.)

Neurologic complications of collagen vascular diseases. Lisak RP, et al. **Ann N Y Acad Sci** 1988;540:115–21 (37 ref.)

Beware the patient with a headache in the accident and emergency department. Fodden DI, et al.
Arch Emerg Med 1989 Mar;6(1):7–12

Hemianesthesia and aphasia. An anatomical and behavioral study. Hyman BT, et al. **Arch Neurol** 1989 Jul;46(7):816–9

Neuropsychological deficits in choreoacanthocytosis. Medalia A, et al. **Arch Neurol** 1989 May;46(5):573–5

Relapsing bilateral brachial plexopathy during pregnancy. Report of a case. Redmond JM, et al. **Arch Neurol** 1989 Apr;46(4):462–4

Neurologic involvement in Behçet's syndrome. A prospective study. Serdaroğlu P, et al. **Arch Neurol** 1989 Mar; 46(3):265–9

Horner's syndrome. Sweat gland and pupillary responsiveness in two cases with a probable 3rd neurone dysfunction. Salvesen R, et al. **Cephalalgia** 1989 Mar; 9(1):63–70

Other neurologic diseases with dementia as a sequela. Feher EP, et al. **Clin Geriatr Med** 1988 Nov;4(4):799–814 (75 ref.)

ICU management of pulmonary dysfunction in neurosurgical patients. Popp AJ, et al. **Clin Neurosurg** 1989;35:71–92

Hyponatremia in neurosurgical patients. Shucart W. **Clin Neurosurg** 1989;35:93–100

Chronic nonspherocytic hemolytic anemia (CNSHA) and glucose 6 phosphate dehydrogenase (G6PD) deficiency in a patient with familial amyloidotic polyneuropathy (FAP). Molecular study of a new variant (G6PD Clinic) with markedly acidic pH optimum. Vives-Corrons JL, et al. **Hum Genet** 1989 Jan;81(2):161–4

Neurocutaneous diseases--a study of 61 cases. Joshi RM, et al. **Indian J Pediatr** 1988 Jul–Aug;55(4):617–25

Complications of burn care in patients with neurologic disorders. Larson CM, et al. **J Burn Care Rehabil** 1988 Sep–Oct;9(5):482–4

Neurologic complications of the acquired immune deficiency syndrome. Slade WR Jr. **J Natl Med Assoc** 1987 Aug; 79(8):833–40 (58 ref.)

Central nervous system AIDS. Tucker T. **J Neurol Sci** 1989 Feb;89(2–3):119–33 (65 ref.)

Disturbance of cerebral function by aluminium in haemodialysis patients [letter] **Lancet** 1989 Aug 26; 2(8661):501–2

Choices in surgical treatment of rigid neurogenic and arthrogrypotic clubfeet. Lichtblau S.
Mt Sinai J Med (NY) 1989 Jan;56(1):17–22

Deafferentation pain syndromes. Davar G, et al.
Neurol Clin 1989 May;7(2):289–304 (97 ref.)

'Hot and dry foot' as initial manifestation of neoplastic lumbosacral plexopathy. Dalmau J, et al. **Neurology** 1989 Jun;39(6):871–2

Early onset leukodystrophy with distinct facial features in 2 siblings. Harbord MG, et al. **Neuropediatrics** 1989 Aug; 20(3):154–7

Psychiatric and neurological manifestations in systemic lupus erythematosus. Lim L, et al. **Q J Med** 1988 Jan; 66(249):27–38

Urogenital problems in neurology. **Semin Neurol** 1988 Summer;8(2):121–73

Neurologic problems of pregnancy. **Semin Neurol** 1988 Sep; 8(3):181–254

Mononeuropathies in pregnancy. Massey EW.
Semin Neurol 1988 Sep;8(3):193–6 (39 ref.)

Neurophysiology of male sexual dysfunction in neurologic disorders. Siroky MB. **Semin Neurol** 1988 Summer; 8(2):137–40 (29 ref.)

Neurogenic claudication and root claudication treated with calcitonin. A double-blind trial. Porter RW, et al.
Spine 1988 Sep;13(9):1061–4

Neuro-myopathic flexion deformities of the cervical spine. Simmons EH, et al. **Spine** 1988 Jul;13(7):756–62

[Diaphragmatic paralysis and neurologic diseases (letter)] de Toffol B, et al. **Rev Med Interne** 1989 Jan–Feb;10(1):78 **(Fre)**

[Use of synthetic ACTH in combination with low-dose tricyclic antidepressants in chronic deafferentation pain] Salvi E, et al. **Minerva Anestesiol** 1988 Jun;54(6):275–8 (Eng. Abstr.) **(Ita)**

[Sleep-related respiratory disturbance with special reference to sleep apnea syndrome] Tashiro T, et al.
Kokyu To Junkan 1989 Jan;37(1):21–4 **(Jpn)**

[Orthostatic hypotension in primary amyloidosis] Lapin VV, et al. **Ter Arkh** 1988;60(6):121–3 (Eng. Abstr.) **(Rus)**

[Neurogenic immunodeficiency] Evseev VA, et al.
Vestn Akad Med Nauk SSSR 1988;(11):85–92 (49 ref.) (Eng. Abstr.) **(Rus)**

[The human immunodeficiency virus type I and the nervous system] Begovac J, et al. **Lijec Vjesn** 1988 Sep–Oct; 110(9–10):332–8 (116 ref.) (Eng. Abstr.) **(Scr)**

[Neurology of the acquired deficiency syndrome. I] Orolin D, et al. **Cesk Neurol Neurochir** 1988 Nov;51(6):357–69 (71 ref.) **(Slo)**

[Disseminated pigmented nevus syndrome] Cabrera HN, et al. **Med Cutan Ibero Lat Am** 1988;16(2):101–5 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Quantitation of the stretch reflex. Technical procedures and clinical applications. Toft E, et al. **Acta Neurol Scand** 1989 May;79(5):384–90 (33 ref.)

Problems of the evaluation of occupational vasoneurosis in medical practice--a case report. Zák J.
Acta Univ Palacki Olomuc Fac Med 1987;117:211–8

Hysterical conversion reactions mimicking neurological disease. Bangash IH, et al. **Am J Dis Child** 1988 Nov; 142(11):1203–6

Borrelia burgdorferi in the nervous system: the new "great imitator". Pachner AR. **Ann N Y Acad Sci** 1988;539:56–64

Magnetic resonance in diseases of the nervous system. Kendall BE. **Arch Dis Child** 1988 Nov;63(11):1301–4 (15 ref.)

Neurocysticercosis [letter] **Arch Neurol** 1989 Aug;46(8):842–3

Clinical neuroepidemiology. III. Decisions. Koprowski CD, et al. **Arch Neurol** 1989 Feb;46(2):223–9 (42 ref.)

Clinical biochemistry of neuron specific enolase. Kaiser E, et al. **Clin Chim Acta** 1989 Jul 31;183(1):13–31 (162 ref.)

The role of quantitative topographic mapping or 'neurometrics' in the diagnosis of psychiatric and neurological disorders: the cons. Fisch BJ, et al.
Electroencephalogr Clin Neurophysiol 1989 Jul;73(1):5–9

The role of quantitative EEG topographic mapping or 'neurometrics' in the diagnosis of psychiatric and neurological disorders: the pros. John ER.
Electroencephalogr Clin Neurophysiol 1989 Jul;73(1):2–4

Neurologic presentation of a non-neurologic disorder. Perry A, et al. **Geriatrics** 1989 Apr;44(4):113–4

Ocular palsy preceding chronic relapsing idiopathic polyneuropathy. Poor response to plasma exchange. Piccolo G, et al. **Ital J Neurol Sci** 1988 Aug;9(4):383–4

Porphyrias and neurological disease [editorial] Nath AR, et al. **J Assoc Physicians India** 1988 Oct;36(10):581–2

Neurological complications in intermittent acute porphyria. Saxena HC, et al. **J Assoc Physicians India** 1988 Oct; 36(10):585–8

Cerebrospinal fluid protein analysis in diseases of the nervous system. Harrington MG, et al. **J Chromatogr** 1988 Jul 29; 429:345–58 (115 ref.)

Comparison of two IQ conversion tables for the Vocabulary-Block Design short form. Ryan JJ, et al.
J Clin Psychol 1988 Nov;44(6):950–2

Taxonomy of neurodiagnostic modalities. Neff SD.
J Manipulative Physiol Ther 1989 Apr;12(2):120–30 (20 ref.)

Psychogenic sensory loss. Rolak LA. **J Nerv Ment Dis** 1988 Nov;176(11):686–7

Pure sensory stroke and cheiro-oral syndrome [letter] Iwasaki Y, et al. **J Neurol** 1989 Mar;236(3):186–7

An unusual neurological disorder with abnormal copper metabolism. Ono S, et al. **J Neurol** 1988 Sep;235(7):397–9 (9 ref.)

Symptoms mimicking neurologic disorders in fibromyalgia syndrome. Simms RW, et al. **J Rheumatol** 1988 Aug; 15(8):1271–3

HLA-DR-expressing cells and T-lymphocytes in sural nerve biopsies. Schrøder HD, et al. **Muscle Nerve** 1988 Aug; 11(8):864–70

Electrophysiological and clinical importance of early and late components of the winking reflex and their role in diagnosis. Avakyan GN, et al. **Neurosci Behav Physiol** 1989 May–Jun;19(3):220–3

The long-term significance of neurological findings at toddler's age. Hadders-Algra M, et al.
Padiatr Grenzgeb 1989;28(2):93–9

Does continuous intrapartum fetal monitoring predict long-term neurological disorders? Lumley J.
Paediatr Perinat Epidemiol 1988 Oct;2(4):299–307

Urinary sialic acid screening in neurologic disorders. Carroll JE, et al. **Pediatr Neurol** 1986 Mar–Apr;2(2):67–71

Somatosensory evoked potentials: Part II. A review of the clinical applications in pediatric neurology. Fagan ER, et al. **Pediatr Neurol** 1987 Sep–Oct;3(5):249–55 (52 ref.)

EEG abnormalities aid diagnosis of Rett syndrome. Garofalo EA, et al. **Pediatr Neurol** 1988 Nov–Dec;4(6):350–3

Deep tendon reflexes in premature infants. Kuban KC, et al. **Pediatr Neurol** 1986 Sep–Oct;2(5):266–71

Neonatal neurodevelopmental examination as a predictor of neuromotor outcome in premature infants. Allen MC, et al. **Pediatrics** 1989 Apr;83(4):498–506

Paraneoplastic syndromes. How to recognize the remote neurologic effects of cancer. Mandel S. **Postgrad Med** 1989 Jan;85(1):141–4, 149–52

Serodiagnosis of neurocysticercosis [letter] Schantz PM, et al. **Rev Infect Dis** 1988 Nov–Dec;10(6):1231–3

Evaluating the perplexing neuropathic patient. Brown MJ. **Semin Neurol** 1987 Mar;7(1):1–8 (36 ref.)

Episodic disorders of childhood. Evans OB.
Semin Neurol 1988 Spring;8(1):42–50 (69 ref.)

Intraoperative echotomographic diagnosis in abdominal and neurosurgery. el Mouaaouy A. **Surg Endosc** 1987; 1(2):109–12

[Possibilities and perspectives in the use of thermovision technics in neurosurgery] Kozler P, et al.
Cas Lek Cesk 1988 Jul 8;127(28):873–80 (Eng. Abstr.) **(Cze)**

[The ambulatory function of a department of neuromedicine at a central hospital] Jepsen IM, et al. **Ugeskr Laeger** 1988 Nov 21;150(47):2909–11 (Eng. Abstr.) **(Dan)**

[Diagnosis of HIV infections and neurologic-psychiatric aspects of AIDS] Glaser E. **Beitr Infusionther** 1988; 21:174–6 **(Ger)**

[Neurologic examination in the 1st year of life. 1] Mattigk G. **Kinderarztl Prax** 1988 Dec;56(12):579–84 (Eng. Abstr.) **(Ger)**

[The neurologic examination in the 1st year of life. 2] Mattigk G. **Kinderarztl Prax** 1989 Jan;57(1):13–21 (29 ref.) (Eng. Abstr.) **(Ger)**

[Analysis of gait using motography in healthy children and patients with neurologic disorders. I: Qualitative analysis] Funke R, et al. **Klin Padiatr** 1988 Nov–Dec;200(6):434–7 (Eng. Abstr.) **(Ger)**

[Analysis of gait using motography in healthy children and patients with neurologic disorders. II: Quantitative analysis] Funke R, et al. **Klin Padiatr** 1988 Nov–Dec;200(6):438–43 (Eng. Abstr.) **(Ger)**

[The current status of developmental diagnostics in West Germany] Palitzsch D. **Monatsschr Kinderheilkd** 1988 Nov; 136(11):766–9 (32 ref.) **(Ger)**

[Diagnostic and expert assessment aspects of iatrogenic nerve damage] Müller D, et al.
Psychiatr Neurol Med Psychol Beih 1988;39:82–3 **(Ger)**

[Virus diseases of the nervous system in selected patients at a neurologic specialty unit during a 9-year period] Oder W, et al. **Wien Med Wochenschr** 1988 Dec 31; 138(23–24):604–11 (Eng. Abstr.) **(Ger)**

[A test of symptom validity in assessing functional symptoms] Pankratz L, et al.
Z Klin Psychol Psychopathol Psychother 1988;36(2):130–7 (Eng. Abstr.) **(Ger)**

[Neurologic tests in children having recovered from leukemia] Schuler D, et al. **Orv Hetil** 1989 Jul 30; 130(31):1639–41 (Eng. Abstr.) **(Hun)**

[Selection and understanding of bedside tests. Neuro-motor symptoms] Watanabe H. **Rinsho Byori** 1987 Jul;Spec No 72:123–30 **(Jpn)**

[Concentration of the alpha subunit of GTP-binding protein G0 in the cerebrospinal fluid of patients with neurological disorders] Murayama T, et al. **Rinsho Shinkeigaku** 1988 May;28(5):525–31 (Eng. Abstr.) **(Jpn)**

[Functional disorders in workers in noisy manufacturing depending on the intensity and mobility of the neural processes] Zvereva GS, et al. **Gig Tr Prof Zabol** 1988 Jul; (7):44–5 **(Rus)**

[Clinico-neuro-ophthalmologic disorders in vascular

hypertension in childhood] Kadyrova TK, et al. **Pediatriia** 1988;(11):46–8 **(Rus)**

[Experience with the use of computers in neurological practice] Akimov GA, et al. **Vestn Akad Med Nauk SSSR** 1988;(8):69–74 (Eng. Abstr.) **(Rus)**

[Clinico–electromyographic assessment of early neurologic manifestations of osteochondrosis of the vertebral column] Macheret EL, et al. **Vrach Delo** 1988 Nov;(11):83–6 (Eng. Abstr.) **(Rus)**

[Neurologic functions of patients after open–heart surgery under perfusion–less deep (26–25 degrees C) hypothermic protection] Postnov VG, et al. **Zh Nevropatol Psikhiatr** 1988;88(11):30–3 (Eng. Abstr.) **(Rus)**

[Vestibulometry and its importance in elucidating the pathogenesis and prognosis of the course of nervous system diseases in children] Semenova KA, et al. **Zh Nevropatol Psikhiatr** 1988;88(8):32–7 (Eng. Abstr.) **(Rus)**

[Methods of improving the quality of emergency aid in acute neurologic pathology] Vilenskiĭ BS, et al. **Zh Nevropatol Psikhiatr** 1989;89(1):3–7 (Eng. Abstr.) **(Rus)**

[Diagnostic characteristics of acute neurologic pathology at the prehospital stage] Vilenskiĭ BS, et al. **Zh Nevropatol Psikhiatr** 1988;88(12):3–5 (Eng. Abstr.) **(Rus)**

[Diagnosis of early neurologic disorders and diseases in development] Nikolić V, et al. **Med Pregl** 1988; 41(5–6):241–5 (Eng. Abstr.) **(Scr)**

[Early diagnosis of neurologic diseases] Barac B, et al. **Neurologija** 1988;37(3–4):143–58 (Eng. Abstr.) **(Scr)**

[Rational diagnosis in neurology—technological advances] Mihaljev–Martinov J, et al. **Neurologija** 1988; 37(3–4):119–25 (Eng. Abstr.) **(Scr)**

[Semantics in neurology in the age of development] Nikolić V. **Neurologija** 1988;37(3–4):59–66 (Eng. Abstr.) **(Scr)**

DRUG THERAPY

Effects of long–term administration of antidepressants and neuroleptics on receptors in the central nervous system. Baker GB, et al. **Cell Mol Neurobiol** 1989 Mar;9(1):1–44 (192 ref.)

Cyclosporine in neurological autoimmune disease. Belendiuk G, et al. **Clin Neuropharmacol** 1988 Aug;11(4):291–302 (43 ref.)

Therapeutic applications of bromocriptine in endocrine and neurological diseases. Ho KY, et al. **Drugs** 1988 Jul; 36(1):67–82 (119 ref.)

Praziquantel in neurocysticercosis [letter] Misra SC, et al. **J Assoc Physicians India** 1988 Aug;36(8):524

Use of implantable pumps for central nervous system drug infusions to treat neurological disease. Harbaugh RE, et al. **Neurosurgery** 1988 Dec;23(6):693–8 (63 ref.)

Drug treatment of neurologic disorders. **Semin Neurol** 1987 Jun;7(2):119–226

[Use of calciotropic agents in psychiatry and neurology] Zofková I. **Cas Lek Cesk** 1989 Jun 9;128(24):737–41 (Eng. Abstr.) **(Cze)**

[How are neurologic manifestations of Lyme borreliosis treated?] Pfister HW. **Nervenarzt** 1988 Nov;59(11):687–9 (21 ref.) **(Ger)**

[Problems of neurological drug therapy in pregnancy] Piccione E, et al. **Clin Ter** 1989 Apr 30;129(2):139–44 (42 ref.) **(Ita)**

[A case of primary acquired sideroblastic anemia (PASA) with motor dominant polyneuropathy responsive to vitamin B6] Ikeda A, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr; 78(4):561–2 **(Jpn)**

[Tibolone (Livial) in the treatment of disorders of the postmenopausal period (preliminary report)] Radowicki S, et al. **Ginekol Pol** 1988 Nov;59(11):705–8 (Eng. Abstr.) **(Pol)**

[Use of fenibut in psychiatry and neurology and its place among other psychotropic drugs (review of the literature)] Khaunina RA, et al. **Zh Nevropatol Psikhiatr** 1989; 89(4):142–51 (95 ref.) **(Rus)**

[Interferon and its use in neurology] Ivanišević V, et al. **Vojnosanit Pregl** 1988 Sep–Oct;45(5):366–9 **(Scr)**

ECONOMICS

The high cost of not doing neurological research. Gibson WC. **Can J Neurol Sci** 1988 Aug;15(3):273–5

ENZYMOLOGY

Clinical relevance of increased neuron–specific enolase concentration in cerebrospinal fluid. Jacobi C, et al. **Clin Chim Acta** 1988 Sep 30;177(1):49–54

Neuropathy target esterase in hens after sarin and soman. Crowell JA, et al. **J Biochem Toxicol** 1989 Spring; 4(1):15–20

Leukocyte glutamate dehydrogenase activity in patients with degenerative neurological disorders. Aubby D, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):893–902

Neurologic syndromes in hyperammonemic disorders. Breningstall GN. **Pediatr Neurol** 1986 Sep–Oct;2(5):253–62 (23 ref.)

EPIDEMIOLOGY

The changing face of neurological disease 1946–1987: an epidemiological perspective. Cumming RG, et al. **Aust N Z J Med** 1988 Dec;18(7):881–9 (55 ref.)

The prevalence of urinary symptoms in patients with chronic neurological disease. Thomas TM, et al. **Community Med** 1988 May;10(2):124–9

A protocol to detect neurological disorders in the community. Gourie–Devi M, et al. **Indian J Med Res** 1988 Nov;88:443–9

Lyme borreliosis in the Soviet Union: a cooperative US–USSR report. Dekonenko EJ, et al. **J Infect Dis** 1988 Oct;158(4):748–53

Lessons for neurologists from the United Kingdom Third National Morbidity Survey. Hopkins A. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):430–3

A record of patient encounters in neurological practice in the United Kingdom. Hopkins A, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):436–8

The neurological content of general practice. Papapetropoulos T, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):434–5

An analysis of 7836 successive new outpatient referrals. Perkin GD. **J Neurol Neurosurg Psychiatry** 1989 Apr; 52(4):447–8

Neurology in Gloucestershire: the clinical workload of an English neurologist. Stevens DL. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):439–46

Neuro–developmental problems in children in Riyadh, Saudi Arabia: 1–year's experience in a family practice centre. al–Naquib N. **J Trop Pediatr** 1988 Dec;34(6):294–300

Prevalence of neurological diseases in Madrid, Spain. Cruz Gutierrez–del–Olmo M, et al. **Neuroepidemiology** 1989; 8(1):43–7

Neuroepidemiological survey on Sicilian population. A feasibility study. Morgante L, et al. **Neuroepidemiology** 1989;8(4):214–20

The myeloneuropathies of Jamaica: an unfolding story. Morgan OS, et al. **Q J Med** 1988 Apr;67(252):273–81 (54 ref.)

Segmental wiring for spinal deformity. A morbidity report. Dove J. **Spine** 1989 Feb;14(2):229–31

Prevalence of neurological disorders in Udo, a rural community in southern Nigeria. Longe AC, et al. **Trop Geogr Med** 1989 Jan;41(1):36–40

[10 years' intensive care in the Schwerin district neurologic clinic—development and limits] Bomplitz U, et al. **Psychiatr Neurol Med Psychol Beih** 1988;40:23–6 **(Ger)**

[Cases at a neuropsychiatric intensive care unit—a retrospective analysis of 20 years] Voigt W. **Psychiatr Neurol Med Psychol Beih** 1988;40:19–22 **(Ger)**

[Hospitalization of farm workers with lesions of the nervous system] Kuptsov VV. **Sov Zdravookhr** 1989;(2):47–9 (Eng. Abstr.) **(Rus)**

ETHNOLOGY

Neurolathyrism remains a threat in India [news] Jayaraman KS. **Nature** 1989 Jun 15;339(6225):495

ETIOLOGY

Polyneuropathy following gastric banding for obesity. Case report. Wadström C, et al. **Acta Chir Scand** 1989 Feb; 155(2):131–4

Initial manifestations and development of neurological dysfunctions in multiple sclerosis. Kalafatova O. **Acta Neurol (Napoli)** 1988 Feb;10(1):16–9

Clinical study on intrauterine growth retardation. Part I. Outcome for small–for–gestational–age infants with very low birth weight (less than 1,500 g). Yamaguchi K, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Oct;29(5):742–8

Neurological disorders in AIDS and HIV disease in the northern zone of Tanzania. Howlett WP, et al. **Aids** 1989 May;3(5):289–96

HIV and the nervous system. MRC–INSERM, 19–20 January 1989, Paris, France. McDonald I, et al. **Aids** 1989 Jul;3(7):465–7

Role of HIV in human nervous system dysfunction. Wigdahl B, et al. **AIDS Res Hum Retroviruses** 1989 Aug;5(4):369–74 (0 ref.)

Permanent neurological complications in patients with thrombotic thrombocytopenic purpura. Ben–Yehuda D, et al. **Am J Hematol** 1988 Oct;29(2):74–8

Nervous system abnormalities in Lyme disease. Halperin JJ, et al. **Ann N Y Acad Sci** 1988;539:24–34

Borrelia burgdorferi infection: a neurologist's perspective. Reik L. **Ann N Y Acad Sci** 1988;539:1–3

Treatment of Lyme borreliosis with emphasis on neurological disease. Sköldenberg B, et al. **Ann N Y Acad Sci** 1988; 539:317–23 (15 ref.)

Clinical manifestations and diagnosis of neuroborreliosis. Stiernstedt G, et al. **Ann N Y Acad Sci** 1988;539:46–55

Vitamin E deficiency and neurologic disease. Sokol RJ. **Annu Rev Nutr** 1988;8:351–73 (96 ref.)

Role of variant prealbumin in the pathogenesis of familial amyloidotic polyneuropathy: fate of normal and variant prealbumin in the circulation. Ando Y, et al. **Arch Biochem Biophys** 1989 Oct;274(1):87–93

Neurologic complications in long–standing nephropathic cystinosis. Fink JK, et al. **Arch Neurol** 1989 May; 46(5):543–8

Varicella zoster–associated neurologic disease without skin lesions. Mayo DR, et al. **Arch Neurol** 1989 Mar;46(3):313–5

Neurological complications arising in bilateral lengthening of the tibiae in an achondroplastic subject. Giglio GC, et al. **Basic Life Sci** 1988;48:325–31

Managing adults with cystic fibrosis [letter] Hoogenraad TU. **BMJ** 1989 Apr 22;298(6680):1098

Neurological disorders associated to dengue infection. Jiménez DR, et al. **Bol Asoc Med P R** 1988 Jun; 80(6):208–11 (7 ref.)

HIV—a neurotropic virus [editorial] Jeffries DJ. **Br J Hosp Med** 1988 Jul;40(1):13

HIV and the nervous system [published erratum appears in Br J Hosp Med 1988 Sep;40(3):234] McAllister RH, et al. **Br J Hosp Med** 1988 Jul;40(1):21–6 (32 ref.)

Neurologic complications of cervical cancer. A review of 2261 cases. Saphner T, et al. **Cancer** 1989 Sep 1; 64(5):1147–51 (32 ref.)

Neurological and behavioral sequelae in children operated on for brain abscess. Buonaguro A, et al. **Childs Nerv Syst** 1989 Jun;5(3):153–5

Congenital AIDS: review of neurologic problems. Curless RG. **Childs Nerv Syst** 1989 Feb;5(1):9–11 (21 ref.)

Neurological complications of infection with human immunodeficiency virus type 1. A review of literature and 241 cases. de Gans J, et al. **Clin Neurol Neurosurg** 1989; 91(3):199–219 (262 ref.)

Nervous system damage and nutritional factors in chronic alcoholics. Melgaard B, et al. **Clin Neurol Neurosurg** 1989; 91(2):129–34

Very–low–birth–weight, preterm infants with or without intracranial hemorrhage. Neurologic, cognitive and cranial MRI correlations at 4–8–year follow–up. Ford LM, et al. **Clin Pediatr (Phila)** 1989 Jul;28(7):302–10

Lyme disease: neurologic manifestations. Sorensen RW. **Compr Ther** 1989 Jul;15(7):16–22 (24 ref.)

Neurologic abnormalities of uremia. Albertazzi A, et al. **Contrib Nephrol** 1989;70:188–93 (10 ref.)

Perinatal correlates of major and minor neurological dysfunction at school age: a multivariate analysis. Hadders–Algra M, et al. **Dev Med Child Neurol** 1988 Aug; 30(4):472–81

Perinatal risk factors and minor neurological dysfunction: significance for behaviour and school achievement at nine years. Hadders–Algra M, et al. **Dev Med Child Neurol** 1988 Aug;30(4):482–91

Neurological deficits secondary to spinal deformities: their treatment and results in 13 patients. Cantore GP, et al. **Eur Neurol** 1989;29(4):181–5

The neurobiology of human immunodeficiency virus infections. Johnson RT, et al. **FASEB J** 1988 Nov; 2(14):2970–81 (63 ref.)

AIDS and the nervous system: current status and future perspectives. Dal Canto MC. **Hum Pathol** 1989 May; 20(5):410–8 (78 ref.)

Psychoneurological sequelae in patients with JE virus encephalitis. Mathur GP, et al. **Indian Pediatr** 1988 Apr; 25(4):371–3

Nervous system involvement in systemic lupus erythematosus. Denburg JA, et al. **Isr J Med Sci** 1988 Dec; 24(12):754–8 (32 ref.)

Paraneoplastic syndrome in the course of Hodgkin disease. Case report. Maggioni F, et al. **Ital J Neurol Sci** 1989 Apr; 10(2):207–10

Hypereosinophilia, neurologic, and gastrointestinal symptoms after bee–pollen ingestion. Lin FL, et al. **J Allergy Clin Immunol** 1989 Apr;83(4):793–6

A comparative study of neurological and myxedematous endemic cretinism in western China. Boyages SC, et al. **J Clin Endocrinol Metab** 1988 Dec;67(6):1262–71

The neurologic manifestations of primary HIV infection. Haist SA. **J Ky Med Assoc** 1989 Feb;87(2):75–7 (16 ref.)

Neurologic complications of cardiovascular diseases. Slade WR Jr, et al. **J Natl Med Assoc** 1989 Feb;81(2):193–7 (67 ref.)

Paraneoplastic syndromes: a role for the immune system. Antel JP, et al. **J Neurol** 1989 Jan;236(1):1–3 (23 ref.)

Cryptococcosis in AIDS patients: observations concerning CNS involvement. Weinke T, et al. **J Neurol** 1989 Jan; 236(1):38–42

Neurological syndromes of brucellosis. Bahemuka M, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug;51(8):1017–21

The somatosensory evoked potential predicts neurologic deficits and serotonergic pathochemistry after spinal distraction injury in experimental scoliosis. Salzman SK, et al. **J Neurotrauma** 1988;5(3):173–86

Neuropsychological deficits in right hemisphere stroke patients. I: Methods and results from factor analysis. Finset A. **J Oslo City Hosp** 1988 Aug–Sep;38(8–9):77–83

Neuropsychological deficits in right hemisphere stroke patients. II: Relationships to intra–hemispheric lesion location. Finset A, et al. **J Oslo City Hosp** 1988 Aug–Sep; 38(8–9):85–92

Neurologic and developmental status related to the evolution of visual–motor abnormalities from birth to 2 years of age in preterm infants with intraventricular hemorrhage. Vohr BR, et al. **J Pediatr** 1989 Aug;115(2):296–302

Neurodevelopmental status of low birth weight infants with bronchopulmonary dysplasia requiring prolonged oxygen supplementation. Lifschitz MH, et al. **J Perinatol** 1987 Spring;7(2):127–32

Longitudinal studies of family units. Huygen FJ. **J R Coll Gen Pract** 1988 Apr;38(309):168–70

Neurourological implications of the changing approach in management of occult spinal lesions. Keating MA, et al.

J Urol 1988 Nov;140(5 Pt 2):1299–301
Symptomatic internal carotid thrombosis after carotid endarterectomy. Painter TA, et al. J Vasc Surg 1987 Mar; 5(3):445–51
AIDS and the nervous system [clinical conference] Dalakas M, et al. JAMA 1989 Apr 28;261(16):2396–9 (21 ref.)
Cobalamin deficiency and neuropsychiatric disorders [letter] N Engl J Med 1988 Dec 29;319(26):1733–5
Neurologic manifestations of systemic disease. Neurol Clin 1989 Aug;7(3):447–679
Neurologic pain syndromes in patients with cancer. Elliott K, et al. Neurol Clin 1989 May;7(2):333–60 (94 ref.)
Sarcoidosis and the nervous system. Heck AW, et al. Neurol Clin 1989 Aug;7(3):641–54 (52 ref.)
Neurologic complications of endocrine diseases. Kaminski HJ, et al. Neurol Clin 1989 Aug;7(3):489–508 (136 ref.)
Neurologic manifestations of vasculitis. Kissel JT. Neurol Clin 1989 Aug;7(3):655–73 (89 ref.)
Neurologic manifestations of hematologic disease. Massey EW, et al. Neurol Clin 1989 Aug;7(3):549–61 (84 ref.)
Neurobrucellosis: clinical characteristics, diagnosis, and outcome. al Deeb SM, et al. Neurology 1989 Apr; 39(4):498–501
Late onset of distinct neurologic syndromes in galactosemic siblings. Friedman JH, et al. Neurology 1989 May; 39(5):741–2
Human immunodeficiency virus (HIV) infection and the nervous system: report from the American Academy of Neurology AIDS Task Force. Janssen RS, et al. Neurology 1989 Jan;39(1):119–22 (49 ref.)
Is ischemia implicated in chronic multifocal demyelinating neuropathy? Nukada H, et al. Neurology 1989 Jan; 39(1):106–10
Neurologic complications of endocarditis: a 12-year experience. Salgado AV, et al. Neurology 1989 Feb;39(2 Pt 1):173–8
Short-term outcomes of skull fracture: a population-based study of survival and neurologic complications. Wiederholt WC, et al. Neurology 1989 Jan;39(1):96–102
Necrotizing vasculitis of the nervous system in a patient with AIDS-related complex. Vinters HV, et al. Neuropathol Appl Neurobiol 1988 Sep–Oct;14(5):417–24
Hypomelanosis of Ito: neurologic complications. Golden SE, et al. Pediatr Neurol 1986 May–Jun;2(3):170–4
Nature, incidence and prognosis of neurological involvement in the acquired immunodeficiency syndrome in central London. Guiloff RJ, et al. Postgrad Med J 1988 Dec; 64(758):919–25
Neurological complications of human immunodeficiency virus infection. Kennedy PG. Postgrad Med J 1988 Mar; 64(749):180–7 (46 ref.)
Report of the Second Public Health Service AIDS Prevention and Control Conference. Report of the workgroup on clinical manifestations and pathogenesis. Public Health Rep 1988;103 Suppl 1:28–40
Report of the Second Public Health Service AIDS Prevention and Control Conference. Report of the workgroup on neuroscience and behavior. Public Health Rep 1988;103 Suppl 1:72–9
The neurology of human immunodeficiency virus infection. Bredesen DE, et al. Q J Med 1988 Sep;68(257):665–77 (35 ref.)
Complications of spinal cord arteriography: prospective assessment of risk for diagnostic procedures. Forbes G, et al. Radiology 1988 Nov;169(2):479–84
The effect of bystander CPR on neurologic outcome in survivors of prehospital cardiac arrests. Troiano P, et al. Resuscitation 1989 Feb;17(1):91–8
Neurological features of HIV-related disease in Glasgow. Kennedy PG, et al. Scott Med J 1989 Apr;34(2):433–7
Secondary mania from cerebral embolization with nonfocal neurologic findings. Goldschmidt TJ, et al. South Med J 1988 Oct;81(10):1309–11
Relationship between traumatic spinal canal stenosis and neurologic deficits in thoracolumbar burst fractures. Hashimoto T, et al. Spine 1988 Nov;13(11):1268–72
Long-term results of lumbar spine surgery complicated by unintended incidental durotomy. Jones AA, et al. Spine 1989 Apr;14(4):443–6
Significance of acute posttraumatic bony encroachment of the neural canal. Keene JS, et al. Spine 1989 Aug; 14(8):799–802
Tethered cord syndrome in the adult postoperative myelomeningocele patient. A case report. Logan SR, et al. Spine 1989 Aug;14(8):895–7
Neurologic manifestations of atrial myxoma. A 12-year experience and review. Knepper LE, et al. Stroke 1988 Nov;19(11):1435–40
ts1, a mutant of Moloney murine leukemia virus-TB, causes both immunodeficiency and neurologic disorders in BALB/c mice. Wong PK, et al. Virology 1989 Jun; 170(2):450–9
[Disorders of the nervous system in hemoblastoses in childhood] Kučerová J, et al. Cesk Pediatr 1988 Sep; 43(9):555–6 (Cze)
[Neurological and neuropathological expressions of HIV infection] Elovaara I, et al. Duodecim 1988;104(14):1035–46 (65 ref.) (Fin)
[Neurological manifestations in relation to vitamin E deficiency, caused by a defect of biliary acid synthesis] Chaine P, et al. Ann Med Interne (Paris) 1988; 139(3):198–200 (Eng. Abstr.) (Fre)
[Neurologic and psychiatric manifestations of AIDS in Central African Republic] Bélec PL, et al. Bull Soc Pathol Exot Filiales 1989;82(3):297–307 (Eng. Abstr.) (Fre)
[American trypanosomiasis (Chagas disease) and the nervous system] Spina-Franca A. Bull Soc Pathol Exot Filiales 1988;81(3 Pt 2):645–9 (29 ref.) (Eng. Abstr.) (Fre)
[Neurological manifestations of Behçet's disease] Bousser MG, et al. J Mal Vasc 1988;13(3):231–4 (24 ref.) (Eng. Abstr.) (Fre)
[Neuropathology of human type 1 immunodeficiency virus infection] Hénin D, et al. Presse Med 1988 Nov 12; 17(40):2129–33 (27 ref.) (Eng. Abstr.) (Fre)
[Neurologic manifestations of sarcoidosis] Dubas F. Rev Med Interne 1988 Sep–Oct;9(4):390–8 (115 ref.) (Fre)
[Neurological complications of Paget's disease of bone] Foidart M, et al. Rev Med Liege 1989 Jun 1;44(11):396–401 (42 ref.) (Fre)
[Giant axonal neuropathy: intermediate filament disease with involvement of the peripheral and central nervous system] Buissonnière RF, et al. Rev Neurol (Paris) 1989; 145(5):355–61 (23 ref.) (Eng. Abstr.) (Fre)
[Multiple neurologic manifestations of Borrelia burgdorferi infection] Dupuis MJ. Rev Neurol (Paris) 1988; 144(12):765–75 (164 ref.) (Eng. Abstr.) (Fre)
[Eales' disease with neurologic disorders] Masson C, et al. Rev Neurol (Paris) 1988;144(12):817–9 (13 ref.) (Eng. Abstr.) (Fre)
[Secondary and late development of hematoma of the brain stem] Rousseaux M, et al. Rev Neurol (Paris) 1989; 145(5):384–8 (Eng. Abstr.) (Fre)
[Neurologic complications following regional spinal anesthesia] Weis KH. Dtsch Med Wochenschr 1989 Jun 23; 114(25):1008 (Ger)
[Limb and joint pain in Lyme disease. An important differential neurologic diagnosis] von Albert HH. Fortschr Med 1989 Aug 10;107(23):493–5 (Eng. Abstr.) (Ger)
[Neurologic manifestations of Lyme borreliosis] Matschke HJ, et al. Psychiatr Neurol Med Psychol (Leipz) 1989 Feb; 41(2):65–74 (38 ref.) (Eng. Abstr.) (Ger)
[Neuro-AIDS] Kollegger H, et al. Wien Klin Wochenschr 1988 Oct 21;100(20):665–7 (32 ref.) (Eng. Abstr.) (Ger)
[Nervous system involvement in systemic lupus erythematosus (editorial)] Denburg YA. Harefuah 1989 Apr 2;116(7):389–91 (Heb)
[AIDS and the nervous system. Immunologic aspects of the cerebrospinal fluid: personal data and review of the literature] Buscaino GA, et al. Acta Neurol (Napoli) 1989 Feb;11(1):51–62 (25 ref.) (Ita)
[Behçet's disease. Apropos of a clinical case] Coniglio MG, et al. Acta Neurol (Napoli) 1989 Apr–Jun;11(2–3):136–42 (Ita)
[Metabolic endocrine syndromes correlated with primary tumors of the retroperitoneal space] Podestà A, et al. Minerva Chir 1988 Oct 15;43(19):1575–91 (45 ref.) (Eng. Abstr.) (Ita)
[AIDS in pediatrics: a neurological syndrome] Minerva Med 1988 Dec;79(12):1113 (Ita)
[Toxico-metabolic neuropathies] Amabile G, et al. Riv Neurol 1988 Mar–Apr;58(2):65–79 (30 ref.) (Ita)
[Retrovirus and neurologic diseases] Itoyama Y. Fukuoka Igaku Zasshi 1988 Jun;79(6):437–9 (0 ref.) (Jpn)
[Acquired immunodeficiency syndrome presenting with neurological symptoms] Kamei S, et al. Nippon Naika Gakkai Zasshi 1989 Mar;78(3):426–7 (Jpn)
[Pineal metastatic tumor from lung cancer initially caused by neurological abnormalities of pineal body tumor] Keyaki A, et al. No Shinkei Geka 1989 May;17(5):495–9 (Eng. Abstr.) (Jpn)
[An autopsy case of AIDS with disseminated cytomegalovirus infection and neurological disturbance] Shinzato O, et al. Rinsho Ketsueki 1989 Mar;30(3):343–8 (Eng. Abstr.) (Jpn)
[Evolution of theories on diseases and degenerative processes in the nervous system] Dąmbska M. Neuropatol Pol 1988; 26(1):1–8 (Eng. Abstr.) (Pol)
[Neurological disorders in AIDS] Minciu E, et al. Rev Med Interna Neurol Psihiatr Neurochir Dermatovenerol Neurol Psihiatr Neurochir 1988 Oct–Dec;33(4):249–54 (12 ref.) (Rum)
[Effect of working conditions and various social and living factors of the incidence of nervous system diseases with temporary disability among farmers] Kuptsov VV. Gig Tr Prof Zabol 1989;(3):22–5 (Eng. Abstr.) (Rus)
[Clinical variants of the neurodystrophic syndrome of the muscles of the anterior abdominal wall in osteochondrosis of the spine] Veselovskiĭ VP, et al. Klin Med (Mosk) 1988 Jul;66(7):50–3 (Eng. Abstr.) (Rus)
[General pathophysiology of the nervous system. I. The general etiology and pathogenesis of nervous disorders] Kryzhanovskiĭ GN. Patol Fiziol Eksp Ter 1988 May–Jun; (3):70–80 (Rus)
[Neurologic disorders in young children with thymomegaly] Mekhtieva AA. Pediatriia 1989;(5):85–7 (Rus)
[Neurologic disorders in the postural compression syndrome] Iunakh OB. Sov Med 1988;(8):122–3 (Rus)
[Neurologic manifestations in cardiovascular diseases: angioneurology in the therapist's practice] Vereshchagin NV. Ter Arkh 1988;60(10):41–4 (Rus)
[Disorders of nervous trophism and nerve cell plasticity as factors in the development and compensation of pathological processes in nervous system diseases] Gekht BM, et al. Vestn Akad Med Nauk SSSR 1988;(11):26–34 (Eng. Abstr.) (Rus)
[Characteristics of the nervous system lesion in children following pathologic labor] Pasechnik LI. Vrach Delo 1989 Mar;(3):94–5 (Eng. Abstr.) (Rus)
[Status of the nervous system in victims of the accident at the Chernobyl atomic power plant] Torubarov FS, et al. Zh Nevropatol Psikhiatr 1989;89(2):48–52 (Eng. Abstr.) (Rus)
[Neurologic changes following proton irradiation of the hypophysis in patients with generalized breast cancer] Voinarevich AO, et al. Zh Nevropatol Psikhiatr 1988; 88(6):88–91 (Eng. Abstr.) (Rus)
[Neuropsychologic disorders in drug addicts] García López A, et al. Actas Luso Esp Neurol Psiquiatr Cienc Afines 1988 Nov–Dec;16(6):425–33 (57 ref.) (Eng. Abstr.) (Spa)
[Neurologic follow-up of polycythemic newborn infants] Fernández-Carrocera LA, et al. Bol Med Hosp Infant Mex 1989 Apr;46(4):259–64 (Eng. Abstr.) (Spa)
[Clinical characterization of a sample of newborns at risk of presenting with an altered neurologic evaluation] Flores-Tamez ME, et al. Bol Med Hosp Infant Mex 1989 Jun;46(6):382–8 (Eng. Abstr.) (Spa)
[Neurologic disorders in children with chronic terminal renal insufficiency] Gordillo-Paniagua G, et al. Bol Med Hosp Infant Mex 1989 Jun;46(6):389–94 (Eng. Abstr.) (Spa)
[Essential mixed cryoglobulinemia and neuropathy (letter)] Michán Doña AL, et al. Med Clin (Barc) 1988 Jun 25; 91(5):199 (Spa)
[Nervous system lupus (letter)] Chicharro Serrano ML. Rev Clin Esp 1988 Oct;183(5):278 (Spa)
[Whipple's disease: neurologic manifestations and review of cases published in the Spanish literature] Ojeda E, et al. Rev Clin Esp 1988 Nov;183(7):365–7 (27 ref.) (Eng. Abstr.) (Spa)

GENETICS

Norrie disease gene is distinct from the monoamine oxidase genes. Sims KB, et al. Am J Hum Genet 1989 Sep; 45(3):424–34
Viral infectious complementary-DNA studies may identify nonviral genes critical to central nervous system disease. Ohara Y, et al. Ann Neurol 1989 Mar;25(3):305–9 (35 ref.)
The molecular genetic revolution. Its impact on clinical neurology. Payne CS, et al. Arch Neurol 1988 Dec; 45(12):1366–76 (197 ref.)
Variant apolipoprotein AI as a major constituent of a human hereditary amyloid. Nichols WC, et al. Biochem Biophys Res Commun 1988 Oct 31;156(2):762–8
European Society of Human Genetics. Abstracts from Symposium on Neurogenetics. Cardiff, June 30–July 3, 1988. Clin Genet 1988 Dec;34(6):387–426
Radionuclide angiographic assessment of left ventricular diastolic filling in amyloid heart disease: a study of patients with familial amyloid polyneuropathy. Hongo M, et al. J Am Coll Cardiol 1989 Jan;13(1):48–53
Assessment of thyroid and adrenal function in patients with familial amyloidotic polyneuropathy. Olofsson BO, et al. J Intern Med 1989 May;225(5):337–41
A database of genetically determined neurological conditions for clinicians. Baraitser M, et al. J Neurol Neurosurg Psychiatry 1989 Jan;52(1):106–7
Neuronal expression of mutations affecting primarily glia in the mouse: studies in the dysmyelinated and convulsive mutant quaking. Baumann N, et al. J Physiol (Paris) 1987; 82(4):271–8 (70 ref.)
Neurogenetic diseases. Neurol Clin 1989 Feb;7(1):1–181
Late-onset familial amyloid polyneuropathy in an American family of English origin. Kincaid JC, et al. Neurology 1989 Jun;39(6):861–3
Neurologic aspects of the 9p- syndrome. Chaves-Carballo E, et al. Pediatr Neurol 1985 Jan–Feb;1(1):57–9
Cardiac and neurological abnormalities in v-fps transgenic mice. Yee SP, et al. Proc Natl Acad Sci U S A 1989 Aug; 86(15):5873–7
Mouse models of human neurogenetic disorders [news] Hardy J. Trends Neurosci 1988 Mar;11(3):89–90 (11 ref.)
[Primary retinitis pigmentosa and associated with metabolic or non-metabolic diseases, hereditary and with neurologic symptomatology diseases] Stanescu-Segal B. J Fr Ophtalmol 1988;11(12):887–95 (111 ref.) (Fre)
[Identification of asymptomatic forms of type I amyloid neuropathy] Turpin JC, et al. Rev Neurol (Paris) 1988; 144(8–9):519–22 (Eng. Abstr.) (Fre)
[Acanthocytosis, short stature and disordered deep sensation in a 26-year-old patient] Parhofer KG, et al. Internist (Berlin) 1989 Jun;30(6):382–5 (Ger)
[Cerebrotendinous xanthomatosis in a Druze family] Ben Dror G, et al. Harefuah 1988 Nov 1;115(9):224–6 (Eng. Abstr.) (Heb)
[Familial amyloid polyneuropathy presenting as recurrent hemoptysis and hemosputum: detection of amyloid deposition of the lung by transbronchial lung biopsy] Morita M, et al. Nippon Naika Gakkai Zasshi 1988 Sep; 77(9):1435–9 (Jpn)
[Trend in molecular biochemical studies on neurological disorders] Nakazato M, et al. Nippon Rinsho 1989 Jan;

47(1):227–38 (29 ref.) (Jpn)
[Hereditary pathology of the nervous system in the urban population of the Kazakh SSR] Dadali EL, et al. **Genetika** 1988 Aug;24(8):1508–11 (Eng. Abstr.) (Rus)
[Familial type I (Portuguese form) amyloidotic polyneuropathy in Majorca. Study using the TTR (Met30) genetic marker] Munar-Qués M, et al. **Med Clin (Barc)** 1988 Oct 15;91(12):441–4 (Eng. Abstr.) (Spa)

HISTORY

Lhermitte's sign. From observation to eponym. Gutrecht JA. **Arch Neurol** 1989 May;46(5):557–8
Strabismus surgery for neurological illness. The Stevens Commission 1887–1889. Keane JR. **Arch Neurol** 1989 Mar; 46(3):323–4
Changing spectrum of pediatric neurologic disorders during 18 selected years, 1900–1980, at the Hospital of University of Tokyo. Sakakihara Y, et al. **Brain Dev** 1989;11(4):251–6

IMMUNOLOGY

Advances in neuroimmunology. Proceedings of the Second International Congress of Neuroimmunology. Philadelphia, September 8–11, 1987. **Ann N Y Acad Sci** 1988;540:1–745
Antineuronal autoantibodies in neurologic paraneoplastic syndromes. Anderson NE, et al. **Ann N Y Acad Sci** 1988; 540:440–1
Antibody-producing cells in CSF and peripheral blood. A new principle for evaluation of B-cell response in inflammatory nervous system diseases. Link H, et al. **Ann N Y Acad Sci** 1988;540:277–81
Antibodies to sulfated glucuronic acid containing glycosphingolipids in neuropathy associated with anti-MAG antibodies and in normal individuals. McGinnis S, et al. **Ann N Y Acad Sci** 1988;540:442–4
Neuropathy and monoclonal IgM M-protein with antibody activity against gangliosides. Nardelli E, et al. **Ann N Y Acad Sci** 1988;540:378–80
Paraneoplastic autoimmunity. Steck AJ, et al. **Ann N Y Acad Sci** 1988;540:91–8 (27 ref.)
Neurological autoimmune disease and the trimolecular complex of T-lymphocytes. Hohlfeld R. **Ann Neurol** 1989 Jun;25(6):531–8 (89 ref.)
IgM paraprotein reactive with muscle antigens associated with autonomic and peripheral neuropathy. Green AR, et al. **Br J Haematol** 1989 May;72(1):108–9
IgG paraproteinemias: a comparative CSF and serum study. Arata L, et al. **Eur Neurol** 1989;29(1):53–5
Special issue in honor of Heinrich Pette. **J Neuroimmunol** 1988 Dec;20(2–3):93–321
Anti-CNS antibodies in neurological and psychiatric disorders [letter] Anderson NE, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):1009–10
Antibodies to simian virus 5 in patients with multiple sclerosis and other neurological disorders. Brankin B, et al. **J Neurol Sci** 1989 Feb;89(2–3):181–7
Response of human T lymphocyte lines to myelin basic protein: association of dominant epitopes with HLA class II restriction molecules. Chou YK, et al. **J Neurosci Res** 1989 Jun;23(2):207–16
Predominance of Borrelia burgdorferi specific B cells in cerebrospinal fluid in neuroborreliosis. Baig S, et al. **Lancet** 1989 Jul 8;2(8654):71–4
Immune mechanisms in HIV-related neuropathies [letter] Chavanet, et al. **Lancet** 1989 Sep 30;2(8666):812–3
Anticardiolipin antibody and neurological disease in black patients [letter] Bhigjee AI, et al. **S Afr Med J** 1989 Jun 17;75(12):598
Polyneuropathies associated with plasma cell dyscrasias. Kelly JJ Jr. **Semin Neurol** 1987 Mar;7(1):30–9 (24 ref.)
[IgG index: its role in the diagnosis of neurologic disorders] Dachy B, et al. **Rev Med Brux** 1988 Sep;9(6):340–5 (Eng. Abstr.) (Fre)
[Search for anti-endothelial cell antibodies in patient with neuroimmunological disorders] Tanaka Y, et al. **Arerugi** 1988 Dec;37(12):1190–5 (Eng. Abstr.) (Jpn)
[Focal neurologic deficit associated with antiphospholipid antibodies (letter)] **Med Clin (Barc)** 1988 Oct 22; 91(13):515–6 (Spa)

METABOLISM

Adrenoleukodystrophy and other peroxisomal disorders that affect the nervous system, including new observations on L-pipecolic acid oxidase in primates. Moser HW, et al. **Brain Dev** 1989;11(2):80–90 (81 ref.)
Glutathione status and cadmium neurotoxicity: studies in discrete brain regions of growing rats. Shukla GS, et al. **Fundam Appl Toxicol** 1988 Aug;11(2):229–35
Biogenic amines and their metabolites in body fluids of normal, psychiatric and neurological subjects. Davis BA. **J Chromatogr** 1989 Apr 19;466:89–218 (972 ref.)
Systemic senile amyloidosis. Identification of a new prealbumin (transthyretin) variant in cardiac tissue: immunologic and biochemical similarity to one form of familial amyloidotic polyneuropathy. Gorevic PD, et al. **J Clin Invest** 1989 Mar;83(3):836–43
Protein gradients in the cerebrospinal fluid and the calculation of intracerebral IgG synthesis. Wurster U. **J Neuroimmunol** 1988 Dec;20(2–3):233–5
Peroxisomal disorders in neurology. Wanders RJ, et al. **J Neurol Sci** 1988 Dec;88(1–3):1–39 (241 ref.)
Metabolism and nervous system disease: a challenge for our times. Part I. Roberts E. **Metab Brain Dis** 1986 Mar; 1(1):3–23 (61 ref.)
Metabolism and nervous system disease: a challenge for our times. Part II. Roberts E. **Metab Brain Dis** 1986 Jun; 1(2):91–117 (66 ref.)
Patterns of cerebral glucose metabolism using 18FDG and positron tomography in the neurologic investigation of the full term newborn infant. Thorp PS, et al. **Neuropediatrics** 1988 Aug;19(3):146–53
Energy metabolism in disorders of the nervous system. Blass JP, et al. **Rev Neurol (Paris)** 1988;144(10):543–63 (171 ref.)
[Neurotoxicologic significance of biotransformation reactions in the CNS] Bien E, et al. **Pharmazie** 1988 Sep;43(9):601–5 (87 ref.) (Ger)

MICROBIOLOGY

Central motor conduction time in patients with HTLV-1 associated myelopathy. Tomita I, et al. **Acta Neurol Scand** 1989 May;79(5):419–27
Neuroborreliosis in morphea and lichen sclerosus et atrophicus. Aberer E, et al. **J Am Acad Dermatol** 1988 Nov; 19(5 Pt 1):820–5
Sindbis virus mutations which coordinately affect glycoprotein processing, penetration, and virulence in mice. Russell DL, et al. **J Virol** 1989 Apr;63(4):1619–29
Role of hemagglutinin cleavage and expression of M1 protein in replication of A/WS/33, A/PR/8/34, and WSN influenza viruses in mouse brain. Schlesinger RW, et al. **J Virol** 1989 Apr;63(4):1695–703
Viruses, the immune system and central nervous system diseases [news] Lipkin WI, et al. **Trends Neurosci** 1988 Feb; 11(2):43–5
Unraveling prion diseases through molecular genetics. Westaway D, et al. **Trends Neurosci** 1989 Jun;12(6):221–7 (96 ref.)
Autologous and allogeneic antibody responses to canine distemper virus isolates from dogs with chronic neurological diseases. Shapshak P, et al. **Viral Immunol** 1987 Spring;1(1):45–54

NURSING

Neurologic nursing research. Parsons LC, et al. **Annu Rev Nurs Res** 1989;7:3–25 (46 ref.)
A model for ambulatory care of patients with epilepsy and other neurological disorders. Graham O, et al. **J Neurosci Nurs** 1989 Apr;21(2):108–12
Certification: recognizing excellence. Latimer GE. **J Neurosci Nurs** 1988 Oct;20(5):271
Role delineation and test specification validation study for the CNRN examination. Nowin M, et al. **J Neurosci Nurs** 1988 Oct;20(5):273–7
Keeping the caring in nursing [editorial] Stewart-Amidei C. **J Neurosci Nurs** 1988 Aug;20(4):211–2
Validation of defining characteristics: clinical design. Woodtli AO. **J Neurosci Nurs** 1988 Oct;20(5):324–6 (11 ref.)
The nurse's use of restraint with a neurologically impaired patient. Yorker BC. **J Neurosci Nurs** 1988 Dec;20(6):390–2 (11 ref.)

PATHOLOGY

Reappraisal of neurofibrillary tangles. Immunohistochemical, ultrastructural, and immunoelectron microscopical studies. Kato S, et al. **Acta Neuropathol (Berl)** 1989;77(3):258–66
Abnormal mitochondria in the Rett syndrome. Eeg-Olofsson O, et al. **Brain Dev** 1988;10(4):260–2
Late nervous system disorders in cured malignant lymphoma: a clinical and neuropathological study. Vesterby A, et al. **Clin Neuropathol** 1988 May-Jun;7(3):134–8
The vulnerability of gerbils to focal cerebral ischemia. Neurological signs and regional biochemical changes after ischemia and recirculation. Bereczki D, et al. **Eur Arch Psychiatry Neurol Sci** 1988;238(1):11–8
Mesangiolytic glomerulonephritis associated with Takatsuki's syndrome: an analysis of five renal biopsy specimens. Nakamoto Y, et al. **Hum Pathol** 1989 Mar;20(3):243–51
Rapid immunoperoxidase staining of axons for frozen section diagnosis of nerve biopsy specimens. Davidson GS, et al. **J Clin Pathol** 1989 May;42(5):551–4
Abnormalities of the axonal cytoskeleton in giant axonal neuropathy. Donaghy M, et al. **J Neurocytol** 1988 Apr; 17(2):197–208
Vascularized muscle fibers: etiopathogenesis and clinical significance. Sulaiman AR, et al. **J Neurol Sci** 1989 Aug; 92(1):37–54
Morphopathology of toxic neuropathies. Alexianu M, et al. **Neurol Psychiatr (Bucur)** 1989 Jan-Mar;27(1):15–22 (70 ref.)
Ubiquitin is a component of neurofibrillary tangles in a variety of neurodegenerative diseases. Lennox G, et al. **Neurosci Lett** 1988 Nov 22;94(1–2):211–7
[The morphology of coxsackie B virus infections of the nervous system] Dietzmann K, et al. **Zentralbl Allg Pathol** 1989;135(3):249–56 (Eng. Abstr.) (Ger)
[Degenerative neuropathies] Pisano F, et al. **Riv Neurol** 1988 Mar-Apr;58(2):50–5 (22 ref.) (Ita)
[Neuropathologic changes in AIDS] Alexianu M, et al. **Rev Med Interna Neurol Psihiatr Neurochir Dermatovenerol Neurol Psihiatr Neurochir** 1989 Jan-Mar;34(1):23–38 (56 ref.) (Rum)

PHYSIOPATHOLOGY

Multimodal evoked potentials in neuro-Behçet: a longitudinal study of two cases. Rizzo PA, et al. **Acta Neurol Scand** 1989 Jan;79(1):18–22
Color vision defects in adrenomyeloneuropathy. Sack GH Jr, et al. **Am J Hum Genet** 1989 Jun;44(6):794–8
Expression of neural cell adhesion molecules in normal and pathologic tissues. Brackenbury R. **Ann N Y Acad Sci** 1988; 540:39–46 (56 ref.)
Simple and choice reaction time in patients with human immunodeficiency virus infection. Perdices M, et al. **Ann Neurol** 1989 May;25(5):460–7
Hemiballism-hemichorea. Clinical and pharmacologic findings in 21 patients. Dewey RB Jr, et al. **Arch Neurol** 1989 Aug;46(8):862–7
Increased muscular fatigue in patients with neurogenic muscle weakness: quantification and pathophysiology. Milner-Brown HS, et al. **Arch Phys Med Rehabil** 1989 May; 70(5):361–6
Impaired left ventricular diastolic filling in patients with familial amyloid polyneuropathy: a pulsed Doppler echocardiographic study. Kinoshita O, et al. **Br Heart J** 1989 Feb;61(2):198–203
Correspondence between neurological symptoms and outcome of quantitative sensory testing in the hand-arm vibration syndrome. Ekenvall L, et al. **Br J Ind Med** 1989 Aug;46(8):570–4
Investigations into the origin of the high pressure neurological syndrome: the interaction between pressure, strychnine and 1,2-propandiols in the mouse. Bowser-Riley F, et al. **Br J Pharmacol** 1988 Aug;94(4):1069–76
Startle disorders of man: hyperekplexia, jumping and startle epilepsy. Andermann F, et al. **Brain Dev** 1988;10(4):213–22 (60 ref.)
Auditory brainstem responses (ABR) in children with neurological disorders. el Khateeb I, et al. **Brain Dev** 1988; 10(4):243–8
Domains in the neurosciences: a 3-dimensional view of the brain. Langfitt TW. **Clin Neurosurg** 1989;35:29–42
Hemodynamic management in the neurosurgical intensive care unit. Williams FC Jr, et al. **Clin Neurosurg** 1989; 35:101–63 (239 ref.)
Diabetic and hypoglycemic neuropathy—a comparison in the BB rat. Sima AA, et al. **Diabetes Res Clin Pract** 1989 May 15;6(4):279–96
Annual meeting of the Spanish Society of EEG and Clinical Neurophysiology. Barcelona, 10–11 December 1987. Abstracts. **Electroencephalogr Clin Neurophysiol** 1989 Mar; 72(3):45P–51P
Nordic meeting of clinical neurophysiology. Espoo, Finland, 12–14 May 1988. Abstracts. **Electroencephalogr Clin Neurophysiol** 1989 Mar; 72(3):52P–60P
The EEG Society. Bristol, 8 June 1988. Abstracts. **Electroencephalogr Clin Neurophysiol** 1989 Mar; 72(3):61P–64P
Rett syndrome: EEG presentation. Robertson R, et al. **Electroencephalogr Clin Neurophysiol** 1988 Nov; 70(5):388–95
Comparative study of evoked potentials in multiple sclerosis and neuro-Behçet's syndrome. Nakamura Y, et al. **Electromyogr Clin Neurophysiol** 1989 Jan-Feb;29(1):59–64
Abnormal postcibal antral and small bowel motility due to neuropathy or myopathy in systemic sclerosis. Greydanus MP, et al. **Gastroenterology** 1989 Jan;96(1):110–5
Somatosensory evoked potentials in infants and children. Cracco JB. **J Child Neurol** 1989 Jan;4(1):2, 70–2
The use of somatosensory evoked potentials in infants and children. Gilmore R. **J Child Neurol** 1989 Jan;4(1):3–19 (97 ref.)
Tellurium-induced neuropathy: metabolic alterations associated with demyelination and remyelination in rat sciatic nerve. Harry GJ, et al. **J Neurochem** 1989 Mar; 52(3):938–45
Brainstem auditory evoked potential (BAEP) abnormalities in brucellosis. Khuraibet AJ, et al. **J Neurol Sci** 1988 Nov; 87(2–3):307–13
Firing rate may be a determinant of nerve fibre vulnerability in axonopathies. Satchell PM, et al. **J Neurol Sci** 1988 Nov; 87(2–3):289–97
Neurobehavioral deficit due to ischemic brain damage limited to half of the CA1 sector of the hippocampus. Auer RN, et al. **J Neurosci** 1989 May;9(5):1641–7
A high dose of MPTP overcomes the protective effect of selegiline against dopaminergic neurotoxicity. Fuller RW, et al. **J Pharm Pharmacol** 1989 Jul;41(7):492–3
Left ventricular systolic and diastolic time intervals in familial amyloid polyneuropathy. Kono J, et al. **Jpn Circ J** 1989 Apr;53(4):291–7
Evaluation of an automatic method of measuring features of motor unit action potentials. Stewart CR, et al. **Muscle Nerve** 1989 Feb;12(2):141–8
The use of somatosensory evoked potentials in the evaluation of the central nervous system. Aminoff MJ. **Neurol Clin** 1988 Nov;6(4):809–23 (49 ref.)
The use of brain stem auditory evoked potentials in the evaluation of the central nervous system. Epstein CM. **Neurol Clin** 1988 Nov;6(4):771–90 (63 ref.)
Use of somatosensory evoked potentials in infants and children. Gilmore R. **Neurol Clin** 1988 Nov;6(4):839–59 (71 ref.)
Synesthesia and mapping of subjective sensory dimensions

[editorial] Cytowic RE. **Neurology** 1989 Jun;39(6):849–50
Colored hearing synesthesia: an investigation of neural factors. Rizzo M, et al. **Neurology** 1989 Jun;39(6):781–4
Scales for rating impairment in multiple sclerosis: a critique. Willoughby EW, et al. **Neurology** 1988 Nov;38(11):1793–8
Platelets as neuronal models in neuropsychiatric disorders. Rehavi M, et al. **Prog Clin Biol Res** 1988;283:569–83
Somatostatin in neuropsychiatric disorders. Rubinow DR, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988;12 Suppl:S137–55 (147 ref.)
Neuropeptide Y (NPY) and the central nervous system: distribution effects and possible relationship to neurological and psychiatric disorders. Wahlestedt C, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1–2):31–54 (120 ref.)
Sensory neuronopathy. Asbury AK. **Semin Neurol** 1987 Mar; 7(1):58–66 (49 ref.)
Sexual functioning of persons with neurologic disorders. Strasberg PD, et al. **Semin Neurol** 1988 Summer;8(2):141–4
Thalamic stimulation and recording in patients with deafferentation and central pain. Gorecki J, et al **Stereotact Funct Neurosurg** 1989;52(2–4):219–26
[Methodology, normal values and clinical application regarding measurement of the near-nerve orthodromic sensory conduction velocity] Tang XF. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Apr; 21(2):87–92, 127 (Eng. Abstr.) **(Chi)**
[Early auditory potentials in neurologic involvement in children] Coll J, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(4):333–5 (Eng. Abstr.) **(Fre)**
[Neurotransmitters and neurologic disorders] Kanazawa I. **No To Hattatsu** 1989 Mar;21(2):97–103 (12 ref.) (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

Prophylaxis and the mechanism for the initiation of organophosphorous compound-induced delayed neurotoxicity. Carrington CD. **Arch Toxicol** 1989; 63(3):165–72 (62 ref.)
[Effectiveness of preliminary medical examinations in evaluating the status of the nervous system in persons to be exposed to organic solvents] Polakowska B. **Med Pr** 1988;39(6):429–33 (Eng. Abstr.) **(Pol)**
[Prevention of nervous system diseases in workers manufacturing rubber products] Danilenko LP, et al. **Vrach Delo** 1989 Mar;(3):109–10 (Eng. Abstr.) **(Rus)**
[Mass screening and prognosis of sequelae of closed cranio-cerebral trauma in children] Pishel' IaV, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):77–82 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Psychiatric morbidity and illness behaviour in female neurological in-patients. Metcalfe R, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1387–90
Physical symptoms after neurotoxic exposure [letter] Ziem G. **J Occup Med** 1989 Apr;31(4):410–1

RADIOGRAPHY

Contribution of computerized tomography to the diagnosis of non-tumorous neuropaediatric diseases. Kvíčala V. **Acta Univ Carol [Med Monogr] (Praha)** 1987;121:1–162 (213 ref.)
ASNR 1988 meeting abstracts. 26th annual meeting of the American Society of Neuroradiology. Chicago, May 15–20, 1988. **AJNR** 1988 Sep;9(5):1001–44
The tethered spinal cord syndrome: a correlation of radiological features and peroperative findings in 30 patients. Merx JL, et al. **Neuroradiology** 1989;31(1):63–70
[Neuro-AIDS: a multicenter neuroradiological study] Cecchini A, et al. **Radiol Med (Torino)** 1989 Jun; 77(6):602–12 (Eng. Abstr.) **(Ita)**
[A study of brain CT on neurological endemic cretinism] Ma J, et al. **Rinsho Hoshasen** 1988 Dec;33(13):1667–70 (Eng. Abstr.) **(Jpn)**

RADIONUCLIDE IMAGING

Radionuclide angiography of the hand in occupational vasoneurosis. Zák J, et al. **Acta Univ Palacki Olomuc Fac Med** 1987;117:219–24

REHABILITATION

Description and interobserver reliability of the Tufts Assessment of Motor Performance. Gans BM, et al. **Am J Phys Med Rehabil** 1988 Oct;67(5):202–10
Sensory loss in the hand after sensory stroke: therapeutic rationale. Dannenbaum RM, et al. **Arch Phys Med Rehabil** 1988 Oct;69(10):833–9
A model for multisystem evaluation, interpretation, and treatment of individuals with neurologic dysfunction. Schenkman M, et al. **Phys Ther** 1989 Jul;69(7):538–47
[The hospital nursing home as a partner and supplement of district neurology clinics] Donalies C. **Psychiatr Neurol Med Psychol Beih** 1988;39:24–5 **(Ger)**
[Occupational therapy in neurology—results of 7 years' experience] Kittel J, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Jul;41(7):385–91 (Eng. Abstr.) **(Ger)**
[Medical rehabilitation of neurologic patients at a military sanatorium] Akimov GA, et al. **Voen Med Zh** 1988 Jul; (7):65–7 **(Rus)**

SURGERY

Critical care: when is enough enough? Langfitt TW. **Clin Neurosurg** 1989;35:15–28
Neurosurgical critical care: who's in charge? Pitts LH. **Clin Neurosurg** 1989;35:55–62
Proceedings of the joint meeting of the Society of British Neurological Surgeons (112th meeting), the Neurosurgical Society of Australia and the Neuroanaesthetists Travelling Club. Oxford, 14–15 April, 1988. Abstracts. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):139–48
Doctors' versus patients' evaluation of results after neurosurgery. Carlson H, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):153–5
Pyloroplasty in association with Nissen fundoplication in children with neurologic disorders. Campbell JR, et al. **J Pediatr Surg** 1989 Apr;24(4):375–7
Forty-first annual meeting of the Southern Neurosurgical Society. Point Clear, Alabama, March 9–12, 1989. Abstracts. **Neurosurgery** 1989 Jun;24(6):943–52
[Towards the 4th All-Union congress of neurosurgeons] Konovalov AN, et al. **Zh Vopr Neirokhir** 1988 Jul–Aug; (4):3–9 **(Rus)**
[Reconstruction of nerve damage] **Lakartidningen** 1988 Oct 19;85(42):3478–82 **(Swe)**

THERAPY

The critically ill child in the pediatric emergency department. Kissoon N, et al. **Ann Emerg Med** 1989 Jan;18(1):30–3
Cholinergic grafts in the neocortex or hippocampus of aged rats: reduction of delay-dependent deficits in the delayed non-matching to position task. Dunnett SB, et al. **Exp Neurol** 1988 Oct;102(1):57–64
Neurogenetic deficits caused by alcoholism: restoration by SAAVE, a neuronutrient intervention adjunct. Blum K, et al. **J Psychoactive Drugs** 1988 Jul–Sep;20(3):297–313 (94 ref.)
Improvement of cocaine-induced neuromodulator deficits by the neuronutrient Tropamine. Trachtenberg MC, et al. **J Psychoactive Drugs** 1988 Jul–Sep;20(3):315–31 (90 ref.)
High-dose intravenous human immunoglobulin in chronic inflammatory demyelinating polyneuropathy. Faed JM, et al. **Neurology** 1989 Mar;39(3):422–5
Pediatric outpatient neurology. **Semin Neurol** 1988 Spring; 8(1):1–119
Outpatient management. **Semin Neurol** 1987 Dec;7(4):303–81
[Immunosuppression and -modulation in neurologic diseases. Assessment of status and recent developments] Kappos L, et al. **Nervenarzt** 1989 Mar;60(3):135–40 (67 ref.) **(Ger)**
[Psychiatry and neurology in basic medical care. Proceedings of the meeting of the East German Society of Psychiatry and Neurology with international participation. 26–29 October 1986, Neubrandenburg] **Psychiatr Neurol Med Psychol Beih** 1988;39:1–116 **(Ger)**
[Current problems of neurologic intensive care medicine. Proceedings of the Neurologic Intensive Care Medicine Symposium with international participation. 6 February 1987, Berlin] **Psychiatr Neurol Med Psychol Beih** 1988; 40:1–111 **(Ger)**
[Basic, specialized and highly specialized care in the specialties of psychiatry and neurology] Dinger W, et al. **Psychiatr Neurol Med Psychol Beih** 1988;39:16–21 **(Ger)**
[Plasmapheresis treatment in neurologic diseases—a report of experiences] Hendrich A, et al. **Psychiatr Neurol Med Psychol Beih** 1988;40:79–83 **(Ger)**
[Evaluation of the specialty specific intensive care medicine at the Neurologic Clinic of the Charité] Michalik M, et al. **Psychiatr Neurol Med Psychol Beih** 1988;40:13–8 **(Ger)**
[Ventilation therapy in specialty specific intensive care medicine] Sachs E, et al. **Psychiatr Neurol Med Psychol Beih** 1988;40:44–6 **(Ger)**
[The relation of basic management and intensive care in clinical neurology] Schulze HA. **Psychiatr Neurol Med Psychol Beih** 1988;39:13–6 **(Ger)**
[Plasmapheresis in neurological disease—a year's experience (editorial)] Wirguin I, et al. **Harefuah** 1988 Sep; 115(5–6):153–5 **(Heb)**
[Temporary disability and ambulatory care of collective farm members with diseases of the nervous system] Kuptsov VV. **Sov Med** 1988;(11):39–41 **(Rus)**
[Use of transcranial electrical action for the treatment of painful neurologic syndromes] Akimov GA, et al. **Voen Med Zh** 1989 Mar;(3):27–8 **(Rus)**

VETERINARY

Neurological disease associated with degenerative axonopathy of neonatal Holstein-Friesian calves. Harper PA, et al. **Aust Vet J** 1989 May;66(5):143–4, 145–6
Nervous disease associated with coccidiosis in young cattle. Jubb TF. **Aust Vet J** 1988 Nov;65(11):353–4
Neurologic abnormalities as the predominant signs of neoplasia of the nasal cavity in dogs and cats: seven cases (1973–1986). Smith MO, et al. **J Am Vet Med Assoc** 1989 Jul 15;195(2):242–5
Sprague Dawley rat mutant with tremor, ataxia, tonic immobility episodes, epilepsy and paralysis. Holmgren B, et al. **Lab Anim Sci** 1989 May;39(3):226–8
Neurologic and otologic disorders of geriatric patients. Sorjonen DC. **Vet Clin North Am [Small Anim Pract]** 1989 Jan;19(1):125–35 (0 ref.)
Cat deaths: toxicity or ...? [letter] Lloyd CH. **Vet Rec** 1989 Jan 7;124(1):23
An outbreak of Mycoplasma anatis infection associated with nervous symptoms in large-scale duck flocks. Ivanics E, et al. **Zentralbl Veterinarmed [B]** 1988 Jun;35(5):368–78
[Diagnostic aspects of neurological diseases of cattle. A retrospective study] Leupold U, et al. **Schweiz Arch Tierheilkd** 1989;131(6):327–40 (Eng. Abstr.) **(Ger)**
[Neurotoxic syndrome of sheep due to the ingestion of plants of the Mediterranean scrub: clinical, histopathological, histochemical and ultrastructural observations] Leoni A, et al. **Schweiz Arch Tierheilkd** 1989;131(6):361–8 (Eng. Abstr.) **(Ita)**

NERVOUS SYSTEM NEOPLASMS

Neurofibromatosis. **Clin Orthop** 1989 Aug;(245):1–56
Nerve sheath tumors of the head and neck [letter] Hardingham M. **Ear Nose Throat J** 1989 Jan;68(1):67
Schwannoma of the cervical sympathetic chain. Myssiorek DJ, et al. **J Laryngol Otol** 1988 Oct;102(10):962–5
Neurotropic melanoma of the head and neck. Schroeder WA Jr, et al. **Mo Med** 1987 May;84(5):242–6
Ependymomas in children. Kun LE, et al. **Pediatr Neurosci** 1988;14(2):57–63 (41 ref.)

BLOOD

Erythrocyte polyamines: their diagnostic and therapeutic importance in human neuro-oncology. Moulinoux JP, et al. **Adv Exp Med Biol** 1988;250:353–63 (15 ref.)

CHEMICALLY INDUCED

Effects of EDTA in newborn mice with special reference to neural crest cells. Nozue AT. **Anat Anz** 1988; 166(1–5):209–17
Experimental model of tumors associated with neurofibromatosis. Cardesa A, et al. **Cancer** 1989 May 1; 63(9):1737–49
Transplacental initiation of liver, lung, neurogenic, and connective tissue tumors by N-nitroso compounds in mice. Anderson LM, et al. **Fundam Appl Toxicol** 1989 Apr; 12(3):604–20
Phenobarbital lacks promoting activity for neurogenic tumors in F344 rats transplacentally exposed to ethylnitrosourea. Walker VE, et al. **J Neuropathol Exp Neurol** 1989 May; 48(3):263–9

CLASSIFICATION

Schwannomatosis. An unusual variant of neurofibromatosis or a distinct clinical entity? Purcell SM, et al. **Arch Dermatol** 1989 Mar;125(3):390–3

COMPLICATIONS

Intraocular neurilemmoma arising from the posterior ciliary nerve in neurofibromatosis. Pathologic findings. Freedman SF, et al. **Ophthalmology** 1988 Nov;95(11):1559–64
Two epithelioid malignant schwannomas in a patient with neurofibromatosis. Cytology, histology and DNA-flow-cytometry. Molenaar WM, et al. **Pathol Res Pract** 1989 May;184(5):529–34
[Urologic symptoms as first clinical manifestation of tumors of the nervous system. Apropos of 2 cases] Perea J, et al. **Actas Urol Esp** 1989 Jan–Feb;13(1):71–4 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Cytopathology of neoplasms of the central nervous system in specimens obtained by the Cavitron Ultrasonic Surgical Aspirator. Silverman JF, et al. **Acta Cytol** 1989 Sep–Oct; 33(5):576–82
Paragangliomas of the cauda equina. Hayes E, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S45–7
Cytologic and immunohistochemical diagnosis of neuroendocrine (Merkel cell) carcinoma in cerebrospinal fluid. Dudley TH Jr, et al. **Am J Clin Pathol** 1989 Jun; 91(6):714–7
Optic nerve involvement as the initial manifestation of sarcoidosis. Jordan DR, et al. **Can J Ophthalmol** 1988 Aug; 23(5):232–7
Practical approaches to the diagnosis of central nervous system tumors. Burger PC, et al. **Mod Pathol** 1988 Nov; 1(6):493–511
Lyme disease meningopolyneuritis simulating malignant lymphoma. Szyfelbein WM, et al. **Mod Pathol** 1988 Nov; 1(6):464–8
[Echographic aspect of 2 rare soft-tissue neoplasms: chordoid sarcoma and neurotekeoma] Battaglia S, et al. **Radiol Med (Torino)** 1988 Nov;76(5):502–4 **(Ita)**
[Aldolase and LDH activity in the cerebrospinal fluid in neuroleukemia in children] Poliakova OA. **Pediatriia** 1988; (8):110–1 **(Rus)**

DRUG THERAPY

An immunotoxin for the treatment of T-acute lymphoblastic leukemic meningitis: studies in rhesus monkeys. Hertler AA, et al. **Cancer Immunol Immunother** 1989;28(1):59–66
Improved tumor-specific immunotoxins in the treatment of CNS and leptomeningeal neoplasia. Johnson VG, et al.

J Neurosurg 1989 Feb;70(2):240–8

EPIDEMIOLOGY

[Statistical analysis of 1016 cases of nervous system tumors in different nationalities in Xinjiang] Chen CL, et al. Chung Hua Chung Liu Tsa Chih 1988 Mar;10(2):126–8 (Eng. Abstr.) (Chi)

ETIOLOGY

Neurologic tumors in offspring after inoculation of mothers with killed-poliovirus vaccine [letter] Melnick JL, et al. N Engl J Med 1988 Nov 3;319(18):1226

GENETICS

Fundamental mechanisms of tumorigenesis in the human nervous system: isolation and characterization of genes associated with hereditary forms of cancer. Seizinger BR. Clin Chem 1989 Jul;35(7 Suppl):B25–7

Gene linkage in neurofibromatosis. DiSimone RE, et al. Clin Orthop 1989 Aug;(245):49–52

Elevated expression of basic fibroblast growth factor messenger ribonucleic acid in acoustic neuromas. Murphy PR, et al. Mol Endocrinol 1989 Feb;3(2):225–31

Occurrence of both neurofibromatoses 1 and 2 in the same individual with a rapidly progressive course. Sadeh M, et al. Neurology 1989 Feb;39(2 Pt 1):282–3

[Cytogenetic studies in tumors of the nervous system] Gutiérrez MI, et al. Medicina (B Aires) 1988;48(5):474–8 (Eng. Abstr.) (Spa)

IMMUNOLOGY

Diagnostic markers in human neurooncology. A progress report. Rubinstein LJ. Ann N Y Acad Sci 1988;540:78–90

[Immunology of tumors of the central nervous system] de Micco C. Bull Cancer (Paris) 1989;76(1):17–31 (101 ref.) (Eng. Abstr.) (Fre)

METABOLISM

Neuroendocrine markers in central nervous system neuronal tumors (gangliocytoma and ganglioglioma). Takahashi H, et al. Acta Neuropathol (Berl) 1989;77(3):237–43

Atrial natriuretic peptide in human neuroblastoma. Niimura S, et al. Res Commun Chem Pathol Pharmacol 1989 Feb; 63(2):189–200

Epidermal growth factor receptor expression and growth fraction in human tumours of the nervous system. Reifenberger G, et al. Virchows Arch [A] 1989; 414(2):147–55

PATHOLOGY

Ki-67 immunoperoxidase stain as marker for the histological grading of nervous system tumours. Shibata T, et al. Acta Neurochir Suppl (Wien) 1988;43:103–6

Epithelioid malignant schwannoma. A case report. Honma K, et al. Acta Pathol Jpn 1989 Mar;39(3):195–202

Biology and pathogenesis of CNS leukemia. Bleyer WA. Am J Pediatr Hematol Oncol 1989 Spring;11(1):57–63

Neuropsychological status of children with acute lymphoblastic leukemia treated for central nervous system relapse. Mulhern RK, et al. Am J Pediatr Hematol Oncol 1989 Spring;11(1):106–13 (26 ref.)

Central nervous system lymphomas. Immunohistochemical and clinicopathologic study of 26 autopsy cases. Nakhleh RE, et al. Arch Pathol Lab Med 1989 Sep;113(9):1050–6

Neurofibromatosis. Clinical overview. Brill CB. Clin Orthop 1989 Aug;(245):10–5 (27 ref.)

Establishment and characterization of an intracerebrally transplanted tumor line, induced experimentally in the spinal cord. Mennel HD. Exp Pathol 1988;33(3):165–72

Prognostic value of histopathology in advanced neuroblastoma: a report from the Childrens Cancer Study Group. Chatten J, et al. Hum Pathol 1988 Oct; 19(10):1187–98

Paragangliomas: assessment of prognosis by histologic, immunohistochemical, and ultrastructural techniques. Kliewer KE, et al. Hum Pathol 1989 Jan;20(1):29–39

Malignant optic glioma in adults. Case report. Taphoorn MJ, et al. J Neurosurg 1989 Feb;70(2):277–9 (15 ref.)

Gliomatosis peritonei in childhood and adolescence. Clinicopathological study of 13 cases including immunohistochemical findings. Harms D, et al. Pathol Res Pract 1989 Apr;184(4):422–30

Neuroendocrine carcinomas of the colon and rectum: a clinicopathologic evaluation. Staren ED, et al. Surgery 1988 Dec;104(6):1080–9

[Malignant pheochromocytoma of both adrenals combined with sympathetic nervous system tumors of the small intestine] Iakimov A, et al. Khirurgiia (Sofiia) 1988; 41(6):49–53 (Eng. Abstr.) (Bul)

[Combination cytologic and histologic diagnosis by extemporaneous peroperative examination of 700 central nervous system tumors] Loosli H, et al. Rev Med Suisse Romande 1989 Mar;109(3):217–24 (Fre)

[Intrathoracic tumors of the sympathetic nervous system—characteristics of their biological behavior] Anders M, et al. Padiatr Grenzgeb 1988;27(6):503–9 (Eng. Abstr.) (Ger)

[Histological grading of neuroblastomas. 25 cases] Anders M, et al. Zentralbl Allg Pathol 1988;134(3):235–42 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Carbamazepine inhibits spontaneous activity in experimental neuromas. Burchiel KJ. Exp Neurol 1988 Nov; 102(2):249–53

Sensory neuronopathy. Asbury AK. Semin Neurol 1987 Mar; 7(1):58–66 (49 ref.)

RADIOTHERAPY

Photoradiation therapy of tumors [letter] Steichen JD. J Neurosurg 1989 Jul;71(1):151–2

SECONDARY

Neurologic complications of cervical cancer. A review of 2261 cases. Saphner T, et al. Cancer 1989 Sep 1; 64(5):1147–51 (32 ref.)

[Carcinomatous neuropathy in recurrent rectal carcinoma. The results of radiotherapy and the role of CT] Gaeta M, et al. Radiol Med (Torino) 1989 Jul–Aug;78(1–2):89–93 (Eng. Abstr.) (Ita)

ULTRASTRUCTURE

Melanotic schwannoma arising in the sympathetic ganglion. Kayano H, et al. Hum Pathol 1988 Nov;19(11):1355–8

[Electron microscopy of 300 tumors in the nervous system] Huang WQ, et al. Chung Hua Chung Liu Tsa Chih 1988 Mar;10(2):120–2 (Eng. Abstr.) (Chi)

URINE

Method of measurement of urinary homovanillic acid and vanillylmandelic acid by gas chromatography–mass spectrometry suitable for neuroblastoma screening. Seviour JA, et al. J Chromatogr 1988 Nov 18;432:273–7

VETERINARY

Craniolateral approach to the canine brachial plexus. Sharp NJ. Vet Surg 1988 Jan–Feb;17(1):18–21

NESIDIOBLASTOMA see **ISLET CELL TUMOR**

NESIDIOBLASTOSIS see **PANCREATIC DISEASES**

NESIDIOBLASTS see **ISLANDS OF LANGERHANS**

NESTING BEHAVIOR

DRUG EFFECTS

Lead exposure, environmental temperature, nesting and consummatory behavior of adult male mice of two ages. DeLuca J, et al. Neurotoxicol Teratol 1989 Jan–Feb; 11(1):7–11

PHYSIOLOGY

Burrowing behavior in wild house mice: variation within and between populations. Bouchard PR, et al. Behav Genet 1989 May;19(3):447–56

Inheritance of burrow building in Peromyscus. Dawson WD, et al. Behav Genet 1988 May;18(3):371–82

Increased levels of arginine vasotocin and neurophysin during nesting in sea turtles. Figler RA, et al. Gen Comp Endocrinol 1989 Feb;73(2):223–32

Changes in plasma levels of prolactin and estradiol, nutrient intake, and time spent nesting during the incubation phase of broodiness in the Chabo hen (Japanese bantam). Zadworny D, et al. Gen Comp Endocrinol 1988 Sep; 71(3):406–12

Concentrations of plasma prolactin and luteinizing hormone following nest deprivation and renesting in ring doves (Streptopelia risoria). Lea RW, et al. Horm Behav 1989 Jun;23(2):279–89

Reproductive behavior and LH levels of cockatiels (Nymphicus hollandicus) associated with photostimulation, nest-box presentation, and degree of mate access. Shields KM, et al. Horm Behav 1989 Mar;23(1):68–82

Relationships between prolactin, LH and broody behaviour in bantam hens. Sharp PJ, et al. J Endocrinol 1988 Aug; 118(2):279–86

NETILMICIN

ADMINISTRATION & DOSAGE

Randomized trial comparing ciprofloxacin plus netilmicin versus piperacillin plus netilmicin for empiric treatment of fever in neutropenic patients. Chan CC, et al. Antimicrob Agents Chemother 1989 Jan;33(1):87–91

Evaluation of the combination effects of ampicillin or vancomycin combined with streptomycin, gentamicin, tobramycin or netilmicin against enterococci. Fuursted K. APMIS 1989 Jan;97(1):23–6

The treatment of gynaecological and intra-abdominal infections: a comparative study of cefotetan versus netilmicin plus clindamycin. Poularas J, et al. Chemioterapia 1988 Aug;7(4):253–5

Once-daily versus thrice-daily administration of netilmicin in combination therapy of Pseudomonas aeruginosa infection in a man-adapted neutropenic animal model. Gerber AU, et al. Eur J Clin Microbiol Infect Dis 1989 Mar;8(3):233–7

Once daily administration of netilmicin compared with thrice daily, both in combination with metronidazole, in gangrenous and perforated appendicitis. Fan ST, et al. J Antimicrob Chemother 1988 Jul;22(1):69–74

[Clinico-bacteriological efficacy, pharmacokinetics and tolerability of netilmicin administered in a daily single dose in bronchopulmonary infections] Salvati F, et al. Clin Ter 1988 Apr 15;125(1):15–24 (Eng. Abstr.) (Ita)

ADVERSE EFFECTS

Randomized multi center study comparing nephrotoxicity of ceftazidime versus the combination of piperacillin and netilmicin with and without furosemide. Mondorf AW, et al. Adv Exp Med Biol 1989;252:307–12

Tolerance of once-daily dosing of netilmicin and teicoplanin, alone or in combination, in healthy volunteers. Pierre C, et al. Clin Pharmacol Ther 1988 Oct;44(4):458–66

ANALYSIS

[Determination of netilmicin in continuous ambulatory peritoneal dialysis (CAPD): comparison of 3 methods] Cavalli G, et al. Clin Ter 1988 Jan 31;124(2):103–8 (Eng. Abstr.) (Ita)

BLOOD

Fluorescence polarization immunoassay of gentamicin or netilmicin in blood spotted on filter paper. Fujimoto T, et al. Clin Chem 1989 May;35(5):867–9

Is monitoring plasma levels of netilmicin necessary in neonates? Autret E, et al. Fundam Clin Pharmacol 1989; 3(2):89–94

High-performance liquid chromatographic determination of netilmicin in guinea-pig and human serum by fluorodinitrobenzene derivatization with spectrophotometric detection. Dionisotti S, et al. J Chromatogr 1988 Dec 29;434(1):169–76

Determination of the aminoglycoside antibiotics sisomicin and netilmicin in dried blood spots on filter discs, by high-performance liquid chromatography with pre-column derivatization and fluorimetric detection. Tawa R, et al. J Chromatogr 1989 May 5;490(1):125–32

CEREBROSPINAL FLUID

[Penetration of cefmetazole and netilmicin into the cerebrospinal fluid] Yoshino K, et al. Jpn J Antibiot 1988 May;41(5):563–6 (Eng. Abstr.) (Jpn)

PHARMACOKINETICS

Once-daily dosing decreases renal accumulation of gentamicin and netilmicin. Verpooten GA, et al. Clin Pharmacol Ther 1989 Jan;45(1):22–7

Pharmacokinetics of netilmicin during hemodialysis: comparison of four artificial kidneys. Herrero A, et al. Int J Clin Pharmacol Ther Toxicol 1988 Dec;26(12):605–9

A mouse model for simultaneous pharmacokinetic and efficacy studies of antibiotics at sites of infection. Renneberg J, et al. J Antimicrob Chemother 1988 Jul; 22(1):51–60

Gentamicin, tobramycin and netilmicin pharmacokinetics in plasma and pleural fluid. Limthongkul S, et al. J Med Assoc Thai 1988 Oct;71(10):541–7

[Action of indomethacin and oxybuprocaine on the penetration of netilmicine across the blood-ocular barrier] Palomar A, et al. Ophtalmologie 1988 Jan–Mar;2(1):53–5 (Eng. Abstr.) (Fre)

PHARMACOLOGY

Effect of netilmicin and amikacin on urinary phospholipids excretion in humans. Ibrahim S, et al. Arch Toxicol Suppl 1989;13:413–6

In vitro study of synergistic activity between netilmicin and tobramycin combined with ceftriaxone versus Pseudomonas and Serratia species. Focà A, et al. Chemioterapia 1987 Jun;6(2 Suppl):123–4

In vitro effect of combinations of netilmicin with aztreonam against Pseudomonas aeruginosa. Tumah H, et al. Chemioterapia 1987 Jun;6(2 Suppl):128–9

The influence of subminimal inhibitory concentrations of netilmicin and ceftriaxone on the interaction of Escherichia coli with host defences. Raponi G, et al. J Antimicrob Chemother 1989 Apr;23(4):565–76

[Bactericidal activity of daptomycin and vancomycin alone or in combination with tobramycin, netilmicin or ampicillin against enterococcus] Duez JM, et al. Pathol Biol (Paris) 1989 Apr;37(4):263–8 (Eng. Abstr.) (Fre)

[Sensitivity of bacteria to netilmicin in comparison with their sensitivity to gentamicin and other aminoglycosides] Ruczkowska J, et al. Przegl Lek 1988;45(4):383–6 (Eng. Abstr.) (Pol)

[Sensitivity of Staphylococci to netilmicin and other antibiotics with reference to oxacillin-resistant strains] Ruczkowska J, et al. Wiad Lek 1988 Aug 15;41(16):1086–90 (Eng. Abstr.) (Pol)

[The effect of netilmicin on gram negative rods isolated in the Konya region] Sengil AZ, et al. Mikrobiyol Bul 1988; 22(4):276–83 (Eng. Abstr.) (Tur)

THERAPEUTIC USE

Prospective study of amikacin versus netilmicin in the treatment of severe infection in hospitalized patients. Noone M, et al. **Am J Med** 1989 Jun;86(6 Pt 2):809–13

Ceftriaxone–netilmicin combination in single–daily–dose treatment of experimental Escherichia coli endocarditis. Fantin B, et al. **Antimicrob Agents Chemother** 1989 May; 33(5):767–70

European experience of timentin in combination with aminoglycosides as empirical treatment in febrile neutropenic patients. Croydon E, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):405–7

Therapeutic effect of cefotetan plus netilmicin in the treatment of bacterial peritonitis. Puleo S, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):470–1

Netilmicin alone or in combination in renal transplantation. Stathakis C, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):497–9

Netilmicin. Laboratory and clinical studies. Wang F, et al. **Chin Med J [Engl]** 1988 Oct;101(10):776–80

The efficacy of the combination of teicoplanin or flucloxacillin with netilmicin in the treatment of Staphylococcus aureus bacteraemia. Degener JE, et al. **J Antimicrob Chemother** 1989 Jun;23(6):899–904

Selection of resistance to gentamicin and netilmicin in the faecal flora following prophylaxis for colo–rectal surgery. Heritage J, et al. **J Antimicrob Chemother** 1988 Aug; 22(2):249–56

Serum and sputum concentrations of netilmicin in combination with acylureidopenicillin and cephalosporins in clinical treatment of pulmonary exacerbations in cystic fibrosis. Hjelte L, et al. **J Antimicrob Chemother** 1989 Jun; 23(6):885–90

A multicentric study of netilmicin once daily versus thrice daily in patients with appendicitis and other intra–abdominal infections. Hollender LF, et al. **J Antimicrob Chemother** 1989 May;23(5):773–83

A comparison of double beta–lactam combinations with netilmicin/ureidopenicillin regimens in the empirical therapy of febrile neutropenic patients. Kibbler CC, et al. **J Antimicrob Chemother** 1989 May;23(5):759–71

A randomized trial of empirical antibiotic therapy with one of four beta–lactam antibiotics in combination with netilmicin in febrile neutropenic patients. Sage R, et al. **J Antimicrob Chemother** 1988 Aug;22(2):237–47

Netilmicin in the treatment of gram–negative bacteremia: single daily versus multiple daily dosage. Sturm AW. **J Infect Dis** 1989 May;159(5):931–7

Netilmicin sulfate as single–agent therapy for Pseudomonas infections. Greenberg RN, et al. **South Med J** 1989 Jun; 82(6):715–8

[Ceftazidime for the treatment of infections in neutropenic children] Leverger G, et al. **Presse Med** 1988 Oct 26; 17(37):1974–6 (Eng. Abstr.) **(Fre)**

[Netilmicin in the treatment of infections of the lower urinary tract] Paoletti V, et al. **Clin Ter** 1989 Mar 31;128(6):405–9 (Eng. Abstr.) **(Ita)**

[Evaluation of the clinico–bacteriologic efficacy and tolerance of netilmicin in the treatment of neonatal staphylococcal infections] Stronati M, et al. **G Ital Chemioter** 1988 Jan–Dec;35(1–3):27–31 (Eng. Abstr.) **(Ita)**

TOXICITY

Aminoglycoside and nephrotoxicity. Silva VL, et al. **Renal Physiol** 1988;10(6):327–37

[Nephrotoxicity of gentamicin and netilmicin in the rat. Quantification and qualification of glomeruli] Núñez M, et al. **Rev Esp Fisiol** 1988 Mar;44(1):41–4 (Eng. Abstr.) **(Spa)**

NETROPSIN see under **GUANIDINES**

NEURAL ANALYZERS

[Anatomo–physiological aspects of the vestibular analyzer in children] Mostovaia TS. **Vestn Otorinolaringol** 1988 Jul–Aug;(4):84–8 (48 ref.) **(Rus)**

PHYSIOLOGY

Monitors: key mechanisms and roles in the development and aging of the consciousness and self. Strehler BL. **Mech Ageing Dev** 1989 Feb;47(2):85–132 (19 ref.)

[Function of the visual and motor analyzers in adolescent operators in the chemical industry working first and second shifts] Balichev Iu. **Probl Khig** 1988;13:157–63 (Eng. Abstr.) **(Bul)**

[Dynamics of the differential analyzer thresholds during activity] Sysoev VN. **Fiziol Cheloveka** 1988 May–Jun; 14(3):510–2 **(Rus)**

[Effect of the beginning of school education on the functional state of the visual analyzer in children] Bazarnyi VF, et al. **Gig Sanit** 1988 Jul;(7):85–6 **(Rus)**

[Functional status of the visual analyzer in operators working with displays] Liman AD, et al. **Gig Tr Prof Zabol** 1989; (6):30–3 (Eng. Abstr.) **(Rus)**

[A device for studying liminal and supraliminal indices of the state of the olfactory analyzer] Kitsera AE, et al. **Med Tekh** 1988 Sep–Oct;(5):46–8 (Eng. Abstr.) **(Rus)**

[Synaptic transmission in the receptors of the lateral acoustic system] Akoev GN, et al. **Usp Fiziol Nauk** 1988 Jul–Sep; 19(3):81–98 (127 ref.) **(Rus)**

[Systems organization of the higher sections of the auditory analyzer] Komissarov VI. **Usp Fiziol Nauk** 1988 Oct–Dec; 19(4):33–53 **(Rus)**

RADIATION EFFECTS

[The absolute light sensitivity of the visual analyzer in sailors during a 10–month commercial voyage] Ponomarchuk VS, et al. **Oftalmol Zh** 1989;(2):107–11 (Eng. Abstr.) **(Rus)**

[Quantitative histologic changes of the glioneuronal complex in the central and intermediate parts of the visual analyzer exposed to microwaves of thermogenic intensity] Logvinov SV. **Radiobiologiia** 1989 Mar–Apr;29(2):247–50 (Eng. Abstr.) **(Rus)**

NEURAL CONDUCTION

Clinical use of peripheral nerve stimulators. Viby–Mogensen J. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):239–44

Spinal and central sensory conduction times in subjects aged between 20 and 60 years. D'Alpa F, et al. **Acta Neurol (Napoli)** 1988 Jun;10(3):193–9

Diagnostic value of quantitative sensory testing (QST) in carpal tunnel syndrome. Borg K, et al. **Acta Neurol Scand** 1988 Dec;78(6):537–41

Nerve conduction studies in upper limbs of patients with cervical spondylosis and motor neurone disease. Thacker AK, et al. **Acta Neurol Scand** 1988 Jul;78(1):45–8

Central motor conduction in cerebrovascular disease and motor neuron disease. Ugawa Y, et al. **Acta Neurol Scand** 1988 Oct;78(4):297–306

Effects of nerve compression or ischaemia on conduction properties of myelinated and non–myelinated nerve fibres. An experimental study in the rabbit common peroneal nerve. Dahlin LB, et al. **Acta Physiol Scand** 1989 May; 136(1):97–105

Evidence for sympathetic regulation of the hydraulic conductance of rat jejunal mucosa in vivo. Hemlin M, et al. **Acta Physiol Scand** 1989 Apr;135(4):459–67

Afferent innervation of the guinea–pig's ureter. Sann H, et al. **Agents Actions** 1988 Dec;25(3–4):243–5

Slow conduction in the infarct scar: relevance to the occurrence, detection, and ablation of ventricular reentry circuits resulting from myocardial infarction. Stevenson WG, et al. **Am Heart J** 1989 Feb;117(2):452–67 (131 ref.)

Effect of pacing cycle length and autonomic blockade on sinus node refractoriness. Kerr CR. **Am J Cardiol** 1988 Dec 1;62(17):1192–6

Correlation between directly measured and indirectly estimated sinoatrial conduction time in children. Young ML, et al. **Am J Cardiol** 1988 Dec 1;62(17):1197–201

Median and radial sensory latencies to digit I as compared with other screening tests in carpal tunnel syndrome. Cassvan A, et al. **Am J Phys Med Rehabil** 1988 Oct; 67(5):221–4

Averaged F–wave conduction velocity of peroneal nerve [letter] Horsley W, et al. **Am J Phys Med Rehabil** 1989 Apr;68(2):103–4

Brief vagal stimuli and AV conduction in dogs: effects on retrograde exceed antegrade. Martin PJ. **Am J Physiol** 1989 Sep;257(3 Pt 2):H812–7

Comparison of sensory nerve conduction velocities in horses versus ponies. Blythe LL, et al. **Am J Vet Res** 1988 Dec; 49(12):2138–42

Electromyographic evaluation of conduction time and velocity of the recurrent laryngeal nerves of clinically normal dogs. Steiss JE, et al. **Am J Vet Res** 1988 Sep; 49(9):1533–6

Mechanism of rib cage inspiratory muscle recruitment in diaphragmatic paralysis. Ninane V, et al. **Am Rev Respir Dis** 1989 Jan;139(1):146–9

The long and the short of conduction block. Fink BR. **Anesth Analg** 1989 May;68(5):553–5

Spinal cord transmission of impulses during high spinal anesthesia as measured by cortical evoked potentials. Lang E, et al. **Anesth Analg** 1989 Jul;69(1):15–20

Solution of the Hodgkin–Huxley and cable equations on an array processor. Stockbridge N. **Ann Biomed Eng** 1989; 17(3):253–68

Motor conduction studies in Guillain–Barré syndrome [letter] Kern RZ. **Ann Neurol** 1988 Nov;24(5):695

Ulnar nerve entrapment [letter] Bilbao A. **Arch Phys Med Rehabil** 1989 Jun;70(6):495

Across–elbow ulnar nerve sensory conduction technique. Felsenthal G, et al. **Arch Phys Med Rehabil** 1989 Sep; 70(9):668–72

Electrophysiologic recovery of acute conduction block of rat tail nerve. Hong CZ, et al. **Arch Phys Med Rehabil** 1989 Mar;70(3):205–9

Correlation studies of velocity, amplitude, and duration in median nerves. Joynt RL. **Arch Phys Med Rehabil** 1989 Jun;70(6):477–81

Monopolar needle stimulation: safety considerations. Pease WS, et al. **Arch Phys Med Rehabil** 1989 May;70(5):412–4

Current perception: preferred test for evaluation of peripheral nerve integrity. Weseley SA, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):188–93

Narrow–sense heritability estimates for nerve conduction velocity and residual latency in mice. Reed TE. **Behav Genet** 1988 Sep;18(5):595–603

Simultaneous measurement of changes in current and tracer flux in voltage–clamped squid giant axon. Rakowski RF. **Biophys J** 1989 Apr;55(4):663–71

Nerve conduction studies. Morgan MH. **Br J Hosp Med** 1989 Jan;41(1):22, 26–8, 32–6 (26 ref.)

The role of pudendal nerve damage in the aetiology of genuine stress incontinence in women. Smith AR, et al. **Br J Obstet Gynaecol** 1989 Jan;96(1):29–32

Immediate return of nerve function following microsurgical repair. Grace PA, et al. **Br J Plast Surg** 1989 Mar; 42(2):212–5

Maturation of peripheral nerves in preterm infants: proprioceptive and motor nerve conductions of tibial nerve. Tranier S, et al. **Brain Dev** 1989;11(4):215–20

Electric vs magnetic trans–cranial stimulation of the brain in healthy humans: a comparative study of central motor tracts 'conductivity' and 'excitability'. Caramia MD, et al. **Brain Res** 1989 Feb 6;479(1):98–104

Phasic modulation of reticulospinal neurones during fictive locomotion and other types of spinal motor activity in lamprey. Kasicki S, et al. **Brain Res** 1989 Apr 10; 484(1–2):203–16

Relations between time–and frequency–domain measures of signal transmission from cutaneous afferents to dorsal horn neurons. Kuipers U, et al. **Brain Res** 1988 Oct 11; 462(1):154–9

A study of ionic conductances involved in plateau potential activity in putative vasopressinergic neurons in primary cell culture. Legendre P, et al. **Brain Res** 1988 Aug 9; 457(2):386–91

Relationships between axonal diameter, soma size, and axonal conduction velocity of HRP–filled, pyramidal tract cells of awake cats. Sakai H, et al. **Brain Res** 1988 Sep 13; 460(1):1–7

Electrophysiological evidence for axonal branching of ambiguous laryngeal motoneurons. Yajima Y, et al. **Brain Res** 1989 Jan 30;478(2):309–14

Single fibre motor evoked potentials to brain, spinal roots and nerve stimulation. Comparisons of the 'central' and 'peripheral' response jitter to magnetic and electric stimuli. Zarola F, et al. **Brain Res** 1989 Aug 28;495(2):217–24

Transcarpal median sensory conduction: detection of latent abnormalities in mild carpal tunnel syndrome. De Léan J. **Can J Neurol Sci** 1988 Nov;15(4):388–93

Mechanism of facilitation of conduction in Purkinje fibers with sequential pacing. Tchou P, et al. **Can J Physiol Pharmacol** 1989 Jun;67(6):650–5

Origin, domain, and dynamics of rate–induced variations of functional refractory period in rabbit atrioventricular node. Billette J, et al. **Circ Res** 1989 Jul;65(1):164–75

Neural modeling in electrical stimulation. Coburn B. **Crit Rev Biomed Eng** 1989;17(2):133–78 (64 ref.)

Abnormal nerve conduction in impotent patients with diabetes mellitus. Daniels JS. **Diabetes Care** 1989 Jul–Aug; 12(7):449–54

Microangiopathy in human diabetic neuropathy: relationship between capillary abnormalities and the severity of neuropathy. Malik RA, et al. **Diabetologia** 1989 Feb; 32(2):92–102

The application of F wave measurements in hepatic patients. Fierro B, et al. **Electroencephalogr Clin Neurophysiol** 1988 Nov;70(5):442–6

Conduction properties of epidurally recorded spinal cord potentials following lower limb stimulation in man. Halonen JP, et al. **Electroencephalogr Clin Neurophysiol** 1989 May–Jun;74(3):161–74

Muscle fiber conduction velocity related to stimulation rate. Nishizono H, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jun; 72(6):529–34

Ischemia and motor nerve conduction in diabetic neuropathy: some physiopathological considerations. Dellantonio R, et al. **Electromyogr Clin Neurophysiol** 1988 Nov–Dec; 28(7–8):385–90

Miller Fisher syndrome: an electrophysiologic case study. de Pablos C, et al. **Electromyogr Clin Neurophysiol** 1988 Jan;28(1):21–5

Electrophysiologic study of the Riche–Cannieu anomaly. Dumitru D, et al. **Electromyogr Clin Neurophysiol** 1988 Jan;28(1):27–31

Motor unit recruitment order in neuropathic disease. Herdmann J, et al. **Electromyogr Clin Neurophysiol** 1988 Jan;28(1):53–60

SEPs and central somatosensory conduction time in hemiplegics. Jacobs H, et al. **Electromyogr Clin Neurophysiol** 1988 Nov–Dec; 28(7–8):355–60

Proximal vs. distal nerve conduction measurements in uremic neuropathy. Marra TR. **Electromyogr Clin Neurophysiol** 1988 Nov–Dec;28(7–8):439–43

F–response studies in neonates, infants and children. Misra UK, et al. **Electromyogr Clin Neurophysiol** 1989 May–Jun; 29(4):251–4

Deleterious effect of the carpal tunnel on nerve conduction in diabetic polyneuropathy. Ozaki I, et al. **Electromyogr Clin Neurophysiol** 1988 Aug–Oct;28(6):301–6

Identification of motor conduction block despite desynchronisation. A method. Roth G, et al. **Electromyogr Clin Neurophysiol** 1989 Jul–Aug;29(5):305–13

Central somatosensory conduction time: a comparison of two methods of calculation. Shaw NA. **Electromyogr Clin Neurophysiol** 1987 Dec;27(8):503–6

Electromyographic evaluation of conduction time of the recurrent laryngeal nerve: findings in clinically normal horses and ponies. Steiss JE, et al. **Equine Vet J** 1989 May;

21(3):218–20
Effects of high pressure on nervous conduction velocity in man. Grapperon J, et al. **Eur J Appl Physiol** 1988; 58(1–2):141–5
The fatigability of two agonistic muscles in human isometric voluntary submaximal contraction: an EMG study. II. Motor unit firing rate and recruitment. Maton B, et al. **Eur J Appl Physiol** 1989;58(4):369–74
An early outward conductance modulates the firing latency and frequency of neostriatal neurons of the rat brain. Bargas J, et al. **Exp Brain Res** 1989;75(1):146–56
Synchronized neuronal activities in neocortical explant cultures. Gutnick MJ, et al. **Exp Brain Res** 1989; 76(1):131–40
Surface anodal stimulation of human peripheral nerves. Winkler T, et al. **Exp Brain Res** 1988;73(3):481–8
Electrophysiological characteristics of neurons in neocortical explant cultures. Wolfson B, et al. **Exp Brain Res** 1989; 76(1):122–30
Aortic occlusion and reperfusion and conduction, blood flow, and the blood–nerve barrier of rat sciatic nerve. Day TJ, et al. **Exp Neurol** 1989 Feb;103(2):173–8
Methods for estimating isometric recruitment curves of electrically stimulated muscle. Durfee WK, et al. **IEEE Trans Biomed Eng** 1989 Jul;36(7):654–67
Spectrum dip estimator of nerve conduction velocity. McVicar GN, et al. **IEEE Trans Biomed Eng** 1988 Dec; 35(12):1069–76
Topographical map of innervation zones within single motor units measured with a grid surface electrode. Masuda T, et al. **IEEE Trans Biomed Eng** 1988 Aug;35(8):623–8
The inverse problem in electroneurography—I: Conceptual basis and mathematical formulation. Schoonhoven R, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):769–77
The inverse problem in electroneurography—II: Computational aspects and evaluation using simulated data. Stegeman DF, et al. **IEEE Trans Biomed Eng** 1988 Oct; 35(10):778–88
Influences of stimulation conditions on recruitment of myelinated nerve fibers: a model study. Veltink PH, et al. **IEEE Trans Biomed Eng** 1988 Nov;35(11):917–24
An electroneurographic assessment of subclinical lead neurotoxicity. He FS, et al. **Int Arch Occup Environ Health** 1988;61(1–2):141–6
Evaluation of peripheral nerve conduction and central visual conduction in chronic alcoholics and in chronic alcoholics after prolonged abstention. Devetag F. **Ital J Neurol Sci** 1988 Dec;9(6):583–92
Peripheral nerve conduction velocity in normal infants and children. Moglia A, et al. **Ital J Neurol Sci** 1989 Jun; 10(3):311–4
Diaphragm motor unit recruitment during ventilatory and nonventilatory behaviors. Sieck GC, et al. **J Appl Physiol** 1989 Jun;66(6):2539–45
Spinal sympathetic conduction velocity in humans. Wallin BG, et al. **J Auton Nerv Syst** 1988 Oct;24(3):221–5
Method for studying muscle properties under orderly stimulated motor units with tripolar nerve cuff electrode. Baratta R, et al. **J Biomed Eng** 1989 Mar;11(2):141–7
Central somatosensory conduction time and acoustic brainstem transmission time in post-traumatic coma. Rumpl E, et al. **J Clin Neurophysiol** 1988 Jul;5(3):237–60
The paradox of sudden slowing of idioventricular rhythm during exercise in complete heart block: modulation of automatic focus, concealed reentry, or Wedensky inhibition? Klein HO, et al. **J Electrocardiol** 1988 Aug; 21(3):289–91
Nerve conduction and creatinine clearance in aged subjects with periodic movements in sleep. Bliwise DL, et al. **J Gerontol** 1989 Sep;44(5):M164–7
Assessment of sensory nerve conduction in carpal tunnel syndrome before, during and after operation. Luchetti R, et al. **J Hand Surg [Br]** 1988 Nov;13(4):386–90
Anisotropy of electrotonus in the sinoatrial node of the rabbit heart. Bouman LN, et al. **J Mol Cell Cardiol** 1989 Apr; 21(4):407–18
The conduction velocities of peripheral nerve fibres conveying sensations of warming and cooling. Fowler CJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep; 51(9):1164–70
Intercostal nerve conduction study in man. Pradhan S, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):763–6
A comparison of nerve conduction velocities and current perception thresholds as correlates of clinical severity of diabetic sensory neuropathy. Rendell MS, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):502–11
Motor axon loop as a source of error in the measurement of motor nerve conduction velocity [letter] Shimpo T, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1462–3
The non-linear relationship between nerve conduction velocity and skin temperature. Todnem K, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):497–501
Guillain–Barré syndrome: a model of random conduction block. van der Meché FG, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1158–63
Firing rate may be a determinant of nerve fibre vulnerability in axonopathies. Satchell PM, et al. **J Neurol Sci** 1988 Nov; 87(2–3):289–97
Dynamics of neuronal firing correlation: modulation of "effective connectivity". Aertsen AM, et al. **J Neurophysiol** 1989 May;61(5):900–17
Temporal coding of resonances by low-frequency auditory nerve fibers: single-fiber responses and a population model. Carney LH, et al. **J Neurophysiol** 1988 Nov;60(5):1653–77
Unitary conductance changes at teleost Mauthner cell glycinergic synapses: a voltage-clamp and pharmacologic analysis. Faber DS, et al. **J Neurophysiol** 1988 Dec; 60(6):1982–99
Conduction of neural impulses in human mechanoreceptive cutaneous afferents. Mackel R. **J Physiol (Lond)** 1988 Jul; 401:597–615
Nonlinear muscle recruitment during intramuscular and nerve stimulation. Gruner JA, et al. **J Rehabil Res Dev** 1989 Spring;26(2):1–16
Motor action potential (M.A.P.) in the evaluation of uremic peripheral neurone damage: influence of middle molecules (M.M.). Coratelli P, et al. **Life Support Syst** 1983;1 Suppl 1:129–32
Multielectrode intrafascicular and extraneural stimulation. Veltink PH, et al. **Med Biol Eng Comput** 1989 Jan; 27(1):19–24
The application of nerve conduction and clinical studies to genetic counseling in hereditary motor and sensory neuropathy type I. Berciano J, et al. **Muscle Nerve** 1989 Apr;12(4):302–6
Reversible proximal conduction block underlies rapid recovery in Guillain–Barré syndrome. Berger AR, et al. **Muscle Nerve** 1988 Oct;11(10):1039–42
Nonlinear force addition of newly recruited motor units in the cat hindlimb. Clamann HP, et al. **Muscle Nerve** 1988 Oct;11(10):1079–89
Electrophysiological and ultrastructural studies on reversible neural conduction disturbance after high voltage discharge. Eickhorn R, et al. **Muscle Nerve** 1988 Sep;11(9):945–52
The utility of magnetic stimulation for routine peripheral nerve conduction studies. Evans BA, et al. **Muscle Nerve** 1988 Oct;11(10):1074–8
Conduction studies in peripheral cat nerve using implanted electrodes: II. The effects of prolonged constriction on regeneration of crushed nerve fibers. Krarup C, et al. **Muscle Nerve** 1988 Sep;11(9):933–44
Conduction studies in peripheral cat nerve using implanted electrodes: I. Methods and findings in controls. Krarup C, et al. **Muscle Nerve** 1988 Sep;11(9):922–32
Relationship of age and sex to sensory conduction of the median nerve at the carpal tunnel and association of slowed conduction with symptoms. Nathan PA, et al. **Muscle Nerve** 1988 Nov;11(11):1149–53
Effect of rewarming on relative refractory period [letter] Petajan JH. **Muscle Nerve** 1989 Mar;12(3):246–7
The anatomic and physiologic bases of motor-evoked potentials. Rossini PM. **Neurol Clin** 1988 Nov;6(4):751–69 (60 ref.)
Maximal and minimal motor nerve conduction velocities in amyotrophic lateral sclerosis. Nakanishi T, et al. **Neurology** 1989 Apr;39(4):580–3
Somatosensory evoked potential measures of conduction in peripheral and central pathways in children with protein-calorie malnutrition. Bartel PR, et al. **Neuropediatrics** 1989 Feb;20(1):53–6
Overestimation of the electrical length of neuron dendrites and synaptic electrotonic attenuation. Glenn LL. **Neurosci Lett** 1988 Aug 15;91(1):112–9
Conduction velocity and fibre diameter of the peroneal nerve in normal and growth retarded fetal sheep. Rees S, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):157–63
Intraretinal axons of ganglion cells in the Japanese monkey (Macaca fuscata): conduction velocity and diameter distribution. Fukuda Y, et al. **Neurosci Res** 1988 Oct; 6(1):53–71
Cell type and conduction velocity of rat primary sensory neurons with substance P-like immunoreactivity. McCarthy PW, et al. **Neuroscience** 1989;28(3):745–53
Conduction velocity changes along the processes of rat primary sensory neurons. Waddell PJ, et al. **Neuroscience** 1989;30(3):577–84
The performance and usefulness of nerve conduction studies in the orthopedic office. Feierstein MS. **Orthop Clin North Am** 1988 Oct;19(4):859–66 (2 ref.)
Cochlear nerve conduction block: an explanation for spontaneous hearing return after acoustic tumor surgery. Kveton JF, et al. **Otolaryngol Head Neck Surg** 1989 Jun; 100(6):594–601
Atrial refractory periods after atrial premature beats in patients with paroxysmal atrial fibrillation. Chauvin M, et al. **PACE** 1989 Jul;12(7 Pt 1):1018–26
Atrioventricular nodal conduction and refractoriness following abrupt changes in cycle length. Shenasa M, et al. **PACE** 1988 Sep;11(9):1281–90
Oscillations of diastolic interval and refractory period following premature and postmature stimuli in canine cardiac Purkinje fibers. Watanabe M, et al. **PACE** 1989 Jul;12(7 Pt 1):1089–103 (18 ref.)
Estimation of gestational age [letter] Miller G. **Pediatr Neurol** 1988 Mar–Apr;4(2):129
Roth technique—a new approach for measuring sensory neural conduction in the median and ulnar nerves: suggestion from the field. Greathouse DG, et al. **Phys Ther** 1989 Sep;69(9):777–9
A macromolecular approach to excitation phenomena: mechanical and thermal changes in nerve during excitation. Tasaki I. **Physiol Chem Phys Med NMR** 1988;20(4):251–68 (63 ref.)
Electrically coupled but chemically isolated synapses: dendritic spines and calcium in a rule for synaptic modification. Wickens J. **Prog Neurobiol** 1988;31(6):507–28 (281 ref.)
Nerve conduction velocity in man during deep diving to 360 msw. Todnem K, et al. **Undersea Biomed Res** 1989 Jan; 16(1):31–40
Dynamics of signal conduction from soma to axon terminal of the teleost retinal horizontal cell: in vivo, in vitro and model studies. Yagi T. **Vision Res** 1989;29(4):375–84
[Methodology, normal values and clinical application regarding measurement of the near-nerve orthodromic sensory conduction velocity] Tang XF. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Apr; 21(2):87–92, 127 (Eng. Abstr.) **(Chi)**
[Involvement of the ulnar nerve in idiopathic carpal tunnel syndrome] Dijs H, et al. **Acta Belg Med Phys** 1988 Jul–Sep; 11(3):107–9 (Eng. Abstr.) **(Dut)**
[Does the atrioventricular node indeed conduct?] Meijler FL, et al. **Ned Tijdschr Geneeskd** 1989 Jun 3;133(22):1109–14 (36 ref.) **(Dut)**
[Role of the electrophysiologic examination in the diagnosis of Bassen–Kornzweig syndrome] Hirsch E, et al. **Neurophysiol Clin** 1988 Sep;18(5):469–75 (Eng. Abstr.) **(Fre)**
[Velocity of nerve conduction in children and adolescents with type I diabetes mellitus: clinical, metabolic and immunologic correlations] Cardella F, et al. **Pediatr Med Chir** 1989 Jan–Feb;11(1):33–6 (Eng. Abstr.) **(Ita)**
[Clinical application of the F-wave in various pathological conditions of the peripheral nervous system] Fierro B, et al. **Riv Neurol** 1988 May–Jun;58(3):116–20 (Eng. Abstr.) **(Ita)**
[Measurement of nerve conduction velocity of the dorsal nerve of the penis] Kiwamoto H, et al. **Hinyokika Kiyo** 1988 Jun;34(6):1007–10 (Eng. Abstr.) **(Jpn)**
[The effects of aging on clinical neurophysiology] Takanashi Y, et al. **Rinsho Byori** 1988 Oct;36(10):1144–51 **(Jpn)**
[Percutaneous electrical stimulation (PES) and SEP in peripheral neuropathies] Aizawa H, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):447–52 (Eng. Abstr.) **(Jpn)**
[A case of sporadic polyneuropathy with tomacula demonstrating marked nerve conduction delay] Hashimoto K, et al. **Rinsho Shinkeigaku** 1988 Sep;28(9):1023–9 (Eng. Abstr.) **(Jpn)**
[A threshold method in diabetic neuropathy] Mizuno T, et al. **Rinsho Shinkeigaku** 1988 Sep;28(9):1072–5 (Eng. Abstr.) **(Jpn)**
[Central sensory and motor conduction in adrenoleukodystrophy (ALD), cerebrotendinous xanthomatosis (CTX), HTLV-1-associated myelopathy (HAM) and tabes dorsalis] Ugawa Y, et al. **Rinsho Shinkeigaku** 1988 Jul;28(7):819–27 (Eng. Abstr.) **(Jpn)**
[Magneto-electrical stimulation (MES)—compared with percutaneous electrical stimulation (PES)] Ugawa Y, et al. **Rinsho Shinkeigaku** 1989 Jan;29(1):8–12 (Eng. Abstr.) **(Jpn)**
[Analysis of nerve fiber deformation during excitation] Malev VV, et al. **Biofizika** 1988 May–Jun;33(3):485–9 (Eng. Abstr.) **(Rus)**
[Effect of the burst stimulation of the vagus nerve on the sinoatrial and atrioventricular conduction of excitation in the feline heart] Sheĭkh-Zade IuR. **Fiziol Zh SSSR** 1988 Oct;74(10):1418–24 (Eng. Abstr.) **(Rus)**
[Electrophysiological analysis of the phenomenon of "blocked" neuromuscular synapses in patients with myasthenia gravis] Gekht BM, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):96–102 (Eng. Abstr.) **(Rus)**
[Comparative analysis of disorders of neuromuscular conduction in patients with botulism and Eaton–Lambert myasthenic syndrome] Sanadze AG, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):102–7 (Eng. Abstr.) **(Rus)**
[Effect of the background activity of a network of excitatory neuron-like elements on the conduction of excitation] Shul'gina GI, et al. **Zh Vyssh Nerv Deiat** 1988 Jul–Aug; 38(4):715–24 (Eng. Abstr.) **(Rus)**
[Possibilities of detecting the plasticity of monosynaptic excitable connections during the analysis of impulse activity of neurons using cross-correlation histograms and Cox's method] Zosimovskiĭ VA. **Zh Vyssh Nerv Deiat** 1989 Jan–Feb;39(1):110–7 (Eng. Abstr.) **(Rus)**
[A new, noninvasive method of measuring motor and sensory conductivity] Jovičić A, et al. **Vojnosanit Pregl** 1988 Nov–Dec;45(6):407–12 (Eng. Abstr.) **(Scr)**
[Proximal and distal peripheral nerve conduction in chronic renal insufficiency] Fernández Liguori NA, et al. **Medicina (B Aires)** 1987;47(5):477–83 (Eng. Abstr.) **(Spa)**
[The variation in neural conduction velocity related to temperature is not age-dependent] Paradiso G. **Medicina (B Aires)** 1988;48(3):251–4 (Eng. Abstr.) **(Spa)**
[Digital neural conduction] Paradiso G. **Medicina (B Aires)** 1987;47(5):484–8 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Nitrous oxide augments sympathetic outflow: direct evidence from human peroneal nerve recordings. Ebert TJ, et al. **Anesth Analg** 1989 Oct;69(4):444–9

Tachyphylaxis to local anesthetics does not result from reduced drug effectiveness at the nerve itself. Lipfert P, et al. **Anesthesiology** 1989 Jan;70(1):71–5

A study of nerve conduction velocity, late responses and neuromuscular synapse functions in organophosphate workers in India. Misra UK, et al. **Arch Toxicol** 1988; 61(6):496–500

Changes of the conduction velocity of isolated muscles induced by altered external potassium concentration. Kössler F, et al. **Biomed Biochim Acta** 1989;48(5–6):S465–70

Effect of 4–aminopyridine on axonal conduction–block in chronic spinal cord injury. Blight AR. **Brain Res Bull** 1989 Jan;22(1):47–52

Selective depression of conduction of premature action potentials in canine Purkinje fibres by class Ib antiarrhythmic drugs: comparison with Ia and Ic drugs. Pallandi RT, et al. **Cardiovasc Res** 1988 Mar;22(3):171–8

Improvement of nerve conduction velocity in mutant diabetic mice by aldose reductase inhibitor without affecting nerve myo–inositol content. Miwa I, et al. **Chem Pharm Bull (Tokyo)** 1989 Jun;37(6):1581–2

Beneficial effect of Org 2766 in treatment of peripheral neuropathy in streptozocin–induced diabetic rats. Van der Zee CE, et al. **Diabetes** 1989 Feb;38(2):225–30

Disulfiram neuropathy: electrophysiological study. Palliyath S, et al. **Electromyogr Clin Neurophysiol** 1988 Jun–Jul; 28(5):245–7

Comparison of the effects of carbamazepine and oxcarbazepine on peripheral nerve conduction. Danner R, et al. **Epilepsy Res** 1988 Jul–Aug;2(4):272–5

The effects of amiodarone on repolarization and refractoriness of cardiac fibers. Varró A, et al. **Eur J Pharmacol** 1988 Sep 1;154(1):11–8

Methylcobalamin improves nerve conduction in streptozotocin–diabetic rats without affecting sorbitol and myo–inositol contents of sciatic nerve. Sonobe M, et al. **Horm Metab Res** 1988 Nov;20(11):717–8

Propranolol blocks ventricular refractory period changes with orthostatic stress in humans. Martins JB, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1488–93

Essential fatty acids prevent slowed nerve conduction in streptozotocin diabetic rats. Julu PO. **J Diabetic Complications** 1988 Oct–Dec;2(4):185–8

The cyclic GMP–induced inward current in neuron R14 of Aplysia californica: similarity to a FMRFamide–induced inward current. Ichinose M, et al. **J Neurobiol** 1989 Jan; 20(1):10–24

Measurement of neurotoxic actions on mammalian nerve impulse conduction. Lipman JJ. **Methods Enzymol** 1988; 165:254–69

The response of a patient with von Recklinghausen's disease to succinylcholine and atracurium. Naguib M, et al. **Middle East J Anesthesiol** 1988 Jun;9(5):429–34

Nerve conduction study of human tetrodotoxication. Oda K, et al. **Neurology** 1989 May;39(5):743–5

Excitation of striatal neurons by dexamphetamine is not abolished by either chloral hydrate or urethane anaesthesia. Warenycia MW, et al. **Neuropharmacology** 1988 Dec; 27(12):1309–12

The effects of blocking nerve conduction on retrograde HRP labeling of rat motoneuron. Kanda K, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):153–6

Somatosensory evoked potentials and peripheral nerve conduction velocities in patients on long–term carbamazepine therapy. Carenini L, et al. **Riv Neurol** 1988 Nov–Dec;58(6):231–4

[Effect on the rat brain of small concentrations of the alkaloid–containing substance ignatium–amar administered perorally] Umanskiĭ LD, et al. **Zh Vyssh Nerv Deiat** 1989 Jan–Feb;39(1):148–52 **(Rus)**

RADIATION EFFECTS

Inhibition of nerve conduction by electromagnetic induction of the frog sciatic nerve–gastrocnemius muscle preparation. Wali FA, et al. **Jpn J Physiol** 1989;39(2):303–10

NEURAL CREST

Piebaldism–Waardenburg syndrome: histopathologic evidence for a neural crest syndrome. Kaplan P, et al. **Am J Med Genet** 1988 Nov;31(3):679–88

Neural crest and craniofacial disorders: genetic aspects. Proceedings of the March of Dimes Clinical Genetic Conference. Minneapolis, July 19–22, 1987. **Am J Med Genet Suppl** 1988;4:1–218

Neural crest origin of trabecular meshwork cells and other structures of the anterior chamber [editorial] Kaiser–Kupfer MI. **Am J Ophthalmol** 1989 Jun 15; 107(6):671–2

Neurofibromatosis and neural crest neoplasms: primary acquired melanosis and malignant melanoma of the conjunctiva. To KW, et al. **Surv Ophthalmol** 1989 Mar–Apr;33(5):373–9 (53 ref.)

Understanding the molecules of neural cell contacts: emerging patterns of structure and function. Lander AD. **Trends Neurosci** 1989 May;12(5):189–95 (79 ref.)

ANALYSIS

Heart conduction system: a neural crest derivative? Gorza L, et al. **Brain Res** 1988 Aug 9;457(2):360–6

CYTOLOGY

Relationships between neural crest cells and mast cells in newborn mice. Nozue AT. **Anat Anz** 1988;166(1–5):219–25

Dysdifferentiation of neural crest cells by temperature in newborn mice. Nozue AT. **Anat Anz** 1988;167(2):165–9

Relationships between neural crest cells and serotonin in newborn mice. Nozue AT. **Anat Anz** 1988;166(1–5):227–37

Distribution of the neural crest cells in the heart of birds: a three dimensional analysis. Sumida H, et al. **Anat Embryol (Berl)** 1989;180(1):29–35

Closure of the posterior neuropore in the vl mutant mouse. Wilson DB, et al. **Anat Embryol (Berl)** 1988;178(6):559–63

Specific configurations of fibronectin–containing particles correlate with pathways taken by neural crest cells at two axial levels. Brauer PR, et al. **Anat Rec** 1988 Sep; 222(1):69–82

Culture conditions affect the cholinergic development of an isolated subpopulation of chick mesencephalic neural crest cells. Barald KF. **Dev Biol** 1989 Oct;135(2):349–66

Migratory pathways of HNK–1–immunoreactive neural crest cells in the rat embryo. Erickson CA, et al. **Dev Biol** 1989 Jul;134(1):112–8

The effect of tenascin and embryonic basal lamina on the behavior and morphology of neural crest cells in vitro. Halfter W, et al. **Dev Biol** 1989 Mar;132(1):14–25

Basic fibroblast growth factor stimulates survival of nonneuronal cells developing from trunk neural crest. Kalcheim C. **Dev Biol** 1989 Jul;134(1):1–10

Timing in the regulation of neural crest cell migration: retarded "maturation" of regional extracellular matrix inhibits pigment cell migration in embryos of the white axolotl mutant. Löfberg J, et al. **Dev Biol** 1989 Jan; 131(1):168–81

Physical influences on neural crest cell migration in avian embryos: contact guidance and spatial restriction. Newgreen DF. **Dev Biol** 1989 Jan;131(1):136–48

SSEA–1 is a specific marker for the spinal sensory neuron lineage in the quail embryo and in neural crest cell cultures. Sieber–Blum M. **Dev Biol** 1989 Aug;134(2):362–75

Cellular and molecular aspects of cephalic neural crest development: workshop report. Bee J, et al. **Development** 1988;103 Suppl:95–9

Extracellular matrix synthesis is required for the movement of sclerotome and neural crest cells on collagen. Sanders EJ, et al. **Differentiation** 1988 Nov;39(1):34–41

Attachment, spreading and locomotion of avian neural crest cells are mediated by multiple adhesion sites on fibronectin molecules. Dufour S, et al. **EMBO J** 1988 Sep;7(9):2661–71

Differentiation of musculoskeletal tissues. Nathanson MA. **Int Rev Cytol** 1989;116:89–164 (444 ref.)

Effects of HNK–1 monoclonal antibody on the substratum attachment and survival of neural crest and sclerotome cells in culture. Sanders EJ, et al. **J Cell Sci** 1988 May;90 (Pt 1):115–22

A monoclonal antibody directed against quail tyrosine hydroxylase: description and use in immunocytochemical studies on differentiating neural crest cells. Fauquet M, et al. **J Histochem Cytochem** 1989 Aug;37(8):1197–205

Neural crest cell differentiation and carcinogenesis: capability of goldfish erythrophoroma cells for multiple differentiation and clonal polymorphism in their melanogenic variants. Matsumoto J, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):255S–260S

Cytochemical analysis of neural dysraphism in the vl mutant mouse. Wilson DB, et al. **J Neuropathol Exp Neurol** 1988 Nov;47(6):609–17

Selective expression of high–affinity nerve growth factor receptors on tyrosine hydroxylase–containing neuron–like cells in neural crest cultures. Bernd P. **J Neurosci** 1988 Oct;8(10):3549–55

Human medullary thyroid carcinoma: characterization of the serotonergic and neuronal properties of a neurectodermally derived cell line. Tamir H, et al. **J Neurosci** 1989 Apr; 9(4):1199–212

Migration–related changes in the cytoskeleton of cultured neural crest cells visualized by the monoclonal antibody I–5G9. Wright J, et al. **J Neurosci Res** 1988 Oct–Dec; 21(2–4):148–54

A study of the extracellular matrix protein as the migration pathway of neural crest cells in the gut: analysis in human embryos with special reference to the pathogenesis of Hirschsprung's disease. Fujimoto T, et al. **J Pediatr Surg** 1989 Jun;24(6):550–6

In vitro model systems permitting the analysis of the differentiation of mammalian progenitor cells either into neurons or into glial cells. Simonneau M, et al. **J Physiol (Paris)** 1987;82(4):336–45 (74 ref.)

Adrenergic development of neural crest cells grown in a defined medium under a reconstituted basement–membrane–like matrix. Maxwell GD, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):64–8

Differentiation of neural crest cells of Xenopus laevis in clonal culture. Akira E, et al. **Pigment Cell Res** 1987; 1(1):28–36

Melanophore differentiation in the periodic albino mutant of Xenopus laevis. Fukuzawa T, et al. **Pigment Cell Res** 1987;1(3):197–201

Invasive characteristics of neural crest cells in vitro. Gehlsen KR, et al. **Pigment Cell Res** 1987;1(1):16–21

Gene transfer and expression studies in cultured avian neural crest cells differentiating into melanocytes. Vielkind JR, et al. **Pigment Cell Res** 1989 Jan–Feb;2(1):44–52

Commitment of neural crest cells to the sensory neuron lineage. Sieber–Blum M. **Science** 1989 Mar 24; 243(4898):1608–11

Cellular 'neoteny': a possible developmental basis for chromaffin cell plasticity. Anderson DJ. **Trends Genet** 1989 Jun;5(6):174–8 (25 ref.)

Multipotent cells in the avian neural crest. Lumsden A. **Trends Neurosci** 1989 Mar;12(3):81–3 (16 ref.)

[Differentiation of the neural crest. Influence of growth factors] Le Douarin NM. **Ann Endocrinol (Paris)** 1988; 49(4–5):256–69 (44 ref.) (Eng. Abstr.) **(Fre)**

DRUG EFFECTS

Effects of EDTA in newborn mice with special reference to neural crest cells. Nozue AT. **Anat Anz** 1988; 166(1–5):209–17

ENZYMOLOGY

Neural crest origin of human trabecular meshwork and its implications for the pathogenesis of glaucoma. Tripathi BJ, et al. **Am J Ophthalmol** 1989 Jun 15;107(6):583–90

Tyrosinase protein is expressed also in some neural crest derived cells which are not melanocytes. Haninec P, et al. **Pigment Cell Res** 1988;1(5):340–3

IMMUNOLOGY

Monoclonal antibodies made to chick mesencephalic neural crest cells and to ciliary ganglion neurons identify a common antigen on the neurons and a neural crest subpopulation. Barald KF. **J Neurosci Res** 1988 Oct–Dec; 21(2–4):107–18

Antigen recognized by monoclonal antibodies to mesencephalic neural crest and to ciliary ganglion neurons is involved in the high affinity choline uptake mechanism in these cells. Barald KF. **J Neurosci Res** 1988 Oct–Dec; 21(2–4):119–34

Molecular differentiation of the otic vesicle and neural tube in the chick embryo demonstrated by monoclonal antibodies. Obata K, et al. **Neurosci Res** 1988 Dec; 6(2):131–42

METABOLISM

Distribution of laminin and collagens during avian neural crest development. Duband JL, et al. **Development** 1987 Nov;101(3):461–78

The distribution of fibronectin and tenascin along migratory pathways of the neural crest in the trunk of amphibian embryos. Epperlein HH, et al. **Development** 1988 Aug; 103(4):743–56

Tissue effects on the expression of serotonin, tyrosine hydroxylase and GABA in cultures of neurogenic cells from the neuraxis and branchial arches. Mackey HM, et al. **Development** 1988 Oct;104(2):205–17

Plasminogen activator activity is associated with neural crest cell motility in tissue culture. Erickson CA, et al. **J Exp Zool** 1989 Aug;251(2):123–33

Distribution and function of tenascin during cranial neural crest development in the chick. Bronner–Fraser M. **J Neurosci Res** 1988 Oct–Dec;21(2–4):135–47

Expression of an engrailed–like gene during development of the early embryonic chick nervous system. Gardner CA, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):426–37

PHYSIOLOGY

Application of new technologies to studies of neural crest migration and differentiation. Bronner–Fraser M, et al. **Am J Med Genet Suppl** 1988;4:23–39 (46 ref.)

Molecular determinants of cranial neural crest–derived odontogenic ectomesenchyme during dentinogenesis. Slavkin HC, et al. **Am J Med Genet Suppl** 1988;4:7–22 (76 ref.)

Fuel–mediated teratogenesis: biochemical effects of hypoglycemia during neurulation in mouse embryos in vitro. Hunter ES 3d, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):E269–76

Neural crest ablation does not alter pulmonary vein development in the chick embryo. Phillips MT 3d, et al. **Anat Rec** 1989 Mar;223(3):292–8

Development of the peripheral nervous system from the neural crest. Le Douarin NM, et al. **Annu Rev Cell Biol** 1988;4:375–404 (75 ref.)

Changes in the migratory properties of neural crest and early crest–derived cells in vivo following treatment with a phorbol ester drug. Sears R, et al. **Dev Biol** 1988 Nov; 130(1):133–43

The fate map of the cephalic neural primordium at the presomitic to the 3–somite stage in the avian embryo. Couly G, et al. **Development** 1988;103 Suppl:101–13

Control of pathfinding by the avian trunk neural crest. Erickson CA. **Development** 1988;103 Suppl:63–80 (95 ref.)

Spatial organization of the epithelium and the role of neural crest cells in the initiation of the mammalian tooth germ. Lumsden AG. **Development** 1988;103 Suppl:155–69

Exogenous basement–membrane–like matrix stimulates adrenergic development in avian neural crest cultures. Maxwell GD, et al. **Development** 1987 Dec;101(4):767–76

Cell–adhesion and substrate–adhesion molecules: their instructive roles in neural crest cell migration. Tucker GC, et al. **Development** 1988;103 Suppl:81–94 (109 ref.)

Pattern formation in the facial primordia. Wedden SE, et

al. **Development** 1988;103 Suppl:31–40 (42 ref.)
Hemodynamic characteristics in neural crest cell–excised chick embryo. Nakazawa M, et al. **Heart Vessels** 1988; 4(3):136–40
Migration of Schwann cells and axons into developing chick forelimb muscles following removal of either the neural tube or the neural crest. Noakes PG, et al. **J Comp Neurol** 1988 Nov 8;277(2):214–33
Patterns of cholinesterase staining during neural crest cell morphogenesis in mouse and chick embryos. Martins-Green M, et al. **J Exp Zool** 1988 Jul;247(1):62–8
Neural and glial phenotypic expression by neural crest cells in culture: effects of control and presumptive aganglionic bowel from ls/ls mice. Coulter HD, et al. **J Neurobiol** 1988 Sep;19(6):507–31
Development of neuropeptides in the sympathoadrenal system of birds and mammals. A short review. Garcia-Arraras JE, et al. **P R Health Sci J** 1988 Aug; 7(2):88–93 (65 ref.)
Cardiovascular malformations and the neural crest. Beckwith JB. **Pediatr Radiol** 1989;19(2):122–3
Extra-cutaneous melanin. Breathnach AS. **Pigment Cell Res** 1988;1(4):234–7 (23 ref.)
Neural crest origin of clear cell sarcoma of tendons and aponeuroses. Ultrastructural and enzyme cytochemical study of human and nude mouse-transplanted tumours. Mii Y, et al. **Virchows Arch** [A] 1989;415(1):51–60
[Control of migration and differentiation of neural crest cells by the extracellular matrix] Epperlein HH. **Naturwissenschaften** 1988 Sep;75(9):443–50 (62 ref.) (Eng. Abstr.) (Ger)

RADIOGRAPHY

Beckwith-wiedemann syndrome and neural crest tumors. A report of two cases. Sirinelli D, et al. **Pediatr Radiol** 1989; 19(4):242–5

TRANSPLANTATION

Plasticity and predetermination of mesencephalic and trunk neural crest transplanted into the region of the cardiac neural crest. Kirby ML. **Dev Biol** 1989 Aug;134(2):402–12

ULTRASTRUCTURE

Basal lamina is not a barrier to neural crest cell emigration: documentation by TEM and by immunofluorescent and immunogold labelling. Martins-Green M, et al. **Development** 1987 Nov;101(3):517–33

NEURAL INHIBITION

Pre- and post-synaptic aspects of GABA-mediated synaptic inhibition in cultured rat hippocampal neurons. Harrison NL, et al. **Adv Biochem Psychopharmacol** 1988;45:73–85
Central effects of somatostatin: pressor response, AVP release, and sympathoinhibition. Rettig R, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):R588–94
Sensory receptors and reflex pathways of nonadrenergic inhibitory nervous system in feline airways. Inoue H, et al. **Am Rev Respir Dis** 1989 May;139(5):1175–8
Long-term depression. Ito M. **Annu Rev Neurosci** 1989; 12:85–102 (87 ref.)
Supraspinal inhibition of the two components of formalin-induced responses in rat dorsal horn neurons. Sotgiu ML. **Arch Ital Biol** 1989 Jun;127(3):219–23
Functional maturation of the GABAergic inhibition on dopamine-mediated behaviours during the neonatal period in the mouse. Tirelli E. **Behav Brain Res** 1989 May 1; 33(1):83–95
Lateral hypothalamic stimulation can augment or attenuate nucleus gigantocellularis escape: evidence for appetite-associated aversion amelioration. Simson PE, et al. **Behav Neurosci** 1989 Jun;103(3):612–20
Coma associated with flaccidity produced by fluid-percussion concussion in the cat. II: Contribution of activity in the pontine inhibitory system. Katayama Y, et al. **Brain Inj** 1988 Jan-Mar;2(1):51–66
Synaptic inhibition of phrenic motoneurones evoked by stimulation of the superior laryngeal nerve. Bellingham MC, et al. **Brain Res** 1989 May 8;486(2):391–5
Commissural synapses, but not mossy fiber synapses, in hippocampal field CA3 exhibit associative long-term potentiation and depression. Chattarji S, et al. **Brain Res** 1989 Aug 21;495(1):145–50
Inhibitory influences on hypoglossal neural activity by stimulation of midpontine dorsal tegmentum in decerebrate cat. Kawahara K, et al. **Brain Res** 1989 Feb 6;479(1):185–9
Long-lasting reduction of dentate paired-pulse depression following LTP-inducing tetanic stimulations of perforant path. Maru E, et al. **Brain Res** 1989 Jan 23;478(1):112–20
Activity-induced depression of synaptic inhibition during LTP-inducing patterned stimulation. Pacelli GJ, et al. **Brain Res** 1989 May 1;486(1):26–32
Involvement of fast synaptic inhibition in the generation of high-frequency oscillation in central respiratory system. Schmid K, et al. **Brain Res** 1989 Apr 17;485(1):193–8
Identification of a GABA-activated chloride-mediated synaptic potential in rat pars intermedia. Williams PJ, et al. **Brain Res** 1989 Mar 27;483(1):130–4
Claustral influence on ipsi- and contralateral motor cortical areas, in the cat. Crescimanno G, et al. **Brain Res Bull** 1989 May;22(5):839–43
Potent inhibitory input to locus coeruleus from the nucleus prepositus hypoglossi. Ennis M, et al. **Brain Res Bull** 1989 May;22(5):793–803
Effects of lesion and stimulation of rat hypothalamic arcuate nucleus on the pain system. Hamba M. **Brain Res Bull** 1988 Nov;21(5):757–63
Paramedian reticular nucleus—sympathetic inhibition in spontaneously hypertensive rats. Lin AM, et al. **Brain Res Bull** 1988 Oct;21(4):651–7
Selective procaine inhibition of rat chorda tympani responses to electric taste stimulation. Ninomiya Y, et al. **Comp Biochem Physiol** [A] 1989;92(2):185–8
Intractable epilepsy [letter] Gordon N. **Dev Med Child Neurol** 1988 Dec;30(6):830
Inhibition in synchronously firing human hippocampal neurons. Isokawa-Akesson M, et al. **Epilepsy Res** 1989 May-Jun;3(3):236–47
Inhibitory control by substantia nigra of generalized epilepsy in the cat. Sabatino M, et al. **Epilepsy Res** 1988 Nov-Dec; 2(6):380–6
Decrementing expiratory neurons of the Bötzinger complex. II. Direct inhibitory synaptic linkage with ventral respiratory group neurons. Ezure K, et al. **Exp Brain Res** 1988;72(1):159–66
Intrastriatal dopaminergic grafts restore inhibitory control over striatal cholinergic neurons. Herman JP, et al. **Exp Brain Res** 1988;73(2):236–48
Inhibitory processes in development of seizure activity in hippocampal slices. Higashima M. **Exp Brain Res** 1988; 72(1):37–44
Inhibition of the responses of cat dorsal horn neurons to noxious skin heating by stimulation in medial or lateral medullary reticular formation. Pretel S, et al. **Exp Brain Res** 1988;72(1):51–62
Cutaneous control of group I pathways from ankle flexors to extensors in man. Rossi A, et al. **Exp Brain Res** 1988; 73(1):8–14
Ia afferents of the antagonist are inhibited presynaptically before the onset of a ballistic muscle contraction in man. Ruegg DG. **Exp Brain Res** 1989;74(3):663–6
Single medullary reticulospinal neurons exert postsynaptic inhibitory effects via inhibitory interneurons upon alpha-motoneurons innervating cat hindlimb muscles. Takakusaki K, et al. **Exp Brain Res** 1989;74(1):11–23
Suprarhinal cortex response to electrical stimulation of the lateral amygdala nucleus in the rat. Velasco JM, et al. **Exp Brain Res** 1989;74(1):168–72
Reduction of paired pulse inhibition in the CA1 region of the hippocampus by pilocarpine in naive and in amygdala-kindled rats. Michelson HB, et al. **Exp Neurol** 1989 Jun;104(3):264–71
Excitation and suppression of primary auditory fibres in the pigeon. Hill KG, et al. **Hear Res** 1989 May;39(1-2):37–48
Induced suppression in spike responses to tone-on-noise stimuli in the auditory nerve of the pigeon. Hill KG, et al. **Hear Res** 1989 May;39(1-2):49–62
Postexercise hypotension and sympathoinhibition in borderline hypertensive men. Floras JS, et al. **Hypertension** 1989 Jul;14(1):28–35
Recurrent inhibition in human spinal spasticity. Mazzocchio R, et al. **Ital J Neurol Sci** 1989 Jun;10(3):337–47
Tonic descending inhibition of the spinal cardio-sympathetic reflex in the cat. Müller UW, et al. **J Auton Nerv Syst** 1988 Aug;23(2):111–23
Studies of the inhibitory non-adrenergic neuromuscular transmission in the smooth muscle of the normal human intestine and from a case of Hirschsprung's disease. Zagorodnyuk VP, et al. **J Auton Nerv Syst** 1989 Feb; 26(1):51–60
Role of inhibitory mechanisms in staring spells. Fromm GH. **J Clin Neurophysiol** 1986 Oct;3(4):297–311 (66 ref.)
Common and specific inhibition in leg muscles of decapods: sharpened distinctions. Wiens TJ. **J Neurobiol** 1989 Jul; 20(5):458–69 (62 ref.)
Short-latency autogenic inhibition (IB inhibition) in human spasticity. Delwaide PJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1546–50
Extensor tone disinhibition from an infarction within the midline anterior cerebellar lobe [letter] Ringel RA, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1597–9
Urinary bladder and hindlimb afferent input inhibits activity of primate T2-T5 spinothalamic tract neurons. Brennan TJ, et al. **J Neurophysiol** 1989 Mar;61(3):573–88
Evidence that repetitive seizures in the hippocampus cause a lasting reduction of GABAergic inhibition. Kapur J, et al. **J Neurophysiol** 1989 Feb;61(2):417–26
Loss of inhibition precedes delayed spontaneous seizures in the hippocampus after tetanic electrical stimulation. Kapur J, et al. **J Neurophysiol** 1989 Feb;61(2):427–34
Activity-dependent disinhibition. I. Repetitive stimulation reduces IPSP driving force and conductance in the hippocampus in vitro. Thompson SM, et al. **J Neurophysiol** 1989 Mar;61(3):501–11
Corollary discharge inhibition and preservation of temporal information in a sensory nucleus of mormyrid electric fish. Bell CC, et al. **J Neurosci** 1989 Mar;9(3):1029–44
Evidence that glycine mediates the postsynaptic potentials that inhibit lumbar motoneurons during the atonia of active sleep. Chase MH, et al. **J Neurosci** 1989 Mar;9(3):743–51
Neuropeptide Y action in the rat hippocampal slice: site and mechanism of presynaptic inhibition. Colmers WF, et al. **J Neurosci** 1988 Oct;8(10):3827–37
GABA-mediated inhibition of locus coeruleus from the dorsomedial rostral medulla. Ennis M, et al. **J Neurosci** 1989 Aug;9(8):2973–81
Feedforward inhibition of the rat entorhinal cortex and subicular complex. Finch DM, et al. **J Neurosci** 1988 Jul; 8(7):2213–26
Heparin and heparan sulfate partially inhibit induction of acetylcholine receptor accumulation by nerve in Xenopus culture. Hirano Y, et al. **J Neurosci** 1989 May;9(5):1555–61
Determinants of patchy metabolic labeling in the somatosensory cortex of cats: a possible role for intrinsic inhibitory circuitry. Juliano SL, et al. **J Neurosci** 1989 Jan; 9(1):1–12
Response-dedicated trigger neurons as control points for behavioral actions: selective inhibition of lateral giant command neurons during feeding in crayfish. Krasne FB, et al. **J Neurosci** 1988 Oct;8(10):3703–12
Neurophysiology of magnocellular forebrain inputs to the olfactory bulb in the rat: frequency potentiation of field potentials and inhibition of output neurons. Nickell WT, et al. **J Neurosci** 1988 Dec;8(12):4492–502
Activation of GABAA receptors causes presynaptic and postsynaptic inhibition at synapses between muscle spindle afferents and motoneurons in the spinal cord of bullfrogs. Peng YY, et al. **J Neurosci** 1989 May;9(5):1516–22
Activation of GABAB receptors causes presynaptic inhibition at synapses between muscle spindle afferents and motoneurons in the spinal cord of bullfrogs. Peng YY, et al. **J Neurosci** 1989 May;9(5):1502–15
Evidence for glycine as an inhibitory neurotransmitter of vestibular, reticular, and prepositus hypoglossi neurons that project to the cat abducens nucleus. Spencer RF, et al. **J Neurosci** 1989 Aug;9(8):2718–36
The effects of postsynaptic levels of cyclic AMP on exc atory and inhibitory responses of an identified central neuron. Wolszon LR, et al. **J Neurosci** 1989 Mar; 9(3):784–97
Autonomic drug effects after chronic lowering of ocular cholinergic input. I. Pupillary responses. Colasanti BK. **J Ocul Pharmacol** 1987 Spring;3(1):23–9
Cianergoline lowers intraocular pressure in rabbits and monkeys and inhibits contraction of the cat nictitans by suppressing sympathetic neuronal function. Potter DE, et al. **J Ocul Pharmacol** 1987 Winter;3(4):309–21
Changes in binomial parameters of quantal release at crustacean motor axon terminals during presynaptic inhibition. Atwood HL, et al. **J Physiol (Lond)** 1988 Aug; 402:177–93
Inhibition of neurones transmitting non-monosynaptic Ia excitation to human wrist flexor motoneurones. Malmgren K, et al. **J Physiol (Lond)** 1988 Nov;405:765–83
Acute kindling: discrepancy between lengthening of after-discharge duration and increase of field EPSP evoked in kindled site during interstimulation interval. Jibiki I, et al. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):323–30
Reciprocal inhibition in patients with hand cramps. Panizza ME, et al. **Neurology** 1989 Jan;39(1):85–9
Spatial distribution of the inhibitory effect of peripheral non-informative cues on simple reaction time to non-fixated visual targets. Berlucchi G, et al. **Neuropsychologia** 1989;27(2):201–21
Repeated exposure to sham testing procedures reduces reflex withdrawal and hot-plate latencies: attenuation of tonic descending inhibition? Gamble GD, et al. **Neurosci Lett** 1989 Jan 30;96(3):312–7
Candidate interneurons mediating peripherally evoked disynaptic inhibition of masseter motoneurons of both sides. Kamogawa H, et al. **Neurosci Lett** 1988 Dec 19; 95(1-3):149–54
Phrenic-to-phrenic inhibition and excitation in spinal cats. Macron JM, et al. **Neurosci Lett** 1988 Aug 15;91(1):24–9
A GABA-mediated inhibition of neurones in the nucleus tractus solitarius of the cat that respond to electrical stimulation of the carotid sinus nerve. McWilliam PN, et al. **Neurosci Lett** 1988 Dec 5;94(3):321–6
Excitatory and inhibitory effects on human spinal motoneurones from magnetic brain stimulation. Mills KR. **Neurosci Lett** 1988 Dec 5;94(3):297–302
Inhibition of spinal nociceptive neurons by excitation of cell bodies or fibers of passage at various brainstem sites in the cat. Sandkühler J, et al. **Neurosci Lett** 1988 Oct 31; 93(1):67–72
Twenty-four-hour post-seizure inhibition during limbic kindling requires seizure generalization. Stripling JS, et al. **Neurosci Lett** 1989 Apr 24;99(1-2):208–13
Modulation of an inhibitory reflex in single motor units in human masseter at different joint angles. Türker KS, et al. **Neurosci Lett** 1989 May 22;100(1-3):157–63
Effects of chloralose-urethane anesthesia on single-axon reciprocal Ia IPSPs in the cat. Yuan CS, et al. **Neurosci Lett** 1988 Dec 5;94(3):291–6
Experimentally induced postinhibitory rebound in rat nucleus ambiguus is dependent on hyperpolarization parameters and membrane potential. Dean JB, et al. **Neurosci Res** 1989 Jun;6(5):487–93
Long latency inhibition of H-reflex recovery by cutaneous tactile stimulation in man: a cutaneous transcortical reflex. Chandran AP, et al. **Neuroscience** 1988 Dec;27(3):1037–48
Alterations in excitatory and GABAergic inhibitory connections in hippocampal transplants. Freund TF, et al. **Neuroscience** 1988 Nov;27(2):373–85
The effects of brainstem peribrachiai stimulation on

perigeniculate neurons: the blockage of spindle waves. Hu B, et al. **Neuroscience** 1989;31(1):1–12

The effects of brainstem peribrachial stimulation on neurons of the lateral geniculate nucleus. Hu B, et al. **Neuroscience** 1989;31(1):13–24

Fast hyperpolarization following an excitatory postsynaptic potential in cat bladder parasympathetic neurons. Kumamoto E, et al. **Neuroscience** 1989;30(3):671–81

Linear relation between the magnitude of long-term potentiation in the dentate gyrus and associative learning in the rat. A demonstration using commissural inhibition and local infusion of an N-methyl-D-aspartate receptor antagonist. Laroche S, et al. **Neuroscience** 1989; 28(2):375–86

Gamma-aminobutyric acid and afferent inhibition in the cat and rat ventrobasal thalamus. Salt TE. **Neuroscience** 1989; 28(1):17–26

Histamine H2 receptor mediates postsynaptic excitation and presynaptic inhibition in submucous plexus neurons of the guinea-pig. Tokimasa T, et al. **Neuroscience** 1989; 28(3):735–44

Primary afferent depolarization and presynaptic inhibition in the mammalian spinal cord. Rudomin P. **P R Health Sci J** 1988 Aug;7(2):155–66 (82 ref.)

Inhibitory effect of the lateral reticular nucleus on neurons of the gigantocellularis nucleus which respond to noxious stimuli. Sotgiu ML. **Pain** 1988 Dec;35(3):355–62

Observations on the effect of an excitatory–inhibitory stimulus on the landing reaction of the fly, Calliphoridae. Negrin NS. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):823–9

Coerulospinal influence on recurrent inhibition of spinal motonuclei innervating antagonistic hindleg muscles of the cat. Fung SJ, et al. **Pflugers Arch** 1988 Sep;412(4):346–53

Tonic descending inhibition and spinal nociceptive transmission. Duggan AW, et al. **Prog Brain Res** 1988; 77:193–211 (103 ref.)

Electrophysiological evidence for the activation of descending inhibitory controls by nociceptive afferent pathways. Le Bars D, et al. **Prog Brain Res** 1988;77:275–99 (127 ref.)

Analysis of recurrent inhibitory circuit in rat thalamus: neurophysiology of the thalamic reticular nucleus. Shosaku A, et al. **Prog Neurobiol** 1989;32(2):77–102 (112 ref.)

Activity-dependent enhancement of presynaptic inhibition in Aplysia sensory neurons. Small SA, et al. **Science** 1989 Mar 24;243(4898):1603–6

Electrophysiology of GABAA and GABAB receptor subtypes. Bormann J. **Trends Neurosci** 1988 Mar; 11(3):112–6 (48 ref.)

[Evidence of presynaptic inhibitory activity in mechanosensory afferents directed to the solitary nucleus in frogs] Gilberti G, et al. **Boll Soc Ital Biol Sper** 1988 Apr;64(4):353–60 (Eng. Abstr.) **(Ita)**

[Inhibition of the response of Deiters nucleus neurons to serotonin in the presence of antagonists] Licata F, et al. **Boll Soc Ital Biol Sper** 1988 Dec;64(12):1121–8 (Eng. Abstr.) **(Ita)**

[Interpretation of the regulatory mechanisms of the occurrence of epileptic activity in neural networks. II. The structure of neural networks and the possibility of paroxysmal discharges: the role of inhibitory systems] Trąbka W. **Przegl Lek** 1988;45(12):847–50 (20 ref.) **(Pol)**

[Selective electric-current inhibition of signals from the C fibers in nerve fiber microbundles: a method for identifying A and C afferents] Revenko SV, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):395–6 (Eng. Abstr.) **(Rus)**

[Antibodies against glial glycolipid antigens affect synaptic potentiation and depression in the frog nerve-muscle synapse] Vinogradova IM, et al. **Dokl Akad Nauk SSSR** 1989;304(6):1504–7 **(Rus)**

[System principles in the organization of neurons carrying out cortical inhibition] Batuev AS, et al. **Fiziol Zh** 1989 May-Jun;35(3):84–91 (22 ref.) (Eng. Abstr.) **(Rus)**

[Results of studies of the processes of excitation and inhibition in neurons of the cerebral cortex and the thalamus] Serkov FN. **Fiziol Zh** 1988 Sep-Oct;34(5):3–21 (32 ref.) (Eng. Abstr.) **(Rus)**

[Nonadrenergic inhibition in smooth muscles of the large intestines of patients with Hirschsprung disease] Zagorodniuk VP, et al. **Fiziol Zh** 1988 Sep-Oct;34(5):50–5 (Eng. Abstr.) **(Rus)**

[Inhibitory reactions of the neurosecretory cells of the supraoptic hypothalamic nucleus in lactating rats to subiculum stimulation] Alekseev NP, et al. **Neirofiziologiia** 1988;20(4):431–7 (Eng. Abstr.) **(Rus)**

[Reactions of the neuronal networks with various mechanisms for the termination of activity to external de- and hyperpolarization exposures] Degtiarenko AM. **Neirofiziologiia** 1988;20(4):438–47 (Eng. Abstr.) **(Rus)**

[Participation of the central noradrenergic system in the mechanisms of latent inhibition] Loskutova LV. **Zh Vyssh Nerv Deiat** 1988 Nov-Dec;38(6):1113–8 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Inhibition of acoustic startle in the rat by a footshock prestimulus: effects of morphine and naloxone. Leitner DS. **Behav Neurosci** 1988 Aug;102(4):526–33

Pro-Leu-Gly-NH2 serves as a conditioned stimulus in the acquisition of conditioned tolerance. McLaughlin CR, et al. **Behav Neurosci** 1989 Apr;103(2):447–51

Adenosine antagonists delay hypoxia-induced depression of neuronal activity in hippocampal brain slice. Fowler JC. **Brain Res** 1989 Jun 26;490(2):378–84

Carbachol depresses synaptic responses in the medial but not the lateral perforant path. Kahle JS, et al. **Brain Res** 1989 Mar 13;482(1):159–63

Effects of LTP-inducing tetanic stimulations of the perforant path on the commissural inhibition and facilitation of dentate granule cell discharge. Kanda M, et al. **Brain Res** 1989 Apr 10;484(1–2):325–32

Spreading depression induced by 100 mM KCl in caudate is blocked by local anesthesia of the substantia nigra. Kasser RJ, et al. **Brain Res** 1988 Dec 20;475(2):333–44

The lateral vestibular nucleus is a site for the depressant action of benzodiazepines on the crossed extensor reflex. Kawasaki K, et al. **Brain Res** 1988 Oct 4;461(2):282–9

Quisqualate, kainate and NMDA can initiate spreading depression in the turtle cerebellum. Lauritzen M, et al. **Brain Res** 1988 Dec 20;475(2):317–27

Potassium ions play a role in the glycine-induced inhibition of rat substantia nigra zona compacta neurones. Mercuri NB, et al. **Brain Res** 1988 Oct 11;462(1):199–203

Inhibitory effect of GABA on cerebrovascular sympathetic neurotransmission. Miranda FJ, et al. **Brain Res** 1989 Jul 17;492(1–2):45–52

Electrophysiological effects of locally applied noradrenergic agents at cerebellar Purkinje neurons: receptor specificity. Parfitt KD, et al. **Brain Res** 1988 Oct 18;462(2):242–51

Selective depression of GABA-mediated IPSPs by somatostatin in area CA1 of rabbit hippocampal slices. Scharfman HE, et al. **Brain Res** 1989 Jul 31;493(2):205–11

Optic tract stimulation evokes GABAA but not GABAB IPSPs in the rat ventral lateral geniculate nucleus. Soltesz I, et al. **Brain Res** 1989 Feb 6;479(1):49–55

Opioid inhibition of spontaneously active neurons of the rat arcuate nucleus in vitro. Loose MD, et al. **Brain Res Bull** 1989 May;22(5):819–23

Histamine modulates local inhibition in the rat hippocampal slice. Springfield SA, et al. **Cell Mol Neurobiol** 1988 Dec; 8(4):431–45

Sympathoinhibitory responses to digitalis glycosides in heart failure patients. Direct evidence from sympathetic neural recordings. Ferguson DW, et al. **Circulation** 1989 Jul; 80(1):65–77

Motoneurone recurrent inhibition is enhanced by L-acetylcarnitine in humans. Schieppati M, et al. **Electromyogr Clin Neurophysiol** 1989 Mar;29(2):73–80

Blockade of sustained repetitive action potentials in cultured spinal cord neurons by zonisamide (AD 810, CI 912), a novel anticonvulsant. Rock DM, et al. **Epilepsy Res** 1989 Mar-Apr;3(2):138–43

The role of inhibitory processes in the formation of functional properties of neurons in vibrissal projection zone of the cat somatosensory cortex. Batuev AS, et al. **Exp Brain Res** 1989;76(1):198–206

Postsynaptic depression induced by isoflurane and Althesin in neocortical neurons. el-Beheiry H, et al. **Exp Brain Res** 1989;75(2):361–8

Blockade of intracortical inhibition in kitten striate cortex: effects on receptive field properties and associated loss of ocular dominance plasticity. Ramoa AS, et al. **Exp Brain Res** 1988;73(2):285–96

Spontaneous junction potentials and slow waves in the circular muscle of isolated segments of guinea-pig ileum. Smith TK. **J Auton Nerv Syst** 1989 Jul;27(2):147–54

GABAergic inhibition shapes temporal and spatial response properties of pyramidal cells in the electrosensory lateral line lobe of gymnotiform fish. Shumway CA, et al. **J Comp Physiol [A]** 1989 Jan;164(3):391–407

Activity-dependent disinhibition. III. Desensitization and GABAB receptor-mediated presynaptic inhibition in the hippocampus in vitro. Thompson SM, et al. **J Neurophysiol** 1989 Mar;61(3):524–33

Activity-dependent disinhibition. II. Effects of extracellular potassium, furosemide, and membrane potential on ECl- in hippocampal CA3 neurons. Thompson SM, et al. **J Neurophysiol** 1989 Mar;61(3):512–23

Intracerebroventricular morphine decreases descending inhibitions acting on lumbar dorsal horn neuronal activities related to pain in the rat. Bouhassira D, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):332–42

Sympathoadrenal activity and sympathoinhibitory hormones during acute and chronic nicotine application in dogs. Bassenge E, et al. **Klin Wochenschr** 1988;66 Suppl 11:12–20

Temperature-dependence of reflex transmission in the neonatal rat spinal cord, in vitro: influence on strychnine- and bicuculline-sensitive inhibition. Deshpande SB, et al. **Neuropharmacology** 1988 Oct;27(10):1033–7

Apomorphine-induced inhibition of substantia nigra dopamine neurons: effects of unilateral injection through the internal carotid artery. Akaoka H, et al. **Neurosci Lett** 1989 Mar 27;98(2):205–10

Presynaptic effect of gamma-aminobutyric acid on the inhibitory nerve and nerve terminals in the crayfish neuromuscular junction. Finger W, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):129–34

Inhibition by cortisol of neurons in the paraventricular nucleus of the hypothalamus in adrenalectomized rats; an in vitro study. Kasai M, et al. **Neurosci Lett** 1988 Aug 15; 91(1):59–64

GABA-mediated inhibition in nucleus paragigantocellularis lateralis in the cat. Lovick TA. **Neurosci Lett** 1988 Oct 5;92(2):182–6

Peculiarities of receptor-channel complexes for inhibitory mediators in the membranes of lamprey spinal cord neurones. Safronov BV, et al. **Neurosci Lett** 1989 Jul 17; 102(1):82–6

Changes of transcranially evoked motor responses in man by midazolam, a short acting benzodiazepine. Schönle PW, et al. **Neurosci Lett** 1989 Jul 3;101(3):321–4

Effects of melatonin on neuronal activity in the rat suprachiasmatic nucleus in vitro. Shibata S, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):140–4

Blockade of a late inhibitory postsynaptic potential in hippocampal CA3 neurons in vitro reveals a late depolarizing potential that is augmented by pentobarbital. Thalmann RH. **Neurosci Lett** 1988 Dec 19;95(1–3):155–60

Effect of GABA (gamma-aminobutyric acid) on neurotransmission in inferior colliculus slices from the guinea pig. Yamauchi R, et al. **Neurosci Res** 1989 Jun; 6(5):446–55

Muscarinic inhibition of quantal transmitter release from the magnesium-paralysed frog sartorius muscle. Arenson MS. **Neuroscience** 1989;30(3):827–36

Selective depression of synaptic transmission by tetanus toxin: a comparative study on hippocampal and neostriatal slices. Calabresi P, et al. **Neuroscience** 1989;30(3):663–70

Long-term loss of paired pulse inhibition in the kainic acid-lesioned hippocampus of the rat. Cornish SM, et al. **Neuroscience** 1989;28(3):563–71

Tachykinins enhance the depression of spinal nociceptive neurons caused by cutaneously applied vibration in the cat. Salter MW, et al. **Neuroscience** 1988 Oct;27(1):243–9

Repeated administration of SCH 23390 enhances the SKF 38393-induced inhibition in the rat hippocampus. Smialowski A, et al. **Neuroscience** 1989;28(2):409–12

Pentobarbital augments serotonin-mediated inhibition of cerebellar Purkinje cells. Strahlendorf JC, et al. **Neuroscience** 1988 Oct;27(1):107–15

Modulatory role of serotonin on GABA-elicited inhibition of cerebellar Purkinje cells. Strahlendorf JC, et al. **Neuroscience** 1989;30(1):117–25

Postnatal development of GABA-mediated synaptic inhibition in rat hippocampus. Swann JW, et al. **Neuroscience** 1989;28(3):551–61

Dose-dependent inhibition by naloxone of nociceptive activity evoked in the rat thalamus. Jurna I. **Pain** 1988 Dec; 35(3):349–54

Electrophysiological studies on the effects of opiates on dorsal horn nociceptive neurones at 51 atmospheres absolute. Smallman K, et al. **Pain** 1989 Jul;38(1):57–64

Effects of (–)baclofen on inhibitory neurons in the guinea pig hippocampal slice. Misgeld U, et al. **Pflugers Arch** 1989 Jun;414(2):139–44

CCK inhibits real and sham feeding in gastric vagotomized rats. Le Sauter J, et al. **Physiol Behav** 1988;44(4–5):527–34

Inhibitory influence of oxytocin infusion on contingent negative variation and some memory tasks in normal men. Geenen V, et al. **Psychoneuroendocrinology** 1988; 13(5):367–75

Electrophysiological and pharmacological characterization of identified nigrostriatal and mesoaccumbens dopamine neurons in the rat. Clark D, et al. **Synapse** 1988;2(5):474–85

D1 receptor activation enhances sciatic nerve stimulation-induced inhibition of nigrostriatal dopamine neurons. Kelland MD, et al. **Synapse** 1989;3(4):339–45

Type I and type II pyrethroids increase inhibition in the hippocampal dentate gyrus of the rat. Joy RM, et al. **Toxicol Appl Pharmacol** 1989 May;98(3):398–412

[Effect of ethanol on the inhibitory pause in the discharge of cerebellar Purkinje cells in rats] Lukanidina VE. **Fiziol Zh SSSR** 1989 Feb;75(2):257–60 **(Rus)**

[Voltage dependence of the cobalt-induced blockage of synaptic transmission between the photoreceptors and horizontal cells of the retina] Byzov AL. **Neirofiziologiia** 1988;20(3):374–83 (Eng. Abstr.) **(Rus)**

[Furosemide depression of the dorsal root potentials and of the presynaptic inhibition of monosynaptic reflexes in the cat spinal cord] Ruchinskaia TIu, et al. **Neirofiziologiia** 1988;20(4):561–3 (Eng. Abstr.) **(Rus)**

[Effect of the enkephalin derivative DAGO on neuronal behavior and activity in the neocortex and hippocampus of rabbits during the acquisition of conditioned defense and inhibitory reflexes] Shul'gina GI, et al. **Zh Vyssh Nerv Deiat** 1989 Mar-Apr;39(2):309–19 (Eng. Abstr.) **(Rus)**

NEURAL PATHWAYS

Neurons, neural networks and molecular biology. **Bioessays** 1989 Feb-Mar;10(2–3):43–93

Nerve sparing retroperitoneal lymphadenectomy in clinical stage I, low stage II and after chemotherapy in stage III nonseminomatous testicular cancer. Javadpour N. **Prog Clin Biol Res** 1988;277:53–62

ANATOMY & HISTOLOGY

Topographic organization of ascending dopaminergic projections. Fallon JH. **Ann N Y Acad Sci** 1988;537:1–9 (19 ref.)

Architecture and intrinsic connections of the prefrontal cortex in the rhesus monkey. Barbas H, et al. **J Comp Neurol** 1989 Aug 15;286(3):353–75

CYTOLOGY

Telencephalic projections of the A8 dopamine cell group. Deutch AY, et al. **Ann N Y Acad Sci** 1988;537:27–50 (64 ref.)

Segregation and overlap of callosal and association neurons in frontal and parietal cortices of primates: a spectral and coherency analysis. Johnson PB, et al. **J Neurosci** 1989 Jul;9(7):2313–26

DRUG EFFECTS

The relative contribution of ascending and descending serotonergic pathways in p-chloroamphetamine-induced antinociception. Bjørkum AA, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):135–40

Amiloride suppresses the induction of long-term potentiation in the mossy fiber pathway but not in the commissural/associational pathway of the hippocampal CA3 region. Kamiya H. **Synapse** 1989;3(3):286–7

METABOLISM

Absence of P2-purinoceptors in hippocampal pathways. Stone TW, et al. **Br J Pharmacol** 1989 Jun;97(2):631–5

PHYSIOLOGY

Influence of clonazepam on epileptic after-discharges induced by perforant path stimulation in rats. Kubová H, et al. **Arch Int Pharmacodyn Ther** 1989 May–Jun;299:35–43

Heterogeneity of stimulated dopamine overflow within rat striatum as observed with in vivo voltammetry. May LJ, et al. **Brain Res** 1989 May 22;487(2):311–20

Increased dopamine and serotonin metabolism in rat nucleus accumbens produced by intracranial self-stimulation of medial forebrain bundle as measured by in vivo microdialysis. Nakahara D, et al. **Brain Res** 1989 Aug 21; 495(1):178–81

Intra-raphe neurokinin-induced hyperactivity: effects of 5,7-dihydroxytryptamine lesions. Paris JM, et al. **Brain Res** 1989 Jan 2;476(1):183–8

The region of medial forebrain bundle is involved in tonic maintenance of arterial pressure and heart rate. Ohta H, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:353–60

Involvement of a central nervous pathway in yohimbine-induced insulin secretion. Ribes G, et al. **Eur J Pharmacol** 1989 Mar 21;162(2):207–14

Terminal arbors of individual "feedback" axons projecting from area V2 to V1 in the macaque monkey: a study using immunohistochemistry of anterogradely transported Phaseolus vulgaris-leucoagglutinin. Rockland KS, et al. **J Comp Neurol** 1989 Jul 1;285(1):54–72

Cybernetic model of psychophysiologic pathways: II. Consciousness of tension and kinesthesia. Leisman G. **J Manipulative Physiol Ther** 1989 Jun;12(3):174–91 (42 ref.)

Medial forebrain bundle stimulation or D-2 dopamine receptor activation increases preproenkephalin mRNA in rat striatum. Bannon MJ, et al. **J Neurochem** 1989 Mar; 52(3):859–62

Intracranial reward after 5,6-dihydroxytryptamine: further evidence for serotonin's inhibitory role. Poschel BP, et al. **Life Sci** 1974 Oct 15;15(8):1515–22

Relationship between rotational behaviour induced by apomorphine and caffeine in rats with unilateral lesion of the nigrostriatal pathway. Casas M, et al. **Neuropharmacology** 1989 Apr;28(4):407–9

Involvement of spinal monoaminergic pathways in antinociception produced by substance P and neurotensin in rodents. Naranjo JR, et al. **Neuropharmacology** 1989 Mar; 28(3):291–8

Frequency modulation of the neuronal theta bursts in the rabbit's septum deprived of ascending afferent input. Brazhnik ES, et al. **Neurosci Behav Physiol** 1989 Jan–Feb; 19(1):26–33

Opposite influences of dopaminergic pathways to the prefrontal cortex or the septum on the dopaminergic transmission in the nucleus accumbens. An in vivo voltammetric study. Louilot A, et al. **Neuroscience** 1989; 29(1):45–56

Neuroanatomical substrates involved in the control of food intake. Kuenzel WJ. **Poult Sci** 1989 Jul;68(7):926–37 (43 ref.)

Memory storage and neural systems. Alkon DL. **Sci Am** 1989 Jul;261(1):42–50

[The influence of blocking habenulae or medial forebrain bundles on the analgesic effect elicited by administration L-glutamic acid into the septa] Liu GJ, et al. **Sheng Li Hsueh Pao** 1988 Dec;40(6):547–52 (Eng. Abstr.) **(Chi)**

[Anatomo-functional considerations on the pathways generated by cortical somatosensory evoked potentials of the median nerve. Study in 6 hemispherectomized patients] Villanueva J, et al. **Arch Neurobiol (Madr)** 1988 Nov–Dec; 51(6):316–23 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

The physiological basis of pain pathways and the segmental controls of pain. Besson JM. **Acta Anaesthesiol Belg** 1988; 39(3 Suppl 2):47–51

Electrophysiological evaluation of the patient with acute spinal cord injury. Grundy BL, et al. **Crit Care Clin** 1987 Jul;3(3):519–48 (89 ref.)

Electrophysiology of the corticomotoneurone pathways in patients with movement disorders. Thompson PD, et al. **Mov Disord** 1986;1(2):113–7

Localization of left free-wall and posteroseptal accessory atrioventricular pathways by direct recording of accessory pathway activation. Jackman WM, et al. **PACE** 1989 Jan; 12(1 Pt 2):204–14 (36 ref.)

SURGERY

Corpus callosum section and other disconnection procedures for medically intractable epilepsy. Spencer SS. **Epilepsia** 1988;29 Suppl 2:S85–99

Fulguration of accessory pathways in any location: report of seventy cases. Warin JF, et al. **PACE** 1989 Jan;12(1 Pt 2):215–8

NEURAL TRANSMISSION

Synaptic and non-synaptic communication in the brain: morphological, physiological and behavioral aspects. Proceedings of a workshop. Nijmegan, The Netherlands, November 29, 1988. **Acta Morphol Neerl Scand** 1988–89; 26(2–3):65–190

Synaptic and nonsynaptic release of neuromediators in the central nervous system. Buma P. **Acta Morphol Neerl Scand** 1988–89;26(2–3):81–113 (65 ref.)

Issues involved in the transmission of chemical signals through the brain extracellular space. Nicholson C. **Acta Morphol Neerl Scand** 1988–89;26(2–3):69–80 (38 ref.)

Localization and pharmacology of some dopamine receptor complexes in the striatum and the pituitary gland: synaptic and son-synaptic communication. Stoof JC. **Acta Morphol Neerl Scand** 1988–89;26(2–3):115–30 (53 ref.)

Peripheral nerve function during hyperglycemic clamping in healthy subjects. Sindrup SH, et al. **Acta Neurol Scand** 1988 Aug;78(2):141–5

The role of tail skin temperature in the facilitation of the tail-flick reflex after spinal transection or interference with descending serotonergic neurotransmission. Eide PK, et al. **Acta Physiol Scand** 1989 Apr;135(4):427–33

Some aspects of the communicational and computational organization of the brain. Fuxe K, et al. **Acta Physiol Scand** 1989 Mar;135(3):203–16

Sympathetic transmission in small mesenteric arteries from the rat: highly calcium-dependent at low stimulation rates. Sjöblom-Widfeldt N, et al. **Acta Physiol Scand** 1989 Apr; 135(4):505–11

On premotoneuronal integration in cat and man. Malmgren K. **Acta Physiol Scand Suppl** 1988;576:1–53

Studies on central D1 receptors role in volume transmission, neuroendrocrine regulation and release of noradrenaline. Fuxe K, et al. **Adv Exp Med Biol** 1988;235:83–119 (73 ref.)

The role of NMDA and non-NMDA receptors in the central vestibular synaptic transmission. Knöpfel T, et al. **Adv Otorhinolaryngol** 1988;42:229–33

Primary olfactory projections and the nervus terminalis in the African lungfish: implications for the phylogeny of cranial nerves. von Bartheld CS, et al. **Am J Anat** 1988 Aug;182(4):325–34

Computer algorithm for modeling transmission over one or two conduction pathways through AV node. Dorveaux LD, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1247–53

Peripheral reflex pathways involving abdominal viscera: transmission of impulses through prevertebral ganglia. King BF, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G581–8

Patterns of fast synaptic cholinergic activation of neurons in the celiac ganglia of cats. Niel JP, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G759–66

Autonomic innervation of reproductive organs: analysis of the neurons whose axons project in the main penile nerve in the pelvic plexus of the rat. Dail WG, et al. **Anat Rec** 1989 May;224(1):94–101

Histologic and physiologic evaluation of electrically stimulated peripheral nerve: considerations for the selection of parameters. Agnew WF, et al. **Ann Biomed Eng** 1989; 17(1):39–60

In vitro blockade of neuromuscular transmission by monoclonal anti-acetylcholine receptor antibodies. Maselli RA, et al. **Ann N Y Acad Sci** 1988;540:523–4

Hypoxia-sensitive hyperexcitability of the intramuscular nerve axons in Isaacs' syndrome. Oda K, et al. **Ann Neurol** 1989 Feb;25(2):140–5

Chemical coding of neurons and plurichemical transmission. Furness JB, et al. **Annu Rev Pharmacol Toxicol** 1989; 29:289–306 (112 ref.)

Purinergic supersensitivity following sympathectomy adds further support to co-transmission in the rat vas deferens. Rohde GC, et al. **Arch Int Pharmacodyn Ther** 1988 Jul–Aug;294:99–111

In vitro low frequency electromagnetic field effect on fast axonal transport. Zborowski M, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):669–73

Lateral hypothalamic stimulation can augment or attenuate nucleus gigantocellularis escape: evidence for appetite-associated aversion amelioration. Simson PE, et al. **Behav Neurosci** 1989 Jun;103(3):612–20

The role of giant axons in studies of the nerve impulse. Keynes RD. **Bioessays** 1989 Feb–Mar;10(2–3):90–3 (44 ref.)

Identification of multifiber neural spike trains by interval prediction and morphology. Lu JP, et al. **Biomed Sci Instrum** 1989;25:23–6

Directionality of neural signals in central nervous system neural networks. Turbes CC, et al. **Biomed Sci Instrum** 1989;25:1–5

Stochastic variables responsible for observed saccadic variability. Westine DM, et al. **Biomed Sci Instrum** 1989; 25:141–8

Phase conjugation model for information transfer in the nervous system. Kosugi Y, et al. **Biosystems** 1989; 22(3):215–21

Histamine H3-receptors inhibit cholinergic neurotransmission in guinea-pig airways. Ichinose M, et al. **Br J Pharmacol** 1989 May;97(1):13–5

Development of cholinergic nerve transmission in the chick oesophagus. Miyazaki H, et al. **Br J Pharmacol** 1989 Mar; 96(3):623–30

Selective vulnerability of synaptic transmission in hippocampus to ex-vivo ischemia: effects of extracellular ionic substitution in the postischemic period. Ashton D, et al. **Brain Res** 1989 May 22;487(2):402–6

Evidence for excitatory amino acid transmission between mesencephalic nucleus of V afferents and jaw-closer motoneurons in the guinea pig. Chandler SH. **Brain Res** 1989 Jan 16;477(1–2):252–64

Sensory modulation of hippocampal transmission. I. Opposite effects on CA1 and dentate gyrus synapsis. Herreras O, et al. **Brain Res** 1988 Oct 4;461(2):290–302

The role of dendritic diameters in maximizing the effectiveness of synaptic inputs. Holmes WR. **Brain Res** 1989 Jan 23;478(1):127–37

Electrical coupling between secondary hair cells in the statocyst of the squid Alloteuthis subulata. Williamson R. **Brain Res** 1989 May 1;486(1):67–72

Direct evidence for electrical coupling among rat supraoptic nucleus neurons. Yang QZ, et al. **Brain Res** 1988 Oct 25; 463(1):47–56

Loss of neurons in the rat basal forebrain cholinergic projection system after prolonged intake of ethanol. Arendt T, et al. **Brain Res Bull** 1988 Oct;21(4):563–9

Slow cardioacceleration mediated by noncholinergic transmission in the stellate ganglion of the cat. Bachoo M, et al. **Can J Physiol Pharmacol** 1988 Aug;66(8):1066–74

The involvement of nonspiking cells in long-term potentiation of synaptic transmission in the hippocampus. Sastry BR, et al. **Can J Physiol Pharmacol** 1988 Jun; 66(6):841–4

Excitatory responses of trigeminal neurons to substance P suggest involvement in sensory transmission. Spigelman I, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):845–8

Infusions of adrenaline stimulate noradrenergic transmission in man, but adrenaline is not released later as a co-transmitter. Gordon RD, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:329–35

Hippocampal synaptic transmission: regulation of the NMDA receptor-mediated component. Herron CE, et al. **Comp Biochem Physiol [A]** 1989;93(1):203–10 (84 ref.)

The role of excitatory amino acids in synaptic transmission in the hippocampus. Lambert JD, et al. **Comp Biochem Physiol [A]** 1989;93(1):195–201 (64 ref.)

Postsynaptic modulation of cholinergic transmission by endogenous substances. Akasu T, et al. **Comp Biochem Physiol [C]** 1988;91(1):241–6

Protein phosphorylation of nicotinic acetylcholine receptors. Huganir RL, et al. **Crit Rev Biochem Mol Biol** 1989; 24(3):183–215 (187 ref.)

Axonal transport and central visual projections of ganglion cells in congenitally blind chickens. Ulshafer RJ, et al. **Curr Eye Res** 1989 Mar;8(3):321–7

Evolution of motor, IA and cutaneous nerve-fibre conduction velocities in premature and fullterm newborns. Khater-Boidin J, et al. **Dev Med Child Neurol** 1989 Feb; 31(1):47–55

Electrophysiological assessment of maturation of regenerating motor nerve fibres in infants with brachial plexus palsy. Kwast O. **Dev Med Child Neurol** 1989 Feb; 31(1):56–65

The cortical distribution of muscle and cutaneous afferent projections from the human foot. Macefield G, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jun; 72(6):518–28

The axon reflex as ephaptic transmission: an hypothesis. Gilchrist JM. **Electromyogr Clin Neurophysiol** 1988 May; 28(4):209–13

Changes in human alpha-motoneurone excitability following mechanical muscle stimuli. Claus D, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(3):140–3

Evidence that ATP does not act as a cotransmitter with noradrenaline in field-stimulated preparations of rat seminal vesicles. Chin PF, et al. **Eur J Pharmacol** 1988 Oct 18; 155(3):309–12

Muscarinic M1- and M2-receptors mediating opposite effects on neuromuscular transmission in rabbit vas deferens. Eltze M. **Eur J Pharmacol** 1988 Jul 7;151(2):205–21

Facilitation of transmission in the pathway of non-monosynaptic Ia excitation to wrist flexor motoneurones at the onset of voluntary movement in man. Baldissera F, et al. **Exp Brain Res** 1989;74(2):437–9

Electrophysiological study of the tangential vestibular nucleus of the chick embryo "in vitro". Peusner KD, et al. **Exp Brain Res** 1989;74(1):80–8

Neurochemical heterogeneity among corticofugal and callosal projections. Dinopoulos A, et al. **Exp Neurol** 1989 Jul;105(1):36–44

Additive feature of long-term potentiation and phorbol ester-induced synaptic enhancement in the mossy

fiber–CA3 synapse. Kamiya H, et al. **Exp Neurol** 1988 Dec; 102(3):314–7

Neural regulation of mRNA for the alpha-subunit of acetylcholine receptors: role of neuromuscular transmission. Lipsky NG, et al. **Exp Neurol** 1989 Aug; 105(2):171–6

Evidence for dual serotonergic projections to neocortex: axons from the dorsal and median raphe nuclei are differentially vulnerable to the neurotoxin p-chloroamphetamine (PCA). Mamounas LA, et al. **Exp Neurol** 1988 Oct;102(1):23–36

Collateral axonal projections from the A1 noradrenergic cell group to the paraventricular nucleus and bed nucleus of the stria terminalis in the rat. Woulfe JM, et al. **Exp Neurol** 1988 Oct;102(1):121–4

Ethanol ingestive behavior as a function of central neurotransmission. Blum K, et al. **Experientia** 1989 May 15;45(5):444–52 (108 ref.)

Electrical coupling between astrocytes and between oligodendrocytes studied in mammalian cell cultures. Kettenmann H, et al. **GLIA** 1988;1(1):64–73

Analysis of histamine as a hair-cell transmitter in the lateral line of Xenopus laevis. Bledsoe SC Jr, et al. **Hear Res** 1989 Mar;38(1–2):81–93

Response from the exposed intracranial human auditory nerve to low-frequency tones: basic characteristics. Møller AR, et al. **Hear Res** 1989 Mar;38(1–2):163–75

The Lambert-Eaton myasthenic syndrome. Pascuzzi RM. **Indiana Med** 1989 Mar;82(3):174–9

Synchrony-dependent autocorrelation in eighth-nerve-fiber response to rippled noise. ten Kate JH, et al. **J Acoust Soc Am** 1988 Dec;84(6):2092–102

Inhibition of cholinergic neurotransmission in human airways by beta 2-adrenoceptors. Rhoden KJ, et al. **J Appl Physiol** 1988 Aug;65(2):700–5

Motor nerve conduction velocities and neuropathy amongst diabetics. Kumar BR, et al. **J Assoc Physicians India** 1988 Oct;36(10):589–93

Neurons projecting rostrally in the hypogastric nerve of the cat. Baron R, et al. **J Auton Nerv Syst** 1988 Sep; 24(1–2):81–6

Enhancement of peptidergic synaptic transmission by catecholamines in the bullfrog sympathetic ganglion. Ushijima H, et al. **J Auton Nerv Syst** 1988 Aug;23(2):95–102

The electrical and mechanical basis of co-transmission in some vascular and non-vascular smooth muscles. Muir TC, et al. **J Auton Pharmacol** 1988 Sep;8(3):203–18

Cerebral involvement in children with acute and relapsing inflammatory polyneuropathy. Willis J, et al. **J Child Neurol** 1988 Jul;3(3):200–4

Basic electronics for clinical neurophysiology. Misulis KE. **J Clin Neurophysiol** 1989 Jan;6(1):41–74 (0 ref.)

Central somatosensory conduction time and acoustic brainstem transmission time in post-traumatic coma. Rumpl E, et al. **J Clin Neurophysiol** 1988 Jul;5(3):237–60

Spatial organization of thalamocortical and corticothalamic projection systems in the rat SmI barrel cortex. Chmielowska J, et al. **J Comp Neurol** 1989 Jul 15; 285(3):325–38

Chemoanatomical organization of the noradrenergic input from locus coeruleus to the olfactory bulb of the adult rat. McLean JH, et al. **J Comp Neurol** 1989 Jul 15; 285(3):339–49

Effects of stimulus timing on transmitter release and postsynaptic membrane potential at crayfish neuromuscular junctions. Bittner GD, et al. **J Comp Physiol [A]** 1989 Jul; 165(3):371–82

Structural and functional correlates of synaptic transmission in the vertebrate neuromuscular junction. Rash JE, et al. **J Electron Microsc Tech** 1988 Oct;10(2):153–85 (185 ref.)

Laser microbeam axotomy and conduction block show that electrical transmission at a central synapse is distributed at multiple contacts. Gu XN, et al. **J Neurobiol** 1989 Jul; 20(5):422–34

Presynaptic aspects of cotransmission: relationship between vesicles and neurotransmitters. Boarder MR. **J Neurochem** 1989 Jul;53(1):1–11 (88 ref.)

High-voltage stimulation over the human spinal cord: sources of latency variation. Plassman BL, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):213–7

The origins of lumbosacral spinal evoked potentials [letter] Seyal M, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec; 51(12):1600

Diphtheritic neuropathy, an analysis based on muscle and nerve biopsy and repeated neurophysiological and autonomic function tests. Solders G, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):876–80

Central motor and sensory conduction in adrenoleukomyeloneuropathy, cerebrotendinous xanthomatosis, HTLV-1-associated myelopathy and tabes dorsalis. Ugawa Y, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug;51(8):1069–74

Excitatory neurotransmission activates voltage-dependent properties in neurons in spinal motor system of lamprey. Alford S, et al. **J Neurophysiol** 1989 Aug;62(2):334–41

Postsynaptic control of the induction of long-term changes in efficacy of transmission at neocortical synapses in slices of rat brain. Bindman LJ, et al. **J Neurophysiol** 1988 Sep; 60(3):1053–65

The development of transmission at an identified molluscan synapse. II. A quantal analysis of transmission. Pawson PA, et al. **J Neurophysiol** 1988 Dec;60(6):2211–22

The development of transmission at an identified molluscan synapse. I. The emergence of synaptic plasticities. Pawson PA, et al. **J Neurophysiol** 1988 Dec;60(6):2196–210

Vagal afferent modulation of spinal nociceptive transmission in the rat. Ren K, et al. **J Neurophysiol** 1989 Aug; 62(2):401–15

Dissection of the neuron network in the catfish inner retina. I. Transmission to ganglion cells. Sakai HM, et al. **J Neurophysiol** 1988 Nov;60(5):1549–67

Effects of preventing reinnervation on axotomized spinal motoneurons in the cat. II. Changes in group Ia synaptic function. Vanden Noven S, et al. **J Neurophysiol** 1989 Aug; 62(2):325–33

Nonuniform release probabilities underlie quantal synaptic transmission at a mammalian excitatory central synapse. Walmsley B, et al. **J Neurophysiol** 1988 Sep;60(3):889–908

Neurotransmission regulates stability of acetylcholine receptors at the neuromuscular junction. Avila OL, et al. **J Neurosci** 1989 Aug;9(8):2902–6

A circumscribed projection from the nucleus of the solitary tract to the nucleus ambiguus in the rat: anatomical evidence for somatostatin-28-immunoreactive interneurons subserving reflex control of esophageal motility. Cunningham ET Jr, et al. **J Neurosci** 1989 May; 9(5):1668–82

Signaling properties of Ascaris motorneurons: graded active responses, graded synaptic transmission, and tonic transmitter release. Davis RE, et al. **J Neurosci** 1989 Feb; 9(2):415–25

Modulation of excitatory synaptic transmission by glycine and zinc in cultures of mouse hippocampal neurons. Forsythe ID, et al. **J Neurosci** 1988 Oct;8(10):3733–41

Nasotemporal overlap of crossed and uncrossed retinal ganglion cell projections in the Japanese monkey (Macaca fuscata). Fukuda Y, et al. **J Neurosci** 1989 Jul;9(7):2353–73

The effects of dephosphorylation on the structure of the projections of neurofilament. Hisanaga S, et al. **J Neurosci** 1989 Mar;9(3):959–66

Structure of the intraspinal projections of single, identified muscle spindle afferents from neck muscles of the cat. Keirstead SA, et al. **J Neurosci** 1988 Sep;8(9):3413–26

Different projections of the central amygdaloid nucleus mediate autonomic and behavioral correlates of conditioned fear. LeDoux JE, et al. **J Neurosci** 1988 Jul; 8(7):2517–29

Involvement of excitatory amino acids in neurotransmission of inspiratory drive to spinal respiratory motoneurons. McCrimmon DR, et al. **J Neurosci** 1989 Jun;9(6):1910–21

Disuse-induced enhancement of Ia synaptic transmission in spinal motoneurons of the rat. Manabe T, et al. **J Neurosci** 1989 Jul;9(7):2455–61

Enrichment of a vasoactive neuropeptide (calcitonin gene related peptide) in the trigeminal sensory projection to the intracranial arteries. O'Connor TP, et al. **J Neurosci** 1988 Jul;8(7):2468–76

Differential ascending projections to aural regions in the 60 kHz contour of the mustache bat's inferior colliculus. Ross LS, et al. **J Neurosci** 1989 Aug;9(8):2819–34

Retinotopic organization of the developing retinotectal projection in the zebrafish embryo. Stuermer CA. **J Neurosci** 1988 Dec;8(12):4513–30

The projection of individual axons from the parabrachial region of the brain stem to the dorsal lateral geniculate nucleus in the cat. Uhlrich DJ, et al. **J Neurosci** 1988 Dec; 8(12):4565–75

A cryogenic device for reversibly blocking transmission through small regions of the spinal cord white matter. Apkarian AV, et al. **J Neurosci Methods** 1989 Aug; 29(2):93–106

Cross-correlation-based evaluations of the impulse transmission in a nerve: simulation and experimental studies. Fiore L, et al. **J Neurosci Methods** 1989 Apr;27(3):235–43

Statistical and graphical methods for testing the hypothesis that quanta are made up of subunits. Van der Kloot W. **J Neurosci Methods** 1989 Feb;27(1):81–9

Evidence for muscarinic inhibitory neurotransmission in rodent small intestine. Nowak TV, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):573–80

Burst-patterned stimulation promotes nicotinic transmission in isolated perfused rat sympathetic ganglia. Birks RI, et al. **J Physiol (Lond)** 1988 Aug;402:515–32

Dopamine and memory function in Parkinson's disease. Mohr E, et al. **Mov Disord** 1989;4(2):113–20

Maturation of transmission in reinnervated mouse soleus muscle. Badke A, et al. **Muscle Nerve** 1989 Jul;12(7):580–6 (22 ref.)

AAEE Minimonograph #33: electrodiagnostic approach to defects of neuromuscular transmission. Keesey JC. **Muscle Nerve** 1989 Aug;12(8):613–26 (52 ref.)

Neuronal-glial interactions. A new form of transmission? [news] Barres BA. **Nature** 1989 Jun 1;339(6223):343–4

Neurobiology. Glycine maintains excitement [news] Foster AC, et al. **Nature** 1989 Mar 30;338(6214):377–8

An essential role for postsynaptic calmodulin and protein kinase activity in long-term potentiation. Malenka RC, et al. **Nature** 1989 Aug 17;340(6234):554–7

A neuromodulator of synaptic transmission acts on the secretory apparatus as well as on ion channels. Man-Son-Hing H, et al. **Nature** 1989 Sep 21; 341(6239):237–9

Synaptic transmission. Broad minded on narrow spikes [news] Meech R. **Nature** 1989 Aug 24;340(623?):594 (12 ref.)

Presynaptic spike broadening reduces junctional potential amplitude. Spencer AN, et al. **Nature** 1989 Aug 24; 340(6235):636–8

Strengthening the synapses [news] Stevens CF. **Nature** 1989 Apr 6;338(6215):460–1

Glycine enhances NMDA-receptor mediated synaptic potentials in neocortical slices. Thomson AM, et al. **Nature** 1989 Mar 30;338(6214):422–4

Failure of non-adrenergic transmission in the rat vas deferens. Ebong OO, et al. **Neuropharmacology** 1989 Apr; 28(4):335–41

The development of long-term potentiation in hippocampus and neocortex. Teyler TJ, et al. **Neuropsychologia** 1989; 27(1):31–9

Modulation of the transmission of signals of the rabbit septum in the presence of influences on the cholinergic system. Brazhnik ES, et al. **Neurosci Behav Physiol** 1989 May-Jun; 19(3):255–63

Topical organization of the projections of neurons of the substantia nigra and the ventral field of the tegmentum of the midbrain to the head of the caudate nucleus of the cat. Gorbachevskaya IA. **Neurosci Behav Physiol** 1989 May-Jun;19(3):196–203

Raphé-produced excitation of spinal cord motoneurons in the cat. Fung SJ, et al. **Neurosci Lett** 1989 Aug 28; 103(2):185–90

Nerve endings from rat brain tissue release copper upon depolarization. A possible role in regulating neuronal excitability. Kardos J, et al. **Neurosci Lett** 1989 Aug 28; 103(2):139–44

Frequency dependent inhibition of the nicotinic transmission by serotonin in vesical pelvic ganglia of the rabbit. Nishimura T, et al. **Neurosci Lett** 1989 Aug 28; 103(2):179–84

Modification of parallel fibre-Purkinje cell transmission by long-term activation of climbing fibres. Rawson JA, et al. **Neurosci Lett** 1988 Aug 15;91(1):14–8

Synaptic transmission between cultured rat hippocampal neurons is enhanced by activation of protein kinase-C. Segal M. **Neurosci Lett** 1989 Jun 19;101(2):169–74

Autoradiographic and electrophysiological evidence for excitatory amino acid transmission in the periaqueductal gray projection to nucleus raphe magnus in the rat. Wiklund L, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):158–63

Spinal lamina I projection neurons in the rat: collateral innervation of parabrachial area and thalamus. Hylden JL, et al. **Neuroscience** 1989;28(1):27–37

Denervation reveals two components of neurotransmission in electroreceptor synapses. Peters RC, et al. **Neuroscience** 1988 Dec;27(3):1049–53

Effects of anoxia and recovery on the neurotransmission and level of high-energy phosphates in thin hippocampal slices from the guinea-pig. Yoneda K, et al. **Neuroscience** 1989; 28(2):401–7

Destabilization of junctional ACh receptors by a reinnervating frog motor nerve. Aframian D, et al. **P R Health Sci J** 1988 Aug;7(2):80–6

Multiplicity of controls of gap junctional communication. Bennett MV, et al. **P R Health Sci J** 1988 Aug;7(2):126, 131–2 (19 ref.)

Specificity of synapse formation in the cockroach. Blagburn JM. **P R Health Sci J** 1988 Aug;7(2):171–6

The role of cyclic nucleotides on junctional permeability. De Mello WC. **P R Health Sci J** 1988 Aug;7(2):141

A possible role for the acetylcholine transport system in non-quantal release of acetylcholine at the rodent myoneural junction. Edwards C, et al. **P R Health Sci J** 1988 Aug;7(2):71–4

Simulating stimulating bulges: the electrical meddling of neurons. Hentall ID. **P R Health Sci J** 1988 Aug;7(2):144–8

Functional sites of the nicotinic acetylcholine receptor. Karlin A, et al. **P R Health Sci J** 1988 Aug;7(2):75

GAD-like and TH-like immunoreactivity in ground squirrel retina. Lugo-Garcia N, et al. **P R Health Sci J** 1988 Aug; 7(2):178–80

Studies on the development of voltage-activated calcium channels in vertebrate neurons. Lux HD. **P R Health Sci J** 1988 Aug;7(2):116–21

Proton-induced transformation of Ca2+ channel: possible mechanisms and physiological implications. Morad M, et al. **P R Health Sci J** 1988 Aug;7(2):113–6

Calcium channels and neurotransmitter release. Nicholls JG. **P R Health Sci J** 1988 Aug;7(2):177

Voltage-gated currents recorded from the surface of the frog optic nerve. Ortiz S, et al. **P R Health Sci J** 1988 Aug; 7(2):141–3

How many channels should there be in a gap junction? Rivera A, et al. **P R Health Sci J** 1988 Aug;7(2):133–40

Single acetylcholine channel currents recorded from Xenopus myocytes are influenced by the glass of the patch pipette. Rojas L, et al. **P R Health Sci J** 1988 Aug; 7(2):78–80

Visceral nociceptive transmission at the spinal level: structural aspects. Sobrino Montalban JA. **P R Health Sci J** 1988 Aug;7(2):166–71 (46 ref.)

Molecular isoforms of the sodium pump in brain. Specht SC. **P R Health Sci J** 1988 Aug;7(2):189–94

Update on the use of sulfhydryl reagents to study acetylcholine receptor kinetics. Steinacker A. **P R Health Sci J** 1988 Aug;7(2):75–7

Transmitter release at the neuromuscular junction. Thesleff S. **P R Health Sci J** 1988 Aug;7(2):67–70 (24 ref.)

Alteration of identified output synapses spared by axotomy. Titmus MJ, et al. **P R Health Sci J** 1988 Aug;7(2):181–2

Modulation of glutamate-activated channels in primary culture of cortical neurons. Vinini S, et al. **P R Health Sci J** 1988 Aug;7(2):93–5

Observations on the effect of an excitatory-inhibitory stimulus on the landing reaction of the fly, Calliphoridae. Negrin NS. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):823–9

Presynaptic inhibition of cholinergic transmission by peptidergic neurons in bullfrog sympathetic ganglia. Hasuo H, et al. **Pflugers Arch** 1988 Dec;413(2):206–8

A method to estimate the effects of parallel inputs on neuronal discharge probability. Windhorst U, et al. **Pflugers Arch** 1989 Apr;413(6):622–8

VIP and autonomic neurotransmission. Fahrenkrug J. **Pharmacol Ther** 1989;41(3):515–34 (231 ref.)

Role of adenine compounds in autonomic neurotransmission. White TD. **Pharmacol Ther** 1988;38(2):129–68 (333 ref.)

Modulation of synaptic transmission in autonomic ganglia mediated via the activation of postganglionic muscarinic M1 receptors. Galvan M. **Pharmacology** 1988;37 Suppl 1:11–6

Sympathetic neuroeffector transmission in arteries and arterioles. Hirst GD, et al. **Physiol Rev** 1989 Apr; 69(2):546–604 (263 ref.)

Momentary alteration of the postsynaptic membrane during transmission of a single nerve impulse. Dunant Y, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1717–20

Transduction and cellular mechanisms in sensory receptors. Proceedings of the 2d international symposium. Hong Kong, 1987. **Prog Brain Res** 1988;74:1–356

The transfer of visual information across the corpus callosum in cats, monkeys and humans: spatial and temporal properties. Berardi N, et al. **Prog Brain Res** 1988;75:181–5

Organisation of efferent projections from superior colliculus to brainstem in rat: evidence for functional output channels. Dean P, et al. **Prog Brain Res** 1988;75:27–36 (40 ref.)

The patchy intrinsic projections of visual cortex. LeVay S. **Prog Brain Res** 1988;75:147–61 (120 ref.)

Effect of haloperidol on transplants of fetal substantia nigra: evidence for feedback regulation of dopamine turnover in the graft and its projections. Meloni R, et al. **Prog Brain Res** 1988;78:457–61

Visual projections induced into auditory thalamus and cortex: implications for thalamic and cortical information processing. Sur M. **Prog Brain Res** 1988;75:129–36 (129 ref.)

Facilitation as a tool to study the entry of calcium and the mechanism of neurotransmitter release. Parnas H, et al. **Prog Neurobiol** 1989;32(1):1–9 (28 ref.)

Neurochemical transmission and the sodium-pump. Török TL. **Prog Neurobiol** 1989;32(1):11–76 (339 ref.)

A behavioral quantal theory of brain function: an alternative to Lashley's continuity theory of mass action. Tsai LS. **Psychol Rep** 1989 Feb;64(1):3–17 (18 ref.)

Recent developments in neurobiology: Part III. Effectors of transmitter action. Hyman SE. **Psychosomatics** 1988 Fall; 29(4):373–8 (51 ref.)

Studies on the inspiratory generating effect of the dorso-medial area of nucleus facialis. Lei L, et al. **Respir Physiol** 1989 Jan;75(1):65–73

Simulation of action potential propagation in terminal arborizations of cultured sensory ganglia. Braschler U, et al. **Schweiz Arch Neurol Psychiatr** 1989;140(1):13–8

Synaptic transmission between dissociated adult mammalian neurons and attached synaptic boutons. Drewe JA, et al. **Science** 1988 Sep 30;241(4874):1810–3

Postsynaptic calcium is sufficient for potentiation of hippocampal synaptic transmission. Malenka RC, et al. **Science** 1988 Oct 7;242(4875):81–4

Inhibition of postsynaptic PKC or CaMKII blocks induction but not expression of LTP. Malinow R, et al. **Science** 1989 Aug 25;245(4920):862–6

Organization of trigeminal nociceptive pathways. Maciewicz R, et al. **Semin Neurol** 1988 Dec;8(4):255–64 (100 ref.)

Responses of neurons in somatosensory cortical area II of cats to high-frequency vibratory stimuli during iontophoresis of a GABA antagonist and glutamate. Alloway KD, et al. **Somatosens Mot Res** 1988;6(2):109–40

Neurochemical transmission in the dorsal column nuclei. Banna NR, et al. **Somatosens Mot Res** 1989;6(3):237–51 (120 ref.)

Putative nociceptive modulatory neurons in the rostral ventromedial medulla of the rat display highly correlated firing patterns. Barbaro NM, et al. **Somatosens Mot Res** 1989;6(4):413–25

Putative nociceptive modulating neurons in the rostral ventromedial medulla of the rat: firing of on- and off-cells is related to nociceptive responsiveness. Heinricher MM, et al. **Somatosens Mot Res** 1989;6(4):427–39

Abnormal impulse discharge in primary afferent axons injured in the peripheral versus the central nervous system. Papir-Kricheli D, et al. **Somatosens Mot Res** 1988; 6(1):63–77

The interstitial system of the spinal trigeminal tract in the rat: anatomical evidence for morphological and functional heterogeneity. Phelan KD, et al. **Somatosens Mot Res** 1989; 6(4):367–99

Spontaneous activity in afferent and efferent fibers after chronic axotomy: response to potassium channel blockade. Russell LC, et al. **Somatosens Mot Res** 1988;6(2):163–77

Modified coeruleo-cortical noradrenergic neurotransmission after serotonin depletion by PCPA: electrophysiological studies in the rat. Ferron A. **Synapse** 1988;2(5):532–6

Cholinergic transmission at newly formed synapses made by retinal neurons in culture. Stockbridge N, et al. **Synapse** 1987;1(2):214–20

Physiological mechanisms underlying long-term potentiation. Gustafsson B, et al. **Trends Neurosci** 1988 Apr; 11(4):156–62 (90 ref.)

Neurotransmission at the NMJ. Wessler I. **Trends Pharmacol Sci** 1988 Apr;9(4):125–6 (12 ref.)

Neuromodulation by polypeptide growth factors: preliminary results on the distribution of epidermal growth factor receptors in adult brain. Wiedermann CJ, et al. **Wien Klin Wochenschr** 1988 Dec 2;100(23):760–3

[Observation on the velocity of propagated sensation along channels] Hu XL, et al. **Chen Tzu Yen Chiu** 1987;12 Suppl 2:39–44 (Eng. Abstr.) **(Chi)**

[Observation on the spectral characteristics of EEG from cortical somatosensory area during the advance of the propagated sensation along channels] Wu BH, et al. **Chen Tzu Yen Chiu** 1987;12 Suppl 2:32–8 (Eng. Abstr.) **(Chi)**

[Studies on the mechanism underlying the blocking of the propagated sensation along channels by local cooling] Wu BH, et al. **Chen Tzu Yen Chiu** 1987;12 Suppl 2:21–5, 66 (Eng. Abstr.) **(Chi)**

[Correlation between motor terminal latency time of the median nerve and the result of conservative treatment (cortisone injection) in carpal tunnel syndrome] Mortier G, et al. **Acta Belg Med Phys** 1989 Jan-Mar;12(1):19–21 (Eng. Abstr.) **(Dut)**

[Astroglia—more than a neural glue] Kauppinen RA, et al. **Duodecim** 1989;105(6):498–506 (50 ref.) **(Fin)**

[An experimental model for the evaluation of pathologic changes in the spinal canal] Wehling P, et al. **Biomed Tech (Berlin)** 1988 Jun;33(6):136–40 (Eng. Abstr.) **(Ger)**

[Function of the long spinal cord pathways in cervical spinal stenosis—an electrophysiologic study] Masur H, et al. **EEG EMG** 1988 Dec;19(4):264–6 (Eng. Abstr.) **(Ger)**

[Fractionated determination of central motor conduction times using stimulation of the cortex, spinal tract and spinal nerve roots: possibilities and limits] Meyer BU, et al. **EEG EMG** 1988 Dec;19(4):234–40 (Eng. Abstr.) **(Ger)**

[A method of electrical cervical motor root stimulation: effect of stimulation parameters and normal values] Schmid UD, et al. **EEG EMG** 1989 Mar;20(1):39–49 (Eng. Abstr.) **(Ger)**

[Effect of a static 0.2 T magnetic field on the EEG power spectrum in periodic median nerve stimulation] von Klitzing L, et al. **EEG EMG** 1989 Mar;20(1):50–3 (Eng. Abstr.) **(Ger)**

[Central motor conduction time in multiple sclerosis: an comparison of visual and somatosensory evoked potentials in relation to the type of disease course] Witt TN, et al. **EEG EMG** 1988 Dec;19(4):247–54 (Eng. Abstr.) **(Ger)**

[Structural and functional changes in the brain caused by aging] Platt D. **Verh Dtsch Ges Inn Med** 1988;94:232–40 (40 ref.) **(Ger)**

[Summary of the dissertation: studies of impulse transmission in the inferior mesenteric ganglion] Wesselmann U. **Z Gastroenterol [Verh]** 1989 Jul;24:5–6 **(Ger)**

[High extracellular concentrations of potassium and rubidium modulate the synaptic transmission in the frog labyrinth] Rossi ML, et al. **Boll Soc Ital Biol Sper** 1989 Jan;65(1):23–7 (Eng. Abstr.) **(Ita)**

[Static and dynamic properties of EPSP (excitatory postsynaptic potentials) at the cyto-neural junction of the posterior canal in the labyrinth of the frog] Rossi ML, et al. **Boll Soc Ital Biol Sper** 1988 May;64(5):425–31 (Eng. Abstr.) **(Ita)**

[New stimulation pattern for manual evaluation of neuromuscular transmission—double burst stimulation (DBS)] Ueda N, et al. **Masui** 1988 Jun;37(6):716–21 (Eng. Abstr.) **(Jpn)**

[A new neuromuscular transmission monitoring system (Accelograph)—the rationale behind the method and its clinical usefulness] Ueda N, et al. **Masui** 1988 Oct; 37(10):1265–72 (Eng. Abstr.) **(Jpn)**

[Neurotransmitters and modulators in the cerebellum] Kimura H. **Nippon Yakurigaku Zasshi** 1988 Dec; 92(6):337–47 (50 ref.) (Eng. Abstr.) **(Jpn)**

[Antibodies against glial glycolipid antigens affect synaptic potentiation and depression in the frog nerve-muscle synapse] Vinogradova IM, et al. **Dokl Akad Nauk SSSR** 1989;304(6):1504–7 **(Rus)**

[An analysis of transmission in the interneuronal synapses using a convolution of binomial distributions] Bart AG, et al. **Neirofiziologiia** 1988;20(4):487–94 (Eng. Abstr.) **(Rus)**

[An attempt to estimate various characteristics of neuro-muscular transmission from the rising phase of miniature end-plate currents] Krivoĭ II. **Neirofiziologiia** 1989;21(2):272–5 (Eng. Abstr.) **(Rus)**

[Synaptic transmission in the receptors of the lateral acoustic system] Akoev GN, et al. **Usp Fiziol Nauk** 1988 Jul-Sep; 19(3):81–98 (127 ref.) **(Rus)**

[Participation of the limbic-neocortical structures in the transmission of trace information in rats] Eliseeva AP, et al. **Zh Vyssh Nerv Deiat** 1988 May-Jun;38(3):562–4 **(Rus)**

[The noncholinergic-nonadrenergic nervous system] Bauer V. **Cesk Fysiol** 1986;35(5):399–413 (76 ref.) **(Slo)**

DRUG EFFECTS

Effect of dihydroergotoxine mesylate (Hydergine) on delayed neuronal death in the gerbil hippocampus. Izumiyama K, et al. **Acta Neurol Scand** 1988 Sep;78(3):214–20

Study of the participation of the dopaminergic transmission system in the effects of two newly synthesized barbiturates. Getova D, et al. **Acta Physiol Pharmacol Bulg** 1988; 14(2):56–62

Significance of the cerebral dopaminergic neurotransmission for the individual differences in learning and memory (experiments on rats). Kehayov R, et al. **Acta Physiol Pharmacol Bulg** 1989;15(1):76–82

Both the cholinergic and non-cholinergic components of airway excitation are inhibited by morphine in the guinea-pig. Johansson IG, et al. **Acta Physiol Scand** 1989 Mar;135(3):411–5

Do alpha 2-agonists inhibit sympathetic transmitter secretion in part by depressing a Ca2+ component of the nerve impulse 'upstream' of varicosities? Stjärne C, et al. **Acta Physiol Scand** 1988 Aug;133(4):591–2

Effect of ethanol on neuromuscular function in the rat diaphragm preparation. Wali FA, et al. **Alcohol Alcohol** 1988;23(4):299–303

Facilitatory effects of ouabain and digitalis-like substance on adrenergic transmission in hypertension. Tsuda K, et al. **Am J Hypertens** 1989 Jun;2(6 Pt 1):465–7

Effects of halothane on acetylcholine release and sympathetic ganglionic transmission. Bosnjak ZJ, et al. **Anesthesiology** 1988 Oct;69(4):500–6

Clinical recovery and train-of-four ratio measured mechanically and electromyographically following atracurium. Engback J, et al. **Anesthesiology** 1989 Sep; 71(3):391–5

Inhibition of mobilization of acetylcholine: the weak link in neuromuscular transmission during partial neuromuscular block with d-tubocurarine. Foldes FF, et al. **Anesthesiology** 1989 Aug;71(2):218–23

Inhibitory effect of anti-allergic drugs on cholinergic and non-cholinergic neurotransmissions of guinea pig bronchial muscle in vitro. Kamikawa Y. **Ann Allergy** 1989 Jul; 63(1):59–63

Effect of digitalis on central demyelinative conduction block in vivo. Kaji R, et al. **Ann Neurol** 1989 Feb;25(2):159–65

Effects of new 4-aminopyridine derivatives on neuromuscular transmission and on smooth muscle contractility. Berger SG, et al. **Arzneimittelforschung** 1989 Jul;39(7):762–5

Endothelin inhibits presynaptic adrenergic neurotransmission in rat mesenteric artery. Tabuchi Y, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):803–8

Cholesterol metabolism in infant rats, effect of 6-hydroxydopamine and guanfacine. Hahn P, et al. **Biol Neonate** 1989;55(3):180–4

Similar effects of daily cocaine and stress on mesocorticolimbic dopamine neurotransmission in the rat. Kalivas PW, et al. **Biol Psychiatry** 1989 Apr 1;25(7):913–28

Pharmacology of nicotine. Grenhoff J, et al. **Br J Addict** 1989 May;84(5):477–92 (150 ref.)

Effects of methohexitone, althesin, ketamine and droperidol on peripheral vagal transmission. Inoue K, et al. **Br J Anaesth** 1988 Oct;61(4):456–61

Effect of surface electrode positioning on the compound action potential evoked by ulnar nerve stimulation in anaesthetized infants and children. Kalli I. **Br J Anaesth** 1989 Feb;62(2):188–93

Effects of the anaesthetic 2,6-diisopropylphenol on synaptic transmission in the rat olfactory cortex slice. Collins GG. **Br J Pharmacol** 1988 Nov;95(3):939–49

Facilitation by tachykinins of neurotransmission in guinea-pig pulmonary parasympathetic nerves. Hall AK, et al. **Br J Pharmacol** 1989 May;97(1):274–80

Use of geographutoxin II (mu-conotoxin) for the study of neuromuscular transmission in mouse. Hong SJ, et al. **Br J Pharmacol** 1989 Jul;97(3):934–40

Contribution of galanin to non-cholinergic, non-adrenergic transmission in rat ileum. Muramatsu I, et al. **Br J Pharmacol** 1988 Aug;94(4):1241–9

Interactions of calcium antagonists and the calcium channel agonist Bay K 8644 on neurotransmission of the mouse isolated vas deferens. Rae GA, et al. **Br J Pharmacol** 1989 Feb;96(2):333–40

Evidence for dopaminergic co-transmission in dog mesenteric arterial vessels. Soares-da-Silva P. **Br J Pharmacol** 1988 Sep;95(1):218–24

Adenosine enhancement of adrenergic neuroeffector transmission in guinea-pig pulmonary artery. Wiklund NP, et al. **Br J Pharmacol** 1989 Feb;96(2):425–33

Argiotoxin-636 blocks excitatory synaptic transmission in rat hippocampal CA1 pyramidal neurons. Ashe JH, et al. **Brain Res** 1989 Feb 20;480(1–2):234–41

Cyclic GMP and protein kinase G inhibit the quantal transmitter release induced by protein kinase C. Brănişteanu DD, et al. **Brain Res** 1988 Nov;464(3):263–6

Changes in extracellular calcium and magnesium and synaptic transmission in isolated mouse spinal cord. Czéh G, et al. **Brain Res** 1989 May 8;486(2):274–85

Enkephalins modulate excitatory synaptic transmission in the superficial dorsal horn by acting at mu-opioid receptor sites. Jeftinija S. **Brain Res** 1988 Sep 20;460(2):260–8

Inhibition of spinal nociceptive transmission from the

midbrain, pons and medulla in the rat: activation of descending inhibition by morphine, glutamate and electrical stimulation. Jones SL, et al. **Brain Res** 1988 Sep 20; 460(2):281–96

Prolonged exposure to high potassium concentration results in irreversible loss of synaptic transmission in hippocampal tissue slices. Kawasaki K, et al. **Brain Res** 1988 Aug 9; 457(2):322–9

Clindamycin–induced alteration of ganglionic function. II. Effect of nicotinic receptor–channel function. Konopka LM, et al. **Brain Res** 1988 Aug 23;458(2):278–84

Excitatory amino acid receptors intrinsic to synaptic transmission in nucleus tractus solitarii. Miller BD, et al. **Brain Res** 1988 Jul 26;456(2):333–43

Spatial performance is severely impaired in rats with combined reduction of serotonergic and cholinergic transmission. Richter–Levin G, et al. **Brain Res** 1989 Jan 16;477(1–2):404–7

Persistent sensitization of dopamine neurotransmission in ventral striatum (nucleus accumbens) produced by prior experience with (+)–amphetamine: a microdialysis study in freely moving rats. Robinson TE, et al. **Brain Res** 1988 Oct 18;462(2):211–22

Effect of low glucose concentration on synaptic transmission in the rat hippocampal slice. Fan P, et al. **Brain Res Bull** 1988 Nov;21(5):741–7

Neural control of canine colon motor function: studies in vitro. Gonda T, et al. **Can J Physiol Pharmacol** 1988 Apr; 66(4):359–68

Neural control of canine colon motor function: studies in vivo. Gonda T, et al. **Can J Physiol Pharmacol** 1988 Apr; 66(4):350–8

Effects of reserpine pretreatment on neuroeffector transmission in the vas deferens. Cunnane TC, et al. **Clin Exp Pharmacol Physiol** 1989 Jun;16(6):451–5

Paradoxical effects of endothelin on cardiovascular noradrenergic neurotransmission. Wong–Dusting HK, et al. **Clin Exp Pharmacol Physiol** 1989 Apr;16(4):229–33

Electrophysiological assessment of the effects of antidepressant treatments on the efficacy of 5–HT neurotransmission. Blier P, et al. **Clin Neuropharmacol** 1988; 11 Suppl 2:S1–10

Excitatory and inhibitory action of GABA on synaptic transmission in slices of guinea pig superior colliculus. Arakawa T, et al. **Eur J Pharmacol** 1988 Dec 13; 158(3):217–24

Enhancement of GABAergic transmission by zolpidem, an imidazopyridine with preferential affinity for type I benzodiazepine receptors. Biggio G, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):173–80

Diazepam enhances the inhibitory action of adenosine on transmission at the frog neuromuscular junction. De Mendonça A, et al. **Eur J Pharmacol** 1989 May 19; 164(2):347–54

Effects of SK&F 85174, a DA–1/DA–2 receptor agonist, on pre– and postganglionic sympathetic neurotransmission to the heart. Dlewati A, et al. **Eur J Pharmacol** 1989 May 19;164(2):197–203

Involvement of postjunctional purinergic mechanisms in the facilitatory action of bradykinin in neurotransmission in the rat vas deferens. Donoso MV, et al. **Eur J Pharmacol** 1989 Jan 31;160(2):263–73

Verapamil, neuromuscular transmission and the nicotinic receptor. Edeson RO, et al. **Eur J Pharmacol** 1988 Jul 7; 151(2):301–6

Acute and long–term regulation of brain alpha 2–adrenoceptors after manipulation of noradrenergic transmission in the rat. Giralt MT, et al. **Eur J Pharmacol** 1989 May 30;164(3):455–66

Serotonergic involvement in the inhibitory effects of repeated buspirone treatment on synaptic transmission in the hippocampus. O'Connor JJ, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):21–9

Use of reserpine and 6–hydroxydopamine supports evidence for purinergic cotransmission in the rabbit ear artery. Saville VL, et al. **Eur J Pharmacol** 1988 Oct 18; 155(3):271–7

Isoniazid, an inhibitor of GABAergic transmission, enhances [35S]TBPS binding in rat cerebral cortex. Serra M, et al. **Eur J Pharmacol** 1989 May 19;164(2):385–8

Adrenergic and purinergic neurotransmission in arterial resistance vessels of the cat intestinal circulation. Taylor EM, et al. **Eur J Pharmacol** 1989 May 2;164(1):23–33

Decrease of recurrent and feed–forward inhibitions under high pressure of helium in rat hippocampal slices. Zinebi F, et al. **Eur J Pharmacol** 1988 Aug 24;153(2–3):191–9

Effect of ampicillin on neuromuscular transmission in healthy men: a single–fiber electromyographic study. Girlanda P, et al. **Eur Neurol** 1989;29(1):36–8

Isoflurane–induced impairment of synaptic transmission in hippocampal neurons. Miu P, et al. **Exp Brain Res** 1989; 75(2):354–60

The effect of DOPA and clonidine on reflex pathways from group II muscle afferents to alpha–motoneurones in the cat. Schomburg ED, et al. **Exp Brain Res** 1988;71(2):442–6

Light chain of tetanus toxin intracellularly inhibits acetylcholine release at neuro–neuronal synapses, and its internalization is mediated by heavy chain. Mochida S, et al. **FEBS Lett** 1989 Aug 14;253(1–2):47–51

The action of hydrogen peroxide on paired pulse and long–term potentiation in the hippocampus. Colton CA, et al. **Free Radic Biol Med** 1989;7(1):3–8

Effects of cisapride on cholinergic neurotransmission and propulsive motility in the guinea pig ileum. Tonini M, et al. **Gastroenterology** 1989 May;96(5 Pt 1):1257–64

Effects of clonixin, a non–steroidal analgesic, on the neurotransmission of the vas deferens of the rat. Bustamante D, et al. **Gen Pharmacol** 1988;19(6):755–8

Effects of dineopentyl and dipinacoline ethers of glutamic acid on neuromuscular transmission in locust (Locusta migratoria). Ivlev SV, et al. **Gen Physiol Biophys** 1989 Apr; 8(2):163–9

Effect of spider venom on cochlear nerve activity consistent with glutamatergic transmission at hair cell–afferent dendrite synapse. Cousillas H, et al. **Hear Res** 1988 Nov; 36(2–3):213–20

The quinoxalinediones DNOX, CNOX and two related congeners suppress hair cell–to–auditory nerve transmission. Littman T, et al. **Hear Res** 1989 Jun 15; 40(1–2):45–53

Pharmacological alterations of the activity of afferent fibers innervating hair cells. Mroz EA, et al. **Hear Res** 1989 Mar; 38(1–2):141–62

The sympathetic neuro–melanophore transmission in a fresh–water Indian major carp, Labeo rohita (Ham.). Patil S, et al. **Indian J Physiol Pharmacol** 1989 Apr–Jun; 33(2):101–6

Responses of cholinergic markers to a pre– or a postsynaptic pharmacological blockage in the developing chick embryo spinal cord. Thiriet G, et al. **Int J Dev Neurosci** 1988; 6(3):309–16

Presynaptic modulation of sympathetic nerve transmission—an element in vasomotor control. Fuglsang A, et al. **Int J Microcirc Clin Exp** 1989 Feb;8(1):71–84

Effects of DA–1– and DA–2–dopamine antagonists on apomorphine–induced inhibition of peripheral sympathetic neurotransmission. Hietala J. **J Auton Pharmacol** 1988 Dec; 8(4):297–302

The effects of purine nucleotides on transmission in vesical parasympathetic ganglia of the cat. Theobald RJ Jr, et al. **J Auton Pharmacol** 1989 Jun;9(3):167–81

Reassessment of the blocking activity of prazosin at low and high concentrations on sympathetic neurotransmission in the isolated mesenteric vasculature of rats. Yamamoto R, et al. **J Auton Pharmacol** 1988 Dec;8(4):303–9

Inhibitors of prostaglandin synthesis reverse the effects of chronic beta–receptor blockade to attenuate adrenergic neurovascular transmission in dogs. Daniell HB, et al. **J Cardiovasc Pharmacol** 1988 Sep;12(3):300–7

Modulation of adrenergic neurotransmission in the rat tail artery by dietary lipids. Semafuko WE, et al. **J Cardiovasc Pharmacol** 1989 Jan;13(1):138–45

Thromboxane mimetics enhance adrenergic neurotransmission in the rabbit–isolated portal vein. Stein EA, et al. **J Cardiovasc Pharmacol** 1989 Sep;14(3):469–74

Regional curare test in the study of neuromuscular transmission in hyperthyroidism. Witoonpanich R, et al. **J Med Assoc Thai** 1989 Jan;72 Suppl 1:187–91

Excitatory amino acid neurotransmission. Johnson RL, et al. **J Med Chem** 1988 Nov;31(11):2057–66 (153 ref.)

Effects of intrastriatal blockade of glutamatergic transmission on the acquisition of T–maze and radial maze tasks. Hauber W, et al. **J Neural Transm** 1989;78(1):29–41

Noradrenergic, purinergic, and cholinergic transmission in the mouse vas deferens: influence of field–stimulation parameters, reserpinization, 6–hydroxydopamine and 4–aminopyridine. Kaschube M, et al. **J Neural Transm** 1989; 76(1):39–53

Lambert–Eaton myasthenic syndrome: the lack of short–term in vitro effects of serum factors on neuromuscular transmission. Kim YI, et al. **J Neurol Sci** 1988 Oct; 87(1):1–13

The noradrenergic neurotoxin DSP–4 eliminates the coeruleospinal projection but spares projections of the A5 and A7 groups to the ventral horn of the rat spinal cord. Lyons WE, et al. **J Neurosci** 1989 May;9(5):1481–9

Presynaptic actions of carbachol and adenosine on corticostriatal synaptic transmission studied in vitro. Malenka RC, et al. **J Neurosci** 1988 Oct;8(10):3750–6

Adenosine–angiotensin II interactions. Part I. Role of adenosine in regulating angiotensin II–induced potentiation of noradrenergic neurotransmission and angiotensin II–induced vasoconstriction. Holycross BJ, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):433–41

Inhibition of vagal transmission by cardiac sympathetic nerve stimulation in the dog: possible involvement of opioid receptor. Koyanagawa H, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):1092–6

Effects of opioid agonists on sympathetic and parasympathetic transmission to the dog heart. Musha T, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):1087–91

Neuromuscular transmission changes associated with tolerance development after chronic exposure to diisopropylfluorophosphate. Thomsen RH, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):635–9

Effects of amiloride and 5–(N,N–hexamethylene)amiloride on dopaminergic and cholinergic neurotransmission. Zubieta JK, et al. **J Pharmacol Exp Ther** 1988 Oct; 247(1):88–95

Prolonged nerve stimulation causes changes in transmitter release at the frog neuromuscular junction. Hinz I, et al. **J Physiol (Lond)** 1988 Jul;401:557–65

Effects of 2–(4–phenylpiperidino)cyclohexanol (AH5183) and barium ions on frog neuromuscular transmission. Maeno T, et al. **J Physiol (Lond)** 1988 Jul;401:671–85

Electrophysiology of neuromuscular transmission in guinea–pig mesenteric veins. Van Helden DF. **J Physiol (Lond)** 1988 Jul;401:469–88

Inhibition of adrenergic transmission by methionine– and leucine–enkephalins is impaired in the mesenteric vasculatures of spontaneously hypertensive rats. Tsuda K, et al. **Jpn Circ J** 1989 Mar;53(3):255–60

Effect of l–ephedrine on cholinergic neurotransmission in the isolated guinea pig ileum. Yamamoto R, et al. **Jpn J Pharmacol** 1989 Aug;50(4):511–4

Effects of prostaglandins E1, E2, F2 alpha and I2 on adrenergic transmission in guinea pig pulmonary arteries. Yasuda G, et al. **Jpn J Pharmacol** 1988 Sep;48(1):153–6

Alterations of accumbens neuronal activity in freely moving rats following methamphetamine. Fukuzako H, et al. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):331–5

A histamine–activated chloride channel involved in neurotransmission at a photoreceptor synapse. Hardie RC. **Nature** 1989 Jun 29;339(6227):704–6

Modulation of GABAergic neurotransmission in the brain by dipeptides. Varga V, et al. **Neurochem Res** 1988 Nov; 13(11):1027–34

Activation of cholinergic neurotransmission by pyridostigmine reverses the inhibitory effect of hyperglycemia on growth hormone (GH) releasing hormone–induced GH secretion in man: does acute hyperglycemia act through hypothalamic release of somatostatin? Peñalva A, et al. **Neuroendocrinology** 1989 May;49(5):551–4

Neuromuscular effects distant from the site of botulinum neurotoxin injection. Olney RK, et al. **Neurology** 1988 Nov; 38(11):1780–3

Chronic treatment with naltrexone enhances morphine–stimulated dopamine neurotransmission: neurochemical and behavioral evidence. Bardo MT, et al. **Neuropharmacology** 1988 Nov;27(11):1103–9

Effect of minaprine on synaptic transmission in the neocortex of the rat in vivo. Okuyama S, et al. **Neuropharmacology** 1988 Sep;27(9):915–22

Effect of GABAergic transmission in the subpallidal region on the hypermotility response to the administration of excitatory amino acids and picrotoxin into the nucleus accumbens. Shreve PE, et al. **Neuropharmacology** 1988 Dec;27(12):1271–7

The effects of amphetamine on neuromuscular transmission in the lobster. Turkanis SA, et al. **Neuropharmacology** 1988 Dec;27(12):1221–5

Effects of piracetam on single central neurons. Maillis A, et al. **Neuropsychobiology** 1988;19(3):139–45

Formation of serotoninergic and GABAergic mechanisms of synaptic transmission in the cat neocortex during early ontogenesis. Raevskii VV. **Neurosci Behav Physiol** 1988 May–Jun;18(3):230–6

Ketamine blocks an NMDA receptor–mediated component of synaptic transmission in rat hippocampus in a voltage–dependent manner. Davies SN, et al. **Neurosci Lett** 1988 Oct 5;92(2):213–7

Single or repeated administrations of SCH 23390 fail to affect serotonergic neurotransmission. Gandolfi O, et al. **Neurosci Lett** 1988 Oct 5;92(2):192–6

Excitatory transmission in the dorsal horn is in part mediated through APV–sensitive NMDA receptors. Jeftinija S. **Neurosci Lett** 1989 Jan 16;96(2):191–6

Synthetic omega–conotoxin blocks synaptic transmission in the hippocampus in vitro. Kamiya H, et al. **Neurosci Lett** 1988 Aug 15;91(1):84–8

Blockade of excitatory synaptic transmission by 6–cyano–7–nitroquinoxaline–2,3–dione (CNQX) in the hippocampus in vitro. Neuman RS, et al. **Neurosci Lett** 1988 Sep 23;92(1):64–8

Different susceptibilities of long–term potentiations in CA3 and CA1 regions of guinea pig hippocampal slices to nootropic drugs. Satoh M, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):236–41

Cholecystokinin modulates neurotransmission through the dentate gyrus. Sinton CM. **Neurosci Lett** 1988 Dec 19; 95(1–3):341–6

Leucomyosuppressin, a novel insect neuropeptide, inhibits evoked transmitter release at the mealworm neuromuscular junction. Yamamoto D, et al. **Neurosci Lett** 1988 Dec 19; 95(1–3):137–42

The effect of GABA on neurotransmission in frog tectal slices. Arakawa T, et al. **Neurosci Res** 1989 Apr;6(4):363–8

Activation of the bilateral corticostriatal glutamatergic projection by infusion of GABA into thalamic motor nuclei in the cat: an in vivo release study. Barbeito L, et al. **Neuroscience** 1989;28(2):365–74

Reversible effect of depolarization by K–propionate on sub–miniature endplate potential to bell–miniature endplate potential ratios, on miniature endplate potential frequencies and amplitudes, and on synaptic vesicle diameters and densities in frog neuromuscular junctions. Florey E, et al. **Neuroscience** 1988 Dec;27(3):1055–72

Reappearance of miniature endplate potentials in frog neuromuscular junctions "silenced" by lanthanum ions. Glavinović MI, et al. **Neuroscience** 1989;31(1):181–6

Heterogeneity of presynaptic muscarinic receptors involved in modulation of transmitter release. Vizi ES, et al. **Neuroscience** 1989;31(1):259–67

Effects of neurotoxicants on synaptic transmission: lessons learned from electrophysiological studies. Atchison WD.

Neurotoxicol Teratol 1988 Sep–Oct;10(5):393–416 (206 ref.)
Triethyltin exposure suppresses synaptic transmission in area CA1 of the rat hippocampal slice. Fountain SB, et al. **Neurotoxicol Teratol** 1988 Nov–Dec;10(6):539–48
Intramembrane charge movement in depolarized frog muscle fibers: the effects of D–600 and lanthanum ions. Caputo C, et al. **P R Health Sci J** 1988 Aug;7(2):122–6
Attempts to gauge the relative importance of pre– and postsynaptic effects of morphine on the transmission of noxious messages in the dorsal horn of the rat spinal cord. Lombard MC, et al. **Pain** 1989 Jun;37(3):335–45
Pharmacological analysis of conditioning in sensorimotor cortex neurons in a model. Chizhenkova RA. **Pavlov J Biol Sci** 1989 Jan–Mar;24(1):11–8
Effect of ingestion of smokeless tobacco on motor distal latency of the median nerve. Lester MJ, et al. **Percept Mot Skills** 1988 Aug;67(1):283–90
Adrenaline inhibits muscarinic transmission in bullfrog sympathetic ganglia. Akasu T. **Pflugers Arch** 1989 Apr; 413(6):616–21
Mechanisms of inhibitory noradrenergic transmission in the rabbit facial vein. Komori K, et al. **Pflugers Arch** 1989 Feb; 413(4):359–64
Conditioned stereotypy: behavioral specification of the UCS and pharmacological investigation of the neural change. Hiroi N, et al. **Pharmacol Biochem Behav** 1989 Jan; 32(1):249–58
Interaction between bambuterol and physostigmine: aspects on cholinesterase inhibition and neuromuscular transmission in the smooth and skeletal muscles of the guinea–pig. Jeppsson AB, et al. **Pharmacol Toxicol** 1988 Oct;63(4):211–4
Effect of etorphine on adrenergic neurotransmission in the rat and guinea pig heart. Semafuko WE, et al. **Pharmacology** 1988;37(3):195–202
The glutamate analog 2–amino–4–phosphonobutyrate antagonizes synaptic transmission from cones to horizontal cells in the goldfish retina. Nawy S, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1726–30
Multiple effects of capsaicin on synaptic transmission in a mammalian sympathetic ganglion in vitro. Anthony TL, et al. **Proc West Pharmacol Soc** 1988;31:5–8
The use of microiontophoresis in the study of the descending control of nociceptive transmission. Hill RG. **Prog Brain Res** 1988;77:339–47 (37 ref.)
Inhibition by prostaglandin E2 of neurotransmission in rabbit but not human bronchus—a calcium–related mechanism? Black JL, et al. **Prostaglandins** 1989 Mar;37(3):317–30
Prostaglandins do not mediate the inhibitory effects of angiotensins II and III on autonomic neurotransmission in the rabbit vas deferens. Trachte GJ. **Prostaglandins** 1988 Aug;36(2):215–28
Neurophysiological and endocrine consequences of immune activity. Saphier D. **Psychoneuroendocrinology** 1989; 14(1–2):63–87
Appearance of a stereotyped apomorphine–induced climbing in unresponsive DBA2 mice after subchronic manipulations of brain dopamine transmission. Duterte–Boucher D, et al. **Psychopharmacology (Berlin)** 1989;98(1):56–60
Methyl salicylate as a cutaneous stimulus: a psychophysical analysis. Green BG, et al. **Somatosens Mot Res** 1989; 6(3):253–74
Pharmacological aspects of excitatory synaptic transmission to second–order vestibular neurons in the frog. Cochran SL, et al. **Synapse** 1987;1(1):102–23
Single Ca2+ entry and transmitter release systems at the neuromuscular synapse. Guan YY, et al. **Synapse** 1988; 2(5):558–64
Cocaine: an in vivo microdialysis evaluation of its acute action on dopamine transmission in rat striatum. Hurd YL, et al. **Synapse** 1989;3(1):48–54
Induction of hippocampal long–term potentiation in the absence of extracellular Ca2+. May PB, et al. **Synapse** 1987;1(3):273–8
Rate–limiting step for transmission at excitatory synapses in hippocampus. Muller D, et al. **Synapse** 1989;3(1):67–73
Cardiovascular effects and modulation of noradrenergic neurotransmission following central and peripheral administration of neuropeptide Y. Westfall TC, et al. **Synapse** 1988;2(3):299–307
[Clonidine inhibition effect on synaptic transmission of guinea pig celiac ganglia] Shao QL, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Sep;9(5):388–91 (Eng. Abstr.) **(Chi)**
[Pharmacology of cholinergic neurotransmission] Bouzouita K, et al. **Tunis Med** 1987 Oct;65(10):635–41 (Eng. Abstr.) **(Fre)**
[The decrement–increment phenomenon in disorders of neuromuscular transmission by inhibition of acetylcholinesterase] Besser R, et al. **EEG EMG** 1989 Mar; 20(1):28–33 (Eng. Abstr.) **(Ger)**
[Receptor diseases. 1: Disorders of adrenergic receptors, cholinergic receptors and neurotransmitters] Nestele M. **Med Monatsschr Pharm** 1989 May;12(5):147–52 (0 ref.) **(Ger)**
[Successful corticoid treatment of lumbosacral plexus neuropathy in heroin abuse. Clinical aspects, electrophysiology, therapy and follow–up] Herdmann J, et al. **Nervenarzt** 1988 Nov;59(11):683–6 (Eng. Abstr.) **(Ger)**
[Sense and nonsense in barbiturate–induced functional paralysis for the protective and therapeutic decrease in cerebral oxygen requirements] Schneider D, et al. **Psychiatr Neurol Med Psychol Beih** 1988;40:36–43 **(Ger)**
[Animal experiment studies of the effect of the hazardous substance carbon tetrachloride on peripheral nerves] Wagner A, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Jun;41(6):352–60 (Eng. Abstr.) **(Ger)**
[Neurotoxicity in long–term lithium therapy: an electroneurographic study] Eisenstädter A, et al. **Wien Klin Wochenschr** 1989 Mar 3;101(5):166–8 (Eng. Abstr.) **(Ger)**
[Early functional and structural changes in the nerve tissue following contact with chymopapain] Wehling P, et al. **Z Orthop** 1988 Dec;126(6):693–6 (Eng. Abstr.) **(Ger)**
[Regulation of neural transmission in the mouse vas deferens by 2 subtypes of dopaminergic receptors] Mitolo–Chieppa D, et al. **Boll Soc Ital Biol Sper** 1988 Aug;64(8):763–8 (Eng. Abstr.) **(Ita)**
[Effects of benzodiazepines on the excitatory and inhibitory synaptic transmissions in the rat dentate gyrus] Suzuki H, et al. **Masui** 1988 Oct;37(10):1199–205 (Eng. Abstr.) **(Jpn)**
[Effect of diazepam on various effects of morphine use in mice and rats] Matla J, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:125–33 (Eng. Abstr.) **(Pol)**
[Post– and presynaptic mechanisms of restoring nerve–muscle transmission with tubocurarine after the effect of an organophosphorous inhibitor of acetylcholinesterase] Krivoĭ II, et al. **Dokl Akad Nauk SSSR** 1989;306(2):499–502 **(Rus)**
[Restoration of neuromuscular transmission in the rat diaphragm after the action of an organophosphorus inhibitor of acetylcholinesterase by using curare] Krivoĭ II, et al. **Fiziol Zh SSSR** 1988 Dec;74(12):1751–8 (Eng. Abstr.) **(Rus)**
[Effect of antagonists of excitatory amino acids on synaptic transmission in the electroreceptors (Lorenzini's ampullae) in skates] Akoev GN, et al. **Neirofiziologiia** 1988; 20(4):457–63 (Eng. Abstr.) **(Rus)**
[Neuromotor transmission under conditions of acetylcholinesterase inhibition by eserine] Sei TP. **Nerv Sist** 1988;27:119–26 **(Rus)**
[Effect of hydrocortisone on synaptic transmission in surviving slices of the olfactory cortex from the rat brain] Mokrushin AA, et al. **Probl Endokrinol (Mosk)** 1988 Nov–Dec;34(6):52–6 (Eng. Abstr.) **(Rus)**
[Comparative research on synaptic transmission in the sympathetic ganglia of rabbits and frogs during acetylcholinesterase inhibition] Lukomskaia NIa, et al. **Zh Evol Biokhim Fiziol** 1988 Sep–Oct;24(5):668–78 (Eng. Abstr.) **(Rus)**
[Modulation of signal transmission by the septal neurons of the rabbit during action on the cholinergic system] Brazhnik ES, et al. **Zh Vyssh Nerv Deiat** 1988 Jul–Aug; 38(4):701–9 (Eng. Abstr.) **(Rus)**

NEURAL TUBE DEFECTS

[Etiologic and epidemiologic aspects of neural tube defects] Stoll C, et al. **Arch Fr Pediatr** 1988 Nov;45(9):617–22 (22 ref.) (Eng. Abstr.) **(Fre)**
[Diastematomyelia] Lapras C, et al. **Neurochirurgie** 1988;34 Suppl 1:99–103 (31 ref.) **(Fre)**
[Neurenteric cyst of the mediastinum] Schlolaut KH, et al. **ROFO** 1988 Dec;149(6):660–3 **(Ger)**

BLOOD

Serum from pregnant women carrying a fetus with neural tube defect is teratogenic for rat embryos in culture. Anwar M, et al. **Br J Obstet Gynaecol** 1989 Jan;96(1):33–7
Maternal zinc and selenium status in pregnancies with a neural tube defect or elevated plasma alpha–fetoprotein. Hinks LJ, et al. **Br J Obstet Gynaecol** 1989 Jan;96(1):61–6
Acanthocytosis associated with myelodysplasia. Doll DC, et al. **J Clin Oncol** 1989 Oct;7(10):1569–72
Immunoglobulin levels in maternal and neonatal sera from normal and abnormal pregnancies. Medina–Gómez P, et al. **J Perinat Med** 1988;16(3):233–9
Cost–justification analysis of prenatal maternal serum alpha–feto protein screening. Taplin SH, et al. **Med Care** 1988 Dec;26(12):1185–202

CHEMICALLY INDUCED

Arachidonic acid reversal of phenytoin–induced neural tube and craniofacial defects in vitro in mice. Kay ED, et al. **J Craniofac Genet Dev Biol** 1988;8(2):179–86
Ovulation induction and neural tube defects [letter] Czeizel A. **Lancet** 1989 Jul 15;2(8655):167
Vitamin A–induced suppression/enhancement of protein glycosylation and neurulation. Ersahin Y, et al. **Pediatr Neurosci** 1987;13(6):293–303
Biomechanical basis of diazepam–induced neural tube defects in early chick embryos: a morphometric study. Nagele RG, et al. **Teratology** 1989 Jul;40(1):29–36

CLASSIFICATION

Neural tube defects: heterogeneity and homogeneity. Seller MJ, et al. **Am J Med Genet Suppl** 1986;2:77–87

COMPLICATIONS

Central ventilatory dysfunction in myelodysplasia: an independent determinant of survival. Hays RM, et al. **Dev Med Child Neurol** 1989 Jun;31(3):366–70
Thoracic myelopathy caused by cervicothoracic diastematomyelia. A case report. Ohwada T, et al. **J Bone Joint Surg [Am]** 1989 Feb;71(2):296–9
Neural defects in Jarcho–Levin syndrome. Reyes MG, et al. **J Child Neurol** 1989 Jan;4(1):51–4
Suprapubic bladder neck suspension for the management of urinary incontinence in the myelodysplastic girl. Gearhart JP, et al. **J Urol** 1988 Nov;140(5 Pt 2):1296–8
Diastematomyelia combined with disc herniation at T 6/7 in an adult. Case report. Conzen MA, et al. **Neurosurg Rev** 1989;12(2):177–81
Mixed meningitis with Bacteroides ovatus caused by an occult congenital dermal sinus. Frank GR, et al. **Pediatr Infect Dis J** 1989 Jun;8(6):401–3
Diastematomyelia associated with ectopic renal tissue. Gaskill SJ, et al. **Pediatr Neurosci** 1988;14(2):108–11 (18 ref.)
Myelodysplasia. McGuire EJ. **Semin Neurol** 1988 Summer; 8(2):145–9 (8 ref.)
Urologic aspects of tethered cord. Flanigan RC, et al. **Urology** 1989 Jan;33(1):80–2

DIAGNOSIS

Immunobiological methods in the prenatal diagnosis and evaluation of foetal neural tube defects. Polgár K, et al. **Acta Physiol Hung** 1988;71(4):551–5
MR imaging characteristics of a neurenteric cyst. Geremia GK, et al. **AJNR** 1988 Sep;9(5):978–80
Alpha fetoprotein and acetylcholinesterase levels in twins discordant for neural tube defects: dependence on type of fetal membranes [letter] Schnatterly PT, et al. **Am J Med Genet** 1989 Jan;32(1):146–7
The role of ultrasonography and amniocentesis in the evaluation of pregnancies at risk for neural tube defects. Hogge WA, et al. **Am J Obstet Gynecol** 1989 Sep; 161(3):520–3; discussion 523–4
Accuracy of ultrasound in the prenatal diagnosis of spinal anomalies. Romero R, et al. **Am J Perinatol** 1989 Jul; 6(3):320–3
Neutral–red uptake and expression of monocytic antigens in amniotic–fluid mononuclear phagocytes: evaluation of a novel approach for prenatal diagnosis of neural–tube defects. Polgár K, et al. **Am J Reprod Immunol Microbiol** 1988 Nov;18(3):81–6
Antenatal diagnosis of neural tube defects using a coated bead immunoassay for acetylcholinesterase in amniotic fluid. Mehta S, et al. **Ann Clin Biochem** 1988 Sep;25 (Pt 5):569–76
An occipital dermoid tumor and sinus. Wiemer DR. **Ann Plast Surg** 1988 Nov;21(5):465–7
A study of the value of measuring maternal serum alpha–fetoprotein for the antenatal diagnosis of neural tube defects. Tidy J. **Arch Gynecol Obstet** 1989;244(3):133–6
Amniotic fluid cholinesterase of valproate–induced exencephaly in the mouse: an animal model for prenatal diagnosis of neural tube defects. Elmazar MM, et al. **Arch Toxicol** 1988;61(6):501–3
Assessment of the fetus: relevance to brain injury. Hill A. **Clin Perinatol** 1989 Jun;16(2):413–34 (104 ref.)
Diastematomyelia: prenatal ultrasonic appearances. Winter RK, et al. **Clin Radiol** 1989 May;40(3):291–4
Gadolinium–DTPA enhanced MR imaging of intradural neurenteric cysts. Pierot L, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):762–4
Routine maternal serum alpha–fetoprotein testing [letter] Ganiats T. **J Fam Pract** 1988 Nov;27(5):465, 469, 550
Prospective prenatal screening for fetal abnormalities using a quantitative immunoassay for acetylcholinesterase. Brock DJ, et al. **J Med Genet** 1988 Sep;25(9):606–8
Osteomyelitis of the cervical spine presenting as a neurenteric cyst. Ein SH, et al. **J Pediatr Surg** 1988 Aug;23(8):779–81
Semilobar holoprosencephaly with associated Arnold–Chiari variant. Britton CA. **JCU** 1989 Jun;17(5):374–8
Chorionic villus sampling: first trimester fetal diagnosis. Reussner L, et al. **Kans Med** 1989 Apr;90(4):109–12
Magnetic resonance imaging of pediatric spinal dysraphism. Rindahl MA, et al. **Magn Reson Imaging** 1989 Mar–Apr; 7(2):217–24
Fetal sonography. I. Neural tube defects. Garel L, et al. **Pediatr Radiol** 1989;19(3):157–62
Prenatal screening and diagnosis of neural tube defects in England and Wales in 1985. Cuckle HS, et al. **Prenat Diagn** 1989 Jun;9(6):393–400
[Clinical use of 7 methods of prenatal diagnosis of neural tube defects] Li SR. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Nov;23(6):341–4, 387 (Eng. Abstr.) **(Chi)**
[Percentage of concanavalin–A non–conjugating alpha–fetoprotein in amniotic fluid in the prenatal diagnosis of neural tube defects] Meng JP. **Chung Hua Fu Chan Ko Tsa Chih** 1988 May;23(3):139–41, 188 (Eng. Abstr.) **(Chi)**
[Biochemical markers of neural tube closure defects during the second half of pregnancy] Guibaud S, et al. **J Genet Hum** 1988 Aug;36(4):337–46 (Eng. Abstr.) **(Fre)**
[Diastematomyelia in adulthood] Neundörfer B, et al. **Fortschr Neurol Psychiatr** 1988 Oct;56(10):311–4 (Eng. Abstr.) **(Ger)**
[The determination of acetylcholinesterase activity in amniotic fluid as a further possibility for the prenatal diagnosis of open neural tube defects] Grosch A, et al.

Z Med Lab Diagn 1989;30(4):228–33 (Eng. Abstr.) (Ger)
[Possibility and reality, with or without responsibility. (The prevention of neural tube defects)] Orv Hetil 1988 Sep 18; 129(38):2059 (Hun)
[Two cases of diastematomyelia: its evaluation with MR imaging] Koyama S, et al. No Shinkei Geka 1989 Apr; 17(4):393–8 (Eng. Abstr.) (Jpn)
[A case of neurenteric cyst diagnosed by magnetic resonance imaging] Kawamura N, et al. No To Hattatsu 1989 Jan; 21(1):57–62 (Eng. Abstr.) (Jpn)
[Two patients with cervical diastematomyelia] Nakamura Y, et al. Rinsho Shinkeigaku 1989 Mar;29(3):371–5 (Eng. Abstr.) (Jpn)

DRUG THERAPY

Growth hormone treatment accelerates growth of short children with neural tube defects. Rotenstein D, et al. J Pediatr 1989 Sep;115(3):417–20

EMBRYOLOGY

Accumulation of basement membrane-associated hyaluronate is reduced in the posterior neuropore region of mutant (curly tail) mouse embryos developing spinal neural tube defects. Copp AJ, et al. Dev Biol 1988 Dec;130(2):583–90
A cell-type-specific abnormality of cell proliferation in mutant (curly tail) mouse embryos developing spinal neural tube defects. Copp AJ, et al. Development 1988 Oct; 104(2):285–95
Developmental study of neural tube closure in a mouse stock with a high incidence of exencephaly. Macdonald KB, et al. Teratology 1989 Feb;39(2):195–213

ENZYMOLOGY

Maternal serum neurone specific enolase in the diagnosis of anencephaly and other neural tube defects. Spencer K, et al. Ann Clin Biochem 1988 Nov;25 (Pt 6):668–9
Variation in some enzymes in amniotic fluid and maternal serum during pregnancy. Salgó L, et al. Enzyme 1989; 41(2):101–7

EPIDEMIOLOGY

Survey of neural tube defects in spontaneously aborted embryos. McFadden DE, et al. Am J Med Genet 1989 Mar; 32(3):356–8
The range of neural tube defects in southern India. Kulkarni ML, et al. Arch Dis Child 1989 Feb;64(2):201–4
Birth prevalence and recurrence rates of neural tube defects in southern Alberta in 1970–81 [letter] Lowry RB, et al. Can Med Assoc J 1988 Dec 15;139(12):1129
Prevalence of neural tube defects in the Yorkshire Region. Smithells RW, et al. Community Med 1989 May;11(2):163–7
Current trends in the prevalence at birth of neural tube defects in Singapore [letter] Tan KC, et al. J Med Genet 1989 Jun;26(6):412–3
Neural tube defects in South Carolina counties. Gardner SD, et al. J S C Med Assoc 1988 Dec;84(12):571–4
Periconceptional use of multivitamins and the occurrence of neural tube defects. Mulinare J, et al. JAMA 1988 Dec 2;260(21):3141–5
Periconceptional use of multivitamins and the occurrence of anencephaly and spina bifida. MMWR 1988 Dec 2; 37(47):727–30
High incidence of neural tube defects in Bursa, Turkey. Akar N, et al. Paediatr Perinat Epidemiol 1988 Jan;2(1):89–92
Changing incidence of neural tube defects in Aegean Turkey. Caglayan S, et al. Paediatr Perinat Epidemiol 1989 Jan; 3(1):62–5
A survey of neural tube defect pregnancies in north-west England. Bernard SH, et al. Z Kinderchir 1988 Dec;43 Suppl 2:15–6
[Epidemiology of neural tube defects in China] Xiao KZ. Chung Hua I Hsueh Tsa Chih 1989 Apr;69(4):189–91, 14 (Eng. Abstr.) (Chi)

ETIOLOGY

Are 'upper' and 'lower' neural tube defects aetiologically different? [letter] Frecker MF, et al. J Med Genet 1988 Jul;25(7):503–4
Ovulation induction and neural tube defects [letter] Cornel MC, et al. Lancet 1989 Jun 17;1(8651):1386
Dietary folate and neural-tube defects. Mann J. Med J Aust 1989 Jun 5;150(11):609
Neural tube defects and Chernobyl? [letter] Akar N, et al. Paediatr Perinat Epidemiol 1989 Jan;3(1):102–3
[Relation of maternal zinc deficiency and fetal neural tube defects] Li DC. Chung Hua Fu Chan Ko Tsa Chih 1988 Mar;23(2):88–90, 127 (Eng. Abstr.) (Chi)
[A case-control study of the pathogenic factors of neural tube defect in 64 cases] Wang YY. Chung Hua Fu Chan Ko Tsa Chih 1988 Mar;23(2):85–7, 127 (Eng. Abstr.) (Chi)

GENETICS

Clinical, genetic, and epidemiological factors in neural tube defects. Hall JG, et al. Am J Hum Genet 1988 Dec; 43(6):827–37
Neural tube defects and omphalocele in trisomy 18. Moore CA, et al. Clin Genet 1988 Aug;34(2):98–103
Neural tube defects and omphalocele in trisomy 18 [letter] van Maldergem L, et al. Clin Genet 1989 Jan;35(1):77–8
Common hierarchies of susceptibility to the induction of neural tube defects in mouse embryos by valproic acid and its 4-propyl-4-pentenoic acid metabolite. Finnell RH, et al. Teratology 1988 Oct;38(4):313–20
Interaction between the splotch mutation and retinoic acid in mouse neural tube defects in vitro. Kapron-Brás CM, et al. Teratology 1988 Aug;38(2):165–73
[Spina bifida occulta and other neural tube defects. Genetic study and management] Robert E. Neurochirurgie 1988;34 Suppl 1:87–90 (Fre)

METABOLISM

Amniotic fluid folate, vitamin B12 and transcobalamins in neural tube defects. Gardiki-Kouidou P, et al. Clin Genet 1988 Jun;33(6):441–8
Immunohistochemical study of intracranial cysts. Inoue T, et al. Neurosurgery 1988 Nov;23(5):576–81

PATHOLOGY

Myelodysplasia with bone marrow lymphocytosis and fibrosis mimicking recurrent Hodgkin's disease [see comments] Gottlieb CA, et al. Am J Clin Pathol 1989 Jan; 91(1):6–11. Comment in: Am J Clin Pathol 1989 Jul;92(1):127–8
Ectopic midline spinal ganglion in diastematomyelia: a study of its connections. Ross GW, et al. J Neurol Neurosurg Psychiatry 1988 Sep;51(9):1231–4
Neurenteric cysts—a spectrum. Alrabeeah A, et al. J Pediatr Surg 1988 Aug;23(8):752–4
A variant of the split notochord syndrome. Meller JL, et al. J Pediatr Surg 1989 Aug;24(8):733–5
Spinal ganglia reduction in the splotch-delayed mouse neural tube defect mutant. Moase CE, et al. Teratology 1989 Jul; 40(1):67–75
[Neural tube defect associated with thoracoabdominal evisceration] Hori A, et al. Ann Pathol 1988;8(4–5):321–4 (Eng. Abstr.) (Fre)
[Terminal cone traction syndrome. Attached cord and sacral lipoma] Lapras C, et al. Neurochirurgie 1988;34 Suppl 1:91–8 (Fre)

PREVENTION & CONTROL

Predictive values, relative risks, and overall benefits of high and low maternal serum alpha-fetoprotein screening in singleton pregnancies: new epidemiologic data. Milunsky A, et al. Am J Obstet Gynecol 1989 Aug;161(2):291–7
The development of action lines in an Australian maternal serum alphafetoprotein screening service for neural tube defects. Nicolas T, et al. Aust N Z J Obstet Gynaecol 1988 Feb;28(1):12–6
Prevention of spinal neural tube defects in the mouse embryo by growth retardation during neurulation. Copp AJ, et al. Development 1988 Oct;104(2):297–303
Neural tube defect recurrence after 'partial' vitamin supplementation. Sheppard S, et al. J Med Genet 1989 May; 26(5):326–9
Does taking vitamins at the time of conception prevent neural tube defects? [editorial] Holmes LB. JAMA 1988 Dec 2; 260(21):3181
Vitamins and the neural tube [editorial] Lancet 1989 Aug 26;2(8661):486
Prevention of neural tube defect recurrences in Yorkshire: final report [letter] Smithells RW, et al. Lancet 1989 Aug 26;2(8661):498–9
Dietary folate as a risk factor for neural-tube defects: evidence from a case-control study in Western Australia. Bower C, et al. Med J Aust 1989 Jun 5;150(11):613–9
The absence of a relation between the periconceptional use of vitamins and neural-tube defects. National Institute of Child Health and Human Development Neural Tube Defects Study Group [see comments] Mills JL, et al. N Engl J Med 1989 Aug 17;321(7):430–5. Comment in: N Engl J Med 1989 Aug 17;321(7):464–6
[Maternal serum AFP screening in type I diabetic patients] Briese V. Zentralbl Gynakol 1989;111(10):664–8 (Eng. Abstr.) (Ger)

REHABILITATION

Pediatric rehabilitation. 3. Disorders of the spinal cord: spinal cord injury, myelodysplasia. Badell A, et al. Arch Phys Med Rehabil 1989 May;70(5–S):S170–4 (48 ref.)

SURGERY

Surgical closure of the back lesion in open neural tube defects [letter] Deans GT, et al. BMJ 1988 Sep 3;297(6648):619
Respiratory epithelial cyst of the cerebellopontine angle. Muller J, et al. Neurosurgery 1989 Jun;24(6):936–9
Diastematomyelia—a 40-year experience. Gower DJ, et al. Pediatr Neurosci 1988;14(2):90–6
An alternative to the classical nerve graft for the management of the short nerve gap. Dellon AL, et al. Plast Reconstr Surg 1988 Nov;82(5):849–56
[Spinal dysraphia and disordered ascension of the spinal cord in adults] Zumkeller M, et al. Z Orthop 1989 May–Jun; 127(3):336–42 (Eng. Abstr.) (Ger)

THERAPY

Intravesical bladder stimulation in myelodysplasia. Kaplan WE, et al. J Urol 1988 Nov;140(5 Pt 2):1282–4
Case control study of neural tube defects and periconceptional vitamin use. Mitchell A. Paediatr Perinat Epidemiol 1989 Apr;3(2):216
Prospects for effective oral iron chelation therapy in man with 1,2-dimethyl-3-hydroxypyrid-4-one and other alpha-ketohydroxypyridines. Kontoghiorghes GJ, et al. Prog Clin Biol Res 1989;309:107–14

NEURALGIA

Herpes zoster and postherpetic neuralgia: the need for early intervention in the elderly. LeFort SM. Nurse Pract 1989 Mar;14(3):30, 35–6, 38 passim (26 ref.)

CHEMICALLY INDUCED

[Causalgia in patients treated with anticoagulants (letter)] Astarloa S, et al. Med Clin (Barc) 1989 Feb 18;92(6):236 (Spa)

CLASSIFICATION

Classification and diagnostic criteria for headache disorders, cranial neuralgias and facial pain. Headache Classification Committee of the International Headache Society. Cephalalgia 1988;8 Suppl 7:1–96

COMPLICATIONS

Unilateral clubbing of fingers associated with causalgia. Saunders PR, et al. BMJ 1988 Dec 24–31;297(6664):1635
Causalgic form of postphlebitic syndrome. A variety of reflex sympathetic dystrophy caused by acute deep thrombophlebitis. Massell TB. West J Med 1988 Sep; 149(3):294–5
[Glossopharyngeal nerve neuralgia: not just a sore throat] Brekelmans GJ, et al. Ned Tijdschr Geneeskd 1989 Apr 8;133(14):720–3 (Eng. Abstr.) (Dut)

DIAGNOSIS

Bursitis: a factor in the differential diagnosis of orofacial neuralgias and myofascial pain dysfunction syndrome. Salins PC, et al. Oral Surg Oral Med Oral Pathol 1989 Aug;68(2):154–7
[The glossopharyngeal nerve: a cardiological nerve] Cicogna R, et al. Cardiologia 1988 Jul;33(7):651–4 (Ita)

DRUG THERAPY

Horner's syndrome after intrapleural anesthesia with bupivacaine for post-herpetic neuralgia. Sihota MK, et al. Acta Anaesthesiol Scand 1988 Oct;32(7):593–4
Successful treatment of postherpetic neuralgia with capsaicin. Bucci FA Jr, et al. Am J Ophthalmol 1988 Dec 15; 106(6):758–9
Benzydamine cream in post-herpetic neuralgia [letter] Coniam SW, et al. Anaesthesia 1988 Oct;43(10):901
Antiviral treatment and postherpetic neuralgia [letter] Klenerman P, et al. BMJ 1989 Mar 25;298(6676):832
Lack of effect of acyclovir on postherpetic neuralgia. McKendrick MW, et al. BMJ 1989 Feb 18;298(6671):431
Management of causalgia after peripheral nerve injury. Girgis FL, et al. Int Disabil Stud 1989;11(1):15–20
Topical capsaicin treatment of chronic postherpetic neuralgia. Bernstein JE, et al. J Am Acad Dermatol 1989 Aug;21(2 Pt 1):265–70
Are current therapies useful for the prevention of postherpetic neuralgia? A critical analysis of the literature. Schmader KE, et al. J Gen Intern Med 1989 Mar–Apr; 4(2):83–9
Oral acyclovir in the treatment of herpes zoster in general practice. Morton P, et al. N Z Med J 1989 Mar 8; 102(863):93–5
Topical lidocaine for relief of superficial pain in postherpetic neuralgia. Kissin I, et al. Neurology 1989 Aug;39(8):1132–3
Comment on the article by Paul R. Layman, E. Argyras, and C.J. Glynn entitled 'Iontophoresis of vincristine versus saline in post-herpetic neuralgia. A controlled trial.' Pain, 25 (1986) 165–170. Gangarosa LP Sr. Pain 1988 Nov; 35(2):230–3
An unusual case of causalgia. Relevance to recent hypothesis on mechanism of causalgia. Hopkins CS, et al. Pain 1989 Apr;37(1):93–5
Crossed transvertebral puncture to block spinal ganglion in treatment of pain. Kolařík J, et al. Zentralbl Neurochir 1988; 49(3):185–8
[Herpes zoster neuralgia—a persistent therapeutic problem] Pöyhiä R, et al. Nord Med 1989;104(3):72–5 (Eng. Abstr.) (Swe)

ETIOLOGY

Treatment of chronic pain syndromes with transcutaneous iontophoresis of vinca alkaloids, with special regard to post-herpetic neuralgia. Tajti J, et al. Acta Med Hung 1989; 46(1):3–12 (35 ref.)
Poststernotomy neuralgia: a new pain syndrome. Defalque RJ, et al. Anesth Analg 1989 Jul;69(1):81–2
Intraoperative cryoanalgesia for postthoracotomy pain relief. Müller LC, et al. Ann Thorac Surg 1989 Jul;48(1):15–8
Neuralgia following lumbar sympathectomy. Buche M, et al. Ann Vasc Surg 1988 Jul;2(3):279–81
Evaluation of syncope from head and neck cancer. Papay FA, et al. Laryngoscope 1989 Apr;99(4):382–8
King and Robert, concerning the management of pain associated with herpes zoster and of postherpetic neuralgia

[letter] Kassirer MR. **Pain** 1988 Dec;35(3):368–9
Delayed diagnosis of herpes zoster. Brings HA. **Postgrad Med** 1989 Feb 1;85(2):57, 60, 63
[Lumboradiculalgia and calcified disk hernia] L'Huillier F, et al. **J Radiol** 1988 Dec;69(12):763–6 (8 ref.) (Eng. Abstr.) (Fre)
[Arnold's neuralgia and facial neuralgia in osteogenesis imperfecta] Chartier JP, et al. **Rev Rhum Mal Osteoartic** 1988 Jul–Sep;55(9):713–7 (12 ref.) (Fre)
[Neuro-rheumatologic manifestations in patients infected with the AIDS virus] Cherin P, et al. **Rev Rhum Mal Osteoartic** 1989 Jun;56(7):519–21 (Eng. Abstr.) (Fre)
[Limb and joint pain in Lyme disease. An important differential neurologic diagnosis] von Albert HH. **Fortschr Med** 1989 Aug 10;107(23):493–5 (Eng. Abstr.) (Ger)

MICROBIOLOGY

Post-herpetic neuralgia: 208 cases. Watson CP, et al. **Pain** 1988 Dec;35(3):289–97

PATHOLOGY

Diabetic polyradiculopathy with trigeminal nerve involvement. A case report. Casamassimo PS, et al. **Oral Surg Oral Med Oral Pathol** 1988 Sep;66(3):315–7 (9 ref.)
Glossopharyngeal neuralgia with syncope and cervical mass. Chalmers AC, et al. **Otolaryngol Head Neck Surg** 1989 Mar; 100(3):252–5 (18 ref.)
Post-herpetic neuralgia: post-mortem analysis of a case. Watson CP, et al. **Pain** 1988 Aug;34(2):129–38

PHYSIOPATHOLOGY

Lack of sensitization of primary afferent receptors by prostaglandins in a rat model of causalgic chronic pains. Seltzer Z, et al. **Agents Actions** 1988 Dec;25(3–4):252–4
Posterior femoral cutaneous neuralgia. Chutkow JG. **Muscle Nerve** 1988 Nov;11(11):1146–8
Evoked potentials directly recorded from the trigeminal root in man. Leandri M, et al. **Pain** 1988 Nov;35(2):227–9
[Alcock's canal syndrome and perineal neuralgia] Amarenco G, et al. **Rev Neurol (Paris)** 1988;144(8–9):523–6 (Eng. Abstr.) (Fre)

PREVENTION & CONTROL

Treatment of shingles and post-herpetic neuralgia. Jolleys JV. **BMJ** 1989 Jun 10;298(6687):1537–8 (33 ref.)
The prevention of postherpetic neuralgia: a retrospective view of patients treated in the acute phase of herpes zoster. Rutgers MJ, et al. **Br J Clin Pract** 1988 Oct;42(10):412–4
Corticosteroids and postherpetic neuralgia [letter; comment] **J Am Acad Dermatol** 1989 Mar;20(3):523–4. **Comment on:** J Am Acad Dermatol 1988 Mar;18(3):605–10
Isoprinosine does not influence the natural history of herpes zoster or postherpetic neuralgia. Payne CM, et al. **Scand J Infect Dis** 1989;21(1):15–8

RADIOTHERAPY

[Treatment of vasomotor rhinitis, trigeminal neuralgia and Sluder's syndrome by irradiation of the sphenopalatine ganglion with helium-neon lasers] Shuster MA, et al. **Vestn Otorinolaringol** 1988 Jul–Aug;(4):35–40 (Eng. Abstr.) (Rus)

SURGERY

Intrafascicular decompression in the treatment of causalgia with special reference to the mechanism. Zhu SX, et al. **Ann Plast Surg** 1985 Dec;15(6):460–4
Treatment of shingles and post-herpetic neuralgia [letter] Schieff C. **BMJ** 1989 Jul 1;299(6690):55
Retrosigmoidal approach in otoneurological surgery. Wang PZ. **Chin Med J [Engl]** 1988 Jun;101(6):456–7
Median neuralgia caused by brachial pseudoaneurysm. Ergungor MF, et al. **Neurosurgery** 1989 Jun;24(6):924–5
[Sympathectomy in causalgia pain caused by arteriovenous malformations of the upper extremity] Stölzel U, et al. **Med Klin** 1988 Jul 15;83(15):470–2 (Ger)

THERAPY

Spinal cord stimulation (SCS) in the treatment of postherpetic pain. Meglio M, et al. **Acta Neurochir Suppl (Wien)** 1989; 46:65–6
Hypnosis in the management of postherpetic neuralgia: three case studies. Dane JR, et al. **Am J Clin Hypn** 1988 Oct; 31(2):107–13
Spinal cord stimulation (SCS) in deafferentation pain. Meglio M, et al. **PACE** 1989 Apr;12(4 Pt 2):709–12
Peripheral stimulator implant for treatment of causalgia caused by electrical burns. Racz GB, et al. **Tex Med** 1988 Nov;84(11):45–50
[Preliminary clinical study and theoretical approach to an I.R. An emitter with athermal pulses] Clérin M. **Acta Belg Med Phys** 1989 Jan–Mar;12(1):7–10 (Fre)
[Possibilities of neural therapy in internal medicine] Becke H. **Z Gesamte Inn Med** 1988 Nov 15;43(22):643–5 (12 ref.) (Eng. Abstr.) (Ger)

NEURALGIC AMYOTROPHY see **CERVICO-BRACHIAL NEURALGIA**

NEURAMINIC ACIDS

ANALYSIS

N-acetylneuraminic acid and N-glycolylneuraminic acid in glycopeptides of colonic tumor and mucosa in rats treated with carrageenan and 1,2-dimethylhydrazine. Arakawa S, et al. **Biochem Biophys Res Commun** 1989 Mar 15; 159(2):452–6
Generation of two murine monoclonal antibodies that can discriminate N-glycolyl and N-acetyl neuraminic acid residues of GM2 gangliosides. Miyake M, et al. **Cancer Res** 1988 Nov 1;48(21):6154–60
Elderberry bark lectin--gold techniques for the detection of Neu5Ac (alpha 2,6) Gal/GalNAc sequences: applications and limitations. Taatjes DJ, et al. **Histochem J** 1988 Sep;20(9):478–90
Analysis of the expression of N-glycolylneuraminic acid-containing gangliosides in cells and tissues using two human monoclonal antibodies. Furukawa K, et al. **J Biol Chem** 1988 Dec 5;263(34):18507–12
Identification of N-glycolylneuraminic acid-containing gangliosides of cat and sheep erythrocytes. 252Cf fission fragment ionization mass spectrometry in the analysis of glycosphingolipids. Furukawa K, et al. **J Biol Chem** 1988 Oct 15;263(29):14939–47
Detection of gangliosides as N-glycolylneuraminic acid-specific tumor-associated Hanganutziu-Deicher antigen in human retinoblastoma cells. Higashi H, et al. **Jpn J Cancer Res** 1988 Aug;79(8):952–6

BIOSYNTHESIS

The biosynthesis of N-glycoloylneuraminic acid occurs by hydroxylation of the CMP-glycoside of N-acetylneuraminic acid. Shaw L, et al. **Biol Chem Hoppe Seyler** 1988 Jun;369(6):477–86

CHEMICAL SYNTHESIS

Neuraminic acid and related compounds. I. Syntheses of biologically active 4',7',8',9'-tetra-O-acetyl-sialyl- and sialyl-(alpha 2-6)-D-glucosamine-4-phosphate analogues of lipid A. Shimizu C, et al. **Chem Pharm Bull (Tokyo)** 1988 May;36(5):1772–8

METABOLISM

Transport of CMP-N-glycoloylneuraminic acid into mouse liver Golgi vesicles. Lepers A, et al. **FEBS Lett** 1989 Jul 3;250(2):245–50
Distribution of lectin binding glycoprotein in osteoclasts. Illés T, et al. **Histochemistry** 1989;91(1):55–9

NEURAMINIDASE

Modification of low density lipoprotein by desialylation causes lipid accumulation in cultured cells: discovery of desialylated lipoprotein with altered cellular metabolism in the blood of atherosclerotic patients. Orekhov AN, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):206–11
Sialidase from different sources compared for electrophoretically separating serum alkaline phosphatase fractions from liver and bone. Jung K, et al. **Clin Chem** 1989 Sep;35(9):1955–7
Use of a bacteriophage-derived endo-N-acetylneuraminidase and an equine antipolysialyl antibody to characterize the polysialyl residues in salmonid fish egg polysialoglycoproteins. Substrate and immunospecificity studies. Kitajima K, et al. **J Biol Chem** 1988 Dec 5; 263(34):18269–76
Three-dimensional structures of influenza virus neuraminidase-antibody complexes. Colman PM, et al. **Philos Trans R Soc Lond [Biol]** 1989 Jun 12;323(1217):511–8
Crystallization and preliminary X-ray analysis of type B influenza virus neuraminidase complexed with antibody Fab fragments. Laver WG, et al. **Virology** 1988 Dec; 167(2):621–4
Breaking and rejoining of disulfide bonds in external glycoproteins of influenza virus. Selimova LM, et al. **Virology** 1988 Oct;166(2):591–3

ADMINISTRATION & DOSAGE

Effects of in vivo neuraminidase on the regulation of erythropoiesis. II: Modulation of erythroid colony formation by thymic regulatory cells. La Russa VF, et al. **Exp Hematol** 1989 Feb;17(2):106–9
Intravenously injected sialidase inactivates attachment sites for lymphocytes on high endothelial venules. Rosen SD, et al. **J Immunol** 1989 Mar 15;142(6):1895–902

ANALYSIS

Properties of sialidase isolated from Actinomyces viscosus DSM 43798. Teufel M, et al. **Biol Chem Hoppe Seyler** 1989 May;370(5):435–43
Characterization of mouse liver sialidase and partial purification of the lysosomal sialidase. Nagai T, et al. **Chem Pharm Bull (Tokyo)** 1988 Oct;36(10):4008–18
The identification of lysosomal ganglioside sialidase in human cells. Zeigler M, et al. **Eur J Biochem** 1989 Aug 1; 183(2):455–8
Detection of sialidase (neuraminidase) activity in Actinomyces species by using 2'-(4-methylumbelliferyl)alpha-D-N-acetylneuraminic acid in a filter paper spot test. Moncla BJ, et al. **J Clin Microbiol** 1989 Jan;27(1):182–4
Early detection of influenza virus by using a fluorometric assay of infected tissue culture. Pachucki CT, et al. **J Clin Microbiol** 1988 Dec;26(12):2664–6
Fluorometric assay for the measurement of viral neuraminidase in influenza vaccines. Lambré CR, et al. **Vaccine** 1989 Apr;7(2):104–5
Effect of syngeneic anti-idiotypic antibody on influenza virus neuraminidase antibody response. Mayer R, et al. **Viral Immunol** 1987;1(2):121–34
[Epitope analysis of mumps virus proteins in a persistent cell culture infection: changes in the hemagglutinin-neuraminidase polypeptide] Boriskin IuS, et al. **Vopr Virusol** 1988 Sep–Oct;33(5):595–600 (Eng. Abstr.) (Rus)

ANTAGONISTS & INHIBITORS

Inhibition of mouse liver sialidase by plant flavonoids. Nagai T, et al. **Biochem Biophys Res Commun** 1989 Aug 30; 163(1):25–31
Studies on the binding substances on human erythrocytes for the heat-labile enterotoxin isolated from porcine enterotoxigenic Escherichia coli. Sugii S, et al. **Biochim Biophys Acta** 1989 Apr 14;980(2):155–60
Inhibitory effect of taurolipids on Clostridium perfringens sialidase. Nohara-Uchida K, et al. **J Biochem (Tokyo)** 1988 May;103(5):840–2
Inhibition of mouse liver sialidase by the root of Scutellaria baicalensis. Nagai T, et al. **Planta Med** 1989 Feb;55(1):27–9

BIOSYNTHESIS

[A nutrient medium for the culturing and neuraminidase biosynthesis of Erysipelothrix rhusiopathiae] Abrashev I, et al. **Acta Microbiol Bulg** 1988;23:49–51 (Eng. Abstr.) (Bul)

DEFICIENCY

Inherited lysosomal storage disease associated with deficiencies of beta-galactosidase and alpha-neuraminidase in sheep. Ahern-Rindell AJ, et al. **Am J Med Genet** 1988 Sep;31(1):39–56
Juvenile galactosialidosis in a white male: a new variant. Chitayat D, et al. **Am J Med Genet** 1988 Dec;31(4):887–901
Successful treatment of cherry red spot-myoclonus syndrome with 5-hydroxytryptophan. Gascon G, et al. **Ann Neurol** 1988 Sep;24(3):453–5
Isolation and structural characterization of twenty-one sialyloligosaccharides from galactosialidosis urine. An intact N,N'-diacetylchitobiose unit at the reducing end of a diantennary structure. van Pelt J, et al. **Biol Chem Hoppe Seyler** 1989 Mar;370(3):191–203
Acid alpha-neuraminidase deficiency: a nephropathic phenotype? Roth KS, et al. **Clin Genet** 1988 Sep; 34(3):185–94
Storage of sialic acid-containing carbohydrates in the placenta of a human galactosialidosis fetus. Isolation and structural characterization of 16 sialyloligosaccharides. Van Pelt J, et al. **Eur J Biochem** 1988 Nov 1;177(2):327–38
Galactosialidosis: molecular heterogeneity in biosynthesis and processing of protective protein for beta-galactosidase. Nanba E, et al. **Hum Genet** 1988 Dec;80(4):329–32
The presence of a reduced amount of 32-kd "protective" protein is a distinct biochemical finding in late infantile galactosialidosis. Strisciuglio P, et al. **Hum Genet** 1988 Nov; 80(3):304–6
[Prenatal diagnosis of sialidosis, a defect of the lysosomal enzyme neuraminidase] Heyes H, et al. **Geburtshilfe Frauenheilkd** 1988 Nov;48(11):814–5 (Eng. Abstr.) (Ger)
[A case of adult type galactosialidosis--with special reference to pharmacologic and neurophysiologic studies on myoclonus] Yarita H, et al. **Rinsho Shinkeigaku** 1988 Nov; 28(11):1234–40 (Eng. Abstr.) (Jpn)

GENETICS

Cloning and sequencing of a Clostridium perfringens sialidase gene. Roggentin P, et al. **FEBS Lett** 1988 Sep 26; 238(1):31–4
Cloning and expression of the pneumococcal neuraminidase gene in Escherichia coli. Berry AM, et al. **Gene** 1988 Nov 30;71(2):299–305
Syncytium formation by recombinant vaccinia viruses carrying bovine parainfluenza 3 virus envelope protein genes. Sakai Y, et al. **J Virol** 1989 Sep;63(9):3661–8
Complementation of recombinant baculoviruses by coinfection with wild-type virus facilitates production in insect larvae of antigenic proteins of hepatitis B virus and influenza virus. Price PM, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1453–6
Molecular cloning and analysis of the N5 neuraminidase subtype from an avian influenza virus. Harley VR, et al. **Virology** 1989 Mar;169(1):239–43

IMMUNOLOGY

Purified influenza virus hemagglutinin and neuraminidase are

equivalent in stimulation of antibody response but induce contrasting types of immunity to infection. Johansson BE, et al. **J Virol** 1989 Mar;63(3):1239–46

Comparative efficacy of pneumococcal neuraminidase and pneumolysin as immunogens protective against Streptococcus pneumoniae. Lock RA, et al. **Microb Pathog** 1988 Dec;5(6):461–7

Neuraminidases and hemagglutinins of influenza viruses augment cell–mediated cytotoxicity by activating NK cells [letter] Sinkovics JG. **Nat Immun Cell Growth Regul** 1989; 8(3):187–8

Recognition of the PB1, neuraminidase, and matrix proteins of influenza virus A/NT/60/68 by cytotoxic T lymphocytes. Reay PA, et al. **Virology** 1989 Jun; 170(2):477–85

Mapping of three antigenic sites on the haemagglutinin–neuraminidase protein of Newcastle disease virus. Yusoff K, et al. **Virus Res** 1988 Nov; 11(4):319–33

[Immunologic analysis of the antigenic properties of neuraminidase from drift–variants of influenza virus B] Rovnova ZI, et al. **Vopr Virusol** 1988 Nov–Dec; 33(6):669–74 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Isolation and characterization of a sialidase from the starfish Asterias rubens. Schauer R, et al. **Biol Chem Hoppe Seyler** 1989 Mar;370(3):183–90

Purification and properties of Streptococcus pneumoniae neuraminidase. Scanlon KL, et al. **Enzyme** 1989; 41(3):143–50

Characterization of extracellular neuraminidase produced by Actinomyces pyogenes. Schaufuss P, et al. **Int J Med Microbiol** 1989 May;271(1):28–35

Purification and immunological characterization of neuraminidase produced by Streptococcus pneumoniae. Lock RA, et al. **Microb Pathog** 1988 Jan;4(1):33–43

Separation of hemagglutinin and neuraminidase from influenza virus membrane by column displacement electrophoresis (isotachophoresis) with preservation of their activities. Johansson G, et al. **Prep Biochem** 1988; 18(4):405–12

[Isolation and purification of neuraminidase from Erysipelothrix rhusiopathiae] Abrashev I. **Acta Microbiol Bulg** 1988;22:33–8 (Eng. Abstr.) **(Bul)**

[Neuraminidase forms in human chorion] Petushkova NA. **Vopr Med Khim** 1988 Jul–Aug;34(4):67–71 (Eng. Abstr.) **(Rus)**

METABOLISM

In vitro activation of neuraminidase in the beta–galactosidase–neuraminidase–protective protein complex by cathepsin C. D'Agrosa RM, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):770–5

Ganglioside GM3 sialidase activity in fibroblasts of normal individuals and of patients with sialidosis and mucolipidosis IV. Subcellular distribution and and some properties. Lieser M, et al. **Biochem J** 1989 May 15;260(1):69–74

Interaction of N–acetyl–4–epi–D–neuraminic acid with key enzymes of sialic acid metabolism. Gross HJ, et al. **Biochemistry** 1988 Jun 14;27(12):4279–83

Interactions of proteins with ganglioside–enriched microdomains on the membrane: the lateral phase separation of molecular species of GD1a ganglioside, having homogeneous long–chain base composition, is recognized by Vibrio cholerae sialidase. Masserini M, et al. **Biochemistry** 1988 Oct 4;27(20):7973–8

Alteration in sialidase and other glycosidase activities in the kidney of spontaneously hypertensive rats: persistence after preventive treatment with hydralazine. Cohen–Forterre L, et al. **Can J Physiol Pharmacol** 1988 Jul;66(7):884–8

Variation of leukocyte neuraminidase with Duke stage in patients with adenocarcinoma of the colon and rectum. Arida EN. **Cancer Detect Prev** 1988;13(3–4):203–12

Sialidase activity and antibodies to sialidase–treated autologous erythrocytes in bronchoalveolar lavages from patients with idiopathic pulmonary fibrosis or sarcoidosis. Lambré CR, et al. **Clin Exp Immunol** 1988 Aug;73(2):230–5

Characteristics of sialidase in the rat salivary glands. Sato A, et al. **Enzyme** 1989;41(4):200–8

Influenza neuraminidase is delivered directly to the apical surface of MDCK cell monolayers. Daniels PU, et al. **FEBS Lett** 1989 Feb 13;244(1):57–60

Enzymatic deglycosylation of the dendrotoxin–binding protein. Rehm H. **FEBS Lett** 1989 Apr 10;247(1):28–30

Streptozotocin–induced diabetes increases sialidase activity in the rat liver. Murayama M, et al. **Horm Metab Res** 1988 Nov;20(11):718–9

Consideration of a functional role of an extracellular sialidase secreted by cultured fibroblasts. Usuki S, et al. **Indian J Biochem Biophys** 1988 Feb–Apr;25(1–2):102–5 (54 ref.)

Identification and in vitro reconstitution of lysosomal neuraminidase from human placenta. van der Horst GT, et al. **J Biol Chem** 1989 Jan 15;264(2):1317–22

Stimulation of receptor–mediated low density lipoprotein endocytosis in neuraminidase–treated cultured bovine aortic endothelial cells. Sprague EA, et al. **J Cell Physiol** 1988 Nov;137(2):251–62

Occurrence in brain lysosomes of a sialidase active on ganglioside. Fiorilli A, et al. **J Neurochem** 1989 Sep; 53(3):672–80

Role of divalent cations, pH, cytoskeleton components and surface charge on the adhesion of Trichomonas vaginalis to a polystyrene substrate. Silva Filho FC, et al. **Mem Inst Oswaldo Cruz** 1987 Jul–Sep;82(3):379–84

The effect of enzymatic removal of sialic acids on the functional properties of protein C. Hau L, et al. **Thromb Haemost** 1988 Oct 31;60(2):267–70

Sialic acid is cleaved from glycoconjugates at the cell surface when influenza virus neuraminidases are expressed from recombinant vaccinia viruses. Els MC, et al. **Virology** 1989 May;170(1):346–51

Identification of amino acids involved in the sialidase activity of the mumps virus hemagglutinin–neuraminadase protein. Waxham MN, et al. **Virology** 1988 Nov;167(1):226–32

Cell electrophoresis of group B streptococci: separation of types Ia, Ib/c, II, III and IV before and after neuraminidase treatment. Uhlenbruck G, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):28–34

PHARMACOLOGY

Influenza A virus enhances allergic histamine release. Effect of neuraminidase. Clementsen P, et al. **Allergy** 1989 Jan; 44(1):33–8

Neuraminidase selectively enhances transient Ca2+ current in cardiac myocytes. Yee HF Jr, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):C1267–72

Effect of neuraminidase on the adherence to salivary pellicle of Streptococcus sanguis and Streptococcus mitis. Liljemark WF, et al. **Caries Res** 1989;23(3):141–5

Neuraminidase treatment of isolated rat adipocytes and differential regulation of basal and insulin–stimulated glucose transport. Ciaraldi TP. **Diabetes** 1989 Aug; 38(8):951–8

In vitro membrane desialylation in porcine granulosa cells unmasks functional receptors for follicle–stimulating hormone. Nishimori K, et al. **Endocrinology** 1989 Jun; 124(6):2659–65

Effects of neuraminidase on the regulation of erythropoiesis: III: Characterization of carbohydrate moieties on the surface of thymic regulatory cells that interact with erythroid colony–forming cells. La Russa VF, et al. **Exp Hematol** 1989 May;17(4):351–6

Neuraminidase pretreatment of donor lymphocytes and graft–versus–host disease. Stacey NH, et al. **Exp Hematol** 1989 Mar;17(3):273–7

Application of the selective periodate oxidation of sialic acids. III. Identification of neuraminidase–sensitive and neuraminidase–resistant sialic acids and their side chain O–acyl variants. Reid PE, et al. **Histochem J** 1988 Nov; 20(11):645–50

Human influenza virus neuraminidase, but not hemagglutinin, induces murine macrophage interleukin 1 in vivo and in vitro. Houde M, et al. **Immunol Lett** 1989 Jul;22(1):41–6

Influence of surface modulations by enzymes and monoclonal antibodies on alternative complement pathway activation by Yersinia enterocolitica. Wachter E, et al. **Infect Immun** 1989 Jul;57(7):1984–9

Differential exposure of the major gangliosides in rabbit thymocytes to Vibrio cholerae neuraminidase. Iwamori M, et al. **J Biochem (Tokyo)** 1989 May;105(5):723–7

Neuraminidase–treated macrophages stimulate allogenic CD8+ T cells in the presence of exogenous interleukin 2. Hirayama Y, et al. **J Exp Med** 1988 Oct 1;168(4):1443–56

Glycoconjugates on corneal epithelial surface: effect of neuraminidase treatment. Hazlett LD, et al. **J Histochem Cytochem** 1989 Aug;37(8):1215–24

Monoclonal antibodies capable of causing hemolysis of neuraminidase–treated human erythrocytes by homologous complement. Okada N, et al. **J Immunol** 1989 Oct 1; 143(7):2262–6

Common cleavage pattern of polysialic acid by bacteriophage endosialidases of different properties and origins. Pelkonen S, et al. **J Virol** 1989 Oct;63(10):4409–16

Depression of the induction of murine delayed–type hypersensitivity responses without prolongation of cardiac allograft survival by intravenous neuraminidase–treated allogeneic lymphocytes. Samlowski WE, et al. **Transplantation** 1989 Mar;47(3):560–4

[Effect of neuraminidase isolated from Erysipelothrix rhusiopathiae on cell cultures] Abrashev I, et al. **Acta Microbiol Bulg** 1988;22:3–8 (Eng. Abstr.) **(Bul)**

[Effect of neuraminidase on the invasiveness of Erysipelothrix rhusiopathiae in cell cultures] Abrashev I, et al. **Acta Microbiol Bulg** 1988;23:94–9 (Eng. Abstr.) **(Bul)**

[Effects of neuraminidase on lectin binding sites in the corneal and conjunctival epithelium and conjunctival goblet cells of monkey eye] Uehara F, et al. **Nippon Ganka Gakkai Zasshi** 1988 Aug;92(8):1354–8 (Eng. Abstr.) **(Jpn)**

[The composition of glycosphingolipids and the effect of neuraminidase on cultured glioma cell lines] Li ZX, et al. **No To Shinkei** 1989 Apr;41(4):347–52 (Eng. Abstr.) **(Jpn)**

[Transplantability and immunogenicity in mice of lymphoma Nk/Ly cells modified by concanavalin A and neuraminidase] Bratus' GG, et al. **Eksp Onkol** 1989; 11(3):35–8 (Eng. Abstr.) **(Rus)**

SECRETION

Trichomonas vaginalis and Tritrichomonas foetus secrete neuraminidase into the culture medium. Costa e Silva Filho F, et al. **Mol Biochem Parasitol** 1989 Jun 1;35(1):73–8

THERAPEUTIC USE

Controlled clinical trial of adjuvant immunotherapy with BCG and neuraminidase–treated autologous tumour cells in large bowel cancer. Gray BN, et al. **J Surg Oncol** 1989 Jan;40(1):34–7

NEURASTHENIA

Fatigue syndrome: neurasthenia revived. White P. **BMJ** 1989 May 6;298(6682):1199–200 (27 ref.)

Neurasthenia in Asian cultures. **Cult Med Psychiatry** 1989 Jun;13(2):105–241

CHEMICALLY INDUCED

Prenarcotic and neuraesthenic symptoms among Dutch workers exposed to organic solvents. van Vliet C, et al. **Br J Ind Med** 1989 Aug;46(8):586–90

DIAGNOSIS

The indigenization of neurasthenia in Hong Kong. Cheung FM. **Cult Med Psychiatry** 1989 Jun;13(2):227–41

Neurasthenia in China: modern and traditional criteria for its diagnosis. Liu SX. **Cult Med Psychiatry** 1989 Jun; 13(2):163–86

The socio–cultural significance of the diagnostic label "neurasthenia" in Japan's mental health care system. Munakata T. **Cult Med Psychiatry** 1989 Jun;13(2):203–13

Neurasthenia as nosological dilemma. Rin H, et al. **Cult Med Psychiatry** 1989 Jun;13(2):215–26

The necessity of retaining the diagnostic concept of neurasthenia. Yan HQ. **Cult Med Psychiatry** 1989 Jun; 13(2):139–45

The diagnosis and phenomenology of neurasthenia. A Shanghai study. Zhang MY. **Cult Med Psychiatry** 1989 Jun; 13(2):147–61

[Clinical characteristics of asthenic depression in the late period of craniocerebral trauma] Belov VP, et al. **Vrach Delo** 1988 Aug;(8):91–2 (Eng. Abstr.) **(Rus)**

[Neurologic analysis of cerebral exhaustion] Solov'eva AD, et al. **Zh Nevropatol Psikhiatr** 1988;88(11):67–74 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Neurasthenic complaints and psychometric function of toluene–exposed rotogravure printers. Orback P, et al. **Am J Ind Med** 1989;16(1):67–77

[Etiology of the neurastheniform psychosyndrome following injuries of the cervical spine, including cervicocephalic acceleration trauma] Laubichler W, et al. **Beitr Gerichtl Med** 1988;46:439–49 (Eng. Abstr.) **(Ger)**

[Somatic and mental status in recurrent duodenal ulcer] Smirnova LE, et al. **Sov Med** 1989;(2):77–9 **(Rus)**

[Work psychopathology] Cabral CA. **Acta Psiquiatr Psicol Am Lat** 1988 Sep;34(3):237–42 (Eng. Abstr.) **(Spa)**

HISTORY

The Weir Mitchell rest cure. Olfson M. **Pharos** 1988 Summer; 51(3):30–2

'Prisoners of their own feebleness': women, nerves and Western medicine—a historical overview. Cayleff SE. **Soc Sci Med** 1988;26(12):1199–208

Medical and popular traditions of nerves. Davis DL, et al. **Soc Sci Med** 1988;26(12):1209–21

PHYSIOPATHOLOGY

[The renin–angiotensin system in patients with neurasthenia with normal and decreased arterial blood pressure] Ashkinazi Ila, et al. **Zh Nevropatol Psikhiatr** 1989; 89(2):70–3 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Neurasthenia revisited: its place in modern psychiatry. Tsung YL. **Cult Med Psychiatry** 1989 Jun;13(2):105–29

Neurasthenia and related problems. Young D. **Cult Med Psychiatry** 1989 Jun;13(2):131–8

THERAPY

The concept of neurasthenia and its treatment in Japan. Suzuki T. **Cult Med Psychiatry** 1989 Jun;13(2):187–202

NEURASTHENIC NEUROSES see NEURASTHENIA

NEURENTERIC CYST see NEURAL TUBE DEFECTS

NEURILEMMA

CYTOLOGY

Satellite cells as blood–ganglion cell barrier in autonomic ganglia. Ten Tusscher MP, et al. **Brain Res** 1989 Jun 19; 490(1):95–102

[Neurolemmocytes and the problem of regenerating damaged nerves] Sotnikov OS, et al. **Arkh Anat Gistol Embriol** 1989

Jan;96(1):87–99 (123 ref.) (Rus)

IMMUNOLOGY

Antisera to an axolemma-enriched fraction have antiaxon and antimyelin effects in vitro. Bourdette DN, et al. **Ann N Y Acad Sci** 1988;540:423–6

[Changes in the neurite-glial interrelations under the influence of antiserum against galactocerebrosides (a vital tissue culture study)] Sotnikov OS, et al. **Arkh Anat Gistol Embriol** 1989 Feb;96(2):14–23 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Na+–Ca2+ exchange in squid optic nerve membrane vesicles is activated by internal calcium. Condrescu M, et al. **Biochim Biophys Acta** 1988 Dec 22;946(2):289–98

NEURILEMMOMA

Intralabyrinthine schwannoma. Sataloff RT, et al. **Am J Otol** 1988 Jul;9(4):323–6 (20 ref.)

Primary neurilemoma of the diaphragm. McClenathan JH, et al. **Ann Thorac Surg** 1989 Jul;48(1):126–8 (14 ref.)

Multiple cutaneous plexiform schwannomas with tumors of the central nervous system [letter] Rongioletti F, et al. **Arch Dermatol** 1989 Mar;125(3):431–2

Parapharyngeal neurilemmomas. Bradley N, et al. **Br J Oral Maxillofac Surg** 1989 Apr;27(2):139–46

Cystic schwannoma of the brainstem. Ladouceur D, et al. **Can J Neurol Sci** 1989 Aug;16(3):357–60 (22 ref.)

A rare endobronchial neurilemmoma (Schwannoma). Feldhaus RJ, et al. **Chest** 1989 Feb;95(2):461–2

Intramedullary spinal schwannoma. Sharma SC, et al. **Indian Pediatr** 1989 Mar;26(3):290–2

Neurilemoma in the distal part of the thigh. A case report. Roberts CS, et al. **J Bone Joint Surg [Am]** 1989 Aug; 71(7):1082–3

Schwannoma of the cervical sympathetic chain. Myssiorek DJ, et al. **J Laryngol Otol** 1988 Oct;102(10):962–5

Pelvic neurilemmoma: case report and literature review. Stone CD, et al. **Kans Med** 1988 Dec;89(12):331–3 (8 ref.)

[A malignant schwannoma of the jejunum associated with multiple neurofibromas and a primary adenoma of the parathyroid] Godlewski G, et al. **Ann Gastroenterol Hepatol (Paris)** 1989 Jan–Feb;25(1):13–7 (Eng. Abstr.) (Fre)

[Malignant nerve sheath tumor (malignant schwannoma). Presentation of a clinical case and review of the literature] Monje Gil F, et al. **Rev Stomatol Chir Maxillofac** 1989; 90(1):20–3 (32 ref.) (Eng. Abstr.) (Fre)

[Malignant schwannoma of the cervico-cephalic region. Clinical case] Pomatto E, et al. **Minerva Stomatol** 1988 Nov; 37(11):831–5 (Eng. Abstr.) (Ita)

[A case of schwannoma of intrathoracic right phrenic nerve] Morisaki Y, et al. **Kyobu Geka** 1989 Mar;42(3):239–43 (Eng. Abstr.) (Jpn)

[Three cases of neurinoma arising from the vagus nerve in the neck] Furukawa M, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Aug;91(8):1256–66 (66 ref.) (Eng. Abstr.) (Jpn)

[Four cases of intrathoracic schwannoma originating from the vagal nerve] Yoshida K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug;36(8):1408–12 (21 ref.) (Eng. Abstr.) (Jpn)

[Primary tumors of the small intestine] Telia AV, et al. **Khirurgiia (Mosk)** 1989 May;(5):34–9 (Eng. Abstr.) (Rus)

[Neurilemmoma of the vagus nerve and the cervical section of the marginal sympathetic trunk] Prokof'ev VA, et al. **Vestn Otorinolaringol** 1988 Jul–Aug;(4):66 (Rus)

[Neurinoma of the right vagus nerve, sympathetic nerve trunk and branches of the cervical plexus] Tolstov IuP, et al. **Vestn Otorinolaringol** 1989 May–Jun;(3):73–4 (Rus)

[Supratentorial intracerebral neurilemmoma] Rozumenko VD, et al. **Zh Vopr Neirokhir** 1989 Jan–Feb;(1):53–5 (Rus)

ANALYSIS

Malignant peripheral nerve sheath tumors and spindle cell sarcomas: an immunohistochemical analysis of multiple markers. Giangaspero F, et al. **Appl Pathol** 1989;7(2):134–44

Immunohistochemical studies on the tissue localization of collagen types I, III, IV, V and VI in schwannomas. Correlation with ultrastructural features of the extracellular matrix. Oda Y, et al. **Virchows Arch [B]** 1988;56(3):153–63

CLASSIFICATION

Schwannomatosis. An unusual variant of neurofibromatosis or a distinct clinical entity? Purcell SM, et al. **Arch Dermatol** 1989 Mar;125(3):390–3

COMPLICATIONS

Polypoid neurilemmoma of the trachea: an unusual cause of major airway obstruction. Robin J, et al. **Aust N Z J Surg** 1988 Nov;58(11):912–4

Intraosseous schwannoma of the cervical spine associated with skeletal fluorosis. Naidu MR, et al. **Clin Neurol Neurosurg** 1988;90(3):257–60

Horner's syndrome due to superior-mediastinal schwannoma [letter] Mathew BG, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1460–1

An unusual case presentation. Cellular schwannoma in pregnancy: an unusual cause of low back pain. Bardeguez A, et al. **J Perinatol** 1989 Mar;9(1):94–7

Lumbar intervertebral disk herniation with a concomitant nerve root neurinoma at the same site. Case report and review of the literature. Albert FK, et al. **Neurochirurgia (Stuttg)** 1988 Nov;31(6):222–5 (25 ref.)

Cordectomy for syringobulbo-myelia with sleep apnea secondary to a spinal extramedullary tumor: case report. Tokoro K, et al. **Neurosurgery** 1989 Jan;24(1):118–24

Two epithelioid malignant schwannomas in a patient with neurofibromatosis. Cytology, histology and DNA-flow-cytometry. Molenaar WM, et al. **Pathol Res Pract** 1989 May;184(5):529–34

Primary non-epithelial tumours of the small intestine presenting with gastrointestinal bleeding. Tonello P, et al. **Pathologica** 1988 Sep–Oct;80(1069):601–10

Schwannoma of the facial nerve in the cerebellopontine angle presenting with hearing loss. Lee KS, et al. **Surg Neurol** 1989 Sep;32(3):231–4

[Neurinoma of the vagus nerve, contralateral peripheral facial paralysis] Labauge R, et al. **Rev Neurol (Paris)** 1988; 144(10):606–9 (Eng. Abstr.) (Fre)

[Hemifacial spasm disclosing neurinoma of the hypoglossal nerve] Pou Serradell A, et al. **Rev Neurol (Paris)** 1988; 144(12):820–2 (10 ref.) (Eng. Abstr.) (Fre)

[Spinal subarachnoid hemorrhage due to neurinoma of the cauda equina] Furuno M, et al. **No Shinkei Geka** 1989 May; 17(5):485–8 (14 ref.) (Eng. Abstr.) (Jpn)

[Giant neurilemmoma of the small pelvis as a labor obstacle and the cause of inability to perform curettage of the uterine cavity] Gwóźdź AZ, et al. **Ginekol Pol** 1988 Jun; 59(6):386–9 (Eng. Abstr.) (Pol)

DIAGNOSIS

Fine needle aspiration of schwannomas. Value of electron microscopy and immunocytochemistry in the preoperative diagnosis. Zbieranowski I, et al. **Acta Cytol** 1989 May–Jun; 33(3):381–4

Magnetic resonance imaging of jugular foramen neurinomas. Matsushima T, et al. **Acta Neurochir (Wien)** 1989; 96(3–4):83–7

Small cauda equina neurinoma detected by MR imaging. Komatsu Y, et al. **AJNR** 1988 Nov–Dec;9(6):1243

Malignant epithelioid schwannoma of the skin. A low-grade neurotropic malignant melanoma? Suster S, et al. **Am J Dermatopathol** 1989 Aug;11(4):338–44

Correlation of ABR and medical imaging in patients with cerebellopontine angle tumors. Josey AF, et al. **Am J Otol** 1988 Dec;9 Suppl:12–6

Meningioma, meningeal hemangiopericytoma (angioblastic meningioma), peripheral hemangiopericytoma, and acoustic schwannoma. A comparative immunohistochemical study. Winek RR, et al. **Am J Surg Pathol** 1989 Apr;13(4):251–61 (29 ref.)

Cryptogenic oculomotor nerve palsy. The need for repeated neuroimaging studies. Abdul-Rahim AS, et al. **Arch Ophthalmol** 1989 Mar;107(3):387–90

Neurogenic neoplasms in the head and neck region. Ishikawa K, et al. **Auris Nasus Larynx** 1988;15(3):199–210 (21 ref.)

The glossopharyngeal neurinoma. Case reports and literature review. Claesen P, et al. **Clin Neurol Neurosurg** 1989; 91(1):65–9 (14 ref.)

Tumors of the cauda equina: the importance of an early diagnosis. HogenEsch RI, et al. **Clin Neurol Neurosurg** 1988;90(4):343–8

Abdominal and flank pain as presenting symptoms of schwannoma. Neinstein LS. **J Adolesc Health Care** 1989 Mar;10(2):143–5

Neurilemoma of the sciatic nerve mimicking tarsal tunnel syndrome. Report of a case. Wolock BS, et al. **J Bone Joint Surg [Am]** 1989 Jul;71(6):932–4

Neurilemoma of the tongue: MR findings. Flickinger FW, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):886–8

Ancient neurilemmoma (Schwannoma) of the oral cavity. Dayan D, et al. **J Craniomaxillofac Surg** 1989 Aug; 17(6):280–2 (8 ref.)

Granular cell tumor of the esophagus. Woodall M, et al. **J Tenn Med Assoc** 1989 Aug;82(8):419

Gadolinium-enhanced magnetic resonance imaging in temporal bone lesions. Millen SJ, et al. **Laryngoscope** 1989 Mar;99(3):257–60

MR imaging of intraspinal tumors—capability in histological differentiation and compartmentalization of extramedullary tumors. Takemoto K, et al. **Neuroradiology** 1988; 30(4):303–9

Malignant nerve sheath tumors of the head and neck. Hoffmann DF, et al. **Otolaryngol Head Neck Surg** 1988 Sep;99(3):309–14

Trigeminal neurilemoma: appearance on magnetic resonance imaging. Embry BM, et al. **South Med J** 1989 May; 82(5):653–6

Massive schwannoma of the nose and paranasal sinuses. Ross C, et al. **South Med J** 1988 Dec;81(12):1588–91 (12 ref.)

Intracranial glossopharyngeal neurinomas. Report of two cases with special emphasis on computed tomography and magnetic resonance imaging findings. Suzuki F, et al. **Surg Neurol** 1989 May;31(5):390–4

Primary intrasellar schwannoma: case report. Wilberger JE Jr. **Surg Neurol** 1989 Aug;32(2):156–8

[Malignant neurinoma (schwannoma) of the stomach simulating the picture of a bleeding ulcer] Manolov G, et al. **Khirurgiia (Sofiia)** 1989;42(2):89–91 (Bul)

[Benign tumors of the duodenum. Apropos of 2 cases: a schwannoma and a leiomyoma] Jouvie J, et al. **J Chir (Paris)** 1988 Nov;125(11):646–9 (Eng. Abstr.) (Fre)

[A case of benign schwannoma of the posterior tibial nerve. Treatment by simple excision without nerve graft (letter)] Tourne Y, et al. **J Chir (Paris)** 1989 Mar;126(3):204–5 (Fre)

[Echotomographic diagnosis of a case of schwannoma of the median nerve] Tabasso MD. **Radiol Med (Torino)** 1989 May;77(5):569–72 (Ita)

[A case of pulmonary neurilemmoma] Yamada Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jan;27(1):71–4 (Eng. Abstr.) (Jpn)

[A case of intracranial hypoglossal neurinoma] Serizawa T, et al. **No Shinkei Geka** 1989 Mar;17(3):279–83 (Eng. Abstr.) (Jpn)

[Localization of spinal tumors by MRI] Takahashi M, et al. **Rinsho Hoshasen** 1989 Feb;34(2):191–8 (Eng. Abstr.) (Jpn)

[A difficult pneumologic case] Albu A, et al. **Rev Ig [Pneumoftiziol]** 1988 Jan–Mar;37(1):85–90 (Rum)

[Differential diagnosis of intraspinal neurinomas and meningiomas by means of a bayesian system] Iglesias JR, et al. **Arch Neurobiol (Madr)** 1988 Nov–Dec;51(6):333–41 (Spa)

ETIOLOGY

Gastric schwannoma after Nissen fundoplication. A rare complication? Genova G, et al. **Am Surg** 1989 Aug; 55(8):495–7

[Von Recklinghausen's peripheral neurofibromatosis (report of a case with malignant degeneration)] Colombo C, et al. **Chir Ital** 1988 Aug–Oct;40(4–5):345–52 (Eng. Abstr.) (Ita)

PATHOLOGY

Fine needle aspiration cytology of malignant schwannoma metastatic to the breast. Matsuda M, et al. **Acta Cytol** 1989 May–Jun;33(3):372–6

Epithelioid malignant schwannoma. A case report. Honma K, et al. **Acta Pathol Jpn** 1989 Mar;39(3):195–202

Tactile corpuscle-like structures in peripheral nerve sheath tumors in plastic embedded material. Jurecka W. **Am J Dermatopathol** 1988 Feb;10(1):74–9

Diagnosis of a tumor with an unusual presentation in the pelvis. Sloan D. **Am J Obstet Gynecol** 1988 Oct; 159(4):826–7

Malignant peripheral nerve sheath tumor (MPNST) showing perineurial cell differentiation. Hirose T, et al. **Am J Surg Pathol** 1989 Jul;13(7):613–20

Primary malignant Schwannoma of the uterine cervix. Case report. Junge J, et al. **Br J Obstet Gynaecol** 1989 Jan; 96(1):111–6

Intrascleral neurilemmoma. Graham CM, et al. **Br J Ophthalmol** 1989 May;73(5):378–81

Multiple primary retroperitoneal tumours: a unique case. Patel JJ, et al. **Br J Surg** 1989 Aug;76(8):819–20

Malignant schwannoma of the clitoris in a 1-year-old child. Thomas WJ, et al. **Cancer** 1989 Jun 1;63(11):2216–9

Cervical schwannoma with intranuclear vacuoles by fine-needle sampling without aspiration. Vendraminelli R, et al. **Diagn Cytopathol** 1988;4(4):335–8

Neurilemmoma of the vagus nerve in the neck. Hussain SS, et al. **Ear Nose Throat J** 1989 Jan;68(1):52–6

Unorthodox diagnostic procedure in a rare case of intrapericardial malignant schwannoma. Nesser HJ, et al. **Eur Heart J** 1989 Apr;10(4):377–9

Malignant nerve sheath tumour arising in a benign ancient schwannoma. Rasbridge SA, et al. **Histopathology** 1989 May;14(5):525–8

Malignant triton tumor of the nose and paranasal sinuses: a case study. Shajrawi I, et al. **Hum Pathol** 1989 Aug; 20(8):811–4

Accessory nerve schwannoma extending extracranially to the second cervical level of vertebra. Nakashima T, et al. **J Laryngol Otol** 1988 Oct;102(10):959–61

Immortalized rat Schwann cells produce tumours in vivo. Langford LA, et al. **J Neurocytol** 1988 Aug;17(4):521–9

Malignant schwannoma. Walling AD. **Kans Med** 1989 Apr; 90(4):102–3

Solitary cutaneous plexiform neurilemmoma (schwannoma): a clinicopathologic, immunohistochemical, and ultrastructural study of 11 cases. Kao GF, et al. **Mod Pathol** 1989 Jan;2(1):20–6

Radiation-induced schwannomas. Rubinstein AB, et al. **Neurosurgery** 1989 Jun;24(6):929–32

Intraocular neurilemmoma arising from the posterior ciliary nerve in neurofibromatosis. Pathologic findings. Freedman SF, et al. **Ophthalmology** 1988 Nov;95(11):1559–64

Benign solitary schwannoma. Diagnostic value of fine-needle aspiration biopsy. Cristallini EG. **Pathologica** 1988 Jul–Aug;80(1068):501–4

Cellular schwannoma: report of a case with immunohistochemical and electron microscopical study. Sementa AR, et al. **Pathologica** 1988 Jul–Aug; 80(1068):505–12

Solitary cervical intra- and extramedullary schwannoma. Garen PD, et al. **Pathology** 1988 Jul;20(3):296–8

Solitary schwannomas of cranial-nerve origin presenting in

the neck. A report of 4 cases. Maharaj D, et al. **S Afr J Surg** 1988 Dec;26(4):166–8

Pheochromocytoma combined with malignant schwannoma: unusual neoplasm of the adrenal medulla. Miettinen M, et al. **Ultrastruct Pathol** 1988 Sep–Oct;12(5):513–27

Leiomyoma and neurilemoma: report of two unusual non–epithelial tumours of the thyroid gland. Andrion A, et al. **Virchows Arch [A]** 1988;413(4):367–72

[Apropos of a case of malignant schwannoma with rhabdomyoblastic components. Malignant Triton tumor] Ben Nasr R, et al. **Arch Anat Cytol Pathol** 1988;36(4):175–7 (Eng. Abstr.) **(Fre)**

[Hemorrhagic ulcerated schwannoma with a double endo and exogastric localization. Apropos of a case (letter)] Firouz Abadi M, et al. **J Chir (Paris)** 1989 Feb;126(2):123–4 **(Fre)**

[Extra–medullary intradural melanotic tumor: apropos of a case of dorsal pigmented neurinoma. Review of the literature] Graziani N, et al. **Neurochirurgie** 1988; 34(3):210–7 (49 ref.) (Eng. Abstr.) **(Fre)**

[Neurinoma of the facial nerve] Bento RF, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(5):473–5 (10 ref.) (Eng. Abstr.) **(Fre)**

[Benign and malignant schwannoma of the orbit—clinical picture and histopathologic diagnosis] Nieuwenhuis I, et al. **Fortschr Ophthalmol** 1988;85(6):782–5 (Eng. Abstr.) **(Ger)**

[Extra–temporal localized facial neuromas] Kempf HG, et al. **HNO** 1989 Jan;37(1):14–8 (Eng. Abstr.) **(Ger)**

[Neurinoma of the vocal cord. A case report] Bonkowsky VM, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Aug; 67(8):392–4 (Eng. Abstr.) **(Ger)**

[Differential diagnosis of parapharyngeal tumors—the vagus neurinoma] Kehrl W, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Aug;67(8):389–91 (Eng. Abstr.) **(Ger)**

[Neurinoma of the L3 spinal nerve root as a cause of stress–induced lumbo–ischialgias] Mayer HM, et al. **Sportverletz Sportschaden** 1988 Mar;2(1):35–8 (Eng. Abstr.) **(Ger)**

[The effect of various surgical technics on neuroma development using the neodymium laser] Mewe R, et al. **Z Orthop** 1989 Jan–Feb;127(1):130–4 (Eng. Abstr.) **(Ger)**

[Degenerated schwannoma of the oral cavity] Suba Z, et al. **Fogorv Sz** 1989 Jun;82(6):185–8 (Eng. Abstr.) **(Hun)**

[A case of mediastinal schwannoma originating from the intrathoracic vagal nerve] Hasegawa N, et al. **Kyobu Geka** 1989 Jun;42(6):474–7 (9 ref.) (Eng. Abstr.) **(Jpn)**

[Multiple neurilemmomas of the chest wall] Matsubara M, et al. **Kyobu Geka** 1988 Aug;41(9):764–7 (Eng. Abstr.) **(Jpn)**

[A case of neurilemmomatosis] Takano Y, et al. **Nippon Hifuka Gakkai Zasshi** 1989 Jan;99(1):67–71 (Eng. Abstr.) **(Jpn)**

[A case of mediastinal schwannoma originating from the intrathoracic phrenic nerve] Ayabe H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Nov; 26(11):1187–90 (Eng. Abstr.) **(Jpn)**

[Spinal melanotic schwannoma: report of a case] Iizuka H, et al. **No Shinkei Geka** 1988 Sep;16(10):1199–205 (29 ref.) (Eng. Abstr.) **(Jpn)**

[Cell kinetics of human meningiomas and neurinomas—Ki–67 PAP stain] Shibata T, et al. **No Shinkei Geka** 1988 Jul; 16(8):939–44 (Eng. Abstr.) **(Jpn)**

[Facial nerve neurinoma with extension to middle cranial fossa] Sadaoka S, et al. **Rinsho Hoshasen** 1988 Nov; 33(12):1585–8 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

[Changes in the sensitivity of the cornea in patients with intracerebral tumors. Studies of patients with meningioma of the cranial base and neurinoma of the trigeminal nerve and the vestibulocochlear nerve using the Draeger esthesiometer] Heller H, et al. **Klin Monatsbl Augenheilkd** 1988 Oct;193(4):356–9 (Eng. Abstr.) **(Ger)**

[Pronator teres syndrome caused by neurinoma of the median nerve] Berlit P. **Nervenarzt** 1989 Mar;60(3):184–6 **(Ger)**

RADIOGRAPHY

Multiple schwannomas presenting as a mass of the lateral chest wall [letter] Murray RJ, et al. **AJR** 1988 Dec; 151(6):1250–1

Ossification within a thoracic neurilemoma—a case report. Ou YC, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Aug; 42(2):143–6

Exogastric neurilemmoma presenting as acute abdomen: role of computed tomography in diagnosis. Nussinson E, et al. **Gastrointest Radiol** 1988 Oct;13(4):306–8

Computed tomography of elephantiasis neuromatosa. Hertzanu Y, et al. **J Comput Assist Tomogr** 1989 Jan–Feb; 13(1):156–8

Presacral neurilemoma (schwannoma)—report of a rare case. Gupta S, et al. **Jpn J Surg** 1989 Mar;19(2):229–31

Benign solitary schwannoma of the retroperitoneum: CT features. Ghiatas AA, et al. **South Med J** 1989 Jun; 82(6):801–2 (10 ref.)

Primary neurilemoma of the trachea. Pang LC. **South Med J** 1989 Jun;82(6):785–7

A gigantic neurilemoma originating in the pterygopalatine fossa. Case report. Iwai Y, et al. **Surg Neurol** 1988 Dec; 30(6):452–6

[Efficacy of CT omnipaque myelography in the demonstration of intraspinal space–occupying diseases (report of 77 cases)] Wang YS. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Feb;23(1):11–3 (Eng. Abstr.) **(Chi)**

[Computed tomographic metrizamide myelography of intraspinal tumors. Report of 38 cases] Zeng YL, et al. **Chung Hua I Hsueh Tsa Chih** 1988 May;68(5):272–4, 20 (Eng. Abstr.) **(Chi)**

[Broad mediastinal flutter in a patient] Paul R, et al. **Duodecim** 1988;104(18):1474–7 **(Fin)**

[Lumbar neurinoma with corporeal–pedicle development. Apropos of a case] Lozes G, et al. **Rev Rhum Mal Osteoartic** 1989 Mar 15;56(4):333–5 **(Fre)**

[Computed tomography of a neurinoma of the gastric wall] Doringer E, et al. **ROFO** 1989 Aug;151(2):235–6 **(Ger)**

[CT morphology of malignant schwannoma] Triebel HJ, et al. **ROFO** 1988 Oct;149(4):354–60 (Eng. Abstr.) **(Ger)**

[A case of neurinoma of the hypoglossal nerve] Padolecchia R, et al. **Radiol Med (Torino)** 1988 Sep;76(3):218–20 **(Ita)**

[A case of neurilemmoma of the L5 spinal nerve root with a clinical and radiculographic picture of intervertebral disk prolapse] Styczyński T, et al. **Neurol Neurochir Pol** 1988 Jul–Aug;22(4):356–9 (Eng. Abstr.) **(Pol)**

[Thrombosed aneurysm of the accessory hemiazygos vein simulating neurinoma of the posterior mediastinum] Vishnevskiĭ AA, et al. **Vestn Khir** 1989 Mar;142(3):49–50 **(Rus)**

[Retroperitoneal schwannoma: report of a case] Navalón P, et al. **Arch Esp Urol** 1989 May;42(4):366–9 (Eng. Abstr.) **(Spa)**

SECONDARY

Fine needle aspiration cytology of metastatic malignant schwannoma. A case report. Schwartz JG, et al. **Acta Cytol** 1989 May–Jun;33(3):377–80

The management of spinal epidural metastases. Brihaye J, et al. **Adv Tech Stand Neurosurg** 1988;16:121–76 (192 ref.)

Malignant schwannoma (neurofibrosarcoma) metastatic to spine. Surgical decompression and stabilization. Cybulski GR, et al. **Spine** 1989 May;14(5):549–51

[Successful combination therapy of a metastatic Triton tumor in a 5–year–old boy] Glöckel U, et al. **Monatsschr Kinderheilkd** 1988 Aug;136(8):471–4 (Eng. Abstr.) **(Ger)**

SURGERY

Intraspinal pigmented schwannoma with malignant progression. Röyttä M, et al. **Acta Neurochir (Wien)** 1988; 95(3–4):147–54

The combined supra–infratentorial pre–sigmoid sinus avenue to the petro–clival region. Surgical technique and clinical applications. Samii M, et al. **Acta Neurochir (Wien)** 1988; 95(1–2):6–12

Intraventricular schwannoma. Pimentel J, et al. **Childs Nerv Syst** 1988 Dec;4(6):373–5 (25 ref.)

Ischialgia caused by a malignant Triton tumour of the lumbosacral plexus. A case report. Frijns RJ, et al. **Clin Neurol Neurosurg** 1989;91(2):177–80

Ciliary body neurilemoma recurring after 15 years. Hufnagel TJ, et al. **Graefes Arch Clin Exp Ophthalmol** 1988; 226(5):443–6

Benign schwannoma of the foot. Pace JF, et al. **J Am Podiatr Med Assoc** 1989 Jun;79(6):293–4

Superficial malignant schwannoma on the face: a case for early radical surgery. Bleach NR, et al. **J Laryngol Otol** 1989 Mar;103(3):316–8

Trigeminal schwannoma. Surgical series of 14 cases with review of the literature. McCormick PC, et al. **J Neurosurg** 1988 Dec;69(6):850–60 (63 ref.)

Neurilemomas of the trigeminal nerve. Pollack IF, et al. **J Neurosurg** 1989 May;70(5):737–45

Malignant schwannoma of the vulva. A case report. Terada KY, et al. **J Reprod Med** 1988 Dec;33(12):969–72 (12 ref.)

Neuromas of the superficial radial nerve. Attarian DE. **Milit Med** 1988 Aug;153(8):393–4

The occurrence of different types of spinal tumours in one patient. A case report and review of the literature. Nishiura I, et al. **Neurochirurgia (Stuttg)** 1989 Mar;32(2):52–5 (21 ref.)

Surgical treatment of intracavernous neoplasms: a four–year experience. Sekhar LN, et al. **Neurosurgery** 1989 Jan; 24(1):18–30

Tumors involving the facial nerve [letter] Whittaker CK, et al. **Neurosurgery** 1988 Jul;23(1):129

Intrathoracic tumors arising from the vagus nerve. Review of resected tumors in Japan. Shirakusa T, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):173–5 (14 ref.)

[Cervical localization of a neurinoma of the n. vagus treated surgically] Kazandzhiev P, et al. **Khirurgiia (Sofiia)** 1989; 42(2):81–3 **(Bul)**

[A trap of parotidectomy: nervous tumors of the facial nerve] Breton P, et al. **Ann Chir Plast Esthet** 1988;33(2):172–5 (Eng. Abstr.) **(Fre)**

[Schwannoma of the endothoracic phrenic nerve. General review apropos of a case] Grunstein P, et al. **Rev Pneumol Clin** 1988;44(3):146–50 (31 ref.) (Eng. Abstr.) **(Fre)**

[Schwannoma and neurofibroma of the neck] Decurtins C, et al. **HNO** 1988 Nov;36(11):437–44 (Eng. Abstr.) **(Ger)**

[Neurinoma of the recurrent laryngeal nerve—as a case report, an argument for nerve preparation] Hermes H, et al. **Laryngorhinootologie** 1989 Apr;68(4):244–5 (Eng. Abstr.) **(Ger)**

[Intratemporal facial neurinoma] Kempf HG, et al. **Laryngorhinootologie** 1989 Mar;68(3):144–5 (Eng. Abstr.) **(Ger)**

[Malignant retroperitoneal schwannoma] Niebuhr H, et al. **Zentralbl Chir** 1989;114(1):40–4 **(Ger)**

[Aggressive schwannoma of the ileum] Antonini R, et al. **Minerva Chir** 1988 Jun 15;43(11):975–81 (Eng. Abstr.) **(Ita)**

[A case of dumbbell neurogenic tumor in the posterior mediastinum] Fukata T, et al. **Kyobu Geka** 1989 May; 42(5):400–3 (Eng. Abstr.) **(Jpn)**

[Hoarseness after removing a cervical schwannoma—a case report] Niimoto M, et al. **Nippon Geka Gakkai Zasshi** 1988 Jul;89(7):1132–6 (Eng. Abstr.) **(Jpn)**

[Multiple neurinoma of the spinal cord: case report] Hida K, et al. **No Shinkei Geka** 1988 Dec;16(13):1489–93 (22 ref.) (Eng. Abstr.) **(Jpn)**

[1–stage sequential removal of a mediastinal–intravertebral neurinoma of the sandglass type] Velibekov ASh, et al. **Grudn Khir** 1988 Sep–Oct;(5):92–3 **(Rus)**

ULTRASTRUCTURE

Melanotic schwannoma arising in the sympathetic ganglion. Kayano H, et al. **Hum Pathol** 1988 Nov;19(11):1355–8

Ultrastructural study of a perineurioma. Ohno T, et al. **Ultrastruct Pathol** 1988 Sep–Oct;12(5):495–504 (21 ref.)

[A new cell line of rat gasserian ganglion neurinoma NGUK–1] Avtsyn AP, et al. **Tsitologiia** 1989 Jan; 31(1):97–102 (Eng. Abstr.) **(Rus)**

VETERINARY

Management of a schwannoma in the larynx of a lion. Paul–Murphy J, et al. **J Am Vet Med Assoc** 1986 Nov 1; 189(9):1202–3

Multicentric schwannoma in a mature Holstein cow. Johnson RC, et al. **Vet Rec** 1988 Dec 17;123(25):649–50

NEURILEMMOMA, ACOUSTIC see **NEUROMA, ACOUSTIC**

NEURITIS

Vestibular neuritis—a horizontal semicircular canal paresis? Büchele W, et al. **Adv Otorhinolaryngol** 1988;42:157–61 (9 ref.)

CLASSIFICATION

[Inflammatory neuropathies] Rizzo PA, et al. **Riv Neurol** 1988 Mar–Apr;58(2):56–64 (23 ref.) **(Ita)**

COMPLICATIONS

Vestibular neuronitis in childhood. Shirabe S. **Acta Otolaryngol Suppl (Stockh)** 1988;458:120–2

Mononeuritis multiplex with brachial plexus neuropathy coincident with Mycoplasma pneumoniae infection. Kidron D, et al. **Eur Neurol** 1989;29(2):90–2

An adolescent with intermittent headache, transient hemiparesis, and urinary abnormalities [clinical conference] Gruskin AB, et al. **J Pediatr** 1988 Oct;113(4):769–76

Ocular pain could be caused by occipital neuritis [letter] Bode D. **Ophthalmic Surg** 1988 Sep;19(9):679

[A case of HTLV–I associated myelopathy (HAM) complicated by mononeuritis multiplex] Ueta Y, et al. **Sangyo Ika Daigaku Zasshi** 1988 Dec 1;10(4):423–6 (Eng. Abstr.) **(Jpn)**

[Syphilitic vestibulocochlear neuritis] Bętkowski A, et al. **Wiad Lek** 1988 Mar 15;41(6):397–400 (Eng. Abstr.) **(Pol)**

[Clinical manifestations and treatment of odontogenic neuropathy (neuritis) of the alveolar nerves] Puzin MN, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):133–5 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Field detection of early neuritis in leprosy [letter] Harris JR. **Lepr Rev** 1988 Jun;59(2):184

Field detection of early neuritis in leprosy [letter] Warren G, et al. **Lepr Rev** 1988 Jun;59(2):183

Acute retinal necrosis syndrome presenting with papillitis and arcuate neuroretinitis. Margolis T, et al. **Ophthalmology** 1988 Jul;95(7):937–40

[Investigation of serum viral antibody titers in vestibular neuronitis] Hirata T, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jun;91(6):835–46 (Eng. Abstr.) **(Jpn)**

[The clinical picture and treatment of neuropathies of the trigeminal nerve system] Mamedbekov FN, et al. **Zh Nevropatol Psikhiatr** 1988;88(10):58–62 (Eng. Abstr.) **(Rus)**

[HIV should be considered in cases of diffuse neurologic conditions] Samuelsson K, et al. **Lakartidningen** 1988 Nov 2;85(44):3674–6 **(Swe)**

DRUG THERAPY

[Treatment of cochlear neuritis of vascular etiology by endaural phonophoresis and phonoelectrophoresis] Pal'chun VT, et al. **Vestn Otorinolaringol** 1989 May-Jun; (3):46-50 (Eng. Abstr.) (Rus)

ETIOLOGY

Peripheral neural involvement in cutaneous leishmaniasis. A pathologic study of human and experimental animal lesions. Satti MB, et al. **Int J Dermatol** 1989 May;28(4):243-7

Postpartum idiopathic brachial neuritis. Dumitru D, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 2):473-5

Brachial plexitis complicating disseminated gonococcal infection. Maroun B, et al. **Postgrad Med J** 1989 Feb; 65(760):118-9

Neuritis cordis due to the acute polyneuritis of the Guillain-Barré syndrome. Feiden W, et al. **Virchows Arch** [A] 1988;413(6):573-80

[Polyneuritis of cranial nerves and acquired immunodeficiency syndrome (AIDS): 5 cases] Uldry PA, et al. **Rev Neurol (Paris)** 1988;144(10):586-9 (Eng. Abstr.) (Fre)

[A case of Sjögren's syndrome with mononeuritis associated with high levels of circulating immune complexes] Tanaka Y, et al. **Rinsho Shinkeigaku** 1989 Mar;29(3):336-42 (Eng. Abstr.) (Jpn)

PATHOLOGY

Hypertrophic brachial plexus neuritis: a pathological study of two cases. Cusimano MD, et al. **Ann Neurol** 1988 Nov; 24(5):615-22

Histopathology of Bell's palsy. Liston SL, et al. **Laryngoscope** 1989 Jan;99(1):23-6 (28 ref.)

[The leprous neuritis of the lower limbs—histopathological findings and its possible mechanism] Minauchi Y. **Nippon Rai Gakkai Zasshi** 1988 Jul-Sep;57(3):137-48 (Eng. Abstr.) (Jpn)

PHYSIOPATHOLOGY

Beat-to-beat variability of nystagmus. A clinical study. Pyykkö I, et al. **Adv Otorhinolaryngol** 1988;41:196-200

Neurogenic inflammation: axon reflex in pigs. Pierau FK, et al. **Agents Actions** 1989 Jan;26(1-2):231-2

[Evoked potentials in experimental neuritis (neuropathies) of the trigeminal nerve] Grechko VE, et al. **Zh Nevropatol Psikhiatr** 1988;88(7):98-102 (Eng. Abstr.) (Rus)

RADIOTHERAPY

[Treatment of trigeminal neuralgia, ganglioneuritis of the pterygopalatine ganglion and other types of prosopalgias by helium-neon laser irradiation of the pterygopalatine ganglion] Shuster MA, et al. **Zh Nevropatol Psikhiatr** 1988; 88(7):96-8 (Eng. Abstr.) (Rus)

SURGERY

Postirradiation lesions of the brachial plexus. Results of surgical treatment. LeQuang C. **Hand Clin** 1989 Feb; 5(1):23-32

[Surgical treatment of neurotrophic lesions in leprosy. Application in other neuropathies] Bourrel P. **Chirurgie** 1988;114(7-8):545-60 (65 ref.) (Eng. Abstr.) (Fre)

[Surgical treatment of leprous neuritis. The results in 114 operations] Nores JM, et al. **Presse Med** 1988 Oct 8; 17(34):1756-9 (Eng. Abstr.) (Fre)

THERAPY

High-dose intravenous human immunoglobulin in chronic inflammatory demyelinating polyneuropathy. Faed JM, et al. **Neurology** 1989 Mar;39(3):422-5

[Preliminary clinical study and theoretical approach to an I.R. An emitter with athermal pulses] Clérin M. **Acta Belg Med Phys** 1989 Jan-Mar;12(1):7-10 (Fre)

[Electrostimulation in the combined treatment of patients with facial neuritis] Korchemnyi VA, et al. **Vrach Delo** 1988 Dec;(12):74-7 (Eng. Abstr.) (Rus)

VETERINARY

Encephalitis, proventricular and ventricular myositis, and myenteric ganglioneuritis in an umbrella cockatoo. Joyner KL, et al. **Avian Dis** 1989 Apr-Jun;33(2):379-81

NEURITIS, EXPERIMENTAL ALLERGIC

COMPLICATIONS

Antioxidant enzyme suppression of demyelination in experimental optic neuritis. Guy J, et al. **Curr Eye Res** 1989 May;8(5):467-77

DRUG THERAPY

Suppression of experimental allergic neuritis by cyclosporin A. Nakayasu H, et al. **Ann N Y Acad Sci** 1988;540:546-8

ETIOLOGY

The role of macrophages and eicosanoids in the pathogenesis of experimental allergic neuritis. Serial clinical, electrophysiological, biochemical and morphological observations. Hartung HP, et al. **Brain** 1988 Oct;111 (Pt 5):1039-59

IMMUNOLOGY

Suppression of P2-T-cell line mediated experimental autoimmune neuritis by interleukin-2 receptor blockade. Hartung HP, et al. **Ann N Y Acad Sci** 1988;540:563-5

Changes in T-cell subsets in experimental allergic neuritis. Yamashita T, et al. **Ann N Y Acad Sci** 1988;540:720-2

Suppression of P2-T cell line-mediated experimental autoimmune neuritis by interleukin-2 receptor targeted monoclonal antibody ART 18. Hartung HP, et al. **Brain Res** 1989 Jun 5;489(1):120-8

A T cell epitope for experimental allergic neuritis is an amphipathic alpha-helical structure. Olee T, et al. **J Neuroimmunol** 1989 Feb;21(2-3):235-40

In vivo monoclonal antibody treatment with Ox19 (anti-rat CD5) causes disease relapse and terminates P2-induced immunospecific tolerance in experimental allergic neuritis. Strigård K, et al. **J Neuroimmunol** 1989 Jun;23(1):11-8

Responsiveness to P2 of blood- and cauda equina-derived lymphocytes in experimental allergic neuritis in the Lewis rat: preliminary characterisation of a P2-specific cauda equina-derived T cell line. Taylor WA, et al. **J Neuroimmunol** 1988 Oct;19(4):279-89

Elimination of CD8+ T cells in vivo does not break induced immunospecific tolerance to experimental allergic neuritis in rats. Strigård K, et al. **Scand J Immunol** 1988 Sep; 28(3):325-30

PATHOLOGY

Role of endoneural cells in experimental allergic neuritis and characterisation of a resident phagocytic cell. Stevens A, et al. **Acta Neuropathol (Berl)** 1989;77(4):412-9

Chronic experimental allergic neuritis in Lewis rats. Adam AM, et al. **Neuropathol Appl Neurobiol** 1989 May-Jun; 15(3):249-64

PHYSIOPATHOLOGY

Experimental allergic neuritis; studies on pathogenesis and immunoregulation. Strigård K. **Acta Neurol Scand Suppl** 1989;123:1-29

Role of mast cells in peripheral nervous system demyelination. Johnson D, et al. **Ann N Y Acad Sci** 1988; 540:727-8

Demyelination of sciatic nerve in acute experimental allergic neuritis of the rat. A gel electrophoresis investigation. Schott K, et al. **J Neuroimmunol** 1988 Nov;20(1):53-61

[Forms of experimental allergic neuritis. Electrophysiologic studies and treatment with plasmapheresis] Wiethölter H. **Schriftenr Neurol** 1989;31:1-134 (137 ref.) (Ger)

PREVENTION & CONTROL

High-dose methylprednisolone suppresses experimental allergic neuritis in the Lewis rat. Watts PM, et al. **Exp Neurol** 1989 Jan;103(1):101-4

THERAPY

Effects on experimental allergic neuritis in rats by in vivo treatment with monoclonal anti-T-cell antibodies. Olsson T, et al. **Ann N Y Acad Sci** 1988;540:560-2

Experimental allergic neuritis: effect of plasma infusions. Harvey GK, et al. **Clin Exp Immunol** 1989 Jun;76(3):452-7

IgG immunoadsorption in experimental allergic neuritis: effect on antibody levels and clinical course. Harvey GK, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):865-70

NEUROANATOMY

EDUCATION

Computer-enhanced learning in neuroanatomy. Tan CK, et al. **Med Educ** 1989 Jul;23(4):371-5

HISTORY

Santiago Ramón y Cajal, the retina and the neuron theory. Piccolino M, et al. **Doc Ophthalmol** 1989 Feb;71(2):123-41

INSTRUMENTATION

A device for enhancing the visibility of the tip of a glass micropipette: application in neuroanatomy. Ter Horst GJ, et al. **Brain Res Bull** 1988 Dec;21(6):917-8

NEUROBIOLOGY

Essential aspects of the research problem in schizophrenia. Hirsch SR. **J R Soc Med** 1988 Dec;81(12):691-7 (36 ref.)

Animal experiments [letter] Porter DG. **Nature** 1989 Jul 20; 340(6230):180

Institute of Neurobiology, 20th anniversary symposium "Modern Concepts in Neurobiology". San Juan, Puerto Rico, November 11-13, 1987. Proceedings. **P R Health Sci J** 1988 Aug;7(2):57-203

Molecular neurobiology—a conference sponsored by the NIMH [news] Scheller RH, et al. **Science** 1988 Oct 7; 242(4875):13-4

[Problems of neurobiology and the development of memory] Vasilevskiĭ NN. **Zh Evol Biokhim Fiziol** 1988 May-Jun; 24(3):311-8 (17 ref.) (Rus)

[The life and work of Eduardo De Robertis (1913-1988): a challenge to youth] Jaim-Etcheverry G. **Medicina (B Aires)** 1988;48(4):429-32 (Spa)

EDUCATION

Shifting toward problem-based learning in a medical school neurobiology course. Nolte J, et al. **Proc Annu Conf Res Med Educ** 1988;27:66-71

[The physiology of higher nervous activity (the neurobiological bases of behavior). A draft program for university biology departments and for examinations on the candidate degree minimum qualification in the specialty] Batuev AS. **Zh Vyssh Nerv Deiat** 1988 Nov-Dec; 38(6):1174-8 (Rus)

HISTORY

Nine "Conferences of the three institutes" (1958-1988). Zernicki B. **Acta Neurobiol Exp (Warsz)** 1989;49(2-3):125-8

Nervenkitt: notes on the history of the concept of neuroglia. Somjen GG. **GLIA** 1988;1(1):2-9

INSTRUMENTATION

Microcomputers and neurobiology: a short review. Fraser PJ. **Comput Appl Biosci** 1985 Dec;1(4):219-24 (61 ref.)

METHODS

Perspectives on cognitive neuroscience. Churchland PS, et al. **Science** 1988 Nov 4;242(4879):741-5 (47 ref.)

TRENDS

Frontiers in neuroscience [editorial] Koshland DE Jr. **Science** 1988 Nov 4;242(4879):641

NEUROBLASTOMA

Primary orbital neuroblastoma. Bullock JD, et al. **Arch Ophthalmol** 1989 Jul;107(7):1031-3

Neuroblastoma today. Ferster A, et al. **Biomed Pharmacother** 1988;42(4):247-55 (71 ref.)

Stimulation of choline acetyltransferase activity by retinoic acid and sodium butyrate in a cultured human neuroblastoma. Casper D, et al. **Brain Res** 1989 Jan 23; 478(1):74-84

Mechanism of activation of choline acetyltransferase in a human neuroblastoma cell line. Casper D, et al. **Brain Res** 1989 Jan 23;478(1):85-94

Identification and characterization of D1 and D2 dopamine receptors in cultured neuroblastoma and retinoblastoma clonal cell lines. Monsma FJ Jr, et al. **Brain Res** 1989 Jul 17;492(1-2):314-24

Psychotropic drugs block voltage-gated ion channels in neuroblastoma cells. Ogata N, et al. **Brain Res** 1989 Jan 2;476(1):140-4

Prolonged exposure of human neuroblastoma SH-SY5Y cell line to morphine and oxotremorine modulates signal transduction in adenylate cyclase system. Olasmaa M, et al. **Brain Res** 1988 Dec 20;475(2):291-6

Acetylcholine synthesis and secretion by LA-N-2 human neuroblastoma cells. Richardson UI, et al. **Brain Res** 1989 Jan 9;476(2):323-31

Aluminum salts induce the accumulation of neurofilaments in perikarya of NB2a/dl neuroblastoma. Shea TB, et al. **Brain Res** 1989 Jul 17;492(1-2):53-64

Inhibition of cyclic AMP formation in N1E-115 neuroblastoma cells is mediated by a non-cardiac M2 muscarinic receptor subtype. Surichamorn W, et al. **Brain Res** 1989 Jul 31;493(2):320-5

Endogenous opioid systems regulate growth of neural tumor cells in culture. Zagon IS, et al. **Brain Res** 1989 Jun 19; 490(1):14-25

Endogenous opioid systems and neural cancer: transmission and scanning electron microscopic studies of murine neuroblastoma in tissue culture. Zagon IS. **Brain Res Bull** 1988 Nov;21(5):777-84

TPA-induced neurite formation in a neuroblastoma cell line (SH-SY5Y) is associated with increased IGF-I receptor mRNA and binding. Ota A, et al. **Brain Res Mol Brain Res** 1989 Jul;6(1):69-76

Changes in expression of tyrosine hydroxylase immunoreactivity in human SMS-KCNR neuroblastoma following retinoic acid or phorbol ester-induced differentiation. Pennypacker KR, et al. **Brain Res Mol Brain Res** 1989 Jun;5(4):251-8

Insulin imprinting of neuroblastoma cells. Kovacs P, et al. **Cell Biol Int Rep** 1989 Jun;13(6):563-7

5-Aza-2'-deoxycytidine as inducer of differentiation and growth inhibition in mouse neuroblastoma cells. Bartolucci S, et al. **Cell Differ Dev** 1989 Jun;27(1):47-55

Neuroblastoma cell-oligodendrocyte interaction is mediated by neural cell adhesion molecules. Bhat S, et al. **Dev Neurosci** 1988;10(4):231-5

Regulation of choline acetyltransferase activity by cell density in a cultured human neuroblastoma cell line. Casper D, et al. **Dev Neurosci** 1988;10(4):245-55

Neuroblastoma in Libyan children. el Mauhoub M, et al. **Indian Pediatr** 1989 Mar;26(3):284-6

Induction of morphological differentiation of human neuroblastoma cells is accompanied by induction of tissue-type plasminogen activator. Neuman T, et al.

J Neurosci Res 1989 Jul;23(3):274–81
Pelvic neuroblastoma. Knoedler CJ, et al. J Urol 1989 Apr; 141(4):905–7
Dideoxycytidine, an anti-HIV drug, selectively inhibits growth but not phosphatidylcholine metabolism in neuroblastoma and glioma cells. Cook HW, et al. Neurochem Res 1989 Mar;14(3):279–84
Adenosine receptors linked to adenylate cyclase activity in human neuroblastoma cells: modulation during cell differentiation. Abbracchio MP, et al. Neuroscience 1989; 30(3):819–25
Changes in lipid composition of neuroblastoma C1300 N18 cell during differentiation. Gulaya NM, et al. Neuroscience 1989;30(1):153–64
Properties of neuronal type acetylcholine receptors in voltage clamped mouse neuroblastoma cells. Oortgiesen M, et al. Neuroscience 1989;31(1):169–79
Synapse-competence of LA-N-2 human neuroblastoma cells in coculture with rat striated muscle cells. Yeh HH, et al. Neuroscience 1988 Oct;27(1):309–15

ANALYSIS

Expression of pan-neuroendocrine proteins in 53 neuroblastic tumors. An immunohistochemical study with neuron-specific enolase, chromogranin, and synaptophysin. Hachitanda Y, et al. Arch Pathol Lab Med 1989 Apr; 113(4):381–4
Purification of a growth factor related to platelet-derived growth factor and a type beta transforming growth factor secreted by mouse neuroblastoma cells. A general strategy for the purification of basic polypeptide growth factors. Van den Eijnden-Van Raaij AJ, et al. Biochem J 1989 Jan 15;257(2):375–82
Alterations in plasminogen activator and inhibitor activity during the differentiation of a human neuroblastoma cell line, SMS-KAN. Benjamin LA, et al. Cancer Lett 1989 Feb;44(2):101–8
Analysis of nerve growth factor receptor expression in human neuroblastoma and neuroepithelioma cell lines. Baker DL, et al. Cancer Res 1989 Aug 1;49(15):4142–6
Procoagulant activity of human neuroblastoma cell lines, in relation to cell growth, differentiation and cytogenetic abnormalities. Esumi N, et al. Jpn J Cancer Res 1989 May; 80(5):438–43
Characterization of opioid, sigma, and phencyclidine receptors in the neuroblastoma-brain hybrid cell line NCB-20. Kushner L, et al. Mol Pharmacol 1988 Nov; 34(5):689–94
Gangliosides in neuroblastomas. Schengrund CL, et al. Neurochem Pathol 1988 Jun;8(3):189–202 (42 ref.)
Analysis of the c-src gene product structure, abundance, and protein kinase activity in human neuroblastoma and glioblastoma cells. O'Shaughnessy J, et al. Oncogene Res 1987;2(1):1–18
[Detection of N-acylethanolamine phospholipids in neuroblastoma C1300 cells] Gulaia NM, et al. Ukr Biokhim Zh 1988 Sep-Oct;60(5):58–63 (Eng. Abstr.) (Rus)

BLOOD

Serum ferritin in stage IV neuroblastoma. Imashuku S, et al. Am J Pediatr Hematol Oncol 1988 Spring;10(1):39–41
Glutathione peroxidase activity, selenium and lipid peroxides levels in blood of cancer children. Gromadzinska J, et al. Ann Clin Res 1988;20(3):177–83
Determination of serum catecholamine metabolites in neuroblastoma by high performance liquid chromatography with electrochemical detection. Tang QM, et al. Biomed Chromatogr 1986 Feb;1(1):7–11
Combined measurements of plasma aromatic L-amino acid decarboxylase and DOPA as tumour markers in diagnosis and follow-up of neuroblastoma. Boomsma F, et al. Eur J Cancer Clin Oncol 1989 Jul;25(7):1045–52
Plasma neuropeptide Y concentrations in patients with neuroendocrine tumors. Grouzmann E, et al. J Clin Endocrinol Metab 1989 Apr;68(4):808–13
Plasma renin levels in patients with thoracic neuroblastoma. Leckie B, et al. J Pediatr Surg 1989 Jun;24(6):601–3

CHEMICALLY INDUCED

Neuroblastoma after prenatal exposure to phenytoin: cause and effect? Koren G, et al. Teratology 1989 Aug; 40(2):157–62 (15 ref.)

COMPLICATIONS

Neuroblastoma presenting with obstructive jaundice. Walsh MT, et al. Br J Radiol 1989 Jul;62(739):624–6
Biliary stenting in an infant with malignant obstructive jaundice. Guelrud M, et al. Gastrointest Endosc 1989 May-Jun;35(3):259–61
Chemotherapy as the initial treatment of spinal cord compression due to disseminated neuroblastoma. Sanderson IR, et al. J Neurosurg 1989 May;70(5):688–90
Clinical outcome in children with acute cerebellar encephalopathy and neuroblastoma. Telander RL, et al. J Pediatr Surg 1989 Jan;24(1):11–4; Discussion 14
Cystic neuroblastoma with colonic fistula. Thajunnisa bte Hassan Mohd, et al. Pediatr Radiol 1988;18(5):406
Neuroblastoma associated with adrenocortical defects. Blatt J, et al. Pediatrics 1988 Nov;82(5):790–2 (9 ref.)

CONGENITAL

Congenital neuroblastoma. Murthy TV, et al. J Indian Med Assoc 1988 Apr;86(4):101–3
Congenital cervical neuroblastoma associated with Horner syndrome. Ogita S, et al. J Pediatr Surg 1988 Nov; 23(11):991–2
Congenital quadrantanopia with occipital lobe ganglioglioma. Fletcher WA, et al. Neurology 1988 Dec;38(12):1892–4
Nuclear magnetic resonance computerised tomography (NMR-CT) in early diagnosis of dumbbell neuroblastoma. Ogita S, et al. Z Kinderchir 1989 Apr;44(2):122–3
[Congenital suprarenal hemorrhagic pseudocyst and neuroblastoma in situ] Núñez Núñez R, et al. An Esp Pediatr 1989 Mar;30(3):237–8 (Spa)

DIAGNOSIS

Aspiration cytology, immunocytochemistry and electron microscopy of a malignant peripheral neuroectodermal tumor. A case report. Neuhold N, et al. Acta Cytol 1989 Jan-Feb;33(1):74–9
Urinary excretion of HMMA in children. Walters EG, et al. Ann Clin Biochem 1989 Jan;26 (Pt 1):44–8
Neuroblastoma, an under-diagnosed tumour: a 7-year experience in Zaria. Aikhionbare HA, et al. Ann Trop Paediatr 1988 Sep;8(3):149–52
Thoracic neuroblastoma presenting as a cystic hygroma. Ganick DJ, et al. Arch Dis Child 1988 Oct;63(10):1270–1
Serum neuron-specific/nonneuronal enolase ratio in the diagnosis of neuroblastomas. Viallard JL, et al. Cancer 1988 Dec 15;62(12):2546–53
Determination of vanillylmandelic acid, vanillactic acid, and homovanillic acid in dried urine on filter-paper discs by high-performance liquid chromatography with coulometric electrochemical detection for neuroblastoma screening. Kinoshita Y, et al. Clin Chem 1988 Nov; 34(11):2228–30
Magnetic resonance imaging as a sensitive and specific predictor of neoplasms removed for intractable epilepsy. Bergen D, et al. Epilepsia 1989 May-Jun;30(3):318–21
The sonographic imaging of fetal adrenal neuroblastoma; a case report. Pley EA, et al. Eur J Obstet Gynecol Reprod Biol 1989 Apr;31(1):95–9
Amplification of clone 8 as a prognostic indicator of neuroblastoma [letter] Nakagawara A, et al. Eur J Pediatr 1989 Jun;148(7):684
Positive S100 protein staining of neuroblastoma discovered by VMA mass screening [letter] Nakagawara A, et al. Eur J Pediatr 1988 Nov;148(2):171–2
International criteria for diagnosis, staging, and response to treatment in patients with neuroblastoma. Brodeur GM, et al. J Clin Oncol 1988 Dec;6(12):1874–81
Intraventricular central neurocytoma: CT and MR findings. Bolen JW Jr, et al. J Comput Assist Tomogr 1989 May-Jun; 13(3):495–7
Accuracy of diagnostic imaging as determined by delayed operative intervention for advanced neuroblastoma. Foglia RP, et al. J Pediatr Surg 1989 Jul;24(7):708–11
A new urinary mass screening system for neuroblastoma in infancy by use of monoclonal antibodies against VMA and HVA. Yokomori K, et al. J Pediatr Surg 1989 Apr; 24(4):391–4
I-131 metaiodobenzylguanidine: diagnostic use in neuroblastoma patients in relapse. Heyman S, et al. Med Pediatr Oncol 1988;16(5):337–40
Neuroblastoma-like epidural localization in non-Hodgkin's lymphoma. Fest T, et al. Neuroradiology 1988;30(6):569–70
Magnetic resonance imaging in primary cerebral neuroblastoma. Just M, et al. Neuroradiology 1989;31(1):108
Ultrasound case of the day. Cystic neuroblastoma with metastatic disease of the liver. Kurtz AB, et al. Radiographics 1989 Mar;9(2):361–4
Adult neuroblastoma: a report of two cases. Krikke AP, et al. ROFO 1989 Feb;150(2):138–41
Sonographic diagnosis and follow-up of abdominal neuroblastoma. Dershaw DD, et al. Urol Radiol 1988; 10(2):80–4
[Mediastinal neuroblastoma in Wiedemann-Beckwith syndrome] Huber A, et al. Monatsschr Kinderheilkd 1989 Apr;137(4):243–4 (Eng. Abstr.) (Ger)
[Malignant bone marrow infiltration in nuclear magnetic resonance tomography] Gamillscheg A, et al. Padiatr Padol 1989;24(2):103–11 (Eng. Abstr.) (Ger)
[Acute megakaryoblastic leukemia in an infant: diagnostic difficulties in differentiating from metastatic neuroblastoma] Yamada S, et al. Rinsho Ketsueki 1988 Jul; 29(7):1078–82 (Eng. Abstr.) (Jpn)
[Neuroblastoma of the lung] Alekseenko AV, et al. Klin Khir 1989;(5):65 (Rus)

DRUG THERAPY

Should treatment of acute lymphoblastic leukemia be a model for therapeutic strategy in metastatic neuroblastoma? [letter] Armata J. Am J Pediatr Hematol Oncol 1989 Fall; 11(3):369–70
Deferoxamine inhibition of human neuroblastoma viability and proliferation. Becton DL, et al. Cancer Res 1988 Dec 15;48(24 Pt 1):7189–92
Comparison of activity of deferoxamine with that of oral iron chelators against human neuroblastoma cell lines. Blatt J, et al. Cancer Res 1989 Jun 1;49(11):2925–7
Inhibitory effect of adenosine dialdehyde on in situ murine neuroblastoma growth. Bostrom B, et al. Cancer Res 1988 Nov 1;48(21):5933–6
Clinical trial of continuous infusion verapamil, bolus vinblastine, and continuous infusion VP-16 in drug-resistant pediatric tumors. Cairo MS, et al. Cancer Res 1989 Feb 15;49(4):1063–6
Functional properties and effect on growth suppression of human neuroblastoma tumors by isotype switch variants of monoclonal antiganglioside GD2 antibody 14.18. Mujoo K, et al. Cancer Res 1989 Jun 1;49(11):2857–61
Ifosfamide in previously untreated disseminated neuroblastoma. Results of Study 3A of the European Neuroblastoma Study Group. Kellie SJ, et al. Eur J Cancer Clin Oncol 1988 May;24(5):903–8
Combined effects of vitamin E (alpha-tocopherol) and cisplatin on the growth of murine neuroblastoma in vivo. Sue K, et al. Eur J Cancer Clin Oncol 1988 Nov; 24(11):1751–8
Anti-tumor efficacy of interleukin-2-activated killer cells in human neuroblastoma ex vivo. Atzpodien J, et al. Exp Cell Biol 1988;56(5):236–44
Improved survival rates in children over 1 year of age with stage III or IV neuroblastoma following an intensive chemotherapeutic regimen. Ikeda K, et al. J Pediatr Surg 1989 Feb;24(2):189–93
Chemotherapeutic management of epidural neuroblastoma. Hayes FA, et al. Med Pediatr Oncol 1989;17(1):6–8
The impact of preoperative chemotherapy on resectability of primary tumour and complication rate in metastatic neuroblastoma. Berthold F, et al. Z Kinderchir 1989 Feb; 44(1):21–4
[Myeloablative chemo- and radiotherapy with autologous and allogenic bone marrow reconstitution in children with metastatic neuroblastoma] Berthold F, et al. Klin Padiatr 1988 May-Jun;200(3):221–5 (Eng. Abstr.) (Ger)
[Treatment of tumors in children] Hashito K. Gan No Rinsho 1989 Jan;Spec No:539–48 (Jpn)
[Clinical evaluation of A 1 protocol in advanced neuroblastoma] Iwafuchi M, et al. Gan To Kagaku Ryoho 1989 Apr;16(4 Pt 2-2):1323–8 (Eng. Abstr.) (Jpn)

EMBRYOLOGY

Cardiovascular malformations and the neural crest. Beckwith JB. Pediatr Radiol 1989;19(2):122–3
The association of congenital neuroblastoma and congenital heart disease. Is there a common embryologic basis? Bellah R, et al. Pediatr Radiol 1989;19(2):119–21

ENZYMOLOGY

Antioxygenic enzyme activities in differentiating human neuroblastoma cells. Steinkühler C, et al. Ann N Y Acad Sci 1988;551:137–40
(-)-Indolactam V activates protein kinase C and induces changes in muscarinic receptor functions in SH-SY5Y human neuroblastoma cells. Heikkilä J, et al. Biochem Biophys Res Commun 1989 Aug 15;162(3):1207–13
Carbohydrate reactivation of thyroxine 5'-deiodinase (type II) in cultured mouse neuroblastoma cells is dependent upon new protein synthesis. Gavin LA, et al. Endocrinology 1989 Feb;124(2):635–41
Correlation between transglutaminase activity and polyamine levels in human neuroblastoma cells. Effect of retinoic acid and alpha-difluoromethylornithine. Melino G, et al. Exp Cell Res 1988 Dec;179(2):429–45
Phosphoinositide hydrolysis in permeabilized SH-SY5Y human neuroblastoma cells is inhibited by mastoparan. Wojcikiewicz RJ, et al. FEBS Lett 1989 Apr 24; 247(2):341–4
Effect of persistent measles virus infection on protein kinase C activity and c-fos protooncogene expression in neuroblastoma cells. Wolfson M, et al. FEBS Lett 1989 Jul 3;250(2):367–70
Correlations of dihydropyrimidine dehydrogenase, thymidine phosphorylase and thymidine kinase activities in strongly and weakly malignant cultured murine neuroblastoma cells. Williams CS, et al. Int J Cancer 1989 May 15;43(5):901–4
Effect of alpha tocopheryl succinate on adenylate cyclase activity in murine neuroblastoma cells in culture. Sahu SN, et al. J Am Coll Nutr 1988 Aug;7(4):285–93
Coordinate regulation of ganglioside glycosyltransferases in differentiating NG108-15 neuroblastoma x glioma cells. Walton KM, et al. J Neurochem 1989 May;52(5):1537–44
Specific kinase activity and phosphorylation state of pp60c-src from neuroblastomas and fibroblasts. Yang XM, et al. Oncogene 1988 Sep;3(3):237–44
[The occurrence of tyrosine hydroxylase-immunoreactive neurons in a parietal lobe ganglioglioma] Wakabayashi K, et al. No To Shinkei 1989 Feb;41(2):165–70 (Eng. Abstr.) (Jpn)

EPIDEMIOLOGY

Imaging evaluation of infants with neuroblastoma detected by VMA screening spot test. Fujioka M, et al. Pediatr Radiol 1988;18(6):479–83
[Regional differences in the occurrence of neuroblastoma in Denmark] Carlsen NL. Ugeskr Laeger 1988 Oct 17; 150(42):2511–6 (Eng. Abstr.) (Dan)

GENETICS

Association of cytogenetic abnormalities in a neuroblastoma and fragile sites expression. Vernole P, et al. **Br J Cancer** 1988 Sep;58(3):287–91

Flow cytometry DNA ploidy analysis and catecholamine secretion profiles in neuroblastoma. Abramowsky CR, et al. **Cancer** 1989 May 1;63(9):1752–6

Cytogenetic findings and prognosis in neuroblastoma with emphasis on marker chromosome 1. Hayashi Y, et al. **Cancer** 1989 Jan 1;63(1):126–32

Molecular biology and genetics of human neuroblastoma. Brodeur GM, et al. **Cancer Genet Cytogenet** 1989 Sep; 41(2):153–74 (175 ref.)

Fragile site 1p13.1 in neuroblastoma patients [letter] Vernole P, et al. **Cancer Genet Cytogenet** 1989 Jul 1;40(1):135–6

Common fragile sites and human cancer. A study on lymphocytes from neuroblastoma patients. Vernole P, et al. **Cancer Genet Cytogenet** 1988 Nov;36(1):13–23

N-myc amplification and neuronal differentiation in human primitive neuroectodermal tumors of the central nervous system. Rouah E, et al. **Cancer Res** 1989 Apr 1; 49(7):1797–801

Frequent loss of heterozygosity on chromosome 14q in neuroblastoma. Suzuki T, et al. **Cancer Res** 1989 Mar 1; 49(5):1095–8

Clinical significance of genetic rearrangements in human neuroblastomas. Brodeur GM. **Clin Chem** 1989 Jul;35(7 Suppl):B38–42 (67 ref.)

Association of near-diploid DNA content and N-myc amplification in neuroblastomas. Dominici C, et al. **Clin Exp Metastasis** 1989 Mar-Apr;7(2):201–11

Molecular analysis of chromosome 1 abnormalities in neuroblastoma. Ritke MK, et al. **Cytogenet Cell Genet** 1989; 50(2–3):84–90

Regulation of N-myc expression is a critical event controlling the ability of human neuroblasts to differentiate. Thiele CJ, et al. **Exp Cell Biol** 1988;56(6):321–33 (34 ref.)

Clinical significance of gene amplification studied in human neuroblastoma xenografts: relationship with tumor growth rate, chemotherapeutic sensitivities and levels of neuron-specific enolase. Tsuchida Y, et al. **Exp Cell Biol** 1988;56(5):277–84

Characterization of DNA rearrangements of N-myc gene amplification in three neuroblastoma cell lines by pulsed-field gel electrophoresis. Kato H, et al. **FEBS Lett** 1989 Jul 3;250(2):529–35

Neuroblastoma double minutes isolated by pulsed-field gel electrophoresis without prior strand-cleaving treatments. Chen TL, et al. **Genomics** 1989 Apr;4(3):430–3

N-myc amplification and neuron-specific enolase production of a neuroblastoma cell line and germ cell tumor cell lines. Ishiwata I, et al. **Gynecol Oncol** 1989 Jun;33(3):356–9

Differential expression of N-myc and c-src proto-oncogenes during neuronal and schwannian differentiation of human neuroblastoma cells. Horii Y, et al. **Int J Cancer** 1989 Feb 15;43(2):305–9

Expression of myc and ras oncogenes in two newly established neuroblastoma cell lines. Csaikl F, et al. **J Cancer Res Clin Oncol** 1989;115(3):242–6

N-myc amplification at chromosome band 1p32 in neuroblastoma cells as investigated by in situ hybridization. Longo L, et al. **J Cancer Res Clin Oncol** 1988;114(6):636–40

N-myc gene product expression in neuroblastoma. Hashimoto H, et al. **J Clin Pathol** 1989 Jan;42(1):52–5

Correlation of MDR1 gene expression with chemotherapy in neuroblastoma. Bourhis J, et al. **J Natl Cancer Inst** 1989 Sep 20;81(18):1401–5

N-myc oncogene RNA expression in neuroblastoma. Nisen PD, et al. **J Natl Cancer Inst** 1988 Dec 21;80(20):1633–7

Flow cytometric analysis of DNA content in children with neuroblastoma. Brenner DW, et al. **J Pediatr Surg** 1989 Feb;24(2):204–7

Coamplification of the L-myc and N-myc oncogenes in a neuroblastoma cell line. Jinbo T, et al. **Jpn J Cancer Res** 1989 Apr;80(4):299–301

Similar chromosomal patterns and lack of N-myc gene amplification in localized and IV-S stage neuroblastomas in infants. Hayashi Y, et al. **Med Pediatr Oncol** 1989; 17(2):111–5

Detection of amplified N-myc gene in neuroblastoma by in situ hybridization using the single-step silver enhancement method. Noguchi M, et al. **Mod Pathol** 1988 Nov; 1(6):428–32

Molecular biology of brain tumors. McDonald JD, et al. **Neurosurgery** 1988 Nov;23(5):537–44 (34 ref.)

Amplification of N-myc and ornithine decarboxylase genes in human neuroblastoma and hydroxyurea-resistant hamster cell lines. Tonin PN, et al. **Oncogene** 1989 Sep; 4(9):1117–21

Coordinate alteration of pp60c-src abundance and c-src RNA expression in human neuroblastoma variants. Veillette A, et al. **Oncogene** 1989 Apr;4(4):421–7

Loss of heterozygosity for the short arm of chromosome 1 in human neuroblastomas: correlation with N-myc amplification. Fong CT, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3753–7

Lineage-specific regulation of the vasoactive intestinal peptide gene in neuroblastoma cells is conferred by 5.2 kilobases of 5'-flanking sequence. Waschek JA, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9547–51

[Activation of cellular N-myc oncogene in neuroblastoma] Sansone R, et al. **Clin Ter** 1988 Feb 29;124(4):269–78 (101 ref.) (Eng. Abstr.) **(Ita)**

[Genetic and cytogenetic characteristics of human neuroblastoma] Vernole P, et al. **Clin Ter** 1988 Feb 29; 124(4):279–85 (32 ref.) (Eng. Abstr.) **(Ita)**

[Cytogenetic studies in tumors of the nervous system] Gutiérrez MI, et al. **Medicina (B Aires)** 1988;48(5):474–8 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Effector mechanisms against neuroblastoma cells and their modulation by lymphokines. Iwami T, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Aug;30(4):483–91

The influence of natural killer cells in neuroblastoma. Reynolds JV, et al. **Arch Surg** 1989 Feb;124(2):235–9

GM-CSF enhances 3F8 monoclonal antibody-dependent cellular cytotoxicity against human melanoma and neuroblastoma. Kushner BH, et al. **Blood** 1989 May 15; 73(7):1936–41

S-L 11.14: a monoclonal antibody recognizing neuroectodermal tumors with possible value for bone marrow purging before autograft. Combaret V, et al. **Bone Marrow Transplant** 1988 May;3(3):221–7

The effects of gamma interferon on the natural killer and tumor cells of children with neuroblastoma. A preliminary report. Evans A, et al. **Cancer** 1989 Oct 1;64(7):1383–7

Differential susceptibility of HLA class II antigens induced by gamma-interferon in human neuroblastoma cell lines. Sugimoto T, et al. **Cancer Res** 1989 Apr 1;49(7):1824–8

Immunosuppressive activity of human neuroblastoma tumor gangliosides. Floutsis G, et al. **Int J Cancer** 1989 Jan 15; 43(1):6–9

New anti-GD2 monoclonal antibodies produced from gamma-interferon-treated neuroblastoma cells. Gross N, et al. **Int J Cancer** 1989 Apr 15;43(4):665–71

Effects of granulocytes on human neuroblastoma cells measured by chemiluminescence and chromium-51 release assay. Bruchelt G, et al. **J Biolumin Chemilumin** 1989 Apr-Jun;3(2):93–6

IFN-treated neuroblastoma cell lines remain resistant to T cell-mediated allo-killing, and susceptible to non-MHC-restricted cytotoxicity. Main EK, et al. **J Immunol** 1988 Nov 1;141(9):2943–50

Systematic analysis of the immunoregulation of murine neuroblastoma. Choi SH, et al. **J Pediatr Surg** 1989 Jan; 24(1):15–9; Discussion 19–20

Arginine, protein malnutrition, and cancer. Reynolds JV, et al. **J Surg Res** 1988 Dec;45(6):513–22

Lymphokine-activated killer cytotoxicity in neonatal mononuclear cells: in vitro responses to tumor cell lines from pediatric solid tumors. Chin T, et al. **Pediatr Res** 1989 Feb;25(2):156–60

METABOLISM

Muscarinic activation of phosphatidylinositol breakdown in neuroblastoma cells. Ponte-Sucre A. **Acta Cient Venez** 1987;38(3):356–61

Neuroendocrine markers in central nervous system neuronal tumors (gangliocytoma and ganglioglioma). Takahashi H, et al. **Acta Neuropathol (Berl)** 1989;77(3):237–43

Contribution of diffusion to the oxygen dependence of energy metabolism in human neuroblastoma cells. Rumsey WL, et al. **Adv Exp Med Biol** 1989;248:829–33

Synthesis of angiotensinogen by renin-containing neuroblastomas. Petrossian G, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C185–9

Oxygen diffusion and mitochondrial respiration in neuroblastoma cells. Robiolio M, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):C1207–13

Voltage-operated calcium-channel subtypes in human neuroblastoma and rat pheochromocytoma cells. Sher E, et al. **Ann N Y Acad Sci** 1989;560:249–50 (7 ref.)

Bradykinin-induced generation of inositol 1,4,5-trisphosphate in fibroblasts and neuroblastoma cells: effect of pertussis toxin, extracellular calcium, and down-regulation of protein kinase C. Fu T, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1429–35

Phosphorylation of peripherin, an intermediate filament protein, in mouse neuroblastoma NIE 115 cell line and in sympathetic neurons. Huc C, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):772–9

Identification of alpha 2-adrenergic receptor sites in human retinoblastoma (Y-79) and neuroblastoma (SH-SY5Y) cells. Kazmi SM, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):921–8

Retinoic acid inhibits phosphatidylinositol turnover only in RA-sensitive while not in RA-resistant human neuroblastoma cells. Lanciotti M, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):284–9

Inhibitors of membrane transport system for organic anions block fura-2 excretion from PC12 and N2A cells. Di Virgilio F, et al. **Biochem J** 1988 Dec 15;256(3):959–63

Biochemical properties of monoamine-rich human neuroblastoma cells. Mena MA, et al. **Brain Res** 1989 May 8;486(2):286–96

Neurofilament triplet proteins of NB2a/d1 neuroblastoma: posttranslational modification and incorporation into the cytoskeleton during differentiation. Shea TB, et al. **Brain Res** 1988 Sep 1;471(1):97–109

Characterization of zeta (zeta): a new opioid receptor involved in growth. Zagon IS, et al. **Brain Res** 1989 Mar 20;482(2):297–305

Opioid antagonist modulation of murine neuroblastoma: a profile of cell proliferation and opioid peptides and receptors. Zagon IS, et al. **Brain Res** 1989 Feb 20; 480(1–2):16–28

Calcium dependent regulation of catecholamine and serotonin metabolism in human neuroblastoma cells. Pastuszko A, et al. **Cancer Biochem Biophys** 1988 Jul; 10(1):67–76

Active uptake and extravesicular storage of m-iodobenzylguanidine in human neuroblastoma SK-N-SH cells. Smets LA, et al. **Cancer Res** 1989 Jun 1;49(11):2941–4

Effects of long-term in vitro exposure to aluminum, cadmium or lead on differentiation and cholinergic receptor expression in a human neuroblastoma cell line. Gotti C, et al. **Cell Biol Toxicol** 1987 Dec;3(4):431–40

Effect of galactose and glucose levels and sorbinil treatment on myo-inositol metabolism and Na+-K+ pump activity in cultured neuroblastoma cells. Yorek MA, et al. **Diabetes** 1989 Aug;38(8):996–1004

The influence of insulin and sorbinil on myoinositol uptake in peripheral nerve from normal and diabetic rats and a neuroblastoma cell line (N1E-115). Dunlop ME, et al. **Diabetes Res** 1988 Jun;8(2):51–7

Triiodothyronine transport into differentiated and undifferentiated mouse neuroblastoma cells (NB41A3). Gonçalves E, et al. **Endocrinology** 1989 Jan;124(1):293–300

Insulin-like growth factor receptors and binding protein in rat neuroblastoma cells. Sturm MA, et al. **Endocrinology** 1989 Jan;124(1):388–96

Etoposide (VP-16) uptake by tumour spheroids and activity in the presence of Brij 30, formulation additives and sodium salicylate. Cook JM, et al. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):311–8

Heterologous desensitization of bradykinin-induced phosphatidylinositol response and Ca2+ mobilization by neurotensin in NG108-15 cells. Imaizumi T, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):203–8

Muscarinic receptor binding characteristics of a human neuroblastoma SK-N-SH and its clones SH-SY5Y and SH-EP1. Lambert DG, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):71–7

Effects of peripheral benzodiazepines upon the O2 consumption of neuroblastoma cells. Larcher JC, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):197–202

Biochemical evidence for somatostatin receptors in murine neuroblastoma clone N1E-115. McKinney M, et al. **Eur J Pharmacol** 1989 Mar 29;162(3):397–405

Divalent cations modulate 5-HT3 receptor-induced currents in N1E-115 neuroblastoma cells. Peters JA, et al. **Eur J Pharmacol** 1988 Jul 14;151(3):491–5

Gradient distribution pattern of muscarinic receptors in N1E 115 mouse neuroblastoma cells. Fraeyman NH, et al. **Experientia** 1989 Aug 15;45(8):742–7

Elevated levels of the guanine nucleotide binding protein, Go, are associated with differentiation of neuroblastoma x glioma hybrid cells. Mullaney I, et al. **FEBS Lett** 1989 Feb 13;244(1):113–8

Binding of Clostridium botulinum type C neurotoxin to different neuroblastoma cell lines [published erratum appears in Infect Immun 1989 Jul;57(7):2265] Yokosawa N, et al. **Infect Immun** 1989 Jan;57(1):272–7

Alterations of phospholipid metabolism by phorbol esters and fatty acids occur by different intracellular mechanisms in cultured glioma, neuroblastoma, and hybrid cells. Cook HW, et al. **J Biol Chem** 1989 Feb 15;264(5):2746–52

Aberrant fatty acyl alpha-hydroxylation in human neuroblastoma tumor gangliosides. Ladisch S, et al. **J Biol Chem** 1989 Jul 15;264(20):12097–105

Phosphatidylethanol biosynthesis in ethanol-exposed NG108-15 neuroblastoma X glioma hybrid cells. Evidence for activation of a phospholipase D phosphatidyl transferase activity by protein kinase C. Liscovitch M. **J Biol Chem** 1989 Jan 25;264(3):1450–6

Binding of monoiodinated neuropeptide Y to hippocampal membranes and human neuroblastoma cell lines. Sheikh SP, et al. **J Biol Chem** 1989 Apr 25;264(12):6648–54

Uptake and release of iodine-labelled m-iodobenzylguanidine in a neuroblastoma cell culture system and its importance in neuroblastoma therapy. Paffenholz V, et al. **J Cancer Res Clin Oncol** 1989;115(3):269–75

Proteolytic regulation of neurite outgrowth from neuroblastoma cells by thrombin and protease nexin-1. Cunningham DD, et al. **J Cell Biochem** 1989 Jan; 39(1):55–64 (28 ref.)

Increased epidermal growth factor receptor in multidrug-resistant human neuroblastoma cells. Meyers MB, et al. **J Cell Biochem** 1988 Oct;38(2):87–97

The sodium channels of the neuroblastoma x glioma 108 CC 15 hybrid cell change their sensitivity for volatile and local anesthetics upon continuous passage. Tas PW, et al. **J Neural Transm** 1989;76(2):99–107

Alpha 2-adrenergic and muscarinic cholinergic receptors have opposing actions on cyclic AMP levels in SK-N-SH human neuroblastoma cells. Baron BM, et al. **J Neurochem** 1989 Aug;53(2):602–9

Protein carboxylmethyltransferase activity in intact, differentiated neuroblastoma cells: quantitation by S-[3H]adenosylmethionine prelabeling. Barten DM, et al. **J Neurochem** 1989 Oct;53(4):1156–65

Characterization of binding sites for the angiotensin II antagonist 125I-[Sarc1,Ile8]-angiotensin II on murine

neuroblastoma N1E-115 cells. Fluharty SJ, et al. **J Neurochem** 1989 May;52(5):1393-400

Opioid receptors of neuroblastoma cells are in two domains of the plasma membrane that differ in content of G proteins. Ott S, et al. **J Neurochem** 1989 Feb;52(2):619-26

Expression of calmodulin-dependent phosphodiesterase, calmodulin-dependent protein phosphatase, and other calmodulin-binding proteins in human SMS-KCNR neuroblastoma cells. Pennypacker KR, et al. **J Neurochem** 1989 May;52(5):1438-48

Mechanism of agonist-induced down-regulation and subsequent recovery of muscarinic acetylcholine receptors in a clonal neuroblastoma x glioma hybrid cell line. Ray P, et al. **J Neurochem** 1989 Feb;52(2):402-9

Characterization of cysteine proteases functioning in degradation of dynorphin in neuroblastoma cells: evidence for the presence of a novel enzyme with strict specificity toward paired basic residues. Satoh M, et al. **J Neurochem** 1989 Jan;52(1):61-8

Uptake of exogenous phosphatidylserine by human neuroblastoma cells stimulates the incorporation of [methyl-14C]choline into phosphatidylcholine. Slack BE, et al. **J Neurochem** 1989 Aug;53(2):472-81

Acetylcholinesterase in mouse neuroblastoma NB2A cells: analysis of production, secretion, and molecular forms. Stieger S, et al. **J Neurochem** 1989 Apr;52(4):1188-96

Differentiation of human neuroblastoma cells: marked potentiation of prostaglandin E-stimulated accumulation of cyclic AMP by retinoic acid. Yu VC, et al. **J Neurochem** 1988 Dec;51(6):1892-9

Comparison of the effects of forskolin and dibutyryl cyclic AMP in neuroblastoma cells: evidence that some of the actions of dibutyryl cyclic AMP are mediated by butyrate. Yusta B, et al. **J Neurochem** 1988 Dec;51(6):1808-18

Quantitative study of radioiodinated metaiodobenzylguanidine uptake in children with neuroblastoma: correlation with tumor histopathology. Moyes JS, et al. **J Nucl Med** 1989 Apr;30(4):474-80

A bumetanide-sensitive, potassium carrier-mediated transport system in excitable tissues. Babila T, et al. **Life Sci** 1989;44(22):1665-75

Muscarinic receptor regulation of cytoplasmic Ca2+ concentrations in human SK-N-SH neuroblastoma cells: Ca2+ requirements for phospholipase C activation. Fisher SK, et al. **Mol Pharmacol** 1989 Feb;35(2):195-204

Incorporation of exogenous ganglioside GM1 into neuroblastoma membranes: inhibition by calcium ion and dependence upon membrane protein. Leskawa KC, et al. **Neurochem Res** 1989 Jun;14(6):547-54

Molecular characteristics and peptide specificity of bradykinin binding sites in intact neuroblastoma-glioma cells in culture (NG 108-15). Lee RT, et al. **Neuropeptides** 1989 Jul;14(1):51-7

Effects of opioid peptides on human neuroblastoma cells. Sadee W, et al. **NIDA Res Monogr** 1988;87:111-7

Temperature-dependent subconducting states and kinetics of deltamethrin-modified sodium channels of neuroblastoma cells. Chinn K, et al. **Pflugers Arch** 1989 Apr;413(6):571-9

Atrial natriuretic peptide in human neuroblastoma. Niimura S, et al. **Res Commun Chem Pathol Pharmacol** 1989 Feb; 63(2):189-200

Radioligand binding studies identify 5-HT3 recognition sites in neuroblastoma cell lines and mammalian CNS. Watling KJ. **Trends Pharmacol Sci** 1988 Jul;9(7):227-9 (17 ref.)

[Intracellular uptake and accumulation of metaiodobenzylguanidine in neuroblastoma cells and small cell carcinoma of the lung] Melino G. **Minerva Pediatr** 1989 Mar;41(3):123-8 (Eng. Abstr.) **(Ita)**

[Monoclonal antibodies to cytoplasmic tetrodotoxin-sensitive brain protein. The effect of veratrine on antibody binding to neuroblastoma cells] Pinchuk GV, et al. **Neirofiziologiia** 1988;20(6):794-800 (Eng. Abstr.) **(Rus)**

[Morphological differentiation and change in the lipid composition of neuroblastoma C1300 cells treated with gangliosides] Gulaia NM, et al. **Ukr Biokhim Zh** 1989 May-Jun;61(3):72-9 (Eng. Abstr.) **(Rus)**

[Content of fatty acids bound to proteins and of cholesterol in neuroblastoma C1300 N18 cells during differentiation] Klimashevsk'kiĭ VM, et al. **Ukr Biokhim Zh** 1989 May-Jun; 61(3):80-4 (Eng. Abstr.) **(Ukr)**

MICROBIOLOGY

Restricted growth of attenuated poliovirus strains in cultured cells of a human neuroblastoma. Agol VI, et al. **J Virol** 1989 Sep;63(9):4034-8

[Selective resistance of human neuroblastoma cells to a vaccine strain of poliomyelitis virus] Tol'skaia EA, et al. **Dokl Akad Nauk SSSR** 1989;305(4):987-9 **(Rus)**

MORTALITY

Gender and survival in neuroblastoma [letter] Brewin TB. **Lancet** 1989 Apr 22;1(8643):909

Gender and survival in neuroblastoma [letter] Pritchard J, et al. **Lancet** 1989 Feb 11;1(8633):328

PATHOLOGY

Relationship between interphasic nucleolar organizer regions and growth rate in two neuroblastoma cell lines. Derenzini M, et al. **Am J Pathol** 1989 Apr;134(4):925-32

Transient dyserythropoiesis occurring during the involutionary phase of stage IV-S neuroblastoma. Mills AE, et al. **Am J Pediatr Hematol Oncol** 1989 Spring; 11(1):23-7

Cell cycle dependence of inositol phosphate levels in neuroblastoma cells. Fleischman LF, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):C531-5

Heparan sulfate proteoglycans of Ras-transformed 3T3 or neuroblastoma cells. Differing functions in adhesion on fibronectin. Culp LA, et al. **Ann N Y Acad Sci** 1989; 556:194-216 (48 ref.)

Characterization of a continuous cell line (MHH-NB-11) derived from advanced neuroblastoma. Pietsch T, et al. **Anticancer Res** 1988 Nov-Dec;8(6):1329-33

Anaplastic neuroblastomas [letter] Chatten J. **Arch Pathol Lab Med** 1989 Jan;113(1):9-10

Anaplasia in solid malignant tumors of childhood [editorial] Dehner LP. **Arch Pathol Lab Med** 1989 Jan;113(1):11-2

Differentiated neuroblastoma cells are more susceptible to aluminium toxicity than developing cells. Roll M, et al. **Arch Toxicol** 1989;63(3):231-7

Improved CFU-GM recoveries from marrows of neuroblastoma patients using a slightly modified immunomagnetic depletion technique [letter] Lopez M, et al. **Bone Marrow Transplant** 1989 Jul;4(4):453-4

Purging by dye-mediated photosensitization. Porcellini A, et al. **Bone Marrow Transplant** 1989 Jan;4 Suppl 1:188-9

Histology of neuroblastoma involving bone marrow [letter] Ironside JW, et al. **Br J Haematol** 1989 Apr;71(4):565-6

Clinical manifestations of ganglioneuroma. Hayes FA, et al. **Cancer** 1989 Mar 15;63(6):1211-4

The relative effectiveness of analogues of cisplatin in the experimental chemotherapy of human non-small-cell lung cancer and neuroblastoma grown as multicellular spheroids. Russell J, et al. **Cancer Chemother Pharmacol** 1989;23(2):111-4

Phenotypic diversification in human neuroblastoma cells: expression of distinct neural crest lineages. Ciccarone V, et al. **Cancer Res** 1989 Jan 1;49(1):219-25

Conversion to the terminally differentiated state during treatment of NG108-15 neural tumor cells with 1-beta-D-arabinofuranosylcytosine in defined medium. Krystosek A. **Cancer Res** 1989 Jan 15;49(2):450-8

Neuronal cell differentiation of human neuroblastoma cells by retinoic acid plus herbimycin A. Preis PN, et al. **Cancer Res** 1988 Nov 15;48(22):6530-4

Effect of cytidine analogs on cell growth and differentiation on a human neuroblastoma line. Bartolucci S, et al. **Cell Biophys** 1989 Aug-Oct;15(1-2):67-77

Aspiration cytology of neuroblastoma: light microscopy with transmission and scanning electron microscopic correlations. Akhtar M, et al. **Diagn Cytopathol** 1988; 4(4):323-7

Phenotypic and molecular characterization of inducible human neuroblastoma cell lines. Yeger H, et al. **Differentiation** 1988 Dec;39(3):216-27

Human neuroblastoma cell lines as models for the in vitro study of neoplastic and neuronal cell differentiation. Abemayor E, et al. **Environ Health Perspect** 1989 Mar; 80:3-15 (147 ref.)

PC12 pheochromocytoma and sympathetic nervous system derived trophic factors augment growth of neuroblastoma. Chelmicka-Schorr E, et al. **Eur J Cancer Clin Oncol** 1989 Jul;25(7):1057-9

Long term bone marrow culture in metastatic neuroblastoma. Thierry D, et al. **Eur J Cancer Clin Oncol** 1989 Feb; 25(2):167-72

Immunocytochemical detection of neuroblastoma cells infiltrating clinical bone marrow samples. Beck D, et al. **Eur J Pediatr** 1988 Aug;147(6):609-12

Expression of the plasma membrane proteolipid in mouse neuroblastoma cells: transient increase in synthesis during differentiation with N6,O2-dibutyryl adenosine 3',5'-cyclic monophosphate. Shea TB, et al. **Exp Cell Biol** 1989; 57(3):131-8

Decline in c-myc mRNA expression but not the induction of c-fos mRNA expression is associated with differentiation of SH-SY5Y human neuroblastoma cells. Jalava AM, et al. **Exp Cell Res** 1988 Nov;179(1):10-7

Morphologic and phenotypic changes of human neuroblastoma cells in culture induced by cytosine arabinoside. Ponzoni M, et al. **Exp Cell Res** 1989 Mar; 181(1):226-37

Ganglioneuroblastic transformation of olfactory neuroblastoma. Chan JK, et al. **Histopathology** 1989 Apr; 14(4):425-8

Prognostic value of histopathology in advanced neuroblastoma: a report from the Childrens Cancer Study Group. Chatten J, et al. **Hum Pathol** 1988 Oct; 19(10):1187-98

Bone marrow examination in neuroblastoma patients: a morphologic, immunocytochemical, and immunohistochemical study. Oppedal BR, et al. **Hum Pathol** 1989 Aug;20(8):800-5

Stability of phenotypic and genotypic traits during the establishment of a human neuroblastoma cell line, IGR-N-835. Bettan-Renaud L, et al. **Int J Cancer** 1989 Sep 15;44(3):460-6

Diverse responses to retinoid in morphological differentiation, tumorigenesis and N-myc expression in human neuroblastoma sublines. Hino T, et al. **Int J Cancer** 1989 Aug 15;44(2):286-91

Establishment and characterization of a human neuroblastoma cell line. Scarpa S, et al. **Int J Cancer** 1989 Apr 15;43(4):645-51

Protein kinase C activation and down-regulation in relation to phorbol ester-induced differentiation of SH-SY5Y human neuroblastoma cells. Heikkilä JE, et al. **J Cell Physiol** 1989 Sep;140(3):593-600

Autonomous growth of a human neuroblastoma cell line is mediated by insulin-like growth factor II. el-Badry OM, et al. **J Clin Invest** 1989 Sep;84(3):829-39

Mechanism of antineuroblastoma activity of deferoxamine in vitro. Blatt J, et al. **J Lab Clin Med** 1988 Oct;112(4):433-6

Attachment of neuroblastoma cells to extracellular matrix: correlation with metastatic capacity. Hutchinson R, et al. **J Lab Clin Med** 1989 May;113(5):561-8

Enhancement of in vitro activity against neuroblastoma by doxorubicin and deferoxamine. Blatt J, et al. **J Natl Cancer Inst** 1989 Jun 7;81(11):866-70

Antiproliferative action of benzodiazepines in cultured brain cells is not mediated through the peripheral-type benzodiazepine acceptor. Gorman AM, et al. **J Neurochem** 1989 Sep;53(3):849-55

Enhanced oxygen metabolism of peritoneal macrophages in the presence of murine neuroblastoma cells is partly caused by enkephalins. Willems J, et al. **J Neuroimmunol** 1988 Oct; 19(4):269-78

Primary cerebral neuroblastoma (neurocytoma) in adults. Ferreol E, et al. **J Neurooncol** 1989 Jul;7(2):121-8

Olfactory neuroblastoma: report of a case and review of the literature. Anavi Y, et al. **J Oral Maxillofac Surg** 1989 May; 47(5):514-7 (33 ref.)

Different clonal drug sensitivity of murine neuroblastoma cells in vivo. Okuzono S, et al. **J Pediatr Surg** 1988 Oct; 23(10):962-6

A surgical perspective on the current staging in neuroblastoma--the International Neuroblastoma Staging System proposal. Smith EI, et al. **J Pediatr Surg** 1989 Apr; 24(4):386-90

Endogenous opioids and the growth regulation of a neural tumor. Zagon IS, et al. **Life Sci** 1988;43(16):1313-8

High-grade cerebral neuroblastoma: a case study. Wyche M, et al. **Med J Aust** 1989 May 1;150(9):505-7

A reduced rate of bulky DNA adduct removal is coincident with differentiation of human neuroblastoma cells induced by nerve growth factor. Jensen L, et al. **Mol Cell Biol** 1988 Sep;8(9):3964-8

The expression of multiple proto-oncogenes is differentially regulated during retinoic acid induced maturation of human neuroblastoma cell lines. Thiele CJ, et al. **Oncogene** 1988 Sep;3(3):281-8

Brainstem gangliogliomas. Martin LD, et al. **Pediatr Neurol** 1986 May-Jun;2(3):178-82 (18 ref.)

Primitive neuroectodermal tumor [letter] Gray ES. **Pediatr Pathol** 1989;9(1):106

Role of adenosine 3'5'-cyclic monophosphate in antineoplastic effect of prostaglandins (PGE1, PGE2, PGD2 and PGA1) on human neuroblastoma cells. Hashida T, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Jul;33(1):61-8

Neuroblastoma in adults. A report of 3 cases. Behr A, et al. **S Afr Med J** 1989 Apr 1;75(7):333-5

[Cerebral neuroblastoma in the newborn infant] Saint-Martin J, et al. **Ann Pathol** 1988;8(3):244-7 (Eng. Abstr.) **(Fre)**

[Abdominal neuroblastoma in childhood: diagnostic and therapeutic aspects. Apropos of 26 cases] Hentati M, et al. **Tunis Med** 1987 Jun-Jul;65(6-7):423-6 (Eng. Abstr.) **(Fre)**

[Initial description of a retinal ganglioglioma] Faschinger C, et al. **Klin Monatsbl Augenheilkd** 1988 Oct;193(4):412-5 (Eng. Abstr.) **(Ger)**

[Intrathoracic tumors of the sympathetic nervous system—characteristics of their biological behavior] Anders M, et al. **Padiatr Grenzgeb** 1988;27(6):503-9 (Eng. Abstr.) **(Ger)**

[Differentiation in embryonal tumors] Altmannsberger M, et al. **Verh Dtsch Ges Pathol** 1988;72:150-63 (Eng. Abstr.) **(Ger)**

[Histological grading of neuroblastomas. 25 cases] Anders M, et al. **Zentralbl Allg Pathol** 1988;134(3):235-42 (Eng. Abstr.) **(Ger)**

[Malignant peripheral neuroectodermal tumors. Histological and immunohistological conditions in 41 cases] Schmidt D, et al. **Zentralbl Allg Pathol** 1989;135(3):257-68 (Eng. Abstr.) **(Ger)**

[Effects of treatment with ethyl methanesulfonate on cellular growth of a line of human neuroblastoma] Brambilla Bas M, et al. **Boll Soc Ital Biol Sper** 1988 Nov;64(11):1053-60 (Eng. Abstr.) **(Ita)**

[Sympathetic neuroblastoma in adults] Vecchioli Scaldazza C, et al. **Minerva Urol Nefrol** 1988 Apr-Jun;40(2):109-16 (14 ref.) (Eng. Abstr.) **(Ita)**

[The radiosensitivities of human neuroblastoma in vitro—a comparison of three cell lines] Ito H, et al. **Gan No Rinsho** 1988 Dec;34(15):2031-5 (Eng. Abstr.) **(Jpn)**

[Histological diagnosis of brain tumors: (3) Gangliocytoma (ganglioglioma)] Tamura M. **No Shinkei Geka** 1989 Apr; 17(4):311-7 (25 ref.) **(Jpn)**

[Histological diagnosis of brain tumors: (4) Neuroblastoma, neurocytoma] Tsujita Y. **No Shinkei Geka** 1989 May; 17(5):413-9 (27 ref.) **(Jpn)**

[Differential cytological diagnosis of neuroblastoma and acute lymphoblastic leukemia in children] Peterson IS, et al. **Pediatriia** 1988;(7):18-22 (Eng. Abstr.) **(Rus)**

[Epidural spread of neuroblastoma] Sánchez de Toledo Codina J, et al. **An Esp Pediatr** 1988 May;28(5):422–4 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Differential sensitivity of phosphoinositide and cyclic GMP responses to short–term regulation by a muscarinic agonist in mouse neuroblastoma cells. Correlation with down–regulation of cell surface receptors. Cioffi CL, et al. **Biochem Pharmacol** 1989 Jun 1;38(11):1827–34

Sympathetic nervous system derived trophic factor augments growth of human neuroblastoma in vitro. Chelmicka–Schorr E, et al. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):393–4

Depolarization of human neuroblastoma cells as a result of muscarinic receptor–induced rise in cytosolic Ca2+. Akerman KE. **FEBS Lett** 1989 Jan 2;242(2):337–40

Ca2+–dependent K+ channels in neuroblastoma hybrid cells activated by intracellular inositol trisphosphate and extracellular bradykinin. Higashida H, et al. **FEBS Lett** 1988 Oct 10;238(2):395–400

Retinoic acid enhances VIP receptor expression and responsiveness in human neuroblastoma cell, SH–SY5Y. Waschek JA, et al. **FEBS Lett** 1989 Jul 3;250(2):611–4

Functional vasoactive intestinal polypeptide (VIP) receptors in human neuroblastoma subclones that contain VIP precursor mRNA and release VIP–like substances. Muller JM, et al. **J Biol Chem** 1989 Mar 5;264(7):3647–50

Modification of Na channel gating by an alpha scorpion toxin from Tityus serrulatus. Kirsch GE, et al. **J Gen Physiol** 1989 Jan;93(1):67–83

Type–A cholecystokinin receptors in CHP212 neuroblastoma cells: evidence for association with G protein and activation of phosphoinositide hydrolysis. Barrett RW, et al. **Mol Pharmacol** 1989 Apr;35(4):394–400

Chloramine–T–induced modifications of K+ channel inactivation in neuroblastoma cells. Rouzaire–Dubois B, et al. **Pflugers Arch** 1989;414 Suppl 1:S127–8

Activity of ion channels during volume regulation by clonal N1E115 neuroblastoma cells. Falke LC, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3919–23

[Cell kinetic analysis with flow cytometry as a disdifferentiation mechanism in human neuroblastoma cells in vitro] Yamamoto H, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–3):1842–50 (Eng. Abstr.) **(Jpn)**

[Hydrogen ion block of single sodium channels in neuroblastoma cells] Neguliaev IuA, et al. **Neirofiziologiia** 1989;21(1):101–5 (Eng. Abstr.) **(Rus)**

[Effect of blood plasma and serum and its fractions on the activity of the sodium channels in neuroblastoma cells] Zubov AN, et al. **Tsitologiia** 1988 Dec;30(12):1487–91 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Feasibility study for neonatal neuroblastoma screening in the United States. Tuchman M, et al. **Med Pediatr Oncol** 1989; 17(4):258–64

Studies on the effects of vitamin E on neuroblastoma N1E 115. Slack R, et al. **Nutr Cancer** 1989;12(1):75–82

RADIOGRAPHY

Tumors of the neuron series presenting as cysts with mural nodules. Maiuri F, et al. **Acta Neurol (Napoli)** 1989 Feb; 11(1):25–31

Radiologic evaluation of surgical resectability in abdominal neuroblastoma. Saeki M, et al. **J Pediatr Surg** 1989 Apr; 24(4):378–81

Hirschsprung's disease, Ondine's curse, and neuroblastoma—manifestations of neurocristopathy. Roshkow JE, et al. **Pediatr Radiol** 1988;19(1):45–9

Beckwith–wiedemann syndrome and neural crest tumors. A report of two cases. Sirinelli D, et al. **Pediatr Radiol** 1989; 19(4):242–5

[Neuroblastoma and Wilm's tumor. Computerized tomography study] Manenti A, et al. **Acta Urol Belg** 1988; 56(3):458–63 (Eng. Abstr.) **(Fre)**

RADIONUCLIDE IMAGING

Gastrointestinal iodine–131–meta–iodobenzylguanidine activity. Geatti O, et al. **Am J Physiol Imaging** 1988; 3(4):188–91

Neuroblastoma: imaging evaluation by sequential Tc–99m MDP, I–131 MIBG, and Ga–67 citrate studies. Garty I, et al. **Clin Nucl Med** 1989 Jul;14(7):515–22

Radio–iodobenzylguanidine scintigraphy of neuroblastoma: conflicting results, when compared with standard investigations. Schmiegelow K, et al. **Med Pediatr Oncol** 1989;17(2):127–30

[Indications for MIBG scintigraphy in the diagnosis of neuroblastoma] Hausegger KA, et al. **Nuklearmedizin** 1989 Feb;28(1):34–40 (Eng. Abstr.) **(Ger)**

[Scintigraphy of the adrenergic nervous system] Dabasi G, et al. **Orv Hetil** 1989 Feb 12;130(7):327–31 (Eng. Abstr.) **(Hun)**

RADIOTHERAPY

Olfactory neuroblastoma. Observations on seven patients treated with radiation therapy and review of the literature. Urdaneta N, et al. **Am J Clin Oncol** 1988 Dec;11(6):672–8 (35 ref.)

131I–metaiodobenzylguanidine in the treatment of neuroblastoma at diagnosis. Mastrangelo R, et al. **Am J Pediatr Hematol Oncol** 1989 Spring;11(1):28–31

A tumour spheroid model for antibody–targeted therapy of micrometastases. Walker KA, et al. **Br J Cancer** 1988 Jul; 58(1):13–6

Radionuclide therapy of pheochromocytomas and neuroblastomas using iodine–131 metaiodobenzylguanidine (MIBG). Brendel AJ, et al. **Clin Nucl Med** 1989 Jan; 14(1):19–21

Enhanced therapeutic tumour dose of 131I–MIBG by accelerated diuresis. Darte L, et al. **Eur J Nucl Med** 1988; 14(9–10):512–4

Toxicity from treatment of neuroblastoma with 131I–meta–iodobenzylguanidine. Sisson JC, et al. **Eur J Nucl Med** 1988;14(7–8):337–40

Implantation of a silastic balloon for reduction of radiation injuries of the bowel in two children with neuroblastoma. Hawliczek R, et al. **Prog Pediatr Surg** 1989;22:146–54

Monoclonal antibodies as targeting agents for cytotoxic compounds in vivo: a current assessment. Kemshead JT, et al. **Prog Pediatr Surg** 1989;22:30–44

Therapeutic use of I–131–MIBG in nude mice hosting human neuroblastoma xenografts. Senekowitsch R, et al. **Strahlenther Onkol** 1989 Jul;165(7):566–8

[131(I)–meta–iodobenzylguanidine treatment of 32 children with therapy–refractory neuroblastoma] Berthold F, et al. **Klin Padiatr** 1988 May–Jun;200(3):226–9 (Eng. Abstr.) **(Ger)**

SECONDARY

Immunological detection of neuroblastoma cells in bone marrow harvested for autologous transplantation. Combaret V, et al. **Br J Cancer** 1989 Jun;59(6):844–7

Miliary pulmonary neuroblastoma. A risk of autologous bone marrow transplantation? Graeve JL, et al. **Cancer** 1988 Nov 15;62(10):2125–7

Secondary testicular tumors. Nistal M, et al. **Eur Urol** 1989; 16(3):185–8

Stage IV–S metastatic neuroblastoma presenting as skin nodules at birth. Nguyen TQ, et al. **Int J Dermatol** 1988 Dec;27(10):712–3

Monoclonal antibodies for detecting bone marrow invasion by neuroblastoma. Rogers DW, et al. **J Clin Pathol** 1989 Apr;42(4):422–6

Small round cell tumors. Pritchard DJ. **Orthop Clin North Am** 1989 Jul;20(3):367–75 (23 ref.)

Unusual CNS and orbital metastases of neuroblastoma. Gallet BL, et al. **Pediatr Radiol** 1989;19(5):287–9

Case report 493: Neuroblastoma of the left ilium with disseminated bony metastasis. Roberts JL, et al. **Skeletal Radiol** 1988;17(5):375–7

[Secondary metastatic neuromeningeal localization of neuroblastoma in children] Rohrlich P, et al. **Arch Fr Pediatr** 1989 Jan;46(1):5–10 (25 ref.) (Eng. Abstr.) **(Fre)**

[Orbital involvement in neuroblastoma] Fries U, et al. **Fortschr Ophthalmol** 1988;85(3):317–20 (Eng. Abstr.) **(Ger)**

SECRETION

Specific overproduction of very late antigen 1 integrin in two human neuroblastoma cell lines selected for resistance to detachment by an Arg–Gly–Asp–containing synthetic peptide. Dedhar S, et al. **J Biol Chem** 1989 Mar 25; 264(9):4832–6

Human neuroblastoma cells acquire regulated secretory properties and different sensitivity to Ca2+ and alpha–latrotoxin after exposure to differentiating agents. Sher E, et al. **J Cell Biol** 1989 Jun;108(6):2291–300

[Metastatic neuroblastoma with secondary hypersecretion of vasoactive intestinal peptide] Brunet J, et al. **Pediatrie** 1988; 43(5):415–7 (Eng. Abstr.) **(Fre)**

SURGERY

Epilepsy course in cerebral gangliogliomas: a study of 16 cases. Casazza M, et al. **Acta Neurochir Suppl (Wien)** 1989; 46:17–20

The role of marrow autografting in neuroblastoma [editorial] Graham–Pole J. **Bone Marrow Transplant** 1989 Jan;4(1):3

Improvement in survival after excision of primary tumor in stage III neuroblastoma. Haase GM, et al. **J Pediatr Surg** 1989 Feb;24(2):194–200

Kidney–preserving radical tumor resection in advanced neuroblastoma. Hata Y, et al. **J Pediatr Surg** 1989 Apr; 24(4):382–5

Resection of advanced stage neuroblastoma with the cavitron ultrasonic surgical aspirator. Loo R, et al. **J Pediatr Surg** 1988 Dec;23(12):1135–8

Beneficial effects following carbon dioxide laser excision on experimental neuroblastoma. McCormack CJ, et al. **J Pediatr Surg** 1989 Feb;24(2):201–3

Renal artery spasm: a cause of acute renal failure following abdominal surgery for neuroblastoma. Ogita S, et al. **J Pediatr Surg** 1989 Feb;24(2):215–7

A surgical perspective on the current staging in neuroblastoma—the International Neuroblastoma Staging System proposal. Smith EI, et al. **J Pediatr Surg** 1989 Apr; 24(4):386–90

Surgery for neuroblastoma. Kiely EM. **Prog Pediatr Surg** 1989;22:140–5

Primary cerebral neuroblastoma. Mierau GW, et al. **Ultrastruct Pathol** 1989 Mar–Jun;13(2–3):281–9

[Problems and results of reinterventions on the adrenal gland] Menzel J, et al. **Acta Med Austriaca** 1988;15(4):112–5 (Eng. Abstr.) **(Ger)**

[Treatment of neuroblastoma. Results of therapy at the Zurich University Pediatric Clinic, 1967–1987] Belvedere M, et al. **Helv Paediatr Acta** 1989 Jun;43(5–6):423–31 (Eng. Abstr.) **(Ger)**

[Accomplishments of tumor surgery in neuroblastoma in childhood] Mildenberger H. **Langenbecks Arch Chir** 1988; Suppl 2:511–4 (7 ref.) (Eng. Abstr.) **(Ger)**

[The clinical aspects of neuroblastomas and ganglioneuromas with intraspinal involvement] Klimmer M, et al. **Z Kinderchir** 1988 Oct;43(5):343–6 (Eng. Abstr.) **(Ger)**

[Evaluation of second–look operations in neuroblastoma] Sawaguchi S, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–2):1317–22 (Eng. Abstr.) **(Jpn)**

[Adult neuroblastoma of the adrenal with intraatrial tumor thrombus: report of a case] Onishi S, et al. **Hinyokika Kiyo** 1988 Jul;34(7):1195–9 (Eng. Abstr.) **(Jpn)**

THERAPY

Experiences in the treatment of neuroblastoma. Joseph VT, et al. **Ann Acad Med Singapore** 1988 Jan;17(1):145–51

Autologous bone marrow transplantation. Santos GW, et al. **Annu Rev Med** 1989;40:99–112 (49 ref.)

Recombinant human granulocyte–macrophage colony stimulating factor (rh GM–CSF) after bone marrow transplantation. Link H, et al. **Behring Inst Mitt** 1988 Aug; (83):313–9

Removal of neuroblastoma cells from bone marrow by a direct monoclonal antibody rosetting technique. Berthold F, et al. **Bone Marrow Transplant** 1989 May;4(3):273–8

Influence of single and double immunomagnetic depletion on the hemopoietic capacity of marrow in patients with advanced neuroblastoma submitted to autologous bone marrow transplantation. Lopez M, et al. **Bone Marrow Transplant** 1987 Dec;2(4):413–9

Effectiveness of two methods of parenteral nutrition support in improving muscle mass of children with neuroblastoma or Wilms' tumor. A randomized study. Rickard KA, et al. **Cancer** 1989 Jul 1;64(1):116–25

A phase–II study of adoptive immunotherapy with continuous infusion of interleukin–2 in children with advanced neuroblastoma. A report on 11 cases. Favrot M, et al. **Cancer Treat Rev** 1989 Jun;16 Suppl A:129–42

Autologous bone marrow transplantation in children. Pick TE. **CRC Crit Rev Oncol Hematol** 1988;8(4):311–37 (165 ref.)

Targeted radiotherapy and immunotherapy of human neuroblastoma with GD2 specific monoclonal antibodies. Cheung NK, et al. **Int J Rad Appl Instrum [B]** 1989; 16(2):111–20 (26 ref.)

Advanced neuroblastoma: results of two treatment programs including sequential hemibody irradiation. Lombardi F, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):485–91

Treatment results among adults with childhood tumors: a 20–year experience. Prestidge BR, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):507–14

Excellent outcome of stage II neuroblastoma is independent of residual disease and radiation therapy. Matthay KK, et al. **J Clin Oncol** 1989 Feb;7(2):236–44

Therapy for metastatic neuroblastoma: future directions? Marshall GM, et al. **Med J Aust** 1989 Jul 17;151(2):60–2

Caudal epidural morphine analgesia for an infant with advanced neuroblastoma: report of a case. Berde CB, et al. **Pain** 1989 Feb;36(2):219–23

[A preliminary treatment report of the Study Group of Japan for Advanced Neuroblastoma] Sawaguchi S, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 May 20;24(5):1020–6 (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

Immunocytochemical and ultrastructural studies of the histogenesis of Ewing's sarcoma and putatively related tumors. Ushigome S, et al. **Cancer** 1989 Jul 1;64(1):52–62

Round cell neoplasms of children: value of electron microscopy in their diagnosis. Aboul Ela F, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):738–40

An ultrastructural and immunohistochemical evaluation of cytodifferentiation in neuroblastic tumors. Hachitanda Y, et al. **Mod Pathol** 1989 Jan;2(1):13–9

Primary cerebral neuroectodermal tumors: neuroblastoma, differentiated neuroblastoma, and composite neuroectodermal tumor. Dehner LP, et al. **Ultrastruct Pathol** 1988 Sep–Oct;12(5):479–94

Anaplastic Wilms' tumor and other clinically aggressive childhood renal neoplasms: ultrastructural and immunocytochemical features. Mierau GW, et al. **Ultrastruct Pathol** 1989 Mar–Jun;13(2–3):225–48

URINE

Neuroblastoma—when are urinary catecholamines and their metabolites 'normal'? Worthington DJ, et al. **Ann Clin Biochem** 1988 Nov;25 (Pt 6):620–6

Disparate urinary catecholamine patterns in secondary hypertension due to unique sequential development of pheochromocytoma and neuroblastoma. Amodeo C, et al. **Arch Pathol Lab Med** 1989 Jul;113(7):800–2

Method of measurement of urinary homovanillic acid and vanillylmandelic acid by gas chromatography–mass spectrometry suitable for neuroblastoma screening. Seviour JA, et al. **J Chromatogr** 1988 Nov 18;432:273–7

Stage and urinary catecholamine metabolite excretion in neuroblastoma. European Neuroblastoma Study Group [letter] Pritchard J, et al. **Lancet** 1989 Aug 26;2(8661):514–5

Laboratory techniques and neuroblastoma screening [letter] Sawada T. **Lancet** 1988 Nov 12;2(8620):1134–5

NEUROCHEMISTRY

Third joint meeting on neurochemical approaches to the understanding of cerebral disorders. June 9–12, 1988, Helsingør/Copenhagen. Abstracts. **Acta Neurol Scand** 1989 Mar;79(3):249–69

Twelfth meeting of the International Society for Neurochemistry. Algarve, Portugal, April 23–28, 1989. Abstracts. **J Neurochem** 1989;52 Suppl:S1–227

METHODS

High-pressure extraction of membrane-associated protein kinase C from rat brain. Lester DS. **J Neurochem** 1989 Jun;52(6):1950–3

A method for parallel determination of choline acetyltransferase and muscarinic cholinergic receptors: application in aged-rat brain. Haba K, et al. **Neurochem Res** 1988 Oct;13(10):951–5

NEUROCIRCULATORY ASTHENIA

[Historic consideration on so called cardiac neurosis] Harumi K. **Kokyu To Junkan** 1988 Oct;36(10):1051–7 (20 ref.) **(Jpn)**

BLOOD

[The effect of a controlled physical load on the level of cyclic adenosine monophosphate in plasma and thrombocytes] Volkov VI, et al. **Vrach Delo** 1989 May;(5):14–7 (Eng. Abstr.) **(Rus)**

COMPLICATIONS

[Diagnosis of depression in functional diseases of the internal organs] Bratoliubova TN, et al. **Klin Med (Mosk)** 1988 Sep; 66(9):70–2 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

[Various computer programs for the diagnosis of ischemic heart disease and neurocirculatory asthenia] Abbakumov SA, et al. **Klin Med (Mosk)** 1989 Mar;67(3):55–8 **(Rus)**

[Clinico-instrumental examination of women with myocardial dystrophy and neurocirculatory asthenia] Mordovich VF, et al. **Klin Med (Mosk)** 1988 Oct; 66(10):46–8 (Eng. Abstr.) **(Rus)**

[Hemodynamic aspects of neurocirculatory dystonia in adolescents] Komissarov VA. **Pediatriia** 1988;(12):32–6 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

[Effect of obzidan on coronary blood flow in patients with the hyperkinetic type of hemodynamics in the acute period of myocardial infarct] Bogatyrev IV, et al. **Kardiologiia** 1988 Aug;28(8):52–5 (Eng. Abstr.) **(Rus)**

[Obsidan treatment of neuroendocrine disorders and hyperkinetic syndrome in patients with macrofocal myocardial infarction] Simerzin VV. **Klin Med (Mosk)** 1989 Jan;67(1):84–7 (Eng. Abstr.) **(Rus)**

[Use of beta adrenergic receptor blockaders in industrial workers with neurocirculatory asthenia of the hypertensive type] Mazii SA, et al. **Sov Med** 1988;(7):96–9 **(Rus)**

ETIOLOGY

[Hypokinesia as a psychoneurologic risk factor] Shaposhnikov EA. **Voen Med Zh** 1988 Oct;(10):65–7 **(Rus)**

METABOLISM

Magnetic resonance muscle studies [letter] Rosen SD, et al. **J R Soc Med** 1988 Nov;81(11):676–7

PHYSIOPATHOLOGY

Normal muscle strength and fatigability in patients with effort syndromes [letter] Hughson AV. **BMJ** 1988 Dec 17; 297(6663):1610–1

Central nervous system impairment in effort syndromes [letter] Mäntysaari M. **BMJ** 1988 Dec 3;297(6661):1472–3

Normal muscle strength and fatigability in patients with effort syndromes. Stokes MJ, et al. **BMJ** 1988 Oct 22; 297(6655):1014–7

[Status of the microcirculatory bed of the bulbar conjunctiva in various forms of vestibular dysfunction] Aleksandrov IuG, et al. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):11–5 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Screening emergency room patients with atypical chest pain for depression and panic disorder. Wulsin LR, et al. **Int J Psychiatry Med** 1988;18(4):315–23

Cardiac preoccupations. Halpert E. **Psychosom Q** 1989 Apr; 58(2):210–26

THERAPY

[Non-pharmacological methods of treatment of neurocirculatory asthenia] Petrov MN, et al. **Sov Med** 1988; (5):54–7 **(Rus)**

NEURODERMATITIS

[The terminology of neurodermatitis] Brailovskiĭ AIa. **Vestn Dermatol Venerol** 1988;(11):22–4 **(Rus)**

[What are diffuse neurodermatitis and atopic dermatitis?] Gol'dshtein LM. **Vestn Dermatol Venerol** 1989;(3):32–3 (Eng. Abstr.) **(Rus)**

[The terminology of neurodermatitis] Il'in II, et al. **Vestn Dermatol Venerol** 1989;(3):30–1 (Eng. Abstr.) **(Rus)**

BLOOD

[Radioimmunologic study of the hormonal and immune status in eczema, psoriasis and neurodermatitis] Baltabaev TS. **Med Radiol (Mosk)** 1989 Aug;34(8):61–3 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

[Differential diagnosis of allergic and pseudoallergic variants of urticaria, Quincke's edema and neurodermatitis in children] Cheburkin AA, et al. **Pediatriia** 1989;(5):39–42 **(Rus)**

[Terminology, clinical picture and treatment of atopic dermatitis and neurodermatitis] Romanenko GF, et al. **Vestn Dermatol Venerol** 1989;(4):22–6 (Eng. Abstr.) **(Rus)**

DIET THERAPY

[Psychological aspects of nutrition in patients with neurodermatitis] von Uslar A. **Z Hautkr** 1988;63 Suppl 4:95–9 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

[Comparative effectiveness of current pathogenetic methods of treating neurodermatitis] Grebennikov VA, et al. **Vestn Dermatol Venerol** 1989;(5):35–9 (Eng. Abstr.) **(Rus)**

[Effect of thymotropin on neuroendocrine regulation of the humoral immunity link in patient with neurodermatitis] Khamidov ShA. **Vestn Dermatol Venerol** 1988;(11):17–9 (Eng. Abstr.) **(Rus)**

[The immediate and late results of treating neurodermatitis by the indirect endolymphatic administration of drug preparations] Shakhtmeister IIa, et al. **Vestn Dermatol Venerol** 1988;(11):12–3 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Calcitonin gene-related peptide immunoreactivity in prurigo nodularis: a comparative study with neurodermatitis circumscripta. Vaalasti A, et al. **Br J Dermatol** 1989 May; 120(5):619–23

[Dynamics of clinico-immunological indicators in children with neurodermatitis during climatotherapy] Tuleutaeva GA. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 May–Jun; (3):29–31 (Eng. Abstr.) **(Rus)**

METABOLISM

[Vitamin B6 metabolism in children with allergic dermatoses] Chistiakov GM, et al. **Pediatriia** 1989;(5):43–5 **(Rus)**

PATHOLOGY

[The state of the hepatobiliary system and the pancreas in patients with eczema and neurodermatitis] Zaerko VV, et al. **Vestn Dermatol Venerol** 1989;(3):38–42 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Neurogenic inflammation in the skin of the rabbit. Lynn B, et al. **Agents Actions** 1988 Dec;25(3–4):228–30

PSYCHOLOGY

[Emotional stresses and cognitive processes in patients with neurodermatitis] Korth EE, et al. **Psychother Psychosom Med Psychol** 1988 Aug;38(8):276–81 (Eng. Abstr.) **(Ger)**

SURGERY

Cryosurgical treatment of nodular neurodermatitis with Refrigerant 12. McDow RA, et al. **J Dermatol Surg Oncol** 1989 Jun;15(6):621–3

THERAPY

[Atopic neurodermatitis] Thürlimann W. **Ther Umsch** 1989 Feb;46(2):111–7 (Eng. Abstr.) **(Ger)**

[Climate therapy and change in cellular immunity] Drosner M. **Z Hautkr** 1988;63 Suppl 4:104–7 (Eng. Abstr.) **(Ger)**

[Autotransfusion of UV-irradiated blood and the morphofunctional status of mononuclear cells in neurodermitis patients] Finkel'shtein BB, et al. **Vestn Dermatol Venerol** 1989;(2):43–6 (Eng. Abstr.) **(Rus)**

[A method of UV irradiation of the blood in the combination therapy of neurodermatitis] Gromov VV, et al. **Vestn Dermatol Venerol** 1988;(12):30–3 (Eng. Abstr.) **(Rus)**

[The use of sibicort in the combined therapy of patients with eczema, neurodermatitis and allergic dermatitis] Iagovdik NZ, et al. **Vestn Dermatol Venerol** 1989;(2):60–2 (Eng. Abstr.) **(Rus)**

[Potentials of oxygen barotherapy in neurodermatitis] Gromov VV, et al. **Voen Med Zh** 1988 Aug;(8):61–3 **(Rus)**

NEURODERMATITIS, ATOPIC see **DERMATITIS, ATOPIC**

NEURODERMATITIS, DISSEMINATED see **DERMATITIS, ATOPIC**

NEUROEFFECTOR JUNCTION

DRUG EFFECTS

Effects of reserpine pretreatment on neuroeffector transmission in the vas deferens. Cunnane TC, et al. **Clin Exp Pharmacol Physiol** 1989 Jun;16(6):451–5

Lack of mixed agonist–antagonist properties of [Gln8-Gly31]-beta h-EP-Gly-Gly-NH2 and [Arg9,19,24,28,29]-beta h-EP in the rat vas deferens neuroeffector junction: studies with naloxone, beta-funaltrexamine and ICI 174,864. Valenzuela R, et al. **J Pharm Pharmacol** 1989 Feb;41(2):92–6

PHYSIOLOGY

A functional study of the development of the cardiac sympathetic neuroeffector junction in the SHR. Dyke AC, et al. **J Hypertens** 1989 May;7(5):345–53

Time course of transmitter action at the sympathetic neuroeffector junction in rodent vascular and non-vascular smooth muscle. Astrand P, et al. **J Physiol (Lond)** 1988 Jul;401:657–70

NEUROENDOCRINE SYSTEM see **NEUROSECRETORY SYSTEMS**

NEUROENDOCRINOLOGY

HISTORY

[Development of studies on the physiology of the neuroendocrine system at Kiev University] Gordienko VM, et al. **Fiziol Zh** 1989 Jan–Feb;35(1):112–9 (Eng. Abstr.) **(Rus)**

NEUROEPITHELIOMA

ANALYSIS

Importance of flow cytometric (CFM) data as prognostic factors [letter] Gaetani P, et al. **Am J Clin Pathol** 1989 Aug;92(2):254

Analysis of nerve growth factor receptor expression in human neuroblastoma and neuroepithelioma cell lines. Baker DL, et al. **Cancer Res** 1989 Aug 1;49(15):4142–6

Some differences in steroid receptors between meningeal and neuroepithelial tumors. Sica G, et al. **J Neurosurg Sci** 1989 Jan–Mar;33(1):71–5

CHEMICALLY INDUCED

Chemically induced esthesioneuroepithelioma: a cytogenetic, cell culture and biochemical investigation with implications for tumor histogenesis. Vollrath M. **Arch Otorhinolaryngol** 1989;246(2):71–8 (64 ref.)

COMPLICATIONS

Dysembryoplastic neuroepithelial tumor: a surgically curable tumor of young patients with intractable partial seizures. Report of thirty-nine cases. Daumas-Duport C, et al. **Neurosurgery** 1988 Nov;23(5):545–56

DIAGNOSIS

Aspiration cytology, immunocytochemistry and electron microscopy of a malignant peripheral neuroectodermal tumor. A case report. Neuhold N, et al. **Acta Cytol** 1989 Jan–Feb;33(1):74–9

Esthesioneuroblastoma or malignant lymphoma? A case report. Falkson CB. **Am J Clin Oncol** 1988 Dec; 11(6):669–71

Malignant teratoid medulloepithelioma of the ciliary body simulating persistent hyperplastic primary vitreous. Shields JA, et al. **Am J Ophthalmol** 1989 Mar 15;107(3):296–8

Malignant neuroepithelioma (peripheral neuroblastoma). A case report. Buckley SL, et al. **Clin Orthop** 1989 Jun; (243):220–4

Olfactory neuroblastoma: imaging by magnetic resonance, CT and conventional techniques. Woodhead P, et al. **Clin Otolaryngol** 1988 Oct;13(5):387–94

DRUG THERAPY

Treatment of esthesioneuroblastoma with chemotherapy: a report of two cases. Heros DO, et al. **J Neurooncol** 1988 Sep;6(2):141–5

ETIOLOGY

[Esthesioneuroblastoma: histogenesis and diagnosis] Vollrath M, et al. **Strahlenther Onkol** 1989 Jun;165(6):461–7 (Eng. Abstr.) **(Ger)**

GENETICS

N-myc amplification and neuronal differentiation in human primitive neuroectodermal tumors of the central nervous system. Rouah E, et al. **Cancer Res** 1989 Apr 1; 49(7):1797–801

IMMUNOLOGY

Lymphokine-activated killer cytotoxicity in neonatal mononuclear cells: in vitro responses to tumor cell lines from pediatric solid tumors. Chin T, et al. **Pediatr Res** 1989 Feb;25(2):156–60

METABOLISM

Esthesioneuroblastoma: a nasal catecholamine-producing tumor of neural crest origin. Demonstration of tyrosine hydroxylase-immunoreactive tumor cells. Takahashi H, et al. **Acta Neuropathol (Berl)** 1988;76(5):522–7

Expression of the cholecystokinin gene by cultured human primitive neuroepithelioma cell lines. Schneider BS, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):411–9

Recurrent medulloepithelioma of the ciliary body. Immunohistochemical characteristics. Kivelä T, et al. **Ophthalmology** 1988 Nov;95(11):1565–75

PATHOLOGY

Peripheral neuroepithelioma in childhood. Immunohistochemical demonstration of epithelial differentiation. Shinoda M, et al. **Arch Pathol Lab Med** 1988 Nov;112(11):1155–8

Medulloepithelioma: MRI appearances. Davies RP, et al. **Australas Radiol** 1988 Nov;32(4):503–5

Medulloepithelioma (diktyoma). Canning CR, et al. **Br J Ophthalmol** 1988 Oct;72(10):764–7 (11 ref.)

Primary peripheral neuroepithelioma of the orbit with intracranial extension. Wilson WB, et al. **Cancer** 1988 Dec 15;62(12):2595–601

Olfactory neuroblastoma. Durham JC. **Ear Nose Throat J** 1989 Mar;68(3):185–6, 190, 195–6, passim (15 ref.)

Peripheral neuroectodermal sarcoma of soft tissue (peripheral neuroepithelioma): a pathologic study of ten cases with differential diagnosis regarding other small, round-cell sarcomas. Llombart-Bosch A, et al. **Hum Pathol** 1989 Mar; 20(3):273–80

Pigmented esthesioneuroblastoma showing dual differentiation following transplantation in nude mice. An immunohistochemical, electron microscopical, and cytogenetic analysis. Llombart-Bosch A, et al. **Virchows Arch [A]** 1989;414(3):199–208

[Esthesioneuroblastoma: a comparative study of tumor and matrix tissue with derived histogenesis] Vollrath M, et al. **Verh Dtsch Ges Pathol** 1988;72:288–91 (Eng. Abstr.) **(Ger)**

[Esthesioblastoma] Katenkamp D, et al. **Arkh Patol** 1988; 50(12):12–7 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Computed tomographic features of esthesioneuroblastoma. Hurst RW, et al. **Neuroradiology** 1989;31(3):253–7

[X-ray findings in Askin tumors] Crone-Münzebrock W, et al. **Rontgenblatter** 1989 Jun;42(6):271–3 (Eng. Abstr.) **(Ger)**

RADIOTHERAPY

[Neuroblastoma of the olfactory nerve. Radiotherapy experiences in 6 patients] Herzog J, et al. **Strahlenther Onkol** 1988 Sep;164(9):515–26 (Eng. Abstr.) **(Ger)**

SECONDARY

Esthesioneuroblastoma metastatic to the trachea. Franklin D, et al. **Head Neck Surg** 1987 Nov-Dec;10(2):102–6

SURGERY

[Operative approach to a dumbbell-shaped tumor in the anterior cranial fossa. A case of olfactory neuroblastoma] Kawakami K, et al. **No Shinkei Geka** 1988 Oct; 16(11):1317–21 (Eng. Abstr.) **(Jpn)**

THERAPY

High-dose chemotherapy and autologous marrow transplantation for esthesioneuroblastoma and sinonasal undifferentiated carcinoma. Stewart FM, et al. **Am J Clin Oncol** 1989 Jun;12(3):217–21

Olfactory neuroblastoma. O'Connor TA, et al. **Cancer** 1989 Jun 15;63(12):2426–8

ULTRASTRUCTURE

Chemically induced esthesioneuroepithelioma: ultrastructural findings. Vollrath M, et al. **Ann Otol Rhinol Laryngol** 1989 Apr;98(4 Pt 1):256–66

Case 3. Primitive neuroectodermal tumor-peripheral neuroepithelioma. Pysher TJ, et al. **Pediatr Pathol** 1989; 9(2):185–91

VETERINARY

Spontaneous olfactory neuroepithelioma in a domestic medaka (Oryzias latipes). Torikata C, et al. **Cancer Res** 1989 Jun 1;49(11):2994–8

Malignant intraocular medulloepithelioma in two cockatiels. Schmidt RE, et al. **J Am Vet Med Assoc** 1986 Nov 1; 189(9):1105–6

Olfactory neuroblastomas in two cats. Cox NR, et al. **Vet Pathol** 1989 Jul;26(4):341–3

NEUROFIBRILS

The repeat region of microtubule-associated protein tau forms part of the core of the paired helical filament of Alzheimer's disease. Crowther T, et al. **Ann Med** 1989; 21(2):127–32 (23 ref.)

Polypeptide composition of paired helical filaments. Ihara Y, et al. **Ann Med** 1989;21(2):121–5 (34 ref.)

ANALYSIS

Tangles of ependyma-choroid plexus contain B-amyloid protein epitopes and represent a new form of amyloid fiber [letter] Wen GY, et al. **Arch Neurol** 1988 Dec;45(12):1298–9

The molecular and cellular pathology of Alzheimer neurofibrillary lesions. Kosik KS. **J Gerontol** 1989 May; 44(3):B55–8 (42 ref.)

DRUG EFFECTS

Disrupted retention of the classically conditioned nictitating membrane response in rabbits with aluminum-induced neurofibrillary degeneration. Solomon PR, et al. **Neurotoxicology** 1988 Summer;9(2):209–21

IMMUNOLOGY

The reinterpretation of the immunochemical study of Alzheimer neurofibrillary tangles. Nukina N. **Ann Med** 1989;21(2):117–9 (19 ref.)

Selective expression of epitopes in multiphosphorylation repeats of the high and middle molecular weight neurofilament proteins in Alzheimer neurofibrillary tangles. Trojanowski JQ, et al. **Ann Med** 1989;21(2):113–6 (22 ref.)

Properties of antigenic determinants that distinguish neurofibrillary tangles in progressive supranuclear palsy and Alzheimer's disease. Schmidt ML, et al. **Lab Invest** 1988 Oct;59(4):460–6

Antigenic characteristics of neurofibrillary tangles in progressive supranuclear palsy. Galloway PG. **Neurosci Lett** 1988 Aug 31;91(2):148–53

METABOLISM

Immunodetection of the amyloid P component in Alzheimer's disease. Duong T, et al. **Acta Neuropathol (Berl)** 1989; 78(4):429–37

Along the way to a neurofibrillary tangle: a look at the structure of tau. Kosik KS, et al. **Ann Med** 1989; 21(2):109–12 (32 ref.)

Aberrant guanosine triphosphate-beta-tubulin interaction in Alzheimer's disease. Khatoon S, et al. **Ann Neurol** 1989 Aug;26(2):210–5

Alzheimer's disease: microtubule-associated proteins 2 (MAP 2) are not components of paired helical filaments. Rosemblatt M, et al. **FEBS Lett** 1989 Jul 31;252(1-2):91–4

Organization of the guinea-pig uterine innervation. Distribution of immunoreactivities for different neuronal markers. Effects of chemical- and pregnancy-induced sympathectomy. Alm P, et al. **Histochem J** 1988 May; 20(5):290–300

Novel astrocytic protein in multiple sclerosis plaques. Malhotra SK, et al. **J Neurosci Res** 1989 Jan;22(1):36–49

A unifying theory of movement and madness: involvement of free radicals in disorders of the isodendritic core of the brainstem. Cadet JL. **Med Hypotheses** 1988 Sep;27(1):59–63 (61 ref.)

An analysis of the morphology of senile plaques in Down's syndrome patients of different ages using immunocytochemical and lectin histochemical techniques. Mann DM, et al. **Neuropathol Appl Neurobiol** 1989 Jul-Aug;15(4):317–29

A4 amyloid protein immunoreactivity is present in Alzheimer's disease neurofibrillary tangles. Hyman BT, et al. **Neurosci Lett** 1989 Jul 3;101(3):352–5

Galanin-like immunoreactivity is present in human substantia innominata and in senile plaques in Alzheimer's disease. Kowall NW, et al. **Neurosci Lett** 1989 Mar 13;98(1):118–23

PATHOLOGY

Mamillary bodies in Alzheimer's disease. Grossi D, et al. **Acta Neurol Scand** 1989 Jul;80(1):41–5

Alzheimer's disease: areal and laminar pathology in the occipital isocortex. Braak H, et al. **Acta Neuropathol (Berl)** 1989;77(5):494–506

Demonstration of microglial cells in and around senile (neuritic) plaques in the Alzheimer brain. An immunohistochemical study using a novel monoclonal antibody. Haga S, et al. **Acta Neuropathol (Berl)** 1989; 77(6):569–75

Reappraisal of neurofibrillary tangles. Immunohistochemical, ultrastructural, and immunoelectron microscopical studies. Kato S, et al. **Acta Neuropathol (Berl)** 1989;77(3):258–66

Pathology of the dentate nucleus in progressive supranuclear palsy: a histological, immunohistochemical and ultrastructural study. Mizusawa H, et al. **Acta Neuropathol (Berl)** 1989;78(4):419–28

Age-related changes in the density and morphology of plaques and neurofibrillary tangles in Down syndrome brain. Motte J, et al. **Acta Neuropathol (Berl)** 1989; 77(5):535–46

The pigmented subpeduncular nucleus: a neuromelanin-containing nucleus in the human pontine tegmentum. Morphology and changes in Alzheimer's disease. Ohm TG, et al. **Acta Neuropathol (Berl)** 1988; 77(1):26–32

Senile plaque neurites fail to demonstrate anti-paired helical filament and anti-microtubule-associated protein-tau immunoreactive proteins in the absence of neurofibrillary tangles in the neocortex. Probst A, et al. **Acta Neuropathol (Berl)** 1989;77(4):430–6

Progressive supranuclear palsy: extensive neuropil threads in addition to neurofibrillary tangles. Very similar antigenicity of subcortical neuronal pathology in progressive supranuclear palsy and Alzheimer's disease. Probst A, et al. **Acta Neuropathol (Berl)** 1988;77(1):61–8

Laminar distribution of neuritic plaques in normal aging, Alzheimer's disease and Down's syndrome. Rafalowska J, et al. **Acta Neuropathol (Berl)** 1988;77(1):21–5

Occurrence of neurofibrillary tangles in the celiac ganglia. Wakabayashi K, et al. **Acta Neuropathol (Berl)** 1989; 78(4):448

The pathogenesis and progression of the pathological changes of Alzheimer's disease. Mann DM. **Ann Med** 1989; 21(2):133–6 (25 ref.)

Neurofibrillary tangles in cholinergic pedunculopontine neurons in Alzheimer's disease. Mufson EJ, et al. **Ann Neurol** 1988 Nov;24(5):623–9

Parkinsonism and neurofibrillary tangle pathology in pigmented nuclei. Rajput AH, et al. **Ann Neurol** 1989 Jun; 25(6):602–6

The neuropathology of aminergic nuclei in Alzheimer's disease. Zweig RM, et al. **Ann Neurol** 1988 Aug; 24(2):233–42

Lamina-specific arrangement of astrocytic gliosis and senile plaques in Alzheimer's disease visual cortex. Beach TG, et al. **Brain Res** 1988 Nov 1;463(2):357–61

Stability of cell size and nucleolar size in tangle-bearing neurons of the hippocampus in Alzheimer's disease. Gertz HJ, et al. **Brain Res** 1989 May 22;487(2):373–5

Balint's syndrome in Alzheimer's disease: specific disruption of the occipito-parietal visual pathway. Hof PR, et al. **Brain Res** 1989 Jul 31;493(2):368–75

Massive somatodendritic sprouting of cortical neurons in Alzheimer's disease. Ihara Y. **Brain Res** 1988 Aug 30; 459(1):138–44

The presubicular region in Alzheimer's disease: topography of amyloid deposits and neurofibrillary changes. Kalus P, et al. **Brain Res** 1989 Aug 7;494(1):198–203

Thalamic nuclei in Alzheimer disease: evidence against the cholinergic hypothesis of plaque formation. Masliah E, et al. **Brain Res** 1989 Jul 31;493(2):240–6

Solitary asymptomatic plaque of demyelination in the medulla oblongata. Auer RN, et al. **Clin Neuropathol** 1988 Sep-Oct;7(5):225–7

Progressive medullary failure associated with neurofibrillary degeneration. Lidov HG, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):643–7

The pattern of acquisition of plaques and tangles in the brains of patients under 50 years of age with Down's syndrome. Mann DM, et al. **J Neurol Sci** 1989 Feb;89(2-3):169–79

Fibre disorganization in the neocortex of patients with senile dementia of the Alzheimer type. Duyckaerts C, et al. **Neuropathol Appl Neurobiol** 1989 May-Jun;15(3):233–47

Congo red birefringent structures in the hypothalamus in senile dementia of the Alzheimer type. Simpson J, et al. **Neuropathol Appl Neurobiol** 1988 Sep-Oct;14(5):381–93

Alzheimer's disease: mismatch between amyloid plaques and neuritic plaques. Braak H, et al. **Neurosci Lett** 1989 Aug 14;103(1):24–8

Neurochemical characteristics of aluminum-induced neurofibrillary degeneration in rabbits. Beal MF, et al. **Neuroscience** 1989;29(2):339–46

Aluminum-induced neurofibrillary degeneration affects a subset of neurons in rabbit cerebral cortex, basal forebrain and upper brainstem. Kowall NW, et al. **Neuroscience** 1989; 29(2):329–37

Silver impregnation of Alzheimer's neurofibrillary changes counterstained for basophilic material and lipofuscin pigment. Braak H, et al. **Stain Technol** 1988 Jul; 63(4):197–200

PHYSIOLOGY

Aluminum-induced neurofibrillary degeneration disrupts acquisition of the rabbit's classically conditioned nictitating membrane response. Pendlebury WW, et al. **Behav Neurosci** 1988 Oct;102(5):615–20

ULTRASTRUCTURE

Immunocytochemical characterization of neurofibrillary tangles in amyotrophic lateral sclerosis and parkinsonism-dementia of Guam. Shankar SK, et al. **Ann Neurol** 1989 Feb;25(2):146-51

Accumulation of abnormally phosphorylated tau precedes the formation of neurofibrillary tangles in Alzheimer's disease. Bancher C, et al. **Brain Res** 1989 Jan 16; 477(1-2):90-9

A pathological study of the association between Lewy body disease and Alzheimer's disease. Gibb WR, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):701-8

Neurofibrillary tangles and senile plaques in aged bears [published erratum appears in J Neuropathol Exp Neurol 1989 Jul;48(4):497] Cork LC, et al. **J Neuropathol Exp Neurol** 1988 Nov;47(6):629-41

Lewy bodies contain epitopes both shared and distinct from Alzheimer neurofibrillary tangles. Galloway PG, et al. **J Neuropathol Exp Neurol** 1988 Nov;47(6):654-63

Tau protein immunoreactivity in dementia of the Alzheimer type: II. Electron microscopy and pathogenetic implications. Effects of fixation on the morphology of the Alzheimer's abnormal filaments. Papasozomenos SC. **Lab Invest** 1989 Mar;60(3):375-89

Ubiquitin is a component of neurofibrillary tangles in a variety of neurodegenerative diseases. Lennox G, et al. **Neurosci Lett** 1988 Nov 22;94(1-2):211-7

Amyloid protein and neurofibrillary tangles coexist in the same neuron in Alzheimer disease. Grundke-Iqbal I, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2853-7

Neurofibrillar long-range amacrine cells in mammalian retinae. Vaney DI, et al. **Proc R Soc Lond [Biol]** 1988 Dec 22;235(1280):203-19

Ultrastructure of neurofibrillary tangles in Alzheimer's disease. Miyakawa T, et al. **Virchows Arch [B]** 1989; 57(4):267-73

[The reappraisal study of the ultrastructure of Alzheimer's neurofibrillary tangles in three cases of progressive supranuclear palsy] Amano N, et al. **No To Shinkei** 1989 Jan;41(1):35-44 (27 ref.) (Eng. Abstr.) **(Jpn)**

NEUROFIBROMA

Supratentorial neurofibroma unassociated with cranial nerves. Ng HK, et al. **Aust N Z J Surg** 1988 Jul;58(7):594-7 (26 ref.)

Ampullary neurofibroma [letter] Simmons TC. **Dig Dis Sci** 1988 Nov;33(11):1500-1

[Von Recklinghausen's neurofibromatosis with rectal involvement] Rötker J, et al. **Dtsch Med Wochenschr** 1988 Oct 28;113(43):1673-5 (Eng. Abstr.) **(Ger)**

[Recklinghausen's neurofibromatosis: unusual involvement of the maxillary sinus] Piccini A, et al. **Acta Otorhinolaryngol Ital** 1988 Nov-Dec;8(6):617-22 (Eng. Abstr.) **(Ita)**

[Atypical case of solitary neurofibroma localized in the hand] Zanotti G, et al. **Chir Organi Mov** 1988 Apr-Jun; 73(2):175-7 (Eng. Abstr.) **(Ita)**

[Neurofibroma and meningioma of the spinal canal] Araszkiewicz H, et al. **Neurol Neurochir Pol** 1988 May-Jun; 22(3):264-7 (Eng. Abstr.) **(Pol)**

[A giant neurofibroma of the diaphragm] Shipulin PP, et al. **Grudn Khir** 1988 Nov-Dec;(6):95-6 **(Rus)**

[A malignant neurofibroma of the small intestine] Nosal'chuk NK, et al. **Klin Khir** 1989;(2):62-3 **(Rus)**

[Lesions of the larynx in a child with Recklinghausen's disease] Garashchenko TI. **Vestn Otorinolaringol** 1988 Jul-Aug;(4):68-70 **(Rus)**

CHEMICALLY INDUCED

Transplacental induction of peripheral nervous tumor in the Syrian golden hamster by N-nitroso-N-ethylurea. A new animal model for von Recklinghausen's neurofibromatosis. Nakamura T, et al. **Am J Pathol** 1989 Aug;135(2):251-9

COMPLICATIONS

Diffuse neurofibroma of the pylorus: a cause of gastric outlet obstruction. Waxman JS, et al. **Mt Sinai J Med** 1989 Mar; 56(2):129-32

The neurofibromatosis Recklinghausen and its central manifestation. Braunsdorf WE. **Zentralbl Neurochir** 1988; 49(2):77-85

[Obstructive jaundice and portal hypertension caused by isolated neurofibroma of the common bile duct (letter)] Claudon M, et al. **Gastroenterol Clin Biol** 1988 Oct; 12(10):765-7 **(Fre)**

[Sciatica. Neurofibrosarcoma of the thigh] Labauge R, et al. **Rev Neurol (Paris)** 1989;145(2):157-9 (Eng. Abstr.) **(Fre)**

[Pigmented neurofibrosarcoma in a patient with von Recklinghausen's disease: clinical and ultrastructural studies] Kato H, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Oct;98(11):1121-30 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Benign extramedullary tumors of the foramen magnum. Guidetti B, et al. **Adv Tech Stand Neurosurg** 1988;16:83-120 (63 ref.)

Neurogenic neoplasms in the head and neck region. Ishikawa K, et al. **Auris Nasus Larynx** 1988;15(3):199-210 (21 ref.)

A case of neurofibroma located in the retroperitoneum involving the uncinate process of the pancreas. Imai H, et al. **Gastroenterol Jpn** 1989 Aug;24(4):421-4

Neurofibrosarcoma complicating pregnancy. Baker VV, et al. **Gynecol Oncol** 1989 Aug;34(2):237-9

MRI of peripheral neurofibromas in children. Glasier CM, et al. **Orthopedics** 1989 Feb;12(2):269-72

Malignant nerve sheath tumors of the head and neck. Hoffmann DF, et al. **Otolaryngol Head Neck Surg** 1988 Sep;99(3):309-14

[Neurofibrosarcomas in neurofibromatosis 1] Sieb JP, et al. **Dtsch Med Wochenschr** 1989 Mar 17;114(11):417-9 (Eng. Abstr.) **(Ger)**

EPIDEMIOLOGY

[Neurofibrosarcomas in neurofibromatosis 1] Sieb JP, et al. **Dtsch Med Wochenschr** 1989 Mar 17;114(11):431-4 (52 ref.) **(Ger)**

ETIOLOGY

Surgical treatment of a retroperitoneal neurofibroma in von Recklinghausen's disease. Deruyter L, et al. **Eur J Surg Oncol** 1989 Jun;15(3):258-62

Neurogenic fibrosarcoma following radiation therapy for seminoma. O'Brien WM, et al. **Urology** 1989 May; 33(5):420-3

METABOLISM

Nerve growth factor receptor immunoreactivity in human benign peripheral nerve sheath tumor. Yasuda T, et al. **Acta Neuropathol (Berl)** 1989;77(6):591-8

Deficiency of a 42-kilodalton protein in tumor-derived fibroblastic cells in neurofibromatosis. Maruyama E, et al. **Exp Cell Biol** 1988;56(3):153-8

Epithelial membrane antigen expression by the perineurial cell: further studies of peripheral nerve lesions. Theaker JM, et al. **Histopathology** 1989 Jun;14(6):581-92

PATHOLOGY

Malignant peripheral nerve sheath tumors of the skin. George E, et al. **Am J Dermatopathol** 1989 Jun;11(3):213-21

Tactile corpuscle-like structures in peripheral nerve sheath tumors in plastic embedded material. Jurecka W. **Am J Dermatopathol** 1988 Feb;10(1):74-9

Plexiform neurofibroma of the skin. Jurecka W. **Am J Dermatopathol** 1988 Jun;10(3):209-17

Gastrointestinal autonomic nerve tumors. 'Plexosarcomas'. Herrera GA, et al. **Arch Pathol Lab Med** 1989 Aug; 113(8):846-53

Supratentorial neurofibroma unassociated with cranial nerves. Ng HK, et al. **Aust N Z J Surg** 1988 Jul;58(7):594-7

Characterization of mast cells residing in cutaneous neurofibromas. Kamide R, et al. **Dermatologica** 1989;179 Suppl 1:124

Children mesenchymal tumours in cytomorphometric assessments. Enchev V. **Gegenbaurs Morphol Jahrb** 1989; 135(1):177-81

Giant pigmented tumour of the scalp--a diffuse neurofibroma or a congenital naevus showing neurofibromatous changes? Immunohistochemical and electron microscopic studies. Ito H, et al. **Histopathology** 1988 Aug;13(2):181-9

Hemangiopericytoma arising in a solitary plexiform neurofibroma: report of a case and review of the literature. Aduana V, et al. **J Oral Maxillofac Surg** 1988 Dec; 46(12):1106-9 (22 ref.)

Solitary neurofibroma of the mandible: case report and review of the literature. Polak M, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):65-8 (39 ref.)

Neurofibromatosis: challenges for applied cellular and molecular biology. Riccardi VM. **Lab Invest** 1988 Dec; 59(6):726-8

Giant epicranial neurofibroma--case report. Wakuta Y, et al. **Neurol Med Chir (Tokyo)** 1988 Jul;28(7):690-4 (18 ref.)

[Neurofibroma of the penis (letter)] Levillain P, et al. **Ann Pathol** 1989;9(3):222 **(Fre)**

[Cervical melanotic neurofibroma. Apropos of a case and a review of the literature] Lozes G, et al. **Neurochirurgie** 1989;35(1):47-51 (55 ref.) (Eng. Abstr.) **(Fre)**

[Giant nerve-sheath fibroma. Apropos of a case associated with hepatorenal polycystosis] Satge D, et al. **Pathologica** 1987 Nov-Dec;79(1064):761-72 (Eng. Abstr.) **(Fre)**

PHYSIOPATHOLOGY

Femoral pain of solitary neurofibromatous origin. Sharma SC, et al. **Indian Pediatr** 1988 Dec;25(12):1221-3

RADIOGRAPHY

Unusually low CT density in a peripheral neurofibroma. Tàpies Barba C, et al. **J Comput Assist Tomogr** 1988 Nov-Dec;12(6):1086-7

Case report 547: Plexiform neurofibroma involving a dorsal root ganglion. Hallisey MJ, et al. **Skeletal Radiol** 1989; 18(4):314-7

[Efficacy of CT omnipaque myelography in the demonstration of intraspinal space-occupying diseases (report of 77 cases)] Wang YS. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Feb;23(1):11-3 (Eng. Abstr.) **(Chi)**

RADIOTHERAPY

Radiation port dermatophytosis. Rosen T, et al. **J Am Acad Dermatol** 1988 Dec;19(6):1053-6

SURGERY

Is limb-sparing surgery applicable to neurogenic sarcomas of the extremities? Bolton JS, et al. **Arch Surg** 1989 Jan; 124(1):118-21

Iatrogenic lumbar meningocoel after excision of a neurofibroma [letter] Ward PJ. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):410-1

Resection of a tumor of the psoas muscle. Shamberger RC, et al. **J Pediatr Surg** 1989 Sep;24(9):933-5

The occurrence of different types of spinal tumours in one patient. A case report and review of the literature. Nishiura I, et al. **Neurochirurgia (Stuttg)** 1989 Mar;32(2):52-5 (21 ref.)

Denervation in von Recklinghausen's neurofibromatosis (NF-1) leads to fewer and smaller neurofibromas. Riccardi VM, et al. **Neurology** 1988 Nov;38(11):1810

Choice of surgical approach in orbital space occupations--an interdisciplinary problem. Heesen J, et al. **Neurosurg Rev** 1988;11(3-4):239-44

Intrathoracic tumors arising from the vagus nerve. Review of resected tumors in Japan. Shirakusa T, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):173-5 (14 ref.)

Hydraulic bedscale lift for retracting and holding large lesions. Morris DM, et al. **South Med J** 1989 Jun; 82(6):796-7

C2 neurofibroma. A case report. Clavel M. **Spine** 1988 May; 13(5):589-91

[Intratemporal facial neurinoma] Kempf HG, et al. **Laryngorhinootologie** 1989 Mar;68(3):144-5 (Eng. Abstr.) **(Ger)**

[Neurogenic tumors of the mediastinum. Considerations apropos of 6 operated cases] Ghilardi G, et al. **Minerva Chir** 1988 Dec 31;43(23-24):2125-9 (Eng. Abstr.) **(Ita)**

[Neurofibroma of the diaphragm] Al'perovich BI, et al. **Grudn Khir** 1988 Sep-Oct;(5):89-91 **(Rus)**

[Benign non-epithelial tumors of the alimentary canal] Spivak VP, et al. **Klin Khir** 1989;(2):58 **(Rus)**

[Neurofibroma of the larynx] Nikolaev MP, et al. **Vestn Otorinolaringol** 1988 May-Jun;(3):71 **(Rus)**

ULTRASTRUCTURE

Pigmented neurofibroma. Jurecka W. **J Dermatol (Tokyo)** 1988 Apr;15(2):172-9

Interaction between mast cells and perineurial fibroblasts in neurofibroma. New insights into mast cell function. Kirkpatrick CJ, et al. **Pathol Res Pract** 1988 Aug; 183(4):453-61

Ultrastructural study of a perineurioma. Ohno T, et al. **Ultrastruct Pathol** 1988 Sep-Oct;12(5):495-504 (21 ref.)

VETERINARY

Radiotherapy of soft tissue sarcomas in dogs. McChesney SL, et al. **J Am Vet Med Assoc** 1989 Jan 1;194(1):60-3

NEUROFIBROMATOSIS

Neurofibromatosis. **Clin Orthop** 1989 Aug;(245):1-56

Endotracheal neurofibroma in a patient with von Recklinghausen's disease. Lossos IS, et al. **Eur Respir J** 1988 May;1(5):464-5 (7 ref.)

[Carcinoid of the duodenum in neurofibromatosis] Skála J, et al. **Vnitr Lek** 1989 Jan;35(1):74-8 (Eng. Abstr.) **(Cze)**

[A malignant schwannoma of the jejunum associated with multiple neurofibromas and a primary adenoma of the parathyroid] Godlewski G, et al. **Ann Gastroenterol Hepatol (Paris)** 1989 Jan-Feb;25(1):13-7 (Eng. Abstr.) **(Fre)**

[Lesions of the larynx in a child with Recklinghausen's disease] Garashchenko TI. **Vestn Otorinolaringol** 1988 Jul-Aug;(4):68-70 **(Rus)**

CHEMICALLY INDUCED

Transplacental induction of peripheral nervous tumor in the Syrian golden hamster by N-nitroso-N-ethylurea. A new animal model for von Recklinghausen's neurofibromatosis. Nakamura T, et al. **Am J Pathol** 1989 Aug;135(2):251-9

Experimental model of tumors associated with neurofibromatosis. Cardesa A, et al. **Cancer** 1989 May 1; 63(9):1737-49

CLASSIFICATION

Neurofibromatosis classification clarified [letter] Lewis RA, et al. **Ophthalmology** 1989 Jul;96(7):1123-4

COMPLICATIONS

Adrenal cortical adenoma in a 13-year-old girl with neurofibromatosis. Case report and review of the literature. Sartori P, et al. **Acta Paediatr Scand** 1989 May;78(3):476-8

Duodenal carcinoid (somatostatinoma) combined with von Recklinghausen's disease. A case report and review of the literature. Ohtsuki Y, et al. **Acta Pathol Jpn** 1989 Feb; 39(2):141-6 (18 ref.)

Neurofibromatosis with spinal paralysis due to arteriovenous fistula. Wada K, et al. **Arch Orthop Trauma Surg** 1989;

108(5):322–4
Recurrent perforation complicating intestinal neurofibromatosis. Bhattacharyya R, et al. **Aust N Z J Surg** 1988 Sep;58(9):749–51
A case of neurofibromatosis associated with a coronary artery aneurysm and myocardial infarction. Kandarpa K, et al. **Cardiovasc Intervent Radiol** 1988 Jun;11(3):143–5
Segmental neurofibromatosis and pruritus. McFadden P, et al. **Clin Exp Dermatol** 1988 Jul;13(4):265–8
Parathyroid adenoma associated with neurofibromatosis: correlative scintigraphic and magnetic resonance imaging. Vogelzang PJ, et al. **Clin Nucl Med** 1989 Mar;14(3):168–70
Scoliosis surgery in neurofibromatosis. Betz RR, et al. **Clin Orthop** 1989 Aug;(245):53–6
Pitfalls of spinal deformities associated with neurofibromatosis in children. Crawford AH. **Clin Orthop** 1989 Aug;(245):29–42 (47 ref.)
Congenital pseudarthrosis of the tibia. Long-term follow-up study. Crossett LS, et al. **Clin Orthop** 1989 Aug;(245):16–8
Cotrel-Dubousset instrumentation in neurofibromatosis spine curves. A preliminary report. Holt RT, et al. **Clin Orthop** 1989 Aug;(245):19–23
Cotrel-Dubousset instrumentation in neurofibromatosis spinal problems. Shufflebarger HL. **Clin Orthop** 1989 Aug;(245):24–8
Learning problems in neurofibromatosis patients. Stine SB, et al. **Clin Orthop** 1989 Aug;(245):43–8
Surgical treatment of a retroperitoneal neurofibroma in von Recklinghausen's disease. Deruyter L, et al. **Eur J Surg Oncol** 1989 Jun;15(3):258–62
Multiple neurofibromatosis with histoid leprosy [letter] Thomas J, et al. **Int J Lepr Other Mycobact Dis** 1989 Sep; 57(3):695–6
Large pelvic mass in a patient with neurofibromatosis [clinical conference] Green WJ, et al. **Invest Radiol** 1988 Oct;23(10):772–4
Segmental neurofibromatosis. Sanchez Conejo-Mir J, et al. **J Am Acad Dermatol** 1989 Apr;20(4):681–2
Scoliosis in neurofibromatosis. The natural history with and without operation. Calvert PT, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):246–51
An unusual cause of gastrointestinal hemorrhage—intestinal neurofibromatosis [letter] Jeng KS, et al. **J Clin Gastroenterol** 1988 Oct;10(5):585–7
Congenital glaucoma and buphthalmos in a child with neurofibromatosis. Castillo M, et al. **J Clin Neuro Ophthalmol** 1988 Mar;8(1):69–71
Anterolateral cervical meningocele in association with neurofibromatosis: MR and CT studies. So CB, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):692–5 (16 ref.)
Neurofibromatosis with ulnar nerve palsy and skull deformity. Rajendraretnam K, et al. **J Indian Med Assoc** 1988 Jul;86(7):200
Parotid mass in a patient with von Recklinghausen's disease [clinical conference] Skouteris CA, et al. **J Oral Maxillofac Surg** 1989 May;47(5):495–501
Optic gliomas in children with neurofibromatosis type 1. Listernick R, et al. **J Pediatr** 1989 May;114(5):788–92
Intestinal duplication in a patient with neurofibromatosis: aid of ultrasound and CT scan in diagnosis. Berezin S, et al. **J Pediatr Gastroenterol Nutr** 1988 Nov–Dec;7(6):922–5
Von Recklinghausen neurofibromatosis and myeloproliferative disorders in adults [letter] Lightman SM. **Lancet** 1988 Nov 19;2(8621):1197–8
Chromosome pattern in juvenile chronic myelogenous leukemia, myelodysplastic syndrome, and acute leukemia associated with neurofibromatosis. Kaneko Y, et al. **Leukemia** 1989 Jan;3(1):36–41
Fibrosarcoma in a child with neurofibromatosis. Wasserman R. **Med Pediatr Oncol** 1989;17(4):271–3
Bilateral vertebral arteriovenous fistulas and atlantoaxial dislocation associated with neurofibromatosis—case report. Hasegawa H, et al. **Neurol Med Chir (Tokyo)** 1989 Jan; 29(1):55–9
von Recklinghausen's neurofibromatosis and aqueduct stenosis [letter] **Neurosurgery** 1989 Aug;25(2):318–9
Association of von Recklinghausen's neurofibromatosis and aqueduct stenosis. Senveli E, et al. **Neurosurgery** 1989 Jan; 24(1):99–101 (23 ref.)
Intraocular neurilemmoma arising from the posterior ciliary nerve in neurofibromatosis. Pathologic findings. Freedman SF, et al. **Ophthalmology** 1988 Nov;95(11):1559–64
Two epithelioid malignant schwannomas in a patient with neurofibromatosis. Cytology, histology and DNA-flow-cytometry. Molenaar WM, et al. **Pathol Res Pract** 1989 May;184(5):529–34
Renovascular hypertension in neurofibromatosis. Pollard SG, et al. **Postgrad Med J** 1989 Jan;65(759):31–3
Diagnosis and management of neurocutaneous syndromes. Roach ES. **Semin Neurol** 1988 Spring;8(1):83–96 (141 ref.)
Lupus anticoagulant and cerebrovascular accident in a patient with neurofibromatosis. Carr ME Jr, et al. **South Med J** 1989 Jul;82(7):921–3
Lateral thoracic meningocele associated with neurofibromatosis: total excision by posterolateral extradural approach. A case report. Chee CP. **Spine** 1989 Jan;14(1):129–31
Multiple meningiomas and their relation to neurofibromatosis. Review of the literature and report of seven cases. Eljamel MS, et al. **Surg Neurol** 1989 Aug;32(2):131–6
Asymptomatic fusiform aneurysm of the petrous carotid artery in a patient with von Recklinghausen's neurofibromatosis. Frank E, et al. **Surg Neurol** 1989 Jul; 32(1):75–8
Neurofibromatosis and neural crest neoplasms: primary acquired melanosis and malignant melanoma of the conjunctiva. To KW, et al. **Surv Ophthalmol** 1989 Mar–Apr;33(5):373–9 (53 ref.)
Leukemias associated with neurofibromatosis in children. Gürgey A, et al. **Turk J Pediatr** 1987 Jul–Sep;29(3):171–6
Neurofibromatosis associated with renovascular hypertension due to stenosis and aneurysm of the left renal segmental artery: report of a case. Kuo JY, et al. **Urol Int** 1989; 44(3):177–80
Neurofibromatosis presenting as perineal pain and urethral burning. Batta AG, et al. **Urology** 1989 Feb;33(2):138–40
Renal artery stenosis in a Jamaican with von Recklinghausen's neurofibromatosis. Venkatesh S, et al. **West Indian Med J** 1988 Jun;37(2):106–9
[Neurofibromatosis with interstitial pulmonary fibrosis—case report and literature review] Chen YM, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;42(3):213–8 (Eng. Abstr.) **(Chi)**
[Neurofibromatosis accompanied by congenital glaucoma (report of 2 cases)] Wu SX. **Yen Ko Hsueh Pao** 1987 Mar; 3(1):43–6 (Eng. Abstr.) **(Chi)**
[Recklinghausen's disease and vascular complications during pregnancy] Horyn G, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(5):641–5 (Eng. Abstr.) **(Fre)**
[Ophthalmologic manifestations revealing a forme fruste of Recklinghausen's disease] Bale F, et al. **Presse Med** 1989 May 13;18(19):972–4 (Eng. Abstr.) **(Fre)**
[Temporomandibular joint dysfunction and neurofibromatosis. Apropos of a case] Pasturel A, et al. **Rev Stomatol Chir Maxillofac** 1989;90(1):17–9 (Eng. Abstr.) **(Fre)**
[Neurofibrosarcomas in neurofibromatosis 1] Sieb JP, et al. **Dtsch Med Wochenschr** 1989 Mar 17;114(11):417–9 (Eng. Abstr.) **(Ger)**
[Pressure-sensitive skin nodules, skin spots, dyspnea (clinical conference)] Steiner A, et al. **Schweiz Rundsch Med Prax** 1988 May 3;77(18):496–8 (Eng. Abstr.) **(Ger)**
[Von Recklinghausen's peripheral neurofibromatosis (report of a case with malignant degeneration)] Colombo C, et al. **Chir Ital** 1988 Aug–Oct;40(4–5):345–52 (Eng. Abstr.) **(Ita)**
[Multiple duodenal and ampullary carcinoids and von Recklinghausen's neurofibromatosis] Turri L, et al. **Chir Ital** 1988 Aug–Oct;40(4–5):285–94 (47 ref.) (Eng. Abstr.) **(Ita)**
[von Recklinghausen disease and cutaneous melanoma. A rare association] Baldini MT, et al. **G Ital Oncol** 1988 Apr–Jun;8(2):93–6 (Eng. Abstr.) **(Ita)**
[Mitral valve prolapse and Recklinghausen's disease. Description of a case] Scotto di Uccio V, et al. **Minerva Cardioangiol** 1988 Jun;36(6):331–3 (Eng. Abstr.) **(Ita)**
[A case of early gastric cancer accompanied by Recklinghausen's disease] Kumahara T, et al. **Gan No Rinsho** 1988 Sep;34(11):1590–4 (Eng. Abstr.) **(Jpn)**
[A case of von Recklinghausen's disease with pulmonary fibrosis and multiple emphysematous pulmonary bullae] Yoh S, et al. **Kokyu To Junkan** 1988 Dec;36(12):1365–9 (Eng. Abstr.) **(Jpn)**
[Pigmented neurofibrosarcoma in a patient with von Recklinghausen's disease: clinical and ultrastructural studies] Kato H, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Oct;98(11):1121–30 (Eng. Abstr.) **(Jpn)**
[Pheochromocytoma complicated by hypercalcemia and hyperreninemia in a patient with von Recklinghausen neurofibromatosis developed hypertensive crisis in the third trimester of pregnancy] Monno S. **Nippon Naika Gakkai Zasshi** 1988 Dec;77(12):1879–83 **(Jpn)**
[von Recklinghausen's disease associated with malignant lymphoma] Matsuzaki M, et al. **Rinsho Ketsueki** 1989 Mar; 30(3):382–6 (9 ref.) (Eng. Abstr.) **(Jpn)**
[Neurofibromatosis and development of cancer in childhood] Kolmannskog S, et al. **Tidsskr Nor Laegeforen** 1989 Apr 30;109(12):1297–9 (Eng. Abstr.) **(Nor)**
[A rare cause of gastrointestinal hemorrhage] Zhane AK, et al. **Vestn Khir** 1988 Sep;141(9):55–6 **(Rus)**
[Intestinal neurofibromatosis and recurrent digestive hemorrhage] Reñé Espinet JM, et al. **Rev Esp Enferm Apar Dig** 1989 Mar;75(3):296–8 (11 ref.) (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Multiple spinal granulocytic sarcomas simulating neurofibromatosis. Eelkema E, et al. **AJNR** 1989 Sep–Oct; 10(5 Suppl):S42–4 (29 ref.)
Hamartomatous spinal cord lesion in neurofibromatosis. Katz BH, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S101
The diagnosis of neurofibromatosis-1 in the child under the age of 6 years. Obringer AC, et al. **Am J Dis Child** 1989 Jun;143(6):717–9
Neurofibromatosis and pregnancy [letter] Mitterschiffthaler G, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):501
Correlation of ABR and medical imaging in patients with cerebellopontine angle tumors. Josey AF, et al. **Am J Otol** 1988 Dec;9 Suppl:12–6
Gadolinium-enhanced facial nerves: accompanying bilateral acoustic tumors in patient with neurofibromatosis. Dolan KD, et al. **Ann Otol Rhinol Laryngol** 1989 Sep;98(9):747–8
Recent developments in the diagnosis and management of neurofibromatosis. Huson SM. **Arch Dis Child** 1989 May; 64(5):745–9 (25 ref.)
Segmental neurofibromatosis. Sharma SC, et al. **Indian J Pathol Microbiol** 1989 Jul;32(3):229–31
Neurofibromatosis in Nigerian children. Ademiluyi SA, et al. **J Natl Med Assoc** 1988 Sep;80(9):1014–7
The influence of magnetic resonance tomography on diagnosis and therapy in patients with intracranial manifestation of neurofibromatosis (Recklinghausen disease). Kiwit JC, et al. **Neurosurg Rev** 1987;10(4):283–6
MRI of peripheral neurofibromas in children. Glasier CM, et al. **Orthopedics** 1989 Feb;12(2):269–72
Brain tumors in children with neurofibromatosis: computed tomography and magnetic resonance imaging. Gray J, et al. **Pediatr Neurol** 1987 Nov–Dec;3(6):335–41
Neurofibromatosis types 1 and 2: cranial MR findings. Aoki S, et al. **Radiology** 1989 Aug;172(2):527–34
[Diagnosis of von Recklinghausen's neurofibromatosis (letter)] Pulst SM. **Dtsch Med Wochenschr** 1989 Apr 21; 114(16):647–8 **(Ger)**
[Visualization of multiple neurofibromas using gadolinium-DTPA assisted MRT: a case report] Kaminsky S, et al. **Rontgenblatter** 1988 Dec;41(12):492–4 (Eng. Abstr.) **(Ger)**
[A case from practice (140). Patient: Mr. M. V., born 1946, chemist] Waldmann C. **Schweiz Rundsch Med Prax** 1989 May 30;78(22):649–51 **(Ger)**
[A case of isolated pigmented nevus of the skin with limited dysfunction of the nervous system] Kawiak W, et al. **Wiad Lek** 1989 Dec 1;41(23):1618–20 (Eng. Abstr.) **(Pol)**
[Clinical criteria of the diagnosis of neurofibromatosis in children] Dats MS, et al. **Pediatriia** 1989;(5):93–4 **(Rus)**

EPIDEMIOLOGY

Neurofibromatosis in Papua New Guinea [letter] Scrimgeour EM, et al. **Am J Med Genet** 1988 Dec;31(4):995
Von Recklinghausen neurofibromatosis. A clinical and population study in south-east Wales. Huson SM, et al. **Brain** 1988 Dec;111 (Pt 6):1355–81

GENETICS

The von Recklinghausen neurofibromatosis region on chromosome 17—genetic and physical maps come into focus. Collins FS, et al. **Am J Hum Genet** 1989 Jan; 44(1):1–5
A refined genetic map of the region of chromosome 17 surrounding the von Recklinghausen neurofibromatosis (NF1) gene. Diehl SR, et al. **Am J Hum Genet** 1989 Jan; 44(1):33–7
The order of loci in the pericentric region of chromosome 17, based on evidence from physical and genetic breakpoints. Fain PR, et al. **Am J Hum Genet** 1989 Jan; 44(1):68–72
Physical mapping of the von Recklinghausen neurofibromatosis region on chromosome 17. Fountain JW, et al. **Am J Hum Genet** 1989 Jan;44(1):58–67
Multipoint linkage analysis in neurofibromatosis type I: an international collaboration. Goldgar DE, et al. **Am J Hum Genet** 1989 Jan;44(1):6–12
Linkage analysis of neurofibromatosis type I, using chromosome 17 DNA markers. Kittur SD, et al. **Am J Hum Genet** 1989 Jan;44(1):48–50
Precise localization of NF1 to 17q11.2 by balanced translocation. Ledbetter DH, et al. **Am J Hum Genet** 1989 Jan;44(1):20–4
Linkage analysis of chromosome 17 markers in British and South African families with neurofibromatosis type I. Mathew CG, et al. **Am J Hum Genet** 1989 Jan;44(1):38–40
Fine structure DNA mapping studies of the chromosomal region harboring the genetic defect in neurofibromatosis type I. O'Connell P, et al. **Am J Hum Genet** 1989 Jan; 44(1):51–7
Flanking markers for the gene causing von Recklinghausen neurofibromatosis (NF1). Seizinger BR, et al. **Am J Hum Genet** 1989 Jan;44(1):30–2
Genetic analysis of eight loci tightly linked to neurofibromatosis 1. Stephens K, et al. **Am J Hum Genet** 1989 Jan;44(1):13–9
Close flanking markers for neurofibromatosis type I (NF1). Upadhyaya M, et al. **Am J Hum Genet** 1989 Jan;44(1):41–7
Genetic linkage mapping of chromosome 17 markers and neurofibromatosis type I. Vance JM, et al. **Am J Hum Genet** 1989 Jan;44(1):25–9
Exclusion of allelism and close linkage between neurofibromatosis and multiple cartilaginous exostoses [letter] Pai GS, et al. **Am J Med Genet** 1989 Jan;32(1):145
Familial neurofibromatosis and hypertrophic cardiomyopathy. Fitzpatrick AP, et al. **Br Heart J** 1988 Sep;60(3):247–51
Use of transgenic animals to study human retroviruses. Hinrichs SH, et al. **Cancer Metastasis Rev** 1988 Dec; 7(4):311–20 (53 ref.)
Fundamental mechanisms of tumorigenesis in the human nervous system: isolation and characterization of genes associated with hereditary forms of cancer. Seizinger BR. **Clin Chem** 1989 Jul;35(7 Suppl):B25–7

Gene linkage in neurofibromatosis. DiSimone RE, et al. **Clin Orthop** 1989 Aug;(245):49–52

Type 1 neurofibromatosis: selective expression of extracellular matrix genes by Schwann cells, perineurial cells, and fibroblasts in mixed cultures. Jaakkola S, et al. **J Clin Invest** 1989 Jul;84(1):253–61

Consortium closing in on neurofibromatosis type 1 gene [news] Newman ME. **J Natl Cancer Inst** 1989 Oct 4; 81(19):1444–5

Myotonic dystrophy and hyperparathyroidism: association with neurofibromatosis and multiple endocrine adenomatosis type 2A. Rosenberg NL, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1578–80

Neurofibromatosis and renal artery stenosis: a case of familial incidence. Craddock GR Jr, et al. **J Vasc Surg** 1988 Oct; 8(4):489–94

Neurofibromatosis genetic study [letter] Gardner RJ, et al. **N Z Med J** 1988 Dec 14;101(859):832

Neurofibromatosis and other disorders among children with CNS tumors and their families. Baptiste M, et al. **Neurology** 1989 Apr;39(4):487–92

Occurrence of both neurofibromatoses 1 and 2 in the same individual with a rapidly progressive course. Sadeh M, et al. **Neurology** 1989 Feb;39(2 Pt 1):282–3

Physical mapping of a translocation breakpoint in neurofibromatosis. Fountain JW, et al. **Science** 1989 Jun 2;244(4908):1085–7

Two NF1 translocations map within a 600-kilobase segment of 17q11.2. O'Connell P, et al. **Science** 1989 Jun 2; 244(4908):1087–8

Progress towards identifying the neurofibromatosis (NF1) gene. Collins FS, et al. **Trends Genet** 1989 Jul;5(7):217–21 (26 ref.)

[New aspects of neurofibromatosis] Steigleder GK. **Z Hautkr** 1988 Aug 15;63(8):635–6 **(Ger)**

[The HLA system and neurofibromatosis, type I] Torres i Peris V, et al. **Z Hautkr** 1989 Jul 15;64(7):588–90 (Eng. Abstr.) **(Ger)**

[Hereditary brain tumor and associated phakomatoses] Shitara N. **No To Shinkei** 1988 Sep;40(9):825–32 **(Jpn)**

[Clinical and genetic examination of women and their newborn infants with generalized neurofibromatosis] Lotocki W, et al. **Ginekol Pol** 1988 Oct;59(10):655–9 (Eng. Abstr.) **(Pol)**

[Neurofibromatosis and genetics] Akesson HO. **Lakartidningen** 1989 Jun 14;86(24):2283, 2286 **(Swe)**

HISTORY

A treatise on the pathology, diagnosis and treatment of neuroma. 1849 [classical article] Smith RW. **Clin Orthop** 1989 Aug;(245):3–9

PATHOLOGY

MR imaging of asymptomatic brainstem and spinal cord lesions in sisters with neurofibromatosis. Kim T, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S71–2

Cutaneous malignant melanoma in a black patient with neurofibromatosis (von Recklinghausen's disease). Silverman JF, et al. **Am J Dermatopathol** 1988 Dec; 10(6):536–40 (16 ref.)

Localized neurofibromatosis of the female genitourinary tract. Gersell DJ, et al. **Am J Surg Pathol** 1989 Oct; 13(10):873–8

Concomitant occurrence of an adrenal ganglioneuroma and a contralateral pheochromocytoma in a patient with von Recklinghausen's neurofibromatosis. An immunocytochemical study. Jansson S, et al. **Cancer** 1989 Jan 15;63(2):324–9

Neurofibromatosis associated with somatostatinoma: a report of two patients. Swinburn BA, et al. **Clin Endocrinol (Oxf)** 1988 Apr;28(4):353–9

Neurofibromatosis. Clinical overview. Brill CB. **Clin Orthop** 1989 Aug;(245):10–5 (27 ref.)

Non-von Recklinghausen's neurofibromatosis resembling a giant pigmented nevus. Bousema MT, et al. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 2):358–62 (15 ref.)

Neurofibromatosis: review and report of case. Reynolds RL, et al. **J Am Dent Assoc** 1988 Nov;117(6):735–7 (6 ref.)

Case presentation: neurofibromatosis. Cameron G. **J Audiov Media Med** 1988 Oct;11(4):128

Axial and peripheral skeletal features of von Recklinghausen's disease in the African. Ijaduola GT, et al. **J Natl Med Assoc** 1988 Nov;80(11):1205–7

Cellular differentiation and expression of matrix genes in type 1 neurofibromatosis. Peltonen J, et al. **Lab Invest** 1988 Dec; 59(6):760–71

Neurofibromatosis: challenges for applied cellular and molecular biology. Riccardi VM. **Lab Invest** 1988 Dec; 59(6):726–8

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 15–1989. A 52-year-old man with neurofibromatosis and jaundice. **N Engl J Med** 1989 Apr 13;320(15):996–1004

The significance of MRI abnormalities in children with neurofibromatosis. Duffner PK, et al. **Neurology** 1989 Mar; 39(3):373–8

Jaw and skull changes in neurofibromatosis. D'Ambrosio JA, et al. **Oral Surg Oral Med Oral Pathol** 1988 Sep;66(3):391–6

Multiple smooth muscle tumours in neurofibromatosis presenting with chronic gastrointestinal bleeding. Cox JG, et al. **Postgrad Med J** 1988 Feb;64(748):149–51

Cutaneous segmental neurofibromatosis. Kaplan DL, et al. **South Med J** 1989 Apr;82(4):516–7 (12 ref.)

An unusual cause of gastrointestinal bleeding: intestinal neurofibromatosis. Jeng KS, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Oct;87(10):1014–6

[Spontaneous rupture of the flexor tendon of the hand disclosing the presence of Recklinghausen's disease] Arkwright S, et al. **Ann Chir Main** 1989;8(1):64–6 (Eng. Abstr.) **(Fre)**

[A historical case of von Recklinghausen neurofibromatosis] Dalac S, et al. **Ann Dermatol Venereol** 1988;115(11):1111–2 **(Fre)**

[Spinal changes in neurofibromatosis in children] Köhler B, et al. **ROFO** 1989 Aug;151(2):186–91 (Eng. Abstr.) **(Ger)**

[Cerebral MRT in neurofibromatosis: gliosis versus neoplasia?] Mautner VF, et al. **ROFO** 1989 Aug; 151(2):225–8 (Eng. Abstr.) **(Ger)**

[A case of neurofibromatosis with spinal dural ectasia and vertebral body scalloping: a case report] Ito Y, et al. **No Shinkei Geka** 1988 Dec;16(13):1495–9 (Eng. Abstr.) **(Jpn)**

[Multifocal gliomas in cerebral hemisphere associated with von Recklinghausen's disease: case report] Mukai K, et al. **No Shinkei Geka** 1989 Feb;17(2):197–202 (Eng. Abstr.) **(Jpn)**

[Multiple neurofibromatosis combined with diabetes mellitus] Zaretskiĭ MM, et al. **Vestn Dermatol Venerol** 1988;(10):43–5 (Eng. Abstr.) **(Rus)**

[Segmental neurofibromatosis] Zulaica A, et al. **Med Cutan Ibero Lat Am** 1989;17(1):41–3 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Neurofibromatosis type 1 (Recklinghausen's disease). Neurologic and cognitive assessment with sibling controls. Eldridge R, et al. **Am J Dis Child** 1989 Jul;143(7):833–7

Relative fertility and mutation rate in neurofibromatosis. Samuelsson B, et al. **Hereditas** 1988;108(2):169–71

Neuroaudiologic abnormalities in patients with type 1 neurofibromatosis. Pensak ML, et al. **Laryngoscope** 1989 Jul;99(7 Pt 1):702–6

[Comparative results of data of brain stem auditory evoked potentials and imaging during an evaluation of the course of Recklinghausen's neurofibromatosis] Loth D, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(4):239–44 (Eng. Abstr.) **(Fre)**

[Prolonged action of vecuronium in neurofibromatosis (von Recklinghausen's disease)] Mitterschiffthaler G, et al. **Anaesthesiol Reanim** 1989;14(3):175–8 (Eng. Abstr.) **(Ger)**

PSYCHOLOGY

Neurofibromatosis and psychological processes. Varnhagen CK, et al. **J Dev Behav Pediatr** 1988 Oct;9(5):257–65

[A case of Recklinghausen's disease in the light of 14-year follow-up] Januszkiewicz-Grabias A, et al. **Psychiatr Pol** 1988 Sep–Oct;22(5):391–5 **(Pol)**

RADIOGRAPHY

Abdominal plexiform neurofibromatosis simulating pseudomyxoma peritonei on computed tomography. Mirich DR, et al. **J Comput Assist Tomogr** 1989 Jul–Aug; 13(4):709–11

Localized cortical bone sclerosis and intramedullar linear sclerosis in neurofibromatosis. Kuur E, et al. **Rontgenblatter** 1988 Aug;41(8):329–31

Case report 556: Multiple non-ossifying fibromas of long bones in a patient with neurofibromatosis. Gross ML, et al. **Skeletal Radiol** 1989;18(5):389–91

[Recklinghausen's disease royal tumors. Apropos of 2 case reports with major involvement of the lower limbs] Vidal J, et al. **Rev Chir Orthop** 1988;74 Suppl 2:244–6 **(Fre)**

RADIONUCLIDE IMAGING

Uptake of Ga-67 citrate in a benign neurofibroma. Kaplan IL, et al. **Clin Nucl Med** 1989 Mar;14(3):224

Methodology and dosimetry in adrenal medullary imaging with iodine-131 MIBG. Lindberg S, et al. **J Nucl Med** 1988 Oct;29(10):1638–43

SURGERY

Experiences in the surgical treatment of cranio-orbital neurofibromatosis. Poole MD. **Br J Plast Surg** 1989 Mar; 42(2):155–62

The response of a patient with von Recklinghausen's disease to succinylcholine and atracurium. Naguib M, et al. **Middle East J Anesthesiol** 1988 Jun;9(5):429–34

Denervation in von Recklinghausen's neurofibromatosis (NF-1) leads to fewer and smaller neurofibromas. Riccardi VM, et al. **Neurology** 1988 Nov;38(11):1810

Preservation of hearing in the surgical removal of cerebellopontine angle tumors. Maniglia AJ, et al. **Otolaryngol Clin North Am** 1989 Feb;22(1):211–32 (38 ref.)

[Neurofibromatosis and spinal deformities—a case report] Pfeiffer U, et al. **Beitr Orthop Traumatol** 1988 Jul; 35(7):315–20 (Eng. Abstr.) **(Ger)**

[Neurofibromatosis of the bladder in infancy. 10 years' follow-up] Kempter F, et al. **Monatsschr Kinderheilkd** 1989 May;137(5):289–92 (Eng. Abstr.) **(Ger)**

NEUROFIBROMATOSIS, CENTRAL, NF-2 see **NEUROMA, ACOUSTIC**

NEUROFIBROMATOSIS, PERIPHERAL, NF-1 see **NEUROFIBROMATOSIS**

NEUROGLIA

Intracranial extracerebral glioneural heterotopia. Nishio S, et al. **Childs Nerv Syst** 1988 Aug;4(4):244–8 (20 ref.)

Neuroglial choristoma of the pharynx. Carrillo-Farga J, et al. **Ear Nose Throat J** 1988 Aug;67(8):579–80, 582–3

Characterization of an estradiol-stimulated mRNA in the brain of adult male rats. Nalik P, et al. **Mol Cell Endocrinol** 1989 Apr;62(2):235–42

ANALYSIS

A peanut agglutinin binding glycoprotein in CNS myelin and oligodendrocytes. Mikol DD, et al. **Ann N Y Acad Sci** 1988; 540:409–12

Colocalisation of acetylated microtubules, glial filaments, and mitochondria in astrocytes in vitro. Cambray-Deakin MA, et al. **Cell Motil Cytoskeleton** 1988;10(3):438–49

Phase separation of myelin proteins in triton X-114: differential behavior of myelin basic protein in purified myelin and in cultured oligodendrocytes. Bürgisser P, et al. **Dev Neurosci** 1989;11(3):179–87

An immunocytochemical study of cat retinal Müller cells in culture. Lewis GP, et al. **Exp Eye Res** 1988 Dec; 47(6):855–68

Plasma membrane of cultured oligodendrocytes: I. Isolation, purification, and initial characterization. Polak PE, et al. **GLIA** 1988;1(1):39–53

Plasma membrane of cultured oligodendrocytes: III. Relatedness to myelin. Szuchet S, et al. **GLIA** 1988; 1(2):141–50

Plasma membrane of cultured oligodendrocytes: II. Possible structural and functional domains. Szuchet S, et al. **GLIA** 1988;1(1):54–63

A morphological and biochemical study of the myelin-like membrane structures formed in cultures of pure oligodendrocytes. Nussbaum JL, et al. **Int J Dev Neurosci** 1988;6(4):395–408

Analysis of the calcium-modulated proteins, S100 and calmodulin, and their target proteins during C6 glioma cell differentiation. Zimmer DB, et al. **J Cell Biol** 1989 Jan; 108(1):141–51

Distribution of Müller cells in the turtle retina: an immunocytochemical study. Gaur VP, et al. **J Neurocytol** 1988 Oct;17(5):683–92

Expression of galactocerebroside in developing normal and jimpy oligodendrocytes in situ. Ghandour MS, et al. **J Neurocytol** 1988 Aug;17(4):485–98

Ganglioside and lipid composition of bulk-isolated rat and bovine oligodendroglia. Yu RK, et al. **J Neurosci Res** 1989 Jun;23(2):136–41

Cerebral microvascular and parenchymal phospholipid composition in the mouse. Williams WM, et al. **Neurochem Res** 1988 Aug;13(8):743–7

A zonal pattern of neuroglial cells during the development of the intermediate lobe of the rat pituitary. Lakke EA, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):146–51

Vimentin and glial fibrillary acidic protein filaments in radial glia of the adult urodele spinal cord. Zamora AJ, et al. **Neuroscience** 1988 Oct;27(1):279–88

[Immunocytochemical localization of cytochrome P-450scc in cultured rat oligodendrocytes] Jung-Testas I, et al. **C R Acad Sci [III]** 1989;308(6):165–70 (Eng. Abstr.) **(Fre)**

CLASSIFICATION

Attempt to classify glial cells by means of their process specialization using the rabbit retinal Müller cell as an example of cytotopographic specialization of glial cells. Reichenbach A. **GLIA** 1989;2(4):250–9 (106 ref.)

Discrimination between different types of neuroglial cells in rat central nervous system using combined immuno- and enzyme-histochemical methods. de Groot CJ, et al. **Immunobiology** 1988 Dec;178(3):177–90

[The ratio of the types of gliocytes in the cerebellar cortex of mice during malnutrition and subsequent nutritional rehabilitation] Medvedev DI, et al. **Biol Nauki** 1988; (10):58–60 **(Rus)**

CYTOLOGY

Formation of microglia-derived brain macrophages is blocked by adriamycin. Graeber MB, et al. **Acta Neuropathol (Berl)** 1989;78(4):348–58

Human oligodendrocytes in dissociated cell culture. Rihs F, et al. **Acta Neuropathol (Berl)** 1989;78(3):317–24

The structure of rabbit retinal Müller (glial) cells is adapted to the surrounding retinal layers. Reichenbach A, et al. **Anat Embryol (Berl)** 1989;180(1):71–9

Interleukin-2 blocks oligodendrocyte progenitor proliferation. Knobler RL, et al. **Ann N Y Acad Sci** 1988; 540:324–6

Intracellular messengers. Influence of oligodendrocyte substratum adhesion. Vartanian T, et al. **Ann N Y Acad Sci** 1988;540:433–6

The macroglial cells of the rat optic nerve. Miller RH, et al. **Annu Rev Neurosci** 1989;12:517–34 (98 ref.)

A quantitative analysis of glial cell coupling in the retina of the axolotl (Ambystoma mexicanum). Mobbs P, et al. **Brain Res** 1988 Sep 20;460(2):235–45

Microglia and microglia-derived brain macrophages in culture: generation from axotomized rat facial nuclei, identification and characterization in vitro. Rieske E, et al. **Brain Res** 1989 Jul 17;492(1–2):1–14

The activities of host and graft glial cells following retinal transplantation into the lesioned adult rat eye: developmental expression of glial markers. Seiler M, et al. **Brain Res** 1988 Sep 1;471(1):111–22

Lymphokines facilitate maturation of oligodendrocytes in vitro. Suzumura A, et al. **Brain Res** 1989 Feb 20; 480(1–2):51–7

Satellite glial cells penetrate neurosecretory cells to perinuclear position in the goldfish preoptic area. Gregory WA, et al. **Brain Res Dev Brain Res** 1988 Nov 1;44(1):1–8

Identification of radial glial cells within the developing murine central nervous system: studies based upon a new immunohistochemical marker. Misson JP, et al. **Brain Res Dev Brain Res** 1988 Nov 1;44(1):95–108

Immunocytochemical studies on the development of astrocytes, Müller (glial) cells, and oligodendrocytes in the rabbit retina. Schnitzer J. **Brain Res Dev Brain Res** 1988 Nov 1;44(1):59–72

Differentiation of neuron-like cells in cultured rat optic nerves: a neuron or common neuron-glia progenitor? Omlin FX, et al. **Dev Biol** 1989 May;133(1):247–53

Cyclic AMP regulates the rate of differentiation of oligodendrocytes without changing the lineage commitment of their progenitors. Raible DW, et al. **Dev Biol** 1989 Jun;133(2):437–46

Cerebellar soluble lectin is responsible for cell adhesion and participates in myelin compaction in cultured rat oligodendrocytes. Kuchler S, et al. **Dev Neurosci** 1988; 10(3):199–212

Rat C6 glial cells synthesize insulin-like growth factor I (IGF-I) and express IGF-I receptors and IGF-II/mannose 6-phosphate receptors. Kiess W, et al. **Endocrinology** 1989 Apr;124(4):1727–36

Growth in retinal glial cells in vitro is affected differentially by two types of cell contact-mediated interactions. Burke JM. **Exp Cell Res** 1989 Jan;180(1):13–9

Type I collagen preparations inhibit DNA synthesis in glial cells of the peripheral nervous system. Eccleston PA, et al. **Exp Cell Res** 1989 May;182(1):173–85

Karyometric and cytophotometric studies of the oligodendroglia in the corpus callosum of the rat after hypoxia. Wender M, et al. **Exp Pathol** 1988;33(4):249–55

Tissue culture of retinal glial cells. Savage FJ, et al. **Eye** 1988;2 Suppl:S164–79 (59 ref.)

Early stages of development of the human retinal astroglia. A neurohistological study. Vrabec F. **Folia Morphol (Praha)** 1988;36(3):250–5

Glial conditioned medium enables jimpy oligodendrocytes to express properties of normal oligodendrocytes: production of myelin antigens and membranes. Bartlett WP, et al. **GLIA** 1988;1(4):253–9

Characterization of glial subpopulations in cultures of the ovine central nervous system. Elder GA, et al. **GLIA** 1988; 1(5):317–27

Tetanus toxin binding to isolated and cultured rat retinal glial cells. Huba R, et al. **GLIA** 1988;1(2):156–64

Effect of thyroid deficiency on the development of glia in the hippocampal formation of the rat: an immunocytochemical study. Rami A, et al. **GLIA** 1988; 1(5):337–45

Cytotopographical specialization of enzymatically isolated rabbit retinal Müller (glial) cells: K+ conductivity of the cell membrane. Reichenbach A, et al. **GLIA** 1988; 1(3):191–7

Glia:neuron index: review and hypothesis to account for different values in various mammals. Reichenbach A. **GLIA** 1989;2(2):71–7 (84 ref.)

Glial fiber pattern in the developing chicken cerebellum: vimentin and glial fibrillary acidic protein (GFAP) immunostaining. Roeling TA, et al. **GLIA** 1988; 1(6):398–402

Nervenkitt: notes on the history of the concept of neuroglia. Somjen GG. **GLIA** 1988;1(1):2–9

Size and density of glial and neuronal cells within the cerebral neocortex of various insectivorian species. Stolzenburg JU, et al. **GLIA** 1989;2(2):78–84

Growth factors for human glial cells in culture. Yong VW, et al. **GLIA** 1988;1(2):113–23

Effects of acidic and basic fibroblast growth factors on proliferation and maturation of cultured rat oligodendrocytes. Besnard F, et al. **Int J Dev Neurosci** 1989;7(4):401–9

Latex beads phagocytosis capacity and ecto-NAD+ glycohydrolase activity of rat brain microglia cells in vitro. Bocchini V, et al. **Int J Dev Neurosci** 1988;6(6):525–34

Procedure for establishing oligodendroglial cells in primary cultures based on developmental parameters. Juurlink BH, et al. **Int J Dev Neurosci** 1987;5(4):327–36

Effects of forskolin on growth and morphology of cultured glial and cerebrovascular endothelial and smooth muscle cells. Kempski O, et al. **Int J Dev Neurosci** 1987; 5(5–6):435–45

Thrombin is a potent mitogen for rat astroblasts but not for oligodendroblasts and neuroblasts in primary culture. Perraud F, et al. **Int J Dev Neurosci** 1987;5(3):181–8

Experimental modifications of postnatal differentiation and fate of glial cells related to axo-glial relationships. Valat J, et al. **Int J Dev Neurosci** 1988;6(3):245–60

Retinal glial cell proliferation and ion channels: a possible link. Puro DG, et al. **Invest Ophthalmol Vis Sci** 1989 Mar; 30(3):521–9

A quantitative histological study of neuroglial number in the retrofacial, facial and trigeminal motor nuclei in the ageing mouse brain. Sturrock RR. **J Anat** 1988 Dec;161:153–7

Evidence that an RGD-dependent receptor mediates the binding of oligodendrocytes to a novel ligand in a glial-derived matrix. Cardwell MC, et al. **J Cell Biol** 1988 Oct;107(4):1541–9

An epithelium-type cytoskeleton in a glial cell: astrocytes of amphibian optic nerves contain cytokeratin filaments and are connected by desmosomes. Rungger-Brändle E, et al. **J Cell Biol** 1989 Aug;109(2):705–16

Development of microglia in the albino rabbit retina. Ashwell K. **J Comp Neurol** 1989 Sep 15;287(3):286–301

Quantitative cytology of ganglion neurons and satellite glial cells in the superior cervical ganglion of the sheep. Relationship with ganglion neuron size. Gabella G, et al. **J Neurocytol** 1988 Dec;17(6):753–69

Antibody to galactocerebroside alters organization of oligodendroglial membrane sheets in culture. Dyer CA, et al. **J Neurosci** 1988 Nov;8(11):4307–18

Embryonic development of axon pathways in the Drosophila CNS. I. A glial scaffold appears before the first growth cones. Jacobs JR, et al. **J Neurosci** 1989 Jul;9(7):2402–11

Stimulation of oligodendrocyte differentiation in culture by growth in the presence of a monoclonal antibody to sulfated glycolipid. Bansal R, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):260–7

Serum contains inducers and repressors of oligodendrocyte differentiation. Bologa L, et al. **J Neurosci Res** 1988; 20(2):182–8

CNS neuronal cell line-derived factors regulate gliogenesis in neonatal rat brain cultures. Bottenstein JE, et al. **J Neurosci Res** 1988 Jul;20(3):291–303

Immortalization of bipotential glial progenitors and generation of permanent "blue" cell lines. Evrard C, et al. **J Neurosci Res** 1988 Sep;21(1):80–7

Secreted peptides as regulators of neuron–glia and glia–glia interactions in the developing nervous system. Giulian D, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):487–500

Insulin-like growth factor I promotes cell proliferation and oligodendroglial commitment in rat glial progenitor cells developing in vitro. McMorris FA, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):199–209

Development of identified glia that ensheathe axons in Hirudo medicinalis. Morrissey AM, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):513–20

A normal human brain cell aggregate model for neurobiological studies. Pulliam L, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):521–30

Differentiation-regulated loss of the polysialylated embryonic form and expression of the different polypeptides of the neural cell adhesion molecule by cultured oligodendrocytes and myelin. Trotter J, et al. **J Neurosci Res** 1989 Apr;22(4):369–83

Simple method for the culture of glial cells from embryonic rat brain: implications for regional heterogeneity and the radial glial lineage. Wilkie MB, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):220–5

In vitro model systems permitting the analysis of the differentiation of mammalian progenitor cells either into neurons or into glial cells. Simonneau M, et al. **J Physiol (Paris)** 1987;82(4):336–45 (74 ref.)

Immunocytochemical characterization of primary glial cell cultures from normal adult human brain. Newcombe J, et al. **Neuropathol Appl Neurobiol** 1988 Nov–Dec;14(6):453–65

Identification of astrocyte- and oligodendrocyte-like cells of goldfish optic nerves in culture. Bastmeyer M, et al. **Neurosci Lett** 1989 Jun 19;101(2):127–32

Lineage relationship between oligodendrocytes and brain macrophages? Mallat M, et al. **Neurosci Lett** 1989 Apr 24; 99(1–2):12–7

The rabbit retina: a suitable mammalian tissue for obtaining astroglia-free Müller cell cultures. Scherer J, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):51–6

Modifications of quiescence and functional activity of glial cultured cells by phospholipase A2-prostaglandin system inhibition. Ciccarelli R, et al. **Pharmacol Res Commun** 1988 Dec;20(12):1069–70

Reversible inhibition of oligodendrocyte progenitor differentiation by a monoclonal antibody against surface galactolipids. Bansal R, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6181–5

Glial cells develop a laminar pattern before neuronal cells in the lateral geniculate nucleus. Hutchins JB, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8316–20

How is oligodendrocyte differentiation and myelin formation regulated? Dutly F, et al. **Schweiz Arch Neurol Psychiatr** 1989;140(1):19–21

Glial cell diversification in the rat optic nerve. Raff MC. **Science** 1989 Mar 17;243(4897):1450–5 (52 ref.)

New roles for PDGF and CNTF in controlling the timing of glial cell differentiation in the optic nerve. Anderson DJ. **Trends Neurosci** 1989 Mar;12(3):83–5 (20 ref.)

[Modulation, by transforming growth factor beta (TGF beta), of the mitogenic effect of fibroblast growth factor (FGF) on rat oligodendrocytes in culture] Besnard F, et al. **C R Acad Sci [III]** 1989;308(10):287–92 (Eng. Abstr.) **(Fre)**

[Proliferation of oligodendrocytes is stimulated after their adhesion on a matrix made up of a nerve lectin, CSL] Fressinaud C, et al. **C R Acad Sci [III]** 1988;307(20):863–8 (Eng. Abstr.) **(Fre)**

[Histological evaluation of neuroglia during the process of myelination in pt rabbits] Zelman IB, et al. **Neuropatol Pol** 1988;26(1):27–37 (Eng. Abstr.) **(Pol)**

[Features of glia growth in tissue cultures of the rat cerebrum] Balabanov IuV, et al. **Arkh Anat Gistol Embriol** 1989 May; 96(5):25–31 (Eng. Abstr.) **(Rus)**

[Effect of neurite-stimulating protein on the growth and proliferation of peripheral glia cells] Chumasov EI, et al. **Neirofiziologiia** 1989;21(3):416–20 (Eng. Abstr.) **(Rus)**

[Dynamic processes during the organization of neurono-glial networks in nerve tissue culture] Makhmutov RIa. **Zh Evol Biokhim Fiziol** 1989 May–Jun;25(3):337–40 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Ethanol in clinically relevant concentrations enhances expression of oligodendroglial differentiation but has no effect on astrocytic differentiation or DNA synthesis in primary cultures. Bass T, et al. **Dev Neurosci** 1989; 11(1):52–64

Influence of epidermal growth factor on the maturation of fetal rat brain cells in aggregate culture. An immunocytochemical study. Monnet-Tschudi F, et al. **Dev Neurosci** 1989;11(1):30–40

PDGF A chain homodimers drive proliferation of bipotential (O-2A) glial progenitor cells in the developing rat optic nerve. Pringle N, et al. **EMBO J** 1989 Apr;8(4):1049–56

Proliferation of rat astrocytes, but not of oligodendrocytes, is stimulated in vitro by protease inhibitors. Perraud F, et al. **Int J Dev Neurosci** 1988;6(3):261–6

Forskolin and phorbol esters decrease the same K+ conductance in cultured oligodendrocytes. Soliven B, et al. **J Membr Biol** 1988 Oct;105(2):177–86

Colony-stimulating factors as promoters of ameboid microglia. Giulian D, et al. **J Neurosci** 1988 Dec; 8(12):4707–17

Insulin effect on GABA uptake in astroglial primary cultures. Bouhaddi K, et al. **Neurochem Res** 1988 Dec;13(12):1119–24

[Effect of phorbol ester on the oligodendrocyte in culture] Sekiguchi S, et al. **No To Hattatsu** 1989 May;21(3):296–8 **(Jpn)**

[Current concepts of the brain neuroglia and its reactions to exposure to chemical factors (a review)] Kvitnitskiĭ-Ryzhov IuN, et al. **Zh Nevropatol Psikhiatr** 1988;88(7):134–45 (253 ref.) **(Rus)**

ENZYMOLOGY

Phospholipase A2 activity in cultured glial cells. Correlation with appearance of myelin markers and effects of steroid hormones. Brenner T, et al. **Ann N Y Acad Sci** 1988; 540:403–4

On the type of DNA polymerase activity in neuronal, astroglial, and oligodendroglial cell fractions from young, adult, and old rat brains. Subrahmanyam K, et al. **Biochem Int** 1988 Jun;16(6):1111–7

Purine nucleoside phosphorylase: a histochemical marker for glial cells. Van Reempts J, et al. **Brain Res** 1988 Oct 11; 462(1):142–7

Ontogenetic development of the 5 alpha-reductase in the rat brain: cerebral cortex, hypothalamus, purified myelin and isolated oligodendrocytes. Melcangi RC, et al. **Brain Res Dev Brain Res** 1988 Dec 1;44(2):181–8

Comparative study of GABA-T from glial cells, neuronal perikarya cells and synaptosomes. Bedoya MP, et al. **Comp Biochem Physiol [C]** 1988;90(1):61–4

2',3'-cyclic nucleotide 3'-phosphodiesterase, an oligodendrocyte-Schwann cell and myelin-associated enzyme of the nervous system. Sprinkle TJ. **Crit Rev Neurobiol** 1989;4(3):235–301 (505 ref.)

Effects of some antidepressant drugs on the activity of glial cell enzymes in culture. Bal-Klara A. **Eur J Pharmacol** 1989 Feb 28;161(2–3):231–5

Influence of basic fibroblast growth factor on carbonic anhydrase expression by rat glial cells in primary culture. Delaunoy JP, et al. **Int J Dev Neurosci** 1988;6(2):129–36

UDPgalactose:ceramide galactosyltransferase in cultured oligodendrocytes: an enzymological and immunological study. Neskovic NM, et al. **Int J Dev Neurosci** 1988; 6(6):535–46

Enzyme-histochemical demonstration of microglial cells in the adult and postnatal rabbit retina. Schnitzer J. **J Comp Neurol** 1989 Apr 8;282(2):249–63

Differential localization of glutathione-S-transferase Yp and Yb subunits in oligodendrocytes and astrocytes of rat brain. Cammer W, et al. **J Neurochem** 1989 Mar;52(3):876–83

Role of protein kinase C in glial cell proliferation. Bhat NR. **J Neurosci Res** 1989 Jan;22(1):20–7

Oligodendrocytes express a normal phenotype in carbonic anhydrase II-deficient mice. Ghandour MS, et al. **J Neurosci Res** 1989 Jun;23(2):180–90

Cultured neonatal rat oligodendrocytes are enriched in acid hydrolase activities. Bradel EJ, et al. **Neurochem Res** 1988 Oct;13(10):929–36

Cytophotometric study of ATPase activity in brain neurons and gliocytes of paradoxical sleep-deprived rats. Klenikova

VA, et al. **Neurosci Behav Physiol** 1989 Mar–Apr; 19(2):163–9

[Biochemical and morphological changes in the neuroglia in experimental herpetic encephalitis] Nasyrov RA, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):350–3 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Ia-expressing microglial cells in experimental allergic encephalomyelitis in rats. Konno H, et al. **Acta Neuropathol (Berl)** 1989;77(5):472–9

Astrocytes and microglia in human brain share an epitope recognized by a B-lymphocyte-specific monoclonal antibody (LN-1). Dickson DW, et al. **Am J Pathol** 1989 Jul;135(1):135–47

Accessory cell competence of human glial cells in mitogenic activation of resting peripheral T cells. Cashman N, et al. **Ann N Y Acad Sci** 1988;540:498–500

Synergism in the pathogenesis of EAE induced by an MBP-specific T-cell line and monoclonal antibodies to galactocerebroside or a myelin oligodendroglial glycoprotein. Fierz W, et al. **Ann N Y Acad Sci** 1988; 540:360–3

Immunobiology of microglial cells. Frei K, et al. **Ann N Y Acad Sci** 1988;540:218–27 (39 ref.)

Expression of leukocyte antigens on an oligodendroglial cell line. Rose LM, et al. **Ann N Y Acad Sci** 1988;540:455–8

Mechanism of arachidonic acid release by terminal complement complexes from rat oligodendrocyte X C6 glioma cell hybrids. Shirazi Y, et al. **Ann N Y Acad Sci** 1988;540:381–3

MHC antigen expression on glial cells. Suzumura A, et al. **Ann N Y Acad Sci** 1988;540:495–7

Macrophages express glial markers. Alliot F, et al. **Biol Cell** 1988;63(1):109–11

Microglial response to 6-hydroxydopamine-induced substantia nigra lesions. Akiyama H, et al. **Brain Res** 1989 Jun 12;489(2):247–53

Cells positive for the O4 surface antigen isolated by cell sorting are able to differentiate into astrocytes or oligodendrocytes. Trotter J, et al. **Brain Res Dev Brain Res** 1989 Mar 1;46(1):115–22

Immunological reactions induced by intracerebral transplantation: evidence that host microglia but not astroglia are the antigen-presenting cells. Poltorak M, et al. **Exp Neurol** 1989 Mar;103(3):222–33

Expression of Ia antigen on perivascular and microglial cells after sublethal and lethal motor neuron injury. Streit WJ, et al. **Exp Neurol** 1989 Aug;105(2):115–26

Functional plasticity of microglia: a review. Streit WJ, et al. **GLIA** 1988;1(5):301–7 (57 ref.)

Reversible injury of cultured rat oligodendrocytes by complement. Scolding NJ, et al. **Immunology** 1989 Aug; 67(4):441–6

Non-MHC-restricted, tissue-specific T cells recognizing autologous oligodendrocytes in the normal SJL/J mouse. Jewtoukoff V, et al. **J Autoimmun** 1988 Oct;1(5):433–44

Immunohistochemical studies of adult human glial cells. Grenier Y, et al. **J Neuroimmunol** 1989 Feb;21(2–3):103–15

Identification of a common idiotype on myelin oligodendrocyte glycoprotein-specific autoantibodies in chronic relapsing experimental allergic encephalomyelitis. Gunn C, et al. **J Neuroimmunol** 1989 Jul;23(2):101–8

Lymphocyte proliferative response to glial cells in SJL/J mice immunized with rat whole spinal cord and rat myelin basic protein. Jewtoukoff V, et al. **J Neuroimmunol** 1989 Jan;21(1):81–6

Induction of MHC class I antigens on glial cells is dependent on persistent mouse hepatitis virus infection. Lavi E, et al. **J Neuroimmunol** 1989 Apr;22(2):107–11

Myelin-oligodendrocyte glycoprotein (MOG) is a surface marker of oligodendrocyte maturation. Scolding NJ, et al. **J Neuroimmunol** 1989 May;22(3):169–76

Normal rat serum cytotoxicity against syngeneic oligodendrocytes. Complement activation and attack in the absence of anti-myelin antibodies. Scolding NJ, et al. **J Neurol Sci** 1989 Feb;89(2–3):289–300

Axotomy of the rat facial nerve leads to increased CR3 complement receptor expression by activated microglial cells. Graeber MB, et al. **J Neurosci Res** 1988 Sep; 21(1):18–24

Monoclonal antibody RG1 against rat Müller cells recognizes optic nerve and cerebral cortex glia in culture. Mori T, et al. **Jpn J Ophthalmol** 1988;32(4):365–74

Vesicular removal by oligodendrocytes of membrane attack complexes formed by activated complement. Scolding NJ, et al. **Nature** 1989 Jun 22;339(6226):620–2

Expression of immune system-associated antigens by cells of the human central nervous system: relationship to the pathology of Alzheimer's disease. Rogers J, et al. **Neurobiol Aging** 1988 Jul–Aug;9(4):339–49

Oligodendrocyte-specific autoreactive T cells using an alpha/beta T-cell receptor kill their target without self restriction. Jewtoukoff V, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2824–8

Lymphokines and monokines in the neuroendocrine system. Benveniste EN. **Prog Allergy** 1988;43:84–120 (152 ref.)

Demyelination in brain cell aggregate cultures, induced by a monoclonal antibody against the myelin/oligodendrocyte glycoprotein (MOG). Honegger P, et al. **Schweiz Arch Neurol Psychiatr** 1989;140(1):10–3

Theiler's virus-associated antigens on the surfaces of cultured glial cells. Rodriguez M, et al. **Virology** 1988 Oct; 166(2):463–74

[Effect of antibodies to glial glycolipid antigens on miniature end-plate potentials] Vinogradova IM, et al. **Neirofiziologiia** 1989;21(2):217–23 (Eng. Abstr.) **(Rus)**

METABOLISM

DARPP-32 as a marker for D-1 dopaminoceptive cells in the rat brain: prenatal development and presence in glial elements (tanycytes) in the basal hypothalamus. Hökfelt T, et al. **Adv Exp Med Biol** 1988;235:65–82 (38 ref.)

Do oligodendrocytes mediate iron regulation in the human brain? Gerber MR, et al. **Ann Neurol** 1989 Jul;26(1):95–8

Induction of ketone body enzymes in glial cells. Poduslo SE. **Arch Biochem Biophys** 1989 Aug 1;272(2):318–22

An endogenous source of the superoxide anion in the central nervous system. Colton CA, et al. **Basic Life Sci** 1988; 49:1005–10

Neurosteroids: steroidogenesis in primary cultures of rat glial cells after release of aminoglutethimide blockade. Hu ZY, et al. **Biochem Biophys Res Commun** 1989 Jun 15; 161(2):917–22

Differences in the metabolism of inositol and phosphoinositides by cultured cells of neuronal and glial origin. Glanville NT, et al. **Biochim Biophys Acta** 1989 Aug 8;1004(2):169–79

The role of chloride ions on the transport of glycine in plasma membrane vesicles from glial cells. Zafra F, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):147–52

Efflux and exchange of glycine by plasma membrane vesicles isolated from glioblastoma cells. Zafra F, et al. **Biochim Biophys Acta** 1988 Dec 22;946(2):202–8

Variations in the cellular incorporation of [3H]proline. Contos N, et al. **Brain Res** 1989 Feb 6;479(1):172–6

Neuronal control of [3H]GABA uptake in the ependymocytes of the subcommissural organ: an in vivo model of neuron-glia interaction. Didier-Bazes M, et al. **Brain Res** 1989 Jun 5;489(1):137–45

Lactic acid-induced swelling in C6 glial cells via Na+/H+ exchange. Jakubovicz DE, et al. **Brain Res** 1989 Apr 24; 485(2):215–24

Production of tumor necrosis factor-alpha by microglia and astrocytes in culture. Sawada M, et al. **Brain Res** 1989 Jul 10;491(2):394–7

Basal ganglia lesions in the rat: effects on quinolinic acid metabolism. Schwarcz R, et al. **Brain Res** 1989 Jun 19; 490(1):103–9

Developmental profile and differential localization of mRNAs of myelin proteins (MBP and PLP) in oligodendrocytes in the brain and in culture. Shiota C, et al. **Brain Res Dev Brain Res** 1989 Jan 1;45(1):83–94

Ionic mechanisms of intracellular pH regulation in the nervous system. Schlue WR, et al. **Ciba Found Symp** 1988; 139:47–69

Proteoglycan biosynthesis by chick embryo retina glial-like cells. Threlkeld A, et al. **Dev Biol** 1989 Apr;132(2):559–68

Neuroblastoma cell–oligodendrocyte interaction is mediated by neural cell adhesion molecules. Bhat S, et al. **Dev Neurosci** 1988;10(4):231–5

Demonstration of cell–ricin interaction by electrophoretic light scattering. Hakim Hachemi B, et al. **Electrophoresis** 1989 Jul;10(7):494–7

Dexamethasone reduces steady state insulin-like growth factor I messenger ribonucleic acid levels in rat neuronal and glial cells in primary culture. Adamo M, et al. **Endocrinology** 1988 Nov;123(5):2565–70

Changes in the expression of specific Müller cell proteins during long-term retinal detachment. Lewis GP, et al. **Exp Eye Res** 1989 Jul;49(1):93–111

Glial cells of mammalian brain produce a variant form of laminin. Liesi P, et al. **Exp Neurol** 1989 Jul;105(1):86–92

Presynaptic effects of spider toxins: increase of high affinity uptake in the arthropod peripheral glutamatergic system. van Marle J, et al. **Experientia** 1989 Feb 15;45(2):155–6

Electrogenic Na+/HCO3- cotransport in neuroglia. Astion ML, et al. **GLIA** 1988;1(5):355–7

Heterogeneity of potassium currents in cultured oligodendrocytes. Sontheimer H, et al. **GLIA** 1988; 1(6):415–20

Oligodendrocytes but not astrocytes express apolipoprotein E after injury of rat optic nerve. Stoll G, et al. **GLIA** 1989; 2(3):170–6

Expression of the 2',3'-cyclic nucleotide 3'-phosphohydrolase gene and immunoreactive protein in oligodendrocytes as revealed by in situ hybridization and immunofluorescence. Vogel US, et al. **GLIA** 1988; 1(3):184–90

Modulation of neuronal choline acetyltransferase activity by factors derived from cultures of non-neuronal cells from the CNS. Alderson RF, et al. **Int J Dev Neurosci** 1989; 7(3):309–22

Transferrin: an early marker of oligodendrocytes in culture. Espinosa de los Monteros A, et al. **Int J Dev Neurosci** 1988;6(2):167–75

Isolation and partial characterization of a glial hyaluronate-binding protein. Perides G, et al. **J Biol Chem** 1989 Apr 5;264(10):5981–7

Glucose-dependent regulation of glucose transport activity, protein, and mRNA in primary cultures of rat brain glial cells. Walker PS, et al. **J Biol Chem** 1988 Oct 25; 263(30):15594–601

The initial events in myelin synthesis: orientation of proteolipid protein in the plasma membrane of cultured oligodendrocytes. Hudson LD, et al. **J Cell Biol** 1989 Aug; 109(2):717–27

Selective release from cultured mammalian cells of heat-shock (stress) proteins that resemble glia-axon transfer proteins. Hightower LE, et al. **J Cell Physiol** 1989 Feb; 138(2):257–66

Arachidonic acid mobilization and phosphoinositide turnover by the terminal complement complex, C5b-9, in rat oligodendrocyte x C6 glioma cell hybrids. Shirazi Y, et al. **J Immunol** 1989 Jun 15;142(12):4385–91

Expression and localization of myelin basic protein in oligodendrocytes and transfected fibroblasts. Barbarese E, et al. **J Neurochem** 1988 Dec;51(6):1737–45

Metabolism of angiotensin peptides by neuronal and glial cultures from rat brain. Hermann K, et al. **J Neurochem** 1989 Mar;52(3):863–8

Alpha 2-adrenergic receptors in neuronal and glial cultures: characterization and comparison. Richards EM, et al. **J Neurochem** 1989 Jul;53(1):287–96

Effects of increased extracellular K on the elemental composition and water content of neuron and glial cells in leech CNS. Saubermann AJ, et al. **J Neurochem** 1988 Dec;51(6):1797–807

Regulation by dibutyryl cyclic AMP of carnosine synthesis in astroglia-rich primary cultures kept in serum-free medium. Schulz M, et al. **J Neurochem** 1989 Jan; 52(1):229–34

Inactivation of cyclic AMP-dependent taurine release from astroglia. Shain W, et al. **J Neurochem** 1989 May; 52(5):1455–60

Glial hyaluronate-binding protein in polar spongioblastoma. Bignami A, et al. **J Neuropathol Exp Neurol** 1989 Mar; 48(2):187–96

Selective localization by neuroglia of immunoglobulin G in normal mice. Fishman PS, et al. **J Neuropathol Exp Neurol** 1989 Mar;48(2):212–20

Monoclonal antibodies differentiate neurofilament and glial filament proteins in the goldfish visual pathway: probes for monitoring neurite outgrowth from retinal explants. Jones PS, et al. **J Neurosci** 1989 Feb;9(2):454–65

Major histocompatibility complex antigen expression on rat microglia following epidural kainic acid lesions. Akiyama H, et al. **J Neurosci Res** 1988;20(2):147–57

Effects of inhibitors of glycoprotein processing on oligodendroglial differentiation in primary cultures of embryonic rat brain cells. Bhat NR. **J Neurosci Res** 1988; 20(2):158–64

Conditioned media of regenerating fish optic nerves modulate laminin levels in glial cells. Cohen A, et al. **J Neurosci Res** 1989 Mar;22(3):269–73

Myelin basic protein and transferrin characterize different subpopulations of oligodendrocytes in rat primary glial cultures. Espinosa de los Monteros A, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):181–7

Dolichol-linked oligosaccharide and glycoprotein biosyntheses in glial cells in primary culture: development and enzymatic correlates. Ishii S, et al. **J Neurosci Res** 1988 Aug;20(4):463–72

Differential expression of galactocerebroside, myelin basic protein, and 2',3'-cyclic nucleotide 3'-phosphohydrolase during development of oligodendrocytes in vitro. Knapp PE, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):249–59

Developmental expression of neural cell type-specific mRNA markers in the myelin-deficient mutant rat brain: inhibition of oligodendrocyte differentiation. Kumar S, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):268–74

Effect of HEPES on the taurine uptake by cultured glial cells. Lleu PL, et al. **J Neurosci Res** 1989 May;23(1):78–86

Expression and localization of the fibronectin receptor in the mouse nervous system. Pesheva P, et al. **J Neurosci Res** 1988 Aug;20(4):420–30

Expression of monoclonal antibody Q113 immunoreactivity in the rat cerebral cortex: unique differential sublayering of layer I: staining of radial glia. Plioplys AV, et al. **J Neurosci Res** 1988 Jul;20(3):359–75

Insulin/insulin-like growth factor I and other epigenetic modulators of myelin basic protein expression in isolated oligodendrocyte progenitor cells. Saneto RP, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):210–9

Differential modulation of glutamate metabolizing enzymes in mouse and chick cultured glial cells by insulin. Sena A, et al. **J Neurosci Res** 1988;20(2):189–94

Epidermal growth factor inhibits the expression of myelin basic protein in oligodendrocytes. Sheng HZ, et al. **J Neurosci Res** 1989 Aug;23(4):425–32

The supply of metabolic substrate from glia to photoreceptors in the retina of the honeybee drone. Tsacopoulos M, et al. **J Physiol (Paris)** 1987;82(4):279–87

Human glial cell production of lipoxygenase-generated eicosanoids: a potential role in the pathophysiology of vascular changes following traumatic brain injury. Hariri RJ, et al. **J Trauma** 1989 Sep;29(9):1203–10

Cell-specific fatty acylation of proteins in cultured cells of neuronal and glial origin. Byers DM, et al. **Neurochem Res** 1989 Jun;14(6):503–9

Glial uptake system of GABA distinct from that of taurine in the bullfrog sympathetic ganglia. Tasaka J, et al. **Neurochem Res** 1989 Mar;14(3):271–7

Degradation of substance P by neuronal and glial cells cultured from rat fetal brain and their membranes. Endo S, et al. **Neuropeptides** 1989 Jul;14(1):31–7

Immunocytochemical evidence that vigabatrin in rats causes GABA accumulation in glial cells of the retina. Neal MJ, et al. **Neurosci Lett** 1989 Mar 13;98(1):29–32

Microglial cells around amyloid plaques in Alzheimer's disease express leucocyte adhesion molecules of the LFA–1 family. Rozemuller JM, et al. **Neurosci Lett** 1989 Jul 3; 101(3):288–92

Effect of hydrocortisone on myelin basic protein in developing primary brain cultures. Ved HS, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):203–7

Satellite cells surrounding axotomised rat dorsal root ganglion cells increase expression of a GFAP–like protein. Woodham P, et al. **Neurosci Lett** 1989 Mar 13;98(1):8–12

Immunohistochemical localization of myelin basic protein and 2',3'-cyclic nucleotide 3'-phosphohydrolase in flattened membrane expansions produced by cultured oligodendrocytes. Reynolds R, et al. **Neuroscience** 1989; 28(1):181–8

Neuronal and glial elements of fetal neostriatal grafts in the adult neostriatum. Zhou FC, et al. **Neuroscience** 1989; 30(1):19–31

Influence of PLA2–PG system on purine release and cAMP content in dissociated primary glial cultures from rat striatum. Caciagli F, et al. **Pharmacol Res** 1989 May–Jun; 21(3):271–84

Differential regulation of oligodendrocyte markers by glucocorticoids: post–transcriptional regulation of both proteolipid protein and myelin basic protein and transcriptional regulation of glycerol phosphate dehydrogenase. Kumar S, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6807–11

Substance P receptor binding sites are expressed by glia in vivo after neuronal injury. Mantyh PW, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5193–7

Honeybee retinal glial cells transform glucose and supply the neurons with metabolic substrate. Tsacopoulos M, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8727–31

Spatial buffering of light–evoked potassium increases by retinal Müller (glial) cells. Karwoski CJ, et al. **Science** 1989 May 5;244(4904):578–80

MICROBIOLOGY

Mammalian reovirus receptor expression by oligodendrocytes. Cohen JA, et al. **Ann N Y Acad Sci** 1988; 540:445–8

Long–term effect of elevated temperatures on SSPE virus expression in persistently infected rat glial cells. Ogura H, et al. **Arch Virol** 1989;104(3–4):259–69

Vulnerability of rat and mouse brain cells to murine hepatitis virus (JHM–strain): studies in vivo and in vitro. van Berlo MF, et al. **GLIA** 1989;2(2):85–93

Coronavirus mouse hepatitis virus (MHV)–A59 causes a persistent, productive infection in primary glial cell cultures. Lavi E, et al. **Microb Pathog** 1987 Aug;3(2):79–86

Expression of v–src arrests murine glial cell differentiation. Trotter J, et al. **Oncogene** 1989 Apr;4(4):457–64

Hypomyelination in border disease: the roles of thyroid hormones, growth hormone, and virus infection of the CNS. Anderson CA, et al. **Prog Clin Biol Res** 1988; 281:59–70

PATHOLOGY

Stability of neuron and glial number in the parabigeminal nucleus of the ageing mouse. Sturrock RR. **Acta Anat (Basel)** 1989;134(4):322–6

Leptomeningeal gliomatosis with spinal cord or cauda equina compression: a complication of supratentorial gliomas in adults. Delattre JY, et al. **Acta Neurol Scand** 1989 Feb; 79(2):133–9

Quantitation and karyometry of cerebral neuroglia and endothelial cells in liver cirrhosis and in the hepatosplenic schistosomiasis mansoni. Brasileiro–Filho G, et al. **Acta Neuropathol (Berl)** 1989;77(6):582–90

Demonstration of microglial cells in and around senile (neuritic) plaques in the Alzheimer brain. An immunohistochemical study using a novel monoclonal antibody. Haga S, et al. **Acta Neuropathol (Berl)** 1989; 77(6):569–75

Microglia in the giant cell encephalitis of acquired immune deficiency syndrome: proliferation, infection and fusion. Michaels J, et al. **Acta Neuropathol (Berl)** 1988;76(4):373–9

Microglial and neural differentiation in human teratomas. Sangruchi T, et al. **Acta Neuropathol (Berl)** 1989; 78(3):258–63

Experimental allergic encephalomyelitis. I. Oligodendroglial cell population in monkey brain at the acute stage. Ohkawa T. **Acta Pathol Jpn** 1989 Apr;39(4):224–8

Oligodendrocyte proliferation and enhanced CNS remyelination after therapeutic manipulation of chronic relapsing EAE. Raine CS, et al. **Ann N Y Acad Sci** 1988; 540:712–4

Experimental fluid percussion brain injury: vascular disruption and neuronal and glial alterations. Cortez SC, et al. **Brain Res** 1989 Mar 20;482(2):271–82

Expression of the jimpy gene in the spinal cords of heterozygous female mice. 2. Oligodendroglial and endothelial cell hyperplasia. Bartlett WP, et al. **Brain Res Dev Brain Res** 1989 May 1;47(1):1–11

Absence of gliosis in the brains of epileptic fowl. Munoz DG, et al. **Can J Neurol Sci** 1988 Nov;15(4):409–12

Choroid plexus hemangioma with glial nodules in a premature stillborn study. Ho KL. **Clin Neuropathol** 1989 Mar–Apr;8(2):98–101

Diffuse gliomatosis of the central nervous system with histological features of microgliomatosis. Ng HK. **Clin Neuropathol** 1988 Sep–Oct;7(5):266–70

Immunocytochemical staining of astrocytes, tanycytes, immature glial cells and ependymal cells in the central nervous system of the normal rat and the myelin–deficient mutant. Cammer W, et al. **Dev Neurosci** 1989;11(2):90–8

Astroglial plasticity in hemizygous and heterozygous jimpy mice. Best TT, et al. **Int J Dev Neurosci** 1988;6(1):39–57

The effects of extracellular acidosis on neurons and glia in vitro. Goldman SA, et al. **J Cereb Blood Flow Metab** 1989 Aug;9(4):471–7

Cell kinetics and cell death in the optic nerve of the myelin deficient rat. Jackson KF, et al. **J Neurocytol** 1988 Oct; 17(5):657–70

Oligodendroglial proliferative abnormality associated with arteriovenous malformation: report of three cases with review of the literature. Nazek M, et al. **Neurosurgery** 1988 Dec;23(6):781–5 (22 ref.)

Neurotypic and gliotypic proteins as biochemical markers of neurotoxicity. O'Callaghan JP. **Neurotoxicol Teratol** 1988 Sep–Oct;10(5):445–52

Transfection of normal and transformed hamster cerebral cortex glial cells with activated c–H–ras–1 results in the acquisition of a diffusely invasive phenotype. Fetherston JD, et al. **Oncogene Res** 1989;5(1):25–30

Symptomatic glial cysts of the pineal gland. Vaquero J, et al. **Surg Neurol** 1988 Dec;30(6):468–70

PHYSIOLOGY

A glial cell line promotes the outgrowth of neurites from embryonic Xenopus retina. Sakaguchi DS, et al. **Acta Biol Hung** 1988;39(2–3):201–9

Cloning of cDNA for two large polypeptides found in myelinating oligodendrocytes. Gulcher JR, et al. **Ann N Y Acad Sci** 1988;540:405–6

Insulin–like growth factor–I stimulates regeneration of oligodendrocytes in vitro. Mozell RL, et al. **Ann N Y Acad Sci** 1988;540:430–2

Expression and stability of c–sis mRNA in human glioblastoma cells. Press RD, et al. **Biochemistry** 1988 Jul 26;27(15):5736–41

Single potential–dependent K+ channels and their oligomers in molluscan glial cells. Geletyuk VI, et al. **Biochim Biophys Acta** 1989 Jun 6;981(2):343–50

Neuronal and glial responses to hypoxia and hypercapnia. Lehmenkühler A, et al. **Biomed Biochim Acta** 1989; 48(2–3):S155–60

Insulin–like growth factor (IGF–1) as a stimulator of regeneration in the freeze–injured rat sciatic nerve. Sjöberg J, et al. **Brain Res** 1989 Apr 17;485(1):102–8

Neuronal–glial and synaptic plasticity in the adult rat paraventricular nucleus. Theodosis DT, et al. **Brain Res** 1989 Apr 10;484(1–2):361–6

Glial activity during axonal regrowth following cryogenic injury of rat spinal cord. Collins GH, et al. **Brain Res Bull** 1989 Jan;22(1):71–9

Quantitation of synaptic, neuronal and glial development in the intermediate and medial hyperstriatum ventrale (IMHV) of the chick Gallus domesticus, pre– and post–hatch. Curtis EM, et al. **Brain Res Dev Brain Res** 1989 Jul 1;48(1):105–18

Spatial arrangement of radial glia and ingrowing retinal axons in the chick optic tectum during development. Vanselow J, et al. **Brain Res Dev Brain Res** 1989 Jan 1;45(1):15–27

Interneurons versus efferent neurons: heterogeneity in their neurite outgrowth response to glia from several brain regions. Denis–Donini S, et al. **Dev Biol** 1988 Nov; 130(1):237–49

Developmental modulation of a glial cell–associated glycoprotein, 5B12, in an insect, Acheta domesticus. Meyer MR, et al. **Dev Biol** 1988 Nov;130(1):374–91

Phagocytosis of polystyrene latex beads by rat brain microglia cell cultures is increased by treatment with gangliosides. Bocchini V, et al. **Dev Neurosci** 1988; 10(4):270–6

Myelination and remyelination in the central nervous system by transplanted oligodendrocytes using the shiverer model. Discussion on the remyelinating cell population in adult mammals. Gumpel M, et al. **Dev Neurosci** 1989;11(2):132–9 (42 ref.)

Evolving concepts and issues in remyelination. Ludwin SK. **Dev Neurosci** 1989;11(2):140–8 (60 ref.)

Expression and modulation of K+ currents in oligodendrocytes: possible role in myelinogenesis. Soliven B, et al. **Dev Neurosci** 1989;11(2):118–31 (51 ref.)

Regulation of rat brain/HepG2 glucose transporter gene expression by insulin and insulin–like growth factor–I in primary cultures of neuronal and glial cells. Werner H, et al. **Endocrinology** 1989 Jul;125(1):314–20

On the cellular source and function of interleukin 6 produced in the central nervous system in viral diseases. Frei K, et al. **Eur J Immunol** 1989 Apr;19(4):689–94

Monokine production by microglial cell clones. Righi M, et al. **Eur J Immunol** 1989 Aug;19(8):1443–8

Changes in microglial cell numbers in the spinal cord dorsal horn following brachial plexus transection in the adult rat. Cova JL, et al. **Exp Brain Res** 1988;73(1):61–8

Laminin expressed by cultured Müller cells stimulates growth of retinal neurites. Wakakura M, et al. **Exp Eye Res** 1989 Apr;48(4):577–82

Direct effects of carbachol on membrane potential and ion activities in leech glial cells. Ballanyi K, et al. **GLIA** 1988; 1(2):165–7

Glutamate and kainate increase intracellular sodium activity in leech neuropile glial cells. Ballanyi K, et al. **GLIA** 1989; 2(1):51–4

Ion channel expression by white matter glia: I. Type 2 astrocytes and oligodendrocytes. Barres BA, et al. **GLIA** 1988;1(1):10–30

Glial conditioned medium enables jimpy oligodendrocytes to express properties of normal oligodendrocytes: production of myelin antigens and membranes. Bartlett WP, et al. **GLIA** 1988;1(4):253–9

Functions of glial cells in the retina of the honeybee drone. Coles JA. **GLIA** 1989;2(1):1–9 (48 ref.)

Increase in glial intracellular K+ in drone retina caused by photostimulation but not mediated by an increase in extracellular K+. Coles JA, et al. **GLIA** 1989;2(4):213–22

Relations between slow extracellular potential changes, glial potassium buffering, and electrolyte and cellular volume changes during neuronal hyperactivity in cat brain. Dietzel I, et al. **GLIA** 1989;2(1):25–44

Axon–glia transfer of a protein and a carbohydrate. Grossfeld RM, et al. **GLIA** 1988;1(4):292–300

Electrical coupling between astrocytes and between oligodendrocytes studied in mammalian cell cultures. Kettenmann H, et al. **GLIA** 1988;1(1):64–73

Optical recording of electrical activity from axons and glia of frog optic nerve: potentiometric dye responses and morphometrics. Konnerth A, et al. **GLIA** 1988;1(3):225–32

Potassium conductance in Müller cells of fish. Newman EA. **GLIA** 1988;1(4):275–81

Model of potassium dynamics in the central nervous system. Odette LL, et al. **GLIA** 1988;1(3):198–210

Patterns of glial proliferation during formation of olfactory glomeruli in an insect. Oland LA, et al. **GLIA** 1989; 2(1):10–24

Glial cells promote dendritic development in rat sympathetic neurons in vitro. Tropea M, et al. **GLIA** 1988;1(6):380–92

Effects of trembler mouse serum and laminin on oligodendrocyte proliferation and differentiation in culture. Hantaz–Ambroise D, et al. **Int J Dev Neurosci** 1988; 6(3):289–99

Satellite cells in developing spinal ganglia. An immunohistochemical study. Lauriola L, et al. **Int J Dev Neurosci** 1989;7(3):275–9

Development of axonal–oligodendroglial relationships and junctions during myelination of the optic nerve. Wiggins RC, et al. **Int J Dev Neurosci** 1988;6(3):233–43

Neuron–glia interrelations. Vernadakis A. **Int Rev Neurobiol** 1988;30:149–224 (511 ref.)

RGD–containing peptides inhibit the synthesis of myelin–like membrane by cultured oligodendrocytes. Cardwell MC, et al. **J Cell Biol** 1988 Oct;107(4):1551–9

Oligodendrocytes repel axons and cause axonal growth cone collapse. Fawcett JW, et al. **J Cell Sci** 1989 Jan;92 (Pt 1):93–100

Neuronal and glial changes in the rat phrenic nucleus occurring within hours after spinal cord injury. Goshgarian HG, et al. **J Comp Neurol** 1989 Jun 22;284(4):519–33

Spatial and temporal patterns of oligodendrocyte differentiation in rat cerebrum and cerebellum. LeVine SM, et al. **J Comp Neurol** 1988 Nov 15;277(3):441–55

Effects of hydroxyurea parallel the effects of radiation in developing olfactory glomeruli in insects. Oland LA, et al. **J Comp Neurol** 1988 Dec 15;278(3):377–87

Light microscopic study of degenerating cobalt–filled optic axons in goldfish: role of microglia and radial glia in debris removal. Springer AD, et al. **J Comp Neurol** 1989 Apr 1;282(1):119–32

Fate mapping the avian neural plate with quail/chick chimeras: origin of prospective median wedge cells. Schoenwolf GC, et al. **J Exp Zool** 1989 Mar;249(3):271–8

Neural and glial phenotypic expression by neural crest cells in culture: effects of control and presumptive aganglionic bowel from ls/ls mice. Coulter HD, et al. **J Neurobiol** 1988 Sep;19(6):507–31

Role of glial cells for the basal and Ca2+–dependent K+–evoked release of transmitter amino acids investigated by microdialysis. Paulsen RE, et al. **J Neurochem** 1989 Jun; 52(6):1823–9

Glutamate neurotoxicity in culture depends on the presence of glutamine: implications for the role of glial cells in normal and pathological brain development. Simantov R. **J Neurochem** 1989 Jun;52(6):1694–9

Response of axons and glia at the site of anastomosis between the optic nerve and cellular or acellular sciatic nerve grafts. Berry M, et al. **J Neurocytol** 1988 Dec;17(6):727–44

Effect of Mycobacterium leprae–infected Schwann cells and their supernatant on lymphocyte neuroglia interaction. Mehta R, et al. **J Neuroimmunol** 1989 Apr;22(2):149–55

Phagocytic activity of human adult astrocytes and oligodendrocytes in culture. Watabe K, et al. **J Neuropathol Exp Neurol** 1989 Sep;48(5):499–506

A neuroglial cooperativity is required for the potentiation by 2–chloroadenosine of the muscarinic–sensitive phospholipase C in the striatum. el–Etr M, et al. **J Neurosci** 1989 May;9(5):1473–80

Plasticity of process–bearing glial cell cultures from neonatal rat cerebral cortical tissue. Ingraham CA, et al. **J Neurosci** 1989 Jan;9(1):63–9

Embryonic divergence of oligodendrocyte and astrocyte lineages in developing rat cerebrum. LeVine SM, et al. **J Neurosci** 1988 Nov;8(11):3992–4006

Oligodendrocytes and CNS myelin are nonpermissive substrates for neurite growth and fibroblast spreading in vitro. Schwab ME, et al. **J Neurosci** 1988 Jul;8(7):2381–93

Growth and differentiation properties of O-2A progenitors purified from rat cerebral hemispheres. Behar T, et al. **J Neurosci Res** 1988 Oct-Dec;21(2–4):168–80

Gliogenesis in rat spinal cord: evidence for origin of astrocytes and oligodendrocytes from radial precursors. Hirano M, et al. **J Neurosci Res** 1988 Oct-Dec; 21(2–4):155–67

Carrier-mediated Cl- transport in cultured mouse oligodendrocytes. Hoppe D, et al. **J Neurosci Res** 1989 Aug;23(4):467–75

Intracellular pH regulation in cultured mouse oligodendrocytes. Kettenmann H, et al. **J Physiol (Lond)** 1988 Dec;406:147–62

Cellular and molecular aspects of glial neurone interactions. 11th Gif lecture in neurobiology. Gif-sur-Yvette, November 27-28th 1986. **J Physiol (Paris)** 1987; 82(4):191–356

The glial blood-brain barrier of crustacea and cephalopods: a review. Abbott NJ, et al. **J Physiol (Paris)** 1987; 82(4):304–13 (53 ref.)

Neuronal expression of mutations affecting primarily glia in the mouse: studies in the dysmyelinated and convulsive mutant quaking. Baumann N, et al. **J Physiol (Paris)** 1987; 82(4):271–8 (70 ref.)

Voltage gated ionic channels in rat cultured astrocytes, reactive astrocytes and an astrocyte-oligodendrocyte progenitor cell. Bevan S, et al. **J Physiol (Paris)** 1987; 82(4):327–35

Molecular and cellular aspects of axon-glia interaction in CNS regeneration. Schwartz M, et al. **J Physiol (Paris)** 1987;82(4):314–21

Neuronal-derived factors regulating glial cell proliferation and maturation. Sensenbrenner M, et al. **J Physiol (Paris)** 1987;82(4):288–90

Glial repair in an insect. Treherne JE, et al. **J Physiol (Paris)** 1987;82(4):239–47 (30 ref.)

Induction of oligodendrocyte proliferation and remyelination after chronic demyelination. Relevance to multiple sclerosis. Raine CS, et al. **Lab Invest** 1988 Oct;59(4):467–76

Neuron-glial relationship during regeneration of motorneurons. Kreutzberg GW, et al. **Metab Brain Dis** 1989 Mar;4(1):81–5 (35 ref.)

Neuronal-glial interactions. A new form of transmission? [news] Barres BA. **Nature** 1989 Jun 1;339(6223):343–4

Facilitation of voltage-gated ion channels in frog neuroglia by nerve impulses. Marrero H, et al. **Nature** 1989 Jun 1; 339(6223):378–80

GABA triggers a Cl- efflux from cultured mouse oligodendrocytes. Hoppe D, et al. **Neurosci Lett** 1989 Feb 27;97(3):334–9

Existence of inward potassium currents in adult human oligodendrocytes. McLarnon JG, et al. **Neurosci Lett** 1989 Jun 5;101(1):107–12

A theoretical and experimental study of the effects of non-uniform membrane resistance on the shape of single-cell charging curves. Winslow RL, et al. **Neuroscience** 1989;29(3):761–71

Cultures of glial cells release purines under field electrical stimulation: the possible ionic mechanisms. Caciagli F, et al. **Pharmacol Res Commun** 1988 Nov;20(11):935–47

Purification and characterization of glia maturation factor beta: a growth regulator for neurons and glia. Lim R, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3901–5

Individual microglia move rapidly and directly to nerve lesions in the leech central nervous system. McGlade-McCulloh E, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1093–7

gamma-Aminobutyric acid (GABA)-induced currents of skate Muller (glial) cells are mediated by neuronal-like GABAA receptors. Malchow RP, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4226–30

Culture preparations of neuroglial cells useful for studies of myelin repair and axonal regeneration in the central nervous system. Bunge RP, et al. **Prog Brain Res** 1988; 78:321–6 (24 ref.)

Central nervous system regeneration: oligodendrocytes and myelin as non-permissive substrates for neurite growth. Caroni P, et al. **Prog Brain Res** 1988;78:363–70 (34 ref.)

Perivascular glia-endothelium relationships in the developing cerebral vessels. A three-dimensional computer aided study. Roncali L, et al. **Prog Clin Biol Res** 1989;295:383–7

Long-term tissue cultures: a tool to study functional aspects of CN glia. Omlin FX. **Schweiz Arch Neurol Psychiatr** 1989; 140(1):33–7

Macrophages and microglia in the nervous system. Perry VH, et al. **Trends Neurosci** 1988 Jun;11(6):273–7 (45 ref.)

A role for glia in the development of organized neuropilar structures. Tolbert LP, et al. **Trends Neurosci** 1989 Feb; 12(2):70–5 (41 ref.)

[The effect of central and peripheral neuroglia on the regeneration of the optic nerve] Thanos S, et al. **Fortschr Ophthalmol** 1989;86(2):172–5 (Eng. Abstr.) **(Ger)**

[Trophic factors acting on glial growth and differentiation] Kato T, et al. **Tanpakushitsu Kakusan Koso** 1988 Aug; 33(10):1667–73 (69 ref.) **(Jpn)**

[Myelination, demyelination and re-myelination in the central nervous system] Graça DL. **Arq Neuropsiquiatr** 1988 Sep; 46(3):292–7 (48 ref.) (Eng. Abstr.) **(Por)**

[Contractile activity and intravital fluctuations in the dry weight of glial cells in monolayer cultures] Didimova EV, et al. **Ontogenez** 1988 Sep-Oct;19(5):487–90 (Eng. Abstr.) **(Rus)**

[Neuron-neuroglia functional relation in the squid giant nerve fiber] Villegas J, et al. **Acta Physiol Pharmacol Latinoam** 1988;38(1):127–34 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Molecular mechanisms of glial swelling in vitro. Kempski O, et al. **Neurochem Pathol** 1988 Jul-Dec;9:109–25

Expression of the messenger RNA encoding the glial fibrillary acidic protein in rat basal forebrain following fimbria-fornix lesion. Cavicchioli L, et al. **Pharmacol Res Commun** 1988 Jul;20(7):609–10

RADIATION EFFECTS

Radiation sensitivity of glial cells in primary culture. Barbarese E, et al. **J Neurol Sci** 1989 Jun;91(1–2):97–107

[Quantitative histologic changes of the glioneuronal complex in the central and intermediate parts of the visual analyzer exposed to microwaves of thermogenic intensity] Logvinov SV. **Radiobiologiia** 1989 Mar-Apr;29(2):247–50 (Eng. Abstr.) **(Rus)**

[Postradiation changes of the active ion transport systems of the CNS. Na, K-ATPase of neurons and neuroglia] Shainskaia AM, et al. **Radiobiologiia** 1989 Jul-Aug; 29(4):481–4 (Eng. Abstr.) **(Rus)**

TRANSPLANTATION

Transplantation of oligodendrocytes and Schwann cells into the spinal cord of the myelin-deficient rat. Duncan ID, et al. **J Neurocytol** 1988 Jun;17(3):351–60

Myelination by oligodendrocytes isolated from 4–6-week-old rat central nervous system and transplanted into newborn shiverer brain. Lubetzki C, et al. **J Neurol Sci** 1988 Dec;88(1–3):161–75

ULTRASTRUCTURE

Evidence of oligodendrocyte infection and degeneration in canine distemper encephalomyelitis. Blakemore WF, et al. **Acta Neuropathol (Berl)** 1989;77(5):550–3

Cyst formation and glial response in the brain lesions of stroke-prone spontaneously hypertensive rats. Fredriksson K, et al. **Acta Neuropathol (Berl)** 1988;76(5):441–50

On-grid immunogold labeling of glial intermediate filaments in epoxy-embedded tissue. Johnson AB, et al. **Am J Anat** 1989 Jun-Jul;185(2–3):335–41

Subpial glial limiting membrane of the cat spinal cord visualized by scanning electron microscopy. Sasaki H. **Anat Embryol (Berl)** 1989;179(6):533–40

Comparative ultrastructural study of rabbit Müller cells in vitro and in situ. Wakakura M, et al. **Eye** 1988;2 (Pt 6):664–9

Prenatal gliogenesis in the developing cerebrum of the mouse. Choi BH. **GLIA** 1988;1(5):308–16

Orthogonal arrays of particles in plasma membranes of Müller cells in the guinea pig retina. Gotow T, et al. **GLIA** 1989;2(4):273–85

Cytoplasmic membrane elaborations in oligodendrocytes during myelination of spinal motoneuron axons. Waxman SG, et al. **GLIA** 1988;1(4):286–91

Distribution of orthogonal arrays of particles in the Müller cell membrane of the mouse retina. Wolburg H, et al. **GLIA** 1988;1(4):246–52

Role of glial cells in the differentiation and function of myelinated axons. Rosenbluth J. **Int J Dev Neurosci** 1988; 6(1):3–24

Comparative study of neuronal and glial gap-junctions in crayfish nerve cords. Bosch E. **J Comp Neurol** 1989 Jul 15;285(3):399–411

Ultrastructural characteristics of GD3 ganglioside-positive immature glia in rat forebrain white matter. LeVine SM, et al. **J Comp Neurol** 1988 Nov 15;277(3):456–64

Ultrastructure of rabbit retinal nerve fibre layer—neuro-glial relationships, myelination, and nerve fibre spectrum. Reichenbach A, et al. **J Hirnforsch** 1988;29(5):481–91

Mitogenic effect of axolemma-enriched fraction on cultured oligodendrocytes. Chen SJ, et al. **J Neurochem** 1989 Jan; 52(1):325–7

Electron microscopic study of the interaction of axons and glia at the site of anastomosis between the optic nerve and cellular or acellular sciatic nerve grafts. Hall S, et al. **J Neurocytol** 1989 Apr;18(2):171–84

Transglial pathway of diffusion in the Schwann sheath of the squid giant axon. Zwahlen MJ, et al. **J Neurocytol** 1988 Apr;17(2):145–59

Alterations of oligodendrocytes and demyelination in the spinal cord of patients with mitochondrial encephalomyopathy. Ohara S, et al. **J Neurol Sci** 1988 Aug; 86(1):19–29

Role for the oligodendrocyte cytoskeleton in myelination. Wilson R, et al. **J Neurosci Res** 1989 Apr;22(4):439–48

Glial cells of the crayfish and their relationships with neurons. An ultrastructural study. Cuadras J, et al. **J Physiol (Paris)** 1987;82(4):196–217

Karyometric studies of glial cells in corpus callosum of rats developing a fat deficient diet. Wender M, et al. **Neuropatol Pol** 1988;26(3):403–13

Gliomatosis cerebri in a newborn. Barth PG, et al. **Neuropediatrics** 1988 Nov;19(4):197–200

Direct contacts between Auerbach's ganglia and smooth muscle cells in the small intestine of the rat. Komuro T. **Neurosci Lett** 1988 Sep 23;92(1):27–9

Quantitative electron microscopy of rabbit Müller (glial) cells in dependence on retinal topography. Reichenbach A, et al. **Z Mikrosk Anat Forsch** 1988;102(5):721–55

Cytotopographical specialization of enzymatically isolated rabbit retinal Müller (glial) cells: structure, ultrastructure, and 3H-ouabain binding sites. Reichenbach A, et al. **Z Mikrosk Anat Forsch** 1988;102(6):897–912

[Morphologic characteristics of neuroglioform cells in the visual cortex of various mammals (rat, guinea pig, alticola and cat). A Golgi study] Hedlich A. **J Hirnforsch** 1988; 29(6):709–15 (Eng. Abstr.) **(Ger)**

[The impregnation of glial fibers] Krutsay M. **Zentralbl Allg Pathol** 1989;135(1):71–2 (Eng. Abstr.) **(Ger)**

[Ultrastructural organization of the septum pellucidum in dogs subjected to long-term partial intraspecific isolation] Dzamoeva EI, et al. **Arkh Anat Gistol Embriol** 1989 Apr; 96(4):17–21 (Eng. Abstr.) **(Rus)**

[Structural changes in the neuropil of the frontal cortex in schizophrenia] Uranova NA. **Zh Nevropatol Psikhiatr** 1988; 88(7):52–8 (Eng. Abstr.) **(Rus)**

NEUROHEMAL ORGAN see **NEUROSECRETORY SYSTEMS**

NEUROHUMOR RECEPTORS see **RECEPTORS, NEUROHUMOR**

NEUROHUMORS see **NEUROREGULATORS**

NEUROHYPOPHYSIS see **PITUITARY GLAND, POSTERIOR**

NEUROIMMUNE PROCESSES see **NEUROIMMUNOMODULATION**

NEUROIMMUNOMODULATION

Autonomic nervous system regulation of murine immune responses as assessed by local surgical sympathetic and parasympathetic denervation. Alito AE, et al. **Acta Physiol Pharmacol Latinoam** 1987;37(3):305–19

Advances in neuroimmunology. Proceedings of the Second International Congress of Neuroimmunology. Philadelphia, September 8–11, 1987. **Ann N Y Acad Sci** 1988;540:1–745

Brain neocortex immunomodulation in rats. Barnéoud P, et al. **Brain Res** 1988 Dec 6;474(2):394–8

The neuroendocrine system, an opportunity for immunotoxicologists. Snyder CA. **Environ Health Perspect** 1989 May;81:165–6 (14 ref.)

Neuroendocrine regulation of mucosal immunity. Bienenstock J, et al. **Immunol Invest** 1989 Jan-May; 18(1–4):69–76 (22 ref.)

Neuroimmunomodulation: facts and dilemmas. Janković BD. **Immunol Lett** 1989 May;21(2):101–18 (200 ref.)

Physiology and pathology of an immunoendocrine feedback loop. Kroemer G, et al. **Immunol Today** 1988 Jun;9(6):163–5

Neuroimmunomodulation in cancer patients: correlations between melatonin and beta-endorphin blood levels and T helper/suppressor ratio. Barni S, et al. **Int J Biol Markers** 1988 Apr-Jun;3(2):82–6

Neuroimmunomodulation: the interaction between the nervous system and the immune system. Ovadia H, et al. **Isr J Med Sci** 1989 Jan;25(1):7–14 (58 ref.)

An overview of neuroimmunomodulation and a possible correlation with musculoskeletal system function. Fidelibus JC. **J Manipulative Physiol Ther** 1989 Aug;12(4):289–92 (26 ref.)

Neuroendocrine-immune interactions in the gut. Freier S, et al. **J Pediatr Gastroenterol Nutr** 1989 Jul;9(1):4–12 (67 ref.)

Effect of growth hormone-releasing hormone on human peripheral blood leukocyte chemotaxis and migration in normal subjects. Zelazowski P, et al. **Neuroendocrinology** 1989 Aug;50(2):236–9

28th International Neuropsychiatric Symposium. Pula, 30th May–4th June, 1988. Abstracts. **Neurologija** 1988;37 Suppl 1:1–116

Functional characteristics of the developing brain after early postnatal neuroimmunization in rats: behavioral analysis. Zubova OB, et al. **Neurosci Behav Physiol** 1989 Jan-Feb; 19(1):19–25

Biological basis of the behavior of sick animals. Hart BL. **Neurosci Biobehav Rev** 1988 Summer;12(2):123–37 (181 ref.)

Production of neuroendocrine peptide hormones by the immune system. Blalock JE. **Prog Allergy** 1988;43:1–13 (37 ref.)

Immunoregulatory properties of neuroendocrine peptide hormones. Johnson HM, et al. **Prog Allergy** 1988;43:37–67 (117 ref.)

Signaling pathways of the neuroendocrine-immune network. Roszman TL, et al. **Prog Allergy** 1988;43:140–59 (99 ref.)

Immune cells and the hypothalamic-pituitary axis in major

depression [published erratum appears in Psychiatry Res 1989 Jun;28(3):355] Darko DF, et al. **Psychiatry Res** 1988 Aug;25(2):173–9

The "stress analogy" in the context of psychoneuroimmunology. Chiappelli F. **Schizophr Bull** 1988;14(2):135–7, 139–40

[Introduction to neuroimmunology] Bonavita V, et al. **Acta Neurol (Napoli)** 1989 Apr–Jun;11(2–3):79–91 (24 ref.) **(Ita)**

[Effect of the neuromediator systems of the neostriatum on immunocompetent cells] Aliev NA. **Fiziol Zh SSSR** 1988 Dec;74(12):1738–42 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Lymphokines and monokines in the neuroendocrine system. Benveniste EN. **Prog Allergy** 1988;43:84–120 (152 ref.)

Hormonal activities of lymphokines, monokines, and other cytokines. Smith EM. **Prog Allergy** 1988;43:121–39 (93 ref.)

NEUROKININ A see SUBSTANCE K

NEUROKININ B see NEUROKININ K

NEUROKININ K

ANALOGS & DERIVATIVES

Neuromedin B receptor in esophagus: evidence for subtypes of bombesin receptors. Von Schrenck T, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):G747–58

Behavioral effects of bombesin. Cowan A. **Ann N Y Acad Sci** 1988;547:204–9

The distribution and biological effects of neuromedins B and U. Domin J, et al. **Ann N Y Acad Sci** 1988;547:391–403

Neuromedin B: physiological and pharmacological perturbations. Lazarus LH, et al. **Ann N Y Acad Sci** 1988; 547:404–14

Neuromedin B and neuromedin Ca. Two mammalian bombesin-like peptides identified in porcine spinal cord and brain. Minamino N, et al. **Ann N Y Acad Sci** 1988; 547:373–90

Molecular biology of bombesin-like peptides. Comparison of cDNAs encoding human gastrin-releasing peptide, human neuromedin B, and amphibian ranatensin. Spindel ER, et al. **Ann N Y Acad Sci** 1988;547:10–20 (28 ref.)

Inhibition of serotonin release by bombesin-like peptides in rat hypothalamus in vitro. Saporito MS, et al. **Life Sci** 1989; 45(1):15–23

Role of neuromedin B in the control of the release of thyrotropin in the rat. Rettori V, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4789–92

ANALYSIS

Neurokinin B in a human pheochromocytoma measured with a specific radioimmunoassay. Kage R, et al. **Peptides** 1989 May–Jun;10(3):713–6

Neurokinin A, neurokinin B and neuropeptide K in the rabbit iris: a study comparing different extraction methods. Beding-Barnekow B, et al. **Regul Pept** 1989 May; 25(2):199–206

Establishment of highly specific radioimmunoassays for neurokinin A and neurokinin B and determination of tissue distribution of these peptides in rat central nervous system. Tateishi K, et al. **Regul Pept** 1989 Mar;24(3):245–57

GENETICS

Neurokinin B and substance P genes are co-expressed in a subset of neurons in the rat habenula. Burgunder JM, et al. **Neuropeptides** 1989 Apr;13(3):165–9

METABOLISM

Ontogeny of the novel tachykinins neurokinin A, neurokinin B and neuropeptide K in the rat central nervous system. Diez-Guerra FJ, et al. **Regul Pept** 1989 Apr;25(1):87–97

PHARMACOLOGY

Characterization of the effects of neurokinins on canine antral muscle. Koelbel CB, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G779–86

Characterization of neurokinin effects and receptor selectivity in human isolated bronchi. Naline E, et al. **Am Rev Respir Dis** 1989 Sep;140(3):679–86

Mammalian tachykinins modulate the nicotinic secretory response of cultured bovine adrenal chromaffin cells. Khalil Z, et al. **Brain Res** 1988 Sep 6;459(2):289–97

Tachykinins produce fast and slow depolarizations in sympathetic neurons of rat coeliac-superior mesenteric ganglia. Konishi S, et al. **Brain Res** 1989 Jun 19; 490(1):162–5

Prostacyclin release induced by neurokinins in cultured human endothelial cells. Marceau F, et al. **Can J Physiol Pharmacol** 1989 Feb;67(2):159–62

Dimerization of neurokinin A and B COOH-terminal heptapeptide fragments enhanced the selectivity for tachykinin receptor subtypes. Kodama H, et al. **Eur J Pharmacol** 1988 Jul 7;151(2):317–20

The actions of neurokinins and substance P in canine pylorus, antrum and duodenum. Allescher HD, et al. **Peptides** 1989 May–Jun;10(3):671–9

PHYSIOLOGY

Substance P, neurokinin A and neurokinin B in the ocular response to injury in the rabbit. Beding-Barnekow B, et al. **Br J Pharmacol** 1988 Sep;95(1):259–67

Cardiovascular roles of tachykinin peptides in the nucleus tractus solitarii of rats. Nagashima A, et al. **Brain Res** 1989 May 22;487(2):392–6

NEUROLEPTANALGESIA

Anaesthesia for closed embolisation of cerebral arteriovenous malformations. O'Mahony BJ, et al. **Anaesth Intensive Care** 1988 Aug;16(3):318–23

Neuroleptanalgesia using alfentanil for awake craniotomy. Welling EC, et al. **Anesth Analg** 1989 Jan;68(1):57–60

Pharmacokinetics of droperidol in surgical patients under different conditions of anaesthesia. Lehmann KA, et al. **Br J Anaesth** 1988 Sep;61(3):297–301

[Changes in blood cortisol and ACTH concentrations during urologic operations performed under halothane and neuroleptanesthesia] Gosheva-Antonova Ts, et al. **Khirurgiia (Sofiia)** 1988;41(5):71–7 (Eng. Abstr.) **(Bul)**

[Analgesia in noninvasive lithotripsy of gallstones] Beneš J, et al. **Sb Lek** 1988 Oct;90(10):310–3 (Eng. Abstr.) **(Cze)**

[Clinico-experimental studies of the effect of the form of anesthesia on the postoperative small intestinal absorption] Weiner R, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(4):254–9 (Eng. Abstr.) **(Ger)**

[Effects of famotidine on plasma pentazocine concentration in surgical patients] Takahashi S, et al. **Masui** 1988 Jun; 37(6):701–6 (Eng. Abstr.) **(Jpn)**

[EEG analysis of high-dose fentanyl anesthesia—a comparison with NLA] Takatori M, et al. **Masui** 1988 Jul; 37(7):786–93 (Eng. Abstr.) **(Jpn)**

[Use of tropaphen to increase alpha adrenergic blockade for the purpose of reducing fentanyl dose in general anesthesia during aortocoronary bypass] Kuliev EA, et al. **Anesteziol Reanimatol** 1988 Jul–Aug;(4):15–9 (Eng. Abstr.) **(Rus)**

[Effect of hyperbaric oxygenation, hypothermia and neuroleptanalgesia on the development of hemodynamic pulmonary edema] Kurygin GV, et al. **Anesteziol Reanimatol** 1988 Nov–Dec;(6):27–30 **(Rus)**

[The problem of adequacy of general anesthesia in the surgery of esophageal cancer] Osipova NA, et al. **Anesteziol Reanimatol** 1988 May–Jun;(3):34–8 (Eng. Abstr.) **(Rus)**

[Changes in central hemodynamics and microcirculation in patients with hepatobiliary pathology undergoing operations using ketamine, neuroleptanalgesia and epidural anesthesia] Vasil'kov VG, et al. **Anesteziol Reanimatol** 1988 Sep–Oct;(5):66–9 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Cognitive impairment after neuroleptanalgesia in cataract surgery. Chung F, et al. **Anesth Analg** 1989 May; 68(5):614–8

METHODS

[Effects of modified NLA with droperidol and eptazocine and surgery on pituitary-adrenocortical function in man] Takahashi S, et al. **Masui** 1989 Apr;38(4):523–30 (Eng. Abstr.) **(Jpn)**

VETERINARY

Haemodynamic, metabolic and physical responses to a neuroleptanalgesic-glyceryl guaiacolate combination in the horse. Gasthuys F, et al. **Vet Res Commun** 1989; 13(2):113–26

NEUROLEPTIC MALIGNANT SYNDROME

A prospective analysis of 24 episodes of neuroleptic malignant syndrome. Rosebush P, et al. **Am J Psychiatry** 1989 Jun;146(6):717–25

The relationship between malignant hyperthermia and neuroleptic malignant syndrome [letter] Hermesh H, et al. **Anesthesiology** 1989 Jan;70(1):171–3

Serotonin syndrome versus neuroleptic malignant syndrome as a cause of death. Kline SS, et al. **Clin Pharm** 1989 Jul; 8(7):510–4

Neuroleptic malignant syndrome—a study of 4 cases. Maniam T, et al. **Singapore Med J** 1988 Jun;29(3):293–5

[Neuroleptic malignant syndrome. Clinical and therapeutic considerations] Pariante F, et al. **Clin Ter** 1988 Aug 15; 126(3):169–79 (Eng. Abstr.) **(Ita)**

COMPLICATIONS

Fatal recurrence of neuroleptic malignant syndrome. McCarthy A, et al. **Br J Psychiatry** 1988 Apr;152:558–9

Twenty neuroleptic rechallenges after neuroleptic malignant syndrome in 15 patients [corrected; erratum to be published] Rosebush PI, et al. **J Clin Psychiatry** 1989 Aug; 50(8):295–8

Neuroleptic malignant syndrome in an AIDS patient [letter] Burch EA Jr, et al. **J Clin Psychopharmacol** 1989 Jun; 9(3):228–9

AIDS and neuroleptic malignant syndrome [letter] Breitbart W, et al. **Lancet** 1988 Dec 24–31;2(8626–8627):1488–9

DIAGNOSIS

Neuroleptic malignant syndrome. Goldwasser HD, et al. **Am Fam Physician** 1988 Nov;38(5):211–6

Clinical differentiation between lethal catatonia and neuroleptic malignant syndrome [letter] **Am J Psychiatry** 1989 Sep;146(9):1240–2

Clinical differentiation between lethal catatonia and neuroleptic malignant syndrome. Castillo E, et al. **Am J Psychiatry** 1989 Mar;146(3):324–8 (54 ref.)

Delirium with dystonia: a variant of neuroleptic malignant syndrome? [letter] Dowling JJ, et al. **Am J Psychiatry** 1989 Feb;146(2):276–7

Spectrum concept of neuroleptic malignant syndrome. Adityanjee, et al. **Br J Psychiatry** 1988 Jul;153:107–11

Spectrum concept of neuroleptic malignant syndrome [letter] Walker WD. **Br J Psychiatry** 1988 Oct;153:574

Neuroleptic malignant syndrome: nine cases. Freyne A, et al. **Ir J Med Sci** 1988 Oct;157(10):321–3

Neuroleptic malignant syndrome with hypomania and mental retardation. Ward MR, et al. **J Ment Defic Res** 1989 Aug; 33 (Pt 4):339–42

Neuroleptic malignant syndrome: recognizing an unrecognized killer. Hooper JF, et al. **J Psychosoc Nurs Ment Health Serv** 1989 Jul;27(7):13–5

Benign type of malignant syndrome [letter] **Lancet** 1989 Jan 7;1(8628):49–50

Clinical spectrum of neuroleptic malignant syndrome [letter] Clarke CE, et al. **Lancet** 1988 Oct 22;2(8617):969–70

Neuroleptic malignant syndrome [letter] Clarke CE, et al. **Lancet** 1989 Jan 28;1(8631):221

Potential confusion of neuroleptic malignant syndrome and Wilson's disease [letter] Dening TR, et al. **Lancet** 1989 Jul 1;2(8653):43

Fatal thermal injury. Scott RJ. **Med J Aust** 1989 Feb 20; 150(4):215–7

[Neuroleptic malignant syndrome: 3 clinical cases] Retamal P, et al. **Rev Med Chil** 1988 Mar;116(3):264–7 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Treatment of a mild form of neuroleptic malignant syndrome with oral diazepam. Kontaxakis VP, et al. **Acta Psychiatr Scand** 1988 Sep;78(3):396–8

Concomitant treatment of neuroleptic malignant syndrome and psychosis. Goldwasser HD, et al. **Br J Psychiatry** 1989 Jan;154:102–4

Neuroleptic malignant syndrome treated with Diazepam [letter] O'Brien P. **Can J Psychiatry** 1988 Nov;33(8):780

Neuroleptic malignant syndrome responsive to carbidopa/levodopa: support for a dopaminergic pathogenesis. Harris M, et al. **Clin Neuropharmacol** 1987 Apr;10(2):186–9

The calcium antagonist nifedipine in recurrent neuroleptic malignant syndrome. Hermesh H, et al. **Clin Neuropharmacol** 1988 Dec;11(6):552–5

Fatal thermal injury [letter] Denborough M. **Med J Aust** 1989 May 15;150(10):608

[Neuroleptic malignant syndrome: therapeutic difficulties (letter) (published erratum appears in Med Clin (Barc) 1988 Dec 3;91(19):724)] Pedrol E, et al. **Med Clin (Barc)** 1988 Oct 22;91(13):516 **(Spa)**

EPIDEMIOLOGY

Frequency and presentation of neuroleptic malignant syndrome in a state psychiatric hospital. Keck PE Jr, et al. **J Clin Psychiatry** 1989 Sep;50(9):352–5

ETIOLOGY

Protracted neuroleptic malignant syndrome complicating long-acting neuroleptic administration. Legras A, et al. **Am J Med** 1988 Dec;85(6):875–8

Risk of malignant hyperthermia among patients with neuroleptic malignant syndrome and their families. Hermesh H, et al. **Am J Psychiatry** 1988 Nov; 145(11):1431–4

Recurrent neuroleptic malignant syndrome due to haloperidol and amantadine. Hermesh H, et al. **Biol Psychiatry** 1989 Apr 1;25(7):962–5

Neuroleptic malignant syndrome [letter] Koponen H, et al. **Biol Psychiatry** 1988 Dec;24(8):943–5

Idiopathic hypoparathyroidism presenting as the neuroleptic malignant syndrome. Lim R. **Br J Hosp Med** 1989 Feb; 41(2):182

Neuroleptic malignant syndrome (NMS): a misnomer? [letter] **Br J Psychiatry** 1987 Dec;151:863–5

'Neuroleptic malignant syndrome' without neuroleptics [letter] Brennan D, et al. **Br J Psychiatry** 1988 Apr: 152:578–9

Neuroleptic malignant syndrome in striatonigral degeneration. Gibb WR. **Br J Psychiatry** 1988 Aug; 153:254–5

"At risk" group for neuroleptic malignant syndrome [letter] O'Brien P. **Can J Psychiatry** 1988 Dec;33(9):872–3

Use of neuroleptics after an episode of neuroleptic malignant syndrome. Padgett R, et al. **Can J Psychiatry** 1989 May; 34(4):323–5

Amoxapine-induced neuroleptic malignant syndrome. Madakasira S. **DICP** 1989 Jan;23(1):50–1, 55

Neuroleptic malignant syndrome. Bhatia MS, et al. **Indian Pediatr** 1988 Aug;25(8):788–90
Neuroleptic malignant syndrome in a child treated with metoclopramide for chemotherapy-related nausea [letter] Brower RD, et al. **J Child Neurol** 1989 Jul;4(3):230–2
Trimipramine-induced neuroleptic malignant syndrome after transient psychogenic polydipsia in one patient. Langlow JR, et al. **J Clin Psychiatry** 1989 Apr;50(4):144–5
Prolonged fever without extrapyramidal symptoms during neuroleptic treatment [letter] Keshavan MS, et al. **J Clin Psychopharmacol** 1989 Jun;9(3):230–1
Neuroleptic-induced pyrexia. A benign variant. Bamrah JS. **J Nerv Ment Dis** 1988 Dec;176(12):741–3
Neuroleptic malignant syndrome due to sulpiride [letter] Kashihara K, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug;51(8):1109–10
Neuroleptic malignant syndrome in a patient with Wilson's disease [letter] Kontaxakis V, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):1001–2
Neuroleptic malignant syndrome in the multiple trauma patient. Quinn DE, et al. **J Orthop Trauma** 1989;3(1):68–70
Neuroleptic malignant-like syndrome and lithium [letter] Koehler PJ, et al. **Lancet** 1988 Dec 24–31; 2(8626–8627):1499–500
Neuroleptic malignant syndrome after clozapine plus carbamazepine [letter] Müller T, et al. **Lancet** 1988 Dec 24–31;2(8626–8627):1500
Neuroleptic malignant syndrome in a man with mental retardation. McNally RJ, et al. **Ment Retard** 1988 Dec; 26(6):385–6
Neuroleptic malignant-like syndrome induced by metoclopramide. Samie MR. **Mov Disord** 1987;2(1):57–60
Drug treatment of hyperkinetic movement disorders [letter] Howsepian AA. **Semin Neurol** 1987 Dec;7(4):382
[Neuroleptic malignant syndrome caused by tiapride and neurologic complications (letter)] Perez Y, et al. **Presse Med** 1989 Mar 18;18(11):585 **(Fre)**
[The malignant neuroleptic syndrome and malignant hyperthermia] Mitterschiffthaler G, et al. **Anaesthesist** 1989 Apr;38(4):210–3 (Eng. Abstr.) **(Ger)**
[Neuroleptic malignant syndrome] Koberstein B, et al. **Dtsch Med Wochenschr** 1989 May 5;114(18):718–21 (66 ref.) **(Ger)**
[Neuroleptic malignant syndrome (letter)] Müller T, et al. **Dtsch Med Wochenschr** 1989 Mar 17;114(11):442–3 **(Ger)**
[The malignant neuroleptic syndrome] Pietzcker A. **Nervenarzt** 1988 Dec;59(12):691–700 (40 ref.) **(Ger)**
[Acute myopathy caused by psychotropic agents. Report of 2 cases] Romanelli R, et al. **Pathologica** 1988 Nov–Dec; 80(1070):711–6 (Eng. Abstr.) **(Ita)**
[Etiologic mechanism of neuroleptic malignant syndrome—hypothesis of dopamine-serotonin imbalance] Yamawaki N. **Seishin Shinkeigaku Zasshi** 1988; 90(10):869–76 **(Jpn)**
[Neuroleptic malignant syndrome] Johannessen JO, et al. **Tidsskr Nor Laegeforen** 1989 Feb 28;109(6):696–7 (Eng. Abstr.) **(Nor)**
[Malignant hyperpyrexia caused by neuroleptics] Escolano Villén F, et al. **Rev Esp Anestesiol Reanim** 1988 Jul–Aug; 35(4):214–7 (50 ref.) (Eng. Abstr.) **(Spa)**

METABOLISM

Sarcoplasmic ionic calcium concentration in neuroleptic malignant syndrome. López JR, et al. **Cell Calcium** 1989 May–Jun;10(4):223–33

MORTALITY

Mortality from neuroleptic malignant syndrome. Shalev A, et al. **J Clin Psychiatry** 1989 Jan;50(1):18–25 (151 ref.)
Agitation associated with dementia: neuroleptic malignant syndrome and fatal outcome in an 84-year-old man [letter] Osser DN, et al. **J Clin Psychopharmacol** 1988 Dec; 8(6):443–4

PATHOLOGY

Cerebellar degeneration in neuroleptic malignant syndrome: neuropathologic findings and review of the literature concerning heat-related nervous system injury. Lee S, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):387–91 (28 ref.)

PHYSIOPATHOLOGY

Rapid death during cocaine abuse: a variant of the neuroleptic malignant syndrome? Kosten TR, et al. **Am J Drug Alcohol Abuse** 1988;14(3):335–46 (44 ref.)
Neuroleptic malignans [letter] Hermesh H, et al. **Neurology** 1989 Sep;39(9):1273

PREVENTION & CONTROL

Patients with neuroleptic malignant syndrome histories: what happens when they are rehospitalized? Gelenberg AJ, et al. **J Clin Psychiatry** 1989 May;50(5):178–80

PSYCHOLOGY

Neuroleptic malignant syndrome and compulsive drinking of water. Cantor CH, et al. **Med J Aust** 1989 Apr 17; 150(8):457–8

THERAPY

Neuroleptic malignant syndrome. Review of response to therapy. Rosenberg MR, et al. **Arch Intern Med** 1989 Sep; 149(9):1927–31 (50 ref.)
Diagnosis and treatment of neuroleptic malignant syndrome [clinical conference] Guerrero RM, et al. **Clin Pharm** 1988 Sep;7(9):697–701

NEUROLEPTICS see **TRANQUILIZING AGENTS, MAJOR**

NEUROLOGIC EXAMINATION

Neurological condition of large-for-gestational-age infants during the newborn period. Otamiri G, et al. **Acta Paediatr Scand** 1988 Sep;77(5):647–52
Fetal heart rate patterns during labor: neurologic and cognitive development at six to nine years of age. Painter MJ, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):854–8
Comparison of the processed electroencephalogram and awake neurological assessment during carotid endarterectomy. Silbert BS, et al. **Anaesth Intensive Care** 1989 Aug;17(3):298–304
Neurologic evaluation of taste and smell disorders. Barwick MC. **Ear Nose Throat J** 1989 May;68(5):354, 357, 361
Relationship among CT scans, neurological exam, and neuropsychological test performance in right-brain-damaged stroke patients. Egelko S, et al. **J Clin Exp Neuropsychol** 1988 Oct;10(5):539–64
A universal subarachnoid hemorrhage scale: report of a committee of the World Federation of Neurosurgical Societies [letter] Teasdale GM, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1457
Uniform SAH grading [letter] Stålhammar D, et al. **J Neurosurg** 1989 Aug;71(2):303–4
Effect of maternal intrapartum glucose therapy on neonatal blood glucose levels and neurobehavioral status of hypoglycemic term newborn infants. Singhi S. **J Perinat Med** 1988;16(3):217–24
Neurological evaluation of occupational hand pain. Corwin HM, et al. **Occup Med** 1989 Jul–Sep;4(3):393–403 (8 ref.)
The long-term significance of neurological findings at toddler's age. Hadders-Algra M, et al. **Padiatr Grenzgeb** 1989;28(2):93–9
What matters in developmental assessment? Illingworth R. **Paediatr Perinat Epidemiol** 1989 Jul;3(3):233–41
Periodical, neurological-functional assessment for cervical cord injury. Tominaga S. **Paraplegia** 1989 Jun;27(3):227–36
Neonatal neurodevelopmental examination as a predictor of neuromotor outcome in premature infants. Allen MC, et al. **Pediatrics** 1989 Apr;83(4):498–506
Prognostic significance of neurologic examination and glycemia after cardiac arrest. Longstreth WT Jr. **Resuscitation** 1989;17 Suppl:S175–9; discussion S199–204
Measurements of acute cerebral infarction: a clinical examination scale. Brott T, et al. **Stroke** 1989 Jul; 20(7):864–70
[Care for foreign adoptive children (letter)] Barth PG, et al. **Ned Tijdschr Geneeskd** 1989 May 20;133(20):1044 **(Dut)**
[What can a neurophysiologic examination contribute to phlebologists?] Guex JJ, et al. **Phlebologie** 1988 Nov–Dec; 41(4):781–5 (Eng. Abstr.) **(Fre)**
[MR tomography following craniocerebral trauma: comparison with computed tomography, electroencephalography and neurologic status] Dewes W, et al. **ROFO** 1989 Mar;150(3):316–22 (Eng. Abstr.) **(Ger)**

INSTRUMENTATION

Observations on the applicability of the Wartenberg pendulum test to healthy, elderly subjects. Brown RA, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1171–7
Does the Wartenberg pendulum test differentiate quantitatively between spasticity and rigidity? A study in elderly stroke and Parkinsonian patients. Brown RA, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1178–86
Comparison of two-point discrimination testing devices. Crosby PM, et al. **Microsurgery** 1989;10(2):134–7

METHODS

Testing of autonomic cardiovascular regulation—methodological considerations. Mustonen J, et al. **Clin Physiol** 1989 Jun;9(3):249–57
A standard form for recording clinical findings in children with a motor deficit of central origin [letter] **Dev Med Child Neurol** 1989 Feb;31(1):119–20
Clinical neurologic assessment tool: development and testing of an instrument to index neurologic status. Crosby L, et al. **Heart Lung** 1989 Mar;18(2):121–9
How to examine patients using the Abnormal Involuntary Movement Scale. Munetz MR, et al. **Hosp Community Psychiatry** 1988 Nov;39(11):1172–7
The Neurological Evaluation Scale (NES): a structured instrument for the assessment of neurological signs in schizophrenia. Buchanan RW, et al. **Psychiatry Res** 1989 Mar;27(3):335–50
[Neurologic examination in the 1st year of life. 1] Mattigk G. **Kinderarztl Prax** 1988 Dec;56(12):579–84 (Eng. Abstr.) **(Ger)**
[The neurologic examination in the 1st year of life. 2] Mattigk G. **Kinderarztl Prax** 1989 Jan;57(1):13–21 (29 ref.) (Eng. Abstr.) **(Ger)**
[Criteria for assessing the reliability and information value of diagnostic data in neurological studies] Kaminskiĭ SN. **Zh Nevropatol Psikhiatr** 1988;88(7):102–4 (Eng. Abstr.) **(Rus)**
[Clinical characterization of a sample of newborns at risk of presenting with an altered neurologic evaluation] Flores-Tamez ME, et al. **Bol Med Hosp Infant Mex** 1989 Jun;46(6):382–8 (Eng. Abstr.) **(Spa)**

STANDARDS

[Selection of bedside tests. Neurologic tests] Takase S, et al. **Rinsho Byori** 1987 Jul;Spec No 72:81–94 **(Jpn)**

NEUROLOGY

see related
NERVOUS SYSTEM DISEASES

Psychosomatic microsyndromes in neurological practice. Macek Z. **Act Nerv Super (Praha)** 1988 Dec;30(4):307–8
Attitudes in the management of acute ischaemic cerebrovascular accident and cerebral haemorrhage in Latin America: a multinational study. Collaborative Group for Latin America. **Acta Neurol Scand** 1989 Apr;79(4):300–5
The scope of neurologic practice and care in England, Canada, and the United States. Is there a better way? Menken M, et al. **Arch Neurol** 1989 Feb;46(2):210–3
Commentary. Generalism and specialism revisited: the case of neurology. Menken M. **Health Aff (Millwood)** 1988 Winter;7(5):115–23
Basic sciences and clinical neurology: a firsthand experience. Macchi G. **Ital J Neurol Sci** 1988 Aug;9(4):323–8
The Journal of Child Neurology and child neurology: growing together [editorial] Brumback RA, et al. **J Child Neurol** 1988 Oct;3(4):232, 274
Education and research foundation honors Mark A. Mintun, MD, with 9th annual Tetalman Memorial Award. Tilyou SM. **J Nucl Med** 1989 Jul;30(7):1141–2, 1146
Neurology. Joynt RJ. **JAMA** 1989 May 19;261(19):2859–60
Neurologists join neurosurgeons in urging restraint in Parkinson's surgery [news] Merz B. **JAMA** 1989 May 26; 261(20):2929
Recent advances in neurological sciences and new goals of child neurology. Barac B. **Neurologija** 1988;37(1–2):99–108
Position of the American Academy of Neurology on certain aspects of the care and management of the persistent vegetative state patient. Adopted by the Executive Board, American Academy of Neurology, April 21, 1988, Cincinnati, Ohio. **Neurology** 1989 Jan;39(1):125–6
Guidelines on the vegetative state: commentary on the American Academy of Neurology statement. Munsat TL, et al. **Neurology** 1989 Jan;39(1):123–4
The neurologist's approach to alcoholism and drug abuse: outpatient care. Richter RW, et al. **Semin Neurol** 1987 Dec; 7(4):336–43 (26 ref.)
[The tasks and goals of pediatric neurology] Jeras J. **Neurologija** 1988;37(1–2):109–16 (Eng. Abstr.) **(Scr)**
[Current advances and perspectives in pediatric neurology] Križ M. **Neurologija** 1988;37(1–2):117–23 (Eng. Abstr.) **(Scr)**

EDUCATION

Residency training programs in child neurology and their accreditation. Bell WE. **J Child Neurol** 1989 Apr;4(2):80–3
[The present state and perspectives in postgraduate education in neurology] Hanzal F. **Cesk Neurol Neurochir** 1988 Sep; 51(5):333–5 **(Cze)**

HISTORY

Some reminiscences. Aird RB. **Arch Neurol** 1988 Oct; 45(10):1145–55
A neurological Wanderjahr. Aring CD. **Arch Neurol** 1989 Mar;46(3):326–9
The neurology in Shakespeare. Fogan L. **Arch Neurol** 1989 Aug;46(8):922–4
Training of the neurologist for the 21st century. Landau WM. **Arch Neurol** 1989 Jan;46(1):21–2
The first neurology book written in English (1650) by Robert Pemell. De Morbis Capitis. Pestronk A. **Arch Neurol** 1989 Feb;46(2):215–20
Harvard neurology, Boston City Hospital, and Peter Bent Brigham Hospital 1938–1942. Romano J. **Arch Neurol** 1988 Nov;45(11):1261–6
A tribute to Martinus Rulandus. A 16th-century description of benign focal epilepsy of childhood. van Huffelen AC. **Arch Neurol** 1989 Apr;46(4):445–7
What do you know about Joseph Babinski? Bélanger C. **Can J Neurol Sci** 1989 Feb;16(1):1–7 **(Eng, Fre)**
The neurological legacy of psychoanalysis: Freud as a neurologist. Miller NS, et al. **Compr Psychiatry** 1989 Mar–Apr;30(2):128–34
Obituary Marian W. Kies. Martenson RE, et al. **J Neuroimmunol** 1989 Jul;23(2):91–2
Ontogeny of neuroembryology. Hamburger V. **J Neurosci** 1988 Oct;8(10):3535–40
Neuropathology—then and now. Bailey OT. **JAMA** 1988 Nov 18;260(19):2891–3
Luigi Galvani, body electricity, and the 'galvanic skin response'. Boller F, et al. **Neurology** 1989 Jun;39(6):868–70
Between Magendie and Brown-Séquard: Isaäc van Deen's

spinal hemisections. Koehler PJ, et al. **Neurology** 1989 Mar; 39(3):446–8
Neurological sciences at their origin: neurology and neurological surgery in the medicine of ancient Egypt. Mazzone P, et al. **Pathologica** 1987 Nov–Dec; 79(1064):787–800
A gentleman of Bologna. Duchenne, Duchesne, etc. Goldblatt D. **Semin Neurol** 1988 Spring;8(1):115–6
Neurosonology pioneers. White DN. **Ultrasound Med Biol** 1988;14(7):541–61
[History of pediatric neurology in Czechoslovakia] Lesný I. **Cesk Neurol Neurochir** 1988 Jul;51(4):277–9 **(Cze)**
[Ideas on nervosity in the works of V. Kh. Vasilenko] Kanareĭkin KF, et al. **Klin Med (Mosk)** 1988 Jun;66(6):10–3 **(Rus)**
[I.P. Lebedev, neuromorphologist, neuropathologist and psychiatrist and his contribution to Russian neurology in the second part of the 19th century and the first decade of the 20th century] Arkhangel'skiĭ GV. **Zh Nevropatol Psikhiatr** 1988;88(9):127–30 **(Rus)**
[The man behind the "sign": the academicians were not supporting Babinski] Mellergård P, et al. **Lakartidningen** 1989 Jan 18;86(3):149–51 **(Swe)**

INSTRUMENTATION

The controlled application of cold and heat by a new device (Migra-lief apparatus) in the treatment of headache. Lance JW. **Headache** 1988 Aug;28(7):458–61

ORGANIZATION & ADMINISTRATION

[Specialized neurocardiology departments at a sanatorium—a new form of patient treatment organization] Velikanov II, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Jul–Aug; (4):48–51 (Eng. Abstr.) **(Rus)**

STANDARDS

Mental status examination of children with learning problems. Brunquell PJ, et al. **Pediatr Neurol** 1989 Jan–Feb;5(1):32–6
Neurology, neurosurgery, controlled trials and academic accountability [editorial] McDowell FH. **Stroke** 1988 Dec; 19(12):1463–5

TRENDS

Psychiatry: mindless or brainless, both or neither? Lipowski ZJ. **Can J Psychiatry** 1989 Apr;34(3):249–54
Studying the isolated central nervous system; a report on 35 years: more inquisitive than acquisitive. Kerkut GA. **Comp Biochem Physiol [A]** 1989;93(1):9–24 (260 ref.)
Researchers shifting focus to neurology in 1989. Souhrada L. **Hospitals** 1989 Jan 5;63(1):25
Facts and trends in cerebral blood flow and metabolism: synopsis of brain '89. Fieschi C, et al. **J Cereb Blood Flow Metab** 1989 Oct;9(5):573–8
The work of neurologists [editorial] Marsden CD. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):429
Whose responsibility? A call for active participation. 1989 American Academy of Neurology presidential address. Munsat TL. **Neurology** 1989 May;39(5):719–24
The new neuroanatomy of the spinal cord. Hughes JT. **Paraplegia** 1989 Apr;27(2):90–8 (35 ref.)
Child neurology and child psychiatry: current and future interfaces. Eisenhauer GL, et al. **Psychosomatics** 1989 Summer;30(3):332–6 (33 ref.)
[New possibilities in neuropsychiatry] Bolwig TG. **Ugeskr Laeger** 1989 May 22;151(21):1339–43 **(Dan)**
[Perestroika in neurology, psychiatry and narcology at the present-day stage] Denisov IN. **Zh Nevropatol Psikhiatr** 1989;89(5):3–10 **(Rus)**
[Toward the 8th All-Union Congress of Neuropathologists, Psychiatrists and Drug Abuse Specialists] Morozov GV. **Zh Nevropatol Psikhiatr** 1988;88(10):3–8 **(Rus)**

NEUROLYMPHOMATOSIS see **MAREK'S DISEASE**

NEUROLYMPHOMATOSIS VIRUS see **MAREK'S DISEASE VIRUS**

NEUROMA

Nerve cysts (neuroma/neuromata) [editorial] Reinherz RP, et al. **J Foot Surg** 1988 Nov–Dec;27(6):491–2
[Neuroma of the common bile duct (letter)] Pariente EA, et al. **Gastroenterol Clin Biol** 1989;13(2):222–30 **(Fre)**

ANALYSIS

Palisaded encapsulated neuroma: an immunohistochemical study. Albrecht S, et al. **Mod Pathol** 1989 Jul;2(4):403–6

COMPLICATIONS

Intracerebral pneumocephalus after ventriculoperitoneal shunt. Coraddu M, et al. **Acta Neurol (Napoli)** 1989 Feb; 11(1):42–5
Recalcitrant heel pain. Traumatic fibrosis versus heel neuroma. Beito SB, et al. **J Am Podiatr Med Assoc** 1989 Jul;79(7):336–9
Electroacupuncture therapy for stump neuroma pain. A case report. Sidlow CJ, et al. **J Am Podiatr Med Assoc** 1989 Jan;79(1):31–4
Palmar wrist pain caused by ulnar nerve entrapment in the flexor carpi ulnaris tendon. Zook EG, et al. **J Hand Surg [Am]** 1988 Sep;13(5):732–5
Large schwannoma of the psoas: a rare but treatable cause of chronic low back pain. Downey DB, et al. **J R Soc Med** 1989 Aug;82(8):504
Pain responses to perineuromal injection of normal saline, gallamine, and lidocaine in humans. Chabal C, et al. **Pain** 1989 Mar;36(3):321–5
Appendicovesical fistula associated with neuroma of the appendix. Lund PG, et al. **Urol Int** 1988;43(6):362–3
[A rare case of gastric neuroma as a cause of hemorrhage from the upper segment of the digestive tract] Stelmach E. **Wiad Lek** 1988 Apr 1;41(7):459–63 (Eng. Abstr.) **(Pol)**

DIAGNOSIS

T1 and T2 measurements of meningiomas and neuromas before and after Gd-DTPA. Watabe T, et al. **AJNR** 1989 May-Jun;10(3):463–70
Neuromas of the facial nerve. O'Donoghue GM, et al. **Am J Otol** 1989 Jan;10(1):49–54
Magnetic resonance images. Interdigital or Morton's neuroma. Sartoris DJ, et al. **J Foot Surg** 1989 Jan–Feb; 28(1):78–82
Intracranial hypoglossal neurinoma with extracranial extension: review and case report. Odake G. **Neurosurgery** 1989 Apr;24(4):583–7
Morton neuroma: sonographic evaluation. Redd RA, et al. **Radiology** 1989 May;171(2):415–7
[Surgical and echographic comparison in Morton's neuroma] Caruso S, et al. **Chir Organi Mov** 1988 Apr–Jun;73(2):145–7 (Eng. Abstr.) **(Ita)**

ETIOLOGY

Post-cone biopsy traumatic neuroma of the uterine cervix. Barua R. **Arch Pathol Lab Med** 1989 Aug;113(8):945–7
Traumatic neuroma following sagittal mandibular osteotomy. Chau MN, et al. **Int J Oral Maxillofac Surg** 1989 Apr; 18(2):95–8 (19 ref.)

METABOLISM

The bradykinin-induced release of substance P from nerve fibre endings in the rat saphenous nerve neuroma is not related to electrophysiological excitation. White DM, et al. **Neurosci Lett** 1988 Sep 23;92(1):108–13
Substance P-, CGRP- and NPY-immunoreactive nerve fibers in rat sciatic nerve-end neuromas. Fried K, et al. **Regul Pept** 1989 Apr;25(1):11–24

PATHOLOGY

Solitary circumscribed neuroma of the skin (so-called palisaded, encapsulated neuroma). A clinicopathologic and immunohistochemical study. Fletcher CD. **Am J Surg Pathol** 1989 Jul;13(7):574–80
Palisaded encapsulated neuromas. A clinicopathologic study. Dover JS, et al. **Arch Dermatol** 1989 Mar;125(3):386–9
Solitary bronchial mucosal neuroma. Miura H, et al. **Chest** 1989 Jan;95(1):245–7
Multiple endocrine neoplasia (MEN) type II b: report of a case observed at autopsy with immunohistochemical study of mucosal neuromas. Lesourd A, et al. **Clin Neuropathol** 1988 Sep-Oct;7(5):238–43

PHYSIOPATHOLOGY

Carbamazepine inhibits spontaneous activity in experimental neuromas. Burchiel KJ. **Exp Neurol** 1988 Nov; 102(2):249–53
Contrasting time course of catecholamine accumulation and of spontaneous discharge in experimental neuromas in the rat. Goldstein RS, et al. **Neurosci Lett** 1988 Nov 22; 94(1-2):58–63

PREVENTION & CONTROL

A new operation for the prevention and treatment of amputation neuromas. Martini A, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):379–82
Degenerative and regenerative processes in the peripheral nerve after disconnection and reanastomosis using the Neodym Yag laser. Mewe R, et al. **Neurosurg Rev** 1989; 12(2):151–6
Comparative study of neuroma formation in the rat sciatic nerve after CO2 laser and scalpel neurectomy in combination with milliwatt CO2 laser "sealing". Shapiro S, et al. **Surg Neurol** 1989 Oct;32(4):281–4

RADIOGRAPHY

Computed tomographic analysis of the intratemporal facial nerve and facial nerve neuromas. Shankar L, et al. **Can Assoc Radiol J** 1989 Jun;40(3):150–5
Stump neuroma masquerading as recurrent malignancy on chest roentgenogram. Donnal JF, et al. **Chest** 1989 Mar; 95(3):684–5
Trigeminal neuroma. A report of eleven cases. Bordi L, et al. **Surg Neurol** 1989 Apr;31(4):272–6

SURGERY

Recurrent pain following interdigital neurectomy—a plantar approach. Beskin JL, et al. **Foot Ankle** 1988 Aug;9(1):34–9
Plantar excision of primary interdigital neuromas. Karges DE. **Foot Ankle** 1988 Dec;9(3):120–4
Wandering nerve graft technique for management of the recalcitrant painful neuroma in the hand: a case report. Mackinnon SE. **Microsurgery** 1988;9(2):95–102
[Autoplasty of a large defect of the sciatic nerve long after its injury in a child] Govenko FS, et al. **Vestn Khir** 1989 Mar;142(3):74 **(Rus)**

THERAPY

A comparative analysis of conservative versus surgical treatment of Morton's neuroma. Gaynor R, et al. **J Am Podiatr Med Assoc** 1989 Jan;79(1):27–30
Experimental treatment of neuromas in the rat by retrograde axoplasmic transport of ricin with selective destruction of ganglion cells. Brandner MD, et al. **J Hand Surg [Am]** 1989 Jul;14(4):710–4

VETERINARY

Attempts to prevent equine post neurectomy neuroma formation through retrograde transport of two neurotoxins, doxorubicin and ricin. Cummings JF, et al. **Equine Vet J** 1988 Nov;20(6):451–6

NEUROMA, ACOUSTIC

Scandinavian Workshop in Skull Base Surgery. Selected papers on acoustic tumour diagnosis and treatment. Linköping 1986. **Acta Otolaryngol Suppl (Stockh)** 1988; 452:1–68
Unusual presentation of neurilemmoma in the cerebellopontine angle. De SK, et al. **J Laryngol Otol** 1989 May;103(5):508–11

BLOOD SUPPLY

Acoustic neurinoma presenting as intratumoral bleeding. Lee JP, et al. **Neurosurgery** 1989 May;24(5):764–8 (23 ref.)

COMPLICATIONS

The association of posterior capsular lens opacities with bilateral acoustic neuromas in patients with neurofibromatosis type 2. Kaiser-Kupfer MI, et al. **Arch Ophthalmol** 1989 Apr;107(4):541–4
Neurofibromatosis with ulnar nerve palsy and skull deformity. Rajendraretnam K, et al. **J Indian Med Assoc** 1988 Jul;86(7):200
Subarachnoid haemorrhage due to acoustic neurinoma. Case report and review of the literature. Arienta C, et al. **Neurochirurgia (Stuttg)** 1988 Sep;31(5):162–5 (52 ref.)
Uni-lateral hearing-loss with acoustic neuroma patients: electrocochleographic findings. Hesse G, et al. **Scand Audiol Suppl** 1988;30:229–32
[Value of the stapedial reflex in the diagnosis of a retrocochlear lesion] Dauman R, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(5):409–13 (20 ref.) (Eng. Abstr.) **(Fre)**
["Presenile" dementia in a 64-year-old patient. Hydrocephalus as a sequela of left sided acoustic neuroma] von Albert HH. **Fortschr Med** 1989 Jun 10;107(17):378–9 (Eng. Abstr.) **(Ger)**
[Clinical and electromyographic features of "intermittent tonic facial spasm" due to acoustic neurinoma. Report of two cases] Sugiura Y, et al. **Neurol Med Chir (Tokyo)** 1988 Dec;28(12):1198–202 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Vestibular investigations in acoustic neuroma. Hulshof JH, et al. **Acta Otolaryngol (Stockh)** 1989 Jul–Aug; 108(1-2):38–44
Audiovestibular tests in the diagnosis of cerebellopontine angle tumours. Harder H. **Acta Otolaryngol Suppl (Stockh)** 1988;452:5–11
Otoneurological diagnostics in posterior fossa lesions. Odkvist LM. **Acta Otolaryngol Suppl (Stockh)** 1988; 452:12–5 (19 ref.)
Diagnostic strategies in search for acoustic neuromas. Findings in 300 acoustic neuroma patients. Thomsen J, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;452:16–25
Acoustic neuromas. Diagnostic delay, growth rate and possible non-surgical treatment. Thomsen J, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;452:26–33
Multicystic acoustic neuroma. Case report and differential diagnosis. Drapkin AJ, et al. **Acta Radiol** 1989 Jan–Feb; 30(1):7–9
T1 and T2 measurements of meningiomas and neuromas before and after Gd-DTPA. Watabe T, et al. **AJNR** 1989 May-Jun;10(3):463–70
Gadolinium-enhanced facial nerves: accompanying bilateral acoustic tumors in patient with neurofibromatosis. Dolan KD, et al. **Ann Otol Rhinol Laryngol** 1989 Sep;98(9):747–8
Clinico-statistical study on acoustic tumors with sudden hearing loss. Yoshimoto Y. **Auris Nasus Larynx** 1988; 15(3):165–71
Disposable electrodes in auditory brainstem response audiometry. Baguley DM, et al. **Br J Audiol** 1988 Aug; 22(3):219–21
Magnetic resonance imaging of acoustic neuromas: the role of gadolinium-DTPA. Stack JP, et al. **Br J Radiol** 1988 Sep;61(729):800–5
GdMRI—good value at 150 DM a vial? [editorial] Phelps PD. **Clin Otolaryngol** 1989 Feb;14(1):1–2
The utility of contrast media in MRI at 0.02 T. A preliminary

report. Kormano M, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S289–91

Aneurysm of the anterior inferior cerebellar artery mimicking an intracanalicular acoustic neuroma. Gleeson MJ, et al. **J Laryngol Otol** 1989 Jan;103(1):107–10

Strategy and benefits of acoustic neuroma searching. Moffat DA, et al. **J Laryngol Otol** 1989 Jan;103(1):51–9

Early diagnosis of acoustic neuroma. Gorman WF. **J Okla State Med Assoc** 1988 May;81(5):283–7 (27 ref.)

Gadolinium-enhanced magnetic resonance imaging in temporal bone lesions. Millen SJ, et al. **Laryngoscope** 1989 Mar;99(3):257–60

Auditory brainstem response [letter; comment] Smith SA. **Laryngoscope** 1989 Jun;99(6 Pt 1):665. **Comment on:** Laryngoscope 1989 Jan;99(1):10–4

Diagnosis, size, and operation results in 41 acoustic neurinomas. Mrázek J, et al. **Neoplasma** 1988;35(4):467–74

Comparison between air CT and MRI in the detection of small acoustic neurinomas. Kamei T, et al. **Radiat Med** 1989 Jan–Feb;7(1):16–22

Neurofibromatosis types 1 and 2: cranial MR findings. Aoki S, et al. **Radiology** 1989 Aug;172(2):527–34

Screening for retrocochlear pathology. Mair IW, et al. **Scand Audiol** 1988;17(3):163–9

Calcified acoustic neuroma. Beskin RR, et al. **South Med J** 1989 Aug;82(8):1048–50

[Comprehensive diagnosis of tumors of the statoacoustic nerve] Hahn A, et al. **Cesk Otolaryngol** 1989 Mar;38(2):65–9 (Eng. Abstr.) **(Cze)**

[Neurinoma of the acoustic nerve diagnosed at the otoneurologic laboratory of the Regional Hospital with Polyclinic in Ostrava] Mrázek J. **Cesk Otolaryngol** 1989 Mar;38(2):70–7 (Eng. Abstr.) **(Cze)**

[Radiologic imaging in acoustic neurinoma] Darrouzet V, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(5):421–7 (16 ref.) (Eng. Abstr.) **(Fre)**

[Initial clinical symptoms of acoustic neurinoma] Portmann M, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(5):401–4 (Eng. Abstr.) **(Fre)**

[Diagnosis of von Recklinghausen's neurofibromatosis (letter)] Pulst SM. **Dtsch Med Wochenschr** 1989 Apr 21; 114(16):647–8 **(Ger)**

[Diagnosis of acoustic neuroma] Messing B, et al. **Nervenarzt** 1989 Jul;60(7):407–13 (Eng. Abstr.) **(Ger)**

[Gadolinium DTPA in a MR study of expansive lesions of the cranial base] Bartolozzi C, et al. **Radiol Med (Torino)** 1988 Sep;76(3):152–7 (Eng. Abstr.) **(Ita)**

[Diagnosis and surgical results of brain tumor in early stage] Kubo T, et al. **Nippon Rinsho** 1989 May;47(5):1190–6 **(Jpn)**

[Magnetic resonance imaging of acoustic neuroma] Kashihara K, et al. **Rinsho Hoshasen** 1989 Mar;34(3):329–34 (Eng. Abstr.) **(Jpn)**

[Comparison of the clinical manifestations of neurinoma of the 8th nerve with their size] Blagoveshchenskaia NS, et al. **Zh Vopr Neirokhir** 1988 Nov–Dec;(6):20–5 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Noise trauma in the aetiology of acoustic neuromas in men in Los Angeles County, 1978–1985. Preston-Martin S, et al. **Br J Cancer** 1989 May;59(5):783–6

GENETICS

Lack of chromosome 22 rearrangements in lymphocytes of patients with bilateral acoustic neurofibromatosis [letter] Faustinella F, et al. **Cancer Genet Cytogenet** 1989 May; 39(1):137–8

Cytogenetic and in situ DNA-hybridization studies in intracranial tumors of a patient with central neurofibromatosis. Wullich B, et al. **Hum Genet** 1989 Apr; 82(1):31–4

Elevated expression of basic fibroblast growth factor messenger ribonucleic acid in acoustic neuromas. Murphy PR, et al. **Mol Endocrinol** 1989 Feb;3(2):225–31

Occurrence of both neurofibromatoses 1 and 2 in the same individual with a rapidly progressive course. Sadeh M, et al. **Neurology** 1989 Feb;39(2 Pt 1):282–3

IMMUNOLOGY

An immunohistochemical study of the endolymphatic sac in patients with acoustic tumors. Bui HT, et al. **Laryngoscope** 1989 Aug;99(8 Pt 1):775–8

PATHOLOGY

Histologic findings in two very small intracanalicular solitary schwannomas of the eighth nerve: II. "Onion bulbs". Neely JG, et al. **Am J Otol** 1988 May;9(3):216–21

Growth rate of acoustic neuromas. Valvassori GE, et al. **Am J Otol** 1989 May;10(3):174–6

Neurofibromatosis type II of the head and neck. Costantino PD, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar; 115(3):380–3

The involvement of the cochlear nerve in neurinomas of the eighth cranial nerve. Forton G, et al. **Arch Otorhinolaryngol** 1989;246(3):156–60

Atypical morphological components in a tumor of the cerebello-pontine angle. Matyja E, et al. **Neuropatol Pol** 1988;26(4):581–8

[Cell kinetics of human meningiomas and neurinomas—Ki-67 PAP stain] Shibata T, et al. **No Shinkei Geka** 1988 Jul; 16(8):939–44 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

The relationship between caloric response, oculomotor dysfunction and size of cerebello-pontine angle tumours. Bergenius J, et al. **Acta Otolaryngol (Stockh)** 1988 Nov–Dec;106(5–6):361–7

Evoked otoacoustic emissions in patients with acoustic neuromas. Bonfils P, et al. **Am J Otol** 1988 Sep;9(5):412–7

Normal brain-stem auditory evoked potentials with abnormal latency-intensity studies in patients with acoustic neuromas. Legatt AD, et al. **Arch Neurol** 1988 Dec; 45(12):1326–30 (35 ref.)

False-negative brainstem auditory evoked potential recordings in a case of multiple acoustic neuroma. Buettner UW, et al. **Eur Arch Psychiatry Neurol Sci** 1988 Sep; 237(6):343–6

Contribution of the otoliths to the calculation of linear displacement. Israël I, et al. **J Neurophysiol** 1989 Jul; 62(1):247–63

Normal auditory brainstem response in patients with acoustic neuroma [see comments] Telian SA, et al. **Laryngoscope** 1989 Jan;99(1):10–4. **Comment in:** Laryngoscope 1989 Jun;99(6 Pt 1):665

[Electrophysiologic study of auditory pathways in acoustic neurinoma] Dauman R, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(5):415–20 (21 ref.) (Eng. Abstr.) **(Fre)**

[Standard speech and pure-tone audiometry in acoustic neurinoma (statistical study of 120 cases)] Portmann M, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(5):405–8 (14 ref.) (Eng. Abstr.) **(Fre)**

[Changes in the compound action potential in patients with acoustic neuroma] Hesse G, et al. **HNO** 1988 May; 36(5):193–7 (Eng. Abstr.) **(Ger)**

[Changes in the sensitivity of the cornea in patients with intracerebral tumors. Studies of patients with meningioma of the cranial base and neurinoma of the trigeminal nerve and the vestibulocochlear nerve using the Draeger esthesiometer] Heller H, et al. **Klin Monatsbl Augenheilkd** 1988 Oct;193(4):356–9 (Eng. Abstr.) **(Ger)**

[Auditory brain stem responses in the posterior fossa tumor patients] Takizawa Y, et al. **Rinsho Byori** 1989 Feb; 37(2):199–204 **(Jpn)**

[Orthostatic reactions of cerebral and systemic circulation in patients with tumors of the posterior cranial fossa operated on in a sitting position] Sokolovskaia IE, et al. **Anesteziol Reanimatol** 1988 Sep–Oct;(5):23–7 (Eng. Abstr.) **(Rus)**

[Value of dynamic recording of short-latency auditory evoked potentials in the diagnosis and pathogenetic characteristics of hearing loss in acoustic neuroma] Sagalovich BM, et al. **Vestn Otorinolaringol** 1989 Jan–Feb; (1):15–20 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Imaging patients with suspected acoustic neuroma [letter] Swan IR, et al. **Lancet** 1989 Jan 28;1(8631):219

RADIOGRAPHY

Computed tomography of the internal auditory canals. Tawn DJ, et al. **Bristol Med Chir J** 1988 Feb;103(1):13–5

Temporal bone venous anomaly of surgical significance. Shotton JC, et al. **J Laryngol Otol** 1989 Jan;103(1):101–6

CT air meatography: review of side effects in 60 patients. Smith IM, et al. **J Laryngol Otol** 1989 Feb;103(2):173–4

Imaging patients with suspected acoustic neuroma [editorial] **Lancet** 1988 Dec 3;2(8623):1294

Bilateral 'acoustic' neuromas. Kreel L. **Postgrad Med J** 1988 Jun;64(752):447–9

Plain radiography and tomography of the internal auditory canal for the diagnosis of acoustic neuroma. Pyhtinen J, et al. **Rontgenblatter** 1989 Aug;42(8):339–42

[CT diagnosis of acoustic neuroma of cerebellopontine angle (analysis of 204 cases)] Chen XR. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Apr;23(2):75–8 (Eng. Abstr.) **(Chi)**

[Diagnostic value of computer tomographic pneumomeatocisternography] Dutka J, et al. **Cesk Radiol** 1988 Nov;42(6):396–401 (Eng. Abstr.) **(Cze)**

[A new CT technic in the study of intracanalicular neurinoma of the acoustic nerve. Preliminary report] Ettorre GC, et al. **Radiol Med (Torino)** 1988 Sep;76(3):206–9 (Eng. Abstr.) **(Ita)**

[A vascular loop in the cerebellopontile angle simulating neurinoma of the acoustic nerve] Kuznetsov SV. **Vestn Otorinolaringol** 1989 Mar–Apr;(2):38–9 **(Rus)**

[Computerized pneumoencephalographic cysternography in the diagnosis of acoustic neurinoma] Meli FJ, et al. **Medicina (B Aires)** 1988;48(1):12–6 (Eng. Abstr.) **(Spa)**

RADIOTHERAPY

Audiological findings after stereotactic radiosurgery in acoustic neurinomas. Hirsch A, et al. **Acta Otolaryngol (Stockh)** 1988 Sep–Oct;106(3–4):244–51

Audiologic findings after stereotactic radiosurgery in acoustic neurinomas. Hirsch A, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:17

Gamma knife: an alternative treatment for acoustic neurinomas. Kamerer DB, et al. **Ann Otol Rhinol Laryngol** 1988 Nov–Dec;97(6 Pt 1):631–5

SURGERY

Two cases of painters operated more than ten years ago for intracranial lesions. Evolution of their artistic production. Foroglou G, et al. **Acta Neurochir Suppl (Wien)** 1988; 44:84–92

Intraoperative monitoring of the electrocochleogram and the preservation of hearing during acoustic neuroma excision. Symon L, et al. **Acta Neurochir Suppl (Wien)** 1988;42:27–30

The small acoustic tumour; a chance to preserve hearing. Compton JS, et al. **Acta Neurochir (Wien)** 1989; 98(3–4):115–7

Neurophysiologic monitoring in posterior fossa surgery. I. Technical principles, applicability and limitations. Schramm J, et al. **Acta Neurochir (Wien)** 1989;98(1–2):9–18

Neurophysiologic monitoring in posterior fossa surgery. II. BAEP-waves I and V and preservation of hearing. Watanabe E, et al. **Acta Neurochir (Wien)** 1989; 98(3–4):118–28

Hearing preservation in acoustic neuroma surgery and postoperative audiological findings. Kanzaki J, et al. **Acta Otolaryngol (Stockh)** 1989 May–Jun;107(5–6):474–8

Translabyrinthine acoustic neuroma surgery as performed by the otoneurosurgical group at Lund University Hospital. Mercke U, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 452:34–7

Acoustic neuroma surgery in northern Finland. Nyström S, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;452:52–6

Middle fossa operation and suboccipital operation for removal of acoustic neuromas. Tos M, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:21–2

Is preservation of hearing in acoustic neuroma worthwhile? Tos M, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 452:57–68

Ten years' experience with translabyrinthine acoustic neuroma surgery in Denmark. Tos M, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:23–4

Results of translabyrinthine removal of 300 acoustic neuromas related to tumour size. Tos M, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;452:38–51

Insights of patient following bilateral acoustic tumor surgery with bilateral deficits in hearing, balance, and facial function [letter] Miller RE. **Am J Otol** 1988 Sep;9(5):427–9

Neurophysiologic intraoperative monitoring: II. Facial nerve function. Niparko JK, et al. **Am J Otol** 1989 Jan;10(1):55–61 (23 ref.)

Age considerations in acoustic neuroma surgery: the horns of a dilemma. Wiet RJ, et al. **Am J Otol** 1989 May; 10(3):177–80

Cochlear nerve action potentials during cerebellopontine angle surgery: relationship of latency, amplitude, and threshold measurements to hearing. Stanton SG, et al. **Ear Hear** 1989 Feb;10(1):23–8

Role of post-operative electroneuronography in predicting facial nerve recovery after acoustic neuroma removal: a pilot study. Croxson GR, et al. **J Laryngol Otol** 1989 Jan; 103(1):60–2

Facial nerve recovery after acoustic neuroma removal. Moffat DA, et al. **J Laryngol Otol** 1989 Feb;103(2):169–72

Endaural extracranial repair for cerebrospinal otorrhoea with human fibrin glue: technical note. Ferrante L, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1438–40

The effect of transportation between the recovery room and intensive care unit on postoperative acoustic tumor patients. Hamm CW, et al. **J Neurosci Nurs** 1988 Oct;20(5):303–8

Hearing preservation after resection of acoustic neuroma: a review. Rabb CH. **J Okla State Med Assoc** 1989 Apr; 82(4):155–8 (22 ref.)

Use of bacitracin for neurotologic surgery. Kartush JM, et al. **Laryngoscope** 1988 Oct;98(10):1050–4

Management of neurovascular complications in extended skull base surgery. Leonetti JP, et al. **Laryngoscope** 1989 May;99(5):492–6

Middle fossa acoustic tumor surgery: results in 106 cases. Shelton C, et al. **Laryngoscope** 1989 Apr;99(4):405–8

Delayed diagnosis and treatment of acoustic neuroma. Traquina DN, et al. **Laryngoscope** 1989 Aug;99(8 Pt 1):814–8

Acoustic neuroma—the patient's perspective: subjective assessment of symptoms, diagnosis, therapy, and outcome in 541 patients. Wiegand DA, et al. **Laryngoscope** 1989 Feb; 99(2):179–87

Trochlear nerve meningioma in von Recklinghausen's disease. Tada T, et al. **Neurochirurgia (Stuttg)** 1988 Nov; 31(6):226–7

Cochlear nerve conduction block: an explanation for spontaneous hearing return after acoustic tumor surgery. Kveton JF, et al. **Otolaryngol Head Neck Surg** 1989 Jun; 100(6):594–601

Complications of translabyrinthine vs. suboccipital approach for acoustic tumor surgery. Mangham CA. **Otolaryngol Head Neck Surg** 1988 Oct;99(4):396–400

The effect of acoustic neuroma removal on hearing in the contralateral ear. Barratt HJ, et al. **Scand Audiol** 1988; 17(3):137–42

Surgical management of acoustic neuromas during the last five years: Parts I and II [letter] Lye RH, et al. **Surg Neurol** 1988 Nov;30(5):413

Acoustic neuroma surgery in Northern Ireland 1976–1986. Lang J, et al. **Ulster Med J** 1988 Oct;57(2):141–8

[Distant epidural hematomas after removal of acoustic neurinomas] Luan WZ. **Chung Hua Wai Ko Tsa Chih** 1988 May;26(5):297–8, 319 (Eng. Abstr.) **(Chi)**

[Management of recurrent acoustic neuromas] Zhou LF. **Chung Hua Wai Ko Tsa Chih** 1988 Aug;26(8):491–3, 511 (Eng. Abstr.) **(Chi)**

[Life-threatening complications and severe neurologic sequelae in surgery of acoustic neurinoma] Sterkers JM. **Ann Otolaryngol Chir Cervicofac** 1989;106(4):245–50 (Eng. Abstr.) **(Fre)**

[Problem of the preservation of hearing in acoustic neuroma. Value of the mixed supra petrous and retrosigmoid approach] Vaneecloo FM, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(1):5–11 (Eng. Abstr.) **(Fre)**

[Acoustic neurinoma. What surgical approach?] Bébéar JP, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(5):429–33 (20 ref.) (Eng. Abstr.) **(Fre)**

[Preservation of the functions of facial and cochlear nerves after excision of acoustic neurinoma] Portmann M, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(5):437–41 (22 ref.) (Eng. Abstr.) **(Fre)**

[Function-saving microsurgery in suboccipital removal of large acoustic neuromas] Strauss C, et al. **HNO** 1989 Jul; 37(7):281–6 (Eng. Abstr.) **(Ger)**

[Pre- and postoperative hearing thresholds and brain stem potential in acoustic neuroma. Is neuroma-induced hearing loss reversible?] Höhmann D. **Laryngol Rhinol Otol (Stuttg)** 1988 Dec;67(12):629–33 (Eng. Abstr.) **(Ger)**

[Meatotomy by the retrosigmoid approach to the cerebellopontile angle: an anatomo-surgical study] Magliulo G, et al. **Acta Otorhinolaryngol Ital** 1988 Sep–Oct; 8(5):525–32 (Eng. Abstr.) **(Ita)**

[Operative results in 45 cases of acoustic neurinoma: technical comments on the preservation of the facial nerve and hearing function] Morita A, et al. **No Shinkei Geka** 1988 Jun;16(7):811–8 (30 ref.) (Eng. Abstr.) **(Jpn)**

[Intraoperative electrophysiological monitoring for hearing preservation in acoustic neurinoma surgery] Ohira T, et al. **No To Shinkei** 1988 Jun;40(6):553–60 (Eng. Abstr.) **(Jpn)**

THERAPY

Management of bilateral acoustic tumors. Glasscock ME 3d, et al. **Laryngoscope** 1989 May;99(5):475–84

ULTRASTRUCTURE

Histological structures of bilateral acoustic tumors. Kitamura K, et al. **Adv Otorhinolaryngol** 1988;42:172–6

NEUROMA, ACOUSTIC, BILATERAL see **NEUROMA, ACOUSTIC**

NEUROMEDIATOR RECEPTORS see **RECEPTORS, NEUROHUMOR**

NEUROMODULATOR RECEPTORS see **RECEPTORS, NEUROHUMOR**

NEUROMODULATORS see **NEUROREGULATORS**

NEUROMUSCULAR BLOCKING AGENTS

Neuromuscular blockade with vecuronium in paediatric patients with burn injury. Mills AK, et al. **Br J Clin Pharmacol** 1989 Aug;28(2):155–9

Aztreonam: absence of neuromuscular blocking activity. Crassaris LG, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):314–5

The neuromuscular blocking effect of dibekacin and its reversal by Ca2+ and drugs in the isolated rat phrenic-hemidiaphragm preparation. Baños JE, et al. **Gen Pharmacol** 1989;20(4):507–11

Pancuronium-phenytoin interaction: a case of decreased duration of neuromuscular blockade. Liberman BA, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Aug;26(8):371–4

Hypaconitine, the dominant constituent responsible for the neuromuscular blocking action of the Japanese-sino medicine "bushi" (aconite root). Kimura M, et al. **Jpn J Pharmacol** 1988 Oct;48(2):290–3

Neuromuscular blocking agents [letter] Mishkin D, et al. **Milit Med** 1988 Nov;153(11):595–6

Assessment of neuromuscular blockade produced by atracurium in the rat diaphragm preparation. Measurements of tetanic fade, depression and recovery profile. Wali FA, et al. **Pharmacol Res** 1989 Mar–Apr;21(2):231–8

[Predictive value of intradermal tests using muscle-relaxing drugs] Leynadier F, et al. **Ann Fr Anesth Reanim** 1989; 8(2):98–101 (Eng. Abstr.) **(Fre)**

[Lathyrism and anesthesia: apropos of a case (letter)] Keenoy PM, et al. **Rev Esp Anestesiol Reanim** 1989 Mar–Apr; 36(2):124 **(Spa)**

ADMINISTRATION & DOSAGE

Indications for paralysis in ventilated patients. Willatts S. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):231–4

Computerized feedback autoregulation of neuromuscular blockade. Yeh TS, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun; 26(2):123–30

Paralyzed with pain: the need for education. Loper KA, et al. **Pain** 1989 Jun;37(3):315–6

[Constant-flow drug administration in anesthesia] Richard JP, et al. **Cah Anesthesiol** 1988 Sep;36(5):365–6 (Eng. Abstr.) **(Fre)**

ADVERSE EFFECTS

Cardiovascular effects of pipecuronium and pancuronium in patients undergoing coronary artery bypass grafting. Tassonyi E, et al. **Anesthesiology** 1988 Nov;69(5):793–6

Prick tests to diagnose anaphylaxis [letter] Leynadier F. **Br J Anaesth** 1988 Sep;61(3):365–6

ANALYSIS

Determination of Arduan and its desacetyl metabolites in biological fluids. Gábor S, et al. **Acta Pharm Hung** 1989 Jul;59(4):167–72

PHARMACOKINETICS

Noncompartmental pharmacokinetic analysis of nondepolarising neuromuscular blocking agents. Moulaert P, et al. **Acta Anaesthesiol Belg** 1988;39(4):267–9

The influence of renal failure on the pharmacokinetics and duration of action of pipecuronium bromide in patients anesthetized with halothane and nitrous oxide. Caldwell JE, et al. **Anesthesiology** 1989 Jan;70(1):7–12

Pipecuronium and pancuronium: comparison of pharmacokinetics and duration of action. Caldwell JE, et al. **Br J Anaesth** 1988 Dec;61(6):693–7

Pharmacokinetics and disposition of pipecuronium bromide in the cat. Agoston S, et al. **Eur J Anaesthesiol** 1988 Jul; 5(4):233–42

PHARMACOLOGY

Pharmacological profile of neuromuscular blocking agents: present and future trends. Agoston S. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):235–7

Cardiovascular effects of vecuronium, atracurium, pancuronium, metocurine and RGH-4201 in dogs. Hackett GH, et al. **Acta Anaesthesiol Scand** 1989 May;33(4):298–303

Doxacurium chloride for neuromuscular blockade before tracheal intubation and surgery during nitrous oxide–oxygen–narcotic–enflurane anesthesia. Lennon RL, et al. **Anesth Analg** 1989 Mar;68(3):255–60

Dose-response relation and time course of action of pipecuronium bromide in humans anesthetized with nitrous oxide and isoflurane, halothane, or droperidol and fentanyl. Wierda JM, et al. **Anesth Analg** 1989 Mar;68(3):208–13

Manual evaluation of residual curarization using double burst stimulation: a comparison with train-of-four. Drenck NE, et al. **Anesthesiology** 1989 Apr;70(4):578–81

Exercise produces sensitivity to metocurine. Gronert GA, et al. **Anesthesiology** 1989 Jun;70(6):973–7

The effects of succinylcholine on doxacurium-induced neuromuscular blockade. Katz JA, et al. **Anesthesiology** 1988 Oct;69(4):604–7

A comparison of the neuromuscular blocking and autonomic effects of two new short-acting muscle relaxants with those of succinylcholine in the anesthetized cat and pig. Muir AW, et al. **Anesthesiology** 1989 Mar;70(3):533–40

Pipecuronium-induced neuromuscular blockade during nitrous oxide-fentanyl, isoflurane, and halothane anesthesia in adults and children. Pittet JF, et al. **Anesthesiology** 1989 Aug;71(2):210–3

Cimetidine and succinylcholine: potential interaction and effect on neuromuscular blockade in man. Stirt JA, et al. **Anesthesiology** 1988 Oct;69(4):607–8

Use of the post-tetanic count to monitor recovery from intense neuromuscular blockade in children. Gwinnutt CL, et al. **Br J Anaesth** 1988 Nov;61(5):547–50

Differing interactions between hexamethonium and tubocurarine, pancuronium or alcuronium at the neuromuscular junction. Pollard BJ, et al. **Br J Anaesth** 1988 Oct;61(4):419–24

Neuromuscular blocking drugs. Bevan DR. **Can Anaesth Soc J** 1983 May;30(3 Pt 2):S56–61 (24 ref.)

Neuromuscular blocking action of verapamil in cats. Kraynack BJ, et al. **Can Anaesth Soc J** 1983 May;30(3 Pt 1):242–7

Effects of partial neuromuscular blockade on sympathetic nerve responses to static exercise in humans. Victor RG, et al. **Circ Res** 1989 Aug;65(2):468–76

Train-of-four fade during neuromuscular blockade induced by tubocurarine, succinylcholine or alpha-bungarotoxin in the rat isolated hemidiaphragm. Cheah LS, et al. **Clin Exp Pharmacol Physiol** 1988 Dec;15(12):937–43

Neuromuscular blocking activity of 6-phenylphenanthridine-3,8-bis-(tri-methylammonium) iodide (compound 76-805). Mukherjee KC, et al. **Indian J Exp Biol** 1988 Jul;26(7):535–7

Neuromuscular blocking agents. Lingle CJ, et al. **Int Anesthesiol Clin** 1988 Winter;26(4):288–301 (96 ref.)

Comparison of neuromuscular blockade in upper facial and hypothenar muscles. Paloheimo MP, et al. **J Clin Monit** 1988 Oct;4(4):256–60

A dose-response evaluation of pipecuronium bromide in elderly patients under balanced anesthesia. Azad SS, et al. **J Clin Pharmacol** 1989 Jul;29(7):657–9

Neuromuscular blocking drugs. Bruton-Maree N. **J Neurosci Nurs** 1989 Jun;21(3):198–200 (6 ref.)

beta-eudesmol (a main component of Atractylodes lancea)-induced potentiation of depolarizing neuromuscular blockade in diaphragm muscles of normal and diabetic mice. Muroi M, et al. **Jpn J Pharmacol** 1989 May;50(1):69–71

Neuromuscular blockers in patients with burns. **Lancet** 1988 Oct 29;2(8618):1003–4 (16 ref.)

Recovery of hippocampal cholinergic activity by transplantation of septal neurons in AF64A treated rats. Ikegami S, et al. **Neurosci Lett** 1989 Jun 5;101(1):17–22

[Effects of ethylcholine mustard aziridinium ion (AF64A) administered intraperitoneally on cholinergic nerves in rat brain] Nishio H, et al. **Nippon Yakurigaku Zasshi** 1988 Dec; 92(6):349–58 (Eng. Abstr.) **(Jpn)**

POISONING

A suicide with neuromuscular blocker. Varga M, et al. **Z Rechtsmed** 1988;100(2–3):223–6

THERAPEUTIC USE

Fetal neuromuscular blockade [letter] Taslimi MM, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1598

Train-of-four fade of non depolarizing muscle relaxants: an insight into the mechanism of precurarization. Erkola O. **Ann Fr Anesth Reanim** 1988;7(4):299–304

Myoneural blockers and suxamethonium [letter] Eisenkraft JB, et al. **Br J Anaesth** 1988 Nov;61(5):642

NEUROMUSCULAR DEPOLARIZING AGENTS

Elevation of intracellular cyclic AMP concentration fails to inhibit adrenaline-induced hyperpolarization in amphibian sympathetic neurons. Zidichouski JA, et al. **Br J Pharmacol** 1989 Apr;96(4):779–84

Tetrodotoxin-unaffected depolarization of frog muscles induced by the venom of jellyfish (Genus aurelia). Kihara H, et al. **Jpn J Physiol** 1988;38(6):839–49

The depolarizing action of 5-hydroxytryptamine on rabbit isolated preganglionic cervical sympathetic nerves. Elliott P, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Dec; 338(6):608–15

Does treatment with haloperidol for 3 weeks produce depolarization block in midbrain dopamine neurons of unanaesthetized rats? Andén NE, et al. **Psychopharmacology (Berlin)** 1988;96(4):558–60

Pertussis toxin-insensitive mechanism for carbachol-induced depolarization and positive inotropic effect in heart muscle. Pappano AJ, et al. **Trends Pharmacol Sci** 1988 Feb; Suppl:35–9 (26 ref.)

ANALYSIS

Confirmation of domoic acid in molluscan shellfish by chemical derivatization and reversed-phase liquid chromatography. Lawrence JF, et al. **J Chromatogr** 1989 Jan 13;462:419–25

ANTAGONISTS & INHIBITORS

Quinoxalinediones selectively block quisqualate and kainate receptors and synaptic events in rat neocortex and hippocampus and frog spinal cord in vitro. Fletcher EJ, et al. **Br J Pharmacol** 1988 Oct;95(2):585–97

L-alpha-aminodipate antagonizes the priming effect of quisqualate in hippocampal slices. Harris EW. **Eur J Pharmacol** 1989 Feb 14;161(1):107–9

PHARMACOLOGY

Inhibitory effect of 1,2,3,4-tetrahydro-9-aminoacridine on the depolarization-induced release of GABA from cerebral cortex. de Belleroche J, et al. **Br J Pharmacol** 1988 Aug; 94(4):1017–9

Effects of an inhibitor of the synaptic vesicle acetylcholine transport system on quantal neurotransmitter release: an electrophysiological study. Lupa MT. **Brain Res** 1988 Sep 27;461(1):118–26

A voltage clamp study of the glutamate responsive neuromuscular junction in Drosophila melanogaster. McLarnon JG, et al. **Can J Physiol Pharmacol** 1988 Apr; 66(4):321–7

A comparison of the actions of 4-aminopyridine, caffeine and quinine on the toad isolated rectus abdominis muscle. Savage AO. **Comp Biochem Physiol [C]** 1989;92(1):27–33

GABAB autoreceptors in rat cortex synaptosomes: response under different depolarizing and ionic conditions. Bonanno G, et al. **Eur J Pharmacol** 1989 Mar 7;172(1):41–9

Effect of 4-aminopyridine on the postsynaptic action of polymyxin B. Brazil OV, et al. **Eur J Pharmacol** 1989 Jan 2;159(1):47–51

Quisqualate, high calcium concentration and zero-chloride prevent kainate-induced toxicity of cerebellar granule cells. McCaslin PP, et al. **Eur J Pharmacol** 1988 Aug 2; 152(3):341–6

Acetylcholine synthesis by a sympathetic ganglion in the presence of 2-(4-phenylpiperidino)cyclohexanol (AH5183) and picrylsulfonic acid. Mykita S, et al. **J Neurochem** 1989 Jun;52(6):1686–93

Effects of 2-(4-phenylpiperidino)cyclohexanol (AH5183) and barium ions on frog neuromuscular transmission.

Maeno T, et al. **J Physiol (Lond)** 1988 Jul;401:671–85

Phosphoinositide hydrolysis induced by depolarization and sodium channel activation in mouse cerebrocortical slices. Benuck M, et al. **Neuropharmacology** 1989 Aug; 28(8):847–54

5-Hydroxytryptamine depolarizes neonatal rat motorneurones through a receptor unrelated to an identified binding site. Connell LA, et al. **Neuropharmacology** 1989 Jun;28(6):625–34

Preventive action of quisqualic acid against grayanotoxin-induced suppression of locomotor activity in mice. Ohgaki T, et al. **Neuropharmacology** 1988 Oct; 27(10):1045–53

Solubilization of stereospecific and quisqualate-sensitive activity of [3H]glutamate binding in the pituitary of the rat. Yoneda Y, et al. **Neuropharmacology** 1989 Jun; 28(6):611–6

POISONING

Toxicology of mussels contaminated by neuroexcitant domoic acid [letter] Glavin G, et al. **Lancet** 1989 Mar 4; 1(8636):506–7

THERAPEUTIC USE

[Akinesia of the eyeball by the use of diplacin] Bobrova GV. **Vestn Oftalmol** 1988 Sep–Oct;104(5):26–9 (Eng. Abstr.) **(Rus)**

NEUROMUSCULAR DISEASES

Correlation between specific histological and electromyographic findings in neuromuscular disorders. Werneck LC, et al. **Arq Neuropsiquiatr** 1988 Sep; 46(3):264–71

Muscular dystrophy and related diseases. Proceedings of the Second Australian Rotary Health Research Fund Conference. Sydney, 26–28 November 1986. **Aust Paediatr J** 1988;24 Suppl 1:1–115

Scientific meeting of The Netherlands Society of Neurology. Garderen, 11–12th December 1987. Abstracts [published erratum appears in Clin Neurol Neurosurg 1988;90(3):306] **Clin Neurol Neurosurg** 1988;90(2):184–92

Third European meeting of neuropathology. Verona, September 27–29, 1988. Abstracts. **Clin Neuropathol** 1988 Jul–Aug;7(4):139–223

Neuromuscular disorders in the newborn. Roland EH. **Clin Perinatol** 1989 Jun;16(2):519–47 (75 ref.)

Research progress in motor neuron diseases. Rowland LP. **Rev Neurol (Paris)** 1988;144(11):623–9 (90 ref.)

Neuromuscular diseases. Hopkins LC. **Trans Assoc Life Insur Med Dir Am** 1989;72:111–8 (0 ref.)

[The anterior horn of the spinal cord and its pathology. International Neurology Meeting. Paris, 11–12 June 1987. Proceedings] **Rev Neurol (Paris)** 1988;144(11):617–763 **(Fre)**

[31st meeting of the Japanese Society of Child Neurology. Sapporo, 6–8 July 1989. Abstracts] **No To Hattatsu** 1989; 21 Suppl:S71–306 **(Jpn)**

BLOOD

Muscle-specific carbonic anhydrase III is a more sensitive marker of muscle damage than creatine kinase in neuromuscular disorders. Väänänen HK, et al. **Arch Neurol** 1988 Nov;45(11):1254–6

Hyperestrogenemia in neuromuscular diseases. Usuki F, et al. **J Neurol Sci** 1989 Feb;89(2–3):189–97

Disorders characterized by spontaneous attacks of weakness connected with changes of serum potassium. Gamstorp I. **Prog Clin Biol Res** 1989;306:175–95 (65 ref.)

CHEMICALLY INDUCED

Zidovudine-associated myopathy. Gertner E, et al. **Am J Med** 1989 Jun;86(6 Pt 2):814–8

Neuromuscular blockade with magnesium sulfate and nifedipine. Snyder SW, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):35–6

Prolonged neuromuscular blockade following the use of vecuronium for mediastinoscopy. Schindler MB. **Anaesth Intensive Care** 1989 Aug;17(3):372–4

Relationship of aluminum to neurocognitive dysfunction in chronic dialysis patients. Sprague SM, et al. **Arch Intern Med** 1988 Oct;148(10):2169–72

Muscle involvement in aluminium phosphide poisoning. Khosla SN, et al. **J Assoc Physicians India** 1988 Apr; 36(4):289–90

Reversible emetine-induced myopathy with ECG abnormalities: a toxic myopathy. Kuntzer T, et al. **J Neurol** 1989 May;236(4):246–8

Late onset isofenphos neurotoxicity. Catz A, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1338–40

Motoneuron disease: a disorder secondary to solvent exposure? Hawkes CH, et al. **Lancet** 1989 Jan 14; 1(8629):73–6

Laxative abuse causing hypermagnesemia, quadriparesis, and neuromuscular junction defect. Castelbaum AR, et al. **Neurology** 1989 May;39(5):746–7

The effects of long-term lead intoxication on the nervous system of the chicken. Mazliah J, et al. **Neurosci Lett** 1989 Jul 3;101(3):253–7

Colchicine [editorial] VanDemark RE Sr. **S D J Med** 1988 Sep;41(9):13

[Severe involvement of the brachial plexus after intra-arterial chemotherapy (letter)] Chaine P, et al. **Presse Med** 1989 Apr 22;18(16):842 **(Fre)**

[Neuromuscular toxicity of colchicine. A case (letter)] Gendron Y, et al. **Presse Med** 1989 Jun 24;18(25):1256 **(Fre)**

[Peripheral neuropathies caused by drugs] Uldry PA, et al. **Schweiz Rundsch Med Prax** 1989 Jun 6;78(23):667–70 (21 ref.) (Eng. Abstr.) **(Fre)**

[Muscular diseases in relation to drug consumption] Uldry PA, et al. **Schweiz Rundsch Med Prax** 1989 Jun 6; 78(23):671–3 (20 ref.) (Eng. Abstr.) **(Fre)**

CLASSIFICATION

World Federation of Neurology Research Committee Research Group on Neuromuscular Diseases. **J Neurol Sci** 1988 Sep;86(2–3):333–60

[Clinical systematization of diseases of the locomotor apparatus caused by functional overstrain] Kol'tsov VA. **Vrach Delo** 1988 Dec;(12):89–91 (Eng. Abstr.) **(Rus)**

COMPLICATIONS

Neurologic aspects of mitral valve prolapse. Heck AF. **Angiology** 1989 Aug;40(8):743–51 (108 ref.)

The neuromuscular manifestations of human immunodeficiency virus infections. Lange DJ, et al. **Arch Neurol** 1988 Oct;45(10):1084–8

Adult maltase acid deficiency myopathy: treatment with long-term home mechanical ventilation. Vercken JB, et al. **Biomed Pharmacother** 1988;42(5):343–9

Rheumatoid arthritis and motor neurone disease—an association? Schady W, et al. **Br J Rheumatol** 1989 Feb; 28(1):70–3

Segmental spinal instrumentation for neuromuscular spinal deformity. Stevens DB, et al. **Clin Orthop** 1989 May; (242):164–8

Management of neuromuscular spinal deformities with Luque segmental instrumentation. Boachie-Adjei O, et al. **J Bone Joint Surg [Am]** 1989 Apr;71(4):548–62

Spinal fusion augmented by luque-rod segmental instrumentation for neuromuscular scoliosis. Broom MJ, et al. **J Bone Joint Surg [Am]** 1989 Jan;71(1):32–44

Thalamic dementia and motor neuron disease. Deymeer F, et al. **Neurology** 1989 Jan;39(1):58–61

Neurologic disorders and aspiration. Brin MF, et al. **Otolaryngol Clin North Am** 1988 Nov;21(4):691–9 (35 ref.)

Nocturnal hypoventilation in children with nonprogressive neuromuscular disease. Heckmatt JZ, et al. **Pediatrics** 1989 Feb;83(2):250–5

Splints and casts. Managing foot deformity in children with neuromotor disorders. Cusick BD. **Phys Ther** 1988 Dec; 68(12):1903–12 (84 ref.)

Pregnancy and autoimmune neuromuscular disease. Parry GJ, et al. **Semin Neurol** 1988 Sep;8(3):197–204 (96 ref.)

[Orthopedic problems in children caused by neuromuscular diseases] Goldman AB, et al. **J Radiol** 1988 Dec; 69(12):721–30 (25 ref.) (Eng. Abstr.) **(Fre)**

[Segmental spinal instrumentation in neuromuscular scolioses] Luque ER. **Orthopade** 1989 Apr;18(2):128–33 (Eng. Abstr.) **(Ger)**

[Stiff-man syndrome and type I diabetes mellitus: a common autoimmune pathogenesis?] Solimena M, et al. **Ann Ist Super Sanita** 1988;24(4):583–6 (Eng. Abstr.) **(Ita)**

[Home-stay respiratory management of a child with nemaline myopathy by using a negative pressure-controlled respirator] Ikeya K, et al. **No To Hattatsu** 1988;20(5):423–8 (Eng. Abstr.) **(Jpn)**

[Report of a case of Kearns-Sayre syndrome associating with Isaacs-Mertens syndrome] Tomimoto H, et al. **No To Shinkei** 1988 Aug;40(8):771–7 (Eng. Abstr.) **(Jpn)**

[Spinal muscular atrophy with features of myasthenia gravis and Eaton-Lambert syndrome. A case report] Ono S, et al. **Rinsho Shinkeigaku** 1988 May;28(5):497–500 (Eng. Abstr.) **(Jpn)**

CONGENITAL

Congenital myopathies. Shield LK. **Aust Paediatr J** 1988;24 Suppl 1:77–9

Effects of immobilization on fetal bone development. A morphometric study in newborns with congenital neuromuscular diseases with intrauterine onset. Rodríguez JI, et al. **Calcif Tissue Int** 1988 Dec;43(6):335–9

Congenital myasthenic syndromes. Engel AG. **J Child Neurol** 1988 Oct;3(4):233–46 (48 ref.)

Congenital myopathy with progressive external ophthalmoplegia. Riggs JE, et al. **J Child Neurol** 1989 Jul; 4(3):195–7

Congenital paucity of secondary synaptic clefts (CPSC) syndrome in 2 adult sibs. Wokke JH, et al. **Neurology** 1989 May;39(5):648–54

Cerebro-ocular-muscular syndrome in a Portuguese family. Leão M, et al. **Prog Clin Biol Res** 1989;306:203–4

[Central core disease associated with malignant hyperthermia sensitivity] Krivosic-Horber R, et al. **Presse Med** 1989 Apr 22;18(16):828–31 (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Diabetic amyotrophy: reassessment of the clinical spectrum. Leedman PJ, et al. **Aust N Z J Med** 1988 Oct;18(6):768–73 (23 ref.)

Mitochondrial myopathies [letter] Ross BD. **BMJ** 1989 Jun 17;298(6688):1644–5

Electromyography. Forster A. **Br J Hosp Med** 1989 Jan; 41(1):38–44, 48–9 (40 ref.)

Nerve conduction studies. Morgan MH. **Br J Hosp Med** 1989 Jan;41(1):22, 26–8, 32–6 (26 ref.)

Update on neuromuscular diseases of childhood. Carroll JE, et al. **Curr Probl Pediatr** 1989 Mar;19(3):113–66

A standard form for recording clinical findings in children with a motor deficit of central origin [letter] **Dev Med Child Neurol** 1989 Feb;31(1):119–20

Hypokinesia and rigidity as clinical manifestations of mitochondrial encephalomyopathy: report of three cases. van Erven PM, et al. **Dev Med Child Neurol** 1989 Feb; 31(1):81–91

Motor unit firing rates and firing rate variability in the detection of neuromuscular disorders. Dorfman LJ, et al. **Electroencephalogr Clin Neurophysiol** 1989 Sep; 73(3):215–24

Neuropsychological, electroencephalogram and brain computed tomography findings in motor neuron disease. Gallassi R, et al. **Eur Neurol** 1989;29(2):115–20

DNA restriction fragment length polymorphisms in differential diagnosis of genetic disease: application in neuromuscular diseases. Defesche JC, et al. **Hum Genet** 1989 Apr;82(1):55–8

Some probability models for diagnosing neurogenic disorders. Wilson BC, et al. **IMA J Math Appl Med Biol** 1988;5(3):167–79

Progressive diaphyseal dysplasia presenting as neuromuscular disease. Stenzler S, et al. **J Pediatr Orthop** 1989 Jul–Aug; 9(4):463–7

High-frequency ultrasonography of skeletal muscle in children with neuromuscular disease. Lamminen A, et al. **J Ultrasound Med** 1988 Sep;7(9):505–9

Myokymia of the tongue in a case of brainstem tumour that simulated motor-neuron disease [published erratum appears in Med J Aust 1989 Apr 17;150(8):468] Adams RW, et al. **Med J Aust** 1988 Nov 7;149(9):494, 496–7

AAEE minimonograph #29: automatic quantitative electromyography. Dorfman LJ, et al. **Muscle Nerve** 1988 Aug;11(8):804–18 (108 ref.)

Electrodiagnosis of human colchicine myoneuropathy. Kuncl RW, et al. **Muscle Nerve** 1989 May;12(5):360–4

Neuromuscular thermography [letter] **Orthop Rev** 1989 Aug; 18(8):923–4

Dystrophin diagnosis: comparison of dystrophin abnormalities by immunofluorescence and immunoblot analyses. Arahata K, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7154–8

Magnetic resonance in neuromuscular disorders. Shabas D, et al. **Semin Neurol** 1986 Mar;6(1):94–9 (41 ref.)

Neuropathological diagnosis of childhood neurodegenerative disorders by biopsy: invited topic. Goebel HH. **Turk J Pediatr** 1988 Jul–Sep;30(3):193–211 (24 ref.)

[Continuous muscular activity. Clinical aspects and neurophysiological differences from Isaacs' syndrome] De Grandis D, et al. **Rev Neurol (Paris)** 1988;144(6–7):447–51 (Eng. Abstr.) **(Fre)**

[Possibilities of deviations in electrodiagnostic findings in lesions of the central motor neuron] Manojlović O, et al. **Srp Arh Celok Lek** 1986 Apr;114(4):421–4 (Eng. Abstr.) **(Scc)**

[Diseases of the motor system—a review] Edström L, et al. **Lakartidningen** 1989 Feb 15;86(7):531–4 **(Swe)**

DRUG THERAPY

High-dose TRH treatment of neuromuscular diseases: summary of mechanisms and critique of clinical studies. Summary of section IX. Engel WK. **Ann N Y Acad Sci** 1989;553:462–72 (50 ref.)

TRH and diseases of the motor system. Munsat TL, et al. **Ann N Y Acad Sci** 1989;553:388–98 (79 ref.)

Subacute administration of a TRH analogue (RX77368) in motorneuron disease: an open study. Modarres-Sadeghi H, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep; 51(9):1146–57

Double-blind controlled trials of Cronassial in chronic neuromuscular diseases and ataxia. Bradley WG, et al. **Neurology** 1988 Nov;38(11):1731–9

Differential effects of prednisone and cyclophosphamide on autoantibodies in human neuromuscular disorders. Pestronk A, et al. **Neurology** 1989 May;39(5):628–33

ENZYMOLOGY

Cytochrome c oxidase—deficient myogenic cell lines in mitochondrial myopathy. Shimoizumi H, et al. **Ann Neurol** 1989 Jun;25(6):615–21

Lipid peroxidation and superoxide dismutase activity in muscle and erythrocytes in adult muscular dystrophies and neurogenic atrophies. Diószeghy P, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(3):175–7

Partial deficiency of complexes I and IV of the mitochondrial respiratory chain in skeletal muscle of two patients with mitochondrial myopathy. Bleistein J, et al. **J Neurol** 1989 May;236(4):218–22

Histochemical features of tubular aggregates in diseased human skeletal muscle fibres. Meijer AE. **J Neurol Sci** 1988 Aug;86(1):73–82

Adult onset motor neuronopathy in the juvenile type of

hexosaminidase A and B deficiency. Rubin M, et al. **J Neurol Sci** 1988 Oct;87(1):103–19

Focal cytochrome c oxidase deficiency in various neuromuscular diseases. Yamamoto M, et al. **J Neurol Sci** 1989 Jun;91(1–2):207–13

S–methylation in motorneuron disease and Parkinson's disease. Waring RH, et al. **Lancet** 1989 Aug 12; 2(8659):356–7

Glutamate dehydrogenase and aspartate aminotransferase in leukocytes of patients with motor neuron disease. Hugon J, et al. **Neurology** 1989 Jul;39(7):956–8

Elevated activity of several antioxidant enzymes in neuromuscular diseases. A histochemical and biochemical study. Meijer AE. **Pathol Res Pract** 1989 May; 184(5):535–40

EPIDEMIOLOGY

Neuromotor disabilities within the James Bay Cree pediatric population. Larson C, et al. **Arctic Med Res** 1988 Apr; 47(2):62–6

Child neuromuscular disease in southern Norway. Prevalence, age and distribution of diagnosis with special reference to "non–Duchenne muscular dystrophy". Tangsrud SE, et al. **Clin Genet** 1988 Sep;34(3):145–52

Motoneuron disease and past poliomyelitis [letter] Martyn CN, et al. **Lancet** 1988 Dec 24–31;2(8626–8627):1485

Epidemiology of motor neuron disease in two Italian provinces. Analysis of secular trend and geographic distribution. Chiò A, et al. **Neuroepidemiology** 1989; 8(2):79–86

Incidence and prevalence of motor neuron disease in two Danish counties. Højer–Pedersen E, et al. **Neuroepidemiology** 1989;8(3):151–9

Motor neuron disease in blacks. Epidemiological observations in Natal. Cosnett JE, et al. **S Afr Med J** 1989 Aug 19; 76(4):155–7

[Tropical African neuromyelopathies: 61 studied cases in the Ivory Coast] Giordano C, et al. **Rev Neurol (Paris)** 1988; 144(10):578–85 (Eng. Abstr.) (Fre)

[Epidemiology of neuromuscular diseases] Vílchez JJ, et al. **An Esp Pediatr** 1988 Sep;29 Suppl 33:74–7 (19 ref.) (Spa)

ETIOLOGY

Lower motor neurone paralysis due to herpes zoster. Bhattacharyya PK, et al. **Br J Clin Pract** 1988 Feb; 42(2):79–82

Weaning failure due to acute neuromuscular disease [letter] Waldhausen E, et al. **Crit Care Med** 1989 Jun;17(6):594–5

Post–poliomyelitis sequelae in the elderly. Ciocon JO, et al. **J Am Geriatr Soc** 1989 Mar;37(3):256–8

Dysmaturation neuromyopathy [letter] Sarnat HB. **J Child Neurol** 1989 Jul;4(3):230

A new type of mitochondrial encephalomyopathy with stroke–like episodes due to cytochrome oxidase deficiency. Maertens P, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:186–8

Motor neuron disease and malignancies: results of a population–based study. Chiò A, et al. **J Neurol** 1988 Jul; 235(6):374–5

Parental age and motor neuron disease. Hawkes CH, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):618–21

Production and reversal of the neuromuscular pathology and related signs of zinc deficiency in guinea pigs. O'Dell BL, et al. **J Nutr** 1989 Feb;119(2):196–201

Poliomyelitis: the battle continues [editorial] Yarnell SK. **JAMA** 1989 Jun 9;261(22):3294–5

Relation between motoneuron disease and past poliomyelitis [letter] Clements GB, et al. **Lancet** 1988 Oct 29; 2(8618):1024–5

Dual virus etiology of age–dependent poliomyelitis of mice. A potential model for human motor neuron diseases. Contag CH, et al. **Microb Pathog** 1989 Jun;6(6):391–401 (58 ref.)

Neuromuscular symptoms in patients with previous poliomyelitis: a New Zealand study. Baker PC. **N Z Med J** 1989 Mar 22;102(864):132–4

Neurologic manifestations of human immunodeficiency virus infections. Kieburtz K, et al. **Neurol Clin** 1989 Aug; 7(3):447–68 (119 ref.)

Progressive weakness in infancy and childhood. Lewis DW, et al. **Pediatr Rev** 1987 Jan;8(7):200–8 (10 ref.)

Isokinetic, electrophysiologic, and clinical function relationships following tourniquet–aided knee arthrotomy. Krebs DE. **Phys Ther** 1989 Oct;69(10):803–15

Eaton–Lambert syndrome in a patient with acute T cell lymphocytic leukemia. Morrow JD, et al. **South Med J** 1988 Dec;81(12):1578–9 (11 ref.)

[Neuromuscular forms of hyperparathyroidism. Apropos of 2 cases] Verges B, et al. **Ann Med Interne (Paris)** 1988; 139(4):254–7 (Eng. Abstr.) (Fre)

[Neuromuscular manifestations of HIV–1 and HTLV–I infections] Hartung HP, et al. **Dtsch Med Wochenschr** 1988 Dec 16;113(50):1975–81 (64 ref.) (Ger)

[Progressive neuromuscular syndrome in survivors of poliomyelitis] Streifler J, et al. **Harefuah** 1988 Dec 1; 115(11):313–5 (Eng. Abstr.) (Heb)

[Carcinomatous neuropathy] Izumo S, et al. **Gan No Rinsho** 1989 Jan;Spec No:687–94 (Jpn)

[A case of Eaton–Lambert syndrome with a clinical recovery following surgical removal of the tumor] Shimada T, et al. **Nippon Naika Gakkai Zasshi** 1987 May;76(5):707–12 (Jpn)

[Chronic muscular dysfunction of the bulbar innervation in hyperthyroidism: report of a case] Cardoso B de A, et al. **Arq Neuropsiquiatr** 1988 Dec;46(4):393–6 (Eng. Abstr.) (Por)

[Characteristics of local overexertion of the hands] Vasil'eva TN, et al. **Gig Sanit** 1988 Sep;(9):85–6 (Rus)

[Hereditary defects of glycogenolysis and glycolysis enzymes in neuromuscular diseases (a review)] Rozenfel'd EL, et al. **Zh Nevropatol Psikhiatr** 1988;88(11):115–22 (53 ref.) (Rus)

GENETICS

Associations of the autoimmune myasthenias with genetic markers in the immunoglobulin heavy chain region. Demaine A, et al. **Ann N Y Acad Sci** 1988;540:266–8

Inherited neuromuscular diseases in the mouse. A review of the literature. Torres LF. **Arq Neuropsiquiatr** 1988 Sep; 46(3):298–307 (115 ref.)

Recombinant DNA techniques in medicine. Brown GK. **Aust Paediatr J** 1988;24 Suppl 1:83–6 (15 ref.)

Systematic gene mapping in man: data management considerations. Pericak–Vance MA, et al. **Aust Paediatr J** 1988;24 Suppl 1:87–9

Linkage studies of Myotonia congenita and Paramyotonia congenita. Bender K, et al. **Clin Genet** 1989 Aug;36(2):92–9

The genes for two neuromuscular diseases of the mouse, 'arrested development of righting response', adr, and 'myotonia', mto, are allelic. Jockusch H, et al. **Genet Res** 1988 Dec;52(3):203–5

A treatable familial neuromyopathy with vitamin E deficiency, normal absorption, and evidence of increased consumption of vitamin E. Kohlschütter A, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:149–52

An unusual familial muscle disorder. Cumming WJ, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):266–9

Familial mitochondrial myopathy associated with peripheral neuropathy: partial deficiencies of complex I and complex IV. Mizusawa H, et al. **J Neurol Sci** 1988 Sep; 86(2–3):171–84

Familial motor neuron disease: differing penetrance in large pedigrees. Williams DB, et al. **J Neurol Sci** 1988 Sep; 86(2–3):215–30

Rett syndrome genetic study [letter] Gardner RJ, et al. **N Z Med J** 1988 Dec 14;101(859):833

Disorders of glycogen metabolism of muscle. Servidei S, et al. **Neurol Clin** 1989 Feb;7(1):159–78 (113 ref.)

Deletions of muscle mitochondrial DNA in mitochondrial myopathies: sequence analysis and possible mechanisms. Holt IJ, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4465–9

Farber lipogranulomatosis: an unusual presentation in a black child. Eviatar L, et al. **Pediatr Neurol** 1986 Nov–Dec; 2(6):371–4

Genetics of neuromuscular disorders. Proceedings of the Fifth International Clinical Genetics Seminar. Rethymno, Crete, October 25–30, 1988. **Prog Clin Biol Res** 1989; 306:1–216

Mitochondrial encephalomyopathies. DiMauro S, et al. **Prog Clin Biol Res** 1989;306:117–28 (21 ref.)

Maternal inheritance in a family with mitochondrial encephalomyopathy. Torbergsen T, et al. **Prog Clin Biol Res** 1989;306:129–33 (8 ref.)

The genetics of motor neurone disease. Vassilopoulos D. **Prog Clin Biol Res** 1989;306:91–104 (33 ref.)

Mitochondrial DNA mutations and neuromuscular disease. Wallace DC. **Trends Genet** 1989 Jan;5(1):9–13 (42 ref.)

[Neuromuscular diseases in childhood and adolescence] Karch D. **Off Gesundheitswes** 1988 Aug–Sep;50(8–9):474–9 (9 ref.) (Eng. Abstr.) (Ger)

[Examination strategies in hereditary neuromuscular diseases] Bachmann H, et al. **Psychiatr Neurol Med Psychol Beih** 1988;39:76–8 (Ger)

[Development of a computer–assisted disease register for hereditary neuromuscular diseases in the Dresden district] Sauermann W, et al. **Psychiatr Neurol Med Psychol Beih** 1988;39:78–80 (Ger)

[Genetic heterogeneity of familial motor neuron disease] Kondo K. **No To Shinkei** 1989 Mar;41(3):225–8 (11 ref.) (Jpn)

IMMUNOLOGY

Voltage–dependent Ca2+ channels in small cell carcinomas are blocked by autoantibodies from patients with Lambert–Eaton myasthenic syndrome. De Aizpurua HJ, et al. **Ann N Y Acad Sci** 1988;540:369–71

Motor nerve terminal calcium channels in Lambert–Eaton myasthenic syndrome. Morphologic evidence for depletion and that the depletion is mediated by autoantibodies. Engel AG, et al. **Ann N Y Acad Sci** 1989;560:278–90 (29 ref.)

Generation of antibodies to gangliosides GM1 and GD1b. Genetic control of fine antigenic specificity. Ito H, et al. **Ann N Y Acad Sci** 1988;540:258–60

Autoimmunity in neuromuscular disease. Newsom–Davis J. **Ann N Y Acad Sci** 1988;540:25–38 (77 ref.)

Antibodies against calcium channels in the Lambert–Eaton myasthenic syndrome. Wray DW, et al. **Ann N Y Acad Sci** 1989;560:269–77

Lambert–Eaton myasthenic syndrome: immunoglobulin G inhibition of Ca2+ flux in tumor cells correlates with disease severity. Lang B, et al. **Ann Neurol** 1989 Mar; 25(3):265–71

Lambert–Eaton myasthenic syndrome IgG depletes presynaptic membrane active zone particles by antigenic modulation. Nagel A, et al. **Ann Neurol** 1988 Oct; 24(4):552–8

Antibodies to GM1 and GD1b in patients with motor neuron disease without plasma cell dyscrasia. Shy ME, et al. **Ann Neurol** 1989 May;25(5):511–3

Localization of neural epitopes that bind to IgM monoclonal autoantibodies (M–proteins) from two patients with motor neuron disease. Thomas FP, et al. **J Neuroimmunol** 1989 Jan;21(1):31–9

Monoclonal IgMs with anti–Gal(beta 1–3) GalNAc activity in lower motor neuron disease; identification of glycoprotein antigens in neural tissue and cross–reactivity with serum immunoglobulins. Thomas FP, et al. **J Neuroimmunol** 1989 Jul;23(2):167–74

Lambert–Eaton myasthenic syndrome: the lack of short–term in vitro effects of serum factors on neuromuscular transmission. Kim YI, et al. **J Neurol Sci** 1988 Oct; 87(1):1–13

Combined features of myasthenia gravis and Eaton–Lambert syndrome: anti–ganglioside antibodies in serum. Kusunoki S, et al. **J Neurol Sci** 1988 Oct;87(1):61–6

Expression of class I and class II MHC antigens in neuromuscular diseases. McDouall RM, et al. **J Neurol Sci** 1989 Feb;89(2–3):213–26

Antibodies to glycoconjugates in human motor neuron disease. Latov N, et al. **Neurochem Pathol** 1988 Jun; 8(3):181–7

Immunostaining of motor nerve terminals by IgM M protein with activity against gangliosides GM1 and GD1b from a patient with motor neuron disease. Schluep M, et al. **Neurology** 1988 Dec;38(12):1890–2

The effect of Lambert–Eaton myasthenic syndrome antibody on slow action potentials in mouse cardiac ventricle. Lang B, et al. **Proc R Soc Lond [Biol]** 1988 Oct 22; 235(1278):103–10

METABOLISM

Multiple defects of the respiratory chain including complex II in a family with myopathy and encephalopathy. Desnuelle C, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):695–700

Cytoskeletal abnormalities in motor neuron disease. An immunocytochemical study. Leigh PN, et al. **Brain** 1989 Apr;112 (Pt 2):521–35

A comparison of the distributions of eight peptides in spinal cord from normal controls and cases of motor neurone disease with special reference to Onuf's nucleus. Gibson SJ, et al. **Brain Res** 1988 Dec 6;474(2):255–78

Dolichos biflorus agglutinin receptors in mouse muscle. I. Developmental expression in relation to synaptic acetylcholinesterase and to neuromuscular disease. Kaupmann K, et al. **Eur J Cell Biol** 1988 Aug;46(3):411–8

Brain metabolism in mitochondrial encephalomyopathy: a PET study. De Volder A, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):854–7

Phosphorylation of neurofilament proteins and localization of axonal swellings in motor neuron disease. Toyoshima I, et al. **J Neurol Sci** 1989 Feb;89(2–3):269–77

Electrophoretic studies of muscle proteins in Duchenne muscular dystrophy and other neuromuscular disorders—with special reference to the change of dystrophin. Uchino M, et al. **Jpn J Med** 1989 Mar–Apr; 28(2):170–4

Quantitative and qualitative fat analysis in human leg muscle of neuromuscular diseases by 1H MR spectroscopy in vivo. Bárány M, et al. **Magn Reson Med** 1989 May;10(2):210–26

Muscle carnitine deficiency in neurogenic atrophy [letter] Amit R, et al. **Muscle Nerve** 1989 Mar;12(3):245–6

Coexpression of myosin isoforms in muscle of patients with neurogenic disease. Sawchak JA, et al. **Muscle Nerve** 1989 Aug;12(8):679–89 (23 ref.)

Proopiomelanocortin–derived peptides in mice with motoneurone disease. Hughes S, et al. **Neurosci Lett** 1989 Aug 28;103(2):169–73

Ubiquitin deposits in anterior horn cells in motor neurone disease. Leigh PN, et al. **Neurosci Lett** 1988 Nov 11; 93(2–3):197–203

Muscle coenzyme Q deficiency in familial mitochondrial encephalomyopathy. Ogasahara S, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2379–82

Human leg neuromuscular diseases: P–31 MR spectroscopy. Bárány M, et al. **Radiology** 1989 Aug;172(2):503–8

MICROBIOLOGY

Leg weakness associated with Powassan virus infection—Ontario. Jackson AC. **Can Dis Wkly Rep** 1989 Jun 17;15(24):123–4 (Eng, Fre)

MORTALITY

Trends in mortality from motoneuron disease [letter; comment] **Lancet** 1989 Apr 29;1(8644):958. **Comment on:** Lancet 1989 Apr 1;1(8640):710–3

Rising mortality from motoneuron disease [letter] Flaten TP. **Lancet** 1989 May 6;1(8645):1018–9

Rising mortality from motoneuron disease in the USA, 1962–84 [see comments] Lilienfeld DE, et al. **Lancet** 1989 Apr 1;1(8640):710–3. **Comment in:** Lancet 1989 Apr 29;1(8644):958

Motoneuron disease and exposure to solvents [letter] Martyn CN. **Lancet** 1989 Feb 18;1(8634):394
Secular trends in mortality rates from motor neuron disease in Kentucky 1964–1984. Stallones L, et al. **Neuroepidemiology** 1989;8(2):68–78

PATHOLOGY

Lewy body–like hyaline inclusions in sporadic motor neuron disease are ubiquitinated. Kato T, et al. **Acta Neuropathol (Berl)** 1989;77(4):391–6
Dementia, parkinsonism, and motor neuron disease: neurochemical and neuropathological correlates. Gilbert JJ, et al. **Ann Neurol** 1988 Nov;24(5):688–91
Vascular involvement in mitochondrial myopathy. Sakuta R, et al. **Ann Neurol** 1989 Jun;25(6):594–601
An autopsy case of atypical infantile motor neuron disease with hyaline intraneuronal inclusions. Yokochi K, et al. **Arch Neurol** 1989 Jan;46(1):103–7
Peripheral neuropathy associated with mitochondrial myopathy. Yiannikas C, et al. **Aust Paediatr J** 1988;24 Suppl 1:62–3
Sensory neuron degeneration in familial Kugelberg–Welander disease [published erratum appears in Can J Neurol Sci 1989 May;16(2):223] Winder TR, et al. **Can J Neurol Sci** 1989 Feb;16(1):67–70
Distribution of different fibre types in human skeletal muscles: a method for the detection of neurogenic disorders. Downham DY, et al. **IMA J Math Appl Med Biol** 1987; 4(1):81–91
Mitochondrial oculoskeletal myopathy: case report. Colombo A, et al. **Ital J Neurol Sci** 1988 Aug;9(4):385–9
Cryoglobulinemic neuropathy: case report. Testa D, et al. **Ital J Neurol Sci** 1988 Aug;9(4):391–5
Dysmaturation neuromyopathy: correlation with minimal neuropathy in sural nerve biopsies. Verity MA, et al. **J Child Neurol** 1988 Oct;3(4):276–91
Diffuse cerebrospinal gliomatosis presenting as motor neuron disease for two years. Schmidbauer M, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):275–8
Psychiatric disturbance in mitochondrial encephalomyopathy [letter] Suzuki T, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):920–2
Neurogenic involvement in distal myopathy (Welander). Histochemical and morphological observations on muscle and nerve biopsies. Borg K, et al. **J Neurol Sci** 1989 Jun; 91(1–2):53–70
Vascularized muscle fibers: etiopathogenesis and clinical significance. Sulaiman AR, et al. **J Neurol Sci** 1989 Aug; 92(1):37–54
Junctional plasticity in hereditary myasthenia. Jennekens FG, et al. **Monogr Allergy** 1988;25:125–7
A study of infantile motor neuron disease with neurofilament and ubiquitin immunocytochemistry. Lee S, et al. **Neuropediatrics** 1989 May;20(2):107–11
A filamentous inclusion body within anterior horn neurones in motor neurone disease defined by immunocytochemical localisation of ubiquitin. Lowe J, et al. **Neurosci Lett** 1988 Nov 22;94(1–2):203–10
Life-threatening congestive heart failure as the presentation of centronuclear myopathy. Gospe SM Jr, et al. **Pediatr Neurol** 1987 Mar–Apr;3(2):117–20
[A morphologic approach to the mobile oral and pharyngeal structures; a preliminary statistical study of a population of children presenting with a disorder of labiolingual behavior] Doual-Bisser A, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1988 Aug–Dec; 31(3–4):131–40 (Eng. Abstr.) **(Fre)**
[Mitochondrial myopathies and encephalomyelopathies] Zierz S, et al. **Nervenarzt** 1989 Jul;60(7):394–400 (33 ref.) **(Ger)**
[2 cases of mitochondrial encephalomyopathy] Parisi L, et al. **Riv Neurol** 1988 May–Jun;58(3):110–5 (Eng. Abstr.) **(Ita)**
[Muscle biopsy in neurogenic lesions] Vaccario ML. **Riv Neurol** 1988 Mar–Apr;58(2):84–8 (8 ref.) **(Ita)**
[Morphometrical study on muscle specimens in motor neuron disease—muscle fiber diameter, type grouping and type IIc] Kimura F, et al. **Rinsho Shinkeigaku** 1988 Jun;28(6):653–61 (Eng. Abstr.) **(Jpn)**
[A case of mitochondrial encephalomyopathy characterized by repeated stroke-like episodes] Mizuno Y, et al. **Rinsho Shinkeigaku** 1989 Mar;29(3):360–6 (Eng. Abstr.) **(Jpn)**
[Clinical and pathological study of motor neuron disease] Tsukagoshi H. **Rinsho Shinkeigaku** 1988 Dec; 28(12):1357–66 (Eng. Abstr.) **(Jpn)**
[Characteristics of the ultrastructural organization of the vascular wall in disordered neuromuscular interactions] Gurko NS, et al. **Patol Fiziol Eksp Ter** 1988 May–Jun; (3):41–5 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Some basic features of the pathological and normal motor system studied by chronic deep electrodes. Tóth S, et al. **Acta Neurochir Suppl (Wien)** 1989;46:31–6
Motor neuron disease in textile factory workers. Abarbanel JM, et al. **Acta Neurol Scand** 1989 Apr;79(4):347–9
Nerve conduction studies in upper limbs of patients with cervical spondylosis and motor neurone disease. Thacker AK, et al. **Acta Neurol Scand** 1988 Jul;78(1):45–8
Vascular innervation in human skeletal muscle with and without neuromuscular disease. A quantitative ultrastructural study with references to the effects of age and different blood pressure. Case CP, et al. **Acta Neuropathol (Berl)** 1988;76(5):511–21
Expression of voltage-gated calcium channels in tumor cell lines of neuroectodermal or other origin. Lang B, et al. **Ann N Y Acad Sci** 1988;540:389–91
Muscle afferent activity and its central projection in man. Burke D. **Aust Paediatr J** 1988;24 Suppl 1:109–12 (27 ref.)
The distribution of muscular weakness in upper motor neuron lesions affecting the arm. Colebatch JG, et al. **Brain** 1989 Jun;112 (Pt 3):749–63
Overview of gait and movement disorders in the elderly. Bertoni JM. **Compr Ther** 1988 Jul;14(7):46–50 (10 ref.)
Evolution of motor, IA and cutaneous nerve-fibre conduction velocities in premature and fullterm newborns. Khater-Boidin J, et al. **Dev Med Child Neurol** 1989 Feb; 31(1):47–55
The Lambert-Eaton myasthenic syndrome. Pascuzzi RM. **Indiana Med** 1989 Mar;82(3):174–9
Multi-beat clonus in a patient without an upper motor neuron lesion. A case report. Adams SE, et al. **J Am Podiatr Med Assoc** 1989 Apr;79(4):194–6
A patient with progressive muscle wasting. Jose J, et al. **J Assoc Physicians India** 1988 Apr;36(4):277–9
Compressive mononeuropathy of the deep palmar branch of the ulnar nerve in cyclists. Hankey GJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1588–90
Extensor tone disinhibition from an infarction within the midline anterior cerebellar lobe [letter] Ringel RA, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1597–9
Physiological analysis of asterixis: silent period locked averaging. Ugawa Y, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):89–92
Quantitative measures of neurological function in chronic neuromuscular diseases and ataxia. Fillyaw MJ, et al. **J Neurol Sci** 1989 Aug;92(1):17–36
Active oxygen in neuromuscular disorders. Davison A, et al. **Mol Cell Biochem** 1988 Dec;84(2):199–216 (89 ref.)
Lambert-Eaton myasthenic syndrome: a review. Newsom-Davis J. **Monogr Allergy** 1988;25:116–24 (29 ref.)
The first agonist and antagonist burst in patients with an upper motor neuron syndrome. Fagioli S, et al. **Mov Disord** 1988;3(2):126–32
Myoadenylate deaminase deficiency: fact and fancy [letter] Fishbein WN. **Muscle Nerve** 1989 Feb;12(2):158–9
Diverse electrophysiological spectrum of the Lambert-Eaton myasthenic syndrome. Oh SJ. **Muscle Nerve** 1989 Jun; 12(6):464–9
The single-fiber EMG in the Lambert-Eaton myasthenic syndrome [letter] Oh SJ, et al. **Muscle Nerve** 1989 Feb; 12(2):159–60
Altered mechanisms of muscular force generation in lower motor neuron disease. Reiners K, et al. **Muscle Nerve** 1989 Aug;12(8):647–59 (51 ref.)
Patterns of selective involvement of thigh muscles in neuromuscular disease. Schwartz MS, et al. **Muscle Nerve** 1988 Dec;11(12):1240–5
Motor neuropathy with multifocal conduction blocks. Van den Bergh P, et al. **Muscle Nerve** 1989 Jan;12(1):26–31
Electrocardiographic abnormalities in pediatric neuromuscular disease: a review. Arensman FW, et al. **Pediatr Neurol** 1985 Mar–Apr;1(2):65–73 (73 ref.)
The respiratory muscles. Green M, et al. **Prax Klin Pneumol** 1988 Dec;42 Suppl 2:827–35 (38 ref.)
Sniff transdiaphragmatic pressure in the assessment of respiratory muscle function. Mier A. **Prax Klin Pneumol** 1988 Dec;42 Suppl 2:812–3
[The evaluation of axial and locomotor function in clinical dis- ability] Soukka A, et al. **Duodecim** 1989;105(2):92–9 (43 ref.) **(Fin)**
[Oropharyngeal dysphagia in neuromuscular diseases—differential diagnosis, examination procedure and therapy] Hörmann M, et al. **Fortschr Neurol Psychiatr** 1988 Aug;56(8):265–74 (35 ref.) (Eng. Abstr.) **(Ger)**
[Central motor conduction in cerebrovascular disease and motor neuron disease] Ugawa Y, et al. **Rinsho Shinkeigaku** 1988 Jul;28(7):756–64 (Eng. Abstr.) **(Jpn)**
[Neuromuscular reactions to passive movements of the arm in patients with reactive states] Safronov VA, et al. **Zh Nevropatol Psikhiatr** 1988;88(10):41–6 (Eng. Abstr.) **(Rus)**
[Syndrome of continuous muscular activity and distal neurogenic involvement of the arms] Castilla JM, et al. **Arch Neurobiol (Madr)** 1988 May–Jun;51(3):143–6 (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

Protection against nerve toxicity by monoclonal antibodies to the sodium channel blocker tetrodotoxin. Huot RI, et al. **J Clin Invest** 1989 Jun;83(6):1821–6

PSYCHOLOGY

[Remarks on sports education from the viewpoint of the pediatric neuropsychiatrist] Kinze W. **Arztl Jugendkd** 1989; 80(2):106–9 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

CT in neuromuscular disorders: a comparison of CT and histology. v.d. Vliet AM, et al. **Neuroradiology** 1988; 30(5):421–5
[Clinical and radiologic comparison of "idiopathic" and "neurogenic" pes cavus] Windhager R, et al. **Z Orthop** 1989 Mar–Apr;127(2):169–73 (Eng. Abstr.) **(Ger)**

RADIONUCLIDE IMAGING

Single photon emission computed tomography in motor neuron disease with dementia. Sawada H, et al. **Neuroradiology** 1988;30(6):577–8

REHABILITATION

A headband for anterior head support. Taylor SJ, et al. **Am J Occup Ther** 1989 Apr;43(4):261–2
Occupational therapy and the postpolio syndrome. Young GR. **Am J Occup Ther** 1989 Feb;43(2):97–103
Pediatric rehabilitation. 4. Disorders of the motor unit. Binder H, et al. **Arch Phys Med Rehabil** 1989 May;70(5–S):S175–8 (28 ref.)
Research foundations of EMG biofeedback in rehabilitation. Basmajian JV. **Biofeedback Self Regul** 1988 Dec; 13(4):275–98 (69 ref.)
The role of the physiotherapist in motor neurone disease. Burford K. **Int J Rehabil Res** 1987;10(4 Suppl 5):176–9
The influence of adaptive seating devices on vocalization. Hulme JB, et al. **J Commun Disord** 1989 Apr;22(2):137–45
Rehabilitation of infants and children with neuromuscular disorders. Eng GD, et al. **Pediatr Ann** 1988 Dec;17(12):745, 748, 750–2 passim
[Muscle function therapy of the orofacial area] Clausnitzer V, et al. **Kinderarztl Prax** 1989 Feb;57(2):61–70 (16 ref.) (Eng. Abstr.) **(Ger)**
[Responsibilities and establishing goals for neuromuscular diseases in the Dresden district] Kunath B. **Psychiatr Neurol Med Psychol Beih** 1988;39:74–5 **(Ger)**

SURGERY

Role of the community orthopaedic surgeon in rehabilitation of the stroke patient. Reid RL. **J Ky Med Assoc** 1989 Jun; 87(6):272–4
[Neuro-orthopedic problems in the area of the elbow joint] Baumann JU. **Orthopade** 1988 Aug;17(4):382–9 (39 ref.) (Eng. Abstr.) **(Ger)**

THERAPY

Restorative neurology of progressive neuromuscular disorders. Dimitrijevic MR. **Aust Paediatr J** 1988;24 Suppl 1:100–3 (32 ref.)
Motor neurone disease. Cochrane GM. **Br J Hosp Med** 1989 Mar;41(3):274–9
Cardiorespiratory responses to aerobic training by patients with postpoliomyelitis sequelae. Jones DR, et al. **JAMA** 1989 Jun 9;261(22):3255–8
[Important addresses for physicians treating patients with neuromuscular diseases (letter)] Gerssen-Schoorl KB. **Ned Tijdschr Geneeskd** 1988 Aug 6;132(32):1500 **(Dut)**
[The plasticity of motor units in change of the activity pattern by electric stimulation—electrostimulation and its possible clinical applications] Nix WA. **Fortschr Neurol Psychiatr** 1989 Mar;57(3):94–106 (194 ref.) (Eng. Abstr.) **(Ger)**

VETERINARY

Suspected fusariomycotoxicosis in sandhill cranes (Grus canadensis): clinical and pathological findings. Roffe TJ, et al. **Avian Dis** 1989 Jul–Sep;33(3):451–7
Australian Stringhalt—epidemiological, clinical and neurological investigations. Huntington PJ, et al. **Equine Vet J** 1989 Jul;21(4):266–73
Pathophysiologic basis of canine muscle disorders. Shelton GD, et al. **J Vet Intern Med** 1987 Jan–Mar;1(1):36–44 (57 ref.)
Nonsystemic causes of the downer cow syndrome. Cox VS. **Vet Clin North Am [Food Anim Pract]** 1988 Jul;4(2):413–33 (52 ref.)
Feline kaliopenic polymyopathy/nephropathy syndrome. Fettman MJ. **Vet Clin North Am Small Anim Pract** 1989 May;19(3):415–32 (62 ref.)
Progressive neuronopathy in the cairn terrier [letter] Palmer AC, et al. **Vet Rec** 1988 Jul 2;123(1):39

NEUROMUSCULAR JUNCTION

see related
RECEPTORS, CHOLINERGIC

A new dual function nerve stimulator. Sansome AJ, et al. **Anaesthesia** 1989 Jun;44(6):494–7
Neuromuscular dysfunction in burns and its relationship to burn size, hypermetabolism, and immunosuppression. Tomera JF, et al. **J Trauma** 1988 Oct;28(10):1499–504

ANALYSIS

The effect of suspension on nicotinic acetylcholine receptor number and affinity at the rat neuromuscular junction. Royland JE, et al. **Physiologist** 1989 Feb;32(1 Suppl):S19–20
Differential effect of alpha-latrotoxin on exocytosis from small synaptic vesicles and from large dense-core vesicles containing calcitonin gene-related peptide at the frog neuromuscular junction [published erratum appears in Proc Natl Acad Sci U S A 1989 Feb;86(4):1416] Matteoli M,

et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7366–70
Immunochemical identification of desmin in Torpedo postsynaptic membranes and at the rat neuromuscular junction. Sealock R, et al. **Synapse** 1989;3(4):315–24
[Coexistence of acetylcholine and calcitonin gene-related peptides at the frog neuromuscular junction: a model for the study of differential secretion of classical neurotransmitters and peptides] Matteoli M, et al.
Ann Ist Super Sanita 1988;24(4):527–30 (Eng. Abstr.) **(Ita)**

ANATOMY & HISTOLOGY

Nerve terminal morphology in C57BL/6NNia mice at different ages. Andonian MH, et al. **J Gerontol** 1989 Mar; 44(2):B43–51
A silver impregnation method for motor and sensory nerves and their endings in formalin-fixed mammalian muscles. Schweizer H, et al. **J Neurosci Methods** 1988 Aug; 25(1):45–8
[Distribution of motor endplates in the muscles of the hindlimb in minipigs] Kubišová I.
Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl 1988;31(1):45–51 (Eng. Abstr.) **(Cze)**

CYTOLOGY

Quantitative investigation of the neuromuscular junction of rat skeletal muscle fibres after double innervation. Huang SK, et al. **Cell Tissue Res** 1989 Jan;255(1):209–13
Neural cell adhesion molecule (N-CAM) is elevated in adult avian slow muscle fibers with multiple terminals. Bleisch W, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6403–7

DRUG EFFECTS

Pharmacodynamics of neuromuscular blockade: a homogeneous phenomenon? Duvaldestin P.
Acta Anaesthesiol Belg 1988;39(3 Suppl 2):245–7
Tetanic fade following atracurium-induced neuromuscular blockade in the rat diaphragm preparation. Wali FA, et al. **Acta Anaesthesiol Belg** 1989;40(1):29–34
Atracurium and pancuronium in renal insufficiency. Berntman L, et al. **Acta Anaesthesiol Scand** 1989 Jan; 33(1):48–52
The influence of 0.5% isoflurane on a vecuronium-induced neuromuscular blockade. Eriksson LI, et al.
Acta Anaesthesiol Scand 1989 May;33(4):309–12
Spontaneous recovery of residual neuromuscular blockade after atracurium or vecuronium during isoflurane anaesthesia. Erkola O, et al. **Acta Anaesthesiol Scand** 1989 May;33(4):290–4
Train-of-four fade during onset of neuromuscular block with nondepolarising neuromuscular blocking agents. Gibson FM, et al. **Acta Anaesthesiol Scand** 1989 Apr;33(3):204–6
Residual curarization in the recovery room: atracurium versus gallamine. Howardy-Hansen P, et al.
Acta Anaesthesiol Scand 1989 Feb;33(2):167–9
Midazolam does not potentiate the effect of vecuronium in patients. Husby P, et al. **Acta Anaesthesiol Scand** 1989 May; 33(4):280–2
Duration of action of vecuronium in infants and children anaesthetized without potent inhalation agents. Kalli I, et al. **Acta Anaesthesiol Scand** 1989 Jan;33(1):29–33
On pre- and/or post-junctional roles of ATP and an unknown 'substance X' as sympathetic co-transmitters in rat tail artery. Bao JX, et al. **Acta Physiol Scand** 1989 Jan; 135(1):65–6
Presynaptic site of action of the toxic component AgTx from the venom of the Pit viper (Agkistrodon halys (PalI.] on the frog nerve-muscle preparation. Gong OH, et al.
Acta Physiol Scand 1988 Jan;132(1):115–6
Effect of ethanol on neuromuscular function in the rat diaphragm preparation. Wali FA, et al. **Alcohol Alcohol** 1988;23(4):299–303
Suxamethonium—the relation between dose and response. Chestnut RJ, et al. **Anaesthesia** 1989 Jan;44(1):14–8
The effect of acutely administered phenytoin on vecuronium-induced neuromuscular blockade. Gray HS, et al. **Anaesthesia** 1989 May;44(5):379–81
Atracurium infusion during paediatric craniofacial surgery. Closed loop control of neuromuscular block. Wait CM, et al. **Anaesthesia** 1989 Jul;44(7):567–70
Edrophonium-hyoscine butylbromide mixture in neonates [letter] Yamashita M, et al. **Anaesthesia** 1989 Feb;44(2):169
Species variation in the site and mechanism of the neuromuscular effects of diadonium in rodents. Foldes FF, et al. **Anesth Analg** 1989 May;68(5):638–44
Comparison of tracheal intubating conditions and neuromuscular blocking profiles after intubating doses of mivacurium chloride or succinylcholine in surgical outpatients. Goldberg ME, et al. **Anesth Analg** 1989 Jul; 69(1):93–9
Prolonged vecuronium-induced neuromuscular blockade in children. Harwood TN, et al. **Anesth Analg** 1989 Apr; 68(4):534–6
Vecuronium infusion requirements in pediatric patients during fentanyl-N2O-O2 anesthesia. Meretoja OA.
Anesth Analg 1989 Jan;68(1):20–4
Accidental subarachnoid injection of pancuronium. Peduto VA, et al. **Anesth Analg** 1989 Oct;69(4):516–7
Ketamine potentiates nondepolarizing neuromuscular relaxants in a primate. Tsai SK, et al. **Anesth Analg** 1989 Jan;68(1):5–8
Clinical recovery and train-of-four ratio measured mechanically and electromyographically following atracurium. Engbaek J, et al. **Anesthesiology** 1989 Sep; 71(3):391–5
The influence of bambuterol (carbamylated terbutaline) on the duration of action of succinylcholine-induced paralysis in humans. Fisher DM, et al. **Anesthesiology** 1988 Nov; 69(5):757–9
The effect of neuromuscular blockade with vecuronium on hemodynamic responses to noxious stimuli in the rat. Gibbs NM, et al. **Anesthesiology** 1989 Aug;71(2):214–7
Onset and duration of neuromuscular blockade following high-dose vecuronium administration. Ginsberg B, et al.
Anesthesiology 1989 Aug;71(2):201–5
Neuromuscular and cardiovascular effects of mivacurium in children. Goudsouzian NG, et al. **Anesthesiology** 1989 Feb; 70(2):237–42
The effect of H2-receptor antagonist premedication on the duration of vecuronium-induced neuromuscular blockade in postpartum patients. Hawkins JL, et al.
Anesthesiology 1989 Aug;71(2):175–7
Prolongation of succinylcholine block by metoclopramide. Kao YJ, et al. **Anesthesiology** 1989 Jun;70(6):905–8
The effect of resting muscle tension on the dose-effect relationship of d-tubocurarine: does preload influence the evoked EMG? Kopman AF. **Anesthesiology** 1988 Dec; 69(6):1003–5
Pancuronium, gallamine, and d-tubocurarine compared: is speed of onset inversely related to drug potency? Kopman AF. **Anesthesiology** 1989 Jun;70(6):915–20
Effect of thermal injury on the pharmacokinetics and pharmacodynamics of atracurium in humans. Marathe PH, et al. **Anesthesiology** 1989 May;70(5):752–5
Two-dose technique to create an individual dose-response curve for atracurium. Meretoja OA, et al.
Anesthesiology 1989 May;70(5):732–6
The effect of maintenance dose vecuronium on pre-established metocurine- or vecuronium-induced neuromuscular blockade. Ornstein E, et al.
Anesthesiology 1988 Dec;69(6):954–5
Pipecuronium-induced neuromuscular blockade during nitrous oxide-fentanyl, isoflurane, and halothane anesthesia in adults and children. Pittet JF, et al. **Anesthesiology** 1989 Aug;71(2):210–3
Dose-response relationship for succinylcholine in a patient with genetically determined low plasma cholinesterase activity. Smith CE, et al. **Anesthesiology** 1989 Jan; 70(1):156–8
Dose-response relationships for edrophonium and neostigmine as antagonists of atracurium and vecuronium neuromuscular blockade. Smith CE, et al.
Anesthesiology 1989 Jul;71(1):37–43
In vitro comparison of the neuromuscular antinicotinic and intestinal antimuscarinic effects of different nondepolarizing muscle relaxants. Töröcsik A, et al.
Arch Int Pharmacodyn Ther 1989 May-Jun;299:247–53
Myasthenic syndrome caused by direct effect of chloroquine on neuromuscular junction. Robberecht W, et al.
Arch Neurol 1989 Apr;46(4):464–8 (65 ref.)
A study of nerve conduction velocity, late responses and neuromuscular synapse functions in organophosphate workers in India. Misra UK, et al. **Arch Toxicol** 1988; 61(6):496–500
Effects of new 4-aminopyridine derivatives on neuromuscular transmission and on smooth muscle contractility. Berger SG, et al. **Arzneimittelforschung** 1989 Jul;39(7):762–5
New anti-H2 agents assayed at the mouse end-plate: electrophysiological and in-vitro studies. Re L, et al.
Boll Soc Ital Biol Sper 1988 Apr;64(4):333–40
Comparison of mivacurium and suxamethonium administered by bolus and infusion. Brandom BW, et al.
Br J Anaesth 1989 May;62(5):488–93
Recovery of neuromuscular function after infusion or intermittent bolus doses of atracurium or vecuronium. Gordon KL, et al. **Br J Anaesth** 1989 Mar;62(3):269–73
Neuromuscular and cardiovascular effects of doxacurium in children anaesthetized with halothane. Goudsouzian NG, et al. **Br J Anaesth** 1989 Mar;62(3):263–8
Automatic control of neuromuscular block with atracurium. MacLeod AD, et al. **Br J Anaesth** 1989 Jul;63(1):31–5
Is vecuronium a long-acting neuromuscular blocking agent in neonates and infants? Meretoja OA. **Br J Anaesth** 1989 Feb;62(2):184–7
Use of atracurium or vecuronium to prolong the action of tubocurarine. Middleton CM, et al. **Br J Anaesth** 1989 Jun; 62(6):659–63
Differing interactions between hexamethonium and tubocurarine, pancuronium or alcuronium at the neuromuscular junction. Pollard BJ, et al. **Br J Anaesth** 1988 Oct;61(4):419–24
Doxapram and the neuromuscular junction. Pollard BJ, et al. **Br J Anaesth** 1989 Jun;62(6):664–8
Priming with alcuronium and tubocurarine accelerates the onset of neuromuscular block. Pollard BJ. **Br J Anaesth** 1989 Jul;63(1):7–11
Post-tetanic count and intense neuromuscular blockade with vecuronium in children. Ridley SA, et al. **Br J Anaesth** 1988 Nov;61(5):551–6
Accelerated recovery from combined atracurium-vecuronium neuromuscular block. Stirt JA.
Br J Anaesth 1989 Jun;62(6):697–9
In vitro investigation of the priming principle for rapid neuromuscular block. Storella RJ, et al. **Br J Anaesth** 1989 May;62(5):478–82
Interaction of ketamine with atracurium. Toft P, et al.
Br J Anaesth 1989 Mar;62(3):319–20
Effects of charybdotoxin, a blocker of Ca2+-activated K+ channels, on motor nerve terminals. Anderson AJ, et al.
Br J Pharmacol 1988 Dec;95(4):1329–35
Use of geographutoxin II (mu-conotoxin) for the study of neuromuscular transmission in mouse. Hong SJ, et al.
Br J Pharmacol 1989 Jul;97(3):934–40
Potassium channel blocking actions of beta-bungarotoxin and related toxins on mouse and frog motor nerve terminals. Rowan EG, et al. **Br J Pharmacol** 1988 Jul;94(3):839–47
1,3,8- and 1,3,7-substituted xanthines: relative potency as adenosine receptor antagonists at the frog neuromuscular junction. Sebastião AM, et al. **Br J Pharmacol** 1989 Jan; 96(1):211–9
Stizolobic acid, a competitive antagonist of the quisqualate-type receptor at the crayfish neuromuscular junction. Shinozaki H, et al. **Brain Res** 1988 Jun 7; 451(1-2):353–6
Neuromuscular blocking action of verapamil in cats. Kraynack BJ, et al. **Can Anaesth Soc J** 1983 May;30(3 Pt 1):242–7
"Priming" with neostigmine: failure to accelerate reversal of single twitch and train-of-four responses. Donati F, et al. **Can J Anaesth** 1989 Jan;36(1):30–4
Atracurium and vecuronium interaction with gentamicin and tobramycin. Dupuis JY, et al. **Can J Anaesth** 1989 Jul; 36(4):407–11
Train-of-four ratio after antagonism of atracurium with edrophonium: influence of different priming doses of edrophonium. Naguib M. **Can J Anaesth** 1989 Jan; 36(1):25–9
Atropine-neostigmine mixture: a dose-response study. Naguib M, et al. **Can J Anaesth** 1989 Jul;36(4):412–7
Does vecuronium accumulate in the renal transplant patient? Starsnic MA, et al. **Can J Anaesth** 1989 Jan;36(1):35–9
Synaptic restructuring during long-term facilitation at the crayfish neuromuscular junction. Wojtowicz JM, et al.
Can J Physiol Pharmacol 1989 Feb;67(2):167–71
Train-of-four fade during neuromuscular blockade induced by tubocurarine, succinylcholine or alpha-bungarotoxin in the rat isolated hemidiaphragm. Cheah LS, et al.
Clin Exp Pharmacol Physiol 1988 Dec;15(12):937–43
The actions of verapamil at the neuromuscular junction. Ribera AB, et al. **Comp Biochem Physiol [C]** 1989; 93(1):137–41
Effect of ethanol on the maturation of the spontaneous transmitter release by regenerated nerve endings. Cuppini R. **Drug Alcohol Depend** 1989 Jan;23(1):87–92
Administration of vecuronium, atracurium and pancuronium in divided doses: effect on onset and duration of action. Brady MM, et al. **Eur J Anaesthesiol** 1988 Jul;5(4):243–9
The induction phase of neuromuscular block after suxamethonium and pancuronium: analysis of the time constant of single-twitch decay (tau T1). Romano E, et al. **Eur J Anaesthesiol** 1988 May;5(3):161–70
Effects of respiratory and metabolic alkalosis and acidosis on pipecuronium neuromuscular block. Biró K.
Eur J Pharmacol 1988 Sep 23;154(3):329–33
Diazepam enhances the inhibitory action of adenosine on transmission at the frog neuromuscular junction. De Mendonça A, et al. **Eur J Pharmacol** 1989 May 19; 164(2):347–54
Verapamil, neuromuscular transmission and the nicotinic receptor. Edeson RO, et al. **Eur J Pharmacol** 1988 Jul 7; 151(2):301–6
Effects of dineopentyl and dipinacoline ethers of glutamic acid on neuromuscular transmission in locust (Locusta migratoria). Ivlev SV, et al. **Gen Physiol Biophys** 1989 Apr; 8(2):163–9
Neuromuscular blocking activity of 6-phenylphenanthridine-3,8-bis-(tri-methylammonium) iodide (compound 76-805). Mukherjee KC, et al.
Indian J Exp Biol 1988 Jul;26(7):535–7
Maturational changes in neonatal rat motor system with early postnatal administration of nicotine. Frischer RE, et al.
Int J Dev Neurosci 1988;6(2):149–54
Protons resolve dual effects of calcium on miniature end-plate potential frequency at frog neuromuscular junctions. Talbot PA. **J Gen Physiol** 1989 Apr;93(4):745–60
Alterations of spontaneous and evoked release of acetylcholine during dithiobiuret-induced neuromuscular weakness. Atchison WD. **J Pharmacol Exp Ther** 1989 Jun; 249(3):735–43
Effect of alpha-latrotoxin on the frog neuromuscular junction at low temperature. Ceccarelli B, et al.
J Physiol (Lond) 1988 Aug;402:195–217
The nature of the presynaptic effects of (+)-tubocurarine at the mouse neuromuscular junction. Ferry CB, et al.
J Physiol (Lond) 1988 Sep;403:425–37
Calcium-independent increase of transmitter release at frog end-plate by trinitrobenzene sulphonic acid. Kijima H, et al. **J Physiol (Lond)** 1988 Sep;403:135–49
Effects of cesium ions on the frequency of miniature end-plate potentials at the frog neuromuscular junction. Takikawa Y. **Jpn J Physiol** 1989;39(1):75–85
Evaluation of glycopyrrolate and atropine in a mixture with neostigmine for reversal of neuromuscular blockage in geriatric patient. Sit KF, et al. **Ma Tsui Hsueh Tsa Chi**

1988 Dec;26(4):369–74

The use of atracurium in Chinese myasthenic patients undergoing thymectomy. Yang MW, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun;26(2):161–8

Interaction of aminoglycoside antibiotics and calcium channel blockers at the neuromuscular junctions. Paradelis AG, et al. **Methods Find Exp Clin Pharmacol** 1988 Nov; 10(11):687–90

Effects of the facilitatory compounds catechol, guanidine, noradrenaline and phencyclidine on presynaptic currents of mouse motor nerve terminals. Anderson AJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Aug; 338(2):133–7

The actions of 5-hydroxytryptamine receptor agonists and antagonists at pre- and postjunctional level on the canine saphenous vein. Paiva MQ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Dec; 338(6):616–22

Facilitatory and inhibitory muscarine receptors on the rat phrenic nerve: effects of pirenzepine and dicyclomine. Wessler I, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Aug;338(2):138–42

Neuromuscular effects distant from the site of botulinum neurotoxin injection. Olney RK, et al. **Neurology** 1988 Nov; 38(11):1780–3

Effects of sodium selenite on neuromuscular junction of the mouse phrenic nerve–diaphragm preparation. Liu SH, et al. **Neuropharmacology** 1989 Jul;28(7):733–9

Muscarinic inhibition of quantal transmitter release from the magnesium–paralysed frog sartorius muscle. Arenson MS. **Neuroscience** 1989;30(3):827–36

Intramembrane charge movement in depolarized frog muscle fibers: the effects of D-600 and lanthanum ions. Caputo C, et al. **P R Health Sci J** 1988 Aug;7(2):122–6

Interaction between bambuterol and physostigmine: aspects on cholinesterase inhibition and neuromuscular transmission in the smooth and skeletal muscles of the guinea-pig. Jeppsson AB, et al. **Pharmacol Toxicol** 1988 Oct;63(4):211–4

The importance of phospholipase A2 in the early induction by crotoxin of biphasic changes in endplate potentials at the frog neuromuscular junction. Hawgood BJ, et al. **Toxicon** 1989;27(2):272–6

Neuromuscular effects of a toxic phospholipase A2 and its nontoxic homologue from the venom of the sea snake, Laticauda colubrina. Rowan EG, et al. **Toxicon** 1989; 27(5):587–91

Neuromuscular effects of three phospholipases A2 from the venom of the Australian king brown snake Pseudechis australis. Rowan EG, et al. **Toxicon** 1989;27(5):551–60

Prejunctional action of tubocurarine-like fade [letter] Bradley RJ. **Trends Pharmacol Sci** 1988 Jun;9(6):200–1

ACTH(4–10) and the neuromuscular junction. Izquierdo I. **Trends Pharmacol Sci** 1988 Jul;9(7):230–1 (13 ref.)

[The fetal neuromuscular effect of atracurium administered in pregnant ewes] Tsai SK, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Jan;41(1):1–6 (Eng. Abstr.) **(Chi)**

[Effects of isoflurane on the duration of neuromuscular block induced by a single dose of vecuronium bromide] Amiot JF, et al. **Cah Anesthesiol** 1988 Sep;36(5):349–52 **(Fre)**

[Influence of isoflurane on the neuromuscular block induced by vecuronium in the child] Bazin JE, et al. **Cah Anesthesiol** 1988 Dec;36(8):593–8 **(Fre)**

[The rate of injection of succinylcholine and onset of neuromuscular action, serum potassium or myoglobin levels. Studies in men during halothane anesthesia] Plötz J, et al. **Anaesthesist** 1989 Aug;38(8):408–12 (Eng. Abstr.) **(Ger)**

[Interactions of H2 antagonists and non-depolarizing muscle relaxants] Tryba M, et al. **Anaesthesist** 1989 May; 38(5):251–4 (Eng. Abstr.) **(Ger)**

[The decrement-increment phenomenon in disorders of neuromuscular transmission by inhibition of acetylcholinesterase] Besser R, et al. **EEG EMG** 1989 Mar; 20(1):28–33 (Eng. Abstr.) **(Ger)**

[Botulinum toxin in therapy of craniocervical dystonia] Dressler D, et al. **Nervenarzt** 1989 Jul;60(7):386–93 (49 ref.) (Eng. Abstr.) **(Ger)**

[Antagonistic effect of 4-aminopyridine derivatives on dTc induced block] Amaki Y, et al. **Masui** 1989 May;38(5):661–5 (Eng. Abstr.) **(Jpn)**

[A clinical and experimental study on potentiation with sevoflurane of neuromuscular blocking effects of vecuronium and pancuronium] Itagaki T, et al. **Masui** 1988 Aug;37(8):943–54 (Eng. Abstr.) **(Jpn)**

[Contractile abnormalities of myasthenic muscle prior to neuromuscular transmission block] Takamori M, et al. **Rinsho Shinkeigaku** 1975 Feb;15(2):65–74 (Eng. Abstr.) **(Jpn)**

[The action of the venom of the spider Eresus niger on the neuromuscular synapses of the frog] Usmanov PB, et al. **Biol Nauki** 1988;(11):20–3 (Eng. Abstr.) **(Rus)**

[Post- and presynaptic mechanisms of restoring nerve-muscle transmission with tubocurarine after the effect of an organophosphorous inhibitor of acetylcholinesterase] Krivoĭ II, et al. **Dokl Akad Nauk SSSR** 1989;306(2):499–502 **(Rus)**

[Effect of tubocurarine on the quantum release of acetylcholine during the infrequent stimulation of a motor nerve] Grigor'ev VM, et al. **Fiziol Zh SSSR** 1988 Oct; 74(10):1377–82 (Eng. Abstr.) **(Rus)**

[Presynaptic action of tubocurarine during frequent stimulation of a motor nerve] Grigor'ev VM, et al. **Fiziol Zh SSSR** 1989 Jan;75(1):28–32 (Eng. Abstr.) **(Rus)**

[Quantitative patterns of tubocurarine action on the synaptic potentials of frog muscle] Grigor'ev VM, et al. **Fiziol Zh SSSR** 1988 Sep;74(9):1228–34 (Eng. Abstr.) **(Rus)**

[Restoration of neuromuscular transmission in the rat diaphragm after the action of an organophosphorus inhibitor of acetylcholinesterase by using curare] Krivoĭ II, et al. **Fiziol Zh SSSR** 1988 Dec;74(12):1751–8 (Eng. Abstr.) **(Rus)**

[Effect of a brain extract containing the postural asymmetry factor on the frog neuromuscular synapse] Drabkina TM, et al. **Neirofiziologiia** 1988;20(4):554–7 (Eng. Abstr.) **(Rus)**

[Reactivating and cholinolytic action of dipyroxime in the myoneural synapse of warm-blooded animals] Giniatullin RA, et al. **Neirofiziologiia** 1988;20(3):351–7 (Eng. Abstr.) **(Rus)**

[The action of metabolites on the frog neuromuscular synapse] Drabkina TM, et al. **Nerv Sist** 1988;27:23–30 **(Rus)**

[Neuromotor transmission under conditions of acetylcholinesterase inhibition by eserine] Sel TP. **Nerv Sist** 1988;27:119–26 **(Rus)**

[Effect of proteolytic enzymes on the frog neuromuscular junction] Vinogradova IM, et al. **Nerv Sist** 1988;27:16–23 **(Rus)**

[Clinico-morphologic and histochemical changes in the neuromuscular apparatus in acute carbophos poisoning] Kolesnichenko IP, et al. **Zh Nevropatol Psikhiatr** 1988; 88(7):76–80 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Dynamics of soleplate formation. Sisto Daneo L, et al. **Biol Struct Morphog** 1989;2(1):25–30

Development of neuromuscular connections: guidance of motoneuron axons to muscles in the embryonic chick hindlimb. Lance-Jones C. **Ciba Found Symp** 1988; 138:97–115 (25 ref.)

Changes in myosin and C-protein isoforms proceed independently of the conversion to singly innervated neuromuscular junctions in developing pectoral muscle. Hall JA, et al. **Dev Biol** 1988 Dec;130(2):591–8

Reorganization and stabilization of acetylcholine receptor aggregates on rat myotubes. Krikorian JG, et al. **Dev Biol** 1989 Feb;131(2):524–38

Development of postsynaptic-like specializations of the neuromuscular synapse in the absence of motor nerve. Sohal GS. **Int J Dev Neurosci** 1988;6(6):553–65

Localization of nicotinic acetylcholine receptor alpha-subunit transcripts during myogenesis and motor endplate development in the chick. Fontaine B, et al. **J Cell Biol** 1989 Mar;108(3):1025–37

ENZYMOLOGY

Dolichos biflorus agglutinin receptors in mouse muscle. I. Developmental expression in relation to synaptic acetylcholinesterase and to neuromuscular disease. Kaupmann K, et al. **Eur J Cell Biol** 1988 Aug;46(3):411–8

Fine structural localization of Ca2+-ATPase activity at the frog neuromuscular junction. Pappas GD, et al. **J Neurocytol** 1988 Aug;17(4):417–23

Serine proteases and serpins: their possible roles in the motor system. Hantaï D, et al. **Rev Neurol (Paris)** 1988; 144(11):680–7

GROWTH & DEVELOPMENT

Growth of inhibitory innervation in a lobster muscle. Govind CK, et al. **J Morphol** 1989 Feb;199(2):197–205

IMMUNOLOGY

Immunostaining of motor nerve terminals by IgM M protein with activity against gangliosides GM1 and GD1b from a patient with motor neuron disease. Schluep M, et al. **Neurology** 1988 Dec;38(12):1890–2

METABOLISM

Prejunctional modulation of acetylcholine release from the skeletal neuromuscular junction: link between positive (nicotinic)- and negative (muscarinic)-feedback modulation. Vizi ES, et al. **Br J Pharmacol** 1989 May; 97(1):65–70

Acceleration by stannous ion of the evoked release of transmitter from motor nerve endings in the frog. Hattori T, et al. **Brain Res** 1988 Nov 8;473(1):157–60

Is the internal calcium regulation altered in type A botulinum toxin-poisoned motor endings? Mallart A, et al. **Brain Res** 1989 Feb 6;479(1):167–71

Calcitonin gene-related peptide immunoreactivity at the human neuromuscular junction. Mora M, et al. **Brain Res** 1989 Jul 17;492(1–2):404–7

Rapid synthesis of acetylcholine receptors at neuromuscular junctions. Ramsay DA, et al. **Brain Res** 1988 Oct 11; 462(1):134–41

Degradation rate of acetylcholine receptors inserted into denervated vertebrate neuromuscular junctions. Shyng SL, et al. **J Cell Biol** 1989 Feb;108(2):647–51

Synaptophysin (p38) at the frog neuromuscular junction: its incorporation into the axolemma and recycling after intense quantal secretion. Valtorta F, et al. **J Cell Biol** 1988 Dec; 107(6 Pt 2):2717–27

A light and electron microscopical study of B-50 (GAP-43) in human intramuscular nerve and neuromuscular junctions during development. Hesselmans LF, et al. **J Neurol Sci** 1989 Feb;89(2–3):301–11

Dual effects of theophylline on spontaneous transmitter release from frog motor nerve terminals. Barry SR. **J Neurosci** 1988 Dec;8(12):4427–33

Morphometry of peptide-containing nerves in gut muscle layers: a quantitative approach to the study of autonomic neuro-muscular junctions. Ferri GL, et al. **J Neurosci Methods** 1989 Apr;27(3):211–8

Silver cholinesterase immunocytochemistry: a new neuromuscular junction stain. Alderson K, et al. **Muscle Nerve** 1989 Jan;12(1):9–14

A laminin-like adhesive protein concentrated in the synaptic cleft of the neuromuscular junction. Hunter DD, et al. **Nature** 1989 Mar 16;338(6212):229–34

Stimulation of spontaneous transmitter release at the frog neuromuscular junction by 12-O-tetradecanoylphorbol-13-acetate occurs in the absence of extracellular Ca2+ and is enhanced by depolarization. Light PE, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):339–44

Intense non-quantal release of glutamate in an insect neuromuscular junction. Antonov SM, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):204–8

Adenosine effects upon the spontaneous quantal transmitter release at the frog neuromuscular junction in the presence of protein kinase C-blocking and -activating agents. Brănişteanu DD, et al. **Neurosci Lett** 1989 Mar 13; 98(1):96–100

The use of auto-anti-idiotypes for the visualization of acetylcholine receptors in an invertebrate skeletal muscle. Grandier-Vazeille X, et al. **Neurosci Lett** 1989 Apr 24; 99(1–2):30–4

Transmitter release at frog end-plate loaded with a Ca2+-chelator, BAPTA: hypertonicity and erythrosin B augment the release independently of internal Ca2+. Tanabe N, et al. **Neurosci Lett** 1988 Sep 23;92(1):52–7

Leucomyosuppressin, a novel insect neuropeptide, inhibits evoked transmitter release at the mealworm neuromuscular junction. Yamamoto D, et al. **Neurosci Lett** 1988 Dec 19; 95(1–3):137–42

The packing of acetylcholine into quanta at the frog neuromuscular junction is inhibited by increases in intracellular sodium. Van der Kloot W. **Pflugers Arch** 1988 Aug;412(3):258–63

Block of potassium channels and facilitation of acetylcholine release at the neuromuscular junction by the venom of the scorpion, Pandinus imperator. Marshall DL, et al. **Toxicon** 1989;27(4):493–8

MICROBIOLOGY

Rabies virus infection of myotubes and neurons as elements of the neuromuscular junction. Tsiang H. **Rev Infect Dis** 1988 Nov-Dec;10 Suppl 4:S733–8

PATHOLOGY

Congenital myasthenic syndromes. Engel AG. **J Child Neurol** 1988 Oct;3(4):233–46 (48 ref.)

Calcitonin gene-related peptide prevents disuse-induced sprouting of rat motor nerve terminals. Tsujimoto T, et al. **J Neurosci** 1988 Oct;8(10):3951–7

PHYSIOLOGY

Evaluation of motor blockade by isometric force measurement and electromyographic recording during epidural anaesthesia—a methodological study. Nydahl PA, et al. **Acta Anaesthesiol Scand** 1988 Aug;32(6):477–84

Morphological studies of the neuromuscular mechanism shifting from sucking to biting of mice. Kubota K, et al. **Acta Anat (Basel)** 1988;133(3):200–8

Summation of unit potentials. Bíró G, et al. **Acta Biochim Biophys Hung** 1988;23(3–4):255–64

The dynamic sensitivity of Ib inhibition. Lundberg A, et al. **Acta Physiol Scand** 1988 May;133(1):123–4

Fetal neuromuscular blockade: effect on oxygen demand and placental transport. Wilkening RB, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H734–8

An evaluation of eight peripheral nerve stimulators for monitoring neuromuscular blockade. Beemer GH, et al. **Anaesth Intensive Care** 1988 Nov;16(4):464–72

Rapid neuromuscular remodeling following limb immobilization. Fahim MA. **Anat Rec** 1989 May; 224(1):102–9

Manual evaluation of residual curarization using double burst stimulation: a comparison with train-of-four. Drenck NE, et al. **Anesthesiology** 1989 Apr;70(4):578–81

Inhibition of mobilization of acetylcholine: the weak link in neuromuscular transmission during partial neuromuscular block with d-tubocurarine. Foldes FF, et al. **Anesthesiology** 1989 Aug;71(2):218–23

Mechanisms involved in the action of prostaglandins as modulators of neurotransmission. Gustafsson LE. **Ann N Y Acad Sci** 1989;559:178–91

In vitro blockade of neuromuscular transmission by

monoclonal anti-acetylcholine receptor antibodies. Maselli RA, et al. **Ann N Y Acad Sci** 1988;540:523–4
Narrow-sense heritability estimates for nerve conduction velocity and residual latency in mice. Reed TE. **Behav Genet** 1988 Sep;18(5):595–603
Calitoxin, a neurotoxic peptide from the sea anemone Calliactis parasitica: amino acid sequence and electrophysiological properties. Cariello L, et al. **Biochemistry** 1989 Mar 21;28(6):2484–9
Effect of Ca2+ diffusion on the time course of neurotransmitter release. Parnas H, et al. **Biophys J** 1989 May;55(5):859–74
Double burst stimulation (DBS): a new pattern of nerve stimulation to identify residual neuromuscular block. Engbaek J, et al. **Br J Anaesth** 1989 Mar;62(3):274–8
Effect of surface electrode positioning on the compound action potential evoked by ulnar nerve stimulation in anaesthetized infants and children. Kalli I. **Br J Anaesth** 1989 Feb;62(2):188–93
Train-of-four fade during onset and recovery of neuromuscular block: a study in non-anaesthetized subjects. Turner GA, et al. **Br J Anaesth** 1989 Mar; 62(3):279–86
Variation in neuromuscular activity during prey capture by trophic specialists and generalists (Pisces: Labridae). Sanderson SL. **Brain Behav Evol** 1988;32(5):257–68
Depression of calcium current at mouse motor nerve endings by polycationic antibiotics. Bourret C, et al. **Brain Res** 1989 Jan 30;478(2):403–6
Cyclic GMP and protein kinase G inhibit the quantal transmitter release induced by protein kinase C. Brănişteanu DD, et al. **Brain Res** 1988 Nov;464(3):263–6
Seasonal changes in the normal variability in release properties of motor nerve terminals in Rana pipiens. Pawson PA, et al. **Brain Res** 1989 Aug 21;495(1):182–8
Changes in the properties of synaptic channels opened by acetylcholine in denervated frog muscle. Reiser G, et al. **Brain Res** 1989 Feb 6;479(1):83–97
Effects of pentobarbital on behavioral and synaptic plasticities in crayfish. Winegar BD, et al. **Brain Res** 1988 Dec 13;475(1):21–7
Formation of functional endplates by spinal axons regenerating through a peripheral nerve graft. A study in the adult rat. Horvat JC, et al. **Brain Res Bull** 1989 Jan; 22(1):103–14
A voltage clamp study of the glutamate responsive neuromuscular junction in Drosophila melanogaster. McLarnon JG, et al. **Can J Physiol Pharmacol** 1988 Apr; 66(4):321–7
Action of lycorine on neuroadrenergic response of a nerve-skin preparation. Quevedo L, et al. **Cell Mol Biol** 1988;34(3):295–302
Aztreonam: absence of neuromuscular blocking activity. Crassaris LG, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):314–5
Mechanism of interaction between motoneurons and muscles. Brown MC, et al. **Ciba Found Symp** 1988;138:78–96 (31 ref.)
Comparison of injury and development in the neuromuscular system. Gordon T, et al. **Ciba Found Symp** 1988;138:210–26 (47 ref.)
Properties of synaptic transmission at the neuromuscular junction of the squid, Loligo opalescens. Stockbridge N, et al. **Comp Biochem Physiol [A]** 1988;91(3):557–64
The regulation of intramuscular nerve branching during normal development and following activity blockade. Dahm LM, et al. **Dev Biol** 1988 Dec;130(2):621–44
On the role of the 200-kDa neurofilament protein at the developing neuromuscular junction. Donahue SP, et al. **Dev Biol** 1988 Nov;130(1):154–66
Variation among acetylcholine receptor clusters induced by ciliary ganglion neurons in vitro. Dubinsky JM, et al. **Dev Biol** 1988 Nov;130(1):209–19
Where is the ideal reference site for recording the thenar compound muscle action potential. Wee AS, et al. **Electromyogr Clin Neurophysiol** 1988 Jun-Jul;28(5):249–52
Involvement of the constituent chains of botulinum neurotoxins A and B in the blockade of neurotransmitter release. Maisey EA, et al. **Eur J Biochem** 1988 Nov 15; 177(3):683–91
Muscarinic M1- and M2-receptors mediating opposite effects on neuromuscular transmission in rabbit vas deferens. Eltze M. **Eur J Pharmacol** 1988 Jul 7;151(2):205–21
Effect of ampicillin on neuromuscular transmission in healthy men: a single-fiber electromyographic study. Girlanda P, et al. **Eur Neurol** 1989;29(1):36–8
Free functional musculocutaneous transfer: electrophysiological studies. Ugawa Y, et al. **Eur Neurol** 1988;28(5):241–5
Neural regulation of mRNA for the alpha-subunit of acetylcholine receptors: role of neuromuscular transmission. Lipsky NG, et al. **Exp Neurol** 1989 Aug; 105(2):171–6
Spectral analysis interpretation of electrosurgical generator nerve and muscle stimulation. LaCourse JR, et al. **IEEE Trans Biomed Eng** 1988 Jul;35(7):505–9
Topographical map of innervation zones within single motor units measured with a grid surface electrode. Masuda T, et al. **IEEE Trans Biomed Eng** 1988 Aug;35(8):623–8
Daily hormonal and neuromuscular responses to intensive strength training in 1 week. Häkkinen K, et al. **Int J Sports Med** 1988 Dec;9(6):422–8
Neuromuscular and hormonal adaptations in athletes to strength training in two years. Häkkinen K, et al. **J Appl Physiol** 1988 Dec;65(6):2406–12
Expression of cytotactin in the normal and regenerating neuromuscular system. Daniloff JK, et al. **J Cell Biol** 1989 Feb;108(2):625–35
Fibroblasts that proliferate near denervated synaptic sites in skeletal muscle synthesize the adhesive molecules tenascin(J1), N-CAM, fibronectin, and a heparan sulfate proteoglycan. Gatchalian CL, et al. **J Cell Biol** 1989 May; 108(5):1873–90
Two classes of channel-specific toxins from funnel web spider venom. Adams ME, et al. **J Comp Physiol [A]** 1989 Jan;164(3):333–42
Effects of stimulus timing on transmitter release and postsynaptic membrane potential at crayfish neuromuscular junctions. Bittner GD, et al. **J Comp Physiol [A]** 1989 Jul; 165(3):371–82
Structural and functional correlates of synaptic transmission in the vertebrate neuromuscular junction. Rash JE, et al. **J Electron Microsc Tech** 1988 Oct;10(2):153–85 (185 ref.)
Aminergic and peptidergic modulation of motor function at an identified neuromuscular junction in Helisoma. Zoran MJ, et al. **J Exp Biol** 1989 Mar;142:225–43
Regional curare test in the study of neuromuscular transmission in hyperthyroidism. Witoonpanich R, et al. **J Med Assoc Thai** 1989 Jan;72 Suppl 1:187–91
Excitation-contraction coupling. Bridging the gap. Timmerman M, et al. **J Muscle Res Cell Motil** 1988 Oct; 9(5):367–9
Effects of botulinum neurotoxin and Lambert-Eaton myasthenic syndrome IgG at mouse nerve terminals. Lande S, et al. **J Neural Transm Park Dis Dement Sect** 1989; 1(3):229–42
Rapid introduction of long-lasting synaptic changes at crustacean neuromuscular junctions. Atwood HL, et al. **J Neurobiol** 1989 Jul;20(5):373–85 (37 ref.)
Synaptic plasticity at the crayfish opener neuromuscular preparation. Bittner GD. **J Neurobiol** 1989 Jul; 20(5):386–408 (100 ref.)
Androgens modulate endplate size and ACh receptor density at synapses in rat levator ani muscle. Bleisch WV, et al. **J Neurobiol** 1989 Jun;20(4):189–202
Structural plasticity at crustacean neuromuscular synapses. Govind CK, et al. **J Neurobiol** 1989 Jul;20(5):409–21 (48 ref.)
Disruption of muscle reorganization by lesions of the peripheral nerve in transforming claws of snapping shrimps. Mellon D Jr, et al. **J Neurobiol** 1988 Sep;19(6):532–51
Terminal nerve sprouting at the frog neuromuscular junction induced by prolonged tetrodotoxin blockade of nerve conduction. Diaz J, et al. **J Neurocytol** 1989 Feb; 18(1):39–46
Postsynaptic control of the induction of long-term changes in efficacy of transmission at neocortical synapses in slices of rat brain. Bindman LJ, et al. **J Neurophysiol** 1988 Sep; 60(3):1053–65
Phosphatidylinositol system's role in serotonin-induced facilitation at the crayfish neuromuscular junction. Dixon D, et al. **J Neurophysiol** 1989 Jul;62(1):239–46
Impulse activity of a crayfish motoneuron regulated its neuromuscular synaptic properties. Lnenicka GA, et al. **J Neurophysiol** 1989 Jan;61(1):91–6
Nonuniform release probabilities underlie quantal synaptic transmission at a mammalian excitatory central synapse. Walmsley B, et al. **J Neurophysiol** 1988 Sep;60(3):889–908
Neurotransmission regulates stability of acetylcholine receptors at the neuromuscular junction. Avila OL, et al. **J Neurosci** 1989 Aug;9(8):2902–6
Studies of nerve-muscle interactions in Xenopus cell culture: fine structure of early functional contacts. Buchanan J, et al. **J Neurosci** 1989 May;9(5):1540–54
Differential loss of neuromuscular connections according to activity level and spinal position of neonatal rabbit soleus motor neurons. Callaway EM, et al. **J Neurosci** 1989 May; 9(5):1806–24
Studies of nerve-muscle interactions in Xenopus cell culture: analysis of early synaptic currents. Evers J, et al. **J Neurosci** 1989 May;9(5):1523–39
Cyclic AMP only partially mediates the actions of serotonin at lobster neuromuscular junctions. Goy MF, et al. **J Neurosci** 1989 Jan;9(1):369–79
The role of gonadal hormones in neuromuscular synapse elimination in rats. II. Multiple innervation persists in the adult levator ani muscle after juvenile androgen treatment. Jordan CL, et al. **J Neurosci** 1989 Jan;9(1):239–47
The role of gonadal hormones in neuromuscular synapse elimination in rats. I. Androgen delays the loss of multiple innervation in the levator ani muscle. Jordan CL, et al. **J Neurosci** 1989 Jan;9(1):229–38
Control of contractile properties within adaptive ranges by patterns of impulse activity in the rat. Westgaard RH, et al. **J Neurosci** 1988 Dec;8(12):4415–26
Remodeling of neuromuscular junctions in adult mouse soleus. Wigston DJ. **J Neurosci** 1989 Feb;9(2):639–47
Presynaptic long-term facilitation at the crayfish neuromuscular junction: voltage-dependent and ion-dependent phases. Wojtowicz JM, et al. **J Neurosci** 1988 Dec;8(12):4667–74
Statistical and graphical methods for testing the hypothesis that quanta are made up of subunits. Van der Kloot W. **J Neurosci Methods** 1989 Feb;27(1):81–9
Temperature and synaptic efficacy in frog skeletal muscle. Adams BA. **J Physiol (Lond)** 1989;408:443–55
Changes in binomial parameters of quantal release at crustacean motor axon terminals during presynaptic inhibition. Atwood HL, et al. **J Physiol (Lond)** 1988 Aug; 402:177–93
The effect of potassium on exocytosis of transmitter at the frog neuromuscular junction. Ceccarelli B, et al. **J Physiol (Lond)** 1988 Jul;401:163–83
Prolonged nerve stimulation causes changes in transmitter release at the frog neuromuscular junction. Hinz I, et al. **J Physiol (Lond)** 1988 Jul;401:557–65
Spontaneous release of multiquantal miniature excitatory junction potentials induced by a Drosophila mutant. Ikeda K, et al. **J Physiol (Lond)** 1988 Dec;406:215–23
Calcium-independent increase of transmitter release at frog end-plate by trinitrobenzene sulphonic acid. Kijima H, et al. **J Physiol (Lond)** 1988 Sep;403:135–49
Effects of 2-(4-phenylpiperidino)cyclohexanol (AH5183) and barium ions on frog neuromuscular transmission. Maeno T, et al. **J Physiol (Lond)** 1988 Jul;401:671–85
Transmitter release at mouse motor nerve terminals mediated by temporary accumulation of intracellular barium. Quastel DM, et al. **J Physiol (Lond)** 1988 Dec;406:55–73
Estimating the timing of quantal releases during end-plate currents at the frog neuromuscular junction. Van der Kloot W. **J Physiol (Lond)** 1988 Aug;402:595–603
The kinetics of quantal releases during end-plate currents at the frog neuromuscular junction. Van der Kloot W. **J Physiol (Lond)** 1988 Aug;402:605–26
Electrophysiology of neuromuscular transmission in guinea-pig mesenteric veins. Van Helden DF. **J Physiol (Lond)** 1988 Jul;401:469–88
Contraction-induced potentiation of human motor unit discharge and surface EMG activity. Suzuki S, et al. **Med Sci Sports Exerc** 1988 Aug;20(4):391–5
Fatigue-related changes in neuromuscular excitability of rat hindlimb muscles. Enoka RM, et al. **Muscle Nerve** 1988 Nov;11(11):1123–32
AAEE Minimonograph #33: electrodiagnostic approach to defects of neuromuscular transmission. Keesey JC. **Muscle Nerve** 1989 Aug;12(8):613–26 (52 ref.)
The effects of amphetamine on neuromuscular transmission in the lobster. Turkanis SA, et al. **Neuropharmacology** 1988 Dec;27(12):1221–5
F-responses after metrizamide and iohexol lumbar myelography. Sand T. **Neuroradiology** 1988;30(5):534–7
Transduction mechanism involving the presynaptic adenosine receptor at mouse motor nerve terminals. Chen H, et al. **Neurosci Lett** 1989 Jan 30;96(3):318–22
Sprouting of frog motor nerve terminals after long-term paralysis by botulinum type A toxin. Diaz J, et al. **Neurosci Lett** 1989 Jan 16;96(2):127–32
Prolonged time course of glutamate-operated single channel currents in neuromuscular preparations of small crayfish and a membrane current triggered by glutamate channel gating. Finger W, et al. **Neurosci Lett** 1988 Aug 31; 91(2):183–8
Presynaptic effect of gamma-aminobutyric acid on the inhibitory nerve and nerve terminals in the crayfish neuromuscular junction. Finger W, et al. **Neurosci Lett** 1989 Feb 13;97(1-2):129–34
Calcitonin gene-related peptide enhances spontaneous acetylcholine release from the rat motor nerve terminal. Jinnai K, et al. **Neurosci Lett** 1989 Aug 14;103(1):64–8
Both augmentation and potentiation occur independently of internal Ca2+ at the frog neuromuscular junction. Tanabe N, et al. **Neurosci Lett** 1989 Apr 24;99(1-2):147–52
Zinc ion enhances the blocking potency of synthetic analogs of spider toxin (JSTX) on the glutamate receptor. Kawai N, et al. **Neurosci Res** 1989 Apr;6(4):358–62
Action potentials and sodium inward currents of developing neurons in Xenopus nerve-muscle cultures. Kidokoro Y, et al. **Neurosci Res** 1989 Feb;6(3):191–208
Simultaneous intracellular and focal extracellular recording of junction potentials and currents, and the time course of quantal transmitter action in rodent vas deferens. Cunnane TC, et al. **Neuroscience** 1989;30(3):563–75
Reversible effect of depolarization by K-propionate on sub-miniature endplate potential to bell-miniature endplate potential ratios, on miniature endplate potential frequencies and amplitudes, and on synaptic vesicle diameters and densities in frog neuromuscular junctions. Florey E, et al. **Neuroscience** 1988 Dec;27(3):1055–72
Reappearance of miniature endplate potentials in frog neuromuscular junctions "silenced" by lanthanum ions. Glavinović MI, et al. **Neuroscience** 1989;31(1):181–6
Effects of Bay K 8644 on spontaneous and evoked transmitter release at the mouse neuromuscular junction. Pancrazio JJ, et al. **Neuroscience** 1989;30(1):215–21
The biventer cervicis nerve-muscle preparation of adult hens: effects of phenyl saligenin phosphate administration. el-Fawal HA, et al. **Neurotoxicology** 1988 Winter; 9(4):625–36
Destabilization of junctional ACh receptors by a reinnervating frog motor nerve. Aframian D, et al. **P R Health Sci J** 1988 Aug;7(2):80–6
A possible role for the acetylcholine transport system in non-quantal release of acetylcholine at the rodent myoneural junction. Edwards C, et al. **P R Health Sci J** 1988 Aug;7(2):71–4
Neurotransmitter and hormonal effects on ionic currents in

uterine smooth muscle. Erulkar SD, et al. **P R Health Sci J** 1988 Aug;7(2):87–8

Functional sites of the nicotinic acetylcholine receptor. Karlin A, et al. **P R Health Sci J** 1988 Aug;7(2):75

Single acetylcholine channel currents recorded from Xenopus myocytes are influenced by the glass of the patch pipette. Rojas L, et al. **P R Health Sci J** 1988 Aug; 7(2):78–80

Pre- and post-synaptic muscarinic receptors of the rat vas deferens: an update. Silva WI, et al. **P R Health Sci J** 1988 Aug;7(2):105–10

Update on the use of sulfhydryl reagents to study acetylcholine receptor kinetics. Steinacker A. **P R Health Sci J** 1988 Aug;7(2):75–7

Transmitter release at the neuromuscular junction. Thesleff S. **P R Health Sci J** 1988 Aug;7(2):67–70 (24 ref.)

Potassium channels in lizard nodes of Ranvier and motor endings. Benoit E, et al. **Pflugers Arch** 1989;414 Suppl 1:S133–4

Neuronal control of extrajunctional acetylcholine receptor–channels induced by injury in frog skeletal muscle fibres. Reiser G, et al. **Pflugers Arch** 1989 Jun;414(2):113–7

Characteristics of Schwann–cell miniature end–plate currents in denervated frog muscle. Reiser G, et al. **Pflugers Arch** 1988 Jul;412(1–2):22–8

Spontaneous and evoked quantal neurotransmitter release at the neuromuscular junction of the larval housefly, Musca domestica. Seabrook GR, et al. **Pflugers Arch** 1989 May; 414(1):44–51

Three potassium currents in mouse motor nerve terminals. Tabti N, et al. **Pflugers Arch** 1989 Feb;413(4):395–400

Muscle endplate cholinoreceptors. Barrantes FJ. **Pharmacol Ther** 1988;38(3):331–85 (417 ref.)

Sympathetic neuroeffector transmission in arteries and arterioles. Hirst GD, et al. **Physiol Rev** 1989 Apr; 69(2):546–604 (263 ref.)

Neuromuscular recovery using calcium protease inhibition after median nerve repair in primates. Badalamente MA, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5983–7

Decrease in plasminogen activator correlates with synapse elimination during neonatal development of mouse skeletal muscle. Hantaï D, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):362–6

Golgi apparatus in chick skeletal muscle: changes in its distribution during end plate development and after denervation. Jasmin BJ, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7218–22

The morphological sequences in man of de- and reinnervation in free muscle transfer with microneurovascular anastomoses. Oldfors A, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(1):35–42

Changes in miniature end–plate currents due to high potassium and calcium at the frog neuromuscular junction. Glavinović MI. **Synapse** 1988;2(6):636–43

Single Ca2+ entry and transmitter release systems at the neuromuscular synapse. Guan YY, et al. **Synapse** 1988; 2(5):558–64

Frequency and amplitude gradients of spontaneous release along the length of the frog neuromuscular junction. Robitaille R, et al. **Synapse** 1989;3(4):291–307

Mammalian neuromuscular development accelerated with early but slowed with late gestational administration of ACTH peptide. Rose KJ, et al. **Synapse** 1988;2(3):200–4

Feedback control of transmitter release at the neuromuscular junction. Bowman WC, et al. **Trends Pharmacol Sci** 1988 Jan;9(1):16–20

Neurotransmission at the NMJ. Wessler I. **Trends Pharmacol Sci** 1988 Apr;9(4):125–6 (12 ref.)

[The effects of heptaminol chlorhydrate on neuromuscular transmission] Vautrin J, et al. **Can J Physiol Pharmacol** 1988 Nov;66(11):1442–9 (Eng. Abstr.) (Fre)

[Possible trophic role on the neuromuscular junction of a neuropeptide co–existing with acetylcholine in motor neurons of the spinal cord] Fontaine B, et al. **Rev Neurol (Paris)** 1989;145(3):194–200 (29 ref.) (Eng. Abstr.) (Fre)

[Thermodynamic modelling of the electrical properties of end–plate channels] Fritzsche B. **Biol Cybern** 1988; 59(2):131–5 (Eng. Abstr.) (Ger)

[Characteristics of electrical discharges by transcranial cortex stimulation activated motor units of the hand muscles of the human] Hess CW, et al. **EEG EMG** 1988 Dec; 19(4):216–21 (Eng. Abstr.) (Ger)

[New stimulation pattern for manual evaluation of neuromuscular transmission—double burst stimulation (DBS)] Ueda N, et al. **Masui** 1988 Jun;37(6):716–21 (Eng. Abstr.) (Jpn)

[A new neuromuscular transmission monitoring system (Accelograph)—the rationale behind the method and its clinical usefulness] Ueda N, et al. **Masui** 1988 Oct; 37(10):1265–72 (Eng. Abstr.) (Jpn)

[Antibodies against glial glycolipid antigens affect synaptic potentiation and depression in the frog nerve–muscle synapse] Vinogradova IM, et al. **Dokl Akad Nauk SSSR** 1989;304(6):1504–7 (Rus)

[An attempt to estimate various characteristics of neuro–muscular transmission from the rising phase of miniature end–plate currents] Krivoi II. **Neirofiziologiia** 1989;21(2):272–5 (Eng. Abstr.) (Rus)

[Analysis of a model of the miniature endplate current] Nigmatullin NR, et al. **Neirofiziologiia** 1988;20(3):390–8 (Eng. Abstr.) (Rus)

[Effect of antibodies to glial glycolipid antigens on miniature end–plate potentials] Vinogradova IM, et al. **Neirofiziologiia** 1989;21(2):217–23 (Eng. Abstr.) (Rus)

[Phenomenology and chronology of a neurotrophic deficit] Pushkarev IuP, et al. **Nerv Sist** 1988;27:103–11 (Rus)

[Trace postsynaptic reactions in neuromuscular junctions] Magazanik LG. **Zh Evol Biokhim Fiziol** 1988 Sep–Oct; 24(5):657–67 (32 ref.) (Eng. Abstr.) (Rus)

[Comparative analysis of disorders of neuromuscular conduction in patients with botulism and Eaton–Lambert myasthenic syndrome] Sanadze AG, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):102–7 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Motor unit firing rates and firing rate variability in the detection of neuromuscular disorders. Dorfman LJ, et al. **Electroencephalogr Clin Neurophysiol** 1989 Sep; 73(3):215–24

Motor unit recruitment order in neuropathic disease. Herdmann J, et al. **Electromyogr Clin Neurophysiol** 1988 Jan;28(1):53–60

The Lambert–Eaton myasthenic syndrome. Pascuzzi RM. **Indiana Med** 1989 Mar;82(3):174–9

Burn injury to trunk of rat causes denervation–like responses in the gastrocnemius muscle. Kim C, et al. **J Appl Physiol** 1988 Oct;65(4):1745–51

Facioscapulohumeral dystrophy: jitter in facial muscles. Trontelj JV, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):950–5

Intraperitoneal endotoxin but not protein malnutrition shifts d–tubocurarine dose–response curves in mouse gastrocnemius muscle. Tomera JF, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):216–20

End–plate dysfunction in acute organophosphate intoxication. Besser R, et al. **Neurology** 1989 Apr; 39(4):561–7

[Electrophysiological analysis of the phenomenon of "blocked" neuromuscular synapses in patients with myasthenia gravis] Gekht BM, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):96–102 (Eng. Abstr.) (Rus)

[Electrolyte composition of the cerebrospinal fluid and neuromuscular excitability in epilepsy] Vein AM, et al. **Zh Nevropatol Psikhiatr** 1988;88(6):7–10 (Eng. Abstr.) (Rus)

SECRETION

Constraints on the interpretation of nonquantal acetylcholine release from frog neuromuscular junctions. Meriney SD, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2098–102

[Identification of the site of mediator release in the frog motor nerve ending using 3 extracellular microelectrodes] Benish TV, et al. **Dokl Akad Nauk SSSR** 1988;302(2):477–80 (Rus)

ULTRASTRUCTURE

Fine structure of the neuromuscular junctions in the alimentary tract of phylogenetically different animal species. Benedeczky I, et al. **Acta Biol Hung** 1987; 38(3–4):363–81

Structure of motor endplates in the different fiber types of vertebrate skeletal muscles. Ogata T. **Arch Histol Jpn** 1988 Dec;51(5):385–424 (137 ref.)

Size–related differences in the branching pattern of the motor nerve terminals in triangularis sterni muscle of the mouse. Tomasi J, et al. **Biol Cell** 1989;65(3):271–80

Frequency of neuromuscular junctions on arteries of different dimensions in the rabbit, guinea pig and rat. Luff SE, et al. **Blood Vessels** 1989;26(2):95–106

Abnormal neuromuscular junctions in the lateral rectus muscle of wobbler mice. La Vail JH, et al. **Brain Res** 1988 Oct 25;463(1):78–89

Innervation and gap junctions of intestinal striated and smooth muscle cells in the loach. Thin section and freeze–fracture study. Hara M, et al. **Cell Tissue Res** 1989 Jul;257(1):53–9

Morphogenesis of nuclear inclusions in the soleplate region of rat skeletal muscle fibers following chronic daily administration of neostigmine. Kawabuchi M, et al. **Cell Tissue Res** 1989 Apr;256(1):137–44

Stimulation–induced changes at crayfish (Procambarus clarkii) neuromuscular terminals. Mearow KM, et al. **Cell Tissue Res** 1989 Apr;256(1):119–23

Classic illustration from Gap junctions: their presence and necessity in myometrium during parturition. By R. E. Garfield, et al, Science 1977. Garfield RE. **Eur J Obstet Gynecol Reprod Biol** 1988 Oct;29(2):179–80

Origin of true intranuclear inclusions in the soleplate region of rat skeletal muscle fibers following chronic daily administration of neostigmine. Kawabuchi M, et al. **Fukuoka Igaku Zasshi** 1988 Jun;79(6):440–3

Cytoskeletal architecture of neuromuscular junction: localization of vinculin. Yorifuji H, et al. **J Electron Microsc Tech** 1989 Jun;12(2):160–71

Discrimination between fast- and slow–twitch fibres of guinea pig skeletal muscle using the relative surface density of junctional transverse tubule membrane. Franzini–Armstrong C, et al. **J Muscle Res Cell Motil** 1988 Oct;9(5):403–14

The form of sympathetic postganglionic axons at clustered neuromuscular junctions near branch points of arterioles in the submucosa of the guinea pig ileum. Luff SE, et al. **J Neurocytol** 1988 Aug;17(4):451–63

Filopodia, lamellipodia and retractions at mouse neuromuscular junctions. Robbins N, et al. **J Neurocytol** 1988 Aug;17(4):545–61

Histological investigations of muscle atrophy and end plates in two critically ill patients with generalized weakness. Wokke JH, et al. **J Neurol Sci** 1988 Dec;88(1–3):95–106

Premature aging changes in neuromuscular junctions of transgenic mice with an extra human CuZnSOD gene: a model for tongue pathology in Down's syndrome. Yarom R, et al. **J Neurol Sci** 1988 Dec;88(1–3):41–53

Scanning electron microscopic study of denervated and reinnervated neuromuscular junction. Matsuda Y, et al. **Muscle Nerve** 1988 Dec;11(12):1266–71

Proximodistal gradients of the postjunctional folds at the frog neuromuscular junction: a scanning electron microscopic study. Tremblay JP, et al. **Neuroscience** 1989;30(2):535–50

Membrane domains of AChR clusters of cultured rat myotubes revealed by rapid–freeze, deep–etch, rotary–replication. Pumplin DW, et al. **P R Health Sci J** 1988 Aug;7(2):96–9

[Detection of the neuromuscular synapses in isolated muscle fibers] Danilov RK, et al. **Arkh Anat Gistol Embriol** 1989 Apr;96(4):81–3 (Rus)

[Comparative organization of the neuromuscular synapses of the phasic skeletal muscles in vertebrates] Balezina OP. **Usp Fiziol Nauk** 1989 Jan–Mar;20(1):68–89 (81 ref.) (Rus)

NEUROMUSCULAR NONDEPOLARIZING AGENTS see **CURARE–LIKE AGENTS**

NEUROMUSCULAR SPINDLES

ANATOMY & HISTOLOGY

Morphology of muscle spindles in the human popliteus muscle. Evidence of a possible monitoring role of the popliteus muscle in the locked knee joint? Amonoo–Kuofi HS. **Acta Anat (Basel)** 1989;134(1):48–53

Muscle receptors: content of some of the extrinsic and intrinsic muscles of the larynx in the bonnet monkey (Macaca radiata). Raman R, et al. **Anat Rec** 1989 Apr; 223(4):433–6

Muscle–spindle distribution in relation to the fibre–type composition of masseter in mammals. Rowlerson A, et al. **J Anat** 1988 Dec;161:37–60

Morphology of jaw–muscle spindle afferents in the rat. Dessem D, et al. **J Comp Neurol** 1989 Apr 15; 282(3):389–403

A silver impregnation method for motor and sensory nerves and their endings in formalin–fixed mammalian muscles. Schweizer H, et al. **J Neurosci Methods** 1988 Aug; 25(1):45–8

EMBRYOLOGY

[Prenatal development of muscle spindles in pig extraocular muscles and its significance] Matsuyama S. **Kaibogaku Zasshi** 1988 Oct;63(5):419–31 (Eng. Abstr.) (Jpn)

METABOLISM

Postnatal expression of myosin heavy chains in muscle spindles of the rat. Kucera J, et al. **Anat Embryol (Berl)** 1989;179(4):369–76

PHYSIOLOGY

The effect of tenotomy and immobilization on muscle spindles and tendon organs of the rat calf muscles. A histochemical and morphometrical study. Józsa L, et al. **Acta Neuropathol (Berl)** 1988;76(5):465–70

Superimposing noise linearizes the responses of primary muscle spindle afferents to sinusoidal muscle stretch. Kröller J, et al. **Biol Cybern** 1988;60(2):131–7

Muscle afferents and the neural dynamics of limb position and velocity sensations. Ewert DL, et al. **Biomed Sci Instrum** 1989;25:7–12

Responses of cat muscle spindle afferents after short periods of denervation and reinnervation. Scott JJ. **Brain Res** 1988 Oct 4;461(2):381–3

Study of cortical spindles during sleep in the rat. Terrier G, et al. **Brain Res Bull** 1978 Nov–Dec;3(6):701–6

Innervation of regenerated spindles in muscle grafts of the rat. Walro JM, et al. **Histochemistry** 1989;92(1):1–13

Structure of the intraspinal projections of single, identified muscle spindle afferents from neck muscles of the cat. Keirstead SA, et al. **J Neurosci** 1988 Sep;8(9):3413–26

Activation of GABAA receptors causes presynaptic and postsynaptic inhibition at synapses between muscle spindle afferents and motoneurons in the spinal cord of bullfrogs. Peng YY, et al. **J Neurosci** 1989 May;9(5):1516–22

Activation of GABAB receptors causes presynaptic inhibition at synapses between muscle spindle afferents and motoneurons in the spinal cord of bullfrogs. Peng YY, et al. **J Neurosci** 1989 May;9(5):1502–15

Specificities of afferents reinnervating cat muscle spindles after nerve section. Banks RW, et al. **J Physiol (Lond)** 1989; 408:345–72

Responses to passive movement of receptors in joint, skin

and muscle of the human hand. Burke D, et al. **J Physiol (Lond)** 1988 Aug;402:347–61
Further evidence for synaptic actions of muscle spindle secondaries in the middle lumbar segments of the cat spinal cord. Harrison PJ, et al. **J Physiol (Lond)** 1988 Aug; 402:671–86
Responses of muscle spindles depend on their history of activation and movement. Gregory JE, et al. **Prog Brain Res** 1988;74:85–90

PHYSIOPATHOLOGY

Muscle spindles in the paraspinal musculature of patients with adolescent idiopathic scoliosis. Ford DM, et al. **Spine** 1988 May;13(5):461–5

ULTRASTRUCTURE

Scanning electron microscopy of teased intrafusal muscle fibers from rat muscle spindles. Schröder JM, et al. **Muscle Nerve** 1989 Mar;12(3):221–32 (53 ref.)

NEUROMYELITIS OPTICA see under **DEMYELINATING DISEASES**

NEURON DEGENERATION see **NERVE DEGENERATION**

NEURON-SPECIFIC ENOLASE see **PHOSPHOPYRUVATE HYDRATASE**

NEURONAL CEROID-LIPOFUSCINOSIS

Ceroid-lipofuscinoses. Batten disease and allied disorders. Proceedings of the international conference. Staten Island, New York, April 30 and May 1, 1987. **Am J Med Genet Suppl** 1988;5:1–307
Bibliography on ceroid-lipofuscinoses. Black L, et al. **Am J Med Genet Suppl** 1988;5:1–20
Batten disease: past, present, and future. Rider JA, et al. **Am J Med Genet Suppl** 1988;5:21–6
Adult neuronal ceroid-lipofuscinosis. Goebel HH, et al. **Clin Neuropathol** 1989 May–Jun;8(3):109–19 (72 ref.)
Neurological progress. The neuronal ceroid lipofuscinoses: a review. Boustany RM, et al. **Rev Neurol (Paris)** 1989; 145(2):105–10 (35 ref.)

BLOOD

Decreased membrane fluidity of lymphocytes from patients with juvenile neuronal ceroid-lipofuscinosis. Kohlschütter A, et al. **Am J Med Genet Suppl** 1988;5:203–7

CEREBROSPINAL FLUID

Bleomycin-detectable iron and phenanthroline-detectable copper in the cerebrospinal fluid of patients with neuronal ceroid-lipofuscinoses. Heiskala H, et al. **Am J Med Genet Suppl** 1988;5:193–202

CLASSIFICATION

Clinical classification of neuronal ceroid-lipofuscinosis subtypes. Boustany RM, et al. **Am J Med Genet Suppl** 1988; 5:47–58
Reconsideration of the classification of the neuronal ceroid-lipofuscinoses. Dyken PR. **Am J Med Genet Suppl** 1988;5:69–84
The neuronal ceroid lipofuscinoses. Dyken PR. **J Child Neurol** 1989 Jul;4(3):165–74 (23 ref.)

COMPLICATIONS

Hodgkin's disease complicating neuronal ceroid-lipofuscinosis. Chen KT, et al. **Am J Pediatr Hematol Oncol** 1989 Spring;11(1):51–4
Drug-induced dystonia in neuronal ceroid-lipofuscinosis. Gospe SM Jr, et al. **Pediatr Neurol** 1986 Jul–Aug;2(4):236–7

DIAGNOSIS

Juvenile neuronal ceroid lipofuscinosis (JNCL): quantitative description of its clinical variability. Kohlschütter A, et al. **Acta Paediatr Scand** 1988 Nov;77(6):867–72
Kufs disease: clinical features and forms. Berkovic SF, et al. **Am J Med Genet Suppl** 1988;5:105–9 (14 ref.)
Ultrastructural studies as a method of prenatal diagnosis of neuronal ceroid-lipofuscinosis. MacLeod PM, et al. **Am J Med Genet Suppl** 1988;5:93–7
Placental pathology and prenatal diagnosis of infantile type of neuronal ceroid-lipofuscinosis. Rapola J, et al. **Am J Med Genet Suppl** 1988;5:99–103
4-Hydroxynonenal: a specific indicator for canine neuronal-retinal ceroidosis. Siakotos AN, et al. **Am J Med Genet Suppl** 1988;5:171–81
First-trimester diagnosis of juvenile neuronal ceroid lipofuscinosis by demonstration of fingerprint inclusions in chorionic villi. Conradi NG, et al. **Prenat Diagn** 1989 Apr; 9(4):283–7
Probable exclusion of juvenile neuronal ceroid lipofuscinosis in a fetus at risk: an interim report. Kohlschütter A, et al. **Prenat Diagn** 1989 Apr;9(4):289–92
[Juvenile neuronal ceroid lipofuscinosis] Santavuori P, et al. **Duodecim** 1989;105(3):273–9 **(Fin)**

DRUG THERAPY

Selenium treatment in neuronal ceroid-lipofuscinosis. Naidu S, et al. **Am J Med Genet Suppl** 1988;5:283–9
Experience over 17 years with antioxidant treatment in Spielmeyer-Sjögren disease. Santavuori P, et al. **Am J Med Genet Suppl** 1988;5:265–74

ENZYMOLOGY

Abnormal cathepsin B activity in Batten disease. Dawson G, et al. **Am J Med Genet Suppl** 1988;5:209–20

GENETICS

The Newfoundland aggregate of neuronal ceroid-lipofuscinosis. Andermann E, et al. **Am J Med Genet Suppl** 1988;5:111–6
Electrophysiological findings of neuronal ceroid lipofuscinosis in heterozygotes. Gottlob I, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(6):516–21

METABOLISM

Accumulation of dolichol-linked oligosaccharides in ceroid-lipofuscinosis (Batten disease). Hall NA, et al. **Am J Med Genet Suppl** 1988;5:221–32
Characterization of disease-specific brain fluorophores in ceroid-lipofuscinosis. Katz ML, et al. **Am J Med Genet Suppl** 1988;5:253–64
Oligosaccharyl diphosphodolichols in the ceroid-lipofuscinoses. Pullarkat RK, et al. **Am J Med Genet Suppl** 1988;5:243–51
Lipopigment in the aging brain. Wisniewski HM, et al. **Am J Med Genet Suppl** 1988;5:183–91 (12 ref.)
Dolichol and dolichyl phosphate in the neuronal ceroid-lipofuscinoses and other diseases. Wolfe LS, et al. **Am J Med Genet Suppl** 1988;5:233–42
Immunoreactivity of ceroid lipofuscin storage pigment in Batten disease with monoclonal antibodies to the amyloid beta-protein [letter] Wisniewski KE, et al. **N Engl J Med** 1989 Jan 26;320(4):256–7

PATHOLOGY

Ceroid-lipofuscinosis. Report of two autopsy cases. Monma N, et al. **Acta Pathol Jpn** 1988 Sep;38(9):1191–203
Morphological diagnosis and misdiagnosis in Batten-Kufs disease. Carpenter S. **Am J Med Genet Suppl** 1988;5:85–91
Clinico-pathological variability in the childhood neuronal ceroid-lipofuscinoses and new observations on glycoprotein abnormalities. Wisniewski KE, et al. **Am J Med Genet Suppl** 1988;5:27–46
Histiocytic diseases of bone marrow. Lee RE. **Hematol Oncol Clin North Am** 1988 Dec;2(4):657–67
Case 3, 1988. Progressive myoclonic epilepsy, dementia, and blindness in a young girl. Jankovic J, et al. **Mov Disord** 1988;3(4):362–9
Ceroid-lipofuscinosis (Batten's disease): pathogenesis and sequential neuropathological changes in the ovine model. Jolly RD, et al. **Neuropathol Appl Neurobiol** 1989 Jul–Aug; 15(4):371–83
Lymphocyte autofluorescence: a screening procedure for neurodegenerative diseases. Hawkins EP, et al. **Pediatr Neurol** 1986 May–Jun;2(3):160–6
Light and electron microscopic study of juvenile neuronal ceroid-lipofuscinosis lymphocytes. Kimura S, et al. **Pediatr Neurol** 1988 May–Jun;4(3):148–52

PHYSIOPATHOLOGY

Clinical and biochemical studies of Japanese neuronal ceroid-lipofuscinosis. Eto Y, et al. **Am J Med Genet Suppl** 1988;5:59–67

SURGERY

Allogeneic bone marrow transplantation for canine ceroid lipofuscinosis. Deeg HJ, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 3):3082–3

THERAPY

Therapeutic modification of membrane lipid abnormalities in juvenile neuronal ceroid-lipofuscinosis (Batten disease). Bennett MJ, et al. **Am J Med Genet Suppl** 1988;5:275–81

VETERINARY

Morphological studies in canine (Dalmatian) neuronal ceroid-lipofuscinosis. Goebel HH, et al. **Am J Med Genet Suppl** 1988;5:127–39
Ovine ceroid-lipofuscinosis II: Pathologic changes interpreted in light of biochemical observations. Jolly RD, et al. **Am J Med Genet Suppl** 1988;5:159–70
The English setter with ceroid-lipofuscinosis: a suitable model for the juvenile type of ceroid-lipofuscinosis in humans. Koppang N. **Am J Med Genet Suppl** 1988;5:117–25
Ovine ceroid-lipofuscinosis. I: Lipopigment composition is indicative of a lysosomal proteinosis. Palmer DN, et al. **Am J Med Genet Suppl** 1988;5:141–58
Ovine ceroid lipofuscinosis. The major lipopigment protein and the lipid-binding subunit of mitochondrial ATP synthase have the same NH2-terminal sequence. Palmer DN, et al. **J Biol Chem** 1989 Apr 5;264(10):5736–40
Quantitative autofluorescence in the ovine and canine ocular fundus in ceroid-lipofuscinosis (Batten's disease). Armstrong D, et al. **Vet Res Commun** 1988;12(6):453–6

NEURONAL PLASTICITY

Alteration in the pattern of locomotion following a partial movement restraint in puppies. Błaszczyk JW, et al. **Acta Neurobiol Exp (Warsz)** 1989;49(1):39–46
Brain development, plasticity, and behavior. Kolb B. **Am Psychol** 1989 Sep;44(9):1203–12
Rapid neuromuscular remodeling following limb immobilization. Fahim MA. **Anat Rec** 1989 May; 224(1):102–9
Short-term synaptic plasticity. Zucker RS. **Annu Rev Neurosci** 1989;12:13–31 (148 ref.)
Brain state and plasticity: an integration of the reciprocal interaction model of sleep cycle oscillation with attentional models of hippocampal function. Hobson JA, et al. **Arch Ital Biol** 1988 Oct;126(4):209–24 (60 ref.)
Plasticity after brain lesions: contemporary concepts. Kaplan MS. **Arch Phys Med Rehabil** 1988 Nov;69(11):984–91 (76 ref.)
Dark-rearing modifies serotonin and 5-hydroxyindoleacetic acid contents in specific regions of rabbit brain. Alesci R, et al. **Behav Brain Res** 1988 Dec 1;31(2):115–20
Ontogeny of open field activity in rats after neonatal lesioning of the mesocortical dopaminergic projection. Kalsbeek A, et al. **Behav Brain Res** 1989 Mar 1;32(2):115–27
Extent and limits of cerebral adjustment to early section or congenital absence of the corpus callosum. Lassonde M, et al. **Behav Brain Res** 1988 Sep 15;30(2):165–81
Synaptic plasticity in the hypoglossal nucleus of female canaries: structural correlates of season, hemisphere, and testosterone treatment. Clower RP, et al. **Behav Neural Biol** 1989 Jul;52(1):63–77
Role of context in the expression of learning-induced plasticity of single neurons in auditory cortex. Diamond DM, et al. **Behav Neurosci** 1989 Jun;103(3):471–94
Impaired hippocampal plasticity in experimental chronic hydrocephalus. Tsubokawa T, et al. **Brain Inj** 1988 Jan–Mar;2(1):19–30
Embryonic spinal cord neurons develop preferential cholinergic projections to sympathetic ganglia explanted from appropriate levels of the neuraxis. Chalazonitis A, et al. **Brain Res** 1989 Apr 17;485(1):115–24
Critical period-dependent alterations of the transient body image in the rodent cerebral cortex. Cooper NG, et al. **Brain Res** 1989 Jun 5;489(1):167–76
Hippocampal interneuron loss and plasticity in human temporal lobe epilepsy. de Lanerolle NC, et al. **Brain Res** 1989 Aug 28;495(2):387–95
Perforated synapses on double-headed dendritic spines: a possible structural substrate of synaptic plasticity. Geinisman Y, et al. **Brain Res** 1989 Feb 20;480(1–2):326–9
Collateral sprouting of somatostatin-immunoreactive axons after partial deafferentation of the central nucleus of the rat amygdala. Gotow T, et al. **Brain Res** 1989 Jul 17; 492(1–2):325–36
Loss of entrainment and anatomical plasticity after lesions of the hamster retinohypothalamic tract. Johnson RF, et al. **Brain Res** 1988 Sep 20;460(2):297–313
Occurrence, ontogeny, ultrastructure and some plasticity of CGRP (calcitonin gene-related peptide)-immunoreactive nerves in the carotid body of rats. Kondo H, et al. **Brain Res** 1988 Nov 15;473(2):283–93
Theta pattern stimulation and the induction of LTP: the sequence in which synapses are stimulated determines the degree to which they potentiate. Larson J, et al. **Brain Res** 1989 Jun 5;489(1):49–58
Motor nerve outgrowth: reduced capacity for sprouting in the terminals of longer axons. Pestronk A, et al. **Brain Res** 1988 Nov 1;463(2):218–22
Is senile dementia of the Alzheimer type associated with hippocampal plasticity? Represa A, et al. **Brain Res** 1988 Aug 9;457(2):355–9
Neuronal-glial and synaptic plasticity in the adult rat paraventricular nucleus. Theodosis DT, et al. **Brain Res** 1989 Apr 10;484(1–2):361–6
Different metabolic changes in the lateral geniculate nucleus and the superior colliculus of adult rats after simultaneous or delayed double enucleation. Zilles K, et al. **Brain Res** 1989 May 29;488(1–2):14–21
Morphological and functional studies of rat tectal transplants. Golden GT, et al. **Brain Res Bull** 1989 Feb;22(2):461–8
Correlative scanning-immunoelectromicroscopic analysis of neuropeptide localization and neuronal plasticity in the endocrine hypothalamus. Wu WT, et al. **Brain Res Bull** 1989 Feb;22(2):399–410
Regulation of granule cell number by a predetermined number of Purkinje cells in development. Chen S, et al. **Brain Res Dev Brain Res** 1989 Jan 1;45(1):137–47
Basal forebrain neurons undergo somatal and dendritic remodeling during postnatal development: a single-section Golgi and choline acetyltransferase analysis. Gould E, et al. **Brain Res Dev Brain Res** 1989 Apr 1;46(2):297–302
Blockade of NMDA-receptors prevents ocularity changes in kitten visual cortex after reversed monocular deprivation. Gu QA, et al. **Brain Res Dev Brain Res** 1989 Jun 1;47(2):281–8
Effects of neonatal hemispherectomy on location and number of corticospinal neurons in the rat. Huttenlocher PR, et al. **Brain Res Dev Brain Res** 1989 May 1;47(1):59–69
Peripheral competition in the control of sensory neuron

numbers in Xenopus frogs reared with a single bilaterally innervated hindlimb. Lamb AH, et al. **Brain Res Dev Brain Res** 1989 Jan 1;45(1):149–53

Somatotopically organized transient projections from the primary somatosensory cortex to the cerebellar cortex. Tolbert DL. **Brain Res Dev Brain Res** 1989 Jan 1; 45(1):113–27

Selective association of dopamine axons with their striatal target cells in vitro. Won L, et al. **Brain Res Dev Brain Res** 1989 May 1;47(1):93–100

Plasticity of the neuromuscular system. **Ciba Found Symp** 1988;138:1–273

Model for the study of plasticity of the human nervous system: features of residual spinal cord motor activity resulting from established post-traumatic injury. Dimitrijevic MR. **Ciba Found Symp** 1988;138:227–39 (10 ref.)

Plasticity and predetermination of mesencephalic and trunk neural crest transplanted into the region of the cardiac neural crest. Kirby ML. **Dev Biol** 1989 Aug;134(2):402–12

Drinking behavior and motor function in rat pups depleted of brain dopamine during development. Weihmuller FB, et al. **Dev Psychobiol** 1989 Mar;22(2):101–13

Modifications of the N1–P1 component of the somatosensory evoked potential in humans after partial limb amputation as a manifestation of central nervous system remodeling. Sica RE, et al. **Electromyogr Clin Neurophysiol** 1988 Jun–Jul;28(5):227–31

Retinal axons innervate the embryonic chick diencephalon in an in-vivo-like pattern in explant co-cultures. Bird MM. **Exp Brain Res** 1989;75(3):563–8

Long-term potentiation of evoked and spontaneous neuronal activity in the grafted hippocampus. Buzsáki G, et al. **Exp Brain Res** 1989;76(2):401–8

Transplanted rat retinae do not project in a topographic fashion on the host tectum. Galli L, et al. **Exp Brain Res** 1989;74(2):427–30

The effects of reverse monocular deprivation in monkeys. I. Psychophysical experiments. Harwerth RS, et al. **Exp Brain Res** 1989;74(2):327–47

Auditory cortical responses to neonatal deafening: pyramidal neuron spine loss without changes in growth or orientation. McMullen NT, et al. **Exp Brain Res** 1988;72(1):195–200

A study of corticospinal remodelling using retrograde fluorescent tracers in rats. Reinoso BS, et al. **Exp Brain Res** 1989;74(2):387–94

The principle of "conservation of total axonal arborizations": massive compensatory sprouting in the hamster subcortical visual system after early tectal lesions. Sabel BA, et al. **Exp Brain Res** 1988;73(3):505–18

Plasticity in the barrel cortex of the adult mouse: effects of peripheral deprivation on GAD-immunoreactivity. Welker E, et al. **Exp Brain Res** 1989;74(3):441–52

Split chiasm developmentally induced in kittens: plasticity of interhemispheric transfer in visual cortex cells. Yinon U, et al. **Exp Brain Res** 1988;72(1):201–3

Synaptic structural plasticity following repetitive activation in the rat hippocampus. Petit TL, et al. **Exp Neurol** 1989 Jul;105(1):72–9

Plasticity-related binding of GABA and muscarinic receptor sites in piriform cortex of rat: an autoradiographic study. Thomas AP, et al. **Exp Neurol** 1989 Sep;105(3):265–71

Plasticity of astroglia: evidence supporting process elongation by "stretch". Jaeger CB. **GLIA** 1988;1(1):31–8

Astroglial plasticity in hemizygous and heterozygous jimpy mice. Best TT, et al. **Int J Dev Neurosci** 1988;6(1):39–57

Adaptation to telescopic spectacles: vestibulo-ocular reflex plasticity. Demer JL, et al. **Invest Ophthalmol Vis Sci** 1989 Jan;30(1):159–70

Axonal pathfinding during the regeneration of the goldfish optic pathway. Bernhardt R. **J Comp Neurol** 1989 Jun 1; 284(1):119–34

Extension of the critical period for developmental plasticity of the corticospinal pathway. Bregman BS, et al. **J Comp Neurol** 1989 Apr 15;282(3):355–70

Plasticity of acid phosphatase (FRAP) afferent terminal fields and of dorsal horn cell growth in the neonatal rat. Fitzgerald M, et al. **J Comp Neurol** 1985 Oct 22; 240(4):414–22

Pathfinding and target selection of goldfish retinal axons regenerating under TTX-induced impulse blockade. Hartlieb E, et al. **J Comp Neurol** 1989 Jun 1;284(1):148–68

Death of some dorsal root ganglion neurons and plasticity of others following sciatic nerve section in adult and neonatal rats. Himes BT, et al. **J Comp Neurol** 1989 Jun 8;284(2):215–30

Structure-function relationships in rat brainstem subnucleus interpolaris: V. Functional consequences of neonatal infraorbital nerve section. Jacquin MF. **J Comp Neurol** 1989 Apr 1;282(1):63–79

Postnatal development of lamina III/IV nonpyramidal neurons in rabbit auditory cortex: quantitative and spatial analyses of Golgi-impregnated material. McMullen NT, et al. **J Comp Neurol** 1988 Dec 1;278(1):139–55

Plasticity of frequency organization in auditory cortex of guinea pigs with partial unilateral deafness. Robertson D, et al. **J Comp Neurol** 1989 Apr 15;282(3):456–71

Target dependence of hypoglossal motor neurons during development in maturity. Snider WD, et al. **J Comp Neurol** 1989 Jan 15;279(3):489–98

Plasticity in the developing chick visual system: topography and maintenance of experimentally induced ipsilateral projections. Thanos S, et al. **J Comp Neurol** 1988 Dec 8; 278(2):303–11

Numerical matching in the mammalian CNS: lack of a competitive advantage of early over late-generated cerebellar granule cells. Vogel MW, et al. **J Comp Neurol** 1989 May 1;283(1):118–28

Cortical organization after treatment of a peripheral nerve with ricin: an evaluation of the relationship between sensory neuron death and cortical adjustments after nerve injury. Wall JT, et al. **J Comp Neurol** 1988 Nov 22; 277(4):578–92

Developmental plasticity of the rubrospinal tract in the North American opossum. Xu XM, et al. **J Comp Neurol** 1989 Jan 15;279(3):368–81

Noradrenergic sprouting and beta-adrenergic receptor binding in the lateral geniculate nucleus of rats after unilateral visual cortex ablation. Aurich M, et al. **J Hirnforsch** 1988;29(6):659–67

Changes of DNA synthesis in brain cortical cells after transplantation of embryonic nervous tissue into the brain of rats after hypoxia. Polezhaev LV, et al. **J Hirnforsch** 1988;29(6):669–72

DNA synthesis and mitotic division of cortical neurons in adult rats upon intrabrain transplantation of embryonic nervous tissue. Polezhaev LV, et al. **J Hirnforsch** 1988; 29(6):673–81

Structural plasticity at identified synapses during long-term memory in Aplysia. Bailey CH, et al. **J Neurobiol** 1989 Jul;20(5):356–72 (50 ref.)

Synaptic plasticity at the crayfish opener neuromuscular preparation. Bittner GD. **J Neurobiol** 1989 Jul; 20(5):386–408 (100 ref.)

Neuronal plasticity in the adult invertebrate nervous system. Bulloch AG, et al. **J Neurobiol** 1989 Jul;20(5):295–311 (56 ref.)

Neural and glial phenotypic expression by neural crest cells in culture: effects of control and presumptive aganglionic bowel from ls/ls mice. Coulter HD, et al. **J Neurobiol** 1988 Sep;19(6):507–31

Structural plasticity at crustacean neuromuscular synapses. Govind CK, et al. **J Neurobiol** 1989 Jul;20(5):409–21 (48 ref.)

The use of hormonally induced mosaics to study alterations in the synaptic connections made by persistent sensory neurons during insect metamorphosis. Levine RB, et al. **J Neurobiol** 1989 Jul;20(5):326–38

The refinement of invertebrate synapses during development. Lnenicka GA, et al. **J Neurobiol** 1989 Jul;20(5):339–55 (75 ref.)

Plasticity of cone horizontal cell functioning in cyprinid fish retina: effects of background illumination of moderate intensity. Djamgoz MB, et al. **J Neurocytol** 1988 Oct; 17(5):701–10

The development of transmission at an identified molluscan synapse. I. The emergence of synaptic plasticities. Pawson PA, et al. **J Neurophysiol** 1988 Dec;60(6):2196–210

Time course of structural changes at identified sensory neuron synapses during long-term sensitization in Aplysia. Bailey CH, et al. **J Neurosci** 1989 May;9(5):1774–80

Long-term expansion and sensitization of mechanosensory receptive fields in Aplysia support an activity-dependent model of whole-cell sensory plasticity. Billy AJ, et al. **J Neurosci** 1989 Apr;9(4):1254–62

Hippocampal place cells: stereotypy and plasticity. Breese CR, et al. **J Neurosci** 1989 Apr;9(4):1097–111

The medullary pacemaker nucleus is unnecessary for electroreceptor tuning plasticity in Sternopygus. Ferrari MB, et al. **J Neurosci** 1989 Apr;9(4):1354–61

Rapid remodeling of sensory endings in the corneas of living mice. Harris LW, et al. **J Neurosci** 1989 Jun;9(6):2210–4

Plasticity of process-bearing glial cell cultures from neonatal rat cerebral cortical tissue. Ingraham CA, et al. **J Neurosci** 1989 Jan;9(1):63–9

Dendritic growth and remodeling of cat retinal ganglion cells during fetal and postnatal development. Ramoa AS, et al. **J Neurosci** 1988 Nov;8(11):4239–61

Remodeling of neuromuscular junctions in adult mouse soleus. Wigston DJ. **J Neurosci** 1989 Feb;9(2):639–47

Corticorubral connections: ultrastructural evidence for homotypical synaptic reinnervation after developmental deafferentation. Fisher RS, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):438–46

Role of neuron-target interactions in the development of a subpopulation of avian sensory neurons. Marusich MF, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):480–6

Regeneration and grafting. Bernstein JJ. **J Neurotrauma** 1988; 5(3):229–34

Brain damage and plasticity (Part II). Proceedings from an international symposium. Kotor, Yugoslavia, June 2–5, 1988. **Metab Brain Dis** 1989 Mar;4(1):1–85

Brain damage and plasticity (Part I). Proceedings from an international symposium. Kotor, Yugoslavia, June 2–5, 1988. **Metab Brain Dis** 1988 Dec;3(4):245–315

Structural basis of the developmental plasticity in the human cerebral cortex: the role of the transient subplate zone. Kostović I, et al. **Metab Brain Dis** 1989 Mar;4(1):17–23

Brain plasticity after corpus callosum transection in the newborn rat. Zečević N, et al. **Metab Brain Dis** 1989 Mar; 4(1):25–31

Neurotransmitter systems and receptor plasticity in brain aging. Racagni G, et al. **Mod Probl Pharmacopsychiatry** 1989;23:21–7 (26 ref.)

A neuromodulator of synaptic transmission acts on the secretory apparatus as well as on ion channels. Man-Son-Hing H, et al. **Nature** 1989 Sep 21; 341(6239):237–9

Associative long-term depression in the hippocampus induced by hebbian covariance. Stanton PK, et al. **Nature** 1989 May 18;339(6221):215–8

Age-dependent alterations in hippocampal synaptic plasticity: relation to memory disorders. deToledo-Morrell L, et al. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):581–90 (88 ref.)

Electron microscopic study on the synaptic glomeruli of rat cerebellum: quantitative and qualitative analyses using the ethanol-phosphotungustic acid (E-PTA) procedure. Miyazaki M. **Neuropediatrics** 1989 May;20(2):73–8

Synaptic plasticity and learning. II: Do different kinds of plasticity underlie different kinds of learning? Morris RG, et al. **Neuropsychologia** 1989;27(1):41–59

Reach training selectively alters dendritic branching in subpopulations of layer II–III pyramids in rat motor-somatosensory forelimb cortex. Withers GS, et al. **Neuropsychologia** 1989;27(1):61–9

Restructuring of the topical organization of the motor cortex of the rat following damage to the opposite hemisphere. Ptitsyna IB, et al. **Neurosci Behav Physiol** 1989 May–Jun; 19(3):249–55

Local changes in transmembrane ionic currents during plastic reorganizations of electrogenesis of isolated neurons of the pond snail. Zapara GA, et al. **Neurosci Behav Physiol** 1989 May–Jun;19(3):224–9

Transient GABA-like immunoreactive axons in the corpus callosum of perinatal rats. Cobas A, et al. **Neurosci Lett** 1988 Oct 31;93(1):7–12

Mismatches between peripheral receptor type and central projections after peripheral nerve regeneration. Koerber HR, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):67–72

Electrophysiological evidence for terminal sprouting of locus coeruleus neurons following repeated mild stress. Nakamura S, et al. **Neurosci Lett** 1989 May 22; 100(1–3):147–52

Effect of hypophysectomy on the hypothalamic corticotropin-releasing factor (CRF) neuronal system in the eel: immunocytochemical study. Olivereau M, et al. **Neurosci Lett** 1988 Sep 12;91(3):271–5

Hippocampal plasticity in childhood epilepsy. Represa A, et al. **Neurosci Lett** 1989 May 8;99(3):351–5

Hippocampal plasticity in the kindling model of epilepsy in rats. Represa A, et al. **Neurosci Lett** 1989 May 8; 99(3):345–50

Ultrastructural evidence for hippocampal target cell-mediated trophic effects on septal cholinergic neurons in reaggregating cell cultures. Hsiang J, et al. **Neuroscience** 1988 Aug;26(2):417–31

Human organ donor adrenals: fine structure, plasticity and viability. Gash DM, et al. **Prog Brain Res** 1988;78:559–65

Plasticity in the neocortex: mechanisms underlying recovery from early brain damage. Kolb B, et al. **Prog Neurobiol** 1989;32(4):235–76 (150 ref.)

Plasticity in brain development. Aoki C, et al. **Sci Am** 1988 Dec;259(6):56–64 (4 ref.)

Memory in a neuron. Kinoshita J. **Sci Am** 1989 Jan;260(1):28, 32

Plasticity in brain development [letter] Ramachandran VS. **Sci Am** 1989 Mar;260(3):8–9

Plasticity and differentiation of embryonic retinal cells after terminal mitosis. Adler R, et al. **Science** 1989 Jan 20; 243(4889):391–3

Inescapable versus escapable shock modulates long-term potentiation in the rat hippocampus. Shors TJ, et al. **Science** 1989 Apr 14;244(4901):224–6

Nerve regeneration. Selzer ME. **Semin Neurol** 1987 Mar; 7(1):88–96 (89 ref.)

Modelling afferent connectivity, postsynaptic plasticity, and signal discrimination. Chover J. **Synapse** 1989;3(2):101–16

Effects of fimbria-fornix transection and ganglioside treatments on histochemical staining for glucose-6-phosphate dehydrogenase in the lateral septum. Fass B, et al. **Synapse** 1987;1(1):70–81

Synaptic structural plasticity: role of synaptic shape. Markus EJ, et al. **Synapse** 1989;3(1):1–11 (63 ref.)

Afferent axons from the antenna influence the number and placement of intrinsic synapses in the antennal lobes of Manduca sexta. Tolbert LP. **Synapse** 1989;3(1):83–95

The emerging generality of the neurotrophic hypothesis [news] Davies AM. **Trends Neurosci** 1988 Jun;11(6):243–4 (19 ref.)

When are neurones specified? [news] Price J. **Trends Neurosci** 1989 Aug;12(8):276–8

A role for glia in the development of organized neuropilar structures. Tolbert LP, et al. **Trends Neurosci** 1989 Feb; 12(2):70–5 (41 ref.)

[Is Alzheimer's senile dementia associated with the phenomena of reactive synaptogenesis in the hippocampus?] Represa A, et al. **C R Acad Sci [III]** 1988; 306(19):575–7 (Eng. Abstr.) **(Fre)**

[The plasticity of motor units in change of the activity pattern by electric stimulation—electrostimulation and its possible clinical applications] Nix WA. **Fortschr Neurol Psychiatr** 1989 Mar;57(3):94–106 (194 ref.) (Eng. Abstr.) **(Ger)**

[Neurohistologic studies of cortical pyramidal neurons in the rat following rehabilitation of early postnatal malnutrition]

Schönheit B, et al. **J Hirnforsch** 1988;29(6):599–615 (Eng. Abstr.) **(Ger)**

[Information characteristics of neuronal and synaptic plasticity] Frolov AA, et al. **Biofizika** 1988 Jul–Aug; 33(4):659–66 (Eng. Abstr.) **(Rus)**

[Second messengers in the regulation of nerve cell plasticity during learning] Pivovarov AS, et al. **Biol Nauki** 1989; (3):75–101 (130 ref.) (Eng. Abstr.) **(Rus)**

[Autonomic reactions in the mnemonic activity of subjects at various levels of functional mobility of neural processes] Makarenko NV, et al. **Fiziol Cheloveka** 1988 May–Jun; 14(3):355–63 **(Rus)**

[Plasticity of the interneuronal connections of the cerebral cortex from the aspect of age] Bogolepov NN. **Vestn Akad Med Nauk SSSR** 1988;(11):35–8 (Eng. Abstr.) **(Rus)**

[Disorders of nervous trophism and nerve cell plasticity as factors in the development and compensation of pathological processes in nervous system diseases] Gekht BM, et al. **Vestn Akad Med Nauk SSSR** 1988;(11):26–34 (Eng. Abstr.) **(Rus)**

[Plasticity of the behavior of Myrmica rubra ants during learning in a multi-alternative symmetric labyrinth] Dashevskii BA, et al. **Zh Vyssh Nerv Deiat** 1989 Jan–Feb; 39(1):81–9 (Eng. Abstr.) **(Rus)**

[Molecular mechanisms of neuronal plasticity during learning: the role of second messengers] Kotliar BI, et al. **Zh Vyssh Nerv Deiat** 1989 Mar–Apr;39(2):195–214 (100 ref.) **(Rus)**

[Possibilities of detecting the plasticity of monosynaptic excitable connections during the analysis of impulse activity of neurons using cross-correlation histograms and Cox's method] Zosimovskii VA. **Zh Vyssh Nerv Deiat** 1989 Jan–Feb;39(1):110–7 (Eng. Abstr.) **(Rus)**

[The analysis of the impulse activity of 2 neurons monosynaptically excitable by a 3rd using cross-correlation histograms and Cox's method. The potential for detecting neuronal and synaptic plasticity] Zosimovskii VA. **Zh Vyssh Nerv Deiat** 1989 Mar–Apr;39(2):334–42 (Eng. Abstr.) **(Rus)**

[Mechanisms of synaptic plasticity] Beňušková L. **Cesk Fysiol** 1988;37(5):387–400 (91 ref.) **(Slo)**

DRUG EFFECTS

Improvement of vestibular plasticity in the guinea pig with a calcium entry blocker. Tolu E, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;460:72–9

Plasma HVA, neuroleptics, and dopaminergic plasticity [editorial] Dávila R. **Biol Psychiatry** 1989 Jan;25(1):1–3

Thyroxine influences neuronal connectivity in the adult frog brain. Hofmann MH, et al. **Brain Res** 1989 Jul 17; 492(1–2):389–91

The effects of sodium appetite on the responses of cells in the zona incerta to the sight or ingestion of food, salt and water in sheep. Kendrick KM, et al. **Brain Res** 1989 Jul 17;492(1–2):211–8

Alterations and recovery of dendritic spine density in rat hippocampus following long-term ethanol ingestion. King MA, et al. **Brain Res** 1988 Sep 6;459(2):381–5

Effects of pentobarbital on behavioral and synaptic plasticities in crayfish. Winegar BD, et al. **Brain Res** 1988 Dec 13;475(1):21–7

6-Hydroxydopamine treatment and beta adrenergic receptor binding in kittens. Relation to visual cortical plasticity. Allen EE, et al. **Exp Brain Res** 1988;72(3):605–10

Blockade of intracortical inhibition in kitten striate cortex: effects on receptive field properties and associated loss of ocular dominance plasticity. Ramoa AS, et al. **Exp Brain Res** 1988;73(2):285–96

Aspartame exposure and in vitro hippocampal slice excitability and plasticity. Fountain SB, et al. **Fundam Appl Toxicol** 1988 Aug;11(2):221–8

Endogenous opioid systems and the regulation of dendritic growth and spine formation. Hauser KF, et al. **J Comp Neurol** 1989 Mar 1;281(1):13–22

The effects of haloperidol on synaptic plasticity in rat's medial prefrontal cortex. Klintzova AJ, et al. **J Hirnforsch** 1989;30(1):51–7

The effects of amphetamine on synaptic plasticity in rat's medial prefrontal cortex. Uranova NA, et al. **J Hirnforsch** 1989;30(1):45–50

Terminal nerve sprouting at the frog neuromuscular junction induced by prolonged tetrodotoxin blockade of nerve conduction. Diaz J, et al. **J Neurocytol** 1989 Feb; 18(1):39–46

Dopaminergic neuromodulation in the retinas of lower vertebrates. Weiler R, et al. **Neurosci Res Suppl** 1988; 8:S183–96 (21 ref.)

Prenatal ethanol exposure impairs lesion-induced plasticity in a dopaminergic synapse after maturity. Gottesfeld Z, et al. **Neuroscience** 1989;29(3):715–23

Neurotransmitter regulation of neuronal outgrowth, plasticity and survival. Lipton SA, et al. **Trends Neurosci** 1989 Jul; 12(7):265–70

Immature and mature variants of MAP2 and tau proteins and neuronal plasticity [news] Nunez J. **Trends Neurosci** 1988 Nov;11(11):477–9 (30 ref.)

[Mobility of the structures of live myelinated nerve fibers under the action of proteolytic enzymes] Sotnikov OS, et al. **Biull Eksp Biol Med** 1989 May;107(5):621–4 **(Rus)**

NEURONS

see related
NEURAL CONDUCTION

Neuronal biosensors. Buch RM, et al. **Anal Chem** 1989 Apr 15;61(8):533A–542A

Neuroanatomical organization of dopamine neurons in the ventral tegmental area. Domesick VB. **Ann N Y Acad Sci** 1988;537:10–26 (62 ref.)

Intracranial extracerebral glioneural heterotopia. Nishio S, et al. **Childs Nerv Syst** 1988 Aug;4(4):244–8 (20 ref.)

Computer software for development and simulation of compartmental models of neurons. De Schutter E. **Comput Biol Med** 1989;19(2):71–81

Morphological and biochemical evidence showing neuronal properties in AtT-20 cells and their growth cones. Tooze J, et al. **Eur J Cell Biol** 1989 Aug;49(2):259–73

A neuron-specific enhancer of the Drosophila dopa decarboxylase gene. Johnson WA, et al. **Genes Dev** 1989 May;3(5):676–86

Cryopreservation of fetal rat and non-human primate mesencephalic neurons: viability in culture and neural transplantation. Collier TJ, et al. **Prog Brain Res** 1988; 78:631–6

Hyperglycemia decreases acute neuronal ischemic changes after middle cerebral artery occlusion in cats. Zasslow MA, et al. **Stroke** 1989 Apr;20(4):519–23

[Can psychosis of neurons explain the low frequency of cancer in mental disease? Maybe] Merle H. **J Chir (Paris)** 1988 Oct;125(10):601–9 **(Fre)**

[A modified method for preparing neuronally isolated neocortex slabs] Taranenko VD, et al. **Fiziol Zh** 1988 Nov–Dec;34(6):112–4 (Eng. Abstr.) **(Rus)**

ANALYSIS

Lectins as neuroanatomical tracers. Büttner-Ennever JA, et al. **Acta Histochem Suppl (Jena)** 1988;36:141–51 (60 ref.)

Distribution, mobility, and function of benzodiazepine receptors on primary cultures of vertebrate neurons. Thompson CL, et al. **Adv Biochem Psychopharmacol** 1988; 45:135–49

Differential localization of 5-HT1 receptors on myenteric and submucosal neurons. Galligan JJ, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):G603–11

Distribution and function of enteric GAL-IR nerves in dogs: comparison with VIP. Gonda T, et al. **Am J Physiol** 1989 May;256(5 Pt 1):G884–96

Quantitative analysis of individual neurons by open tubular liquid chromatography with voltammetric detection. Kennedy RT, et al. **Anal Chem** 1989 Mar 1;61(5):436–41

Neuromelanin in the substantia nigra of adult horses. Cozzi B, et al. **Anat Anz** 1988;166(1–5):53–61

Luteinizing hormone-releasing hormone (LHRH) neurons in the male and female rats at peripubertal period. Takahashi S, et al. **Anat Embryol (Berl)** 1988;178(6):475–80

Somatostatin-containing neurons in the mouse brain: an immunohistochemical study and comparison with the rat brain. Shimada O, et al. **Arch Histol Cytol** 1989 Jul; 52(3):201–12

Molecular analysis of two general markers of neurons and the diffuse neuroendocrine system: neuron-specific enolase and PGP9.5. Day IN. **Biochem Soc Trans** 1988 Aug; 16(4):454–7

Monoclonal antibody to microtubule-associated STOP protein: affinity purification of neuronal STOP activity and comparison of antigen with activity in neuronal and nonneuronal cell extracts. Pirollet F, et al. **Biochemistry** 1989 Jan 24;28(2):835–42

Tissue-specific mitochondrial proteins. Vayssiere JL, et al. **Biochimie** 1989 Jul;71(7):787–91

Localization of proopiomelanocortin (POMC) immunoreactive neurons in the forebrain of the pig. Kineman RD, et al. **Biol Reprod** 1989 May;40(5):1119–26

Immunocytochemical localization of luteinizing hormone-releasing hormone and proopiomelanocortin neurons within the preoptic area and hypothalamus of the bovine brain. Leshin LS, et al. **Biol Reprod** 1988 Nov; 39(4):963–75

Highly sensitive enzyme immunoassay system: determination of nervous system-related proteins at the level of single neurons. Kato K. **Biomed Biochim Acta** 1989; 48(2–3):S188–93

Enkephalin-like immunoreactivity in neurons in the human pineal gland. Moore RY, et al. **Brain Res** 1988 Aug 9; 457(2):395–8

Preservation of GABAergic perikarya and boutons after transient ischemia in the gerbil hippocampal CA1 field. Nitsch C, et al. **Brain Res** 1989 Aug 28;495(2):243–52

A fluorescence histochemical method for the demonstration of central catecholamine neurons in young embryonic tissues. Woerly S, et al. **Brain Res** 1989 Aug 28; 495(2):377–81

Pharmacological characterization of sodium channels in the primary culture of individual Drosophila embryos: neurons of a mutant deficient in a putative sodium channel gene. Sakai K, et al. **Cell Differ Dev** 1989 Mar;26(2):107–18

Neurons containing cholecystokinin mRNA in the mammillary region: ontogeny and adult distribution in the rat. Burgunder JM, et al. **Cell Mol Neurobiol** 1989 Jun; 9(2):281–94

Differential localisation of tyrosinated, detyrosinated, and acetylated alpha-tubulins in neurites and growth cones of dorsal root ganglion neurons. Robson SJ, et al. **Cell Motil Cytoskeleton** 1989;12(4):273–82

Projections of neurons with neuromedin U-like immunoreactivity in the small intestine of the guinea-pig. Furness JB, et al. **Cell Tissue Res** 1989 Aug;257(2):415–22

Ultrastructural studies on calcitonin gene-related peptide-, tachykinins- and somatostatin-immunoreactive neurones in rat dorsal root ganglia: evidence for the colocalization of different peptides in single secretory granules. Merighi A, et al. **Cell Tissue Res** 1988 Oct;254(1):101–9

Catecholaminergic nerves in the embryonic chick ovary: co-localization with beta 2-adrenoceptor-bearing steroidogenic cells. Müller-Marschhausen U, et al. **Cell Tissue Res** 1988 Oct;254(1):1–9

Early sexual differentiation of diencephalic dopaminergic neurons of the rat in vitro. Reisert I, et al. **Cell Tissue Res** 1989 Feb;255(2):411–7

Peptide-containing neurons in explant cultures of guinea-pig myenteric plexus during development in vitro: gross morphology and growth patterns. Saffrey MJ, et al. **Cell Tissue Res** 1988 Oct;254(1):167–76

Layer-specific innervation of the dopamine-deficient frontal cortex in weaver mutant mice by grafted mesencephalic dopaminergic neurones. Triarhou LC, et al. **Cell Tissue Res** 1988 Oct;254(1):11–5

Immunohistochemical and ultrastructural localisation of peptide-containing nerves and myocardial cells in the human atrial appendage. Wharton J, et al. **Cell Tissue Res** 1988 Oct;254(1):155–66

Coexistence of FMRFamide, met-enkephalin and serotonin in molluscan neurons. Takayanagi H, et al. **Comp Biochem Physiol [A]** 1988;91(3):613–20

Tubulin isotype usage in vivo: a unique spatial distribution of the minor neuronal-specific beta-tubulin isotype in pheochromocytoma cells. Asai DJ, et al. **Dev Biol** 1989 Apr;132(2):398–409

Neuropeptides in the human appendix. Distribution and motor effects. Ekblad E, et al. **Dig Dis Sci** 1989 Aug; 34(8):1217–30

Karyometry of the neurosecretory neurons of the hypothalamus of mice of various ages treated with sodium glutamate. Srebro Z, et al. **Folia Biol (Krakow)** 1988; 36(1–2):95–102

In situ hybridization demonstrating coexpression of urotensins I, II-alpha, and II-gamma in the caudal neurosecretory neurons of the carp, Cyprinus carpio. Ichikawa T, et al. **Gen Comp Endocrinol** 1988 Sep; 71(3):493–501

Quantitative immunohistochemical analysis of VIP-neurons in the rat visual cortex. Hajós F, et al. **Histochemistry** 1988; 90(2):139–44

DNA content in neurons of Auerbach's plexus under experimental conditions in adult rats. Giacobini Robecchi MG, et al. **Int J Dev Neurosci** 1988;6(2):109–15

Identification of alpha-galactose (alpha-fucose)-asialo-GM1 glycolipid expressed by subsets of rat dorsal root ganglion neurons [published erratum appears in J Biol Chem 1989 Aug 25;264(24):14585] Chou DK, et al. **J Biol Chem** 1989 Feb 25;264(6):3409–15

Isolation and chemical characterization of Alzheimer's disease paired helical filament cytoskeletons: differentiation from amyloid plaque core protein. Roher AE, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2703–16

Nerve growth factor-induced changes in the intracellular localization of the protein kinase C substrate B-50 in pheochromocytoma PC12 cells. Van Hooff CO, et al. **J Cell Biol** 1989 Mar;108(3):1115–25

Histaminergic system in the tree shrew brain. Airaksinen MS, et al. **J Comp Neurol** 1989 Aug 15;286(3):289–310

Biochemical and immunocytochemical characterization of olfactory marker protein in the rodent central nervous system. Baker H, et al. **J Comp Neurol** 1989 Jul 8; 285(2):246–61

Nerve growth factor receptor immunoreactive profiles in the normal, aged human basal forebrain: colocalization with cholinergic neurons. Mufson EJ, et al. **J Comp Neurol** 1989 Jul 8;285(2):196–217

Distributions of pro-vasopressin expressing and pro-vasopressin deficient CRH neurons in the paraventricular hypothalamic nucleus of colchicine-treated normal and adrenalectomized rats. Whitnall MH. **J Comp Neurol** 1988 Sep 1;275(1):13–28

Vasopressin gene expression in the normal and Brattleboro rat: a histological analysis in semi-thin sections with biotinylated oligonucleotide probes. Guitteny AF, et al. **J Histochem Cytochem** 1989 Oct;37(10):1479–87

Identification of protein-bound oligosaccharides on the surface of growth cones that bind to muscle cells. Ambron RT, et al. **J Neurobiol** 1989 Sep;20(6):549–68

Characterization of protein-linked glycoconjugates produced by identified neurons of Aplysia californica. Gabel CA, et al. **J Neurobiol** 1989 Sep;20(6):530–48

Axolinin localization in the nervous tissue of squid revealed by monoclonal antibodies specific for axolinin: cellular and subcellular localization of axolinin in the squid neuron. Arai T, et al. **J Neurochem** 1989 Jan;52(1):93–100

Highly basic 30- and 32-kilodalton proteins associated with synapse formation on polylysine-coated beads in enriched neuronal cell cultures. Burry RW, et al. **J Neurochem** 1989 Feb;52(2):551–60

Purification of neuronal cell surface proteins and generation of epitope-specific monoclonal antibodies against cell

adhesion molecules. Schlosshauer B. **J Neurochem** 1989 Jan;52(1):82–92

GABAergic neurons of different morphological classes are cogenerated in the mouse barrel cortex. Cobas A, et al. **J Neurocytol** 1988 Aug;17(4):511–9

A comparison of four techniques for mapping the distribution of serotonin and serotonin-containing neurons in fixed and living ganglia of the snail, Lymnaea. Kemenes G, et al. **J Neurocytol** 1989 Apr;18(2):193–208

Denervation induces long-lasting changes in the distribution of microtubule proteins in hippocampal neurons. Kwak S, et al. **J Neurocytol** 1988 Apr;17(2):189–95

The distribution of acetylcholine receptors in chick ciliary ganglion neurons following disruption of ganglionic connections. Jacob MH, et al. **J Neurosci** 1988 Oct; 8(10):3838–49

Voltage-clamp analysis of sodium channels in wild-type and mutant Drosophila neurons. O'Dowd DK, et al. **J Neurosci** 1988 Oct;8(10):3633–43

A versatile means of intracellular labeling: injection of biocytin and its detection with avidin conjugates. Horikawa K, et al. **J Neurosci Methods** 1988 Aug;25(1):1–11

Improvement of the tetramethyl benzidine reaction with ammonium molybdate as a stabilizer for light and electron microscopic ligand–HRP neurohistochemistry, immunocytochemistry and double-labelling. Liang FY, et al. **J Neurosci Methods** 1989 Jun;28(3):155–62

Quantitative immunocytochemistry using an image analyzer. I. Hardware evaluation, image processing, and data analysis. Mize RR, et al. **J Neurosci Methods** 1988 Nov; 26(1):1–23

Neural connections identified with PHA-L anterograde and HRP retrograde tract-tracing techniques. Thompson AM, et al. **J Neurosci Methods** 1988 Aug;25(1):13–7

Adenosine A1 and A2 receptors of the substantia gelatinosa are located predominantly on intrinsic neurons: an autoradiography study. Choca JI, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):757–64

Immunohistochemistry of a spontaneous murine ovarian teratoma with neuroepithelial differentiation. Neuron-associated beta-tubulin as a marker for primitive neuroepithelium. Caccamo D, et al. **Lab Invest** 1989 Mar; 60(3):390–8

Age-related changes of enkephalinergic innervation of human sympathetic neurons. Järvi R, et al. **Mech Ageing Dev** 1988 Aug;44(2):143–51

Identification of an intracellular pool of gamma-aminobutyric acidA/benzodiazepine receptors en route to the cell surface of brain neurons in culture. Czajkowski C, et al. **Mol Pharmacol** 1989 Feb;35(2):183–8

Origin of luteinizing hormone-releasing hormone neurons. Schwanzel-Fukuda M, et al. **Nature** 1989 Mar 9; 338(6211):161–4

Cerebral microvascular and parenchymal phospholipid composition in the mouse. Williams WM, et al. **Neurochem Res** 1988 Aug;13(8):743–7

Is phenylethanolamine-N-methyltransferase (PNMT) contained in rat hypothalamic neurons? Anderson CR, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):164–9

Electrophysiological evidence for cholinoceptive neurons in the medial vestibular nucleus: studies on rat brain stem in vitro. Ujihara H, et al. **Neurosci Lett** 1988 Nov 11; 93(2–3):231–5

Development of immunoreactivity to the invertebrate neuropeptide small cardiac peptide B in the tapeworm Diphyllobothrium dendriticum. Gustafsson MK, et al. **Parasitol Res** 1989;75(5):396–400

A peptide with N-terminal histidine and C-terminal isoleucine amide (PHI) and vasoactive intestinal peptide (VIP) are copackaged in myenteric neurones of the guinea pig ileum. Agoston DV, et al. **Peptides** 1989 May-Jun; 10(3):571–3

The distribution of luteinizing hormone-releasing hormone (LHRH) neurons and fibers in the Formosan rock-monkey. Sung WL, et al. **Proc Natl Sci Counc Repub China [B]** 1988 Jul;12(3):156–62

Structure of nicotinic acetylcholine receptors from muscle and neurons. Lindstrom J, et al. **Prog Clin Biol Res** 1989; 289:245–66 (82 ref.)

Localization and regulation of vasopressin mRNA in human neurons. Rivkees SA, et al. **Synapse** 1989;3(3):246–54

Expression of MHC antigens in the central nervous system. Bartlett PF, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3163–5 (15 ref.)

The biochemistry and molecular biology of the dihydropyridine-sensitive calcium channel. Campbell KP, et al. **Trends Neurosci** 1988 Oct;11(10):425–30 (58 ref.)

Seizure-inducible c-fos protein(s) in mammalian neurons. Dragunow M, et al. **Trends Pharmacol Sci** 1988 Jan;9(1):5–6 (19 ref.)

Vasoactive intestinal polypeptidergic innervation of human urinary bladder in normal and pathological conditions. Van Poppel H, et al. **Urol Int** 1988;43(4):205–10

[Decrease in the immunoreactivity of protein 7B2 in vasopressinergic cells in the supraoptic nucleus and in fibers of the neurohypophysis, in Brattleboro rats] Marcinkiewicz M, et al. **C R Acad Sci [III]** 1988;307(12):689–94 (Eng. Abstr.) **(Fre)**

[The significance of a positive reaction to anti-serotonin (5-HT) in certain hypothalamic neurons of the rat during the perinatal period] Ugrumov M, et al. **C R Acad Sci [III]** 1988;307(8):505–9 (Eng. Abstr.) **(Fre)**

[Neurotransmitters of giant neurons in the African giant snail, Achatina fulica Férussac. IV. Supplemental results] Takeuchi H, et al. **C R Soc Biol (Paris)** 1988;182(4):425–32 (Eng. Abstr.) **(Fre)**

[Distribution of RNA during neuronal migration in developing normal and dysplastic brains in man. Acridine orange study] Sarnat HB. **Rev Neurol (Paris)** 1989; 145(2):127–33 (Eng. Abstr.) **(Fre)**

[Cytomorphometric analysis of the DNA content of neurons in Auerbach's myenteric plexus] Geuna S, et al. **Boll Soc Ital Biol Sper** 1988 Aug;64(8):775–7 (Eng. Abstr.) **(Ita)**

[Catecholaminergic systems in the amygdaloid complex of SDAT and aged controls: tyrosine hydroxylase immunohistochemistry] Nakamura S, et al. **Rinsho Shinkeigaku** 1989 Mar;29(3):296–300 (Eng. Abstr.) **(Jpn)**

[Calmodulin and neuron: immunohistochemical studies] Sano M, et al. **Yakubutsu Seishin Kodo** 1988 Sep;8(3):421–8 (23 ref.) (Eng. Abstr.) **(Jpn)**

[Immunochemical identification of vasopressin in neurons and in granule-containing cells of the human cerebral blood vessels] Motavkin PA, et al. **Arkh Anat Gistol Embriol** 1989 May;96(5):18–23 (Eng. Abstr.) **(Rus)**

[Study of the distribution of surface membrane glycoconjugates in spinal cord and spinal ganglia neurons cultured in a monolayer] Koval' LM, et al. **Dokl Akad Nauk SSSR** 1988;303(2):481–3 **(Rus)**

[Electron cytochemical detection of carbohydrate determinants of surface membrane of cultured neurons] Skibo GG, et al. **Dokl Akad Nauk SSSR** 1988;300(4):971–3 **(Rus)**

[Immunocytochemical study of the distribution of cytoskeletal proteins in cultured neurons of the spinal cord of mouse embryos] Skibo GG, et al. **Neirofiziologiia** 1988; 20(5):618–23 (Eng. Abstr.) **(Rus)**

[Functional similarity of the P-2 form of primary sleep and hypobiosis in the frog Rana temporaria (based on data from luminescent microspectral analysis of the cytoplasm of neurosecretory neurons)] Khomutetskaia OE, et al. **Zh Evol Biokhim Fiziol** 1989 Jan-Feb;25(1):88–94 (Eng. Abstr.) **(Rus)**

[Distribution of the LPa3 and PPa3 neuronal processes in the pedal ganglia of the edible snail] Lisachev PD, et al. **Zh Vyssh Nerv Deiat** 1988 Nov-Dec;38(6):1132–7 (Eng. Abstr.) **(Rus)**

ANATOMY & HISTOLOGY

Somatostatin-14-like immunoreactive neurons and fibres in the human olfactory bulb. Ohm TG, et al. **Anat Embryol (Berl)** 1988;179(2):165–71

Neurons of origin of the internal ramus of the rabbit accessory nerve: localization in the dorsal nucleus of the vagus nerve and the nucleus retroambigualis. Kitamura S, et al. **Anat Rec** 1989 Aug;224(4):541–9

Nucleolar eccentricity in trigeminal ganglion neurons. Palmer RJ, et al. **J Anat** 1988 Apr;157:163–8

Topical organization of the projections of neurons of the substantia nigra and the ventral field of the tegmentum of the midbrain to the head of the caudate nucleus of the cat. Gorbachevskaya IA. **Neurosci Behav Physiol** 1989 May-Jun;19(3):196–203

Transient increase in the number of cholinergic neurons in the developing rat dentate gyrus. Kanaya-Ida S, et al. **Neurosci Lett** 1989 Jun 5;101(1):23–8

The morphology of cat spinal neurons projecting to both the lateral cervical nucleus and the dorsal column nuclei. Lu GW, et al. **Neurosci Lett** 1989 Jun 5;101(1):29–34

[Localization of neurons giving rise to the preganglionic parasympathetic fibers passing through or bypassing the ciliary ganglion in the cat] Kuchiiwa S, et al. **Nippon Ganka Gakkai Zasshi** 1988 Jun;92(6):946–51 (Eng. Abstr.) **(Jpn)**

[Input and output neuronal structures of the pontine micturition center. Part I. Mainly input neuronal structures] Sugaya K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Jul;79(7):1210–8 (Eng. Abstr.) **(Jpn)**

CLASSIFICATION

Neuronal types and their percent distribution within the magnocellular nuclei of the human basal forebrain. Ulfig N, et al. **Acta Anat (Basel)** 1989;134(3):237–41

Neurons in Onuf's nucleus [letter] Swift TR. **Arch Neurol** 1989 Jun;46(6):606–7

Classification of the neurons in fowl hypothalamic nuclei based on their dendritic patterns. Yamauchi K, et al. **Br Poult Sci** 1988 Sep;29(3):581–8

A totally automated system for the detection and classification of neural spikes. Yang XW, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):806–16

Enteric neuron numbers and sizes in Auerbach's plexus in the small and large intestine of adult and aged rats. Santer RM, et al. **J Auton Nerv Syst** 1988 Nov;25(1):59–67

Morphologies of rabbit retinal ganglion cells with complex receptive fields. Amthor FR, et al. **J Comp Neurol** 1989 Feb 1;280(1):97–121

Structure of the nucleus olfactorius anterior of the hedgehog (Erinaceus europaeus). Valverde F, et al. **J Comp Neurol** 1989 Jan 22;279(4):581–600

Yaw direction neurons in the cat inferior olive. Robinson FR, et al. **J Neurophysiol** 1988 Nov;60(5):1739–52

Evidence for two functionally distinct subpopulations of neurons within the rat striatum. Nisenbaum ES, et al. **J Neurosci** 1988 Nov;8(11):4138–50

A monoclonal antibody, Py, distinguishes different classes of hippocampal neurons. Woodhams PL, et al. **J Neurosci** 1989 Jun;9(6):2170–81

A monoclonal antibody specific for a subpopulation of retinal bipolar cells in vertebrates. Onoda N. **Neurosci Res Suppl** 1988;8:S113–25

The spinothalamic system of the rat: structural types of retrogradely labelled neurons in the marginal zone (lamina I). Lima D, et al. **Neuroscience** 1988 Oct;27(1):215–30

The taxonomy of invertebrate neurons: a plea for a new field. Rowell CH. **Trends Neurosci** 1989 May;12(5):169–74 (26 ref.)

[The classification of neurons in the corpus geniculatum laterale pars ventralis of the albino rat: a Golgi-Kopsch study] Meier U, et al. **Z Mikrosk Anat Forsch** 1989; 103(2):247–56 (Eng. Abstr.) **(Ger)**

CYTOLOGY

Topography of the pelvic autonomic nerves in human fetuses between 21–29 weeks of gestation. Fritsch H. **Anat Embryol (Berl)** 1989;180(1):57–64

The human oral raphe system. Architectonics and neuronal types in pigment-Nissl preparations. Ohm TG, et al. **Anat Embryol (Berl)** 1989;180(1):37–43

Two types of locus coeruleus neurons born on different embryonic days in the mouse. Steindler DA, et al. **Anat Embryol (Berl)** 1989;179(5):423–34

Patterns of maturation of somatotopical distribution of corticospinal neurons in postnatal rats. A WGA-HRP study. Uozumi T, et al. **Anat Embryol (Berl)** 1988; 179(1):19–24

New technique for differential staining of myelinated fibers and nerve cells on paraffin sections. Tolivia J, et al. **Anat Rec** 1988 Dec;222(4):437–40

Distribution of TRH-like immunoreactivity with special reference to coexistence with other neuroactive compounds. Hökfelt T, et al. **Ann N Y Acad Sci** 1989; 553:76–105 (151 ref.)

Localization and development of bombesin/GRP-like immunoreactivity in the rat central nervous system. Panula P, et al. **Ann N Y Acad Sci** 1988;547:54–69

Acetylcholinesterase-rich pyramidal neurons in the human neocortex and hippocampus: absence at birth, development during the life span, and dissolution in Alzheimer's disease. Mesulam MM, et al. **Ann Neurol** 1988 Dec;24(6):765–73

Effects of chronic phenobarbital exposure on cultured mouse spinal cord neurons. Serrano EE, et al. **Ann Neurol** 1988 Sep;24(3):429–38

Immortalization of neural cells via retrovirus-mediated oncogene transduction. Cepko CL. **Annu Rev Neurosci** 1989;12:47–65 (75 ref.)

Cytotoxic effects of acrylamide and its related compounds assessed by protein content, LDH activity and cumulative glucose consumption of neuron-rich cultures in a chemically defined medium. Hayashi M, et al. **Arch Toxicol** 1989;63(4):308–13

The effect of Staphylococcus aureus enterotoxin A on proliferation of lymphoid and nerve cells. Alakhov VYu, et al. **Biotechnol Appl Biochem** 1988 Dec;10(6):563–7

Effects of the richness of the environment on six different cortical areas of the cat cerebral cortex. Beaulieu C, et al. **Brain Res** 1989 Aug 28;495(2):382–6

The dendritic morphology of pyramidal neurons in the rat hippocampal CA3 area. I. Cell types. Fitch JM, et al. **Brain Res** 1989 Feb 6;479(1):105–14

Astroglia-induced detachment of central neurons but astroglia-dependent growth of peripheral neurons in rat embryonic spinal cord primary cultures. Gilad GM, et al. **Brain Res** 1988 Aug 23;458(2):249–60

The dendritic morphology of pyramidal neurons in the rat hippocampal CA3 area. II. Effects of gender and the environment. Juraska JM, et al. **Brain Res** 1989 Feb 6; 479(1):115–9

Identification of an insulin-like factor in astrocyte conditioned medium. Kadle R, et al. **Brain Res** 1988 Sep 13;460(1):60–7

Selective flow cytometric sorting of viable dopamine neurons. Lopez Lozano JJ, et al. **Brain Res** 1989 May 8; 486(2):351–6

Extent of colocalization of serotonin and GABA in neurons of the ventral medulla oblongata in rat. Millhorn DE, et al. **Brain Res** 1988 Sep 27;461(1):169–74

Selective decrease of large neurons in the neostriatum in progressive supranuclear palsy. Oyanagi K, et al. **Brain Res** 1988 Aug 23;458(2):218–23

A novel way of removing quiescent astrocytes in a culture of subcortical neurons grown in a chemically defined medium. Patel AJ, et al. **Brain Res** 1988 Aug 1;470(2):283–8

Age-dependent patterns and rates of neurite outgrowth from CNS neurons on Schwann cell-derived basal lamina and laminin substrata. Schinstine M, et al. **Brain Res** 1988 Sep 1;471(1):23–37

Human neuronal cell viability demonstrated in culture after cryopreservation. Silani V, et al. **Brain Res** 1988 Nov 8; 473(1):169–74

Neurons containing a N-terminal sequence of the TRH-prohormone (preproTRH53–74) are present in a unique location of the midbrain periaqueductal gray of the rat. Van den Bergh P, et al. **Brain Res** 1988 Sep 27;

461(1):53–63
Depletion of cholinergic habenulo–interpeduncular neurons by selectively timed methylazoxymethanol acetate (MAM) treatment during pregnancy. Virgili M, et al. **Brain Res** 1988 Sep 20;460(2):361–5
Nucleoli numbers and neuronal growth in supraoptic nucleus neurons during postnatal development in the rat. Crespo D, et al. **Brain Res Dev Brain Res** 1988 Nov 1;44(1):151–5
Effects of methylmercury on retinoic acid–induced neuroectodermal derivatives of embryonal carcinoma cells. Cadrin M, et al. **Cell Biol Toxicol** 1988 Mar;4(1):61–80
Neurons in primary cultures from five defined rat brain regions—cellular composition and morphological appearance. Söderbäck M, et al. **Cell Mol Biol** 1989; 35(1):1–16
Establishment of a stable, acetylated microtubule bundle during neuronal commitment. Falconer MM, et al. **Cell Motil Cytoskeleton** 1989;12(3):169–80
Amacrine cells in the retina of a cyprinid fish: functional characterization and intracellular labelling with horseradish peroxidase. Djamgoz MB, et al. **Cell Tissue Res** 1989 Jun; 256(3):607–22
Shapes of nerve cells in the myenteric plexus of the guinea–pig small intestine revealed by the intracellular injection of dye. Furness JB, et al. **Cell Tissue Res** 1988; 254(3):561–71
Principal neurons projecting to the pineal gland in close association with small intensely fluorescent cells in the superior cervical ganglion of rats. Reuss S, et al. **Cell Tissue Res** 1988 Oct;254(1):97–100
Culture conditions affect the cholinergic development of an isolated subpopulation of chick mesencephalic neural crest cells. Barald KF. **Dev Biol** 1989 Oct;135(2):349–66
Development of the enteric nervous system in the moth. II. Stereotyped cell migration precedes the differentiation of embryonic neurons. Copenhaver PF, et al. **Dev Biol** 1989 Jan;131(1):85–101
The survival of early chick sympathetic neurons in vitro is dependent on a suitable substrate but independent of NGF. Ernsberger U, et al. **Dev Biol** 1989 Oct;135(2):250–62
Differentiation of noradrenergic traits in the principal neurons and small intensely fluorescent cells of the parasympathetic sphenopalatine ganglion of the rat. Leblanc GG, et al. **Dev Biol** 1989 Jan;131(1):44–59
Membrane voltage and neurotransmitter regulation of neuronal growth cone motility. McCobb DP, et al. **Dev Biol** 1988 Dec;130(2):599–609
Differentiation of neuron–like cells in cultured rat optic nerves: a neuron or common neuron–glia progenitor? Omlin FX, et al. **Dev Biol** 1989 May;133(1):247–53
A laminin–pepsin fragment with cell attachment and neurite outgrowth activity at distinct sites. Sephel GC, et al. **Dev Biol** 1989 Sep;135(1):172–81
Segmental specificity and lateral asymmetry in the differentiation of developmentally homologous neurons during leech embryogenesis. Shankland M, et al. **Dev Biol** 1989 Oct;135(2):431–48
Comparison of the proliferative activity of neuroblasts from chick embryo cerebral hemispheres of different ages in culture. Barakat I, et al. **Dev Neurosci** 1988;10(3):173–9
Neurite penetration into collagen gels requires $Ca2+$–dependent metalloproteinase activity. Pittman RN, et al. **Dev Neurosci** 1989;11(1):41–51
Scanning electron microscopy of the development of layer I of the human visual cortex (area 17). Zheng DR, et al. **Dev Neurosci** 1989;11(1):1–10
Induction of process outgrowth in vertebrate and invertebrate cell lines by a 2–pyridinyl thiosemicarbazone. Carrow GM, et al. **Differentiation** 1988 Nov;39(1):22–7
Santiago Ramón y Cajal, the retina and the neuron theory. Piccolino M, et al. **Doc Ophthalmol** 1989 Feb;71(2):123–41
Insulin receptors mediate growth effects in cultured fetal neurons. I. Rapid stimulation of protein synthesis. Heidenreich KA, et al. **Endocrinology** 1989 Sep; 125(3):1451–7
Insulin receptors mediate growth effects in cultured fetal neurons. II. Activation of a protein kinase that phosphorylates ribosomal protein S6. Heidenreich KA, et al. **Endocrinology** 1989 Sep;125(3):1458–63
Glucocorticoid endangerment of hippocampal neurons does not involve deoxyribonucleic acid cleavage. Masters JN, et al. **Endocrinology** 1989 Jun;124(6):3083–8
Human neuroblastoma cell lines as models for the in vitro study of neoplastic and neuronal cell differentiation. Abemayor E, et al. **Environ Health Perspect** 1989 Mar; 80:3–15 (147 ref.)
Immunocytochemical study of GABAergic neurons containing the calcium–binding protein parvalbumin in the rat hippocampus. Katsumaru H, et al. **Exp Brain Res** 1988; 72(2):347–62
Gap junctions on GABAergic neurons containing the calcium–binding protein parvalbumin in the rat hippocampus (CA1 region). Katsumaru H, et al. **Exp Brain Res** 1988;72(2):363–70
Further analysis of presence of peptides in dopamine neurons. Cholecystokinin, peptide histidine–isoleucine/vasoactive intestinal polypeptide and substance P in rat supramammillary region and mesencephalon. Seroogy K, et al. **Exp Brain Res** 1988;72(3):523–34
IFN–gamma facilitates NGF–induced neuronal differentiation in PC12 cells. Improta T, et al. **Exp Cell Res** 1988 Nov;179(1):1–9
Growth cone advance mediated by fibronectin–associated filopodia is inhibited by a phorbol ester tumor promoter. Muir D, et al. **Exp Cell Res** 1989 Jan;180(1):134–49
Types of neurons in the dorsal parasympathetic nucleus of aurochs. Szteyn S, et al. **Folia Morphol (Warsz)** 1987; 46(3–4):153–60
Neuronal morphology of the hypoglossal nucleus in aurochs. Szteyn S, et al. **Folia Morphol (Warsz)** 1987;46(3–4):147–51
A quantitative study on the myenteric plexus of the distal end of the human esophagus. de Souza RR, et al. **Gegenbaurs Morphol Jahrb** 1988;134(4):565–74
Glia:neuron index: review and hypothesis to account for different values in various mammals. Reichenbach A. **GLIA** 1989;2(2):71–7 (84 ref.)
Size and density of glial and neuronal cells within the cerebral neocortex of various insectivorian species. Stolzenburg JU, et al. **GLIA** 1989;2(2):78–84
Cytomorphological and cytochemical responses of cortical neurons on intraneuronal accumulation of age–pigment lipofuscin. Sharma D. **Indian J Exp Biol** 1988 May; 26(5):400–2
Presence of nerve growth factor–like immunoreactivity in carcinoid tumour cells and induction of a neuronal phenotype in long–term culture. Ahlman H, et al. **Int J Cancer** 1989 May 15;43(5):949–55
Thrombin is a potent mitogen for rat astroblasts but not for oligodendroblasts and neuroblasts in primary culture. Perraud F, et al. **Int J Dev Neurosci** 1987;5(3):181–8
Cytodifferentiation and developing neuronal circuitry in the human lateral geniculate nucleus. Wadhwa S, et al. **Int J Dev Neurosci** 1988;6(1):59–75
Characteristics of microtubules at the different stages of neuronal differentiation and maturation. Meininger V, et al. **Int Rev Cytol** 1989;114:21–79 (295 ref.)
Neuronal differentiation of retinoblastoma cells induced by medium conditioned by human RPE cells. Tombran–Tink J, et al. **Invest Ophthalmol Vis Sci** 1989 Aug;30(8):1700–7
Accurate counting of neurons in frozen sections: some necessary precautions. Cooper JD, et al. **J Anat** 1988 Apr; 157:13–21
Neuronal relationships between the dorsal periaqueductal nucleus and the inferior colliculus (nucleus commissuralis) in the cat. A Golgi study. Herrera M, et al. **J Anat** 1988 Jun;158:137–45
Morphological and electrophysiological properties of cat lumbar paravertebral neurones. Percy WH, et al. **J Auton Nerv Syst** 1988 Oct;24(3):183–92
Cell growth on metallic glasses: the interaction of amorphous metal alloys with cultured neuronal, osteoblast, endothelial, and fibroblast cells. McAuslan BR, et al. **J Biomed Mater Res** 1988 Oct;22(10):905–17
The organization of myosin and actin in rapid frozen nerve growth cones. Bridgman PC, et al. **J Cell Biol** 1989 Jan; 108(1):95–109
The mouse neuronal cell surface protein F3: a phosphatidylinositol–anchored member of the immunoglobulin superfamily related to chicken contactin. Gennarini G, et al. **J Cell Biol** 1989 Aug;109(2):775–88
Experimental observations on the development of polarity by hippocampal neurons in culture. Goslin K, et al. **J Cell Biol** 1989 Apr;108(4):1507–16
K–252a, a potent protein kinase inhibitor, blocks nerve growth factor–induced neurite outgrowth and changes in the phosphorylation of proteins in PC12h cells. Hashimoto S. **J Cell Biol** 1988 Oct;107(4):1531–9
The adhesive and neurite–promoting molecule p30: analysis of the amino–terminal sequence and production of antipeptide antibodies that detect p30 at the surface of neuroblastoma cells and of brain neurons. Rauvala H, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2293–305
Basic fibroblast growth factor is an extracellular matrix component required for supporting the proliferation of vascular endothelial cells and the differentiation of PC12 cells. Rogelj S, et al. **J Cell Biol** 1989 Aug;109(2):823–31
Ciliary neurotrophic factor induces cholinergic differentiation of rat sympathetic neurons in culture. Saadat S, et al. **J Cell Biol** 1989 May;108(5):1807–16
Coexistence of glutamate and substance P in dorsal root ganglion neurons of the rat and monkey. Battaglia G, et al. **J Comp Neurol** 1988 Nov 8;277(2):302–12
Time course of expression of neuropeptide Y, calcitonin gene–related peptide, and NADPH diaphorase activity in neurons of the developing murine bowel and the appearance of 5–hydroxytryptamine in mucosal enterochromaffin cells. Branchek TA, et al. **J Comp Neurol** 1989 Jul 8;285(2):262–73
Cholinergic neurons in the brain of a teleost fish (Porichthys notatus) located with a monoclonal antibody to choline acetyltransferase. Brantley RK, et al. **J Comp Neurol** 1988 Sep 1;275(1):87–105
Central trajectories of type II spiral ganglion neurons. Brown MC, et al. **J Comp Neurol** 1988 Dec 22;278(4):581–90
Quantitation of catecholamine neurons in the locus coeruleus in human brains of normal young and older adults and in depression. Chan–Palay V, et al. **J Comp Neurol** 1989 Sep 15;287(3):357–72
Fine structure of identified neurons in the primate hippocampus: a combined Golgi/EM study in the baboon. Frotscher M, et al. **J Comp Neurol** 1988 Sep 8;275(2):254–70
Localization of glycine–containing neurons in the Macaca monkey retina. Hendrickson AE, et al. **J Comp Neurol** 1988 Jul 22;273(4):473–87
Laminar and areal differences in the origin of the subcortical projection neurons of the rat somatosensory cortex. Killackey HP, et al. **J Comp Neurol** 1989 Apr 15; 282(3):428–45
Identification of vagal efferent fibers and putative target neurons in the enteric nervous system of the rat. Kirchgessner AL, et al. **J Comp Neurol** 1989 Jul 1; 285(1):38–53
Local circuit neurons of macaque monkey striate cortex: II. Neurons of laminae 5B and 6. Lund JS, et al. **J Comp Neurol** 1988 Oct 1;276(1):1–29
The nuclei of origin of monoaminergic, peptidergic, and cholinergic afferents to the cat nucleus reticularis magnocellularis: a double–labeling study with cholera toxin as a retrograde tracer. Luppi PH, et al. **J Comp Neurol** 1988 Nov 1;277(1):1–20
Monoclonal antibodies to the molluscan small cardioactive peptide SCPB: immunolabeling of neurons in diverse invertebrates. Masinovsky B, et al. **J Comp Neurol** 1988 Jul 22;273(4):500–12
Terminal field of cholecystokinin–8–like immunoreactive projection neurons of the rat main olfactory bulb. Matsutani S, et al. **J Comp Neurol** 1989 Jul 1;285(1):73–82
Localization of immunoreactive GABA and enkephalin and NADPH–diaphorase–positive neurons in fetal striatal grafts in the quinolinic–acid–lesioned rat neostriatum. Roberts RC, et al. **J Comp Neurol** 1988 Aug 15;274(3):406–21
Shape and distribution of an unusual retinal neuron. Sandell JH, et al. **J Comp Neurol** 1989 Feb 15;280(3):489–97
Glucocorticoid receptor–immunoreactivity in C1, C2, and C3 adrenergic neurons that project to the hypothalamus or to the spinal cord in the rat. Sawchenko PE, et al. **J Comp Neurol** 1989 Jul 1;285(1):107–16
Quantitative Golgi study of anatomically identified subdivisions of motor thalamus in the rat. Sawyer SF, et al. **J Comp Neurol** 1989 Aug 1;286(1):1–27
Distribution and morphometric characteristics of oxytocin– and vasopressin–immunoreactive neurons in the rabbit hypothalamus. Schimchowitsch S, et al. **J Comp Neurol** 1989 Jul 15;285(3):304–24
Three–dimensional counting: an accurate and direct method to estimate numbers of cells in sectioned material [published erratum appears in J Comp Neurol 1989 Mar 8;281(2):335] Williams RW, et al. **J Comp Neurol** 1988 Dec 15; 278(3):344–52
Kinetic properties of single sodium channels in rat heart and rat brain. Kirsch GE, et al. **J Gen Physiol** 1989 Jan; 93(1):85–99
The photoreceptors of the chameleon retina (Chamaleo chamaleo). A Golgi study. Armengol JA, et al. **J Hirnforsch** 1988;29(4):403–9
Stellate cells and their axonal patterns in the central nucleus of the inferior colliculus of the cat (Felis domesticus). Herrera M, et al. **J Hirnforsch** 1988;29(4):393–402
Cell types of the paleostriatal complex of the domestic chicken (Gallus domesticus): a Golgi study. Tömböl T, et al. **J Hirnforsch** 1988;29(5):493–507
A modified gold chloride technique for optimal impregnation of nerves within corneal whole mounts and dura of the albino rat. Silverberg KR, et al. **J Histochem Cytochem** 1989 Feb;37(2):269–71
Catecholamine neurons in Aplysia: improved light–microscopic resolution and ultrastructural study using paraformaldehyde and glutaraldehyde (FaGlu) cytochemistry. Goldstein RS, et al. **J Neurobiol** 1989 Jun; 20(4):203–18
The effect of cyclic AMP on neuritic outgrowth in explant cultures of developing chick olfactory epithelium. Johnson RR, et al. **J Neurobiol** 1988 Dec;19(8):681–93
Hippocampal membranes contain a neurotrophic activity that stimulates cholinergic properties of fetal rat septal neurons cultured under serum–free conditions. Emerit MB, et al. **J Neurochem** 1989 Mar;52(3):952–61
Quantitative cytology of ganglion neurons and satellite glial cells in the superior cervical ganglion of the sheep. Relationship with ganglion neuron size. Gabella G, et al. **J Neurocytol** 1988 Dec;17(6):753–69
Morphology of cochlear root neurons in the rat. Merchan MA, et al. **J Neurocytol** 1988 Oct;17(5):711–25
Neurons containing retrogradely transported Fluoro–Gold exhibit a variety of lysosomal profiles: a combined brightfield, fluorescence, and electron microscopic study. Schmued LC, et al. **J Neurocytol** 1989 Jun;18(3):333–43
Differentiation in vitro of neural precursor cells from normal and Pecanex mutant Drosophila embryos. LaBonne SG, et al. **J Neurogenet** 1989 May;5(2):99–104
Effects of oxotremorine on neuronal RNA and chromatin in thalamic cholinoceptive sites. Martin LJ, et al. **J Neurol Sci** 1988 Sep;86(2–3):159–69
Neurotoxicity of human eosinophils towards peripheral nerves. Sunohara N, et al. **J Neurol Sci** 1989 Aug;92(1):1–7
Immunoreactive epidermal growth factor receptors in neuritic plaques from patients with Alzheimer's disease. Birecree E, et al. **J Neuropathol Exp Neurol** 1988 Sep; 47(5):549–60
Parkinson's disease and dementia with neuronal inclusions in the cerebral cortex: Lewy bodies or Pick bodies. Tiller–Borcich JK, et al. **J Neuropathol Exp Neurol** 1988 Sep;47(5):526–35
Two sexually dimorphic cell groups in the human brain. Allen LS, et al. **J Neurosci** 1989 Feb;9(2):497–506
Roles for mitotic history in the generation and degeneration

of hippocampal neuroarchitecture. Mattson MP, et al. **J Neurosci** 1989 Apr;9(4):1223–32

Quantitation of neurochemically identified neurons in reaggregate tissue cultures. Heller A, et al. **J Neurosci Methods** 1988 Aug;25(1):83–90

A simple method for combining HRP–TMB histochemistry with tritiated thymidine autoradiography on the same tissue section. Nandi KN, et al. **J Neurosci Methods** 1988 Sep; 25(2):159–63

Flow cytometric identification and purification of cells by ligand–induced changes in intracellular calcium. Schieren I, et al. **J Neurosci Methods** 1988 Nov;26(1):35–44

Edge detection in images using Marr–Hildreth filtering techniques. Smith TG Jr, et al. **J Neurosci Methods** 1988 Nov;26(1):75–81

Aspartate neurotoxicity on cultured cortical neurons. Choi DW, et al. **J Neurosci Res** 1989 May;23(1):116–21

Secreted peptides as regulators of neuron–glia and glia–glia interactions in the developing nervous system. Giulian D, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):487–500

Influence of laminin on the responsiveness of early chick embryo neural tube neurons to nerve growth factor. Heaton MB. **J Neurosci Res** 1989 Apr;22(4):390–6

Basic fibroblast growth factor and epidermal growth factor exert differential trophic effects on CNS neurons. Morrison RS, et al. **J Neurosci Res** 1988 Sep;21(1):71–9

Presence of nerve cell bodies in the lingual nerve in the third molar area. Smith EE, et al. **J Oral Maxillofac Surg** 1989 Sep;47(9):931–5

Quantitative assessment of the stage of neuronal maturation in the developing human fetal gut—a new dimension in the pathogenesis of developmental anomalies of the myenteric plexus. Vaos GC. **J Pediatr Surg** 1989 Sep; 24(9):920–5

In vitro model systems permitting the analysis of the differentiation of mammalian progenitor cells either into neurons or into glial cells. Simonneau M, et al. **J Physiol (Paris)** 1987;82(4):336–45 (74 ref.)

The use of autoradiographic techniques for the identification and mapping of transmitter–specific neurones in the brain. Schon F, et al. **Life Sci** 1974 Jul 15;15(2):157–75 (102 ref.)

Induction of neuronal differentiation in PC12 cells by B–cell stimulatory factor 2/interleukin 6. Satoh T, et al. **Mol Cell Biol** 1988 Aug;8(8):3546–9

Developments in neuronal cell culture. Banker G, et al. **Nature** 1988 Nov 10;336(6195):185–6

Trophic regulation of nerve cell morphology and innervation in the autonomic nervous system. Purves D, et al. **Nature** 1988 Nov 10;336(6195):123–8 (42 ref.)

Subfornical organ connections with septal neurons projecting to the median eminence. Donevan SD, et al. **Neuroendocrinology** 1988 Jul;48(1):67–71

Vasopressin neuron is the target of monoclonal antibodies raised against vasopressin–neurophysin injected in vivo. Leon–Henri B, et al. **Neuroendocrinology** 1989 Feb; 49(2):125–33

Morphology of luteinizing hormone–releasing hormone neurons as a function of age and hormonal condition in the male rat. Witkin JW. **Neuroendocrinology** 1989 Apr; 49(4):344–8

Dynamics of rat hippocampus development in organotypic tissue culture. Light and electron–microscopic study. Matyja E, et al. **Neuropatol Pol** 1988;26(4):431–53

NMDA receptor regulation of neuronal morphology in cultured hippocampal neurons. Brewer GJ, et al. **Neurosci Lett** 1989 May 8;99(3):268–73

Effects of nerve growth factor and GM1 ganglioside on the number and size of cholinergic neurons in rats with unilateral lesion of the nucleus basalis. Casamenti F, et al. **Neurosci Lett** 1989 Aug 14;103(1):87–91

Distinct patterns of distribution among NADPH–diaphorase neurones of the guinea pig retina. Cobcroft M, et al. **Neurosci Lett** 1989 Aug 14;103(1):1–7

Coexistence of corticotropin releasing factor and neurotensin within oval nucleus neurons in the bed nuclei of the stria terminalis in the rat. Ju G, et al. **Neurosci Lett** 1989 May 8;99(3):246–50

Direct extracellular electrical stimulation influences density dependent aggregation of fetal rat cerebrocortical neurons in vitro. Kaplan FS, et al. **Neurosci Lett** 1988 Nov 22; 94(1–2):33–8

Branching projections from subcoeruleus area neurons to medial preoptic area and cervical spinal cord revealed by double retrograde neuronal labeling. Leanza G, et al. **Neurosci Lett** 1989 Aug 14;103(1):11–6

Morphological evidence for newly discovered double projection spinal neurons. Lu GW, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):181–5

Neuritic outgrowth in primary cell culture of neurons from the squid, Loligo pealei. Parsons TD, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):23–8

Direct neurotoxic effects of colchicine on cholinergic neurons in medial septum and striatum. Peterson GM, et al. **Neurosci Lett** 1988 Nov 22;94(1–2):46–51

Neuropeptide Y afferents have synaptic interactions with histaminergic (histidine decarboxylase–immunoreactive) neurons in the rat brain. Tamiya R, et al. **Neurosci Lett** 1989 May 8;99(3):241–5

Differential distribution and non–collateralization of central amygdaloid neurons projecting to different medullary regions. Thompson RL, et al. **Neurosci Lett** 1989 Feb 27; 97(3):245–51

Morphology of identified entorhinal neurons projecting to the hippocampus. A light microscopical study combining retrograde tracing and intracellular injection. Germroth P, et al. **Neuroscience** 1989;30(3):683–91

Development of neuronal types and laminar organization in the central nucleus of the inferior colliculus in the cat. González–Hernández TH, et al. **Neuroscience** 1989; 30(1):127–41

Neurons of origin of the internal ramus of the rabbit accessory nerve: localization in the nucleus ambiguus. Kitamura S, et al. **Okajimas Folia Anat Jpn** 1988 Dec; 65(5):291–301

Studies on the development of voltage–activated calcium channels in vertebrate neurons. Lux HD. **P R Health Sci J** 1988 Aug;7(2):116–21

The regulation of neuronal number during embryonic chick development. Pilar G, et al. **P R Health Sci J** 1988 Aug; 7(2):149–55 (47 ref.)

Peptide immunocytochemistry in afferent neurons from lower gut in rats. Chery–Croze S, et al. **Peptides** 1988 Jul–Aug;9(4):873–81

Localization of substance P immunoreactivity in phrenic primary afferent neurons. Holtman JR Jr. **Peptides** 1989 Jan–Feb;10(1):53–6

Sex differences in vasopressin neurons in the bed nucleus of the stria terminalis by in situ hybridization. Miller MA, et al. **Peptides** 1989 May–Jun;10(3):615–9

Melanin–concentrating hormone (MCH) immunoreactivity in the brain and pituitary of the dogfish Scyliorhinus canicula. Colocalization with alpha–melanocyte–stimulating hormone (alpha–MSH) in hypothalamic neurons. Vallarino M, et al. **Peptides** 1989 Mar–Apr;10(2):375–82

Trophic influences of alpha–MSH and ACTH4–10 on neuronal outgrowth in vitro. Van der Neut R, et al. **Peptides** 1988 Sep–Oct;9(5):1015–20

Slice cultures of LHRH neurons in the presence and absence of brainstem and pituitary. Wray S, et al. **Peptides** 1988 Sep–Oct;9(5):1151–75

Polarity orientation of microtubules in hippocampal neurons: uniformity in the axon and nonuniformity in the dendrite. Baas PW, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(21):8335–9

Antiserum raised against residues 159–168 of the guanine nucleotide–binding protein Gi3–alpha reacts with ependymal cells and some neurons in the rat brain containing cholecystokinin– or cholecystokinin– and tyrosine 3–hydroxylase–like immunoreactivities. Cortés R, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9351–5

Gangliosides potentiate in vivo and in vitro effects of nerve growth factor on central cholinergic neurons. Cuello AC, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2056–60

A cell line producing recombinant nerve growth factor evokes growth responses in intrinsic and grafted central cholinergic neurons. Ernfors P, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4756–60

Local influence of substrate molecules in determining distinctive growth patterns of identified neurons in culture. Grumbacher–Reinert S. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7270–4

Glial cells develop a laminar pattern before neuronal cells in the lateral geniculate nucleus. Hutchins JB, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8316–20

5,7–Dihydroxytryptamine identifies living dopaminergic neurons in mesencephalic cultures. Silva NL, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7346–50

Development of substance P– and vasoactive intestinal polypeptide–containing neurones in the rat stomach. Ito S, et al. **Q J Exp Physiol** 1988 Sep;73(5):729–36

A Golgi–Cox study of the hypoglossal nucleus of 'wobbler' and normal mice. Ukabam CU. **Ric Clin Lab** 1988 Oct–Dec; 18(4):313–8

Perineurium originates from fibroblasts: demonstration in vitro with a retroviral marker. Bunge MB, et al. **Science** 1989 Jan 13;243(4888):229–31

Genetic control of differentiation of the Caenorhabditis elegans touch receptor neurons. Chalfie M, et al. **Science** 1989 Feb 24;243(4894 Pt 1):1027–33 (43 ref.)

Localization of substance P binding sites in submucous plexus of guinea pig ileum, using whole–mount autoradiography. Burcher E, et al. **Synapse** 1988;2(3):232–9

Immunohistochemical study of neurons containing corticotropin–releasing factor in Alzheimer's disease. Powers RE, et al. **Synapse** 1987;1(5):405–10

Comparative immunohistochemical demonstration of peptide F– and other enkephalin–containing neurons in the enteric nervous system of the rat. Wang YN, et al. **Synapse** 1987; 1(2):208–13

Cellular 'heoteny': a possible developmental basis for chromaffin cell plasticity. Anderson DJ. **Trends Genet** 1989 Jun;5(6):174–8 (25 ref.)

Role of neurotrophic factors in development. Davies AM. **Trends Genet** 1988 May;4(5):139–43 (31 ref.)

Immortalization of neural cells via oncogene transduction [news] Cepko C. **Trends Neurosci** 1988 Jan;11(1):6–8 (24 ref.)

Confocal microscopy: applications in neurobiology. Fine A, et al. **Trends Neurosci** 1988 Aug;11(8):346–51 (26 ref.)

Organotypic cultures of neural tissue. Gähwiler BH. **Trends Neurosci** 1988 Nov;11(11):484–9 (34 ref.)

Growth cone movement [letter] Goldberg DJ, et al. **Trends Neurosci** 1988 Jun;11(6):257–8

Genes for neural differentiation. Palka J, et al. **Trends Neurosci** 1988 Dec;11(12):515–7

A multifaceted approach to neural development. Ready DF. **Trends Neurosci** 1989 Mar;12(3):102–10 (38 ref.)

Means to immortalize neural cells [letter] Smalheiser N. **Trends Neurosci** 1988 Jul;11(7):307

Control of cell fates within equivalence groups in C. elegans. Sternberg PW. **Trends Neurosci** 1988 Jun;11(6):259–64 (30 ref.)

Visualization of neurons by NADH–diaphorase staining in the myenteric plexus of some invertebrate and vertebrate species. Gábriel R, et al. **Z Mikrosk Anat Forsch** 1988; 102(5):769–84

[Immunocytochemical study of catecholaminergic neurons in grafted mesencephalon transplanted into the hypothalamus of the rat] Guy J, et al. **C R Soc Biol (Paris)** 1988;182(1):67–73 (Eng. Abstr.) **(Fre)**

[The effect of methionine enkephalin, leucine enkephalin and the hexapeptide, dalargin on the morphology of cultured neurons] Lindner G, et al. **J Hirnforsch** 1988;29(5):547–56 (Eng. Abstr.) **(Ger)**

[Development of neurons in the rat oculomotor complex] Kairada K, et al. **Nippon Ganka Gakkai Zasshi** 1988 Jun; 92(6):1009–15 (Eng. Abstr.) **(Jpn)**

[Quantitative analysis of spinocerebellar tract neurons sending their axons to the anterior and posterior cerebellar lobes in the rat. A study using the horseradish peroxidase retrograde transport method] Kitamura T. **Nippon Ika Daigaku Zasshi** 1988 Aug;55(4):361–70 (Eng. Abstr.) **(Jpn)**

[Morphological observations on the alteration of the myenteric plexus neurons in the bullfrog small intestine during metamorphosis] Torihashi S. **Nippon Ika Daigaku Zasshi** 1988 Oct;55(5):465–77 (Eng. Abstr.) **(Jpn)**

[Localization of neurons, making projections via the postganglionic nerves of the stellate ganglion] Kade AKh, et al. **Arkh Anat Gistol Embriol** 1988 Oct;95(10):22–5 (Eng. Abstr.) **(Rus)**

[Neuronal organization of field 4 of the motor cortex of the cat brain] Melik–Musian AB. **Arkh Anat Gistol Embriol** 1988 Aug;95(8):12–7 (Eng. Abstr.) **(Rus)**

[Types of neurons in the central nervous system of the Japanese scallop Mizuhopecten yessoensis (Jay)] Motsvkin PA, et al. **Arkh Anat Gistol Embriol** 1988 Dec;95(12):14–20 (Eng. Abstr.) **(Rus)**

[Neuronal organization of the periamygdaloid cortex in the cat brain] Mukhina IuK. **Arkh Anat Gistol Embriol** 1988 Oct;95(10):5–17 (Eng. Abstr.) **(Rus)**

[Morphometry of giant multipolar neurons of the brain stem reticular formation in rats on board the Kosmos–1667 biosatellite] Belichenko PV, et al. **Biull Eksp Biol Med** 1989 May;107(5):618–20 (Eng. Abstr.) **(Rus)**

[Location of neurons in the dorsal motor nucleus of the vagus nerve, innervating the pyloric part of the stomach] Bagaev VA, et al. **Dokl Akad Nauk SSSR** 1989;304(4):985–7 **(Rus)**

[Topography of catecholamine–containing neurons of the locus coeruleus in the cat] Semeniutin AI. **Fiziol Zh** 1989 Mar–Apr;35(2):7–13 (Eng. Abstr.) **(Rus)**

[Neural connections in the septum of lizards studied by the method of horseradish peroxidase axonal transport] Belekhova MG, et al. **Neirofiziologiia** 1988;20(3):398–407 (Eng. Abstr.) **(Rus)**

[Distribution of norepinephrine–containing neurons projecting to the parietal associative cortex and spinal cord in the cat locus coeruleus] Semeniutin AI, et al. **Neirofiziologiia** 1989;21(1):112–21 (Eng. Abstr.) **(Rus)**

[Morphologic characteristics of the RPD1 neuron in the pond snail and its participation in the processing of multimodality sensory information] Zaitsev OV, et al. **Neirofiziologiia** 1988;20(6):785–93 (Eng. Abstr.) **(Rus)**

[Dynamic processes during the organization of neurono–glial networks in nerve tissue culture] Makhmutov RIa. **Zh Evol Biokhim Fiziol** 1989 May–Jun;25(3):337–40 (Eng. Abstr.) **(Rus)**

[Morphologic characteristics and responses of the neurons of the right parietal ganglion in Lymnaea stagnalis to stimulation of the sensory structures] Shuvalova NE, et al. **Zh Evol Biokhim Fiziol** 1988 Sep–Oct;24(5):708–14 (Eng. Abstr.) **(Rus)**

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Phorbol esters that activate protein kinase C induce long–term changes of membrane excitability and postsynaptic currents in neocortical neurons. Baranyi A, et al. **Acta Biol Hung** 1987;38(3–4):315–32

Action of peripherally administered cholecystokinin on monoaminergic and GABAergic neurons in the rat brain. Kaneyuki T, et al. **Acta Med Okayama** 1989 Jun;43(3):153–9

QSAR of inhibition of monoamine oxidase by substituted phenylalkylamines in vitro and in various neurons in vivo. Mahmoudian M. **Acta Pharm Suec** 1988;25(3):151–62

Pacemaker–like firing of noradrenergic locus coeruleus neurons in vivo induced by the excitatory amino acid antagonist kynurenate in the rat. Svensson TH, et al. **Acta Physiol Scand** 1989 Mar;135(3):421–2

Voltage–clamp models for the study of acute and chronic effects of ethanol on ionic currents in adult mammalian neurons. Ikeda SR, et al. **Adv Alcohol Subst Abuse** 1988; 7(3–4):91–3

Spinal cord cultured neurons: an in vitro model to study GABA synaptic pharmacology. Ticku M, et al. **Adv Biochem Psychopharmacol** 1988;45:151–9

Atrial natriuretic factor suppresses neural stimulation of renin release in dogs. Hisa H, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):E332–5

Disruption of the rhythmic activity of the medullary inspiratory neurons and phrenic nerve by fentanyl and reversal with nalbuphine. Tabatabai M, et al. **Anesthesiology** 1989 Mar;70(3):489–95

Characterization of ethosuximide reduction of low-threshold calcium current in thalamic neurons. Coulter DA, et al. **Ann Neurol** 1989 Jun;25(6):582–93

Effect of minaprine on neuronal activity in the brain stem reticular formation of the rat. Okuyama S, et al. **Arch Int Pharmacodyn Ther** 1988 Nov–Dec;296:246–54

Effects of aniracetam on one-trial passive avoidance tests and cholinergic neurons in discrete brain regions of rats. Toide K. **Arch Int Pharmacodyn Ther** 1989 Mar–Apr; 298:25–37

The effect of gentamicin on the cockroach nerve cord. Callaghan LP, et al. **Arch Toxicol Suppl** 1989;13:381–5

(S)-emopamil, a novel calcium and serotonin antagonist for the treatment of cerebrovascular disorders. 3rd communication: effect on postischemic cerebral blood flow and metabolism, and ischemic neuronal cell death. Szabo L, et al. **Arzneimittelforschung** 1989 Mar;39(3):314–9

6-Hydroxydopamine toxicity to dopamine neurons in culture: potentiation by the addition of superoxide dismutase and N-acetylcysteine. Mytilineou C, et al. **Biochem Pharmacol** 1989 Jun 1;38(11):1872–5

Effects of vigabatrin and of GABA on myelinated rat cerebellar cultures: preliminary data. Hauw JJ, et al. **Br J Clin Pharmacol** 1989;27 Suppl 1:47S–52S

Actions of the GABAB agonist, (-)-baclofen, on neurones in deep dorsal horn of the rat spinal cord in vitro. Allerton CA, et al. **Br J Pharmacol** 1989 Jan;96(1):29–38

Differential susceptibility of cholinergic and noncholinergic neurogenic responses to calcium channel blockers and low Ca2+ medium in rat urinary bladder. Bhat MB, et al. **Br J Pharmacol** 1989 Apr;96(4):837–42

A quantitative study of the actions of excitatory amino acids and antagonists in rat hippocampal slices. Blake JF, et al. **Br J Pharmacol** 1988 Sep;95(1):291–9

Agonists at mu-opioid, M2-muscarinic and GABAB-receptors increase the same potassium conductance in rat lateral parabrachial neurones. Christie MJ, et al. **Br J Pharmacol** 1988 Nov;95(3):896–902

Effects of non-sedative anxiolytic drugs on responses to GABA and on diazepam-induced enhancement of these responses on mouse neurones in cell culture. De Deyn PP, et al. **Br J Pharmacol** 1988 Sep;95(1):109–20

Muscarinic agonists and potassium currents in guinea-pig myenteric neurones. Galligan JJ, et al. **Br J Pharmacol** 1989 Jan;96(1):193–203

Facilitation by tachykinins of neurotransmission in guinea-pig pulmonary parasympathetic nerves. Hall AK, et al. **Br J Pharmacol** 1989 May;97(1):274–80

The mechanism of action and pharmacological specificity of the anticonvulsant NMDA antagonist MK-801: a voltage clamp study on neuronal cells in culture. Halliwell RF, et al. **Br J Pharmacol** 1989 Feb;96(2):480–94

Kinetic and pharmacological properties of the GABA-induced chloride current in Aplysia neurones: a 'concentration clamp' study. Ikemoto Y, et al. **Br J Pharmacol** 1988 Nov;95(3):883–95

GABAA receptor-mediated positive inotropism in guinea-pig isolated left atria: evidence for the involvement of capsaicin-sensitive nerves. Maggi CA, et al. **Br J Pharmacol** 1989 May;97(1):103–10

A 5-HT1-like receptor mediates a pertussis toxin-sensitive inhibition of rat ventromedial hypothalamic neurones in vitro. Newberry NR, et al. **Br J Pharmacol** 1988 Sep; 95(1):6–8

Involvement of a pertussis toxin-sensitive G-protein in the pharmacological properties of septo-hippocampal neurones. Rascol O, et al. **Br J Pharmacol** 1989 Apr; 96(4):956–60

Caesium ions: a glycine-activated channel agonist in rat spinal cord neurones grown in cell culture. Smith SM, et al. **Br J Pharmacol** 1989 Apr;96(4):940–8

Effects of Ca2+ on the transient outward current of single isolated Helix central neurones. Tsuda Y, et al. **Br J Pharmacol** 1988 Oct;95(2):526–30

Elevation of intracellular cyclic AMP concentration fails to inhibit adrenaline-induced hyperpolarization in amphibian sympathetic neurons. Zidichouski JA, et al. **Br J Pharmacol** 1989 Apr;96(4):779–84

Cytotoxicity of 3-hydroxykynurenine in a neuronal hybrid cell line. Eastman CL, et al. **Brain Res** 1989 Aug 28; 495(2):225–31

Desensitization kinetics of a chloride acetylcholine response in Aplysia. Evans ML, et al. **Brain Res** 1989 Aug 28; 495(2):309–18

The effect of amitriptyline on growth of olfactory and cerebral neurons in vitro. Farbman AI, et al. **Brain Res** 1988 Aug 9;457(2):281–6

Glutamate becomes neurotoxic via the N-methyl-D-aspartate receptor when intracellular energy levels are reduced. Novelli A, et al. **Brain Res** 1988 Jun 7;451(1-2):205–12

Desensitization kinetics of a K+ acetylcholine response in Aplysia. Salánki J, et al. **Brain Res** 1989 Aug 28; 495(2):298–308

Nerve growth factor promotes survival of retrogradely labeled hippocampus-projecting neurons in the rat basal forebrain in vitro. Arimatsu Y, et al. **Brain Res Dev Brain Res** 1989 Feb 1;45(2):297–301

Defense reaction elicited by microinjection of kainic acid in the medial hypothalamus of the rat. Silveira MC, et al. **Braz J Med Biol Res** 1988;21(3):569–71

Electrophysiological assessment of putative antagonists of 5-hydroxytryptamine receptors: a single-cell study in the rat dorsal raphe nucleus. Blier P, et al. **Can J Physiol Pharmacol** 1989 Feb;67(2):98–105

Modulatory effects of catecholamines on neurons of the rat visual cortex: single-cell iontophoretic studies. Kolta A, et al. **Can J Physiol Pharmacol** 1989 Jun;67(6):615–23

Snail neurons as a possible model for testing neurotoxic side effects of antitumor agents: paracrystal formation by Vinca alkaloids. Müller LJ, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7184–8

Neuronal cell differentiation of human neuroblastoma cells by retinoic acid plus herbimycin A. Preis PN, et al. **Cancer Res** 1988 Nov 15;48(22):6530–4

In vitro cytotoxicity of heavy metals, acrylamide, and organotin salts to neural cells and fibroblasts. Borenfreund E, et al. **Cell Biol Toxicol** 1987 Mar;3(1):63–73

Proportion-altering factor (PAF) stimulates nerve cell formation in Hydractinia echinata. Plickert G. **Cell Differ Dev** 1989 Jan;26(1):19–27

Effect of chemical ablation of myenteric neurones on intestinal cell proliferation. Zucoloto S, et al. **Cell Tissue Kinet** 1988 Jul;21(4):213–9

Electrophysiological assessment of the effects of antidepressant treatments on the efficacy of 5-HT neurotransmission. Blier P, et al. **Clin Neuropharmacol** 1988; 11 Suppl 2:S1–10

Use of an identified neurone in pesticide research. Leake LD. **Comp Biochem Physiol [A]** 1989;93(1):63–8 (44 ref.)

Evidence that levamisole, pyrantel, morantel, amidantel, deacylated amidantel and hycanthone may act on acetylcholine receptors of central neurones of Helix aspersa. Hassoni AA, et al. **Comp Biochem Physiol [C]** 1988; 91(2):525–33

Further study of effects of synthetic peptides on identifiable giant neurones of an African giant snail (Achatina fulica Férussac). Kim KH, et al. **Comp Biochem Physiol [C]** 1988; 91(2):549–52

Effect of deltamethrin on transient outward currents in identified snail neurons. Kiss T. **Comp Biochem Physiol [C]** 1988;91(2):337–41

Effects of synthetic biologically active peptides on giant neurones identified in the left buccal ganglion of an African giant snail (Achatina fulica Férussac). Matsuoka T, et al. **Comp Biochem Physiol [C]** 1988;90(2):347–50

Interaction of serotonin and leu-enkephalin on the habituating central neurons of Helix pomatia L. in situ and in vitro. Rózsa KS, et al. **Comp Biochem Physiol [C]** 1989; 92(2):361–70

Influence of epidermal growth factor on the maturation of fetal rat brain cells in aggregate culture. An immunocytochemical study. Monnet-Tschudi F, et al. **Dev Neurosci** 1989;11(1):30–40

Antibodies against mouse nerve growth factor interfere in vivo with the development of avian sensory and sympathetic neurones. Rohrer H, et al. **Development** 1988 Jul;103(3):545–52

Further characterization of the neurofunctional effects of the calcium ionophore A23187. Sobotka T, et al. **Drug Chem Toxicol** 1989 Mar;12(1):1–19

Effects of toxin II from the scorpion Androctonus australis Hector on sodium current in neuroblastoma cells and their modulation by oleic acid. Jourdon P, et al. **Eur Biophys J** 1989;16(6):351–6

Effects of chlorpromazine on hypothalamic aminergic neurons and stress responses in moderate cold. Kortelainen ML, et al. **Eur J Appl Physiol** 1989;58(5):514–21

Stimulation of peripheral cholinergic nerves by glutamate indicates a new peripheral glutamate receptor. Aas P, et al. **Eur J Pharmacol** 1989 May 2;164(1):93–102

Galanin protects hippocampal neurons from the functional effects of anoxia. Ari YB, et al. **Eur J Pharmacol** 1989 Jun 20;165(2-3):331–2

Effects of systemic morphine upon A delta- and C-fibre evoked activities of subnucleus reticularis dorsalis neurones in the rat medulla. Bing Z, et al. **Eur J Pharmacol** 1989 May 2;164(1):85–92

M2 muscarinic receptors on the iris sphincter muscle differ from those on iris noradrenergic nerves. Bognar IT, et al. **Eur J Pharmacol** 1989 Apr 25;163(2-3):263–74

Opioids and non-opioid enantiomers selectively attenuate N-methyl-D-aspartate neurotoxicity on cortical neurons. Choi DW, et al. **Eur J Pharmacol** 1988 Oct 11; 155(1-2):27–35

D-aminophosphonovaleric acid-sensitive spontaneous giant EPSPs in immature rat hippocampal neurones. Corradetti R, et al. **Eur J Pharmacol** 1988 Sep 13;154(2):221–2

Tetrahydroaminoacridine selectively attenuates NMDA receptor-mediated neurotoxicity. Davenport CJ, et al. **Eur J Pharmacol** 1988 Sep 1;154(1):73–8

Action of loperamide on neuronally mediated and Ca2+- or cAMP-mediated secretion in rat colon. Diener M, et al. **Eur J Pharmacol** 1988 Aug 2;152(3):217–25

Galanin blocks the slow cholinergic EPSP in CA1 pyramidal neurons from ventral hippocampus. Dutar P, et al. **Eur J Pharmacol** 1989 May 19;164(2):355–60

The effect of acute and chronic treatment with SCH 23390 on the spontaneous activity of midbrain dopamine neurons. Esposito E, et al. **Eur J Pharmacol** 1989 Mar 14; 162(1):109–13

Clonidine modulates dopamine cell firing in rat ventral tegmental area. Grenhoff J, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):11–8

5-HT3 receptor binding sites are on capsaicin-sensitive fibres in the rat spinal cord. Hamon M, et al. **Eur J Pharmacol** 1989 May 19;164(2):315–22

Evidence for two independent modes of activation of the 'efferent' function of capsaicin-sensitive nerves. Maggi CA, et al. **Eur J Pharmacol** 1988 Nov 8;156(3):367–73

Direct central effects of acute methylenedioxymethamphetamine on serotonergic neurons. Schmidt CJ, et al. **Eur J Pharmacol** 1988 Oct 26; 156(1):121–31

Galanin decreases the activity of locus coeruleus neurons in vitro. Seutin V, et al. **Eur J Pharmacol** 1989 May 19; 164(2):373–6

Local anesthetics: lipophilicity, charge, diffusion and site of action in isolated neuron. Stolc S, et al. **Eur J Pharmacol** 1989 May 19;164(2):249–56

GABA pretreatment enhances glutamate mediated phosphoinositide hydrolysis in neurons. Yu O, et al. **Eur J Pharmacol** 1988 Dec 6;158(1-2):179–80

Changes in cytoplasmic RNA content in neurons of the supraoptic and paraventricular nuclei in mice treated with kainic acid. Srebro Z, et al. **Folia Biol (Krakow)** 1988; 36(1-2):103–8

The most desirable conformation of phenylethylamine (PEA) moiety stimulating noradrenergic neurons: effects of PEA, methamphetamine, phenelzine, methylphenidate, nomifensine and mazindol on rat spinal reflexes. Hasebe Y, et al. **Gen Pharmacol** 1989;20(3):375–9

Effects of alpha, beta-methylene ATP on electrical responses produced by ATP and nerve stimulation in smooth muscle cells of the guinea-pig mesenteric artery. Nagao T, et al. **Gen Pharmacol** 1988;19(6):799–805

Pharmacological activity profiles of dopamine D-1 and D-2 reception agonists and antagonists on striatal neuronal activity and the response to dexamphetamine in freely moving rats. Warenycia MW, et al. **Gen Pharmacol** 1989; 20(3):295–301

Trypan blue in vivo stains nigral dopaminergic neurons killed by 6-hydroxydopamine. Lees GJ. **Histochemistry** 1989; 91(4):357–9

Responses of medullary vasoactive neurones in cat to iontophoretically applied acetylcholine and noradrenaline. Raghubir R, et al. **Indian J Exp Biol** 1988 Dec;26(12):950–3

Effects of glycosaminoglycans and proteinase inhibitors on astroglia-induced detachment of cultured rat cerebellar neurons. Gilad GM, et al. **Int J Dev Neurosci** 1989; 7(2):133–43

Effects of nitroimidazoles on neuronal cells in vitro. Stevenson MA, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1225–30

Thyrotropin-releasing hormone: effects on identified neurons of the dorsal vagal complex. McCann MJ, et al. **J Auton Nerv Syst** 1989 Mar;26(2):107–12

Interactions of the ulcerogen cysteamine with enteric inhibitory nerves and putative transmitters in the rat small intestine. Krantis A, et al. **J Auton Pharmacol** 1989 Jun; 9(3):219–29

Actions of cytochalasins on the organization of actin filaments and microtubules in a neuronal growth cone. Forscher P, et al. **J Cell Biol** 1988 Oct;107(4):1505–16

Selective destruction of mossy fibers and granule cells with preservation of the GABAergic network in the inferior region of the rat hippocampus after colchicine treatment. Robain O, et al. **J Comp Neurol** 1989 Jul 8;285(2):274–87

Tonic and phasic block of neuronal sodium currents by 5-hydroxyhexano-2',6'-xylide, a neutral lidocaine homologue. Chernoff DM, et al. **J Gen Physiol** 1989 Jun; 93(6):1075–90

Direct evidence that excitotoxicity in cultured neurons is mediated via N-methyl-D-aspartate (NMDA) as well as non-NMDA receptors. Frandsen A, et al. **J Neurochem** 1989 Jul;53(1):297–9

Glutamate neurotoxicity in culture depends on the presence of glutamine: implications for the role of glial cells in normal and pathological brain development. Simantov R. **J Neurochem** 1989 Jun;52(6):1694–9

Rapid cell death induced by methyl mercury in suspension of cerebellar granule neurons. Sarafian T, et al. **J Neuropathol Exp Neurol** 1989 Jan;48(1):1–10

Effects of baclofen on transient neurons in the mudpuppy retina: electrogenic and network actions. Bai SH, et al. **J Neurophysiol** 1989 Feb;61(2):382–90

Kainate receptor-mediated synaptic currents in mudpuppy inner retinal neurons reduced by D-O-phosphoserine. Coleman PA, et al. **J Neurophysiol** 1989 Aug;62(2):495–500

Activators of protein kinase C selectively enhance inactivation of a calcium current component of cultured sensory neurons in a pertussis toxin-sensitive manner. Gross RA, et al. **J Neurophysiol** 1989 Jun;61(6):1259–69

Modulation of a subthreshold calcium current by the neuropeptide FMRFamide in Aplysia neuron R15. Kramer RH, et al. **J Neurophysiol** 1988 Nov;60(5):1728–38

Tachykinins modulate multiple ionic conductances in voltage-clamped rat spinal dorsal horn neurons. Murase K, et al. **J Neurophysiol** 1989 Apr;61(4):854–65

Consequences of 4-aminopyridine applications to trigeminal root ganglion neurons. Puil E, et al. **J Neurophysiol** 1989 Sep;62(3):810–20

K+-channel blockade in trigeminal root ganglion neurons: effects on membrane outward currents. Spigelman I, et al. **J Neurophysiol** 1989 Sep;62(3):802–9

Mechanism of action of galanin on myenteric neurons. Tamura K, et al. **J Neurophysiol** 1988 Sep;60(3):966–79

Effect of testosterone on input received by an identified neuron type of the canary song system: a Golgi/electron microscopy/degeneration study. Canady RA, et al. **J Neurosci** 1988 Oct;8(10):3770–84

The voltage-dependent, slow inward current induced by the neuropeptide FMRFamide in Aplysia neuron R14. Ichinose M, et al. **J Neurosci** 1988 Oct;8(10):3891–900

Basic and acidic fibroblast growth factors have trophic effects on neurons from multiple CNS regions. Walicke PA. **J Neurosci** 1988 Jul;8(7):2618–27

Cytosine arabinoside kills postmitotic neurons: evidence that deoxycytidine may have a role in neuronal survival that is independent of DNA synthesis. Wallace TL, et al. **J Neurosci** 1989 Jan;9(1):115–24

Delayed rescue of N-methyl-D-aspartate receptor-mediated neuronal injury in cortical culture. Hartley DM, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):752–8

Neurologic deficits and neuronal injury in rats resulting from nonopioid actions of the delta opioid receptor antagonist ICI 174864. Long JB, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):1169–77

Neocarzinostatin induces neuronal morphology of mouse neuroblastoma in culture. Schor NF. **J Pharmacol Exp Ther** 1989 Jun;249(3):906–10

Guanosine 5'-triphosphate analogue activates potassium current modulated by neurotransmitters in Aplysia neurones. Březina V. **J Physiol (Lond)** 1988 Dec;407:15–40

Changes in spontaneous firing patterns of rat hippocampal neurones induced by volatile anaesthetics. Fujiwara N, et al. **J Physiol (Lond)** 1988 Aug;402:155–75

Somatostatin induces an inward rectification in rat locus coeruleus neurones through a pertussis toxin-sensitive mechanism. Inoue M, et al. **J Physiol (Lond)** 1988 Dec; 407:177–98

Dopamine-induced depolarizing responses associated with negative slope conductance in LB-cluster neurones of Aplysia. Matsumoto M, et al. **J Physiol (Lond)** 1988 Dec; 407:199–213

Inhibitory effects of L-threo-DOPS, an L-noradrenaline precursor, on locus coeruleus-originating neurons in the caudate nucleus. Hirose A, et al. **Jpn J Pharmacol** 1988 Dec;48(4):435–40

Testing drug effects against hypoxic damage of cultured neurons during long-term recovery. Ahlemeyer B, et al. **Life Sci** 1989;45(9):835–42

A comparison of the effects of chlorpromazine, 7-hydroxychlorpromazine and chlorpromazine sulfoxide on the activity of central dopaminergic neurons. Bunney BS, et al. **Life Sci** 1974 Jul 15;15(2):309–18

Phencyclidine-induced activation of ventral tegmental A10 dopamine neurons is differentially affected by lesions of the nucleus accumbens and medial prefrontal cortex. Ceci A, et al. **Life Sci** 1989;45(7):637–46

Steroid hormones and neurotrophism: relationship to nerve injury. Jones KJ. **Metab Brain Dis** 1988 Mar;3(1):1–18 (98 ref.)

Detection of drug effects on neurons: protein synthesis inhibition by low doses of amphetamine. Berninsone PM, et al. **Methods Find Exp Clin Pharmacol** 1989 Apr; 11(4):249–53

Delayed increase of Ca2+ influx elicited by glutamate: role in neuronal death. Manev H, et al. **Mol Pharmacol** 1989 Jul;36(1):106–12

Neuronal cell killing by the envelope protein of HIV and its prevention by vasoactive intestinal peptide. Brenneman DE, et al. **Nature** 1988 Oct 13;335(6191):639–42

Effects of emopamil on postischemic blood flow and neuronal damage in rat brain. Bielenberg GW, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):230–5

The depolarizing action of 5-hydroxytryptamine on rabbit isolated preganglionic cervical sympathetic nerves. Elliott P, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Dec; 338(6):608–15

Opioid dependence in myenteric neurons innervating the circular muscle of guinea-pig ileum. Johnson SM, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):166–72

Pharmacologic and radioligand binding analysis of the actions of 1,4-dihydropyridine activators related to Bay K 8644 in smooth muscle, cardiac muscle and neuronal preparations. Kwon YW, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):19–30

Valproate enhances GABA-A mediated inhibition of locus coeruleus neurones in vitro. Olpe HR, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Dec; 338(6):655–7

Effect of ferric nitrilotriacetate on predominantly cortical neuronal cell cultures. Swaiman KF, et al. **Neurochem Res** 1989 Jul;14(7):683–8

Thyroid hormone regulation of neurons staining for a pro-TRH-derived cryptic peptide sequence in the rat hypothalamic paraventricular nucleus. Liao N, et al. **Neuroendocrinology** 1989 Aug;50(2):217–21

Omega-conotoxin GVIA specifically blocks neuronal mechanisms in rat ileum. Allescher HD, et al. **Neuropeptides** 1989 May-Jun;13(4):253–8

Effects of cholecystokinin and pentagastrin on rat hippocampal neurones maintained in vitro. Boden PR, et al. **Neuropeptides** 1988 Aug-Sep;12(2):95–103

Responses of anterior hypothalamic-preoptic thermosensitive neurons to thyrotropin releasing hormone and cyclo(His-Pro). Hori T, et al. **Neuropharmacology** 1988 Sep;27(9):895–901

Effect of pretreatment with amphetamine on the interaction between amphetamine and dopamine neurons in the nucleus accumbens. Kolta MG, et al. **Neuropharmacology** 1989 Jan; 28(1):9–14

Presynaptic action of uranyl nitrate on the phrenic nerve-diaphragm preparation of the mouse. Lin RH, et al. **Neuropharmacology** 1988 Aug;27(8):857–63

Comparison of the actions of phencyclidine and sigma ligands on CA1 hippocampal pyramidal neurons in the rat. Malouf AT, et al. **Neuropharmacology** 1988 Nov;27(11):1161–70

Effects of intraperitoneal administration of apomorphine and the isomers of 3-(1-propyl-3-piperidinyl)phenol on the firing activity of substantia nigra dopamine neurons: comparison of agonist efficacies and development of acute tolerance. Meltzer LT, et al. **Neuropharmacology** 1988 Sep; 27(9):933–42

Actions of potent cholinergic anthelmintics (morantel, pyrantel and levamisole) on an identified insect neurone reveal pharmacological differences between nematode and insect acetylcholine receptors. Pinnock RD, et al. **Neuropharmacology** 1988 Aug;27(8):843–8

Acute electrophysiological and neurochemical effects of administration of MPTP in mice. Studer A, et al. **Neuropharmacology** 1988 Sep;27(9):923–31

Pertussis toxin pretreatment discriminates between pre- and postsynaptic actions of baclofen in rat dorsal raphe nucleus in vitro. Colmers WF, et al. **Neurosci Lett** 1988 Nov 11; 93(2-3):300–6

Electrophysiological analysis of the neural circuitry underlying opiate effects in the nucleus accumbens septi. Hakan RL, et al. **Neurosci Lett** 1989 Jun 19;101(2):163–8

Cyclic AMP reduces adhesion of isolated neuronal growth cones from developing rat forebrain to an astrocytic cell line from embryonic mouse striatum. Lockerbie RO, et al. **Neuroscience** 1989;28(2):443–54

Effect of chronic hydrogen peroxide exposure on neuronal electric membrane properties. Scott B, et al. **Neurotoxicology** 1988 Summer;9(2):189–96

Influence of in vitro lactic acidosis on central nervous system neurons. Khan NA, et al. **Pathol Biol (Paris)** 1989 Jun; 37(6):725–9

Bilirubin toxicity in a neuroblastoma cell line N-115: I. Effects on Na+K+ ATPase, [3H]-thymidine uptake, L-[35S]-methionine incorporation, and mitochondrial function. Amit Y, et al. **Pediatr Res** 1989 Apr;25(4):364–8

Bilirubin toxicity in a neuroblastoma cell line N-115: II. Delayed effects and recovery. Amit Y, et al. **Pediatr Res** 1989 Apr;25(4):369–72

Effects of elevated potassium on neuronal death and network formation in neocortical cultures. Baker RE, et al. **Pflugers Arch** 1989;414 Suppl 1:S126

Effect of glibenclamide, a selective blocker of an ATP-K+ channel, on the anoxic response of hippocampal neurones. Ben Ari Y. **Pflugers Arch** 1989;414 Suppl 1:S111-4

Omega-conotoxin blockade distinguishes Ca from Na permeable states in neuronal calcium channels. Carbone E, et al. **Pflugers Arch** 1988 Nov;413(1):14–22

Potassium channel blockers and neuronal function. Harvey AL, et al. **Pflugers Arch** 1989;414 Suppl 1:S106-10 (34 ref.)

Effects of ryanodine on the spike after-hyperpolarization in sympathetic neurones of the rat superior cervical ganglion. Kawai T, et al. **Pflugers Arch** 1989 Mar;413(5):470–5

Effects of (-)baclofen on inhibitory neurons in the guinea pig hippocampal slice. Misgeld U, et al. **Pflugers Arch** 1989 Jun;414(2):139–44

Effects of peripheral chemo- and baro-receptor denervation on responses of preoptic thermosensitive neurons to inspired CO2. Tamaki Y, et al. **Pflugers Arch** 1989 Sep; 414(5):495–9

The action of flecainide acetate and its enantiomers on mammalian non-myelinated nerve fibres. Lie-A-Huen L, et al. **Pharm Weekbl [Sci]** 1989 Jun 23;11(3):92–4

Gangliosides prevent glutamate and kainate neurotoxicity in primary neuronal cultures of neonatal rat cerebellum and cortex. Favaron M, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7351–5

Developmental changes in estrogen-sensitive neurons in the forebrain of the zebra finch. Gahr M, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7380–3

Correlation between oxytocin neuronal sensitivity and oxytocin receptor binding: an electrophysiological and autoradiographical study comparing rat and guinea pig hippocampus. Raggenbass M, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):750–4

Ritanserin, a 5-HT2 receptor antagonist, activates midbrain dopamine neurons by blocking serotonergic inhibition. Ugedo L, et al. **Psychopharmacology (Berlin)** 1989; 98(1):45–50

The neuronal growth cone: calcium regulation of a presecretory structure. Kater SB, et al. **Soc Gen Physiol Ser** 1989;44:111–22

Regulation of ion channels in Aplysia neurons by autoactive peptides and second messengers. Loechner KJ, et al. **Soc Gen Physiol Ser** 1989;44:69–82 (47 ref.)

Effect of cyclooxygenase and lipoxygenase inhibitors on delayed neuronal death in the gerbil hippocampus. Nakagomi T, et al. **Stroke** 1989 Jul;20(7):925–9

Toluene exposure during maturation of intraocular brain tissue transplants: alterations of host and graft cerebellar Purkinje neuron function and sensitivity to norepinephrine. Granholm AC, et al. **Toxicol Appl Pharmacol** 1988 Nov; 96(2):296–304

Studies on hypothalamo-pituitary corticoliberin system. VI. Comparison of the effects of long-term intraventricular CRF-administration and adrenalectomy in CRF- and neurophysin-immunoreactive neurons in the rat. Miśkowiak B. **Z Mikrosk Anat Forsch** 1988;102(3):432–44

[Effects of biologically active peptides on the giant neurons of the giant African snail, Achatina fulica Férussac] Takeuchi H, et al. **C R Soc Biol (Paris)** 1988;182(4):433–8 (Eng. Abstr.) (Fre)

[Interferon stimulates the expression of cholinergic properties in human spinal cord neurons in culture] Erkman L, et al. **Rev Neurol (Paris)** 1988;144(11):660–3 (Eng. Abstr.) (Fre)

[Steroid effect on cultured retinal neuronal cells] Yuda K, et al. **Nippon Ganka Gakkai Zasshi** 1988 Jul;92(7):1117–21 (Eng. Abstr.) (Jpn)

[The role of cyclic 3',5'-adenosine monophosphate in the extinction of the reaction of identified neurons in the edible snail to acetylcholine] Pivovarov AS, et al. **Biol Nauki** 1988;(11):54–61 (Eng. Abstr.) (Rus)

[Effect of a cyclic enkephalin analog on the protein content in the hippocampal neurons of rats during the acquisition of a 2-way avoidance conditioned reflex] Segal OL, et al. **Biol Nauki** 1989;(5):59–64 (Eng. Abstr.) (Rus)

[Effect of amino acid derivatives of beta-carboline on the evoked activity of hippocampal neurons] Glushankov PG, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):563–5 (Eng. Abstr.) (Rus)

[The effect of serotonin on the desensitization of GABA-receptors in mollusk neurons] Diatlov VA. **Dokl Akad Nauk SSSR** 1989 Mar-Apr;305(1):238–40 (Rus)

[Harmanes allosterically modulate serotonin receptors of IA type] Komissarov IV, et al. **Dokl Akad Nauk SSSR** 1989; 302(3):749–52 (Rus)

[The effect of calcium ions on the deactivation of the calcium current in nerve cells of Helix pomatia] Kononenko NI, et al. **Dokl Akad Nauk SSSR** 1989;305(4):993–7 (Rus)

[Features of the interaction between polymethylene-bis-trimethylammonium compounds and h-cholinoreceptors of an isolated neuron of the mollusk Planorbarius corneus] Skliarov AJ, et al. **Dokl Akad Nauk SSSR** 1988;303(3):760–3 (Rus)

[Effect of corazole on the dynamics of oxidative-reductive processes in cerebral cortical neurons] Sofronov GA, et al. **Farmakol Toksikol** 1989 Mar-Apr;52(2):30–3 (Eng. Abstr.) (Rus)

[Kinetics of the inactivation of tetrodotoxin-sensitive sodium channels in the spinal ganglion neurons of rats] Akoev GN, et al. **Fiziol Zh SSSR** 1988 Jun;74(6):802–8 (Eng. Abstr.) (Rus)

[Sensitivity of the dopamine receptors of the amygdaloid neurons in rats with different alcohol motivations] Bondarenko TT. **Fiziol Zh SSSR** 1988 Oct;74(10):1373–6 (Eng. Abstr.) (Rus)

[Effect of proteolytic enzymes on the functional activity of the neuron] Kazanskii VV. **Fiziol Zh SSSR** 1988 Jun; 74(6):809–13 (Eng. Abstr.) (Rus)

[Background impulsation of cortical neurons during blockade of synaptic inhibition in vital slices] Karnup SV. **Neirofiziologiia** 1989;21(1):16–24 (Eng. Abstr.) (Rus)

[Blocking action of Nephila clavata spider toxin on ionic currents activated by glutamate and its agonists in isolated hippocampal neurons] Kiskin NI, et al. **Neirofiziologiia** 1989;21(2):152–60 (Eng. Abstr.) (Rus)

[Effect of the microiontophoretic injection of AMP and cAMP on the calcium current in the dialyzed neuron of the edible snail] Kononenko NI, et al. **Neirofiziologiia** 1988; 20(6):769–76 (Eng. Abstr.) (Rus)

[Effect of application of oxytocin on neurons of Helix pomatia: depolarization effects] Kononenko NI, et al. **Neirofiziologiia** 1988;20(5):652–9 (Eng. Abstr.) (Rus)

[Effect of application of oxytocin on neurons of Helix pomatia: hyperpolarization effects] Kononenko NI, et al. **Neirofiziologiia** 1988;20(5):659–66 (Eng. Abstr.) (Rus)

[The "trap"—a modification of the block of neuronal nicotinic cholinoceptors] Kurennyi DE, et al. **Neirofiziologiia** 1988;20(6):826–9 (Eng. Abstr.) (Rus)

[Action of tubocurarine on non-activated nicotinic cholinoreceptors of neurons of sympathetic ganglia in the rat] Kurennyi DE. **Neirofiziologiia** 1989;21(1):130–3 (Eng. Abstr.) (Rus)

[Effect of natural ribonucleotides on the ATP receptors of the neurons of the rat nodose ganglion] Marchenko SM, et al. **Neirofiziologiia** 1988;20(3):410–2 (Eng. Abstr.) (Rus)

[Pharmacologic and metabolic dependence of the delayed inactivated potassium outward current in the somatic

membrane of snail neurons] Martyniuk AE. **Neirofiziologiia** 1989;21(1):52–9 (Eng. Abstr.) **(Rus)**

[Effect of oxytocin on rat dorsal root ganglia in vitro] Molokanova EA, et al. **Neirofiziologiia** 1989;21(3):420–2 (Eng. Abstr.) **(Rus)**

[Effect of vasopressin on the somatic membrane of spinal ganglion neurons] Molokanova EA, et al. **Neirofiziologiia** 1988;20(6):801–8 (Eng. Abstr.) **(Rus)**

[Effect of the gamma-aminobutyric acid antagonist disulfotetraazadamantane on the evoked responses of neurons in hippocampal slices] Pervukhin GIa, et al. **Neirofiziologiia** 1989;21(1):66–70 (Eng. Abstr.) **(Rus)**

[Ionic mechanisms evoked by acetylcholine-, nicotine-, and muscarine-induced depolarization of Helix lucorum RPa4 neurons] Pivovarov AS, et al. **Neirofiziologiia** 1989; 21(3):305–14 (Eng. Abstr.) **(Rus)**

[Action of l-DOPA and acidic amino acids on isolated neurons of spinal cord in the lamprey] Rusin KI, et al. **Neirofiziologiia** 1988;20(5):706–8 (Eng. Abstr.) **(Rus)**

[Characteristics of the effect of glycine and gamma-aminobutyric acid on the spinal cord neurons in the lamprey] Safronov BV, et al. **Neirofiziologiia** 1988; 20(6):823–5 (Eng. Abstr.) **(Rus)**

[Effect of strychnine and bicuculline on responses evoked by application of inhibitory mediators in neurons of the lamprey spinal cord] Safronov BV. **Neirofiziologiia** 1989; 21(1):133–5 (Eng. Abstr.) **(Rus)**

[Mechanism of action of tubocurarine on nicotinic cholinoreceptors of neurons of the sympathetic ganglia of rats] Selianko AA, et al. **Neirofiziologiia** 1988;20(5):672–80 (Eng. Abstr.) **(Rus)**

[Mechanisms of the action of antihypoxic agents on central nervous system neurons] Burgova MP, et al. **Nerv Sist** 1988; 27:8–16 **(Rus)**

[The function of the cholinoreactive systems of the postsynaptic neuron under the action of nerve growth factor] Kaliunov VN, et al. **Nerv Sist** 1988;27:41–8 **(Rus)**

[The influence of neuropeptides on the membrane of identified mollusk neurons and their modulating action on GABA-induced effects] Sologub MI, et al. **Nerv Sist** 1988; 27:135–43 **(Rus)**

[Effect of neonatal androgenization on the septal neurons of the brain in female rats in early postnatal ontogeny] Myslitskii VF. **Ontogenez** 1989 May–Jun;20(3):327–31 (Eng. Abstr.) **(Rus)**

[Depression of penicillin-evoked seizure discharges of cerebrospinal neurons by magnesium ions] Kornilov OV, et al. **Patol Fiziol Eksp Ter** 1989 Mar–Apr;(2):43–5 (Eng. Abstr.) **(Rus)**

[Factors affecting the cholinomimetic activity of alkyltrimethylammonium compounds in experiments on isolated neurons of the mollusk Planorbarius corneus] Skliarov AI, et al. **Zh Evol Biokhim Fiziol** 1989 May–Jun; 25(3):401–3 (Eng. Abstr.) **(Rus)**

[Effect of inhibitors of energy metabolism on potassium accumulation in the neurons of the mollusk Planorbarius corneus] Skul'skii IA, et al. **Zh Evol Biokhim Fiziol** 1988 Nov–Dec;24(6):817–21 (Eng. Abstr.) **(Rus)**

[Modulation of signal transmission by the septal neurons of the rabbit during action on the cholinergic system] Brazhnik ES, et al. **Zh Vyssh Nerv Deiat** 1988 Jul–Aug; 38(4):701–9 (Eng. Abstr.) **(Rus)**

[Effect of strychnine on the neuronal reactivity of the sensorimotor cortex and the temporary connection in rabbits] Chizhenkova RA. **Zh Vyssh Nerv Deiat** 1988 Sep–Oct;38(5):846–54 (Eng. Abstr.) **(Rus)**

[Changes in the dopamine sensitivity of the amygdala neurons in freely moving rats during the initiation of interspecies aggression] Gromov AI. **Zh Vyssh Nerv Deiat** 1988 Jul–Aug;38(4):762–3 **(Rus)**

[Effect of ethanol on the neuronal activity of the raphe nuclei of the rat brain in tissue culture] Gromova EA, et al. **Zh Vyssh Nerv Deiat** 1989 Mar–Apr;39(2):373–5 **(Rus)**

[A comparative analysis of the effect of an analog of vasopressin on functionally different neurons in the grape snail] Kudriashova IV. **Zh Vyssh Nerv Deiat** 1989 Jan–Feb; 39(1):103–9 (Eng. Abstr.) **(Rus)**

[Effect of the enkephalin derivative DAGO on neuronal behavior and activity in the neocortex and hippocampus of rabbits during the acquisition of conditioned defense and inhibitory reflexes] Shul'gina GI, et al. **Zh Vyssh Nerv Deiat** 1989 Mar–Apr;39(2):309–19 (Eng. Abstr.) **(Rus)**

[Effect of piracetam on the neuronal activity of the neocortex and on behavior in rabbits during learning] Shul'gina GI, et al. **Zh Vyssh Nerv Deiat** 1988 May–Jun;38(3):460–6 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Neurogenesis in the vomeronasal epithelium of adult garter snakes: 3. Use of H3-thymidine autoradiography to trace the genesis and migration of bipolar neurons. Wang RT, et al. **Am J Anat** 1988 Oct;183(2):178–85

The neurogenesis of the callosal population of cortical cells in hamsters. Lent R, et al. **Braz J Med Biol Res** 1988; 21(3):503–6

Neuronal maturation in the foetal brain in Down's syndrome. Brooksbank BW, et al. **Early Hum Dev** 1989 Feb; 18(4):237–46

[Quantitative analysis of the development of neurons in embryonal tissue of the cerebral cortex, transplanted into the brain of adult rats in comparison with the development of neurons in the intact brain] Kozlova EN, et al. **Dokl Akad Nauk SSSR** 1989;306(2):472–6 **(Rus)**

ENZYMOLOGY

Electron microscopical localization of guanylate cyclase activity in the neocortex of the guinea pig. Davidoff M, et al. **Acta Histochem (Jena)** 1989;85(1):109–16

Consecutive diaphorase–acetylcholinesterase histochemistry in the myenteric plexus of frog stomach. Gábriel R, et al. **Acta Histochem (Jena)** 1989;85(2):135–41

Neuronal carbonic anhydrase activity in the central nervous system of the rat: light- and electron histochemical investigations of the islands of Calleja. Nógrádi A, et al. **Acta Histochem (Jena)** 1989;85(2):187–93

Differences in response of acetylcholinesterase to diisopropylfluorophosphate in the mesencephalic raphe region. A microelectrophoretic, histochemical, and biochemical study in albino rats. Seidel J, et al. **Acta Histochem (Jena)** 1989;85(1):65–72

The neuron-specific enolase as a marker of brain destruction in a case of Reye's syndrome: related to the treatment of brain edema. Nara T, et al. **Acta Paediatr Scand** 1988 Nov; 77(6):912–3

Reduction of enzyme activity of tyrosine hydroxylase and aromatic L-aminoacid decarboxylase in clonal pheochromocytoma PC12h cells by carcinogenic heterocyclic amines. Naoi M, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):494–9

On the type of DNA polymerase activity in neuronal, astroglial, and oligodendroglial cell fractions from young, adult, and old rat brains. Subrahmanyam K, et al. **Biochem Int** 1988 Jun;16(6):1111–7

Specific soman-hydrolyzing enzyme activity in a clonal neuronal cell culture. Ray R, et al. **Biochim Biophys Acta** 1988 Dec 15;967(3):373–81

Tyrosine hydroxylase-containing neurons in the supraoptic and paraventricular nuclei of the adult human. Li YW, et al. **Brain Res** 1988 Sep 27;461(1):75–86

Reduced nicotinamide adenine dinucleotide phosphate (NADPH)-diaphorase-positive neurons in cat cerebral white matter. Mizukawa K, et al. **Brain Res** 1988 Oct 4; 461(2):274–81

PNMT-containing catecholaminergic neurons are not necessarily adrenergic. Sved AF. **Brain Res** 1989 Feb 27; 481(1):113–8

Distribution of choline acetyltransferase immunopositive structures in the rat brainstem. Tago H, et al. **Brain Res** 1989 Aug 28;495(2):271–97

Drosophila abl tyrosine kinase in embryonic CNS axons: a role in axonogenesis is revealed through dosage-sensitive interactions with disabled. Gertler FB, et al. **Cell** 1989 Jul 14;58(1):103–13

Clinical biochemistry of neuron specific enolase. Kaiser E, et al. **Clin Chim Acta** 1989 Jul 31;183(1):13–31 (162 ref.)

Comparative study of GABA-T from glial cells, neuronal perikarya cells and synaptosomes. Bedoya MP, et al. **Comp Biochem Physiol [C]** 1988;90(1):61–4

BRL 24924: a potent agonist at a non-classical 5-HT receptor positively coupled with adenylate cyclase in colliculi neurons. Dumuis A, et al. **Eur J Pharmacol** 1989 Mar 21; 162(2):381–4

Association of casein kinase II with microtubules. Serrano L, et al. **Exp Cell Res** 1989 Mar;181(1):263–72

Extrinsic denervation elevates neuronal aromatic L-amino acid decarboxylase immunoreactivity in rat small intestine. Mann R, et al. **Histochemistry** 1989;92(3):219–23

The appearance of a highly digitalis-sensitive isoform of Na+,K+-ATPase during maturation in vitro of primary cultured rat cerebral neurons. Inoue N, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):349–54

Ca2+/calmodulin-dependent protein kinase enriched in cerebellar granule cells. Identification of a novel neuronal calmodulin-dependent protein kinase. Ohmstede CA, et al. **J Biol Chem** 1989 Apr 5;264(10):5866–75

Distribution of monoamine-synthesizing neurons in the human medulla oblongata. Halliday GM, et al. **J Comp Neurol** 1988 Jul 15;273(3):301–17

Type B monoamine-oxidase-containing cells and fibers in the cat hypothalamus demonstrated by an improved enzyme histochemical method. Kitahama K, et al. **J Comp Neurol** 1989 Jul 8;285(2):218–30

Two types of tyrosine hydroxylase-immunoreactive amacrine cell in the rhesus monkey retina. Mariani AP, et al. **J Comp Neurol** 1988 Oct 1;276(1):81–91

Ultrastructural localization of CMPase, TPPase, and NADPase activity in neurons, satellite cells, and Schwann cells in frog dorsal root ganglia. Bennett G, et al. **J Histochem Cytochem** 1989 Feb;37(2):165–72

Expression of neuron-specific enolase, Leu-7, and neuropeptides in human fetal salivary gland epithelium. Hayashi Y, et al. **J Histochem Cytochem** 1989 Jul; 37(7):1147–52

Histochemical characterization of neuronal NADPH-diaphorase. Hope BT, et al. **J Histochem Cytochem** 1989 May;37(5):653–61

Inhibition of monoamine oxidase within monoaminergic neurons in the rat brain by (E)-beta-fluoromethylene-m-tyrosine (MDL 72394). Fagervall I, et al. **J Neurochem** 1989 Feb;52(2):467–71

Antibodies to a synthetic peptide corresponding to a Ser-40-containing segment of tyrosine hydroxylase: activation and immunohistochemical localization of tyrosine hydroxylase. Lee KY, et al. **J Neurochem** 1989 Oct;53(4):1238–44

Cyclic AMP-dependent protein phosphorylation in isolated neuronal growth cones from developing rat forebrain. Lockerbie RO, et al. **J Neurochem** 1989 Mar;52(3):786–96

Translocation and activation of protein kinase C in striatal neurons in primary culture: relationship to phorbol dibutyrate actions on the inositol phosphate generating system and neurotransmitter release. Weiss S, et al. **J Neurochem** 1989 Feb;52(2):530–6

Acid phosphatase activity at nodes of Ranvier in alpha-motor and dorsal root ganglion neurons of the cat. Gatzinsky KP, et al. **J Neurocytol** 1988 Aug;17(4):531–44

Development of acetylcholinesterase-positive neuronal pathways in the cochlea of the mouse. Sobkowicz HM, et al. **J Neurocytol** 1989 Apr;18(2):209–24

Glutamate decarboxylase-immunoreactive neurons are preserved in human epileptic hippocampus. Babb TL, et al. **J Neurosci** 1989 Jul;9(7):2562–74

Postmitotic, postmigrational expression of tyrosine hydroxylase in olfactory bulb dopaminergic neurons. McLean JH, et al. **J Neurosci** 1988 Oct;8(10):3658–69

Two anatomically specific classes of candidate cholinoceptive neurons in the rat olfactory bulb. Nickell WT, et al. **J Neurosci** 1988 Dec;8(12):4482–91

Differentiation increases type II calmodulin-dependent protein kinase in the neuroblastoma/glioma cell line 108CC15 (NG108-15). Vallano ML, et al. **J Neurosci** 1989 Feb;9(2):539–47

Localization of choline acetyltransferase in perikarya and dendrites within the nuclei of the solitary tracts. Armstrong DM, et al. **J Neurosci Res** 1988 Jul;20(3):279–90

Neuronal changes in fetal cortex transplanted to ischemic adult rat cortex. Mampalam TJ, et al. **J Neurosurg** 1988 Dec;69(6):904–12

Histochemical localization of acetylcholinesterase in the cerebral ganglia of Fasciola hepatica, a parasitic flatworm. Sukhdeo SC, et al. **J Parasitol** 1988 Dec;74(6):1023–32

Activities of neuronal and astrocytic marker enzymes in autopsied brain tissue from patients with hepatic encephalopathy. Lavoie J, et al. **Metab Brain Dis** 1987 Dec; 2(4):283–90

Mass and activity of tyrosine hydroxylase in tuberoinfundibular dopaminergic neurons of the aged brain. Control by prolactin and ovarian hormones. Gonzalez HA, et al. **Neuroendocrinology** 1988 Dec;48(6):663–7

Electronmicroscopic immunocytochemistry of pig brain shows that endopeptidase-24.11 is localized in neuronal membranes. Barnes K, et al. **Neurosci Lett** 1988 Nov 22; 94(1-2):64–9

Electrophysiological detection of acetylcholinesterase activity using concentration clamp on physically isolated Aplysia neurons. Oyama Y, et al. **Neurosci Res** 1988 Dec; 6(2):174–80

Tyrosine hydroxylase-like and dopamine beta-hydroxylase-like immunoreactivity in the gustatory zone of the nucleus of the solitary tract in the hamster: light- and electron-microscopic studies. Davis BJ, et al. **Neuroscience** 1988 Dec;27(3):949–64

Acetylcholinesterase on the dendrites of central cholinergic neurons: an electron microscopical study in the ferret. Henderson Z. **Neuroscience** 1989;28(1):95–108

Cytochrome oxidase patches and Meynert cells in monkey visual cortex. Payne BR, et al. **Neuroscience** 1989; 28(2):353–63

Partial purification and characterization of a membrane-derived factor regulating neurotransmitter phenotypic expression. Adler JE, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1080–3

Phenylethanolamine N-methyltransferase-containing neurons in the limbic system of the young rat. Mezey E. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):347–51

Evolutionary expression of the neuronal form of the src protein in the brain. Yang XM, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4751–5

The appearance of Na+,K+-ATPase isozymes in rat neuronal cell cultures. Inoue N, et al. **Prog Clin Biol Res** 1988;268B:91–6

Age-dependent vulnerability of brain choline acetyltransferase activity to transient cerebral ischemia in rats. Nyberg P, et al. **Stroke** 1989 Apr;20(4):495–500

Cytochrome oxidase: an endogenous metabolic marker for neuronal activity. Wong-Riley MT. **Trends Neurosci** 1989 Mar;12(3):94–101 (89 ref.)

[Enzymatic activity of neurons of various parts of the digestive tube in postnatal ontogenesis of the rat (cytophotometric histochemical study)] Baburin VE, et al. **Arkh Anat Gistol Embriol** 1988 Aug;95(8):27–32 (Eng. Abstr.) **(Rus)**

[Electron microscopic-cytochemical study of the enzyme activity of energy metabolism in "dark" and "light" neurons of the rat cerebral cortex] Solov'eva ZhF, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):475–7 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Aspects of epileptogenesis: maturation of neuronal circuits. Knowles WD. **Cleve Clin J Med** 1989;56 Suppl Pt 2:S221–5 (28 ref.)

Development and differentiation of neuronal subsets in asexually reproducing Microstomum lineare.

Immunocytochemistry of 5-HT, RF-amide and SCPB. Reuter M, et al. **Histochemistry** 1989;91(2):123-31

Interstitial cells of the adult neocortical white matter are the remnant of the early generated subplate neuron population. Chun JJ, et al. **J Comp Neurol** 1989 Apr 22;282(4):555-69

From bird song to neurogenesis. Nottebohm F. **Sci Am** 1989 Feb;260(2):74-9 (3 ref.)

IMMUNOLOGY

Regional differences in glucocorticoid receptor immunoreactivity among neuropeptide Y immunoreactive neurons of the rat brain. Härfstrand A, et al. **Acta Physiol Scand** 1989 Jan;135(1):3-9

Antineuronal autoantibodies in neurologic paraneoplastic syndromes. Anderson NE, et al. **Ann N Y Acad Sci** 1988; 540:440-1

EAE serum decreases CNPase activity in cultures of B104 cells. Elkin R, et al. **Ann N Y Acad Sci** 1988;540:396-7

Functional implications of class I MHC modulation in neural tissue. Lampson LA, et al. **Ann N Y Acad Sci** 1988; 540:479-82

Clonal restriction of complement-fixing antineural antibodies in the Guillain-Barré syndrome. Ryberg B. **Ann N Y Acad Sci** 1988;540:384-6

A novel neuronal antigen identified by sera from patients with systemic lupus erythematosus. Hanly JG, et al. **Arthritis Rheum** 1988 Dec;31(12):1492-9

Anti-neuronal autoantibodies and neurological paraneoplastic syndromes. Anderson NE. **Aust N Z J Med** 1989 Aug;19(4):379-87 (83 ref.)

Antibodies against Drosophila potassium channels identify membrane proteins across species. Barbas JA, et al. **Brain Res Mol Brain Res** 1989 Mar;5(2):171-6

A monoclonal antibody recognizing a common antigen on neurons and fibroblasts in chicken and quail. Graniou M, et al. **Cell Differ** 1988 Aug;24(3):179-90

The distribution of GABA-like-immunoreactive neurons in the brain of the newt, Triturus cristatus carnifex, and the green frog, Rana esculenta. Franzoni MF, et al. **Cell Tissue Res** 1989 Jan;255(1):155-66

Somatostatin-like immunoreactivity in non-pyramidal neurons of the human entorhinal region. Friederich-Ecsy B, et al. **Cell Tissue Res** 1988 Nov;254(2):361-7

Immunoreactive galanin-like material in magnocellular hypothalamo-neurohypophysial neurones of the rat. Gaymann W, et al. **Cell Tissue Res** 1989 Jan;255(1):139-47

The organization of prolactin-like-immunoreactive neurons in the rat central nervous system. Light- and electron-microscopic immunocytochemical studies. Siaud P, et al. **Cell Tissue Res** 1989 Jan;255(1):107-15

Membrane glycoproteins immunologically related to the human insulin receptor are associated with presumptive neuronal territories and developing neurones in Drosophila melanogaster. Piovant M, et al. **Development** 1988 May; 103(1):145-56

A carbohydrate epitope expressed uniquely on the cell surface of Drosophila neurons is altered in the mutant nac (neurally altered carbohydrate). Katz F, et al. **EMBO J** 1988 Nov;7(11):3471-7

Isolation and partial characterization of high affinity laminin receptors in neural cells. Douville PJ, et al. **J Biol Chem** 1988 Oct 15;263(29):14964-9

Antigenic and functional characterization of a rat central nervous system-derived cell line immortalized by a retroviral vector. Geller HM, et al. **J Cell Biol** 1988 Nov; 107(5):1977-86

Immunoreactivity in pituitary gonadotropes and hypothalamic vasopressinergic neurons for the monoclonal antibody INO. Madsen JR, et al. **J Neuroimmunol** 1988 Nov;20(1):83-91

Expression of a developmental stage-specific antigen by neuronal precursor cells of human fetal cerebellum. Moss TJ, et al. **J Neuroimmunol** 1988 Nov;20(1):3-14

An antigenic profile of Lewy bodies: immunocytochemical indication for protein phosphorylation and ubiquitination. Bancher C, et al. **J Neuropathol Exp Neurol** 1989 Jan; 48(1):81-93

Alzheimer's disease antibodies bind specifically to a neurofilament protein in Torpedo cholinergic neurons. Chapman J, et al. **J Neurosci** 1989 Aug;9(8):2710-7

Anti-tubulin monoclonal antibodies that bind to specific neurons in Caenorhabditis elegans. Siddiqui SS, et al. **J Neurosci** 1989 Aug;9(8):2963-72

The monoclonal antibody B30 recognizes a specific neuronal cell surface antigen in the developing mesencephalic trigeminal nucleus of the mouse. Stainier DY, et al. **J Neurosci** 1989 Jul;9(7):2468-85

Circulating antineuronal antibodies in small cell lung cancer. Popp W, et al. **Lung** 1988;166(4):243-51

Neuronal antinuclear antibodies in a patient with Lambert-Eaton myasthenic syndrome and small-cell lung carcinoma. Dropcho EJ, et al. **Neurology** 1989 Feb;39(2 Pt 1):249-51

Neuron- and myelin-specific monoclonal antibodies recognizing cell-surface antigens of the central and peripheral nervous system. Patsavoudi E, et al. **Neuroscience** 1989;30(2):463-78

Immunocytochemical characterization of the cellular immune response to intracerebral xenografts of brain tissue. Finsen B, et al. **Prog Brain Res** 1988;78:261-70

[Circulating antineuronal antibodies--use of a paraneoplastic phenomenon as tumor marker in small cell bronchial carcinoma] Popp W, et al. **Prax Klin Pneumol** 1988 Aug; 42(8):665-7 (Eng. Abstr.) **(Ger)**

[Changes in the neurite-glial interrelations under the influence of antiserum against galactocerebrosides (a vital tissue culture study)] Sotnikov OS, et al. **Arkh Anat Gistol Embriol** 1989 Feb;96(2):14-23 (Eng. Abstr.) **(Rus)**

[GABA-immunoreactive cells in the brain of the frog Rana temporaria (letter)] Kenigfest NB, et al. **Zh Evol Biokhim Fiziol** 1989 Jan-Feb;25(1):131-2 **(Rus)**

INJURIES

Role of dopamine in ischemic neuronal damage [letter] Globus MY. **Stroke** 1989 Jun;20(6):827-8

METABOLISM

Autofluorescence emission spectra of neuronal lipopigment in mucopolysaccharidosis (Sanfilippo's syndrome). Dowson JH, et al. **Acta Neuropathol (Berl)** 1989;77(4):426-9

Differences in the kinetics of ionic currents in the somatic membrane of identified T- and N-mechanosensory neurons of medical leech. Boev K, et al. **Acta Physiol Pharmacol Bulg** 1988;14(3):67-76

Evidence for the existence of angiotensinogen mRNA in magnocellular paraventricular hypothalamic neurons. Aronsson M, et al. **Acta Physiol Scand** 1988 Apr; 132(4):585-6

Effects of transient forebrain ischaemia on vasoactive intestinal polypeptide-immunoreactive neuronal populations in the frontoparietal cortex and hippocampal formation of the male rat. Grimaldi R, et al. **Acta Physiol Scand** 1989 Jun;136(2):289-90

Loss of muscarinic and benzodiazepine neuroreceptors from hippocampus of alcohol abusers. Freund G, et al. **Alcohol** 1989 Jan-Feb;6(1):23-31

Biochemical studies on opioid and alpha 2-adrenergic receptors in canine submucosal neurons. Ahmad S, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):G957-65

[3H]saxitoxin as a marker for canine deep muscular plexus neurons. Ahmad S, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):G462-9

Release of immunoreactive angiotensin II from neuronal cultures: adrenergic influences. Richards EM, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):C588-95

Modulation of angiotensin II binding sites in neuronal cultures by mineralocorticoids. Sumners C, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):C121-9

Measurements of the DNA amount in mono- and binucleate cells in the celiac superior mesenteric ganglion of the guinea pig. Forsman CA, et al. **Anat Embryol (Berl)** 1989; 179(6):587-90

Acridine orange-RNA fluorescence of maturing neurons in the perinatal rat brain. Topaloglu H, et al. **Anat Rec** 1989 May;224(1):88-93

Arachidonic acid metabolism in ischemic neuronal damage. Abe K, et al. **Ann N Y Acad Sci** 1989;559:259-68

An in vivo voltammetric study of the response of mesocortical and mesoaccumbens dopaminergic neurons to environmental stimuli in strains of rats with differing levels of emotionality. Scatton B, et al. **Ann N Y Acad Sci** 1988;537:124-37 (45 ref.)

Changes in intracellular calcium during neuron activity. Ross WN. **Annu Rev Physiol** 1989;51:491-506 (88 ref.)

Immunocytochemical localizations of neuron-specific proteins in the taste bud of the guinea pig. Yoshie S, et al. **Arch Histol Cytol** 1988 Oct;51(4):379-84

Effects of capsaicin on the contractility and peptide-containing nerves of large cerebral arteries of the cat. Saito A, et al. **Arch Int Pharmacodyn Ther** 1988 Sep-Oct;295:194-203

Effects of the anti-dementia drug hopantenate calcium upon striatal dopaminergic neurons in young and aged rats. Toide K. **Arch Int Pharmacodyn Ther** 1989 May-Jun;299:7-13

Neuronal RNA in Pick's and Alzheimer's diseases. Comparison of disease-susceptible and disease-resistant cortical areas. Doebler JA, et al. **Arch Neurol** 1989 Feb; 46(2):134-7

Hydrogen peroxide production in dopamine neurons. Spina MB, et al. **Basic Life Sci** 1988;49:1011-4

Characterization of rat and human tyrosine hydroxylase genes: functional expression of both promoters in neuronal and non-neuronal cell types. Coker GT 3d, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1341-7

Phosphorylation of peripherin, an intermediate filament protein, in mouse neuroblastoma NIE 115 cell line and in sympathetic neurons. Huc C, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):772-9

Characterization of insulin-like growth factor binding proteins of cultured rat astroglial and neuronal cells. Ocrant I, et al. **Biochem Biophys Res Commun** 1989 Mar 31; 159(3):1316-22

Menadione-treated synaptosomes as a model for post-ischaemic neuronal damage. White EJ, et al. **Biochem J** 1988 Jul 15;253(2):425-33

36Cl- flux measurements on GABAA receptor-activated chloride exchange. Multiple mechanisms of the chloride channel inactivation. Kardos J. **Biochem Pharmacol** 1989 Aug 15;38(16):2587-91

Structure and expression of neural cell adhesion molecule complementary DNA clones in skeletal muscle. Barton CH, et al. **Biochem Soc Trans** 1988 Aug;16(4):457-60

Differences in the metabolism of inositol and phosphoinositides by cultured cells of neuronal and glial origin. Glanville NT, et al. **Biochim Biophys Acta** 1989 Aug 8;1004(2):169-79

Extracellular adhesive molecules in neurite growth. Rauvala H, et al. **Biosci Rep** 1989 Feb;9(1):1-12 (52 ref.)

An angiotensin-like immunoreactive neuronal system in the avian hypothalamus. Ramieri G. **Boll Soc Ital Biol Sper** 1988 Sep;64(9):835-9

Electrophysiological estimation of the actions of acetylcholinesterase inhibitors on acetylcholine receptor and cholinesterase in physically isolated Aplysia neurones. Oyama Y, et al. **Br J Pharmacol** 1989 Mar;96(3):573-82

Ganglioside content of astroglia and neurons isolated from maturing rat brain: consideration of the source of astroglial gangliosides. Byrne MC, et al. **Brain Res** 1988 Sep 27; 461(1):87-97

Variations in the cellular incorporation of [3H]proline. Contos N, et al. **Brain Res** 1989 Feb 6;479(1):172-6

Intracellular acidosis of identified leech neurones produced by substitution of external sodium. Deitmer JW, et al. **Brain Res** 1988 Oct 18;462(2):233-41

Neuronal control of [3H]GABA uptake in the ependymocytes of the subcommissural organ: an in vivo model of neuron-glia interaction. Didier-Bazes M, et al. **Brain Res** 1989 Jun 5;489(1):137-45

Distribution of striatonigral and striatopallidal peptidergic neurons in both patch and matrix compartments: an in situ hybridization histochemistry and fluorescent retrograde tracing study. Gerfen CR, et al. **Brain Res** 1988 Sep 13; 460(1):161-7

Introduction of macromolecules into primary cultured neuronal cells by fusion with erythrocyte ghosts. Hikawa N, et al. **Brain Res** 1989 Feb 27;481(1):162-4

Autoradiographic localization of binding sites for 125I-substance P on neurones from cultured rat superior cervical ganglion. James S, et al. **Brain Res** 1988 Aug 23; 458(2):205-11

Selective staining of a population of parvalbumin-containing GABAergic neurons in the rat cerebral cortex by lectins with specific affinity for terminal N-acetylgalactosamine. Kosaka T, et al. **Brain Res** 1989 Mar 27;483(1):158-63

Immunocytochemical characterization of neuron-rich rat brain primary cultures: calbindin D28K as marker of a neuronal subpopulation. Pfeiffer B, et al. **Brain Res** 1989 Jan 2;476(1):120-8

Direct evidence for the presence of GABAA receptors on the cytoplasmic side of the Deiters' neurone membrane. Rapallino MV, et al. **Brain Res** 1988 Oct 18;462(2):350-3

Glutathione is present in high concentrations in cultured astrocytes but not in cultured neurons. Raps SP, et al. **Brain Res** 1989 Jul 31;493(2):398-401

A bag cell neuron-specific antigen localizes to a subset of dense core vesicles in Aplysia californica. Sossin WS, et al. **Brain Res** 1989 Aug 14;494(2):205-14

Expression of proto-oncogenes in neural tissues. Sudol M. **Brain Res** 1988 Dec;472(4):391-403 (151 ref.)

The expression of gamma-aminobutyric acid and Leu-enkephalin immunoreactivity in primary monolayer cultures of rat striatum. Surmeier DJ, et al. **Brain Res** 1988 Aug 1;470(2):265-82

Organization of GABA and GABA-transaminase containing neurons in the gustatory zone of the nucleus of the solitary tract. Lasiter PS, et al. **Brain Res Bull** 1988 Oct; 21(4):623-36

Monoamines in the caudal neurosecretory complex: biochemistry and immunohistochemistry. McKeon TW, et al. **Brain Res Bull** 1988 Jul;21(1):37-42

Ontogeny of somatostatin in cerebral cortex of macaque monkey: an immunohistochemical study. Yamashita A, et al. **Brain Res Dev Brain Res** 1989 Jan 1;45(1):103-11

Neuronal nicotinic alpha-bungarotoxin sites. Quik M, et al. **Can J Physiol Pharmacol** 1988 Aug;66(8):971-9 (106 ref.)

Platelet-activating factor: lack of direct action on guinea pig myocardium and possible transmitter release from cardiac sympathetic nerve endings at high concentrations. Shigenobu K, et al. **Can J Physiol Pharmacol** 1989 Jun; 67(6):669-74

Dietary fat influences electric membrane properties of neurons in cell culture. Scott B, et al. **Cell Mol Neurobiol** 1989 Mar;9(1):105-13

Immunohistochemical study of 5-HT-containing neurons in the teleost intestine: relationship to the presence of enterochromaffin cells. Anderson C, et al. **Cell Tissue Res** 1988;254(3):553-9

Simultaneous immunogold labeling of GABAergic terminals and vasopressin-containing neurons in the rat paraventricular nucleus. Decavel C, et al. **Cell Tissue Res** 1989 Jan;255(1):77-80

Changes in lectin binding of lumbar dorsal root ganglia neurons and peripheral axons after sciatic and spinal nerve injury in the rat. Peyronnard JM, et al. **Cell Tissue Res** 1989 Aug;257(2):379-88

Effect of ginseng saponins on the survival of cerebral cortex neurons in cell cultures. Himi T, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb;37(2):481-4

Proton-induced transformation in gating and selectivity of the calcium channel in neurons. Morad M. **Ciba Found Symp** 1988;139:187-200

Ionic mechanisms of intracellular pH regulation in the nervous system. Schlue WR, et al. **Ciba Found Symp** 1988; 139:47-69

Plasma dihydroxyphenylglycol for estimation of noradrenaline neuronal re-uptake in the sympathetic nervous system in vivo. Eisenhofer G, et al. **Clin Sci** 1989 Feb;76(2):171–82

The opiomelanocortin peptide family: neuronal expression and modulation of neural cellular development and regeneration in the central nervous system. Berry S, et al. **Comp Biochem Physiol [A]** 1989;93(1):267–72 (40 ref.)

Amino acid uptake and incorporation not cell-specific peptides and evidence for intracellular peptide pools in Aplysia neurons R3–R14. Lin CY, et al. **Comp Biochem Physiol [B]** 1989;92(1):143–50

Metabolic origins of 5-hydroxytryptamine in enteric neurons in a teleostean fish (Platycephalus bassensis), a toad (Bufo marinus) and the guinea-pig. Anderson CR, et al. **Comp Biochem Physiol [C]** 1989;92(2):253–8

The pharmacological characteristics of two types of cholinoreceptors in the membrane of dialyzed neurons. Ayrapetyan SN, et al. **Comp Biochem Physiol [C]** 1988; 90(1):29–39

Changes in the number, function, and regulation of nicotinic acetylcholine receptors during neuronal development. Margiotta JF, et al. **Dev Biol** 1989 Oct;135(2):326–39

Cell adhesion molecules in neural development. Linnemann D, et al. **Dev Neurosci** 1989;11(3):149–73 (177 ref.)

Production and characterization of monoclonal antibodies recognizing head activator in precursor form and immunocytochemical localization of head activator precursor and head activator peptide in the neural cell line NH15-CA2 and in hydra. Schawaller M, et al. **Differentiation** 1988 Sep;38(3):149–60

Dexamethasone reduces steady state insulin-like growth factor I messenger ribonucleic acid levels in rat neuronal and glial cells in primary culture. Adamo M, et al. **Endocrinology** 1988 Nov;123(5):2565–70

Characterization of 11 beta-methoxy-16 alpha-[125I]iodoestradiol binding: neuronal localization of estrogen-binding sites in the developing rat brain. Brown TJ, et al. **Endocrinology** 1989 May;124(5):2074–88

Glutamate stimulates somatostatin release from diencephalic neurons in primary culture. Tapia-Arancibia L, et al. **Endocrinology** 1988 Nov;123(5):2360–6

Characterization of epidermal growth factor receptors in astrocytic glial and neuronal cells in primary culture. Wang SL, et al. **Endocrinology** 1989 Jan;124(1):240–7

Localization of 4.1 related proteins in cerebellar neurons. Yorifuji H, et al. **Eur J Cell Biol** 1989 Feb;48(1):104–15

Acute reduction of dopamine levels alters responses of basal ganglia neurons to selective D-1 and D-2 dopamine receptor stimulation. Carlson JH, et al. **Eur J Pharmacol** 1988 Aug 2;152(3):289–300

Quinine potently blocks single K+ channels activated by dopamine D-2 receptors in rat corpus striatum neurons. Freedman JE, et al. **Eur J Pharmacol** 1989 May 19; 164(2):341–6

9-Amino-1,2,3,4-tetrahydroacridine (THA) blocks agonist-induced potassium conductance in rat hippocampal neurones. Halliwell JV, et al. **Eur J Pharmacol** 1989 Apr 25;163(2-3):369–72

Absence of receptor reserve at striatal dopamine receptors regulating cholinergic neuronal activity. Meller E, et al. **Eur J Pharmacol** 1988 Oct 11;155(1-2):151–4

Complex interaction between quisqualate and kainate receptors as revealed by measurement of GABA release from striatal neurons in primary culture. Pin JP, et al. **Eur J Pharmacol** 1989 Mar 7;172(1):81–91

Repeated amphetamine: reduced dopamine neuronal responsiveness to apomorphine but not quinpirole. Pitts DK, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):167–71

Presynaptic alpha 2-adrenoceptors modulate the release of [3H]noradrenaline from rat spinal cord dorsal horn neurones. Reimann W, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):161–6

Serotonin raises the cyclic GMP level in a neuronal cell line via 5-HT3 receptors. Reiser G, et al. **Eur J Pharmacol** 1989 May 11;172(2):195–8

Blockade of GABAA receptors in the midbrain periaqueductal gray abolishes nociceptive spinal dorsal horn neuronal activity. Sandkühler J, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):163–6

Enhanced acetylcholine release from denervated atria: intrinsic neural supersensitivity. Smith DC, et al. **Eur J Pharmacol** 1989 Feb 28;161(2-3):249–53

Classification of GABA receptors in snail neurones. Yongsiri A, et al. **Eur J Pharmacol** 1988 Oct 18;155(3):239–45

GABAergic and cholinergic neurons exhibit high-affinity nerve growth factor binding in rat basal forebrain. Dreyfus CF, et al. **Exp Neurol** 1989 May;104(2):181–5

Loss of nerve growth factor receptor-containing neurons in Alzheimer's disease: a quantitative analysis across subregions of the basal forebrain. Mufson EJ, et al. **Exp Neurol** 1989 Sep;105(3):221–32

Thermoadaptive influence on reactivity pattern of vasopressinergic neurons in the guinea pig. Merker G, et al. **Experientia** 1989 Aug 15;45(8):722–6

General anesthetics modulate GABA receptor channel complex in rat dorsal root ganglion neurons. Nakahiro M, et al. **FASEB J** 1989 May;3(7):1850–4

Tumor promoter 12-O-tetradecanoylphorbol 13-acetate inhibits mas/angiotensin receptor-stimulated inositol phosphate production and intracellular Ca2+ elevation in the 401L-C3 neuronal cell line. Jackson TR, et al. **FEBS Lett** 1989 Jul 17;251(1-2):27–30

Expression of the vasopressin and oxytocin genes in rats occurs in mutually exclusive sets of hypothalamic neurons. Mohr E, et al. **FEBS Lett** 1988 Dec 19;242(1):144–8

Organization of the thyroid hormone receptor in the chromatin of C6 glial cells: evidence that changes in receptor levels are not associated with changes in receptor distribution. Ortiz-Caro J, et al. **FEBS Lett** 1989 Jul 3; 250(2):419–24

Changes in the cytoplasmic RNA content in neurons of the nucleus suprachiasmaticus following a single dose of kainic acid. Lach H, et al. **Folia Biol (Krakow)** 1989;37(1-2):55–9

Immunocytochemical demonstration of a novel system of neuroendocrine peptidergic neurons in the pond snail Lymnaea stagnalis, with antisera to the teleostean hormone hypocalcin and mammalian parathyroid hormone. Wendelaar Bonga SE, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):29–38

Sodium-azide-evoked noradrenaline and catecholamine release from peripheral sympathetic nerves and chromaffin cells. Török TL, et al. **Gen Pharmacol** 1989;20(2):143–9

Techniques for the simultaneous demonstrations of neuropeptide y gene expression and peptide storage in single neurons of the human brain. Chan-Palay V. **Histochemistry** 1988;90(2):123–7

Axons containing neuropeptide Y innervate arginine vasopressin-containing neurons in the rat paraventricular nucleus. Dual electron microscopic immunolabeling. Kagotani Y, et al. **Histochemistry** 1989;91(4):273–81

Immunocytochemical localization of GABA containing neurons in the ventrolateral medulla oblongata of the rat. Kihara M, et al. **Histochemistry** 1989;91(4):309–14

In situ hybridization using 32P labelled oligodeoxyribonucleotides for the cellular localisation of mRNA in neuronal and endocrine tissue. An analysis of procedural variables. Priestley JV, et al. **Histochemistry** 1988;89(5):467–79

Cytochemical observations of the coiled bodies in neurons of rat sympathetic ganglia. Zaręba-Kowalska A. **Histochemistry** 1989;91(3):251–6

Vasopressin in neuronal cultures from neonatal rat brain. Cheng SW, et al. **Hypertension** 1989 Jun;13(6 Pt 2):902–9

GABA agonist promoted formation of low affinity GABA receptors on cerebellar granule cells is restricted to early development. Belhage B, et al. **Int J Dev Neurosci** 1988; 6(2):125–8

Effects of injecting antibodies to mouse nerve growth factor into the chick embryo. Dimberg Y, et al. **Int J Dev Neurosci** 1988;6(6):513–23

Further studies on the effect of ASF factor on Cl- permeability across the Deiters' neurone plasma membrane. Rapallino MV, et al. **Int J Neurosci** 1989 Jun;46(3-4):93–5

Immunohistochemical localization of GABA-containing neurons during postnatal development of the rat retina. Versaux-Botteri C, et al. **Invest Ophthalmol Vis Sci** 1989 Apr;30(4):652–9

The vesicle content of catecholamine-containing axons in the rectum of the domestic fowl: effect of permanganate and chromaffin fixations. Young HM. **J Auton Nerv Syst** 1989 Feb;26(1):17–25

Phosphorylation of the peripherin 58-kDa neuronal intermediate filament protein. Regulation by nerve growth factor and other agents. Aletta JM, et al. **J Biol Chem** 1989 Mar 15;264(8):4619–27

ADP-ribosylation of 24-26-kDa GTP-binding proteins localized in neuronal and non-neuronal cells by botulinum neurotoxin D. Matsuoka I, et al. **J Biol Chem** 1989 Jan 15;264(2):706–12

Multiple phosphorylated variants of the high molecular mass subunit of neurofilaments in axons of retinal cell neurons: characterization and evidence for their differential association with stationary and moving neurofilaments. Lewis SE, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2689–701

Neuronal pH regulation: constant normal intracellular pH is maintained in brain during low extracellular pH induced by acetazolamide--31P NMR study. Vorstrup S, et al. **J Cereb Blood Flow Metab** 1989 Jun;9(3):417–21

Neuronal localization of prosomatostatin mRNA in the rat brain with in situ hybridization histochemistry. Fitzpatrick-McElligott S, et al. **J Comp Neurol** 1988 Jul 22;273(4):558–72

Catecholaminergic and cholinergic neurons in the developing retina of the rat. Mitrofanis J, et al. **J Comp Neurol** 1988 Oct 15;276(3):343–59

Substance P-like immunoreactive amacrine cells in the cat retina. Pourcho RG, et al. **J Comp Neurol** 1988 Sep 22; 275(4):542–52

Generation of monoclonal antibodies against a nematode peptide extract: another approach for identifying unknown neuropeptides. Sithigorngul P, et al. **J Comp Neurol** 1989 Jun 15;284(3):389–97

Anticonvulsant activities of phenyl-substituted bicyclic 2,4-oxazolidinediones and monocyclic models. Comparison with binding to the neuronal voltage-dependent sodium channel. Brouillette WJ, et al. **J Med Chem** 1988 Nov; 31(11):2218–21

Anomalous influence of reduced internal ATP levels on sodium efflux in Myxicola giant axons. Sjodin RA, et al. **J Membr Biol** 1989 Apr;108(1):61–71

Voltage-independent barium-permeable channel activated in Lymnaea neurons by internal perfusion or patch excision. Yazejian B, et al. **J Membr Biol** 1989 Jan;107(1):63–75

Proctolin: a review with emphasis on insects. Orchard I, et al. **J Neurobiol** 1989 Jul;20(5):470–96 (125 ref.)

Isolation and characterization of secretory granules storing a vasoactive intestinal polypeptide-like peptide in Torpedo cholinergic electromotor neurones. Agoston DV, et al. **J Neurochem** 1989 Jun;52(6):1729–40

Calcium uptake and protein phosphorylation in myenteric neurons, like the release of vasoactive intestinal polypeptide and acetylcholine, are frequency dependent. Agoston DV, et al. **J Neurochem** 1989 May;52(5):1637–40

Muscarinic and quisqualate receptor-induced phosphoinositide hydrolysis in primary cultures of striatal and hippocampal neurons. Evidence for differential mechanisms of activation. Ambrosini A, et al. **J Neurochem** 1989 Sep;53(3):825–33

Stathmin is a major phosphoprotein and cyclic AMP-dependent protein kinase substrate in mouse brain neurons but not in astrocytes in culture: regulation during ontogenesis. Chneiweiss H, et al. **J Neurochem** 1989 Sep; 53(3):856–63

Mesencephalic dopamine neurons become less sensitive to 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine toxicity during development in vitro. Danias P, et al. **J Neurochem** 1989 Oct;53(4):1149–55

Neuroactive sulphur amino acids evoke a calcium-dependent transmitter release from cultured neurones that is sensitive to excitatory amino acid receptor antagonists. Dunlop J, et al. **J Neurochem** 1989 May;52(5):1648–51

Bradykinin stimulates phosphoinositide hydrolysis and mobilization of arachidonic acid in dorsal root ganglion neurons. Gammon CM, et al. **J Neurochem** 1989 Jul; 53(1):95–101

Effect of thyroid hormones on benzodiazepine receptors in neuron-enriched primary cultures. Go T, et al. **J Neurochem** 1988 Nov;51(5):1497–500

Characteristics of glucose transport in neuronal cells and astrocytes from rat brain in primary culture. Hara M, et al. **J Neurochem** 1989 Mar;52(3):902–8

Effect of glucose starvation on glucose transport in neuronal cells in primary culture from rat brain. Hara M, et al. **J Neurochem** 1989 Mar;52(3):909–12

Metabolism of angiotensin peptides by neuronal and glial cultures from rat brain. Hermann K, et al. **J Neurochem** 1989 Mar;52(3):863–8

Endogenous release of neuronal serotonin and 5-hydroxyindoleacetic acid in the caudate-putamen of the rat as revealed by intracerebral dialysis coupled to high-performance liquid chromatography with fluorimetric detection. Kalén P, et al. **J Neurochem** 1988 Nov; 51(5):1422–35

Glycine potentiates the stimulation of inositol phospholipid hydrolysis by excitatory amino acids in primary cultures of cerebellar neurons. Nicoletti F, et al. **J Neurochem** 1989 Sep;53(3):724–7

Inositol hexakisphosphate (phytic acid) enhances Ca2+ influx and D-[3H]aspartate release in cultured cerebellar neurons. Nicoletti F, et al. **J Neurochem** 1989 Oct; 53(4):1026–30

Targeting and processing of pro-opiomelanocortin in neuronal cell lines. Noël G, et al. **J Neurochem** 1989 Apr; 52(4):1050–7

Thymopoietin, a thymic polypeptide, specifically interacts at neuronal nicotinic alpha-bungarotoxin receptors. Quik M, et al. **J Neurochem** 1989 Oct;53(4):1320–3

Muscarinic agonists cause calcium influx and calcium mobilization in forebrain neurons in vitro. Reynolds IJ, et al. **J Neurochem** 1989 Jul;53(1):226–33

Alpha 2-adrenergic receptors in neuronal and glial cultures: characterization and comparison. Richards EM, et al. **J Neurochem** 1989 Jul;53(1):287–96

Effects of increased extracellular K on the elemental composition and water content of neuron and glial cells in leech CNS. Saubermann AJ, et al. **J Neurochem** 1988 Dec;51(6):1797–807

Potassium-stimulated release of [3H]taurine from cultured GABAergic and glutamatergic neurons. Schousboe A, et al. **J Neurochem** 1989 Oct;53(4):1309–15

Inositol uptake and metabolism in molluscan neuronal tissue. Tuersley MD, et al. **J Neurochem** 1988 Nov;51(5):1610–6

Modulation of ganglioside biosynthesis in primary cultured neurons. van Echten G, et al. **J Neurochem** 1989 Jan; 52(1):207–14

Endogenous amino acid release from cultured cerebellar neuronal cells: effect of tetanus toxin on glutamate release. Van Vliet BJ, et al. **J Neurochem** 1989 Apr;52(4):1229–39

Glutamate-induced increase in intracellular Ca2+ in cerebral cortex neurons is transient in immature cells but permanent in mature cells. Wahl P, et al. **J Neurochem** 1989 Oct; 53(4):1316–9

Neuronal glutamine utilization: pathways of nitrogen transfer studied with [15N]glutamine. Yudkoff M, et al. **J Neurochem** 1989 Aug;53(2):632–40

Lipid hydroperoxides inhibit reacylation of phospholipids in neuronal membranes. Zaleska MM, et al. **J Neurochem** 1989 Jan;52(1):255–60

A developmentally regulated chicken neuronal protein associated with the cortical cytoskeleton. Allsopp TE, et al. **J Neurosci** 1989 Jan;9(1):13–24

Selective expression of high-affinity nerve growth factor receptors on tyrosine hydroxylase-containing neuron-like cells in neural crest cultures. Bernd P. **J Neurosci** 1988 Oct;8(10):3549–55

Dynamics of alpha-tubulin deacetylation in intact neurons. Black MM, et al. **J Neurosci** 1989 Jan;9(1):358–68

Phosphorylation of neurofilament proteins in intact neurons: demonstration of phosphorylation in cell bodies and axons. Black MM, et al. **J Neurosci** 1988 Sep;8(9):3296–305

Altered branching of serotonin-containing neurons in Drosophila mutants unable to synthesize serotonin and dopamine. Budnik V, et al. **J Neurosci** 1989 Aug; 9(8):2866–77

Mu and delta opiate receptors coupled negatively to adenylate cyclase on embryonic neurons from the mouse striatum in primary cultures. Chneiweiss H, et al. **J Neurosci** 1988 Sep;8(9):3376–82

The earliest-generated neurons of the cat cerebral cortex: characterization by MAP2 and neurotransmitter immunohistochemistry during fetal life. Chun JJ, et al. **J Neurosci** 1989 May;9(5):1648–67

A persistent, TTX-sensitive sodium current in an invertebrate neuron with neurosecretory ultrastructure. Davis RE, et al. **J Neurosci** 1988 Nov;8(11):3978–91

Neuronal proteoglycans: biosynthesis and functional interaction with neurons in vitro. Dow KE, et al. **J Neurosci** 1988 Sep;8(9):3278–89

Inositol trisphosphate releases intracellularly stored calcium and modulates ion channels in molluscan neurons. Fink LA, et al. **J Neurosci** 1988 Jul;8(7):2544–55

Properties of appropriately and inappropriately expressed sodium channels in squid giant axon and its somata. Gilly WF, et al. **J Neurosci** 1989 Apr;9(4):1362–74

Expression of GAP-43, a rapidly transported growth-associated protein, and class II beta tubulin, a slowly transported cytoskeletal protein, are coordinated in regenerating neurons. Hoffman PN. **J Neurosci** 1989 Mar; 9(3):893–7

Localization of acetylcholine receptors on isolated CNS neurons: cellular and subcellular differentiation. James WM, et al. **J Neurosci** 1988 Nov;8(11):4225–38

Serotonergic and serotonin-accumulating neurons in the goldfish retina. Marc RE, et al. **J Neurosci** 1988 Sep; 8(9):3427–50

Distribution and phosphorylation of the growth-associated protein GAP-43 in regenerating sympathetic neurons in culture. Meiri KF, et al. **J Neurosci** 1988 Jul;8(7):2571–81

A modulatory proctolin-containing neuron (MPN). II. State-dependent modulation of rhythmic motor activity. Nusbaum MP, et al. **J Neurosci** 1989 May;9(5):1600–7

A modulatory proctolin-containing neuron (MPN). I. Identification and characterization. Nusbaum MP, et al. **J Neurosci** 1989 May;9(5):1591–9

Separation of quisqualate- and kainate-selective glutamate receptors in cultured neurons from the rat superior colliculus. Perouansky M, et al. **J Neurosci** 1989 Jan; 9(1):70–80

Two distinct mechanisms, differentially affected by excitatory amino acids, trigger GABA release from fetal mouse striatal neurons in primary culture. Pin JP, et al. **J Neurosci** 1989 Feb;9(2):648–56

Binding characteristics of brain-derived neurotrophic factor to its receptors on neurons from the chick embryo. Rodriguez-Tébar A, et al. **J Neurosci** 1988 Sep; 8(9):3337–42

Acetylcholine receptor-like molecules are found in both synaptic and extrasynaptic clusters on the surface of neurons in the frog cardiac ganglion. Sargent PB, et al. **J Neurosci** 1989 Mar;9(3):1062–72

Distribution of glycine receptors on the membrane of a central neuron: an immunoelectron microscopy study. Seitanidou T, et al. **J Neurosci** 1988 Nov;8(11):4319–33

Different times of origin of choline acetyltransferase- and somatostatin-immunoreactive neurons in the rat striatum. Semba K, et al. **J Neurosci** 1988 Oct;8(10):3937–44

Non-neuronal cell-conditioned medium regulates muscarinic receptor expression in cultured sympathetic neurons. Smith KE, et al. **J Neurosci** 1988 Jul;8(7):2406–13

Distribution and lateral mobility of GABA/benzodiazepine receptors on nerve cells. Velazquez JL, et al. **J Neurosci** 1989 Jun;9(6):2163–9

Dopaminergic and indoleamine-accumulating amacrine cells express GABA-like immunoreactivity in the cat retina. Wässle H, et al. **J Neurosci** 1988 Sep;8(9):3383–94

Characterization of bovine and human neuronal nicotinic acetylcholine receptors using monoclonal antibodies. Whiting PJ, et al. **J Neurosci** 1988 Sep;8(9):3395–404

Developmental and regional regulation of rab3: a new brain specific "ras-like" gene. Ayala J, et al. **J Neurosci Res** 1989 Mar;22(3):241–6

Glucose transport in primary cultured neurons. Heidenrich KA, et al. **J Neurosci Res** 1989 Apr;22(4):397–407

Expression and localization of the fibronectin receptor in the mouse nervous system. Pesheva P, et al. **J Neurosci Res** 1988 Aug;20(4):420–30

Stimulus-coupled taurine efflux from cerebellar neuronal cultures: on the roles of Ca++ and Na+. Philibert RA, et al. **J Neurosci Res** 1989 Feb;22(2):167–71

Interaction of the prejunctional inhibitory action of 5-hydroxytryptamine on noradrenergic transmission with neuronal amine uptake in rabbit isolated ear artery. Meehan AG, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):342–7

Benzodiazepine and beta-carboline interactions with GABAA receptor-gated chloride channels in mammalian cultured spinal cord neurons. Mehta AK, et al. **J Pharmacol Exp Ther** 1989 May;249(2):418–23

From the Alcohol, Drug Abuse, and Mental Health Administration. Cause of AIDS mental problems. Goodwin FK. **JAMA** 1988 Dec 9;260(22):3250

Effect of (+/-)-methyl 3-ethyl-2,3,3a,4-tetrahydro-1H-indolo-[3,2,1-de] [1,5] naphthyridine-6-carboxylate hydrochloride (OM-853), a new vincamine analogue, on the metabolism and function of cerebral serotonergic neurons. Koda H, et al. **Jpn J Pharmacol** 1989 Mar;49(3):413–21

Decrease in neuronal uptake of noradrenaline simply explains the supersensitivity after sympathectomy in the rat iris dilator. Shibata K, et al. **Jpn J Pharmacol** 1989 May; 50(1):19–29

Aluminium, hot water tanks, and neurobiology [letter] Brenner S. **Lancet** 1989 Apr 8;1(8641):781

Aluminium and the nucleus of nerve cells [letter] Lukiw WJ, et al. **Lancet** 1989 Apr 8;1(8641):781

Dexamethasone treatment increases neuropeptide Y levels in rat hypothalamic neurones. Corder R, et al. **Life Sci** 1988;43(23):1879–86

Incorporation of 3H-lysine into a rapidly labelling neuronal protein fraction in visual cortex is suppressed in dark reared rats. Rose SP, et al. **Life Sci** 1974 Jul 15;15(2):223–30

Changes in neurofilament gene expression occur after axotomy of dorsal root ganglion neurons: an in situ hybridization study. Wong J, et al. **Metab Brain Dis** 1987 Dec;2(4):291–303

Graphical and statistical approaches to data analysis for in situ hybridization. McCabe JT, et al. **Methods Enzymol** 1989;168:822–48

Characterization of muscarinic acetylcholine receptors on intact neuroblastoma x glioma NG108-15 cell upon induced differentiation. Ghahary A, et al. **Mol Cell Biochem** 1989 Apr 11;86(2):181–8

Thyroid hormone metabolism in neuron-enriched primary cultures of fetal rat brain cells. Courtin F, et al. **Mol Cell Endocrinol** 1988 Jul;58(1):73–84

Neurotransmitter inhibition of neuronal calcium currents by changes in channel voltage dependence. Bean BP. **Nature** 1989 Jul 13;340(6229):153–6

NMDA receptors activate the arachidonic acid cascade system in striatal neurons. Dumuis A, et al. **Nature** 1988 Nov 3;336(6194):68–70

A diacylglycerol analogue reduces neuronal calcium currents independently of protein kinase C activation. Hockberger P, et al. **Nature** 1989 Mar 23;338(6213):340–2

Inositol 1,4,5-trisphosphate receptor localized to endoplasmic reticulum in cerebellar Purkinje neurons. Ross CA, et al. **Nature** 1989 Jun 8;339(6224):468–70

Zinc and LTP [letter] Weiss JH, et al. **Nature** 1989 Mar 16; 338(6212):212

Lack of differences between the neuronal and extraneuronal handling of 3H-7- and 3H-ring-2,5,6-(-)noradrenaline. Grohmann M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Aug; 338(2):180–4

Effects of hypoxia on noradrenaline release and neuronal reuptake in isolated rabbit thoracic aortic strips. Lee K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):503–8

Neuronally released (-)-noradrenaline relaxes smooth muscle of calf trachea mainly through beta 1-adrenoceptors: comparison with (-)-adrenaline and relation to adenylate cyclase stimulation. Lemonine H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):85–98

Down-regulation of 3H-lofentanil binding to opiate receptors in different cultured neuronal cells. Maloteaux JM, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb;339(1-2):192–9

Inhibition of neuronal noradrenaline uptake (uptake1) and desipramine binding by N-ethylmaleimide (NEM). Schömig E, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jun; 337(6):633–6

Kinetic evidence for a common binding site for substrates and inhibitors of the neuronal noradrenaline carrier. Schömig E, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jun; 337(6):626–32

Chloride-dependence of the potency of inhibitors of the neuronal noradrenaline carrier in the rat vas deferens. Ungell AL, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):65–70

Cell-specific fatty acylation of proteins in cultured cells of neuronal and glial origin. Byers DM, et al. **Neurochem Res** 1989 Jun;14(6):503–9

Catecholamine and indoleamine levels in chick cultured neurons and embryonic brain. Hevor TK, et al. **Neurochem Res** 1988 Sep;13(9):823–7

Genes expressed in cortical neurons--chromatin conformation and DNase I hypersensitive sites. Ivanov TR, et al. **Neurochem Res** 1989 Feb;14(2):129–37

Differential effects of ammonia and beta-methylene-DL-aspartate on metabolism of glutamate and related amino acids by astrocytes and neurons in primary culture. Lai JC, et al. **Neurochem Res** 1989 Apr; 14(4):377–89

Choline plasmalogen synthesis by the methylation pathway in cnick neurons in culture. Mozzi R, et al. **Neurochem Res** 1989 Jun;14(6):579–83

Effects of anticonvulsants on cholinergic and GABAergic properties in the neuronal cell clone NG108-15. Searles CD, et al. **Neurochem Res** 1988 Oct;13(10):1007–13

Isolation of metabolically distinct synaptosomes on Percoll gradients. Sherman AD. **Neurochem Res** 1989 Jan; 14(1):97–101

Levels and sub-cellular distribution of physiologically important metal ions in neuronal cells cultured from chick embryo cerebral cortex. Tholey G, et al. **Neurochem Res** 1988 Dec;13(12):1163–7

Estrogen modulation of the alpha-1-adrenergic response of hypothalamic neurons. Condon TP, et al. **Neuroendocrinology** 1989 Jul;50(1):51–8

Catecholaminergic innervation of luteinizing hormone-releasing hormone and glutamic acid decarboxylase immunopositive neurons in the rat medial preoptic area. An electron-microscopic double immunostaining and degeneration study. Leranth C, et al. **Neuroendocrinology** 1988 Dec;48(6):591–602

Substance p in the median eminence and pituitary of the rat: demonstration of immunoreactive fibers and specific binding sites. Mikkelsen JD, et al. **Neuroendocrinology** 1989 Jul;50(1):100–8

Neuronal cell bodies in the hypothalamic paraventricular nucleus mediate stress-induced renin and corticosterone secretion. Morton KD, et al. **Neuroendocrinology** 1989 Jul; 50(1):73–80

Changes in tuberoinfundibular dopaminergic neuron activity during the rat estrous cycle in relation to the prolactin surge: alteration by a mammary carcinogen. Pasqualini C, et al. **Neuroendocrinology** 1988 Sep;48(3):320–7

Calcium dependence of somatostatin (SRIF) release and cyclic AMP levels in cultured diencephalic neurons. Tapia-Arancibia L, et al. **Neuroendocrinology** 1989 May; 49(5):555–60

Degradation of substance P by neuronal and glial cells cultured from rat fetal brain and their membranes. Endo S, et al. **Neuropeptides** 1989 Jul;14(1):31–7

Pharmacological evidence for the presence of cholecystokinin-containing neurones in the mesenteric nerves supplying the guinea-pig ileum. Barthó L. **Neuropharmacology** 1989 Jun;28(6):643–5

Pharmacological characterization of high affinity choline transporters in primary neuronal cultures in rat brain. Kelley MC, et al. **Neuropharmacology** 1988 Aug; 27(8):837–42

Quantitative analysis of the distribution of serotonin-immunoreactive cell bodies in the mouse brain. Ishimura K, et al. **Neurosci Lett** 1988 Sep 12;91(3):265–70

Dopaminergic cells in the superior cervical ganglion of the rat: light and electron microscopic study using an antibody against dopamine. Sakai M, et al. **Neurosci Lett** 1989 Jan 16;96(2):157–62

Soluble, phosphorylated forms of the high molecular weight neurofilament protein in perikarya of cultured neuronal cells. Shea TB, et al. **Neurosci Lett** 1988 Oct 17;92(3):291–7

Projections of peptide-containing neurons in rat colon. Ekblad E, et al. **Neuroscience** 1988 Nov;27(2):655–74

Characterization of excitatory amino acid receptors in cultured chick cerebellar neurons. Mori-Okamoto J, et al. **Neuroscience** 1989;28(2):413–22

Exposure to lindane and two other hexachlorocyclohexane isomers increases free intracellular calcium levels in neurohybridoma cells. Joy RM, et al. **Neurotoxicology** 1988 Winter;9(4):637–43

Localization of cellular src mRNA during development and in the differentiated bipolar neurons of the adult neural retina in Xiphophorus. Raulf F, et al. **Oncogene Res** 1989; 5(1):39–47

Neuropeptide-dopamine interactions. IV. Effect of thyrotropin-releasing hormone on striatal dopaminergic neurons. Ikegami H, et al. **Peptides** 1989 May-Jun; 10(3):681–5

Adenosine-5'-triphosphate-sensitive ion channels in neonatal rat cultured central neurones. Ashford ML, et al. **Pflugers Arch** 1988 Aug;412(3):297–304

Changes in body temperature and vasopressin content of brain neurons, in pregnant and non-pregnant guinea pigs, during fevers produced by Poly I:Poly C. Cooper KE, et al. **Pflugers Arch** 1988 Aug;412(3):292–6

GTP-binding proteins mediate acetylcholine inhibition of voltage dependent calcium channels in hippocampal neurons. Toselli M, et al. **Pflugers Arch** 1989 Jan; 413(3):319–21

Effect of circadian rhythm on the neuronal uptake and sensitivity to the inotropic action of norepinephrine by rat atria. Mehrabani P, et al. **Pharmacol Biochem Behav** 1989 Feb;32(2):475–7

Characterization, purification, and affinity labeling of the brain [3H]glibenclamide-binding protein, a putative neuronal ATP-regulated K+ channel. Bernardi H, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9816–20

Influence of steroids on the hypothalamic corticotropin-releasing factor and preproenkephalin mRNA responses to stress. Lightman SL, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4306–10

Regulation of neuronal oxytocin mRNA by ovarian steroids in the mature and developing hypothalamus. Miller FD, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2468–72

A glutamate receptor regulates Ca2+ mobilization in hippocampal neurons. Murphy SN, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8737–41

Rapid turnover of microtubule-associated protein MAP2 in the axon revealed by microinjection of biotinylated MAP2 into cultured neurons. Okabe S, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4127–31

Co-release of acetylcholine and gamma-aminobutyric acid by a retinal neuron. O'Malley DM, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3414–8

Purine metabolite inosine is an adrenergic neurotrophic substance for cultured chicken sympathetic neurons. Zurn AD, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(21):8301–5

Effect of drugs on [3H]PK 11195 binding to human neuron-like cells. Syapin PJ. **Proc West Pharmacol Soc** 1989;32:255–8

Antidepressant effect of lithium: a neurochemical study on neuronal uptake of norepinephrine and serotonin. Wolf MA, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989;13(5):765–73

Does treatment with haloperidol for 3 weeks produce depolarization block in midbrain dopamine neurons of unanaesthetized rats? Andén NE, et al. **Psychopharmacology (Berlin)** 1988;96(4):558–60

Unimpaired RNA synthesis in neurons and epithelial cells in a freshwater leech exposed to the organophosphate insecticide chlorpyrifos. Singhal RN, et al. **Sci Total Environ** 1989 Jul 1;83(1–2):195–202

Limbic seizures increase neuronal production of messenger RNA for nerve growth factor. Gall CM, et al. **Science** 1989 Aug 18;245(4919):758–61

Acetylcholine and GABA mediate opposing actions on neuronal chloride channels in crayfish. Pfeiffer-Linn C, et al. **Science** 1989 Sep 15;245(4923):1249–51

Multiple roles for calcium and calcium-dependent enzymes in the activation of peptidergic neurons of Aplysia. Strong JA, et al. **Soc Gen Physiol Ser** 1987;42:187–99 (36 ref.)

Drosophila adhesion molecules and neural development [news] Anderson H. **Trends Neurosci** 1988 Nov; 11(11):472–5 (52 ref.)

Regulating the number and function of neuronal acetylcholine receptors. Berg DK, et al. **Trends Neurosci** 1989 Jan;12(1):16–21 (40 ref.)

Calcium transport and buffering in neurons. Blaustein MP. **Trends Neurosci** 1988 Oct;11(10):438–43 (60 ref.)

Characterization of neuronal nicotinic receptors by snake venom neurotoxins. Loring RH, et al. **Trends Neurosci** 1988 Feb;11(2):73–8 (42 ref.)

Neurofilament protein phosphorylation--where, when and why [news] Matus A. **Trends Neurosci** 1988 Jul;11(7):291–2 (18 ref.)

The intracellular distribution of calcium. Meldolesi J, et al. **Trends Neurosci** 1988 Oct;11(10):449–52 (32 ref.)

Molecular determinants of GABAergic local-circuit neurons in the visual cortex. Naegele JR, et al. **Trends Neurosci** 1989 Jan;12(1):28–34 (71 ref.)

Intracellular Mg2+ may act as a co-factor in ion channel function [news] Stanfield PR. **Trends Neurosci** 1988 Nov; 11(11):475–7 (23 ref.)

Effects of nerve growth factor on cholinergic brain neurons. Dreyfus CF. **Trends Pharmacol Sci** 1989 Apr;10(4):145–9 (38 ref.)

Biochemical and immunological studies on the regulation of cardiac and neuronal muscarinic acetylcholine receptor number and function. Subers EM, et al. **Trends Pharmacol Sci** 1988 Feb;Suppl:25–8 (14 ref.)

[Age changes in the distribution of VIP-positive neurons in the rat auditory cortex] Dolchev V, et al. **Eksp Med Morfol** 1989;28(2):15–8 (Eng. Abstr.) **(Bul)**

[Neuronal tracing with choleragen subunit B—a monoclonal immunocytochemical method] Liang FY. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Dec; 10(6):448–50 (Eng. Abstr.) **(Chi)**

[The action of aminobenzoic acid derivatives on the ion currents in myelinated nerves. 1. Dose–response relationship] Jedicke U, et al. **Arzneimittelforschung** 1988 Jun;38(6):801–5 (Eng. Abstr.) **(Ger)**

[The effect of aminobenzoic acid derivatives on the ion current of myelinated neurons. 2. Inactivation of sodium permeability] Jedicke U, et al. **Arzneimittelforschung** 1988 Jul;38(7):873–6 (Eng. Abstr.) **(Ger)**

[Cytochemical study of the neurocytes of the rat locus coeruleus after guanethidine sympathectomy] Altan G, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):242–5 (Eng. Abstr.) **(Rus)**

[Modulation of calcium currents in the snail neuron membrane by osmotic gradient] Airapetian SN, et al. **Dokl Akad Nauk SSSR** 1988;300(4):983–5 **(Rus)**

[Cytophotometric study of catecholamines and energy metabolism enzymes in the neurons of the rat celiac plexus during cold and emotional stresses] Lapsha VI, et al. **Neirofiziologiia** 1988;20(6):743–9 (Eng. Abstr.) **(Rus)**

[Effect of neonatal castration on the capacity of the cerebral neurons in the septal complex of male rats to bind sex steroids] Myslitskiĭ VF. **Probl Endokrinol (Mosk)** 1988 Nov–Dec;34(6):56–9 (Eng. Abstr.) **(Rus)**

[DNA repair in mammalian nerve cells. II. DNA synthesis in neurons, induced by gamma-irradiation of isolated rat neocortex slices] Ivanov VA. **Tsitologiia** 1988 Nov; 30(11):1338–44 (Eng. Abstr.) **(Rus)**

[Effect of the neurosensitization of female rats on the functional indices of the DNA-, RNA- and protein-synthesizing neuronal apparatus of the cerebral cortex and of the immune system in their progeny] Kolomeets NS, et al. **Zh Nevropatol Psikhiatr** 1988; 88(7):80–4 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Herpes simplex virus infection of the rat sensory neuron. Effects of interferon on cultured cells. Svennerholm B, et al. **Arch Virol** 1989;104(1–2):153–6

Persistence of measles virus in rat brain neurons is promoted by depletion of CD8+ T cells. Maehlen J, et al. **J Neuroimmunol** 1989 Feb;21(2–3):149–55

Non-lethal infection of aminergic reticular core neurons: age-dependent spread of ts mutant vesicular stomatitis virus from the nose. Lundh B, et al. **J Neuropathol Exp Neurol** 1988 Sep;47(5):497–506

Prion protein biosynthesis in scrapie-infected and uninfected neuroblastoma cells. Caughey B, et al. **J Virol** 1989 Jan; 63(1):175–81

Invasion of the peripheral nervous systems of adult mice by the CVS strain of rabies virus and its avirulent derivative AvO1. Coulon P, et al. **J Virol** 1989 Aug;63(8):3550–4

CD4-independent infection of human neural cells by human immunodeficiency virus type 1. Harouse JM, et al. **J Virol** 1989 Jun;63(6):2527–33

Differences in replication of attenuated and neurovirulent polioviruses in human neuroblastoma cell line SH-SY5Y. La Monica N, et al. **J Virol** 1989 May;63(5):2357–60

herpes simplex virus infection accelerates the age-related reactivity of mouse trigeminal ganglia neurons with anti-mouse IgG antibody in immunostaining. Wroblewska Z, et al. **Microb Pathog** 1988 Oct;5(4):233–40

Characterization of canine distemper viruses adapted to human neural cells. Morikawa Y, et al. **Microbiol Immunol** 1988;32(12):1211–20

Reversion of neurovirulence and in vitro phenotype of neural cell-adapted canine distemper virus after passage in non-neural cells. Morikawa Y, et al. **Microbiol Immunol** 1988;32(12):1263–8

Rabies virus infection of myotubes and neurons as elements of the neuromuscular junction. Tsiang H. **Rev Infect Dis** 1988 Nov–Dec;10 Suppl 4:S733–8

Transneuronal transfer of herpes virus from peripheral nerves to cortex and brainstem. Ugolini G, et al. **Science** 1989 Jan 6;243(4887):89–91

Beta-galactosidase as a marker in the peripheral and neural tissues of the herpes simplex virus-infected mouse. Ho DY, et al. **Virology** 1988 Nov;167(1):279–83

Regulated transcription of herpes simplex virus immediate-early genes in neuroblastoma cells. Kemp LM, et al. **Virology** 1989 Aug;171(2):607–10

Herpes simplex latent infection: quantitation of latency-associated transcript-positive neurons and reactivable neurons. Tenser RB, et al. **Yale J Biol Med** 1989 Mar–Apr;62(2):197–204

[Comparative study on cell's properties to retain herpes simplex virus among a few cell lines] Shimizu A, et al. **Uirusu** 1988 Dec;38(2):127–9 **(Jpn)**

PATHOLOGY

Stability of neuron and glial number in the parabigeminal nucleus of the ageing mouse. Sturrock RR. **Acta Anat (Basel)** 1989;134(4):322–6

Nerve cell injury in the brain of stroke-prone spontaneously hypertensive rats. Fredriksson K, et al. **Acta Neuropathol (Berl)** 1988;76(3):227–37

Evidence for sequential degeneration of the neurons in the intermediate zone of the spinal cord in amyotrophic lateral sclerosis: a topographic and quantitative investigation. Oyanagi K, et al. **Acta Neuropathol (Berl)** 1989;77(4):343–9

Abnormal neuronal distribution within the cerebral cortex after prenatal methylmercury intoxication. Peckham NH, et al. **Acta Neuropathol (Berl)** 1988;76(3):222–6

Galanin-like immunoreactivity within Ch2 neurons in the vertical limb of the diagonal band of Broca in aging and Alzheimer's disease. Vogels OJ, et al. **Acta Neuropathol (Berl)** 1989;78(1):90–5

Neuroblastic differentiation potential of the human retinoblastoma cell lines Y-79 and WERI-Rb1 maintained in an organ culture system. An immunohistochemical, electron microscopic, and biochemical study. Herman MM, et al. **Am J Pathol** 1989 Jan;134(1):115–32

Selective sparing of NADPH-diaphorase neurons in neonatal hypoxia-ischemia. Ferriero DM, et al. **Ann Neurol** 1988 Nov;24(5):670–6

New stereological method for obtaining unbiased and efficient estimates of total nerve cell number in human brain areas. Exemplified by the mediodorsal thalamic nucleus in schizophrenics. Pakkenberg B, et al. **APMIS** 1989 Aug; 97(8):677–81

The basal nucleus of Meynert revised: the nerve cell number decreases with age. Lowes-Hummel P, et al. **Arch Gerontol Geriatr** 1989 Jan;8(1):21–7

Focal neuronal gigantism and cerebral cortical thickening after therapeutic irradiation of the central nervous system. Caccamo D, et al. **Arch Pathol Lab Med** 1989 Aug; 113(8):880–5

Changes of the neuronal structure produced by prolonged hypobaric hypoxia in infant rats. Langmeier M, et al. **Biomed Biochim Acta** 1989;48(2–3):S204–7

X-linked recessive bulbospinal neuronopathy. A clinicopathological study. Sobue G, et al. **Brain** 1989 Feb; 112 (Pt 1):209–32

Experimental fluid percussion brain injury: vascular disruption and neuronal and glial alterations. Cortez SC, et al. **Brain Res** 1989 Mar 20;482(2):271–82

N-myc amplification and neuronal differentiation in human primitive neuroectodermal tumors of the central nervous system. Rouah E, et al. **Cancer Res** 1989 Apr 1; 49(7):1797–801

Naftidrofuryl protects neurons against ischemic damage. Krieglstein J, et al. **Eur Neurol** 1989;29(4):224–8

Cell loss in the cerebellum and hippocampal formation of adult rats after long-term low-protein diet. Paula-Barbosa MM, et al. **Exp Neurol** 1989 Feb;103(2):186–93

Chronic intrastriatal L-pyroglutamate: neuropathology and neuron sparing like Huntington's disease. Rieke GK, et al. **Exp Neurol** 1989 May;104(2):147–54

Fall in the number of myenteric neurons in aging guinea pigs. Gabella G. **Gastroenterology** 1989 Jun;96(6):1487–93

An anomaly in the auditory brain stem projections of hypopigmented ferrets. Moore DR, et al. **Hear Res** 1988 Sep 15;35(2–3):275–8

Differential expression of N-myc and c-src proto-oncogenes during neuronal and schwannian differentiation of human neuroblastoma cells. Horii Y, et al. **Int J Cancer** 1989 Feb 15;43(2):305–9

Alterations in catecholamine neurons of the locus coeruleus in senile dementia of the Alzheimer type and in Parkinson's disease with and without dementia and depression. Chan-Palay V, et al. **J Comp Neurol** 1989 Sep 15; 287(3):373–92

Changes in neuronal cell bodies in N. laminaris during deafferentation-induced dendritic atrophy. Deitch JS, et al. **J Comp Neurol** 1989 Mar 8;281(2):259–68

Noradrenaline metabolism in neocortex and hippocampus following transient forebrain ischemia in rats: relation to development of selective neuronal necrosis. Miyauchi Y, et al. **J Neurochem** 1989 Aug;53(2):408–15

Patterns of neuronal loss in the cerebral cortex in chronic alcoholic patients. Harper C, et al. **J Neurol Sci** 1989 Aug; 92(1):81–9

MK-801 prevents hypobaric-ischemic neuronal degeneration in infant rat brain. Olney JW, et al. **J Neurosci** 1989 May; 9(5):1701–4

Changes in neuronal size and neurotransmitter marker in hereditary canine spinal muscular atrophy. Cork LC, et al. **Lab Invest** 1989 Jul;61(1):69–76

Classifying cells from light microscopic bit features by binary logic. Application to grade neuronal injury in cerebral ischemia. Eke A, et al. **Lab Invest** 1989 Aug;61(2):243–52

Neuronal damage in the albino rat: excitotoxin, microtubule inhibitor synergism. Cohen MR, et al. **Life Sci** 1988; 43(13):1039–44

Heterotopic neurons in spinal cord of patients with ALS. Kozlowski MA, et al. **Neurology** 1989 May;39(5):644–8

Apoptosis and dark neurons. Iwanowski L. **Neuropatol Pol** 1988;26(4):573–9

Hypoxic neuronal injury in vitro depends on extracellular glutamine. Goldberg MP, et al. **Neurosci Lett** 1988 Nov 22;94(1–2):52–7

Dopaminergic dorsal raphe neurons in cats and monkeys are sensitive to the toxic effects of MPTP. Unguez GA, et al. **Neurosci Lett** 1988 Nov 22;94(1–2):218–23

Neurotypic and gliotypic proteins as biochemical markers of neurotoxicity. O'Callaghan JP. **Neurotoxicol Teratol** 1988 Sep–Oct;10(5):445–52

Indomethacin ameliorates ischemic neuronal damage in the gerbil hippocampal CA1 sector. Sasaki T, et al. **Stroke** 1988 Nov;19(11):1399–403

Role for gamma-aminobutyric acid in selective vulnerability in gerbils. Sternau LL, et al. **Stroke** 1989 Feb;20(2):281–7

Calcium-mediated neurotoxicity: relationship to specific channel types and role in ischemic damage. Choi DW. **Trends Neurosci** 1988 Oct;11(10):465–9 (67 ref.)

Neuronal loss and GABAergic innervation in the basal forebrain [letter] Ulfig N. **Trends Neurosci** 1988 May; 11(5):209

Reduction of spiral ganglion neurons in the aging canine with hearing loss. Knowles K, et al. **Zentralbl Veterinarmed** [A] 1989 Mar;36(3):188–99

[Demonstration of a neuronotoxic activity in the cerebrospinal fluid of severe head injured patients] Lefebvre PP, et al. **Agressologie** 1988 Apr;29(4):241–2 (Eng. Abstr.) **(Fre)**

[Karyometric studies of astrocytes and nerve cells of the putamen in human hepatic encephalopathy] Martin H, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):55–62 (Eng. Abstr.) **(Ger)**

[Malfunction of gene expression as a possible cause of delayed neuronal death] Sakaguchi T, et al. **No To Shinkei** 1988 Jul;40(7):629–35 (Eng. Abstr.) **(Jpn)**

[Comparative study of atrial ganglia and nerve lesions in patients with chronic Chagas' disease (published erratum appears in Arq Bras Cardiol 1988 Sep;51(3):257)] Almeida H de O, et al. **Arq Bras Cardiol** 1988 Mar;50(3):159–62 (Eng. Abstr.) **(Por)**

[Problem of pathology of neurocytes of the trigeminal ganglion in lesions of the head and brain (quantitative analysis)] Reshetnikov SS, et al. **Zh Nevropatol Psikhiatr** 1989;89(5):32–4 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Effects of extracellular Ca and Ca-channel blockers on

A-currents in snail brain neurons. Erdélyi L. **Acta Biol Hung** 1987;38(3-4):299-314
The neuronal bases of locomotion in lamprey--in vitro studies of the brainstem-spinal cord. Grillner S, et al. **Acta Biol Hung** 1988;39(2-3):145-9 (38 ref.)
A glial cell line promotes the outgrowth of neurites from embryonic Xenopus retina. Sakaguchi DS, et al. **Acta Biol Hung** 1988;39(2-3):201-9
Reticulospinal neurons, locomotor control and the development of tailswimming in Xenopus. van Mier P. **Acta Biol Hung** 1988;39(2-3):161-77 (40 ref.)
Responses of auditory brainstem neurons in the grassfrog to clicks. van Stokkum IH, et al. **Acta Biol Hung** 1988; 39(2-3):291-304
Intracellular recordings from neurones in rat cerebral cortex during hypoxia. Langmoen IA, et al. **Acta Neurochir Suppl (Wien)** 1988;43:168-71
Role of endoneural cells in experimental allergic neuritis and characterisation of a resident phagocytic cell. Stevens A, et al. **Acta Neuropathol (Berl)** 1989;77(4):412-9
Dorsal raphe stimulation modulates responses of substantia nigra, pars reticulata neurons to painful stimulation. Moyanova S, et al. **Acta Physiol Pharmacol Bulg** 1988; 14(2):24-32
Firing patterns of midbrain dopamine neurons: differences between A9 and A10 cells. Grenhoff J, et al. **Acta Physiol Scand** 1988 Sep;134(1):127-32
Local cooling of pre-frontal cortex induces pacemaker-like firing of dopamine neurons in rat ventral tegmental area in vivo. Svensson TH, et al. **Acta Physiol Scand** 1989 May; 136(1):135-6
Survival of rat fetal cholinergic neurons co-cultured with human carcinoid tumour cells. Wigander A, et al. **Acta Physiol Scand** 1989 Jun;136(2):291-2
Unitary activity in the bed nucleus of the stria terminalis after homo- and contralateral stria terminalis stimulation. Yajeya J, et al. **Acta Physiol Scand** 1989 Mar;135(3):241-8
Pre- and post-synaptic aspects of GABA-mediated synaptic inhibition in cultured rat hippocampal neurons. Harrison NL, et al. **Adv Biochem Psychopharmacol** 1988;45:73-85
Histaminergic neuron system and its function. Wada H, et al. **Adv Exp Med Biol** 1988;236:343-57
Neurophysiological examination of the role of D-1 dopamine receptors in the regulation of neuronal activity in the basal ganglia. Walters JR, et al. **Adv Exp Med Biol** 1988; 235:145-58 (44 ref.)
Neurophysiology of the vestibular system. Selected papers of the Bárány Society Meeting. Bologna, June 1-4, 1987. **Adv Otorhinolaryngol** 1988;41:1-243
The effect of serotonin on the pontine pause neurons in the cat. Furuya N, et al. **Adv Otorhinolaryngol** 1988;42:224-8
Response characteristics of different size vestibulospinal neurons to roll tilt of the animal and neck rotation in decerebrate cats with the cerebellum intact. Pompeiano O, et al. **Adv Otorhinolaryngol** 1988;41:127-33
Is the noradrenergic neuron system in the brain stem related to motion sickness in rats? Takeda N, et al. **Adv Otorhinolaryngol** 1988;42:234-7
The regulation of neuronal calcium and potassium channels by protein phosphorylation. Kaczmarek LK. **Adv Second Messenger Phosphoprotein Res** 1988;22:113-38 (140 ref.)
Neurons in rostral VLM are inhibited by chemical stimulation of caudal VLM in rats. Agarwal SK, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R265-70
Responses of thoracolumbar spinal neurons to renal artery occlusion. Ammons WS, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):H1515-23
Processing of pulmonary afferent input patterns by respiratory I-beta neurons. Bajić J, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R379-93
Effects of ouabain on neuronal thermosensitivity in hypothalamic tissue slices. Curras MC, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R21-8
In vitro localization of thermosensitive neurons in the rat diencephalon. Dean JB, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R57-64
Effects of synaptic blockade on thermosensitive neurons in rat diencephalon in vitro. Dean JB, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R65-73
Neuronal and cardiovascular responses to ANF microinjected into the solitary nucleus. Ermirio R, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R577-82
Neuronal histamine modulates feeding behavior through H1-receptor in rat hypothalamus. Fukagawa K, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):R605-11
Activity of in vivo canine cardiac plexus neurons. Gagliardi M, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H789-800
Stimulation of parabrachial neurons elicits a sympathetically mediated pressor response in cats. Hade JS, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1349-58
Central respiratory modulation of medullary sympathoexcitatory neurons in rat. Haselton JR, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):R739-50
Neuronal activity during sleep and complete bouts of hibernation. Krilowicz BL, et al. **Am J Physiol** 1988 Dec; 255(6 Pt 2):R1008-19
GABA-mediated inhibition of sympathoexcitatory neurons by midline medullary stimulation. McCall RB. **Am J Physiol** 1988 Oct;255(4 Pt 2):R605-15
Identification and function of brain stem neurons regulating rat ileal water absorption. Martin K, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):G266-73
Stimulatory effects of neuronally released norepinephrine on renin release in vitro. Matsumura Y, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):F614-20
Reticulospinal vasomotor neurons in the RVL mediate the somatosympathetic reflex. Morrison SF, et al. **Am J Physiol** 1989 May;256(5 Pt 2):R1084-97
Patterns of fast synaptic cholinergic activation of neurons in the celiac ganglia of cats. Niel JP, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G759-66
Inhibition of paraventricular neurons by subfornical organ and AV3V in cats. Osaka T, et al. **Am J Physiol** 1988 Dec; 255(6 Pt 2):R961-7
Responses of thalamic neurons in rats to skin cooling and hypothalamic temperature. Sakata Y, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1293-8
Neurons of rostral ventrolateral medulla mediate somatic pressor reflex. Stornetta RL, et al. **Am J Physiol** 1989 Feb; 256(2 Pt 2):R448-62
In vitro diencephalic neuronal thermosensitivity in normotensive and hypertensive rats. Travis KA, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R560-6
Muscular contraction stimulates posterior hypothalamic neurons. Waldrop TG, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R348-56
Two distinct mechanisms are responsible for single K channel block by internal tetraethylammonium ions. Yamamoto D, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C683-7
Degenerative changes of primary neurons following tooth extraction. Kubota K, et al. **Anat Anz** 1988;166(1-5):133-9
Combined effects of deafferentation and de-efferentation on isthmo-optic neurons during the period of their naturally occurring cell death. Clarke PG, et al. **Anat Embryol (Berl)** 1988;179(2):103-8
Effects of aging on the neurons within area 17 of rhesus monkey cerebral cortex. Vincent SL, et al. **Anat Rec** 1989 Mar;223(3):329-41
Modulation of defined vertebrate neural circuits. **Ann N Y Acad Sci** 1989;563:1-195
Responses of single neurons in the parietoinsular vestibular cortex of primates. Akbarian S, et al. **Ann N Y Acad Sci** 1988;545:187-202
Influence of TRH and TRH analogues RGH-2202 and DN-1417 on cultured ventral spinal cord neurons. Askanas V, et al. **Ann N Y Acad Sci** 1989;553:325-36
Calcium channels in vertebrate neurons. Experiments on a neuroblastoma hybrid model. Brown DA, et al. **Ann N Y Acad Sci** 1989;560:358-72
Effects of acute and chronic neuroleptic treatment on the activity of midbrain dopamine neurons. Bunney BS. **Ann N Y Acad Sci** 1988;537:77-85 (55 ref.)
Modulation of Ca channels in peripheral neurons. Carbone E, et al. **Ann N Y Acad Sci** 1989;560:346-57 (54 ref.)
The presence and possible roles of bombesin-like peptides in enteric neurons. Furness JB, et al. **Ann N Y Acad Sci** 1988;547:76-82 (47 ref.)
Heterologous regulation of receptors on target cells of dopamine neurons in the prefrontal cortex, nucleus accumbens, and striatum. Glowinski J, et al. **Ann N Y Acad Sci** 1988;537:112-23 (64 ref.)
In vivo and in vitro intracellular recordings from rat midbrain dopamine neurons. Grace AA. **Ann N Y Acad Sci** 1988; 537:51-76 (62 ref.)
Responses of single neurons in the pretectum of monkeys to visual stimuli in three-dimensional space. Hoffmann KP. **Ann N Y Acad Sci** 1988;545:180-6 (23 ref.)
Enkephalin modulation of A10 dopamine neurons: a role in dopamine sensitization. Kalivas PW, et al. **Ann N Y Acad Sci** 1988;537:405-14 (30 ref.)
The biochemistry and pharmacology of mesoamygdaloid dopamine neurons. Kilts CD, et al. **Ann N Y Acad Sci** 1988; 537:173-87 (59 ref.)
The N-type Ca channel in frog sympathetic neurons and its role in alpha-adrenergic modulation of transmitter release. Kongsamut S, et al. **Ann N Y Acad Sci** 1989; 560:312-33 (63 ref.)
MPTP effects on dopamine neurons. Kopin IJ. **Ann N Y Acad Sci** 1988;537:451-61 (52 ref.)
Voltage-dependent calcium conductances in mammalian neurons. The P channel. Llinás RR, et al. **Ann N Y Acad Sci** 1989;560:103-11 (29 ref.)
Interactions between mesolimbic dopamine neurons, cholecystokinin, and neurotensin: evidence using in vivo voltammetry. Phillips AG, et al. **Ann N Y Acad Sci** 1988; 537:347-61 (51 ref.)
Mesencephalic dopaminergic neurons: role in the general economy of the brain. Simon H, et al. **Ann N Y Acad Sci** 1988;537:235-53 (80 ref.)
Dopamine neuronal tracts in schizophrenia: their pharmacology and in vivo glucose metabolism. Tamminga CA, et al. **Ann N Y Acad Sci** 1988;537:443-50 (35 ref.)
Influence of the mesocortical/prefrontal dopamine neurons on their target cells. Thierry AM, et al. **Ann N Y Acad Sci** 1988;537:101-11 (42 ref.)
Thyrotropin-releasing hormone (TRH) effects on spinal cord neuronal excitability. White SR, et al. **Ann N Y Acad Sci** 1989;553:337-50 (52 ref.)
Growth cone motility and guidance. Bray D, et al. **Annu Rev Cell Biol** 1988;4:43-61 (70 ref.)
Spider toxins: recent applications in neurobiology. Jackson H, et al. **Annu Rev Neurosci** 1989;12:405-14 (57 ref.)
Integrating with neurons. Robinson DA. **Annu Rev Neurosci** 1989;12:33-45 (23 ref.)
Extracellular matrix molecules that influence neural development. Sanes JR. **Annu Rev Neurosci** 1989; 12:491-516 (238 ref.)
Axonal growth-associated proteins. Skene JH. **Annu Rev Neurosci** 1989;12:127-56 (155 ref.)
Fluorescent probes of cell signaling. Tsien RY. **Annu Rev Neurosci** 1989;12:227-53 (129 ref.)
Short-term synaptic plasticity. Zucker RS. **Annu Rev Neurosci** 1989;12:13-31 (148 ref.)
Chemical coding of neurons and plurichemical transmission. Furness JB, et al. **Annu Rev Pharmacol Toxicol** 1989; 29:289-306 (112 ref.)
Visualization of neuronal activity in monkey striate cortex. Blasdel GG. **Annu Rev Physiol** 1989;51:561-81 (25 ref.)
Optical approaches to neuron function. Cohen L. **Annu Rev Physiol** 1989;51:487-90
Optical recording of voltage changes in nerve terminals and in fine neuronal processes. Salzberg BM. **Annu Rev Physiol** 1989;51:507-26 (74 ref.)
Sympathetic neuronotrophic activity in the pulp of the cat canine tooth. Naftel JP. **Arch Oral Biol** 1987;32(12):897-905
Achatin-I, an endogenous neuroexcitatory tetrapeptide from Achatina fulica Férussac containing a D-amino acid residue. Kamatani Y, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1015-20
An investigation into the development of calcium-dependent neurotransmitter release from isolated growth cones. Taylor J, et al. **Biochem Soc Trans** 1988 Aug;16(4):444-6
Neurons, neural networks and molecular biology. **Bioessays** 1989 Feb-Mar;10(2-3):43-93
The adaptation ability of neuronal models subject to a current step stimulus. Awiszus F. **Biol Cybern** 1988;59(4-5):295-302
On the description of neuronal output properties using spike train data. Awiszus F. **Biol Cybern** 1989;60(5):323-33 (15 ref.)
Maximum likelihood analysis of spike trains of interacting nerve cells. Brillinger DR. **Biol Cybern** 1988;59(3):189-200
Noise effects in an electronic model of a single neuron. Bulsara AR, et al. **Biol Cybern** 1989;61(3):211-22
Locking, intermittency, and bifurcations in a periodically driven pacemaker neuron: Poincaré maps and biological implications. Diez Martinez O, et al. **Biol Cybern** 1988; 60(1):49-58
A unified framework for connectionist systems. Golden RM. **Biol Cybern** 1988;59(2):109-20
Solid perception mechanism by a shading pattern: spatial frequency components in a corrugated wave pattern. Nameda N. **Biol Cybern** 1988;59(2):121-30
Analysis of the activity of single neurons in stochastic settings. Nelken I. **Biol Cybern** 1988;59(3):201-15
Underlying neural computations for some visual phenomena. Oğuztöreli MN, et al. **Biol Cybern** 1988;60(2):89-106
Delayed-exponential approximation of a linear homogeneous diffusion model of neuron. Pacut A, et al. **Biol Cybern** 1988; 59(6):395-404
Mass correlograms of multiple neuronal activity in the cat's extrastriate cortex. Reinis S, et al. **Biol Cybern** 1988; 59(2):103-7
Multinomial pulse-number distributions for neural spikes in primary auditory fibers: theory. Teich MC, et al. **Biol Cybern** 1988;59(2):91-102
Neuronal activity and information processing in motor control: from stages to continuous flow. Requin J, et al. **Biol Psychol** 1988 Jun;26(1-3):179-98 (37 ref.)
Latencies of visually responsive neurons in various regions of the rhesus monkey brain and their relation to human visual responses. Robinson DL, et al. **Biol Psychol** 1988 Jun;26(1-3):111-6 (23 ref.)
Neuronal and glial responses to hypoxia and hypercapnia. Lehmenkühler A, et al. **Biomed Biochim Acta** 1989; 48(2-3):S155-60
Hypoxia in brain slices. Shimoji K, et al. **Biomed Biochim Acta** 1989;48(2-3):S149-54
A system model for investigating passive electrical properties of neurons. D'Aguanno A, et al. **Biophys J** 1989 Jun; 55(6):1169-82
Delayed activation of large-conductance Ca2+-activated K channels in hippocampal neurons of the rat. Ikemoto Y, et al. **Biophys J** 1989 Jul;56(1):207-12
Measurement of nonuniform current densities and current kinetics in Aplysia neurons using a large patch method. Johnson JW, et al. **Biophys J** 1989 Feb;55(2):299-308
Action potentials initiated by single channels opening in a small neuron (rat olfactory receptor). Lynch JW, et al. **Biophys J** 1989 Apr;55(4):755-68
Optical recording of the electrical activity of synaptically interacting Aplysia neurons in culture using potentiometric probes. Parsons TD, et al. **Biophys J** 1989 Jul;56(1):213-21
Quantum molecular computer model of the neuron and a pathway to the union of the sciences. Liberman EA, et al. **Biosystems** 1989;22(2):135-54
Evidence that central 5-hydroxytryptaminergic neurones are involved in the anxiolytic activity of buspirone. Carli M, et al. **Br J Pharmacol** 1989 Apr;96(4):829-36
Neuronal activity in human lateral temporal cortex related to short-term verbal memory, naming and reading. Ojemann GA, et al. **Brain** 1988 Dec;111 (Pt 6):1383-403
Localisation of the first-order neurone of the jaw opening reflex elicited by periodontal stimulation. Aigouy L, et al. **Brain Res** 1988 Nov 15;473(2):380-4
N-methyl-D-aspartate (NMDA) receptors are inactivated

by trypsin. Allen CN, et al. **Brain Res** 1988 Aug 16; 458(1):147–50

Kainic acid–induced seizures: potentiation by alpha–methyl–p–tyrosine. Baran H, et al. **Brain Res** 1989 Aug 28;495(2):253–60

Bicuculline blocks the response to acetylcholine and nicotine but not to muscarine or GABA in isolated insect neuronal somata. Benson JA. **Brain Res** 1988 Aug 16;458(1):65–71

Purine modulation of cholinomimetic responses in the rat hippocampal slice. Brooks PA, et al. **Brain Res** 1988 Aug 16;458(1):106–14

Preferential cholinergic projections by embryonic spinal cord neurons within cocultured mouse superior cervical ganglia. Chalazonitis A, et al. **Brain Res** 1988 Aug 23;458(2):231–48

Modulation of calcium current in snail neurones by dopamine: the role of intracellular free calcium. Chemeris NK, et al. **Brain Res** 1988 Sep 13;460(1):142–5

Noxious stimuli excite neurons in nucleus submedius of the normal and arthritic rat. Dostrovsky JO, et al. **Brain Res** 1988 Sep 20;460(2):269–80

FMRFamide–like immunoreactive neurons of the nervus terminalis of teleosts innervate both retina and pineal organ. Ekström P, et al. **Brain Res** 1988 Sep 13;460(1):68–75

Vagally mediated insulin secretion by stimulation of brain cholinergic neurons with neostigmine in bilateral adrenalectomized rats. Gotoh M, et al. **Brain Res** 1989 Jul 24;493(1):97–102

Deviations in brain development of F2 generation on caloric undernutrition and scope of their prevention by rehabilitation: alterations in dendritic spine production and pruning of pyramidal neurons of lower laminae of motor cortex and visual cortex. Gundappa G, et al. **Brain Res** 1988 Jul 26;456(2):205–23

Neonatal lesions of the basal forebrain cholinergic neurons result in abnormal cortical development. Hohmann CF, et al. **Brain Res** 1988 Aug 1;470(2):253–64

Adaptation of cultured mammalian neurons to a hypotonic environment with age–related response. Horie H, et al. **Brain Res** 1989 Jan 16;477(1–2):233–40

Temporal sequence of neurotransmitter expression by developing neurons of fetal monkey visual cortex. Huntley GW, et al. **Brain Res** 1988 Sep 1;471(1):69–96

Direct projections of non–pyramidal neurons of Ammon's horn to the supramammillary region in the cat. Ino T, et al. **Brain Res** 1988 Sep 13;460(1):173–7

Responses of rat lateral hypothalamic neurons to periaqueductal gray stimulation and nociceptive stimuli. Kai Y, et al. **Brain Res** 1988 Sep 27;461(1):107–17

Regeneration of frog sympathetic neurons is accompanied by sprouting and retraction of intraganglionic neurites. Kelly ME, et al. **Brain Res** 1989 Jan 16;477(1–2):363–8

The connectivity underlying the orientation selectivity in the infragranular layers of monkey striate cortex. Krüger J, et al. **Brain Res** 1989 Jan 16;477(1–2):57–65

Neuropeptide Y–immunoreactive neurons receive synaptic inputs from dopaminergic axon terminals in the rat neostriatum. Kubota Y, et al. **Brain Res** 1988 Aug 23; 458(2):389–93

Soman enhances nicotinic depolarizations, and depresses muscarinic hyperpolarizations in parasympathetic neurons. Kumamoto E, et al. **Brain Res** 1988 Aug 16;458(1):151–6

A study of ionic conductances involved in plateau potential activity in putative vasopressinergic neurons in primary cell culture. Legendre P, et al. **Brain Res** 1988 Aug 9; 457(2):386–91

Effects of Na+ and Ca2+ gradients on intracellular free Ca2+ in voltage–clamped Aplysia neurons. Levy S, et al. **Brain Res** 1988 Dec 6;474(2):333–42

Single unit response of suprachiasmatic neurons to arginine vasopressin (AVP) is mediated by a V1–like receptor in the hamster. Liou SY, et al. **Brain Res** 1989 Jan 16; 477(1–2):336–43

Differential actions of neurotrophic factors on lesion–induced damage of the serotonergic neurons projecting to the hippocampus. Lombardi G, et al. **Brain Res** 1988 Aug 23; 458(2):348–52

Identification of serotonergic and sympathetic neurons in medullary raphe nuclei. McCall RB, et al. **Brain Res** 1989 Jan 16;477(1–2):172–82

Differential burst firing modes in neurons of the mammalian visual cortex in vitro. Montoro RJ, et al. **Brain Res** 1988 Sep 13;460(1):168–72

Glutamate cytotoxicity in a neuronal cell line is blocked by membrane depolarization. Murphy TH, et al. **Brain Res** 1988 Sep 13;460(1):155–60

Synaptic action of layer I fibers on cells in cat striate cortex. Nakajima S, et al. **Brain Res** 1988 Aug 2;457(1):176–80

Fetal cortical transplants into neonatal rats respond to thalamic and peripheral stimulation in the adult. An electrophysiological study of single–unit activity. Neafsey EJ, et al. **Brain Res** 1989 Jul 24;493(1):33–40

Spontaneous activity of type II but not type I striatal neurons is correlated with recovery of behavioral function after dopamine–depleting brain lesions. Nisenbaum ES, et al. **Brain Res** 1988 Nov 15;473(2):389–93

Cyclic AMP–dependent protein phosphorylation is involved in activation of the potassium current associated with endogenous cellular calcium in Euhadra neurons. Onozuka M, et al. **Brain Res** 1988 Nov 15;473(2):401–5

The activity of late inspiratory cells during the behavioral inhibition of inspiration. Orem J. **Brain Res** 1988 Aug 23; 458(2):224–30

Characterization of an inward current elicited by edrophonium in physically isolated and internally perfused Aplysia neurons. Oyama Y, et al. **Brain Res** 1988 Oct 25; 463(1):124–32

Three types of voltage–dependent calcium current in cultured rat hippocampal neurons. Ozawa S, et al. **Brain Res** 1989 Aug 28;495(2):329–36

Two types of K+ channels in excised patches of somatic membrane of the leech AP neuron. Pellegrini M, et al. **Brain Res** 1989 Apr 3;483(2):294–300

The effects of serotonin on N–methyl–D–aspartate and synaptically evoked depolarizations in rat neocortical neurons. Reynolds JN, et al. **Brain Res** 1988 Jul 26; 456(2):286–92

Evidence that NPY–containing neurons in the brainstem project into selected hypothalamic nuclei: implication in feeding behavior. Sahu A, et al. **Brain Res** 1988 Aug 9; 457(2):376–8

Physiological modulation by adenosine: selective blockade of A1–receptors with DPCPX enhances stimulus train–evoked neuronal Ca influx in rat hippocampal slices. Schubert P. **Brain Res** 1988 Aug 16;458(1):162–5

Somatotopic organization of tooth pulp primary afferent neurons in the cat. Shigenaga Y, et al. **Brain Res** 1989 Jan 16;477(1–2):66–89

Morphological and functional properties of trigeminal nucleus oralis neurons projecting to the trigeminal motor nucleus of the cat. Shigenaga Y, et al. **Brain Res** 1988 Sep 27;461(1):143–9

Intracellular injection of apamin reduces a slow potassium current mediating afterhyperpolarizations and IPSPs in neocortical neurons of cats. Szente MB, et al. **Brain Res** 1988 Sep 27;461(1):64–74

Neurons in the lateral hypothalamic area and zona incerta with ascending projections to the subfornical organ area in the rat. Tanaka J, et al. **Brain Res** 1988 Jul 26; 456(2):397–400

Facilitation of noradrenergic character of sympathetic neurons by co–culturing with heart cells. Wakade AR, et al. **Brain Res** 1988 Aug 16;458(1):115–22

Membrane currents induced by pentylenetetrazol in identified neurons of Helix pomatia. Walden J, et al. **Brain Res** 1988 Nov 15;473(2):294–305

Response properties of lateral hypothalamic neurons during ingestive behavior with special reference to licking of various taste solutions. Yamamoto T, et al. **Brain Res** 1989 Mar 6;481(2):286–97

Short latency activation of local circuit neurons in the cat somatosensory cortex. Yamamoto T, et al. **Brain Res** 1988 Sep 27;461(1):199–203

Basic questions in neuroscience: a symposium. San Antonio, Texas, November 30–December 2, 1987. Proceedings. **Brain Res Bull** 1988 Sep;21(3):341–546

Loss of neurons in the rat basal forebrain cholinergic projection system after prolonged intake of ethanol. Arendt T, et al. **Brain Res Bull** 1988 Oct;21(4):563–9

Neuron activity in rat hippocampus and motor cortex during discrimination reversal. Disterhoft JF, et al. **Brain Res Bull** 1978 Nov–Dec;3(6):583–8

Three–dimensional plotting of neuronal population response patterns. Doetsch GS, et al. **Brain Res Bull** 1978 Jul–Aug; 3(4):299–303

Rat hypothalamic arcuate neuron response in electroacupuncture–induced analgesia. Hamba M, et al. **Brain Res Bull** 1988 Jul;21(1):31–5

Postnatal development of the parabrachial gustatory zone in rat: dendritic morphology and mitochondrial enzyme activity. Lasiter PS, et al. **Brain Res Bull** 1988 Jul; 21(1):79–94

Dorsal raphe and external electrical stimulation modulate noxious input to single neurons in nucleus parafascicularis thalami. Qiao JT, et al. **Brain Res Bull** 1988 Oct;21(4):671–5

Salivatory neurons in the brainstem nucleus parvocellularis of the rat: effects of electrolytic lesions. Ramos JM, et al. **Brain Res Bull** 1988 Oct;21(4):547–55

First appearance of type II neurons during ontogenesis in the spiral ganglion of the rat. An immunocytochemical study. Hafidi A, et al. **Brain Res Dev Brain Res** 1989 Jul 1;48(1):143–9

The postnatal development of layer VI pyramidal neurons in the cat's striate cortex, as visualized by intracellular Lucifer yellow injections in aldehyde–fixed tissue. Lübke J, et al. **Brain Res Dev Brain Res** 1989 Jan 1;45(1):29–38

Differences in the effects of membrane depolarization on levels of preprosomatostatin mRNA and tyrosine hydroxylase mRNA in rat sympathetic neurons in vivo and in culture. Spiegel K, et al. **Brain Res Mol Brain Res** 1989 Jan;5(1):23–9

A rhythmically discharging neuron in the earthworm ventral cord nerve as identified by lucifer yellow–CH injection. Assmé Z, et al. **Braz J Med Biol Res** 1988;21(2):391–3

Molecular properties of voltage–sensitive sodium and calcium channels. Catterall WA. **Braz J Med Biol Res** 1988; 21(6):1129–44 (57 ref.)

Telencephalic and pretectal modulation of the directional selectivity of accessory optic neurons in the pigeon. Hamassaki DE, et al. **Braz J Med Biol Res** 1988; 21(3):649–52

Computational simulation of activity of cortical–like neural systems. Ventriglia F. **Bull Math Biol** 1988;50(2):143–85

Prediction of linear and non–linear responses of MGB neurons by system identification methods. Yeshurun Y, et al. **Bull Math Biol** 1989;51(3):337–46

Cerebrospinal fluid contacting neurons and openings of the central canal in rabbits and monkeys—light and electron microscopic observation. Ikegami Y, et al. **Bull Osaka Med Sch** 1987 Jul;33(1):1–19

Characterization of a developmentally transient adrenergic depolarizing response in cultured locus coeruleus neurons. Finlayson PG, et al. **Can J Physiol Pharmacol** 1988 Dec; 66(12):1547–54

The development of voltage–dependent ionic conductances in murine spinal cord neurones in culture. Krieger C, et al. **Can J Physiol Pharmacol** 1988 Oct;66(10):1328–36

Membrane responses of neurons in human sympathetic ganglia. Puil E, et al. **Can J Physiol Pharmacol** 1988 Jun; 66(6):853–7

The effects of midazolam on hippocampal dentate gyrus granule neurons from young and old Fischer 344 rats. Reynolds JN, et al. **Can J Physiol Pharmacol** 1989 Apr; 67(4):359–62

The involvement of nonspiking cells in long–term potentiation of synaptic transmission in the hippocampus. Sastry BR, et al. **Can J Physiol Pharmacol** 1988 Jun; 66(6):841–4

pH shifts evoked by neuronal stimulation in slices of rat hippocampus. Walz W. **Can J Physiol Pharmacol** 1989 Jun; 67(6):577–81

Calcium as a modulator of the immediate–early gene cascade in neurons. Morgan JI, et al. **Cell Calcium** 1988 Dec; 9(5–6):303–11 (34 ref.)

Kinetic analysis of acetylcholine–induced chloride current in isolated snail neurons. Ikemoto Y, et al. **Cell Mol Neurobiol** 1988 Sep;8(3):293–305

Neuronal membrane depolarization and the control of cholinergic muscarinic receptors: selective effect on different neuronal cell types. Simantov R, et al. **Cell Mol Neurobiol** 1989 Mar;9(1):87–94

Modulation of nuclear rotation in neuronal interphase nuclei by nerve growth factor, by gamma–aminobutyric acid, and by changes in intracellular calcium. Fung LC, et al. **Cell Motil Cytoskeleton** 1988;10(3):363–73

Rapid growth cone translocation on laminin is supported by lamellipodial not filopodial structures. Kleitman N, et al. **Cell Motil Cytoskeleton** 1989;13(4):288–300

Synaptic regulation of paraventricular arginine vasopressin–containing neurons by neuropeptide Y–containing monoaminergic neurons in rats. Electron–microscopic triple labeling. Kagotani Y, et al. **Cell Tissue Res** 1989 Aug;257(2):269–78

Improvement of nerve conduction velocity in mutant diabetic mice by aldose reductase inhibitor without affecting nerve myo–inositol content. Miwa I, et al. **Chem Pharm Bull (Tokyo)** 1989 Jun;37(6):1581–2

Extracellular pH and stimulated neurons. Syková E, et al. **Ciba Found Symp** 1988;139:220–35

Proton channels in snail neurons studied with surface pH glass microelectrodes. Thomas RC. **Ciba Found Symp** 1988; 139:168–83

Some possible neurological applications of applied potential tomography. Holder DS, et al. **Clin Phys Physiol Meas** 1988;9 Suppl A:111–9

Role of G–protein–coupled phosphatidylinositide system in signal transduction in vertebrate neurons: experiments on neuroblastoma hybrid cells and ganglion cells. Brown DA, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:375–84

Molecular mechanisms of phospholipid signaling pathways in mammalian nerve cells. Hanley MR, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:435–45 (62 ref.)

Functional expression of the 5–HT1c receptor in neuronal and nonneuronal cells. Julius D, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:385–93

The role of arachidonic acid metabolites in signal transduction in an identified neural network mediating presynaptic inhibition in Aplysia. Shapiro E, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:425–33

Analysis of extracellular potentials using an IBM PC. Bagust J. **Comp Biochem Physiol [A]** 1989;93(1):161–70

The Retzius cells in the leech: a review of their properties and synaptic connections. Carretta M. **Comp Biochem Physiol [A]** 1988;91(3):405–13 (74 ref.)

Hybridization histochemistry or in situ hybridization in the study of neuronal gene expression. Emson PC. **Comp Biochem Physiol [A]** 1989;93(1):233–9 (23 ref.)

Nicotinic–type unitary currents in Helix neurons. Green KA, et al. **Comp Biochem Physiol [A]** 1989;93(1):47–51

Characterization of deep dorsal horn neurones in the rat spinal cord in vitro: synaptic and excitatory amino acid induced excitations. King AE, et al. **Comp Biochem Physiol [A]** 1989;93(1):171–5

Acetylcholine suppresses calcium current in neurons of Aplysia californica. Březina V. **Comp Biochem Physiol [C]** 1988;91(1):219–28

An analysis of the inhibitory responses of dopamine and octopamine on Helix central neurons. Cox RT, et al. **Comp Biochem Physiol [C]** 1988;91(2):541–7

Effects of hypothalamic releasing hormones and biogenic amines on identified neurones in the circumoesophageal ganglia of the water snail (Planorbis corneus). Steiner FA, et al. **Comp Biochem Physiol [C]** 1989;92(2):301–7

Axon outgrowth along segmental nerves in the leech. II. Identification of actual guidance cells. Braun J, et al.

Dev Biol 1989 Apr;132(2):486–501
Interneurons versus efferent neurons: heterogeneity in their neurite outgrowth response to glia from several brain regions. Denis-Donini S, et al. **Dev Biol** 1988 Nov; 130(1):237–49
Basic fibroblast growth factor promotes the survival and development of mesencephalic neurons in culture. Ferrari G, et al. **Dev Biol** 1989 May;133(1):140–7
Growth cone behavior on gradients of substratum bound laminin. McKenna MP, et al. **Dev Biol** 1988 Nov; 130(1):232–6
Embryonic neurons as in vitro inducers of differentiation of nephrogenic mesenchyme. Sariola H, et al. **Dev Biol** 1989 Apr;132(2):271–81
A study in developing visual systems with a new method of staining neurones and their processes in fixed tissue. Godement P, et al. **Development** 1987 Dec;101(4):697–713
Cell lineage in the rat cerebral cortex: a study using retroviral-mediated gene transfer. Price J, et al. **Development** 1988 Nov;104(3):473–82
The effects of tectal lesion on the survival of isthmic neurones in Xenopus. Straznicky C, et al. **Development** 1987 Dec; 101(4):869–76
Effects of nedocromil sodium on airway microvascular leakage and neural reflexes. Barnes PJ. **Drugs** 1989;37 Suppl 1:94–100; discussion 127–36 (34 ref.)
Cardiac and respiratory correlations with unit discharge in human amygdala and hippocampus. Frysinger RC, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jun; 72(6):463–70
Computer simulation of the generation of the electroencephalogram. Lagerlund TD, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jan;72(1):31–40
The maturational process of gonadotropin-releasing hormone neurons in the male rat: a role for the adrenal gland in the increase in secretory function. Barnea A, et al. **Endocrinology** 1988 Dec;123(6):2730–5
Membrane receptor-mediated electrophysiological effects of glucocorticoid on mammalian neurons. Hua SY, et al. **Endocrinology** 1989 Feb;124(2):687–91
Regulation of rat brain/HepG2 glucose transporter gene expression by insulin and insulin-like growth factor-I in primary cultures of neuronal and glial cells. Werner H, et al. **Endocrinology** 1989 Jul;125(1):314–20
Action of cyclic AMP on intracellular calcium concentration and bursting activity. Sugaya E, et al. **Epilepsy Res** 1988 Sep-Oct;2(5):317–22
Involvement of the constituent chains of botulinum neurotoxins A and B in the blockade of neurotransmitter release. Maisey EA, et al. **Eur J Biochem** 1988 Nov 15; 177(3):683–91
Comparison of the effect of vasoactive intestinal polypeptide and non-adrenergic non-cholinergic neurone stimulation in the cat gastric fundus. D'Amato M, et al. **Eur J Pharmacol** 1988 Jul 26;152(1-2):71–82
Effects of histamine H3-receptor ligands on various biochemical indices of histaminergic neuron activity in rat brain. Garbarg M, et al. **Eur J Pharmacol** 1989 May 2; 164(1):1–11
Spontaneous activity of A9 and A10 dopamine neurons after acute and chronic administration of the selective dopamine D-1 receptor antagonist SCH 23390. Goldstein JM, et al. **Eur J Pharmacol** 1988 Oct 11;155(1-2):175–80
Inhibitory histamine H3-receptors on cholinergic nerves in human airways. Ichinose M, et al. **Eur J Pharmacol** 1989 Apr 25;163(2-3):383–6
Effect of acute and chronic MDL 73,147EF, a 5-HT3 receptor antagonist, on A9 and A10 dopamine neurons. Sorensen SM, et al. **Eur J Pharmacol** 1989 Apr 12; 163(1):115–8
Selective sigma receptor agonist and antagonist affect dopamine neuronal activity. Steinfels GF, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):167–70
Indirect evidence for separate vesicular neuronal origins of norepinephrine and ATP in the rabbit vas deferens. Trachte GJ, et al. **Eur J Pharmacol** 1989 May 30;164(3):425–33
Electrotonic properties of neostriatal neurons are modulated by extracellular potassium. Bargas J, et al. **Exp Brain Res** 1988;72(2):390–8
Differential antiepileptic effects of the organic calcium antagonists verapamil and flunarizine in neurons of organotypic neocortical explants from newborn rats. Bingmann D, et al. **Exp Brain Res** 1988;72(2):439–42
Effects of convergent strabismus on spatio-temporal response properties of neurons in cat area 18. Chino YM, et al. **Exp Brain Res** 1988;72(2):264–78
Reinnervation of dopamine neurons by regenerating serotonin axons in the rat medial zona incerta. A combined radioautographic and immunocytochemical ultrastructural study. Frankfurt M, et al. **Exp Brain Res** 1988;72(3):473–80
Divergent projections of physiologically characterized rat ventral cochlear nucleus neurons as shown by intra-axonal injection of horseradish peroxidase. Friauf E, et al. **Exp Brain Res** 1988;73(2):263–84
Premotor and supplementary motor cortex in rhesus monkeys: neuronal activity during externally- and internally-instructed motor tasks. Kurata K, et al. **Exp Brain Res** 1988;72(2):237–48
Carbachol effects on hippocampal neurons in vitro: dependence on the rate of rise of carbachol tissue concentration. Müller W, et al. **Exp Brain Res** 1988; 72(2):287–98
Excitatory input to burst neurons from the labyrinth and its mediating pathway in the cat: location and functional characteristics of burster-driving neurons. Ohki Y, et al. **Exp Brain Res** 1988;72(3):457–72
Hippocampal neurons grafted to newborn rats establish efferent commissural connections. Tønder N, et al. **Exp Brain Res** 1988;72(3):577–83
Superior colliculus neurons provide the saccadic motor error signal. Waitzman DM, et al. **Exp Brain Res** 1988; 72(3):649–52
Collateral projections of neurons from the lower part of the spinal cord to anterior and posterior cerebellar termination areas. A retrograde fluorescent double labeling study in the cat. Xu Q, et al. **Exp Brain Res** 1988;72(3):562–76
H1 horizontal cells of carp retina have different postsynaptic mechanisms to mediate short- versus long-wavelength visual signals. Yasui S, et al. **Exp Brain Res** 1989; 74(2):256–62
Presumptive neurons derived by differentiation of a human embryonal carcinoma cell line exhibit tetrodotoxin-sensitive sodium currents and the capacity for regenerative responses. Rendt J, et al. **Exp Cell Res** 1989 Feb;180(2):580–4
Promotion of survival and neurite outgrowth of cultured peripheral neurons by exogenous lipids and detergents. Unsicker K, et al. **Exp Cell Res** 1988 Oct;178(2):377–89
Increased fragility of neuronal membranes with aging. Bondy SC, et al. **Exp Neurol** 1989 Jan;103(1):61–3
Sensory nerve crush and regeneration and the receptive fields and response properties of neurons in the primary somatosensory cerebral cortex of cats. Brandenberg GA, et al. **Exp Neurol** 1989 Mar;103(3):256–66
Ketamine and MK-801 prevent degeneration of thalamic neurons induced by focal cortical seizures. Clifford DB, et al. **Exp Neurol** 1989 Sep;105(3):272–9
Spinal cord localization and characterization of the neurons which give rise to the accessory phrenic nerve in the adult rat. DeVries KL, et al. **Exp Neurol** 1989 Apr;104(1):88–90
Projections from inspiratory neurons of the nucleus retroambigualis to phrenic motoneurons in the cat. Fedorko L, et al. **Exp Neurol** 1989 Sep;105(3):306–10
Characterization of cat nasal afferents and brain stem neurones receiving ethmoidal input. Lucier GE, et al. **Exp Neurol** 1989 Jan;103(1):83–9
The fate of prelabeled Clarke's column neurons after axotomy. McBride RL, et al. **Exp Neurol** 1988 Nov; 102(2):236–43
Changes in the firing properties of neurons in the dentate gyrus with denervation and reinnervation: implications for behavioral recovery. Reeves TM, et al. **Exp Neurol** 1988 Oct;102(1):37–49
Development of NADPH diaphorase-positive pedunculopontine nucleus neurons. Skinner RD, et al. **Exp Neurol** 1989 Apr;104(1):15–21
Sex difference in neuronal loss induced by axotomy in the rat brain stem motor nuclei. Yu WH. **Exp Neurol** 1988 Nov;102(2):230–5
Catch-relaxing peptide (CARP) decreases the Ca-permeability of snail neuronal membrane. Kiss T. **Experientia** 1988 Dec 1;44(11-12):998–1000
Stimulation of sodium current by cyclic AMP is mediated through protein phosphorylation in Euhadra neurons. Onozuka M, et al. **Experientia** 1988 Dec 1;44(11-12):996–8
Role of protein phosphorylation in neuronal signal transduction. Hemmings HC Jr, et al. **FASEB J** 1989 Mar; 3(5):1583–92 (39 ref.)
Plasticity of neuronal receptors. Klein WL, et al. **FASEB J** 1989 Aug;3(10):2132–40 (55 ref.)
Xylazine-evoked depression of rat cerebral cortical neurons: a pharmacological study. O'Regan MH. **Gen Pharmacol** 1989;20(4):469–74
Mathematical modelling of intra- and extracellular potentials generated by active structures with short regions of increased diameter. Dimitrova N. **Gen Physiol Biophys** 1988 Aug;7(4):401–12
The effect of pentylenetetrazol on the metacerebral neuron of Helix pomatia. Fehér O, et al. **Gen Physiol Biophys** 1988 Oct;7(5):505–16
The maternal sex determination gene daughterless has zygotic activity necessary for the formation of peripheral neurons in Drosophila. Caudy M, et al. **Genes Dev** 1988 Jul; 2(7):843–52
Evidence for an early role for myelin-associated glycoprotein in the process of myelination. Owens GC, et al. **GLIA** 1989; 2(2):119–28
Sensitivity of auditory cortical neurons of kittens to monaural and binaural high frequency sound. Brugge JF, et al. **Hear Res** 1988 Jul 15;34(2):127–40
Post-stimulatory effects of direct current stimulation of the cochlea on auditory nerve activity. Cousillas H, et al. **Hear Res** 1988 Oct;36(1):21–39
Neuronal discharge rate is unsuitable for encoding sound intensity at the inferior-colliculus level. Ehret G, et al. **Hear Res** 1988 Sep 1;35(1):1–7
Synaptic potentials of chinchilla lateral superior olivary neurons. Finlayson PG, et al. **Hear Res** 1989 Apr; 38(3):221–8
Masked thresholds of auditory midbrain neurons in the frog Rana ridibunda. Joermann G. **Hear Res** 1988 Sep 15; 35(2-3):191–9
Coding of tone-pulse amplitude by single neurons in auditory cortex of albino rats (Rattus norvegicus). Phillips DP, et al. **Hear Res** 1989 Feb;37(3):269–79
Off-responses in the auditory system in relation to the signal end phase and neuronal characteristic frequency. Radionova EA. **Hear Res** 1988 Sep 15;35(2-3):229–35
Effect of electrical pulse shape on AVCN unit responses to cochlear stimulation. Wiler JA, et al. **Hear Res** 1989 Jun 1;39(3):251–61
Response properties of inferior colliculus neurons in young and very old CBA/J mice. Willott JF, et al. **Hear Res** 1988 Dec;37(1):1–14
Response properties of inferior colliculus neurons in middle-aged C57BL/6J mice with presbycusis. Willott JF, et al. **Hear Res** 1988 Dec;37(1):15–27
Responsiveness of noradrenergic neurons in rat experimental hypertension. Debinski WK, et al. **Hypertension** 1989 Jun; 13(6 Pt 2):712–5
Computation of the passive electrical parameters of neurons using a system model. Fu P, et al. **IEEE Trans Biomed Eng** 1989 Jan;36(1):55–64
Neuronal assemblies. Gerstein GL, et al. **IEEE Trans Biomed Eng** 1989 Jan;36(1):4–14 (52 ref.)
Dendritic transformations on random synaptic inputs as measured from a neuron's spike train—modeling and simulation. Kohn AF. **IEEE Trans Biomed Eng** 1989 Jan; 36(1):44–54 (42 ref.)
Signal transformation and coding in neural systems. Marmarelis VZ. **IEEE Trans Biomed Eng** 1989 Jan; 36(1):15–24 (14 ref.)
A long-term in vitro silicon-based microelectrode-neuron connection. Regehr WG, et al. **IEEE Trans Biomed Eng** 1988 Dec;35(12):1023–32
A real-time multiprocessor system for acquisition of multichannel neural data. Smith SR, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):875–7
Neuronal activities related to higher brain functions—theoretical and experimental implications. Vaadia E, et al. **IEEE Trans Biomed Eng** 1989 Jan; 36(1):25–35 (33 ref.)
Studies with spike initiators: linearization by noise allows continuous signal modulation in neural networks. Yu XL, et al. **IEEE Trans Biomed Eng** 1989 Jan;36(1):36–43
A model for the periodic synaptic inhibition of a neuronal oscillator. Kiemel T, et al. **IMA J Math Appl Med Biol** 1987;4(2):145–69
Correlation of preoptic neuronal activity with spontaneous and induced cortical EEG changes. Kumar VM, et al. **Indian J Physiol Pharmacol** 1988 Apr-Jun;32(2):83–92
The sympathetic neuro-melanophore transmission in a fresh-water Indian major carp, Labeo rohita (Ham.). Patil S, et al. **Indian J Physiol Pharmacol** 1989 Apr-Jun; 33(2):101–6
In vitro experiments on neuronal and glial cell lineages among the ventricular cells of the mouse neural plate. Buse E, et al. **Int J Dev Neurosci** 1989;7(1):103–13
Age-dependent beta-adrenergic response of neuronal discharge in the raphe dorsalis: evidence of a transient regulation. Lanfumey L, et al. **Int J Dev Neurosci** 1988; 6(3):301–7
Synapse formation and development of neurotransmitter functions in neuronal cells from chick brain cultured in a serum-free, defined medium. Langui D, et al. **Int J Dev Neurosci** 1988;6(2):137–47
Factors influencing neuronal growth in primary cultures derived from 3-day-old chick embryos. Mangoura D, et al. **Int J Dev Neurosci** 1988;6(1):89–102
Substrate effects on the dynamics of neurite growth in vitro: a quantitative multi-parametric analysis. Saxod R, et al. **Int J Dev Neurosci** 1988;6(2):177–91
Ganglioside potentiation of NGF-independent conditioned medium enhancement of neuritic outgrowth from spinal cord and ciliary ganglia explants. Spoerri PE, et al. **Int J Dev Neurosci** 1988;6(3):223–32
Functional properties of presumed dopamine-containing and other ventral tegmental area neurons in conscious rats. Kiaytkin EA. **Int J Neurosci** 1988 Sep;42(1-2):21–43
GABA A receptors on the cytoplasmic side of the Deiters' neurone plasma membrane: mechanism and functional implications. Rapallino MV, et al. **Int J Neurosci** 1988 Nov; 43(1-2):69–73
Transferrin and the growth-promoting effect of nerves. Mescher AL, et al. **Int Rev Cytol** 1988;110:1–26 (157 ref.)
Neuron-glia interrelations. Vernadakis A. **Int Rev Neurobiol** 1988;30:149–224 (511 ref.)
An interpretation of cortical maps in echolocating bats. Altes RA. **J Acoust Soc Am** 1989 Feb;85(2):934–42
Neurons projecting rostrally in the hypogastric nerve of the cat. Baron R, et al. **J Auton Nerv Syst** 1988 Sep; 24(1-2):81–6
An electrophysiological comparison of substance P-immunoreactive neurons with other neurons in the guinea-pig submucous plexus. Bornstein JC, et al. **J Auton Nerv Syst** 1989 Mar;26(2):113–20
Origin of tonic GABAergic inputs to vasopressor neurons in the subretrofacial nucleus of the rabbit. Dampney RA, et al. **J Auton Nerv Syst** 1988 Oct;24(3):227–39
Effects of volume loading on paraventriculo-spinal neurones in the rat. Lovick TA, et al. **J Auton Nerv Syst** 1988 Dec; 25(2-3):135–40
Calcium-activated chloride conductance in parasympathetic neurons of the rabbit urinary bladder. Tokimasa T, et al. **J Auton Nerv Syst** 1988 Sep;24(1-2):123–31
Different receptor subtypes mediate the dual presynaptic

effects of 5-hydroxytryptamine on peripheral sympathetic neurones. Adler-Graschinsky E, et al. **J Auton Pharmacol** 1989 Feb;9(1):3-13

Sequence of contactin, a 130-kD glycoprotein concentrated in areas of interneuronal contact, defines a new member of the immunoglobulin supergene family in the nervous system. Ranscht B. **J Cell Biol** 1988 Oct;107(4):1561-73

Neural cell adhesion molecule expression is regulated by Schwann cell-neuron interactions in culture. Seilheimer B, et al. **J Cell Biol** 1989 May;108(5):1909-15

Fluidity of the neural epithelium during forebrain formation in rat embryos. Morriss-Kay G, et al. **J Cell Sci Suppl** 1987;8:433-49

Colocalization of fixative-modified glutamate and glutaminase but not GAD in rubrospinal neurons. Beitz AJ, et al. **J Comp Neurol** 1988 Aug 8;274(2):265-79

Demonstration of initial axon collaterals of cells of origin of the ventral spinocerebellar tract in the cat. Bras H, et al. **J Comp Neurol** 1988 Jul 22;273(4):584-92

GABA-immunoreactive neurons and terminals in the lateral cervical nucleus of the cat. Broman J, et al. **J Comp Neurol** 1988 Aug 22;274(4):467-82

Immunocytochemical localization of glutamate decarboxylase in the rat basolateral amygdaloid nucleus, with special reference to GABAergic innervation of amygdalostriatal projection neurons. Carlsen J. **J Comp Neurol** 1988 Jul 22;273(4):513-26

Galanin hyperinnervates surviving neurons of the human basal nucleus of Meynert in dementias of Alzheimer's and Parkinson's disease: a hypothesis for the role of galanin in accentuating cholinergic dysfunction in dementia. Chan-Palay V. **J Comp Neurol** 1988 Jul 22;273(4):543-57

A Golgi analysis of the gustatory zone of the nucleus of the solitary tract in the adult hamster. Davis BJ, et al. **J Comp Neurol** 1988 Dec 15;278(3):388-96

Endogenous opioid systems and the regulation of dendritic growth and spine formation. Hauser KF, et al. **J Comp Neurol** 1989 Mar 1;281(1):13-22

Lobule structure and somatotopic organization of the medullary facial lobe in the channel catfish Ictalurus punctatus. Hayama T, et al. **J Comp Neurol** 1989 Jul 1; 285(1):9-17

Connections of primary auditory cortex in the New World monkey, Saguinus. Luethke LE, et al. **J Comp Neurol** 1989 Jul 22;285(4):487-513

Expression of c-fos protein in interneurons and projection neurons of the rat spinal cord in response to noxious somatic, articular, and visceral stimulation. Menétrey D, et al. **J Comp Neurol** 1989 Jul 8;285(2):177-95

Maturation of rat visual cortex: IV. The generation, migration, morphogenesis, and connectivity of atypically oriented pyramidal neurons. Miller MW. **J Comp Neurol** 1988 Aug 15;274(3):387-405

Morphological and electrophysiological identification of gigantocellular tegmental field neurons with descending projections in the cat: II. Bulb. Mitani A, et al. **J Comp Neurol** 1988 Aug 15;274(3):371-86

Morphology of physiologically identified second-order vestibular neurons in cat, with intracellularly injected HRP. Ohgaki T, et al. **J Comp Neurol** 1988 Oct 15;276(3):387-411

Basal forebrain cholinergic and noncholinergic projections to the thalamus and brainstem in cats and monkeys. Parent A, et al. **J Comp Neurol** 1988 Nov 8;277(2):281-301

Generation patterns of four groups of cholinergic neurons in rat cervical spinal cord: a combined tritiated thymidine autoradiographic and choline acetyltransferase immunocytochemical study. Phelps PE, et al. **J Comp Neurol** 1988 Jul 22;273(4):459-72

Ultrastructural and neurochemical analysis of synaptic input to trigemino-thalamic projection neurones in lamina I of the rat: a combined immunocytochemical and retrograde labelling study. Priestley JV, et al. **J Comp Neurol** 1989 Jul 22;285(4):467-86

Golgi study of the mouse striatum: age-related dendritic changes in different neuronal populations. Rafols JA, et al. **J Comp Neurol** 1989 Jan 8;279(2):212-27

Neuronal processing of conspecific and related calls in the torus semicircularis of Rana r. ridibunda Pall. (Anura): single-unit recordings. Diekamp B, et al. **J Comp Physiol [A]** 1988 Jul;163(3):301-15

Trophic control of lung development by sympathetic neurons: effects of neonatal sympathectomy with 6-hydroxydopamine. Slotkin TA, et al. **J Dev Physiol** 1988 Dec;10(6):577-90

The functional activity of hypothalamic 5-hydroxytryptamine neurones in broody bantam hens. Macnamee MC, et al. **J Endocrinol** 1989 Jan;120(1):125-34

New growth elicited in adult leech mechanosensory neurones by peripheral axon damage. Bannatyne BA, et al. **J Exp Biol** 1989 May;143:419-34

Optimizing release from peptide hormone secretory nerve terminals. Bicknell RJ. **J Exp Biol** 1988 Sep;139:51-65 (55 ref.)

Presynaptic calcium currents and facilitation of serotonin release at synapses between cultured leech neurones. Stewart RR, et al. **J Exp Biol** 1989 Jul;144:1-12

Na+, K+ and Ca2+ currents in identified leech neurones in culture. Stewart RR, et al. **J Exp Biol** 1989 Jan;141:1-20

Depression of excitatory motoneurones by a single neurone in the leech central nervous system. Wadepuhl M. **J Exp Biol** 1989 May;143:509-27

"Caged calcium" in Aplysia pacemaker neurons. Characterization of calcium-activated potassium and nonspecific cation currents. Landò L, et al. **J Gen Physiol** 1989 Jun;93(6):1017-60

B-wave of the electroretinogram. A reflection of ON bipolar cell activity. Stockton RA, et al. **J Gen Physiol** 1989 Jan; 93(1):101-22

Systemic phenoxybenzamine but not beta-adrenergic antagonists block noradrenergic inhibition of cerebellar Purkinje and hippocampal pyramidal neurons. Staunton DA, et al. **J Neural Transm** 1988;73(2):101-13

The role of the sexual organs in the generation of postembryonic neurons in the leech Hirudo medicinalis. Baptista CA, et al. **J Neurobiol** 1988 Dec;19(8):707-26

Joint hormonal and sensory stimulation modulate neuronal number in adult canary brains. Bottjer SW, et al. **J Neurobiol** 1988 Oct;19(7):624-35

Neural and glial phenotypic expression by neural crest cells in culture: effects of control and presumptive aganglionic bowel from ls/ls mice. Coulter HD, et al. **J Neurobiol** 1988 Sep;19(6):507-31

Parallel processing and selection of the responses to serotonin during reinnervation of an identified leech neuron. Drapeau P, et al. **J Neurobiol** 1989 Jul;20(5):312-25 (42 ref.)

The differential regulation of formation of chemical and electrical connections in Helisoma. Haydon PG, et al. **J Neurobiol** 1988 Oct;19(7):636-55

Long-term cultures of neurons from adult frog brain express GABA and glutamate-activated channels [published erratum appears in J Neurobiol 1989 Sep;20(6):603] Wetzel DM, et al. **J Neurobiol** 1989 Jun;20(4):255-70

In vivo measurement of extracellular 5-hydroxytryptamine in hippocampus of the anaesthetized rat using microdialysis: changes in relation to 5-hydroxytryptaminergic neuronal activity. Sharp T, et al. **J Neurochem** 1989 Jul;53(1):234-40

Neuronal activation regulates the expression of opioid receptors: possible role of glial-derived factors and voltage-dependent ion channels. Simantov R, et al. **J Neurochem** 1989 Jan;52(1):305-9

In vivo modulation of the N-methyl-D-aspartate receptor complex by D-serine: potentiation of ongoing neuronal activity as evidenced by increased cerebellar cyclic GMP. Wood PL, et al. **J Neurochem** 1989 Sep;53(3):979-81

Some mutations affecting neural or muscular tissues alter the physiological components of the electroretinogram in Drosophila. Homyk T Jr, et al. **J Neurogenet** 1989 Jan; 5(1):37-48

Persistent hypersynchronization of neocortical neurons in the mocha mutant of mouse. Noebels JL, et al. **J Neurogenet** 1989 Sep;6(1):53-6

Prelabeled red nucleus and sensorimotor cortex neurons of the rat survive 10 and 20 weeks after spinal cord transection. McBride RL, et al. **J Neuropathol Exp Neurol** 1989 Sep;48(5):568-76

Detecting spatiotemporal firing patterns among simultaneously recorded single neurons. Abeles M, et al. **J Neurophysiol** 1988 Sep;60(3):909-24

Dynamics of neuronal firing correlation: modulation of "effective connectivity". Aertsen AM, et al. **J Neurophysiol** 1989 May;61(5):900-17

Kinetic analysis of acetylcholine-induced current in isolated frog sympathetic ganglion cells. Akaike N, et al. **J Neurophysiol** 1989 Feb;61(2):283-90

Excitatory neurotransmission activates voltage-dependent properties in neurons in spinal motor system of lamprey. Alford S, et al. **J Neurophysiol** 1989 Aug;62(2):334-41

Electrophysiological characteristics of primate spinothalamic neurons with renal and somatic inputs. Ammons WS. **J Neurophysiol** 1989 Jun;61(6):1121-30

Renal and somatic input to spinal neurons antidromically activated from the ventrolateral medulla. Ammons WS. **J Neurophysiol** 1988 Dec;60(6):1967-81

Responses of primate spinothalamic tract neurons to renal pelvic distension. Ammons WS. **J Neurophysiol** 1989 Sep; 62(3):778-88

Lateral tegmental field neurons of cat medulla: a source of basal activity of raphespinal sympathoinhibitory neurons. Barman SM, et al. **J Neurophysiol** 1989 May;61(5):1011-24

Convergence of retinal W-cell and corticotectal input to cells of the cat superior colliculus. Berson DM. **J Neurophysiol** 1988 Dec;60(6):1861-73

Postsynaptic potentials recorded in neurons of the cat's lateral geniculate nucleus following electrical stimulation of the optic chiasm. Bloomfield SA, et al. **J Neurophysiol** 1988 Dec;60(6):1924-45

Participation of prefrontal neurons in the preparation of visually guided eye movements in the rhesus monkey. Boch RA, et al. **J Neurophysiol** 1989 May;61(5):1064-84

Synaptic effects of intercostal tendon organs on membrane potentials of medullary respiratory neurons. Bolser DC, et al. **J Neurophysiol** 1989 May;61(5):918-26

Neuroendocrine bag cells of Aplysia are activated by bag cell peptide-containing neurons in the pleural ganglion. Brown RO, et al. **J Neurophysiol** 1989 Jun;61(6):1142-52

Responses of low-frequency cells in the inferior colliculus to interaural time differences of clicks: excitatory and inhibitory components. Carney LH, et al. **J Neurophysiol** 1989 Jul;62(1):144-61

Measurement of passive membrane parameters with whole-cell recording from neurons in the intact amphibian retina. Coleman PA, et al. **J Neurophysiol** 1989 Jan; 61(1):218-30

Amplifying role of convergence in olfactory system a comparative study of receptor cell and second-order neuron sensitivities. Duchamp-Viret P, et al. **J Neurophysiol** 1989 May;61(5):1085-94

An electrophysiological study of single somatosensory neurons in rat granular cortex serving the limbs: a laminar analysis. Dykes RW, et al. **J Neurophysiol** 1988 Aug; 60(2):703-24

Physiological and pharmacological analysis of suppressive rod-cone interaction in Necturus retina [corrected] [published erratum appears in J Neurophysiol 1989 Jun;61(6):following Table of Contents] Eysteinsson T, et al. **J Neurophysiol** 1989 Apr;61(4):866-77

Norepinephrine selectively reduces slow Ca2+- and Na+-mediated K+ currents in cat neocortical neurons. Foehring RC, et al. **J Neurophysiol** 1989 Feb;61(2):245-56

Cerebellar neuronal activity related to whole-arm reaching movements in the monkey. Fortier PA, et al. **J Neurophysiol** 1989 Jul;62(1):198-211

Two components of rapid sensory adaptation in a cockroach mechanoreceptor neuron. French AS. **J Neurophysiol** 1989 Sep;62(3):768-77

Sets of synaptic currents paired by common presynaptic or postsynaptic neurons. Gardner D. **J Neurophysiol** 1989 Apr;61(4):845-53

Patterns of intracellular potentials in salamander mitral/tufted cells in response to odor stimulation. Hamilton KA, et al. **J Neurophysiol** 1989 Sep;62(3):609-25

Physiological properties of sensory trigeminal neurons projecting to mesencephalic parabrachial area in the cat. Hayashi H, et al. **J Neurophysiol** 1989 Jun;61(6):1153-60

Identification of two calcium currents in acutely dissociated neurons from the rat lateral geniculate nucleus. Hernández-Cruz A, et al. **J Neurophysiol** 1989 Jun; 61(6):1270-83

Organization and properties of neurons in a visual area within the insular cortex of the cat. Hicks TP, et al. **J Neurophysiol** 1988 Aug;60(2):397-421

Modality specificity of neuronal responses within the cat's insula. Hicks TP, et al. **J Neurophysiol** 1988 Aug; 60(2):422-37

Functional properties of monkey caudate neurons. II. Visual and auditory responses. Hikosaka O, et al. **J Neurophysiol** 1989 Apr;61(4):799-813

Functional properties of monkey caudate neurons. III. Activities related to expectation of target and reward. Hikosaka O, et al. **J Neurophysiol** 1989 Apr;61(4):814-32

Spinocervical tract neurons responsive to light mechanical stimulation of the raccoon forepaw. Hirata H, et al. **J Neurophysiol** 1989 Jan;61(1):138-48

Quantitative analysis of visual receptive fields of neurons in nucleus of the optic tract and dorsal terminal nucleus of the accessory optic tract in macaque monkey. Hoffmann KP, et al. **J Neurophysiol** 1989 Aug;62(2):416-28

Effects of tooth pulp deafferentation on nociceptive and nonnociceptive neurons of the feline trigeminal subnucleus caudalis (medullary dorsal horn). Hu JW, et al. **J Neurophysiol** 1989 Jun;61(6):1197-206

Voltage-clamp characterization of Cl- conductance gated by GABA and L-glutamate in single neurons of Aplysia. King WM, et al. **J Neurophysiol** 1989 May;61(5):892-9

Relation of cortical areas MT and MST to pursuit eye movements. III. Interaction with full-field visual stimulation. Komatsu H, et al. **J Neurophysiol** 1988 Aug; 60(2):621-44

Relation of cortical areas MT and MST to pursuit eye movements. I. Localization and visual properties of neurons. Komatsu H, et al. **J Neurophysiol** 1988 Aug; 60(2):580-603

Monaural and binaural response properties of neurons in the inferior colliculus of the rabbit: effects of sodium pentobarbital. Kuwada S, et al. **J Neurophysiol** 1989 Feb; 61(2):269-82

An iontophoretic study of single somatosensory neurons in rat granular cortex serving the limbs: a laminar analysis of glutamate and acetylcholine effects on receptive-field properties. Lamour Y, et al. **J Neurophysiol** 1988 Aug; 60(2):725-50

Periodicity coding in the inferior colliculus of the cat. I. Neuronal mechanisms. Langner G, et al. **J Neurophysiol** 1988 Dec;60(6):1799-822

Membrane currents of retinal bipolar cells in culture. Lasater EM. **J Neurophysiol** 1988 Oct;60(4):1460-80

Hypoxic changes in hippocampal neurons. Leblond J, et al. **J Neurophysiol** 1989 Jul;62(1):1-14

Spatial organization of visual messages of the rabbit's cerebellar flocculus. I. Typology of inferior olive neurons of the dorsal cap of Kooy. Leonard CS, et al. **J Neurophysiol** 1988 Dec;60(6):2073-90

Discharge patterns of rostrolateral medullary expiratory neurons in the cat: regulation by concurrent network processes. Lindsey BG, et al. **J Neurophysiol** 1989 Jun; 61(6):1185-96

Theory of dynamic similarity in neuronal systems. MacGregor RJ, et al. **J Neurophysiol** 1988 Aug; 60(2):751-68

Role of the acoustic striae in hearing: contribution of dorsal and intermediate striae to detection of noises and tones. Masterton RB, et al. **J Neurophysiol** 1988 Dec; 60(6):1841-60

Responses of rat lateral hypothalamic neuronal activity to fastigial nucleus stimulation. Min BI, et al. **J Neurophysiol** 1989 Jun;61(6):1178-84

A comparison of supramammillary and medial septal influences on hippocampal field potentials and single-unit activity. Mizumori SJ, et al. **J Neurophysiol** 1989 Jan; 61(1):15-31

Response properties of dorsolateral pontine units during smooth pursuit in the rhesus macaque. Mustari MJ, et al. **J Neurophysiol** 1988 Aug;60(2):664-86

Response properties of single units in the lateral terminal nucleus of the accessory optic system in the behaving primate. Mustari MJ, et al. **J Neurophysiol** 1989 Jun; 61(6):1207-20

Characterization of neurons responsive to noxious colorectal distension in the T13-L2 spinal cord of the rat. Ness TJ, et al. **J Neurophysiol** 1988 Oct;60(4):1419-38

Relation of cortical areas MT and MST to pursuit eye movements. II. Differentiation of retinal from extraretinal inputs. Newsome WT, et al. **J Neurophysiol** 1988 Aug; 60(2):604-20

Components of the responses of a population of DSCT neurons determined from single-unit recordings. Osborn CE, et al. **J Neurophysiol** 1989 Feb;61(2):447-55

Components of responses of a population of DSCT neurons to muscle stretch and contraction. Osborn CE, et al. **J Neurophysiol** 1989 Feb;61(2):456-65

5-HT-mediated synaptic potentials in the dorsal raphe nucleus: interactions with excitatory amino acid and GABA neurotransmission. Pan ZZ, et al. **J Neurophysiol** 1989 Aug;62(2):481-6

Neural coding of gustatory information in the thalamus of Macaca mulatta. Pritchard TC, et al. **J Neurophysiol** 1989 Jan;61(1):1-14

Patterns of resting discharge in neurons of the raccoon main cuneate nucleus. Pubols BH Jr, et al. **J Neurophysiol** 1989 Jun;61(6):1131-41

Temporally dependent changes in response properties of dorsal horn neurons after dorsolateral funiculus lesions. Pubols LM, et al. **J Neurophysiol** 1988 Oct;60(4):1253-67

Depth distribution of neuronal activity related to a visual reaction time task in the monkey prefrontal cortex. Sawaguchi T, et al. **J Neurophysiol** 1989 Feb;61(2):435-46

Whole cell recording from lobster olfactory receptor cells: responses to current and odor stimulation. Schmiedel-Jakob I, et al. **J Neurophysiol** 1989 May; 61(5):994-1000

Long-lasting reduction of excitability by a sodium-dependent potassium current in cat neocortical neurons. Schwindt PC, et al. **J Neurophysiol** 1989 Feb;61(2):233-44

W-and Y-cells in the C layers of the cat's lateral geniculate nucleus: normal properties and effects of monocular deprivation. Spear PD, et al. **J Neurophysiol** 1989 Jan; 61(1):58-73

Two populations of rhythmically bursting neurons in rat medial septum are revealed by atropine. Stewart M, et al. **J Neurophysiol** 1989 May;61(5):982-93

Patterns of spontaneous discharge in primate spinothalamic neurons. Surmeier DJ, et al. **J Neurophysiol** 1989 Jan; 61(1):106-15

Efferent neurons and suspected interneurons in S-1 vibrissa cortex of the awake rabbit: receptive fields and axonal properties. Swadlow HA. **J Neurophysiol** 1989 Jul; 62(1):288-308

Analysis of motion of the visual field by direction, expansion/contraction, and rotation cells clustered in the dorsal part of the medial superior temporal area of the macaque monkey. Tanaka K, et al. **J Neurophysiol** 1989 Sep;62(3):626-41

Underlying mechanisms of the response specificity of expansion/contraction and rotation cells in the dorsal part of the medial superior temporal area of the macaque monkey. Tanaka K, et al. **J Neurophysiol** 1989 Sep; 62(3):642-56

Deep neurons in piriform cortex. I. Morphology and synaptically evoked responses including a unique high-amplitude paired shock facilitation. Tseng GF, et al. **J Neurophysiol** 1989 Aug;62(2):369-85

Deep neurons in piriform cortex. II. Membrane properties that underlie unusual synaptic responses. Tseng GF, et al. **J Neurophysiol** 1989 Aug;62(2):386-400

Combination-sensitive neurons in the ventroanterior area of the auditory cortex of the mustached bat. Tsuzuki K, et al. **J Neurophysiol** 1988 Dec;60(6):1908-23

Encoding of electrical, thermal, and mechanical noxious stimuli by subnucleus reticularis dorsalis neurons in the rat medulla. Villanueva L, et al. **J Neurophysiol** 1989 Feb; 61(2):391-402

Effects of 5-hydroxytryptamine on the afterhyperpolarization, spike frequency regulation, and oscillatory membrane properties in lamprey spinal cord neurons. Wallén P, et al. **J Neurophysiol** 1989 Apr; 61(4):759-68

Discrimination among odorants by single neurons of the rat olfactory bulb. Wellis DP, et al. **J Neurophysiol** 1989 Jun; 61(6):1161-77

Taste responses of cortical neurons in freely ingesting rats. Yamamoto T, et al. **J Neurophysiol** 1989 Jun;61(6):1244-58

Trifluoperazine blocks GABA-gated chloride currents in cultured chick spinal cord neurons. Yang J, et al. **J Neurophysiol** 1989 Feb;61(2):363-73

Primary afferent-evoked synaptic responses and slow potential generation in rat substantia gelatinosa neurons in vitro. Yoshimura M, et al. **J Neurophysiol** 1989 Jul; 62(1):96-108

Ionic currents of Drosophila neurons in embryonic cultures. Byerly L, et al. **J Neurosci** 1988 Nov;8(11):4379-93

Pioneer growth cone adhesion in vivo to boundary cells and neurons after enzymatic removal of basal lamina in grasshopper embryos. Condic ML, et al. **J Neurosci** 1989 Aug;9(8):2687-96

Protein kinase inhibitors selectively block phorbol ester- or forskolin-induced changes in excitability of Aplysia neurons. Conn PJ, et al. **J Neurosci** 1989 Feb;9(2):473-9

Inhibitors of protein kinase C prevent enhancement of calcium current and action potentials in peptidergic neurons of Aplysia. Conn PJ, et al. **J Neurosci** 1989 Feb; 9(2):480-7

Dynamics of the endoplasmic reticulum and other membranous organelles in growth cones of cultured neurons. Dailey ME, et al. **J Neurosci** 1989 Jun; 9(6):1897-909

Selection of postsynaptic serotonin receptors during reinnervation of an identified leech neuron in culture. Drapeau P, et al. **J Neurosci** 1988 Dec;8(12):4718-27

Contact-mediated loss of the nonsynaptic response to transmitter during reinnervation of an identified leech neuron in culture. Drapeau P, et al. **J Neurosci** 1989 Jul; 9(7):2502-8

The effect of down regulation of protein kinase C on the inhibitory modulation of dorsal root ganglion neuron Ca2+ currents by neuropeptide Y. Ewald DA, et al. **J Neurosci** 1988 Jul;8(7):2447-51

Modulation of excitatory synaptic transmission by glycine and zinc in cultures of mouse hippocampal neurons. Forsythe ID, et al. **J Neurosci** 1988 Oct;8(10):3733-41

Monocularly deprived cats: binocular tests of cortical cells reveal functional connections from the deprived eye. Freeman RD, et al. **J Neurosci** 1988 Jul;8(7):2491-506

Local role of Ca2+ in formation of veils in growth cones. Goldberg DJ. **J Neurosci** 1988 Jul;8(7):2596-605

Development of inward currents in chick sensory and autonomic neuronal precursor cells in culture. Gottmann K, et al. **J Neurosci** 1988 Oct;8(10):3722-32

Sprouts emerging from the dendrites of axotomized lamprey central neurons have axonlike ultrastructure. Hall GF, et al. **J Neurosci** 1989 Feb;9(2):588-99

Comparison of effects of D-1 and D-2 dopamine receptor agonists on neurons in the rat caudate putamen: an electrophysiological study. Hu XT, et al. **J Neurosci** 1988 Nov;8(11):4340-8

Transneuronal regulation of protein synthesis in the brain-stem auditory system of the chick requires synaptic activation. Hyson RL, et al. **J Neurosci** 1989 Aug; 9(8):2835-45

Visual cortex development in the ferret. I. Genesis and migration of visual cortical neurons. Jackson CA, et al. **J Neurosci** 1989 Apr;9(4):1242-53

Relationships between segregated afferents and postsynaptic neurones in the optic tectum of three-eyed frogs. Katz LC, et al. **J Neurosci** 1988 Sep;8(9):3160-80

Controlled outgrowth of dissociated neurons on patterned substrates. Kleinfeld D, et al. **J Neurosci** 1988 Nov; 8(11):4098-120

Response-dedicated trigger neurons as control points for behavioral actions: selective inhibition of lateral giant command neurons during feeding in crayfish. Krasne FB, et al. **J Neurosci** 1988 Oct;8(10):3703-12

Two cell types in rat substantia nigra zona compacta distinguished by membrane properties and the actions of dopamine and opioids. Lacey MG, et al. **J Neurosci** 1989 Apr;9(4):1233-41

Peripheral target choice by homologous neurons during embryogenesis of the medicinal leech. I. Segment-specific preferences of Retzius cells. Loer CM, et al. **J Neurosci** 1989 Feb;9(2):513-27

Peripheral target choice by homologous neurons during embryogenesis of the medicinal leech. II. Innervation of ectopic reproductive tissue by nonreproductive Retzius cells. Loer CM, et al. **J Neurosci** 1989 Feb;9(2):528-38

Amacrine cell interactions underlying the response to change in the tiger salamander retina. Maguire G, et al. **J Neurosci** 1989 Feb;9(2):726-35

The extending astroglial process: development of glial cell shape, the growing tip, and interactions with neurons. Mason CA, et al. **J Neurosci** 1988 Sep;8(9):3124-34

Topographic distribution of modality-specific amygdalar neurons in alert monkey. Nishijo H, et al. **J Neurosci** 1988 Oct;8(10):3556-69

Single neuron responses in amygdala of alert monkey during complex sensory stimulation with affective significance. Nishijo H, et al. **J Neurosci** 1988 Oct;8(10):3570-83

Binocularly deprived cats: binocular tests of cortical cells show regular patterns of interaction. Ohzawa I, et al. **J Neurosci** 1988 Jul;8(7):2507-16

Muscarine and t-LHRH suppress M-current by activating an IAP-insensitive G-protein. Pfaffinger P. **J Neurosci** 1988 Sep;8(9):3343-53

Hippocampal neurons in the monkey with activity related to the place in which a stimulus is shown. Rolls ET, et al. **J Neurosci** 1989 Jun;9(6):1835-45

The role of a modulatory neuron in feeding and satiation in Aplysia: effects of lesioning of the serotonergic metacerebral cells. Rosen SC, et al. **J Neurosci** 1989 May; 9(5):1562-78

Rat CNS white matter, but not gray matter, is nonpermissive for neuronal cell adhesion and fiber outgrowth. Savio T, et al. **J Neurosci** 1989 Apr;9(4):1126-33

Amplitude fluctuations in small EPSPs recorded from CA1 pyramidal cells in the guinea pig hippocampal slice. Sayer RJ, et al. **J Neurosci** 1989 Mar;9(3):840-50

Evidence for the transneuronal regulation of cerebellin biosynthesis in developing Purkinje cells. Slemmon JR, et al. **J Neurosci** 1988 Dec;8(12):4603-11

Human medullary thyroid carcinoma: characterization of the serotonergic and neuronal properties of a neurectodermally derived cell line. Tamir H, et al. **J Neurosci** 1989 Apr; 9(4):1199-212

Place cells and silent cells in the hippocampus of freely-behaving rats. Thompson LT, et al. **J Neurosci** 1989 Jul;9(7):2382-90

Inward rectification in response to FMRFamide in Aplysia neuron L2: summation with transient K current. Thompson S, et al. **J Neurosci** 1988 Sep;8(9):3200-7

Responses of lateral geniculate neurons that survive long-term visual cortex damage in kittens and adult cats. Tumosa N, et al. **J Neurosci** 1989 Jan;9(1):280-98

Structural and functional properties of reticulospinal neurons in the early-swimming stage Xenopus embryo. van Mier P, et al. **J Neurosci** 1989 Jan;9(1):25-37

Voltage- and ligand-activated inwardly rectifying currents in dorsal raphe neurons in vitro. Williams JT, et al. **J Neurosci** 1988 Sep;8(9):3499-506

Inward rectification of resting and opiate-activated potassium currents in rat locus coeruleus neurons. Williams JT, et al. **J Neurosci** 1988 Nov;8(11):4299-306

The effects of postsynaptic levels of cyclic AMP on excitatory and inhibitory responses of an identified central neuron. Wolszon LR, et al. **J Neurosci** 1989 Mar; 9(3):784-97

Enhancing high-speed digitization of single-unit neuronal activity on a microcomputer using a hybrid software-hardware technique. Aldridge JW, et al. **J Neurosci Methods** 1989 Jun;28(3):205-8

Head restraint device for chronic recording of neural activity in the awake monkey. Buchholz SR, et al. **J Neurosci Methods** 1988 Sep;25(2):139-41

The sequential-interval state space: a means of displaying temporal information in neuron firing. Eagan KP, et al. **J Neurosci Methods** 1989 Apr;27(3):245-52

A chamber for electrophysiological recording from cultured neurones allowing perfusion and temperature control. Forsythe ID, et al. **J Neurosci Methods** 1988 Aug; 25(1):19-27

Visual receptive fields of local intracortical potentials. Lohmann H, et al. **J Neurosci Methods** 1988 Aug; 25(1):29-44

How synaptic noise may affect cross-correlations. Midroni G, et al. **J Neurosci Methods** 1989 Feb;27(1):1-12

A new method for relating behavior to neuronal activity in performing monkeys. Montgomery EB Jr. **J Neurosci Methods** 1989 Jun;28(3):197-204

Unsupervised waveform classification for multi-neuron recordings: a real-time, software-based system. I. Algorithms and implementation. Salganicoff M, et al. **J Neurosci Methods** 1988 Oct;25(3):181-7

Unsupervised waveform classification for multi-neuron recordings: a real-time, software-based system. II. Performance comparison to other sorters. Sarna MF, et al. **J Neurosci Methods** 1988 Oct;25(3):189-96

Components of neurite outgrowth that determine neuronal cytoarchitecture: influence of calcium and the growth substrate. Mattson MP, et al. **J Neurosci Res** 1988 Jul; 20(3):331-45

Different classes of cat spinal neurons display differential sensitivity to sodium pentobarbital. Paik KS, et al. **J Neurosci Res** 1989 May;23(1):107-15

Protein kinase C activators reduce the inositol trisphosphate-induced outward current and the Ca2+-activated outward current in identified neurons of Aplysia. Sawada M, et al. **J Neurosci Res** 1989 Feb; 22(2):158-66

Effect of cocaine and cocaine congeners on veratridine-induced depolarization in mouse cerebrocortical synaptoneurosomes. Zimányi I, et al. **J Neurosci Res** 1989 Feb;22(2):201-8

Effect of dorsal-column stimulation on gelatinosa and marginal neurons of cat spinal cord. Dubuisson D. **J Neurosurg** 1989 Feb;70(2):257-65

The effects of scopolamine and traumatic brain injury on central cholinergic neurons. Saija A, et al. **J Neurotrauma** 1988;5(2):161-70

Evidence for involvement of 5-hydroxytryptamine1 receptors in antidepressant-like drug effects on differential-reinforcement-of-low-rate 72-second behavior. Marek GJ, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):60-71

Intracellular chloride regulation in amphibian dorsal root ganglion neurones studied with ion-selective microelectrodes. Alvarez-Leefmans FJ, et al. **J Physiol (Lond)** 1988 Dec;406:225-46

Stimulation of afferent fibres of the guinea-pig ureter evokes potentials in inferior mesenteric ganglion neurones. Amann R, et al. **J Physiol (Lond)** 1988 Aug;402:543-53

Outward rectification of inhibitory postsynaptic currents in cultured rat hippocampal neurones. Barker JL, et al. **J Physiol (Lond)** 1988 Sep;403:41-55

Electrophysiological properties of rostral medullary respiratory neurones in the cat: an intracellular study.

Bianchi AL, et al. **J Physiol (Lond)** 1988 Dec;407:293–310
Bilateral inputs and supraspinal control of viscerosomatic neurones in the lower thoracic spinal cord of the cat. Cervero F, et al. **J Physiol (Lond)** 1988 Sep;403:221–37
Synaptic potentials in rat locus coeruleus neurones. Cherubini E, et al. **J Physiol (Lond)** 1988 Dec;406:431–42
Two inhibitory postsynaptic potentials, and GABAA and GABAB receptor-mediated responses in neocortex of rat and cat. Connors BW, et al. **J Physiol (Lond)** 1988 Dec; 406:443–68
Taste responses in the nucleus tractus solitarius of sodium-deprived rats. Jacobs KM, et al. **J Physiol (Lond)** 1988 Dec;406:393–410
Adenosine 5'-triphosphate modulates membrane potassium conductance in guinea-pig myenteric neurones. Katayama Y, et al. **J Physiol (Lond)** 1989;408:373–90
On the potassium conductance increase activated by GABAB and dopamine D2 receptors in rat substantia nigra neurones. Lacey MG, et al. **J Physiol (Lond)** 1988 Jul;401:437–53
Ventrolateral medullary neurones: effects on magnitude and rhythm of discharge of mesenteric and renal nerves in cats. Stein RD, et al. **J Physiol (Lond)** 1989;408:571–86
Cellular and molecular aspects of glial neurone interactions. 11th Gif lecture in neurobiology. Gif-sur-Yvette, November 27–28th 1986. **J Physiol (Paris)** 1987; 82(4):191–356
Further studies on the role of astroglia in brain neurons maturation and morphogenesis. Prochiantz A, et al. **J Physiol (Paris)** 1987;82(4):291–3
2-Hydroxyestradiol is not mediating the effects of estradiol on tuberoinfundibular dopaminergic neurons controlling prolactin secretion in female rats. Fernández-Ruiz JJ, et al. **J Steroid Biochem** 1989 Jan;32(1A):71–5
Temperature-sensitive activation of G-protein regulating the resting membrane conductance of Aplysia neurons. Hakozaki S, et al. **Jpn J Physiol** 1989;39(1):115–30
Electrical properties and activities of single neurons in rat suprachiasmatic nuclei. Akasu T, et al. **Kurume Med J** 1988; 35(4):217–20
Muscarinic M2 receptors on cardiac ganglion neurons of the guinea-pig heart. Mihara S, et al. **Kurume Med J** 1988; 35(4):183–92
Role of the sodium pump in regulating the excitability of neurons in the vesical parasympathetic ganglia of the rabbit. Nishimura T, et al. **Kurume Med J** 1988;35(4):221–4
In vivo voltammetry in the B3 group of serotonin neurons of the rat medulla oblongata after drug-induced modifications of arterial pressure. Aslanian V, et al. **Life Sci** 1988;43(13):1031–8
Cholecystokinin stimulates neuronal receptors to produce contraction of the canine colon. Barone FC, et al. **Life Sci** 1989;44(8):533–42
Tonic activity of submucosal neurons influences basal ion transport. Carey HV, et al. **Life Sci** 1989;44(16):1083–8
Effects of imipramine and serotonin-2 agonists and antagonists on serotonin-2 and beta-adrenergic receptors following noradrenergic or serotonergic denervation. Eison AS, et al. **Life Sci** 1989;44(19):1419–27
Nicotine induced excitation of locus coeruleus neurons is mediated via release of excitatory amino acids. Engberg G. **Life Sci** 1989;44(21):1535–40
Drug receptors on single enteric neurons. Galligan JJ, et al. **Life Sci** 1988;43(26):2183–92 (79 ref.)
Ethanol withdrawal in the rat: involvement of noradrenergic neurons. Pohorecky LA, et al. **Life Sci** 1974 Aug 1; 15(3):427–37
Electrophysiological evidence for involvement of cyclic adenosine monophosphate in dopamine responses of caudate neurons. Siggins GR, et al. **Life Sci** 1974 Aug 15; 15(4):779–92
Effects of aging on neuronal electrical membrane properties. Scott B, et al. **Mech Ageing Dev** 1988 Sep;44(3):203–14
Hardware-based adaptive system for discrimination of neuronal spikes. Nakao M, et al. **Med Biol Eng Comput** 1988 Jul;26(4):360–6
Time-domain cross-correlation assembly language routine for the IBM PC and an application in neural signal analysis. Ricci D, et al. **Med Biol Eng Comput** 1988 Jul;26(4):454–6
Differential effects of axotomy on immature and mature hamster facial neurons: a tritiated-uridine autoradiographic study. Jones KJ, et al. **Metab Brain Dis** 1987 Dec; 2(4):259–69
In situ hybridization histochemistry combined with markers of neuronal connectivity. Schwaber JS, et al. **Methods Enzymol** 1989;168:778–91
Voltage clamping with single microelectrodes: comparison of the discontinuous mode and continuous mode using the Axoclamp 2A amplifier. Pun RY. **Mol Cell Biochem** 1988 Mar-Apr;80(1-2):109–20 (41 ref.)
Glucocorticoid- and nerve growth factor-induced changes in chromogranin A expression define two different neuronal phenotypes in PC12 cells. Rausch DM, et al. **Mol Endocrinol** 1988 Oct;2(10):921–7
"Run-down" of gamma-aminobutyric acidA receptor function during whole-cell recording: a possible role for phosphorylation. Gyenes M, et al. **Mol Pharmacol** 1988 Dec;34(6):719–23
Modification of slow inactivation of single sodium channels by phenytoin in neuroblastoma cells. Quandt FN. **Mol Pharmacol** 1988 Oct;34(4):557–65
Patch-clampers clean the brain [news] Ascher P. **Nature** 1989 Jul 27;340(6231):267–8
Neuronal-glial interactions. A new form of transmission? [news] Barres BA. **Nature** 1989 Jun 1;339(6223):343–4
Rapid increase of an immediate early gene messenger RNA in hippocampal neurons by synaptic NMDA receptor activation. Cole AJ, et al. **Nature** 1989 Aug 10; 340(6233):474–6
The recent excitement about neural networks. Crick F. **Nature** 1989 Jan 12;337(6203):129–32
5-HT3 receptors are membrane ion channels. Derkach V, et al. **Nature** 1989 Jun 29;339(6227):706–9
Development of neuronal polarity: GAP-43 distinguishes axonal from dendritic growth cones. Goslin K, et al. **Nature** 1988 Dec 15;336(6200):672–4
Inhibition contributes to orientation selectivity in visual cortex of cat. Hata Y, et al. **Nature** 1988 Oct 27; 335(6193):815–7
Temporal hyperacuity in single neurons of electric fish. Kawasaki M, et al. **Nature** 1988 Nov 10;336(6195):173–6
Segmental patterns of neuronal development in the chick hindbrain. Lumsden A, et al. **Nature** 1989 Feb 2; 337(6206):424–8
Using caged neurotransmitters. Marque JJ. **Nature** 1989 Feb 9;337(6207):583–4
Neuronal correlate of visual associative long-term memory in the primate temporal cortex. Miyashita Y. **Nature** 1988 Oct 27;335(6193):817–20
Cell physiology. Answer in a flash [news] Ogden D. **Nature** 1988 Nov 3;336(6194):16–7
GABAA responses in hippocampal neurons are potentiated by glutamate. Stelzer A, et al. **Nature** 1989 Jan 12; 337(6203):170–3
Effects of moving textured background on neuronal responses in the toad's optic tectum. Tsai H, et al. **Naturwissenschaften** 1989 Jan;76(1):37–8
Similarities between the relaxations induced by vasoactive intestinal peptide and by stimulation of the non-adrenergic non-cholinergic neurons in the rat stomach. Kamata K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):401–6
Neuron numbers and sizes in aging brain: comparisons of human, monkey, and rodent data. Flood DG, et al. **Neurobiol Aging** 1988 Sep-Dec;9(5-6):453–63 (69 ref.)
Estrogen-dependent and estrogen-independent effects of progesterone on the electrophysiological excitability of dorsal midbrain neurons in golden hamsters. Havens MD, et al. **Neuroendocrinology** 1988 Aug;48(2):120–9
Median eminence dopamine and serotonin neuronal activity. Temporal relationship to preovulatory prolactin and luteinizing hormone surges. Kerdelhué B, et al. **Neuroendocrinology** 1989 Feb;49(2):176–80
Histaminergic regulation of prolactin secretion: involvement of tuberoinfundibular dopaminergic neurons. Knigge U, et al. **Neuroendocrinology** 1988 Aug;48(2):167–73
Postsynaptic effects of prolactin and estrogen on arcuate neurons in rat hypothalamic slices. Nishihara M, et al. **Neuroendocrinology** 1989 Feb;49(2):215–8
A subset of neurons containing immunoreactive prolactin is a target for estrogen regulation of gene expression in rat hypothalamus. Shivers BD, et al. **Neuroendocrinology** 1989 Jan;49(1):23–7
GABAergic neocortical neurons are resistant to NMDA receptor-mediated injury. Tecoma ES, et al. **Neurology** 1989 May;39(5):676–82
Different actions of a short-acting barbiturate on sodium and potassium conductances in invertebrate and vertebrate neurons. Johansen J, et al. **Neuropharmacology** 1989 Feb; 28(2):153–60
Blockade of alpha 2-adrenergic receptors, but not blockade of gamma-aminobutyric acidA, serotonin, or opiate receptors, augments responsiveness of locus coeruleus neurons to excitatory stimulation. Simson PE, et al. **Neuropharmacology** 1989 Jul;28(7):651–60
Excitation of striatal neurons by dexamphetamine is not abolished by either chloral hydrate or urethane anaesthesia. Warenycia MW, et al. **Neuropharmacology** 1988 Dec; 27(12):1309–12
Potency of antipsychotics in reversing the effects of a hallucinogenic drug on locus coeruleus neurons correlates with 5-HT2 binding affinity. Rasmussen K, et al. **Neuropsychopharmacology** 1988 May;1(2):101–7
Role of inhibitory processes in shaping functional characteristics of neurons of the vibrissae projection area of the somatosensory cortex in the cat. Batuev AS, et al. **Neurosci Behav Physiol** 1988 May-Jun;18(3):222–30
Habituation of command neurons against the background of introducing an analogue of vasopressin in snails. Kudryashova IV. **Neurosci Behav Physiol** 1988 Jul-Aug; 18(4):280–1
Conjugation of unit activity in visual and sensorimotor neocortical areas of rabbits during calm wakefulness and pseudoconditioning. Pavlova IV. **Neurosci Behav Physiol** 1988 May-Jun;18(3):193–201
Two forms of noradenergic modulation of neocortical neurons in early ontogeny of cats. Raevskii VV. **Neurosci Behav Physiol** 1988 May-Jun;18(3):265–7
Behavioral specialization of neurons of the cortex and hypothalamus of the rabbit. Shevchenko DG. **Neurosci Behav Physiol** 1988 Sep-Oct;18(5):425–32
Influence of piracetam on activity of neurons of the neocortex of rabbits during learning. Shul'gina GI, et al. **Neurosci Behav Physiol** 1989 May-Jun;19(3):229–35
Cellular analog of "instrumental behavior" in individual neurons of a mollusk with intracellular automatic electrostimulation. Verbnyi YaI, et al. **Neurosci Behav Physiol** 1989 May-Jun;19(3):235–41
Local changes in transmembrane ionic currents during plastic reorganizations of electrogenesis of isolated neurons of the pond snail. Zapara GA, et al. **Neurosci Behav Physiol** 1989 May-Jun;19(3):224–9
4-Aminopyridine induces a long-lasting depolarizing GABA-ergic potential in human neocortical and hippocampal neurons maintained in vitro. Avoli M, et al. **Neurosci Lett** 1988 Dec 5;94(3):327–32
Electrophysiological properties of neurons in neonatal rat occipital cortex slices grown in a serum-free medium. Baker RE, et al. **Neurosci Lett** 1989 Feb 27;97(3):310–5
Electrophysiological connections of neurons in ventral pallidal regions of the olfactory tubercle with the main olfactory bulb and piriform cortex. Barragán E, et al. **Neurosci Lett** 1988 Nov 11;93(2-3):214–9
The GABAergic neurones of the cerebellar nuclei in the rat: projections to the cerebellar cortex. Batini C, et al. **Neurosci Lett** 1989 May 8;99(3):251–6
N-linked oligosaccharides are not required for neuron-neuron interactions mediated by neural cell adhesion molecule. Cole GJ, et al. **Neurosci Lett** 1988 Nov 11;93(2-3):170–5
The A-type potassium current: methoxybenzenes increase the rate of inactivation in snail neurons. Erdélyi L, et al. **Neurosci Lett** 1989 Jul 17;102(1):44–9
Dichotomizing unmyelinated afferents supplying pelvic viscera and perineum are rare in the sacral segments of the cat. Häbler HJ, et al. **Neurosci Lett** 1988 Nov 22; 94(1-2):119–24
Serotonergic dorsal raphe neurons: changes in spontaneous neuronal activity and responsiveness to 5-MeODMT following long-term amphetamine administration. Heidenreich BA, et al. **Neurosci Lett** 1989 Aug 14; 103(1):81–6
Morphology of identified projection neurons in layer 5 of rat visual cortex. Hübener M, et al. **Neurosci Lett** 1988 Nov 22;94(1-2):76–81
Ontogeny of tyrosine hydroxylase-positive but dopamine beta-hydroxylase-negative neuron-like cells in the pineal gland of golden hamsters. Jin KL, et al. **Neurosci Lett** 1989 Feb 13;97(1-2):41–5
Glutamate induces a depolarization of adult rat dorsal root ganglion neurons that is mediated predominantly by NMDA receptors. Lovinger DM, et al. **Neurosci Lett** 1988 Dec 5;94(3):314–20
The kainate/quisqualate receptor antagonist, CNQX, blocks the fast component of spontaneous epileptiform activity in organotypic cultures of rat hippocampus. McBain CJ, et al. **Neurosci Lett** 1988 Nov 11;93(2-3):341–5
A GABA-mediated inhibition of neurones in the nucleus tractus solitarius of the cat that respond to electrical stimulation of the carotid sinus nerve. McWilliam PN, et al. **Neurosci Lett** 1988 Dec 5;94(3):321–6
Characteristics of tooth pulp-driven neurons in the posterior group of the cat thalamus. Matsumoto N, et al. **Neurosci Lett** 1988 Nov 11;93(2-3):253–8
Quisqualate receptor-mediated rhythmic bursting of rat hypothalamic neurons in dissociated cell culture. Misgeld U, et al. **Neurosci Lett** 1989 Apr 10;98(3):291–6
GTP-binding proteins mediate the M2-muscarinic effect on the action potential in isolated sympathetic neurons of rabbits. Mochida S, et al. **Neurosci Lett** 1988 Nov 11; 93(2-3):247–52
Excitatory and inhibitory amino acids and peptide-induced responses in acutely isolated rat spinal dorsal horn neurons. Murase K, et al. **Neurosci Lett** 1989 Aug 14;103(1):56–63
Simultaneous recording of presynaptic spikes and excitatory postsynaptic potentials from monosynaptically connected hippocampal neurons. Sawada S, et al. **Neurosci Lett** 1989 Aug 14;103(1):34–8
Glutamate decarboxylase-immunoreactive neurons in the aging rat hippocampus are more resistant to ischemia than CA1 pyramidal cells. Schlander M, et al. **Neurosci Lett** 1988 Sep 12;91(3):241–6
Synaptic transmission between cultured rat hippocampal neurons is enhanced by activation of protein kinase-C. Segal M. **Neurosci Lett** 1989 Jun 19;101(2):169–74
Comparison of low-threshold Ca2+ currents in the hippocampal CA1 neurons among the newborn, adult and aged rats. Takahashi K, et al. **Neurosci Lett** 1989 Aug 14; 103(1):29–33
Neuronal activity of the supplementary motor area (SMA) during internally and externally triggered wrist movements. Thaler DE, et al. **Neurosci Lett** 1988 Nov 11;93(2-3):264–9
Separation of different types of afterpotentials following penicillin-induced paroxysmal depolarization shifts of neurons in the motor cortex of the rat. Witte OW, et al. **Neurosci Lett** 1989 Jun 5;101(1):51–6
Delayed and fast transient potassium currents in rat neocortical neurons in cell culture. Zona C, et al. **Neurosci Lett** 1988 Dec 5;94(3):285–90
Calcium influx through N-methyl-D-aspartate channels activates a potassium current in postnatal rat hippocampal neurons. Zorumski CF, et al. **Neurosci Lett** 1989 May 8; 99(3):293–9
Action potentials and sodium inward currents of developing neurons in Xenopus nerve-muscle cultures. Kidokoro Y, et al. **Neurosci Res** 1989 Feb;6(3):191–208
Effects of dopamine on spatial properties of horizontal cell

responses in the carp retina. Shigematsu Y, et al. **Neurosci Res Suppl** 1988;8:S69–80

Modulation of calcium current by calmodulin antagonists. Doroshenko PA, et al. **Neuroscience** 1988 Dec; 27(3):1073–80

Spinal lamina I projection neurons in the rat: collateral innervation of parabrachial area and thalamus. Hylden JL, et al. **Neuroscience** 1989;28(1):27–37

Enkephalin fibers synapse on cholinergic neurons in the rat sacral intermediolateral nucleus: a double-immunostaining at the light and electron microscopic levels. Kohno J, et al. **Neuroscience** 1989;28(2):487–94

Excitatory effect of serotonin on pacemaker neurons in spinal cord cell culture. Legendre P, et al. **Neuroscience** 1989; 28(1):201–9

Electrophysiological and pharmacological evidence for the existence of distinct subpopulations of nigrostriatal dopaminergic neuron in the rat. Shepard PD, et al. **Neuroscience** 1988 Nov;27(2):537–46

Electrophysiological characteristics of morphologically identified reticular thalamic neurons from rat slices. Spreafico R, et al. **Neuroscience** 1988 Nov;27(2):629–38

Calcium and neuronal function. Simons TJ. **Neurosurg Rev** 1988;11(2):119–29 (76 ref.)

Simulating stimulating bulges: the electrical meddling of neurons. Hentall ID. **P R Health Sci J** 1988 Aug;7(2):144–8

Proton-induced transformation of Ca2+ channel: possible mechanisms and physiological implications. Morad M, et al. **P R Health Sci J** 1988 Aug;7(2):113–6

Long-term changes in discharge behaviour of cat dorsal horn neurones following noxious stimulation of deep tissues. Hoheisel U, et al. **Pain** 1989 Feb;36(2):239–47

Neuronal manifestation of two-way connections in conditioning. Merzhanova GKh. **Pavlov J Biol Sci** 1988 Oct–Dec;23(4):135–42

Electrophysiological studies with new CCK analogs: correlation with binding affinity on B-type receptors. Böhme GA, et al. **Peptides** 1989 Mar–Apr;10(2):407–14

Neuropeptides and septo-hippocampal neurons: electrophysiological effects and distributions of immunoreactivity. Lamour Y, et al. **Peptides** 1988 Nov–Dec;9(6):1351–9

Sites of origin of growth hormone-releasing factor-containing neurons projecting to the stalk-median eminence of the rat. Niimi M, et al. **Peptides** 1989 May–Jun; 10(3):605–8

Potassium channels: function, regulation and pharmacology in neuronal, muscular, secretory and immune systems. Proceedings of the Rhône-Polenc Santé Foundation, 6th international round table. Paris, 23rd January 1989. **Pflugers Arch** 1989;414 Suppl 1:S71–193

Potassium current kinetics and single-channel currents in embryonic cultured insect neurones. Amar M, et al. **Pflugers Arch** 1989;414 Suppl 1:S145–6

KNa. A sodium-activated potassium current. Bertrand D, et al. **Pflugers Arch** 1989;414 Suppl 1:S76–9

A thin slice preparation for patch clamp recordings from neurones of the mammalian central nervous system. Edwards FA, et al. **Pflugers Arch** 1989 Sep;414(5):600–12

Electrophysiological function of the delayed rectifier (IK) in bullfrog sympathetic ganglion neurones. Goh JW, et al. **Pflugers Arch** 1989 Mar;413(5):482–6

Involvement of calcium-activated K+ channels in the firing characteristics of molluscan neurones. Gola M, et al. **Pflugers Arch** 1989;414 Suppl 1:S142–3

Presynaptic inhibition of cholinergic transmission by peptidergic neurons in bullfrog sympathetic ganglia. Hasuo H, et al. **Pflugers Arch** 1988 Dec;413(2):206–8

Kinetic analysis of acetylcholine-induced chloride current in isolated Aplysia neurones. Ikemoto Y, et al. **Pflugers Arch** 1988 Aug;412(3):240–7

Multiplicity of unitary potassium channels recorded in the somata of cultured neurones from cockroach embryos. Larmet Y, et al. **Pflugers Arch** 1989;414 Suppl 1:S147

Peripheral chemoreceptor inputs to medullary inspiratory and postinspiratory neurons of cats. Lawson EE, et al. **Pflugers Arch** 1989 Sep;414(5):523–33

Neuronal control of extrajunctional acetylcholine receptor-channels induced by injury in frog skeletal muscle fibres. Reiser G, et al. **Pflugers Arch** 1989 Jun;414(2):113–7

Influence of rubrospinal tract and the adjacent mesencephalic reticular formation on the activity of medullary respiratory neurons and the phrenic nerve discharge in the rabbit. Schmid K, et al. **Pflugers Arch** 1988 Nov;413(1):23–31

Neural function: metabolism and actions of inositol metabolites in mammalian brain. Hanley MR, et al. **Philos Trans R Soc Lond [Biol]** 1988 Jul 26; 320(1199):381–98 (60 ref.)

Electrophysiological properties of the isolated vestibulocerebellar complex of the frog in vitro. Strauss P. **Physiol Bohemoslov** 1988;37(5):407–16

A macromolecular approach to excitation phenomena: mechanical and thermal changes in nerve during excitation. Tasaki I. **Physiol Chem Phys Med NMR** 1988;20(4):251–68 (63 ref.)

Electrical field effects: their relevance in central neural networks. Faber DS, et al. **Physiol Rev** 1989 Jul; 69(3):821–63 (198 ref.)

Optical imaging of neuronal activity. Grinvald A, et al. **Physiol Rev** 1988 Oct;68(4):1285–366 (254 ref.)

Neuromelanin and its possible protective and destructive properties. Lindquist NG, et al. **Pigment Cell Res** 1987; 1(3):133–6 (63 ref.)

Birth of projection neurons in the higher vocal center of the canary forebrain before, during, and after song learning. Alvarez-Buylla A, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8722–6

Axonal arborizations of a magnocellular basal nucleus input and their relation to the neurons in the thalamic reticular nucleus of rats. Asanuma C. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4746–50

Adaptation of antennal neurons in moths is associated with cessation of pheromone-mediated upwind flight. Baker TC, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9826–30

Organization of corticocortical connections in human visual cortex. Burkhalter A, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1071–5

Consequences of stochastic release of neurotransmitters for network computation in the central nervous system. Burnod Y, et al. **Proc Natl Acad Sci U S A** 1989 Jan; 86(1):352–6

Process elimination underlies ontogenetic change in the distribution of callosal projection neurons in the postcentral gyrus of the fetal rhesus monkey. Chalupa LM, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1076–9

Cell cultures of neuroblasts from rat olfactory epithelium that show odorant responses. Coon HG, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1703–7

Stimulus-specific neuronal oscillations in orientation columns of cat visual cortex. Gray CM, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1698–702

Intermittent chaos, self-organization, and learning from synchronous synaptic activity in model neuron networks. Hoppensteadt FC. **Proc Natl Acad Sci U S A** 1989 May; 86(9):2991–5

Noise in neural networks: thresholds, hysteresis, and neuromodulation of signal-to-noise. Keeler JD, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1712–6

Role of Ca2+ channels in the ability of membrane depolarization to prevent neuronal death induced by trophic-factor deprivation: evidence that levels of internal Ca2+ determine nerve growth factor dependence of sympathetic ganglion cells. Koike T, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6421–5

Purification and characterization of glia maturation factor beta: a growth regulator for neurons and glia. Lim R, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3901–5

Blocking and isolation of a calcium channel from neurons in mammals and cephalopods utilizing a toxin fraction (FTX) from funnel-web spider poison. Llinás R, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1689–93

Concanavalin A selectively reduces desensitization of mammalian neuronal quisqualate receptors. Mayer ML, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1411–5

Visual responses of neurons in somatosensory cortex of hamsters with experimentally induced retinal projections to somatosensory thalamus. Métin C, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):357–61

Formation and action of 8-hydroxy-11,12-epoxy-5,9,14-icosatrienoic acid in Aplysia: a possible second messenger in neurons. Piomelli D, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1721–5

Differences in the negative allosteric modulation of gamma-aminobutyric acid receptors elicited by 4'-chlorodiazepam and by a beta-carboline-3-carboxylate ester: a study with natural and reconstituted receptors. Puia G, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7275–9

Spatially and temporally resolved calcium concentration changes in oscillating neurons of crab stomatogastric ganglion. Ross WN, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1679–83

Reentrant signaling among simulated neuronal groups leads to coherency in their oscillatory activity. Sporns O, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7265–9

T-type calcium channels mediate the transition between tonic and phasic firing in thalamic neurons. Suzuki S, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7228–32

Age-related development of a heterozygous phenotype in solitary neurons of the homozygous Brattleboro rat. van Leeuwen F, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(16):6417–20

Transient low-threshold Ca2+ current triggers burst firing through an afterdepolarizing potential in an adult mammalian neuron. White G, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6802–6

Magnetic localization of neuronal activity in the human brain. Yamamoto T, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(22):8732–6

Response characteristics of neurons in chick forebrain slices. Bradley PM, et al. **Proc R Soc Lond [Biol]** 1988 Jul 22; 234(1275):145–57

Role of excitatory amino acid receptors in synaptic transmission in area CA1 of rat hippocampus. Davies SN, et al. **Proc R Soc Lond [Biol]** 1989 May 22;236(1285):373–84

Steps in the development of chemical and electrical synapses by pairs of identified leech neurons in culture. Liu Y, et al. **Proc R Soc Lond [Biol]** 1989 Apr 22;236(1284):253–68

Development of ionic conductances in neurons of the inferior olive in the rat: an in vitro study. Pettigrew AG, et al. **Proc R Soc Lond [Biol]** 1988 Jul 22;234(1275):199–218

The assembly of ionic currents in a thalamic neuron. I. The three-dimensional model. Rose RM, et al. **Proc R Soc Lond [Biol]** 1989 Aug 22;237(1288):267–88

The assembly of ionic currents in a thalamic neuron. II. The stability and state diagrams. Rose RM, et al. **Proc R Soc Lond [Biol]** 1989 Aug 22;237(1288):289–312

The assembly of ionic currents in a thalamic neuron. III. The seven-dimensional model. Rose RM, et al. **Proc R Soc Lond [Biol]** 1989 Aug 22;237(1288):313–34

Dual actions of N-butanol on electrical excitability of the molluscan neurons. Barnes CD, et al. **Proc West Pharmacol Soc** 1988;31:13–5

Cisapride potentiates fast nicotinic synaptic potentials in the myenteric plexus of the guinea pig ileum. Galligan JJ, et al. **Proc West Pharmacol Soc** 1988;31:9–11

Differences between Ca2+- and Sr2+-activated gK+ in bullfrog sympathetic neurons. Riker WK, et al. **Proc West Pharmacol Soc** 1988;31:1–3

Electrophysiological analysis of chemosensitive neurons within the area postrema of the rat. Adacjo A, et al. **Prog Brain Res** 1988;74:77–83

Lens accommodation-related and pupil-related units in the lateral suprasylvian area in cats. Bando T, et al. **Prog Brain Res** 1988;75:231–6

Effect of target and non-target transplants on neuronal survival and axonal elongation after injury to the developing spinal cord. Bregman BS, et al. **Prog Brain Res** 1988;78:205–11

Cellular and molecular models of neuron-matrix adhesion in nerve fiber growth. Carbonetto S, et al. **Prog Brain Res** 1988;78:347–52 (38 ref.)

Trophic effects on cholinergic striatal interneurons by submaxillary gland transplants. Fischer W, et al. **Prog Brain Res** 1988;78:409–12

Influence of areas 17, 18, and 19 on receptive-field properties of neurons in the cat's posteromedial lateral suprasylvian visual cortex. Spear PD. **Prog Brain Res** 1988;75:197–210 (32 ref.)

Central nervous system grafts of nerve growth factor-rich tissue as an alternative source of trophic support for axotomized cholinergic neurons. Springer JE, et al. **Prog Brain Res** 1988;78:401–7

Temperature-sensitive neurons in the hypothalamus: a new hypothesis that they act as thermostats, not as transducers. Kobayashi S. **Prog Neurobiol** 1989;32(2):103–35 (49 ref.)

Facilitation as a tool to study the entry of calcium and the mechanism of neurotransmitter release. Parnas H, et al. **Prog Neurobiol** 1989;32(1):1–9 (28 ref.)

Neurochemical transmission and the sodium-pump. Török TL. **Prog Neurobiol** 1989;32(1):11–76 (339 ref.)

Interactions of neurotensin with dopamine-containing neurons in the central nervous system. Ervin GN, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988;12 Suppl:S53–69 (87 ref.)

Tryptophan availability, 5HT synthesis and 5HT function. Young SN, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3–4):373–9 (19 ref.)

Blockade of non-opioid analgesia in intruder mice by selective neuronal and non-neuronal benzodiazepine recognition site ligands. Rodgers RJ, et al. **Psychopharmacology (Berlin)** 1988;96(1):45–54

Neural nets. Cowan JD, et al. **Q Rev Biophys** 1988 Aug; 21(3):365–427 (207 ref.)

Functions of the retrofacial nucleus in chemosensitivity and ventilatory neurogenesis. St. John WM, et al. **Respir Physiol** 1989 May;76(2):159–71

Memory storage and neural systems. Alkon DL. **Sci Am** 1989 Jul;261(1):42–50

GABAergic neurons. Gottlieb DI. **Sci Am** 1988 Feb; 258(2):82–9 (0 ref.)

Memory in a neuron. Kinoshita J. **Sci Am** 1989 Jan;260(1):28, 32

Whole-cell clamp study of Xenopus embryonic cholinergic neurons. Xie ZP, et al. **Sci China [B]** 1989 Feb;32(2):148–54

Modulation of calcium channels in cardiac and neuronal cells by an endogenous peptide. Callewaert G, et al. **Science** 1989 Feb 3;243(4891):663–6

Synaptic transmission between dissociated adult mammalian neurons and attached synaptic boutons. Drewe JA, et al. **Science** 1988 Sep 30;241(4874):1810–3

Odor-induced membrane currents in vertebrate-olfactory receptor neurons. Firestein S, et al. **Science** 1989 Apr 7; 244(4900):79–82

Spatial selectivity of rat hippocampal neurons: dependence on preparedness for movement. Foster TC, et al. **Science** 1989 Jun 30;244(4912):1580–2

Mental rotation of the neuronal population vector. Georgopoulos AP, et al. **Science** 1989 Jan 13; 243(4888):234–6

Switching of a neuron from one network to another by sensory-induced changes in membrane properties. Hooper SL, et al. **Science** 1989 Jun 30;244(4912):1587–9

Localization and mobility of omega-conotoxin-sensitive Ca2+ channels in hippocampal CA1 neurons. Jones OT, et al. **Science** 1989 Jun 9;244(4909):1189–93

Transient pioneer neurons are essential for formation of an embryonic peripheral nerve. Klose M, et al. **Science** 1989 Sep 1;245(4921):982–4

The intrinsic electrophysiological properties of mammalian neurons: insights into central nervous system function. Llinás RR. **Science** 1988 Dec 23;242(4886):1654–64 (123 ref.)

Neuronal correlates of subjective visual perception. Logothetis NK, et al. **Science** 1989 Aug 18;245(4919):761–3

Ethanol inhibits NMDA-activated ion current in

hippocampal neurons. Lovinger DM, et al. **Science** 1989 Mar 31;243(4899):1721–4
Subplate neurons pioneer the first axon pathway from the cerebral cortex. McConnell SK, et al. **Science** 1989 Sep 1;245(4921):978–82
Synaptic connections in vitro: modulation of number and efficacy by electrical activity. Nelson PG, et al. **Science** 1989 May 5;244(4904):585–7
Mapping neuronal inputs to REM sleep induction sites with carbachol–fluorescent microspheres. Quattrochi JJ, et al. **Science** 1989 Sep 1;245(4921):984–6
The elav gene product of Drosophila, required in neurons, has three RNP consensus motifs published erratum appears in Science 1989 Jan 6;243(4887):12] Robinow S, et al. **Science** 1988 Dec 16;242(4885):1570–2
Neuronal cytomechanics: the actin–based motility of growth cones. Smith SJ. **Science** 1988 Nov 4;242(4879):708–15 (60 ref.)
Model of the origin of rhythmic population oscillations in the hippocampal slice. Traub RD, et al. **Science** 1989 Mar 10;243(4896):1319–25 (45 ref.)
Muscarinic depression of long–term potentiation in CA3 hippocampal neurons. Williams S, et al. **Science** 1988 Oct 7;242(4875):84–7
Electrophysiological characterization of human subcortical structures by frequency spectrum analysis of neural noise (field potential) obtained during stereotactic surgery. Preliminary presentation of frequency power spectrum of various subcortical structures. Yoshida M. **Stereotact Funct Neurosurg** 1989;52(2–4):157–63
Neuronal network disturbance after focal ischemia in rats. Kataoka K, et al. **Stroke** 1989 Sep;20(9):1226–35
Modification of 5–HT neuron properties by sustained administration of the 5–HT1A agonist gepirone: electrophysiological studies in the rat brain. Blier P, et al. **Synapse** 1987;1(5):470–80
Neurophysiological investigation of effects of the D–1 agonist SKF 38393 on tonic activity of substantia nigra dopamine neurons. Carlson JH, et al. **Synapse** 1987; 1(5):411–6
Pharmacological aspects of excitatory synaptic transmission to second–order vestibular neurons in the frog. Cochran SL, et al. **Synapse** 1987;1(1):102–23
Effects of a behaviorally active LHRH fragment and septal area stimulation on the activity of mediobasal hypothalamic neurons. Dudley CA, et al. **Synapse** 1987;1(3):240–7
Noradrenergic denervation prevents sensitization of rat forebrain neurons to serotonin by tricyclic antidepressant treatment. Gravel P, et al. **Synapse** 1987;1(3):233–9
Inhibitory effect of norepinephrine on the single–unit activity of caudally projecting paraventricular neurons. Kim YI, et al. **Synapse** 1989;3(3):213–24
Effects of dopamine depletion on the spontaneous activity of type I striatal neurons: relation to local dopamine concentration and motor behavior. Orr WB, et al. **Synapse** 1987;1(5):461–9
Differential effects of selective lesions of cholinergic and dopaminergic neurons on serotonin–type 1 receptors in rat brain. Quirion R, et al. **Synapse** 1987;1(1):124–30
Electrophysiological responses of serotoninergic dorsal raphe neurons to 5–HT1A and 5–HT1B agonists. Sprouse JS, et al. **Synapse** 1987;1(1):3–9
In vitro studies of the role of gamma–aminobutyric acid in inhibition in the lateral septum of the rat. Stevens DR, et al. **Synapse** 1987;1(2):184–90
Excitation of locus coeruleus neurons by an adenosine 3',5'–cyclic monophosphate–activated inward current: extracellular and intracellular studies in rat brain slices. Wang YY, et al. **Synapse** 1987;1(5):481–7
Effects of furosemide on the resting membrane potentials and the transmitter–induced responses of the Aplysia ganglion cells. Nakai K, et al. **Tohoku J Exp Med** 1988 Sep; 156(1):79–90
Is contiguity detection in classical conditioning a system or a cellular property? Learning in Aplysia suggests a possible molecular site. Abrams TW, et al. **Trends Neurosci** 1988 Apr;11(4):128–35 (62 ref.)
Receptor–mediated activation of phospholipase A2 via GTP–binding proteins: arachidonic acid and its metabolites as second messengers. Axelrod J, et al. **Trends Neurosci** 1988 Mar;11(3):117–23 (58 ref.)
M–currents: an update. Brown D. **Trends Neurosci** 1988 Jul; 11(7):294–9 (58 ref.)
Neural edelmanism. Crick F. **Trends Neurosci** 1989 Jul; 12(7):240–8 (17 ref.)
Inositol phosphates: a family of signal molecules? [news] Downes CP. **Trends Neurosci** 1988 Aug;11(8):336–8 (20 ref.)
Growth cone guidance and pathway formation [news] Eisen JS. **Trends Neurosci** 1988 Aug;11(8):333–5 (30 ref.)
Inositol polyphosphates regulate excitability [news] Fink LA, et al. **Trends Neurosci** 1988 Aug;11(8):338–9 (28 ref.)
Is there a correlation between continuous neurogenesis and directed axon regeneration in the vertebrate nervous system? [published erratum appears in Trends Neurosci 1988 Jun;11(6):277] Holder N, et al. **Trends Neurosci** 1988 Mar;11(3):94–9 (74 ref.)
Calcium regulation of the neuronal growth cone. Kater SB, et al. **Trends Neurosci** 1988 Jul;11(7):315–21 (53 ref.)
Neurotransmitter regulation of neuronal outgrowth, plasticity and survival. Lipton SA, et al. **Trends Neurosci** 1989 Jul; 12(7):265–70
Amacrine cells. Masland RH. **Trends Neurosci** 1988 Sep; 11(9):405–10 (39 ref.)
Calcium signalling in neurons. Miller RJ. **Trends Neurosci** 1988 Oct;11(10):415–9 (39 ref.)
Inositol polyphosphates and neuronal calcium homeostasis. Nahorski SR. **Trends Neurosci** 1988 Oct;11(10):444–8 (50 ref.)
Tonotopic organization of the insect auditory pathway. Oldfield BP. **Trends Neurosci** 1988 Jun;11(6):267–70 (33 ref.)
Logical neurons: the enigmatic legacy of Warren McCulloch. Perkel DH. **Trends Neurosci** 1988 Jan;11(1):9–12 (52 ref.)
When are neurones specified? [news] Price J. **Trends Neurosci** 1989 Aug;12(8):276–8
Multiple modes and sites for the induction of axonal growth. Rotshenker S. **Trends Neurosci** 1988 Aug;11(8):363–6 (38 ref.)
Calcium ions, active zones and synaptic transmitter release. Smith SJ, et al. **Trends Neurosci** 1988 Oct;11(10):458–64 (69 ref.)
Multiple types of neuronal calcium channels and their selective modulation. Tsien RW, et al. **Trends Neurosci** 1988 Oct;11(10):431–8 (116 ref.)
Fluorescence measurement and photochemical manipulation of cytosolic free calcium. Tsien RY. **Trends Neurosci** 1988 Oct;11(10):419–24 (29 ref.)
The role of dynein in retrograde axonal transport. Vallee RB, et al. **Trends Neurosci** 1989 Feb;12(2):66–70 (36 ref.)
Electrophysiology of 5–HT3 receptors in neuronal cell lines. Peters JA, et al. **Trends Pharmacol Sci** 1989 May; 10(5):172–5 (30 ref.)
Morphometric changes between one–day–old and adult chicken neurons of the nucleus isthmi. Bentura ML, et al. **Z Mikrosk Anat Forsch** 1989;103(2):336–44
[Nomenclature of the plasmic transport of neurons] Gan SD. **Sheng Li Ko Hsueh Chin Chan** 1989 Jan;20(1):84–6 (25 ref.) **(Chi)**
[Research on neurons of the somatotropin release inhibiting hormone in th hypothalamus] Qin Y, et al. **Sheng Li Ko Hsueh Chin Chan** 1989 Jan;20(1):12–6 (44 ref.) **(Chi)**
[Dopaminergic neurons and behavior] Simon H. **Arch Int Physiol Biochim** 1988 Sep;96(4):A179–80 **(Fre)**
[Convergence of nociceptive information on the parabrachio–amygdala neurons in the rat] Bernard JF, et al. **C R Acad Sci [III]** 1988;307(19):841–7 (Eng. Abstr.) **(Fre)**
[Dopaminergic transmission in mammalian striatum: electrophysiologic and pharmacologic studies] Calabresi P. **Ann Ist Super Sanita** 1988;24(4):523–5 (Eng. Abstr.) **(Ita)**
[Differences in neuron responsiveness to serotonin between the dorsal and ventral zones of the Deiters nucleus] Licata F, et al. **Boll Soc Ital Biol Sper** 1988 Dec;64(12):1135–42 (Eng. Abstr.) **(Ita)**
[The effects of electrical stimulation of nucleus raphe magnus and nucleus reticularis gigantocellularis on medial thalamic neurons—special reference to noxious neurons] Miyamoto T. **No To Shinkei** 1988 Oct;40(10):971–8 (Eng. Abstr.) **(Jpn)**
[Diversity of third order neurons and their functions in mammalian retina] Fukuda Y. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):663–73 **(Jpn)**
[Outline of the information processing of second order neurons in vertebrate retina] Saito T. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):631–41 **(Jpn)**
[Neural circuit of the retina subserving processing of color and spatial signals as revealed by studies on dissociated solitary neurons] Kaneko A. **Yakubutsu Seishin Kodo** 1988 Sep;8(3):429–36 (Eng. Abstr.) **(Jpn)**
[Nerve growth factor, its chemical structure and biological function] Sieroń A, et al. **Postepy Biochem** 1988; 34(3):173–82 (70 ref.) **(Pol)**
[Interpretation of the regulatory mechanisms of the occurrence of epileptic activity in neural networks. II. The structure of neural networks and the possibility of paroxysmal discharges: the role of inhibitory systems] Trąbka W. **Przegl Lek** 1988;45(12):847–50 (20 ref.) **(Pol)**
[Regulatory interpretation of the mechanisms of occurrence of epileptic activity in the neuronal networks. I. Paroxysmal depolarization shift: a cellular or network phenomenon?] Trąbka W. **Przegl Lek** 1988;45(11):793–6 (20 ref.) **(Pol)**
[Role of the monoaminergic system in the transmission of the effect of androgens on neurons of separate limbic structures of the rat brain] Myslitskiĭ VF. **Arkh Anat Gistol Embriol** 1989 May;96(5):23–5 (Eng. Abstr.) **(Rus)**
[The ability of neuronal networks to generalize using an induction method] Anshelevich VV, et al. **Biofizika** 1989 May–Jun;34(3):491–5 (Eng. Abstr.) **(Rus)**
[Information properties of neuron assemblies] Frolov AA. **Biofizika** 1989 Mar–Apr;34(2):280–6 (Eng. Abstr.) **(Rus)**
[A study of the change in conductivity of the neuronal membrane caused by a generator potential using a method of computer modeling] Liberman EA, et al. **Biofizika** 1988 Nov–Dec;33(6):996–1000 (Eng. Abstr.) **(Rus)**
[reflection of stimulus orientation in reactions of visual cortex neurons] Rybak IA, et al. **Biofizika** 1988 Jul–Aug; 33(4):667–71 (Eng. Abstr.) **(Rus)**
[Integrative properties of the microsystem of cortical neurons during repeated local stimulation] Kotliar BI, et al. **Biol Nauki** 1988;(9):42–60 (Eng. Abstr.) **(Rus)**
[An experimental approach to research on the integrative properties of a single brain neuron] Kotliar BI, et al. **Biol Nauki** 1989;(3):56–63 (Eng. Abstr.) **(Rus)**
[Participation of beta–endorphin in the regulation of the membrane chemoreactive properties of the cortical neurons in rats] Kruglikov RI, et al. **Biol Nauki** 1988;(5):51–6 (Eng. Abstr.) **(Rus)**
[Changes in the neuronal reactions of the substantia nigra to nociceptive stimuli during electroacupuncture] Ta TL, et al. **Biol Nauki** 1988;(7):53–8 (Eng. Abstr.) **(Rus)**
[Electrophysiological and neurochemical study of long–term sensitization in the snail] Beregovoĭ NA, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):259–61 (Eng. Abstr.) **(Rus)**
[Long–term potentiation in the neurons of the edible snail] Borisova OV. **Biull Eksp Biol Med** 1988 Dec;106(12):651–3 (Eng. Abstr.) **(Rus)**
[The role of catecholaminergic group–A5 neurons in analgesia induced by auricular electroacupuncture and in electrodermal pain stimulation] Bragin EO, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):310–2 (Eng. Abstr.) **(Rus)**
[A floating hydraulic micromanipulator for microelectrode research on brain neurons] Piatin VF. **Biull Eksp Biol Med** 1988 Nov;106(11):519–21 (Eng. Abstr.) **(Rus)**
[Comparative study of the effects of antibodies to S–100 protein and ouabain on neurons of Helix pomatia] Pozdniakova AL. **Biull Eksp Biol Med** 1988 Oct; 106(10):393–5 (Eng. Abstr.) **(Rus)**
[Depolarization shifts of membrane potential of the command neurons of snail avoidance reflex during long–term sensitization] Beregovoĭ NA, et al. **Dokl Akad Nauk SSSR** 1988;301(4):989–92 **(Rus)**
[Quantum state of kinetic parameters of single ion channels] Geletiuk VI, et al. **Dokl Akad Nauk SSSR** 1988; 301(2):465–9 **(Rus)**
[Basic functions of the visual cortex in the cat] Glezer VD, et al. **Dokl Akad Nauk SSSR** 1988;300(3):740–4 **(Rus)**
[Effect of Mg2+ on fast Ka+–channels in molluskan neurons] Kazachenko VN, et al. **Dokl Akad Nauk SSSR** 1988;301(4):997–1002 **(Rus)**
[Selectivity of neurons in squirrel striatal cortex (frontal visual field) to contrast polarity and direction of movement of visual stimuli] Polkoshnikov EV, et al. **Dokl Akad Nauk SSSR** 1989 Jan–Feb;304(1):238–41 **(Rus)**
[Imidazole causes long–term elevation of evoked postsynaptic potential and potential–dependent calcium current in molluskan neurons] Solntseva EI, et al. **Dokl Akad Nauk SSSR** 1988;300(3):760–3 **(Rus)**
[Independence of the increase in the number of action potentials and excitability in the response of mollusk neurons during their combined activation] Tsitolovskiĭ LE, et al. **Dokl Akad Nauk SSSR** 1988;303(4):1015–8 **(Rus)**
[Interval–dependent changes in neuron excitation as a basis of the interval–selective functional relations in the central nervous system] Vartanian GA, et al. **Dokl Akad Nauk SSSR** 1988;302(2):480–3 **(Rus)**
[Neuronal correlations of the reward and pulse activity of single cells in the dog frontal cortex] Vartanian GA, et al. **Dokl Akad Nauk SSSR** 1988;300(5):1252–6 **(Rus)**
[Restructuring of neuronal reactions upon local modification of the membrane] Zapara TA, et al. **Dokl Akad Nauk SSSR** 1989;304(4):1012–4 **(Rus)**
[Sizes of the ionic channel of the nerve cell nicotinic cholinoreceptor at the site of its blocking with channel blockaders] Zhorov BS, et al. **Dokl Akad Nauk SSSR** 1989; 305(2):499–503 **(Rus)**
[Neuronal organization of the stages of making a decision. Part II. A case of making a decision caused by two sequential stimuli] Kroporov IuD, et al. **Fiziol Cheloveka** 1988 Sep–Oct;14(5):723–9 **(Rus)**
[Neuronal organization of the stages in decision making. I. A case of decision making evoked by a single information stimulus] Kropotov IuD, et al. **Fiziol Cheloveka** 1988 May–Jun;14(3):378–86 **(Rus)**
[Analysis of the processes of synchronization of single discharges of remotely arranged neuronal ensembles] Perepelkin PD. **Fiziol Cheloveka** 1989 Mar–Apr;15(2):154–8 **(Rus)**
[Responses of neurons of the medial geniculate body of the cat to cortical and peripheral stimulations] Khorevin VI. **Fiziol Zh** 1988 Sep–Oct;34(5):32–8 (Eng. Abstr.) **(Rus)**
[Dynamics of neuronal activity of a lateral septal nucleus in the sleep–wakefulness cycle] Manzhavidze ShD, et al. **Fiziol Zh** 1988 Nov–Dec;34(6):32–8 (Eng. Abstr.) **(Rus)**
[Results of studies of the processes of excitation and inhibition in neurons of the cerebral cortex and the thalamus] Serkov FN. **Fiziol Zh** 1988 Sep–Oct;34(5):3–21 (32 ref.) (Eng. Abstr.) **(Rus)**
[Analysis of the nature of responses of neurons of rat spinal ganglia evoked by the activation of GABA–B receptors] Abramets II, et al. **Fiziol Zh SSSR** 1989 Mar;75(3):305–11 (Eng. Abstr.) **(Rus)**
[Effect of stimulation of the thalamic reticular nucleus on the neuronal activity of the associative and nonspecific structures of the thalamus] Airapetian AA, et al. **Fiziol Zh SSSR** 1988 Jul;74(7):924–32 (Eng. Abstr.) **(Rus)**

[Participation of beta-endorphins in organizing neuronal activity of the rabbit hypothalamic "hunger centers"] Figurov AI, et al. **Fiziol Zh SSSR** 1989 Jan;75(1):13–8 (Eng. Abstr.) **(Rus)**

[Effect of the frequency of neuronal stimulation of the raphe nuclei on the monoamine content of the cerebral cortex] Mamedov ZG, et al. **Fiziol Zh SSSR** 1988 Jul;74(7):1030–3 **(Rus)**

[Changes in ion currents in electrically stimulated neuron membranes in snails after administration of phenamine derivatives] Mantsev VV, et al. **Fiziol Zh SSSR** 1989 Mar; 75(3):403–7 **(Rus)**

[Characteristics of neurophysiologic changes in experimental stress induced by long-term group isolation in rats] Rasulov MM, et al. **Fiziol Zh SSSR** 1988 Aug;74(8):1087–93 (Eng. Abstr.) **(Rus)**

[Antidromic cortical responses and neuronal retrograde degeneration during stimulation and dissection of the fibers of the corpus callosum] Samadashvili ZV, et al. **Fiziol Zh SSSR** 1988 Aug;74(8):1077–86 **(Rus)**

[Functional properties of the neurons of the ventral tegmentum and adjacent areas of the midbrain in waking rats] Kiiatkin EA. **Izv Akad Nauk SSSR [Biol]** 1988 Sep–Oct;(5):683–93 (Eng. Abstr.) **(Rus)**

[Metabolic and ionic dependence of neuronal responses evoked by serotonin in the rat sensory ganglia] Abramets II, et al. **Neirofiziologiia** 1989;21(1):86–93 (Eng. Abstr.) **(Rus)**

[Responses of the neurons of the parietal associative cortex of the cat brain to indifferent and conditioned acoustic stimuli] Afonskiĭ AS, et al. **Neirofiziologiia** 1988; 20(5):637–45 (Eng. Abstr.) **(Rus)**

[Changes in the intracellular calcium concentration and transmembrane currents, evoked by iontophoretic injections of cyclic AMP, in Helix pomatia neurons] Belian PV, et al. **Neirofiziologiia** 1989;21(3):396–403 (Eng. Abstr.) **(Rus)**

[Neuronal background activity in surviving slices of guinea pig visual cortex] Bortnik AT. **Neirofiziologiia** 1988; 20(6):817–20 (Eng. Abstr.) **(Rus)**

[Nonlinear temporal summation of EPSP in mollusk neurons] Cherkasskiĭ VL. **Neirofiziologiia** 1989;21(2):204–10 (Eng. Abstr.) **(Rus)**

[Dependence of the character of EPSP summation in mollusk neurons on the level of the membrane potential] Cherkasskiĭ VL. **Neirofiziologiia** 1989;21(3):314–20 (Eng. Abstr.) **(Rus)**

[Determination of the neuronal reactions of the thermoregulation center in the posterior hypothalamus of the rabbit to thermal stimulation] Chernova ND, et al. **Neirofiziologiia** 1988;20(3):291–301 (Eng. Abstr.) **(Rus)**

[Reactions of the neuronal networks with various mechanisms for the termination of activity to external de- and hyperpolarization exposures] Degtiarenko AM. **Neirofiziologiia** 1988;20(4):438–47 (Eng. Abstr.) **(Rus)**

[Neurons of the edible snail involved in controlling the rhythmic movements of the pneumostome] D'iakonova TL, et al. **Neirofiziologiia** 1988;20(4):509–17 (Eng. Abstr.) **(Rus)**

[Role of calcium ions in the processes of modulation of serotonin responses of Helix pomatia neurons to the application of serotonin] Diatlov VA. **Neirofiziologiia** 1988; 20(5):666–71 (Eng. Abstr.) **(Rus)**

[Bimodal effect of serotonin on glutamate-induced ionic currents in Helix pomatia neurons] Diatlov VA. **Neirofiziologiia** 1989;21(3):411–3 (Eng. Abstr.) **(Rus)**

[Serotonin modulation of glycine-induced ionic currents in mollusk neurons] Diatlov VA. **Neirofiziologiia** 1989; 21(3):413–6 (Eng. Abstr.) **(Rus)**

[Functional characteristics of potassium channels in the somatic membrane of neurons of Lymnaea stagnalis of various ages] Frol'kis VV, et al. **Neirofiziologiia** 1989; 21(1):3–7 (Eng. Abstr.) **(Rus)**

[Effect of stimulation of the central gray matter of the midbrain on responses of neurons of the ventroposteromedial nucleus of the thalamus in cats] Gura EV, et al. **Neirofiziologiia** 1988;20(5):688–94 (Eng. Abstr.) **(Rus)**

[Effect of the stimulation of the central gray substance of the midbrain on the neuronal responses of the trigeminal caudal nucleus during peripheral excitations] Gura EV, et al. **Neirofiziologiia** 1988;20(6):729–36 (Eng. Abstr.) **(Rus)**

[A single calcium channel with anomalous rectification in mollusk neurons] Kachman AN, et al. **Neirofiziologiia** 1989; 21(1):31–8 (Eng. Abstr.) **(Rus)**

[Changes in the electrical activity of spinal cord neurons of adrenalectomized rats under the effect of adrenal cortex hormones] Kapriian TK, et al. **Neirofiziologiia** 1989; 21(2):233–8 (Eng. Abstr.) **(Rus)**

[Effect of stimulation of the central gray substance on the low- and high-threshold responses of the reticular neurons in the pons and medulla oblongata] Karpukhina MV, et al. **Neirofiziologiia** 1988;20(6):749–57 (Eng. Abstr.) **(Rus)**

[Effect of artificial polarization of the membrane on IPSP of neurons in the cat sensorimotor cortex] Kokaia ZG, et al. **Neirofiziologiia** 1989;21(2):264–7 (Eng. Abstr.) **(Rus)**

[Participation of calcium-dependent potassium conductance in the processes of membrane hyperpolarization of the pyramidal neurons in the sensorimotor cortex in the cat] Kokaia ZG, et al. **Neirofiziologiia** 1988;20(3):383–9 (Eng. Abstr.) **(Rus)**

[Tryptamine as an endogenous modulator of neuronal sensitivity to serotonin] Komissarov IV, et al. **Neirofiziologiia** 1989;21(3):352–7 (Eng. Abstr.) **(Rus)**

[Reactions of the neurons of the parietal association cortex in the cat that send axons into the pyramidal tract to peripheral stimuli] Koreniuk II, et al. **Neirofiziologiia** 1988; 20(3):310–8 (Eng. Abstr.) **(Rus)**

[Influence of a natriuretic factor on the chemically sensitive membrane of dialyzed snail neurons] Krivorotov SV. **Neirofiziologiia** 1989;21(1):122–4 (Eng. Abstr.) **(Rus)**

[Responses of visual cortex neurons in the rabbit to direct stimulation by a current of varying intensity] Latanov AV, et al. **Neirofiziologiia** 1989;21(2):239–47 (Eng. Abstr.) **(Rus)**

[Electrical activity of the neurons in an epileptic focus created in an isolated strip of cerebral cortex by electrical stimulation] Lopantsev VE, et al. **Neirofiziologiia** 1988; 20(3):357–65 (Eng. Abstr.) **(Rus)**

[Responses of neurons of an isolated cortical strip in a state of convulsive excitation to single electrical stimuli] Lopantsev VE, et al. **Neirofiziologiia** 1989;21(2):198–204 (Eng. Abstr.) **(Rus)**

[Low- and high-threshold calcium current in the membrane of cultured neurons of Helix pomatia] Lozinskaia IM, et al. **Neirofiziologiia** 1989;21(1):127–9 (Eng. Abstr.) **(Rus)**

[Inactivation of potassium outward current depending on the extracellular calcium ions] Martynok AE, et al. **Neirofiziologiia** 1988;20(5):602–10 (Eng. Abstr.) **(Rus)**

[Role of neurons of the thalamus and striopallidar complex of the human brain in ensuring the constancy of visual perception] Medvedev SV, et al. **Neirofiziologiia** 1989; 21(1):93–101 (Eng. Abstr.) **(Rus)**

[Functional characteristics of the orientation-selective neurons in the frontal visual field of the striate cortex in the baronduki] Polkoshnikov EV, et al. **Neirofiziologiia** 1988;20(3):365–74 (Eng. Abstr.) **(Rus)**

[Modelling of ion channel properties and study of channel role in the formation of impulse activity of the neuron] Romanov SP. **Neirofiziologiia** 1989;21(3):379–89 (Eng. Abstr.) **(Rus)**

[Features of the effect of leukotriene LTC4 and the blocker of its biosynthesis BW755C on the contractile capability of smooth muscles and the functioning of potential-dependent calcium channels of the nerve cell] Skryma RN, et al. **Neirofiziologiia** 1989;21(1):24–31 (Eng. Abstr.) **(Rus)**

[Action of the leukotriene LTC4 on the calcium channels of the somatic membrane of the nerve cell and tone of smooth muscle organs] Skryma RN, et al. **Neirofiziologiia** 1989;21(2):262–4 (Eng. Abstr.) **(Rus)**

[Influence of monoamines on heterosynaptic facilitation in giant neurons of Planorbis corneus] Storozhuk VM, et al. **Neirofiziologiia** 1989;21(2):224–32 (Eng. Abstr.) **(Rus)**

[Spreading excitation in the upper (I–III) layers of an isolated strip of cat auditory cortex] Taranenko VD, et al. **Neirofiziologiia** 1988;20(4):546–53 (Eng. Abstr.) **(Rus)**

[Convergence of preganglionic fibers on neurons of the rabbit superior cervical ganglion] Tatarchenko LA. **Neirofiziologiia** 1989;21(2):252–61 (Eng. Abstr.) **(Rus)**

[Gaba-activated conductance of isolated neurons of rat cerebellum and sensory ganglia] Valeev AE, et al. **Neirofiziologiia** 1988;20(5):645–52 (Eng. Abstr.) **(Rus)**

[Changes in neuronal excitability elicited by subthreshold depolarization as a possible mechanism of interval-selective interrelations in the central nervous system] Vartanian GA, et al. **Neirofiziologiia** 1989;21(3):291–9 (Eng. Abstr.) **(Rus)**

[Temperature dependence of neuronal activity in hypothalamic and hippocampal slices of the guinea-pig] Vasilenko VIu, et al. **Neirofiziologiia** 1989;21(3):358–65 (Eng. Abstr.) **(Rus)**

[Various responses of neurons of the caudate nucleus in alert cats to visual stimulation] Zelenskaia VS, et al. **Neirofiziologiia** 1989;21(3):372–8 (Eng. Abstr.) **(Rus)**

[Modern approaches to the study of cellular and synaptic mechanisms of the so-called dominant] Batuev AS. **Nerv Sist** 1988;26:34–44 (27 ref.) **(Rus)**

[Identified neuronal networks in the edible snail] Zhuravlev VL, et al. **Nerv Sist** 1988;27:34–41 **(Rus)**

[The role of group A5 catecholaminergic neurons in stress and morphine analgesia mechanisms in rats] Bragin EO, et al. **Patol Fiziol Eksp Ter** 1989 Jan–Feb;(1):18–20 (Eng. Abstr.) **(Rus)**

[Reflection of dominant motivation in the neuronal activity of the brain and peripheral organs] Sudakov KV, et al. **Usp Fiziol Nauk** 1988 Jul–Sep;19(3):24–44 (56 ref.) **(Rus)**

[Comparative analysis of the neuronal organization of the corticocerebellar relay formations of the pons] Fanardzhian VV, et al. **Zh Evol Biokhim Fiziol** 1988 May–Jun; 24(3):335–43 (Eng. Abstr.) **(Rus)**

[Morphofunctional characteristics of serotonin-like neurons in the hypothalamus of rats in ontogeny] Ugriumov MV, et al. **Zh Evol Biokhim Fiziol** 1989 May–Jun;25(3):324–9 (Eng. Abstr.) **(Rus)**

[The role of GABA-ergic regulation in organizing spontaneous and evoked activity of the septal neurons] Belousov AB, et al. **Zh Vyssh Nerv Deiat** 1988 Nov–Dec; 38(6):1076–84 (Eng. Abstr.) **(Rus)**

[The monosynaptic connection between identified neurons in the snail] Berezhnaia LA, et al. **Zh Vyssh Nerv Deiat** 1989 Mar–Apr;39(2):329–33 (Eng. Abstr.) **(Rus)**

[Neuronal responses of the rate somatosensory cortex transplanted into the vibrissae representation field of the neocortex to the electrical stimulation of the recipient brain] Bragin AG, et al. **Zh Vyssh Nerv Deiat** 1988 Nov–Dec;38(6):1098–106 (Eng. Abstr.) **(Rus)**

[Activity of the cerebellar neurons of the rabbit in food procurement behavior. A comparison with the activity of motor cortex neurons] Grinchenko IuV, et al. **Zh Vyssh Nerv Deiat** 1988 Nov–Dec;38(6):1164–7 **(Rus)**

[Changes in the temporal structure of the impulse activity of the visual cortical neurons in rabbits undergoing reticular formation stimulation] Iakupova LP. **Zh Vyssh Nerv Deiat** 1988 Jul–Aug;38(4):758–61 **(Rus)**

[Functional regulation of the neuronal activity of the rat hippocampus transplanted into the rabbit septum] Kichigina VF, et al. **Zh Vyssh Nerv Deiat** 1988 Sep–Oct;38(5):914–21 (Eng. Abstr.) **(Rus)**

[Characteristics of the functional coupling of cerebral cortical neurons in cats and the signal meaning of the stimulus (the hypothesis of the information switching of conditioned reflex activity)] Komissarov VI. **Zh Vyssh Nerv Deiat** 1988 Nov–Dec;38(6):1027–32 (Eng. Abstr.) **(Rus)**

[Sound-specific neurons in the visual cortex of the cat] Polianskiĭ VB, et al. **Zh Vyssh Nerv Deiat** 1988 May–Jun; 38(3):546–9 **(Rus)**

[Effect of the background activity of a network of excitatory neuron-like elements on the conduction of excitation] Shul'gina GI, et al. **Zh Vyssh Nerv Deiat** 1988 Jul–Aug; 38(4):715–24 (Eng. Abstr.) **(Rus)**

[An analysis of the neuronal processes in the activating brain systems of the rat during the acquisition of an instrumental defense reflex] Slezin VB, et al. **Zh Vyssh Nerv Deiat** 1989 Mar–Apr;39(2):278–83 (Eng. Abstr.) **(Rus)**

[Changes in the background impulse activity of the motor cortex neurons of waking rats in acute alcoholic intoxication] Stashkevich IS, et al. **Zh Vyssh Nerv Deiat** 1988 May–Jun;38(3):556–8 **(Rus)**

[Long-term post-tetanic changes in the impulse reactions of the visual cortex neurons in the cat] Veber NV, et al. **Zh Vyssh Nerv Deiat** 1988 Sep–Oct;38(5):963–5 **(Rus)**

[Cellular analog of instrumental behavior on single mollusk neurons during automatic intracellular electrostimulation] Verbnyĭ IaI, et al. **Zh Vyssh Nerv Deiat** 1988 May–Jun; 38(3):489–96 (Eng. Abstr.) **(Rus)**

[The analysis of the impulse activity of 2 neurons monosynaptically excitable by a 3rd using cross-correlation histograms and Cox's method. The potential for detecting neuronal and synaptic plasticity] Zosimovskiĭ VA. **Zh Vyssh Nerv Deiat** 1989 Mar–Apr;39(2):334–42 (Eng. Abstr.) **(Rus)**

[Possibilities of detecting the plasticity of monosynaptic excitable connections during the analysis of impulse activity of neurons using cross-correlation histograms and Cox's method] Zosimovskiĭ VA. **Zh Vyssh Nerv Deiat** 1989 Jan–Feb;39(1):110–7 (Eng. Abstr.) **(Rus)**

[Postnatal development of neurons containing vasoactive intestinal peptide (VIP) in the rabbit visual cortex: quantitative and morphological study] Ramón y Cajal Agüeras S, et al. **Arch Neurobiol (Madr)** 1988 May–Jun; 51(3):139–42 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

A model for slow axonal transport and its application to neurofilamentous neuropathies. Blum JJ, et al. **Cell Motil Cytoskeleton** 1989;12(1):53–65

Precocial neural function in the growth-retarded fetal lamb. Cook CJ, et al. **Pediatr Res** 1988 Nov;24(5):600–4

RADIATION EFFECTS

Radiofrequency radiation-induced calcium ion efflux enhancement from human and other neuroblastoma cells in culture. Dutta SK, et al. **Bioelectromagnetics** 1989; 10(2):197–202

Radiation-induced impairment of neuronal excitability. Pellmar TC, et al. **Fundam Appl Toxicol** 1988 Nov; 11(4):577–8

Variations in DNA topoisomerase I activity after gamma irradiation of mature neurons. Ivanov VA. **Neurosci Lett** 1988 Nov 22;94(1–2):99–103

Alterations of neuronal nuclear matrix and chromatin structure after irradiation under aerobic and anoxic conditions. Jaberaboansari A, et al. **Radiat Res** 1989 Jul; 119(1):57–72

[Calcium channels of neurons and mechanism of action of low intensity 337 nm laser irradiation] Samko IuN, et al. **Biofizika** 1988 May–Jun;33(3):525–7 (Eng. Abstr.) **(Rus)**

[The action of ionizing radiation on neuronal function in the edible snail. Phospholipase A2 and the Na+ and K+ transport systems] Dvoretskiĭ AI, et al. **Radiobiologiia** 1989 May–Jun;29(3):413–5 (Eng. Abstr.) **(Rus)**

[Hyperbolic function of the neuroelectrical effects in the cerebral form of radiation lesions] Karpov VN, et al. **Radiobiologiia** 1989 Mar–Apr;29(2):171–4 (Eng. Abstr.) **(Rus)**

[Quantitative histologic changes of the glioneuronal complex in the central and intermediate parts of the visual analyzer exposed to microwaves of thermogenic intensity] Logvinov SV. **Radiobiologiia** 1989 Mar–Apr;29(2):247–50 (Eng. Abstr.) **(Rus)**

[Postradiation changes of the active ion transport systems of the CNS. Na, K-ATPase of neurons and neuroglia]

Shainskaia AM, et al. **Radiobiologiia** 1989 Jul-Aug; 29(4):481-4 (Eng. Abstr.) **(Rus)**

SECRETION

Involvement of DHP voltage-sensitive calcium channels and protein kinase C in thyroliberin (TRH) release by developing hypothalamic neurons in culture. Loudes C, et al. **Brain Res** 1988 Jul 26;456(2):324-32

Degeneration of serotonin-specific neurons in the brain in experimental Trypanosoma brucei infection. Ormerod WE, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):480-1

Lactate release from cultured astrocytes and neurons: a comparison. Walz W, et al. **GLIA** 1988;1(6):366-70

Actions of excitatory amino acids on somatostatin release from cortical neurons in primary cultures. Tapia-Arancibia L, et al. **J Neurochem** 1989 Oct;53(4):1134-41

An immunological study of the secretory activity of neurons producing melanin-concentrating hormone in a teleost. Bird DJ, et al. **Neuroscience** 1989;28(1):245-51

TRANSPLANTATION

Transplant-induced recovery from 6-OHDA lesions of the nigrostriatal dopamineneurones in mice. Shimizu K, et al. **Acta Neurochir Suppl (Wien)** 1988;43:149-53

Intracerebral transplantation of dopamine neurons: understanding the functional role of the mesolimbocortical dopamine system and developing a therapy for Parkinson's disease. Brundin P, et al. **Ann N Y Acad Sci** 1988;537:148-60 (54 ref.)

Human fetal dopamine neurons grafted into the striatum in two patients with severe Parkinson's disease. A detailed account of methodology and a 6-month follow-up. Lindvall O, et al. **Arch Neurol** 1989 Jun;46(6):615-31

Electrophysiological and pharmacological properties of neurons within solid basal forebrain transplants in the rat brain. Bassant MH, et al. **Brain Res** 1988 Sep 13;460(1):8-16

Serotonin neurons grafted to the adult rat hippocampus. I. Time course of growth as studied by immunohistochemistry and biochemistry. Daszuta A, et al. **Brain Res** 1988 Aug 16;458(1):1-19

Immunological aspects of grafting in the mammalian central nervous system. A review and speculative synthesis. Widner H, et al. **Brain Res** 1988 Nov;472(3):287-324 (270 ref.)

The physiological basis of transplantation of fetal catecholaminergic neurons in the transected spinal cord of the rat. Commissiong JW, et al. **Comp Biochem Physiol [A]** 1989;93(1):301-7

Fetal brain grafts rescue adult retinal ganglion cells from axotomy-induced cell death. Sievers J, et al. **J Comp Neurol** 1989 Mar 15;281(3):467-78

In vivo measurement using microdialysis of the release and metabolism of 5-hydroxytryptamine in raphe neurones grafted to the rat hippocampus. Sharp T, et al. **J Neurochem** 1989 Jul;53(1):303-6

Fetal brain tissue and Parkinson's disease [letter] Blunt SB. **Lancet** 1989 May 6;1(8645):1021

Transplanted gonadotropin-releasing hormone neurons promote pulsatile luteinizing hormone secretion in congenitally hypogonadal (hpg) male mice. Kokoris GJ, et al. **Neuroendocrinology** 1988 Jul;48(1):45-52

Recovery of hippocampal cholinergic activity by transplantation of septal neurons in AF64A treated rats. Ikegami S, et al. **Neurosci Lett** 1989 Jun 5;101(1):17-22

Suppression and induction of epileptic activity by neuronal grafts. Buzsáki G, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9327-30

Peripheral nerve damage facilitates functional innervation of brain grafts in adult sensory cortex. Ebner FF, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):730-4

Can human fetal dopamine neuron grafts provide a therapy for Parkinson's disease? Brundin P, et al. **Prog Brain Res** 1988;78:441-8 (24 ref.)

Transplant improves hemiparkinsonian syndrome in nonhuman primate: intracerebral injection, rotometry, tyrosine hydroxylase immunohistochemistry. Dubach M, et al. **Prog Brain Res** 1988;78:491-6

The development of functional connections between transplanted embryonic and mature cortical neurons. Ebner FF. **Prog Brain Res** 1988;78:3-11 (48 ref.)

Transplantation of embryonic marmoset dopaminergic neurons to the corpus striatum of marmosets rendered parkinsonian by 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine. Fine A, et al. **Prog Brain Res** 1988;78:479-89

Cross-species intracerebral grafting of embryonic swine dopaminergic neurons. Freeman TB, et al. **Prog Brain Res** 1988;78:473-7

Matrigel enhances survival and integration of grafted dopamine neurons into the striatum. Haber S, et al. **Prog Brain Res** 1988;78:427-33

Paraneuronal grafts in unilateral 6-hydroxydopamine-lesioned rats: morphological aspects of adrenal chromaffin and carotid body glomus cell implants. Hansen JT, et al. **Prog Brain Res** 1988;78:507-11

Fetal cortical cell suspension grafts to the excitotoxically lesioned neocortex: anatomical and neurochemical studies of trophic interactions. Isacson O, et al. **Prog Brain Res** 1988;78:13-26

Effect of implants prepared from tissue culture of dorsal root ganglion neurons and Schwann cells on growth of corticospinal fibers after spinal cord injury in neonatal rats. Kuhlengel KR. **Prog Brain Res** 1988;78:199-204

Neuronal transplants used in the repair of acute ischemic injury in the central nervous system. Mudrick LA, et al. **Prog Brain Res** 1988;78:87-93

Flow cytometric analyses and sorting of neural cells for transplantation. Notter MF, et al. **Prog Brain Res** 1988; 78:605-11

Transplantation of fetal serotonin neurons into the transected spinal cord of adult rats: morphological development and functional influence. Privat A, et al. **Prog Brain Res** 1988; 78:155-66

Physiology of graft-host interactions in the rat hippocampus. Segal M, et al. **Prog Brain Res** 1988;78:95-101 (30 ref.)

Laminin directs and facilitates migration and fiber growth of transplanted serotonin and norepinephrine neurons in adult brain. Zhou FC, et al. **Prog Brain Res** 1988;78:413-26

Functional compensation afforded by grafts of foetal neurones. Iversen SD, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3-4):453-67 (52 ref.)

Re-development of synaptic connections after implanted single 5-HT containing neuron in isolated leech ganglia. Zhang RJ. **Sci China [B]** 1989 Jan;32(1):88-95

Cellular events associated with induced rejection of neural xenografts placed into neonatal rat brains. Lund RD, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3174-5

Fundamental investigation of neural transplantation for Parkinson's disease in mice. Shimizu K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3171-3

[Reconstruction of nerve damage] **Lakartidningen** 1988 Oct 19;85(42):3478-82 **(Swe)**

ULTRASTRUCTURE

Cytoplasmic organelles in neurons of the dorsal lateral geniculate nucleus of aged rats. Cano J, et al. **Acta Anat (Basel)** 1989;134(3):227-31

Surgical trauma to the cochlea results in reversible damage to spiral ganglion type I neurons. Rueda J, et al. **Acta Otolaryngol (Stockh)** 1989 Jan-Feb;107(1-2):59-62

HRP morphology of functionally identified vestibular type I neurons in the cat. Ohgaki T, et al. **Adv Otorhinolaryngol** 1988;41:14-9

A Golgi and electron microscope study of the precommissural dorsal septum in the reptile: Podarcis hispanica. Martín-Pérez V, et al. **Anat Anz** 1988; 166(1-5):195-207

Autonomic innervation of reproductive organs: analysis of the neurons whose axons project in the main penile nerve in the pelvic plexus of the rat. Dail WG, et al. **Anat Rec** 1989 May;224(1):94-101

Multiple types of calcium channels in heart muscle and neurons. Modulation by drugs and neurotransmitters. Bean BP. **Ann N Y Acad Sci** 1989;560:334-45 (33 ref.)

The ultrastructure of somatostatin-immunoreactive cell bodies, nerve fibers and terminals in the dorsal horn of rat spinal cord. Mizukawa K, et al. **Arch Histol Jpn** 1988 Dec;51(5):443-52

Laminin A chain synthetic peptide which supports neurite outgrowth. Sephel GC, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):821-9

Chromatin and nuclear envelope of freeze-fractured, neuronal interphase nuclei, resolved by scanning electron microscopy. De Boni U. **Biol Cell** 1988;63(1):1-8

Neurons of the substantia nigra reticulata receive a dense GABA-containing input from the globus pallidus in the rat. Smith Y, et al. **Brain Res** 1989 Jul 24;493(1):160-7

Influence of developmental auditory deprivation on neuronal ultrastructure in the mouse anteroventral cochlear nucleus. Trune DR, et al. **Brain Res** 1988 Aug 1;470(2):304-8

Ultrastructural features of NPY-containing neurons in the rat striatum. Vuillet J, et al. **Brain Res** 1989 Jan 16; 477(1-2):241-51

Principal neurons of the basilar pons as the source of a recurrent collateral system. Mihailoff GA. **Brain Res Bull** 1978 Jul-Aug;3(4):319-32

Neuronal and glial gap junctions in the goldfish preoptic area, a thin section and freeze-fracture study. Gregory WA, et al. **Brain Res Dev Brain Res** 1988 Nov 1;44(1):9-19

Fine structures of cerebrospinal fluid-contacting neurons with mitochondria-containing bulbs in the primate spinal cord. Morita F, et al. **Bull Osaka Med Sch** 1987 Oct; 33(2):117-27

Cell differentiation as assayed by the topography and number of ribosomal genes. Brodsky VY, et al. **Cell Differ** 1988 Aug;24(3):201-7

Light- and electron-microscopic immunocytochemistry of peptidergic neurons innervating thoracico-abdominal neurohaemal areas in the blowfly. Duve H, et al. **Cell Tissue Res** 1988 Sep;253(3):583-95

Intraepidermal nerves in human digital skin. Novotny GE, et al. **Cell Tissue Res** 1988 Oct;254(1):111-7

Cultured Schwann cells assemble normal-appearing basal lamina only when they ensheathe axons. Clark MB, et al. **Dev Biol** 1989 Jun;133(2):393-404

In vitro growth properties of Xenopus retinal neurons undergo developmental modulation. Grant P, et al. **Dev Biol** 1989 Jun;133(2):502-14

Immunocytochemical and physiological evidence of a synapse between dopamine- and luteinizing hormone releasing hormone-containing neurons in the ewe median eminence. Kuljis RO, et al. **Endocrinology** 1989 Mar; 124(3):1579-81

Vesicle-mediated delivery of membrane to growth cones during neuritogenesis in embryonic rat primary neuronal cultures. Shea TB, et al. **Exp Cell Biol** 1988;56(1-2):67-73

Correlation of development stage and gap junction formation between chick embryo neurons and cloned skeletal muscle myoblasts. Bonner PH. **Exp Cell Res** 1989 Mar; 181(1):205-16

Effects of pregnancy on the extrinsic innervation of the guinea pig uterus. A histochemical, immunohistochemical and ultrastructural study. Alm P, et al. **Histochem J** 1988 Aug;20(8):414-26

Early changes of surface morphology in monolayer cultures of neural retina cells. The effect of p-bromophenacyl bromide. Suburo AM, et al. **Int J Dev Neurosci** 1987; 5(5-6):407-15

Ruffed cells in the olfactory bulb of freshwater teleosts. I. Golgi impregnation. Alonso JR, et al. **J Anat** 1987 Dec; 155:101-7

The cytoarchitecture of the nucleus cuneiformis. A Nissl and Golgi study. Gioia M, et al. **J Anat** 1987 Dec;155:165-76

Ultrastructural evidence for the mitotic division of neurons in the anterior horn of the fetal rabbit in the later stages of gestation. Sturrock RR. **J Anat** 1987 Dec;155:63-75

The lack of a role for protein kinase C in neurite extension and in the induction of ornithine decarboxylase by nerve growth factor in PC12 cells. Reinhold DS, et al. **J Biol Chem** 1989 Feb 25;264(6):3538-44

Evidence that calcium may control neurite outgrowth by regulating the stability of actin filaments. Lankford KL, et al. **J Cell Biol** 1989 Sep;109(3):1229-43

Organization of cytoskeletal elements and organelles preceding growth cone emergence from an identified neuron in situ. Lefcort F, et al. **J Cell Biol** 1989 May; 108(5):1737-49

Progressive and spatially differentiated stability of microtubules in developing neuronal cells. Lim SS, et al. **J Cell Biol** 1989 Jul;109(1):253-63

Posttranslational membrane attachment and dynamic fatty acylation of a neuronal growth cone protein, GAP-43. Skene JH, et al. **J Cell Biol** 1989 Feb;108(2):613-24

Richness of environment affects the number of contacts formed by boutons containing flat vesicles but does not alter the number of these boutons per neuron. Beaulieu C, et al. **J Comp Neurol** 1988 Aug 15;274(3):347-56

Comparative study of neuronal and glial gap-junctions in crayfish nerve cords. Bosch E. **J Comp Neurol** 1989 Jul 15;285(3):399-411

Morphology of peptide-immunoreactive neurons in the rat central nucleus of the amygdala. Cassell MD, et al. **J Comp Neurol** 1989 Mar 8;281(2):320-33

Axon-bearing amacrine cells of the macaque monkey retina. Dacey DM. **J Comp Neurol** 1989 Jun 8;284(2):275-93

Morphology of neurons in area 4 gamma of the cat's cortex studied with intracellular injection of HRP [corrected and issued with original paging in J Comp Neurol 1988 Nov 8;277(2)] Ghosh S, et al. **J Comp Neurol** 1988 Nov 8; 277(2):290-312

Ultrastructure and synaptic organization of luteinizing hormone-releasing hormone (LHRH) neurons in the anestrous ewe. Lehman MN, et al. **J Comp Neurol** 1988 Jul 22;273(4):447-58

High-resolution 2-deoxyglucose mapping of functional cortical columns in mouse barrel cortex. McCasland JS, et al. **J Comp Neurol** 1988 Dec 22;278(4):555-69

Laminar distribution and morphology of gamma-aminobutyric acid (GABA)-immunoreactive neurons in the medial and dorsomedial areas of the cerebral cortex of the lizard Podarcis hispanica. Schwerdtfeger WK, et al. **J Comp Neurol** 1988 Dec 22;278(4):473-85

Concanavalin A binding sites of rough endoplasmic reticulum containing intracisternal microtubules in canine neurones. Atoji Y, et al. **J Comp Pathol** 1988 Jul;99(1):55-63

Cytoplasmic tubular arrays in canine neurons containing intracisternal microtubules. Atoji Y, et al. **J Electron Microsc (Tokyo)** 1988;37(4):208-11

Ultrastructure of rabbit retinal nerve fibre layer--neuro-glial relationships, myelination, and nerve fibre spectrum. Reichenbach A, et al. **J Hirnforsch** 1988;29(5):481-91

Three-dimensional imaging of neurons by confocal fluorescence microscopy. Carlsson K, et al. **J Microsc** 1989 Jul;155 (Pt 1):15-26 (22 ref.)

On the structure of nerve cells. 1898 [classical article] Golgi C. **J Microsc** 1989 Jul;155 (Pt 1):3-7

On the structure of the nerve cells of the spinal ganglia. 1898 [classical article] Golgi C. **J Microsc** 1989 Jul;155 (Pt 1):9-14

Neuronal imaging with colloidal gold. van den Pol AN. **J Microsc** 1989 Jul;155 (Pt 1):27-59 (156 ref.)

Simple three-dimensional imaging of HRP-labelled neurons with the aid of an image processor. van der Linden JA, et al. **J Microsc** 1989 Feb;153 (Pt 2):223-9

Characterization, by size, density, osmotic fragility, and immunoaffinity, of acetylcholine- and vasoactive intestinal polypeptide-containing storage particles from myenteric neurones of the guinea-pig. Agoston DV, et al. **J Neurochem** 1989 May;52(5):1474-80

Subcellular localization of functionally differentiated microtubules in squid neurons: regional distribution of microtubule-associated proteins and beta-tubulin isotypes. Arai T, et al. **J Neurochem** 1988 Dec;51(6):1825-38

Effects of the murine mutation 'nervous' on neurons in

cerebellum and dorsal cochlear nucleus. Berrebi AS, et al. **J Neurocytol** 1988 Aug;17(4):465–84

The distribution and movement of organelles in maturing growth cones: correlated video-enhanced and electron microscopic studies. Burmeister DW, et al. **J Neurocytol** 1988 Dec;17(6):783–95

Neuronal membrane remodelling during the oestrus cycle: a freeze-fracture study in the arcuate nucleus of the rat hypothalamus. Garcia-Segura LM, et al. **J Neurocytol** 1988 Jun;17(3):377–83

Ultrastructure and synaptic relationships of calbindin-reactive, Dogiel type II neurons, in myenteric ganglia of guinea-pig small intestine. Pompolo S, et al. **J Neurocytol** 1988 Dec;17(6):771–82

Dynamics of the Golgi method: a time-lapse study of the early stages of impregnation in single sections. Spaček J. **J Neurocytol** 1989 Feb;18(1):27–38

Evidence from neuron/lymphoma heterokaryons for a common trans-acting factor suppressing Thy-1 expression. Saleh M, et al. **J Neuroimmunol** 1989 Aug;23(3):203–14

Differential localization of microtubules in cerebellar cells. Ginzburg I, et al. **J Neurosci** 1989 Jun;9(6):1961–7

Dendritic spines of CA 1 pyramidal cells in the rat hippocampus: serial electron microscopy with reference to their biophysical characteristics. Harris KM, et al. **J Neurosci** 1989 Aug;9(8):2982–97

Ultrastructural characterization of gerbil olivocochlear neurons based on differential uptake of 3H-D-aspartic acid and a wheatgerm agglutinin-horseradish peroxidase conjugate from the cochlea. Helfert RH, et al. **J Neurosci** 1988 Sep;8(9):3111–23

Synaptic ultrastructure of functionally and morphologically characterized neurons of the superficial spinal dorsal horn of cat. Rèthelyi M, et al. **J Neurosci** 1989 Jun;9(6):1846–63

A morphometric analysis of functionally defined subpopulations of neurons in the paraventricular nucleus of the rat with observations on the effects of colchicine. Rho JH, et al. **J Neurosci** 1989 Apr;9(4):1375–88

Quantitative computer analysis of Golgi-impregnated neurons using a new 'expanded stick' model for coding; its application to the study of axons. Freire M. **J Neurosci Methods** 1988 Sep;25(2):143–50

Stabilization of tetramethylbenzidine (TMB) reaction product at the electron microscopic level by ammonium molybdate. Marfurt CF, et al. **J Neurosci Methods** 1988 Oct; 25(3):215–23

A fractal analysis of cell images. Smith TG Jr, et al. **J Neurosci Methods** 1989 Mar;27(2):173–80

Glial cells of the crayfish and their relationships with neurons. An ultrastructural study. Cuadras J, et al. **J Physiol (Paris)** 1987;82(4):196–217

The clinical and pathologic heterogeneity of feline alpha-mannosidosis. Cummings JF, et al. **J Vet Intern Med** 1988 Oct-Dec;2(4):163–70

Cytophotometric analysis of T-2 toxin induced alterations in chromatin condensation and neuronal nuclear volume of rat supraoptic-magnocellular neurons. Ballough GP, et al. **Life Sci** 1989;45(2):189–96

Age-related changes in the function of somatic membrane potassium channels of neurons in the mollusc Lymnaea stagnalis. Frolkis VV, et al. **Mech Ageing Dev** 1989 Jan; 47(1):47–54

Neuropeptide Y-like immunoreactivity is present in boutons synapsing on vasopressin-containing neurons in rabbit supraoptic nucleus. Beroukas D, et al. **Neuroendocrinology** 1989 Aug;50(2):222–8

Synaptic interconnections among growth hormone-releasing hormone (GHRH)-containing neurons in the arcuate nucleus of the rat hypothalamus. Horváth S, et al. **Neuroendocrinology** 1988 Nov;48(5):471–6

Ultrastructural changes in neurons and interneuronal synapses of the hypothalamus in progeny of morphine-dependent rats. Kolusheva GV. **Neurosci Behav Physiol** 1989 May-Jun;19(3):186–90

Three-dimensional structure of the presynaptic nerve ending in the ciliary ganglion of the chick embryo: a scanning electron microscopic study. Fujiwara T, et al. **Neurosci Lett** 1989 Mar 27;98(2):125–8

Monosynaptic nigral inputs to the pedunculopontine tegmental nucleus neurons which send their axons to the medial reticular formation in the medulla oblongata. An electron microscopic study in the cat. Nakamura Y, et al. **Neurosci Lett** 1989 Aug 28;103(2):145–50

Nutritional influences on adrenal chromaffin cell development: comparison with central neurons. Lau C, et al. **Pediatr Res** 1988 Nov;24(5):583–7

Crustacean peptidergic neurons in culture show immediate outgrowth in simple medium. Cooke I, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):402–6

A technique for studying the perikaryal projections of spinal ganglion neurons by scanning electron microscopy. Pannese E, et al. **Prog Clin Biol Res** 1989;295:371–6

Three-dimensional structure of bidirectional, excitatory chemical synapses in the jellyfish Cyanea capillata. Anderson PA, et al. **Synapse** 1988;2(6):606–13

Gonadotropin releasing hormone (GnRH) neurons are directly innervated by catecholamine terminals. Chen WP, et al. **Synapse** 1989;3(3):288–90

The basis of polarity in neurons. Black MM, et al. **Trends Neurosci** 1989 Jun;12(6):211–4 (35 ref.)

[Ammonium molybdate as stabilizing agent in tetramethyl benzidine reaction of CB-HRP neurohistochemistry and its application to electron microscopy and immunocytochemistry] Liang FY, et al. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Apr; 11(2):142–6 (Eng. Abstr.) (Chi)

[Projection of the neurons of the substantia nigra and ventral field of the midbrain tegmen in the cat to the putamen] Gorbachevskaia AI. **Arkh Anat Gistol Embriol** 1989 Mar; 96(3):8–15 (Eng. Abstr.) (Rus)

[Changes in the dendrite ultrastructure of the cerebral cortex neurons in human tumors located in the hypothalamo-hypophyseal area] Kaganovskaia EA. **Arkh Anat Gistol Embriol** 1988 Sep;95(9):5–11 (Eng. Abstr.) (Rus)

[Ultrastructure of mitotically dividing cells with signs of neurons in the rat brain] Kleshchinov VN. **Arkh Anat Gistol Embriol** 1989 Jan;96(1):41–4 (Eng. Abstr.) (Rus)

[Ultrastructural changes in the neurons of the cerebral cortex of ondatra in acute hypoxia] Novozhilova AP. **Arkh Anat Gistol Embriol** 1989 Apr;96(4):5–10 (Eng. Abstr.) (Rus)

[Changes in the ultrastructure of cortical synapses during exposure to associated neurochemical stimuli] Kotliar BI, et al. **Neirofiziologiia** 1989;21(2):270–2 (Eng. Abstr.) (Rus)

[Changes in the brain neurons of the recipient around an embryonic nerve tissue transplant] Kleshchinov VN. **Ontogenez** 1989 Mar-Apr;20(2):216–20 (Eng. Abstr.) (Rus)

[Differences in the ribosome state of nerve cells detectable by acridine orange fluorochrome staining] Gordon RIa, et al. **Tsitologiia** 1989 Jan;31(1):73–9 (Eng. Abstr.) (Rus)

[Ultrastructure of the Mauthner neurons in goldfish fry after their adaptation to vestibular stimulation] Potemkin VV, et al. **Tsitologiia** 1989 Mar;31(3):273–6 (Eng. Abstr.) (Rus)

[Ultrastructure of the cerebral cortical neurons in hypoxic hypoxia] Cherkasov LV, et al. **Zh Nevropatol Psikhiatr** 1988;88(7):16–9 (Eng. Abstr.) (Rus)

[Structural changes in the neuropil of the frontal cortex in schizophrenia] Uranova NA. **Zh Nevropatol Psikhiatr** 1988; 88(7):52–8 (Eng. Abstr.) (Rus)

[Ultrastructural changes in cortical neuron synapses during their functional isolation using EGTA iontophoresis] Kotliar BI, et al. **Zh Vyssh Nerv Deiat** 1989 Jan-Feb; 39(1):145–7 (Rus)

NEURONS, AFFERENT

Black box analysis of the skin senses as a multiple communication channel. Eijkman EG. **Biol Cybern** 1989; 61(3):163–70

Centrifugal decrement in diameter of myelinated afferent fibres innervating frog taste organ. Sato T, et al. **Comp Biochem Physiol [A]** 1989;92(3):435–40

Afferent projections of the trigeminal nerve in the goldfish, Carassius auratus. Puzdrowski RL. **J Morphol** 1988 Nov; 198(2):131–47

Dose-dependent expression of neuronopathy after experimental pyridoxine intoxication. Xu Y, et al. **Neurology** 1989 Aug;39(8):1077–83

[Morphologic and functional peculiarities of the visceral protoneuron reexamined in light of recent data] Mei N. **Arch Int Physiol Biochim** 1988 Aug;96(3):A92–8 (13 ref.) (Eng. Abstr.) (Fre)

ABNORMALITIES

Aberrant cutaneous nerve of the thigh arising from the sciatic nerve in the human. Horiguchi M, et al. **Acta Anat (Basel)** 1988;133(2):118–21

ANALYSIS

Comparative lectin histochemical investigation of the taste buds of different vertebrates. Witt M, et al. **Acta Histochem Suppl (Jena)** 1988;36:405–8

Identification of two taurine receptor subtypes on the primary afferent terminal of frog spinal cord. Kudo Y, et al. **Br J Pharmacol** 1988 Aug;94(4):1051–6

The iontophoretic application of Fluoro-Gold for the study of afferents to deep brain nuclei. Pieribone VA, et al. **Brain Res** 1988 Dec 20;475(2):259–71

Indoleamine accumulation by retinal neurons exposed to blood. Sandell JH, et al. **Histochemistry** 1989;92(1):57–60

Quantification of cutaneous sensory nerves and their substance P content in psoriasis. Naukkarinen A, et al. **J Invest Dermatol** 1989 Jan;92(1):126–9

Immunohistochemical study of neuropeptides in vagal and glossopharyngeal afferent neurons in the rat. Helke CJ, et al. **Neuroscience** 1988 Aug;26(2):539–51

Measurement of neuronal Ca2+ transients using simultaneous microfluorimetry and electrophysiology. Thayer SA, et al. **Pflugers Arch** 1988 Jul;412(1-2):216–23

Glutamate and substance P coexist in primary afferent terminals in the superficial laminae of spinal cord. De Biasi S, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7820–4

Contributions from the upper cervical dorsal roots and trigeminal ganglia to the feline circle of Willis. Saito K, et al. **Stroke** 1989 Apr;20(4):524–6

[Localization of efferent sympathetic neurons and afferent neurons in dorsal root ganglia innervating the heart] Fateev MM, et al. **Neirofiziologiia** 1989;21(1):106–11 (Eng. Abstr.) (Rus)

ANATOMY & HISTOLOGY

[The observation of the sensory neurons in the anterior roots of fetus spinal nerve] Zhang JH, et al. **Chen Tzu Yen Chiu** 1988;13(2):152–4, 166 (Eng. Abstr.) (Chi)

CYTOLOGY

Cortico-cortical and subcortico-cortical afferent connection of the rabbit's primary visual cortex. A horseradish peroxidase study. Müller-Paschinger IB, et al. **Anat Embryol (Berl)** 1989;180(1):81–8

An HRP study of the central projections from primary sensory neurons innervating the rat masseter muscle. Arvidsson J, et al. **Brain Res** 1989 Feb 20;480(1-2):111–8

Death of sensory ganglion neurons after acute withdrawal of nerve growth factor in dissociated cell cultures. Eichler ME, et al. **Brain Res** 1989 Mar 20;482(2):340–6

Effects of unilateral naris closure on the olfactory epithelia of adult mice. Maruniak JA, et al. **Brain Res** 1989 Jun 26; 490(2):212–8

The cells of origin of the hypoglossal afferent nerves and central projections in the cat. Nazruddin, et al. **Brain Res** 1989 Jun 26;490(2):219–35

The pelvic innervation in the rat: different spinal origin and projections in Sprague-Dawley and Wistar rats. Pascual JI, et al. **Brain Res** 1989 Feb 20;480(1-2):397–402

Characterization of Merkel cells and mechanosensory axons of the rat by styryl pyridinium dyes. Nurse CA, et al. **Cell Tissue Res** 1989 Jan;255(1):125–8

SSEA-1 is a specific marker for the spinal sensory neuron lineage in the quail embryo and in neural crest cell cultures. Sieber-Blum M. **Dev Biol** 1989 Aug;134(2):362–75

K+ potentiation of non-NGF mediated neurite outgrowth in sensory ganglia. Spoerri PE, et al. **Eur J Cell Biol** 1989 Feb;48(1):154–8

Preservation of sensory cells by placing stumps of transected nerve in an impermeable tube. Melville S, et al. **Exp Neurol** 1989 Sep;105(3):311–5

Ganglionic distribution of afferent neurons innervating the canine heart and cardiopulmonary nerves. Hopkins DA, et al. **J Auton Nerv Syst** 1989 Apr;26(3):213–22

Origins of the renal innervation in the primate, Macaca fascicularis. Marfurt CF, et al. **J Auton Nerv Syst** 1989 Jul;27(2):113–26

Neuronal process outgrowth of human sensory neurons on monolayers of cells transfected with cDNAs for five human N-CAM isoforms. Doherty P, et al. **J Cell Biol** 1989 Aug; 109(2):789–98

Sympathetic and afferent somata projecting in hindlimb nerves and the anatomical organization of the lumbar sympathetic nervous system of the rat. Baron R, et al. **J Comp Neurol** 1988 Sep 15;275(3):460–8

Mormyromast electroreceptor organs and their afferent fibers in mormyrid fish: I. Morphology. Bell CC, et al. **J Comp Neurol** 1989 Aug 15;286(3):391–407

Distribution and central projections of primary afferent neurons that innervate the masseter muscle and mandibular periodontium: a double-label study. Capra NF, et al. **J Comp Neurol** 1989 Jan 15;279(3):341–52

Connectional analysis of the ipsilateral and contralateral afferent neurons of the superior temporal region in the rhesus monkey. Cipolloni PB, et al. **J Comp Neurol** 1989 Mar 22;281(4):567–85

The projection of the medial and posterior articular nerves of the cat's knee to the spinal cord. Craig AD, et al. **J Comp Neurol** 1988 Oct 8;276(2):279–88

Morphology of jaw-muscle spindle afferents in the rat. Dessem D, et al. **J Comp Neurol** 1989 Apr 15; 282(3):389–403

Anatomical organization of long ascending propriospinal neurons in the cat spinal cord. English AW, et al. **J Comp Neurol** 1985 Oct 22;240(4):349–58

Somatotopic organization of inputs from the hand to the spinal gray and cuneate nucleus of monkeys with observations on the cuneate nucleus of humans. Florence SL, et al. **J Comp Neurol** 1989 Aug 1;286(1):48–70

Gustatory innervation in the rabbit: central distribution of sensory and motor components of the chorda tympani, glossopharyngeal, and superior laryngeal nerves. Hanamori T, et al. **J Comp Neurol** 1989 Apr 1;282(1):1–14

Structure-function relationships in rat brainstem subnucleus interpolaris: IV. Projection neurons. Jacquin MF, et al. **J Comp Neurol** 1989 Apr 1;282(1):45–62

Projections of submucosal neurons to the myenteric plexus of the guinea pig intestine: in vitro tracing of microcircuits by retrograde and anterograde transport. Kirchgessner AL, et al. **J Comp Neurol** 1988 Nov 22;277(4):487–98

Physiological, morphological, and cytochemical characteristics of a layer 1 neuron in cat striate cortex. Martin KA, et al. **J Comp Neurol** 1989 Apr 15; 282(3):404–14

Sensory innervation of the hairs of the rat hindlimb: a light microscopic analysis. Millard CL, et al. **J Comp Neurol** 1988 Nov 8;277(2):183–94

Morphology of a new population of spiking local interneurones in the locust metathoracic ganglion. Nagayama T. **J Comp Neurol** 1989 May 8;283(2):189–211

Central distribution of cervical primary afferents in the rat, with emphasis on proprioceptive projections to vestibular,

perihypoglossal, and upper thoracic spinal nuclei. Neuhuber WL, et al. **J Comp Neurol** 1989 Feb 8; 280(2):231–53

Somatotopic mapping of sensory neurons innervating mechanosensory hairs on the larval prolegs of Manduca sexta. Peterson BA, et al. **J Comp Neurol** 1988 Sep 1; 275(1):128–44

Calbindin–immunoreactive sensory neurons of dorsal root ganglion project to skeletal muscle in the chick. Philippe E, et al. **J Comp Neurol** 1989 May 1;283(1):153–60

Projections of digit afferents to the cuneate nucleus in the raccoon before and after partial deafferentation. Rasmusson DD. **J Comp Neurol** 1988 Nov 22;277(4):549–56

"Necklace olfactory glomeruli" form unique components of the rat primary olfactory system. Shinoda K, et al. **J Comp Neurol** 1989 Jun 15;284(3):362–73

Development of spinocerebellar afferents in the clawed toad, Xenopus laevis. van der Linden JA, et al. **J Comp Neurol** 1988 Nov 1;277(1):41–52

The avian somatosensory system. I. Primary spinal afferent input to the spinal cord and brainstem in the pigeon (Columba livia). Wild JM. **J Comp Neurol** 1985 Oct 22; 240(4):377–95

The tritocerebral commissure 'dwarf' (TCD): a major GABA–immunoreactive descending interneuron in the locust. Tyrer NM, et al. **J Comp Physiol [A]** 1988 Dec; 164(2):141–50

Central projections of the lateral line nerves of Chelon labrosus (teleosts, order Perciformes). Diaz SM, et al. **J Hirnforsch** 1989;30(3):339–47

Rectospinal neurons: evidence for a direct projection from the enteric to the central nervous system in the rat. Doerffler–Melly J, et al. **Neurosci Lett** 1988 Oct 5; 92(2):121–5

The projection pattern of forepaw nerves to the cuneate nucleus of the raccoon. Rasmusson DD. **Neurosci Lett** 1989 Mar 27;98(2):129–34

Sensory nerve endings in the cat cruciate ligaments: a morphological investigation. Sjölander P, et al. **Neurosci Lett** 1989 Jul 17;102(1):33–8

Giant lateral–line afferent terminals in the electroreceptive dorsal nucleus of lampreys. Kishida R, et al. **Neurosci Res** 1988 Oct;6(1):83–7

Morphometrical study of the cat thoracic dorsal root ganglion cells in relation to muscular and cutaneous afferent innervation. Larnicol N, et al. **Neurosci Res** 1988 Dec; 6(2):149–61

Spinal and supraspinal terminations of primary afferent fibers from the gastrocnemius–soleus muscle in the cat. Mense S, et al. **Neuroscience** 1988 Sep;26(3):1023–35

DRUG EFFECTS

Effects of capsaicin on articular afferents of the cat's knee joint. He X, et al. **Agents Actions** 1988 Dec;25(3–4):222–4

Sufentanil, morphine, met–enkephalin, and kappa–agonist (U–50,488H) inhibit substance P release from primary sensory neurons: a model for presynaptic spinal opioid actions. Chang HM, et al. **Anesthesiology** 1989 Apr; 70(4):672–7

Primary sensory neurones and naloxone–precipitated morphine withdrawal. Donnerer J. **Br J Pharmacol** 1989 Apr;96(4):767–72

Local opioid–sensitive afferent sensory neurones in the modulation of gastric damage induced by Paf. Esplugues JV, et al. **Br J Pharmacol** 1989 Jun;97(2):579–85

The effect of temperature on the GABA–induced chloride current in isolated sensory neurones of the frog. ffrench–Mullen JM, et al. **Br J Pharmacol** 1988 Nov; 95(3):753–62

Capsaicin and nicotine–sensitive afferent neurones and nasal secretion in healthy human volunteers and in patients with vasomotor rhinitis. Stjärne P, et al. **Br J Pharmacol** 1989 Mar;96(3):693–701

Role of vagal and sympathetic afferents in reflex respiratory responses to capsaicin in dogs. Ravi K. **Can J Physiol Pharmacol** 1988 Jul;66(7):946–50

Effect of acetylcholine on ventrocaudal sensory neurons in the pleural ganglia of Aplysia. Ichinose M, et al. **Cell Mol Neurobiol** 1989 Jun;9(2):233–45

Modulatory action of galanin on responses due to antidromic activation of peripheral terminals of capsaicin–sensitive sensory nerves. Giuliani S, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):91–6

The antagonism induced by ruthenium red of the actions of capsaicin on the peripheral terminals of sensory neurons: further studies. Maggi CA, et al. **Eur J Pharmacol** 1988 Sep 1;154(1):1–10

The effects of neonatal capsaicin treatment on the sensory innervation of the nipple and on the milk ejection reflex in the rat. Tasker JG, et al. **Exp Brain Res** 1988;73(1):32–8

Sensory nerves and urinary bladder function: effects of diabetes, capsaicin and acrylamide treatment. Kudlacz EM, et al. **Gen Pharmacol** 1989;20(1):31–4

Bullfrog dorsal root ganglion cells having tetrodotoxin–resistant spikes are endowed with nicotinic receptors. Morita K, et al. **J Neurophysiol** 1989 Sep; 62(3):657–64

Selective modulation of spike duration by serotonin and the neuropeptides, FMRFamide, SCPB, buccalin and myomodulin in different classes of mechanoafferent neurons in the cerebral ganglion of Aplysia. Rosen SC, et al. **J Neurosci** 1989 Feb;9(2):390–402

Experimental retrograde adriamycin trigeminal sensory ganglionectomy. Kato S, et al. **J Neurosurg** 1988 Nov; 69(5):760–5

Morphine, capsaicin and K+ release purines from capsaicin–sensitive primary afferent nerve terminals in the spinal cord. Sweeney MI, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):447–54

Excitation and sensitization of fine articular afferents from cat's knee joint by prostaglandin E2. Schaible HG, et al. **J Physiol (Lond)** 1988 Sep;403:91–104

Bradykinin analogs antagonize bradykinin–induced second messenger production in a sensory neuron cell line. Francel PC, et al. **Mol Pharmacol** 1989 Jan;35(1):34–8

Capsaicin–sensitive afferents and blood pressure regulation during pentobarbital anaesthesia in the rat. Bramhall T, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):584–9

Vesico–inhibitory responses and capsaicin–sensitive afferents in rats. Conte B, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan–Feb; 339(1–2):178–83

Capsaicin–sensitive afferents in the rat urinary bladder activate a spinal sympathetic cardiovascular reflex. Giuliani S, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):411–6

Modulation of calcium–currents by capsaicin in a subpopulation of sensory neurones of guinea pig. Petersen M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan–Feb;339(1–2):184–91

Stimulation of afferent nerve endings by intragastric capsaicin protects against ethanol–induced damage of gastric mucosa. Holzer P, et al. **Neuroscience** 1988 Dec;27(3):981–7

The effect of 4–aminopyridine on action potential shape and firing pattern of rat dorsal root ganglion neurones. Waddell PJ, et al. **Pflugers Arch** 1989;414 Suppl 1:S131–2

The effect of tachykinins and CGRP on the obstructed ureter—a study on capsaicin–sensitive sensory nerves in the guinea–pig. Kinn AC, et al. **Scand J Urol Nephrol Suppl** 1988;110:291–7

[Bis(5'–adenosyl)tetraphosphate—a partial agonist of the ATP receptors on sensory neurons of the rat] Marchenko SM, et al. **Neirofiziologiia** 1988;20(4):427–31 (Eng. Abstr.) **(Rus)**

[Effect of serotonin on the activity of the neurons involved in the realization of the avoidance reflex of the snail] Chistiakova MV, et al. **Zh Vyssh Nerv Deiat** 1988 Nov–Dec;38(6):1060–7 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Pre–axonogenesis migration of afferent pioneer cells in the grasshopper embryo. Bentley D, et al. **J Exp Zool** 1989 Aug;251(2):217–23

Different subsets of axonal guidance cues are essential for sensory neurite outgrowth to cutaneous and muscle targets in the dorsal ramus of the embryonic chick. Tosney KW, et al. **J Exp Zool** 1989 Aug;251(2):232–44

Commitment of neural crest cells to the sensory neuron lineage. Sieber–Blum M. **Science** 1989 Mar 24; 243(4898):1608–11

ENZYMOLOGY

Carbonic anhydrase activity in the peripheral nervous system of rat: the enzyme as a marker for muscle afferents. Szabolcs MJ, et al. **Brain Res** 1989 Jul 17;492(1–2):129–38

Activation of guanylate cyclase by bradykinin in rat sensory neurones is mediated by calcium influx: possible role of the increase in cyclic GMP. Burgess GM, et al. **J Neurochem** 1989 Oct;53(4):1212–8

Enzyme translocation in the course of regeneration of central primary afferent terminals in the substantia gelatinosa of the adult rodent spinal cord. Knyihár–Csillik E, et al. **J Neurosci Res** 1989 Jan;22(1):74–82

Further observations on the relationship between adenosine deaminase–containing axons and trigeminal mesencephalic neurons: an electron microscopic, immunohistochemical and anterograde tracing study. Yamamoto T, et al. **Neuroscience** 1988 Aug;26(2):669–80

Ultrastructural changes in acetylcholinesterase activity in the deafferented spinal trigeminal nucleus. Wilson FR, et al. **Synapse** 1988;2(4):341–52

Ontogenesis of two genuine marker enzymes of primary sensory neurons in the rat. Gyulai F. **Z Mikrosk Anat Forsch** 1988;102(3):423–31

GROWTH & DEVELOPMENT

Mosaic Drosophila wings reveal regional heterogeneity in the guidance of ectopic axons. Blair SS, et al. **J Neurobiol** 1989 Mar;20(2):55–68

Alpha 1–acid glycoprotein promotes nerve growth in vitro. Liu HM, et al. **Prog Clin Biol Res** 1989;300:239–42

IMMUNOLOGY

Reduced numbers of calcitonin gene–related peptide–(CGRP–) and tachykinin–immunoreactive sensory neurones associated with greater enkephalin immunoreactivity in the dorsal horn of a mutant rat with hereditary sensory neuropathy. Kar S, et al. **Cell Tissue Res** 1989 Feb;255(2):451–66

METABOLISM

Changes in tachykinin and actin gene expression in rat sensory neurones after cutting or crushing the sciatic nerve. Nielsch U, et al. **Biochem Soc Trans** 1988 Aug;16(4):465–6

An investigation into the mechanisms of inhibition of calcium channel currents in cultured sensory neurones of the rat by guanine nucleotide analogues and (–)–baclofen. Dolphin AC, et al. **Br J Pharmacol** 1989 May;97(1):263–73

Substance P content in cultured neonatal rat vagal sensory neurons: the effect of nerve growth factor. MacLean DB, et al. **Brain Res** 1988 Aug 2;457(1):53–62

Differential regulation of calcitonin gene–related peptide and substance P in cultured neonatal rat vagal sensory neurons. MacLean DB, et al. **Brain Res** 1989 Jan 30;478(2):349–55

Biochemical, anatomical and functional correlates of postnatal development of the capsaicin–sensitive innervation of the rat urinary bladder. Maggi CA, et al. **Brain Res** 1988 Oct 1;471(2):183–90

Reciprocal regulation of tachykinin– and vasoactive intestinal peptide–gene expression in rat sensory neurones following cut and crush injury. Nielsch U, et al. **Brain Res** 1989 Feb 27;481(1):25–30

A quantitative analysis of the retrograde axonal transport of 4 different fluorescent dyes in peripheral sensory and motor neurons and lack of anterograde transport in the corticospinal system. Ogilvy CS, et al. **Brain Res** 1988 Dec 20;475(2):244–53

Ontogeny and afferent connections of corticotropin releasing factor–like immunoreactivity in the rat neocortex. Sakanaka M, et al. **Brain Res** 1988 Oct 1;471(2):175–82

5–Hydroxytryptamine releases adenosine from primary afferent nerve terminals in the spinal cord. Sweeney M, et al. **Brain Res** 1988 Oct 18;462(2):346–9

Calcitonin gene–related peptide– and substance P–containing primary afferent fibers in the dorsal column of the rat. Tamatani M, et al. **Brain Res** 1989 Aug 21;495(1):122–30

Convergence of serotonin–, enkephalin– and substance P–like immunoreactive afferent fibers onto cat medullary dorsal horn projection neurons: a triple immunocytochemical staining technique combined with the retrograde HRP–tracing method. Tashiro T, et al. **Brain Res** 1989 Jul 10;491(2):360–5

Convergence of serotonin–, enkephalin– and substance P–like immunoreactive afferent fibers on single pudendal motoneurons in Onuf's nucleus of the cat: a light microscope study combining the triple immunocytochemical staining technique with the retrograde HRP–tracing method. Tashiro T, et al. **Brain Res** 1989 Mar 6;481(2):392–8

Is the supply of axoplasmic proteins a burden for the cell body? Morphometry of sensory neurons and amino acid incorporation into their cell bodies. von Bernhardi R, et al. **Brain Res** 1989 Jan 30;478(2):301–8

Calcitonin gene–related peptide containing sympathetic preganglionic and sensory neurons projecting to the superior cervical ganglion of the rat. Yamamoto K, et al. **Brain Res** 1989 May 15;487(1):158–64

Proenkephalin opioid peptide product in the sensory ganglia of the rat: a developmental immunohistochemical study. Senba E, et al. **Brain Res Dev Brain Res** 1989 Aug 1; 48(2):263–71

NPY–, galanin–, VIP/PHI–, CGRP– and substance P–immunoreactive neuronal subpopulations in cat autonomic and sensory ganglia and their projections. Lindh B, et al. **Cell Tissue Res** 1989;256(2):259–73

Distribution of substance P in the enteric plexuses of the small intestine of the platypus, Ornithorhynchus anatinus. Osborne PB, et al. **Cell Tissue Res** 1989 Mar;255(3):663–7

Tachykinins and calcitonin gene–related peptide: co–existence in sensory nerves of the nasal mucosa and effects on blood flow. Stjärne P, et al. **Cell Tissue Res** 1989 Jun;256(3):439–46

Immunohistochemical and behavioral analysis of spinal lesions induced by a substance P antagonist and protection by thyrotropin releasing hormone. Freedman J, et al. **Exp Brain Res** 1989;74(2):279–92

Calcitonin gene–related peptide–like immunoreactivity in nerve fibers in the human skin. Relation to fibers containing substance P–, somatostatin– and vasoactive intestinalpolypeptide–like immunoreactivity. Dalsgaard CJ, et al. **Histochemistry** 1989;91(1):35–8

Plasminogen activator secretion in relation to Schwann cell activities. Krystosek A, et al. **Int J Dev Neurosci** 1988; 6(5):483–93

Two different G–proteins mediate neuropeptide Y and bradykinin–stimulated phospholipid breakdown in cultured rat sensory neurons. Perney TM, et al. **J Biol Chem** 1989 May 5;264(13):7317–27

Lumbar dorsal root ganglia of the cat: a quantitative study of peptide immunoreactivity and cell size. Garry MG, et al. **J Comp Neurol** 1989 Jun 1;284(1):36–47

Markers shared between dorsal root and enteric ganglia. Kirchgessner AL, et al. **J Comp Neurol** 1988 Oct 22; 276(4):607–21

Peripheral patterns of calcitonin–gene–related peptide general somatic sensory innervation: cutaneous and deep terminations. Kruger L, et al. **J Comp Neurol** 1989 Feb 8;280(2):291–302

Distribution of radioactive leucine following uptake by olfactory sensory neurons in normal and heteromorphic crayfish antennules. Mellon D Jr, et al. **J Comp Neurol** 1989 Feb 22;280(4):645–62

Calcitonin-gene-related-peptide-immunoreactive innervation of the rat head with emphasis on specialized sensory structures. Silverman JD, et al. **J Comp Neurol** 1989 Feb 8;280(2):303–30

Fast-deactivating calcium channels in chick sensory neurons. Swandulla D, et al. **J Gen Physiol** 1988 Aug;92(2):197–218

Capsaicin-induced ion fluxes increase cyclic GMP but not cyclic AMP levels in rat sensory neurones in culture. Wood JN, et al. **J Neurochem** 1989 Oct;53(4):1203–11

Immunocytochemical evidence for the localization of the GM1 ganglioside in carbonic anhydrase-containing and RT 97-immunoreactive rat primary sensory neurons. Robertson B, et al. **J Neurocytol** 1989 Feb;18(1):77–86

Sexually dimorphic polypeptides in developing antennal sensory neurons of an insect. Kingan TG, et al. **J Neurosci** 1989 Jun;9(6):1951–60

Regulation of calcium homeostasis in sensory neurons by bradykinin. Thayer SA, et al. **J Neurosci** 1988 Nov; 8(11):4089–97

Nerve growth factor receptors on normal and injured sensory neurons. Verge VM, et al. **J Neurosci** 1989 Mar;9(3):914–22

Sensory ganglia from tadpoles but not adult bullfrogs synthesize heat shock-like proteins in vitro at non-heat shock temperature. Hammerschlag R, et al. **J Neurosci Res** 1989 Aug;23(4):416–24

Evidence from neuronal heterokaryons for a trans-acting factor suppressing Thy-1 expression during neuronal development. Saleh M, et al. **J Neurosci Res** 1989 Aug; 23(4):406–15

Retrograde transneuronal labeling of premotor neurons of horizontal eye movement system in the cat using wheat germ agglutinin conjugated with horseradish peroxidase. Ozaki M, et al. **Jpn J Ophthalmol** 1989;33(1):85–94

Nerve growth factor regulates expression of neuropeptide genes in adult sensory neurons. Lindsay RM, et al. **Nature** 1989 Jan 26;337(6205):362–4

Early metabolic responses of retinal neurons to trimethyltin intoxication. Toews AD, et al. **Neurochem Pathol** 1988 Apr; 8(2):63–78

Ruthenium red selectively inhibits capsaicin-induced release of calcitonin gene-related peptide from the isolated perfused guinea pig lung. Amann R, et al. **Neurosci Lett** 1989 Jul 3;101(3):311–5

Cholinergic properties of embryonic chick sensory neurons. Bhave SV, et al. **Neurosci Lett** 1988 Sep 12;91(3):333–8

Calcitonin gene-related peptide messenger RNA is expressed in sensory neurones of the dorsal root ganglia and also in spinal motoneurones in man and rat. Gibson SJ, et al. **Neurosci Lett** 1988 Sep 12;91(3):283–8

Higher mitochondrial density in slow versus fast lobster sensory neurons. Mayes JI, et al. **Neurosci Lett** 1989 Jul 17;102(1):87–90

Capsaicin-induced release of substance P-like immunoreactivity from the guinea pig stomach in vitro and in vivo. Renzi D, et al. **Neurosci Lett** 1988 Oct 17; 92(3):254–8

Release of calcitonin gene-related peptide-like immunoreactivity (CGRP-LI) from organs of the genitourinary tract in rats. Santicioli P, et al. **Neurosci Lett** 1988 Oct 5;92(2):197–201

Tachykinins, calcitonin gene-related peptide and neuropeptide Y in nerves of the mammalian thymus: interactions with mast cells in autonomic and sensory neuroimmunomodulation? Weihe E, et al. **Neurosci Lett** 1989 May 22;100(1–3):77–82

Bimodal effects of noxious stimuli on vasopressin secretion in rats. Onaka T, et al. **Neurosci Res** 1988 Dec;6(2):143–8

Ulex europeus agglutinin I binds exclusively to primary olfactory neurons in the rat nervous system. Barber PC. **Neuroscience** 1989;30(1):1–9

The coexistence of neuropeptides in feline sensory neurons. Cameron AA, et al. **Neuroscience** 1988 Dec;27(3):969–79

Expression of substance P and of a Ca2+-activated Cl- current in quail sensory trigeminal neurons. Schlichter R, et al. **Neuroscience** 1989;30(3):585–94

Calcitonin gene-related peptide in visceral afferent nerve fibres: quantification by radioimmunoassay and determination of axonal transport rates. Varro A, et al. **Neuroscience** 1988 Sep;26(3):927–32

Modulation of Ca-channel current by an adenosine analog mediated by a GTP-binding protein in chick sensory neurons. Kasai H, et al. **Pflugers Arch** 1989 Jun; 414(2):145–9

Role of two different guanine nucleotide-binding proteins in the antagonistic modulation of the S-type K+ channel by cAMP and arachidonic acid metabolites in Aplysia sensory neurons. Volterra A, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7810–4

MICROBIOLOGY

The anterograde transport of rabies virus in rat sensory dorsal root ganglia neurons. Tsiang H, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2075–85

Varicella-zoster virus infection of adult rat sensory neurons in vitro. Merville-Louis MP, et al. **J Virol** 1989 Jul; 63(7):3155–60

Herpes simplex virus type 1 latency-associated transcription plays no role in establishment or maintenance of a latent infection in murine sensory neurons. Sedarati F, et al. **J Virol** 1989 Oct;63(10):4455–8

Latency-associated transcript but not reactivatable virus is present in sensory ganglion neurons after inoculation of thymidine kinase-negative mutants of herpes simplex virus type 1. Tenser RB, et al. **J Virol** 1989 Jun;63(6):2861–5

PATHOLOGY

Axonal degeneration and regeneration in sensory roots in a genital herpes model. Soffer D, et al. **Acta Neuropathol (Berl)** 1989;77(6):605–11

Sensory neuron degeneration in familial Kugelberg-Welander disease [published erratum appears in Can J Neurol Sci 1989 May;16(2):223] Winder TR, et al. **Can J Neurol Sci** 1989 Feb;16(1):67–70

Morphological alterations in dorsal root ganglion neurons after peripheral axon injury: association with changes in metabolism. Wells MR, et al. **Exp Neurol** 1989 Apr; 104(1):32–8

Neurogenic inflammation in the rat trachea. I. Changes in venules, leucocytes and epithelial cells. McDonald DM. **J Neurocytol** 1988 Oct;17(5):583–603

Neurogenic inflammation in the rat trachea. II. Identity and distribution of nerves mediating the increase in vascular permeability. McDonald DM, et al. **J Neurocytol** 1988 Oct; 17(5):605–28

Familial bulbo-spinal muscular atrophy associated with testicular atrophy and sensory neuropathy (Kennedy-Alter-Sung syndrome). Autopsy case report of two brothers. Nagashima T, et al. **J Neurol Sci** 1988 Nov; 87(2–3):141–52

Selective destruction of vagal sensory neurons using Shigella cytotoxin. Wiley RG, et al. **Methods Enzymol** 1988; 165:250–4

The effect of peripheral nerve injury on immature motor and sensory neurons and on muscle fibres. Possible relation to the histogenesis of Werdnig-Hoffmann disease. Schmalbruch H. **Rev Neurol (Paris)** 1988;144(11):721–9

PHYSIOLOGY

Comparative view of the central organization of afferent and efferent circuitry for the inner ear. Meredith GE. **Acta Biol Hung** 1988;39(2–3):229–49 (57 ref.)

Synaptic connections between primary afferents and motoneurons in the spinal cord of anuran larvae. Shupliakov OV. **Acta Biol Hung** 1988;39(2–3):127–34

Transganglionic regulation of primary sensory neurons. Csillik B, et al. **Acta Morphol Hung** 1988;36(1–2):35–46

Diagnostic value of quantitative sensory testing (QST) in carpal tunnel syndrome. Borg K, et al. **Acta Neurol Scand** 1988 Dec;78(6):537–41

Tactile extinction to simple (elementary) and complex stimuli. Ito K, et al. **Acta Neurol Scand** 1989 Jul;80(1):68–77

A study of 5-HT-receptors associated with afferent nerves located in normal and inflamed rat ankle joints. Grubb BD, et al. **Agents Actions** 1988 Dec;25(3–4):216–8

A novel type of unmyelinated chemosensitive nociceptor in the acutely inflamed urinary bladder. Häbler HJ, et al. **Agents Actions** 1988 Dec;25(3–4):219–21

Neuronal and behavioural consequences of chemical inflammation of rat urinary bladder. McMahon SB. **Agents Actions** 1988 Dec;25(3–4):231–3

Peripheral and spinal components of the sensitization of spinal neurons during an acute experimental arthritis. Neugebauer V, et al. **Agents Actions** 1988 Dec;25(3–4):234–6

Inflammatory and antiinflammatory effects of antidromic stimulation of dorsal roots in the rat. Pintér E, et al. **Agents Actions** 1988 Dec;25(3–4):240–2

Afferent innervation of the guinea-pig's ureter. Sann H, et al. **Agents Actions** 1988 Dec;25(3–4):243–5

Hemodynamic effects of activation of renal and mesenteric sensory nerves in rats. Janssen BJ, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R29–36

Degeneration of the primary snout sensory afferents in the cervical spinal cords following the infraorbital nerve transection in some mammals. Chang CM, et al. **Anat Anz** 1988;166(1–5):43–51

Modulation of Ca2+-channel currents in sensory neurons by pertussis toxin-sensitive G-proteins. Dolphin AC, et al. **Ann N Y Acad Sci** 1989;560:387–90 (6 ref.)

Antagonistic modulation of S-K+ channel activity by cyclic AMP and arachidonic acid metabolites. Role for two G proteins. Volterra A, et al. **Ann N Y Acad Sci** 1989; 559:219–36

Diabetic truncal neuropathy: topography of the sensory deficit. Stewart JD. **Ann Neurol** 1989 Mar;25(3):233–8

The cell biology of vertebrate taste receptors. Roper SD. **Annu Rev Neurosci** 1989;12:329–53 (128 ref.)

Morphology of electrophysiologically identified baroreceptor afferents and second order neurones in the brainstem of the cat. Czachurski J, et al. **Arch Ital Biol** 1988 Jun;126(3):129–44

Multisensory deficits in rats produced by acute exposure to cold swim stress. Leitner DS. **Behav Neurosci** 1989 Feb; 103(1):151–7

Two high voltage-activated calcium currents are present in isolation in adult rat spinal neurons. Ferroni A, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):379–84

Continuous functions for the analysis of sensory transduction. Awiszus F. **Biol Cybern** 1989;61(2):153–61

How sensory maps could enhance resolution through ordered arrangements of broadly tuned receivers. Baldi P, et al. **Biol Cybern** 1988;59(4–5):313–8

Black box analysis of the skin senses as a multiple communication channel. Eijkman EG. **Biol Cybern** 1989; 61(3):163–70

Superimposing noise linearizes the responses of primary muscle spindle afferents to sinusoidal muscle stretch. Kröller J, et al. **Biol Cybern** 1988;60(2):131–7

Modification of sodium and gating currents by amino group specific cross-linking and monofunctional reagents. Drews G, et al. **Biophys J** 1988 Sep;54(3):383–91

A nonlinear cascade model for action potential encoding in an insect sensory neuron. French AS, et al. **Biophys J** 1989 Apr;55(4):655–61

GABAA-receptor-mediated inhibition of the delayed increase in intragastric pressure to stimulation of vagal afferent fibres in cats. Okamoto T, et al. **Br J Pharmacol** 1988 Sep;95(1):163–8

Neuro-ophthalmology. Jones SM. **Br Vet J** 1989 Mar-Apr; 145(2):99–120 (39 ref.)

Changes in excitability of human cutaneous afferents following prolonged high-frequency stimulation. Applegate C, et al. **Brain** 1989 Feb;112 (Pt 1):147–64

Paraesthesiae and hypaesthesia following prolonged high-frequency stimulation of cutaneous afferents. Burke D, et al. **Brain** 1989 Aug;112 (Pt 4):913–29

Neuroimmune interactions in the airways: implications for asthma, allergy, and other inflammatory airway diseases. Saria A. **Brain Behav Immun** 1988 Dec;2(4):318–21 (5 ref.)

REM sleep enhancement induced by sensory stimulation is prevented by kainic acid lesion of the pontine reticular formation. Arankowsky-Sandoval G, et al. **Brain Res** 1989 Aug 14;494(2):396–400

Re-afferent effects of individual static and dynamic gamma-stimuli during maintained fusimotor stimulation. Awiszus F, et al. **Brain Res** 1989 Jun 5;489(1):41–8

Inhibitor of cyclic AMP-dependent protein kinase blocks opioid-induced prolongation of the action potential of mouse sensory ganglion neurons in dissociated cell cultures. Chen GG, et al. **Brain Res** 1988 Oct 18;462(2):372–7

Unitary discharges in dorsal and ventral roots after the administration of 4-aminopyridine in the cat. Dubuc R, et al. **Brain Res** 1989 Jul 10;491(2):349–55

The effects of NH3 and CO2 on the sensory ending of mammalian muscle spindles: intracellular pH as a possible mechanism. Fukami Y. **Brain Res** 1988 Oct 25;463(1):140–3

Ceruletide suppresses endogenous dopamine release via vagal afferent system, studied by in vivo intracerebral dialysis. Hamamura T, et al. **Brain Res** 1989 Mar 27;483(1):78–83

Sensory modulation of hippocampal transmission. I. Opposite effects on CA1 and dentate gyrus synapsis. Herreras O, et al. **Brain Res** 1988 Oct 4;461(2):290–302

Sensory modulation of hippocampal transmission. II. Evidence for a cholinergic locus of inhibition in the Schaffer-CA1 synapse. Herreras O, et al. **Brain Res** 1988 Oct 4;461(2):303–13

Modulation of reflex responses during fictive locomotion in the forelimb of the cat. Hishinuma M, et al. **Brain Res** 1989 Mar 13;482(1):184–8

Intraspinal sprouting after administration of nerve growth factor antibodies to neonatal rats. Hulsebosch CE, et al. **Brain Res** 1988 Oct 4;461(2):322–7

Structure and function of barrel 'precursor' cells in trigeminal nucleus principalis. Jacquin MF, et al. **Brain Res** 1988 Oct 1;471(2):309–14

Destruction of sympathetic and sensory neurons in the developing rat by a monoclonal antibody against the nerve growth factor (NGF) receptor. Johnson EM Jr, et al. **Brain Res** 1989 Jan 23;478(1):166–70

Somatic activation of thalamic neurons transplanted into lesioned somatosensory thalamus. Juliano SL, et al. **Brain Res** 1989 Jan 30;478(2):356–60

Relations between time-and frequency-domain measures of signal transmission from cutaneous afferents to dorsal horn neurons. Kuipers U, et al. **Brain Res** 1988 Oct 11; 462(1):154–9

Postcordotomy spontaneous dysesthesias in macaques: recurrence after spinal cord transection. Levitt M. **Brain Res** 1989 Feb 27;481(1):47–56

Progressive changes in somatosensory cortical maps in 6-week-old kittens cord-transected at T12. McKinley PA, et al. **Brain Res** 1989 Apr 10;484(1–2):378–82

Characterization of superficial T13–L2 dorsal horn neurons encoding for colorectal distension in the rat: comparison with neurons in deep laminae. Ness TJ, et al. **Brain Res** 1989 May 8;486(2):301–9

Effects of bath-applied L-glutamate and related chemicals on the afferent synapse of the Plotosus electroreceptor. Okano K, et al. **Brain Res** 1988 Aug 2;457(1):79–88

Two pharmacologically distinct receptors mediate two postsynaptic potential (PSP) components in the afferent synapse of the Plotosus eletroreceptor. Okano K. **Brain Res** 1988 Aug 2;457(1):89–97

A role for nerve growth factor in collateral reinnervation from sensory nerves in the guinea pig. Owen DJ, et al. **Brain Res** 1989 Jan 9;476(2):248–55

Somato-motor components of the pelvic and pudendal nerves of the female rat. Pacheco P, et al. **Brain Res** 1989 Jun 19;490(1):85–94

Postnatal maturation of primary afferent terminations in the substantia gelatinosa of the rat spinal cord. An electron microscopic study. Pignatelli D, et al. **Brain Res** 1989 Jul 3;491(1):33–44

Prefrontal representation of stimulus attributes during delay tasks. I. Unit activity in cross-temporal integration of sensory and sensory-motor information. Quintana J, et al.

Brain Res 1988 Dec 6;474(2):211–21
Serotonin modulates calcium-dependent plateau of action potentials recorded from bull frog A-type sensory neurons which is omega-conotoxin GVIA-sensitive, but dihydropyridine-insensitive. Scroggs RS, et al. **Brain Res** 1989 Apr 24;485(2):391–5
Inspiratory-modulated neurons of the rostrolateral pons: effects of pulmonary afferent input. Shaw CF, et al. **Brain Res** 1989 Apr 17;485(1):179–84
Fusimotor neurones can be reflexly influenced by activity in receptor afferents from the posterior cruciate ligament. Sojka P, et al. **Brain Res** 1989 Mar 27;483(1):177–83
Actions of excitatory amino acid acid agonists and antagonists on the primary afferents of the vestibular system of the axolotl (Ambystoma mexicanum). Soto E, et al. **Brain Res** 1988 Oct 11;462(1):104–11
Responses of neurons in the lamb nucleus tractus solitarius to stimulation of the caudal oral cavity and epiglottis with different stimulus modalities. Sweazey RD, et al. **Brain Res** 1989 Feb 20;480(1–2):133–50
Prostaglandin effects after elimination of indirect hyperalgesic mechanisms in the skin of the rat. Taiwo YO, et al. **Brain Res** 1989 Jul 17;492(1–2):397–9
Possible involvement of calcitonin gene-related peptide (CGRP) in non-cholinergic non-adrenergic relaxation induced by mesenteric nerve stimulation in guinea pig ileum. Takaki M, et al. **Brain Res** 1989 Jan 23; 478(1):199–203
Sprouting of CGRP nerve fibers in response to dentin injury in rat molars. Taylor PE, et al. **Brain Res** 1988 Oct 4; 461(2):371–6
The allocation of nerve fibres to the anterior eye segment and peripheral ganglia of rats. I. The sensory innervation. ten Tusscher MP, et al. **Brain Res** 1989 Aug 7;494(1):95–104
Central terminations of periodontal mechanoreceptive and tooth pulp afferents in the trigeminal principal and oral nuclei of the cat. Tsuru K, et al. **Brain Res** 1989 Apr 17; 485(1):29–61
Nerve section alters the interaction between C-fibre activity and intrathecal neuropeptides on the flexor reflex in rat. Wiesenfeld-Hallin Z. **Brain Res** 1989 Jun 5;489(1):129–36
Anatomical distribution and response patterns of reticular neurons active in relation to acoustic startle. Wu MF, et al. **Brain Res** 1988 Aug 9;457(2):399–406
Ganglioside synthesis and transport in regenerating sensory neurons of the rat sciatic nerve. Yates AJ, et al. **Brain Res** 1989 Feb 13;479(2):277–82
Dual somatosensory representation of the periodontium in nucleus ventralis posteromedialis of the cat thalamus. Yokota T, et al. **Brain Res** 1988 Dec 13;475(1):187–91
Effects of locally infused pharmacological agents on spontaneous and sensory-evoked activity of locus coeruleus neurons. Adams LM, et al. **Brain Res Bull** 1988 Sep;21(3):395–400
Mathematical model of cellular mechanisms contributing to presynaptic facilitation. Gingrich KJ, et al. **Brain Res Bull** 1988 Sep;21(3):513–20
Responses of primate locus coeruleus neurons to simple and complex sensory stimuli. Grant SJ, et al. **Brain Res Bull** 1988 Sep;21(3):401–10
Modulation of the spontaneous and evoked discharges of ventral posterior thalamic neurons during shifts in arousal. Morrow TJ, et al. **Brain Res Bull** 1988 Sep;21(3):433–8
Mapping the effects of motor cortex stimulation on single neurons in the dorsal column nuclei in the rat: direct responses and afferent modulation. Shin HC, et al. **Brain Res Bull** 1989 Feb;22(2):245–52
Response characteristics of lamb trigeminal neurons to stimulation of the oral cavity and epiglottis with different sensory modalities. Sweazey RD, et al. **Brain Res Bull** 1989 May;22(5):883–91
Peripheral competition in the control of sensory neuron numbers in Xenopus frogs reared with a single bilaterally innervated hindlimb. Lamb AH, et al. **Brain Res Dev Brain Res** 1989 Jan 1;45(1):149–53
The early ontogeny of the afferent nerves and papillary ridges in human digital glabrous skin. Moore SJ, et al. **Brain Res Dev Brain Res** 1989 Jul 1;48(1):119–41
Transcarpal median sensory conduction: detection of latent abnormalities in mild carpal tunnel syndrome. De Léan J. **Can J Neurol Sci** 1988 Nov;15(4):388–93
Excitatory responses of trigeminal neurons to substance P suggest involvement in sensory transmission. Spigelman I, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):845–8
Effects of capsaicin on reproductive function in the female rat: role of peptide-containing primary afferent nerves innervating the uterine cervix in the neuroendocrine copulatory response. Traurig HH, et al. **Cell Tissue Res** 1988 Sep;253(3):573–81
Molecular convergence of presynaptic inhibition and presynaptic facilitation on common substrate proteins of individual sensory neurons of Aplysia. Sweatt D, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:395–405
Computer program for statistical Mann-Whitney U nonparametric analysis of neuronal spike activity. Soto E, et al. **Comput Methods Programs Biomed** 1989 Mar; 28(3):197–200
Central projections of peripheral mechanosensory cells with increased excitability in Drosophila mosaics. Burg MG, et al. **Dev Biol** 1989 Feb;131(2):505–14
Projections of group Ia afferents to motoneurons of thigh muscles in man. Bayoumi A, et al. **Exp Brain Res** 1989; 76(1):223–8
An investigation of local actions of ionophoretically applied DOPA in the spinal cord. Bras H, et al. **Exp Brain Res** 1988;71(2):447–9
Comparison of effects of monoamines on transmission in spinal pathways from group I and II muscle afferents in the cat. Bras H, et al. **Exp Brain Res** 1989;76(1):27–37
Cobalt-complex ATP enhanced regeneration in the dorsal horn of the rat spinal cord. Ferencsik M, et al. **Exp Brain Res** 1989;76(2):409–16
Oculo-manual tracking of visual targets in monkey: role of the arm afferent information in the control of arm and eye movements. Gauthier GM, et al. **Exp Brain Res** 1988; 73(1):138–54
Spared-root deafferentation of a cat's hindlimb: hierarchical regulation of pathways mediating recovery of motor behavior. Goldberger ME. **Exp Brain Res** 1988; 73(2):329–42
Partial and complete deafferentation of cat hindlimb: the contribution of behavioral substitution to recovery of motor function. Goldberger ME. **Exp Brain Res** 1988;73(2):343–53
The responses of muscle spindles in the kitten to stretch and vibration. Gregory JE, et al. **Exp Brain Res** 1988; 73(3):606–14
Post-tetanic influences on primary afferent depolarization in the cat spinal cord. Gynther BD, et al. **Exp Brain Res** 1989; 74(2):365–74
Somatosensory evoked potential correlates of psychophysical magnitude estimations for tactile air-puff stimulation in man. Hashimoto I, et al. **Exp Brain Res** 1988;73(3):459–69
Influences of morphology and topography of motoneurons and muscle spindle afferents on amplitude of single fiber excitatory postsynaptic potentials in cat. Lüscher HR, et al. **Exp Brain Res** 1989;74(3):493–500
Striatal influences on paravermal cerebellar activity. Manetto C, et al. **Exp Brain Res** 1988;73(1):53–60
Characteristics of the tooth pulp-driven neurons in a functional column of the cat's somatosensory cortex (SI). Matsumoto N, et al. **Exp Brain Res** 1989;74(2):263–71
Sensory components facilitating jaw-closing muscle activities in the rabbit. Morimoto T, et al. **Exp Brain Res** 1989; 76(2):424–40
Receptive field properties of thalamo-cortical taste relay neurons in the parvicellular part of the posteromedial ventral nucleus in rats. Ogawa H, et al. **Exp Brain Res** 1988;73(2):364–70
Alteration of proprioceptive messages induced by tendon vibration in man: a microneurographic study. Roll JP, et al. **Exp Brain Res** 1989;76(1):213–22
Cutaneous control of group I pathways from ankle flexors to extensors in man. Rossi A, et al. **Exp Brain Res** 1988; 73(1):8–14
Ia afferents of the antagonist are inhibited presynaptically before the onset of a ballistic muscle contraction in man. Ruegg DG. **Exp Brain Res** 1989;74(3):663–6
The effect of DOPA and clonidine on reflex pathways from group II muscle afferents to alpha-motoneurones in the cat. Schomburg ED, et al. **Exp Brain Res** 1988;71(2):442–6
Plasticity in the barrel cortex of the adult mouse: effects of peripheral deprivation on GAD-immunoreactivity. Welker E, et al. **Exp Brain Res** 1989;74(3):441–52
Expansion of innervation territory by afferents involved in plasma extravasation after nerve regeneration in adult and neonatal rats. Wiesenfeld-Hallin Z, et al. **Exp Brain Res** 1989;76(1):88–96
Sensory and motor responses of trigeminal and reticular neurons during ingestive behavior in rats. Yamamoto T, et al. **Exp Brain Res** 1989;76(2):386–400
Physiological properties of sensory neurons of the interstitial nucleus in the spinal trigeminal tract. Hayashi H, et al. **Exp Neurol** 1989 Aug;105(2):219–20
Characterization of cat nasal afferents and brain stem neurones receiving ethmoidal input. Lucier GE, et al. **Exp Neurol** 1989 Jan;103(1):83–9
Ionic currents in the somatic membrane of identified T-mechanosensory neurons isolated from segmental ganglia of the medicinal leech. Valkanov M, et al. **Gen Physiol Biophys** 1988 Dec;7(6):643–9
Excitation and suppression of primary auditory fibres in the pigeon. Hill KG, et al. **Hear Res** 1989 May;39(1–2):37–48
Induced suppression in spike responses to tone-on-noise stimuli in the auditory nerve of the pigeon. Hill KG, et al. **Hear Res** 1989 May;39(1–2):49–62
Temporal synchronization in the primary auditory response in the pigeon. Hill KG, et al. **Hear Res** 1989 May; 39(1–2):63–73
A model proposing synaptic and extra-synaptic influences on the responses of cochlear nerve fibres. Hill KG, et al. **Hear Res** 1989 May;39(1–2):75–90 (78 ref.)
Physiology of cochlear efferent and afferent neurons: direct comparisons in the same animal. Liberman MC. **Hear Res** 1988 Jul 15;34(2):179–91
Innervation of regenerated spindles in muscle grafts of the rat. Walro JM, et al. **Histochemistry** 1989;92(1):1–13
Effects of nerve growth factor on sensory neurons in the chick embryo: a stereological study. Dimberg Y, et al. **Int J Dev Neurosci** 1987;5(3):207–13
Selective effects of thyroid hormonal deprivation on growth and development of olfactory receptor sheet during the early postnatal period: a morphometric and cell count study in the rat. Paternostro M, et al. **Int J Dev Neurosci** 1989; 7(3):243–55
Contralateral and ipsilateral tactile extinction in patients with right and left focal brain damage. Gainotti G, et al. **Int J Neurosci** 1989 Mar;45(1–2):81–9
Ataxic hemiparesis syndrome: sensory disturbances and somatosensory evoked potentials. Crespi V, et al. **Ital J Neurol Sci** 1988 Oct;9(5):459–66
Peripheral nerve conduction velocity in normal infants and children. Moglia A, et al. **Ital J Neurol Sci** 1989 Jun; 10(3):311–4
Tonic activity in inspiratory muscles and phrenic motoneurons by stimulation of vagal afferents. Badier M, et al. **J Appl Physiol** 1989 Apr;66(4):1613–9
Circulating atrial natriuretic factor activates vagal afferent inputs to paraventriculo-spinal neurones in the rat. Lovick TA, et al. **J Auton Nerv Syst** 1989 Mar;26(2):129–34
Capsaicin pretreatment attenuates multiple responses to cholecystokinin in rats. McCann MJ, et al. **J Auton Nerv Syst** 1988 Sep;23(3):265–72
Neuronal maintenance and neurite extension of adult mouse neurones in non-neuronal cell-reduced cultures is dependent on substratum coating. Orr DJ, et al. **J Cell Sci** 1988 Dec;91 (Pt 4):555–61
Viscerotopic representation of the upper alimentary tract in the rat: sensory ganglia and nuclei of the solitary and spinal trigeminal tracts. Altschuler SM, et al. **J Comp Neurol** 1989 May 8;283(2):248–68
Embryonic development of the chick primary trigeminal sensory-motor complex. Covell DA Jr, et al. **J Comp Neurol** 1989 Aug 22;286(4):488–503
Development of central projections of lumbosacral sensory neurons in the chick. Davis BM, et al. **J Comp Neurol** 1989 Jan 22;279(4):556–66
Kinesthetic cortical area anterior to primary somatic sensory cortex in the raccoon (Procyon lotor). Feldman SH, et al. **J Comp Neurol** 1988 Nov 1;277(1):80–95
Structure-function relationships in rat brainstem subnucleus interpolaris: V. Functional consequences of neonatal infraorbital nerve section. Jacquin MF. **J Comp Neurol** 1989 Apr 1;282(1):63–79
Structure-function relationships in the rat brainstem subnucleus interpolaris: VI. Cervical convergence in cells deafferented at birth and a potential primary afferent substrate. Jacquin MF, et al. **J Comp Neurol** 1989 May 22;283(4):513–25
Expansion of spinal cord primary sensory afferent projection following combined sciatic nerve resection and saphenous nerve crush: a horseradish peroxidase study in the adult rat. Molander C, et al. **J Comp Neurol** 1988 Oct 15; 276(3):436–41
Degeneration and regeneration of peripheral nerve in the rat trigeminal system: III. Abnormal sensory reinnervation of rat guard hairs following nerve transection and crush. Munger BL, et al. **J Comp Neurol** 1989 May 8;283(2):169–76
Effects of hydroxyurea parallel the effects of radiation in developing olfactory glomeruli in insects. Oland LA, et al. **J Comp Neurol** 1988 Dec 15;278(3):377–87
Sensory pathways and motoneurons of the proboscis reflex in the suboesophageal ganglion of the honey bee. Rehder V. **J Comp Neurol** 1989 Jan 15;279(3):499–513
Cortical organization after treatment of a peripheral nerve with ricin: an evaluation of the relationship between sensory neuron death and cortical adjustments after nerve injury. Wall JT, et al. **J Comp Neurol** 1988 Nov 22; 277(4):578–92
The contribution of olfactory receptor neurons to the perception of pheromone component ratios in male redbanded leafroller moths. Akers RP, et al. **J Comp Physiol [A]** 1988;163(5):641–50
Information processing at a central synapse suggests a noise filter in the auditory pathway of the noctuid moth. Boyan GS, et al. **J Comp Physiol [A]** 1988 Dec;164(2):251–8
Cutaneous sensory afferents recorded from the nervus intramandibularis of Gallus gallus var domesticus. Gentle MJ. **J Comp Physiol [A]** 1989 Feb;164(6):763–74
Modulation of activity in sensory neurons and wind-sensitive interneurons by cercal displacement in the cockroach. Goldstein RS, et al. **J Comp Physiol [A]** 1988 Aug; 163(4):479–87
Physiology and morphology of projection neurons in the antennal lobe of the male moth Manduca sexta. Kanzaki R, et al. **J Comp Physiol [A]** 1989 Aug;165(4):427–53
From distributed sensory processing to discrete motor representations in the diencephalon of the electric fish, Eigenmannia. Keller CH, et al. **J Comp Physiol [A]** 1989 Feb;164(5):565–76
Sex recognition and neuronal coding of electric organ discharge waveform in the pulse-type weakly electric fish, Hypopomus occidentalis. Shumway CA, et al. **J Comp Physiol [A]** 1988 Aug;163(4):465–78
GABAergic inhibition shapes temporal and spatial response properties of pyramidal cells in the electrosensory lateral line lobe of gymnotiform fish. Shumway CA, et al. **J Comp Physiol [A]** 1989 Jan;164(3):391–407
Evolutionary adaptation of a reflex system: sensory hysteresis counters muscle 'catch' tension. Zill SN, et al. **J Comp Physiol [A]** 1988 Nov;164(1):43–8
Long-latency enhancement of quadriceps excitability from stimulation of skin afferents in young and old adults. Burke JR, et al. **J Gerontol** 1989 Sep;44(5):M158–63
Cybernetic model of psychophysiologic pathways: III. Clinical impairment of tension and kinesthesia. Leisman G. **J Manipulative Physiol Ther** 1989 Aug;12(4):275–80

Effects of altered afferent articular input on sensation, proprioception, muscle tone and sympathetic reflex responses. Slosberg M. **J Manipulative Physiol Ther** 1988 Oct;11(5):400–8 (78 ref.)

Structural plasticity at identified synapses during long–term memory in Aplysia. Bailey CH, et al. **J Neurobiol** 1989 Jul;20(5):356–72 (50 ref.)

Laser microbeam axotomy and conduction block show that electrical transmission at a central synapse is distributed at multiple contacts. Gu XN, et al. **J Neurobiol** 1989 Jul; 20(5):422–34

The use of hormonally induced mosaics to study alterations in the synaptic connections made by persistent sensory neurons during insect metamorphosis. Levine RB, et al. **J Neurobiol** 1989 Jul;20(5):326–38

Analysis of proprioceptive inputs to DPG interneurons in the cockroach. Murrain M, et al. **J Neurobiol** 1988 Sep; 19(6):552–70

Diagnostic specificity of sensory and motor nerve conduction variables in early detection of carpal tunnel syndrome. Cioni R, et al. **J Neurol** 1989 May;236(4):208–13

Influence of autograft size on peripheral nerve regeneration in cats. Pover CM, et al. **J Neurol Sci** 1989 Apr; 90(2):179–85

The sympathetic skin response: normal values, elucidation of afferent components and application limits. Uncini A, et al. **J Neurol Sci** 1988 Nov;87(2–3):299–306

Cross–correlation analysis of taste neuron pairs in rat solitary tract nucleus. Adachi M, et al. **J Neurophysiol** 1989 Aug; 62(2):501–9

Serotonergic modulation of two potassium currents in the pleural sensory neurons of Aplysia. Baxter DA, et al. **J Neurophysiol** 1989 Sep;62(3):665–79

Urinary bladder and hindlimb afferent input inhibits activity of primate T2–T5 spinothalamic tract neurons. Brennan TJ, et al. **J Neurophysiol** 1989 Mar;61(3):573–88

Monocular and binocular response properties of cells in the striate–recipient zone of the cat's lateral posterior–pulvinar complex. Casanova C, et al. **J Neurophysiol** 1989 Aug; 62(2):544–57

The correlation of monkey medullary dorsal horn neuronal activity and the perceived intensity of noxious heat stimuli. Dubner R, et al. **J Neurophysiol** 1989 Aug;62(2):450–7

Distribution of combination–sensitive neurons in the ventral fringe area of the auditory cortex of the mustached bat. Edamatsu H, et al. **J Neurophysiol** 1989 Jan;61(1):202–7

Cyclic AMP selectively reduces the N–type calcium current component of mouse sensory neurons in culture by enhancing inactivation. Gross RA, et al. **J Neurophysiol** 1989 Jan;61(1):97–105

Gustatory responsiveness of fibers in the hamster glossopharyngeal nerve. Hanamori T, et al. **J Neurophysiol** 1988 Aug;60(2):478–98

Polysensory properties of neurons in the anterior bank of the caudal superior temporal sulcus of the macaque monkey. Hikosaka K, et al. **J Neurophysiol** 1988 Nov; 60(5):1615–37

Response of vestibular neurons to head rotations in vertical planes. I. Response to vestibular stimulation. Kasper J, et al. **J Neurophysiol** 1988 Nov;60(5):1753–64

Response of vestibular neurons to head rotations in vertical planes. II. Response to neck stimulation and vestibular–neck interaction. Kasper J, et al. **J Neurophysiol** 1988 Nov;60(5):1765–78

Serotonergic/cholinergic muscle receptor cells in the crab stomatogastric nervous system. I. Identification and characterization of the gastropyloric receptor cells. Katz PS, et al. **J Neurophysiol** 1989 Aug;62(2):558–70

Serotonergic/cholinergic muscle receptor cells in the crab stomatogastric nervous system. II. Rapid nicotinic and prolonged modulatory effects on neurons in the stomatogastric ganglion. Katz PS, et al. **J Neurophysiol** 1989 Aug;62(2):571–81

Functional specialization of central projections from identified primary afferent fibers. Koerber HR, et al. **J Neurophysiol** 1988 Nov;60(5):1597–614

Nociceptive neurons in rat superior colliculus: response properties, topography, and functional implications. McHaffie JG, et al. **J Neurophysiol** 1989 Aug;62(2):510–25

Responses of monkey medullary dorsal horn neurons during the detection of noxious heat stimuli. Maixner W, et al. **J Neurophysiol** 1989 Aug;62(2):437–49

Muscle afferent contribution to control of paw shakes in normal cats. Prochazka A, et al. **J Neurophysiol** 1989 Mar; 61(3):550–62

Nociceptive cutaneous stimuli evoke localized contractions in a skeletal muscle. Theriault E, et al. **J Neurophysiol** 1988 Aug;60(2):446–62

Modulation of a steady–state Ca2+–activated, K+ current in tail sensory neurons of Aplysia: role of serotonin and cAMP. Walsh JP, et al. **J Neurophysiol** 1989 Jan; 61(1):32–44

Binaural neurons in the mustache bat's inferior colliculus. II. Determinants of spatial responses among 60–kHz EI units. Wenstrup JJ, et al. **J Neurophysiol** 1988 Oct; 60(4):1384–404

Binaural neurons in the mustache bat's inferior colliculus. I. Responses of 60–kHz EI units to dichotic sound stimulation. Wenstrup JJ, et al. **J Neurophysiol** 1988 Oct; 60(4):1369–83

Time course of structural changes at identified sensory neuron synapses during long–term sensitization in Aplysia. Bailey CH, et al. **J Neurosci** 1989 May;9(5):1774–80

Interruptions of fictive scratch motor rhythms by activation of cutaneous flexion reflex afferents in the turtle. Currie SN, et al. **J Neurosci** 1989 Feb;9(2):488–96

Spatial and temporal factors determining afferent fiber responses to a grating moving sinusoidally over the monkey's fingerpad. Goodwin AW, et al. **J Neurosci** 1989 Apr;9(4):1280–93

Development of inward currents in chick sensory and autonomic neuronal precursor cells in culture. Gottmann K, et al. **J Neurosci** 1988 Oct;8(10):3722–32

Rapid remodeling of sensory endings in the corneas of living mice. Harris LW, et al. **J Neurosci** 1989 Jun;9(6):2210–4

Relationships between segregated afferents and postsynaptic neurones in the optic tectum of three–eyed frogs. Katz LC, et al. **J Neurosci** 1988 Sep;8(9):3160–80

Monosynaptic projections of single muscle spindle afferents to neck motoneurons in the cat. Keirstead SA, et al. **J Neurosci** 1988 Oct;8(10):3945–50

Structure of the intraspinal projections of single, identified muscle spindle afferents from neck muscles of the cat. Keirstead SA, et al. **J Neurosci** 1988 Sep;8(9):3413–26

Expansion of the central arborizations of persistent sensory neurons during insect metamorphosis: the role of the steroid hormone, 20–hydroxyecdysone. Levine RB. **J Neurosci** 1989 Mar;9(3):1045–54

Nerve growth factors (NGF, BDNF) enhance axonal regeneration but are not required for survival of adult sensory neurons. Lindsay RM. **J Neurosci** 1988 Jul; 8(7):2394–405

Quantitative lineage analysis of the origin of frog primary motor and sensory neurons from cleavage stage blastomeres. Moody SA. **J Neurosci** 1989 Aug;9(8):2919–30

Selective attention in an insect auditory neuron. Pollack GS. **J Neurosci** 1988 Jul;8(7):2635–9

Perceived roughness of a grating: correlation with responses of mechanoreceptive afferents innervating the monkey's fingerpad. Sathian K, et al. **J Neurosci** 1989 Apr; 9(4):1273–9

Neuropeptide Y modulates neurotransmitter release and Ca2+ currents in rat sensory neurons. Walker MW, et al. **J Neurosci** 1988 Jul;8(7):2438–46

Vibrating glass stylets: tools for precise microsurgery on cuticular structures. Gödde J. **J Neurosci Methods** 1989 Jul;29(1):77–83

A new approach for the evaluation of recovery after peripheral nerve damage. van der Hoop RG, et al. **J Neurosci Methods** 1988 Dec;26(2):111–6

Role of neuron–target interactions in the development of a subpopulation of avian sensory neurons. Marusich MF, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):480–6

Stimulation of afferent fibres of the guinea–pig ureter evokes potentials in inferior mesenteric ganglion neurones. Amann R, et al. **J Physiol (Lond)** 1988 Aug;402:543–53

Specificities of afferents reinnervating cat muscle spindles after nerve section. Banks RW, et al. **J Physiol (Lond)** 1989; 408:345–72

Membrane properties of primary sensory neurones of the cat after peripheral reinnervation. Belmonte C, et al. **J Physiol (Lond)** 1988 Nov;405:219–32

Responses to passive movement of receptors in joint, skin and muscle of the human hand. Burke D, et al. **J Physiol (Lond)** 1988 Aug;402:347–61

An electrophysiological and anatomical study of intestinal afferent fibres in the rat. Cervero F, et al. **J Physiol (Lond)** 1988 Jul;401:381–97

Evidence that mid–lumbar neurones in reflex pathways from group II afferents are involved in locomotion in the cat. Edgley SA, et al. **J Physiol (Lond)** 1988 Sep;403:57–71

The ascending projection of interneurones activated by group I muscle afferent fibres of the cat hindlimb. Fern R, et al. **J Physiol (Lond)** 1988 Nov;405:275–88

The dorsal column projection of muscle afferent fibres from the cat hindlimb. Fern R, et al. **J Physiol (Lond)** 1988 Jul; 401:97–113

Conduction of neural impulses in human mechanoreceptive cutaneous afferents. Mackel R. **J Physiol (Lond)** 1988 Jul; 401:597–615

The characteristics and regional distribution of afferent fibres in the chorda tympani of the cat. Robinson PP. **J Physiol (Lond)** 1988 Dec;406:345–57

Two–suction–electrode voltage–clamp analysis of the sustained calcium current in cat sensory neurones. Taylor WR. **J Physiol (Lond)** 1988 Dec;407:405–32

Permeation of barium and cadmium through slowly inactivating calcium channels in cat sensory neurones. Taylor WR. **J Physiol (Lond)** 1988 Dec;407:433–52

An acetylcholine–induced potassium current in tail sensory neurons in the pleural ganglion of Aplysia. Ichinose M, et al. **Jpn J Physiol** 1988;38(4):563–8

High threshold aortic baroreceptors afferents in the sympathetic nerve of monkey. Koley B, et al. **Jpn J Physiol** 1989;39(1):145–53

Cardiac nociceptors and ischemia: role of sympathetic afferents in cat. Pal P, et al. **Jpn J Physiol** 1989;39(1):131–44

The firing properties of second–order vestibular neurons in correlation with the far–field recorded vestibular–evoked response. Elidan J, et al. **Laryngoscope** 1989 Jan;99(1):92–9

Regeneration of the eighth cranial nerve. III. Central projections of the primary afferent fibers from individual vestibular receptors in the bullfrog. Newman A, et al. **Laryngoscope** 1989 Feb;99(2):162–73

Subtypes of dorsal root ganglion neurons based on different inward currents as measured by whole–cell voltage clamp. McLean MJ, et al. **Mol Cell Biochem** 1988 Mar–Apr; 80(1–2):95–107

Direct evidence that growth cones pull. Lamoureux P, et al. **Nature** 1989 Jul 13;340(6229):159–62

Persistent and transcriptionally–dependent increase in protein phosphorylation in long–term facilitation of Aplysia sensory neurons. Sweatt JD, et al. **Nature** 1989 May 4; 339(6219):51–4

Effects of dorsal root section and occlusion of dorsal spinal artery on the neurotransmitter candidates in rat spinal cord. Fujita K, et al. **Neurochem Res** 1989 May;14(5):399–404

A sex difference in the stimulatory afferent regulation of tuberoinfundibular dopaminergic neuronal activity. Barton AC, et al. **Neuroendocrinology** 1989 Apr;49(4):361–6

Mathematical modeling of the reactivity of analyzer systems during the course of adaptation. Prisnyakov VF, et al. **Neurosci Behav Physiol** 1988 Nov–Dec;18(6):474–80

Influence of glucose on polysensory properties of neurons of the ventromedial nucleus of the hypothalamus. Smirnov SI, et al. **Neurosci Behav Physiol** 1989 Mar–Apr;19(2):150–6

5–Hydroxytryptamine facilitates GABA–induced depolarization in bullfrog primary afferent neurons. Akasu T. **Neurosci Lett** 1988 Oct 17;92(3):270–4

Cells of the rat lateral habenula respond to high–threshold somatosensory inputs. Benabid AL, et al. **Neurosci Lett** 1989 Jan 30;96(3):289–94

Renal and cardiovascular afferent inputs to hypothalamic paraventriculo–spinal neurons. Caverson MM, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):167–72

Bradykinin–induced stimulation of afferent fibres is mediated through protein kinase C. Dray A, et al. **Neurosci Lett** 1988 Sep 12;91(3):301–7

Primary afferent depolarization in the rat spinal cord is mediated by pathways utilising NMDA and non–NMDA receptors. Evans RH, et al. **Neurosci Lett** 1989 May 22; 100(1–3):231–6

The re–expression of two myosin heavy chains in regenerated rat muscle spindles. Fei C, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):75–9

Spinal projections to the dorsal column nuclei in pigeons. Funke K. **Neurosci Lett** 1988 Sep 12;91(3):295–300

Thyrotropin releasing hormone (TRH) modified excitability of spinal cord dorsal horn cells. Jackson DA, et al. **Neurosci Lett** 1988 Oct 5;92(2):171–6

Convergence of noncholinergic afferent neurons in the inferior mesenteric ganglion of the guinea pig. Keef KD, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):161–6

Mismatches between peripheral receptor type and central projections after peripheral nerve regeneration. Koerber HR, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):67–72

Receptor position, not nerve branch, determines electroreceptor somatotopy in the gymnotiform fish (Apteronotus leptorhynchus). Lannoo MJ, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):11–7

Bradykinin enhances excitability in cultured rat sensory neurones by a GTP–dependent mechanism. McGuirk SM, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):85–9

The effects of movements on caudate sensory responses. Manetto C, et al. **Neurosci Lett** 1989 Jan 30;96(3):295–9

Vagal vasodilatory mechanisms in the pig bronchial circulation preferentially involves sensory nerves. Martling CR, et al. **Neurosci Lett** 1989 Jan 30;96(3):306–11

Neuromagnetic imaging studies discriminate proprioceptive and cutaneous cortical inputs during median nerve stimulation in man. Narici L, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):169–74

Electrosensory activity in the telencephalon of the axolotl. Northcutt RG, et al. **Neurosci Lett** 1989 Apr 24; 99(1–2):79–84

High perilymphatic potassium and rubidium levels modulate the sensory resting discharge in the isolated frog labyrinth. Rossi ML, et al. **Neurosci Lett** 1988 Oct 31;93(1):44–8

Simultaneous motor output and sensory input: cortical interference site resolved in humans via neuromagnetic measurements. Rossini PM, et al. **Neurosci Lett** 1989 Jan 30;96(3):300–5

The effects of lumbosacral deafferentation on pontine micturition centre–evoked voiding in the decerebrate cat. Shefchyk SJ. **Neurosci Lett** 1989 Apr 24;99(1–2):175–80

Dendrotoxin–sensitive K+ channels in dorsal root ganglion cells. Stansfeld C, et al. **Neurosci Lett** 1988 Oct 31; 93(1):49–55

Effect of deafferentation on the levels of uric acid in the spinal cord of the rat. Weil–Fugazza J, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):181–6

Inhibition of drug–gated chloride currents by calcium influx in frog sensory neurons. Akaike N, et al. **Neurosci Res** 1988 Aug;5(6):557–62

Inhibition of the voltage–dependent calcium currents in isolated frog sensory neurons by GABA–related agonistic compounds. Maruyama T, et al. **Neurosci Res** 1988 Dec; 6(2):97–105

Oral cavity representation at the frontal operculum of macaque monkeys. Ogawa H, et al. **Neurosci Res** 1989 Apr; 6(4):283–98

Augmentation of GABA–induced chloride current in frog sensory neurons by diazepam. Yakushiji T, et al. **Neurosci Res** 1989 Apr;6(4):309–20

Afferent projections to the rostral anterior pretectal nucleus of the rat: a possible role in the processing of noxious

stimuli. Foster GA, et al. **Neuroscience** 1989;29(3):685–94
Non-cholinergic synaptic potentials mediated by lumbar colonic nerve in the guinea-pig inferior mesenteric ganglion in vitro. Hankins MW, et al. **Neuroscience** 1988 Sep;26(3):1073–81
Cationic channels activated by extracellular ATP in rat sensory neurons. Krishtal OA, et al. **Neuroscience** 1988 Dec;27(3):995–1000
Cell type and conduction velocity of rat primary sensory neurons with substance P-like immunoreactivity. McCarthy PW, et al. **Neuroscience** 1989;28(3):745–53
Patterns of intersection among climbing fiber receptive fields. McCollum G, et al. **Neuroscience** 1988 Oct;27(1):93–105
Regional differences in the motor response to capsaicin in the guinea-pig urinary bladder: relative role of pre- and postjunctional factors related to neuropeptide-containing sensory nerves. Maggi CA, et al. **Neuroscience** 1988 Nov; 27(2):675–88
Somatic and vagal afferent convergence on solitary tract neurons in cat: electrophysiological characteristics. Person RJ. **Neuroscience** 1989;30(2):283–95
The effects of strychnine on neurons in cat somatosensory cortex and its interaction with the inhibitory amino acids, glycine, taurine and beta-alanine. Tremblay N, et al. **Neuroscience** 1988 Sep;26(3):745–62
Conduction velocity changes along the processes of rat primary sensory neurons. Waddell PJ, et al. **Neuroscience** 1989;30(3):577–84
Electrical stimulation of primary afferent A fibres does not reduce substance P release in the dorsal horn of the cat. Hutchison WD, et al. **Pain** 1989 Jun;37(3):357–63
Attempts to gauge the relative importance of pre- and postsynaptic effects of morphine on the transmission of noxious messages in the dorsal horn of the rat spinal cord. Lombard MC, et al. **Pain** 1989 Jun;37(3):335–45
Spinal recordings suggest that wide-dynamic-range neurons mediate sympathetically maintained pain. Roberts WJ, et al. **Pain** 1988 Sep;34(3):289–304
Identification of afferents contributing to sympathetically evoked activity in wide-dynamic-range neurons. Roberts WJ, et al. **Pain** 1988 Sep;34(3):305–14
Receptors for sensory neuropeptides in human inflammatory diseases: implications for the effector role of sensory neurons. Mantyh PW, et al. **Peptides** 1989 May-Jun; 10(3):627–45
Characterization of two kinds of high-voltage-activated Ca-channel currents in chick sensory neurons. Differential sensitivity to dihydropyridines and omega-conotoxin GVIA. Aosaki T, et al. **Pflugers Arch** 1989 Jun;414(2):150–6
Decay kinetics of calcium currents in rat sensory neurones: analysis at two internal free calcium concentrations. Bossu JL, et al. **Pflugers Arch** 1989 May;414(1):89–91
Calcium-dependent slow outward current in visceral primary afferent neurones of the rabbit. Morita K, et al. **Pflugers Arch** 1989 Jun;414(2):171–7
K+ conductance of mechanically dissociated rat sensory neurones in long term cultures in a defined medium. Ypey DL, et al. **Pflugers Arch** 1989;414 Suppl 1:S129–30
Afferent pathways involved in reflex regulation of airway smooth muscle. Coleridge HM, et al. **Pharmacol Ther** 1989; 42(1):1–63 (275 ref.)
Actions of calcitonin gene-related peptide on rat sensory ganglion neurones. Ryu PD, et al. **Physiol Bohemoslov** 1988;37(3):259–65
Information storage in the nervous system of Aplysia: specific proteins affected by serotonin and cAMP. Eskin A, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2458–62
Calcium channel block by cadmium in chicken sensory neurons. Swandulla D, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1736–40
Evidence that the Merkel cell is not the transducer in the mechanosensory Merkel cell-neurite complex. Diamond J, et al. **Prog Brain Res** 1988;74:51–6 (28 ref.)
On the role of vestibular, visual and somatosensory information for dynamic postural control in humans. Diener HC, et al. **Prog Brain Res** 1988;76:253–62 (28 ref.)
The effect of behavioral state on the sensory processing of nociceptive and non-nociceptive information. Dubner R. **Prog Brain Res** 1988;77:213–28 (26 ref.)
Integration of vestibular and neck afferent signals in the central cervical nucleus. Hongo T, et al. **Prog Brain Res** 1988;76:155–62 (35 ref.)
Mechano-electric transduction in the slowly adapting cutaneous afferent units of frogs. Ogawa H, et al. **Prog Brain Res** 1988;74:63–8
Immunohistochemical evidence for a co-transmitter role of opioid peptides in primary sensory neurons. Weihe E, et al. **Prog Brain Res** 1988;74:189–99
Development of the lateral line system in Xenopus. Winklbauer R. **Prog Neurobiol** 1989;32(3):181–206 (37 ref.)
Afferent vagal activity during hyperthermic polypnea in the pigeon. Mückenhoff K, et al. **Respir Physiol** 1989 Mar; 75(3):267–78
Effects of intrapulmonary CO2 and airway pressure on pulmonary vagal afferent activity in the alligator. Powell FL, et al. **Respir Physiol** 1988 Dec;74(3):285–98
Spectral composition of synchronized discharge of phrenic nerve activity in the rabbit and effects of pulmonary afferents. Schmid K, et al. **Respir Physiol** 1989 Apr; 76(1):37–52
Golf: an olfactory neuron specific-G protein involved in odorant signal transduction. Jones DT, et al. **Science** 1989 May 19;244(4906):790–5
Synaptic connections in vitro: modulation of number and efficacy by electrical activity. Nelson PG, et al. **Science** 1989 May 5;244(4904):585–7
Activity-dependent enhancement of presynaptic inhibition in Aplysia sensory neurons. Small SA, et al. **Science** 1989 Mar 24;243(4898):1603–6
Modelling afferent connectivity, postsynaptic plasticity, and signal discrimination. Chover J. **Synapse** 1989;3(2):101–16
Primary afferent excitatory transmission recorded intracellularly in vitro from rat medial vestibular neurons. Lewis MR, et al. **Synapse** 1989;3(2):149–53
Failure to block responses of locus coeruleus neurons to somatosensory stimuli by destruction of two major afferent nuclei. Rasmussen K, et al. **Synapse** 1989;4(2):162–4
Afferent axons from the antenna influence the number and placement of intrinsic synapses in the antennal lobes of Manduca sexta. Tolbert LP. **Synapse** 1989;3(1):83–95
Sensory control of target acquisition. Cordo PJ, et al. **Trends Neurosci** 1989 Mar;12(3):110–7 (49 ref.)
Representation of form in the somatosensory system [news] Pons TP. **Trends Neurosci** 1988 Sep;11(9):373–5 (13 ref.)
[Stimulation of large afferent fibers of skeletal muscles provokes an increase in systemic arterial pressure] Orani GP, et al. **Boll Soc Ital Biol Sper** 1988 Aug;64(8):769–74 (Eng. Abstr.) **(Ita)**
[Changes in muscular reactivity in long-term afferent stimulation] Klukowska-Siczek L. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:319–24 (Eng. Abstr.) **(Pol)**
[Properties of extracellular monosynaptic potential of a single afferent in the light of the theory of dendrites with N-shaped volt-ampere characteristics] Gutman AM, et al. **Biofizika** 1989 Jan-Feb;34(1):124–9 (Eng. Abstr.) **(Rus)**
[Characteristics of the potential of the dorsal surface of the spinal cord in a chronic deficit of afferent influences] Makii EA, et al. **Biol Nauki** 1988;(6):49–54 (Eng. Abstr.) **(Rus)**
[Neurophysiological analysis of efferent-afferent interaction of neurons of the parietal associate cortex in cats] Pravdivtsev VA, et al. **Biull Eksp Biol Med** 1988 Oct; 106(10):403–5 (Eng. Abstr.) **(Rus)**
[A quantitative assessment of the degree of freedom of cortex neurons in the instrumental behavior of animals] Vagin IuE, et al. **Dokl Akad Nauk SSSR** 1989;305(2):494–9 **(Rus)**
[System principles in the organization of neurons carrying out cortical inhibition] Batuev AS, et al. **Fiziol Zh** 1989 May-Jun;35(3):84–91 (22 ref.) (Eng. Abstr.) **(Rus)**
[Basic principles of the functional organization of the nociceptive and antinociceptive systems of the brain] Limanskii IuP. **Fiziol Zh** 1989 Mar-Apr;35(2):110–21 (58 ref.) (Eng. Abstr.) **(Rus)**
[Electrophysiologic study of hippocampal projections to the neurosecretory cells of the supraoptic nucleus in rats] Prutskova NP, et al. **Fiziol Zh SSSR** 1989 Mar; 75(3):297–304 (Eng. Abstr.) **(Rus)**
[Changes in the neuronal activity of the nodose ganglion under the action of a traveling pulsed magnetic field in animals with various arterial pressure levels] Mikhailova SD, et al. **Patol Fiziol Eksp Ter** 1988 Sep-Oct;(5):65–7 (Eng. Abstr.) **(Rus)**
[Long-term posttetanic changes in the neuronal impulse reactions of the somatosensory cortex in the cat] Veber NV, et al. **Zh Vyssh Nerv Deiat** 1988 Nov-Dec; 38(6):1158–60 **(Rus)**
[A new, noninvasive method of measuring motor and sensory conductivity] Jovičić A, et al. **Vojnosanit Pregl** 1988 Nov-Dec;45(6):407–12 (Eng. Abstr.) **(Scr)**

PHYSIOPATHOLOGY

Contribution of guanine nucleotide regulatory proteins to prostaglandin hyperalgesia in the rat. Taiwo YO, et al. **Brain Res** 1989 Jul 17;492(1–2):400–3
The sensorium of the migraineur. Amery WK, et al. **Ital J Neurol Sci** 1988 Dec;9(6):539–45
Bilateral cheiro-oral syndrome following pontine haemorrhage. Yasuda Y, et al. **J Neurol** 1988 Nov; 235(8):489–90
The contribution of sensory nerves to xylene-induced cystitis in rats. Maggi CA, et al. **Neuroscience** 1988 Aug; 26(2):709–23
Sensory neuronopathy. Asbury AK. **Semin Neurol** 1987 Mar; 7(1):58–66 (49 ref.)
Neuropathy in childhood. Sladky JT. **Semin Neurol** 1987 Mar;7(1):67–75 (25 ref.)

SECRETION

G proteins couple alpha-adrenergic and GABAb receptors to inhibition of peptide secretion from peripheral sensory neurons. Holz GG 4th, et al. **J Neurosci** 1989 Feb; 9(2):657–66

ULTRASTRUCTURE

Ultrastructural analysis of lymph node innervation in the rat. Novotny GE. **Acta Anat (Basel)** 1988;133(1):57–61
Fine structure of the primary afferent vestibulocochlear terminals in the frog. Matesz C. **Acta Biol Hung** 1988; 39(2–3):267–77
Changes in features of degenerating primary sensory neurons with time after capsaicin treatment. Hiura A, et al. **Acta Neuropathol (Berl)** 1989;78(1):35–46
Morphological characteristics of the innervation of the cat's knee joint. Heppelmann B, et al. **Agents Actions** 1988 Dec; 25(3–4):225–7
Origin of lingual proprioceptive afferents in Japanese monkey, M. fuscata fuscata. Studied by HRP-labeling technique. Kubota K, et al. **Anat Anz** 1988;166(1–5):141–8
Coccygeus and levator ani muscles in the rabbit: morphology and proprioceptive innervation. Palmieri G, et al. **Biol Struct Morphog** 1988;1(4):142–6
Evidence for unmyelinated sensory fibres in the posterior columns in man. Briner RP, et al. **Brain** 1988 Oct;111 (Pt 5):999–1007
An electron microscopic analysis of the morphology and connectivity of individual HRP-labeled slowly adapting vibrissa primary afferents in the adult rat. Renehan WE, et al. **Brain Res** 1988 Oct 18;462(2):396–400
Ultrastructural evidence for peptidergic innervation of the apical region of frog olfactory epithelium. Zielinski BS, et al. **Brain Res** 1989 Jul 17;492(1–2):361–5
Genetic control of sexually dimorphic axon morphology in Drosophila sensory neurons. Possidente DR, et al. **Dev Biol** 1989 Apr;132(2):448–57
The endolymphatic sac and inner ear homeostasis. II: Effect of glycerol on the sensory end organs with or without colchicine pretreatment. Takumida M, et al. **Hear Res** 1989 Jun 15;40(1–2):17–28
The innervation of the adrenal gland. II. The source of spinal afferent nerve fibres to the guinea-pig adrenal gland. Mohamed AA, et al. **J Anat** 1988 Oct;160:51–8
Mamillary body in the rat: topography and synaptology of projections from the subicular complex, prefrontal cortex, and midbrain tegmentum. Allen GV, et al. **J Comp Neurol** 1989 Aug 15;286(3):311–36
Ultrastructural analysis of axosomatic contacts on functionally identified primate spinothalamic tract neurons. Carlton SM, et al. **J Comp Neurol** 1989 Mar 22; 281(4):555–66
Morphology of afferent synapses in the Mauthner cell of larval Xenopus laevis. Cioni C, et al. **J Comp Neurol** 1989 Jun 8;284(2):205–14
Auditory receptor of the red-eared turtle: II. Afferent and efferent synapses and innervation patterns. Sneary MG. **J Comp Neurol** 1988 Oct 22;276(4):588–606
Ultrastructural features of functionally identified primary afferent neurons with C (unmyelinated) fibers of the guinea pig: classification of dorsal root ganglion cell type with reference to sensory modality. Sugiura Y, et al. **J Comp Neurol** 1988 Oct 8;276(2):265–78
Subacute sensory neuronopathy associated with Sjögren's sicca syndrome. Laloux P, et al. **J Neurol** 1988 Jul; 235(6):352–4
Ultrastructural alterations of primary afferent axons in the nucleus gracilis after peripheral nerve axotomy. Hachisuka K, et al. **J Neuropathol Exp Neurol** 1989 Jul;48(4):413–24
Ultrastructural heterogeneity of spinal terminations in the cat inferior olive. Molinari HH. **Neuroscience** 1988 Nov; 27(2):425–35
Innervation densities of inner and outer hair cells of the human organ of Corti. Evidence for auditory neural degeneration in a case of Usher's syndrome. Nadol JB Jr. **ORL J Otorhinolaryngol Relat Spec** 1988;50(6):363–70

NEURONS, EFFERENT

ANALYSIS

[Localization of efferent sympathetic neurons and afferent neurons in dorsal root ganglia innervating the heart] Fateev MM, et al. **Neirofiziologiia** 1989;21(1):106–11 (Eng. Abstr.) **(Rus)**

ANATOMY & HISTOLOGY

Olivocochlear neurons in the brainstem of the mouse. Campbell JP, et al. **Hear Res** 1988 Sep 15;35(2–3):271–4

CYTOLOGY

A double-label study of efferent projections from the Edinger-Westphal nucleus in goldfish and kelp bass. Wathey JC, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):121–6
[Brain stem neurons of the guinea pig that form projections into the ampullae of the anterior, lateral and posterior semicircular canals] Preobrazhenskiĭ NN, et al. **Neirofiziologiia** 1988;20(4):526–32 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Transmitter neurochemistry of the efferent neuron system innervating the labyrinth. Schwarz DW, et al. **J Otolaryngol** 1989 Feb;18(1):28–31

METABOLISM

Some mammalian retinae lack FMRF-amide-like immunoreactive efferents. Rusoff AC, et al. **Invest Ophthalmol Vis Sci** 1989 May;30(5):791–4

PHYSIOLOGY

Comparative view of the central organization of afferent and efferent circuitry for the inner ear. Meredith GE. **Acta Biol Hung** 1988;39(2–3):229–49 (57 ref.)
Physiological characteristics of the primary horizontal canal neurons in guinea pigs: response difference between alert

and anesthetized animals. Yagi T, et al. **Adv Otorhinolaryngol** 1988;41:20–4
Effects of electrical stimulation of efferent olivocochlear neurons on cat auditory-nerve fibers. III. Tuning curves and thresholds at CF. Guinan JJ Jr, et al. **Hear Res** 1988 Dec;37(1):29–45
Modulation transfer function of efferent neurones in the guinea pig cochlea. Gummer M, et al. **Hear Res** 1988 Oct; 36(1):41–51
Physiology of cochlear efferent and afferent neurons: direct comparisons in the same animal. Liberman MC. **Hear Res** 1988 Jul 15;34(2):179–91
Effects of contralateral sound on auditory-nerve responses. I. Contributions of cochlear efferents. Warren EH 3d, et al. **Hear Res** 1989 Jan;37(2):89–104
Medullary expiratory activity during opossum development. Farber JP. **J Appl Physiol** 1989 Apr;66(4):1606–12
Response properties of cochlear efferent neurons: monaural vs. binaural stimulation and the effects of noise. Liberman MC. **J Neurophysiol** 1988 Nov;60(5):1779–98
Influence of somatosensory cortex on different classes of cat motor cortex output neuron. Zarzecki P. **J Neurophysiol** 1989 Aug;62(2):487–94
Peptidergic modulation of efferent sympathetic neurons in intrathoracic ganglia regulating the canine heart. Armour JA. **Proc Soc Exp Biol Med** 1989 May;191(1):60–8
Efferent modulation of penile mechanoreceptor activity. Johnson RD. **Prog Brain Res** 1988;74:319–24
[Effects of amygdaloid stimulation on efferent activities of the vesical branch of the pelvic nerve and the urethral branch of the pudendal nerve in dogs] Koyama K. **Nippon Hinyokika Gakkai Zasshi** 1989 Feb;80(2):236–44 (Eng. Abstr.) **(Jpn)**
[Neurophysiological analysis of efferent–afferent interaction of neurons of the parietal associate cortex in cats] Pravdivtsev VA, et al. **Biull Eksp Biol Med** 1988 Oct; 106(10):403–5 (Eng. Abstr.) **(Rus)**
[Participation of the cholinergic system in the development of hemodynamic effects of GABA, administered intrabulbarly] Shapoval LN, et al. **Fiziol Zh SSSR** 1989 Jan;75(1):58–65 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Asymmetrical pudendal nerve damage in pelvic floor disorders. Lubowski DZ, et al. **Int J Color Dis** 1988 Aug; 3(3):158–60

SURGERY

Pyloroplasty divides the efferent right gastroepiploic nerve. Yoshida J, et al. **Curr Surg** 1988 Jul–Aug;45(4):285–7
Desheathing the nodose ganglion is not a reliable method of de-efferentation in the ferret [published erratum appears in Life Sci 1989;44(3):243] Greenwood B, et al. **Life Sci** 1988;43(17):1393–401

ULTRASTRUCTURE

Ultrastructural analysis of lymph node innervation in the rat. Novotny GE. **Acta Anat (Basel)** 1988;133(1):57–61

NEURONS, SENSORY see **NEURONS, AFFERENT**

NEUROPATHIES, HEREDITARY MOTOR AND SENSORY

BLOOD

Leber's hereditary optic atrophy: further evidence for a defect of cyanide metabolism? Berninger TA, et al. **Br J Ophthalmol** 1989 Apr;73(4):314–6

CLASSIFICATION

Hereditary motor and sensory neuropathies. Miller G, et al. **Pediatr Ann** 1989 Jul;18(7):428–31 (6 ref.)

COMPLICATIONS

[Spastic paraplegia and primary adrenal insufficiency: a case of adrenomyeloneuropathy] Sánchez A, et al. **Medicina (B Aires)** 1988;48(3):290–6 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Does sporadic Leber's disease exist? Nikoskelainen E, et al. **J Clin Neuro Ophthalmol** 1988 Dec;8(4):225–9
Familial spastic paraplegia: clinical observations and genetic studies. Kolodny EH, et al. **Prog Clin Biol Res** 1989; 306:205–11
Clinical, age of onset, nerve conduction studies, electromyography, visual evoked potentials, and Duffy blood group studies in a family with hereditary motor and sensory neuropathy (HMSN). McLeod DR, et al. **Prog Clin Biol Res** 1989;306:197–201

ENZYMOLOGY

Histochemical, ultrastructural and biochemical study of muscle mitochondria in Leber's hereditary optic atrophy. Federico A, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:193–7
Rhodanese isozymes in three subjects with Leber's optic neuropathy. Whitehouse DB, et al. **J Med Genet** 1989 Feb; 26(2):113–5
A defect in mitochondrial electron-transport activity (NADH-coenzyme Q oxidoreductase) in Leber's hereditary optic neuropathy. Parker WD Jr, et al. **N Engl J Med** 1989 May 18;320(20):1331–3
[Dopamine beta-monooxygenase activity in the brain and adrenal glands of pt rabbits] Kowalczuk K, et al. **Neuropatol Pol** 1988;26(2):225–32 (Eng. Abstr.) **(Pol)**

GENETICS

Genetic heterogeneity in Leber hereditary optic neuroretinopathy revealed by mitochondrial DNA polymorphism. Vilkki J, et al. **Am J Hum Genet** 1989 Aug; 45(2):206–11
Optic atrophy, hearing loss, and peripheral neuropathy. Hagemoser K, et al. **Am J Med Genet** 1989 May;33(1):61–5 (17 ref.)
X-linked spastic paraplegia: evidence for homogeneity with a variable phenotype. Goldblatt J, et al. **Clin Genet** 1989 Feb;35(2):116–20
Homozygosity for the transthyretin-met30-gene in two Swedish sibs with familial amyloidotic polyneuropathy. Holmgren G, et al. **Clin Genet** 1988 Nov;34(5):333–8
Hypomanic behaviour associated with familial spastic paraplegia. Jansen PH, et al. **Eur Arch Psychiatry Neurol Sci** 1988;238(1):28–30
Absence of linkage of hereditary motor and sensory neuropathy type I to chromosome 1 markers. Middleton-Price HR, et al. **Genomics** 1989 Feb;4(2):192–7
Preliminary exclusion of an X-linked gene in Leber optic atrophy by linkage analysis. Chen JD, et al. **Hum Genet** 1989 Jun;82(3):203–7
Mitochondrial DNA polymorphism in Finnish families with Leber's hereditary optic neuroretinopathy. Vilkki J, et al. **Hum Genet** 1989 Jun;82(3):208–12
Haplotype analysis of familial amyloidotic polyneuropathy. Evidence for multiple origins of the Val——Met mutation most common to the disease. Yoshioka K, et al. **Hum Genet** 1989 Apr;82(1):9–13
Familial spastic paraplegia. Phanthumchinda K, et al. **J Med Assoc Thai** 1989 Feb;72(2):62–6
Palmoplantar keratoderma, nail dystrophy, and hereditary motor and sensory neuropathy: an autosomal dominant trait. Tolmie JL, et al. **J Med Genet** 1988 Nov;25(11):754–7
Restriction endonuclease analysis of leukocyte mitochondrial DNA in Leber's optic atrophy. Holt IJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug;51(8):1075–7
Mitochondrial DNA mutation in family with Leber's hereditary optic neuropathy [letter] Yoneda M, et al. **Lancet** 1989 May 13;1(8646):1076–7
The application of nerve conduction and clinical studies to genetic counseling in hereditary motor and sensory neuropathy type I. Berciano J, et al. **Muscle Nerve** 1989 Apr;12(4):302–6
A mitochondrial DNA mutation as a cause of Leber's hereditary optic neuropathy. Singh G, et al. **N Engl J Med** 1989 May 18;320(20):1300–5
Leber's congenital amaurosis associated with high hyperopia in four sisters. Babel J, et al. **Ophthalmic Paediatr Genet** 1989 Mar;10(1):55–61
Maternal dysinheritance. Beardsley TM. **Sci Am** 1988 Oct; 259(4):32–4
Mitochondrial DNA mutation associated with Leber's hereditary optic neuropathy. Wallace DC, et al. **Science** 1988 Dec 9;242(4884):1427–30
[Myotonia congenita with familial spastic paraparesis] Wessel K, et al. **Nervenarzt** 1988 Nov;59(11):675–8 (Eng. Abstr.) **(Ger)**
[Hereditary neuropathy with liability to pressure palsy] Eisenberg E, et al. **Harefuah** 1989 Apr 2;116(7):345–7 (Eng. Abstr.) **(Heb)**
[Hereditary neuropathy with recurrent mononeuropathy (tomaculous neuropathy)] Serena M, et al. **Riv Neurol** 1988 May–Jun;58(3):97–105 (Eng. Abstr.) **(Ita)**
[A Mitochondrial mutation defect is identified in Leber's hereditary optic neuropathy] Ehinger B. **Lakartidningen** 1989 Mar 29;86(13):1161 **(Swe)**

IMMUNOLOGY

Reduced numbers of calcitonin gene-related peptide-(CGRP-) and tachykinin-immunoreactive sensory neurones associated with greater enkephalin immunoreactivity in the dorsal horn of a mutant rat with hereditary sensory neuropathy. Kar S, et al. **Cell Tissue Res** 1989 Feb;255(2):451–66
Studies on Leber's optic neuropathy III. Palan A, et al. **Doc Ophthalmol** 1989 Jan;71(1):77–87

MICROBIOLOGY

Virological investigations in patients with Leber's optic neuropathy. van Gemert GW, et al. **Doc Ophthalmol** 1989 Jan;71(1):88–92

PATHOLOGY

Hereditary motor and sensory neuropathy with optic atrophy. Ultrastructural and morphometric observations on nerve fibers, mitochondria, and dense-cored vesicles. Sommer C, et al. **Arch Neurol** 1989 Sep;46(9):973–7
Magnetic resonance imaging in Leber's optic neuropathy. Kermode AG, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):671–4
Autosomal recessive motor and sensory neuropathy with excessive myelin outfolding. Ohnishi A, et al. **Muscle Nerve** 1989 Jul;12(7):568–75
A case of progressive hypertrophic neuropathy in childhood with facial diplegia (Dejerine-Sottas disease). Sunwoo IN, et al. **Yonsei Med J** 1988;29(3):278–85
[Sensori-motor neuropathy associated with congenital bilateral club feet: histological and ultrastructural study of the sural nerve] Yoshimura N, et al. **No To Shinkei** 1988 Sep;40(9):857–61 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Somatosensory evoked potentials in spinal muscular atrophies and hereditary motor neuropathies. Egerházi A, et al. **Electromyogr Clin Neurophysiol** 1988 Jun–Jul;28(5):285–8
Recurrent familial neuropathy due to liability to pressure palsies. Marazzi R, et al. **Ital J Neurol Sci** 1988 Aug; 9(4):355–63
Longitudinal conduction studies in hereditary motor and sensory neuropathy type 1. Roy EP 3d, et al. **Muscle Nerve** 1989 Jan;12(1):52–5
BAEPs in hereditary motor-sensory neuropathies. Involvement of central brain-stem parts of the auditory pathway. Nevšímalová S, et al. **Schweiz Arch Neurol Psychiatr** 1988;139(6):23–32
[Brain stem auditory evoked potentials in hereditary motor-sensory neuropathies] Nevšímalová S, et al. **Cesk Neurol Neurochir** 1988 Jul;51(4):239–45 (Eng. Abstr.) **(Cze)**
[A case of sporadic polyneuropathy with tomacula demonstrating marked nerve conduction delay] Hashimoto K, et al. **Rinsho Shinkeigaku** 1988 Sep;28(9):1023–9 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

[X-ray computed tomography of lumbosacral roots and primary hypertrophic neuritis (Dejerine–Sottas disease)] Mas JL, et al. **Rev Neurol (Paris)** 1989;145(3):215–20 (Eng. Abstr.) **(Fre)**

NEUROPATHIES, HEREDITARY SENSORY AND AUTONOMIC

[Acute pandysautonomia and acute autonomic and sensory neuropathy] Okada F. **Hokkaido Igaku Zasshi** 1989 Jan; 64(1):4–9 (24 ref.) (Eng. Abstr.) **(Jpn)**

CHEMICALLY INDUCED

Extensive oxidative metabolism of dextromethorphan in patients with almitrine neuropathy. Belec L, et al. **Br J Clin Pharmacol** 1989 Mar;27(3):387–90

CLASSIFICATION

Hereditary motor and sensory neuropathies. Miller G, et al. **Pediatr Ann** 1989 Jul;18(7):428–31 (6 ref.)

COMPLICATIONS

Neurotrophic corneal ulcers in congenital sensory neuropathy. Bowe BE, et al. **Am J Ophthalmol** 1989 Mar 15;107(3):303–4
Spanish toxic oil syndrome neuropathy in three patients with hereditary motor and sensory neuropathy type I. de Pablos C, et al. **Arch Neurol** 1989 Feb;46(2):202–4
Hereditary sensory neuropathy with deafness: a familial multisystem atrophy. Horoupian DS. **Neurology** 1989 Feb; 39(2 Pt 1):244–8

DIAGNOSIS

[Usefulness of thermography in ulcero-mutilating acropathy of the lower limbs. Description of a case] Federici S, et al. **Minerva Cardioangiol** 1988 Jul–Aug;36(7–8):377–80 (Eng. Abstr.) **(Ita)**

GENETICS

Homozygosity for the transthyretin-met30-gene in two Swedish sibs with familial amyloidotic polyneuropathy. Holmgren G, et al. **Clin Genet** 1988 Nov;34(5):333–8
Molecular genetics of amyloid neuropathy in Europe. Holt IJ, et al. **Lancet** 1989 Mar 11;1(8637):524–6
[Clinical and biochemical studies of a family of familial amyloidotic polyneuropathy including a late-onset patient] Yi S, et al. **Rinsho Shinkeigaku** 1988 Jun;28(6):705–10 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Direct immunofluorescence in sural nerve biopsies. Schenone A, et al. **Eur Neurol** 1988;28(5):262–9

NEUROPATHY, HEREDITARY MOTOR AND SENSORY TYPE IV see **REFSUM'S SYNDROME**

NEUROPEPTIDE PHI 27 see **PEPTIDE PHI**

NEUROPEPTIDE Y

Synthesis and biological properties of 4-norleucine-neuropeptide Y; secondary structure of neuropeptide Y. Balasubramaniam A, et al. **Biochim Biophys Acta** 1989 Aug 31;997(3):176–81

NPY and related substances. McDonald JK. **Crit Rev Neurobiol** 1988;4(1):97–135 (351 ref.)
Characterization of amphiphilic secondary structures in neuropeptide Y through the design, synthesis, and study of model peptides. Minakata H, et al. **J Biol Chem** 1989 May 15;264(14):7907–13
Molecular modeling and dynamics of neuropeptide Y. MacKerell AD Jr. **J Comput Aided Mol Des** 1988 Apr; 2(1):55–63
Glycine-extended anglerfish peptide YG (aPY) a neuropeptide Y (NPY) homologue may be a precursor of a biologically active peptide. Balasubramaniam A, et al. **Peptides** 1989 May–Jun;10(3):581–5

ADMINISTRATION & DOSAGE

On the regulatory functions of neuropeptide Y (NPY) with respect to vascular resistance and exocrine and endocrine secretion in the pig pancreas. Holst JJ, et al. **Acta Physiol Scand** 1989 Aug;136(4):519–26
Neuropeptide-Y. A peptide found in human coronary arteries constricts primarily small coronary arteries to produce myocardial ischemia in dogs. Maturi MF, et al. **J Clin Invest** 1989 Apr;83(4):1217–24

ANALOGS & DERIVATIVES

Synthesis and biological properties of 4-norleucine-neuropeptide Y; secondary structure of neuropeptide Y. Balasubramaniam A, et al. **Biochim Biophys Acta** 1989 Aug 31;997(3):176–81
Synthesis and biological evaluation of pNPY fragments. Danho W, et al. **Int J Pept Protein Res** 1988 Dec; 32(6):496–505
Synthesis and hypertensive activity of neuropeptide Y fragments and analogues with modified N- or C-termini or D-substitutions. Boublik JH, et al. **J Med Chem** 1989 Mar;32(3):597–601
Centrally truncated and stabilized porcine neuropeptide Y analogs: design, synthesis, and mouse brain receptor binding. Krstenansky JL, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4377–81

ANALYSIS

Neuropeptide Y, somatostatin, and cholecystokinin neurone preservation in anaplastic astrocytomas. Przedborski S, et al. **Acta Neuropathol (Berl)** 1988;76(5):507–10
Neuropeptide Y in the human female genital tract: localization and biological action. Jørgensen JC, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):E220–7
Neuropeptide Y-containing nerves in rat gonads: sex difference and development. Allen LG, et al. **Biol Reprod** 1989 Feb;40(2):371–8
Neuropeptide Y-immunoreactive neurons receive synaptic inputs from dopaminergic axon terminals in the rat neostriatum. Kubota Y, et al. **Brain Res** 1988 Aug 23; 458(2):389–93
An increase in the expression of neuropeptidergic vasodilator, but not vasoconstrictor, cerebrovascular nerves in aging rats. Mione MC, et al. **Brain Res** 1988 Sep 13;460(1):103–13
Neuropeptide Y-like immunoreactive neurons in the human olfactory bulb. Ohm TG, et al. **Brain Res** 1988 Jun 7; 451(1–2):295–300
C-PON containing neurons in the rat striatum are also positive for NADPH-diaphorase activity. A light microscopic study. Villalba RM, et al. **Brain Res** 1988 Oct 18;462(2):359–62
Ultrastructural features of NPY-containing neurons in the rat striatum. Vuillet J, et al. **Brain Res** 1989 Jan 16; 477(1–2):241–51
Synaptic regulation of paraventricular arginine vasopressin-containing neurons by neuropeptide Y-containing monoaminergic neurons in rats. Electron-microscopic triple labeling. Kagotani Y, et al. **Cell Tissue Res** 1989 Aug;257(2):269–78
Localization and characterization of neuropeptide Y-like peptides in the brain and islet organ of the anglerfish (Lophius americanus). Noe BD, et al. **Cell Tissue Res** 1989 Aug;257(2):303–11
Immunohistological demonstration of a substance related to neuropeptide Y and FMRFamide in the cephalic and thoracic nervous systems of the locust Locusta migratoria. Rémy C, et al. **Cell Tissue Res** 1988 Oct;254(1):189–95
Study of neuropeptide Y-containing nerve fibers in the human penis. Wespes E, et al. **Cell Tissue Res** 1988 Oct; 254(1):69–74
Synthesis of peptide fragments of neuropeptide Y: potent inhibitors of calmodulin-stimulated phosphodiesterase. Ishiguro T, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul; 36(7):2720–3
Elevated neuropeptide Y concentrations in the central hypothalamus of the spontaneously diabetic BB/E Wistar rat. Williams G, et al. **Diabetic Med** 1989 Sep–Oct; 6(7):601–7
Localization of bombesin-, neuropeptide Y-, enkephalin- and tyrosine hydroxylase-like immunoreactivities in rat coeliac-superior mesenteric ganglion. Järvi R. **Histochemistry** 1989;92(3):231–6
Co-localization of chromogranin A and B, secretogranin II and neuropeptide Y in chromaffin granules of rat adrenal medulla studied by electron microscopic immunocytochemistry. Steiner HJ, et al. **Histochemistry** 1989;91(6):473–7
Neuropeptide Y-, tyrosine hydroxylase- and vasoactive intestinal polypeptide-immunoreactive nerves in bone and surrounding tissues. Bjurholm A, et al. **J Auton Nerv Syst** 1988 Dec;25(2–3):119–25
Synaptic analysis of amacrine cells with neuropeptide Y-like immunoreactivity in turtle retina. Isayama T, et al. **J Comp Neurol** 1988 Sep 15;275(3):452–9
Distribution and characterization of neuropeptide Y-like immunoreactivity in the brain of the crested newt. Perroteau I, et al. **J Comp Neurol** 1988 Sep 15;275(3):309–25
A double-label pre-embedding immunoperoxidase technique for electron microscopy using diaminobenzidine and tetramethylbenzidine as markers. Norgren RB Jr, et al. **J Histochem Cytochem** 1989 Aug;37(8):1283–9
The concentration of neuropeptide Y immunoreactivity falls with age selectively in microdissected regions of the ventrolateral medulla of spontaneously hypertensive and normotensive Wistar-Kyoto rats. Maccarrone C, et al. **J Hypertens** 1989 May;7(5):417–22
Regional distribution of neuropeptide Y and its receptor in the porcine central nervous system. Busch-Sørensen M, et al. **J Neurochem** 1989 May;52(5):1545–52
The autonomic innervation of the human vocal cord: neuropeptides. Basterra J, et al. **Laryngoscope** 1989 Mar; 99(3):293–6
Neuropeptide Y-like immunoreactivity is present in boutons synapsing on vasopressin-containing neurons in rabbit supraoptic nucleus. Beroukas D, et al. **Neuroendocrinology** 1989 Aug;50(2):222–8
Iodinated-NPY binding sites: autoradiographic study in the rat brain. Giardino L, et al. **Neuropeptides** 1989 Jan; 13(1):23–8
Neuropeptide Y immunoreactivity is preferentially located in rat lumbar sexually dimorphic nuclei. Newton BW, et al. **Neurosci Lett** 1988 Nov 22;94(1–2):10–6
Neuropeptide Y afferents have synaptic interactions with histaminergic (histidine decarboxylase-immunoreactive) neurons in the rat brain. Tamiya R, et al. **Neurosci Lett** 1989 May 8;99(3):241–5
NPY-like peptides occur in the nervous system and midgut of the migratory locust, Locusta migratoria and in the brain of the grey fleshfly, Sarcophaga bullata. Schoofs L, et al. **Peptides** 1988 Sep–Oct;9(5):1027–36
Neuropeptide Y and vasoactive intestinal peptide coexist in rat thyroid nerve fibers emanating from the thyroid ganglion. Grunditz T, et al. **Regul Pept** 1988 Nov; 23(2):193–208
Neuropeptide Y-like immunoreactivity in intramural ganglia of the newborn guinea pig urinary bladder. James S, et al. **Regul Pept** 1988 Nov;23(2):237–45
Increased tissue concentration of neuropeptide Y in the duodenal mucosa in coeliac disease. Sjölund K, et al. **Scand J Gastroenterol** 1989 Jun;24(5):607–12
[Peptidergic innervation of the human dental pulp: neuropeptide Y] Piemontesi F, et al. **Boll Soc Ital Biol Sper** 1989 Mar;65(3):249–53 (Eng. Abstr.) **(Ita)**

BIOSYNTHESIS

Protease-catalyzed semisynthesis of human neuropeptide Y. Sakina K, et al. **Chem Pharm Bull (Tokyo)** 1989 Mar; 37(3):811–2
Evidence for neuropeptide Y synthesis in the rat anterior pituitary and the influence of thyroid hormone status: comparison with vasoactive intestinal peptide, substance P, and neurotensin. Jones PM, et al. **Endocrinology** 1989 Jul;125(1):334–41
Biosynthesis, development, and regulation of neuropeptide Y in superior cervical ganglion culture. Marek KL, et al. **J Neurochem** 1989 Jun;52(6):1807–16

BLOOD

Baroreflex modulation of sympathetic activity and sympathetic neurotransmitters in humans. Eckberg DL, et al. **Acta Physiol Scand** 1988 Jun;133(2):221–31
Elevation of plasma neuropeptide Y levels in congestive heart failure. Maisel AS, et al. **Am J Med** 1989 Jan;86(1):43–8
Plasma neuropeptide Y and atrial natriuretic peptide concentrations in man. Russell AE, et al. **Clin Exp Pharmacol Physiol** 1988 Dec;15(12):955–8
Cigarette smoke-induced elevation of plasma neuropeptide Y levels in man. Rudehill A, et al. **Clin Physiol** 1989 Jun; 9(3):243–8
Neuropeptide Y-like immunoreactivity of plasma during hypoglycaemia in man. Russell AE, et al. **J Auton Nerv Syst** 1989 Feb;26(1):85–8
Effect of ganglion blockade with pentolinium on circulating neuropeptide Y levels in conscious rats. Corder R, et al. **J Cardiovasc Pharmacol** 1988 Aug;12(2):140–3
Alpha-adrenoceptor influence on plasma levels of neuropeptide Y-like immunoreactivity and catecholamines during rest and sympathoadrenal activation in humans. Pernow J, et al. **J Cardiovasc Pharmacol** 1988;12(5):593–9
Plasma neuropeptide Y concentrations in patients with neuroendocrine tumors. Grouzmann E, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):808–13
Nicotine-induced release of noradrenaline and neuropeptide Y in guinea pig heart. Richardt G, et al. **Klin Wochenschr** 1988;66 Suppl 11:21–7

CEREBROSPINAL FLUID

Neuropeptide Y: vasoconstrictor effects and possible role in cerebral vasospasm after experimental subarachnoid hemorrhage. Abel PW, et al. **Brain Res** 1988 Nov 1; 463(2):250–8
High levels of NPY in rabbit cerebrospinal fluid and immunohistochemical analysis of possible sources. McDonald JK, et al. **Brain Res** 1988 Nov 1;463(2):259–67
Cerebrospinal fluid neuropeptide Y in depression and schizophrenia. Berrettini WH, et al. **Neuropsychopharmacology** 1987 Dec;1(1):81–3

CHEMICAL SYNTHESIS

Synthesis and biological evaluation of pNPY fragments. Danho W, et al. **Int J Pept Protein Res** 1988 Dec; 32(6):496–505
Centrally truncated and stabilized porcine neuropeptide Y analogs: design, synthesis, and mouse brain receptor binding. Krstenansky JL, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4377–81

GENETICS

Techniques for the simultaneous demonstrations of neuropeptide y gene expression and peptide storage in single neurons of the human brain. Chan-Palay V. **Histochemistry** 1988;90(2):123–7
Cellular localisation of somatostatin mRNA and neuropeptide Y mRNA in foetal striatal tissue grafts. Morris BJ, et al. **Neurosci Lett** 1989 Aug 28;103(2):121–6
Coexistence and gene expression of phenylethanolamine N-methyltransferase, tyrosine hydroxylase, and neuropeptide tyrosine in the rat and bovine adrenal gland: effects of reserpine. Schalling M, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8306–10
Rapid increase in enzyme and peptide mRNA in sympathetic ganglia after electrical stimulation in humans. Schalling M, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4302–5
Localization of neuropeptide Y messenger ribonucleic acid in rat and mouse brain by in situ hybridization. Gehlert DR, et al. **Synapse** 1987;1(1):25–31

IMMUNOLOGY

Regional differences in glucocorticoid receptor immunoreactivity among neuropeptide Y immunoreactive neurons of the rat brain. Härfstrand A, et al. **Acta Physiol Scand** 1989 Jan;135(1):3–9
Developmental study of neuropeptide Y-like immunoreactivity in the neurohypophysis and intermediate lobe of the rhesus monkey (Macaca mulatta). McDonald JK, et al. **Cell Tissue Res** 1988;254(3):499–509
Double labeling of the paravertebral sympathetic C system in the bullfrog with antisera to LHRH and NPY. Horn JP, et al. **J Auton Nerv Syst** 1988 Jun;23(1):17–24

ISOLATION & PURIFICATION

Concurrent separation of catecholamines, dihydroxyphenylglycol, vasoactive intestinal peptide, and neuropeptide Y in superfusate and tissue extract. Hunter LW, et al. **Anal Biochem** 1988 Sep;173(2):340–52

METABOLISM

Localization of dopamine beta-hydroxylase (DBH) and neuropeptide tyrosine (NPY) mRNA in the grey monkey locus coeruleus and adrenal medulla. Dagerlind A, et al. **Acta Physiol Scand** 1988 Dec;134(4):563–4
Renal sympathetic nerve activation in relation to reserpine-induced depletion of neuropeptide Y in the kidney of the rat. Pernow J, et al. **Acta Physiol Scand** 1988 Sep;134(1):53–9
Possible involvement of neuropeptide Y in sympathetic vascular control of canine skeletal muscle. Pernow J, et al. **Acta Physiol Scand** 1988 Jan;132(1):43–50
Co-release and functional interactions of neuropeptide Y and noradrenaline in peripheral sympathetic vascular control. Pernow J. **Acta Physiol Scand Suppl** 1988;568:1–56
Identification of noradrenergic nerve terminals immunoreactive for neuropeptide Y and vasoactive intestinal peptide in the rat kidney. Knight DS, et al. **Am J Anat** 1989 Mar;184(3):190–204
Cross-linking of neuropeptide Y to its receptor on rat brain membranes. Mannon PJ, et al. **Am J Physiol** 1989 Mar; 256(3 Pt 1):G637–43
Influence of sympathetic discharge pattern on norepinephrine and neuropeptide Y release. Pernow J, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H866–72
Neuropeptide Y-containing neurons in the rat striatum: ultrastructure and cellular relations with tyrosine hydroxylase- containing terminals and with astrocytes. Aoki C, et al. **Brain Res** 1988 Sep 6;459(2):205–25
Subpopulations of somatostatin 28-immunoreactive neurons display different vulnerability in senile dementia of the Alzheimer type. Gaspar P, et al. **Brain Res** 1989 Jun 19; 490(1):1–13
Long-term effects of cholinergic basal forebrain lesions on neuropeptide Y and somatostatin immunoreactivity in rat neocortex. Gaykema RP, et al. **Brain Res** 1989 Jun 12; 489(2):392–6
Neuropeptide Y-like immunoreactive amacrine cells in the retina of Bufo marinus. Hiscock J, et al. **Brain Res** 1989 Aug 7;494(1):55–64

Neuropeptide Y (NPY) and vasopressin (AVP) in the hypothalamo-neurohypophysial axis of salt-loaded or Brattleboro rats. Hooi SC, et al. **Brain Res** 1989 May 8; 486(2):214-20

Distribution, possible origins and fine structure of neuropeptide Y-containing nerve fibers in the rat liver. Inoue N, et al. **Brain Res** 1989 Jul 24;493(1):87-96

Neuropeptide Y-containing neurons in the human infant hippocampus. Lotstra F, et al. **Brain Res** 1989 Jan 30; 478(2):211-26

The geniculohypothalamic tract in monkey and man. Moore RY. **Brain Res** 1989 May 1;486(1):190-4

Neuropeptide Y-like immunoreactivity in neurons of the solitary tract nuclei: vesicular localization and synaptic input from GABAergic terminals. Pickel VM, et al. **Brain Res** 1989 Jan 9;476(2):265-78

Ultrastructural localization of neuropeptide Y and galanin immunoreactivity in the paraventricular nucleus of the hypothalamus in the rat. Sawchenko PE, et al. **Brain Res** 1988 Dec 6;474(2):231-45

Relationship between external calcium concentration and noradrenaline- and neuropeptide Y-evoked release from perfused dog spleen. Saxena VK, et al. **Brain Res** 1989 May 8;486(2):310-5

Peptide immunoreactivity of the ciliary ganglion and its accessory cells in the rat. Stone RA, et al. **Brain Res** 1988 Dec 20;475(2):389-92

Direct synaptic contacts of catecholamine fibers on neuropeptide Y-containing neurons of the rat cerebral cortex. Tsuchiyama M, et al. **Brain Res** 1989 Aug 7; 494(1):168-71

Somatostatin-, vasoactive intestinal polypeptide- and neuropeptide Y-like immunoreactivity in eye- and submandibular gland-projecting sympathetic neurons. Wright LL, et al. **Brain Res** 1989 Aug 14;494(2):267-75

Lateral geniculate lesions alter circadian activity rhythms in the hamster. Johnson RF, et al. **Brain Res Bull** 1989 Feb; 22(2):411-22

Development of neuropeptide Y-immunoreactive neurons in the rat retina. Ferriero DM, et al. **Brain Res Dev Brain Res** 1989 Jul 1;48(1):19-26

Quantitative autoradiographic localization of neuropeptide Y (NPY) binding sites in rat posterior pituitary lobe. Saavedra JM, et al. **Cell Mol Neurobiol** 1988 Sep;8(3):333-8

Vasoactive intestinal polypeptide-like immunoreactivity in the bovine heart: high degree of coexistence with neuropeptide Y-like immunoreactivity. Forsgren S. **Cell Tissue Res** 1989 Apr;256(1):125-35

Galanin-, neuropeptide Y- and enkephalin-like immunoreactivities in catecholamine-storing paraganglia of the fetal guinea pig and newborn pig. Fried G, et al. **Cell Tissue Res** 1989 Mar;255(3):495-504

Vasoactive intestinal polypeptide (VIP)- and neuropeptide Y (NPY)-containing nerve fibres in the penile cavernous tissue of green monkeys (Cercopithecus aethiops). Schmalbruch H, et al. **Cell Tissue Res** 1989 Jun; 256(3):529-41

Increased neuropeptide Y concentrations in specific hypothalamic regions of streptozocin-induced diabetic rats. Williams G, et al. **Diabetes** 1989 Mar;38(3):321-7

Testosterone raises neuropeptide-Y concentration in selected hypothalamic sites and in vitro release from the medial basal hypothalamus of castrated male rats. Sahu A, et al. **Endocrinology** 1989 Jan;124(1):410-4

Increased neuropeptide Y messenger RNA and peptide in sympathetic ganglia after reserpine pretreatment. Schalling M, et al. **Eur J Pharmacol** 1988 Nov 8;156(3):419-20

Highly potent and small neuropeptide Y agonist obtained by linking NPY 1-4 via spacer to alpha-helical NPY 25-36. Beck A, et al. **FEBS Lett** 1989 Feb 13;244(1):119-22

Y1 and Y2 receptors for neuropeptide Y. Sheikh SP, et al. **FEBS Lett** 1989 Mar 13;245(1-2):209-14

Axons containing neuropeptide Y innervate arginine vasopressin-containing neurons in the rat paraventricular nucleus. Dual electron microscopic immunolabeling. Kagotani Y, et al. **Histochemistry** 1989;91(4):273-81

Reduced hypothalamic somatostatin and neuropeptide Y concentrations in the spontaneously-diabetic Chinese hamster. Williams G, et al. **Horm Metab Res** 1988 Nov; 20(11):668-70

Development of the neuronal system containing neuropeptide Y in the rat hypothalamus. Kagotani Y, et al. **Int J Dev Neurosci** 1989;7(4):359-74

Increase in neuropeptide Y, but not noradrenaline, in the superior cervical ganglion of rabbits chronically exposed to cold. Cowen T, et al. **J Auton Nerv Syst** 1988 Sep; 24(1-2):175-8

Distribution and density of neuropeptide Y-immunoreactive nerve fibres and cells in the horse urinary bladder. Prieto D, et al. **J Auton Nerv Syst** 1989 Jul;27(2):173-80

The effects of streptozotocin-induced diabetes on the peptidergic innervation and function of the rat parotid gland. Sharkey KA, et al. **J Auton Nerv Syst** 1989 Jul; 27(2):127-37

Binding of monoiodinated neuropeptide Y to hippocampal membranes and human neuroblastoma cell lines. Sheikh SP, et al. **J Biol Chem** 1989 Apr 25;264(12):6648-54

Alterations in serotonin and neuropeptide Y content of cerebrovascular sympathetic nerves following experimental subarachnoid hemorrhage. Jackowski A, et al. **J Cereb Blood Flow Metab** 1989 Jun;9(3):271-9

Plasma and amniotic fluid immunoreactive neuropeptide-Y level changes during pregnancy, labor, and at parturition. Petraglia F, et al. **J Clin Endocrinol Metab** 1989 Aug; 69(2):324-8

Distribution of sympathetic preganglionic neurons and monoaminergic nerve terminals in the spinal cord of the rat. Anderson CR, et al. **J Comp Neurol** 1989 May 8; 283(2):269-84

Multiple types of neuropeptide Y-containing neurons in primate neocortex. Kuljis RO, et al. **J Comp Neurol** 1989 Feb 15;280(3):393-409

Distribution of neuropeptide Y-containing perikarya and axons in various neocortical areas in the macaque monkey. Kuljis RO, et al. **J Comp Neurol** 1989 Feb 15;280(3):383-92

Differential colocalization of neuropeptide Y- and methionine-enkephalin-Arg6-Gly7-Leu8-like immunoreactivity in catecholaminergic neurons in the rat brain stem. Murakami S, et al. **J Comp Neurol** 1989 Mar 22;281(4):532-44

Neuropeptide Y-like immunoreactive neurons in the hedgehog (Erinaceus europaeus) and the sheep (Ovis aries) brain. Antonopoulos J, et al. **J Hirnforsch** 1989; 30(3):349-60

Neuropeptide Y-like immunoreactivity in relation to the distribution of sympathetic nerve fibers in the heart conduction system. Forsgren S. **J Mol Cell Cardiol** 1989 Mar;21(3):279-90

Neuropeptide Y-containing neurons in the rat superior cervical ganglion: projections to the pineal gland. Reuss S, et al. **J Pineal Res** 1989;6(4):307-16

Dexamethasone treatment increases neuropeptide Y levels in rat hypothalamic neurones. Corder R, et al. **Life Sci** 1988;43(23):1879-86

Substance P and NPY innervation of microvessels in the rabbit tenuissimus muscle. Ohlén A, et al. **Microvasc Res** 1988 Sep;36(2):117-29

125I-neuropeptide Y and 125I-peptide YY bind to multiple receptor sites in rat brain. Walker MW, et al. **Mol Pharmacol** 1988 Dec;34(6):779-92

Characterization and presynaptic modulation of stimulation-evoked exocytotic co-release of noradrenaline and neuropeptide Y in guinea pig heart. Haass M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):71-8

Differential increases in brain levels of neuropeptide Y and vasoactive intestinal polypeptide after kainic acid-induced seizures in the rat. Marksteiner J, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):173-7

Localization of neuropeptide Y binding sites in the zona glomerulosa of the bovine adrenal gland. Torda T, et al. **Neuroendocrinology** 1988 Aug;48(2):207-10

Co-existence of neuropeptides and differential inhibition of vasodilator responses by neuropeptide Y in guinea pig uterine arteries. Fallgren B, et al. **Neurosci Lett** 1989 May 22;100(1-3):71-6

Localization of glucocorticoid receptor in neuropeptide Y-containing neurons in the arcuate nucleus of the rat hypothalamus. Hisano S, et al. **Neurosci Lett** 1988 Dec 19; 95(1-3):13-8

Immunoreactive tachykinins, calcitonin gene-related peptide and neuropeptide Y in human synovial fluid from inflamed knee joints. Larsson J, et al. **Neurosci Lett** 1989 May 22; 100(1-3):326-30

Ultrastructural correlates of functional relationships between nigral dopaminergic or cortical afferent fibers and neuropeptide Y-containing neurons in the rat striatum. Vuillet J, et al. **Neurosci Lett** 1989 May 22;100(1-3):99-104

Tachykinins, calcitonin gene-related peptide and neuropeptide Y in nerves of the mammalian thymus: interactions with mast cells in autonomic and sensory neuroimmunomodulation? Weihe E, et al. **Neurosci Lett** 1989 May 22;100(1-3):77-82

Morphometrical and microdensitometrical studies on phenylethanolamine-N-methyltransferase- and neuropeptide Y-immunoreactive neurons in the rostral medulla oblongata of the adult and old male rat. Agnati LF, et al. **Neuroscience** 1988 Aug;26(2):461-78

Pharmacological characterization of dopaminergic influence on expression of neuropeptide Y immunoreactivity by rat striatal neurons. Kerkerian L, et al. **Neuroscience** 1988 Sep; 26(3):809-17

Differential distribution of neuropeptides and serotonin in pig adrenal glands. Kong JY, et al. **Neuroscience** 1989; 28(3):765-75

Co-release of neuropeptide Y and noradrenaline from pig spleen in vivo: importance of subcellular storage, nerve impulse frequency and pattern, feedback regulation and resupply by axonal transport. Lundberg JM, et al. **Neuroscience** 1989;28(2):475-86

Concomitant increase of somatostatin, neuropeptide Y and glutamate decarboxylase in the frontal cortex of rats with decreased seizure threshold. Marksteiner J, et al. **Neuroscience** 1988 Aug;26(2):379-85

Morphometrical and microdensitometrical studies on phenylethanolamine-N-methyltransferase- and neuropeptide Y-immunoreactive nerve terminals and on glucocorticoid receptor-immunoreactive nerve cell nuclei in the paraventricular hypothalamic nucleus in adult and old male rats. Zoli M, et al. **Neuroscience** 1988 Aug; 26(2):479-92

Autoradiographic localization of peptide YY and neuropeptide Y binding sites in the medulla oblongata. Leslie RA, et al. **Peptides** 1988 Sep-Oct;9(5):1071-6

Substance P-, CGRP- and NPY-immunoreactive nerve fibers in rat sciatic nerve-end neuromas. Fried K, et al. **Regul Pept** 1989 Apr;25(1):11-24

Analysis of structure-function relationships of neuropeptide Y using molecular dynamics simulations and pharmacological activity and binding measurements. MacKerell AD Jr, et al. **Regul Pept** 1989 Jun-Jul; 25(3):295-313

Right ventricular neuropeptide Y levels in a rat model of left ventricular failure. Maccarrone C, et al. **Res Commun Chem Pathol Pharmacol** 1988 Dec;62(3):515-8

Neuropeptide Y, peptide YY, and sympathetic control of rectal tone and anal canal pressure in the cat. Hellström PM, et al. **Scand J Gastroenterol** 1989 Mar;24(2):231-43

Somatostatin and neuropeptide Y immunoreactivity in Parkinson's disease dementia with Alzheimer's changes. Beal MF, et al. **Synapse** 1988;2(4):463-7

Differential sparing of somatostatin-neuropeptide Y and cholinergic neurons following striatal excitotoxin lesions. Beal MF, et al. **Synapse** 1989;3(1):38-47

PHARMACOLOGY

Parathyroid hormone and noradrenaline-induced enhancement of cyclic AMP in a cloned osteogenic sarcoma cell line (UMR 106) is inhibited by neuropeptide Y. Bjurholm A, et al. **Acta Physiol Scand** 1988 Nov; 134(3):451-2

Neuropeptide Y (NPY) induced inhibition of preganglionic nerve stimulation evoked release of adrenalin and noradrenaline in the pithed rat. Dahlöf P, et al. **Acta Physiol Scand** 1988 Jan;132(1):51-7

Sympathetic vascular control of the pig nasal mucosa (2): Reserpine-resistant, non-adrenergic nervous responses in relation to neuropeptide Y and ATP. Lacroix JS, et al. **Acta Physiol Scand** 1988 Jun;133(2):183-97

Neuropeptide Y induces potent contraction of arterial vascular smooth muscle via an endothelium-independent mechanism. Pernow J, et al. **Acta Physiol Scand** 1988 Sep; 134(1):157-8

Different effects of neuropeptide Y on electrically induced contractions in the longitudinal and circular smooth muscle layers of the female rabbit urethra. Sjögren C, et al. **Acta Physiol Scand** 1988 Jun;133(2):177-81

Does clonidine- or neuropeptide Y-mediated inhibition of ATP secretion from sympathetic nerves operate primarily by increasing a potassium conductance? Stjärne L, et al. **Acta Physiol Scand** 1989 May;136(1):137-8

Neuropeptide Y may inhibit sympathetic transmitter secretion by an effect 'upstream' of varicosities. Stjärne L, et al. **Acta Physiol Scand** 1988 Dec;134(4):577-8

Neuropeptide Y and peptide YY inhibit adenylate cyclase activity in the rat striatum. Westlind-Danielsson A, et al. **Acta Physiol Scand** 1988 Mar;132(3):425-30

Mechanism of neuropeptide Y inhibition of vasopressin action in rat cortical collecting tubule. Dillingham MA, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):F408-13

Renal actions of neuropeptide Y in the primate. Echtenkamp SF, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):F524-31

Mechanism of pressor response to posterior hypothalamic injection of neuropeptide Y. Martin JR, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H791-8

Coronary constriction due to neuropeptide Y: alleviation with cyclooxygenase blockers. Martin SE, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H927-34

Lateral cerebroventricular injection of neuropeptide Y stimulates feeding in sheep. Miner JL, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R383-7

Neuropeptide Y mobilizes Ca2+ and inhibits adenylate cyclase in human erythroleukemia cells. Motulsky HJ, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):E880-5

Neuropeptide Y augments adrenergic contractions at feline lower esophageal sphincter. Parkman HP, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G589-97

Potentiation by neuropeptide Y of vasoconstriction in rat resistance arteries. Andriantsitohaina R, et al. **Br J Pharmacol** 1988 Oct;95(2):419-28

The actions of neuropeptide Y and peptide YY on the hepatic arterial and portal vascular beds of the anaesthetized dog. Corder R, et al. **Br J Pharmacol** 1988 Aug;94(4):1149-56

Endothelin- and neuropeptide Y-induced vasoconstriction of human epicardial coronary arteries in vitro. Franco-Cereceda A. **Br J Pharmacol** 1989 Jul;97(3):968-72

Neuropeptide Y and reserpine-resistant vasoconstriction evoked by sympathetic nerve stimulation in the dog skeletal muscle. Pernow J, et al. **Br J Pharmacol** 1988 Jul; 94(3):952-60

The effects of peptide histidine isoleucine and neuropeptide Y on mucus volume output from the ferret trachea. Webber SE. **Br J Pharmacol** 1988 Sep;95(1):49-54

Injection of neuropeptide Y into the paraventricular nucleus of the hypothalamus inhibits gastric acid secretion in the rat. Humphreys GA, et al. **Brain Res** 1988 Jul 26; 456(2):241-8

The effect of neuropeptide Y on drinking in mice. Morley JE, et al. **Brain Res** 1989 Aug 7;494(1):129-37

Neuropeptide Y, epinephrine and norepinephrine in the paraventricular nucleus: stimulation of feeding and the release of corticosterone, vasopressin and glucose. Leibowitz SF, et al. **Brain Res Bull** 1988 Dec;21(6):905-12

Neuropeptide Y does not inhibit the release of alpha-MSH from the pars intermedia of the rat adenohypophysis.

Kraicer J, et al. **Can J Physiol Pharmacol** 1988 Apr; 66(4):318–20

Cardiovascular effects of neuropeptide Y in rat brainstem nuclei. Tseng CJ, et al. **Circ Res** 1989 Jan;64(1):55–61

Effect of oral administration of nifedipine on neuropeptide Y- and noradrenaline-induced vasoconstriction in the human forearm. Pernow J, et al. **Clin Physiol** 1989 Feb; 9(1):67–75

Failure of neuropeptide Y to modulate the release of LH and prolactin by cultured bovine pituitary cells. Chao CC, et al. **Domest Anim Endocrinol** 1987 Oct;4(4):309–14

Neuropeptide-Y suppresses pulsatile secretion of luteinizing hormone in ovariectomized rats: possible site of action. McDonald JK, et al. **Endocrinology** 1989 Jul;125(1):186–91

Neuropeptide-Y stimulation of luteinizing hormone-releasing hormone secretion from the median eminence in vitro by estrogen-dependent and extracellular Ca2+-independent mechanisms. Sabatino FD, et al. **Endocrinology** 1989 May; 124(5):2089–98

Peptide-YY and neuropeptide-Y inhibit vasoactive intestinal peptide-stimulated adenosine 3',5'-monophosphate production in rat small intestine: structural requirements of peptides for interacting with peptide-YY-preferring receptors. Servin AL, et al. **Endocrinology** 1989 Feb; 124(2):692–700

Neuropeptide Y (NPY)-induced suppression of activity in the rat: evidence for NPY receptor heterogeneity and for interaction with alpha-adrenoceptors. Heilig M, et al. **Eur J Pharmacol** 1988 Nov 22;157(2–3):205–13

Pharmacological characterization of neuropeptide Y and noradrenaline mechanisms in sympathetic control of pig spleen. Lundberg JM, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):103–13

Neuropeptide Y (NPY): a coronary vasoconstrictor and potentiator of catecholamine-induced coronary constriction. Macho P, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):67–74

Inhibition of cholinergic and non-adrenergic, non-cholinergic bronchoconstriction in the guinea pig mediated by neuropeptide Y and alpha 2-adrenoceptors and opiate receptors. Matran R, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):15–23

Disparate effects of neuropeptide Y and clonidine on the excretion of sodium and water in the rat. Smyth DD, et al. **Eur J Pharmacol** 1988 Jul 26;152(1–2):157–62

Neuropeptide Y inhibits vasoactive intestinal peptide- and dopamine-induced cyclic AMP formation in human Ewing's sarcoma WE-68 cells. van Valen F, et al. **FEBS Lett** 1989 Jun 5;249(2):271–4

Selective potentiation of extracellular Ca2+-dependent contraction by neuropeptide Y in rabbit mesenteric arteries. Oshita M, et al. **Gen Pharmacol** 1989;20(3):363–7

Neuropeptide Y and galanin in norepinephrine release in hypothalamic slices. Tsuda K, et al. **Hypertension** 1989 Jul; 14(1):81–6

Neuropeptide Y and neuropeptide Y18–36. Structural and biological characterization. Boublik J, et al. **Int J Pept Protein Res** 1989 Jan;33(1):11–5

Regional haemodynamic effects of neuropeptide Y, vasopressin and angiotensin II in conscious, unrestrained, Long Evans and Brattleboro rats. Gardiner SM, et al. **J Auton Nerv Syst** 1988 Sep;24(1–2):15–27

Effects of neuropeptide Y on the renal, mesenteric and hindlimb vascular beds of the conscious rabbit. Minson R, et al. **J Auton Nerv Syst** 1989 Jul;27(2):139–46

Effects of neuropeptide Y on contraction, relaxation, and membrane potential of rabbit cerebral arteries. Abel PW, et al. **J Cardiovasc Pharmacol** 1989 Jan;13(1):52–63

Intracellular Ca2+ release in vascular muscle cells by caffeine, ryanodine, norepinephrine, and neuropeptide Y. Erne P, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 5:S85–91

Effects of neuropeptide Y and calcitonin gene-related peptide on local cerebral blood flow in rat striatum. Suzuki Y, et al. **J Cereb Blood Flow Metab** 1989 Jun;9(3):268–70

Involvement of vascular endothelium in the potentiation of vasoconstrictor responses by neuropeptide Y. Hieble JP, et al. **J Hypertens Suppl** 1988 Dec;6(4):S239–42

Neuropeptide Y increases the inhibitory effects of clonidine on potassium evoked 3H-noradrenaline but not 3H-5-hydroxytryptamine release from synaptosomes of the hypothalamus and the frontoparietal cortex of the male Sprague-Dawley rat. Martire M, et al. **J Neural Transm** 1989;78(1):61–72

Reduced inhibitory effects of clonidine and neuropeptide Y on 3H-noradrenaline release from synaptosomes of the medulla oblongata of the spontaneously hypertensive rat. Martire M, et al. **J Neural Transm** 1989;76(3):181–9

The effect of down regulation of protein kinase C on the inhibitory modulation of dorsal root ganglion neuron Ca2+ currents by neuropeptide Y. Ewald DA, et al. **J Neurosci** 1988 Jul;8(7):2447–51

Effects of a nonpressor dose of neuropeptide Y on cardiac output, regional blood flow distribution and plasma renin, vasopressin and catecholamine levels. Aubert JF, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):1109–15

Effects of neuropeptide Y on the response of isolated blood vessels to norepinephrine and sympathetic field stimulation. Hieble JP, et al. **J Pharmacol Exp Ther** 1989 Aug; 250(2):523–8

Neuropeptide Y and platelet aggregation by adrenaline. Dewar HA, et al. **Life Sci** 1989;45(5):367–70

Effect of neuropeptide Y on the hypothalamic-pituitary-adrenal axis in the dog. Inoue T, et al. **Life Sci** 1989;44(15):1043–51

The antiadrenergic effect of neuropeptide Y on the ventricular cardiomyocyte. Millar BC, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):426–9

Bronchoconstrictor action of neuropeptide Y (NPY) in isolated guinea pig airways. Cadieux A, et al. **Neuropeptides** 1989 May-Jun;13(4):215–9

Stimulation of cholinergic receptor mediated secretion from the bovine adrenal medulla by neuropeptide Y. Hexum TD, et al. **Neuropeptides** 1989 Jan;13(1):35–41

Pertussis toxin treatment counteracts the cardiovascular effects of neuropeptide Y and clonidine in the awake unrestrained rat. Fuxe K, et al. **Neurosci Lett** 1989 Jul 3; 101(3):337–41

Continuous intraventricular infusion of neuropeptide Y evokes episodic food intake in satiated female rats: effects of adrenalectomy and cholecystokinin. Kalra SP, et al. **Peptides** 1988 Jul-Aug;9(4):723–8

Neuropeptide Y: behavioral effects in the golden hamster. Kulkosky PJ, et al. **Peptides** 1988 Nov-Dec;9(6):1389–93

Neuropeptide tyrosine (NPY)-induced potentiation of the pressor activity of catecholamines in conscious rats. López LF, et al. **Peptides** 1989 May-Jun;10(3):551–8

Peripheral and central satiety factors in neuropeptide Y-induced feeding in rats. Rowland NE. **Peptides** 1988 Sep-Oct;9(5):989–92

Neuropeptide Y antagonises secretagogue evoked chloride transport in rat jejunal epithelium. Cox HM, et al. **Pflugers Arch** 1988 Nov;413(1):38–42

Alpha 2-adrenoceptor blockade attenuates feeding behavior induced by neuropeptide Y and epinephrine. Clark JT, et al. **Physiol Behav** 1988;43(4):417–22

Characterization of central actions of neuropeptide Y on food and water intake in rabbits. Pau MY, et al. **Physiol Behav** 1988;44(6):797–802

Peptidergic modulation of efferent sympathetic neurons in intrathoracic ganglia regulating the canine heart. Armour JA. **Proc Soc Exp Biol Med** 1989 May;191(1):60–8

Potentiation of norepinephrine-induced vasoconstrictions by neuropeptide Y in isolated canine carotid artery. Gintautas J, et al. **Proc West Pharmacol Soc** 1989;32:327–8

Regulation of renal function by central neuropeptide Y in the anesthetized rat. Smyth DD, et al. **Proc West Pharmacol Soc** 1989;32:281–4

Centrally administered neuropeptide Y (NPY) produces anxiolytic-like effects in animal anxiety models. Heilig M, et al. **Psychopharmacology (Berlin)** 1989;98(4):524–9

Neuropeptide Y and vasoactive intestinal polypeptide in cerebral arteries of the rat: relationships between innervation pattern and mechanical response. Brayden JE, et al. **Regul Pept** 1988 Aug;22(3):253–65

Neuropeptide Y: prejunctional inhibition of vagally induced contractions in the guinea pig trachea. Grundemar L, et al. **Regul Pept** 1988 Dec;23(3):309–13

Pre- and postjunctional actions of neuropeptide Y and related peptides. Potter EK, et al. **Regul Pept** 1989 May; 25(2):167–77

Neuropeptide Y and control of vascular resistance in skeletal muscle. Revington M, et al. **Regul Pept** 1988 Dec; 23(3):331–42

The cardiovascular actions of centrally administered neuropeptide Y. Scott NA, et al. **Regul Pept** 1989 May; 25(2):247–58

Vascular "sphincter" and microangioarchitecture in the central nervous system: constriction of intraparenchymal blood vessels following a treatment of vasoconstrictive neurotransmitter. Nakai K, et al. **Scanning Microsc** 1989 Mar;3(1):337–41

Regulation of luteinizing hormone secretion by neuropeptide Y in rats: hypothalamic and pituitary actions. Crowley WR, et al. **Synapse** 1988;2(3):276–81

Control of feeding and sexual behaviors by neuropeptide Y: physiological implications. Kalra SP, et al. **Synapse** 1988; 2(3):254–7

Cardiovascular effects and modulation of noradrenergic neurotransmission following central and peripheral administration of neuropeptide Y. Westfall TC, et al. **Synapse** 1988;2(3):299–307

Role of neuropeptide Y (NPY) in cardiovascular responses to stress. Zukowska-Grojec Z, et al. **Synapse** 1988; 2(3):293–8

PHYSIOLOGY

The effect of splanchnic nerve stimulation and neuropeptide Y on cholera secretion and release of vasoactive intestinal polypeptide in the feline small intestine. Sjöqvist A, et al. **Acta Physiol Scand** 1988 Jul;133(3):289–95

Evidence for co-transmitter role of neuropeptide Y in the pig spleen. Lundberg JM, et al. **Br J Pharmacol** 1989 Mar; 96(3):675–87

Evidence that NPY-containing neurons in the brainstem project into selected hypothalamic nuclei: implication in feeding behavior. Sahu A, et al. **Brain Res** 1988 Aug 9; 457(2):376–8

Neuropeptide Y as a putative modulator of the vagal effects on heart rate. Warner MR, et al. **Circ Res** 1989 May; 64(5):882–9

Neuropeptide Y in the sympathetic control of blood pressure in hypertensive subjects. Chalmers J, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:59–66

Evidence that neuropeptide Y released from noradrenergic axons causes prolonged contraction of the guinea-pig uterine artery. Morris JL, et al. **J Auton Nerv Syst** 1988 Oct;24(3):241–9

Two different G-proteins mediate neuropeptide Y and bradykinin-stimulated phospholipid breakdown in cultured rat sensory neurons. Perney TM, et al. **J Biol Chem** 1989 May 5;264(13):7317–27

Time course of expression of neuropeptide Y, calcitonin gene-related peptide, and NADPH diaphorase activity in neurons of the developing murine bowel and the appearance of 5-hydroxytryptamine in mucosal enterochromaffin cells. Branchek TA, et al. **J Comp Neurol** 1989 Jul 8;285(2):262–73

The role of neuropeptide Y in vascular sympathetic neurotransmission may be enhanced in hypertension. Daly RN, et al. **J Hypertens Suppl** 1988 Dec;6(4):S535–8

Involvement of neuropeptide Y in sympathetic vascular control of skeletal muscle in vivo. Kahan T, et al. **J Hypertens Suppl** 1988 Dec;6(4):S532–4

Neuropeptide Y action in the rat hippocampal slice: site and mechanism of presynaptic inhibition. Colmers WF, et al. **J Neurosci** 1988 Oct;8(10):3827–37

Neuropeptide Y modulates neurotransmitter release and Ca2+ currents in rat sensory neurons. Walker MW, et al. **J Neurosci** 1988 Jul;8(7):2438–46

Parkinson's disease and Alzheimer's disease: new neurochemical parallels. Whitehouse PJ. **Mov Disord** 1989; 4 Suppl 1:S57–62

A physiological role for neuropeptide Y in regulating the estrogen/progesterone induced luteinizing hormone surge in ovariectomized rats. Wehrenberg WB, et al. **Neuroendocrinology** 1989 Jun;49(6):680–2

Neuropeptide Y: brain localization and central effects on plasma insulin levels in chicks. Kuenzel WJ, et al. **Physiol Behav** 1988;44(4–5):669–78

Neuropeptide Y (NPY) and the central nervous system: distribution effects and possible relationship to neurological and psychiatric disorders. Wahlestedt C, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1–2):31–54 (120 ref.)

Involvement of perivascular neuropeptide Y nerve fibres in uterine arterial vasoconstriction in conjunction with pregnancy. Fallgren B, et al. **Regul Pept** 1989 Feb; 24(2):119–30

Studies on the physiological role and mechanism of action of neuropeptide Y in the regulation of luteinizing hormone secretion in the rat. Guy J, et al. **Regul Pept** 1988 Nov; 23(2):209–16

[Neuropeptide Y—a potential factor in blood pressure disease and vasospasm during parturition?] Härkönen M. **Duodecim** 1989;105(13–14):1233–6 (8 ref.) **(Fin)**

[Neuropeptide Y (NPY): functions and biosynthesis as a peptidergic neurotransmitter and the regulation of neuron-specific expression of NPY gene] Higuchi H. **Nippon Yakurigaku Zasshi** 1989 Apr;93(4):203–18 (106 ref.) (Eng. Abstr.) **(Jpn)**

SECRETION

Differential release of calcitonin gene-related peptide and neuropeptide Y from the isolated heart by capsaicin, ischaemia, nicotine, bradykinin and ouabain. Franco-Cereceda A, et al. **Acta Physiol Scand** 1989 Feb; 135(2):173–87

Sympathetic vascular control of the pig nasal mucosa (III): Co-release of noradrenaline and neuropeptide Y. Lacroix JS, et al. **Acta Physiol Scand** 1989 Jan;135(1):17–28

Release and vasoconstrictor effects of neuropeptide Y in relation to non-adrenergic sympathetic control of renal blood flow in the pig. Pernow J, et al. **Acta Physiol Scand** 1989 Aug;136(4):507–17

Simultaneous induction of neuropeptide Y and gonadotropin-releasing hormone release in the rabbit hypothalamus. Pau KY, et al. **Neuroendocrinology** 1989 Feb;49(2):197–201

THERAPEUTIC USE

Alterations in blood pressure of normotensive and hypertensive rats following intrathecal injections of neuropeptide Y. Chen X, et al. **J Cardiovasc Pharmacol** 1988 Oct;12(4):473–8

NEUROPEPTIDE Y-LIKE IMMUNOREACTIVE PEPTIDE see **NEUROPEPTIDE Y**

NEUROPEPTIDES

Autoradiographic distribution in rat tissues of binding sites for endothelin: a neuropeptide? Koseki C, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):R858–66

Conformation of the alpha form of human calcitonin gene-related peptide (CGRP) in aqueous solution as determined by circular dichroism spectroscopy. Manning MC. **Biochem Biophys Res Commun** 1989 Apr 14; 160(1):388–92

1H-nuclear magnetic resonance studies of the neuropeptide head activator. Saffrich R, et al. **Biochim Biophys Acta** 1989 Jul 27;997(1–2):144–53

Regulatory peptides. **Experientia Suppl** 1989;56:1–406
Hormone action. Part K. Neuroendocrine peptides.

Methods Enzymol 1989;168:1–906

Use of molecular biological methods to study neuropeptides. Brownstein MJ. **NIDA Res Monogr** 1988;87:83–92 (21 ref.)

Sequence analyses of two neuropeptides of the AKH/RPCH–family from the lubber grasshopper, Romalea microptera. Gäde G, et al. **Peptides** 1988 Jul–Aug; 9(4):681–8

[Peptide C–terminal alpha–amidating enzyme] Mizuno K, et al. **Seikagaku** 1988 Jul;60(7):551–7 **(Jpn)**

ADMINISTRATION & DOSAGE

Effects of intravenous calcitonin gene–related peptide (CGRP) and substance P on the blood–aqueous barrier in the rabbit. Andersson SE, et al. **Acta Physiol Scand** 1989 Mar;135(3):349–57

Effects of neuropeptides and capsaicin on tracheobronchial blood flow of the pig. Matran R, et al. **Acta Physiol Scand** 1989 Mar;135(3):335–42

ADVERSE EFFECTS

[Study of the mechanism of hypertensive effect of FMRF–like peptides] Zhukovskii SV, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(1):45–7 (Eng. Abstr.) **(Rus)**

ANALYSIS

Innervation of the thyroid. A study of the rat using retrograde tracing and immunocytochemistry. Sundler F, et al. **Acta Histochem Suppl (Jena)** 1989;37:191–8

Regulatory peptides as tumour markers. Theodorsson E. **Acta Oncol** 1989;28(3):319–24 (26 ref.)

Networks of peptide–containing nerve fibres in laryngeal nerve paraganglia. An immunohistochemical study. Dahlqvist A, et al. **Acta Otolaryngol (Stockh)** 1989 Mar–Apr;107(3–4):289–95

Neurotransmitters, receptors and neuropeptides in post–mortem brains of chronic schizophrenic patients. Toru M, et al. **Acta Psychiatr Scand** 1988 Aug;78(2):121–37

Peptide neuroanatomy of adjuvant–induced arthritic inflammation in rat. Weihe E, et al. **Agents Actions** 1988 Dec;25(3–4):255–9

Bidimensional reversed–phase high–pressure liquid chromatography analysis of cultured cell neuropeptides: application to atrial natriuretic factor. Nguyen TT, et al. **Anal Biochem** 1989 May 15;179(1):24–7

Ultrastructural immunocytochemical studies of the localization and distribution of somatostatin, calcitonin, calcitonin gene–related peptide, and substance P in the bat thyroid follicle. Nunez EA, et al. **Anat Rec** 1988 Jul; 221(3):707–13

Diazepam binding inhibitor in brain and in cerebrospinal fluid of human. Ferrero P, et al. **Ann Ist Super Sanita** 1988; 24(3):443–59

The distribution and biological effects of neuromedins B and U. Domin J, et al. **Ann N Y Acad Sci** 1988;547:391–403

Distribution of TRH–like immunoreactivity with special reference to coexistence with other neuroactive compounds. Hökfelt T, et al. **Ann N Y Acad Sci** 1989; 553:76–105 (151 ref.)

Consideration of the chemistry of solid–phase matrix interaction leads to improved quantitation of neuropeptides. Kasprzyk PG, et al. **Ann N Y Acad Sci** 1988;547:41–53

Immunohistochemical studies of the neurochemical markers, CGRP, enkephalin, galanin, gamma–MSH, NPY, PHI, proctolin, PTH, somatostatin, SP, VIP, tyrosine hydroxylase and neurofilament in nerves and cells of the human attached gingiva. Luthman J, et al. **Arch Oral Biol** 1988;33(3):149–58

Calcitonin, katacalcin, and calcitonin gene–related peptide in the human prostate. An immunocytochemical and immunoelectron microscopic study. di Sant'Agnese PA, et al. **Arch Pathol Lab Med** 1989 Jul;113(7):790–6

Amino acid sequence of pheromone–biosynthesis–activating neuropeptide (PBAN) of the silkworm, Bombyx mori. Kitamura A, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):520–6

Studies of peptidergic input to the lateral spinal nucleus. Cliffer KD, et al. **Brain Res** 1988 Sep 20;460(2):356–60

FMRFamide–like immunoreactive neurons of the nervus terminalis of teleosts innervate both retina and pineal organ. Ekström P, et al. **Brain Res** 1988 Sep 13;460(1):68–75

Temporal sequence of neurotransmitter expression by developing neurons of fetal monkey visual cortex. Huntley GW, et al. **Brain Res** 1988 Sep 1;471(1):69–96

Occurrence, ontogeny, ultrastructure and some plasticity of CGRP (calcitonin gene–related peptide)–immunoreactive nerves in the carotid body of rats. Kondo H, et al. **Brain Res** 1988 Nov 15;473(2):283–93

An increase in the expression of neuropeptidergic vasodilator, but not vasoconstrictor, cerebrovascular nerves in aging rats. Mione MC, et al. **Brain Res** 1988 Sep 13;460(1):103–13

Presence of a substance P–like immunoreactive neurone system from the parabrachial area to the central amygdaloid nucleus of the rat with reference to coexistence with calcitonin gene–related peptide. Yamano M, et al. **Brain Res** 1988 Jun 7;451(1–2):179–88

Developmental changes of neuropeptides and amino acids in baboon cortex. Beal MF, et al. **Brain Res Dev Brain Res** 1988 Nov 1;44(1):156–9

Ontogenesis of endocrine cells in the chicken intestine: an immunohistochemical study. Salvi E, et al. **Cell Mol Biol** 1989;35(1):17–26

Immunocytochemical analysis of calcitonin gene–related peptide and vasoactive intestinal polypeptide in Merkel cells and cutaneous free nerve endings of cats. Alvarez FJ, et al. **Cell Tissue Res** 1988 Nov;254(2):429–37

Projections of neurons with neuromedin U–like immunoreactivity in the small intestine of the guinea–pig. Furness JB, et al. **Cell Tissue Res** 1989 Aug;257(2):415–22

Ultrastructural studies on calcitonin gene–related peptide–, tachykinins– and somatostatin–immunoreactive neurones in rat dorsal root ganglia: evidence for the colocalization of different peptides in single secretory granules. Merighi A, et al. **Cell Tissue Res** 1988 Oct;254(1):101–9

Immunohistological demonstration of a substance related to neuropeptide Y and FMRFamide in the cephalic and thoracic nervous systems of the locust Locusta migratoria. Rémy C, et al. **Cell Tissue Res** 1988 Oct;254(1):189–95

Peptide–containing neurons in explant cultures of guinea–pig myenteric plexus during development in vitro: gross morphology and growth patterns. Saffrey MJ, et al. **Cell Tissue Res** 1988 Oct;254(1):167–76

Immunohistochemical and ultrastructural localisation of peptide–containing nerves and myocardial cells in the human atrial appendage. Wharton J, et al. **Cell Tissue Res** 1988 Oct;254(1):155–66

Coexistence of FMRFamide, met–enkephalin and serotonin in molluscan neurons. Takayanagi H, et al. **Comp Biochem Physiol [A]** 1988;91(3):613–20

Elevated neuropeptide Y concentrations in the central hypothalamus of the spontaneously diabetic BB/E Wistar rat. Williams G, et al. **Diabetic Med** 1989 Sep–Oct; 6(7):601–7

Neuropeptides in the human appendix. Distribution and motor effects. Ekblad E, et al. **Dig Dis Sci** 1989 Aug; 34(8):1217–30

Three–dimensional reconstruction of transmitter–identified central neurons by "en bloc" immunofluorescence histochemistry and confocal scanning microscopy. Brodin L, et al. **Exp Brain Res** 1988;73(2):441–6

Further analysis of presence of peptides in dopamine neurons. Cholecystokinin, peptide histidine–isoleucine/vasoactive intestinal polypeptide and substance P in rat supramammillary region and mesencephalon. Seroogy K, et al. **Exp Brain Res** 1988;72(3):523–34

Calcitonin gene–related peptide (CGRP) immunoreactive sensory nerves in the human and guinea pig uvea and cornea. Uusitalo H, et al. **Exp Eye Res** 1989 Apr; 48(4):467–75

An improved immunohistostaining procedure for peptides in human brain. Guntern R, et al. **Experientia** 1989 Feb 15;45(2):159–61

Peptidergic innervation of the temporomandibular disk in the rat. Ichikawa H, et al. **Experientia** 1989 Mar 15; 45(3):303–4

Aspects of measurement and analysis of regulatory peptides. Burrin JM, et al. **Experientia Suppl** 1989;56:34–50 (34 ref.)

Quantitative analysis of autoradiograms. Davenport AP, et al. **Experientia Suppl** 1989;56:137–53 (45 ref.)

Coexistence of peptides with classical neurotransmitters. Hökfelt T, et al. **Experientia Suppl** 1989;56:154–79 (150 ref.)

Combined axonal transport tracing and immunocytochemistry for mapping pathways of peptide–containing nerves in the peripheral nervous system. Su HC, et al. **Experientia Suppl** 1989;56:98–112 (107 ref.)

Regulatory peptide immunocytochemistry at light and electron microscopical levels. Van Noorden S, et al. **Experientia Suppl** 1989;56:11–33 (79 ref.)

Progressive changes in adrenergic, serotonergic, and peptidergic nerves in proximal colon of streptozotocin–diabetic rats. Belai A, et al. **Gastroenterology** 1988 Nov;95(5):1234–41

Immunocytochemical evidence for the colocalization of neurotensin/xenopsin– and gastrin/caerulein–immunoreactive substances in Xenopus laevis gastrointestinal tract. Flucher BE, et al. **Gen Comp Endocrinol** 1988 Oct;72(1):54–62

Calcitonin gene–related peptide in the bullfrog, Rana catesbeiana: localization and vascular actions. Kline LW, et al. **Gen Comp Endocrinol** 1988 Oct;72(1):123–9

Peptidergic innervation of the adrenocorticotropic hormone (ACTH)– and growth hormone (GH)–producing cells in the pars distalis of the sea bass (Dicentrarchus labrax). Moons L, et al. **Gen Comp Endocrinol** 1988 Nov; 72(2):171–80

Localization of adrenergic and neuropeptide tyrosine–containing nerves in the mammalian liver. Burt AD, et al. **Hepatology** 1989 Jun;9(6):839–45

Ontogenetic development of the guinea pig uterine innervation. An immunohistochemical study of different neuronal markers, neuropeptides and S–100 protein. Alm P, et al. **Histochemistry** 1988;90(1):19–24

Calcitonin gene–related peptide (CGRP) immunoreactivity in the neuroendocrine Merkel cells and nerve fibres of pig and human skin. García–Caballero T, et al. **Histochemistry** 1989;92(2):127–32

Immunohistochemical localization of calcitonin gene–related peptide and bombesin/gastrin–releasing peptide in nerve fibers of the rat, guinea pig and pig female genital organs. Häppölä O, et al. **Histochemistry** 1989;92(3):211–8

Innervation of radicular and extraparenchymal arteries of spinal cord. Histochemical and immunohistochemical study in primate. Hegde SA, et al. **Histochemistry** 1988; 89(5):415–20

Protein gene product 9.5 (PGP 9.5). A new neuronal marker visualizing the whole uterine innervation and pregnancy–induced and developmental changes in the guinea pig. Lundberg LM, et al. **Histochemistry** 1988; 90(1):9–17

Immunohistochemical analysis of calcitonin and calcitonin gene–related peptide in human lung. Tsutsumi Y. **Hum Pathol** 1989 Sep;20(9):896–902

An increased pool of secretory hormones and peptides in adrenal medulla of stroke–prone spontaneously hypertensive rats. Schober M, et al. **Hypertension** 1989 May;13(5):469–74

Immunocytochemical demonstration of neuropeptides in the fish–gill parasite, Diclidophora merlangi (Monogenoidea). Maule AG, et al. **Int J Parasitol** 1989 May;19(3):307–16

Dot immunobinding assay of high–performance liquid chromatographic fractions on poly(vinylidene difluoride) membranes [letter] Li KW, et al. **J Chromatogr** 1989 Jun 23;472(2):445–6

Appearance of neuropeptides in ascitic fluid after peritoneal therapy with interleukin–2 and lymphokine–activated killer cells for intraabdominal malignancy. Schiogolev SA, et al. **J Clin Immunol** 1989 Mar;9(2):169–73

Immunohistochemical localization of substance P, somatostatin, enkephalin, and serotonin in the spinal cord of the northern leopard frog, Rana pipiens. Adli DS, et al. **J Comp Neurol** 1988 Sep 1;275(1):106–16

Organization of calcitonin gene–related peptide–immunoreactive terminals in the primate dorsal horn. Carlton SM, et al. **J Comp Neurol** 1988 Oct 22; 276(4):527–36

The nuclei of origin of monoaminergic, peptidergic, and cholinergic afferents to the cat nucleus reticularis magnocellularis: a double–labeling study with cholera toxin as a retrograde tracer. Luppi PH, et al. **J Comp Neurol** 1988 Nov 1;277(1):1–20

Monoclonal antibodies to the molluscan small cardioactive peptide SCPB: immunolabeling of neurons in diverse invertebrates. Masinovsky B, et al. **J Comp Neurol** 1988 Jul 22;273(4):500–12

Immunohistochemical study of the telencephalon of the spiny dogfish, Squalus acanthias. Northcutt RG, et al. **J Comp Neurol** 1988 Nov 8;277(2):250–67

Immunocytochemical localization of neuropeptides in the adrenal medulla. Pelto–Huikko M. **J Electron Microsc Tech** 1989 Aug;12(4):364–79 (86 ref.)

The anterior pituitary content of neuromedin U–like immunoreactivity is altered by thyrotrophin–releasing hormone and thyroid hormone status in the rat. Domin J, et al. **J Endocrinol** 1989 Aug;122(2):471–6

Ultrastructural localization of RFamide–like peptides in neuronal dense–cored vesicles in the peduncle of Hydra. Koizumi O, et al. **J Exp Zool** 1989 Jan;249(1):17–22

Expression of neuron–specific enolase, Leu–7, and neuropeptides in human fetal salivary gland epithelium. Hayashi Y, et al. **J Histochem Cytochem** 1989 Jul; 37(7):1147–52

Peptide immunoreactivity of unmyelinated primary afferent axons in rat lumbar dorsal roots. McNeill DL, et al. **J Histochem Cytochem** 1989 Jul;37(7):1047–52

Neuropeptides in interscapular and perirenal brown adipose tissue in the rat: a plurality of innervation. Norman D, et al. **J Neurocytol** 1988 Jun;17(3):305–11

Neurotransmitter phenotype plasticity in cultured dissociated adult rat dorsal root ganglia: an immunocytochemical study. Schoenen J, et al. **J Neurosci Res** 1989 Apr; 22(4):473–87

Immunohistochemical study of neurochemical markers in gingiva obtained from periodontitis–affected sites. Luthman J, et al. **J Periodont Res** 1989 Jul;24(4):267–78

Neuropeptides in synovium of patients with rheumatoid arthritis and osteoarthritis. Grönblad M, et al. **J Rheumatol** 1988 Dec;15(12):1807–10

Microdialysis for measurement of neuroendocrine peptides. Levine JE, et al. **Methods Enzymol** 1989;168:166–81

Structure of one of the neuropeptides of the egg–laying hormone precursor of Lymnaea. Dictus WJ, et al. **Mol Cell Endocrinol** 1988 Nov;60(1):23–9

High–performance liquid chromatography of the neuropeptides: the endogenous opioid peptides. McKnight AT, et al. **Monogr Endocrinol** 1988;30:66–94 (50 ref.)

Distribution and coexistence of corticotropin–releasing factor–, neurotensin–, enkephalin–, cholecystokinin–, galanin– and vasoactive intestinal polypeptide/peptide histidine isoleucine–like peptides in the parvocellular part of the paraventricular nucleus. Ceccatelli S, et al. **Neuroendocrinology** 1989 Mar;49(3):309–23

Galanin and vasopressin coexist in the rat hypothalamo–neurohypophyseal system. Skofitsch G, et al. **Neuroendocrinology** 1989 Apr;49(4):419–27

Isolation of neurosecretory granules containing vasotocin, mesotocin, MSEL– and VLDV–neurophysins from goose neurohypophysis. Rouillé Y, et al. **Neuropeptides** 1989 Apr; 13(3):187–90

Effect of chronic morphine administration on measured levels and chromatographic characterization of six neuropeptides in guinea–pig ileum. Shuttleworth CW, et al. **Neuropeptides** 1988 Nov–Dec;12(4):249–56

Origins of substance P– and calcitonin gene–related peptide–containing nerves in the internal carotid artery of rat. Hardebo JE, et al. **Neurosci Lett** 1989 Jun 5;

101(1):39–45
Immunohistochemical study of neuropeptides in vagal and glossopharyngeal afferent neurons in the rat. Helke CJ, et al. **Neuroscience** 1988 Aug;26(2):539–51
Distribution and origin of peptide-containing nerve fibers in the celiac superior mesenteric ganglion of the guinea-pig. Lindh B, et al. **Neuroscience** 1988 Sep;26(3):1037–71
Light and electron microscopic immunocytochemistry of neurons in the blowfly optic lobe reacting with antisera to RFamide and FMRFamide. Nässel DR, et al. **Neuroscience** 1988 Oct;27(1):347–62
Localization of neuropeptides and catecholamines in the nerve cord of the marine annelid Sabellastrate magnifica. Diaz L, et al. **P R Health Sci J** 1988 Aug;7(2):110–1
Development of immunoreactivity to the invertebrate neuropeptide small cardiac peptide B in the tapeworm Diphyllobothrium dendriticum. Gustafsson MK, et al. **Parasitol Res** 1989;75(5):396–400
Immunocytochemical demonstration of a neuropeptide in Ascaris suum (Nematoda) using an antiserum to FMRFamide. Davenport TR, et al. **Parasitology** 1988 Aug; 97 (Pt 1):81–8
Immunocytochemical demonstration of neuropeptides in the nervous system of the liver fluke, Fasciola hepatica (Trematoda, Digenea). Magee RM, et al. **Parasitology** 1989 Apr;98 Pt 2:227–38
Distribution of galanin-like immunoreactivity in baboon brain. Beal MF, et al. **Peptides** 1988 Jul–Aug;9(4):847–51
Peptide-containing pathways from the parabrachial complex to the central nucleus of the amygdala. Block CH, et al. **Peptides** 1989 Mar–Apr;10(2):465–71
Peptide immunocytochemistry in afferent neurons from lower gut in rats. Chery-Croze S, et al. **Peptides** 1988 Jul–Aug;9(4):873–81
Tissue-specific sex differences in galanin-like immunoreactivity and galanin mRNA during development in the rat. Gabriel SM, et al. **Peptides** 1989 Mar–Apr; 10(2):369–74
Neuropeptides and septo-hippocampal neurons: electrophysiological effects and distributions of immunoreactivity. Lamour Y, et al. **Peptides** 1988 Nov–Dec;9(6):1351–9
Biochemical characterization of FMRF-NH2-like peptides in spinal cords of various mammalian species using specific radioimmunoassays. Majane EA, et al. **Peptides** 1988 Sep–Oct;9(5):1137–44
Calcitonin gene-related peptide-like immunoreactivities in pheochromocytomas. Mouri T, et al. **Peptides** 1989 Jan–Feb;10(1):201–4
The central nervous system of Bulla gouldiana: peptide localization. Roberts MH, et al. **Peptides** 1988 Nov–Dec; 9(6):1323–34
Distribution of a novel cardioactive neuropeptide (CCAP) in the nervous system of the shore crab Carcinus maenas. Stangier J, et al. **Peptides** 1988 Jul–Aug;9(4):795–800
Purification, characterization, and localization of neuropeptides in the cornea. Tinsley PW, et al. **Peptides** 1988 Nov–Dec;9(6):1373–9
Calcitonin gene-related peptide (CGRP) in normotensive and spontaneously hypertensive rats. Xu D, et al. **Peptides** 1989 Mar–Apr;10(2):309–12
Crustacean peptidergic neurons in culture show immediate outgrowth in simple medium. Cooke I, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):402–6
Differential effect of alpha-latrotoxin on exocytosis from small synaptic vesicles and from large dense-core vesicles containing calcitonin gene-related peptide at the frog neuromuscular junction [published erratum appears in Proc Natl Acad Sci U S A 1989 Feb;86(4):1416] Matteoli M, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7366–70
Purification and sequencing of neuropeptides contained in neuron R15 of Aplysia californica. Weiss KR, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2913–7
Regulatory peptides in paraganglia. Heym C, et al. **Prog Histochem Cytochem** 1988;18(2):1–95 (361 ref.)
Neurokinin A, neurokinin B and neuropeptide K in the rabbit iris: a study comparing different extraction methods. Beding-Barnekow B, et al. **Regul Pept** 1989 May; 25(2):199–206
Calcitonin gene-related peptide in hamster lung and its coexistence with serotonin: a chemical and immunocytochemical study. Keith IM, et al. **Regul Pept** 1988 Sep;22(4):315–23
Immunoreactivity to various peptides in the human carotid body. Heath D, et al. **Res Commun Chem Pathol Pharmacol** 1988 Nov; 62(2):289–93
Peptide- and transmitter-containing neurons in the mediobasal hypothalamus and their relation to GABAergic systems: possible roles in control of prolactin and growth hormone secretion. Meister B, et al. **Synapse** 1988; 2(6):585–605
FMRFamide-like immunoreactivity in the brain and pituitary of the teleost. Eigenmannia lineata (Gymnotiformes). Bonn U, et al. **Z Mikrosk Anat Forsch** 1989;103(2):221–36
[Peripheral distribution of a neuropeptide recognized by an antiserum raised against the mammalian CRF41, in the mollusc Helix pomatia] Cardot J, et al. **C R Soc Biol (Paris)** 1988;182(1):44–51 (Eng. Abstr.) **(Fre)**
[Coexistence of acetylcholine and calcitonin gene-related peptides at the frog neuromuscular junction: a model for the study of differential secretion of classical neurotransmitters and peptides] Matteoli M, et al. **Ann Ist Super Sanita** 1988;24(4):527–30 (Eng. Abstr.) **(Ita)**

ANTAGONISTS & INHIBITORS

G proteins couple alpha-adrenergic and GABAb receptors to inhibition of peptide secretion from peripheral sensory neurons. Holz GG 4th, et al. **J Neurosci** 1989 Feb; 9(2):657–66

BIOSYNTHESIS

Production and characterisation of immunoreactive calcitonin gene-related peptide (CGRP) from a CGRP receptor-positive cloned osteosarcoma cell line (UMR 106.01). Zaidi M, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):214–9
Endocrine cells producing regulatory peptides. Solcia E, et al. **Experientia Suppl** 1989;56:220–46 (180 ref.)
Neuroendocrinology of the thymus. Geenen V, et al. **Horm Res** 1989;31(1–2):81–4 (39 ref.)
Synthesis of alpha- and beta-calcitonin gene-related peptide by a human pheochromocytoma. Conlon JM, et al. **Peptides** 1989 Mar–Apr;10(2):327–31
Biosynthesis of peptide neurotransmitters: studies on the formation of peptide amides. Bradbury AF, et al. **Physiol Bohemoslov** 1988;37(3):267–74

BLOOD

The calcitonin gene-related peptide (CGRP) response to intravenous calcium is related to blood pressure. Hvarfner A, et al. **Acta Physiol Scand** 1988 Mar;132(3):439–40
Adrenal vein catecholamines and neuropeptides during splanchnic nerve stimulation in cats. Gaumann DM, et al. **Peptides** 1989 May–Jun;10(3):587–92
[Diabetes mellitus and the intestinal nervous system] Schusdziarra V. **Z Gastroenterol** 1988 Apr;26(4):237–8 (Eng. Abstr.) **(Ger)**
[Radioimmunoassay of plasma calcitonin gene-related peptide (CGRP) levels in patients with endocrine tumor] Takami H, et al. **Gan To Kagaku Ryoho** 1989 Jun; 16(6):2219–25 (Eng. Abstr.) **(Jpn)**
[Calcitonin and related peptides] Drzhevetskiĭ IuM. **Sov Med** 1988;(8):28–32 (62 ref.) **(Rus)**

CEREBROSPINAL FLUID

Cerebrospinal fluid content of diazepam binding inhibitor in chronic hepatic encephalopathy. Rothstein JD, et al. **Ann Neurol** 1989 Jul;26(1):57–62
Pituitary protein 7B2-like immunoreactivity in cerebrospinal fluid: comparison with other neuropeptides. Suzuki H, et al. **J Lab Clin Med** 1989 Jun;113(6):743–8
Diazepam binding inhibitor-like immunoreactivity (DBI-LI) in human CSF. Correlations with neurological disorders. Ferrero P, et al. **J Neurol Sci** 1988 Nov;87(2–3):327–49
Hydrocephalus-induced changes in the composition of cerebrospinal fluid. Del Bigio MR. **Neurosurgery** 1989 Sep; 25(3):416–23 (152 ref.)
Significance of opioid peptides and other potential markers of neuropeptide systems in cerebrospinal fluid. Terenius L. **Prog Brain Res** 1988;77:419–29 (46 ref.)
Characteristics of cerebrospinal fluid neuropeptides relevant to clinical research. Berrettini WH, et al. **Psychiatry Res** 1988 Sep;25(3):349–59
[Biochemistry of manic-depressive disorder (II)—neuropeptides and neuroendocrinological research] Takahashi R, et al. **Tanpakushitsu Kakusan Koso** 1988 Jul; 33(8):1300–6 (36 ref.) **(Jpn)**

CHEMICAL SYNTHESIS

Studies on peptides. CLXII. Synthesis of chicken calcitonin-gene-related peptide (cCGRP) by application of sulfoxide-directed disulfide-bond-forming reaction. Fujii N, et al. **Chem Pharm Bull (Tokyo)** 1988 Sep; 36(9):3304–11
Glycine-extended anglerfish peptide YG (aPY) a neuropeptide Y (NPY) homologue may be a precursor of a biologically active peptide. Balasubramaniam A, et al. **Peptides** 1989 May–Jun;10(3):581–5
[Solid-phase peptide synthesis of a cardioexcitatory peptide and its analog] Liu W, et al. **Yao Hsueh Hsueh Pao** 1988 Apr;23(4):262–6 (Eng. Abstr.) **(Chi)**

CLASSIFICATION

[Atrial natriuretic factor—a new neuropeptide?] Januszewicz P, et al. **Przegl Lek** 1988;45(9):684–6 (26 ref.) **(Pol)**

GENETICS

Detection of calcitonin and CGRP mRNAs in thyroid parafollicular cells using biotinylated probes. Zabel M, et al. **Acta Histochem Suppl (Jena)** 1989;37:117–21
Molecular analysis of two general markers of neurons and the diffuse neuroendocrine system: neuron-specific enolase and PGP9.5. Day IN. **Biochem Soc Trans** 1988 Aug; 16(4):454–7
In vitro splicing analysis of mini-gene constructs of the alternatively processed human calcitonin/CGRP-I pre-mRNA. Bovenberg RA, et al. **Biochim Biophys Acta** 1989 Jul 7;1008(2):223–33
Distribution of striatonigral and striatopallidal peptidergic neurons in both patch and matrix compartments: an in situ hybridization histochemistry and fluorescent retrograde tracing study. Gerfen CR, et al. **Brain Res** 1988 Sep 13; 460(1):161–7
Nucleotide sequences of two embryonic drebrins, developmentally regulated brain proteins, and developmental change in their mRNAs. Kojima N, et al. **Brain Res** 1988 Nov;464(3):207–15
Molecular cloning of a cDNA for the developmentally regulated brain protein, drebrin. Shirao T, et al. **Brain Res** 1988 Aug;464(1):71–4
Mitotic deletions of 11p15.5 in two different tumors indicate that the CALCA locus is distal to the PTH locus. Henry I, et al. **Cytogenet Cell Genet** 1989;50(2–3):155–7
Post-translational proteolytic processing of precursors to regulatory peptides. Andrews PC, et al. **Experientia Suppl** 1989;56:192–209 (108 ref.)
Transgenic mouse models and peptide producing endocrine tumours: morpho-functional aspects. Rindi G, et al. **Experientia Suppl** 1989;56:210–9 (42 ref.)
cDNA structure and expression of bombyxin, an insulin-like brain secretory peptide of the silkmoth Bombyx mori. Adachi T, et al. **J Biol Chem** 1989 May 5;264(13):7681–5
Independent regulation of neuropeptide mRNA level and poly(A) tail length. Carter DA, et al. **J Biol Chem** 1989 Apr 25;264(12):6601–3
Differential steroid hormone and neural influences on peptide mRNA levels in CRH cells of the paraventricular nucleus: a hybridization histochemical study in the rat. Swanson LW, et al. **J Comp Neurol** 1989 Jul 22;285(4):413–35
Detection of mRNA molecules coding for neuropeptide hormones of the pond snail Lymnaea stagnalis by radioactive and non-radioactive in situ hybridization: a model study for mRNA detection. Dirks RW, et al. **J Histochem Cytochem** 1989 Jan;37(1):7–14
Isolation and characterization of a rat brain triakontatetraneuropeptide, a posttranslational product of diazepam binding inhibitor: specific action at the Ro 5–4864 recognition site. Slobodyansky E, et al. **J Neurochem** 1989 Oct;53(4):1276–84
Sequence of pedal peptide: a novel neuropeptide from the central nervous system of Aplysia. Lloyd PE, et al. **J Neurosci** 1989 Jan;9(1):312–7
Regulation of hypothalamic magnocellular neuropeptides and their mRNAs in the Brattleboro rat: coordinate responses to further osmotic challenge. Sherman TG, et al. **J Neurosci** 1988 Oct;8(10):3785–96
Isolation, characterization, and evolutionary aspects of a cDNA clone encoding multiple neuropeptides involved in the stereotyped egg-laying behavior of the freshwater snail Lymnaea stagnalis. Vreugdenhil E, et al. **J Neurosci** 1988 Nov;8(11):4184–91
The senile dementias: a new model. Edlin GJ. **Med Hypotheses** 1988 Sep;27(1):29–31
Application of fast atom bombardment mass spectrometry to posttranslational modifications of neuropeptides. Andrews PC, et al. **Methods Enzymol** 1989;168:72–103
Regulation of neuroendocrine peptide gene expression. Blum M. **Methods Enzymol** 1989;168:618–33
Nonradioactive methods of in situ hybridization: visualization of neuroendocrine mRNA. Emson PC, et al. **Methods Enzymol** 1989;168:753–61
Neuropeptide gene transcription in central and peripheral nervous system tissue by nuclear run-on assay. White JD, et al. **Methods Enzymol** 1989;168:681–90
In situ hybridization histochemical detection of neuropeptide mRNA using DNA and RNA probes. Young WS 3d. **Methods Enzymol** 1989;168:702–10
Alternative production of calcitonin and CGRP mRNA is regulated at the calcitonin-specific splice acceptor. Emeson RB, et al. **Nature** 1989 Sep 7;341(6237):76–80
Nerve growth factor regulates expression of neuropeptide genes in adult sensory neurons. Lindsay RM, et al. **Nature** 1989 Jan 26;337(6205):362–4
Unusual branch point selection involved in splicing of the alternatively processed Calcitonin/CGRP-I pre-mRNA. Adema GJ, et al. **Nucleic Acids Res** 1988 Oct 25; 16(20):9513–26
Structure and methylation of the human calcitonin/alpha-CGRP gene. Broad PM, et al. **Nucleic Acids Res** 1989 Sep 12;17(17):6999–7011
Distribution of neurotensin/neuromedin N mRNA in rat forebrain: unexpected abundance in hippocampus and subiculum. Alexander MJ, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5202–6
Estrogen differentially regulates neuropeptide gene expression in a sexually dimorphic olfactory pathway. Simerly RB, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(12):4766–70
Age-related development of a heterozygous phenotype in solitary neurons of the homozygous Brattleboro rat. van Leeuwen F, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(16):6417–20
Brain region and gene specificity of neuropeptide gene expression in cultured astrocytes. Shinoda H, et al. **Science** 1989 Jul 28;245(4916):415–7
Synapsins: mosaics of shared and individual domains in a family of synaptic vesicle phosphoproteins. Südhof TC, et al. **Science** 1989 Sep 29;245(4925):1474–80 (39 ref.)

HISTORY

Neuropeptides, a personalized history. Udenfriend S. **NIDA Res Monogr** 1988;87:1-9

IMMUNOLOGY

Calcitonin gene-related peptide immunoreactivity in prurigo nodularis: a comparative study with neurodermatitis circumscripta. Vaalasti A, et al. **Br J Dermatol** 1989 May; 120(5):619-23

Reduced numbers of calcitonin gene-related peptide-(CGRP-) and tachykinin-immunoreactive sensory neurones associated with greater enkephalin immunoreactivity in the dorsal horn of a mutant rat with hereditary sensory neuropathy. Kar S, et al. **Cell Tissue Res** 1989 Feb;255(2):451-66

Alteration in the histochemical presence of tyrosine hydroxylase and CGRP-immunoreactivities in the eye following chronic sympathetic or sensory denervation. Unger WG, et al. **Curr Eye Res** 1988 Aug;7(8):761-9

Production and characterization of monoclonal antibodies recognizing head activator in precursor form and immunocytochemical localization of head activator precursor and head activator peptide in the neural cell line NH15-CA2 and in hydra. Schawaller M, et al. **Differentiation** 1988 Sep;38(3):149-60

Identification of immunoreactive neuropeptide-gamma in human placenta: localization, secretion, and binding sites. Petraglia F, et al. **Endocrinology** 1989 Apr;124(4):2016-22

Neuropeptides with immunoregulatory functions: current status of investigations. Covelli V, et al. **Funct Neurol** 1988 Jul-Sep;3(3):253-61 (24 ref.)

Retrograde neuronal labelling and double-staining immunohistochemistry of tachykinin- and calcitonin gene-related peptide-immunoreactive pathways in the carotid sinus nerve of the guinea pig. Kummer W. **J Auton Nerv Syst** 1988 Aug;23(2):131-41

Cranial motor neurons contain either galanin- or calcitonin gene-related peptidelike immunoreactivity. Moore RY. **J Comp Neurol** 1989 Apr 22;282(4):512-22

Generation of monoclonal antibodies against a nematode peptide extract: another approach for identifying unknown neuropeptides. Sithigorngul P, et al. **J Comp Neurol** 1989 Jun 15;284(3):389-97

Occurrence of FMRF amide-like immunoreactive nerve fibers in guinea pig small intestine. Fehér E, et al. **J Histochem Cytochem** 1989 Sep;37(9):1427-33

Cross-reaction of two different somatostatin antisera with calcitonin gene-related peptide. Ishizuka J, et al. **Proc Soc Exp Biol Med** 1988 Oct;189(1):1-4

Production of neuroendocrine peptide hormones by the immune system. Blalock JE. **Prog Allergy** 1988;43:1-13 (37 ref.)

Hormone and neuropeptide receptors on mononuclear leukocytes. Bost KL. **Prog Allergy** 1988;43:68-83 (90 ref.)

Immunoregulatory properties of neuroendocrine peptide hormones. Johnson HM, et al. **Prog Allergy** 1988;43:37-67 (117 ref.)

Evidence of protection against diarrhoea in suckling piglets by a hormone-like protein in the sow's milk. Lönnroth I, et al. **Zentralbl Veterinarmed [B]** 1988 Oct;35(8):628-35

ISOLATION & PURIFICATION

Isolation and structural determination of rat neuromedin U. Minamino N, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):355-60

Isolation, primary structure and bioactivity of schistoflrf-amide, a FMRF-amide-like neuropeptide from the locust, Schistocerca gregaria. Robb S, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):850-6

Isolation of pyroGlu-Leu-Leu-Gly-Gly-Arg-Phe-NH2 (Pol-RFamide), a novel neuropeptide from hydromedusae. Grimmelikhuijzen CJ, et al. **Brain Res** 1988 Dec 13; 475(1):198-203

Aldosterone secretion inhibitory factor: a novel neuropeptide in bovine chromaffin cells. Nguyen TT, et al. **Endocrinology** 1989 Mar;124(3):1591-3

Isolation of less than Glu-Gly-Leu-Arg-Trp-NH2 (Antho-RWamide II), a novel neuropeptide from sea anemones. Graff D, et al. **FEBS Lett** 1988 Oct 24; 239(1):137-40

Isolation and structure of corazonin, a cardioactive peptide from the American cockroach. Veenstra JA. **FEBS Lett** 1989 Jul 3;250(2):231-4

Isolation and characterization of a rat brain triakontatetraneuropeptide, a posttranslational product of diazepam binding inhibitor: specific action at the Ro 5-4864 recognition site. Slobodyansky E, et al. **J Neurochem** 1989 Oct;53(4):1276-84

Purification of neuropeptides: cholecystokinin and vasoactive intestinal peptide. Eng J, et al. **Methods Enzymol** 1989; 168:302-8

Isolation and identification of neuroendocrine peptides from milk. Hazum E. **Methods Enzymol** 1989;168:494-7

Primary structure of four allatostatins: neuropeptide inhibitors of juvenile hormone synthesis. Woodhead AP, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5997-601

[Developmental change in brain proteins--a study on drebrin] Obata K, et al. **Tanpakushitsu Kakusan Koso** 1988 Aug;33(10):1688-95 (23 ref.) **(Jpn)**

[Limited proteolysis of brain-specific protein S100. Isolation, physico-chemical and immunochemical characteristics of the neuropeptide AT-1-1] Poletaev AB, et al. **Biokhimiia** 1988 Jun;53(6):985-90 (Eng. Abstr.) **(Rus)**

METABOLISM

Electron-immunocytochemical localization of calcitonin and calcitonin-gene-related peptide in human c cells of the thyroid. Kakudo K, et al. **Acta Anat (Basel)** 1989; 135(1):17-21

Immunohistochemical study of the developing endocrine pancreas of the opossum (Didelphis virginiana). Krause WJ, et al. **Acta Anat (Basel)** 1989;135(1):84-96

The synthesis of peptides in enteroendocrine cells developing in explanted presumptive endoderm. Drukker J, et al. **Acta Histochem Suppl (Jena)** 1988;36:319-22

Immunohistochemical demonstration of neuroactive substances in the inner ear of rat and guinea pig. Ylikoski J, et al. **Acta Otolaryngol (Stockh)** 1989 May-Jun; 107(5-6):417-23

Substance P-, VIP- and CGRP-like immunoreactivities coexist in a population of cholinergic postganglionic sympathetic nerves innervating sweat glands in the cat. Lindh B, et al. **Acta Physiol Scand** 1988 Dec;134(4):569-70

Calcitonin gene-related peptide in nerves of the hamster cheek pouch. Ohlén A, et al. **Acta Physiol Scand** 1988 Dec; 134(4):579-80

Effect of acute morphine treatment on peptide levels in the peri-aqueductal grey. Rosén A, et al. **Acta Physiol Scand** 1989 Jul;136(3):493-4

Neuropeptides in the human internal mammary artery. Sisto T, et al. **Acta Physiol Scand** 1989 Aug;136(4):615-6

Inflammation of rat molar pulp and periodontium causes increased calcitonin gene-related peptide and axonal sprouting. Kimberly CL, et al. **Anat Rec** 1988 Nov; 222(3):289-300

Neuropeptides, dopamine, and schizophrenia. Nemeroff CB, et al. **Ann N Y Acad Sci** 1988;537:273-91 (120 ref.)

Effects of capsaicin on the contractility and peptide-containing nerves of large cerebral arteries of the cat. Saito A, et al. **Arch Int Pharmacodyn Ther** 1988 Sep-Oct;295:194-203

Phosphorylation of peripherin, an intermediate filament protein, in mouse neuroblastoma NIE 115 cell line and in sympathetic neurons. Huc C, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):772-9

Neuropeptide-degrading endopeptidase activity of locust (Schistocerca gregaria) synaptic membranes. Isaac RE. **Biochem J** 1988 Nov 1;255(3):843-7

The metabolism of neuropeptides. Hydrolysis of peptides by the phosphoramidon-insensitive rat kidney enzyme 'endopeptidase-2' and by rat microvillar membranes. Stephenson SL, et al. **Biochem J** 1988 Oct 1;255(1):45-51

A comparison of bradykinin- and capsaicin-induced myocardial and coronary effects in isolated perfused heart of guinea-pig: involvement of substance P and calcitonin gene-related peptide release. Manzini S, et al. **Br J Pharmacol** 1989 Jun;97(2):303-12

"Classical" neuroendocrine peptide hormones produced by cells of the immune system. Carr DJ, et al. **Brain Behav Immun** 1988 Dec;2(4):328-34 (25 ref.)

Altered levels of calcitonin gene-related peptide (CGRP)-like immunoreactivity of cat lumbar motoneurons after chronic spinal cord transection. Arvidsson U, et al. **Brain Res** 1989 Jun 12;489(2):387-91

Diazepam binding inhibitor-like immunoreactivity(51-70): distribution in human brain, spinal cord and peripheral tissues. Ball JA, et al. **Brain Res** 1989 Feb 13;479(2):300-5

Calcitonin gene-related peptide (CGRP) in the rat substantia innominata and globus pallidus: a light and electron microscopic immunocytochemical study. Chang HT, et al. **Brain Res** 1989 Aug 21;495(1):167-72

Effect of intrathecal proctolin administration on the behaviour evoked by the thyrotrophin-releasing hormone (TRH) analogue (RX 77368) and the indoleamine, TRH, substance P and calcitonin gene-related peptide levels and choline acetyltransferase activity in the rat spinal cord. Fone KC, et al. **Brain Res** 1988 Sep 13;460(1):22-8

A comparison of the distributions of eight peptides in spinal cord from normal controls and cases of motor neurone disease with special reference to Onuf's nucleus. Gibson SJ, et al. **Brain Res** 1988 Dec 6;474(2):255-78

Ontogeny of calcitonin gene-related peptide-immunoreactive structures in the rat forebrain and diencephalon. Inagaki S, et al. **Brain Res** 1988 Oct 1; 471(2):235-48

Distribution and fine structure of calcitonin gene-related peptide-like immunoreactive nerve fibers in the rat skin. Ishida-Yamamoto A, et al. **Brain Res** 1989 Jul 3; 491(1):93-101

An immunohistochemical observation of polypeptides and monoamines in the nucleus preopticus medianus of the rat. Kawano H, et al. **Brain Res** 1989 Jul 17;492(1-2):139-48

Calcitonin gene-related peptide (CGRP) in the rat central nervous system: patterns of immunoreactivity and receptor binding sites. Kruger L, et al. **Brain Res** 1988 Nov 1; 463(2):223-44

Evidence for peptidergic innervation of the endocrine optic gland in Sepia by neurons showing FMRFamide-like immunoreactivity. Le Gall S, et al. **Brain Res** 1988 Oct 11;462(1):83-8

Neuropeptides in propriospinal neurones in the rat. Leah J, et al. **Brain Res** 1989 Aug 21;495(1):173-7

Dystrophic peptidergic neurites in senile plaques of Alzheimer's disease hippocampus precede formation of paired helical filaments. Lenders MB, et al. **Brain Res** 1989 Mar 6;481(2):344-9

Differential regulation of calcitonin gene-related peptide and substance P in cultured neonatal rat vagal sensory neurons. MacLean DB, et al. **Brain Res** 1989 Jan 30;478(2):349-55

Calcitonin gene-related peptide immunoreactivity at the human neuromuscular junction. Mora M, et al. **Brain Res** 1989 Jul 17;492(1-2):404-7

Peptide immunoreactivity of the ciliary ganglion and its accessory cells in the rat. Stone RA, et al. **Brain Res** 1988 Dec 20;475(2):389-92

CNS cell groups regulating the sympathetic outflow to adrenal gland as revealed by transneuronal cell body labeling with pseudorabies virus. Strack AM, et al. **Brain Res** 1989 Jul 10;491(2):274-96

Demonstration of calcitonin gene-related peptide immunoreactive axons contacting dynorphin A(1-8) immunoreactive spinal neurons in a rat model of peripheral inflammation and hyperalgesia. Takahashi O, et al. **Brain Res** 1988 Dec 13;475(1):168-72

The organization of the rat lateral geniculate body by immunohistochemical analysis of neuroactive substances. Takatsuji K, et al. **Brain Res** 1989 Feb 20;480(1-2):198-209

Calcitonin gene-related peptide- and substance P-containing primary afferent fibers in the dorsal column of the rat. Tamatani M, et al. **Brain Res** 1989 Aug 21;495(1):122-30

Sprouting of CGRP nerve fibers in response to dentin injury in rat molars. Taylor PE, et al. **Brain Res** 1988 Oct 4; 461(2):371-6

Basal forebrain lesions differentially alter galanin levels and acetylcholinergic receptors in the hippocampus and neocortex. Wenk GL, et al. **Brain Res** 1988 Sep 13; 460(1):17-21

Calcitonin gene-related peptide containing sympathetic preganglionic and sensory neurons projecting to the superior cervical ganglion of the rat. Yamamoto K, et al. **Brain Res** 1989 May 15;487(1):158-64

Ultrastructural evidence for peptidergic innervation of the apical region of frog olfactory epithelium. Zielinski BS, et al. **Brain Res** 1989 Jul 17;492(1-2):361-5

Molecular and cellular regulation of neuropeptide expression: the bag cell model system. Arch S, et al. **Brain Res Brain Res Rev** 1989 Apr-Jun;14(2):181-201 (115 ref.)

A light and electron microscopic study of calcitonin gene-related peptide in the rat caudate putamen. Okayama T, et al. **Brain Res Bull** 1989 Apr;22(4):657-63

Coexistence of multiple peptides in small intensely fluorescent (SIF) cells of inferior mesenteric ganglion of the guinea pig. Chiba T, et al. **Cell Tissue Res** 1989 Mar;255(3):523-7

Small cardioactive peptide-like immunoreactivity and its colocalization with FMRFamide-like immunoreactivity in the central nervous system of the leech Hirudo medicinalis. Evans BD, et al. **Cell Tissue Res** 1989 Jul;257(1):187-99

Regulation of discrete sub-populations of transmitter-identified neurones after inhibition of electrical activity in cultures of mouse spinal cord. Foster GA, et al. **Cell Tissue Res** 1989 Jun;256(3):543-52

Effects of capsaicin in rat and pigeon on peripheral nerves containing substance P and calcitonin gene-related peptide. Harti G, et al. **Cell Tissue Res** 1989 Jun;256(3):465-74

NPY-, galanin-, VIP/PHI-, CGRP- and substance P-immunoreactive neuronal subpopulations in cat autonomic and sensory ganglia and their projections. Lindh B, et al. **Cell Tissue Res** 1989;256(2):259-73

Neuronal galanin is widely distributed in the chicken respiratory tract and coexists with multiple neuropeptides. Luts A, et al. **Cell Tissue Res** 1989 Apr;256(1):95-103

Distribution of FMRFamide-like immunoreactivity in the brain and neurohypophysis of the lamprey, Lampetra japonica. Ohtomi M, et al. **Cell Tissue Res** 1989 Jun; 256(3):581-4

Tachykinins and calcitonin gene-related peptide: co-existence in sensory nerves of the nasal mucosa and effects on blood flow. Stjärne P, et al. **Cell Tissue Res** 1989 Jun;256(3):439-46

Axonal tracing of autonomic nerve fibers to the superficial temporal artery in the rat. Uddman R, et al. **Cell Tissue Res** 1989 Jun;256(3):559-65

Dynamics of FMRFamide immunoreactivity in response to physiologically active substances in the central nervous system of the snail, Achatina fulica. Takayanagi H, et al. **Comp Biochem Physiol [A]** 1988;91(3):609-12

Amino acid uptake and incorporation not cell-specific peptides and evidence for intracellular peptide pools in Aplysia neurons R3-R14. Lin CY, et al. **Comp Biochem Physiol [B]** 1989;92(1):143-50

Development of the enteric nervous system in the moth. I. Diversity of cell types and the embryonic expression of FMRFamide-related neuropeptides. Copenhaver PF, et al. **Dev Biol** 1989 Jan;131(1):70-84

Mechanism based design of inhibitors of neuropeptide degrading enzymes. Bateman RC Jr, et al. **Drug Des Deliv** 1987 Sep;2(1):55-68 (85 ref.)

Evidence for neuropeptide Y synthesis in the rat anterior pituitary and the influence of thyroid hormone status: comparison with vasoactive intestinal peptide, substance P, and neurotensin. Jones PM, et al. **Endocrinology** 1989 Jul;125(1):334-41

Galanin receptor and its ligands in the rat hippocampus. Fisone G, et al. **Eur J Biochem** 1989 Apr 15;181(1):269-76

Neuropeptide K, scyliorhinin I and II: new tools in the tachykinin receptor field. Beaujouan JC, et al. **Eur J Pharmacol** 1988 Jul 7;151(2):353–4

Duodenal ulcers are associated with a depletion of duodenal calcitonin gene-related peptide-like immunoreactivity in rats. Evangelista S, et al. **Eur J Pharmacol** 1989 May 19; 164(2):389–91

Neurotransmitters, neuropeptides and binding sites in the rat mediobasal hypothalamus: effects of monosodium glutamate (MSG) lesions. Meister B, et al. **Exp Brain Res** 1989;76(2):343–68

Regulatory peptide receptors: visualization by autoradiography. Palacios JM, et al. **Experientia Suppl** 1989;56:70–97 (137 ref.)

Release of substance P- and calcitonin gene-related peptide-like immunoreactivity and motor response of the isolated guinea pig gallbladder to capsaicin. Maggi CA, et al. **Gastroenterology** 1989 Apr;96(4):1093–101

Peptide-containing nerve in the rat stomach: an immunohistochemical study. Ito H, et al. **Hiroshima J Med Sci** 1988 Sep;37(3):97–102

Light- and electron-microscopical localization of calcitonin, calcitonin gene-related peptide, somatostatin and C-terminal gastrin/cholecystokinin immunoreactivities in rat thyroid. Arias J, et al. **Histochemistry** 1989;91(4):265–72

Calcitonin gene-related peptide-like immunoreactivity in nerve fibers in the human skin. Relation to fibers containing substance P-, somatostatin- and vasoactive intestinalpolypeptide-like immunoreactivity. Dalsgaard CJ, et al. **Histochemistry** 1989;91(1):35–8

Development and differentiation of neuronal subsets in asexually reproducing Microstomum lineare. Immunocytochemistry of 5-HT, RF-amide and SCPB. Reuter M, et al. **Histochemistry** 1989;91(2):123–31

CGRP-immunoreactive sensory nerve fibers in the submandibular gland of the rat. Soinila J, et al. **Histochemistry** 1989;91(6):455–60

Altered lymphocyte proliferation of immunized rats after neurological manipulation with capsaicin. Nilsson G, et al. **Int J Immunopharmacol** 1988;10(6):747–51

Neuropeptide-processing, -converting, and -inactivating enzymes in human cerebrospinal fluid. Terenius L, et al. **Int Rev Neurobiol** 1988;30:101–21 (82 ref.)

Some mammalian retinae lack FMRF-amide-like immunoreactive efferents. Rusoff AC, et al. **Invest Ophthalmol Vis Sci** 1989 May;30(5):791–4

Neuropeptides and the innervation of the avian lacrimal gland. Walcott B, et al. **Invest Ophthalmol Vis Sci** 1989 Jul;30(7):1666–74

Neuropeptide and noradrenaline distributions in rat interscapular brown fat and in its intact and obstructed nerves of supply. Lever JD, et al. **J Auton Nerv Syst** 1988 Nov;25(1):15–25

Specificity of action on neuropeptides of an endopeptidase from the synaptosomal membranes of guinea pig brain. Yoshikawa S, et al. **J Biochem (Tokyo)** 1988 Dec; 104(6):1007–10

Binding of calcitonin and calcitonin gene-related peptide to calvarial cells and renal cortical membranes. Seitz PK, et al. **J Bone Miner Res** 1986 Feb;1(1):51–6

Organization of lateral geniculate-hypothalamic connections in the rat. Card JP, et al. **J Comp Neurol** 1989 Jun 1; 284(1):135–47

Immunohistochemical localization of seven different peptides in the human spinal cord. Chung K, et al. **J Comp Neurol** 1989 Feb 1;280(1):158–70

Monoaminergic, peptidergic, and cholinergic afferents to the cat facial nucleus as evidenced by a double immunostaining method with unconjugated cholera toxin as a retrograde tracer. Fort P, et al. **J Comp Neurol** 1989 May 8; 283(2):285–302

Lumbar dorsal root ganglia of the cat: a quantitative study of peptide immunoreactivity and cell size. Garry MG, et al. **J Comp Neurol** 1989 Jun 1;284(1):36–47

Studies on the cellular architecture of the bed nuclei of the stria terminalis in the rat: II. Chemoarchitecture. Ju G, et al. **J Comp Neurol** 1989 Feb 22;280(4):603–21

Markers shared between dorsal root and enteric ganglia. Kirchgessner AL, et al. **J Comp Neurol** 1988 Oct 22; 276(4):607–21

Peripheral patterns of calcitonin-gene-related peptide general somatic sensory innervation: cutaneous and deep terminations. Kruger L, et al. **J Comp Neurol** 1989 Feb 8;280(2):291–302

Distribution of calcitonin gene-related peptide-like immunoreactivity in the nucleus ambiguus of the cat. McWilliam PN, et al. **J Comp Neurol** 1989 Apr 8; 282(2):206–14

Distribution of neuropeptidelike immunoreactivities in the guinea pig olfactory bulb. Matsutani S, et al. **J Comp Neurol** 1989 Feb 22;280(4):577–86

Laminar and segregated distribution of immunoreactivities for some neuropeptides and adenosine deaminase in the superior colliculus of the rat. Miguel-Hidalgo JJ, et al. **J Comp Neurol** 1989 Feb 15;280(3):410–23

Calcitonin-gene-related-peptide-immunoreactive innervation of the rat head with emphasis on specialized sensory structures. Silverman JD, et al. **J Comp Neurol** 1989 Feb 8;280(2):303–30

Cerebral arterial innervation: II. Development of calcitonin-gene-related peptide and norepinephrine in the rat. Tsai SH, et al. **J Comp Neurol** 1989 Jan 1;279(1):1–12

Peptidergic neurons in the basal forebrain magnocellular complex of the rhesus monkey. Walker LC, et al. **J Comp Neurol** 1989 Feb 8;280(2):272–82

Calcitonin gene-related peptide and calcitonin secretion from a human medullary thyroid carcinoma cell line: effects of ionomycin, phorbol ester and forskolin. Haller-Brem S, et al. **J Endocrinol** 1988 Oct;119(1):147–52

FMRFamide immunoreactivity in the brain and pituitary of Carassius auratus (Cyprinidae, Teleostei). Bonn U, et al. **J Hirnforsch** 1989;30(3):361–70

Ultrastructural localization of neuropeptides and GABA in rat dorsal horn: a comparison of different immunogold labeling techniques. Merighi A, et al. **J Histochem Cytochem** 1989 Apr;37(4):529–40

Neuropeptide-metabolizing peptidases of nervous tissue [letter] Camargo AC. **J Neurochem** 1989 Jul;53(1):315–6

Purification of two dipeptidyl aminopeptidases II from rat brain and their action on proline-containing neuropeptides. Mentlein R, et al. **J Neurochem** 1989 Apr;52(4):1284–93

Clathrin-coated vesicle subtypes in mammalian brain tissue: detection of polypeptide heterogeneity by immunoprecipitation with monoclonal antibodies. Puszkin S, et al. **J Neurochem** 1989 Jul;53(1):51–63

Calcitonin gene-related peptide-binding sites of porcine cardiac muscles and coronary arteries: solubilization and characterization. Sano Y, et al. **J Neurochem** 1989 Jun; 52(6):1919–24

Increase in diazepam binding inhibitor-like immunoreactivity (51–70) in Huntington's disease. Ball JA, et al. **J Neurol Sci** 1988 Dec;88(1–3):177–84

Elevated levels of head activator in human brain tumors and in serum of patients with brain and other neurally derived tumors. Schaller HC, et al. **J Neurooncol** 1988 Nov; 6(3):251–8

FMRFamide peptides in Helisoma: identification and physiological actions at a peripheral synapse. Bulloch AG, et al. **J Neurosci** 1988 Sep;8(9):3459–69

Cholinergic regulation of protein III phosphorylation in bovine adrenal chromaffin cells. Haycock JW, et al. **J Neurosci** 1988 Sep;8(9):3233–9

Preganglionic and sensory origins of calcitonin gene-related peptide-like and substance P-like immunoreactivities in bullfrog sympathetic ganglia. Horn JP, et al. **J Neurosci** 1989 Jul;9(7):2543–61

Sexually dimorphic polypeptides in developing antennal sensory neurons of an insect. Kingan TG, et al. **J Neurosci** 1989 Jun;9(6):1951–60

Fast axonal transport of modulatory neuropeptides from central ganglia to components of the feeding system in Aplysia. Lloyd PE. **J Neurosci** 1988 Sep;8(9):3507–14

Enrichment of a vasoactive neuropeptide (calcitonin gene related peptide) in the trigeminal sensory projection to the intracranial arteries. O'Connor TP, et al. **J Neurosci** 1988 Jul;8(7):2468–76

Immunocytological localization of pedal peptide in the central nervous system and periphery of Aplysia. Pearson WL, et al. **J Neurosci** 1989 Jan;9(1):318–25

A quantitative study of the coexistence of peptides in varicosities within the superficial laminae of the dorsal horn of the rat spinal cord. Tuchscherer MM, et al. **J Neurosci** 1989 Jan;9(1):195–205

Morphometry of peptide-containing nerves in gut muscle layers: a quantitative approach to the study of autonomic neuro-muscular junctions. Ferri GL, et al. **J Neurosci Methods** 1989 Apr;27(3):211–8

Reversibility and prevention of intraspinal peptidergic loss caused by sciatic nerve lesions. Di Giulio AM, et al. **J Neurosci Res** 1989 Jan;22(1):92–6

Post-translational processing in model neuroendocrine systems: precursors and products that coordinate reproductive activity in Aplysia and Lymnaea. Nagle GT, et al. **J Neurosci Res** 1989 Aug;23(4):359–70 (55 ref.)

Changes in nerves and neuropeptides in skin from 100 leprosy patients investigated by immunocytochemistry. Karanth SS, et al. **J Pathol** 1989 Jan;157(1):15–26

The first demonstration of CGRP-immunoreactive fibers in canine hearts: coronary vasodilator, inotropic and chronotropic effects of CGRP in canine isolated, blood-perfused heart preparations. Sugiyama A, et al. **Jpn J Pharmacol** 1989 Aug;50(4):421–7

Quantifying carrier-mediated transport of peptides from the brain to the blood. Banks WA, et al. **Methods Enzymol** 1989;168:652–60

Distribution of a putative endogenous modulator of the GABAergic system in human brain. Ferrarese C, et al. **Neurology** 1989 Mar;39(3):443–5

Ruthenium red selectively inhibits capsaicin-induced release of calcitonin gene-related peptide from the isolated perfused guinea pig lung. Amann R, et al. **Neurosci Lett** 1989 Jul 3;101(3):311–5

Calcitonin gene-related peptide-like immunoreactive fibres innervating the hypothalamic inferior lobes of teleost fishes. Batten TF, et al. **Neurosci Lett** 1989 Mar 13;98(1):1–7

Dietary calcium modulates spinal cord content of calcitonin gene-related peptide in the rat. DiPette DJ, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):335–40

Co-existence of neuropeptides and differential inhibition of vasodilator responses by neuropeptide Y in guinea pig uterine arteries. Fallgren B, et al. **Neurosci Lett** 1989 May 22;100(1–3):71–6

Calcitonin gene-related peptide messenger RNA is expressed in sensory neurones of the dorsal root ganglia and also in spinal motoneurones in man and rat. Gibson SJ, et al. **Neurosci Lett** 1988 Sep 12;91(3):283–8

Effects of age on binding sites for calcitonin gene-related peptide in the rat central nervous system. Guidobono F, et al. **Neurosci Lett** 1989 Jul 17;102(1):20–6

Developmental alterations in thermal nociceptive threshold and the distribution of immunoreactive calcitonin gene-related peptide and substance P after neonatal administration of capsaicin in the rat. Hammond DL, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):57–62

Immunoreactive tachykinins, calcitonin gene-related peptide and neuropeptide Y in human synovial fluid from inflamed knee joints. Larsson J, et al. **Neurosci Lett** 1989 May 22; 100(1–3):326–30

Coexistence of GABA and peptide immunoreactivity in non-pyramidal neurons of the basolateral amygdala. McDonald AJ, et al. **Neurosci Lett** 1989 May 22; 100(1–3):53–8

Release of VIP- but not CGRP-like immunoreactivity by capsaicin from the human isolated small intestine. Maggi CA, et al. **Neurosci Lett** 1989 Apr 10;98(3):317–20

Effects of piperine on calcitonin gene-related peptide (CGRP)-containing nerves in the isolated rat atria. Miyauchi T, et al. **Neurosci Lett** 1988 Aug 31;91(2):222–7

Changes of calcitonin gene-related peptide-like immunoreactivity in cerebrovascular nerve fibers in the dog after experimentally produced subarachnoid hemorrhage. Nozaki K, et al. **Neurosci Lett** 1989 Jul 17;102(1):27–32

Localization of calcitonin gene-related peptide (CGRP) at a neuronal nicotinic synapse. Peng HB, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):75–80

Release of calcitonin gene-related peptide-like immunoreactivity (CGRP-LI) from organs of the genitourinary tract in rats. Santicioli P, et al. **Neurosci Lett** 1988 Oct 5;92(2):197–201

Brain natriuretic peptides: differential localization of a new family of neuropeptides. Saper CB, et al. **Neurosci Lett** 1989 Jan 2;96(1):29–34

Intracellular dyes mask immunoreactivity of hippocampal interneurons. Scharfman HE, et al. **Neurosci Lett** 1989 Jan 2;96(1):23–8

Calcitonin gene-related peptide increases in rat facial motoneurons after peripheral nerve transection. Streit WJ, et al. **Neurosci Lett** 1989 Jun 19;101(2):143–8

Tachykinins, calcitonin gene-related peptide and neuropeptide Y in nerves of the mammalian thymus: interactions with mast cells in autonomic and sensory neuroimmunomodulation? Weihe E, et al. **Neurosci Lett** 1989 May 22;100(1–3):77–82

Calcitonin gene-related peptide and chromogranin A: presence and intra-axonal transport in lumbar motor neurons in the rat, a comparison with synaptic vesicle antigens in immunohistochemical studies. Böőj S, et al. **Neuroscience** 1989;30(2):479–501

The coexistence of neuropeptides in feline sensory neurons. Cameron AA, et al. **Neuroscience** 1988 Dec;27(3):969–79

Projections of peptide-containing neurons in rat colon. Ekblad E, et al. **Neuroscience** 1988 Nov;27(2):655–74

Calcitonin gene-related peptide in rat salivary glands: neuronal localization, depletion upon nerve stimulation, and effects on salivation in relation to substance P. Ekström J, et al. **Neuroscience** 1988 Sep;26(3):933–49

Calcitonin gene-related peptide in the rat kidney: occurrence, sensitivity to capsaicin, and stimulation of adenylate cyclase. Geppetti P, et al. **Neuroscience** 1989;30(2):503–13

Differential distribution of neuropeptides and serotonin in pig adrenal glands. Kong JY, et al. **Neuroscience** 1989; 28(3):765–75

Ontogeny of the calcitonin gene-related peptide in the nervous system of rat brain stem: an immunohistochemical analysis. Kubota Y, et al. **Neuroscience** 1988 Sep; 26(3):905–26

Regional differences in the motor response to capsaicin in the guinea-pig urinary bladder: relative role of pre- and postjunctional factors related to neuropeptide-containing sensory nerves. Maggi CA, et al. **Neuroscience** 1988 Nov; 27(2):675–88

Distribution of neurons expressing calcitonin gene-related peptide mRNAs in the brain stem, spinal cord and dorsal root ganglia of rat and guinea-pig. Réthelyi M, et al. **Neuroscience** 1989;29(1):225–39

Cholinergic and peptidergic projections from the medial septum and the nucleus of the diagonal band of Broca to dorsal hippocampus, cingulate cortex and olfactory bulb: a combined wheatgerm agglutinin-apohorseradish peroxidase-gold immunohistochemical study. Senut MC, et al. **Neuroscience** 1989;30(2):385–403

Acetylcholinesterases: zymogens of neuropeptide processing enzymes? Small DH. **Neuroscience** 1989;29(2):241–9 (69 ref.)

Trigeminal fibre collaterals storing substance P and calcitonin gene-related peptide associate with ganglion cells containing choline acetyltransferase and vasoactive intestinal polypeptide in the sphenopalatine ganglion of the rat. An axon reflex modulating parasympathetic ganglionic activity? Suzuki N, et al. **Neuroscience** 1989;30(3):595–604

Calcitonin gene-related peptide in visceral afferent nerve fibres: quantification by radioimmunoassay and determination of axonal transport rates. Varro A, et al. **Neuroscience** 1988 Sep;26(3):927–32

Dopamine-regulated phosphorylation of synaptic vesicle-associated proteins in rat neostriatum and substantia

nigra. Walaas SI, et al. **Neuroscience** 1989;29(1):9–19

Endooligopeptidase A activity in rabbit heart: generation of enkephalin from enkephalin containing peptides. Cicilini MA, et al. **Peptides** 1988 Sep–Oct;9(5):945–55

Neuropeptide K–(1–24)–peptide: storage and release by carcinoid tumors. Conlon JM, et al. **Peptides** 1988 Jul–Aug; 9(4):859–66

Autoradiographic localization of binding sites for galanin and VIP in small intestine. King SC, et al. **Peptides** 1989 Mar–Apr;10(2):313–7

Calcitonin gene–related peptide increases in the dorsal root ganglia of adjuvant arthritic rat. Kuraishi Y, et al. **Peptides** 1989 Mar–Apr;10(2):447–52

Autoradiographic localization of calcitonin gene–related peptide (CGRP) binding sites in human and guinea pig lung. Mak JC, et al. **Peptides** 1988 Sep–Oct;9(5):957–63

Peptidergic neurons in the nucleus raphe magnus and the nucleus gigantocellularis: their distributions, interrelationships, and projections to the spinal cord. Bowker RM, et al. **Prog Brain Res** 1988;77:95–127 (63 ref.)

Release of calcitonin gene–related peptide from rat enteric nerves is Ca2+–dependent but is not induced by K+ depolarization. Belai A, et al. **Regul Pept** 1988 Nov; 23(2):227–35

Ontogeny of the novel tachykinins neurokinin A, neurokinin B and neuropeptide K in the rat central nervous system. Diez–Guerra FJ, et al. **Regul Pept** 1989 Apr;25(1):87–97

Substance P–, CGRP– and NPY–immunoreactive nerve fibers in rat sciatic nerve–end neuromas. Fried K, et al. **Regul Pept** 1989 Apr;25(1):11–24

Distribution of calcitonin gene–related peptide–like immunoreactivity in various rat tissues: correlation with substance P and other tachykinins and sensitivity to capsaicin. Geppetti P, et al. **Regul Pept** 1988 Dec; 23(3):289–98

Calcitonin gene–related peptide is metabolized by an endopeptidase hydrolyzing substance P. Le Grevès P, et al. **Regul Pept** 1989 Jun–Jul;25(3):277–86

Effects of chronic toluene exposure on central monoamine and peptide receptors and their interactions in the adult male rat. von Euler G, et al. **Toxicology** 1988 Nov 14; 52(1–2):103–26

[Neuropeptides and psychotic disorders] Zhai ST. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Aug; 21(4):246–51 (29 ref.) **(Chi)**

[Amount changes in several neuropeptides in hypothalamus paraventricular nuclei of epileptic rats model] Zhang B, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec; 19(4):371–5 (Eng. Abstr.) **(Chi)**

[Neuropeptides in urology] Scultéty S. **Orv Hetil** 1988 Jun 19;129(25):1317–20 (33 ref.) (Eng. Abstr.) **(Hun)**

[The effects of whole body vibration on dopamine metabolism and dopamine–related peptides in the rat brain] Nakamura H. **Nippon Eiseigaku Zasshi** 1988 Oct; 43(4):872–86 (Eng. Abstr.) **(Jpn)**

[Effects of neonatal administration of monosodium glutamate on four neuropeptide concentrations in the rat brain] Hashigami Y. **Nippon Nnibunpi Gakkai Zasshi** 1989 Feb 20;65(2):79–90 (Er.g. Abstr.) **(Jpn)**

[Abnormalities of neurotransmitters in Alzheimer's disease. Neurotransmitters and receptors] Ogawa N, et al. **Nippon Rinsho** 1988 Jul;46(7):1496–501 **(Jpn)**

[Neuropeptides and sleep] Drucker–Colín R, et al. **Rev Med Univ Navarra** 1988 Apr–Jun;32(2):93–7 (54 ref.) **(Spa)**

PHARMACOLOGY

Biochemical and behavioral effects of alaptide, a spirocyclic dipeptide derived from Pro–Leu–Gly–NH2. Dlohožková N, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):79–80

The effects of calcitonin gene–related peptide on the blood flow of the upper respiratory tract and the middle and inner ear. Hillerdal M, et al. **Acta Otolaryngol (Stockh)** 1989 Jul–Aug;108(1–2):94–100

Effects of calcitonin, katacalcin, and calcitonin gene–related peptide on basal and TSH–stimulated thyroid hormone secretion in the mouse. Ahrén B. **Acta Physiol Scand** 1989 Feb;135(2):133–7

Capsaicin–induced vasodilatation of human coronary arteries in vitro is mediated by calcitonin gene–related peptide rather than substance P or neurokinin A. Franco–Cereceda A, et al. **Acta Physiol Scand** 1989 Aug;136(4):575–80

Calcitonin gene–related peptide (CGRP) and transcutaneous electrical nerve stimulation (TENS) increase cutaneous blood flow in a musculocutaneous flap in the rat. Kjartansson J, et al. **Acta Physiol Scand** 1988 Sep; 134(1):89–94

Calcitonin gene–related peptide and tachykinins in relation to local sensory control of cardiac contractility and coronary vascular tone. Franco–Cereceda A. **Acta Physiol Scand Suppl** 1988;569:1–63

Mast cells, neuropeptides and inflammation. Church MK, et al. **Agents Actions** 1989 Apr;27(1–2):8–16 (76 ref.)

Acute cardiovascular and renal effects of human calcitonin gene–related peptide. Gennari C, et al. **Am J Hypertens** 1989 Feb;2(2 Pt 2):45S–49S

Effects of calcitonin, calcitonin analogues, and calcitonin gene–related peptide on basal in vitro renin secretion. Resnick LM, et al. **Am J Hypertens** 1989 Jun;2(6 Pt 1):453–7

Dose–dependent systemic and regional hemodynamic effects of calcitonin gene–related peptide. DiPette DJ, et al. **Am J Med Sci** 1989 Feb;297(2):65–70

Effects of hCGRP I and II on gastric blood flow and acid secretion in anesthetized rabbits. Bauerfeind P, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):G145–9

Calcitonin gene–related peptide receptor antagonist human CGRP–(8–37). Chiba T, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):E331–5

Regional hemodynamic effects of calcitonin gene–related peptide. Gardiner SM, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R332–8

Inhibition of gastric and pancreatic secretion in dogs by CGRP: role of somatostatin. Helton WS, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):G715–20

Calcitonin gene–related peptide action on intestinal circular muscle. Holzer P, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G546–52

Calcitonin gene–related peptide increases cAMP, tension, and rate in rat atria. Wang X, et al. **Am J Physiol** 1989 Feb; 256(2 Pt 2):R421–8

Neuropeptides elevate cytosolic calcium in small–cell lung cancer cells. Moody TW, et al. **Ann N Y Acad Sci** 1988; 551:280–2

Effect of neuropeptides present in skin on the proliferation of human peripheral blood mononuclear cells and T cells. Reusch MK, et al. **Arch Dermatol Res** 1988;280(5):279–81

Endocrine system—sanguine system relationship: antiaggregant activity of the pineal polypeptidic hormone E5 on blood platelets. Neacşu C. **Arch Roum Pathol Exp Microbiol** 1988 Apr–Jun; 47(2):125–31

Achatin–I, an endogenous neuroexcitatory tetrapeptide from Achatina fulica Férussac containing a D–amino acid residue. Kamatani Y, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1015–20

Calcitonin gene–related peptide(CGRP) stimulates the release of atrial natriuretic peptide(ANP) from isolated rat atria. Yamamoto A, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1452–8

Biological properties of two models of calcitonin gene related peptide with idealized amphiphilic alpha–helices of different lengths. Lynch B, et al. **Biochemistry** 1988 Oct 4;27(20):7600–7

Relationship between neuropeptides and gastrointestinal smooth muscle activity. Nieber K, et al. **Biomed Biochim Acta** 1989;48(5–6):S565–8

Calcitonin, calcitonin gene–related peptide and renal calcitonin receptors in the Zucker rat. Seitz PK, et al. **Bone Miner** 1987 Feb;2(1):53–62

Human alpha–calcitonin gene–related peptide (CGRP) is a potent vasodilator in human mesenteric vasculature. Marshall I, et al. **Br J Clin Pharmacol** 1988 Dec;26(6):691–5

Interactions between the tachykinins and calcitonin gene–related peptide lead to the modulation of oedema formation and blood flow in rat skin. Brain SD, et al. **Br J Pharmacol** 1989 May;97(1):77–82

Regional haemodynamic effects of depressor neuropeptides in conscious, unrestrained, Long Evans and Brattleboro rats. Gardiner SM, et al. **Br J Pharmacol** 1988 Sep; 95(1):197–208

Characterization of neuropeptide–induced histamine release from human dispersed skin mast cells. Lowman MA, et al. **Br J Pharmacol** 1988 Sep;95(1):121–30

Calcitonin gene–related peptide desensitizes skeletal muscle arterioles to substance P in vivo. Ohlén A, et al. **Br J Pharmacol** 1988 Nov;95(3):673–4

Effects and interactions of sensory neuropeptides on airway microvascular leakage in guinea–pigs. Rogers DF, et al. **Br J Pharmacol** 1988 Dec;95(4):1109–16

Effects of neuropeptides and capsaicin on the canine tracheal vasculature in vivo. Salonen RO, et al. **Br J Pharmacol** 1988 Dec;95(4):1262–70

The relaxant properties of human calcitonin gene–related peptide on vascular and extravascular capsular) smooth muscle of the isolated blood–perfused spleen of the anaesthetized dog. Withrington PG. **Br J Pharmacol** 1989 Apr;96(4):823–8

Activation of macrophages by neuropeptides. Hartung HP. **Brain Behav Immun** 1988 Dec;2(4):275–81 (38 ref.)

Effect of neuropeptides and monoamines on lymphocyte activation. Nordlind K, et al. **Brain Behav Immun** 1988 Dec;2(4):282–92 (91 ref.)

Bombesin–like peptides: neuropeptides with mitogenic activity. Wiedermann CJ, et al. **Brain Behav Immun** 1988 Dec;2(4):301–10 (51 ref.)

Calcitonin gene–related peptide evokes distinct types of excitatory response in guinea pig coeliac ganglion cells. Dun NJ, et al. **Brain Res** 1989 Jan 9;476(2):256–64

Renal vasodilatation after central administration of galanin. Gardiner SM, et al. **Brain Res** 1988 Aug 16;458(1):176–9

Calcitonin gene–related peptide modulates calcium mobilization in synaptosomes of rat spinal dorsal horn. Oku R, et al. **Brain Res** 1988 Dec 20;475(2):356–60

Effects of vasopressin and other neuropeptides on rostral medullary sympathoexcitatory neurons 'in vitro'. Sun MK, et al. **Brain Res** 1989 Jul 17;492(1–2):261–70

Possible involvement of calcitonin gene–related peptide (CGRP) in non–cholinergic non–adrenergic relaxation induced by mesenteric nerve stimulation in guinea pig ileum. Takaki M, et al. **Brain Res** 1989 Jan 23; 478(1):199–203

Nerve section alters the interaction between C–fibre activity and intrathecal neuropeptides on the flexor reflex in rat. Wiesenfeld–Hallin Z. **Brain Res** 1989 Jun 5;489(1):129–36

Positive inotropic effect of calcitonin gene–related peptide mediated by cyclic AMP in guinea pig heart. Ishikawa T, et al. **Circ Res** 1988 Oct;63(4):726–34

In vitro inhibition of methionine incorporation in the dorsal bodies of Helix aspersa by synthetic FMRFamide. Griffond B, et al. **Comp Biochem Physiol [C]** 1989;92(1):45–9

Some neuropeptides as modulators of experimental contact allergy. Wallengren J, et al. **Contact Dermatitis** 1988 Nov; 19(5):351–4

High–dose porcine galanin infusion and effect on intravenous glucose tolerance in humans. Gilbey SG, et al. **Diabetes** 1989 Sep;38(9):1114–6

Intravenous calcitonin gene–related peptide stimulates net water secretion in rat colon in vivo. Rolston RK, et al. **Dig Dis Sci** 1989 Apr;34(4):612–6

New drug opportunities based on neuropeptides? A personal view. Morley JS. **Drug Des Deliv** 1986 Aug;1(1):47–50

Interleukin–1 beta increases prostaglandin E2 in rat astrocyte cultures: modulatory effect of neuropeptides. Katsuura G, et al. **Endocrinology** 1989 Jun;124(6):3125–7

Inhibition of pancreatic exocrine secretion in the rat by calcitonin gene–related peptide: involvement of circulating somatostatin. Mulholland MW, et al. **Endocrinology** 1989 Apr;124(4):1849–56

Stimulation by calcitonin gene–related peptide of atrial natriuretic peptide secretion in vitro and its mechanism of action. Schiebinger RJ, et al. **Endocrinology** 1989 May; 124(5):2473–9

Calcitonin gene–related peptide stimulates adenylate cyclase activation via a guanine nucleotide–dependent process in rat liver plasma membranes. Yamaguchi A, et al. **Endocrinology** 1988 Nov;123(5):2591–6

Neuromedin U octapeptide alters ion transport in porcine jejunum. Brown DR, et al. **Eur J Pharmacol** 1988 Oct 11; 155(1–2):159–62

The role of cyclic AMP in the inhibition of leukotriene biosynthesis by neuropeptides. Di Marzo V, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):115–21

Calcitonin gene–related peptides relax guinea pig and rat gastric smooth muscle. Katsoulis S, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):129–34

Effects of endothelin in the systemic and renal vascular beds in vivo. Lippton H, et al. **Eur J Pharmacol** 1988 Oct 11; 155(1–2):197–9

Regional vasodilation is a prominent feature of the haemodynamic response to endothelin in anaesthetized, spontaneously hypertensive rats. Wright CE, et al. **Eur J Pharmacol** 1988 Oct 11;155(1–2):201–3

Increase in outflow facility of aqueous humor in cats induced by calcitonin gene–related peptide [letter] Oksala O, et al. **Exp Eye Res** 1988 Nov;47(5):787–90

Calcitonin gene–related peptide–1 (CGRP–1) is a potent regulator of glycogen metabolism in rat skeletal muscle. Leighton B, et al. **FEBS Lett** 1989 Jun 5;249(2):357–61

Effects of calcitonin (CAL) on canine gastric mucosal cells—comparison with effects of calcitonin gene–related peptide (CGRP). Chiba T, et al. **Gastroenterol Jpn** 1989 Apr;24(2):222

Inhibitory effect of galanin on postprandial gastrointestinal motility and gut hormone release in humans. Bauer FE, et al. **Gastroenterology** 1989 Aug;97(2):260–4

Neuroendocrine and juvenile hormone effects on fat body protein synthesis during the reproductive cycle in female Blaberus discoidalis cockroaches. Keeley LL, et al. **Gen Comp Endocrinol** 1988 Dec;72(3):364–73

Excitatory action of the native neuropeptide antho–rfamide on muscles in the pennatulid Renilla köllikeri. Anctil M, et al. **Gen Pharmacol** 1989;20(3):381–4

Galanin and pancreastatin inhibit stimulated insulin secretion in the mouse: comparison of effects. Lindskog S, et al. **Horm Res** 1988;29(5–6):237–40

Further studies on the effect of ASF factor on Cl– permeability across the Deiters' neurone plasma membrane. Rapallino MV, et al. **Int J Neurosci** 1989 Jun;46(3–4):93–5

Effects of galanin on insulin and glucagon secretion in the rat. Lindskog S, et al. **Int J Pancreatol** 1989 Apr; 4(3):335–44

Calcitonin and CGRP block bombesin– and substance P–induced increases in airway tone. Gatto C, et al. **J Appl Physiol** 1989 Feb;66(2):573–7

The effects of streptozotocin–induced diabetes on the peptidergic innervation and function of the rat parotid gland. Sharkey KA, et al. **J Auton Nerv Syst** 1989 Jul; 27(2):127–37

Calcitonin gene–related peptide and cyclic AMP stimulate phosphoinositide turnover in skeletal muscle cells. Interaction between two second messenger systems. Laufer R, et al. **J Biol Chem** 1989 Feb 15;264(5):2683–9

Suppression of insulin release by galanin and somatostatin is mediated by a G–protein. An effect involving repolarization and reduction in cytoplasmic free Ca2+ concentration. Nilsson T, et al. **J Biol Chem** 1989 Jan 15; 264(2):973–80

Effects of calcitonin gene–related peptide on cyclic AMP formation in chicken, rat, and mouse bone cells. Michelangeli VP, et al. **J Bone Miner Res** 1989 Apr; 4(2):269–72

Effects of neuropeptide Y and calcitonin gene–related peptide on local cerebral blood flow in rat striatum. Suzuki Y, et al. **J Cereb Blood Flow Metab** 1989 Jun;9(3):268–70

Regional differences of adenylate cyclase stimulation by

calcitonin and calcitonin gene-related peptide in the human kidney. Geppetti P, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):491–5

The cardiovascular effects of human calcitonin gene-related peptide in conscious sheep. Braslis KG, et al. **J Hypertens** 1988 Nov;6(11):881–7

The interaction of calcitonin gene-related peptide with angiotensin II on blood pressure and renin release. Itabashi A, et al. **J Hypertens Suppl** 1988 Dec;6(4):S418–20

Potentiation of IL-1-induced BALB/3T3 fibroblast proliferation by neuropeptides. Kimball ES, et al. **J Immunol** 1988 Dec 15;141(12):4203–8

Peptides encoded by the calcitonin gene inhibit macrophage function. Nong YH, et al. **J Immunol** 1989 Jul 1;143(1):45–9

The cyclic GMP-induced inward current in neuron R14 of Aplysia californica: similarity to a FMRFamide-induced inward current. Ichinose M, et al. **J Neurobiol** 1989 Jan; 20(1):10–24

Effect of calcitonin gene-related peptide on skeletal muscle via specific binding site and G protein. Takamori M, et al. **J Neurol Sci** 1989 Mar;90(1):99–109

Modulation of a subthreshold calcium current by the neuropeptide FMRFamide in Aplysia neuron R15. Kramer RH, et al. **J Neurophysiol** 1988 Nov;60(5):1728–38

The voltage-dependent, slow inward current induced by the neuropeptide FMRFamide in Aplysia neuron R14. Ichinose M, et al. **J Neurosci** 1988 Oct;8(10):3891–900

Selective modulation of spike duration by serotonin and the neuropeptides, FMRFamide, SCPB, buccalin and myomodulin in different classes of mechanoafferent neurons in the cerebral ganglion of Aplysia. Rosen SC, et al. **J Neurosci** 1989 Feb;9(2):390–402

Inward rectification in response to FMRFamide in Aplysia neuron L2: summation with transient K current. Thompson S, et al. **J Neurosci** 1988 Sep;8(9):3200–7

Effects of neuropeptide Y, calcitonin gene-related peptide, substance P, and capsaicin on cerebral arteries in man and animals. Mejia JA, et al. **J Neurosurg** 1988 Dec;69(6):913–8

Cardiovascular effects of rat calcitonin gene-related peptide in the conscious rat. Sirén AL, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):69–78

Guanosine 5'-triphosphate analogue activates potassium current modulated by neurotransmitters in Aplysia neurones. Březina V. **J Physiol (Lond)** 1988 Dec;407:15–40

Renal mesangium is a target for calcitonin gene-related peptide. Kurtz A, et al. **Kidney Int** 1989 Aug;36(2):222–7

Acute metabolic and cardiovascular effects of human and salmon calcitonin in gene-derived products. Gennari C, et al. **Kidney Int Suppl** 1988 Sep;25:S61–3

Pancreatic amylin and calcitonin gene-related peptide cause resistance to insulin in skeletal muscle in vitro. Leighton B, et al. **Nature** 1988 Oct 13;335(6191):632–5

A neuromodulator of synaptic transmission acts on the secretory apparatus as well as on ion channels. Man-Son-Hing H, et al. **Nature** 1989 Sep 21; 341(6239):237–9

Effects of calcitonin gene-related peptide (CGRP), neurokinin A and neurokinin A (4–10) on the mitogenic response of human peripheral blood mononuclear cells. Casini A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Mar;339(3):354–8

Actions of calcitonin gene-related peptide and tachykinins in relation to the contractile effects of capsaicin in the guinea-pig and rat heart in vitro. Franco-Cereceda A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jun; 337(6):649–55

Human isolated small intestine: motor responses of the longitudinal muscle to field stimulation and exogenous neuropeptides. Maggi CA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Apr; 339(4):415–23

Evidence of a central inhibition of growth hormone secretion by calcitonin gene-related peptide. Netti C, et al. **Neuroendocrinology** 1989 Mar;49(3):242–7

Effect and site of action of hypothalamic neuropeptides on prolactin release in sheep. Thomas GB, et al. **Neuroendocrinology** 1988 Sep;48(3):252–7

Neuropeptides and other secretagogues in bovine chromaffin cells: their effect on opioid peptide metabolism. Bommer M, et al. **Neuropeptides** 1989 May-Jun;13(4):243–51

Coronary vasodilatation induced by calcitonin gene-related peptide in the anaesthetised pig. Tippins JR, et al. **Neuropeptides** 1989 Feb-Mar;13(2):95–102

Neuropeptides modulate beta-adrenergic agonist binding and receptor downregulation in slices of rat brain. Nukina I, et al. **Neuropharmacology** 1989 May;28(5):529–33

Acupuncture and sensory neuropeptides increase cutaneous blood flow in rats. Jansen G, et al. **Neurosci Lett** 1989 Feb 27;97(3):305–9

Calcitonin gene-related peptide enhances spontaneous acetylcholine release from the rat motor nerve terminal. Jinnai K, et al. **Neurosci Lett** 1989 Aug 14;103(1):64–8

Leucomyosuppressin, a novel insect neuropeptide, inhibits evoked transmitter release at the mealworm neuromuscular junction. Yamamoto D, et al. **Neurosci Lett** 1988 Dec 19; 95(1–3):137–42

Radioimmunoassay for rat pancreatic alpha-amylase and the effect of Phe-Met-Arg-Phe-amide on amylase secretion in the isolated perfused rat pancreas. Garry DJ, et al. **Pancreas** 1988;3(5):551–8

Does galanin inhibit insulin secretion by opening of the ATP-regulated K+ channel in the beta-cell? Ahrén B, et al. **Peptides** 1989 Mar-Apr;10(2):453–7

One receptor type mediates two independent effects of FMRFa on neurosecretory cells of Lymnaea. Brussaard AB, et al. **Peptides** 1989 Mar-Apr;10(2):289–97

Diminished nociceptive response in mice following immunization with neurokinins. Elliott PJ, et al. **Peptides** 1989 Jan-Feb;10(1):69–71

Actions of galanin fragments on rat, guinea-pig, and canine intestinal motility. Fox JE, et al. **Peptides** 1988 Sep-Oct; 9(5):1183–9

The effects of various peptides on the isolated pulmonary artery. Obara H, et al. **Peptides** 1989 Jan-Feb;10(1):241–3

The effects of intracerebroventricular administration of biologically active peptides in conscious sheep. Parkes DG, et al. **Peptides** 1988 Nov-Dec;9(6):1221–5

Supraspinal FMRFamide antagonizes morphine-induced horizontal, but not vertical, locomotor activity. Raffa RB. **Peptides** 1989 Mar-Apr;10(2):403–6

The action of FMRFamide (Phe-Met-Arg-Phe-NH2) and related peptides on mammals. Raffa RB. **Peptides** 1988 Jul-Aug;9(4):915–22 (66 ref.)

FMRFamide enhances acetylcholine-induced contractions of guinea pig ileum. Raffa RB, et al. **Peptides** 1989 May-Jun; 10(3):693–5

Central nervous system action of calcitonin gene-related peptide to inhibit gastric emptying in the conscious rat. Raybould HE, et al. **Peptides** 1988 Jul-Aug;9(4):735–7

Bilateral neural transections at the level of mesencephalon increase food intake and reduce latency to onset of feeding in response to neuropeptide Y. Sahu A, et al. **Peptides** 1988 Nov-Dec;9(6):1269–73

Cardiovascular and renal effects of calcitonin gene-related peptide in hypertensive dogs. Verburg KM, et al. **Peptides** 1989 May-Jun;10(3):663–9

Renal hemodynamic response to intrarenal infusion of calcitonin gene-related peptide in dogs. Villarreal D, et al. **Peptides** 1988 Sep-Oct;9(5):1129–35

Effect of calcitonin gene-related peptide on prolactin secretion. Sibilia V, et al. **Pharmacol Res** 1989 Jan-Feb; 21(1):97–8

Actions of calcitonin gene-related peptide on rat sensory ganglion neurones. Ryu PD, et al. **Physiol Bohemoslov** 1988;37(3):259–65

Pineal-pancreas interaction: pineal hormone E5 action on insulin activity. Neacşu C. **Physiologie** 1988 Jul-Sep; 25(3):119–27

Distal retinal pigment of the fiddler crab, Uca pugilator: release of the dark-adapting hormone by methionine enkephalin and FMRFamide. Kulkarni GK, et al. **Pigment Cell Res** 1987;1(1):51–6

Regulation of the gastrin promoter by epidermal growth factor and neuropeptides. Godley JM, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3036–40

Neuropeptide K potently stimulates salivary gland secretion and potentiates substance P-induced salivation. Takeda Y, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):392–6

Effects of calcitonin gene-related peptide on synaptic acetylcholine receptor-channels in rat muscle fibres. Eusebi F, et al. **Proc R Soc Lond [Biol]** 1988 Aug 23; 234(1276):333–42

Effects of peptides from the calcitonin genes on bone and bone cells. Zaidi M, et al. **Q J Exp Physiol** 1988 Jul; 73(4):471–85

Effects of substance P, calcitonin gene-related peptide and capsaicin on tension and membrane potential of pig coronary artery in vitro. Bény JL, et al. **Regul Pept** 1989 Apr;25(1):25–36

FMRFamide prevents habituation and potentiates the gill withdrawal reflex in the isolated gill preparation of Aplysia. Cawthorpe D, et al. **Regul Pept** 1988 Aug;22(3):227–36

Effects of neuropeptides on gastric acid and duodenal bicarbonate secretions in freely moving rats. Lenz HJ, et al. **Regul Pept** 1989 Mar;24(3):293–300

Human alpha-calcitonin gene-related peptide influences colonic secretion by acting on myenteric neurons. McCulloch CR, et al. **Regul Pept** 1989 Jan;24(1):87–96

Insulin and glucagon secretion in rats: effects of calcitonin gene-related peptide. Pettersson M, et al. **Regul Pept** 1988 Oct;23(1):37–50

Neuropeptide K suppresses feeding in the rat. Sahu A, et al. **Regul Pept** 1988 Nov;23(2):135–43

Increased skin flap survival and arterial dilation by calcitonin gene-related peptide. A study in the pig. Hedén P, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(1):11–6

The effect of tachykinins and CGRP on the obstructed ureter—a study on capsaicin-sensitive sensory nerves in the guinea-pig. Kinn AC, et al. **Scand J Urol Nephrol Suppl** 1988;110:291–7

Effect of subarachnoid hemorrhage on calcitonin gene-related peptide-induced relaxation in rabbit basilar artery. Hongo K, et al. **Stroke** 1989 Jan;20(1):100–4

[Effects of biologically active peptides on the giant neurons of the giant African snail, Achatina fulica Férussac] Takeuchi H, et al. **C R Soc Biol (Paris)** 1988;182(4):433–8 (Eng. Abstr.) **(Fre)**

[Bronchoconstriction and neuropeptides] Uchida Y, et al. **Kokyu To Junkan** 1989 May;37(5):493–7 **(Jpn)**

[The structural organization of interferon molecules as precursors of immuno- and neuroactive oligopeptides] Chipens GI, et al. **Fiziol Zh SSSR** 1989 May;75(5):638–45 (20 ref.) (Eng. Abstr.) **(Rus)**

[Thymus hormones—precursors of new psychoneuromodulatory peptides] Klusha VE, et al. **Fiziol Zh SSSR** 1989 May;75(5):691–6 (Eng. Abstr.) **(Rus)**

[The morphogenetic function of neuropeptides] Sheiman IM, et al. **Fiziol Zh SSSR** 1989 May;75(5):619–26 (Eng. Abstr.) **(Rus)**

[Effect of a brain extract containing the postural asymmetry factor on the frog neuromuscular synapse] Drabkina TM, et al. **Neirofiziologiia** 1988;20(4):554–7 (Eng. Abstr.) **(Rus)**

[The influence of neuropeptides on the membrane of identified mollusk neurons and their modulating action on GABA-induced effects] Sologub MI, et al. **Nerv Sist** 1988; 27:135–43 **(Rus)**

PHYSIOLOGY

Control of vascular permeability and vascular smooth muscle in the respiratory tract by multiple neuropeptides. Saria A, et al. **Acta Otolaryngol Suppl (Stockh)** 1989;457:25–8 (29 ref.)

Allergy or inflammation? From neuropeptide stimulation of human skin mast cells to studies on the mechanism of the late asthmatic response. Church MK, et al. **Agents Actions** 1989 Jan;26(1–2):22–30 (75 ref.)

Airway diseases: role of epithelium and inflammatory peptides. Widdicombe JH. **Am J Physiol** 1989 Aug;257(2 Pt 1):L144–6

Neuropeptides in the pathogenesis of lung inflammation. Casale TB, et al. **Am Rev Respir Dis** 1988 Oct;138(4):1053–5

Behavioral evidence for differential neuropeptide modulation of the mesolimbic dopamine system. Kelley AE, et al. **Ann N Y Acad Sci** 1988;537:415–34 (72 ref.)

A mechanism for the involvement of colocalized neuropeptides in the actions of antipsychotic drugs. Gariano RF, et al. **Biol Psychiatry** 1989 Jul;26(3):303–14 (120 ref.)

The innervation of the immature rat ovary by calcitonin gene-related peptide. Calka J, et al. **Biol Reprod** 1988 Dec; 39(5):1215–23

Neuropeptides, nerve growth factor, and mucosal immunity. Pezzati P, et al. **Brain Behav Immun** 1988 Dec;2(4):311–7 (26 ref.)

Neuroimmune interactions in the airways: implications for asthma, allergy, and other inflammatory airway diseases. Saria A. **Brain Behav Immun** 1988 Dec;2(4):318–21 (5 ref.)

Brain neuropeptides: actions on central cardiovascular control mechanisms. Gardiner SM, et al. **Brain Res Brain Res Rev** 1989 Jan-Mar;14(1):79–116 (405 ref.)

Criteria for establishing a physiological role for brain peptides. A case in point: the role of vasopressin in thermoregulation during fever and antipyresis. Kasting NW. **Brain Res Brain Res Rev** 1989 Apr-Jun;14(2):143–53 (86 ref.)

Ontogeny of calcitonin gene-related peptide in the organ of Corti of the rat. Tohyama Y, et al. **Brain Res Dev Brain Res** 1989 Feb 1;45(2):309–12

Co-existence and origin of peptidergic and adrenergic nerves in the guinea pig uterus. Retrograde tracing and immunocytochemistry, effects of chemical sympathectomy, capsaicin treatment and pregnancy. Alm P, et al. **Cell Tissue Res** 1988;254(3):517–30

The role of sensory neuropeptides in the pathogenesis of bronchial asthma. Joos GF. **Clin Exp Allergy** 1989 Jan;19 Suppl 1:9–13 (8 ref.)

The biology of the FMRFamide-series of peptides in molluscs with special reference to Helix. Cottrell GA. **Comp Biochem Physiol [A]** 1989;93(1):41–5 (40 ref.)

The antisecretory factors: inducible proteins which modulate secretion in the small intestine. Lönnroth I, et al. **Comp Biochem Physiol [A]** 1988;90(4):611–7

Neuropeptides: animal behaviour and human psychopathology. de Wied D, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(5–6):323–31 (69 ref.)

Regulatory peptides in the respiratory system. Barnes PJ. **Experientia Suppl** 1989;56:317–33 (86 ref.)

Neuropeptides in pelvic afferent pathways. de Groat WC. **Experientia Suppl** 1989;56:334–61 (127 ref.)

Regulatory peptides in the mammalian urogenital system. Fahrenkrug J, et al. **Experientia Suppl** 1989;56:362–81 (145 ref.)

Peptides and epithelial growth regulation. Goodlad RA, et al. **Experientia Suppl** 1989;56:180–91 (110 ref.)

The use of cell and tissue culture techniques in the study of regulatory peptides. Hassall CJ, et al. **Experientia Suppl** 1989;56:113–36 (140 ref.)

Neuropeptides and the microcircuitry of the enteric nervous system. Llewellyn-Smith IJ. **Experientia Suppl** 1989; 56:247–65 (67 ref.)

Regulatory peptides: introduction. Polak JM, et al. **Experientia Suppl** 1989;56:1–10 (26 ref.)

Neuropeptides and the ocular innervation. Stone RA, et al. **Experientia Suppl** 1989;56:266–91 (155 ref.)

Peptides in the mammalian cardiovascular system. Wharton J, et al. **Experientia Suppl** 1989;56:292–316 (220 ref.)

Neuropeptides in the uveal tract. Unger WG, et al. **Eye** 1988; 2 Suppl:S202–12 (106 ref.)

Flight-induced inhibition of the cerebral median peptidergic neurosecretory system in Locusta migratoria. Diederen JH, et al. **Gen Comp Endocrinol** 1988 Aug;71(2):257–64

Immunocytochemical demonstration of close relationships

between neuropeptidergic nerve fibers and hormone-producing cell types in the adenohypophysis of the sea bass (Dicentrarchus labrax). Moons L, et al. **Gen Comp Endocrinol** 1989 Feb;73(2):270–83

Interaction of neuropeptides with human mast cells. Church MK, et al. **Int Arch Allergy Appl Immunol** 1989; 88(1–2):70–8 (67 ref.)

Characteristics of histamine secretion induced by neuropeptides: implications for the relevance of peptide–mast cell interactions in allergy and inflammation. Pearce FL, et al. **Int Arch Allergy Appl Immunol** 1989; 88(1–2):129–31

Neuropeptides in urology. Scultéty S. **Int Urol Nephrol** 1989; 21(1):39–45 (33 ref.)

Time course of expression of neuropeptide Y, calcitonin gene-related peptide, and NADPH diaphorase activity in neurons of the developing murine bowel and the appearance of 5-hydroxytryptamine in mucosal enterochromaffin cells. Branchek TA, et al. **J Comp Neurol** 1989 Jul 8;285(2):262–73

Galanin hyperinnervates surviving neurons of the human basal nucleus of Meynert in dementias of Alzheimer's and Parkinson's disease: a hypothesis for the role of galanin in accentuating cholinergic dysfunction in dementia. Chan-Palay V. **J Comp Neurol** 1988 Jul 22;273(4):543–57

Structure, afferent innervation, and transmitter content of ganglia of the guinea pig gallbladder: relationship to the enteric nervous system. Mawe GM, et al. **J Comp Neurol** 1989 May 15;283(3):374–90

Interaction between cholinergic neurons and substance P or calcitonin gene-related peptide terminals of the rat sacral intermediolateral nucleus: double immunostaining at the light and electron microscopic levels. Peng YW, et al. **J Comp Neurol** 1989 Jul 1;285(1):1–8

Peptide B induction of bag-cell activity in Aplysia: localization of sites of action to the cerebral and pleural ganglia. Painter SD, et al. **J Neurobiol** 1988 Dec; 19(8):695–706

Inhibitors of protein kinase C prevent enhancement of calcium current and action potentials in peptidergic neurons of Aplysia. Conn PJ, et al. **J Neurosci** 1989 Feb; 9(2):480–7

Calcitonin gene-related peptide prevents disuse-induced sprouting of rat motor nerve terminals. Tsujimoto T, et al. **J Neurosci** 1988 Oct;8(10):3951–7

Insect cardioactive neuropeptides: peptidergic modulation of the intrinsic rhythm of an insect heart is mediated by inositol 1,4,5-trisphosphate. Tublitz NJ. **J Neurosci** 1988 Nov;8(11):4394–9

Calcitonin gene-related polypeptide as a mediator of the neurogenic ocular injury response. Unger WG, et al. **J Ocul Pharmacol** 1985 Summer;1(2):189–99

Involvement of calcitonin gene-related peptide in the positive chronotropic and inotropic effects of piperine and development of cross-tachyphylaxis between piperine and capsaicin in the isolated rat atria. Miyauchi T, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):816–24

Calcitonin gene-related peptide and vasodilator nerves in large cerebral arteries of cats. Saito A, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):455–62

Cigarette smoke-induced irritation in the airways in relation to peptide-containing, capsaicin-sensitive sensory neurons. Lundberg JM, et al. **Klin Wochenschr** 1988;66 Suppl 11:151–60

Can central neuropeptides be implicated in carotid sinus reflex hypersensitivity? Baig MW, et al. **Med Hypotheses** 1989 Apr;28(4):255–9

Assessment of peptide regulation of the autonomic nervous system. Brown MR, et al. **Methods Enzymol** 1989; 168:431–43

Expression of dopaminergic phenotypes in the mouse olfactory bulb induced by the calcitonin gene-related peptide. Denis-Donini S. **Nature** 1989 Jun 29; 339(6227):701–3

Developmental neurobiology. Neuropeptides find a role? [news] Mudge AW. **Nature** 1989 Jun 29;339(6227):663

Calcitonin gene-related peptide regulates calcium current in heart muscle. Ono K, et al. **Nature** 1989 Aug 31; 340(6236):721–4

Neuropeptides—occurrence and functions in insects. Penzlin H. **Naturwissenschaften** 1989 Jun;76(6):243–52 (98 ref.)

Eosinophil chemotactic response to rat CGRP-1 is increased after exposure to trypsin or guinea-pig lung particulate fraction. Manley HC, et al. **Neuropeptides** 1989 Jan; 13(1):29–34

Neuropeptides and male sexual behavior. Dornan WA, et al. **Neurosci Biobehav Rev** 1989 Spring;13(1):1–15 (162 ref.)

Antinociception induced in rats by intrathecal administration of antiserum against calcitonin gene-related peptide. Kuraishi Y, et al. **Neurosci Lett** 1988 Oct 17;92(3):325–9

Analgesia and neuropeptides. Mayer DJ. **NIDA Res Monogr** 1988;87:118–56 (256 ref.)

Peptides and thermoregulation. Shukla R, et al. **NIDA Res Monogr** 1988;87:192–208 (85 ref.)

Development of neuropeptides in the sympathoadrenal system of birds and mammals. A short review. Garcia-Arraras JE, et al. **P R Health Sci J** 1988 Aug; 7(2):88–93 (65 ref.)

Impact of neuropeptides in biological psychiatry. Current status and perspectives in clinical studies. **Prog Neuropsychopharmacol Biol Psychiatry** 1988;12 Suppl:S1–187

The neurochemistry of mood. Steiner M. **Psychiatr J Univ Ottawa** 1989 Jun;14(2):342–3; discussion 349–51 (24 ref.)

The G.L. Brown lecture. Regulatory peptides and the neuroendocrinology of gut–brain relations. Dockray GJ. **Q J Exp Physiol** 1988 Sep;73(5):703–27 (162 ref.)

Neuropeptides as growth factors. Possible roles in human diseases. Dalsgaard CJ, et al. **Regul Pept** 1989 Apr;25(1):1–9 (43 ref.)

Calcitonin gene-related peptide: a sensory and motor neurotransmitter in the feline lower esophageal sphincter. Parkman HP, et al. **Regul Pept** 1989 Apr;25(1):131–46

Pain mechanisms underlying vascular headaches. Progress Report 1989. Moskowitz MA, et al. **Rev Neurol (Paris)** 1989;145(3):181–93 (135 ref.)

Pain fibers in osteoarthritis: a review. Konttinen YT, et al. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):35–40 (26 ref.)

Co-existence of galanin and acetylcholine: is galanin involved in memory processes and dementia? Crawley JN, et al. **Trends Neurosci** 1989 Aug;12(8):278–82 (46 ref.)

[Neuropeptides in sensory neurons in relation to peripheral functions] Hua XY. **Sheng Li Ko Hsueh Chin Chan** 1988 Oct;19(4):304–9 (30 ref.) **(Chi)**

[Calcitonin gene-related peptide] Wu K. **Sheng Li Ko Hsueh Chin Chan** 1989 Jan;20(1):57–62 (54 ref.) **(Chi)**

[Role of the central nervous system in the pathogenesis of stress ulcer] Yang H. **Sheng Li Ko Hsueh Chin Chan** 1988 Jul;19(3):218–22 (31 ref.) **(Chi)**

[Implication of serotoninergic and peptidergic systems in the mechanisms of pain] Hamon M. **Arch Int Physiol Biochim** 1988 Aug;96(3):A90–1 **(Fre)**

[Dopaminergic regulation of the activity of peptidergic, GABAergic and glutamatergic neuronal systems in the striatum] Kerkerian L, et al. **Encephale** 1989 Jan–Feb;15 Spec No:143–54 **(Fre)**

[Possible trophic role on the neuromuscular junction of a neuropeptide co-existing with acetylcholine in motor neurons of the spinal cord] Fontaine B, et al. **Rev Neurol (Paris)** 1989;145(3):194–200 (29 ref.) (Eng. Abstr.) **(Fre)**

[New aspects in the pathogenesis and therapy of hyperreflexive rhinopathy] Wolf G. **Laryngol Rhinol Otol (Stuttg)** 1988 Sep;67(9):438–45 (41 ref.) (Eng. Abstr.) **(Ger)**

[Role of neurotransmitters (VIP, PP and GIP) in diabetic autonomic neuropathies] Fedele D, et al. **Minerva Endocrinol** 1988 Jul–Sep;13(3):145–50 (71 ref.) **(Ita)**

[Inflammation and airway response] Aizawa H. **Kokyu To Junkan** 1989 May;37(5):511–6 **(Jpn)**

[The lung and neuropeptides] Kitamura S. **Kokyu To Junkan** 1989 May;37(5):477–82 **(Jpn)**

[Peptidergic regulation of the processes of gestation and labor in mammals] Mamamtavrishvili ID, et al. **Akush Ginekol (Mosk)** 1988 Jul;(7):60–3 (Eng. Abstr.) **(Rus)**

[Neuropeptides in the mechanisms of the activation of escape reactions induced by stimulation of the ventromedial hypothalamus during food motivation satiation] Sudakov SK. **Biull Eksp Biol Med** 1989 Feb;107(2):135–8 (Eng. Abstr.) **(Rus)**

[Various effects of stimulation of a peptidergic neuron on post-synaptic cells in the CNS of Helix pomatia] Kononenko NI, et al. **Dokl Akad Nauk SSSR** 1989 May-Jun;306(1):236–9 **(Rus)**

[Effect of various neuropeptides on the electrical activity of brain structures of the rabbit] Papsuevich OS, et al. **Fiziol Zh** 1988 Sep–Oct;34(5):38–44 (Eng. Abstr.) **(Rus)**

[The participation of brain mediator and peptidergic systems in the mechanisms of the conditioned reflex] Suvorov NF, et al. **Fiziol Zh SSSR** 1989 May;75(5):664–9 (Eng. Abstr.) **(Rus)**

[Regulatory peptides and autonomic regulation of the heart] Sokolova NA. **Patol Fiziol Eksp Ter** 1988 Nov–Dec; (6):74–9 (88 ref.) **(Rus)**

[Hormones and regulatory peptides in the gastrointestinal tract] Klimeš I. **Cesk Fysiol** 1989;38(3):241–58 (45 ref.) **(Slo)**

SECRETION

Adrenal pheochromocytoma-ganglioneuroma producing catecholamines and various neuropeptides. Salmi J, et al. **Acta Med Scand** 1988;224(4):403–8

Differential release of calcitonin gene-related peptide and neuropeptide Y from the isolated heart by capsaicin, ischaemia, nicotine, bradykinin and ouabain. Franco-Cereceda A, et al. **Acta Physiol Scand** 1989 Feb; 135(2):173–87

Calcitonin gene-related peptide: release by capsaicin and prolongation of the action potential in the guinea-pig heart. Franco-Cereceda A, et al. **Acta Physiol Scand** 1988 Feb; 132(2):181–90

Calcium stimulates the release of calcitonin gene-related peptide from the canine thyroid. Ahrén B, et al. **Am J Physiol** 1989 May;256(5 Pt 1):E597–9

The role of arachidonic acid and its metabolites in the release of neuropeptides. Ojeda SR, et al. **Ann N Y Acad Sci** 1989; 559:192–207 (62 ref.)

Release of neuropeptides does not only occur at nerve terminals. Nordmann JJ, et al. **Biosci Rep** 1988 Oct; 8(5):471–83

Adrenal and intestinal secretion of catecholamines and neuropeptides during splanchnic artery occlusion shock. Gaumann DM, et al. **Circ Shock** 1988 Dec;26(4):391–407

Cosecretion of calcitonin and calcitonin gene-related peptide from cultured rat medullary thyroid C cells. Seitz PK, et al. **J Bone Miner Res** 1989 Feb;4(1):129–34

Pituitary gland: neuropeptides, neurotransmitters and growth factors. Koenig JI. **Toxicol Pathol** 1989;17(2):256–65 (89 ref.)

[Insulinoma simultaneously secreting calcitonin and calcitonin gene-related peptide. A case report] Yoshida S, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr;78(4):569–70 **(Jpn)**

THERAPEUTIC USE

Calcitonin gene-related peptide delays the no-reflow phenomenon in the rat island flap. Westin M, et al. **Ann Plast Surg** 1988 Oct;21(4):329–34

The therapeutic potential of neuropeptides and monoamines as antagonists of lymphocyte activation. Nordlind K, et al. **Drug Des Deliv** 1989 Jun;4(4):273–8 (54 ref.)

[The effect of cyclo(L-alanyl-1-amino-1-cyclopentancarbonyl)--Alaptide on experimental gastric ulcers in rats] Korbová L, et al. **Cas Lek Cesk** 1988 Dec 16;127(51):1574–7 (Eng. Abstr.) **(Cze)**

TOXICITY

Embryotoxicity of L-prolyl-L-leucyl-glycinamide, cyclo(1-amino-cyclopentanecarbonyl-alanyl) and cyclo(glycyl-leucyl), new potential neuropeptides in chick embryos. Kosař K, et al. **Pharmazie** 1988 Oct;43(10):715–6

NEUROPHARMACOLOGY

Sixth Italo-Soviet Symposium on Neuropsychopharmacology. Tashkent, USSR, October 22–23, 1986. Proceedings. **Ann Ist Super Sanita** 1988; 24(3):363–497

Comment: Neuropharmacology [letter] Webster JC, et al. **Drug Intell Clin Pharm** 1988 Oct;22(10):827–8

Immunopharmacology [letter] Vinar O, et al. **Pharmacopsychiatry** 1988 Sep;21(5):255

Perspectives in Canadian neuro-psychopharmacology. Proceedings of the 1th annual meeting of the Canadian College of Neuro-psychopharmacology. Montreal, Quebec, May 3–6, 1988. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3–4):303–598

[Proceedings of the 18th annual meeting of the Japanese Society of Neuropsychopharmacology. Hiroshima, 21–22 September 1988. Abstracts] **Yakubutsu Seishin Kodo** 1989 Mar;9(1):1–192 **(Jpn)**

NEUROPHYSINS

ANALYSIS

Application of high-performance liquid chromatography in neurophysin disulfide assignment. Burman S, et al. **J Chromatogr** 1988 Jun 29;443:285–98

Vasopressin neuron is the target of monoclonal antibodies raised against vasopressin-neurophysin injected in vivo. Leon-Henri B, et al. **Neuroendocrinology** 1989 Feb; 49(2):125–33

Complete assignment of neurophysin disulfides indicates pairing in two separate domains. Burman S, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):429–33

Studies on hypothalamo-pituitary corticoliberin system. VI. Comparison of the effects of long-term intraventricular CRF-administration and adrenalectomy in CRF- and neurophysin-immunoreactive neurons in the rat. Miśkowiak B. **Z Mikrosk Anat Forsch** 1988;102(3):432–44

BIOSYNTHESIS

[Common precursors of neurohypophysial hormones and neurophysins] Chauvet J. **Ann Endocrinol (Paris)** 1988; 49(4–5):377–83 (24 ref.) (Eng. Abstr.) **(Fre)**

[Ectopic hormone production by neoplasms] Yamaji T. **Rinsho Byori** 1988 Dec;36(12):1386–92 **(Jpn)**

BLOOD

Treatment outcome, seizure duration, and the neurophysin response to ECT. Scott AI, et al. **Biol Psychiatry** 1989 Mar 1;25(5):585–97

Vasopressin reduces release from vasopressin-neurons and oxytocin-neurons by acting on V2-like receptors. Cheng SW, et al. **Brain Res** 1989 Feb 6;479(1):35–9

Increased levels of arginine vasotocin and neurophysin during nesting in sea turtles. Figler RA, et al. **Gen Comp Endocrinol** 1989 Feb;73(2):223–32

Increased basal plasma vasopressin-neurophysin in mania. Legros JJ, et al. **Horm Res** 1989;31(1–2):55–8

ISOLATION & PURIFICATION

Ostrich MSEL-neurophysin belongs to the class of two-domain "big" neurophysin as indicated by complete amino acid sequence of the neurophysin/copeptin. Lazure C, et al. **Int J Pept Protein Res** 1989 Jan;33(1):46–58

METABOLISM

Structure, processing and evolution of the neurohypophysial hormone-neurophysin precursors. Acher R, et al. **Biochimie** 1988 Sep;70(9):1197–207 (31 ref.)

Processing endoprotease recognizes a structural feature at the cleavage site of peptide prohormones. The pro-oxytocin/neurophysin model. Brakch N, et al. **J Biol Chem** 1989 Sep 25;264(27):15912–6

Post-translational processing of oxytocin-neurophysin prohormone in the ovine corpus luteum: activity of peptidyl glycine alpha-amidating mono-oxygenase and concentrations of its cofactor, ascorbic acid. Sheldrick EL, et al. **J Endocrinol** 1989 Jul;122(1):313–22

Presence of pro-vasopressin mRNA, neurophysin and arginine vasopressin in mouse anterior pituitary cells and the AtT-20 corticotrophic tumour cell line. Loh YP, et al. **J Mol Endocrinol** 1988 Jul;1(1):39–48

[Enzymatic cleavage of human neurophysin into 2 sub-domains containing 3 and 4 disulfides] Chauvet J, et al. **C R Acad Sci [III]** 1988;307(18):811–6 (Eng. Abstr.) (Fre)

SECRETION

Effect of bromocriptine on neurophysin secretion in pregnant women in labour. Coiro V, et al. **Gynecol Endocrinol** 1988 Mar;2(1):35–43

NEUROPHYSIOLOGY

see related

SENSATION

Bilingualism and neurolinguistics. **Brain Lang** 1989 Jan; 36(1):1–158

A microcomputer-based system for multi-channel neurophysiological recording. Bermejo R, et al. **Comput Biol Med** 1989;19(1):35–54

Annual meeting of the Spanish Society of EEG and Clinical Neurophysiology. Barcelona, 10–11 December 1987. Abstracts. **Electroencephalogr Clin Neurophysiol** 1989 Mar; 72(3):45P–51P

Nordic meeting of clinical neurophysiology. Espoo, Finland, 12–14 May 1988. Abstracts. **Electroencephalogr Clin Neurophysiol** 1989 Mar; 72(3):52P–60P

Contribution of electrophysiological studies to cerebellar physiology. Dow RS. **J Clin Neurophysiol** 1988 Oct; 5(4):307–23 (47 ref.)

[Development of the theory of systemogenesis at the present stage] Shuleikina KV, et al. **Zh Vyssh Nerv Deiat** 1989 Jan–Feb;39(1):3–19 (88 ref.) (Rus)

EDUCATION

American Electroencephalographic Society report on the status of training programs in clinical neurophysiology. Moshé SL. **J Clin Neurophysiol** 1986 Oct;3(4):349–52

HISTORY

Francis Glisson, MD (1597–1677): the Glissonian irritability phenomenon and its roots, links, and confirmation. Bloch H. **South Med J** 1988 Nov;81(11):1433–6

[The French Society of EEG and Clinical Neurophysiology is 40 years old] Courjon J, et al. **Neurophysiol Clin** 1989 May;19(2):95–107 (Eng. Abstr.) (Fre)

INSTRUMENTATION

A device for continuous monitoring of water consumption by rats. Schultz TJ, et al. **Biomed Sci Instrum** 1989;25:39–46

A signal generator for testing extracellular recording amplifiers and probes. Aldridge JW, et al. **Brain Res Bull** 1988 Oct;21(4):711–2

A signal averaging program. Duffin J. **Brain Res Bull** 1988 Nov;21(5):851–3

Basic electronics for clinical neurophysiology. Misulis KE. **J Clin Neurophysiol** 1989 Jan;6(1):41–74 (0 ref.)

Ultra-low noise silver-plated carbon fibre microelectrodes. Millar J, et al. **J Neurosci Methods** 1988 Aug;25(1):59–62

An optic-fiber photocell detector for measuring tongue protrusion in the rat: evaluation of recovery from localized cortical lesions. Whishaw IQ, et al. **Physiol Behav** 1988; 43(3):397–401

[A floating hydraulic micromanipulator for microelectrode research on brain neurons] Piatin VF. **Biull Eksp Biol Med** 1988 Nov;106(11):519–21 (Eng. Abstr.) (Rus)

[An automatic adapter for the Simonov chamber] Karpenko NA, et al. **Fiziol Zh SSSR** 1989 Jan;75(1):149–51 (Rus)

[Automated programmable apparatus complexes in clinico-physiological research on the human brain] Bekhtereva NP, et al. **Vestn Akad Med Nauk SSSR** 1988; (8):7–13 (Eng. Abstr.) (Rus)

METHODS

Fluorescent voltage-sensitive dyes: applications for neurophysiology. Dasheiff RM. **J Clin Neurophysiol** 1988 Jul;5(3):211–35 (106 ref.)

Measurement of passive membrane parameters with whole-cell recording from neurons in the intact amphibian retina. Coleman PA, et al. **J Neurophysiol** 1989 Jan; 61(1):218–30

Psychophysical and neurophysiological studies of chemically induced cutaneous pain and itch. The case of the missing nociceptor. Lamotte RH. **Prog Brain Res** 1988;74:331–5

[Physiology and physiopathology of somatic sensations studied in man by the method of evoked potentials] Desmedt JE. **J Physiol (Paris)** 1987;82(2):64–136 (437 ref.) (Eng. Abstr.) (Fre)

[Structural analysis of parameters of neurophysiological processes] Manevskiĭ SE. **Fiziol Cheloveka** 1988 Jan–Feb; 14(1):163–7 (Rus)

STATISTICS & NUMERICAL DATA

Comparison of the different variants of the current source density analysis methods in neurophysiological studies. Kossev A, et al. **Acta Physiol Pharmacol Bulg** 1988; 14(2):75–82

TRENDS

[The status and outlook of the study of nervous system physiology in the USSR] Simonov PV. **Usp Fiziol Nauk** 1989 Jan–Mar;20(1):21–7 (Rus)

NEUROPSYCHOLOGICAL TESTS

Psychiatric and neuropsychological findings after stereotactic hypothalamotomy, in cases of extreme sexual aggressivity. Dieckmann G, et al. **Acta Neurochir Suppl (Wien)** 1988; 44:163–6

S-100 protein in cerebrospinal fluid after aneurysmal subarachnoid haemorrhage: relation to functional outcome, late CT and SPECT changes, and signs of higher cortical dysfunction. Hårdemark HG, et al. **Acta Neurochir (Wien)** 1989;99(3–4):135–44

Neuropsychological changes after callosotomy in drug-resistant epilepsy: a study of the short-term evolution. Provinciali L, et al. **Acta Neurochir (Wien)** 1988; 94(1–2):15–22

Early stages of late onset Alzheimer's disease. Diagnostic criteria, protein metabolism, precursor loading effects, neurochemical and neuropsychological applications. Forssell LG, et al. **Acta Neurol Scand Suppl** 1989;121:1–95

Cognitive, psychiatric and neuropsychological aspects of elevated lead levels in asymptomatic children: a controlled study. Leung PW, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Jun;30(3):339–51

Neuropsychological assessment of functional central nervous system disorders. I. Hemispheric functioning characteristics in schizophrenia and affective illness. Bellini L, et al. **Acta Psychiatr Scand** 1988 Aug;78(2):242–6

The GBS scale in multi-infarct dementia and senile dementia of Alzheimer type. Olafsson K, et al. **Acta Psychiatr Scand** 1989 Jan;79(1):94–7

Neurobehavioral functioning in children exposed to narcotics in utero. Davis DD, et al. **Addict Behav** 1988;13(3):275–83

Measuring everyday memory in elderly people: a preliminary study. Cockburn J, et al. **Age Ageing** 1988 Jul;17(4):265–9

Neuropsychological performance of young nondrinkers, social drinkers, and long- and short-term sober alcoholics. Emmerson RY, et al. **Alcoholism (NY)** 1988 Oct;12(5):625–9

Graded neuropsychological impairment and elevated gamma-glutamyl transferase in chronic alcoholic men. Irwin M, et al. **Alcoholism (NY)** 1989 Feb;13(1):99–103

Impact of cirrhosis on the neuropsychological test performance of alcoholics. Tarter RE, et al. **Alcoholism (NY)** 1988 Oct;12(5):619–21

Neuropsychological status of children with acute lymphoblastic leukemia treated for central nervous system relapse. Mulhern RK, et al. **Am J Pediatr Hematol Oncol** 1989 Spring;11(1):106–13 (26 ref.)

Lateralization of dementia of depression in stroke patients. Bolla-Wilson K, et al. **Am J Psychiatry** 1989 May; 146(5):627–34

Association of left-handedness with ventricle size and neuropsychological performance in schizophrenia. Katsanis J, et al. **Am J Psychiatry** 1989 Aug;146(8):1056–8

Cognitive deficits in olivopontocerebellar atrophy: implications for the cholinergic hypothesis of Alzheimer's dementia. Kish SJ, et al. **Ann Neurol** 1988 Aug;24(2):200–6

Inferior parietal region implicated in neurocognitive impairment in schizophrenia [letter] Cleghorn JM, et al. **Arch Gen Psychiatry** 1989 Aug;46(8):758–60

A verbal memory test with high predictive accuracy for dementia of the Alzheimer type. Knopman DS, et al. **Arch Neurol** 1989 Feb;46(2):141–5

The intracarotid amobarbital sodium procedure. False-positive errors during recognition memory assessment. Loring DW, et al. **Arch Neurol** 1989 Mar; 46(3):285–7

Neuropsychological test findings in subjects with leukoaraiosis. Rao SM, et al. **Arch Neurol** 1989 Jan; 46(1):40–4

The Western Neuro Sensory Stimulation Profile: a tool for assessing slow-to-recover head-injured patients. Ansell BJ, et al. **Arch Phys Med Rehabil** 1989 Feb;70(2):104–8

High-altitude mountaineering and brain function: neuropsychological testing of members of a Mount Everest expedition. Jason GW, et al. **Aviat Space Environ Med** 1989 Feb;60(2):170–3

Tranquillisers: prevalence, predictors and possible consequences. Data from a large United Kingdom survey. Ashton H, et al. **Br J Addict** 1989 May;84(5):541–6

Dependence on sedative-hypnotics: neuropsychological impairment, field dependence and clinical course in a 5-year follow-up study. Bergman H, et al. **Br J Addict** 1989 May;84(5):547–53

The relation between subjective and objective memory impairment after stroke. Lincoln NB, et al. **Br J Clin Psychol** 1989 Feb;28 (Pt 1):61–5

Diagnosis of unilateral telencephalic hearing disorders. Evaluation of a simple psychoacoustic pattern discrimination test. Blaettner U, et al. **Brain** 1989 Feb;112 (Pt 1):177–95

Neuropsychological functioning in hemiparkinsonism. Blonder LX, et al. **Brain Cogn** 1989 Mar;9(2):244–57

Patient classification in neuropsychological research. Caramazza A, et al. **Brain Cogn** 1989 Jul;10(2):256–95

On the different roles of the cerebral hemispheres in mental imagery: the "o'Clock Test" in two clinical cases. Grossi D, et al. **Brain Cogn** 1989 May;10(1):18–27

The relationship between cerebral lateralization and cognitive ability: suggested criteria for empirical tests. Lewis RS, et al. **Brain Cogn** 1988 Dec;8(3):275–90 (43 ref.)

The neuropsychology of paramedian thalamic infarction. Stuss DT, et al. **Brain Cogn** 1988 Dec;8(3):348–78

The case against the case against group studies. Zurif EB, et al. **Brain Cogn** 1989 Jul;10(2):237–55

The brain injury rehabilitation scale (BIRS): a measure of change during post-acute rehabilitation. Farmer JE, et al. **Brain Inj** 1988 Oct–Dec;2(4):323–31

Vocational evaluation of traumatic brain injury patients using the functional assessment inventory. Mysiw WJ, et al. **Brain Inj** 1989 Jan–Mar;3(1):27–34

Compensatory strategies in the language of closed head injured patients. Penn C, et al. **Brain Inj** 1988 Jan–Mar; 2(1):3–17

Aphasic and non-brain-damaged adults' knowledge of scripts for common situations. Armus SR, et al. **Brain Lang** 1989 Apr;36(3):518–28

Differential recovery in naming in bilingual aphasics. Junqué C, et al. **Brain Lang** 1989 Jan;36(1):16–22

Pure agraphia and Gerstmann's syndrome as a visuospatial-language dissociation: an experimental case study. Levine DN, et al. **Brain Lang** 1988 Sep;35(1):172–96

Pragmatic-mode mediation of sentence comprehension among aphasic bilinguals and hispanophones. Schnitzer ML. **Brain Lang** 1989 Jan;36(1):76–91

Three variant forms of subcortical aphasia in Chinese stroke patients. Yang BJ, et al. **Brain Lang** 1989 Jul;37(1):145–62

A neurodiagnostic approach to schizophrenia. Cleghorn JM. **Can J Psychiatry** 1988 Aug;33(6):555–61 (70 ref.)

Nonlinear changes in cognition with age and their neuropsychologic correlates. Albert M, et al. **Can J Psychol** 1987 Jun;41(2):141–57

Neuropsychological assessment of memory in the elderly [published erratum appears in Can J Psychol 1987 Sep;41(3):preceding 271] Read DE. **Can J Psychol** 1987 Jun;41(2):158–74

An investigation of cognitive function in relation to psychosocial variables in institutionalized old people. Winocur G, et al. **Can J Psychol** 1987 Jun;41(2):257–69

The value of a neuropsychiatric examination of children with complex severe epilepsy. Harvey I, et al. **Child Care Health Dev** 1988 Sep–Oct;14(5):329–40

Evaluation of preschool children with Down's syndrome in Cape Town using the Griffiths Scale of Mental Development. Neser PS, et al. **Child Care Health Dev** 1989 Jul–Aug;15(4):217–25

Effects of changing therapy on cognition of children in renal failure. Fennell RS 3d, et al. **Child Nephrol Urol** 1988–89; 9(4):211–9

Impairment of neuropsychological functions in children with medulloblastomas and astrocytomas in the posterior fossa. Riva D, et al. **Childs Nerv Syst** 1989 Apr;5(2):107–10

Primary thalamic malignant fibrous histiocytoma of the dominant hemisphere causing severe neuropsychological symptoms. Roosen N, et al. **Clin Neuropathol** 1989 Jan–Feb; 8(1):16–21

Neuropsychological follow-up of patients operated for aneurysms of the middle cerebral artery and posterior communicating artery. Barbarotto R, et al. **Cortex** 1989 Jun;25(2):275–88

Neuropsychological follow-up of patients operated for aneurysms of anterior communicating artery. Laiacona M, et al. **Cortex** 1989 Jun;25(2):261–73

Aetiological variation in the amnesic syndrome: comparisons using the Brown-Peterson task. Leng NR, et al. **Cortex** 1989 Jun;25(2):251–9

The effect of analytic versus holistic encoding instructions on hemispheric superiority. Magaro PA, et al. **Cortex** 1989 Jun;25(2):317–24

Location of lesions in Korsakoff's syndrome: neuropsychological and neuropathological data on two patients. Mayes AR, et al. **Cortex** 1988 Sep;24(3):367–88

Serial neuropsychological follow-up of a child following craniospinal irradiation. Bendersky M, et al. **Dev Med Child Neurol** 1988 Dec;30(6):816–20

Relationship between lead exposure indicators and neuropsychological performance in children. Bergomi M, et al. **Dev Med Child Neurol** 1989 Apr;31(2):181–90

Locomotor strategies preceding independent walking: prospective study of neurological and language development in 424 cases. Bottos M, et al. **Dev Med Child Neurol** 1989 Feb;31(1):25–34

Limb and oral praxic abilities of children with verbal sequencing deficits. Dewey D, et al. **Dev Med Child Neurol** 1988 Dec;30(6):743–51

Children with preschool minor neurodevelopmental disorders. V: Neurodevelopmental profiles at age 13. Gillberg IC, et al. **Dev Med Child Neurol** 1989 Feb; 31(1):14–24

The infant motor screen. Nickel RE, et al. **Dev Med Child Neurol** 1989 Feb;31(1):35–42

Brain potentials in a memory-scanning task. II. Effects of aging on potentials to the probes. Pratt H, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jun; 72(6):507–17

Motor speed is a contaminating factor in evaluating the "cognitive" effects of phenytoin. Dodrill CB, et al. **Epilepsia** 1989 Jul–Aug;30(4):453–7

Factors affecting the outcome of MMPI and neuropsychological assessments of psychogenic and epileptic seizure patients. Wilkus RJ, et al. **Epilepsia** 1989 May–Jun;30(3):339–47

Neuropsychological assessment of the transcallosal approach. Oepen G, et al. **Eur Arch Psychiatry Neurol Sci** 1988 Sep; 237(6):365–75

Neurodevelopmental screening of 5-year-old children [letter] Michelsson K, et al. **Eur J Pediatr** 1988 Aug; 147(6):664–5

Neuropsychological, electroencephalogram and brain computed tomography findings in motor neuron disease. Gallassi R, et al. **Eur Neurol** 1989;29(2):115–20

Cholinergic grafts in the neocortex or hippocampus of aged rats: reduction of delay-dependent deficits in the delayed non-matching to position task. Dunnett SB, et al. **Exp Neurol** 1988 Oct;102(1):57–64

Recognition of dementia in general practice: comparison of general practitioners' opinions with assessments using the mini-mental state examination and the Blessed dementia rating scale. Mant A, et al. **Fam Pract** 1988 Sep;5(3):184–8

Idiopathic headaches: a neuropsychological and computerized electromyographic study. Formisano R, et al. **Headache** 1988 Jul;28(6):426–9

Neuropsychological consequences of volatile substance abuse: a review. Chadwick OF, et al. **Hum Toxicol** 1989 Jul;8(4):307–12 (24 ref.)

Applications of cognitive testing to group therapies with the chronically mentally ill. Erickson RC. **Int J Group Psychother** 1989 Apr;39(2):223–35

The neuropsychological significance of a verbal-performance discrepancy with the Wechsler Intelligence Scale for Children-Revised. Batchelor ES, et al. **Int J Neurosci** 1989 Mar;45(1–2):33–9

A test of the multiple connections model of reading acquisition. Berninger VW, et al. **Int J Neurosci** 1988 Oct; 42(3–4):283–95 (70 ref.)

Neuropsychological correlates of urinary amine metabolites in Tourette's syndrome. Bornstein RA, et al. **Int J Neurosci** 1988 Sep;42(1–2):113–20

Neuropsychological factors associated with perceptual biases for emotional chimeric faces. Borod JC, et al. **Int J Neurosci** 1989 Mar;45(1–2):101–10

HRNB factors with simultaneous-successive marker variables. Brooks DA, et al. **Int J Neurosci** 1989 Jun; 46(3–4):157–60

Performance of schizophrenic patients on putative neuropsychological tests of frontal lobe function. Goldberg TE, et al. **Int J Neurosci** 1988 Sep;42(1–2):51–8

Test-retest reliability of the Reitan-Indiana Neuropsychological Test Battery for Children Aged 5 Through 8. Johnstone B, et al. **Int J Neurosci** 1988 Nov; 43(1–2):21–6

Statistical and diagnostic adequacy of a short form of the Halstead Category Test. Moehle KA, et al. **Int J Neurosci** 1988 Sep;42(1–2):107–12

Children as informants of neuropsychological symptomology: the child neuropsychological symptom inventory. Rattan AI, et al. **Int J Neurosci** 1989 Jun;46(3–4):161–6

A modified, event-related potential-based guilty knowledge test. Rosenfeld JP, et al. **Int J Neurosci** 1988 Sep; 42(1–2):157–61

Validity of the Luria-Nebraska language scales in aphasia. Ryan JJ, et al. **Int J Neurosci** 1988 Nov;43(1–2):75–80

Neuropsychiatric manifestations of obstructive sleep apnea: a review. Hudgel DW. **Int J Psychiatry Med** 1989; 19(1):11–22 (35 ref.)

Psychological factors in back pain: self-rated back pain. Lindal E. **Int J Rehabil Res** 1987;10(4 Suppl 5):248–58 (55 ref.)

Transient global amnesia: a large series with neuropsychological examination and a case-control study. Ghidoni E, et al. **Ital J Neurol Sci** 1988 Apr;Suppl 9:31–2

A comparison of 13-year-old boys with attention deficit and/or reading disorder on neuropsychological measures. McGee R, et al. **J Abnorm Child Psychol** 1989 Feb; 17(1):37–53

Self-reported delinquency, neuropsychological deficit, and history of attention deficit disorder. Moffitt TE, et al. **J Abnorm Child Psychol** 1988 Oct;16(5):553–69

Neuropsychological correlates of psychopathology in an unselected cohort of young adolescents. Frost LA, et al. **J Abnorm Psychol** 1989 Aug;98(3):307–13

The EASI: a self-administered screening test for cognitive impairment in the elderly. Horn L, et al. **J Am Geriatr Soc** 1989 Sep;37(9):848–55

Delirium induced by neuropsychological tests [letter] Rozzini R, et al. **J Am Geriatr Soc** 1989 Jul;37(7):666

Cognitive profile of Rett syndrome. Fontanesi J, et al. **J Child Neurol** 1988;3 Suppl:S20–4

Measuring the quality of life of cancer patients: psychometric properties of instruments. van Knippenberg FC, et al. **J Clin Epidemiol** 1988;41(11):1043–53 (67 ref.)

Isocapnic hypoxemia and neuropsychological functioning. Berry DT, et al. **J Clin Exp Neuropsychol** 1989 Mar; 11(2):241–51

Neuropsychological improvement versus practice effect following unilateral carotid endarterectomy in patients without stroke. Casey JE, et al. **J Clin Exp Neuropsychol** 1989 Aug;11(4):461–70

Development of a scale for assessment of agitation following traumatic brain injury. Corrigan JD. **J Clin Exp Neuropsychol** 1989 Mar;11(2):261–77

California Verbal Learning Test (CVLT) performance in severely head-injured and neurologically normal adult males. Crosson B, et al. **J Clin Exp Neuropsychol** 1988 Dec; 10(6):754–68

Relationship among CT scans, neurological exam, and neuropsychological test performance in right-brain-damaged stroke patients. Egelko S, et al. **J Clin Exp Neuropsychol** 1988 Oct;10(5):539–64

Neurobehavioral anomalies in neonates with seizures. Emory EK, et al. **J Clin Exp Neuropsychol** 1989 Mar;11(2):231–40

Discriminant validity of lateral sensorimotor tests in children. Francis DJ, et al. **J Clin Exp Neuropsychol** 1988 Dec; 10(6):779–99

Gradiental approach to neocortical functional organization. Goldberg E. **J Clin Exp Neuropsychol** 1989 Aug; 11(4):489–517 (100 ref.)

Longitudinal study of the early neuropsychological and cerebral metabolic changes in dementia of the Alzheimer type. Grady CL, et al. **J Clin Exp Neuropsychol** 1988 Oct; 10(5):576–96

Developmental aspects of linguistic and mnestic abilities in normal children. Halperin JM, et al. **J Clin Exp Neuropsychol** 1989 Aug;11(4):518–28

A response to Mapou. Kane RL, et al. **J Clin Exp Neuropsychol** 1989 Aug;11(4):589–95

Patterns of performance on the Fuld Object Memory Evaluation in elderly inpatients with depression or dementia. La Rue A. **J Clin Exp Neuropsychol** 1989 Aug; 11(4):409–22

Is Wilson's disease a dementing condition? Lang C. **J Clin Exp Neuropsychol** 1989 Aug;11(4):569–70

Neuropsychological findings in toxicometabolic confusional states. Lee GP, et al. **J Clin Exp Neuropsychol** 1988 Dec; 10(6):769–78

Unawareness of deficits in neuropsychological syndromes. McGlynn SM, et al. **J Clin Exp Neuropsychol** 1989 Mar; 11(2):143–205 (240 ref.)

Neuropsychological consequences of circulatory arrest with hypothermia—a case report. Newman S, et al. **J Clin Exp Neuropsychol** 1989 Aug;11(4):529–38

Links between clinical and experimental neuropsychology. Oscar-Berman M. **J Clin Exp Neuropsychol** 1989 Aug; 11(4):571–88 (48 ref.)

Selective Reminding Tests: a normative study of verbal learning in adults. Ruff RM, et al. **J Clin Exp Neuropsychol** 1989 Aug;11(4):539–50

Effect of simulated hearing loss on speech sounds perception. Schear JM, et al. **J Clin Exp Neuropsychol** 1988 Oct; 10(5):597–602

The relationship between learning disability, emotional disorders, and neuropsychology; some results and observations. Spreen O. **J Clin Exp Neuropsychol** 1989 Jan; 11(1):117–40

Rey-Auditory Verbal Learning and Rey-Osterrieth Complex Figure Design performance in Alzheimer's disease and closed head injury. Bigler ED, et al. **J Clin Psychol** 1989 Mar;45(2):277–80

Seashore Rhythm Test performance in patients with unilateral temporal lobe damage. Boone KB, et al. **J Clin Psychol** 1989 Jul;45(4):614–8

Screening for learning disabilities: a neuropsychological approach. Davis RD, et al. **J Clin Psychol** 1989 May; 45(3):423–9

A multifactor model of the Halstead-Reitan Neuropsychological Test Battery and its relationship to cognitive status and psychiatric diagnosis [published erratum appears in J Clin Psychol 1989 Jan;45(1):36] Fowler PC, et al. **J Clin Psychol** 1988 Nov;44(6):898–906

Inpatient Memory Impairment Scale: a cross-validation and extension study. Godfrey HP, et al. **J Clin Psychol** 1988 Sep;44(5):783–6

Performance of inattentive-overactive children on selected measures of prefrontal-type function. Gorenstein EE, et al. **J Clin Psychol** 1989 Jul;45(4):619–32

Prediction of the effects of mild head injury: a message about the Kennard Principle. Hart K, et al. **J Clin Psychol** 1988 Sep;44(5):780–2

The influence of age, education, IQ, gender, and alcohol abuse on Halstead-Reitan Neuropsychological Test Battery performance. Leckliter IN, et al. **J Clin Psychol** 1989 Jul; 45(4):484–512 (57 ref.)

Who needs cutting points? Lindeboom J. **J Clin Psychol** 1989 Jul;45(4):679–83

Differential effects on verbal-performance achievement levels on the WAIS-R as a function of progressive error rate on the Memory for Designs Test (MFD). Mandes E, et al. **J Clin Psychol** 1988 Sep;44(5):795–8

AIDS-related dementia: a case report of rapid cognitive decline. Morgan MK, et al. **J Clin Psychol** 1988 Nov; 44(6):1024–8

Measuring dementia: assessment of multiple deficit domains. O'Donnell BF, et al. **J Clin Psychol** 1988 Nov;44(6):916–23

Constructing overlapping cell tables to maximize the clinical usefulness of normative test data: rationale and an example from neuropsychology. Pauker JD. **J Clin Psychol** 1988 Nov;44(6):930–3

Pediatric malingering: the capacity of children to fake believable deficits on neuropsychological testing. Faust D, et al. **J Consult Clin Psychol** 1988 Aug;56(4):578–82

The premature aging hypothesis: old before its time? Kramer JH, et al. **J Consult Clin Psychol** 1989 Apr;57(2):257–62

Motivational effects on neuropsychological functioning: comparison of depressed versus nondepressed individuals. Richards PM, et al. **J Consult Clin Psychol** 1989 Jun; 57(3):396–402

Neuropsychological sequelae of central nervous system prophylaxis in survivors of childhood acute lymphoblastic leukemia. Said JA, et al. **J Consult Clin Psychol** 1989 Apr; 57(2):251–6

Neuropsychological test performance and the attention deficit disorders: clinical utility of the Luria-Nebraska Neuropsychological Battery-Children's Revision. Schaughency EA, et al. **J Consult Clin Psychol** 1989 Feb; 57(1):112–6

Neuropsychological testing: relevance for assessing children's learning disabilities. Taylor HG. **J Consult Clin Psychol** 1988 Dec;56(6):795–800 (47 ref.)

Comparison of the Halstead Category Test and the revised Category Test: comment on Russell and Levy. Vanderploeg RD, et al. **J Consult Clin Psychol** 1989 Apr; 57(2):315–8

Effects of sex and lesion locus on measures of intelligence. Whelan TB, et al. **J Consult Clin Psychol** 1988 Aug; 56(4):633–5

Neuropsychologic and academic functioning of children with sickle cell anemia. Fowler MG, et al. **J Dev Behav Pediatr** 1988 Aug;9(4):213–20

Cognitive disturbances in Parkinson's disease. Beatty WW, et al. **J Geriatr Psychiatry Neurol** 1989 Jan–Mar;2(1):22–33

Geographical knowledge in patients with Alzheimer's disease. Beatty WW, et al. **J Geriatr Psychiatry Neurol** 1989 Apr–Jun;2(2):76–82

Stage transitioning in the sensorimotor development of Down's syndrome infants. Dunst CJ. **J Ment Defic Res** 1988 Oct;32 (Pt 5):405–10

Neuropsychological evaluation of adults with Down's syndrome: patterns of selective impairment in non-demented old adults. Haxby JV. **J Ment Defic Res** 1989 Jun;33 (Pt 3):193–210

Conservatively treated patients with cerebral arteriovenous malformation: mental and physical outcome. Andersen EB, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep; 51(9):1208–12

Dementia and cognitive impairment in Parkinson's disease. Girotti F, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec; 51(12):1498–502

Topographic subtypes of tardive dyskinesia in schizophrenic patients aged less than 60 years: relationship to demographic, clinical, treatment, and neuropsychological variables. Gureje O. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1525–30

Does cognitive impairment in Parkinson's disease result from non-dopaminergic lesions? Pillon B, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):201–6

Comparison of the Westmead PTA Scale and the Glasgow Coma Scale as predictors of neuropsychological outcome following extremely severe blunt head injury [letter] Shores EA. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):126–7

Neuropsychological and neuroradiological correlates in Huntington's disease. Starkstein SE, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1259–63

Recovery from aphasia and neglect after subcortical stroke: neuropsychological and cerebral perfusion study. Vallar G, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct; 51(10):1269–76

Depth distribution of neuronal activity related to a visual reaction time task in the monkey prefrontal cortex. Sawaguchi T, et al. **J Neurophysiol** 1989 Feb;61(2):435–46

Neuropsychological evidence for multiple implicit memory systems: a comparison of Alzheimer's, Huntington's, and Parkinson's disease patients. Heindel WC, et al. **J Neurosci** 1989 Feb;9(2):582–7

A brief neurobehavioral exam useful for early detection of postoperative complications in neurosurgical patients. Cammermeyer M, et al. **J Neurosci Nurs** 1988 Oct; 20(5):314–23

Common pitfalls in the evaluation of developmental screening tests. Frankenburg WK, et al. **J Pediatr** 1988 Dec;113(6):1110–3

Early identification of developmental problems [editorial] Garfunkel JM. **J Pediatr** 1988 Dec;113(6):1113–4

The reliability and validity of the Mini-Mental State in a British community survey. O'Connor DW, et al. **J Psychiatr Res** 1989;23(1):87–96

Phonological transformations in Spanish-speaking aphasics. Ardila A, et al. **J Psycholinguist Res** 1989 Mar;18(2):163–80

Assessment scales for tardive dyskinesia. Bostrom AC.

J Psychosoc Nurs Ment Health Serv 1988 Jun;26(6):9–12
Predicting the Western Aphasia Battery Aphasia Quotient. Crary MA, et al. J Speech Hear Disord 1989 May; 54(2):163–6
Risk factors for neuropsychological impairment in alcoholics: antisocial personality, age, years of drinking and gender. Malloy P, et al. J Stud Alcohol 1989 Sep;50(5):422–6
Neuropsychological and neuropsychiatric findings in right hemisphere damaged patients. Motomura N, et al. Jpn J Psychiatry Neurol 1988 Dec;42(4):747–52
A new screening test for dementia. Otsuka T, et al. Jpn J Psychiatry Neurol 1988 Jun;42(2):223–9
Cognitive function during absence seizures. Sengoku A, et al. Jpn J Psychiatry Neurol 1988 Sep;42(3):558–9
Clinical–pathologic correlation in Huntington's disease: a neuropsychological and computed tomography study. Bamford KA, et al. Neurology 1989 Jun;39(6):796–801
Correlation of neuropsychological and MRI findings in chronic/progressive multiple sclerosis. Franklin GM, et al. Neurology 1988 Dec;38(12):1826–9
Human callosal function: MRI–verified neuropsychological functions. Gazzaniga MS, et al. Neurology 1989 Jul; 39(7):942–6
Regional metabolic correlates of Token test results in cortical and subcortical left hemispheric infarction. Karbe H, et al. Neurology 1989 Aug;39(8):1083–8
Hemispatial neglect [letter; comment] LeFever FF. Neurology 1989 Jul;39(7):1006. Comment on: Neurology 1988 Aug;38(8):1207–11
The Consortium to Establish a Registry for Alzheimer's Disease (CERAD). Part I. Clinical and neuropsychological assessment of Alzheimer's disease. Morris JC, et al. Neurology 1989 Sep;39(9):1159–65
Cognitive slowing in Parkinson's disease fails to respond to levodopa treatment: the 15–objects test. Pillon B, et al. Neurology 1989 Jun;39(6):762–8
Correlation of magnetic resonance imaging with neuropsychological testing in multiple sclerosis. Rao SM, et al. Neurology 1989 Feb;39(2 Pt 1):161–6
Selective attention in Alzheimer's disease: CSF correlates of behavioral impairments. Freed DM, et al. Neuropsychologia 1988;26(6):895–902
A signal processing component to Broca's aphasia functor deficits. Harris RA, et al. Neuropsychologia 1989; 27(5):599–605
Psycholinguistic diagnostic methods for focal cerebellar lesions. Babkina TI. Neurosci Behav Physiol 1988 Jul–Aug; 18(4):357–60
Partial section of the corpus callosum: focal signs and their recovery. Castro-Caldas A, et al. Neurosurgery 1989 Sep; 25(3):442–7
Cognitive outcome and quality of life one year after subarachnoid haemorrhage. McKenna P, et al. Neurosurgery 1989 Mar;24(3):361–7
Late magnetic resonance imaging related to neurobehavioral functioning after aneurysmal subarachnoid hemorrhage. Romner B, et al. Neurosurgery 1989 Sep;25(3):390–6; discussion 396–7
Denver Developmental Screening Test on children in the Well–Baby Clinic, Dr. Kariadi Hospital Semarang, Indonesia. Hariyono R, et al. Paediatr Indones 1987 May–Jun;27(5–6):85–92
Neuropsychology of posttraumatic stress disorder: a pilot study. Everly GS, et al. Percept Mot Skills 1989 Jun;68(3 Pt 1):807–10
Finger tapping: effects of trials and sessions. Gill DM, et al. Percept Mot Skills 1986 Apr;62(2):675–8
Attention deficit disorder psychosis: psychometric distinction from schizophrenia. Kay SR, et al. Percept Mot Skills 1986 Apr;62(2):510
Analysis of errors on the Trail Making Test. Klusman LE, et al. Percept Mot Skills 1989 Jun;68(3 Pt 2):1199–204
Speech Sounds Perception Test: nonrandom response locations form a logical fallacy in structure. Reddon JR, et al. Percept Mot Skills 1989 Aug;69(1):235–40
Automatic detection vs controlled search: a paper–and–pencil approach. Ruff RM, et al. Percept Mot Skills 1986 Apr;62(2):407–16
Correlation of two competence assessment methods in a geriatric population. Searight HR, et al. Percept Mot Skills 1989 Jun;68(3 Pt 1):863–72
Manual behavior, lateralization of manual skills and cognitive performance of preschool children. Smirni P, et al. Percept Mot Skills 1989 Feb;68(1):267–72
Prognosis of aphasia by fitting growth curves. Yamada K. Percept Mot Skills 1989 Jun;68(3 Pt 2):1147–50
Stability of Bayley Motor Scale scores in the first year of life. Coryell J, et al. Phys Ther 1989 Oct;69(10):834–41
Behavioral assessment and treatment of the brain–injured patient. Webster JS, et al. Prog Behav Modif 1988;22:48–87 (130 ref.)
Neuropsychiatric sequellae of traumatic brain injury in children and adolescents. Parmelee DX. Psychiatr Med 1989;7(1):11–6 (20 ref.)
The neuropsychological aspects of HIV–1 spectrum disease. Van Gorp WG, et al. Psychiatr Med 1989;7(2):59–78 (46 ref.)
Luria–Nebraska performance and symptomatology in unmedicated schizophrenic patients. Faustman WO, et al. Psychiatry Res 1988 Oct;26(1):29–34
The spectrum of structural brain changes in schizophrenia: age of onset as a predictor of cognitive and clinical impairments and their cerebral correlates. Johnstone EC, et al. Psychol Med 1989 Feb;19(1):91–103
Vasopressin levels in CSF of Alzheimer patients: correlations with monoamine metabolites and neuropsychological test performance. Jolkkonen J, et al. Psychoneuroendocrinology 1989;14(1–2):89–95
A psychiatric study of 247 liver transplantation candidates. Trzepacz PT, et al. Psychosomatics 1989 Spring; 30(2):147–53
Normative data for eight neuropsychological tests based on a Danish sample. Nielsen H, et al. Scand J Psychol 1989; 30(1):37–45
Probing prefrontal function in schizophrenia with neuropsychological paradigms. Goldberg TE, et al. Schizophr Bull 1988;14(2):179–83 (17 ref.)
[Neuropsychologic study of a psycho–organic syndrome secondary to idiopathic hypoparathyroidism: apropos of a case] Everett J, et al. Psychiatr J Univ Ottawa 1988 Nov; 13(4):208–11 (Eng. Abstr.) (Fre)
[Alzheimer's disease and Parkinson's disease: neuropsychological differentiation] Lavernhe G, et al. Rev Neurol (Paris) 1989;145(1):24–30 (56 ref.) (Eng. Abstr.) (Fre)
[Cerebral blood flow deficit and thalamic infarcts. Topographic and neuropsychological confrontations] Rousseaux M, et al. Rev Neurol (Paris) 1989;145(2):140–7 (Eng. Abstr.) (Fre)
[Neuropsychiatric disorders in newborn infants with very low birth weight (VLBW infants)—before and following introduction of modern perinatal medicine. 1. Overview of the problem, criteria for quality of survival, major CNS disorders (major handicap)] Zielonka VS, et al. Kinderarztl Prax 1989 Jun;57(6):255–61 (Eng. Abstr.) (Ger)
[Disorders of regional cerebrovascular circulation and neuropsychological findings in dementia of the Alzheimer type] Broich K, et al. Nervenarzt 1989 Mar;60(3):141–8 (Ger)
[Hypoxic amnesia following heart arrest. A neuropsychological case study] Drühe CM, et al. Nervenarzt 1989 May;60(5):280–3 (Ger)
[Comment on the contribution by L. Hermle and G. Oepen. Hemispheric laterality and early childhood autism] Durwen HF. Nervenarzt 1989 Jun;60(6):370 (Ger)
[Neuropsychological and psychosocial aspects of surgical therapy of epilepsy] Durwen HF, et al. Nervenarzt 1989 Jan;60(1):10–6 (50 ref.) (Eng. Abstr.) (Ger)
[Suicide attempts in diabetic patients with insulin and their neuropsychiatric sequelae] Hambrecht M, et al. Nervenarzt 1989 Jun;60(6):367–9 (Ger)
[Neuropsychological disorders in Parkinson disease. Relations to psychomotor inhibition and obsessive–compulsive disease] Lees AJ. Nervenarzt 1989 Feb;60(2):71–9 (64 ref.) (Ger)
[Is there a specific cerebral organic psychosyndrome following craniocerebral trauma in childhood and adolescence? Neuropsychological and psychopathologic results] Lehmkuhl G, et al. Nervenarzt 1989 Feb; 60(2):106–14 (Eng. Abstr.) (Ger)
[Psychiatric symptoms and neuropsychologic manifestations in HIV–infected patients] Naber D, et al. Nervenarzt 1989 Feb;60(2):80–5 (Ger)
[Expert assessment of neuropsychiatric symptoms in HIV–infected patients] von Oefele K. Off Gesundheitswes 1989 Feb;51(2):84–8 (Eng. Abstr.) (Ger)
[Neuropsychologic study procedures in the diagnosis of brain–damaged children] Frühauf K. Padiatr Grenzgeb 1988;27(3):165–74 (35 ref.) (Eng. Abstr.) (Ger)
[The pathogenesis of reading–writing weakness] von Suchodoletz W, et al. Padiatr Grenzgeb 1988;27(5):373–9 (Eng. Abstr.) (Ger)
[Brain structure and brain function in anorexia nervosa: a computerized tomography study] Krieg JC, et al. Psychother Psychosom Med Psychol 1989 Jul;39(7):256–9 (Eng. Abstr.) (Ger)
[Movement patterns of demented and non–demented nursing home patients using the Involuntary Movements and Extrapyramidal Scale. Effects of pharmacotherapy] Schönenberger PM, et al. Schweiz Arch Neurol Psychiatr 1989;140(2):147–57 (Eng. Abstr.) (Ger)
[Psychological changes following whiplash injury of the cervical vertebrae] Radanov BP, et al. Schweiz Med Wochenschr 1989 Apr 29;119(17):536–43 (Eng. Abstr.) (Ger)
[Psychometric and psychophysiologic studies in AIDS patients with reference to the "declining performance syndrome"—level reduction] Grünberger J, et al. Wien Med Wochenschr 1989 Apr 30;139(8):175–8 (Eng. Abstr.) (Ger)
[Measuring the age dependent psychophysical functional status of elderly humans] Kühne KD, et al. Z Arztl Fortbild (Jena) 1989;83(8):419–22 (0 ref.) (Ger)
[The Tree and Figure Test as a diagnostic aid in geriatric patients] Böger J. Z Gerontol 1988 Jul–Aug;21(4):232–6 (Eng. Abstr.) (Ger)
[Continuous pattern recognition in the assessment of memory disorders in dementia] Lang C. Z Gerontol 1989 Jan–Feb; 22(1):49–53 (Eng. Abstr.) (Ger)
[Theoretical test problems in the diagnosis of brain damage in childhood exemplified by the validity of neuropsychological test procedures] Rees UM, et al. Z Kinder Jugenpsychiatr 1989 Mar;17(1):17–22 (41 ref.) (Ger)
[The significance of neuropsychological test batteries for the diagnosis of disorders of brain function in childhood] Schulze C, et al. Z Kinder Jugenpsychiatr 1989 Mar; 17(1):23–30 (53 ref.) (Ger)
[The effect of hyperbilirubinemia and phototherapy on the behavior organization of newborn infants] Schedle A, et al. Z Klin Psychol Psychopathol Psychother 1988; 36(1):34–45 (Eng. Abstr.) (Ger)
[Neuropsychiatric–psychological findings in patients with hypophyseal adenoma following trans–sphenoidal surgery] Pittasch D, et al. Zentralbl Neurochir 1988;49(3):202–5 (Eng. Abstr.) (Ger)
[Effect of the position and size of the postoperative brain defect on psychological outcome] Pittasch D, et al. Zentralbl Neurochir 1988;49(4):298–309 (Eng. Abstr.) (Ger)
[Audiological and neuropsychological development study in a sample of school children from a low–iodine area of the Central Apennines that is endemic for cretinism] Donati L, et al. Minerva Endocrinol 1989 Apr–Jun;14(2):99–103 (Eng. Abstr.) (Ita)

INSTRUMENTATION

Repeated automated assessment of abstinent male alcoholics: essential fatty acid supplementation and age effects. Skinner FK, et al. Alcohol Alcohol 1989;24(2):129–39
An improved optical eye movement detector for visual half–field studies of cerebral hemisphere memory. Lindahl O, et al. J Med Eng Technol 1988 May–Jun;12(3):106–11
Selective visual attention in Alzheimer's and Parkinson's patients: memory– and data–driven control. Cossa FM, et al. Neuropsychologia 1989;27(6):887–92
Psychology of computer use: IX. A menu of self–administered microcomputer–based neurotoxicology tests. Kennedy RS, et al. Percept Mot Skills 1989 Jun;68(3 Pt 2):1255–72
[The diagnostic value of computer–assisted psychometric procedures] Krause A, et al. Psychiatr Neurol Med Psychol (Leipz) 1988 Sep; 40(9):537–41 (Eng. Abstr.) (Ger)
[The computer as an aid in attention training—a clinico–experimental study] Lamberti G, et al. Rehabilitation (Stuttg) 1988 Nov;27(4):190–8 (Eng. Abstr.) (Ger)
[Increasing mental performance by multistep oxygen therapy. Computer–assisted measurements of information processing capacity, intelligence, short–term memory and further parameters of cerebral performance] von Ardenne M, et al. ZFA 1989 Jan–Feb;44(1):37–48 (Eng. Abstr.) (Ger)

METHODS

The accuracy of the dichotic, the visual half–field, and the intracarotid sodium amytal memory tests in preoperative neuropsychological investigation of epileptic patients. Nilsson LG, et al. Acta Neurol Scand Suppl 1988;117:73–8 (25 ref.)
The verbal selective reminding test: preliminary data for healthy elderly. Banks PG, et al. Exp Aging Res 1987 Winter;13(4):203–7
Clock drawing in Alzheimer's disease. A novel measure of dementia severity. Sunderland T, et al. J Am Geriatr Soc 1989 Aug;37(8):725–9
Screening for Alzheimer's disease by clock drawing. Wolf–Klein GP, et al. J Am Geriatr Soc 1989 Aug; 37(8):730–4
The right stuff: advanced methods in neuropsychology today. Adams KM. J Clin Exp Neuropsychol 1988 Oct; 10(5):659–63 (8 ref.)
When diagnostic agreement is high, but reliability is low: some paradoxes occurring in joint independent neuropsychology assessments. Cicchetti DV. J Clin Exp Neuropsychol 1988 Oct;10(5):605–22
An introduction to structural equation models. Francis DJ. J Clin Exp Neuropsychol 1988 Oct;10(5):623–39 (35 ref.)
Classification in neuropsychology: a theoretical framework and research paradigm. Morris RD, et al. J Clin Exp Neuropsychol 1988 Oct;10(5):640–58 (20 ref.)
Statistical and methodological issues in the design of neuropsychological research. Rourke BP. J Clin Exp Neuropsychol 1988 Oct;10(5):603–4
Evaluating evidence for automaticity in frequency of occurrence judgments: a bias for bias? Tweedy JR, et al. J Clin Exp Neuropsychol 1988 Oct;10(5):664–74
Optimal tempo for the random number generation test. Okura M, et al. Tokushima J Exp Med 1987 Dec;34(3–4):71–3
[Application and evaluation of the complex figure test in patients with brain lesions] Tang CM. Chung Hua Shen Ching Ching Shen Ko Tsa Chih 1988 Dec; 21(6):321–5, 384 (Eng. Abstr.) (Chi)
[The configuration frequency analysis. Victor's singular types and syndromes] Dunki E, et al. Z Klin Psychol Psychopathol Psychother 1989;37(2):139–45 (Eng. Abstr.) (Ger)
[Detection of cerebral damage in a Spanish–speaking population using neuropsychologic evaluation] Quintanar L, et al. Rev Invest Clin 1988 Oct–Dec;40(4):379–84 (Eng. Abstr.) (Spa)

STANDARDS

Inter-rater reliability of the Crichton Geriatric Behavioural Rating Scale. Cole MG. **Age Ageing** 1989 Jan;18(1):57–60

Neuropsychological screening of aviators: a review. Banich MT, et al. **Aviat Space Environ Med** 1989 Apr;60(4):361–6 (67 ref.)

Inter-rater reliability of the Rey figure copying test. Carr EK, et al. **Br J Clin Psychol** 1988 Sep;27 (Pt 3):267–8

Defining measurement precision for effort dependent tests: the case of three neurobehavioural tests [published erratum appears in Int J Epidemiol 1989 Jun;18(2):476] Eisen EA, et al. **Int J Epidemiol** 1988 Dec;17(4):920–6

Quality of life measurement: a psychometric tower of Babel. Mor V, et al. **J Clin Epidemiol** 1988;41(11):1055–8

Item reliability of the Milani-Comparetti Motor Development Screening Test. Stuberg WA, et al. **Phys Ther** 1989 May;69(5):328–35

NEUROPSYCHOLOGY

International Neuropsychological Society. Program and abstracts. 12th European conference. July 5–8, 1989, Antwerp, Belgium. **J Clin Exp Neuropsychol** 1989 May; 11(3):333–408

[Developmental aspects in child psychiatry and child neurology] Verhulst FC. **Ned Tijdschr Geneeskd** 1989 Feb 4;133(5):193–5 **(Dut)**

[The motives for the participation in work processes of severely mentally retarded persons at a psychoneurology boarding house] Dement'eva NF, et al. **Zh Nevropatol Psikhiatr** 1988;88(10):97–102 (Eng. Abstr.) **(Rus)**

[Modern social care institutions and their neuropsychiatric needs] Nikolić V. **Med Pregl** 1988;41(3–4):151–4 (Eng. Abstr.) **(Scr)**

HISTORY

[Medicine and the psychophysical problem (the history of relations between medicine and philosophy in the modern era)] Kulczycki J. **Arch Hist Filoz Med** 1988;51(3):301–17 (Eng. Abstr.) **(Pol)**

TRENDS

Our changing science. Shapiro T. **J Am Psychoanal Assoc** 1989;37(1):3–6

Neuropsychology and the neurochemical lesion: evolution, applications and extensions. Hartman DE. **Neurotoxicology** 1988 Fall;9(3):401–4

NEURORADIOGRAPHY

ASNR Presidential Address, 1988. Huckman MS. **AJNR** 1988 Sep;9(5):995–7

Neuroradiology [editorial] Calabro A. **Neuroradiology** 1989; 31(1):1–2

EDUCATION

Training in interventional neuroradiology. Taveras JM. **AJNR** 1989 Sep–Oct;10(5):909–10

METHODS

[Use of a chlordemethyldiazepam-fentanyl combination in invasive neuroradiologic examinations] Scafuro M, et al. **Minerva Anestesiol** 1988 Sep;54(9):363–6 (Eng. Abstr.) **(Ita)**

NEURORECEPTORS see **RECEPTORS, SENSORY**

NEUROREGULATOR RECEPTORS see **RECEPTORS, NEUROHUMOR**

NEUROREGULATORS

see related
NEUROIMMUNOMODULATION
SLOW-REACTING SUBSTANCES

Histaminergic neuron system and its function. Wada H, et al. **Adv Exp Med Biol** 1988;236:343–57

Systemic and coronary hemodynamic and neurohumoral effects of levodopa in chronic congestive heart failure. De Marco T, et al. **Am J Cardiol** 1988 Dec 1;62(17):1228–33

Studies on the ionic mechanism for the neuromodulatory actions of adenosine in the brain. Michaelis ML, et al. **Brain Res** 1988 Nov 15;473(2):249–60

Serotonin as a neurotransmitter: a review. Folk GE Jr, et al. **Comp Biochem Physiol [C]** 1988;91(1):251–7 (27 ref.)

Evidence for adenosine triphosphate as an excitatory transmitter in guinea-pig, rabbit and pig urinary bladder. Fujii K. **J Physiol (Lond)** 1988 Oct;404:39–52

Using caged neurotransmitters. Marque JJ. **Nature** 1989 Feb 9;337(6207):583–4

Substance P as a transmitter in the human ciliary muscle. Lograno MD, et al. **Pharmacol Res Commun** 1988 Oct; 20(10):901–5

New evidence that L-glutamate is a transmitter at the squid giant synapse. De Santis A, et al. **Q J Exp Physiol** 1989 Mar;74(2):219–22

[Neuropeptide Y (NPY): functions and biosynthesis as a peptidergic neurotransmitter and the regulation of neuron-specific expression of NPY gene] Higuchi H. **Nippon Yakurigaku Zasshi** 1989 Apr;93(4):203–18 (106 ref.) (Eng. Abstr.) **(Jpn)**

[Pain and chemical transmitters] Otsuka M. **Rinsho Shinkeigaku** 1988 Dec;28(12):1367–9 (Eng. Abstr.) **(Jpn)**

[Neuromodulation by second messengers] Higashida H. **Yakubutsu Seishin Kodo** 1988 Dec;8(4):493–6 **(Jpn)**

ADVERSE EFFECTS

The overshoot effect of intracerebral transplants [letter] Cassel JC, et al. **Ann Neurol** 1988 Nov;24(5):695–6

ANALYSIS

Antibodies against neuroactive amino acids and neuropeptides. A new two-step-procedure for the preparation of carrierprotein linked amino compounds. Meyer KH, et al. **Acta Histochem Suppl (Jena)** 1989; 37:187–8

Antibodies against neuroactive amino acids and neuropeptides. Combination of acetylcholinesterase cytochemistry with immunocytochemical double staining techniques for the demonstration of GABA and glutamate like immunoreactivities in thalamus, hippocampus, cerebellar and cerebral cortex of the rat. Veh RW, et al. **Acta Histochem Suppl (Jena)** 1989;37:189–90

Core and paracores; some new chemoarchitectural entities in the mammalian neuraxis. Nieuwenhuys R, et al. **Acta Morphol Neerl Scand** 1988–89;26(2–3):131–63 (145 ref.)

Neurotransmitters, receptors and neuropeptides in post-mortem brains of chronic schizophrenic patients. Toru M, et al. **Acta Psychiatr Scand** 1988 Aug;78(2):121–37

Dementia, parkinsonism, and motor neuron disease: neurochemical and neuropathological correlates. Gilbert JJ, et al. **Ann Neurol** 1988 Nov;24(5):688–91

Brain neurotransmitters in glycine encephalopathy. Kish SJ, et al. **Ann Neurol** 1988 Sep;24(3):458–61

Amino acid neurotransmitters and their receptors in the brain synaptosomes of acute hepatic failure rats. Watanabe A, et al. **Biochem Med Metab Biol** 1988 Dec;40(3):247–52

Applications of modified electrodes in the voltammetric determination of catecholamine neurotransmitters. Coury LA Jr, et al. **Biotechnology** 1989;11:1–37 (158 ref.)

Putative neurotransmitters in the rat cochlea at several ages. Hoffman DW, et al. **Brain Res** 1988 Sep 20;460(2):366–8

Temporal sequence of neurotransmitter expression by developing neurons of fetal monkey visual cortex. Huntley GW, et al. **Brain Res** 1988 Sep 1;471(1):69–96

Developmental changes of neuropeptides and amino acids in baboon cortex. Beal MF, et al. **Brain Res Dev Brain Res** 1988 Nov 1;44(1):156–9

Biological markers of suicide risk and adolescent suicide. Cohen LS, et al. **Clin Neuropharmacol** 1988 Oct; 11(5):423–35 (104 ref.)

Drosophila embryonic neuroblasts in culture: autonomous differentiation of specific neurotransmitters. Huff R, et al. **Dev Biol** 1989 Jul;134(1):146–57

Coexistence of peptides with classical neurotransmitters. Hökfelt T, et al. **Experientia Suppl** 1989;56:154–79 (150 ref.)

An increased pool of secretory hormones and peptides in adrenal medulla of stroke-prone spontaneously hypertensive rats. Schober M, et al. **Hypertension** 1989 May;13(5):469–74

High-performance liquid chromatographic analysis of neurotransmitter amino acids in brain. Durkin TA, et al. **J Chromatogr** 1988 Jun 24;428(1):9–15

Perfluorinated acids as ion-pairing agents in the determination of monoamine transmitters and some prominent metabolites in rat brain by high-performance liquid chromatography with amperometric detection. Patthy M, et al. **J Chromatogr** 1988 Sep 30;449(1):191–205

Monoaminergic neurotransmitters in Alzheimer's disease. An HPLC study comparing presenile familial and sporadic senile cases. Herregodts P, et al. **J Neurol Sci** 1989 Aug; 92(1):101–16

Quantitative immunocytochemistry using an image analyzer. II. Concentration standards for transmitter immunocytochemistry. Nabors LB, et al. **J Neurosci Methods** 1988 Nov;26(1):25–34

Neurotransmitter phenotype plasticity in cultured dissociated adult rat dorsal root ganglia: an immunocytochemical study. Schoenen J, et al. **J Neurosci Res** 1989 Apr; 22(4):473–87

Neurochemical findings in neuroacanthocytosis. de Yebenes JG, et al. **Mov Disord** 1988;3(4):300–12

Age-related changes in multiple neurotransmitter systems in the monkey brain. Wenk GL, et al. **Neurobiol Aging** 1989 Jan–Feb;10(1):11–9 (50 ref.)

Peptide- and transmitter-containing neurons in the mediobasal hypothalamus and their relation to GABAergic systems: possible roles in control of prolactin and growth hormone secretion. Meister B, et al. **Synapse** 1988; 2(6):585–605

Comparative study of amino acid composition in an extract from hornet venom sacs: high content of neuroactive amino acids in Vespa. Abe T, et al. **Toxicon** 1989;27(6):683–8

[Neurotransmitters of giant neurons in the African giant snail, Achatina fulica Férussac. IV. Supplemental results] Takeuchi H, et al. **C R Soc Biol (Paris)** 1988;182(4):425–32 (Eng. Abstr.) **(Fre)**

[Neuromodulators and Alzheimer's disease] Vallet PG, et al. **Encephale** 1988 Sep–Oct;14(5):345–51 (123 ref.) (Eng. Abstr.) **(Fre)**

[Chemical neuroanatomy of the human spinal cord] Schoenen J. **Rev Neurol (Paris)** 1988;144(11):630–42 (60 ref.) (Eng. Abstr.) **(Fre)**

[The regulatory effect of VIP on exploratory behavior of the rat and on the neuromediator level in the normal brain and in frontal lobectomy] Romanova GA, et al. **Fiziol Zh SSSR** 1989 May;75(5):670–6 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Excitatory amino acid receptors intrinsic to synaptic transmission in nucleus tractus solitarii. Miller BD, et al. **Brain Res** 1988 Jul 26;456(2):333–43

Antagonist activity of the cyclic somatostatin analogue CTP at mu- but not delta- and kappa-opioid receptors involved in presynaptic inhibition of neurotransmitter release. Mulder AH, et al. **Eur J Pharmacol** 1988 Nov 15; 157(1):109–14

Opiate and peptide inhibition of transmitter release in parasympathetic nerve terminals. Gray DB, et al. **J Neurosci** 1989 May;9(5):1683–92

Effects of transmitter antagonists on monopolar postsynaptic potentials. Straka H, et al. **Naturwissenschaften** 1988 Oct; 75(10):521–3

Possible role of carbamates in neurotoxicity and neurotransmitter inactivation. Mroz EA. **Science** 1989 Mar 24;243(4898):1615

BIOSYNTHESIS

The control of aromatic amino acid catabolism and its relationship to neurotransmitter amine synthesis. Pogson CI, et al. **Crit Rev Neurobiol** 1989;5(1):29–64 (275 ref.)

Increased neurotransmitter biosynthesis in phenylketonuria induced by phenylalanine restriction or by supplementation of unrestricted diet with large amounts of tyrosine. Lykkelund C, et al. **Eur J Pediatr** 1988 Dec;148(3):238–45

Aspartate aminotransferase for synthesis of transmitter glutamate in the medulla oblongata: effect of aminooxyacetic acid and 2-oxoglutarate. Kihara M, et al. **J Neurochem** 1989 Apr;52(4):1127–34

Regulation of tryptophan and tyrosine hydroxylase. Lovenberg W, et al. **Life Sci** 1974 Jun 16;14(12):2337–53 (55 ref.)

Biosynthesis of peptide neurotransmitters: studies on the formation of peptide amides. Bradbury AF, et al. **Physiol Bohemoslov** 1988;37(3):267–74

Partial purification and characterization of a membrane-derived factor regulating neurotransmitter phenotypic expression. Adler JE, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1080–3

Brain monoamine oxidase (MAO) B: a unique neurotoxin and neurotransmitter producing enzyme. Youdim MB. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3–4):363–71 (41 ref.)

BLOOD

Hemodynamic, antiischemic, and neurohumoral effects of enoximone in patients with coronary artery disease. Mitrovic V, et al. **Am Heart J** 1989 Jan;117(1):106–11

Neurohumoral changes during onset and offset of ovine heart failure: role of ANP. Fitzpatrick MA, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1052–9

Alterations in circulating neurotransmitters & cortisol with severity of breast cancer. Banu N, et al. **Indian J Med Res** 1988 May;87:479–53

A revised interpretation of the TRH test results in female depressed patients. Part II: Prolactin responses. Relationships with sex hormones, corticosteroid state, age, monoamines and amino acid levels. Maes M, et al. **J Affective Disord** 1989 Mar–Jun;16(2–3):215–21

Neurotransmitter systems and personality measurements: a study in psychosomatic patients and healthy subjects. Arqué JM, et al. **Neuropsychobiology** 1988;19(3):149–57

Endocrine parameters and biogenic amines in relationship to psychopathology after cholinergic drug challenge (RS-86). Fritze J, et al. **Psychiatry Res** 1988 Sep; 25(3):339–48

CEREBROSPINAL FLUID

Myoclonic encephalopathy due to bismuth salts: treatment with dimercaprol and analysis of CSF transmitters. Molina JA, et al. **Acta Neurol Scand** 1989 Mar;79(3):200–3

Baseline studies on transmitter substances in cerebrospinal fluid in depression. Gjerris A. **Acta Psychiatr Scand Suppl** 1988;346:1–35 (178 ref.)

Do concentrations of neurotransmitters in lumbar CSF reflect cerebral dysfunction in depression? Gjerris A. **Acta Psychiatr Scand Suppl** 1988;345:21–4

Corrections to a 1980 article on CSF monoamine metabolites [letter] Faull KF, et al. **Am J Psychiatry** 1989 Jan;146(1):118

CSF neurochemical study of tardive dyskinesia. Lu RB, et al. **Biol Psychiatry** 1989 Mar 15;25(6):717–24

CSF gradients for amino acid neurotransmitters. Crawford PM, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep; 51(9):1193–200

Hydrocephalus-induced changes in the composition of cerebrospinal fluid. Del Bigio MR. **Neurosurgery** 1989 Sep; 25(3):416–23 (152 ref.)

Analysis of equine cisterna magna cerebrospinal fluid for the presence of some monoamine neurotransmitters and transmitter metabolites. Vaughn DM, et al. **Vet Res Commun** 1989;13(3):237–49

CLASSIFICATION

[Atrial natriuretic factor—a new neuropeptide?] Januszewicz P, et al. **Przegl Lek** 1988;45(9):684–6 (26 ref.) (Pol)

IMMUNOLOGY

Serotonin and peptide immunoneuromodulators: recent discoveries and new ideas. Silverman DH, et al. **Adv Enzymol** 1989;62:203–26 (92 ref.)

ISOLATION & PURIFICATION

Isolation, separation and analysis in neurochemistry: trace amines and acids as an illustrative example. Boulton AA, et al. **J Chromatogr** 1989 Mar 17;488(1):129–43 (37 ref.)

Single-step purification of two hyperglycaemic neurohormones from the sinus gland of Procambarus bouvieri. Comparative peptide mapping by means of high-performance liquid chromatography. Huberman A, et al. **J Chromatogr** 1988 Jun 29;443:337–42

METABOLISM

Synaptic and non-synaptic communication in the brain: morphological, physiological and behavioral aspects. Proceedings of a workshop. Nijmegan, The Netherlands, November 29, 1988. **Acta Morphol Neerl Scand** 1988–89; 26(2–3):65–190

Synaptic and nonsynaptic release of neuromediators in the central nervous system. Buma P. **Acta Morphol Neerl Scand** 1988–89;26(2–3):81–113 (65 ref.)

Issues involved in the transmission of chemical signals through the brain extracellular space. Nicholson C. **Acta Morphol Neerl Scand** 1988–89;26(2–3):69–80 (38 ref.)

Neurotransmitter deficits in a non-multi-infarct category of vascular dementia. Wallin A, et al. **Acta Neurol Scand** 1989 May;79(5):397–406

Early stages of late onset Alzheimer's disease. Diagnostic criteria, protein metabolism, precursor loading effects, neurochemical and neuropsychological applications. Forssell LG, et al. **Acta Neurol Scand Suppl** 1989;121:1–95

Immunohistochemical demonstration of neuroactive substances in the inner ear of rat and guinea pig. Ylikoski J, et al. **Acta Otolaryngol (Stockh)** 1989 May-Jun; 107(5–6):417–23

Amphetamine stereotypy in cats and neurotransmitter interactions in the caudate nucleus. I. Effects of intracaudate injections of haloperidol, GABA and bicuculline. Moyanova SG, et al. **Acta Physiol Pharmacol Bulg** 1989;15(1):54–62

In vivo PET and SPECT receptor imaging: new technology and tactics for receptor measurement. Wong DF, et al. **Adv Exp Med Biol** 1988;236:181–93 (22 ref.)

Acetaldehyde-induced alterations in metabolism of monoamines in mouse brain. Hashimoto T, et al. **Alcohol Alcohol** 1989;24(2):91–9

Neurochemical abnormalities of anorexia nervosa and bulimia nervosa. Fava M, et al. **Am J Psychiatry** 1989 Aug; 146(8):963–71 (98 ref.)

A rostrocaudal gradient for neurotransmitter metabolites and a caudorostral gradient for protein in canine cerebrospinal fluid. Vaughn DM, et al. **Am J Vet Res** 1988 Dec; 49(12):2134–7

A superfusion system designed to measure release of radiolabeled neurotransmitters on a subsecond time scale. Turner TJ, et al. **Anal Biochem** 1989 Apr;178(1):8–16

Quantitative electron microscopic immunocytochemistry of neuroactive amino acids. Ottersen OP. **Anat Embryol (Berl)** 1989;180(1):1–15 (87 ref.)

Immunocytochemical analysis of potential neurotransmitters present in the myenteric plexus and muscular layers of the corpus of the guinea pig stomach. Mawe GM, et al. **Anat Rec** 1989 Jul;224(3):431–42

Do carbohydrates affect food intake via neurotransmitter activity? Wurtman RJ, et al. **Appetite** 1988;11 Suppl 1:42–7 (24 ref.)

Subclinical effects of groundwater contaminants. II. Alteration of regional brain monoamine neurotransmitters by benzene in CD-1 mice. Hsieh GC, et al. **Arch Environ Contam Toxicol** 1988 Nov;17(6):799–805

The search for a biochemistry of memory. Chapouthier G. **Arch Gerontol Geriatr Suppl** 1989;1:7–19 (67 ref.)

Staurosporine counteracts the phorbol ester-induced enhancement of neurotransmitter release in hippocampus. Daschmann B, et al. **Arch Int Pharmacodyn Ther** 1988 Nov-Dec;296:232–45

Effect of ergolines on neurotransmitter systems in the rat brain. Moretti A, et al. **Arch Int Pharmacodyn Ther** 1988 Jul-Aug;294:33–45

Relationship between prostaglandin synthesis and release of acidic amino acid neurotransmitters. Terrian DM, et al. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 2):A2–9

Reconstitution and partial purification of the sodium and chloride-coupled glycine transporter from rat spinal cord. Lopez-Corcuera B, et al. **Biochim Biophys Acta** 1989 Aug 7;983(2):247–52

Chronic effects of tranylcypromine and 4-fluorotranylcypromine on regional brain monoamine metabolism in rats: a comparison with clorgyline. Greenshaw AJ, et al. **Biol Psychiatry** 1989 Apr 15; 25(8):1014–20

Prevention of cardiac arrhythmias by adaptation to hypoxia: regulatory mechanisms and cardiotropic effect. Meerson FZ, et al. **Biomed Biochim Acta** 1989;48(2–3):S83–8

Effect of the N-terminal tetrapeptide of substance P SP (1–4) and tuftsin on the pre- and postsynaptic transmitter outflow in rat adrenal gland slices. Nieber K, et al. **Biomed Biochim Acta** 1988;47(7):663–6

Beta-adrenoceptor stimulation enhances transmitter output from the rat phrenic nerve. Wessler I, et al. **Br J Pharmacol** 1988 Jul;94(3):669–74

The effect of an uptake inhibitor (dihydrokainate) on endogenous excitatory amino acids in the lamprey spinal cord as revealed by microdialysis. Brodin L, et al. **Brain Res** 1988 Aug 16;458(1):166–9

Neurotransmitter abnormalities in Borna disease. Lipkin WI, et al. **Brain Res** 1988 Dec 20;475(2):366–70

Changes in neurotransmitter turnover in locus coeruleus produced by changes in arterial blood pressure. Bhaskaran D, et al. **Brain Res Bull** 1988 Aug;21(2):191–9

Platelet-activating factor: lack of direct action on guinea pig myocardium and possible transmitter release from cardiac sympathetic nerve endings at high concentrations. Shigenobu K, et al. **Can J Physiol Pharmacol** 1989 Jun; 67(6):669–74

Inhibition of transmitter release from sympathetic nerve endings by omega-conotoxin. Brock JA, et al. **Clin Exp Pharmacol Physiol** 1989 Apr;16(4):333–9

Effect of ethanol on the maturation of the spontaneous transmitter release by regenerated nerve endings. Cuppini R. **Drug Alcohol Depend** 1989 Jan;23(1):87–92

Influence of age on effects induced by intermittent ethanol treatment on the ethanol drinking pattern and related neurochemical changes in the rat. Wahlström G, et al. **Drug Alcohol Depend** 1988 Oct;22(1–2):117–28

A Markov process based model of the neurotransmitter-receptor binding process in the brain. Elkarmi AZ, et al. **Drug Des Deliv** 1988 Jul;3(1):69–76

Conformational analysis of nisoxetine and fluoxetine, selective inhibitors of norepinephrine and serotonin reuptake: are conformational differences an explanation of neurotransmitter selectivity? Grunewald GL, et al. **Drug Des Deliv** 1986 Aug;1(1):23–37

Bunazosin, an alpha 1-adrenoceptor blocker, differentially releases co-transmitters in dog mesenteric vessels. Komori K, et al. **Eur J Pharmacol** 1989 May 2;164(1):111–20

Effects of botulinum A toxin on presynaptic modulation of evoked transmitter release. Nakov R, et al. **Eur J Pharmacol** 1989 May 2;164(1):45–53

Mu-, delta- and kappa-opioid receptor-mediated inhibition of neurotransmitter release and adenylate cyclase activity in rat brain slices: studies with fentanyl isothiocyanate. Schoffelmeer AN, et al. **Eur J Pharmacol** 1988 Sep 13; 154(2):169–78

Neurotransmitters, neuropeptides and binding sites in the rat mediobasal hypothalamus: effects of monosodium glutamate (MSG) lesions. Meister B, et al. **Exp Brain Res** 1989;76(2):343–68

A-23187 evoked transmitter release from rabbit pulmonary artery and its inhibition by reactivation of sodium-pump. Török TL, et al. **Gen Pharmacol** 1989;20(4):421–5

Liquid membrane phenomenon in the biological actions of gonadal steroid hormones. Nagappa AN, et al. **Indian J Biochem Biophys** 1988 Aug;25(4):350–5

Improvement of inpatient treatment of the alcoholic as a function of neurotransmitter restoration: a pilot study. Blum K, et al. **Int J Addict** 1988 Sep;23(9):991–8

Comparative hemodynamic and neurohormonal effects of intravenous captopril and digoxin and their combinations in patients with severe heart failure. Gheorghiade M, et al. **J Am Coll Cardiol** 1989 Jan;13(1):134–42

Comparative effects of carbohydrate restriction vs starvation on biochemical parameters related to neurotransmitters in rat. Thibault L, et al. **J Am Coll Nutr** 1989 Feb;8(1):35–46

Preganglionic sympathetic neurones innervating the rat adrenal medulla: immunocytochemical evidence of synaptic input from nerve terminals containing substance P, GABA or 5-hydroxytryptamine. Bacon SJ, et al. **J Auton Nerv Syst** 1988 Sep;24(1–2):97–122 (110 ref.)

Interactions of the ulcerogen cysteamine with enteric inhibitory nerves and putative transmitters in the rat small intestine. Krantis A, et al. **J Auton Pharmacol** 1989 Jun; 9(3):219–29

Effects of stimulus timing on transmitter release and postsynaptic membrane potential at crayfish neuromuscular junctions. Bittner GD, et al. **J Comp Physiol [A]** 1989 Jul; 165(3):371–82

Effects of cadmium on quantal transmitter release and ultrastructure of frog motor nerve endings. Molgó J, et al. **J Neural Transm** 1989;77(2–3):79–91

Stimulation-induced release of coexistent transmitters in the prefrontal cortex: an in vivo microdialysis study of dopamine and neurotensin release. Bean AJ, et al. **J Neurochem** 1989 Aug;53(2):655–7

Effect of impact trauma on neurotransmitter and nonneurotransmitter amino acids in rat spinal cord. Demediuk P, et al. **J Neurochem** 1989 May;52(5):1529–36

Neurotransmitter amino acid release from synaptosomes [letter] Levi G, et al. **J Neurochem** 1989 Oct;53(4):1324–6

Role of glial cells for the basal and Ca2+-dependent K+-evoked release of transmitter amino acids investigated by microdialysis. Paulsen RE, et al. **J Neurochem** 1989 Jun; 52(6):1823–9

Effect of taurine on neurotransmitter release from insect synaptosomes. Whitton PS, et al. **J Neurochem** 1988 Nov; 51(5):1356–60

Dual effects of theophylline on spontaneous transmitter release from frog motor nerve terminals. Barry SR. **J Neurosci** 1988 Dec;8(12):4427–33

Aplysia synaptosomes. II. Release of transmitters. Chin GJ, et al. **J Neurosci** 1989 Jan;9(1):49–55

The earliest-generated neurons of the cat cerebral cortex: characterization by MAP2 and neurotransmitter immunohistochemistry during fetal life. Chun JJ, et al. **J Neurosci** 1989 May;9(5):1648–67

Signaling properties of Ascaris motorneurons: graded active responses, graded synaptic transmission, and tonic transmitter release. Davis RE, et al. **J Neurosci** 1989 Feb; 9(2):415–25

The relationship between the number of synaptic vesicles and the amount of transmitter released. Koenig JH, et al. **J Neurosci** 1989 Jun;9(6):1937–42

Concomitant characterization of behavioral and striatal neurotransmitter response to amphetamine using in vivo microdialysis. Kuczenski R, et al. **J Neurosci** 1989 Jun; 9(6):2051–65

A modulatory proctolin-containing neuron (MPN). I. Identification and characterization. Nusbaum MP, et al. **J Neurosci** 1989 May;9(5):1591–9

A modulatory proctolin-containing neuron (MPN). II. State-dependent modulation of rhythmic motor activity. Nusbaum MP, et al. **J Neurosci** 1989 May;9(5):1600–7

Neuropeptide Y modulates neurotransmitter release and Ca2+ currents in rat sensory neurons. Walker MW, et al. **J Neurosci** 1988 Jul;8(7):2438–46

The role of folate and vitamin B-12 in neurotransmitter metabolism and degenerative neurological changes associated with aging: proceedings of a workshop. Green R. **J Nutr** 1989 Jun;119(6):841–2

Transmitter neurochemistry of the efferent neuron system innervating the labyrinth. Schwarz DW, et al. **J Otolaryngol** 1989 Feb;18(1):28–31

Effect of lithium chloride on the neurotransmitter release from adrenergic nerve terminals of guinea-pig atria. Mantelli L, et al. **J Pharm Pharmacol** 1989 Mar;41(3):203–5

Neuronal uptake and metabolism of 2- and 6-fluorodopamine: false neurotransmitters for positron emission tomographic imaging of sympathetically innervated tissues. Eisenhofer G, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):419–27

Time course of transmitter action at the sympathetic neuroeffector junction in rodent vascular and non-vascular smooth muscle. Astrand P, et al. **J Physiol (Lond)** 1988 Jul;401:657–70

Quantal secretion at release sites of nerve terminals in toad (Bufo marinus) muscle during formation of topographical maps. Bennett MR, et al. **J Physiol (Lond)** 1988 Jul; 401:567–79

Prolonged nerve stimulation causes changes in transmitter release at the frog neuromuscular junction. Hinz I, et al. **J Physiol (Lond)** 1988 Jul;401:557–65

Transmitter release at mouse motor nerve terminals mediated by temporary accumulation of intracellular barium. Quastel DM, et al. **J Physiol (Lond)** 1988 Dec;406:55–73

A primer on neurotransmitters and cocaine. Daigle RD, et al. **J Psychoactive Drugs** 1988 Jul-Sep;20(3):283–95 (47 ref.)

Neurotransmitter release: development of a theory for total release based on kinetics. Lustig C, et al. **J Theor Biol** 1989 Jan 23;136(2):151–70

Drug and neurotransmitter receptors. New perspectives with clinical relevance. Snyder SH. **JAMA** 1989 Jun 2; 261(21):3126–9 (16 ref.)

Effect of buflomedil [4-(1-pyrrolidinyl)-1-(2,4,6-trimethoxyphenyl)-1-butanone hydrochloride] on neurotransmitters in the striatum and substantia nigra. Koda H, et al. **Jpn J Pharmacol** 1988 Jul;47(3):253–9

No alteration of monoamines and GABA systems in the kindled rat brain. Nishimura S, et al. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):638–9

Changes in neuronal size and neurotransmitter marker in hereditary canine spinal muscular atrophy. Cork LC, et al. **Lab Invest** 1989 Jul;61(1):69–76

Effect of long-term caloric restriction on brain monoamines in aging male and female Fischer 344 rats. Kolta MG, et al. **Mech Ageing Dev** 1989 May;48(2):191–8

Regional brain monoamines and their metabolites after portacaval shunting. Mans AM, et al. **Metab Brain Dis** 1987 Sep;2(3):183–93

Aging related changes of neurotransmitters in the visual system. Drago F, et al. **Metab Pediatr Syst Ophthalmol** 1989;12(1–3):21–3 (18 ref.)

N-methyl-D-aspartate (NMDA) receptor-mediated stimulation of noradrenaline release, but not release of other neurotransmitters, in the rat brain cortex: receptor location, characterization and desensitization. Fink K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):514–21

Uptake inhibitors do not change the effect of imidazoline alpha 2-adrenoceptor agonists on transmitter release evoked by single pulse stimulation in mouse vas deferens. Gonçalves J, et al.

Naunyn Schmiedebergs Arch Pharmacol 1989 Mar; 339(3):288–92

Stimulation of spontaneous transmitter release at the frog neuromuscular junction by 12-O-tetradecanoylphorbol-13-acetate occurs in the absence of extracellular Ca2+ and is enhanced by depolarization. Light PE, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):339–44

Transmitter release patterns of noradrenergic, dopaminergic and cholinergic axons in rabbit brain slices during short pulse trains, and the operation of presynaptic autoreceptors. Mayer A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Dec;338(6):632–43

Individual differences in aging: behavioral and neurobiological correlates. Markowska AL, et al. **Neurobiol Aging** 1989 Jan-Feb;10(1):31–43

Effects of dorsal root section and occlusion of dorsal spinal artery on the neurotransmitter candidates in rat spinal cord. Fujita K, et al. **Neurochem Res** 1989 May;14(5):399–404

The activation of phosphatidylinositol turnover is not directly involved in the modulation of neurotransmitter release mediated by presynaptic muscarinic receptors. Marchi M, et al. **Neurochem Res** 1988 Sep;13(9):903–7

Neurotransmitter systems in the outer plexiform layer of mammalian retina. Redburn DA. **Neurosci Res Suppl** 1988; 8:S127–36 (31 ref.)

Neurochemical characteristics of aluminum-induced neurofibrillary degeneration in rabbits. Beal MF, et al. **Neuroscience** 1989;29(2):339–46

Novel neurotransmitters in the autonomic nervous systems of nonmammalian vertebrates. Nilsson S, et al. **Pharmacol Ther** 1989;41(1-2):257–87 (320 ref.)

Regional concentrations of transmitter amino acids after spinal cord ischaemia in the rabbit. Martiniak J, et al. **Physiol Bohemoslov** 1989;38(3):275–81

Immunoglobulins from amyotrophic lateral sclerosis patients enhance spontaneous transmitter release from motor-nerve terminals. Uchitel OD, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7371–4

Peptidergic neurons in the nucleus raphe magnus and the nucleus gigantocellularis: their distributions, interrelationships, and projections to the spinal cord. Bowker RM, et al. **Prog Brain Res** 1988;77:95–127 (63 ref.)

In vivo and in vitro release of central neurotransmitters in relation to pain and analgesia. Hamon M, et al. **Prog Brain Res** 1988;77:431–44 (91 ref.)

Neurotransmitters in vestibular pathways. Raymond J, et al. **Prog Brain Res** 1988;76:29–43 (106 ref.)

Facilitation as a tool to study the entry of calcium and the mechanism of neurotransmitter release. Parnas H, et al. **Prog Neurobiol** 1989;32(1):1–9 (28 ref.)

Neurochemical transmission and the sodium-pump. Török TL. **Prog Neurobiol** 1989;32(1):11–76 (339 ref.)

Effect of mild hypothermia on ischemia-induced release of neurotransmitters and free fatty acids in rat brain. Busto R, et al. **Stroke** 1989 Jul;20(7):904–10

Biochemical studies in suicide victims: current findings and future implications. Stanley M, et al. **Suicide Life Threat Behav** 1989 Spring;19(1):30–42 (42 ref.)

Frequency and amplitude gradients of spontaneous release along the length of the frog neuromuscular junction. Robitaille R, et al. **Synapse** 1989;3(4):291–307

Transient expression of neurotransmitters in the developing neocortex [news] Parnavelas JG, et al. **Trends Neurosci** 1988 Mar;11(3):92–3 (22 ref.)

Feedback control of transmitter release at the neuromuscular junction. Bowman WC, et al. **Trends Pharmacol Sci** 1988 Jan;9(1):16–20

How does adenosine inhibit transmitter release? Fredholm BB, et al. **Trends Pharmacol Sci** 1988 Apr;9(4):130–4 (28 ref.)

Receptor-mediated control of neurotransmitter release from brain slices or synaptosomes. Middlemiss DN. **Trends Pharmacol Sci** 1988 Mar;9(3):83–4 (29 ref.)

Transmitter release from brain slices elicited by single pulses: a powerful method to study presynaptic mechanisms. Singer EA. **Trends Pharmacol Sci** 1988 Aug;9(8):274–6 (19 ref.)

Action of lead on neurotransmission in rats. McIntosh MJ, et al. **Xenobiotica** 1989 Jan;19(1):101–13

Chlorpromazine-induced alterations in hypothalamic amine metabolism and stress responses in severe cold. Kortelainen ML, et al. **Z Rechtsmed** 1989;102(6):377–90

[Neurotransmitters, hormones and portal hypertension] Li XN, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Jun; 26(6):377–80 (28 ref.) **(Chi)**

[Effects of ginseng root saponins on serum corticosterone and brain neurotransmitters of mice under hypobaric and hypoxic environment] Lu G, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Nov;9(6):489–92 (Eng. Abstr.) **(Chi)**

[Effects of methyl-4-ethyl-6,7-dimethoxy-beta-carboline-3-carboxylate on the release of monoamine neurotransmitters from rat brain slices] Yang XM, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jul;9(4):304–7 (Eng. Abstr.) **(Chi)**

[Arslan and Belloni acute nucleoreticular vestibular syndrome. Interpretation of changes in neuromediators] Sala T. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(5):457–9 (15 ref.) (Eng. Abstr.) **(Fre)**

[Possible diagnostic significance of deviations in transmitter metabolism in acute neurologic diseases] Uebelhack R, et al. **Psychiatr Neurol Med Psychol Beih** 1988;40:47–8 **(Ger)**

[Pharmacologic modification of mediator liberation and the effect of mediators] Hahn HL. **Wien Med Wochenschr** 1989 Feb 28;139(4):63–77 (123 ref.) (Eng. Abstr.) **(Ger)**

[Changes in neurotransmitters in Alzheimer-type dementia] Nakamura S, et al. **Nippon Ronen Igakkai Zasshi** 1988 Jul; 25(4):358–63 (Eng. Abstr.) **(Jpn)**

[Changes in brain level of neurotransmitters in Alzheimer's disease] Shini H, et al. **Seishin Shinkeigaku Zasshi** 1988; 90(10):863–9 **(Jpn)**

[A mathematical model of the system controlling mediator release from presynaptic endings] Pokrovskiĭ N. **Biofizika** 1989 May-Jun;34(3):400–4 (Eng. Abstr.) **(Rus)**

[Neurochemical mechanisms of regulation in cataleptiform states in animals] Mileikovskiĭ Blu, et al. **Fiziol Zh SSSR** 1988 Aug;74(8):1073–6 (Eng. Abstr.) **(Rus)**

[Regional, cellular, subcellular distribution of neurospecific protein-hormonal complexes] Srapionian RM, et al. **Ukr Biokhim Zh** 1989 May-Jun;61(3):53–8 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Phosphorylation of B-50 (GAP43) is correlated with neurotransmitter release in rat hippocampal slices. Dekker LV, et al. **J Neurochem** 1989 Jan;52(1):24–30

Stimulation of the Na+/K+ pump activity during electrogenic uptake of acidic amino acid transmitters by rat brain synaptosomes. Erecińska M. **J Neurochem** 1989 Jan;52(1):135–9

Cytosolic-free calcium and neurotransmitter release with decreased availability of glucose or oxygen. Gibson GE, et al. **Neurochem Res** 1989 May;14(5):437–43

Expression of neurotransmitter transport from rat brain mRNA in Xenopus laevis oocytes. Blakely RD, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9846–50

PHARMACOLOGY

On pre- and/or post-junctional roles of ATP and an unknown 'substance X' as sympathetic co-transmitters in rat tail artery. Bao JX, et al. **Acta Physiol Scand** 1989 Jan; 135(1):65–6

Neurotransmitters and peptides modulate the release of immunoreactive corticotropin-releasing factor from cultured human placental cells. Petraglia F, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):247–51

VIP and acetylcholine: neurotransmitters in esophageal circular smooth muscle. Behar J, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):G380–5

Modulatory effect of neurotransmitters and neurotropic drugs on the release of 3H-D-aspartic acid from synaptosomes. Rayevsky KS, et al. **Ann Ist Super Sanita** 1988;24(3):383–8

Modulation of arachidonate turnover in cerebral phospholipids. Barkai AI, et al. **Ann N Y Acad Sci** 1989; 559:56–73

Multiple types of calcium channels in heart muscle and neurons. Modulation by drugs and neurotransmitters. Bean BP. **Ann N Y Acad Sci** 1989;560:334–45 (33 ref.)

Acute regulation of tyrosine hydroxylase by nerve activity and by neurotransmitters via phosphorylation. Zigmond RE, et al. **Annu Rev Neurosci** 1989;12:415–61 (306 ref.)

Effects of GTP on hormone-stimulated adenylate cyclase activity in cerebral cortex, striatum, and hippocampus from rats treated chronically with lithium. Mørk A, et al. **Biol Psychiatry** 1989 Jul;26(3):279–88

Prevention of physostigmine-, DFP-, and diazinon-induced acute toxicity by monoethylcholine and N-aminodeanol. Patterson TA, et al. **Br J Pharmacol** 1989 Jun;97(2):451–60

Electrophysiological and pharmacological properties of neurons within solid basal forebrain transplants in the rat brain. Bassant MH, et al. **Brain Res** 1988 Sep 13;460(1):8–16

Effect of intrathecal proctolin administration on the behaviour evoked by the thyrotrophin-releasing hormone (TRH) analogue (RX 77368) and the indoleamine, TRH, substance P and calcitonin gene-related peptide levels and choline acetyltransferase activity in the rat spinal cord. Fone KC, et al. **Brain Res** 1988 Sep 13;460(1):22–8

Protein kinase C modulates neurotransmitter responses in Xenopus oocytes injected with rat brain RNA. Moran O, et al. **Brain Res Mol Brain Res** 1989 May;5(3):193–202

Pharmacological alterations of the activity of afferent fibers innervating hair cells. Mroz EA, et al. **Hear Res** 1989 Mar; 38(1-2):141–62

Altered responsiveness to autonomic transmitters of hearts from neonatal spontaneously hypertensive rats. Tanaka H, et al. **J Cardiovasc Pharmacol** 1988 Dec;12(6):678–82

Direct and neurohumoral cardiovascular effects of atrial natriuretic peptide. Woods RL, et al. **J Cardiovasc Pharmacol** 1989 Feb;13(2):177–85

Glutamate, a neurotoxic transmitter. Olney JW. **J Child Neurol** 1989 Jul;4(3):218–26 (64 ref.)

Neuropharmacological analysis of the control of LH secretion in gonadectomized male and female rats: altered hypothalamic responses to inhibitory neurotransmitters in long-term castrated rats. Almeida OF, et al. **J Endocrinol** 1988 Oct;119(1):15–21

Aminergic and peptidergic modulation of motor function at an identified neuromuscular junction in Helisoma. Zoran MJ, et al. **J Exp Biol** 1989 Mar;142:225–43

Primary afferent responses of a crustacean mechanoreceptor are modulated by proctolin, octopamine, and serotonin. Pasztor VM, et al. **J Neurobiol** 1989 Jun;20(4):234–54

Effects of neurotransmitters on astrocyte glycogen stores in vitro. Cambray-Deakin M, et al. **J Neurochem** 1988 Dec; 51(6):1852–7

Pharmacological and functional heterogeneity of astrocytes: regional differences in phospholipase C stimulation by neuromediators. el-Etr M, et al. **J Neurochem** 1989 Mar; 52(3):981–4

Actions of excitatory amino acids on somatostatin release from cortical neurons in primary cultures. Tapia-Arancibia L, et al. **J Neurochem** 1989 Oct;53(4):1134–41

Modulation of a subthreshold calcium current by the neuropeptide FMRFamide in Aplysia neuron R15. Kramer RH, et al. **J Neurophysiol** 1988 Nov;60(5):1728–38

Vasopressin neuromodulation in the hippocampus. Brinton RE, et al. **J Neurosci** 1989 Mar;9(3):752–9

Selective modulation of spike duration by serotonin and the neuropeptides, FMRFamide, SCPB, buccalin and myomodulin in different classes of mechanoafferent neurons in the cerebral ganglion of Aplysia. Rosen SC, et al. **J Neurosci** 1989 Feb;9(2):390–402

Transmitter-induced glycogenolysis and gluconeogenesis in leech segmental ganglia. Pennington AJ, et al. **J Physiol (Paris)** 1987;82(4):218–28

Effects of neurotransmitters and other pharmacological agents on 32Pi incorporation into phospholipids of the iris muscle of the rabbit. Abdel-Latif AA. **Life Sci** 1974 Sep 1;15(5):961–73

Effects of intraventricular brain injections of neurotransmitters on colonic temperature in morphine-tolerant rats. Lagerspetz KY, et al. **Life Sci** 1974 Jul 15;15(2):281–8

Inhibitory neuromodulators do not alter the course of experimental hepatic encephalopathy. Rzepczynski D, et al. **Metab Brain Dis** 1988 Sep;3(3):211–6

Neurotransmitter inhibition of neuronal calcium currents by changes in channel voltage dependence. Bean BP. **Nature** 1989 Jul 13;340(6229):153–6

The effects of transmitters on the affinity of the insoluble fraction of ox brain for Na+ and K+. Ahmed N, et al. **Neurochem Res** 1989 Feb;14(2):179–84

Novel autonomic neurotransmitters and intestinal function. Taylor GS, et al. **Pharmacol Ther** 1989;40(3):401–38 (374 ref.)

Effect of neurotransmitters on the system that transports Tyr-MIF-1 and the enkephalins across the blood-brain barrier: a dominant role for serotonin. Banks WA, et al. **Psychopharmacology (Berlin)** 1989;98(3):380–5

M-currents: an update. Brown D. **Trends Neurosci** 1988 Jul; 11(7):294–9 (58 ref.)

[The role of the endothelium in the reactions of the vascular wall to mechanical stretching and the action of neuromediators] Azin AL, et al. **Fiziol Zh SSSR** 1989 Feb; 75(2):205–11 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Regulation of local blood flow by neurohumoral substances released from perivascular nerves and endothelial cells. Burnstock G. **Acta Physiol Scand Suppl** 1988;571:53–9 (44 ref.)

Neurohumoral circulatory regulation in hypertension. Korner PI. **Acta Physiol Scand Suppl** 1988;571:83–96 (36 ref.)

The role of the kidney in neurohormonal cardiovascular regulation. Zanchetti A, et al. **Acta Physiol Scand Suppl** 1988;571:69–81 (26 ref.)

Relationship between acupuncture-induced immunity and the regulation of central neurotransmitters in the rabbit: I. Effect of central catecholaminergic neurons in regulating acupuncture-induced immune function. Zhao JC, et al. **Acupunct Electrother Res** 1988;13(2-3):79–85

Interactions between neurotransmitters that regulate cAMP and intracellular Ca2+ levels in the CNS. Cooper DM, et al. **Adv Exp Med Biol** 1988;236:217–27

Implications of behavioral sensitization and kindling for stress-induced behavioral change. Post RM, et al. **Adv Exp Med Biol** 1988;245:441–63 (47 ref.)

Neurochemical and electrophysiological events underlying stress-induced depression in an animal model. Weiss JM, et al. **Adv Exp Med Biol** 1988;245:425–40 (81 ref.)

Effects of cooling on in vitro responses of human peripheral airways to inflammatory mediators and neurotransmitters. Jongejan RC, et al. **Agents Actions** 1989 Jan;26(1-2):73–4

Disturbances in regulation of catecholamine neuromediation in alcoholism. Anokhina IP, et al. **Alcohol Alcohol** 1988; 23(5):343–50

Genetic differences in the effects of voluntary ethanol consumption on brain monoamine levels in inbred strains of mice, C57BL/6J, C3H/He and DBA/2Cr. Yoshimoto K, et al. **Alcohol Alcohol** 1989;24(3):225–9

Atrial natriuretic factor: neuromodulator of the central nervous system regulation of blood pressure. Levin ER. **Am J Hypertens** 1989 Jul;2(7):594–8 (53 ref.)

Ascending enteric reflex: multiple neurotransmitter systems and interactions. Holzer P. **Am J Physiol** 1989 Mar;256(3 Pt 1):G540–5

Neural systems involved in fear-potentiated startle. Davis M. **Ann N Y Acad Sci** 1989;563:165–83 (42 ref.)

The function of synaptic transmitters in the retina. Daw NW, et al. **Annu Rev Neurosci** 1989;12:205–25 (161 ref.)
Involvement of hormonal and neuromodulatory systems in the regulation of memory storage. McGaugh JL. **Annu Rev Neurosci** 1989;12:255–87 (216 ref.)
Chemical coding of neurons and plurichemical transmission. Furness JB, et al. **Annu Rev Pharmacol Toxicol** 1989; 29:289–306 (112 ref.)
Noradrenergic–cholinergic interaction: its possible role in memory dysfunction associated with senile dementia. Sara SJ. **Arch Gerontol Geriatr S.ppl** 1989;1:99–108 (39 ref.)
Reticulospinal neurons in lamprey: transmitters, synaptic interactions and their role during locomotion. Brodin L, et al. **Arch Ital Biol** 1988 Oct;126(4):317–45 (134 ref.)
Different forms of post–training memory processing. Izquierdo I. **Behav Neural Biol** 1989 Mar;51(2):171–202 (155 ref.)
Evidence for co–transmitter role of neuropeptide Y in the pig spleen. Lundberg JM, et al. **Br J Pharmacol** 1989 Mar; 96(3):675–87
Evidence for excitatory amino acid transmission between mesencephalic nucleus of V afferents and jaw–closer motoneurons in the guinea pig. Chandler SH. **Brain Res** 1989 Jan 16;477(1–2):252–64
Neurohormonal influences in the pathogenesis of congestive heart failure. Cody RJ. **Cardiol Clin** 1989 Feb;7(1):73–86 (107 ref.)
Growth hormone neuroregulation and its alterations in disease states. Dieguez C, et al. **Clin Endocrinol (Oxf)** 1988 Jan;28(1):109–43 (278 ref.)
Commentary on the evolution of transmitters, receptors and ion channels in invertebrates. Walker RJ, et al. **Comp Biochem Physiol [A]** 1989;93(1):25–39 (180 ref.)
Membrane voltage and neurotransmitter regulation of neuronal growth cone motility. McCobb DP, et al. **Dev Biol** 1988 Dec;130(2):599–609
Development of neurochemical separation of ON and OFF channels at retinal ganglion cells. Ikeda H, et al. **Doc Ophthalmol** 1988 Jun;69(2):175–86
Pharmacologic exploitation of neurotransmitter receptors for the design of novel antidepressant drugs. Palazidou E, et al. **Drug Des Deliv** 1988 May;2(4):247–56 (68 ref.)
The role of neurotransmitters and opioids in polycystic ovarian syndrome. Lobo RA. **Endocrinol Metab Clin North Am** 1988 Dec;17(4):667–83 (39 ref.)
Neurotransmitters and intraocular pressure. Lapalus P, et al. **Fundam Clin Pharmacol** 1988;2(4):305–25 (71 ref.)
Neurohumoral pathways mediating stress–induced changes in rat gastrointestinal transit. Lenz HJ. **Gastroenterology** 1989 Jul;97(1):216–8
The role of neurotransmitters in processing painful stimuli. Kahn CH, et al. **Hosp Pract [Off]** 1989 Jan 15;24(1):165, 169–70
Involvement of neurohumoral transmitters in electroshock induced hyperthermia in mice. Singh PP, et al. **Indian J Exp Biol** 1988 May;26(5):371–3
Interactions between neurotransmitters and inflammatory cells in the airways. Pauwels R, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):68–9 (6 ref.)
Alcoholism: scientific basis of a neuropsychogenetic disease. Blum K, et al. **Int J Addict** 1988 Aug;23(8):781–96 (39 ref.)
Synapse formation and development of neurotransmitter functions in neuronal cells from chick brain cultured in a serum–free, defined medium. Langui D, et al. **Int J Dev Neurosci** 1988;6(2):137–47
Neurophysiology and neurochemistry of drug dependence: a review. Kiyatkin EA. **Int J Neurosci** 1989 Feb; 44(3–4):283–316 (111 ref.)
Biologic factors in personality disorders. Zemishlany Z, et al. **Isr J Psychiatry Relat Sci** 1988;25(1):12–23 (59 ref.)
Neurochemicals and respiratory control during development. Moss IR, et al. **J Appl Physiol** 1989 Jul;67(1):1–13 (150 ref.)
Putative neurotransmitters involved in medullary cardiovascular regulation. Urbanski RW, et al. **J Auton Nerv Syst** 1988 Dec;25(2–3):181–93
Vasopressin– and proctolin–like immunoreactive efferent neurons in blowfly abdominal ganglia: development and ultrastructure. Nässel DR, et al. **J Comp Neurol** 1989 May 15;283(3):450–63
The neurologic implications of depression in the elderly [letter] Brumback RA. **J Geriatr Psychiatry Neurol** 1988 Oct–Dec;1(4):240–1
Intellectual impairment in Parkinson's disease: clinical, pathologic, and biochemical correlates. Cummings JL. **J Geriatr Psychiatry Neurol** 1988 Jan;1(1):24–36 (151 ref.)
Proctolin: a review with emphasis on insects. Orchard I, et al. **J Neurobiol** 1989 Jul;20(5):470–96 (125 ref.)
Presynaptic aspects of cotransmission: relationship between vesicles and neurotransmitters. Boarder MR. **J Neurochem** 1989 Jul;53(1):1–11 (88 ref.)
Contact–mediated loss of the nonsynaptic response to transmitter during reinnervation of an identified leech neuron in culture. Drapeau P, et al. **J Neurosci** 1989 Jul; 9(7):2502–8
Postnatal development of glutamatergic, GABAergic, and cholinergic neurotransmitter phenotypes in the visual cortex, lateral geniculate nucleus, pulvinar, and superior colliculus in cats. Fosse VM, et al. **J Neurosci** 1989 Feb; 9(2):426–35
Presynaptic transmitters and depolarizing influences regulate development of the substantia nigra in culture. Friedman WJ, et al. **J Neurosci** 1988 Oct;8(10):3616–23
Is L–glutamate a neurotransmitter of baroreceptor information in the nucleus of the tractus solitarius? Leone C, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):953–62
Renal periarterial nerve stimulation–induced vasoconstriction at low frequencies is primarily due to release of a purinergic transmitter in the rat. Schwartz DD, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):764–71
Changes in binomial parameters of quantal release at crustacean motor axon terminals during presynaptic inhibition. Atwood HL, et al. **J Physiol (Lond)** 1988 Aug; 402:177–93
Glutamate receptors of ganglion cells in the rabbit retina: evidence for glutamate as a bipolar cell transmitter. Massey SC, et al. **J Physiol (Lond)** 1988 Nov;405:635–55
Improvement of cocaine–induced neuromodulator deficits by the neuronutrient Tropamine. Trachtenberg MC, et al. **J Psychoactive Drugs** 1988 Jul–Sep;20(3):315–31 (90 ref.)
The relevance to clinical care of recent research in neurobiology. Wallace J. **J Subst Abuse Treat** 1988; 5(4):207–17 (93 ref.)
Acetylcholine as a possible neurotransmitter in penile erection. Stief C, et al. **J Urol** 1989 Jun;141(6):1444–8
Vasoactive intestinal peptide (VIP), a putative neurotransmitter of nonadrenergic, noncholinergic (NANC) inhibitory innervation and its relevance to therapy. Venugopalan CS. **J Vet Pharmacol Ther** 1989 Jun; 12(2):113–23 (100 ref.)
Neurochemical correlates of synaptically active amino acids. Bennett JP Jr, et al. **Life Sci** 1974 Sep 15;15(6):1045–56 (37 ref.)
Receptor regulation of ion transport in the intestinal epithelium. Brown DR, et al. **Life Sci** 1988;43(26):2193–201 (76 ref.)
Chronic electroconvulsive shock and neurotransmitter receptors—an update. Gleiter CH, et al. **Life Sci** 1989; 44(15):985–1006 (159 ref.)
The use of autoradiographic techniques for the identification and mapping of transmitter–specific neurones in the brain. Schon F, et al. **Life Sci** 1974 Jul 15;15(2):157–75 (102 ref.)
Neurotransmitter systems and receptor plasticity in brain aging. Racagni G, et al. **Mod Probl Pharmacopsychiatry** 1989;23:21–7 (26 ref.)
A common trans–acting factor is involved in transcriptional regulation of neurotransmitter genes by cyclic AMP. Hyman SE, et al. **Mol Cell Biol** 1988 Oct;8(10):4225–33
The genetically epilepsy–prone rat. A valuable model for the study of the epilepsies. Laird HE 2d. **Mol Chem Neuropathol** 1989 Aug;11(1):45–59 (45 ref.)
Biochemistry of Parkinson's disease 28 years later: a critical review. Agid Y, et al. **Mov Disord** 1989;4 Suppl 1:S126–44 (132 ref.)
Chemical codes for the control of behaviour in arthropods. Bicker G, et al. **Nature** 1989 Jan 5;337(6202):33–9 (74 ref.)
Mitogenic neurotransmitters [news] Hanley MR. **Nature** 1989 Jul 13;340(6229):97
Amnesia and Alzheimer's disease: which neurotransmitter system is responsible? Wenk GL. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):640–1
Specific neurochemical systems and memory. Whitehouse PJ. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):639–40
Corticotropin–releasing factor: evidence for a neurotransmitter role in the locus ceruleus during hemodynamic stress. Valentino RJ, et al. **Neuroendocrinology** 1988 Dec;48(6):674–7
Psychopharmacological effects in the radial–arm maze. Levin ED. **Neurosci Biobehav Rev** 1988 Summer;12(2):169–75 (82 ref.)
Does noradrenaline behave as a neurotransmitter or hormone in the mammalian retina? Osborne NN, et al. **Neurosci Res Suppl** 1988;8:S197–210 (25 ref.)
Developmental differences in neurohumoral modulation of the cat lower esophageal sphincter. Hillemeier C, et al. **Pediatr Res** 1989 Jul;26(1):39–42
Spontaneous and evoked quantal neurotransmitter release at the neuromuscular junction of the larval housefly, Musca domestica. Seabrook GR, et al. **Pflugers Arch** 1989 May; 414(1):44–51
Attenuation of forgetting by pharmacological stimulation of aminergic neurotransmitter systems. Quartermain D, et al. **Pharmacol Biochem Behav** 1988 May;30(1):77–81
Some aspects of the neurotransmitter control of anterior pituitary function. Müller EE. **Pharmacol Res** 1989 Jan–Feb;21(1):75–85 (46 ref.)
Novel peripheral neurotransmitters in invertebrates. Cottrell GA, et al. **Pharmacol Ther** 1989;41(3):411–42 (401 ref.)
Novel autonomic neurotransmitters and upper gastrointestinal function. McKirdy HC. **Pharmacol Ther** 1988;38(3):429–52 (269 ref.)
Neuroinhibition of xylazine induced emesis. Zabara J. **Pharmacol Toxicol** 1988 Aug;63(2):70–4
Monoamine transmitter activity in lateral hypothalamus during its perfusion with insulin or 2–DG in sated and fasted rat. Myers RD, et al. **Physiol Behav** 1988; 44(4–5):633–43
Monoamine metabolism and its responses to food deprivation in the brain of Zucker rats. Tsujii S, et al. **Physiol Behav** 1988;44(4–5):495–500
Endogenous sleep–promoting substances and sleep regulation. Borbély AA, et al. **Physiol Rev** 1989 Apr; 69(2):605–70 (430 ref.)
Peripheral and central control of food intake. Denbow DM. **Poult Sci** 1989 Jul;68(7):938–47 (102 ref.)
Noise in neural networks: thresholds, hysteresis, and neuromodulation of signal–to–noise. Keeler JD, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1712–6
Immunohistochemical evidence for a co–transmitter role of opioid peptides in primary sensory neurons. Weihe E, et al. **Prog Brain Res** 1988;74:189–99
Behavioral correlates of presynaptic events in the cholinergic neurotransmitter system. Russell RW. **Prog Drug Res** 1988; 32:43–130 (355 ref.)
Neurochemical and cognitive aspects of anxiety disorders. Kidman A. **Prog Neurobiol** 1989;32(5):391–402 (61 ref.)
Drug effects on active immobility responses: what they tell us about neurotransmitter systems and motor functions. Klemm WR. **Prog Neurobiol** 1989;32(5):403–22 (137 ref.)
In search of cellular mechanisms of memory. Matthies H. **Prog Neurobiol** 1989;32(4):277–349 (250 ref.)
Are the neurodevelopmental effects of gonadal hormones related to sex differences in psychiatric illnesses? Sikich L, et al. **Psychiatr Dev** 1988 Winter;6(4):277–309 (210 ref.)
Neurochemical and receptor theories of depression. Nair NP, et al. **Psychiatr J Univ Ottawa** 1989 Jun;14(2):328–41; discussion 349–51 (191 ref.)
On the neurobiology of depression: research based on heterogeneous diagnostic groups produces heterogeneous biological data. Richardson JS. **Psychiatr J Univ Ottawa** 1989 Jun;14(2):433–4 (9 ref.)
The neurochemistry of mood. Steiner M. **Psychiatr J Univ Ottawa** 1989 Jun;14(2):342–3; discussion 349–51 (24 ref.)
A neurotransmitter basis for Eysenck's theory of personality. Lester D. **Psychol Rep** 1989 Feb;64(1):189–90
Systemic hormonal and physiological abnormalities in anxiety disorders. Cameron OG, et al. **Psychoneuroendocrinology** 1988;13(4):287–307 (240 ref.)
Neuroendocrine evidence for serotonin receptor hypersensitivity in panic disorder. Kahn RS, et al. **Psychopharmacology (Berlin)** 1988;96(3):360–4
The promise of receptor studies in psychophysiologic research. Mills PJ, et al. **Psychosom Med** 1988 Nov–Dec; 50(6):555–66 (59 ref.)
Recent developments in neurobiology: Part III. Effectors of transmitter action. Hyman SE. **Psychosomatics** 1988 Fall; 29(4):373–8 (51 ref.)
Regulation of blood pressure by central neurotransmitters and neuropeptides. Philippu A. **Rev Physiol Biochem Pharmacol** 1988;111:1–115 (791 ref.)
Neurochemistry and neuropharmacology. Friedhoff AJ, et al. **Schizophr Bull** 1988;14(3):399–412
Defensive behaviors in infant rhesus monkeys: environmental cues and neurochemical regulation. Kalin NH, et al. **Science** 1989 Mar 31;243(4899):1718–21
Neurochemical transmission in the dorsal column nuclei. Banna NR, et al. **Somatosens Mot Res** 1989;6(3):237–51 (120 ref.)
Role of neurotransmitters in fenitrothion–induced aggressive behaviour in normal and lesioned rats. Anand M, et al. **Toxicol Lett** 1989 Feb;45(2–3):215–20
Does cyclosporin A affect neurotransmitters? Studies after kidney transplantation. Kopsa H, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1506–7
Trophic role of neurotransmitters [letter] Barker R. **Trends Neurosci** 1988 Dec;11(12):533
Excitatory amino acids and the basal ganglia: implications for the therapy of Parkinson's disease [letter] Klockgether T, et al. **Trends Neurosci** 1989 Aug;12(8):285–6
Neurotransmitter regulation of neuronal outgrowth, plasticity and survival. Lipton SA, et al. **Trends Neurosci** 1989 Jul; 12(7):265–70
Caffeine interactions with multiple neurotransmitter systems [letter] Baldwin HA, et al. **Trends Pharmacol Sci** 1988 Aug; 9(8):280–1
Sympathetic purinergic transmission in small blood vessels. Burnstock G. **Trends Pharmacol Sci** 1988 Apr;9(4):116–7 (25 ref.)
Validity of human brain autopsy samples for characterizing neurotransmitter function. Fowler CJ. **Trends Pharmacol Sci** 1988 Jul;9(7):232–4 (22 ref.)
[Role of the central nervous system in the pathogenesis of stress ulcer] Yang H. **Sheng Li Ko Hsueh Chin Chan** 1988 Jul;19(3):218–22 (31 ref.) **(Chi)**
[Neurotransmission and the lower urinary tract] Jurascheck F. **Ann Urol (Paris)** 1988;22(5):309–20 (180 ref.) (Eng. Abstr.) **(Fre)**
[Symposium. Neurotransmitter interactions: implications in neuro and psychopathology. Dopaminergic systems. Cannes, 4–6 March 1988. Proceedings] **Encephale** 1989 Jan–Feb;15 Spec No:63–207 **(Fre)**
[Endocrine changes in bulimia] Luton JP, et al. **Encephale** 1989 Mar–Apr;15(2 Spec No):239–41 (Eng. Abstr.) **(Fre)**
[Receptor diseases. 1: Disorders of adrenergic receptors, cholinergic receptors and neurotransmitters] Nestele M. **Med Monatsschr Pharm** 1989 May;12(5):147–52 (0 ref.) **(Ger)**
[The neuroendocrinology of puberty] Amendt P. **Padiatr Grenzgeb** 1988;27(3):189–95 (26 ref.) (Eng. Abstr.) **(Ger)**
[Structural and functional changes in the brain caused by aging] Platt D. **Verh Dtsch Ges Inn Med** 1988;94:232–40 (40 ref.) **(Ger)**

[Endocrinology from the veterinary viewpoint] Karasszon D. **Z Gesamte Inn Med** 1988 Aug 1;43(15):432–3 (Eng. Abstr.) (Ger)

[Neurobiologic aspects of coping behavior] Schüssler G. **Z Psychosom Med Psychoanal** 1988;34(3):247–58 (39 ref.) (Eng. Abstr.) (Ger)

[Neurotransmitter modulation of hunger sensation] D'Amato M. **Clin Ter** 1987 Sep 30;122(6):407–28 (296 ref.) (Eng. Abstr.) (Ita)

[Neurotransmitters and neurologic disorders] Kanazawa I. **No To Hattatsu** 1989 Mar;21(2):97–103 (12 ref.) (Eng. Abstr.) (Jpn)

[Autonomic regulation of functions of the gastrointestinal system and various problems of pharmacotherapy] Waluga M. **Przegl Lek** 1988;45(11):797–800 (32 ref.) (Pol)

[Effect of controlled normovolemic hemodilution on the activity of neurohumoral adaptive reactions in patients after operations on the abdominal organs] Kuznetsov NA, et al. **Anesteziol Reanimatol** 1988 Jul–Aug;(4):51–3 (Eng. Abstr.) (Rus)

[Disorders of neurohumoral regulatory mechanisms in sudden cardiac death] Shavalev VN, et al. **Arkh Patol** 1988; 50(11):5–14 (25 ref.) (Eng. Abstr.) (Rus)

[Neurochemical induction of the factor of postural asymmetry in the pituitary] Vartanian GA, et al. **Dokl Akad Nauk SSSR** 1988;300(2):501–3 (Rus)

[Intermediator relation of the CNS and the improvement in the agents for therapy of drug poisoning] Kutsenko SA, et al. **Farmakol Toksikol** 1989 Jan–Feb;52(1):118–23 (87 ref.) (Eng. Abstr.) (Rus)

[Neurohumoral means for realizing the trophic function of the nervous system (on the centenary of the birth of Academician A. D. Speranskii)] Azhipa IaI. **Fiziol Cheloveka** 1988 Jan–Feb;14(1):3–19 (96 ref.) (Rus)

[Effect of the neuromediator systems of the neostriatum on immunocompetent cells] Aliev NA. **Fiziol Zh SSSR** 1988 Dec;74(12):1738–42 (Eng. Abstr.) (Rus)

[Results and prospectives of the first year of study of the mechanism of neurohumoral regulation of the functions of the visceral systems] Baklavadzhian OG, et al. **Fiziol Zh SSSR** 1988 Jun;74(6):769–90 (Rus)

[Reorganization of the neuromediatory function of the brain and autonomic regulation at rest during adaptation to chronic hypokinesia] Zhuravleva NG. **Gig Sanit** 1989 Mar; (3):85–6 (Rus)

[Neurohumoral regulation of the adaptive processes in workers subjected to toluene diisocyanate exposure] Ermakova GA, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):22–3 (Eng. Abstr.) (Rus)

[Neurohumoral mechanisms of regulating the motor–evacuatory function of the stomach] Legeza VI, et al. **Patol Fiziol Eksp Ter** 1989 Jan–Feb;(1):75–8 (58 ref.) (Rus)

[Neurohumoral regulation of gastric secretion in stomach and duodenal ulcers] Raikhlin NT, et al. **Sov Med** 1988; (7):38–41 (54 ref.) (Rus)

[Neurochemical mechanisms of autostimulation] Talalaenko AN. **Usp Fiziol Nauk** 1989 Apr–Jun;20(2):46–62 (147 ref.) (Rus)

[The development by I. P. Razenkov of the concept of neurohumoral regulation in the body] Okhnianskaia LG. **Vestn Akad Med Nauk SSSR** 1989;(1):9–16 (Eng. Abstr.) (Rus)

[The cortical layer of the cytoplasm—a possible site of the action of prenervous transmitters] Grigor'ev NG. **Zh Evol Biokhim Fiziol** 1988 Sep–Oct;24(5):625–9 (Eng. Abstr.) (Rus)

[Mechanisms of the interaction of neurotransmitter systems] Iurchenko OP. **Zh Evol Biokhim Fiziol** 1988 Sep–Oct; 24(5):630–5 (Eng. Abstr.) (Rus)

[Neuromediators of centrifugal innervation of the main olfactory bulb] Kratskin IL. **Zh Evol Biokhim Fiziol** 1989 Mar–Apr;25(2):262–77 (135 ref.) (Rus)

[Neurohumoral and immune homeostasis in experimental toxoplasmosis in white rats] P'ianova RE, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jan;(1):75–80 (Eng. Abstr.) (Rus)

[The significance of multiple neuromediator activity in supporting integrative brain functions] Kotliar BI, et al. **Zh Vyssh Nerv Deiat** 1988 Sep–Oct;38(5):931–8 (Eng. Abstr.) (Rus)

[Hormones of the central nervous system—phylogenetic and integrated approach] Langer P. **Vnitr Lek** 1989 Mar; 35(3):214–8 (Slo)

[Neurotransmitters as intracellular mediators during embryo development (editorial)] Pirola CJ. **Medicina (B Aires)** 1988;48(3):326–7 (Spa)

RADIATION EFFECTS

Chronic exposure of primates to 60-Hz electric and magnetic fields: II. Neurochemical effects. Seegal RF, et al. **Bioelectromagnetics** 1989;10(3):289–301

[Early effects of the influence of ionizing radiation in relatively small doses on the neuromediator systems responding to the central regulation of the hypothalamo–pituitary–adrenal cortex system] Taĭts MIu, et al. **Radiobiologiia** 1988 Sep–Oct;28(5):660–2 (Eng. Abstr.) (Rus)

SECRETION

ATP as a sympathetic co-transmitter in rat vasomotor nerves—further evidence that individual release sites respond to nerve impulses by intermittent release of single quanta. Astrand P, et al. **Acta Physiol Scand** 1989 Jul; 136(3):355–65

Do alpha 2-agonists inhibit sympathetic transmitter secretion in part by depressing a Ca2+ component of the nerve impulse 'upstream' of varicosities? Stjärne C, et al. **Acta Physiol Scand** 1988 Aug;133(4):591–2

Basic features of an extracellular recording method to study secretion of a sympathetic co-transmitter, presumably ATP. Stjärne L, et al. **Acta Physiol Scand** 1989 Mar; 135(3):217–26

Is cyclic AMP the intra-axonal messenger 'X' mediating 'upstream' control of sympathetic transmitter secretion? Stjärne L, et al. **Acta Physiol Scand** 1989 Aug;136(4):617–8

Some pharmacological applications of an extracellular recording method to study secretion of a sympathetic co-transmitter, presumably ATP. Stjärne L, et al. **Acta Physiol Scand** 1989 Mar;135(3):227–39

Neuropeptide Y may inhibit sympathetic transmitter secretion by an effect 'upstream' of varicosities. Stjärne L, et al. **Acta Physiol Scand** 1988 Dec;134(4):577–8

Evidence that alpha 2-agonists may inhibit sympathetic transmitter secretion by an effect 'upstream' of varicosities. Stjärne L, et al. **Acta Physiol Scand** 1988 Jul;133(3):433–4

Pertussis toxin effects on transmitter release from perivascular nerve terminals. Nozaki M, et al. **Am J Physiol** 1989 Feb; 256(2 Pt 2):H455–9

The N-type Ca channel in frog sympathetic neurons and its role in alpha-adrenergic modulation of transmitter release. Kongsamut S, et al. **Ann N Y Acad Sci** 1989; 560:312–33 (63 ref.)

Exocytotic release of neurotransmitter substances from nerve endings in the taste buds of rat circumvallate papillae. Endo Y. **Arch Histol Jpn** 1988 Dec;51(5):489–94

Effect of Ca2+ diffusion on the time course of neurotransmitter release. Parnas H, et al. **Biophys J** 1989 May;55(5):859–74

Reversals of the neostigmine-induced tetanic fade and endplate potential run-down with respect to the autoregulation of transmitter release. Chang CC, et al. **Br J Pharmacol** 1988 Dec;95(4):1255–61

Stretch-induced release of proctolin from the dendrites of a lobster sense organ. Pasztor VM, et al. **Brain Res** 1988 Aug 16;458(1):199–203

The role of calmodulin in neurotransmitter release and vascular responsiveness in spontaneously hypertensive rats. Tsuda K, et al. **Clin Exp Hypertens [A]** 1988;10(6):1051–64

Acute choline supplementation in vivo enhances acetylcholine synthesis in vitro when neurotransmitter release is increased by potassium. Wecker L, et al. **J Neurochem** 1989 Feb;52(2):568–75

Translocation and activation of protein kinase C in striatal neurons in primary culture: relationship to phorbol dibutyrate actions on the inositol phosphate generating system and neurotransmitter release. Weiss S, et al. **J Neurochem** 1989 Feb;52(2):530–6

Adenosine A1 receptors inhibit adenylate cyclase activity and neurotransmitter release and hyperpolarize pyramidal neurons in rat hippocampus. Dunwiddie TV, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):31–7

Acute epinephrine treatment fails to facilitate stimulus-induced neurotransmitter overflow in the isolated perfused rat kidney. Schwartz DD, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):177–83

The effect of potassium on exocytosis of transmitter at the frog neuromuscular junction. Ceccarelli B, et al. **J Physiol (Lond)** 1988 Jul;401:163–83

Use of microdialysis in neuroendocrinology. Kendrick KM. **Methods Enzymol** 1989;168:182–205

Alpha-adrenergic inhibition of sympathetic neurotransmitter release mediated by modulation of N-type calcium-channel gating. Lipscombe D, et al. **Nature** 1989 Aug 24; 340(6235):639–42

Modulation of neurotransmitter release by presynaptic autoreceptors. Starke K, et al. **Physiol Rev** 1989 Jul; 69(3):864–989 (716 ref.)

Consequences of stochastic release of neurotransmitters for network computation in the central nervous system. Burnod Y, et al. **Proc Natl Acad Sci U S A** 1989 Jan; 86(1):352–6

Fingering the trigger for neurotransmitter secretion: studies on the calcium channels of squid giant presynaptic terminals. Augustine GJ, et al. **Soc Gen Physiol Ser** 1989; 44:203–23

Effects of methylmercury on neurotransmitter release from rat brain synaptosomes. Minnema DJ, et al. **Toxicol Appl Pharmacol** 1989 Jul;99(3):510–21

Pituitary gland: neuropeptides, neurotransmitters and growth factors. Koenig JI. **Toxicol Pathol** 1989;17(2):256–65 (89 ref.)

[Identification of the site of mediator release in the frog motor nerve ending using 3 extracellular microelectrodes] Benish TV, et al. **Dokl Akad Nauk SSSR** 1988;302(2):477–80 (Rus)

THERAPEUTIC USE

[Drug therapy of Alzheimer's disease. Problems and strategy in development of new therapeutic drugs for Alzheimer's disease] Moroji T, et al. **Nippon Rinsho** 1988 Jul; 46(7):1586–91 (Jpn)

[Drug therapy of Alzheimer's disease using neurotransmitter-related substances] Nakamura S. **Nippon Rinsho** 1988 Jul;46(7):1580–5 (Jpn)

[Peptide and aminergic neurotransmitters in arterial hypertension (editorial)] Pirola CJ. **Medicina (B Aires)** 1988;48(2):213–5 (Spa)

NEUROSCIENCES

Basic questions in neuroscience: a symposium. San Antonio, Texas, November 30–December 2, 1987. Proceedings. **Brain Res Bull** 1988 Sep;21(3):341–546

Political power for neuroscience nurses. Hinkle J, et al. **J Neurosci Nurs** 1989 Feb;21(1):9–13

The significance of neuroscience for philosophy. Churchland PS. **Trends Neurosci** 1988 Jul;11(7):304–7 (30 ref.)

EDUCATION

A neurosciences internship and graduate nurse role conception. Aldrich SK. **J Neurosci Nurs** 1988 Dec; 20(6):377–85

Strategies for journal publication. Hodges LC, et al. **J Neurosci Nurs** 1988 Dec;20(6):386–9

HISTORY

[Eulogy for Paul Castaigne (1916–1988)] Richet G. **Bull Acad Natl Med** 1989 Feb;173(2):207–15 (Fre)

[An "echologic" survey of ultramontane neurologic sciences] Poirier LJ. **Can J Neurol Sci** 1988 Aug;15(3):320–3 (Fre)

METHODS

The analytic and functional accuracy of a video densitometry system. McEachron DL, et al. **J Neurosci Methods** 1988 Aug;25(1):63–74

TRENDS

Changing paradigms within psychiatry: implications for nursing research. Liaschenko J. **Arch Psychiatr Nurs** 1989 Jun;3(3):153–8

NEUROSECRETION

see related
NEUROSECRETORY SYSTEMS
PITUITARY HORMONE RELEASING HORMONES

Optimizing release from peptide hormone secretory nerve terminals. Bicknell RJ. **J Exp Biol** 1988 Sep;139:51–65 (55 ref.)

Pituicytes, glia and control of terminal secretion. Hatton GI. **J Exp Biol** 1988 Sep;139:67–79 (47 ref.)

The neuroendocrine paraventricular hypothalamus: receptors, signal transduction, mRNA and neurosecretion. Lightman SL. **J Exp Biol** 1988 Sep;139:31–49 (74 ref.)

Electrophysiology of neurosecretory cells from the pituitary intermediate lobe. McBurney RN, et al. **J Exp Biol** 1988 Sep;139:317–28 (30 ref.)

The role of calcium in stimulus-secretion coupling in excitable and non-excitable cells. Penner R, et al. **J Exp Biol** 1988 Sep;139:329–45 (82 ref.)

Optical studies of the secretory event at vertebrate nerve terminals. Salzberg BM, et al. **J Exp Biol** 1988 Sep; 139:195–231 (97 ref.)

Possible role for ionic channels in neurosecretory granules of the rat neurohypophysis. Lemos JR, et al. **Soc Gen Physiol Ser** 1989;44:333–47

Excitation and secretion at the nerve terminals of vertebrates: optical measurements with and without voltage-sensitive dyes. Salzberg BM, et al. **Soc Gen Physiol Ser** 1989; 44:311–31

[The hypothalamic–hypophyseal neurosecretory system of the Alosa fallax nilotica. A histological and ultrastructural study] Romita G, et al. **Acta Biomed Ateneo Parmense** 1988; 59(5–6):175–97 (Eng. Abstr.) (Ita)

NEUROSECRETORY SYSTEMS

see related
NEUROIMMUNOMODULATION
NEUROSECRETION

Small cell carcinoma of the ovary that is commonly associated with hypercalcemia is a neuroendocrine tumor on the basis of presently available evidence [letter] Scully RE, et al. **Int J Gynecol Pathol** 1989;8(3):296–7

Ultrastructural morphometry distinguishes Burkitt's-like lymphomas from neuroendocrine neoplasms: useful criteria applied to the evaluation of a poorly differentiated neuroendocrine neoplasm of the nasal cavity masquerading as Burkitt's-like lymphoma. Payne CM, et al. **Mod Pathol** 1989 Jan;2(1):35–45

[Characteristics of the clinical picture and course of chronic alcoholic intoxication in patients with various types of neuroendocrine changes] Kolupaev GP, et al. **Zh Nevropatol Psikhiatr** 1988;88(11):104–6 (Eng. Abstr.) (Rus)

ANALYSIS

Histochemical demonstration of lectin binding sites in neuroendocrine tumors. Höfler H, et al. **Acta Histochem Suppl (Jena)** 1988;36:273–6

Molecular analysis of two general markers of neurons and

the diffuse neuroendocrine system: neuron-specific enolase and PGP9.5. Day IN. **Biochem Soc Trans** 1988 Aug; 16(4):454-7

Calbindin-D28K and the peptidergic neuroendocrine system in rat gut: an immunohistochemical study. Resibois A, et al. **Biol Cell** 1988;63(1):67-75

Amino acid sequence of locust neuroparsins. Girardie J, et al. **FEBS Lett** 1989 Mar 13;245(1-2):4-8

In situ hybridization demonstrating coexpression of urotensins I, II-alpha, and II-gamma in the caudal neurosecretory neurons of the carp, Cyprinus carpio. Ichikawa T, et al. **Gen Comp Endocrinol** 1988 Sep; 71(3):493-501

The distribution of GAWK-like immunoreactivity in neuroendocrine cells of the human gut, pancreas, adrenal and pituitary glands and its co-localisation with chromogranin B. Bishop AE, et al. **Histochemistry** 1989; 90(6):475-83

An immunohistochemical study of neuroendocrine cells in gynecologic tumors. Ueda G, et al. **Int J Gynaecol Obstet** 1989 Jun;29(2):165-72

Pancreastatin-like immunoreactivity in epidermal Merkel cells of pig and man. Hartschuh W, et al. **Neurosci Lett** 1989 Apr 10;98(3):258-63

Serotonin-like immunoreactive fibers in the medial dorsal accessory group and the anterior fornical nucleus of the magnocellular neurosecretory system in the rat. Ju G, et al. **Neurosci Lett** 1988 Oct 31;93(1):19-22

Angiotensin II receptors in paraventricular nucleus, subfornical organ, and pituitary gland of hypophysectomized, adrenalectomized, and vasopressin-deficient rats. Castrén E, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):725-9

Multiple messenger candidates and marker substance in the mammalian Merkel cell-axon complex: a light and electron microscopic immunohistochemical study. Hartschuh W, et al. **Prog Brain Res** 1988;74:181-7

ANATOMY & HISTOLOGY

The histology of the cerebral neurosecretory system in several representatives of Cleroidea (Coleoptera, Insecta). Panov AA. **J Hirnforsch** 1989;30(1):5-10

Neuroendocrine innervation of the hepatic vessels in the rat and in man. Carlei F, et al. **J Surg Res** 1988 Nov; 45(5):417-26

Subfornical organ connections with septal neurons projecting to the median eminence. Donevan SD, et al. **Neuroendocrinology** 1988 Jul;48(1):67-71

CYTOLOGY

Stimulation of hamster pulmonary neuroendocrine cells and associated peptides by repeated exposure to cigarette smoke. Tabassian AR, et al. **Am Rev Respir Dis** 1989 Aug; 140(2):436-40

Chromogranin- and somatostatin-containing neuroendocrine cells in the porcine uterus. An immunocytochemical study. Vittoria A, et al. **Anat Histol Embryol** 1989 Jun; 18(2):136-42

Satellite glial cells penetrate neurosecretory cells to perinuclear position in the goldfish preoptic area. Gregory WA, et al. **Brain Res Dev Brain Res** 1988 Nov 1;44(1):1-8

Comparative marker analysis of the ependymocytes of the subcommissural organ in four different mammalian species. Chouaf L, et al. **Cell Tissue Res** 1989 Aug;257(2):255-62

Light- and electron-microscopic immunocytochemistry of peptidergic neurons innervating thoracico-abdominal neurohaemal areas in the blowfly. Duve H, et al. **Cell Tissue Res** 1988 Sep;253(3):583-95

Karyometry of the neurosecretory neurons of the hypothalamus of mice of various ages treated with sodium glutamate. Srebro Z, et al. **Folia Biol (Krakow)** 1988; 36(1-2):95-102

Nucleolar extrusions and location of the Golgi apparatus in the caudal neurosecretory motoneurons of anurans (Amphibia). Chapra R. **Folia Morphol (Praha)** 1988; 36(4):395-402

Fluorescence-histochemical and ultrastructural research on the monoaminergic neurosecretory cells of the earthworm Octolasium complanatum (Annelida: Oligochaeta). Bianchi S, et al. **Gen Comp Endocrinol** 1988 Aug;71(2):243-56

Vasopressin- and proctolin-like immunoreactive efferent neurons in blowfly abdominal ganglia: development and ultrastructure. Nässel DR, et al. **J Comp Neurol** 1989 May 15;283(3):450-63

Sauvagine/urotensin I-like immunoreactivity in the caudal neurosecretory system of a seawater fish Diplodus sargus L. in normal and hyposmotic milieu. Minniti F, et al. **Peptides** 1989 Mar-Apr;10(2):383-9

Neuroendocrine cell populations in normal human lungs: a quantitative study. Gosney JR, et al. **Thorax** 1988 Nov; 43(11):878-82

[Functional similarity of the P-2 form of primary sleep and hypobiosis in the frog Rana temporaria (based on data from luminescent microspectral analysis of the cytoplasm of neurosecretory neurons)] Khomutetskaia OE, et al. **Zh Evol Biokhim Fiziol** 1989 Jan-Feb;25(1):88-94 (Eng. Abstr.) **(Rus)**

[The effect of constant light on the histologic picture of the subcommissural and subfornical organ in rats] Kecman M, et al. **Med Pregl** 1988;41(7-8):271-7 (Eng. Abstr.) **(Scr)**

DRUG EFFECTS

Hemodynamic, hormonal, and renal effects of atrial natriuretic peptide in untreated congestive cardiac failure. Anand IS, et al. **Am Heart J** 1989 Sep;118(3):500-5

Subfornical organ connectivity and drinking to captopril or carbachol in rats. Masson DB, et al. **Behav Neurosci** 1989 Aug;103(4):873-80

Psychomotor, respiratory and neuroendocrinological effects of nalbuphine and haloperidol, alone and in combination, in healthy subjects. Saarialho-Kere U. **Br J Clin Pharmacol** 1988 Jul;26(1):79-87

Central administration of immunomodulatory factors alters neural activity and adrenocortical secretion. Kidron D, et al. **Brain Behav Immun** 1989 Mar;3(1):15-27

SK&F 86466, a novel alpha-adrenolytic drug: effects on heart rate, blood pressure, and neuroendocrine function in supine resting position and in response to postural and cold stimulation in normal humans. de Mey C, et al. **J Cardiovasc Pharmacol** 1989 Jan;13(1):25-31

The neuroendocrine effects of interleukin-2 treatment. Denicoff KD, et al. **J Clin Endocrinol Metab** 1989 Aug; 69(2):402-10

Neuroendocrine actions of nicotine and of exposure to cigarette smoke: medical implications. Fuxe K, et al. **Psychoneuroendocrinology** 1989;14(1-2):19-41 (150 ref.)

Comparative anxiogenic, neuroendocrine, and other physiologic effects of m-chlorophenylpiperazine given intravenously or orally to healthy volunteers. Murphy DL, et al. **Psychopharmacology (Berlin)** 1989;98(2):275-82

Angiotensin acts at the subfornical organ to increase plasma oxytocin concentrations in the rat. Ferguson AV, et al. **Regul Pept** 1988 Dec;23(3):343-52

The dispersed neuroendocrine cells: the structure, function, regulation and effects of xenobiotics on this system. Tischler AS. **Toxicol Pathol** 1989;17(2):307-16 (98 ref.)

[Effect of thymotropin on neuroendocrine regulation of the humoral immunity link in patient with neurodermatitis] Khamidov ShA. **Vestn Dermatol Venerol** 1988;(11):17-9 (Eng. Abstr.) **(Rus)**

[Effect of L-DOPA on the function of the brain neuromediator systems] Lovedova EL. **Zh Nevropatol Psikhiatr** 1988;88(7):19-21 (Eng. Abstr.) **(Rus)**

[Neuroendocrine effects of buspirone] Gastó C. **Med Clin (Barc)** 1989 May 20;92(19):2p. (5 ref.) **(Spa)**

[A bupivacaine-morphine combination by intrathecal route: correlation between pain relief and postoperative neuroendocrine response] Adrián JR, et al. **Rev Med Univ Navarra** 1988 Jan-Mar;32(1):35-9 (Eng. Abstr.) **(Spa)**

EMBRYOLOGY

Neuron-specific enolase (NSE) as a neuroendocrine cell marker in the human fetal pancreas. von Dorsche HH, et al. **Acta Histochem (Jena)** 1989;85(2):227-8

Formation of the transverse nerve in moth embryos. I. A scaffold of nonneuronal cells prefigures the nerve. Carr JN, et al. **Dev Biol** 1988 Dec;130(2):487-99

Formation of the transverse nerve in moth embryos. II. Stereotyped growth by the axons of identified neuroendocrine neurons. Carr JN, et al. **Dev Biol** 1988 Dec; 130(2):500-12

Sexual differentiation of neuroendocrine systems and behavior. Ottinger MA. **Poult Sci** 1989 Jul;68(7):979-89 (82 ref.)

IMMUNOLOGY

Monoclonal antibody directed against neuroendocrine properties of both normal and malignant cells. Okuda T, et al. **Hybridoma** 1988 Dec;7(6):569-81

Signaling pathways of the neuroendocrine-immune network. Roszman TL, et al. **Prog Allergy** 1988;43:140-59 (99 ref.)

Neuroendocrine regulation and the immune response in MS. Reder AT. **Res Immunol** 1989 Feb;140(2):239-45; discussion 245-8 (59 ref.)

METABOLISM

Neuroendocrine markers in central nervous system neuronal tumors (gangliocytoma and ganglioglioma). Takahashi H, et al. **Acta Neuropathol (Berl)** 1989;77(3):237-43

Neuroendocrine changes in acute myocardial infarction. McAlpine HM, et al. **Am J Med** 1988 Mar 11;84(3A):61-6

Enalapril decreases angiotensin II receptors in subfornical organ of SHR. Nazarali AJ, et al. **Am J Physiol** 1989 Jun; 256(6 Pt 2):H1609-14

Lack of stress-induced neuroendocrine changes after prolonged drinking of acid water in the rat. Preziosi P, et al. **Arch Toxicol Suppl** 1989;13:448-51

"Classical" neuroendocrine peptide hormones produced by cells of the immune system. Carr DJ, et al. **Brain Behav Immun** 1988 Dec;2(4):328-34 (25 ref.)

Evidence for the common expression of neuroendocrine hormones and cytokines in the immune and central nervous systems. Farrar WL. **Brain Behav Immun** 1988 Dec; 2(4):322-7 (10 ref.)

Neuronal control of [3H]GABA uptake in the ependymocytes of the subcommissural organ: an in vivo model of neuron-glia interaction. Didier-Bazes M, et al. **Brain Res** 1989 Jun 5;489(1):137-45

Tyrosine hydroxylase-immunoreactive somata within the primate subfornical organ: species specificity. Kordower JH, et al. **Brain Res** 1988 Oct 4;461(2):221-9

A bag cell neuron-specific antigen localizes to a subset of dense core vesicles in Aplysia californica. Sossin WS, et al. **Brain Res** 1989 Aug 14;494(2):205-14

Molecular and cellular regulation of neuropeptide expression: the bag cell model system. Arch S, et al. **Brain Res Brain Res Rev** 1989 Apr-Jun;14(2):181-201 (115 ref.)

Brainstem location of serotonin neurons projecting to the caudal neurosecretory complex. Cohen SL, et al. **Brain Res Bull** 1989 Mar;22(3):481-7

Monoamines in the caudal neurosecretory complex: biochemistry and immunohistochemistry. McKeon TW, et al. **Brain Res Bull** 1988 Jul;21(1):37-42

Opioid mechanisms in insects, with special attention to Leucophaea maderae. Scharrer B, et al. **Cell Mol Neurobiol** 1988 Sep;8(3):269-84 (53 ref.)

Immunohistochemical localization of glial fibrillary acidic protein (GFAP) and vimentin in the subcommissural organ of the Mongolian gerbil (Meriones unguiculatus). Redecker P. **Cell Tissue Res** 1989 Mar;255(3):595-600

Pinealocytes immunoreactive with antisera against secretory glycoproteins of the subcommissural organ: a comparative study. Rodríguez EM, et al. **Cell Tissue Res** 1988; 254(3):469-80

Antagonism of serotonin receptor mediated neuroendocrine and temperature responses by atypical neuroleptics in the rat. Nash JF, et al. **Eur J Pharmacol** 1988 Jul 14; 151(3):463-9

Immunocytochemical demonstration of a novel system of neuroendocrine peptidergic neurons in the pond snail Lymnaea stagnalis, with antisera to the teleostean hormone hypocalcin and mammalian parathyroid hormone. Wendelaar Bonga SE, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):29-38

Immunocytochemical localization of prolactin-like antigenic determinants in the neuroendocrine system of the honeybee (Apis mellifica). Schmid KP, et al. **Histochemistry** 1989; 91(6):469-72

Alterations in serum sodium in relation to atrial natriuretic factor and other neuroendocrine variables in experimental pacing-induced heart failure. Moe GW, et al. **J Am Coll Cardiol** 1989 Jan;13(1):173-9

beta-Endorphin and gonadotropin-releasing hormone synaptic input to gonadotropin-releasing hormone neurosecretory cells in the male rat. Chen WP, et al. **J Comp Neurol** 1989 Aug 1;286(1):85-95

Expression of the neural cell adhesion molecule NCAM in endocrine cells. Langley OK, et al. **J Histochem Cytochem** 1989 Jun;37(6):781-91

Post-translational processing in model neuroendocrine systems: precursors and products that coordinate reproductive activity in Aplysia and Lymnaea. Nagle GT, et al. **J Neurosci Res** 1989 Aug;23(4):359-70 (55 ref.)

The neuroendocrine prostate: characterization and quantitation of calcitonin in the human gland. Davis NS, et al. **J Urol** 1989 Sep;142(3):884-8

Cytochemical techniques for studying the diffuse neuroendocrine system. Bishop AE, et al. **Methods Enzymol** 1989;168:791-808

Paragangliomas of the head and neck: immunohistochemical neuroendocrine and intermediate filament typing. Johnson TL, et al. **Mod Pathol** 1988 May;1(3):216-23

Neuroendocrine abnormalities and the pathogenesis of estrogen-receptor-positive breast cancer. Lehrer S, et al. **Mt Sinai J Med (NY)** 1988 Sep;55(4):272-5 (44 ref.)

Receptor autoradiographic evidence of specific brain natriuretic peptide binding sites in the porcine subfornical organ. Niwa M, et al. **Neurosci Lett** 1988 Dec 19; 95(1-3):113-8

Effects of sinoaortic denervation on glucose utilization in the subfornical organ and pituitary neural lobe during administration of angiotensin II. Kadekaro M, et al. **Peptides** 1989 Jan-Feb;10(1):103-8

Lymphokines and monokines in the neuroendocrine system. Benveniste EN. **Prog Allergy** 1988;43:84-120 (152 ref.)

Partial characterization of a thyroid-stimulating hormone-like peptide in neuroendocrine cells of the human prostate gland. Abrahamsson PA, et al. **Prostate** 1989; 14(1):71-81

Neuroendocrine differentiation in carcinomas of the breast: a study of 51 cases. Papotti M, et al. **Semin Diagn Pathol** 1989 May;6(2):174-88

PATHOLOGY

Neuroendocrine differentiation and prostatic carcinoma. The concept 'comes of age'. di Sant'Agnese PA. **Arch Pathol Lab Med** 1988 Nov;112(11):1097-9

Neuroendocrine differentiation in prostatic carcinomas. A retrospective autopsy study. Turbat-Herrera EA, et al. **Arch Pathol Lab Med** 1988 Nov;112(11):1100-5

Advances in the biology of lung cancer. Clinical significance of neuroendocrine differentiation. Gazdar AF. **Chest** 1989 Jul;96(1 Suppl):39S-41S (15 ref.)

Identification of gastroenteropancreatic neuroendocrine cells in normal and neoplastic human tissue with antibodies against synaptophysin, chromogranin A, secretogranin I (chromogranin B), and secretogranin II. Wiedenmann B, et al. **Gastroenterology** 1988 Nov;95(5):1364-74

Small cell neuroendocrine carcinoma of the urinary bladder. An immunohistochemical and ultrastructural evaluation of

3 cases with a review of the literature. Blomjous CE, et al. **Virchows Arch [A]** 1988;413(6):505–12 (31 ref.)

PHYSIOLOGY

Controlled and automatic processing mode in vigilance situation: neuroendocrine correlates of effort. Paus T, et al. **Act Nerv Super (Praha)** 1988 Dec;30(4):289–90

The neuroendocrine system of the gut. Sundler F, et al. **Acta Oncol** 1989;28(3):303–14 (54 ref.)

Studies on central D1 receptors role in volume transmission, neuroendrocrine regulation and release of noradrenaline. Fuxe K, et al. **Adv Exp Med Biol** 1988;235:83–119 (73 ref.)

Effect of paraventricular nucleus lesions on drinking and pressor responses to ANG II. Gutman MB, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):R882–7

Inhibition of paraventricular neurons by subfornical organ and AV3V in cats. Osaka T, et al. **Am J Physiol** 1988 Dec; 255(6 Pt 2):R961–7

Bombesin-related peptides in the diffuse neuroendocrine system. Solcia E, et al. **Ann N Y Acad Sci** 1988;547:83–94 (44 ref.)

Involvement of hormonal and neuromodulatory systems in the regulation of memory storage. McGaugh JL. **Annu Rev Neurosci** 1989;12:255–87 (216 ref.)

Cyclic delta peaks during sleep: result of a pulsatile endocrine process? [letter] Feinberg I, et al. **Arch Gen Psychiatry** 1988 Dec;45(12):1141–2

Release of neuropeptides does not only occur at nerve terminals. Nordmann JJ, et al. **Biosci Rep** 1988 Oct; 8(5):471–83

Neuroimmune interactions. Proceedings of an international conference. London, England, September 19–20, 1988. **Brain Behav Immun** 1988 Dec;2(4):275–358

Subfornical organ activation stimulates luteinizing hormone secretion in the rat. Donevan SD, et al. **Brain Res** 1989 May 29;488(1–2):398–402

Contribution of nucleus medianus to the drinking and pressor responses to angiotensin II acting at subfornical organ. Gutman MB, et al. **Brain Res** 1989 May 29;488(1–2):49–56

Angiotensin II may mediate excitatory neurotransmission from the subfornical organ to the hypothalamic supraoptic nucleus: an anatomical and electrophysiological study in the rat. Jhamandas JH, et al. **Brain Res** 1989 May 15; 487(1):52–61

The role of cAMP in regulation of electrical activity of the neuroendocrine caudodorsal cells of Lymnaea stagnalis. Moed PJ, et al. **Brain Res** 1989 Jan 9;476(2):298–306

Inputs from the nucleus of the solitary tract to subfornical organ neurons projecting to the paraventricular nucleus in the rat. Shioya M, et al. **Brain Res** 1989 Mar 27; 483(1):192–5

Responses from osmosensitive neurons of the rat subfornical organ in vitro. Sibbald JR, et al. **Brain Res** 1988 Oct 4; 461(2):205–14

Neurons in the lateral hypothalamic area and zona incerta with ascending projections to the subfornical organ area in the rat. Tanaka J, et al. **Brain Res** 1988 Jul 26; 456(2):397–400

The median preoptic nucleus participates in the control of paraventricular vasopressin neurons by the subfornical organ in the rat. Tanaka J, et al. **Brain Res** 1988 Oct 4; 461(2):403–6

Role of opiates in the regulation of water and salt metabolism: effects of the FK 33–824 injection into the subfornical organ of both normal and hypophysectomized rats. Fregoneze JB, et al. **Braz J Med Biol Res** 1988;21(3):641–4

Angiotensin and the lamina terminalis: illustrations of a complex unity. Lind RW. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:79–105 (72 ref.)

NPY and related substances. McDonald JK. **Crit Rev Neurobiol** 1988;4(1):97–135 (351 ref.)

Neuroendocrine control of thymic hormonal production. I. Prolactin stimulates in vivo and in vitro the production of thymulin by human and murine thymic epithelial cells. Dardenne M, et al. **Endocrinology** 1989 Jul;125(1):3–12

Streptozotocin-induced deficits in sex behavior and neuroendocrine function in male rats. Steger RW, et al. **Endocrinology** 1989 Apr;124(4):1737–43

Neuroendocrine mechanisms regulating growth hormone and prolactin secretion during lactation. Wehrenberg WB, et al. **Endocrinology** 1989 Jan;124(1):464–7

The neuroendocrine system, an opportunity for immunotoxicologists. Snyder CA. **Environ Health Perspect** 1989 May;81:165–6 (14 ref.)

Involvement of the median preoptic nucleus in the regulation of paraventricular vasopressin neurons by the subfornical organ in the rat. Tanaka J. **Exp Brain Res** 1989;76(1):47–54

Neuroendocrine biomarkers of aging in the rat. Meites J. **Exp Gerontol** 1988;23(4–5):349–58 (29 ref.)

Endocrine control of maturation in males of Poekilocerus pictus Fabr. (Insecta). Gupta US, et al. **Folia Morphol (Praha)** 1988;36(3):317–23

Endocrine control of metamorphosis in Poekilocerus pictus Fabr. (Insecta). Gupta US, et al. **Folia Morphol (Praha)** 1988;36(3):324–30

Corpus allatum and corpus cardiacum regulation of long hyaline gland protein synthesis in the male grasshopper, Melanoplus sanguinipes. Cheeseman MT, et al. **Gen Comp Endocrinol** 1988 Dec;72(3):416–23

Flight-induced inhibition of the cerebral median peptidergic neurosecretory system in Locusta migratoria. Diederen JH, et al. **Gen Comp Endocrinol** 1988 Aug;71(2):257–64

Insulin and other islet hormones (somatostatin, glucagon and PP) in the neuroendocrine system of some lower vertebrates and that of invertebrates—a minireview. Conlon JM, et al. **Horm Metab Res** 1988 Jul;20(7):406–10 (39 ref.)

From the neuroendocrinology of lymphocytes toward a molecular basis of the network theory. Carr DJ, et al. **Horm Res** 1989;31(1–2):76–80 (28 ref.)

Decrease of hypothalamic TRH levels but not plasmatic TSH levels after ablation of submandibular salivary glands in the rat. Boyer R, et al. **J Biol Buccale** 1988 Jun;16(2):69–74

Neuroendocrine regulation of human growth hormone secretion. Diagnostic and clinical applications. Delitala G, et al. **J Endocrinol Invest** 1988 Jun;11(6):441–62 (187 ref.)

Quasielastic laser light scattering and laser Doppler electrophoresis as probes of synaptic and secretory terminal function. Sattelle DB. **J Exp Biol** 1988 Sep;139:233–52 (39 ref.)

Positive feedback by autoexcitatory neuropeptides in neuroendocrine bag cells of Aplysia. Brown RO, et al. **J Neurosci** 1989 Apr;9(4):1443–51

Neuroendocrine–immune interactions in the gut. Freier S, et al. **J Pediatr Gastroenterol Nutr** 1989 Jul;9(1):4–12 (67 ref.)

Neuroendocrine control of male reproductive function. The opioid system as a model of control at multiple sites. Fabbri A, et al. **J Steroid Biochem** 1989 Jan;32(1B):145–50 (58 ref.)

Use of metal complexes in neuroendocrine studies. Barnea A. **Methods Enzymol** 1989;168:710–5

Neuroendocrine effects on memory in aged rodents and humans. Gold PE, et al. **Neurobiol Aging** 1988 Sep–Dec; 9(5–6):709–17 (57 ref.)

Differential neuroendocrine responses to the 5-HT agonist m-chlorophenylpiperazine in Fawn-Hooded rats relative to Wistar and Sprague-Dawley rats. Aulakh CS, et al. **Neuroendocrinology** 1988 Oct;48(4):401–6

Psychotropic properties of ovarian estrogens (review). Arushanyan EB, et al. **Neurosci Behav Physiol** 1989 Jan–Feb;19(1):57–66 (109 ref.)

Involvement of the septum in the regulation of paraventricular vasopressin neurons by the subfornical organ in the rat. Tanaka J, et al. **Neurosci Lett** 1988 Oct 5;92(2):187–91

Impaired responsiveness of paraventricular neurosecretory neurons to osmotic stimulation in rats after local anesthesia of the subfornical organ. Tanaka J, et al. **Neurosci Lett** 1989 Mar 13;98(1):51–6

Lateral hypothalamic area and paraventricular nucleus connections with subfornical organ neurons: an electrophysiological study in the rat. Tanaka J, et al. **Neurosci Res** 1988 Oct;6(1):45–52

One receptor type mediates two independent effects of FMRFa on neurosecretory cells of Lymnaea. Brussaard AB, et al. **Peptides** 1989 Mar–Apr;10(2):289–97

Independent activation of subfornical organ and hypothalamo-neurohypophysial system during administration of angiotensin II. Kadekaro M, et al. **Peptides** 1989 Mar–Apr;10(2):423–9

Sauvagine/urotensin I-like immunoreactivity in the caudal neurosecretory system of a seawater fish Diplodus sargus L. in normal and hyposmotic milieu. Minniti F, et al. **Peptides** 1989 Mar–Apr;10(2):383–9

Neuroendocrine regulation of growth hormone secretion in major depressive disorder. Lesch KP, et al. **Pharmacopsychiatry** 1988 Nov;21(6):440–2

A molecular basis for bidirectional communication between the immune and neuroendocrine systems. Blalock JE. **Physiol Rev** 1989 Jan;69(1):1–32 (146 ref.)

Neuroimmunoendocrinology. **Prog Allergy** 1988;43:1–165

Evidence that underfeeding acts via the neuroendocrine system to influence aging processes. Meites J. **Prog Clin Biol Res** 1989;287:169–80 (31 ref.)

Neuroendocrine responses to nicotine and stress: enhancement of peripheral stress responses by the administration of nicotine. Morse DE. **Psychopharmacology (Berlin)** 1989;98(4):539–43

Control of release of vasopressin by neuroendocrine reflexes. Bisset GW, et al. **Q J Exp Physiol** 1988 Nov;73(6):811–72 (480 ref.)

Neuroendocrinology of the pituitary gland. Reichlin S. **Toxicol Pathol** 1989;17(2):250–5 (5 ref.)

Bidirectional regulatory circuit between the immune and neuroendocrine systems. Cavagnaro J, et al. **Year Immunol** 1989;4:241–52 (44 ref.)

[Neuroendocrine mechanisms in the circadian regulation of feeding in the rat] Stoynev AG, et al. **Endocrinologie** 1988 Jul–Sep;26(3):159–64 **(Fre)**

[Psycho-neuro-immunological aspects in the evaluation and prevention of anesthesiologic-surgical risk] Caregnato L, et al. **Minerva Anestesiol** 1988 Oct;54(10):439–43 (Eng. Abstr.) **(Ita)**

[Inhibitory reactions of the neurosecretory cells of the supraoptic hypothalamic nucleus in lactating rats to subiculum stimulation] Alekseev NP, et al. **Neirofiziologiia** 1988;20(4):431–7 (Eng. Abstr.) **(Rus)**

[The neuroendocrine regulation of sexual functions in middle-aged and elderly men] Gorpinchenko II. **Vrach Delo** 1989 Mar;(3):88–90 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

The pulmonary neuroendocrine cell: a role in adult lung disease? [editorial] Miller YE. **Am Rev Respir Dis** 1989 Aug;140(2):283–4 (30 ref.)

Effect of morphine on the hemodynamic and neuroendocrine responses to hemorrhage in conscious rats. Feuerstein G, et al. **Circ Shock** 1989 Mar;27(3):219–35

Neuroendocrine function in obesity. Kopelman PG. **Clin Endocrinol (Oxf)** 1988 Jun;28(6):675–89 (91 ref.)

Abstracts of the Hans Selye Symposium on Neuroendocrinology and Stress. September 13–15, 1989, Estérel, Quebec, Canada. Neuroendocrine aspects of gastrointestinal (GI) ulceration. **Dig Dis Sci** 1989 Aug; 34(8):1311–23

A hypothesis to integrate partial seizures of temporal lobe origin and reproductive endocrine disorders. Herzog AG. **Epilepsy Res** 1989 Mar–Apr;3(2):151–9 (82 ref.)

The effect of neuroendocrine secretion on brain morphology and EEG sleep in patients with eating disorders. Lauer C, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(4):208–12

Psychoneuroendocrine research in depression. II. Hormonal responses to releasing hormones as a probe for hypothalamic-pituitary-endorgan dysfunction. Lesch KP, et al. **J Neural Transm** 1989;75(3):179–94 (89 ref.)

Psychoneuroendocrine research in depression. I. Hormone levels of different neuroendocrine axes and the dexamethasone suppression test. Rupprecht R, et al. **J Neural Transm** 1989;75(3):167–78 (102 ref.)

HIV induced neuroendocrine alterations in AIDS patients as a co-factor of immune deficiency. Salomon JC. **Med Hypotheses** 1988 Sep;27(1):83–4

Neuroendocrinological function in Alzheimer's disease. Franceschi M, et al. **Neuroendocrinology** 1988 Oct; 48(4):367–70

Neurologic complications of endocrine diseases. Kaminski HJ, et al. **Neurol Clin** 1989 Aug;7(3):489–508 (136 ref.)

Neurohormonal aspects of fibromyalgia syndrome. Russell IJ. **Rheum Dis Clin North Am** 1989 Feb;15(1):149–68

[Rheumatoid arthritis. Interactions between the endocrine and immune systems] Neeck G, et al. **Dtsch Med Wochenschr** 1988 Oct 7;113(40):1572–3 (11 ref.) **(Ger)**

[Disorders of neuroendocrine regulation and of the hormonal reserves of the testes in rats during total overheating] Reznikov AG, et al. **Fiziol Zh** 1988 Jul–Aug;34(4):78–83 (Eng. Abstr.) **(Rus)**

[Changes in the bioelectrochemical activity of the neurosecretory hypothalamic nuclei in fever caused by endogenous pyrogen/interleukin-1] Romanovskiĭ AA, et al. **Fiziol Zh SSSR** 1988 Dec;74(12):1731–7 (Eng. Abstr.) **(Rus)**

[Functional state of the neuroendocrine system in men after myocardial infarction in the period of rehabilitation] Kurbanov VA, et al. **Ter Arkh** 1988;60(9):57–61 (Eng. Abstr.) **(Rus)**

[Reaction of the neuroendocrine system to surgical trauma to the ear] Revskoĭ IuK, et al. **Voen Med Zh** 1988 May; (5):59–60 (0 ref.) **(Rus)**

[Characteristics of neuroendocrine regulation in tumors of the sellar-diencephalon area] Skoromets AA, et al. **Zh Vopr Neirokhir** 1988 Nov–Dec;(6):38–42 (62 ref.) **(Rus)**

RADIATION EFFECTS

[Histophysiology of the neurosecretory systems of the hypothalamus, epiphysis cerebri and myometrium in pregnant rats exposed to a helium-neon laser] Gul'iants ES, et al. **Akush Ginekol (Mosk)** 1989 Apr;(4):52–5 (Eng. Abstr.) **(Rus)**

SECRETION

Monoclonal antibody C1B8A8 recognizes a ventricular secretory product elaborated in the bovine subcommissural organ. Meiniel R, et al. **Cell Tissue Res** 1988;254(3):611–5

Evidence for apical secretion in the subcommissural organ of the chicken (Gallus gallus). Biosca A, et al. **J Hirnforsch** 1989;30(3):265–71

Evidence for basal secretion in the subcommissural organ of the chicken (Gallus gallus). Biosca A, et al. **J Hirnforsch** 1989;30(3):273–9

ULTRASTRUCTURE

Ultrastructure of a neuroendocrine complex in oxyntic mucosa of normal human stomach. D'Adda T, et al. **Cell Tissue Res** 1988 Nov;254(2):465–7

Staining of neuroendocrine cells by Linder's argyrophil method. Cecio A, et al. **J Anat** 1988 Apr;157:197–201

A persistent, TTX-sensitive sodium current in an invertebrate neuron with neurosecretory ultrastructure. Davis RE, et al. **J Neurosci** 1988 Nov;8(11):3978–91

[Ultrastructural aspects of the corpus cardiacum, corpus allatum and aorta of Panstrongylus megistus (Hemiptera: Reduviidae)] Schuetz MJ, et al. **Rev Bras Biol** 1988 Aug; 48(3):625–34 (Eng. Abstr.) **(Por)**

[Ultrastructure of neurosecretory cells of the hypothalamic supraoptic nuclei of albino rats during nociceptive stress and aging] Pelevin IuM, et al. **Neirofiziologiia** 1989; 21(3):389–96 (Eng. Abstr.) **(Rus)**

NEUROSES see **NEUROTIC DISORDERS**

NEUROSES, ANXIETY see **ANXIETY DISORDERS**

NEUROSES, NEURASTHENIC see **NEURASTHENIA**

NEUROSES, PHOBIC see PHOBIC DISORDERS

NEUROSES, POST-TRAUMATIC see STRESS DISORDERS, POST-TRAUMATIC

NEUROSIS, DEPRESSIVE see DEPRESSIVE DISORDER

NEUROSIS, HYPOCHONDRIACAL see HYPOCHONDRIASIS

NEUROSIS, OBSESSIVE-COMPULSIVE see OBSESSIVE-COMPULSIVE DISORDER

NEUROSPORA

Luminescence emission from Neurospora copper metallothionein. Time-resolved studies. Beltramini M, et al. **Biochem J** 1989 May 15;260(1):189–93

ANALYSIS

Method for identification of intracellular free flavin species in the photosensitive fungus Neurospora crassa. Scheideler L, et al. **Anal Biochem** 1988 Aug 15;173(1):106–10

Identification and electron microscopic analysis of a chaperonin oligomer from Neurospora crassa mitochondria. Hutchinson EG, et al. **EMBO J** 1989 May; 8(5):1485–90

DRUG EFFECTS

Isolation and characterization of cadmium-resistant mutants of Neurospora crassa. Levine WB, et al. **Can J Microbiol** 1989 Mar;35(3):359–65

ENZYMOLOGY

An optimized procedure for sodium dodecyl sulfate-polyacrylamide gel electrophoresis analysis of hydrophobic peptides from an integral membrane protein. Hennessey JP Jr, et al. **Anal Biochem** 1989 Feb 1; 176(2):284–9

Protein chemistry of the Neurospora crassa plasma membrane H+-ATPase. Subrahmanyeswara Rao U, et al. **Anal Biochem** 1988 Sep;173(2):251–64

Neurospora crassa alpha-ketoglutarate dehydrogenase complex: description, resolution of components and catalytic properties. Bessam H, et al. **Biochim Biophys Acta** 1989 Jan 27;990(1):66–72

Sedimentation properties of chitosomal chitin synthetase from the wild-type strain and the 'slime' variant of Neurospora crassa. Martínez JP, et al. **Biochim Biophys Acta** 1989 Jan 27;990(1):45–52

A novel reverse transcriptase activity associated with mitochondrial plasmids of Neurospora [published erratum appears in Cell 1989 Jan 13;56(1):following 139] Kuiper MT, et al. **Cell** 1988 Nov 18;55(4):693–704

A small isoform of NADH:ubiquinone oxidoreductase (complex I) without mitochondrially encoded subunits is made in chloramphenicol-treated Neurospora crassa. Friedrich T, et al. **Eur J Biochem** 1989 Mar 1;180(1):173–80

Assembly kinetics and identification of precursor proteins of complex I from Neurospora crassa. Videira A, et al. **Eur J Biochem** 1989 May 1;181(2):493–502

The pathway of the quinol/quinone transhydrogenation reaction in ubiquinol: cytochrome-c reductase of Neurospora mitochondria. Zweck A, et al. **Eur J Biochem** 1989 Jul 15;183(1):199–203

Cyclic nucleotide phosphodiesterase activity in Neurospora crassa. Purification by immunoaffinity chromatography and characterization. Ulloa RM, et al. **FEBS Lett** 1988 Dec 5;241(1-2):219–22

The amino acid sequence of ribonuclease N1, a guanine-specific ribonuclease from the fungus Neurospora crassa. Takahashi K. **J Biochem (Tokyo)** 1988 Sep; 104(3):375–82

Biosynthesis of the plasma membrane H+-ATPase of Neurospora crassa. Aaronson LR, et al. **J Biol Chem** 1988 Oct 5;263(28):14552–8

Translocation of a fragment of invertase across microsomal vesicles isolated from Neurospora crassa requires the hydrolysis of a nucleoside triphosphate. Addison R. **J Biol Chem** 1988 Oct 5;263(28):14281–7

Studies on the active site of the Neurospora crassa plasma membrane H+-ATPase with periodate-oxidized nucleotides. Bidwai AP, et al. **J Biol Chem** 1989 Jul 15; 264(20):11790–5

The vacuolar ATPase of Neurospora crassa contains an F1-like structure. Bowman BJ, et al. **J Biol Chem** 1989 Sep 15;264(26):15606–12

The plasma membrane H+-ATPase of Neurospora crassa. Properties of two reactive sulfhydryl groups. Davenport JW, et al. **J Biol Chem** 1988 Nov 5;263(31):16007–13

The actions of Neurospora endo-exonuclease on double strand DNAs. Fraser MJ, et al. **J Biol Chem** 1989 Aug 5;264(22):13093–101

The amino and carboxyl termini of the Neurospora plasma membrane H+-ATPase are cytoplasmically located. Mandala SM, et al. **J Biol Chem** 1989 Sep 25; 264(27):16276–81

Identification of tryptic cleavage sites for two conformational states of the Neurospora plasma membrane H+-ATPase. Mandala SM, et al. **J Biol Chem** 1988 Oct 15; 263(29):15122–8

Cysteine 532 and cysteine 545 are the N-ethylmaleimide-reactive residues of the Neurospora plasma membrane H+-ATPase. Pardo JP, et al. **J Biol Chem** 1989 Jun 5;264(16):9373–9

The fluorescein isothiocyanate-binding site of the plasma-membrane H+-ATPase of Neurospora crassa. Pardo JP, et al. **J Biol Chem** 1988 Dec 15;263(35):18664–8

NAD-specific glutamate dehydrogenase of Neurospora crassa. cDNA cloning and gene expression during derepression. Vierula PJ, et al. **J Biol Chem** 1989 Jan 15; 264(2):1108–14

Chitinase from Neurospora crassa. Arroyo-Begovich A. **Methods Enzymol** 1988;161:471–4

Purification of vacuolar membranes, mitochondria, and plasma membranes from Neurospora crassa and modes of discriminating among the different H+-ATPases. Bowman EJ, et al. **Methods Enzymol** 1988;157:562–73

Large-scale purification of plasma membrane H+-ATPase from a cell wall-less mutant of Neurospora crassa. Scarborough GA. **Methods Enzymol** 1988;157:574–9

Immunological identification of the alternative oxidase of Neurospora crassa mitochondria. Lambowitz AM, et al. **Mol Cell Biol** 1989 Mar;9(3):1362–4

Molecular cloning and regulatory analysis of the arylsulfatase structural gene of Neurospora crassa. Paietta JV. **Mol Cell Biol** 1989 Sep;9(9):3630–7

GENETICS

Defective myo-inositol-1-phosphate synthase production in an inositolless double mutant Neurospora crassa strain. Kiss A, et al. **Acta Biochim Biophys Hung** 1988;23(3-4):215–23

The response time of transcription and translation of the leu-2 gene of Neurospora to its inducer, alpha-isopropylmalate, approaches the permissible minimum. Mary A, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1286–90

Binding of a 30-kDa protein to the pyruvate kinase gene of Neurospora crassa. Devchand MR, et al. **Biochem Cell Biol** 1988 Sep;66(9):958–66

Transformation of Neurospora crassa by an integrative transforming plasmid is not enhanced by ribosomal DNA sequences. Russell PJ, et al. **Biochim Biophys Acta** 1989 Jul 7;1008(2):243–6

The Neurospora am gene and allelic complementation. Fincham JR. **Bioessays** 1988 Nov;9(5):169–72

Molecular cloning vectors for Aspergillus and Neurospora. Cullen D, et al. **Biotechnology** 1988;10:419–33 (50 ref.)

Duplication of the tRNA(MMet) and tRNA(Cys) genes and of fragments of a gene encoding a subunit of the NADH dehydrogenase complex in Neurospora grassa mitochondrial DNA. Agsteribbe E, et al. **Curr Genet** 1989 Jan;15(1):57–62

Early response and induced tolerance to cycloheximide in Neurospora crassa. Grotewold E, et al. **Curr Genet** 1989 Jun;15(6):429–34

Inducible responses to DNA damaging or stress inducing agents in Neurospora crassa. Howard CA, et al. **Curr Genet** 1989 Jan;15(1):47–55

Restricted distribution of the Tad transposon in strains of Neurospora. Kinsey JA. **Curr Genet** 1989 Apr;15(4):271–5

Isolation and characterization of a Neurospora glucose-repressible gene. McNally MT, et al. **Curr Genet** 1988 Dec;14(6):545–51

DNA methylation and control of genome organization in Neurospora crassa. Selker EU, et al. **Gene** 1988 Dec 25; 74(1):109–11

A morphological and genetic analysis of conidiophore development in Neurospora crassa. Springer ML, et al. **Genes Dev** 1989 Apr;3(4):559–71

Molecular characterization of the mitochondrial DNA of a new stopper mutant ER-3 of Neurospora crassa. Almasan A, et al. **Genetics** 1988 Dec;120(4):935–45

Premeiotic change of nucleolus organizer size in Neurospora. Butler DK, et al. **Genetics** 1989 Aug;122(4):783–91

Recombination and replication of plasmid-like derivatives of a short section of the mitochondrial chromosome of Neurospora crassa. Gross SR, et al. **Genetics** 1989 Apr; 121(4):693–701

Change in chromosome number associated with a double deletion in the Neurospora crassa mitochondrial chromosome. Gross SR, et al. **Genetics** 1989 Apr; 121(4):685–91

Two kinds of "recombination nodules" in Neurospora crassa. Bojko M. **Genome** 1989 Apr;32(2):309–17

Deoxyglucose-resistant mutants of Neurospora crassa: isolation, mapping, and biochemical characterization. Allen KE, et al. **J Bacteriol** 1989 Jan;171(1):53–8

Evidence for three differentially regulated catalase genes in Neurospora crassa: effects of oxidative stress, heat shock, and development. Chary P, et al. **J Bacteriol** 1989 May; 171(5):2646–52

Isolation of nit-4, the minor nitrogen regulatory gene which mediates nitrate induction in Neurospora crassa. Fu YH, et al. **J Bacteriol** 1989 Jul;171(7):4067–70

Chemical synthesis and expression of copper metallothionein gene of Neurospora crassa. Sugimoto M, et al. **J Biochem (Tokyo)** 1988 Dec;104(6):924–6

Isolation of genes encoding the Neurospora vacuolar ATPase. Analysis of vma-2 encoding the 57-kDa polypeptide and comparison to vma-1. Bowman BJ, et al. **J Biol Chem** 1988 Oct 5;263(28):14002–7

Isolation of genes encoding the Neurospora vacuolar ATPase. Analysis of vma-1 encoding the 67-kDa subunit reveals homology to other ATPases. Bowman EJ, et al. **J Biol Chem** 1988 Oct 5;263(28):13994–4001

Nucleotide sequence of the Neurospora crassa trp-3 gene encoding tryptophan synthetase and comparison of the trp-3 polypeptide with its homologs in Saccharomyces cerevisiae and Escherichia coli. Burns DM, et al. **J Biol Chem** 1989 Mar 5;264(7):3840–8

A mitochondrial protein from Neurospora crassa detected both on ribosomes and in membrane fractions. Analysis of the gene, the message, and the protein. Kreader CA, et al. **J Biol Chem** 1989 Jan 5;264(1):317–27

Biogenesis of cytochrome c1. Role of cytochrome c1 heme lyase and of the two proteolytic processing steps during import into mitochondria. Nicholson DW, et al. **J Biol Chem** 1989 Jun 15;264(17):10156–68

Cyclosporin A-binding protein (cyclophilin) of Neurospora crassa. One gene codes for both the cytosolic and mitochondrial forms. Tropschug M, et al. **J Biol Chem** 1988 Oct 5;263(28):14433–40

Nucleotide sequence of the Varkud mitochondrial plasmid of Neurospora and synthesis of a hybrid transcript with a 5' leader derived from mitochondrial RNA. Akins RA, et al. **J Mol Biol** 1988 Nov 5;204(1):1–25

DNA sequence, organization and regulation of the qa gene cluster of Neurospora crassa. Geever RF, et al. **J Mol Biol** 1989 May 5;207(1):15–34

Characterization of mutant mitochondrial plasmids of Neurospora spp. that have incorporated tRNAs by reverse transcription. Akins RA, et al. **Mol Cell Biol** 1989 Feb; 9(2):678–91

cys-3, the positive-acting sulfur regulatory gene of Neurospora crassa, encodes a protein with a putative leucine zipper DNA-binding element. Fu YH, et al. **Mol Cell Biol** 1989 Mar;9(3):1120–7

Development of an in vitro transcription system for Neurospora crassa mitochondrial DNA and identification of transcription initiation sites. Kennell JC, et al. **Mol Cell Biol** 1989 Sep;9(9):3603–13

Molecular cloning of a Neurospora crassa carotenoid biosynthetic gene (albino-3) regulated by blue light and the products of the white collar genes. Nelson MA, et al. **Mol Cell Biol** 1989 Mar;9(3):1271–6

Cytochrome oxidase subunit V gene of Neurospora crassa: DNA sequences, chromosomal mapping, and evidence that the cya-4 locus specifies the structural gene for subunit V. Sachs MS, et al. **Mol Cell Biol** 1989 Feb;9(2):566–77

Use of transformation to make targeted sequence alterations at the am (GDH) locus of Neurospora. Frederick GD, et al. **Mol Gen Genet** 1989 Jun;217(2-3):294–300

Molecular cloning and characterization of a negative-acting nitrogen regulatory gene of Neurospora crassa. Fu YH, et al. **Mol Gen Genet** 1988 Sep;214(1):74–9

Characterization of a mutation that causes overproduction of inositol in Neurospora crassa. Schablik M, et al. **Mol Gen Genet** 1988 Jul;213(1):140–3

Molecular cloning, identification and transcriptional analysis of genes involved in acetate utilization in Neurospora crassa. Thomas GH, et al. **Mol Microbiol** 1988 Sep; 2(5):599–606

Effect of the uvs-2 allele of Neurospora crassa on the mutagenic potency of two N-hydroxylaminopurines and 2-aminopurine in the ad-3 forward-mutation test. Brockman HE, et al. **Mutat Res** 1989 Jul;218(1):1–11

Epistasis, photoreactivation and mutagen sensitivity of DNA repair mutants upr-1 and mus-26 in Neurospora crassa. Ishii C, et al. **Mutat Res** 1989 Sep;218(2):95–103

Sensitivity to bleomycin and hydrogen peroxide of DNA repair-defective mutants in Neurospora crassa. Käfer E, et al. **Mutat Res** 1989 Jan;217(1):75–81

Effects of heat shock on the induction of mutations by chemical mutagens in Neurospora crassa. Tanaka S, et al. **Mutat Res** 1989 Jun;223(2):233–42

The Neurospora clock gene frequency shares a sequence element with the Drosophila clock gene period. McClung CR, et al. **Nature** 1989 Jun 15;339(6225):558–62

Independent transfer of mitochondrial plasmids in Neurospora crassa. May G, et al. **Nature** 1989 May 25; 339(6222):320–2

The mitochondrial plasmid from Neurospora intermedia strain Labelle-1b contains a long open reading frame with blocks of amino acids characteristic of reverse transcriptases and related proteins. Pande S, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2023–42

Genes expressed during conidiation in Neurospora crassa: characterization of con-8. Roberts AN, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):197–214

Fast light-regulated genes of Neurospora crassa. Sommer T, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5713–23

Ubiquitin expression in Neurospora crassa: cloning and sequencing of a polyubiquitin gene. Taccioli GE, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6153–65

Isolation of a transposable element from Neurospora crassa. Kinsey JA, et al. **Proc Natl Acad Sci U S A** 1989 Mar; 86(6):1929–33

Repeat-induced G-C to A-T mutations in Neurospora. Cambareri EB, et al. **Science** 1989 Jun 30;244(4912):1571–5

Molecular cloning of genes under control of the circadian clock in Neurospora. Loros JJ, et al. **Science** 1989 Jan 20; 243(4889):385–8

Genetic engineering of filamentous fungi. Timberlake WE, et al. **Science** 1989 Jun 16;244(4910):1313–7 (71 ref.)

Aminoacyl-tRNA synthetases are involved in RNA splicing

in fungal mitochondria. Benne R. **Trends Genet** 1988 Jul; 4(7):181–2
Sequences important for gene expression in filamentous fungi. Ballance DJ. **Yeast** 1986 Dec;2(4):229–36 (81 ref.)

GROWTH & DEVELOPMENT

Uptake, intracellular binding, and excretion of polyamines during growth of Neurospora crassa. Davis RH, et al. **Arch Biochem Biophys** 1989 Jun;271(2):315–22
Dual roles for calcium ions in apical growth of Neurospora crassa. Schmid J, et al. **J Gen Microbiol** 1988 Sep;134 (Pt 9):2623–31

METABOLISM

Polyamine transport in Neurospora crassa. Davis RH, et al. **Arch Biochem Biophys** 1988 Dec;267(2):479–89
Deoxyribonucleoside triphosphate pools in mutagen sensitive mutants of Neurospora crassa. Srivastava VK, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):583–90
Metabolism of D-glucose in a wall-less mutant of Neurospora crassa examined by 13C and 31P nuclear magnetic resonances: effects of insulin. Greenfield NJ, et al. **Biochemistry** 1988 Nov 15;27(23):8526–33
Proton NMR studies of a metallothionein from Neurospora crassa: sequence-specific assignments by NOE measurements in the rotating frame. Malikayil JA, et al. **Biochemistry** 1989 Apr 4;28(7):2991–5
The mitochondrial outer membrane channel, VDAC, is modulated by a soluble protein. Holden MJ, et al. **FEBS Lett** 1988 Dec 5;241(1–2):105–9
13N isotope studies of glutamine assimilation pathways in Neurospora crassa. Calderón J, et al. **J Bacteriol** 1989 Mar; 171(3):1772–4
In vivo control of gluconeogenesis in wild-type Neurospora crassa and in the adenylate cyclase-deficient cr-1 (crisp) mutant. Neves MJ, et al. **J Bacteriol** 1989 Mar; 171(3):1767–71
Identification of an arginine carrier in the vacuolar membrane of Neurospora crassa. Paek YL, et al. **J Biol Chem** 1989 May 5;264(13):7285–90
Mitochondrial protein import. Bypass of proteinaceous surface receptors can occur with low specificity and efficiency. Pfaller R, et al. **J Biol Chem** 1989 Jan 5; 264(1):34–9
Structure of D-prephenyllactate. A carboxycyclohexadienyl metabolite from Neurospora crassa. Zamir LO, et al. **J Biol Chem** 1988 Nov 25;263(33):17284–90
Import pathways of precursor proteins into mitochondria: multiple receptor sites are followed by a common membrane insertion site. Pfaller R, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2483–90
Involvement of tyrosyl-tRNA synthetase in splicing of group I introns in Neurospora crassa mitochondria: biochemical and immunochemical analyses of splicing activity. Majumder AL, et al. **Mol Cell Biol** 1989 May;9(5):2089–104
An insulin receptor in microorganisms: fact or fiction? Dietz E, et al. **Naturwissenschaften** 1989 Jun;76(6):269–70
Novel mechanisms controlling arginine metabolism in Neurospora. Davis RH, et al. **Trends Biochem Sci** 1988 Mar;13(3):101–4 (23 ref.)
[Mechanism of photoregulation of carotenogenesis in Neurospora crassa: the use of mutants] Chernysheva EK, et al. **Dokl Akad Nauk SSSR** 1988;301(2):484–6 **(Rus)**

PHYSIOLOGY

The heat shock response of Neurospora crassa: stress-induced thermotolerance in relation to peroxidase and superoxide dismutase levels. Kapoor M, et al. **Biochem Biophys Res Commun** 1988 Nov 15; 156(3):1097–102
Mating type response in Neurospora crassa. Early and transient changes in the patterns of protein synthesis in sexually stimulated mycelia. Terenzi HF. **Braz J Med Biol Res** 1988;21(4):747–57
Transcellular ionic currents studied by intracellular potential recordings in Neurospora crassa hyphae. Transfer of energy from proximal to apical cells. Potapova TV, et al. **FEBS Lett** 1988 Dec 5;241(1–2):173–6

RADIATION EFFECTS

Blue light induces circadian rhythms in the bd mutant of Neurospora: double mutants bd,wc-1 and bd,wc-2 are blind. Russo VE. **J Photochem Photobiol -B-** 1988 Jul; 2(1):59–65
X-ray-induced specific-locus mutations in the ad-3 region of two-component heterokaryons of Neurospora crassa. II. More extensive genetic tests reveal an unexpectedly high frequency of multiple-locus mutations. de Serres FJ. **Mutat Res** 1989 Feb;210(2):281–90
X-ray-induced specific locus mutations in the ad-3 region of two-component heterokaryons of Neurospora crassa. III. Genetic fine structure analysis of the ad-3 and immediately adjacent genetic regions by means of complementation tests. de Serres FJ. **Mutat Res** 1989 Mar; 211(1):89–102

ULTRASTRUCTURE

Inositol trisphosphate induces calcium release from Neurospora crassa vacuoles. Cornelius G, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):852–6
Presence of abnormal synaptonemal complexes in heterothallic species of Neurospora. Bojko M. **Genome** 1988 Oct;30(5):697–709

NEUROSPORA CRASSA see under **NEUROSPORA**

NEUROSURGERY

Pediatric neuroanesthesia computerized monitoring system. Sammartino M, et al. **Acta Anaesthesiol Belg** 1989; 40(1):53–7
Cardiorespiratory effects of the sitting position in neurosurgery. Smelt WL, et al. **Acta Anaesthesiol Belg** 1988;39(4):223–31
The European spirit and the European Association of Neurosurgical Societies (EANS). Brihaye J. **Acta Neurochir (Wien)** 1989;99(1–2):1–10
Subspecialization in neurosurgery. Rossi GF. **Acta Neurochir (Wien)** 1988;94(1–2):1–9
The 27th Rovenstine Lecture: Neuroanesthesia and the achievement of professional respect. Michenfelder JD. **Anesthesiology** 1989 Apr;70(4):695–701
Prevention of deep vein thrombosis in potential neurosurgical patients. A randomized trial comparing graduated compression stockings alone or graduated compression stockings plus intermittent pneumatic compression with control. Turpie AG, et al. **Arch Intern Med** 1989 Mar; 149(3):679–81
Volatile anaesthetic agents in neurosurgery. Moss E. **Br J Anaesth** 1989 Jul;63(1):4–6 (21 ref.)
Neuroanaesthesia. Saunders B. **Can Anaesth Soc J** 1983 May; 30(3 Pt 2):S39–41 (4 ref.)
Pediatric neurosurgery in Latin America. Basauri L. **Childs Nerv Syst** 1988 Dec;4(6):315–6
Quo vadis, neurochirurgia paediatrica? Sano K. **Childs Nerv Syst** 1989 Feb;5(1):3–8
Pediatric neurosurgery around the world—Asia and Australasia. Sato O. **Childs Nerv Syst** 1988 Dec;4(6):317–20
The intensive care unit: who's in charge? Belzberg H. **Clin Neurosurg** 1989;35:63–7
Risky business: is personal risk an obligation in treating patients? Black PM. **Clin Neurosurg** 1989;35:487–99
The art and science of evaluating neurosurgical treatment. Haines SJ. **Clin Neurosurg** 1989;35:451–8
Are randomized clinical trials of surgical procedures feasible? Langfitt TW. **Clin Neurosurg** 1989;35:43–52
Subspecialty certification in critical care. Mahaley MS Jr. **Clin Neurosurg** 1989;35:68–70
Neurosurgical critical care: who's in charge? Pitts LH. **Clin Neurosurg** 1989;35:55–62
Commitment and contribution. Quest DO. **Clin Neurosurg** 1989;35:3–14
Neurosurgeons and the supply of human organs. Prottas JM, et al. **Health Aff (Millwood)** 1989 Spring;8(1):119–31
Fever in the neurosurgical patient. Cunha BA, et al. **Heart Lung** 1988 Nov;17(6 Pt 1):608–11 (13 ref.)
A frameless stereotaxic operating microscope for neurosurgery. Friets EM, et al. **IEEE Trans Biomed Eng** 1989 Jun;36(6):608–17
Simple peroperative antimicrobial chemoprophylaxis in elective neurosurgical operations. Ingham HR, et al. **J Hosp Infect** 1988 Oct;12(3):225–33
Role of gastric colonization in nosocomial infections and endotoxemia: a prospective study in neurosurgical patients on mechanical ventilation. Reusser P, et al. **J Infect Dis** 1989 Sep;160(3):414–21
Neurologists join neurosurgeons in urging restraint in Parkinson's surgery [news] Merz B. **JAMA** 1989 May 26; 261(20):2929
Neurological surgery. Tindall GT. **JAMA** 1989 May 19; 261(19):2857–8
NeuroSIG: the computer network of the Congress of Neurological Surgeons. Reid SA. **Neurosurgery** 1988 Oct; 23(4):519–24
Historical vignette. Problems, progress and change of perception. Alexander E Jr. **Surg Neurol** 1988 Nov; 30(5):408
Specialization in neurosurgery. Hoffman HJ. **Surg Neurol** 1989 Aug;32(2):165
The neurosurgeon as chairman of surgery. Popp AJ. **Surg Neurol** 1989 Feb;31(2):92–5
[The present position of Czechoslovak neurosurgery and its perspectives] Petr R, et al. **Cas Lek Cesk** 1988 Sep 30; 127(39–40):1217–9 (Eng. Abstr.) **(Cze)**
[Neurosurgery in Japan] Beneš V. **Cesk Neurol Neurochir** 1989 Jan;52(1):52–5 **(Cze)**
[A neurosurgeon's point of view on lumbago] Thurel C, et al. **Agressologie** 1989 Mar;30(3):125–6 (Eng. Abstr.) **(Fre)**
[Hypothermia and neuroanesthesia: monitoring and prevention] Robiquet P, et al. **Cah Anesthesiol** 1989 May; 37(3):195–9 **(Fre)**
[Antibioprophylaxis with cefamandole in neurosurgery (letter)] Rocca B, et al. **Presse Med** 1989 Jun 10;18(23):1165 **(Fre)**
[Advances in neurosurgery (editorial)] Probst C. **Clin Ter** 1987 Oct 15;123(1):3–6 **(Ita)**
[Treatment of brain injuries in a peripheral intensive care unit. Results of the cooperation with the specialists at the nearest regional hospital] Corbanese U, et al. **Minerva Anestesiol** 1988 Mar;54(3):77–9 (Eng. Abstr.) **(Ita)**
[The "Arkhiv" information retrieval system] Kazarnovskaia MI, et al. **Zh Vopr Neirokhir** 1989 Jan–Feb;(1):61–3 **(Rus)**
[Principles of intensive therapy in neurosurgery] Manevich AZ. **Zh Vopr Neirokhir** 1989 Mar–Apr;(2):3–8 **(Rus)**
[Use of lasers in neurosurgery] Negovetić L, et al. **Lijec Vjesn** 1988 Nov;110(11):380–3 (Eng. Abstr.) **(Scr)**

ADVERSE EFFECTS

Prevalence of psychologic disorders after surgical treatment of seizures. Koch-Weser M, et al. **Arch Neurol** 1988 Dec; 45(12):1308–11

EDUCATION

Foundation for International Education in Neurological Surgery, Inc. report of activities, 1986–1988 [letter] Mosberg WH Jr. **J Neurosurg** 1988 Nov;69(5):800–1
The longest lasting legacy. Clark WK. **Surg Neurol** 1989 Feb; 31(2):155–60
[The training of neurosurgeons in clinical internships] Samotokin BA, et al. **Zh Vopr Neirokhir** 1988 Nov–Dec; (6):45–7 **(Rus)**

HISTORY

The evolution of the World Federation of Neurosurgical Societies. Walker AE. **Acta Neurochir (Wien)** 1988; 94(3–4):99–102
Fifty-seven years ago in Anesthesia & Analgesia. D. A. Wood: Survey of anesthesia given in 550 brain operations in the years 1921 to 1930 inclusive. Current Researches in Anesthesia and Analgesia: 1932;11:201–5. Wood DA. **Anesth Analg** 1989 Jul;69(1):14
Development of neurosurgery in Canada. Weir BK. **Aust N Z J Surg** 1988 Dec;58(12):929–36
William Osler and "the special field of neurological surgery". Canale DJ. **J Neurosurg** 1989 May;70(5):759–66
Microvascular compression-decompression: a recollection [letter] Parkinson D. **J Neurosurg** 1989 May;70(5):819
The contribution to neurosurgery of the Combined Services Hospital for Head Injuries at St Hugh's College, Oxford, 1940–1945. Schurr PH. **J R Army Med Corps** 1988 Oct; 134(3):146–8
Sixty years of neurological surgery. Bucy PC. **JAMA** 1988 Oct 21;260(15):2264–6
Roswell Park. A pioneer in the surgical treatment of epilepsy. Soria ED, et al. **N Y State J Med** 1988 Nov;88(11):591–5
Neurological surgery during the Great War: the influence of Colonel Cushing. Hanigan WC. **Neurosurgery** 1988 Sep; 23(3):283–94
The Johns Hopkins medical centennial. 1889–1989: a century of neurosurgery. Long DM. **Neurosurgery** 1989 Jun; 24(6):953–5
Dandy's contributions to the foundation of neurological surgery. Rizzoli HV. **Pediatr Neurosci** 1987;13(6):316–22
Cushing and epilepsy surgery: two successfully treated cases with long-term follow-up. Moore MR, et al. **Surg Neurol** 1989 Sep;32(3):241–5
Harvey Cushing as medical artist: a case of cirsoid aneurysm of the scalp. Rossitch E Jr, et al. **Surg Neurol** 1989 Sep; 32(3):237–40
[The history of neurosurgery. Egas Moniz 1874–1955] Pothe H. **Zentralbl Neurochir** 1988;49(4):354–7 **(Ger)**
[The man behind the fracture: Geoffrey Jefferson. He received his surgical training on the eastern front] Zygmunt S, et al. **Lakartidningen** 1989 Feb 8;86(6):447–9 **(Swe)**

INSTRUMENTATION

Shunts and shunt problems in childhood. Hirsch JF, et al. **Adv Tech Stand Neurosurg** 1988;16:177–96 (49 ref.)
The antigravity suit in neurosurgery. Cardiovascular responses in seated neurosurgical patients. Brodrick PM, et al. **Anaesthesia** 1988 Sep;43(9):762–5
Surgery of intracranial tumors: aspects of operating room design with integration and use of technical adjuvants. Apuzzo ML. **Clin Neurosurg** 1989;35:185–214
Neurosurgical stimulation, impedance monitoring and data acquisition system. Record P, et al. **J Biomed Eng** 1989 Mar;11(2):133–6
A simple fluid collection system for neurosurgical operations. Sugiura K, et al. **Neurosurgery** 1988 Sep;23(3):398–9
[Experimental validation of the use of an ultrasonic surgical instrument in neurophysiology] Ramazanov RKh, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):539–42 (Eng. Abstr.) **(Rus)**
[A device for studying visual evoked potentials during neurosurgical operations] Oliushin VE, et al. **Zh Vopr Neirokhir** 1988 Nov–Dec;(6):55–6 **(Rus)**

LEGISLATION & JURISPRUDENCE

"Perjury is not a crime". Mayfield FH. **Surg Neurol** 1989 Jan;31(1):71–5

METHODS

Advances in stereotactic and functional neurosurgery 8. Proceedings of the 8th meeting of the European Society for Stereotactic and Functional Neurosurgery. Budapest, 1988. **Acta Neurochir Suppl (Wien)** 1989;46:1–114
Intraoperative monitoring of the motor function: experimental and clinical study. Kaneko M, et al. **Acta Neurochir Suppl (Wien)** 1988;42:18–21

Microsurgery of midbrain lesions. Pendl G, et al. **Acta Neurochir Suppl (Wien)** 1988;42:130–6
Safety limits of controlled hypotension in humans. Yamada S, et al. **Acta Neurochir Suppl (Wien)** 1988;42:14–7
Intraoperative ultrasound imaging in lumbar disc herniation surgery. Koivukangas J, et al. **Acta Neurochir (Wien)** 1989; 98(1–2):47–54
Experimental radiofrequency (RF) coagulation with computer-based on line monitoring of temperature and power. Moringlane JR, et al. **Acta Neurochir (Wien)** 1989; 96(3–4):126–31
The combined supra-infratentorial pre-sigmoid sinus avenue to the petro-clival region. Surgical technique and clinical applications. Samii M, et al. **Acta Neurochir (Wien)** 1988; 95(1–2):6–12
Combined contralateral pterional and interhemispheric approach to a subchiasmal carotid-ophthalmic aneurysm. Shiokawa Y, et al. **Acta Neurochir (Wien)** 1988; 93(3–4):154–8
Cranioplasty with hydroxylapatite ceramic plates that can easily be trimmed during surgery. A preliminary report. Yamashima T. **Acta Neurochir (Wien)** 1989;96(3–4):149–53
Benign extramedullary tumors of the foramen magnum. Guidetti B, et al. **Adv Tech Stand Neurosurg** 1988;16:83–120 (63 ref.)
Measurement of intracranial pressure in the unanesthetized rabbit. Malkinson TJ, et al. **Brain Res Bull** 1978 Nov–Dec; 3(6):635–8
Neurosurgery in the treatment of cancer pain. Sundaresan N, et al. **Cancer** 1989 Jun 1;63(11 Suppl):2365–77 (84 ref.)
Interaction of metallic neurosurgical implants with magnetic resonance imaging at 1.5 Tesla as a cause of image distortion and of hazardous movement of the implant. Go KG, et al. **Clin Neurol Neurosurg** 1989;91(2):109–15
Stereotactic technology in tumor surgery. Kelly PJ. **Clin Neurosurg** 1989;35:215–53
Neurotization via the spinal accessory nerve in complete paralysis due to multiple avulsion injuries of the brachial plexus. Allieu Y, et al. **Clin Orthop** 1988 Dec;(237):67–74
Esmolol for the control of hypertension after neurologic surgery. Gibson BE, et al. **Clin Pharmacol Ther** 1988 Dec; 44(6):650–3
Prophylactic parenteral antibiotics in neurosurgery [letter] **J Neurosurg** 1989 Jan;70(1):150–2
Management of difficult basilar artery aneurysms [letter; comment] McMurtry JG 3d. **J Neurosurg** 1989 Mar; 70(3):503–4. **Comment on:** J Neurosurg 1988 Jun;68(6):868–79
One-stage posterolateral decompression and stabilization for primary and metastatic vertebral tumors in the thoracic and lumbar spine. Shaw B, et al. **J Neurosurg** 1989 Mar; 70(3):405–10
Current reporting of responsiveness in acute cerebral disorders. A survey of the neurosurgical literature. Starmark JE, et al. **J Neurosurg** 1988 Nov;69(5):692–8 (61 ref.)
Surgical treatment of craniosynostosis. Butti G, et al. **J Neurosurg Sci** 1988 Apr–Jun;32(2):41–6
An advanced system for electrocoagulation in neurosurgery. Casotto A, et al. **J Neurosurg Sci** 1988 Apr–Jun;32(2):61–3
Transethmoidal decompression of the optic nerve in the case of craniocerebral trauma. Kolenda H, et al. **Neurosurg Rev** 1988;11(1):39–43
Surgical strategies for combined intraorbital and intracranial tumors. Szuwart U, et al. **Neurosurg Rev** 1988;11(2):131–5
Microsurgical anatomy of the venous drainage into the superior sagittal sinus. Andrews BT, et al. **Neurosurgery** 1989 Apr;24(4):514–20
Modified skull clamp procedure [letter] Aoki N. **Neurosurgery** 1989 Feb;24(2):299
Use of the linear accelerator for neurosurgery [letter] Arndt J. **Neurosurgery** 1989 Apr;24(4):641
Tension pneumocephalus after clipping of a carotid-ophthalmic artery aneurysm via an interhemispheric approach: case report. Asai A, et al. **Neurosurgery** 1988 Nov;23(5):650–4 (26 ref.)
Free peritoneal catheter [letter] Azzam N. **Neurosurgery** 1988 Nov;23(5):682
Transoral approach to extradural lesions of the lower clivus and upper cervical spine: an experience of 19 cases. Di Lorenzo N. **Neurosurgery** 1989 Jan;24(1):37–42
Aid to exposure of the upper basilar artery: technical note. Dorsch NW. **Neurosurgery** 1988 Dec;23(6):790–1
Perioperative lumbar injection of Ringer's lactate solution in chronic subdural hematomas: a series of 100 cases. Grisoli F, et al. **Neurosurgery** 1988 Nov;23(5):616–21 (65 ref.)
Zygomaticotemporal approach to the basis cranii and basilar artery. Neil-Dwyer G, et al. **Neurosurgery** 1988 Jul; 23(1):20–2
To shunt or to fenestrate: which is the best surgical treatment for arachnoid cysts in pediatric patients? Raffel C, et al. **Neurosurgery** 1988 Sep;23(3):338–42
Efficacy of antibiotic prophylaxis [letter] Savitz MH. **Neurosurgery** 1989 Aug;25(2):315–6
Surgical treatment of intracavernous neoplasms: a four-year experience. Sekhar LN, et al. **Neurosurgery** 1989 Jan; 24(1):18–30
Relief of lumbar canal stenosis using multilevel subarticular fenestrations as an alternative to wide laminectomy: preliminary report. Young S, et al. **Neurosurgery** 1988 Nov; 23(5):628–33
Neurosurgical treatment of persistent pain. Physiological and pathological mechanisms of human pain. Gybels JM, et al. **Pain Headache** 1989;11:1–402 (1158 ref.)
Proceedings of the meeting on the use of microphysiological recordings during stereotactic neurosurgery. Evain-les-Bains, France, September 4–6, 1987. **Stereotact Funct Neurosurg** 1989;52(2–4):77–261
A method for MRI and CT mapping of diencephalic somatotopography. Hardy TL. **Stereotact Funct Neurosurg** 1989;52(2–4):242–9
New trends in computer graphics and computer vision to assist functional neurosurgery. Lipinski HG, et al. **Stereotact Funct Neurosurg** 1989;52(2–4):234–41
Two dimensional echoencephalography during the neurosurgical operations. Santa M, et al. **Zentralbl Neurochir** 1988;49(2):86–92
[The transoral approach in neurosurgical practice] Pásztor E, et al. **Zh Vopr Neirokhir** 1989 Mar–Apr;(2):35–8 (Eng. Abstr.) **(Rus)**

ORGANIZATION & ADMINISTRATION

[Interprovince neurosurgical centers in the RSFSR] Lebedev ED. **Zh Vopr Neirokhir** 1988 Nov–Dec;(6):47–8 **(Rus)**

STANDARDS

What are the determinants of a competent neurosurgeon? Bosk C. **Clin Neurosurg** 1989;35:474–86
Utilization of resources for the maintenance of excellence in neurological surgery. The 1988 American Association of Neurological Surgeons presidential address. Garretson HD. **J Neurosurg** 1988 Dec;69(6):815–25
Neurology, neurosurgery, controlled trials and academic accountability [editorial] McDowell FH. **Stroke** 1988 Dec; 19(12):1463–5

STATISTICS & NUMERICAL DATA

Results of Spinal Task Force survey [letter] Connolly ES. **J Neurosurg** 1989 Feb;70(2):292–3
Neurosurgery in patients over age 65. Hirsh LF, et al. **Pa Med** 1988 Dec;91(12):38, 40, 42 (20 ref.)

TRENDS

Neurosurgery in the Middle East: life under fire. Haddad FS. **Neurosurgery** 1989 Aug;25(2):303–11
The changes in neurosurgery over the next 10 years. Alexander E Jr. **Surg Neurol** 1988 Oct;30(4):324–6
[Recent progress in neurosurgery] Antunes JL. **Acta Med Port** 1988 Jul–Dec;1(4–6):285–90 (6 ref.) (Eng. Abstr.) **(Por)**
[Towards the 4th All-Union congress of neurosurgeons] Konovalov AN, et al. **Zh Vopr Neirokhir** 1988 Jul–Aug; (4):3–9 **(Rus)**

NEUROSYPHILIS

Neurosyphilis—forgotten but not gone. Bierman D, et al. **N C Med J** 1989 Mar;50(3):157–8
[A case of early meningovascular syphilis] Mitriukovskiĭ LS, et al. **Klin Med (Mosk)** 1988 Nov;66(11):137–8 **(Rus)**

CEREBROSPINAL FLUID

Clinical significance of cerebrospinal fluid tests for neurosyphilis. Davis LE, et al. **Ann Neurol** 1989 Jan; 25(1):50–5
[Passive microhemagglutination reaction to Treponema pallidum in the cerebrospinal fluid in the diagnosis of neurosyphilis] Machado A de B, et al. **Arq Neuropsiquiatr** 1988 Dec;46(4):369–73 (Eng. Abstr.) **(Por)**
[Neurosyphilis with normal cerebrospinal fluid: diagnostic difficulties (letter)] Pérez Vidal R, et al. **Med Clin (Barc)** 1989 Jun 10;93(2):76 **(Spa)**

COMPLICATIONS

Benign tertiary syphilis and HIV infection. Dawson S, et al. **Aids** 1988 Aug;2(4):315–6
Neurosyphilis presenting with Raeder's syndrome [letter] Watanabe K, et al. **Ann Neurol** 1989 Apr;25(4):418
Neurosyphilis in acquired immunodeficiency syndrome. Katz DA, et al. **Arch Neurol** 1989 Aug;46(8):895–8
Angiography in pure motor hemiparesis due to meningovascular syphilis [letter] Rosenberg NL, et al. **Arch Neurol** 1989 Jan;46(1):10–1
Neurosyphilis and psychiatry [letter] Emsley RA, et al. **Br J Psychiatry** 1988 Apr;152:573
Quaternary neurosyphilis in a Haitian man with human immunodeficiency virus infection. Morgello S, et al. **Hum Pathol** 1989 Aug;20(8):808–11
Syphilis associated with human immunodeficiency virus infection [letter] Held JL, et al. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 1):295
Melkersson's syndrome associated with syphilis. Keane JR. **J Clin Neuro Ophthalmol** 1988 Dec;8(4):249–53
Neurosyphilis in HIV infection—persistence after high-dose penicillin therapy. Emskötter T, et al. **J Neuroimmunol** 1988 Dec;20(2–3):153–5
Quaternary neurosyphilis [letter] Morgello S, et al. **N Engl J Med** 1988 Dec 8;319(23):1549–50
Recurrent syphilitic uveitis [letter] Richards BW, et al. **N Engl J Med** 1989 Jan 5;320(1):62
[Meningovascular syphilis. Apropos of 4 cases] Zagnoli F, et al. **Ann Med Interne (Paris)** 1988;139(6):391–4 (Eng. Abstr.) **(Fre)**
[Syphilis in HIV infection. 2 cases of neurosyphilis] Breustedt W, et al. **Dermatol Monatsschr** 1989;175(4):232–41 (Eng. Abstr.) **(Ger)**
[Syphilitic meningitis presenting facial paralysis and the eighth nerve dysfunction. A case report] Satoh J, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr;78(4):581–2 **(Jpn)**
[Syphilitic vestibulocochlear neuritis] Bętkowski A, et al. **Wiad Lek** 1988 Mar 15;41(6):397–400 (Eng. Abstr.) **(Pol)**

DIAGNOSIS

Intracranial gumma presenting as a cerebral tumour. Pall HS, et al. **J R Soc Med** 1988 Oct;81(10):603–4
[Neurosyphilis in 1988: a serological diagnosis?] Frijns CJ, et al. **Ned Tijdschr Geneeskd** 1988 Dec 3;132(49):2225–7 **(Dut)**
[Diagnostic problems in neurosyphilis] Behr W, et al. **Dtsch Med Wochenschr** 1988 Nov 4;113(44):1718–22 (Eng. Abstr.) **(Ger)**
[Selected aspects of syphilis serology] Gschnait F. **Z Hautkr** 1989 May 15;64(5):398–400 (12 ref.) (Eng. Abstr.) **(Ger)**
[A case of cerebral gumma] Hamada J, et al. **No Shinkei Geka** 1988 Sep;16(10):1207–10 (Eng. Abstr.) **(Jpn)**
[Current methods of laboratory diagnosis of syphilis of the central nervous system] Manikowska-Lesińska W, et al. **Przegl Dermatol** 1986 Jul–Aug;73(4):273–9 (Eng. Abstr.) **(Pol)**

DRUG THERAPY

Persistence of neurosyphilis despite multiple treatment regimens. Whiteside CM. **Am J Med** 1989 Aug;87(2):225–7
Treatment of neurosyphilis [letter] Rolfs RT, et al. **Ann Intern Med** 1989 Apr 1;110(7):574–5
Treatment of neurosyphilis. Wolters EC. **Clin Neuropharmacol** 1987 Apr;10(2):143–54 (76 ref.)
Central nervous system involvement in early and late syphilis: the problem of asymptomatic neurosyphilis. Wolters EC, et al. **J Neurol Sci** 1988 Dec;88(1–3):229–39
Treating neurosyphilis [letter] Nitrini R. **West J Med** 1989 Feb;150(2):213

EPIDEMIOLOGY

Invasion of the central nervous system by Treponema pallidum: implications for diagnosis and treatment. Lukehart SA, et al. **Ann Intern Med** 1988 Dec 1; 109(11):855–62
Therapy for syphilis [letter] Matz R. **Ann Intern Med** 1989 Mar 15;110(6):496
[Is there a recrudescence of neurosyphilis? 7 cases observed in a 1-year period in non-carriers of the human immunodeficiency virus (letter)] Amarenco P, et al. **Presse Med** 1988 Sep 17;17(31):1589–90 **(Fre)**

ETIOLOGY

Neurosyphilis and stroke in a patient with antibodies to the human immunodeficiency virus. Reid SE, et al. **Am J Med** 1989 Jul;87(1):119–20
Chronic syphilitic meningitis resulting in superior orbital fissure syndrome and posterior fossa gumma. A report of two cases followed for 20 years. Currie JN, et al. **J Clin Neuro Ophthalmol** 1988 Sep;8(3):145–59 (91 ref.)

IMMUNOLOGY

Local IgM production in meningoradiculitis Bannwarth and neurosyphilis. Boeer A, et al. **J Neuroimmunol** 1988 Dec; 20(2–3):315–6

PHYSIOPATHOLOGY

Ultralate cerebral potentials as correlates of delayed pain perception: observation in a case of neurosyphilis. Treede RD, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct; 51(10):1330–3

NEUROTENDINOUS SPINDLES see under **MECHANORECEPTORS**

NEUROTENSIN

ANALOGS & DERIVATIVES

Effect of neurotensin and its fragments neurotensin-(1–6) and neurotensin-(8–13) on dopamine release from cat striatum. Markstein R, et al. **Eur J Pharmacol** 1988 Jul 26; 152(1–2):147–52
[D-TRP11]-neurotensin, unlike alpha-flupenthixol, may not block amphetamine-induced hyperactivity in rats. Sahgal A, et al. **Neuropharmacology** 1989 Mar;28(3):283–9

ANALYSIS

The coexistence of three neuroactive substances in amacrine cells of the chicken retina. Wu SM, et al. **Brain Res** 1988 Aug 16;458(1):195–8
Peptides related to the N-terminus of pro-opiomelanocortin in the human adrenal medulla. Gaspar L, et al.

Clin Invest Med 1989 Apr;12(2):90–8

Immunohistochemical demonstration of neurotensin and tyrosine hydroxylase in iris nerves of the rabbit eye. Hernandez DE, et al. **Histochemistry** 1989;92(3):261–4

Effects of 3,4–methylenedioxyamphetamine and 3,4–methylenedioxymethamphetamine isomers on central serotonergic, dopaminergic and nigral neurotensin systems of the rat. Johnson M, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):977–82

Neurotensin in microdissected brain nuclei and in the pituitary of the lean and obese Zucker rats. Beck B, et al. **Neuropeptides** 1989 Jan;13(1):1–7

Coexistence of corticotropin releasing factor and neurotensin within oval nucleus neurons in the bed nuclei of the stria terminalis in the rat. Ju G, et al. **Neurosci Lett** 1989 May 8;99(3):246–50

Comparison of neurotensin levels, receptors and actions in LS/Ibg and SS/Ibg mice. Erwin VG, et al. **Peptides** 1989 Mar–Apr;10(2):435–40

Neurotensin immunoreactivity in the central nucleus of the rat amygdala: an ultrastructural approach. Tay SS, et al. **Peptides** 1989 Jan–Feb;10(1):113–20

[A study of the contents of vasoactive intestinal peptide, somatostatin and neurotensin in rectal mucosa in patients with inflammatory bowel disease] Zhang J. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Oct; 10(5):365–7 (Eng. Abstr.) **(Chi)**

[Ascending mesencephalic dopaminergic pathways in the rat. Immunohistochemical demonstration of the coexistence of the amine with CCK–8 or neurotensin] Tramu G, et al. **Encephale** 1989 Jan–Feb;15 Spec No:73–8 **(Fre)**

BLOOD

Neurotensin and vasoactive intestinal peptide levels during orthotopic liver transplantation in man. Khoury GF, et al. **Transplantation** 1988 Oct;46(4):601–2

CEREBROSPINAL FLUID

Cerebrospinal fluid concentrations of neurotensin and corticotropin–releasing factor in pediatric patients. Hedner J, et al. **Biol Neonate** 1989;55(4–5):260–7

GENETICS

Lithium dramatically potentiates neurotensin/neuromedin N gene expression. Dobner PR, et al. **J Biol Chem** 1988 Oct 5;263(28):13983–6

Distribution of neurotensin/neuromedin N mRNA in rat forebrain: unexpected abundance in hippocampus and subiculum. Alexander MJ, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5202–6

IMMUNOLOGY

Multiple peptide hormone producing adenocarcinoma of lung with neurotensin and CRF–like immunoreactivity. Dämmrich J, et al. **Pathol Res Pract** 1988 Nov;183(6):670–4

METABOLISM

Tubular handling of neurotensin in the rat kidney as studied by micropuncture and HPLC. Bjerke T, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):F100–6

Tissue distribution of a novel neurotensin–degrading metallopeptidase. An immunological approach using monospecific polyclonal antibodies. Checler F, et al. **Biochem J** 1989 Jan 15;257(2):549–54

Effect of preganglionic stimulation or chronic decentralization on neurotensin–like immunoreactivity in sympathetic ganglia of the cat. Caverson MM, et al. **Brain Res** 1989 Mar 20;482(2):365–70

Heterogeneity of [3H]neurotensin bindings: studies with dynorphin, L–156,903 and levocabastine. Pettibone DJ, et al. **Brain Res** 1988 Aug 9;457(2):212–8

Effects of short– and long–term haloperidol administration and withdrawal on regional brain cholecystokinin and neurotensin concentrations in the rat. Radke JM, et al. **Brain Res** 1989 Feb 20;480(1–2):178–83

Immunocytochemical evidence for direct connections between neurotensin–containing axons and dopaminergic neurons in the rat ventral midbrain tegmentum. Woulfe J, et al. **Brain Res** 1989 Feb 13;479(2):402–6

Asymmetrical distribution of neurotensin immunoreactivity following unilateral injection of 6–hydroxydopamine in rat ventral tegmental area (VTA). Zahm DS, et al. **Brain Res** 1989 Apr 3;483(2):301–11

Neurotensin metabolism in the kidney: role of tubular fluid. Bjerke T, et al. **Contrib Nephrol** 1988;68:92–7

Effects of anticholinergic drugs on regional brain neurotensin concentrations. Levant B, et al. **Eur J Pharmacol** 1989 Jun 20;165(2–3):327–30

Release of neurotensin by selective perfusion of the jejunum with oleic acid in dogs. Fujimura M, et al. **Gastroenterology** 1989 Jun;96(6):1502–5

The influence of the duodenal passage on postprandial neurotensin release in dogs. Köhler H, et al. **Horm Metab Res** 1989 Jul;21(7):351–5

Purification of the neurotensin receptor from mouse brain by affinity chromatography. Mazella J, et al. **J Biol Chem** 1989 Apr 5;264(10):5559–63

Comparison of met–enkephalin, dynorphin A, and neurotensin immunoreactive neurons in the cat and rat spinal cords: II. Segmental differences in the marginal zone. Miller KE, et al. **J Comp Neurol** 1989 Jan 22;279(4):619–28

Production and characterization of a novel monoclonal antibody against neurotensin: immunohistochemical localization in the midbrain and hypothalamus. Williams FG, et al. **J Histochem Cytochem** 1989 Jun;37(6):831–41

Stimulation–induced release of coexistent transmitters in the prefrontal cortex: an in vivo microdialysis study of dopamine and neurotensin release. Bean AJ, et al. **J Neurochem** 1989 Aug;53(2):655–7

Peptidasic activities associated with acetylcholinesterase are due to contaminating enzymes. Checler F, et al. **J Neurochem** 1989 Sep;53(3):924–8

Electron microscopic localization of neurotensin binding sites in the midbrain tegmentum of the rat. I. Ventral tegmental area and the interfascicular nucleus. Dana C, et al. **J Neurosci** 1989 Jul;9(7):2247–57

Association of neurotensin binding sites with sensory and visceromotor components of the vagus nerve. Kessler JP, et al. **J Neurosci** 1989 Feb;9(2):466–72

Dopamine and neurotensin storage in colocalized and noncolocalized neuronal populations. Bean AJ, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):681–7

In vivo inactivation of neurotensin in dog ileum: major involvement of endopeptidase 24–11. Checler F, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):1040–4

Radioligand–binding assays for study of neurotensin receptors. Goedert M. **Methods Enzymol** 1989;168:462–81

Effects of ovariectomy and estradiol replacement on the binding of 125I–neurotensin in rat suprachiasmatic nucleus. Moyse E, et al. **Neuroendocrinology** 1988 Jul;48(1):53–60

The effect of the stereoisomers of butaclamol on neurotensin content in discrete regions of the rat brain. Bissette G, et al. **Neuropsychopharmacology** 1988 Dec;1(4):329–35

Interactions of thyrotropin–releasing hormone (TRH) with neurotensin and dopamine in the central nucleus of the amygdala during stress ulcer formation in rats. Henke PG, et al. **Neurosci Lett** 1988 Aug 15;91(1):95–100

Neurotensin–containing projections from the retrosplenial cortex to the anterior ventral thalamic nucleus in the rat. Fukami K, et al. **Neuroscience** 1988 Sep;26(3):819–26

Coexistence of peptides (corticotropin releasing factor/neurotensin and substance P/somatostatin) in the bed nucleus of the stria terminalis and central amygdaloid nucleus of the rat. Shimada S, et al. **Neuroscience** 1989; 30(2):377–83

A quantitative ultrastructural analysis of neurotensin–like immunoreactive terminals in the midbrain periaqueductal gray: analysis of their possible relationship to periaqueductal gray–raphe magnus projection neurons. Williams FG, et al. **Neuroscience** 1989;29(1):121–34

The ventral striatopallidal parts of the basal ganglia in the rat—II. Compartmentation of ventral pallidal efferents. Zahm DS. **Neuroscience** 1989;30(1):33–50

Anatomical substrate for neurotensin–acetylcholine interactions in the rat basal forebrain. Szigethy E, et al. **Peptides** 1988 Nov–Dec;9(6):1227–34

Distribution of neurotensin–like immunoreactivity in the central nervous system of the Formosan monkey. Chen ST, et al. **Proc Natl Sci Counc Repub China [B]** 1988 Jul; 12(3):163–73

[Neurotensin] Sliwiński Z. **Pol Arch Med Wewn** 1985 Jun; 73(6):377–85 (38 ref.) **(Pol)**

PHARMACOKINETICS

Pharmacokinetics and metabolism of neurotensin in man. Pedersen JH, et al. **J Clin Endocrinol Metab** 1989 Feb; 68(2):294–300

PHARMACOLOGY

Neurotensin modulates the binding characteristics of dopamine D2 receptors in rat striatal membranes also following treatment with toluene. von Euler G, et al. **Acta Physiol Scand** 1989 Apr;135(4):443–8

Neurotensin and ethanol interactions on hypothermia and locomotor activity in LS and SS mice. Erwin VG, et al. **Alcoholism (NY)** 1989 Feb;13(1):91–4

Tracheal and phrenic responses to neurotensin applied to ventral medulla. Haxhiu MA, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R780–6

Mechanics and neuropeptide responses of feline pylorus and gastric muscle in vitro. Merlo A, et al. **Am J Physiol** 1989 May;256(5 Pt 1):G862–7

Neurotensin stimulates growth of small intestine in rats. Wood JG, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G813–7

Central neurotensin affects rat gastric integrity, prostaglandin E2, and blood flow. Zhang L, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):G226–32

Neurotensin, bradykinin and somatostatin inhibit cAMP production in neuroblastoma N1E115 cells via both pertussis toxin sensitive and insensitive mechanisms. Bozou JC, et al. **Biochem Biophys Res Commun** 1989 Jun 30; 161(3):1144–50

Substance P, neurotensin and enkephalin injections into the ventral tegmental area: comparative study on dopamine turnover in several forebrain structures. Cador M, et al. **Brain Res** 1989 May 8;486(2):357–63

Neurotensin–induced polydipsia: a structure–activity study. Hawkins MF, et al. **Brain Res** 1989 May 15;487(1):188–91

Cardioacceleration produced by close intra–arterial injection of neurotensin into the stellate ganglion of the cat. Bachoo M, et al. **Can J Physiol Pharmacol** 1988 Apr;66(4):408–12

Species–specific effects of neurotensin on gallbladder contraction in vitro. Guo YS, et al. **Dig Dis Sci** 1989 Jan; 34(1):21–6

The dynamics of arachidonic acid liberation and prolactin release: a comparison of thyrotropin–releasing hormone, angiotensin II, and neurotensin stimulation in perifused rat anterior pituitary cells. Ross PC, et al. **Endocrinology** 1988 Nov;123(5):2445–53

Beta–endorphin and neurotensin stimulate in vitro clonal growth of human SCLC cells. Davis TP, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):283–5

Heterologous desensitization of bradykinin–induced phosphatidylinositol response and Ca2+ mobilization by neurotensin in NG108–15 cells. Imaizumi T, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):203–8

Effects of neurotensin–related peptides on the motility of the guinea pig oesophagus. Katsoulis S, et al. **Eur J Pharmacol** 1988 Aug 2;152(3):363–6

Neurotensin and prostaglandin interactions in smooth muscle of the guinea pig stomach. Katsoulis S, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):251–6

Effect of neurotensin and its fragments neurotensin–(1–6) and neurotensin–(8–13) on dopamine release from cat striatum. Markstein R, et al. **Eur J Pharmacol** 1988 Jul 26; 152(1–2):147–52

Behavioral effects of neurotensin: operant responding and assessment of 'anhedonia'. Rossitch E Jr, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):119–22

Neutral endopeptidase modulates neurotensin–induced airway contraction. Djokic TD, et al. **J Appl Physiol** 1989 May;66(5):2338–43

Neurotensin regulation of macrophage colony–stimulating factor–stimulated in vitro myelopoiesis. Moore RN, et al. **J Immunol** 1989 Apr 15;142(8):2689–94

Effects of somatostatin, a somatostatin analog, neurotensin and met–enkephalin in the eye with special reference to the irritative response. Stjernschantz J, et al. **J Ocul Pharmacol** 1985 Spring;1(1):59–70

Neurohormonal regulation of ion transport in the porcine distal jejunum. Actions of neurotensin and its natural homologs. Brown DR, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):348–57

Neurotensin affects metabolism of opioid peptides, catecholamines and inositol phospholipids in bovine chromaffin cells. Bommer M, et al. **Life Sci** 1989; 44(5):327–35

Neurotensin activates tuberoinfundibular dopamine neurons and increases serum corticosterone concentrations in the rat. Gudelsky GA, et al. **Neuroendocrinology** 1989 Jun; 49(6):604–9

Involvement of spinal monoaminergic pathways in antinociception produced by substance P and neurotensin in rodents. Naranjo JR, et al. **Neuropharmacology** 1989 Mar; 28(3):291–8

Antagonization of the behavioral activation produced by direct stimulation of forebrain dopamine receptors caused by intraaccumbens injections of neurotensin. Ervin GN, et al. **Neuropsychopharmacology** 1988 Sep;1(3):243–50

Possible role of plasma neurotensin in regulating the excitatory neural control of the rectum of the fowl. Ohashi H, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):17–28

Distinguishable effects of intrathecal dynorphins, somatostatin, neurotensin and s–calcitonin on nociception and motor function in the rat. Spampinato S, et al. **Pain** 1988 Oct;35(1):95–104

Effects of ICV administration of neurotensin and analogs on EEG in rats. Castel MN, et al. **Peptides** 1989 Jan–Feb; 10(1):95–101

Anorectic effect of calcitonin, neurotensin and bombesin infused in the area of the rostral part of the nucleus of the tractus solitarius in the rat. de Beaurepaire R, et al. **Peptides** 1988 Jul–Aug;9(4):729–33

Neurotensin perfused in hypothalamus of sated or fasted rat: HPLC analysis of release of DA, NE and 5–HT and their metabolites. Miñano FJ, et al. **Peptides** 1988 Nov–Dec; 9(6):1381–7

Capsaicin–sensitive structures as potential target sites for neurotensin and bradykinin in guinea pig atria. Rioux F, et al. **Peptides** 1988 Jul–Aug;9(4):883–92

Local application of neurotensin to abdominal organs triggers cardiovascular reflexes in guinea pigs: possible mechanisms. Rioux F, et al. **Peptides** 1989 May–Jun;10(3):647–55

Microinjection of neurotensin into the CNS induces hyperdipsia in the rat. Baker JD, et al. **Pharmacol Biochem Behav** 1989 May;33(1):7–10

Neurotensin, substance P, neurokinin–alpha, and enkephalin: injection into ventral tegmental area in the rat produces differential effects on operant responding. Kelley AE, et al. **Psychopharmacology (Berlin)** 1989;97(2):243–52

[Circulatory and metabolic effects of neuropeptides on the stomach] Gustaw P. **Folia Med Cracov** 1988;29(1–2):3–19 (Eng. Abstr.) **(Pol)**

[Effect of neurotensin on circulation and oxygen consumption of the intestines] Pavlik VV, et al. **Fiziol Zh** 1988 Nov–Dec;34(6):59–65 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Neurotensin and the mesocorticolimbic dopamine system. Bissette G, et al. **Ann N Y Acad Sci** 1988;537:397–404 (57 ref.)

Interactions between mesolimbic dopamine neurons, cholecystokinin, and neurotensin: evidence using in vivo

voltammetry. Phillips AG, et al. **Ann N Y Acad Sci** 1988; 537:347–61 (51 ref.)

Basal forebrain lesions and memory: alterations in neurotensin, not acetylcholine, may cause amnesia. Wenk GL, et al. **Behav Neurosci** 1989 Aug;103(4):765–9

Response by the neurotensin systems of the basal ganglia to cocaine treatment. Hanson GR, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):23–30

Changes in the limbic neurotensin systems induced by dopaminergic drugs. Merchant KM, et al. **Eur J Pharmacol** 1988 Aug 9;153(1):1–9

Role of dopamine D–1 and D–2 receptors in the regulation of neurotensin systems of the neostriatum and the nucleus accumbens. Merchant KM, et al. **Eur J Pharmacol** 1989 Feb 7;160(3):409–12

Bed nucleus of the stria terminalis: cytoarchitecture, immunohistochemistry, and projection to the parabrachial nucleus in the rat. Moga MM, et al. **J Comp Neurol** 1989 May 15;283(3):315–32

Role of substance P and neurotensin in the regulation of neurosecretion and vascular responsiveness in hypertension. Tsuda K, et al. **J Hypertens Suppl** 1988 Dec; 6(4):S539–41

Antagonism of neurotensin induced miosis by thyrotropin–releasing hormone (TRH) in rabbits. Hernandez DE, et al. **Neuropeptides** 1988 Nov–Dec; 12(4):225–8

The biological relevance of N–terminal neurotensin fragments in the regulation of exocrine pancreas secretion. Nustede R, et al. **Pancreas** 1989;4(1):114–9

Use of antiserum to neurotensin reveals a physiological role for the peptide in rat prolactin release. Vijayan E, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9866–9

Interactions of neurotensin with dopamine–containing neurons in the central nervous system. Ervin GN, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988;12 Suppl:S53–69 (87 ref.)

Interaction of neurotensin with caerulein or secretin on digestive tract growth in rats. Hoang HD, et al. **Regul Pept** 1988 Aug;22(3):275–84

[Neurotensin/dopamine interactions] Kitabgi P, et al. **Encephale** 1989 Jan–Feb;15 Spec No:91–4 (48 ref.) **(Fre)**

SECRETION

Evidence that neurotensin participates in the central regulation of the preovulatory surge of luteinizing hormone in the rat. Alexander MJ, et al. **Endocrinology** 1989 Feb; 124(2):783–8

TOXICITY

Promotion by neurotensin of gastric carcinogenesis induced by N–methyl–N'–nitro–N–nitrosoguanidine in Wistar rats. Tatsuta M, et al. **Cancer Res** 1989 Feb 15;49(4):843–6

NEUROTIC DISORDERS

Naltrexone for neurotic excoriations [letter] Smith KC, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 1):860–1

[Psychic disturbances in prisoners] Joukamaa M. **Duodecim** 1989;105(12):1175–83 (63 ref.) **(Fin)**

[Psychoneurotic disorders in soldiers. Experience in military ambulatory care] Trnjak Z, et al. **Vojnosanit Pregl** 1988 May–Jun;45(3):216–8 **(Scr)**

BLOOD

[Lipid peroxidation in emotional stress and neurotic disorders] Aleksandrovskiĭ IuA, et al. **Zh Nevropatol Psikhiatr** 1988;88(11):95–101 (Eng. Abstr.) **(Rus)**

[Hormone content of the blood in neurotic patients] Kolygin VM, et al. **Zh Nevropatol Psikhiatr** 1988;88(12):85–90 (Eng. Abstr.) **(Rus)**

CHEMICALLY INDUCED

[Mental disorders during chemotherapy of malignant testicular neoplasms] Mironova IN, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):87–90 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

[Can one construct a clinic without theoretical references?] Havet JM, et al. **Ann Med Psychol (Paris)** 1988 May; 146(5):467–70 **(Fre)**

COMPLICATIONS

Psychotic and non–psychotic temporal lobe epileptics. Sijuwola OA. **East Afr Med J** 1987 Aug;64(8):538–42

[Psychological aspects of the pathogenesis of pain] Lazowski J. **Przegl Lek** 1989;46(4):415–9 (28 ref.) **(Pol)**

[Evaluation of various psychosomatic syndromes in patients with acute myocardial infarction and diabetes mellitus] Nasiłowska–Barud A, et al. **Wiad Lek** 1988 Jul 1; 41(13):837–41 (Eng. Abstr.) **(Pol)**

[Various psychosomatic problems in patients with diabetes mellitus] Nasiłowska–Barud A. **Wiad Lek** 1988 Aug 15; 41(16):1059–64 (Eng. Abstr.) **(Pol)**

[Neurosis and hypertensive disease] Zakharzhevskiĭ VB. **Fiziol Zh SSSR** 1988 Nov;74(11):1645–53 (21 ref.) (Eng. Abstr.) **(Rus)**

[Prognostic value of psychological characteristics in the evolution of borderline arterial hypertension] Rozhanets RV, et al. **Kardiologiia** 1988 Dec;28(12):13–6 (Eng. Abstr.) **(Rus)**

[Atypical cardiac pain syndrome in chronic ischemic heart disease] Vinogradov VF. **Sov Med** 1989;(5):117–8 **(Rus)**

DIAGNOSIS

A study of chronic neurotic illness in Nigeria. Jegede RO, et al. **Afr J Med Med Sci** 1989 Mar;18(1):13–20

Psychiatric disorders in a dental clinic. Hughes AM, et al. **Br Dent J** 1989 Jan 7;166(1):16–9

Psychodiagnostics of neuroses and depressions. Tashev T, et al. **Folia Med (Plovdiv)** 1987;29(2):5–10

Systemic approach to the detection, identification and assessment of the influence of risk factors on the occurrence of borderline neuropsychic disorders. Petrakov BD. **Sante Publique (Bucur)** 1988 Oct–Dec;31(4):325–30

[Differential diagnostic and terminology considerations of so–called functional disorders in the neuropsychiatric and phoniatric specialty. 1. The neuropsychiatric aspect] Pahn J, et al. **Folia Phoniatr (Basel)** 1988;40(4):162–7 (4 ref.) (Eng. Abstr.) **(Ger)**

[Differential diagnostic and terminology considerations of so–called functional disorders in the neuropsychiatric and phoniatric specialty. The phoniatric aspect] Pahn J, et al. **Folia Phoniatr (Basel)** 1988;40(4):168–74 (15 ref.) (Eng. Abstr.) **(Ger)**

[Panic attacks in neuroses and psychoses. Diagnosis and nosology] Philipp M, et al. **Nervenarzt** 1988 Oct; 59(10):590–5 (25 ref.) **(Ger)**

[Can endogenous depressions be differentiated from neurotic depressions using depression–specific psychologic methods?] Richter J, et al. **Psychiatr Neurol Med Psychol Beih** 1988;41:47–9 **(Ger)**

[The difficult neurotic patient from the psychiatrist's viewpoint] Honegger R. **Schweiz Rundsch Med Prax** 1989 Mar 7;78(10):260–2 (Eng. Abstr.) **(Ger)**

[Objective diagnosis of pre–Oedipal disorders] Ehlers W, et al. **Z Psychosom Med Psychoanal** 1988;34(4):325–37 (Eng. Abstr.) **(Ger)**

[The initial manifestations of neurotic disorders] Aleksandrovskiĭ IuA. **Klin Med (Mosk)** 1988 Sep; 66(9):58–65 (Eng. Abstr.) **(Rus)**

[Borderline mental disorders in gastroenterologic practice] Makhov VM, et al. **Klin Med (Mosk)** 1989 Mar;67(3):92–5 **(Rus)**

[The semeiotics of psychopathological syndromes in dental patients with stomatalgia (glossalgia)] Matveev VF, et al. **Stomatologiia (Mosk)** 1988 Nov–Dec;67(6):34–6 (Eng. Abstr.) **(Rus)**

[Secondary prevention of neuroses in workers at industrial enterprises] Gladkova KI, et al. **Vrach Delo** 1988 Nov; (11):103–5 (Eng. Abstr.) **(Rus)**

[Clinical variants of neurosis–like disorders in burns] Gel'fand VB, et al. **Zh Nevropatol Psikhiatr** 1988;88(11):33–7 (Eng. Abstr.) **(Rus)**

[Characteristics of the nature and dynamics of neuropsychic disorders in patients with newly detected pulmonary tuberculosis undergoing intensive chemotherapy] Immerman KL, et al. **Zh Nevropatol Psikhiatr** 1988; 88(6):109–13 (Eng. Abstr.) **(Rus)**

[The dynamics of neurotic disorders with autonomic paroxysms] Lakosina ND, et al. **Zh Nevropatol Psikhiatr** 1988;88(11):74–9 (Eng. Abstr.) **(Rus)**

[Clinical characteristics of neurotic and neurosis–like states in patients with acute myocardial infarct] Matveev VF, et al. **Zh Nevropatol Psikhiatr** 1988;88(12):57–60 (Eng. Abstr.) **(Rus)**

[Clinical picture and dynamics of borderline psychoneurotic disturbances in menstrual cycle disorders in girls at puberty] Mikirtumov BE. **Zh Nevropatol Psikhiatr** 1988; 88(8):75–9 (Eng. Abstr.) **(Rus)**

[Characteristics of the night sleep of patients with neuroses and a subjectively good and bad sleep] Veuin AM, et al. **Zh Nevropatol Psikhiatr** 1988;88(11):83–6 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Early phase–II semi double–blind study of the new alkaline propanolamine derivative enciprazine (short communication). Linden M, et al. **Arzneimittelforschung** 1988 Jun;38(6):814–6

A double blind controlled clinical trial of benzoctamin (Tacitin) and imipramine (Tofranil) in the treatment of 'internal heat' and its association symptoms. Ahmed MH, et al. **East Afr Med J** 1988 Apr;65(4):230–7

Treatments for neurotic disorders [letter] Klein DF. **Lancet** 1988 Dec 17;2(8625):1418

Nottingham study of neurotic disorder [letter] Tyrer P, et al. **Lancet** 1989 Feb 4;1(8632):277

Comparison of therapeutic efficacy of neuroses between CM6912 (ethyl loflazepate) and diazepam in a double–blind trial. Murasaki M, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1–2):145–54

[Safety in the treatment of psychiatric patients during pregnancy, labor and lactation] Yie L, et al. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Oct; 21(5):314–7 (12 ref.) **(Chi)**

[Tibolone (Livial) in the treatment of disorders of the postmenopausal period (preliminary report)] Radowicki S, et al. **Ginekol Pol** 1988 Nov;59(11):705–8 (Eng. Abstr.) **(Pol)**

[Age and sex of patients with neuroses as the factors differentiating the effect of diazepam doses on the psychomotor efficiency] Borys B. **Psychiatr Pol** 1988 Sep–Oct;22(5):336–41 (Eng. Abstr.) **(Pol)**

[Effect of physostigmine and various nootropic drugs on various mental disorders caused by brain injury] Kocur J, et al. **Psychiatr Pol** 1988 Sep–Oct;22(5):317–21 (Eng. Abstr.) **(Pol)**

[Psychiatric indications of drugs used in clinical practice] Bacaltchuk J. **Rev Paul Med** 1987 Nov–Dec;105(6):336–40 (31 ref.) (Eng. Abstr.) **(Por)**

[Experience using nootropil in patients with chronic ischemic heart disease] Shubina TI, et al. **Klin Med (Mosk)** 1989 May;67(5):36–8 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Neuropsychiatric disorders in Nigerians: 1914 consecutive new patients seen in 1 year. Gureje O, et al. **Afr J Med Med Sci** 1989 Sep;18(3):203–9 (34 ref.)

Psychiatric aspects of terrorist violence: Northern Ireland 1969–1987. Curran PS. **Br J Psychiatry** 1988 Oct;153:470–5 (32 ref.)

Psychiatric casualties among U.S. Marines in Vietnam. Palinkas LA, et al. **Milit Med** 1988 Oct;153(10):521–6

Psychoneuroses and psychophysiological disorders: prevalence, courses and strategies for prevention. Schepank H. **Psychother Psychosom** 1988;49(3–4):187–96

[Psychosomatic diseases in urologic practice. Prostatic neurosis] Stratev S, et al. **Khirurgiia (Sofiia)** 1988;41(6):23–7 (Eng. Abstr.) **(Bul)**

[Structural dynamics of morbidity at the psychiatry departments of the Gh. Marinescu Hospital in 1967 and 1987] Meiu G, et al. **Rev Med Interna Neurol Psihiatr Neurochir Dermatovenerol Neurol Psihiatr Neurochir** 1989 Jan–Mar;34(1):77–80 (Eng. Abstr.) **(Rum)**

[The prevalence of psychoneurotic disorders during natural calamities (a review)] Garnov VM. **Zh Nevropatol Psikhiatr** 1988;88(8):125–30 (45 ref.) **(Rus)**

ETIOLOGY

Neurosis induced by home monitoring of blood glucose concentrations [letter] **BMJ** 1989 Mar 18;298(6675):753–4

Neurosis induced by home monitoring of blood glucose concentrations. Beer SF, et al. **BMJ** 1989 Feb 11; 298(6670):362

Psychiatric and psychological aspects of AIDS. Raskin DE. **Del Med J** 1988 Aug;60(8):38–40

Depression and neuroticism in multiple sclerosis. Colombo G, et al. **Ital J Neurol Sci** 1988 Dec;9(6):551–7

An estimation of a model explaining the mechanism causing neurotic disorders using a theory of fuzzy sets. Fujikake M, et al. **J Med Syst** 1988 Aug;12(4):211–29

Unrecognized cobalamin–responsive neuropsychiatric disorders. **Nutr Rev** 1989 Jul;47(7):208–10 (7 ref.)

[Incest and sexual abuse. A study among patients at a hospital for neuroses, Montebello] Glyngdal P, et al. **Ugeskr Laeger** 1989 Apr 3;151(14):877–80 (Eng. Abstr.) **(Dan)**

[Psychiatric manifestations of the fear of immunological deficiency] Vuorio KA, et al. **Duodecim** 1988;104(9):714–8 **(Fin)**

[Ergonomic study of neuropsychic impairment in relation to health status in printing occupations] Cristescu M, et al. **Sante Publique (Bucur)** 1989 Apr–Jun;32(2):169–83 (Eng. Abstr.) **(Fre)**

[Selected psychological problems of patients with hyperthyroidism] Warmuz–Stangierska I, et al. **Pol Tyg Lek** 1988 Apr 25;43(17):548–50 (Eng. Abstr.) **(Pol)**

[A case of Recklinghausen's disease in the light of 14–year follow–up] Januszkiewicz–Grabias A, et al. **Psychiatr Pol** 1988 Sep–Oct;22(5):391–5 **(Pol)**

[Psychological factors in mitral valve leaflet prolapse syndrome] Ruszczyńska B, et al. **Psychiatr Pol** 1988 Jul–Aug;22(4):296–302 (Eng. Abstr.) **(Pol)**

[Etiology, clinical aspects and treatment of neuroses and neurosis– like conditions] Kanareĭkin KF. **Klin Med (Mosk)** 1989 Jun;67(6):136–42 **(Rus)**

[Emotional disorders in chronic glomerulonephritis] Riabov SI, et al. **Klin Med (Mosk)** 1988 Oct;66(10):130–3 (Eng. Abstr.) **(Rus)**

[Epidemiologic studies of the effect of microwaves (neurophysiologic, hematologic and ophthalmologic aspects)] Davydov BI, et al. **Kosm Biol Aviakosm Med** 1989 Jan–Feb;23(1):4–11 (35 ref.) (Eng. Abstr.) **(Rus)**

[Characteristics of the mental state of patients with newly detected tuberculosis during antibacterial therapy] Shul'gina ZL, et al. **Probl Tuberk** 1988;(6):27–30 (Eng. Abstr.) **(Rus)**

[Psychoneurotic disorders in patients with chronic pancreatitis and their correction] Piskunov GG, et al. **Voen Med Zh** 1988 Dec;(12):35–6 **(Rus)**

[Hypokinesia as a psychoneurologic risk factor] Shaposhnikov EA. **Voen Med Zh** 1988 Oct;(10):65–7 **(Rus)**

[Psychoneurotic disorders in cardial achalasia] Martynov IuS,

et al. **Zh Nevropatol Psikhiatr** 1988;88(11):24–9 (Eng. Abstr.) **(Rus)**

GENETICS

On the evolution of neurotic maladaptations [letter] Sloman L. **Am J Psychiatry** 1975 Jan;132(1):84

Neuroticism, extraversion, and related traits in adult twins reared apart and reared together. Pedersen NL, et al. **J Pers Soc Psychol** 1988 Dec;55(6):950–7

HISTORY

Body and mind in nineteenth-century medicine: some clinical origins of the neurosis construct. Rosenberg CE. **Bull Hist Med** 1989 Summer;63(2):185–97

[2 lectures from 1918 and 1919 (classical article)] Groddeck G. **Psyche (Stuttg)** 1989 Jul;43(7):642–55 **(Ger)**

[Goethe, Kant, Locke, Villaume knew our technic of individual therapy] Leonhard K. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Feb;41(2):105–8 (Eng. Abstr.) **(Ger)**

METABOLISM

Adaptogenic significance of serotonin in dogs emerging from experimental neurosis. Bolondinskii VK, et al. **Neurosci Behav Physiol** 1988 Nov–Dec;18(6):511–6

[The nature of the neurohormonal reorganizations in patients with neuroses] Mgaloblishvili BI, et al. **Zh Nevropatol Psikhiatr** 1988;88(11):87–92 (Eng. Abstr.) **(Rus)**

PATHOLOGY

[Pringle's adenoma of the sebaceous glands combined with vitiligo and logoneurosis] Aĭziatulov RF. **Vestn Dermatol Venerol** 1989;(4):69–70 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

A sensory evoked potential comparison of persons 'at risk' for Huntington's disease and hospitalized neurotic patients. Josiassen RC, et al. **Int J Psychophysiol** 1988 Nov; 6(4):281–9

Effects of extraversion and neuroticism on experimental pain, clinical pain, and illness behavior. Harkins SW, et al. **Pain** 1989 Feb;36(2):209–18

[Subjective and objective characteristics of nocturnal sleep in neuroses] Posokhov SI, et al. **Sov Med** 1988;(5):18–21 (Eng. Abstr.) **(Rus)**

[Comparative pathology of higher nervous activity] Karamian AI, et al. **Zh Evol Biokhim Fiziol** 1988 May–Jun; 24(3):284–94 (Eng. Abstr.) **(Rus)**

[Characteristics of slow electrical potentials in healthy subjects and in patients with various forms of neuroses] Slezin VB, et al. **Zh Nevropatol Psikhiatr** 1988;88(12):28–31 (Eng. Abstr.) **(Rus)**

[Function and reactivity of the microvascular bed in human neuroses] Belen'kaia IM. **Zh Vyssh Nerv Deiat** 1988 Jul–Aug;38(4):725–30 (Eng. Abstr.) **(Rus)**

[The role of cholinergic mechanisms in memory processes in experimental neurosis in dogs] Doronin AG, et al. **Zh Vyssh Nerv Deiat** 1988 Nov–Dec;38(6):1138–44 (Eng. Abstr.) **(Rus)**

[Effect of substance P on the reproduction of memory engrams and on the amino acid composition of brain structures in rats with experimental neurosis] Nerush PA. **Zh Vyssh Nerv Deiat** 1988 Nov–Dec;38(6):1152–7 (Eng. Abstr.) **(Rus)**

[Effect of neurotizing exposures on conditioned reflex activity in the late postresuscitation period in rats] Nezlina NI. **Zh Vyssh Nerv Deiat** 1988 Sep–Oct;38(5):952–7 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Clinico-organizational aspects of the complex prophylaxis and treatment of neuroses. Litvak ME. **Sante Publique (Bucur)** 1989 Apr–Jun;32(2):145–52

PSYCHOLOGY

Pain in non-psychotic psychiatric patients: life events, symptomatology and personality traits. Jensen J. **Acta Psychiatr Scand** 1988 Aug;78(2):201–7

The total score of the Crown-Crisp Experiential Index: a useful and valid measure of psychoneurotic pathology. Birtchnell J, et al. **Br J Med Psychol** 1988 Sep;61 (Pt 3):255–66

Some clinical applications of the distinction between divergent and convergent conflicts. Kris AO. **Int J Psychoanal** 1988;69 (Pt 3):431–41

Trauma as a shibboleth in psychoanalysis? Sacerdoti G, et al. **Int J Psychoanal** 1989;70 (Pt 1):95–103

Aspects of the analysis of a neurotic patient. Sandler AM. **Int J Psychoanal** 1988;69 (Pt 3):317–26

The relationship of models of the mind to clinical work: object relations theory. Panel report. **J Am Psychoanal Assoc** 1988;36(3):749–57

The seduction hypothesis. Panel report. **J Am Psychoanal Assoc** 1988;36(3):759–71

Psychoanalytic reconstructions and empirical data: reciprocal contributions. Barglow P, et al. **J Am Psychoanal Assoc** 1989;37(2):401–35

The traumatic element in the typical dream of feeling embarrassed at being naked. Myers WA. **J Am Psychoanal Assoc** 1989;37(1):117–30

Neuroticism, symptom reports, and type A behavior: interpretive cautions for the Framingham Scale. Smith TW, et al. **J Behav Med** 1989 Feb;12(1):1–11

The investigation of neurotic fears: transcript of a seminar. Wolpe J. **J Behav Ther Exp Psychiatry** 1988 Sep; 19(3):211–6

Optimism, neuroticism, coping, and symptom reports: an alternative interpretation of the Life Orientation Test. Smith TW, et al. **J Pers Soc Psychol** 1989 Apr;56(4):640–8

Perseverative structuring of responses by schizophrenic and affective disorder patients. Lyon N, et al. **J Psychiatr Res** 1988;22(4):261–77

Clinical applications of Rorschach-based visual imagery reactivity. Yanovski A, et al. **Percept Mot Skills** 1989 Aug; 69(1):9–10

Neurotic disturbance in pregnancy—a review. Campbell EA. **Psychiatr Dev** 1988 Winter;6(4):311–28 (64 ref.)

The indivisibility of Freudian object relations and drive theories. Spruiell V. **Psychoanal Q** 1988 Oct;57(4):597–625

Freud's retraction of his seduction theory and the Schreber case. Bloch D. **Psychoanal Rev** 1989 Summer;76(2):185–201

On the fate of the intrapsychic image of the psychoanalyst after termination of the analysis. Bergmann MS. **Psychoanal Study Child** 1988;43:137–53

The transference neurosis in child analysis. Chused JF. **Psychoanal Study Child** 1988;43:51–81

Trauma or drive—drive and trauma. A reading of Sigmund Freud's phylogenetic fantasy of 1915. Grubrich-Simitis I. **Psychoanal Study Child** 1988;43:3–32

[Apropos of Pomme's work on "vaporous affections": theory and clinical affections, natural history of the diseases] Biéder J, et al. **Ann Med Psychol (Paris)** 1988 May–Jun; 146(7):664–76 **(Fre)**

[Vapors: a historical approach] Laxenaire M, et al. **Ann Med Psychol (Paris)** 1988 May–Jun;146(7):637–44 (Eng. Abstr.) **(Fre)**

[The need for preventive examinations in detecting psychoreactive disorders in childhood] Reinhardt H, et al. **Arztl Jugendkd** 1988;79(5):270–6 (Eng. Abstr.) **(Ger)**

[Transference, taboo and truth] Bloom H. **Psyche (Stuttg)** 1989 May;43(5):397–414 (Eng. Abstr.) **(Ger)**

[Psychoanalysis and social engagement] Hornstra L. **Psyche (Stuttg)** 1988 Aug;42(8):724–8 **(Ger)**

[Critique of the "therapeutic ego split"] Körner J. **Psyche (Stuttg)** 1989 May;43(5):385–96 (Eng. Abstr.) **(Ger)**

[Structure and fantasy] Held T. **Psychother Psychosom Med Psychol** 1988 Jul;38(7):225–31 (Eng. Abstr.) **(Ger)**

[The finite nature of human life and its significance in the perception of neurotic patients] Meyer JE. **Psychother Psychosom Med Psychol** 1989 Feb;39(2):64–7 (Eng. Abstr.) **(Ger)**

[Type A personality and its relations: the significance of hostility, neuroticism and verbal behavior for coronary heart diseases] Siegman AW. **Z Klin Psychol Psychopathol Psychother** 1988;36(1):3–24 (86 ref.) (Eng. Abstr.) **(Ger)**

[Proof of complex theories regarding conflicts, neuroses and their therapy, exemplified by Mjasiščew's theory of relations] Lauterbach W. **Z Psychol** 1989;197(1):87–96 (Eng. Abstr.) **(Ger)**

[What protects against neurosis? Results of a comparative study of neurotic patients with high risk factors and healthy probands] Lieberz K. **Z Psychosom Med Psychoanal** 1988; 34(4):338–50 (Eng. Abstr.) **(Ger)**

[The Schultz-Hencke concept of psychosomatics] Wunderlich G. **Z Psychosom Med Psychoanal** 1989; 35(1):1–9 (20 ref.) (Eng. Abstr.) **(Ger)**

[Basic motor pattern in 4 neurotic structures] Zander W. **Z Psychosom Med Psychoanal** 1988;34(4):373–88 (Eng. Abstr.) **(Ger)**

[Personality characteristics of alcoholic subjects using the Minnesota Multiphasic Personality Inventory (MMPI)] Grantaliano S, et al. **Minerva Psichiatr** 1989 Apr–Jun; 30(2):77–80 (Eng. Abstr.) **(Ita)**

[Age-related characteristics of neuroses] Grineva IM, et al. **Vrach Delo** 1989 Mar;(3):90–2 (Eng. Abstr.) **(Rus)**

[Memory changes in patients with functional and vascular psychic disorders at a late age] Alimova RA. **Zh Nevropatol Psikhiatr** 1989;89(1):106–11 (Eng. Abstr.) **(Rus)**

[Use of a method of color assessment of states for studying the emotional sphere of patients with neuroses] Nikitina NV, et al. **Zh Nevropatol Psikhiatr** 1988;88(12):82–5 (Eng. Abstr.) **(Rus)**

[Neurotic and neurosis-like disorders in the school maladaptation of children with retardation of mental development] Zakharov NP. **Zh Nevropatol Psikhiatr** 1988; 88(8):72–5 (Eng. Abstr.) **(Rus)**

[Manifestation of the characteristics of alexithymia in a group of psychosomatic patients] Retamales Rojas R. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1988 Sep–Oct;16(5):337–46 (Eng. Abstr.) **(Spa)**

[Differences and similarities between neurotic and somatoform patients regarding feeling verbalization] Retamales Rojas R. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1988 Nov–Dec;16(6):435–44 (Eng. Abstr.) **(Spa)**

REHABILITATION

Providing gainful employment for emotionally disabled persons—a model of vocational integration. Seyfried B. **Int J Rehabil Res** 1987;10(4 Suppl 5):215–20

[Effect of occupational therapy on the mental state of patients with myocardial infarction at the hospital stage of rehabilitation] Rozykhodzhaeva GA, et al. **Kardiologiia** 1988 Nov;28(11):107–9 **(Rus)**

THERAPY

Modifiability of trait anxiety and neuroticism: a meta-analysis of the literature. Jorm AF. **Aust N Z J Psychiatry** 1989 Mar;23(1):21–9

The voice of Memnon [editorial] Wortis J. **Biol Psychiatry** 1989 Jun;26(2):111–2

Which neurotic patients do psychiatrists treat? Eagles JM, et al. **Br J Psychiatry** 1988 Feb;152:222–8

Treatment of neurotic illnesses by yogic techniques. Sharma I, et al. **Indian J Med Sci** 1989 Mar;43(3):76–9

Existential and psychopathological evaluation of group psychotherapy of neurotic and psychotic patients. Opalić P. **Int J Group Psychother** 1989 Jul;39(3):389–411

Analysis terminable and interminable' 50 years afterwards. Analysis of adolescents. Rosenthal G. **Int J Psychoanal** 1988;69 (Pt 3):327–34

Which neurotic patients are treated with psychotherapy? Alexander DA, et al. **Int J Soc Psychiatry** 1989 Summer; 35(2):173–80

The derailment of behavior therapy: a tale of conceptual misdirection. Wolpe J. **J Behav Ther Exp Psychiatry** 1989 Mar;20(1):3–15 (71 ref.)

Nottingham study of neurotic disorder [letter] Klein DF. **Lancet** 1988 Oct 29;2(8618):1015

Paradoxical interventions in behavior modification. Dowd ET, et al. **Prog Behav Modif** 1988;23:96–130 (70 ref.)

Application of Osgood's Semantic Differential to the study of psychotherapeutic treatments. Bovet J, et al. **Psychother Psychosom** 1988;50(1):42–56

Psychotherapeutic outcome: measuring reliable clinical change. Dormaar M, et al. **Psychother Psychosom** 1988; 50(2):95–101

An experience with psychoanalytic psychotherapy in Singapore. Kong DS. **Singapore Med J** 1988 Aug; 29(4):327–31

[The effect of the development of the group on the therapeutic effect] Brezinová J, et al. **Cesk Psychiatr** 1989 Feb;85(1):37–40 (Eng. Abstr.) **(Cze)**

[Types of therapeutic groups in the treatment of neuroses] Jedličková D, et al. **Cesk Psychiatr** 1988 Oct;84(5):313–6 (Eng. Abstr.) **(Cze)**

[The effect of the group structure on the course of group therapy in neuroses] Plháková A, et al. **Cesk Psychiatr** 1988 Oct;84(5):323–6 (Eng. Abstr.) **(Cze)**

[Inner and outer reality in psychoanalysis] Vogt R. **Psyche (Stuttg)** 1988 Aug;42(8):657–88 (Eng. Abstr.) **(Ger)**

[Reconstruction of early seduction] Williams M. **Psyche (Stuttg)** 1988 Nov;42(11):945–60 **(Ger)**

[The effect of auditory feedback on the perception of verbal behavior in dynamic group psychotherapy] Salz M, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Mar; 41(3):144–50 (Eng. Abstr.) **(Ger)**

[The sense and need for clarification of relations in the psychotherapeutic team] Tuchscheerer G. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Nov; 40(11):688–92 (Eng. Abstr.) **(Ger)**

[Selected analytic sessions in assessment by the treating analyst and an analytic rater group] Deneke FW, et al. **Psychother Psychosom Med Psychol** 1988 Nov; 38(11):369–75 (Eng. Abstr.) **(Ger)**

[Evaluation of psychotherapy exemplified by a comparison of open and closed therapy groups—II] Eichhorn H. **Psychother Psychosom Med Psychol** 1988 Sep–Oct; 38(9–10):337–41 (Eng. Abstr.) **(Ger)**

[The development and status of inpatient psychotherapy in The Netherlands] van Eck L. **Psychother Psychosom Med Psychol** 1989 Feb;39(2):84–6 (Eng. Abstr.) **(Ger)**

[Biofeedback—a modern therapeutic approach and its possible relevance for general practice] Seefeldt D, et al. **Z Arztl Fortbild (Jena)** 1989;83(12):613–6 (0 ref.) **(Ger)**

[The effects of psychotherapy as a result of the relation of therapeutic availability and acceptance by the client] Ambühl H, et al. **Z Klin Psychol Psychopathol Psychother** 1988;36(4):308–27 (Eng. Abstr.) **(Ger)**

[Study of the key concepts of Morita therapy—from the standpoint of clinical practice] Kitanishi K. **Seishin Shinkeigaku Zasshi** 1989;91(2):61–72 **(Jpn)**

[The influence of a sanatorium cure on neuroses as a function of the clinical form and of the dominant syndromes] Niţurad A, et al. **Rev Med Interna Neurol Psihiatr Neurochir Dermatovenerol Neurol Psihiatr Neurochir** 1988 Oct–Dec;33(4):295–308 **(Rum)**

[Prevention and treatment of posthypoxic encephalopathies] Alekseeva GV. **Anesteziol Reanimatol** 1988 Jul–Aug; (4):32–3 (Eng. Abstr.) **(Rus)**

[Prevention and treatment of neuro-psychological disorders in surgical patients] Iaremchuk AIa, et al. **Klin Khir** 1989; (1):41–3 (Eng. Abstr.) **(Rus)**

[Psychological rehabilitation of patients with implanted electrocardiostimulators] Krylov VI, et al. **Klin Med (Mosk)** 1989 Apr;67(4):74–7 (Eng. Abstr.) **(Rus)**

[Somatic disorders during psychotherapy of patients with different personality characteristics] Rutsitskii EM, et al. **Sov Med** 1988;(5):83–5 **(Rus)**

[Psychotherapy of post-traumatic borderline neuropsychiatric disorders] Morozov AM. **Vrach Delo** 1989 Feb;(2):88–90 (Eng. Abstr.) **(Rus)**

[Clinico-psychopathologic and electroencephalographic correlations in patients with cranio-cerebral trauma during laser therapy] Anishchenko GIa, et al. **Zh Nevropatol Psikhiatr** 1989;89(5):37–41 (Eng. Abstr.) **(Rus)**

[Combined acupuncture reflexotherapy and hypnosis in treating neuroses] Olelnikov NI. **Zh Nevropatol Psikhiatr** 1988;88(11):101–3 (Eng. Abstr.) **(Rus)**

[Results of the treatment of neuroses at a day-care psychiatric sanatorium in Bratislava] Gešová Z, et al. **Cesk Psychiatr** 1989 Jun;85(3):165–72 (Eng. Abstr.) **(Slo)**

NEUROTOXINS

Spider toxins: recent applications in neurobiology. Jackson H, et al. **Annu Rev Neurosci** 1989;12:405–14 (57 ref.)

Botulinum neurotoxin type A radiolabeled at either the light or the heavy chain. Dekleva ML, et al. **Arch Biochem Biophys** 1989 Oct;274(1):235–40

Botulinum neurotoxin type A: cleavage of the heavy chain into two halves and their partial sequences. Sathyamoorthy V, et al. **Arch Biochem Biophys** 1988 Oct;266(1):142–51

Reduction of nitroheterocyclic drugs by ascorbate and catecholamines: a possible mechanism for the neurotoxicity of nitroheterocyclic drugs. Rao DN, et al. **Basic Life Sci** 1988;49:787–94

A N-methyltransferase in human brain catalyses N-methylation of 1,2,3,4-tetrahydroisoquinoline into N-methyl-1,2,3,4-tetrahydroisoquinoline, a precursor of a dopaminergic neurotoxin, N-methylisoquinolinium ion. Naoi M, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1213–9

Unusual amino acid sequence of fasciatoxin, a weak reversibly acting neurotoxin in the venom of the banded krait, Bungarus fasciatus. Liu CS, et al. **Biochem J** 1989 Apr 1;259(1):153–8

Sequence-specific 1H NMR assignments and secondary structure in the sea anemone polypeptide Stichodactyla helianthus neurotoxin I. Fogh RH, et al. **Biochemistry** 1989 Feb 21;28(4):1826–34

Proton nuclear magnetic resonance characterization of the aromatic residues in the variant-3 neurotoxin from Centruroides sculpturatus Ewing. Krishna NR, et al. **Biochemistry** 1989 Feb 21;28(4):1555–62

Proton nuclear magnetic resonance studies on the variant-3 neurotoxin from Centruroides sculpturatus Ewing: sequential assignment of resonances. Nettesheim DG, et al. **Biochemistry** 1989 Feb 21;28(4):1548–55

1H NMR study of the solution properties of the polypeptide neurotoxin I from the sea anemone Stichodactyla helianthus. Norton RS, et al. **Biochemistry** 1989 Feb 21; 28(4):1820–6

Amino-acid sequence of the minor neurotoxin from Acalyptophis peronii venom. Mori N, et al. **Biol Chem Hoppe Seyler** 1988 Jun;369(6):521–6

Diazepam attenuation of somatostatin-induced motor disturbances and neurotoxicity. Balaban CD, et al. **Brain Res** 1988 Aug 16;458(1):91–6

Neurotoxic effects of p-chloroamphetamine on the serotoninergic innervation of the trigeminal motor nucleus: a retrograde transport study. Fritschy JM, et al. **Brain Res** 1988 Nov 15;473(2):261–70

Evidence for multiple mechanisms responsible for 2,5-hexanedione-induced neuropathy. Lapadula DM, et al. **Brain Res** 1988 Aug 16;458(1):123–31

Glutamate cytotoxicity in a neuronal cell line is blocked by membrane depolarization. Murphy TH, et al. **Brain Res** 1988 Sep 13;460(1):155–60

Role of dopamine in manganese neurotoxicity. Parenti M, et al. **Brain Res** 1988 Nov 15;473(2):236–40

Fetal hippocampal cell suspensions ameliorate behavioral effects of intradentate colchicine in the rat. Tandon P, et al. **Brain Res** 1988 Nov 15;473(2):241–8

Guanethidine adrenergic neuropathy: an animal model of selective autonomic neuropathy. Zochodne DW, et al. **Brain Res** 1988 Sep 27;461(1):10–6

Anticonvulsant potency and neurotoxicity of valproate alone and in combination with carbamazepine or phenobarbital. Bourgeois BF. **Clin Neuropharmacol** 1988 Aug;11(4):348–59

Alkaloid neurotoxins-dependent sodium transport in insect synaptic nerve-ending particles. Dwivedy AK. **Comp Biochem Physiol [C]** 1988;91(2):349–54

Glucocorticoid endangerment of hippocampal neurons does not involve deoxyribonucleic acid cleavage. Masters JN, et al. **Endocrinology** 1989 Jun;124(6):3083–8

Secondary structure determination for alpha-neurotoxin from Dendroaspis polylepis polylepis based on sequence-specific 1H-nuclear-magnetic-resonance assignments. Labhardt AM, et al. **Eur J Biochem** 1988 Nov 1;177(2):295–305

Involvement of the constituent chains of botulinum neurotoxins A and B in the blockade of neurotransmitter release. Maisey EA, et al. **Eur J Biochem** 1988 Nov 15; 177(3):683–91

Depletion of serotonin using p-chlorophenylalanine (PCPA) and reserpine protects against the neurotoxic effects of p-chloroamphetamine (PCA) in the brain. Berger UV, et al. **Exp Neurol** 1989 Feb;103(2):111–5

Thymopoietins and long postsynaptic neurotoxins share common information in their primary structures. Skerl V, et al. **FEBS Lett** 1988 Oct 24;239(1):141–6

Isolated light chains of botulinum neurotoxins inhibit exocytosis. Studies in digitonin-permeabilized chromaffin cells. Bittner MA, et al. **J Biol Chem** 1989 Jun 25; 264(18):10354–60

Cloning and expression of a synthetic gene for Cerebratulus lacteus neurotoxin B-IV. Howell ML, et al. **J Biol Chem** 1989 Sep 15;264(26):15268–73

Purification and characterization of two classes of neurotoxins from the funnel web spider, Agelenopsis aperta. Skinner WS, et al. **J Biol Chem** 1989 Feb 5; 264(4):2150–5

Acute and chronic effects of the neurolytic agent ricin on dorsal root ganglia, spinal cord, and nerves. Pubols LM, et al. **J Comp Neurol** 1988 Sep 8;275(2):271–81

Lack of central sprouting of primary afferent fibers after ricin deafferentation. Pubols LM, et al. **J Comp Neurol** 1988 Sep 8;275(2):282–7

Binding of crotoxin, a presynaptic phospholipase A2 neurotoxin, to negatively charged phospholipid vesicles. Radvanyi F, et al. **J Neurochem** 1989 Oct;53(4):1252–60

Dose-dependence of endoneurial fluid sodium and chloride accumulation in galactose intoxication. Mizisin AP, et al. **J Neurol Sci** 1988 Sep;86(2–3):113–24

2-Phenylpyridine and 3-phenylpyridine, constituents of tea, are unlikely to cause idiopathic Parkinson's disease. Perry TL, et al. **J Neurol Sci** 1988 Jul;85(3):309–17

Early and delayed neurotoxicity of mitoxantrone and doxorubicin following subarachnoid injection. Siegal T, et al. **J Neurooncol** 1988 Sep;6(2):135–40

Aspartate neurotoxicity on cultured cortical neurons. Choi DW, et al. **J Neurosci Res** 1989 May;23(1):116–21

Prediction of the packing arrangement of strands in beta-sheets of globular proteins. Kikuchi T, et al. **J Protein Chem** 1988 Aug;7(4):473–90

Isolation and characterization of the Botulinum neurotoxins. Simpson LL, et al. **Methods Enzymol** 1988;165:76–85

Reductive methylation of lysine residues of botulinum neurotoxin types A and B. Sathyamoorthy V, et al. **Mol Cell Biochem** 1988 Sep;83(1):65–72

Effect of tetranitromethane on the biological activities of botulinum neurotoxin types A, B and E. Woody M, et al. **Mol Cell Biochem** 1989 Feb 21;85(2):159–69

Aluminum-induced neurotoxicity: alterations in membrane function at the blood-brain barrier. Banks WA, et al. **Neurosci Biobehav Rev** 1989 Spring;13(1):47–53 (106 ref.)

Direct neurotoxic effects of colchicine on cholinergic neurons in medial septum and striatum. Peterson GM, et al. **Neurosci Lett** 1988 Nov 22;94(1–2):46–51

Biological markers of neurotoxicity. Satellite symposium to the Second World Congress of Neuroscience. Szeged, Hungary, August 13–14, 1987. Proceedings. **Neurotoxicol Teratol** 1988 Sep-Oct;10(5):393–495

Parkinsonism: a clinical marker of exposure to neurotoxins. Bleecker ML. **Neurotoxicol Teratol** 1988 Sep-Oct; 10(5):475–8 (61 ref.)

The psychological performance profile in occupational intoxications. Hänninen H. **Neurotoxicol Teratol** 1988 Sep-Oct;10(5):485–8 (13 ref.)

Neurophysiological markers as early signs of organophosphate neurotoxicity. Nagymajtényi L, et al. **Neurotoxicol Teratol** 1988 Sep-Oct;10(5):429–34

Molecular cloning of the human eosinophil-derived neurotoxin: a member of the ribonuclease gene family. Rosenberg HF, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(12):4460–4

Ageing and neurotoxins as causative factors in idiopathic Parkinson's disease—a critical analysis of the neurochemical evidence. Hornykiewicz O. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3–4):319–28 (18 ref.)

Kynurenic acid protects against neurotoxicity and lethality of toxic extracts from contaminated Atlantic coast mussels. Pinsky C, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3–4):595–8

Neurotoxicity creates regulatory dilemma [news] Barnes DM. **Science** 1989 Jan 6;243(4887):29–30

Role for excitatory amino acids in methamphetamine-induced nigrostriatal dopaminergic toxicity. Sonsalla PK, et al. **Science** 1989 Jan 20; 243(4889):398–400

Effect of DSP-4, a noradrenergic neurotoxin, on sleep and wakefulness and sensitivity to drugs acting on adrenergic receptors in the rat. Monti JM, et al. **Sleep** 1988 Aug; 11(4):370–7

Resistance of nerves from certain toxic crabs to paralytic shellfish poison and tetrodotoxin. Daigo K, et al. **Toxicon** 1988;26(5):485–90

Dissociation of catalytic activity and neurotoxicity of a basic phospholipase A2 from Russell's viper (Vipera russelli) venom. Jayanthi GP, et al. **Toxicon** 1989;27(8):875–85

Amyotrophic lateral sclerosis and Parkinson's disease complex on Guam linked to an environmental neurotoxin. Kurland LT. **Trends Neurosci** 1988 Feb;11(2):51–4 (38 ref.)

[Effect of the intracisternal administration of the neurotoxins 6-hydroxydopamine and 5,7-dihydroxytryptamine on the formation of the passive avoidance reaction and the biogenic amine level in the brain of rats] Shabanov PD, et al. **Fiziol Zh SSSR** 1988 Jul;74(7):920–3 (Eng. Abstr.) **(Rus)**

ANALYSIS

Phylogenetic relationships of snake venom toxic proteins. Ventura MM. **An Acad Bras Cienc** 1988;60(2):239–44 (38 ref.)

Quantification of the putative neurotoxin 2-amino-3-(methylamino)propanoic acid (BMAA) in cycadales: analysis of the seeds of some members of the family Cycadaceae. Duncan MW, et al. **J Anal Toxicol** 1989 May-Jun;13(3):169–75

Amino acid sequence of a presynaptic neurotoxin, agkistrodotoxin, from the venom of Agkistrodon halys Pallas. Kondo K, et al. **J Biochem (Tokyo)** 1989 Feb; 105(2):196–203

Migration of tetrahydroisoquinoline, a possible parkinsonian neurotoxin, into monkey brain from blood as proved by gas chromatography-mass spectrometry. Niwa T, et al. **J Chromatogr** 1988 Oct 28;452:85–91

Electroencephalogram as a tool for assaying neurotoxicity. Lipman JJ. **Methods Enzymol** 1988;165:270–7

Botulinum neurotoxin types A, B & E: pH induced difference spectra. Datta A, et al. **Mol Cell Biochem** 1988 Jun; 81(2):187–94

Molecular topography and secondary structure comparisons of botulinum neurotoxin types A, B and E. Singh BR, et al. **Mol Cell Biochem** 1989 Mar 16;86(1):87–95

Orthorhombic crystals and three-dimensional structure of the potent toxin II from the scorpion Androctonus australis Hector. Fontecilla-Camps JC, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7443–7

Clostridium botulinum type D neurotoxin: purification and detection. De Jongh KS, et al. **Toxicon** 1989;27(2):221–8

A new muscle damaging toxin, myotoxin II, from the venom of the snake Bothrops asper (terciopelo). Lomonte B, et al. **Toxicon** 1989;27(7):725–33

Correlation between the surface hydrophobicities and elution orders of elapid neurotoxins and cardiotoxins on hydrophobic-interaction high-performance liquid chromatography. Osthoff G, et al. **Toxicon** 1988; 26(5):475–83

Molecular differences between type A botulinum neurotoxin and its toxoid. Singh BR, et al. **Toxicon** 1989;27(4):403–10

[Amino acid sequence of neurotoxin II from the sea anemone Radianthus macrodactylus] Zykova TA, et al. **Bioorg Khim** 1988 Jul;14(7):878–82 (Eng. Abstr.) **(Rus)**

[Amino acid sequence of neurotoxins IV and V from the sea anemone Radianthus macrodactylus] Zykova TA, et al. **Bioorg Khim** 1988 Nov;14(11):1489–94 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Regulation of neurotoxin and protease formation in Clostridium botulinum Okra B and Hall A by arginine. Patterson-Curtis SI, et al. **Appl Environ Microbiol** 1989 Jun;55(6):1544–8

GENETICS

Characterization of botulinum type A neurotoxin gene: delineation of the N-terminal encoding region. Betley MJ, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1388–95

Synthesis of a gene coding for an insect-specific scorpion neurotoxin and attempts to express it using baculovirus vectors. Carbonell LF, et al. **Gene** 1988 Dec 20; 73(2):409–18

Molecular cloning of the human eosinophil-derived neurotoxin: a member of the ribonuclease gene family. Rosenberg HF, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(12):4460–4

IMMUNOLOGY

Immunological properties of notexin, a potent presynaptic and myotoxic component from venom of the Australian tiger snake Notechis scutatus scutatus. Mollier P, et al. **FEBS Lett** 1989 Jul 3;250(2):479–82

Immunological characterization of papain-induced fragments of Clostridium botulinum type A neurotoxin and interaction of the fragments with brain synaptosomes. Kozaki S, et al. **Infect Immun** 1989 Sep;57(9):2634–9

ISOLATION & PURIFICATION

Calitoxin, a neurotoxic peptide from the sea anemone Calliactis parasitica: amino acid sequence and electrophysiological properties. Cariello L, et al. **Biochemistry** 1989 Mar 21;28(6):2484–9

Isolation, characterization, and amino acid sequence of a polypeptide neurotoxin occurring in the sea anemone Stichodactyla helianthus. Kem WR, et al. **Biochemistry** 1989 Apr 18;28(8):3483–9

Spectroscopic characterization of textilotoxin, a presynaptic neurotoxin from the venom of the Australian eastern brown snake (Pseudonaja t. textilis). Aird SD, et al. **Biochim Biophys Acta** 1989 Aug 31;997(3):219–23

Purification and the partial amino acid sequence of an insect neurotoxin from the venom of scorpion Buthus martensi Karsch. Ji YH, et al. **Comp Biochem Physiol [C]** 1988; 90(1):237–40

Molecular diversity of neurotoxins from Clostridium botulinum type D strains. Moriishi K, et al. **Infect Immun** 1989 Sep;57(9):2886–91

Human eosinophil-derived neurotoxin and eosinophil protein X are likely the same protein. Slifman NR, et al. **J Immunol** 1989 Oct 1;143(7):2317–22

Preparation and purification of staphylococcal alpha toxin. Harshman S, et al. **Methods Enzymol** 1988;165:3–7

A simplified procedure for the fractionation of Tityus serrulatus venom: isolation and partial characterization of TsTX-IV, a new neurotoxin. Arantes EC, et al. **Toxicon** 1989;27(8):907–16

[Biochemistry of Parkinson's disease] Nagatsu T. **Seikagaku** 1988 May;60(5):358–66 (16 ref.) **(Jpn)**

METABOLISM

Interactions between dendrotoxin, a blocker of voltage-dependent potassium channels, and charybdotoxin, a blocker of calcium-activated potassium channels, at binding sites on neuronal membranes. Harvey AL, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):394–7

Effect of pH on the interaction of botulinum neurotoxins A, B and E with liposomes. Montecucco C, et al. **Biochem J** 1989 Apr 1;259(1):47–53

Dendrotoxin acceptor from bovine synaptic plasma membranes. Binding properties, purification and subunit composition of a putative constituent of certain voltage-activated K+ channels. Parcej DN, et al. **Biochem J** 1989 Feb 1;257(3):899–903

Interaction of insecticides of the pyrethroid family with specific binding sites on the voltage-dependent sodium channel from mammalian brain. Lombet A, et al. **Brain Res** 1988 Aug 30;459(1):44–53

Interactions between discrete neuronal membrane binding sites for the putative K+-channel ligands beta-bungarotoxin, dendrotoxin and mast-cell-degranulating peptide. Breeze AL, et al. **Eur J Biochem** 1989 Jan 2;178(3):771–8

Major basic protein and eosinophil-derived neurotoxin concentrations in nasal-lavage fluid after antigen challenge: effect of systemic corticosteroids and relationship to eosinophil influx. Bascom R, et al. **J Allergy Clin Immunol** 1989 Sep;84(3):338–46

Deuterium isotope effect measurements on the interactions of the neurotoxin 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine with monoamine oxidase B. Ottoboni S, et al. **J Biol Chem** 1989 Aug 15;264(23):13684–8

Astrocytes as a primary locus for the conversion MPTP into MPP+. Brooks WJ, et al. **J Neural Transm** 1989;76(1):1–12

The regions of alpha-neurotoxin binding on the extracellular part of the alpha-subunit of human acetylcholine receptor. Mulac-Jericevic B, et al. **J Protein Chem** 1988 Apr; 7(2):173–7

Activation of sodium channels and inhibition of [3H]batrachotoxinin A-20-alpha-benzoate binding by an N-alkylamide neurotoxin. Ottea JA, et al. **Mol Pharmacol** 1989 Aug;36(2):280–4

Brain monoamine oxidase (MAO) B: a unique neurotoxin and neurotransmitter producing enzyme. Youdim MB. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3–4):363–71 (41 ref.)

Commentary on "Biochemical mechanism of action of the dopaminergic neurotoxin 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP)". Di Monte D, et al. **Toxicol Lett** 1989 Aug;48(2):117–9

Biochemical mechanism of action of the dopaminergic neurotoxin 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP). Sayre LM. **Toxicol Lett** 1989 Aug;48(2):121–49 (244 ref.)

Toxins in the characterization of potassium channels. Castle NA, et al. **Trends Neurosci** 1989 Feb;12(2):59–65 (61 ref.)

PHARMACOLOGY

Morphology of ventricular wall surfaces following neurotoxin induced degeneration of supraependymal afferents. Cupédo RN, et al. **Acta Morphol Neerl Scand** 1988–89;26(1):19–31

Degeneration of neuronal processes in rats induced by a protease inhibitor, leupeptin. Takauchi S, et al. **Acta Neuropathol (Berl)** 1989;78(4):380–7

Effects of the noradrenaline neurotoxin N-2-chloroethyl-N-ethyl-2-bromo-benzylamine hydrochloride (DSP4) on the blood-brain barrier. An experimental study in the mouse using protein tracer and density determination techniques. Tengvar C, et al. **Acta Neuropathol (Berl)** 1989;78(1):28–34

Residual ethylene oxide in hollow fiber hemodialysis units is neurotoxic in vitro. Windebank AJ, et al. **Ann Neurol** 1989 Jul;26(1):63–8

1-Methyl-4-phenyl-1,2,3,6-tetrahydropyridine inhibits proton motive force in energized liver mitochondria. Singh Y, et al. **Arch Biochem Biophys** 1989 May 15;271(1):217–22

Effect of DSP4, a neurotoxic agent, on attentive behaviour and related electrocortical activity in cat. Delagrange P, et al. **Behav Brain Res** 1989 May 1;33(1):33–43

Enhancement by tetraphenylboron of the interaction of the 1-methyl-4-phenylpyridinium ion (MPP+) with mitochondria. Ramsay RR, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):983–90

Irreversible inhibition of rat striatal dopamine uptake induced by in vitro exposure to DSP4. Dwoskin LP, et al. **Biochem Pharmacol** 1989 Feb 1;38(3):549–51

Potassium channel blocking actions of beta-bungarotoxin and related toxins on mouse and frog motor nerve terminals. Rowan EG, et al. **Br J Pharmacol** 1988 Jul;94(3):839–47

Selective neuronal destruction by Ricinus communis agglutinin I and its use for the quantitative determination of sciatic nerve dorsal root ganglion cell numbers. Aldskogius H, et al. **Brain Res** 1988 Oct 4;461(2):215–20

Analogies and differences in the mode of action and properties of binding sites (localization and mutual interactions) of two K+ channel toxins, MCD peptide and dendrotoxin I. Bidard JN, et al. **Brain Res** 1989 Aug 21; 495(1):45–57

Subtypes of K+ channels differentiated by the effect of K+ channel openers upon K+ channel blocker-induced seizures. Gandolfo G, et al. **Brain Res** 1989 Aug 21; 495(1):189–92

The histological effects of intracerebral injection or infusion of MPTP (1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine) and MPP+ (1-methyl-4-phenylpyridinium) in rat and mouse. Gibb WR, et al. **Brain Res** 1988 Oct 4;461(2):361–6

MPP+-induced increases in extracellular potassium ion activity in rat striatal slices suggest that consequences of MPP+ neurotoxicity are spread beyond dopaminergic terminals. Hollinden GE, et al. **Brain Res** 1988 Dec 20; 475(2):283–90

Neurotoxicity of N-methyl-D-aspartate is markedly enhanced in developing rat central nervous system. McDonald JW, et al. **Brain Res** 1988 Aug 30;459(1):200–3

1-Methyl-4-(2'-methylphenyl)-1,2,3,6-tetrahydropyridine (2'CH3-MPTP)-induced degeneration of mesostriatal dopaminergic neurons in the mouse: biochemical and neuroanatomical studies. Manaye KF, et al. **Brain Res** 1989 Jul 10;491(2):307–15

Axonal transport of neurofilament is accelerated in peripheral nerve during 2,5-hexanedione intoxication. Monaco S, et al. **Brain Res** 1989 Jul 10;491(2):328–34

L-beta-methylaminoalanine inhibits [3H]glutamate binding in the presence of bicarbonate ions. Richter KE, et al. **Brain Res** 1989 Jul 17;492(1–2):385–8

MPTP produces a pattern of nigrostriatal degeneration which coincides with the mosaic organization of the caudate nucleus. Turner BH, et al. **Brain Res** 1988 Nov 8; 473(1):60–4

Effect of MK-801, kynurenate, glycine, dextrorphan and 4-acetylpyridine on striatal toxicity of quinolinate. Zhu SG, et al. **Brain Res** 1989 Mar 6;481(2):356–60

Development of N-methyl-D-aspartate excitotoxicity in cultured hippocampal neurons. Peterson C, et al. **Brain Res Dev Brain Res** 1989 Aug 1;48(2):187–95

Neurotoxic effects of kainic acid on developing chick retina. De Nardis R, et al. **Dev Neurosci** 1988;10(4):256–69

Neurotransmitters, neuropeptides and binding sites in the rat mediobasal hypothalamus: effects of monosodium glutamate (MSG) lesions. Meister B, et al. **Exp Brain Res** 1989;76(2):343–68

Age-dependent variation in the sensitivity of rat brain glutamine synthetase to L-methionine-DL-sulfoximine. Rao VL, et al. **Int J Dev Neurosci** 1988;6(5):425–30

Glutamate, a neurotoxic transmitter. Olney JW. **J Child Neurol** 1989 Jul;4(3):218–26 (64 ref.)

Effects of kynurenate and other excitatory amino acid antagonists as blockers of light- and kainate-induced retinal rod photoreceptor disc shedding. Besharse JC, et al. **J Comp Neurol** 1988 Aug 8;274(2):295–303

Modification of Na channel gating by an alpha scorpion toxin from Tityus serrulatus. Kirsch GE, et al. **J Gen Physiol** 1989 Jan;93(1):67–83

Acute action of DSP-4 on central norepinephrine axons: biochemical and immunohistochemical evidence for differential effects. Grzanna R, et al. **J Histochem Cytochem** 1989 Sep;37(9):1435–42

Mechanism of inactivation of single sodium channels after modification by chloramine-T, sea anemone toxin and scorpion toxin. Nagy K. **J Membr Biol** 1988 Nov; 106(1):29–40

Norepinephrine-stimulated inositol phospholipid breakdown in the rat cerebral cortex following serotoninergic lesion. Fowler CJ, et al. **J Neural Transm** 1988;73(3):205–15

Mesencephalic dopamine neurons become less sensitive to 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine toxicity during development in vitro. Danias P, et al. **J Neurochem** 1989 Oct;53(4):1149–55

Direct evidence that excitotoxicity in cultured neurons is mediated via N-methyl-D-aspartate (NMDA) as well as non-NMDA receptors. Frandsen A, et al. **J Neurochem** 1989 Jul;53(1):297–9

The noradrenergic neurotoxin DSP-4 eliminates the coeruleospinal projection but spares projections of the A5 and A7 groups to the ventral horn of the rat spinal cord. Lyons WE, et al. **J Neurosci** 1989 May;9(5):1481–9

Neurotoxicity of excitatory amino acid receptor agonists in young rat hippocampal slices. Garthwaite G, et al. **J Neurosci Methods** 1989 Jul;29(1):33–42

Noradrenaline depletion protects cholinergic neurons in rat hippocampus against AF64A-induced damage. Hörtnagl H, et al. **J Neurosci Methods** 1989 Mar;27(2):103–8

Neurotoxic effect induced by quinolinic acid in dissociated cell culture of mouse hippocampus. Khaspekov L, et al. **J Neurosci Res** 1989 Feb;22(2):150–7

The effects of 1-methyl-4-phenylpyridinium ion (MPP+) on the efflux and metabolism of endogenous dopamine in rat striatal slices. Snape BM, et al. **J Pharm Pharmacol** 1988 Sep;40(9):620–6

Effects of MPTP, MPP+ and paraquat on mitochondrial potential and oxidative stress. Lambert CE, et al. **Life Sci** 1989;44(18):1277–84

Central depletion of dopamine in rats by 1-methyl-4-phenylpyridine. Okada M, et al. **Life Sci** 1989; 45(5):391–9

Measurement of neurotoxic actions on mammalian nerve impulse conduction. Lipman JJ. **Methods Enzymol** 1988; 165:254–69

Some features of the nigrostriatal dopaminergic neurotoxin 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP) in the mouse. Heikkila RE, et al. **Mol Chem Neuropathol** 1989 Jun;10(3):171–83 (54 ref.)

Compensatory responses to nigrostriatal bundle injury. Studies with 6-hydroxydopamine in an animal model of parkinsonism. Zigmond MJ, et al. **Mol Chem Neuropathol** 1989 Jun;10(3):185–200 (65 ref.)

Use of tissue culture models to study neuronal regulatory trophic and toxic factors in the aged brain. Azmitia EC, et al. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):743–58 (184 ref.)

Effect of selective noradrenergic denervation on noradrenaline content and [3H]dopamine release in rat nucleus accumbens slices. Russell VA, et al. **Neurochem Res** 1989 Feb;14(2):169–72

Non-specific effects of the putative cholinergic neurotoxin ethylcholine mustard aziridinium ion in the rat brain examined by autoradiography, immunocytochemistry and gel electrophoresis. Allen YS, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):69–74

Alterations in serotonin binding sites after 5,7-dihydroxytryptamine treatment in the rat spinal cord. Brown LM, et al. **Neurosci Lett** 1989 Jul 17;102(1):103–7

Effect of apamin on local rates of glucose utilization in the brain and the spinal cord in rats. Cohen S, et al. **Neurosci Lett** 1988 Sep 12;91(3):253–8

The effects of long-term lead intoxication on the nervous system of the chicken. Mazliah J, et al. **Neurosci Lett** 1989 Jul 3;101(3):253–7

Electrophysiological evidence of the neurotoxic effects of apamin on auditory function in the rat. Moore BD, et al. **Neurosci Lett** 1988 Sep 12;91(3):247–52

Non-competitive antagonists of N-methyl-D-aspartate receptors protect cortical and hippocampal cell cultures against glutamate neurotoxicity. Rondouin G, et al. **Neurosci Lett** 1988 Aug 31;91(2):199–203

Tetrahydroaminoacridine potentiates neurotoxicity of quinolinic acid in rat striatum. Zhu SG, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):252–6

Sparing of cholinergic neurons following quinolinic acid lesions of the rat striatum. Davies SW, et al. **Neuroscience** 1988 Aug;26(2):387–93

Immunohistochemical analysis of the neurotoxic effects of DSP-4 identifies two populations of noradrenergic axon terminals. Fritschy JM, et al. **Neuroscience** 1989; 30(1):181–97

Excitatory amino acid neurotoxicity in the hippocampal slice preparation. Siman R, et al. **Neuroscience** 1988 Aug; 26(2):433–47

Effects of neurotoxicants on synaptic transmission: lessons learned from electrophysiological studies. Atchison WD. **Neurotoxicol Teratol** 1988 Sep–Oct;10(5):393–416 (206 ref.)

Responses of dopaminergic and serotonergic systems to triethyllead intoxication. DeHaven-Hudkins DL, et al. **Neurotoxicol Teratol** 1988 Jul–Aug;10(4):279–85

Sensory evoked potentials in neurotoxicology. Mattsson JL, et al. **Neurotoxicol Teratol** 1988 Sep–Oct;10(5):435–43 (25 ref.)

Inhibition of calcium channel dihydropyridine receptor binding by purified Mojave toxin. Valdes JJ, et al. **Neurotoxicol Teratol** 1989 Mar–Apr;11(2):129–33

Characterization of a murine model for human bismuth encephalopathy. Ross JF, et al. **Neurotoxicology** 1988 Winter;9(4):581–6

Botulinum toxin type A blocks the morphological changes induced by chemical stimulation on the presynaptic membrane of Torpedo synaptosomes. Marsal J, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):372–6

Cytoskeletal effects of acrylamide and 2,5-hexanedione: selective aggregation of vimentin filaments. Sager PR. **Toxicol Appl Pharmacol** 1989 Jan;97(1):141–55

2nd International Symposium on Neurotoxins in Neurobiology. December 1988, Solis, Uruguay. Abstracts. **Toxicon** 1989;27(8):831–40

Gangliosides mediate inhibitory effects of tetanus and botulinum A neurotoxins on exocytosis in chromaffin cells. Marxen P, et al. **Toxicon** 1989;27(8):849–59

Do chemical modifications dissociate between the enzymatic and pharmacological activities of beta bungarotoxin and notexin? Rosenberg P, et al. **Toxicon** 1989;27(2):137–59

Characterization of neuronal nicotinic receptors by snake venom neurotoxins. Loring RH, et al. **Trends Neurosci** 1988 Feb;11(2):73–8 (42 ref.)

[DSP 4, a neurotoxic agent that destroys noradrenergic endings, selectively increases "expectancy" in the cat]

Tadjer D, et al. **C R Acad Sci [III]** 1988;307(11):647–52 (Eng. Abstr.) **(Fre)**

PHYSIOLOGY

Excitotoxins: a possible new mechanism for the pathogenesis of ischemic retinal damage. Bresnick GH. **Arch Ophthalmol** 1989 Mar;107(3):339–41 (37 ref.)

TOXICITY

Subacute neurotoxicity of 5-fluorouracil and its derivative, carmofur, in cats. Okeda R, et al. **Acta Pathol Jpn** 1988 Oct;38(10):1255–66

Triphenyl phosphite neurotoxicity in the hen: inhibition of neurotoxic esterase and of prophylaxis by phenylmethylsulfonyl fluoride. Carrington CD, et al. **Arch Toxicol** 1988;62(5):375–80

An in vitro model of 1-methyl-4-phenyl-pyridinium (MPP+) toxicity: incubation of rabbit caudate nucleus slices with MPP+ followed by biochemical and functional analysis. Feuerstein TJ, et al. **Br J Pharmacol** 1988 Oct; 95(2):449–58

Neurotoxicity of MPTP and MPP+ in vitro: characterization using specific cell lines. Notter MF, et al. **Brain Res** 1988 Jul 26;456(2):254–62

Modification of the cell surface expression of histocompatibility antigens induced by the neurotoxin 2,5 hexanedione. Molinari A, et al. **Cell Biol Toxicol** 1987 Dec; 3(4):417–30

The N-methyl-D-aspartate antagonists aminophosphonovaleric acid and MK-801 reduce anoxic damage to dentate granule and CA1 pyramidal cells in the rat hippocampal slice. Kass IS, et al. **Exp Neurol** 1989 Feb; 103(2):116–22

Cortical muscarinic receptor function following quinolinic acid-induced lesion of the nucleus basalis magnocellularis. Scarth BJ, et al. **Exp Neurol** 1989 Feb;103(2):158–64

Charybdotoxin blocks dendrotoxin-sensitive voltage-activated K+ channels. Schweitz H, et al. **FEBS Lett** 1989 Jul 3;250(2):519–22

Methylmercury-induced movement and postural disorders in developing rat: high-affinity uptake of choline, glutamate, and gamma-aminobutyric acid in the cerebral cortex and caudate-putamen. O'Kusky JR, et al. **J Neurochem** 1989 Oct;53(4):999–1006

Toxic effects of potential environmental neurotoxins related to 1-methyl-4-phenylpyridinium on cultured rat dopaminergic neurons. Michel PP, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):842–50

The effects of exogenous GM1 ganglioside on neurotoxin induced damage of cerebral serotonin nerve terminals in adult rats. Kojima H, et al. **Kurume Med J** 1988;35(2):49–61

Pyridine and other coal tar constituents as free radical-generating environmental neurotoxicants. Pinsky C, et al. **Mol Cell Biochem** 1988 Dec;84(2):217–22

Evaluation of the genotoxicity of domoic acid in a hepatocyte-mediated assay with V79 Chinese hamster lung cells. Rogers CG, et al. **Mutat Res** 1989 Jul;226(3):191–5

Evaluation of the toxicity of the dopaminergic neurotoxins MPTP and MPP+ in PC12 pheochromocytoma cells: binding and biological studies. Marongiu ME, et al. **Neurosci Lett** 1988 Dec 5;94(3):349–54

EEG correlates of neurotoxicity. Eccles CU. **Neurotoxicol Teratol** 1988 Sep-Oct;10(5):423–8 (37 ref.)

The neurobehavioral effects of chronic styrene exposure in the rat. Kulig BM. **Neurotoxicol Teratol** 1988 Nov-Dec; 10(6):511–7

Behavioral effects of prenatal methoxy-ethyl-mercury chloride exposure in rat pups. Lehotzky K, et al. **Neurotoxicol Teratol** 1988 Sep-Oct;10(5):471–4

Biological indicators of neurotoxicity in central and peripheral toxic neuropathies. Maroni M, et al. **Neurotoxicol Teratol** 1988 Sep-Oct;10(5):479–84 (27 ref.)

Neurotypic and gliotypic proteins as biochemical markers of neurotoxicity. O'Callaghan JP. **Neurotoxicol Teratol** 1988 Sep-Oct;10(5):445–52

Neurotoxicity and lethality of toxic extracts from Atlantic coast shellfish. Bose R, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3-4):559–62

Effect of chlorpromazine and quinacrine on the lethality in mice of the venoms and neurotoxins from several snakes. Crosland RD. **Toxicon** 1989;27(6):655–63

Intrastriatal dendrotoxin injection: behavioral and neurochemical effects. Silveira R, et al. **Toxicon** 1988; 26(11):1009–15

Lack of effect of a neurotoxin from the scorpion Buthus martensi Karsch on nerve fibers of this scorpion. Terakawa S, et al. **Toxicon** 1989;27(5):569–78

[Clinico-electroencephalographic indices of the parkinsonian syndrome induced by MPP+ in rats] Kryzhanovskiĭ GN, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):147–50 (Eng. Abstr.) **(Rus)**

NEUROTRANSMITTER UPTAKE INHIBITORS see **TRANSMITTER UPTAKE INHIBITORS, NEURONAL**

NEUROTRANSMITTERS see **NEUROREGULATORS**

NEUTRAL RED see under **PHENAZINES**

NEUTRALIZATION TESTS

Prevalence of neutralizing antibodies against California and Bunyamwera serogroup viruses in deer from mountainous areas of California. Campbell GL, et al. **Am J Trop Med Hyg** 1989 Apr;40(4):428–37

Neutralization antibody to herpes simplex virus type 1 in Bell's palsy. Nakamura K, et al. **Ann Otol Rhinol Laryngol Suppl** 1988 Nov-Dec;137:18–21

Neutralization of cholera toxin by rat IgA secretory antibodies induced by a free synthetic peptide. Delmas A, et al. **Biochem Biophys Res Commun** 1989 Mar 15; 159(2):707–12

Monoclonal antibody-mediated protection and neutralization of motility in experimental Proteus mirabilis infection. Harmon RC, et al. **Infect Immun** 1989 Jul;57(7):1936–41

Modulation of lentivirus replication by antibodies. Non-neutralizing antibodies to caprine arthritis-encephalitis virus enhance early stages of infection in macrophages, but do not cause increased production of virions. Jolly PE, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2221–6

Molecular characterization of a neutralizing domain of the Japanese encephalitis virus structural glycoprotein. Mason PW, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2037–49

IgG-neutralized influenza virus undergoes primary, but not secondary uncoating in vivo. Rigg RJ, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2097–109

Distinct domains of recombinant human IFN-gamma responsible for anti-viral effector function. Alfa MJ, et al. **J Immunol** 1988 Oct 1;141(7):2474–9

Monoclonal antibodies recognizing transforming growth factor-beta. Bioactivity neutralization and transforming growth factor beta 2 affinity purification. Dasch JR, et al. **J Immunol** 1989 Mar 1;142(5):1536–41

Neutralization-sensitive epitopes are exposed on the surface of infectious Cryptosporidium parvum sporozoites. Riggs MW, et al. **J Immunol** 1989 Aug 15;143(4):1340–5

Generation and characterization of hamster monoclonal antibodies that neutralize murine tumor necrosis factors. Sheehan KC, et al. **J Immunol** 1989 Jun 1;142(11):3884–93

Development of polyclonal and monoclonal antibodies for immunoassay and neutralization of human interleukin-4. Chrétien I, et al. **J Immunol Methods** 1989 Feb 8; 117(1):67–81

Fluorometric enzyme immunoassay for measurement of infectious feline leukemia virus and its neutralization. Kushner NN, et al. **J Immunol Methods** 1988 Nov 10; 114(1-2):253–60

A neutralization-inhibition enzyme immunoassay for anti-idiotypic antibodies that block monoclonal antibodies neutralizing Semliki Forest virus. Oosterlaken TA, et al. **J Immunol Methods** 1988 Dec 9;115(2):255–61

Anticytotoxin-neutralizing antibodies in immune globulin preparations: potential use in hemolytic-uremic syndrome. Ashkenazi S, et al. **J Pediatr** 1988 Dec;113(6):1008–14

Complement-mediated neutralization test for determination of mumps vaccine-induced antibody. Hishiyama M, et al. **Vaccine** 1988 Oct;6(5):423–7

METHODS

Radiometric cytolysis inhibition assay, a new rapid test for neutralizing antibodies to intact and trypsin-cleaved poliovirus. Hovi T, et al. **J Clin Microbiol** 1989 Apr; 27(4):709–15

Rapid (24h) neutralization assay for the detection of antibodies to human cytomegalovirus using a monoclonal antibody to an HCMV early nuclear protein. Braun W, et al. **J Virol Methods** 1988 Oct;22(1):31–40

A rapid serum neutralization test in microplates for the detection of antibodies to hog cholera virus. Buonavoglia C, et al. **J Virol Methods** 1989 Jan;23(1):77–9

Detection of serotypic variants in viral preparations: sensitivity of a procedure for selection. Watson DG, et al. **J Virol Methods** 1989 Mar;23(3):333–8

Passive immunoneutralization: a method for studying the regulation of basal and pulsatile hormone secretion. Culler MD, et al. **Methods Enzymol** 1989;168:498–516

NEUTRON ACTIVATION ANALYSIS see under **ACTIVATION ANALYSIS**

NEUTRONS

Neutron radiotherapy for malignant gliomas. Griffin BR, et al. **Am J Clin Oncol** 1989 Aug;12(4):311–5 (45 ref.)

Fast neutron radiation for inoperable and recurrent salivary gland cancers. Koh WJ, et al. **Am J Clin Oncol** 1989 Aug; 12(4):316–9 (30 ref.)

Fast neutron radiotherapy for sarcomas of soft tissue, bone, and cartilage. Laramore GE, et al. **Am J Clin Oncol** 1989 Aug;12(4):320–6 (33 ref.)

Fast neutron radiotherapy in the treatment of locally advanced adenocarcinoma of the prostate. Clinical experience and future directions. Russell KJ, et al. **Am J Clin Oncol** 1989 Aug;12(4):307–10 (22 ref.)

Fast neutron radiotherapy for the treatment of carcinoma of the urinary bladder. A review of clinical trials. Russell KJ, et al. **Am J Clin Oncol** 1989 Aug;12(4):301–6 (18 ref.)

Neutron radiation therapy for unresectable non-small-cell carcinoma of the lung. A review. Stewart G, et al. **Am J Clin Oncol** 1989 Aug;12(4):290–4 (21 ref.)

Evaluation of neutron irradiation of pancreatic cancer. Results of a randomized Radiation Therapy Oncology Group clinical trial. Thomas FJ, et al. **Am J Clin Oncol** 1989 Aug;12(4):283–9

Fast neutron teletherapy in advanced epidermoid head and neck cancer. A review. Wells G, et al. **Am J Clin Oncol** 1989 Aug;12(4):295–300 (26 ref.)

Fast neutron therapy clinical trials in the United States. Zink S, et al. **Am J Clin Oncol** 1989 Aug;12(4):277–82

Clinical aspects of neutron capture therapy. Proceedings of a workshop. February 1–2, 1988, Upton, New York. **Basic Life Sci** 1989;50:1–370

Boron compounds for neutron capture therapy. Alam F, et al. **Basic Life Sci** 1989;50:107–11

Dose fractionation in neutron capture therapy for malignant melanoma. Allen BJ, et al. **Basic Life Sci** 1989;50:63–7

Thermal neutron capture therapy: the Japanese-Australian clinical trial for malignant melanoma. Allen BJ, et al. **Basic Life Sci** 1989;50:69–73

BNCT project in Czechoslovakia. Burian J, et al. **Basic Life Sci** 1989;50:39–48

Neutron capture therapy for melanoma. Coderre JA, et al. **Basic Life Sci** 1989;50:219–32

Status report on the development of a spallation neutron source for neutron capture therapy (NCT). Conde H, et al. **Basic Life Sci** 1989;50:319–23

A proposed protocol for clinical trials of boron neutron capture therapy in glioblastoma multiforme. Dorn RV 3d, et al. **Basic Life Sci** 1989;50:135–44

The effect of ionizing radiation on the blood-brain-barrier (BBB): considerations for the application of boron neutron capture therapy (BNCT) of brain tumors. Dorn RV 3d, et al. **Basic Life Sci** 1989;50:145–52

Fractionation in boron neutron capture therapy. Durrant KR, et al. **Basic Life Sci** 1989;50:53–61

Dose rate and therapeutic gain. Fairchild RG. **Basic Life Sci** 1989;50:1–7

Tumor-seeking compounds for boron neutron capture therapy: synthesis and biodistribution. Gabel D. **Basic Life Sci** 1989;50:233–41

Some thoughts on tolerance, dose, and fractionation in boron neutron capture therapy. Gahbauer R, et al. **Basic Life Sci** 1989;50:81–5

Delayed effects of neutron irradiation on central nervous system microvasculature in the rat. Goodman JH, et al. **Basic Life Sci** 1989;50:87–93

Blood-brain-barrier impairment after irradiation: implication in boron neutron capture therapy. Grégoire V, et al. **Basic Life Sci** 1989;50:299–309 (32 ref.)

Boron-11 magnetic resonance imaging and spectroscopy; tools for investigating pharmacokinetics for boron neutron capture therapy. Kabalka GW, et al. **Basic Life Sci** 1989; 50:243–9

A carboranyl porphyrin for boron neutron capture therapy of brain tumors. Kahl SB, et al. **Basic Life Sci** 1989; 50:193–203

Neutron capture therapy in support of other radiation treatment. Larsson B. **Basic Life Sci** 1989;50:21–6

Computerized axial tomographic and magnetic resonance imaging scan follow-up of two patients after boron neutron capture therapy for glioblastoma multiforme. Marano SR, et al. **Basic Life Sci** 1989;50:153–63

Fractionation considerations for boron neutron capture therapy: the perspective of a clinician. Meek AG. **Basic Life Sci** 1989;50:113–4

Selective thermal neutron capture therapy and diagnosis of malignant melanoma: from basic studies to first clinical treatment. Mishima Y, et al. **Basic Life Sci** 1989;50:251–60

Working group on tumor compound and compound delivery system. Rockwell S, et al. **Basic Life Sci** 1989;50:263–72; discussion 272–6 (0 ref.)

Implications of genotypic and microenvironmental heterogeneity for the cure of solid tumors by neutron capture therapy. Rockwell S. **Basic Life Sci** 1989;50:311–7 (28 ref.)

Research on neutron capture therapy in the USSR. Ryabukhin Y. **Basic Life Sci** 1989;50:27–38

Working group on optimization of radiation dose delivery. Wambersie A, et al. **Basic Life Sci** 1989;50:277–84; discussion 284–97

A stochastic model for high-LET response for boron neutron capture therapy (BNCT). Wheeler FJ, et al. **Basic Life Sci** 1989;50:165–78

Clinical considerations in the use of thermal and epithermal neutron beams for neutron capture therapy. Zamenhof RG, et al. **Basic Life Sci** 1989;50:121–34

Neutron and X-ray diffraction structural analysis of phosphatidylinositol bilayers. McDaniel RV, et al. **Biochim Biophys Acta** 1989 Aug 7;983(2):241–6

Dysphagia after fast neutron therapy to the head and neck. Alexander MS, et al. **Br J Radiol** 1989 Aug;62(740):724–8

Changes in biological effectiveness of the neutron beam at Clatterbridge (62 MeV p on Be) measured with cells in vitro. Bewley DK, et al. **Br J Radiol** 1989 Apr; 62(736):344–7

The Clatterbridge high-energy neutron facility: dosimetry intercomparisons. Blake SW, et al. **Br J Radiol** 1988 Oct; 61(730):921–7

Changes in relative biological effectiveness with depth of neutron beams [letter] Hall EJ. **Br J Radiol** 1989 Aug; 62(740):765

Biophysical interpretation of the response of Chinese hamster

cells to 24 keV neutrons. Holt PD. **Br J Radiol** 1988 Dec; 61(732):1142–6

The relative biological effectiveness of fractionated doses of fast neutrons (42 MeVd——Be) for normal tissues in the pig. I. Effects on the epidermis and dermal vascular/connective tissues. Hopewell JW, et al. **Br J Radiol** 1988 Oct;61(730):928–38

Changes in relative biological effectiveness with depth of the Clatterbridge neutron therapy beam. Hornsey S, et al. **Br J Radiol** 1988 Nov;61(731):1058–62

In vitro induction of chromosomal aberrations in human lymphocytes, with and without boron 10, by radiations concerned in boron neutron capture therapy. Lloyd DC, et al. **Br J Radiol** 1988 Dec;61(732):1136–41

The interpretation of dose calculations and cell-survival measurements for the boron neutron capture therapy of brain tumours with 24 keV neurons. Mill AJ, et al. **Br J Radiol** 1988 Dec;61(732):1147–54

The radiobiology of 24 keV neutrons. Measurement of the relative biological effect free-in-air, survival and cytogenetic analysis of the biological effect at various depths in a polyethylene phantom and modification of the depth–dose profile by boron 10 for V79 Chinese hamster and HeLa cells. Morgan GR, et al. **Br J Radiol** 1988 Dec; 61(732):1127–35

A review of boron neutron capture therapy (BNCT) and the design and dosimetry of a high-intensity, 24 keV, neutron beam for BNCT research. Perks CA, et al. **Br J Radiol** 1988 Dec;61(732):1115–26 (23 ref.)

The use of neutron beam therapy in the management of locally advanced nonresectable radioresistant tumors. Hendrickson FR. **CA** 1988 Nov–Dec;38(6):353–61 (23 ref.)

Boron neutron capture therapy of a murine melanoma. Coderre JA, et al. **Cancer Res** 1988 Nov 15;48(22):6313–6

The cell cycle of spermatogonial colony forming stem cells in the CBA mouse after neutron irradiation. Bootsma AL, et al. **Cell Tissue Kinet** 1988 Mar;21(2):105–13

Practical neutron dosimetry with superheated drops. Apfel RE, et al. **Health Phys** 1989 Jan;56(1):79–83

Estimation of the effective dose equivalent (HE) for neutron irradiation [letter] Beckner WM, et al. **Health Phys** 1989 Jul;57(1):210–1

Neutron dose equivalent outside the lateral shielding of an electron linear accelerator operating at 0.48–2.15 GeV. Hirayama H, et al. **Health Phys** 1989 Jun;56(6):947–52

Measurement of neutron leakage spectra at a 500-MeV proton accelerator. Moritz LE. **Health Phys** 1989 Mar; 56(3):287–96

Neutron personnel dosimetry intercomparison studies at the Oak Ridge National Laboratory: a summary (1981–1986). Swaja RE, et al. **Health Phys** 1988 Sep;55(3):549–64

High energy nucleon data bases [letter] Wilson JW, et al. **Health Phys** 1988 Nov;55(5):817–9

Radionuclide production and partial radiochemical characterization following fast neutron irradiation of mouse spleens. Mellenberg DE, et al. **Int J Rad Appl Instrum [B]** 1988;15(6):631–5

Cell survival and DNA double-strand break repair following X-ray or neutron irradiation of V79 cells. Fox JC, et al. **Int J Radiat Biol** 1988 Dec;54(6):1021–30

DNA damage and repair in rodent and human cells after exposure to JANUS fission spectrum neutrons: a minor fraction of single-strand breaks as revealed by alkaline elution is refractory to repair. Peak MJ, et al. **Int J Radiat Biol** 1989 May;55(5):761–72

Normal tissue reactions and complications following high-energy neutron beam therapy: I. Crude response rates. Cohen L, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan; 16(1):73–8

Neutron vs photon irradiation of inoperable salivary gland tumors: results of an RTOG-MRC Cooperative Randomized Study. Griffin TW, et al. **Int J Radiat Oncol Biol Phys** 1988 Nov;15(5):1085–90

Microdosimetry of a 42 MeV therapy neutron beam. Kliauga P, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):845–8

Neutron brachytherapy for the treatment of malignant neoplasia. Maruyama Y. **Int J Radiat Oncol Biol Phys** 1988 Dec;15(6):1415–29

Protection of cultured Chinese hamster ovary cells by the aminothiol WR-255591 from the lethal and DNA-damaging effects of fast neutrons. vanAnkeren SC, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1205–8

Treatment of malignant melanoma by selective thermal neutron capture therapy using melanoma-seeking compound. Mishima Y, et al. **J Invest Dermatol** 1989 May; 92(5 Suppl):321S–325S

Solvent effect in protein crystals. A neutron diffraction analysis of solvent and ion density. Schoenborn BP. **J Mol Biol** 1988 Jun 20;201(4):741–9

Measurements of neutron fluence from the Hiroshima atomic bomb. Kato K, et al. **J Radiat Res (Tokyo)** 1988 Dec; 29(4):261–6

Treatment of malignant melanoma by single thermal neutron capture therapy with melanoma-seeking 10B-compound [letter] Mishima Y, et al. **Lancet** 1989 Aug 12;2(8659):388–9

Boron-11 MRI and MRS of intact animals infused with a boron neutron capture agent. Kabalka GW, et al. **Magn Reson Med** 1988 Oct;8(2):231–7

Dynamical transition of myoglobin revealed by inelastic neutron scattering. Doster W, et al. **Nature** 1989 Feb 23; 337(6209):754–6

Photoneutron production in tissue during high energy bremsstrahlung radiotherapy. Allen PD, et al. **Phys Med Biol** 1988 Sep;33(9):1017–36

Production of photoneutrons in a lead shield by high-energy x-rays. McGinley PH, et al. **Phys Med Biol** 1988 Aug; 33(8):975–80

The simultaneous imaging of boronated tissue sections and the location of fissionable actinide particles in CR-39 solid state track detector, utilising a neutron-induced autoradiographic technique. Morris KJ, et al. **Phys Med Biol** 1988 Oct;33(10):1195–203

Halogenated pyrimidines as radiosensitizers for high-LET radiation. Atcher RW, et al. **Radiat Res** 1989 Feb; 117(2):351–5

Oncogenic transformation by fractionated doses of neutrons [letter] Balcer-Kubiczek EK, et al. **Radiat Res** 1989 Feb; 117(2):359–61

Radiobiological intercomparison of clinical neutron beams for growth inhibition in Vicia faba bean roots. Beauduin M, et al. **Radiat Res** 1989 Feb;117(2):245–50

Dose-response modeling of life shortening in a retrospective analysis of the combined data from the JANUS program at Argonne National Laboratory. Carnes BA, et al. **Radiat Res** 1989 Jul;119(1):39–56

Measurements of neutron energy using a recoil-proton telescope and a high-pressure ionization chamber. Folkard M, et al. **Radiat Res** 1989 Apr;118(1):37–45

Protection by WR1065 and WR151326 against fission-neutron-induced mutations at the HGPRT locus in V79 cells. Grdina DJ, et al. **Radiat Res** 1989 Mar; 117(3):500–10

Lung carcinomas in Sprague–Dawley rats after exposure to low doses of radon daughters, fission neutrons, or gamma rays. Lafuma J, et al. **Radiat Res** 1989 May;118(2):230–45

Vascular and epithelial damage in the lung of the mouse after X rays or neutrons. Law MP, et al. **Radiat Res** 1989 Jan; 117(1):128–44

Derivation of radiation quality average parameters in neutron-gamma radiation fields with the high-pressure ionization chamber: theory and practice. Makrigiorgos GM. **Radiat Res** 1989 Jun;118(3):387–400

Neutron-energy-dependent oncogenic transformation of C3H 10T1/2 mouse cells. Miller RC, et al. **Radiat Res** 1989 Jan;117(1):114–27

Comparison of recovery from potential mitotic abnormality in mitotically quiescent lens cells after X, neutron, and 56Fe irradiations. Riley EF, et al. **Radiat Res** 1989 Aug; 119(2):232–45

What to do with neutrons in radiotherapy: a suggestion [letter] Fowler JF. **Radiother Oncol** 1988 Nov;13(3):233–5

A comparison of the effects of p(62)-Be and d(16)-Be neutrons in the mouse kidney. Joiner MC. **Radiother Oncol** 1988 Nov;13(3):211–24

Neutron measurements around an 18 MV linac. Sánchez F, et al. **Radiother Oncol** 1989 Jul;15(3):259–65

Teratogenic effect of fission neutron and tritium water on rat embryo. Satow Y, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:416–31

Third International Symposium on Neutron Capture Therapy. Bremen, 31 May–3 June 1988. Proceedings. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):65–257

Proceedings of the EORTC-Heavy Particles Therapy Group meeting. European Organization for Research on Treatment of Cancer. Munich, October 16th–17th, 1987. **Strahlenther Onkol** 1989 Apr;165(4):259–356

Boronated compounds for neutron capture therapy. Alam F, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):121–3

Neutron capture therapy with gadolinium-157. Allen BJ, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):156–8

Radiobiological intercomparisons of fast neutron beams used in therapy. Beauduin M, et al. **Strahlenther Onkol** 1989 Apr;165(4):263–7

Method of in situ dosimetry in boron neutron capture therapy. Blue J, et al. **Strahlenther Onkol** 1989 Feb–Mar; 165(2–3):109–12

Dose inhomogeneities at various levels of biological organization. Bond VP. **Strahlenther Onkol** 1989 Feb–Mar; 165(2–3):182–5

Fast neutron boost for the treatment of grade IV astrocytomas. Breteau N, et al. **Strahlenther Onkol** 1989 Apr;165(4):320–3

Evaluation of gadolinium-157 as a neutron capture therapy agent. Brugger RM, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):153–6

Neutron therapy of low grade "pencil" gliomas of the spinal cord: a review of ten cases. Budach V, et al. **Strahlenther Onkol** 1989 Apr;165(4):315–9

The physical tests for realization of neutron capture therapy in Czechoslovakia. Burian J. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):72–5

Neutron therapy at Hammersmith Hospital 1970 to 1985. A re-examination of results. Catterall M. **Strahlenther Onkol** 1989 Apr;165(4):298–301

Enhanced survival in a rat glioma model following BNCT. Clendenon NR, et al. **Strahlenther Onkol** 1989 Feb–Mar; 165(2–3):222–5

Boronophenylalanine for neutron capture therapy of melanoma. Coderre JA, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):215–7

The production by 72 MeV protons of keV neutrons for 10B neutron capture therapy. Condé H, et al. **Strahlenther Onkol** 1989 Apr;165(4):340–2

Harwell research on beams for neutron capture therapy. Constantine G, et al. **Strahlenther Onkol** 1989 Feb–Mar; 165(2–3):92–5

Radiation field for BNCT experiments. Csom G, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):78–81

A proposed protocol for clinical trials of boron neutron capture therapy in glioblastoma multiforme. Dorn RV 3d, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):233–4

Fractionation and other clinical considerations in boron neutron capture therapy. Durrant KR, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):231–3

Combined neutron-photon-therapy of locally recurrent rectosigmoidal tumors. Engenhart R, et al. **Strahlenther Onkol** 1989 Apr;165(4):327–9

High energy neutron therapy programme at the Douglas Cyclotron Centre, Clatterbridge Hospital. Errington RD, et al. **Strahlenther Onkol** 1989 Apr;165(4):324–6

Optimization of an epithermal beam for NCT at the Brookhaven Medical Research Reactor (BMRR). Fairchild RG, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):84–6

Recent developments in neutron capture therapy. Fairchild RG, et al. **Strahlenther Onkol** 1989 Apr;165(4):343–7

Comments about the late effects of fast neutron therapy at the Hamburg University DT generator. Franke HD. **Strahlenther Onkol** 1989 Apr;165(4):311–2 (Eng, Ger)

Dose bracketing in boron neutron capture therapy. Gahbauer R, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):229–30

Canine spontaneous brain tumors—a large animal model for BNCT. Gavin PR, et al. **Strahlenther Onkol** 1989 Feb–Mar; 165(2–3):225–8

Early repair kinetics of intestine and lung in mice, after fast neutron and photon irradiation. Gregoire V, et al. **Strahlenther Onkol** 1989 Apr;165(4):272–5

Response of the R3327-AT1 Dunning prostate tumor to fast neutrons and cobalt-60. Hahn EW, et al. **Strahlenther Onkol** 1989 Apr;165(4):283–5

Neutron beams for neutron capture therapy at the MIT Research Reactor. Harling OK, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):90–2

Variation in neutron (42 MeVd-Be) RBE with dose/fraction for early and late reactions in the normal tissues of the pig. Hopewell JW. **Strahlenther Onkol** 1989 Apr;165(4):290 (Eng, Ger)

Neutron therapy of soft tissue sarcomas and status report from the Radiotherapy Department of the Hamburg University Hospital. Hübener KH, et al. **Strahlenther Onkol** 1989 Apr;165(4):309–10

RBE of thermal neutron capture therapy using 10B1-para-boronophenylalanine for human and B-16 melanoma cells. Ichihashi M, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):198–201

An overview: radiation sources, beam quality, dosimetry and spectroscopy in neutron capture therapy. Kanda K. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):67–9

Measurement and analysis on neutron flux distributions in a heavy water phantom using the KUR neutron guide tube for BNCT. Kobayashi T, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):101–3

In situ measurement on 10B concentrations and absorbed dose estimations in human malignant melanoma treated by BNCT. Kobayashi T, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):104–6

Biological effectiveness of neutrons and pi-mesons in gut, bone, and transplantable tumours. Kummermehr J, et al. **Strahlenther Onkol** 1989 Apr;165(4):276–82

Biological efficacy of a boronated porphyrin as measured in cell culture. Laster BH, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):203–5

Reactor moderated intermediate energy neutron beams for neutron capture therapy. Less TJ, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):87–90

Computerized axial tomographic and magnetic resonance imaging scan follow-up of two patients after boron neutron capture therapy for glioblastoma multiforme. Marano SR, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):240–2

Head phantom experiment and calculation for NCT using various neutron beams. Matsumoto T, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):98–100

Development of dose measuring system for thermal neutron capture therapy. Matsumoto T, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):112–5

Biological effects of intermediate-energy neutrons and their relevance to boron neutron capture therapy. Mill AJ. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):193–6

First human clinical trial of melanoma neutron capture. Diagnosis and therapy. Mishima Y, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):251–4

Three cases of terminal stage malignant gliomas in which the diffusely disseminated intraventricular tumors became the target of boron neutron capture therapy. Montagno E de A, et al. **Strahlenther Onkol** 1989 Feb–Mar; 165(2–3):238–40

The radiobiology of a nearly pure, high intensity beam of 24 keV neutrons. Morgan GR, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):196–8

Comparison of iron/aluminium/sulphur and aluminium/sulphur/argon filtered neutron beams. Perks CA, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):95–8

Optimization of fast neutron spectra available for neutron capture therapy. Pfister G, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):107–9

Neutron therapy of soft tissue sarcoma at Louvain-la-Neuve (interim results 1987). Richard F, et al.

Strahlenther Onkol 1989 Apr;165(4):306–8
First experiences with fission neutrons in the radiation therapy of cancer patients. Ries G, et al.
Strahlenther Onkol 1989 Apr;165(4):302–5
The incorporation of boronated substances into melanin in vitro—an experimental model for melanotic melanoma. Roberto A, et al. **Strahlenther Onkol** 1989 Feb–Mar; 165(2–3):165–7
The United States BNCT program. Robertson JS, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):249–51
Integrated approach in the planning of neutron capture therapy. Ryabukhin YS. **Strahlenther Onkol** 1989 Feb–Mar; 165(2–3):158–62
Comparative microscopic study on response of Ehrlich carcinoma to BNCT vs. chemo- and radiotherapy. Samarrai SF, et al. **Strahlenther Onkol** 1989 Feb–Mar; 165(2–3):217–8
A method for selective evaluation of the effectiveness of fast neutrons in radiotherapy. Satoh S, et al. **Strahlenther Onkol** 1989 Apr;165(4):337–9
Research reactor adaptation project for neutron capture therapy. Sauer IL, et al. **Strahlenther Onkol** 1989 Feb–Mar; 165(2–3):81–3
Neutron capture therapy using a fast neutron beam: clinical considerations and physical aspects. Sauerwein W, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):208–10
A review of neutron therapy trials. Schmitt G, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):205–8 (29 ref.)
Results of fast neutron therapy of adenoid-cystic carcinomas of the head and neck at the neutron therapy facility Hamburg-Eppendorf. Schwarz R, et al. **Strahlenther Onkol** 1989 Apr;165(4):313–4
Perspectives of the clinical BNCT of malignant gliomas in Czechoslovakia. Sourek K, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):247–9
Biological efficacy of thermal neutrons using Na2(10)B12H11SH studied in vivo on B-16 mouse melanoma. Spryshkova R, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):213–5
Boronated monoclonal antibodies for potential neutron capture therapy of malignant melanoma and leukaemia. Tamat SR, et al. **Strahlenther Onkol** 1989 Feb–Mar; 165(2–3):145–7
Present status of fast neutron therapy in Asian countries. Tsunemoto H, et al. **Strahlenther Onkol** 1989 Apr; 165(4):330–6
The enhancement of thermal-neutron induced cell death by 10-boron dextran. Ujeno Y, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):201–3
Fast neutrons for BNCT. Wagner FM, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):115–7
Clinical implementation in BNCT (boron neutron capture therapy): fractionated versus protracted low dose rate irradiation. Wambersie A, et al. **Strahlenther Onkol** 1989 May;165(5):407–11
A design study of an accelerator-based epithermal neutron source for boron neutron capture therapy. Wang CK, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):75–8
Reactor physics design for an epithermal neutron beam at the Power Burst reactor Facility. Wheeler FJ, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):69–71
Analytical modeling for neutron capture therapy. Wheeler FJ, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):186–8
Radiobiological philosophy of current U.S. neutron trials. Withers HR. **Strahlenther Onkol** 1989 Apr;165(4):294–7 (30 ref.)
Plan for synthesis of biomolecules for neutron capture therapy of cervical carcinoma. Wongwiechintana C, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):125–6
Monte Carlo treatment planning and high-resolution alpha-track autoradiography for neutron capture therapy. Zamenhof RG, et al. **Strahlenther Onkol** 1989 Feb–Mar; 165(2–3):188–92
A multidisciplinary program leading to a clinical trial of neutron capture therapy at Tufts–New England Medical Center and the Massachusetts Institute of Technology. Zamenhof RG, et al. **Strahlenther Onkol** 1989 Feb–Mar; 165(2–3):254–7
Fast neutrons from the Essen cyclotron can be used successfully for neutron capture experiments in vitro. Ziegler W, et al. **Strahlenther Onkol** 1989 Feb–Mar; 165(2–3):210–2
[Neutrons and new particles in radiotherapy] Wambersie A, et al. **Pathol Biol (Paris)** 1989 Feb;37(2):154–5 **(Fre)**
[The present status of neutron therapy from the point of view of physics] Hess A, et al. **Rontgenpraxis** 1988 Dec; 41(12):437–44 **(Ger)**
[Radiotherapy results in malignant tumors of the inner nose and paranasal sinuses with special reference to neutron therapy] Schwarz R, et al. **Strahlenther Onkol** 1989 Jun; 165(6):478–80 (Eng. Abstr.) **(Ger)**
[RBEs of thermal neutron capture therapy and 10B(n, alpha)7Li reaction on melanoma bearing hamster] Hiratsuka J, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jun 25; 48(6):759–66 (Eng. Abstr.) **(Jpn)**
[Status of neutron monitors in radiation protection] Maruyama T. **Radioisotopes** 1988 Nov;37(11):633–44 **(Jpn)**
[In vivo cell fusion induced by fast neutrons and gamma-rays] Gil'ano NIa, et al. **Dokl Akad Nauk SSSR** 1988; 301(6):1484–7 **(Rus)**
[RBE of neutrons from the BR-10 reactor based on their antitumor effect and on acute radiation reactions of the skin] Kuznetsova MN, et al. **Med Radiol (Mosk)** 1989 May; 34(5):45–8 (Eng. Abstr.) **(Rus)**
[Local radiation reactions and injuries in neutron and combined therapy of tumors using the U-120 cyclotron] Musabaeva LI, et al. **Med Radiol (Mosk)** 1988 Oct; 33(10):30–5 (Eng. Abstr.) **(Rus)**
[The distribution of chromosome aberrations after gamma and neutron irradiation among cells in various stages of the mitotic cycle in a human lymphocyte culture] Demina EA. **Radiobiologiia** 1989 Jul-Aug;29(4):485–91 (Eng. Abstr.) **(Rus)**
[Modification of the effect of fast neutrons in an experiment and in radiation practice] Demina EA, et al. **Radiobiologiia** 1989 Jul-Aug;29(4):520–3 (Eng. Abstr.) **(Rus)**
[Distribution of the relative biological effectiveness of fast neutrons according to the depth of the irradiated tissue] Lisin VA. **Radiobiologiia** 1989 May-Jun;29(3):399–402 (Eng. Abstr.) **(Rus)**
[Comparative action of X-rays and fast neutrons on thymus endocrine function] Martynenko SV, et al. **Radiobiologiia** 1989 Mar-Apr;29(2):268–71 (Eng. Abstr.) **(Rus)**
[Comparative frequency of chromosome aberrations in a human lymphocyte culture depending on the mode of neutron irradiation] Sevan'kaev AV, et al. **Radiobiologiia** 1989 Mar-Apr;29(2):264–6 (Eng. Abstr.) **(Rus)**
[The RBE of 0.85-MeV neutrons in the cerebral form of radiation sickness in guinea pigs] Shaporov VN, et al. **Radiobiologiia** 1989 Jul-Aug;29(4):571–3 (Eng. Abstr.) **(Rus)**
[The RBE of 0.85-MeV neutrons in the intestinal form of radiation sickness in guinea pigs] Shaporov VN, et al. **Radiobiologiia** 1989 Mar-Apr;29(2):164–7 (Eng. Abstr.) **(Rus)**
[Neutron therapy of endometrial cancer using californium-252 sources of high activity] Kiseleva VN, et al. **Vopr Onkol** 1988;34(9):1070–4 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Radiotherapy's second setback [letter] **BMJ** 1989 Jan 21; 298(6667):183–4

THERAPEUTIC USE

Neutron therapy for nonresectable radioresistant tumors. Cohen L, et al. **Arch Surg** 1989 Mar;124(3):294–300 (15 ref.)
Radiotherapy's second setback [letter] **BMJ** 1989 Mar 11; 298(6674):671–2
Radiotherapy's second setback [editorial] Smith R. **BMJ** 1988 Dec 24–31;297(6664):1625–6
Post-operative neutron irradiation [letter] Courdi A. **Br J Radiol** 1989 Mar;62(735):298–9
Soft-tissue sarcoma: neutrons versus photons for post-operative irradiation. Glaholm J, et al. **Br J Radiol** 1988 Sep;61(729):829–34
Status of clinical trials with neutron irradiation. Griffin TW. **Important Adv Oncol** 1989;:221–34 (77 ref.)
Fast neutron radiotherapy for locally advanced prostate cancer. Update of a past trial and future research directions. Krieger JN, et al. **Urology** 1989 Jul;34(1):1–9

NEUTROPENIA see under **AGRANULOCYTOSIS**

NEUTROPHILIC LEUKEMIA, CHRONIC see **LEUKEMIA, NEUTROPHILIC, CHRONIC**

NEUTROPHILS

Chronic myelogenous leukemia and Sweet syndrome. Cohen PR, et al. **Am J Hematol** 1989 Oct;32(2):134–7 (17 ref.)
Endotoxin-induced neutrophilic alveolitis and macrophage chemotaxin production in sheep. Duke SS, et al. **Am J Med Sci** 1988 Dec;296(6):381–6
Polymorphonuclear leukocytes in gastric aspirate of neonate [letter] Katzman GH. **Am J Obstet Gynecol** 1988 Oct; 159(4):1019–20
Effects of intracisternal bead devices on lacteal secretion components, plaque formation, and bacterial infection during the nonlactating period. Nickerson SC, et al. **Am J Vet Res** 1988 Aug;49(8):1205–9
Bronchiolitis in adults. A reversible cause of airway obstruction associated with airway neutrophils and neutrophil products. Kindt GC, et al. **Am Rev Respir Dis** 1989 Aug;140(2):483–92
Granulocyte depletion prevents tumor necrosis factor-mediated acute lung injury in guinea pigs. Stephens KE, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1300–7
Diagnosing the Sweet syndrome [letter] Cohen PR, et al. **Ann Intern Med** 1989 Apr 1;110(7):573–4
Fever and painful plaques on the face, back, and extremities. Acute febrile neutrophilic dermatosis (Sweet's syndrome). Urrutia S, et al. **Arch Dermatol** 1989 Sep;125(9):1265–6, 1268
Response of complement and neutrophils to hydrophilized synthetic membranes. Ward RA, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):334–7
Leucocyte count and neutrophil percentage in appendicectomy for suspected appendicitis. Lau WY, et al. **Aust N Z J Surg** 1989 May;59(5):395–8
Fine catheter peritoneal cytology for the acute abdomen: a randomized, controlled trial. Stewart RJ, et al. **Aust N Z J Surg** 1988 Dec;58(12):965–70
Sweet's syndrome and malignancy: a case associated with multiple myeloma and review of the literature. Berth-Jones J, et al. **Br J Dermatol** 1989 Jul;121(1):123–7 (48 ref.)
Adrenocortical and heterophil/lymphocyte responses to challenge in hens showing short or long tonic immobility reactions. Beuving G, et al. **Br Poult Sci** 1989 Mar; 30(1):175–84
Comparison of leucocyte and neutrophil counts in healthy and infected Nigerian males. Amene PC. **Cent Afr J Med** 1988 Dec;34(12):279–81
The use of pulse methylprednisolone and chlorambucil in the treatment of Sweet's syndrome. Case JD, et al. **Cutis** 1989 Aug;44(2):125–9
Fecal leukocytosis, indium-111-labelled autologous polymorphonuclear leukocyte abdominal scanning, and quantitative fecal indium-111 excretion in acute gastroenteritis and enteropathogen carriage. Kordossis T, et al. **Dig Dis Sci** 1988 Nov;33(11):1383–90
Characteristics of inflammatory cells in urethral smears from men with non-gonococcal urethritis. Shahmanesh M. **Genitourin Med** 1989 Jan;65(1):18–21
Evaluation of ascitic fluid polymorphonuclear count & ascitic fluid pH in early diagnosis of spontaneous bacterial peritonitis. Rai RR, et al. **Indian J Med Res** 1988 Jun; 87:600–4
Labeled polymorphonuclear leukocytes: a comparison of methodology. Chowdhury S, et al. **Int J Rad Appl Instrum [B]** 1988;15(5):511–5
Interleukin 1 and tumor necrosis factor stimulate human vascular endothelial cells to promote transendothelial neutrophil passage. Moser R, et al. **J Clin Invest** 1989 Feb; 83(2):444–55
Genetic control of blood neutrophil concentration in the rat. Stolc V. **J Immunogenet** 1988 Oct-Dec;15(5–6):345–51
Granulopoiesis in the preterm infant: adequate progenitors, but still neutropenic [editorial] Olson TA. **J Lab Clin Med** 1989 Apr;113(4):401–2
Monoclonal antibodies as agents for selective radiolabeling of human neutrophils. Thakur ML, et al. **J Nucl Med** 1988 Nov;29(11):1817–25
Neutrophil storage pool depletion in neonates with sepsis [letter] Cairo MS. **J Pediatr** 1989 Jun;114(6):1064–5
Neutrophil storage pool depletion in neonates with sepsis and neutropenia. Engle WA, et al. **J Pediatr** 1988 Oct; 113(4):747–9
Production of chemotactic factors for neutrophils following the interaction of Bacteroides gingivalis with purified C5. Schenkein HA, et al. **J Periodont Res** 1988 Sep;23(5):308–12
Calcium pyrophosphate and monosodium urate crystal interactions with neutrophils: effect of crystal size and lipoprotein binding to crystals. Burt HM, et al. **J Rheumatol** 1989 Jun;16(6):809–17
The use of 111In-labelled autologous neutrophils in imaging myocardial infarction. Muir AJ, et al. **Nucl Med Commun** 1988 Oct;9(10):707–11
Significance of polymorphonuclear leukocytes in CSF of bacteremic children. Bonadio WA, et al. **Pediatr Emerg Care** 1988 Sep;4(3):180–2
Acute phase response of sheep: changes in the concentrations of ceruloplasmin, fibrinogen, haptoglobin and the major blood cell types associated with pulmonary damage. Pfeffer A, et al. **Res Vet Sci** 1989 Jan;46(1):118–24
Correlation between white blood cell count and neutrophil count after chemotherapy administration at a day hospital. Germa Lluch JR, et al. **Rev Esp Oncol** 1985;32(4):627–32
Acute febrile neutrophilic dermatosis (Sweet's syndrome). A report of 2 cases. Jordaan HF, et al. **S Afr Med J** 1989 Apr 1;75(7):336–8
Recent developments in leukocyte research. Foy MA, et al. **Year Immunol** 1989;4:208–17 (28 ref.)
[Acute febrile neutrophilic dermatosis and malignant hematologic diseases: report of a new bullous case and review of the literature] Dereure O, et al. **Ann Dermatol Venereol** 1988;115(6–7):689–701 (83 ref.) (Eng. Abstr.) **(Fre)**
[Localized Sweet syndrome in urethro-prostatitis caused by Ureaplasma] Stieler W, et al. **Hautarzt** 1988 Oct; 39(10):658–61 (25 ref.) (Eng. Abstr.) **(Ger)**
[Arneth's formula and mean erythrocyte volume in chronic alcoholism] Chiarioni S, et al. **G Clin Med** 1988 Aug–Sep; 69(8–9):509–13 (Eng. Abstr.) **(Ita)**
[The evaluation of automated analysis on plasma lysozyme biological activity by turbidimetric assay: relation to neutrophils in the peripheral blood] Kabutomori O, et al. **Rinsho Byori** 1988 Dec;36(12):1426–30 **(Jpn)**

ANALYSIS

The measurement of cytochrome b559 in polymorphonuclear leukocytes and macrophages in the presence of hemoglobin or mitochondrial cytochromes. Ding AH, et al. **Anal Biochem** 1988 Nov 15;175(1):22–9
Analysis of horseradish peroxidase-amplified chemiluminescence produced by human neutrophils reveals a role for the superoxide anion in the light emitting reaction. Lock R, et al. **Anal Biochem** 1988 Sep; 173(2):450–5
Zinc concentrations in pure populations of peripheral blood

neutrophils, lymphocytes and monocytes. Goode HF, et al. **Ann Clin Biochem** 1989 Jan;26 (Pt 1):89–95

Intracellular contents of cyclic nucleotides in neutrophils and lymphocytes from patients with systemic lupus erythematosus. Shingu M, et al. **Arch Dermatol Res** 1989; 281(3):203–5

Folate deficiency: morphological and functional consequences. Pietrzik K. **Bibl Nutr Dieta** 1989;(44):123–30

Localization of the 47 kDa phosphoprotein involved in the respiratory-burst NADPH oxidase of phagocytic cells. Heyworth PG, et al. **Biochem J** 1989 May 15;260(1):243–8

Identification of a human neutrophil protein of Mr 24 000 that binds N-formyl peptides: co-sedimentation with specific granules. Allen RA, et al. **Biochim Biophys Acta** 1989 Apr 25;991(1):123–33

Neutrophil granulation stained with May Grunwald Giemsa or pure Azure B–eosin Y quantified by image analysis. Bins M, et al. **Blut** 1989 Feb;58(2):79–82

Improved methods for separating hydrolytic granules of neutrophil leucocytes. Takano Y, et al. **Cell Biochem Funct** 1988 Oct;6(4):263–9

New, simple flow cytometry technique to discriminate between internalized and membrane-bound particles in phagocytosis. Fattorossi A, et al. **Cytometry** 1989 May; 10(3):320–5

Actin-associated proteins in human neutrophils: identification and reorganization upon cell activation. Niggli V, et al. **Eur J Cell Biol** 1989 Aug;49(2):366–72

Heavy water (D2O)-induced shape changes, movements and F-actin redistribution in human neutrophil granulocytes. Zimmermann A, et al. **Eur J Cell Biol** 1988 Dec;47(2):320–6

Comparison of plasma, mononuclear and polymorphonuclear leucocyte vitamin C levels in young and elderly women during depletion and supplementation. Blanchard J, et al. **Eur J Clin Nutr** 1989 Feb;43(2):97–106

Characterization of C3a receptor-proteins on guinea pig platelets and human polymorphonuclear leukocytes. Gerardy-Schahn R, et al. **Eur J Immunol** 1989 Jun; 19(6):1095–102

The cytosolic G-protein alpha-subunit in human neutrophils responds to treatment with guanine nucleotides and magnesium. Rudolph U, et al. **FEBS Lett** 1989 Jul 17; 251(1–2):137–42

cDNA cloning and nucleotide sequence of lipocortin-like 33 kDa protein in guinea pig neutrophils. Sato EF, et al. **FEBS Lett** 1989 Feb 13;244(1):108–12

Premenstrual increase of intracellular magnesium levels in women with ovulatory, asymptomatic menstrual cycles. Facchinetti F, et al. **Gynecol Endocrinol** 1988 Sep; 2(3):249–56

Purification, composition, and activity of two bactenecins, antibacterial peptides of bovine neutrophils. Gennaro R, et al. **Infect Immun** 1989 Oct;57(10):3142–6

Purification, primary structure, and biological activity of guinea pig neutrophil cationic peptides. Yamashita T, et al. **Infect Immun** 1989 Aug;57(8):2405–9

Choline-linked phosphoglycerides. A source of phosphatidic acid and diglycerides in stimulated neutrophils. Agwu DE, et al. **J Biol Chem** 1989 Jan 25;264(3):1405–13

Cloning of the cDNA of a human neutrophil bactericidal protein. Structural and functional correlations. Gray PW, et al. **J Biol Chem** 1989 Jun 5;264(16):9505–9

Purification and characterization of human neutrophil peptide 4, a novel member of the defensin family. Wilde CG, et al. **J Biol Chem** 1989 Jul 5;264(19):11200–3

Recognition of an endothelial determinant for CD 18-dependent human neutrophil adherence and transendothelial migration. Smith CW, et al. **J Clin Invest** 1988 Nov;82(5):1746–56

Neutrophil actin dysfunction is a genetic disorder associated with partial impairment of neutrophil actin assembly in three family members. Southwick FS, et al. **J Clin Invest** 1988 Nov;82(5):1525–31

Characterization and cytoskeletal association of a major cell surface glycoprotein, GP 140, in human neutrophils. Suchard SJ, et al. **J Clin Invest** 1989 Aug;84(2):484–92

Elastase inhibitor. Characterization of the human elastase inhibitor molecule associated with monocytes, macrophages, and neutrophils. Remold-O'Donnell E, et al. **J Exp Med** 1989 Mar 1;169(3):1071–86

Identification and characterization of specific receptors for monocyte-derived neutrophil chemotactic factor (MDNCF) on human neutrophils. Samanta AK, et al. **J Exp Med** 1989 Mar 1;169(3):1185–9

Preferential binding of the neutrophil cytoplasmic granule-derived bactericidal/permeability increasing protein to target bacteria. Implications and use as a means of purification. Mannion BA, et al. **J Immunol** 1989 Apr 15;142(8):2807–12

Quantitation of a cationic antimicrobial granule protein of human polymorphonuclear leukocytes by ELISA. Pereira HA, et al. **J Immunol Methods** 1989 Feb 8;117(1):115–20

Binding of plasma fibronectin to human polymorphonuclear leukocytes in normal subjects and patients with aplastic anemia and thyroid dysfunction. Ohara T, et al. **J Lab Clin Med** 1989 Feb;113(2):229–34

Isolation and characterization of interleukin-1 from bovine polymorphonuclear leukocytes. Canning PC, et al. **J Leukoc Biol** 1989 Jan;45(1):21–8

High-resolution localization of lactoferrin in human neutrophils: labeling of secondary granules and cell heterogeneity. Esaguy N, et al. **J Leukoc Biol** 1989 Jul; 46(1):51–62

Quantitation of intracellular Mac-1 (CD11b/CD18) pools in human neutrophils. Jones DH, et al. **J Leukoc Biol** 1988 Dec;44(6):535–44

Preparation and characterization of monoclonal antibodies to human neutrophil cathepsin G, lactoferrin, eosinophil peroxidase, and eosinophil major basic protein. Skubitz KM, et al. **J Leukoc Biol** 1989 Aug;46(2):109–18

Effect of a fish oil diet on the composition of rat neutrophil lipids and the molecular species of choline and ethanolamine glycerophospholipids. Careaga-Houck M, et al. **J Lipid Res** 1989 Jan;30(1):77–87

Marrow transplantation in chronic granulomatous disease: an update, with 6-year follow-up. Kamani N, et al. **J Pediatr** 1988 Oct;113(4):697–700

Cytolytic heterogeneity of polymorphonuclear leukocytes in killing of murine tumor cells. Yamazaki M, et al. **Jpn J Cancer Res** 1988 Nov;79(11):1217–23

G-protein alpha-subunits in cytosolic and membranous fractions of human neutrophils. Rudolph U, et al. **Mol Cell Endocrinol** 1989 May;63(1–2):143–53

Identification of protease(s) capable of further degrading native 3/4- and 1/4-collagen fragments generated by collagenase from native type I collagen in human neutrophils. Sorsa T, et al. **Proc Finn Dent Soc** 1989; 85(1):3–11

Antibiotic proteins of human polymorphonuclear leukocytes. Gabay JE, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(14):5610–4

Polymorphonuclear leukocyte chemiluminescence response in HLA-B27 positive and negative arthritic patients. Tertti R. **Rheumatol Int** 1989;8(6):279–82

[Reflections on the systematic screening of cervico-vaginal smears rich in polynuclear cells] Saliou-Diallo M, et al. **Rev Fr Gynecol Obstet** 1989 Mar 10;84(3):201–4 (Eng. Abstr.) **(Fre)**

[Bronchoalveolar lavage in acute respiratory insufficiency] Vesconi S, et al. **Minerva Anestesiol** 1988 Jun;54(6):279–83 (Eng. Abstr.) **(Ita)**

[Changes in the physical properties of the lipid phase of neutrophils during their activation] Akopov SE, et al. **Biofizika** 1989 Mar-Apr;34(2):321–2 (Eng. Abstr.) **(Rus)**

[Evaluation of the cationic-lysosomal test in patients with pneumonia against a background of therapy] Domashenko ON, et al. **Lab Delo** 1989;(5):15–7 (Eng. Abstr.) **(Rus)**

[Study of the cationic protein in the leukocytes of patients with acute and chronic hepatitis] Domashenko ON, et al. **Lab Delo** 1988;(9):25–7 (Eng. Abstr.) **(Rus)**

[Improving the informativeness of studying the content of cationic proteins in blood leukocytes in inflammatory diseases of the lungs] Iashchenko LV, et al. **Lab Delo** 1989; (6):22–6 (Eng. Abstr.) **(Rus)**

[Cytophotometry of the peripheral blood neutrophils in patients with acute pneumonia] Novosad AB, et al. **Lab Delo** 1989;(3):70–1 **(Rus)**

[Lipid levels in peripheral blood neutrophilic leukocytes in diseases of the hepatobiliary system] Podil'chak MD, et al. **Vrach Delo** 1989 May;(5):62–3 **(Rus)**

CLASSIFICATION

Immunocytochemical characterization of round cells in human semen using monoclonal antibodies and the APAAP-technique. Schöbel WA, et al. **Andrologia** 1989 Jul-Aug;21(4):370–6

Functional and metabolic heterogeneity among normal neutrophil subpopulations. Smith DM Jr, et al. **J Clin Lab Anal** 1989;3(3):174–83

CYTOLOGY

Bronchoalveolar lavage fluid processing. Effect of membrane filtration preparation on neutrophil recovery. Thompson AB, et al. **Acta Cytol** 1989 Jul-Aug;33(4):544–9

Progesterone promotes a massive infiltration of the rat uterine cervix by the eosinophilic polymorphonuclear leukocytes. Luque EH, et al. **Anat Rec** 1989 Mar;223(3):257–65

Clinical studies with granulocyte colony stimulating factor (G-CSF) in patients receiving cytotoxic chemotherapy. Morstyn G, et al. **Behring Inst Mitt** 1988 Aug;(83):234–9

Protective effect of human granulocyte colony-stimulating factor on bacterial and fungal infections in neutropenic mice. Ono M, et al. **Behring Inst Mitt** 1988 Aug;(83):216–21

Cell locomotion as shape change. Oliver WR. **Blood Cells** 1989;15(2):334–42 (41 ref.)

Factors responsible for variable reported lineages of HL-60 cells induced to mature with butyric acid. Hoessly MC, et al. **Cancer Res** 1989 Jul 1;49(13):3594–7

Cellular and eicosanoid composition of bronchoalveolar lavage fluid in endotoxin protection against pulmonary oxygen toxicity. Klein J, et al. **Crit Care Med** 1989 Mar; 17(3):247–50

The neutrophilic granulocyte. Benestad HB, et al. **Curr Top Pathol** 1989;79:7–36 (178 ref.)

CD15 antibodies increase neutrophil adhesion to endothelium by an LFA-1-dependent mechanism. Forsyth KD, et al. **Eur J Immunol** 1989 Jul;19(7):1331–4

A single low dose of human recombinant interleukin 1 accelerates the recovery of neutrophils in mice with cyclophosphamide-induced neutropenia. Fibbe WE, et al. **Exp Hematol** 1989 Aug;17(7):805–8

Polymorphonuclear cell count response and duration of antibiotic therapy in spontaneous bacterial peritonitis. Fong TL, et al. **Hepatology** 1989 Mar;9(3):423–6

Microcomputer-based interactive tracking of blood cells at biomaterial surfaces. Capson DW, et al. **IEEE Trans Biomed Eng** 1989 Aug;36(8):860–4

Evidence for coordinate, selective regulation of eicosanoid synthesis in platelet-derived growth factor-stimulated 3T3 fibroblasts and in HL-60 cells induced to differentiate into macrophages or neutrophils. Goerig M, et al. **J Biol Chem** 1988 Dec 25;263(36):19384–91

Differentiation of HL-60 cells is associated with an increase in the 35-kDa protein lipocortin I. William F, et al. **J Cell Physiol** 1988 Dec;137(3):402–10

Hydrogen peroxide stimulates the synthesis of platelet-activating factor by endothelium and induces endothelial cell-dependent neutrophil adhesion. Lewis MS, et al. **J Clin Invest** 1988 Dec;82(6):2045–55

Cryopreservable neutrophil surrogates. Stored cytoplasts from human polymorphonuclear leukocytes retain chemotactic, phagocytic, and microbicidal function. Malawista SE, et al. **J Clin Invest** 1989 Feb;83(2):728–32

Adherence of neutrophils to cultured human microvascular endothelial cells. Stimulation by chemotactic peptides and lipid mediators and dependence upon the Mac-1, LFA-1, p150,95 glycoprotein family. Tonnesen MG, et al. **J Clin Invest** 1989 Feb;83(2):637–46

Polarization assay studies of human neutrophil motility. Tsuda S, et al. **J Dermatol (Tokyo)** 1988 Apr;15(2):116–22

Phorbol myristate acetate-treated endothelium stimulates polymorphonuclear leukocyte adhesion and superoxide secretion. Gudewicz PW, et al. **J Lab Clin Med** 1989 Jun; 113(6):708–16

Granulopoiesis in the preterm infant: adequate progenitors, but still neutropenic [editorial] Olson TA. **J Lab Clin Med** 1989 Apr;113(4):401–2

Selective depletion of rat neutrophils by in vivo administration of a monoclonal antibody. Sekiya S, et al. **J Leukoc Biol** 1989 Aug;46(2):96–102

Human neutrophil degranulation. Wright DG. **Methods Enzymol** 1988;162:538–51

Mechanics of stimulated neutrophils: cell stiffening induces retention in capillaries. Worthen GS, et al. **Science** 1989 Jul 14;245(4914):183–6

Morphological analysis of the activation of adherent neutrophils in vitro. Albertine KH, et al. **Tissue Cell** 1988; 20(4):519–30

[Emperipolesis and interrelations of megakaryocytes and neutrophilic granulocytes in the bone marrow of healthy dogs] Vlasov PA. **Arkh Anat Gistol Embriol** 1989 Feb; 96(2):60–3 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Effects of Coxiella burnetii endotoxin on granulocyte functions. Fumarulo R, et al. **Acta Paediatr Hung** 1988–89; 29(1–2):109–10

Microcirculatory disturbances in endotoxin-induced disseminated intravascular coagulation. The effects of heparin and gabexate mesilate on locomotive and metabolic changes of neutrophils. Suzuki M, et al. **Adv Exp Med Biol** 1988;242:135–41

The effect of highly purified eicosapentaenoic acid in patients with psoriasis. Terano T, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:610–3

Effect of tunicamycin C2 on the induction of crystal induced chemotactic factor in human neutrophils. Bhatt AK, et al. **Agents Actions** 1988 Jul;24(3–4):303–12

Failure of PAF-acether to induce in vivo neutrophil migration. Cunha FQ, et al. **Agents Actions** 1988 Aug; 25(1–2):191–4

An activating and cytotoxic effect of asbestos on polymorphonuclear leukocytes. Elferink JG, et al. **Agents Actions** 1989 Jan;26(1–2):213–5

Hydrogen peroxide production by inflammatory cells ex vivo: alteration by dexamethasone and diclofenac. Hirschelmann R, et al. **Agents Actions** 1989 Jan; 26(1–2):238–9

Effects of antirheumatic drugs on leukotriene B4 and prostanoid synthesis in human polymorphonuclear leukocytes in vitro. Moilanen E, et al. **Agents Actions** 1988 Jul;24(3–4):387–94

Effects of antirheumatic drugs on endogenous arachidonate metabolism and chemotaxis in human neutrophil granulocytes. Nielsen OH, et al. **Agents Actions** 1989 Jan; 26(1–2):233–4

Chloroquine interaction with inflammatory human polymorphonuclear leucocytes. Raghoebar M, et al. **Agents Actions** 1988 Jul;24(3–4):331–42

Agonist-induced calcium flux, phosphoinositide metabolism, aggregation and enzyme secretion in human neutrophils. Rossi AG, et al. **Agents Actions** 1988 Jul;24(3–4):272–82

Neutrophil migration induced by inflammatory stimuli is reduced by macrophage depletion. Souza GE, et al. **Agents Actions** 1988 Jul;24(3–4):377–80

Enhancement by cimetidine of chemotactic peptide-stimulated ATP release and chemiluminescence in human neutrophils. Tarnok I, et al. **Agents Actions** 1988 Jul;24(3–4):261–5

Monensin disruption of neutrophil granule genesis. Parmley RT, et al. **Am J Pathol** 1988 Dec;133(3):537–48

Kinetics and mechanisms of recombinant human granulocyte-colony stimulating factor-induced neutrophilia [published erratum appears in Am J Pathol

1989 Feb;134(2):236] Ulich TR, et al. **Am J Pathol** 1988 Dec;133(3):630–8

Diacylglycerol kinase inhibitor R59022 and stimulated neutrophil responses. Mege JL, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):C589–94

Tropism of canine neutrophils to xanthine oxidase. Gruber DF, et al. **Am J Vet Res** 1989 Jul;50(7):1102–5

Effects of glycolytic and cytoskeletal inhibitors on phagocytic and nitroblue tetrazolium reductive activities of bovine neutrophils. Silva ID, et al. **Am J Vet Res** 1989 Jul;50(7):1175–9

PGE1 inhibits neutrophil adherence and neutrophil-mediated injury to cultured endothelial cells. Chopra J, et al. **Am Rev Respir Dis** 1988 Oct;138(4):915–20

Endotoxin-induced suppression of pulmonary antibacterial defenses against Staphylococcus aureus. Harris SE, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1439–43

Mepacrine impairs neutrophil response after acute lung injury in rats. Effects on neutrophil migration. Mikes PS, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1464–70

Pentoxifylline decreases endotoxin-induced pulmonary neutrophil sequestration and extravascular protein accumulation in the dog. Welsh CH, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1106–14

Two cases of aspirin-intolerant asthma whose leukocytes demonstrated hypersensitivity to sulpyrin. Tajima K, et al. **Ann Allergy** 1989 Mar;62(3):190–3

Granulocyte colony-stimulating factor and neutrophil alkaline phosphatase [letter] Ushijima T, et al. **Ann Intern Med** 1989 Jul 1;111(1):91

Inhibition of human neutrophils by auranofin: chemotaxis and metabolism of arachidonate via the 5-lipoxygenase pathway. Elmgreen J, et al. **Ann Rheum Dis** 1989 Feb; 48(2):134–8

Inhibition of polymorphonuclear leucocyte functions in vivo by Yersinia enterocolitica lipopolysaccharide. Hartiala KT, et al. **Ann Rheum Dis** 1989 Jan;48(1):42–7

Influence of diet with different lipid composition on neutrophil chemiluminescence and disease activity in patients with rheumatoid arthritis. Magaro M, et al. **Ann Rheum Dis** 1988 Oct;47(10):793–6

Pentamidine isethionate-induced neutrophil dysfunction. Arnott MA, et al. **Ann Trop Med Parasitol** 1988 Dec; 82(6):627–9

Effect of clindamycin on neutrophil killing of gram-negative periodontal bacteria. Baker PJ, et al. **Antimicrob Agents Chemother** 1988 Oct;32(10):1521–7

Effects of amodiaquine, chloroquine, and mefloquine on human polymorphonuclear neutrophil function in vitro. Labro MT, et al. **Antimicrob Agents Chemother** 1988 Aug; 32(8):1124–30

Miconazole and amphotericin B alter polymorphonuclear leukocyte functions and membrane fluidity in similar fashions. Yasui K, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1864–8

Effects of N-acetylcysteine on human polymorphonuclear leukocytes. Paulsen O, et al. **APMIS** 1989 Feb;97(2):115–9

Leukotriene B4 enhances adherence of human polymorphonuclear leukocytes to dermal microvascular endothelial cells in vitro. Reusch MK, et al. **Arch Dermatol Res** 1988;280(4):194–7

The mechanisms of action of nonsteroidal antiinflammatory drugs. Abramson SB, et al. **Arthritis Rheum** 1989 Jan; 32(1):1–9 (48 ref.)

Hematological response to the new synthetic muramyl dipeptide derivative muroctasin after chemotherapy in patients with malignant lymphoma. A randomized crossover trial. Hiraoka A, et al. **Arzneimittelforschung** 1988 Oct;38(10):1499–501

Calcium-dependent activation of human neutrophils by a synthetic ionophore. Atkinson P, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):209–14

Substance P primes human neutrophil activation: a mechanism for neurological regulation of inflammation. Perianin A, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):520–4

Protection of crystal-induced polymorphonuclear leukocyte membranolysis by phosphocitrate. Sallis JD, et al. **Biochem Med Metab Biol** 1989 Feb;41(1):56–63

Inhibition by the LTD4 antagonist, SR2640, of effects of LTD4 on canine polymorphonuclear leukocyte functions. Thomsen MK, et al. **Biochem Pharmacol** 1989 Jul 15; 38(14):2291–5

The inhibitory effect of acetaminophen on the myeloperoxidase-induced antimicrobial system of the polymorphonuclear leukocyte. van Zyl JM, et al. **Biochem Pharmacol** 1989 Jan 1;38(1):161–5

Isoniazid-mediated irreversible inhibition of the myeloperoxidase antimicrobial system of the human neutrophil and the effect of thyronines. van Zyl JM, et al. **Biochem Pharmacol** 1989 Jul 15;38(14):2363–73

Schiff base formation with amino acids enhances light emission and damage induced in neutrophils by phenylacetaldehyde. Nascimento AL, et al. **Biochim Biophys Acta** 1989 Apr 25;991(1):50–5

The effects of heavy metal cations and sulfhydryl reagents on degranulation from digitonin-permeabilized neutrophils. Sandborg RR, et al. **Biochim Biophys Acta** 1989 Mar 6; 1010(3):330–7

Effect of pentoxifylline on neutrophil behaviour: stimulation of movement without adhesion changes. Crocket KV, et al. **Biomed Pharmacother** 1988;42(2):117–20

Effects of some antimalarial drugs on rat inflammatory polymorphonuclear leukocyte function. Fontagne J, et al. **Biomed Pharmacother** 1989;43(1):43–51

Dithranol-mediated, dose-dependent priming and activation of luminol-enhanced chemiluminescence responses of human neutrophils in vitro. Anderson R. **Br J Dermatol** 1989 Jul;121(1):1–9

Effect of iron on polymorphonuclear granulocyte phagocytic capacity: role of oxidation state and effect of ascorbic acid. Hoepelman IM, et al. **Br J Haematol** 1988 Dec; 70(4):495–500

E-type prostaglandins but not iloprost inhibit platelet activating factor-induced generation of leukotriene B4 by human polymorphonuclear leukocytes. Ney P, et al. **Br J Pharmacol** 1989 Jan;96(1):186–92

Effects of adenosine on polymorphonuclear leucocyte function, cyclic 3': 5'-adenosine monophosphate, and intracellular calcium. Nielson CP, et al. **Br J Pharmacol** 1989 Jul;97(3):882–8

Evidence that neutrophil accumulation induced by interleukin-1 requires both local protein biosynthesis and neutrophil CD18 antigen expression in vivo. Rampart M, et al. **Br J Pharmacol** 1988 Aug;94(4):1143–8

Effect of antibiotics on CR1 receptor levels of human neutrophils and on the binding and phagocytosis of opsonized polystyrene microspheres by these leucocytes. Ogle JD, et al. **Burns** 1989 Jun;15(3):141–4

Lignocaine in experimental myocardial infarction: failure to prevent neutrophil accumulation and ventricular fibrillation and to reduce infarct size. de Lorgeril M, et al. **Cardiovasc Res** 1988 Jun;22(6):439–46

Activation of neutrophils by recombinant interleukin 6. Borish L, et al. **Cell Immunol** 1989 Jul;121(2):280–9

Myristoylation of neutrophil proteins and their biological characteristics. Terada S, et al. **Cell Struct Funct** 1988 Oct; 13(5):359–71

Effects of cefbuperazone on the chemiluminescence of human neutrophils. Kumae T, et al. **Chemotherapy** 1989; 35(4):260–6

Effect of ciprofloxacin and ofloxacin on human polymorphonuclear leukocyte activity against staphylococci. Pascual A, et al. **Chemotherapy** 1989; 35(1):17–22

Identification of a time window for therapy to reduce experimental canine myocardial injury: suppression of neutrophil activation during 72 hours of reperfusion. Simpson PJ, et al. **Circ Res** 1988 Dec;63(6):1070–9

Limitation of myocardial reperfusion injury by intravenous perfluorochemicals. Role of neutrophil activation. Bajaj AK, et al. **Circulation** 1989 Mar;79(3):645–56

Granulocyte-macrophage colony-stimulating factor may inhibit neutrophil migration in vivo. Addison IE, et al. **Clin Exp Immunol** 1989 May;76(2):149–53

Inhibitory effect of retinoic acid on the respiratory burst of adult and cord blood neutrophils and macrophages: potential implication to bronchopulmonary dysplasia. Wolfson M, et al. **Clin Exp Immunol** 1988 Jun;72(3):505–9

pH-dependent impairment of the neutrophil respiratory burst by the Bacteroides byproduct succinate. Rotstein OD, et al. **Clin Invest Med** 1988 Aug;11(4):259–65

Timolol-induced up-regulation of polymorphonuclear leukocyte beta 2-adrenergic receptors in the elderly. Zahniser NR, et al. **Clin Pharmacol Ther** 1989 May; 45(5):469–75

H2-antagonist inhibition of human neutrophil superoxide anion synthesis. Zimmerman J, et al. **Clin Pharmacol Ther** 1989 May;45(5):487–94

Effects of plasma, tumour necrosis factor, endotoxin and dexamethasone on extracellular proteolysis by neutrophils from healthy subjects and patients with emphysema. Burnett D, et al. **Clin Sci** 1989 Jul;77(1):35–41

The effects of oral or intravenous citrate on the activation of neutrophils in vitro. Pfister RR, et al. **Cornea** 1988; 7(4):244–51

Polymorphonuclear leucocyte chemotaxis in response to leukotriene B4 in treated and untreated psoriatics. Green CM, et al. **Dermatologica** 1989;178(1):20–2

Effect of nedocromil sodium on the beta-adrenergic response of human polymorphonuclear leucocytes. Busse WW, et al. **Drugs** 1989;37 Suppl 1:26–31; discussion 69–77

Nedocromil sodium inhibition of IgE-mediated activation of human mononuclear phagocytes and platelets from asthmatics. Joseph M, et al. **Drugs** 1989;37 Suppl 1:32–6; discussion 69–77

The relevance of in vitro measurements of opsonophagocytosis to the study of antibiotic-PMN-bacterium interactions in vivo. Gemmell CG. **Drugs Exp Clin Res** 1988;14(12):735–40

Oxidation of DNA bases by tumor promoter-activated processes. Frenkel K. **Environ Health Perspect** 1989 May; 81:45–54 (81 ref.)

Eicosanoids and phagocytic and bactericidal activity of equine neutrophils. Watson ED. **Equine Vet J** 1988 Sep; 20(5):373–5

Tumor necrosis factor stimulates human neutrophils to release leukotriene B4 and platelet-activating factor. Induction of phospholipase A2 and acetyl-CoA:1-alkyl-sn-glycero-3-phosphocholine O2-acetyltransferase activity and inhibition by antiproteinase. Camussi G, et al. **Eur J Biochem** 1989 Jul 1;182(3):661–6

Cytoprotection of human polymorphonuclear leukocytes by stimulators of adenylate and guanylate cyclases. Korbut R, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):171–2

Dapsone inhibits LTB4 binding and bioresponse at the cellular and physiologic levels. Maloff BL, et al. **Eur J Pharmacol** 1988 Dec 6;158(1-2):85–9

Effects of human GM-CSF on neutrophil degranulation in vitro. Kaufman SE, et al. **Exp Hematol** 1989 Aug; 17(7):800–4

Stereospecific bioactions of 5-hydroxyeicosatetraenoate. Rossi AG, et al. **FEBS Lett** 1988 Nov 21;240(1-2):163–6

Biological effects of cigarette smoking assessed with the NBT test. Moszczyński P, et al. **Folia Haematol (Leipz)** 1989; 116(1):157–60

Dimethylthiourea prevents hydrogen peroxide and neutrophil mediated damage to lung endothelial cells in vitro and disappears in the process. Toth KM, et al. **Free Radic Biol Med** 1989;6(5):457–66

Cephalosporin-induced alterations in erythroid (CFU-E) and granulocyte-macrophage (CFU-GM) colony-forming capacity in canine bone marrow. Deldar A, et al. **Fundam Appl Toxicol** 1988 Oct;11(3):450–63

Effects of acetylsalicylic acid on the phagocytic function of human polymorphonuclear leukocytes in vitro. Rodriguez AB, et al. **Gen Pharmacol** 1989;20(2):151–5

Effects of non-steroidal anti-inflammatory drugs on isolated human polymorphonuclear leukocytes (PMN): chemotaxis, superoxide production, degranulation and N-formyl-L-methionyl-L-leucyl-L-phenylalanine (FMLP) receptor binding. Shelly J, et al. **Gen Pharmacol** 1989;20(3):329–34

A human embryo fibroblast-derived peptide suppresses the zymosan-induced biochemical activation in human polymorphonuclear leukocytes. Okai Y. **Immunol Lett** 1989 Jan 15;20(1):41–6

Mechanism of GM-CSF stimulation of neutrophils. Coffey RG. **Immunol Res** 1989;8(3):236–48 (85 ref.)

Human granulocyte chemotactic peptide (IL-8) as a specific neutrophil degranulator: comparison with other monokines. Willems J, et al. **Immunology** 1989 Aug;67(4):540–2

Stimulatory effects of anti-rheumatic drugs on human neutrophil functions. Oben JA, et al. **Immunopharmacology** 1988 Nov-Dec;16(3):157–65

Variable effect of toxic shock toxins from different sources on neutrophil function in vitro. Berger EM, et al. **Inflammation** 1988 Oct;12(5):447–53

Fluoride activation of neutrophils: similarities to formylmethionyl-leucyl-phenylalanine. Gabler WL, et al. **Inflammation** 1989 Feb;13(1):47–58

Thiourea and dimethylthiourea decrease human neutrophil bactericidal function in vitro. Jackson JH, et al. **Inflammation** 1988 Oct;12(5):515–24

Function and stimulus-specific effects of phorbol 12-myristate 13-acetate on human polymorphonuclear neutrophils: autoregulatory role for protein kinase C in signal transduction. Smith RJ, et al. **Inflammation** 1988 Dec; 12(6):597–611

Titanium dioxide induced chemiluminescence of human polymorphonuclear leukocytes. Hedenborg M. **Int Arch Occup Environ Health** 1988;61(1-2):1–6

Suppression of neutrophil superoxide production by conventional peritoneal dialysis solution. Ing BL, et al. **Int J Artif Organs** 1988 Sep;11(5):351–4

Effect of granulocyte-macrophage colony-stimulating factor on chemiluminescence of human neutrophils. Yamaga S, et al. **Int J Cell Cloning** 1989 Jan;7(1):50–8

Studies on the effects of disease-modifying antirheumatic drugs on lipoxygenase product synthesis in human neutrophils in vitro. Poubelle PE, et al. **Int J Immunopharmacol** 1988;10(6):709–15

Possible changes in the leukocyte membrane as a mechanism of leukocyte adhesion to the venular walls induced by leukotriene B4 and fMLP in the microvasculature of the hamster cheek pouch. Nagai K, et al. **Int J Microcirc Clin Exp** 1988 Nov;7(4):305–14

Pulmonary effects of zymosan activated plasma and phorbol myristate acetate in anaesthetized and awake rabbits. Opdahl H, et al. **Int J Microcirc Clin Exp** 1988 Aug; 7(3):237–51

Modulation of human polymorphonuclear leukocyte function by the flavonoid silybin. Minonzio F, et al. **Int J Tissue React** 1988;10(4):223–31

Effect of neutrophil activating substances on intracellular generation of phagocyte chemiluminescence by means of luminol-bound microspheres. Takeuchi A, et al. **Int J Tissue React** 1988;10(3):169–75

Inhibitory effect of antibiotic cerulenin on the respiratory burst in phagocytes. II. Inhibition by cerulenin of intracellular calcium mobilization in human neutrophils. Nakata M, et al. **J Antibiot (Tokyo)** 1989 Jul;42(7):1178–83

The effect of pentamidine salts on the in-vitro responses of neutrophilic granulocytes. Arnott MA, et al. **J Antimicrob Chemother** 1989 Apr;23(4):557–64

Influence of subinhibitory concentrations of ceftriaxone on opsonization and killing of Pseudomonas aeruginosa by human neutrophils. Labro MT, et al. **J Antimicrob Chemother** 1988 Sep;22(3):341–52

The influence of cefoperazone, cefotaxime, ceftazidime and aztreonam on phagocytosis by human neutrophils in vitro. Lingaas E, et al. **J Antimicrob Chemother** 1989 May; 23(5):701–10

Phorbol myristate acetate-induced injury of isolated perfused rat lungs: neutrophil dependence. Perry M, et al.

J Appl Physiol 1988 Nov;65(5):2164–9
Paradoxical effects of retinal in neutrophil stimulation. Badwey JA, et al. J Biol Chem 1989 Sep 5;264(25):14947–53
Modulation of neutrophil functions by a beta-interferon of human origin. Brunelleschi S, et al.
J Biol Regul Homeost Agents 1988 Apr–Jun;2(2):93–7
Lodoxamide tromethamine prevents neutrophil accumulation in reexpansion pulmonary edema. Veal CF Jr, et al.
J Cardiovasc Pharmacol 1989 Aug;14(2):227–32
Rapid deformation of "passive" polymorphonuclear leukocytes: the effects of pentoxifylline. Needham D, et al. J Cell Physiol 1989 Sep;140(3):549–57
Actin depolymerization and inhibition of capping induced by pentoxifylline in human lymphocytes and neutrophils. Rao KM, et al. J Cell Physiol 1988 Dec;137(3):577–82
Diacylglycerol-induced shape changes, movements and altered F-actin distribution in human neutrophils. Zimmermann A, et al. J Cell Sci 1988 Aug;90 (Pt 4):657–66
Lipopolysaccharide priming of human neutrophils for an enhanced respiratory burst. Role of intracellular free calcium. Forehand JR, et al. J Clin Invest 1989 Jan; 83(1):74–83
Bovine vitamin A and beta-carotene intake and lactational status. 1. Responsiveness of peripheral blood polymorphonuclear leukocytes to vitamin A and beta-carotene challenge in vitro. Tjoelker LW, et al.
J Dairy Sci 1988 Nov;71(11):3112–9
Gamma interferon enhances the killing of Staphylococcus aureus by human neutrophils. Edwards SW, et al.
J Gen Microbiol 1988 Jan;134 (Pt 1):37–42
Involvement of tumor necrosis factor in endotoxin-triggered neutrophil adherence to sinusoidal endothelial cells of mouse liver and its modulation in acute phase. Schlayer HJ, et al. J Hepatol 1988 Oct;7(2):239–49
Erythromycin and roxithromycin potentiate human neutrophil locomotion in vitro by inhibition of leukoattractant-activated superoxide generation and autooxidation. Anderson R. J Infect Dis 1989 May; 159(5):966–73
Effects of 1,25 dihydroxyvitamin D3 on leukocyte function in patients receiving chronic hemodialysis. Venezio FR, et al. J Infect Dis 1988 Nov;158(5):1102–5
Effects of fibronectin on the interaction of polymorphonuclear leukocytes with unopsonized and antibody-opsonized bacteria. Yang KD, et al.
J Infect Dis 1988 Oct;158(4):823–30
Recombinant mouse interferon-gamma is not chemotactic for macrophages or neutrophils. Canono BP, et al.
J Interferon Res 1989 Feb;9(1):79–86
Recombinant human leukocyte interferon modulates neutrophil function in vitro. Gyllenhammar H, et al.
J Interferon Res 1988 Aug;8(4):441–9
Interferons affect oxygen metabolism in human neutrophil granulocytes. Lappegård KT, et al. J Interferon Res 1988 Oct;8(5):665–77
Dithranol modulates the leukotriene B4-induced intraepidermal accumulation of polymorphonuclear leukocytes. Chang A, et al. J Invest Dermatol 1989 Jun; 92(6):806–8
Human tumor necrosis factor is a potent activator of the oxidative metabolism in human polymorphonuclear neutrophilic granulocytes: comparison with human lymphotoxin. Kapp A, et al. J Invest Dermatol 1989 Mar; 92(3):348–54
Biochemical mechanisms involved in the priming of neutrophils by tumor necrosis factor. Berkow RL, et al.
J Leukoc Biol 1988 Nov;44(5):345–52
The calcium ionophore ionomycin can prime, but not activate, the reactive oxygen generating system in differentiated HL-60 cells. Dahlgren C. J Leukoc Biol 1989 Jul;46(1):15–24
3-deaza-adenosine inhibition of stimulus-response coupling in human polymorphonuclear leukocytes. Fantone JC, et al. J Leukoc Biol 1989 Feb;45(2):121–8
In vivo neutrophil emigration in response to interleukin-1 and tumor necrosis factor-alpha. Mason MJ, et al.
J Leukoc Biol 1989 Jan;45(1):62–8
Induction of proteins in interferon-alpha- and interferon-gamma-treated polymorphonuclear leukocytes. Rubin BY, et al. J Leukoc Biol 1989 May;45(5):396–400
Both recombinant interleukin-1 (beta) and purified human monocyte interleukin-1 prime human neutrophils for increased oxidative activity and promote neutrophil spreading. Sullivan GW, et al. J Leukoc Biol 1989 May; 45(5):389–95
Beta-endorphin and lipopolysaccharide interactions with human neutrophils. Simpkins CO, et al.
J Natl Med Assoc 1988 Feb;80(2):199–203
Effects of levamisole on experimental periodontitis. Novak MJ, et al. J Periodontol 1989 Mar;60(3):137–44
Effects of indomethacin and diclofenac on some functions of polymorphonuclear neutrophils. Berradia N, et al.
J Pharm Pharmacol 1988 Nov;40(11):806–8
Effect of acute-phase proteinase inhibitors on chemotaxis of rat polymorphonuclear leukocytes in vitro. Nakagawa H, et al. J Pharmacobiodyn 1989 Jun;12(6):363–9
Inhibitory action of synthetic proteinase inhibitors and substrates on the chemotaxis of rat polymorphonuclear leukocytes in vitro. Nakagawa H, et al.
J Pharmacobiodyn 1988 Oct;11(10):674–8
An assessment of the effects of glucocorticoids on degranulation, chemotaxis, binding to vascular endothelium and formation of leukotriene B4 by purified human neutrophils. Schleimer RP, et al. J Pharmacol Exp Ther 1989 Aug;250(2):598–605
The effect of various antibacterial preparations on the in vitro morphology and chemotactic response of equine neutrophils. Pycock JF, et al. J Vet Pharmacol Ther 1988 Jun;11(2):191–6
Antitumor activity and neutrophil-selective hematopoietic toxicity of busulfan analogs in mice. Kato T, et al.
Jpn J Cancer Res 1988 Sep;79(9):1048–53
Morphologic changes of neutrophils in myelodysplastic syndrome treated with recombinant human granulocyte colony-stimulating factor. Toyama K, et al.
Jpn J Cancer Res 1988 Jul;79(7):813–6
Effect of etizolam (Depas) on production of superoxide anion by platelet-activating factor and N-formyl-methionyl-leucyl-phenylalanine-stimulated guinea pig polymorphonuclear leukocytes. Aratani H, et al. Jpn J Pharmacol 1988 Jun;47(2):200–3
The effect of dialysate on peritoneal phagocyte oxidative metabolism. Topley N, et al. Kidney Int 1988 Sep; 34(3):404–11
Simultaneous presence of platelet activating factor, leukotriene B4, prostaglandin F1 alpha and F2 alpha in the supernatant of human neutrophils treated with phospholipase A2 of human monocytes. Sipka S, et al.
Klin Wochenschr 1989 Feb 1;67(3):123–5
Modulation of functions of granulocytes by recombinant human GM-CSF and possible complications of GM-CSF therapy. Klausmann M, et al. Leukemia 1988 Dec;2(12 Suppl):63S–72S
Opsonic effect of fibronectin on staphylococcal phagocytosis by human polymorphonuclear leukocytes: its relative inefficiency in post-phagocytic metabolic activities and in intracellular killing. Yonemasu K, et al.
Microbiol Immunol 1988;32(8):795–805
Morphological changes induced by colchicine in neutrophils interfere with the distribution of glycogen particles. Pimenta PF, et al. Microsc Electron Biol Celular 1987 Dec; 11(2):133–43
Vasoactive amines and eicosanoids interactively regulate both polymorphonuclear leukocyte diapedesis and albumin permeability in vitro. Doukas J, et al. Microvasc Res 1989 Mar;37(2):125–37
Ca2+ ionophores inhibit superoxide generation by chemotactic peptide in rabbit neutrophils and the correlation with intracellular calcium. Jacob J.
Mol Cell Biochem 1988 Nov;84(1):97–103
Effects of gold coordination complexes on neutrophil function are mediated via inhibition of protein kinase C. Parente JE, et al. Mol Pharmacol 1989 Jan;35(1):26–33
Effect of amorolfine (Ro 14-4767/002) on in vitro phagocytosis and intracellular killing of Candida albicans by human neutrophils. Richardson MD, et al. Mycoses 1989 May;32(5):245–9
In vitro inhibition of human polymorphonuclear cell function by cloricromene. Bertocchi F, et al.
Naunyn Schmiedebergs Arch Pharmacol 1989 Jun; 339(6):697–703
Influence of substance P and substance P—sequences on immunocompetent cells. Paegelow I, et al. Pharmazie 1989 Feb;44(2):145–6
Activation of human neutrophils and oxygen radical scavenging activity of phenyl-3-methoxy-4-hydroxy styryl ketone. Saldanha LA, et al. Pharmazie 1989 Apr; 44(4):300–1
Inhibition of the behaviour of human polynuclear leukocytes by an extract of Chrysanthemum parthenium. Lösche W, et al. Planta Med 1988 Oct;54(5):381–4
Effect of inhaled platelet-activating factor on circulating neutrophils and platelets in vivo and ex vivo in man. Kioumis I, et al. Prostaglandins 1988 Sep;36(3):343–54
Differential effects of 20-trifluoromethyl leukotriene B4 on human neutrophil functions. Tsai BS, et al.
Prostaglandins 1989 Feb;37(2):287–302
Effect of single oral administrations of non steroidal antiinflammatory drugs to healthy volunteers on arachidonic acid metabolism in peripheral polymorphonuclear and mononuclear leukocytes. Colli S, et al. Prostaglandins Leukot Essent Fatty Acids 1988 Dec; 34(3):167–74
Effect of the 5-lipoxygenase inhibitor piriprost on superoxide production by human neutrophils. Flament J, et al.
Prostaglandins Leukot Essent Fatty Acids 1988 Dec; 34(3):175–80
12(R)-hydroxyeicosatetraenoic acid is a neutrophil chemoattractant in the cavine, lapine, murine and canine dermis. Fretland DJ, et al.
Prostaglandins Leukot Essent Fatty Acids 1989 Aug; 37(2):79–81
Asbestos-induced activation of the respiratory burst in rabbit neutrophils. Elferink JG, et al.
Res Commun Chem Pathol Pharmacol 1988 Aug; 61(2):201–11
Tumour necrosis factor-beta modulates human neutrophil-mediated cartilage damage. Kowanko IC, et al.
Scand J Immunol 1988 Nov;28(5):591–8
Differential sensitivities of purified human eosinophils and neutrophils to defined chemotaxins. Morita E, et al.
Scand J Immunol 1989 Jun;29(6):709–16
Recombinant human tumour necrosis factor beta (lymphotoxin) lacks chemotactic activity for human peripheral blood neutrophils, monocytes, and T cells. Mrowietz U, et al. Scand J Immunol 1989 Sep;30(3):373–7
Effect of defibrotide on polymorphonuclear leukocytes: modulation of calcium entry and availability. Di Perri T, et al. Semin Thromb Hemost 1988;14 Suppl:23–6
Protective effect of ketotifen on chemiluminescence of neutrophils. Hsu K, et al.
Taiwan I Hsueh Hui Tsa Chih 1988 Oct;87(10):939–43
Dieldrin activates rat neutrophils in vitro. Hewett JA, et al.
Toxicol Appl Pharmacol 1988 Nov;96(2):269–78
Effects of Pasteurella haemolytica leukotoxin on isolated bovine neutrophils. Clinkenbeard KD, et al. Toxicon 1989; 27(7):797–804
The effect of allopurinol on lysosomal enzyme release. Mikuliková D, et al. Z Rheumatol 1989 Jan–Feb;48(1):26–9
Stimulated chemiluminescence of polymorphonuclear leukocytes in rheumatoid arthritis: in vivo enhancement by auranofin. Piergiacomi G, et al. Z Rheumatol 1988 May–Jun;47(3):151–5
[Effect of anisodamine (654-2) on rat neutrophil function] Chen XY.
Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao 1988 Aug; 10(4):240–3 (Eng. Abstr.) (Chi)
[Ex vivo study of the effect of ribomunyl on the release of oxygen radicals by polynuclear neutrophils] Rahimy MC, et al. Allerg Immunol (Paris) 1989 May;21(5):201–3 (Eng. Abstr.) (Fre)
[Bactericidal synergy of josamycin and human polynuclear neutrophils in vitro] Labro MT, et al.
Pathol Biol (Paris) 1989 May;37(5):329–34 (Eng. Abstr.) (Fre)
[Interaction of roxithromycin with human polymorphonuclear neutrophils in vitro and ex vivo] Labro MT, et al. Pathol Biol (Paris) 1988 Jun;36(5 Pt 2):711–4 (Eng. Abstr.) (Fre)
[Effect of opioids on granulocyte adherence] Krumholz W, et al. Anasth Intensivther Notfallmed 1988 Dec;23(6):313–5 (Eng. Abstr.) (Ger)
[Effect of PUVA therapy on migration modulating serum factors in psoriasis] Westphal HJ, et al.
Dermatol Monatsschr 1988;174(7):407–13 (Eng. Abstr.) (Ger)
[Effect of serum on the intra- and extracellular bactericidal capacity of neutrophils] Sarkisov DS, et al. Arkh Patol 1988;50(7):17–23 (Eng. Abstr.) (Rus)
[Effects of gentamycin on interactions of neutrophils with Staphylococcus] Pal'tsyn AA, et al.
Biull Eksp Biol Med 1989 Jan;107(1):65–8 (Eng. Abstr.) (Rus)
[Use of lithium carbonate as a leukocyte stimulant in acute radiation sickness in humans] Konchalovskiĭ MV, et al.
Gematol Transfuziol 1989 Mar;34(3):16–23 (Eng. Abstr.) (Rus)
[Effect of cytostatic and hormonal drugs on the phagocytic activity of neutrophils of leukemia patients] Rozanova OE, et al. Gematol Transfuziol 1989 Apr;34(4):15–20 (Eng. Abstr.) (Rus)
[Use of the NBT test for evaluating the sensitivity of neutrophils to stimulants] Shcherbakov VI. Lab Delo 1989; (1):30–3 (Eng. Abstr.) (Rus)
[A comprehensive assessment of the phagocytic activity of the blood neutrophils in patients with rubromycosis treated with griseofulvin and nizoral] Belukha UK, et al.
Vestn Dermatol Venerol 1989;(1):50–2 (Eng. Abstr.) (Rus)
[Effect of prodigiozan on the antibody-dependent cytotoxicity of neutrophils in chronic myeloid leukemia] Guseva SA, et al. Vopr Onkol 1989;35(1):30–4 (Eng. Abstr.) (Rus)
[Effects of low density lipoproteins on uric acid crystals] Muniain Ezcurra MA, et al. Rev Clin Esp 1988 Oct; 183(5):232–4 (Eng. Abstr.) (Spa)

ENZYMOLOGY

Neutrophil alkaline phosphatase in AIDS [letter] Grozdea J, et al. Acta Haematol (Basel) 1988;80(4):229
Immunoreactive polymorphonuclear leukocyte elastase in complex with alpha 1-antitrypsin in Kawasaki disease. Inamo Y, et al. Acta Paediatr Jpn Overseas Ed 1987 Apr; 29(2):202–5
Inhibition of human neutrophil elastase by acid-soluble inter-alpha-trypsin inhibitor. Gast A, et al.
Adv Exp Med Biol 1988;240:75–82
Flow cytometric analysis of oxidase activity of neutrophils from chronic granulomatous disease patients. Hassan NF, et al. Adv Exp Med Biol 1988;239:73–8
The degradation of collagen by a metalloproteinase from human leucocytes. Kohnert U, et al.
Adv Exp Med Biol 1988;240:33–44
Neutrophil elastase, thrombin and plasmin in septic shock. Seitz R, et al. Adv Exp Med Biol 1988;240:481–4
Inhibition of human neutrophil elastase by polyguanylic acid and other synthetic polynucleotides. Simon S, et al.
Adv Exp Med Biol 1988;240:65–74
Neutrophil elastase and cathepsin G: structure, function, and biological control. Watorek W, et al.
Adv Exp Med Biol 1988;240:23–31
Neutrophil enzyme activities in carrageenan-induced inflammation in rats. Sopata I, et al. Agents Actions 1989 Aug;28(1–2):89–92
Monocyte induces alkaline phosphatase synthesis in neutrophils of chronic myeloid leukemia and myelofibrosis

with myeloid metaplasia patients. Chikkappa G, et al. **Am J Clin Pathol** 1989 May;91(5):550–7

Neutrophil and eosinophil involvement of the small bowel in patients with celiac disease and Crohn's disease: studies on the secretion rate and immunohistochemical localization of granulocyte granule constituents. Hällgren R, et al. **Am J Med** 1989 Jan;86(1):56–64

Colocalization of elastase and myeloperoxidase in human blood and bone marrow neutrophils using a monoclonal antibody and immunogold. Cramer EM, et al. **Am J Pathol** 1989 Jun;134(6):1275–84

Neutrophil cathepsin G increases permeability of cultured type II pneumocytes. Rochat T, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):C603–11

Human neutrophil elastase causes glycoconjugate release from the epithelial cell surface of hamster trachea in organ culture. Breuer R, et al. **Am Rev Respir Dis** 1989 Mar; 139(3):779–82

A peptide from alveolar macrophages that releases neutrophil enzymes into the lungs in patients with the adult respiratory distress syndrome. Cohen AB, et al. **Am Rev Respir Dis** 1988 May;137(5):1151–8

Inhibition of neutrophil elastase by alpha-1-proteinase inhibitor oxidized by activated neutrophils. Padrines M, et al. **Am Rev Respir Dis** 1989 Mar;139(3):783–90

Fluorophore-labeled ether lipids: substrates for enzymes of the platelet-activating factor cycle in peritoneal polymorphonuclear leukocytes. Schindler PW, et al. **Anal Biochem** 1988 Nov 1;174(2):477–84

Anti-neutrophil-elastase defenses of the lower respiratory tract in alpha 1-antitrypsin deficiency directly augmented with an aerosol of alpha 1-antitrypsin. Hubbard RC, et al. **Ann Intern Med** 1989 Aug 1;111(3):206–12

Role of myeloperoxidase in intracellular and extracellular chemiluminescence of neutrophils. Nurcombe HL, et al. **Ann Rheum Dis** 1989 Jan;48(1):56–62

Inhibition of neutrophil myeloperoxidase by rabbit anti-(human myeloperoxidase) [letter] Thompson RA, et al. **Ann Rheum Dis** 1989 Jul;48(7):615

Preparation and characterization of monoclonal antibodies against human myeloperoxidase. Homma T, et al. **Arch Biochem Biophys** 1989 Aug 15;273(1):189–96

The role of human neutrophil elastase in the premature rupture of membranes. Kanayama N, et al. **Asia Oceania J Obstet Gynaecol** 1988 Sep;14(3):389–97

The respiratory burst oxidase. Babior BM. **Basic Life Sci** 1988;49:815–21 (37 ref.)

Oxidative inactivation of neutrophil granule proteinases: implications for neutrophil-mediated proteolysis. Vissers MC, et al. **Basic Life Sci** 1988;49:845–8

Inositol lipids and phosphatidic acid inhibit cell-free activation of neutrophil NADPH oxidase. Aviram I, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):712–9

Free radicals inactivate human neutrophil elastase and its inhibitors with comparable efficiency. Dean RT, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):821–7

Parameters of activation of the membrane-bound O2- generating oxidase from bovine neutrophils in a cell-free system. Pilloud MC, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):783–90

Activation of neutrophil calpain following its translocation to the plasma membrane induced by phorbol ester or fMet-Leu-Phe. Pontremoli S, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):737–43

Enhanced activation of the respiratory burst oxidase in neutrophils from hypertensive patients. Pontremoli S, et al. **Biochem Biophys Res Commun** 1989 Feb 15; 158(3):966–72

Activation of human neutrophil NADPH-oxidase in vitro by the catalytic fragment of protein kinase-C. Tauber AI, et al. **Biochem Biophys Res Commun** 1989 Feb 15; 158(3):884–90

Kinetics of cell-free activation of neutrophil NADPH oxidase. Effects of neomycin and guanine nucleotides. Aviram I, et al. **Biochem J** 1989 Jul 15;261(2):477–82

Inhibition of myeloperoxidase by salicylhydroxamic acid. Davies B, et al. **Biochem J** 1989 Mar 15;258(3):801–6

Superoxide generation by the electrogenic NADPH oxidase of human neutrophils is limited by the movement of a compensating charge. Henderson LM, et al. **Biochem J** 1988 Oct 1;255(1):285–90

Characterization of gelatinase from pig polymorphonuclear leucocytes. A metalloproteinase resembling tumour type IV collagenase. Murphy G, et al. **Biochem J** 1989 Mar 1;258(2):463–72

The structural basis for neutrophil inactivation of C1 inhibitor. Pemberton PA, et al. **Biochem J** 1989 Feb 15; 258(1):193–8

Purification and characterization of an isoform of protein kinase C from bovine neutrophils. Dianoux AC, et al. **Biochemistry** 1989 Jan 24;28(2):424–31

Human neutrophils contain distinct cytosolic and particulate tyrosine kinase activities: possible role in neutrophil activation. Berkow RL, et al. **Biochim Biophys Acta** 1989 Aug 31;997(3):292–301

The 47-kDa protein involved in the NADPH:O2 oxidoreductase activity of human neutrophils is phosphorylated by cyclic AMP-dependent protein kinase without induction of a respiratory burst. Kramer IM, et al. **Biochim Biophys Acta** 1988 Sep 16;971(2):189–96

Biosynthesis of paf-acether. XI. Regulation of acetyltransferase by enzyme-substrate imbalance. Ninio E, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):288–94

Proteolytic inactivation of dog lung surfactant-associated proteins by neutrophil elastase. Pison U, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):251–7

Molecular cloning of human neutrophil elastase. Farley D, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:3–7

The human neutrophil elastase gene. Analysis of the nucleotide sequence reveals three distinct classes of repetitive DNA. Farley D, et al. **Biol Chem Hoppe Seyler** 1989 Jul;370(7):737–44

Preliminary data on isolation of an elastase-like proteinase and its inhibitor from ovine neutrophil granulocytes. Junger W, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:63–8

Mechanism of kinin release from human low-molecular-mass-kininogen by the synergistic action of human plasma kallikrein and leukocyte elastase. Sato F, et al. **Biol Chem Hoppe Seyler** 1988 Sep;369(9):1009–17

Absence of both the 91kD and 22kD subunits of human neutrophil cytochrome b in two genetic forms of chronic granulomatous disease. Parkos CA, et al. **Blood** 1989 May 1;73(6):1416–20

Differences in the expression of alkaline phosphatase mRNA in chronic myelogenous leukemia and paroxysmal nocturnal hemoglobinuria polymorphonuclear leukocytes. Rambaldi A, et al. **Blood** 1989 Apr;73(5):1113–5

Evidence for a pretranslational defect in hereditary and acquired myeloperoxidase deficiency. Tobler A, et al. **Blood** 1989 May 15;73(7):1980–6

Respiratory burst oxidase activation can be dissociated from phosphatidylinositol bisphosphate degradation in a cell-free system from human neutrophils. Traynor AE, et al. **Blood** 1989 Jan;73(1):296–300

Platelet-dependent induction and amplification of polymorphonuclear leucocyte lysosomal enzyme release. Del Maschio A, et al. **Br J Haematol** 1989 Jul;72(3):329–35

Identification of a tissue kallikrein in human polymorphonuclear leucocytes. Figueroa CD, et al. **Br J Haematol** 1989 Jul;72(3):321–8

Neutrophil activation in pregnancy-induced hypertension. Greer IA, et al. **Br J Obstet Gynaecol** 1989 Aug; 96(8):978–82

Relationship between gelatinase secretion and chemotaxis of rat polymorphonuclear leukocytes. Watanabe K, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):2197–203

Lymphocytes are the preferred cells for the measurement of blood coproporphyrinogen oxidase activity. Rossi E, et al. **Clin Chim Acta** 1989 Apr 28;181(1):115–7

Enzymatic quantification of polymorphonuclear leucocytes in normal and psoriatic skin following standardized injury. Chang A, et al. **Clin Exp Dermatol** 1988 Mar;13(2):62–6

Captopril—a potential free radical scavenger: inhibition of PMN NADPH oxidase. Egan TM, et al. **Clin Invest Med** 1988 Oct;11(5):351–6

Myeloperoxidase deficient polymorphonuclear leucocytes in leukaemia and allied disorders. Bendix-Hansen K. **Dan Med Bull** 1988 Dec;35(6):501–20 (210 ref.)

Thin-layer agarose isoelectric focusing of alkaline phosphatase isoenzymes from human neutrophils. Brisson-Lougarre A, et al. **Electrophoresis** 1988 May; 9(5):221–4

Characterization of alkaline phosphatase in polymorphonuclear neutrophils from normal sheep. Courdouhji MK, et al. **Enzyme** 1988;40(4):217–22

Inhibition of NADPH oxidase by aminoacyl chloromethane protease inhibitors in phorbol-ester-stimulated human neutrophils: a reinvestigation. Are proteases really involved in the activation process? Conseiller EC, et al. **Eur J Biochem** 1989 Jul 15;183(1):107–14

Purification and characterization of 20-hydroxy-leukotriene B4 dehydrogenase in human neutrophils. Gotoh Y, et al. **Eur J Biochem** 1989 Feb 1;179(2):315–21

Involvement of glutathione peroxidase activity in the stimulation of 5-lipoxygenase activity by glutathione-depleting agents in human polymorphonuclear leukocytes. Hatzelmann A, et al. **Eur J Biochem** 1989 Apr 1;180(3):527–33

Combination of diaminobenzidine staining and immunogold labeling: a novel technical approach to identify lysozyme in human neutrophil cells. Mutasa HC. **Eur J Cell Biol** 1989 Aug;49(2):319–25

Possible prediction of neonatal and puerperal infections by intrapartum determination of polymorphonuclear granulocyte elastase levels in maternal blood [letter] Fischbach F, et al. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):588–9

The disturbance of hemostasis in septic shock: role of neutrophil elastase and thrombin, effects of antithrombin III and plasma substitution. Seitz R, et al. **Eur J Haematol** 1989 Jul;43(1):22–8

Local increase of antiprotease and neutrophil elastase-alpha 1-proteinase inhibitor complexes in lung cancer. Marchandise FX, et al. **Eur Respir J** 1989 Jul;2(7):623–9

Phorbol ester-induced activation of protein kinase C leads to increased formation of diacylglycerol in human neutrophils. Fällman M, et al. **Exp Cell Res** 1989 Mar; 181(1):217–25

Modulation by retinoids and interferons of alkaline phosphatase activity in granulocytes induced by granulocyte colony-stimulating factor. Sato N, et al. **Exp Hematol** 1989 Mar;17(3):258–62

An 18-month study of the effects on hamster lungs of intratracheally administered human neutrophil elastase. Lucey EC, et al. **Exp Lung Res** 1988;14(5):671–86

Search for drugs that may reduce the load of neutrophil azurophilic granule enzymes in the lungs of patients with emphysema. Stevens MD, et al. **Exp Lung Res** 1989 Jul; 15(4):663–80

Differential activation by fMet-Leu-Phe and phorbol ester of a plasma membrane phosphatidylcholine-specific phospholipase D in human neutrophil. Gelas P, et al. **FEBS Lett** 1989 Jul 17;251(1-2):213–8

Activation of matrix metalloproteinase 3 (stromelysin) and matrix metalloproteinase 2 ('gelatinase') by human neutrophil elastase and cathepsin G. Okada Y, et al. **FEBS Lett** 1989 Jun 5;249(2):353–6

Studies on the nature and activation of O2- -forming NADPH oxidase of leukocytes. II. Relationships between phosphorylation of a component of the enzyme and oxidase activity. Bellavite P, et al. **Free Radic Res Commun** 1987; 4(2):83–98

Studies on the nature and activation of O2(-)-forming NADPH oxidase of leukocytes. Identification of a phosphorylated component of the active enzyme. Bellavite P, et al. **Free Radic Res Commun** 1985;1(1):11–29

Neutrophilic proteases: mediators of formyl-methionyl-leucyl-phenylalanine-induced ileitis in rats. von Ritter C, et al. **Gastroenterology** 1989 Sep; 97(3):605–9

Depressed neutrophil-mediated tumor cell cytotoxicity in subjects affected by hereditary myeloperoxidase deficiency and secondary neoplasia. Lanza F, et al. **Haematologica (Pavia)** 1988 Sep-Oct;73(5):355–8

The role of complement in the stimulation of lysosomal enzyme release by polymorphonuclear leucocytes induced by immune complexes of IgG and of IgM. Lucisano YM, et al. **Immunology** 1988 Oct;65(2):171–5

Membrane potential and activities of certain membrane-bound enzymes of polymorphonuclear leukocytes in essential hypertension. Rahman I, et al. **Indian J Biochem Biophys** 1988 Aug;25(4):326–30

Cathepsin D-like activity in neutrophils and monocytes. Levy J, et al. **Infect Immun** 1989 May;57(5):1632–4

Inhibition of human neutrophil NADPH oxidase by Chlamydia serovars E, K, and L2. Tauber AI, et al. **Infect Immun** 1989 Apr;57(4):1108–12

Activation of neutrophil collagenase by cathepsin G. Capodici C, et al. **Inflammation** 1989 Jun;13(3):245–58

Cathepsin G degrades denatured collagen. Capodici C, et al. **Inflammation** 1989 Apr;13(2):137–45

Degranulation of peripheral blood neutrophils during haemoperfusion in chronic uraemics. Trznadel K, et al. **Int Urol Nephrol** 1988;20(6):685–90

Release of lysosomal enzyme beta-glucuronidase from isolated human eosinophils. Marshall T, et al. **J Allergy Clin Immunol** 1988 Oct;82(4):550–5

Effect of 2',3'-dialdehyde NADPH on activation of superoxide-producing NADPH oxidase in a cell-free system of pig neutrophils. Takasugi S, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):155–7

Subcellular localization and dynamics of components of the respiratory burst oxidase. Borregaard N. **J Bioenerg Biomembr** 1988 Dec;20(6):637–51 (80 ref.)

Activation of the respiratory burst oxidase in neutrophils: on the role of membrane-derived second messengers, Ca++, and protein kinase C. Lambeth JD. **J Bioenerg Biomembr** 1988 Dec;20(6):709–33 (173 ref.)

Phospholipase A2 activation in human neutrophils. Differential actions of diacylglycerols and alkylacylglycerols in priming cells for stimulation by N-formyl-Met-Leu-Phe. Bauldry SA, et al. **J Biol Chem** 1988 Nov 15;263(32):16787–95

Studies on the NADPH oxidase of phagocytes. Production of a monoclonal antibody which blocks the enzymatic activity of pig neutrophil NADPH oxidase. Berton G, et al. **J Biol Chem** 1989 Apr 5;264(10):5564–8

Down-regulation and inactivation of neutral endopeptidase 24.11 (enkephalinase) in human neutrophils. Erdös EG, et al. **J Biol Chem** 1989 Aug 25;264(24):14519–23

Inactivation of human antithrombin by neutrophil elastase. Kinetics of the heparin-dependent reaction. Jordan RE, et al. **J Biol Chem** 1989 Jun 25;264(18):10493–500

Mechanism of inhibition of human neutrophil collagenase by Gold(I) chrysotherapeutic compounds. Interaction at a heavy metal binding site. Mallya SK, et al. **J Biol Chem** 1989 Jan 25;264(3):1594–601

Bidirectional effects of protein kinase C activators. Studies with human neutrophils and platelet-activating factor. O'Flaherty JT, et al. **J Biol Chem** 1989 Apr 25; 264(12):6836–43

Use of an affinity label to probe the function of the NADPH binding component of the respiratory burst oxidase of human neutrophils. Smith RM, et al. **J Biol Chem** 1989 Jul 25;264(21):12243–8

Affinity labeling of the cytosolic and membrane components of the respiratory burst oxidase by the 2',3'-dialdehyde derivative of NADPH. Evidence for a cytosolic location of the nucleotide-binding site in the resting cell. Smith RM, et al. **J Biol Chem** 1989 Feb 5;264(4):1958–62

Identification of an aldehyde dehydrogenase in the microsomes of human polymorphonuclear leukocytes that metabolizes 20-aldehyde leukotriene B4. Sutyak J, et al. **J Biol Chem** 1989 Sep 5;264(25):14818–23

Structure of the human neutrophil elastase gene. Takahashi H, et al. **J Biol Chem** 1988 Oct 15;263(29):14739–47

Inhibitors of elastase and cathepsin G in Chédiak–Higashi (beige) neutrophils. Takeuchi KH, et al. **J Biol Chem** 1989 May 5;264(13):7431–6

The superoxide-generating respiratory burst oxidase of human neutrophil plasma membrane. Phosphatidylserine as an effector of the activated enzyme. Tamura M, et al. **J Biol Chem** 1988 Nov 25;263(33):17621–6

Chemoattractant-stimulated GTPase activity is decreased on membranes from polymorphonuclear leukocytes incubated in chemoattractant. Wilde MW, et al. **J Biol Chem** 1989 Jan 5;264(1):190–6

Pharmacological profile of the substituted beta-lactam L-659,286: a member of a new class of human PMN elastase inhibitors. Bonney RJ, et al. **J Cell Biochem** 1989 Jan;39(1):47–53

Characterization of the membrane-associated GTPase activity: effects of chemotactic factors and toxins. Pelz C, et al. **J Cell Biochem** 1989 Feb;39(2):197–206

Enhancement of phorbol ester-induced protein kinase activity in human neutrophils by platelet-activating factor. Gay JC, et al. **J Cell Physiol** 1988 Dec;137(3):439–47

Identification of neutrophil alkaline phosphatase-inducing factor in cystic fluid of a human squamous cell carcinoma as granulocyte colony-stimulating factor. Sato N, et al. **J Cell Physiol** 1988 Nov;137(2):272–6

Isocratic determination of arachidonic acid 5-lipoxygenase products in human neutrophils by high-performance liquid chromatography. Mita H, et al. **J Chromatogr** 1988 Sep 9;430(2):299–308

Hormonal regulation of glycogen synthase and phosphorylase activities in human polymorphonuclear leukocytes. Ohtsuka Y, et al.
J Clin Chem Clin Biochem 1988 Nov;26(11):679–84

A phosphoprotein of Mr 47,000, defective in autosomal chronic granulomatous disease, copurifies with one of two soluble components required for NADPH:O2 oxidoreductase activity in human neutrophils. Bolscher BG, et al. **J Clin Invest** 1989 Mar;83(3):757–63

Proteinase 3. A distinct human polymorphonuclear leukocyte proteinase that produces emphysema in hamsters. Kao RC, et al. **J Clin Invest** 1988 Dec;82(6):1963–73

Myeloperoxidase secretion during phagocytosis: a case of a patient with impaired bactericidal activity. Edwards SW, et al. **J Clin Lab Immunol** 1988 Oct;27(2):97–102

Neutrophil elastase and elastic tissue in emphysema [letter] Damiano VV. **J Clin Pathol** 1989 Jan;42(1):114–5

Use of monoclonal antibody against human neutrophil elastase in normal and leukaemic myeloid cells. Pulford KA, et al. **J Clin Pathol** 1988 Aug;41(8):853–60

Differential modulation of adherence of oral streptococci by human neutrophil myeloperoxidase. Miyasaki KT, et al. **J Dent Res** 1988 Oct;67(10):1300–6

Expression of the neutrophil elastase gene during human bone marrow cell differentiation. Fouret P, et al. **J Exp Med** 1989 Mar 1;169(3):833–45

The human neutrophil serine proteinases, elastase and cathepsin G, can mediate glomerular injury in vivo. Johnson RJ, et al. **J Exp Med** 1988 Sep 1;168(3):1169–74

Neutrophil cathepsin G increases calcium flux and inositol polyphosphate production in cultured endothelial cells. Peterson MW, et al. **J Immunol** 1989 Jul 15;143(2):609–16

Inhibition of human neutrophil and Pseudomonas elastases by the amyloid P-component: a constituent of elastic fibers and amyloid deposits. Vachino G, et al. **J Leukoc Biol** 1988 Dec;44(6):529–34

Modification of low density lipoproteins by polymorphonuclear cell elastase leads to enhanced uptake by human monocyte-derived macrophages via the low density lipoprotein receptor pathway. Polacek D, et al.
J Lipid Res 1988 Jun;29(6):797–808

Host modulation of adherence of oral bacteria: the effect of human neutrophil myeloperoxidase on the attachment of Actinomyces viscosus and Actinomyces naeslundii to saliva-coated hydroxyapatite. de Camargo PM, et al.
J Periodont Res 1988 Sep;23(5):334–9

Comparison of interstitial collagenases from human gingiva, sulcular fluid and polymorphonuclear leukocytes. Sorsa T, et al. **J Periodont Res** 1988 Nov;23(6):386–93

Selectivity of neutrophil 5-lipoxygenase and cyclo-oxygenase inhibition by an anti-inflammatory flavonoid glycoside and related aglycone flavonoids. Moroney MA, et al. **J Pharm Pharmacol** 1988 Nov; 40(11):787–92

Gold(I) compounds and human neutrophil collagenase [letter] Sorsa T, et al. **J Rheumatol** 1989 Jul;16(7):1009–10

Species difference of 5-lipoxygenase derived from polymorphonuclear leukocytes on sensitivity to drugs. Okumura M, et al. **Jpn J Pharmacol** 1989 May;50(1):37–46

Phospholipase A in acute lung injury after trauma and sepsis: its relation to the inflammatory mediators PMN-elastase, C3a, and neopterin. Kellermann W, et al.
Klin Wochenschr 1989 Feb 1;67(3):190–5

Diagnostic criteria for adult respiratory distress syndrome: time for reappraisal [published erratum appears in Lancet 1989 Feb 11;1(8633):342] Rocker GM, et al. **Lancet** 1989 Jan 21;1(8630):120–3

Cleavage of collagen type X by human synovial collagenase and neutrophil elastase. Gadher SJ, et al. **Matrix** 1989 Mar; 9(2):109–15

Human neutrophil and mast cell proteases implicated in inflammation. Rest RF. **Methods Enzymol** 1988;163:309–27

5- and 15(omega-6)-lipoxygenases from human polymorphonuclear leukocytes. Soberman RJ.
Methods Enzymol 1988;163:344–9

Leukotriene B4 20-hydroxylase of human polymorphonuclear leukocytes. Soberman RJ, et al.
Methods Enzymol 1988;163:349–53

Different sensitivity of Pseudomonas aeruginosa exotoxin A and diphtheria toxin to enzymes from polymorphonuclear leukocytes. Döring G, et al. **Microb Pathog** 1989 Apr; 6(4):287–95

Genetic variants of chronic granulomatous disease: prevalence of deficiencies of two cytosolic components of the NADPH oxidase system. Clark RA, et al.
N Engl J Med 1989 Sep 7;321(10):647–52

Changes of neutrophil elastase and alpha 1-antitrypsin in systemic lupus erythematosus. Zhang XH, et al.
Proc Chin Acad Med Sci Peking Union Med Coll 1989; 4(1):26–9

Cytosolic components of the respiratory burst oxidase: resolution of four components, two of which are missing in complementing types of chronic granulomatous disease. Curnutte JT, et al. **Proc Natl Acad Sci U S A** 1989 Feb; 86(3):825–9

Structure of human neutrophil elastase in complex with a peptide chloromethyl ketone inhibitor at 1.84-A resolution. Navia MA, et al. **Proc Natl Acad Sci U S A** 1989 Jan; 86(1):7–11

Cloning of the cDNA and functional expression of the 47-kilodalton cytosolic component of human neutrophil respiratory burst oxidase. Volpp BD, et al.
Proc Natl Acad Sci U S A 1989 Sep;86(18):7195–9

An automated homogeneous enzyme immunoassay for human PMN elastase. Dreher M, et al. **Prog Clin Biol Res** 1989; 308:707–10

Reasons for the ineffectiveness of eglin C to ameliorate endotoxin shock in sheep. Junger WG, et al.
Prog Clin Biol Res 1989;308:953–7

Validity of the elastase assay in intensive care medicine. Lang H, et al. **Prog Clin Biol Res** 1989;308:701–6

Specificity of an HPETE peroxidase from rat PMN. Skoog MT, et al. **Prostaglandins** 1988 Sep;36(3):373–84

Impaired polymorphonuclear leukocyte 15-lipoxygenase activity in juvenile and rapidly progressive periodontitis. Noguchi K, et al.
Prostaglandins Leukot Essent Fatty Acids 1988 Aug; 33(2):137–41

Defenses of the hamster lung against human neutrophil and porcine pancreatic elastase. Stone PJ, et al. **Respiration** 1988;54(1):1–15

Translocation of protein kinase C to subcellular fractions of human neutrophils. Christiansen NO, et al.
Scand J Immunol 1989 Apr;29(4):409–16

Interaction of polymorphonuclear leukocytes with cartilage in vitro. Catabolic effects of serine proteases and oxygen radicals. Burkhardt H, et al. **Scand J Rheumatol** 1988; 17(3):183–95

Two cytosolic neutrophil oxidase components absent in autosomal chronic granulomatous disease. Volpp BD, et al. **Science** 1988 Dec 2;242(4883):1295–7

Evidence for regulation of endothelial plasminogen-activating system by polymorphonuclear leukocyte elastase. Gilboa N, et al. **Thromb Res** 1989 Jun 1;54(5):467–75

[Changes of neutrophil elastase in COPD and the role of elastase in experimental pulmonary hypertension] Yan YZ.
Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1988 Dec; 11(6):324–6, 384 (Eng. Abstr.) **(Chi)**

[New aspects of the diagnosis of pancreatic cancer by determination of granulocyte elastase] Dütschke P, et al.
Med Klin 1989 Feb 15;84(2):77–80 (Eng. Abstr.) **(Ger)**

[Immunoenzyme assay of lysozyme secretion from activated human neutrophils] Erben K, et al. **Z Med Lab Diagn** 1988; 29(4):188–95 (Eng. Abstr.) **(Ger)**

[Polymorphonuclear leukocyte elastase (PMNE) levels in sepsis; the effect of PMNE on multiple organ failure (MOF)] Tanaka H, et al. **Nippon Geka Gakkai Zasshi** 1989 Mar;90(3):334–42 (Eng. Abstr.) **(Jpn)**

[Lysozyme activities in plasma and neutrophilic granulocytes] Kabutomori O, et al. **Rinsho Byori** 1989 Apr; 37(4):445–6 **(Jpn)**

[Secretion of lysozyme by blood neutrophils during physical exertion] Morozov VI, et al. **Fiziol Zh SSSR** 1989 Mar; 75(3):334–7 (Eng. Abstr.) **(Rus)**

[Transport Na+,K+-ATPase of gonococci and neutrophilic leukocytes] Dmitriev GA, et al.
Izv Akad Nauk SSSR [Biol] 1988 Jul-Aug;(4):622–5 (Eng. Abstr.) **(Rus)**

[Alkaline phosphatase activity of the neutrophils in pregnancy and newborn infants] Kaiumov FA.
Lab Delo 1989;(6):19–21 (Eng. Abstr.) **(Rus)**

[Enzymatic spectrum of the lysosomal system of granulocytes and mononuclear phagocytes in the blood of young children with acute pneumonia] Faĭziev KhN. **Pediatriia** 1989;(2):110–1 **(Rus)**

[Value of cytochemical tests in nephrology] Artem'eva VB, et al. **Ter Arkh** 1988;60(7):74–8 (Eng. Abstr.) **(Rus)**

[Intracellular metabolism and phagocytic activity of neutrophilic leukocytes in patients with viral hepatitis B] Nagoev BS. **Ter Arkh** 1988;60(11):15–8 **(Rus)**

[The importance of studying the acid phosphatase of the blood serum and bone marrow lymphoblasts and polymorphonuclear neutrophils in the prognosis of the course of acute lymphoblastic leukemia] Vaiuta NP, et al.
Ter Arkh 1988;60(5):33–5 (Eng. Abstr.) **(Rus)**

[Functional activity of blood neutrophils in patients with non-coronarogenic myocardial diseases] Mazurets AF.
Vrach Delo 1988 Oct;(10):21–3 (Eng. Abstr.) **(Rus)**

[Myeloperoxidase deficiency of the peripheral blood neutrophils and the incidence of infectious complications in patients with acute myeloblastic leukemia] Tishchenko LM, et al. **Vrach Delo** 1989 Mar;(3):49–51 (Eng. Abstr.) **(Rus)**

[Circadian variations in the production of superoxide and liberation of lysosomal enzymes of neutrophils in peripheral blood] Muniain MA, et al. **Rev Clin Esp** 1989 Jan; 184(1):20–3 (Eng. Abstr.) **(Spa)**

[Plasma leukocyte elastase in septic processes. Experience in surgical patients] León G, et al. **Rev Med Chil** 1988 May; 116(5):449–54 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Reduced function of neutrophils during routine postoperative glucose infusion. Rasmussen A, et al. **Acta Chir Scand** 1988 Jul-Aug;154(7–8):429–33

Spinal cord injury in rats: inability of nimodipine or anti-neutrophil serum to improve spinal cord blood flow or neurologic status. Holtz A, et al. **Acta Neurol Scand** 1989 Jun;79(6):460–7

Sites of egress of inflammatory cells and horseradish peroxidase transport across the blood-brain barrier in a murine model of chronic relapsing experimental allergic encephalomyelitis. Lossinsky AS, et al.
Acta Neuropathol (Berl) 1989;78(4):359–71

Impaired microbial killing in two patients with defective degranulation of myeloperoxidase. Edwards SW, et al.
Acta Paediatr Hung 1988–89;29(1–2):101–4

Metabolic activation of human polymorphonuclear leukocytes by opsonized Haemophilus influenzae type b. Fleer A, et al. **Acta Paediatr Hung** 1988–89;29(1–2):131–5

Functional and biochemical activities of neutrophil granulocytes from patients with Hodgkin's disease. Kiss E, et al. **Acta Paediatr Hung** 1988–89;29(1–2):217–8

Gingival crevicular studies in patients with neutrophil dysfunction. Kowolik MJ, et al. **Acta Paediatr Hung** 1988–89;29(1–2):203–7

CGD associated with cytochrome B deficiency: granulocyte function tests 25 months after bone marrow transplantation. Manzionna MM, et al. **Acta Paediatr Hung** 1988–89; 29(1–2):229–32

Effects of serum opsonins and intravenous immunoglobulin on phagocytosis and intracellular killing of Staphylococcus saprophyticus by human granulocytes. Maródi L, et al.
Acta Paediatr Hung 1988–89;29(1–2):147–51

Increased neutrophil chemotaxis. A secondary phenomenon useful in the diagnosis and follow up of diseases with inflammatory component. Matzner Y, et al.
Acta Paediatr Hung 1988–89;29(1–2):191–5

Chemiluminescence of human neutrophils after interaction with group A streptococci opsonized with antibodies to streptococcal carbohydrate. Rüfenacht R, et al.
Acta Paediatr Hung 1988–89;29(1–2):125–30

Phagocytic cell function after administration of intravenous immunoglobulins in low birth weight neonates. Xanthou M, et al. **Acta Paediatr Hung** 1988–89;29(1–2):137–41

Molecular diversity of human leukocyte receptors. Koo CH, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989;19:191–4

Relationship between interleukin 1 (IL1), tumor necrosis factor (TNF) and a neutrophil attracting peptide (NAP-1). Oppenheim JJ, et al. **Agents Actions** 1989 Jan; 26(1–2):134–40

The relationship between phagocytic activity of polymorphonuclear leukocytes and mastitis in cattle. van der Vliet H, et al. **Agents Actions** 1989 Jan;26(1–2):211–2

Arachidonic acid products and the thoracic accumulation of neutrophils and platelets following i.v. antigen challenge of sensitised guinea-pig. Walker JR, et al.
Agents Actions 1989 Jan;26(1–2):99–102

Anti-neutrophil cytoplasmic antibodies associated with atrial myxoma [letter] Savige JA, et al. **Am J Med** 1988 Nov; 85(5):755–6

Effect of parathyroid hormone on random migration of human polymorphonuclear leukocytes. Doherty CC, et al.
Am J Nephrol 1988;8(3):212–9

Autoimmune responses in systemic vasculitis. Lockwood CM. **Am J Nephrol** 1989;9 Suppl 1:30–2

Protein synthesis dependent and independent mechanisms of neutrophil emigration. Different mechanisms of inflammation in rabbits induced by interleukin-1, tumor necrosis factor alpha or endotoxin versus leukocyte chemoattractants. Cybulsky MI, et al. **Am J Pathol** 1989 Jul;135(1):227–37

Neutrophil mobilization induced by complement fragments during experimental group B streptococcal (GBS) infection. Shigeoka AO, et al. **Am J Pathol** 1988 Dec; 133(3):623–9

Lymphokine production by blood or spleen mononuclear cells from patients with schistosomiasis mansoni. Dabes TM, et al. **Am J Trop Med Hyg** 1989 Mar;40(3):273–81

Alterations in bovine neutrophil function during the periparturient period. Kehrli ME Jr, et al.
Am J Vet Res 1989 Feb;50(2):207–14

Sources of variation introduced into a phagocytosis assay as a result of the isolation of neutrophils from bovine blood. Paape MJ, et al. **Am J Vet Res** 1988 Aug;49(8):1210–3

A method to detect rabbit neutrophil phagocytosis of Pasteurella multocida. Rush HG, et al. **Am J Vet Res** 1988 Aug;49(8):1415–8

Phagocytic and nitroblue tetrazolium reductive properties of mature and immature neutrophils and eosinophils from blood and bone marrow from cows. Silva ID, et al. **Am J Vet Res** 1989 May;50(5):778–81

In vitro function of bovine neutrophils against Actinomyces pyogenes. Watson ED. **Am J Vet Res** 1989 Apr;50(4):455–8

Neutrophil accumulation and structural changes in nonpulmonary organs after acute lung injury induced by phorbol myristate acetate. Mizer LA, et al. **Am Rev Respir Dis** 1989 Apr;139(4):1017–26

Effects of bovine colostrum, foal serum immunoglobulin concentration and intravenous plasma transfusion on chemiluminescence response of foal neutrophils. Leblanc MM, et al. **Anim Genet** 1988;19(4):435–45

Neutrophil function and humoral immunity in children with recurrent infections of the lower respiratory tract and chronic bronchial suppuration. Cazzola G, et al. **Ann Allergy** 1989 Sep;63(3):213–8

Studies of neutrophil chemotactic factor of anaphylaxis in metabisulfite sensitivity. Sprenger JD, et al. **Ann Allergy** 1989 Feb;62(2):117–21

Characterization of neutrophil agglutinins in primary autoimmune neutropenia of early childhood. Madyastha PR, et al. **Ann Clin Lab Sci** 1988 Sep–Oct;18(5):367–73

Neutrophil antigens and antibodies in the diagnosis of immune neutropenias. Madyastha PR, et al. **Ann Clin Lab Sci** 1989 May–Jun;19(3):146–54 (40 ref.)

Colony-stimulating factors and neutrophil migration [letter] Toner GC, et al. **Ann Intern Med** 1989 May 15; 110(10):846–7

Neutrophil response, serum opsonic activity, and precipitating antibodies in human infection with Actinobacillus hominis. Friis-Møller A, et al. **APMIS** 1988 Nov;96(11):1023–8

Engulfment of the Philadelphia strain of Legionella pneumophila within pseudopod coils in human phagocytes. Comparison with other Legionella strains and species. Rechnitzer C, et al. **APMIS** 1989 Feb;97(2):105–14

Anti neutrophil cytoplasm antibodies. Proceedings of the 1st international workshop on ANCA. Copenhagen, 1988. **APMIS Suppl** 1989;6:1–49

Constituents of the human neutrophil cytoplasm: methods for examination and methodological problems with special reference to the binding site of the anti-neutrophil cytoplasmic antibodies. Borregaard N, et al. **APMIS Suppl** 1989;6:10–1

Towards standard sera for the determination of anti-neutrophil cytoplasmic (ANCA) and anti-myeloperoxidase (aMPO) antibodies. Kallenberg CG, et al. **APMIS Suppl** 1989;6:14–5

Indirect immunofluorescence examination for IgG-ANCA in sera submitted for the 1st international workshop on ANCA, 1988. Rasmussen N, et al. **APMIS Suppl** 1989; 6:16–20

ELISA examination for IgG-ANCA in sera submitted for the 1st international workshop on ANCA. Rasmussen N, et al. **APMIS Suppl** 1989;6:21–2

Solid-phase assays for ANCA. Savage CO. **APMIS Suppl** 1989;6:23–4

IgA class anti-neutrophil cytoplasmic antibodies (IgA-ANCA) in primary IgA nephropathy. van den Wall Bake AW, et al. **APMIS Suppl** 1989;6:25–6

Anti-neutrophil cytoplasmic antibodies (ANCA): a historic review. Wiik A, et al. **APMIS Suppl** 1989;6:7 (3 ref.)

Delineation of a standard procedure for indirect immunofluorescence detection of ANCA. Wiik A. **APMIS Suppl** 1989;6:12–3

Studies of polymorphonuclear migration into psoriatic skin using a new in vivo method. Guillot B, et al. **Arch Dermatol Res** 1989;280(8):477–80

Antineutrophil cytoplasm antibodies in Kawasaki disease. Savage CO, et al. **Arch Dis Child** 1989 Mar;64(3):360–3

Inhibition of postpyrogenic increase of phagocytic and killing activity of neutrophils by nonsteroid antiinflammatory drugs. Dębowy J, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(3):295–301

Ability of peripheral blood neutrophils from patients with infectious bronchial asthma to engulf latex particles and reduce nitroblue tetrazolium. Matusiewicz R, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(1):55–9

The influence of aminophylline on human neutrophils—possible protection of lung from proteolytic injury. Nowak D, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(3):351–60

Phagocytosis and killing of Listeria by guinea pig macrophages and neutrophils. Rudnicka W, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(2):161–6

Reversal of neutropenia with methotrexate treatment in patients with Felty's syndrome. Correlation of response with neutrophil-reactive IgG. Fiechtner JJ, et al. **Arthritis Rheum** 1989 Feb;32(2):194–201

Influence of the surface area of different dialysis membranes on granulocyte adherence and superoxide generation. Paul JL, et al. **Artif Organs** 1988 Aug;12(4):341–4

Protein kinase C blockers and neutrophil receptors for leukotriene B4. O'Flaherty JT, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1456–60

Phagocytosis by guinea pig polymorphonuclear leukocytes of liposomes stabilized with polysaccharides. Atsuta Y, et al. **Biomater Artif Cells Artif Organs** 1989;17(2):125–35

Human neutrophil-mediated lysis of ovarian cancer cells. Lichtenstein A, et al. **Blood** 1989 Aug 1;74(2):805–9

Characterization of two monoclonal antibodies against cytochrome b558 of human neutrophils. Verhoeven AJ, et al. **Blood** 1989 May 1;73(6):1686–94

Sensitivity of locally recurrent rat mammary tumour cell lines to syngeneic polymorphonuclear cell, macrophage and natural killer cell cytolysis. Aeed PA, et al. **Br J Cancer** 1988 Dec;58(6):746–52

Renal biopsy and antineutrophil antibodies in the diagnosis and assessment of Wegener's granuloma. Harrison DJ, et al. **Br J Dis Chest** 1988 Oct;82(4):398–404

Serial study of phagocytic function in rat bovine serum albumin (BSA) nephritis. Kawasaki K, et al. **Br J Exp Pathol** 1988 Aug;69(4):505–13

Characterization of human neutrophil glycoproteins expressing the CD15 differentiation antigen (3-fucosyl-N-acetyllactosamine). Albrechtsen M, et al. **Br J Haematol** 1989 Jul;72(3):312–20

Comparative effect of rat and fetal calf serum on measurement of the natural tumoricidal activity of rat lymphocytes, macrophages and polymorphonuclear cells. Reisser D, et al. **Cancer Immunol Immunother** 1989; 28(1):34–6

Antitumor activity of murine neutrophils demonstrated by cytometric analysis. Ackermann MF, et al. **Cancer Res** 1989 Feb 1;49(3):528–32

Immunomodulating properties of newer cephalosporins: a preliminary classification. Labro M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):219–21

Wegener's granulomatosis presenting as acute respiratory failure with anti-neutrophil-cytoplasm antibodies. Lenclud C, et al. **Chest** 1989 Aug;96(2):345–7

Purification of crystal induced chemotactic factor from human neutrophils. Bhatt AK, et al. **Clin Biochem** 1988 Dec;21(6):341–5

Defective antibody-dependent tumour cell lysis by neutrophils from cancer patients. Dallegri F, et al. **Clin Exp Immunol** 1989 Jul;77(1):58–61

The effect of products from bronchoalveolar-derived neutrophils on oxidant production and phagocytic activity of alveolar macrophages. Donaldson K, et al. **Clin Exp Immunol** 1988 Dec;74(3):477–82

Different activation pathways involved in antibody-dependent and immune-complexes-triggered cytotoxicity mediated by neutrophils. Geffner JR, et al. **Clin Exp Immunol** 1988 Dec;74(3):471–6

Modulation of human neutrophilic granulocyte functions by recombinant human tumor necrosis factor and recombinant human lymphotoxin. Promotion of adherence, inhibition of chemotactic migration and superoxide anion release from adherent cells. Kownatzki E, et al. **Clin Exp Immunol** 1988 Oct;74(1):143–8

Anti-neutrophil nuclear antibody in ulcerative colitis, Crohn's disease and primary sclerosing cholangitis. Snook JA, et al. **Clin Exp Immunol** 1989 Apr;76(1):30–3

Effects of HLA-B27 positive and negative sera on migration of polymorphonuclear leukocytes in vitro. Repo H, et al. **Clin Exp Rheumatol** 1988 Jul–Sep;6(3):227–31

Defective polymorphonuclear chemotaxis in patients with Turner's syndrome (45,X). López-Osuna M, et al. **Clin Genet** 1988 Sep;34(3):165–71

Inhibition of neutrophil and monocyte functions by the monoclonal antibody TM2. Takeuchi A, et al. **Clin Immunol Immunopathol** 1988 Dec;49(3):439–49

Chemiluminescence response of polymorphonuclear leucocytes to serum-opsonized zymosan—a predictive parameter for infections and prognosis in multiple myeloma patients. Nagler A, et al. **Clin Lab Haematol** 1988; 10(4):365–75

Interactions of Neisseria gonorrhoeae with human neutrophils. Rest RF, et al. **Clin Microbiol Rev** 1989 Apr; 2 Suppl:S83–91 (136 ref.)

In vitro determination of phagocytosis and intracellular killing of Brucella melitensis by goat's polymorphonuclear phagocytes. Gallego MC, et al. **Comp Immunol Microbiol Infect Dis** 1989;12(1-2):9–15

Identification of two endogenous neutrophil-activating peptides in psoriatic skin and inflammatory cells: C5ades arg and NAP. Christophers E, et al. **Dermatologica** 1989; 179 Suppl 1:9–15

Characterization of isolated human skin mast cells: the effect of human anaphylatoxin and neutrophils on histamine release from human skin mast cells. Kubota Y, et al. **Dermatologica** 1989;179 Suppl 1:125

Equine neutrophil locomotion in response to Streptococcus zooepidemicus. Pycock JF, et al. **Equine Vet J** 1988 Nov; 20(6):448–50

Opsonins in uterine washings influencing in vitro activity of equine neutrophils. Watson ED. **Equine Vet J** 1988 Nov; 20(6):435–7

Effect of amoxycillin and clavulanic acid, alone and in combination, on human polymorphonuclear leukocyte function against Staphylococcus aureus. Pascual A, et al. **Eur J Clin Microbiol Infect Dis** 1989 Apr;8(4):277–81

Monoclonal antibody 5.5 reacts with p8,14, a myeloid molecule associated with some vascular endothelium. Hogg N, et al. **Eur J Immunol** 1989 Jun;19(6):1053–61

Echinococcus multilocularis: inhibition of murine neutrophil and macrophage chemotaxis. Alkarmi T, et al. **Exp Parasitol** 1989 Jul;69(1):16–22

Iron depletion alters surface-associated properties of Staphylococcus aureus and its association to human neutrophils in chemiluminescence. Domingue PA, et al. **FEMS Microbiol Lett** 1989 Jun;50(3):265–8

The activity of neutrophil myeloperoxidase in patients with lung carcinoma. Dąbrowska M, et al. **Folia Haematol (Leipz)** 1988;115(5):613–9

Increased neutrophil receptors for and response to the proinflammatory bacterial peptide formyl-methionyl-leucyl-phenylalanine in Crohn's disease. Anton PA, et al. **Gastroenterology** 1989 Jul;97(1):20–8

Interaction of campylobacter species with antibody, complement and phagocytes. Bernatowska E, et al. **Gut** 1989 Jul;30(7):906–11

Neutrophil defects are a prognostic factor in acute myeloid leukemia. Mazzone A, et al. **Haematologica (Pavia)** 1988 Jul–Aug;73(4):293–6

Monoclonal antibody to the crystal induced chemotactic factor from human neutrophils detects similar immunoreactive and biologically active protein in promyelocytic HL-60 cells. Bhatt AK, et al. **Hybridoma** 1989 Jun;8(3):323–30

Functional properties of a novel neutrophil chemotactic factor derived from human monocytes. Kownatzki E, et al. **Immunobiology** 1988 Sep;177(4–5):352–62

Activation of human polymorphonuclear neutrophilic granulocytes by immuno-modulating cytokines: an ultrastructural study. Zeck-Kapp G, et al. **Immunobiology** 1989 Mar;179(1):44–55

Tumour necrosis factors modulate the affinity state of the leukotriene B4 receptor on human neutrophils. Brom J, et al. **Immunology** 1988 Dec;65(4):647–9

Regulation of human neutrophil type 3 complement receptor (iC3b receptor) expression during phagocytosis of Staphylococcus aureus and Escherichia coli. Gordon DL, et al. **Immunology** 1989 Aug;67(4):460–5

Interaction of human eosinophils or neutrophils with Trypanosoma cruzi in vitro causes bystander cardiac cell damage. Molina HA, et al. **Immunology** 1989 Feb; 66(2):289–95

Neutrophil function tests in disseminated malignancies. Gomathinayagam D, et al. **Indian J Pathol Microbiol** 1987 Oct;30(4):397–400

Augmentation of the neutrophil response to Naegleria fowleri by tumor necrosis factor alpha. Ferrante A. **Infect Immun** 1989 Oct;57(10):3110–5

Tumor necrosis factor alpha potentiates neutrophil antimicrobial activity: increased fungicidal activity against Torulopsis glabrata and Candida albicans and associated increases in oxygen radical production and lysosomal enzyme release. Ferrante A. **Infect Immun** 1989 Jul; 57(7):2115–22

In vivo activation of peripheral blood polymorphonuclear neutrophils by gamma interferon results in enhanced fungal killing. Morrison CJ, et al. **Infect Immun** 1989 Oct; 57(10):2953–8

Aggregated human colostral sIgA stimulates delayed, non-complement-dependent, NBT reduction by human neutrophils. Bullock WW, et al. **Inflammation** 1989 Feb; 13(1):67–78

Stimulation of human neutrophils, monocytes, and platelets by modified C-reactive protein (CRP) expressing a neoantigenic specificity. Potempa LA, et al. **Inflammation** 1988 Aug;12(4):391–405

Influence of monoclonal IgM cold agglutinins on adhesiveness, phagocytosis, and bactericidal activity on human granulocytes and monocytes. Pruzanski W, et al. **Inflammation** 1989 Apr;13(2):201–9

Mast cell histamine-releasing activity from stimulated rat neutrophils. Cochrane DE, et al. **Int Arch Allergy Appl Immunol** 1988;87(3):269–74

Anti-neutrophil cytoplasmic antibodies (ANCA) in Wegener's granulomatosis [letter] Bambery P, et al. **Int J Artif Organs** 1989 Jan;12(1):68

Polymorphonuclear leukocyte functions in psoriasis. Goihman-Yahr M, et al. **Int J Dermatol** 1988 Nov; 27(9):633–7

Treatment of malignant ascites and pleurisy by a streptococcal preparation OK-432 with fresh frozen plasma—a mechanism of polymorphonuclear leukocyte (PMN) accumulation. Kato H, et al. **Int J Immunopharmacol** 1989;11(2):117–28

Enhanced susceptibility of gram-negative bacteria to phagocytic killing by human polymorphonuclear leucocytes after brief exposure to aztreonam. Pruul H, et al. **J Antimicrob Chemother** 1988 Nov;22(5):675–86

Rapid flow cytometric studies of Borrelia burgdorferi phagocytosis by human polymorphonuclear leukocytes. Banfi E, et al. **J Appl Bacteriol** 1989 Jul;67(1):37–45

Three states for the formyl peptide receptor on intact cells. Sklar LA, et al. **J Biol Chem** 1989 May 25;264(15):8483–6

Effect of a new fluorinated quinolone (ofloxacin) on the chemiluminescence of phagocytosing human neutrophils. Aquilini D, et al. **J Biolumin Chemilumin** 1989 Apr–Jun; 3(2):85–7

The behavioural repertoire of neutrophils requires multiple signal transduction pathways. Lackie JM. **J Cell Sci** 1988 Apr;89 (Pt 4):449–52 (20 ref.)

Deficiency in immune complex uptake by chronic granulomatous disease neutrophils. Petty HR, et al. **J Cell Sci** 1988 Jul;90 (Pt 3):425–32

Surface events in polymorphonuclear leucocyte activation:

insights from a hydrophobic membrane antigen that triggers the respiratory burst. Rosen H, et al. **J Cell Sci** 1987 Dec;88 (Pt 5):591–601

Impaired neutrophil killing in a patient with defective degranulation of myeloperoxidase. Edwards SW, et al. **J Clin Lab Immunol** 1988 Apr;25(4):201–6

Human polymorphonuclear leukocyte activating factor isolated from Aleurites Fordii Hemsl. (Euphorbiaceae) seed. Shichijo S, et al. **J Clin Lab Immunol** 1988 Dec; 27(4):183–9

Monoclonal antibodies: modulation of cellular activities and identification of heterogeneity of functional response in human neutrophils. Traniello S, et al. **J Clin Lab Immunol** 1988 Jul;26(3):135–9

Effects of growth temperature on the ingestion and killing of clinical isolates of Listeria monocytogenes by human neutrophils. Stecha PF, et al. **J Clin Microbiol** 1989 Jul; 27(7):1572–6

Periparturient hypocalcemia in cows: effects on peripheral blood neutrophil and lymphocyte function. Kehrli ME Jr, et al. **J Dairy Sci** 1989 May;72(5):1188–96

Depression of polymorphonuclear leukocyte functions by purified influenza virus hemagglutinin and sialic acid–binding lectins. Cassidy LF, et al. **J Immunol** 1989 Jun 15;142(12):4401–6

Polymorphonuclear leukocytes cap a derivative of wheat germ agglutinin upon stimulation with formyl peptide and C5a but not leukotriene B4. Kurrasch R, et al. **J Immunol** 1989 Sep 15;143(6):1969–73

Genomic structure of the human monocyte-derived neutrophil chemotactic factor IL-8. Mukaida N, et al. **J Immunol** 1989 Aug 15;143(4):1366–71

The cell surface glycoprotein Mac-1 (CD11b/CD18) mediates neutrophil adhesion and modulates degranulation independently of its quantitative cell surface expression. Schleiffenbaum B, et al. **J Immunol** 1989 May 15; 142(10):3537–45

Suppression of lymphokine-activated killer induction by neutrophils. Shau HY, et al. **J Immunol** 1988 Dec 15; 141(12):4395–402

Inhibition of lymphokine-activated killer– and natural killer–mediated cytotoxicities by neutrophils. Shau HY, et al. **J Immunol** 1989 Aug 1;143(3):1066–72

CD15 monoclonal antibodies react with a phosphotyrosine-containing protein on the surface of human neutrophils. Skubitz KM, et al. **J Immunol** 1988 Dec 15;141(12):4318–23

Production and characterization of monoclonal antibodies against the novel neutrophil activating peptide NAP/IL-8. Sticherling M, et al. **J Immunol** 1989 Sep 1;143(5):1628–34

Neutrophils and mast cells. Comparison of neutrophil-derived histamine-releasing activity with other histamine-releasing factors. White MV, et al. **J Immunol** 1988 Nov 15;141(10):3575–83

Evaluation of a fluorochrome assay for assessing the bactericidal activity of neutrophils in human phagocyte dysfunctions. Bellinati-Pires R, et al. **J Immunol Methods** 1989 May 12;119(2):189–96

Detection and quantitation of anti-neutrophil cytoplasm antibodies in Wegener's granulomatosis by ELISA using affinity-purified antigen. Lüdemann J, et al. **J Immunol Methods** 1988 Nov 10;114(1–2):167–74

Phagocytosis of opsonized fluorescent microspheres by human neutrophils. A two-color flow cytometric method for the determination of attachment and ingestion. Ogle JD, et al. **J Immunol Methods** 1988 Nov 25;115(1):17–29

Impaired neutrophil function in patients with AIDS or AIDS-related complex: a comprehensive evaluation. Ellis M, et al. **J Infect Dis** 1988 Dec;158(6):1268–76

Role of complement-derived and bacterial formylpeptide chemotactic factors in the in vivo migration of neutrophils in experimental Escherichia coli pyelonephritis in rats. Meylan PR, et al. **J Infect Dis** 1989 May;159(5):959–65

Circulating anti-neutrophil cytoplasm antibodies in patients with rapidly progressive glomerulonephritis and extracapillary proliferation. Nässberger L, et al. **J Intern Med** 1989 Mar;225(3):191–6

Coagulation increases neutrophil CR1 and CR3 expression: primary role for platelet-derived growth factor. Garcia-Aguilar J, et al. **J Lab Clin Med** 1989 Sep; 114(3):312–20

Wegener's granulomatosis: false positive anti-neutrophil cytoplasmic antibody test. Mains B. **J Laryngol Otol** 1989 May;103(5):524–5

Comparison of methods for assessing chemotaxis of monocytes and polymorphonuclear leukocytes isolated from patients with AIDS or AIDS-related conditions. Martin LS, et al. **J Leukoc Biol** 1988 Nov;44(5):361–6

Inhibitory effects of human neutrophil granules and oxygen radicals on adherence of Candida albicans. Vuddhakul V, et al. **J Med Microbiol** 1989 Jul;29(3):181–7

Phagocytosis and ingestion of influenza virus by human polymorphonuclear leucocytes in vitro: electronmicroscopy studies. Yamamoto K, et al. **J Med Microbiol** 1989 Mar;28(3):191–8

Autoantibodies to neutrophil cytoplasmic antigens in systemic vasculitis have the same target specificity. Harrison DJ, et al. **J Pathol** 1989 Jul;158(3):233–8

Very rapid assay of polymorphonuclear leukocyte chemotaxis in vitro. Watanabe K, et al. **J Pharmacol Methods** 1989 Aug;22(1):13–8

A neutrophil-derived antiviral protein: induction requirements and biological properties. Ohmann HB, et al. **J Virol** 1989 May;63(5):1916–23

Increased leukotriene B4 synthesis in polymorphonuclear leukocytes of smokers. Schlosser K, et al. **Klin Wochenschr** 1988;66 Suppl 11:120–4

Toxicity of phorbol myristate acetate–stimulated polymorphonuclear neutrophils against rat hepatocytes. Demonstration and mechanism. Guigui B, et al. **Lab Invest** 1988 Dec;59(6):831–7

Anti-neutrophil cytoplasmic antibody assay in diagnosis of recurrent subglottic stenosis [letter] Hoare TJ, et al. **Lancet** 1988 Dec 10;2(8624):1360

Anti-neutrophil cytoplasmic antibody and subglottic stenosis [letter] Michaels L. **Lancet** 1989 Jan 7;1(8628):53–4

Antineutrophil cytoplasmic antibodies [letter] Thompson RA, et al. **Lancet** 1989 Mar 25;1(8639):670–1

Neutrophil chemotaxis, phagocytosis and parameters of reactive oxygen species in human aging: cross-sectional and longitudinal studies. Niwa Y, et al. **Life Sci** 1989; 44(22):1655–64

The visualization of receptors for the Fc portion of the IgG molecule on human neutrophil leukocytes. Sajnani AN, et al. **Life Sci** 1974 Jun 16;14(12):2427–30

Neutrophil blood count in relation with other parameters during sequential hemodialysis. Kalaitzidis K, et al. **Life Support Syst** 1983;1 Suppl 1:195–8

Polymorphonuclear leukocyte activation during hemodialysis: a chemiluminescence study. Mori R, et al. **Life Support Syst** 1983;1 Suppl 1:154–7

Serodiagnosis of Wegener's granulomatosis: pathobiologic and clinical implications. Cross CE, et al. **Mayo Clin Proc** 1989 Jan;64(1):119–22

In vitro and in vivo effects produced by the immunomodulating agent RU 41740 on human polymorphonuclear leukocytes in the elderly. el Abbouyi A, et al. **Mech Ageing Dev** 1988 Sep;44(3):215–29

Leukotriene B4 receptors on rat and human neutrophil membranes. Ford-Hutchinson AW, et al. **Methods Enzymol** 1988;163:340–3

Purified human and recombinant murine interleukin-1 alpha induced accumulation of inflammatory peritoneal neutrophils and mononuclear phagocytes: possible contributions to antibacterial resistance. Czuprynski CJ, et al. **Microb Pathog** 1987 Nov;3(5):377–86

Neutrophil-macrophage cooperation in the host defence against mycobacterial infections. Silva MT, et al. **Microb Pathog** 1989 May;6(5):369–80

Priming activity for chemiluminescence reaction of PMN in the culture supernatant of streptococcal preparation (OK-432)-stimulated spleen cells. Fukase Y, et al. **Microbiol Immunol** 1988;32(6):621–33

Luminol-dependent chemiluminescence in antibody-sensitized neutrophils stimulated with protein A-bearing staphylococci. Nishihara S, et al. **Microbiol Immunol** 1988;32(5):535–40

Three forms of monocyte-derived neutrophil chemotactic factor (MDNCF) distinguished by different lengths of the amino-terminal sequence. Yoshimura T, et al. **Mol Immunol** 1989 Jan;26(1):87–93

Digestion of killed Paracoccidioides brasiliensis by neutrophils. Goihman-Yahr M, et al. **Mycopathologia** 1989 Apr;106(1):53–8

Anti-neutrophil cytoplasmic autoantibodies [letter] Specks U, et al. **N Engl J Med** 1988 Nov 24;319(21):1416–7

Enhancement of neutrophil function for treatment of neonatal infections. Krause PJ, et al. **Pediatr Infect Dis J** 1989 Jun; 8(6):382–9 (105 ref.)

Fluorescent cytometric analysis of polymorphonuclear leukocytes in Chediak-Higashi syndrome: diminished C3bi receptor expression (OKM1) with normal granular cell density. Cairo MS, et al. **Pediatr Res** 1988 Dec;24(6):673–6

Heterogeneity of Fc receptor expression in chemotaxis and adherence of neonatal neutrophils. Masuda K, et al. **Pediatr Res** 1989 Jan;25(1):6–10

cDNA sequence for the alpha M subunit of the human neutrophil adherence receptor indicates homology to integrin alpha subunits. Hickstein DD, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):257–61

Activation of the neutrophil. Sha'afi RI, et al. **Prog Allergy** 1988;42:1–64 (362 ref.)

Essential fatty acid deficiency inhibits early but not late leukocyte infiltration in rabbit myocardial infarcts. Freed MS, et al. **Prostaglandins** 1989 Jul;38(1):33–44

Neutrophilia and lymphopenia in major mood disorders. Darko DF, et al. **Psychiatry Res** 1988 Sep;25(3):243–51

Antibodies to components of neutrophil cytoplasm: a new diagnostic tool in patients with Wegener's granulomatosis and systemic vasculitis. Parlevliet KJ, et al. **Q J Med** 1988 Jan;66(249):55–63

Pathogenicity of two strains of Streptococcus uberis infused into lactating and non-lactating bovine mammary glands. Hill AW. **Res Vet Sci** 1988 Nov;45(3):400–4

Relative importance of Salmonella-specific antibody isotypes in phagocytosis of Salmonella typhimurium by ovine mammary neutrophils. Mukkur TK, et al. **Res Vet Sci** 1989 Mar;46(2):153–9

Human neutrophil antimicrobial activity. Thomas EL, et al. **Rev Infect Dis** 1988 Jul–Aug;10 Suppl 2:S450–6 (50 ref.)

Felty syndrome: autoimmune neutropenia or immune-complex-mediated disease? Breedveld FC, et al. **Rheumatol Int** 1985;5(6):253–8

Spontaneous and induced immunoglobulin synthesis and anti-neutrophil cytoplasm antibodies in Wegener's granulomatosis: relation to leukocyte subpopulations in blood and active lesions. Rasmussen N, et al. **Rheumatol Int** 1988;8(4):153–8

Circulating auto-antibodies to neutrophil cytoplasmic antigens in vasculitis. A report of 3 cases. Pudifin DJ, et al. **S Afr Med J** 1989 Jan 21;75(2):73–5

Antineutrophil cytoplasmic auto-antibodies in the diagnosis and management of vasculitis [editorial] Ress S. **S Afr Med J** 1989 Jan 21;75(2):41

Inhibition of neutrophil chemotaxis by a monoclonal antibody (TM316). Shimizu A, et al. **Scand J Immunol** 1988 Dec; 28(6):675–85

Defective phagocytosis, decreased tumour necrosis factor-alpha production, and lymphocyte hyporesponsiveness predispose patients with systemic lupus erythematosus to infections. Yu CL, et al. **Scand J Rheumatol** 1989;18(2):97–105

Neutrophil Mac-1 and MEL-14 adhesion proteins inversely regulated by chemotactic factors. Kishimoto TK, et al. **Science** 1989 Sep 15;245(4923):1238–41

Antibodies to neutrophil cytoplasmic antigens in Wegener's granulomatosis and other conditions. Harrison DJ, et al. **Thorax** 1989 May;44(5):373–7

Significance of antibodies to cytoplasmic components of neutrophils. Specks U, et al. **Thorax** 1989 May;44(5):369–70 (18 ref.)

Airway hyperresponsiveness after endotoxin inhalation depends on leukocyte infiltration. Horie T, et al. **Tohoku J Exp Med** 1988 Oct;156(2):109–20

Neutrophil-specific antigens and gene frequencies in Japanese [letter] Ohto H, et al. **Transfusion** 1989 Sep; 29(7):654

Reduction of degranulation of polymorphonuclear leukocytes by immunosuppression in patients following cadaveric renal transplantation. Hörl WH, et al. **Transplantation** 1989 Jan;47(1):144–8

Wegener's granulomatosis and autoantibodies to neutrophil antigens. McCluskey DR, et al. **Ulster Med J** 1988 Oct; 57(2):137–40

Chemotactic and chemokinetic activity of Streptococcus faecalis culture supernatant for equine neutrophils. Blancquaert AM, et al. **Vet Immunol Immunopathol** 1988 Oct;19(3–4):285–97

Effects of in vitro and in vivo administration of recombinant bovine interferon-gamma on bovine neutrophil responses to Brucella abortus. Canning PC, et al. **Vet Immunol Immunopathol** 1989 Jan;20(2):119–33

In vivo activation of equine eosinophils and neutrophils by experimental Strongylus vulgaris infections. Dennis VA, et al. **Vet Immunol Immunopathol** 1988 Dec;20(1):61–74

FeLV-induced immunosuppression through alterations in signal transduction: down regulation of protein kinase C. Dezzutti CS, et al. **Vet Immunol Immunopathol** 1989 May; 21(1):55–67

In vivo effects of a thymosin alpha 1–containing colostral whey product on neutrophils and lymphocytes from lactating cows without and with experimentally induced Staphylococcus aureus mastitis. Kehrli ME Jr, et al. **Vet Immunol Immunopathol** 1989 Jan;20(2):149–63

Biological variation in random and leukotriene B4–directed migration of canine neutrophils. Krogsgaard Thomsen M, et al. **Vet Immunol Immunopathol** 1989 Jun;21(2):219–24

Polymorphonuclear leukocyte function in HIV-1–infected chimpanzees. Lafrado LJ, et al. **Vet Immunol Immunopathol** 1989 May;21(1):3–12

Immunodeficiency in latent feline leukemia virus infections. Lafrado LJ, et al. **Vet Immunol Immunopathol** 1989 May; 21(1):39–46 (37 ref.)

Preincubation of bovine blood neutrophils with bovine herpesvirus-1 does not impair neutrophil interaction with Pasteurella haemolytica A1 in vitro. Noel EJ, et al. **Vet Immunol Immunopathol** 1988 Oct;19(3–4):273–84

Resistance of some capsular serotype D strains of Pasteurella multocida to rabbit polymorphonuclear neutrophil phagocytosis. Rush HG. **Vet Microbiol** 1989 May; 20(1):79–87

Neutrophil-induced erythrocyte injury: a potential cause of erythrocyte destruction in the anemia associated with inflammatory disease. Weiss DJ, et al. **Vet Pathol** 1988 Nov; 25(6):450–5

Modulation of the migration and chemotaxis of PMN cells by hyaluronic acid. Partsch G, et al. **Z Rheumatol** 1989 May-Jun;48(3):123–8

Enhancement of neutrophil adherence to Toxocara canis larvae by the C3 component of complement and IgG antibodies. Huwer M, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Jan; 270(3):418–23

Quantitative assessment of human neutrophil chemiluminescence induced by opsonized Escherichia coli K-12. Jungi TW, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Jan; 270(3):406–17

In vitro influence of Mycoplasma species on the stimulation of human polymorphonuclear granulocytes. Krausse R, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):228–36

Investigations on the opsonin-dependent interaction of Klebsiella bacteria and human polymorphonuclear leukocytes. Przondo-Mordarska A, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov;

270(1-2):252-9
Effect of ketone bodies on the phagocytic activity of bovine milk macrophages and polymorphonuclear leukocytes. Kluciński W, et al. **Zentralbl Veterinarmed [A]** 1988 Sep; 35(8):632-9
Phagocytosis and intracellular killing of Staphylococcus aureus by bovine blood polymorphonuclear leukocytes after migration in vitro. Niemialtowski M, et al. **Zentralbl Veterinarmed [B]** 1989 Mar;36(2):154-6
Alterations in neutrophil phagocytosis and lymphocyte blastogenesis in dairy cows around parturition. Saad AM, et al. **Zentralbl Veterinarmed [B]** 1989 Jul;36(5):337-45
Effects of exogenous estrogen administration to ovariectomized cows on the blood and milk-leukocyte counts and -neutrophil phagocytosis measured by flow cytometry. Saad AM, et al. **Zentralbl Veterinarmed [B]** 1988 Nov;35(9):654-63
[Anti-cytoplasmic antibodies of neutrophil granulocytes in systemic vasculitis] Brugier JC, et al. **Presse Med** 1989 Feb 11;18(5):225-6 (Eng. Abstr.) (Fre)
[Fc gamma receptors of polymorphonuclear neutrophils. A study of the clinical and biological correlations in patients with rheumatoid polyarthritis] Le Goff P, et al. **Rev Rhum Mal Osteoartic** 1988 May;55(7):545-9 (Fre)
[Diagnostic significance of antineutrophil cytoplasmic antibodies in Wegener's granulomatosis and related disease pictures] Andrassy K, et al. **Dtsch Med Wochenschr** 1989 Jan 6;114(1):23-6 (16 ref.) (Ger)
[Regulatory factors of the psoriatic skin reaction] Christophers E. **Hautarzt** 1989 Jul;40(7):456-60 (44 ref.) (Ger)
[Lymphocyte transformation test following stimulation with a protein factor from neutrophilic granulocytes (PMNL) in psoriasis patients] Ruszczak Z, et al. **Hautarzt** 1988 Dec; 39(12):787-90 (Eng. Abstr.) (Ger)
[The modification of phagocytosis by different K1 capsule preparations of Escherichia coli] Sokolowska-Köhler W, et al. **J Basic Microbiol** 1989;29(1):49-54 (Eng. Abstr.) (Ger)
[Antibodies, clinical and hematologic findings in immunoneutropenias] Neppert J, et al. **Med Klin** 1989 Jan 15;84(1):9-14, 64 (Eng. Abstr.) (Ger)
[Polymorphonuclear leukocyte elastase in the cerebrospinal fluid in the diagnosis of acute inflammatory central nervous system diseases] Stöffler A, et al. **Nervenarzt** 1989 Jul; 60(7):420-4 (Ger)
[Phagocytic activity of neutrophilic granulocytes in neonatal hyperbilirubinemia before and following phototherapy] Leipe S, et al. **Padiatr Grenzgeb** 1988;27(5):347-58 (Eng. Abstr.) (Ger)
[Oxygen radical production of alveolar inflammatory cells in sarcoidosis and idiopathic lung fibrosis] Strausz J, et al. **Pneumologie** 1989 Aug;43(8):440-5 (Eng. Abstr.) (Ger)
[Phagocytic reactivity of granulocytes in the peripheral blood of patients with multiple sclerosis and normal probands] Lehmitz R, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Jan;41(1):50-3 (Eng. Abstr.) (Ger)
[Wegener's granulomatosis and autoantibodies against cytoplasmic granules of neutrophils] Joller-Jemelka HI, et al. **Schweiz Med Wochenschr** 1988 Aug 20;118(33):1163-8 (Eng. Abstr.) (Ger)
[Neutrophil defense against bovine uterine infections] Morris TH. **Tierarztl Prax** 1989;Suppl 4:12-3 (Eng. Abstr.) (Ger)
[Humoral and cellular changes of non-specific immune response following severe trauma] Regel G, et al. **Unfallchirurg** 1989 Jul;92(7):314-20 (Eng. Abstr.) (Ger)
[The practicality of an NBT test] Krause B, et al. **Z Med Lab Diagn** 1989;30(4):246-8 (Ger)
[Defects in opsonization activity of the serum of patients with chronic arthritis] Böhm U, et al. **Z Rheumatol** 1988 May-Jun;47(3):161-5 (Eng. Abstr.) (Ger)
[Relationship between chemotaxis and surface antigen of neutrophils] Takeuchi A, et al. **Arerugi** 1989 Jan;38(1):31-5 (Eng. Abstr.) (Jpn)
[Activation of neutrophil function by MDP-Lys(L 18)] Hirota M, et al. **Gan To Kagaku Ryoho** 1989 Feb; 16(2):219-24 (Eng. Abstr.) (Jpn)
[A study of neutrophil functions in patients with chronic respiratory tract diseases] Yamaguchi T, et al. **Kansenshogaku Zasshi** 1989 Apr;63(4):369-75 (Eng. Abstr.) (Jpn)
[Antitumor activity of neutrophils induced by a nonspecific immunopotentiator OK-432. III. Experimental study using human peripheral neutrophils] Umemoto T, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jul 20;23(7):1518-24 (Eng. Abstr.) (Jpn)
[Antitumor activity of neutrophils induced by a nonspecific immunopotentiator OK-432. I. Experimental study using a rat model of malignant ascites] Umemoto T, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jun 20;23(6):1229-35 (Eng. Abstr.) (Jpn)
[Antitumor activity of neutrophils induced by a nonspecific immunopotentiator OK-432. II. Experimental study using human malignant ascites] Umemoto T, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jul 20;23(7):1512-7 (Eng. Abstr.) (Jpn)
[Neutrophil chemiluminescence in pneumoconiosis] Saburi Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jan; 27(1):57-63 (Eng. Abstr.) (Jpn)
[Synergism between defence mechanisms and chemotherapy] Machida T, et al. **Nippon Saikingaku Zasshi** 1988 Nov; 43(6):971-80 (43 ref.) (Jpn)
[Role of phagocytosis by PMN and macrophages in bio-defense] Nomoto K. **Nippon Saikingaku Zasshi** 1988 Sep;43(5):899-910 (101 ref.) (Jpn)
[Myelodysplastic syndrome with granulocyte function abnormalities resulted in intractable cutaneous infections] Yamane T, et al. **Rinsho Ketsueki** 1988 Jul;29(7):1088-92 (Eng. Abstr.) (Jpn)
[Phagocytosis-stimulating factor (PSF) produced by polymorphonuclear neutrophils] Ishibashi Y, et al. **Seikagaku** 1989 Jan;61(1):21-6 (Jpn)
[Selected indicators of immunity in patients with chronic osteomyelitis] Pyzio A, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(4):313-7 (Eng. Abstr.) (Pol)
[Evaluation of the phagocytic activity of peripheral blood neutrophils in patients with hyperthyroidism] Hrycek A, et al. **Endokrynol Pol** 1989;40(1):15-24 (Eng. Abstr.) (Pol)
[Chemiluminescence as a method of evaluating phagocytic activity] Garliński P, et al. **Pneumonol Pol** 1988 Jul; 56(7):336-9 (18 ref.) (Eng. Abstr.) (Pol)
[Nonspecific immunologic response of the host to parasitic infections] Golińska Z. **Wiad Parazytol** 1988;34(4-6):485-95 (42 ref.) (Eng. Abstr.) (Pol)
[Prognosis of suppurative-septic puerperal complications based on indicators of nonspecific body resistance in pregnant women] Dobrovol'skaia IA. **Akush Ginekol (Mosk)** 1988 Sep;(9):18-20 (Rus)
[Structural bases of the decrease in nonspecific antibacterial resistance of the body, related to the functioning of the neutrophil system] Galankin VN, et al. **Arkh Patol** 1989; 51(3):49-54 (Eng. Abstr.) (Rus)
[Problems of the current theory of polymorphonuclear leukocytes] Pal'tsyn AA. **Arkh Patol** 1988;50(8):85-90 (70 ref.) (Eng. Abstr.) (Rus)
[Electron-radioautographic study of phagocytosis of Pseudomonas aeruginosa by neutrophils] Pal'tsyn AA, et al. **Arkh Patol** 1989;51(5):12-8 (Eng. Abstr.) (Rus)
[Endotoxin and the polymorphonuclear leukocyte system] Permiakov NK, et al. **Arkh Patol** 1989;51(5):3-11 (71 ref.) (Eng. Abstr.) (Rus)
[Effect of neutrophilokines on the immune response in mice] Dolgushin II, et al. **Biull Eksp Biol Med** 1988 Sep; 106(9):330-1 (Eng. Abstr.) (Rus)
[Cytostatic action of the peritoneal cells of Syrian hamsters on transformed cells] Lavnikova NA, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):333-5 (Eng. Abstr.) (Rus)
[Radioautographic demonstration of the intracellular and extracellular bactericidal action of the neutrophils] Pal'tsyn AA, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):621-3 (Eng. Abstr.) (Rus)
[Proliferative activity of normal, transformed and tumor cells in in vitro contact with Syrian hamster neutrophils] Burdelia LG. **Eksp Onkol** 1988;10(6):42-4 (Eng. Abstr.) (Rus)
[Secretion of type-E prostaglandin by tumor cells of different degrees of malignancy when in contact with effectors of natural resistance] Kliuchareva TE, et al. **Eksp Onkol** 1989; 11(1):53-6 (Eng. Abstr.) (Rus)
[Basic principles of protective reactions of phagocytic cells of the respiratory tract to deposition of cytotoxic dust particles and its regulation] Privalova LI. **Gig Sanit** 1989 Mar;(3):28-31 (Eng. Abstr.) (Rus)
[Use of cytochemical methods for evaluating body resistance of laboratory animals] Venglinskaia EA, et al. **Gig Sanit** 1988 Oct;(10):60-1 (Rus)
[Histamine-related reactions in patients with byssinosis] Grishina TI, et al. **Gig Tr Prof Zabol** 1989;(4):22-4 (Eng. Abstr.) (Rus)
[Opsonic and anti-opsonic effects of the synovial fluid in patients with rheumatoid arthritis based on its effect on the complement-dependent adhesion of neutrophils] Salikhov IG, et al. **Lab Delo** 1989;(2):9-12 (Eng. Abstr.) (Rus)
[Study of latex-induced luminol-dependent chemiluminescence of neutrophils] Zurochka AV, et al. **Lab Delo** 1989;(3):32-6 (Eng. Abstr.) (Rus)
[The significance of changes in neutrophil reactivity in the clinical picture of chronic liver diseases in children] Gorbunova IV, et al. **Pediatriia** 1988;(6):19-23 (Eng. Abstr.) (Rus)
[Clinical value of determining spontaneous chemiluminescence of neutrophils in young children with meningococcal infection] Susanova VF, et al. **Pediatriia** 1989;(7):40-3 (Eng. Abstr.) (Rus)
[Phagocytic activity of neutrophils in children with positive reactions to tuberculin] Skliarov SD, et al. **Probl Tuberk** 1988;(10):69-70 (Rus)
[The role of neutrophils in the pathogenesis of rheumatoid arthritis and their changes as affected by anti-rheumatic agents] Malinovskaia EI. **Revmatologiia (Moskva)** 1988 Apr-Jun;(2):63-8 (98 ref.) (Rus)
[Functional activity of neutrophils and lymphocytes in hypertension] Ananchenko VG, et al. **Sov Med** 1988; (7):32-5 (Eng. Abstr.) (Rus)
[Functional activity of blood phagocytes in food poisoning] Chekalina KI, et al. **Sov Med** 1989;(2):10-3 (Eng. Abstr.) (Rus)
[Diagnostic possibilities of a test of blood neutrophil damage in various forms of yersiniosis in man] Malov IV, et al. **Vestn Akad Med Nauk SSSR** 1989;(6):65-7 (Rus)
[Phagocytic activity of leukocytes in syphilis] Kapkaev RA, et al. **Vestn Dermatol Venerol** 1988;(7):69-73 (Eng. Abstr.) (Rus)
[Neutrophil granulocyte function in patients with malignant neoplasms] Cherdyntseva NV, et al. **Vopr Onkol** 1989; 35(4):429-33 (Eng. Abstr.) (Rus)
[Opsonic cooperation in the neutrophil phagocytosis system in acute myeloblastic leukemia] Guseva SA. **Vrach Delo** 1989 Jan;(1):58-61 (Eng. Abstr.) (Rus)
[The mutagenic effect of polymorphonuclear leukocytes on Yersinia pestis] Atchabarov BB, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Apr;(4):10-4 (Eng. Abstr.) (Rus)
[The neutrophil receptor apparatus in typhoid fever] Rashidova RA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 May;(5):60-5 (Eng. Abstr.) (Rus)
[Evaluation of lymphocyte cooperative interaction with neutrophils by the stimulation of lymphokine production in erysipelatous inflammation] Tsol IG. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Oct;(10):59-64 (Eng. Abstr.) (Rus)
[Age-dependent effect of non-steroidal anti-inflammatory agents on the phagocytic activity of leukocytes in mice] Olekšáková T, et al. **Bratisl Lek Listy** 1989 Mar;90(3):180-5 (Eng. Abstr.) (Slo)
[Anti-neutrophil cytoplasm antibody as a new serologic marker] Nässberger L, et al. **Lakartidningen** 1989 Mar 22; 86(12):1064-7 (Swe)

METABOLISM

Effect of lymphokines on bioluminescence activity of polymorphonuclear granulocytes. Molnár I, et al. **Acta Paediatr Hung** 1988-89;29(1-2):113-4
The role of cationic transport in the respiratory burst activation in granulocytes. Szabó I, et al. **Acta Paediatr Hung** 1988-89;29(1-2):93-6
Decreased leukotriene B4(LTB4) synthesis in polymorphonuclear (PMN) cells in severe chronic asthma. Hamasaki Y, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Apr;30(2):209-11
Platelet-neutrophil interactions in the eicosanoid pathway. Marcus AJ, et al. **Adv Exp Med Biol** 1988;243:31-6 (19 ref.)
Metabolism of leukotriene B4 and related substances by polymorphonuclear leukocytes. Powell WS, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:112-5
On the generation of lipoxins and novel related compounds by human neutrophils: relationship to leukotriene production. Serhan CN. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:116-21
Effect of auranofin on eicosanoids and protein kinase C in human neutrophils. Herlin T, et al. **Agents Actions** 1989 Aug;28(1-2):121-9
Orally administered tolfenamic acid inhibits leukotriene synthesis in isolated human peripheral polymorphonuclear leukocytes. Moilanen E, et al. **Agents Actions** 1989 Aug; 28(1-2):83-8
Enhancement of N-formyl-methionyl-leucyl-phenylalanine (fMLP) binding to isolated human neutrophils. Psychoyos S, et al. **Agents Actions** 1989 Mar;26(3-4):372-7
Association between nonspecific bronchial hyperreactivity and superoxide anion production by polymorphonuclear leukocytes in chronic airflow obstruction. Renkema TE, et al. **Agents Actions** 1989 Jan;26(1-2):52-4
Modulation of PAF biosynthesis in human polymorphonuclear leukocytes. The role of phorbol esters and protein kinases. Sanchez Crespo M, et al. **Agents Actions** 1989 Jan;26(1-2):111-2
Polymorphonuclear leukocyte activity and ventricular arrhythmia in acute myocardial infarction. Kuzuya T, et al. **Am J Cardiol** 1988 Nov 1;62(13):868-72
Chemotactic peptide-induced arachidonic acid mobilization in human polymorphonuclear leukocytes. Galbraith GM. **Am J Pathol** 1988 Nov;133(2):347-54
Granulocyte chemotactic protein/interleukin-8 induces plasma leakage and neutrophil accumulation in rabbit skin. Rampart M, et al. **Am J Pathol** 1989 Jul;135(1):21-5
Glomerular dysfunction induced by polymorphonuclear leukocyte-derived reactive oxygen species. Yoshioka T, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):F53-9
Enhanced generation of leukotriene B4 by neutrophils stimulated by unopsonized zymosan and by calcium ionophore after exercise-induced asthma. Arm JP, et al. **Am Rev Respir Dis** 1988 Jul;138(1):47-53
Aromatic hydroxylation of phenylalanine as an assay for hydroxyl radicals: application to activated human neutrophils and to the heme protein leghemoglobin. Kaur H, et al. **Anal Biochem** 1988 Aug 1;172(2):360-7
Increased production of oxygen free radicals by polymorphonuclear leukocytes in heart failure due to aortic stenosis. Prasad K, et al. **Angiology** 1989 May;40(5):472-8
Effect of eugenol on prostaglandin E levels in polymorphonuclear cells and serum. Fotos PG, et al. **Ann Dent** 1988 Winter;47(2):19-22
Activation of the inositol phospholipid signaling system by receptors for extracellular ATP in human neutrophils, monocytes, and neutrophil/monocyte progenitor cells. Dubyak GR, et al. **Ann N Y Acad Sci** 1988;551:218-37;

discussion 237–8
Fluorometric measurement of ofloxacin uptake by human polymorphonuclear leukocytes. Pascual A, et al. **Antimicrob Agents Chemother** 1989 May;33(5):653–6
Diacylglycerol generation and phosphoinositide turnover in human neutrophils: effects of particulate versus soluble stimuli. Burnham DN, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):345–53
Synergism between protein kinase C activator and fatty acids in stimulating superoxide anion production in guinea pig polymorphonuclear leukocytes. Ozawa M, et al. **Arch Biochem Biophys** 1989 Sep;273(2):491–6
Chondrocyte activation by a putative interleukin-1 derived from lapine polymorphonuclear leukocytes. Watanabe S, et al. **Arch Biochem Biophys** 1989 Apr;270(1):69–76
In vitro inhibition of leukotriene B4 formation by exogeneous 5-lipoxygenase inhibitors is associated with enhanced generation of 15-hydroxy-eicosatetraenoic acid (15-HETE) by human neutrophils. Fogh K, et al. **Arch Dermatol Res** 1988;280(7):430–6
The comparative study of reactive oxygen species generated by polymorphonuclear leukocytes as alpha 1-proteinase inhibitor inactivators-possible application for antioxidant prevention of emphysema. Nowak D. **Arch Immunol Ther Exp (Warsz)** 1988;36(6):723–31
Effect of venoruton on hypoxic stress-induced neurotoxicity in mice and oxygen free radical generation by human neutrophils. Shukla VK, et al. **Arch Int Pharmacodyn Ther** 1989 May–Jun;299:127–33
Oxidative activity of polymorphonuclear leukocytes after thermal injury. Dobke MK, et al. **Arch Surg** 1989 Jul; 124(7):856–9
Superoxide production by neutrophils in a model of adult respiratory distress syndrome. Holman RG, et al. **Arch Surg** 1988 Dec;123(12):1491–5
Kinetics of the uptake of antimicrobial agents by human polymorphonuclear leucocytes. Laufen H, et al. **Arzneimittelforschung** 1989 Feb;39(2):233–5
Neutrophil behavior during hemodialysis. Role of membrane contact. Neveceral P, et al. **ASAIO Trans** 1988 Jul–Sep; 34(3):564–7
Inhibition by prostacyclin analogs of .O2- production in human polymorphonuclear leukocytes. Stahlberg HJ, et al. **Basic Life Sci** 1988;49:991–5
Mass determination of receptor-mediated accumulation of phosphatidate and diglycerides in human neutrophils measured by Coomassie blue staining and densitometry. Agwu DE, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):79–86
Phosphorylation of both 47 and 49kDa proteins accompanies superoxide release by neutrophils. Badwey JA, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):1029–35
Receptor-mediated actin assembly in electropermeabilized neutrophils: role of intracellular pH. Downey GP, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):18–24
Tyrosine phosphorylation in human neutrophil. Gomez-Cambronero J, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1478–85
Hydroxyl radical and leukotoxin biosynthesis in neutrophil plasma membrane. Hayakawa M, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1077–85
Extracellular ATP triggers superoxide production in human neutrophils. Kuroki M, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):377–80
Hydroxylation of leukotriene B4 in leukocytes from various species: identification of a metabolite to authentic 5S,12R,19-trihydroxy-6Z,8E,10E,14Z-eicosatetra enoic acid and relative importance of 19- and 20-hydroxylations. Mansuy D, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1283–9
Lack of effect of pertussis toxin on TNF-alpha-induced formation of reactive oxygen intermediates by human neutrophils. Meurer R, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):763–9
Diacylglycerol kinase inhibitors R59022 and dioctanoylethylene glycol potentiate the respiratory burst of neutrophils by raising cytosolic Ca2+. Nasmith P, et al. **Biochem Biophys Res Commun** 1989 May 30; 161(1):95–100
Temperature-dependent inhibition of fmet-leu-phe-stimulated superoxide generation by C-I and H-7 in human neutrophils. Nath J, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1376–82
DNA-regulated arginine-specific mono(ADP-ribosyl)ation and de-ADP-ribosylation of endogenous acceptor proteins in human neutrophils. Obara S, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):452–7
Characterization of receptor for granulocyte colony-stimulating factor on human circulating neutrophils. Uzumaki H, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):1026–32
Specific translocation of tuftsin (Thr-Lys-Pro-Arg), a natural immunomodulating peptide, into the nuclei of human monocytes. Wagle JR, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1147–53
Elevation of PMN cytosolic free calcium and locomotion stimulated by novel peptides from IL-1-treated human synovial cell cultures. Watson ML, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1154–60
Generation of nitric oxide by human neutrophils. Wright CD, et al. **Biochem Biophys Res Commun** 1989 Apr 28; 160(2):813–9
Studies on opsonized zymozan, FMLP, carbachol, PMA and A23187 stimulated respiratory burst of human PMNLs. Fülöp T Jr, et al. **Biochem Int** 1988 Sep;17(3):419–26
Potential phospholipid source(s) of arachidonate used for the synthesis of leukotrienes by the human neutrophil. Chilton FH. **Biochem J** 1989 Mar 1;258(2):327–33
Arachidonate release in neutrophils: does a lack of effect of protein kinase C inhibitors imply no involvement of protein kinase C? [letter] Krishnamurthi S, et al. **Biochem J** 1989 Jul 15;261(2):687–8
Synthesis of nitric oxide from L-arginine by neutrophils. Release and interaction with superoxide anion. McCall TB, et al. **Biochem J** 1989 Jul 1;261(1):293–6
Guanine nucleotides induce tyrosine phosphorylation and activation of the respiratory burst in neutrophils. Nasmith PE, et al. **Biochem J** 1989 Feb 1;257(3):893–7
Na+/H+ exchange modulates the production of leukotriene B4 by human neutrophils. Osaki M, et al. **Biochem J** 1989 Feb 1;257(3):751–8
Arachidonic acid release in rabbit neutrophils. Tao W, et al. **Biochem J** 1989 Feb 1;257(3):633–7
Stimulation of phosphorylcholine turnover and diacylglycerol production in human polymorphonuclear leukocytes. Novel assay for phosphorylcholine. Truett AP 3d, et al. **Biochem J** 1989 Jun 15;260(3):909–13
Apparent involvement of phospholipase A2, but not protein kinase C, in the pro-oxidative interactions of clofazimine with human phagocytes. Anderson R, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4635–41
Leukotriene formation by human polymorphonuclear leukocytes from endogenous arachidonate. Physiological triggers and modulation by prostanoids. Haurand M, et al. **Biochem Pharmacol** 1989 Jul 1;38(13):2129–37
Stimulation of protein synthesis in human neutrophils by gamma-interferon. Humphreys JM, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1241–6
Synergism between chemotactic peptide and platelet-activating factor in stimulating thromboxane B2 and leukotriene B4 biosynthesis in human neutrophils. Tanizawa H, et al. **Biochem Pharmacol** 1989 Aug 1; 38(15):2559–63
Interactions between bacterial surfaces and phagocyte plasma membranes. Edwards SW. **Biochem Soc Trans** 1989 Jun; 17(3):460–2
Bacterial capsules and interactions with complement and phagocytes. Roberts IS, et al. **Biochem Soc Trans** 1989 Jun; 17(3):462–4
A study on the role of protein kinase C and intracellular calcium in the activation of superoxide generation. Christiansen NO, et al. **Biochim Biophys Acta** 1988 Oct 7;971(3):317–24
Difference in hydrogen peroxide release between human neutrophils and neutrophil cytoplasts following calcium ionophore activation. A role of the subcellular granule in activation of the NADPH-oxidase in human neutrophils? Dahlgren C, et al. **Biochim Biophys Acta** 1989 Jan 17; 1010(1):41–8
Inhibition of eicosanoid and PAF formation by dexamethasone in rat inflammatory polymorphonuclear neutrophils may implicate lipocortin 5. Fradin A, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):248–57
Stimulated human neutrophils damage cardiac sarcoplasmic reticulum function by generation of oxidants. Kukreja RC, et al. **Biochim Biophys Acta** 1989 Feb 24;990(2):198–205
ATP-induced calcium mobilization in human neutrophils. Kuroki M, et al. **Biochim Biophys Acta** 1989 Jun 15; 1012(1):103–6
Regulation of cellular retention of paf-acether by extracellular pH and cell concentration. Leyravaud S, et al. **Biochim Biophys Acta** 1989 Sep 25;1005(2):192–5
Studies on the incorporation and transacylation of various fatty acids in choline and ethanolamine-containing phosphoacylglycerol subclasses in human neutrophils. MacDonald JI, et al. **Biochim Biophys Acta** 1989 Aug 8; 1004(2):151–7
The plasma membrane potential of human neutrophils. Role of ion channels and the sodium/potassium pump. Majander A, et al. **Biochim Biophys Acta** 1989 Apr 14;980(2):139–45
Identification of a novel 7-cis-11-trans-lipoxin A4 generated by human neutrophils: total synthesis, spasmogenic activities and comparison with other geometric isomers of lipoxins A4 and B4. Nicolaou KC, et al. **Biochim Biophys Acta** 1989 May 15;1003(1):44–53
Functional responses of aequorin-loaded human neutrophils. Comparison with fura-2-loaded cells. Ozaki Y, et al. **Biochim Biophys Acta** 1988 Nov 18;972(2):113–9
Intracellular spin-trapping of oxygen-centered radicals generated by human neutrophils. Pou S, et al. **Biochim Biophys Acta** 1989 Jun 27;991(3):459–64
Inhibition of platelet-activating factor biosynthesis via the acetyltransferase by arachidonic and oleic acids in ionophore A23187-stimulated bovine neutrophils. Remy E, et al. **Biochim Biophys Acta** 1989 Sep 11;1005(1):87–92
Effects of aristolochic acid on phospholipase A2 activity and arachidonate metabolism of human neutrophils. Rosenthal MD, et al. **Biochim Biophys Acta** 1989 Jan 23;1001(1):1–8
On the relationship between leukotriene and lipoxin production by human neutrophils: evidence for differential metabolism of 15-HETE and 5-HETE. Serhan CN. **Biochim Biophys Acta** 1989 Aug 8;1004(2):158–68
Biochemical studies of neutrophils from male and female rats: a differential response to basement membrane treated with nephrotoxic antiserum. Unarska-Jachimczyk M, et al. **Biochim Biophys Acta** 1988 Nov 18;972(2):137–43
Effects of prostacyclin analogs on cyclic adenosine monophosphate and superoxide formation in human polymorphonuclear leukocytes stimulated by formyl-methionyl-leucyl-phenylalanine. Stahlberg HJ, et al. **Biol Chem Hoppe Seyler** 1988 May;369(5):329–36
Fc and complement receptor (CR1 and CR3) expression on neonatal human polymorphonuclear leukocytes. Fleit HB. **Biol Neonate** 1989;55(3):156–63
Cyclic-AMP production by polymorphonuclear leukocytes in psychiatric disorders. Kanof PD, et al. **Biol Psychiatry** 1989 Feb 15;25(4):413–20
Metabolism of stimulated polymorphonuclear leukocytes. Takeshige K, et al. **Biomed Biochim Acta** 1989; 48(2-3):S25–30
Lactoferrin from human breast milk and from neutrophil granulocytes. Comparative studies of isolation, quantitation, characterization and iron binding properties. Bezwoda WR, et al. **Biomed Chromatogr** 1989 May; 3(3):121–6
Candidacidal activity of the neutrophil myeloperoxidase system can be protected from excess hydrogen peroxide by the presence of ammonium ion. Beilke MA, et al. **Blood** 1989 Mar;73(4):1045–9
LTB4 production in human polymorphonuclear leukocytes incubated with nFMLP. Marchiseppe I, et al. **Boll Soc Ital Biol Sper** 1988 Jun;64(6):501–6
The "metabolic burst" in polymorphonuclear leukocytes: in vitro reduction by scale extract of psoriasis. Muti S, et al. **Boll Soc Ital Biol Sper** 1988 Feb;64(2):123–30
Decreased membrane fluidity in polymorphonuclear cells in psoriasis. Offidani AM, et al. **Boll Soc Ital Biol Sper** 1988 Jun;64(6):495–500
Cytotoxin from polymorphonuclear leukocytes and inflammatory ascitic fluids. Yamazaki M, et al. **Br J Cancer** 1989 Mar;59(3):353–5
Nedocromil sodium inhibits the A23187- and opsonized zymosan-induced leukotriene formation by human eosinophils but not by human neutrophils. Bruijnzeel PL, et al. **Br J Pharmacol** 1989 Mar;96(3):631–6
Generation of histamine-releasing activity from serum albumin by medium derived from stimulated neutrophils of rat. Cochrane DE, et al. **Br J Pharmacol** 1989 Jun; 97(2):524–32
Arachidonic acid-induced mobilization of calcium in human neutrophils: evidence for a multicomponent mechanism of action. Naccache PH, et al. **Br J Pharmacol** 1989 Jun; 97(2):461–8
Characterization of receptors for platelet-activating factor on platelets, polymorphonuclear leukocytes and macrophages. Stewart AG, et al. **Br J Pharmacol** 1988 Aug; 94(4):1225–33
Neutrophil dysfunction after thermal injury: alteration of phagolysosomal acidification in patients with large burns. Bjerknes R, et al. **Burns** 1989 Apr;15(2):77–81
ESR studies on oxygen consumption during the respiratory burst of human polymorphonuclear leukocytes. Zhao BL, et al. **Cell Biol Int Rep** 1989 Apr;13(4):317–23
ESR studies on active oxygen radicals produced in the respiratory burst of human polymorphonuclear leukocytes. Zhao BL, et al. **Cell Biol Int Rep** 1989 Jun;13(6):529–36
Scavenging effect of extracts of green tea and natural antioxidants on active oxygen radicals. Zhao BL, et al. **Cell Biophys** 1989 Apr;14(2):175–85
Stimulation of polymorphonuclear leukocytes by dicyclohexylcarbodiimide: calcium homeostasis. Aviram A, et al. **Cell Calcium** 1989 Feb-Mar;10(2):115–24
Calciosome, a sarcoplasmic reticulum-like organelle involved in intracellular Ca2+-handling by non-muscle cells: studies in human neutrophils and HL-60 cells. Krause KH, et al. **Cell Calcium** 1989 Jul;10(5):351–61 (55 ref.)
Indirect immunofluorescence localization of ponticulin in motile cells. Wuestehube LJ, et al. **Cell Motil Cytoskeleton** 1989;13(4):245–63
Arachidonic acid metabolism in polymorphonuclear cells in headaches. A methodologic study. Fragoso YD, et al. **Cephalalgia** 1988 Sep;8(3):149–55
Role of the LFA-1 adhesion glycoprotein in neutrophil adhesion to endothelium and plastic surfaces. Forsyth KD, et al. **Clin Exp Immunol** 1989 Feb;75(2):265–8
Effect of colforsin on human neutrophil superoxide production and intracellular calcium mobilization. Furui H, et al. **Clin Exp Pharmacol Physiol** 1989 Mar; 16(3):199–209
Alterations in chemotactic factor-induced responses of neutrophils and monocytes from chronic dialysis patients. Lewis SL, et al. **Clin Nephrol** 1988 Aug;30(2):63–72
Leukocytic oxygen activation and microbicidal oxidative toxins. Hurst JK, et al. **Crit Rev Biochem Mol Biol** 1989; 24(4):271–328 (375 ref.)
Analysis of cytosolic ionized calcium variation in polymorphonuclear leukocytes using flow cytometry and Indo-1 AM. Lopez M, et al. **Cytometry** 1989 Mar; 10(2):165–73
Neutrophil and eosinophil chemotactic factors released from human keratinocytic (hair follicular) tumor cells. Kanzaki T. **Dermatologica** 1989;179 Suppl 1:118
Lucigenin-induced chemiluminescence in human neutrophils in the process of chemotactic migration measured in a modified Boyden chamber. Kato T, et al. **Dermatologica** 1989;179 Suppl 1:113–5

Interleukin-1 production by polymorphonuclear leukocytes during the course of acute inflammation in rabbits. Ohkawara S, et al. **Dermatologica** 1989;179 Suppl 1:84–90
Inhibition of polymorphonuclear leukocyte respiratory burst by elevated glucose concentrations in vitro. Nielson CP, et al. **Diabetes** 1989 Aug;38(8):1031–5
Leukotriene B4 metabolism in neutrophils of patients with chronic granulomatous disease: phorbol myristate acetate decreases endogenous leukotriene B4 via NADPH oxidase-dependent mechanism. Hamasaki T, et al. **Eur J Clin Invest** 1989 Aug;19(4):404–11
Stimulus-specific defect in oxidative metabolism of polymorphonuclear granulocytes in polycythemia vera. Samuelsson J, et al. **Eur J Haematol** 1988 Nov;41(5):454–8
The Fc valency of an immune complex is the decisive factor for binding to low-affinity Fc gamma receptors. Klaassen RJ, et al. **Eur J Immunol** 1988 Sep;18(9):1373–7
Effect of sulfhydryl reagents on PAF binding to human neutrophils and platelets. Ng DS, et al. **Eur J Pharmacol** 1988 Sep 1;154(1):47–52
Dexamethasone reduces rat tracheal goblet cell hyperplasia produced by human neutrophil products. Lundgren JD, et al. **Exp Lung Res** 1988;14(6):853–63
Characterization of PAF receptors on human neutrophils using the specific antagonist, WEB 2086. Correlation between receptor binding and function. Dent G, et al. **FEBS Lett** 1989 Feb 27;244(2):365–8
Zinc increases phorbol ester receptors in intact B-cells, neutrophil polymorphs and platelets. Forbes IJ, et al. **FEBS Lett** 1989 Apr 24;247(2):445–7
Age related impairment in phosphatidylinositol breakdown of polymorphonuclear granulocytes. Fülöp T Jr, et al. **FEBS Lett** 1989 Mar 13;245(1–2):249–52
GTP-dependent and -independent activation of superoxide producing NADPH oxidase in a neutrophil cell-free system. Ishida K, et al. **FEBS Lett** 1989 Jan 30; 243(2):169–72
1,2-Diacylglycerol accumulation in human neutrophils does not correlate with respiratory burst activation. Koenderman L, et al. **FEBS Lett** 1989 Jan 30; 243(2):399–403
Biochemical and antigenic characterization of CD45 polypeptides expressed on plasma membrane and internal granules of human neutrophils. Pulido R, et al. **FEBS Lett** 1989 Jun 5;249(2):337–42
Formation and release of nitric oxide from human neutrophils and HL-60 cells induced by a chemotactic peptide, platelet activating factor and leukotriene B4. Schmidt HH, et al. **FEBS Lett** 1989 Feb 27;244(2):357–60
Halothane, an inhalation anesthetic, activates protein kinase C and superoxide generation by neutrophils. Tsuchiya M, et al. **FEBS Lett** 1988 Dec 19;242(1):101–5
Do humans neutrophils form hydroxyl radical? Evaluation of an unresolved controversy. Cohen MS, et al. **Free Radic Biol Med** 1988;5(2):81–8 (79 ref.)
Conversion of superoxide generated by polymorphonuclear leukocytes to hydroxyl radical: a direct spectrophotometric detection system based on degradation of deoxyribose. Greenwald RA, et al. **Free Radic Biol Med** 1989; 6(4):385–92
Evidence that de novo protein synthesis participates in a time-dependent augmentation of the chemotactic peptide-induced respiratory burst in neutrophils. Effects of recombinant human colony stimulating factors and dihydrocytochalasin B. Woodman RC, et al. **Free Radic Biol Med** 1988;5(5–6):355–61
Interaction between neutrophils and 4-hydroxyalkenals and consequences on neutrophil motility. Curzio M. **Free Radic Res Commun** 1988;5(2):55–66 (47 ref.)
Studies on the origin of the hydroxyl spin adduct of DMPO produced from the stimulation of neutrophils by phorbol-12-myristate-13-acetate. Janzen EG, et al. **Free Radic Res Commun** 1987;4(2):115–23
Changes in glutathione peroxidase activities and the oxidative burst of leukocytes during inflammation in the mouse and rat. Parnham MJ, et al. **Free Radic Res Commun** 1987; 4(3):183–8
Cell-dependent chemiluminescence. Modulation of the N-formyl chemotactic peptide (FNLPNTL) mediated oxidative burst in human polymorphonuclear leukocytes (PMNL) by murine monoclonal antibody NMS-1. Schmitt M, et al. **Free Radic Res Commun** 1987;2(4–6):359–68
Neutrophil-derived oxidants mediate formyl-methionyl-leucyl-phenylalanine-induced increases in mucosal permeability in rats. von Ritter C, et al. **Gastroenterology** 1989 Sep;97(3):778–80
Differential changes in receptor-mediated transduction in migraine and cluster headache: studies on polymorphonuclear leucocytes. de Belleroche J, et al. **Headache** 1988 Jul;28(6):409–13
Diagnosis of acute myeloid leukaemia with the use of monoclonal anti-neutrophil elastase (NP57) reactive with routinely processed biopsy samples. Ralfkiaer E, et al. **Histopathology** 1989 Jun;14(6):637–43
Proteoglycans synthesized by human polymorphonuclear leucocytes in vitro. Bartold PM, et al. **Immunol Cell Biol** 1989 Feb;67 (Pt 1):9–17
Complement-mediated enhancement of IgA-induced H2O2 release by human polymorphonuclear leucocytes. Gorter A, et al. **Immunology** 1989 May;67(1):120–5
Role of cloned virulence factors (mannose-resistant haemagglutination, mannose-resistant adhesions) from uropathogenic Escherichia coli strains in the release of inflammatory mediators from neutrophils and mast cells. König W, et al. **Immunology** 1989 Jul;67(3):401–7
A T-lymphocyte-derived factor that enhances IgG-dependent release of leukotriene B4 (LTB4) from human neutrophils. Tsai JJ, et al. **Immunology** 1988 Nov; 65(3):449–56
Changes in canine neutrophil function(s) following cellular isolation by Percoll gradient centrifugation or isotonic lysis. Gruber DF, et al. **Immunopharmacol Immunotoxicol** 1988; 10(4):537–44
Effect of protein kinase C inhibitors on calcium ionophore-induced arachidonic acid mobilization in human leukocytes. Galbraith GM. **Immunopharmacology** 1988 Sep-Oct;16(2):63–9
Glutathione & its redox system, superoxide anion & superoxide dismutases of polymorphonuclear leukocytes in essential hypertension. Rahman I, et al. **Indian J Med Res** 1988 Jul;88:64–70
Phorbol myristate acetate modulates calcium ion-dependent superoxide anion generation induced by a monoclonal antibody raised against polymorphonuclear leukocytes. Ichinose Y, et al. **Infect Immun** 1989 Aug;57(8):2529–33
Relationship between intracellularly and extracellularly generated oxygen metabolites from primed polymorphonuclear leukocytes differs from that obtained from nonprimed cells. Briheim G, et al. **Inflammation** 1989 Aug;13(4):455–64
Effects on extra- and intracellularly localized, chemoattractant-induced, oxygen radical production in neutrophils following modulation of conditions for ligand-receptor interaction. Dahlgren C. **Inflammation** 1988 Aug;12(4):335–49
Antiarthritic synergism of combined oral and parenteral chrysotherapy. II. Increased inhibition of activated leukocyte oxygen burst by combined gold action. Finkelstein AE, et al. **Inflammation** 1988 Aug;12(4):383–90
Patients with adult respiratory distress syndrome (ARDS) demonstrate in vivo neutrophil activation associated with diminished binding of neutrophil-specific monoclonal antibody 31D8. Fletcher MP, et al. **Inflammation** 1988 Oct; 12(5):455–73
In vitro effects of omega-3 fatty acids on neutrophil intracellular calcium homeostasis and receptor expression for FMLP and LTB4. Georgilis K, et al. **Inflammation** 1988 Oct;12(5):475–90
Lipoteichoic acid-antilipoteichoic acid complexes induce superoxide generation by human neutrophils. Ginsburg I, et al. **Inflammation** 1988 Dec;12(6):525–48
Lysophosphatides enhance superoxide responses of stimulated human neutrophils. Ginsburg I, et al. **Inflammation** 1989 Apr;13(2):163–74
Metal content of neutrophil granules is altered in chronic inflammation. Hällgren R, et al. **Inflammation** 1989 Aug; 13(4):383–92
Stimulation of guinea pig neutrophil superoxide anion-producing system with thymol. Suzuki Y, et al. **Inflammation** 1988 Dec;12(6):575–84
Macrophage-produced oxygen radical generating activities for polymorphonuclear leukocytes. Tsukamoto Y, et al. **Inflammation** 1989 Jun;13(3):259–66
Production of interleukin-1-alpha and -beta by human peripheral polymorphonuclear neutrophils. Goh K, et al. **Int Arch Allergy Appl Immunol** 1989;88(3):297–303
Phospholipid metabolism in polymorphonuclear leukocytes from rheumatoid arthritis patients: effects of non-steroidal anti-inflammatory agents and clotrimazole. Smith DM Jr, et al. **Int J Immunopharmacol** 1989;11(1):45–55
Inhibition of platelet-activating factor (PAF)-induced chemotaxis and PAF binding to human eosinophils and neutrophils by the specific ginkgolide-derived PAF antagonist, BN 52021. Kurihara K, et al. **J Allergy Clin Immunol** 1989 Jan;83(1):83–90
Superoxide generation and its modulation by adenosine in the neutrophils of subjects with asthma. Meltzer S, et al. **J Allergy Clin Immunol** 1989 May;83(5):960–6
Dopamine inhibition of superoxide anion production by polymorphonuclear leukocytes. Yamazaki M, et al. **J Allergy Clin Immunol** 1989 May;83(5):967–72
Influence of ofloxacin and pefloxacin on human lymphocyte immunoglobulin secretion and on polymorphonuclear leucocyte superoxide anion production. Fantoni M, et al. **J Antimicrob Chemother** 1988 Aug;22(2):193–6
Intraphagocytic penetration of antibiotics. Van der Auwera P, et al. **J Antimicrob Chemother** 1988 Aug;22(2):185–92
Effect of O2 partial pressure on the myeloperoxidase pathway of neutrophils. Davis WB, et al. **J Appl Physiol** 1988 Nov; 65(5):1995–2003
Extracellular matrix proteoglycan degradation by human alveolar macrophages and neutrophils. McGowan SE, et al. **J Appl Physiol** 1989 Jan;66(1):400–9
Hyperoxia and self- or neutrophil-generated O2 metabolites inactivate xanthine oxidase. Terada LS, et al. **J Appl Physiol** 1988 Nov;65(5):2349–53
Proton release associated with respiratory burst of polymorphonuclear leukocytes. Takanaka K, et al. **J Biochem (Tokyo)** 1988 Apr;103(4):656–60
Reevaluation of the spin-trapped adduct formed from 5,5-dimethyl-1-pyrroline-1-oxide during the respiratory burst in neutrophils. Ueno I, et al. **J Biochem (Tokyo)** 1989 Jun;105(6):905–10
Activation of the neutrophil respiratory burst by chemoattractants: regulation of the N-formyl peptide receptor in the plasma membrane. Jesaitis AJ, et al. **J Bioenerg Biomembr** 1988 Dec;20(6):679–707 (151 ref.)
Selective priming of rate and duration of the respiratory burst of neutrophils by 1,2-diacyl and 1-O-alkyl-2-acyl diglycerides. Possible relation to effects on protein kinase C. Bass DA, et al. **J Biol Chem** 1988 Dec 25; 263(36):19610–7
Increased breakdown of phosphatidylinositol 4,5-bisphosphate is not an initiating factor for actin assembly in human neutrophils. Bengtsson T, et al. **J Biol Chem** 1988 Nov 25;263(33):17385–9
The interaction of small oligomers of complement 3B (C3B) with phagocytes. High affinity binding and phorbol ester-induced internalization by polymorphonuclear leukocytes. Brown EJ. **J Biol Chem** 1989 Apr 15; 264(11):6196–201
Inactivation of transferrin iron binding capacity by the neutrophil myeloperoxidase system. Clark RA, et al. **J Biol Chem** 1989 Jun 5;264(16):9420–7
Dynamics of the diradylglycerol responses of stimulated phagocytes. Dougherty RW, et al. **J Biol Chem** 1989 Jul 5;264(19):11263–9
Protein phosphorylation associated with synergistic stimulation of neutrophils. Heyworth PG, et al. **J Biol Chem** 1989 Sep 5;264(25):14935–9
Structure of the cDNA encoding transcobalamin I, a neutrophil granule protein. Johnston J, et al. **J Biol Chem** 1989 Sep 25;264(27):15754–7
1-O-hexadecyl-2-O-methylglycerol, a novel inhibitor of protein kinase C, inhibits the respiratory burst in human neutrophils. Kramer IM, et al. **J Biol Chem** 1989 Apr 5; 264(10):5876–84
Eosinophils preferentially use bromide to generate halogenating agents. Mayeno AN, et al. **J Biol Chem** 1989 Apr 5;264(10):5660–8
Use of manganese to discriminate between calcium influx and mobilization from internal stores in stimulated human neutrophils. Merritt JE, et al. **J Biol Chem** 1989 Jan 25; 264(3):1522–7
Studies of signal transduction in the respiratory burst-associated stimulation of fMet-Leu-Phe-induced tubulin tyrosinolation and phorbol 12-myristate 13-acetate-induced posttranslational incorporation of tyrosine into multiple proteins in activated neutrophils and HL-60 cells. Nath J, et al. **J Biol Chem** 1989 Jan 15; 264(2):848–55
Oscillating actin polymerization/depolymerization responses in human polymorphonuclear leukocytes. Omann GM, et al. **J Biol Chem** 1989 Oct 5;264(28):16355–8
Analysis of calcium homeostasis in activated human polymorphonuclear leukocytes. Evidence for two distinct mechanisms for lowering cytosolic calcium. Perianin A, et al. **J Biol Chem** 1989 Jan 15;264(2):1005–9
Spin-trapping and human neutrophils. Limits of detection of hydroxyl radical. Pou S, et al. **J Biol Chem** 1989 Jul 25;264(21):12299–302
Functional inactivation and structural disruption of human alpha 2-macroglobulin by neutrophils and eosinophils. Reddy VY, et al. **J Biol Chem** 1989 Aug 15;264(23):13801–9
Monokine-induced neutrophil chemotactic factor gene expression in human fibroblasts. Strieter RM, et al. **J Biol Chem** 1989 Jun 25;264(18):10621–6
Stimulation of platelet-activating factor synthesis by a nonmetabolizable bioactive analog of platelet-activating factor and influence of arachidonic acid metabolites. Tessner TG, et al. **J Biol Chem** 1989 Mar 25;264(9):4794–9
On the biological occurrence and regulation of 1-acyl and 1-O-alkyl-diradylglycerols in human neutrophils. Selective destruction of diacyl species using Rhizopus lipase. Tyagi SR, et al. **J Biol Chem** 1989 Aug 5; 264(22):12977–82
Respiratory burst oscillations in human neutrophils and their correlation with fluctuations in apparent cell shape. Wymann MP, et al. **J Biol Chem** 1989 Sep 25; 264(27):15829–34
Purification and some properties of the small subunit of cytochrome b558 from human neutrophils. Yamaguchi T, et al. **J Biol Chem** 1989 Jan 5;264(1):112–8
Factors affecting the measurement of chemiluminescence in stimulated human polymorphonuclear leucocytes. Harber MJ, et al. **J Biolumin Chemilumin** 1986 Jun;1(1):15–27
Luminol dependent chemiluminescence and thiol group oxidation provoked by neutrophils is attributable to different oxidizing species. Jenner DE, et al. **J Biolumin Chemilumin** 1987 May;1(3):165–71
Pholasin chemiluminescence detects mostly superoxide anion released from activated human neutrophils. Müller T, et al. **J Biolumin Chemilumin** 1989 Jul-Sep;3(3):105–13
The effect of thermal injury on murine neutrophil oxidative metabolism. Gadd MA, et al. **J Burn Care Rehabil** 1989 Mar-Apr;10(2):125–30
Perioperative alteration of neutrophil functions after open heart and other major surgeries. A comparative study. Utoh J, et al. **J Cardiovasc Surg (Torino)** 1989 Jul-Aug; 30(4):692–5
The metabolism of arachidonic and eicosapentaenoic acids in human neutrophils stimulated by A23187 and FMLP. Mahadevappa VG, et al. **J Cell Biochem** 1989 Jul; 40(3):341–52
Coupling of antagonistic signalling pathways in modulation of neutrophil function. Mueller H, et al.

J Cell Biochem 1989 Jul;40(3):287–94
Subcellular localization of phospholipids and enzymes involved in PAF–acether metabolism. Record M, et al. J Cell Biochem 1989 Jul;40(3):353–9
High molecular weight kininogen inhibits fibrinogen binding to cytoadhesins of neutrophils and platelets. Gustafson EJ, et al. J Cell Biol 1989 Jul;109(1):377–87
Influence of botulinum C2 toxin on F–actin and N–formyl peptide receptor dynamics in human neutrophils. Norgauer J, et al. J Cell Biol 1989 Sep;109(3):1133–40
The dynamics of exocytosis in human neutrophils. Nüsse O, et al. J Cell Biol 1988 Dec;107(6 Pt 1):2117–23
Production of transforming growth factor beta by human peripheral blood monocytes and neutrophils. Grotendorst GR, et al. J Cell Physiol 1989 Aug;140(2):396–402
F–actin distribution in polymorphonuclear leucocytes. Haston WS. J Cell Sci 1987 Nov;88 (Pt 4):495–501
Extracellular adenosine triphosphate activates calcium mobilization in human phagocytic leukocytes and neutrophil/monocyte progenitor cells. Cowen DS, et al. J Clin Invest 1989 May;83(5):1651–60
Bacterial lipopolysaccharides prime human neutrophils for enhanced production of leukotriene B4. Doerfler ME, et al. J Clin Invest 1989 Mar;83(3):970–7
Studies on the molecular mechanisms of human Fc receptor–mediated phagocytosis. Amplification of ingestion is dependent on the generation of reactive oxygen metabolites and is deficient in polymorphonuclear leukocytes from patients with chronic granulomatous disease. Gresham HD, et al. J Clin Invest 1988 Oct; 82(4):1192–201
Human neutrophils contain and bind high molecular weight kininogen. Gustafson EJ, et al. J Clin Invest 1989 Jul; 84(1):28–35
Mechanism of mitogen–induced stimulation of glucose transport in human peripheral blood mononuclear cells. Evidence of an intracellular reserve pool of glucose carriers and their recruitment. Jacobs DB, et al. J Clin Invest 1989 Feb;83(2):437–43
Granulocyte–macrophage colony–stimulating factor induces cytokine secretion by human polymorphonuclear leukocytes. Lindemann A, et al. J Clin Invest 1989 Apr; 83(4):1308–12
Botulinum C2 toxin ADP–ribosylates actin and enhances O2– production and secretion but inhibits migration of activated human neutrophils. Norgauer J, et al. J Clin Invest 1988 Oct;82(4):1376–82
Metabolism of procainamide to the cytotoxic hydroxylamine by neutrophils activated in vitro. Rubin RL, et al. J Clin Invest 1989 Apr;83(4):1336–43
Augmented release of human leucocyte lactoferrin (and elastase) during coagulation. Adeyemi EO, et al. J Clin Lab Immunol 1988 Sep;27(1):1–4
The limitation of the human neutrophil chemiluminescence response by extracellular peroxidase is stimulus dependent: effect of added horse radish peroxidase on the response induced by both soluble and particulate stimuli. Dahlgren C, et al. J Clin Lab Immunol 1988 May;26(1):49–53
Effects of extracellular pH on neutrophil superoxide anion production, and chemiluminescence augmented with luminol, lucigenin or DMNH. Gyllenhammar H. J Clin Lab Immunol 1989 Feb;28(2):97–102
The monocyte–derived neutrophil activating peptide (NAP/interleukin 8) stimulates human neutrophil arachidonate–5–lipoxygenase, but not the release of cellular arachidonate. Schröder JM. J Exp Med 1989 Sep 1; 170(3):847–63
Oxygen–dependent killing of Staphylococcus aureus by human neutrophils. Edwards SW, et al. J Gen Microbiol 1987 Dec;133 (Pt 12):3591–7
Rapid damage to membranes of Neisseria gonorrhoeae caused by human neutrophil granule extracts. Rock JP, et al. J Gen Microbiol 1988 Feb;134 (Pt 2):509–19
The release of neutrophil chemoattractant activity by bronchoalveolar macrophages from adult and senescent mice. Esposito AL, et al. J Gerontol 1989 Jul;44(4):B93–9
Comparison between the effects of aging on antagonist and agonist interactions with beta–adrenergic receptors on human mononuclear and polymorphonuclear leukocyte membranes. Zahniser NR, et al. J Gerontol 1988 Nov; 43(6):M151–7
Changes in the activity of oxygen–dependent metabolism in polymorphonuclear leukocytes and macrophages from a primary focus during experimental Y. pestis infection in the mouse. Isin ZM. J Hyg Epidemiol Microbiol Immunol 1989;33(2):229–32
The effect of IFN–gamma and colony–stimulating factors on the expression of neutrophil cell membrane receptors. Buckle AM, et al. J Immunol 1989 Oct 1;143(7):2295–301
Perturbation of beta–glucan receptors on human neutrophils initiates phagocytosis and leukotriene B4 production. Czop JK, et al. J Immunol 1988 Nov 1;141(9):3170–6
Human Fc gamma RIII (CD16). Isoforms with distinct allelic expression, extracellular domains, and membrane linkages on polymorphonuclear and natural killer cells. Edberg JC, et al. J Immunol 1989 Sep 1;143(5):1642–9
Temporal adaptation of neutrophil oxidative responsiveness to n–formyl–methionyl–leucyl–phenylalanine. Acceleration by granulocyte–macrophage colony stimulating factor. English D, et al. J Immunol 1988 Oct 1;141(7):2400–6
Involvement of guanine nucleotides in superoxide release by fluoride–treated neutrophils. Implications for a role of a guanine nucleotide regulatory protein. English D, et al. J Immunol 1989 Sep 1;143(5):1685–91
Regulation of formyl peptide receptor binding to rabbit neutrophil plasma membranes. Use of monovalent cations, guanine nucleotides, and bacterial toxins to discriminate among different states of the receptor. Feltner DE, et al. J Immunol 1989 Jun 1;142(11):3963–70
Binding characteristics of dimeric IgG subclass complexes to human neutrophils. Huizinga TW, et al. J Immunol 1989 Apr 1;142(7):2359–64
The 40–kDa Fc gamma receptor (FcRII) on human neutrophils is essential for the IgG–induced respiratory burst and IgG–induced phagocytosis. Huizinga TW, et al. J Immunol 1989 Apr 1;142(7):2365–9
Halogenation and proteolysis of complement component C3 on Salmonella typhimurium during phagocytosis by human neutrophils. Joiner KA, et al. J Immunol 1989 May 1; 142(9):3164–70
Carbohydrates on human Fc gamma receptors. Interdependence of the classical IgG and nonclassical lectin–binding sites on human Fc gamma RIII expressed on neutrophils. Kimberly RP, et al. J Immunol 1989 Jun 1;142(11):3923–30
Thrombospondin and fibronectin are synthesized by neutrophils in human inflammatory joint disease and in a rabbit model of in vivo neutrophil activation. Kreis C, et al. J Immunol 1989 Sep 15;143(6):1961–8
Protease–modulation of neutrophil superoxide response. Kusner DJ, et al. J Immunol 1989 Sep 1;143(5):1696–702
Biosynthesis of paf–acether. X. Phorbol myristate acetate–induced paf–acether biosynthesis and acetyltransferase activation in human neutrophils. Leyravaud S, et al. J Immunol 1989 Jul 1;143(1):245–9
Mechanism of arachidonic acid liberation in platelet–activating factor–stimulated human polymorphonuclear neutrophils. Nakashima S, et al. J Immunol 1989 Aug 15;143(4):1295–302
Presence of IL–1 receptors on human and murine neutrophils. Relevance to IL–1–mediated effects in inflammation. Parker KP, et al. J Immunol 1989 Jan 15;142(2):537–42
Mastoparan, a wasp venom peptide, identifies two discrete mechanisms for elevating cytosolic calcium and inositol trisphosphates in human polymorphonuclear leukocytes. Perianin A, et al. J Immunol 1989 Sep 1;143(5):1669–73
Laminin promotes the oxidative burst in human neutrophils via increased chemoattractant receptor expression. Pike MC, et al. J Immunol 1989 Mar 15;142(6):2004–11
Effect of tumor necrosis factor and granulocyte/macrophage colony–stimulating factor on neutrophil degranulation. Richter J, et al. J Immunol 1989 May 1;142(9):3199–205
CDw17: a neutrophil glycolipid antigen regulated by activation. Symington FW. J Immunol 1989 Apr 15; 142(8):2784–90
Characterization of N–formyl–methionyl–leucyl–phenylalanine receptors on human neutrophils. Effects of isolation and temperature on receptor expression and functional activity. Tennenberg SD, et al. J Immunol 1988 Dec 1;141(11):3937–44
Functional differences between the 40 kDa and 50 to 70 kDa IgG Fc receptors on human neutrophils revealed by elastase treatment and antireceptor antibodies. Tosi MF, et al. J Immunol 1988 Sep 15;141(6):2097–103
Different membrane anchors of Fc gamma RIII (CD16) on K/NK–lymphocytes and neutrophils. Protein– vs lipid–anchor. Ueda E, et al. J Immunol 1989 Aug 15; 143(4):1274–7
Subcellular distribution and membrane association of human neutrophil substrates for ADP–ribosylation by pertussis toxin and cholera toxin. Volpp BD, et al. J Immunol 1989 May 1;142(9):3206–12
Platelet–activating factor production in human neutrophils by sequential stimulation with granulocyte–macrophage colony–stimulating factor and the chemotactic factors C5A or formyl–methionyl–leucyl–phenylalanine. Wirthmueller U, et al. J Immunol 1989 May 1;142(9):3213–8
Simultaneous measurement by flow cytometry of phagocytosis and hydrogen peroxide production of neutrophils in whole blood. Hasui M, et al. J Immunol Methods 1989 Feb 8;117(1):53–8
Separation and chemiluminescence properties of human, canine and rat polymorphonuclear cells. Lindena J, et al. J Immunol Methods 1988 Nov 25;115(1):141–7
Antibody–coated target cell membrane–induced chemiluminescence by human polymorphonuclear leukocytes. Van Kessel KP, et al. J Immunol Methods 1989 Mar 31;118(2):279–85
Effects of in vivo administration of recombinant human granulocyte–macrophage colony–stimulating factor on human neutrophil chemotaxis and oxygen metabolism [letter] Buescher ES, et al. J Infect Dis 1988 Nov; 158(5):1140–2
Use of platelets, mononuclear and polymorphonuclear cells in the diagnosis of glycogen storage disease type VI. Dahan N, et al. J Inherited Metab Dis 1988;11(3):253–60
Analysis of the interaction of human C5a and C5a des Arg with human monocytes and neutrophils: flow cytometric and chemotaxis studies. Yancey KB, et al. J Invest Dermatol 1989 Feb;92(2):184–9
Neutrophil oxidative metabolism after exposure to bacterial phospholipase C. Styrt B, et al. J Lab Clin Med 1989 Jul; 114(1):51–7
Occult intracellular calcium pools: relevance to neutrophil oxidant production. Weisdorf DJ, et al. J Lab Clin Med 1989 Sep;114(3):260–5
Characterization of arachidonic acid metabolism, superoxide production, and bacterial killing in bovine circulating neutrophils and elicited alveolar neutrophils. Heidel JR, et al. J Leukoc Biol 1989 Jul;46(1):41–50
Characterization of the luminol–amplified light–generating reaction induced in human monocytes. Johansson A, et al. J Leukoc Biol 1989 May;45(5):444–51
Inhibition of neutrophil superoxide anion generation by platelet products: role of adenine nucleotides. McGarrity ST, et al. J Leukoc Biol 1988 Nov;44(5):411–21
Regulation of phagolysosome pH in bovine and human neutrophils: the role of NADPH oxidase activity and an Na+/H+ antiporter. Mayer SJ, et al. J Leukoc Biol 1989 Mar;45(3):239–48
Effect of granulocyte–macrophage colony–stimulating factor on superoxide production in cytoplasts and intact human neutrophils: role of protein kinase and G–proteins. Mege JL, et al. J Leukoc Biol 1989 Aug;46(2):161–8
Inflammatory cells degrade inter–alpha inhibitor to liberate urinary proteinase inhibitors. Pratt CW, et al. J Leukoc Biol 1989 Jan;45(1):1–9
Superoxide anion production in glass–adherent polymorphonuclear leukocytes and its relationship to calcium movement. Rebut–Bonneton C, et al. J Leukoc Biol 1988 Nov;44(5):402–10
Cytochemical evaluation of neutrophil components in beta thalassemia hemoglobin E. Trewatcharegon S, et al. J Med Assoc Thai 1989 Feb;72(2):67–70
Inhibitions of metabolic responses of polymorphonuclear leukocytes by antiallergic drugs. Taniguchi K, et al. J Pharmacobiodyn 1989 Jan;12(1):37–42
Dexamethasone modulated protein synthesis in polymorphonuclear leukocytes: response in rheumatoid arthritis. Blowers LE, et al. J Rheumatol 1988;15(5):785–90
Immunoglobulin G coating on crystals and ceramics enhances polymorphonuclear cell superoxide production: correlation with immunoglobulin G adsorbed. Nagase M, et al. J Rheumatol 1989 Jul;16(7):971–6
Altered formation of leukotriene B4 in vitro by synovial fluid neutrophils in rheumatoid arthritis. Poubelle PE, et al. J Rheumatol 1989 Mar;16(3):280–4
Degradation of hyaluronic acid by neutrophil derived oxygen radicals is stimulus dependent. Weitz Z, et al. J Rheumatol 1988 Aug;15(8):1250–3
Endotoxemia and enhanced generation of oxygen radicals by neutrophils from patients undergoing cardiopulmonary bypass. Kharazmi A, et al. J Thorac Cardiovasc Surg 1989 Sep;98(3):381–5
Deferoxamine reduces neutrophil–mediated free radical production during cardiopulmonary bypass in man. Menasché P, et al. J Thorac Cardiovasc Surg 1988 Oct; 96(4):582–9
Comparative ability of human monocytes and neutrophils to degrade glomerular basement membrane in vitro. Vissers MC, et al. Lab Invest 1989 Jun;60(6):831–8
Capillary gas chromatography and tandem mass spectrometry of paf–acether and analogs: absence of 1–O–alkyl–2–propionyl–sn–glycero–3–phosphocholine in human polymorphonuclear neutrophils. Bossant MJ, et al. Lipids 1989 Feb;24(2):121–4
Vitamin E. deficiency increases the synthesis of platelet–activating factor (PAF) in rat polymorphonuclear leucocytes. Fukuzawa K, et al. Lipids 1989 Mar;24(3):236–9
Effects of sera from patients with obstructive jaundice on the generation of oxygen intermediates by normal polymorphonuclear leukocytes. Ohshio G, et al. Liver 1988 Dec;8(6):366–71
Neutrophil–derived epoxide, 9,10–epoxy–12–octadecenoate, induces pulmonary edema. Hu JN, et al. Lung 1988; 166(6):327–37
Phospholipase A2 and lipocortins, antiphospholipase proteins. Di Rosa M, et al. Methods Enzymol 1988; 163:23–31
Leukocyte chemoattractant receptors. Pike MC, et al. Methods Enzymol 1988;162:236–45
Biochemical changes in leukocytes in response to chemoattractants. Verghese MW, et al. Methods Enzymol 1988;162:279–82
Different priming on human neutrophil respiratory burst by lipopolysaccharides from phase I and phase II Coxiella burnetii. Fumarulo R, et al. Microbiologica 1989 Jan; 12(1):55–60
Oxidation of proteins in rat heart and lungs by polymorphonuclear leukocyte oxidants. Fliss H. Mol Cell Biochem 1988 Dec;84(2):177–88
Neutrophil oxygen radical production by dialysis membranes. Kuwahara T, et al. Nephrol Dial Transplant 1988;3(5):661–5
Oxidative metabolism of polymorphonuclear leukocytes and serum opsonic activity in chronic renal failure. Lucchi L, et al. Nephron 1989;51(1):44–50
Neutrophil–mediated transport of liposomes across the Madin Darby canine kidney epithelial cell monolayer. Cho MJ, et al. Pharm Res 1989 Jan;6(1):78–84
Cellular uptake of a fluid–phase marker by human neutrophils from solutions and liposomes. Scieszka JF, et al. Pharm Res 1988 Jun;5(6):352–8
Complement receptor type three (CD11b/CD18) of human polymorphonuclear leukocytes recognizes fibrinogen. Wright SD, et al. Proc Natl Acad Sci U S A 1988 Oct; 85(20):7734–8

Hormone and neuropeptide receptors on mononuclear leukocytes. Bost KL. **Prog Allergy** 1988;43:68–83 (90 ref.)

Beta-adrenergic binding sites on alpha 1-acid glycoprotein and mononuclear leukocytes. Sager G. **Prog Clin Biol Res** 1989;300:413–6

Stimulation of inositol phosphate production by propranolol in human neutrophils. Das I, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(5):721–6

Characterization of the priming effects of human granulocyte-macrophage colony-stimulating factor on human neutrophil leukotriene synthesis. DiPersio JF, et al. **Prostaglandins** 1988 Nov;36(5):673–91

Biosynthesis of peptidyl leukotrienes and other lipoxygenase products by rat pancreatic islets. Comparison with macrophages and neutrophils. Morgan RO, et al. **Prostaglandins** 1988 Apr;35(4):609–23

Comparative effect of leukotriene B4 and leukotriene B5 on calcium mobilization in human neutrophils. Seya A, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Oct; 34(1):47–50

Inhibition by triphenyltin chloride of cytosolic free calcium mobilization in human neutrophils stimulated by a chemotactic factor. Miura Y, et al. **Res Commun Chem Pathol Pharmacol** 1989 May; 64(2):331–41

Effect of platelet-activating factor (PAF) on cytosolic free calcium in human peripheral blood mononuclear leukocytes. Ng DS, et al. **Res Commun Chem Pathol Pharmacol** 1989 May; 64(2):351–4

Phagocytes, O2 reduction, and hydroxyl radical. Cohen MS, et al. **Rev Infect Dis** 1988 Nov–Dec;10(6):1088–96 (105 ref.)

Auranofin modulates human neutrophil superoxide production and protein phosphorylation. Hurst NP, et al. **Rheumatol Int** 1989;8(6):245–50

Correlation between neutrophil superoxide formation, luminol-augmented chemiluminescence and intracellular Ca2+ levels upon stimulation with leukotriene B4, formylpeptide and phorbolester. Gyllenhammar H. **Scand J Clin Lab Invest** 1989 Jun;49(4):317–22

Lysophosphatidylcholine and the inflammatory action of neutrophils. Lindahl M, et al. **Scand J Clin Lab Invest** 1988 Jun;48(4):303–11

The specific binding of thrombin to human polymorphonuclear leucocytes. Sonne O. **Scand J Clin Lab Invest** 1988 Dec;48(8):831–8

In vitro studies on the significance of arachidonate metabolism and other oxidative processes in the inflammatory response of human neutrophils and macrophages. With special reference to chronic inflammatory bowel disease. Nielsen OH. **Scand J Gastroenterol Suppl** 1988;150:1–21

Chemiluminescence of polymorphonuclear leukocytes and whole blood during acute bacterial infection. Pauksens K, et al. **Scand J Infect Dis** 1989;21(3):277–84

Recombinant interleukin 1 and tumor necrosis factor acting in synergy to release thromboxane, 6-KETO-PGF1 alpha and PGE2 by human neutrophils. Conti P, et al. **Scand J Rheumatol Suppl** 1988;75:318–24

Effect of polymorph derived oxidants on IgG in relation to rheumatoid factor binding. Griffiths HR, et al. **Scand J Rheumatol Suppl** 1988;75:148–56

Recombinant 47-kilodalton cytosol factor restores NADPH oxidase in chronic granulomatous disease. Lomax KJ, et al. **Science** 1989 Jul 28;245(4916):409–12

Two forms of autosomal chronic granulomatous disease lack distinct neutrophil cytosol factors. Nunoi H, et al. **Science** 1988 Dec 2;242(4883):1298–301

Thromboxane mediates the ischemia-induced neutrophil oxidative burst. Paterson IS, et al. **Surgery** 1989 Aug; 106(2):224–9

Biochemical analysis of the activation of adherent neutrophils in vitro. Cerasoli F Jr, et al. **Tissue Cell** 1988;20(4):505–17

Effect of NaCl and urea concentration comparable to renal medulla on superoxide production by human polymorphonuclear leukocytes. Matsumoto T, et al. **Urol Res** 1988;16(5):367–71

[Effects of anisodamine on the metabolism of arachidonic acid by rat pleural neutrophils] Yue TL, et al. **Yao Hsueh Hsueh Pao** 1988;23(10):727–31 (Eng. Abstr.) (Chi)

[Stimulation of the chemiluminescence of human polymorphonuclear leukocytes in various stages of the intraerythrocyte development of Plasmodium falciparum] Malhotra K, et al. **C R Soc Biol (Paris)** 1988;182(3):270–8 (Eng. Abstr.) (Fre)

[Oxidative metabolism of the peripheral neutrophilic granulocytes in patients with rapidly progressing and with localized juvenile periodontitis] Zafiropoulos GG, et al. **Zahn Mund Kieferheilkd** 1988;76(6):595–602 (Eng. Abstr.) (Ger)

[Study of the activity of neutrophils to produce active oxygen species in asthmatic children—using whole blood luminol-dependent chemiluminescence] Kato M, et al. **Arerugi** 1988 Oct;37(10):992–8 (Eng. Abstr.) (Jpn)

[Production of leukotrienes and superoxide from neutrophil-rich fraction of bronchial asthmatics] Takahashi K, et al. **Arerugi** 1988 Jun;37(6):322–30 (Eng. Abstr.) (Jpn)

[The effects of 1-methyl-4-phenylpyridine (MPP+) on O2- generation by neutrophils] Nozuhara T. **Nippon Ika Daigaku Zasshi** 1989 Feb;56(1):14–21 (Eng. Abstr.) (Jpn)

[Luminol-dependent chemiluminescence of peripheral neutrophils in asthmatic patients] Fukuda K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Feb;27(2):200–5 (Eng. Abstr.) (Jpn)

[Study on productive activity of leukotrienes in peripheral neutrophils in patients with liver disease] Kawada N, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Aug;85(8):1570 (Jpn)

[Role of lipid peroxidation and polymorphonuclear leukocytes-derived oxygen radicals in acute gastric lesions induced by hyperthermic treatment] Yoshikawa T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Feb;86(2):159–64 (Eng. Abstr.) (Jpn)

[Role of polymorphonuclear leukocytes and oxygen-derived free radicals in the formation of gastric mucosal lesions induced by platelet-activating factor] Yoshikawa T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Apr;86(4):858–64 (Eng. Abstr.) (Jpn)

[Platelet-activating factor producing cell—target cell interactions] Oda M, et al. **Rinsho Byori** 1989 Apr;Spec No 81:9–15 (Jpn)

[Superoxide formation by neutrophils] Takeshige K, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2744–55 (Jpn)

[Anti-tumor effect by leukocyte-derived active oxygens] Yamazaki M, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):3031–6 (Jpn)

[Histochemical studies of peripheral blood neutrophils from patients with atopic dermatitis (ad)] Legieć C, et al. **Przegl Dermatol** 1986 Jul–Aug;73(4):280–3 (Eng. Abstr.) (Pol)

[Bioactive derivatives of arachidonic acid in the human neutrophilic granulocyte. The icosanoid "alphabet" (II)] Dragomirescu T. **Rev Ig [Bacteriol]** 1988 Jan–Mar; 33(1):1–14 (146 ref.) (Eng. Abstr.) (Rum)

[Regulation by the protein kinase C activator phorbol ester of calcium channels in polymorphonuclear leukocytes] Grigorian MR, et al. **Biokhimiia** 1988 Sep;53(9):1462–6 (Eng. Abstr.) (Rus)

[Antioxidative properties and degradation of serum proteins by active oxygen forms (O2-., OCl-) generated by stimulated neutrophils] Sharonov BP, et al. **Biokhimiia** 1988 May;53(5):816–25 (Eng. Abstr.) (Rus)

[Dynamics of changes in the functional activity of blood polymorphonuclear leukocytes in reversible myocardial ischemia in dogs] Klebanov GI, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):297–9 (Eng. Abstr.) (Rus)

[Mechanism of incorporation of DNA, RNA and reconstituted nucleosomes into neutrophils] Zakharian RA, et al. **Dokl Akad Nauk SSSR** 1988;302(6):1498–500 (Rus)

[Release of active forms of oxygen by blood neutrophils of Syrian hamsters with primary and transplanted tumors] Kashkina LM, et al. **Eksp Onkol** 1988;10(5):73–5 (Eng. Abstr.) (Rus)

[Myeloperoxidase of neutrophils and its possible role in lipid peroxidation processes in arteriosclerosis] Davidenkova EF, et al. **Klin Med (Mosk)** 1989 Jun;67(6):56–8 (Eng. Abstr.) (Rus)

[Lysosomal cation proteins of neutrophils in acute pneumonia and chronic bronchitis] Iakushin SS. **Klin Med (Mosk)** 1989 Feb;67(2):102–4 (Eng. Abstr.) (Rus)

[Comparative cytofluorimetry of the lymphocytes and neutrophils after acridine orange and rivanol SO2 staining in various infectious pathologies in premature infants] Karachunskiĭ AI, et al. **Pediatriia** 1988;(8):40–4 (Rus)

[Synthesis of oxygen free radicals by neutrophils in acute pneumonia] Aleksandrova IV, et al. **Sov Med** 1988;(5):8–10 (Eng. Abstr.) (Rus)

[Changes in the cytochemical indices of the blood leukocytes in chronic cerebral leptomeningitis during combined treatment using decimeter waves] Kilichev IA. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Jul–Aug;(4):35–8 (Eng. Abstr.) (Rus)

[Enzymatic production of superoxide by human polymorphonuclear leukocytes in burns] Karelin AA, et al. **Vopr Med Khim** 1988 Sep–Oct;34(5):107–10 (Eng. Abstr.) (Rus)

[The role of activation of polymorphic nuclear leukocytes in the development of experimental uveitis] Klebanov GI, et al. **Vopr Med Khim** 1988 Nov–Dec;34(6):128–32 (Eng. Abstr.) (Rus)

[Cationic proteins from neutrophils as inhibitors of nonenzymatic fibrinolytic and anticoagulant activity of blood plasma] Kudriashov BA, et al. **Vopr Med Khim** 1989 May–Jun;35(3):103–8 (Eng. Abstr.) (Rus)

[Biochemical mechanisms of the role of neutrophils in reactions of acute inflammation (review of the literature)] Ogloblina OG. **Vopr Med Khim** 1988 Sep–Oct;34(5):2–9 (35 ref.) (Rus)

[Ascorbic acid level and the indicators of cellular immunity in patients with hepatitis A during pathogenetic therapy] Vasil'ev VS, et al. **Vopr Pitan** 1988 Jul–Aug;(4):31–4 (Eng. Abstr.) (Rus)

[The microbial factor in the chemiluminescence of the peripheral blood neutrophils of patients with suppurative surgical infection] Belotskiĭ SM, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Aug;(8):87–90 (Eng. Abstr.) (Rus)

[Changes in the functional activity of polymorphonuclear leukocytes in pseudotubercular infection] Isachkova LM, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jan;(1):72–5 (Eng. Abstr.) (Rus)

MICROBIOLOGY

Cytopathic effects of Moraxella bovis on cultured bovine neutrophils and corneal epithelial cells. Kagonyera GM, et al. **Am J Vet Res** 1989 Jan;50(1):10–7

Effects of Moraxella bovis and culture filtrates on 51Cr-labeled bovine neutrophils. Kagonyera GM, et al. **Am J Vet Res** 1989 Jan;50(1):18–21

Purification and antimicrobial properties of three defensins from rat neutrophils. Eisenhauer PB, et al. **Infect Immun** 1989 Jul;57(7):2021–7

Correlation between immunofluorescent detection of human cytomegalovirus immediate early antigens in polymorphonuclear leukocytes and viremia [letter] Grazia Revello M, et al. **J Infect Dis** 1989 Jul;160(1):159–60

Intracellular destruction of salmonellae in genetically resistant mice. Lin FR, et al. **J Med Microbiol** 1989 Sep; 30(1):79–87

Interactions of virulent and avirulent Legionella pneumophila with human polymorphonuclear leukocytes. Summersgill JT, et al. **Microb Pathog** 1988 Jul;5(1):41–7

Ingestion and killing of Streptococcus agalactiae by bovine granulocytes in the presence of natural opsonins. Rainard P, et al. **Vet Microbiol** 1988 Sep;18(1):41–50

PARASITOLOGY

Leishmania interaction with human monocytes and neutrophils: modulation of the chemotactic response. Sørensen AL, et al. **APMIS** 1989 Aug;97(8):754–60

Ultrastructural analysis of the interaction between host cells and Trypanosoma cruzi in experimental chagomas. Bijovsky AT, et al. **Trans R Soc Trop Med Hyg** 1988; 82(5):704–8

PATHOLOGY

Hypersegmented neutrophils and vitamin B12 deficiency. Hypersegmentation in B12 deficiency. Thompson WG, et al. **Acta Haematol (Basel)** 1989;81(4):186–91

Acute lymphoblastic leukemia and Sweet's syndrome [letter] Tuncer AM. **Acta Haematol (Basel)** 1988;80(4):224

Bovine serum albumin (BSA) nephritis in rats. VII. In vivo kinetics of polymorphonuclear leukocytes. Miyazaki S. **Acta Pathol Jpn** 1988 Dec;38(12):1513–21

Acute febrile neutrophilic dermatosis. A histopathological study of 37 patients and a review of the literature. Jordaan HF. **Am J Dermatopathol** 1989 Apr;11(2):99–111 (58 ref.)

History and implications of the neutrophil glycoprotein deficiencies. Styrt B. **Am J Hematol** 1989 Aug;31(4):288–97 (112 ref.)

Chediak-Higashi syndrome: prenatal diagnosis by fetal blood examination in the feline model of the disease. Kahraman MM, et al. **Am J Med Genet** 1989 Mar;32(3):325–9

Tumor necrosis factor and interferon-gamma induce distinct patterns of endothelial activation and associated leukocyte accumulation in skin of Papio anubis. Munro JM, et al. **Am J Pathol** 1989 Jul;135(1):121–33

Myocardial neutrophil accumulation during reperfusion after reversible or irreversible ischemic injury. Go LO, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1188–98

Temporal relation between neutrophil accumulation and myocardial reperfusion injury. Smith EF 3d, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1060–8

Lung injury and neutrophil density during air embolization in sheep after leukocyte depletion with nitrogen mustard. Albertine KH. **Am Rev Respir Dis** 1988 Dec;138(6):1444–53

Prognostic implications of bronchoalveolar lavage neutrophilia in patients with Pneumocystis carinii pneumonia and AIDS [editorial] Kaner RJ, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1322–4

Prognostic implications of bronchoalveolar lavage neutrophilia in patients with Pneumocystis carinii pneumonia and AIDS. Mason GR, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1336–42

Reduced myocardial neutrophil accumulation and infarct size following thromboxane synthetase inhibitor or receptor antagonist. Nichols WW, et al. **Angiology** 1989 Mar; 40(3):209–21

Experimental arthritis in C57black/6 normal and beige (Chediak-Higashi) mice: in vivo and in vitro observations on cartilage degradation. Schalkwijk J, et al. **Ann Rheum Dis** 1988 Nov;47(11):940–6

Acute febrile neutrophilic dermatosis (Sweet's syndrome). Association with rheumatoid vasculitis. Delaporte E, et al. **Arch Dermatol** 1989 Aug;125(8):1101–4

Rheumatoid neutrophilic dermatitis. Scherbenske JM, et al. **Arch Dermatol** 1989 Aug;125(8):1105–8

Neutrophil migration is defective during recombinant human granulocyte-macrophage colony-stimulating factor infusion after autologous bone marrow transplantation in humans. Peters WP, et al. **Blood** 1988 Oct;72(4):1310–5

GM-CSF accelerates neutrophil recovery after autologous bone marrow transplantation for Hodgkin's disease. Devereaux S, et al. **Bone Marrow Transplant** 1989 Jan; 4(1):49–54

Experimental murine schistosomiasis mansoni: inhibition of neutrophil granulocyte inflammatory reaction. Santos-da-Silva C, et al. **Braz J Med Biol Res** 1988;

21(2):273–9
A sequential histopathological study of dermographism. English JS, et al. **Clin Exp Dermatol** 1988 Sep;13(5):314–7
Acute febrile neutrophilic dermatosis (Sweet's syndrome). Rahav G, et al. **Cutis** 1989 Aug;44(2):157–9
Epidermal proliferation and accumulation of polymorphonuclear leukocytes in the psoriatic lesion. Beurskens T, et al. **Dermatologica** 1989;178(2):67–72
Sweet's syndrome in pregnancy [letter] Saxena U, et al. **Dermatologica** 1988;177(1):20–1
Neutrophil-induced decrease in wound margin strength after intestinal anastomosis—influence on collagen and mechanisms of granulocyte action. Högström H, et al. **Eur Surg Res** 1988;20(4):260–6
Congenital neutropenia: sustained myeloid cell proliferation and neutrophil differentiation in vitro. Revoltella RP, et al. **Haematologica (Pavia)** 1988 Nov–Dec;73(6):455–65
Membrane glycoproteins of neutrophils and related diseases. Ricevuti G, et al. **Haematologica (Pavia)** 1988 Sep–Oct; 73(5):415–22 (49 ref.)
Correlative patterns of neutrophil and platelet counts during very early remission of acute myeloblastic leukemia. Ventura GJ, et al. **Hematol Pathol** 1987;1(2):113–6
Relationship between neutrophil-mediated oxidative injury during acute experimental pyelonephritis and chronic renal scarring. Meyland PR, et al. **Infect Immun** 1989 Jul; 57(7):2196–202
Ontogeny of inflammatory cell responsiveness: superoxide anion generation by phorbol ester-stimulated fetal, neonatal, and adult bovine neutrophils. Clifford CB, et al. **Inflammation** 1989 Apr;13(2):221–31
White blood cells as mediators of hyperviscosity-induced tissue damage in neutrophilic vascular reactions: therapy with pentoxifylline. Ely H. **J Am Acad Dermatol** 1989 Apr; 20(4):677–80
Sweet's syndrome in hairy cell leukemia. Fischer G, et al. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 1):573–4
Sweet's syndrome associated with chronic myelogenous leukemia. Hatch ME, et al. **J Am Osteopath Assoc** 1989 Mar;89(3):363–70
Reduction of myocardial damage and polymorphonuclear leukocyte accumulation following coronary artery occlusion and reperfusion by the thromboxane receptor antagonist BM 13.505. Smith EF 3d, et al. **J Cardiovasc Pharmacol** 1989 May;13(5):715–22
Platelets mediate neutrophil-dependent immune complex nephritis in the rat. Johnson RJ, et al. **J Clin Invest** 1988 Oct;82(4):1225–35
Inflammatory properties of recombinant tumor necrosis factor in rabbit skin in vivo. Rampart M, et al. **J Exp Med** 1989 Jun 1;169(6):2227–32
Cessation of neutrophil influx in C5a-induced acute experimental arthritis is associated with loss of chemoattractant activity from the joint space. Haslett C, et al. **J Immunol** 1989 May 15;142(10):3510–7
Accumulation of 111In-neutrophils in rabbit skin in allergic and non-allergic inflammatory reactions in vivo. Inhibition by neutrophil pretreatment in vitro with a monoclonal antibody recognizing the CD18 antigen. Nourshargh S, et al. **J Immunol** 1989 May 1;142(9):3193–8
Leukocyte function in Pelger–Huët anomaly of dogs. Latimer KS, et al. **J Leukoc Biol** 1989 Apr;45(4):301–10
Polymorphic reticulosis: a malignant lymphoma of B-cell lineage. Lin CZ, et al. **Laryngoscope** 1989 Mar;99(3):307–10
Diagnostic significance of dysplastic features of peripheral blood polymorphs in myelodysplastic syndromes. Hast R, et al. **Leuk Res** 1989;13(2):173–8
Possible prognostic value of plasma activity augmenting polymorphonuclear neutrophils (PMN) adherence estimations in untreated patients with chronic myeloid leukemia. Wysocki H, et al. **Leuk Res** 1988;12(8):627–9
Validity of bronchoalveolar lavage in acute lung injury: recovered cells accurately reflect changes in the lung parenchyma. Weiland JE, et al. **Pathology** 1989 Jan; 21(1):59–62
Leucocytes, neutrophilia and elastase–a1-proteinase-inhibitor–complex: marker of different validity for monitoring the perioperative infection risk. Fink PC, et al. **Prog Clin Biol Res** 1989;308:695–700
Neutrophil-mediated vascular injury in shock and multiple organ failure. Vedder NB, et al. **Prog Clin Biol Res** 1989; 299:181–91 (48 ref.)
Acute febrile neutrophilic dermatosis (Sweet syndrome): a review of the literature with emphasis on musculoskeletal manifestations. Moreland LW, et al. **Semin Arthritis Rheum** 1988 Feb;17(3):143–53 (97 ref.)
The relation between Campylobacter pylori and inflammatory cell infiltration of antral mucosa in patients with dyspepsia. Chang FY, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Jan;88(1):8–12
Number and activity of inflammatory cells in bronchoalveolar lavage fluid in asthma and their relation to airway responsiveness. Kelly C, et al. **Thorax** 1988 Sep; 43(9):684–92
Early neutrophil alveolitis after rechallenge in drug induced alveolitis. Salmeron S, et al. **Thorax** 1988 Aug;43(8):647–8
[Disseminated aspergillosis with marked morphological and functional defects of polymorphonuclear leukocytes in a case of myelodysplastic syndrome] Kohi F, et al. **Rinsho Ketsueki** 1988 Jul;29(7):1060–5 (Eng. Abstr.) **(Jpn)**
[Evaluation of the nature of changes of developing bone marrow neutrophils in albino rats in carbaryl poisoning. I] Halliop J, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:141–9 (Eng. Abstr.) **(Pol)**
[Evaluation of the nature of changes of developing bone marrow neutrophils in albino rats in carbamyl poisoning. II] Latalski M, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:151–8 (Eng. Abstr.) **(Pol)**
[Megaloblastic anemia: the diagnostic importance of hypersegmentation of neutrophils when associated with iron deficiency] Benseñor IJ, et al. **AMB Rev Assoc Med Bras** 1988 Jul–Aug;34(4):133–7 (Eng. Abstr.) **(Por)**
[A case of marked pseudo-Pelger–Huet anomaly of neutrophils in a patient with myelodysplastic syndrome and partial red cell aplasia (a special type of acute leukemia with pathologic blast differentiation)] Iavorkovskiĭ LL, et al. **Gematol Transfuziol** 1989 May;34(5):46–9 **(Rus)**
[Sweet's acute febrile neutrophilic dermatosis] Karalitskiĭ EM. **Vestn Dermatol Venerol** 1988;(8):58–61 (Eng. Abstr.) **(Rus)**
[Diagnostic aids in bronchial asthma using macrophage and neutrophil indices and serum IgE levels] Aguilar Angeles D, et al. **Rev Alerg Mex** 1989 Mar–Apr;36(2):45–8 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Functional states of neutrophils as suggested by whole blood chemiluminescence. Zgliczyński JM, et al. **Acta Biochim Pol** 1988;35(4):331–42
The influence of increasing glucose concentrations on selected functions of polymorphonuclear neutrophils. Wierusz-Wysocka B, et al. **Acta Diabetol Lat** 1988 Oct–Dec;25(4):283–8
Demonstration of leukocyte-immobilizing activity in normal human plasma. Kalmár L, et al. **Acta Med Hung** 1988; 45(3–4):313–21
Effects of neutrophil granulocytes on the inulin barrier of renal tubular epithelium after ischaemic damage. Hellberg PO, et al. **Acta Physiol Scand** 1988 Oct;134(2):313–5
Activation of leukocytes during prolonged physical exercise. Kokot K, et al. **Adv Exp Med Biol** 1988;240:57–63
A mutation in Salmonella typhimurium that enhances resistance to oxygen-independent antimicrobal neutrophil protein. Spitznagel JK. **Adv Exp Med Biol** 1988;239:79–88 (20 ref.)
Regulation of polymorphonuclear leukocyte leukotriene synthesis by endothelial cell cyclooxygenase products. Feinmark SJ, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:255–8
Phospholipase A2 (PLA2) release leukotrienes and other lipoxygenase products from endogenous sources. Lam BK, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989;19:598–601
Platelets and endothelial cells contribute to the production of LTC4 by transcellular metabolism with neutrophils. Maclouf J, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:259–62
Interactions between platelets and neutrophils in the eicosanoid pathway. Marcus AJ, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:263–6
Edema and cell infiltration in the phorbol ester-treated mouse ear are temporally separate and can be differentially modulated by pharmacologic agents. De Young LM, et al. **Agents Actions** 1989 Mar;26(3–4):335–41
Humoral and cellular components in inflammation: hyper-reactivity and decreased feed-back inhibition of asthmatic neutrophils. Rocklin RE. **Allergy** 1988;43 Suppl 8:12–5
Attenuation of neutrophil function by inhibitors of arachidonate metabolism reduces the extent of canine myocardial infarction. Hoshida S, et al. **Am J Cardiol** 1989 Mar 7;63(10):24E–28E
Increased phagocytic cell chemiluminescence in patients with cystic fibrosis. Roberts RL, et al. **Am J Dis Child** 1989 Aug;143(8):944–50
Neutrophil maturation and hypersegmentation promoted in normal bone marrow by a carcinoma-elaborated protein factor. Bailey SC, et al. **Am J Hematol** 1989 Jul; 31(3):159–65
Role of polymorphonuclear leukocytes in collagenase production in chronic otitis media. Moriyama H, et al. **Am J Otolaryngol** 1989 May–Jun;10(3):198–202
Effects of middle ear effusion on neutrophil function. Shimizu T, et al. **Am J Otolaryngol** 1989 Mar–Apr;10(2):132–7
Characterization of the human neutrophil response to sex pheromones from Streptococcus faecalis. Ember JA, et al. **Am J Pathol** 1989 Apr;134(4):797–805
In vivo chemotaxis of bovine neutrophils induced by 5-lipoxygenase metabolites of arachidonic and eicosapentaenoic acid. Heidel JR, et al. **Am J Pathol** 1989 Mar;134(3):671–6
Xanthine oxidase activity in rat pulmonary artery endothelial cells and its alteration by activated neutrophils. Phan SH, et al. **Am J Pathol** 1989 Jun;134(6):1201–11
An evaluation of the neutrophil as a mediator of in vivo renal ischemic–reperfusion injury. Thornton MA, et al. **Am J Pathol** 1989 Sep;135(3):509–15
Endothelial cell killing by neutrophils. Synergistic interaction of oxygen products and proteases. Varani J, et al. **Am J Pathol** 1989 Sep;135(3):435–8
Review of G-CSF and GM-CSF. Effects on neonatal neutrophil kinetics. Cairo MS. **Am J Pediatr Hematol Oncol** 1989 Summer;11(2):238–44 (25 ref.)
Neutrophil kinetics in the fetus and neonate. Christensen RD. **Am J Pediatr Hematol Oncol** 1989 Summer;11(2):215–23 (37 ref.)
Transformation of neutrophils as indicator of irreversibility in hemorrhagic shock. Barroso-Aranda J, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H846–52
Postischemic renal injury is mediated by neutrophils and leukotrienes. Klausner JM, et al. **Am J Physiol** 1989 May; 256(5 Pt 2):F794–802
Neutrophils accentuate ischemia–reperfusion injury in isolated perfused rat kidneys. Linas SL, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):F728–35
Influence of neutrophil depletion on myocardial function and flow after reversible ischemia. O'Neill PG, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H341–51
Free radical defense mechanisms and neutrophil infiltration in postischemic skeletal muscle. Smith JK, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H789–93
Cytoplasts and Mo1-deficient neutrophils pretreated with plasma and LPS induce lung injury. Wencel ML, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H751–9
Alteration of neutrophil function associated with coccidiosis in cattle: influence of decoquinate and dexamethasone. Roth JA, et al. **Am J Vet Res** 1989 Aug;50(8):1250–3
Ozone-induced bronchial hyperresponsiveness in the rat is not accompanied by neutrophil influx or increased vascular permeability in the trachea. Evans TW, et al. **Am Rev Respir Dis** 1988 Jul;138(1):140–4
111Indium-labeled neutrophil migration into the lungs of bleomycin-treated rabbits assessed noninvasively by external scintigraphy. Haslett C, et al. **Am Rev Respir Dis** 1989 Sep;140(3):756–63
ARDS, neutrophils, and pentoxifylline. Mandell GL. **Am Rev Respir Dis** 1988 Nov;138(5):1103–5 (22 ref.)
Studies on the mechanism of decreased neutrophil adherence to postconfluent cultured endothelial cells. Render ML, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1115–23
Neutrophil depletion fails to improve neurologic outcome after cardiac arrest in dogs. Schott RJ, et al. **Ann Emerg Med** 1989 May;18(5):517–22
Enhancement of phagocytosis and intracellular killing of Candida albicans by human neutrophils in the presence of a morpholine antifungal derivative, Ro 14–4767. Richardson MD, et al. **Ann N Y Acad Sci** 1988;544:403–5
In vivo leucocyte migration in Behçet's syndrome. Efthimiou J, et al. **Ann Rheum Dis** 1989 Mar;48(3):206–10
Sequential patterns of eicosanoid, platelet, and neutrophil interactions in the evolution of the fulminant post-traumatic adult respiratory distress syndrome. Rivkind AI, et al. **Ann Surg** 1989 Sep;210(3):355–72; discussion 372–3
Chemotaxis in eukaryotic cells: a focus on leukocytes and Dictyostelium. Devreotes PN, et al. **Annu Rev Cell Biol** 1988;4:649–86 (267 ref.)
The effect of selenium on phagocytosis in humans. Greenman E, et al. **Anticancer Res** 1988 Jul–Aug;8(4):825–8
Human granulocyte activity against moxalactam-induced filamentous forms of Pseudomonas aeruginosa. Hammer MC, et al. **Antimicrob Agents Chemother** 1988 Oct; 32(10):1565–70
Human neutrophil chemiluminescence and f-Meth-Leu-Phe receptor exposure in bacterial infections. Follin P, et al. **APMIS** 1989 Jul;97(7):585–90
A reference procedure to study chemiluminescence induced in polymorphonuclear leukocytes by Neisseria meningitidis. Fredlund H, et al. **APMIS** 1988 Oct;96(10):941–9
Neutrophil migration in vivo and in vitro in healthy neutropenic subjects. Koivuranta-Vaara P, et al. **APMIS** 1988 Oct;96(10):906–10
Reduced redox potential during growth of some gram-negative bacteria. Effect on the biochemical and physicochemical surface properties and phagocytosis by polymorphonuclear leukocytes. Maluszynska GM, et al. **APMIS** 1988 Sep;96(9):773–82
Luminol-enhanced chemiluminescence of whole blood. Statistical analysis, and comparison of the responses of different subjects. Ristola M, et al. **APMIS** 1989 Jun; 97(6):503–12
Epidermal proliferation and the neutrophilic infiltrates of experimental cutaneous candidiasis in mice. Sohnle PG, et al. **Arch Dermatol Res** 1989;281(4):279–83
Tumor necrosis factor-enhanced leukotriene B4 generation and chemotaxis in human neutrophils. Meyer JD, et al. **Arch Surg** 1988 Dec;123(12):1454–8
Biologic priming of neutrophils in subcutaneous wounds. Paty PB, et al. **Arch Surg** 1988 Dec;123(12):1509–13
Early burn wound excision and skin grafting postburn trauma restores in vivo neutrophil delivery to inflammatory lesions. Tchervenkov JI, et al. **Arch Surg** 1988 Dec;123(12):1477–81
Changes of allergen-specific antibodies, circulating immune complexes and restoration of polymorphonuclear leukocyte function after hyposensitization. Lue KH, et al. **Asian Pac J Allergy Immunol** 1989 Jun;7(1):9–14
Kawasaki disease, oxygen radicals and high dose gammaglobulin therapy. Kuratsuji T, et al.

Basic Life Sci 1988;49:997–1003
Oxidative modification of enzymes by stimulated neutrophils. Oliver CN. **Basic Life Sci** 1988;49:839–44
Superoxide generation of phagocytizing polymorphonuclear leukocytes from patients with chronic renal failure. Tanigawa T, et al. **Basic Life Sci** 1988;49:857–61
Latex beads as vehicles for the study of free radical processes in phagocytic cells. Thomas MJ, et al. **Basic Life Sci** 1988; 49:853–6
Monitoring the interactions of environmental agents by cell-dependent chemiluminescence: studies with polycyclic aromatic hydrocarbons. Twerdok LE, et al. **Basic Life Sci** 1988;49:255–9
Bryostatin stimulation of human neutrophil luminol and DBA (lucigenin) chemiluminescence. Warren JT, et al. **Basic Life Sci** 1988;49:223–7
Reactions of myeloperoxidase with superoxide and hydrogen peroxide: significance for its function in the neutrophil. Winterbourn CC, et al. **Basic Life Sci** 1988;49:823–7
Effects of alpha, beta-unsaturated aldehydes on macrophage and neutrophil membrane function, fluidity and sulfhydryl status. Witz G, et al. **Basic Life Sci** 1988;49:849–51
Neutrophil activating factor (NAF) induces polymorphonuclear leukocyte adherence to endothelial cells and to subendothelial matrix proteins. Carveth HJ, et al. **Biochem Biophys Res Commun** 1989 Jul 14; 162(1):387–93
Localization of chemotactic activity and 64 kD protein phosphorylation for human polymorphonuclear leukocytes in N-terminus of the chemotactic protein LUCT/IL-8. Suzuki K, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1298–305
A novel cleavage product of beta-thromboglobulin formed in cultures of stimulated mononuclear cells activates human neutrophils. Walz A, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):969–75
Purification and characterization of cytokine-induced neutrophil chemoattractant produced by epithelioid cell line of normal rat kidney (NRK-52E cell). Watanabe K, et al. **Biochem Biophys Res Commun** 1989 Jun 30; 161(3):1093–9
Alterations in c-abl gene methylation in cells transformed by phagocyte-generated oxidants. Weitzman SA, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):24–30
Polymorphonuclear leukocytes regulate the plasminogen-activating system of cultured endothelial cells. Gilboa N, et al. **Biochem Int** 1988 Sep;17(3):585–92
Toxicity of polymorphonuclear neutrophils against hepatocytes: protective effect of heparin. Mavier P, et al. **Biochem Pharmacol** 1989 Jun 1;38(11):1865–7
Role of cytochrome b-559 in arachidonic acid activation of resting human neutrophils. Amit N, et al. **Biochim Biophys Acta** 1988 Oct 20;944(3):437–43
The bactericidal effects of the respiratory burst and the myeloperoxidase system isolated in neutrophil cytoplasts. Odell EW, et al. **Biochim Biophys Acta** 1988 Oct 7; 971(3):266–74
The effect of Eglin C on the function of human neutrophils in vitro. Suter S, et al. **Biol Chem Hoppe Seyler** 1988 Jul; 369(7):573–8
Role of polymorphonuclear leukocytes in hyperoxic lung injury. Prevention of neutrophil influx into the lung endothelium during oxygen exposure by ibuprofen. Das DK, et al. **Biomed Biochim Acta** 1988;47(12):1023–36
Potent inhibition of leukotriene (LT) B4 release from human polymorphonuclear leukocytes (PMN) by the PGE1-analogue OP-1206. Ney P, et al. **Biomed Biochim Acta** 1988;47(10–11):S186–9
Down-modulation of neutrophil production by erythropoietin in human hematopoietic clones. Christensen RD, et al. **Blood** 1989 Aug 1;74(2):817–22
Potentiation of leukotriene production following sequestration of neutrophils in isolated lungs: indirect evidence for intercellular leukotriene A4 transfer. Grimminger F, et al. **Blood** 1988 Nov;72(5):1687–92
Heparin cofactor II-proteinase reaction products exhibit neutrophil chemoattractant activity. Hoffman M, et al. **Blood** 1989 May 1;73(6):1682–5
The effect of recombinant human granulocyte macrophage colony-stimulating factor on neutrophil activation in patients with refractory carcinoma. Kaplan SS, et al. **Blood** 1989 Feb 15;73(3):636–8
Mechanisms of tumor-induced neutrophilia: constitutive production of colony-stimulating factors and their synergistic actions. Lee MY, et al. **Blood** 1989 Jul; 74(1):115–22
Shear-dependent inhibition of granulocyte adhesion to cultured endothelium by dextran sulfate. Ley K, et al. **Blood** 1989 Apr;73(5):1324–30
Recombinant human interleukin-3 stimulation of hematopoiesis in humans: loss of responsiveness with differentiation in the neutrophilic myeloid series. Lopez AF, et al. **Blood** 1988 Nov;72(5):1797–804
Involvement of guanine nucleotide binding proteins in neutrophil activation and priming by GM-CSF. McColl SR, et al. **Blood** 1989 Feb;73(2):588–91
Respiratory burst in adherent human neutrophils: triggering by colony-stimulating factors CSF-GM and CSF-G. Nathan CF. **Blood** 1989 Jan;73(1):301–6
The relationship between CR3 deficiency and neutrophil actin assembly. Southwick FS, et al. **Blood** 1989 May 15; 73(7):1973–9
Polymorphonuclear leukocytes in psoriatic smokers [letter] Cox N. **Br J Dermatol** 1989 Jul;121(1):143
Plasma lactoferrin reflects neutrophil activation in psoriasis. Kähler S, et al. **Br J Dermatol** 1988 Sep;119(3):289–93
Polymorphonuclear leukocyte random migration and chemotaxis in psoriatic and healthy adult smokers and non-smokers. Sonnex TS, et al. **Br J Dermatol** 1988 Nov; 119(5):653–9
In-vivo blockage of neutrophil migration by LPS is mimicked by a factor released from LPS-stimulated macrophages. Cunha FQ, et al. **Br J Exp Pathol** 1989 Feb; 70(1):1–8
Increased chemiluminescence of polymorphonuclear leucocytes in dogs with volume overload heart failure. Prasad K, et al. **Br J Exp Pathol** 1989 Aug;70(4):463–8
Increased vascular permeability and polymorphonuclear leucocyte accumulation in vivo in response to recombinant cytokines and supernatant from cultures of human synovial cells treated with interleukin 1. Watson ML, et al. **Br J Exp Pathol** 1989 Feb;70(1):93–101
In vivo viability of 111In-labelled granulocytes demonstrated in a sham-dialysis model. Becker W, et al. **Br J Radiol** 1989 May;62(737):463–7
Neutrophil degranulation and increased pulmonary capillary permeability following oesophagectomy: a model of early lung injury in man. Rocker GM, et al. **Br J Surg** 1988 Sep;75(9):883–6
Neutrophil function in megaloblastic anemia. Falcão RP. **Braz J Med Biol Res** 1988;21(5):939–40
Role of respiratory-burst products from polymorphonuclear leukocytes in the antitumor activity of Propionibacterium acnes vaccine. Murano EA, et al. **Cancer Immunol Immunother** 1989;29(1):7–16
Modulation of murine natural killer cells by a granulocytosis-inducing tumor. Pollack SB, et al. **Cancer Res** 1989 Jan 1;49(1):174–8
Activated neutrophils induce prolonged DNA damage in neighboring cells [published erratum appears in Carcinogenesis 1989 Mar;10(3):628] Shacter E, et al. **Carcinogenesis** 1988 Dec;9(12):2297–304
Lymphocytes treated with natural alfa-interferon produce a chemotactic factor for human neutrophils. Spisani S, et al. **Cell Biol Int Rep** 1989 Feb;13(2):163–9
Measurement of the chemotaxis coefficient for human neutrophils in the under-agarose migration assay. Tranquillo RT, et al. **Cell Motil Cytoskeleton** 1988; 11(1):1–15
The hemopexin receptor on the cell surface of human polymorphonuclear leukocytes. Okazaki H, et al. **Cell Struct Funct** 1989 Feb;14(1):129–40
Fluoroquinolone derivatives: effects on neutrophil functional tests. Bersani C, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):222–3
Direct action of antibiotics and immunomodulating agents on phagocytosis. Fietta A, et al. **Chemioterapia** 1987 Jun; 6(2 Suppl):229–31
Effect of ceftriaxone on bacterial killing by human neutrophils in vitro. Labro M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):234–6
Interaction of cefotaxime versus desacetyl cefotaxime on human neutrophil functions. Labro M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):237–9
Multiple organ damage caused by tumor necrosis factor and prevented by prior neutrophil depletion. Mallick AA, et al. **Chest** 1989 May;95(5):1114–20
Fibrin is a determinant of neutrophil sequestration in the lung. Cooper JA, et al. **Circ Res** 1988 Oct;63(4):735–41
Attenuation of no-reflow phenomenon, neutrophil activation, and reperfusion injury in intestinal microcirculation by topical adenosine. Kaminski PM, et al. **Circ Res** 1989 Aug; 65(2):426–35
Lipoxygenase products induce neutrophil activation and increase endothelial permeability after thrombin-induced pulmonary microembolism. Perlman MB, et al. **Circ Res** 1989 Jan;64(1):62–73
Complement and neutrophil activation in the pathogenesis of ischemic myocardial injury. Crawford MH, et al. **Circulation** 1988 Dec;78(6):1449–58
Neutrophil function in ischemic heart disease. Mehta J, et al. **Circulation** 1989 Mar;79(3):549–56
Inhibition of neutrophil and natural killer cell function by human seminal fluid acid phosphatase. Mukhopadhyay NK, et al. **Clin Chim Acta** 1989 Jun 15;182(1):31–40
Kinetics of glomerular neutrophil influx after lipopolysaccharide in antibody-mediated injury. Savige JA, et al. **Clin Exp Immunol** 1988 Jul;73(1):134–8
Neutrophil lysosomal degradation of human CRP: CRP-derived peptides modulate neutrophil function. Shephard EG, et al. **Clin Exp Immunol** 1988 Jul; 73(1):139–45
Polymorphonuclear neutrophils function in splenectomized patients. Wysocki H, et al. **Clin Exp Immunol** 1989 Mar; 75(3):392–5
Blood polymorphonuclear behavior in patients with ankylosing spondylitis. el Abbouyi A, et al. **Clin Exp Rheumatol** 1988 Oct-Dec;6(4):401–3
Polymorphonuclear cell functions in patients with primary Sjögren's syndrome. Pennec YL, et al. **Clin Exp Rheumatol** 1988 Jul-Sep;6(3):293–6
Signal transduction events in stimulated rat neutrophils: effects of adenine nucleotides. Ward PA, et al. **Clin Immunol Immunopathol** 1989 Jan;50(1 Pt 1):30–41
Na+/H+ exchange and the regulation of intracellular pH in polymorphonuclear leukocytes. Grinstein S, et al. **Comp Biochem Physiol [A]** 1988;90(4):543–9
Effects of ibuprofen on neutrophil function and acute lung injury in canine endotoxin shock. Balk RA, et al. **Crit Care Med** 1988 Nov;16(11):1121–7
Neutrophilic granulocyte function. Quantitative leukocyte mobilization and function of circulating and exudative neutrophils. Wandall JH. **Dan Med Bull** 1988 Jun; 35(3):237–52 (182 ref.)
Leukocyte microbicidal activity assessed by chemiluminescence in elderly non-insulin dependent diabetes mellitus. Winocour PH, et al. **Diabetes Res** 1988 Oct;9(2):73–5
Release of neutrophil chemotactic factors from gastric tissue. Initial biochemical characterization. Kozol RA, et al. **Dig Dis Sci** 1989 May;34(5):681–7
Effect of ovarian steroids on migration of uterine lumenal neutrophils and on chemokinetic factors in uterine secretions from mares. Watson ED. **Equine Vet J** 1988 Sep; 20(5):368–70
Purine and pyrimidine nucleotides potentiate activation of NADPH oxidase and degranulation by chemotactic peptides and induce aggregation of human neutrophils via G proteins. Seifert R, et al. **Eur J Biochem** 1989 Apr 15; 181(1):277–85
Receptor signalling and intracellular calcium in neutrophil activation. Lew DP. **Eur J Clin Invest** 1989 Aug; 19(4):338–46 (40 ref.)
Role of the polymorphonuclear leukocyte: interaction with nosocomial pathogens. Toews GB. **Eur J Clin Microbiol Infect Dis** 1989 Jan;8(1):21–4 (46 ref.)
The human neutrophil. Function and dysfunction. Borregaard N. **Eur J Haematol** 1988 Nov;41(5):401–13 (129 ref.)
Roles of mast cells and PMN leukocytes in cardiotoxin-induced rat paw edema. Wang JP, et al. **Eur J Pharmacol** 1989 Feb 14;161(1):9–18
Substance P-induced increase in vascular permeability in the rat trachea does not depend on neutrophils or other components of circulating blood. Bethel RA, et al. **Exp Lung Res** 1988;14(6):769–79
Protease inhibitor eglin-c affects superoxide anion release but not bacterial killing by human polymorphonuclear leukocytes. Esposito AL, et al. **Exp Lung Res** 1988; 14(6):743–56
Neutrophil response following intratracheal instillation of collagen peptides into rat lungs. Riley DJ, et al. **Exp Lung Res** 1988;14(4):549–63
Entamoeba histolytica: role of amebic proteinases and polymorphonuclear leukocytes in acute experimental amebiasis in the rat. Becker I, et al. **Exp Parasitol** 1988 Dec;67(2):268–80
Characteristics of ingress and life span of neutrophils at a site of acute inflammation, determined with the Sephadex model in rats. Egger G, et al. **Exp Pathol** 1988;35(4):209–18
Does protein kinase C control receptor-mediated phagocytosis in human neutrophils? Andersson T, et al. **FEBS Lett** 1988 Nov 7;239(2):371–5
C-reactive protein decreases protein phosphorylation in stimulated human neutrophils. Buchta R, et al. **FEBS Lett** 1988 Sep 12;237(1–2):173–7
A time-course study on superoxide generation and protein kinase C activation in human neutrophils. Christiansen NO. **FEBS Lett** 1988 Nov 7;239(2):195–8
ATP stimulates secretion in human neutrophils and HL60 cells via a pertussis toxin-sensitive guanine nucleotide-binding protein coupled to phospholipase C. Cockcroft S, et al. **FEBS Lett** 1989 Mar 13;245(1–2):25–9
Concanavalin A stimulation of O2 consumption in electropermeabilized neutrophils via a pertussis toxin-insensitive G protein. Lu DJ, et al. **FEBS Lett** 1989 Aug 14;253(1–2):151–6
Immunoregulatory granulocyte factor (GF). II. In vitro features of antibodies against GF+. Baj Z, et al. **Folia Biol (Praha)** 1988;34(6):390–8
Genetic determination of phagocytic activity of polymorphonuclear leucocytes. Zalkovičová M, et al. **Folia Biol (Praha)** 1988;34(4):240–7
HEMA-particles phagocytosis of rat neutrophils. Berger J. **Folia Haematol (Leipz)** 1988;115(6):833–6
A possible role for ferritin during inflammation. Brailsford S, et al. **Free Radic Res Commun** 1985;1(2):101–9
Effects of liposomal superoxide dismutase on human neutrophil activity. Somiya K, et al. **Free Radic Res Commun** 1986;1(5):329–37
Antioxidant properties of conjugated bilirubin and biliverdin: biologically relevant scavenging of hypochlorous acid. Stocker R, et al. **Free Radic Res Commun** 1989;6(1):57–66
Inflammation-induced intestinal hyperemia in the rat: role of neutrophils. Sekizuka E, et al. **Gastroenterology** 1988 Dec;95(6):1528–34
Neutrophil and eosinophil involvement of the small bowel affected by chronic alcoholism. Colombel JF, et al. **Gut** 1988 Dec;29(12):1656–60
Interleukin 6 primes human neutrophil and monocyte oxidative burst response. Kharazmi A, et al. **Immunol Lett** 1989 May;21(2):177–84
CD11/CD18-independent neutrophil adherence to inducible endothelial-leucocyte adhesion molecules (E-LAM) in vitro. Dobrina A, et al. **Immunology** 1989 Aug;67(4):502–8
Linoleic acid-deficient rat neutrophils show decreased

bactericidal capacity, superoxide formation and membrane depolarization. Gyllenhammar H, et al. **Immunology** 1989 Apr;66(4):616–20

Neutrophil stimulation by recombinant cytokines and a factor produced by IL–1–treated human synovial cell cultures. Watson ML, et al. **Immunology** 1988 Dec;65(4):567–72

Role of yeast cell growth temperature on Candida albicans virulence in mice. Antley PP, et al. **Infect Immun** 1988 Nov;56(11):2884–90

Rat alveolar macrophage production of chemoattractants for neutrophils: response to Escherichia coli endotoxin. Christman JW, et al. **Infect Immun** 1989 Mar;57(3):810–6

Activity of polymorphonuclear leukocytes in the presence of sulfide. Claesson R, et al. **Infect Immun** 1989 Sep; 57(9):2776–81

In vivo activation of neutrophil function in hamsters by recombinant human granulocyte colony–stimulating factor. Cohen AM, et al. **Infect Immun** 1988 Nov;56(11):2861–5

Strain variation in phagocytosis of Cryptococcus neoformans: dissociation of susceptibility to phagocytosis from activation and binding of opsonic fragments of C3. Kozel TR, et al. **Infect Immun** 1988 Nov;56(11):2794–800

Effects of pyocyanine, a phenazine dye from Pseudomonas aeruginosa, on oxidative burst and bacterial killing in human neutrophils. Müller PK, et al. **Infect Immun** 1989 Sep;57(9):2591–6

Impairment of phagocytosis by the Klebsiella pneumoniae mannose–inhibitable adhesin–T7 receptor. Pruzzo C, et al. **Infect Immun** 1989 Mar;57(3):975–82

A soluble Bacteroides by–product impairs phagocytic killing of Escherichia coli by neutrophils. Rotstein OD, et al. **Infect Immun** 1989 Mar;57(3):745–53

Natural inhibitor from Candida albicans blocks release of azurophil and specific granule contents by chemotactic peptide–stimulated human neutrophils. Smail EH, et al. **Infect Immun** 1989 Mar;57(3):689–92

A 25–kilodalton fraction from Mycobacterium tuberculosis that inhibits hexose monophosphate shunt activity, lysozyme release, and H2O2 production: reversal by gamma interferon. Wadee AA, et al. **Infect Immun** 1989 Mar;57(3):864–9

Independence of neutrophil respiratory burst oxidant generation from the early cytosolic calcium response after stimulation with unopsonized Candida albicans hyphae. Wysong DR, et al. **Infect Immun** 1989 May;57(5):1499–505

Polymorphonuclear leucocyte dysfunction during short term metabolic changes from normo– to hyperglycemia in type 1 (insulin dependent) diabetic patients. Kjersem H, et al. **Infection** 1988 Jul–Aug;16(4):215–21

Effects of products from inflammatory pulmonary neutrophils on alveolar macrophage chemotaxis, spreading, and thymidine incorporation. Donaldson K, et al. **Inflammation** 1989 Aug;13(4):443–53

Permeabilization and calcium–dependent activation of rabbit polymorphonuclear leukocytes by poly–L–arginine. Elferink JG, et al. **Inflammation** 1989 Jun;13(3):285–94

Instability of leukocyte aggregation: lack of evidence for leukoembolization during various states of inflammation. Fadilah R, et al. **Inflammation** 1988 Oct;12(5):425–32

Effect of fluoride on movement of concanavalin A–acceptor molecules of human neutrophils. Gabler WL, et al. **Inflammation** 1989 Jun;13(3):317–28

Effect of piroxicam therapy on granulocyte function and granulocyte elastase concentration in peripheral blood and synovial fluid of rheumatoid arthritis patients. Montecucco C, et al. **Inflammation** 1989 Apr;13(2):211–20

Effect of recombinant DNA–produced tumor necrosis factor on various parameters of neutrophil function. Ozaki Y, et al. **Inflammation** 1988 Aug;12(4):297–309

Modulation of functional activity of human polymorphonuclear and mononuclear phagocytes by intravenous gamma globulin. Pruzanski W, et al. **Inflammation** 1989 Jun;13(3):341–57

Relationship between neutrophil infiltration and tissue eosinophilia in the rat. Cook RM, et al. **Int Arch Allergy Appl Immunol** 1988;87(1):105–8

Release of high molecular weight–neutrophil chemotactic activity from human tissues, cells and secretion. Nagakura T, et al. **Int Arch Allergy Appl Immunol** 1989; 88(1–2):187–90

Prolonged exposure of neutrophils to saline or bronchoalveolar lavage fluid does not alter superoxide anion generation. Nguyen P, et al. **Int Arch Allergy Appl Immunol** 1989;89(2–3):301–5

Inhibition by histamine of platelet–activating–factor–induced neutrophil chemotaxis in bronchial asthma. Rabier M, et al. **Int Arch Allergy Appl Immunol** 1989;89(2–3):314–7

The role of polymorphonuclear leukocytes (PMN) on the growth and metastatic potential of 13762NF mammary adenocarcinoma cells. Aeed PA, et al. **Int J Cancer** 1988 Nov 15;42(5):748–59

Granulocyte activation by a cell surface complex of Staphylococcus saprophyticus: a receptor–mediated phenomenon. Ko HL, et al. **Int J Med Microbiol** 1989 May; 271(1):104–13

Identification of leukotriene B4 as the neutrophil chemotactic factor released by antigen challenge from passively sensitized guinea pig lungs. Atkins PC, et al. **J Allergy Clin Immunol** 1989 Jan;83(1):136–43

Interleukin–4 is a neutrophil activator. Boey H, et al. **J Allergy Clin Immunol** 1989 May;83(5):978–84

Effect of salbutamol and inhaled sodium cromoglycate on the airway and neutrophil chemotactic activity in "fog"induced bronchospasm. Moscato G, et al. **J Allergy Clin Immunol** 1988 Sep;82(3 Pt 1):382–8

Atopic dermatitis: influence of bacterial infections on human monocyte and neutrophil granulocyte functional activities. Mrowietz U, et al. **J Allergy Clin Immunol** 1988 Dec; 82(6):1027–36

Neutrophil depletion does not prevent myocardial dysfunction after brief coronary occlusion. Jeremy RW, et al. **J Am Coll Cardiol** 1989 Apr;13(5):1155–63

Do neutrophils mediate the phenomenon of stunned myocardium? Kloner RA. **J Am Coll Cardiol** 1989 Apr; 13(5):1164–6

Effect of antimicrobial and antineoplastic drugs alone and in combination on the phagocytic and candidacidal function of human polymorphonuclear leucocytes. Pallister CJ, et al. **J Antimicrob Chemother** 1989 Jan;23(1):87–94

Polymorphonuclear leukocyte cytoplasts mediate acute lung injury. Antony VB, et al. **J Appl Physiol** 1988 Aug; 65(2):706–13

Neutrophil kinetics in rabbits during infusion of zymosan–activated plasma. Doerschuk CM, et al. **J Appl Physiol** 1989 Jul;67(1):88–95

Neutrophil retention in model capillaries: deformability, geometry, and hydrodynamic forces. Downey GP, et al. **J Appl Physiol** 1988 Oct;65(4):1861–71

Kinetics of radiolabeled neutrophils in swine. Ohgami M, et al. **J Appl Physiol** 1989 Apr;66(4):1881–5

Endotoxin–pretreated neutrophils increase pulmonary vascular permeability in dogs. Welsh CH, et al. **J Appl Physiol** 1989 Jan;66(1):112–9

Neutrophil function in patients with localized juvenile periodontitis and with rapidly progressive periodontitis. Zafiropoulos GG, et al. **J Biol Buccale** 1988 Sep; 16(3):151–6

Granulocyte–macrophage colony–stimulating factor primes neutrophils by activating a pertussis toxin–sensitive G protein not associated with phosphatidylinositol turnover. Corey SJ, et al. **J Biol Chem** 1989 Aug 25;264(24):14165–71

Two transduction sequences are necessary for neutrophil activation by receptor agonists. Dewald B, et al. **J Biol Chem** 1988 Nov 5;263(31):16179–84

Chemoattractant receptor promotion of Ca2+ influx across the plasma membrane of HL–60 cells. A role for cytosolic free calcium elevations and inositol 1,3,4,5–tetrakisphosphate production. Pittet D, et al. **J Biol Chem** 1989 May 5;264(13):7251–61

Determination of the disulfide array in the human defensin HNP–2. A covalently cyclized peptide. Selsted ME, et al. **J Biol Chem** 1989 Mar 5;264(7):4003–7

Transient increase in phosphatidylinositol 3,4–bisphosphate and phosphatidylinositol trisphosphate during activation of human neutrophils. Traynor–Kaplan AE, et al. **J Biol Chem** 1989 Sep 15;264(26):15668–73

Analysis of luminol–dependent chemiluminescence from granule depleted neutrophil cytoplasts reveals two different light–emitting mechanisms. Dahlgren C. **J Biolumin Chemilumin** 1988 Jan–Mar;2(1):25–33

Lipopolysaccharide–dependent enhancement of adherence–mediated chemiluminescence response of polymorphonuclear leukocytes. Dwenger A, et al. **J Biolumin Chemilumin** 1988 Jan–Mar;2(1):35–9

Inhibition of luminol–dependent luminescence and simultaneous generation of native luminescence of activated human polymorphonuclear leukocytes by addition of albumin. Roschger P, et al. **J Biolumin Chemilumin** 1988 Jan–Mar;2(1):1–7

A novel member of the integrin receptor family mediates Arg–Gly–Asp–stimulated neutrophil phagocytosis. Gresham HD, et al. **J Cell Biol** 1989 May;108(5):1935–43

Cytokine–induced respiratory burst of human neutrophils: dependence on extracellular matrix proteins and CD11/CD18 integrins. Nathan C, et al. **J Cell Biol** 1989 Sep;109(3):1341–9

Interactions of cytoplasmic granules with microtubules in human neutrophils. Rothwell SW, et al. **J Cell Biol** 1989 Jun;108(6):2313–26

Guanine nucleotide–induced polymerization of actin in electropermeabilized human neutrophils. Therrien S, et al. **J Cell Biol** 1989 Sep;109(3):1125–32

Sequential expression of cell surface C3bi receptors during neutrophil locomotion. Francis JW, et al. **J Cell Physiol** 1989 Sep;140(3):519–23

Modulation of endothelial fibronectin synthesis by polymorphonuclear granulocytes. Macarak EJ, et al. **J Cell Physiol** 1989 Jun;139(3):517–23

Effect of pentoxifylline on developmental changes in neutrophil cell surface mobility and membrane fluidity. Newton JA, et al. **J Cell Physiol** 1989 Sep;140(3):427–31

Chemotactic peptide receptor–cytoskeletal interactions and functional correlations in differentiated HL–60 cells and human polymorphonuclear leukocytes. Rao KM, et al. **J Cell Physiol** 1989 Oct;141(1):119–25

Gradient perception by neutrophil leucocytes, continued [editorial] Lauffenburger D, et al. **J Cell Sci** 1987 Nov;88 (Pt 4):415–6

Delayed hypoperfusion after incomplete forebrain ischemia in the rat. The role of polymorphonuclear leukocytes. Grøgaard B, et al. **J Cereb Blood Flow Metab** 1989 Aug; 9(4):500–5

Functional defect in neutrophil cytosols from two patients with autosomal recessive cytochrome–positive chronic granulomatous disease. Curnutte JT, et al. **J Clin Invest** 1989 Apr;83(4):1236–40

Receptor–mediated phagocytosis in human neutrophils is associated with increased formation of inositol phosphates and diacylglycerol. Elevation in cytosolic free calcium and formation of inositol phosphates can be dissociated from accumulation of diacylglycerol. Fällman M, et al. **J Clin Invest** 1989 Sep;84(3):886–91

Disruption of the subendothelial basement membrane during neutrophil diapedesis in an in vitro construct of a blood vessel wall. Huber AR, et al. **J Clin Invest** 1989 Apr; 83(4):1122–36

Modulation of polymorphonuclear leukocyte microbicidal activity and oxidative metabolism by fibrinogen degradation products D and E. Kazura JW, et al. **J Clin Invest** 1989 Jun;83(6):1916–24

Interaction of human defensins with Escherichia coli. Mechanism of bactericidal activity. Lehrer RI, et al. **J Clin Invest** 1989 Aug;84(2):553–61

Role of catalytic and lysine–binding sites in plasmin–induced neutrophil adherence to endothelium. Lo SK, et al. **J Clin Invest** 1989 Sep;84(3):793–801

Formyl peptide–induced chemotaxis of human polymorphonuclear leukocytes does not require either marked changes in cytosolic calcium or specific granule discharge. Role of formyl peptide receptor reexpression (or recycling). Perez HD, et al. **J Clin Invest** 1989 Jun; 83(6):1963–70

Macrophage phagocytosis of aging neutrophils in inflammation. Programmed cell death in the neutrophil leads to its recognition by macrophages. Savill JS, et al. **J Clin Invest** 1989 Mar;83(3):865–75

Cooperative interactions of LFA–1 and Mac–1 with intercellular adhesion molecule–1 in facilitating adherence and transendothelial migration of human neutrophils in vitro. Smith CW, et al. **J Clin Invest** 1989 Jun;83(6):2008–17

Cytolysis mediated by phagocytosing neutrophils. Influence of the presence of an alternative target cell population. Dallegri F, et al. **J Clin Lab Immunol** 1988 Jun;26(2):103–6

Interferon induction and granulocyte function in patients with viral meningitis. Moringlane IL, et al. **J Clin Lab Immunol** 1988 Jun;26(2):85–8

Neutrophil chemotactic behaviour in patients with early–onset forms of periodontitis (I). Leading front analysis in Boyden chambers. Kinane DF, et al. **J Clin Periodontol** 1989 Apr;16(4):242–6

Neutrophil chemotactic behaviour in patients with early–onset forms of periodontitis (II). Assessment using the under agarose technique. Kinane DF, et al. **J Clin Periodontol** 1989 Apr;16(4):247–51

Microbiological aspects of diseases [letter] Oshrain HI, et al. **J Clin Periodontol** 1989 Feb;16(2):132

Chemiluminescence of peripheral polymorphonuclear leukocytes from adult periodontitis patients. Whyte GJ, et al. **J Clin Periodontol** 1989 Feb;16(2):69–74

Oxygen concentration in milk of healthy and mastitic cows and implications of low oxygen tension for the killing of Staphylococcus aureus by bovine neutrophils. Mayer SJ, et al. **J Dairy Res** 1988 Nov;55(4):513–9

Functional activity of neutrophils from bovine mammary glands infected with Staphylococcus aureus. Fox LK, et al. **J Dairy Sci** 1988 Dec;71(12):3521–4

Phagocytic and postphagocytic activities of bovine neutrophils for pure and mixed bacterial cultures. Silva ID, et al. **J Dairy Sci** 1988 Sep;71(9):2513–9

Electrophoretic mobility of polymorphonuclear leukocytes response to scale extracts from psoriasis vulgaris. Higuchi M. **J Dermatol (Tokyo)** 1988 Oct;15(5):367–72

Transient adhesion of neutrophils to endothelium. Lo SK, et al. **J Exp Med** 1989 May 1;169(5):1779–93

Alternative membrane forms of Fc gamma RIII(CD16) on human natural killer cells and neutrophils. Cell type–specific expression of two genes that differ in single nucleotide substitutions. Ravetch JV, et al. **J Exp Med** 1989 Aug 1;170(2):481–97

Purification and partial primary sequence of a chemotactic protein for polymorphonuclear leukocytes derived from human lung giant cell carcinoma LU65C cells. Suzuki K, et al. **J Exp Med** 1989 Jun 1;169(6):1895–901

Interaction of Bordetella pertussis virulence components with neutrophils: effect on chemiluminescence induced by a chemotactic peptide and by intact bacteria. Craig FF, et al. **J Gen Microbiol** 1988 Aug;134 (Pt 8):2201–11

Induction of DNA strand scissions in HeLa cells by human polymorphonuclear leucocytes activated by Chlamydia trachomatis elementary bodies. Zvillich M, et al. **J Gen Microbiol** 1988 Aug;134 (Pt 8):2405–12

A phospholipase A2–activating protein (PLAP) stimulates human neutrophil aggregation and release of lysosomal enzymes, superoxide, and eicosanoids. Bomalaski JS, et al. **J Immunol** 1989 Jun 1;142(11):3957–62

IL–1–induced adhesion of polymorphonuclear leukocytes to cultured human endothelial cells. Role of platelet–activating factor. Breviario F, et al. **J Immunol** 1988 Nov 15;141(10):3391–7

Adenosine regulates the respiratory burst of cytokine–triggered human neutrophils adherent to biologic surfaces. de la Harpe J, et al. **J Immunol** 1989 Jul 15; 143(2):596–602

Endothelial–leukocyte adhesion molecule–1–dependent and leukocyte (CD11/CD18)–dependent mechanisms contribute to polymorphonuclear leukocyte adhesion to

cytokine-activated human vascular endothelium. Luscinskas FW, et al. **J Immunol** 1989 Apr 1;142(7):2257-63

Regulation of human neutrophil functions by adenine nucleotides. McGarrity ST, et al. **J Immunol** 1989 Mar 15; 142(6):1986-94

Modulation of IL-1, tumor necrosis factor, and C5a-mediated murine neutrophil migration by alpha-melanocyte-stimulating hormone. Mason MJ, et al. **J Immunol** 1989 Mar 1;142(5):1646-51

Chemoattractant-induced cytoplasmic pH changes and cytoskeletal reorganization in human neutrophils. Relationship to the stimulated calcium transients and oxidative burst. Naccache PH, et al. **J Immunol** 1989 Apr 1;142(7):2438-44

Studies on molecular regulation of phagocytosis in neutrophils. Con A-mediated ingestion and associated respiratory burst independent of phosphoinositide turnover, rise in [Ca2+]i, and arachidonic acid release. Rossi F, et al. **J Immunol** 1989 Mar 1;142(5):1652-60

Leukocyte inhibitory factor stimulates neutrophil-endothelial cell adhesion. Schainberg H, et al. **J Immunol** 1988 Nov 1;141(9):3055-60

Secretion of novel and homologous neutrophil-activating peptides by LPS-stimulated human endothelial cells. Schröder JM, et al. **J Immunol** 1989 Jan 1;142(1):244-51

Activation of human neutrophils by substance P. Effect on oxidative metabolism, exocytosis, cytosolic Ca2+ concentration and inositol phosphate formation. Serra MC, et al. **J Immunol** 1988 Sep 15;141(6):2118-24

Leukotriene release enhancing factor. Purification, specific allergen induction, and further biologic properties. Tsai JJ, et al. **J Immunol** 1989 Mar 1;142(5):1661-8

Use of sparse-pore polycarbonate (Nuclepore) membrane for the measurement of chemotaxis of polymorphonuclear leukocytes. Comparison of 'micro-Boyden' chambers and estimation of 'drop-off' of cells. Bignold LP. **J Immunol Methods** 1989 Mar 31;118(2):217-25

A new simplified single-filter assay for 'in vitro' evaluation of chemotaxis of 51Cr-labeled polymorphonuclear leukocytes. Capsoni F, et al. **J Immunol Methods** 1989 Jun 2;120(1):125-31

Rapid method for the isolation of neutrophils in high yield without the use of dextran or density gradient polymers. Eggleton P, et al. **J Immunol Methods** 1989 Jul 6; 121(1):105-13

Priming of polymorphonuclear neutrophilic leukocyte oxidative activity by type 1 pili from Escherichia coli. Goetz MB. **J Infect Dis** 1989 Mar;159(3):533-42

Induction of signal transduction in human neutrophils by Candida albicans hyphae: the role of pertussis toxin-sensitive guanosine triphosphate-binding proteins. Lyman CA, et al. **J Infect Dis** 1988 Nov;158(5):1056-64

Neutrophil-endothelial cell interactions: mechanisms of neutrophil adherence to vascular endothelium. Tonnesen MG. **J Invest Dermatol** 1989 Aug;93(2 Suppl):53S-58S (48 ref.)

Neutrophil chemotaxis and adherence in vitro and localization in vivo in rabbits with Staphylococcus aureus abscesses. Bamberger DM, et al. **J Lab Clin Med** 1989 Aug; 114(2):135-41

Neutrophil-induced depletion of adenosine triphosphate in target cells: evidence for a hypochlorous acid-mediated process. Dallegri F, et al. **J Lab Clin Med** 1988 Dec; 112(6):765-72

Effect of neutrophil depletion on ischemic renal injury in the rat. Paller MS. **J Lab Clin Med** 1989 Mar;113(3):379-86

Neutrophil cathepsin G increases transendothelial albumin flux. Peterson MW. **J Lab Clin Med** 1989 Mar; 113(3):297-308

Neutrophil chemiluminescence induced by opsonized group A streptococcal particles: an effective probe of intravenous immunoglobulin preparations. Rüfenacht R, et al. **J Lab Clin Med** 1989 Mar;113(3):387-95

Induction of interferon-gamma and tumor necrosis factor by Legionella pneumophila: augmentation of human neutrophil bactericidal activity. Blanchard DK, et al. **J Leukoc Biol** 1989 Jun;45(6):538-45

Human neutrophils activated by interferon-gamma and tumour necrosis factor-alpha kill Entamoeba histolytica trophozoites in vitro. Denis M, et al. **J Leukoc Biol** 1989 Sep;46(3):270-4

Are serine proteases involved in immune complex activation of neutrophils? Mark DE, et al. **J Leukoc Biol** 1988 Nov; 44(5):441-7

Differences in the ability of neutrophils and monocytes to traverse epithelial occluding junctions. Migliorisi G, et al. **J Leukoc Biol** 1988 Dec;44(6):485-92

Neutrophil membrane sulfhydryl groups are involved in stimulated neutrophil adherence to endothelium. Schwartz BR, et al. **J Leukoc Biol** 1989 Mar;45(3):177-82

Species variation in neutrophil biochemistry and function. Styrt B. **J Leukoc Biol** 1989 Jul;46(1):63-74 (143 ref.)

Thrombin-treated endothelium primes neutrophil functions: inhibition by platelet-activating factor receptor antagonists. Vercellotti GM, et al. **J Leukoc Biol** 1989 Jun;45(6):483-90

Phagocytosis of microcapsules by guinea-pig polymorphonuclear leucocytes. Sano T, et al. **J Microencapsul** 1986 Oct-Dec;3(4):265-73

Reduction in coronary vasodilator reserve following coronary occlusion and reperfusion in anesthetized dog: role of endothelium-derived relaxing factor, myocardial neutrophil infiltration and prostaglandins. Nichols WW, et al. **J Mol Cell Cardiol** 1988 Oct;20(10):943-54

Changes in insulin receptor expression in HL60 cells induced to differentiate towards neutrophils or monocytes. Lord JM, et al. **J Mol Endocrinol** 1988 Nov;1(3):197-201

Accumulation of polymorphonuclear leukocytes in reperfused ischemic canine myocardium: relation with tissue viability assessed by fluorine-18-2-deoxyglucose uptake. Wijns W, et al. **J Nucl Med** 1988 Nov; 29(11):1826-32

Chemoattractant activity of Entamoeba histolytica for human polymorphonuclear neutrophils. Salata RA, et al. **J Parasitol** 1989 Aug;75(4):644-6

Impaired neutrophil function in children with seizures treated with the ketogenic diet. Woody RC, et al. **J Pediatr** 1989 Sep;115(3):427-30

Altered free cytosolic calcium changes and neutrophil chemotaxis in patients with juvenile periodontitis. Agarwal S, et al. **J Periodont Res** 1989 Mar;24(2):149-54

Abnormal lymphocyte profiles and leukotriene B4 status in a patient with Crohn's disease and severe periodontitis. Engel LD, et al. **J Periodontol** 1988 Dec;59(12):841-7

Detachment of oral bacteria from saliva-coated hydroxyapatite by human polymorphonuclear leukocytes. Erard JC, et al. **J Periodontol** 1989 Apr;60(4):211-6

Defective neutrophil chemotaxis in Down's syndrome patients and its relationship to periodontal destruction. Izumi Y, et al. **J Periodontol** 1989 May;60(5):238-42

Evidence for the existence and ionic modulation of platelet-activating factor receptors mediating degranulatory responses in human polymorphonuclear leukocytes. Marquis O, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):293-300

The effect of tumor necrosis factor-alpha and interferon-gamma on neutrophil function. Livingston DH, et al. **J Surg Res** 1989 Apr;46(4):322-6

Altered polymorphonuclear neutrophilic granulocyte functions in patients with large burns. Bjerknes R, et al. **J Trauma** 1989 Jun;29(6):847-55

Polymorphonuclear leucocyte sequestration in the lungs and liver following soft-tissue trauma: an in vivo study. Thörne J, et al. **J Trauma** 1989 Apr;29(4):451-6

Suppression of leukocyte function and intracellular content of ATP in hyperosmotic condition comparable to the renal medulla. Matsumoto T, et al. **J Urol** 1989 Aug;142(2):399-402

The role of leukocytes in the pathophysiology of skeletal muscle ischemic injury. Belkin M, et al. **J Vasc Surg** 1989 Jul;10(1):14-8; discussion 18-9

The selective and superoxide-independent disruption of intestinal epithelial tight junctions during leukocyte transmigration. Nash S, et al. **Lab Invest** 1988 Oct; 59(4):531-7

Neutrophil-mediated endothelial injury in haemolytic uraemic syndrome. Forsyth KD, et al. **Lancet** 1989 Aug 19;2(8660):411-4

Neutrophil death as a defence mechanism against Candida albicans infections. McNamara MP, et al. **Lancet** 1988 Nov 19;2(8621):1163-5

Granulocyte-macrophage colony-stimulating factor for granulocyte defects of bone marrow transplant patients [letter] Zimmerli W, et al. **Lancet** 1989 Mar 4;1(8636):494

Effects of C-reactive protein on human neutrophil granulocytes challenged with N-formyl-methionyl-leucyl-phenylalanine and platelet-activating factor. Filep J, et al. **Life Sci** 1989; 44(8):517-24

Quartz-dust-induced production of reactive oxygen metabolites by human granulocytes. Hedenborg M, et al. **Lung** 1989;167(1):23-32

Disturbances of neutrophil granulocyte function in diabetics. Part II. Mechanisms responsible for impaired neutrophil granulocyte functions. Wierusz-Wysocka B. **Mater Med Pol** 1988 Oct-Dec;20(4):255-7 (30 ref.)

Disorders of polymorphonuclear neutrophils function in diabetics. Part I. Impairment of basic polymorphonuclear neutrophils functions. Wierusz-Wysocka B. **Mater Med Pol** 1988 Jul-Sep;20(3):177-9

Modulation of neutrophil mediated pulmonary damage: lessons learned from clinical disorders of neutrophils. Boxer LA. **Mead Johnson Symp Perinat Dev Med** 1986;(28):20-31 (13 ref.)

Neutrophil kinetics in the fetus and neonate and the clinical utility of granulocyte transfusion in neonatal medicine. Christensen RD, et al. **Mead Johnson Symp Perinat Dev Med** 1986;(28):32-42 (50 ref.)

Effect of influenza A on phagocytic cell function. Ertürk M, et al. **Med Microbiol Immunol (Berl)** 1989; 178(4):199-209

Semiautomated measurement of neutrophil chemotaxis with an image analyzer. Daughaday CC, et al. **Methods Enzymol** 1988;162:79-85

Neutrophil aggregation and chemokinesis assays. Ford-Hutchinson AW, et al. **Methods Enzymol** 1988; 162:72-8

Necrotaxis and galvanotaxis. Gruler H. **Methods Enzymol** 1988;162:115-27

Visual methods for measuring leukocyte locomotion. Haston WS, et al. **Methods Enzymol** 1988;162:17-38

Ionic events relevant to neutrophil activation. Naccache PH, et al. **Methods Enzymol** 1988;162:283-98

Agarose method for human neutrophil chemotaxis. Nelson RD, et al. **Methods Enzymol** 1988;162:50-9

Platelet alpha-granule protein-induced chemotaxis of inflammatory cells and fibroblasts. Senior RM, et al. **Methods Enzymol** 1989;169:233-44

Crystal-induced chemotactic factor. Spilberg I, et al. **Methods Enzymol** 1988;162:193-7

Orientation chamber in chemotaxis. Zigmond SH. **Methods Enzymol** 1988;162:65-72

Modulation of bovine neutrophil antibacterial activities by Pasteurella haemolytica A1 purified capsular polysaccharide. Czuprynski CJ, et al. **Microb Pathog** 1989 Feb;6(2):133-41

The endothelial cell cytoskeleton modulates extravascular polymorphonuclear leukocyte accumulations in vivo. Paterson IS, et al. **Microvasc Res** 1989 Jul;38(1):49-56

Neutrophil mediator release by rheumatoid factor. Blackburn WD. **Monogr Allergy** 1989;26:96-102 (33 ref.)

Increased frequency of oxidant-mediated DNA strand breaks in mononuclear leucocytes exposed to activated neutrophils from cigarette smokers. Schwalb G, et al. **Mutat Res** 1989 Mar;225(3):95-9

Tissue destruction by neutrophils [letter; comment] **N Engl J Med** 1989 Aug 3;321(5):327-9. **Comment on:** N Engl J Med 1989 Feb 9;320(6):365-76

Incidence, neutrophil kinetics, and natural history of neonatal neutropenia associated with maternal hypertension [see comments] Koenig JM, et al. **N Engl J Med** 1989 Aug 31;321(9):557-62. **Comment in:** N Engl J Med 1989 Aug 31;321(9):606-7

Neutrophils and emphysema [editorial: comment] McGowan SE, et al. **N Engl J Med** 1989 Oct 5;321(14):968-70. **Comment on:** N Engl J Med 1989 Oct 5;321(14):924-8

The effect of cigarette smoking on neutrophil kinetics in human lungs [see comments] MacNee W, et al. **N Engl J Med** 1989 Oct 5;321(14):924-8. **Comment in:** N Engl J Med 1989 Oct 5;321(14):968-70

Tissue destruction by neutrophils [see comments] Weiss SJ. **N Engl J Med** 1989 Feb 9;320(6):365-76 (86 ref.). **Comment in:** N Engl J Med 1989 Aug 3;321(5):327-9

Rapid induction of neutrophil-endothelial adhesion by endothelial complement fixation. Marks RM, et al. **Nature** 1989 May 25;339(6222):314-7

Dihydrorhodamine 123: a new flow cytometric indicator for respiratory burst activity in neutrophil granulocytes. Rothe G, et al. **Naturwissenschaften** 1988 Jul;75(7):354-5

Role of neutrophils in gastric damage induced by platelet activating factor. Etienne A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):422-5

Protection of the ischemic myocardium from reperfusion injury by prostaglandin E1 inhibition of ischemia-induced neutrophil activation. Schrör K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Sep; 338(3):268-74

Is complement alone capable of inducing glomerular injury in passive Heymann nephritis? Hara M, et al. **Nephron** 1989; 52(2):187-8

Polymorphonuclear leukocyte function during hemodialysis: relationship to complement activation. Jacobs AA Jr, et al. **Nephron** 1989;52(2):119-24

Bacteria, phagocytes, and bystander cells. Interaction between Staphylococcus aureus, polymorphonuclear leukocytes, and endothelial cells. Vandenbroucke-Grauls CM, et al. **Pathol Immunopathol Res** 1988;7(3):149-61 (42 ref.)

Effect of cyclic adenosine monophosphate elevations on functional responses of polymorphonuclear leukocytes from patients with cystic fibrosis. Suter S, et al. **Pediatr Pulmonol** 1989;6(4):237-41

Defective leukocyte fungicidal activity in end-organ resistance to 1,25-dihydroxyvitamin D. Etzioni A, et al. **Pediatr Res** 1989 Mar;25(3):276-9

Characterization of nonmotile neutrophil subpopulations in neonates and adults. Krause PJ, et al. **Pediatr Res** 1989 May;25(5):519-24

Abnormal membrane fluidity as a cause of impaired functional dynamics of chemoattractant receptors on neonatal polymorphonuclear leukocytes: lack of modulation of the receptors by a membrane fluidizer. Yasui K, et al. **Pediatr Res** 1988 Oct;24(4):442-6

Mechanisms for luminol-augmented chemiluminescence from neutrophils induced by leukotriene B4 and N-formyl-methionyl-leucyl-phenylalanine. Gyllenhammar H. **Photochem Photobiol** 1989 Feb; 49(2):217-23

Granulocyte-macrophage colony-stimulating factor and human neutrophils: role of guanine nucleotide regulatory proteins. Gomez-Cambronero J, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3569-73

Recombinant tumor necrosis factor increases pulmonary vascular permeability independent of neutrophils. Horvath CJ, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):9219-23

Human neutrophils and mononuclear cells inhibit platelet aggregation by releasing a nitric oxide-like factor. Salvemini D, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(16):6328-32

Tumor-elicited polymorphonuclear cells, in contrast to "normal" circulating polymorphonuclear cells, stimulate invasive and metastatic potentials of rat mammary adenocarcinoma cells. Welch DR, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5859-63

Phorbol 12–myristate 13–acetate inhibits binding of leukotriene B4 and platelet–activating factor and the responses they induce in neutrophils: site of action. Yamazaki M, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(15):5791–4

Superoxide production by phagocytic leukocytes: transmembrane signalling and potential interactions of the second messengers in cell stimulation. Badwey JA, et al. **Prog Clin Biol Res** 1988;282:209–21

Neutrophil stimulation by PMA increases alveolar permeability in rabbits. Burchardi H, et al. **Prog Clin Biol Res** 1989;308:323–9

Thrombin–induced neutrophil adhesion. Del Vecchio PJ, et al. **Prog Clin Biol Res** 1989;308:101–12

The role of calpain and protein kinase C in activation of human neutrophils. Pontremoli S, et al. **Prog Clin Biol Res** 1988;282:195–208

Leukocyte neutral proteinase inhibitor of the pig: modification by eglin C and superoxide dismutase of the response to shock. Siebeck M, et al. **Prog Clin Biol Res** 1989;308:945–51

Acute hyperoxic lung edema is not reduced by granulocyte depletion in rats. Lurie A. **Respiration** 1988;53(4):232–8

The neutrophil, friend or foe: pharmacologic manipulation. Mikes PS, et al. **Respiration** 1988;54 Suppl 1:9–15 (26 ref.)

Neutrophil activation by recombinant cytokines. Steinbeck MJ, et al. **Rev Infect Dis** 1989 Jul–Aug;11(4):549–68 (156 ref.)

Peripheral PMN cell activity in relation to treatment of juvenile periodontitis. Asman B, et al. **Scand J Dent Res** 1988 Oct;96(5):418–20

Chemotactic response of neutrophil polymorphonuclear leukocytes in juvenile periodontitis measured by the Leading Front method. Pedersen MM. **Scand J Dent Res** 1988 Oct;96(5):421–7

Increased expression of leucocyte adherence–related glycoproteins by polymorphonuclear leucocytes during phagocytosis of staphylococci on an endothelial surface. Vandenbroucke–Grauls CM, et al. **Scand J Immunol** 1989 Jul;30(1):91–8

Endothelial leukocyte adhesion molecule 1: an inducible receptor for neutrophils related to complement regulatory proteins and lectins. Bevilacqua MP, et al. **Science** 1989 Mar 3;243(4895):1160–5

Endothelial adhesiveness for blood neutrophils is inhibited by transforming growth factor–beta. Gamble JR, et al. **Science** 1988 Oct 7;242(4875):97–9

Blood cell rheology in acute cerebral infarction. Mercuri M, et al. **Stroke** 1989 Jul;20(7):959–62

Differential neutrophil activation before and after endotoxin infusion in enterally versus parenterally fed volunteers. Meyer J, et al. **Surg Gynecol Obstet** 1988 Dec;167(6):501–9

Oxygen radicals, lipid peroxidation, and neutrophil infiltration after small–intestinal ischemia and reperfusion. Otamiri T. **Surgery** 1989 May;105(5):593–7

Evidence for neutrophil–related acute lung injury after intestinal ischemia–reperfusion. Schmeling DJ, et al. **Surgery** 1989 Aug;106(2):195–201; discussion 201–2

Role of neutrophils in generalized reperfusion injury associated with resuscitation from shock. Vedder NB, et al. **Surgery** 1989 Sep;106(3):509–16

Assessment of pulmonary macrophage and neutrophil function in sequential bronchoalveolar lavage aspirates in sarcoidosis. Kelly CA, et al. **Thorax** 1988 Oct;43(10):787–91

Influence of polymorphonuclear leukocytes on the metabolism of arachidonate in human platelets. Oudinet JP, et al. **Thromb Haemost** 1988 Aug 30;60(1):59–62

Studies on the human plasma kallikrein–kinin system: alpha–kallikrein does not directly activate blood neutrophils. Burger D, et al. **Thromb Res** 1989 Jul 1; 55(1):109–19

Fibrinolytic activity of normal human blood monocytes. Grau E, et al. **Thromb Res** 1989 Jan 15;53(2):145–62

Human neutrophil function and immunoregulatory serum factors. Etheredge EE, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):92–5

Polymorphism of white blood cells in the rat. Stolc V. **Transplant Proc** 1989 Apr;21(2):3260–1

Effects of immunization with bovine herpesvirus–1 glycoproteins on bovine herpesvirus–1–induced alteration of bovine neutrophil chemotactic and anti–Pasteurella haemolytica activities. Noel EJ, et al. **Vaccine** 1988 Oct; 6(5):433–9

Platelet activating factor as a mediator of equine cell locomotion. Dawson J, et al. **Vet Res Commun** 1988; 12(2–3):101–7

Assessment of neutrophil function in the dairy cow during the perinatal period. Nagahata H, et al. **Zentralbl Veterinarmed [B]** 1988 Dec;35(10):747–51

[Chemiluminescence study on polymorphonuclear leukocytes of burned patients during acute infection] Dong YL. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 May;1(2):17–20 (Eng. Abstr.) **(Chi)**

[Neutrophil and lung diseases] Kong XJ, et al. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Oct; 11(5):297–9 (15 ref.) **(Chi)**

[Effects of neutrophils emigration on vascular permeability and anti–inflammatory mechanism of dexamethasone] Hou YN, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 May; 9(3):258–61 (Eng. Abstr.) **(Chi)**

[Ascitic fluid from alcoholic cirrhosis patients does not enhance chemotaxis of polynuclear neutrophils] Blanchard M, et al. **Ann Gastroenterol Hepatol (Paris)** 1989 Mar–Apr; 25(2):47–50 (Eng. Abstr.) **(Fre)**

[Properties and activation mechanism of neutrophilic leukocytes] Baggiolini M, et al. **Arzneimittelforschung** 1989 Jan;39(1A):177–80 (33 ref.) (Eng. Abstr.) **(Ger)**

[The measuring of the spontaneous migration of granulocytes in capillaries] Rytter M, et al. **Z Med Lab Diagn** 1989; 30(5):283–6 (Eng. Abstr.) **(Ger)**

[Functional defects of the local granulocytes in periodontal diseases] Jordan T, et al. **Zahn Mund Kieferheilkd** 1988; 76(6):603–4 (Eng. Abstr.) **(Ger)**

[Polymorphonuclear leukocytes inhibit proliferation of epithelial cells in rabbit cornea] Katakami C, et al. **Nippon Ganka Gakkai Zasshi** 1988 May;92(5):798–805 (Eng. Abstr.) **(Jpn)**

[Polarization assay of polymorphonuclear leukocytes in Behçet's diseases] Watanabe R, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Dec;98(14):1451–7 (Eng. Abstr.) **(Jpn)**

[Evaluation of the metabolism and function of peripheral blood neutrophils in a patient with the lazy leukocyte syndrome] Hrycek A, et al. **Pol Arch Med Wewn** 1985 Jun; 73(6):386–90 (Eng. Abstr.) **(Pol)**

[A method for assessing the lysosomal secretory activity of neutrophilic granulocytes using a diagnostic focus of inflammation] Pigarevskii VE, et al. **Arkh Patol** 1988; 50(7):83–7 (Eng. Abstr.) **(Rus)**

[Functional activity of the blood polymorphonuclear leukocytes in vascular lesions of the brain] Klebanov GI, et al. **Klin Med (Mosk)** 1988 Sep;66(9):82–5 **(Rus)**

[Cytochemical studies of leukocytes in patients with leptospirosis] Avdeeva MG, et al. **Lab Delo** 1988;(11):22–4 (Eng. Abstr.) **(Rus)**

[The role of neutrophils in the regulation of tissue metabolism (review of the literature)] Bakhov NI, et al. **Lab Delo** 1988; (6):3–12 (75 ref.) **(Rus)**

[Functional studies of neutrophils in chronic viral hepatitis] Bondarev LS, et al. **Lab Delo** 1988;(11):75–6 **(Rus)**

[A method of studying the secretory function of neutrophils] Dolgushin II, et al. **Lab Delo** 1988;(7):7–9 (Eng. Abstr.) **(Rus)**

[Characteristics of C3b–dependent neutrophil adhesion in man] Konyshkina TM, et al. **Lab Delo** 1989;(5):70–2 (Eng. Abstr.) **(Rus)**

[Phagocytic activity of neutrophils in children with hereditary glucose–6–phosphate dehydrogenase deficiency during acute pneumonia] Kasumova SM, et al. **Pediatriia** 1988;(9):24–7 (Eng. Abstr.) **(Rus)**

[Inhibition of the function of the neutrophil granulocyte caused by autologous serum from patients with acne vulgaris] Vignale R, et al. **Med Cutan Ibero Lat Am** 1988; 16(4):348–50 (Eng. Abstr.) **(Spa)**

[The function of the neutrophil granulocyte in acne vulgaris] Vignale R, et al. **Med Cutan Ibero Lat Am** 1988;16(4):351–4 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

A study of the functions of polymorphonuclear neutrophil in patients with Down's syndrome. Rascón Trincado MV, et al. **Allergol Immunopathol (Madr)** 1988 Sep–Oct; 16(5):339–45

Polymorphonuclear leucocyte motility in men with ankylosing spondylitis. Pease CT, et al. **Ann Rheum Dis** 1989 Jan;48(1):35–41

Elevated phagocytosis, oxidative burst, and F–actin formation in PMNs from individuals with intraoral manifestations of HIV infection. Ryder MI, et al. **J Acquir Immune Defic Syndr** 1988;1(4):346–53

[Pathology of the function of polymorphonuclear neutrophils] Baroni CD. **Ric Clin Lab** 1976 Jan–Mar;6 Suppl 1:78–9 (0 ref.) **(Ita)**

RADIATION EFFECTS

Low power energy laser and polymorphonuclear leukocytes. Silveri F, et al. **Boll Soc Ital Biol Sper** 1988 Feb; 64(2):115–22

PUVA and UVB inhibit the intra–epidermal accumulation of polymorphonuclear leukocytes. Chang A, et al. **Br J Dermatol** 1988 Sep;119(3):281–7

Enhancing effect of whole–body ultraviolet light irradiation on Candida albicans activity of human polymorphonuclear leukocytes. Hunyadi J, et al. **Dermatol Monatsschr** 1989; 175(6):326–32

[Ultrastructural findings in ultraviolet–irradiated lymphocytes and granulocytes] Gast W, et al. **Dermatol Monatsschr** 1988;174(12):762–5 **(Ger)**

[Inhibition of granulocyte phagocytosis in relation to ultraviolet irradiation dose and wave–length in vitro] Walther T, et al. **Dermatol Monatsschr** 1988;174(12):766–8 **(Ger)**

[The effect of infra–low frequency alternating magnetic field on the functional activity of blood neutrophils from rats with limited mobility] Temur'iants NA, et al. **Biofizika** 1988 Sep–Oct;33(5):863–6 (Eng. Abstr.) **(Rus)**

[Effect of UV radiation and the autotransfusion of UV–irradiated blood on the content of cationic proteins in the neutrophilic granulocytes of calves] Skorina IA, et al. **Tsitologiia** 1988 May;30(5):616–22 (Eng. Abstr.) **(Rus)**

SECRETION

Neutrophil secretion during blood coagulation: evidence for a prekallikrein independent pathway. Plow EF, et al. **Thromb Haemost** 1988 Jun 16;59(3):360–3

TRANSPLANTATION

Neutrophil transfusions in the treatment of neonatal sepsis. Cairo MS. **Am J Pediatr Hematol Oncol** 1989 Summer; 11(2):227–34 (37 ref.)

ULTRASTRUCTURE

The ultrastructural basis of interactions between leukocytes and endothelium. Hammersen F, et al. **Adv Exp Med Biol** 1988;242:77–84 (27 ref.)

Morphometric studies on human leukocyte granules. Schmid–Schönbein GW, et al. **Adv Exp Med Biol** 1988; 242:99–109

Ring–shaped nuclei in human neutrophilic leukocytes of healthy individuals: evidence of their occurrence and characteristics. Cabral HR, et al. **Am J Hematol** 1989 Apr; 30(4):259–60

Microtubule–granule relationships in motile human polymorphonuclear leukocytes. Ryder MI, et al. **Anat Rec** 1988 Jul;221(3):679–86

Possible involvement of microfilaments in protein kinase C translocation. Ito M, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1344–9

Changes in membrane properties of erythrocytes and polymorphonuclear cells in psoriasis. Ferretti G, et al. **Biochem Med Metab Biol** 1989 Apr;41(2):132–8

Reconstitution and characterization of the human neutrophil N–formyl peptide receptor and GTP binding proteins in phospholipid vesicles. Cupo JF, et al. **Biochim Biophys Acta** 1989 Jun 26;982(1):31–40

Immunocytochemical discovery of the 22– to 23–Kd subunit of cytochrome b558 at the surface of human peripheral phagocytes. Nakamura M, et al. **Blood** 1988 Nov; 72(5):1550–2

Abnormal peroxidase–positive granules in "specific granule" deficiency. Parmley RT, et al. **Blood** 1989 Feb 15; 73(3):838–44

Congenital macrothrombocytopenia, leucocyte inclusions, deafness and proteinuria: functional and electron microscopic observations on platelets and megakaryocytes. Heynen MJ, et al. **Br J Haematol** 1988 Dec;70(4):441–8

Effect of nedocromil sodium on neutrophil and eosinophil–induced epithelial cell desquamation in a human in vitro epithelial model. Phillips MJ, et al. **Drugs** 1989;37 Suppl 1:56–62; discussion 69–77

Dual granule localization of the dormant NADPH oxidase and cytochrome b559 in human neutrophils. Bjerrum OW, et al. **Eur J Haematol** 1989 Jul;43(1):67–77

Temperature–dependent formation of vacuolar and canalicular systems in association with degranulation in stimulated neutrophils. Hara Y, et al. **Eur J Haematol** 1989 May;42(5):474–80

Guanine nucleotides inhibit poly–L–arginine–induced membrane damage in polymorphonuclear leukocytes. Elferink JG. **Experientia** 1988 Dec 1;44(11–12):1016–7

Applicability of using acrylic resins in post–embedding ultrastructural immunolabelling of human neutrophil granule proteins. Mutasa HC. **Histochem J** 1989 May; 21(5):249–58

Influence of calcium on the subcellular distribution of protein kinase C in human neutrophils. Extraction conditions determine partitioning of histone–phosphorylating activity and immunoreactivity between cytosol and particulate fractions. Phillips WA, et al. **J Biol Chem** 1989 May 15; 264(14):8361–5

Selective defect in myeloid cell lactoferrin gene expression in neutrophil specific granule deficiency. Lomax KJ, et al. **J Clin Invest** 1989 Feb;83(2):514–9

The persistence of Chlamydia trachomatis elementary body cell walls in human polymorphonuclear leucocytes and induction of a chemiluminescent response. Zvillich M, et al. **J Gen Microbiol** 1989 Jan;135 (Pt 1):95–104

Thermal regulation of FMLP receptors on human neutrophils. Coles RB, et al. **J Leukoc Biol** 1989 Jun; 45(6):529–37

Change of membrane fluidity of rat neutrophils accompanying Escherichia coli inoculation. Masuda M, et al. **J Leukoc Biol** 1989 Aug;46(2):169–74

Granulocytic fragments in sepsis. Krauss JS, et al. **Mod Pathol** 1989 Jul;2(4):301–5

Prostaglandin binding sites in human polymorphonuclear neutrophils. Rossi AG, et al. **Prostaglandins** 1989 Jun; 37(6):641–53

[Cytoplasmic changes in neutrophilic granulocytes. Diagnostic characteristics in septicemia] Lybecker H, et al. **Ugeskr Laeger** 1988 Nov 21;150(47):2884–6 (30 ref.) (Eng. Abstr.) **(Dan)**

[Ultrastructure of peripheral neutrophils in pregnant women with late pregnancy toxemia] Vityk DP. **Akush Ginekol (Mosk)** 1988 Jun;(6):57–8 **(Rus)**

[Ultrastructural manifestations of the membrane activity of neutrophilic leukocytes] Galankin VN, et al. **Arkh Patol** 1988;50(7):23–30 (Eng. Abstr.) **(Rus)**

[Ultrastructural analysis of interactions of neutrophil leukocytes and macrophages in the center of inflammation] Vtiurin BV, et al. **Biull Eksp Biol Med** 1989 Jan; 107(1):68–71 (Eng. Abstr.) **(Rus)**

[Electron microscopic study of the interaction of human neutrophils and mononuclear cells with Trichophyton rubrum] Katsitadze AG. **Vestn Dermatol Venerol** 1989; (4):14–21 (Eng. Abstr.) **(Rus)**

NEVOXANTHOENDOTHELIOMA see **XANTHOMA, JUVENILE**

NEVUS

Connective tissue nevus and osteopoikilosis in the hand: the Buschke–Ollendorff syndrome. Kobus RJ, et al. **J Hand Surg [Am]** 1989 May;14(3):535–8

Dysplastic nevus syndrome—biological significance. Elder DE. **Semin Oncol** 1988 Dec;15(6):529–40

[Pigmented lesions of the oral cavity. II. Melanosis and melanoma] Bucci E, et al. **Minerva Stomatol** 1989 May; 38(5):533–45 (162 ref.) (Eng. Abstr.) **(Ita)**

COMPLICATIONS

Incidence of nuchal nevus flammeus [letter] Manzke H. **Dermatologica** 1989;179(1):55

Nuchal nevi flammei and alopecia areata [letter] Van Baar H, et al. **Dermatologica** 1989;179(1):52–3

Nevus of ota with nevus of Ito—report of a case with cataract. Dekio S, et al. **J Dermatol** 1989 Apr;16(2):164–6

The treatment of serous macular detachment secondary to choroidal melanomas and nevi. Folk JC, et al. **Ophthalmology** 1989 Apr;96(4):547–51

[What is your diagnosis? Becker's nevus with ipsilateral mammary hypoplasia] Friedel J, et al. **Ann Dermatol Venereol** 1988;115(10):1059–60 **(Fre)**

CONGENITAL

Elastic fibers in congenital melanocytic nevus [letter] Massi G, et al. **Arch Dermatol** 1989 Feb;125(2):299–300

Giant congenital nevus and malignant melanoma. Hori Y, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):310S–314S

Immunohistologic evidence for the malignant potential of congenital melanocytic nevi. Steijlen PM, et al. **J Invest Dermatol** 1989 Mar;92(3):366–70

Precursors to malignant melanoma. **Natl Inst Health Consensus Dev Conf Summ** 1984;4(9):6 p. (0 ref.)

DIAGNOSIS

Can HLA-DR expression help in the routine diagnosis of malignant melanomas? West KP, et al. **Br J Dermatol** 1989 Aug;121(2):175–8

[Cancer of the sebaceous glands] Polev AV, et al. **Vestn Dermatol Venerol** 1988;(11):72–4 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Dithranol in the treatment of inflammatory linear verrucous epidermal nevus. de Mare S, et al. **Acta Derm Venereol (Stockh)** 1989;69(1):77–80

Treatment of nevus comedonicus with ammonium lactate lotion. Milton GP, et al. **J Am Acad Dermatol** 1989 Feb; 20(2 Pt 2):324–8

Epidermal nevus syndrome. Report of a case. Guardalà C, et al. **Riv Eur Sci Med Farmacol** 1987 Sep;9(3):299–302

EPIDEMIOLOGY

Clinical analysis of tumors of the eye and its adnexa. Roh KK, et al. **Korean J Ophthalmol** 1988 Jun;2(1):27–31 (24 ref.)

ETIOLOGY

Epidemiology of human malignant skin tumors with special reference to natural and artificial ultraviolet radiation exposures. Elwood JM, et al. **Carcinog Compr Surv** 1989; 11:55–84 (94 ref.)

[Unilateral nevoid telangiectasia and hyperestrogenism. A new case [letter] Scocco GL, et al. **G Ital Dermatol Venereol** 1988 Sep;123(9):448 (Eng. Abstr.) **(Ita)**

GENETICS

Reduced DNA repair in cultured melanocytes and nevus cells from a patient with xeroderma pigmentosum. Kraemer KH, et al. **Arch Dermatol** 1989 Feb;125(2):263–8

Familial Becker's nevus. Jain HC, et al. **Int J Dermatol** 1989 May;28(4):263–4

Where have dysplastic nevi led us? Tucker MA. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:251–9

[Elastic nevi of a familial nature. Buschke–Ollendorf syndrome. Forme frustre?] Macedo N, et al. **Med Cutan Ibero Lat Am** 1989;17(3):189–92 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Beta 2 microglobulin expression in normal melanocytes, nevocellular nevi, and malignant melanomas. Takata M, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):243S–247S

PATHOLOGY

Nevus cell maturation or atrophy? Goovaerts G, et al. **Am J Dermatopathol** 1988 Feb;10(1):20–7

Tactile corpuscle-like structures in peripheral nerve sheath tumors in plastic embedded material. Jurecka W. **Am J Dermatopathol** 1988 Feb;10(1):74–9

Some remarks on dysplasia. Rywlin AM. **Am J Dermatopathol** 1989 Aug;11(4):390–1

A benign nevus of cornea and corneoscleral limbus. Whitcup SM, et al. **Am J Ophthalmol** 1989 Mar 15;107(3):304–5

A case of conjunctival Spitz nevus: review of literature and comparison with cutaneous locations. Kantelip B, et al. **Ann Ophthalmol** 1989 May;21(5):176–9 (15 ref.)

Pseudoepitheliomatous hyperplasia in Spitz nevi. A possible source of confusion with squamous cell carcinoma. Scott G, et al. **Arch Pathol Lab Med** 1989 Jan;113(1):61–3

Naevoid psoriasis. Atherton DJ, et al. **Br J Dermatol** 1989 Jun;120(6):837–41

Association of early malignant melanoma with nevocytic nevi. Stolz W, et al. **Cancer** 1989 Feb 1;63(3):550–5 (38 ref.)

Antigenic profile of tumor progression stages in human melanocytic nevi and melanomas. Elder DE, et al. **Cancer Res** 1989 Sep 15;49(18):5091–6

Multiple connective tissue nevi. DePadova-Elder S, et al. **Cutis** 1988 Sep;42(3):222–4

Eccrine-pilar angiomatous nevus. Velasco JA, et al. **Dermatologica** 1988;177(5):317–22 (18 ref.)

Typical, dysplastic, congenital, and Spitz nevi: a comparative immunohistochemical study. Palazzo J, et al. **Hum Pathol** 1989 Apr;20(4):341–6

Lichenoid epidermal nevus: "linear lichen planus". Brownstein MH, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 2):913–15

Pruritus confined to scapular or subscapular region? Occult Becker's nevus with mild folliculitis [letter] Dobson RL. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 1):296–7

Epidermal nevi and the epidermal nevus syndrome. A review of 131 cases. Rogers M, et al. **J Am Acad Dermatol** 1989 Mar;20(3):476–88

Porokeratotic eccrine ostial and dermal duct nevus. Report of a case of adult onset. Stoof TJ, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 2):924–7

Melanocytic nevus counts and melanoma [letter] Swerdlow AJ, et al. **J Am Acad Dermatol** 1989 Mar;20(3):522–3

In situ malignant melanoma arising in a speckled lentiginous nevus. Wagner RF Jr, et al. **J Am Acad Dermatol** 1989 Jan;20(1):125–6

Porokeratotic eccrine ostial and dermal duct nevus. Fernández-Redondo V, et al. **J Cutan Pathol** 1988 Dec; 15(6):393–5

Comparison of acral nevomelanocytic proliferations in Japanese and whites. Margolis RJ, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):222S–226S

Benign conjunctival melanocytic lesions. Clinicopathologic features. Folberg R, et al. **Ophthalmology** 1989 Apr; 96(4):436–61 (150 ref.)

Nevus unius lateris and intraoral verrucous nevi. Hickman RE, et al. **Oral Surg Oral Med Oral Pathol** 1988 Aug; 66(2):226–9

[What is your diagnosis? Becker's nevus with ipsilateral mammary hypoplasia] Friedel J, et al. **Ann Dermatol Venereol** 1988;115(10):1059–60 **(Fre)**

[Lectin histochemical study of epidermal nevi] Wollina U, et al. **Z Hautkr** 1988 Nov 15;63(11):940–2 (Eng. Abstr.) **(Ger)**

[Linear psoriasis (linear psoriatic epidermal nevus) in a patient with HIV infection] Masina M, et al. **G Ital Dermatol Venereol** 1989 Jan–Feb;124(1–2):49–50 (Eng. Abstr.) **(Ita)**

[Nevus sebaceous] Pippione M, et al. **G Ital Dermatol Venereol** 1988 Nov;123(11):559–61 (8 ref.) **(Ita)**

[Nevoid angiokeratoma] Trofimova IB, et al. **Vestn Dermatol Venerol** 1988;(6):28–31 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

How much does the public know about moles, skin cancer and malignant melanoma? The results of a postal survey. Newman S, et al. **Community Med** 1988 Nov;10(4):351–7

SURGERY

Penetrating keratoplasty in the management of iridocorneal endothelial syndrome. Crawford GJ, et al. **Cornea** 1989; 8(1):34–40

Cultured epithelial autografts for giant congenital nevi. Gallico GG 3d, et al. **Plast Reconstr Surg** 1989 Jul;84(1):1–9

Superficial destruction of giant congenital nevocytic nevi [letter] Zitelli JA. **Plast Reconstr Surg** 1989 Aug; 84(2):374–5

[Giant nevus comedonicus] Bogdanowski T, et al. **Przegl Dermatol** 1988 Jul–Aug;75(4):305–7 (Eng. Abstr.) **(Pol)**

ULTRASTRUCTURE

Nucleolar organizer regions in Spitz nevi and malignant melanomas. Howat AJ, et al. **Cancer** 1989 Feb 1;63(3):474–8

Nuclear size and shape parameters correlate with proliferative activity in cutaneous melanocytic tumors. Smolle J, et al. **J Invest Dermatol** 1989 Jul;93(1):178–82

[Dysplastic melanocytic nevi: quantitative ultrastructural investigation comparing intraepidermal melanocytes of dysplastic melanocytic nevi, superficial spreading melanoma, nevocellular nevi, and normal skin] Seki Y, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Oct;98(11):1093–103 (Eng. Abstr.) **(Jpn)**

NEVUS OF OTA see under **NEVUS, PIGMENTED**

NEVUS, PIGMENTED

Spontaneous resolution of a giant congenital melanocytic nevus. Hogan DJ, et al. **Pediatr Dermatol** 1988 Aug; 5(3):170–2

[Iris nevus syndrome (report of 9 cases)] Ye TC, et al. **Yen Ko Hsueh Pao** 1987 Jun;3(2):114–8 (Eng. Abstr.) **(Chi)**

ANALYSIS

Nonmelanized macromelanosomes in a cellular blue nevus. Light and electron microscopic observations. Tschen JA, et al. **Arch Dermatol** 1989 Jun;125(6):809–12

CHEMICALLY INDUCED

Excess benign melanocytic naevi after chemotherapy for malignancy in childhood. Hughes BR, et al. **BMJ** 1989 Jul 8;299(6691):88–91

COMPLICATIONS

Borderline spindle cell nevus of the ciliary body as a second primary melanoma—a clinicopathologic case. Kremer I, et al. **Ann Ophthalmol** 1989 Jun;21(6):217–21

Obesity and nevocellular nevi. Leung AK. **Br J Clin Pract** 1988 Apr;42(4):172–3

Meyerson's naevi in pityriasis rosea [letter] Crovato F, et al. **Br J Dermatol** 1989 Feb;120(2):318–9

Concomitant Becker's naevus and acanthosis nigricans [letter] Hulsmans RF, et al. **Br J Dermatol** 1989 May;120(5):716–7

Epidermal nevus syndrome with hemimegalencephaly: a clinical report of a case with acanthosis nigricans-like nevi on the face and neck, hemimegalencephaly, and hemihypertrophy of the body. Sakuta R, et al. **Brain Dev** 1989;11(3):191–4

Blue nevus and nevus of Ota associated with dural melanoma. Hartmann LC, et al. **Cancer** 1989 Jul 1;64(1):182–6

Klippel–Trenaunay and Sturge–Weber syndrome with extensive Mongolian spots, hypoplastic larynx and subglottic stenosis. Leung AK, et al. **Clin Exp Dermatol** 1988 Mar;13(2):128–32

Neurocutaneous melanosis with interstitial lung involvement—a rare association. Pant K, et al. **Indian J Chest Dis Allied Sci** 1988 Jan–Mar;30(1):46–50

Nevus of ota with nevus of Ito—report of a case with cataract. Dekio S, et al. **J Dermatol** 1989 Apr;16(2):164–6

Moles and site-specific risk of nonfamilial cutaneous malignant melanoma in women. Weinstock MA, et al. **J Natl Cancer Inst** 1989 Jun 21;81(12):948–52

Personal risk-factor chart for cutaneous melanoma. MacKie RM, et al. **Lancet** 1989 Aug 26;2(8661):487–90

Congenital giant pigmented nevus and intracranial arteriovenous malformation. Leno C, et al. **Surg Neurol** 1989 May;31(5):407–8

Pigmented tumor and acute visual loss [clinical conference] Shuey TF, et al. **Surv Ophthalmol** 1988 Sep–Oct; 33(2):121–6

[Becker's nevus and breast hypoplasia] Blanc F, et al. **Ann Dermatol Venereol** 1988;115(11):1127 **(Fre)**

[Dysplastic pigmented nevi as a high risk group for the development of malignant melanoma] Kik A, et al. **Przegl Dermatol** 1986 Jul–Aug;73(4):323–6 (17 ref.) **(Pol)**

[Disseminated pigmented nevus syndrome] Cabrera HN, et al. **Med Cutan Ibero Lat Am** 1988;16(2):101–5 (Eng. Abstr.) **(Spa)**

CONGENITAL

Histopathology of congenital pigmented nevi. Everett MA. **Am J Dermatopathol** 1989 Feb;11(1):11–2

Congenital nevocellular nevus of the oral mucosa. Takeda Y. **Ann Dent** 1988 Winter;47(2):40–2

The histology of "congenital features" in early acquired melanocytic nevi. Clemmensen OJ, et al. **J Am Acad Dermatol** 1988 Oct;19(4):742–6

Congenital giant hairy nevus: implications for treatment. Llaneras MR, et al. **J Emerg Med** 1989 Jan–Feb;7(1):25–8

Melanomas arising in large congenital nevocytic nevi: a prospective study. Gari LM, et al. **Pediatr Dermatol** 1988 Aug;5(3):151–8

Hypothesis and empiricism [editorial] Bolande RP. **Pediatr Pathol** 1988;8(3):iii–iv

The melanocytic differentiation pathway in congenital melanocytic nevi: theoretical considerations. Cramer SF. **Pediatr Pathol** 1988;8(3):253–65

[Congenital pseudomelanoma] Kerl H, et al. **Z Hautkr** 1989 Jul 15;64(7):564, 567–8 (Eng. Abstr.) **(Ger)**

[Sebaceous linear nevus syndrome with hemimegalencephaly. Report of a case] Patrizi A, et al. **G Ital Dermatol Venereol** 1989 Jan–Feb;124(1–2):55–8 (Eng. Abstr.) **(Ita)**

DIAGNOSIS

Freckles, moles and melanoma. National Skin Cancer Awareness Week 1988. Marks R. **Aust Fam Physician** 1988 Dec;17(12):1025

Accuracy in clinically evaluating pigmented lesions. Curley RK, et al. **BMJ** 1989 Jul 1;299(6690):16–8

An assessment of the value of Ag NOR staining in the identification of dysplastic and other borderline melanocytic naevi. MacKie RM, et al. **Br J Dermatol** 1989 Apr;120(4):511–6

A routine method for the quantification of physical change in melanocytic naevi using digital image processing. Murray AE. **J Audiov Media Med** 1988 Apr;11(2):52–7

Magnetic resonance imaging of cutaneous melanocytic lesions. Zemtsov A, et al. **J Dermatol Surg Oncol** 1989 Aug;15(8):854–8

Cockarde nevus: a case report and review of the literature. Guzzo C, et al. **Pediatr Dermatol** 1988 Nov;5(4):250–3 (7 ref.)

[Neurocutaneous melanosis] Husstedt IW, et al. **Fortschr Neurol Psychiatr** 1989 Jun;57(6):250–4 (Eng. Abstr.) **(Ger)**

[A case of isolated pigmented nevus of the skin with limited dysfunction of the nervous system] Kawiak W, et al. **Wiad Lek** 1989 Dec 1;41(23):1618–20 (Eng. Abstr.) **(Pol)**

[Smooth muscle hamartoma or nevus of Becker? Apropos of 4 cases] Civatte J, et al. **Med Cutan Ibero Lat Am** 1988; 16(2):145–8 (Eng. Abstr.) **(Spa)**

EPIDEMIOLOGY

Dysplastic naevi in a population-based survey. Cooke KR, et al. **Cancer** 1989 Mar 15;63(6):1240–4

Melanocytic nevi in schoolchildren in Queensland. Green A, et al. **J Am Acad Dermatol** 1989 Jun;20(6):1054–60

Clinical features and distribution of malignant melanoma and pigmented nevi on the soles of the feet in Japan. Kukita A, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):210S–213S

Moles in Australian and British school children [letter] Green A, et al. **Lancet** 1988 Dec 24–31;2(8626–8627):1497

Changing trends in malignant melanoma in New York State. **N Y State J Med** 1989 Apr;89(4):239–41

ETHNOLOGY

Racial differences in mole proneness. Rampen FH, et al. **Acta Derm Venereol (Stockh)** 1989;69(3):234–6

ETIOLOGY

Eruptive dysplastic nevi associated with human immunodeficiency virus infection. Duvic M, et al. **Arch Dermatol** 1989 Mar;125(3):397–401

Diminished cutaneous hair density in dysplastic nevus syndrome [letter] Tobacman JK. **Arch Dermatol** 1989 Sep; 125(9):1287

Naevocytic naevi as an atavism; their relationship to melanoma risk. Rampen FH. **Med Hypotheses** 1988 Sep; 27(1):71–5 (38 ref.)

GENETICS

The flow cytometry of melanocytic skin lesions. Newton JA, et al. **Br J Cancer** 1988 Nov;58(5):606–9

Differential expression of ras oncogene products among the types of human melanomas and melanocytic nevi. Yasuda H, et al. **J Invest Dermatol** 1989 Jul;93(1):54–9

[Immunohistochemical analysis of ras gene expression in human melanomas and melanocytic nevi] Yasuda H. **Hokkaido Igaku Zasshi** 1989 May;64(3):243–53 (Eng. Abstr.) **(Jpn)**

HISTORY

[Lentigo maligna and naevus pigmentosus et pilosus in oil paintings at the National Gallery in London] Roth W. **Hautarzt** 1989 May;40(5):320–1 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Halo giant congenital melanocytic nevus: in vitro immunologic studies. Berman B, et al. **J Am Acad Dermatol** 1988 Nov;19(5 Pt 2):954–60

[Expression of HLA-Dr and CD1+ cells in malignant and benign pigmentary tumors] Ramírez-Bosca A, et al. **Med Cutan Ibero Lat Am** 1989;17(1):58–64 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Nevus sebaceus is associated with unusual neoplasms. An atlas. Alessi E, et al. **Am J Dermatopathol** 1988 Apr; 10(2):116–27

Malignant blue nevus with metastases to the lung. Kuhn A, et al. **Am J Dermatopathol** 1988 Oct;10(5):436–41

Deep penetrating nevus. Seab JA Jr, et al. **Am J Surg Pathol** 1989 Jan;13(1):39–44

Iris nevus syndrome. Makley TA, et al. **Ann Ophthalmol** 1988 Aug;20(8):311–5

Common acquired melanocytic nevi, melanocytic dysplasia and malignant melanoma. A morphometric study. Santucci M, et al. **Appl Pathol** 1989;7(2):111–5

Oligosymptomatic form of Klippel-Trenaunay-Weber syndrome associated with giant nevus spilus [letter] Sigg C, et al. **Arch Dermatol** 1989 Sep;125(9):1284–5

Blue nevus of the uterine cervix. Matsumoto T, et al. **Asia Oceania J Obstet Gynaecol** 1989 Mar;15(1):17–20

Primary malignant melanoma of the orbit arising in a cellular blue naevus. Löffler KU, et al. **Br J Ophthalmol** 1989 May; 73(5):388–93

Malignant melanoma arising in a giant congenital melanocytic nevus. A case report with cytogenetic and histopathologic analyses. Padilla RS, et al. **Cancer** 1988 Dec 15;62(12):2589–94

Tumor progression in melanoma: the biology of epidermal melanocytes in vitro. Mancianti ML, et al. **Carcinog Compr Surv** 1989;11:369–86 (49 ref.)

Human melanoma xenografts. Pawlowski A, et al. **Carcinog Compr Surv** 1989;11:103–32 (75 ref.)

Metastatic malignant melanoma arising from a common blue nevus in a patient with subacute cutaneous lupus erythematosus. Modly C, et al. **Dermatologica** 1989; 178(3):171–5 (19 ref.)

Basement membrane deposition in benign and malignant naevo-melanocytic lesions: an immunohistochemical study with antibodies to type IV collagen and laminin. Havenith MG, et al. **Histopathology** 1989 Aug;15(2):137–46

Giant pigmented tumour of the scalp—a diffuse neurofibroma or a congenital naevus showing neurofibromatous changes? Immunohistochemical and electron microscopic studies. Ito H, et al. **Histopathology** 1988 Aug;13(2):181–9

Silver staining of nucleolar organizer regions in malignant melanoma and melanotic nevi. Leong AS, et al. **Hum Pathol** 1989 Mar;20(3):257–62

Lid reconstruction for kissing naevus. Betharia SM, et al. **Indian J Ophthalmol** 1988 Jan–Mar;36(1):32–3

Non-von Recklinghausen's neurofibromatosis resembling a giant pigmented nevus. Bousema MT, et al. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 2):358–62 (15 ref.)

Malignant blue nevus. Case report and literature review. Goldenhersh MA, et al. **J Am Acad Dermatol** 1988 Oct; 19(4):712–22 (37 ref.)

The role of inhibitors in the fluorescent staining of benign naevus and malignant melanoma cells with 9-amino acridine and acridine orange. Steven FS, et al. **J Enzym Inhib** 1987;1(4):275–87

Proliferating giant pigmented nevus: a report of an unusual tumor occurring in association with a congenital giant pigmented nevus. Arao T, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):315S–317S

Structure of basement membranes in malignant melanoma and nevocytic nevi. Schmoeckel C, et al. **J Invest Dermatol** 1989 May;92(5):663–8

Intradermal nevus of the ear canal. Youngs R, et al. **J Otolaryngol** 1988 Aug;17(5):241–3

Naevus of Jamaica [letter] Williams HC, et al. **Lancet** 1988 Oct 15;2(8616):915

Malignant conjunctival melanoma. A case report. Kandiah R, et al. **Med J Malaysia** 1988 Jun;43(2):178–80

Massive pseudophakic pigment dispersion associated with an iris nevus. Kremer I, et al. **Ophthalmic Surg** 1989 Mar; 20(3):182–5

Melanocytic nevi of the palpebral conjunctiva. An extremely rare location usually signifying melanoma. Buckman G, et al. **Ophthalmology** 1988 Aug;95(8):1053–7

Conjunctival melanocytic lesions in children. McDonnell JM, et al. **Ophthalmology** 1989 Jul;96(7):986–93

Peripunctal melanocytic nevi. Distinctive clinical findings and differential diagnosis. Scott KR, et al. **Ophthalmology** 1989 Jul;96(7):994–8

Spindle and epithelioid cell nevus of tongue at an unusual site. Teh M, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jan;67(1):68–72

Multiple agminate Spitz nevi. Renfro L, et al. **Pediatr Dermatol** 1989 Jun;6(2):114–7

Pigmentary regression in a giant nevocellular nevus: a case report and a review of the subject. Zack LD, et al. **Pediatr Dermatol** 1988 Aug;5(3):178–83 (42 ref.)

Melanocytic carcinogenesis in albino guinea pigs. Gomez S, et al. **Pigment Cell Res** 1988;1(6):390–6

Deep dermis [letter] Tolhurst DE. **Plast Reconstr Surg** 1989 Oct;84(4):707–8

Carney's complex of primary pigmented nodular adrenocortical disease and pigmentous and myxomatous lesions. Cheung PS, et al. **Surg Gynecol Obstet** 1989 May; 168(5):413–6

Spitz nevus (large spindle cell and/or epithelioid cell nevus). Age-related involvement of the suprabasal epidermis. Mérot Y, et al. **Virchows Arch [A]** 1989;415(2):97–101

[Jadassohn's nevus sebaceus. Analysis of 36 cases and review of the literature] Mateu J, et al. **Ann Chir Plast Esthet** 1988; 33(3):251–5 (14 ref.) (Eng. Abstr.) **(Fre)**

[Conjunctival localization of Spitz nevus] Boccard R, et al. **Ann Dermatol Venereol** 1988;115(6–7):733–4 (8 ref.) **(Fre)**

[Phakomatosis pigmentovascularis type IIa] Guillaume JC, et al. **Ann Dermatol Venereol** 1988;115(11):1113–5 **(Fre)**

[Giant nevus spilus with blue nevus. Apropos of a case] Toppe F, et al. **Ann Dermatol Venereol** 1988;115(6–7):703–7 **(Fre)**

[Malignant orbital degeneration of a nevus of Ota] Herdan ML, et al. **Bull Soc Ophtalmol Fr** 1988 Jan;88(1):89–92 (Eng. Abstr.) **(Fre)**

[A case of Ota nevus] Milosevic R, et al. **Bull Soc Ophtalmol Fr** 1988 May;88(5):705–8, 710 (24 ref.) (Eng. Abstr.) **(Fre)**

[Follow-up and ultrastructure of plaque-type blue nevus] Pfaltz M, et al. **Hautarzt** 1989 Jun;40(6):355–7 (Eng. Abstr.) **(Ger)**

[Comment on the work by H.P. Soyer, J. Smolle, H. Kresbach, S. Hödl, P. Glavanovitz, H. Pachernegg and H. Kerl: Direct light microscopy of pigment tumors of the skin (letter)] Schwermann M, et al. **Hautarzt** 1988 Dec; 39(12):795 **(Ger)**

[Eccrine sweat gland nevus—immunohistochemical demonstration of MAM-3 and MAM-6 antigens] Wätzig V, et al. **Hautarzt** 1989 Mar;40(3):164–6 (Eng. Abstr.) **(Ger)**

[Lectin histochemical studies of nevus cell nevi of the corium] Wollina U, et al. **Z Hautkr** 1989 Jul 15;64(7):569–72 (Eng. Abstr.) **(Ger)**

[Lectin histochemical study of epidermal nevi] Wollina U, et al. **Z Hautkr** 1988 Nov 15;63(11):940–2 (Eng. Abstr.) **(Ger)**

[Pigmented lesions of the oral cavity. I. Classification and etiopathogenesis] Bucci E, et al. **Minerva Stomatol** 1989 Mar;38(3):369–78 (162 ref.) (Eng. Abstr.) **(Ita)**

[Sporadic dysplastic nevus] Massi G, et al. **Pathologica** 1988 Jan–Feb;80(1065):31–42 (Eng. Abstr.) **(Ita)**

[Primary intracranial malignant melanoma associated with nevus of Ota: a case report] Kabuto M, et al. **No Shinkei Geka** 1988 Jun;16(7):875–80 (32 ref.) (Eng. Abstr.) **(Jpn)**

[Malignant uveal melanoma and cutaneous pigmented nevi] Talea L. **Rev Chir [Oftalmol]** 1988 Jul–Sep;32(3):217–20 (Eng. Abstr.) **(Rum)**

[Ductal tumor of the eccrine sweat glands] Sangüeza P, et al. **Med Cutan Ibero Lat Am** 1989;17(3):166–8 (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

[A case of blue rubber bleb nevus syndrome with splenic hemangioma] Hasegawa T, et al. **Rinsho Hoshasen** 1988 Oct;33(10):1143–6 (12 ref.) (Eng. Abstr.) **(Jpn)**

RADIONUCLIDE IMAGING

[Intracranial cellular blue nevus with increased uptake on gallium imaging] Futami S, et al. **Rinsho Hoshasen** 1988 Jul;33(7):821–3 (Eng. Abstr.) **(Jpn)**

RADIOTHERAPY

Results of argon laser treatment of port-wine stains: a method of assessment. Quaba AA. **Br J Plast Surg** 1989 Mar; 42(2):125–32

SURGERY

Surgical removal of pigmented nevi. Harahap M. **Ann Acad Med Singapore** 1988 Oct;17(4):509–13 (13 ref.)

An effective cosmetic treatment for Ota's nevus. Cosman B, et al. **Ann Plast Surg** 1989 Jan;22(1):36–42

L-shaped flap for triangular skin defects. Sakai S, et al. **Br J Plast Surg** 1988 Nov;41(6):628–32

Bilateral vermilion flap. A modification of Goldstein's technique. Sawada Y, et al. **Int J Oral Maxillofac Surg** 1988 Aug;17(4):257–9

An approach to excision of congenital giant pigmented nevi in infancy and early childhood. Bauer BS, et al. **Plast Reconstr Surg** 1988 Dec;82(6):1012–21

[Which are the nevomelanocytic nevi which should be excised?] Mérot Y. **Rev Med Suisse Romande** 1989 Jun; 109(6):433–5 **(Fre)**

[Nevi of the face] Oswald J, et al. **Fortschr Kiefer Gesichtschir** 1989;34:165–7 **(Ger)**

[Management of acquired nevus-cell nevi in clinical practice] Sigg C. **Ther Umsch** 1989 Feb;46(2):133–7 (Eng. Abstr.) **(Ger)**

[Malignant blue nevus] Djawari D, et al. **Z Hautkr** 1989 Jan 15;64(1):51–3 (Eng. Abstr.) **(Ger)**

[Preventive removal of pigmented nevi: dermatologic and psychological indicators based on personal experience] Bogdanowski T, et al. **Przegl Dermatol** 1988 Sep–Oct; 75(5):358–62 (Eng. Abstr.) **(Pol)**

THERAPY

Laser therapy for selected cutaneous vascular lesions in the pediatric population: a review. Tan OT, et al. **Pediatrics** 1988 Oct;82(4):652–62 (53 ref.)

ULTRASTRUCTURE

Natural history of melanocytic nevi. Brodell R, et al. **Am Fam Physician** 1988 Nov;38(5):93–101

Blue nevus and melanosis of the prostate. Electron-microscopic and immunohistochemical studies. Ro JY, et al. **Am J Clin Pathol** 1988 Nov;90(5):530–5

Melanosis (pigmented melanocytosis) of the prostate gland. Botticelli AR, et al. **Eur Urol** 1989;16(3):229–32

Nuclear size and shape parameters correlate with proliferative activity in cutaneous melanocytic tumors. Smolle J, et al. **J Invest Dermatol** 1989 Jul;93(1):178–82

[Endomitosis in pigmented neoplasms of human skin] Savchenko IuIu. **Tsitol Genet** 1988 Nov-Dec;22(6):20–4 (Eng. Abstr.) **(Rus)**

NEVUS SYNDROME, DYSPLASTIC see **DYSPLASTIC NEVUS SYNDROME**

NEWBORN INTENSIVE CARE UNITS see INTENSIVE CARE UNITS, NEONATAL

NEWCASTLE DISEASE

EPIDEMIOLOGY

A model for the epidemiological and economic evaluation of Newcastle disease of village poultry in South-East Asia and its control using heat tolerant V4 vaccine. Copland JW, et al. **Acta Vet Scand Suppl** 1988;84:405-7

Survey for Newcastle disease virus in northern Queensland birds. Garnett ST, et al. **Aust Vet J** 1989 May;66(5):129-34

Harmattan--a predisposing factor in the spread of viral diseases in domestic animals. Bannor TT, et al. **Trop Anim Health Prod** 1988 Nov;20(4):211

ETIOLOGY

The interaction between vitamin A status and Newcastle disease virus infection in chickens. Sijtsma SR, et al. **J Nutr** 1989 Jun;119(6):932-9

GENETICS

Avian cells expressing the Newcastle disease virus hemagglutinin-neuraminidase protein are resistant to Newcastle disease virus infection. Morrison TG, et al. **Virology** 1989 Jul;171(1):10-7

IMMUNOLOGY

[Serology of Newcastle disease and salmonellosis (S. gallinarum-pullorum) in poultry from small country units in Togo] Grundler G, et al. **Rev Elev Med Vet Pays Trop** 1988;41(4):327-8 (Eng. Abstr.) **(Fre)**

METABOLISM

Effects of Newcastle disease virus administration to mice on the metabolism of cerebral biogenic amines, plasma corticosterone, and lymphocyte proliferation. Dunn AJ, et al. **Brain Behav Immun** 1987 Sep;1(3):216-30

Effect of Newcastle disease virus infection on vitamin A metabolism in chickens. Sijtsma SR, et al. **J Nutr** 1989 Jun; 119(6):940-7

MICROBIOLOGY

Effect of Newcastle disease virus on ocular and paraocular tissues in experimentally inoculated chickens. Obaldia N 3d, et al. **Avian Dis** 1989 Apr-Jun;33(2):285-90

Virus distribution and histopathologic changes in organs of chickens inoculated with Newcastle disease virus (avian paramyxovirus-1) isolated from racing pigeons. Shirai J, et al. **Avian Dis** 1988 Jul-Sep;32(3):544-7

Elevated virulence of Newcastle disease virus strains following serial passages in kidney cells in vitro. Slosaris M, et al. **Avian Dis** 1989 Apr-Jun;33(2):248-53

PHYSIOPATHOLOGY

Effect of adrenal blocking chemicals on viral and respiratory infections of chickens. Gross WB. **Can J Vet Res** 1989 Jan; 53(1):48-51

PREVENTION & CONTROL

A new, simple aerosol immunization technique against Newcastle disease. Tamási G, et al. **Acta Vet Hung** 1988; 36(3-4):185-93

Immunoglobulin concentrations in serum and tissues of vitamin A-deficient broiler chicks after Newcastle disease virus vaccination. Davis CY, et al. **Poult Sci** 1989 Jan; 68(1):136-44

Serology-based potency test for inactivated Newcastle disease vaccines. Goddard RD, et al. **Vaccine** 1988 Dec; 6(6):530-2

Inactivated oil emulsion vaccines from selected clones of Newcastle disease virus. Adu FD, et al. **Vet Q** 1989 Jul; 11(3):190-2

A preliminary vaccine potency trial of a Newcastle disease virus inactivated with binary ethylenimine. Buonavoglia C, et al. **Vet Res Commun** 1988;12(2-3):195-7

TRANSMISSION

Exotic Newcastle disease from smuggled birds remains threat to domestic poultry [news] **J Am Vet Med Assoc** 1989 May 1;194(9):1166-7

Persistence of the V4 strain of Newcastle disease virus in an open-range flock of chickens. Samuel JL, et al. **Vet Rec** 1989 Feb 25;124(8):193-6

NEWCASTLE DISEASE VIRUS

Alternative mechanisms for gene activation induced by poly(rI).poly(rC) and Newcastle disease virus. Lammers R, et al. **Eur J Biochem** 1988 Dec 1;178(1):93-9

GENETICS

An alternative method of oligonucleotide fingerprinting for resolving Newcastle disease virus-specific RNA fragments. Palmieri S, et al. **Avian Dis** 1989 Apr-Jun;33(2):345-50

Genetic relationships among lentogenic strains of Newcastle disease virus. Palmieri S. **Avian Dis** 1989 Apr-Jun; 33(2):351-6

Mutations located on both F1 and F2 subunits of the Newcastle disease virus fusion protein confer resistance to neutralization with monoclonal antibodies. Neyt C, et al. **J Virol** 1989 Feb;63(2):952-4

Presence of transcription regulatory elements within an intron of the virus-inducible murine TIMP gene. Coulombe B, et al. **Mol Cell Biol** 1988 Aug;8(8):3227-34

Organization of the murine Mx gene and characterization of its interferon- and virus-inducible promoter. Hug H, et al. **Mol Cell Biol** 1988 Aug;8(8):3065-79

Involvement of a cis-element that binds an H2TF-1/NF kappa B like factor(s) in the virus-induced interferon-beta gene expression. Fujita T, et al. **Nucleic Acids Res** 1989 May 11;17(9):3335-46

Production of tumor necrosis factor and other cytokines by astrocytes stimulated with lipopolysaccharide or a neurotropic virus. Lieberman AP, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6348-52

Newcastle disease virus evolution. I. Multiple lineages defined by sequence variability of the hemagglutinin-neuraminidase gene. Sakaguchi T, et al. **Virology** 1989 Apr;169(2):260-72

Newcastle disease virus evolution. II. Lack of gene recombination in generating virulent and avirulent strains. Toyoda T, et al. **Virology** 1989 Apr;169(2):273-82

Fusion (F) protein gene of Newcastle disease virus: sequence and hydrophobicity comparative analysis between virulent and avirulent strains. Le L, et al. **Virus Genes** 1988 Jul; 1(4):333-50

GROWTH & DEVELOPMENT

Titration of avirulent Newcastle disease virus by the plaque assay method. Kournikakis B, et al. **J Virol Methods** 1988 Aug;20(4):285-93

IMMUNOLOGY

A model for the epidemiological and economic evaluation of Newcastle disease of village poultry in South-East Asia and its control using heat tolerant V4 vaccine. Copland JW, et al. **Acta Vet Scand Suppl** 1988;84:405-7

Attempts at the detection of antibodies to Newcastle disease virus by haemofusion-inhibition test. Trybala E. **Acta Virol (Praha)** 1988 Sep;32(5):435-42

Postoperative activation of tumor specific T cells by immunization with virus-modified tumor cells and effects on metastasis. Schirrmacher V, et al. **Adv Exp Med Biol** 1988;233:91-6

Characterization of French avian paramyxovirus type 1 (PMV 1) isolates with a Panel of monoclonal antibodies to the Ploufragan strain of Newcastle disease virus. Jestin V, et al. **Arch Virol** 1989;105(3-4):189-98

An ELISA blocking test using a peroxidase-labelled anti-HN monoclonal antibody for the specific titration of antibodies to avian paramyxovirus type 1 (PMV1). Jestin V, et al. **Arch Virol** 1989;105(3-4):199-208

A method to rapidly convert Newcastle disease virus and infectious bronchitis virus ImmunoComb scores into conventional hemagglutination-inhibition titers. Brown J, et al. **Avian Dis** 1988 Jul-Sep;32(3):517-8

Modification of tumor cells by a low dose of Newcastle disease virus. II. Augmented tumor-specific T cell response as a result of CD4+ and CD8+ immune T cell cooperation. Schild H, et al. **Cancer Immunol Immunother** 1989;28(1):22-8

Prevention of metastatic spread by postoperative immunotherapy with virally modified autologous tumor cells. III. Postoperative activation of tumor-specific CTLP from mice with metastases requires stimulation with the specific antigen plus additional signals. von Hoegen P, et al. **Invasion Metastasis** 1989;9(2):117-33

Identification of amino acids relevant to three antigenic determinants on the fusion protein of Newcastle disease virus that are involved in fusion inhibition and neutralization. Toyoda T, et al. **J Virol** 1988 Nov; 62(11):4427-30

Treatment of stage II malignant melanoma patients with a Newcastle disease virus oncolysate [letter] Cassel WA, et al. **Nat Immun Cell Growth Regul** 1988;7(5-6):351-2

Antibody response to Newcastle disease virus and Pasteurella multocida of two strains of turkeys. Sharaf MM, et al. **Poult Sci** 1988 Oct;67(10):1372-7

Virus modified tumor cell vaccines for active specific immunotherapy of micrometastases: expansion and activation of tumor-specific T cells. Schirrmacher V, et al. **Prog Clin Biol Res** 1989;288:391-9

Efficacy of infectious bronchitis virus vaccines against heterologous challenge. Muneer MA, et al. **Res Vet Sci** 1988 Jul;45(1):22-7

Inactivated oil emulsion vaccines from selected clones of Newcastle disease virus. Adu FD, et al. **Vet Q** 1989 Jul; 11(3):190-2

A preliminary vaccine potency trial of a Newcastle disease virus inactivated with binary ethylenimine. Buonavoglia C, et al. **Vet Res Commun** 1988;12(2-3):195-7

Functional and neutralization profile of seven overlapping antigenic sites on the HN glycoprotein of Newcastle disease virus: monoclonal antibodies to some sites prevent viral attachment. Iorio RM, et al. **Virus Res** 1989 Jul; 13(3):245-61

Mapping of three antigenic sites on the haemagglutinin-neuraminidase protein of Newcastle disease virus. Yusoff K, et al. **Virus Res** 1988 Nov; 11(4):319-33

[Production and trials of inactivated vaccines in oil excipient against Newcastle disease in Ethiopia] Thiaucourt F. **Rev Elev Med Vet Pays Trop** 1988;41(3):229-33 (Eng. Abstr.) **(Fre)**

ISOLATION & PURIFICATION

Concentration and purification of Newcastle disease virus by microfiltration and exclusion liquid chromatography. Krashenyuk AI, et al. **Acta Virol (Praha)** 1988 Jul; 32(4):353-7

Virus distribution and histopathologic changes in organs of chickens inoculated with Newcastle disease virus (avian paramyxovirus-1) isolated from racing pigeons. Shirai J, et al. **Avian Dis** 1988 Jul-Sep;32(3):544-7

METABOLISM

Effect of amino acid substitutions on glycosylation of the haemagglutinin-neuraminidase glycoprotein of Newcastle disease virus strain Beaudette C. Yusoff K, et al. **J Gen Virol** 1989 Jun;70 (Pt 6):1549-52

Isolation and characterization of mouse FM3A cell mutants which are devoid of Newcastle disease virus receptors. Hara T, et al. **J Virol** 1989 Jan;63(1):182-8

Endoproteolytic activation of Newcastle disease virus fusion proteins requires an intracellular acidic environment. Yoshida T, et al. **Virology** 1989 Jun;170(2):571-4

Dependence of virus adsorption to the cell surface on the input multiplicity of infection. Lipkind M, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(4):501-5

PATHOGENICITY

Elevated virulence of Newcastle disease virus strains following serial passages in kidney cells in vitro. Slosaris M, et al. **Avian Dis** 1989 Apr-Jun;33(2):248-53

PHYSIOLOGY

Kinetics of large-scale production of bovine leukocyte interferon, using three viral inducers. Jacobsen KL, et al. **Am J Vet Res** 1988 Sep;49(9):1441-6

Differential expression of interferon alpha and beta induced with Newcastle disease virus in mouse macrophage cultures. Hoss A, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):575-89

Newcastle disease virus as an antineoplastic agent: induction of tumor necrosis factor-alpha and augmentation of its cytotoxicity. Lorence RM, et al. **J Natl Cancer Inst** 1988 Oct 19;80(16):1305-12

The mode of insertion of the paramyxovirus F1 N-terminus into lipid matrix, an initial step in host cell/virus fusion. Brasseur R, et al. **Virus Genes** 1988 Jul;1(4):325-32

[Effects of IPO-63, Carbaryl, Foschlor and Reglone on Newcastle disease virus replication in chick embryo and chick embryo cell cultures] Grabowska G, et al. **Med Dosw Mikrobiol** 1989;41(1):47-52 (Eng. Abstr.) **(Pol)**

NEWS MEDIA RELATIONS see PUBLIC RELATIONS

NEWSLETTERS see PERIODICALS

NEWSPAPERS

Specialization, surgery, and the Sydney Bulletin. Egan B. **Aust N Z J Surg** 1988 Dec;58(12):983-7

Ecstasy and the oxygen of publicity. Farrell M. **Br J Addict** 1989 Aug;84(8):943

Peers, press, and public: a cautionary note [editorial] Golub ES. **Brain Behav Immun** 1987 Sep;1(3):195-6

Concord Chronicle. A special newspaper for special children. Rowe P. **Child Today** 1988 Jul-Aug;17(4):26-31

Nasal hyperreactivity to newspapers. Theander C, et al. **Clin Exp Allergy** 1989 Jan;19(1):57-8

Medical decisions and premature disclosures. Schatz IJ. **Hawaii Med J** 1988 Oct;47(10):486

Of course there is a malpractice crisis, but is the St. Petersburg Times for real? Campbell EB. **J Fla Med Assoc** 1988 Oct;75(10):689-90

Prepublication release of scientific data and the right of the public to know: adapting to our times. Huth EJ. **J Infect Dis** 1989 Mar;159(3):407-11

AIDS: the challenge to the press. Eckholm E. **Mt Sinai J Med** 1989 May;56(3):230-2

Blood lead levels in young newspaper vendors [letter] **S Afr Med J** 1989 Sep 2;76(5):230-1

Suicide: media impacts in war and peace, 1910-1920. Stack S. **Suicide Life Threat Behav** 1988 Winter;18(4):342-57

The newspaper as a tool for introducing research. Coppens NM. **West J Nurs Res** 1988 Oct;10(5):677-9

["Public relations" or "The man, who expands horizons"] Leu HJ. **Vasa** 1989;18(2):91-3 **(Ger)**

[Medicine and the media] Nylenna M. **Tidsskr Nor Laegeforen** 1989 Jan 30;109(3):309-310 **(Nor)**

TRENDS

[Surgery and the mass media in search of conflict resolution.

The press] Flöhl R. **Langenbecks Arch Chir** 1988;Suppl 2:331–4 **(Ger)**
[Conflicts from the viewpoint of the journalist] Lempke K. **Langenbecks Arch Chir** 1988;Suppl 2:355–60 **(Ger)**

NEWTS see **SALAMANDRIDAE**

NIACIN

Synthesis of N–nicotinoyl–tryptamine (tryptamide). Eckstein M, et al. **Pol J Pharmacol Pharm** 1987 Nov–Dec; 39(6):725–7

ADMINISTRATION & DOSAGE

Effect of low–dose niacin on high–density lipoprotein cholesterol and total cholesterol/high–density lipoprotein cholesterol ratio. Luria MH. **Arch Intern Med** 1988 Nov; 148(11):2493–5
Enhanced myocardial preservation by nicotinic acid, an antilipolytic compound: mechanism of action. Datta S, et al. **Basic Res Cardiol** 1989 Jan–Feb;84(1):63–76
[Experimental evaluation of the effectiveness of vitamin–enriched chopped meat products] Alekseeva IA, et al. **Vopr Pitan** 1988 Jul–Aug;(4):55–9 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Potential problems with the widespread use of niacin. Goldstein MR. **Am J Med** 1988 Dec;85(6):881
Nicotinic acid–associated myopathy [letter] Goldstein MR. **Am J Med** 1989 Aug;87(2):248
Nicotinic acid–associated myopathy: a report of three cases. Litin SC, et al. **Am J Med** 1989 Apr;86(4):481–3
Fulminant hepatic failure after ingestion of sustained–release nicotinic acid. Mullin GE, et al. **Ann Intern Med** 1989 Aug 1;111(3):253–5
Burning mouth syndrome due to nicotinic acid esters and sorbic acid. Haustein UF. **Contact Dermatitis** 1988 Sep; 19(3):225–6
Niacin maculopathy [letter] Jampol LM. **Ophthalmology** 1988 Dec;95(12):1704–5
Niacin maculopathy. Millay RH, et al. **Ophthalmology** 1988 Jul;95(7):930–6
[Appearance of EEG abnormalities in two patients during long–term treatment with B vitamins] Santanelli P, et al. **Neurophysiol Clin** 1988 Dec;18(6):549–53 (Eng. Abstr.) **(Fre)**

ANALYSIS

Simultaneous determination of niacin and niacinamide in meats by high–performance liquid chromatography. Hamano T, et al. **J Chromatogr** 1988 Dec 21;457:403–8
Developmental changes in niacin compounds in corn. **Nutr Rev** 1988 Aug;46(8):301–2 (10 ref.)

BLOOD

Niacin status of schoolchildren in Transvaal Province, South Africa. Soldenhoff M, et al. **Int J Vitam Nutr Res** 1988; 58(2):208–12

METABOLISM

Correlation between niacin equivalent intake and urinary excretion of its metabolites, N'–methylnicotinamide, N'–methyl–2–pyridone–5–carboxamide, and N'–methyl–4–pyridone–3–carboxamide, in humans consuming a self–selected food. Shibata K, et al. **Am J Clin Nutr** 1989 Jul;50(1):114–9
Interaction of niacin and zinc metabolism in patients with alcoholic pellagra. Vannucchi H, et al. **Am J Clin Nutr** 1989 Aug;50(2):364–9
Effects of a dietary excess of leucine and of the addition of leucine and 2–oxo–isocaproate on the metabolism of tryptophan and niacin in isolated rat liver cells. Bender DA. **Br J Nutr** 1989 May;61(3):629–40
Comparison of excretion of nicotinuric acid after ingestion of two controlled release nicotinic acid preparations in man. Figge HL, et al. **J Clin Pharmacol** 1988 Dec;28(12):1136–40
Biochemical markers for assessment of niacin status in young men: urinary and blood levels of niacin metabolites. Jacob RA, et al. **J Nutr** 1989 Apr;119(4):591–8
Studies on intestinal lymphatic absorption of drugs. II. Glyceride prodrugs for improving lymphatic absorption of naproxen and nicotinic acid. Sugihara J, et al. **J Pharmacobiodyn** 1988 Aug;11(8):555–62
Excretion and metabolism of nicotinic acid by the avian kidney. Springate J, et al. **J Pharmacol Exp Ther** 1988 Mar; 244(3):797–801

PHARMACOLOGY

In vivo and in vitro effects of copper(I)nicotinic acid complexes on lipids and lipoproteins. el–Saadani M, et al. **Agents Actions Suppl** 1988;26:247–58
Copper and copper–nicotinic acid complexes mediated oxidation of high density lipoprotein. el–Saadani M, et al. **Basic Life Sci** 1988;49:381–5
Comparison of the biopotencies of nicotinic acid and nicotinamide for broiler chicks. Ruiz N, et al. **Br Poult Sci** 1988 Sep;29(3):491–8
Effects of lead and niacin on tryptophan and serotonin metabolism. Cupo MA, et al. **Drug Nutr Interact** 1988; 5(4):297–308
Effects of whole cottonseed, niacin, and niacinamide on in vitro rumen fermentation and on lactating Holstein cows. Horner JL, et al. **J Dairy Sci** 1988 Dec;71(12):3334–44
Effect of nicotinic acid supplementation in vivo on oxygen radical–induced genetic damage in human lymphocytes. Weitberg AB. **Mutat Res** 1989 Aug;216(4):197–201
Release of markedly increased quantities of prostaglandin D2 in vivo in humans following the administration of nicotinic acid. Morrow JD, et al. **Prostaglandins** 1989 Aug; 38(2):263–74
[Physicochemical and biopharmaceutical characteristics of trimag tablets] Dumitrache M, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Apr–Jun;92(2):355–8 (Eng. Abstr.) **(Rum)**

THERAPEUTIC USE

Hypocholesterolemic effects of nicotinic acid and chromium supplementation. Urberg M, et al. **J Fam Pract** 1988 Dec; 27(6):603–6
Nicotinic acid: a review of its clinical use in the treatment of lipid disorders. Figge HL, et al. **Pharmacotherapy** 1988; 8(5):287–94 (57 ref.)
[Menière's disease treated with traditional Chinese medicine combined with Western medicine] Tang DJ. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Aug;8(8):475–6, 453 (Eng. Abstr.) **(Chi)**
[Clinical evaluation of a therapeutic complex incorporating linetol and ascorbic and nicotinic acids for the correction of lipid metabolic disorders in children with glomerulonephritis] Makovetskaia GA, et al. **Pediatriia** 1988;(10):109–10 **(Rus)**

NIACINAMIDE see **NICOTINAMIDE**

NIALAMIDE

PHARMACOLOGY

Promotion by nialamide of gastric carcinogenesis induced by N–methyl–N'–nitro–N–nitrosoguanidine in Wistar rats. Tatsuta M, et al. **Jpn J Cancer Res** 1989 Jun;80(6):521–5
Influence of some monoamine oxidase inhibitors on the sleep–wakefulness cycle of the cat. Oniani TN, et al. **Neurosci Behav Physiol** 1988 Jul–Aug;18(4):301–6
Nialamide–induced hypermotility in mice treated with inhibitors of monoamine uptake, 5–HT antagonists and lithium. Buus Lassen J. **Psychopharmacology (Berlin)** 1989; 98(2):257–61

THERAPEUTIC USE

Dexamethasone suppression test and response to MAOI treatment [letter] Rihmer Z, et al. **J Clin Psychiatry** 1989 Mar;50(3):107–8

NICARBAZIN see under **CARBANILIDES**

NICARDIPINE

ADMINISTRATION & DOSAGE

Basic studies on controlled transdermal delivery of nicardipine hydrochloride using ethylene–vinyl acetate and ethylene–vinyl alcohol copolymer membranes. Morimoto Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2633–41
Dose response to hydrochlorothiazide in hypertensives receiving a calcium channel blocker. Ziegler MG, et al. **Clin Exp Hypertens [A]** 1988;10(5):791–800
Reversal of a calcium–mediated vasoconstrictor component in patients with congestive heart failure. Cody RJ, et al. **Clin Pharmacol Ther** 1989 Sep;46(3):291–6
Electrophysiologic evaluation of intravenous nicardipine in man. Di Biase M, et al. **Int J Cardiol** 1989 Feb;22(2):177–83
[Comparison of protective effects induced by the ultrasonic mist of nicardipine + fenoterol versus nicardipine + fenoterol + ipratropium bromide] Miravalle C, et al. **Minerva Med** 1988 Dec;79(12):1091–3 (Eng. Abstr.) **(Ita)**

ADVERSE EFFECTS

Erythromelalgia induced by nicardipine [letter] Drenth JP. **BMJ** 1989 Jun 10;298(6687):1582
Erythromelalgia induced by nicardipine (inverse Raynaud's phenomenon?). Levesque H, et al. **BMJ** 1989 May 6; 298(6682):1252–3
Erythromelalgia induced by nicardipine [letter] Levesque H, et al. **BMJ** 1989 Jul 29;299(6694):323
[The ebb and flow of LDH–IgG complexes influenced by the administered drugs] Mizutani H, et al. **Rinsho Byori** 1989 Apr;37(4):436–40 **(Jpn)**

ANALYSIS

The compatibility of nicardipine hydrochloride injection with various ICU medications during simulated Y–site injection. Halpern NA, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 May;27(5):250–4

PHARMACOKINETICS

Percutaneous absorption enhancer applied to membrane permeation–controlled transdermal delivery of nicardipine hydrochloride. Seki T, et al. **Drug Des Deliv** 1989 Jan; 4(1):69–75
Percutaneous absorption of nicardipine and ketorolac in rhesus monkeys. Yu D, et al. **Pharm Res** 1988 Jul; 5(7):457–62
The distribution of intravenous nicardipine in rat brain after subarachnoid hemorrhage. Tsukahara T, et al. **Surg Neurol** 1989 Sep;32(3):188–94
[Absence of polymorphism in individual response to the dihydropyridines nifedipine and (+/–)–nicardipine] Porchet HC, et al. **Schweiz Med Wochenschr** 1988 Dec 17;118(50):1918–20 (Eng. Abstr.) **(Fre)**

PHARMACOLOGY

Ovine fetal cardiorespiratory response to nicardipine. Holbrook RH Jr, et al. **Am J Obstet Gynecol** 1989 Sep; 161(3):718–21
Effect of nicardipine and atriopeptin on transcapillary shift of fluid and proteins. Valentin JP, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R174–9
Haemodynamic responses to nicardipine in humans anaesthetised with halothane. Ray DC, et al. **Anaesthesia** 1989 May;44(5):382–5
Effect of nicardipine on the isolated uterus and other smooth muscles of the rat. Milovanović SR, et al. **Arch Int Pharmacodyn Ther** 1988 Sep–Oct;295:291–304
Vasodilatory properties in vascular smooth muscle of the calcium antagonist NB–818 compared to nicardipine and nimodipine. Nishikibe M, et al. **Arch Int Pharmacodyn Ther** 1989 Jan–Feb;297:98–111
Inhibition by nicardipine of endothelin–mediated inositol phosphate formation and Ca2+ mobilization in smooth muscle cell. Xuan YT, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):758–64
Effect of nicardipine infusion on the release of glutathione S–transferase following halothane anaesthesia. Ray DC, et al. **Br J Anaesth** 1989 May;62(5):553–9
The effect of slow–release nicardipine on ambulatory and clinic blood pressure in mild hypertension. Cox JP, et al. **Br J Clin Pharmacol** 1989 Jul;28(1):79–82
Nicardipine, a new calcium channel blocker: role for vascular selectivity. Pepine C. **Clin Cardiol** 1989 May;12(5):240–6 (29 ref.)
Calcium entry blockade and alpha–adrenergic vascular reactivity in human beings: differences between nicardipine and verapamil. Pedrinelli R, et al. **Clin Pharmacol Ther** 1989 Mar;45(3):285–90
Effects of intracoronary infusion of nicardipine during silent ischaemia on myocardial metabolism and function. Hanet C, et al. **Eur Heart J** 1988 Dec;9 Suppl N:145–50
Influence of nicardipine on renal function and plasma cyclosporin in renal transplant patients. Kessler M, et al. **Eur J Clin Pharmacol** 1989;36(6):637–8
Different antagonism of the positive chronotropic and inotropic responses of the isolated, blood–perfused dog atrium to Bay k 8644 by nicardipine and verapamil. Furukawa Y, et al. **Eur J Pharmacol** 1988 Nov 1; 156(2):231–7
Intratumoural injection of calcium channel blocker enhances cytotoxicity of adriamycin in Ehrlich ascites solid tumour. Matsuoka H, et al. **Eur J Surg Oncol** 1989 Jun;15(3):224–31
Nicardipine does not significantly affect serum digoxin concentrations at the steady state of patients with congestive heart failure. Debruyne D, et al. **Int J Clin Pharmacol Res** 1989;9(1):15–9
Effect of intracoronary nicardipine on methylergonovine–induced coronary artery spasm in patients with variant angina. Bertrand ME, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Jan;27(1):39–43
Predictive factors of the blood pressure fall induced by intravenous nicardipine. Cluzel P, et al. **J Cardiovasc Pharmacol** 1989 Mar;13(3):370–5
Functional antagonism between PK 11195, a peripheral benzodiazepine receptor antagonist, and nicardipine at the vascular level in healthy subjects: a peripheral hemodynamic study. Thuillez C, et al. **J Cardiovasc Pharmacol** 1989 Feb;13(2):307–13
Endothelin–1–induced contractions of vascular and tracheal smooth muscle: effects of nicardipine and BRL 34915. Turner NC, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S180–2
Effect of nicardipine on angiotensin II platelet content. Ferri C, et al. **J Hypertens Suppl** 1988 Nov;6(1):S117–9
Nicardipine and atrial natriuretic factor increase whole body vascular permeability in rats. Valentin JP, et al. **J Hypertens Suppl** 1988 Dec;6(4):S303–5
Effects of calcium channel blockers on the endothelial release of von Willebrand factor after exercise in healthy subjects. Musumeci V, et al. **J Lab Clin Med** 1989 Apr;113(4):525–31
Fatty acid binding protein of cardiac muscle in spontaneously hypertensive rats: effect of hypertrophy and its regression. Fujii S, et al. **J Mol Cell Cardiol** 1988 Sep;20(9):779–87
Effects of the Ca–antagonist nicardipine on K+ currents and Na+–Ca2+ exchange in frog atrial fibres. Richard S, et al. **J Mol Cell Cardiol** 1988 Dec;20(12):1133–40
Is adrenal medulla involved in the antihypertensive effect of nicardipine? Tran MA, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):1116–20
Effects of captopril and nicardipine on renal hyperfiltration and hypertrophy in uninephrectomized diabetic rats. Matsushima Y, et al. **Nippon Jinzo Gakkai Shi** 1988 Mar; 30(3):279–83

Effects of quinine and of calmodulin inhibitors on calcium-dependent potassium channels of human aorta. Serebryakov VN, et al. **Pflugers Arch** 1989;414 Suppl 1:S185

Nicardipine after spinal cord compression in the lamb. Hitchon PW, et al. **Surg Neurol** 1989 Feb;31(2):101–10

Blocking of the receptor-stimulated calcium entry into human platelets by verapamil and nicardipine. Avdonin PV, et al. **Thromb Res** 1988 Dec 15;52(6):587–97

[Comparative effects of dihydropyridine inhibitors of calcium penetration on spontaneous contraction of the isolated heart atria in the guinea pig] Prostran M, et al. **C R Soc Biol (Paris)** 1988;182(6):556–62 (Eng. Abstr.) **(Fre)**

[Echocardiographic analysis of anatomical and functional changes in the left heart ventricle during antihypertensive treatment with nicardipine] Costantino G, et al. **G Ital Cardiol** 1988 Aug;18(8):644–8 (Eng. Abstr.) **(Ita)**

[Evaluation of anatomical and functional changes in the left heart ventricle during the treatment with nicardipine: clinical significance of M-mode echocardiographic indices (editorial)] Moro E, et al. **G Ital Cardiol** 1988 Aug; 18(8):649–50 **(Ita)**

[The direct effect of nicardipine on renal function after ischemia] Nakamura H, et al. **Masui** 1988 Jun;37(6):707–15 (Eng. Abstr.) **(Jpn)**

[Effect of Cepharanthin and Nicardipine on thermotolerance] Uda M, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Oct 25;48(10):1236–42 (Eng. Abstr.) **(Jpn)**

[Influence of sodium intake on antihypertensive effect of calcium antagonist] Sakurai J. **Nippon Jinzo Gakkai Shi** 1988 Jun;30(6):737–43 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Hypertension in the elderly: focus on nicardipine. Proceedings of a symposium. May 26, 1988, Kyoto, Japan. **Am Heart J** 1989 Jan;117(1):227–73

Regional hemodynamic effects of slow-release nicardipine in elderly patients with hypertension: evaluation by a new ultrasound technique. Carretta R, et al. **Am Heart J** 1989 Jan;117(1):229–35

The potential use of nicardipine in cerebrovascular disease. Flamm ES. **Am Heart J** 1989 Jan;117(1):236–42

Nicardipine in elderly patients with hypertension: a review of experience in France. Forette F, et al. **Am Heart J** 1989 Jan;117(1):256–61

Nicardipine monotherapy in ambulatory elderly patients with hypertension. Krakoff LR. **Am Heart J** 1989 Jan; 117(1):250–5

The clinical performance of nicardipine in elderly hypertensive patients with concomitant diseases. Leonetti G. **Am Heart J** 1989 Jan;117(1):266–9

Nicardipine in the elderly hypertensive: a review of experience in the United Kingdom. Littler WA. **Am Heart J** 1989 Jan;117(1):262–5

Effects of nicardipine on blood pressure and renal function in elderly hypertensive patients with renal dysfunction. Saruta T. **Am Heart J** 1989 Jan;117(1):243–9

Usefulness of nicardipine as monotherapy for chronic, stable angina. Sklar J, et al. **Am J Cardiol** 1989 May 15; 63(17):1203–7

Effects of nicardipine on left ventricular hemodynamic patterns in systemic hypertension. de Simone G, et al. **Am J Hypertens** 1989 Mar;2(3 Pt 1):139–45

Nicardipine and propranolol in the treatment of essential hypertension. Lessem JN, et al. **Am J Hypertens** 1989 Mar; 2(3 Pt 1):146–53

Assessment of captopril and nicardipine effects on chronic occlusive arterial disease of the lower extremity using Doppler ultrasound. Bernardi D, et al. **Angiology** 1988 Nov; 39(11):942–52

Antihypertensive activity of a new calcium channel blocker LF 2.0254, in spontaneously hypertensive rats: a comparison with nifedipine and nicardipine. Pruneau D, et al. **Arch Int Pharmacodyn Ther** 1988 Sep–Oct;295:109–24

Comparison of the efficacy and acceptability of nicardipine and propranolol, alone and in combination, in mild to moderate hypertension. Maclean D, et al. **Br J Clin Pharmacol** 1989 May;27(5):569–80

Evaluation of a long acting formulation of nicardipine in hypertension by clinic and home recorded blood pressures and Doppler aortovelography. Webster J, et al. **Br J Clin Pharmacol** 1989 May;27(5):563–8

Serum lipid changes in patients with mild to moderate essential hypertension taking nicardipine and propranolol. Naukkarinen VA. **Br J Clin Pract** 1988 Dec;42(12):509–13

Improvement in left ventricular diastolic function in patients with stable angina after chronic treatment with verapamil and nicardipine. Rodrigues EA, et al. **Br J Clin Pract Symp Suppl** 1988 Apr;60:27–32

Nicardipine HCl: clinical experience in patients undergoing anaesthesia for intracranial aneurysm clipping. Warner DS, et al. **Can J Anaesth** 1989 Mar;36(2):219–23

Nicardipine, a new calcium channel blocker: role for vascular selectivity [letter] Fukyama O. **Clin Cardiol** 1989 Aug; 12(8):A11

Nicardipine and hydrochlorothiazide in essential hypertension. Fagan TC, et al. **Clin Pharmacol Ther** 1989 Apr;45(4):429–38

Efficacy and safety of nicardipine in 29,104 patients with hypertension. Dubois C, et al. **Clin Ther** 1989 Jul–Aug; 11(4):452–60

The role of nicardipine during anesthesia and surgery. Kaplan JA. **Clin Ther** 1989;11(1):84–93 (20 ref.)

Comparison of the renal effects of angiotensin converting enzyme inhibitor and calcium antagonist in hypertensive type 2 (non-insulin-dependent) diabetic patients with microalbuminuria: a randomised controlled trial. Baba T, et al. **Diabetologia** 1989 Jan;32(1):40–4

Acute and chronic effects of nicardipine on rest and exercise haemodynamics in post-myocardial infarction patients with latent cardiac failure. La Rovere MT, et al. **Eur Heart J** 1989 May;10(5):429–36

Effect of nicardipine on insulin secretion, glucose and lipid metabolism in hypertensive, non-insulin dependent diabetics. Pasanisi F, et al. **Eur J Clin Pharmacol** 1989; 36(1):1–4

Antihypertensive effect of slow-release nicardipine. A placebo-controlled cross-over study. Salvetti A, et al. **Eur J Clin Pharmacol** 1989;36(5):439–42

Comparison of the anti-anginal efficacy of nicardipine and nifedipine in patients receiving atenolol: a randomized, double-blind, crossover study. Douard H, et al. **Int J Cardiol** 1989 Mar;22(3):357–63

Nicardipine versus nifedipine: multicentre controlled trial in essential hypertension. Rumboldt Z, et al. **Int J Clin Pharmacol Res** 1988;8(6):393–400

Antihypertensive and hemodynamic effects of slow-release nicardipine. Mazzola C, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Oct;26(10):503–8

Verapamil versus nicardipine in rest and exercise hypertension. Fiasconaro G, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 4:S71–2

New therapeutic modalities in hypertension: focus on a new calcium antagonist-nicardipine. Frishman WH. **J Clin Pharmacol** 1989 Jun;29(6):481–7 (35 ref.)

A randomised comparative trial of nicardipine versus amiloride and hydrochlorothiazide in mild to moderate hypertension. A report from the General Practitioner Hypertension Study Group. Gostick NK, et al. **J Hum Hypertens** 1989 Apr;3(2):141–4

Antihypertensive efficacy of nicardipine-based treatment in patients of different age and in patients with isolated systolic hypertension. Leonetti G, et al. **J Hypertens Suppl** 1988 Dec;6(4):S655–7

Effects of nicardipine on chronic stable effort angina: a non-invasive assessment. Galderisi M, et al. **J Int Med Res** 1988 Sep–Oct;16(5):349–58

Nicardipine improves myocardial perfusion in systemic sclerosis. Kahan A, et al. **J Rheumatol** 1988 Sep; 15(9):1395–400

Nicardipine in systemic sclerosis [letter] McCarthy G, et al. **J Rheumatol** 1989 Mar;16(3):415

Natriuretic and renal hemodynamic effects of nicardipine in essential hypertension. Chaignon M, et al. **Kidney Int Suppl** 1988 Sep;25:S184–6

Nicardipine—a new calcium-entry blocker. **Med Lett Drugs Ther** 1989 May 5;31(791):41–2

Nicardipine reduces ischemic brain injury. Magnetic resonance imaging/spectroscopy study in cats. Kucharczyk J, et al. **Stroke** 1989 Feb;20(2):268–74

[Effects of nicardipine on left ventricular hypertrophy of the rat with renovascular arterial hypertension] Grellet J, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:45–9 (Eng. Abstr.) **(Fre)**

[Acute response to calcium inhibitors in secondary arterial hypertension: does renin play a role?] Jeunemaitre X, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:141–4 (Eng. Abstr.) **(Fre)**

[Treatment of hypertensive attacks in children with nicardipine] Buttet C, et al. **Pediatrie** 1988;43(5):447–50 (Eng. Abstr.) **(Fre)**

[Antihypertensive effects of intravenous nicardipine in arterial hypertension in the elderly] Escande M, et al. **Therapie** 1989 May–Jun;44(3):161–5 (9 ref.) (Eng. Abstr.) **(Fre)**

[Antihypertensive effect and tolerability of slow-release nicardipine] Fogari R, et al. **Cardiologia** 1989 Feb; 34(2):161–5 (Eng. Abstr.) **(Ita)**

[Effects of nicardipine in the treatment of essential arterial hypertension] Gigliottino R, et al. **Clin Ter** 1988 Oct 31; 127(2):99–104 (Eng. Abstr.) **(Ita)**

[Effects of medium- and long-term treatment with nicardipine on arterial blood pressure, hemodynamics and renal function in patients with arterial hypertension of mild and moderate degree] Onofri R, et al. **Clin Ter** 1988 Nov 15;127(3):181–4 (Eng. Abstr.) **(Ita)**

[Distensibility of large arteries after chronic treatment with nicardipine SR in aged hypertensive patients] Carretta R, et al. **G Clin Med** 1988 Aug–Sep;69(8–9):501–4 (Eng. Abstr.) **(Ita)**

NICERGOLINE see under **ERGOLINES**

NICERITROL see under **NICOTINIC ACIDS**

NICKEL

Aligning, leveling, and torque control—a pilot study. Andreasen GF, et al. **Angle Orthod** 1989 Spring;59(1):51–60

A titanium-nickel alloy intravascular endoprosthesis. In vitro studies. Oku T, et al. **ASAIO Trans** 1988 Jul–Sep; 34(3):399–403

ESR evidence for superoxide, hydroxyl radicals and singlet oxygen produced from hydrogen peroxide and nickel(II) complex of glycylglycyl-L-histidine. Inoue S, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):445–51

The magnetic properties of the nickel cofactor F430 in the enzyme methyl-coenzyme M reductase of Methanobacterium thermoautotrophicum. Cheesman MR, et al. **Biochem J** 1989 Jun 1;260(2):613–6

Neonatal myosin heavy chains are not expressed in Ni-induced rat rhabdomyosarcoma. Borrione AC, et al. **Differentiation** 1988 Jun;38(1):49–59

Spectroscopic characterization of the nickel and iron-sulphur clusters of hydrogenase from the purple photosynthetic bacterium Thiocapsa roseopersicina. 1. Electron spin resonance spectroscopy. Cammack R, et al. **Eur J Biochem** 1989 Jun 15;182(2):357–62

Spectroscopic characterization of the nickel and iron-sulphur clusters of hydrogenase from the purple photosynthetic bacterium Thiocapsa roseopersicina. 2. Electron spin-echo spectroscopy. Cammack R, et al. **Eur J Biochem** 1989 Jun 15;182(2):363–6

Japanese NiTi alloy wire: use of the direct electric resistance heat treatment method. Miura F, et al. **Eur J Orthod** 1988 Aug;10(3):187–91

A pulsed EPR study of redox-dependent hyperfine interactions for the nickel centre of Desulfovibrio gigas hydrogenase. Chapman A, et al. **FEBS Lett** 1988 Dec 19; 242(1):134–8

The magnetic and electronic properties of Methanobacterium thermoautotrophicum (strain delta H) methyl coenzyme M reductase and its nickel tetrapyrrole cofactor F430. A low temperature magnetic circular dichroism study. Hamilton CL, et al. **J Biol Chem** 1989 Jul 15; 264(20):11605–13

Coordination chemistry of F430. Axial ligation equilibrium between square-planar and bis-aquo species in aqueous solution. Shiemke AK, et al. **J Biol Chem** 1989 Jul 5; 264(19):11236–45

Crystal structures and spectroscopic studies of ternary compounds of Ni(II) with ethylenediamine and 5′GMP and 5′IMP. Fiol JJ, et al. **J Inorg Biochem** 1989 Mar; 35(3):191–214

Interactions of water-soluble metalloporphyrins with nucleic acids studied by resonance Raman spectroscopy. Schneider JH, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10323–38

The use of nickel-titanium alloy in orthopedic surgery in China. Kuo PP, et al. **Orthopedics** 1989 Jan;12(1):111–6

Evidence for selenocysteine coordination to the active site nickel in the [NiFeSe]hydrogenases from Desulfovibrio baculatus. Eidsness MK, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):147–51

[Evaluation of super-elasticity characteristics of orthodontic Ni-Ti alloy wire] Yoneyama T, et al. **Kokubyo Gakkai Zasshi** 1989 Mar;56(1):93–101 (Eng. Abstr.) **(Jpn)**

[Oxygen free radical production and DNA damage induced by metal compounds and hydrogen peroxide] Kawanishi S, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):2838–43 **(Jpn)**

ADMINISTRATION & DOSAGE

[Food chemistry and technology aspects of nickel-deficient nutrition in endogenously-induced allergic contact eczemas] Scheller R, et al. **Hautarzt** 1988 Aug;39(8):491–7 (40 ref.) (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Nickel dermatitis and diet: clinical improvement and a reduction in blood and urine nickel levels with a low-nickel diet. Gawkrodger DJ, et al. **Acta Derm Venereol (Stockh)** 1988;68(5):453–5

Metal allergy in cashiers. An in vitro and in vivo study for the presence of metal allergy. Gilboa R, et al. **Acta Derm Venereol (Stockh)** 1988;68(4):317–24

Deaths and tumors among workers grinding stainless steel. Svensson BG, et al. **Am J Ind Med** 1989;15(1):51–9

Histopathology of sinonasal and lung cancers in nickel refinery workers. Sunderman FW Jr, et al. **Ann Clin Lab Sci** 1989 Jan–Feb;19(1):44–50

Dermatitis from shell splinters after 43 years. Bruynzeel DP. **Contact Dermatitis** 1988 Sep;19(3):233–5

Nickel allergy: tolerance to metallic surface-plated samples in nickel-sensitive humans and guinea pigs. Cavelier C, et al. **Contact Dermatitis** 1988 Nov;19(5):358–61

The innumerable sources of nickel. Fernández de Corrés L, et al. **Contact Dermatitis** 1988 Nov;19(5):386–7

Dermatitis from shell splinters [letter] Fisher AA. **Contact Dermatitis** 1989 Apr;20(4):317–8

Allergic contact dermatitis from nickel in eyeshadow. Goh CL, et al. **Contact Dermatitis** 1989 May;20(5):380–1

Contact dermatitis from nickel: an investigation of its sources. Romaguera C, et al. **Contact Dermatitis** 1988 Jul;19(1):52–7

Nickel sensitivity: effects of prolonged oral intake of the element. Santucci B, et al. **Contact Dermatitis** 1988 Sep; 19(3):202–5

The release of nickel from blackboard chalk may cause contact dermatitis. Zanca A, et al. **Contact Dermatitis** 1988 Aug;19(2):143

Allergic contact dermatitis to nickel: bioavailability from consumer products and provocation threshold. Emmett EA, et al. **J Am Acad Dermatol** 1988 Aug;19(2 Pt 1):314–22

Allergic reaction to orthodontic wire: report of case. Dunlap

CL, et al. **J Am Dent Assoc** 1989 Apr;118(4):449–50
Mechanisms of nickel carcinogenesis. Sunderman FW Jr. **Scand J Work Environ Health** 1989 Feb;15(1):1–12 (147 ref.)
[Sensitization to nickel sulfate in patients with ileitis terminalis (Crohn disease)] Schöfer H, et al. **Derm Beruf Umwelt** 1988 Sep–Oct;36(5):157–62 (Eng. Abstr.) **(Ger)**
[Metallic nickel on skin and in artificial sweat. Case studies] Hums R, et al. **Dermatol Monatsschr** 1988;174(12):723–9 (Eng. Abstr.) **(Ger)**
[Patch testing with nickel compounds] Hums R, et al. **Dermatol Monatsschr** 1988;174(12):730–5 (Eng. Abstr.) **(Ger)**
[Shoulder stiffness and metal allergy—a possible link? A single case report] Theermann R, et al. **Z Orthop** 1989 Jan–Feb;127(1):65–7 (Eng. Abstr.) **(Ger)**
[Occupational allergy in nurses] Rudzki E, et al. **Pol Tyg Lek** 1988 Oct 17–24;43(42–43):1374–6 (Eng. Abstr.) **(Pol)**

ANALYSIS

Metal composition analysis of hydrogenase from Thiocapsa roseopersicina by proton induced X-ray emission spectroscopy. Bagyinka C, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):422–6
Determination of nickel in lung specimens of thirty-nine autopsied nickel workers. Andersen I, et al. **Int Arch Occup Environ Health** 1989;61(4):289–95
A rapid digestion method for analysis of nickel compounds in tissue by electrothermal atomic absorption spectrometry. Benson JM, et al. **J Appl Toxicol** 1989 Aug;9(4):219–22
EPR studies with 77Se-enriched (NiFeSe) hydrogenase of Desulfovibrio baculatus. Evidence for a selenium ligand to the active site nickel. He SH, et al. **J Biol Chem** 1989 Feb 15;264(5):2678–82
Calcineurin immunoprecipitated from bovine brain extract contains no detectable Ni2+ or Mn2+. Rao J, et al. **J Biol Chem** 1989 Jan 15;264(2):1058–61
Identification of a Ni- and Fe-containing cluster in Rhodospirillum rubrum carbon monoxide dehydrogenase. Stephens PJ, et al. **J Biol Chem** 1989 Oct 5; 264(28):16347–50
Quantitative determination of chromium and nickel in tumour and tumour-free human tissue. Raithel HJ, et al. **J Environ Pathol Toxicol Oncol** 1989 Mar–Apr;9(2):115–26
Bioaccumulation of metals from nickel smelter waste in P and F1 generations of exposed animals. I. Dynamics of metal distribution in the organs and AM activity. Reichrtová E, et al. **J Hyg Epidemiol Microbiol Immunol** 1989;33(1):1–10
Stability constants of ampicillin complexes with Co(II) and Ni(II) ions. Veselinović D, et al. **J Pharm Belg** 1988 May–Jun;43(3):163–6
[The nickel content of food] Ruick G. **Nahrung** 1988; 32(9):807–14 (Eng. Abstr.) **(Ger)**
[Inhalation exposure to welding fumes of arc welders in processing Cr-Ni steel in large chemical industry] Dyrba BC, et al. **Z Gesamte Hyg** 1989 May;35(5):271–5 (Eng. Abstr.) **(Ger)**
[Methodology and evaluation of exposure to fumes formed during welding of chromium-nickel steel] Matczak W, et al. **Med Pr** 1988;39(3):175–85 (Eng. Abstr.) **(Pol)**

ANTAGONISTS & INHIBITORS

Inhibitory effect of zinc on nickel subsulfide carcinogenesis in Fischer rats. Kasprzak KS, et al. **Toxicology** 1988 Nov 30;52(3):253–62

BLOOD

Serum nickel concentrations in hemodialysis patients with environmental exposure. Hopfer SM, et al. **Ann Clin Lab Sci** 1989 May–Jun;19(3):161–7

DIAGNOSTIC USE

Patch testing with nickel sulphate under occlusion for five hours. Bruze M. **Acta Derm Venereol (Stockh)** 1988; 68(4):361–4

IMMUNOLOGY

HLA class II restriction specificity for nickel-reactive T lymphocytes. Emtestam L, et al. **Acta Derm Venereol (Stockh)** 1988;68(5):395–401
Prostaglandin E1 and prostaglandin F2 alpha in exudate in nickel allergy. Lerche A, et al. **Acta Derm Venereol (Stockh)** 1989;69(3):253–6
Nickel antigen induces IL-2 secretion and IL-2 receptor expression mainly on CD4+ T cells, but no measurable gamma interferon secretion in peripheral blood mononuclear cell cultures in delayed type hypersensitivity to nickel. Karttunen R, et al. **Clin Exp Immunol** 1988 Dec; 74(3):387–91
Patch testing with nickel chloride in a hydrogel. Fullerton A, et al. **Contact Dermatitis** 1989 Jan;20(1):17–20
Zinc effects on nickel dermatitis in the guinea pig. Warner RD, et al. **Contact Dermatitis** 1988 Aug;19(2):98–108
PUVA treatment of nickel contact dermatitis: effect on dermatitis, patch test sensitivity, and lymphocyte transformation reactivity. Kalimo K, et al. **Photodermatol** 1989 Feb;6(1):16–9

ISOLATION & PURIFICATION

Chromium and nickel in roadside grapes. Pertoldi Marletta G, et al. **Food Addit Contam** 1989 Apr–Jun;6(2):219–25

METABOLISM

Nickel transport by the thermophilic acetogen Acetogenium kivui. Yang HC, et al. **Appl Environ Microbiol** 1989 May; 55(5):1078–81
A time-resolved fluorescence study of azurin and metalloazurin derivatives. Hutnik CM, et al. **Biochemistry** 1989 May 2;28(9):3935–9
Binding of nickel to human epidermis in vitro. Fullerton A, et al. **Br J Dermatol** 1988 Nov;119(5):675–82
Postischemic changes of calcium and endogenous antagonist in the rat hippocampus studied by proton-induced X-ray emission analysis. Tsuda T, et al. **Brain Res** 1989 Apr 10; 484(1–2):228–33
Energy-dependent, high-affinity transport of nickel by the acetogen Clostridium thermoaceticum. Lundie LL Jr, et al. **J Bacteriol** 1988 Dec;170(12):5705–8
Structural and spectroscopic characterization of exogenous ligand binding to isolated factor F430 and its configurational isomers. Shiemke AK, et al. **J Biol Chem** 1989 May 5;264(13):7276–84
Competitive inhibitors of Klebsiella aerogenes urease. Mechanisms of interaction with the nickel active site. Todd MJ, et al. **J Biol Chem** 1989 Sep 25;264(27):15835–42
Chromosome aberrations in peripheral blood lymphocytes of welders and characterization of their exposure by biological samples analysis. Elias Z, et al. **J Occup Med** 1989 May;31(5):477–83
Cobalt, chromium, and nickel concentrations in body fluids of patients with porous-coated knee or hip prostheses. Sunderman FW Jr, et al. **J Orthop Res** 1989;7(3):307–15 (28 ref.)

PHARMACOKINETICS

Nickel uptake and regulation in a copper-tolerant decapod, Cambarus bartoni (Fabricius) (Decapoda, Crustacea). Alikhan MA, et al. **Bull Environ Contam Toxicol** 1989 Jan; 42(1):94–102
The accumulation of nickel in human lungs. Edelman DA, et al. **Environ Health Perspect** 1989 May;81:221–4
Distribution of nickel in diethylmaleate (DEM) pre-treated rats: protective role of glutathione and histidine. Srivastava RC, et al. **Ind Health** 1988;26(3):183–5
Elimination of nickel, cobalt, and chromium following repeated injections of high dose metal salts. Merritt K, et al. **J Biomed Mater Res** 1989 Aug;23(8):845–62
Nickel absorption and kinetics in human volunteers. Sunderman FW Jr, et al. **Proc Soc Exp Biol Med** 1989 May;191(1):5–11
Sodium lauryl sulfate enhances nickel penetration through guinea-pig skin. Studies with energy dispersive X-ray microanalysis. Lindberg M, et al. **Scanning Microsc** 1989 Mar;3(1):221–4
Uptake of 63Ni2+ in the central and peripheral nervous system of mice after oral administration: effects of treatments with halogenated 8-hydroxyquinolines. Borg K, et al. **Toxicology** 1989 Jan;54(1):59–68

PHARMACOLOGY

Nickel is required for the transfer of electrons from carbon monoxide to the iron-sulfur center(s) of carbon monoxide dehydrogenase from Rhodospirillum rubrum. Ensign SA, et al. **Biochemistry** 1989 Jun 13;28(12):4968–73
Nickel-specific, slow-binding inhibition of carbon monoxide dehydrogenase from Rhodospirillum rubrum by cyanide. Ensign SA, et al. **Biochemistry** 1989 Jun 13;28(12):4973–9
Nickel as a micronutrient element for plants. Dalton DA, et al. **Biofactors** 1988 Jan;1(1):11–6 (62 ref.)
Influence of nickel chloride on bone marrow of iron-deficient rats. Novelli EL, et al. **Bol Estud Med Biol** 1988; 36(1–4):35–42
Nickel chloride protection against alloxan- and streptozotocin-induced diabetes. Novelli EL, et al. **Braz J Med Biol Res** 1988;21(1):129–32
Characterization of mouse cell lines resistant to nickel(II) ions. Wang XW, et al. **Cancer Res** 1988 Dec 1;48(23):6850–4
Effects of amorphous and crystalline nickel sulfide on induction of interferons-alpha/beta and -gamma and interleukin-2. Jaramillo A, et al. **Environ Res** 1989 Apr; 48(2):275–86
Characterization of the inhibition effect induced by nickel on glucose-6-phosphate dehydrogenase and glutathione reductase. Cartañá J, et al. **Enzyme** 1989;41(1):1–5
Supercoil-stabilized left-handed DNA in the plasmid (dA-dT)16 insert formed in the presence of Ni2+. Nejedlý K, et al. **FEBS Lett** 1989 Jan 30;243(2):313–7
Charge transfer-oxy radical mechanism for anticancer agents: mAMSA derivatives, rhodamine 123, and nickel salicylaldoximate. Crawford PW, et al. **Free Radic Res Commun** 1987;3(6):347–56
Different modulating effects of the monoamines adrenaline, noradrenaline, and serotonin on the DNA synthesis response of human peripheral blood T lymphocytes activated by mercuric chloride and nickel sulfate. Nordlind K, et al. **Int Arch Allergy Appl Immunol** 1988;87(3):317–20
Cloning of pMOL28-encoded nickel resistance genes and expression of the genes in Alcaligenes eutrophus and Pseudomonas spp. Siddiqui RA, et al. **J Bacteriol** 1989 Sep; 171(9):5071–8
Magnesium counteracts nickel-induced suppression of T lymphocyte response to concanavalin A. Kasprzak KS, et al. **Magnesium** 1988;7(3):166–72
Enhancement of UV-induced mutagenesis and sister-chromatid exchanges by nickel ions in V79 cells: evidence for inhibition of DNA repair. Hartwig A, et al. **Mutat Res** 1989 Jan;217(1):65–73
The effects of nickel on contraction and membrane current in isolated rat myocytes. O'Neill SC, et al. **Q J Exp Physiol** 1988 Nov;73(6):1017–20
Effects of lime on nickel uptake and toxicity in celery grown on muck soil contaminated by a nickel refinery. Bisessar S. **Sci Total Environ** 1989 Aug;84:82–90
Studies of mutagenesis and neoplastic transformation by bivalent metal ions and ionizing radiation. Little JB, et al. **Teratogenesis Carcinog Mutagen** 1988;8(5):287–92
Influence of diethyldithiocarbamate on nickel-induced hepatic metallothionein in rats. Khandelwal S, et al. **Toxicol Ind Health** 1989 May;5(3):405–13
Effect of sodium lauryl sulphate and nickel alone and in combination on the skin of guinea pigs. Mathur AK, et al. **Toxicol Lett** 1988 Sep;42(3):249–56
[Nickel chloride and alloxan. I. Determination of glucose, insulin and superoxide dismutase in blood and pancreas of rats] Novelli EL, et al. **Acta Physiol Pharmacol Latinoam** 1987;37(3):377–93 (Eng. Abstr.) **(Por)**
[Ultrastructure of HeLa cells after exposure to nickel ions] Iurova AV, et al. **Tsitol Genet** 1988 Jul–Aug;22(4):13–6 (Eng. Abstr.) **(Rus)**

POISONING

Acute nickel toxicity in electroplating workers who accidently ingested a solution of nickel sulfate and nickel chloride. Sunderman FW Jr, et al. **Am J Ind Med** 1988; 14(3):257–66

THERAPEUTIC USE

Nickel chloride and diabetes. II. Calcium, zinc, phosphorus and iron determinations in alloxan diabetic and in rats treated by nickel chloride injections. Novelli EL, et al. **Bol Estud Med Biol** 1987 Jul–Dec;35(3–4):221–30
Nickel sulphate in the treatment of alopecia areata. García-Bravo B, et al. **Contact Dermatitis** 1989 Mar; 20(3):228–9

TOXICITY

Nickel- and cadmium-induced fetal myocardial changes in the mouse: the hazards of cigarette smoke in pregnancy. Patai K, et al. **Acta Chir Hung** 1988;29(4):315–21
The mechanism of malignant tumor induction by nickel subsulfide. Lumb G, et al. **Ann Clin Lab Sci** 1988 Sep–Oct; 18(5):353–66
A pilgrimage into the archives of nickel toxicology. Sunderman FW. **Ann Clin Lab Sci** 1989 Jan–Feb;19(1):1–16
Nickel inhibition of the osmotic-sensitive ionic cellular channels. Terreros DA, et al. **Ann Clin Lab Sci** 1988 Nov–Dec;18(6):444–50
Mechanistic aspects of nickel carcinogenicity. Sunderman FW Jr. **Arch Toxicol Suppl** 1989;13:40–7 (34 ref.)
Immortalization of normal human kidney epithelial cells by nickel(II). Tveito G, et al. **Cancer Res** 1989 Apr 1; 49(7):1829–35
In vitro polymerization of histones by carcinogenic nickel compounds. Kasprzak KS, et al. **Carcinogenesis** 1989 Mar; 10(3):621–4
Chromosomal changes in cell lines from mouse tumors induced by nickel sulfide and methylcholanthrene. Christie NT, et al. **Cell Biol Toxicol** 1988 Dec;4(4):427–45
Temperature regulation following nickel intoxication in the mouse: effect of ambient temperature. Gordon CJ, et al. **Comp Biochem Physiol [C]** 1989;92(1):73–6
Toxicity and carcinogenicity of nickel compounds. Coogan TP, et al. **Crit Rev Toxicol** 1989;19(4):341–84 (315 ref.)
Perspectives on the mechanism of nickel carcinogenesis gained from models of in vitro carcinogenesis. Costa M. **Environ Health Perspect** 1989 May;81:73–6 (26 ref.)
Morphological and neoplastic transformation of C3H/10T1/2 Cl 8 mouse embryo cells by insoluble carcinogenic nickel compounds. Miura T, et al. **Environ Mol Mutagen** 1989; 14(2):65–78
Lung toxicity after 13-week inhalation exposure to nickel oxide, nickel subsulfide, or nickel sulfate hexahydrate in F344/N rats and B6C3F1 mice. Dunnick JK, et al. **Fundam Appl Toxicol** 1989 Apr;12(3):584–94
Standard mouse ear swelling test (MEST) [letter] Gad SC. **Fundam Appl Toxicol** 1988 Nov;11(4):732–3
Alleviation of nickel-induced biochemical alterations by chelating agents. Misra M, et al. **Fundam Appl Toxicol** 1988 Aug;11(2):285–92
Effects of metal cations on pituitary hormone secretion in vitro. Cooper RL, et al. **J Biochem Toxicol** 1987 Fall–Winter;2:241–9
Effect of nickel(II) on DNA–protein binding, thymidine incorporation, and sedimentation pattern of chromatin fractions from intact mammalian cells. Patierno SR, et al. **J Biochem Toxicol** 1987 Spring;2:13–23
Induction of soft tissue tumours in F344 rats by subcutaneous, intramuscular, intra-articular, and retroperitoneal injection

of nickel sulphide (Ni3S2). Shibata M, et al. **J Pathol** 1989 Mar;157(3):263–74

Effect of nickel chloride on body temperature and behavioral thermoregulation in the rat. Gordon CJ. **Neurotoxicol Teratol** 1989 May–Jun;11(3):317–20

Hypothermia and deranged circadian rhythm of core body temperature in nickel chloride–treated rats. Hopfer SM, et al. **Res Commun Chem Pathol Pharmacol** 1988 Dec; 62(3):495–505

Nickel–induced histopathological alterations in the gill architecture of a tropical freshwater perch, Colisa fasciatus (Bloch & Schn.). Nath K, et al. **Sci Total Environ** 1989 May 15;80(2–3):293–6

Toxicity to alveolar macrophages in rats following parenteral injection of nickel chloride. Sunderman FW Jr, et al. **Toxicol Appl Pharmacol** 1989 Aug;100(1):107–18

Planning and using PB–PK models: an integrated inhalation and distribution model for nickel. Menzel DB. **Toxicol Lett** 1988 Oct;43(1–3):67–83

Pulmonary histopathology of rats following parenteral injections of nickel chloride. Knight JA, et al. **Toxicol Pathol** 1988;16(3):350–9

Biochemical responses of rat and mouse lung to inhaled nickel compounds. Benson JM, et al. **Toxicology** 1989 Aug; 57(3):255–66

[Studies of the effect of nickel and nickel compounds on transformation on Syrian hamster embryo cells] Tang P, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Jun; 19(2):150–3 (Eng. Abstr.) **(Chi)**

[Effect of Ni2O3 dust on the respiratory system] Adachi S, et al. **Sangyo Igaku** 1989 Mar;31(2):64–5 **(Jpn)**

[Evaluation of occupational exposure to nickel and other metals based on the analysis of air in the production of nickel alloys] Dobecki M, et al. **Med Pr** 1988;39(6):399–405 (Eng. Abstr.) **(Pol)**

URINE

Isotope dilution gas chromatography/mass spectrometry for the determination of nickel in biological materials. Aggarwal SK, et al. **Anal Chem** 1989 May 15; 61(10):1099–103

[Creatinine as an adjustment parameter in urinary excretion of vanadium and nickel] Barbieri F, et al. **G Ital Med Lav** 1988 Mar;10(2):65–71 (Eng. Abstr.) **(Ita)**

NICKEL–CHROMIUM ALLOYS see **CHROMIUM ALLOYS**

NICLOFOLAN see under **NITROPHENOLS**

NICLOSAMIDE

ANALOGS & DERIVATIVES

[Action of a molluscacide (Bayluscide–SRB) from the Dynatech R/D Company in lakes of northeastern Brazil—Sergipe, Brazil] Rosas E, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:321–9 (Eng. Abstr.) **(Por)**

PHARMACOLOGY

[The action of fenasal on the ultrastructure of the tegument in Caryophyllaeus laticeps cestodes] Volodin AV, et al. **Parazitologiia** 1988 Sep–Oct;22(5):389–93 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Effect of some anthelmintics on Hymenolepis nana in albino mice. el–Ridi AM, et al. **J Egypt Soc Parasitol** 1989 Dec; 19(2):477–82

[Comparative effectiveness of mebendazole, medamine and pyrantel pamoate and their combination with fenasal in nippostrongylosis and hymenolepiasis in white mice] Kulieva NS. **Med Parazitol (Mosk)** 1988 Sep–Oct;(5):68–72 (Eng. Abstr.) **(Rus)**

TOXICITY

Genotoxic effects of niclosamide in Aspergillus nidulans. de la Torre RA, et al. **Mutat Res** 1989 Apr;222(4):337–41

NICOTIANA see **TOBACCO**

NICOTINAMIDASE see under **AMIDOHYDROLASES**

NICOTINAMIDE

ADMINISTRATION & DOSAGE

[Stereometric evaluation of the myocardial cardiomyocyte–capillary ratio in emotional and pain–induced stress after administration of thiamine and nicotinamide] Shneider AB. **Kardiologiia** 1989 Apr; 29(4):97–9 (Eng. Abstr.) **(Rus)**

ANALOGS & DERIVATIVES

A symposium: A new treatment for angina pectoris and heart failure. October 17, 1987, San Francisco. Proceedings. **Am J Cardiol** 1989 Jun 20;63(21):1J–85J

Effect of nicorandil on coronary spasm. Aizawa T, et al. **Am J Cardiol** 1989 Jun 20;63(21):75J–79J

A controlled single–dose study of the efficacy, dose response and duration of action of nicorandil in angina pectoris. Camm AJ, et al. **Am J Cardiol** 1989 Jun 20;63(21):61J–65J

Acute hemodynamic effects of single–dose nicorandil in coronary artery disease. Coltart DJ, et al. **Am J Cardiol** 1989 Jun 20;63(21):34J–39J

Pharmacokinetics of nicorandil. Frydman AM, et al. **Am J Cardiol** 1989 Jun 20;63(21):25J–33J

Effects of nicorandil on coronary circulation and myocardial ischemia. Gross G, et al. **Am J Cardiol** 1989 Jun 20; 63(21):11J–17J (13 ref.)

Effects of intravenous administration of nicorandil on cardiovascular hemodynamics and left ventricular function. Kambara H, et al. **Am J Cardiol** 1989 Jun 20;63(21):56J–60J

Comparison of antianginal activity of nicorandil, propranolol and diltiazem with reference to the antianginal mechanism. Kinoshita M, et al. **Am J Cardiol** 1989 Jun 20; 63(21):71J–74J

Effects of nicorandil on arterial and venous vessels of the forearm in systemic hypertension. Levenson J, et al. **Am J Cardiol** 1989 Jun 20;63(21):40J–43J

Exercise capacity after single and twice–daily doses of nicorandil in chronic stable angina pectoris. Meany TB, et al. **Am J Cardiol** 1989 Jun 20;63(21):66J–70J

Nicorandil: animal pharmacology. Sakai K. **Am J Cardiol** 1989 Jun 20;63(21):2J–10J (103 ref.)

Effects of nicorandil on left ventricular hemodynamics and volume at rest and during exercise–induced angina pectoris. Silke B, et al. **Am J Cardiol** 1989 Jun 20;63(21):49J–55J

Hemodynamic action of nicorandil in chronic congestive heart failure. Solal AC, et al. **Am J Cardiol** 1989 Jun 20; 63(21):44J–48J

Coronary vasodilatory action after nicorandil: a quantitative angiographic study. Suryapranata H, et al. **Am J Cardiol** 1989 Jun 20;63(21):80J–85J

Nicorandil as a hybrid between nitrates and potassium channel activators. Taira N. **Am J Cardiol** 1989 Jun 20; 63(21):18J–24J (38 ref.)

Correlation between niacin equivalent intake and urinary excretion of its metabolites, N'–methylnicotinamide, N'–methyl–2–pyridone–5–carboxamide, and N'–methyl–4–pyridone–3–carboxamide, in humans consuming a self–selected food. Shibata K, et al. **Am J Clin Nutr** 1989 Jul;50(1):114–9

The negative inotropic effect of nicorandil is independent of cyclic GMP changes: a comparison with pinacidil and cromakalim in canine atrial muscle. Yanagisawa T, et al. **Br J Pharmacol** 1988 Oct;95(2):393–8

Effect of light on reactions between N1–methylnicotinamide and methyl ketones. Carpenter KJ, et al. **Clin Chem** 1989 Sep;35(9):2000

The characterization of the protection by nicotinamide against the action of diabetogenic nitrosoureas. Akpan JO. **Diabete Metab** 1988 Dec;14(6):693–9

Plasma prolactin, sex steroids and gastrin in human volunteers treated for 2 weeks with therapeutic doses of cimetidine or the new histamine H2–receptor antagonist ramixotidine (CM 57755A). Colle M, et al. **Eur J Clin Pharmacol** 1988; 35(5):529–34

Effects of nicorandil and nipradilol on ischemic myocardium in perfused rat heart. Haneda T, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):81–7

Assessment of the antiarrhythmic activity of nicorandil during myocardial ischemia and reperfusion. Kempsford RD, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):61–8

Comparative effects of K+ channel blockade on the vasorelaxant activity of cromakalim, pinacidil and nicorandil. Wilson C, et al. **Eur J Pharmacol** 1988 Aug 2;152(3):331–9

Protoporphyrinogen oxidase inhibition by three peroxidizing herbicides: oxadiazon, LS 82–556 and M&B 39279. Matringe M, et al. **FEBS Lett** 1989 Mar 13;245(1–2):35–8

Cromakalim, nicorandil and pinacidil: novel drugs which open potassium channels in smooth muscle. Hamilton TC, et al. **Gen Pharmacol** 1989;20(1):1–9 (96 ref.)

Reduction of size of myocardial infarction with nicorandil, a new antianginal drug, after coronary artery occlusion in dogs. Endo T, et al. **J Cardiovasc Pharmacol** 1988; 12(5):587–92

6–Aminonicotinamide selectively causes necrosis in reactive astroglia cells in vivo. Preliminary morphological observations. Politis MJ. **J Neurol Sci** 1989 Aug;92(1):71–9

Effect of supplementing low protein diets with the limiting amino acids on the excretion of N1–methylnicotinamide and its pyridones in rats. Shibata K, et al. **J Nutr** 1989 Jun;119(6):896–901

Prediction of the in–vitro human skin permeability of nicorandil from animal data. Sato K, et al. **J Pharm Pharmacol** 1989 Jun;41(6):379–83

Activation of ATP–sensitive outward K+ current by nicorandil (2–nicotinamidoethyl nitrate) in isolated ventricular myocytes. Hiraoka M, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):278–85

Experimental studies on ischemic injury and reperfusion injury to the cardiac sarcoplasmic reticulum—the myocardial protective effect of nicorandil. Irié H. **Jpn Circ J** 1988 Jun;52(6):563–9

Inhibition of biopterin synthesis and DOPA production in PC–12 pheochromocytoma cells induced by 6–aminonicotinamide. Jung W, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Apr; 339(4):424–32

A comparison of the effects of the selective 5–HT uptake inhibitor WY 27587 on 5–HT uptake into platelets and synaptosomes in the rat. Billingsley AJ, et al. **Neuropharmacology** 1989 Jan;28(1):33–6

Comparison of the effects of putative activators of K+ channels on pancreatic B–cell function. Plant TD, et al. **Pflugers Arch** 1989;414 Suppl 1:S152–3

Comparison of the gastric antisecretory effects of ramixotidine dihydrochloride (CM 57755), a new H2 receptor antagonist, and cimetidine in dogs. Soldani G, et al. **Pharmacol Res Commun** 1988 Aug;20(8):663–72

Protective effect of nicorandil on postischemic function and tissue adenine nucleotides following a brief period of low–flow global ischemia in the isolated perfused rat heart. Pieper GM, et al. **Pharmacology** 1989;38(4):205–13

A spectrophotometric method for N–nicotinoyl–tryptamine (tryptamide) assay in the blood serum of rats. Danek L, et al. **Pol J Pharmacol Pharm** 1987 Nov–Dec;39(6):773–7

Influence of N–3–pyridoyltryptamine (tryptamide) on fetal development in rats and mice. Dłużniewski A, et al. **Pol J Pharmacol Pharm** 1987 Nov–Dec;39(6):779–86

Synthesis of N–nicotinoyl–tryptamine (tryptamide). Eckstein M, et al. **Pol J Pharmacol Pharm** 1987 Nov–Dec; 39(6):725–7

Pharmacological investigations on anti–inflammatory activity of tryptamide (3–nicotinoyl–tryptamine). Gieldanowski J, et al. **Pol J Pharmacol Pharm** 1987 Nov–Dec;39(6):759–67

Basic pharmacological properties of a novel antiinflammatory drug tryptamide. Herman ZS, et al. **Pol J Pharmacol Pharm** 1987 Nov–Dec;39(6):729–36

Some pharmacological properties and subacute and chronic toxicity of tryptamide. Kleinrok Z, et al. **Pol J Pharmacol Pharm** 1987 Nov–Dec;39(6):737–47

A comparison of anti–inflammatory, analgesic and ulcerogenic action of tryptamide, ibuprofen and piroxicam. Kulig D, et al. **Pol J Pharmacol Pharm** 1987 Nov–Dec; 39(6):769–72

The anti–inflammatory and analgesic activity of N–3–pyridoyltryptamine (tryptamide). Maj J, et al. **Pol J Pharmacol Pharm** 1987 Nov–Dec;39(6):749–58

Molecular pharmacology of niaprazine. Scherman D, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(6):989–1001

Evaluation of elution parameters in reversed phase HPLC for the determination of niacin vitamers and metabolites. Kollenkirchen U, et al. **Zentralbl Veterinarmed [A]** 1989 Apr;36(4):253–60

[Acute cardio–respiratory failure after niaprazine absorption (letter)] Auduy B. **Arch Fr Pediatr** 1988 Jun–Jul;45(6):439 **(Fre)**

[Niaprazine and side effects in pediatrics. Cooperative evaluation of French centers of pharmacovigilance] Bodiou C, et al. **Therapie** 1988 Jun–Jul;43(4):307–11 (Eng. Abstr.) **(Fre)**

[Accelerated myocardial metabolic and functional recovery with terminal nicorandil–mg cardioplegia in experimental heart transplantation] Orita H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct; 36(10):2188–93 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Simultaneous determination of niacin and niacinamide in meats by high–performance liquid chromatography. Hamano T, et al. **J Chromatogr** 1988 Dec 21;457:403–8

Gas chromatographic determination of nicotinamide in meats and meat products as 3–cyanopyridine. Tanaka A, et al. **J Chromatogr** 1989 Apr 19;466:307–17

Evaluation of elution parameters in reversed phase HPLC for the determination of niacin vitamers and metabolites. Kollenkirchen U, et al. **Zentralbl Veterinarmed [A]** 1989 Apr;36(4):253–60

DIAGNOSTIC USE

Nicotinamide increases C–peptide secretion in patients with recent onset type 1 diabetes. Pozzilli P, et al. **Diabetic Med** 1989 Sep–Oct;6(7):568–72

ISOLATION & PURIFICATION

Purification procedure for the determination of niacin vitamers in gastrointestinal contents and blood. Kollenkirchen U, et al. **Zentralbl Veterinarmed [A]** 1989 Apr;36(4):247–52

METABOLISM

Fate of excess nicotinamide and nicotinic acid differs in rats. Shibata K. **J Nutr** 1989 Jun;119(6):892–5

[Solubilization of the central benzodiazepine receptor and study of its interaction with nicotinamide] Fomenko AI, et al. **Biokhimiia** 1989 Mar;54(3):381–6 (Eng. Abstr.) **(Rus)**

[The vitamin B6, PP and C allowances of patients in the acute period of ischemic stroke] Shevata VN, et al. **Vrach Delo** 1989 Mar;(3):15–6 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Nicotinamide and selenium stimulate the repair of DNA damage produced by N–nitrosobis (2–oxopropyl) amine. Lawson T. **Anticancer Res** 1989 Mar–Apr;9(2):483–6

Selective inhibition of chlorophyll biosynthesis by

nicotinamide. Shioi Y, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):69–74

Induction of histidine decarboxylase in rat basophilic leukemia cells by interferon and prevention of its effect in coincubation with ADP–ribosyltransferase inhibitors. Kito T, et al. **Biochem Biophys Res Commun** 1989 Jan 16; 158(1):94–8

Comparison of the biopotencies of nicotinic acid and nicotinamide for broiler chicks. Ruiz N, et al. **Br Poult Sci** 1988 Sep;29(3):491–8

Potentiation of the antitumor activity of cisplatin in mice by 3–aminobenzamide and nicotinamide. Chen G, et al. **Cancer Chemother Pharmacol** 1988;22(4):303–7

The characterization of the protection by nicotinamide against the action of diabetogenic nitrosoureas. Akpan JO. **Diabete Metab** 1988 Dec;14(6):693–9

Oxygen free–radical scavengers and immune destruction of murine islets in allograft rejection and multiple low–dose streptozocin–induced insulitis. Mendola J, et al. **Diabetes** 1989 Mar;38(3):379–85

Tissue culture of human fetal pancreas. Effects of nicotinamide on insulin production and formation of isletlike cell clusters. Sandler S, et al. **Diabetes** 1989 Jan; 38 Suppl 1:168–71

Effect of nicotinamide treatment on the residual insulin secretion in type 1 (insulin–dependent) diabetic patients. Vague P, et al. **Diabetologia** 1989 May;32(5):316–21

Survival and B–cell function of mouse pancreatic islets maintained in culture after concomitant exposure to streptozotocin and nicotinamide. Strandell E, et al. **Exp Clin Endocrinol** 1989 May;93(2–3):219–24

Radiosensitization by nicotinamide in tumors and normal tissues: the importance of tissue oxygenation status. Horsman MR, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1273–6

Nicotinamide prolongs survival of primary cultured hepatocytes without involving loss of hepatocyte–specific functions. Inoue C, et al. **J Biol Chem** 1989 Mar 25; 264(9):4747–50

Effects of whole cottonseed, niacin, and niacinamide on in vitro rumen fermentation and on lactating Holstein cows. Horner JL, et al. **J Dairy Sci** 1988 Dec;71(12):3334–44

Angiogenic potency of nucleotide metabolites: potential role in ischemia–induced vascular growth. Morris PB, et al. **J Mol Cell Cardiol** 1989 Apr;21(4):351–8

Cycloheximide blocks nicotinamide action on phosphate excretion in thyroparathyroidectomized rats. Wu KI, et al. **Miner Electrolyte Metab** 1988;14(5):271–6

On the cytotoxicity of chrysotile asbestos fibers toward pulmonary alveolar macrophages. II. Effects of nicotinamide on the cell metabolism. Nadeau D, et al. **Toxicol Appl Pharmacol** 1989 Mar 15;98(1):144–58

[The action of nicotinamide on the adenine nucleotide system as well as on mitochondrial oxidation and phosphorylation processes in the liver of db/db strain mice] Obrosova IG, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):681–3 (Eng. Abstr.) **(Rus)**

[Change in carbohydrate metabolism, secretion of insulin and glucagon in normoglycemic rats during administration of various doses of nicotinamide] Krylov IuF, et al. **Vopr Med Khim** 1989 May–Jun;35(3):30–2 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Mechanism for the reduction of tumour hypoxia by nicotinamide and the clinical relevance for radiotherapy. Horsman MR, et al. **Biomed Biochim Acta** 1989; 48(2–3):S251–4

Effect of nicotinamide therapy upon B–cell function in newly diagnosed type 1 (insulin–dependent) diabetic patients. Mendola G, et al. **Diabetologia** 1989 Mar;32(3):160–2

Tumor radiosensitization by nicotinamide: a result of improved perfusion and oxygenation. Horsman MR, et al. **Radiat Res** 1989 Apr;118(1):139–50

Comparison of low dose nicotinamide versus benzamide, administered per os, as radiosensitizers in a C3H mammary carcinoma. Kjellen E, et al. **Radiother Oncol** 1988 Aug; 12(4):327–31

[Inhibition of morphine hyperthermia, induced by nicotinamide] Iakimova K, et al. **Eksp Med Morfol** 1989; 28(1):33–7 (Eng. Abstr.) **(Bul)**

[Effect of delta sleep–inducing peptide, anticonvulsant preparations and nicotinamide on generalized seizure activity] Shandra AA, et al. **Biull Eksp Biol Med** 1989 Feb; 107(2):211–4 (Eng. Abstr.) **(Rus)**

[Prevention of disorders of cardiac contractility with nicotinamide in adriblastin –related damage] Nurmukhambetov AN, et al. **Kardiologiia** 1988 Dec; 28(12):91–3 (Eng. Abstr.) **(Rus)**

[Anticarcinogenic action of vitamins PP and B6 in the natulan initiation of malignant growth in mice] Draudin–Krylenko VA, et al. **Vopr Onkol** 1989;35(1):34–8 (Eng. Abstr.) **(Rus)**

[Fanconi's anemia: effect of treatment with a vitamin complex and with nicotinamide] Pincheira J, et al. **Rev Med Chil** 1988 Aug;116(8):788–92 (Eng. Abstr.) **(Spa)**

TOXICITY

[Working conditions at the final stages in the production of water–soluble vitamins] Nemchinov NN, et al. **Gig Sanit** 1989 Apr;(4):79–80 **(Rus)**

NICOTINAMIDE–ADENINE DINUCLEOTIDE see **NAD**

NICOTINAMIDE–ADENINE DINUCLEOTIDE PHOSPHATE see **NADP**

NICOTINAMIDE MONONUCLEOTIDE

METABOLISM

Genetic characterization of the pnuC gene, which encodes a component of the nicotinamide mononucleotide transport system in Salmonella typhimurium. Zhu N, et al. **J Bacteriol** 1989 Aug;171(8):4402–9

NICOTINE

Nicotine dependence. Milhorn HT Jr. **Am Fam Physician** 1989 Mar;39(3):214–24 (27 ref.)

Nicotine absorption and dependence in an over the counter aid to stopping smoking. Belcher M, et al. **BMJ** 1989 Mar 4;298(6673):570

Identification and analysis of a nicotine–derived N–nitrosamino acid and other nitrosamino acids in tobacco. Djordjevic MV, et al. **Carcinogenesis** 1989 Sep; 10(9):1725–31

Nicotine and ulcerative colitis [letter] Hickey RJ. **Gut** 1989 Mar;30(3):416–8

Smoking cessation in primary care. A randomized controlled trial of nicotine–bearing chewing gum. Gilbert JR, et al. **J Fam Pract** 1989 Jan;28(1):49–55

Drug therapy. Pharmacologic aspects of cigarette smoking and nicotine addition. Benowitz NL. **N Engl J Med** 1988 Nov 17;319(20):1318–30 (167 ref.)

Comparison of four–drug discriminations in training compartments with four identical levers versus four different responses manipulanda. Overton DA, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):879–88

Failure of behavioral dependence induction and oral nicotine bioavailability in rats. Le Houezec J, et al. **Physiol Behav** 1989 Jan;45(1):103–8

Nicotine addiction in the psychiatric hospital: a preliminary report [letter] Peele R. **Psychiatr J Univ Ottawa** 1988 Nov; 13(4):239

Nicotine addiction? [editorial] **W V Med J** 1988 Sep;84(9):405

Transdermal clonidine therapy and nicotine withdrawal. Green JJ, et al. **West J Med** 1989 Jul;151(1):79–80

ADMINISTRATION & DOSAGE

Chronic nicotine treatment partly protects against the 1–methyl–4–phenyl–2,3,6–tetrahydropyridine–induced degeneration of nigrostriatal dopamine neurons in the black mouse. Janson AM, et al. **Acta Physiol Scand** 1988 Apr; 132(4):589–91

Effects of chronic nicotine exposure on contractile enzyme–histochemical and biochemical properties of fast– and slow–twitch skeletal muscles in the rat. Larsson L, et al. **Acta Physiol Scand** 1988 Dec;134(4):519–27

Combination of behavioral smoking cessation with transdermal nicotine substitution. Buchkremer G, et al. **Addict Behav** 1989;14(2):229–38

Can across–treatment changes in cumulative puff duration predict treatment outcome during nicotine fading. Burling TA, et al. **Addict Behav** 1989;14(1):75–82

Nicotine gum and self–help manuals in smoking cessation: an evaluation in a medical context. Harackiewicz JM, et al. **Addict Behav** 1988;13(4):319–30

Nicotine gum use and outcome in a general practitioner intervention against smoking. Jackson PH, et al. **Addict Behav** 1989;14(3):335–41

Behavioral and biochemical effects of gradual reductions in cigarette yields in pregnant and nonpregnant smokers. Kabela E, et al. **Addict Behav** 1988;13(3):231–43

Effects of behavioral skills training and schedule of nicotine gum administration on smoking cessation. Goldstein MG, et al. **Am J Psychiatry** 1989 Jan;146(1):56–60

Daily use of smokeless tobacco: systemic effects. Benowitz NL, et al. **Ann Intern Med** 1989 Jul 15;111(2):112–6

Reduction of cigarette smoking by use of a nicotine patch [letter] Hartman N, et al. **Arch Gen Psychiatry** 1989 Mar; 46(3):289

The inflight use of three pharmacological preparations: Humibid, Nicorette, and Seldane [letter] Morey WA, et al. **Aviat Space Environ Med** 1989 Aug;60(8):822

Preference for 2 mg versus 4 mg nicotine chewing gum. Hajek P, et al. **Br J Addict** 1988 Sep;83(9):1089–93

Perinatal administration of nicotine alters subsequent sexual behavior and testosterone levels of male rats. Segarra AC, et al. **Brain Res** 1989 Feb 20;480(1–2):151–9

Nicotine replacement: effects of postcessation weight gain. Gross J, et al. **J Consult Clin Psychol** 1989 Feb;57(1):87–92

Chain–chewin' [letter] Bransfield DD. **JAMA** 1989 Jan 6; 261(1):45

Quitting smoking: nicotine vs placebo gum [letter] Jacobson TA. **JAMA** 1989 Aug 11;262(6):773–4

Smokeless cigarette' draws plenty of heat [news] Marwick C, et al. **JAMA** 1989 Jan 6;261(1):13–4

Interaction of nicotine with anticancer treatment. Berger MR, et al. **Klin Wochenschr** 1988;66 Suppl 11:127–33

Cardiovascular, electrocortical, and behavioral effects of nicotine chewing gum. Michel C, et al. **Klin Wochenschr** 1988;66 Suppl 11:72–9

Controlled trial of transdermal nicotine patch in tobacco withdrawal [see comments] Abelin T, et al. **Lancet** 1989 Jan 7;1(8628):7–10. **Comment in:** Lancet 1989 Feb 11;1(8633):334

Transdermal nicotine and placebo [letter; comment] Sudan BJ. **Lancet** 1989 Feb 11;1(8633):334. **Comment on:** Lancet 1989 Jan 7;1(8628):7–10

Generation of a submicrometre nicotine aerosol for inhalation. Lux JE, et al. **Med Biol Eng Comput** 1988 Mar; 26(2):232–4

Effects of subchronic nicotine administration on central dopaminergic mechanisms in the rat. Carr LA, et al. **Neurochem Res** 1989 Jun;14(6):511–5

Effects of nicotine gum and tobacco smoking on human avoidance responding. Cherek DR, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):677–81

Sustained nicotine release comparisons in six inbred rat strains. Erickson CK, et al. **Pharmacol Biochem Behav** 1989 May;33(1):63–7

A device for the sustained release of nicotine in the mouse. Erickson CK, et al. **Pharmacol Biochem Behav** 1988 Nov; 31(3):713–5

A system for administering quantified doses of tobacco smoke to human subjects: plasma nicotine and filter pad validation. Gilbert DG, et al. **Pharmacol Biochem Behav** 1988 Dec; 31(4):905–8

Evaluation of a low to middle tar/medium nicotine cigarette designed to maintain nicotine delivery to the smoker. Armitage AK, et al. **Psychopharmacology (Berlin)** 1988; 96(4):447–53

Time course of cigarette withdrawal symptoms while using nicotine gum. West R, et al. **Psychopharmacology (Berlin)** 1989;99(1):143–5

Effects of smoking/nicotine on anxiety, heart rate, and lateralization of EEG during a stressful movie. Gilbert DG, et al. **Psychophysiology** 1989 May;26(3):311–20

[Long–term effects of a combination of transdermal nicotine administration with behavior therapy for smoking cessation] Buchkremer G, et al. **Nervenarzt** 1988 Aug; 59(8):488–90 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Effects of deprivation on smokers' mood during the operation of a complex computer simulation. Cutler GH, et al. **Addict Behav** 1988;13(4):379–82

Augmentation of elastase–induced emphysema by cigarette smoke. Effects of reduced nicotine content. Diamond L, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1201–6

Dependence potential and abuse liability of nicotine replacement therapies. Hughes JR. **Biomed Pharmacother** 1989;43(1):11–7 (27 ref.)

Withdrawal–oriented therapy for smokers. Hajek P. **Br J Addict** 1989 Jun;84(6):591–8

Reasons for smoking and severity of residual nicotine withdrawal symptoms when using nicotine chewing gum. Niaura R, et al. **Br J Addict** 1989 Jun;84(6):681–7

Nicotine induced haemodynamic changes during cigarette smoking and nicotine gum chewing: a placebo controlled study in young healthy volunteers. Bounameaux H, et al. **Cardiovasc Res** 1988 Feb;22(2):154–8

Clonidine in nicotine withdrawal. McGee KH, et al. **DICP** 1989 Jun;23(6):473–4

The tobacco withdrawal syndrome: performance decrements assessed on a computerized test battery. Snyder FR, et al. **Drug Alcohol Depend** 1989 Jun;23(3):259–66

Effects of nicotine on platelet function. Pfueller SL, et al. **Haemostasis** 1988;18(3):163–9

Stop–smoking program using nicotine reduction therapy and behavior modification for heavy smokers [published erratum appears in J Am Dent Assoc 1989 Mar;118(3):274] Cooper TM, et al. **J Am Dent Assoc** 1989 Jan;118(1):47–51

Measuring nicotine dependence: a review of the Fagerstrom Tolerance Questionnaire. Fagerstrom KO, et al. **J Behav Med** 1989 Apr;12(2):159–82 (65 ref.)

Use of clonidine in nicotine withdrawal. Sees KL, et al. **J Psychoactive Drugs** 1988 Jul–Sep;20(3):263–8 (37 ref.)

Contact allergies induced by TTS–treatment. Eichelberg D, et al. **Methods Find Exp Clin Pharmacol** 1989 Mar; 11(3):223–5

ANALOGS & DERIVATIVES

Controlled trial of nicotine polacrilex gum with supportive measures. Blöndal T. **Arch Intern Med** 1989 Aug; 149(8):1818–21

Non–metabolic covalent binding of nicotine–delta 1'(5')–iminium ion to liver microsomes and sulfhydryl–containing polyamino acids. Obach RS, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4601–4

Physiologic effects of nicotine polacrilex. Nemeth–Coslett R. **Biomed Pharmacother** 1989;43(1):5–10 (28 ref.)

Stop–smoking program using nicotine reduction therapy and behavior modification for heavy smokers [published erratum appears in J Am Dent Assoc 1989 Mar;118(3):274] Cooper TM, et al. **J Am Dent Assoc** 1989 Jan;118(1):47–51

Tobacco use and oral health [letter] Herod EL. **J Am Dent Assoc** 1989 Mar;118(3):274

Gingival response to nicotine polacrilex. Silver KJ, et al. **J Am Dent Assoc** 1989 Jan;118(1):53–6

Nicotine gum use with nicotine addiction [letter] Resnick MP, et al. **J Clin Psychiatry** 1989 Aug;50(8):310

Biotransformation of primary nicotine metabolites: metabolism of R-(+)-[3H-N'-CH3; 14C-N-CH3] N-methylnicotinium acetate--the use of double isotope studies to determine the in-vivo stability of the N-methyl groups of N-methylnicotinium ion. Pool WF, et al. **J Pharm Pharmacol** 1988 Nov;40(11):758-62

Effects of the stereoisomers of nicotine and nornicotine on schedule-controlled responding and physiological parameters of dogs. Risner ME, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):807-13

Nicotine polacrilex: clinic-based strategies with chronically ill smokers. Carmody TP, et al. **J Psychoactive Drugs** 1988 Jul-Sep;20(3):269-74

[How to improve the efficacy of nicotine chewing gum (letter)] Becoña Iglesias E, et al. **Med Clin (Barc)** 1988 Sep 10;91(7):277-8 **(Spa)**

ANALYSIS

Proposed definition of a smokeless tobacco user based on "potential" nicotine consumption. Schroeder KL, et al. **Addict Behav** 1988;13(4):395-400

Home air nicotine levels and urinary cotinine excretion in preschool children. Henderson FW, et al. **Am Rev Respir Dis** 1989 Jul;140(1):197-201

Enantiomeric resolution and chiral recognition of racemic nicotine and nicotine analogues by beta-cyclodextrin complexation. Structure-enantiomeric resolution relationships in host-guest interactions. Seeman JI, et al. **Anal Chem** 1988 Oct 1;60(19):2120-7

Skin surface sampling for nicotine: a rapid, noninvasive method for identifying smokers. Nanji AA, et al. **Int J Addict** 1988 Nov;23(11):1207-10

Nicotine analysis of commercial tobacco products. Gottscho AM, et al. **J Assoc Off Anal Chem** 1988 Nov-Dec; 71(6):1110-5

Half lives of nicotine in milk of smoking mothers: implications for nursing [letter] Steldinger R, et al. **J Perinat Med** 1988; 16(3):261-2

Monitoring of harmful constituents of cigarettes and tobacco in Pakistan. Asghar M, et al. **JPMA** 1989 Mar;39(3):66-8

High performance liquid chromatographic determination of nicotine and cotinine in plasma and nicotine and cotinine, simultaneously, in urine. Sioufi A, et al. **Methods Find Exp Clin Pharmacol** 1989 Mar;11(3):179-85

Simultaneous estimation of nicotine and cotinine levels in biological fluids using high-resolution capillary-column gas chromatography combined with solid phase extraction work-up. Teeuwen HW, et al. **Mol Biol Rep** 1988-89; 13(3):165-75

Application of biochemical intake markers to passive smoking measurement and risk estimation. Jarvis MJ. **Mutat Res** 1989 Feb;222(2):101-10 (32 ref.)

Health and public policy implications of the "low yield" cigarette [editorial] Benowitz NL. **N Engl J Med** 1989 Jun 15;320(24):1619-21

"Low yield" cigarettes and the risk of nonfatal myocardial infarction in women. Palmer JR, et al. **N Engl J Med** 1989 Jun 15;320(24):1569-73

Long-term effects of switching to cigarettes with lower tar and nicotine yields. Guyatt AR, et al. **Psychopharmacology (Berlin)** 1989;99(1):80-6

ANTAGONISTS & INHIBITORS

Nicotine antagonists: phosphoinositide turnover and receptor binding to determine muscarinic properties. Benerjee S, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2933-5

Serotonergic/cholinergic muscle receptor cells in the crab stomatogastric nervous system. II. Rapid nicotinic and prolonged modulatory effects on neurons in the stomatogastric ganglion. Katz PS, et al. **J Neurophysiol** 1989 Aug;62(2):571-81

Antagonism of the nicotine-induced changes of the striatal dopamine metabolism in mice by mecamylamine and pempidine. Haikala H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Aug; 338(2):169-73

Structure-activity studies of carbamate and other esters: agonists and antagonists to nicotine. Abood LG, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):403-8

Mecamylamine reduces some EEG effects of nicotine chewing gum in humans. Pickworth WB, et al. **Pharmacol Biochem Behav** 1988 May;30(1):149-53

5HT3 receptor antagonists block morphine- and nicotine-but not amphetamine-induced reward. Carboni E, et al. **Psychopharmacology (Berlin)** 1989;97(2):175-8

BLOOD

Plasma concentrations of nicotine in rats during tolerance and chronic exposure studies. Thomas BF, et al. **Eur J Drug Metab Pharmacokinet** 1988 Oct-Dec; 13(4):247-52

Absorption of nicotine from a cigarette that does not burn tobacco. deBethizy JD, et al. **Pharmacology** 1988; 37(5):328-32

CEREBROSPINAL FLUID

Effect of alteration of cerebrospinal fluid bulk flow on nicotine cerebrospinal fluid exit transfer kinetics. Karol MD, et al. **J Pharm Sci** 1988 Jul;77(7):571-8

DIAGNOSTIC USE

Effect of acute electrode placement on regional CBF in the gerbil: a comparison of blood flow measured by hydrogen clearance, [3H]nicotine, and [14C]iodoantipyrine techniques. Tomida S, et al. **J Cereb Blood Flow Metab** 1989 Feb;9(1):79-86

METABOLISM

Reduction of [3H]nicotine binding in hypothalamic and cortical membranes by dopamine D1 receptors. Fuxe K, et al. **Acta Physiol Scand** 1989 Jun;136(2):295-6

Nicotine intake in young smokers: longitudinal study of saliva cotinine concentrations. McNeill AD, et al. **Am J Public Health** 1989 Feb;79(2):172-5

Cotinine determination by immunoassays may be influenced by other nicotine metabolites. Schepers G, et al. **Arch Toxicol** 1988;62(5):395-7

Microsomal nicotine metabolism: a comparison of relative activities of six purified rabbit cytochrome P-450 isozymes. McCoy GD, et al. **Biochem Pharmacol** 1989 Apr 1; 38(7):1185-8

Hypothesis: a nicotine-dopamine interaction linking smoking with Parkinson's disease and tardive dyskinesia. Kirch DG, et al. **Cell Mol Neurobiol** 1988 Sep;8(3):285-91 (32 ref.)

Sexual dimorphism of nicotine metabolism and distribution in the rat. Studies in vivo and in vitro. Kyerematen GA, et al. **Drug Metab Dispos** 1988 Nov-Dec;16(6):823-8

Nicotine metabolism in mammals. Nakayama H. **Drug Metabol Drug Interact** 1988;6(2):95-122 (108 ref.)

Intracerebroventricular injection of neosurugatoxin induces a prolonged blockade of brain nicotinic acetylcholine receptors. Yamada S, et al. **Eur J Pharmacol** 1988 Nov 1;156(2):279-82

Evidence for a nicotinic component to the actions of acetylcholine in cat visual cortex. Parkinson D, et al. **Exp Brain Res** 1988;73(3):553-68

Enantioselective metabolism during continuous administration of S-(-)- and R-(+)-nicotine isomers to guinea-pigs. Nwosu CG, et al. **J Pharm Pharmacol** 1988 Dec;40(12):862-9

Biotransformation of primary nicotine metabolites: metabolism of R-(+)-[3H-N'-CH3; 14C-N-CH3] N-methylnicotinium acetate--the use of double isotope studies to determine the in-vivo stability of the N-methyl groups of N-methylnicotinium ion. Pool WF, et al. **J Pharm Pharmacol** 1988 Nov;40(11):758-62

The effect of acute dyflos (DFP) treatment on [3H]nicotine binding to mouse brain homogenate. Scimeca JA, et al. **J Pharm Pharmacol** 1988 Nov;40(11):793-7

In vivo specific binding of [3H]1-nicotine in the mouse brain. Broussolle EP, et al. **Life Sci** 1989;44(16):1123-32

Quantitative autoradiography of nicotinic receptors in large cryosections of human brain hemispheres. Adem A, et al. **Neurosci Lett** 1989 Jul 3;101(3):247-52

Recent studies of nicotine metabolism in humans. Jacob P 3d, et al. **Pharmacol Biochem Behav** 1988 May;30(1):249-53

Species variation and stereoselectivity in the metabolism of nicotine enantiomers. Nwosu CG, et al. **Xenobiotica** 1988 Dec;18(12):1361-72

[Nicotine chewing gums and lactation (letter)] Matheson I. **Tidsskr Nor Laegeforen** 1989 Feb 10;109(4):485 **(Nor)**

PHARMACOKINETICS

Uptake and regional distribution of (+)-(R)- and (-)-(S)-N-[methyl-11C]-nicotine in the brains of rhesus monkey. An attempt to study nicotinic receptors in vivo. Nordberg A, et al. **J Neural Transm Park Dis Dement Sect** 1989;1(3):195-205

Pharmacokinetics of nicotine, cotinine, and 3'-hydroxycotinine in cigarette smokers. Scherer G, et al. **Klin Wochenschr** 1988;66 Suppl 11:5-11

Pharmacokinetics and bioavailability of nicotine in healthy volunteers following single and repeated administration of different doses of transdermal nicotine systems. Dubois JP, et al. **Methods Find Exp Clin Pharmacol** 1989 Mar; 11(3):187-95

Human pharmacological investigations of a transdermal nicotine system. Müller P, et al. **Methods Find Exp Clin Pharmacol** 1989 Mar;11(3):197-204

Embryo-maternal distribution of basic compounds in the CD-1 mouse: doxylamine and nicotine. Roberts LG, et al. **Toxicol Appl Pharmacol** 1989 Jan;97(1):134-40

PHARMACOLOGY

Differential release of calcitonin gene-related peptide and neuropeptide Y from the isolated heart by capsaicin, ischaemia, nicotine, bradykinin and ouabain. Franco-Cereceda A, et al. **Acta Physiol Scand** 1989 Feb; 135(2):173-87

Selective stimulation of limbic dopamine activity by nicotine. Grenhoff J, et al. **Acta Physiol Scand** 1988 Aug; 133(4):595-6

Prenatal cholinergic stimulation of pulmonary neuroendocrine cells by nicotine. Nylén ES, et al. **Acta Physiol Scand** 1988 Jan;132(1):117-8

Behavioral desensitization to nicotine is enhanced differentially by ethanol in long-sleep and short-sleep mice. de Fiebre CM, et al. **Alcohol** 1989 Jan-Feb;6(1):45-51

Effects of nicotine and nicotine/ethanol on human placental amino acids transfer. Schenker S, et al. **Alcohol** 1989 Jul-Aug;6(4):289-96

Differential effect of nicotine on plasma norepinephrine levels in normal humans and in patients with congestive heart failure. Goldsmith SR, et al. **Am J Cardiol** 1989 Jan 1; 63(1):122-3

Acute effects of nicotine on resting metabolic rate in cigarette smokers. Perkins KA, et al. **Am J Clin Nutr** 1989 Sep; 50(3):545-50

Patterns of fast synaptic cholinergic activation of neurons in the celiac ganglia of cats. Niel JP, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G759-66

Influence of nicotine and caffeine on skeletal development in the rat. Nash JE, et al. **Anat Anz** 1989;168(2):109-26

Effects of cigarette smoke, carbon monoxide and nicotine on the uptake of fibrinogen by the canine arterial wall. Allen DR, et al. **Atherosclerosis** 1989 May;77(1):83-8

Chronic voluntary nicotine drinking enhances nicotine palatability in rats. Flynn FW, et al. **Behav Neurosci** 1989 Apr;103(2):356-64

Chronic nicotine use blocks haloperidol-induced increase in striatal D2-dopamine receptor density. Prasad C, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):48-52

Effect of secretagogues on chromogranin A synthesis in bovine cultured chromaffin cells. Possible regulation by protein kinase C. Simon JP, et al. **Biochem J** 1989 Jun 15; 260(3):915-22

Chronic treatment with lithium produces supersensitivity to nicotine. Dilsaver SC, et al. **Biol Psychiatry** 1989 Mar 15; 25(6):795-9

Nicotine gum and theophylline metabolism. Benowitz NL, et al. **Biomed Pharmacother** 1989;43(1):1-3

Nicotine potentiates the effects of haloperidol in animals and in patients with Tourette syndrome. Sanberg PR, et al. **Biomed Pharmacother** 1989;43(1):19-23

Pharmacology of nicotine. Grenhoff J, et al. **Br J Addict** 1989 May;84(5):477-92 (150 ref.)

Mechanism of action of nicotine in isolated iris sphincter preparations of rabbit. Hisayama T, et al. **Br J Pharmacol** 1988 Oct;95(2):459-64

Mechanism of action of nicotine in isolated urinary bladder of guinea-pig. Hisayama T, et al. **Br J Pharmacol** 1988 Oct;95(2):465-72

Capsaicin and nicotine-sensitive afferent neurones and nasal secretion in healthy human volunteers and in patients with vasomotor rhinitis. Stjärne P, et al. **Br J Pharmacol** 1989 Mar;96(3):693-701

Bicuculline blocks the response to acetylcholine and nicotine but not to muscarine or GABA in isolated insect neuronal somata. Benson JA. **Brain Res** 1988 Aug 16;458(1):65-71

Cingulate cell discharge patterns related to hippocampal EEG and their modulation by muscarinic and nicotinic agents. Colom LV, et al. **Brain Res** 1988 Sep 20; 460(2):329-38

Local cerebral glucose utilization of the awake rat during chronic administration of nicotine. Grünwald F, et al. **Brain Res** 1988 Jul 26;456(2):350-6

Tonic and baroreflex effects on arterial pressure and ventilation of pentobarbital and nicotine on the rat ventral medullary surface. Jung R, et al. **Brain Res** 1989 Apr 24; 485(2):399-402

Effect of substance P on nicotine-induced desensitization of cultured bovine adrenal chromaffin cells: possible receptor subtypes. Khalil Z, et al. **Brain Res** 1988 Sep 6;459(2):282-8

Mammalian tachykinins modulate the nicotinic secretory response of cultured bovine adrenal chromaffin cells. Khalil Z, et al. **Brain Res** 1988 Sep 6;459(2):289-97

Nicotine infused into the nucleus accumbens increases synaptic dopamine as measured by in vivo microdialysis. Mifsud JC, et al. **Brain Res** 1989 Jan 30;478(2):365-7

Effect of nicotine gum on gastric emptying [letter] Chaudhuri TK, et al. **Chest** 1988 Nov;94(5):1122

Endogenous opioids inhibit oxytocin release during nicotine-stimulated secretion of vasopressin in man. Seckl JR, et al. **Clin Endocrinol (Oxf)** 1988 May;28(5):509-14

Effect of chronic nicotine administration on monoamine and monoamine metabolite concentrations in rat brain. Kirch DG, et al. **Clin Neuropharmacol** 1987 Aug;10(4):376-83

Response of plasma arginine vasopressin to nicotine in normal man. Goldsmith SR, et al. **Clin Pharmacol Ther** 1988 Oct; 44(4):478-81

Nicotine enhances the circulatory effects of adenosine in human beings. Smits P, et al. **Clin Pharmacol Ther** 1989 Sep;46(3):272-8

Nicotine mydriasis. Rosenzweig M, et al. **Drug Alcohol Depend** 1989 Apr;23(2):133-6

Receptor mechanisms of nicotine-induced locomotor hyperactivity in chronic nicotine-treated rats. Fung YK, et al. **Eur J Pharmacol** 1988 Aug 2;152(3):263-71

Action of nicotine on accumbens dopamine and attenuation with repeated administration. Lapin EP, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):53-9

Dual effect of nicotine injected in the cerebral ventricles on rat gastric motility. Nagata M, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):85-90

A pharmacological distinction between the long and short latency pathways of the human blink reflex revealed with tobacco. Evinger C, et al. **Exp Brain Res** 1988;73(3):477-80

Effect of nicotine on in vitro human sperm penetrability through cervical mucus and motility parameters. Crandall LA, et al. **Fertil Steril** 1989 Apr;51(4):722-4

The relaxing response of the isolated rat duodenum to nicotine. Guimaraes CR, et al. **Gen Pharmacol** 1988;

19(5):655–9
Maturational changes in neonatal rat motor system with early postnatal administration of nicotine. Frischer RE, et al. **Int J Dev Neurosci** 1988;6(2):149–54
Response of the arteriolar network in rat cremaster muscle to intraarterial infusion of nicotine. Fleming BP, et al. **Int J Microcirc Clin Exp** 1989 Jul;8(3):275–92
Dominant role of circulating catecholamines in the myocardial contractile response to intravenous nicotine. Downey HF, et al. **J Cardiovasc Pharmacol** 1988 Jul; 12(1):58–64
Inhibition of platelet aggregation following chronic in vivo treatment of rats with nicotine: prevention by simultaneous application of propranolol. Terres W, et al. **J Cardiovasc Pharmacol** 1989 Feb;13(2):233–7
Effect of chronic nicotine treatment on nicotinic autoreceptor function and N-[3H]methylcarbamylcholine binding sites in the rat brain. Lapchak PA, et al. **J Neurochem** 1989 Feb;52(2):483–91
Effects of nicotine on local cerebral glucose utilization in the rat. London ED, et al. **J Neurosci** 1988 Oct; 8(10):3920–8
Effects of chronic nicotine pretreatment on (+)-amphetamine and nicotine-induced synthesis and release of [3H]dopamine from [3H]tyrosine in rat nucleus accumbens. Fung YK. **J Pharm Pharmacol** 1989 Jan; 41(1):66–8
Inhibition of histamine N-methyltransferase activity in guinea-pig pulmonary alveolar macrophages by nicotine. Gairola C, et al. **J Pharm Pharmacol** 1988 Oct;40(10):724–6
Effects of acute nicotine on catecholamine turnover in various rat brain regions. Amano H, et al. **J Pharmacobiodyn** 1989 Jan;12(1):18–23
Nicotine-induced regional changes in brain noradrenaline and dopamine turnover in rats. Kubo T, et al. **J Pharmacobiodyn** 1989 Feb;12(2):107–12
Characterization of the effect of nicotine on vasopressin and atrial natriuretic factor in the rabbit. Larose P, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):1093–7
Effects of acute and chronic prenatal nicotine treatment on central catecholamine systems of male and female rat fetuses and offspring. Ribary U, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):786–92
Effects of the stereoisomers of nicotine and nornicotine on schedule-controlled responding and physiological parameters of dogs. Risner ME, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):807–13
Sympathoadrenal activity and sympathoinhibitory hormones during acute and chronic nicotine application in dogs. Bassenge E, et al. **Klin Wochenschr** 1988;66 Suppl 11:12–20
Blood platelet function after chronic treatment of rats and guinea pigs with nicotine. Becker BF, et al. **Klin Wochenschr** 1988;66 Suppl 11:28–36
Inhibitory effect of nicotine on benzo(a)pyrene elimination and marked pulmonary metabolism of nicotine in isolated perfused rat lung. Foth H, et al. **Klin Wochenschr** 1988;66 Suppl 11:98–104
The effect of an acute nicotine infusion on the local cerebral glucose utilization of the awake rat. Grünwald F, et al. **Klin Wochenschr** 1988;66 Suppl 11:37–41
Stimulation of submucosal glands by nicotine applied locally to the airway mucosa. Hümmer B, et al. **Klin Wochenschr** 1988;66 Suppl 11:161–9
Effect of systemic nicotine on mucus secretion from tracheal submucosal glands and on cardiovascular, pulmonary, and hematologic variables. Lang M, et al. **Klin Wochenschr** 1988;66 Suppl 11:170–9
Nicotine-induced release of noradrenaline and neuropeptide Y in guinea pig heart. Richardt G, et al. **Klin Wochenschr** 1988;66 Suppl 11:21–7
Metabolism of benz(a)anthracene catalyzed by liver microsomes of untreated and nicotine-pretreated rats. Schmoldt A, et al. **Klin Wochenschr** 1988;66 Suppl 11:108–13
Influence of nicotine on monocyte phenotype and function. Ziegler-Heitbrock HW, et al. **Klin Wochenschr** 1988;66 Suppl 11:114–6
Nicotine induced excitation of locus coeruleus neurons is mediated via release of excitatory amino acids. Engberg G. **Life Sci** 1989;44(21):1535–40
Nicotine and cotinine effects on 3 alpha hydroxysteroid dehydrogenase in canine prostate. Meikle AW, et al. **Life Sci** 1988;43(23):1845–50
Negative correlation of cigarette smoking and dysmenorrhea: reduced prostaglandin synthesis due to beta-endorphin, nicotine, or acrolein antagonism. Backon J. **Med Hypotheses** 1989 Mar;28(3):213–4
The effect of nicotine on energy expenditure during light physical activity. Perkins KA, et al. **N Engl J Med** 1989 Apr 6;320(14):898–903
Nicotine antagonizes the effects of reserpine on the striatal metabolism of dopamine, 5-hydroxytryptamine and noradrenaline in hypothermic but not in normothermic mice. Haikala H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):546–50
Reflex epicardial coronary vasoconstriction elicited by nicotine in anaesthetized dogs. Sobey CG, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Apr; 339(4):464–8
Conditioning of nicotine effects on motility and behaviour in rats. Walter S, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan–Feb; 339(1–2):208–13
Involvement of D1 dopamine receptors in the nicotine-induced neuro-endocrine effects and depletion of diencephalic catecholamine stores in the male rat. Andersson K, et al. **Neuroendocrinology** 1988 Aug; 48(2):188–200
Further studies on the stimulatory action of nicotine on adrenocortical function in the rat. Weidenfeld J, et al. **Neuroendocrinology** 1989 Aug;50(2):132–8
Neuropeptides and other secretagogues in bovine chromaffin cells: their effect on opioid peptide metabolism. Bommer M, et al. **Neuropeptides** 1989 May–Jun;13(4):243–51
Nicotine-induced inhibition of cerebellar Purkinje neurons: specific actions of nicotine and selective blockade by mecamylamine. de la Garza R, et al. **Neuropharmacology** 1989 May;28(5):495–501
Dopamine D1 receptor and dopamine D2 receptor binding activity changes during chronic administration of nicotine in 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-treated mice. Wiener HL, et al. **Neuropharmacology** 1989 May; 28(5):535–7
Sodium-dependent and sodium-independent nicotine-evoked catecholamine release from cat adrenals. Abajo FJ, et al. **Neurosci Lett** 1989 Jun 5;101(1):101–6
The rat nucleus paragigantocellularis as a relay station to mediate peripherally induced central effects of nicotine. Chen Z, et al. **Neurosci Lett** 1989 Jun 5;101(1):67–71
Kappa-bungarotoxin blockade of nicotine electrophysiological actions in cerebellar Purkinje neurons. de la Garza R, et al. **Neurosci Lett** 1989 Apr 24; 99(1–2):95–100
Action of acetylcholine, muscarine, nicotine and antagonists on the membrane potential of astrocytes in cultured rat brainstem and spinal cord. Hösli L, et al. **Neurosci Lett** 1988 Oct 5;92(2):165–70
Effect of chronic oral nicotine on dopaminergic function in the MPTP-treated mouse. Sershen H, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):270–4
Effect of ingestion of smokeless tobacco on motor distal latency of the median nerve. Lester MJ, et al. **Percept Mot Skills** 1988 Aug;67(1):283–90
Progress in understanding the relationship between the pharmacological effects of nicotine and human tobacco dependence. Proceedings of a symposium. Baltimore, MD, August 17–21, 1986. **Pharmacol Biochem Behav** 1988 May; 30(1):215–94
Genetic influences on acute responses to nicotine and nicotine tolerance in the mouse. Collins AC, et al. **Pharmacol Biochem Behav** 1988 May;30(1):269–78
The actions of nicotine and cocaine in a mouse model of anxiety. Costall B, et al. **Pharmacol Biochem Behav** 1989 May;33(1):197–203
Genetic differences in plasma corticosterone levels in response to nicotine injection. Freund RK, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):1059–64
Effect of nicotine pretreatment on striatal dopaminergic system in rats. Fung YK, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):221–6
Reinforcing effects of nicotine in humans and experimental animals responding under intermittent schedules of i.v. drug injection. Goldberg SR, et al. **Pharmacol Biochem Behav** 1988 May;30(1):227–34 (28 ref.)
Progress in understanding the relationship between the pharmacological effects of nicotine and human tobacco dependence. Henningfield JE, et al. **Pharmacol Biochem Behav** 1988 May;30(1):217–20
Pharmacologic determinants of tobacco self-administration by humans. Henningfield JE, et al. **Pharmacol Biochem Behav** 1988 May;30(1):221–6 (66 ref.)
Nicotine interactions with ethanol tolerance. Hjeresen DL. **Pharmacol Biochem Behav** 1988 Nov;31(3):617–22
Influence of genotype on nicotine-induced increases of plasma corticosterone in mice as a result of acute nicotine pretreatment. Martin BJ, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):1065–70
Tolerance to tobacco smoke- and nicotine-induced analgesia in rats. Mousa SA, et al. **Pharmacol Biochem Behav** 1988 Oct;31(2):265–8
Nicotine impairs acquisition of radial maze performance in rats. Mundy WR, et al. **Pharmacol Biochem Behav** 1988 May;30(1):119–22
Characterization of central nicotinic receptors by studies on the nicotine cue and conditioned taste aversion in rats. Stolerman IP. **Pharmacol Biochem Behav** 1988 May; 30(1):235–42
Discriminative stimulus effects of intravenous nicotine in squirrel monkeys. Takada K, et al. **Pharmacol Biochem Behav** 1988 May;30(1):243–7
Behavioral interactions between nicotine and diazepam. White JM. **Pharmacol Biochem Behav** 1989 Feb; 32(2):479–82
5-HT3 receptors antagonists block morphine- and nicotine- but not amphetamine-induced place-preference conditioning. Acquas E, et al. **Pharmacol Res Commun** 1988 Dec;20(12):1113–4
Dual effects of nicotine on neuroleptic-induced changes of striatal dopamine metabolism in mice. Haikala H. **Pharmacol Toxicol** 1989 Apr;64(4):334–9
Adrenocortical hormone regulation of nicotine sensitivity in mice. Pauly JR, et al. **Physiol Behav** 1988;44(1):109–16
Regional hemodynamic responses to nicotine in conscious and anesthetized dogs: comparative effects of pentobarbital and chloralose. Crystal GJ, et al. **Proc Soc Exp Biol Med** 1989 Sep;191(4):396–402
Neuroendocrine actions of nicotine and of exposure to cigarette smoke: medical implications. Fuxe K, et al. **Psychoneuroendocrinology** 1989;14(1–2):19–41 (150 ref.)
Chronic ethanol or nicotine treatment results in partial cross-tolerance between these agents. Burch JB, et al. **Psychopharmacology (Berlin)** 1988;95(4):452–8
Nicotine tolerance: an analysis of the time course of its development and loss in the rat. Collins AC, et al. **Psychopharmacology (Berlin)** 1988;96(1):7–14
Evidence for opioid mechanisms in the behavioral effects of nicotine. Corrigall WA, et al. **Psychopharmacology (Berlin)** 1988;96(1):29–35
Cue properties of oral and transdermal nicotine in the rat. Craft RM, et al. **Psychopharmacology (Berlin)** 1988; 96(3):281–4
Environment-specific tolerance to nicotine. Epstein LH, et al. **Psychopharmacology (Berlin)** 1989;97(2):235–7
Nicotine and some related compounds: effects on schedule-controlled behaviour and discriminative properties in rats. Goldberg SR, et al. **Psychopharmacology (Berlin)** 1989;97(3):295–302
Neuroendocrine responses to nicotine and stress: enhancement of peripheral stress responses by the administration of nicotine. Morse DE. **Psychopharmacology (Berlin)** 1989;98(4):539–43
Nicotine chewing gum (2 mg, 4 mg) and cigarette smoking: comparative effects upon vigilance and heart rate. Parrott AC, et al. **Psychopharmacology (Berlin)** 1989;97(2):257–61
Chronic and acute tolerance to the heart rate effects of nicotine. Perkins KA, et al. **Psychopharmacology (Berlin)** 1989;97(4):529–34
Effects of nicotine administration following 12 h of tobacco deprivation: assessment on computerized performance tasks. Snyder FR, et al. **Psychopharmacology (Berlin)** 1989; 97(1):17–22
Discriminative stimulus effects of nicotine in rats trained under different schedules of reinforcement. Stolerman IP. **Psychopharmacology (Berlin)** 1989;97(1):131–8
The effects of long-term nicotine treatment on locomotion, exploration and memory in young and old rats. Welzl H, et al. **Psychopharmacology (Berlin)** 1988;96(3):317–23
The stimulatory effect of nicotine on vagal pulmonary C-fibers in dogs. Kou YR, et al. **Respir Physiol** 1989 Jun; 76(3):347–56
Influence of nicotine and cotinine on the expression of plasminogen activator activity in bovine aortic endothelial cells. Kuo BS, et al. **Thromb Haemost** 1989 Feb 28; 61(1):70–6
Altered exocrine pancreatic function in rats treated with nicotine. Dubick MA, et al. **Toxicol Appl Pharmacol** 1988 Oct;96(1):132–9
Alterations of guinea pig alveolar macrophage oxidative metabolism by nicotine. Ogunbiyi PO, et al. **Toxicol Appl Pharmacol** 1989 Mar 15;98(1):25–30
Effect of continuous administration of nicotine on urinary histamine and N tau-methylhistamine levels in the guinea pig. Houdi AA, et al. **Toxicol Lett** 1988 Nov;44(1–2):161–6
[Hemodynamic effects of the Bezold-Jarisch reflex in rabbit] Sun SY, et al. **Sheng Li Hsueh Pao** 1989 Feb;41(1):1–9 (Eng. Abstr.) **(Chi)**
[Oral administration of nicotine and plasma levels of ACTH and cortisol in smokers and non-smokers] Sellini M, et al. **Boll Soc Ital Biol Sper** 1989 Apr;65(4):371–5 (Eng. Abstr.) **(Ita)**
[The effects of nicotine on the synthesis and secretion of surfactant in the rabbit fetal lung] Nakamura K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Nov; 40(11):1679–84 (Eng. Abstr.) **(Jpn)**
[Effect of nicotine on mesenteric circulation and tissue oxygen uptake] Pawlik WW, et al. **Folia Med Cracov** 1988; 29(1–2):73–85 (Eng. Abstr.) **(Pol)**
[Ionic mechanisms evoked by acetylcholine-, nicotine-, and muscarine-induced depolarization of Helix lucorum RPa4 neurons] Pivovarov AS, et al. **Neirofiziologiia** 1989; 21(3):305–14 (Eng. Abstr.) **(Rus)**
[Respiratory effects of nicotine and naloxone] Jiménez-Vargas J, et al. **Rev Med Univ Navarra** 1988 Jan–Mar;32(1):51–2 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Nicotinic-type unitary currents in Helix neurons. Green KA, et al. **Comp Biochem Physiol [A]** 1989;93(1):47–51
Kappa-bungarotoxin blocks nicotinic transmission at an identified invertebrate central synapse. Chiappinelli VA, et al. **J Exp Biol** 1989 Jan;141:61–71
Nicotinic and muscarinic agonists stimulate rapid protein kinase C translocation in PC12 cells. Messing RO, et al. **J Neurosci** 1989 Feb;9(2):507–12

POISONING

"Hip-pocket" sign in the diagnosis of nicotine poisoning [letter] Haruda F. **Pediatrics** 1989 Jul;84(1):196

THERAPEUTIC USE

Physicians need better training on prescribing nicotine gum: study [news] **Bol Asoc Med P R** 1988 Nov;80(11):445–6
Nicotine vs placebo gum in general medical practice. Hughes JR, et al. **JAMA** 1989 Mar 3;261(9):1300–5

Nicotine and cannabinoids as adjuncts to neuroleptics in the treatment of Tourette syndrome and other motor disorders. Moss DE, et al. **Life Sci** 1989;44(21):1521–5 (18 ref.)
Effectiveness of a transdermal nicotine system in smoking cessation studies. Abelin T, et al.
Methods Find Exp Clin Pharmacol 1989 Mar;11(3):205–14
Efficiency of multimodal smoking cessation therapy combining transdermal nicotine substitution with behavioral therapy. Buchkremer G, et al.
Methods Find Exp Clin Pharmacol 1989 Mar;11(3):215–8 (10 ref.)
The effect of different dosages of a transdermal nicotine substitution system on the success rate of smoking cessation therapy. Minneker E, et al.
Methods Find Exp Clin Pharmacol 1989 Mar;11(3):219–22
Combined and separate treatment effects of nicotine chewing gum and self-control method. Huber D.
Pharmacopsychiatry 1988 Nov;21(6):461–2
Nicotine replacement: ten-week effects on tobacco withdrawal symptoms. Gross J, et al.
Psychopharmacology (Berlin) 1989;98(3):334–41

TOXICITY

Developmental neurotoxicity of nicotine, carbon monoxide, and other tobacco smoke constituents. Mactutus CF.
Ann N Y Acad Sci 1989;562:105–22 (76 ref.)
Sublethal effects of phenanthrene, nicotine, and pinane on Daphnia pulex. Savino JF, et al.
Bull Environ Contam Toxicol 1989 May;42(5):778–84
Effects of systemic administration of nicotine on capillaries in rat oral mucosa. Johnson GK, et al.
J Oral Pathol Med 1989 Apr;18(4):230–2
Postnatal behavioural effects of maternal nicotine exposure in rats. Fung YK. **J Pharm Pharmacol** 1988 Dec; 40(12):870–2
Prenatal exposure to nicotine via maternal infusions: effects on development of catecholamine systems. Navarro HA, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):940–4
Effects of prenatal nicotine exposure on rat striatal dopaminergic and nicotinic systems. Fung YK, et al.
Pharmacol Biochem Behav 1989 May;33(1):1–6
A new device for monitoring early motor development: prenatal nicotine-induced changes. Schlumpf M, et al.
Pharmacol Biochem Behav 1988 May;30(1):199–203
Behavioral effects of acute hexamethonium in rats chronically intoxicated with nicotine. Levin ED, et al.
Physiol Behav 1988;44(3):355–9
Evaluation of the developmental toxicity of nicotine and cotinine with frog embryo teratogenesis assay: Xenopus. Dawson DA, et al. **Teratogenesis Carcinog Mutagen** 1988; 8(6):329–38

URINE

Exposure to environmental tobacco smoke and urinary excretion of cotinine and nicotine in children. Rylander E, et al. **Acta Paediatr Scand** 1989 May;78(3):449–50
Serum placental-like alkaline phosphatase levels and nicotine intake in smokers. Ellard GA, et al. **Br J Cancer** 1988 Aug; 58(2):219–21
Elimination of caffeine interference in HPLC determination of urinary nicotine and cotinine. Thuan NT, et al.
Clin Chem 1989 Jul;35(7):1456–9
Assessment of exposure to environmental tobacco smoke using a high-performance liquid chromatographic method for the simultaneous determination of nicotine and two of its metabolites in urine. Parviainen MT, et al.
J Chromatogr 1988 Sep 23;431(1):216–21
[A high pressure liquid chromatographic method for determining nicotine and cotinine in urine] Godin J, et al.
J Chromatogr 1989 Mar 24;488(2):487–91 **(Fre)**

NICOTINIC ACID see NIACIN

NICOTINIC ACIDS

Prevention of pressure sores. A comparison of new and old pressure sore treatments. van der Cammen TJ, et al.
Br J Clin Pract 1987 Nov;41(11):1009–11

ADMINISTRATION & DOSAGE

Effect of nicotinic acid administration on serum levels of bilirubin and iron in patients with porphyria cutanea tarda. Gentile S, et al. **Scand J Clin Lab Invest** 1988 Nov; 48(7):641–5

ADVERSE EFFECTS

Cutaneous responses to topical methyl nicotinate in black, oriental, and caucasian subjects. Gean CJ, et al.
Arch Dermatol Res 1989;281(2):95–8
Systemic symptoms associated with a rubefacient. Fergusson DA. **BMJ** 1988 Nov 19;297(6659):1339
Dermatomyositis-like syndrome induced by nonsteroidal anti-inflammatory agents. Grob JJ, et al. **Dermatologica** 1989;178(1):58–9
[Status epilepticus during pipemidic acid treatment (letter)] Devriendt J, et al. **Presse Med** 1989 Feb 25;18(8):433 **(Fre)**
[Rhabdomyolysis and niflumic acid] Desvignes V, et al.
Therapie 1988 Aug-Sep;43(5):429–30 (Eng. Abstr.) **(Fre)**
[2 epidemics of acute kidney failure caused by piromidic acid] Rostin M, et al. **Therapie** 1988 Aug-Sep;43(5):426–7 **(Fre)**

ANALYSIS

Polymorphism of 1,2-dihydro-6-neopentyl-2-oxonicotinic acid: characterization, interconversion, and quantitation. Chao RS, et al. **Pharm Res** 1987 Oct;4(5):429–32
Evaluation of elution parameters in reversed phase HPLC for the determination of niacin vitamers and metabolites. Kollenkirchen U, et al. **Zentralbl Veterinarmed [A]** 1989 Apr;36(4):253–60

BLOOD

Protein binding of quinolonecarboxylic acids. I. Cinoxacin, nalidixic acid and pipemidic acid. Izumi T, et al.
Chem Pharm Bull (Tokyo) 1989 Mar;37(3):742–5
Protein binding of quinolonecarboxylic acids. II. Spectral changes on the interaction of cinoxacin, nalidixic acid and pipemidic acid with human and rat albumins. Izumi T, et al. **Chem Pharm Bull (Tokyo)** 1989 Mar;37(3):746–52

CHEMICAL SYNTHESIS

Synthesis and muscarinic activity of a series of tertiary and quaternary N-substituted guvacine esters structurally related to arecoline and arecaidine propargyl ester. Wolf-Pflugmann M, et al. **Arzneimittelforschung** 1989 May; 39(5):539–44
Synthesis and hypolipidemic activity of some new esters of glycerol and 2-O-methyl-glycerol with nicotinic and 5-fluoro-nicotinic acids. Dall Asta L, et al.
Boll Chim Farm 1989 Mar;128(3):106–10

ISOLATION & PURIFICATION

Purification procedure for the determination of niacin vitamers in gastrointestinal contents and blood. Kollenkirchen U, et al. **Zentralbl Veterinarmed [A]** 1989 Apr;36(4):247–52

METABOLISM

Degradation of 5-chloro-2-hydroxynicotinic acid by Mycobacterium sp. BA. Tibbles PE, et al.
Biol Chem Hoppe Seyler 1989 Jun;370(6):601–6
Identification of cyclic intermediates in Azorhizobium caulinodans nicotinate catabolism. Kitts CL, et al.
J Bacteriol 1989 Jun;171(6):3406–11
Fate of excess nicotinamide and nicotinic acid differs in rats. Shibata K. **J Nutr** 1989 Jun;119(6):892–5

PHARMACOKINETICS

Disposition and excretion of flunixin meglumine in horses. Soma LR, et al. **Am J Vet Res** 1988 Nov;49(11):1894–8
Methodology to measure the transient effect of occlusion on skin penetration and stratum corneum hydration in vivo. Ryatt KS, et al. **Br J Dermatol** 1988 Sep;119(3):307–12
Flunixin pharmacokinetics and serum thromboxane inhibition in the dog. McKellar QA, et al. **Vet Rec** 1989 Jun 24; 124(25):651–4

PHARMACOLOGY

The bactericidal effect on Pseudomonas strains of adriamycin associated with quinolones. Castelli M, et al.
Anticancer Res 1989 May-Jun;9(3):611–4
Differential effect of nicotinic acid derivatives on smooth muscle and endothelial cell proliferation. Wülfroth P, et al. **Basic Res Cardiol** 1989 May-Jun;84(3):291–7
The effects of topically applied hexyl nicotinate lotion on the cutaneous blood flow in patients with Raynaud's phenomenon. Bunker CB, et al. **Br J Dermatol** 1988 Dec; 119(6):771–6
The dihydropyridine derivative 202-791: interpretation of the effects of the racemate considering inverse agonistic enantiomers. Damarowsky M, et al. **Br J Pharmacol** 1988 Dec;95(4):1125–32
Voltage- and use-dependent modulation of cardiac calcium channels by the dihydropyridine (+)-202-791. Kamp TJ, et al. **Circ Res** 1989 Feb;64(2):338–51
Increased beta-cell secretory capacity as mechanism for islet adaptation to nicotinic acid-induced insulin resistance. Kahn SE, et al. **Diabetes** 1989 May;38(5):562–8
GABA uptake inhibitors. Synthesis and effects on audiogenic seizures of ester prodrugs of nipecotic acid, guvacine and cis-4-hydroxynipecotic acid. Falch E, et al.
Drug Des Deliv 1987 Sep;2(1):9–21
Antibacterial activity after a single-dose of norfloxacin, ofloxacin and pipemidic acid detected in urine of volunteers. Cruciani M, et al. **Drugs Exp Clin Res** 1988; 14(8):533–7
Analgesic action of clonixin, nifedipine and morphine using the formalin test. Bustamante D, et al. **Gen Pharmacol** 1989; 20(3):319–22
Effects of clonixin, a non-steroidal analgesic, on the neurotransmission of the vas deferens of the rat. Bustamante D, et al. **Gen Pharmacol** 1988;19(6):755–8
Interaction of quinolones with the theophylline metabolism in man: investigations with lomefloxacin and pipemidic acid. Staib AH, et al.
Int J Clin Pharmacol Ther Toxicol 1989 Jun;27(6):289–3
Modulation of immune responses in mice by oral administration of niflumic acid. Florentin I, et al.
Int J Immunopharmacol 1989;11(2):173–83
Effects of alpha-tocopherol-nicotinate administration on the microdynamics of phospholipids of erythrocyte membranes in human subjects. Koyama T, et al.
J Nutr Sci Vitaminol (Tokyo) 1988 Oct;34(5):449–57
Effect of flunixin meglumine on the breakdown of the blood-aqueous barrier following paracentesis in the canine eye. Regnier A, et al. **J Ocul Pharmacol** 1986 Spring; 2(2):165–70
Picrate and niflumate block anion modulation of radioligand binding to the gamma-aminobutyric acid/benzodiazepine receptor complex. Evoniuk G, et al. **Mol Pharmacol** 1988 Dec;34(6):837–42
Effect of different doses of S-adenosyl-L-methionine (SAMe) on nicotinic acid-induced hyperbilirubinaemia in Gilbert's syndrome. Gentile S, et al.
Scand J Clin Lab Invest 1988 Oct;48(6):525–9
[Effect of niflumic acid on the components of inactivation of the sodium channels of the Ranvier node membrane] Lonskii AV, et al. **Fiziol Zh SSSR** 1989 Mar;75(3):327–33 (Eng. Abstr.) **(Rus)**
[Action mechanism of nicotinic acid on fibrinolysis in vitro and in vivo] Andreenko GV, et al. **Vopr Med Khim** 1971 Jul-Aug;17(4):423–7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

[Importance of essential macronutrients in the human organism: the role of chromium] Mancinella A.
Clin Ter 1988 May 31;125(4):295–301 (36 ref.) (Eng. Abstr.) **(Ita)**

THERAPEUTIC USE

Effects of nicotinic acid on concentrations of serum apolipoproteins B, C-I, C-II, C-III and E in hyperlipidemic patients. Wahlberg G, et al.
Acta Med Scand 1988;224(4):319–27
Phenylbutazone and flunixin meglumine fail to show beneficial effects on bovine subclinical mastitis. Pyörälä S, et al. **Acta Vet Scand** 1988;29(3-4):501–3
Effect of flunixin meglumine on Escherichia coli heat-stable enterotoxin-induced diarrhea in calves. Roussel AJ Jr, et al. **Am J Vet Res** 1988 Aug;49(8):1431–3
Does inositol nicotinate (Hexopal) influence intermittent claudication? A controlled trial. Kiff RS, et al.
Br J Clin Pract 1988 Apr;42(4):141–5
The therapeutic efficacy of inositol nicotinate (Hexopal) in intermittent claudication: a controlled trial. O'Hara J, et al. **Br J Clin Pract** 1988 Sep;42(9):377–83
Experimental uses of flunixin meglumine and phenylbutazone in food-producing animals. Kopcha M, et al.
J Am Vet Med Assoc 1989 Jan 1;194(1):45–9 (36 ref.)
Nicotinic acid in the treatment of lipid disorders [letter] Labreche DG. **Pharmacotherapy** 1989;9(4):270–1
Clinical and laboratory responses to niceritrol in the treatment of hypercholesterolaemia. Curtis LD, et al.
Postgrad Med J 1988 Sep;64(755):672–5
The effect of anti-inflammatory agents on the clinical expression of bovine ephemeral fever. Uren MF, et al.
Vet Microbiol 1989 Feb;19(2):99–111
Flunixin meglumine and flurbiprofen in cows with experimental Escherichia coli mastitis. Lohuis JA, et al.
Vet Rec 1989 Mar 25;124(12):305–8
Anti-inflammatory therapy in acute endotoxin-induced bovine mastitis. Anderson KL, et al. **Vet Res Commun** 1989; 13(1):17–26
[Preventive treatment of recurrent essential cystitis in women. Comparative study of pipemidic acid and placebo in a daily dose of 200 mg. for 6 months]
Ann Urol (Paris) 1989;23(1):53–7 (Eng. Abstr.) **(Fre)**
[Use of pikamilon in the combined treatment of patients with cerebral circulatory disorders] Zinchenko VA, et al.
Vrach Delo 1988 Dec;(12):18–9 (Eng. Abstr.) **(Rus)**

TOXICITY

Clinical and pathological effects of flunixin meglumine administration to neonatal foals. Carrick JB, et al.
Can J Vet Res 1989 Apr;53(2):195–201
Evaluation of the DNA-damaging and mutagenic activity of oxolinic and pipemidic acids by the granuloma pouch assay. Maura A, et al. **Mutagenesis** 1988 Sep;3(5):397–401

URINE

Comparison of excretion of nicotinuric acid after ingestion of two controlled release nicotinic acid preparations in man. Figge HL, et al. **J Clin Pharmacol** 1988 Dec;28(12):1136–40

NICOTINIC AGENTS see GANGLIONIC STIMULANTS

NICOTINIC RECEPTORS see RECEPTORS, NICOTINIC

NICOTINYL ALCOHOL see under PYRIDINES

NICOUMALONE see ACENOCOUMAROL

NICTITATING MEMBRANE

DRUG EFFECTS

Atypical alpha-adrenoceptor mediates phenylephrine-induced mydriasis in anesthetized cats. Hey JA, et al. **J Ocul Pharmacol** 1988 Winter;4(4):303–10
Cianergoline lowers intraocular pressure in rabbits and monkeys and inhibits contraction of the cat nictitans by suppressing sympathetic neuronal function. Potter DE, et

al. **J Ocul Pharmacol** 1987 Winter;3(4):309–21

INNERVATION

Aluminum-induced neurofibrillary degeneration disrupts acquisition of the rabbit's classically conditioned nictitating membrane response. Pendlebury WW, et al. **Behav Neurosci** 1988 Oct;102(5):615–20

PHYSIOLOGY

Water deprivation optimizes hippocampal activity and facilitates nictitating membrane conditioning. Berry SD, et al. **Behav Neurosci** 1989 Feb;103(1):71–6

Effect of removal of lacrimal and third eyelid glands on Schirmer tear test results in cats. McLaughlin SA, et al. **J Am Vet Med Assoc** 1988 Oct 1;193(7):820–2

Cerebellar lesions and the nictitating membrane reflex: performance deficits of the conditioned and unconditioned response. Welsh JP, et al. **J Neurosci** 1989 Jan;9(1):299–311

Disrupted retention of the classically conditioned nictitating membrane response in rabbits with aluminum-induced neurofibrillary degeneration. Solomon PR, et al. **Neurotoxicology** 1988 Summer;9(2):209–21

ULTRASTRUCTURE

SEM-studies of the nictitating membrane of the pigeon. Kühnel W, et al. **Prog Clin Biol Res** 1989;295:521–5

NIDATION see **OVUM IMPLANTATION**

NIDDM see **DIABETES MELLITUS, NON-INSULIN-DEPENDENT**

NIEMANN-PICK DISEASE

[2 cases of type C Niemann-Pick disease] Mydlil J, et al. **Cesk Pediatr** 1989 Apr;44(4):214–6 **(Cze)**

[Inherited storage disease associated mononuclear phagocytic system] Takami T, et al. **Nippon Rinsho** 1989 Mar; 47(3):664–8 **(Jpn)**

CLASSIFICATION

Type C Niemann-Pick disease: clinical and biochemical studies on 6 cases. Omura K, et al. **Brain Dev** 1989; 11(1):57–61

Clinical spectrum of Niemann-Pick disease type C. Fink JK, et al. **Neurology** 1989 Aug;39(8):1040–9

COMPLICATIONS

Glycogen storage disease associated with Niemann-Pick disease [letter] Narita T, et al. **N Engl J Med** 1989 Mar 23;320(12):810–1

DIAGNOSIS

Synthesis of pyrenesulfonylamido-sphingomyelin and its use as substrate for determining sphingomyelinase activity and diagnosing Niemann-Pick disease. Klar R, et al. **Clin Chim Acta** 1988 Sep 15;176(3):259–67

Culture conditions found to minimize false positive diagnosis of lysosomal storage disorders. Arnon J, et al. **In Vitro Cell Dev Biol** 1988 Dec;24(12):1159–64

Diagnosis of Niemann-Pick disease type C on chorionic villus cells [letter] Vanier MT, et al. **Lancet** 1989 May 6; 1(8645):1014–5

[The infantile form of Niemann-Pick disease] Rodecka-Gustaw E, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:313–7 (Eng. Abstr.) **(Pol)**

DRUG THERAPY

Clinical improvement with DMSO treatment in a patient with Niemann-Pick disease (type C). Sakuragawa N, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Aug;30(4):509–16

Therapeutic effects of dipolar aprotic substances on Niemann-Pick cells. Sakuragawa N, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Jun;29(3):433–40

ENZYMOLOGY

Correction of sphingomyelinase deficiency in Niemann-Pick type C fibroblasts by removal of lipoprotein fraction from culture media. Thomas GH, et al. **J Inherited Metab Dis** 1989;12(2):139–51

[Importance of fluorescent lipid substrates for the study of hereditary lysosomal lipidoses. Application to the diagnosis of Niemann-Pick disease] Douste-Blazy L, et al. **Bull Acad Natl Med (Paris)** 1988 Jun;172(6):807–13 (Eng. Abstr.) **(Fre)**

GENETICS

Niemann-Pick disease types C and D. Brady RO, et al. **Neurol Clin** 1989 Feb;7(1):75–88 (34 ref.)

[Early infantile form of Niemann-Pick disease type C. Apropos of 2 siblings] Kanoun N, et al. **Ann Pediatr (Paris)** 1989 May;36(5):335–8 (Eng. Abstr.) **(Fre)**

METABOLISM

Lysosphingolipids and mitochondrial function. II. Deleterious effects of sphingosylphosphorylcholine. Strasberg PM, et al. **Biochem Cell Biol** 1988 Dec; 66(12):1322–32

The intracellular transport of low density lipoprotein-derived cholesterol is defective in Niemann-Pick type C fibroblasts. Liscum L, et al. **J Cell Biol** 1989 May;108(5):1625–36

Evidence for both endogenous and exogenous sources of the sphingomyelin storage in lymphoid cell lines from patients with Niemann-Pick disease types A and B. Levade T, et al. **J Inherited Metab Dis** 1988;11(2):151–7

Type-C Niemann-Pick disease: low density lipoprotein uptake is associated with premature cholesterol accumulation in the Golgi complex and excessive cholesterol storage in lysosomes. Blanchette-Mackie EJ, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8022–6

PATHOLOGY

[Sphingomyelinase activity in a patient with Niemann-Pick disease] Sengers RC, et al. **Tijdschr Kindergeneeskd** 1989 Apr;57(2):70–3 (Eng. Abstr.) **(Dut)**

[Ultrastructural study of the liver in Niemann-Pick disease type C] Chamlian A, et al. **Ann Pathol** 1989;9(2):132–6 (Eng. Abstr.) **(Fre)**

PHYSIOPATHOLOGY

The diverse neurological features of Niemann-Pick disease type C: a report of two cases. Coleman RJ, et al. **Mov Disord** 1988;3(4):295–9

RADIOGRAPHY

[The pure visceral form of Niemann-Pick disease in children. Review of the literature apropos of a case] Coussement A, et al. **J Radiol** 1988 Dec;69(12):783–5 (15 ref.) (Eng. Abstr.) **(Fre)**

NIF GENES see **GENES, NITROGEN FIXATION**

NIFEDIPINE

Nifedipine. Sharma BK, et al. **Indian Pediatr** 1988 Sep; 25(9):867–70 (15 ref.)

ADMINISTRATION & DOSAGE

Usefulness of nifedipine for myocardial ischemia and the nifedipine gastrointestinal therapeutic system. Bittar N. **Am J Cardiol** 1989 Sep 19;64(11):31F–34F

The nifedipine gastrointestinal therapeutic system in the treatment of hypertension. Frishman WH, et al. **Am J Cardiol** 1989 Sep 19;64(11):65F–69F

Advanced technology in cardiovascular therapy. Investigators' dialogue. Proceedings of a symposium. December 5 to 7, 1986, Boca Raton, Florida. **Am J Med** 1987 Dec 21;83(6B):1–30

Efficacy of nifedipine gastrointestinal therapeutic system in combination with beta blockers in the management of exertional angina. A multicenter study of 54 patients. Bittar N, et al. **Am J Med** 1987 Dec 21;83(6B):30–3

Multicenter comparison of the nifedipine gastrointestinal therapeutic system and long-acting propranolol in patients with mild to moderate systemic hypertension receiving diuretics. A preliminary experience. Frishman WH, et al. **Am J Med** 1987 Dec 21;83(6B):15–9

Antihypertensive effectiveness of the nifedipine gastrointestinal therapeutic system. Gavras I, et al. **Am J Med** 1987 Dec 21;83(6B):20–3

Chronic stable angina monotherapy. Nifedipine versus propranolol. Higginbotham MB, et al. **Am J Med** 1989 Jan 16;86(1A):1–5

Nifedipine gastrointestinal therapeutic system. Swanson DR, et al. **Am J Med** 1987 Dec 21;83(6B):3–9

High-dose monotherapy and combination therapy with calcium channel blockers for angina. A comprehensive review of the literature. Temkin LP. **Am J Med** 1989 Jan 16;86(1A):23–7 (77 ref.)

Nifedipine gastrointestinal therapeutic system in stable angina pectoris. Results of a multicenter open-label crossover comparison with standard nifedipine. Vetrovec GW, et al. **Am J Med** 1987 Dec 21;83(6B):24–9

Once-daily therapy for angina pectoris with nifedipine gastrointestinal therapeutic system. Dosing and clinical efficacy. Vetrovec GW. **Am J Med** 1989 Jan 16; 86(1A):28–32

Nifedipine and the pressor response to laryngoscopy [letter] Puri GD. **Anaesthesia** 1989 Jun;44(6):520

Effects of sublingual administration of nifedipine on arterial pressure, plasma renin activity, and glomerular filtration rate in essential hypertension. Yurtkuran M, et al. **Angiology** 1989 Sep;40(9):791–4

Sublingual nifedipine in the treatment of hypertensive crisis associated with monoamine oxidase inhibitors [letter] Schenk CH, et al. **Ann Emerg Med** 1989 Jan;18(1):114–5

Sublingual nifedipine in acute severe hypertension [letter] Hatton RC, et al. **Arch Dis Child** 1989 Apr;64(4):633

Rectal nifedipine in acute severe hypertension in young children [letter] Uchiyama M, et al. **Arch Dis Child** 1989 Apr;64(4):632–3

Oral nifedipine vs oral clonidine in the treatment of urgent hypertension. Jaker M, et al. **Arch Intern Med** 1989 Feb; 149(2):260–5

Anti-ischemic effects of slow-release formulations of nifedipine, isosorbide-5-mononitrate and their combination in patients with coronary heart disease. Erlemeier HH, et al. **Cardiology** 1988;75(6):409–18

Use of sublingual nifedipine in the treatment of coronary artery spasm [letter] Davis WR. **Cathet Cardiovasc Diagn** 1988;15(3):215

Effective method of delivering nifedipine sublingually [letter] Frank WP. **Cathet Cardiovasc Diagn** 1988;15(3):215

Administration of nifedipine [letter] Weaver WF. **Cathet Cardiovasc Diagn** 1989 Jan;16(1):80

A double-blind cross-over study of nifedipine retard in patients with Raynaud's phenomenon. Finch MB, et al. **Clin Rheumatol** 1988 Sep;7(3):359–65

Lithium clearance and renal tubular sodium handling during acute and long-term nifedipine treatment in essential hypertension. Bruun NE, et al. **Clin Sci** 1988 Dec; 75(6):609–13

Calcium antagonist in the treatment of symptomatic dermographism. Low-dose and high-dose studies with nifedipine. Lawlor F, et al. **Dermatologica** 1988; 177(5):287–91

Studies on improvement of pharmaceutical preparations prescribed in hospitals. V. Nifedipine hollow type suppository. Namiki N, et al. **Drug Des Deliv** 1986 Nov; 1(2):167–73

Drug input rate from the GI-tract. Michaelis-Menten kinetics and the bioavailability of slow release verapamil and nifedipine. Woodcock BG, et al. **Drug Des Deliv** 1988 May;2(4):299–310

Subcutaneous administration of nifedipine. Krichbaum DW, et al. **Drug Intell Clin Pharm** 1988 Nov;22(11):891–2

Efficacy of intranasal nifedipine for relief of intra-operative hypertension. Puri GD, et al. **Indian Heart J** 1988 Jan–Feb; 40(1):4–7

Long-term survival and risk stratification in patients with angina at rest undergoing medical treatment. De Servi S, et al. **Int J Cardiol** 1989 Jan;22(1):43–50

Atenolol and/or nifedipine in effort angina: which is the treatment of choice for exercise coronary protection? Romano M, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Sep;26(9):468–70

Treatment of hypertensive crisis in children with nifedipine. Lopez-Herce J, et al. **Intensive Care Med** 1988;14(5):519–21

Nifedipine and pulmonary functions in bronchial asthma [letter] Sharma SK, et al. **J Assoc Physicians India** 1988 May;36(5):350–1

Nifedipine substituted for minoxidil in the treatment of refractory hypertension. Heagerty AM, et al. **J Hum Hypertens** 1987 Sep;1(2):83–6

Nifedipine and acebutolol in combination for the treatment of moderate to severe essential hypertension. Singer DR, et al. **J Hum Hypertens** 1987 Jun;1(1):31–7

The haemodynamic effects of intravenous nifedipine in normotensive and hypertensive subjects. Walley TJ, et al. **J Hum Hypertens** 1988 Oct;2(3):199–202

Interaction of slow-channel calcium blocking drugs with sodium restriction, diuretics and angiotensin converting enzyme inhibitors. Morgan T, et al. **J Hypertens Suppl** 1988 Dec;6(4):S652–4

Midazolam as an induction agent for thoracotomy in comparison with diazepam with or without nifedipine. Hseu SS, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun; 26(2):147–52

Nifedipine augments haloperidol in the treatment of Tourette syndrome. Alessi NE, et al. **Pediatr Neurol** 1988 May–Jun; 4(3):191

[The simultaneous administration of nifedipine and beta blockers] Málek I, et al. **Cas Lek Cesk** 1986 Oct 24; 125(43):1325–9 (Eng. Abstr.) **(Cze)**

[Effect of preoperative continuous nifedipine maintenance medication on hemodynamics and myocardial lactate extraction in coronary surgery patients] Rieke H, et al. **Anasth Intensivther Notfallmed** 1988 Dec;23(6):297–302 (Eng. Abstr.) **(Ger)**

[The significance of a staged diagnostic-therapeutic program for the disease course in patients following unstable angina pectoris during a follow-up period of 3 1/2 years] Brunke W, et al. **Z Gesamte Inn Med** 1989 Jun 1;44(11):326–9 (Eng. Abstr.) **(Ger)**

[Diastolic left ventricular volume flow in patients with arterial hypertension before and following acute antihypertensive medication] Curtius JM, et al. **Z Kardiol** 1988 Dec;77(12):789–96 (Eng. Abstr.) **(Ger)**

[Nifedipine associated with cardioplegia with blood in the experimental protection of the ischemic myocardium] Coli G, et al. **Cardiologia** 1988 May;33(5):469–73 (Eng. Abstr.) **(Ita)**

[Hypertensive emergencies treated with nifedipine drops] Gancitano A, et al. **Clin Ter** 1987 Dec 15;123(5):359–61 (Eng. Abstr.) **(Ita)**

[Parenteral nifedipine in hypertensive crisis. Documentation of a case] Punzo S, et al. **Medicina (Firenze)** 1988 Apr–Jun; 8(2):191–3 (Eng. Abstr.) **(Ita)**

[Potentiation of morphine analgesia by nifedipine in postoperative pain] Carta F, et al. **Minerva Anestesiol** 1988 Apr;54(4):127–30 **(Ita)**

[Effect of long-term treatment with nifedipine on the activity of the sympathetic-adrenal system, lipids and beta-thromboglobulin in patients with primary arterial hypertension] Knypl K, et al. **Kardiol Pol** 1988;31 Suppl 1:8–15 (Eng. Abstr.) **(Pol)**

[Effect of a single dose of nifedipine on hemodynamic parameters of pulmonary circulation and left-ventricular function in patients with hypoxic pulmonary hypertension]

Poloński L, et al. **Kardiol Pol** 1988;31(10):621–5 (Eng. Abstr.) **(Pol)**

[Interactions of propranolol with nifedipine, verapamil and diltiazem] Halawa B, et al. **Pol Tyg Lek** 1988 Oct 31; 43(44):1412–4 **(Pol)**

[Nifedipine level in the blood and its immediate hypotensive effect after its sublingual administration to aged patients] Kawecka-Jaszcz K, et al. **Przegl Lek** 1989;46(2):311–5 (Eng. Abstr.) **(Pol)**

[Changes in central and cerebral hemodynamics in patients with hypertension after a single-dose administration of corinfar] Kuznetsov VN, et al. **Klin Med (Mosk)** 1989 Mar; 67(3):37–9 (Eng. Abstr.) **(Rus)**

[Tolerance to delayed-action nifedipine (letter)] Robles NR, et al. **Med Clin (Barc)** 1989 Mar 25;92(11):438 **(Spa)**

[Treatment with nifedipine retard: increasing doses as a therapeutic method (letter)] Lobos Berajano JM, et al. **Rev Clin Esp** 1989 Jan;184(1):47–9 **(Spa)**

[Treatment of hypertensive emergencies and crisis with sublingual nifedipine] Domínguez B, et al. **Rev Med Panama** 1988 May;13(2):100–6 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Potentiation of cocaine toxicity with calcium channel blockers. Derlet RW, et al. **Am J Emerg Med** 1989 Sep; 7(5):464–8

Neuromuscular blockade with magnesium sulfate and nifedipine. Snyder SW, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):35–6

Consecutive cardiac arrests on induction of anesthesia associated with nifedipine-induced carotid sinus hypersensitivity. Plotkin CN, et al. **Anesth Analg** 1989 Mar; 68(3):402–5

Are beta blockers and nifedipine safe? Stockley IH. **BMJ** 1989 Jun 10;298(6687):1584

Nifedipine-induced gingival hyperplasia. Yusof WZ. **Can Dent Assoc J** 1989 May;55(5):389–91

Increase in number of myocardial ischemic episodes following nifedipine administration in two patients. Detection of silent episodes by Holter monitoring and role of heart rate. Casolo GC, et al. **Chest** 1989 Mar;95(3):541–3

Elicitation of myocardial ischemia by nifedipine in a case of coronary artery fistula. Montorsi P, et al. **Chest** 1989 Mar;95(3):702–4

Elucidation of the nifedipine–quinidine interaction. Munger MA, et al. **Clin Pharmacol Ther** 1989 Apr;45(4):411–6

Paradoxical elevation of pulmonary vascular resistance after nifedipine in primary pulmonary hypertension. A case study. Pohar B, et al. **Cor Vasa** 1989;31(3):238–41

Acute renal failure during nifedipine therapy in a patient with congestive heart failure. Eicher JC, et al. **Crit Care Med** 1988 Nov;16(11):1163–4

Adverse effects of sublingual nifedipine in acute myocardial infarction. Shettigar UR, et al. **Crit Care Med** 1989 Feb; 17(2):196–7

Cutaneous reactions to nifedipine [letter] Zlotogorski A, et al. **Dermatologica** 1988;177(4):249

Neonatal bilirubin production after preterm labor tocolysis with nifedipine. Ferguson JE 2d, et al. **Dev Pharmacol Ther** 1989;12(3):113–7

Diabetogenic effect of nifedipine. Heyman SN, et al. **DICP** 1989 Mar;23(3):236–7

Nifedipine-induced nonthrombocytopenic purpura [letter] Oren R, et al. **DICP** 1989 Jan;23(1):88

Effect of nifedipine on thyrotropin, prolactin, and thyroid hormone release in man: a placebo-controlled study. Valensi P, et al. **Fundam Clin Pharmacol** 1989;3(1):59–66

Nifedipine-induced gingival hyperplasia: case reports and literature review. Zlotogorski A, et al. **Isr J Med Sci** 1989 Aug;25(8):453–5 (13 ref.)

Nifedipine induced gingival hyperplasia. Raman PG, et al. **J Assoc Physicians India** 1988 Mar;36(3):231–3

The CO2 laser in the excision of gingival hyperplasia caused by nifedipine. Barak S, et al. **J Clin Periodontol** 1988 Nov; 15(10):633–5

Nifedipine–aminophylline interaction. Kalra L, et al. **J Clin Pharmacol** 1988 Nov;28(11):1056–7

Hemodynamic and endocrine effects of acute and chronic administration of nifedipine. Parent R, et al. **J Clin Pharmacol** 1989 Feb;29(2):107–11

Nifedipine and prostatism [letter] Evans MJ. **J R Coll Gen Pract** 1988 Jan;38(306):34

Nifedipine and nocturia [letter] Mignot G, et al. **Lancet** 1988 Oct 8;2(8615):857

Nifedipine and myoclonic disorders [letter] Pedro-Botet ML, et al. **Nephron** 1989;51(2):281

Decreased rectal body temperature induced by different vasodilatory drugs. Wollersheim H, et al. **Neth J Med** 1989 Apr;34(3–4):189–93

Gingival hyperplasia caused by nifedipine. Puolijoki H, et al. **Proc Finn Dent Soc** 1988;84(5–6):311–4

Gingival hyperplasia: an intra-oral side effect of phenytoin, nifedipine and cyclosporine therapies. Yusof WZ. **Singapore Med J** 1988 Oct;29(5):498–503

Nifedipine-induced hypotension and mesenteric ischemia. Goglin WK, et al. **South Med J** 1989 Feb;82(2):274–5

[Nifedipine-induced gingival hyperplasia] Puolijoki H, et al. **Duodecim** 1988;104(14):1063–6 **(Fin)**

[Acute intestinal occlusion and calcium antagonists] Lamaison D, et al. **Therapie** 1989 May-Jun;44(3):201–2 (Eng. Abstr.) **(Fre)**

[Is nifedipine diabetogenic? (letter)] Carleo R, et al. **Minerva Endocrinol** 1988 Apr-Jun;13(2):141–2 **(Ita)**

[A case of acute respiratory failure precipitated by long-acting nifedipine] Hasebe N, et al. **Kokyu To Junkan** 1988 Nov;36(11):1255–9 (Eng. Abstr.) **(Jpn)**

[Withdrawal syndrome after discontinuation of calcium channel blockers] Sosnowski M, et al. **Pol Tyg Lek** 1988 Oct 31;43(44):1409–11 **(Pol)**

[Adverse effects of nifedipine and treatment dropouts (letter)] **Med Clin (Barc)** 1989 May 20;92(19):758–9 **(Spa)**

[Nifedipine and epistaxis recurrence (letter)] Martínez Martínez R, et al. **Med Clin (Barc)** 1989 Apr 1;92(12):476 **(Spa)**

[Gingival hyperplasia associated with nifedipine (letter)] Ferrés E, et al. **Rev Clin Esp** 1989 Apr;184(6):341–2 **(Spa)**

ANALOGS & DERIVATIVES

Effect of the second-generation calcium channel blocking drug nisoldipine on diastolic left ventricular dysfunction in heart failure. Lewis BS, et al. **Am Heart J** 1989 Sep; 118(3):505–11

Effects of nisoldipine on systemic and leg blood flow, oxygen transport and metabolism, and hemodynamics during exercise in effort angina pectoris. Ram J, et al. **Am J Cardiol** 1989 Apr 1;63(12):802–6

Antihypertensive effectiveness of amlodipine in combination with hydrochlorothiazide. Chrysant SG, et al. **Am J Hypertens** 1989 Jul;2(7):537–41

Safety and efficacy of amlodipine added to hydrochlorothiazide therapy in essential hypertension. Glasser SP, et al. **Am J Hypertens** 1989 Mar;2(3 Pt 1):154–7

Effect of the calcium channel blocker nisoldipine on the progression of chronic renal failure in man. Eliahou HE, et al. **Am J Nephrol** 1988;8(4):285–90

Effect of nisoldipine on the oxymyoglobin level of myocardial cells in hypoxic, perfused rat hearts. Hara A, et al. **Arch Int Pharmacodyn Ther** 1989 Mar-Apr;298:78–89

Effects of a newly synthetized calcium antagonist, cyclopropylmethyl 4-(3-nitrophenyl) 1,4-dihydro-2,6-dimethylpyridine-3,5-dicarboxylate (MPC-2101), on action potentials of rabbit's myocardial tissues in vitro. Kano T, et al. **Arch Int Pharmacodyn Ther** 1988 Nov-Dec;296:101–17

Benidipine hydrochloride (KW-3049): a new dihydropyridine calcium antagonist. **Arzneimittelforschung** 1988 Nov;38(11A):1661–763

Pharmacokinetics of nisoldipine. I. Absorption, concentration in plasma, and excretion after single administration of [14C]nisoldipine in rats, dogs, monkey, and swine. Ahr HJ, et al. **Arzneimittelforschung** 1988 Aug;38(8):1093–8

Pharmacokinetics of nisoldipine. II. Distribution to and elimination from tissues and organs following single or repeated administration of [14C]nisoldipine to rats and dogs. Ahr HJ, et al. **Arzneimittelforschung** 1988 Aug; 38(8):1099–104

Determination of the calcium antagonist benidipine hydrochloride in plasma by sensitive radioimmunoassay. Akinaga S, et al. **Arzneimittelforschung** 1988 Nov; 38(11A):1738–41

Biotransformation of amlodipine. Identification and synthesis of metabolites found in rat, dog and human urine/confirmation of structures by gas chromatography-mass spectrometry and liquid chromatography-mass spectrometry. Beresford AP, et al. **Arzneimittelforschung** 1989 Feb;39(2):201–9

Absorption of amlodipine unaffected by food. Solid dose equivalent to solution dose. Faulkner JK, et al. **Arzneimittelforschung** 1989 Jul;39(7):799–801

Effects of nisoldipine on sympathetic activity, the renin-angiotensin-aldosterone system, and water-sodium-calcium metabolism in patients with essential hypertension. Iimura O, et al. **Arzneimittelforschung** 1989 Jun;39(6):710–4

Sensitive radioreceptor assay of the calcium antagonist benidipine hydrochloride in plasma and urine. Ishii A, et al. **Arzneimittelforschung** 1988 Nov;38(11A):1733–7

Receptor binding properties of the new calcium antagonist benidipine hydrochloride. Ishii A, et al. **Arzneimittelforschung** 1988 Nov;38(11A):1677–80

Slow dissociation of the new slow-onset and long-acting calcium antagonist benidipine hydrochloride from 3H-nitrendipine binding sites. Ishii A, et al. **Arzneimittelforschung** 1988 Nov;38(11A):1681–3

Antihypertensive effects of the new calcium antagonist benidipine hydrochloride in rats. Karasawa A, et al. **Arzneimittelforschung** 1988 Nov;38(11A):1684–90

Antihypertensive effects of intravenous administration of benidipine hydrochloride and some other calcium antagonists in conscious, spontaneously hypertensive rats. Karasawa A, et al. **Arzneimittelforschung** 1988 Nov; 38(11A):1691–4

Antihypertensive effects of the new calcium antagonist benidipine hydrochloride in conscious, renal-hypertensive dogs. Karasawa A, et al. **Arzneimittelforschung** 1988 Nov; 38(11A):1695–7

Effects of benidipine hydrochloride on atrioventricular conduction time and postural reflex in gallamine-immobilized cats. Karasawa A, et al. **Arzneimittelforschung** 1988 Nov;38(11A):1698–701

Antianginal effects of the new calcium antagonist benidipine hydrochloride in anesthetized rats and spontaneously hypertensive rats. Electrocardiographic study. Karasawa A, et al. **Arzneimittelforschung** 1988 Nov;38(11A):1702–7

Vasodilating effects of the new calcium antagonist benidipine hydrochloride in anesthetized dogs and cats. Karasawa A, et al. **Arzneimittelforschung** 1988 Nov;38(11A):1707–12

Effects of the new calcium antagonist benidipine hydrochloride on cardiohemodynamics in anesthetized dogs. Karasawa A, et al. **Arzneimittelforschung** 1988 Nov; 38(11A):1713–6

Beneficial effects of the new calcium antagonist benidipine hydrochloride on myocardial dysfunction following coronary occlusion and reperfusion in anesthetized dogs. Karasawa A, et al. **Arzneimittelforschung** 1988 Nov; 38(11A):1717–21

Pharmacological actions of benidipine hydrochloride in several isolated smooth muscles and myocardium. Karasawa A, et al. **Arzneimittelforschung** 1988 Nov; 38(11A):1722–30

Gas chromatographic method for the quantification of the new calcium antagonist benidipine hydrochloride in plasma using electron capture detection. Kobayashi H, et al. **Arzneimittelforschung** 1988 Nov;38(11A):1730–3

Absorption, distribution and excretion after oral administration of 14C-benidipine hydrochloride in rats and dogs. Kobayashi H, et al. **Arzneimittelforschung** 1988 Nov; 38(11A):1742–6

Absorption, distribution and excretion of 14C-benidipine hydrochloride after repeated administration to rats. Kobayashi H, et al. **Arzneimittelforschung** 1988 Nov; 38(11A):1747–9

Pharmacokinetic study of benidipine hydrochloride in rats and dogs. Kobayashi H, et al. **Arzneimittelforschung** 1988 Nov;38(11A):1750–3

Identification of benidipine hydrochloride metabolites in rats and dogs. Kobayashi H, et al. **Arzneimittelforschung** 1988 Nov;38(11A):1753–6

Benidipine hydrochloride—a new calcium-channel blocker of the dihydropyridine type. Pharmacokinetics, pharmacodynamics, tolerance and dose finding in mild to moderate hypertension. Maier-Lenz H, et al. **Arzneimittelforschung** 1988 Nov;38(11A):1757–63

Binding of the new calcium entry blocker nilvadipine to rat aortic and guinea pig left ventricular membranes. Matsuo M, et al. **Arzneimittelforschung** 1989 May;39(5):576–9

Synthesis and pharmacological activity of stereoisomers of 1,4-dihydro-2,6-dimethyl-4-(3-nitrophenyl)-3,5-pyridine-dicarboxylic acid methyl 1-(phenylmethyl)-3-piperidinyl ester. Muto K, et al. **Arzneimittelforschung** 1988 Nov;38(11A):1662–5

Synthesis of expected metabolites of benidipine hydrochloride. Muto K, et al. **Arzneimittelforschung** 1988 Nov;38(11A):1666–70

Assessment in pig coronary artery of long-lasting and potent calcium antagonistic actions of the novel dihydropyridine derivative mepirodipine hydrochloride. Nakayama K, et al. **Arzneimittelforschung** 1989 Jan;39(1):50–5

Effects of nilvadipine on the cardiovascular system in experimental animals. Ohtsuka M, et al. **Arzneimittelforschung** 1988 Nov;38(11):1605–18

Dose-related effects of intracoronary application of nisoldipine on central and peripheral circulatory parameters. Schartl M, et al. **Arzneimittelforschung** 1989 Jun;39(6):682–5

Pharmacokinetics of nisoldipine. III. Biotransformation of nisoldipine in rat, dog, monkey, and man. Scherling D, et al. **Arzneimittelforschung** 1988 Aug;38(8):1105–10

Physico-chemical properties and stabilities of the highly potent calcium antagonist benidipine hydrochloride. Suzuki H, et al. **Arzneimittelforschung** 1988 Nov;38(11A):1671–6

Comparison of nisoldipine and atenolol in the treatment of essential hypertension. Takahashi H, et al. **Arzneimittelforschung** 1989 Mar;39(3):379–82

Protective action of a calcium antagonist, nilvadipine, against aortic calcium deposition—a pathogenic factor in atherosclerosis. Mutoh S, et al. **Atherosclerosis** 1988 Oct; 73(2-3):181–9

Smooth muscle cell migration induced by inflammatory cell products and its inhibition by a potent calcium antagonist, nilvadipine. Nomoto A, et al. **Atherosclerosis** 1988 Aug; 72(2-3):213–9

The effect of nisoldipine on whole blood platelet aggregation in patients with Raynaud's phenomenon. Francis JL, et al. **Br J Clin Pharmacol** 1988 Jun;25(6):751–4

24 h blood pressure control with the once daily calcium antagonist, amlodipine. Heber ME, et al. **Br J Clin Pharmacol** 1989 Mar;27(3):359–65

The contribution of nisoldipine-induced changes in liver blood flow to its pharmacokinetics after oral administration. van Harten J, et al. **Br J Clin Pharmacol** 1989 May; 27(5):581–6

The influence of infusion rate on the pharmacokinetics and haemodynamic effects of nisoldipine in man. van Harten J, et al. **Br J Clin Pharmacol** 1988 Jun;25(6):709–17

The mechanism of action of calcium antagonists on arrhythmias in early myocardial ischaemia: studies with nifedipine and DHM9. Curtis MJ, et al. **Br J Pharmacol** 1988 Aug;94(4):1275–86

Actions of nisoldipine in cardiovascular disease. Duncker DJ, et al. **Can J Cardiol** 1989 Jun-Aug;5(5):266–74 (72 ref.)

Increased thermal response to ultrasound in the Walker carcinosarcoma treated with vasoactive drugs. Knapp WH,

et al. **Cancer Res** 1989 Apr 1;49(7):1768–72

Influence of renal function on the pharmacokinetics and cardiovascular effects of nisoldipine after single and multiple dosing. van Harten J, et al. **Clin Pharmacokinet** 1989 Jan;16(1):55–64

Single- and multiple-dose nisoldipine kinetics and effects in the young, the middle-aged, and the elderly. van Harten J, et al. **Clin Pharmacol Ther** 1989 Jun;45(6):600–7

Ex vivo platelet studies following oral nisoldipine in normotensive insulin-dependent diabetics and non-diabetic controls. Hendra TJ, et al. **Diabetes Res** 1988 Jul; 8(3):117–22

Synthesis and calcium channel antagonist activity of nifedipine analogues containing 1-oxido-2-pyridyl in place of the 2-nitrophenyl moiety. Ramesh M, et al. **Drug Des Deliv** 1988 Dec;3(4):337–41

Synthesis and calcium channel antagonist activity of alkyl t-butyl esters of nifedipine analogues containing pyridinyl substituents. Ramesh M, et al. **Drug Des Deliv** 1987 Dec; 2(2):79–89

Synthesis and calcium channel antagonist activity of nifedipine analogues containing 1,2-dihydropyridyl in place of the 1,4-dihydropyridyl moiety. Soboleski DA, et al. **Drug Des Deliv** 1988 Feb;2(3):177–89

Synthesis and calcium channel antagonist activity of 1,2-dihydropyridyl analogues of nifedipine. Wynn H, et al. **Drug Des Deliv** 1988 Nov;3(3):245–56

Stereoselective oxidation of nilvadipine, a new dihydropyridine calcium antagonist, in rat and dog liver. Niwa T, et al. **Drug Metab Dispos** 1989 Jan–Feb;17(1):64–8

Nisoldipine. A preliminary review of its pharmacodynamic and pharmacokinetic properties, and therapeutic efficacy in the treatment of angina pectoris, hypertension and related cardiovascular disorders. Friedel HA, et al. **Drugs** 1988 Dec;36(6):682–731 (274 ref.)

Pharmacokinetics of amlodipine in renal impairment. Doyle GD, et al. **Eur J Clin Pharmacol** 1989;36(2):205–8

The effects of nisoldipine on left ventricular filling rate in patients with ischemic heart disease measured with radionuclide gated blood pool scintigraphy. Otto AC, et al. **Eur J Nucl Med** 1988;14(11):542–5

Nisoldipine inhibits adrenergic responses in the hindquarters vascular bed of the cat. Minkes RK, et al. **Eur J Pharmacol** 1989 Jun 20;165(2–3):259–67

Nisoldipine inhibition of sodium influx into aorta from aldosterone-salt-hypertensive rats. Smith JM, et al. **Hypertension** 1989 Jun;13(6 Pt 2):676–80

Pharmacokinetics of nilvadipine after single oral doses in healthy volunteers. Cheung WK, et al. **Int J Clin Pharmacol Res** 1988;8(5):299–305

Nisoldipine inhibits vasoconstrictor responses in the cat pulmonary vascular bed. Kadowitz PJ, et al. **J Appl Physiol** 1989 Jun;66(6):2885–90

Calcium antagonists in cardiovascular disease: rationale for 24-hour action. Proceedings of an official satellite symposium and papers on amlodipine presented at the 25th Anniversary International Symposium on Calcium Antagonists in Hypertension. Basel, Switzerland, February 11–12, 1988. **J Cardiovasc Pharmacol** 1988;12 Suppl 7:S1–114

Amlodipine in elderly hypertensive patients: pharmacokinetics and pharmacodynamics. Abernethy DR, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 7:S67–71

Double-blind comparison of amlodipine and hydrochlorothiazide in patients with mild to moderate hypertension. Burris JF, et al. **J Cardiovasc Pharmacol** 1988; 12 Suppl 7:S98–102

Natriuretic activity of amlodipine, diltiazem, and nitrendipine in saline-loaded anesthetized dogs. Carter AJ, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 7:S34–8

Multicenter placebo-controlled comparison of amlodipine and atenolol in mild to moderate hypertension. de Bruijn B, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 7:S107–9

A comparison of the disposition of single oral doses of amlodipine in young and elderly subjects. Elliott HL, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 7:S64–6

Particular antihypertensive profile of amlodipine administered orally to Okamoto rats (SHRs) and NaCl-loaded salt-sensitive Dahl rats. Fleckenstein A, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 7:S39–40

Amlodipine: a double-blind evaluation of the dose-response relationship in mild to moderate hypertension. Frick MH, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 7:S76–8

A randomized placebo-controlled comparison of amlodipine and atenolol in mild to moderate systemic hypertension. Frishman WH, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 7:S103–6

Amlodipine in hypertension: an overview of the clinical dossier. Julius S. **J Cardiovasc Pharmacol** 1988;12 Suppl 7:S27–33 (11 ref.)

Inhibitory effect of nisoldipine on angiotensin-II-induced renal actions in anesthetized dogs. Kageyama M, et al. **J Cardiovasc Pharmacol** 1989 Jul;14(1):96–102

Block of heart calcium channels by amlodipine: influence of drug charge on blocking activity. Kass RS, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 7:S45–9

Amlodipine in angina pectoris: effect on maximal and submaximal exercise performance. Kinnard DR, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 7:S110–3

Pharmacokinetics of amlodipine in renal impairment. Laher MS, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 7:S60–3

Comparison of amlodipine and verapamil in the treatment of mild to moderate hypertension. Lorimer AR, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 7:S89–93

A double-blind crossover comparison of amlodipine and placebo added to captopril in moderate to severe hypertension. Maclean D, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 7:S85–8

Vasodilatory action of amlodipine on rat aorta, pig coronary artery, human coronary artery, and on isolated Langendorff rat heart preparations. Matlib MA, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 7:S50–4

Intravenous nisoldipine in severe congestive heart failure. Moe GW, et al. **J Cardiovasc Pharmacol** 1988 Aug; 12(2):160–6

A double-blind evaluation of the effect of amlodipine on ambulatory blood pressure in hypertensive patients. Mroczek WJ, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 7:S79–84

The effect of amlodipine on hypertension-induced cardiac hypertrophy and reperfusion-induced calcium overload. Nayler WG. **J Cardiovasc Pharmacol** 1988;12 Suppl 7:S42–4

Long-term open evaluation of amlodipine versus hydrochlorothiazide in patients with essential hypertension. Rofman BA. **J Cardiovasc Pharmacol** 1988;12 Suppl 7:S94–7

Effects of nisoldipine on renal function in normal volunteers and essential hypertensive patients. Ruilope LM, et al. **J Cardiovasc Pharmacol** 1989 Jan;13(1):90–3

Effects of amlodipine on steady-state digoxin concentrations and renal digoxin clearance. Schwartz JB. **J Cardiovasc Pharmacol** 1988 Jul;12(1):1–5

The metabolism and pharmacokinetics of amlodipine in humans and animals. Stopher DA, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 7:S55–9

Amlodipine--a once-daily calcium antagonist in the treatment of angina pectoris: a parallel dose-response placebo-controlled study. Thadani U. **J Cardiovasc Pharmacol** 1988;12 Suppl 7:S114

Pharmacokinetics and hemodynamic effects of long-term nisoldipine treatment in hypertensive patients. van Harten J, et al. **J Cardiovasc Pharmacol** 1989 Apr;13(4):624–9

Once-daily amlodipine in the treatment of mild to moderate hypertension. Webster J, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 7:S72–5

Importance of oral dosing rate on the hemodynamic and pharmacokinetic profile on nilvadipine. Cheung WK, et al. **J Clin Pharmacol** 1988 Nov;28(11):1001–7

Variability in the pharmacokinetics of nisoldipine as caused by differences in liver blood flow response. van Harten J, et al. **J Clin Pharmacol** 1989 Aug;29(8):714–21

Amlodipine pharmacokinetics in healthy volunteers. Williams DM, et al. **J Clin Pharmacol** 1988 Nov;28(11):990–4

Influence of pHo on calcium channel block by amlodipine, a charged dihydropyridine compound. Implications for location of the dihydropyridine receptor. Kass RS, et al. **J Gen Physiol** 1989 Jun;93(6):1109–27

A comparison of amlodipine, verapamil and placebo in the treatment of mild to moderate hypertension. Amlodipine Study Group. Lorimer AR, et al. **J Hum Hypertens** 1989 Jun;3(3):191–6

Amlodipine and captopril in moderate-severe essential hypertension. Maclean D, et al. **J Hum Hypertens** 1988 Aug;2(2):127–32

Rapid development of tolerance to the antihypertensive effect of nisoldipine. Ramsay LE, et al. **J Hum Hypertens** 1988 Mar;1(4):277–80

A dose-response study of amlodipine in mild to moderate hypertension. Frick MH, et al. **J Intern Med** 1989 Feb; 225(2):101–5

Effect of calcium antagonist compound nisoldipine on transepithelial electrical parameters in the isolated frog cornea. Wiederholt M, et al. **J Ocul Pharmacol** 1986 Spring; 2(2):159–64

Inhibitory effect of KW-3049, a new 1,4-dihydropyridine calcium antagonist, on the reduction of myocardial creatine kinase activity and high-energy phosphate content in rats subjected to coronary artery ligation. Karasawa A, et al. **J Pharmacobiodyn** 1988 Nov;11(11):722–9

Effect of nisoldipine on coronary resistance, contractility and oxygen consumption of the isolated blood-perfused canine left ventricle. Schipke JD, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):1000–4

Effect of a new calcium antagonist, nilvadipine, on variant angina pectoris evaluated by 24-hour Holter electrocardiography. Kishida H, et al. **Jpn Heart J** 1988 Nov;29(6):781–93

Complexation of nifedipine with substituted phenolic ligands. Boje KM, et al. **Pharm Res** 1988 Oct;5(10):655–9

Effects of nisoldipine on coronary collateral perfusion and hemodynamics in chronically instrumented dogs. Kenny D, et al. **Pharmacology** 1989;38(4):263–71

Effect of nisoldipine on large coronary arteries in situ: inhibition of vasoconstriction induced by vasopressin. Saito T, et al. **Pharmacology** 1988;37(2):85–93

Calcium antagonists: vinylogues and bivalent ligands related to nifedipine. Balboni B, et al. **Pharmazie** 1988 May; 43(5):318–20

Use of exercise Doppler for non-invasive haemodynamic optimization of dose and identification of poor responders to an oral anti-anginal agent. A double-blind dose-finding study of nisoldipine. Singer M, et al. **Postgrad Med J** 1988 Oct;64(756):755–60

AK-2-38, a nifedipine analogue with potent smooth muscle calcium antagonist action and partial agonist effects on isolated guinea pig left atrium. Matowe WC, et al. **Proc West Pharmacol Soc** 1989;32:305–7

Stereoselective disposition of nilvadipine, a new dihydropyridine calcium antagonist, in the rat and dog. Tokuma Y, et al. **Res Commun Chem Pathol Pharmacol** 1989 Feb;63(2):249–62

Silent myocardial ischemia: improvement with nisoldipine therapy. Glasser SP, et al. **South Med J** 1989 Jan;82(1):32–4, 46

Nilvadipine attenuates ischemic degradation of gerbil brain cytoskeletal proteins. Kuwaki T, et al. **Stroke** 1989 Jan; 20(1):78–83

A double-blind, randomized trial of PY108-068 in acute ischemic cerebral infarction. Oczkowski WJ, et al. **Stroke** 1989 May;20(5):604–8

[Effects of m-nisoldipine and nisoldipine on hemodynamics in anesthetized dogs] Fu SX, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jan;9(1):43–8 (Eng. Abstr.) **(Chi)**

[Prophylactic effects of m-nisoldipine and nisoldipine on reperfusion arrhythmia in hearts of rats] Li YL, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Nov;9(6):542–7 (Eng. Abstr.) **(Chi)**

[Cardiovascular action of m-nisoldipine in anaesthetized rabbits and guinea pigs] Ren LM, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Sep;9(5):426–30 (Eng. Abstr.) **(Chi)**

[Indoles of nifedipine] Born L, et al. **Arch Pharm (Weinheim)** 1988 Dec;321(12):855–8 (Eng. Abstr.) **(Ger)**

[Mechano- and impedance cardiography parameters in patients with heart failure in administration of a calcium antagonist. The significance of the Heather index] Linde M, et al. **Z Kardiol** 1989 Mar;78(3):181–6 (Eng. Abstr.) **(Ger)**

[Acute effects of nisoldipine in patients with stable effort angina] De Caprio L, et al. **Cardiologia** 1988 Oct; 33(10):985–8 (Eng. Abstr.) **(Ita)**

[Age and efficacy of new long acting calcium blocker, nisoldipine, is essential hypertension] Kuwajima I, et al. **Nippon Ronen Igakkai Zasshi** 1989 Jan;26(1):37–46 (Eng. Abstr.) **(Jpn)**

[Experimental study of the therapeutic effect of a calcium channel blocker foridon in the post-resuscitation period] Mutuskina EA, et al. **Anesteziol Reanimatol** 1988 Jul–Aug; (4):24–7 (Eng. Abstr.) **(Rus)**

[Effect of the calcium antagonists ryodipine and verapamil on the carnitine-dependent metabolism of fatty acids in the rat heart] Simkhovich BZ, et al. **Farmakol Toksikol** 1989 Jan–Feb;52(1):34–7 (Eng. Abstr.) **(Rus)**

[Anti-angina effect of foridon in patients with stable exertion-induced stenocardia] Glukhovtsev EV, et al. **Kardiologiia** 1988 Oct;28(10):44–7 (Eng. Abstr.) **(Rus)**

[Use of foridon in the treatment of arterial hypertension and hypertension of the lesser circulation] Mikunis RI, et al. **Kardiologiia** 1988 Dec;28(12):51–3 (Eng. Abstr.) **(Rus)**

[Hemodynamic effect of foridon and nifedipine at rest and during exercise] Zateishchikov DA, et al. **Kardiologiia** 1988 Oct;28(10):40–4 (Eng. Abstr.) **(Rus)**

ANALYSIS

Nifedipine transfer into human milk. Ehrenkranz RA, et al. **J Pediatr** 1989 Mar;114(3):478–80

Quantitative design for photostabilization of nifedipine by using titanium dioxide and/or tartrazine as colourants in model film coating systems. Teraoka R, et al. **J Pharm Pharmacol** 1989 May;41(5):293–7

BLOOD

Quantitative determination of nifedipine and its metabolite in hamster plasma by radio-gas chromatography. Akira K, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug;36(8):3000–7

Clinical utility of nifedipine and diltiazem plasma levels in patients with angina pectoris receiving monotherapy and combination treatment. Goldberger J, et al. **J Clin Pharmacol** 1989 Jul;29(7):628–34

[Nifedipine: correlation of plasma levels and some hemodynamic effects in healthy volunteers] Prat G, et al. **Rev Med Chil** 1988 Apr;116(4):313–7 (Eng. Abstr.) **(Spa)**

CHEMICAL SYNTHESIS

Synthesis and calcium channel antagonist activity of alkyl t-butyl esters of nifedipine analogues containing pyridinyl substituents. Ramesh M, et al. **Drug Des Deliv** 1987 Dec; 2(2):79–89

Synthesis and calcium channel antagonist activity of nifedipine analogues containing 1,2-dihydropyridyl in place of the 1,4-dihydropyridyl moiety. Soboleski DA, et al. **Drug Des Deliv** 1988 Feb;2(3):177–89

METABOLISM

Influence of enzyme induction and inhibition on the oxidation of nifedipine, sparteine, mephenytoin and antipyrine in humans as assessed by a "cocktail" study design. Schellens JH, et al. **J Pharmacol Exp Ther** 1989 May;249(2):638–45

PHARMACOKINETICS

Clinical pharmacokinetics of nifedipine gastrointestinal

therapeutic system. A controlled-release formulation of nifedipine. Chung M, et al. **Am J Med** 1987 Dec 21; 83(6B):10–4

The pharmacokinetics of oral nifedipine--a population study. Renwick AG, et al. **Br J Clin Pharmacol** 1988 Jun; 25(6):701–8

Nifedipine kinetics in the rat and relationship between its serum concentrations and uterine and cardiovascular effects. Downing SJ, et al. **Br J Pharmacol** 1988 Sep; 95(1):23–32

Nifedipine is excreted in human milk. Penny WJ, et al. **Eur J Clin Pharmacol** 1989;36(4):427–8

Pharmacokinetics and acute side-effects of nifedipine given as slow-release tablets or liquid-filled capsules. Saano V, et al. **Int J Clin Pharmacol Res** 1989;9(4):247–54

Kinetics of a single dose combination of nifedipine/acebutolol in patients with chronic liver disease. Lejeune P, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Oct;26(10):513–6

Pharmacokinetics of oral nifedipine: relevance of the distribution phase. Hoyo-Vadillo C, et al. **J Clin Pharmacol** 1989 Mar;29(3):251–6

Characterization of the pharmacokinetic interaction between nifedipine and ethanol in the rat. Boje KM, et al. **J Pharmacol Exp Ther** 1989 May;249(2):567–71

Bioavailability of nifedipine from different oral dosage forms in healthy volunteers. Leucuța SE, et al. **Pharmazie** 1989 May;44(5):336–8

The kinetics of nifedipine release from porous hydrophilic matrices and the pharmacokinetics in man. Leucuta SE. **Pharmazie** 1988 Dec;43(12):845–8

[Absence of polymorphism in individual response to the dihydropyridines nifedipine and (+/-)-nicardipine] Porchet HC, et al. **Schweiz Med Wochenschr** 1988 Dec 17;118(50):1918–20 (Eng. Abstr.) **(Fre)**

[Bioavailability and pharmacokinetics of a new nifedipine preparation in healthy volunteers] Hutt V, et al. **Arzneimittelforschung** 1989 May;39(5):607–11 (Eng. Abstr.) **(Ger)**

[Nifedipine pharmacokinetics in patients with exertion-induced stenocardia after its single and long-term administration] Rumiantsev DO, et al. **Kardiologiia** 1989 May;29(5):12–5 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Effects of a calcium channel blocker and calcium chelating agents on cochlear electrical activity in the guinea pig. Sato Y. **Acta Otolaryngol (Stockh)** 1989 Jul-Aug; 108(1–2):76–82

Cardiorespiratory effects of nifedipine in pregnant sheep. Vojcek L, et al. **Acta Physiol Hung** 1988;71(4):535–44

Effects of calcium channel-blocker tokolysis on the foetal circulation. Vojcek L, et al. **Acta Physiol Hung** 1988; 71(4):517–28

Potentiation of the diuretic and natriuretic effect of furosemide by the calcium antagonist nifedipine. Piryova B, et al. **Acta Physiol Pharmacol Bulg** 1989;15(1):13–8

Different effect of diltiazem and nifedipine on some central actions of ethanol in the rat. Pucilowski O, et al. **Alcohol** 1989 Mar-Apr;6(2):165–8

Comparison of coronary vasomotor responses to nifedipine in syndrome X and in Prinzmetal's angina pectoris. Montorsi P, et al. **Am J Cardiol** 1989 May 15; 63(17):1198–202

Effects of nifedipine on left ventricular distensibility, relaxation and filling dynamics during pacing-induced myocardial ischemia. Sasayama S, et al. **Am J Cardiol** 1989 Mar 7;63(10):102E–107E

Effects of oral calcium, potassium, digoxin, and nifedipine on natriuresis in normal humans. Luft FC, et al. **Am J Hypertens** 1989 Jan;2(1):14–9

Comparative effects of captopril and nifedipine on split renal function in renovascular hypertension. Miyamori I, et al. **Am J Hypertens** 1988 Oct;1(4 Pt 1):359–63

Nifedipine does not adversely affect uteroplacental blood flow in the hypertensive term-pregnant rat. Ahokas RA, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1440–5

The effect of sublingual nifedipine on coronary venous graft resistance immediately following cardiopulmonary bypass. Eide TR, et al. **Anesth Analg** 1989 Apr;68(4):462–6

Hemodynamic effects of nifedipine in a canine model of acid aspiration. Griffeth JK, et al. **Anesth Analg** 1988 Dec; 67(12):1166–8

Influence of nifedipine on systemic and regional hemodynamics during adenosine-induced hypotension in dogs. Rooney MW, et al. **Anesth Analg** 1989 Mar; 68(3):261–9

Depression of myocardial force and stiffness without change in crossbridge kinetics: effects of volatile anesthetics reproduced by nifedipine. Chung OY, et al. **Anesthesiology** 1989 Sep;71(3):444–8

Differential effects of nifedipine and diltiazem on methacholine-induced bronchospasm in allergic asthma. Ferrari M, et al. **Ann Allergy** 1989 Sep;63(3):196–200

Suppression of atherogenesis by nifedipine in the cholesterol-fed rhesus monkey. Lichtor T, et al. **Appl Pathol** 1989;7(1):8–18

Nifedipine reversal of decreased serotonin metabolite levels during morphine withdrawal. Colado MI, et al. **Arch Int Pharmacodyn Ther** 1989 Mar-Apr;298:61–7

Changes in blood viscosity following nifedipine administration and its relation to the contents of adenosine triphosphate and 2,3-diphosphoglyceric acid in red blood cells in patients with angina pectoris. Yoneda S, et al. **Arzneimittelforschung** 1989 Apr;39(4):504–6

Inhibition of rat heart and liver microsomal lipid peroxidation by nifedipine. Engineer F, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1279–85

Elevation of blood pressure in young rats fed a low calcium diet. Effects of nifedipine and captopril. Togari A, et al. **Biochem Pharmacol** 1989 Mar 15;38(6):889–93

Lipid peroxidation of phosphatidylcholine liposomes depressed by the calcium channel blockers nifedipine and verapamil and by the antiarrhythmic-antihypoxic drug stobadine. Ondriaš K, et al. **Biochim Biophys Acta** 1989 Jun 28;1003(3):238–45

Effect of the combination of alinidine and other anti-anginal drugs on heart rate and blood pressure in healthy volunteers. Harron DW, et al. **Br J Clin Pharmacol** 1989 Jan;27(1):23–9

Evaluation of the potassium channel activator cromakalim (BRL 34915) as a bronchodilator in the guinea-pig: comparison with nifedipine. Arch JR, et al. **Br J Pharmacol** 1988 Nov;95(3):763–70

Selective blockade by nifedipine of 'purinergic' rather than adrenergic nerve-mediated vasopressor responses in the pithed rat. Bulloch JM, et al. **Br J Pharmacol** 1988 Nov; 95(3):695–700

Interactions of calcium antagonists and the calcium channel agonist Bay K 8644 on neurotransmission of the mouse isolated vas deferens. Rae GA, et al. **Br J Pharmacol** 1989 Feb;96(2):333–40

Phencyclidine and MK-801: a behavioral and neurochemical comparison of their interactions with dihydropyridine calcium antagonists. O'Neill SK, et al. **Brain Res Bull** 1989 Apr;22(4):611–6

Nifedipine attenuates the intraocular pressure response to intubation following succinylcholine. Indu B, et al. **Can J Anaesth** 1989 May;36(3 Pt 1):269–72

Release of growth hormone from purified somatotrophs: effects of the calcium channel antagonists diltiazem and nifedipine on release induced by growth hormone-releasing factor. Lussier BT, et al. **Can J Physiol Pharmacol** 1988 Nov;66(11):1373–80

Clinical relevance of the interaction of theophylline with diltiazem or nifedipine. Christopher MA, et al. **Chest** 1989 Feb;95(2):309–13

Nifedipine potentiates cardiopulmonary baroreflex control of sympathetic nerve activity in healthy humans. Direct evidence from microneurographic studies. Ferguson DW, et al. **Circulation** 1989 Aug;80(2):285–98

Separation of afterload reduction and a direct beneficial cardiac effect of nifedipine in congestive cardiomyopathy. Percy RF, et al. **Clin Cardiol** 1989 Aug;12(8):435–40

Enalapril & nifedipine in essential hypertension; synergism of the hypotensive effects in combination. Morgan T, et al. **Clin Exp Hypertens [A]** 1988;10(5):779–89

Calcium content of the erythrocytes: a sensitive and easy handling method for measuring free calcium ions, and modulation of the Ca2+ ion concentration by the calcium antagonists nifedipine and pentoxifylline. Friederichs E, et al. **Clin Exp Pharmacol Physiol** 1989 May;16(5):387–94

Nifedipine blocks ACTH and cortisol release in man. Jackson RV, et al. **Clin Exp Pharmacol Physiol** 1989 Apr; 16(4):257–61

The effect of verapamil, diltiazem and nifedipine on baroreceptor reflexes. Zsotér TT, et al. **Clin Invest Med** 1988 Dec;11(6):430–4

The effect of nifedipine on graft function in renal allograft recipients treated with cyclosporin A. Propper DJ, et al. **Clin Nephrol** 1989 Aug;32(2):62–7

The influence of verapamil and nifedipine on hepatic indocyanine green clearance in patients with HBsAg-positive cirrhosis and ascites. Lay CS, et al. **Clin Pharmacol Ther** 1988 Oct;44(4):453–7

Effect of oral administration of nifedipine on neuropeptide Y- and noradrenaline-induced vasoconstriction in the human forearm. Pernow J, et al. **Clin Physiol** 1989 Feb; 9(1):67–75

Nifedipine inhibits cholecystokinin-induced gallbladder contraction. Clas D, et al. **Curr Surg** 1988 Sep-Oct; 45(5):374–6

Nifedipine decreases the mitotic activity of adrenocortical cells in early stage of adrenal regeneration. Zieleniewski J, et al. **Cytobios** 1989;57(230–231):185–8

Nifedipine and gastric emptying [letter] Chaudhuri TK, et al. **Dig Dis Sci** 1989 Jan;34(1):157–8

An investigation into the effects of nifedipine and nimodipine on platelet function and vascular prostacyclin synthesis. Jeremy JY, et al. **Drugs Exp Clin Res** 1985;11(9):645–51

Electrocardiographic alterations suggestive of myocardial injury elicited by rapid pressure lowering in hypertension. Pepi M, et al. **Eur Heart J** 1988 Aug;9(8):899–905

Prevention of pacing-induced silent myocardial ischaemia by nifedipine in coronary heart disease. Pust B, et al. **Eur Heart J** 1988 Dec;9 Suppl N:151–7

Modification by nifedipine of 131I-meta-iodobenzylguanidine kinetics in malignant phaeochromocytoma. Blake GM, et al. **Eur J Nucl Med** 1988;14(7–8):345–8

Effect of nifedipine on the shuttlebox escape deficit induced by inescapable shock in the rat. Geoffroy M, et al. **Eur J Pharmacol** 1988 Sep 23;154(3):277–83

Effects of gallopamil, diltiazem and nifedipine on the loss of K+ from ischaemic pig hearts. Kirchengast M, et al. **Eur J Pharmacol** 1989 Feb 7;160(3):349–58

BAY K 8644 enhances immobility in the mouse behavioral despair test, an effect blocked by nifedipine. Mogilnicka E, et al. **Eur J Pharmacol** 1988 Jul 7;151(2):307–11

Decrease in analgesic effect of nifedipine following chronic morphine administration. Ohnishi T, et al. **Eur J Pharmacol** 1988 Dec 6;158(1–2):173–5

Selective inhibition by nifedipine of the purinergic component of neurogenic vasoconstriction in the dog mesenteric artery. Omote S, et al. **Eur J Pharmacol** 1989 Jan 31;160(2):239–45

Influences of nifedipine on vascular conductance of portally drained viscera, liver and kidney. Van Berlo CL, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):17–21

The combined effect of nifedipine and sodium cromoglycate on the airway response to inhaled hypertonic saline in patients with bronchial asthma. Kivity S, et al. **Eur Respir J** 1989 Jun;2(6):513–6

Renal effects of nifedipine in healthy normotensive volunteers. Effects of dose, formulation, duration of treatment, and chlorothiazide coadministration. Adebayo GI, et al. **Fundam Clin Pharmacol** 1988;2(6):541–9

Regional differences in the vascular response of the canine esophagus to vasodilators. Prokopiw I, et al. **Gastroenterology** 1989 Jul;97(1):42–7

Analgesic action of clonixin, nifedipine and morphine using the formalin test. Bustamante D, et al. **Gen Pharmacol** 1989; 20(3):319–22

The effect of calcium free medium and nifedipine on the release of substance P-like immunoreactivity and contractions induced by capsaicin in the isolated guinea-pig and rat bladder. Maggi CA, et al. **Gen Pharmacol** 1989; 20(4):445–56

Effect of oxodipine and nifedipine on guinea-pig ileum. Martin M, et al. **Gen Pharmacol** 1988;19(6):771–4

Nifedipine: individual responses and concentration-effect relationships. Donnelly R, et al. **Hypertension** 1988 Oct; 12(4):443–9

Effects of acute administration of nifedipine on glomerular filtration rate and urinary excretion of sodium and uric acid in patients with mild-moderate essential hypertension. Roychowdhury D, et al. **Indian J Physiol Pharmacol** 1988 Oct-Dec;32(4):278–84

Effect of digoxin and vasodilators on left ventricular function in aortic regurgitation. Crawford MH, et al. **Int J Cardiol** 1989 Jun;23(3):385–93

Renal effects of calcium channel blockers in vivo. Mittal SR, et al. **Int J Cardiol** 1988 Oct;21(1):82–4

The effect of nifedipine alone or combined with low dose acetylsalicyclic acid on endotoxin-induced pulmonary hypertension in the piglet. Schranz D, et al. **Intensive Care Med** 1988;14(6):595–601

Nifedipine administered after reperfusion ablates systolic contractile dysfunction of postischemic "stunned" myocardium. Przyklenk K, et al. **J Am Coll Cardiol** 1989 Apr;13(5):1176–83

Acute drug interaction between indomethacin and nifedipine in hypertensive patients. Thatte UM, et al. **J Assoc Physicians India** 1988 Dec;36(12):695–8

Dihydropyridine-sensitive and insensitive Ca2+ channels in human platelets. Moriyama T, et al. **J Biochem (Tokyo)** 1988 Dec;104(6):875–7

Comparison of the effects of nifedipine and nitroglycerin on hemodynamic determinants of myocardial oxygen consumption and supply during exertional angina. Choong CY, et al. **J Cardiovasc Pharmacol** 1989 Mar;13(3):361–9

Dissociation of cardiodepression from cardioprotection with calcium antagonists: diltiazem protects ischemic rat myocardium with a lower functional cost as compared with verapamil or nifedipine. Grover GJ, et al. **J Cardiovasc Pharmacol** 1989 Aug;14(2):331–40

Facilitation of natriuresis with nifedipine in normal humans. Luft FC, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 6:S120–2

The effects of flosequinan and nifedipine on glucose tolerance in healthy volunteers. Lewis H, et al. **J Clin Pharm Ther** 1988 Aug;13(4):269–72

Hemodynamic and endocrine effects of acute and chronic administration of nifedipine. Parent R, et al. **J Clin Pharmacol** 1989 Jan;29(1):59–64

The influence of oestrogen and progesterone on the actions of two calcium entry blockers in the rat uterus. Downing SJ, et al. **J Endocrinol** 1988 Aug;118(2):251–8

Calcium channels that are required for secretion from intact nerve terminals of vertebrates are sensitive to omega-conotoxin and relatively insensitive to dihydropyridines. Optical studies with and without voltage-sensitive dyes. Obaid AL, et al. **J Gen Physiol** 1989 Apr;93(4):715–29

Effects of verapamil and nifedipine on systemic hemodynamics in spontaneously hypertensive rats. Lee JY, et al. **J Hypertens** 1988 Dec;6(12):1017–22

Contrasting effects of captopril and nifedipine in normotensive patients with incipient diabetic nephropathy. Mimran A, et al. **J Hypertens** 1988 Nov;6(11):919–23

The effect of nifedipine and captopril on platelet activation and prostanoid production in essential hypertension. Birkebaek NH, et al. **J Hypertens Suppl** 1988 Dec; 6(4):S378–80

Comparative effects of captopril and nifedipine on diastolic and systolic cardiac function in elderly hypertensive patients. Marmor A, et al. **J Hypertens Suppl** 1988 Nov;

6(1):S101–3
Biochemical and behavioral evidence for an interaction between ethanol and calcium channel antagonists. Engel JA, et al. **J Neural Transm** 1988;74(3):181–93
Verapamil and nifedipine effects on gastric acid secretion and ulcer formation in rats. Glavin GB.
J Pharm Pharmacol 1988 Jul;40(7):514–5
A comparison of the effects of oxodipine and nifedipine on rat vas deferens. Martin I, et al. **J Pharm Pharmacol** 1988 Sep;40(9):657–9
Contrasting effects of verapamil and nifedipine on pH of ischemic myocardium in the dog. Moo Y, et al.
J Pharmacol Exp Ther 1989 Feb;248(2):654–60
Calcium channel antagonists modulate the acrosome reaction but not capacitation in mouse spermatozoa. Fraser LR, et al. **J Reprod Fertil** 1989 May;86(1):223–33
Nifedipine inhibits cholecystokinin-induced gallbladder contraction. Clas D, et al. **J Surg Res** 1989 May; 46(5):479–83
A preliminary study on the effect of induced hypocalcaemia and nifedipine on uterine activity in the parturient cow. Al-Eknah MM, et al. **J Vet Pharmacol Ther** 1989 Jun; 12(2):237–9
Effects of calcium-entry modulators on the biphasic neurogenic contractions in the circular muscle of guinea pig vas deferens. Suzuki N, et al. **Jpn J Pharmacol** 1989 Jan;49(1):59–65
Morphological changes of human thyroid medullary carcinoma cell line treated with calcium channel antagonist nifedipine. Nakamura A, et al. **Kitasato Arch Exp Med** 1988 Dec;61(4):195–200
An experimental study on the additional myocardial protective effect of adenosine triphosphate and nifedipine in cardioplegic solution. Qiao JH, et al.
Kobe J Med Sci 1988 Dec;34(6):285–302
The inhibitory effects of nifedipine and fentanyl on circulatory response during laryngoscopy and intubation in patients pretreated with neosynephrine eye drops for mydriasis. Ho CT, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun; 26(2):153–60
Stereoisomers of BAY K 8644 show opposite activities in the normal and ischaemic rat heart. A comparison with nifedipine. van Amsterdam FT, et al.
Naunyn Schmiedebergs Arch Pharmacol 1989 Jun; 339(6):647–52
Regulation of voltage-dependent excitatory responses to alpha,beta-methylene ATP, ATP and non-adrenergic nerve stimulation by dihydropyridines in the guinea-pig vas deferens. MacKenzie I, et al. **Neuroscience** 1988 Oct; 27(1):317–32
Effects of calcium antagonists and beta-adrenergic receptor blocking agents on cardiovascular rhythmicity. Bellomo G, et al. **Panminerva Med** 1988 Oct–Dec;30(4):236–9
Acute hemodynamic effects of nifedipine in infants with bronchopulmonary dysplasia and pulmonary hypertension. Brownlee JR, et al. **Pediatr Res** 1988 Aug;24(2):186–90
Comparison of the effects of RP 49356, cromakalim and nifedipine on guinea-pig trachea in vitro. Brown TJ, et al. **Pflugers Arch** 1989;414 Suppl 1:S188–9
Modulation produced by nifedipine of the unitary Ba current of dispersed smooth muscle cells of the rabbit ileum. Inoue Y, et al. **Pflugers Arch** 1989 Sep;414(5):534–42
Effects of nifedipine on blood pressure and heart rate in conscious neurogenic hypertensive rats. Vasquez EC, et al. **Pharmacology** 1988;37(6):370–5
Increased vasodilator responsiveness to BRL 34915 in spontaneously hypertensive versus normotensive rats: contrast with nifedipine. Falotico R, et al.
Proc Soc Exp Biol Med 1989 Feb;190(2):179–85
Swimming-induced suppression of rat pineal melatonin is prevented by pretreatment with calcium channel blockers. Morton DJ, et al. **Proc Soc Exp Biol Med** 1989 Jan; 190(1):105–8
Inhibition of the oxygen-induced contraction of the isolated human umbilical artery by indomethacin, flurbiprofen, aspirin and drugs modifying Ca2+ disposition. MacLennan SJ, et al. **Prostaglandins** 1988 Nov;36(5):711–29
The effects of two calcium antagonists (nifedipine and verapamil) on renal function in sheep. Verschuer L, et al. **Q J Exp Physiol** 1988 Jul;73(4):533–8
Effects of verapamil and nifedipine on human uterine artery "in vitro". García de Boto MJ, et al.
Res Commun Chem Pathol Pharmacol 1988 Nov;62(2):361–4
Effects of a calcium antagonist (nifedipine) on cats in live E. coli bacteriemic shock. Bosson S, et al.
Res Exp Med (Berl) 1988;188(5):357–65
Effects of calcium antagonists on hypertension and diastolic function [published erratum appears in S Afr Med J 1989 Sep 2;76(5):232] Opie LH, et al. **S Afr Med J** 1989 Aug 5;76(3):89–92
Characterization of inhibition by nifedipine and nitroprusside of the pressor responses to alpha 1-adrenoceptor agonists cirazoline and Sgd 101/75 in pithed rats. Jung HO, et al. **Yonsei Med J** 1988;29(2):176–84
In vivo effects of nifedipine and BAY 1 8201 on ceruletide induced gallbladder contraction. Porschen R, et al.
Z Gastroenterol 1988 Dec;26(12):755–61
[Clinico-pharmacologic study on the liquid form of nifedipine in treating hypertensive crisis] Popiliev I, et al. **Vutr Boles** 1989;28(1):22–6 (Eng. Abstr.) **(Bul)**
[Value of nifedipine in respiratory failure related to obstructive chronic bronchitis during treatment over 6 months] Meurice JC, et al. **Ann Cardiol Angeiol (Paris)** 1989 Mar;38(3):171–7 (Eng. Abstr.) **(Fre)**
[Effects of nifedipine in patients with chronic obstructive bronchitis and pulmonary hypertension undergoing artificial respiration] Turetta F, et al.
Ann Fr Anesth Reanim 1989;8(3):267–72 (22 ref.) (Eng. Abstr.) **(Fre)**
[Comparative effects of dihydropyridine inhibitors of calcium penetration on spontaneous contraction of the isolated heart atria in the guinea pig] Prostran M, et al.
C R Soc Biol (Paris) 1988;182(6):556–62 (Eng. Abstr.) **(Fre)**
[Increase in urinary excretion of vanilmandelic acid and noradrenaline under nifedipine (letter)] Premel-Cabic A, et al. **Presse Med** 1988 Sep 10;17(30):1545 **(Fre)**
[Vasodilator effects of LF 2.0254, a new 1,4-dihydropyridine. Comparison with nifedipine] Pruneau D, et al. **Therapie** 1989 May-Jun;44(3):203–8 (Eng. Abstr.) **(Fre)**
[The behavior of intracranial pressure and intracranial compliance in nifedipine-induced hypotension] Anger C, et al. **Anasth Intensivther Notfallmed** 1988 Dec;23(6):303–8 (Eng. Abstr.) **(Ger)**
[Glucose tolerance and electrolyte metabolism in nifedipine and nifedipine dihydroergotoxin treated healthy subjects] Petersen KG, et al. **Arzneimittelforschung** 1989 May; 39(5):612–4 (Eng. Abstr.) **(Ger)**
[Negative inotropic action of famotidine] Kirch W, et al. **Schweiz Med Wochenschr** 1988 Dec 17;118(50):1912–4 (Eng. Abstr.) **(Ger)**
[Modification of left ventricular filling after acute administration of nifedipine in hypertensive patients. Doppler echocardiographic study] Manca C, et al.
Cardiologia 1989 Mar;34(3):237–45 (Eng. Abstr.) **(Ita)**
[Comparison of the effects of oxprenolol and nifedipine on blood pressure at rest and during physical exercise in essential hypertension] Gambini G, et al. **Clin Ter** 1988 Feb 15;124(3):203–10 (Eng. Abstr.) **(Ita)**
[Long-term treatment with nifedipine does not alter carbohydrate tolerance in normal subjects and does not worsen metabolic control in diabetics] Gasparoni P, et al. **Clin Ter** 1987 Jan 31;120(2):131–4 (Eng. Abstr.) **(Ita)**
[The effects of Ca2+-antagonist on visual field in low tension glaucoma] Shirai H, et al. **Nippon Ganka Gakkai Zasshi** 1988 May;92(5):792–7 (Eng. Abstr.) **(Jpn)**
[Quadratic analysis of left ventricular ejection phase volume using a M-mode echocardiogram, and the effects of beta-methyldigoxin, nifedipine, physical exercise and propranolol on new parameters] Suzuki K.
Nippon Ika Daigaku Zasshi 1988 Dec;55(6):527–38 (Eng. Abstr.) **(Jpn)**
[Association of intracellular free calcium concentration in lymphocytes with acute hypotensive response to nifedipine in patients with essential hypertension] Shingu T, et al. **Nippon Naika Gakkai Zasshi** 1989 May;78(5):635–40 **(Jpn)**
[Comparative studies of the effect of Cordafen on coronary circulation in dogs] Filczewski M, et al.
Acta Pol Pharm 1988;45(6):559–63 (Eng. Abstr.) **(Pol)**
[Differences in the effects of corinfar and nitroglycerin on coronary blood flow and myocardial function] Kostko SZ.
Kardiologiia 1988 Oct;28(10):85–8 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Asthma and nifedipine. Comparison of nifedipine, ketotifen and placebo in the prophylaxis of childhood extrinsic asthma. Montoya F. **Allergol Immunopathol (Madr)** 1988 Jul-Aug;16(4):253–8
Randomized double-blind comparison of metoprolol, nifedipine, and their combination in chronic stable angina: effects on total ischemic activity and heart rate at onset of ischemia. Egstrup K. **Am Heart J** 1988 Oct;116(4):971–8
Different coronary vasomotor effects of nifedipine and therapeutic correlates in angina with spontaneous and effort components versus Prinzmetal angina. Loaldi A, et al.
Am Heart J 1989 Feb;117(2):315–22
The efficacy of the addition of nifedipine in patients with mixed angina compared to patients with classic exertional angina: a multicenter, randomized, double-blind, placebo-controlled clinical trial. Stone PH, et al.
Am Heart J 1988 Oct;116(4):961–71
The Nifedipine-Total Ischemia Awareness Program: a national survey of painful and painless myocardial ischemia including results of antiischemic therapy. Cohn PF, et al. **Am J Cardiol** 1989 Mar 1;63(9):534–9
Comparison of nifedipine, propranolol and isosorbide dinitrate on angiographic progression and regression of coronary arterial narrowings in angina pectoris. Loaldi A, et al. **Am J Cardiol** 1989 Sep 1;64(8):433–9
Nifedipine and systemic hypertension. MacGregor GA.
Am J Cardiol 1989 Sep 19;64(11):46F–50F (21 ref.)
Myocardial properties of the new dihydropyridine calcium antagonist isradipine compared to nifedipine with or without additional beta blockade in coronary artery disease. Mauser M, et al. **Am J Cardiol** 1989 Jan 1;63(1):40–4
Comparison of combination nifedipine-propranolol and diltiazem-propranolol with high dose diltiazem monotherapy for stable angina pectoris. Morse JR.
Am J Cardiol 1988 Nov 15;62(16):1028–32
Comparative study of the effect of nifedipine versus diltiazem on exercise performance, serum propranolol levels, and ST-segment abnormalities in patients with chronic stable angina taking propranolol. Robinson K, et al.
Am J Cardiol 1989 Sep 19;64(11):27F–30F
Comparison of atenolol and nifedipine in chronic stable angina pectoris. Shapiro W, et al. **Am J Cardiol** 1989 Jul 15;64(3):186–90
Comparison of antianginal efficacies and exercise hemodynamic effects of nifedipine and diltiazem in stable angina pectoris. Wallace WA, et al. **Am J Cardiol** 1989 Feb 15;63(7):414–8
Nifedipine, but not propranolol, improves left ventricular systolic and diastolic function in patients with hypertension. Zusman RM, et al. **Am J Cardiol** 1989 Sep 19; 64(11):51F–61F
Cardiac and hemodynamic adjustments to rapid and sustained blood pressure reduction. Phillips RA, et al.
Am J Hypertens 1989 Jun;2(6 Pt 2):196S–199S
Short-term and long-term renal response to nifedipine monotherapy. Reams GP, et al. **Am J Hypertens** 1989 Mar; 2(3 Pt 1):188–90
Chronic fatigue syndrome: possible effective treatment with nifedipine. Adolphe AB. **Am J Med** 1988 Dec;85(6):892
Superior efficacy of propranolol versus nifedipine in double-component angina, as related to different influences on coronary vasomotility. DeCesare N, et al.
Am J Med 1989 Jul;87(1):15–21
Prophylaxis of 5-fluorouracil-induced coronary vasospasm with calcium channel blockers. Oleksowicz L, et al.
Am J Med 1988 Nov;85(5):750–1
Different vasomotor action of nifedipine on dynamic coronary obstructions and therapeutic response in effort and prinzmetal angina. Polese A, et al. **Am J Med Sci** 1989 Feb;297(2):73–9
Cardiovascular and metabolic effects associated with nifedipine and ritodrine tocolysis. Ferguson JE 2d, et al.
Am J Obstet Gynecol 1989 Sep;161(3):788–95
Calcium channel blockers for tardive dyskinesia in geriatric psychiatric patients. Kushnir SL, et al. **Am J Psychiatry** 1989 Sep;146(9):1218–9
Nifedipine reduces pulmonary pressure and vascular tone during short- but not long-term treatment of pulmonary hypertension in patients with chronic obstructive pulmonary disease. Agostoni P, et al.
Am Rev Respir Dis 1989 Jan;139(1):120–5
Attenuation of electroconvulsive therapy induced hypertension with sublingual nifedipine. Wells DG, et al.
Anaesth Intensive Care 1989 Feb;17(1):31–3
Nifedipine and surgical removal of phaeochromocytoma. Chari P, et al. **Anaesthesia** 1988 Sep;43(9):791–4
Microvascular evaluation of the effects of nifedipine in vascular patients by laser-Doppler flowmetry. Belcaro G, et al. **Angiology** 1989 Aug;40(8):689–94
Vibrotactile sensation and response to nifedipine dose titration in primary Raynaud's phenomenon. Challenor VF, et al. **Angiology** 1989 Feb;40(2):122–8
Controlled comparison of ketanserin and nifedipine in Raynaud's phenomenon. Codella O, et al. **Angiology** 1989 Feb;40(2):114–21
Effect of nifedipine on the sick sinus syndrome. Kouvaras G, et al. **Angiology** 1989 May;40(5):450–7
Nifedipine for the relief of renal colic: a double-blind, placebo-controlled clinical trial. Caravati EM, et al.
Ann Emerg Med 1989 Apr;18(4):352–4
Central effects of drugs used in migraine prophylaxis evaluated by visual evoked potentials. Diener HC, et al.
Ann Neurol 1989 Feb;25(2):125–30
Antihypertensive activity of a new calcium channel blocker LF 2.0254, in spontaneously hypertensive rats: a comparison with nifedipine and nicardipine. Pruneau D, et al. **Arch Int Pharmacodyn Ther** 1988 Sep-Oct;295:109–24
Negative trial of nifedipine in depression [letter] Kramer MS, et al. **Biol Psychiatry** 1988 Dec;24(8):958–9
Comparison of intravenous infusions of iloprost and oral nifedipine in treatment of Raynaud's phenomenon in patients with systemic sclerosis: a double blind randomised study. Rademaker M, et al. **BMJ** 1989 Mar 4; 298(6673):561–4
Cold intolerance in patients with angina pectoris: effect of nifedipine and propranolol. Peart I, et al. **Br Heart J** 1989 Jun;61(6):521–8
A double-blind randomized cross-over study of the efficacy and tolerability of nifedipine and nitrendipine in the treatment of mild to moderate hypertension. Heagerty AM, et al. **Br J Clin Pharmacol** 1989 Apr;27(4):411–6
Nifedipine: a calcium channel blocking drug. George CF.
Br J Clin Pract 1987 Dec;41(12):1059–61
Clinical trials of verapamil: comparative studies of verapamil with beta-blockers and nifedipine. Jackson SH.
Br J Clin Pract Symp Suppl 1988 Apr;60:45–7 (10 ref.)
Diuretics and calcium antagonists in hypertension. MacGregor GA, et al. **Br J Clin Pract Symp Suppl** 1988 Apr;60:58–9
The treatment of chilblains with nifedipine: the results of a pilot study, a double-blind placebo-controlled randomized study and a long-term open trial. Rustin MH, et al. **Br J Dermatol** 1989 Feb;120(2):267–75
The effect of nifedipine on bronchial reactivity to inhaled histamine and methacholine: a comparative study in normal and asthmatic subjects. Henderson AF, et al.
Br J Dis Chest 1988 Oct;82(4):374–81
Calcium antagonist prevents nephrotoxicity.
Br J Hosp Med 1988 Jul;40(1):78
The effect of sublingual nifedipine on uteroplacental blood flow in hypertensive pregnancy. Lindow SW, et al.

Br J Obstet Gynaecol 1988 Dec;95(12):1276–81

The mechanism of action of calcium antagonists on arrhythmias in early myocardial ischaemia: studies with nifedipine and DHM9. Curtis MJ, et al. **Br J Pharmacol** 1988 Aug;94(4):1275–86

Nifedipine versus propranolol treatment for unstable angina in the elderly. Myers MG, et al. **Can J Cardiol** 1988 Nov–Dec;4(8):402–6

Bepridil versus nifedipine for ventricular tachycardia induced in the late postinfarction phase in conscious dogs. Brachmann J, et al. **Cardiology** 1989;76(3):211–21

Vasodilators and primary pulmonary hypertension. Variability of long-term response. Dantzker DR, et al. **Chest** 1989 Jun;95(6):1185–9

Prolonged survival in pulmonary veno-occlusive disease treated with nifedipine. Salzman GA, et al. **Chest** 1989 May; 95(5):1154–6

Acute hemodynamic effect and mechanism of nifedipine on severe congestive heart failure. Feng QP, et al. **Chin Med J [Engl]** 1988 May;101(5):315–9

Experimental coronary artery spasm–induced thrombosis and myocardial infarction prevented by intravenous nifedipine. A study of hemodynamics, electrocardiograms, biochemistry and pathology. Jiang YQ, et al. **Chin Med J [Engl]** 1988 Oct;101(10):761–7

Left ventricular diastolic filling characteristics and nifedipine effects on chronic aortic regurgitation. Shen WF, et al. **Chin Med J [Engl]** 1988 Jan;101(1):67–9

Suppression of picrotoxin-induced cardiac arrhythmias by nifedipine in cats. Liu RH, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Oct;40(4):393–6

Effects of nifedipine therapy on pulmonary Raynaud's in primary Sjögren's syndrome. Joseph BZ, et al. **Clin Exp Rheumatol** 1988 Oct–Dec;6(4):409–10

Effects of nifedipine on cisplatinum-induced nephrotoxicity in rats. Deray G, et al. **Clin Nephrol** 1988 Sep;30(3):146–50

The calcium antagonist nifedipine in recurrent neuroleptic malignant syndrome. Hermesh H, et al. **Clin Neuropharmacol** 1988 Dec;11(6):552–5

Nifedipine treatment of Raynaud's phenomenon secondary to chemotherapy [letter] Anderaen LB, et al. **Dermatologica** 1988;177(1):19–20

Comparative effect of captopril and nifedipine in normotensive patients with incipient diabetic nephropathy. Mimran A, et al. **Diabetes Care** 1988 Nov–Dec;11(10):850–3

A comparison of sublingual nifedipine versus nitroglycerin in the treatment of acute angina pectoris. Mooss AN, et al. **DICP** 1989 Jul–Aug;23(7–8):562–4

Comparative effects of pinacidil and nifedipine in the treatment of arterial hypertension. Jürgensen HJ. **Drugs** 1988;36 Suppl 7:67–9

Effects of long term treatment with pinacidil and nifedipine on left ventricular anatomy and function in patients with mild to moderate systemic hypertension. Steensgaard-Hansen F, et al. **Drugs** 1988;36 Suppl 7:70–6

Anti-ischaemic and anti-anginal activity of atenolol, nifedipine and their combination in stable, chronic effort angina. Lai C, et al. **Drugs Exp Clin Res** 1988; 14(11):699–705

Labetalol in the treatment of stable exertional angina pectoris: a comparison with nifedipine. Crake T, et al. **Eur Heart J** 1988 Nov;9(11):1200–5

Coronary vasomotor and therapeutic influences of propranolol and nifedipine on the spontaneous component of mixed angina. Polese A, et al. **Eur Heart J** 1988 Dec; 9 Suppl N:15–20

The efficacy and tolerability of atenolol, nifedipine, and their combination in the management of hypertension. Stanley NN, et al. **Eur J Clin Pharmacol** 1988;34(6):543–8

Insulin secretion and glucose tolerance in non-insulin dependent diabetic patients after chronic nifedipine treatment. Tentorio A, et al. **Eur J Clin Pharmacol** 1989; 36(3):311–3

Nifedipine in patients with peripheral vascular disease. Lewis P, et al. **Eur J Vasc Surg** 1989 Apr;3(2):159–64

Digital and radial artery blood flow in patients with Raynaud's phenomenon in response to nifedipine. Morgan RH, et al. **Eur J Vasc Surg** 1987 Dec;1(6):403–8

Long-term treatment of chronic obstructive lung disease by Nifedipine: an 18-month haemodynamic study. Saadjian AY, et al. **Eur Respir J** 1988 Aug;1(8):716–20

The use of calcium channel blockade for the prevention of postoperative adhesion formation. Steinleitner A, et al. **Fertil Steril** 1988 Nov;50(5):818–21

Nifedipine versus propranolol for the initial prophylaxis of migraine. Albers GW, et al. **Headache** 1989 Apr;29(4):215–8

Clinical trial of nifedipine in angina pectoris. Somani PN, et al. **Indian Heart J** 1988 Jan–Feb;40(1):8–11

Clinical application of quantitative coronary angiography using the CAAS system: preliminary results of the INTACT study (International Nifedipine Trial on Antiatherosclerotic Therapy). Jost S, et al. **Int J Card Imaging** 1988;3(2–3):75–86

Coronary vasomotor and clinical effects of nifedipine in effort, mixed and Prinzmental angina. Polese A, et al. **Int J Card Imaging** 1988;3(2–3):99–109

A randomised double-blind crossover study of isosorbide mononitrate and nifedipine retard in chronic stable angina. Akhras F, et al. **Int J Cardiol** 1989 Aug;24(2):191–6

Comparison of the anti-anginal efficacy of nicardipine and nifedipine in patients receiving atenolol: a randomized, double-blind, crossover study. Douard H, et al. **Int J Cardiol** 1989 Mar;22(3):357–63

Nicardipine versus nifedipine: multicentre controlled trial in essential hypertension. Rumboldt Z, et al. **Int J Clin Pharmacol Res** 1988;8(6):393–400

Treatment of hypertensive emergencies with nifedipine. Karachalios GN, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Jul;26(7):351–5

Therapy of chronic idiopathic urticaria with nifedipine: demonstration of beneficial effect in a double-blinded, placebo-controlled, crossover trial. Bressler RB, et al. **J Allergy Clin Immunol** 1989 Apr;83(4):756–63

A randomized double-blind comparison of diltiazem and nifedipine in stable angina. Klinke WP, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1562–7

Safe use of clonidine, nifedipine and vitamin K in hepatic porphyria [letter] Bhadoria DP, et al. **J Assoc Physicians India** 1988 Nov;36(11):675–6

Treatment of hypertensive urgencies and emergencies with nitrendipine, nifedipine, and clonidine: effect on blood pressure and heart rate. Späh F, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S154–6

Early treatment of unstable angina with nifedipine and metoprolol—the HINT trial. Tijssen JG, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 1:S71–7

Nifedipine–haloperidol combination in the treatment of Gilles de la Tourette's syndrome: a case study. Alessi NE, et al. **J Clin Psychiatry** 1989 Mar;50(3):103–4

Use of nifedipine in hypertensive emergencies [letter] Wright SW. **J Emerg Med** 1988 Nov–Dec;6(6):548–50

A comparison of felodipine and nifedipine as monotherapies for the treatment of mild to moderate hypertension. Abelardo NS, et al. **J Hum Hypertens** 1989 Feb;3(1):57–9

The effects of verapamil, diltiazem, nifedipine and propranolol on metabolic control in hypertensives with non-insulin dependent diabetes mellitus. Chellingsworth MC, et al. **J Hum Hypertens** 1989 Feb;3(1):35–9

A comparison of long acting nifedipine and enalapril in elderly hypertensives: a randomised, single-blind, cross-over study. Gilchrist NL, et al. **J Hum Hypertens** 1988 Jun;2(1):33–9

Lisinopril in essential hypertension: a six month comparative study with nifedipine. Richardson PJ, et al. **J Hum Hypertens** 1987 Dec;1(3):175–9

Effect of long-term nifedipine treatment on body fluid composition in essential hypertension. Toftdahl DB, et al. **J Hum Hypertens** 1989 Jun;3(3):203–6

Lisinopril versus slow-release nifedipine in the treatment of mild to moderate hypertension: a multicentre study. The Cooperative Study Group. Witchitz S, et al. **J Hum Hypertens** 1989 Jun;3 Suppl 1:29–33

Modulation by chronic nifedipine of plasma atrial natriuretic peptide, cell Na+ transport and plasma volume in rats with renal hypertension. Knorr AM, et al. **J Hypertens** 1988 Oct;6(10):839–44

Sympathetic (alpha-beta) or calcium channel blockade for hypertensive myocardial infarction? A haemodynamic comparison of labetalol and nifedipine. Verma SP, et al. **J Hypertens** 1988 Nov;6(11):897–904

Hypertensive emergencies in old age: effects of angiotensin converting enzyme inhibition. Marigliano V, et al. **J Hypertens Suppl** 1988 Nov;6(1):S91–3

Effect of nifedipine in chronic obstructive airways disease. Alkrishna B, et al. **J Indian Med Assoc** 1988 Nov; 86(11):295–7

A multicentre open comparison of isosorbide-5-mononitrate and nifedipine given prophylactically to general practice patients with chronic stable angina pectoris. Ankier SI, et al. **J Int Med Res** 1989 Mar–Apr;17(2):172–8

Safety and efficacy of nifedipine 20 mg tablets in hypertension using electronic data collection in general practice. Marley JE. **J R Soc Med** 1989 May;82(5):272–5

Raynaud's phenomenon and nifedipine [letter] Kraus A. **J Rheumatol** 1989 Jul;16(7):1013

Reperfusion-induced arrhythmias in the conscious rat: a comparative study with three calcium antagonists. Kinoshita K, et al. **J Surg Res** 1989 Aug;47(2):166–72

Effect of nifedipine on left ventricular function during exercise in patients with stable effort angina. Relation of its efficacy to the severity of coronary artery disease. Ajisaka R, et al. **Jpn Heart J** 1989 Jan;30(1):13–25

A case of atrial septal defect combined with hypertension and left ventricular hypertrophy. Left ventricular failure induced by balloon occlusion and the effect of nifedipine. Matsubara T, et al. **Jpn Heart J** 1989 Jan;30(1):103–7

Pathogenesis of hypertension in hemodialysis patients: a pharmacological study. Zuccalà A, et al. **Kidney Int Suppl** 1988 Sep;25:S190–1

Nifedipine and impaired oxygenation in patients with chronic bronchitis and cor pulmonale [letter] Kalra L, et al. **Lancet** 1989 May 20;1(8647):1135–6

Nifedipine in the treatment of Raynaud's disease in childhood [letter] Kaya IS, et al. **Lancet** 1989 May 20;1(8647):1136

Contrasting effects of acute angiotensin converting enzyme inhibitors and calcium antagonists in transplant renal artery stenosis. Mourad G, et al. **Nephrol Dial Transplant** 1989; 4(1):66–70

Nifedipine and amphotericin B nephrotoxicity in the rat. Soupart A, et al. **Nephron** 1989;52(3):278–80

Nifedipine in the prophylaxis of classic migraine: a crossover, double-masked, placebo-controlled study of headache frequency and side effects. McArthur JC, et al. **Neurology** 1989 Feb;39(2 Pt 1):284–6

Acute effects of oxygen, nifedipine, and diltiazem in patients with cystic fibrosis and mild pulmonary hypertension. Davidson A, et al. **Pediatr Pulmonol** 1989;6(1):53–9

Comparative effect of captopril and nifedipine in normotensive patients with incipient diabetic nephropathy. Insua A, et al. **Postgrad Med J** 1988;64 Suppl 3:59–62; discussion 90–2

Effect of nifedipine and mefruside on renal reserve in hypertensive patients. Notghi A, et al. **Postgrad Med J** 1988 Nov;64(757):856–9

Therapy of acute respiratory distress syndrome with nifedipine. Hoffmann P, et al. **Prog Clin Biol Res** 1989; 308:1087–90

One-year clinical study on nifedipine in the treatment of pulmonary hypertension in chronic obstructive lung disease. Vestri R, et al. **Respiration** 1988;54(2):139–44

Preservation of myocardial ultrastructural integrity following ischemic arrest. Clinical use of nifedipine cardioplegia. Preliminary report. Donegani E, et al. **Riv Eur Sci Med Farmacol** 1987 Dec;9(4):363–7

Nifedipine in acute hypertensive emergencies in pregnancy. Seabe SJ, et al. **S Afr Med J** 1989 Sep 16;76(6):248–50

Calcium antagonist treatment of recipients minimizes early cyclosporine nephrotoxicity in renal transplantation: a prospective randomized trial. Morales JM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1537–9

Cyclosporine-associated hypertension in cardiopulmonary transplantation. The beneficial effect of nifedipine on renal function. Kirk AJ, et al. **Transplantation** 1989 Sep; 48(3):428–30

[Co-operative effect of tranilast and nifedipine on inhibition of the release of SRS-A from the guinea-pig lung] Chen DQ. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Apr; 11(2):96–7, 128 (Eng. Abstr.) **(Chi)**

[Therapeutic effect of nifedipine on the rabbit after injection of oleic acid] Zhao MW. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Feb; 11(1):4–7, 61 (Eng. Abstr.) **(Chi)**

[The relation of hypotensive effects of nifedipine and clonidine and changes in platelet-free calcium and serum-free calcium in essential hypertension] Chen S, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Oct; 16(5):258–60, 316 (Eng. Abstr.) **(Chi)**

[A comparison of the effects of nifedipine and nifedipine retard on blood pressure reduction before and after treadmill exercise] Tsai CH, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;42(3):185–90 (Eng. Abstr.) **(Chi)**

[Nifedipine in primary pulmonary hypertension while waiting for heart–lung transplantation] Petersen TI, et al. **Ugeskr Laeger** 1989 Aug 14;151(33):2087–8 (Eng. Abstr.) **(Dan)**

[Long-term treatment of pulmonary hypertension in chronic obstructive bronchopneumopathies with nifedipine. Hemodynamic study over 18 months] Saadjian A, et al. **Ann Cardiol Angeiol (Paris)** 1989 Apr;38(4):197–202 (Eng. Abstr.) **(Fre)**

[A combination of nifedipine and diltiazem in the treatment of refractory spastic angina] Bory M, et al. **Arch Mal Coeur** 1989 Apr;82(4):581–4 (Eng. Abstr.) **(Fre)**

[Comparative clinical studies of myocardial blood flow in coronary heart disease with two nifedipine preparations] Eichstädt H, et al. **Arzneimittelforschung** 1988 Dec; 38(12):1824–9 (Eng. Abstr.) **(Ger)**

[Beta receptor block versus calcium antagonism. A comparative study of bopindolol and nifedipine with special regard to quality of life] Welzel D, et al. **Arzneimittelforschung** 1989 Apr;39(4):499–503 (Eng. Abstr.) **(Ger)**

[Antihypertensive effect and tolerance to urapidil. Comparison with nifedipine in a multicenter double-blind study] Stumpe KO, et al. **Fortschr Med** 1989 Jan 15; 107(1):54–7 (Eng. Abstr.) **(Ger)**

[Noninvasive methods for assessing the effect of nifedipine on cardiorespiratory function in a patient with cystic fibrosis] Hussein A, et al. **Prax Klin Pneumol** 1988 Aug; 42(8):672–4 (Eng. Abstr.) **(Ger)**

[Betaxolol versus nifedipine in the treatment of essential hypertension] Steiner A, et al. **Schweiz Rundsch Med Prax** 1988 Oct 11;77(41):1101–3 (Eng. Abstr.) **(Ger)**

[Lipid metabolism and peripheral hemodynamics in arteriosclerosis obliterans treated with nifedipine—a comparison with pentoxifylline] Beykirch H, et al. **Z Gesamte Inn Med** 1989 Feb 1;44(3):77–9 (Eng. Abstr.) **(Ger)**

[Nifedipine therapy in uncomplicated essential hypertension and hypertensive problem cases] Dück KD, et al. **Z Gesamte Inn Med** 1988 Dec 1;43(23):685–8 (Eng. Abstr.) **(Ger)**

[Modification of pulmonary hypertension in patients with chronic obstructive lung diseases using calcium antagonists in an acute trial] Schauer J, et al. **Z Gesamte Inn Med** 1989 Jan 15;44(2):50–4 (Eng. Abstr.) **(Ger)**

[Computer-assisted geometric measuring technic in coronary angiography interval studies: results of initial angiograms of the International Nifedipine Trial of Anti-atherosclerotic Therapy (INTACT) study] Jost S, et al. **Z Kardiol** 1989 Jan;78(1):23–32 (Eng. Abstr.) **(Ger)**

[Isradipine (PN 200-110), a new dihydropyridine calcium antagonist with slight negative inotropic properties in

comparison with nifedipine] Mauser M, et al. **Z Kardiol** 1988 Jun;77(6):373–7 (Eng. Abstr.) **(Ger)**

[Nifedipine in secondary prevention after myocardial infarction. SPRINT Study Group] **Harefuah** 1989 Jan 1; 116(1):1–6 (Eng. Abstr.) **(Heb)**

[Protective effects of nifedipine, DSCG and salbutamol in bronchospasm induced by ultrasonic mist] Mazzarella G, et al. **Arch Monaldi Mal Torace** 1987 Mar–Apr;42(2):183–90 (Eng. Abstr.) **(Ita)**

[Hypoxic pulmonary hypertension: nifedipine therapy] Agostoni P, et al. **Cardiologia** 1988 Oct;33(10):961–9 (Eng. Abstr.) **(Ita)**

[Relation between the therapeutic efficacy of nifedipine in exercise-induced, mixed and spontaneous angina and acute coronary vasomotor effects evaluated by quantitative angiography] Polese A, et al. **Cardiologia** 1988 May; 33(5):515–24 (Eng. Abstr.) **(Ita)**

[Capillaroscopic evaluation of the effects of nifedipine in patients with Raynaud's phenomenon] Riccio A, et al. **Clin Ter** 1988 May 15;125(3):185–90 (Eng. Abstr.) **(Ita)**

[Angina pectoris caused by dynamic coronary obstruction and beta-blockers] Pinelli G, et al. **Minerva Cardioangiol** 1989 May;37(5):229–32 (Eng. Abstr.) **(Ita)**

[Essential arterial hypertension: therapeutic experience with "nifedipine A. R."] Sandullo A, et al. **Riv Eur Sci Med Farmacol** 1987 Dec;9(4):459–63 (Eng. Abstr.) **(Ita)**

[Left ventricular systolic and diastolic functions in hypertrophic cardiomyopathy: with special reference to clinical symptom and the effects of calcium blocking agent (nifedipine)] Yamakado T, et al. **J Cardiol** 1987;17 Suppl 16:53–63 (Eng. Abstr.) **(Jpn)**

[A case report of reflex sympathetic dystrophy treated with nifedipine] Ohta S, et al. **Masui** 1989 May;38(5):679–83 (Eng. Abstr.) **(Jpn)**

[The effects of nifedipine on blood pressure and renal function] Igarashi N. **Nippon Jinzo Gakkai Shi** 1989 Apr; 31(4):367–77 (Eng. Abstr.) **(Jpn)**

[Effects of nifedipine on pulmonary hypertension in patients with chronic respiratory failure—a comparison with oxygen administration at rest and during exercise] Araki Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Aug; 26(8):805–11 (Eng. Abstr.) **(Jpn)**

[Effect of low flow oxygen and nifedipine on ventilation and hemodynamics in chronic lung diseases] Mutoh T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 May; 26(5):524–30 (Eng. Abstr.) **(Jpn)**

[Effect of various beta-adrenolytic drugs and calcium channel blockers (nifedipine) on serum levels of T3 and T4 in patients with hyperthyroidism and simple goiter] Gasińska T, et al. **Endokrynol Pol** 1988;39(3):119–27 (Eng. Abstr.) **(Pol)**

[Calcium channel blockers and their value in the treatment of bronchial asthma] Wąsek Z. **Pneumonol Pol** 1988 Oct; 56(10):467–71 **(Pol)**

[Treatment of idiopathic arterial hypertension with delayed-action nifedipine] Liszewska-Pfejfer D, et al. **Pol Tyg Lek** 1988 Jul 4;43(27):872–5 (Eng. Abstr.) **(Pol)**

[Calcium antagonists in hypertrophic cardiomyopathy] Nartowicz E, et al. **Pol Tyg Lek** 1988 Oct 31;43(44):1395–8 **(Pol)**

[Comparative studies of the effects of nifedipine, verapamil and diltiazem on respiratory mechanics in patients with atopic and non-atopic asthma] Wąsek Z, et al. **Pol Tyg Lek** 1988 Oct 17–24;43(42–43):1358–60 (Eng. Abstr.) **(Pol)**

[Treatment of multiple leiomyomata with nifedipine] Grudzińska-Staniewska D, et al. **Przegl Dermatol** 1988 May–Jun;75(3):186–9 (Eng. Abstr.) **(Pol)**

[Nifedipine as a coadjuvant drug in the treatment of uncontrolled epilepsy: a preliminary report] Rotta NT, et al. **Arq Neuropsiquiatr** 1989 Mar;47(1):118–9 (Eng. Abstr.) **(Por)**

[Mechanisms of the anti-anginal effect of korinfar] Voronkov LG, et al. **Farmakol Toksikol** 1988 Sep–Oct;51(5):38–41 (Eng. Abstr.) **(Rus)**

[Treatment of vibration-induced disease with corinfar] Sukharevskaia TM, et al. **Gig Tr Prof Zabol** 1989;(4):37–9 (Eng. Abstr.) **(Rus)**

[Effect of nifedipine (corinfar) on pulmonary ventilation at the peak of the action of propranolol in patients with ischemic heart disease associated with chronic obstructive bronchitis] Denisova OS, et al. **Kardiologiia** 1988 Sep; 28(9):90–2 **(Rus)**

[Calcium antagonists in the treatment of stenocardia] Furkalo NK, et al. **Kardiologiia** 1988 Oct;28(10):5–9 **(Rus)**

[Use of a static exercise test for evaluating anti-angina effects of drugs in patients with ischemic heart disease at a polyclinic] Gel'fgat EB, et al. **Kardiologiia** 1988 Oct; 28(10):47–51 (Eng. Abstr.) **(Rus)**

[Comparative evaluation of the anti-anginal effects of dilzem and corinfar in patients with ischemic heart disease and exertion-induced stenocardia] Guliev AB, et al. **Kardiologiia** 1989 Apr;29(4):54–8 (Eng. Abstr.) **(Rus)**

[Effect of nifedipine (corinfar) on cerebrovascular circulation in patients with exertion-induced stenocardia] Karpov RS, et al. **Kardiologiia** 1989 Mar;29(3):17–21 (Eng. Abstr.) **(Rus)**

[Methodological approaches to the evaluation of the effectiveness of anti-anginal preparations in patients with stenocardia by 24-hour ECG monitoring] Metelitsa VI, et al. **Kardiologiia** 1988 Dec;28(12):61–5 (Eng. Abstr.) **(Rus)**

[Evaluation of the effectiveness of corinfar in patients with ischemic heart disease using a method of repeated transesophageal electric stimulation of the left atrium] Mironova IIu, et al. **Kardiologiia** 1989 Mar;29(3):34–7 (Eng. Abstr.) **(Rus)**

[Relation between hemodynamic reactions to corinfar and the status of peripheral circulation in middle-aged and elderly patients with ischemic heart disease and chronic heart failure] Sukhorukova ES, et al. **Kardiologiia** 1988 Jul; 28(7):81–3 **(Rus)**

[Hemodynamic effect of foridon and nifedipine at rest and during exercise] Zateishchikov DA, et al. **Kardiologiia** 1988 Oct;28(10):40–4 (Eng. Abstr.) **(Rus)**

[Effect of the calcium antagonist nifangin on hemodynamics in patients with congestive heart failure] Zharov EI, et al. **Kardiologiia** 1989 May;29(5):23–7 (Eng. Abstr.) **(Rus)**

[Nifedipine treatment of pulmonary hypertension as a complication of chronic obstructive diseases of the lungs] Paleev NR, et al. **Klin Med (Mosk)** 1989 Jun;67(6):117–20 **(Rus)**

[Use of calcium antagonists under outpatient polyclinic conditions in patients with chronic obstructive bronchitis complicated by cor pulmonale] Butorov IV, et al. **Probl Tuberk** 1988;(8):35–7 (Eng. Abstr.) **(Rus)**

[Treatment of pulmonary heart failure with calcium antagonists] Butorov IV, et al. **Sov Med** 1988;(8):56–8 **(Rus)**

[Corinfar in ischemic heart disease associated with chronic obstructive bronchitis] Lazebnik LV, et al. **Sov Med** 1989; (2):51–4 **(Rus)**

[Use of peripheral vasodilator agents with various mechanisms of action in patients with dilated cardiomyopathy] Grigor'iants RA, et al. **Ter Arkh** 1988; 60(8):51–5 **(Rus)**

[Effect of nifedipine on renal activity] Merzon AK, et al. **Ter Arkh** 1988;60(6):74–9 (Eng. Abstr.) **(Rus)**

[Renal hemodynamics in hypertensive nephritis: the effect of nifedipine] Rogov VA, et al. **Ter Arkh** 1988;60(6):67–70 **(Rus)**

[Use of nifedipine in the broncho-obstructive syndrome] Kolomiets VV, et al. **Vrach Delo** 1988 Nov;(11):72–3 (Eng. Abstr.) **(Rus)**

[Heart-filling pressure in patients with hypertension treated by nifedipine] Konoshevich SN, et al. **Vrach Delo** 1988 Dec;(12):20–1 (Eng. Abstr.) **(Rus)**

[Changes in cerebral circulation under the influence of korinfar in hypertension patients] Shchepotin BM, et al. **Vrach Delo** 1989 Mar;(3):29–32 (Eng. Abstr.) **(Rus)**

[Acute natriuretic effect of nifedipine in elderly people with essential hypertension] Schnapp P, et al. **Bratisl Lek Listy** 1989 Jun;90(6):454–7 (Eng. Abstr.) **(Slo)**

[Esophageal motility dysfunction and radioisotopes. Its modification with a calcium channel blocker] Baz RA, et al. **Acta Gastroenterol Latinoam** 1988;18(1):29–37 (Eng. Abstr.) **(Spa)**

[10 years' experience in the use of vasodilator agents in the treatment of primary pulmonary arterial hypertension (P-PAH) (1977–1987)] Beltrán Gámez ME, et al. **Arch Inst Cardiol Mex** 1988 Jul–Aug;58(4):281–91 (Eng. Abstr.) **(Spa)**

[Open study to evaluate the efficacy and tolerance of prolonged-action nifedipine in the treatment of mild to moderate essential arterial hypertension] **Med Clin (Barc)** 1988 Oct 22;91(13):493–5 (Eng. Abstr.) **(Spa)**

[Clinical and ergometric evaluation of diltiazem in the treatment of angina pectoris] Lage Bouzamayor B, et al. **Med Clin (Barc)** 1988 Nov 26;91(18):685–9 (Eng. Abstr.) **(Spa)**

NIFLUMIC ACID see under **NICOTINIC ACIDS**

NIFURATEL see under **NITROFURANS**

NIFURAZOLIDONE see **FURAZOLIDONE**

NIFUROXIME see under **NITROFURANS**

NIFURTIMOX see under **NITROFURANS**

NIGERICIN see under **ANTIBIOTICS**

NIGHT BLINDNESS see **NYCTALOPIA**

NIGHT CARE

Night visits and the disturbance factor [editorial] Kerrigan P. **Practitioner** 1988 Oct 8;232(1456 (Pt 1)):1059

PSYCHOLOGY

Adverse changes in mood and cognitive performance of house officers after night duty. Orton DI, et al. **BMJ** 1989 Jan 7;298(6665):21–3

Alertness of night nurses: two shift systems compared. Wilkinson R, et al. **Ergonomics** 1989 Mar;32(3):281–92

NIGHT TERRORS see **SLEEP DISORDERS**

NIGHTMARES see **DREAMS**

NIH CONSENSUS DEVELOPMENT CONFERENCES see **CONSENSUS DEVELOPMENT CONFERENCES**

NIKETHAMIDE

Solvent dependency of rotational barriers in ethamivan and comparison to nikethamide. Rosenthal LS, et al. **Biochem Pharmacol** 1989 Feb 15;38(4):581–8

THERAPEUTIC USE

[Prevention of transfusion reaction by intravenous drip of coramine] Guan ZX. **Chung Hua Hu Li Tsa Chih** 1988 Aug;23(8):495–6 **(Chi)**

NIMODIPINE

Prevention and treatment of delayed ischaemic dysfunction in patients with subarachnoid haemorrhage. An update. **Acta Neurochir Suppl (Wien)** 1988;45:1–55

Interactions between nimodipine and general anaesthesia—clinical investigations in 124 patients during neurosurgical operations. Müller H, et al. **Acta Neurochir Suppl (Wien)** 1988;45:29–35

ADMINISTRATION & DOSAGE

Recovery of function after brain damage: facilitation by the calcium entry blocker nimodipine. LeVere TE, et al. **Behav Neurosci** 1989 Jun;103(3):561–5

The calcium entry blocker nimodipine improves the quality of life of patients operated on for cerebral aneurysms. A 5-year follow-up analysis. Kostron H, et al. **Neurochirurgia (Stuttg)** 1988 Sep;31(5):150–3

Reference: nimodipine in cerebral vasospasm [letter; comment] Dorsch NW, et al. **Neurosurgery** 1989 Jun; 24(6):959–60. **Comment on:** Neurosurgery 1988 Aug;23(2):154–7

Somatosensory evoked potentials quantify clinical improvement of cerebral vasospasm after intravenous administration of nimodipine. Lipschitz R, et al. **S Afr Med J** 1988 Oct 15;74(8):403–5

Comparison of intraluminally versus extraluminally administered nimodipine on serotonin-induced cerebral vascular responses in vitro and in situ. Vinall PE, et al. **Stroke** 1989 Aug;20(8):1065–70

DIAGNOSTIC USE

Penumbra around chronic cerebral infarction? Auer LM, et al. **Neurol Res** 1988 Dec;10(4):246–51

METABOLISM

Differential effects of acute and repeated electrically and chemically induced seizures on [3H]Nimodipine and [125I]omega-conotoxin GVIA binding in rat brain. Gleiter CH, et al. **Epilepsia** 1989 Jul–Aug;30(4):487–92

Characteristics of [3H]nimodipine binding to sarcolemmal membranes from rat vas deferens and its regulation by guanine nucleotide. Higo K, et al. **Jpn J Pharmacol** 1988 Oct;48(2):213–21

In vivo morphine decreases [3H]nimodipine receptor binding in rat brain regions. Gandhi VC, et al. **Neurochem Res** 1988 Dec;13(12):1175–81

PHARMACOKINETICS

Possible molecular basis for the pharmacokinetics and pharmacodynamics of three membrane-active drugs: propranolol, nimodipine and amiodarone. Herbette LG, et al. **J Mol Cell Cardiol** 1988 May;20(5):373–8

PHARMACOLOGY

Cerebrovascular and cerebral effects of nimodipine—an update. Brandt L, et al. **Acta Neurochir Suppl (Wien)** 1988; 45:11–20 (105 ref.)

An experimental study of the effect of nimodipine in primate subarachnoid haemorrhage. Dorsch NW, et al. **Acta Neurochir (Wien)** 1989;99(1–2):65–75

Inhibitory effect of calcium channel blockers on proliferation of human glioma cells in vitro. Kunert-Radek J, et al. **Acta Neurol Scand** 1989 Feb;79(2):166–9

The effect of flunarizine and nimodipine on rotatory evoked potentials in rabbit. Zünkeler B, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;460:66–71

Effects of nimodipine, Bay K 8644 and pinacidil on alpha 1- and alpha 2-adrenoceptor-mediated vasoconstriction in human hand veins. Arner M, et al. **Acta Physiol Scand** 1988 Jul;133(3):417–22

Effects of nimodipine on the responses to cerebral ischemia in the Mongolian gerbil. Cohen S, et al. **Adv Exp Med Biol** 1989;248:429–38

Effects of nimodipine on cerebral blood flow and cerebrospinal fluid pressure after cardiac arrest: correlation with neurologic outcome. Forsman M, et al. **Anesth Analg** 1989 Apr;68(4):436–43

Nimodipine and the "no-reflow phenomenon"—experimental triumph, clinical failure? Prough DS, et al. **Anesth Analg** 1989 Apr;68(4):431–5

Vasodilatory properties in vascular smooth muscle of the calcium antagonist NB-818 compared to nicardipine and nimodipine. Nishikibe M, et al. **Arch Int Pharmacodyn Ther** 1989 Jan–Feb;297:98–111

Effect of nimodipine on brightness discrimination learning

test in Wistar Kyoto and spontaneously hypertensive rats. Nomura M. **Arzneimittelforschung** 1988 Sep;38(9):1282–6

Densitometric measurement of increased endothelial permeability in arteriosclerotic plaques and inhibition of permeability under the influence of two calcium antagonists. Strohschneider T, et al. **Atherosclerosis** 1989 Feb;75(2–3):135–44

Nimodipine reduces postischemic lactate levels in the isolated perfused rat brain. Bielenberg GW, et al. **Biochem Pharmacol** 1989 Mar 1;38(5):853–5

Effect of nimodipine on drinking behavior measured in the runway: comparison and interaction with (+/–)-amphetamine. Nencini P, et al. **Drug Alcohol Depend** 1988 Oct;22(1–2):9–14

Nimodipine. A review of its pharmacodynamic and pharmacokinetic properties, and therapeutic potential in cerebrovascular disease. Langley MS, et al. **Drugs** 1989 May;37(5):669–99 (141 ref.)

An investigation into the effects of nifedipine and nimodipine on platelet function and vascular prostacyclin synthesis. Jeremy JY, et al. **Drugs Exp Clin Res** 1985;11(9):645–51

Plasma concentrations and haemodynamic effects of nimodipine in patients resuscitated after cardiac arrest. Huyghens LP, et al. **Eur J Clin Pharmacol** 1989; 36(4):327–33

Anticonvulsant profile of the dihydropyridine calcium channel antagonists, nitrendipine and nimodipine. Dolin SJ, et al. **Eur J Pharmacol** 1988 Jul 26;152(1–2):19–27

Diltiazem enhances and flunarizine inhibits nimodipine's antiseizure effects. Morón MA, et al. **Eur J Pharmacol** 1989 Apr 25;163(2–3):299–307

Nimodipine enhances growth and vascularization of neural grafts. Finger S, et al. **Exp Neurol** 1989 Apr;104(1):1–9

Cerebrovascular autoregulation is resistant to calcium channel blockade with nimodipine. McCalden TA, et al. **Experientia** 1989 Mar 15;45(3):305–6

Pharmacological basis for the use of nimodipine in central nervous system disorders. Scriabine A, et al. **FASEB J** 1989 May;3(7):1799–806 (67 ref.)

The effect of nimodipine on the evolution of human cerebral infarction studied by PET. Hakim AM, et al. **J Cereb Blood Flow Metab** 1989 Aug;9(4):523–34 (63 ref.)

Different effects of the calcium antagonists nimodipine and flunarizine on dopamine metabolism in the rat brain. Fadda F, et al. **J Neural Transm** 1989;75(3):195–200

Influence of nimodipine on cerebral blood flow in human cerebral ischaemia. Pozzilli C, et al. **J Neurol** 1989 May; 236(4):199–202

Potassium-stimulated calcium uptake in astrocytes and its potent inhibition by nimodipine. Hertz L, et al. **J Neurosci Res** 1989 Feb;22(2):209–15

The effect of nimodipine and dextran on axonal function and blood flow following experimental spinal cord injury. Fehlings MG, et al. **J Neurosurg** 1989 Sep;71(3):403–16

The influence of nimodipine on cerebral blood flow autoregulation and blood–brain barrier. Höllerhage HG, et al. **J Neurosurg** 1988 Dec;69(6):919–22

Cerebrovascular effects of nimodipine in cats. Schilling L, et al. **Miner Electrolyte Metab** 1989;15(3):178–84

Long-term neurological assessment of the post-resuscitative effects of flunarizine, verapamil and nimodipine in a new model of global complete ischaemia. Wauquier A, et al. **Neuropharmacology** 1989 Aug;28(8):837–46

Anticonvulsant activity of MK-801 and nimodipine alone and in combination against pentylenetetrazole and strychnine. O'Neill SK, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):595–600

Effects of nimodipine on the discriminative stimulus properties of d-amphetamine in rats. Nencini P, et al. **Psychopharmacology (Berlin)** 1988;96(1):40–4

Nimodipine facilitates associative learning in aging rabbits. Deyo RA, et al. **Science** 1989 Feb 10;243(4892):809–11

Beneficial effect of nimodipine on metabolic and functional disturbances in rabbit hippocampus following complete cerebral ischemia. Lazarewicz JW, et al. **Stroke** 1989 Jan; 20(1):70–7

Effect of nimodipine on canine cerebrovascular responses to 5-hydroxytryptamine and potassium chloride after exposure to blood. Tsuji T, et al. **Stroke** 1989 Jan; 20(1):105–11

Effect of nimodipine on cerebral blood flow and metabolism in rats during hyperventilation. Young WL, et al. **Stroke** 1989 Feb;20(2):275–80

[The effect of calcium antagonists nimodipin, verapamil, diltiazem and flunarizin on local cerebral blood flow in rabbits in chronic experiments] Gachev E, et al. **Eksp Med Morfol** 1989;28(2):48–51 (Eng. Abstr.) **(Bul)**

[The effect of the calcium antagonists nimodipin, verapamil and diltiazem on local cerebral blood flow of the cortex and thalamus in cats] Ganchev E. **Eksp Med Morfol** 1989; 28(2):44–7 (Eng. Abstr.) **(Bul)**

[Effect of sodium valproate and nimodipine on learning in rats during cold exposure] Surcheva S, et al. **Eksp Med Morfol** 1988;27(2):24–7 (Eng. Abstr.) **(Bul)**

THERAPEUTIC USE

Review of treatment of symptomatic cerebral vasospasm with nimodipine. Buchheit F, et al. **Acta Neurochir Suppl (Wien)** 1988;45:51–5 (23 ref.)

Nimodipine in the prevention of ischaemic deficits after aneurysmal subarachnoid haemorrhage. An analysis of recent clinical studies. Gilsbach JM. **Acta Neurochir Suppl (Wien)** 1988;45:41–50 (49 ref.)

Haemodynamic effectiveness of nimodipine on spastic brain vessels after subarachnoid haemorrhage evaluated by the transcranial Doppler method. A review of clinical studies. Harders A, et al. **Acta Neurochir Suppl (Wien)** 1988;45:21–8 (39 ref.)

Effect of nimodipine on mitochondrial respiration in different rat brain areas after subarachnoid haemorrhage. Rodriguez y Baena R, et al. **Acta Neurochir Suppl (Wien)** 1988; 43:177–81

Morbidity and mortality after early aneurysm surgery—a prospective study with nimodipine prevention. Gilsbach JM, et al. **Acta Neurochir (Wien)** 1989;96(1–2):1–7

Results of treatment for cerebral saccular aneurysms in a small neurosurgical unit—evaluation of early operation and nimodipine treatment. Hillman J, et al. **Acta Neurochir (Wien)** 1988;94(1–2):28–31

Spinal cord injury in rats: inability of nimodipine or anti-neutrophil serum to improve spinal cord blood flow or neurologic status. Holtz A, et al. **Acta Neurol Scand** 1989 Jun;79(6):460–7

Relationship between putrescine content and density of ischemic cell damage in the brain of mongolian gerbils: effect of nimodipine and barbiturate. Paschen W, et al. **Acta Neuropathol (Berl)** 1988;76(4):388–94

Treatment of vertebrobasilar insufficiency. Use of calcium antagonists. Hofferberth B, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;460:154–9

Magnesium and cobalt, not nimodipine, protect neurons against anoxic damage in the rat hippocampal slice. Kass IS, et al. **Anesthesiology** 1988 Nov;69(5):710–5

Effect of oral nimodipine on cerebral infarction and outcome after subarachnoid haemorrhage: British aneurysm nimodipine trial. Pickard JD, et al. **BMJ** 1989 Mar 11; 298(6674):636–42

Nimodipine in migraine prophylaxis. Anseil E, et al. **Cephalalgia** 1988 Dec;8(4):269–72

Nimodipine treatment of subarachnoid hemorrhage. Laursen J, et al. **Clin Neurol Neurosurg** 1988;90(4):329–37

Nimodipine in ischemic stroke. Gelmers HJ. **Clin Neuropharmacol** 1987 Oct;10(5):412–22 (43 ref.)

Nimodipine in the treatment of subarachnoid hemorrhage. Yasuda SU, et al. **DICP** 1989 Jun;23(6):451–5 (37 ref.)

Effect of prophylactic administration of nimodipine in patients with migraine. Stewart DJ, et al. **Headache** 1988 May;28(4):260–2

Nimodipine prevents hyperglycemia-induced cerebral acidosis in middle cerebral artery occluded rats. Berger L, et al. **J Cereb Blood Flow Metab** 1989 Feb;9(1):58–64

Control of epilepsy partialis continuans with intravenous nimodipine. Report of two cases. Brandt L, et al. **J Neurosurg** 1988 Dec;69(6):949–50

Nimodipine treatment in poor-grade aneurysm patients [letter] Höllerhage HG. **J Neurosurg** 1988 Nov;69(5):803–5

Effect of nimodipine on the outcome of patients after aneurysmal subarachnoid hemorrhage and surgery. Ohman J, et al. **J Neurosurg** 1988 Nov;69(5):683–6

Nimodipine for cerebral vasospasm after subarachnoid hemorrhage. **Med Lett Drugs Ther** 1989 May 19; 31(792):47–8

Aneurysmal subarachnoid hemorrhage: prevention of delayed ischemic dysfunction with intravenous nimodipine. Ljunggren B, et al. **Neurosurg Rev** 1987;10(4):255–63 (64 ref.)

The efficacy of intravenous nimodipine in the treatment of focal cerebral ischemia in a primate model. Hadley MN, et al. **Neurosurgery** 1989 Jul;25(1):63–70

Therapeutic trial of intravenous nimodipine [letter] Heros RC. **Neurosurgery** 1989 Feb;24(2):299

Therapeutic trial of intravenous nimodipine in patients with established cerebral vasospasm after rupture of intracranial aneurysms [see comments] Jan M, et al. **Neurosurgery** 1988 Aug;23(2):154–7. **Comment in:** Neurosurgery 1989 Jun;24(6):959–60

Outcome of aneurysmal subarachnoid hemorrhage in a hospital population: a prospective study including early operation, intravenous nimodipine, and transcranial Doppler ultrasound. Seiler RW, et al. **Neurosurgery** 1988 Nov;23(5):598–604

Improvement of cortical perfusion, intracellular pH, and electrocorticography by nimodipine during transient focal cerebral ischemia. Tally PW, et al. **Neurosurgery** 1989 Jan; 24(1):80–7

Post-SAH vasospasm in patients treated with oral nimodipine. Volpin L, et al. **Riv Eur Sci Med Farmacol** 1987 Jun;9(2):179–83

Nimodipine does not improve neurologic outcome after 14 minutes of cardiac arrest in cats. Tateishi A, et al. **Stroke** 1989 Aug;20(8):1044–50

[The administration of calcium channel blockers in patients with cerebrovascular diseases (letter)] Keppel Hesselink JM. **Ned Tijdschr Geneeskd** 1989 Jan 28;133(4):180–1 **(Dut)**

[Treatment of vasospasm in aneurysmal meningeal hemorrhage using intravenous nimodipine. Multicenter cooperative study] Frerebeau P, et al. **Neurochirurgie** 1988; 34(6):383–8 (Eng. Abstr.) **(Fre)**

[Nimodipine for subarachnoid hemorrhage] Rimpel J. **Dtsch Med Wochenschr** 1989 Jun 2;114(22):888 **(Ger)**

[Therapy of aneurysm-induced subarachnoid hemorrhage] Mehdorn HM, et al. **Neurochirurgia (Stuttg)** 1988 Sep;31 Suppl 1:175–8 (Eng. Abstr.) **(Ger)**

[Calcium channel blockers in preventive treatment of migraine] Rødahl E. **Tidsskr Nor Laegeforen** 1988 Sep 10; 108(25):2040–2 (Eng. Abstr.) **(Nor)**

NIMORAZOLE see under **NITROIMIDAZOLES**

NIMUSTINE

ADMINISTRATION & DOSAGE

Phase I/II study of intraventricular and intrathecal ACNU for leptomeningeal neoplasia. Levin VA, et al. **Cancer Chemother Pharmacol** 1989;23(5):301–7

[Therapeutic efficacy of intracarotid infusion of 20% mannitol with ACNU in Fischer rats with intracerebrally implanted 9L gliosarcoma] Miyagami M, et al. **Gan To Kagaku Ryoho** 1989 May;16(5):2059–65 (Eng. Abstr.) **(Jpn)**

[Treatment of malignant gliomas with high-dose ACNU and autologous bone marrow transplantation] Nakagawa H, et al. **Gan To Kagaku Ryoho** 1988 Nov;15(11):3153–7 (Eng. Abstr.) **(Jpn)**

PHARMACOKINETICS

[Concentration of ACNU in a branch of middle cerebral artery, femoral vein and brain tissue by intracarotid or intravenous administration in a patient with recurrent glioblastoma] Nakagawa H, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 1):2667–9 **(Jpn)**

PHARMACOLOGY

DNA lability induced by nimustine and ramustine in rat glioma cells. Mineura K, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1391–4

[Response to antitumoral agents of a human medulloblastoma implanted into the chorioallantoic membrane of a chick embryo] Nakamura O, et al. **Gan No Rinsho** 1989 Mar; 35(4):477–80 (Eng. Abstr.) **(Jpn)**

[Circumvention of ACNU-resistance in rat glioma cells by pretreatment with O6-methylguanine] Mineura K, et al. **Gan To Kagaku Ryoho** 1989 Feb;16(2):259–62 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Hypersensitivity of human tumor xenografts lacking O6-alkylguanine-DNA alkyltransferase to the anti-tumor agent 1-(4-amino-2-methyl-5-pyrimidinyl)methyl-3-(2-chloroethyl)-3-nitros ourea. Fujio C, et al. **Carcinogenesis** 1989 Feb;10(2):351–6

Intrathecal ACNU—a new therapeutic approach against malignant leptomeningeal tumors. Arita N, et al. **J Neurooncol** 1988 Nov;6(3):221–6

Treatment of high grade glioma xenografts with nitrosoureas in nude mice. Stuschke M, et al. **Strahlenther Onkol** 1989 Jul;165(7):539–40

[Effect of ACNU against experimental brain tumor—immunohistochemical study using anti-BrdU monoclonal antibody] Izumoto S, et al. **No To Shinkei** 1988 Nov;40(11):1095–9 (Eng. Abstr.) **(Jpn)**

[Ring enhancement on CT scan associated with the local ACNU administration therapy following glioblastoma surgery] Shoin K, et al. **Rinsho Hoshasen** 1988 Jul; 33(7):825–8 (Eng. Abstr.) **(Jpn)**

TOXICITY

Pathogenesis of persistent truncus arteriosus induced by nimustine hydrochloride in chick embryos. Miyagawa S, et al. **Teratology** 1989 Mar;39(3):287–94

Cardiovascular anomalies produced by nimustine hydrochloride in the rat fetus. Miyagawa S, et al. **Teratology** 1988 Dec;38(6):553–8

NINHYDRIN see under **INDENES**

NIPECOTIC ACIDS

METABOLISM

Entropy as a factor in the binding of gamma-aminobutyric acid and nipecotic acid to the gamma-aminobutyric acid transport system. Althaus JS, et al. **Neurochem Res** 1989 Apr;14(4):311–6

PHARMACOLOGY

Release of [3H]- and endogenous GABA from slices of the rat medulla oblongata: modification by 3-mercaptopropionic acid, nipecotic acid and diaminobutyric acid. Kihara M, et al. **Arch Int Pharmacodyn Ther** 1989 Mar–Apr;298:50–60

GABA uptake inhibitors. Synthesis and effects on audiogenic seizures of ester prodrugs of nipecotic acid, guvacine and cis-4-hydroxynipecotic acid. Falch E, et al. **Drug Des Deliv** 1987 Sep;2(1):9–21

Prophylaxis of amygdala kindling-induced epileptogenesis: comparison of a GABA uptake inhibitor and diazepam. Schwark WS, et al. **Epilepsy Res** 1987 Jan;1(1):63–9

THERAPEUTIC USE

Anticonvulsant activity of intracerebroventricularly

administered glial GABA uptake inhibitors and other GABAmimetics in chemical seizure models. Gonsalves SF, et al. **Epilepsy Res** 1989 Jul–Aug;4(1):34–41

URINE

Identification in rats of N-nitrosonipecotic acid as a major urinary metabolite of the areca-nut alkaloid-derived nitrosamines, N-nitrosoguvacoline and N-nitrosoguvacine. Ohshima H, et al. **Cancer Lett** 1989 Mar;44(3):211–6

NIPPLES see under **BREAST**

NIPPOSTRONGYLUS

DRUG EFFECTS

Activity of commercial Bacillus thuringiensis preparations against Trichostrongylus colubriformis and Nippostrongylus brasiliensis. Bone LW. **J Invertebr Pathol** 1989 Mar;53(2):276–7

ENZYMOLOGY

Haemoprotein terminal oxidases in the nematodes Nippostrongylus brasiliensis and Ascaridia galli. Paget TA, et al. **Biochem J** 1988 Nov 15;256(1):295–8

GROWTH & DEVELOPMENT

[Methods of cultivating parasitic nematoda in vitro] Jabłonowski Z, et al. **Wiad Parazytol** 1988;34(2):93–111 (Eng. Abstr.) **(Pol)**

IMMUNOLOGY

Nippostrongylus brasiliensis: radioresistant IgE antibody-forming cells in infected rats. Watanabe N, et al. **Exp Parasitol** 1989 Feb;68(2):216–22

Proteins of Nippostrongylus brasiliensis analyzed by immunoblotting. Dorzok U, et al. **Parasitol Res** 1989; 75(6):482–7

The role of free oxygen radicals in the expulsion of primary infections of Nippostrongylus brasiliensis. Smith NC. **Parasitol Res** 1989;75(6):423–38 (218 ref.)

[Adoptive transfer of immunity against Nippostrongylus brasiliensis in mice. In vitro restimulation of immune cells before their transfer] Rhalem A, et al. **C R Acad Sci [III]** 1989;309(2):53–7 (Eng. Abstr.) **(Fre)**

ISOLATION & PURIFICATION

Suppression of phytohemagglutinin induced splenocyte proliferation during concurrent infection with Eimeria nieschulzi and Nippostrongylus brasiliensis. Bristol JR, et al. **Experientia** 1989 Aug 15;45(8):762–3

METABOLISM

Respiratory electron transport in Ancylostoma ceylanicum and Nippostrongylus brasiliensis. Agarwal N, et al. **Indian J Exp Biol** 1988 Sep;26(9):724–7

Polyamine metabolism in Ancylostoma ceylanicum and Nippostrongylus brasiliensis. Sharma V, et al. **Int J Parasitol** 1989 Apr;19(2):191–8

NIRIDAZOLE

ADVERSE EFFECTS

[EEG changes in Ambilhar therapy in children with bilharziasis] Schütze I, et al. **Padiatr Grenzgeb** 1988; 27(3):175–82 (Eng. Abstr.) **(Ger)**

PHARMACOLOGY

Studies of embryotoxic mechanisms of niridazole: evidence that oxygen depletion plays a role in dysmorphogenicity. Fantel AG, et al. **Teratology** 1989 Mar;39(3):243–51

TOXICITY

The biochemical basis of niridazole toxicity. Soloman EK, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):316–7

Studies of mechanisms of niridazole-elicited embryotoxicity: evidence against a major role for covalent binding. Fantel AG, et al. **Teratology** 1989 Jan;39(1):63–74

NISIN

Sample preparation dependent fragmentation in 252-Cf plasma desorption mass spectrometry of the polycyclic antibiotic, nisin. Nielsen PF, et al. **Biomed Environ Mass Spectrom** 1988 Aug;17(2):137–41

Interactive NMR and computer simulation studies of lanthionine-ring structures. Palmer DE, et al. **Biopolymers** 1989 Jan;28(1):397–408

GENETICS

Nisin, a peptide antibiotic: cloning and sequencing of the nisA gene and posttranslational processing of its peptide product. Kaletta C, et al. **J Bacteriol** 1989 Mar; 171(3):1597–601

Structure, expression, and evolution of a gene encoding the precursor of nisin, a small protein antibiotic. Buchman GW, et al. **J Biol Chem** 1988 Nov 5;263(31):16260–6

METABOLISM

Interaction of the pore forming-peptide antibiotics Pep 5, nisin and subtilin with non-energized liposomes. Kordel M, et al. **FEBS Lett** 1989 Feb 13;244(1):99–102

PHARMACOLOGY

Effects of nisin on growth of bacteria attached to meat. Chung KT, et al. **Appl Environ Microbiol** 1989 Jun; 55(6):1329–33

Cloning of nisin resistance determinant and replication origin on 7.6-kilobase EcoRI fragment of pNP40 from Streptococcus lactis subsp. diacetylactis DRC3. Froseth BR, et al. **Appl Environ Microbiol** 1988 Aug;54(8):2136–9

Inhibitory action of nisin against Listeria monocytogenes. Benkerroum N, et al. **J Dairy Sci** 1988 Dec;71(12):3237–45

NISSL BODIES

ULTRASTRUCTURE

Immunocytochemical localization of angiotensinogen in the nissl bodies. Sood PP, et al. **Cell Mol Biol** 1988;34(5):461–3

NISSL DEGENERATION see under **NERVE DEGENERATION**

NITRACRINE see under **AMINOACRIDINES**

NITRATE REDUCTASES

Circular dichroism and potentiometry of FAD, heme and Mo-pterin prosthetic groups of assimilatory nitrate reductase. Kay CJ, et al. **Biochemistry** 1988 Aug 9; 27(16):6142–9

ANALYSIS

[Nitrate reductase activity of the oral fluids in periodontitis] Vavilova TP, et al. **Stomatologiia (Mosk)** 1989 Jan–Feb; 68(1):24–6 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Expression of denitrification enzymes in response to the dissolved oxygen level and respiratory substrate in continuous culture of Pseudomonas stutzeri. Körner H, et al. **Appl Environ Microbiol** 1989 Jul;55(7):1670–6

GENETICS

Transformation of seven species of filamentous fungi using the nitrate reductase gene of Aspergillus nidulans. Daboussi MJ, et al. **Curr Genet** 1989 Jun;15(6):453–6

Differential expression of Ustilago maydis DNA sequences during induction of nitrate reductase enzyme activity. Smith TM, et al. **Curr Genet** 1988 Nov;14(5):457–60

A new locus (NIA 1) in Arabidopsis thaliana encoding nitrate reductase. Cheng CL, et al. **EMBO J** 1988 Nov; 7(11):3309–14

Cloning of the nitrate reductase gene (niaD) of Aspergillus nidulans and its use for transformation of Fusarium oxysporum. Malardier L, et al. **Gene** 1989 May 15; 78(1):147–56

Transformation of Aspergillus niger with the homologous nitrate reductase gene. Unkles SE, et al. **Gene** 1989 May 15;78(1):157–66

Genetic regulation of nitrate assimilation in Klebsiella pneumoniae M5al. Cali BM, et al. **J Bacteriol** 1989 May; 171(5):2666–72

Mutations in the Escherichia coli fnr and tgt genes: control of molybdate reductase activity and the cytochrome d complex by fnr. Frey B, et al. **J Bacteriol** 1989 Mar; 171(3):1524–30

Influence of nar (nitrate reductase) genes on nitrate inhibition of formate-hydrogen lyase and fumarate reductase gene expression in Escherichia coli K-12. Stewart V, et al. **J Bacteriol** 1988 Oct;170(10):4437–44

Structure of genes narL and narX of the nar (nitrate reductase) locus in Escherichia coli K-12. Stewart V, et al. **J Bacteriol** 1989 Apr;171(4):2229–34

Roles of the narJ and narI gene products in the expression of nitrate reductase in Escherichia coli. Sodergren EJ, et al. **J Biol Chem** 1988 Nov 5;263(31):16156–62

Nitrate reductase of Escherichia coli: completion of the nucleotide sequence of the nar operon and reassessment of the role of the alpha and beta subunits in iron binding and electron transfer. Blasco F, et al. **Mol Gen Genet** 1989 Aug;218(2):249–56

Molecular cloning and characterisation of the two homologous genes coding for nitrate reductase in tobacco. Vaucheret H, et al. **Mol Gen Genet** 1989 Mar;216(1):10–5

The narX and narL genes encoding the nitrate-sensing regulators of Escherichia coli are homologous to a family of prokaryotic two-component regulatory genes. Nohno T, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):2947–57

Isolation and characterization of the nitrate reductase structural gene of Chlamydomonas reinhardtii. Fernández E, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6449–53

ISOLATION & PURIFICATION

Purification of nitrate reductase from Nicotiana plumbaginifolia by affinity chromatography using 5'AMP-sepharose and monoclonal antibodies. Moureaux T, et al. **Eur J Biochem** 1989 Feb 15;179(3):617–20

METABOLISM

Immunological approach to the regulation of nitrate reductase in Monoraphidium braunii. Díez J, et al. **Arch Biochem Biophys** 1989 Feb 1;268(2):707–15

Regulation of Chlorella nitrate reductase: control of enzyme activity and immunoreactive protein levels by ammonia. Zeiler KG, et al. **Arch Biochem Biophys** 1989 Feb 15; 269(1):46–54

NADH substrate inhibition and enhanced thermal stability of higher plant nitrate reductase immobilized via a monoclonal antibody. Ruoff P, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):496–501

X-ray-absorption and electron-paramagnetic-resonance spectroscopic studies of the environment of molybdenum in high-pH and low-pH forms of Escherichia coli nitrate reductase. George GN, et al. **Biochem J** 1989 May 1; 259(3):693–700

EPR and kinetic analysis of the interaction of halides and phosphate with nitrate reductase. Kay CJ, et al. **Biochemistry** 1989 Jul 11;28(14):5750–8

Organic nitrate reductase: reassessment of its subcellular localization and tissue distribution and its relationship to the glutathione transferases. Taylor IW, et al. **Int J Biochem** 1989;21(1):67–71

The influence of incubation pH on the activity of rat and human gut flora enzymes. Mallett AK, et al. **J Appl Bacteriol** 1989 May;66(5):433–7

Limited proteolysis of the nitrate reductase from spinach leaves. Kubo Y, et al. **J Biol Chem** 19:8 Dec 25; 263(36):19684–9

Nitrosamine formation by denitrifying and non-denitrifying bacteria: implication of nitrite reductase and nitrate reductase in nitrosation catalysis. Calmels S, et al. **J Gen Microbiol** 1988 Jan;134 (Pt 1):221–6

[Determination of the reduction of nitrates to nitrites using a paper indicator system] Fel'dman IuM, et al. **Lab Delo** 1989;(1):69–70 **(Rus)**

NITRATES

ADMINISTRATION & DOSAGE

Nitrosation of bromhexine and aminophenazone in gastric juice after high nitrate loading in the diet. An ex-vivo/in-vitro study in humans. Schlemmer KH, et al. **Arzneimittelforschung** 1988 Sep;38(9):1365–8

Intermittent nitrate therapy in angina pectoris. Reichek N. **Eur Heart J** 1989 May;10 Suppl A:7–10 (17 ref.)

Effectiveness of interval nitrate therapy in angina pectoris. Rudolph W, et al. **Eur Heart J** 1989 May;10 Suppl A:50–5

Nitrate exposure from drinking water and diet in a Danish rural population. Møller H, et al. **Int J Epidemiol** 1989 Mar;18(1):206–12

Recent advances in transdermal delivery systems. Szycher M. **J Biomater Appl** 1986 Oct;1(2):207–38

The loneliness of the long-acting nitrator [letter] Bellomo J, et al. **JAMA** 1989 Jul 7;262(1):33

[Long-term therapy with nitrates. How can continuous effectiveness be achieved?] Rudolph W, et al. **Fortschr Med** 1989 Jun 30;107(19):41–2, 45–7 (20 ref.) (Eng. Abstr.) **(Ger)**

[Prevention of myocardial infarct with nitrates, beta blockers and calcium antagonists] Silber S. **Internist (Berlin)** 1989 May;30(5):322–30 (53 ref.) **(Ger)**

[Effect of vasodilator agents on the effectiveness of the complex treatment of patients with ischemic heart disease and congestive heart failure] Nemirovskaia MA, et al. **Kardiologiia** 1989 Apr;29(4):37–40 (Eng. Abstr.) **(Rus)**

[Monotherapy of patients with stenocardia with individually administered doses of delayed-action nitrates (Working Group for Cooperative Studies on Anti-anginal Drugs)] **Ter Arkh** 1988;60(8):17–21 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Organic nitrate-induced methemoglobinemia. Buenger JW, et al. **DICP** 1989 Apr;23(4):283–8 (26 ref.)

Potential bronchoconstrictor stimuli in acid fog. Balmes JR, et al. **Environ Health Perspect** 1989 Feb;79:163–6

Monday morning sudden death. Warren JV. **Trans Am Clin Climatol Assoc** 1987;99:10–6

[Schwartz-Bartter syndrome as a complication of severe well water poisoning] Töpke B, et al. **Kinderarztl Prax** 1988 Sep;56(9):443–7 (Eng. Abstr.) **(Ger)**

[A case of hemorrhagic vasculitis caused by long-term treatment with nitrong] Rudyk BI, et al. **Kardiologiia** 1989 Mar;29(3):112 **(Rus)**

[Infantile methemoglobinemia caused by nitrates] de Fernícola NA. **Bol Of Sanit Panam** 1989 Jan;106(1):32–40 (34 ref.) (Eng. Abstr.) **(Spa)**

[Correlation of the risk of gastric cancer in the province of Soria and the nitrate content of drinking water] Sanz Anquela JM, et al. **Rev Esp Enferm Apar Dig** 1989 Jun; 75(6 Pt 1):561–5 (Eng. Abstr.) **(Spa)**

ANALYSIS

Determination of nitrite in drinking water and environmental samples by ion exclusion chromatography with electrochemical detection. Kim HJ, et al. **Anal Chem** 1989 Jul 15;61(14):1485–9

Voltammetric and liquid chromatographic identification of organic products of microwave-assisted wet ashing of biological samples. Pratt KW, et al. **Anal Chem** 1988 Oct 1;60(19):2024–7

Re-examination of the determination of environmental nitrate as nitrite by reduction with hydrazine. Kempers AJ, et al. **Analyst** 1988 Jul;113(7):1117–20

Effect of the presence of a urea fertilizer plant on the nitrate content of berseem and constituents of milk and blood of buffaloes. el-Ayoty SA, et al. **Arch Tierernahr** 1989 Apr-May;39(4–5):491–8

Determination of intracellular nitrate. Romero JM, et al. **Biochem J** 1989 Apr 15;259(2):545–8

Nitrite and nitrate levels in ileostomy effluent: effect of dietary change. Radcliffe BC, et al. **Br J Nutr** 1989 Mar; 61(2):323–30

Toxic and potentially toxic constituents of gari and beef marketed in Nigerian traditional markets. Ukhun ME, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):553–7

Preformed tobacco-specific nitrosamines in tobacco—role of nitrate and influence of tobacco type. Fischer S, et al. **Carcinogenesis** 1989 Aug;10(8):1511–7

Measurements of ozone, oxides of N and nitric acid produced in the tunnel of a high-energy electron storage ring. Kanda Y, et al. **Health Phys** 1989 Jun;56(6):953–6

Trace analysis of explosives by capillary supercritical fluid chromatography with thermal energy analysis detection. Douse JM. **J Chromatogr** 1988 Jul 8;445(1):244–50

Estimation of the daily intake of nitrates and nitrites which may be consumed by two groups of population 18–23 years old in the city of Havana. García Roché MO, et al. **Nahrung** 1988;32(5):517–8

Nitrate levels in edible wild herbs and vegetables common in Jordan. Takruri HR, et al. **Nutr Health** 1988;6(2):89–98

Yield and content in nitrates, minerals and ascorbic acid of leeks and turnips grown under mineral or organic nitrogen fertilizations. Termine E, et al. **Plant Foods Hum Nutr** 1987; 37(4):321–32

Negative interference of Teflon sampling devices in the determination of nitric acid and particulate nitrate. De Santis F, et al. **Sci Total Environ** 1988 Sep 15;76(1):93–9

[Contamination of drinking water with atrazine, simazine and nitrate in the Rastatt, Baden-Baden and Bühl areas] Ziegler R. **Off Gesundheitswes** 1989 Feb;51(2):63–6 (Eng. Abstr.) **(Ger)**

[Nitrates and nitrites in marine fish, fish products and common salt] Gajewska R, et al. **Rocz Panstw Zakl Hig** 1988;39(3):186–92 (Eng. Abstr.) **(Pol)**

[Nitrate and nitrite levels in the food. III. Vegetables and potatoes] Karłowski K, et al. **Rocz Panstw Zakl Hig** 1988; 39(4):291–6 (Eng. Abstr.) **(Pol)**

[A spectrophotometric method of determining the levels of nitrates in animal feed, milk and meat] Saiapin VP, et al. **Gig Sanit** 1988 Jul;(7):43–4 **(Rus)**

ANTAGONISTS & INHIBITORS

[Toxicologic characteristics of new nitrification inhibitors] Pogosian SB, et al. **Gig Sanit** 1988 Sep;(9):83 **(Rus)**

BIOSYNTHESIS

Influence of dietary protein and gut microflora on endogenous synthesis of nitrate and N-nitrosamines in the rat. Ward FW, et al. **Food Chem Toxicol** 1989 Jul; 27(7):445–9

[Nitrification in soil columns subjected to continuous flow] Marengo GW. **Rev Argent Microbiol** 1984;16(3):153–8 (Eng. Abstr.) **(Spa)**

METABOLISM

L-arginine is a precursor for nitrate biosynthesis in humans. Leaf CD, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):1032–7

Relationship between a 47-kDa cytoplasmic membrane polypeptide and nitrate transport in Anacystis nidulans. Sivak MN, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):257–62

Macrophage oxidation of L-arginine to nitrite and nitrate: nitric oxide is an intermediate. Marletta MA, et al. **Biochemistry** 1988 Nov 29;27(24):8706–11

Regulation by ammonium of nitrate and nitrite assimilation in Chlamydomonas reinhardtii. Franco AR, et al. **Biochim Biophys Acta** 1988 Nov 10;951(1):98–103

Inhibitory effects of sulphur compounds, copper and tungsten on nitrate reduction by mixed rumen micro-organisms. Takahashi J, et al. **Br J Nutr** 1989 May;61(3):741–8

Nitrate assimilation in intact and excised maize leaves in the presence of lead. Sinha SK, et al. **Bull Environ Contam Toxicol** 1988 Sep;41(3):419–26

Endogenous nitrosation in relation to nitrate exposure from drinking water and diet in a Danish rural population. Møller H, et al. **Cancer Res** 1989 Jun 1;49(11):3117–21

Bioaccumulation of Hg in the mushroom Pleurotus ostreatus. Bressa G, et al. **Ecotoxicol Environ Safety** 1988 Oct; 16(2):85–9

Effect of bimetallic combinations of Ni, Cr, and Pb on growth, uptake of nitrate and ammonia, 14CO2 fixation, and nitrogenase activity of Nostoc muscorum. Rai LC, et al. **Ecotoxicol Environ Safety** 1989 Feb;17(1):75–85

Spectroscopic characterization of a high-potential monohaem cytochrome from Wolinella succinogenes, a nitrate-respiring organism. Redox and spin equilibria studies. Moura I, et al. **Eur J Biochem** 1988 Nov 15; 177(3):673–82

The narK gene product participates in nitrate transport induced in Escherichia coli nitrate-respiring cells. Noji S, et al. **FEBS Lett** 1989 Jul 31;252(1–2):139–43

The metabolism and deamination of [14C]sulphamethazine in a germ-free pig: the influence of nitrate and nitrite. Struble CB, et al. **Food Chem Toxicol** 1988 Sep; 26(9):797–801

Genetic regulation of nitrate assimilation in Klebsiella pneumoniae M5al. Cali BM, et al. **J Bacteriol** 1989 May; 171(5):2666–72

Cytochrome components of nitrate- and sulfate-respiring Desulfovibrio desulfuricans ATCC 27774. Liu MC, et al. **J Bacteriol** 1988 Dec;170(12):5545–51

Rubredoxin as an intermediary electron carrier for nitrate reduction by NAD(P)H in Clostridium perfringens. Seki S, et al. **J Biochem (Tokyo)** 1988 Apr;103(4):583–4

Nitric oxide complex of cytochrome c' in cells of denitrifying bacteria. Yoshimura T, et al. **J Biochem (Tokyo)** 1988 Jun; 103(6):1016–9

Release of reactive nitrogen intermediates and reactive oxygen intermediates from mouse peritoneal macrophages. Comparison of activating cytokines and evidence for independent production. Ding AH, et al. **J Immunol** 1988 Oct 1;141(7):2407–12

Isolation of a gene that down-regulates nitrate assimilation and influences another regulatory gene in the same system. Sorger GJ, et al. **Mol Cell Biol** 1989 Sep;9(9):4113–7

[Nitrate and nitrite content of the saliva, urine, blood and cerebrospinal fluid in patients at an infection clinic] Wettig K, et al. **Wien Klin Wochenschr** 1989 May 26;101(11):386–8 (Eng. Abstr.) **(Ger)**

[Transformation of 2,4,6-trinitrotoluene during oxygen and nitrate respiration in Pseudomonas fluorescens] Naumova RP, et al. **Prikl Biokhim Mikrobiol** 1988 Jul-Aug; 24(4):493–8 (Eng. Abstr.) **(Rus)**

[The nitrogenous compounds of food, alcoholic drinks and tobacco in the biosynthesis of carcinogenic nitrosamines] Gileva OS, et al. **Vopr Pitan** 1988 Sep-Oct;(5):9–14 (57 ref.) **(Rus)**

PHARMACOKINETICS

Biological monitoring of isopropyl nitrate. Ahonen I, et al. **Toxicol Lett** 1989 May;47(2):205–11

[Nitrate metabolism in humans and animals after their intake with drinking water and food] Tsyganenko OI, et al. **Gig Sanit** 1989 Apr;(4):55–9 (58 ref.) **(Rus)**

PHARMACOLOGY

Acidity potentiates bronchoconstriction induced by hypoosmolar aerosols. Balmes JR, et al. **Am Rev Respir Dis** 1988 Jul;138(1):35–9

An in vivo 1H and 31P NMR investigation of the effect of nitrate on hypoxic metabolism in maize roots. Fan TW, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):592–606

Modulation of the activity of hepatic gamma-glutamyl transpeptidase, adenosine triphosphatase, placental glutathione S-transferase and adenylate cyclase by acute administration of lead nitrate. Columbano A, et al. **Basic Appl Histochem** 1988;32(4):501–10

Transient spectroscopy of bacterial rhodopsins with an optical multichannel analyzer. 2. Effects of anions on the halorhodopsin photocycle. Zimányi L, et al. **Biochemistry** 1989 Jun 13;28(12):5172–8

Regional cerebral blood flow changes associated with amyl nitrite inhalation. Mathew RJ, et al. **Br J Addict** 1989 Mar; 84(3):293–99

Induction of rat liver glutathione transferase subunit 7 by lead nitrate. Di Ilio C, et al. **Cancer Lett** 1989 Aug; 46(3):167–71

Effect of ammonium nitrate on the heterocyst differentiation and nitrogen fixing activity of Anabaena HA 101. Huang CY, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1988 May;21(2):93–103

Effect of in vitro organic nitrate tolerance on relaxation, cyclic GMP accumulation, and guanylate cyclase activation by glyceryl trinitrate and the enantiomers of isoidide dinitrate. Bennett BM, et al. **Circ Res** 1988 Oct; 63(4):693–701

Nitrate tolerance in epicardial arteries or in the venous system is not reversed by N-acetylcysteine in vivo, but tolerance-independent interactions exist. Münzel T, et al. **Circulation** 1989 Jan;79(1):188–97

Nitrate tolerance. A review of the evidence. Flaherty JT. **Drugs** 1989 Apr;37(4):523–50 (190 ref.)

Mechanisms of nitrate action and vascular tolerance. Fung HL, et al. **Eur Heart J** 1989 May;10 Suppl A:2–6 (29 ref.)

Soluble, nitrate/nitrite-inducible cytochrome P-450 of the fungus, Fusarium oxysporum. Shoun H, et al. **FEBS Lett** 1989 Feb 13;244(1):11–4

Effects of atrial natriuretic polypeptide and organic nitrates on levels of relaxation and cyclic nucleotide of canine coronary artery with and without endothelial injury. Nakagawa H, et al. **Heart Vessels** 1988;4(1):19–25

Determinants of in vitro nitroglycerin tolerance induction and reversal: influence of dose regimen, nitrate-free period, and sulfhydryl supplementation. Henry PJ, et al. **J Cardiovasc Pharmacol** 1989 Jul;14(1):31–7

Effects of salts in promoting the adhesion of amphibian gastrula cells. Komazaki S. **J Exp Zool** 1989 Apr; 250(1):40–8

Effect of nitrate on methane production and fermentation by slurries of human faecal bacteria. Allison C, et al. **J Gen Microbiol** 1988 Jun;134 (Pt 6):1397–405

The modifying effect of nitrites, nitrates and increased temperature on 14C metabolism. Vasilenko IYa, et al. **J Hyg Epidemiol Microbiol Immunol** 1989;33(1):29–33

Guanylate cyclase activation by organic nitrates is not mediated via nitrite. Romanin C, et al. **J Mol Cell Cardiol** 1988 May;20(5):389–96

The effect of lithium and nitrate on potassium contractures in a glycerol-treated slow-twitch muscle of the rat. Bruton JD. **Jpn J Physiol** 1988;38(5):735–9

Direct comparison of the effects of nitroprusside, SIN 1, and various nitrates on platelet aggregation and soluble guanylate cyclase activity. Gerzer R, et al. **Thromb Res** 1988 Oct 1;52(1):11–21

[Tolerance of nitrate derivatives: pharmacologic and clinical aspects] Unger P, et al. **Rev Med Brux** 1989 Mar;10(3):82–8 (56 ref.) (Eng. Abstr.) **(Fre)**

[Nitrate tolerance] Bertel O. **Schweiz Med Wochenschr** 1988 Dec 17;118(50):1892–8 (38 ref.) (Eng. Abstr.) **(Ger)**

[Tolerance for nitrates] Gherasim L, et al. **Rev Med Interna [Med Interna]** 1988 Mar-Apr;40(2):111–6 (10 ref.) **(Rum)**

[Molecular mechanism of tolerance for vasodilator nitrates] Popescu LM, et al. **Rev Med Interna [Med Interna]** 1988 Mar-Apr;40(2):145–54 (Eng. Abstr.) **(Rum)**

PHYSIOLOGY

Oxygen, nitrate, and molybdenum regulation of dmsABC gene expression in Escherichia coli. Cotter PA, et al. **J Bacteriol** 1989 Jul;171(7):3817–23

Isolation of nit-4, the minor nitrogen regulatory gene which mediates nitrate induction in Neurospora crassa. Fu YH, et al. **J Bacteriol** 1989 Jul;171(7):4067–70

Identification of a second gene involved in global regulation of fumarate reductase and other nitrate-controlled genes for anaerobic respiration in Escherichia coli. Kalman LV, et al. **J Bacteriol** 1989 Jul;171(7):3810–6

Influence of nar (nitrate reductase) genes on nitrate inhibition of formate-hydrogen lyase and fumarate reductase gene expression in Escherichia coli K-12. Stewart V, et al. **J Bacteriol** 1988 Oct;170(10):4437–44

Nucleotide sequence of the narL gene that is involved in global regulation of nitrate controlled respiratory genes of Escherichia coli. Gunsalus RP, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):1965–75

The narX and narL genes encoding the nitrate-sensing regulators of Escherichia coli are homologous to a family of prokaryotic two-component regulatory genes. Nohno T, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):2947–57

POISONING

Ammonium nitrate cold pack ingestion. Challoner KR, et al. **J Emerg Med** 1988 Jul-Aug;6(4):289–93

Effect of Escherichia coli free endotoxin on mercuric nitrate intoxicated rats. Hsueh YM, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Dec;87(12):1149–56

[Structural and ultrastructural study of the kidney of the tench, Tinca tinca L., after experimental poisoning by the absorption of lead nitrate] Roncero V, et al. **Zentralbl Veterinarmed [A]** 1988 Aug;35(7):529–43 (Eng. Abstr.) **(Fre)**

[A case of acute pneumonitis following nitric acid gas inhalation] Kitahara M. **Sangyo Igaku** 1988 Sep;30(5):412–3 **(Jpn)**

[Resuscitation and combined therapy of exotoxic shock caused by methemoglobin-forming poisons] Kosonogov LF, et al. **Anesteziol Reanimatol** 1988 Sep-Oct;(5):61–3 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Why nitrates in acute myocardial infarction? Reduction of myocardial demand or increase in coronary blood supply. De Coster P. **Adv Cardiol** 1988;36:174–7 (8 ref.)

Effect of antianginal medications on the prognostic value of exercise thallium scintigraphy. Burns RJ, et al. **Can J Cardiol** 1989 Jan-Feb;5(1):29–32

Nitrate therapy for myocardial ischemic syndrome: current perspectives including tolerance. Thadani U, et al. **Curr Probl Cardiol** 1988 Nov;13(11):723–84 (253 ref.)

Nitrates: the problem of tolerance [published erratum appears in Drug Ther Bull 1988 Aug 22;26(17):68] **Drug Ther Bull** 1988 Jul 25;26(15):57–8

New strategies for transdermal nitrate therapy. **Eur Heart J** 1989 May;10 Suppl A:1–55

The clinical significance of nitrate tolerance in patients with chronic heart failure. Packer M. **Eur Heart J** 1989 May; 10 Suppl A:20–5 (48 ref.)

Managing angina in the elderly: an update. Segal BL. **Geriatrics** 1989 Jan;44(1):55–8, 61, 65–6

Nitrate tolerance—a therapeutic dilemma. Sharpe N. **Int J Cardiol** 1988 Dec;21(3):207–10

Anti-anginal drugs: calcium channel blockers, beta-adrenergic blockers and nitrates. Chourashy BK. **J Indian Med Assoc** 1988 Oct;86(10):274–6

Nitrates in congestive heart failure. Herman BM, et al. **Med Clin North Am** 1989 Mar;73(2):361–71 (73 ref.)

[Effect of beta-adrenergic blockaders and nitrates on left ventricular diastolic function in patients with ischemic heart disease] Ivanov I. **Vutr Boles** 1989;28(1):26-31 (Eng. Abstr.) **(Bul)**

[Nitrate therapy--a causal therapy of the angina pectoris syndrome? New knowledge on the endothelium-derived relaxing factor] Hütter P, et al. **Fortschr Med** 1988 Jul 10; 106(20):413-6 (19 ref.) (Eng. Abstr.) **(Ger)**

[Is it possible to prevent the phenomenon of tolerance in patients with angina pectoris treated with nitrates?] Scardi S, et al. **G Ital Cardiol** 1989 May;19(5):433-9 (43 ref.) **(Ita)**

TOXICITY

Maternal and fetal chromosomal aberrations in mice following prenatal exposure to subembryotoxic doses of lead nitrate. Nayak BN, et al. **Acta Anat (Basel)** 1989; 135(2):185-8

Effects of organic and inorganic lead on the oxygen equilibrium curves of the fresh water field crab, Barytelphusa guerini. Tulasi SJ, et al. **Bull Environ Contam Toxicol** 1989 Feb;42(2):247-53

Relationship of embryotoxicity to genotoxicity of lead nitrate in mice. Nayak BN, et al. **Exp Pathol** 1989;36(2):65-73

Effect of lead nitrate administration on liver and kidney structure in rats. Abdel-Aal SF, et al. **J Egypt Soc Parasitol** 1989 Dec;19(2):689-99

Embryotoxic and teratogenic effects of aluminum nitrate in rats upon oral administration. Paternain JL, et al. **Teratology** 1988 Sep;38(3):253-7

[Nitrate: effects and standards for man] van Went-de Vries GF, et al. **Ned Tijdschr Geneeskd** 1989 May 20; 133(20):1015-20 (38 ref.) **(Dut)**

[Nitrate and nitrite levels in the milk and formulas for infants and children] Gajewska R, et al. **Rocz Panstw Zakl Hig** 1988;39(6):430-7 (Eng. Abstr.) **(Pol)**

[Toxicologic evaluation of nitrates entering the body with plant products] Voronina LP, et al. **Biol Nauki** 1988; (7):22-5 (Eng. Abstr.) **(Rus)**

[Concerning the article by V.G. Khodzhaev "Effect of water boiling on the level of nitrates"] Balte IM. **Gig Sanit** 1989 Feb;(2):68 **(Rus)**

[Immunologic status of children living in a region with an increased level of nitrates in the drinking water] Kozliuk AS, et al. **Gig Sanit** 1989 Mar;(3):19-22 (Eng. Abstr.) **(Rus)**

[Nitrate level in milk produced at subsidiary farms] Tulupov VP, et al. **Gig Sanit** 1989 Feb;(2):83-4 **(Rus)**

URINE

Urinary excretion of nitrate, nitrite and N-nitroso compounds in Schistosomiasis and bilharzia bladder cancer patients. Tricker AR, et al. **Carcinogenesis** 1989 Mar;10(3):547-52

Protein-related differences in the excretion of nitrosoproline and nitrate by the rat--possible modification of de novo nitrate synthesis. Mallett AK, et al. **Food Chem Toxicol** 1988 Oct;26(10):831-5

No effects of high intake of nitrate in drinking-water on urinary mutagenicity and cytogenetic tests in pigs. Persson L, et al. **Hereditas** 1988;108(2):223-6

NITRAZEPAM

ADMINISTRATION & DOSAGE

[Daytime sedation measured after intake of nitrazepam and lorazepam, respectively, as hypnotics for 10 days] Lundsgaard C, et al. **Ugeskr Laeger** 1989 Jun 26; 151(26):1676-9 (Eng. Abstr.) **(Dan)**

[The compressibility of nitrazepam crystals] Kása P, et al. **Pharmazie** 1988 Aug;43(8):556-7 **(Ger)**

ANALOGS & DERIVATIVES

Preparation of some N-alkylderivatives of nitrazepam as internal standards for the chromatographic determination of benzodiazepines. Leysen D, et al. **J Pharm Belg** 1988 May-Jun;43(3):152-6

ANALYSIS

Difference spectrophotometric assay of nitrazepam in tablet formulations. Davidson AG, et al. **J Pharm Pharmacol** 1989 Jan;41(1):63-5

[Direct compression nitrazepam tablets] Kása P, et al. **Pharmazie** 1988 Nov;43(11):780-1 (Eng. Abstr.) **(Ger)**

[Spray products of sparingly soluble drugs. 1. In vitro study of spray products of nitrazepam in a starch hydrolysis product] Traue J, et al. **Pharmazie** 1988 May;43(5):368-9 **(Ger)**

PHARMACOLOGY

A double-blind comparison between nitrazepam, lorazepam, lormetazepam and placebo as preoperative night sedatives. Sanders LD, et al. **Eur J Anaesthesiol** 1988 Nov;5(6):377-83

Double-blind study on the hypnotic and antianxiety effects of zopiclone compared with nitrazepam in the treatment of insomnia. Agnoli A, et al. **Int J Clin Pharmacol Res** 1989;9(4):277-81

Effects of butoctamide hydrogen succinate and nitrazepam on psychomotor function and EEG in healthy volunteers. Tazaki T, et al. **Psychopharmacology (Berlin)** 1989; 97(3):370-5

[On the changes in the K-complex and slow wave sleep with nitrazepam--functional significance of the K-complex] Kuroda K. **Seishin Shinkeigaku Zasshi** 1989;91(1):16-27 **(Jpn)**

[Effect of benzodiazepines on drug-metabolizing enzymes. II. Increased environmental temperature as a modifier of the effect of nitrazepam on microsomal monooxygenases of the rat liver] Pachecka J, et al. **Acta Pol Pharm** 1988; 45(3):271-5 (Eng. Abstr.) **(Pol)**

[Influence of antidepressants on benzodiazepine (diazepam and nitrazepam) effects] Mashkovskiĭ MD, et al. **Farmakol Toksikol** 1988 Jul-Aug;51(4):16-9 (Eng. Abstr.) **(Rus)**

POISONING

A fatality involving secobarbital, nitrazepam, and codeine. Tracqui A, et al. **Am J Forensic Med Pathol** 1989 Jun; 10(2):130-3

THERAPEUTIC USE

The effects of nitrazepam and flunitrazepam on oxygen desaturation during sleep in patients with stable hypoxemic nonhypercapnic COPD. Midgren B, et al. **Chest** 1989 Apr; 95(4):765-8

NITRENDIPINE

ADMINISTRATION & DOSAGE

[Regression of hypertrophy following nitrendipine: effect on systolic and diastolic function] Vogt M, et al. **Z Kardiol** 1989 Jul;78(7):469-77 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Nitrendipine-induced gingival overgrowth in dogs. Heijl L, et al. **J Periodontol** 1989 Feb;60(2):104-12

ANALOGS & DERIVATIVES

The influence of antihypertensive treatment on the mesenteric arterial structure in spontaneously hypertensive rats. A morphometric study. Nordborg C. **Acta Physiol Scand** 1989 Jan;135(1):47-56

Effect of felodipine on hyperventilation-induced ischemic attacks in variant angina pectoris. Ardissino D, et al. **Am J Cardiol** 1989 Jan 1;63(1):104-7

Felodipine, a new calcium antagonist, modifies exercise-induced asthma. Patel KR, et al. **Am Rev Respir Dis** 1988 Jul;138(1):54-6

Calcium and calmodulin antagonism for inhibition of uterine contractions. Lechner W, et al. **Arch Gynecol Obstet** 1989; 244(3):137-9

Binding of a dihydropyridine felodipine-analogue to calmodulin and related calcium-binding proteins. Boström SL, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3723-8

Activation of protein kinase C by the dihydropyridine calcium channel blocker, felodipine. Sutherland C, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1263-70

The effects of treatment with felodipine as a single agent in coronary artery disease. Metcalfe MJ, et al. **Br Heart J** 1989 Mar;61(3):258-61

Antihypertensive efficacy of the calcium-antagonist felodipine in patients with persisting hypertension on beta-adrenoceptor blocker therapy. The Canadian Felodipine Study Group. **Br J Clin Pharmacol** 1988 Nov; 26(5):535-45

Pharmacokinetics of felodipine after intravenous and chronic oral administration in patients with congestive heart failure. Dunselman PH, et al. **Br J Clin Pharmacol** 1989 Jul; 28(1):45-52

Pharmacokinetics of felodipine in patients with impaired renal function. Edgar B, et al. **Br J Clin Pharmacol** 1989 Jan;27(1):67-74

Effect of indomethacin on the pharmacokinetics and pharmacodynamics of felodipine. Hardy BG, et al. **Br J Clin Pharmacol** 1988 Nov;26(5):557-62

Sustained haemodynamic effects of felodipine in patients with chronic cardiac failure. Tweddel AC, et al. **Br J Clin Pharmacol** 1988 Jun;25(6):689-94

Effects of felodipine on natriuresis, atrial natriuretic factor, the renin-angiotensin-aldosterone system, and blood pressure in essential hypertension. Cerasola G, et al. **Clin Ther** 1988;10(6):694-703

Felodipine. A review of its pharmacodynamic and pharmacokinetic properties, and therapeutic use in hypertension. Saltiel E, et al. **Drugs** 1988 Oct;36(4):387-428 (178 ref.)

Effect of felodipine in refractory hypertension. Seideman P, et al. **Drugs Exp Clin Res** 1988;14(9):587-92

Efficacy of felodipine in congestive heart failure. Dunselman PH, et al. **Eur Heart J** 1989 Apr;10(4):354-64

Increased exercise tolerance and reduced electrocardiographic ischaemia 3 and 12 hours after oral felodipine in effort angina. Verdecchia P, et al. **Eur Heart J** 1989 Jan;10(1):70-6

Felodipine reduces the absorption of theophylline in man. Bratel T, et al. **Eur J Clin Pharmacol** 1989;36(5):481-5

Digoxin-felodipine interaction in patients with congestive heart failure. Dunselman PH, et al. **Eur J Clin Pharmacol** 1988;35(5):461-5

Pharmacokinetics of felodipine in patients with liver disease. Regårdh CG, et al. **Eur J Clin Pharmacol** 1989;36(5):473-9

Dose-dependent effects of felodipine on diuresis and natriuresis in healthy subjects. Bengtsson-Hasselgren B, et al. **J Cardiovasc Pharmacol** 1988 Aug;12(2):134-9

Plasma concentration-effect relationship of felodipine intravenously in patients with congestive heart failure. Dunselman PH, et al. **J Cardiovasc Pharmacol** 1989 Sep; 14(3):438-43

Antihypertensive effect of felodipine or hydralazine when added to beta-blocker therapy. Hansson L, et al. **J Cardiovasc Pharmacol** 1988 Jul;12(1):94-101

A placebo-controlled dose-response study of felodipine extended release in hypertensive patients. Liedholm H, et al. **J Cardiovasc Pharmacol** 1989 Jul;14(1):109-13

Oral pharmacokinetics of felodipine in patients with congestive heart failure: variable prediction using intravenous data. Dunselman PH, et al. **J Clin Pharmacol** 1989 Jun;29(6):518-23

A comparison of felodipine and nifedipine as monotherapies for the treatment of mild to moderate hypertension. Abelardo NS, et al. **J Hum Hypertens** 1989 Feb;3(1):57-9

The effects of combining felodipine and metoprolol in moderate to severe hypertension--a one year study. Chow J. **J Hum Hypertens** 1988 Jun;2(1):27-31

Effect of felodipine on blood pressure and vascular reactivity in stroke-prone spontaneously hypertensive rats. Bruner CA, et al. **J Hypertens** 1989 Jan;7(1):31-5

Effects of felodipine on blood pressure and lymphocyte membrane characteristics in spontaneously hypertensive stroke-prone rats. Furspan PB, et al. **J Hypertens Suppl** 1988 Dec;6(4):S236-8

Effects of felodipine on plasma digoxin levels and haemodynamics in patients with heart failure. Kirch W, et al. **J Intern Med** 1989 Apr;225(4):237-9

Contribution of the intestine to the first-pass metabolism of felodipine in the rat. Wang SX, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):632-6

Cardiovascular-risk reduction: initial diuretic therapy compared with calcium-antagonist (felodipine) therapy for primary hypertension. Sudhir K, et al. **Med J Aust** 1989 Sep 4;151(5):277-9

[Treatment of essential hypertension with felodipine or atenolol as first line therapy. Comparative double-blind randomized study] Lesbre JP, et al. **Presse Med** 1989 Jan 28;18(3):103-6 (Eng. Abstr.) **(Fre)**

[Felodipine in arterial hypertension. Double-blind comparison with atenolol] Andrejak M, et al. **Therapie** 1989 May-Jun;44(3):167-70 (Eng. Abstr.) **(Fre)**

[Felodipine and circulatory disturbances] **Lakartidningen** 1989 May 10;86(19):1821 **(Swe)**

ANALYSIS

[Comparison of several methods for determination of nitrendipine] Zhu SM, et al. **Yao Hsueh Hsueh Pao** 1988 Jul;23(7):527-31 (Eng. Abstr.) **(Chi)**

BLOOD

Plasma nitrendipine concentrations in elderly hypertensive patients after single and multiple dosing. Crome P, et al. **Br J Clin Pharmacol** 1988 Sep;26(3):323-6

Gas chromatographic analysis of nitrendipine and its pyridine metabolite in human plasma. Soons PA, et al. **J Chromatogr** 1988 Jul 15;428(2):362-8

DIAGNOSTIC USE

Characterization of calcium channel antagonist binding sites labeled by [3H]nitrendipine in porcine coronary artery and aorta. Yamada S, et al. **Eur J Pharmacol** 1988 Sep 13; 154(2):203-8

METABOLISM

Acute ethanol and acetaldehyde administration produce similar effects on L-type calcium channels in rat brain. Bergamaschi S, et al. **Alcohol** 1988 Jul-Aug;5(4):337-40

Halothane decreases calcium channel antagonist binding to cardiac membranes. Blanck TJ, et al. **Anesth Analg** 1988 Nov;67(11):1032-5

A primer on "grind and bind". Waud DR. **Anesth Analg** 1988 Nov;67(11):1025-31

Slow dissociation of the new slow-onset and long-acting calcium antagonist benidipine hydrochloride from 3H-nitrendipine binding sites. Ishii A, et al. **Arzneimittelforschung** 1988 Nov;38(11A):1681-3

Partition of Ca2+ antagonists in brain plasma membranes. Carvalho CM, et al. **Biochem Pharmacol** 1989 Jul 1; 38(13):2121-7

[3H]-nitrendipine binding sites in normal and cardiomyopathic hamsters: absence of a selective increase in putative calcium channels in cardiomyopathic hearts. Howlett SE, et al. **Cardiovasc Res** 1988 Nov;22(11):840-6

The mitochondrial high-capacity low-affinity (+/-)-[3H]nitrendipine binding site is regulated by nucleotides. Zernig G, et al. **Eur J Pharmacol** 1988 Nov 15;157(1):67-73

Isolation and characterization of a fraction from brain that inhibits 1,4-[3H]dihydropyridine binding and L-type calcium channel current. Janis RA, et al. **FEBS Lett** 1988 Nov 7;239(2):233-6

Characterization of membrane calcium channels in

nonpregnant and pregnant human uterus. Batra SC, et al. **Gynecol Obstet Invest** 1989;27(2):57–61

Characteristics of specific bindings of nitrendipine and PN200–110 to various crude membranes: induction of irreversible bindings by UV irradiation. Ichida S, et al. **J Biochem (Tokyo)** 1989 May;105(5):760–6

Altered transverse tubule dihydropyridine receptor binding in malignant hyperthermia. Ervasti JM, et al. **J Biol Chem** 1989 Feb 15;264(5):2711–7

Separate binding and functional sites for omega-conotoxin and nitrendipine suggest two types of calcium channels in bovine chromaffin cells. Ballesta JJ, et al. **J Neurochem** 1989 Oct;53(4):1050–6

Endogenous modulators of binding of [3H]nitrendipine in extracts of rat brain. Ebersole BJ, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):971–6

Identification and characterization of [3H]nitrendipine binding sites in rat spinal cord. Gandhi VC, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):473–80

Effects of KB-2796, a new calcium antagonist, and other diphenylpiperazines on [3H]nitrendipine binding. Iwamoto T, et al. **Jpn J Pharmacol** 1988 Oct;48(2):241–7

SR 33557, a novel calcium-antagonist: interaction with [3H]-(+/-)-nitrendipine and [3H]-(-)-desmethoxy-verapamil binding sites in cerebral membranes. Nokin P, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):31–6

Inhibition of calcium channel dihydropyridine receptor binding by purified Mojave toxin. Valdes JJ, et al. **Neurotoxicol Teratol** 1989 Mar-Apr;11(2):129–33

PHARMACOKINETICS

The pharmacokinetics of nitrendipine. I. Absorption, plasma concentrations, and excretion after single administration of [14C]nitrendipine to rats and dogs. Krause HP, et al. **Arzneimittelforschung** 1988 Nov;38(11):1593–9

The pharmacokinetics of nitrendipine. II. Distribution to and elimination from organs and tissues of rats and dogs after single or repeated administration of [14C]nitrendipine. Krause HP, et al. **Arzneimittelforschung** 1988 Nov; 38(11):1599–604

Oral absorption profile of nitrendipine in healthy subjects: a kinetic and dynamic study. Soons PA, et al. **Br J Clin Pharmacol** 1989 Feb;27(2):179–89

Plasma nitrendipine concentrations in elderly normotensive volunteers after single and multiple dosing. Crome P, et al. **Curr Med Res Opin** 1989;11(5):279–82

Elimination and haemodynamic effects of nitrendipine in patients with chronic renal failure. Ankermann T, et al. **Eur J Clin Pharmacol** 1989;36(5):433–7

Pharmacokinetics of nitrendipine in terminal renal failure. van Bortel L, et al. **Eur J Clin Pharmacol** 1989;36(5):467–71

Nitrendipine in human plasma and breast milk. White WB, et al. **Eur J Clin Pharmacol** 1989;36(5):531–4

Pharmacokinetics and pharmacodynamics of nitrendipine in healthy subjects and patients with kidney and liver disease. Eichelbaum M, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S6–10 (12 ref.)

The effects of age and race on nitrendipine pharmacokinetics and pharmacodynamics. Lettieri JT, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S129–32

Disposition of nitrendipine in patients with chronic liver diseases. Zilly W, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S175–7

PHARMACOLOGY

Effects of "nitrendipine" on nitrous oxide anesthesia, tolerance, and physical dependence. Dolin SJ, et al. **Anesthesiology** 1989 Jan;70(1):91–7

Studies on the effects of nitrendipine on oxytocin-, angiotensin II- and ergometrine-induced contraction of pregnant human myometrium in vitro. Odum CU, et al. **Br J Obstet Gynaecol** 1988 Aug;95(8):765–70

Does calcium influx regulate melatonin production through the circadian pacemaker in chick pineal cells? Effects of nitrendipine, Bay K 8644, Co2+, Mn2+, and low external Ca2+. Zatz M, et al. **Brain Res** 1988 Nov 1;463(2):305–16

Nitrendipine blocks high potassium contractures but not twitches in rat skeletal muscle. Frank GB, et al. **Can J Physiol Pharmacol** 1988 Sep;66(9):1210–3

Potential therapeutic effect of nitrendipine [letter] Glavin GB. **Dig Dis Sci** 1989 Sep;34(9):1477

Anticonvulsant profile of the dihydropyridine calcium channel antagonists, nitrendipine and nimodipine. Dolin SJ, et al. **Eur J Pharmacol** 1988 Jul 26;152(1-2):19–27

Calcium antagonist-induced relaxation of the prostaglandin-F2 alpha response of isolated calf retinal resistance arteries. Nielsen PJ, et al. **Exp Eye Res** 1989 Mar;48(3):329–35

Opposite effects of enalapril and nitrendipine on natriuretic response to atrial natriuretic factor. Renal function evaluated with clearance studies in humans. Gaillard CA, et al. **Hypertension** 1989 Feb;13(2):173–80

Effects of nitrendipine on growth activity in cultured vascular smooth muscle cells. Absher MP, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S104–6

Effects of nitrendipine and cilazapril alone or in combination on hemodynamics and regional blood flows in conscious spontaneously hypertensive rats. Clozel JP. **J Cardiovasc Pharmacol** 1988;12(5):600–7

Effects of nitrendipine on blood pressure, renin-angiotensin system, and kidney function in essential hypertension. Glorioso N, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S142–5

Nitrendipine inhibition of calcium current in rat vascular muscle cells. Hermsmeyer K, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 5:S100–3

Diuretic effect of nitrendipine contributes to its antihypertensive efficacy: a review. Kazda S, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S1–5 (18 ref.)

Nitrendipine prevents the development of cardiac hypertrophy in DOCA-salt-treated hypertension-prone (SBH) and -resistant (SBN) rats through nonhemodynamic mechanisms. Kobrin I, et al. **J Cardiovasc Pharmacol** 1988; 12 Suppl 4:S125–8

Hemodynamic effects of nitrendipine on systolic ventricular function, diastolic ventricular function, and peripheral circulation in essential hypertension. Kuschnir E, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S36–44

Nitrendipine block of calcium channel currents in vascular smooth muscle and adrenal glomerulosa cells. McCarthy RT, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S98–101

The effect of nitrendipine (NIT) on maternal and fetal blood pressure, uterine blood flow, and blood gas status in pregnant sheep. Pipkin FB, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 6:S123–5

Persistence of the natriuretic effect of calcium entry blockers. Ruilope LM, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S136–9

Protective effect of nitrendipine against hypoxic injury in perfused livers from ethanol-treated rats. Thurman RG, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S113–6

Potential-dependent interactions of nitrendipine and related 1,4-dihydropyridines in functional smooth muscle preparations. Triggle DJ, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S91–3

Influence of a single dose of nitrendipine on whole blood platelet activity in healthy subjects. Tschöpe D, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S167–9

Improvement of postischemic, contractile function by the calcium channel blocking agent nitrendipine in conscious dogs. Warltier DC, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S120–4

Are changes in neuronal calcium channels involved in ethanol tolerance? Dolin SJ, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):985–91

Voltage-dependent decrease in the availability of single calcium channels by nitrendipine in guinea-pig ventricular cells. Kawashima Y, et al. **J Physiol (Lond)** 1988 Aug; 402:219–35

Effects of organic and inorganic Ca antagonists on rat platelet arachidonic acid metabolism in the presence of Ca2+, Sr2+ and Ba2+. Blache D, et al. **Mol Cell Biochem** 1989 Feb 21;85(2):191–6

Effects of nitrendipine on the autoregulation of regional cerebral blood flow in the pithed rabbit. Aihara K. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Apr; 339(4):469–73

Flumazenil but not nitrendipine reverses the increased anxiety during ethanol withdrawal in the rat. File SE, et al. **Psychopharmacology (Berlin)** 1989;98(2):262–4

[Effects of nitrendipine on coronary flow and myocardial oxygen and carbon dioxide metabolism in dogs] Rao MR, et al. **Yao Hsueh Hsueh Pao** 1988 Feb;23(2):100–3 (Eng. Abstr.) **(Chi)**

[Comparative effects of dihydropyridine inhibitors of calcium penetration on spontaneous contraction of the isolated heart atria in the guinea pig] Prostran M, et al. **C R Soc Biol (Paris)** 1988;182(6):556–62 (Eng. Abstr.) **(Fre)**

[Effects of nitrendipine on cardiovascular systems] Kawahara K, et al. **Nippon Yakurigaku Zasshi** 1988 Dec;92(6):397–410 (Eng. Abstr.) **(Jpn)**

[Coronary selectivity of nitrendipine in dogs] Mosca SM, et al. **Medicina (B Aires)** 1988;48(3):255–9 (Eng. Abstr.) **(Spa)**

THERAPEUTIC USE

The addition of doxazosin to the treatment regimen of hypertensive patients not responsive to nifedipine. Lindner UK, et al. **Am Heart J** 1988 Dec;116(6 Pt 2):1814–20

A double-blind comparative study of doxazosin and nitrendipine in patients with mild-to-moderate essential hypertension. Nechwatal W, et al. **Am Heart J** 1988 Dec; 116(6 Pt 2):1806–14

Efficacy of four antihypertensive drugs (clonidine, enalapril, nitrendipine, oxprenolol) on stress blood pressure. Schmieder RE, et al. **Am J Cardiol** 1989 Jun 1; 63(18):1333–8

Treatment of hypertension in the elderly with a new calcium channel blocking drug, nitrendipine. Byyny RL, et al. **Am J Med** 1989 Jan;86(1):49–55

A double-blind randomized cross-over study of the efficacy and tolerability of nifedipine and nitrendipine in the treatment of mild to moderate hypertension. Heagerty AM, et al. **Br J Clin Pharmacol** 1989 Apr;27(4):411–6

Antihypertensive effects of nitrendipine and cilazapril alone, and in combination in hypertensive patients with chronic renal failure. Kloke HJ, et al. **Br J Clin Pharmacol** 1989; 27 Suppl 2:289S–296S

Systemic and regional hemodynamic and humoral effects of nitrendipine in essential hypertension. Grossman E, et al. **Circulation** 1988 Dec;78(6):1394–400

Nitrendipine versus hydrochlorothiazide in hypertensive patients over 70 years of age. Jansen RW, et al. **Clin Pharmacol Ther** 1989 Mar;45(3):291–8

Antihypertensive and hypouricaemic effects of nitrendipine in chronic renal failure. Weidmann P, et al. **Eur J Clin Pharmacol** 1989;36(3):223–7

Calcium antagonists: first-line partner for antihypertensive care. Third International Nitrendipine Symposium. Basel, Switzerland, February 10, 1988. Proceedings. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S1–187

Nitrendipine in patients with end-stage renal disease and hypertension. Bambauer R, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S133–5

Effects of 5 mg sublingual nitrendipine in patients with precapillary pulmonary hypertension due to pulmonary fibrosis. Burger W, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S164–6

Long-term efficacy and safety of nitrendipine in severe essential hypertension. Burris JF, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S157–60

Short- and long-term cerebrovascular effects of nitrendipine in hypertensive patients. Conen D, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S64–8

Nitrendipine treatment in so-called therapy-resistant arterial hypertension; effect as monotherapy and in combination with propranolol on blood pressure, heart rate, other hemodynamic parameters, plasma renin activity, and catecholamines. Faulhaber HD, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S146–8

Review of long-term trials with nitrendipine. Hulthén UL, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S11–5 (44 ref.)

Effects of nitrendipine and hydrochlorothiazide on postprandial blood pressure reduction and carbohydrate metabolism in hypertensive patients over 70 years of age. Jansen RW, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S59–63

Antihypertensive monotherapy with nitrendipine in general practice. Kiowski W, et al. **J Cardiovasc Pharmacol** 1988; 12 Suppl 4:S149–53

Combination therapy of hypertension with beta-adrenoceptor blockers and the calcium channel antagonist nitrendipine. Mac Carthy EP. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S76–9 (32 ref.)

Antihypertensive therapy with nitrendipine: comparison with hydrochlorothiazide and propranolol. Massie BM. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S55–8

24-hour noninvasive oscillometric blood pressure monitoring: evaluation of the antihypertensive circadian profile of nitrendipine. Meyer-Sabellek W, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S22–8

Comparison of BAY e 5009 (nitrendipine) with dihydralazine in Wistar rats with experimentally induced nephritis. Mohácsi G, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S117–9

Cardiovascular reactivity to physical and psychologic stress during long-term treatment with nitrendipine in essential hypertension. Palombo C, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 6:S135–42

Acute and chronic effects of nitrendipine on hemodynamics and myocardial ischemia in patients with combined angina pectoris and hypertension. Schmoeckel M, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S170–4

Serotonin metabolism and platelet aggregation under antihypertensive treatment with nitrendipine. Sebeková K, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S161–3

Treatment of hypertensive urgencies and emergencies with nitrendipine, nifedipine, and clonidine: effect on blood pressure and heart rate. Späh F, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S154–6

Regression of myocardial and coronary vascular hypertrophy in hypertensive heart disease. Strauer BE. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S45–54 (33 ref.)

Prolonged calcium channel blocker therapy of hypertension. Weber MA. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S16–21

Comparison of quality of life on nitrendipine and propranolol. Zachariah PK, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S29–35

Nitrendipine and ACE inhibitors. Zanchetti A. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S80–5 (9 ref.)

Amiloride compared with nitrendipine in treatment of essential hypertension. Katzman PL, et al. **J Hum Hypertens** 1988 Oct;2(3):147–51

Efficacy of once daily nitrendipine in essential hypertension--a study using ambulatory blood pressure monitoring. Lazarus JH, et al. **J Hum Hypertens** 1988 Oct; 2(3):191–4

Effects of captopril and nitrendipine on the response to acute volume expansion in essential hypertension. Ribstein J, et al. **J Hypertens Suppl** 1988 Dec;6(4):S473–5

Therapeutic value of calcium antagonists in autonomous hyperaldosteronism. Stimpel M, et al. **Klin Wochenschr** 1989 Feb 15;67(4):248–52

Effects of nitrendipine on blood pressure and blood ciclosporin A level in patients with posttransplant hypertension. Copur MS, et al. **Nephron** 1989;52(3):227–30

[Nitrendipine in patients with coronary disease and hypertension. Acute and long-term effects on hemodynamics and myocardial ischemia] Schmoeckel M, et al. **Fortschr Med** 1988 Dec 10;106(35):715–8 (Eng.

Abstr.) (Ger)
[Comparative prospective randomized multicenter study of 2 dosage protocols of nitrendipine in patients with mild to moderate hypertension] Ruilope LM, et al.
Rev Clin Esp 1989 Feb;184(3):125–7 (Eng. Abstr.) (Spa)
[Effect of nitrendipine in the treatment of mild or moderate essential arterial hypertension] Martínez A, et al.
Rev Esp Cardiol 1989 Mar;42(3):185–91 (Eng. Abstr.) (Spa)

NITRIC OXIDE

From nitric oxide to desferal: nitrogen free radicals and iron in oxidative injury. Willson RL. **Basic Life Sci** 1988; 49:87–99 (70 ref.)
[Electronic structure of the binding of O2, CO and NO with heme iron] Kobayashi H, et al.
Tanpakushitsu Kakusan Koso 1987 May;32(6):704–10 (38 ref.) (Jpn)

ANALYSIS

Streptozotocin: a nitric oxide carrying molecule and its effect on vasodilation. Thomas G, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):279–80
Nitric oxide complex of cytochrome c'in cells of denitrifying bacteria. Yoshimura T, et al. **J Biochem (Tokyo)** 1988 Jun; 103(6):1016–9
An improved chemiluminescence assay suggests non nitric oxide–mediated action of lysophosphatidylcholine and acetylcholine. Menon NK, et al.
Proc Soc Exp Biol Med 1989 Jul;191(3):316–9

BIOSYNTHESIS

Hydroxylamine is a vasorelaxant and a possible intermediate in the oxidative conversion of L-arginine to nitric oxide. DeMaster EG, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):527–33
Basic polyamino acids rich in arginine, lysine, or ornithine cause both enhancement of and refractoriness to formation of endothelium–derived nitric oxide in pulmonary artery and vein. Ignarro LJ, et al. **Circ Res** 1989 Feb;64(2):315–29
[Formation of nitric oxide in animal tissues during inflammatory process] Kubrina LN, et al.
Biull Eksp Biol Med 1989 Jan;107(1):31–3 (Eng. Abstr.) (Rus)

BLOOD

Human neutrophils and mononuclear cells inhibit platelet aggregation by releasing a nitric oxide–like factor. Salvemini D, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(16):6328–32

DIAGNOSTIC USE

Nitric oxide (NO), a new test gas for study of alveolar–capillary diffusion. Meyer M, et al.
Eur Respir J 1989 Jun;2(6):494–6 (30 ref.)

METABOLISM

Endogenous nitric oxide and the vascular endothelium. Dusting GJ.
Adv Prostaglandin Thromboxane Leukotriene Res 1989; 19:271–6 (24 ref.)
Inhibition of rat mesangial cell mitogenesis by nitric oxide–generating vasodilators. Garg UC, et al.
Am J Physiol 1989 Jul;257(1 Pt 2):F60–6
Release of NO and EDRF from cultured bovine aortic endothelial cells. Myers PR, et al. **Am J Physiol** 1989 Apr; 256(4 Pt 2):H1030–7
Photodissociation of cytochrome c oxidase–nitric oxide complexes. Gorren AC, et al. **Ann N Y Acad Sci** 1988; 550:139–49
Reduction of nitrite to nitric oxide by enteric bacteria. Ji XB, et al. **Biochem Biophys Res Commun** 1988 Nov 30; 157(1):106–8
A novel citrulline–forming enzyme implicated in the formation of nitric oxide by vascular endothelial cells. Palmer RM, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):348–52
Nitric oxide formation during microsomal hepatic denitration of glyceryl trinitrate: involvement of cytochrome P-450. Servent D, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1210–6
Generation of nitric oxide by human neutrophils. Wright CD, et al. **Biochem Biophys Res Commun** 1989 Apr 28; 160(2):813–9
Synthesis of nitric oxide from L-arginine by neutrophils. Release and interaction with superoxide anion. McCall TB, et al. **Biochem J** 1989 Jul 1;261(1):293–6
The biological significance of nitric oxide formation from L-arginine. Moncada S, et al. **Biochem Soc Trans** 1989 Aug; 17(4):642–4 (37 ref.)
Macrophage oxidation of L-arginine to nitrite and nitrate: nitric oxide is an intermediate. Marletta MA, et al.
Biochemistry 1988 Nov 29;27(24):8706–11
Electron paramagnetic resonance study of ferrous cytochrome P-450scc–nitric oxide complexes: effects of 20(R),22(R)–dihydroxycholesterol and reduced adrenodoxin. Tsubaki M, et al. **Biochemistry** 1988 Jun 28; 27(13):4856–62
Acetylcholine induces vasodilatation in the rabbit isolated heart through the release of nitric oxide, the endogenous nitrovasodilator. Amezcua JL, et al. **Br J Pharmacol** 1988 Nov;95(3):830–4
A specific inhibitor of nitric oxide formation from L-arginine attenuates endothelium–dependent relaxation. Rees DD, et al. **Br J Pharmacol** 1989 Feb;96(2):418–24
Comparison of the survival of endothelium–derived relaxing factor and nitric oxide within the isolated perfused mesenteric arterial bed of the rat. Warner TD, et al.
Br J Pharmacol 1989 Jul;97(3):777–82
The energy–conserving nitric–oxide–reductase system in Paracoccus denitrificans. Distinction from the nitrite reductase that catalyses synthesis of nitric oxide and evidence from trapping experiments for nitric oxide as a free intermediate during denitrification. Carr GJ, et al.
Eur J Biochem 1989 Feb 15;179(3):683–92
Nitric oxide release from the isolated guinea pig heart. Kelm M, et al. **Eur J Pharmacol** 1988 Oct 18;155(3):317–21
Arginine is a physiological precursor of endothelium–derived nitric oxide. Schmidt HH, et al. **Eur J Pharmacol** 1988 Sep 13;154(2):213–6
Formation and release of nitric oxide from human neutrophils and HL–60 cells induced by a chemotactic peptide, platelet activating factor and leukotriene B4. Schmidt HH, et al.
FEBS Lett 1989 Feb 27;244(2):357–60
Formation of the N–N bond from nitric oxide by a membrane–bound cytochrome bc complex of nitrate–respiring (denitrifying) Pseudomonas stutzeri. Heiss B, et al. **J Bacteriol** 1989 Jun;171(6):3288–97
Nitric oxide and nitrous oxide production and cycling during dissimilatory nitrite reduction by Pseudomonas perfectomarina. Zafiriou OC, et al. **J Biol Chem** 1989 Apr 5;264(10):5694–9
Nitric oxide. A macrophage product responsible for cytostasis and respiratory inhibition in tumor target cells. Stuehr DJ, et al. **J Exp Med** 1989 May 1;169(5):1543–55
Activated murine macrophages secrete a metabolite of arginine with the bioactivity of endothelium–derived relaxing factor and the chemical reactivity of nitric oxide. Stuehr DJ, et al. **J Exp Med** 1989 Mar 1;169(3):1011–20
Effect of inositol hexakisphosphate on the spectroscopic properties of the nitric oxide derivative of ferrous naturally glycated human hemoglobin HbA1c. Ascenzi P, et al.
J Inorg Biochem 1988 Sep;34(1):19–24
What is the relationship between the endothelium derived relaxant factor and nitric oxide? Long CJ, et al.
Life Sci 1989;45(1):1–14 (64 ref.)
Formation of nitric oxide from L-arginine in the central nervous system: a transduction mechanism for stimulation of the soluble guanylate cyclase. Knowles RG, et al.
Proc Natl Acad Sci U S A 1989 Jul;86(13):5159–62
Role of endothelium–derived nitric oxide in the regulation of blood pressure. Rees DD, et al.
Proc Natl Acad Sci U S A 1989 May;86(9):3375–8
Identification of arginine as a precursor of endothelium–derived relaxing factor. Sakuma I, et al.
Proc Natl Acad Sci U S A 1988 Nov;85(22):8664–7

PHARMACOKINETICS

A simultaneous single breath measurement of pulmonary diffusing capacity with nitric oxide and carbon monoxide. Borland CD, et al. **Eur Respir J** 1989 Jan;2(1):56–63
[The release of nitric oxide from organic nitroso compounds in the body of animals] Kubrina LN, et al.
Izv Akad Nauk SSSR [Biol] 1988 Nov–Dec;(6):844–50 (Eng. Abstr.) (Rus)

PHARMACOLOGY

Proximal and distal dog coronary arteries respond differently to basal EDRF but not to NO. Hoeffner U, et al.
Am J Physiol 1989 Mar;256(3 Pt 2):H828–31
Independent blockade of cerebral vasodilation from acetylcholine and nitric oxide. Marshall JJ, et al.
Am J Physiol 1988 Oct;255(4 Pt 2):H847–54
Reversible and irreversible effects of nitric oxide on the soluble hydrogenase from Alcaligenes eutrophus H16. Hyman MR, et al. **Biochem J** 1988 Sep 1;254(2):469–75
Crystal structure of nitric oxide inhibited cytochrome c peroxidase. Edwards SL, et al. **Biochemistry** 1988 Oct 18; 27(21):8074–81
Neither nitric oxide nor nitroglycerin accounts for all the characteristics of endothelially mediated vasodilatation of pig coronary arteries. Bény JL, et al. **Blood Vessels** 1988; 25(6):308–11
The effect of arginine and nitric oxide on resistance blood vessels of the perfused rat kidney. Bhardwaj R, et al.
Br J Pharmacol 1989 Jul;97(3):739–44
Nitric oxide–induced vasodilation of organic nitrate–tolerant rabbit aorta. Slack CJ, et al. **Can J Physiol Pharmacol** 1988 Oct;66(10):1344–6
Endothelium–derived nitric oxide relaxes nonvascular smooth muscle. Buga GM, et al. **Eur J Pharmacol** 1989 Feb 14;161(1):61–72
Desensitization of guanylate cyclase in nitrate tolerance does not impair endothelium–dependent responses. Mülsch A, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):191–8
The discovery of nitric oxide as the endogenous nitrovasodilator. Moncada S, et al. **Hypertension** 1988 Oct; 12(4):365–72 (86 ref.)
Inhibition of nitrogenase by NO. Liang JH, et al.
Indian J Biochem Biophys 1988 Dec;25(6):636–41
Activation of a cytosolic ADP–ribosyltransferase by nitric oxide–generating agents. Brüne B, et al. **J Biol Chem** 1989 May 25;264(15):8455–8
Comparative pharmacology of endothelium–derived relaxing factor and nitric oxide. Shikano K, et al.
J Pharmacol Exp Ther 1988 Dec;247(3):873–81
Lysolecithins as endothelium–dependent vascular smooth muscle relaxants that differ from endothelium–derived relaxing factor (nitric oxide) [published erratum appears in Proc Natl Acad Sci U S A 1989 Jun;86(12):4725] Saito T, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8246–50
Heme–dependent activation of soluble guanylate cyclase by nitric oxide: regulation of enzyme activity by porphyrins and metalloporphyrins. Ignarro LJ. **Semin Hematol** 1989 Jan;26(1):63–76 (41 ref.)
[Potentiation of opiates by administration of baclofen and proglumide during the intraoperative period] Massei R, et al. **Minerva Anestesiol** 1988 Apr;54(4):137–40 (Ita)
[Is endogenous nitroglycerin discovered?] Anggård E.
Nord Med 1988;103(11):319–20 (Eng. Abstr.) (Swe)

PHYSIOLOGY

NG–methylarginine, an inhibitor of endothelium–derived nitric oxide synthesis, is a potent pressor agent in the guinea pig: does nitric oxide regulate blood pressure in vivo? Aisaka K, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):881–6
Nitric oxide: a cytotoxic activated macrophage effector molecule [published erratum appears in Biochem Biophys Res Commun 1989 Jan 31;158(2):624] Hibbs JB Jr, et al.
Biochem Biophys Res Commun 1988 Nov 30;157(1):87–94
Biosynthesis of nitric oxide from L-arginine. A pathway for the regulation of cell function and communication. Moncada S, et al. **Biochem Pharmacol** 1989 Jun 1; 38(11):1709–15 (74 ref.)
Biological actions and properties of endothelium–derived nitric oxide formed and released from artery and vein. Ignarro LJ. **Circ Res** 1989 Jul;65(1):1–21 (251 ref.)
Endothelium–derived nitric oxide: actions and properties. Ignarro LJ. **FASEB J** 1989 Jan;3(1):31–6 (41 ref.)

TOXICITY

Nitric oxide–generating vasodilators and 8–bromo–cyclic guanosine monophosphate inhibit mitogenesis and proliferation of cultured rat vascular smooth muscle cells. Garg UC, et al. **J Clin Invest** 1989 May;83(5):1774–7

NITRILES

Molecular imprinting of amino acid derivatives at low temperature (0 degrees C) using photolytic homolysis of azobisnitriles. O'Shannessy DJ, et al. **Anal Biochem** 1989 Feb 15;177(1):144–9
The use of acrylic copolymers as antibody carriers for immunoaffinity chromatography. Rapak A, et al.
Arch Immunol Ther Exp (Warsz) 1987;35(6):811–8
Involvement of nigrotecto–reticulospinal pathways in the iminodipropionitrile (IDPN) model of spasmodic dyskinesias: a 2–deoxy–D–[1–14C]glucose study in the rat. Cadet JL, et al. **Brain Res** 1989 Apr 10;484(1–2):57–64
Synthesis and kinetics of decomposition of 7–(2–cyanoethyl)guanine and O6–(2–cyanoethyl)guanine, markers for reaction of acrylonitrile and 3–(methylnitrosamino)propionitrile with DNA. Prokopczyk B, et al. **Carcinogenesis** 1988 Nov;9(11):2125–8
Allylnitrile: a compound which induces long–term dyskinesia in mice following a single administration. Tanii H, et al.
Exp Neurol 1989 Jan;103(1):64–7
Enzymic degradation of bromoxynil by cell–free extracts of Streptomyces felleus. Neužil J, et al.
Folia Microbiol (Praha) 1988;33(5):349–54
A glucose sensor utilising tetracyanoquinodimethane as a mediator. Hendry SP, et al. **Horm Metab Res Suppl** 1988; 20:37–40
Technetium carboxylate complexes—III. A new synthetic route to hexakis–(isonitrile) technetium(I) salts. Kennedy CM, et al. **Int J Rad Appl Instrum [A]** 1988;39(11):1179–86
Spectinomycin modification. IV. The synthesis of 3'–aminomethyldihydrospectinomycins via spectinomycin 3'–cyanohydrins. Thomas RC, et al. **J Antibiot (Tokyo)** 1988 Oct;41(10):1439–44
Separation of thiols on Spheron Ara activated with 2–nitrophenyl–hydrazonopropandinitrile ligand.
Podhradský D, et al. **J Chromatogr** 1988 Nov 25;455:344–8
Structure of myoglobin–ethyl isocyanide. Histidine as a swinging door for ligand entry. Johnson KA, et al.
J Mol Biol 1989 May 20;207(2):459–63
Reaction products of alpha–tocopherol with a free radical initiator, 2,2'–Azobis(2,4–dimethylvaleronitrile). Yamauchi R, et al. **Lipids** 1989 Mar;24(3):204–9
Light–induced electrical effects in a liquid crystal BLM containing TCNQ. Salamon Z, et al.
Photochem Photobiol 1988 Sep;48(3):281–7
[Exploitation of new synthetic reagents and their application to the total synthesis of biologically active natural products] Shioiri T, et al. **Yakugaku Zasshi** 1988 Dec;108(12):1115–28 (44 ref.) (Eng. Abstr.) (Jpn)

ADVERSE EFFECTS

Allergic contact dermatitis from tetrafluoroterephthalonitrile and TFX diamine. Carmichael AJ, et al.

Contact Dermatitis 1989 Mar;20(3):233–4
Sensitization potential of Euxyl K 400 [letter] Moss JN. **Contact Dermatitis** 1988 Nov;19(5):392–4
Allergic contact dermatitis from Euxyl K 400. Senff H, et al. **Contact Dermatitis** 1989 May;20(5):381–2
Cancer incidence of workers exposed to dimethylformamide and/or acrylonitrile. Chen JL, et al. **J Occup Med** 1988 Oct;30(10):813–8
Mortality study of workers exposed to dimethylformamide and/or acrylonitrile. Chen JL, et al. **J Occup Med** 1988 Oct;30(10):819–21
Mortality patterns among employees exposed to acrylonitrile. Collins JJ, et al. **J Occup Med** 1989 Apr;31(4):368–71
[Contact allergy to a new preservative] Senff H, et al. **Derm Beruf Umwelt** 1989 Mar–Apr;37(2):45–6 (Eng. Abstr.) **(Ger)**
[Problem of correlating the effect of carbon fiber dust on the body and the degree of migration of residual monomers and the products of their thermal destruction in a model biological media] Fediakina RP, et al. **Gig Tr Prof Zabol** 1989;(4):53–4 **(Rus)**

ANALYSIS

Characteristics of the sorption of chlorothalonil and azinphos-methyl to a soil from a commercial cranberry bog. Reduker S, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):633–41
HPLC measurement of chlorophenoxy herbicides, bromoxynil, and ioxynil, in biological specimens to aid diagnosis of acute poisoning. Flanagan RJ, et al. **Clin Chem** 1989 Jul;35(7):1342–7
[Reactions of isonitriles with carbonyl compounds] Kabbe HJ. **Pharm Unserer Zeit** 1972 May;1(3):74–80 **(Ger)**

ANTAGONISTS & INHIBITORS

Partial reversal of the iminodipropionitrile-induced hyperkinetic syndrome in rats by alpha-tocopherol (vitamin E). Lohr JB, et al. **Neuropsychopharmacology** 1988 Dec;1(4):305–9

BIOSYNTHESIS

Cyanogenic glucosides: the biosynthetic pathway and the enzyme system involved. Halkier BA, et al. **Ciba Found Symp** 1988;140:49–66 (35 ref.)

BLOOD

[Determination of toxic nitriles in the blood of victims perishing at a fire site] Babakhanian RV, et al. **Sud Med Ekspert** 1989 Apr–Jun;32(2):28–30 (Eng. Abstr.) **(Rus)**

CHEMICAL SYNTHESIS

Synthesis and antihypertensive activity of substituted (2,6-dichlorobenzylideneamino) guanidines and some hydrazone derivatives of C-cyanoformamidrazone. Emilsson H, et al. **Acta Pharm Suec** 1988;25(2):75–86
1,2,3,4,-Tetrahydro-1,2-diazepine derivatives: synthesis and evaluation of antileukemic activity. Dal Piaz V, et al. **Farmaco [Sci]** 1988 Nov;43(11):943–9
Spectinomycin modification. IV. The synthesis of 3'-aminomethyldihydrospectinomycins via spectinomycin 3'-cyanohydrins. Thomas RC, et al. **J Antibiot (Tokyo)** 1988 Oct;41(10):1439–44

DIAGNOSTIC USE

Comparison of technetium 99m methoxy isobutyl isonitrile and thallium 201 for evaluation of coronary artery disease by planar and tomographic methods. Kiat H, et al. **Am Heart J** 1989 Jan;117(1):1–11
Cardiac imaging and myocardial kinetics of technetium-tertiary butyl-isonitrile during dipyridamole-induced hyperemia. Okada RD, et al. **Am Heart J** 1988 Oct;116(4):979–88
Radionuclide imaging of myocardial perfusion and viability in assessment of acute myocardial infarction. Berman DS, et al. **Am J Cardiol** 1989 Jul 18;64(4):9B–16B
The localization of myocardial ischaemia with technetium-99m methoxy isobutyl isonitrile and single photon emission computed tomography. West DJ, et al. **Br J Radiol** 1989 Apr;62(736):303–13
Quantitative rotational tomography with 201Tl and 99mTc 2-methoxy-isobutyl-isonitrile. A direct comparison in normal individuals and patients with coronary artery disease. Kahn JK, et al. **Circulation** 1989 Jun;79(6):1282–93
Myocardial scintigraphy with Tc-99m TBI in a 6-month-old infant with myocardial infarction after Mustard operation. Sandrock D, et al. **Clin Nucl Med** 1989 May;14(5):381
Iodine-131 metaiodobenzylguanidine uptake in infantile myofibromatosis. Stewart RE, et al. **Clin Nucl Med** 1989 May;14(5):344–6
Myocardial perfusion imaging with a new radiotracer, technetium-99m-hexamibi (methoxy isobutyl isonitrile): comparison with thallium-201 imaging. Taillefer R, et al. **Clin Nucl Med** 1989 Feb;14(2):89–96
The evaluation of ventricular function using gated myocardial imaging with Tc-99m MIBI. Najm YC, et al. **Eur Heart J** 1989 Feb;10(2):142–8
Clinical evaluation of the 99mTc-CPI myocardial perfusion imaging. Liu XJ, et al. **Eur J Nucl Med** 1989;15(6):277–9
Same day injections of Tc-99m methoxy isobutyl isonitrile (hexamibi) for myocardial tomographic imaging: comparison between rest-stress and stress-rest injection sequences. Taillefer R, et al. **Eur J Nucl Med** 1989; 15(3):113–7
Kinetics of Tc-99m hexakis t-butyl isonitrile in normal and ischemic canine myocardium. Williams SJ, et al. **Eur J Nucl Med** 1989;15(6):287–91
99mTc hexakis-t-butyl isonitrile (TBI): an agent for the diagnosis of coronary artery diseases. Mousa SA, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Feb;27(2):66–75
Simultaneous technetium-99m MIBI angiography and myocardial perfusion imaging. Baillet GY, et al. **J Nucl Med** 1989 Jan;30(1):38–44
Comparison of technetium-99m MIBI and thallium-201 chloride myocardial scintigraphy in infants. Flynn B, et al. **J Nucl Med** 1989 Jul;30(7):1176–81
Comparison between 180 degrees and 360 degrees data collection in technetium-99m MIBI SPECT of the myocardium. Maublant JC, et al. **J Nucl Med** 1989 Mar; 30(3):295–300
Quantitative planar imaging with technetium-99m methoxyisobutyl isonitrile: comparison of uptake patterns with thallium-201. Sinusas AJ, et al. **J Nucl Med** 1989 Sep; 30(9):1456–63
[Use of 1,4 diacetoxy-2,3 dicyanobenzol in microspectrofluorometry for determining the intracellular pH of isolated living cells] Alibaud R, et al. **C R Acad Sci [III]** 1988;307(3):89–92 (Eng. Abstr.) **(Fre)**
[Myocardial tomoscintigraphy with 99m Tc-RP30 injected during transluminal coronary angioplasty. Evaluation of the area threatened by coronary stenosis (letter)] Bazan M, et al. **Presse Med** 1989 Apr 1;18(13):685–6 **(Fre)**
[Methoxy-isobutyl-isonitrile myocardial tomoscintigraphy in the very first hours of myocardial infarction. A new non-invasive method of studying myocardial perfusion (letter)] Faraggi M, et al. **Presse Med** 1989 Apr 1;18(13):683 **(Fre)**
[Study of myocardial perfusion at rest using technetium Tc 99m methoxy-isobutylisonitrile: comparison with labeled microspheres and thallium 201] Santoro GM, et al. **G Ital Cardiol** 1988 Nov;18(11):907–13 (Eng. Abstr.) **(Ita)**
[Simultaneous tests of ventricular function and myocardial perfusion during exercise using a new agent labeled with TC-99m] Pérez Baliño N, et al. **Rev Esp Cardiol** 1988 May; 41(5):271–7 (Eng. Abstr.) **(Spa)**

METABOLISM

Determination of desmosine, isodesmosine, and other amino acids by liquid chromatography with electrochemical detection following precolumn derivatization with naphthalenedialdehyde/cyanide. Lunte SM, et al. **Anal Biochem** 1989 Apr;178(1):202–7
A mitochondrial chemiluminescence evoked by a novel mixed copper(II)-cyanide complex/acetaldehyde cyanohydrin chelate: a kinetic analysis suggesting a role for membrane-bound vicinal sulfhydryls. Steele RH, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):125–42
N-acetyl-S-(1-cyano-2-hydroxyethyl)-L-cysteine, a new urinary metabolite of acrylonitrile and oxiranecarbonitrile. Linhart I, et al. **Arch Toxicol** 1988;61(6):484–8
Microbial hydrolysis of organic nitriles and amides. Ingvorsen K, et al. **Ciba Found Symp** 1988;140:16–31 (24 ref.)
The industrial potential of microbial nitrile biochemistry. Wyatt JM, et al. **Ciba Found Symp** 1988;140:32–48 (21 ref.)
DNA adducts of propylene oxide and acrylonitrile epoxide: hydrolytic deamination of 3-alkyl-dCyd to 3-alkyl-dUrd. Solomon JJ, et al. **Environ Health Perspect** 1989 May; 81:19–22
Determination of specific urinary thioethers derived from acrylonitrile and ethylene oxide. Gérin M, et al. **IARC Sci Publ** 1988;(89):275–8
Cyanide and methylisocyanide binding to the isolated iron-molybdenum cofactor of nitrogenase. Conradson SD, et al. **J Biol Chem** 1989 Sep 25;264(27):15967–74
Ioxynil and 3,5,3'-triiodothyronine: comparison of binding to human plasma proteins. Ogilvie LM, et al. **Toxicol Lett** 1988 Dec;44(3):281–7
Intermediary metabolism of 2,6-dichlorobenzonitrile (dichlobenil) in chickens and growth of chickens fed dichlobenil. Davison KL, et al. **Xenobiotica** 1988 Aug; 18(8):941–8
[125I]azido-ioxynil labels Val249 of the photosystem II D-1 reaction center protein. Oettmeier W, et al. **Z Naturforsch [C]** 1989 May-Jun;44(5–6):444–9

PHARMACOKINETICS

Uptake and kinetics of Tc-99m hexakis 2-methoxy isobutyl isonitrile in benign and malignant lesions in the lungs. Hassan IM, et al. **Clin Nucl Med** 1989 May;14(5):333–40
Intracellular pH measurements using flow cytometry with 1,4-diacetoxy-2,3-dicyanobenzene. Cook JA, et al. **Cytometry** 1988 Sep;9(5):441–7
Metabolism of linamarin in rats. Maduagwu EN. **Food Chem Toxicol** 1989 Jul;27(7):451–4
Comparative myocardial uptake characteristics of hexakis (alkylisonitrile) technetium(I) complexes. Effect of lipophilicity. Piwnica-Worms D, et al. **Invest Radiol** 1989 Jan;24(1):25–9
Disposition of methacrylonitrile in rats and distribution in blood components. Cavazos R Jr, et al. **J Appl Toxicol** 1989 Feb;9(1):53–7
Protonophore anion permeability of the human red cell membrane determined in the presence of valinomycin. Bennekou P. **J Membr Biol** 1988 Jun;102(3):225–34
Steady-state and transient membrane potentials in human red cells determined by protonophore-mediated pH changes. Bennekou P. **J Membr Biol** 1988 Nov;106(1):41–6
Metabolism of 2,6-dichlorobenzonitrile, 2,6-dichlorothiobenzamide in rodents and goats. Bakke JE, et al. **Xenobiotica** 1988 Sep;18(9):1063–75
[Studies of distribution and myocardial imaging on 99mTc-CPI in animals] Wu H. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Jun; 10(3):219–22 (Eng. Abstr.) **(Chi)**

PHARMACOLOGY

Effect of carbonyl cyanide m-chlorophenylhydrazone on Escherichia coli halotolerance. Ghoul M, et al. **Appl Environ Microbiol** 1989 Apr;55(4):1040–3
Modes of inhibition of protein kinase C by triphenylacrylonitrile antiestrogens. Bignon E, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1377–83
Acrylonitrile potentiation of oxygen toxicity in rats. Vilim V, et al. **Biomed Biochim Acta** 1988;47(2):205–9
The iminodipropionitrile (IDPN) model of persistent spasmodic dyskinesias: regional serotonin metabolism in rat brain. Cadet JL, et al. **Brain Res** 1988 Jul 26;456(2):371–4
Reduction of intracellular pH as a possible mechanism for killing cells in acidic regions of solid tumors: effects of carbonylcyanide-3-chlorophenylhydrazone. Newell KJ, et al. **Cancer Res** 1989 Aug 15;49(16):4477–82
Metabolic changes in Crithidia fasciculata accompanying physiological adaptation to growth in the presence of carbonyl cyanide m-chlorophenylhydrazone. Kutzman RS, et al. **Comp Biochem Physiol [B]** 1979;62(4):449–53
The effect of inhibition of aromatase enzyme activity on Leydig cell number and ultrastructure in beagles. Walters JR, et al. **Endocrinology** 1988 Nov;123(5):2223–9
Mutation in phenol-type herbicide resistance maps within the psbA gene in Synechocystis 6714. Ajlani G, et al. **FEBS Lett** 1989 Mar 27;246(1-2):207–10
Uncoupling effect of protonophoric and nonprotonophoric analogs of carbonyl cyanide phenylhydrazone on mitochondrial oxidative phosphorylation. Antalík M, et al. **Gen Physiol Biophys** 1988 Oct;7(5):517–28
Radiosensitization of E. coli B/r by arylhydrazonopropanedinitriles. Crump PW, et al. **Int J Radiat Biol** 1989 Apr;55(4):593–604
Effect of protonophore on growth of Escherichia coli. Nakano S, et al. **J Basic Microbiol** 1989;29(3):163–9
Tyrphostins inhibit epidermal growth factor (EGF)-receptor tyrosine kinase activity in living cells and EGF-stimulated cell proliferation. Lyall RM, et al. **J Biol Chem** 1989 Aug 25;264(24):14503–9
The new aromatase inhibitor CGS-16949A suppresses aldosterone and cortisol production by human adrenal cells in vitro. Lamberts SW, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):896–901
Inhibition of aromatase with CGS 16949A in postmenopausal women. Santen RJ, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):99–106
Effects of Ca2+ and a protonophore on growth of an Escherichia coli L-form. Onoda T, et al. **J Gen Microbiol** 1988 Nov;134 (Pt 11):3071–7
Two steps in the intracellular transport of IgD are sensitive to energy depletion. Argon Y, et al. **J Immunol** 1989 Jan 15;142(2):554–61
Effect of triphenylacrylonitrile derivatives on estradiol-receptor binding and on human breast cancer cell growth. Bignon E, et al. **J Med Chem** 1989 Sep; 32(9):2092–103
Effect of a single dose of beta,beta'-iminodipropionitrile in vivo on the properties of neurofilaments in vitro: comparison with the effect of iminodipropionitrile added directly to neurofilaments in vitro. Eyer J, et al. **J Neurochem** 1989 Jun;52(6):1759–65
In vivo action of the anticoccidial diclazuril (Clinacox) on the developmental stages of Eimeria tenella: a histological study. Maes L, et al. **J Parasitol** 1988 Dec;74(6):931–8
In vivo action of the anticoccidial diclazuril (Clinacox) on the developmental stages of Eimeria tenella: an ultrastructural evaluation. Verheyen A, et al. **J Parasitol** 1988 Dec;74(6):939–49
Comparative studies of the effects of RS-8359 and safrazine on monoamine oxidase in-vitro and in-vivo in mouse brain. Yokoyama T, et al. **J Pharm Pharmacol** 1989 Jan;41(1):32–6
Fall in intracellular pH and increase in resting tension induced by a mitochondrial uncoupling agent in crayfish muscle. Kaila K, et al. **J Physiol (Lond)** 1989;408:271–93
Mutagenicity of acrylonitrile and its metabolite 2-cyanoethylene oxide in human lymphoblasts in vitro. Recio L, et al. **Mutat Res** 1988 Oct;206(2):297–305
A morphometric study of cytoskeletal reorganization in rat sciatic nerve axons following beta,beta'-iminodipropionitrile (IDPN) treatment. Nagele RG, et al. **Neurosci Lett** 1988 Oct 17;92(3):241–6
Ultrastructural evaluation of the effects of diclazuril on the endogenous stages of Eimeria maxima and E. brunetti in experimentally inoculated chickens. Verheyen A, et al. **Parasitol Res** 1989;75(8):604–10

In vitro and in vivo studies demonstrating potent and selective estrogen inhibition with the nonsteroidal aromatase inhibitor CGS 16949A. Steele RE, et al. **Steroids** 1987 Jul–Sep;50(1–3):147–61

[Effect of the protonophore carbonylcyanide–m–chlorophenylhydrazone on the localization of secreted alkaline phosphatase in E. coli] Tsfasman IM, et al. **Biokhimiia** 1988 Jul;53(7):1103–10 (Eng. Abstr.) **(Rus)**

[Isopropoxyhermatran—an inhibitor of the development of experimental atherosclerosis of the aorta and an anticoagulant] Rasulov MM, et al. **Dokl Akad Nauk SSSR** 1989;305(2):487–90 **(Rus)**

POISONING

Delayed sudden death after ingestion of MCPP and ioxynil: an unusual presentation of hormonal weedkiller intoxication. Dickey W, et al. **Postgrad Med J** 1988 Sep; 64(755):681–2

STANDARDS

Routine determination of radiochemical purity of 99mTc–MIBI. Proulx A, et al. **Int J Rad Appl Instrum [A]** 1989;40(1):95–7

THERAPEUTIC USE

Efficacy of diclazuril against turkey coccidiosis in a floor–pen experiment. Vanparijs O, et al. **Avian Dis** 1989 Jul–Sep; 33(3):479–81

Efficacy of diclazuril against turkey coccidiosis in dose–titration studies. Vanparijs O, et al. **Avian Dis** 1989 Jul–Sep;33(3):422–4

Inhibitors of immune complex–induced inflammation: 3–[1–(2–benzoxazolyl)hydrazino]propanenitrile derivatives. Kim KH, et al. **J Pharm Sci** 1989 Jun;78(6):494–8

Diclazuril for Isospora belli infection in AIDS [letter] Kayembe K, et al. **Lancet** 1989 Jun 17;1(8651):1397–8

Diclazuril, a new broad spectrum anticoccidial drug in chickens. 1. Dose titration studies and pilot floor pen trials. Vanparijs O, et al. **Poult Sci** 1989 Apr;68(4):489–95

Diclazuril, a new broad spectrum anticoccidial drug in chickens. 2. Battery trials. Vanparijs O, et al. **Poult Sci** 1989 Apr;68(4):496–500

Efficacy of diclazuril in the prevention and cure of intestinal and hepatic coccidiosis in rabbits. Vanparijs O, et al. **Vet Parasitol** 1989 Jul 15;32(2–3):109–17

Effects of treatment of lambs with a probiotic, containing lactic acid bacteria. Asby CB, et al. **Vet Rec** 1989 Jun 3; 124(22):588–9

TOXICITY

Mutagenicity and cytotoxicity of 2–chlorobenzylidene malonitrile (CS) and metabolites in V79 Chinese hamster cells. Ziegler–Skylakakis K, et al. **Arch Toxicol** 1989; 63(4):314–9

Neurofilament gene expression following beta,beta'–iminodipropionitrile (IDPN) intoxication. Parhad IM, et al. **Brain Res** 1988 Dec;464(4):293–301

Toxicity of acrylonitrile on human KB cells in culture. Mochida K, et al. **Bull Environ Contam Toxicol** 1989 Mar; 42(3):424–6

The relationship of vehicle to target organ toxicology induced by the naturally occurring nitrile 1–cyano–2–hydroxy–3–butene. Wallig MA, et al. **Fundam Appl Toxicol** 1989 Apr;12(3):377–85

Biochemical and developmental effects in rats following in utero exposure to acrylonitrile: a preliminary report. Mehrotra J, et al. **Ind Health** 1988;26(4):251–5

2–Chlorobenzylidene malonitrile (CS) causes spindle disturbances in V79 Chinese hamster cells. Schmid E, et al. **Mutat Res** 1989 Jun;226(2):133–6

The iminodipropionitrile (IDPN)–induced dyskinetic syndrome: behavioral and biochemical pharmacology. Cadet JL. **Neurosci Biobehav Rev** 1989 Spring;13(1):39–45 (95 ref.)

Interaction of methacrylonitrile with glutathione. Day WW, et al. **Res Commun Chem Pathol Pharmacol** 1988 Nov; 62(2):267–78

Axotomy–like electrophysiological alterations in spinal motoneurons in beta,beta'–iminodipropionitrile neuropathy. Delio DA, et al. **Toxicol Appl Pharmacol** 1989 Jun 15; 99(2):207–15

[Hygienic standardization of isobutyronitrile in reservoir water] Fomochkin IP, et al. **Gig Sanit** 1988 Oct;(10):77–8 **(Rus)**

[Toxicologic parallels in the group of N–cyanoaniline derivatives] Vasilenko NM, et al. **Gig Tr Prof Zabol** 1988 Sep;(9):32–4 (Eng. Abstr.) **(Rus)**

URINE

Influence of a cysteine prodrug, L–2–oxothiazolidine–4–carboxylic acid, on the urinary elimination of mercapturic acids of ethylene oxide, dibromoethane, and acrylonitrile: a dose–effect study. Goyal R, et al. **Can J Physiol Pharmacol** 1989 Mar; 67(3):207–12

NITRILOTRIACETIC ACID see under **ACETIC ACIDS**

NITRITE REDUCTASES see under **NADH, NADPH OXIDOREDUCTASES**

NITRITES

Nitrite inhalants: patterns of abuse in Baltimore and Washington, D.C. Lange WR, et al. **Am J Drug Alcohol Abuse** 1988;14(1):29–39

The analysis and significance of bound N–nitrosoproline in nitrite–cured meat products. Sen NP, et al. **Food Addit Contam** 1989 Jan–Mar;6(1):21–8

Structural characterization of nitrimyoglobin. Bondoc LL, et al. **J Biol Chem** 1989 Apr 15;264(11):6134–45

Curcumins as inhibitors of nitrosation in vitro. Nagabhushan M, et al. **Mutat Res** 1988 Nov;202(1):163–9

Presence of nitrosable mutagen precursors in cooked meat and fish. Yano M, et al. **Mutat Res** 1988 Nov;202(1):119–23

Nitrite inhalants: contemporary patterns of abuse. Lange WR, et al. **NIDA Res Monogr** 1988;83:86–95

Nitrite–induced iron deficiency in the neonatal rat. Roth AC, et al. **Toxicol Appl Pharmacol** 1988 Oct;96(1):43–51

ADMINISTRATION & DOSAGE

Deliberate inhalation of isobutyl nitrite during adolescence: a descriptive study. Schwartz RH. **NIDA Res Monogr** 1988; 83:81–5

[Prevention using ascorbic acid, hexamethylenetetramine and sodium metabisulfite of the blastomogenic effect caused by the combined administration into the stomach of mice of sodium nitrite with methylurea or with aminopyrine] Dzhioev FK. **Vopr Onkol** 1988;34(11):1369–73 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Toxic smoke inhalation [letter] Hall AH, et al. **Am J Emerg Med** 1989 Jan;7(1):121–2

Suspected cyanide poisoning in smoke inhalation: complications of sodium nitrite therapy. Hall AH, et al. **J Toxicol Clin Exp** 1989 Jan–Feb;9(1):3–9

Nitrite inhalants: historical perspective. Newell GR, et al. **NIDA Res Monogr** 1988;83:1–14 (30 ref.)

The acute toxicity of nitrite inhalants. Wood RW. **NIDA Res Monogr** 1988;83:28–38 (39 ref.)

ANALYSIS

Differential–pulse adsorptive stripping voltammetric method for the determination of nitrite at p.p.b. levels after diazotisation of aniline and coupling with azulene and its modification for the determination of aromatic amines. Fogg AG, et al. **Analyst** 1988 Aug;113(8):1337–8

Re–examination of the determination of environmental nitrate as nitrite by reduction with hydrazine. Kempers AJ, et al. **Analyst** 1988 Jul;113(7):1117–20

Spectrophotometric determination of nitrite in water. Tarafder PK, et al. **Analyst** 1988 Jul;113(7):1073–6

Kinetic and analytic investigations on the formation of N–nitroso–N–methyl–N–cyclohexylamine from bromhexine and nitrite. Schmid J, et al. **Arzneimittelforschung** 1988 Sep;38(9):1355–8

Nitrite and nitrate levels in ileostomy effluent: effect of dietary change. Radcliffe BC, et al. **Br J Nutr** 1989 Mar; 61(2):323–30

Formation of a direct mutagen, diazo–N–nitrosoetilefrin, by interaction of etilefrin with nitrite. Kikugawa K, et al. **Chem Pharm Bull (Tokyo)** 1989 Jun;37(6):1600–3

Formation of mutagens by photochemical reaction of 2–naphthol in aqueous nitrite solution. Suzuki J, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):2204–11

Formation of 2,6–dimethoxy–1,4–benzoquinone, a highly genotoxic compound, from the reaction of sodium nitrite with the sympathomimetic drug dimethophrine in acidic aqueous solution. Mazzei M, et al. **Farmaco [Sci]** 1988 Jun; 43(6):523–38

Proline is not useful as a chemical probe to measure nitrosation in the gastrointestinal tract of patients with gastric disorders characterised by anacidic conditions. Adam B, et al. **Gut** 1989 Aug;30(8):1068–75

Analysis of alkyl nitrites by capillary gas chromatography–mass spectrometry. Bal TS, et al. **J Forensic Sci Soc** 1988 May–Jun;28(3):185–90

Estimation of the daily intake of nitrates and nitrites which may be consumed by two groups of population 18–23 years old in the city of Havana. García Roché MO, et al. **Nahrung** 1988;32(5):517–8

[Nitrates and nitrites in marine fish, fish products and common salt] Gajewska R, et al. **Rocz Panstw Zakl Hig** 1988;39(3):186–92 (Eng. Abstr.) **(Pol)**

[Nitrate and nitrite levels in the food. III. Vegetables and potatoes] Karłowski K, et al. **Rocz Panstw Zakl Hig** 1988; 39(4):291–6 (Eng. Abstr.) **(Pol)**

DIAGNOSTIC USE

Implications of probability analysis for interpreting results of leukocyte esterase and nitrite test strips. Bolann BJ, et al. **Clin Chem** 1989 Aug;35(8):1663–8

METABOLISM

Thermophilic Bacillus sp. that shows the denitrification phenotype of Pseudomonas aeruginosa. Gokce N, et al. **Appl Environ Microbiol** 1989 Apr;55(4):1023–5

Reduction of nitrite to nitric oxide by enteric bacteria. Ji XB, et al. **Biochem Biophys Res Commun** 1988 Nov 30; 157(1):106–8

Macrophage oxidation of L–arginine to nitrite and nitrate: nitric oxide is an intermediate. Marletta MA, et al. **Biochemistry** 1988 Nov 29;27(24):8706–11

Nitrite, a new substrate for nitrogenase. Vaughn SA, et al. **Biochemistry** 1989 Jan 24;28(2):419–24

Regulation by ammonium of nitrate and nitrite assimilation in Chlamydomonas reinhardtii. Franco AR, et al. **Biochim Biophys Acta** 1988 Nov 10;951(1):98–103

Oxidation reaction of Scapharca inaequivalvis hemoglobins with nitrite. Spagnuolo C, et al. **Biochim Biophys Acta** 1988 Sep 21;956(2):119–26

Identification of rumen bacteria that anaerobically degrade nitrite. Cheng KJ, et al. **Can J Microbiol** 1988 Sep; 34(9):1099–102

Antiproliferative activity of gamma–interferon combined with lipopolysaccharide on murine adenocarcinoma: dependence on an L–arginine metabolism with production of nitrite and citrulline. Lepoivre M, et al. **Cancer Res** 1989 Apr 15;49(8):1970–6

Carcinogenic activity of endogenously synthesized N–nitrosobis(2–hydroxypropyl)amine in rats administered bis(2–hydroxypropyl)amine and sodium nitrite. Yamamoto K, et al. **Carcinogenesis** 1989 Sep;10(9):1607–11

Mutagenicity of urine from mice exposed orally to nitrite and various aminated antiparasitic drugs. Arriaga Alba M, et al. **Environ Mol Mutagen** 1989;14(1):13–9

A possible role of the dietary fibre product, wheat bran, as a nitrite scavenger. Møller ME, et al. **Food Chem Toxicol** 1988 Oct;26(10):841–5

Nitrite–cured meats as a source of endogenously and exogenously formed N–nitrosoproline in the ferret. Perciballi M, et al. **Food Chem Toxicol** 1989 Feb; 27(2):111–6

The metabolism and deamination of [14C]sulphamethazine in a germ–free pig: the influence of nitrate and nitrite. Struble CB, et al. **Food Chem Toxicol** 1988 Sep; 26(9):797–801

Interaction of nitrite with catalase in the perfused rat liver. Takano T, et al. **Food Chem Toxicol** 1988 Oct;26(10):837–9

Formation of mutagenic N–nitroso compounds in vegetable extracts upon nitrite treatment: a comparison with the glucosinolate content. Tiedink HG, et al. **Food Chem Toxicol** 1988 Nov–Dec;26(11–12):947–54

Nitric oxide and nitrous oxide production and cycling during dissimilatory nitrite reduction by Pseudomonas perfectomarina. Zafiriou OC, et al. **J Biol Chem** 1989 Apr 5;264(10):5694–9

Cytotoxic, DNA–damaging and mutagenic properties of 2,6–dimethoxy–1,4–benzoquinone, formed by dimethophrine–nitrite interaction. Brambilla G, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):1011–5

Augmenting effect of a nonmutagenic fraction in soy sauce on mutagenicity of 3–diazotyramine produced in the nitrite–treated sauce. Higashimoto M, et al. **Jpn J Cancer Res** 1988 Dec;79(12):1284–92

Bacterial genotoxicity of nitrosated famotidine. De Flora S, et al. **Mutagenesis** 1986 Mar;1(2):125–30

Inhibitory effects of para–aminobenzoic acid on the formation and mutagenicity of N–nitroso compounds. Gichner T, et al. **Mutagenesis** 1988 Jul;3(4):329–31

[Nitrate and nitrite content of the saliva, urine, blood and cerebrospinal fluid in patients at an infection clinic] Wettig K, et al. **Wien Klin Wochenschr** 1989 May 26;101(11):386–8 (Eng. Abstr.) **(Ger)**

[The nitrogenous compounds of food, alcoholic drinks and tobacco in the biosynthesis of carcinogenic nitrosamines] Gileva OS, et al. **Vopr Pitan** 1988 Sep–Oct;(5):9–14 (57 ref.) **(Rus)**

[Nitrification in soil columns subjected to continuous flow] Marengo GW. **Rev Argent Microbiol** 1984;16(3):153–8 (Eng. Abstr.) **(Spa)**

PHARMACOLOGY

Ferrihaemoglobin formation by amyl nitrite and sodium nitrite in different species in vivo and in vitro. Klimmek R, et al. **Arch Toxicol** 1988;62(2–3):152–60

Morphological changes in putrefactive anaerobe 3679 (Clostridium sporogenes) induced by sorbate, hydrochloric acid, and nitrite. Ronning IE, et al. **Can J Microbiol** 1989 Mar;35(3):388–98

Chromosomal aberrations induced by secondary and tertiary amine–containing dyes and in combination with nitrite in vivo in mice. Das SK, et al. **Cytobios** 1988;54(216):25–9

Mutagenicity of some alkyl nitrites used as recreational drugs. Dunkel VC, et al. **Environ Mol Mutagen** 1989;14(2):115–22

Soluble, nitrate/nitrite–inducible cytochrome P–450 of the fungus, Fusarium oxysporum. Shoun H, et al. **FEBS Lett** 1989 Feb 13;244(1):11–4

Reduction of benzo[a]pyrene–induced forestomach neoplasms in mice given nitrite and dietary soy sauce. Benjamin H, et al. **Food Chem Toxicol** 1988 Aug; 26(8):671–8

The inactivation of rhodanese by nitrite and inhibition by other anions in vitro. Alexander K, et al. **J Biochem Toxicol** 1989 Spring;4(1):29–33

The modifying effect of nitrites, nitrates and increased temperature on 14C metabolism. Vasilenko IYa, et al. **J Hyg Epidemiol Microbiol Immunol** 1989;33(1):29–33

Guanylate cyclase activation by organic nitrates is not

mediated via nitrite. Romanin C, et al.
J Mol Cell Cardiol 1988 May;20(5):389–96
Interactions of light and sodium nitrite in producing relaxation of rabbit aorta. Matsunaga K, et al.
J Pharmacol Exp Ther 1989 Feb;248(2):687–95
The nirB promoter of Escherichia coli: location of nucleotide sequences essential for regulation by oxygen, the FNR protein and nitrite. Jayaraman PS, et al. **Mol Microbiol** 1988 Jul;2(4):527–30
Formation of a diazoquinone-type mutagen from acetaminophen treated with nitrite under acidic conditions. Ohta T, et al. **Mutat Res** 1988 Nov–Dec;209(3–4):95–8
[Effect of human gastric juice on dimethylamine nitrosation by sodium nitrite] Ermilov VB, et al. **Vopr Onkol** 1989; 35(5):603–7 (Eng. Abstr.) **(Rus)**

POISONING

[A case of nitrite poisoning in hens of medium weight laying parent stock] van der Rijt TJ. **Tijdschr Diergeneeskd** 1989 Apr 15;114(8):437–42 (Eng. Abstr.) **(Dut)**
[Resuscitation and combined therapy of exotoxic shock caused by methemoglobin-forming poisons] Kosonogov LF, et al. **Anesteziol Reanimatol** 1988 Sep–Oct;(5):61–3 (Eng. Abstr.) **(Rus)**

TOXICITY

Behavioural consequences of NaNO2-induced hypoxia in male rats. Hliňák Z, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):72–4
Lack of teratogenic and mutagenic effects of nitrite on mouse fetuses. Shimada T. **Arch Environ Health** 1989 Jan–Feb; 44(1):59–63
Nitrite inhalants: promising and discouraging news. Lange WR, et al. **Br J Addict** 1989 Feb;84(2):121–3
Nitrite-induced anemia in channel catfish, Ictalurus punctatus rafinesque. Tucker CS, et al.
Bull Environ Contam Toxicol 1989 Aug;43(2):295–301
Toxic and potentially toxic constituents of gari and beef marketed in Nigerian traditional markets. Ukhun ME, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):553–7
Evaluation of the oral toxicity of potassium nitrite in a 13-week drinking-water study in rats. Til HP, et al.
Food Chem Toxicol 1988 Oct;26(10):851–9
Disruption of auditory function by acute administration of a "room odorizer" containing butyl nitrite in rats. Fechter LD, et al. **Fundam Appl Toxicol** 1989 Jan;12(1):56–61
Generation of high yields of Syrian hamster cholangiocellular carcinomas and hepatocellular nodules by combined nitrite and aminopyrine administration and Opisthorchis viverrini infection. Thamavit W, et al. **Jpn J Cancer Res** 1988 Aug; 79(8):909–16
Health hazards of nitrite inhalants. Technical review meeting. March 31, 1987, Rockville, MD. **NIDA Res Monogr** 1988; 83:1–105
Toxicity of inhaled isobutyl nitrite in BALB/c mice: systemic and immunotoxic studies. Lewis DM, et al.
NIDA Res Monogr 1988;83:50–8
The fate and toxicity of butyl nitrites. Maickel RP.
NIDA Res Monogr 1988;83:15–27 (18 ref.)
Indications from animal and chemical experiments of a carcinogenic role for isobutyl nitrite. Mirvish SS, et al.
NIDA Res Monogr 1988;83:39–49 (29 ref.)
Chronic toxicity tests of sodium thiocyanate with sodium nitrite in F344 rats. Lijinsky W, et al.
Toxicol Ind Health 1989 Jan;5(1):25–9
[Nitrate and nitrite levels in the milk and formulas for infants and children] Gajewska R, et al.
Rocz Panstw Zakl Hig 1988;39(6):430–7 (Eng. Abstr.) **(Pol)**
[Study in a cell culture of sodium nitrite as a possible promoter of carcinogenesis] Osin'kovskaia ND, et al.
Dokl Akad Nauk SSSR 1988 Jul–Aug;301(1):237–40 **(Rus)**
[Internal mitochondrial membrane as a sensitive model for evaluating the pathobiochemical mechanisms of the effect of various chemical substances] Ellinger Kh. **Gig Sanit** 1989 Mar;(3):74–5 **(Rus)**
[Formation of transferrin and ceruloplasmin in the blood of rats with acute nitrite-induced methemoglobinemia] Kisliakoc IuIa, et al. **Patol Fiziol Eksp Ter** 1988 Jul–Aug; (4):51–4 (Eng. Abstr.) **(Rus)**
[The biological action of radioactive carbon. The metabolic kinetics and biological effects of the combined action of radioactive carbon (14C-glucose) and sodium nitrite chronically administered] Vasilenko IIa, et al.
Radiobiologiia 1989 Mar–Apr;29(2):192–6 (Eng. Abstr.) **(Rus)**
[Assessment of the degree of carcinogenicity of small doses of nitrites] Il'nitskii AP, et al. **Vopr Onkol** 1989;35(7):843–8 (Eng. Abstr.) **(Rus)**

URINE

Urinary excretion of nitrate, nitrite and N-nitroso compounds in Schistosomiasis and bilharzia bladder cancer patients. Tricker AR, et al. **Carcinogenesis** 1989 Mar;10(3):547–52
A modified nitrite test as a screening test for significant bacteriuria. Tahirović H, et al. **Eur J Pediatr** 1988 Aug; 147(6):632–3
Dipstick urinalysis screening of asymptomatic adults for urinary tract disorders. II. Bacteriuria. Pels RJ, et al.
JAMA 1989 Sep 1;262(9):1221–4 (69 ref.)
Leucocyte esterase-nitrite activity as a rapid screen for significant bacteriuria. Lim YS, et al. **Malays J Pathol** 1988 Aug;10:69–72
Urinary nitrite in Japanese patients with urinary tract infections. Mizutani T, et al. **Sci Total Environ** 1989 May 15;80(2–3):161–5

NITRO COMPOUNDS

Electrochemical characteristics of nitro-heterocyclic compounds of biological interest. I. The influence of solvent. Tocher JH, et al. **Free Radic Res Commun** 1988; 4(5):269–76
Charge calculations in molecular mechanics 7: application to polar pi systems incorporating nitro, cyano, amino, C=S and thio substituents. Abraham RJ, et al.
J Comput Aided Mol Des 1989 Jun;3(2):175–87

ANALYSIS

Spectrophotometric determination of some pharmaceutically important nitro compounds in their dosage forms. Hassan SM, et al. **Analyst** 1988 Jul;113(7):1087–9
Use of corrected retention indices based on 1-nitroalkane and alkyl arylketone scales for HPLC identification of basic drugs. Bogusz M, et al. **J Anal Toxicol** 1988 Nov–Dec; 12(6):325–9
Liquid chromatographic-electrochemical detection screening procedure for six nitro-containing drugs in chicken tissues at low ppb level. Parks OW. **J Assoc Off Anal Chem** 1989 Jul–Aug;72(4):567–9
Trace analysis of explosives by capillary supercritical fluid chromatography with thermal energy analysis detection. Douse JM. **J Chromatogr** 1988 Jul 8;445(1):244–50
Oxidative detection of coulometrically reduced organonitro pesticides in reversed-phase high-performance liquid chromatography. Krause RT, et al. **J Chromatogr** 1988 Dec 28;459:151–62
Isolation, characterization and determination of trace organic impurities in FD&C red no. 40. Richfield-Fratz N, et al. **J Chromatogr** 1989 Apr 21;467(1):167–76
High-performance liquid chromatographic separation of ring-oxidized metabolites of nitro-polycyclic aromatic hydrocarbons. von Tungeln LS, et al. **J Chromatogr** 1989 Jan 6;461:315–26
Application of difference spectroscopy to the determination of some pharmaceutically important nitro compounds. Hassan SM, et al. **J Pharm Pharmacol** 1988 Nov; 40(11):798–800
A sensitive method for the detection of mutagenic nitroarenes: construction of nitroreductase-overproducing derivatives of Salmonella typhimurium strains TA98 and TA100. Watanabe M, et al. **Mutat Res** 1989 Aug; 216(4):211–20
[Distribution, formation, carcinogenic and mutagenic activities of nitro derivatives of polycyclic aromatic hydrocarbons] Khesina AIa, et al. **Eksp Onkol** 1989; 11(2):3–8 (50 ref.) (Eng. Abstr.) **(Rus)**

METABOLISM

Glutathione conjugation of nitro compounds by monkey glutathione S-transferases. Asaoka K, et al.
Biochem Pharmacol 1989 Sep 15;38(18):2977–83
Correlation of kinetic parameters of nitroreductase enzymes with redox properties of nitroaromatic compounds. Orna MV, et al. **J Biol Chem** 1989 Jul 25;264(21):12379–84

PHARMACOKINETICS

Importance of tumor affinity of nitroazoles in hypoxic radiosensitization. Kagiya T, et al.
Int J Radiat Oncol Biol Phys 1989 Apr;16(4):1033–7

PHARMACOLOGY

Photochemical cleavage of DNA by nitrobenzamides linked to 9-aminoacridine. Nielsen PE, et al. **Biochemistry** 1988 Aug 23;27(17):6338–43
Effects of nitrovasodilators, endothelium-dependent vasodilators, and atrial peptides on cGMP. Murad F, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:1005–9 (49 ref.)
Mutagenic activities of selected nitrofluoranthene derivatives in Salmonella typhimurium strains TA98, TA98NR and TA98/1,8-DNP6. Zielinska B, et al. **Mutat Res** 1988 Oct; 206(2):131–40

THERAPEUTIC USE

[Therapeutic effect of enteroorption in diabetes mellitus] Bodnar PN, et al. **Klin Med (Mosk)** 1988 Jul;66(7):62–4 **(Rus)**

TOXICITY

Elevation of urinary N-acetyl-beta-D-glucosaminidase and beta-galactosidase activities in workers with long-term exposure to aromatic nitro-amino compounds. Yoshida M, et al. **Bull Environ Contam Toxicol** 1989 Jul;43(1):1–8
Mutagenicity of nitro compounds in Salmonella typhimurium in the presence of flavin mononucleotide in a preincubation assay. Dellarco VL, et al. **Environ Mol Mutagen** 1989; 13(2):116–27
Effect of the orientation of nitro substituent on the bacterial mutagenicity of dinitrobenzo[e]pyrenes. Fu PP, et al.
Mutat Res 1989 Mar;225(3):121–5
Relationships between structure of nitrated arenes and their mutagenicity in Salmonella typhimurium; 2- and 2,7-nitro substituted fluorene, phenanthrene and pyrene. Hirayama T, et al. **Mutat Res** 1988 Sep–Oct;209(1–2):67–74
The structure-function relationships of nitrofluorenes and nitrofluorenones in the Salmonella mutagenicity and CHO sister-chromatid exchange assays. Kitchin RM, et al.
Mutat Res 1988 Nov;206(3):367–77

NITROANISOLE O-DEMETHYLASE see under **OXIDOREDUCTASES**

NITROBACTER

METABOLISM

[Biology of chemoautotrophs] Takakuwa S, et al.
Tanpakushitsu Kakusan Koso 1988 Dec;33(15):2569–78 (58 ref.) **(Jpn)**

NITROBACTERACEAE

PHYSIOLOGY

Physiology, biochemistry, and specific inhibitors of CH4, NH4+, and CO oxidation by methanotrophs and nitrifiers. Bédard C, et al. **Microbiol Rev** 1989 Mar;53(1):68–84 (180 ref.)

NITROBENZENES

Amino acid analysis by high-performance liquid chromatography after derivatization with 1-fluoro-2,4-dinitrophenyl-5-L-alanine amide. Kochhar S, et al. **Anal Biochem** 1989 Apr;178(1):17–21
Soluble factors in tolerance and contact sensitivity to 2,4-dinitro-fluorobenzene in mice. IX. A monoclonal T cell suppressor molecule is structurally and serologically related to the alpha/beta T cell receptor. Fairchild RL, et al. **J Immunol** 1988 Nov 15;141(10):3342–8
Metabolic myopathy produced by dinitrofluorobenzene inhibition of creatine phosphokinase. Feeback DL, et al.
J Neurol Sci 1988 Dec;88(1–3):219–28
Chemical modification of cobrotoxin with bifunctional reagent, 1,5-difluoro-2,4-dinitrobenzene. Yang ML, et al.
Kao Hsiung I Hsueh Ko Hsueh Tsa Chih 1988 Sep; 4(9):503–13

ADMINISTRATION & DOSAGE

Neonatal suppression with anti-Ia antibody. III. In vivo responses to the type 2 antigen TNP-Ficoll. Fultz M, et al. **J Immunol** 1989 Jul 15;143(2):403–6

ADVERSE EFFECTS

Acute effects and long-term sequelae of 1,3-dinitrobenzene on male reproduction in the rat. II. Quantitative and qualitative histopathology of the testis. Hess RA, et al.
J Androl 1988 Sep–Oct;9(5):327–42
Acute effects and long-term sequelae of 1,3-dinitrobenzene on male reproduction in the rat. I. Sperm quality, quantity, and fertilizing ability. Linder RE, et al. **J Androl** 1988 Sep–Oct;9(5):317–26
Different clinical presentations in photosensitivity to musk ambrette. Sánchez-Pedreño P, et al. **Photodermatol** 1989 Apr;6(2):103–5
The reversibility of nitrobenzene-induced testicular toxicity: continuous monitoring of sperm output from vasocystotomized rats. Levin AA, et al. **Toxicology** 1988 Dec 30;53(2–3):219–30
[An unusual cause of cyanosis] Hassenforder M, et al.
Ann Fr Anesth Reanim 1988;7(6):515–6 (Eng. Abstr.) **(Fre)**

ANALYSIS

Voltammetric determination of airborne 2-chloronitrobenzene using a recirculating absorbent vapour sampler. Fielden PR, et al. **Analyst** 1988 Dec; 113(12):1799–802
Metabolic studies of explosives 6. Electron impact and chemical ionization mass spectrometry of metabolites of 2,4-dinitrotoluene. Yinon J.
Biomed Environ Mass Spectrom 1989 Mar;18(3):149–56

BLOOD

Plasma binding of 1-butanol, phenol, nitrobenzene and pentachlorophenol in the rainbow trout and rat: a comparative study. Schmieder PK, et al.
Comp Biochem Physiol [C] 1988;91(2):413–8

DIAGNOSTIC USE

Immunocytochemical localization of intracellular acidic compartments: rat proximal nephron. Verlander JW, et al.
Am J Physiol 1989 Sep;257(3 Pt 2):F454–62
Application of Marfey's reagent in racemization studies of amino acids and peptides. Szókán G, et al.
J Chromatogr 1988 Jul 1;444:115–22

IMMUNOLOGY

Primary in situ immune response in popliteal lymph nodes

and spleen of mice after subcutaneous immunization with thymus-dependent or thymus-independent (type 1 and 2) antigens. Delemarre FG, et al. **Anat Rec** 1989 Feb; 223(2):152-7

Antibody targeting in vivo: binding of anti-DNP antibodies to implanted silk-DNP as a model of specific antibodies binding to localized antigens. Yakoleff V, et al. **Bol Estud Med Biol** 1988;36(1-4):43-53

Role of interferon-gamma in the modulation of the IgE response by 2,4-dinitrophenyl-Bordetella pertussis vaccine in the mouse. Hagen M, et al. **Eur J Immunol** 1989 Mar; 19(3):441-6

Inhibition of cryoprecipitation of murine IgG3 anti-dinitrophenyl (DNP) monoclonal antibodies by anionic DNP-amino acid conjugates. Spertini F, et al. **Eur J Immunol** 1989 Feb;19(2):273-8

Postnatal B cell development: influence of trinitrobenzenesulfonic acid treatment during pregnancy. Zöller M. **Eur J Immunol** 1988 Dec;18(12):1931-6

Behaviour of guinea pig T cells stimulated by antigen, allo-antigen and mitogen. Healey DG, et al. **Int Arch Allergy Appl Immunol** 1988;87(2):134-42

IL-1 and PGE2 productions by the regional lymph node cells from DNFB-sensitized mice. Natsuaki M, et al. **J Dermatol** 1989 Apr;16(2):111-5

Inverse relationship between proliferation and differentiation in a human TNP-specific B cell line. Cell cycle dependence of antibody secretion. Golding B, et al. **J Immunol** 1988 Oct 15;141(8):2564-8

Limiting dilution analysis of induced unresponsiveness to trinitrophenyl: increased suppression of cytotoxic T precursor cells at unchanged frequencies. Cooper JM, et al. **J Mol Cell Immunol** 1985;2(2):83-94

Tolerogen-mediated suppression of the immune response. Suppressor cells as passive transfer agents. Dintzis RZ, et al. **Scand J Immunol** 1988 Dec;28(6):747-57

Studies on active immunization with self antigens. II. Production of antibody related to hapten substitution. Mahana W, et al. **Scand J Immunol** 1989 Sep;30(3):303-13

METABOLISM

Covalent binding of 4-nitrobenzyl mercaptan S-sulfate to the sulfhydryl groups of hepatic cytosolic proteins and bovine serum albumin with mixed disulfide bond formation. Miwa K, et al. **Chem Biol Interact** 1988;68(1-2):27-38

Metabolism of 2,6-dinitrotoluene in male Wistar rat. Mori M, et al. **Xenobiotica** 1989 Jul;19(7):731-41

Enterohepatic circulation of 2,4-dinitrobenzaldehyde, a mutagenic metabolite of 2,4-dinitrotoluene, in male Wistar rat. Sayama M, et al. **Xenobiotica** 1989 Jan;19(1):83-92

PHARMACOKINETICS

Tissue distribution of epimucosally applied 3H DNFB: an autoradiographic study. Warfvinge G, et al. **Scand J Dent Res** 1988 Oct;96(5):435-41

PHARMACOLOGY

Modification and inactivation of rhodanese by 2,4,6-trinitrobenzenesulphonic acid. Malliopoulou TB, et al. **J Enzym Inhib** 1988;2(2):99-115

ATPase and morphologic changes in Langerhans cells induced by epicutaneous application of a sensitizing dose of DNFB. Hanau D, et al. **J Invest Dermatol** 1989 May; 92(5):689-94

Acetylcholine synthesis by a sympathetic ganglion in the presence of 2-(4-phenylpiperidino)cyclohexanol (AH5183) and picrylsulfonic acid. Mykita S, et al. **J Neurochem** 1989 Jun;52(6):1686-93

Calcium-independent increase of transmitter release at frog end-plate by trinitrobenzene sulphonic acid. Kijima H, et al. **J Physiol (Lond)** 1988 Sep;403:135-49

TOXICITY

M-dinitrobenzene: studies on its toxicity to the testicular Sertoli cell. Foster PM. **Arch Toxicol Suppl** 1989;13:3-17

Hapten-induced model of chronic inflammation and ulceration in the rat colon. Morris GP, et al. **Gastroenterology** 1989 Mar;96(3):795-803

Toxicology update. Dinitrobenzene. **J Appl Toxicol** 1989 Jun; 9(3):199-202 (42 ref.)

Effect of 1,3-dinitrobenzene on prepubertal, pubertal, and adult mouse spermatogenesis. Evenson DP, et al. **J Toxicol Environ Health** 1989;28(1):67-80

Flow cytometric analysis of effects of 1,3-dinitrobenzene on rat spermatogenesis. Evenson DP, et al. **J Toxicol Environ Health** 1989;28(1):81-98

Mutagenicity of 2,6-dinitrotoluene and its metabolites, and their related compounds in Salmonella typhimurium. Sayama M, et al. **Mutat Res** 1989 Jul;226(3):181-4

Effects of dinocap on otolith development: evaluation of mouse and hamster fetuses at term. Rogers JM, et al. **Teratology** 1989 Jun;39(6):515-23

The effects of 1,3-dinitrobenzene and mono-(2-ethylhexyl)phthalate on hormonally stimulated lactate and pyruvate production by rat Sertoli cell cultures. Williams J, et al. **Toxicol Lett** 1989 Jun;47(3):249-57

NITROBENZOATES

HPLC analysis of polyamines and their acetylated derivatives in the picomole range using benzoyl chloride and 3,5-dinitrobenzoyl chloride as derivatizing agent. Wongyai S, et al. **Biomed Chromatogr** 1988 Nov;2(6):254-7

A comparative study of the change in ATPase activity of proteolytic fragments of myosin in relation to the presence of DTNB light chains. Anand S. **Indian J Biochem Biophys** 1985 Dec;22(6):360-3

The SH-SS exchange reaction between the Ellman's reagent and protein containing SH groups as a method for determining conformational states: tubulin. Di Simplicio P, et al. **Ital J Biochem** 1989 Mar-Apr;38(2):83-90

ADVERSE EFFECTS

Accidental occupational sensitization to p-nitrobenzoyl chloride in a chemistry student synthesizing procaine. Foussereau J. **Contact Dermatitis** 1989 May;20(5):397-8

ANALYSIS

Enantiomer resolution of D- and L-alpha-amino acid derivatives by supercritical fluid chromatography on novel chiral diamide phases with carbon dioxide. Dobashi A, et al. **J Chromatogr** 1989 Jan 6;461:121-7

DIAGNOSTIC USE

Chromatographic separation of the diastereomers of a dihydropyridine-type calcium channel antagonist as the bis-3,5-dinitrobenzoates. Kern JR, et al. **J Chromatogr** 1988 Dec 21;457:309-16

METABOLISM

Role of a sulfhydryl group in gastric lipases. A binding study using the monomolecular-film technique. Gargouri Y, et al. **Eur J Biochem** 1989 Mar 15;180(2):367-71

PHARMACOLOGY

Effects of Cl- transport inhibitors on Cl- permeability across hamster ascending thin limb. Isozaki T, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):F92-8

Inhibition of prostaglandin E2 synthesis by a blocker of epithelial chloride channels. Breuer W, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):398-405

Blocking kinetics of Cl- channels in colonic carcinoma cells (HT29) as revealed by 5-nitro-2-(3-phenylpropylamino)benzoic acid (NPPB). Dreinhöfer J, et al. **Biochim Biophys Acta** 1988 Dec 8; 946(1):135-42

Inhibition of hexose transport in the human erythrocyte by 5, 5'-dithiobis(2-nitrobenzoic acid): role of an exofacial carrier sulfhydryl group. May JM. **J Membr Biol** 1989 Jun; 108(3):227-33

The nonselective cation channel in the basolateral membrane of rat exocrine pancreas. Inhibition by 3',5-dichlorodiphenylamine-2-carboxylic acid (DCDPC) and activation by stilbene disulfonates. Gögelein H, et al. **Pflugers Arch** 1989 Jan;413(3):287-98

NITROBLUE TETRAZOLIUM see under **TETRAZOLIUM SALTS**

NITROCELLULOSE see **COLLODION**

NITRODIAZEPAM see **NITRAZEPAM**

NITROFURAL see **NITROFURAZONE**

NITROFURANS

ADVERSE EFFECTS

[Chagas' disease: clastogenic effect of nifurtimox and benznidazole in children] Moya PR, et al. **Medicina (B Aires)** 1988;48(5):487-91 (Eng. Abstr.) **(Spa)**

ANALYSIS

Determination of 5-nitrofurylacrylic acid in wines by high-performance liquid chromatography. Farré R, et al. **J Chromatogr** 1988 Jul 8;445(1):264-7

Simultaneous determination of nitrofuran derivatives in various animal substrates by high-performance liquid chromatography. Laurensen JJ, et al. **J Chromatogr** 1989 Jun 9;472(1):321-6

Quantitation of N-[4-(5-nitro-2-furyl)-2-thiazolyl]formamide and 2-amino-4-(5-nitro-2-furyl)thiazole in rodent diet. Smith RA, et al. **J Chromatogr** 1989 Mar 31;465(2):442-7

BLOOD

High-performance liquid chromatographic determination of nifurtimox in human serum. Paulos C, et al. **J Chromatogr** 1988 Dec 9;433:359-62

METABOLISM

Evaluation of genotoxic activity in the blood and urine of guinea pigs treated with nifurtimox and benznidazole. Ferreira RC, et al. **Braz J Med Biol Res** 1988;21(5):1069-77

Renal metabolism of formic acid 2-[4-(5-nitro-2-furyl)-2-thiazolyl]-hydrazide. Ballal S, et al. **Carcinogenesis** 1988 Nov;9(11):1975-9

Oxidative metabolism of 7-methoxy-2-nitro-naphtho[2,1-b]furan (R 7000) by the microsomal system isolated from 3-methylcholanthrene-induced rat liver. Strapélias H, et al. **Carcinogenesis** 1988 Nov;9(11):1987-93

The reductive metabolism of nifurtimox and benznidazole in Crithidia fasciculata is similar to that in Trypanosoma cruzi. Moreno SN. **Comp Biochem Physiol [C]** 1988; 91(2):321-5

Renal handling of 5-nitrofuran nephrotoxins in the rat. Ballal S, et al. **Drug Metab Dispos** 1988 Nov-Dec;16(6):829-33

Temperature dependence of binding of a fluorescent hypoxia probe. Olive PL. **Int J Radiat Oncol Biol Phys** 1989 Jun; 16(6):1565-70

[Glutathione reductase inhibition by nifurtimox and other 5-nitrofuran derivatives] Grinblat L, et al. **Medicina (B Aires)** 1988;48(5):492-8 (Eng. Abstr.) **(Spa)**

PHARMACOKINETICS

Evidence for hydroxyl free radical formation during paraquat but not for nifurtimox liver microsomal biotransformation. A dimethyl-sulfoxide scavenging study. Castro GD, et al. **Arch Toxicol** 1988;62(5):355-8

PHARMACOLOGY

Antibacterial activities of the antiparasitic drugs nifurtimox and benznidazole. Hof H. **Antimicrob Agents Chemother** 1989 Mar;33(3):404-5

Effects of trypanocidal drugs on protein biosynthesis in vitro and in vivo by Trypanosoma cruzi. Gonzalez NS, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2873-7

Nitrofuran inhibition of yeast and rat tissue glutathione reductases. Structure-activity relationships. Grinblat L, et al. **Biochem Pharmacol** 1989 Mar 1;38(5):767-72

Effect of drugs on Trypanosoma cruzi and on its interaction with heart muscle cell "in vitro". de Castro SL, et al. **Mem Inst Oswaldo Cruz** 1987 Apr-Jun;82(2):209-18

Study on the mutagenicity of nifurtimox and eight derivatives with the L-arabinose resistance test of Salmonella typhimurium. Alejandre-Durán E, et al. **Mutat Res** 1988 Oct;206(2):193-200

[Effects of nifuroxazide on fecal flora in healthy subjects] Buisson Y, et al. **Therapie** 1989 Mar-Apr;44(2):123-6 (Eng. Abstr.) **(Fre)**

[Effect of quinones and nitrofurans on Trypanosoma mega and Crithidia fasciculata] de Pahn EM, et al. **Rev Argent Microbiol** 1988 Jul-Sep;20(3):107-18 (Eng. Abstr.) **(Spa)**

[Effects of nifurtimox, benznidazole, and beta-lapachone on the metabolism of DNA, RNA and proteins in Trypanosoma cruzi] Goijman SG, et al. **Rev Argent Microbiol** 1983;15(4):193-204 (Eng. Abstr.) **(Spa)**

THERAPEUTIC USE

Modification of the pattern of infection and evolution of cardiopathy in experimental Chagas' disease after treatment with immunosuppressive and trypanocidal drugs. Cabeza Meckert PM, et al. **Medicina (B Aires)** 1988;48(1):7-11

Suppression of antibody dependent cytotoxicity to Trypanosoma cruzi in chronic chagasic mice after treatment with nifurtimox. Chambó JG, et al. **Medicina (B Aires)** 1988;48(1):49-53

[Double-blind controlled study of the efficacy of nifuroxazide versus placebo in the treatment of acute diarrhea in adults] Bourée P, et al. **Gastroenterol Clin Biol** 1989 May;13(5):469-72 (Eng. Abstr.) **(Fre)**

[The status of intestinal anti-infective agents in diarrhea at an urban practice in Tunisia] Varlan M. **Tunis Med** 1987 Jun-Jul;65(6-7):475-7 **(Fre)**

[Evaluation of complement mediated lysis technic in patients with chronic Chagas' disease treated with trypanocidal drugs] Levy AM, et al. **Rev Inst Med Trop Sao Paulo** 1988 Jan-Feb;30(1):32-9 (Eng. Abstr.) **(Por)**

TOXICITY

In-vivo carcinogenicity of 2-nitro-oxaphenalenes. Salmon RJ, et al. **Carcinogenesis** 1989 May;10(5):803-5

Ultrastructural alterations in ovaries from nifurtimox or benznidazole-treated rats: their relation to ovarian nitroreductive biotransformation of both drugs. de Castro CR, et al. **Exp Mol Pathol** 1989 Jun;50(3):385-97

Genotoxicity testing of antiparasitic nitrofurans in the Drosophila wing somatic mutation and recombination test. Moraga AA, et al. **Mutagenesis** 1989 Mar;4(2):105-10

DNA adduct formation by 7-methoxy-2-nitro-naphtho[2,1-b]furan (R7000), an extremely potent mutagen. Touati E, et al. **Mutagenesis** 1989 Jul;4(4):254-8

NITROFURANTOIN

ADMINISTRATION & DOSAGE

Preparation of microcapsules from complex coacervation of Gantrez-gelatin. II. In vitro dissolution of nitrofurantoin microcapsules. Mortada SA, et al. **J Microencapsul** 1987 Jan-Mar;4(1):23-37

[Treatment of acute urinary infection with the usual regimen and a single dose of antibiotic (letter)] Sánchez MI. **Rev Med Chil** 1988 Feb;116(2):184-6 **(Spa)**

ADVERSE EFFECTS

Pulmonary toxicity of nitrofurantoin. Witten CM. **Arch Phys Med Rehabil** 1989 Jan;70(1):55–7 (27 ref.)
Hospitalizations for pulmonary reactions following nitrofurantoin use. Jick SS, et al. **Chest** 1989 Sep; 96(3):512–5
Nitrofurantoin hypersensitivity masquerading as pneumonia [letter] Muoghalu BU, et al. **DICP** 1989 Jan;23(1):89–90
Acute pulmonary toxicity to nitrofurantoin. Chudnofsky CR, et al. **J Emerg Med** 1989 Jan–Feb;7(1):15–9
Nitrofurantoin toxicity in children. Coraggio MJ, et al. **Pediatr Infect Dis J** 1989 Mar;8(3):163–6 (34 ref.)
[Neuropathy during prolonged treatment with nitrofurantoin. Study of a nerve biopsy] Pagès M, et al. **Arch Anat Cytol Pathol** 1988;36(4):167–9 (Eng. Abstr.) **(Fre)**

ANALOGS & DERIVATIVES

Comparative human bioavailability study of macrocrystalline nitrofurantoin and two prolonged-action hydroxymethylnitrofurantoin preparations. Guelen PJ, et al. **Drug Intell Clin Pharm** 1988 Dec;22(12):959–64

METABOLISM

Reduction of nitroheterocyclic drugs by ascorbate and catecholamines: a possible mechanism for the neurotoxicity of nitroheterocyclic drugs. Rao DN, et al. **Basic Life Sci** 1988;49:787–94
Evaluation of genotoxic activity in the blood and urine of guinea pigs treated with nifurtimox and benznidazole. Ferreira RC, et al. **Braz J Med Biol Res** 1988;21(5):1069–77
Irreversible binding of nitrofurantoin to skin and to plasma proteins of UV-A exposed rats. Busker RW, et al. **Photochem Photobiol** 1988 Nov;48(5):683–8

PHARMACOKINETICS

In vitro and in vivo evaluation of seven 50 mg and 100 mg nitrofurantoin tablets. Meyer MC, et al. **Biopharm Drug Dispos** 1989 May–Jun;10(3):321–9
Lung metabolism of xenobiotic compounds. Duncan CA. **Clin Chest Med** 1989 Mar;10(1):49–58 (76 ref.)
Comparative human bioavailability study of macrocrystalline nitrofurantoin and two prolonged-action hydroxymethylnitrofurantoin preparations. Guelen PJ, et al. **Drug Intell Clin Pharm** 1988 Dec;22(12):959–64
Preparation of microcapsules from complex coacervation of Gantrez–gelatin. III. Bioavailability of nitrofurantoin microcapsules. Mortada SA, et al. **J Microencapsul** 1988 Oct–Dec;5(4):311–7
Between-lot and within-lot comparisons of bioavailability of macrocrystalline nitrofurantoin capsules. Mason WD, et al. **Pharm Res** 1987 Dec;4(6):499–503

PHARMACOLOGY

Mechanism of nitrofurantoin toxicity and oxidative stress in mitochondria. Carbonera D, et al. **Biochim Biophys Acta** 1988 Oct 26;936(1):139–47
Quantitative study of natural antioxidant systems for cellular nitrofurantoin toxicity. Michiels C, et al. **Biochim Biophys Acta** 1988 Dec 15;967(3):341–7
Nitrofurantoin-stimulated superoxide production by channel catfish (Ictalurus punctatus) hepatic microsomal and soluble fractions. Washburn PC, et al. **Toxicol Appl Pharmacol** 1988 Sep 30;95(3):363–77
[Changes in the antibacterial activity of nitrofurantoin preparations induced by peptone and hydrolysates] Marica D, et al. **Rev Ig [Bacteriol]** 1989 Apr–Jun;34(2):133–40 (Eng. Abstr.) **(Rum)**

RADIATION EFFECTS

Formation of methemoglobin by photoactivation of nitrofurantoin or of 5-nitrofurfural in rats exposed to UV-A light. Busker RW, et al. **Toxicology** 1988 Oct; 51(2–3):255–66

THERAPEUTIC USE

Immunoelectrophoretic tailing albumin phenomenon. Associations with clinical characteristics of the patients and with nitrofurantoin treatment. Haltia K. **Acta Med Scand Suppl** 1988;729:1–124
Comparison of Mictral with amoxycillin, trimethoprim and nitrofurantoin in the treatment of acute cystitis. Lightstone BL, et al. **Br J Clin Pract** 1988 Jul;42(7):283–8
Nitrofurans in the treatment of gastritis associated with Campylobacter pylori. The Gastrointestinal Physiology Working Group of Cayetano Heredia and The Johns Hopkins Universities. Morgan D, et al. **Gastroenterology** 1988 Nov;95(5):1178–84
Nitrofurantoin: an update. Cunha BA. **Obstet Gynecol Surv** 1989 May;44(5):399–406 (95 ref.)
[Antimicrobial therapy with nitroheterocyclic compounds, for example, metronidazole and nitrofurantoin] Hof H. **Immun Infekt** 1988 Dec;16(6):220–5 (52 ref.) (Eng. Abstr.) **(Ger)**
[Preventive use of nitrofurantoin in recurrent urinary tract infections] Kraatz G, et al. **Z Urol Nephrol** 1988 Oct; 81(10):641–5 (Eng. Abstr.) **(Ger)**
[A single dose of sulfamethoxazole-trimethoprim vs. a 7-day course of nitrofurantoin in the treatment of acute non-complicated urinary tract infection in women] Abadi T, et al. **Rev Med Chil** 1987 Dec;115(12):1166–9 (Eng. Abstr.) **(Spa)**

TOXICITY

Nitrofurantoin-stimulated proteolysis in human erythrocytes: a novel index of toxic insult by nitroaromatics. Novak RF, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):439–44
Mutagenicity of nitrofurantoin and furazolidone in Chinese hamster ovary cell strains. Gao N, et al. **Mutat Res** 1989 Apr;225(4):181–7

NITROFURAZONE

ADMINISTRATION & DOSAGE

[Treatment of postpartum endometritis by irrigation of the uterine cavity with cooled antiseptics] Utkin VM, et al. **Sov Med** 1988;(10):109–12 **(Rus)**

METABOLISM

Reduction of 5-nitroimidazoles, nitrofurazone, and 2,4-dinitrophenol to their free radical metabolites by Tritrichomonas foetus hydrogenosomes. Moreno SN, et al. **Basic Life Sci** 1988;49:759–64
Evidence for the involvement of a nitrenium ion in the covalent binding of nitrofurazone to DNA. Streeter AJ, et al. **Pharm Res** 1988 Jul;5(7):434–6

PHARMACOLOGY

Hypovolemia, hyperosmolality, and acidosis associated with intraperitoneal infusion of nitrofurazone solution in healthy horses. Gossett KA, et al. **Am J Vet Res** 1988 Sep; 49(9):1601–4
The activity of nitrofurazone and furazolidone against Leishmania donovani, L. major and L. enriettii in vitro and in vivo. Neal RA, et al. **Ann Trop Med Parasitol** 1988 Oct;82(5):452–6
Effect of furazolidone and nitrofurazone on brain gamma-amino butyric acid and glutamate concentrations in chickens. Ali BH. **Clin Exp Pharmacol Physiol** 1989 May; 16(5):363–6
Effect of furazolidone and nitrofurazone on brain gamma-amino butyric acid and glutamate concentrations in chickens. Ali BH. **Clin Exp Pharmacol Physiol** 1988 Dec; 15(12):959–63

TOXICITY

Toxicity and carcinogenicity of nitrofurazone in F344/N rats and B6C3F1 mice. Kari FW, et al. **Food Chem Toxicol** 1989 Feb;27(2):129–37

NITROGEN

Nitrogen dead space in heavy smokers aged 44–58 years. Rosberg HE, et al. **Clin Physiol** 1989 Jun;9(3):233–41
Gas density dependence of regional VA/V and VA/Q inequality during constant-flow ventilation. Schumacker PT, et al. **J Appl Physiol** 1989 Apr;66(4):1722–9
Extended liquid nitrogen storage of erythrocytes coated with purified monoclonal proteins for Gm allotyping [letter] Bayer PA, et al. **J Immunol Methods** 1988 Oct 26; 113(2):289–90
Induction of sister-chromatid exchanges by direct and indirect mutagens in human lymphocytes, co-cultured with intact rat liver cells. Effect of enzyme induction and preservation of the liver cells by freezing in liquid nitrogen. Lindahl-Kiessling K, et al. **Mutat Res** 1989 Mar; 211(1):77–87
Recovery of DNA from agarose gels using liquid nitrogen. Koenen M. **Trends Genet** 1989 May;5(5):137
Use of DMSO for the cryopreservation of Tritrichomonas foetus in liquid nitrogen. Campero CM. **Vet Parasitol** 1989 Jun;31(3–4):339–43
[A schedule of 40 m nitrogen–oxygen saturation diving] Ikeda T, et al. **Sangyo Igaku** 1988 Jul;30(4):284–5 **(Jpn)**

ADMINISTRATION & DOSAGE

Treatment of genital herpes: an option [letter] Yoneda Y. **Can J Surg** 1989 May;32(3):149
Effect of dietary energy intake on tubular reabsorption of urea in sheep. Faix S, et al. **Physiol Bohemoslov** 1988; 37(6):493–501
[Changes in the functional status of lymphocytes in patients with chronic salpingo-oophoritis treated by normobaric hypoxia] Burlev VA, et al. **Akush Ginekol (Mosk)** 1989 Feb;(2):27–9 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

[Gynecologic morbidity in workers engaged in the manufacture of nitrogen fertilizers and caprolactam] Angelov A. **Akush Ginekol (Sofiia)** 1988;27(5):51–4 (Eng. Abstr.) **(Bul)**
[An unusual cause of gangrene: cold injury caused by liquid nitrogen] Leu HJ, et al. **Schweiz Med Wochenschr** 1989 Feb 11;119(6):192–5 (Eng. Abstr.) **(Ger)**

ANALYSIS

Non-protein nitrogen and true protein in infant formulas. Donovan SM, et al. **Acta Paediatr Scand** 1989 Jul; 78(4):497–504
Isolation of the nonprotein nitrogen fraction from human milk by gel-filtration chromatography and its separation by fast protein liquid chromatography. Donovan SM, et al. **Am J Clin Nutr** 1989 Jul;50(1):53–7
Very-low-calorie diets with high and low protein content: impact on triiodothyronine, energy expenditure, and nitrogen balance. Hendler R, et al. **Am J Clin Nutr** 1988 Nov;48(5):1239–47
Different forms of mineral nitrogen in drinking water and the Balkan nephropathy. Radovanović Z, et al. **Arch Environ Contam Toxicol** 1988 Nov;17(6):813–5
A system for toxicological screening by capillary gas chromatography with use of a drug retention index based on nitrogen-containing reference compounds. Manca D, et al. **Clin Chem** 1989 Apr;35(4):601–7
Multiple breath nitrogen dead space. Arborelius M, et al. **Clin Physiol** 1988 Dec;8(6):561–76
Observations on intraspecific variation of total protein, amino acid and total nonprotein compound levels and their fractions in the muscles, hepatopancreas and gonads of two crustaceans, Portunus pelagicus (L.) and Penaeus kerathurus (L.), in relation to maturation. II. Total nonprotein compounds and their fractions. Hilmy AM, et al. **Folia Morphol (Praha)** 1988;36(3):235–47
Breast milk total nitrogen, non-protein nitrogen and lactoferrin content [letter] Mathur GP, et al. **Indian Pediatr** 1988 Jul;25(7):701–2
Breast milk total nitrogen nonprotein nitrogen and lactoferrin content. Raghuvanshi RS, et al. **Indian Pediatr** 1988 Feb; 25(2):149–59
Determination of nitrogen content in milk by the Kjeldahl method using copper sulfate: interlaboratory study. Grappin R, et al. **J Assoc Off Anal Chem** 1988 Sep–Oct; 71(5):893–8
Apparatus for the measurement of total body nitrogen using prompt neutron activation analysis with californium-252. Mackie A, et al. **J Med Eng Technol** 1988 Jul–Aug; 12(4):152–9
Investigation of factors which lead to the background in the measurement of nitrogen by IVNAA. McNeill KG, et al. **Phys Med Biol** 1989 Jan;34(1):53–9
Effect of applications of sewage sludge on N, P, K, Ca, Mg and trace element contents of plant tissues. Couillard D, et al. **Sci Total Environ** 1989 May 15;80(2–3):113–25
Detection of adulteration of pasteurised milk with whey by determination of the casein-bound phosphorus and protein nitrogen content. Wolfschoon-Pombo AF, et al. **Z Lebensm Unters Forsch** 1989 Jan;188(1):16–21
[Differences in nitrogen and RNA contents between free bacteria and bacteria fixed to food particles in the rumen contents, in the case of different diets; consequences for estimating the ratio of bacterial nitrogen in duodenal nitrogen] Poncet C, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:115–6 (Eng. Abstr.) **(Fre)**
[Concentrating and determining trace amounts of nitrogen-containing fungicides in food products and air] Girenko DB, et al. **Gig Sanit** 1988 Sep;(9):41–2 **(Rus)**

BLOOD

Nitrogen and energy relationships in malnourished patients with emphysema. Goldstein SA, et al. **Am Rev Respir Dis** 1988 Sep;138(3):636–44
Decompression sickness and bubble formation in females exposed to a simulated 7.8 psia suit environment. Dixon GA, et al. **Aviat Space Environ Med** 1988 Dec; 59(12):1146–9
Postmortem changes of blood urea, creatinine, non-protein nitrogen, uric acid & ammonia levels in rabbit. Usmani JA, et al. **Indian J Med Res** 1988 Dec;88:545–9
Correction of inert gas washin or washout for gas solubility in blood. Harris EA, et al. **J Appl Physiol** 1988 Oct; 65(4):1598–603
[The equilibrium of nitrogen, potassium and phosphate and renal excretion of creatinine and creatinine over the course of 3 weeks following severe trauma] Finsterer U, et al. **Anasth Intensivther Notfallmed** 1988 Dec;23(6):316–24 (Eng. Abstr.) **(Ger)**
[The effect of intravenous administration of butyrate, isobutyrate and isovalerate to lambs aged 8–45 days on the blood plasma content of glucose, insulin, free fatty acids and total alpha-amino-N] Düsedau K, et al. **Arch Exp Veterinarmed** 1989 Jan;43(1):81–96 (Eng. Abstr.) **(Ger)**
[Effect of L-carnitine supplemented total parenteral nutrition on postoperative lipid and nitrogen utilization] Rössle C, et al. **Klin Wochenschr** 1988 Dec 15;66(24):1202–11 (Eng. Abstr.) **(Ger)**
[Nitrogen balance in tumor and host in the animal model] Brenner U, et al. **Langenbecks Arch Chir** 1989;374(2):111–7 (Eng. Abstr.) **(Ger)**

DIAGNOSTIC USE

Single breath N2 washout in papain-induced pulmonary emphysema. Hachenberg T, et al. **Intensive Care Med** 1989; 15(5):308–13

ISOLATION & PURIFICATION

[The choice of the extractant for isolating nitrogen-containing organic bases from the liver]

Kartashov VA, et al. **Sud Med Ekspert** 1988 Jul-Sep; 31(3):40-1 (Eng. Abstr.) **(Rus)**
[Extraction of nitrogen-containing organic bases from liver tissue] Kartashov VA, et al. **Sud Med Ekspert** 1988 Oct-Dec;31(4):31-3 (Eng. Abstr.) **(Rus)**

METABOLISM

Dietary carbohydrate-to-fat ratio: influence on whole-body nitrogen retention, substrate utilization, and hormone response in healthy male subjects. McCargar LJ, et al. **Am J Clin Nutr** 1989 Jun;49(6):1169-78
Nutrient intake and nitrogen metabolism in cancer patients during oncological chemotherapy. Ollenschlaeger G, et al. **Am J Clin Nutr** 1989 Sep;50(3):454-9
Clinical relevance of L-carnitine-supplemented total parenteral nutrition in postoperative trauma. Metabolic effects of continuous or acute carnitine administration with special reference to fat oxidation and nitrogen utilization. Pichard C, et al. **Am J Clin Nutr** 1989 Feb;49(2):283-9
Preoxygenation: a study of denitrogenation. Carmichael FJ, et al. **Anesth Analg** 1989 Mar;68(3):406-9
Nitrogen-sparing effect of epidural administration of local anesthetics in colon surgery. Vedrinne C, et al. **Anesth Analg** 1989 Sep;69(3):354-9
In vivo metabolism of nitrogen precursors for urea synthesis in the postprandial rat. Jahoor F, et al. **Ann Nutr Metab** 1988;32(4):240-4
Addition of glutamine to total parenteral nutrition after elective abdominal surgery spares free glutamine in muscle, counteracts the fall in muscle protein synthesis, and improves nitrogen balance. Hammarqvist F, et al. **Ann Surg** 1989 Apr;209(4):455-61
Chronic TNF infusion causes anorexia but not accelerated nitrogen loss. Michie HR, et al. **Ann Surg** 1989 Jan; 209(1):19-24
Organic nitrogen metabolism of phototrophic bacteria. Klemme JH. **Antonie Van Leeuwenhoek** 1989;55(3):197-219 (95 ref.)
Nitrogen metabolism in tumor bearing mice. Márquez J, et al. **Arch Biochem Biophys** 1989 Feb 1;268(2):667-75
Tissue glutamine synthetase associated with ammonia detoxication and nitrogen metabolism in Clarias batrachus. Singh RA, et al. **Arch Int Physiol Biochim** 1989 Apr; 97(2):145-52
Pyrimidine, purine and nitrogen control of cytosine deaminase synthesis in Escherichia coli K 12. Involvement of the glnLG and purR genes in the regulation of codA expression. Andersen L, et al. **Arch Microbiol** 1989; 152(2):115-8
Nitrogen balance in adult hospitalized patients with the use of a pediatric amino acid model. Gazzaniga AB, et al. **Arch Surg** 1988 Oct;123(10):1275-9
Perturbations in nitrogen metabolism of brain and liver of rat following repeated benthiocarb administration. Babu GR, et al. **Biochem Int** 1989 Jun;18(6):1253-68
Glutamine as a major nitrogen carrier to the liver in suckling rat pups. Casado J, et al. **Biochem J** 1988 Dec 1; 256(2):377-81
Molybdenum and vanadium nitrogenases of Azotobacter chroococcum. Low temperature favours N2 reduction by vanadium nitrogenase. Miller RW, et al. **Biochem J** 1988 Dec 1;256(2):429-32
Nitrogen balance study in young Nigerian adult males using four levels of protein intake. Atinmo T, et al. **Br J Nutr** 1988 Nov;60(3):451-8
Effects of substitution of tricaproin for tallow and of protein concentration in milk substitutes on nitrogen and energy balance in the preruminant lamb. Aurousseau B. **Br J Nutr** 1988 Nov;60(3):525-38
Nitrogen metabolism and urinary excretion of purines in goat kids. Lindberg JE. **Br J Nutr** 1989 Mar;61(2):309-21
Partition of portal-drained visceral net flux in beef steers. 1. Blood flow and net flux of oxygen, glucose and nitrogenous compounds across stomach and post-stomach tissues. Reynolds CK, et al. **Br J Nutr** 1988 Nov; 60(3):539-51
Changes in nitrogen metabolism of penaeid prawn, Penaeus indicus, during sublethal phosphamidon and methylparathion-induced stress. Reddy MS, et al. **Bull Environ Contam Toxicol** 1988 Sep;41(3):344-51
The effect of a weight-reducing diet on the nitrogen metabolism of obese adolescents. Pencharz PB, et al. **Can J Physiol Pharmacol** 1988 Dec;66(12):1469-74
Measurement of the transfer of the nitrogen moiety of intestinal lumen glutamic acid in man after oral ingestion of l-[15N]glutamic acid. Johnson AW, et al. **Clin Sci** 1988 Nov;75(5):499-502
Creatinine and inulin clearance at the different nitrogen and energy intake in sheep. Faix S, et al. **Comp Biochem Physiol [A]** 1988;91(4):689-91
Studies on enzymes of nitrogen metabolism, and nitrogen end products in the developing chick (Gallus domesticus) embryo. Emmanuel B, et al. **Comp Biochem Physiol [B]** 1978;61(2):287-9
Effects of varying doses of methionine sulfoximine on liver glutamine synthetase activity and time courses of blood and urinary nitrogenous compounds in the chicken (Gallus domesticus). Karasawa Y, et al. **Comp Biochem Physiol [B]** 1988;91(4):789-92
Exogenous hyperglucagonaemia in insulin controlled diabetic rats increases urea excretion and nitrogen loss from organs. Almdal TP, et al. **Diabetologia** 1988 Nov;31(11):836-41
Serum growth hormone and nitrogen metabolism responses in young bull calves infused with growth hormone-releasing factor for 20 days. Moseley WM, et al. **Domest Anim Endocrinol** 1987 Jan;4(1):51-9
Loss of nitrogen from organs in rats induced by exogenous glucagon. Almdal TP, et al. **Endocrinology** 1988 Nov; 123(5):2182-6
The sick very low birthweight infant fed by parenteral nutrition: studies of nitrogen and energy. Kovar IZ, et al. **Eur J Clin Nutr** 1989 May;43(5):339-46
Nitrogen-limited behaviour of micro-organisms growing in the presence of large concentrations of ammonium ions. Buurman ET, et al. **FEMS Microbiol Lett** 1989 Apr; 49(2-3):229-32
Influence of energy and nitrogen contents of enteral diets on nitrogen balance: a double blind prospective controlled clinical trial. Rees RG, et al. **Gut** 1989 Jan;30(1):123-9
Gluconeogenesis from nitrogen precursors and hyperammonemia of cirrhosis: is there a cause-effect relationship? [letter] Trevisani F, et al. **Hepatology** 1989 Feb;9(2):343-5
Macronutrient content of a hypoenergy diet affects nitrogen retention and muscle function in weight lifters. Walberg JL, et al. **Int J Sports Med** 1988 Aug;9(4):261-6
Effect of dietary protein level on nitrogen metabolism in the growing bovine: I. Nitrogen recycling and intestinal protein supply in calves. Bunting LD, et al. **J Anim Sci** 1989 Mar; 67(3):810-9
Effect of dietary protein level on nitrogen metabolism in the growing bovine: II. Diffusion into and utilization of endogenous urea nitrogen in the rumen. Bunting LD, et al. **J Anim Sci** 1989 Mar;67(3):820-6
Effects of forage source on ruminal microbial nitrogen metabolism and carbohydrate digestion in continuous culture. Dahlberg EM, et al. **J Anim Sci** 1988 Aug; 66(8):2071-83
Nitrogen and protein metabolism and metabolites in plasma and urine of beef steers treated with somatotropin. Eisemann JH, et al. **J Anim Sci** 1989 Jan;67(1):105-15
Effects of cimaterol on nitrogen retention and energy utilization in lambs. Kim YS, et al. **J Anim Sci** 1989 Mar; 67(3):674-81
Apparent digestibility of nitrogen and amino acids in protein feedstuffs by growing pigs. Knabe DA, et al. **J Anim Sci** 1989 Feb;67(2):441-58
Nitrogen metabolism by lactating ewes and their lambs. Lynch GP, et al. **J Anim Sci** 1988 Dec;66(12):3285-94
The role of glucose infusion on the metabolism of nitrogen in ruminants. Matras J, et al. **J Anim Sci** 1989 Jun; 67(6):1642-7
The effects of dietary fat or fiber addition on energy and nitrogen digestibility in lactating, primiparous sows housed in a warm or hot environment. Schoenherr WD, et al. **J Anim Sci** 1989 Feb;67(2):473-81
Lysocellin effects on growth performance, ruminal fermentation, nutrient digestibility and nitrogen metabolism in steers fed forage diets. Spears JW, et al. **J Anim Sci** 1989 Feb;67(2):547-56
Evaluation of soybean meal, corn gluten meal, blood meal and fish meal as sources of nitrogen and amino acids disappearing from the small intestine of steers. Titgemeyer EC, et al. **J Anim Sci** 1989 Jan;67(1):262-75
Effects of rumen-protected amino acids on ruminant nitrogen balance, plasma amino acid concentrations and performance. Wright MD, et al. **J Anim Sci** 1988 Aug; 66(8):2014-27
Changes in polypeptide composition of Synechocystis sp. strain 6308 phycobilisomes induced by nitrogen starvation. Duke CS, et al. **J Bacteriol** 1989 Apr;171(4):1960-6
Role of the Bradyrhizobium japonicum ntrC gene product in differential regulation of the glutamine synthetase II gene (glnII). Martin GB, et al. **J Bacteriol** 1988 Dec; 170(12):5452-9
Changes in gene expression during nitrogen starvation in Anabaena variabilis ATCC 29413. Wealand JL, et al. **J Bacteriol** 1989 Mar;171(3):1309-13
The effects of human growth hormone administration in elderly adults with recent weight loss. Binnerts A, et al. **J Clin Endocrinol Metab** 1988 Dec;67(6):1312-6
Regulation of leucine catabolism by caloric sources. Role of glucose and lipid in nitrogen sparing during nitrogen deprivation. Vazquez JA, et al. **J Clin Invest** 1988 Nov; 82(5):1606-13
Effect of somatotropin on kinetics of nonesterified fatty acids and partition of energy, carbon, and nitrogen in lactating dairy cows. Sechen SJ, et al. **J Dairy Sci** 1989 Jan; 72(1):59-67
Nitrogen absorption in pancreatectomized patients: protein versus protein hydrolysate as substrate. Steinhardt HJ, et al. **J Lab Clin Med** 1989 Feb;113(2):162-7
Synthesis and pharmacology of trans-4-n-propyl-3,4,4a,10b-tetrahydro-2H,5H-1-benzopyrano[4,3-b]-1,4-oxazin-7- and -9-ols: the significance of nitrogen pKa values for central dopamine receptor activation. Dijkstra D, et al. **J Med Chem** 1988 Nov;31(11):2178-82
Effects of pregnancy on the contents of water, taurine, and total amino nitrogen in rat cerebral cortex. Law RO. **J Neurochem** 1989 Jul;53(1):300-2
Neuronal glutamine utilization: pathways of nitrogen transfer studied with [15N]glutamine. Yudkoff M, et al. **J Neurochem** 1989 Aug;53(2):632-40
Effect of vitamin A deficiency on nitrogen balance and hepatic urea cycle enzymes and intermediates in rats. John A, et al. **J Nutr** 1989 Jan;119(1):29-35
Plasma ammonia, plasma, brain and liver amino acids and urea cycle enzyme activities in rats fed ammonium acetate. Semon BA, et al. **J Nutr** 1989 Feb;119(2):166-74
Utilization and requirement of dietary protein taking into account the dermal and miscellaneous nitrogen losses in Japanese women. Kaneko K, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Oct;34(5):459-67
Hormonal and metabolic changes following severe head injury or noncranial injury. Chioléro R, et al. **JPEN J Parenter Enteral Nutr** 1989 Jan-Feb;13(1):5-12
Pentobarbital improves nitrogen retention in sepsis. Dickerson RN, et al. **JPEN J Parenter Enteral Nutr** 1989 Jul-Aug;13(4):359-61 (27 ref.)
Effect of whey proteins, their oligopeptide hydrolysates and free amino acid mixtures on growth and nitrogen retention in fed and starved rats. Poullain MG, et al. **JPEN J Parenter Enteral Nutr** 1989 Jul-Aug;13(4):382-6
Effect of parenteral glutamine peptide supplements on muscle glutamine loss and nitrogen balance after major surgery. Stehle P, et al. **Lancet** 1989 Feb 4;1(8632):231-3
Urea synthesis, nitrogen balance, and glucose turnover in growth-hormone-deficient children before and after growth hormone administration. Dahms WT, et al. **Metabolism** 1989 Mar;38(3):197-203
Serum lipids and apolipoproteins in the rat refed after starving: influence of the molecular form of nitrogen (protein, peptides, or free amino acids). Poullain MG, et al. **Metabolism** 1989 Aug;38(8):740-4
The use of purine compounds as sole sources of carbon and nitrogen by Klebsiella species. Wong SH. **Microbios** 1988; 56(226):57-62
The Klebsiella pneumoniae PII protein (glnB gene product) is not absolutely required for nitrogen regulation and is not involved in NifL-mediated nif gene regulation. Holtel A, et al. **Mol Gen Genet** 1989 Jun;217(2-3):474-80
The Azorhizobium caulinodans nitrogen-fixation regulatory gene, nifA, is controlled by the cellular nitrogen and oxygen status. Ratet P, et al. **Mol Microbiol** 1989 Jun; 3(6):825-38
Evidence for the involvement of a nitrenium ion in the covalent binding of nitrofurazone to DNA. Streeter AJ, et al. **Pharm Res** 1988 Jul;5(7):434-6
Comparisons of bioassays for true metabolizable energy adjusted to zero nitrogen balance. Sibbald IR, et al. **Poult Sci** 1988 Aug;67(8):1192-202
The utiiization of nitrogen for growth in mice fed blends of purified proteins. Keith MO, et al. **Proc Soc Exp Biol Med** 1989 Mar;190(3):246-53
Nutritional evaluation of a lactose-hydrolyzed milk-based enteral formula diet: II. Energy, nitrogen and mineral bioavailabillity. Morales M, et al. **Rev Invest Clin** 1988 Oct-Dec;40(4):341-6
Pulmonary disposition of inhaled NO2-nitrogen in isolated rat lungs. Postlethwait EM, et al. **Toxicol Appl Pharmacol** 1989 Apr;98(2):303-12
Liver transplantation—energy expenditure, nitrogen loss, and substrate oxidation rate in the first two postoperative days. Delafosse B, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2453-4
A decade of photorespiratory nitrogen cycling. Givan CV, et al. **Trends Biochem Sci** 1988 Nov;13(11):433-7 (30 ref.)
Nutritional implications of human and mammalian large intestinal function. McNeil NI. **World Rev Nutr Diet** 1988; 56:1-42 (257 ref.)
[The growth of feed yeasts and protein biosynthesis under conditions of nitrogen limitation] Katranushkova Kh, et al. **Acta Microbiol Bulg** 1988;22:74-80 (Eng. Abstr.) **(Bul)**
[Effect of the growth rate on the activity of nitrogen metabolism enzymes in chemostat cultures of Candida diddensii and Candida tropicalis] Tsvetkova B, et al. **Acta Microbiol Bulg** 1988;23:34-9 (Eng. Abstr.) **(Bul)**
[Feminar with whey (serum) proteins prepared by thermal denaturation. Nitrogen and lipid balance in neonates with a low birth weight] Melichar V, et al. **Cesk Pediatr** 1989 Jan;44(1):1-5 (Eng. Abstr.) **(Cze)**
[Bacterial colonization of different types of feeds incubated in sacco in the rumen: consequences for estimation of nitrogen degradability] Bernard L, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:105-6 (Eng. Abstr.) **(Fre)**
[Effect of dietary restriction on the flow of organic matter and nitrogen in the digestive tract of goats] Brun-Bellut J, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:123-4 (Eng. Abstr.) **(Fre)**
[Influence of flaking of wheat on the intestinal flow of nitrogen in the cow] Focant M, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:121-2 (Eng. Abstr.) **(Fre)**
[Amino acid composition of the nitrogen flow entering the duodenum in the dairy cow] Le Henaff L, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:119-20 (Eng. Abstr.) **(Fre)**
[Measurement of the digestion of dietary nitrogen in different parts of the sheep digestive tract using the nylon bag technic] Yang WZ, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:125-6 (Eng. Abstr.) **(Fre)**
[Nitrogen metabolism and its control mechanisms] Bergner H. **Arch Tierernahr** 1989 Apr-May;39(4-5):377-92 (35 ref.) (Eng. Abstr.) **(Ger)**

[Studies on nitrogen metabolism in the large intestine of ruminants. 5. Metabolism of intra-cecally infused 15N-urea without and with fermentable material in heifers] Bergner H, et al. **Arch Tierernahr** 1989 Apr-May;39(4-5):443-54 (Eng. Abstr.) (Ger)

[Mechanism of action of lysine in relation to its form of supply in swine] Liebert F, et al. **Arch Tierernahr** 1989 Apr-May;39(4-5):405-13 (Eng. Abstr.) (Ger)

[The effect of DL-methionine, N-hydroxymethyl-DL-methionine calcium salt (Mepron) and DL-methionine hydroxy analog calcium salt (MHA) on the N-deposits of calves] Schmidt J, et al. **Arch Tierernahr** 1989 Jan-Feb;39(1-2):141-9 (Eng. Abstr.) (Ger)

[Urea utilization in growing lambs. 7. NPN- and pure protein-N-utilization at various ages] Ulbrich M. **Arch Tierernahr** 1989 Apr-May;39(4-5):455-62 (Eng. Abstr.) (Ger)

[Influence of energy concentration and source on the utilization of feed protein and NPN in lambs. 2. 15N balance and utilization of pure protein and NPN] Ulbrich M, et al. **Arch Tierernahr** 1989 Apr-May;39(4-5):463-72 (Eng. Abstr.) (Ger)

[The influence of different fiber types on the fecal nitrogen excretion and the content of volatile fatty acids in the feces of broiler hen breeds] Zander R, et al. **Arch Tierernahr** 1988 Oct;38(10):893-903 (Eng. Abstr.) (Ger)

[Ruminal 15N-straw degradation in sacco and the in vivo digestibility of 15N from straw in the sheep and pony] Zander R, et al. **Arch Tierernahr** 1989 Mar;39(3):361-8 (Eng. Abstr.) (Ger)

[Studies of solutions with various branched-chain amino acid contents on protein metabolism in the postoperative period. 1. A 15N tracer kinetic animal model for evaluating the effect of parenteral amino acid administration on nitrogen metabolism] Matkowitz R, et al. **Infusionstherapie** 1989 Jun; 16(3):125-31 (Eng. Abstr.) (Ger)

[15N tracer kinetics of the utilization of yeast nitrogen] Heine W, et al. **Nahrung** 1989;33(4):349-54 (Eng. Abstr.) (Ger)

[Nitrogen regulation in microorganisms] Huth J, et al. **Zentralbl Mikrobiol** 1988;143(3):179-94 (98 ref.) (Eng. Abstr.) (Ger)

[Oxygen regulation of nitrogen metabolism in microorganisms] Schauer F. **Zentralbl Mikrobiol** 1988; 143(3):195-206 (46 ref.) (Eng. Abstr.) (Ger)

[Nuclease activity of a chemostat culture of Candida tropicalis P-70] Petkov D, et al. **Acta Microbiol Bulg** 1988; 22:81-6 (Eng. Abstr.) (Rus)

[Nitrogen metabolism of Streptomyces antibioticus on media with various glucose contents] Prokopenko VM, et al. **Antibiot Khimioter** 1988 Jul;33(7):496-9 (Eng. Abstr.) (Rus)

[Growth and spore formation in Bacillus thuringiensis at high substrate concentrations] Sakharova ZV, et al. **Mikrobiologiia** 1988 Nov-Dec;57(6):992-5 (Eng. Abstr.) (Rus)

[Acylase distribution in animal and human tissues] Galaev IuV, et al. **Ukr Biokhim Zh** 1988 Jul-Aug;60(4):83-6 (Eng. Abstr.) (Rus)

[Status of nitrogen balance and parenteral feeding in peritonitis] Ashkhamaf MKh. **Vestn Khir** 1988 Oct; 141(10):39-42 (Eng. Abstr.) (Rus)

[Effects of treatment with polyvinylpyrrolidone on nutritional quality of sorghum] de Mucciarelli SI, et al. **Arch Latinoam Nutr** 1987 Sep;37(3):547-50 (Eng. Abstr.) (Spa)

[Use of chickpea (Cicer arietinum L.) in non-dairy formulas. II. Nitrogen balance in children with lactose intolerance, fed with a formula based on chickpea and a commercial soybean product] Sotelo A, et al. **Arch Latinoam Nutr** 1987 Sep;37(3):468-79 (Eng. Abstr.) (Spa)

[Dynamics of respiration and the microbial biomass in soil supplemented with straw from corn and soybeans] Alvarez R, et al. **Rev Argent Microbiol** 1988 Apr-Jun;20(2):87-96 (Eng. Abstr.) (Spa)

[Assays of nutrition in Ascobolus furfuraceus. Sources of nitrogen] Lima CE, et al. **Rev Argent Microbiol** 1984; 16(4):177-86 (Eng. Abstr.) (Spa)

PHARMACOKINETICS

Nitrogen kinetics of infectious bovine rhinotracheitis-stressed calves. Orr C, et al. **J Anim Sci** 1988 Aug;66(8):1982-9

PHARMACOLOGY

Polyamines in growth and differentiation of plant cell cultures: the effect of nitrogen nutrition, salt stress and embryogenic media. Altman A, et al. **Adv Exp Med Biol** 1988;250:559-72 (33 ref.)

Nitrogen inhibition of mycotoxin production by Alternaria alternata. Orvehed M, et al. **Appl Environ Microbiol** 1988 Oct;54(10):2361-4

Hyperbaric He but not N2 augments Ca2+-dependent dopamine release from rat striatum. Paul ML, et al. **Undersea Biomed Res** 1989 Jul;16(4):293-304

PHYSIOLOGY

Gaseous pathways in atelectatic ears. Sadé J, et al. **Ann Otol Rhinol Laryngol** 1989 May;98(5 Pt 1):355-8

The importance of the form of nitrogen on microbial protein synthesis in the rumen of cattle receiving grass silage and continuous intrarumen infusions of sucrose. Rooke JA, et al. **Br J Nutr** 1989 Jan;61(1):113-21

Influence of heliox, oxygen, and N2O-O2 breathing on N2 bubbles in adipose tissue. Hyldegaard O, et al. **Undersea Biomed Res** 1989 May;16(3):185-93

SECRETION

Protein digestion in weanling pigs: effect of feeding regimen and endogenous protein secretion. Asche GL, et al. **J Nutr** 1989 Aug;119(8):1083-92

[Current clinical evaluation of indicators of the secretory and excretory function of the stomach in patients with chronic glomerulonephritis] Ryss ES, et al. **Urol Nefrol (Mosk)** 1989 Mar-Apr;(2):45-9 (Eng. Abstr.) (Rus)

THERAPEUTIC USE

[Liquid nitrogen therapy of acne vulgaris] Binder R. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Mar;4(1):22-3 (Chi)

[Cryotherapy of rheumatoid arthritis] Zdrojewicz Z, et al. **Wiad Lek** 1988 Jul 15;41(14):930-3 (Eng. Abstr.) (Pol)

TOXICITY

Interactive effects of nitrogen and copper on growth of cyanobacterium Microcystis. Gupta SL. **Bull Environ Contam Toxicol** 1989 Feb;42(2):270-5

[Sanitary and hygienic characteristics of liquid nitrogen fertilizers as industrial waste in the sewer-free water supply system of a chemical plant] Chegrinets GIa, et al. **Gig Sanit** 1988 Jun;(6):75-7 (Rus)

[Hygienic evaluation of the work capacity of workers retiring from chemical nitrogen production plants] Mikhalluts AP, et al. **Gig Tr Prof Zabol** 1989;(3):4-7 (Eng. Abstr.) (Rus)

[Problems of improving working conditions for workers engaged in the production of nitrogen mineral fertilizers] Rumiantsev GI, et al. **Gig Tr Prof Zabol** 1989;(3):1-4 (Eng. Abstr.) (Rus)

URINE

Determinants of urinary nitrogen excretion in burned patients. Belcher HJ, et al. **Burns Incl Therm Inj** 1988 Aug; 14(4):303-7

Nitrogen excretion in cancer cachexia and its modification by a high fat diet in mice. Beck SA, et al. **Cancer Res** 1989 Jul 15;49(14):3800-4

Pyrochemiluminescence: real-time, cost-effective method for determining total urinary nitrogen in clinical nitrogen-balance studies. Konstantinides FN, et al. **Clin Chem** 1988 Dec;34(12):2518-20

Validity of urinary urea nitrogen as a measure of total urinary nitrogen in adult patients requiring parenteral nutrition. Loder PB, et al. **Crit Care Med** 1989 Apr;17(4):309-12

Urinary excretion of 3-methylhistidine, creatinine and total nitrogen by Kenyan children during acute measles and after recovery. Duggan MB, et al. **Eur J Clin Nutr** 1989 Jun; 43(6):391-401

Effect of a recombinant human growth hormone preparation on the urinary 15nitrogen balance in growth-hormone-deficient children. Zachmann M, et al. **Horm Res** 1988;29(4):140-2

Comparison of urinary urea nitrogen excretion and measured energy expenditure in spinal cord injury and nonsteroid-treated severe head trauma patients. Kolpek JH, et al. **JPEN J Parenter Enteral Nutr** 1989 May-Jun; 13(3):277-80

[The prognosis of endogenous nitrogen loss of the human body by the level of energy consumption] Vysotskiĭ VG, et al. **Vopr Pitan** 1988 Nov-Dec;(6):21-8 (Eng. Abstr.) (Rus)

NITROGEN DIOXIDE

Mutagenicity of the reaction products of carbazole in the presence of nitrogen dioxide and nitrocarbazole. Hisamatsu Y, et al. **Mutat Res** 1989 May;226(1):55-9

ADVERSE EFFECTS

Current nitrogen dioxide exposures among railroad workers. Woskie SR, et al. **Am Ind Hyg Assoc J** 1989 Jul; 50(7):346-53

Effect of nitrogen dioxide exposure on susceptibility to influenza A virus infection in healthy adults. Goings SA, et al. **Am Rev Respir Dis** 1989 May;139(5):1075-81

Nitrogen dioxide and respiratory infection. Samet JM. **Am Rev Respir Dis** 1989 May;139(5):1073-4

Domestic pollution as a factor causing respiratory health effects. Boleij JS, et al. **Chest** 1989 Sep;96(3 Suppl):368S-372S (33 ref.)

Nitrogen dioxide exposure in vivo and human alveolar macrophage inactivation of influenza virus in vitro. Frampton MW, et al. **Environ Res** 1989 Apr;48(2):179-92

The pulmonary effects of ozone and nitrogen dioxide alone and combined in healthy and asthmatic adolescent subjects. Koenig JQ, et al. **Toxicol Ind Health** 1988 Dec;4(4):521-32

ANALYSIS

A survey of indoor air quality in twenty-nine anchorage residences. Myers RL. **Alaska Med** 1989 May-Jun; 31(3):103-7

Modification of a high-efficiency passive sampler to determine nitrogen dioxide or formaldehyde in air. Mulik JD, et al. **Anal Chem** 1989 Jan 15;61(2):187-9

[Study of factors influencing the Saltzman factor in spectrophotometric determination of NO2 in air] Sun CJ, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Jun; 19(2):170-3 (Eng. Abstr.) (Chi)

[A passive sampler for simultaneous determination of formaldehyde and nitrogen dioxide in indoor air] Kaulbach S. **Z Gesamte Hyg** 1989 Jan;35(1):55-7 (Eng. Abstr.) (Ger)

[Epidemiologic study of indoor formaldehyde and nitric oxide pollution] Thielebeule U, et al. **Z Gesamte Hyg** 1989 Jan;35(1):53-4 (Eng. Abstr.) (Ger)

[Epidemiological surveys of formaldehyde and nitrogen dioxide levels in indoor air] Hülsse C, et al. **Zentralbl Hyg Umweltmed** 1989 May;188(1-2):179-87 (Eng. Abstr.) (Ger)

PHARMACOKINETICS

Effect of altered dose rate on NO2 uptake and transformation in isolated lungs. Postlethwait EM, et al. **J Toxicol Environ Health** 1989;26(4):497-507

Pulmonary disposition of inhaled NO2-nitrogen in isolated rat lungs. Postlethwait EM, et al. **Toxicol Appl Pharmacol** 1989 Apr;98(2):303-12

PHARMACOLOGY

Mutagenic activity of ultraviolet-irradiated mixtures of nitrogen dioxide and propene or butadiene. Victorin K, et al. **Environ Res** 1989 Aug;49(2):271-82

Effects of chlorphentermine and nitrogen dioxide on murine alveolar macrophages. White SM, et al. **Exp Lung Res** 1988; 14(5):619-36

Changes in T-lymphocyte subpopulations and natural killer cells following exposure to ambient levels of nitrogen dioxide. Richters A, et al. **J Toxicol Environ Health** 1988; 25(2):247-56

Effects of nitrogen dioxide on Mycoplasma pulmonis infection and humoral immune responses in mice. Nisizawa T, et al. **Jpn J Med Sci Biol** 1988 Aug;41(4):175-87

POISONING

Nitrogen dioxide poisoning at a skating rink--Quebec. Dewailly E, et al. **Can Dis Wkly Rep** 1988 Apr 16; 14(15):61-2 (Eng, Fre)

TOXICITY

Short-term exposure to nitrogen dioxide enhances susceptibility to murine respiratory mycoplasmosis and decreases intrapulmonary killing of Mycoplasma pulmonis. Parker RF, et al. **Am Rev Respir Dis** 1989 Aug; 140(2):502-12

Reduction in T lymphocyte subpopulations following acute exposure to 4 ppm nitrogen dioxide. Damji KS, et al. **Environ Res** 1989 Aug;49(2):217-24

Impairment of humoral immune responses in mice exposed to nitrogen dioxide and ozone mixtures. Fujimaki H. **Environ Res** 1989 Apr;48(2):211-7

The effect of dietary vitamin A on NO2 exposure on the hamster lung. Kim JC. **Environ Res** 1978 Aug;17(1):116-30

Effects of in vitro exposure to nitrogen dioxide on human alveolar macrophage release of neutrophil chemotactic factor and interleukin-1. Pinkston P, et al. **Environ Res** 1988 Oct;47(1):48-58

Potentiation of the expression of nitrogen dioxide-induced lung injury by postexposure exercise. Stavert DM, et al. **Environ Res** 1989 Feb;48(1):87-99

Ambient nitrogen dioxide concentrations increase bronchial responsiveness in subjects with mild asthma. Bylin G, et al. **Eur Respir J** 1988 Jul;1(7):606-12

Lung function following exposure to, and recovery from, nitrogen dioxide. Davidson JT, et al. **Isr J Med Sci** 1967 May-Jun;3(3):470-4

Spleen cellularity shifts from the inhalation of 0.25-0.35 PPM nitrogen dioxide. Kuraitis KV, et al. **J Environ Pathol Toxicol Oncol** 1989;9(1):1-11

Nitrogen dioxide (NO2) inhalation, formation of microthrombi in lungs and cancer metastasis. Richters A, et al. **J Environ Pathol Toxicol Oncol** 1989;9(1):45-51

Hormonal and organ weight changes in rats exposed to simultaneous chronic effects of CO and NO2. Vyskočil A, et al. **J Hyg Epidemiol Microbiol Immunol** 1988; 32(3):279-85

Effects of nitrogen dioxide and ozone on blood-borne cancer cell colonization of the lungs. Richters A. **J Toxicol Environ Health** 1988;25(3):383-90

Nitrogen dioxide exposure alters neonatal development. Singh J. **Neurotoxicology** 1988 Fall;9(3):545-9

Effects of low levels of NO2 on terminal bronchiolar cells and its relative toxicity compared to O3. Chang LY, et al. **Toxicol Appl Pharmacol** 1988 Dec;96(3):451-64

Effect of methylprednisolone on nitrogen dioxide (NO2)-induced pulmonary edema in guinea pigs. Vassilyadi M, et al. **Toxicol Appl Pharmacol** 1989 Feb; 97(2):256-66

Pulmonary function responses of young and older adults to mixtures of O3, NO2 and PAN. Drechsler-Parks DM, et al. **Toxicol Ind Health** 1989 May;5(3):505-17

A selective decrease in the xenobiotic metabolizing activity of rat lungs by nitrogen dioxide exposures. Takahashi Y,

et al. **Toxicology** 1989 Mar;54(3):281–96

Effects of nitrogen dioxide and ozone in combination on xenobiotic metabolizing activities of rat lungs. Takahashi Y, et al. **Toxicology** 1989 Jun 16;56(3):253–62

[Study of the combined effect of carbon monoxide, nitrogen dioxide and hydrocarbons on the body of the rat] Vyskochil A, et al. **Gig Sanit** 1989 Mar;(3):69–71 **(Rus)**

NITROGEN FIXATION

see related
GENES, NITROGEN FIXATION

Relationship between nitrogen-fixing sulfate reducers and fermenters in salt marsh sediments and roots of Spartina alterniflora. Gandy EL, et al. **Appl Environ Microbiol** 1988 Aug;54(8):2031–6

Oxidation of nitrogenase iron protein by dioxygen without inactivation could contribute to high respiration rates of Azotobacter species and facilitate nitrogen fixation in other aerobic environments. Thorneley RN, et al. **Biochem J** 1989 Jul 1;261(1):181–7

Physiological and 15N-NMR analysis of molecular nitrogen fixation by Methanococcus thermolithotrophicus, Methanobacterium bryantii and Methanospirillum hungatei. Belay N, et al. **Biochim Biophys Acta** 1988 Oct 7; 971(3):233–45

Molecular aspects of the energetics of nitrogen fixation in Rhizobium–legume symbioses. O'Brian MR, et al. **Biochim Biophys Acta** 1989 May 30;974(3):229–46 (244 ref.)

Interaction between hydrogenase, nitrogenase, and respiratory activities in a Frankia isolate from Alnus rubra. Murry MA, et al. **Can J Microbiol** 1989 Jun;35(6):636–41

Bacterial alternative nitrogen fixation systems. Joerger RD, et al. **CRC Crit Rev Microbiol** 1988;16(1):1–14 (72 ref.)

The energy-conserving nitric-oxide-reductase system in Paracoccus denitrificans. Distinction from the nitrite reductase that catalyses synthesis of nitric oxide and evidence from trapping experiments for nitric oxide as a free intermediate during denitrification. Carr GJ, et al. **Eur J Biochem** 1989 Feb 15;179(3):683–92

Bacterium release into host cells of nitrogen-fixing soybean nodules: the symbiosome membrane comes from three sources. Roth LE, et al. **Eur J Cell Biol** 1989 Jun; 49(1):13–23

Cytoplasmic membrane systems involved in bacterium release into soybean nodule cells as studied with two Bradyrhizobium japonicum mutant strains. Roth LE, et al. **Eur J Cell Biol** 1989 Jun;49(1):24–32

Comparative analysis of proteins induced by heat shock, salinity, and osmotic stress in the nitrogen-fixing cyanobacterium Anabaena sp. strain L-31. Bhagwat AA, et al. **J Bacteriol** 1989 Sep;171(9):5187–9

Ammonium inhibition of nitrogenase activity in Herbaspirillum seropedicae. Fu H, et al. **J Bacteriol** 1989 Jun;171(6):3168–75

Ammonia assimilation pathways in nitrogen-fixing Clostridium kluyverii and Clostridium butyricum. Kanamori K, et al. **J Bacteriol** 1989 Apr;171(4):2148–54

N2O reduction and HD formation by nitrogenase from a nifV mutant of Klebsiella pneumoniae. Liang J, et al. **J Bacteriol** 1989 Jun;171(6):3176–80

Isolation of a Rhizobium phaseoli cytochrome mutant with enhanced respiration and symbiotic nitrogen fixation. Soberón M, et al. **J Bacteriol** 1989 Jan;171(1):465–72

Further analysis of nitrogen fixation (nif) genes in Azotobacter chroococcum: identification and expression in Klebsiella pneumoniae of nifS, nifV, nifM, and nifB genes and localization of nifE/N-, nifU-, nifA- and fixABC-like genes. Evans D, et al. **J Gen Microbiol** 1988 Apr;134 (Pt 4):931–42

DRUG EFFECTS

Effect of insecticides and phenolics on nitrogen fixation by Nostoc linckia. Megharaj M, et al. **Bull Environ Contam Toxicol** 1988 Aug;41(2):277–81

Effect of ammonium nitrate on the heterocyst differentiation and nitrogen fixing activity of Anabaena HA 101. Huang CY, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1988 May;21(2):93–103

Ureide catabolism in nitrogen-fixing legumes. Winkler RG, et al. **Trends Biochem Sci** 1988 Mar;13(3):97–100

NITROGEN MUSTARD see **MECHLORETHAMINE**

NITROGEN MUSTARD COMPOUNDS

[Reactivity of oligonucleotide derivatives, containing a methylphosphate group. Affinity modification of target DNA by 4-N-(methyl-N-2-chlorethylamino)benzyl 3'- and 5'-phosphamide derivatives of octathymidylate containing methylphosphonate residues] Amirkhanov NV, et al. **Bioorg Khim** 1989 Mar;15(3):379–86 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

A cytotoxic agent can be generated selectively at cancer sites. Bagshawe KD, et al. **Br J Cancer** 1988 Dec;58(6):700–3

Enhanced activity of anticancer drugs in murine tumours by co-administration with 3-amino-pyrrolidine-2,5-dione-N-mustard derivative. Ambaye RY, et al. **J Cancer Res Clin Oncol** 1989; 115(4):379–82

A prospective, randomized controlled study on the treatment of stage C and stage D prostatic cancer with estracyt in combination with other chemotherapeutic agents. Akaza H, et al. **Jpn J Clin Oncol** 1988 Dec;18(4):343–55

[Polychemotherapy of multiple myeloma using pafencil (COPPaf protocol)] Tsykalov VA, et al. **Gematol Transfuziol** 1989 Apr;34(4):56–8 **(Rus)**

ANALYSIS

Solvent-sample interactions in thermospray mass spectrometry of antineoplastic nitrogen mustards. Bean MF, et al. **Biomed Environ Mass Spectrom** 1989 Apr; 18(4):219–23

Polymorphism of estramustine. Wadsten T, et al. **J Pharm Sci** 1989 Jul;78(7):563–6

METABOLISM

A time study on the uptake of estramustine into prostatic tumour 1013L cells in vitro. Kruse E, et al. **Biochem Pharmacol** 1989 Feb 15;38(4):702–4

Metabolism and murine pharmacokinetics of the 8-(N,N-dimethylcarboxamide) analogue of the experimental antitumor drug mitozolomide (NSC353451). Horspool KR, et al. **Cancer Res** 1989 Sep 15;49(18):5023–6

Estramustine binds a MAP-1-like protein to inhibit microtubule assembly in vitro and disrupt microtubule organization in DU 145 cells. Stearns ME, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2647–56

Estramustine binds MAP-2 to inhibit microtubule assembly in vitro. Stearns ME, et al. **J Cell Sci** 1988 Mar;89 (Pt 3):331–42

An immunohistochemical technique for localization and semiquantitation of estramustine-binding protein (EMBP) in rat and human prostate. Bichler KH, et al. **Prostate** 1989; 14(1):13–25

Effect of treatment on the expression of estramustine-binding protein (EMBP) in prostatic cancer patients: an immunohistochemical study. Flüchter SH, et al. **Prostate** 1989;14(1):27–43

PHARMACOKINETICS

New estradiol-linked nitrosoureas: can the pharmacokinetic properties help to explain the pharmacodynamic activities? Betsch B, et al. **Eur J Cancer Clin Oncol** 1989 Jan; 25(1):105–11

Uptake of estramustine phosphate (estracyt) metabolites in prostatic cancer. Norlén BJ, et al. **J Urol** 1988 Nov; 140(5):1058–62

Difference in uptake of 3H-estramustine in two human prostatic carcinoma cell lines, LNCaP and LNCaP-r. Hasenson M. **Urol Res** 1989;17(2):103–6

PHARMACOLOGY

Antitumour imidazotetrazines and gene expression. Tisdale MJ. **Acta Oncol** 1988;27(5):511–6

In vitro and in vivo activity of 1-aryl-3-(2-chloroethyl) urea derivatives as new antineoplastic agents. Lacroix J, et al. **Anticancer Res** 1988 Jul-Aug;8(4):595–8

Correlation of resistance to nitrogen mustards in chronic lymphocytic leukemia with enhanced removal of melphalan-induced DNA cross-links. Torres-Garcia SJ, et al. **Biochem Pharmacol** 1989 Sep 15;38(18):3122–3

Estramustine binding protein and anti-proliferative effect of estramustine in human glioma cell lines. von Schoultz E, et al. **Br J Cancer** 1988 Sep;58(3):326–9

Blocking of collagenase secretion by estramustine during in vitro tumor cell invasion. Wang M, et al. **Cancer Res** 1988 Nov 15;48(22):6262–71

Xylamine enhances pineal gland N-acetyltransferase activity in vitro. Haak KA, et al. **Gen Pharmacol** 1989;20(1):77–80

Effects of a new bifunctional alkylating agent (PTT-119) on in vitro growth of human cell lines and normal myeloid progenitors (CFU-GM). Lemoli RM, et al. **Haematologica (Pavia)** 1988 May-Jun;73(3):195–200

Altered actin and immunoglobulin C mu expression in nitrogen mustard-resistant human Burkitt lymphoma cells. Tan KB, et al. **J Cell Biochem** 1989 Aug;40(4):407–15

A low dose of xylamine produces sustained and selective decreases in rat brain norepinephrine without evidence of neuronal degeneration. Dudley MW, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):174–9

The depletion of rat cortical norepinephrine and the inhibition of [3H]norepinephrine uptake by xylamine does not require monoamine oxidase activity. Dudley MW. **Life Sci** 1988;43(23):1871–7

The effect of estramustine, nor-nitrogen mustard and tauromustine on macromolecular labelling in the human prostatic tumour cell line 1013L. Kruse E, et al. **Pharmacol Toxicol** 1989 Jan;64(1):9–13

Amplification and increased expression of alpha class glutathione S-transferase-encoding genes associated with resistance to nitrogen mustards. Lewis AD, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8511–5

Intracellular effects of estramustine (Estracyt/Emcyt). Tew KD, et al. **Prog Clin Biol Res** 1989;303:169–75 (24 ref.)

Growth inhibiting effect of estramustine on two prostatic carcinoma cell lines, LNCaP and LNCaP-r. Hansenson M, et al. **Urol Res** 1988;16(5):357–61

Molecular orbital calculations on tumour-inhibitory aniline mustards: QSARs. Lewis DF. **Xenobiotica** 1989 Feb; 19(2):243–51

[Cytotoxic effect of hyperthermia and nitrocaphane on malignant HEp-2 cells] Li LG. **Chung Hua Chung Liu Tsa Chih** 1989 Jan;11(1):31–3 (Eng. Abstr.) **(Chi)**

[The immunodepressive and lympholytic action of kortifen] Pykhtina AA, et al. **Farmakol Toksikol** 1988 Sep-Oct; 51(5):72–4 (Eng. Abstr.) **(Rus)**

[The action of cortifen and corticosterone on the thymocyte nucleoid of mice in vivo and in vitro] Struchkov VA, et al. **Farmakol Toksikol** 1988 Nov-Dec;51(6):76–80 (Eng. Abstr.) **(Rus)**

[The effect of estramustine phosphate on carcinoma cell proliferation depends on the estrogen receptor status in the cytosol] Zgradić I. **God Vojnomed Akad** 1987;29:77–81 (Eng. Abstr.) **(Ser)**

THERAPEUTIC USE

Clinical evaluation with long-term follow-up of flutamide and estramustine as initial treatment of metastatic carcinoma of the prostate. Johansson JE, et al. **Am J Clin Oncol** 1988;11 Suppl 2:S183–6

The logistics of broader pre-clinical evaluation of potential anti-cancer agents with reference to anti-tumour activity and toxicity of mitozolomide. Bibby MC, et al. **Br J Cancer** 1988 Aug;58(2):139–43

Mitozolomide-induced sensitisation of mammalian cells in vitro to radiation. McKeage MJ, et al. **Br J Cancer** 1989 Aug;60(2):182–4

Phase II study of a new alkylating agent (PTT-119) in resistant-relapsed non-Hodgkin's lymphomas. Tura S, et al. **Cancer Chemother Pharmacol** 1989;23(2):123–5

A phase II study of mitozolomide in metastatic transitional cell carcinoma of the bladder. Blackledge G, et al. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):391–2

Phase II studies of mitozolomide in melanoma, lung and ovarian cancer. Harding M, et al. **Eur J Cancer Clin Oncol** 1989 May;25(5):785–8

Randomized phase II trial of TCNU versus mitozolomide in malignant melanoma. EORTC Early Clinical Trials Group. Smyth JF, et al. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):755–7

Mitozolomide in advanced renal cancer. A phase II study in previously untreated patients from the EORTC Genito-Urinary Tract Cancer Cooperative Group. van Oosterom AT, et al. **Eur J Cancer Clin Oncol** 1989 Aug; 25(8):1249–50

Phase II study with a new alkylating agent (PTT-119) in lymphoid malignancies. Tura S, et al. **Haematologica (Pavia)** 1988 Nov-Dec;73(6):503–8

Phase II study of mitozolomide (M & B 39,565) in colorectal and breast cancer. Herait P, et al. **Invest New Drugs** 1988 Dec;6(4):323–5

Chlorocarbamate-mustard-linked 1,1,2-triphenylbut-1-enes with a selective antitumor activity on mammary tumors containing estrogen receptors. Schneider MR, et al. **J Cancer Res Clin Oncol** 1988;114(6):583–7

Multivariate analysis of prognostic factors in patients with advanced prostatic cancer: results from 2 European Organization for Research on Treatment of Cancer trials. de Voogt HJ, et al. **J Urol** 1989 Apr;141(4):883–8

Estramustine phosphate vs diethylstilbestrol in the treatment of stage D prostate cancer. Benson RC Jr, et al. **Prog Clin Biol Res** 1989;303:177–86

[Complete androgen blockade (orchiectomy + flutamide) versus androgen blockade with cytostasis (orchiectomy + estramustine) in the treatment of virginal advanced prostate cancer] Flamm J, et al. **Wien Klin Wochenschr** 1988 Sep 9;100(17):589–92 (Eng. Abstr.) **(Ger)**

[In vitro study of estradiol-linked nitrosourea in breast cancers in the mouse, rat and human: interspecies comparison] Petru E, et al. **Wien Klin Wochenschr** 1989 Feb 17;101(4):130–4 (Eng. Abstr.) **(Ger)**

[Clinical study of estramustine phosphate (Estracyt) on prostatic cancer] Murase T, et al. **Hinyokika Kiyo** 1989 Jan;35(1):179–85 (Eng. Abstr.) **(Jpn)**

[The phase IV studies with Estracyt in prostatic cancer] Ohhori T, et al. **Hinyokika Kiyo** 1988 Aug;34(8):1493–502 (Eng. Abstr.) **(Jpn)**

[The antineoplastic activity of testiphenon] Lagova ND, et al. **Vopr Onkol** 1988;34(11):1363–8 (Eng. Abstr.) **(Rus)**

[Experimental study of the antitumor properties and mechanism of action of kortifen] Lagova ND, et al. **Vopr Onkol** 1989;35(4):450–6 (Eng. Abstr.) **(Rus)**

[Predictive value of clinical, biochemical, hormonal and histologic parameters of the endocrine response in prostatic adenocarcinoma] Burgos FJ, et al. **Actas Urol Esp** 1988 Nov-Dec;12(6):500–6 (Eng. Abstr.) **(Spa)**

TOXICITY

Effects of nitrogen mustard-N-oxide on ionic activities of inner ear fluid and ionic permeabilities of the cochlear partition in the guinea pig. Ikeda K, et al. **Ann Otol Rhinol Laryngol** 1989 May;98(5 Pt 1):379–83

Mutagenicity to bacteria, cultured cells, and rodents of the human carcinogen chlornaphazine. Ashby J, et al. **Environ Mol Mutagen** 1988;12(4):365–74

Enhancement of nitrocaphane cytotoxicity by hyperthermia in vitro. Li LG, et al. **Int J Hyperthermia** 1989 Jul-Aug;

5(4):525–33
In vivo and in vitro investigations on biological effects of aromatic bis-(2-chloroethyl)amino-bisphosphonic acids, new agents proposed for chemotherapy of bone tumors: cytostatic activity in rat osteosarcoma; toxicity and genotoxicity in liver and bone marrow; mutagenicity in S. typhimurium. Pool BL, et al. **Invest New Drugs** 1988 Jun;6(2):67–78
Concentration and time-dependent inter-relationships for cytotoxicities of nitrogen mustard drugs against lymphoblasts in-vitro. Ehrsson H, et al.
J Pharm Pharmacol 1988 Dec;40(12):834–7
Relationships between structure, toxicity and genetic effects in Salmonella typhimurium and Saccharomyces cerevisiae for substituted aniline mustards. Ferguson LR, et al.
Mutat Res 1989 Sep;224(1):95–104

NITROGEN NARCOSIS see **INERT GAS NARCOSIS**

NITROGEN OXIDES

Sonochemistry of nitrone spin traps in aqueous solutions. Evidence for pyrolysis radicals from spin traps. Kondo T, et al. **Free Radic Biol Med** 1989;7(3):259–68
Electron spin resonance study of the relationship of UV irradiation to nitroxide radical formation in desferrioxamine (Desferal) and related hydroxamate and hydroxylamine derivatives. Hinojosa O, et al. **Photochem Photobiol** 1989 Jan;49(1):1–5

ADVERSE EFFECTS

[Environmental factors and asthma in the child population of Vizcaya] **Casas Vila C, et al. An Esp Pediatr** 1988 May; 28(5):401–4 (Eng. Abstr.) **(Spa)**

ANALYSIS

Artifactual chemiluminescence in the determination of nitrogen monoxide in the vapour phase of mainstream cigarette smoke. Houlgate PR, et al. **Analyst** 1989 Jan; 114(1):71–5
Measurements of ozone, oxides of N and nitric acid produced in the tunnel of a high-energy electron storage ring. Kanda Y, et al. **Health Phys** 1989 Jun;56(6):953–6
Reducing interference effects in the chemiluminescent measurement of nitric oxides from combustion systems. Tidona RJ, et al. **JAPCA** 1988 Jun;38(6):806–11

BIOSYNTHESIS

Synthesis of nitrogen oxides from L-arginine by macrophage cytosol: requirement for inducible and constitutive components. Stuehr DJ, et al.
Biochem Biophys Res Commun 1989 Jun 15;161(2):420–6

BLOOD

Reduction of nitroxide free radical by normal and G6PD deficient red blood cells. Branca M, et al.
Free Radic Biol Med 1988;5(1):7–11

CHEMICAL SYNTHESIS

[Synthesis and anti-allergic properties of N-arylnitrones with furo-pyran structure] Coudert P, et al. **Ann Pharm Fr** 1988; 46(2):91–6 (Eng. Abstr.) **(Fre)**

METABOLISM

Heterotrophic nitrification by Alcaligenes faecalis: NO2-, NO3-, N2O, and NO production in exponentially growing cultures. Papen H, et al. **Appl Environ Microbiol** 1989 Aug; 55(8):2068–72
Metabolism in rat liver microsomes of the nitroxide spin probe tempol. Iannone A, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2581–6
Effects of oxygen on the metabolism of nitroxide spin labels in cells. Chen K, et al. **Biochemistry** 1989 Mar 21; 28(6):2496–501
Factors influencing the formation of the carbon dioxide radical anion (.CO2-) spin adduct of PBN in the rat liver metabolism of halocarbons. Janzen EG, et al.
Free Radic Res Commun 1988;4(6):359–69
Localization of the active center of nitroxide radical reduction in rat liver microsomes: its relation to cytochrome P-450 and membrane fluidity. Utsumi H, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):239–44
[Carbachol—an inducer of nitrogen oxide formation in the liver of animals in vivo] Vanin AF, et al.
Dokl Akad Nauk SSSR 1988;301(2):490–2 **(Rus)**

PHARMACOKINETICS

Direct measurement of nitroxide pharmacokinetics in isolated hearts situated in a low-frequency electron spin resonance spectrometer: implications for spin trapping and in vivo oxymetry. Rosen GM, et al.
Proc Natl Acad Sci U S A 1988 Oct;85(20):7772–6

PHARMACOLOGY

The oxidation of Octopus vulgaris hemocyanin by nitrogen oxides. Salvato B, et al. **Biochemistry** 1989 Jan 24; 28(2):680–4
The effect of nitrone spin trapping agents on red cell glucose metabolism. Thornalley PJ, et al.
Free Radic Res Commun 1985;1(2):111–7
Phenyl-t-butylnitrone, a free radical spin-trapping agent, inhibits acetylcholine-induced relaxation and cyclic GMP accumulation in rat thoracic aorta. Sata T, et al.
Fukuoka Igaku Zasshi 1988 Sep;79(9):674–82
Inhibition of lipid peroxidation by spin labels. Relationships between structure and function. Nilsson UA, et al.
J Biol Chem 1989 Jul 5;264(19):11131–5
Modulation of phenytoin teratogenicity and embryonic covalent binding by acetylsalicylic acid, caffeic acid, and alpha-phenyl-N-t-butylnitrone: implications for bioactivation by prostaglandin synthetase. Wells PG, et al.
Toxicol Appl Pharmacol 1989 Feb;97(2):192–202

PHYSIOLOGY

Endothelium-derived relaxing factor and minoxidil: active mechanisms in hair growth [letter] Proctor PH.
Arch Dermatol 1989 Aug;125(8):1146

THERAPEUTIC USE

Phenyl-T-butyl-nitrone is active against traumatic shock in rats. Novelli GP, et al. **Free Radic Res Commun** 1986; 1(5):321–7
[Hypotensive effect of dinitrosyl iron complexes in experiments on waking animals] Galagan ME, et al.
Biull Vsesoluznogo Kardiol Nauchn Tsentra AMN SSSR 1988;11(2):75–80 (Eng. Abstr.) **(Rus)**

NITROGEN RADIOISOTOPES

DIAGNOSTIC USE

Dynamic positron emission tomography with 13N-ammonia in liver tumors. Shibata T, et al. **Eur J Nucl Med** 1988; 14(12):607–11
[Incorporation of 15N in VLDL and LDL: in vivo synthesis of apolipoprotein B in the post-absorptive and fasting state] Schauder P, et al. **Klin Wochenschr** 1989 Mar 1;67(5):280–5 (Eng. Abstr.) **(Ger)**

NITROGENASE

Hydrogen-1 nuclear magnetic resonance of the nitrogenase iron protein (Cp2) from Clostridium pasteurianum. Meyer J, et al. **Biochemistry** 1988 Aug 9;27(16):6150–6

ANALYSIS

Mössbauer spectroscopy applied to the oxidized and semi-reduced states of the iron-molybdenum cofactor of nitrogenase. Newton WE, et al.
Biochem Biophys Res Commun 1989 Jul 31;162(2):882–91

ANTAGONISTS & INHIBITORS

Inhibition of nitrogenase by NO. Liang JH, et al.
Indian J Biochem Biophys 1988 Dec;25(6):636–41
Ammonium inhibition of nitrogenase activity in Herbaspirillum seropedicae. Fu H, et al. **J Bacteriol** 1989 Jun;171(6):3168–75

BIOSYNTHESIS

Homocitrate is a component of the iron-molybdenum cofactor of nitrogenase. Hoover TR, et al. **Biochemistry** 1989 Apr 4;28(7):2768–71
The roles of the nifW, nifZ and nifM genes of Klebsiella pneumoniae in nitrogenase biosynthesis. Paul W, et al.
Eur J Biochem 1989 Jan 2;178(3):675–82
A haemoprotein is not involved in the control by oxygen of enteric nitrogenase synthesis. Smith A, et al.
J Gen Microbiol 1988 Jun;134 (Pt 6):1499–507

GENETICS

Structural genes for the vanadium nitrogenase from Azotobacter chroococcum. Robson RL, et al. **EMBO J** 1989 Apr;8(4):1217–24
Structural and functional analysis of nitrogenase genes from the broad-host-range Rhizobium strain ANU240. Badenoch-Jones J, et al. **Gene** 1989 Apr 15;77(1):141–53
Sequence and structural analysis of the alpha- and beta-dinitrogenase subunits of Thiobacillus ferrooxidans. Rawlings DE. **Gene** 1988 Sep 30;69(2):337–43
Posttranslational regulatory system for nitrogenase activity in Azospirillum spp. Fu HA, et al. **J Bacteriol** 1989 Sep; 171(9):4679–85
Nucleotide sequence and mutational analysis of the structural genes (anfHDGK) for the second alternative nitrogenase from Azotobacter vinelandii. Joerger RD, et al.
J Bacteriol 1989 Feb;171(2):1075–86
Two nifA-like genes required for expression of alternative nitrogenases by Azotobacter vinelandii. Joerger RD, et al.
J Bacteriol 1989 Jun;171(6):3258–67
Genetic evidence for an Azotobacter vinelandii nitrogenase lacking molybdenum and vanadium. Pau RN, et al.
J Bacteriol 1989 Jan;171(1):124–9
Characterization of the gene for the Fe-protein of the vanadium dependent alternative nitrogenase of Azotobacter vinelandii and construction of a Tn5 mutant. Raina R, et al. **Mol Gen Genet** 1988 Sep;214(1):121–7
Primary structure, functional organization and expression of nitrogenase structural genes of the thermophilic archaebacterium Methanococcus thermolithotrophicus. Souillard N, et al. **Mol Microbiol** 1989 Apr;3(4):541–51

IMMUNOLOGY

Studies of humoral and cell-mediated immunity to peptides shared by HLA-27.1 and Klebsiella pneumoniae nitrogenase in ankylosing spondylitis. Tsuchiya N, et al.
Clin Exp Immunol 1989 Jun;76(3):354–60

ISOLATION & PURIFICATION

The vanadium nitrogenase of Azotobacter chroococcum. Purification and properties of the Fe protein. Eady RR, et al. **Biochem J** 1988 Nov 15;256(1):189–96

METABOLISM

A rapid, sensitive high-performance liquid chromatography analysis of ammonia and methylamine for nitrogenase assays. Bravo M, et al. **Anal Biochem** 1988 Dec; 175(2):482–91
Estimation of nitrogenase activity in the presence of ethylene biosynthesis by use of deuterated acetylene as a substrate. Lin-Vien D, et al. **Appl Environ Microbiol** 1989 Feb; 55(2):354–9
Vanadium K-edge X-ray-absorption spectroscopy of the functioning and thionine-oxidized forms of the VFe-protein of the vanadium nitrogenase from Azotobacter chroococcum. Arber JM, et al. **Biochem J** 1989 Mar 15;258(3):733–7
Reduction of cyclopropene by NifV- and wild-type nitrogenases from Klebsiella pneumoniae. Gemoets JP, et al. **Biochem J** 1989 Mar 1;258(2):487–91
Molybdenum and vanadium nitrogenases of Azotobacter chroococcum. Low temperature favours N2 reduction by vanadium nitrogenase. Miller RW, et al. **Biochem J** 1988 Dec 1;256(2):429–32
Oxidation of nitrogenase iron protein by dioxygen without inactivation could contribute to high respiration rates of Azotobacter species and facilitate nitrogen fixation in other aerobic environments. Thorneley RN, et al. **Biochem J** 1989 Jul 1;261(1):181–7
Electron-transfer studies involving flavodoxin and a natural redox partner, the iron protein of nitrogenase. Conformational constraints on protein-protein interactions and the kinetics of electron transfer within the protein complex. Thorneley RN, et al. **Biochem J** 1988 Jul 15; 253(2):587–95
Vanadium nitrogenase of Azotobacter chroococcum. MgATP-dependent electron transfer within the protein complex. Thorneley RN, et al. **Biochem J** 1989 Feb 1; 257(3):789–94
Nitrite, a new substrate for nitrogenase. Vaughn SA, et al.
Biochemistry 1989 Jan 24;28(2):419–24
The vanadium-containing nitrogenase of Azotobacter. Eady RR. **Biofactors** 1988 Jul;1(2):111–6 (45 ref.)
Interaction between hydrogenase, nitrogenase, and respiratory activities in a Frankia isolate from Alnus rubra. Murry MA, et al. **Can J Microbiol** 1989 Jun;35(6):636–41
Effect of bimetallic combinations of Ni, Cr, and Pb on growth, uptake of nitrate and ammonia, 14CO2 fixation, and nitrogenase activity of Nostoc muscorum. Rai LC, et al. **Ecotoxicol Environ Safety** 1989 Feb;17(1):75–85
Dependence of nitrogenase switch-off upon oxygen stress on the nitrogenase activity in Azotobacter vinelandii. Kuhla J, et al. **J Bacteriol** 1988 Nov;170(11):5325–9
N2O reduction and HD formation by nitrogenase from a nifV mutant of Klebsiella pneumoniae. Liang J, et al.
J Bacteriol 1989 Jun;171(6):3176–80
Cyanide and methylisocyanide binding to the isolated iron-molybdenum cofactor of nitrogenase. Conradson SD, et al. **J Biol Chem** 1989 Sep 25;264(27):15967–74
Kinetics of MgATP-dependent iron chelation from the Fe-protein of the Azotobacter vinelandii nitrogenase complex. Evidence for two states. Deits TL, et al.
J Biol Chem 1989 Apr 25;264(12):6619–28
Fe:S cluster ligands are the only cysteines required for nitrogenase Fe-protein activities. Howard JB, et al.
J Biol Chem 1989 Jul 5;264(19):11270–4
Mössbauer studies of solid thionin-oxidized MoFe protein of nitrogenase. Lindahl PA, et al. **J Biol Chem** 1988 Dec 25;263(36):19412–8
Isolated iron-molybdenum cofactor of nitrogenase exists in multiple forms in its oxidized and semi-reduced states. Newton WE, et al. **J Biol Chem** 1989 Feb 5;264(4):1924–7
Iron-molybdenum cofactor insertion into the Apo-MoFe protein of nitrogenase involves the iron protein-MgATP complex. Robinson AC, et al. **J Biol Chem** 1989 Jun 15; 264(17):10088–95
Cross-linking of nitrogenase components. Structure and activity of the covalent complex. Willing AH, et al.
J Biol Chem 1989 May 25;264(15):8499–503
Respiration supported nitrogenase activity of isolated Rhizobium meliloti bacteroids. Miller RW, et al.
J Cell Biochem 1988 Sep;38(1):35–49
Hydrogen burst associated with nitrogenase-catalyzed reactions. Liang J, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9446–50
Nitrogenases without molybdenum. Pau RN.
Trends Biochem Sci 1989 May;14(5):183–6 (37 ref.)

NITROGLYCERIN see **GLYCERYL TRINITRATE**

NITROHYDROXYIODOPHENYLACETATE see under

NITROPHENOLS

NITROIMIDAZOLES

KIH-802: 2-nitroimidazole-1-acetohydroxamate as a hypoxic cell radiosensitizer. Hori H, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1029-32

ADMINISTRATION & DOSAGE

Antibiotic prophylaxis in colorectal surgery. Combined doxycycline-tinidazole vs. doxycycline alone. Gerner T, et al. **Acta Chir Scand** 1989 Feb;155(2):121-4

Giardiasis. Functional, immunological and histological study of the small bowel. Therapeutic trial with a single dose of tinidazole. Cervetto JL, et al. **Arq Gastroenterol** 1987 Apr-Jun;24(2):102-12

Experimental intra-arterial administration of SR-2508 in the rabbit V2 carcinoma model. Coldwell DM, et al. **Br J Radiol** 1989 Mar;62(735):234-6

Systemic versus systemic plus oral chemoprophylaxis in elective colorectal surgery. Peruzzo L, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):601-3

Comparison of tinidazole given as a single dose and on 2 consecutive days for the treatment of nonspecific bacterial vaginosis. Ekgren J, et al. **Gynecol Obstet Invest** 1988; 26(4):313-7

A multiple dose study of the combined radiosensitizers Ro 03-8799 (pimonidazole) and SR 2508 (etanidazole). Bleehen NM, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr; 16(4):1093-6

Initial results of a phase I trial of continuous infusion SR 2508 (etanidazole): a radiation therapy oncology group study. Coleman CN, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1085-7

The multi-dose clinical tolerance and pharmacokinetics of the combined radiosensitizers Ro 03-8799 (pimonidazole) and SR 2508 (etanidazole). Newman HF, et al. **Int J Radiat Oncol Biol Phys** 1988 Nov;15(5):1073-83

[Preventive use of antibiotics in colorectal interventions. Short-term versus one-shot prevention--a multicenter study] Tuchmann A, et al. **Fortschr Med** 1988 Sep 10; 106(26):537-40 (Eng. Abstr.) **(Ger)**

[Wound infection following appendectomy. Metronidazole vs ornidazole as single-dose prophylaxis in non-perforated appendix] Barth A, et al. **Schweiz Med Wochenschr** 1988 Oct 1;118(39):1403-5 (Eng. Abstr.) **(Ger)**

[Intravenous use of a derivative of metronidazole in abdominal surgery] Hut'an M, et al. **Rozhl Chir** 1989 Apr; 68(4):288-93 (Eng. Abstr.) **(Slo)**

ADVERSE EFFECTS

Assessment of cytogenetic damage in chagasic children treated with benznidazole. Gorla NB, et al. **Mutat Res** 1988 Oct;206(2):217-20

[Chagas' disease: clastogenic effect of nifurtimox and benznidazole in children] Moya PR, et al. **Medicina (B Aires)** 1988;48(5):487-91 (Eng. Abstr.) **(Spa)**

ANALYSIS

Thiol-mediated incorporation of radiolabel from 1-[14C]-methyl-4-phenyl-5-nitrosoimidazole into DNA. A model for the biological activity of 5-nitroimidazoles. Ehlhardt WJ, et al. **Biochem Pharmacol** 1989 Apr 1; 38(7):1175-80

Demonstration of tumor-selective retention of fluorinated nitroimidazole probes by 19F magnetic resonance spectroscopy in vivo. Maxwell RJ, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):925-9

Dimetridazole residues in pork tissue. I. Assay by liquid chromatography with electrochemical detector. Carignan G, et al. **J Assoc Off Anal Chem** 1988 Nov-Dec; 71(6):1141-5

Dimetridazole residues in pork tissue. II. Application of liquid chromatographic method to monitor elimination of drug and its major metabolite. Carignan G, et al. **J Assoc Off Anal Chem** 1988 Nov-Dec;71(6):1146-9

Correlation of partitioning of nitroimidazoles in the n-octanol/saline and liposome systems with pharmacokinetic parameters and quantitative structure-activity relationships (QSAR). Betageri GV, et al. **Pharm Res** 1989 May;6(5):399-403

Conductometric determination of ipronidazole and dimetridazole. Nicolić K, et al. **Pharmazie** 1988 Sep; 43(9):649

BLOOD

Estimation of plasma area under the curve for etanidazole (SR 2508) in toxicity prediction and dose adjustment. Workman P, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul; 17(1):177-81

[Plasma concentrations of ornidazole in newborn infants and infants after iterative administration] Turcant A, et al. **Therapie** 1989 Jan-Feb;44(1):5-7 (Eng. Abstr.) **(Fre)**

CHEMICAL SYNTHESIS

Synthesis and biological properties of 1-methyl-2-[(4-aminophenyl)-sulfonyl-]amino-5-nitro imidazole. Bertolini A, et al. **Boll Chim Farm** 1989 Feb; 128(2):71-3

[Synthesis and antiparasitic activity of arylproprenones in the nitro-5-imidazole series] Ouattara L, et al. **Farmaco [Sci]** 1988 Apr;43(4):389-93 (Eng. Abstr.) **(Fre)**

METABOLISM

Biliary excretion of mutagenic forms of nitroimidazoles in rats. Cantelli-Forti G, et al. **Arch Toxicol Suppl** 1989; 13:333-9

Reduction of 5-nitroimidazoles, nitrofurazone, and 2,4-dinitrophenol to their free radical metabolites by Tritrichomonas foetus hydrogenosomes. Moreno SN, et al. **Basic Life Sci** 1988;49:759-64

Pathways and kinetics of aqueous decomposition and carbamoylating activity of new anticancer nitroimidazole-linked 2-chloroethylnitrosoureas. Carminati A, et al. **Biochem Pharmacol** 1989 Jul 15; 38(14):2253-8

Evaluation of genotoxic activity in the blood and urine of guinea pigs treated with nifurtimox and benznidazole. Ferreira RC, et al. **Braz J Med Biol Res** 1988;21(5):1069-77

Stimulation by localized tumor hyperthermia of reductive bioactivation of 2-nitroimidazole benznidazole in mice. Walton MI, et al. **Cancer Res** 1989 May 1;49(9):2351-5

The reductive metabolism of nifurtimox and benznidazole in Crithidia fasciculata is similar to that in Trypanosoma cruzi. Moreno SN. **Comp Biochem Physiol [C]** 1988; 91(2):321-5

Interaction of benznidazole reactive metabolites with nuclear and kinetoplastic DNA, proteins and lipids from Trypanosoma cruzi. Díaz de Toranzo EG, et al. **Experientia** 1988 Oct 15;44(10):880-1

Molecular enzymology of the reductive bioactivation of hypoxic cell cytotoxins. Walton MI, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):983-6

PHARMACOKINETICS

Effects of localised tumour hyperthermia on pimonidazole (Ro 03-8799) pharmacokinetics in mice. Walton MI, et al. **Br J Cancer** 1989 May;59(5):667-73

Autoradiographic distribution of [14C]-labelled pimonidazole in rhabdomyosarcoma-bearing rats and pigmented mice. Laurent F, et al. **Cancer Chemother Pharmacol** 1988;22(4):308-15

Pharmacokinetics of ornidazole in patients with acute viral hepatitis, alcoholic cirrhosis, and extrahepatic cholestasis. Taburet AM, et al. **Clin Pharmacol Ther** 1989 Apr; 45(4):373-9

High haemodialysis clearance of ornidazole in the presence of a negligible renal clearance. Horber FF, et al. **Eur J Clin Pharmacol** 1989;36(4):389-93

Pharmacokinetics of etanidazole (SR-2508) in bladder and cervical cancer: evidence of diffusion from urine. Awwad HK, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr; 16(4):1083-4

The uptake of the radiosensitizing compound Ro 03-8799 (Pimonidazole) in human tumors. Dische S, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1089-92

Pharmacokinetics of Ro 03-8799 in mice bearing melanosarcoma: comparison with tumors without melanin. Laurent F, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr; 16(4):1101-3

Ro 03-8799: preferential relative uptake in human tumor xenografts compared to a murine tumor: comparison with SR-2508. Lespinasse F, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1105-9

Micropharmacokinetics of chemical modifiers. Workman P. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):897-906 (52 ref.)

Accelerated elimination of pimonidazole following microsomal enzyme induction in mice: a possible approach to reduced neurotoxicity of the pimonidazole-etanidazole combination. Workman P. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1011-4

Pharmacokinetics and bioavailability of ronidazole from a prolonged release tablet in the homing pigeon (Columba livia). Herman J, et al. **J Vet Pharmacol Ther** 1989 Mar; 12(1):46-9

The adsorption of metronidazole and tinidazole to activated charcoal and the effect of magnesium sulfate. Akintonwa A, et al. **Vet Hum Toxicol** 1988 Dec;30(6):556-8

[Antibiotic prophylaxis with a single dose of 1000 mg metronidazole or ornidazole in colorectal surgery (letter)] Martin C, et al. **Presse Med** 1989 Mar 25;18(12):635 **(Fre)**

PHARMACOLOGY

Antibacterial activities of the antiparasitic drugs nifurtimox and benznidazole. Hof H. **Antimicrob Agents Chemother** 1989 Mar;33(3):404-5

Glutathione depletion by 2-nitroimidazole-1-acetohydroxamic acid as a radiosensitizer in hypoxic rat hepatocytes. Takanuki K, et al. **Biochem Int** 1988 Jul;17(1):155-62

Effects of trypanocidal drugs on protein biosynthesis in vitro and in vivo by Trypanosoma cruzi. Gonzalez NS, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2873-7

Cytotoxicity and glutathione depletion by 1-methyl-2-nitrosoimidazole in human colon cancer cells. Mulcahy RT, et al. **Biochem Pharmacol** 1989 May 15; 38(10):1667-71

Nitroimidazole derivatives inhibit anterior pituitary cell function apparently by a direct effect on the catalytic subunit of the adenylate cyclase holoenzyme. Stalla GK, et al. **Endocrinology** 1989 Aug;125(2):699-706

Chemosensitization at reduced nitroimidazole concentrations by mixed-function compounds combining 2-nitroimidazole and chloroethylnitrosourea. Mulcahy RT, et al. **Eur J Cancer Clin Oncol** 1989 Jul;25(7):1099-104

Possible roles for pyruvate:ferredoxin oxidoreductase and thiol-dependent peroxidase and reductase activities in resistance to nitroheterocyclic drugs in Giardia intestinalis. Smith NC, et al. **Int J Parasitol** 1988 Nov;18(7):991-7

Radiosensitization by quaternary salts of 5-nitroimidazole derivatives. Santos L, et al. **Int J Radiat Biol** 1989 Jun; 55(6):983-91

Evaluation of nitroimidazole hypoxic cell radiosensitizers in a human tumor cell line high in intracellular glutathione. DeGraff WG, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1021-4

High efficiency of ferricenium salts as radiosensitizers of V79 cells in vitro and the KHT tumor in vivo. Joy AM, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1053-6

Radiosensitization by a new nucleoside analogue: 1-[2-hydroxy-1-(hydroxymethyl)ethoxy]methyl-2-nitroimidazole (RP-170). Murayama C, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):575-81

Modification of SR 2508 sensitization in hypoxic V79 cells by manipulation of glutathione levels. Phillips TL, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1335-9

Radiosensitizing and cytotoxic effects of nitroimidazoles in CHO cells expressing elevated levels of glutathione-S-transferase. Stratford IJ, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1307-10

A comparison of colorimetric and clonogenic assays for hypoxic-specific toxins with hamster and human cells. Watts ME, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr; 16(4):939-42

Effects of covalently bound silica-nitroimidazole drug particles on Entamoeba histolytica. Mirelman D, et al. **J Infect Dis** 1989 Feb;159(2):303-9

Effect of drugs on Trypanosoma cruzi and on its interaction with heart muscle cell "in vitro". de Castro SL, et al. **Mem Inst Oswaldo Cruz** 1987 Apr-Jun;82(2):209-18

Transferable 5-nitroimidazole resistance in the Bacteroides fragilis group. Breuil J, et al. **Plasmid** 1989 Mar;21(2):151-4

Radiosensitization of human colorectal tumor cells by 4-nitro-5-sulfonatoimidazoles. Fitzpatrick DA, et al. **Radiat Res** 1989 Jan;117(1):47-58

[Radiosensitization effect of new hypoxic cell radiosensitizer RK-27 on normal tissue and Ehrlich tumor of experimental animals] Kohda Y. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Apr 25; 48(4):497-508 (Eng. Abstr.) **(Jpn)**

[Effects of nifurtimox, benznidazole, and beta-lapachone on the metabolism of DNA, RNA and proteins in Trypanosoma cruzi] Goijman SG, et al. **Rev Argent Microbiol** 1983;15(4):193-204 (Eng. Abstr.) **(Spa)**

THERAPEUTIC USE

Therapy of amine-vaginitis by a single dose of ornidazole (Tiberal); serum and tissue (vagina) concentrations of ornidazole after vaginal or rectal application. Petersen E, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):539-40

Single-dose prophylaxis with ceftriaxone and ornidazole in elective colon surgery. Reers B. **Chemioterapia** 1987 Jun; 6(2 Suppl):606-7

Netilmicin alone or in combination in renal transplantation. Stathakis C, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):497-9

Infectious problems in elective colorectal surgery: a multi-centre study. The Norwegian Gastro-Intestinal Group (NORGAS). **Curr Med Res Opin** 1988;11(3):149-58

Infectious problems in elective non-colorectal abdominal surgery. The Norwegian Gastro-Intestinal Group (NORGAS). **Curr Med Res Opin** 1988;11(3):159-70

Infectious problems in elective surgery of the alimentary tract: the influence of pre-operative factors. The Norwegian Gastro-Intestinal Group (NORGAS). **Curr Med Res Opin** 1988;11(3):171-8

Infectious problems after elective surgery of the alimentary tract: the influence of peri-operative factors. The Norwegian Gastro-Intestinal Group (NORGAS). **Curr Med Res Opin** 1988;11(3):179-95

Role of gram-negative rods, anaerobes and fungi in wound infection after head and neck surgery [letter] McGregor IA, et al. **Head Neck** 1989 Jul-Aug;11(4):371

Efficacy of tinidazole (Fasigyn) in giardiasis by parasitologic, biochemical, and gut transit studies [published erratum appears in Indian J Gastroenterol 1989 Jul;8(3):153] Gupta JP, et al. **Indian J Gastroenterol** 1989 Apr;8(2):103-4

A randomized study of CCNU with and without benznidazole in the treatment of recurrent grades 3 and 4 astrocytoma. Report to the Medical Research Council by the Brain Tumor Working Party. Bleehen NM, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1077-81

Combined effects of [illegible] rays, Ro 03-8799, and hyperthermia on growth, necrosis and cell proliferation in a mouse tumor. George KC, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1119-22

The effect of glutathione (GSH) depletion in vivo by buthionine sulfoximine (BSO) on the radiosensitization of SR 2508. Kramer RA, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1325-9

Characteristics of fluorinated nitroazoles as hypoxic cell radiosensitizers. Shibamoto Y, et al.
Int J Radiat Oncol Biol Phys 1989 Apr;16(4):1045–8
Disappearing food animal drugs [news]
J Am Vet Med Assoc 1989 Apr 1;194(7):875
Campylobacter pyloridis is not responsible for duodenal ulcer formation: results of a controlled therapeutic trial. Kumar N, et al. **J Assoc Physicians India** 1988 Feb;36(2):137–9
Treatment of recurrent periodontal disease by root planing and Ornidazole (Tiberal). Clinical and microbiological findings. Mombelli A, et al. **J Clin Periodontol** 1989 Jan; 16(1):38–45
The use of metronidazole, tinidazole and dimetridazole in eliminating trichomonads from laboratory mice. Roach PD, et al. **Lab Anim** 1988 Oct;22(4):361–4
Amoxycillin plus tinidazole for Campylobacter pylori gastritis in children: assessment by serum IgG antibody, pepsinogen I, and gastrin levels. Oderda G, et al.
Lancet 1989 Apr 1;1(8640):690–2
[Verification of the therapeutic effects of ornidazole (1-(3-chloro-2-hydroxypropyl)-2-methyl-5-nitroimidazole) manufactured in Czechoslovakia in trichomoniasis in pigeons] Kučera J, et al.
Vet Med (Praha) 1988 Sep;33(9):551–6 (Eng. Abstr.) **(Cze)**
[Treatment of experimental trypanosomiasis of sheep caused by Trypanosoma brucei brucei: efficacy of Ro 15-0216 (a 2-nitroimidazole derivative)] Bouteille B, et al.
Bull Soc Pathol Exot Filiales 1988;81(3 Pt 2):616–22 (Eng. Abstr.) **(Fre)**
[Efficacy of Ro 15-0216 against human strains of Trypanosoma gambiense maintained in rodents. A preliminary study] Richard-Lenoble D, et al.
Bull Soc Pathol Exot Filiales 1988;81(3 Pt 2):609–15 (Eng. Abstr.) **(Fre)**
[Antibiotic prophylaxis in colon surgery: cefazolin (Kefzol-ornidazole (Tiberal) versus cephazolin-placebo] Zuber M, et al. **Helv Chir Acta** 1989 Jun;56(1-2):211–5 (Eng. Abstr.) **(Ger)**
[Present status of radiation sensitizers—hypoxic cell radiosensitizer] Murayama C, et al.
Gan To Kagaku Ryoho 1989 Jun;16(6):2135–41 (33 ref.) (Eng. Abstr.) **(Jpn)**
[Radiosensitizing effect of the nitroimidazole derivatives RK28 and DNIE on murine tumors] Tanaka M, et al.
Nippon Igaku Hoshasen Gakkai Zasshi 1988 Oct 25; 48(10):1249–60 (Eng. Abstr.) **(Jpn)**
[Evaluation of complement mediated lysis technic in patients with chronic Chagas' disease treated with trypanocidal drugs] Levy AM, et al. **Rev Inst Med Trop Sao Paulo** 1988 Jan-Feb;30(1):32–9 (Eng. Abstr.) **(Por)**
[Comparative efficacy of tiniba and fasigyn in treating primary and persisting Giardia infections] Ozeretskovskaia NN, et al. **Med Parazitol (Mosk)** 1989 Mar-Apr;(2):51–4 (Eng. Abstr.) **(Rus)**
[Therapeutic results in Giardia lamblia infestation] Martínez Costa C, et al. **An Esp Pediatr** 1988 May;28(5):425–8 (Eng. Abstr.) **(Spa)**

TOXICITY

Ultrastructural alterations in ovaries from nifurtimox or benznidazole-treated rats: their relation to ovarian nitroreductive biotransformation of both drugs. de Castro CR, et al. **Exp Mol Pathol** 1989 Jun;50(3):385–97
Oncogenic transforming potential of nitroimidazole radiosensitizers. Hall EJ, et al.
Int J Radiat Oncol Biol Phys 1989 May;16(5):1231–4
Effects of nitroimidazoles on neuronal cells in vitro. Stevenson MA, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1225–30

NITROMIFENE see under **PYRROLIDINES**

NITROPARAFFINS see under **ALKANES**

NITROPHENOLS

The reaction of pyridinecarboxylic acids with dicyclohexylcarbodiimide and p-nitrophenol. Ljungqvist A, et al. **Acta Chem Scand [B]** 1988 Jul;42(6):408–10
Acetylation of Lys-373 in porcine pancreatic lipase after reaction of the enzyme or its C-terminal fragment [corrected] with p-nitrophenyl acetate [published erratum appears in Biochimie 1989 Apr;71(4):611] De Caro JD, et al. **Biochimie** 1988 Dec;70(12):1785–90
2-Hydroxy-5-nitrobenzyl bromide as a specific reagent for tryptophan residues in membrane proteins: bacteriorhodopsin as an example. Sabés M, et al.
J Biochem Biophys Methods 1988 Sep;17(1):17–24

ANALYSIS

Surface-enhanced resonance Raman spectroscopy as an ancillary high-performance liquid chromatography detector for nitrophenol compounds. Ni F, et al.
Anal Chem 1989 Apr 15;61(8):888–94
Nitroxynil residues in meat [letter] Taylor SM, et al.
Vet Rec 1989 Apr 1;124(13):354

IMMUNOLOGY

The immune response to the hapten NP in C57BL/6 mice: insights into the structure of the B-cell repertoire. Blier PR, et al. **Immunol Rev** 1988 Oct;105:27–43 (34 ref.)
The T-cell independent antigen, NP-ficoll, primes for a high affinity IgM anti-NP response. Maizels N, et al.
Mol Immunol 1988 Dec;25(12):1277–82

METABOLISM

Impaired hepatic elimination of paranitrophenol and its metabolites in the rat following chronic ethanol pretreatment. Mitchell MC, et al. **Alcoholism (NY)** 1989 Apr;13(2):264–70
Role of chemical concentration and second carbon sources in acclimation of microbial communities for biodegradation. Wiggins BA, et al. **Appl Environ Microbiol** 1988 Nov; 54(11):2803–7
Hydrolysis of p-nitrophenyl phenylphosphonate catalysed by bovine pancreatic deoxyribonuclease. Liao TH, et al.
Biochem J 1988 Nov 1;255(3):781–7
Evidence that the cytoplasmic aldehyde dehydrogenase-catalysed oxidation of aldehydes involves a different active-site group from that which catalyses the hydrolysis of 4-nitrophenyl acetate. Motion RL, et al.
Biochem J 1988 Sep 15;254(3):903–6
The reactivity of p-nitrophenyl acetate with serum albumins. Awad-Elkarim A, et al. **Comp Biochem Physiol [B]** 1988; 91(2):267–72
Hepatic cytochrome P-450 and in vitro drug metabolism in an overfed rat model of obesity. Matsumoto RM, et al.
Drug Nutr Interact 1988;5(4):236–47
Structures of sugar chains of a p-nitrophenyl acetate-hydrolyzing esterase from the microsomes of rat liver. Natsuka S, et al. **J Biochem (Tokyo)** 1988 Jun; 103(6):986–91
[P-chiral phosphates--the tools for studying the stereochemistry of enzymatic reactions of the transfer of phosphate or nucleotidyl groups] Niewiarowski W.
Postepy Biochem 1988;34(1-2):81–114 (75 ref.) **(Pol)**

PHARMACOLOGY

In vitro deacetylation studies with isomeric acetamidobiphenyls using selective carboxylesterase inhibitors. Sertkaya NN, et al. **Anticancer Res** 1988 Nov-Dec;8(6):1345–50
Isolation of an active form of the ATP + Mg2+-dependent protein phosphatase stimulated by the deinhibitor protein and by p-nitrophenyl phosphate. Goris J, et al.
Biochem J 1988 Sep 1;254(2):501–7
Metabolism of the prodrug DEGA (N-(2,6-dimethylphenyl)-4-[[(diethylamino)= acetyl]amino]benzamide) to the potent anticonvulsant LY201116 in mice. Effect of bis-(p-nitrophenyl)phosphate. Parli CJ, et al. **Drug Metab Dispos** 1988 Sep-Oct; 16(5):707–11

POISONING

[Accidental Dertil poisoning in children] Lutskiĭ IM, et al.
Pediatriia 1989;(5):94–6 **(Rus)**

THERAPEUTIC USE

Efficacy of nitroxynil against a benzimidazole-resistant strain of Haemonchus contortus in sheep. Jeannin PC.
Vet Rec 1989 Jun 24;124(25):662–3
[Role of nitroxynil in the integrated control of Fasciola gigantica fasciliasis in cattle in Madagascar] Touratier L.
Rev Elev Med Vet Pays Trop 1988;41(2):181–9 (Eng. Abstr.) **(Fre)**

TOXICITY

Acute and repeated dose inhalation toxicity of para-nitrophenol sodium salt in rats. Smith LW, et al.
Drug Chem Toxicol 1988;11(3):319–27
Influence of glucose amendment on the toxicity of two nitrophenols to Chlorella vulgaris. Megharaj M, et al.
Ecotoxicol Environ Safety 1988 Jun;15(3):320–3

URINE

Urinary excretion kinetics of p-nitrophenol following oral administration of parathion in the rabbit. Peña-Egido MJ, et al. **Arch Toxicol** 1988;62(5):351–4

NITROPHENYL PHOSPHATASE see under **PHOSPHOMONOESTERASES**

NITROPHENYLGALACTOSIDES see under **GLYCOSIDES**

NITROPHOS see **FENITROTHION**

NITROPRUSSIDE see under **FERRICYANIDES**

4-NITROQUINOLINE-1-OXIDE see under **NITROQUINOLINES**

NITROQUINOLINES

Histomorphometric analysis of epithelial changes in chemically induced oral mucosal carcinogenesis in rats. Rich AM, et al. **J Oral Pathol** 1988 Nov;17(9-10):528–33
Enhancing effect of high fat diet on 4-nitroquinoline 1-oxide-induced pulmonary tumorigenesis in ICR male mice. Imaida K, et al. **Jpn J Cancer Res** 1989 Jun; 80(6):499–502

ADMINISTRATION & DOSAGE

A field evaluation of three dose levels of oxamniquine in Gezira—Sudan. Abdel-Rahim IM, et al.
East Afr Med J 1988 Nov;65(11):771–7

ANALYSIS

Immunohistochemical detection of carcinogen-DNA adducts and DNA repair in mouse skin. Nakagawa K, et al.
J Invest Dermatol 1989 May;92(5 Suppl):275S–279S

METABOLISM

The conjugation of 4-nitroquinoline 1-oxide, a potent carcinogen, by mammalian glutathione transferases. 4-Nitroquinoline 1-oxide conjugation by human, rat and mouse liver cytosols, extrahepatic organs of mice and purified mouse glutathione transferase isoenzymes. Stanley JS, et al. **Biochem J** 1988 Nov 15;256(1):303–6
The repair of identified large DNA adducts induced by 4-nitroquinoline-1-oxide in normal or xeroderma pigmentosum group A human fibroblasts, and the role of DNA polymerases alpha or delta. Jones CJ, et al.
Carcinogenesis 1989 Jul;10(7):1197–201
Identification of the glutathione conjugate of 4-nitroquinoline 1-oxide formed in the reaction catalyzed by murine glutathione transferases. Stanley JS, et al.
Carcinogenesis 1989 Mar;10(3):587–91
Bioreduction of 4-nitroquinoline 1-oxide in dysplastic nevus syndrome fibroblasts. Mirzayans R, et al. **Mutat Res** 1989 Apr;225(4):165–9

PHARMACOLOGY

In vitro DNA modification by the ultimate carcinogen of 4-nitroquinoline-1-oxide: influence of superhelicity. Menichini P, et al. **Carcinogenesis** 1989 Sep;10(9):1589–93
Snuff tumorigenesis: effects of long-term snuff administration after initiation with 4-nitroquinoline-N-oxide and herpes simplex virus type 1. Larsson PA, et al.
J Oral Pathol Med 1989 Apr;18(4):187–92
The significance of variation in the susceptibility of Schistosoma mansoni to the antischistosomal drug oxamniquine. Kinoti GK. **Mem Inst Oswaldo Cruz** 1987; 82 Suppl 4:151–6
Schistosoma mansoni: structural damage after treatment with oxamniquine. Magalhães Filho A, et al.
Mem Inst Oswaldo Cruz 1987;82 Suppl 4:347–52
Nuclear phenotypical changes of human breast epithelial cells treated with carcinogens. de Campos Vidal B, et al.
Microsc Electron Biol Celular 1987 Dec;11(2):145–57
[Inhibition of bacterial adherence by nitroxoline on cellular adhesion and on urinary catheter surfaces] Bourlioux P, et al. **Pathol Biol (Paris)** 1989 May;37(5):451–4 (Eng. Abstr.) **(Fre)**
[Action of oxamniquine on Schistosoma mansoni in mice experimentally infected with a strain from Kenya] Kohn A, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:361 **(Por)**

THERAPEUTIC USE

Repeated mass treatment of schistosomiasis mansoni: experience in hyperendemic areas of Brazil. II. Micro-level evaluation of results. Kloetzel K, et al.
Ann Trop Med Parasitol 1988 Aug;82(4):367–76
Comparison between the efficacy of oxamniquine and praziquantel in the treatment of Schistosoma mansoni infections on a sugar estate in Ethiopia. Taddese K, et al.
Ann Trop Med Parasitol 1988 Apr;82(2):175–80
Experimental schistosomiasis mansoni: electrophoretic studies on serum proteins before and after administration of oxamniquine. Amin AM, et al. **J Egypt Soc Parasitol** 1989 Dec;19(2):447–60
Ultrasonographic profile of the liver and caliber of portal vein after oral antibilharzial drugs. el-Hawey AM, et al.
J Egypt Soc Parasitol 1989 Dec;19(2):605–10
Schistosoma mansoni-induced mesangiocapillary glomerulonephritis: influence of therapy. Martinelli R, et al. **Kidney Int** 1989 May;35(5):1227–33
Specific treatment of advanced schistosomiasis liver disease in man: favourable results. Coutinho A, et al.
Mem Inst Oswaldo Cruz 1987;82 Suppl 4:335–40
Effect of anti-schistosomal treatment on schistosomal-specific nephropathy. Sobh MA, et al.
Nephrol Dial Transplant 1988;3(6):744–51
Experimental chemotherapy of Schistosoma curassoni in mice. Vercruysse J, et al. **Parasitol Res** 1989;75(7):559–62
Analysis of worm burdens in experimental schistosomiasis. Fulford AJ, et al. **Parasitology** 1988 Oct;97 (Pt 2):303–15
Treatment of the acute (toxaemic) phase of schistosomiasis with oxamniquine [letter] Lambertucci JR.
Trans R Soc Trop Med Hyg 1988;82(2):350–1
Cure rates and egg reduction in treatment of intestinal schistosomiasis with oxamniquine and praziquantel in Maniema, Zaire. Polderman AM, et al.
Trans R Soc Trop Med Hyg 1988;82(1):115–6
[Effect of specific therapy on the levels of schistosomiasis mansoni infection] Alvim A de C.
Mem Inst Oswaldo Cruz 1987;82 Suppl 4:333 **(Por)**
[Low effectiveness of an oxamniquine and praziquantel combination in the therapy of schistosomiasis mansoni]

Dietze R, et al. **Rev Soc Bras Med Trop** 1986 Oct-Dec; 19(4):247-9 (Eng. Abstr.) **(Por)**

TOXICITY

Spontaneous and 4-nitroquinoline 1-oxide-induced G2 chromosome aberrations in lymphoblasts from familial melanoma patients. Lu GH, et al. **Cancer Genet Cytogenet** 1989 Jun;39(2):233-43

Transformation of oral keratinocytes in vitro by 4-nitroquinoline N-oxide. Crane IJ, et al. **Carcinogenesis** 1988 Dec;9(12):2251-6

Genotoxic potency of three quinoline compounds evaluated in vivo in mouse marrow cells. McFee AF. **Environ Mol Mutagen** 1989;13(4):325-31

Cytogenetical characterization of UV-sensitive repair-deficient CHO cell line 43-3B. II. Induction of cell killing, chromosomal aberrations and sister-chromatid exchanges by 4NQO, mono- and bi-functional alkylating agents. Darroudi F, et al. **Mutat Res** 1989 Jun;212(2):103-12

Cytogenetical characterisation of Chinese hamster 43-3B transferants with the amplified or non-amplified human DNA repair gene ERCC-1. Darroudi F, et al. **Mutat Res** 1989 Jun;212(2):113-22

NITROREDUCTASES see under **OXIDOREDUCTASES**

NITROSAMINES

Induction of a mixed ductal-squamous-islet cell carcinoma in a rat treated with a tobacco-specific carcinogen. Pour PM, et al. **Am J Pathol** 1989 Mar;134(3):627-31

Formation of directly mutagenic alpha-hydroxy-N-nitrosopiperidine phosphate ester by near-ultraviolet irradiation of N-nitrosopiperidine in phosphate buffer. Arimoto S, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1140-6

Effect of secretin on pancreatic carcinogenesis in the hamster model. Pour PM, et al. **Cancer Lett** 1989 Jul 1;46(1):57-62

Inhibition of 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone-induced DNA adduct formation and tumorigenicity in the lung of F344 rats by dietary phenethyl isothiocyanate. Morse MA, et al. **Cancer Res** 1989 Feb 1;49(3):549-53

Enhancement of hepatocarcinogenesis in rats by dietary fructose. Enzmann H, et al. **Carcinogenesis** 1989 Jul; 10(7):1247-52

Summation effect of uracil on the two-stage and multistage models of urinary bladder carcinogenesis in F344 rats initiated by N-butyl-N-(4-hydroxybutyl)nitrosamine. Masui T, et al. **Carcinogenesis** 1988 Nov;9(11):1981-5

Effects of alkyl chain length on the inhibition of NNK-induced lung neoplasia in A/J mice by arylalkyl isothiocyanates. Morse MA, et al. **Carcinogenesis** 1989 Sep; 10(9):1757-9

Synthesis and kinetics of decomposition of 7-(2-cyanoethyl)guanine and O6-(2-cyanoethyl)guanine, markers for reaction of acrylonitrile and 3-(methylnitrosamino)propionitrile with DNA. Prokopczyk B, et al. **Carcinogenesis** 1988 Nov;9(11):2125-8

Modulation of dietary fat-promoted pancreatic carcinogenesis in rats and hamsters by chronic coffee ingestion. Woutersen RA, et al. **Carcinogenesis** 1989 Feb; 10(2):311-6

Trapping of reactive intermediates from the nitrosation of primary amines by a new type of scavenger reagent. Mende P, et al. **Food Chem Toxicol** 1989 Jul;27(7):469-73

Effect of intravesical instillation of antitumor drugs in the development of N-butyl-N-(4-hydroxybutyl) nitrosamine-induced bladder tumors in rats. Suzuki T, et al. **Hinyokika Kiyo** 1989 Feb;35(2):247-51

Analysis of amino acid mixtures after pre-column derivatisation by N-methylisatoic anhydride using HPLC. Mehra A, et al. **Indian J Biochem Biophys** 1988 Aug; 25(4):360-3

Histogenesis of early preneoplastic lesions induced by N-nitrosobis(2-oxopropyl)amine in exocrine pancreas of hamsters. Meijers M, et al. **Int J Pancreatol** 1989 Mar; 4(2):127-37

The activation of 3H-labeled N-nitrosobis(2-oxopropyl)amine by isolated hamster pancreas cells. Lawson T, et al. **J Cancer Res Clin Oncol** 1989;115(1):47-52

Lack of a modifying effect by the diuretic drug furosemide on the development of neoplastic lesions in rat two-stage urinary bladder carcinogenesis. Shibata MA, et al. **J Toxicol Environ Health** 1989;26(3):255-65

[Urinary bladder carcinogenicity of BBN in beige mice (Chediak-Higashi disease model)] Kobayashi Y. **Nippon Hinyokika Gakkai Zasshi** 1989 May;80(5):650-8 (Eng. Abstr.) **(Jpn)**

[The effect of lpr-gene on the accumulation of the number of piled layer in the bladder epithelium] Ohashi T, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Oct;79(10):1627-32 (Eng. Abstr.) **(Jpn)**

[Effects of thermal burns of the esophagus on carcinogenesis induced by ethyl ethers of N-nitrososarcosine in rats] Novikov AI, et al. **Vopr Onkol** 1989;35(7):848-52 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Chemically induced esthesioneuroepithelioma: ultrastructural findings. Vollrath M, et al. **Ann Otol Rhinol Laryngol** 1989 Apr;98(4 Pt 1):256-66

Trends in volatile N-nitrosamines in baby bottle nipples and pacifiers in recent years. Kushwaha SC, et al. **Can J Public Health** 1988 Nov-Dec;79(6):443-6

A response to concerns about sunscreens: a report from the Skin Cancer Foundation [editorial] Pathak MA, et al. **J Dermatol Surg Oncol** 1989 May;15(5):486-7

N-nitrosamines, trichomoniasis and cervical cancer [letter] O'Farrell N. **S Afr Med J** 1989 Mar 4;75(5):247-8

[The role of various pesticides in nitrosamine-induced carcinogenesis] Ponomareva LA, et al. **Gig Sanit** 1989 May; (5):7-9 **(Rus)**

ANALYSIS

The effect of processing on the content of polycyclic aromatic hydrocarbons and volatile N-nitrosamines in cured and smoked lamb meat. Thorkelsson G. **Bibl Nutr Dieta** 1989;(43):188-98 (45 ref.)

Use of a modified N-nitrosoproline test to show intragastric nitrosation in patients at risk of gastric cancer. Houghton PW, et al. **Br J Cancer** 1989 Aug;60(2):231-4

Nitrosamine in leather dust extracts. Lahiri VL, et al. **Br J Ind Med** 1988 Sep;45(9):647-8

Volatile N-nitrosamines in urinary catheters. Heenan MP, et al. **Br J Urol** 1989 Jan;63(1):72-5

The occurrence of N-nitrosocompounds [corrected] in zarda tobacco [published erratum appears in Cancer Lett 1989 Jan;44(1):81] Tricker AR, et al. **Cancer Lett** 1988 Sep-Oct; 42(1-2):113-8

The occurrence of N-nitroso compounds in kiwam tobacco. Tricker AR, et al. **Cancer Lett** 1989 Aug;46(3):221-4

Identification and analysis of a nicotine-derived N-nitrosamino acid and other nitrosamino acids in tobacco. Djordjevic MV, et al. **Carcinogenesis** 1989 Sep; 10(9):1725-31

Preformed tobacco-specific nitrosamines in tobacco--role of nitrate and influence of tobacco type. Fischer S, et al. **Carcinogenesis** 1989 Aug;10(8):1511-7

Tobacco-specific nitrosamines in mainstream smoke of West German cigarettes--tar alone is not a sufficient index for the carcinogenic potential of cigarette smoke. Fischer S, et al. **Carcinogenesis** 1989 Jan;10(1):169-73

Influence of smoking parameters on the delivery of tobacco-specific nitrosamines in cigarette smoke--a contribution to relative risk evaluation. Fischer S, et al. **Carcinogenesis** 1989 Jun;10(6):1059-66

Occupational exposure to volatile nitrosamines in foundries using the "Ashland" core-making process. Ducos P, et al. **Environ Res** 1988 Oct;47(1):72-8

Volatile N-nitrosamines in Polish malt and beer. Kubacki SJ, et al. **Food Addit Contam** 1989 Jan-Mar;6(1):29-33

Tobacco-specific N-nitrosamines in the saliva of habitual male snuff dippers. Osterdahl BG, et al. **Food Addit Contam** 1988 Oct-Dec;5(4):581-6

Volatile nitrosamines in foods on the Swedish market and estimation of their daily intake. Osterdahl BG. **Food Addit Contam** 1988 Oct-Dec;5(4):587-95

The analysis and significance of bound N-nitrosoproline in nitrite-cured meat products. Sen NP, et al. **Food Addit Contam** 1989 Jan-Mar;6(1):21-8

Formation of N-nitrosamines in microwaved versus skillet-fried bacon containing nitrite. Miller BJ, et al. **Food Chem Toxicol** 1989 May;27(5):295-9

The occurrence of tobacco-specific nitrosamines in oral tobacco products and their potential formation under simulated gastric conditions. Tricker AR, et al. **Food Chem Toxicol** 1988 Oct;26(10):861-5

Investigations on N-nitrosopyrrolidine in dry-cured bacon. Fiddler W, et al. **J Assoc Off Anal Chem** 1989 Jan-Feb; 72(1):19-22

Determination of non-volatile N-nitrosamines in baby bottle rubber nipples and pacifiers by high-performance liquid chromatography-thermal energy analysis. Sen NP, et al. **J Chromatogr** 1989 Feb 3;463(2):419-28

HPLC analysis of N-nitrosamino acids and N-nitrosodipeptides N-terminal in proline. Kubacki SJ, et al. **Z Gesamte Hyg** 1989 Feb;35(2):98-100

[N-nitrosamines in gastric juice of subjects from high incidence area of esophageal cancer] Lu SX. **Chung Hua Chung Liu Tsa Chih** 1988 Sep;10(5):322-5 (Eng. Abstr.) **(Chi)**

[Content of N-nitrosamines in Soviet food products] Zhukova GF. **Vopr Pitan** 1988 Nov-Dec;(6):54-9 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Anticarcinogenic effect of betel leaf extract against tobacco carcinogens. Padma PR, et al. **Cancer Lett** 1989 Jun; 45(3):195-202

Effects of aromatic isothiocyanates on tumorigenicity, O6-methylguanine formation, and metabolism of the tobacco-specific nitrosamine 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone in A/J mouse lung. Morse MA, et al. **Cancer Res** 1989 Jun 1; 49(11):2894-7

Importance of diabetes in inhibition of pancreatic cancer by streptozotocin. Bell RH Jr, et al. **J Surg Res** 1989 May; 46(5):515-9

Protective effect of hydroxychavicol, a phenolic component of betel leaf, against the tobacco-specific carcinogens. Amonkar AJ, et al. **Mutat Res** 1989 Feb;210(2):249-53

[Inhibiting effect of thymogen on the development of tumors of the esophagus and forestomach induced by N-nitrososarcosine ethyl ester in rats] Bespalov VG, et al. **Eksp Onkol** 1989;11(4):23-6 (Eng. Abstr.) **(Rus)**

[The action of inhibitors of the amine nitrosation reaction in human gastric juice and in the body of animals] Ermilov VB, et al. **Vopr Onkol** 1989;35(1):38-44 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Nitrosation of bromhexine and aminophenazone in gastric juice after high nitrate loading in the diet. An ex-vivo/in-vitro study in humans. Schlemmer KH, et al. **Arzneimittelforschung** 1988 Sep;38(9):1365-8

Lack of detectable N-nitroso-N-methyl-N-cyclohexylamine in humans after administration of bromhexine. Schmid J, et al. **Arzneimittelforschung** 1988 Sep;38(9):1359-64

Initiation activity of endogenously synthesized N-nitrosobis(2-hydroxypropyl)amine in the rat liver. Yamamoto K, et al. **Cancer Lett** 1989 Jun;45(3):221-5

Nitrite-cured meats as a source of endogenously and exogenously formed N-nitrosoproline in the ferret. Perciballi M, et al. **Food Chem Toxicol** 1989 Feb; 27(2):111-6

Influence of dietary protein and gut microflora on endogenous synthesis of nitrate and N-nitrosamines in the rat. Ward FW, et al. **Food Chem Toxicol** 1989 Jul; 27(7):445-9

Subdiabetogenic doses of alloxan and endogenously formed nitrosamine failed to cause vertically transmitted diabetes in mice. Lev-Ran A, et al. **Horm Metab Res** 1988 Sep; 20(9):595-6

Nitrosamine formation by denitrifying and non-denitrifying bacteria: implication of nitrite reductase and nitrate reductase in nitrosation catalysis. Calmels S, et al. **J Gen Microbiol** 1988 Jan;134 (Pt 1):221-6

[The nitrogenous compounds of food, alcoholic drinks and tobacco in the biosynthesis of carcinogenic nitrosamines] Gileva OS, et al. **Vopr Pitan** 1988 Sep-Oct;(5):9-14 (57 ref.) **(Rus)**

BLOOD

Detoxication of N-oxygenated arylamines in erythrocytes. An overview. Eyer P. **Xenobiotica** 1988 Nov; 18(11):1327-33 (17 ref.)

CHEMICAL SYNTHESIS

Kinetic and analytic investigations on the formation of N-nitroso-N-methyl-N-cyclohexylamine from bromhexine and nitrite. Schmid J, et al. **Arzneimittelforschung** 1988 Sep;38(9):1355-8

Formation of a direct mutagen, diazo-N-nitrosoetilefrin, by interaction of etilefrin with nitrite. Kikugawa K, et al. **Chem Pharm Bull (Tokyo)** 1989 Jun;37(6):1600-3

[Synthesis of N-2-methylpropyl-N-1'-methylacetonylnitrosamine and its physical properties] Li GY. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Apr; 11(2):132-4 (Eng. Abstr.) **(Chi)**

ISOLATION & PURIFICATION

High-performance liquid chromatography separations of nitrosamines. III. Conformers of N-nitrosamino acids. Issaq HJ, et al. **J Chromatogr** 1988 Oct 28;452:511-8

METABOLISM

Nitrosamine metabolism in protein-deficient weanling rats during the process of repletion. Maduagwu EN. **Ann Nutr Metab** 1989;33(1):49-56

The role of extrahepatic organs in the first pass metabolism of N-nitrosodibutylamine. Feng XC, et al. **Arch Toxicol Suppl** 1989;13:227-9

Macrophage-mediated N-nitrosation of thioproline and proline. Miwa M, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):373-8

Metabolism of 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone by hamster respiratory tissues cultured with ellagic acid. Castonguay A, et al. **Cancer Lett** 1989 Jul 15;46(2):93-105

Detection of exocyclic guanine adducts in hydrolysates of hepatic DNA of rats treated with N-nitrosopyrrolidine and in calf thymus DNA reacted with alpha-acetoxy-N-nitrosopyrrolidine. Chung FL, et al. **Cancer Res** 1989 Apr 15;49(8):2034-41

Formation of hydroxy derivatives, aldehydes, and nitrite from N-nitrosomethyl-n-amylamine by rat liver microsomes and by purified cytochrome P-450 IIB1. Ji C, et al. **Cancer Res** 1989 Oct 1;49(19):5299-304

DNA alkylation in the hamster induced by two pancreatic carcinogens. Kokkinakis DM, et al. **Cancer Res** 1989 Jun 15;49(12):3184-9

Substrate specificity and alkyl group selectivity in the metabolism of N-nitrosodialkylamines. Lee M, et al. **Cancer Res** 1989 Mar 15;49(6):1470-4

Hydroxy metabolites of methyl-n-amylnitrosamine produced by esophagus, stomach, liver, and other tissues of the neonatal to adult rat and hamster. Mirvish SS, et al. **Cancer Res** 1988 Oct 15;48(20):5663-8

Endogenous nitrosation in relation to nitrate exposure from

drinking water and diet in a Danish rural population. Møller H, et al. **Cancer Res** 1989 Jun 1;49(11):3117–21

Cyanoethylation of DNA in vivo by 3-(methylnitrosamino)propionitrile, an Areca-derived carcinogen. Prokopczyk B, et al. **Cancer Res** 1988 Dec 1;48(23):6780–4

Detection of cyclic 1,N2-propanodeoxyguanosine adducts in DNA of rats treated with N-nitrosopyrrolidine and mice treated with crotonaldehyde. Chung FL, et al. **Carcinogenesis** 1989 Jul;10(7):1291–7

Oxidation of N-butyl-N-(3-formylpropyl)nitrosamine to N-butyl-N-(3-carboxypropyl)nitrosamine in rat liver and inhibition by disulfiram. Irving CC. **Carcinogenesis** 1988 Nov;9(11):2109–12

Theoretical model for predicting rates of nitrosamine and nitrosamide formation in the human stomach. Licht WR, et al. **Carcinogenesis** 1988 Dec;9(12):2227–37

The inhibition of bacterially mediated N-nitrosation by vitamin C: relevance to the inhibition of endogenous N-nitrosation in the achlorhydric stomach. Mackerness CW, et al. **Carcinogenesis** 1989 Feb;10(2):397–9

Uptake of N-nitrosobis(2-oxopropyl)amine by isolated rat and hamster hepatocytes: species differences and evidence for an active carrier-mediated transport process. Mangino MM, et al. **Carcinogenesis** 1988 Oct;9(10):1763–72

Carcinogenic activity of endogenously synthesized N-nitrosobis(2-hydroxypropyl)amine in rats administered bis(2-hydroxypropyl)amine and sodium nitrite. Yamamoto K, et al. **Carcinogenesis** 1989 Sep;10(9):1607–11

DNA binding by [2,5-14C]N-nitrosopyrrolidine in excision-repair proficient and deficient strains of Salmonella. Evidence for a major premutagenic adduct. Zieh..ska M, et al. **Carcinogenesis** 1988 Oct;9(10):1901–4

Phorbol ester binding to oral epithelial cells in the presence of retinoic acid or N-nitrosonornicotine. Schuster GS, et al. **Cytobios** 1988;54(216):53–60

Approaches to the development of assays for interaction of tobacco-specific nitrosamines with haemoglobin and DNA. Hecht SS, et al. **IARC Sci Publ** 1988;(89):121–8

Detection in human cells of alkylated macromolecules attributable to exposure to nitrosamines. Montesano R, et al. **IARC Sci Publ** 1988;(89):75–82

Modulations in the biotransformation of tobacco extract and N'-nitrosonornicotine under differential dietary protein status. Ammigan N, et al. **J Biochem Toxicol** 1989 Spring; 4(1):7–13

Metabolism of N-nitroso-hydroxyethyl-alkylamine phosphate esters in the rat. Frank N, et al. **Toxicology** 1989 Jul 3;57(1):59–67

[An experimental study on bladder carcinogenesis in dogs by N-butyl-N-(4-hydroxybutyl) nitrosamine (BBN) and its urinary metabolites] Morishita S, et al. **Hinyokika Kiyo** 1989 Jan;35(1):27–38 (Eng. Abstr.) **(Jpn)**

[Effect of lignins and their model compounds on amine nitrosation in a human gastric juice medium and in the body of mice] Ermilov VB, et al. **Vopr Onkol** 1989; 35(6):693–8 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Microsomal metabolism of the Z and E isomers of N-nitroso-N-methyl-N-n-pentylamine. He C, et al. **Cancer Lett** 1989 Jun;45(3):189–94

Sex differences in the single-dose toxicokinetics of N-nitrosomethyl(2-hydroxyethyl)amine in the rat. Streeter AJ, et al. **Cancer Res** 1989 Apr 1;49(7):1783–9

Influence of inhibition of the metabolic activation on the mutagenicity of some nitrosamines, triazenes, hydrazines and seniciphylline in Drosophila melanogaster. Zijlstra JA, et al. **Mutat Res** 1988 Nov;202(1):251–67

PHARMACOLOGY

Induction of sister chromatid exchanges by tobacco-specific nitrosamine 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone in human and hamster cells. Zimonjic D, et al. **Carcinogenesis** 1989 Apr;10(4):753–5

DNA alkylation by nitrosobis-(2-oxopropyl)amine in rats of different ages. Thomas BJ, et al. **Jpn J Cancer Res** 1988 Sep;79(9):1039–42

Organic solvents inhibit the mutagenicity of promutagens dimethylnitrosamine and methylbutylnitrosamine in a higher plant Arabidopsis thaliana. Gichner T, et al. **Mutagenesis** 1986 Mar;1(2):107–9

Intracellular distribution of pancreatic tumor antigen purified from BHP-induced adenocarcinomas in Syrian hamsters. Matsuzaki M, et al. **Pancreas** 1989;4(4):429–35

Lack of effect of selenium on induction of tumors of esophagus and bladder in rats by two nitrosamines. Lijinsky W, et al. **Toxicol Ind Health** 1989 Jan;5(1):63–72

RADIATION EFFECTS

Formation of directly mutagenic alpha-hydroxy-N-nitrosopiperidine phosphate ester by near-ultraviolet irradiation of N-nitrosopiperidine in phosphate buffer. Arimoto S, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1140–6

TOXICITY

Alterations in pancreatic islet function produced by carcinogenic nitrosamines in the Syrian hamster. Zucker PF, et al. **Am J Pathol** 1988 Dec;133(3):573–7

Nicotinamide and selenium stimulate the repair of DNA damage produced by N-nitrosobis (2-oxopropyl) amine. Lawson T. **Anticancer Res** 1989 Mar–Apr;9(2):483–6

Hypomethylation of c-myc proto-oncogene of N-nitrosomorpholine—induced rat liver nodules and of H4IIE cells. Münzel P, et al. **Arch Toxicol Suppl** 1989; 13:211–3

A study of tobacco carcinogenesis. XLII. Bioassay in A/J mice of some structural analogues of tobacco-specific nitrosamines. Hecht SS, et al. **Cancer Lett** 1988 Sep–Oct; 42(1–2):141–5

Modifying effects of concomitant treatment with butylated hydroxyanisole or butylated hydroxytoluene on N,N-dibutylnitrosamine-induced liver, forestomach and urinary bladder carcinogenesis in F344 male rats. Imaida K, et al. **Cancer Lett** 1988 Dec 15;43(3):167–72

In vitro morphological changes induced by 4-(methylnitrosamino)-1-(3-pyridyl)-1-(butanone) in fetal hamster respiratory tract tissue. Joshi PA, et al. **Cancer Lett** 1989 Mar;44(3):173–8

Carcinogenesis by nitrosobis-(2-oxopropyl)amine labeled with deuterium and by nitroso-2-hydroxypropyl-2-oxopropylamine in rats and hamsters. Lijinsky W, et al. **Cancer Lett** 1988 Sep–Oct; 42(1–2):37–41

Mutagenic and cytogenetic studies of N'-nitrosonornicotine and 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone. Padma PR, et al. **Cancer Lett** 1989 Aug;46(3):173–80

Comparative carcinogenicity of N-nitrosobis(2-oxopropyl)-amine and N-nitrosomethyl(2-oxopropyl)amine following subcutaneous or oral administration to rats. Pour PM, et al. **Cancer Lett** 1989 Apr;45(1):49–57

Evaluation of the transplacental tumorigenicity of the tobacco-specific carcinogen 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone in mice. Anderson LM, et al. **Cancer Res** 1989 Jul 15;49(14):3770–5

Comparative carcinogenesis by nitrosomethylalkylamines in Syrian hamsters. Lijinsky W, et al. **Cancer Res** 1988 Dec 1;48(23):6648–52

Induction of lung and exocrine pancreas tumors in F344 rats by tobacco-specific and Areca-derived N-nitrosamines. Rivenson A, et al. **Cancer Res** 1988 Dec 1;48(23):6912–7

In vitro genotoxicity of 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone activated by hamster maternal and fetal tissues. Alaoui-Jamali M, et al. **Carcinogenesis** 1988 Dec; 9(12):2319–24

Apparent synergy between chrysotile asbestos and N-nitrosoheptamethyleneimine in the induction of pulmonary tumours in rats. Harrison PT, et al. **Carcinogenesis** 1988 Dec;9(12):2165–71

Comparative tumorigenicity of N-nitroso-2-hydroxymorpholine, N-nitrosodiethanolamine and N-nitrosomorpholine in A/J mice and F344 rats. Hecht SS, et al. **Carcinogenesis** 1989 Aug;10(8):1475–7

Carcinogenicity of N-nitroso(2-hydroxypropyl)(2-oxopropyl)amine, N-nitrosobis(2-hydroxypropyl)amine and cis-N-nitroso-2,6-dimethylmorpholine administered continuously in the Syrian hamster, and the effect of dietary protein on N-nitroso(2-hydroxypropyl)(2-oxopropyl)amine carcinogenesis. Kokkinakis DM, et al. **Carcinogenesis** 1989 Apr;10(4):699–704

Effects of urinary potassium and sodium ion concentrations and pH on N-butyl-N-(4-hydroxybutyl)nitrosamine-induced urinary bladder carcinogenesis in rats. Lina BA, et al. **Carcinogenesis** 1989 Sep;10(9):1733–6

Inhibitory effect of butylated hydroxyanisole administration on pancreatic carcinogenesis in Syrian hamsters initiated with N-nitrosobis(2-oxopropyl)amine. Mizumoto K, et al. **Carcinogenesis** 1989 Aug;10(8):1491–4

Cycles of repeated augmentation pressure in rapid production of pancreatic and cholangiocellular carcinomas in hamsters initiated with N-nitrosobis(2-oxopropyl)amine. Mizumoto K, et al. **Carcinogenesis** 1989 Aug;10(8):1457–9

Effects of dietary sinigrin or indole-3-carbinol on O6-methylguanine-DNA-transmethylase activity and 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone-induced DNA methylation and tumorigenicity in F344 rats. Morse MA, et al. **Carcinogenesis** 1988 Oct;9(10):1891–5

Effects of the nitrosopeptide N-(N-acetyl-L-prolyl)-N-nitrosoglycine on Salmonella typhimurium TA100 in the host-mediated assay in mice. Blowers SD, et al. **Food Chem Toxicol** 1988 Nov–Dec; 26(11–12):917–9

The in vivo genotoxic properties of the nitrosopeptide N-(N-acetyl-L-prolyl)-N-nitrosoglycine. Blowers SD, et al. **Food Chem Toxicol** 1988 Sep;26(9):785–90

Suppression of humoral immune responses by dialkylnitrosamines: structure-activity relationships. Kaminski NE, et al. **Fundam Appl Toxicol** 1989 Feb; 12(2):321–32

Role of glucose-6-phosphate dehydrogenase on enhanced proliferation of pre-neoplastic and neoplastic cells in rat liver induced by N-nitrosomorpholine. Baba M, et al. **Int J Cancer** 1989 May 15;43(5):892–5

Tumor-promoting activity and cytotoxicity of 3,4,3',4'-tetrachlorobiphenyl on N-nitrosomorpholine-induced murine liver foci. Kobusch AB, et al. **J Cancer Res Clin Oncol** 1989;115(3):247–52

Rapid production of pancreatic carcinoma by initiation with N-nitroso-bis(2-oxopropyl)amine and repeated augmentation pressure in hamsters. Mizumoto K, et al. **J Natl Cancer Inst** 1988 Dec 7;80(19):1564–7

Effect of 1-hexylcarbamoyl-5-fluorouracil on development of rat urinary bladder tumor induced by N-butyl-N-(4-hydroxybutyl)nitrosamine. Ozono S, et al. **Jpn J Exp Med** 1988 Jun;58(3):123–7

Antimutagenic effects of betel leaf extract against the mutagenicity of two tobacco-specific N-nitrosamines. Padma PR, et al. **Mutagenesis** 1989 Mar;4(2):154–6

Transplacental genotoxicity of a tobacco-specific N-nitrosamine, 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanone, in Syrian golden hamster. Alaoui-Jamali MA, et al. **Mutat Res** 1989 May;223(1):65–72

The rat-liver carcinogen N-nitrosomorpholine initiates unscheduled DNA synthesis and induces micronuclei in the rat liver in vivo. Ashby J, et al. **Mutat Res** 1989 Apr; 225(4):143–7

Dimethylglycine and chemically related amines tested for mutagenicity under potential nitrosation conditions. Hoorn AJ. **Mutat Res** 1989 Apr;222(4):343–50

N-nitroso-butyl-3-carboxypropyl-amine (BCPN), a urinary bladder carcinogen, non-mutagenic in S. typhimurium. Pool BL, et al. **Mutat Res** 1988 Sep–Oct;209(1–2):79–83

Mutagenic activity and specificity of N-nitrosomethylaniline and N-nitrosodiphenylamine in Salmonella. Zielenska M, et al. **Mutat Res** 1988 Nov;202(1):269–76

Theoretical QSAR study on carcinogenic potency of N-nitrosamines. Frecer V, et al. **Neoplasma** 1988; 35(5):525–38

Interaction of carbaryl and N-nitrosocarbaryl with microsomal monooxygenase activities. Beraud M, et al. **Toxicol Lett** 1989 Feb;45(2–3):251–60

Adrenal cortical foci and nodules in Sprague-Dawley rats treated with N-nitrosomorpholine. Light and electron microscopic findings. Moore MA, et al. **Virchows Arch [B]** 1989;57(2):91–7

[Presence of volatile N-nitrosamines in fishes and fish products] Karłowski K, et al. **Rocz Panstw Zakl Hig** 1988; 39(5):355–60 (Eng. Abstr.) **(Pol)**

[N-nitroso compounds in rubber and rubber products] Styczyńska H. **Rocz Panstw Zakl Hig** 1988;39(3):161–8 (Eng. Abstr.) **(Pol)**

[The carcinogenic activity of N-nitrosodipropylamine administered perorally to C57Bl mice] Gritsiute LA, et al. **Eksp Onkol** 1989;11(3):10–1 (Eng. Abstr.) **(Rus)**

[Effect of ethanol on N-nitrososarcosine ethyl ester-induced carcinogenesis in the esophageal and forestomach mucosa of mongrel rats] Novikov AI, et al. **Eksp Onkol** 1989; 11(2):19–22 (Eng. Abstr.) **(Rus)**

URINE

Lack of detectable N-nitroso-N-methyl-N-cyclohexylamine in humans after administration of bromhexine. Schmid J, et al. **Arzneimittelforschung** 1988 Sep;38(9):1359–64

Protein-related differences in the excretion of nitrosoproline and nitrate by the rat—possible modification of de novo nitrate synthesis. Mallett AK, et al. **Food Chem Toxicol** 1988 Oct;26(10):831–5

N-nitrosoproline excretion in patients with gastric lesions and in a control population. Knight TM, et al. **IARC Sci Publ** 1988;(89):97–101

Urinary N-nitrosamino acids as an index of exposure to N-nitroso compounds. Ohshima H, et al. **IARC Sci Publ** 1988;(89):83–91

NITROSO COMPOUNDS

Resonance Raman enhancement of the Mn-N-O bending mode in nitrosyl manganese "strapped" and "open" heme complexes. Yu NT, et al. **Biophys J** 1989 Jun;55(6):1137–44

Superoxide dismutase-mediated reversible conversion of 3-hydroxyamino-1-methyl-5H-pyrido[4,3-b]indole, the N-hydroxy derivative of Trp-P-2, into its nitroso derivative. Hiramoto K, et al. **Carcinogenesis** 1988 Nov; 9(11):2003–8

Non-enzymatic glutathione conjugation of 2-nitroso-6-methyldipyrido [1,2-a: 3',2'-d] imidazole (NO-Glu-P-1) in vitro: N-hydroxy-sulfonamide, a new binding form of arylnitroso compounds and thiols. Umemoto A, et al. **Chem Biol Interact** 1988;68(1–2):57–69

An ESR study of nonenzymatic reactions of nitroso compounds with biological reducing agents. Takahashi N, et al. **Free Radic Res Commun** 1988;4(6):351–8

Electrochemical characteristics of N-nitroso-heterocyclic compounds of biological interest. III. Nitroso derivative formation. Tocher JH, et al. **Free Radic Res Commun** 1989; 5(6):327–32

Spin trapping of the superoxide anion: complications in the use of the water-soluble nitroso-aromatic reagent DBNBS. Mani V, et al. **J Biochem Biophys Methods** 1989 Mar; 18(2):91–6

ADVERSE EFFECTS

[The problem of carcinogenic N-nitroso compounds—30

years old] Mueller RL. **Off Gesundheitswes** 1989 Apr; 51(4):182–5 (32 ref.) (Eng. Abstr.) **(Ger)**

ANALYSIS

Spectrophotometric determination of N-nitroso compounds by flow injection analysis. Ohta T, et al. **Analyst** 1988 Aug; 113(8):1333–5

The occurrence of N-nitroso compounds in kiwam tobacco. Tricker AR, et al. **Cancer Lett** 1989 Aug;46(3):221–4

DNA adduct formation in primary rabbit tracheal epithelial cells following treatment with 1,8-dinitropyrene and its partially reduced derivative, 1-nitro-8-nitrosopyrene. Norman CA, et al. **Carcinogenesis** 1989 Jul;10(7):1323–7

Precautions to be taken in the analysis of total N-nitroso compounds. Bouchikhi B, et al. **Food Addit Contam** 1989 Apr–Jun;6(2):209–17 (23 ref.)

A sensitive analytical procedure for the detection of N-nitrosamides via their alkylating activity. Mende P, et al. **Food Chem Toxicol** 1989 Jul;27(7):475–8

Formation of mutagenic N-nitroso compounds in vegetable extracts upon nitrite treatment: a comparison with the glucosinolate content. Tiedink HG, et al. **Food Chem Toxicol** 1988 Nov–Dec;26(11–12):947–54

Separation and assay of N-nitroso compounds by high-performance liquid chromatography with chemiluminescence detection. Pinche C, et al. **J Chromatogr** 1989 Jan 20;463(1):201–6

ANTAGONISTS & INHIBITORS

Inhibitors of endogenous nitrosation. Mechanisms and implications in human cancer prevention. Bartsch H, et al. **Mutat Res** 1988 Dec;202(2):307–24 (126 ref.)

Mechanisms of inhibition of N-nitroso compounds-induced mutagenicity. Gichner T, et al. **Mutat Res** 1988 Dec; 202(2):325–34 (85 ref.)

[The role of UDP glucuronosyl- and sulfotransferases in the butylhydroxytoluene suppression of the mutagenic action of carcinogenic nitroso compounds and cyclophosphane] Kalinina EV, et al. **Vopr Onkol** 1989;35(2):220–5 (Eng. Abstr.) **(Rus)**

DIAGNOSTIC USE

Evaluation of dibromonitrosobenzene sulfonate as a spin trap in biological systems. Samuni A, et al. **Free Radic Biol Med** 1989;7(1):37–43

METABOLISM

Thiol-mediated incorporation of radiolabel from 1-[14C]-methyl-4-phenyl-5-nitrosoimidazole into DNA. A model for the biological activity of 5-nitroimidazoles. Ehlhardt WJ, et al. **Biochem Pharmacol** 1989 Apr 1; 38(7):1175–80

Identification in rats of N-nitrosonipecotic acid as a major urinary metabolite of the areca-nut alkaloid-derived nitrosamines, N-nitrosoguvacoline and N-nitrosoguvacine. Ohshima H, et al. **Cancer Lett** 1989 Mar;44(3):211–6

Conference on advances in the biology and chemistry of N-nitroso and related compounds. Hecht SS, et al. **Cancer Res** 1989 Mar 1;49(5):1327–9

Nitrosation by stimulated macrophages. Inhibitors, enhancers and substrates. Kosaka H, et al. **Carcinogenesis** 1989 Mar; 10(3):563–6

Theoretical model for predicting rates of nitrosamine and nitrosamide formation in the human stomach. Licht WR, et al. **Carcinogenesis** 1988 Dec;9(12):2227–37

Cytochrome P-455 nm complex formation in the metabolism of phenylalkylamines. IX. A comparative study with enantiomeric 2-nitroso-1-phenylpropane in microsomes and a reconstituted cytochrome P-450 system from rat liver. Paulsen-Sörman U, et al. **Chem Biol Interact** 1988; 67(1–2):49–58

Metabolism of N-nitroso-1,3-thiazolidine in the rat. Cragin DW, et al. **Food Chem Toxicol** 1989 Feb;27(2):105–10

An investigation of the endogenous formation of apparent total N-nitroso compounds in conventional microflora and germ-free rats. Massey RC, et al. **Food Chem Toxicol** 1988 Jul;26(7):595–600

Urinary N-nitrosamino acids as an index of exposure to N-nitroso compounds. Ohshima H, et al. **IARC Sci Publ** 1988;(89):83–91

Biotransformation of N-substituted aromatic compounds in mammalian spermatozoa. Nonoxidative formation of N-hydroxy-N-arylacetamides from nitroso aromatic compounds. Yoshioka T, et al. **J Biol Chem** 1989 Jul 25; 264(21):12432–8

Hydroxychavicol: a new anti-nitrosating phenolic compound from betel leaf. Nagabhushan M, et al. **Mutagenesis** 1989 May;4(3):200–4

[The nitrosophenol system of iron metabolism regulation in actinomycetes] Blinov NO, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Jan–Feb;(1):70–8 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

[Effect of various forms of diet on the nitrosation of sodium metamizole (analgin tablets) under simulated conditions of the human stomach] Ziebarth D, et al. **Arch Geschwulstforsch** 1989;59(2):79–84 (Eng. Abstr.) **(Ger)**

[The release of nitric oxide from organic nitroso compounds in the body of animals] Kubrina LN, et al. **Izv Akad Nauk SSSR [Biol]** 1988 Nov–Dec;(6):844–50 (Eng. Abstr.) **(Rus)**

[Effect of human gastric juice on dimethylamine nitrosation by sodium nitrite] Ermilov VB, et al. **Vopr Onkol** 1989; 35(5):603–7 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

1-Methyl-2-nitrosoimidazole: cytotoxic and glutathione depleting capabilities. Noss MB, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1015–9

Inhibitory effects of para-aminobenzoic acid on the formation and mutagenicity of N-nitroso compounds. Gichner T, et al. **Mutagenesis** 1988 Jul;3(4):329–31

Genotoxicity of nitrosated ranitidine. Franekić J, et al. **Mutat Res** 1989 Sep;227(1):13–6

Microinjection of cultured rat embryos: a new technique for studies in chemical dysmorphogenesis. Stark KL, et al. **Toxicol Appl Pharmacol** 1989 Sep 15;100(3):411–6

TOXICITY

Roussin red methyl ester, a tumor promoter isolated from pickled vegetables. Liu JG, et al. **Carcinogenesis** 1989 Mar; 10(3):617–20

Formation of direct-acting genotoxic substances in nitrosated smoked fish and meat products: identification of simple phenolic precursors and phenyldiazonium ions as reactive products. Ohshima H, et al. **Food Chem Toxicol** 1989 Mar; 27(3):193–203

Transplacental initiation of liver, lung, neurogenic, and connective tissue tumors by N-nitroso compounds in mice. Anderson LM, et al. **Fundam Appl Toxicol** 1989 Apr; 12(3):604–20

Mutagenicity of 1-, 3- and 6-nitrosobenzo[a]pyrene in Salmonella typhimurium and Chinese hamster ovary cells. Heflich RH, et al. **Mutat Res** 1989 Apr;225(4):157–63

The relationship between DNA damage and mutation frequency in mammalian cell lines treated with N-nitroso-N-2-fluorenylacetamide. Kuo ML, et al. **Mutat Res** 1989 Jun;212(2):231–9

Thymic T-cell lymphoma with the CD8+ (OX-8), CD4+ (W3/25) phenotype, induced in F344/NCr rats by nitroso-2-hydroxypropylurea. Konishi N, et al. **Thymus** 1988–89;12(4):225–37

Intestinal cancer induced by N-nitroso compounds. Lijinsky W. **Toxicol Pathol** 1988;16(2):198–204 (15 ref.)

[Changes in the larynx of rats induced by chemical carcinogens] Diagilev VV, et al. **Eksp Onkol** 1988; 10(4):20–3 (Eng. Abstr.) **(Rus)**

URINE

Photolytic interface for high-performance liquid chromatography—chemiluminescence detection of non-volatile N-nitroso compounds. Conboy JJ, et al. **Analyst** 1989 Feb;114(2):155–9

Urinary excretion of nitrate, nitrite and N-nitroso compounds in Schistosomiasis and bilharzia bladder cancer patients. Tricker AR, et al. **Carcinogenesis** 1989 Mar;10(3):547–52

[An experimental study on bladder carcinogenesis in dogs by N-butyl-N-(4-hydroxybutyl) nitrosamine (BBN) and its urinary metabolites] Morishita S, et al. **Hinyokika Kiyo** 1989 Jan;35(1):27–38 (Eng. Abstr.) **(Jpn)**

NITROSODIETHYLAMINE see **DIETHYLNITROSAMINE**

NITROSODIMETHYLAMINE see **DIMETHYLNITROSAMINE**

NITROSOETHYLUREA see **ETHYLNITROSOUREA**

NITROSOGUANIDINES

PHARMACOLOGY

Investigation of the ability of newer beta-lactam antibiotics to select resistant mutants from serratia marcescens after mutagenesis with nitrosoguanidine. Vuye A, et al. **Arzneimittelforschung** 1989 Apr;39(4):424–7

TOXICITY

[The induction of stomach cancer in monkeys with N-methyl-N'-nitro-N-nitrosoguanidine] Sharashidze LK, et al. **Vopr Onkol** 1989;35(3):335–8 (Eng. Abstr.) **(Rus)**

NITROSOMETHYLNITROGUANIDINE see **METHYLNITRONITROSOGUANIDINE**

NITROSOMETHYLUREA see **METHYLNITROSOUREA**

NITROSOMETHYLURETHANE see under **URETHANE**

NITROSOMONAS

METABOLISM

Degradation of trichloroethylene by the ammonia-oxidizing bacterium Nitrosomonas europaea. Arciero D, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):640–3

[Biology of chemoautotrophs] Takakuwa S, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(15):2569–78 (58 ref.) **(Jpn)**

NITROSONITROMETHYLGUANIDINE see **METHYLNITRONITROSOGUANIDINE**

N-NITROSOPYRROLIDINE see under **NITROSAMINES**

NITROSOUREA COMPOUNDS

Cytogenetic studies on rat thymic lymphomas induced by N-propyl-N-nitrosourea. Ogiu T, et al. **Leuk Res** 1988; 12(7):607–10

ADMINISTRATION & DOSAGE

Effects of routes of administration of TCNU on its plasma, tissue and tumour concentrations. Double JA, et al. **Eur J Cancer Clin Oncol** 1988 Aug;24(8):1355–60

ADVERSE EFFECTS

Treatment of refractory cancer-associated hypercalcemia with aminohydroxypropylidene diphosphonate. Heaf JG, et al. **Acta Med Scand** 1988;224(3):287–8

Acute leukemia occurring after radiotherapy and chemotherapy with a nitrosourea, PCNU. Shepard KV, et al. **Invest New Drugs** 1988 Jun;6(2):121–4

CHEMICAL SYNTHESIS

Nucleoside analogues: 7. Effect on colon, breast and lung tumours in mice of 5-fluorouracil/nitrosourea molecular combinations incorporating alkoxy and oxidized sulphur functions. McElhinney RS, et al. **Anticancer Drug Des** 1989 Mar;3(4):255–69

Rationale for the synthesis and preliminary biological evaluation of highly active new antitumor nitrosoureido sugars. Roger P, et al. **J Med Chem** 1989 Jan;32(1):16–23

METABOLISM

Nitrosoureas. Modes of action and perspectives in the use of hormone receptor affinity carrier molecules. Eisenbrand G, et al. **Acta Oncol** 1989;28(2):203–11 (46 ref.)

Quenching of DNA cross-link precursors of chloroethylnitrosoureas and attenuation of DNA interstrand cross-linking by glutathione. Ali-Osman F. **Cancer Res** 1989 Oct 1;49(19):5258–61

PHARMACOKINETICS

Pharmacokinetics of tauromustine in cancer patients. Phase I studies. Gunnarsson PO, et al. **Cancer Chemother Pharmacol** 1989;23(3):176–80

[Clinical pharmacokinetics of nitrosoureas] Bizzari JP, et al. **Bull Cancer (Paris)** 1988;75(8):813–8 (15 ref.) (Eng. Abstr.) **(Fre)**

PHARMACOLOGY

Importance of the DNA repair enzyme O6-alkyl guanine alkyltransferase (AT) in cancer chemotherapy. D'Incalci M, et al. **Cancer Treat Rev** 1988 Dec;15(4):279–92 (99 ref.)

Chemosensitization at reduced nitroimidazole concentrations by mixed-function compounds combining 2-nitroimidazole and chloroethylnitrosourea. Mulcahy RT, et al. **Eur J Cancer Clin Oncol** 1989 Jul;25(7):1099–104

In vitro and in vivo responses of a panel of murine colon tumours to TCNU: a positive correlation. Phillips RM, et al. **Eur J Cancer Clin Oncol** 1988 Aug;24(8):1365–71

DNA lability induced by nimustine and ramustine in rat glioma cells. Mineura K, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1391–4

Influence of glutathione on the mutagenicity of 2-chloroethylnitrosoureas. Mutagenic potential of glutathione derivatives formed from 2-chloroethylnitrosoureas and glutathione. Stahl W, et al. **Mutat Res** 1988 Dec;206(4):459–65

Structural requirement for the induction of the adaptive response in Escherichia coli among N-(substituted alkyl)-N-nitrosoureas. Takahashi K, et al. **Mutat Res** 1988 Nov;202(1):193–201

The effect of estramustine, nor-nitrogen mustard and tauromustine on macromolecular labelling in the human prostatic tumour cell line 1013L. Kruse E, et al. **Pharmacol Toxicol** 1989 Jan;64(1):9–13

[Pharmacological studies on MCNU: a new antitumor agent] Sekido S, et al. **Nippon Yakurigaku Zasshi** 1988 Aug; 92(2):69–96 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Nucleoside analogues: 8. Some isomers of B.3839, the original 5-fluorouracil/nitrosourea molecular combination, and their effect on colon, breast and lung tumours in mice. McElhinney RS, et al. **Anticancer Drug Des** 1989 Jun; 4(1):1–20

Antitumour activity of a new water-soluble nitrosoureido sugar: CY233 (NSC 609224). Gosse C, et al. **Anticancer Res** 1988 Nov–Dec;8(6):1419–22

Anticancer efficacy of 2-chloroethylnitrosocarbamoyl derivatives of L-alanine, glycine, their di- and tripeptide homologues and the respective amides in methylnitrosourea-induced rat mammary carcinoma. Klenner T, et al. **Br J Cancer** 1989 Mar;59(3):335–40

Phase I trial of a new nitrosourea, CGP 6809, given every 2 weeks. Creaven PJ, et al. **Cancer Chemother Pharmacol** 1989;23(4):266–7

CGP 6809—a new nitrosoureido–sugar derivative with activity in human tumor xenografts. Fiebig HH, et al. **Cancer Chemother Pharmacol** 1989;23(6):337–40

CGP 6809, a sugar-containing nitrosourea derivative: pharmacological and physicochemical properties. Schieweck K, et al. **Cancer Chemother Pharmacol** 1989; 23(6):341–7

Biological activity of hydroxylated chloroethylnitrosoureas. Zeller WJ, et al. **Cancer Res** 1989 Jun 15;49(12):3267–70

Anti–tumour activity of TCNU in a panel of transplantable murine colon tumours. Bibby MC, et al. **Eur J Cancer Clin Oncol** 1988 Aug;24(8):1361–4

Phase II study of TCNU in advanced breast cancer. Dombernowsky P, et al. **Eur J Cancer Clin Oncol** 1988 Aug;24(8):1377–8

TCNU (LS 2667), a new active drug in the treatment of advanced colorectal cancer. EORTC Early Clinical Trials Group. Gundersen S, et al. **Eur J Cancer Clin Oncol** 1989 Jul;25(7):1095–7

Phase II study of tauromustine in disseminated malignant melanoma. Nolte H, et al. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):655–7

Randomized phase II trial of TCNU versus mitozolomide in malignant melanoma. EORTC Early Clinical Trials Group. Smyth JF, et al. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):755–7

PCNU: phase II evaluation in advanced colorectal carcinoma. Pazdur R, et al. **Invest New Drugs** 1988 Jun; 6(2):93–5

Effect of HECNU in malignant supratentorial gliomas—a phase II study. Georges P, et al. **J Neurooncol** 1988 Nov; 6(3):211–9

Interaction of nicotine with anticancer treatment. Berger MR, et al. **Klin Wochenschr** 1988;66 Suppl 11:127–33

Effects of tauromustine, a water–soluble nitrosourea compound on NMU–1 murine lung tumor. Pratesi G, et al. **Oncology** 1989;46(2):132–5

Chemosensitization by chlorpromazine (CPZ) and caffeine (C) in human melanoma xenografts sensitive or resistant to methyl–CCNU (semustine). Osieka R, et al. **Strahlenther Onkol** 1989 Jul;165(7):526–8

[Therapeutic effect of ranimustine (MCNU) on essential thrombocythemia and polycythemia vera] Nagai M, et al. **Gan To Kagaku Ryoho** 1988 Dec;15(12):3267–70 (Eng. Abstr.) **(Jpn)**

[The use of MCNU to a patient of primary myelofibrosis complicated with pericardial effusion and proteinuria] Shiga Y, et al. **Rinsho Ketsueki** 1989 Apr;30(4):497–501 (Eng. Abstr.) **(Jpn)**

[Dependence of the antitumor activity of nitroso alkyl urea derivatives on their chemical structure] Sharashidze LK, et al. **Eksp Onkol** 1989;11(2):62–5 (Eng. Abstr.) **(Rus)**

TOXICITY

Carcinogenicity and organ specificity of N–trimethylsilylmethyl–N–nitrosourea (TMS–MNU), N–neopentyl–N–nitrosourea (neoPNU), and N–methyl–N–nitrosourea (MNU) in rats. Maekawa A, et al. **J Cancer Res Clin Oncol** 1988;114(5):473–6

Theoretical study of N–nitrosoureas and mechanism of their carcinogenic effect. Frecer V, et al. **Neoplasma** 1989; 36(3):257–72

The pulmonary toxicity of nitrosoureas. Smith AC. **Pharmacol Ther** 1989;41(3):443–60 (116 ref.)

NITROUS ACID see under **NITRITES**

NITROUS OXIDE

Gaseous homeostasis during low–flow anaesthesia. Bengtson JP, et al. **Acta Anaesthesiol Scand** 1988 Oct;32(7):516–21

Respiratory flow characteristics during isoflurane/nitrous oxide anaesthesia. Jonsson LO, et al. **Acta Anaesthesiol Scand** 1989 May;33(4):331–5

Sedation by the use of inhalation agents in dental care. Hallonsten AL. **Acta Anaesthesiol Scand Suppl** 1988;88:31–5 (29 ref.)

Disadvantages of air–oxygen mixtures replacing nitrous oxide [letter] Gillman MA. **Anaesthesia** 1988 Oct;43(10):898–9

Replacing analgesic nitrous oxide with a dangerous alternative [letter] Gillman NA. **Anaesthesia** 1989 Mar; 44(3):255–7

Sufentanil to supplement nitrous oxide in oxygen during balanced anaesthesia. O'Connor M, et al. **Anaesthesia** 1988 Sep;43(9):749–52

Vecuronium infusion requirements in pediatric patients during fentanyl–N2O–O2 anesthesia. Meretoja OA. **Anesth Analg** 1989 Jan;68(1):20–4

Flammability of esophageal stethoscopes, nasogastric tubes, feeding tubes, and nasopharyngeal airways in oxygen– and nitrous oxide–enriched atmospheres. Simpson JI, et al. **Anesth Analg** 1988 Nov;67(11):1093–5

The dose–response relationship of mivacurium chloride in humans during nitrous oxide–fentanyl or nitrous oxide–enflurane anesthesia [published erratum appears in Anesthesiology 1989 Jul;71(1):174] Caldwell JE, et al. **Anesthesiology** 1989 Jan;70(1):31–5

The influence of renal failure on the pharmacokinetics and duration of action of pipecuronium bromide in patients anesthetized with halothane and nitrous oxide. Caldwell JE, et al. **Anesthesiology** 1989 Jan;70(1):7–12

Halothane, fentanyl/nitrous oxide, and spinal lidocaine protect against spinal cord injury in the rat. Cole DJ, et al. **Anesthesiology** 1989 Jun;70(6):967–72

The relationship between adductor pollicis twitch tension and core, skin, and muscle temperature during nitrous oxide–isoflurane anesthesia in humans. Heier T, et al. **Anesthesiology** 1989 Sep;71(3):381–4

Dose–response relationships of doxacurium chloride in humans during anesthesia with nitrous oxide and fentanyl, enflurane, isoflurane, or halothane. Katz JA, et al. **Anesthesiology** 1989 Mar;70(3):432–6

Insufficient anesthetic potency of nitrous oxide in the rat. Mahmoudi NW, et al. **Anesthesiology** 1989 Feb;70(2):345–9

The neuromuscular blocking and cardiovascular effects of doxacurium chloride in patients receiving nitrous oxide narcotic anesthesia. Murray DJ, et al. **Anesthesiology** 1988 Oct;69(4):472–7

Pipecuronium–induced neuromuscular blockade during nitrous oxide–fentanyl, isoflurane, and halothane anesthesia in adults and children. Pittet JF, et al. **Anesthesiology** 1989 Aug;71(2):210–3

The cardiovascular effects of mivacurium chloride (BW B1090U) in patients receiving nitrous oxide–opiate–barbiturate anesthesia. Savarese JJ, et al. **Anesthesiology** 1989 Mar;70(3):386–94

Lower esophageal contractility predicts movement during skin incision in patients anesthetized with halothane, but not with nitrous oxide and alfentanil. Sessler DI, et al. **Anesthesiology** 1989 Jan;70(1):42–6

Nitrous oxide analgesia in a pediatric emergency department. Gamis AS, et al. **Ann Emerg Med** 1989 Feb;18(2):177–81

Neuroleptanesthesia versus thoracic epidural anesthesia for abdominal aortic surgery. Bonnet F, et al. **Ann Vasc Surg** 1989 Jul;3(3):214–9

Monitoring of sedated pediatric dental patients. Whitehead BG, et al. **ASDC J Dent Child** 1988 Sep–Oct;55(5):329–33

The mechanism of reaction of nitrosyl with met– and oxymyoglobin: an ESR study. Neto LM, et al. **Biochim Biophys Acta** 1988 Sep 21;956(2):189–96

Isoflurane: an appropriate alternative to analgesic nitrous oxide? [letter] Gillman MA. **Br J Anaesth** 1988 Oct; 61(4):517–8

Dose–response curves for suxamethonium in neonates, infants and children. Meakin G, et al. **Br J Anaesth** 1989 Jun; 62(6):655–8

Sufentanil and nitrous oxide anaesthesia for cardiac surgery. Windsor JP, et al. **Br J Anaesth** 1988 Dec;61(6):662–8

The mechanisms of nitrous oxide scavenging devices. Donaldson D, et al. **Can Dent Assoc J** 1989 Jul;55(7):531–4

A comparison of the effectiveness of nitrous oxide scavenging devices. Donaldson D, et al. **Can Dent Assoc J** 1989 Jul; 55(7):535–7

The efficiency of nitrous oxide scavenging devices in dental offices. Donaldson D, et al. **Can Dent Assoc J** 1989 Jul; 55(7):541–3

Hyperbaric pressure does not affect the analgesia produced by nitrous oxide in the mouse. Cohen PJ. **Can J Anaesth** 1989 Jan;36(1):40–3

Double blind comparison of alfentanil N2O and fentanyl N2O for outpatient surgical procedures. Enright AB, et al. **Can J Anaesth** 1988 Sep;35(5):462–7

Nitrous oxide in dental practice. Jastak JT. **Int Anesthesiol Clin** 1989 Summer;27(2):92–7 (63 ref.)

Methylation deficiency causes vitamin B12–associated neuropathy in the pig. Weir DG, et al. **J Neurochem** 1988 Dec;51(6):1949–52

Evaluation of induction technique with high flow of nitrous oxide in pediatric patients. Wong KM, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Dec;26(4):353–8

Hemodynamic effects of verapamil during fentanyl–nitrous oxide anesthesia. Griffin RM, et al. **Mt Sinai J Med** 1989 Mar;56(2):93–6

Influence of anesthetics—nitrous oxide in particular—on electromyographic response evoked by transcranial electrical stimulation of the cortex. Zentner J, et al. **Neurosurgery** 1989 Feb;24(2):253–6

Stimulus processing during apparent unconsciousness in anesthetized volunteers. Bonke B, et al. **Percept Mot Skills** 1986 Apr;62(2):587–91

[Combined endotracheal anesthesia with nitrous oxide in conjunction with electroanalgesia during cesarean section in pregnant women with cardiovascular pathology] Radev R, et al. **Akush Ginekol (Sofiia)** 1988;27(5):19–26 (Eng. Abstr.) **(Bul)**

[Comparison of blood pressure profiles with flunitrazepam/fentanyl/nitrous oxide vs cervical epidural anesthesia in surgery of the carotid artery] Pluskwa F, et al. **Ann Fr Anesth Reanim** 1989;8(1):26–32 (Eng. Abstr.) **(Fre)**

[Hemodynamic effects of anesthesia using propofol, fentanyl, nitrous oxide and vecuronium in kidney transplantation in the adult] Nguyên HN, et al. **Cah Anesthesiol** 1989 Jan–Feb; 37(1):17–21 **(Fre)**

[Sufentanil–N2O2/O2 or halothane–N2O/O2 anesthesia in surgery of infants and children with congenital heart defects. Hemodynamics and plasma catecholamines] Barankay A, et al. **Anaesthesist** 1989 Aug;38(8):391–6 (Eng. Abstr.) **(Ger)**

[Anesthesia with alfentanyl in minor surgery] Venuti FS, et al. **Minerva Anestesiol** 1988 Dec;54(12):509–14 (Eng. Abstr.) **(Ita)**

[Nitrogen protoxide in neuro–anesthesia] Venuti FS, et al. **Minerva Anestesiol** 1988 Jun;54(6):249–54 (37 ref.) (Eng. Abstr.) **(Ita)**

ADMINISTRATION & DOSAGE

Inspired oxygen and nitrous oxide concentrations in volunteers during nitrous oxide sedation with a Hudson mask [published erratum appears in Anaesth Intensive Care 1989 Feb;17(1):8] Anderson BJ, et al. **Anaesth Intensive Care** 1988 Nov;16(4):423–6

The nonlinear contribution of nitrous oxide at sub–MAC concentrations to enflurane MAC in rats. Cole DJ, et al. **Anesth Analg** 1989 May;68(5):556–62

Does 1 + 1 = 2? [editorial] Eger EI. **Anesth Analg** 1989 May;68(5):551–2

Different 1.2 MAC combinations of nitrous oxide–enflurane cause unique cerebral and spinal cord metabolic responses in the rat. Cole DJ, et al. **Anesthesiology** 1989 May; 70(5):787–92

Maternal inspired oxygen concentration and neonatal status for caesarean section under general anaesthesia. Comparison of effects of 33% or 50% oxygen in nitrous oxide. Lawes EG, et al. **Br J Anaesth** 1988 Sep;61(3):250–4

The combined effect of nitrous oxide and oxygen and electrical stimulation during restorative dental treatment. Donaldson D, et al. **J Am Dent Assoc** 1989 Jun;118(6):733–6

ADVERSE EFFECTS

Obstetric pain medication and eventual adult amphetamine addiction in offspring. Jacobson B, et al. **Acta Obstet Gynecol Scand** 1988;67(8):677–82

Otic barotrauma due to nitrous oxide [letter] Bailie R, et al. **Anaesthesia** 1988 Oct;43(10):888–9

Occupational exposure to nitrous oxide in four hospitals. Gray WM. **Anaesthesia** 1989 Jun;44(6):511–4

Multiple nerve palsies after anesthesia—a complication of nitrous oxide use? [letter; comment] Lampert BA. **Anesth Analg** 1989 Jul;69(1):136–7. **Comment on:** Anesth Analg 1988 Oct;67(10):1002–4

Effects of "nitrendipine" on nitrous oxide anesthesia, tolerance, and physical dependence. Dolin SJ, et al. **Anesthesiology** 1989 Jan;70(1):91–7

Nitrous oxide does not increase nausea and vomiting following gynaecological laparoscopy. Hovorka J, et al. **Can J Anaesth** 1989 Mar;36(2):145–8

Postoperative nausea and vomiting. A comparison of sufentanil, nitrous oxide, and isoflurane. Bloomfield E, et al. **Cleve Clin J Med** 1988 Nov–Dec;55(6):549–52

The effect of prolonged occupational exposure to the low concentrations of nitrogen oxides in combination with ammonia on chronic bronchitis and the lung function. Jędrychowski W, et al. **G Ital Med Lav** 1987 May–Jul; 9(3–4):147–51

Nitrous oxide mood disorder. Grigg JR. **J Psychoactive Drugs** 1988 Oct–Dec;20(4):449–50

Anaesthetic failure due to faulty agents [letter] Sağlam F. **Lancet** 1989 Feb 18;1(8634):391

[Amnesic effect of nitrous oxide in gradual general anesthesia] Mouquet W, et al. **Cah Anesthesiol** 1989 May;37(3):187–91 **(Fre)**

[Megaloblastic anemia and occupational exposure (letter)] Lisiewicz J. **Przegl Lek** 1988;45(6):546 **(Pol)**

[Laughing gas and amphetamine abuse] Jacobson B, et al. **Lakartidningen** 1989 Jun 21;86(25):2360 **(Swe)**

ANALYSIS

Atmospheric concentrations of nitrous oxide in ambulances during Entonox administration. Ilsley AH, et al. **Anaesth Intensive Care** 1989 Feb;17(1):83–5

Inhalation anaesthetics—exposure and control: a statistical comparison of personal exposures in operating theatres with and without anaesthetic gas scavenging. Gardner RJ. **Ann Occup Hyg** 1989;33(2):159–73

[Evaluation of occupational exposure to inhalation anesthetics. Study Group on Environmental Monitoring, Biological Monitoring and Laboratory Surveillance in Lombardia] **G Ital Med Lav** 1988 Mar;10(2):49–55 (Eng. Abstr.) **(Ita)**

ANTAGONISTS & INHIBITORS

Stereospecific reversal of nitrous oxide analgesia by naloxone. Moody EJ, et al. **Life Sci** 1989;44(11):703–9

Halothane prevents nitrous oxide teratogenicity in Sprague–Dawley rats; folinic acid does not. Mazze RI, et al. **Teratology** 1988 Aug;38(2):121–7

HISTORY

Fifty–seven years ago in Anesthesia & Analgesia. Nitrous oxide anesthesia: a consideration of some associated factors. Anesthesia and Analgesia: 1932; 11:54–9. McKesson EI. **Anesth Analg** 1989 Jun;68(6):739

Theodore Dreiser's "Laughing Gas". Wright AJ. **Anesth Analg** 1989 Sep;69(3):391–2

METABOLISM

Thermophilic Bacillus sp. that shows the denitrification phenotype of Pseudomonas aeruginosa. Gokce N, et al. **Appl Environ Microbiol** 1989 Apr;55(4):1023–5

N2O reduction and HD formation by nitrogenase from a

nifV mutant of Klebsiella pneumoniae. Liang J, et al. **J Bacteriol** 1989 Jun;171(6):3176–80
Nitric oxide and nitrous oxide production and cycling during dissimilatory nitrite reduction by Pseudomonas perfectomarina. Zafiriou OC, et al. **J Biol Chem** 1989 Apr 5;264(10):5694–9

PHARMACOKINETICS

Monitoring of the inspired and end-tidal oxygen, carbon dioxide, and nitrous oxide concentrations: clinical applications during anesthesia and recovery. Linko K, et al. **J Clin Monit** 1989 Jul;5(3):149–56

PHARMACOLOGY

The influence of different anesthetics on the oxygen delivery to and consumption of the heart. van Daal GJ, et al. **Adv Exp Med Biol** 1989;248:527–32
Does nitrous oxide affect the hemodynamic effects of anesthesia induction with propofol? Carlier S, et al. **Anesth Analg** 1989 Jun;68(6):728–33
Effect of N2O on segmental left ventricular function and effective arterial elastance in pigs when added to a halothane–fentanyl–pancuronium anesthetic technique. Coetzee A, et al. **Anesth Analg** 1989 Sep;69(3):313–22
Nitrous oxide augments sympathetic outflow: direct evidence from human peroneal nerve recordings. Ebert TJ, et al. **Anesth Analg** 1989 Oct;69(4):444–9
The effects of anesthetics and PaCO2 on the cerebrovascular, metabolic, and electroencephalographic responses to nitrous oxide in the rabbit. Kaieda R, et al. **Anesth Analg** 1989 Feb;68(2):135–43
Nitrous oxide: cardiovascular effects in infants and small children during halothane and isoflurane anesthesia. Murray D, et al. **Anesth Analg** 1988 Nov;67(11):1059–64
Interaction between nitrous oxide and diazepam in the mouse staircase test. Pruhs RJ, et al. **Anesth Analg** 1989 Apr; 68(4):501–5
The interaction of nitrous oxide and isoflurane with incomplete cerebral ischemia in the rat. Baughman VL, et al. **Anesthesiology** 1989 May;70(5):767–74
Regional differences in left ventricular wall motion in the anesthetized dog. Diedericks J, et al. **Anesthesiology** 1989 Jan;70(1):82–90
Effects of nitrous oxide and halothane on mu and kappa opioid receptors in guinea-pig brain. Ori C, et al. **Anesthesiology** 1989 Mar;70(3):541–4
Mechanism of age-related and nitrous oxide-associated anesthetic sensitivity: the role of brain catecholamines. Roizen MF, et al. **Anesthesiology** 1988 Nov;69(5):716–20
Effect of nitrous oxide inactivation of vitamin B12-dependent methionine synthetase on the subcellular distribution of folate coenzymes in rat liver. Horne DW, et al. **Arch Biochem Biophys** 1989 May 1;270(2):729–33
Nitrous oxide exposure reduces hepatic C1-tetrahydrofolate synthase expression in rats. Barlowe CK, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):245–9
Methionine synthase activities in mice following acute exposures to ethanol and nitrous oxide. Koblin DD, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1353–8
Effects of nitrous oxide on auditory cortical evoked potentials and subjective thresholds. Houston HG, et al. **Br J Anaesth** 1988 Nov;61(5):606–10
Early cortical auditory evoked response in anaesthesia: comparison of the effects of nitrous oxide and isoflurane. Newton DE, et al. **Br J Anaesth** 1989 Jan;62(1):61–5
Short term effect of nitrous oxide on methionine and S-adenosyl methionine concentrations. Royston BD, et al. **Br J Anaesth** 1989 Apr;62(4):419–24
Nitrous oxide selectively reduces the proliferation of the malignant cells in experimental rat leukemia. Ermens AA, et al. **Cancer Lett** 1989 May;45(2):123–8
Influence of nitrous oxide on rat skin allograft. Kripke BJ, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1988 Nov;21(4):230–5
The inhibitory effects of nitrous oxide and methylmercury in vivo on methionine synthase (EC 2.1.1.13) activity in the brain, liver, ovary and spinal cord of the rat. Brennt CE, et al. **Gen Pharmacol** 1989;20(4):427–31
Nitrous oxide interferes with the aminopyrine breath test [letter] Koblin DD. **Hepatology** 1989 Oct;10(4):526–7
Hormonal responses to analgesic nitrous oxide in man. Gillman MA, et al. **Horm Metab Res** 1988 Dec;20(12):751–4
Assessment of the effects of analgesic concentrations of nitrous oxide on human sexual response. Gillman MA. **Int J Neurosci** 1988 Nov;43(1–2):27–33
Analysis of the time distribution and time sequence of behavioral acts. Kernan WJ Jr, et al. **Int J Neurosci** 1988 Nov;43(1–2):35–51
Extension of the analysis of the time structure of behavioral acts. Mullenix PJ, et al. **Int J Neurosci** 1989 Feb; 44(3–4):251–62
Nitrous oxide suppresses the electromyographic response evoked by electrical stimulation of the motor cortex. Zentner J, et al. **Neurosurgery** 1989 Jan;24(1):60–2
Nitrous oxide and human state-dependent memory. Mewaldt SP, et al. **Pharmacol Biochem Behav** 1988 May;30(1):83–7
Effects of a subanesthetic concentration of nitrous oxide on overt and covert assessments of memory and associative processes. Block RI, et al. **Psychopharmacology (Berlin)** 1988;96(3):324–31
[Effect of nitrous oxide on methionine synthetase activity in human placenta] Jendryczko A, et al. **Wiad Lek** 1988 Oct 1;41(19):1286–8 (Eng. Abstr.) **(Pol)**

POISONING

[An autopsy case of the lethal anesthetic accident caused by nitrous oxide mis-inhalation] Naruse T, et al. **Nippon Hoigaku Zasshi** 1988 Aug;42(4–5):397–402 (Eng. Abstr.) **(Jpn)**
[Comparative study of hematologic indicators in poisoning in relation to the degree of blood loss in animals] Iushkova LA, et al. **Gig Sanit** 1989 Mar;(3):90–1 **(Rus)**

THERAPEUTIC USE

Antileukemic effect of nitrous oxide in a patient with chronic myelogenous leukemia [letter] Ikeda K, et al. **Am J Hematol** 1989 Feb;30(2):114
Nitrous oxide analgesia. Pons PT. **Emerg Med Clin North Am** 1988 Nov;6(4):777–82 (37 ref.)
Prehospital pain control: nitrous oxide inhalation. Peterson TD, et al. **Iowa Med** 1989 Jan;79(1):15–7
Analgesic nitrous oxide for addictive withdrawal states. Gillman MA. **S Afr Med J** 1989 Feb 4;75(3):100–1
Influence of heliox, oxygen, and N2O–O2 breathing on N2 bubbles in adipose tissue. Hyldegaard O, et al. **Undersea Biomed Res** 1989 May;16(3):185–93

TOXICITY

On hot mice, cold facts, and would-be replication [letter] Hartung J, et al. **Anesth Analg** 1989 Sep;69(3):408–10
[Hygienic evaluation of chemical industry equipment placed at open sites] Makhalluts AP, et al. **Gig Sanit** 1989 Apr; (4):6–9 (Eng. Abstr.) **(Rus)**

NITROVIN see under **NITROFURANS**

NITROXINIL see under **NITROPHENOLS**

NIZETHAMID see **NIKETHAMIDE**

NK CELLS see **KILLER CELLS, NATURAL**

NMN ADENYLYLTRANSFERASE see under **NUCLEOTIDYLTRANSFERASES**

NMR IMAGING see **MAGNETIC RESONANCE IMAGING**

NMR TOMOGRAPHY see **MAGNETIC RESONANCE IMAGING**

NO FAULT INSURANCE see **INSURANCE, LIABILITY**

NOBEL PRIZE

Habent sua fata libelli: the adventurous story of Albert Szent-Györgyi's book entitled Studies on Muscle (1945). Zallár A, et al. **Acta Physiol Scand** 1989 Apr;135(4):423–4
The 1987 Nobel Prize for physiology or medicine awarded to molecular immunogeneticist Susumu Tonegawa. Weltman JK. **Allergy Proc** 1988 Sep–Oct;9(5):575–6
The evolution of vascular surgery and the Nobel Prize. Szilagyi DE. **Ann Vasc Surg** 1986 Sep;1(2):237–40
Avery's non-recognition in Nobel awards [letter] Kantha SS. **Bioessays** 1989 Apr;10(4):131
Medical Nobels--stamp of genius. Dunlop JM. **BMJ** 1988 Dec 24–31;297(6664):1674–7
Alfred Nobel and the drug hunters [editorial] Rawlins MD. **BMJ** 1988 Dec 24–31;297(6664):1628
Fundamental laws of nature. Morowitz HJ. **Hosp Pract [Off]** 1989 Sep 15;24(9):161–2
Sir James Black, FRS, FRCP, FACC: Nobel laureate 1988. Meijler FL. **J Am Coll Cardiol** 1989 Mar 1;13(3):769–70
In celebration of a Nobel Prize [editorial] Chabner BA. **J Natl Cancer Inst** 1988 Dec 7;80(19):1512–3
Nobelists emphasize interdependence in global science and technology [news] Kangilaski J. **JAMA** 1989 Jul 21; 262(3):325–6
Pharmacology researchers receive 1988 Nobel Prize [news] Marwick C. **JAMA** 1988 Nov 11;260(18):2625
A review of Nobel prizes in medicine or physiology, 1901–87. Kantha SS. **Keio J Med** 1989 Mar;38(1):1–12
Tadeusz Reichstein--a Polish winner of the Nobel Prize. Sterkowicz S. **Mater Med Pol** 1988 Jul–Sep,20(3):201–4
The Nobel Prize and medical progress through technology [editorial] Hutten H. **Med Prog Technol** 1988;14(1):5–6
1988 Nobel prizes announced for physics and for chemistry [news] Lindley D, et al. **Nature** 1988 Oct 27; 335(6193):752–3
Pharmaceuticals trio a popular choice for Nobel awards [news] Newmark P. **Nature** 1988 Oct 20;335(6192):658
A spin-labelling Nobel? [letter] Zhdanov RI. **Nature** 1989 Jun 15;339(6225):500
The golden age of pharmacology [editorial] Goldowsky SJ. **R I Med J** 1989 Mar;72(3):83
The Nobel Prize for Medicine or Physiology, 1901, awarded to Emil Adolf von Behring. **Scand J Immunol** 1989 Jul; 30(1):3–12
Physiology or medicine. Horgan J. **Sci Am** 1988 Dec; 259(6):33
The 1988 Nobel Prize for Physiology or Medicine [news] [pubished erratum appears in Science 1989 Jan 6;243(4887):12] Marx JL. **Science** 1988 Oct 28; 242(4878):516–7
[Sir James Black, Nobel laureate 1988] Meijler FL. **Ned Tijdschr Geneeskd** 1988 Dec 31;132(53):2429–30 **(Dut)**
[Nobel prize for Medicine 1988] van Zwieten PA. **Ned Tijdschr Geneeskd** 1988 Dec 31;132(53):2401–2 **(Dut)**
[New principles of pharmacotherapy. The 1988 Nobel Prize for Medicine] Vetter W. **Dtsch Med Wochenschr** 1989 Jan 13;114(2):71–2 **(Ger)**
[The Nobel Prize for Medicine for the development of a therapeutic principle] Wink K. **Med Klin** 1989 Feb 15; 84(2):116–7 **(Ger)**
[1988 Nobel prize for medicine and physiology (editorial)] Shoenfield Y, et al. **Harefuah** 1988 Dec 15;115(12):404–5 **(Heb)**
[S. Tonegawa, 1987 Nobel Prize laureate in medicine] Gergely J. **Orv Hetil** 1988 Aug 21;129(34):1822–3 **(Hun)**
[1988 Nobel laureates in medicine] Pécsi T. **Orv Hetil** 1989 Mar 19;130(12):634–5 **(Hun)**
[The Nobel Prize in Medicine 1987: antibody diversity (editorial)] Piazzon I, et al. **Medicina (B Aires)** 1988; 48(1):97–9 **(Spa)**
[Nobel Prize in medicine, 1984 (editorial)] Stoppani AO. **Medicina (B Aires)** 1985;45(1):77–8 **(Spa)**
[Nobel Prize in medicine: three share this year's Nobel Prize in medicine. Important principles in drug therapy] Sjöqvist F. **Lakartidningen** 1988 Oct 26;85(43):3542–7 **(Swe)**

NOCARDIA

[Review: bacteriology of Nocardia—classification and identification] Tsukamura M. **Kekkaku** 1988 Sep; 63(9):605–10 (35 ref.) (Eng. Abstr.) **(Jpn)**

ANALYSIS

Granuloma formation and cytokine-inducing activities of glycolipids containing mycolic acids from Nocardia rubra. Oka S, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:123–4

CLASSIFICATION

Presumptive identification of nocardias in a clinical laboratory. Collins CH, et al. **J Appl Bacteriol** 1988 Jul; 65(1):55–9

DRUG EFFECTS

In vitro susceptibilities of Nocardia species to newer antimicrobial agents. Berkey P, et al. **Antimicrob Agents Chemother** 1988 Jul;32(7):1078–9
In-vitro susceptibility testing of Nocardia spp. and its taxonomic implication. Boiron P, et al. **J Antimicrob Chemother** 1988 Nov;22(5):623–9

ENZYMOLOGY

Modification of recombinant N alpha-acetyl-eglin c by novel proteases from Nocardia mediterranei. Schar H, et al. **Ann N Y Acad Sci** 1988;542:302–6
Purification and characterisation of glutamine synthetase from Nocardia corallina. Illing N, et al. **Antonie Van Leeuwenhoek** 1988;54(6):497–507
Purification and properties of DAHP synthase from Nocardia mediterranei. Xia TH, et al. **Biochim Biophys Acta** 1989 Apr 25;991(1):1–5
Comparison of the NH2-terminal amino acid sequences of the four non-identical subunits of the NAD-linked hydrogenases from Nocardia opaca 1b and Alcaligenes eutrophus H16. Zaborosch C, et al. **Eur J Biochem** 1989 Apr 15;181(1):175–80
[Substrate specificity of the biotransformation enzymes in a Nocardia erythropolis culture] Klimashina MM, et al. **Izv Akad Nauk SSSR [Biol]** 1989 May–Jun;(3):429–34 (Eng. Abstr.) **(Rus)**

GENETICS

Cloning the FnuDI, NaeI, NcoI and XbaI restriction-modification systems. Van Cott EM, et al. **Gene** 1988 Dec 25;74(1):55–9

IMMUNOLOGY

Effect of Nocardia rubra cell wall skeleton on interleukin 1 production from mouse peritoneal macrophages. Inamura N, et al. **Int J Immunopharmacol** 1988;10(5):547–54
Enhancement of natural killer cell activity by Nocardia opaca fractions. Barot-Ciorbaru R, et al. **Scand J Immunol** 1989 Feb;29(2):133–41

ISOLATION & PURIFICATION

A case of lung infection caused by an unusual strain of Nocardia farcinica. Tsukamura M, et al. **Microbiol Immunol** 1988;32(5):541–6
[Nocardiosis: clinical and bacteriological aspects. Experience in 16 cases] Fernández M, et al. **Rev Med Chil** 1987 Nov; 115(11):1053–60 (Eng. Abstr.) **(Spa)**

METABOLISM

Regulation of the biosynthetic pathway of aromatic amino acids in Nocardia mediterranei. Xia TH, et al.

Biochim Biophys Acta 1989 Apr 25;991(1):6–11
Oxidation processes in the biosynthesis of the tetracenomycin and elloramycin antibiotics. Anderson MG, et al.
J Antibiot (Tokyo) 1989 Apr;42(4):640–3
Production of enantiomer of nanaomycin a by Nocardia. Imai H, et al. J Antibiot (Tokyo) 1989 Jul;42(7):1186–8
3-Methylpseudouridine as a fermentation product. Nielsen JB, et al. J Antibiot (Tokyo) 1989 Aug;42(8):1248–52
A resting cell system for efrotomycin biosynthesis. Nielsen JB, et al. J Antibiot (Tokyo) 1989 Jun;42(6):944–51
A42867, a novel glycopeptide antibiotic. Riva E, et al.
J Antibiot (Tokyo) 1989 Apr;42(4):497–505
[Phosphate control to rifamycin SV biosynthesis] Ni LY, et al. Wei Sheng Wu Hsueh Pao 1988 Dec;28(4):340–5 (Eng. Abstr.) (Chi)
[Combined immobilized cultures producing fibrinolytic proteinases] Egorov NS, et al. Mikrobiologiia 1988 Nov–Dec;57(6):945–51 (Eng. Abstr.) (Rus)
[Analysis of the products of ergosta-7,22-dien-3-beta-ol biotransformation by a Nocardia erythropolis culture] Klimashina MM, et al. Prikl Biokhim Mikrobiol 1988 Sep–Oct;24(5):647–52 (Eng. Abstr.) (Rus)
[Microbiologic transformation of flavonoids. I. Flavanone derivatives] Blanco SE, et al. Rev Latinoam Microbiol 1988 Oct–Dec;30(4):369–74 (Eng. Abstr.) (Spa)

PATHOGENICITY

Extracellular proteinase production and the pathogenicity of Nocardiae. Tsuboi R, et al. Arch Dermatol Res 1989; 281(1):78–80

PHYSIOLOGY

Extracellular product of Nocardia amarae induces bacterial cell flocculation. Koizumi J, et al.
FEMS Microbiol Lett 1989 Jan 1;48(1):61–4
Physiological and pathogenic characteristics of Nocardia brasiliensis isolated from human mycetomas. van Gelderen de Komaid A. Mycopathologia 1989 Feb;105(2):111–6
[The structure and biological role of polysaccharides in Mycobacterium, Corynebacterium and Nocardia] Varbanets LD. Mikrobiol Zh 1988 Sep–Oct;50(5):98–107 (48 ref.) (Rus)

ULTRASTRUCTURE

[Morphologo-structural characteristics of the cells of coryneform and nocardiaform bacteria] Stepaniuk VV, et al. Mikrobiol Zh 1988 Sep–Oct;50(5):34–41 (Eng. Abstr.) (Rus)

NOCARDIA ASTEROIDES

ANALYSIS

Relationships between structure and biological activity of the mycolic acid-containing glycolipids from Nocardia asteroides "sensu stricto" and related species. Han Y, et al. Acta Leprol (Geneve) 1989;7 Suppl 1:130–2

DRUG EFFECTS

Antimicrobial susceptibility patterns of Nocardia asteroides. Wallace RJ Jr, et al. Antimicrob Agents Chemother 1988 Dec;32(12):1776–9

ENZYMOLOGY

[Extracellular proteinase from Nocardia asteroides] Yamaguchi T, et al. Nippon Hifuka Gakkai Zasshi 1988 Nov;98(12):1249–52 (Eng. Abstr.) (Jpn)

GENETICS

Method for improved extraction of DNA from Nocardia asteroides. Loeffelholz MJ, et al. J Clin Microbiol 1989 Aug;27(8):1880–1

ISOLATION & PURIFICATION

Gas chromatographic fatty acid determination to differentiate Nocardia asteroides, Mycobacterium fortuitum and Mycobacterium chelonei. Fourche J, et al.
J Chromatogr 1989 Jan 27;487(1):142–6

METABOLISM

Mouse cachexia induced by trehalose dimycolate from Nocardia asteroides. Silva CL, et al. J Gen Microbiol 1988 Jun;134 (Pt 6):1629–33

NOCARDIA INFECTIONS

Nocardia asteroides keratitis associated with extended-wear soft contact lenses. Parsons MR, et al.
Can J Ophthalmol 1989 Apr;24(3):120–2
Nocardia asteroides keratitis: a case associated with soft contact lens wear. Enzenauer RW, et al. CLAO J 1989 Jan–Mar;15(1):71–3
Primary subcutaneous abscess caused by Nocardia otitidiscaviarum. Hachisuka H, et al.
J Am Acad Dermatol 1989 Jul;21(1):137–9
Nocardia asteroides cervical osteomyelitis in an immunocompetent host. Rosendale DE, et al.
Otolaryngol Head Neck Surg 1983 Sep;99(3):334–7
Lymphocutaneous nocardiosis in Pennsylvania. Hessen MT, et al. Pa Med 1988 Nov;91(11):54, 56, 58
Pleuropulmonary manifestations of actinomycosis and nocardiosis. Heffner JE. Semin Respir Infect 1988 Dec; 3(4):352–61 (57 ref.)
[Isolated cerebral nocardiosis. A case (letter)] Guidon-Attali C, et al. Presse Med 1988 Sep 24;17(32):1649 (Fre)
[Review: human nocardiosis] Tsukamura M. Kekkaku 1988 Oct;63(10):651–9 (77 ref.) (Eng. Abstr.) (Jpn)

CHEMICALLY INDUCED

Nocardiosis associated with low dose methotrexate for rheumatoid arthritis [letter] Keegan JM, et al.
J Rheumatol 1988 Oct;15(10):1585–6

COMPLICATIONS

Nocardial spinal epidural abscess. Siao P, et al. Neurology 1989 Jul;39(7):996
Nocardial infection in patients with neoplastic disease. Berkey P, et al. Rev Infect Dis 1989 May–Jun;11(3):407–12
Pulmonary infection with Nocardia caviae in a patient with diabetes mellitus and liver cirrhosis. Salh B, et al.
Thorax 1988 Nov;43(11):933–4

DIAGNOSIS

Primary lymphocutaneous Nocardia brasiliensis infection: three case reports and a review of the literature. Schwartz JG, et al. Diagn Microbiol Infect Dis 1988 Jun;10(2):113–20 (26 ref.)
Disseminated Nocardia asteroides with pustules. Shapiro PE, et al. J Am Acad Dermatol 1989 May;20(5 Pt 2):889–92
Nocardia transvalensis pneumonia in a child. Baghdadlian H, et al. Pediatr Infect Dis J 1989 Jul;8(7):470–1
Endogenous Nocardia asteroides subretinal abscess diagnosed by transvitreal fine-needle aspiration biopsy. Gregor RJ, et al. Retina 1989;9(2):118–21
Nocardiosis: a neglected chronic lung disease in Africa? Baily GG, et al. Thorax 1988 Nov;43(11):905–10
Nocardia infection in a renal transplant unit. Leaker B, et al. Transplant Proc 1989 Feb;21(1 Pt 2):2103–4
[Disseminated nocardiosis due to Nocardia brasiliensis in an ambulatory patient] Zufferey P, et al.
Schweiz Rundsch Med Prax 1989 Jun 20;78(25):718–21 (Eng. Abstr.) (Fre)

DRUG THERAPY

Antimicrobial synergism in the therapy of experimental cerebral nocardiosis. Gombert ME, et al.
J Antimicrob Chemother 1989 Jul;24(1):39–43
[Successful antibiotic treatment of a pulmonary infection with Nocardia asteroides (biovariety A3)] Ruppert S, et al.
Dtsch Med Wochenschr 1988 Nov 18;113(46):1801–5 (Eng. Abstr.) (Ger)
[Therapy of brain abscess, caused by Nocardia farcinica] Dietlein E, et al. Med Klin 1988 Sep 16;83(18):613–4 (Ger)
[Nocardial brain abscess: case report] Yamaguchi Y, et al. No Shinkei Geka 1989 Mar;17(3):285–9 (14 ref.) (Eng. Abstr.) (Jpn)

EPIDEMIOLOGY

Nocardial infections in Israel: a survey. Frumkin A.
Isr J Med Sci 1989 Jun;25(6):324–7 (22 ref.)

ETIOLOGY

Presumed intraocular nocardiosis in a cardiac-transplant patient. Mamalis N, et al. Ann Ophthalmol 1988 Jul; 20(7):271–3, 276
Experience with Nocardia asteroides in renal transplant recipients. Hellyar AG. J Hosp Infect 1988 Jul;12(1):13–8
Nocardial infections in renal transplant recipients. Wilson JP, et al. Medicine (Baltimore) 1989 Jan;68(1):38–57 (259 ref.)
Nocardia pneumonia in a neonate with chronic granulomatous disease. Johnston HC, et al.
Pediatr Infect Dis J 1989 Aug;8(8):526–8
Nocardial endocarditis after aortic valve replacement. Reports of two cases. Eigel P, et al.
Scand J Thorac Cardiovasc Surg 1988;22(3):289–90
[Primary cutaneous nocardiosis and human immunodeficiency virus infection (letter)] Gaspar G, et al. Med Clin (Barc) 1989 Apr 22;92(15):598–9 (Spa)

MICROBIOLOGY

A case of lung infection caused by an unusual strain of Nocardia farcinica. Tsukamura M, et al.
Microbiol Immunol 1988;32(5):541–6
Physiological and pathogenic characteristics of Nocardia brasiliensis isolated from human mycetomas. van Gelderen de Komaid A. Mycopathologia 1989 Feb;105(2):111–6
Nocardia asteroides brain abscess following mastoidectomy. Cox F, et al. Pediatr Neurol 1986 May–Jun;2(3):183–4
[Nocardiosis: clinical and bacteriological aspects. Experience in 16 cases] Fernández M, et al. Rev Med Chil 1987 Nov; 115(11):1053–60 (Eng. Abstr.) (Spa)

PATHOLOGY

Headache, mental status changes, and death in a 36-year-old woman with lupus [clinical conference] Am J Med 1989 Jan;86(1):94–102
Nocardia asteroides keratitis presenting as a persistent epithelial defect. Perry HD, et al. Cornea 1989;8(1):41–4
[Nocardiosis of the lung] Zahradka W, et al.
Z Gesamte Inn Med 1988 Aug 15;43(16):471–2 (Eng. Abstr.) (Ger)
[A case of nocardiosis located in the suprahyoid region (histopathological and microbiological clinical study] Bianchi L, et al. Boll Ist Sieroter Milan 1988;67(2):165–72 (3 ref.) (Eng. Abstr.) (Ita)
[A 46-year-old man with treated pulmonary tuberculosis and later subacute neurological deterioration (clinical conference)] Rev Clin Esp 1988 Apr;182(7):379–87 (Spa)

RADIOGRAPHY

Intracerebral Nocardia brasiliensis infection. Schmid A, et al. Neurosurg Rev 1987;10(4):315–9

SURGERY

[Surgical treatment of mycetoma located in the face] Orellano Ocampo F, et al. Med Cutan Ibero Lat Am 1989;17(1):9–12 (Eng. Abstr.) (Spa)

THERAPY

Nocardial cerebral abscess: report of a case. Tang LM, et al. Taiwan I Hsueh Hui Tsa Chih 1989 Feb;88(2):186–8

VETERINARY

Preliminary observations on bovine cutaneous nocardiosis and dermatophilosis in the subhumid climate of southern Nigeria. Oyekunle MA, et al.
Rev Elev Med Vet Pays Trop 1988;41(4):347–51
Abortion in two foals associated with Nocardia infection. Bolon B, et al. Vet Pathol 1989 May;26(3):277–8
[Nocardia mastitis] Hartmann H. Schweiz Arch Tierheilkd 1989;131(1):31–2 (5 ref.) (Ger)

NOCARDIACEAE

CLASSIFICATION

Molecular taxonomic studies on some LL-diaminopimelic acid-containing coryneforms from herbage: description of Nocardioides fastidiosa sp. nov. Collins MD, et al.
FEMS Microbiol Lett 1989 Feb;48(3):289–93
[Mycolic acids and phospholipids analysis of nocardioform actinomycetes and related taxa] Liu ZH, et al.
Wei Sheng Wu Hsueh Pao 1988 Sep;28(3):206–10 (Eng. Abstr.) (Chi)

ISOLATION & PURIFICATION

Catheter-related bacteremia caused by Oerskovia turbata. LeProwse CR, et al. J Clin Microbiol 1989 Mar;27(3):571–2

METABOLISM

Antiinflammatory and antiallergic effects of a novel metabolite of Nocardiopsis sp. as a potent protein kinase C inhibitor from microbial origin. Ohmori K, et al.
Arzneimittelforschung 1988 Jun;38(6):809–14
Silicon (Si) utilisation by chemoautotrophic nocardioform bacteria isolated from human and animal tissues infected with leprosy bacillus. Chakrabarty AN, et al.
Indian J Exp Biol 1988 Nov;26(11):839–44
Metabolism of fossil fuels by chemoautotrophic nocardioform bacteria from infectious leprosy tissues and its implications. Chakrabarty AN, et al. Indian J Exp Biol 1988 Nov; 26(11):845–7
Rodaplutin, a new peptidylnucleoside from Nocardioides albus. Dellweg H, et al. J Antibiot (Tokyo) 1988 Aug; 41(8):1145–7
[Controlled search for antibiotic producers among Actinomadura] Terekhova LP, et al. Antibiot Khimioter 1988 Dec;33(12):930–4 (60 ref.) (Rus)

NOCICEPTION TESTS see **PAIN MEASUREMENT**

NOCICEPTORS

Nociceptive cutaneous stimuli evoke localized contractions in a skeletal muscle. Theriault E, et al. J Neurophysiol 1988 Aug;60(2):446–62

ANATOMY & HISTOLOGY

GABA-immunoreactive neurons and terminals in the lateral cervical nucleus of the cynomolgus monkey. Broman J, et al. J Comp Neurol 1989 May 15;283(3):415–24
Nociceptive body representation in nucleus ventralis posterolateralis of cat thalamus. Yokota T, et al.
J Neurophysiol 1988 Nov;60(5):1714–27
Visceral nociceptive transmission at the spinal level: structural aspects. Sobrino Montalban JA.
P R Health Sci J 1988 Aug;7(2):166–71 (46 ref.)

DRUG EFFECTS

Apparent hyperalgesia in the mouse tail-flick test due to increased tail skin temperature after lesioning of serotonergic pathways. Eide PK, et al.
Acta Physiol Scand 1988 Nov;134(3):413–20
Intrathecal galanin increases the latency in the tail-flick and hot-plate test in mouse. Post C, et al.
Acta Physiol Scand 1988 Apr;132(4):583–4

Bradykinin activates peripheral capsaicin-sensitive fibres via a second messenger system. Dray A, et al. **Agents Actions** 1988 Dec;25(3–4):214–5

Antinociceptive activity of pentamorphone, a 14-beta-aminomorphinone derivative, compared to fentanyl and morphine. Rudo FG, et al. **Anesth Analg** 1989 Oct;69(4):450–6

Intrathecal midazolam and fentanyl in the rat: evidence for different spinal antinociceptive effects [published erratum appears in Anesthesiology 1989 Sep;71(3):482] Serrao JM, et al. **Anesthesiology** 1989 May;70(5):780–6

Associative morphine tolerance in the rat: examinations of compensatory responding and cross-tolerance with stress-induced analgesia. Maude-Griffin PM, et al. **Behav Neural Biol** 1989 Jan;51(1):11–33

Naltrexone-reversible pain suppression in the isolated attacking mouse. Siegfried B, et al. **Behav Neural Biol** 1988 Nov;50(3):354–60

Procedures that produce context-specific tolerance to morphine in rats also produce context-specific withdrawal. Falls WA, et al. **Behav Neurosci** 1989 Aug;103(4):842–9

Effects of time of testing, stress level, and number of conditioning days on naloxone sensitivity of conditioned stress-induced analgesia in rats. Hagen HS, et al. **Behav Neurosci** 1988 Dec;102(6):906–14

Pro-Leu-Gly-NH2 serves as a conditioned stimulus in the acquisition of conditioned tolerance. McLaughlin CR, et al. **Behav Neurosci** 1989 Apr;103(2):447–51

Tolerance to morphine in the rat: associative and nonassociative effects. Tiffany ST, et al. **Behav Neurosci** 1988 Aug;102(4):534–43

Sustained delivery of aspirin by means of ALCAP ceramics. Snow KR, et al. **Biomed Sci Instrum** 1989;25:203–11

Modality-specific antinociception produced by intrathecal injection of anti-somatostatin antiserum in rats. Ohno H, et al. **Brain Res** 1988 Nov 22;474(1):197–200

Antinociception vs motor effects of intrathecal vasopressin as measured by four pain tests. Thurston CL, et al. **Brain Res** 1988 Oct 25;463(1):1–11

Independence of aversive and pain mechanisms in the dorsal periaqueductal gray matter of the rat. Borges PC, et al. **Braz J Med Biol Res** 1988;21(5):1027–31

A new mechanism of action of dipyrone: blockade of the release of a nociceptive factor from macrophages. de Campos DI, et al. **Braz J Med Biol Res** 1988;21(3):565–8

Ruthenium red selectively prevents capsaicin-induced nociceptor stimulation. Amann R, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):227–9

Flupirtine depresses nociceptive activity evoked in rat thalamus. Bleyer H, et al. **Eur J Pharmacol** 1988 Jul 7; 151(2):259–65

In vivo characterization of phencyclidine/sigma agonist-mediated inhibition of nociception. DeLander GE, et al. **Eur J Pharmacol** 1989 Jan 10;159(2):149–56

Potent antinociceptive effect of centrally administered delta-sleep-inducing peptide (DSIP). Nakamura A, et al. **Eur J Pharmacol** 1988 Oct 18;155(3):247–53

Experimental evaluation of radiographic contrast media in perivascular pain receptors in the perfused isolated rabbit ear. Hagen B, et al. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1989; 128:46–53

Effect of L-tryptophan supplementation on exercise performance. Segura R, et al. **Int J Sports Med** 1988 Oct; 9(5):301–5

Differential effects of morphine and clonidine on visceral and cutaneous spinal nociceptive transmission in the rat. Ness TJ, et al. **J Neurophysiol** 1989 Jul;62(1):220–30

Characterization of antinociception produced by glutamate microinjection in the nucleus tractus solitarius and the nucleus reticularis ventralis. Randich A, et al. **J Neurosci** 1988 Dec;8(12):4675–84

Effects of somatostatin, a somatostatin analog, neurotensin and met-enkephalin in the eye with special reference to the irritative response. Stjernschantz J, et al. **J Ocul Pharmacol** 1985 Spring;1(1):59–70

A simple microcomputer interface for tail-flick determination. Harris DP, et al. **J Pharmacol Methods** 1988 Sep;20(2):103–8

Long-lasting glucocorticoid suppression of opioid-induced antinociception. Ratka A, et al. **Neuroendocrinology** 1988 Oct;48(4):439–44

Reversal by beta-funaltrexamine and 16-methyl cyprenorphine of the antinociceptive effects of opioid agonists in the mouse and guinea-pig. Hayes AG, et al. **Neuropharmacology** 1988 Aug;27(8):813–6

Effect of morphine on the electroencephalogram and other physiological and other physiological and behavioral parameters. Matejcek M, et al. **Neuropsychobiology** 1988; 19(4):202–11

Microinjections of glutamate or morphine at coincident midbrain sites have different effects on nociceptive dorsal horn neurons in the rat. Carstens E, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):185–91

B vitamins suppress spinal dorsal horn nociceptive neurons in the cat. Fu QG, et al. **Neurosci Lett** 1988 Dec 19; 95(1–3):192–7

Reversal of the antinociceptive effects of intrathecally administered serotonin in the rat by a selective 5-HT3 receptor antagonist. Glaum SR, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):313–7

Electrophysiological evidence for a role of bradykinin in chemical nociception in the rat. Haley JE, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):198–202

Buspirone effect on the development of antinociceptive reactions. Bragin EO, et al. **Pain** 1989 Feb;36(2):257–61

Opposing effect of apomorphine on antinociceptive activity of morphine: a dose-dependent phenomenon. Gupta YK, et al. **Pain** 1989 Feb;36(2):263–9

Opioid involvement in TRH-induced antinociception in the rat following intracerebral administration. Reny-Palasse V, et al. **Pain** 1989 Aug;38(2):193–201

Distinguishable effects of intrathecal dynorphins, somatostatin, neurotensin and s-calcitonin on nociception and motor function in the rat. Spampinato S, et al. **Pain** 1988 Oct;35(1):95–104

Naloxone does not alter the perception of pain induced by electrical and thermal stimulation of the skin in healthy humans. Stacher G, et al. **Pain** 1988 Sep;34(3):271–6

Apparent antinociceptive properties of piperazine-type serotonin agonists: trifluoromethylphenylpiperazine, chlorophenylpiperazine, and MK-212. McKearney JW. **Pharmacol Biochem Behav** 1989 Mar;32(3):657–60

Interactions between pentazocine and tripelennamine on autonomic and nociceptive measures in the dog. Vaupel DB. **Pharmacol Biochem Behav** 1989 May;33(1):245–51

Systemic naloxone does not affect pain-related behaviour in the formalin test in rat. Kocher L. **Physiol Behav** 1988; 43(3):265–8

Chemical factors in the sensitization of cutaneous nociceptors. Cohen RH, et al. **Prog Brain Res** 1988; 74:201–6

Brain stem neuronal circuitry underlying the antinociceptive action of opiates. Fields HL, et al. **Prog Brain Res** 1988; 77:245–57 (51 ref.)

Effects of morphine given in the brain stem on the activity of dorsal horn nociceptive neurons. Gebhart GF, et al. **Prog Brain Res** 1988;77:229–43 (49 ref.)

Neuronal effects of controlled superfusion of the spinal cord with monoaminergic receptor antagonists in the cat. Sandkühler J, et al. **Prog Brain Res** 1988;77:321–7

Relationship between behavioral and nociceptive changes in attacked mice: effects of opiate antagonists. Frischknecht HR, et al. **Psychopharmacology (Berlin)** 1989;97(2):160–2

The effect of endotoxin on nociception in mice. Ishikawa M, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jul; 65(1):115–8

Methyl salicylate as a cutaneous stimulus: a psychophysical analysis. Green BG, et al. **Somatosens Mot Res** 1989; 6(3):253–74

[Local anesthetic effect and subjective tolerance of 2% carteolol and 0.6% metipranolol on healthy eyes] Höh H. **Klin Monatsbl Augenheilkd** 1989 Apr;194(4):241–8 (Eng. Abstr.) **(Ger)**

[Effect of epidural capsaicin on thermal sensitivity in rats] Kawai M. **Masui** 1988 Oct;37(10):1212–23 (Eng. Abstr.) **(Jpn)**

[Klofelin intensification of the analgesic effect of ketamine and its influence on the nociceptive reaction of the arterial pressure] Panov AV, et al. **Farmakol Toksikol** 1988 Nov-Dec;51(6):48–50 (Eng. Abstr.) **(Rus)**

[Comparative study of the nociceptive reactions when bradykinin is administered in different receptor areas to waking animals] Panov AV. **Patol Fiziol Eksp Ter** 1988 May-Jun;(3):9–11 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Development of spinal substrate for nociception in man. Bijlani V, et al. **NIDA Res Monogr** 1988;87:167–79

METABOLISM

Blockade of GABAA receptors in the midbrain periaqueductal gray abolishes nociceptive spinal dorsal horn neuronal activity. Sandkühler J, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):163–6

Distribution of glycine receptor immunoreactivity in the spinal cord of the rat: cytochemical evidence for a differential glycinergic control of lamina I and V nociceptive neurons. Basbaum AI. **J Comp Neurol** 1988 Dec 15;278(3):330–6

PHYSIOLOGY

Interactions between noradrenergic and cholinergic mechanisms involved in spinal nociceptive processing. Gordh T Jr, et al. **Acta Anaesthesiol Scand** 1989 Jan; 33(1):39–47

Increased plasma levels of oxytocin in response to afferent electrical stimulation of the sciatic and vagal nerves and in response to touch and pinch in anaesthetized rats. Stock S, et al. **Acta Physiol Scand** 1988 Jan;132(1):29–34

A novel type of unmyelinated chemosensitive nociceptor in the acutely inflamed urinary bladder. Häbler HJ, et al. **Agents Actions** 1988 Dec;25(3–4):219–21

Neurogenic inflammation in the skin of the rabbit. Lynn B, et al. **Agents Actions** 1988 Dec;25(3–4):228–30

Intrathecal fentanyl depresses nociceptive flexion reflexes in patients with chronic pain. Chabal C, et al. **Anesthesiology** 1989 Feb;70(2):226–9

On the nature of the afferent fibers of oculomotor nerve. Manni E, et al. **Arch Ital Biol** 1989 Mar;127(2):99–108

Differentiation of the substrates for analgesia and vocalizations elicited by midbrain stimulation in rats: refractory period estimates. Schenk S, et al. **Behav Brain Res** 1988 Dec 1;31(2):105–10

Chronic sweet intake lowers pain thresholds without changing brain mu- or delta-opiate receptors. Holder MD, et al. **Behav Neural Biol** 1988 Nov;50(3):335–43

Exposure to novel odors induces opioid-mediated analgesia in the land snail, Cepaea nemoralis. Kavaliers M, et al. **Behav Neural Biol** 1988 Nov;50(3):285–99

Noradrenergic and serotonergic involvement in brief shock-induced analgesia in rats. Minor BG, et al. **Behav Neurosci** 1988 Dec;102(6):915–24

Swim-stress-induced antinociception in young rats. Jackson HC, et al. **Br J Pharmacol** 1989 Mar;96(3):617–22

Chronic hyperalgesia and skin warming caused by sensitized C nociceptors. Cline MA, et al. **Brain** 1989 Jun;112 (Pt 3):621–47

Nociceptive responses of trigeminal neurons in SII-7b cortex of awake monkeys. Dong WK, et al. **Brain Res** 1989 Apr 10;484(1–2):314–24

The influence of opioid receptor subtypes on the processing of nociceptive inputs in the spinal dorsal horn of the cat. Fleetwood-Walker SM, et al. **Brain Res** 1988 Jun 7; 451(1–2):213–26

Putative nociceptive modulatory neurons in the dorsolateral pontomesencephalic reticular formation. Haws CM, et al. **Brain Res** 1989 Apr 3;483(2):272–82

Comparison of the antinociceptive effect of morphine and glutamate at coincidental sites in the periaqueductal gray and medial medulla in rats. Jensen TS, et al. **Brain Res** 1989 Jan 2;476(1):1–9

Inhibition of spinal nociceptive transmission from the midbrain, pons and medulla in the rat: activation of descending inhibition by morphine, glutamate and electrical stimulation. Jones SL, et al. **Brain Res** 1988 Sep 20; 460(2):281–96

Beta-estradiol induced catecholamine-sensitive hyperalgesia: a contribution to pain in Raynaud's phenomenon. Levine JD, et al. **Brain Res** 1989 May 15;487(1):143–7

A noxious stimulus induces the preprotachykinin-A gene expression in the rat dorsal root ganglion: a quantitative study using in situ hybridization histochemistry. Noguchi K, et al. **Brain Res** 1988 Aug;464(1):31–5

The spinal antinociceptive actions of morphine metabolites morphine-6-glucuronide and normorphine in the rat. Sullivan AF, et al. **Brain Res** 1989 Mar 20;482(2):219–24

Beta-funaltrexamine disrupts the day-night rhythm of nociception in mice. Kavaliers M. **Brain Res Bull** 1989 May; 22(5):783–5

Responses of pain-sensitive neurons of thalamic parafascicular nucleus to stimulation of anterior cingulate gyrus in rabbits. Yin HZ, et al. **Chen Tzu Yen Chiu** 1988; 13(4):299–304

Involvement of serotonin in nociceptive pathways. Roberts MH. **Drug Des Deliv** 1989 Mar;4(2):77–83 (52 ref.)

Behavioural and electrophysiological studies on the paradoxical antinociceptive effects of an extremely low dose of naloxone in an animal model of acute and localized inflammation. Kayser V, et al. **Exp Brain Res** 1988; 73(2):402–10

Sensitized nociceptors in reflex sympathetic dystrophies. Marchettini P, et al. **Funct Neurol** 1989 Apr-Jun; 4(2):135–40 (28 ref.)

Structure-function relationships in rat brainstem subnucleus interpolaris: III. Local circuit neurons. Jacquin MF, et al. **J Comp Neurol** 1989 Apr 1;282(1):24–44

Cutaneous sensory afferents recorded from the nervus intramandibularis of Gallus gallus var domesticus. Gentle MJ. **J Comp Physiol [A]** 1989 Feb;164(6):763–74

Subsensitivity of serotonin and substance P receptors involved in nociception after repeated administration of a serotonin receptor agonist. Eide PK, et al. **J Neural Transm** 1989;77(1):1–10

Obligatory role of B cells and adherent accessory cells in the transfer of a defect in morphine-mediated antinociception in C57BL/6J-bg/bg (beige-J) mice. Kimball ES, et al. **J Neuroimmunol** 1989 May;22(3):185–92

The correlation of monkey medullary dorsal horn neuronal activity and the perceived intensity of noxious heat stimuli. Dubner R, et al. **J Neurophysiol** 1989 Aug;62(2):450–7

Effects of tooth pulp deafferentation on nociceptive and nonnociceptive neurons of the feline trigeminal subnucleus caudalis (medullary dorsal horn). Hu JW, et al. **J Neurophysiol** 1989 Jun;61(6):1197–206

The detection and perceived intensity of noxious thermal stimuli in monkey and in human. Kenshalo DR Jr, et al. **J Neurophysiol** 1989 Aug;62(2):429–36

Nociceptive neurons in rat superior colliculus: response properties, topography, and functional implications. McHaffie JG, et al. **J Neurophysiol** 1989 Aug;62(2):510–25

Responses of monkey medullary dorsal horn neurons during the detection of noxious heat stimuli. Maixner W, et al. **J Neurophysiol** 1989 Aug;62(2):437–49

Leukotriene B4 decreases the mechanical and thermal thresholds of C-fiber nociceptors in the hairy skin of the rat. Martin HA, et al. **J Neurophysiol** 1988 Aug; 60(2):438–45

Effects of ionic calcium on the responses of canine testicular polymodal receptors to algesic substances. Sato J, et al. **J Neurophysiol** 1989 Jul;62(1):119–25

Nociceptive cutaneous stimuli evoke localized contractions in a skeletal muscle. Theriault E, et al. **J Neurophysiol** 1988 Aug;60(2):446–62

Convergence of heterotopic nociceptive information onto

subnucleus reticularis dorsalis neurons in the rat medulla. Villanueva L, et al. **J Neurophysiol** 1988 Sep;60(3):980–1009

Brain–stem relays mediating stimulation–produced antinociception from the lateral hypothalamus in the rat. Aimone LD, et al. **J Neurosci** 1988 Jul;8(7):2652–63

Calcitonin gene–related polypeptide as a mediator of the neurogenic ocular injury response. Unger WG, et al. **J Ocul Pharmacol** 1985 Summer;1(2):189–99

Prolonged noxious mechanical stimulation of the rat's tail: responses and encoding properties of dorsal horn neurones. Cervero F, et al. **J Physiol (Lond)** 1988 Oct;404:419–36

A method for studying pain arising from the urinary bladder in conscious, freely–moving rats. Abelli L, et al. **J Urol** 1989 Jan;141(1):148–51

Cardiac nociceptors and ischemia: role of sympathetic afferents in cat. Pal P, et al. **Jpn J Physiol** 1989;39(1):131–44

Pineal involvement in the diurnal rhythm of nociception in the rat. Bar–Or A, et al. **Life Sci** 1989;44(16):1067–75

Antinociceptive effects of the 5–HT2 antagonist ritanserin in rats: evidence for an activation of descending monoaminergic pathways in the spinal cord. Barber A, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):234–8

Capsaicin desensitization of peripheral nociceptive fibres does not impair sensitivity to other noxious stimuli. Dray A, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):50–4

Developmental alterations in thermal nociceptive threshold and the distribution of immunoreactive calcitonin gene–related peptide and substance P after neonatal administration of capsaicin in the rat. Hammond DL, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):57–62

Inhibition of spinal nociceptive neurons by excitation of cell bodies or fibers of passage at various brainstem sites in the cat. Sandkühler J, et al. **Neurosci Lett** 1988 Oct 31; 93(1):67–72

Tachykinins enhance the depression of spinal nociceptive neurons caused by cutaneously applied vibration in the cat. Salter MW, et al. **Neuroscience** 1988 Oct;27(1):243–9

Sympathetic facilitation of sustained discharges of polymodal nociceptors. Hu SJ, et al. **Pain** 1989 Jul;38(1):85–90

Expansion of receptive fields of spinal lamina I projection neurons in rats with unilateral adjuvant–induced inflammation: the contribution of dorsal horn mechanisms. Hylden JL, et al. **Pain** 1989 May;37(2):229–43 (51 ref.)

Dose–dependent inhibition by naloxone of nociceptive activity evoked in the rat thalamus. Jurna I. **Pain** 1988 Dec; 35(3):349–54

Intrathecal opioids, potency and lipophilicity. McQuay HJ, et al. **Pain** 1989 Jan;36(1):111–5

Spinal recordings suggest that wide–dynamic–range neurons mediate sympathetically maintained pain. Roberts WJ, et al. **Pain** 1988 Sep;34(3):289–304

Electrophysiological studies on the effects of opiates on dorsal horn nociceptive neurones at 51 atmospheres absolute. Smallman K, et al. **Pain** 1989 Jul;38(1):57–64

Inhibitory effect of the lateral reticular nucleus on neurons of the gigantocellularis nucleus which respond to noxious stimuli. Sotgiu ML. **Pain** 1988 Dec;35(3):355–62

Antinociceptive effects of azepexole (BHT 933) in mice. Vargas ML, et al. **Pain** 1989 Jan;36(1):117–23

Effects of tizanidine (DS 103–282) on dorsal horn convergent neurones in the rat. Villanueva L, et al. **Pain** 1988 Nov; 35(2):187–97

Effects of lesions to rat spinal cord lamina I cell projection pathways on reactions to acute and chronic noxious stimuli. Wall PD, et al. **Pain** 1988 Dec;35(3):327–39

The apparent hyperalgesic effect of a serotonin antagonist in the tail flick test is mainly due to increased tail skin temperature. Tjølsen A, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):601–5

Behavioral consequences of intestinal distention: aversivity and discomfort. Bardos G. **Physiol Behav** 1989 Jan; 45(1):79–85

Mechanical visceral pain model: chronic intermittent intestinal distention in the rat. Colburn RW, et al. **Physiol Behav** 1989 Jan;45(1):191–7

Clip induced analgesia and immobility in the mouse: activation by different sensory modalities. Fleischmann A, et al. **Physiol Behav** 1988;44(1):39–45

Emergence and development of stress–induced analgesia and concomitant behavioral changes in mice exposed to social conflict. Frischknecht HR, et al. **Physiol Behav** 1988; 44(3):383–8

Angiotensin II, bombesin and naloxone in tooth pulp and cutaneous nociceptive mechanisms in rabbits. Raevskaya OS, et al. **Physiol Bohemoslov** 1988;37(3):281–5

Pain modulation. Papers from a conference. Beaune, France, July, 1987. **Prog Brain Res** 1988;77:1–454

Reinnervation of skin by polymodal nociceptors in rats. Bharali LA, et al. **Prog Brain Res** 1988;74:247–51

Morphological features of thin sensory afferent fibers: a new interpretation of 'nociceptor' function. Kruger L. **Prog Brain Res** 1988;74:253–7

Modulation of testicular polymodal receptor activities. Kumazawa T, et al. **Prog Brain Res** 1988;74:325–30

Psychophysical and neurophysiological studies of chemically induced cutaneous pain and itch. The case of the missing nociceptor. Lamotte RH. **Prog Brain Res** 1988;74:331–5

Anatomy and physiology of descending control of nociceptive responses of dorsal horn neurons: comprehensive review. Willis WD Jr. **Prog Brain Res** 1988; 77:1–29 (183 ref.)

Putative nociceptive modulatory neurons in the rostral ventromedial medulla of the rat display highly correlated firing patterns. Barbaro NM, et al. **Somatosens Mot Res** 1989;6(4):413–25

Putative nociceptive modulating neurons in the rostral ventromedial medulla of the rat: firing of on– and off–cells is related to nociceptive responsiveness. Heinricher MM, et al. **Somatosens Mot Res** 1989;6(4):427–39

[Influence of stimulating somatosensory area III (SIII) on cortical response to slow pain] Feng JQ, et al. **Chen Tzu Yen Chiu** 1988;13(1):43–7 (Eng. Abstr.) **(Chi)**

[Centrifugal inhibitory effect of stimulation of the sciatic nerve on A delta–mechanical nociceptors in rat] Hu SJ, et al. **Chen Tzu Yen Chiu** 1988;13(1):52–5, 16 (Eng. Abstr.) **(Chi)**

[The effect of electroacupuncture "Zusanli" on groaning center in cat] Teng AF, et al. **Chen Tzu Yen Chiu** 1988; 13(4):319–21 (Eng. Abstr.) **(Chi)**

[Frequency of electroacupuncture as a cardinal factor determining the potency of analgesia and its vulnerability to naloxone blockade in rabbits] Wang XM, et al. **Chen Tzu Yen Chiu** 1988;13(1):56–60 (Eng. Abstr.) **(Chi)**

[Effects of intracerebroventricularly injected cholecystokinin octapeptide on the electric activities of pain–reacted neurons in nucleus parafascicularis of thalamus in rats] Xu MY, et al. **Chen Tzu Yen Chiu** 1988;13(4):305–9 (Eng. Abstr.) **(Chi)**

[Influence of stimulation of the skin receptive field on evoked discharges of the polymodal nociceptors in rats] Hu SJ, et al. **Sheng Li Hsueh Pao** 1988 Oct;40(5):437–43 (Eng. Abstr.) **(Chi)**

[Effects of stimulation of caudate nucleus on the unit discharges of somato–visceral converging neurons of parafascicular nucleus of thalamus in rats] Tong ZQ, et al. **Sheng Li Hsueh Pao** 1988 Dec;40(6):586–91 (Eng. Abstr.) **(Chi)**

[Effects of noxious heat stimulation in the central nervous system studied by [3H] 2–deoxyglucose method] Wang QP, et al. **Sheng Li Hsueh Pao** 1988 Apr;40(2):125–30 (Eng. Abstr.) **(Chi)**

[Effect of dorsal raphe nucleus stimulation on nociceptive response of dorsal horn neurons and efferent pathway analysis in rats] Yu GD, et al. **Sheng Li Hsueh Pao** 1988 Jun;40(3):231–9 (Eng. Abstr.) **(Chi)**

[Convergence of nociceptive information on the parabrachio–amygdala neurons in the rat] Bernard JF, et al. **C R Acad Sci [III]** 1988;307(19):841–7 (Eng. Abstr.) **(Fre)**

[Modulation of the nociceptive flexor reflex during electrostimulation of the segmental acupuncture points] Vashchenko EA, et al. **Fiziol Zh** 1988 Sep–Oct;34(5):44–9 (Eng. Abstr.) **(Rus)**

[The receptor organization of the reinforcing and analgetic opiate systems in the rat] Patkina NA, et al. **Zh Vyssh Nerv Deiat** 1989 Jan–Feb;39(1):99–102 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

The physiological basis of pain pathways and the segmental controls of pain. Besson JM. **Acta Anaesthesiol Belg** 1988; 39(3 Suppl 2):47–51

Clinical use of nociceptive flexion reflex recording in the evaluation of functional neurosurgical procedures. García–Larrea L, et al. **Acta Neurochir Suppl (Wien)** 1989; 46:53–7

Histological and neurophysiological changes induced by carrageenan in skeletal muscle of cat and rat. Diehl B, et al. **Agents Actions** 1988 Dec;25(3–4):210–3

Peripheral and spinal components of the sensitization of spinal neurons during an acute experimental arthritis. Neugebauer V, et al. **Agents Actions** 1988 Dec;25(3–4):234–6

Lack of sensitization of primary afferent receptors by prostaglandins in a rat model of causalgic chronic pains. Seltzer Z, et al. **Agents Actions** 1988 Dec;25(3–4):252–4

The intensive aspect of information processing in the intradental A–delta system in man—a psychophysiological analysis of sharp dental pain. Franzén OG, et al. **Behav Brain Res** 1989 May 1;33(1):1–11

Development of shock–induced analgesia: a search for hyperalgesia. Matzel LD, et al. **Behav Neurosci** 1989 Aug; 103(4):850–6

Mountains, molehills, and nociceptors [letter] Jessee RA. **Hosp Pract [Off]** 1989 Mar 30;24(3A):16

Does acute intraoral pain alter cutaneous sensibility? Hansson P, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug; 51(8):1032–6

Ultralate cerebral potentials as correlates of delayed pain perception: observation in a case of neurosyphilis. Treede RD, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct; 51(10):1330–3

Evaluation of thermal, pain, and vibration sensation thresholds in newly diagnosed type 1 diabetic patients. Ziegler D, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov; 51(11):1420–4

Organization of trigeminal nociceptive pathways. Maciewicz R, et al. **Semin Neurol** 1988 Dec;8(4):255–64 (100 ref.)

[Cerebral evoked potentials and nociception] Manil J, et al. **Acta Belg Med Phys** 1988 Jul–Sep;11(3):129–30 **(Dut)**

[Cardiac mechanisms for the development of angina pectoris pain] Bassenge E, et al. **Z Kardiol** 1988;77 Suppl 5:5–14 (66 ref.) (Eng. Abstr.) **(Ger)**

[Pain perception and peripheral pain localization in angina pectoris (published erratum appears in Z Kardiol 1989 Mar;78(3):211)] Droste C. **Z Kardiol** 1988;77 Suppl 5:15–33 (239 ref.) (Eng. Abstr.) **(Ger)**

[Pain and the spine. A review. 1. On the pathophysiology of radicular pain syndromes. Current concepts explaining pain in nerve entrapment syndromes] Wehling P, et al. **Z Orthop** 1989 Mar–Apr;127(2):197–201 (54 ref.) (Eng. Abstr.) **(Ger)**

[Basic principles of the functional organization of the nociceptive and antinociceptive systems of the brain] Limanskiĭ IuP. **Fiziol Zh** 1989 Mar–Apr;35(2):110–21 (58 ref.) (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Effect of low power laser irradiation on nociceptive cells in Hirudo medicinalis. Lundeberg T, et al. **Acupunct Electrother Res** 1988;13(2–3):99–104

The possible analgesic effect of soft–laser irradiation on heat nociceptors in the cat tongue. Mezawa S, et al. **Arch Oral Biol** 1988;33(9):693–4

Cutaneous pain and detection thresholds to short CO2 laser pulses in humans: evidence on afferent mechanisms and the influence of varying stimulus conditions. Pertovaara A, et al. **Pain** 1988 Sep;34(3):261–9

ULTRASTRUCTURE

Ultrastructural features of functionally identified primary afferent neurons with C (unmyelinated) fibers of the guinea pig: classification of dorsal root ganglion cell type with reference to sensory modality. Sugiura Y, et al. **J Comp Neurol** 1988 Oct 8;276(2):265–78

NODOSE GANGLION see under **VAGUS NERVE**

NODULAR LEPROSY see **LEPROSY, LEPROMATOUS**

NOGALAMYCIN see under **DAUNORUBICIN**

NOISE

see related
ACOUSTIC STIMULATION
HEARING LOSS, NOISE–INDUCED
SOUND

ERP responses to ethanol and diazepam administration in squirrel monkeys. Ehlers CL. **Alcohol** 1988 Jul–Aug; 5(4):315–20

Noise exposure—sample size and confidence limit calculation. Jackson RA, et al. **Am Ind Hyg Assoc J** 1985 Jul; 46(7):387–90

Noise exposure of motorcyclists. Ross BC. **Ann Occup Hyg** 1989;33(1):123–7

Ontogeny of the acoustic startle response and sensitization to background noise in the rat. Sheets LP, et al. **Behav Neurosci** 1988 Oct;102(5):706–13

Repeated noise exposure affects muscarinic cholinergic receptors in the rat brain. Lai H, et al. **Brain Res** 1989 May 29;488(1–2):361–4

Effect of high–intensity sound on local cerebral glucose utilization in fetal sheep. Abrams RM, et al. **Brain Res Dev Brain Res** 1989 Jul 1;48(1):1–10

Noise environment and exposure of the catering crew on car ferries. Saarni H, et al. **Bull Inst Marit Trop Med Gdynia** 1987;38(3–4):181–8

Hemispheric specialization for tactile perception opposed by contralateral noise. Cohen H, et al. **Cortex** 1988 Sep; 24(3):425–31

Cerebellopontine angle epidermoid in a noise–exposed patient. Miller MH, et al. **Ear Hear** 1989 Aug;10(4):262–5

The effects of "noise suppression" hearing aids on consonant recognition in speech–babble and low–frequency noise. Tyler RS, et al. **Ear Hear** 1989 Aug;10(4):243–9

Effect of noise masking on the brain–stem and middle–latency auditory evoked potentials: central and peripheral components. Gott PS, et al. **Electroencephalogr Clin Neurophysiol** 1989 Mar–Apr; 74(2):131–8

An improved technique for measurement of the relative noise level using a sound spectrograph. Fujiu M, et al. **Folia Phoniatr (Basel)** 1988;40(2):53–7

Blood pressure in resting, anesthetized and noise–exposed guinea pigs. Flynn AJ, et al. **Hear Res** 1988 Jul 15; 34(2):201–5

Biochemical changes in acute noise stress in rats. Prabhakaran K, et al. **Indian J Physiol Pharmacol** 1988 Apr–Jun; 32(2):100–4

High–frequency audiometry in the evaluation of critical noise intensity. Bartsch R, et al. **Int Arch Occup Environ Health** 1989;61(5):347–51

Psychophysical assessment of sinusoidal whole–body vibration in z–axis between 0.6 and 5 Hz combined with different noise levels. Seidel H, et al. **Int Arch Occup Environ Health** 1989;61(6):413–22

On the role of the amplitude of the fricative noise in the perception of place of articulation in voiceless fricative consonants. Behrens S, et al. **J Acoust Soc Am** 1988 Sep; 84(3):861–7

Acoustic–phonetic characteristics of speech produced in noise and while wearing an oxygen mask. Bond ZS, et al. **J Acoust Soc Am** 1989 Feb;85(2):907–12

Modulation and gap detection for broadband and filtered noise signals. Formby C, et al. **J Acoust Soc Am** 1988 Aug;

84(2):545–50
Identification of vowels in quiet, noise, and reverberation: relationships with age and hearing loss. Nábělek AK. **J Acoust Soc Am** 1988 Aug;84(2):476–84
Inhibiting the Lombard effect. Pick HL Jr, et al. **J Acoust Soc Am** 1989 Feb;85(2):894–900
Neuronal responses to amplitude-modulated and pure-tone stimuli in the guinea pig inferior colliculus, and their modification by broadband noise. Rees A, et al. **J Acoust Soc Am** 1989 May;85(5):1978–94
Detectability of words and nonwords in two kinds of noise. Repp BH, et al. **J Acoust Soc Am** 1988 Nov;84(5):1929–32
Active noise control in ducts: some physical insights. Snyder SD, et al. **J Acoust Soc Am** 1989 Jul;86(1):184–94
Synchrony-dependent autocorrelation in eighth-nerve-fiber response to rippled noise. ten Kate JH, et al. **J Acoust Soc Am** 1988 Dec;84(6):2092–102
Comparison of various modes of presenting sentence materials in tests of speech perception in noise. Theodoridis GC, et al. **J Acoust Soc Am** 1988 Dec;84(6):2270–2
Effects of noise on speech production: acoustic and perceptual analyses. Van Summers W, et al. **J Acoust Soc Am** 1988 Sep;84(3):917–28
Some remarks on Pastore (1988). Watson CS, et al. **J Acoust Soc Am** 1988 Dec;84(6):2266–70
Clapping or percussion causes atelectasis in dogs and influences gas exchange. Zidulka A, et al. **J Appl Physiol** 1989 Jun;66(6):2833–8
Information processing at a central synapse suggests a noise filter in the auditory pathway of the noctuid moth. Boyan GS, et al. **J Comp Physiol [A]** 1988 Dec;164(2):251–8
Response properties of cochlear efferent neurons: monaural vs. binaural stimulation and the effects of noise. Liberman MC. **J Neurophysiol** 1988 Nov;60(5):1779–98
Memory and noise immunity in the recognition of emotional state by voice in patients with local lesions of the brain. Tarkhan AU. **Neurosci Behav Physiol** 1989 Mar–Apr; 19(2):129–34
Multiple factors affect speech communication in the work place. Casali JG. **Occup Health Saf** 1989 Jul;58(7):32–4, 36, 40–2
Effects of noise on a simple visual attentional task. Britton LA, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):875–8
Adaptation of plasma catecholamine and corticosterone responses to short-term repeated noise stress in rats. De Boer SF, et al. **Physiol Behav** 1988;44(2):273–80
A comparison of the effects of amphetamine, apomorphine and white noise on response switching in the rat. Evenden JL, et al. **Psychopharmacology (Berlin)** 1989;97(2):238–42
Effects of triazolam on heart rate level and on phasic cardiac response to noise during sleep. Libert JP, et al. **Psychopharmacology (Berlin)** 1988;96(2):188–93
Speech intelligibility in difficult signal/noise circumstances. Kiukaanniemi H, et al. **Scand Audiol Suppl** 1988;30:215–8
An in vitro study of prosthetic heart valve sound. Thulin LI, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(1):33–7
Effects of road traffic noise on prevalence of hypertension in men: results of the Luebeck Blood Pressure Study. Herbold M, et al. **Soz Praventivmed** 1989;34(1):19–23
[A study using laser-Doppler velocimetry of modifications of the labyrinthine microcirculation induced by chemical and physical stimuli] Galioto GB, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(2):117–22 (Eng. Abstr.) **(Fre)**
[The striking hammer] Lacher G, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(3):245–7 (Eng. Abstr.) **(Fre)**
[Noise levels in working environments of the Umberto I Polyclinic in Rome] D'Arca SU, et al. **Nuovi Ann Ig Microbiol** 1987 Sep–Dec;38(5–6):437–43 (Eng. Abstr.) **(Ita)**
[Effects of noise on sleep. Part 1. Development of an automatic analysing system for all-night sleep polygraphy by microcomputer] Aoki S, et al. **Nippon Eiseigaku Zasshi** 1989 Feb;43(6):1092–101 (Eng. Abstr.) **(Jpn)**
[The observation of noise induced temporary threshold shifts (NITTS) on the human auditory brainstem response] Yamanobe S. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Aug; 91(8):1267–73 (Eng. Abstr.) **(Jpn)**
[Evaluation of the effect of auditory fatigue on the human ear by auditory brain stem responses (ABR). I. Effect of auditory fatigue on temporary threshold shifts of ABR] Janczewski G, et al. **Med Pr** 1988;39(2):108–14 (Eng. Abstr.) **(Pol)**
[Exposure to noise in nurseries and nursery schools] Koszarny Z, et al. **Rocz Panstw Zakl Hig** 1988;39(3):239–46 (Eng. Abstr.) **(Pol)**
[Relation of the reaction of the circulatory system to acoustic stimulation and the exposure of schoolchildren to noise in their homes] Szata W. **Rocz Panstw Zakl Hig** 1988; 39(5):410–6 (Eng. Abstr.) **(Pol)**
[Gamma-aminobutyric and glutamic acid levels in the brain of rats exposed to noise and vibration on ships] Stoianov AP, et al. **Fiziol Zh** 1989 Mar–Apr;35(2):13–8 (Eng. Abstr.) **(Rus)**
[Sanitary and hygienic characteristics of working conditions in the manufacture of grass meal] Iankauskas RA. **Gig Sanit** 1988 Nov;(11):76–8 **(Rus)**
[The problem of combined effects of noise and toxic substances] Para'nko NM. **Gig Sanit** 1989 May;(5):62–6 (75 ref.) **(Rus)**
[Characteristics of the effects of etimizol and caffeine on the conditioned-reflex escape reaction after exposure to noise and vibration] Stoianov AP, et al. **Gig Sanit** 1988 Jul; (7):74–5 **(Rus)**
[Immunologic evaluation of the effect of noise] Alekseev SV, et al. **Gig Tr Prof Zabol** 1989;(3):45–7 **(Rus)**
[Physiologic and hygienic substantiation of shift-work schedules in combined effects of noise, local vibration and microclimate heating] Gorban' VS. **Gig Tr Prof Zabol** 1988 Nov;(11):48–50 **(Rus)**
[Functional changes in the immune system of animals exposed to noise] Ianushanets OI. **Gig Tr Prof Zabol** 1988 Dec; (12):53–5 **(Rus)**
[Characteristics of physiologic reactions of persons with increased individual sensitivity to noise after exposure to general low-frequency vibration] Nazarenko VI. **Gig Tr Prof Zabol** 1988 Dec;(12):49–51 **(Rus)**
[Characteristics of functional changes in hearing analyzer of coal miners depending on energy and informational parameters of noise] Zvereva GS, et al. **Gig Tr Prof Zabol** 1989;(1):45–6 **(Rus)**
[Characteristics of functional reorganization of the body after exposure to noise in the initial period of work activity] Zvereva GS. **Gig Tr Prof Zabol** 1988 Dec;(12):25–8 (Eng. Abstr.) **(Rus)**
[The physiological role and significance of prostaglandins in the reaction of the body to unfavorable environmental factors] Petrova TV, et al. **Kosm Biol Aviakosm Med** 1988 Sep–Oct;22(5):6–14 (109 ref.) (Eng. Abstr.) **(Rus)**
[Reactions of the auditory, vestibular and visual analyzers in man to intermittent noise] Svistunov NT, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):86–8 **(Rus)**

ADVERSE EFFECTS

Noise-induced vasoconstriction in the cochlea. Nakai Y, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;447:23–7
Delayed endolymphatic hydrops syndrome after heavy exposure to impulse noise. Ylikoski J. **Am J Otol** 1988 Jul; 9(4):282–5
Effect of sound stress on the migration of prethymic stem cells. Bomberger CE, et al. **Ann N Y Acad Sci** 1988; 540:700–1
Traffic noise and cardiovascular risk. The Caerphilly study, first phase. Outdoor noise levels and risk factors. Babisch W, et al. **Arch Environ Health** 1988 Nov–Dec;43(6):407–14
Combined effects of aspirin and noise in causing permanent hearing loss. Carson SS, et al. **Arch Otolaryngol Head Neck Surg** 1989 Sep;115(9):1070–5
Binaural speech discrimination under noise in hearing-impaired listeners. Kumar KV, et al. **Aviat Space Environ Med** 1988 Oct;59(10):932–6
Aircraft noise-induced temporary threshold shift. Wu YX, et al. **Aviat Space Environ Med** 1989 Mar;60(3):268–70
Noise trauma in the aetiology of acoustic neuromas in men in Los Angeles County, 1978–1985. Preston-Martin S, et al. **Br J Cancer** 1989 May;59(5):783–6
The nucleus locus coeruleus modulates local cerebral glucose utilization during noise stress in rats. Justice A, et al. **Brain Res** 1989 Jun 19;490(1):73–84
Influence of physical factors on the ro-ro vessel over selected parameters of the circulatory system. Otto B, et al. **Bull Inst Marit Trop Med Gdynia** 1987;38(3–4):175–80
Evaluation of the exposure to acoustic factor action on ro-ro vessel during an operating voyage. Szczepański C. **Bull Inst Marit Trop Med Gdynia** 1988;39(1–2):61–9
Word identification performance in the presence of competing speech and noise in learning disabled adults. Chermak GD, et al. **Ear Hear** 1989 Apr;10(2):90–3
Assessing speech recognition in noise for listeners with a signal processor hearing aid. Klein AJ. **Ear Hear** 1989 Feb; 10(1):50–7
Effects of noise and electromagnetic fields on reproductive outcomes. Meyer RE, et al. **Environ Health Perspect** 1989 May;81:193–200 (80 ref.)
Interaction of salicylate and noise results in mortality of rats. Brennan JF, et al. **Experientia** 1989 Aug 15;45(8):731–4
Synergistic interactions of gentamicin and pure tones causing cochlear hair cell loss in pigmented guinea pigs. Collins PW. **Hear Res** 1988 Nov;36(2–3):249–59
Recoveries of whole-nerve AP thresholds, amplitudes and tuning curves in gerbils following noise exposure. Dolan TG, et al. **Hear Res** 1989 Feb;37(3):193–201
Isolated and combined effects of prolonged exposures to noise and whole-body vibration on hearing, vision and strain. Seidel H, et al. **Int Arch Occup Environ Health** 1988; 61(1–2):95–106
Effects of daytime noise load on the sleep-wake cycle and endocrine patterns in man. III. 24 hours secretion of free and sulfate conjugated catecholamines. Fruhstorfer B, et al. **Int J Neurosci** 1988 Nov;43(1–2):53–62
Comparison of discomfort levels obtained with pure tones and multitone complexes. Bentler RA, et al. **J Acoust Soc Am** 1989 Jul;86(1):126–32
Responses of "high-spontaneous" auditory-nerve fibers to consonant-vowel syllables in noise. Geisler CD, et al. **J Acoust Soc Am** 1989 Apr;85(4):1639–52
An acoustic head simulator for hearing protector evaluation. II: Measurements in steady-state and impulse noise environments. Giguère C, et al. **J Acoust Soc Am** 1989 Mar;85(3):1197–205
The growth of and recovery from TTS in human subjects exposed to impact noise. Laroche C, et al. **J Acoust Soc Am** 1989 Apr;85(4):1681–90
Indoor human response to blast sounds that generate rattles. Schomer PD, et al. **J Acoust Soc Am** 1989 Aug; 86(2):665–73
The effect of traffic noise on sleep of young adults in their homes. Stevenson DC, et al. **J Acoust Soc Am** 1989 Feb; 85(2):768–71
Hearing loss due to partly impulsive industrial noise exposure at levels between 87 and 90 dB(A). Thiery L, et al. **J Acoust Soc Am** 1988 Aug;84(2):651–9
Effect of traffic noise on the cyclical nature of sleep. Thiessen GJ. **J Acoust Soc Am** 1988 Nov;84(5):1741–3
Will the increased military low-level flying activity in Labrador be detrimental to the hearing of humans in the region? Baxter JD, et al. **J Otolaryngol** 1989 Feb; 18(1):68–73
Investigation of tinnitus induced by sound and its relationship to ongoing tinnitus. George RN, et al. **J Speech Hear Res** 1989 Jun;32(2):366–72
Noise levels and the sources of noise pollution in Karachi. Zaidi SH. **JPMA** 1989 Mar;39(3):62–5
How safe is the noise exposure? Zaidi SH. **JPMA** 1989 Mar; 39(3):60–1
How the NICU environment sounds to a preterm infant. Thomas KA. **MCN** 1989 Jul–Aug;14(4):249–51
Heart-rate and blood-pressure response in medium-artillery gun crews. Carter NL. **Med J Aust** 1988 Aug 15; 149(4):185–9
Threshold shift in hearing level stems from non-occupational cause. Erdreich J. **Occup Health Saf** 1989 Jan;58(1):44–7, 60
Continuous noise, intermittent noise, and annoyance. Dornic S, et al. **Percept Mot Skills** 1989 Feb;68(1):11–8
Noise annoyance with regard to neurophysiological sensitivity, subjective noise sensitivity and personality variables. Ohrström E, et al. **Psychol Med** 1988 Aug; 18(3):605–13
Can smoking increase attention in rapid information processing during noise? Electrocortical, physiological and behavioral effects. Hasenfratz M, et al. **Psychopharmacology (Berlin)** 1989;98(1):75–80
Memory retrieval in noise and psychophysiological response in the young and old. Jennings JR, et al. **Psychophysiology** 1988 Nov;25(6):633–44
Study of the effects of simultaneous exposure to noise and carbon disulfide on workers' hearing. Morata TC. **Scand Audiol** 1989;18(1):53–8
Noise, S-R compatibility and hand dominance. Smith A. **Scand J Psychol** 1988;29(3–4):180–5
Noise exposure during pregnancy and selected structural malformations in infants. Kurppa K, et al. **Scand J Work Environ Health** 1989 Apr;15(2):111–6
Occupational noise exposure and course of pregnancy. Nurminen T, et al. **Scand J Work Environ Health** 1989 Apr;15(2):117–24
[The information value of indices of the mathematical analysis of heart rhythm in noise exposure] Danev S. **Probl Khig** 1988;13:76–83 (Eng. Abstr.) **(Bul)**
[The noise factor in the manufacture of chocolate and pastry products] Tsvetkov D, et al. **Probl Khig** 1988;13:71–6 (Eng. Abstr.) **(Bul)**
[The discussion of investigation and designing methods on the environment and population influenced by moving sources of the railway noise] Wei BX. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Mar;22(2):76–8 (Eng. Abstr.) **(Chi)**
[Effect of noise on circulatory disorders] Reinharez D. **Phlebologie** 1989 Apr–Jun;42(2):215–22 (Eng. Abstr.) **(Fre)**
[The effect of noise on arterial hypertension in textile workers] Gîdiuță C, et al. **Sante Publique (Bucur)** 1988 Oct–Dec;31(4):299–302 (Eng. Abstr.) **(Fre)**
[Simultaneous determinations of oxygen partial pressure in the scala tympani, electrocochleography and blood pressure measurements in noise stress in guinea pigs] Lamm K, et al. **HNO** 1988 Sep;36(9):367–72 (Eng. Abstr.) **(Ger)**
[Electronic noise compensation for improving speech discrimination in airplane pilots] Matschke RG, et al. **Laryngorhinootologie** 1989 Feb;68(2):101–9 (Eng. Abstr.) **(Ger)**
[Street noise and sleep: whole night somnopolygraphic, psychometric and psychophysiologic studies in comparison with normal data] Saletu B, et al. **Wien Med Wochenschr** 1989 Jun 15;139(11):257–63 (Eng. Abstr.) **(Ger)**
[Procedures for assessing the necessary sound-proofing of windows in school buildings] Fürst P. **Z Gesamte Hyg** 1988 Nov;34(11):614–5 (Eng. Abstr.) **(Ger)**
[Reaction of the cardiovascular system, temporary threshold shift 2 and attitude in local dynamic muscle work with noise] Kobryn U, et al. **Z Gesamte Hyg** 1988 Jul;34(7):415–7 (Eng. Abstr.) **(Ger)**
[A study of the state-trait anxiety inventory (STAI) and its application to noise stress] Iwamoto M, et al. **Nippon Eiseigaku Zasshi** 1989 Feb;43(6):1116–23 (Eng. Abstr.) **(Jpn)**
[Effects of noise on sleep. Part 2. A case report of the effects of three levels of stationary sound on sleep parameters] Kawada T, et al. **Nippon Eiseigaku Zasshi** 1989 Feb; 43(6):1102–8 (Eng. Abstr.) **(Jpn)**

[Effects of noise on sleep. Part 3. A case report of the effects of three levels of intermittent sound on sleep parameters] Kawada T, et al. **Nippon Eiseigaku Zasshi** 1989 Feb; 43(6):1109–15 (Eng. Abstr.) (Jpn)

[Relation of a temporary shift in auditory threshold of schoolchildren and acoustic conditions in their homes] Szata W. **Roez Panstw Zakl Hig** 1988;39(4):325–30 (Eng. Abstr.) (Pol)

[Biological equivalents of noise, local vibration, temperature and air mobility during their combined action on the human body] Gorban' VS. **Fiziol Zh** 1988 Nov–Dec;34(6):97–101 (Eng. Abstr.) (Rus)

[Status and prospects of research on the problem of preventing unfavorable effects of occupational noise and vibration] Izmerov NF, et al. **Gig Sanit** 1988 Sep;(9):4–6 (Rus)

[Effect of transportation noise on the status of the cardiovascular system of the population] Stolbun BM, et al. **Gig Sanit** 1989 Jan;(1):12–6 (Eng. Abstr.) (Rus)

[The contribution of Prof. E. Ts. Andreeva-Galanina to the study of occupational vibration and noise (on the centenary of her birth)] Artamonova VG, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):1–5 (Rus)

[Reaction of the pituitary gland–adrenal cortex system of miners to vibration and noise] ChatskiiGIa, et al. **Gig Tr Prof Zabol** 1988 Dec;(12):52–3 (Rus)

[The combined effect on the human body of general and local vibration, noise and work stress characteristic of the work sites of agricultural equipment operators] Cherniuk VI, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):47–8 (Rus)

[The most important aspects of preventing noise and vibration-induced pathology in coal mines] Kolganov AV, et al. **Gig Tr Prof Zabol** 1988 Nov;(11):22–4 (Eng. Abstr.) (Rus)

[Criteria of hygienic evaluation of variable noise] Mukhin VV, et al. **Gig Tr Prof Zabol** 1988 Dec;(12):48–9 (Rus)

[Experimental evaluation of the combined effect of the noise and aerosols in the air of steel mills] Paranko NM, et al. **Gig Tr Prof Zabol** 1989;(1):21–4 (Eng. Abstr.) (Rus)

[Hygienic characteristics and ways of improving working conditions at a rug-making factory] Rumiantsev GI, et al. **Gig Tr Prof Zabol** 1989;(4):27–30 (Eng. Abstr.) (Rus)

[Effect of microclimate heating and occupational noise and their combination with lead aerosols on the incidence of cardiovascular diseases] Shcherbak EA. **Gig Tr Prof Zabol** 1988 Nov;(11):25–7 (Eng. Abstr.) (Rus)

[Evaluation of impulse noise at an industrial blacksmith's shop] Soletski L. **Gig Tr Prof Zabol** 1988 Dec;(12):22–4 (Eng. Abstr.) (Rus)

[Relation of intensive occupational noise and the incidence of cardiovascular pathology in organized women's collectives of Moscow and Havana (data of simultaneous epidemiologic studies] Vermel' AE, et al. **Gig Tr Prof Zabol** 1988 Dec;(12):18–22 (Eng. Abstr.) (Rus)

[Functional disorders in workers in noisy manufacturing depending on the intensity and mobility of the neural processes] Zvereva GS, et al. **Gig Tr Prof Zabol** 1988 Jul; (7):44–5 (Rus)

[Clinical aspects of occupational pathology caused by noise and vibration] Tarasova LA, et al. **Ter Arkh** 1988; 60(9):84–7 (15 ref.) (Eng. Abstr.) (Rus)

[Intensity of industrial noise and the incidence of arterial hypertension (according to data from a prospective epidemiological study of organized female populations in Moscow] Vermel' AE, et al. **Ter Arkh** 1988;60(9):88–91 (Eng. Abstr.) (Rus)

[Characteristics of the development of neurosensory hearing loss caused by noise and vibration] Pankova VB, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):63–7 (Eng. Abstr.) (Rus)

[Diagnosis and treatment of noise-induced vestibular disorders] Shidlovskaia TV, et al. **Vestn Otorinolaringol** 1988 Jul–Aug;(4):28–31 (Eng. Abstr.) (Rus)

[Characteristics of phospholipid–glycerol metabolism in erythrocyte membranes during acoustic stress] Melkonian MM, et al. **Vopr Med Khim** 1989 Mar–Apr;35(2):68–71 (Eng. Abstr.) (Rus)

[Low frequency noise—an overlooked environmental factor] Rylander R, et al. **Lakartidningen** 1989 Feb 8;86(6):415–6 (Swe)

LEGISLATION & JURISPRUDENCE

[District classification according to noise prevention criteria] Brüdigam G, et al. **Z Gesamte Hyg** 1989 May;35(5):290–2 (Eng. Abstr.) (Ger)

PREVENTION & CONTROL

[Analysis of the status of the acoustic environment in the cities of the People's Republic of Bulgaria during the 8th 5-Year Plan and the measures for noise limitation and abatement in population centers] Chuchkova M. **Probl Khig** 1988;13:9–18 (Eng. Abstr.) (Bul)

[Industrial plants as a source of noise for adjacent districts] Korneva EE, et al. **Gig Tr Prof Zabol** 1988 Dec;(12):37–9 (Eng. Abstr.) (Rus)

[Decreasing noise level during bottling of liquid foods] Kuroian NA, et al. **Gig Tr Prof Zabol** 1988 Aug;(8):43–4 (Eng. Abstr.) (Rus)

NOISE, OCCUPATIONAL see under **NOISE**

NOISE, TRANSPORTATION see under **NOISE**

NOMA

THERAPY

Gangrenous stomatitis in AIDS [letter; comment] Winkler JR, et al. **Lancet** 1989 Jul 8;2(8654):108. **Comment on:** Lancet 1989 Apr 29;1(8644):955

NOMENCLATURE

Anatomical terminology, then and now. O'Rahilly R. **Acta Anat (Basel)** 1989;134(4):291–300

A note on degenerative changes in anatomical terminology. Staubesand J, et al. **Acta Anat (Basel)** 1988;133(4):265–8

Recommendations to the editors of biochemical journals. Nomenclature, abbreviations, symbols. **Acta Biochim Pol** 1988;35(3):225–66

Terminology for ligands of the allosteric modulatory center of GABA-operated Cl- channels. Costa E, et al. **Adv Biochem Psychopharmacol** 1988;45:367–74

Suggested nomenclature for aesthetic and reconstructive surgery of the breasts. IV: Congenital anomalies of the breast. Letterman G, et al. **Aesthetic Plast Surg** 1989 Winter;13(1):59–61

Accessory meningeal artery: an anatomic misnomer. Vitek JJ. **AJNR** 1989 May–Jun;10(3):569–73

Diagnostic specificity: proper use [letter] Harris RD. **AJR Am J Roentgenol** 1989 Sep;153(3):653

Normal and anomalous coronary arteries: definitions and classification. Angelini P. **Am Heart J** 1989 Feb; 117(2):418–34 (314 ref.)

Balloon valvuloplasty instead of balloon valvotomy [letter] Cheng TO. **Am J Cardiol** 1989 Jun 15;63(20):1540

Nomenclature for the use of balloon catheters [letter] Ribeiro PA, et al. **Am J Cardiol** 1989 Jan 15:63(3):262

On the terminology of cutaneous melanoma [letter] Bondi R, et al. **Am J Dermatopathol** 1989 Feb;11(1):93–4

The language of Hippocrates. Dirckx JH. **Am J Dermatopathol** 1987 Apr;9(2):144–8

French and German words in medical English. Dirckx JH. **Am J Dermatopathol** 1989 Aug;11(4):392–5

Papillary eccrine adenoma [letter] Kanitakis J, et al. **Am J Dermatopathol** 1988 Apr;10(2):180–2

Some remarks on dysplasia. Rywlin AM. **Am J Dermatopathol** 1989 Aug;11(4):390–1

Praise for useful words [editorial] Brown GW. **Am J Dis Child** 1989 Jul;143(7):770

An unjustified attack on "incidence"? Martin CA, et al. **Am J Epidemiol** 1989 Apr;129(4):653–4

IVIC syndrome report by Czeizel et al. Neri G, et al. **Am J Med Genet** 1989 Jun;33(2):284

Pediatric cardiology [letter] Lin AE. **Am J Obstet Gynecol** 1988 Dec;159(6):1599

Missed abortion: still appropriate terminology? Pridjian G, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):261–2

The hipbone and Nomina Anatomica. Tuttle RH. **Am J Phys Anthropol** 1988 Sep;77(1):133–4

Patient—or client? [editorial] Johnson EW. **Am J Phys Med Rehabil** 1989 Aug;68(4):161

Depressions "secondary to" other illnesses [letter] Fornal RE. **Am J Psychiatry** 1988 Nov;145(11):1488

The meaning of empathy. Kramer PD. **Am J Psychiatry** 1989 Mar;146(3):413–4

Use of "addictive" to describe neuroleptic drugs [letter] McCormick S. **Am J Psychiatry** 1989 Sep;146(9):1239–40

Overuse of the term "acting out" [letter] O'Boyle M, et al. **Am J Psychiatry** 1989 Sep;146(9):1232

DSM-III-R definition of mental disorder [letter] Sagar RS. **Am J Psychiatry** 1989 Aug;146(8):1077–8

Patients' understanding of selected pharmacy terms. Shaughnessy AF. **Am Pharm** 1988 Oct;NS28(10):38–42

Nomenclature of mycobacterial disease [letter] Grange JM. **Am Rev Respir Dis** 1989 Aug;140(2):561

An expanded definition of the adult respiratory distress syndrome [published erratum appears in Am Rev Respir Dis 1989 Apr;139(4):1065] Murray JF, et al. **Am Rev Respir Dis** 1988 Sep;138(3):720–3

ARDS: refinement of concept and redefinition. Petty TL. **Am Rev Respir Dis** 1988 Sep;138(3):724

A proposed nomenclature for pulmonary surfactant-associated proteins. Possmayer F. **Am Rev Respir Dis** 1988 Oct;138(4):990–8 (116 ref.)

Oviductal, not oviducal. Smith HM, et al. **Anat Rec** 1989 Apr;223(4):446–7

Style notes: bacterial vaginosis or vaginal bacteriosis? [editorial] Huth EJ. **Ann Intern Med** 1989 Oct 1; 111(7):553–4

Style notes: taxonomic names in microbiology and their adjectival derivatives [editorial] Huth EJ. **Ann Intern Med** 1989 Mar 15;110(6):419–20

Nomenclature for pulmonary findings [letter] Yernault JC. **Ann Intern Med** 1989 Feb 1;110(3):248

Bombesin-like peptides in health and disease. Nomenclature meeting. Report and recommendations. 14 October 1987. **Ann N Y Acad Sci** 1988;547:1–2

Recent advances in otitis media. Definition and classification. Klein JO, et al. **Ann Otol Rhinol Laryngol Suppl** 1989 Apr; 139:10

The CHAT classification of stroke. Bernstein EF, et al. **Ann Surg** 1989 Feb;209(2):242–8

Central aortopulmonary shunt using Gore-Tex: the modified Davidson shunt? [letter] Hamilton JR, et al. **Ann Thorac Surg** 1989 Jun;47(6):949

The "incomplete" resection [editorial] Shields TW. **Ann Thorac Surg** 1989 Apr;47(4):487–8

Nursing 'too feminine' for men? [letter] **AORN J** 1989 Feb; 49(2):474, 476

Curriculum terms. Speaking the language. Ammon-Gaberson KB. **AORN J** 1989 Jan;49(1):268–74

Migraineur, or migraineuse? [letter] Leys D, et al. **Arch Neurol** 1989 Sep;46(9):946

The semantic confusion surrounding 'brain death' [letter] Shewmon DA. **Arch Neurol** 1989 Jun;46(6):603–4

Rehabilitation "treatment" (versus training) for "recovery". Anderson TP. **Arch Phys Med Rehabil** 1989 Aug;70(8):647

Standard abbreviations for antiphospholipid antibodies [letter] Asherson RA. **Arthritis Rheum** 1989 Mar; 32(3):359–60

New nomenclature of the non-rod-shaped lactic acid bacteria. Sandine WE. **Biochimie** 1988 Apr;70(4):519–21

CD antigens 1989. Knapp W, et al. **Blood** 1989 Sep; 74(4):1448–50

Caput Medusae in medicine and art. Park RH, et al. **BMJ** 1988 Dec 24–31;297(6664):1677–9

Factor VIII-von Willebrand factor in haemolytic uraemic syndrome [letter] Pasi KJ, et al. **BMJ** 1989 Mar 4; 298(6673):603

Bone histomorphometry: standardization of nomenclature, symbols and units. Summary of proposed system. Parfitt AM. **Bone Miner** 1988 Apr;4(1):1–5

'Latin and Greek terms in prosthetic dentistry' [letter] Davis PR. **Br Dent J** 1988 Nov 19;165(10):356

Latin and Greek terms in prosthetic dentistry. Nairn RI, et al. **Br Dent J** 1988 Sep 24;165(6):229–31

'Latin and Greek terms in prosthetic dentistry' [letter] Nairn RI, et al. **Br Dent J** 1989 Jan 21;166(2):37

Pulmonary atresia with ventricular septal defect and coronary artery fistula: a late presentation [letter] Anderson RH. **Br Heart J** 1988 Sep;60(3):264

Neuroleptic malignant syndrome (NMS): a misnomer? [letter] **Br J Psychiatry** 1987 Dec;151:863–5

Late paraphrenia or the Paraphrenias? [letter] Holden NL. **Br J Psychiatry** 1988 Apr;152:570

RSI—regional pain syndrome: the importance of nomenclature [letter] Brooks P. **Br J Rheumatol** 1989 Apr; 28(2):180–2

A nomenclature for the cortical sulcal features of the tammar wallaby, Macropus eugenii. Mayner L. **Brain Behav Evol** 1989;33(5):293–302

Crohn's disease—a misnomer? Harmer M. **Bristol Med Chir J** 1988 Feb;103(1):9–10

Revision of CDC/WHO case definition for acquired immunodeficiency syndrome (AIDS). **Bull Pan Am Health Organ** 1988;22(2):195–201

"To be or not to be: DDS or DMD". Crawford PR. **Can Dent Assoc J** 1989 Aug;55(8):639–40

Doctor or mister? [letter] **Can J Surg** 1989 Jul;32(4):229–30

Doctor or mister? [letter] Cairns JD. **Can J Surg** 1989 Mar; 32(2):83–4

Doctor or mister? [letter] Eibel P. **Can J Surg** 1989 Sep; 32(5):321

Doctor or Mister (the correct appellation of British surgeons). Eibel P. **Can J Surg** 1988 Nov;31(6):452–3

Righting two wrongs [letter] Righter J. **Can Med Assoc J** 1988 Nov 1;139(9):826

Multilocular cyst of the kidney (cystic nephroma) and cystic, partially differentiated nephroblastoma. Terminology and criteria for diagnosis. Joshi VV, et al. **Cancer** 1989 Jul 15; 64(2):466–79

The case for a name change from neoadjuvant chemotherapy to induction chemotherapy [editorial] Stephens FO. **Cancer** 1989 Apr 1;63(7):1245–6

International Union of Immunological Societies. Nomenclature Committee Working Group on Lymphokines [letter] Paul WE. **Cell Immunol** 1988 Dec; 117(2):430–2

Classification and diagnostic criteria for headache disorders, cranial neuralgias and facial pain. Headache Classification Committee of the International Headache Society. **Cephalalgia** 1988;8 Suppl 7:1–96

Chronic paroxysmal hemicrania (CPH): nomenclature as far as the various stages are concerned [editorial] Sjaastad O. **Cephalalgia** 1989 Mar;9(1):1–2

Value of the new TNM staging system for lung cancer. Mountain CF. **Chest** 1989 Jul;96(1 Suppl):47S–49S

Bronchocentric granulomatosis. Disease or diagnosis? [editorial] Myers JL. **Chest** 1989 Jul;96(1):3–4

Iatrogenic or patient-induced? [letter] Weissberg D. **Chest** 1989 Apr;95(4):936

Velopharyngeal nomenclature: incompetence, inadequacy, insufficiency, and dysfunction. Folkins JW. **Cleft Palate J** 1988 Oct;25(4):413–6 (18 ref.)

Differentiating between sensitivity and limit of detection [letter] Rudy JL. **Clin Chem** 1989 Mar;35(3):509

Definition of cosmetology, cosmetics, and other pertinent terms. Abramovits W. **Clin Dermatol** 1988 Jul–Sep;6(3):5–8

Inhibin: definition and nomenclature, including related substances [letter] Burger HG, et al. **Clin Endocrinol (Oxf)** 1988 Apr;28(4):448–9

International Union of Immunological Societies.

Nomenclature committee working group on lymphokines [letter] Paul WE. **Clin Immunol Immunopathol** 1988 Dec; 49(3):498–500

Unified nomenclature for pathogenic Neisseria species. Hitchcock PJ. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S64–5

Radiological nomenclature in benign breast change. Breast Group of the Royal College of Radiologists. **Clin Radiol** 1989 Jul;40(4):376–9

The formation of Russian ophthalmological terminology. Henning A. **Clio Med** 1985–86;20(1–4):105–23

Prevention orientated and consider marketing techniques to promote dental services [letter] Anderson RJ. **Community Dent Health** 1989 Jun;6(2):169–70

The CODATA/IUIS Hybridoma Data Bank: development of a hybrid system to handle complex data relationships. Walczak CA, et al. **Comput Methods Programs Biomed** 1988 Nov–Dec;27(3):275–85

Metabolic acidosis in severe acute asthma; acid–base nomenclature [letter] **Crit Care Med** 1988 Dec; 16(12):1255–8

The 1987 Catalog of mapped genes and report of the nomenclature committee. McAlpine PJ, et al. **Cytogenet Cell Genet** 1987;46(1–4):29–101

The 1988 catalog of mapped genes and report of the nomenclature committee. McAlpine PJ, et al. **Cytogenet Cell Genet** 1988;49(1–3):4–38

Guidelines for human gene nomenclature. An international system for human gene nomenclature (ISGN, 1987). Shows TB, et al. **Cytogenet Cell Genet** 1987;46(1–4):11–28

Kinetics of bacterial processes in natural aquatic systems based on biomass as determined by high-resolution flow cytometry. Button DK, et al. **Cytometry** 1989 Sep; 10(5):558–63

Polymorphic pemphigoid. Is it still worth using this terminology? Bernard P. **Dermatologica** 1989;178(4):181–3

"Current status" not current status [letter] Haas PA, et al. **Dis Colon Rectum** 1988 Sep;31(9):747–8

The P450 superfamily: updated listing of all genes and recommended nomenclature for the chromosomal loci. Nebert DW, et al. **DNA** 1989 Jan–Feb;8(1):1–13 (145 ref.)

Definitions and nomenclature of nucleic acid structure parameters. **EMBO J** 1989 Jan;8(1):1–4

Nomenclature of tetrapyrroles. Recommendations 1986 IUPAC–IUB Joint Commission on Biochemical Nomenclature (JCBN). Moss GP. **Eur J Biochem** 1988 Dec 15;178(2):277–328

Enzyme nomenclature. Recommendations 1984. Supplement 2: corrections and additions. Webb EC. **Eur J Biochem** 1989 Feb 15;179(3):489–533

Complications of uterine cervix treatments: proposal for a glossary for a uniform classification. Sismondi P, et al. **Eur J Gynaecol Oncol** 1989;10(2):91–6

Cynosures or shibboleths? [editorial] Preece PE. **Eur J Surg Oncol** 1989 Aug;15(4):299–300

Breast microcalcifications [letter] Shetty MR. **Eur J Surg Oncol** 1989 Apr;15(2):200

Recommendations for crystallin nomenclature. Bloemendal H, et al. **Exp Eye Res** 1989 Apr;48(4):465–6

Common and not so common abbreviations: do you understand them? [letter] Brooks MH. **Fam Pract** 1988 Sep; 5(3):234–6

And just what is a pre–embryo? Jones HW Jr, et al. **Fertil Steril** 1989 Aug;52(2):189–91

On the taxonomy of some pathogenic and saprophytic leptospires. Vassilevska M, et al. **Folia Med (Plovdiv)** 1987; 29(2):48–53

High–resolution R–banding at the 1250–band level. II. Schematic representation and nomenclature of human RBG–banded chromosomes. Drouin R, et al. **Genome** 1989 Jun;32(3):425–39

Use of words to describe aged or elderly: a factor analysis. Waskel SA, et al. **Gerontol Geriatr Educ** 1987–88; 8(1–2):123–31

What does gerontology mean? Achenbaum WA, et al. **Gerontologist** 1989 Jun;29(3):393–400 (195 ref.)

On the Covey article [letter] Cohen ES. **Gerontologist** 1988 Oct;28(5):708

Standardization of neck dissection nomenclature. Suen JY, et al. **Head Neck Surg** 1987 Nov–Dec;10(2):75–7

A medically oriented eclectic psychoanalytic psychiatrist [letter] Solomon S. **Headache** 1989 Apr;29(4):258

Current procedural terminology codes for psychiatric services. Margolis JA, et al. **Hosp Community Psychiatry** 1989 Jun;40(6):625–9

The new taxonomy in infections. Turck M. **Hosp Pract [Off]** 1989 Jun 15;24(6):109–18, 120–1

On Chinese restaurants, prolapsing heart valves, and other medical conundrums. Weisse AB. **Hosp Pract [Off]** 1989 Feb 15;24(2):275–6, 279–82

Gene symbols for fragile sites: a proposal [letter] Hecht F, et al. **Hum Genet** 1989 Jul;82(4):394

Nomenclature for factors of the HLA system, 1987. Decisions of the Nomenclature Committee on Leukocyte Antigens, which met in New York on November 21–23, 1987. Dupont B. **Hum Immunol** 1989 Sep;26(1):3–14 (34 ref.)

New nomenclature for vulvar disease: International Society for the Study of Vulvar Disease [letter] Ridley CM, et al. **Hum Pathol** 1989 May;20(5):495–6

Nomenclature for factors of the HLA system, 1987. WHO Nomenclature Committee. **Immunobiology** 1988 Sep; 177(4–5):465–76

Nomenclature for factors of the HLA system, 1987. **Immunogenetics** 1988;28(6):391–8

Lymphokine nomenclature. Paul WE. **Immunol Today** 1988 Dec;9(12):366–7

"Babylon–scopy" or the semantic confusion in gynecologic endoscopy [letter] Vancaillie TG. **Int J Fertil** 1989 Jan–Feb;34(1):17–8

Latino/"Hispanic"—who needs a name? The case against a standardized terminology. Gimenez ME. **Int J Health Serv** 1989;19(3):557–71

Who is the radiation therapist? [letter] Stevens KR Jr. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):243

Nomenclature of chlamydia. Riordan–Eva P. **Int Ophthalmol** 1988;12(1):15–7

The classification and nomenclature of viruses: summary of results of meetings of the International Committee on Taxonomy of Viruses in Edmonton, Canada 1987. Brown F. **Intervirology** 1989;30(4):181–6

Amphibian and piscine iridoviruses proposal for nomenclature and taxonomy based on molecular and biological properties. Essani K, et al. **Intervirology** 1989; 30(4):187–93

Pemphigoid en cocarde. Gawkrodger DJ, et al. **J Am Acad Dermatol** 1989 Jun;20(6):1125

Misuse of the term colposcopy [letter] Helm TN. **J Am Acad Dermatol** 1989 Apr;20(4):707

Etymology of pemphigus [letter] Holubar K. **J Am Acad Dermatol** 1989 Jul;21(1):155–6

Methylchloroisothiazolinone–methylisothiazolinone (Kathon CG) [letter] Larsen WG. **J Am Acad Dermatol** 1989 Apr; 20(4):703

Colposcopic examination of men [letter] Levit F. **J Am Acad Dermatol** 1989 Apr;20(4):707

Code on dental procedures and nomenclature. Council on Dental Care Programs. **J Am Dent Assoc** 1989 Mar; 118(3):369–71, 373–5, 377

International viewpoint: educating medical students, standardizing the term "dietitian" [letter] Montandon C. **J Am Diet Assoc** 1989 Sep;89(9):1234

Assessment in geriatrics. Of caveats and names. Reuben DB, et al. **J Am Geriatr Soc** 1989 Jun;37(6):570–2 (15 ref.)

Culex stigmatosoma and Cx. peus: identification of female adults in the United States. Strickman D. **J Am Mosq Control Assoc** 1988 Dec;4(4):555–6

Blepharochalasis and dermatochalasis [letter] O'Brien RJ 2d. **J Am Optom Assoc** 1988 Oct;59(10):758

Evolving nomenclature for viruses [letter] Cohn DL. **J Am Vet Med Assoc** 1989 Feb 1;194(3):325

Etymologic considerations [letter] Haas KB. **J Am Vet Med Assoc** 1989 Aug 15;195(4):423

The etymology of veterinarian [news] Lawrence EA. **J Am Vet Med Assoc** 1989 Mar 15;194(6):751, 753

VATER association. A unifying concept of multiple anomalies. Beals RK, et al. **J Bone Joint Surg [Am]** 1989 Jul;71(6):948–50 (21 ref.)

Current concepts review. The definitions of terms for motion and position of the knee and injuries of the ligaments. Noyes FR, et al. **J Bone Joint Surg [Am]** 1989 Mar;71(3):465–72 (58 ref.)

Congenital dislocation of the hip—a misleading term: brief report. Klisic PJ. **J Bone Joint Surg [Br]** 1989 Jan;71(1):136

Report of the Ad Hoc Committee on Nomenclature and Standards for Bone Proteins and Growth Factors. Hauschka PV, et al. **J Bone Miner Res** 1986 Oct;1(5):485–6

ACS committee on Nomenclature: annual report for 1987. Loening KL. **J Chem Inf Comput Sci** 1988 Aug;28(3):150–3

Concepts and terms in genetic epidemiology: some similarities to infectious disease epidemiology. Khoury MJ, et al. **J Clin Epidemiol** 1988;41(12):1181–7 (35 ref.)

Lumping and splitting through thick and thin bowel. Morowitz DA. **J Clin Gastroenterol** 1989 Feb;11(1):8–9

Enterobacter hormaechei, a new species of the family Enterobacteriaceae formerly known as enteric group 75. O'Hara CM, et al. **J Clin Microbiol** 1989 Sep;27(9):2046–9

Modified nomenclature for the "10%" electrode system. Chatrian GE, et al. **J Clin Neurophysiol** 1988 Apr; 5(2):183–6

On the use of symbolic labels in psychotherapy outcome research: comment on Wills, Faitler, and Snyder. Collins FL Jr, et al. **J Consult Clin Psychol** 1988 Dec;56(6):932–3

Distinguishing specific from nonspecific interventions in comparative outcome studies: reply to Collins and Thompson. Snyder DK, et al. **J Consult Clin Psychol** 1988 Dec;56(6):934–5

What's in a name? The function of the mineralized tissue matrix proteins [editorial] Boskey AL. **J Dent Res** 1989 Feb;68(2):159

Mitral valve prolapse—from a normal variant to a pathologic entity [letter] Cheng TO. **J Gen Intern Med** 1988 Nov–Dec; 3(6):616

Designation of antibodies and their derivatives. Suggestions for a general nomenclature—a discussion document. Baumgarten H, et al. **J Immunol Methods** 1989 Aug 15; 122(1):1–5

International Union of Immunological Societies. Nomenclature Committee Working Group on Lymphokines. Paul WE. **J Immunol Methods** 1988 Nov 25;115(1):1–2

The in vitro manipulation of terminology [editorial] Thatcher SS, et al. **J In Vitro Fert Embryo Transf** 1988 Aug; 5(4):179–80

Toward a common language [letter] **J Manipulative Physiol Ther** 1988 Aug;11(4):330–2

Treatment of lumbar motor unit instability with a custom orthosis: clinical procedure [letter] Bolton PS. **J Manipulative Physiol Ther** 1988 Oct;11(5):443

A critical look at the subluxation hypothesis: commentary [letter] Dickey JL. **J Manipulative Physiol Ther** 1988 Aug; 11(4):338

Nomenclatures of anatomical distortion of the spine: a comparison [letter] Milliron JR. **J Manipulative Physiol Ther** 1988 Aug;11(4):333–4

Taxonomy of neurodiagnostic modalities. Neff SD. **J Manipulative Physiol Ther** 1989 Apr;12(2):120–30 (20 ref.)

Health and disease: what can medicine do for philosophy? Scadding JG. **J Med Ethics** 1988 Sep;14(3):118–24

Definitions and nomenclature of nucleic acid structure parameters. **J Mol Biol** 1989 Feb 20;205(4):787–91

The tower of Babel [editorial] Laskin DM. **J Oral Maxillofac Surg** 1989 Aug;47(8):779

Naming visual pigments. Vogt K. **J Photochem Photobiol –B–** 1988 Jul;2(1):133–4

Clarifying the "Report of the ISSVD Terminology Committee" [letter] Burdick B. **J Reprod Med** 1988 Jul; 33(7):97–8

Quality assurance, quality management, risk management, and other buzz words of the eighties. How do we use them? [editorial] Skinner RL Jr. **J S C Med Assoc** 1989 Jan; 85(1):46

The Third WHO Regional Workshop on the Standardization of Acupuncture Nomenclature. Wang DS. **J Tradit Chin Med** 1988 Sep;8(3):221–7

Infantile diarrhoea among the northern Thai, 'khi yao' [letter] Imong SM, et al. **J Trop Pediatr** 1989 Apr;35(2):92–3

Endovaginal? [letter] [published erratum appears in J Ultrasound Med 1989 Jun;8(6):339] Garret W. **J Ultrasound Med** 1989 Apr;8(4):222

Extracorporeal shock wave lithotripsy is a surgical operation, albeit noninvasive [letter] Drach GW. **J Urol** 1989 May; 141(5):1213–4

Re: The renal sinus: an imaging review and proposed nomenclature for sinus cysts [letter] Vela–Navarrete R. **J Urol** 1989 Sep;142(3):829

In the words of a vascular surgeon [letter] Friedman SG. **J Vasc Surg** 1989 Aug;10(2):211–2

J–drugs [letter] **JAMA** 1989 May 26;261(20):2952

Renaming AIDS: 'retroviral immunodeficiency'? [letter] Allard R. **JAMA** 1989 May 5;261(17):2503

The unbearable quaintness of neurology [letter] Dasheiff RM. **JAMA** 1989 Jul 7;262(1):30

Dressage for cardiologists: gallop or canter? [letter] [see comments] Hund FW. **JAMA** 1989 Apr 14;261(14):2063. **Comment in:** JAMA 1989 Jul 21;262(3):352

Normal? [letter] Manson FE. **JAMA** 1989 Jun 16; 261(23):3408

Use of the terms euthanasia, euthanatize and killing [letter] Rao GN. **Lab Anim Sci** 1988 Oct;38(5):558

The effect of transportation stress on splenic natural killer cell activity in C57BL/6J mice [letter] Standel PR. **Lab Anim Sci** 1988 Oct;38(5):557

Streptococcus pneumoniae arthritis and osteomyelitis with vitamin C deficiency in guinea pigs [letter] Witt WM. **Lab Anim Sci** 1988 Oct;38(5):557–8

Type 2 diabetes or NIDDM: looking for a better name. **Lancet** 1989 Mar 18;1(8638):589–91 (39 ref.)

"Leukoaraiosis" explained [letter] Ball MJ. **Lancet** 1989 Mar 18;1(8638):612–3

Graves' disease: the thyroid not the pancreas [letter] Scadding JG. **Lancet** 1988 Dec 17;2(8625):1429

Mohs micrographic surgery [letter] Skouge JW. **Laryngoscope** 1989 Mar;99(3):350

Idiopathic granulomatosis manifesting as fever of unknown origin [letter] Colby TV. **Mayo Clin Proc** 1989 May; 64(5):597

Classification and terminology of hepatic allograft rejection: whither bound? Ludwig J. **Mayo Clin Proc** 1989 Jun; 64(6):676–9

A name is not enough. Bishop CW. **MD Comput** 1989 Jul–Aug;6(4):200–6

Education and training in medicine. Calman KC, et al. **Med Educ** 1988 Nov;22(6):488–91

The classification–nomenclature issues in medicine: a return to natural language. Côté RA, et al. **Med Inf (Lond)** 1989 Jan–Mar;14(1):25–41

The improper use of the term "normal" in atherosclerosis research. Velican C, et al. **Med Interne** 1988 Jul–Sep; 26(3):171–7 (17 ref.)

Patients and clients [letter] George CR. **Med J Aust** 1988 Nov 21;149(10):568

Chronic fatigue syndrome [letter] Phillips H. **Med J Aust** 1989 Mar 20;150(6):351–2

Patients and clients [letter] Shum N. **Med J Aust** 1989 Feb 6;150(3):167

The naming of parts [letter] Wodak AD. **Med J Aust** 1988 Nov 21;149(10):568

'Alcohol intoxication' or 'drunkenness': is there a difference? Rix KJ. **Med Sci Law** 1989 Apr;29(2):100–6

New unified nomenclature for the flagellar genes of Escherichia coli and Salmonella typhimurium. Iino T, et al. **Microbiol Rev** 1988 Dec;52(4):533–5

Cephawhatchamacallums [letter] Ellis R, et al. **N Engl J Med** 1989 Mar 30;320(13):872

DNAR: do not attempt resuscitation [letter] Hadorn DG. **N Engl J Med** 1989 Mar 9;320(10):673

Case 43–1988 [letter] Neu HC. **N Engl J Med** 1989 Apr 27;

320(17):1148
Why are we sick? [letter] Baycroft CM. **N Z Med J** 1989 Apr 26;102(866):199
ME syndrome or chronic viral fatigue syndrome? [letter] Palmer KT, et al. **N Z Med J** 1989 May 10;102(867):228
Chaotic names [letter] Ashburner M, et al. **Nature** 1989 May 25;339(6222):264
Embryo definitions [letter] McEvoy AJ. **Nature** 1988 Nov 17;336(6196):198
Apoptosis or apoptomeatic [letter] Michie CA. **Nature** 1989 Apr 27;338(6218):698
Atrial natriuretic factor. What's in a name? [letter] de Wildt D, et al. **Nephron** 1988;50(1):87
How old is old? [editorial] Coleman PD. **Neurobiol Aging** 1989 Mar–Apr;10(2):115
Toward a definition of Parkinson's disease. Duvoisin RC, et al. **Neurology** 1989 May;39(5):746
Lewy body disease [letter] Gibb WR, et al. **Neurology** 1989 Jun;39(6):878–9
Clinical neuromythology VI. Au clair de lacune: holy, wholly, holey logic. Landau WM. **Neurology** 1989 May; 39(5):725–30
What is radiosurgery? [letter] Hudgins WR. **Neurosurgery** 1988 Aug;23(2):272–3
Definitions and nomenclature of nucleic acid structure components. Dickerson RE. **Nucleic Acids Res** 1989 Mar 11;17(5):1797–803
'Chalasia' terminology and treatment questioned [letter] O'Hara S. **Nurse Pract** 1989 Aug;14(8):10
"Madame A is a 30-year-old housewife, gravida X, para Y ...". Pun TC, et al. **Obstet Gynecol** 1989 Feb;73(2):276–7
Labor's dysfunctional lexicon. Schifrin BS, et al. **Obstet Gynecol** 1989 Jul;74(1):121–4
Rational nomenclature of alpha crystallin subunits. Bloemendal H, et al. **Ophthalmic Res** 1988;20(6):380–2
AIDS buzzwords further clarified. Pazin GJ. **Pa Med** 1989 Jun;92(6):72–3
Motivation and reinforcement. Interdisciplinary dictionary. Simonov PV. **Pavlov J Biol Sci** 1989 Jan–Mar;24(1):6–10
Pediatric emergency physicians [letter] Eitzen EM Jr. **Pediatr Emerg Care** 1988 Dec;4(4):301
Lexicographer–scientists and the plasticity of lymphocytes. Kaplan DR. **Perspect Biol Med** 1988 Autumn;32(1):31–7
Some problems in the meanings of terms, as exemplified by tubulointerstitial and medullary cystic diseases of the kidneys. Landing BH. **Perspect Pediatr Pathol** 1988; 12:20–43 (34 ref.)
Agerasia—need aging wither one? Freeman JT. **Pharos** 1989 Winter;52(1):36
Diagnosis: defining the term [editorial] Rose SJ. **Phys Ther** 1989 Feb;69(2):162–3
Intermaxillary fixation [letter] Hupp JR. **Plast Reconstr Surg** 1989 Jan;83(1):198
AAAAA—crawling to the top and why I rode with Wojcik [letter] Welch J. **Plast Reconstr Surg** 1989 Mar;83(3):576
Nomenclature of mammalian aldehyde dehydrogenases. **Prog Clin Biol Res** 1989;290:xix–xxi
How to define hormone–resistance. de Voogt HJ, et al. **Prog Clin Biol Res** 1989;303:325–9
Eicosanoid nomenclature. Smith W. **Prostaglandins** 1989 Jul; 38(1):125–33
Structure, function, nomenclature [editorial] Wetzel R. **Protein Eng** 1988 Apr;2(1):1–3
Diagnostic grammar and assessment: translating criteria into questions. Robins LN. **Psychol Med** 1989 Feb;19(1):57–68
Emotion, affect and mood: a terminological introduction. Berner P. **Psychopathology** 1988;21(2–3):65–9
Psychopathological considerations on the semantic confusion between mood and affect. Pritz WF. **Psychopathology** 1988; 21(2–3):70–5 (23 ref.)
Standard terminology for reporting of reproductive health statistics in the United States. **Public Health Rep** 1988 Sep–Oct;103(5):464–71
What does it mean to be modal? [editorial] Tuddenham WJ. **Radiographics** 1985 Nov;5(6):819–20
Fibrocystic "disease" [letter] Gerson ES. **Radiology** 1989 May;171(2):583–4
The abused "silhouette" [letter] Jackson H. **Radiology** 1988 Nov;169(2):578
Terminology of clinical combined radiotherapy–chemotherapy [letter] Steel GG. **Radiother Oncol** 1988 Dec;13(4):315–6
Illustrated glossary for spinal anatomy. With explanations and a French and German translation. François RJ, et al. **Rheumatol Int** 1985;5(6):241–5
Nomenclature in a pigmentocracy—a scientist's dilemma. Bourne DE. **S Afr Med J** 1989 Sep 2;76(5):185
Some changes in anatomical nomenclature [editorial] Tobias PV. **S Afr Med J** 1989 Mar 4;75(5):206
Acid–related disorders: what are they? Colin–Jones DG. **Scand J Gastroenterol Suppl** 1988;155:8–11
Gastroesophageal reflux disease. Joelsson B. **Scand J Gastroenterol Suppl** 1988;155:18–9
Gastritis—a misused term in clinical gastroenterology. Varis K. **Scand J Gastroenterol Suppl** 1988;155:53–60
The standardisation of terminology of lower urinary tract function. The International Continence Society Committee on Standardisation of Terminology. Abrams P, et al. **Scand J Urol Nephrol Suppl** 1988;114:5–19
Verbum sapienti. Stoker D. **Skeletal Radiol** 1989;18(2):88
'Nerves': folk idiom for anxiety and depression? Nations MK, et al. **Soc Sci Med** 1988;26(12):1245–59
Prothrombin activity [letter] Jeffery WH. **South Med J** 1989 Aug;82(8):1064
Adrenaloma: a better term than incidentaloma [letter] Linos DA. **Surgery** 1989 Mar;105(3):456
Coumarin necrosis or Coumadin necrosis? [letter] Marshall ME, et al. **Surgery** 1989 Feb;105(2 Pt 1):237–8
Recurrence or persistence? [letter] Miller JM. **Surgery** 1988 Nov;104(5):936
Subcommittee on contact activation. Nomenclature of kininogens. Colman RW, et al. **Thromb Haemost** 1988 Oct 31;60(2):340–1
Classification of antithrombin III deficiencies—has a new tower of Babel been built? [letter] Sas G. **Thromb Haemost** 1988 Dec 22;60(3):530–1
Nomenclature for factors of the HLA system, 1987. **Tissue Antigens** 1988 Oct;32(4):177–87
Nomenclature for factors of the HLA system. Comments to the nomenclature committee. Degos L. **Tissue Antigens** 1989 Mar;33(3):427–8
Standard nomenclature and diagnostic criteria in toxicologic pathology [editorial] Streett CS. **Toxicol Pathol** 1988; 16(2):305–6
Naming of cyclic heptapeptide toxins of cyanobacteria (blue–green algae). Carmichael WW, et al. **Toxicon** 1988; 26(11):971–3
The origin of espundia (esponja) [letter] Trees AJ. **Trans R Soc Trop Med Hyg** 1988;82(1):176
Lipid terminology: 'free' fatty acid is ambiguous [letter] Glatz JF, et al. **Trends Biochem Sci** 1988 May;13(5):167–8
Acidic amino acid receptor nomenclature: time for change [letter] Foster AC, et al. **Trends Neurosci** 1988 Jan; 11(1):17–8 (14 ref.)
A comment on the classification and nomenclature of phencyclidine and sigma receptor sites [letter] Kemp JA, et al. **Trends Neurosci** 1988 Sep;11(9):388–9
Behavioral teratology: an inappropriate term for some uninterpretable effects. Cattabeni F, et al. **Trends Pharmacol Sci** 1988 Jan;9(1):13–5 (37 ref.)
May the force be with you [letter] Miller DJ. **Trends Pharmacol Sci** 1988 Apr;9(4):124–5
Benzodiazepine terminology [letter] Nutt D. **Trends Pharmacol Sci** 1988 Mar;9(3):86
From a physician in Alaska, a correction in terminology [letter] Senter TP. **Va Med** 1988 Aug;115(8):361–2
Standardized nomenclature of animal parasitic diseases (SNOAPAD). Kassai T, et al. **Vet Parasitol** 1988 Oct; 29(4):299–326
Three groups of Babesia canis distinguished and a proposal for nomenclature. Uilenberg G, et al. **Vet Q** 1989 Jan; 11(1):33–40
Nomenclature of chromosomes [letter] Long SE. **Vet Rec** 1989 Jun 24;124(25):667
Sensation luminance: a new name to distinguish CIE luminance from luminance dependent on an individual's spectral sensitivity. Kaiser PK. **Vision Res** 1988;28(3):455–6
Nomenclature for factors of the HLA system, 1987. **Vox Sang** 1988;55(2):119–26
On the meaning of words [letter] Hanold FH. **West J Med** 1988 Oct;149(4):466
[Nosology, etiology, pathogenesis and terminology of so–called reactive arthritis and Reiter's syndrome] Koichev K. **Vutr Boles** 1988;27(4):1–6 (20 ref.) **(Bul)**
[Nomenclature of the plasmic transport of neurons] Gan SD. **Sheng Li Ko Hsueh Chin Chan** 1989 Jan;20(1):84–6 (25 ref.) **(Chi)**
[The origins and development of medical terminology] Adlafová A. **Cas Lek Cesk** 1989 Jun 9;128(24):762–3 **(Cze)**
[A standard code for naming microbes] Schindler J, et al. **Cesk Epidemiol Mikrobiol Imunol** 1989 Jan;38(1):48–51 (Eng. Abstr.) **(Cze)**
[Pharmaceutical terminology. II. Present status and perspectives] Melichar M, et al. **Cesk Farm** 1989 Mar; 38(2):69–75 **(Cze)**
[Slang and jargon in drug addiction] Hagelsten JO. **Nord Med** 1989;104(8–9):228–31 (Eng. Abstr.) **(Dan)**
[Overview of nuclear magnetic resonance terminology] Van de Vyver FL, et al. **J Belge Radiol** 1988;71(2):273–93 **(Dut)**
[Medicine and language (letter)] van Everdingen JJ. **Ned Tijdschr Geneeskd** 1989 Mar 4;133(9):465–6 **(Dut)**
[The cecum and the appendix] Järvinen HJ. **Duodecim** 1988; 104(23–24):1996 **(Fin)**
[Littlepox or smallpox?] Meurman O, et al. **Duodecim** 1989; 105(4):383 **(Fin)**
[Erythema infectiosum—Parvovirus infection in Finnish? (letter)] Meurman O, et al. **Duodecim** 1988;104(16):1282 **(Fin)**
[Preference for the name "smallpox"] Raivio K, et al. **Duodecim** 1988;104(23–24):1997 **(Fin)**
[Thoughts of a philosophic nature on the definition of intrinsic asthma] Sonneville A. **Allerg Immunol (Paris)** 1989 Feb;21(2):53–5 (9 ref.) (Eng. Abstr.) **(Fre)**
[Evaluation of the activities of the Taxonomic Subcommittee on Enterobacteriaceae of the International Committee on Systematic Bacteriology] van Oyc E. **Arch Belg** 1987; 45(11–12):523–30 (Eng. Abstr.) **(Fre)**
["Near miss" in the infant: a problem of terminology (letter)] Laplane R, et al. **Arch Fr Pediatr** 1989 Feb;46(2):155 **(Fre)**
[Defense and an illustration of the taxonomy] Brygoo ER. **Arch Inst Pasteur Madagascar** 1988;54(1):11–40 **(Fre)**
[Report on activity in 1988 of the terminology group] Sournia JC. **Bull Acad Natl Med** 1989 Jan;173(1):67–70 **(Fre)**
[The treachery of words: apropos of "beyond coma"] Lazorthes G, et al. **Bull Acad Natl Med (Paris)** 1988 Apr; 172(4):587–93 (Eng. Abstr.) **(Fre)**
[The nomenclature of professional services] Sournia JC. **Bull Acad Natl Med (Paris)** 1988 Apr;172(4):519–22 (Eng. Abstr.) **(Fre)**
[Abridged lexicon of terms in nuclear magnetic resonance] Muller RN. **J Belge Radiol** 1988;71(2):259–71 **(Fre)**
[Pickwickian syndrome or Dickens betrayed] Bonard EC. **Rev Med Suisse Romande** 1988 Oct;108(10):881–2 **(Fre)**
[The consequences of the third edition of the Zoological Code for Nomenclature for parasitology] Eichler W. **Angew Parasitol** 1989 Feb;30(1):51–5 (Eng. Abstr.) **(Ger)**
[Basic abdominal ultrasound diagnosis course. Nomenclature and description of findings] Gresser U. **Bildgebung** 1987–89; 56 Suppl 1:10–3 **(Ger)**
[Tradition and a lack of rhyme in surgical nomenclature] Stelzner F. **Chirurg** 1989 May;60(5):371–5 **(Ger)**
[Recommendations for the nomenclature of psoriasis. Revised version] Schubert H, et al. **Dermatol Monatsschr** 1988; 174(7):414–8 **(Ger)**
[Definition and pathogenesis of unstable angina pectoris] Hamm W, et al. **Dtsch Med Wochenschr** 1989 Mar 31; 114(13):507–10 (20 ref.) **(Ger)**
[Vigilance—a state of order or a force that produces order?] Ulrich G, et al. **Fortschr Neurol Psychiatr** 1988 Dec; 56(12):402–6 (31 ref.) (Eng. Abstr.) **(Ger)**
[Interrater reliability of a German version of the "International Classification of Impairments, Disabilities, and Handicaps (ICIDH)" of the World Health Organization] Behrens E, et al. **Int J Rehabil Res** 1987; 10(4):391–404 (Eng. Abstr.) **(Ger)**
[Elemental diet and its nomenclature. Composition, indications and contraindications] Sailer D. **Med Klin** 1989 May 15;84(5):254–7 (25 ref.) **(Ger)**
[Disease, syndrome, sequence] Spranger J. **Monatsschr Kinderheilkd** 1989 Jan;137(1):2–7 (14 ref.) (Eng. Abstr.) **(Ger)**
[Our language] Raestrup O. **Versicherungsmedizin** 1988 Nov 1;40(6):145–6 **(Ger)**
[Considerations on the nomenclature of "soft tissue rheumatism"] Mathies H. **Z Rheumatol** 1988 Nov–Dec; 47(6):432–3 **(Ger)**
[The definition of the term "mold"] Kreisel H. **Zentralbl Mikrobiol** 1988;143(4):263–7 (32 ref.) (Eng. Abstr.) **(Ger)**
[Position of the Hungarian Academy of Sciences on the orthography of medical terms] **Orv Hetil** 1988 Jun 19; 129(25):1325–6 **(Hun)**
[Further comments on Hungarian medical orthography (letter)] **Orv Hetil** 1988 Jun 19;129(25):1341–2 **(Hun)**
[Common international names and trademarks in the pharmaceutical field] Pasotti V. **Boll Chim Farm** 1989 Apr; 128(4):121–4 (Eng. Abstr.) **(Ita)**
["Natural drugs": old myths and new markets] Nencini P. **Medicina (Firenze)** 1989 Jan–Mar;9(1):73–8 (24 ref.) (Eng. Abstr.) **(Ita)**
[Proposal of a 5–letter obstetric formula] Paradiso S, et al. **Minerva Ginecol** 1988 May;40(5):339 (Eng. Abstr.) **(Ita)**
[The history of psychiatric terminology in Japan] Okada Y. **Seishin Shinkeigaku Zasshi** 1988;90(7):570–8 **(Jpn)**
[Norwegian nomenclature in immunology] Fossum S, et al. **Tidsskr Nor Laegeforen** 1989 Mar 10;109(7–8):853–5 (Eng. Abstr.) **(Nor)**
[Pulmonary edema of extracardiac etiology (ARDS–adult respiratory distress syndrome, HPPE–high permeability pulmonary edema)] Bochenek G. **Pneumonol Pol** 1988 Aug; 56(8):387–92 (0 ref.) **(Pol)**
[Professionals in health areas: knowledge of the documentation terminology] Población DA, et al. **Rev Saude Publica** 1988 Oct;22(5):422–35 (Eng. Abstr.) **(Por)**
[Numerical evaluation of expressions of probability used in medical language] Grigoriu BD, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Apr–Jun;92(2):361–4 (Eng. Abstr.) **(Rum)**
["Nephropathy of pregnant women": from the viewpoint of the urologist where is the harm in the wide use of this term?] Morozov AV, et al. **Akush Ginekol (Mosk)** 1988 Aug;(8):72–4 **(Rus)**
[Gestosis: its clinical, diagnostic and therapeutic aspects] Repina MA. **Akush Ginekol (Mosk)** 1988 Sep;(9):64–7 **(Rus)**
[Disputable problems of the diagnosis and therapy of severe forms of gestosis] Serov VN, et al. **Akush Ginekol (Mosk)** 1988 Sep;(9):67–70 **(Rus)**
[Chronic dust–induced lung disease] Zislin DM. **Gig Tr Prof Zabol** 1988 Oct;(10):10–2 (Eng. Abstr.) **(Rus)**
[Current coding of implanted devices for correction of cardiac rhythm disorders] Bredikis Iulu, et al. **Kardiologiia** 1988 Dec;28(12):123–5 **(Rus)**
[Is a discussion on infection necessary?] Kutin AA. **Khirurgiia (Mosk)** 1989 Jun;(6):98–101 **(Rus)**
[Controversial problems of the terminology and classification of relaparotomy] Myshkin KI, et al. **Khirurgiia (Mosk)** 1989 Feb;(2):69–73 **(Rus)**
[An analysis of the meaning of the concepts of "commitment" and "determination" in the study of patterns of development] Detlaf TA. **Ontogenez** 1988 Sep–Oct;

19(5):453–60 (26 ref.) (Eng. Abstr.) (Rus)
[Definition of traumatologic terms] Kuz'minykh AP, et al. **Ortop Travmatol Protez** 1988 Aug;(8):71–3 (Rus)
[Bronchitis in children: recurrent or chronic?] Artamonov RG. **Pediatriia** 1988;(7):81–4 (Rus)
[Multi-systemic mitochondrial cytopathy in children] Belokon' NA, et al. **Pediatriia** 1988;(7):84–7 (Rus)
[Contradictions in the interpretation of the term "toxicosis"] Bogadel'nikov IV, et al. **Pediatriia** 1988;(6):92–4 (Rus)
[Nephrotic syndrome in children] Ignatova MS. **Pediatriia** 1989;(7):98–100 (Rus)
[Classification and terminology of periodic disease in children] Petrosian RE, et al. **Pediatriia** 1988;(6):94–5 (Rus)
[Value of the principles of conducting scientific research and historical psychology in historical and medical studies (various problems of the theory of history of medicine)] Arkhangel'skiĭ GV. **Sov Zdravookhr** 1988;(6):66–70 (Rus)
[On the term "health education" and its synonyms] Fokina OA, et al. **Sov Zdravookhr** 1989;(6):43–7 (Rus)
[Terminology with regard to health education] Popov VF, et al. **Sov Zdravookhr** 1988;(10):54–7 (Rus)
[The terminology of neurodermatitis] Brailovskiĭ Ala. **Vestn Dermatol Venerol** 1988;(11):22–4 (Rus)
["Atopic dermatitis"—terminology questions] Bukharovich MN, et al. **Vestn Dermatol Venerol** 1989;(1):34–6 (Eng. Abstr.) (Rus)
[What are diffuse neurodermatitis and atopic dermatitis?] Gol'dshteĭn LM. **Vestn Dermatol Venerol** 1989;(3):32–3 (Eng. Abstr.) (Rus)
[Idiopathic Pasini–Pierini atrophoderma associated with guttate scleroderma] Goncharova LI, et al. **Vestn Dermatol Venerol** 1988;(7):68–9 (Eng. Abstr.) (Rus)
[Atopic dermatitis as a term and a disease] Grebeniuk VN, et al. **Vestn Dermatol Venerol** 1989;(5):20–3 (Eng. Abstr.) (Rus)
[The terminology of neurodermatitis] Il'in II, et al. **Vestn Dermatol Venerol** 1989;(3):30–1 (Eng. Abstr.) (Rus)
[Terminology, clinical picture and treatment of atopic dermatitis and neurodermatitis] Romanenko GF, et al. **Vestn Dermatol Venerol** 1989;(4):22–6 (Eng. Abstr.) (Rus)
[An improvement in the terminology of atopic dermatitis–diffuse neurodermatitis] Zadorozhnyĭ BA. **Vestn Dermatol Venerol** 1989;(5):19–20 (Eng. Abstr.) (Rus)
[Relaparotomy: its meaning and classification] Gubov IuP, et al. **Vestn Khir** 1987 Dec;139(12):58–9 (Rus)
[Methodologic aspects of theories on trauma–induced disease] Lytkin MI, et al. **Vestn Khir** 1988 Aug;141(8):3–8 (Eng. Abstr.) (Rus)
[The term "medical protection"] Karakchiev NI. **Voen Med Zh** 1989 Feb;(2):18 (Rus)
[Military medical terminology] Voĭtenko MF. **Voen Med Zh** 1989 Feb;(2):17–8 (Rus)
[Nomenclature of vitamins and related compounds] **Vopr Pitan** 1989 Mar–Apr;(2):75–8 (Rus)
[Is the term "sapronoses" needed?] Domaradskiĭ IV. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Dec;(12):117–25 (35 ref.) (Rus)
[A logical definition of the concept of the "opportunistic microorganism" (a discussion apropos of the article by A. F. Frolov, A. M. Zaritskiĭ and Iu. M. Fel'dman published in Zhurnal mikrogilogii, épidemiologii i immunobiologii, 1986, No. 9, pp. 93–7)] Kalina GP. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Oct;(10):101–5 (Rus)
[Trends in the development of the theory of current American psychiatry (data of the DSM–III–R)] Lichko AE. **Zh Nevropatol Psikhiatr** 1989;89(6):114–8 (Rus)
[The substance of the concept of "phobia"] Poliakov SE. **Zh Nevropatol Psikhiatr** 1988;88(11):64–7 (Eng. Abstr.) (Rus)
[Nomenclature of genes and gene products of the HLA complex 1987] Buc M. **Bratisl Lek Listy** 1988 Dec; 89(12):890–4 (Eng. Abstr.) (Slo)
[Historical research on international medical terminology] Simon F. **Bratisl Lek Listy** 1989 Jan;90(1):48–55 (Eng. Abstr.) (Slo)
[The correct utilization of scientific terminology (letter)] López-Aramburu MA. **Actas Urol Esp** 1989 Mar–Apr; 13(2):154 (Spa)
[Are patients "materials"? (letter)] Batista Miranda JE. **Med Clin (Barc)** 1989 Mar 11;92(9):357 (Spa)
[Medical language. Technicians have what physicians lack...TNC (Technical Nomenclature Center)—in the role of both gene surgeon and midwife when new technical terms are created] Karlsson Y. **Lakartidningen** 1989 Mar 29;86(13):1166–8 (Swe)
[Large dose of medicine in the National Encyclopedia. Also, wrong terms by the national linguistic standards] Karlsson Y. **Lakartidningen** 1989 Mar 8;86(10):860–1 (Swe)

STANDARDS

Standardization of nomenclature in clinical chemistry [letter] Fuentes-Arderiu X. **Clin Chem** 1989 Jul;35(7):1552

NOMIFENSINE

ADVERSE EFFECTS

Adverse lung reactions to nomifensine: a posthumous note [letter] Patel H, et al. **Clin Neuropharmacol** 1987 Apr; 10(2):190–1
Lessons from nomifensine [editorial] **Lancet** 1988 Nov 5; 2(8619):1059–60
Lessons from nomifensine [letter] Mann RD. **Lancet** 1988 Dec 24–31;2(8626–8627):1490–1
Early neutrophil alveolitis after rechallenge in drug induced alveolitis. Salmeron S, et al. **Thorax** 1988 Aug;43(8):647–8

CHEMICAL SYNTHESIS

Synthesis of racemic (+) and (–) N-[methyl-11C]nomifensine, a ligand for evaluation of monoamine re-uptake sites by use of positron emission tomography. Ulin J, et al. **Int J Rad Appl Instrum [A]** 1989; 40(2):171–6

PHARMACOLOGY

Changes in [3H]-imipramine binding sites in relation to muricide following olfactory bulbectomy and the effect of nomifensine in brain of rats. Al-Khatib IM, et al. **Arch Int Pharmacodyn Ther** 1988 Nov–Dec;296:282–92
In vivo neurochemical and anatomical heterogeneity of the dopamine uptake system in the rat caudate putamen. Glynn GE, et al. **Brain Res** 1989 Mar 6;481(2):235–41
Interaction of alcohol with maprotiline or nomifensine: echocardiographic and psychometric effects. Strömberg C, et al. **Eur J Clin Pharmacol** 1988;35(6):593–9
Amphetamine, cocaine, phencyclidine and nomifensine increase extracellular dopamine concentrations preferentially in the nucleus accumbens of freely moving rats. Carboni E, et al. **Neuroscience** 1989;28(3):653–61
Protection against 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-induced parkinsonism by the catecholamine uptake inhibitor nomifensine: behavioral analysis in monkeys with partial striatal dopamine depletions. Schultz W, et al. **Neuroscience** 1989;31(1):219–30
Potentiation of morphine-elicited circling by dopaminergic uptake blockade. Gratton A, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):1077–9

THERAPEUTIC USE

Treatment strategy in depression. II. MAO inhibitors in depression resistant to cyclic antidepressants: two controlled crossover studies with tranylcypromine versus L-5-hydroxytryptophan and nomifensine. Nolen WA, et al. **Acta Psychiatr Scand** 1988 Dec;78(6):676–83
Fluoxetine versus nomifensine in outpatients with neurotic or reactive depressive disorder. Taneri Z, et al. **Int Clin Psychopharmacol** 1989 Jan;4 Suppl 1:57–61
Nomifensine maleate in adult attention deficit disorder. Shekim WO, et al. **J Nerv Ment Dis** 1989 May;177(5):296–9
Tranylcypromine in depression resistant to cyclic antidepressions. Nolen WA. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1–2):155–8
[Antiamnesic action of nomifensine] Il'iuchenok RIu, et al. **Farmakol Toksikol** 1988 Jul–Aug;51(4):13–6 (Eng. Abstr.) (Rus)

NON-B, NON-T, ACUTE LYMPHOBLASTIC LEUKEMIA see **LEUKEMIA, NULL-CELL**

NON-SMALL CELL LUNG CARCINOMA see **CARCINOMA, NON-SMALL CELL LUNG**

NON-STEROIDAL ANTI-INFLAMMATORY AGENTS see **ANTI-INFLAMMATORY AGENTS, NON-STEROIDAL**

NONACHLAZINE see under **PHENOTHIAZINES**

NONAGENARIAN see **AGED, 80 AND OVER**

NONDIRECTIVE THERAPY

Sequential analyses of therapist-client interaction during change events: a task-focused approach. Wiseman H, et al. **J Consult Clin Psychol** 1989 Apr;57(2):281–6

METHODS

[Verbalization of the therapeutic relationship in focal-psychoanalytic and client-centered psychotherapy. A content analytic study from the Hamburg comparative brief psychotherapy experiment] Bechmann R, et al. **Psychother Psychosom Med Psychol** 1989 May;39(5):143–50 (Eng. Abstr.) (Ger)

NONDISJUNCTION, GENETIC

Trisomy 21. Molecular and cytogenetic studies of nondisjunction. Stewart GD, et al. **Adv Hum Genet** 1988; 17:99–140 (124 ref.)
The probability of detecting the origin of nondisjunction of autosomal trisomies. Chakravarti A. **Am J Hum Genet** 1989 May;44(5):639–45
dNORs and meiotic nondisjunction. Schwartz S, et al. **Am J Hum Genet** 1989 May;44(5):627–30
The role of cytologic NOR variants in the etiology of trisomy 21. Spinner NB, et al. **Am J Hum Genet** 1989 May; 44(5):631–8 (29 ref.)
Nondisjunction in Down syndrome [letter] Flannery DB. **Am J Med Genet** 1988 Sep;31(1):181–2
Duplication 8q24.2——qter and 15q14——pter resulting from a 3:1 meiotic segregation of a maternal reciprocal translocation. Kausch K, et al. **Am J Med Genet** 1988 Dec; 31(4):981–5
Effects of alcohol-drinking on mouse chromosomes. II. Sister-chromatid exchange and chromosome dissociation in male germ cells of mice administered ethanol. Hirai M. **Arukoru Kenkyuto Yakubutsu Ison** 1988 Sep;23(3):243–51
The fission yeast dis2+ gene required for chromosome disjoining encodes one of two putative type 1 protein phosphatases. Ohkura H, et al. **Cell** 1989 Jun 16; 57(6):997–1007
Pattern and frequency of nondisjunction in oocytes from the Djungarian hamster are determined by the stage of first meiotic spindle inhibition. Hummler E, et al. **Chromosoma** 1988 Nov;97(3):224–30
Indirect mitotic nondisjunction in Vicia faba and Chinese hamster cells. Rizzoni M, et al. **Chromosoma** 1989 Jan; 97(4):339–46
Nondisjunction reduplication of chromosome 3 is not a common mechanism in the development of human renal cell tumors. Kovacs G, et al. **Cytogenet Cell Genet** 1988; 48(4):242–3
HLA and Down syndrome (DS): parents at the origin of the nondisjunction share no more HLA-A and -B antigens with their DS child than controls. Stoll C, et al. **Genet Epidemiol** 1988;5(4):235–40
The influence of the Robertsonian translocation Rb(X.2)2Ad on anaphase I non-disjunction in male laboratory mice. Adler ID, et al. **Genet Res** 1989 Apr;53(2):77–86
The genetic analysis of distributive segregation in Drosophila melanogaster. I. Isolation and characterization of Aberrant X segregation (Axs), a mutation defective in chromosome partner choice. Zitron AE, et al. **Genetics** 1989 Aug; 122(4):801–21
Increased spindle resistance to antimicrotubule agents in cells prone to chromosomal nondisjunction. Avivi L, et al. **Hum Genet** 1989 Sep;83(2):165–70
Parental age and the origin of trisomy 21. A study of 302 families. Dagna Bricarelli F, et al. **Hum Genet** 1989 Apr; 82(1):20–6
Isolation of chromosome-21-specific DNA probes and their use in the analysis of nondisjunction in Down syndrome. Galt J, et al. **Hum Genet** 1989 Jan;81(2):113–9
Use of restriction fragment length polymorphic probes in the analysis of Down's syndrome trisomy. Millington-Ward AM, et al. **Hum Genet** 1988 Dec; 80(4):362–70
Analysis of two 47,XXX males reveals X–Y interchange and maternal or paternal nondisjunction. Scherer G, et al. **Hum Genet** 1989 Feb;81(3):247–51
Non-disjunction and parental karyotypes. Gallego MS, et al. **Medicina (B Aires)** 1988;48(2):147–55
DNA topoisomerase II must act at mitosis to prevent nondisjunction and chromosome breakage. Holm C, et al. **Mol Cell Biol** 1989 Jan;9(1):159–68
Synaptonemal complex damage induced by clastogenic and anti-mitotic chemicals: implications for non-disjunction and aneuploidy. Allen JW, et al. **Mutat Res** 1988 Oct; 201(2):313–24
The TX; Y test for the detection of nondisjunction and chromosome breakage in Drosophila melanogaster. I. Analysis of spontaneous events and results of male exposure. Foureman PA. **Mutat Res** 1988 Dec; 203(6):427–44
Induction of meiotic chromosomal malsegregation in yeast. Sora S, et al. **Mutat Res** 1988 Oct;201(2):375–84
Studying nondisjunction of chromosome 21 with cytogenetic markers on the short arm and DNA markers encompassing the long arm. Buraczynska M, et al. **Prog Clin Biol Res** 1989;311:101–13
Gene-centromere mapping and the study of non-disjunction in autosomal trisomies and ovarian teratomas. Chakravarti A, et al. **Prog Clin Biol Res** 1989;311:45–79
Non disjunction and maternal age in the mouse. Estop A. **Prog Clin Biol Res** 1989;311:221–44 (60 ref.)
Analysis of non-disjunction in human trisomic spontaneous abortions. Hassold TJ, et al. **Prog Clin Biol Res** 1989; 311:115–34
Genetic and molecular analysis of a simple disjunctional system in Drosophila melanogaster. Hawley RS. **Prog Clin Biol Res** 1989;311:277–302 (28 ref.)
Some reflections on nondisjunction in Drosophila. Lindsley DL. **Prog Clin Biol Res** 1989;311:263–75 (24 ref.)
Cytological and molecular studies of nucleolar organizing region variants and recombination in trisomy 21. Roulston D, et al. **Prog Clin Biol Res** 1989;311:81–100
[Selection of mutants with nondisjunction of minichromosomes in Saccharomyces cerevisiae] Larionov VL, et al. **Dokl Akad Nauk SSSR** 1988;300(6):1485–8 (Rus)
[Double satellites do not increase the risk of chromosome 21 nondisjunction] Kovaleva NV, et al. **Tsitologiia** 1989 Feb;31(2):244–7 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Induction of chromosome malsegregation by halogenated organic solvents in Aspergillus nidulans: unspecific or specific mechanism? Crebelli R, et al. **Mutat Res** 1988 Oct; 201(2):401–11

Chromosome malsegregation and embryonic lethality induced by treatment of normally ovulated mouse oocytes with nocodazole. Generoso WM, et al. **Mutat Res** 1989 Feb;210(2):313–22

RADIATION EFFECTS

The response of spermatogonia and spermatocytes of the Northern vole Microtus oeconomus to the induction of sex-chromosome nondisjunction, diploidy and chromosome breakage by X-rays and fast fission neutrons. Tates AD, et al. **Mutat Res** 1989 Jan;210(1):173–89

NON-HISTONE CHROMOSOMAL PROTEINS see **CHROMOSOMAL PROTEINS, NON-HISTONE**

NONINVASIVE LITHOLAPAXY see **LITHOTRIPSY**

NONLYMPHOBLASTIC LEUKEMIA, ACUTE see **LEUKEMIA, NONLYMPHOCYTIC, ACUTE**

NONLYMPHOCYTIC LEUKEMIA, ACUTE see **LEUKEMIA, NONLYMPHOCYTIC, ACUTE**

NONODONTOGENIC CYSTS

ANALYSIS

Cytokeratin expression of the odontogenic epithelia in dental follicles and developmental cysts. Gao Z, et al. **J Oral Pathol Med** 1989 Feb;18(2):63–7

PATHOLOGY

Pigmented nasopalatine duct cyst. Report of 2 cases. el-Bardaie A, et al. **Int J Oral Maxillofac Surg** 1989 Jun; 18(3):138–9

Inflammatory paradental cysts in the globulomaxillary region. Vedtofte P, et al. **J Oral Pathol Med** 1989 Mar; 18(3):125–7

[Review of pseudocysts and bone lacunae of the jaws] Reychler H. **Rev Stomatol Chir Maxillofac** 1988;89(4):190–8 (72 ref.) (Eng. Abstr.) (Fre)

NONPROFIT ORGANIZATIONS see **ORGANIZATIONS, NONPROFIT**

NONSUPPRESSIBLE INSULIN-LIKE ACTIVITY

see related
INSULIN

NONVERBAL COMMUNICATION

An ethological description of depression. Pedersen J, et al. **Acta Psychiatr Scand** 1988 Sep;78(3):320–30

An ethological analysis of depression: comparison between ethological recording and Hamilton rating of five endogenously depressed patients. Schelde JT, et al. **Acta Psychiatr Scand** 1988 Sep;78(3):331–40

I see what you mean: nonverbal communication strategies of young deaf children. Christensen KM. **Am Ann Deaf** 1988 Oct;133(4):270–5

Validity of messages from quadriplegic persons with cerebral palsy. Sappington J, et al. **Am J Ment Retard** 1989 Jul; 94(1):49–52

The greeting behavior of fragile X males. Wolff PH, et al. **Am J Ment Retard** 1989 Jan;93(4):406–11

Why now? Ours J. **Am J Nurs** 1988 Oct;88(10):1452

Clarification requests of normal and language-impaired children. Hargrove PM, et al. **Br J Disord Commun** 1988 Apr;23(1):51–61

The effects of reduced non-verbal communication in Parkinson's disease. Pentland B, et al. **Br J Disord Commun** 1988 Apr;23(1):31–4

Children's use of a verbal-nonverbal consistency principle to infer truth and lying. Rotenberg KJ, et al. **Child Dev** 1989 Apr;60(2):309–22

Development of a graphic psychiatric self-rating scale. Ernst M, et al. **Compr Psychiatry** 1989 Mar–Apr;30(2):189–94

Nonverbal sensitivity of normal-hearing and hearing-impaired older adults. Rigo TG, et al. **Ear Hear** 1989 Jun;10(3):184–9

Ethological predictors of amitriptyline response in depressed outpatients. Troisi A, et al. **J Affective Disord** 1989 Sep–Oct;17(2):129–36

The effects of cognitive complexity and arousal on client perception of counselor nonverbal behavior. Uhlemann MR, et al. **J Clin Psychol** 1989 Jul;45(4):661–5

The relation of hostile nonverbal communication styles to popularity in preadolescent children. Nowicki S Jr, et al. **J Genet Psychol** 1989 Mar;150(1):39–43

Preliminary results of speech-reception tests obtained with the synthetic Tadoma system. Leotta DF, et al. **J Rehabil Res Dev** 1988 Fall;25(4):45–52

A comparison of symbol transparency in nonspeaking persons with intellectual disabilities. Mirenda P, et al. **J Speech Hear Disord** 1989 May;54(2):131–40

Personality and body-focused hand movements. Kenner AN. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):907–13

Facial expressions of emotions and ethological behavioral categories. Kirouac G, et al. **Percept Mot Skills** 1986 Apr; 62(2):419–23

Nonverbal expressions of anxiety in physician-patient interactions. Shreve EG, et al. **Psychiatry** 1988 Nov; 51(4):378–84

Developing mand and tact repertoires in persons with severe developmental disabilities using graphic symbols. Sigafoos J, et al. **Res Dev Disabil** 1989;10(2):183–200

[Ethology and medicine] Höschl C. **Bratisl Lek Listy** 1989 Mar;90(3):190–202 (15 ref.) (Eng. Abstr.) (Cze)

[Vibrations in deafness and psychosis] Gayda M, et al. **Ann Med Psychol (Paris)** 1988 Jul–Aug;146(8):773–6 (Eng. Abstr.) (Fre)

[Pictographs for hygienic risk areas] Stober HD. **Anaesthesiol Reanim** 1988;13(6):367–9 (Eng. Abstr.) (Ger)

INSTRUMENTATION

Tactile communication of speech: comparison of two computer-based displays. Clements MA, et al. **J Rehabil Res Dev** 1988 Fall;25(4):25–44

PHYSIOLOGY

The relationship between nonverbal intelligence, familial sinistrality and Geschwind scores in right-handed female subjects. Tan U. **Int J Neurosci** 1988 Dec;43(3–4):177–82

The relationship between nonverbal intelligence and Geschwind scores in left-handed subjects. Tan U. **Int J Neurosci** 1988 Dec;43(3–4):183–7

NOONAN SYNDROME

'Noonan's syndrome'—a case report [letter] Mehta MK, et al. **J Assoc Physicians India** 1988 Nov;36(11):677

COMPLICATIONS

Ullrich-Turner syndrome and anorexia nervosa. Ohzeki T, et al. **Am J Med Genet** 1989 Jan;32(1):87–9

Bleeding diathesis in Noonan syndrome: a common association. Witt DR, et al. **Am J Med Genet** 1988 Oct; 31(2):305–17

Severe pulmonary hypertension in Ullrich-Noonan syndrome. Tinker A, et al. **Br Heart J** 1989 Jul;62(1):74–7

Giant right atrial thrombus in Noonan syndrome combined with Eisenmenger's complex. Tatsukawa H, et al. **Chest** 1989 Apr;95(4):930–2

Aneurysms of the sinuses of Valsalva in Noonan's syndrome. Morgan JM, et al. **Eur Heart J** 1989 Feb;10(2):190–3

The Noonan syndrome/cherubism association. Dunlap C, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):698–705

[Diagnosis and surgical treatment of pulmonary stenosis in children with the Noonan syndrome] Hroboňová V, et al. **Cesk Pediatr** 1988 Oct;43(10):594–8 (Eng. Abstr.) (Cze)

[Noonan's syndrome associated with cardiovascular anomalies; report of three cases] Yamauchi T, et al. **Kyobu Geka** 1989 Jan;42(1):32–4 (Eng. Abstr.) (Jpn)

[Cardiopathy in Noonan syndrome. Review of 29 cases] Zubeldia Sánchez J, et al. **An Esp Pediatr** 1989 Feb; 30(2):104–8 (26 ref.) (Eng. Abstr.) (Spa)

DIAGNOSIS

The prenatal sonographic features of Noonan's syndrome. Benacerraf BR, et al. **J Ultrasound Med** 1989 Feb; 8(2):59–63

[2 cases of Noonan syndrome in boys (so-called male Turner's syndrome)] Blaim A, et al. **Pediatr Pol** 1974 Feb; 49(2):209–12 (Pol)

[Syndrome forms of complicated oligophrenia (Rubinstein-Taybi and Noonan syndromes)] Mastiukova EM, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):7–12 (Eng. Abstr.) (Rus)

GENETICS

Mental retardation and Y/8 translocation [karyotype: 46,XY, t(Y;8)(q12;q24)] in father and son. Fryns JP, et al. **Helv Paediatr Acta** 1988 Aug;43(1–2):87–90

Molecular detection of a Yp/18 translocation in a 45,X holoprosencephalic male. Münke M, et al. **Hum Genet** 1988 Nov;80(3):219–23

Iris coloboma, ptosis, hypertelorism, and mental retardation [letter] Hall BD. **J Med Genet** 1989 Jan;26(1):69

Noonan's syndrome: report of a case in a Papuan man. Lloyd AR, et al. **P N G Med J** 1988 Sep;31(3):199–204

[The Ullrich-Noonan syndrome in 3 generations] Fraňková Y, et al. **Cesk Pediatr** 1986 Oct;41(10):615–7 (Eng. Abstr.) (Cze)

[Familial Noonan syndrome] Krüger G, et al. **Kinderarztl Prax** 1989 May;57(5):245–8 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Noonan syndrome: growth and clinical manifestations in 144 cases. Ranke MB, et al. **Eur J Pediatr** 1988 Dec; 148(3):220–7

PSYCHOLOGY

Very superior intelligence in a child with Noonan syndrome. Finegan JA, et al. **Am J Med Genet** 1988 Oct;31(2):385–9

NORADRENALINE see **NOREPINEPHRINE**

NORANDROSTANES

PHARMACOLOGY

Anti-uterotrophic and folliculostatic activities of anordiol (2 alpha,17 alpha-diethynyl-A-nor-5 alpha-androstane-2 beta,17 beta-diol). Chatterton RT Jr, et al. **Contraception** 1989 Mar;39(3):291–7

[Comparison of the effect of various dosages of anordrin and levonorgestrel on the pituitary responsiveness to GnRH] Lu WY, et al. **Sheng Li Hsueh Pao** 1988 Jun;40(3):271–7 (Eng. Abstr.) (Chi)

19-NORANDROSTENES see **ESTRENES**

NORANDROSTENOLONE see **NANDROLONE**

NORBORNANES

METABOLISM

Biosynthesis of monoterpenes. Stereochemistry of the enzymatic cyclization of geranyl pyrophosphate to (-)-endo-fenchol. Croteau R, et al. **J Biol Chem** 1988 Oct 25;263(30):15449–53

PHARMACOLOGY

Psychostimulant effects of fencamfamine in healthy volunteers. Gorenstein C, et al. **Braz J Med Biol Res** 1988; 21(3):475–7

[The molecular mechanism of the antiviral action of 2-(1'-aminoethyl)-bicyclo (2.2.1) heptane hydrochloride] Fedorov AN, et al. **Vopr Virusol** 1988 Jul–Aug;33(4):403–7 (Eng. Abstr.) (Rus)

NORCAMPHANES see **NORBORNANES**

NORDIHYDROGUAIARETIC ACID see under **CATECHOLS**

NOREPHEDRINE see **PHENYLPROPANOLAMINE**

NOREPINEPHRINE

Pharmacological modulation of central monoaminergic systems and influence on the anticonvulsant effectiveness of standard antiepileptics in maximal electroshock seizure. Fischer W, et al. **Biomed Biochim Acta** 1988;47(7):631–45

Na+, K+-ATPase activity in cultured C6 glioma cells. Folbergrova J, et al. **Neurochem Res** 1989 May;14(5):391–7

Caffeine-induced anxiogenesis: the role of adenosine, benzodiazepine and noradrenergic receptors. Baidwin HA, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):181–6

Yohimbine's anxiogenic action: evidence for noradrenergic and dopaminergic sites. Johnston AL, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):151–6

ADMINISTRATION & DOSAGE

Effects of pancreatic noradrenaline infusion on basal and stimulated islet hormone secretion in the dog. Ahrén B, et al. **Acta Physiol Scand** 1988 Feb;132(2):143–50

Altered pressor response to norepinephrine in calcium- and vitamin D-deficient rats. Baksi SN. **Clin Exp Hypertens [A]** 1988;10(5):811–32

Low dose norepinephrine in patients with septic shock and oliguria: effects on afterload, urine flow, and oxygen transport. Hesselvik JF, et al. **Crit Care Med** 1989 Feb; 17(2):179–80

Effects of complete renal denervation and selective afferent renal denervation on the hypertension induced by intrarenal norepinephrine infusion in conscious rats. Janssen BJ, et al. **J Hypertens** 1989 Jun;7(6):447–55

Influence of intraarterial norepinephrine on cerebral hemodynamics of newborn pigs. Rogers AH, et al. **Proc Soc Exp Biol Med** 1989 Jun;191(2):174–8

[Effect of anticholinergics on cardiovascular reactivity in subjects with essential arterial hypertension being administered a sympathetic agonist] Bubueanu G, et al. **Physiologie** 1988 Oct–Dec;25(4):191–9 (Fre)

[Microvascular injury in hyperthermia by injecting warm water using noradrenaline into tumor feeding artery-induced tumor necrosis of Walker-256] Sato T. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2833–6 (Eng. Abstr.) (Jpn)

ADVERSE EFFECTS

Fatal subarachnoid haemorrhage associated with dental local anaesthesia. Okada Y, et al. **Aust Dent J** 1989 Aug; 34(4):323–5

Is Levophed lethal? Mathru M, et al. **Chest** 1989 Jun; 95(6):1177–8

Norepinephrine therapy has no deleterious renal effects in human septic shock. Desjars P, et al. **Crit Care Med** 1989 May;17(5):426–9

Endogenous and exogenous catecholamines can accentuate

myocardial ischemia only when coronary blood flow is below a critical level. Yoshida S, et al. **Jpn Circ J** 1989 Jan;53(1):27–38

ANALOGS & DERIVATIVES

Limitation of the alpha-methylnorepinephrine hypothesis in the hypotensive effect of alpha-methyldopa. Tung CS, et al. **Clin Exp Hypertens [A]** 1989;11(1):45–58

Trapping of transiently formed quinone methide during enzymatic conversion of N-acetyldopamine to N-acetylnorepinephrine. Sugumaran M, et al. **FEBS Lett** 1989 Jul 31;252(1–2):135–8

Modified syntheses of dopamine-4-sulfate, epinephrine-3-sulfate, and norepinephrine-3-sulfate: determination of the position of the sulfate group by 1H-NMR spectroscopy. Lernhardt U, et al. **Int J Sports Med** 1988 Aug;9 Suppl 2:S89–92

Photoaffinity labeling the beta-adrenergic receptor with an iodoazido derivative of norepinephrine. Resek JF, et al. **J Biol Chem** 1988 Oct 5;263(28):14410–6

ANALYSIS

Fluorescence study on the binding of epinephrine, norepinephrine, isoproterenol and dopamine to polyadenylic acid. Borazan HN, et al. **Acta Pharm Suec** 1988;25(3):163–72

Neurotransmitters and sex-hormone profiles in the human serum and ovarian follicular fluid of in vitro fertilization participants. Kamberi IA, et al. **Ann N Y Acad Sci** 1988; 541:190–6

Modification of vesicular dopamine and norepinephrine by monoamine oxidase inhibitors. Buu NT. **Biochem Pharmacol** 1989 May 15;38(10):1685–92

An increase in the expression of neuropeptidergic vasodilator, but not vasoconstrictor, cerebrovascular nerves in aging rats. Mione MC, et al. **Brain Res** 1988 Sep 13;460(1):103–13

Seasonal and daily variations in hypothalamic monoamine levels and monoamine oxidase activity in the teleost Channa punctatus (Bloch). Khan IA, et al. **Chronobiol Int** 1988; 5(4):311–6

Central sodium loading modifies norepinephrine content in the ventrolateral medulla and blood pressure in rats. Mikami H, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:275–9

Brain and peripheral noradrenergic neuron activity in developing genetically hypertensive rats of the Lyon strain. Sautel M, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:423–29

Altered acetylcholine and norepinephrine concentrations in diabetic rat hearts. Role of parasympathetic nervous system in diabetic cardiomyopathy. Akiyama N, et al. **Diabetes** 1989 Feb;38(2):231–6

Progressive changes in adrenergic, serotonergic, and peptidergic nerves in proximal colon of streptozotocin-diabetic rats. Belai A, et al. **Gastroenterology** 1988 Nov;95(5):1234–41

Tissue norepinephrine concentration in spontaneously diabetic Chinese hamsters. Feldman JM, et al. **Horm Res** 1988;29(4):168–75

Chronic CO inhalation and carotid body catecholamines: testing of hypotheses. Lahiri S, et al. **J Appl Physiol** 1989 Jul;67(1):239–42

Further evidence for a noradrenaline-independent storage of dopamine in the dog kidney. Soares-da-Silva P. **J Auton Pharmacol** 1988 Jun;8(2):127–33

Analysis of the O-methylated metabolites of isoprenaline, adrenaline and noradrenaline in physiological salt solutions by high-performance liquid chromatography with electrochemical detection. Bryan LJ, et al. **J Chromatogr** 1989 Jan 27;487(1):29–39

Separation of norepinephrine and metabolites as Dns derivatives by two-dimensional thin-layer chromatography. Ryan PJ, et al. **J Chromatogr** 1989 Mar 31;465(2):448–50

Noradrenergic innervation of monkey prefrontal cortex: a dopamine-beta-hydroxylase immunohistochemical study. Lewis DA, et al. **J Comp Neurol** 1989 Apr 15;282(3):317–30

Distribution of noradrenaline immunoreactivity in the forebrain and midbrain of the lizard Gekko gecko. Smeets WJ, et al. **J Comp Neurol** 1989 Jul 22;285(4):453–66

Acute action of DSP-4 on central norepinephrine axons: biochemical and immunohistochemical evidence for differential effects. Grzanna R, et al. **J Histochem Cytochem** 1989 Sep;37(9):1435–42

The catecholamine content of a cystic phaeochromocytoma. Feldman MA, et al. **J Hum Hypertens** 1989 Feb;3(1):67–8

Effect of reperfusion on the cardiac acetylcholine and norepinephrine contents in rat hearts. Ohno O, et al. **J Mol Cell Cardiol** 1989 Feb;21(2):139–49

A low dose of xylamine produces sustained and selective decreases in rat brain norepinephrine without evidence of neuronal degeneration. Dudley MW, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):174–9

Distinguishing in vitro electrochemical signatures for norepinephrine and dopamine. Broderick PA. **Neurosci Lett** 1988 Dec 19;95(1–3):275–80

Regional differences in the distribution of norepinephrine and epinephrine in human cerebral cortex: a neurochemical study using HPLC and electrochemical detection. Herregodts P, et al. **Neurosci Lett** 1989 Apr 10;98(3):321–6

Chronic administration of clomipramine prevents the increase in serotonin and noradrenaline induced by chronic stress. Adell A, et al. **Psychopharmacology (Berlin)** 1989;99(1):22–6

Acute peripheral catecholaminergic changes in rat after MPTP and MPP+ treatment. Ambrosio S, et al. **Rev Esp Fisiol** 1989 Jun;45(2):157–61

Norepinephrine throughout the spinal cord of the cat: I. Normal quantitative laminar and segmental distribution. Massari VJ, et al. **Synapse** 1988;2(3):258–65

[The stability of norepinephrine hydrogen tartrate, epinephrine hydrogen tartrate and isoprenaline sulfate. 29. The stability of drugs and preparations] Müller C, et al. **Pharmazie** 1988 May;43(5):321–3 (Eng. Abstr.) **(Ger)**

[Determination of catecholamines in brain and cerebrospinal fluid by high-pressure liquid chromatography with electrochemical detection] Nagy E, et al. **Acta Pharm Hung** 1988 Jul;58(4):159–65 (Eng. Abstr.) **(Hun)**

[Changes in amine contents and regulating enzyme activity of gastric mucosa during the healing process of acetic acid induced ulcer in rats] Omata T, et al. **Nippon Yakurigaku Zasshi** 1989 Mar;93(3):113–8 (Eng. Abstr.) **(Jpn)**

[Distribution of norepinephrine-containing neurons projecting to the parietal associative cortex and spinal cord in the cat locus coeruleus] Semeniutin AI, et al. **Neirofiziologiia** 1989;21(1):112–21 (Eng. Abstr.) **(Rus)**

[The level of noradrenaline and serotonin in mice differing in behavior] Poletaeva II, et al. **Zh Vyssh Nerv Deiat** 1989 Jan-Feb;39(1):76–80 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Mechanism of inhibition by methacholine of norepinephrine-stimulated ANP secretion. Schiebinger RJ. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1429–33

Inhibition of inositol phospholipid synthesis and norepinephrine-stimulated hydrolysis in rat brain slices by excitatory amino acids. Jope RS, et al. **Biochem Pharmacol** 1989 Feb 15;38(4):589–96

Pinacidil opens K+-selective channels causing hyperpolarization and relaxation of noradrenaline contractions in rat mesenteric resistance vessels. Videbaek LM, et al. **Br J Pharmacol** 1988 Sep;95(1):103–8

Methylflavonolamine hydrochloride inhibits contractions induced by noradrenaline, calcium and potassium in rabbit isolated aortic strips. Zhang MS, et al. **Br J Pharmacol** 1988 Aug;94(4):1184–8

Effects of concurrent manipulations of cholinergic and noradrenergic function on learning and retention in mice. Decker MW, et al. **Brain Res** 1989 Jan 16;477(1–2):29–37

Conformational analysis of nisoxetine and fluoxetine, selective inhibitors of norepinephrine and serotonin reuptake: are conformational differences an explanation of neurotransmitter selectivity? Grunewald GL, et al. **Drug Des Deliv** 1986 Aug;1(1):23–37

Neuropeptide Y increases the inhibitory effects of clonidine on potassium evoked 3H-noradrenaline but not 3H-5-hydroxytryptamine release from synaptosomes of the hypothalamus and the frontoparietal cortex of the male Sprague-Dawley rat. Martire M, et al. **J Neural Transm** 1989;78(1):61–72

Electrophysiological correlates of presynaptic alpha 2-receptor-mediated inhibition of norepinephrine release at locus coeruleus synapses in dentate gyrus. Washburn M, et al. **J Neurosci** 1989 Jun;9(6):2131–40

Effect of lithium and rubidium on the ganglionic inhibitory action of norepinephrine. Tehrani JB, et al. **Life Sci** 1974 Aug 1;15(3):525–37

LY227942, an inhibitor of serotonin and norepinephrine uptake: biochemical pharmacology of a potential antidepressant drug. Wong DT, et al. **Life Sci** 1988; 43(24):2049–57

Alpha 1 noradrenergic antagonism decreases hormonally-induced and hormonally-independent lordosis. Thornton JE, et al. **Pharmacol Biochem Behav** 1989 Feb; 32(2):421–4

Action of papaverine and verapamil on norepinephrine and calcium evoked contraction of vascular and non vascular smooth muscle. D'Agostino G, et al. **Pharmacol Res Commun** 1983 Nov;15(10):937–49

BIOSYNTHESIS

Tyrosine availability and brain noradrenaline synthesis in the fetus: control by maternal tyrosine ingestion. Garabal MV, et al. **Brain Res** 1988 Aug 9;457(2):330–7

Ascorbic acid within chromaffin granules. In situ kinetics of norepinephrine biosynthesis. Dhariwal KR, et al. **J Biol Chem** 1989 Sep 15;264(26):15404–9

Effects of dopamine beta-monooxygenase substrate analogs on ascorbate levels and norepinephrine synthesis in adrenal chromaffin granule ghosts. Wimalasena K, et al. **J Biol Chem** 1989 Jan 5;264(1):124–30

The effects of Bay K 8644 on myocardial relaxation and cAMP levels in perfused rat heart: role of sympathetic neurotransmitter release. Mundiña C, et al. **J Mol Cell Cardiol** 1988 Sep;20(9):765–9

Newly synthesized dopamine as the precursor for norepinephrine synthesis in bovine adrenomedullary chromaffin cells. Menniti FS, et al. **J Neurochem** 1989 Sep; 53(3):890–7

In vitro synthesis of dopamine and noradrenaline in the isolated rat pineal gland: day-night variations and effects of electrical stimulation. Racké K, et al. **J Neurochem** 1989 Aug;53(2):354–61

Stimulation of the medullary A1 noradrenergic system augments luteinizing hormone release induced by medial preoptic nucleus stimulation. Evaluation of A1 projections to the hypothalamus and of drugs which affect norepinephrine synthesis and adrenoceptors. Gitler MS, et al. **Neuroendocrinology** 1988 Oct;48(4):351–9

Hypothalamic norepinephrine synthesis rate in overfed, underfed and fasted mice. Marriage BJ, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):101–10

[The effect of hyperthermia on catecholamine synthesis in isolated organs] Manukhin BN, et al. **Dokl Akad Nauk SSSR** 1989;304(2):498–501 **(Rus)**

[Catecholamine synthesis in rat tissues after short-term hyperthermia] Mezidova KhA, et al. **Dokl Akad Nauk SSSR** 1988;303(5):1277–9 **(Rus)**

[The action of heart factor H1 on the synthesis and uptake of dopamine and noradrenaline in the rat heart] Chiflikian MD, et al. **Fiziol Zh SSSR** 1988 Jul;74(7):948–52 (Eng. Abstr.) **(Rus)**

BLOOD

Sympathetic activation on effort in patients with chronic heart failure. Long term effects of captopril. Boschetti E, et al. **Acta Cardiol (Brux)** 1988;43(5):569–82

Effect of water immersion on serum ACTH, cortisol and catecholamines in healthy individuals and diabetics. Dulawa J, et al. **Acta Med Pol** 1988;29(1–2):25–39

Plasma noradrenaline and adrenaline concentrations and blood pressure at various stages of spontaneous hypertension in the rat (SHR). Wocial B, et al. **Acta Med Pol** 1987;28(1–4):13–22

Effect of exercise on catecholamines and plasma renin activity in pregnant women. Eneroth-Grimfors E, et al. **Acta Obstet Gynecol Scand** 1988;67(6):519–23

Baroreflex modulation of sympathetic activity and sympathetic neurotransmitters in humans. Eckberg DL, et al. **Acta Physiol Scand** 1988 Jun;133(2):221–31

Acidosis, hypoxia and stress hormone release in response to one-minute inhalation of 80% CO2 in swine. Forslid A, et al. **Acta Physiol Scand** 1988 Feb;132(2):223–31

Reflex activation of renal nerves in humans: differential effects on noradrenaline, dopamine and renin overflow to renal venous plasma. Tidgren B, et al. **Acta Physiol Scand** 1988 Sep;134(1):23–34

Effect of acute ethanol intake and hangover on the levels of plasma and urinary catecholamines and lymphocytic beta-adrenergic receptors. Heikkonen E, et al. **Alcoholism (NY)** 1989 Feb;13(1):20–4

Sequential neurohumoral measurements in patients with congestive heart failure. Francis GS, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1464–8

Plasma norepinephrine in Chagas' cardioneuromyopathy: a marker of progressive dysautonomia. Iosa D, et al. **Am Heart J** 1989 Apr;117(4):882–7

Catecholamine metabolism during angina [letter] McCance AJ, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1652–3

Neurohumoral and hemodynamic effects of lower body negative pressure in patients with congestive heart failure. Mohanty PK, et al. **Am Heart J** 1989 Jul;118(1):78–85

Differential effect of nicotine on plasma norepinephrine levels in normal humans and in patients with congestive heart failure. Goldsmith SR, et al. **Am J Cardiol** 1989 Jan 1; 63(1):122–3

Relation between plasma norepinephrine and response to medical therapy in men with congestive heart failure secondary to coronary artery disease or idiopathic dilated cardiomyopathy. Kao W, et al. **Am J Cardiol** 1989 Sep 15;64(10):609–13

Elevation of plasma neuropeptide Y levels in congestive heart failure. Maisel AS, et al. **Am J Med** 1989 Jan;86(1):43–8

Effects of insulin infusion on plasma catecholamine concentration in fetal sheep. Stonestreet BS, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):740–5

Plasma catecholamine and glucose concentrations during hemorrhagic hypotension in anesthetized dogs. Briand R, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R317–25

Cardiovascular and sympathoadrenal responses to mental stress: influence of beta-blockade. Freyschuss U, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1443–51

Changes in AdSNA and arterial catecholamines to coronary occlusion in cats. Honda T, et al. **Am J Physiol** 1988 Oct; 255(4 Pt 2):H704–10

Relative contributions of the nervous system and hormones to CNS-mediated hyperglycemia. Iguchi A, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):E920–7

Free and sulfoconjugated catecholamine responses to hypoxia in fetal sheep. Padbury JF, et al. **Am J Physiol** 1989 Aug; 257(2 Pt 1):E198–202

Experience affects exercise-induced changes in catecholamines, glucose, and FFA. Scheurink AJ, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R169–73

Adrenal and sympathetic catecholamines in exercising rats. Scheurink AJ, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R155–60

Pre-operative assessment of anxiety and measurement of arterial plasma catecholamine concentrations. The effect of oral beta-adrenergic blockade with metoprolol. Jakobsen CJ, et al. **Anaesthesia** 1989 Mar;44(3):249–52

Simultaneous determination of noradrenaline and 3-methoxy-4-hydroxyphenylglycol in plasma with

high-performance liquid chromatography using electrochemical detection. Okada M, et al. **Anal Biochem** 1988 Dec;175(2):562-8

Hypotensive anesthesia with isoflurane and enflurane during total hip replacement: a comparative study of catecholamine and renin angiotensin responses. Bernard JM, et al. **Anesth Analg** 1989 Oct;69(4):467-72

Intravenous magnesium sulfate inhibits catecholamine release associated with tracheal intubation. James MF, et al. **Anesth Analg** 1989 Jun;68(6):772-6

Serum noradrenaline is composed of plasma and platelet noradrenaline. Popp-Snijders C, et al. **Ann Clin Biochem** 1989 Mar;26 (Pt 2):191-2

The in vitro stability of catecholamines in whole blood. Rumley AG. **Ann Clin Biochem** 1988 Sep;25 (Pt 5):585-6

The influence of plasma catecholamines on methotrexate-enhanced rat salivary gland protein secretion. McBride RK, et al. **Arch Oral Biol** 1988; 33(8):575-8

Neuroendocrine responses of type A individuals to exercise. McMurray RG, et al. **Behav Med** 1989 Summer;15(2):84-92

State-related changes in norepinephrine regulation in anorexia nervosa. Lesem MD, et al. **Biol Psychiatry** 1989 Feb 15;25(4):509-12

Plasma norepinephrine response to exercise in bulimia, anorexia nervosa, and controls. Pirke KM, et al. **Biol Psychiatry** 1989 Mar 15;25(6):799-802

Noradrenergic function in generalized anxiety disorder, major depressive disorder, and healthy subjects. Sevy S, et al. **Biol Psychiatry** 1989 Jan 15;25(2):141-52

Plasma catecholamines and production of thromboxane B2 by platelets after psychological and physical tests in normotensive and mild hypertensive subjects. Vapaatalo H, et al. **Biomed Biochim Acta** 1988;47(10-11):S294-8

Effects of enalapril on myocardial noradrenaline overflow during exercise in patients with chronic heart failure. Mulligan IP, et al. **Br Heart J** 1989 Jan;61(1):23-8

Plasma concentrations of catecholamines following intraocular irrigation with adrenaline. Fell D, et al. **Br J Anaesth** 1989 May;62(5):573-5

Alfentanil obtunds the cardiovascular and sympathoadrenal responses to suxamethonium-facilitated laryngoscopy and intubation. Scheinin B, et al. **Br J Anaesth** 1989 Apr; 62(4):385-92

Plasma catecholamines in conscious rabbits after central administration of vasopressin. Martin SM, et al. **Brain Res** 1988 Aug 2;457(1):192-5

Enhanced exercise noradrenaline concentrations during propranolol treatment: a limiting factor in cardiac beta-adrenoceptor blockade. Hurwitz GA, et al. **Can J Cardiol** 1988 Sep;4(6):262-9

Coronary sinus norepinephrine concentrations during ventricular tachycardia induced by left stellate ganglion stimulation in dogs. Nadeau R, et al. **Can J Physiol Pharmacol** 1988 Apr;66(4):419-21

Direct evidence that an increase in aortic norepinephrine level in response to insulin-induced hypoglycemia is due to increased adrenal norepinephrine output. Yamaguchi N, et al. **Can J Physiol Pharmacol** 1989 May;67(5):499-505

Muscle contraction headache and migraine. Platelet activation and plasma norepinephrine during the cold pressor test. Takeshima T, et al. **Cephalalgia** 1989 Mar; 9(1):7-13

Vasoactive hormones in familial pheochromocytoma with predominant norepinephrine secretion. Tulassay T, et al. **Child Nephrol Urol** 1988-89;9(4):228-31

Dose- and time-dependent changes in plasma catecholamines in response to endotoxin in conscious rats. Jones SB, et al. **Circ Shock** 1989 May;28(1):59-68

Impaired chronotropic response to exercise in patients with congestive heart failure. Role of postsynaptic beta-adrenergic desensitization. Colucci WS, et al. **Circulation** 1989 Aug;80(2):314-23

Catecholamine content of human erythrocytes. Altman RJ, et al. **Clin Chem** 1988 Oct;34(10):2120-2

Radioenzymatic assay for simultaneous estimation of dobutamine and endogenous catecholamines. Padbury F, et al. **Clin Chem** 1988 Nov;34(11):2380

Correlations among blood levels of renin-angiotensin-aldosterone, bradykinin, and catecholamines in healthy subjects. Yamamoto T, et al. **Clin Chim Acta** 1989 May 15;181(2):197-200

Epinephrine and norepinephrine pattern in elderly patients with borderline and established hypertension. Cerasola G, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:371-8

Relaxation therapy lowers blood pressure more effectively in hypertensives with raised plasma norepinephrine and blunts pressor response to anger. Lee DD, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:191-8

Interrelationship between plasma ionized calcium, plasma noradrenaline (NA) and pressor response to infused NA in patients with essential hypertension. Nozawa A, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:419-26

Venous versus arterial forearm catecholamines as an index of overall sympatho-adrenomedullary activity. van den Meiracker AH, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:345-51

Changes of plasma noradrenaline levels in the renal and systemic circulation after successful percutaneous transluminal angioplasty in renovascular hypertension. Zamboulis C, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:449-58

Sympatho-adrenal and cardiovascular responses during hand-grip in human hypertension. Gonzalez M, et al. **Clin Invest Med** 1989 Apr;12(2):115-20

Intravenous yohimbine. Selective enhancer of norepinephrine and cortisol secretion and systolic blood pressure in humans. Grunhaus L, et al. **Clin Neuropharmacol** 1989 Apr; 12(2):106-14

Impaired responses of plasma catecholamines to exercise in diabetic patients with abnormal heart rate reactions to tilt. Bergström B, et al. **Clin Physiol** 1989 Jun;9(3):259-67

Plasma dihydroxyphenylglycol (DHPG) as an index of diabetic autonomic neuropathy. Christensen NJ, et al. **Clin Physiol** 1988 Dec;8(6):577-80

Plasma concentrations of adrenaline, noradrenaline and dopamine during forearm dynamic exercise. Hartling OJ, et al. **Clin Physiol** 1989 Aug;9(4):399-404

Haemodynamic effects of physiological concentrations of circulating noradrenaline in man. Chang PC, et al. **Clin Sci** 1988 Nov;75(5):469-75

Reproducibility of haemodynamic and plasma catecholamine responses to isometric exercise and mental arithmetic in normo- and hyper-tensive subjects. Lenders J, et al. **Clin Sci** 1988 Dec;75(6):615-9

Plasma catecholamines and resuscitation from prolonged cardiac arrest. Kern KB, et al. **Crit Care Med** 1989 Aug; 17(8):786-91

Potentiation of hormonal responses to hemorrhage and fasting, but not hypoglycemia in conscious adrenalectomized rats. Darlington DN, et al. **Endocrinology** 1989 Sep;125(3):1398-406

Body temperature and plasma prolactin and norepinephrine relationships during exercise in a warm environment: effect of dehydration. Melin B, et al. **Eur J Appl Physiol** 1988; 58(1-2):146-51

Plasma norepinephrine and heart rate dynamics during recovery from submaximal exercise in man. Perini R, et al. **Eur J Appl Physiol** 1989;58(8):879-83

Blood pressure and plasma catecholamine responses to various challenges during exercise-recovery in man. Péronnet F, et al. **Eur J Appl Physiol** 1989;58(5):551-5

Circadian variations in plasma renin activity, catecholamines and aldosterone during exercise in women. Stephenson LA, et al. **Eur J Appl Physiol** 1989;58(7):756-64

Plasma concentrations of noradrenaline and 3,4-dihydroxyphenylethyleneglycol under conditions of enhanced sympathetic activity. Ludwig J, et al. **Eur J Clin Pharmacol** 1988;35(3):261-7

Left ventricular performance during psychological stress. Young DZ, et al. **Eur J Nucl Med** 1989;15(3):118-22

Effects of activity, hemorrhage, and dehydration on plasma catecholamine levels in the marine toad (Bufo marinus). Withers PC, et al. **Gen Comp Endocrinol** 1988 Oct; 72(1):63-71

Rise in plasma noradrenaline with age results from an increase in spillover rate. MacGilchrist AJ, et al. **Gerontology** 1989; 35(1):7-13

Biophysical and endocrine-metabolic changes during menopausal hot flashes: increase in plasma free fatty acid and norepinephrine levels. Cignarelli M, et al. **Gynecol Obstet Invest** 1989;27(1):34-7

Epinephrine and norepinephrine related to cardiorespiratory and metabolic changes in calves during physical exercise. Blum JW, et al. **Horm Metab Res** 1988 Dec;20(12):738-42

Total norepinephrine spillover [letter] Christensen NJ, et al. **Hypertension** 1988 Oct;12(4):468-9

Glucose-induced sympathetic activation in obesity-prone and resistant rats. Levin BE, et al. **Int J Obes** 1989 Apr; 13(2):235-46

Sympathoadrenergic regulation in elite fencers in training and competition. Hoch F, et al. **Int J Sports Med** 1988 Aug;9 Suppl 2:S141-5

Humoral regulation of the orthostatic reaction. Huber KH, et al. **Int J Sports Med** 1988 Aug;9 Suppl 2:S103-12

Hypoxemia raises muscle sympathetic activity but not norepinephrine in resting humans. Rowell LB, et al. **J Appl Physiol** 1989 Apr;66(4):1736-43

Plasma norepinephrine and muscle sympathetic discharge during rhythmic exercise in humans. Seals DR, et al. **J Appl Physiol** 1988 Aug;65(2):940-4

Comparison of resting and stimulus-evoked catecholamine release from the femoral and renal vascular beds of the dog. Petrovic T, et al. **J Auton Nerv Syst** 1988 Dec; 25(2-3):195-203

Comparison of the effects of phenoxybenzamine and uptake blockade on noradrenaline efflux from rabbit ear arteries evoked by field stimulation and propagated nerve impulses. Rand MJ, et al. **J Auton Pharmacol** 1988 Dec;8(4):287-95

A technique for simultaneously comparing the release of noradrenaline evoked by field stimulation and by propagated nerve impulses in rabbit ear arteries. Rand MJ, et al. **J Auton Pharmacol** 1988 Dec;8(4):277-85

The relationship of preoperative distress to endocrine and subjective responses to surgery: support for Janis' theory. Salmon P, et al. **J Behav Med** 1988 Dec;11(6):599-613

Plasma catecholamine concentration during and after aorto-femoral bypass grafting. Molnar GW, et al. **J Cardiovasc Surg (Torino)** 1989 Mar-Apr;30(2):198-201

Simultaneous liquid chromatographic determination of norepinephrine, 3,4-dihydroxyphenylethyleneglycol, 3,4-dihydroxyphenylalanine and 3,4-dihydroxyphenylacetic acid in human plasma. Premel-Cabic A, et al. **J Chromatogr** 1988 Dec 29; 434(1):187-90

Determination of catecholamines in human plasma by high-performance liquid chromatography: comparison between a new method with fluorescence detection and an established method with electrochemical detection. van der Hoorn FA, et al. **J Chromatogr** 1989 Jan 27; 487(1):17-28

Pancreatic noradrenergic nerves are activated by neuroglucopenia but not by hypotension or hypoxia in the dog. Evidence for stress-specific and regionally selective activation of the sympathetic nervous system. Havel PJ, et al. **J Clin Invest** 1988 Nov;82(5):1538-45

Reduced responses of prolactin and catecholamine to stress in the lactating rat. Higuchi T, et al. **J Endocrinol** 1989 Aug;122(2):495-8

Concentrations of dopamine and noradrenaline in hypophysial portal blood in the sheep and the rat. Thomas GB, et al. **J Endocrinol** 1989 Apr;121(1):141-7

Effects of physiological increases in plasma noradrenaline on the human endocrine pancreas. Järhult J, et al. **J Endocrinol Invest** 1989 Jun;12(6):401-4

Neurohumoral mechanisms and left ventricular hypertrophy: effects of hygienic therapy. Lee DD, et al. **J Hum Hypertens** 1987 Sep;1(2):147-51

Consequences of impaired arterial baroreflexes in essential hypertension: effects on pressor responses, plasma noradrenaline and blood pressure variability. Floras JS, et al. **J Hypertens** 1988 Jul;6(7):525-35

Disparate effects of mental stress on plasma noradrenaline in young normotensive and hypertensive subjects. Lenders JW, et al. **J Hypertens** 1989 Apr;7(4):317-23

Plasma noradrenaline response to a multistage exercise test in young men at increased risk of developing essential hypertension. Nielsen JR, et al. **J Hypertens** 1989 May; 7(5):377-82

Sympathetic activity in borderline and established hypertension in the elderly. Cerasola G, et al. **J Hypertens Suppl** 1988 Nov;6(1):S55-8

Release of noradrenaline into the cerebrovascular circulation in patients with primary hypertension. Esler MD, et al. **J Hypertens Suppl** 1988 Dec;6(4):S494-6

Autonomic nervous system function. Sowers JR, et al. **J Hypertens Suppl** 1988 Nov;6(1):S49-54 (52 ref.)

Serotonin and noradrenaline concentrations and serotonin uptake in platelets from hyperphenylalaninaemic patients. Giovannini M, et al. **J Inherited Metab Dis** 1988; 11(3):285-90

A kinetic study of chlorpromazine on the hyperglycemic response in rats. I. Effect of chlorpromazine on plasma catecholamines. Sato S, et al. **J Pharmacobiodyn** 1988 Jul; 11(7):486-91

Different serotonin receptors mediate blood pressure, heart rate, plasma catecholamine and prolactin responses to m-chlorophenylpiperazine in conscious rats. Bagdy G, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):72-8

Post-carotid endarterectomy hypertension: association with elevated cranial norepinephrine. Ahn SS, et al. **J Vasc Surg** 1989 Feb;9(2):351-60

Relationship of plasma norepinephrine to ventricular-load coupling in patients with heart failure. Asanoi H, et al. **Jpn Circ J** 1989 Feb;53(2):131-40

Comparison of the acute effects of acebutolol and propranolol on blood pressure, heart rate and hormonal changes during graded treadmill exercise in patients with essential hypertension. Matsuura H, et al. **Jpn J Med** 1989 Jan-Feb; 28(1):8-15

Sympathoadrenal activity and sympathoinhibitory hormones during acute and chronic nicotine application in dogs. Bassenge E, et al. **Klin Wochenschr** 1988;66 Suppl 11:12-20

Plasma concentrations of free and sulfoconjugated dopamine, epinephrine, and norepinephrine in healthy infants and children. Eichler I, et al. **Klin Wochenschr** 1989 Jul 3; 67(13):672-5

Evaluation of the clonidine-suppression test in the diagnosis of pheochromocytoma. Plewe G, et al. **Klin Wochenschr** 1988 Sep 1;66(17):764-7

Nicotine-induced release of noradrenaline and neuropeptide Y in guinea pig heart. Richardt G, et al. **Klin Wochenschr** 1988;66 Suppl 11:21-7

Noradrenergic activity and silent ischaemia in hypertensive patients with stable angina: effect of metoprolol. Lee DD, et al. **Lancet** 1989 Feb 25;1(8635):403-6

Protein binding and stability of norepinephrine in human blood plasma. Involvement of prealbumin, alpha 1-acid glycoprotein and albumin. de Vera N, et al. **Life Sci** 1988; 43(16):1277-86

Suppression of norepinephrine appearance rate in plasma by diazepam in humans. Roy-Byrne PP, et al. **Life Sci** 1988; 43(20):1615-23

The responses of plasma norepinephrine and epinephrine to cardiopulmonary bypass during high-dose fentanyl anesthesia. Fu YP, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Dec; 26(4):347-52

Effect of insulin on plasma norepinephrine and 3,4-dihydroxyphenylalanine in obese men. O'Hare JA, et al. **Metabolism** 1989 Apr;38(4):322-9

Catecholamines in heat stroke. al-Hadramy MS, et al. **Milit Med** 1989 May;154(5):263-4

Hyperadrenergic syndrome with hypertension, hypotension and myocardial necrosis in tetanus. van Lieshout JJ, et al. **Neth J Med** 1988 Aug;33(1-2):33-6

Plasma 3,4-dihydroxyphenylethyleneglycol and

3-methoxy-4-hydroxyphenylethyleneglycol as indicators of central noradrenergic activity. A comparative study on control subjects and depressed patients. Azorin JM, et al. **Neuropsychobiology** 1988;20(2):67-73

The effects of phenylpropanolamine on human sympathetic nervous system function. Lake CR, et al. **Neuropsychopharmacology** 1988 May;1(2):163-8

Chicken gonadotropin-releasing hormone II increases plasma catecholamines in the bullfrog. Wilson JX, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):354-8

Changes in catecholamine level in hypotensive patients subjected to dialysis. Shimoyama H, et al. **Nippon Jinzo Gakkai Shi** 1989 Feb;31(2):165-70

Plasma levels of dihydroxyphenylalanine, dopamine and norepinephrine in the fetoplacental unit and maternal circulation at delivery. Yamamoto K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Dec; 40(12):1894-8

Plasma noradrenaline levels in young subjects at increased risk of developing essential hypertension. Response to a multistage exercise test. Nielsen JR, et al. **Pharmacol Toxicol** 1988;63 Suppl 1:32-4

Relationship between sympathetic nerve traffic and plasma concentrations of noradrenaline in man. Wallin BG. **Pharmacol Toxicol** 1988;63 Suppl 1:9-11

Adaptation of plasma catecholamine and corticosterone responses to short-term repeated noise stress in rats. De Boer SF, et al. **Physiol Behav** 1988;44(2):273-80

Effects of fasting on plasma catecholamine, corticosterone and glucose concentrations under basal and stress conditions in individual rats. De Boer SF, et al. **Physiol Behav** 1989 May;45(5):989-94

Plasma catecholamine and corticosterone responses to predictable and unpredictable noise stress in rats. De Boer SF, et al. **Physiol Behav** 1989 Apr;45(4):789-95

Habituation of sympathetic-adrenal medullary responses following exposure to chronic intermittent stress. Konarska M, et al. **Physiol Behav** 1989 Feb;45(2):255-61

Physiological responses to acute stress in alloxan and streptozotocin diabetic rats. Lee JH, et al. **Physiol Behav** 1989 Mar;45(3):483-9

Lithium chloride stabilizes systolic blood pressure and increases adrenal catecholamines in the spontaneously hypertensive rat. O'Connor EF, et al. **Physiol Behav** 1988; 44(1):69-74

Effect of phentolamine on blood pressure, heart rate and plasma catecholamine levels in conscious, unrestrained morphine dependent rats during naloxone precipitated autonomic withdrawal responses. Dixon WR, et al. **Proc West Pharmacol Soc** 1988;31:117-9

Noradrenergic function in generalized anxiety disorder: effects of yohimbine in healthy subjects and patients with generalized anxiety disorder. Charney DS, et al. **Psychiatry Res** 1989 Feb;27(2):173-82

Noradrenergic function and hypothalamic-pituitary-adrenal axis activity in adolescents with major depressive disorder. de Villiers AS, et al. **Psychiatry Res** 1989 Feb;27(2):101-9

Circadian rhythms in depression and recovery: evidence for blunted amplitude as the main chronobiological abnormality. Souêtre E, et al. **Psychiatry Res** 1989 Jun; 28(3):263-78

Growth hormone, noradrenaline, blood pressure and cortisol responses to clonidine in healthy male volunteers: dose-response relations and reproducibility. Hoehe M, et al. **Psychoneuroendocrinology** 1988;13(5):409-18

Premenopausal and postmenopausal women differ in their cardiovascular and neuroendocrine responses to behavioral stressors. Saab PG, et al. **Psychophysiology** 1989 May; 26(3):270-80

Do increased catecholamines and plasma methionine enkephalin in cirrhosis promote bleeding oesophageal varices? Thornton JR, et al. **Q J Med** 1988 Jul; 68(255):541-51

Evidence that hypoxemia promotes catecholamine release during hypercapnic acidosis in rainbow trout (Salmo gairdneri). Perry SF, et al. **Respir Physiol** 1989 Sep; 77(3):351-63

Catecholamine binding and concentrations in acute phase plasma after surgery. Sager G, et al. **Scand J Clin Lab Invest** 1988 Sep;48(5):419-24

Plasma catecholamine changes during excision of pheochromocytoma. Newell KA, et al. **Surgery** 1988 Dec; 104(6):1064-73

Decreased platelet-free dopamine and unchanged noradrenaline and adrenaline in essential hypertension. Kjeldsen SE, et al. **Thromb Haemost** 1988 Oct 31; 60(2):251-4

Platelet free catecholamines in healthy women. D'Andrea G, et al. **Thromb Res** 1989 Jul 1;55(1):165-8

Anaphylactic death: the effect of aminoguanidine and heparin on histamine and stress hormones in guinea pigs. Hirvonen J, et al. **Z Rechtsmed** 1989;102(5):297-304

[Noradrenalin and dopamine-beta-hydroxylase changes in cerebral microvessels of rats during partial ischemia] Yang SL. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Jun;21(3):152-5, 189 (Eng. Abstr.) **(Chi)**

[Fetal stress response during pregnancy and delivery. Adrenaline, noradrenaline and human beta-endorphin] Hée P. **Ugeskr Laeger** 1988 Dec 5;150(49):3032-4 (Eng. Abstr.) **(Dan)**

[Sympathetic nervous system activity and chronic hepatic disease] Heller FR. **Acta Gastroenterol Belg** 1988 Mar-Apr; 51(2):137-40 **(Fre)**

[Behavior of hemodynamics and catecholamines in patients undergoing excision of pheochromocytoma] Huemer G, et al. **Acta Med Austriaca** 1988;15(4):101-3 (Eng. Abstr.) **(Ger)**

[Left heart hypertrophy in arterial hypertension in relation to hemodynamic and humoral factors] Punzengruber C, et al. **Acta Med Austriaca** 1989;16(1):23-6 (Eng. Abstr.) **(Ger)**

[Plasma catecholamine level in diagnostic heart catheterization studies] Schwaiger A, et al. **Acta Med Austriaca** 1988;15(3):83-6 (Eng. Abstr.) **(Ger)**

[Sufentanil-N2O2/O2 or halothane-N2O/O2 anesthesia in surgery of infants and children with congenital heart defects. Hemodynamics and plasma catecholamines] Barankay A, et al. **Anaesthesist** 1989 Aug;38(8):391-6 (Eng. Abstr.) **(Ger)**

[The kinetics of plasma catecholamine in alkylphosphate poisoning and their therapy] Kauert G, et al. **Klin Wochenschr** 1989 Apr 17;67(8):456-62 (Eng. Abstr.) **(Ger)**

[Dizziness, syncope, orthostatic hypotension (clinical conference)] Sütsch G, et al. **Schweiz Rundsch Med Prax** 1988 Nov 29;77(48):1327-30 (Eng. Abstr.) **(Ger)**

[Changes in the catecholamine plasma level 3 months after aortocoronary bypass operation] Schwaiger A, et al. **Wien Klin Wochenschr** 1989 Mar 17;101(6):191-4 (Eng. Abstr.) **(Ger)**

[Behavior of heart rate, blood pressure, lactate, glucose, noradrenaline and adrenaline level in coronary heart disease patients in the course of light swimming stress] Lehmann M, et al. **Z Kardiol** 1988 Aug;77(8):508-14 (Eng. Abstr.) **(Ger)**

[Elevated levels of atrial natriuretic peptide and plasma catecholamines in arterial hypertension--indications for an interaction] Neyses L, et al. **Z Kardiol** 1988 Jul;77(7):407-12 (Eng. Abstr.) **(Ger)**

[Changes in arterial pressure and adrenergic activity during a holiday at a mountain at low altitude] Palatini P, et al. **G Ital Cardiol** 1989 May;19(5):456-61 (Eng. Abstr.) **(Ita)**

[Postoperative hypertension in coarctation of the aorta associated with different plasma renin activities and catecholamine responses in two cases] Sudo K, et al. **Kyobu Geka** 1988 Nov;41(12):988-93 (Eng. Abstr.) **(Jpn)**

[Effect of laudanosine on catecholamine release in dogs] Fukushima K, et al. **Masui** 1989 May;38(5):654-60 (Eng. Abstr.) **(Jpn)**

[The change in stress hormones after open heart surgery] Ikeda T, et al. **Masui** 1988 Sep;37(9):1070-3 (Eng. Abstr.) **(Jpn)**

[A sophisticated application of catecholamine kinetic data to work load evaluation] Sano M. **Nippon Ika Daigaku Zasshi** 1988 Oct;55(5):439-51 (Eng. Abstr.) **(Jpn)**

[Plasma normetanephrine and metanephrine levels and their relationship to norepinephrine and epinephrine] Yamaya K, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Jul 20; 64(7):573-81 (Eng. Abstr.) **(Jpn)**

[Effect of water immersion on blood adrenaline and noradrenaline levels in patients with obesity] Szurkowski M, et al. **Pol Tyg Lek** 1988 Oct 3;43(40):1297-300 **(Pol)**

[The density of lymphocyte beta 2-adrenoreceptors and blood plasma catecholamines in patients with dilated cardiomyopathy] Gabrusenko SA, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1988;11(2):6-9 (Eng. Abstr.) **(Rus)**

[Obsidan treatment of neuroendocrine disorders and hyperkinetic syndrome in patients with macrofocal myocardial infarction] Simerzin VV. **Klin Med (Mosk)** 1989 Jan;67(1):84-7 (Eng. Abstr.) **(Rus)**

[The effect of obsidan on the content of catecholamines and renin in the blood in myocardial infarct] Simerzin VV. **Sov Med** 1988;(11):59-62 **(Rus)**

[Plasma levels of biogenic amines in patients with various forms of the alcohol abstinence syndrome] Treskov VG, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):109-11 (Eng. Abstr.) **(Rus)**

[Thyroid status and metabolic activity in the lungs] Jovanović T, et al. **Srp Arh Celok Lek** 1986 Apr;114(4):369-74 (Eng. Abstr.) **(Scc)**

[Adrenergic response to dynamic exercise in healthy subjects and in patients with chronic cardiac insufficiency] Jalil J, et al. **Rev Med Chil** 1988 Mar;116(3):215-21 (Eng. Abstr.) **(Spa)**

CEREBROSPINAL FLUID

CSF norepinephrine in schizophrenia is elevated prior to relapse after haloperidol withdrawal. van Kammen DP, et al. **Biol Psychiatry** 1989 Jun;26(2):176-88

Atrial natriuretic peptide, angiotensin, norepinephrine and electrolyte in cerebrospinal fluid of essential hypertension. Kawano Y, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:399-403

Relationship between plasma and cerebrospinal fluid norepinephrine and dopamine metabolites in a nonhuman primate. Greene KA, et al. **J Neurochem** 1989 Oct; 53(4):1007-13

Neurochemical changes in pigeon cerebrospinal fluid during chronic administration of buspirone or 8-hydroxy-2-(di-n-propylamino)tetralin (8-OH-DPAT). Nader MA, et al. **Pharmacol Biochem Behav** 1989 Jan; 32(1):227-32

[The changes in noradrenaline content in CSF of patients under electroacupuncture] Liu BH, et al. **Chen Tzu Yen Chiu** 1988;13(3):243-6 (Eng. Abstr.) **(Chi)**

DEFICIENCY

Characteristics of accelerated kindling after depletion of noradrenaline in adult rats. Corcoran ME. **Neuropharmacology** 1988 Oct;27(10):1081-4

[The role of the neurons of the locus coeruleus and ventral tegmental area in the development of catecholamine-deficient conditions] Kucherenko RP, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):110-2 (Eng. Abstr.) **(Rus)**

METABOLISM

Effects of oral clonidine premedication on concentrations of cortisol and monoamine neurotransmitters and their metabolites in cerebrospinal fluid and plasma. Pouttu J, et al. **Acta Anaesthesiol Scand** 1989 Feb;33(2):137-41

Age-related changes in the recovery of noradrenaline content in sympathetic fibres after reserpine treatment. Paparelli A, et al. **Acta Histochem (Jena)** 1988;84(2):121-5

Norepinephrine content in guinea-pig nasal mucosa response to histamine and methacholine provocation. Kubo N, et al. **Acta Otolaryngol Suppl (Stockh)** 1989;463:39-43

Functional disturbances of the sympathetic nerve in experimentally-induced nasal hypersensitivity. Kubo N, et al. **Acta Otolaryngol Suppl (Stockh)** 1989;463:5-13

Co-release and functional interactions of neuropeptide Y and noradrenaline in peripheral sympathetic vascular control. Pernow J. **Acta Physiol Scand Suppl** 1988;568:1-56

Ethanol's effects on neurotransmitter release and intracellular free calcium in PC12 cells. Rabe CS, et al. **Adv Alcohol Subst Abuse** 1988;7(3-4):95-7

Mechanisms of the vascular effect of pressor hormones. Caramelo C, et al. **Am J Cardiol** 1988 Oct 5; 62(11):47G-53G (53 ref.)

Blood pressure and hypothalamic norepinephrine and dopamine in calcium-deficient rats. Baksi SN. **Am J Hypertens** 1989 Jun;2(6 Pt 1):462-4

Noradrenaline release and the pathophysiology of primary human hypertension. Esler M, et al. **Am J Hypertens** 1989 Mar;2(3 Pt 2):140S-146S (21 ref.)

Effects of chronic sinoaortic denervation on central vasopressin and catecholamine systems. Alexander N, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R768-73

DOPA, norepinephrine, and dopamine in rat tissues: no effect of sympathectomy on muscle DOPA. Eldrup E, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):E284-7

Handling of tracer norepinephrine by the dog liver. Goresky CA, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):G107-23

Influence of sympathetic discharge pattern on norepinephrine and neuropeptide Y release. Pernow J, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H866-72

NE turnover in genetically hypertensive rats of Lyon strain. I. Brain nuclei. Sautel M, et al. **Am J Physiol** 1988 Oct; 255(4 Pt 2):H729-35

Hypertension and alterations in central catecholamines after preoptic recess lesions. Van Huysse JW, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R487-93

Changes of noradrenaline content in the adrenergic nerves of the pig ovaries different periods of the oestrous cycle. Lakomy M, et al. **Anat Anz** 1988;166(1-5):149-55

Facilitation of noradrenaline release by isoprenaline is not mediated by angiotensin II in mouse atria and rat tail artery. Rajanayagam MA, et al. **Arch Int Pharmacodyn Ther** 1989 May-Jun;299:185-99

The central and peripheral renin-angiotensin and noradrenergic systems in the spontaneous hypertensive rats (SHR). Basso N, et al. **Arch Int Physiol Biochim** 1989 Feb; 97(1):53-8

Altered norepinephrine metabolism in Shapiro's syndrome. Sanfield JA, et al. **Arch Neurol** 1989 Jan;46(1):53-7

Stimulation of the hypothalamic-pituitary-adrenal axis and inhibition of growth hormone release via increased central noradrenaline neuronal activity by urethane anaesthesia in the rat: blockade by clonidine. Smythe GA, et al. **Aust J Biol Sci** 1987;40(1):91-6

Evidence for a peroxidatic oxidation of norepinephrine, a catecholamine, by lactoperoxidase. Metodiewa D, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1183-8

Age-dependent effects of beta 2-adrenergic-stimulating drugs on fetal rabbit lung liquid and adrenal catecholamines. Lundell KH, et al. **Biol Neonate** 1988; 54(3):144-50

Thalamic dopamine and norepinephrine ratios in schizophrenia [letter] Katz RJ. **Biol Psychiatry** 1989 Feb 1;25(3):363

Suicidal behavior in depression: relationship to noradrenergic function. Roy A, et al. **Biol Psychiatry** 1989 Feb 1; 25(3):341-50

Changes of norepinephrine levels, tyrosine hydroxylase and dopamine-beta-hydroxylase activities after castration and testosterone treatment in vas deferens of adult rats. Bustamante D, et al. **Biol Reprod** 1989 Mar;40(3):541-8

Actions of PGE2 and indomethacin on adrenergic neuroeffector transmission in the rabbit coeliac artery. Malomvölgyi B, et al. **Biomed Biochim Acta** 1988; 47(10-11):S129-32

Influence of uptake1 and uptake2 on the relationship between diffusion and metabolism of noradrenaline in the perfused rabbit ear artery. Morris RG, et al. **Blood Vessels** 1988; 25(5):217–31

Differences in norepinephrine dynamics in large and small pulmonary arteries of dog. Rorie DK, et al. **Blood Vessels** 1988;25(6):265–72

Role of sympathetic nerves in disposition and metabolism of intraluminal and extraluminal noradrenaline in the rabbit ear artery. Venning MG, et al. **Blood Vessels** 1988; 25(5):232–9

Effect of atracurium and laudanosine on the release of 3H-noradrenaline. Kinjo M, et al. **Br J Anaesth** 1989 Jun; 62(6):683–90

Beta-adrenoceptor-mediated facilitation of [3H]-noradrenaline release from the intramural nerves of bovine mesenteric lymphatic vessels. Allen JM, et al. **Br J Pharmacol** 1989 Jan;96(1):45–50

Release of [3H]-noradrenaline from the sympathetic nerves to bovine mesenteric lymphatic vessels and its modification by alpha-agonists and antagonists. Allen JM, et al. **Br J Pharmacol** 1988 Jul;94(3):823–33

Muscarinic inhibition of [3H]-noradrenaline release on rabbit iris in vitro: effects of stimulation conditions on intrinsic activity of methacholine and pilocarpine. Bognar IT, et al. **Br J Pharmacol** 1988 Jul;94(3):890–900

Possible mechanism of acetaldehyde-induced noradrenaline release from sympathetic nerve terminals in isolated blood vessels. Chiba S, et al. **Br J Pharmacol** 1988 Sep; 95(1):177–82

Inhibition of noradrenaline release by omega-conotoxin GVIA in the rat tail artery. Clasbrummel B, et al. **Br J Pharmacol** 1989 Jan;96(1):101–10

Facilitation of noradrenaline release from sympathetic nerves through activation of ACTH receptors, beta-adrenoceptors and angiotensin II receptors. Costa M, et al. **Br J Pharmacol** 1988 Nov;95(3):993–1001

An examination of the postjunctional alpha-adrenoceptor subtypes for (-)-noradrenaline in several isolated blood vessels from the rabbit. Daly CJ, et al. **Br J Pharmacol** 1988 Oct;95(2):473–84

Neurotransmission in pig renal artery: the actions of angiotensin II and dopamine. Ferguson DR, et al. **Br J Pharmacol** 1989 Feb;96(2):279–82

Measurement of 3-methoxy-4-hydroxyphenylglycol (MHPG) in mouse brain by h.p.l.c. with electrochemical detection, as an index of noradrenaline utilisation and presynaptic alpha 2-adrenoceptor function. Heal DJ, et al. **Br J Pharmacol** 1989 Mar;96(3):547–56

The influence of activation or inhibition of protein kinase C on the release of radioactivity from rat isolated atria labelled with [3H]-noradrenaline. Ishac EJ, et al. **Br J Pharmacol** 1988 Jul;94(3):713–20

Palytoxin-induced contraction and release of endogenous noradrenaline in rat tail artery. Karaki H, et al. **Br J Pharmacol** 1988 Sep;95(1):183–8

Facilitation of noradrenaline release from sympathetic nerves in rat anococcygeus muscle by activation of prejunctional beta-adrenoceptors and angiotensin receptors. Li CG, et al. **Br J Pharmacol** 1988 Oct;95(2):385–92

Tissue noradrenaline and the polyol pathway in experimentally diabetic rats. Lucas PD, et al. **Br J Pharmacol** 1989 Jun;97(2):347–52

Effect of phorbol ester and pertussis toxin on the enhancement of noradrenaline release by angiotensin II in mouse atria. Musgrave IF, et al. **Br J Pharmacol** 1989 Mar; 96(3):609–16

Evidence for a dihydropyridine-sensitive and conotoxin-insensitive release of noradrenaline and uptake of calcium in adrenal chromaffin cells. Owen PJ, et al. **Br J Pharmacol** 1989 May;97(1):133–8

Presynaptic muscarinic receptors inhibiting endogenous noradrenaline release in the portal vein of the freely moving rat. Remie R, et al. **Br J Pharmacol** 1989 Jun;97(2):586–90

Effects of endogenous and synthetic prostanoids, the thromboxane A2 receptor agonist U-46619 and arachidonic acid on [3H]-noradrenaline release and vascular tone in rat isolated kidney. Rump LC, et al. **Br J Pharmacol** 1989 Jul;97(3):819–28

Prostacyclin and noradrenaline in peripheral nerve of chronic experimental diabetes in rats. Ward KK, et al. **Brain** 1989 Feb;112 (Pt 1):197–208

Hippocampus and dentate area of the European hedgehog. Comparative histochemical study. Crutcher KA, et al. **Brain Behav Evol** 1988;32(5):269–76

Interleukin-1 induces changes in norepinephrine metabolism in the rat brain. Kabiersch A, et al. **Brain Behav Immun** 1988 Sep;2(3):267–74

Binding specificity and presynaptic action of anaphylatoxin C5a in rat brain. Schupf N, et al. **Brain Behav Immun** 1989 Mar;3(1):28–38

Time course of changes in serotonin and noradrenaline in rat brain after predictable or unpredictable shock. Adell A, et al. **Brain Res** 1988 Aug 30;459(1):54–9

Vasopressin and noradrenaline coexistence in the rat locus ceruleus: differential decreases of their levels in distant brain areas after thermal and neurotoxic lesions. Caffé AR, et al. **Brain Res** 1988 Sep 6;459(2):386–90

The relationship of benzodiazepine binding sites to the norepinephrine projection in the hypothalamus of the adult rat. Harary N, et al. **Brain Res** 1989 Jul 17;492(1-2):293–9

Basic characteristics of noradrenaline release in the hippocampus of intact and 6-hydroxydopamine-lesioned rats as studied by in vivo microdialysis. Kalén P, et al. **Brain Res** 1988 Dec 6;474(2):374–9

Biochemical properties of monoamine-rich human neuroblastoma cells. Mena MA, et al. **Brain Res** 1989 May 8;486(2):286–96

Noradrenergic systems in human cerebellum. Powers RE, et al. **Brain Res** 1989 Feb 27;481(1):194–9

The effect of cocaine on hippocampal cholinergic and noradrenergic metabolism. Robinson SE, et al. **Brain Res** 1988 Aug 9;457(2):383–5

Intraventricular NGF infusion in the mature rat brain enhances sympathetic innervation of cerebrovascular targets but fails to elicit sympathetic ingrowth. Saffran BN, et al. **Brain Res** 1989 Jul 17;492(1-2):245–54

Accelerated norepinephrine turnover in peripheral tissues after ventromedial hypothalamic stimulation in rats. Saito M, et al. **Brain Res** 1989 Mar 6;481(2):298–303

Relationship between external calcium concentration and noradrenaline- and neuropeptide Y-evoked release from perfused dog spleen. Saxena VK, et al. **Brain Res** 1989 May 8;486(2):310–5

Comparison of nerve regeneration in vascularized and conventional grafts: nerve electrophysiology, norepinephrine, prostacyclin, malondialdehyde, and the blood-nerve barrier. Shupeck M, et al. **Brain Res** 1989 Jul 31;493(2):225–30

Goldthioglucose causes brain norepinephrine and serotonin depletion correlated with increased body weight. Silva E, et al. **Brain Res** 1989 Jun 19;490(1):192–5

Expression of aggression attenuates stress-induced increases in rat brain noradrenaline turnover. Tsuda A, et al. **Brain Res** 1988 Nov 22;474(1):174–80

Facilitation of noradrenergic character of sympathetic neurons by co-culturing with heart cells. Wakade AR, et al. **Brain Res** 1988 Aug 16;458(1):115–22

Effect of dexamethasone on monoamine and metabolite levels in a brain-tumor model. Bayens-Simmonds J, et al. **Brain Res Bull** 1989 Feb;22(2):187–90

Profile of NE, DA and 5-HT activity shifts in medial hypothalamus perfused by 2-DG and insulin in the sated or fasted rat. Miñano FJ, et al. **Brain Res Bull** 1989 Apr; 22(4):695–704

Norepinephrine content of discrete brain nuclei in acutely and chronically stressed borderline hypertensive rats. Mitchell VP, et al. **Brain Res Bull** 1989 Mar;22(3):545–7

HPLC detection of dopamine and noradrenaline in the cochlea of adult and developing rats. Gil-Loyzaga P, et al. **Brain Res Dev Brain Res** 1989 Jul 1;48(1):157–60

Age-related changes in neuronal uptake of catecholamines. Avellar MC, et al. **Braz J Med Biol Res** 1988;21(3):553–5

Buffer systems variably affect the interaction of norepinephrine with brain Na+-K+ ATPase. Mihic SJ, et al. **Can J Physiol Pharmacol** 1988 Aug;66(8):1035–40

Central noradrenergic activity in intact and sinoaortic denervated Dahl rats. Patel KP, et al. **Can J Physiol Pharmacol** 1989 May;67(5):450–5

Altered peripheral noradrenergic activity in intact and sinoaortic denervated Dahl rats. Peuler JD, et al. **Can J Physiol Pharmacol** 1989 May;67(5):442–9

Noradrenaline turnover in brown adipose tissue and the heart of fed and fasted golden hamsters. Trayhurn P, et al. **Can J Physiol Pharmacol** 1989 Feb;67(2):106–9

Continuous infusion of tracer norepinephrine may miscalculate unidirectional nerve uptake of norepinephrine in humans. Henriksen JH, et al. **Circ Res** 1989 Aug; 65(2):388–95

Stimulation of norepinephrine release by peripheral presynaptic beta-adrenoceptors. Chang PC, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:311–21

Regional norepinephrine turnover in human hypertension. Esler M, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:75–89

Catecholamine clearance is not enhanced by increasing levels within the physiological range. Gordon RD, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:337–43

Noradrenergic hyperactivity in primary hypertension; central and peripheral markers of both behavioral pathogenesis and efficacy of sympatholytic and relaxation therapy. Lee DD, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:225–34

Interaction of noradrenaline and dopamine in patients with essential hypertension or with pheochromocytoma. Yoshimura M, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:397–402

Noradrenaline diffusion, metabolism and vascular response in the rabbit ear artery. de la Lande IS. **Clin Exp Pharmacol Physiol** 1989 Jun;16(6):461–4 (11 ref.)

Renal sympathetic nerve activity measured by norepinephrine spillover rate in response to changes in blood pressure in conscious rabbits. Sano N, et al. **Clin Exp Pharmacol Physiol** 1989 Apr;16(4):319–22

Plasma dihydroxyphenylglycol for estimation of noradrenaline neuronal re-uptake in the sympathetic nervous system in vivo. Eisenhofer G, et al. **Clin Sci** 1989 Feb;76(2):171–82

Platelet efflux of noradrenaline in patients with type 1 diabetes mellitus. Smith CC, et al. **Clin Sci** 1989 Jun; 76(6):603–7

Effect of aminophylline on plasma and urinary catecholamine levels during heavy leg exercise in healthy young men. Wennmalm A, et al. **Clin Sci** 1989 Mar;76(3):255–60

Derivatives of epinephrine, norepinephrine, octopamine and histamine formed by homogenates of Trichostrongylus colubriformis, a nematode parasite of ruminants. Frandsen JC, et al. **Comp Biochem Physiol [C]** 1988;91(2):385–7

Concentrations of catecholamines and indoleamines in the central nervous system of Wriggle mouse Sagami. Kumazawa T, et al. **Comp Biochem Physiol [C]** 1989; 93(1):167–9

Comparative studies on catecholamine content and glycogen phosphorylase activity in the myocardium of spontaneously hypertensive and normotensive rats. Ilieva T, et al. **Cor Vasa** 1989;31(1):55–63

Lesions of the hypothalamic paraventricular nucleus and norepinephrine turnover in rats. Yoshida T, et al. **Endocrinol Jpn** 1989 Apr;36(2):187–94

Transection of the pineal stalk produces convulsions in male Mongolian gerbils (Meriones unguiculatus). Champney TH. **Epilepsy Res** 1989 Jul-Aug;4(1):14–9

New perspectives on the molecular pharmacology of affective disorders. Sulser F. **Eur Arch Psychiatry Neurol Sci** 1989;238(5-6):231–9 (72 ref.)

Presynaptic alpha 2-adrenoceptor modulation of 5-hydroxytryptamine and noradrenaline release from vascular adrenergic nerves. Kawasaki H, et al. **Eur J Pharmacol** 1989 May 2;164(1):35–43

Effects of pentazocine and other opioids on the potassium-evoked release of [3H]noradrenaline from guinea pig cortical slices. Kinouchi K, et al. **Eur J Pharmacol** 1989 May 2;164(1):63–8

Inhibition of noradrenaline release in the pig coronary artery via a novel serotonin receptor. Molderings GJ, et al. **Eur J Pharmacol** 1989 May 19;164(2):213–22

NMDA-induced hippocampal [3H]norepinephrine release is modulated by glycine. Ransom RW, et al. **Eur J Pharmacol** 1988 Oct 26;156(1):149–55

Presynaptic alpha 2-adrenoceptors modulate the release of [3H]noradrenaline from rat spinal cord dorsal horn neurones. Reimann W, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):161–6

Characterization of presynaptic beta-adrenoceptors facilitating endogenous noradrenaline release in the portal vein of permanently cannulated, freely moving rats. Remie R, et al. **Eur J Pharmacol** 1988 Nov 15;157(1):37–43

Brain dialysis provides evidence for D2-dopamine receptors modulating noradrenaline release in the rat frontal cortex. Rossetti ZL, et al. **Eur J Pharmacol** 1989 Apr 25; 163(2-3):393–5

Release of [3H]norepinephrine from rat hippocampal slices by N-methyl-D-aspartate: comparison of the inhibitory effects of Mg2+ and MK-801. Schmidt CJ, et al. **Eur J Pharmacol** 1988 Oct 26;156(1):111–20

Indirect evidence for separate vesicular neuronal origins of norepinephrine and ATP in the rabbit vas deferens. Trachte GJ, et al. **Eur J Pharmacol** 1989 May 30;164(3):425–33

The use of ryanodine and calcium channel blockers to characterize intra- and extracellular calcium pools mobilized by noradrenaline in the rat vas deferens. Vesperinas G, et al. **Eur J Pharmacol** 1989 Jun 20; 165(2-3):309–13

Electrical stimulation of the lateral habenula increases hippocampal noradrenaline release as monitored by in vivo microdialysis. Kalén P, et al. **Exp Brain Res** 1989; 76(1):239–45

Kindling-based status epilepticus: effect of norepinephrine depletion with 6-hydroxydopamine. McIntyre DC, et al. **Exp Neurol** 1989 Apr;104(1):10–4

Depletion of hypothalamic norepinephrine reduces the fever induced by polyriboinosinic acid: polyribocytidylic acid (Poly I:Poly C) in rats. Liu HJ, et al. **Experientia** 1989 Aug 15;45(8):720–2

The sources of plasma catecholamines in the American eel, Anguilla rostrata. Hathaway CB, et al. **Gen Comp Endocrinol** 1989 Jun;74(3):418–30

Effect of ambient temperature on serotonin, norepinephrine, and epinephrine contents in the pineal-paraphyseal complex of the soft-shelled turtle (Lissemys punctata punctata). Mahapatra MS, et al. **Gen Comp Endocrinol** 1989 May;74(2):215–20

Modulation of noradrenaline release from cat cerebral arteries by presynaptic alpha 2-adrenoceptors. Effect of chronic treatment with desipramine and cocaine. Balfagón G, et al. **Gen Pharmacol** 1989;20(3):289–94

Interaction between noradrenaline and diltiazem in rat isolated atria. Gonzalez-Sicilia L, et al. **Gen Pharmacol** 1989;20(1):81–3

Sodium-azide-evoked noradrenaline and catecholamine release from peripheral sympathetic nerves and chromaffin cells. Török TL, et al. **Gen Pharmacol** 1989;20(2):143–9

Failure of salt loading to inhibit tissue norepinephrine turnover in prehypertensive Dahl salt-sensitive rats. Genain CP, et al. **Hypertension** 1988 Dec;12(6):568–73

Norepinephrine overflow in perfused mesenteric arteries of spontaneously hypertensive rats. Hano T, et al. **Hypertension** 1989 Jul;14(1):44–53

Neuropeptide Y and galanin in norepinephrine release in hypothalamic slices. Tsuda K, et al. **Hypertension** 1989 Jul; 14(1):81–6

Brain norepinephrine levels after BCG stimulation of the immune system [published erratum appears in Immunol Lett 1988 Dec;19(4):351] Barneoud P, et al. **Immunol Lett** 1988 Jul;18(3):201–4

Influence of exogenously administered oxytocin on central

noradrenaline, dopamine and serotonin levels following psychological stress in nulliparous female rats (Rattus norvegicus). Pfister HP, et al. **Int J Neurosci** 1989 Apr; 45(3–4):221–9

Short-term effects of alcohol on peripheral blood. flow, platelet aggregation and noradrenaline output in normal man. Finch MB, et al. **Int J Tissue React** 1988;10(4):257–60

Sympathetic response to exercise in various tissues with advancing age. Mazzeo RS, et al. **J Appl Physiol** 1989 Mar; 66(3):1506–8

Increase in neuropeptide Y, but not noradrenaline, in the superior cervical ganglion of rabbits chronically exposed to cold. Cowen T, et al. **J Auton Nerv Syst** 1988 Sep; 24(1–2):175–8

Long-term hypoxia increases the turnover of dopamine but not norepinephrine in rat sympathetic ganglia. Dalmaz Y, et al. **J Auton Nerv Syst** 1988 Sep;24(1–2):57–64

Peripheral noradrenaline depletion does not impair extinction of food-rewarded running in the rat. Salmon P, et al. **J Auton Nerv Syst** 1988 Jun;23(1):79–81

Comparative assay of neuronal uptake and autoinhibitory feedback in guinea-pig and rat atria. Dyke A, et al. **J Auton Pharmacol** 1988 Sep;8(3):219–28

Effect of propranolol on early postischemia arrhythmias and noradrenaline and potassium release of ischemic myocardium in anesthetized pigs. Knopf H, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 1:S41–7

The effect of desipramine on ischemia-induced changes in extracellular K+, Na+, and H+ concentrations and noradrenaline release in the isolated rat heart during global ischemia. Knopf H, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 1:S8–14

Effect of chronic verapamil therapy on cardiac norepinephrine and beta-adrenoceptor density. Nayler WG, et al. **J Cardiovasc Pharmacol** 1988 Dec;12(6):629–36

Effects of digoxin on acetylcholine and norepinephrine concentrations in rat myocardium. Watanabe Y, et al. **J Cardiovasc Pharmacol** 1989 May;13(5):702–8

Cerebral arterial innervation: II. Development of calcitonin-gene-related peptide and norepinephrine in the rat. Tsai SH, et al. **J Comp Neurol** 1989 Jan 1;279(1):1–12

The effect of age on presynaptic alpha 2 adrenoceptor autoregulation of norepinephrine release. Daly RN, et al. **J Gerontol** 1989 May;44(3):B59–66

Laminar pattern of cholinergic and adrenergic receptors in rat visual cortex using quantitative receptor autoradiography. Schliebs R, et al. **J Hirnforsch** 1989; 30(3):303–11

Norepinephrine overflow and re-uptake in perfused mesenteric arteries of Dahl salt-sensitive and salt-resistant rats. Hano T, et al. **J Hypertens** 1989 Jan;7(1):43–9

Norepinephrine and calcium responses to altered sodium intake in modulating and non-modulating high-renin hypertension. Burgess ED, et al. **J Hypertens Suppl** 1988 Dec;6(4):S85–7

Endogenous noradrenaline re-uptake blocking factor in rats with reduced renal mass hypertension. Shima H, et al. **J Hypertens Suppl** 1988 Dec;6(4):S342–4

Platelet sodium and potassium ATPase [corrected] activity and noradrenaline efflux rate in relation to autonomic and peripheral nerve function in insulin-dependent diabetic patients [published erratum appears in J Intern Med 1989 Jul;226(1):4] Bergström B, et al. **J Intern Med** 1989 Mar; 225(3):185–90

Catecholaminergic responses of neonatal adrenal gland to insulin. Souto M, et al. **J Neural Transm** 1988;73(2):115–20

[3H]desipramine binding to rat brain tissue: binding to both noradrenaline uptake sites and sites not related to noradrenaline neurons. Bäckström IT, et al. **J Neurochem** 1989 Apr;52(4):1099–106

Presynaptic mechanisms underlying the gamma-aminobutyric acid-evoked receptor-independent release of [3H]norepinephrine in rat hippocampus. Bonanno G, et al. **J Neurochem** 1989 Jun;52(6):1854–8

Prenatal ontogenesis of brain phenolamines and catecholamines in relation to their metabolizing enzymes in Roman avoider strains of rats. Coulon JF, et al. **J Neurochem** 1989 May;52(5):1418–24

Clonidine prevents transient loss of noradrenaline in response to cholinergic hypofunction induced by ethylcholine aziridinium (AF64A). Hörtnagl H, et al. **J Neurochem** 1989 Mar;52(3):853–8

Noradrenaline metabolism in neocortex and hippocampus following transient forebrain ischemia in rats: relation to development of selective neuronal necrosis. Miyauchi Y, et al. **J Neurochem** 1989 Aug;53(2):408–15

Catecholamine content changes in brain regions of spontaneously hypertensive rats under immobilization stress. Nomura M, et al. **J Neurochem** 1989 Mar;52(3):933–7

Inhibition by cyclic AMP of phorbol ester-potentiated norepinephrine release from guinea pig brain cortical synaptosomes. Shuntoh H, et al. **J Neurochem** 1988 Nov; 51(5):1565–72

Changes in lymphocyte beta-adrenergic receptor density and noradrenaline content of the spleen are early indicators of immune reactivity in acute experimental allergic encephalomyelitis in the Lewis rat. Mackenzie FJ, et al. **J Neuroimmunol** 1989 Jul;23(2):93–100

Noradrenaline, adrenaline and tyrosine hydroxylase in adrenal medulla from parkinsonian patients [letter] Cervera P, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug; 51(8):1104–5

Alpha 2-adrenoceptor-mediated modulation of noradrenaline release is decreased in vas deferens but not in cerebral cortex of diabetic rats. Drukarch B, et al. **J Neurol Sci** 1989 Jul;91(3):293–9

Sodium-independent transport of noradrenaline in mouse and rat astrocytes in primary culture. Paterson IA, et al. **J Neurosci Res** 1989 May;23(1):71–7

Brain monoamines during carrageenan-induced acute paw inflammation in rats. Bhattacharya SK, et al. **J Pharm Pharmacol** 1988 Jul;40(7):518–20

Inhibition of Na+,K+-ATPase activity by phospholipase A2 and several lysophospholipids: possible role of phospholipase A2 in noradrenaline release from cerebral cortical synaptosomes. Nishikawa T, et al. **J Pharm Pharmacol** 1989 Jul;41(7):450–8

Effects of methylene blue on the uptake, release and metabolism of noradrenaline in mesenteric arterial vessels. Soares-da-Silva P, et al. **J Pharm Pharmacol** 1988 Aug; 40(8):534–8

Nicotine-induced regional changes in brain noradrenaline and dopamine turnover in rats. Kubo T, et al. **J Pharmacobiodyn** 1989 Feb;12(2):107–12

Age related changes in the inhibitory effect of clonidine on high K+-evoked noradrenaline release from brain slices of rats. Qi SB, et al. **J Pharmacobiodyn** 1988 Jul;11(7):483–5

Regional brain abnormalities in norepinephrine uptake and dopamine beta-hydroxylase activity in the genetically epilepsy-prone rat. Browning RA, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):229–35

Effects of buspirone and its metabolite, 1-(2-pyrimidinyl)piperazine, on brain monoamines and their metabolites in rats. Fuller RW, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):50–6

Application of amperometric detection to the analysis of the diffusion and O-methylation of a catecholamine and a catechol steroid across the blood vessel wall. Panek DU, et al. **J Pharmacol Methods** 1989 May;21(3):171–82

Short- and long-latency muscarinic inhibition of noradrenaline release from rabbit atria induced by vagal stimulation. Habermeier-Muth A, et al. **J Physiol (Lond)** 1988 Jul;401:277–93

The evaluation of 4-hydroxy-3-methoxyphenylglycol sulfate as a possible marker of central norepinephrine turnover. Studies in healthy volunteers and depressed patients. Filser JG, et al. **J Psychiatr Res** 1988;22(3):171–81

The relationship of burn-induced hypermetabolism to central and peripheral catecholamines. Chance WT, et al. **J Trauma** 1989 Mar;29(3):306–12

Age-related differences in norepinephrine and non-collagenous protein in human vas deferens. Nakada T, et al. **J Urol** 1989 Apr;141(4):998–1002

Inhibitory actions of captopril on norepinephrine release from adrenergic nerve endings in spontaneously hypertensive rats. Tsuda K, et al. **Jpn Heart J** 1988 Jul;29(4):475–83

Neurotransmitter release and vascular responsiveness in mesenteric vasculatures from two-kidney, one-clip Goldblatt hypertensive rats. Tsuda K, et al. **Jpn Heart J** 1989 Jan;30(1):85–94

Inhibition of norepinephrine release by presynaptic alpha 2-adrenoceptors in mesenteric vasculature preparations from chronic DOCA-salt hypertensive rats. Tsuda K, et al. **Jpn Heart J** 1989 Mar;30(2):231–9

Characteristics of antinociception induced by noncatecholic phenylethylamine derivatives: the relation of endogenous norepinephrine to phenylethylamine analog-induced antinociception. Matsuoka Y, et al. **Jpn J Pharmacol** 1988 Oct;48(2):263–72

Decrease in neuronal uptake of noradrenaline simply explains the supersensitivity after sympathectomy in the rat iris dilator. Shibata K, et al. **Jpn J Pharmacol** 1989 May; 50(1):19–29

Effects of neurotropin on regional brain noradrenaline metabolism in rats. Tanaka M, et al. **Jpn J Pharmacol** 1989 Feb;49(2):187–96

A possible role for spinal noradrenaline in the mechanisms of 6-hydroxydopamine against pentylenetetrazol induced convulsions in rats. Abed WT. **Life Sci** 1988;43(22):1831–6

Neurotensin affects metabolism of opioid peptides, catecholamines and inositol phospholipids in bovine chromaffin cells. Bommer M, et al. **Life Sci** 1989; 44(5):327–35

The depletion of rat cortical norepinephrine and the inhibition of [3H]norepinephrine uptake by xylamine does not require monoamine oxidase activity. Dudley MW. **Life Sci** 1988;43(23):1871–7

A possible mechanism for the anti-depressant activity of thyrotropin releasing hormone. Horst WD, et al. **Life Sci** 1974 Sep 15;15(6):1073–82

Alterations in spinal cord norepinephrine levels following experimentally produced trauma in normal and adrenalectomized cats. Schoultz TW, et al. **Life Sci** 1974 Oct 15;15(8):1485–95

Norepinephrine turnover in iron deficiency: effect of two semi-purified diets. Smith SM, et al. **Life Sci** 1989; 45(4):341–7

Patterns of extracellular norepinephrine in the paraventricular hypothalamus: relationship to circadian rhythm and deprivation-induced eating behavior. Stanley BG, et al. **Life Sci** 1989;45(4):275–82

The effect of hypothermic doses of 1-delta 9-tetrahydrocannabinol on biogenic amine metabolism in selected parts of the rat brain. Yagiela JA, et al. **Life Sci** 1974 Jun 16;14(12):2367–78

Inhibiting noradrenergic overactivity by inhibition of thromboxane and concomitant activation of opiate receptors via dietary means. Backon J. **Med Hypotheses** 1989 May;29(1):65–74 (182 ref.)

Effect of ischemia on noradrenergic and energy-related metabolites in the cerebral cortex of young and adult gerbils. Kumami K, et al. **Metab Brain Dis** 1988 Dec; 3(4):273–7

Norepinephrine turnover in various tissues at rest and during exercise: evidence for a training effect. Mazzeo RS, et al. **Metabolism** 1989 May;38(5):479–83

Sequential changes of noradrenaline content of vein grafts in rats: quantitative estimation by high-performance liquid chromatography using electrochemical detection. Hukki J, et al. **Microsurgery** 1989;10(2):110–2

Presynaptic action of adrenaline on adrenoceptors modulating stimulation-evoked 3H-noradrenaline release from rabbit isolated aorta. Abrahamsen J, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Mar; 339(3):281–7

The K+-induced increases in noradrenaline and dopamine release are accompanied by reductions in the release of their intraneuronal metabolites from the rat anterior hypothalamus. An in vivo brain microdialysis study. Badoer E, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb;339(1-2):54–9

N-methyl-D-aspartate (NMDA) receptor-mediated stimulation of noradrenaline release, but not release of other neurotransmitters, in the rat brain cortex: receptor location, characterization and desensitization. Fink K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):514–21

Lack of differences between the neuronal and extraneuronal handling of 3H-7- and 3H-ring-2,5,6-(-)noradrenaline. Grohmann M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Aug; 338(2):180–4

Characterization and presynaptic modulation of stimulation-evoked exocytotic co-release of noradrenaline and neuropeptide Y in guinea pig heart. Haass M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):71–8

Total body, systemic and pulmonary clearance and fractional extraction of unlabelled and differently 3H-labelled noradrenaline in the anaesthetized rabbit. Halbrügge T, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):361–7

The measurement of norepinephrine clearance and spillover rate into plasma in conscious spontaneously hypertensive rats. Keeton TK, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):350–60

Biochemical evidence that brainstem adrenaline-containing neurons are activated during clonidine withdrawal in the spontaneously hypertensive rat. Lambás-Señas L, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):543–7

Effects of hypoxia on noradrenaline release and neuronal reuptake in isolated rabbit thoracic aortic strips. Lee K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):503–8

Neuronally released (-)-noradrenaline relaxes smooth muscle of calf trachea mainly through beta 1-adrenoceptors: comparison with (-)-adrenaline and relation to adenylate cyclase stimulation. Lemonine H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):85–98

Presynaptic alpha 2-adrenoceptor, opioid kappa-receptor and adenosine A1-receptor interactions on noradrenaline release in rabbit brain cortex. Limberger N, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jul; 338(1):53–61

Stereoselectivity of noradrenaline uptake into synaptic vesicles of the rat brain. Matthaei H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jun; 337(6):621–5

Facilitatory presynaptic angiotensin receptors on the sympathetic nerves of the human saphenous vein and pulmonary artery. Potential involvement in beta-adrenoceptor-mediated facilitation of noradrenaline release. Molderings GJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Sep; 338(3):228–33

Effect of phorbol esters and polymyxin B on modulation of noradrenaline release in mouse atria. Musgrave IF, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):48–53

Release of vesicular noradrenaline in the rat tail artery induced by cocaine. Palatý V. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):510–6

Pronounced facilitation of endogenous noradrenaline release by presynaptic beta 2-adrenoceptors in the vasculature of freely moving rats. Remie R, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Sep; 338(3):215–20

Sodium dependent 3H-noradrenaline release from rat neocortical slices in the absence of extracellular calcium: presynaptic modulation by mu-opioid receptor and adenylate cyclase activation. Schoffelmeer AN, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov;

338(5):548–52
Kinetic evidence for a common binding site for substrates and inhibitors of the neuronal noradrenaline carrier. Schömig E, et al.
Naunyn Schmiedebergs Arch Pharmacol 1988 Jun; 337(6):626–32
Inhibition of neuronal noradrenaline uptake (uptake1) and desipramine binding by N-ethylmaleimide (NEM). Schömig E, et al.
Naunyn Schmiedebergs Arch Pharmacol 1988 Jun; 337(6):633–6
The release of 3H-noradrenaline by p- and m-tyramines and -octopamines, and the effect of deuterium substitution in alpha-position. Schönfeld CL, et al.
Naunyn Schmiedebergs Arch Pharmacol 1989 Apr; 339(4):433–40
Characterization of prejunctional purinoceptors on adrenergic nerves of the rat caudal artery. Shinozuka K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Sep; 338(3):221–7
ACTH increases noradrenaline release in the rabbit heart. Szabo B, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct;338(4):368–72
Chloride-dependence of the potency of inhibitors of the neuronal noradrenaline carrier in the rat vas deferens. Ungell AL, et al.
Naunyn Schmiedebergs Arch Pharmacol 1989 Jan–Feb; 339(1–2):65–70
Regional distribution of dopamine, 5-hydroxytryptamine, and noradrenaline in the rat vas deferens. Celuch SM, et al. **Neurochem Res** 1988 Oct;13(10):967–72
Effect of selective noradrenergic denervation on noradrenaline content and [3H]dopamine release in rat nucleus accumbens slices. Russell VA, et al.
Neurochem Res 1989 Feb;14(2):169–72
Involvement of brain stem noradrenergic neurons in the development of hypertension in spontaneously hypertensive rats. Yao H, et al. **Neurochem Res** 1989 Jan; 14(1):75–9
Receptive female rats stimulate norepinephrine release from olfactory bulbs of freely behaving male rats. Dluzen DE, et al. **Neuroendocrinology** 1989 Jan;49(1):28–32
Increased central noradrenergic activity during benzodiazepine withdrawal: an electrophysiological study. Bell J, et al. **Neuropharmacology** 1988 Nov;27(11):1187–90
Differences in the temperature dependence of drug interaction with the noradrenaline and serotonin transporters. De Oliveira AM, et al. **Neuropharmacology** 1989 Aug;28(8):823–8
Investigation into the age-dependence of release of serotonin and noradrenaline in the rat brain cortex and of autoreceptor-mediated modulation of release. Schlicker E, et al. **Neuropharmacology** 1989 Aug;28(8):811–5
Biogenic amines and their metabolites in Alzheimer's disease: noradrenaline, 5-hydroxytryptamine and 5-hydroxyindole-3-acetic acid depleted in hippocampus but not in substantia innominata. Baker GB, et al.
Neurosci Lett 1989 May 22;100(1–3):335–9
Contrasting time course of catecholamine accumulation and of spontaneous discharge in experimental neuromas in the rat. Goldstein RS, et al. **Neurosci Lett** 1988 Nov 22; 94(1–2):58–63
Stereoselective antagonism of NMDA-stimulated noradrenaline release from rat hippocampal slices by MK-801. Lalies M, et al. **Neurosci Lett** 1988 Sep 12; 91(3):339–42
Immunocytochemical study of serotoninergic and noradrenergic innervation of the ventrobasal complex of the rat thalamus. Nothias F, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):59–63
Characterization of hippocampal norepinephrine release as measured by microdialysis perfusion: pharmacological and behavioral studies. Abercrombie ED, et al. **Neuroscience** 1988 Dec;27(3):897–904
Immunohistochemical analysis of the neurotoxic effects of DSP-4 identifies two populations of noradrenergic axon terminals. Fritschy JM, et al. **Neuroscience** 1989; 30(1):181–97
In vivo electrochemical studies of monoamine release in the medial prefrontal cortex of the rat. Gratton A, et al.
Neuroscience 1989;29(1):57–64
Co-release of neuropeptide Y and noradrenaline from pig spleen in vivo: importance of subcellular storage, nerve impulse frequency and pattern, feedback regulation and resupply by axonal transport. Lundberg JM, et al.
Neuroscience 1989;28(2):475–86
Effects of hydrocephalus and surgical decompression on cortical norepinephrine levels in neonatal cats. Lovely TJ, et al. **Neurosurgery** 1989 Jan;24(1):43–52
N-(2-cyanoethyl)tranylcypromine, a potential prodrug of tranylcypromine: its disposition and interaction with catecholamine neurotransmitters in brain. Nazarali AJ, et al. **Pharm Res** 1987 Feb;4(1):16–20
Effect of circadian rhythm on the neuronal uptake and sensitivity to the inotropic action of norepinephrine by rat atria. Mehrabani P, et al. **Pharmacol Biochem Behav** 1989 Feb;32(2):475–7
Met-enkephalin, injected during the early phase of stress, attenuates stress-induced increases in noradrenaline release in rat brain regions. Tanaka M, et al.
Pharmacol Biochem Behav 1989 Mar;32(3):791–5
Stressor predictability and rat brain noradrenaline metabolism. Tsuda A, et al. **Pharmacol Biochem Behav** 1989 Feb;32(2):569–72
Evidence that ATP and noradrenaline are released during electrical field stimulation of the rat isolated seminal vesicle. Wali FA, et al. **Pharmacol Res** 1989 Jul–Aug; 21(4):397–404
Effects of acute morphine administration on noradrenaline turnover and metabolism in various brain parts of control and handled rats. Attila LM. **Pharmacol Toxicol** 1989 Feb; 64(2):202–9
Regulation of noradrenaline release in human blood vessels. Göthert M. **Pharmacol Toxicol** 1988;63 Suppl 1:12–5
Halothane decreases uptake of noradrenaline in sliced rat lungs. Hede AR. **Pharmacol Toxicol** 1988 Aug;63(2):141–2
Age-related changes of norepinephrine content in kidneys of spontaneously hypertensive and Wistar-Kyoto rats. Saiz J, et al. **Pharmacology** 1988;37(6):365–9
Urinary MHPG-sulfate and urinary MHPG-glucuronide, two possible markers of the central or peripheral norepinephrine metabolism in man. The effect of alprazolam treatment. Müller WE, et al.
Pharmacopsychiatry 1988 Nov;21(6):371–3
Hypothalamic infusion of amphetamine increases serotonin, dopamine and norepinephrine. Parada M, et al.
Physiol Behav 1988;44(4–5):607–10
Effect of oestrogens and progesterone on the metabolic inactivation of noradrenaline in the human placenta. Saarikoski S. **Placenta** 1988 Sep–Oct;9(5):507–12
Reproductive tract and pancreatic norepinephrine levels in pre- and overt-diabetic C57BL/KsJ mice: relationship to body weight, blood glucose, serum insulin, and reproductive dysfunction. Garris DR.
Proc Soc Exp Biol Med 1988 Oct;189(1):79–83
Effects of chronic cocaine administration on rat cardiac and splenic norepinephrine levels. St. John-Allan K, et al.
Proc West Pharmacol Soc 1989;32:61–3
Noradrenaline-containing transplants in the adult spinal cord of mammals. Nornes HO, et al. **Prog Brain Res** 1988; 78:181–6 (33 ref.)
Laminin directs and facilitates migration and fiber growth of transplanted serotonin and norepinephrine neurons in adult brain. Zhou FC, et al. **Prog Brain Res** 1988;78:413–26
The pharmacology of sibutramine hydrochloride (BTS 54 524), a new antidepressant which induces rapid noradrenergic down-regulation. Buckett WR, et al.
Prog Neuropsychopharmacol Biol Psychiatry 1988; 12(5):575–84
Consequences of monoamine oxidase inhibition: increased vesicular accumulation of dopamine and norepinephrine and increased metabolism by catechol-O-methyltransferase and phenolsulfotransferase. Buu NT, et al.
Prog Neuropsychopharmacol Biol Psychiatry 1989; 13(3–4):563–8
Antidepressant effect of lithium: a neurochemical study on neuronal uptake of norepinephrine and serotonin. Wolf MA, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989;13(5):765–73
Prostaglandin F2 alpha fails to alter the number of beta adrenoceptive specific binding sites in metestrous rat uteri but diminishes noradrenaline tissue uptake. Chaud M, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Nov; 34(2):95–100
Differential postmortem release of noradrenaline and dopamine from rat brain. Rossetti ZL, et al.
Psychopharmacology (Berlin) 1989;98(4):562–3
Differential effects of yohimbine and phenoxybenzamine on norepinephrine metabolites in rat brain. Edwards DJ, et al. **Res Commun Chem Pathol Pharmacol** 1988 Nov; 62(2):195–206
Effects of d- and l-pentazocine on the release and uptake of norepinephrine in rat brain cortex. Kinouchi K, et al. **Res Commun Chem Pathol Pharmacol** 1989 Feb; 63(2):201–13
AL-1576, an aldose reductase inhibitor (ARI), did not prevent the decrease of norepinephrine turnover in diabetic rats. Yen TT, et al.
Res Commun Chem Pathol Pharmacol 1988 Aug; 61(2):257–60
The mechanism of acute gastric ulcer after induced hemorrhagic shock. Urakawa T, et al.
Scand J Gastroenterol 1989 Mar;24(2):193–201
Effect of furazolidone on gut catecholamine in cysteamine-induced duodenal ulcer in the rat. Zheng ZT, et al. **Scand J Gastroenterol** 1988 Oct;23(8):1020–4
Effects of nicotinic agonists and antagonists on N-methyl-D-aspartate-induced 3H-norepinephrine release and 3H-(1-[1-(2-thienyl)cyclohexyl]-piperidine) binding in rat hippocampus. Snell LD, et al. **Synapse** 1989; 3(2):129–35
Effect of reserpine on N-methylthiobenzamide-induced pulmonary edema: role of lung norepinephrine and hypothermia. Gibbs LS, et al. **Toxicology** 1989 Mar; 54(3):311–21
Gangliosides mediate inhibitory effects of tetanus and botulinum A neurotoxins on exocytosis in chromaffin cells. Marxen P, et al. **Toxicon** 1989;27(8):849–59
Specific dynamic action revisited: studies of hormonal regulation of energy expenditure in man. Campbell RG, et al. **Trans Am Clin Climatol Assoc** 1987;99:136–43
[Effects of intraperitoneal injection of bicuculline or atropine on electro-acupuncture analgesic effect and the changes in the brain noradrenaline content in rats] Wang YJ, et al. **Chen Tzu Yen Chiu** 1988;13(4):310–3 (Eng. Abstr.) **(Chi)**
[Histochemical quantitative analysis on the effect of acupuncture at noradrenaline cells in the adrenal medulla and its functional route] Yang YM, et al.
Cheh Tzu Yen Chiu 1988;13(3):247–50 (Eng. Abstr.) **(Chi)**
[Facilitatory effect of verapamil on adrenergic transmitter release and its relation to calmodulin] Min L, et al.
Chung Kuo Yao Li Hsueh Pao 1988 Nov;9(6):530–2 (Eng. Abstr.) **(Chi)**
[Beta adrenergic receptor-induced stimulation of the vascular renin-angiotensin system: significance for noradrenaline liberation and the mechanism of action of angiotensin-converting enzyme inhibitors] Göthert M.
Z Kardiol 1988;77 Suppl 3:35–7 **(Ger)**
[Myocardial noradrenaline content: a factor not considered up to now for the prognosis of patients with dilated cardiomyopathy] Schofer J, et al. **Z Kardiol** 1989 Jun; 78(6):366–71 (Eng. Abstr.) **(Ger)**
[Postganglionic noradrenergic nervous function in Shy-Drager syndrome] Araki N, et al.
Rinsho Shinkeigaku 1988 Oct;28(10):1156–63 (Eng. Abstr.) **(Jpn)**
[Rat brain catecholamines in the initial period of acute radiation exposure] Skopenko EV, et al.
Ukr Biokhim Zh 1989 May–Jun;61(3):90–6 (Eng. Abstr.) **(Rus)**
[Histochemical analysis of noradrenaline and adrenaline cells in the adrenal gland during hypoxic stress in relation to the time of sacrifice] Mihalj-Nović M, et al. **Med Pregl** 1988;41(3–4):124–7 (Eng. Abstr.) **(Scr)**
[Effect of nutrition and environment on noradrenergic metabolism in the central nervous system. I. Chronic malnutrition] Castilla-Serna L, et al.
Bol Med Hosp Infant Mex 1988 Aug;45(8):491–9 (Eng. Abstr.) **(Spa)**
[Effect of nutrition and environment on noradrenergic metabolism of the central nervous system. II. Nutritional and environmental rehabilitation] Castilla-Serna L, et al.
Bol Med Hosp Infant Mex 1988 Sep;45(9):555–64 (Eng. Abstr.) **(Spa)**

PHARMACOKINETICS

Cardiac and whole body [3H]noradrenaline kinetics in ischaemic heart disease: contrast between unstable anginal syndromes and pacing induced ischaemia. McCance AJ, et al. **Br Heart J** 1989 Mar;61(3):238–47
Influence of ramipril on release of norepinephrine during sympathetic nerve stimulation in isolated rabbit hearts. Xiang JZ, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jul; 9(4):320–2
Cardiac norepinephrine kinetics in hypertrophic cardiomyopathy. Brush JE Jr, et al. **Circulation** 1989 Apr; 79(4):836–44
Synaptosomal high-affinity noradrenaline uptake does not differ between mice susceptible (DBA/2J) and resistant (C57 BL/6) to audiogenic seizures. Jazrawi SP, et al.
Epilepsy Res 1987 Mar;1(2):139–41
Comparison of MIBG and monoamines uptake mechanisms: pharmacological animal and blood platelets studies. Guilloteau D, et al. **Eur J Nucl Med** 1988;14(7–8):341–4
On the use of fibroblasts in tissue culture to study the neurochemistry of brain mechanisms controlling blood pressure. Richardson JS, et al. **Int J Neurosci** 1989 May; 46(1–2):41–6
MIBG and catecholamine storage in the brain: an in-vitro study. Guilloteau D, et al. **Int J Rad Appl Instrum [B]** 1988; 15(6):723–4
Reduced inhibitory effects of clonidine and neuropeptide Y on 3H-noradrenaline release from synaptosomes of the medulla oblongata of the spontaneously hypertensive rat. Martire M, et al. **J Neural Transm** 1989;76(3):181–9
Characterization of the inhibitory effect of some antidepressant drugs on the outward transport of norepinephrine in the ischemic myocardium. Carlsson L, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):715–20
Inhibition of norepinephrine transport into synaptic vesicles by amphetamine analogs. Knepper SM, et al.
J Pharmacol Exp Ther 1988 Nov;247(2):487–94
Adrenergic neuromodulation by endothelin in guinea pig pulmonary artery. Wiklund NP, et al. **Neurosci Lett** 1989 Jul 3;101(3):269–73
Comparison of transmitter release properties of embryonic sympathetic neurons growing in vivo and in vitro. Wakade AR, et al. **Neuroscience** 1988 Dec;27(3):1007–19
Demonstration of adrenergic and dopaminergic receptors in cultured sympathetic neurons—their coupling to cAMP but not to the transmitter release process. Wakade AR, et al.
Neuroscience 1988 Dec;27(3):1021–8
Uptake, release, and modulation of release of noradrenaline in rabbit superior colliculus. Wichmann T, et al.
Neuroscience 1988 Aug;26(2):621–34
Effect of (1-24)adrenocorticotrophin on the uptake of 3H-norepinephrine by the rat atria. Mehrabani PA, et al.
Pharmacol Biochem Behav 1988 Jun;30(2):391–6
Norepinephrine uptake dependent upon apparent Mg++-ATPase activity and proton transport in storage vesicles in axoplasm. Bogdanski DF. **Synapse** 1988; 2(4):424–31
Changes in arterial norepinephrine concentration following intravenous administration in dogs with lung edema.

Imamura T, et al. **Tohoku J Exp Med** 1988 Nov; 156(3):271–7

The effects of soman on norepinephrine uptake, release, and metabolism. Hu CY, et al. **Toxicol Appl Pharmacol** 1988 Nov;96(2):185–90

PHARMACOLOGY

Morphological changes in salivary glands after treatment with sialagogues. An electronmicroscopical study. Lundquist PG, et al. **Acta Otolaryngol (Stockh)** 1989 May–Jun;107(5–6):434–40

Luteinizing hormone release induced by noradrenaline after administration of drugs that increase hypothalamic GABA levels. Donoso AO. **Acta Physiol Pharmacol Latinoam** 1988;38(1):11–8

Studies of the luteinization process in the rat: development of catecholamine response on progesterone production during the peri-ovulatory period. Agren PL, et al. **Acta Physiol Scand** 1988 Sep;134(1):143–8

Neurogenic contractions in the tail artery of normotensive rats are mediated by noradrenaline and ATP via post-junctional alpha 1- and alpha 2-adrenoceptors and P2x-purinoceptors. Bao JX, et al. **Acta Physiol Scand** 1989 May;136(1):139–40

Age-related variations in the relative importance of noradrenaline and ATP as mediators of the contractile response of rat tail artery to sympathetic nerve stimulation. Bao JX, et al. **Acta Physiol Scand** 1989 Jun;136(2):287–8

Neurogenic contractions in caudal artery from young rats: receptor–receptor interaction and regional differences in effects of noradrenaline and ATP via alpha 1-, alpha 2- and P2x-receptors. Bao JX, et al. **Acta Physiol Scand** 1989 Aug;136(4):619–20

Parathyroid hormone and noradrenaline-induced enhancement of cyclic AMP in a cloned osteogenic sarcoma cell line (UMR 106) is inhibited by neuropeptide Y. Bjurholm A, et al. **Acta Physiol Scand** 1988 Nov; 134(3):451–2

Differential vasomotor action of noradrenaline, serotonin, and histamine in isolated basilar artery from rat and guinea-pig. Chang JY, et al. **Acta Physiol Scand** 1988 Jan; 132(1):91–102

Transport pathways for Na+ and Br- (Cl-) in noradrenaline-stimulated frog skin (Rana temporaria). Eskesen K, et al. **Acta Physiol Scand** 1989 Aug; 136(4):535–46

Transcapillary clearance of albumin in rat skeletal muscle monitored by external detection. Effects of alterations in capillary surface area. Haraldsson B, et al. **Acta Physiol Scand** 1988 Apr;132(4):495–504

Noradrenaline as a possible mediator in the renal response to vascular expansion with blood in the cat. Rasmussen SN, et al. **Acta Physiol Scand** 1988 Apr;132(4):471–85

Effects of ethanol on VIP-and/or noradrenaline-stimulated cAMP formation in mouse brain. Schaad NC, et al. **Alcohol** 1988 Nov–Dec;5(6):445–9

Cardiovascular responsiveness to norepinephrine in mild essential hypertension. Lenders JW, et al. **Am J Cardiol** 1989 May 15;63(17):1231–4

The effect of norepinephrine versus epinephrine on regional cerebral blood flow during cardiopulmonary resuscitation. Brown CG, et al. **Am J Emerg Med** 1989 May;7(3):278–82

Reduction of norepinephrine-induced tonic contraction and phosphoinositide turnover in arteries of spontaneously hypertensive rats. A possible role for protein kinase C [published erratum appears in Am J Hypertens 1989 Apr;2(4):following Table of Contents] Ek TP, et al. **Am J Hypertens** 1989 Jan;2(1):40–5

Vascular catecholamine sensitivity during pregnancy in the ewe. McLaughlin MK, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):47–53

Modulation of fetal cardiovascular responsiveness to norepinephrine by autonomic nervous system. Brace RA, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):R574–9

Cholesterol-induced changes in rabbit arterial smooth muscle sensitivity to adrenergic stimulation. Broderick R, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H170–8

Effects of aging on agonist-activated 86Rb efflux in arteries of Fischer 344 rats. Cox RH, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H494–501

Renal microvascular effects of vasopressin and vasopressin antagonists. Edwards RM, et al. **Am J Physiol** 1989 Feb; 256(2 Pt 2):F274–8

Developmental changes in adrenergic regulation of fetal arginine vasopressin secretion. Ervin MG, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):E406–12

A novel effect of norepinephrine on cardiac cells is mediated by alpha 1-adrenoceptors. Fedida D, et al. **Am J Physiol** 1989 May;256(5 Pt 2):H1500–4

Vascular sensitivity and reactivity to norepinephrine in diabetes mellitus. Friedman JJ. **Am J Physiol** 1989 Apr; 256(4 Pt 2):H1134–8

Energy expenditure during stress ulcer formation in vulnerable rats. Greenberg D, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R403–7

Effects of norepinephrine and denervation on brown adipose tissue in Syrian hamsters. Hamilton JM, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R396–404

Alpha 2-receptors mediate catecholamine-stimulated acid secretion in Amphiuma jejunum. Hinton CF, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):G640–6

Noradrenergic influence on epithelial responses of rabbit ileum to secretagogues. Hubel KA, et al. **Am J Physiol** 1989 May;256(5 Pt 1):G919–24

Regulation of ion transport in porcine gallbladder: effects of VIP and norepinephrine. O'Grady SM, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):C52–7

Adrenergic control of intrarenal arteries of rabbits. Owen MP, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H607–12

Oxygen free radicals abolish endothelium-dependent relaxation in diabetic rat aorta. Pieper GM, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H825–33

Role of calcium in caffeine–norepinephrine interactions in cardiac Purkinje fibers. Satoh H, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H226–37

Propagation of vasomotor responses coordinates arteriolar resistances. Segal SS, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H832–7

Mutual interaction of vasoconstriction and endothelial damage in stenotic arteries. Tulenko TN, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H881–9

[Ca2+]i and contraction of ear artery in response to rapid stimulation by NE: measurements with quin2 and fura-2. Vonderlage M, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H649–57

Adrenoceptors and temperature regulation in goldfish. Wollmuth LP, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):R600–4

Control of sodium excretion in NE–ACTH hypertension: role of pressure natriuresis. Woods LL, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):R894–900

Reversal of vascular tachyphylaxis to catecholamines and histamine in the feline lung. Cutaia M, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1336–42

The effect of norepinephrine versus epinephrine on myocardial hemodynamics during CPR. Robinson LA, et al. **Ann Emerg Med** 1989 Apr;18(4):336–40

Differential effects of norepinephrine and phorbol ester on alpha-1 adrenergic receptor number and surface-accessibility in DDT1 MF-2 cells. Colucci WS, et al. **Biochem Biophys Res Commun** 1988 Oct 31; 156(2):924–30

Transient accumulation of inositol (1,3,4,5)-tetrakisphosphate in response to alpha 1-adrenergic stimulation in adult cardiac myocytes. Heathers GP, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):485–92

Norepinephrine and GTP-gamma-S increase myofilament Ca2+ sensitivity in alpha-toxin permeabilized arterial smooth muscle. Nishimura J, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):677–83

Norepinephrine stimulates the production of inositol trisphosphate and inositol tetrakisphosphate in rat aorta. Pijuan V, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):240–5

Endothelin enhances adrenergic vasoconstriction in perfused rat mesenteric arteries. Tabuchi Y, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1304–8

Modulation of benthiocarb in vitro inhibited neonate rat (Wistar strain) brain Na+K+-ATPase by norepinephrine. Srinivas PN, et al. **Biochem Int** 1989 Jul;19(1):209–14

Effect of noradrenaline on triacylglycerol synthesis in rat brown adipocytes. Baht HS, et al. **Biochem J** 1989 Mar 1;258(2):369–73

Effects of Bordetella pertussis toxin on catecholamine inhibition of insulin release from intact and electrically permeabilized rat islets. Persaud SJ, et al. **Biochem J** 1989 Mar 15;258(3):669–75

Amrinone potentiates catecholamine-induced lipolysis in fat cells. Dorigo P, et al. **Biochem Pharmacol** 1989 Mar 1; 38(5):855–8

Mediation of norepinephrine effects on free cytosolic calcium in rat parotid acinar cells by alpha 1 adrenergic receptors. McMillian MK, et al. **Biochem Pharmacol** 1988 Oct 1; 37(19):3790–3

Stimulation of phospholipase A2 of synaptosomes of guinea-pig brain by noradrenaline and other amines [Retracted by Rowe CE. In: Biochem J 1977 Apr 15;164(1);287–8] Gullis RJ, et al. **Biochem Soc Trans** 1973 Jul;1(4):849

Catecholamine stimulation of ion transport in the toad urinary bladder. Thurman CL, et al. **Biochim Biophys Acta** 1988 Nov 3;945(1):81–91

Vasoactive compound effects on autoregulating versus nonautoregulating intestinal and renal circulations in young swine. Buckley NM, et al. **Biol Neonate** 1988;54(1):49–59

Catecholamine inhibition of luteinizing hormone secretion in isolated pig pituitary cells. Li PH. **Biol Reprod** 1989 May;40(5):914–9

Inflammation-induced vasodepression detected ex vivo in the isolated perfused hindlegs in mice. Bekemeier H, et al. **Biomed Biochim Acta** 1988;47(9):855–60

Vasomotor tone of isolated porcine coronary veins in response to acetylcholine, noradrenaline, and histamine. Bergner M, et al. **Biomed Biochim Acta** 1988;47(8):775–9

Nonstationary fluctuation analysis of the delayed rectifier K channel in cardiac Purkinje fibers. Actions of norepinephrine on single-channel current [published erratum appears in Biophys J 1989 Jun;55(6):1273–5] Bennett PB, et al. **Biophys J** 1989 Apr;55(4):731–8

Effect of noradrenaline chronic administration on brown fat phospholipids. Mory G, et al. **Biosci Rep** 1988 Oct; 8(5):465–9

Glucose dependence of sequential norepinephrine contractions of vascular smooth muscle. Adams GR, et al. **Blood Vessels** 1989;26(2):77–83

Inhibition of norepinephrine-induced contractile responses of canine mesenteric artery by plant total saponins. Guan YY, et al. **Blood Vessels** 1988;25(6):312–5

Interventricular septum reactivity to norepinephrine of SHR and Wistar rats, in vitro, before and after the hypertensive state development. Vulpis V, et al. **Boll Soc Ital Biol Sper** 1989 Feb;65(2):97–102

Noradrenaline attenuates the natriuretic effect of atrial natriuretic factor in man. McMurray JJ, et al. **Br J Clin Pharmacol** 1989 Jan;27(1):7–12

The effect of angiotensin II and noradrenaline alone and in combination on renal sodium excretion in man. Seidelin PH, et al. **Br J Clin Pharmacol** 1989 Jun;27(6):803–9

Thermogenic responses to graded doses of noradrenaline in undernourished Indian male subjects. Kurpad AV, et al. **Br J Nutr** 1989 Mar;61(2):201–8

Sympathetic denervation caused by long-term noradrenaline infusions; prevention by desipramine and superoxide dismutase. Albino Teixeira A, et al. **Br J Pharmacol** 1989 May;97(1):95–102

Pharmacological analysis of postjunctional alpha-adrenoceptors mediating contractions to (-)-noradrenaline in the rabbit isolated lateral saphenous vein can be explained by interacting responses to simultaneous activation of alpha 1- and alpha 2-adrenoceptors. Daly CJ, et al. **Br J Pharmacol** 1988 Oct; 95(2):485–500

An attempt at selective protection from phenoxybenzamine of postjunctional alpha-adrenoceptor subtypes mediating contractions to noradrenaline in the rabbit isolated saphenous vein. Daly CJ, et al. **Br J Pharmacol** 1988 Oct; 95(2):501–11

Noradrenaline (gamma) and ATP responses of innervated and non-innervated rat cerebral arteries. Edwards FR, et al. **Br J Pharmacol** 1989 Apr;96(4):785–8

M-octopamine injected into the paraventricular nucleus induces eating in rats: a comparison with noradrenaline-induced eating. Fletcher PJ, et al. **Br J Pharmacol** 1989 Jun;97(2):483–9

Contribution of beta 1- and beta 2-adrenoceptors of human atrium and ventricle to the effects of noradrenaline and adrenaline as assessed with (-)-atenolol. Lemoine H, et al. **Br J Pharmacol** 1988 Sep;95(1):55–66

Noradrenaline activates a calcium-activated chloride conductance and increases the voltage-dependent calcium current in cultured single cells of rat portal vein. Pacaud P, et al. **Br J Pharmacol** 1989 May;97(1):139–46

Alterations of coronary vascular responses to noradrenaline, acetylcholine and isoprenaline during acute myocardial ischaemia in dogs. Sun JZ, et al. **Br J Pharmacol** 1989 Jun; 97(2):626–30

Beta-adrenoceptor stimulation enhances transmitter output from the rat phrenic nerve. Wessler I, et al. **Br J Pharmacol** 1988 Jul;94(3):669–74

NMDA receptor antagonists block norepinephrine-induced long-lasting potentiation and long-term potentiation in rat dentate gyrus. Burgard EC, et al. **Brain Res** 1989 Mar 20; 482(2):351–5

Repeated calcitonin treatment reduces the stimulation of inositol phospholipid by norepinephrine and serotonin in rat hippocampus and cerebral cortex. Clementi G, et al. **Brain Res** 1989 Jan 23;478(1):138–42

Electrophysiological characterization of adrenoceptors in the rat dorsal hippocampus. I. Receptors mediating the effect of microiontophoretically applied norepinephrine. Curet O, et al. **Brain Res** 1988 Dec 13;475(1):35–46

Use of microdialysis to measure brain noradrenergic receptor function in vivo. Egawa M, et al. **Brain Res** 1988 Aug 23;458(2):303–8

Developmentally different onset of alpha 1- and alpha 2-adrenergic responses in the neonatal rat dorsal motor nucleus of the vagus in vitro. Fukuda A, et al. **Brain Res** 1989 Jul 31;493(2):357–61

Electrophysiological effects of norepinephrine on Purkinje neurons in intraocular cerebellar grafts: alpha- vs beta-specificity. Granholm AC, et al. **Brain Res** 1988 Sep 6;459(2):256–64

Limited responsiveness of LHRH neurons to norepinephrine may account for failure of locus coeruleus or medullary A1 electrical stimulation to increase plasma LH in estrogen-treated ovariectomized rats. Hartman RD, et al. **Brain Res** 1989 Jan 2;476(1):35–44

Oestrogen and noradrenaline modulate endogenous GABA release from slices of the rat medial preoptic area. Herbison AE, et al. **Brain Res** 1989 May 1;486(1):195–200

Participation of cyclic adenosine monophosphate and beta-adrenergic receptors in the facilitatory effect of noradrenaline on the response of cultured cerebellar neurons to glutamate. Mori-Okamoto J, et al. **Brain Res** 1989 Jun 19;490(1):64–72

Lateral difference in responsiveness of norepinephrine-sensitive cyclic AMP-generating systems of rat cerebral cortex with iron-induced epileptic activity. Moriwaki A, et al. **Brain Res** 1988 Sep 27;461(1):190–3

Electrophysiological effects of locally applied noradrenergic agents at cerebellar Purkinje neurons: receptor specificity. Parfitt KD, et al. **Brain Res** 1988 Oct 18;462(2):242–51

Differential effect of norepinephrine upon granule cells and interneurons in the dentate gyrus. Rose GM, et al. **Brain Res** 1989 May 29;488(1-2):353–6

Effect of norepinephrine, serotonin and tryptophan on the

firing rate of sympathetic nerves. Sakaguchi T, et al. **Brain Res** 1989 Jul 17;492(1-2):271-80

Effects of norepinephrine infused in the paraventricular hypothalamus on energy expenditure in the rat. Siviy SM, et al. **Brain Res** 1989 May 15;487(1):79-88

Different GTP-binding proteins mediate regulation of calcium channels by acetylcholine and noradrenaline in rat sympathetic neurons. Song SY, et al. **Brain Res** 1989 Aug 14;494(2):383-6

Down-regulation of norepinephrine sensitivity after induction of long-term neuronal plasticity (kindling) in the rat dentate gyrus. Stanton PK, et al. **Brain Res** 1989 Jan 9;476(2):367-72

Characterization of the arachidonic acid metabolites mediating bradykinin and noradrenaline hyperalgesia. Taiwo YO, et al. **Brain Res** 1988 Aug 23;458(2):402-6

Noradrenaline excites neurons in the guinea pig cerebellar vermis in vitro. Dennett ER, et al. **Brain Res Bull** 1988 Aug;21(2):245-9

Neuropeptide Y, epinephrine and norepinephrine in the paraventricular nucleus: stimulation of feeding and the release of corticosterone, vasopressin and glucose. Leibowitz SF, et al. **Brain Res Bull** 1988 Dec;21(6):905-12

New evidence for a gating action of norepinephrine in central neuronal circuits of mammalian brain. Waterhouse BD, et al. **Brain Res Bull** 1988 Sep;21(3):425-32

Modulation of proenkephalin A gene expression by cyclic AMP. Folkesson R, et al. **Brain Res Mol Brain Res** 1989 May;5(3):211-7

Progesterone depression of norepinephrine-stimulated cAMP accumulation in hypothalamic slices. Petitti N, et al. **Brain Res Mol Brain Res** 1989 Mar;5(2):109-19

Reactivity of macro- and microvessels of DOCA-salt hypertensive rats: role of the endothelial cell. Cordellini S, et al. **Braz J Med Biol Res** 1988;21(4):845-9

Contractile reactivity of the perfused mesenteric vascular bed from sinoaortic denervated rats to norepinephrine, methoxamine and verapamil. Vasquez EC, et al. **Braz J Med Biol Res** 1988;21(3):629-32

Synthetic nitrovasodilators are effective, in vitro, in relaxing penile tissue from impotent men: the findings and their implications. Heaton JP. **Can J Physiol Pharmacol** 1989 Jan;67(1):78-81

Adenosine modulation of vasoconstrictor responses to stimulation of sympathetic nerves and norepinephrine infusion in the superior mesenteric artery of the cat. Lautt WW, et al. **Can J Physiol Pharmacol** 1988 Jul;66(7):937-41

Organ culture of rat heart: maintained high sensitivity of fetal atria before innervation to norepinephrine. Tanaka H, et al. **Can J Physiol Pharmacol** 1988 Jul;66(7):901-6

The protective effect of vagus nerve stimulation on catecholamine-halothane-induced ventricular fibrillation in dogs. Waxman MB, et al. **Can J Physiol Pharmacol** 1989 Jul;67(7):801-9

Action of lycorine on neuroadrenergic response of a nerve-skin preparation. Quevedo L, et al. **Cell Mol Biol** 1988;34(3):295-302

Chronotropic responsiveness of developing sinoatrial and ventricular rat myocytes to autonomic agonists following adrenergic and cholinergic innervation in vitro. Atkins DL, et al. **Circ Res** 1989 Jun;64(6):1051-62

Aminergic histofluorescence and contractile responses to transmural electrical field stimulation and norepinephrine of human middle cerebral arteries obtained promptly after death. Duckworth JW, et al. **Circ Res** 1989 Aug; 65(2):316-24

Norepinephrine-induced phosphorylation of a 25 kd phosphoprotein in rat aorta is altered in intraperitoneal sepsis. Carcillo JA, et al. **Circ Shock** 1989 Jul;28(3):257-65

Response of femoral arteries to norepinephrine following endotoxicosis. Kato T, et al. **Circ Shock** 1988 Dec; 26(4):383-90

Monocyte-derived interleukin 1: effects on norepinephrine-stimulated aortic contraction and phosphoinositide turnover. McKenna TM, et al. **Circ Shock** 1989 Jun;28(2):131-47

Norepinephrine responsiveness in patients with borderline hypertension under three different sodium balances. Ito Y, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:363-70

Pathogenetic and therapeutic relevance of cardiovascular pressor reactivity to norepinephrine in human hypertension. Weidmann P. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:257-73 (66 ref.)

Blood pressure response to norepinephrine and angiotensin II in the offspring of parathyroidectomized mother rats. Nakanishi H, et al. **Clin Exp Pharmacol Physiol** 1989 May; 16(5):383-6

Effect of oral administration of nifedipine on neuropeptide Y- and noradrenaline-induced vasoconstriction in the human forearm. Pernow J, et al. **Clin Physiol** 1989 Feb; 9(1):67-75

Evidence for a decreased noradrenaline sensitivity in mesenteric resistance vessels from rats with chemical renal medullectomy. Bund SJ, et al. **Clin Sci** 1989 Aug; 77(2):167-70

Effect of catecholamines and insulin on plasma volume and intravascular mass of albumin in man. Hilsted J, et al. **Clin Sci** 1989 Aug;77(2):149-55

In vitro study of adrenergic stimulation of 32P incorporation into phospholipids of brown adipose tissue of control and cold-acclimated rats. Senault C, et al. **Comp Biochem Physiol [A]** 1988;91(1):141-6

Enhancement of the response of hen granulosa cells to LH with norepinephrine in vitro. Chotesangasa R, et al. **Comp Biochem Physiol [C]** 1988;90(1):225-9

The roles of alpha- and beta-adrenoceptors in the chronotropic responses to norepinephrine in carp heart (Cyprinus carpio). Temma K, et al. **Comp Biochem Physiol [C]** 1989;92(1):149-53

A computer model to study norepinephrine-induced oscillations of contraction in tail arteries of spontaneously hypertensive stroke-prone rats. Avinash G, et al. **Comput Biomed Res** 1988 Aug;21(4):324-33

Changes in sensitivity of rat heart to norepinephrine and isoproterenol during pre- and postnatal development and its relation to sympathetic innervation. Shigenobu K, et al. **Dev Pharmacol Ther** 1988;11(4):226-36

Contribution of alpha- and beta-receptors to ketogenic and lipolytic effects of norepinephrine in humans. Keller U, et al. **Diabetes** 1989 Apr;38(4):454-9

Abnormal action of catecholamines on lipolysis in adipocytes of type I diabetic patients treated with insulin. Wahrenberg H, et al. **Diabetes** 1989 Apr;38(4):524-33

Secretion of corticotropin-releasing factor from cultured rat hypothalamic cells: effects of catecholamines. Widmaier EP, et al. **Endocrinology** 1989 Feb;124(2):583-90

Epileptiform activity induced by lowering extracellular [Mg2+] in combined hippocampal-entorhinal cortex slices: modulation by receptors for norepinephrine and N-methyl-D-aspartate. Stanton PK, et al. **Epilepsy Res** 1987 Jan;1(1):53-62

Electroconvulsive shock and reserpine increase alpha 1-adrenoceptor binding sites but not norepinephrine-stimulated phosphoinositide hydrolysis in rat brain. Blendy JA, et al. **Eur J Pharmacol** 1988 Nov 1;156(2):267-70

Diminution by benzodiazepines of the chronotropic responses to noradrenaline in rat isolated atria. Elgoyhen B, et al. **Eur J Pharmacol** 1989 May 30;164(3):467-78

Different calcium sources mobilized by noradrenaline (NA) and adenosine 5'-triphosphate (ATP): a basis for co-transmission in the rat vas deferens. Feddersen M, et al. **Eur J Pharmacol** 1988 Aug 24;153(2-3):313-4

Different effects of norepinephrine and KCl on the cytosolic Ca2+-tension relationship in vascular smooth muscle of rat aorta. Karaki H, et al. **Eur J Pharmacol** 1988 Jul 7; 151(2):325-8

Different effects of R 56865 and calcium entry blockers on K+- and noradrenaline-induced contractions and 45Ca uptake in rat aorta. Koch P, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):183-90

Pharmacological characterization of neuropeptide Y and noradrenaline mechanisms in sympathetic control of pig spleen. Lundberg JM, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):103-13

The role of alpha- and beta-adrenoceptors in the response to noradrenaline of lymphatic vessels isolated from the bovine mesentery. Mahe L, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):31-9

Enhancement of endogenous GABA release from rat synaptosomal preparations is mediated by alpha 2-adrenoceptors pharmacologically different from alpha 2-autoreceptors. Maura G, et al. **Eur J Pharmacol** 1988 Nov 15;157(1):23-9

Effect of noradrenaline on current- and voltage-clamped muscle cells of the guinea-pig vas deferens in normal Krebs solution. Mimata T, et al. **Eur J Pharmacol** 1989 Apr 12; 163(1):181-5

Homologous vs. heterologous desensitization of the adenylate cyclase system in heart cells. Reithmann C, et al. **Eur J Pharmacol** 1988 Sep 1;154(1):99-104

Mechanism of noradrenaline-induced heterologous desensitization of adenylate cyclase stimulation in rat heart muscle cells: increase in the level of inhibitory G-protein alpha-subunits. Reithmann C, et al. **Eur J Pharmacol** 1989 Aug 15;172(3):211-21

Asymmetry of responses to norepinephrine in perfused resistance arteries. Tesfamariam B, et al. **Eur J Pharmacol** 1988 Jul 26;152(1-2):167-70

Comparison of effects of monoamines on transmission in spinal pathways from group I and II muscle afferents in the cat. Bras H, et al. **Exp Brain Res** 1989;76(1):27-37

Membrane properties, response to amines and to tetanic stimulation of hippocampal neurons in the genetically epileptic mutant mouse tottering. Kostopoulos G, et al. **Exp Brain Res** 1988;72(1):45-50

Brown adipocytes differentiated in vitro can express the gene for the uncoupling protein thermogenin: effects of hypothyroidism and norepinephrine. Rehnmark S, et al. **Exp Cell Res** 1989 May;182(1):75-83

Vascular responses of ophthalmic arteries to exogenous and endogenous norepinephrine. Ohkubo H, et al. **Exp Eye Res** 1989 Apr;48(4):539-47

Physiological responses to catecholamine infusions in type A and type B men. Muranaka M, et al. **Health Psychol** 1988;7 Suppl:145-63

Norepinephrine-induced enlargement of nucleus in cultured myocardial cells. Igawa T, et al. **Heart Vessels** 1988; 4(1):1-5

Adrenergic regulation of human fat-cell lipolysis. Kather H. **Horm Metab Res Suppl** 1988;19:40-3

Opposite effects of the catecholamines dopamine and norepinephrine on murine polyclonal B-cell activation. Kouassi E, et al. **Immunopharmacology** 1988 Nov-Dec; 16(3):125-37

Responses of medullary vasoactive neurones in cat to iontophoretically applied acetylcholine and noradrenaline. Raghubir R, et al. **Indian J Exp Biol** 1988 Dec;26(12):950-3

Vascular adrenoceptor sensitivity to graded doses of norepinephrine infusions in undernourished subjects. Kulkarni RN, et al. **Indian J Med Res** 1988 Nov;88:427-33

Thermal changes produced by norepinephrine application in the preoptic area of monkeys. Mallick HN, et al. **Indian J Physiol Pharmacol** 1988 Oct-Dec;32(4):265-70

Stimulation of inositol phospholipid breakdown in pig brain miniprisms by carbachol and monoamines: effect of K+. Tiger G, et al. **Int J Biochem** 1989;21(2):157-63

Effect of phenylephrine, ergonovine, oxytocin and norepinephrine as an extender ingredient on viability of bovine spermatozoa. Gallagher GR, et al. **J Anim Sci** 1989 Jun;67(6):1573-6

Norepinephrine induces lung vascular prostacyclin synthesis via alpha 1-adrenergic receptors. Wang HL, et al. **J Appl Physiol** 1989 Jul;67(1):330-8

Interactive effect of acetylcholine and norepinephrine on the sinoatrial node of the trained rat. Bolter CP, et al. **J Auton Nerv Syst** 1988 Nov;25(1):83-5

Noradrenaline-induced constriction of large and small coronary arteries in the anaesthetized dog. Woodman OL. **J Auton Pharmacol** 1989 Feb;9(1):53-61

Insulin antagonism of catecholamine stimulation of fatty acid transport in the adipocyte. Studies on its mechanism of action. Abumrad NA, et al. **J Biol Chem** 1988 Oct 15; 263(29):14678-83

Resonance Raman studies on the blue-green-colored bovine adrenal tyrosine 3-monooxygenase (tyrosine hydroxylase). Evidence that the feedback inhibitors adrenaline and noradrenaline are coordinated to iron. Andersson KK, et al. **J Biol Chem** 1988 Dec 15;263(35):18621-6

Activation of rat liver microsomal glutathione S-transferase by reduced oxygen species. Aniya Y, et al. **J Biol Chem** 1989 Feb 5;264(4):1998-2002

Triiodothyronine amplifies norepinephrine stimulation of uncoupling protein gene transcription by a mechanism not requiring protein synthesis. Bianco AC, et al. **J Biol Chem** 1988 Dec 5;263(34):18168-75

Cardiac electrophysiological effects of isoprenaline, phenylephrine, and noradrenaline on normal and mildly "ischaemic" sheep Purkinje fibers. Boachie-Ansah G, et al. **J Cardiovasc Pharmacol** 1989 Feb;13(2):291-8

Aortic pulsatile pressure and diameter response to intravenous perfusions of angiotensin, norepinephrine, and epinephrine in conscious dogs. Cabrera E, et al. **J Cardiovasc Pharmacol** 1988 Dec;12(6):643-9

Agonist-induced activation of rat mesenteric resistance vessels: comparison between noradrenaline and vasopressin. Cauvin C, et al. **J Cardiovasc Pharmacol** 1988; 12 Suppl 5:S128-33

Intracellular Ca2+ release in vascular muscle cells by caffeine, ryanodine, norepinephrine, and neuropeptide Y. Erne P, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 5:S85-91

Age dependence of the pressor sensitivity to noradrenaline and angiotensin II during calcium channel blockade in hypertensive patients. Rosendorff C, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S69-71

Effects of norepinephrine and angiotensin II on plasma atrial natriuretic peptide concentration in humans. Shimamoto K, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S59-62

Different effects of endothelin-1 on cAMP- and cGMP-mediated vascular relaxation in human arteries and veins: comparison with norepinephrine. Yang ZH, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S129-31; discussion S142

Serotonin potentiates noradrenaline-induced vasoconstriction through 5-HT1-type receptors in guinea pig basilar artery. Chang JY, et al. **J Cereb Blood Flow Metab** 1989 Oct;9(5):713-6

Enhanced inositol trisphosphate response to alpha 1-adrenergic stimulation in cardiac myocytes exposed to hypoxia. Heathers GP, et al. **J Clin Invest** 1989 Apr; 83(4):1409-13

In vivo brown fat response to hypothermia and norepinephrine in the ovine fetus. Hodgkin DD, et al. **J Dev Physiol** 1988 Oct;10(5):383-91

Alpha-adrenoceptor-mediated effects of norepinephrine on the guinea pig sinus node. Brown RA, et al. **J Electrocardiol** 1988 Aug;21(3):213-7

Influence of norepinephrine administration upon pituitary hormone secretion in normal men. Mileikowsky GN, et al. **J Endocrinol Invest** 1988 Oct;11(9):641-5

Sodium and responses to infused noradrenaline and angiotensin II in subjects predisposed to hypertension. Pusterla C, et al. **J Hum Hypertens** 1988 Mar;1(4):267-76

Pressure natriuresis and control of arterial pressure during chronic norepinephrine infusion. Hall JE, et al. **J Hypertens** 1988 Sep;6(9):723-31

Noradrenaline and cardiac hypertrophy in the rat: changes in morphology, blood pressure and ventricular performance. Newling RP, et al. **J Hypertens** 1989 Jul; 7(7):561-7

Central action of sodium chloride on whole body pressor responsiveness in the DOCA-treated rat. Soltis EE, et al. **J Hypertens** 1989 May;7(5):383-6

The effect of ouabain on pressor responses to infused noradrenaline in patients with essential hypertension.

Nishimura M, et al. **J Hypertens Suppl** 1988 Dec; 6(4):S354–6

Effect of epinephrine on rapid ADP-induced aggregation, protein phosphorylation, and cytoplasmic calcium dynamics of platelets: a quenched-flow study. Carty DJ, et al. **J Lab Clin Med** 1988 Nov;112(5):603–11

Action potentials of cardiac muscle in healing infarcts: response to norepinephrine and caffeine. Boyden PA, et al. **J Mol Cell Cardiol** 1988 Jun;20(6):525–37

Differential acute and chronic response of protein kinase C in cultured neonatal rat heart myocytes to alpha 1-adrenergic and phorbol ester stimulation. Henrich CJ, et al. **J Mol Cell Cardiol** 1988 Dec;20(12):1081–5

Diurnal variation in norepinephrine-stimulated release of pineal serotonin in vitro. Benson B, et al. **J Neural Transm** 1989;78(1):89–101

Norepinephrine-stimulated inositol phospholipid breakdown in the rat cerebral cortex following serotoninergic lesion. Fowler CJ, et al. **J Neural Transm** 1988;73(3):205–15

Effects of oxygen depletion on norepinephrine- and carbachol-stimulated phosphoinositide turnover in rat brain slices. Ninomiya H, et al. **J Neurochem** 1989 Jul; 53(1):183–90

Galanin inhibits noradrenaline-induced accumulation of cyclic AMP in the rat cerebral cortex. Nishibori M, et al. **J Neurochem** 1988 Dec;51(6):1953–5

Inositol phospholipid hydrolysis and potentiation of cyclic AMP formation by noradrenaline in rat cerebral cortex slices are not mediated by the same alpha-adrenoceptor subtypes. Robinson JP, et al. **J Neurochem** 1989 Mar; 52(3):690–8

Norepinephrine selectively reduces slow Ca2+- and Na+-mediated K+ currents in cat neocortical neurons. Foehring RC, et al. **J Neurophysiol** 1989 Feb;61(2):245–56

Ocular effects of adrenergic stereoisomers in the rabbit. Gherezghiher T, et al. **J Ocul Pharmacol** 1985 Spring; 1(1):19–28

Effects of neuropeptide Y on the response of isolated blood vessels to norepinephrine and sympathetic field stimulation. Hieble JP, et al. **J Pharmacol Exp Ther** 1989 Aug; 250(2):523–8

Defective modulation of noradrenergic neurotransmission by endogenous prostaglandins in aging spontaneously hypertensive rats. Jackson EK. **J Pharmacol Exp Ther** 1989 Jul;250(1):9–21

Differential effects of (-)-norepinephrine and of (+/-)-isoproterenol on cardiac contraction, an uptake phenomenon. Korth M, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1164–71

Leukotriene D4 potentiates the contractile effects of epinephrine and norepinephrine on rat aortic rings. Lawson DL, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):953–7

Alpha adrenoceptor stimulation reduces outward currents in rat ventricular myocytes. Ravens U, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):364–70

Altered responsiveness to sympathetic nerve stimulation and agonists of isolated left atria of diabetic rats: no evidence for involvement of hypothyroidism. Sato N, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):367–71

Both alpha and beta adrenoceptor-mediated components contribute to final inotropic response to norepinephrine in rat heart. Skomedal T, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1204–10

Noradrenaline modulation of calcium channels in single smooth muscle cells from rabbit ear artery. Benham CD, et al. **J Physiol (Lond)** 1988 Oct;404:767–84

Membrane ionic mechanisms activated by noradrenaline in cells isolated from the rabbit portal vein. Byrne NG, et al. **J Physiol (Lond)** 1988 Oct;404:557–73

Oscillations of free cytosolic calcium evoked by cholinergic and catecholaminergic agonists in rat parotid acinar cells. Gray PT. **J Physiol (Lond)** 1988 Dec;406:35–53

An alpha-adrenoceptor-mediated chloride conductance in mesenteric veins of the guinea-pig. Van Helden DF. **J Physiol (Lond)** 1988 Jul;401:489–501

Prostacyclin mediates splanchnic vascular response to norepinephrine in portal hypertension. Sitzmann JV, et al. **J Surg Res** 1989 Sep;47(3):208–11

Noradrenaline depolarization and hyperpolarization mediated by alpha-adrenergic receptors in the soma of dorsal root ganglion neurons. Li ZW, et al. **J Tongji Med Univ** 1988; 8(3):144–9

Ionic basis of noradrenaline depolarization and hyperpolarization in toad dorsal root ganglia neurones. Wang AK, et al. **J Tongji Med Univ** 1988;8(4):193–7

Evidence in volume-dependent hypertension for an augmenting factor for norepinephrine overflow from sympathetic nerve endings. Shima H, et al. **Jpn Circ J** 1988 Nov;52(11):1277–85

Effects of atenolol and some other beta-adrenoceptor blocking agents on norepinephrine-induced responses in isolated and perfused rat hearts. Nakasone J, et al. **Jpn J Pharmacol** 1988 Aug;47(4):387–95

Effect of noradrenaline on plasma hormones and metabolites in cold-acclimated rats. Kuroshima A, et al. **Jpn J Physiol** 1988;38(2):199–207

Noradrenaline-induced changes in rat brown adipose tissue glucagon. Kuroshima A, et al. **Jpn J Physiol** 1989; 39(2):311–5

Differentiation of inotropic action from chronotropic action of sympathetic agents in cultured cells of chick embryonic ventricles. Toyota H, et al. **Jpn J Physiol** 1989;39(1):101–14

Characteristics of contractile response of isolated portal veins from chronic portal hypertensive rats under altered levels of external K+, Ca2+, and norepinephrine concentrations: a comparison with normal Wistar rats. Yoshimura T, et al. **Jpn J Physiol** 1988;38(4):459–78

Effect of prostaglandin E2 on vascular responses of the rabbit kidney to nerve stimulation and noradrenaline, in vitro and in situ. Frame MH, et al. **Life Sci** 1974 Jul 15;15(2):239–44

Simultaneous pressure and 19F NMR pH measurements of smooth muscle cells of intact hog carotid arteries at rest and during contractions with norepinephrine. Grieder TA, et al. **Life Sci** 1988;43(12):999–1003

Effects of streptozotocin-induced hyperglycemia on agonist-stimulated phosphatidylinositol turnover in rat aorta. Legan E. **Life Sci** 1989;45(5):371–8

Cyclic AMP and cyclic GMP in hyperresponsiveness. Miller HT, et al. **Life Sci** 1988;43(24):1991–7

Cultured embryonic mouse heart cells as models for T. cruzi–muscle cell interaction: characterization of spontaneous firing and chronotropic responses to norepinephrine. de Nazareth M, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:497

Prediction of steady-state oxygen consumption during norepinephrine infusions in humans. Sheela ML, et al. **Metabolism** 1988 Oct;37(10):907–9

Capillary density and fine structure in rabbit papillary muscles after a high dose of norepinephrine. Brown MD, et al. **Microvasc Res** 1988 Jul;36(1):1–12

Patch clamp analysis of chemically activated and modulated ionic channels in isolated mammalian cardiomyocytes. Vogel SM. **Mol Cell Biochem** 1988 Mar-Apr;80(1-2):37–47

Full expression of uncoupling protein gene requires the concurrence of norepinephrine and triiodothyronine. Silva JE. **Mol Endocrinol** 1988 Aug;2(8):706–13

Noradrenaline contracts arteries by activating voltage-dependent calcium channels. Nelson MT, et al. **Nature** 1988 Nov 24;336(6197):382–5

Noradrenaline and serotonin selectively modulate thalamic burst firing by enhancing a hyperpolarization-activated cation current. Pape HC, et al. **Nature** 1989 Aug 31; 340(6236):715–8

Effects of the facilitatory compounds catechol, guanidine, noradrenaline and phencyclidine on presynaptic currents of mouse motor nerve terminals. Anderson AJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Aug; 338(2):133–7

Regulation of adrenergic receptor number following chronic noradrenaline infusion in the rabbit. Deighton NM, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):517–22

A comparison of the actions of noradrenaline and UK-14,304 in the longitudinal smooth muscle of the rat isolated portal vein--no evidence for a population of post-junctional alpha 2-adrenoceptors. Downing OA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Sep; 338(3):239–45

Effects of calcium entry blocking agents on 5-hydroxytryptamine- and noradrenaline-induced contractions of rat isolated jugular vein and aorta. Gouw MA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May;339(5):533–9

Influence of cooling on the responsiveness of rat isolated anococcygeus muscle to noradrenaline. Ishii T, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jun; 339(6):660–8

Noradrenaline-induced desensitization in cultured heart cells as a model for the defects of the adenylate cyclase system in severe heart failure. Reithmann C, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):138–44

Comparison of the cardiodynamic and metabolic effects of dobutamine with those of norepinephrine and dopamine in the dog isolated heart. Simaan JA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Aug; 338(2):174–9

Increased plasma levels of atrial natriuretic peptide in patients with chronic renal failure: effect of noradrenaline infusion. Jespersen B, et al. **Nephrol Dial Transplant** 1988;3(6):762–7

Cerebellar noradrenergic systems in aging: studies in situ and in in oculo grafts. Bickford-Wimer PC, et al. **Neurobiol Aging** 1988 Sep-Dec;9(5-6):591–9

Regulation of glutamine synthetase synthesis and activity by glucocorticoids and adrenoceptor activation in astroglial cells. Hansson E. **Neurochem Res** 1989 Jun;14(6):585–7

Effects of insulin on rat brain noradrenaline. Kwok RP, et al. **Neurochem Res** 1988 Sep;13(9):887–92

Change in the basal secretion of gonadotropins and LH-RH content of the hypothalamus of male rats on local administration of catecholamines into hypothalamic nuclei. Babichev VN, et al. **Neurosci Behav Physiol** 1988 Nov-Dec;18(6):522–5

Two forms of noradenergic modulation of neocortical neurons in early ontogeny of cats. Raevskii VV. **Neurosci Behav Physiol** 1988 May-Jun;18(3):265–7

Cortisol suppresses noradrenaline-induced excitatory responses of neurons in the paraventricular nucleus; an in vitro study. Kasai M, et al. **Neurosci Lett** 1988 Aug 15; 91(1):65–70

Re-evaluation of the effects of norepinephrine on the single-unit activity of paraventricular neurosecretory neurons. Kim YI, et al. **Neurosci Lett** 1989 Feb 13; 97(1-2):103–10

Cold exposure or norepinephrine injections altered melatonin levels in the quail retina. Lee PP, et al. **Neurosci Lett** 1989 May 22;100(1-3):130–4

Altered neuronal sensitivity of lateral geniculate neurones to noradrenaline and 5-HT following exposure to continuous lighting. Mason R. **Neurosci Lett** 1988 Sep 23; 92(1):102–7

Norepinephrine inhibits calcium action potential through alpha 2-adrenoceptors in rabbit vesical parasympathetic neurons. Akasu T, et al. **Neurosci Res** 1988 Dec;6(2):186–90

The role of alpha 1-adrenoceptor-mediated collateral excitation in the regulation of the electrical activity of locus coeruleus neurons. Nakamura S, et al. **Neuroscience** 1988 Dec;27(3):921–9

Sympathetic facilitation of sustained discharges of polymodal nociceptors. Hu SJ, et al. **Pain** 1989 Jul;38(1):85–90

Neuropeptide tyrosine (NPY)-induced potentiation of the pressor activity of catecholamines in conscious rats. López LF, et al. **Peptides** 1989 May-Jun;10(3):551–8

Opiate and alpha receptor antagonists block the pressor responses of conscious rats given intravenous dynorphin. Thornhill JA, et al. **Peptides** 1989 Jan-Feb;10(1):171–7

Endogenous adenosine improves work rate to oxygen consumption ratio in catecholamine stimulated isovolumic rat heart. Headrick J, et al. **Pflugers Arch** 1989 Feb; 413(4):354–8

Inhibitory action of norepinephrine on sodium transport in vascular smooth muscle cells in culture. Tuck M, et al. **Pflugers Arch** 1989 Mar;413(5):493–7

Effects of environmental temperature on the development of a noradrenergic thermoregulatory mechanism in the rat. Young AA, et al. **Pflugers Arch** 1988 Jul;412(1-2):141–6

Effect of acute ethanol administration on noradrenaline metabolism in brain regions of stressed and nonstressed rats. Shirao I, et al. **Pharmacol Biochem Behav** 1988 Jul; 30(3):769–73

Noradrenergic receptor interactions in feeding elicited by stimulation of the para-ventricular hypothalamus. Towell A, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):133–9

Effect of ouabain on norepinephrine-induced contractions of isolated rabbit aorta. Oktay S, et al. **Pharmacology** 1988; 37(2):69–74

The startle reaction to an acoustic stimulus in the rat: the effect of noradrenaline administered by microinjection into the pontomedullary reticular formation. Pavlásek J. **Physiol Bohemoslov** 1989;38(1):81–91

A comparison of norepinephrine stimulated inositol phosphate accumulation in cerebral cortex of the Acomys cahirinus, the laboratory mice and the rat. Nalepa I, et al. **Pol J Pharmacol Pharm** 1988 Jul-Aug;40(4):435–8

Norepinephrine induces pathway-specific long-lasting potentiation and depression in the hippocampal dentate gyrus. Dahl D, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(12):4776–80

Properties of membrane ion conductances evoked by hormonal stimulation of guinea-pig and rabbit isolated hepatocytes. Capiod T, et al. **Proc R Soc Lond [Biol]** 1989 Mar 22;236(1283):187–201

Increased uptake of methylated low-density lipoprotein induced by noradrenaline in carotid arteries of anaesthetized rabbits. Shafi S, et al. **Proc R Soc Lond [Biol]** 1989 Jan 23;235(1281):289–98

Functional sympatholysis in the microcirculation of the cat sartorius muscle. Dodd LR, et al. **Proc West Pharmacol Soc** 1988;31:121–3

Potentiation of norepinephrine-induced vasoconstrictions by neuropeptide Y in isolated canine carotid artery. Gintautas J, et al. **Proc West Pharmacol Soc** 1989;32:327–8

Total body capacitance (TBC) responses to vasopressin differ from those to angiotensin II and norepinephrine. McNeill JR, et al. **Proc West Pharmacol Soc** 1989;32:297

A novel anti-lipolytic action of norepinephrine in uteri isolated from spayed rats appears subserved by the activation of alpha 1-adrenoreceptors diminishing the generation and release of lipolytic prostaglandins. Gonzalez ET, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Nov;34(2):101–8

Influence of the thromboxane-mimetic U-46619 and the prostacyclin metabolite 6-keto prostaglandin E1 on vasoconstriction induced by noradrenaline and 5-HT in rat mesenteric vasculature. Stanton BJ, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Jul; 33(1):7–12

Neuropeptide Y and control of vascular resistance in skeletal muscle. Revington M, et al. **Regul Pept** 1988 Dec; 23(3):331–42

Effect of short term intravenous infusion of noradrenaline on energy etabolism in shorn and unshorn pregnant sheep. Symonds ME, et al. **Res Vet Sci** 1989 Jan;46(1):58–61

Pharmacological induction of use-dependent receptive field modifications in the visual cortex. Greuel JM, et al. **Science** 1988 Oct 7;242(4875):74–7

Effects of glucocorticoids and norepinephrine on the excitability in the hippocampus. Joëls M, et al. **Science** 1989 Sep 29;245(4925):1502–5

Noradrenergic denervation prevents sensitization of rat forebrain neurons to serotonin by tricyclic antidepressant treatment. Gravel P, et al. **Synapse** 1987;1(3):233–9

Inhibitory effect of norepinephrine on the single-unit activity of caudally projecting paraventricular neurons. Kim YI, et al. **Synapse** 1989;3(3):213–24

Norepinephrine stimulation of adenylate cyclase potentiates

protein kinase C action: electrophysiological studies in the dentate gyrus. Stratton KR, et al. **Synapse** 1988;2(6):614–8

Epinephrine and norepinephrine modulate neuronal responses to excitatory amino acids and agonists in frog spinal cord. Wohlberg CJ, et al. **Synapse** 1987;1(2):202–7

Norepinephrine and DDAVP induced rise in tissue plasminogen activator [letter] Grant PJ, et al. **Thromb Haemost** 1988 Oct 31;60(2):342

Toluene exposure during maturation of intraocular brain tissue transplants: alterations of host and graft cerebellar Purkinje neuron function and sensitivity to norepinephrine. Granholm AC, et al. **Toxicol Appl Pharmacol** 1988 Nov; 96(2):296–304

Stimulation of calcium uptake by norepinephrine or high external potassium in human calyces and renal pelvis. Hertle L, et al. **Urol Res** 1989;17(1):63–7

[Potentiation of norepinephrine on rat acupuncture analgesia antagonized by an arcuate nucleus lesion or naloxone-blocked on opiate receptors in periaqueductal gray] Pan JC, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Mar;9(2):118–22 (Eng. Abstr.) **(Chi)**

[Actions of noradrenaline on alpha-adrenergic receptors of toad dorsal root ganglion neurones] Li ZW, et al. **Sheng Li Hsueh Pao** 1988 Jun;40(3):240–9 (Eng. Abstr.) **(Chi)**

[Ionic mechanism of noradrenaline-induced membrane potential changes of neurones in toad dorsal root ganglion] Wang AJ, et al. **Sheng Li Hsueh Pao** 1989 Apr;41(2):145–52 (Eng. Abstr.) **(Chi)**

[Effects of noradrenaline,glycine, gamma-aminobutyric acid and L-glutamic acid on spinal field potentials in the rat] Yang B, et al. **Sheng Li Hsueh Pao** 1989 Apr;41(2):184–90 (Eng. Abstr.) **(Chi)**

[Effect of noradrenaline and endogenous opioid peptide systems on the anxiogenic action of inverse benzodiazepine receptor agonist DMCM] Yang XM, et al. **Sheng Li Hsueh Pao** 1988 Oct;40(5):464–72 (Eng. Abstr.) **(Chi)**

[The effect of adrenaline and noradrenaline on the oxygen supply of the myocardium during cardiopulmonary resuscitation] Lindner KH, et al. **Anaesthesist** 1989 May; 38(5):245–50 (Eng. Abstr.) **(Ger)**

[Oxygen consumption and RQ-values in rats anesthesized with urethane and pentobarbital during continuous infusion of noradrenaline with and without glucose load] Ankermann H. **Biomed Biochim Acta** 1988;47(7):647–53 (Eng. Abstr.) **(Ger)**

[Noradrenaline and interleukin-1 stimulate CRF secretion from human placental cells in culture] Coukos G, et al. **Medicina (Firenze)** 1988 Oct–Dec;8(4):441–2 (Eng. Abstr.) **(Ita)**

[Regularities of the alpha-agonists inhibitory effect on the magnitude of maximum adrenergic response of the rat vas deferens] Berdysheva LV, et al. **Fiziol Zh SSSR** 1989 Jan; 75(1):19–27 (Eng. Abstr.) **(Rus)**

[The effect of triiodothyronine and catecholamines on the stability of trace effects of cold adaptation in rats] Sobolev VI, et al. **Fiziol Zh SSSR** 1989 Jan;75(1):110–6 (Eng. Abstr.) **(Rus)**

[The nature of the reactions of organ arterial and venous vessels in the combined action of catecholamines] Tkachenko BI, et al. **Fiziol Zh SSSR** 1988 Sep; 74(9):1278–86 (Eng. Abstr.) **(Rus)**

[Kinetics of tissue sodium metabolism and the vascular reactivity to vasopressor agents in healthy persons with different degree of risk of developing arterial hypertension] Merzhievskaia VM, et al. **Kardiologiia** 1988 Dec; 28(12):30–3 (Eng. Abstr.) **(Rus)**

[The effect of noradrenaline, adrenaline and acetylcholine on contractility of the uterus of the guinea pig after testosterone administration] Sochorová R, et al. **Bratisl Lek Listy** 1989 Jun;90(6):436–40 (Eng. Abstr.) **(Slo)**

[Action of calcium antagonists on ureteral dynamics] Salman S, et al. **Actas Urol Esp** 1989 Mar–Apr;13(2):150–2 (Eng. Abstr.) **(Spa)**

[Effect of NaF and calcium in rats mastocytes in response to norepinephrine] Botana LM, et al. **Rev Esp Fisiol** 1988 Mar;44(1):105–6 **(Spa)**

[Contraction of various zones of the rat testicular capsule in vitro induced by noradrenaline] Martínez L, et al. **Rev Esp Fisiol** 1989 Mar;45(1):79–88 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Neurotransmitters and alcoholism: methodological issues. Linnoila M. **Adv Alcohol Subst Abuse** 1988;7(3–4):17–24 (33 ref.)

CRH effects on central noradrenergic neurons: relationship to stress. Valentino RJ. **Adv Exp Med Biol** 1988;245:47–64 (64 ref.)

Is the noradrenergic neuron system in the brain stem related to motion sickness in rats? Takeda N, et al. **Adv Otorhinolaryngol** 1988;42:234–7

Effects of circulating norepinephrine on platelet, leukocyte and red blood cell counts by alpha 1-adrenergic stimulation. Sloand JA, et al. **Am J Cardiol** 1989 May 1; 63(15):1140–2

Greater calmodulin-dependent regulation of neurotransmitter release and vascular responsiveness in chronic Doca-salt hypertension. Tsuda K, et al. **Am J Hypertens** 1989 Feb;2(2 Pt 1):93–8

Stimulatory effects of neuronally released norepinephrine on renin release in vitro. Matsumura Y, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):F614–20

Hypothalamic noradrenergic and sympathoadrenal control of glycemia after stress. Smythe GA, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):E231–5

Central catecholaminergic system stimulates secretion of CRH at different sites. Szafarczyk A, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):E463–8

Mechanism of age-related and nitrous oxide-associated anesthetic sensitivity: the role of brain catecholamines. Roizen MF, et al. **Anesthesiology** 1988 Nov;69(5):716–20

The masseteric (jaw closure) reflex: a simple mammalian brainstem system for studying neurochemical modulation. Jacobs BL, et al. **Ann N Y Acad Sci** 1989;563:59–68

Area postrema: cholinergic and noradrenergic regulation of emesis. A new concept. Beleslin DB, et al. **Arch Int Physiol Biochim** 1989 Feb;97(1):107–15

Isolation-induced fighting in mice and regional brain monoamine utilization. Hadfield MG, et al. **Behav Brain Res** 1988 Nov 1;31(1):93–6

Effects of lesions of the dorsal noradrenergic bundle on conditioned suppression to a CS and to a contextual background stimulus. Tsaltas E, et al. **Behav Brain Res** 1989 Jan 1;31(3):243–56

Food intake and lateral hypothalamic self-stimulation covary after medial hypothalamic lesions or ventral midbrain 6-hydroxydopamine injections that cause obesity. Hernandez L, et al. **Behav Neurosci** 1989 Apr;103(2):412–22

Acquisition and reversal of taste/tactile discrimination after forebrain noradrenaline depletion. Jarbe TU, et al. **Behav Neurosci** 1988 Dec;102(6):925–33

Noradrenergic and serotonergic involvement in brief shock-induced analgesia in rats. Minor BG, et al. **Behav Neurosci** 1988 Dec;102(6):915–24

Hypernoradrenergic innervation: its relationship to functional and hyperplastic changes in the vasculature of the spontaneously hypertensive rat. Head RJ. **Blood Vessels** 1989;26(1):1–20 (115 ref.)

Cardiovascular interactions between vasopressin, angiotensin and noradrenaline in the Brattleboro rat. Laycock JF, et al. **Br J Pharmacol** 1989 Feb;96(2):347–55

Sympathetic noradrenergic innervation of immune organs. Felten DL, et al. **Brain Behav Immun** 1988 Dec; 2(4):293–300 (57 ref.)

Kainic acid-induced seizures: potentiation by alpha-methyl-p-tyrosine. Baran H, et al. **Brain Res** 1989 Aug 28;495(2):253–60

Decreased norepinephrine in the ventral lamina terminalis region is associated with angiotensin II drinking response deficits following local 6-hydroxydopamine injections. Cunningham JT, et al. **Brain Res** 1989 Feb 20; 480(1–2):65–71

Electrophysiological characterization of adrenoceptors in the rat dorsal hippocampus. II. Receptors mediating the effect of synaptically released norepinephrine. Curet O, et al. **Brain Res** 1988 Dec 13;475(1):47–57

Noradrenergic mechanisms in hippocampal kindling with rapidly recurring seizures. Kokaia M, et al. **Brain Res** 1989 Jul 10;491(2):398–402

Beta-estradiol induced catecholamine-sensitive hyperalgesia: a contribution to pain in Raynaud's phenomenon. Levine JD, et al. **Brain Res** 1989 May 15;487(1):143–7

The effects of norepinephrine depletion on cerebral blood flow in the rat. Onesti ST, et al. **Brain Res** 1989 Jan 16; 477(1–2):378–81

Adaptive changes in the central noradrenergic system in monocular deprived rats. Aurich M, et al. **Brain Res Bull** 1989 Feb;22(2):173–80

Hypothalamic norepinephrine mediates limbic effects on adrenocortical secretion. Feldman S, et al. **Brain Res Bull** 1988 Oct;21(4):587–90

Locus coeruleus potentiation of dentate gyrus responses: evidence for two systems. Harley C, et al. **Brain Res Bull** 1989 Apr;22(4):643–50

Locomotion in rats transplanted with noradrenergic neurons. Yakovleff A, et al. **Brain Res Bull** 1989 Jan;22(1):115–21

Noradrenergic control of ocular dominance plasticity in the visual cortex of dark-reared cats. Shirokawa T, et al. **Brain Res Dev Brain Res** 1989 Jun 1;47(2):303–8

Characterization of a developmentally transient adrenergic depolarizing response in cultured locus coeruleus neurons. Finlayson PG, et al. **Can J Physiol Pharmacol** 1988 Dec; 66(12):1547–54

Dual role of norepinephrine in the hippocampal CA1 region of the rat: inhibition and disinhibition. Leung PP, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):814–9

Arrhythmic effects of norepinephrine in a model of cardiac ischemia and reperfusion. Lukas A, et al. **Can J Physiol Pharmacol** 1989 Jul;67(7):765–71

Noradrenaline induces short and long duration potentiation of glutamate excitations of cultured Purkinje neurons. Marshall KC, et al. **Can J Physiol Pharmacol** 1988 Jun; 66(6):848–53

Norepinephrine and serotonin content of the murine spleen: its relationship to lymphocyte beta-adrenergic receptor density and the humoral immune response in vivo and in vitro. Fuchs BA, et al. **Cell Immunol** 1988 Dec; 117(2):339–51

Infusions of adrenaline stimulate noradrenergic transmission in man, but adrenaline is not released later as a co-transmitter. Gordon RD, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:329–35

Stimulatory effects of neuronally released norepinephrine on renin release from rat kidney cortical slices. Matsumura Y, et al. **Clin Exp Hypertens [A]** 1988;10(6):1305–7

Paradoxical effects of endothelin on cardiovascular noradrenergic neurotransmission. Wong-Dusting HK, et al. **Clin Exp Pharmacol Physiol** 1989 Apr;16(4):229–33

Differentiation of noradrenergic traits in the principal neurons and small intensely fluorescent cells of the parasympathetic sphenopalatine ganglion of the rat. Leblanc GG, et al. **Dev Biol** 1989 Jan;131(1):44–59

Myocardial alpha- and beta-adrenergic receptors in heart failure: is cardiac-derived norepinephrine the regulatory signal? Bristow MR, et al. **Eur Heart J** 1988 Jun;9 Suppl H:35–40 (17 ref.)

Central noradrenergic pathways are not involved in the pressor response to intracerebroventricular substance P. Badoer E, et al. **Eur J Pharmacol** 1988 Sep 1;154(1):105–8

M2 muscarinic receptors on the iris sphincter muscle differ from those on iris noradrenergic nerves. Bognar IT, et al. **Eur J Pharmacol** 1989 Apr 25;163(2–3):263–74

Evidence that ATP does not act as a cotransmitter with noradrenaline in field-stimulated preparations of rat seminal vesicles. Chin PF, et al. **Eur J Pharmacol** 1988 Oct 18; 155(3):309–12

Regulation of beta-adrenoceptors by catecholamines in the rabbit skeletal muscle. Elfellah MS, et al. **Eur J Pharmacol** 1988 Nov 22;157(2–3):215–20

Acute and long-term regulation of brain alpha 2-adrenoceptors after manipulation of noradrenergic transmission in the rat. Giralt MT, et al. **Eur J Pharmacol** 1989 May 30;164(3):455–66

Serotonergic regulation of noradrenergic coerulean neurons: electrophysiological evidence for the involvement of 5-HT2 receptors. Gorea E, et al. **Eur J Pharmacol** 1988 Sep 23;154(3):285–91

Sleep state-specific neuronal activity in rat dorsal lateral geniculate nucleus is not altered by local serotonin and norepinephrine depletion. Marks GA, et al. **Exp Brain Res** 1989;74(2):402–10

Parallel development of noradrenergic innervation and cellular compartmentation in the rat spleen. Ackerman KD, et al. **Exp Neurol** 1989 Mar;103(3):239–55

Noradrenergic innervation of the substantia innominata: a light and electron microscopic analysis of dopamine beta-hydroxylase immunoreactive elements in the rat. Chang HT. **Exp Neurol** 1989 May;104(2):101–12

The most desirable conformation of phenylethylamine (PEA) moiety stimulating noradrenergic neurons: effects of PEA, methamphetamine, phenelzine, methylphenidate, nomifensine and mazindol on rat spinal reflexes. Hasebe Y, et al. **Gen Pharmacol** 1989;20(3):375–9

Insulin blockade of norepinephrine tachyphylaxis in the perfused kidney. Costa e Forti A, et al. **Horm Metab Res** 1989 May;21(5):232–5

Responsiveness of noradrenergic neurons in rat experimental hypertension. Debinski WK, et al. **Hypertension** 1989 Jun; 13(6 Pt 2):712–5

Studies on noradrenergic alterations in relation to early phenobarbital-induced behavioral changes. Yanai J, et al. **Int J Dev Neurosci** 1987;5(4):337–44

Influences on cortisol and noradrenergic turnover of healthy controls and depressed patients during L-tryptophan loading. Maes M, et al. **J Affective Disord** 1989 Sep–Oct; 17(2):173–82

Acute hemodynamic effects of norepinephrine inhibition in patients with severe chronic congestive heart failure. Franciosa JA, et al. **J Am Coll Cardiol** 1989 Sep; 14(3):624–30

Evidence that neuropeptide Y released from noradrenergic axons causes prolonged contraction of the guinea-pig uterine artery. Morris JL, et al. **J Auton Nerv Syst** 1988 Oct;24(3):241–9

Potentiation by dopexamine of the cardiac responses to circulating and neuronally released norepinephrine: a possible mechanism for the therapeutic effects of the drug. Bass AS, et al. **J Cardiovasc Pharmacol** 1989 Apr; 13(4):667–71

Plasma dihydroxyphenylalanine and total body and regional noradrenergic activity in humans. Eisenhofer G, et al. **J Clin Endocrinol Metab** 1989 Feb;68(2):247–55

Quantified regional and laminar distribution of the noradrenaline innervation in the anterior half of the adult rat cerebral cortex. Audet MA, et al. **J Comp Neurol** 1988 Aug 15;274(3):307–18

Chemoanatomical organization of the noradrenergic input from locus coeruleus to the olfactory bulb of the adult rat. McLean JH, et al. **J Comp Neurol** 1989 Jul 15; 285(3):339–49

Adrenergic mechanisms in the control of corticotrophin secretion. al-Damluji S. **J Endocrinol** 1988 Oct;119(1):5–14 (119 ref.)

Effects of epinephrine and norepinephrine on glucose release from chinook salmon (Oncorhynchus tshawytscha) liver incubated in vitro. Sheridan MA. **J Exp Zool** 1988 Nov; 248(2):155–9

Noradrenergic sprouting and beta-adrenergic receptor binding in the lateral geniculate nucleus of rats after unilateral visual cortex ablation. Aurich M, et al. **J Hirnforsch** 1988;29(6):659–67

Is aromatic L-amino acid decarboxylase immunoreactivity a marker for noradrenergic sympathetic axons? [letter] Bell C. **J Histochem Cytochem** 1989 Jun;37(6):919, 921

Physiological increases in circulating noradrenaline are antinatriuretic in man. McMurray JJ, et al. **J Hypertens** 1988 Sep;6(9):757–61

Diminished sympathetic excitation of locus coeruleus noradrenergic neurons in the conscious mature spontaneously hypertensive rat. Kawamura H, et al. **J Hypertens Suppl** 1988 Dec;6(4):S518–20

Involvement of norepinephrine neurons in the hypothermia induced by intracerebroventricular administration of 6–hydroxydopamine in mice, evidenced by antidepressants. Leroux–Nicollet I, et al. **J Neural Transm** 1988;74(1):17–27

Audiogenic stress response: behavioral characteristics and underlying monoamine mechanisms. Segal DS, et al. **J Neural Transm** 1989;75(1):31–50

Systemic phenoxybenzamine but not beta–adrenergic antagonists block noradrenergic inhibition of cerebellar Purkinje and hippocampal pyramidal neurons. Staunton DA, et al. **J Neural Transm** 1988;73(2):101–13

Subacute noradrenergic agonist infusions in vivo increase Na+, K+–ATPase and ouabain binding in rat cerebral cortex. Swann AC, et al. **J Neurochem** 1989 May; 52(5):1598–604

The noradrenergic neurotoxin DSP–4 eliminates the coeruleospinal projection but spares projections of the A5 and A7 groups to the ventral horn of the rat spinal cord. Lyons WE, et al. **J Neurosci** 1989 May;9(5):1481–9

A kinetic study of chlorpromazine on the hyperglycemic response in rats. II. Effect of chlorpromazine on plasma glucose. Sato S, et al. **J Pharmacobiodyn** 1988 Jul; 11(7):492–503

Inversion of the alpha–2 and alpha–1 noradrenergic control of the cortical release of acetylcholine and gamma–aminobutyric acid in morphine–tolerant guinea pigs. Beani L, et al. **J Pharmacol Exp Ther** 1988 Oct; 247(1):294–301

Prolactin–lowering ability of (+/–)–idazoxan may be linked to a central noradrenergic–serotonergic interplay. Preziosi P, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):256–63

Behavioral evidence for the role of noradrenaline in the putative anxiogenic actions of the inverse benzodiazepine receptor agonist methyl–4–ethyl–6,7–dimethoxy–beta–carboline–3–carboxylate. Yang XM, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):358–63

Roles of cholinergic, dopaminergic, noradrenergic, serotonergic and GABAergic systems in changes of the EEG power spectra and behavioral states in rabbits. Yamamoto J. **Jpn J Pharmacol** 1988 Jun;47(2):123–34

Ethanol withdrawal in the rat: involvement of noradrenergic neurons. Pohorecky LA, et al. **Life Sci** 1974 Aug 1; 15(3):427–37

Involvement of norepinephrine activity in the regulation of alpha 1 adrenergic receptors in the medial preoptic nucleus of estradiol–treated rats. Sortino MA, et al. **Life Sci** 1989; 44(17):1223–9

Serotonin release mechanisms in bovine pineal gland: stimulation by norepinephrine and dopamine. Chuluyan HE, et al. **Mol Cell Endocrinol** 1989 Jun;64(1):71–80

Transmitter release patterns of noradrenergic, dopaminergic and cholinergic axons in rabbit brain slices during short pulse trains, and the operation of presynaptic autoreceptors. Mayer A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Dec;338(6):632–43

Age–related cognitive impairments as assessed with an automated repeated measures memory task: implications for the possible role of acetylcholine and norepinephrine in memory dysfunction. Pontecorvo MJ, et al. **Neurobiol Aging** 1988 Sep–Dec;9(5–6):617–25 (80 ref.)

Opioid–noradrenergic interactions in the neurohypophysis. II. Does noradrenaline mediate the actions of endogenous opioids on oxytocin and vasopressin release? Zhao BG, et al. **Neuroendocrinology** 1988 Jul;48(1):25–31

Disinhibition by propranolol and chlordiazepoxide of nonrewarded lever–pressing in the rat is unaffected by dorsal noradrenergic bundle lesion. Salmon P, et al. **Neuropharmacology** 1989 Mar;28(3):207–10

Lesions to ascending noradrenergic and serotonergic pathways modify antinociception produced by intracerebroventricular administration of morphine. Sawynok J, et al. **Neuropharmacology** 1989 Feb;28(2):141–7

Opioid inhibition of secretion from oxytocin and vasopressin nerve terminals following selective depletion of neurohypophysial catecholamines. Bicknell RJ, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):281–6

Does noradrenaline behave as a neurotransmitter or hormone in the mammalian retina? Osborne NN, et al. **Neurosci Res Suppl** 1988;8:S197–210 (25 ref.)

Differential effects of ascending neurons containing dopamine and noradrenaline in the control of spontaneous activity and of evoked responses in the rat prefrontal cortex. Mantz J, et al. **Neuroscience** 1988 Nov;27(2):517–26

Neurotransmitter and hormonal effects on ionic currents in uterine smooth muscle. Erulkar SD, et al. **P R Health Sci J** 1988 Aug;7(2):87–8

Estimation of high K– and noradrenaline–induced 45Ca uptakes in isolated rat aorta: effects of washing in icecold solutions. Aaronson PI. **Pflugers Arch** 1989 Sep; 414(5):579–83

Effects of cerebral depletion of norepinephrine on conditioned avoidance responding in Sprague–Dawley and Fischer rats. Martin GE, et al. **Pharmacol Biochem Behav** 1988 May;30(1):137–42

On the role of the dorsal noradrenergic bundle in learning and habituation to novelty. Pisa M, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):835–45

Importance of noradrenergic mechanisms in the olfactory bulbs for the maternal behaviour of mice. Dickinson C, et al. **Physiol Behav** 1988;43(3):313–6

Noise in neural networks: thresholds, hysteresis, and neuromodulation of signal–to–noise. Keeler JD, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1712–6

Noradrenergic sympathetic innervation of lymphoid organs. Felten SY, et al. **Prog Allergy** 1988;43:14–36 (79 ref.)

Intracerebral grafting of fetal noradrenergic locus coeruleus neurons: evidence for seizure suppression in the kindling model of epilepsy. Lindvall O, et al. **Prog Brain Res** 1988; 78:79–86 (32 ref.)

Pharmacologic evidence for the modulation of nociception by noradrenergic neurons. Proudfit HK. **Prog Brain Res** 1988;77:357–70 (114 ref.)

Noradrenergic effects in tardive dyskinesia, akathisia and pseudoparkinsonism via the limbic system and basal ganglia. Wilbur R, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(6):849–64 (61 ref.)

Noradrenergic and opioidergic influences on the antinociceptive effect of clomipramine in the formalin test in rats. Ansuategui M, et al. **Psychopharmacology (Berlin)** 1989;98(1):93–6

DSP4 and Herrnstein's equation: further evidence for a role of noradrenaline in the maintenance of operant behaviour by positive reinforcement. Morley MJ, et al. **Psychopharmacology (Berlin)** 1988;96(4):551–6

Electromyographic activity and noradrenaline content of the rabbit oviduct under different hormonal states. Sachy A, et al. **Reprod Nutr Dev** 1989;29(2):171–83

A1 noradrenergic action on medial preoptic–medial septal neurons: a neuropharmacological study. Kim YI, et al. **Synapse** 1988;2(5):494–507

Cardiovascular effects and modulation of noradrenergic neurotransmission following central and peripheral administration of neuropeptide Y. Westfall TC, et al. **Synapse** 1988;2(3):299–307

Species differences in sensitivity of aortae to norepinephrine are related to alpha–adrenoceptor affinity. Bevan JA, et al. **Trends Pharmacol Sci** 1988 Mar;9(3):87–9 (18 ref.)

[Effect of intraseptal noradrenaline on somatic and visceral pain threshold of rabbits] Wang S, et al. **Sheng Li Hsueh Pao** 1989 Apr;41(2):128–35 (Eng. Abstr.) **(Chi)**

[Implication of spinal catecholaminergic pathways in sympathetic pressor responses] Elghozi JL, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:267–70 (Eng. Abstr.) **(Fre)**

[Reciprocal interactions between the noradrenergic and dopaminergic systems in the prefrontal cortex and ventral tegmental area] Hervé D, et al. **Encephale** 1989 Jan–Feb; 15 Spec No:133–8 (45 ref.) **(Fre)**

[The role of central noradrenergic neurons in the hypothalamic–pituitary–adrenocortical axis of rats: with special reference to feeding cycle and biological rhythm] Noe Y. **Hokkaido Igaku Zasshi** 1988 Nov;63(6):897–912 (Eng. Abstr.) **(Jpn)**

[Autonomic nervous disorders in obesity] Yamada R. **Nippon Rinsho** 1988 Nov;46(11):2380–4 **(Jpn)**

[Role of endogenous norepinephrine and effects of alpha– and beta–blockers in experimental spinal cord compression injury] Uehara H. **Nippon Seikeigeka Gakkai Zasshi** 1988 Nov;62(11):1011–8 (Eng. Abstr.) **(Jpn)**

[Analysis of compensatory mechanisms of arterial hypertension in norepinephrine infusion] Eremeev VS, et al. **Fiziol Zh SSSR** 1988 Nov;74(11):1571–9 (Eng. Abstr.) **(Rus)**

[Genetico–neurochemical analysis of the role of brain catecholamines in population hierarchy in male laboratory mice] Serova LI, et al. **Genetika** 1989 Apr;25(4):691–8 (Eng. Abstr.) **(Rus)**

[Influence of monoamines on heterosynaptic facilitation in giant neurons of Planorbis corneus] Storozhuk VM, et al. **Neirofiziologiia** 1989;21(2):224–32 (Eng. Abstr.) **(Rus)**

[The role of catecholamines in the development of obstetrical pathology] Abramchenko VV. **Sov Med** 1988;(5):43–6 (33 ref.) **(Rus)**

[The role of the dopamine and noradrenaline systems in regulating autogenic motor activity in rat pups] Timofeeva OP. **Zh Evol Biokhim Fiziol** 1989 Jan–Feb;25(1):123–5 (Eng. Abstr.) **(Rus)**

[Participation of the central noradrenergic system in the mechanisms of latent inhibition] Loskutova LV. **Zh Vyssh Nerv Deiat** 1988 Nov–Dec;38(6):1113–8 (Eng. Abstr.) **(Rus)**

SECRETION

Effect of atrial natriuretic peptide on catecholamine release from human pheochromocytoma. Nakamaru M, et al. **Acta Endocrinol (Copenh)** 1989 Jan;120(1):107–12

Neuropeptide Y (NPY) induced inhibition of preganglionic nerve stimulation evoked release of adrenalin and noradrenaline in the pithed rat. Dahlöf P, et al. **Acta Physiol Scand** 1988 Jan;132(1):51–7

Alpha 2–adrenoceptor agonist–mediated inhibition of [3H]noradrenaline release from rat hippocampus is reduced by 4–aminopyridine, but that caused by an adenosine analogue or omega–conotoxin is not. Hu PS, et al. **Acta Physiol Scand** 1989 Jul;136(3):347–53

L–arginine inhibits noradrenaline release in sympathetically stimulated rabbit hearts. Karwatowska–Prokopczuk E, et al. **Acta Physiol Scand** 1989 Mar;135(3):419–20

Sympathetic vascular control of the pig nasal mucosa (III): Co–release of noradrenaline and neuropeptide Y. Lacroix JS, et al. **Acta Physiol Scand** 1989 Jan;135(1):17–28

Role of the coronary endothelium in the regulation of sympathetic transmitter release in isolated rabbit hearts. Wennmalm A, et al. **Acta Physiol Scand** 1989 May; 136(1):81–7

Application of a new technique—blood pressure clamping—for analysis of prostaglandin interference with sympathetic neurotransmission in man. Wennmalm A. **Acta Physiol Scand** 1989 May;136(1):89–96

Adenosine as a modulator of sympathetic nerve–stimulation–induced release of noradrenaline from the isolated rabbit heart. Wennmalm M, et al. **Acta Physiol Scand** 1988 Apr;132(4):487–94

Effect of hypoxia on nerve–stimulation–induced release of noradrenaline from the rabbit heart. Wennmalm M. **Acta Physiol Scand** 1988 May;133(1):25–33

Studies on central D1 receptors role in volume transmission, neuroendrocrine regulation and release of noradrenaline. Fuxe K, et al. **Adv Exp Med Biol** 1988;235:83–119 (73 ref.)

Recent studies on icosanoids and PAF–acether modulation of some central neurosecretions in the rat. Dray F, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:383–6

Renal sympathetic nerve activity and norepinephrine release in rats. Deka–Starosta A, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R229–36

Binding of prostaglandin E2 to cultured bovine adrenal chromaffin cells and its effect on catecholamine secretion. Karaplis AC, et al. **Biochim Biophys Acta** 1989 Mar 6; 1010(3):369–76

Amnesic action of 2–deoxy–D–galactose is not related to alterations in the release of dopamine and noradrenaline. Schröder H, et al. **Biomed Biochim Acta** 1988;47(8):813–6

Noradrenaline release evoked by a physiological irregular sympathetic discharge pattern is modulated by prejunctional alpha– and beta–adrenoceptors in vivo. Kahan T, et al. **Br J Pharmacol** 1988 Dec;95(4):1101–8

Ouabain distinguishes between nicotinic and muscarinic receptor–mediated catecholamine secretions in perfused adrenal glands of cat. Yamada Y, et al. **Br J Pharmacol** 1989 Feb;96(2):470–9

Effect of phorbol esters on noradrenaline release from cerebral arteries. Balfagon G, et al. **Brain Res** 1989 Jan 16;477(1–2):196–201

Secretion from adrenaline– and noradrenaline–storing adrenomedullary cells is regulated by a common dihydropyridine–sensitive calcium channel. Cárdenas AM, et al. **Brain Res** 1988 Jul 26;456(2):364–6

In vivo interactions between prejunctional alpha 2– and beta 2–adrenoceptors at the level of the adrenal medulla. Foucart S, et al. **Can J Physiol Pharmacol** 1988 Oct; 66(10):1340–3

Evoked secretion of [3H]noradrenaline and ATP from nerve varicosities isolated from the myenteric plexus of the guinea pig ileum. Hammond JR, et al. **Can J Physiol Pharmacol** 1988 Apr;66(4):369–75

Functional angiotensin receptor on cultured bovine chromaffin cells: secretory response to angiotensin II and angiotensin III. Brust I, et al. **Clin Exp Hypertens [A]** 1988; 10(6):1321–3

Abnormalities in the sodium transport as the causative factor for enhanced norepinephrine overflow in the spontaneously hypertensive rat. Steenberg ML, et al. **Clin Exp Hypertens [A]** 1988;10(5):833–41

Phaeochromocytomas secreting adrenaline but not noradrenaline do not cause hypertension and require precise adrenaline measurement for diagnosis. Bachmann AW, et al. **Clin Exp Pharmacol Physiol** 1989 Apr; 16(4):275–9

Adrenergic control of the glucagon response to ammonia in the perfused rat pancreas. Ichiba T, et al. **Diabetes Res Clin Pract** 1988 Sep 5;5(3):177–84

Endogenous opioid inhibition and facilitation of gonadotropin–releasing hormone release from the median eminence in vitro: potential role of catecholamines. Rasmussen DD, et al. **Endocrinology** 1988 Dec; 123(6):2916–21

Involvement of the constituent chains of botulinum neurotoxins A and B in the blockade of neurotransmitter release. Maisey EA, et al. **Eur J Biochem** 1988 Nov 15; 177(3):683–91

Phorbol ester–mediated enhancement of hippocampal noradrenaline release: which ion channels are involved? Huang HY, et al. **Eur J Pharmacol** 1988 Aug 24; 153(2–3):175–84

Origin of ATP release in the rat vas deferens: concomitant measurement of [3H]noradrenaline and [14C]ATP. Vizi ES, et al. **Eur J Pharmacol** 1988 Dec 6;158(1–2):69–77

Hypothalamo–hypophyseal portal blood sampling from laboratory rats. The effects of endocrine manipulations on portal blood catecholamine concentrations. Eckland DJ, et al. **Exp Brain Res** 1988;72(3):640–4

The tetanus toxin light chain inhibits exocytosis. Ahnert–Hilger G, et al. **FEBS Lett** 1989 Jan 2;242(2):245–8

Norepinephrine release and reuptake by hypothalamic synaptosomes of spontaneously hypertensive rats. Hano T,

et al. **Hypertension** 1989 Mar;13(3):250–5
Effects of daytime noise load on the sleep–wake cycle and endocrine patterns in man. III. 24 hours secretion of free and sulfate conjugated catecholamines. Fruhstorfer B, et al. **Int J Neurosci** 1988 Nov;43(1–2):53–62
A reassessment of guanine nucleotide effects on catecholamine secretion from permeabilized adrenal chromaffin cells. Bader MF, et al. **J Biol Chem** 1989 Oct 5;264(28):16426–34
Muscarinic–stimulated norepinephrine release and phosphoinositide hydrolysis in PC12 cells are independent events. Takashima A, et al. **J Biol Chem** 1989 Jun 25; 264(18):10654–9
Role of substance P and neurotensin in the regulation of neurosecretion and vascular responsiveness in hypertension. Tsuda K, et al. **J Hypertens Suppl** 1988 Dec; 6(4):S539–41
Protein kinase C–dependent and calmodulin–dependent regulation of neurotransmitter release and vascular responsiveness in spontaneously hypertensive rats. Tsuda K, et al. **J Hypertens Suppl** 1988 Dec;6(4):S565–7
Effects of acidosis on anoxic and exocytotic noradrenaline release from the heart. Dart AM, et al. **J Mol Cell Cardiol** 1989 Jan;21(1):75–83
Interaction between the release of adenosine and noradrenaline during sympathetic stimulation: a feed–back mechanism in rat heart. Richardt G, et al. **J Mol Cell Cardiol** 1989 Mar;21(3):269–77
Clinical concentrations of volatile anesthetics reduce depolarization–evoked release of [3H]norepinephrine, but not [3H]acetylcholine, from rat cerebral cortex. Bazil CW, et al. **J Neurochem** 1989 Sep;53(3):962–5
Isolated light chain of tetanus toxin inhibits exocytosis: studies in digitonin–permeabilized cells. Bittner MA, et al. **J Neurochem** 1989 Sep;53(3):966–8
Actin involvement in exocytosis from PC12 cells: studies on the influence of botulinum C2 toxin on stimulated noradrenaline release. Matter K, et al. **J Neurochem** 1989 Feb;52(2):370–6
Stimulation of histamine H2 receptor in rat hypothalamus releases endogenous norepinephrine. Blandina P, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):44–51
Influence of stimulation train length on the opioid–induced inhibition of norepinephrine release in the rabbit ear artery. Budai D, et al. **J Pharmacol Exp Ther** 1988 Dec; 247(3):839–43
Atrial natriuretic factor inhibits adrenergic and purinergic neurotransmission in the rabbit isolated vas deferens. Drewett JG, et al. **J Pharmacol Exp Ther** 1989 Jan; 248(1):135–42
Effects of alpha adrenoceptor blockade on renal nerve stimulation–induced norepinephrine release and vasoconstriction in the dog kidney. Hisa H, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):752–7
Adenosine–angiotensin II interactions. Part I. Role of adenosine in regulating angiotensin II–induced potentiation of noradrenergic neurotransmission and angiotensin II–induced vasoconstriction. Holycross BJ, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):433–41
Presynaptic interactions between acetylcholine and adrenergic antagonists on norepinephrine release. Kalsner S, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):879–91
Norepinephrine and adenosine triphosphate release in different ratio from guinea pig vas deferens by high potassium chloride, ouabain and monensin. Katsuragi T, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):302–8
Interaction of the prejunctional inhibitory action of 5–hydroxytryptamine on noradrenergic transmission with neuronal amine uptake in rabbit isolated ear artery. Meehan AG, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):342–7
Differential inhibition by ergonovine of norepinephrine release in the coronary artery and saphenous vein of the dog. O'Rourke ST, et al. **J Pharmacol Exp Ther** 1989 Apr; 249(1):52–5
Characterization of bradykinin–stimulated release of noradrenaline from cultured bovine adrenal chromaffin cells. Owen PJ, et al. **J Pharmacol Exp Ther** 1989 Mar; 248(3):1231–6
Thromboxane receptor agonists enhance adrenergic neurotransmission in rabbit isolated mesenteric arteries. Trachte GJ, et al. **J Pharmacol Exp Ther** 1989 Apr; 249(1):216–20
Platelet–generated thromboxane A2 enhances norepinephrine release from adrenergic nerves. Trachte GJ, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1139–45
Selective tolerance at mu and kappa opioid receptors modulating norepinephrine release in guinea pig cortex. Werling LL, et al. **J Pharmacol Exp Ther** 1988 Dec; 247(3):1103–6
Effects of propranolol and yohimbine on periarterial nerve stimulation–induced release of endogenous norepinephrine from the mesenteric vasculature of Wistar Kyoto and spontaneously hypertensive rats. Yamamoto R, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):905–11
Role of protein kinase C in the vesicular release of acetylcholine and norepinephrine from enteric neurons of the guinea pig small intestine. Hashimoto S, et al. **Jpn J Pharmacol** 1988 Nov;48(3):377–85
Inhibitory effect of cilazaprilat on norepinephrine release induced by renal nerve stimulation in anesthetized dogs. Satoh S, et al. **Jpn J Pharmacol** 1988 Oct;48(2):287–9
The effect of etorphine on the secretion of endogenous catecholamines and total tritium evoked by nerve– and acetylcholine–stimulation in perfused rat adrenal glands. Chen YM, et al. **Life Sci** 1989;44(2):167–74
Non–neurogenic stimulation of adrenomedullary secretion during endotoxicosis in the one day old rat. Seidler FJ, et al. **Life Sci** 1989;45(5):379–81
Sympathoadrenomedullary hyper–responsiveness to yohimbine in juvenile spontaneously hypertensive rats. Szemeredi K, et al. **Life Sci** 1988;43(13):1063–8
Ovarian steroids and hypothalamic norepinephrine release: studies using in vivo brain microdialysis. Vathy I, et al. **Life Sci** 1988;43(19):1493–9
Reflex activation of the adrenal medulla during hypoglycemia and circulatory dysregulations is regulated by capsaicin–sensitive afferents. Donnerer J. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Sep; 338(3):282–6
Splanchnic nerve stimulation modulates steroid secretion in hypophysectomized dogs. Engeland WC, et al. **Neuroendocrinology** 1989 Aug;50(2):124–31
Opioid–noradrenergic interactions in the neurohypophysis. I. Differential opioid receptor regulation of oxytocin, vasopressin, and noradrenaline release. Zhao BG, et al. **Neuroendocrinology** 1988 Jul;48(1):16–24
Effects of angiotensin II on cultured, bovine adrenal medullary cells. Bunn SJ, et al. **Neuropeptides** 1989 Feb–Mar;13(2):121–32
Selective opioid antagonist effects on opioid–induced inhibition of release of norepinephrine in guinea pig cortex. Werling LL, et al. **Neuropharmacology** 1989 Feb; 28(2):103–7
Effects of propranolol on cardiovascular and neuroendocrine responses to mental arithmetic in type A men. Williams RB Jr, et al. **Neuropsychopharmacology** 1988 Dec; 1(4):337–40
Neurotensin perfused in hypothalamus of sated or fasted rat: HPLC analysis of release of DA, NE and 5–HT and their metabolites. Miñano FJ, et al. **Peptides** 1988 Nov–Dec; 9(6):1381–7
Frequency–dependence of 3H–noradrenaline release from rabbit pulmonary artery: effect of alpha–adrenoceptor antagonists and inhibitors of transmitter inactivation. Nedergaard OA. **Pharmacol Toxicol** 1988 Nov;63(5):317–23
Inhibition of norepinephrine release from vascular adrenergic nerves by adenyl purines. Shinozuka K, et al. **Proc West Pharmacol Soc** 1988;31:193–5
Adrenal vein and arterial levels of catecholamines and immunoreactive metenkephalin in canine endotoxin shock and their response to naloxone. Watson JD, et al. **Res Exp Med (Berl)** 1988;188(5):319–28
Release–regulating GABAA receptors are present on noradrenergic nerve terminals in selective areas of the rat brain. Bonanno G, et al. **Synapse** 1987;1(3):254–7
[Anesthetic management of a patient with NE–secreting carotid body paraganglioma] Yokota M, et al. **Masui** 1988 Sep;37(9):1124–9 (7 ref.) (Eng. Abstr.) **(Jpn)**
[Steady state–kinetic model of the regulation by autoadrenoreceptors of noradrenaline secretion] Bazian AS, et al. **Neirofiziologiia** 1988;20(3):301–10 (Eng. Abstr.) **(Rus)**
[N–2–chloroethyl–N–ethyl–2–bromobenzylamine (DSP4) increases the liberation of 3H–noradrenaline produced by depolarization of the nerve ending] Landa ME, et al. **Acta Physiol Pharmacol Latinoam** 1988;38(2):167–80 (Eng. Abstr.) **(Spa)**

THERAPEUTIC USE

Successful transcatheter arterial embolization for the replaced right hepatic artery: a new technique using a balloon catheter and norepinephrine infusion [letter] Okazaki M, et al. **AJR** 1989 Jan;152(1):204
Beneficial effect of norepinephrine in the treatment of circulatory shock caused by tricyclic antidepressant overdose. Teba L, et al. **Am J Emerg Med** 1988 Nov; 6(6):566–8
The combined use of noradrenaline, amrinone and nitroglycerin in the management of severe low cardiac output after coronary artery surgery. Nakatsuka M, et al. **Anaesth Intensive Care** 1988 Nov;16(4):485–7
The cardiopulmonary and renal hemodynamic effects of norepinephrine in canine pulmonary embolism. Angle MR, et al. **Chest** 1989 Jun;95(6):1333–7
Effect of dopamine vs norepinephrine on hemodynamics in septic shock. Emphasis on right ventricular performance. Schreuder WO, et al. **Chest** 1989 Jun;95(6):1282–8
Comparison of epinephrine and norepinephrine in the treatment of asphyxial or fibrillatory cardiac arrest in a porcine model. Lindner KH, et al. **Crit Care Med** 1989 May;17(5):437–41
Reversal of intractable septic shock with norepinephrine therapy [letter] Tilden SJ. **Crit Care Med** 1989 Jun;17(6):594
[Norepinephrine in hyperkinetic septic shock: from a misunderstood process to justified rehabilitation] Desjars P, et al. **Ann Fr Anesth Reanim** 1989;8(1):1–3 (25 ref.) **(Fre)**
[Use of norepinephrine in the treatment of septic shock] Martin C, et al. **Ann Fr Anesth Reanim** 1989;8(1):19–25 (Eng. Abstr.) **(Fre)**

URINE

Atrial natriuretic factor, urinary catechol compounds and electrolyte excretion in rats during normal hydration and isotonic volume expansion. Influence of dopamine receptor blockade. Hansell P, et al. **Acta Physiol Scand** 1988 Nov; 134(3):421–8
Influence of oral contraceptive treatment on blood pressure and 24–hour urinary catecholamine excretion in smoking as compared with non–smoking women. Blum M, et al. **Adv Contracept** 1988 Jun;4(2):143–9
The relation of norepinephrine to blood pressure is independent of acculturation in Western Samoan men. James GD. **Am J Hypertens** 1989 Jun;2(6 Pt 1):471–3
Hormone and catecholamine responses accompanying the antinatriuresis of glucose ingestion. Levinson PD, et al. **Am J Hypertens** 1989 Mar;2(3 Pt 1):178–81
Urinary catecholamine assay by HPLC: in vitro interference by some drugs. Davidson DF. **Ann Clin Biochem** 1988 Sep; 25 (Pt 5):583–4
Biochemical classifications of diagnostic subgroups and D–type scores [published erratum appears in Arch Gen Psychiatry 1989 Jul;46(7):616] Potter WZ, et al. **Arch Gen Psychiatry** 1989 Mar;46(3):269–71
Toward a biochemical classification of depressive disorders. X. Urinary catecholamines, their metabolites, and D–type scores in subgroups of depressive disorders [published erratum appears in Arch Gen Psychiatry 1989 Sep;46(9):860] Schatzberg AF, et al. **Arch Gen Psychiatry** 1989 Mar;46(3):260–8
Crew workload in JASDF C–1 transport flight: II. Change in urinary catecholamine excretion. Nakamura A, et al. **Aviat Space Environ Med** 1989 Apr;60(4):301–6
Determination of free and total catecholamines in human urine by HPLC with fluorescence detection. Nohta H, et al. **Biomed Chromatogr** 1987 Feb;2(1):9–12
The effects of VDT work on urinary excretion of catecholamines. Tanaka T, et al. **Ergonomics** 1988 Dec; 31(12):1753–63
Urinary dopamine, noradrenaline and adrenaline in type 2 diabetic patients with and without nephropathy. Murabayashi S, et al. **Horm Metab Res** 1989 Jan;21(1):27–32
Comparison of two analytical procedures for the determination of free urinary catecholamines under the demands of shiftwork experiments. Rutenfranz J, et al. **Int Arch Occup Environ Health** 1988;61(1–2):89–93
Symptomatic mitral valve prolapse in children and adolescents: catecholamines, anxiety, and biofeedback. Smith MS, et al. **Pediatrics** 1989 Aug;84(2):290–5
Urinary catecholamines: comparison between HPLC with electrochemical detection and fluorophotometric assay. Lundberg U, et al. **Pharmacol Biochem Behav** 1988 Oct; 31(2):287–9
Noradrenergic output and clinical response in depressed women during amitriptyline therapy. Corona GL, et al. **Pharmacopsychiatry** 1989 Jul;22(4):144–51
Work conditions and urinary excretion of catecholamines—a study of prison staff in Sweden. Härenstam AB, et al. **Scand J Work Environ Health** 1988 Aug;14(4):257–64
[Increase in urinary excretion of vanilmandelic acid and noradrenaline under nifedipine (letter)] Premel–Cabic A, et al. **Presse Med** 1988 Sep 10;17(30):1545 **(Fre)**
[Behavior of urinary catecholamines in hypertension] Vivoli G, et al. **Cardiologia** 1988 Oct;33(10):931–5 (Eng. Abstr.) **(Ita)**
[Relationship between social factors and urinary catecholamine concentrations in pregnant women] Hiraoka T. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jan;41(1):20–6 (Eng. Abstr.) **(Jpn)**
[Activity of the adrenergic system in children with endocrine disorders] Szewczyk L. **Pediatr Pol** 1988 Oct;63(10):639–43 (Eng. Abstr.) **(Pol)**
[A comprehensive method of determining catecholamines, DOPA and 5–hydroxyindoleacetic acid in urine] Nikiragina GP, et al. **Lab Delo** 1988;(9):8–11 (Eng. Abstr.) **(Rus)**

NORETHANDROLONE

ADVERSE EFFECTS

Norethandrolone produces temporary loss of the ability to escape from salt–retaining steroids. Zumoff B. **Steroids** 1989 Jan–Feb;53(1–2):233–40

NORETHINDRONE

A comparative clinical trial of Norinyl 1/35 versus Brevicon in Rio Clara, Brazil. Albuquerque LA, et al. **Contraception** 1988 Nov;38(5):525–39

ADMINISTRATION & DOSAGE

Contraception in men: efficacy and immediate toxicity. A study of 18 cases. Lobel B, et al. **Acta Urol Belg** 1989; 57(1):117–24
An alternative regimen of hormone replacement therapy to improve patient compliance. Kemp JF, et al. **Aust N Z J Obstet Gynaecol** 1989 Feb;29(1):66–9
Are fixed–dose oestrogen/progestogen combinations ideal for all HRT users? Fraser D, et al. **Br J Obstet Gynaecol** 1989 Jul;96(7):776–82
"Sunday start" multiphasic oral contraception: ovulation prevention and delayed follicular atresia in primates. Danforth DR, et al. **Contraception** 1989 Mar;39(3):321–30
A comparative evaluation of the safety and contraceptive effectiveness of 65 mg and 100 mg of 90–day norethindrone

(NET) injectable microspheres: a multicenter study. Grubb GS, et al. **Fertil Steril** 1989 May;51(5):803–10

Treatment of severe premenstrual syndrome with oestradiol patches and cyclical oral norethisterone. Watson NR, et al. **Lancet** 1989 Sep 23;2(8665):730–2

[Effective progestogen therapy of endometrial hyperplasia and adenocarcinoma by administration of a combined progestogen–estrogen preparation] Miyawaki Y, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Oct 20; 23(10):2598–605 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Plasma reduced and total ascorbic acid in healthy women: effects of smoking and oral contraception. Basu J, et al. **Contraception** 1989 Jan;39(1):85–93

Lack of metabolic effects of a triphasic formulation containing norethindrone in normal women studied prospectively [letter] Crook D, et al. **Contraception** 1989 Jan;39(1):125–8

[Tolerance and acceptance of the norethisterone containing triphasic pill Trinovum] Boschitsch E. **Gynakol Rundsch** 1988;28(3):136–49 (Eng. Abstr.) **(Ger)**

ANALOGS & DERIVATIVES

Comparison of four continuously administered progestogen plus oestradiol combinations for climacteric complaints. Sporrong T, et al. **Br J Obstet Gynaecol** 1988 Oct; 95(10):1042–8

Clinical evaluation of two monthly injectable contraceptives and their effects on some metabolic parameters. Haiba NA, et al. **Contraception** 1989 Jun;39(6):619–32

Acceptability of injectable contraceptives in Assiut, Egypt. Salem HT, et al. **Contraception** 1988 Dec;38(6):697–710

Plasma rifampicin levels during oral contraception. Gupta KC, et al. **J Assoc Physicians India** 1988 Jun;36(6):365–6

Comparison of continuous and sequential oestrogen–progestogen treatment in women with climacteric symptoms. Høvik P, et al. **Maturitas** 1989 Mar; 11(1):75–82

Long-term and withdrawal effects of two different oestrogen–progestogen combinations on lipid and lipoprotein profiles in post-menopausal women. Jensen J, et al. **Maturitas** 1989 Jun;11(2):117–28

Synthesis of 5,17-dihydroxy-5 alpha, 17 alpha,-19-norpregn-20-yn-3-one, a major photodegradation product of norethindrone. Cooper GF. **Steroids** 1988 May–Jun;51(5–6):459–64

[Restoration of pituitary–ovarian function after long-term application of combined norethindrone oenanthate] Shen KY. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Sep; 23(5):293–5, 318 (Eng. Abstr.) **(Chi)**

[Absorption of norethisterone acetate from tablets with normal and coarse particle size] Andreasen EE, et al. **Ugeskr Laeger** 1989 May 1;151(18):1109–10 (Eng. Abstr.) **(Dan)**

[Experience in the treatment of metastatic breast carcinoma with norethisterone acetate in a clinical study] Stier G, et al. **Arch Geschwulstforsch** 1989;59(2):93–8 (Eng. Abstr.) **(Ger)**

[Therapy of juvenile adenomatous hyperplasia of the endometrium by progesterone stimulation] Krafft W. **Zentralbl Gynakol** 1989;111(12):846–8 **(Ger)**

[Interdisciplinary diagnosis and therapy concepts in climacteric osteoporosis] Löttge M, et al. **Zentralbl Gynakol** 1989;111(12):800–6 (Eng. Abstr.) **(Ger)**

BLOOD

Norethindrone plasma levels in human subjects. Cook CE, et al. **Life Sci** 1974 Nov 1;15(9):1621–9

CHEMICAL SYNTHESIS

[Simple synthesis of a complete set of unconjugated norethisterone metabolites and their deutero-analogs] Golubovskaia LE, et al. **Bioorg Khim** 1989 Mar;15(3):411–6 (Eng. Abstr.) **(Rus)**

METABOLISM

Selectivity in progesterone and androgen receptor binding of progestagens used in oral contraceptives. Kloosterboer HJ, et al. **Contraception** 1988 Sep;38(3):325–32

Binding of levonorgestrel, norethisterone and desogestrel to human sex hormone binding globulin and influence on free testosterone levels. Nilsson B, et al. **Gynecol Obstet Invest** 1989;27(3):151–4

Synthesis of 5,17-dihydroxy-5 alpha, 17 alpha,-19-norpregn-20-yn-3-one, a major photodegradation product of norethindrone. Cooper GF. **Steroids** 1988 May–Jun;51(5–6):459–64

PHARMACOKINETICS

Pharmacokinetics of three bioequivalent norethindrone/mestranol-50 micrograms and three norethindrone/ethinyl estradiol-35 micrograms OC formulations: are "low-dose" pills really lower? Brody SA, et al. **Contraception** 1989 Sep;40(3):269–84

Effect of food-restriction on steady state kinetics and tissue distribution of norethindrone and levonorgestrel in rabbits. Nair KM, et al. **Indian J Exp Biol** 1988 May;26(5):392–6

Pharmacokinetics of norethisterone from two different combination contraceptive pills in Indian women. Sivakumar B, et al. **Indian J Physiol Pharmacol** 1989 Jan–Mar;33(1):10–4

PHARMACOLOGY

Prospective study of carbohydrate metabolism in women using a triphasic oral contraceptive containing norethindrone and ethinyl estradiol for 3 months. Spellacy WN, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):877–9

Effect of low-dose oral contraceptives on natural killer cell activity. Baker DA, et al. **Contraception** 1989 Jan; 39(1):119–24

Effect of some oral contraceptives on serum concentrations of sex hormone binding globulin and ceruloplasmin. Song S, et al. **Contraception** 1989 Apr;39(4):385–99

Influence of different stimulation treatments on oocyte characteristics and in-vitro fertilizing ability. Testart J, et al. **Hum Reprod** 1989 Feb;4(2):192–7

The inductive effects of progestogens on aromatase activity in stromal cells of human uterine endometrium. Yamamoto T, et al. **J Endocrinol Invest** 1989 Mar;12(3):201–4

Kinetic studies of inhibition of estradiol 2- and 16 alpha-hydroxylases with 17 alpha-ethynyl and 17 beta-cyano steroids: preferential inhibition of the 16 alpha-hydroxylase. Numazawa M, et al. **J Steroid Biochem** 1989 Jan;32(1A):85–90

[Regression of mullerian ducts in the female chick embryo treated by norethindrone and gonadotropins] Stoll R, et al. **C R Soc Biol (Paris)** 1988;182(6):579–83 (Eng. Abstr.) **(Fre)**

[Intra-individual comparison of the long term effect of Non-Ovlon on caffeine pharmacokinetics] Meyer FP, et al. **Zentralbl Gynakol** 1988;110(22):1449–54 (Eng. Abstr.) **(Ger)**

[Effect of the hormonal estrogen–progestagen preparation Loveston on gland cells of the endometrium in the rat] Sliwa W, et al. **Ginekol Pol** 1988 Nov;59(11):661–7 (Eng. Abstr.) **(Pol)**

THERAPEUTIC USE

Treatment of malignancy-associated hypercalcemia with norethisterone: a case report. Anderson CS, et al. **Aust N Z J Med** 1989 Feb;19(1):51–4

[Single-hormone prophylaxis of uterine hemorrhages in the premenopause] Rachev E. **Akush Ginekol (Sofiia)** 1989; 28(2):75–8 (Eng. Abstr.) **(Bul)**

[Norethisterone in the treatment of hot flushes] Presl J. **Cesk Gynekol** 1988 Jul;53(6):440–2 **(Cze)**

[Treatment of mastodynia using Monogest] Vachoušek J, et al. **Cesk Gynekol** 1989 Mar;54(2):110–2 **(Cze)**

[The effect of norkolut on immune system status in patients with dyshormonal myocardial dystrophy and hyperplastic processes of the uterus] Khait OV, et al. **Vrach Delo** 1989 Feb;(2):21–4 (Eng. Abstr.) **(Rus)**

NORETHISTERONE see **NORETHINDRONE**

NORETHYNODREL

TOXICITY

Chlamydial salpingitis in female guinea pigs receiving oral contraceptives. Barron AL, et al. **Sex Transm Dis** 1988 Jul–Sep;15(3):169–73

NORFENFLURAMINE see under **FENFLURAMINE**

NORFLOXACIN

Spectrophotometric determination of trace amounts of iron(III) with norfloxacin as complexing reagent. Issopoulos PB. **Analyst** 1989 May;114(5):627–30

ADMINISTRATION & DOSAGE

A norfloxacin dose finding study for selective decontamination of the digestive tract in pigs. Van der Waaij LA, et al. **Epidemiol Infect** 1989 Feb;102(1):93–103

Single dose oral norfloxacin or intramuscular spectinomycin to treat gonorrhoea (PPNG and non-PPNG infections): analysis of efficacy and patient preference. Panikabutra K, et al. **Genitourin Med** 1988 Aug;64(4):235–40

Clinical and microbiological efficacy of a single dose of norfloxacin in the treatment of chancroid. Ariyarit C, et al. **Scand J Infect Dis Suppl** 1988;56:55–8

Norfloxacin and cyclosporine—a safe combination [letter] Jadoul M, et al. **Transplantation** 1989 Apr;47(4):747–8

ADVERSE EFFECTS

Norfloxacin and warfarin [letter] Linville T, et al. **Ann Intern Med** 1989 May 1;110(9):751–2

The subcorneal pustular drug eruption: an example induced by norfloxacin. Shelley ED, et al. **Cutis** 1988 Jul;42(1):24–7

Norfloxacin hypersensitivity [letter] Burks EJ. **DICP** 1989 Jan;23(1):90

Arthritis induced by norfloxacin [letter] Jeandel C, et al. **J Rheumatol** 1989 Apr;16(4):560–1

ANALOGS & DERIVATIVES

Antibacterial activity and pharmacokinetics in mice of two new derivatives of norfloxacin. Balsari A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):176–8

1-Chloropiperazinic derivative (ER 311) of norfloxacin: antibacterial activity in vitro and pharmacokinetic properties in mice. Dubini F, et al. **Chemioterapia** 1987 Jun; 6(2 Suppl):178–80

Synthesis of some derivatives of 1-ethyl-6-fluoro-1,4-dihydro-4-oxo-7-(piperazin-1-yl)-3-quino linecarbo xylic acid (norfloxacin) as potential antibacterial agents. Pappalardo M, et al. **Farmaco [Sci]** 1988 Jun;43(6):489–99

Studies on prodrugs. 11. Synthesis and antimicrobial activity of N-[(4-methyl-5-methylene-2-oxo-1,3-dioxolan-4-yl)= oxy]norfloxacin . Kondo H, et al. **J Med Chem** 1989 Mar; 32(3):671–4

Studies on prodrugs. 10. Possible mechanism of N-dealkylation of N-masked norfloxacins having several active methylene groups. Kondo H, et al. **J Med Chem** 1989 Mar;32(3):679–82

Synthesis of novel 5-fluoro analogues of norfloxacin and ciprofloxacin. Moran DB, et al. **J Med Chem** 1989 Jun; 32(6):1313–8

ANALYSIS

Fluorimetric determination of norfloxacin in plasma and urine samples after thin-layer chromatographic separation. Warlich R, et al. **Arzneimittelforschung** 1989 Jun; 39(6):656–8

Effect of absorbents on permeation of norfloxacin. Singh GN, et al. **Pharmazie** 1988 Oct;43(10):699–700

METABOLISM

Endogenous active efflux of norfloxacin in susceptible Escherichia coli. Cohen SP, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1187–91

Norfloxacin binds to human fecal material. Edlund C, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1869–74

Mechanisms of quinolone resistance in Escherichia coli: characterization of nfxB and cfxB, two mutant resistance loci decreasing norfloxacin accumulation. Hooper DC, et al. **Antimicrob Agents Chemother** 1989 Mar;33(3):283–90

Mechanism of quinolone inhibition of DNA gyrase. Appearance of unique norfloxacin binding sites in enzyme-DNA complexes. Shen LL, et al. **J Biol Chem** 1989 Feb 15;264(5):2973–8

PHARMACOKINETICS

Serum and tissue fluid norfloxacin concentrations after oral administration of the drug to healthy dogs. Walker RD, et al. **Am J Vet Res** 1989 Jan;50(1):154–7

Sucralfate reduces the gastrointestinal absorption of norfloxacin. Parpia SH, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):99–102

Chronic dose urinary and serum pharmacokinetics of norfloxacin in the elderly. Kelly JG, et al. **Br J Clin Pharmacol** 1988 Dec;26(6):787–90

Penetration of norfloxacin into abdominal wall muscle tissue [letter] Dan M, et al. **Infection** 1989 Jul–Aug;17(4):249

The pharmacokinetics of norfloxacin in the aged. MacGowan AP, et al. **J Antimicrob Chemother** 1988 Nov;22(5):721–7

Consequences of diarrhoeal disease on the pharmacokinetics of norfloxacin. Bergan T, et al. **Scand J Infect Dis Suppl** 1988;56:11–3

[Penetration of norfloxacin in aqueous humor: preliminary study] Bron A, et al. **Bull Soc Ophtalmol Fr** 1988 Oct; 88(10):1217–9 (Eng. Abstr.) **(Fre)**

[Comparison of enoxacin, ofloxacin, and norfloxacin concentration in human benign prostatic tissue] Yasumoto R, et al. **Hinyokika Kiyo** 1988 Aug;34(8):1519–21 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Effect of norfloxacin, a new quinolone, on GABA modulation of TRH-induced TSH release from perifused rat pituitaries. Roussel JP, et al. **Acta Endocrinol (Copenh)** 1988 Dec;119(4):481–7

Bactericidal and cytotoxic effect of combination of norfloxacin and 5-fluorouracil. Castelli M, et al. **Anticancer Res** 1989 Jan–Feb;9(1):49–52

The bactericidal effect on Pseudomonas strains of adriamycin associated with quinolones. Castelli M, et al. **Anticancer Res** 1989 May–Jun;9(3):611–4

Effect of norfloxacin on theophylline metabolism. Davis RL, et al. **Antimicrob Agents Chemother** 1989 Feb;33(2):212–4

Increasing rates of in vitro resistance to ciprofloxacin and norfloxacin in isolates from urine specimens [letter] Desgrandchamps D, et al. **Antimicrob Agents Chemother** 1989 Apr;33(4):595–6

Development of resistance to nalidixic acid and the fluoroquinolones after the introduction of norfloxacin and ofloxacin. Kresken M, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1285–8

The in vitro activity of norfloxacin, ofloxacin and ciprofloxacin and other antibiotics in current use against Neisseria gonorrhoeae. Melby K, et al. **APMIS** 1989 Apr; 97(4):347–50

In vitro activity of ciprofloxacin, norfloxacin, and ofloxacin against multi-resistant Enterobacteriaceae. Niculescu E, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):132–3

In vitro susceptibility of urinary pathogens to quinolones

compared to other antimicrobial agents. Osman LM, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):147–8

The comparative in vitro activity of ofloxacin (RU 43 280) and other quinolone derivatives against 722 bacteria of clinical interest. Santos Ferreira M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):145–7

Antibacterial activity after a single-dose of norfloxacin, ofloxacin and pipemidic acid detected in urine of volunteers. Cruciani M, et al. **Drugs Exp Clin Res** 1988; 14(8):533–7

Antimicrobial activity and interaction of pefloxacin and its principal metabolites. Collaborative Antimicrobial Susceptibility Testing Group. Jones RN.
Eur J Clin Microbiol Infect Dis 1989 Jun;8(6):551–6

Comparative in vitro activity of norfloxacin against resistant Neisseria gonorrhoeae. Ponticas S, et al.
Eur J Clin Microbiol Infect Dis 1989 Jul;8(7):626–8

Inhibitory effect of enoxacin, ofloxacin and norfloxacin on renal excretion of theophylline in humans. Sano M, et al. **Eur J Clin Pharmacol** 1989;36(3):323–4

Effects of enoxacin, ofloxacin and norfloxacin on theophylline disposition in humans. Sano M, et al.
Eur J Clin Pharmacol 1988;35(2):161–5

In-vitro activity of fleroxacin compared with three other quinolones. Bremner DA, et al.
J Antimicrob Chemother 1988 Oct;22 Suppl D:19–23

Laboratory assessment of lomefloxacin (SC-47111) in comparison with norfloxacin. Edwards R, et al.
J Antimicrob Chemother 1988 Dec;22(6):885–90

Effect of method, medium, pH and inoculum on the in-vitro antibacterial activities of fleroxacin and norfloxacin. Hohl P, et al. **J Antimicrob Chemother** 1988 Oct;22 Suppl D:71–80

Fleroxacin: in-vitro activity worldwide against 20,807 clinical isolates and comparison to ciprofloxacin and norfloxacin. Paganoni R, et al. **J Antimicrob Chemother** 1988 Oct;22 Suppl D:3–17

Clinical impact of newer quinolones: influence on normal microflora. Nord CE, et al. **J Chemother** 1989 Feb; 1(1):18–23 (17 ref.)

Effect of quinolone antimicrobials on theophylline pharmacokinetics. Prince RA, et al. **J Clin Pharmacol** 1989 Jul;29(7):650–4

Failure of norfloxacin to eradicate intestinal colonization of non-typhoidal salmonella in infants. Sirinavin S, et al.
J Med Assoc Thai 1989 Jan;72 Suppl 1:183–6

Antibacterial activity of norfloxacin against bacterial isolates from the urinary tract. Qadri SM, et al.
J Natl Med Assoc 1989 Apr;81(4):382–5

Modification of norfloxacin inhibition of DNA gyrase induced by a 28 KDal DNA binding protein. Landini P, et al. **Microbiologica** 1989 Jul;12(3):247–55

Case 43–1988 [letter] Neu HC. **N Engl J Med** 1989 Apr 27; 320(17):1148

In vitro selection of Escherichia coli mutants with decreased susceptibility to norfloxacin. Forsgren A, et al.
Scand J Infect Dis 1988;20(5):531–4

Manipulation of the oropharyngeal and intestinal microflora by norfloxacin: microbiological and clinical aspects. Edlund C, et al. **Scand J Infect Dis Suppl** 1988;56:14–21 (23 ref.)

[The antibacterial effect of ciprofloxacin, ofloxacin and norfloxacin in vitro] Rotter M, et al.
Zentralbl Bakteriol Mikrobiol Hyg [A] 1988 Nov; 270(1–2):145–52 (Eng. Abstr.) **(Ger)**

[Current antimicrobial agent series III: Norfloxacin] Ueda Y, et al. **Jpn J Antibiot** 1988 Jul;41(7):782–96 (75 ref.) **(Jpn)**

THERAPEUTIC USE

Norfloxacin: a new drug in the treatment of falciparum malaria. Sarma PS. **Ann Intern Med** 1989 Aug 15; 111(4):336–7

Comparison of single-dose treatment with norfloxacin and standard 5-day treatment with trimethoprim–sulfamethoxazole for acute shigellosis in adults. Gotuzzo E, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):1101–4

Safety and efficacy of topical norfloxacin versus tobramycin in the treatment of external ocular infections. Jacobson JA, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1820–4

Treatment failure of norfloxacin against Campylobacter pylori and chronic gastritis in patients with nonulcerative dyspepsia [published erratum appears in Antimicrob Agents Chemother 1989 Jul;33(7):1128] Mertens JC, et al.
Antimicrob Agents Chemother 1989 Feb;33(2):256–7

Prospective, randomized, placebo-controlled trial of norfloxacin for the prophylaxis of recurrent urinary tract infection in women. Nicolle LE, et al.
Antimicrob Agents Chemother 1989 Jul;33(7):1032–5

Double-blind, randomized comparison of 24 weeks of norfloxacin and 12 weeks of norfloxacin followed by 12 weeks of placebo in the therapy of complicated urinary tract infection. Sheehan GJ, et al.
Antimicrob Agents Chemother 1988 Aug;32(8):1292–3

Chemoprophylaxis of bacterial infections in granulocytopenic cancer patients using norfloxacin. Casali A, et al.
Chemioterapia 1988 Oct;7(5):327–9

Low-dose norfloxacin versus placebo for long-term prophylaxis of recurrent uncomplicated urinary tract infection. Rugendorff E, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):533–5

A study of the use of norfloxacin in prostatitis. Sheikh MA, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):529–30

Patient compliance and efficacy of low-dose, long-term prophylaxis in patients with recurrent urinary tract infection. Westenfelder M, et al. **Chemioterapia** 1987 Jun; 6(2 Suppl):530–2

Development of Pseudomonas aeruginosa resistance to norfloxacin during therapy. Rowen RC, et al.
Drug Intell Clin Pharm 1988 Oct;22(10):773–6

Clinical trial of norfloxacin in the treatment of uncomplicated gonococcal urethritis: preliminary report. Cristiano P.
Drugs Exp Clin Res 1989;15(1):33–5

Postoperative prophylaxis with norfloxacin in patients requiring bladder catheters. Verbrugh HA, et al.
Eur J Clin Microbiol Infect Dis 1988 Aug;7(4):490–4

Treatment of uncomplicated gonorrhoea in male with norfloxacin. Dey SK, et al. **Indian J Dermatol** 1988 Jul; 33(3):45–7

Prophylactic co-trimoxazole versus norfloxacin in neutropenic children—perspective randomized study. Cruciani M, et al. **Infection** 1989 Mar–Apr;17(2):65–9

Comparative activities of norfloxacin and fleroxacin in experimental infections due to Salmonella typhimurium and Escherichia coli. Hof H, et al. **J Antimicrob Chemother** 1988 Oct;22 Suppl D:123–7

Prevention of catheter-associated gram-negative bacilluria with norfloxacin by selective decontamination of the bowel and high urinary concentration. Vollaard EJ, et al.
J Antimicrob Chemother 1989 Jun;23(6):915–22

Short-term self-treatment of travellers' diarrhoea with norfloxacin: a placebo-controlled study. Wiström J, et al.
J Antimicrob Chemother 1989 Jun;23(6):905–13

Two new fluoroquinolones: ciprofloxacin and norfloxacin. Karb VB. **J Neurosci Nurs** 1988 Oct;20(5):327–28 (5 ref.)

Norfloxacin in wound infections [letter] Mirza RA, et al. **JPMA** 1988 May;38(5):151

Double-blind comparison of 3-day versus 7-day treatment with norfloxacin in symptomatic urinary tract infections. The Inter-Nordic Urinary Tract Infection Study Group.
Scand J Infect Dis 1988;20(6):619–24

Norfloxacin for prevention of bacterial infections during severe granulocytopenia after bone marrow transplantation. Schmeiser T, et al. **Scand J Infect Dis** 1988;20(6):625–31

Norfloxacin in the treatment of gonorrhea due to penicillinase and non-penicillinase producing Neisseria gonorrheae: a review. Lee CT, et al. **Scand J Infect Dis Suppl** 1988; 56:49–54 (30 ref.)

Norfloxacin versus co-trimoxazole in the treatment of acute bacterial diarrhoea: a placebo controlled study. Lolekha S, et al. **Scand J Infect Dis Suppl** 1988;56:35–45

Norfloxacin versus co-trimoxazole for the treatment of upper urinary tract infections: a double blind trial. Tungsanga K, et al. **Scand J Infect Dis Suppl** 1988;56:28–34

Norfloxacin in the treatment of infections caused by Salmonella typhi. Velmonte MA, et al.
Scand J Infect Dis Suppl 1988;56:46–8

Treatment of urinary tract infections in Hong Kong: a comparative study of norfloxacin and co-trimoxazole. Wong WT, et al. **Scand J Infect Dis Suppl** 1988;56:22–7

Suppressive therapy with norfloxacin in patients with recurrent and/or complicated urinary tract infection. Falck L, et al. **Scand J Urol Nephrol Suppl** 1988;110:307–11

Bacterial infections in liver transplant patients under selective decontamination with norfloxacin. Cuervas-Mons V, et al.
Transplant Proc 1989 Jun;21(3):3558

[A preliminary study of norfloxacin in the treatment of trachoma] Nabli B, et al.
Rev Int Trach Pathol Ocul Trop Subtrop Sante Publique 1988;65(1–2):123–7 (Eng. Abstr.) **(Fre)**

[Clinical study of intestinal infections treated with norfloxacin] Bayeli PF, et al. **Clin Ter** 1987 Jan 31; 120(2):135–8 (Eng. Abstr.) **(Ita)**

[Aztreonam vs norfloxacin: a comparative study of the treatment of urinary tract infections in ambulatory and hospitalized patients] Puppo P, et al. **Clin Ter** 1989 Apr 30;129(2):113–21 (Eng. Abstr.) **(Ita)**

[Treatment of acute bacterial gastroenteritis with norfloxacin] Dal Monte PR, et al. **Minerva Dietol Gastroenterol** 1988 Oct–Dec;34,4):269–71 (Eng. Abstr.) **(Ita)**

[Etiopathogenetic interpretation of urinary tract infections associated with pelvic inflammatory disease and a clinico-therapeutic study of the effects of norfloxacin] Surico N, et al. **Minerva Ginecol** 1988 Mar;40(3):183–92 (Eng. Abstr.) **(Ita)**

[Comparative evaluation of norfloxacin and cinoxacin in the therapy of complicated infections of the urinary tract] Cristiano P, et al. **Minerva Med** 1989 Apr;80(4):393–5 (Eng. Abstr.) **(Ita)**

[Norfloxacin in chronic renal insufficiency] Di Veroli C, et al. **Riv Eur Sci Med Farmacol** 1987 Mar;9(1):95–9 (Eng. Abstr.) **(Ita)**

[Treatment of gonococcal urethritis with norfloxacin] Mitsuya H, et al. **Hinyokika Kiyo** 1989 Apr;35(4):705–9 (Eng. Abstr.) **(Jpn)**

[A comparative study on lomefloxacin and norfloxacin in the treatment of acute uncomplicated cystitis] Ohmori H, et al. **Jpn J Antibiot** 1989 Apr;42(4):1025–50 (Eng. Abstr.) **(Jpn)**

[Effectiveness and tolerance of norfloxacin compared with trimethoprim-sulfamethoxazole in the treatment of uncomplicated urinary tract infections] Ballesteros JJ, et al. **Rev Med Univ Navarra** 1988 Jul–Sep;32(3):135–7 (Eng. Abstr.) **(Spa)**

[A retrospective study: treatment of Salmonella infections with quinoline preparations] Ode B, et al.
Lakartidningen 1988 Sep 14;85(37):2941, 2945 **(Swe)**

TOXICITY

Embryotoxicity studies of norfloxacin in cynomolgus monkeys: I. Teratology studies and norfloxacin plasma concentration in pregnant and nonpregnant monkeys. Cukierski MA, et al. **Teratology** 1989 Jan;39(1):39–52

NORGESTREL

Norplant contraceptive subdermal implants: two-year experience in Singapore. Singh K, et al. **Adv Contracept** 1989 Mar;5(1):13–21

Bleeding patterns and acceptability among Norplant users in two Asian countries. Balogh SA, et al. **Contraception** 1989 May;39(5):541–53

Mini-pill in lactating women. Canto TE, et al.
Contraception 1989 Jun;39(6):589–601

ADMINISTRATION & DOSAGE

Serum testosterone response to low dose dexamethasone and combined contraceptive pill in subgroups of patients with polycystic ovary syndrome. Prelević G, et al.
Acta Med Iugosl 1989;43(2):113–20

Effect of addition oral contraceptives in chicks diet. Abdelhamid AM, et al. **Arch Tierernahr** 1988 Sep; 38(9):757–66

Ethinyl oestradiol and D-norgestrel is an effective emergency postcoital contraceptive: a report of its use in 1,200 patients in a family planning clinic. Bagshaw SN, et al. **Aust N Z J Obstet Gynaecol** 1988 May;28(2):137–40

Are fixed-dose oestrogen/progestogen combinations ideal for all HRT users? Fraser D, et al. **Br J Obstet Gynaecol** 1989 Jul;96(7):776–82

Randomized clinical trial with intrauterine devices (levonorgestrel intrauterine device (LNG), CuT 380Ag, CuT 220C and CuT 200B). A 36-month study. Indian Council of Medical Research Task Force on IUD. Baveja R, et al. **Contraception** 1989 Jan;39(1):37–52

Transdermal delivery of levonorgestrel. VII. In vivo studies. Friend DR, et al. **Contraception** 1989 Jul;40(1):73–80

Acceptability of an experimental intracervical device: results of a study controlling for selection bias. Shain RN, et al.
Contraception 1989 Jan;39(1):73–84

Norplant-2 rods: one year experience in Singapore. Singh K, et al. **Contraception** 1988 Oct;38(4):429–40

Plasma glucose and insulin levels in women using a levonorgestrel-containing triphasic oral contraceptive for three months. Spellacy WN, et al. **Contraception** 1988 Jul; 38(1):27–35 (17 ref.)

Five-year, multicenter study of a triphasic, low-dose, combination oral contraceptive. Woutersz TB, et al.
Int J Fertil 1988 Nov–Dec;33(6):406–10

Transdermal delivery of levonorgestrel. IV: Evaluation of membranes. Friend DR, et al. **J Pharm Sci** 1989 Jun; 78(6):477–80

Postcoital contraception: a family planning study. Kane LA, et al. **N Z Med J** 1989 Apr 12;102(865):151–3

Use of biphasic cyclic hormone therapy in functional bleeding disorders of adolescents (Anteovin). Kis-Csitári I. **Ther Hung** 1988;36(2):73–6

[The levonorgestrel intrauterine device] Thiery M, et al.
Geburtshilfe Frauenheilkd 1989 Feb;49(2):186–8 (Eng. Abstr.) **(Ger)**

[The behavior of cytoplasmic progesterone receptors in the cycling endometrium and the effect of hormonal contraceptives] Carol W, et al. **Zentralbl Gynakol** 1989; 111(12):793–9 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Influence of oral contraceptive treatment on blood pressure and 24-hour urinary catecholamine excretion in smoking as compared with non-smoking women. Blum M, et al.
Adv Contracept 1988 Jun;4(2):143–9

Oral contraceptives and focal nodular hyperplasia of the liver. Hagay ZJ, et al. **Arch Gynecol Obstet** 1988; 243(4):231–4

The WHO multicentre trial of the vasopressor effects of combined oral contraceptives: 1. Comparisons with IUD. Task Force on Oral Contraceptives. WHO Special Programme of Research, Development and Research Training in Human Reproduction. **Contraception** 1989 Aug; 40(2):129–45

The WHO multicentre trial of the vasopressor effects of combined oral contraceptives: 2. Lack of effect of estrogen. Task Force on Oral Contraceptives. WHO Special Programme of Research, Development and Research Training in Human Reproduction. **Contraception** 1989 Aug; 40(2):147–56

Clinical performance of a levonorgestrel-releasing intracervical contraceptive device during the first two years of use. Ratsula K. **Contraception** 1989 Feb; 39(2):187–93

The effects of Norplant on clinical chemistry in Singaporean acceptors after 1 year of use: I. Haemostatic changes. Viegas OA, et al. **Contraception** 1988 Sep;38(3):313–23

[Cytogenetic effect of the once-a-month pill] Cui YQ.
Chung Hua Fu Chan Ko Tsa Chih 1988 Jul;23(4):233–5,

254 (Eng. Abstr.) (Chi)
[Systemic lupus erythematosus during therapy with oral estrogen-progestin. Considerations apropos of a case] Gueli N, et al. **Clin Ter** 1987 May 31;121(4):299-304 (Eng. Abstr.) (Ita)

ANALOGS & DERIVATIVES

Clinical aspects of three new progestogens: desogestrel, gestodene, and norgestimate. Chez RA.
Am J Obstet Gynecol 1989 May;160(5 Pt 2):1296-300 (30 ref.)
Effects of 180 micrograms and 250 micrograms norgestimate on pituitary-ovarian function and cervical mucus. Eyong E, et al. **Fertil Steril** 1988 Nov;50(5):756-60
[A comparative study on the antifertility action of levonorgestrel oxime and levonorgestrel] Liu CQ, et al. **Yao Hsueh Hsueh Pao** 1988 Apr;23(4):252-7 (Eng. Abstr.) (Chi)

ANALYSIS

Automated stability-indicating high-performance liquid chromatographic assay for ethinyl estradiol and (levo)norgestrel tablets. Reif VD, et al. **Pharm Res** 1987 Feb;4(1):54-8

ANTAGONISTS & INHIBITORS

Estradiol is a potent inhibitor of the hypotriglyceridemic effect of levonorgestrel in female rats. Taves EH, et al. **Lipids** 1989 Jul;24(7):669-72

BLOOD

Plasma levonorgestrel levels and ovarian function during the use of a levonorgestrel-releasing intracervical contraceptive device. Ratsula K, et al. **Contraception** 1989 Feb;39(2):195-204
"Free levonorgestrel index" (FLI) is a better parameter than plasma level of levonorgestrel for predicting risk of pregnancy during use of subdermal contraceptive implants releasing levonorgestrel. Olsson SE, et al. **Steroids** 1988 Oct;52(4):407-8

METABOLISM

Selectivity in progesterone and androgen receptor binding of progestagens used in oral contraceptives. Kloosterboer HJ, et al. **Contraception** 1988 Sep;38(3):325-32
The effects of Norplant on clinical chemistry in Singaporean acceptors after 1 year of use: metabolic changes. Viegas OA, et al. **Contraception** 1988 Jul;38(1):79-89
Reduced anaerobic glycolysis in oral contraceptive users. Vijayalakshmi R, et al. **Contraception** 1988 Jul;38(1):91-7
Binding of levonorgestrel, norethisterone and desogestrel to human sex hormone binding globulin and influence on free testosterone levels. Nilsson B, et al.
Gynecol Obstet Invest 1989;27(3):151-4

PHARMACOKINETICS

Clearance of levonorgestrel from the circulation following removal of NORPLANT subdermal implants. Croxatto HB, et al. **Contraception** 1988 Nov;38(5):509-23
Effect of food-restriction on steady state kinetics and tissue distribution of norethindrone and levonorgestrel in rabbits. Nair KM, et al. **Indian J Exp Biol** 1988 May;26(5):392-6

PHARMACOLOGY

Relationship between central cholinergic and GABAergic neurotransmitters activity in the steroid treated rat. Das PC, et al. **Acta Physiol Hung** 1988;72(3-4):355-8
Pituitary-ovarian activity when switching from various monophasic pills to a triphasic pill. Eyong E, et al.
Adv Contracept 1989 Mar;5(1):1-11
Clinical evaluation of the Capronor contraceptive implant: preliminary report. Darney PD, et al.
Am J Obstet Gynecol 1989 May;160(5 Pt 2):1292-5
Norplant: subdermal implant system for long-term contraception. Shoupe D, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 2):1286-92 (29 ref.)
Salivary and plasma free testosterone and androstenedione levels in women using oral contraceptives containing desogestrel or levonorgestrel. Swinkels LM, et al.
Ann Clin Biochem 1988 Jul;25 (Pt 4):354-9
Contraceptive steroid effects on lipids and lipoproteins in cynomolgus monkeys. Parks JS, et al. **Arteriosclerosis** 1989 Mar-Apr;9(2):261-8
Hepatic actions of levonorgestrel: correlations between biochemical and morphological findings. Kretzschmar M, et al. **Chem Biol Interact** 1989;70(1-2):157-66
Estradiol plasma levels during long-term treatment with Norplant subdermal implants. Croxatto HB, et al.
Contraception 1988 Oct;38(4):465-75
Effect of Norplant contraceptive use on hemoglobin, packed cell volume and menstrual bleeding patterns. Fakeye O, et al. **Contraception** 1989 Mar;39(3):265-74
The effect of levonorgestrel administered in large doses at different stages of the cycle on ovarian function and endometrial morphology. Landgren BM, et al.
Contraception 1989 Mar;39(3):275-89
Effect of norgestrel on development of mouse pre-embryos. Logan J, et al. **Contraception** 1989 May;39(5):555-61
Comparative metabolic effects of three types of combined oral contraceptive pills in Chinese women. Prasad RN, et al. **Contraception** 1989 Jan;39(1):21-35
Patterns of bleeding and body iron stores during the use of a levonorgestrel-releasing intracervical device. Ratsula K, et al. **Contraception** 1988 Sep;38(3):333-40
Two-year follow-up of changes in clinical chemistry in Singaporean Norplant-2 rod acceptors: haemostatic changes. Singh K, et al. **Contraception** 1989 Feb;39(2):155-64
The effects of Norplant-2 rods on clinical chemistry in Singaporean acceptors after 1 year of use: haemostatic changes. Singh K, et al. **Contraception** 1988 Oct;38(4):441-51
Two-year follow-up of changes in clinical chemistry in Singaporean Norplant acceptors: haemostatic changes. Singh K, et al. **Contraception** 1989 Feb;39(2):137-46
The effects of Norplant-2 rods on clinical chemistry in Singaporean acceptors after 1 year of use: metabolic changes [published erratum appears in Contraception 1988 Dec;38(6):729] Singh K, et al. **Contraception** 1988 Oct;38(4):453-63
Two-year follow-up of changes in clinical chemistry in Singaporean Norplant-2 rod acceptors: metabolic changes. Singh K, et al. **Contraception** 1989 Feb;39(2):147-54
Two-year follow-up of changes in clinical chemistry in Singaporean Norplant acceptors: metabolic changes. Singh K, et al. **Contraception** 1989 Feb;39(2):129-36
Effect of some oral contraceptives on serum concentrations of sex hormone binding globulin and ceruloplasmin. Song S, et al. **Contraception** 1989 Apr;39(4):385-99
Metabolic effects of two low-dose triphasic oral contraceptives containing ethinyl estradiol and levonorgestrel or gestodene. Lepot MR, et al.
Int J Fertil 1987;32 Suppl:15-20
Effects of combined estrogen and progestin administration on plasma lipoprotein metabolism in postmenopausal women [published erratum appears in J Clin Invest 1989 May;83(5):following 1782] Wolfe BM, et al.
J Clin Invest 1989 Jan;83(1):40-5
Comparative effects of combined oral contraceptives containing desogestrel or levonorgestrel on serum lipids, lipoproteins and sex hormone binding globulin in healthy women. Sirimongkolkasem R, et al. **J Med Assoc Thai** 1988 Jul;71 Suppl 2:68-73
Effect of levonorgestrel and ethinyloestradiol on vasoconstriction in rat isolated vasculature. Byrne KB, et al. **J Pharm Pharmacol** 1988 Aug;40(8):562-6
Effect of orally administered oestrogens on gonadotrophin levels in post-menopausal women. Aedo AR, et al.
Maturitas 1989 Jun;11(2):147-57
Effect of orally administered oestrogens on circulating oestrogen profiles in post-menopausal women. Aedo AR, et al. **Maturitas** 1989 Jun;11(2):159-68
Atherogenic and protective effects of sex steroids on the monkey cardiovascular system. Clarkson TB, et al.
Postgrad Med 1989 Apr;Spec No:69-73; discussion 89-90
Does endogenous sex hormone binding globulin influence the contraceptive effect of levonorgestrel? Cekan SZ.
Steroids 1988 Oct;52(4):399-400
[Comparison of the effect of various dosages of anordrin and levonorgestrel on the pituitary responsiveness to GnRH] Lu WY, et al. **Sheng Li Hsueh Pao** 1988 Jun;40(3):271-7 (Eng. Abstr.) (Chi)
[A comparative study on the antifertility action of levonorgestrel oxime and levonorgestrel] Liu CQ, et al. **Yao Hsueh Hsueh Pao** 1988 Apr;23(4):252-7 (Eng. Abstr.) (Chi)

STANDARDS

Phase III-clinical trial with Norplant-2 (covered rods). Report of a 24-month study. National Programme of Research in Human Reproduction. Division of Human Resource Development Research Indian Council of Medical Research Ansari Nagar, New Delhi, India. Chaudhury N, et al. **Contraception** 1988 Dec;38(6):659-73
A two-year study of acceptability, side effects, and effectiveness of Norplant and Norplant-2 implants in the People's Republic of China. Gu SJ, et al. **Contraception** 1988 Dec;38(6):641-57

THERAPEUTIC USE

Clinical and metabolic effects of gestodene and levonorgestrel. Rabe T, et al. **Int J Fertil** 1987;32 Suppl:29-44
Premenstrual syndrome and oral contraceptives of different character. Hetényi G. **Ther Hung** 1988;36(4):170-3

NORGESTRIENONE see under **NORPREGNATRIENES**

NORLEUCINE see under **AMINOCAPROIC ACIDS**

NORMAL RANGE see **REFERENCE VALUES**

NORMAL SERUM GLOBULIN THERAPY see **IMMUNIZATION, PASSIVE**

NORMAL VALUES see **REFERENCE VALUES**

NORMETANEPHRINE

BLOOD

Noradrenergic activity and silent ischaemia in hypertensive patients with stable angina: effect of metoprolol. Lee DD, et al. **Lancet** 1989 Feb 25;1(8635):403-6
[Plasma normetanephrine and metanephrine levels and their relationship to norepinephrine and epinephrine] Yamaya K, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Jul 20;64(7):573-81 (Eng. Abstr.) (Jpn)

URINE

[Biochemical diagnosis of pheochromocytoma by determining normetanephrine and metanephrine concentrations in single voided urine] Jibiki K, et al.
Nippon Naibunpi Gakkai Zasshi 1988 Aug 20;64(8):707-16 (Eng. Abstr.) (Jpn)

NORMETHANDROLONE

METABOLISM

In vitro metabolism of 7 alpha-methyl-19-nortestosterone by rat liver, prostate, and epididymis. Agarwal AK, et al.
Endocrinology 1988 Nov;123(5):2187-93

NORPREGNADIENES

PHARMACOKINETICS

Uptake of three [3H]progestins by target tissues in vivo: implications for the design of diagnostic imaging agents. Carlson KE, et al. **Int J Rad Appl Instrum [B]** 1988;15(4):403-8

PHARMACOLOGY

Comment on 'Difference between R5020 and the anti progestin RU486 in antiproliferative effects on human breast cancer cells' [letter] Moore MR.
Breast Cancer Res Treat 1988 Sep;12(1):81-2
Inhibition of casein synthesis by progestagens in vitro: modulation in relation to concentration of hormones that synergize with prolactin. Jahn GA, et al.
J Steroid Biochem 1989 Mar;32(3):373-9
Transformation of human progesterone receptor in the presence of the progestin (R5020) and the antiprogestin (RU486). Miller MM, et al. **J Steroid Biochem** 1988 Nov;31(5):777-83
Comparative effects of 17 beta-estradiol, progestin R5020, tamoxifen and RU38486 on lactate dehydrogenase activity in MCF-7 human breast cancer cells. Thomas M, et al.
J Steroid Biochem 1989 Feb;32(2):271-7
The effects of the addition of nomegestrol acetate to post-menopausal oestrogen therapy. Fraser DI, et al.
Maturitas 1989 Mar;11(1):21-34
Estrogen and progesterone receptor-binding sites on the chicken vitellogenin II gene: synergism of steroid hormone action. Cato AC, et al. **Mol Cell Biol** 1988 Dec;8(12):5323-30
Regulation of estrogen receptor messenger ribonucleic acid and protein levels in human breast cancer cell lines by sex steroid hormones, their antagonists, and growth factors. Read LD, et al. **Mol Endocrinol** 1989 Feb;3(2):295-304
Human papillomavirus type 16 cooperates with activated ras and fos oncogenes in the hormone-dependent transformation of primary mouse cells. Crook T, et al.
Proc Natl Acad Sci U S A 1988 Dec;85(23):8820-4

NORPREGNATRIENES

ADVERSE EFFECTS

[Cytogenetic effect of the once-a-month pill] Cui YQ.
Chung Hua Fu Chan Ko Tsa Chih 1988 Jul;23(4):233-5, 254 (Eng. Abstr.) (Chi)

PHARMACOLOGY

Studies on quantitative morphology. XIII. Heterogeneity in the mammary gland of rats. Lõw O, et al. **Exp Pathol** 1988;34(2):105-13
Studies on the mechanism of action of danazol and gestrinone (R2323) in the rat: evidence for a masked estrogen component. Snyder BW, et al. **Fertil Steril** 1989 Apr;51(4):705-10
[Effects of gestrinone on serum lipid and lipoprotein levels in women with endometriosis] Fukuda Y, et al.
Nippon Sanka Fujinka Gakkai Zasshi 1989 May;41(5):577-84 (Eng. Abstr.) (Jpn)

THERAPEUTIC USE

Long-term treatment of leiomyomas with gestrinone. Coutinho EM, et al. **Fertil Steril** 1989 Jun;51(6):939-46
Gestrinone versus danazol in the treatment of endometriosis. Fedele L, et al. **Fertil Steril** 1989 May;51(5):781-5
[Additional experience with the treatment of endometriosis using gestrinone] Presl J. **Cesk Gynekol** 1988 Nov;53(9):679-80 (Cze)
[Antiprogestins] Göretzlehner G, et al. **Zentralbl Gynakol** 1988;110(12):766-71 (22 ref.) (Eng. Abstr.) (Ger)

NORPREGNENES

Clinical experience with an ethinyl estradiol–desogestrel oral contraceptive. Van Trappen Y, et al. **Arzneimittelforschung** 1989 Jun;39(6):717–9

ADMINISTRATION & DOSAGE

The effects of desogestrel and ethinylestradiol combination in normal and hyperandrogenic young girls: speculations on contraception in adolescence. Venturoli S, et al. **Acta Eur Fertil** 1988 May–Jun;19(3):129–34

Ethinylestradiol and desogestrel, alone or in combination with two doses of estriol. Effects on plasma proteins. Cullberg G, et al. **Acta Obstet Gynecol Scand** 1988; 67(2):167–9

Multicenter trial of a monophasic oral contraceptive containing ethinyl estradiol and desogestrel. Rekers H. **Acta Obstet Gynecol Scand** 1988;67(2):171–4

Clinical experience in Switzerland with the new monophasic oral contraceptive Minulet (75 mcg gestodene, 30 mcg ethinyl oestradiol). Privrel T, et al. **Br J Clin Pract** 1988 Jul;42(7):292–8

ADVERSE EFFECTS

[Oral contraception with low-dose progestagen] Heinzl S. **Med Monatsschr Pharm** 1989 Apr;12(4):123–4 **(Ger)**

BLOOD

Alterations in the serum levels of gestodene and SHBG during 12 cycles of treatment with 30 micrograms ethinylestradiol and 75 micrograms gestodene. Kuhl H, et al. **Contraception** 1988 Oct;38(4):477–86

Serum levels of 3-keto-desogestrel and SHBG during 12 cycles of treatment with 30 micrograms ethinylestradiol and 150 micrograms desogestrel. Kuhl H, et al. **Contraception** 1988 Sep;38(3):381–90

Development and application of a radioimmunoassay of the new progestagen gestodene. Nieuweboer B, et al. **Contraception** 1989 Sep;40(3):313–23

METABOLISM

Metabolism of the contraceptive steroid desogestrel by the intestinal mucosa. Madder S, et al. **Br J Clin Pharmacol** 1989 Mar;27(3):295–9

Selectivity in progesterone and androgen receptor binding of progestagens used in oral contraceptives. Kloosterboer HJ, et al. **Contraception** 1988 Sep;38(3):325–32

Gestodene: a novel synthetic progestin—characterization of binding to receptor and serum proteins. Pollow K, et al. **Contraception** 1989 Sep;40(3):325–41

Binding of levonorgestrel, norethisterone and desogestrel to human sex hormone binding globulin and influence on free testosterone levels. Nilsson B, et al. **Gynecol Obstet Invest** 1989;27(3):151–4

PHARMACOKINETICS

Serum levels of 3-keto-desogestrel and SHBG during 12 cycles of treatment with 30 micrograms ethinylestradiol and 150 micrograms desogestrel. Kuhl H, et al. **Contraception** 1988 Sep;38(3):381–90

Synthesis and evaluation of (17 alpha,20E)21-[125I]iodo-11-substituted-19-norpregna-1,3,5(10), 20-tetraene-3,17 beta-diols: the influence of 11-stereochemistry on tissue distribution of radioiodinated estrogens. Hanson RN, et al. **Int J Rad Appl Instrum [B]** 1989;16(1):3–9

PHARMACOLOGY

Comparative trial of the effects on glucose tolerance and lipoprotein metabolism of two new oral contraceptives containing gestoden and desogestrel. Rubeck Petersen K, et al. **Acta Obstet Gynecol Scand** 1988;67(1):37–41

Clinical aspects of three new progestogens: desogestrel, gestodene, and norgestimate. Chez RA. **Am J Obstet Gynecol** 1989 May;160(5 Pt 2):1296–300 (30 ref.)

Salivary and plasma free testosterone and androstenedione levels in women using oral contraceptives containing desogestrel or levonorgestrel. Swinkels LM, et al. **Ann Clin Biochem** 1988 Jul;25 (Pt 4):354–9

Clinical evaluation of a monophasic ethinylestradiol/desogestrel-containing oral contraceptive. Bilotta P, et al. **Arzneimittelforschung** 1988 Jul;38(7):932–4

Pharmacodynamics of a contraceptive vaginal ring releasing 3-keto-desogestrel. Jackson R, et al. **Contraception** 1989 Jun;39(6):653–64

Effect of two oral contraceptives containing 30 micrograms ethinylestradiol and 75 micrograms gestodene or 150 micrograms desogestrel upon various hormonal parameters. Jung-Hoffmann C, et al. **Contraception** 1988 Dec; 38(6):593–603

Comparative metabolic effects of three types of combined oral contraceptive pills in Chinese women. Prasad RN, et al. **Contraception** 1989 Jan;39(1):21–35

Gestodene: an advance in low-dose contraception. Symposium proceedings. Singapore, October 1986. **Int J Fertil** 1987;32 Suppl:1–48

Blood coagulation with a combination pill containing gestodene and ethinyl estradiol. Bonnar J, et al. **Int J Fertil** 1987;32 Suppl:21–8

Metabolic effects of two low-dose triphasic oral contraceptives containing ethinyl estradiol and levonorgestrel or gestodene. Lepot MR, et al. **Int J Fertil** 1987;32 Suppl:15–20

Pharmacological and endocrine profiles of gestodene. Spona J, et al. **Int J Fertil** 1987;32 Suppl:6–14

Comparative effects of combined oral contraceptives containing desogestrel or levonorgestrel on serum lipids, lipoproteins and sex hormone binding globulin in healthy women. Sirimongkolkasem R, et al. **J Med Assoc Thai** 1988 Jul;71 Suppl 2:68–73

[Progress in combined oral contraception: gestodene, a third generation progestogen] Belaisch J. **Rev Fr Gynecol Obstet** 1989 May;84(5):455–9 (Eng. Abstr.) **(Fre)**

[Gonadotropic function during its use and after its cessation of a triphasic combination of gestodene] Levaillant JM, et al. **Rev Fr Gynecol Obstet** 1988 Oct;83(10):655–61 (Eng. Abstr.) **(Fre)**

[Luteal insufficiency and elevation of sex-binding proteins by demegestone] Pugeat M, et al. **Rev Fr Gynecol Obstet** 1988 Jul–Sep;83(7–9):495–8 (Eng. Abstr.) **(Fre)**

[Inhibition of spontaneous uterine contractions by gestagens] Lechner W, et al. **Geburtshilfe Frauenheilkd** 1989 Mar; 49(3):259–61 (Eng. Abstr.) **(Ger)**

[Effects of the oral administration of a contraceptive on lipid balance and on the concentration of serum tocopherol] Martino F, et al. **Minerva Ginecol** 1988 Sep;40(9):557–8 (Eng. Abstr.) **(Ita)**

THERAPEUTIC USE

Short-term treatment of hirsutism related to micropolycystic ovary syndrome with a combination type oral contraceptive containing desogestrel. Sobbrio GA, et al. **Acta Eur Fertil** 1989 Jan–Feb;20(1):35–7

Steroid replacement treatment increases beta-endorphin and beta-lipotropin plasma levels in postmenopausal women. Genazzani AR, et al. **Gynecol Obstet Invest** 1988; 26(2):153–9

Clinical and metabolic effects of gestodene and levonorgestrel. Rabe T, et al. **Int J Fertil** 1987;32 Suppl:29–44

Oral contraception with a triphasic combination of gestodene and ethinyl estradiol: results of a multicenter clinical study. Skouby SO. **Int J Fertil** 1987;32 Suppl:45–8

New steroid for the climacteric syndrome. Kicovic PM. **Minerva Endocrinol** 1989 Jan–Mar;14(1):63–7

[Efficacy of oral contraceptives on acne. Apropos of a comparative study of Varnoline vs Diane in 69 women with acne] Levrier M, et al. **Rev Fr Gynecol Obstet** 1988 Jul–Sep;83(7–9):573–6 (Eng. Abstr.) **(Fre)**

[Changes in plasma levels of androgens and SHBG in patients with polycystic ovary syndrome (PCOs) treated with oral contraceptives containing desogestrel] Negri P, et al. **Minerva Ginecol** 1988 Dec;40(12):699–707 (Eng. Abstr.) **(Ita)**

[Tibolone (Livial) in the treatment of disorders of the postmenopausal period (preliminary report)] Radowicki S, et al. **Ginekol Pol** 1988 Nov;59(11):705–8 (Eng. Abstr.) **(Pol)**

NORPREGNENINOLONE see **NORETHINDRONE**

NORPROGESTERONES see under **NORPREGNENES**

NORSTEROIDS

ADVERSE EFFECTS

[Prevention of iatrogenic hyperandrogenism] Drapier-Faure E. **Rev Fr Gynecol Obstet** 1989 Jun;84(6):535–7 (10 ref.) (Eng. Abstr.) **(Fre)**

CHEMICAL SYNTHESIS

Synthetic approach to analogues of 19-norsteroids with an acyclic side chain. Drašar P, et al. **Steroids** 1989 Jan–Feb; 53(1–2):107–29

METABOLISM

Steroids in equine testes: the identification of endogenous 19-hydroxy and 19-nor neutral steroids by gas chromatography—mass spectrometry. Dumasia MC, et al. **J Endocrinol** 1989 Feb;120(2):223–9

THERAPEUTIC USE

[Single-hormone prophylaxis of uterine hemorrhages in the premenopause] Rachev E. **Akush Ginekol (Sofia)** 1989; 28(2):75–8 (Eng. Abstr.) **(Bul)**

NORSYNEPHRINE

ANALOGS & DERIVATIVES

M-octopamine injected into the paraventricular nucleus induces eating in rats: a comparison with noradrenaline-induced eating. Fletcher PJ, et al. **Br J Pharmacol** 1989 Jun;97(2):483–9

Effects of D2343, a new beta-mimetic drug, and terbutaline on spontaneous term labor. Ingemarsson I, et al. **Gynecol Obstet Invest** 1988;26(2):130–5

ANALYSIS

A radioenzymatic assay for para-tyramine and para-octopamine. Van Huysse JW, et al. **Biochem Med Metab Biol** 1988 Aug;40(1):50–60

METABOLISM

Derivatives of epinephrine, norepinephrine, octopamine and histamine formed by homogenates of Trichostrongylus colubriformis, a nematode parasite of ruminants. Frandsen JC, et al. **Comp Biochem Physiol [C]** 1988;91(2):385–7

Liquid chromatographic procedures for the analysis of compounds in the serotonergic and octopamine pathways of lobster hemolymph. Fadool DA, et al. **J Chromatogr** 1988 Oct 28;452:491–501

Prenatal ontogenesis of brain phenolamines and catecholamines in relation to their metabolizing enzymes in Roman avoider strains of rats. Coulon JF, et al. **J Neurochem** 1989 May;52(5):1418–24

Effects of aging on p- and m-octopamine, catecholamines, and their metabolizing enzymes in the rat. David JC, et al. **J Neurochem** 1989 Jul;53(1):149–54

A possible new class of octopamine receptors coupled to adenylate cyclase in the brain of the dipterous Ceratitis capitata. Pharmacological characterization and regulation of 3H-octopamine binding. Guillén A, et al. **Life Sci** 1989; 45(7):655–62

The release of 3H-noradrenaline by p- and m-tyramines and -octopamines, and the effect of deuterium substitution in alpha-position. Schönfeld CL, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Apr; 339(4):433–40

PHARMACOLOGY

Effects of octopamine on renal function in anaesthetized dogs. Levy M. **Clin Invest Med** 1988 Dec;11(6):396–402

Histochemical localization of octopamine- and proctolin-sensitive adenylate cyclase activity in a locust skeletal muscle. Swales LS, et al. **Histochemistry** 1988; 90(3):233–9

A concentration-dependent localization of octopamine-sensitive adenylate cyclase activity in locust skeletal muscle. Swales LS, et al. **Histochemistry** 1989; 92(3):255–60

Efferent neurotransmission of circadian rhythms in Limulus lateral eye. II. Intracellular recordings in vitro. Kass L, et al. **J Comp Physiol [A]** 1988 Nov;164(1):95–105

Primary afferent responses of a crustacean mechanoreceptor are modulated by proctolin, octopamine, and serotonin. Pasztor VM, et al. **J Neurobiol** 1989 Jun;20(4):234–54

Activities of octopamine and synephrine stereoisomers on octopaminergic receptor subtypes in locust skeletal muscle. Evans PD, et al. **J Pharm Pharmacol** 1988 Dec; 40(12):855–61

Pre- and postsynaptic effects of p-tyramine and p-octopamine in the prostatic portion of the rat vas deferens. Celuch SM, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jul; 338(1):39–46

Octopamine relaxes rabbit jejunal smooth muscle by selective activation of dopamine D1 receptors. Cheng JT, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):373–8

Effects of octopaminergic substances on the labellar lobe spreading response in the blowfly Protophormia terraenovae. Angioy AM, et al. **Neurosci Lett** 1989 Aug 14;103(1):103–7

[Interaction of propranolol and somatostatin with the octopaminergic response of honeybee lipemia in vivo] Bounias M. **C R Soc Biol (Paris)** 1988;182(1):37–43 (Eng. Abstr.) **(Fre)**

PHYSIOLOGY

An analysis of the inhibitory responses of dopamine and octopamine on Helix central neurons. Cox RT, et al. **Comp Biochem Physiol [C]** 1988;91(2):541–7

NORTESTOSTERONE see **NANDROLONE**

NORTRIPTYLINE

ADMINISTRATION & DOSAGE

Integrating research projects into clinical service settings. Madakasira S, et al. **Hosp Community Psychiatry** 1988 Aug; 39(8):888–90

Relapse of depressed patients after effective continuation therapy. Georgotas A, et al. **J Affective Disord** 1989 Sep–Oct;17(2):159–64

Successful treatment of acquired Tourettism and major depression. Malone DA Jr, et al. **J Geriatr Psychiatry Neurol** 1988 Jul–Sep;1(3):169–71

ADVERSE EFFECTS

Tricyclics as a possible cause of hyponatremia in psychiatric patients [letter] Miller MG. **Am J Psychiatry** 1989 Jun; 146(6):807

Treatment-emergent depression with antidepressants in panic disorder. Aronson TA. **Compr Psychiatry** 1989 May–Jun; 30(3):267–71

Naproxen reversal of nortriptyline-induced orthostatic

hypotension [letter] Forster HS. **J Clin Psychiatry** 1989 Sep;50(9):356
Electrocardiographic changes with nortriptyline and 10-hydroxynortriptyline in elderly depressed outpatients. Schneider LS, et al. **J Clin Psychopharmacol** 1988 Dec; 8(6):402-8
Use of yohimbine to counteract nortriptyline-induced orthostatic hypotension [letter] Seibyl JP, et al. **J Clin Psychopharmacol** 1989 Feb;9(1):67-8

ANALOGS & DERIVATIVES

Stereoselective disposition of racemic E-10-hydroxynortriptyline in human beings. Dahl-Puustinen ML, et al. **Clin Pharmacol Ther** 1989 Jun; 45(6):650-6
Electrocardiographic changes with nortriptyline and 10-hydroxynortriptyline in elderly depressed outpatients. Schneider LS, et al. **J Clin Psychopharmacol** 1988 Dec; 8(6):402-8
Plasma levels of nortriptyline and 10-hydroxynortriptyline and treatment-related electrocardiographic changes in the elderly depressed. McCue RE, et al. **J Psychiatr Res** 1989; 23(1):73-9
Plasma 10-hydroxynortriptyline and therapeutic response in geriatric depression. Young RC, et al. **Neuropsychopharmacology** 1988 Sep;1(3):213-5
Relationships among nortriptyline, 10-OH(E)nortriptyline, and 10-OH(Z)nortriptyline steady-state plasma levels and nortriptyline dosage. Lukey BJ, et al. **Ther Drug Monit** 1989;11(3):221-7

ANALYSIS

Milk concentrations of flupenthixol, nortriptyline and zuclopenthixol and between-breast differences in two patients. Matheson I, et al. **Eur J Clin Pharmacol** 1988; 35(2):217-20

BLOOD

High-performance liquid chromatographic quantitation of amitriptyline and nortriptyline in dialysate from plasma or serum using on-line solid-phase extraction. Svensson C, et al. **J Chromatogr** 1988 Nov 18;432:363-9
Plasma levels of nortriptyline and 10-hydroxynortriptyline and treatment-related electrocardiographic changes in the elderly depressed. McCue RE, et al. **J Psychiatr Res** 1989; 23(1):73-9
Evaluation of the EMIT amitriptyline and nortriptyline assays for the determination of serum clomipramine and desmethylclomipramine [published erratum appears in Ther Drug Monit 1989;11(4):492] Fraser AD, et al. **Ther Drug Monit** 1989;11(3):349-53
Relationships among nortriptyline, 10-OH(E)nortriptyline, and 10-OH(Z)nortriptyline steady-state plasma levels and nortriptyline dosage. Lukey BJ, et al. **Ther Drug Monit** 1989;11(3):221-7
Valpromide increases the plasma concentrations of amitriptyline and its metabolite nortriptyline in depressive patients. Vandel S, et al. **Ther Drug Monit** 1988;10(4):386-9

PHARMACOLOGY

Different cardiovascular effects of tricyclic antidepressants in the conscious and anesthetized rats. Záčková P, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):31-2

THERAPEUTIC USE

A placebo-controlled comparison of nortriptyline and phenelzine in maintenance therapy of elderly depressed patients. Georgotas A, et al. **Arch Gen Psychiatry** 1989 Sep; 46(9):783-6
Treatment of premenstrual depression with nortriptyline: a pilot study. Harrison WM, et al. **J Clin Psychiatry** 1989 Apr;50(4):136-9
Dexamethasone suppression test status does not predict differential response to nortriptyline versus amitriptyline. Rush AJ, et al. **J Clin Psychopharmacol** 1988 Dec; 8(6):421-5
Plasma 10-hydroxynortriptyline and therapeutic response in geriatric depression. Young RC, et al. **Neuropsychopharmacology** 1988 Sep;1(3):213-5
Factors affecting the delay of antidepressant effect in responders to nortriptyline and phenelzine. Georgotas A, et al. **Psychiatry Res** 1989 Apr;28(1):1-9
Open-trial maintenance pharmacotherapy in late-life depression: survival analysis. Reynolds CF 3d, et al. **Psychiatry Res** 1989 Mar;27(3):225-31
Double-blind, placebo-controlled study of nortriptyline in depressed children using a "fixed plasma level" design. Geller B, et al. **Psychopharmacol Bull** 1989;25(1):101-8
Open-trial maintenance nortriptyline in geriatric depression: survival analysis and preliminary data on the use of REM latency as a predictor of recurrence. Reynolds CF 3d, et al. **Psychopharmacol Bull** 1989;25(1):129-32

NORTROPANES

Structural requirements of Na+-dependent antidopaminergic agents: Tropapride, Piquindone, Zetidoline, and Metoclopramide. Comparison with Na+-independent ligands. Collin S, et al. **J Comput Aided Mol Des** 1989 Mar;3(1):39-53

BLOOD

Radioimmunoassay of trospiumchloride, a quaternary tropane derivative. Lehtola T, et al. **J Immunoassay** 1988; 9(3-4):297-307

NORWALK AGENT

Small round structured viruses and their spread [letter] Butcher I, et al. **Lancet** 1989 Feb 25;1(8635):443

IMMUNOLOGY

Serum immunoglobulin A response to Norwalk virus infection. Erdman DD, et al. **J Clin Microbiol** 1989 Jun; 27(6):1417-8
Development and evaluation of an IgM capture enzyme immunoassay for diagnosis of recent Norwalk virus infection. Erdman DD, et al. **J Virol Methods** 1989 Apr-May;24(1-2):57-66
Development of an enzyme immunoassay for the Hawaii agent of viral gastroenteritis. Treanor JJ, et al. **J Virol Methods** 1988 Dec;22(2-3):207-14

NOSCAPINE

ANALOGS & DERIVATIVES

[The relation between diazepam content in the serum and reaction and attention performance in healthy subjects] Uchtländer M, et al. **Pharmazie** 1988 Aug;43(8):561 **(Ger)**

ANALYSIS

Effects of system peaks in ion-pair reversed-phase liquid chromatography for noscapine and metabolites. Johansson M, et al. **J Chromatogr** 1988 Oct 28;452:241-55

BLOOD

Determination of noscapine and its metabolites in plasma by coupled-column liquid chromatography. Johansson M, et al. **J Chromatogr** 1988 Dec 28;459:301-11

PHARMACOLOGY

[The effect of the alkaloid narcotine and its diol on small intestinal transit in rats] Marazova K, et al. **Pharmazie** 1988 Aug;43(8):561-2 **(Ger)**
[The effects of noscapine and chlorpheniramine on physical dependence and antitussive activity of dihydrocodeine] Suzuki T, et al. **Yakubutsu Seishin Kodo** 1988 Jun; 8(2):337-43 (Eng. Abstr.) **(Jpn)**

NOSE

Effect of nasal airway positive pressure on upper airway size and configuration. Kuna ST, et al. **Am Rev Respir Dis** 1988 Oct;138(4):969-75
A nasal catheter for monitoring tidal carbon dioxide in spontaneously breathing patients [letter] Bonsu AK, et al. **Anesthesiology** 1989 Aug;71(2):318
Microscopic intranasal decompression of the optic nerve. Takahashi M, et al. **Arch Otorhinolaryngol** 1989; 246(2):113-6
Removal of foreign body from nose or ear. Wavde V. **Aust Fam Physician** 1988 Oct;17(10):904
Nasal sensor attachment [letter] Segstro R. **Can J Anaesth** 1989 May;36(3 Pt 1):365-6
The role of pressure flow and endoscopic assessment in successful palatal obturator revision. Riski JE, et al. **Cleft Palate J** 1989 Jan;26(1):56-62
"Traditional heritage" [letter] Jones A. **Ear Nose Throat J** 1989 Mar;68(3):265-6
A note on migraine and the nose [letter] Blau JN. **Headache** 1988 Aug;28(7):495
Control of extrathoracic airway dynamics. Schultz EL, et al. **J Appl Physiol** 1989 Jun;66(6):2839-43
Use of noseclips in pulmonary function tests. Verrall AB, et al. **J Occup Med** 1989 Jan;31(1):29-31
Intranasal prostheses, splints, and stents. Seals RR Jr, et al. **J Prosthet Dent** 1988 Nov;60(5):595-601 (17 ref.)
Nose pain and syncope in a patient with coronary artery disease. Soffer AD, et al. **Mo Med** 1987 Mar;84(3):141-2
Foreign bodies of the eye, ear, and nose. Brownstein DR, et al. **Pediatr Emerg Care** 1988 Sep;4(3):215-8
Emergency approach to the removal of foreign bodies from the eye, ear and nose [letter] Foster DL. **Pediatr Emerg Care** 1989 Mar;5(1):73
Xomed nasal splints [letter] Barnett A. **Plast Reconstr Surg** 1989 Feb;83(2):397
Nose and society. Huizing E. **Rhinology** 1988;Suppl 7:9-38
Rhinoscopy in small animal clinics: an analysis of the results of 233 rhinoscopies and 97 bacterial cultures from nasal swabs. van Oosterhout IC, et al. **Tijdschr Diergeneeskd** 1989 Apr;114 Suppl 1:94S-95S
Otolaryngological foreign bodies: a study in Jos, Nigeria. Bhatia PL. **Trop Doct** 1989 Apr;19(2):62-4
[Endoscopic naso-biliary drainage for the management of common bile duct obstruction] Chen CJ, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Aug;87(8):796-801 (Eng. Abstr.) **(Chi)**
[Trigeminal neurotrophic ulcer caused by isolated sensitive neuropathy of the trigeminal nerve] Larrègue M, et al. **Ann Dermatol Venereol** 1988;115(11):1228-9 (7 ref.) **(Fre)**
[Iatrogenic foreign body of the nose] Ritter J, et al. **Laryngorhinootologie** 1989 May;68(5):299-300 (Eng. Abstr.) **(Ger)**
[Variety of cows and sires according to types of dermatoglyphics (patterns) of the nose-labial mirror of cattle] Trofimenko AL. **Tsitol Genet** 1988 Sep-Oct; 22(5):34-9 (Eng. Abstr.) **(Rus)**

ABNORMALITIES

Inheritance of cranio-fronto-nasal syndrome [letter] Kwee ML, et al. **Am J Med Genet** 1988 Jul;30(3):841-2
Frontonasal "dysplasia," cerebral anomalies, and polydactyly: report of a new syndrome and discussion from a developmental field perspective. Toriello HV, et al. **Am J Med Genet Suppl** 1986;2:89-96 (33 ref.)
A method of bilateral cleft lip nose repair--a preliminary report. Matsuo K, et al. **Ann Acad Med Singapore** 1988 Jul;17(3):366-71
Hereditary agenesis of nasal cartilage. Surgical implications. Robinson B, et al. **Arch Otolaryngol Head Neck Surg** 1989 Aug;115(8):985-8
Aesthetic considerations related to repair of the bilateral cleft lip nasal deformity. Pigott RW. **Br J Plast Surg** 1988 Nov; 41(6):593-607
Partial trisomy of distal 8q derived from mother with mosaic 8q23.3----24.13 deletion, and relatively mild expression of trichorhinophalangeal syndrome I. Naritomi K, et al. **Hum Genet** 1989 May;82(2):199-201
Congenital absence of the nose: a case report. Cole RR, et al. **Int J Pediatr Otorhinolaryngol** 1989 May;17(2):171-7
Johanson-Blizzard syndrome. Hurst JA, et al. **J Med Genet** 1989 Jan;26(1):45-8 (18 ref.)
Holoprosencephaly: variation of expression in face and brain in three sibs. Zwetsloot CP, et al. **J Med Genet** 1989 Apr; 26(4):274-6
ENT abnormalities associated with Fraser syndrome: case report and literature review. Mina MM, et al. **J Otolaryngol** 1988 Aug;17(5):233-6
Johanson-Blizzard syndrome and hypopituitarism. Kristjansson K, et al. **J Pediatr** 1988 Nov;113(5):851-3
A fresh look at the open rhinoplasty technique. Friedman GD, et al. **Plast Reconstr Surg** 1988 Dec;82(6):973-82
Maintenance of airway patency following treatment of choanal atresia. Jones KM, et al. **Plast Reconstr Surg** 1989 Oct;84(4):669-70
Repair of cleft lip with nonsurgical correction of nasal deformity in the early neonatal period. Matsuo K, et al. **Plast Reconstr Surg** 1989 Jan;83(1):25-31
[Principles of reduction rhinoplasty] Austermann KH. **Fortschr Kiefer Gesichtschir** 1989;34:35-9 **(Ger)**
[Correction of cleft-induced nose dysplasia. A study of 75 cases] Breier T, et al. **Fortschr Kiefer Gesichtschir** 1989; 34:120-4 **(Ger)**
[Réthi opening as a surgical approach to nose correction in lip-jaw-palate clefts] Krumholz K, et al. **Fortschr Kiefer Gesichtschir** 1989;34:61-3 **(Ger)**
[Cialite preserved cartilage tissue for the correction of cleft-induced nose deformities] Michel C, et al. **Fortschr Kiefer Gesichtschir** 1989;34:124-7 **(Ger)**
[Nasomaxillary dysplasias. Morphology and development, therapy and results] Pfeifer G. **Fortschr Kiefer Gesichtschir** 1989;34:90-3 **(Ger)**
[Seckel dwarfism based on a personal case] Howanietz H, et al. **Klin Padiatr** 1989 Mar-Apr;201(2):139-41 (Eng. Abstr.) **(Ger)**
[Johanson-Blizzard syndrome] Lerner A, et al. **Harefuah** 1988 Dec 1;115(11):342-4 (19 ref.) **(Heb)**
[The nasal valve area: structure, function, clinical aspects and treatment. Sulsenti's technic for correction of valve deformities] Sulsenti G, et al. **Acta Otorhinolaryngol Ital** 1989;9 Suppl 22:1-25 (Eng. Abstr.) **(Ita)**
[Clinical syndromes in congenital defects and developmental anomalies of the nasal cavity] Shevrygin BV, et al. **Vestn Otorinolaringol** 1989 May-Jun;(3):38-41 (Eng. Abstr.) **(Rus)**

ANATOMY & HISTOLOGY

Research on predictability in cephalometry of the relationship of chin symphysis and nose-chin balance. Thomas H. **Am J Orthod Dentofacial Orthop** 1989 Aug; 96(2):110-9
Topographical projection of the septal organ to the main olfactory bulb in rats: ontogenetic study. Astic L, et al. **Brain Res** 1988 Aug 1;470(2):297-303
Evaluation of nasal patency by fiberoptic rhinoscopy. Zedalis D, et al. **J Allergy Clin Immunol** 1989 May;83(5):973-8
Descriptive morphological features of the nose--an assessment of their importance for plastic reconstruction. Macho GA. **J Forensic Sci** 1989 Jul;34(4):902-11
A lateral cephalometric analysis of nasal morphology following Le Fort I osteotomy applying photometric analysis techniques. Gassmann CJ, et al. **J Oral Maxillofac Surg** 1989 Sep;47(9):926-30
Fiberoptic rhinolaryngoscopy in primary care. A new direction for expanding in-office diagnostics. Dewitt DE. **Postgrad Med** 1988 Oct;84(5):125-6, 131-5, 138 passim
The influence of the caudal process on the formation of septal deformities. Mladina R, et al. **Rhinology** 1989 Jun; 27(2):113-8

[The tip correction phase in esthetic reduction rhinoplasty] Lévy C, et al. **Ann Otolaryngol Chir Cervicofac** 1989; 106(1):68–70 (Eng. Abstr.) (Fre)
[The base of the nose in corrective rhinoplasty] Pech A, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(7):481–91 (Eng. Abstr.) (Fre)
[From the architecture of the nose to nose–chin relations: morphology and esthetics—the finality of corrective surgery] Levignac J. **Orthod Fr** 1987;58 Pt 2:759–69 (Eng. Abstr.) (Fre)
[The hiatus semiluminaris, the infundibulum and the ostium of the sinus maxillaris, the anterior attached zone of the concha nasalis and its distance to the landmarks of the outer and inner nose] Lang J, et al. **Gegenbaurs Morphol Jahrb** 1988;134(5):637–46 (Eng. Abstr.) (Ger)
[A clinico–statistical study of dimensional relations between central and lateral incisors and the nasal basis and root] Scotti R, et al. **Minerva Stomatol** 1988 Nov;37(11):813–7 (Eng. Abstr.) (Ita)

BLOOD SUPPLY

Response of nasal (and possibly bronchial) vasculature to physical exercise [letter] Syabbalo NC. **Chest** 1989 Sep; 96(3):700–1

CYTOLOGY

Acitretin induces an increased adherence of S. aureus to epithelial cells. Lianou P, et al. **Acta Derm Venereol (Stockh)** 1989;69(4):330–2
Nasal lymphoid tissue in the rat. Spit BJ, et al. **Cell Tissue Res** 1989 Jan;255(1):193–8
[Nasal cytogram after specific nasal provocation test] Pighi GP, et al. **Acta Otorhinolaryngol Ital** 1988 Mar–Apr; 8(2):147–55 (Eng. Abstr.) (Ita)

EMBRYOLOGY

The evolutionary principles of extension of function and substitution of organs as applied to the phylembryogenesis of the nasal apparatus in Sauropsida. Slabý O. **Folia Morphol (Praha)** 1988;36(4):343–9
[Histological and experimental study on the role of F–actin in mouse facial morphogenesis] Osumi N. **Kokubyo Gakkai Zasshi** 1988 Dec;55(4):615–38 (Eng. Abstr.) (Jpn)

ENZYMOLOGY

Purification and characterization of two unique forms of cytochrome P–450 from rabbit nasal microsomes. Ding XX, et al. **Biochemistry** 1988 Nov 1;27(22):8330–7

GROWTH & DEVELOPMENT

Stereophotogrammetric study of growth and development of the nose. Burke PH, et al. **Am J Orthod Dentofacial Orthop** 1989 Aug;96(2):144–51
Growth changes in the nasal profile from 7 to 18 years of age. Meng HP, et al. **Am J Orthod Dentofacial Orthop** 1988 Oct;94(4):317–26

INJURIES

The bilobed flap for nasal reconstruction. Zitelli JA. **Arch Dermatol** 1989 Jul;125(7):957–9
Local versus general anaesthetic in the management of the fractured nose. Watson DJ, et al. **Clin Otolaryngol** 1988 Dec;13(6):491–4
The effects of nasomaxillary injury on future facial growth. Precious DS, et al. **Oral Surg Oral Med Oral Pathol** 1988 Nov;66(5):525–30
[Reconstruction of the side of the nose and the columella using an oblique forehead flap] von Szalay L. **HNO** 1988 Jul;36(7):293–4 (Eng. Abstr.) (Ger)
[Nasolabioplasty after rupture of the nasal ring in cattle] Köstlin RG, et al. **Tierarztl Prax** 1988;16(3):253–8 (Eng. Abstr.) (Ger)
[Our experience with ENT injuries in children] Păunescu C. **Rev Chir [Otorinolaringol]** 1988 Apr–Jun;33(2):119–25 (Eng. Abstr.) (Rum)
[Acupuncture analgesia in pathology and the treatment of ENT injuries] Popovici D. **Rev Chir [Otorinolaringol]** 1988 Oct–Dec;33(4):275–82 (Eng. Abstr.) (Rum)

INNERVATION

Degeneration of the primary snout sensory afferents in the cervical spinal cords following the infraorbital nerve transection in some mammals. Chang CM, et al. **Anat Anz** 1988;166(1–5):43–51
Nasal plug as an aid for cluster headaches: relevance of the nasal cycle [letter] Backon J. **Headache** 1989 Jan;29(1):60

METABOLISM

Mercury poisoning from dental amalgam through a direct nose–brain transport [letter] Störtebecker P. **Lancet** 1989 May 27;1(8648):1207

MICROBIOLOGY

Staphylococcus aureus nasal carriage in hemodialysis patients. Its role in infection and approaches to prophylaxis. Chow JW, et al. **Arch Intern Med** 1989 Jun;149(6):1258–62 (53 ref.)
Nasal carriage of Staphylococcus aureus treated with topical mupirocin (pseudomonic acid) in a children's hospital. Frank U, et al. **J Hosp Infect** 1989 Feb;13(2):117–20
Nasal carriage of sodium fusidate resistant Staphylococcus aureus [letter] Dealler S. **J R Coll Gen Pract** 1988 Apr; 38(309):171
The carrier state: methicillin–resistant Staphylococcus aureus. A hospital study "screening of hospital personnel" for nasal carriage of Staph aureus. Ashiq B. **JPMA** 1989 Feb;39(2):35–8
Persistence of infection in mice inoculated intranasally with Cryptococcus neoformans. Anderson DA, et al. **Mycopathologia** 1988 Dec;104(3):163–9
[Intranasal infection of ICR mice with herpes simplex virus type 1] Hatano A. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Apr;92(4):579–87 (Eng. Abstr.) (Jpn)

PATHOLOGY

Detailed morphometry of the nose in patients with Treacher Collins syndrome. Farkas LG, et al. **Ann Plast Surg** 1989 Mar;22(3):211–9
Dimensions of the cleft nasal airway in adults: a comparison with subjects without cleft. Hairfield WM, et al. **Cleft Palate J** 1989 Jan;26(1):9–13
Skin and bone necrosis following ecthyma gangrenosum in acute leukaemia—report of three cases. Koriech OM, et al. **Clin Exp Dermatol** 1988 Mar;13(2):78–81
Vasomotor rhinitis. Mikaelian AJ. **Ear Nose Throat J** 1989 Mar;68(3):207–10, 213–8 (40 ref.)
Bilateral nasopalatine ducts of the premaxilla. Eppley BL, et al. **Int J Oral Maxillofac Surg** 1988 Dec;17(6):360–2
MR imaging of normal nasal cycle: comparison with sinus pathology. Zinreich SJ, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):1014–9
Diagnostic imaging of the nose and paranasal sinuses. Lloyd GA. **J Laryngol Otol** 1989 May;103(5):453–60
Magnetic resonance imaging of the nose and paranasal sinuses. Lloyd GA. **J R Soc Med** 1989 Feb;82(2):84–7
Histopathological study of skin, nose, ear and tail in experimental leprosy. Vaishnavi C, et al. **Jpn J Exp Med** 1989 Apr;59(2):79–84
Histology of the cleft lip nose [letter] Pennisi VR. **Plast Reconstr Surg** 1988 Dec;82(6):1103–4

PHYSIOLOGY

Maximal relaxation rates of esophageal, nose, and mouth pressures during a sniff reflect inspiratory muscle fatigue. Koulouris N, et al. **Am Rev Respir Dis** 1989 May; 139(5):1213–7
Effect of salicylate on upper airway dilating muscles in anesthetized dogs. Oliven A, et al. **Am Rev Respir Dis** 1989 Jan;139(1):170–5
The nasocardiac reflex [letter] **Anaesthesia** 1989 Jan;44(1):73
Lower anterior face height and lip incompetence do not predict nasal airway obstruction. Hartgerink DV, et al. **Angle Orthod** 1989 Spring;59(1):17–23
Mandibular form and position related to changed mode of breathing—a five–year longitudinal study. Kerr WJ, et al. **Angle Orthod** 1989 Summer;59(2):91–6
Effects of ozone exposure: a comparison between oral and nasal breathing. Hynes B, et al. **Arch Environ Health** 1988 Sep–Oct;43(5):357–60
Treatment of patients with cleft palate in consideration of nasal breathing and speech [letter] Finkelstein Y, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):750–1
Principles of odor coding and a neural network for odor discrimination. Schild D. **Biophys J** 1988 Dec; 54(6):1011–11
Rhinomanometrical findings after septoplasty in children. Risavi R, et al. **Int J Pediatr Otorhinolaryngol** 1988 Nov; 16(2):149–55
Nasal and tracheal responses to chemical and somatic afferent stimulation in anesthetized cats. Strohl KP, et al. **J Appl Physiol** 1988 Aug;65(2):870–7
An assessment of nasal functions in control of breathing. Tanaka Y, et al. **J Appl Physiol** 1988 Oct;65(4):1520–4
The effect of rapid maxillary expansion on nasal airway resistance. White BC, et al. **J Otolaryngol** 1989 Jun; 18(4):137–43
The biophysics of nasal airflow. Scherer PW, et al. **Otolaryngol Clin North Am** 1989 Apr;22(2):265–78
Vomeronasal organ removal and female mouse aggression: the role of experience. Bean NJ, et al. **Physiol Behav** 1989 May;45(5):875–82
Vomeronasal organ and social factors affect urine marking by male mice. Labov JB, et al. **Physiol Behav** 1989 Feb; 45(2):443–7
Nasal 'flow' receptors of the rat. Tsubone H. **Respir Physiol** 1989 Jan;75(1):51–64
Improvement of the nasal airflow by the nasal dilator Nozovent. Petruson B. **Rhinology** 1988 Dec;26(4):289–92
Exact measurements of nasal resistance with the oscillation method. Ulimer S, et al. **Rhinology** 1988 Dec;26(4):263–72
Improvement of the nasal airflow by the nasal dilator Nozovent [letter] Wind J. **Rhinology** 1989 Jun;27(2):136
[Reproducibility of rhinomanometric measurements of nose breathing resistance and of x–ray cephalometric recordings of the natural head position in children] Kuster R, et al. **Fortschr Kieferorthop** 1989 Feb;50(1):43–53 (Eng. Abstr.) (Ger)
[Recent advances in rhinomanometry] Unno T. **Hokkaido Igaku Zasshi** 1989 May;64(3):219–22 (Jpn)
[Nasal resistance in school children and students] Momiyama Y. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Feb;92(2):194–206 (Eng. Abstr.) (Jpn)

PHYSIOPATHOLOGY

Partitioning of ventilation between nose and mouth: the role of nasal resistance. Leiter JC, et al. **Am J Orthod Dentofacial Orthop** 1989 May;95(5):432–8
Alterations of the eustachian tube, middle ear, and nose in rhinovirus infection. McBride TP, et al. **Arch Otolaryngol Head Neck Surg** 1989 Sep;115(9):1054–9
Stability of nasal airflow resistance. Cole P. **Clin Otolaryngol** 1989 Apr;14(2):177–82 (51 ref.)
Clinical or rhinometric assessment of the nasal airway—which is better? Hardcastle PF, et al. **Clin Otolaryngol** 1988 Oct;13(5):381–5
Common upper airway disorders in the elderly and their management. Close LG, et al. **Geriatrics** 1989 Jan; 44(1):67–8, 71–2
Rhinomanometry. Schumacher MJ. **J Allergy Clin Immunol** 1989 Apr;83(4):711–8 (50 ref.)
Aging of the upper airway and the senses of taste and smell. Leopold DA, et al. **Otolaryngol Head Neck Surg** 1989 Apr; 100(4):287–9
Computer averaged nasal resistance. Naito K, et al. **Rhinology** 1989 Mar;27(1):45–52
[The diagnosis of obstructed nasal breathing in clinical practice—a comparative study] Roloff M, et al. **Z Erkr Atmungsorgane** 1989;172(2):123–9 (Eng. Abstr.) (Ger)
[Nasal response to chemical mediators in nasal allergy] Mezawa A. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Sep; 91(9):1444–50 (Eng. Abstr.) (Jpn)
[Use of nasal flowmeter to measure nasal patency] Sakai S. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Feb;92(2):253–9 (Eng. Abstr.) (Jpn)
[Nasal respiratory resistance of nasal allergic patients in postural change] Takagi Y, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Nov;91(11):1825–30 (Eng. Abstr.) (Jpn)

RADIOGRAPHY

An unexpected cause of halitosis. Bennett JD. **J R Army Med Corps** 1988 Oct;134(3):151–2
[Radiation dosage and clinical value of conventional tomography and high resolution computerized tomography of the nose and ear] Grobovschek M, et al. **HNO** 1989 Jan;37(1):23–6 (Eng. Abstr.) (Ger)

SURGERY

Piggyback composite ear grafts in nasal ala reconstruction. Cosman B. **Ann Plast Surg** 1980 Oct;5(4):293–7
Toxic shock syndrome [letter] Kennedy KS. **Arch Otolaryngol Head Neck Surg** 1988 Dec;114(12):1477–8
The transfacial approach for combined anterior craniofacial tumor ablation. Panje WR, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar;115(3):301–7
Evaluation of single–dose cefazolin prophylaxis for toxic shock syndrome [letter] Poole MD. **Arch Otolaryngol Head Neck Surg** 1989 Feb;115(2):248
The deformity termed 'pug nose' and its correction by a simple operation. By John Orlando Roe, 1887 [classical article] Roe JO. **Arch Otolaryngol Head Neck Surg** 1989 Feb;115(2):156–7
Rhinectomy for malignant disease. A 20–year experience. Stanley RJ, et al. **Arch Otolaryngol Head Neck Surg** 1988 Nov;114(11):1307–11
Cocaine and adrenaline: a safe or necessary combination in the nose? A study to determine the effect of adrenaline on the absorption and adverse side effects of cocaine. Pfleiderer AG, et al. **Clin Otolaryngol** 1988 Dec;13(6):421–6
Emergency ear, nose, and throat procedures. Votey S, et al. **Emerg Med Clin North Am** 1989 Feb;7(1):117–54 (69 ref.)
Paranasal incision as an access for maxillary osteotomy. Hollmann K, et al. **J Craniomaxillofac Surg** 1988 Nov; 16(8):359–61
Complications in nasal and sinus surgery [letter] Nunez DA. **Laryngoscope** 1989 Aug;99(8 Pt 1):871
Microvascular approaches to nasal reconstruction. Swartz WM. **Microsurgery** 1988;9(2):150–3
Successful replantation of a bitten–off nose by microvascular anastomosis. Tajima S, et al. **Microsurgery** 1989;10(1):5–7
Ultrastructural observations on primary atrophic rhinitis. Effect of partial closure of the nostril. Elwany S. **ORL J Otorhinolaryngol Relat Spec** 1988;50(6):389–96
Rhinomanometry for preoperative and postoperative assessment of nasal obstruction. Gordon AS, et al. **Otolaryngol Head Neck Surg** 1989 Jul;101(1):20–6
Nasal support and lining: the marriage of beauty and blood supply. Burget GC, et al. **Plast Reconstr Surg** 1989 Aug; 84(2):189–202
An alternate strategy for reducing the large nasal base. Constantian MB. **Plast Reconstr Surg** 1989 Jan;83(1):41–52
A comparative study of the skin envelope of the unilateral cleft lip nose subsequent to rotation–advancement and triangular flap lip repairs. Cutting CB, et al. **Plast Reconstr Surg** 1989 Sep;84(3):409–17; discussion 418–9

Unilateral cleft lip nose correction [letter] Tolhurst DE. **Plast Reconstr Surg** 1989 Jun;83(6):1082–3

Toxic shock syndrome after nasal surgery: is prevention possible? A case report and review of the literature. de Vries N, et al. **Rhinology** 1989 Jun;27(2):125–8 (19 ref.)

The importance of antibiotic treatment in functional and aesthetic rhinosurgery. Pirsig W, et al. **Rhinology** 1988; Suppl 4:3–11

Wedge resection in rhinosurgery: a review of the literature and long-term results in a hundred cases. Pirsig W, et al. **Rhinology** 1988 Jun;26(2):77–88 (16 ref.)

A rhinological approach for the craniofacial resection of the ethmoid. Suárez Nieto C, et al. **Rhinology** 1988 Dec; 26(4):273–9

Nasal surgery: does the type of nasal pack influence the results? Watson MG, et al. **Rhinology** 1989 Jun;27(2):105–11

The value of electrocautery to the inferior turbinates in the treatment of chronic rhinitis. Olu Ibekwe A. **Trop Geogr Med** 1989 Apr;41(2):169–71

[Iatrogenic complications of nasal sinuses surgery] Peytral C, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(5):373–6 (Eng. Abstr.) **(Fre)**

NOSE DEFORMITIES, ACQUIRED

DRUG THERAPY

[Relapsing polychondritis. An infrequent cartilage disease] Bernat Gili A, et al. **An Otorrinolaringol Ibero Am** 1989; 16(1):57–68 (18 ref.) (Eng. Abstr.) **(Spa)**

ETIOLOGY

Prone or supine? [letter] Bray RJ, et al. **Arch Dis Child** 1989 Mar;64(3):429–30

A new cocaine abuse complex. Involvement of nose, septum, palate, and pharynx. Deutsch HL, et al. **Arch Otolaryngol Head Neck Surg** 1989 Feb;115(2):235–7

Wegener's granulomatosis and nasal deformity. Drake-Lee AB, et al. **Br J Clin Pract** 1988 Aug;42(8):348–50

Destruction of ala nasi and loss of columella in borderline tuberculoid leprosy—a case report. Siddappa K, et al. **Indian J Lepr** 1989 Jan;61(1):113–4

Nasal manifestations of yaws. Whittet HB, et al. **J Laryngol Otol** 1988 Dec;102(12):1147–9

"The open sky rhinoplasty" for correction of secondary cleft lip nose deformity, Technique and recent results. Tschopp HM. **Scand J Plast Reconstr Surg Hand Surg** 1988; 22(2):153–8

[Wegener's granulomatosis] Reich H. **Hautarzt** 1988 Sep; 39(9):596–7 **(Ger)**

PREVENTION & CONTROL

Use of Vicryl mesh in prevention of postrhinoplasty dorsal irregularities. Gilmore J. **Ann Plast Surg** 1989 Feb; 22(2):105–7

SURGERY

Apex columellar cartilage graft. Duarte A, et al. **Aesthetic Plast Surg** 1988 Nov;12(4):217–22

Aesthetic rhinoplasty in early adolescence. Fodor PB. **Aesthetic Plast Surg** 1988 Nov;12(4):207–16

Aesthetic aspects in reconstructive surgery of the nose. Meyer R. **Aesthetic Plast Surg** 1988 Nov;12(4):195–201

The comma-shaped tip cartilage graft. Nicolle FV. **Aesthetic Plast Surg** 1988 Nov;12(4):223–7

External septorhinoplasty—exposure for the difficult nose. Stubbs RH. **Ann Plast Surg** 1989 Apr;22(4):283–92

Median forehead island skin flap for the correction of severely collapsed nose. Zhou LY, et al. **Ann Plast Surg** 1989 Jun;22(6):516–22

Clinical application of the free flap based on the cutaneous branch of the acromiothoracic artery. Zhou LY, et al. **Ann Plast Surg** 1989 Jul;23(1):11–6

Failure of tonsil and nose surgery in adults with long-standing severe sleep apnea syndrome. Aubert-Tulkens G, et al. **Arch Intern Med** 1989 Sep; 149(9):2118–21

Repair of severe saddle nose deformity with skin inlay graft. Report of 6 cases. K'ung FH, et al. **Chin Med J** 1966 Sep; 85(9):623–8

Nasofacial defect following fibrosarcoma excision and radiotherapy [clinical conference] Burget GL, et al. **Head Neck Surg** 1988 May-Jun;10(5):350–6

Forehead flap nasal reconstruction with tissue expansion and delayed pedicle separation. Kroll SS. **Laryngoscope** 1989 Apr;99(4):448–52

Correction of the nasal tip deformity following repair of unilateral clefts of the upper lip. Vissarionov VA. **Plast Reconstr Surg** 1989 Feb;83(2):341–7

[The value of Cottle's technic for esthetic and functional correction of the nose] Jammet P, et al. **Ann Chir Plast Esthet** 1989;34(1):38–41 (Eng. Abstr.) **(Fre)**

[Reimplantation of a free graft of the nasal septum. Technic and indications] Gubisch W, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(2):135–7 (Eng. Abstr.) **(Fre)**

[Reconstruction of the side of the nose and the columella using an oblique forehead flap] von Szalay L. **HNO** 1988 Jul;36(7):293–4 (Eng. Abstr.) **(Ger)**

NOSE DISEASES

see related
OTORHINOLARYNGOLOGIC DISEASES

Congenital pilonidal sinus of the nose. Schache DJ, et al. **Aust N Z J Surg** 1989 Jun;59(6):511–2

Nasal obstruction. **Otolaryngol Clin North Am** 1989 Apr; 22(2):253–472

Nasal obstruction in children. Handley GH, et al. **Otolaryngol Clin North Am** 1989 Apr;22(2):383–96 (28 ref.)

The problem of nasal obstruction. Kimmelman CP. **Otolaryngol Clin North Am** 1989 Apr;22(2):253–64 (17 ref.)

[Current possibilities of the diagnosis and treatment of rhinosporidiosis of the nose] Kunel'skaia VIa, et al. **Vestn Otorinolaringol** 1989 May-Jun;(3):13–6 (Eng. Abstr.) **(Rus)**

[Nasal aspergillosis. Apropos of 1 case] Lahoz Zamarro T, et al. **An Otorrinolaringol Ibero Am** 1989;16(4):439–46 (Eng. Abstr.) **(Spa)**

CHEMICALLY INDUCED

Nasal symptoms associated with cocaine abuse during adolescence. Schwartz RH, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jan;115(1):63–4

Osteocartilaginous necrosis of the sinonasal tract following cocaine abuse. Kuriloff DB, et al. **Laryngoscope** 1989 Sep; 99(9):918–24

COMPLICATIONS

Headache in nasal hyperreactivity. De Simone R, et al. **Acta Neurol (Napoli)** 1987 Apr;9(2):116–23

Shortlasting unilateral neuralgiform headache attacks with conjunctival injection, tearing, sweating, and rhinorrhea. Sjaastad O, et al. **Cephalalgia** 1989 Jun;9(2):147–56

The systemic effects of nasal obstruction. Kimmelman CP. **Otolaryngol Clin North Am** 1989 Apr;22(2):461–6 (16 ref.)

Nasal obstruction and human communication. Malinoff R, et al. **Otolaryngol Clin North Am** 1989 Apr;22(2):443–59 (39 ref.)

Nasal and sinus pain: current diagnosis and treatment. Kennedy DW, et al. **Semin Neurol** 1988 Dec;8(4):303–14 (34 ref.)

[Diseases in the field of otorhinopharyngolaryngology as the cause of ventilatory disturbance during sleep] Togawa K, et al. **Kokyu To Junkan** 1989 Jan;37(1):17–20 **(Jpn)**

[Rhinogenic thrombophlebitis of the cavernous sinus in a 77-year-old patient with diabetes mellitus with favorable outcome] Dvoretskov AI. **Vestn Otorinolaringol** 1988 Jul-Aug;(4):83–4 **(Rus)**

CONGENITAL

[Congenital nasal cysts and fistulae] Dvořáková J, et al. **Cesk Otolaryngol** 1989 May;38(3):189–92 (Eng. Abstr.) **(Cze)**

DIAGNOSIS

Inherited nasal and laryngeal degenerative chondropathy. Kurien M, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):746–8

The differential diagnosis of nasal mucosal swelling and adenoidal hyperplasia using two- and three-parameter discriminant functions. Ayiomamitis A, et al. **Arch Otorhinolaryngol** 1989;246(2):83–8

Nasal provocation. Pipkorn U. **Clin Rev Allergy** 1988 Fall; 6(3):285–302 (81 ref.)

Aggressive intranasal carcinoma mimicking infection or inflammation. Stanley RJ, et al. **Cutis** 1988 Oct;42(4):288–93

Nasal involvement in systemic amyloidosis. Dubey SP, et al. **J Laryngol Otol** 1988 Dec;102(12):1153–5

Diagnostic imaging of the nose and paranasal sinuses. Lloyd GA. **J Laryngol Otol** 1989 May;103(5):453–60

Primary nasal tuberculosis masquerading as a malignant tumour. Sim DW, et al. **J Laryngol Otol** 1988 Dec; 102(12):1150–2

Diagnostic fiberoptic rhinolaryngoscopy. Ransom JH, et al. **Kans Med** 1989 Apr;90(4):105–8, 115

Acquired immune deficiency syndrome presenting as a palatal perforation. Fowler CB, et al. **Oral Surg Oral Med Oral Pathol** 1989 Mar;67(3):313–8

Objective assessment of nasal obstruction. Lund VJ. **Otolaryngol Clin North Am** 1989 Apr;22(2):279–90 (54 ref.)

Benign and malignant sinonasal lesions with intracranial extension: differentiation with MR imaging. Som PM, et al. **Radiology** 1989 Sep;172(3):763–6

Nasal obstruction in the neonate. Shott SR, et al. **Rhinology** 1989 Jun;27(2):91–6

[Diseases of the nose and paranasal sinuses in workers of the woodworking industry] Savov A. **Probl Khig** 1988; 13:173–82 (Eng. Abstr.) **(Bul)**

[The diagnosis of obstructed nasal breathing in clinical practice—a comparative study] Roloff M, et al. **Z Erkr Atmungsorgane** 1989;172(2):123–9 (Eng. Abstr.) **(Ger)**

[Wegener's granulomatosis or Hodgkin's disease—diagnostic error or one of the forms of Wegener's granulomatosis? (letter)] Szmurło-Zabolicka B. **Pol Tyg Lek** 1988 Aug 15; 43(33):1072 **(Pol)**

[Diagnostic and treatment problems of rhinophycomycosis (conidiobolusomycosis)] Obiako MN. **Mikrobiol Zh** 1988 Sep-Oct;50(5):69–75 (Eng. Abstr.) **(Rus)**

[Diseases of the nasal cavity and paranasal sinuses] Beliakova LV. **Ter Arkh** 1988;60(10):60–3 **(Rus)**

DRUG THERAPY

Mupirocin for eradication of nasal carriage of staphylococci [letter] Casewell MW, et al. **Lancet** 1989 Jan 21;1(8630):154

ETIOLOGY

Nasal complication after transsphenoidal surgery for pituitary pathologies. Nabe-Nielsen J. **Acta Neurochir (Wien)** 1989; 96(3-4):122–5

Exercise induced rhinorrhoea (athlete's nose). Stanford CF, et al. **BMJ** 1988 Sep 10;297(6649):660

Occurrence of oronasal fistulas in operated cleft palate patients. Amaratunga NA. **J Oral Maxillofac Surg** 1988 Oct;46(10):834–8

Trigeminal trophic syndrome. Arasi R, et al. **Laryngoscope** 1988 Dec;98(12):1330–3

Nasal obstruction after cervical sympathectomy: Horner's syndrome revisited. Whittet HB, et al. **ORL J Otorhinolaryngol Relat Spec** 1988;50(4):246–50

Septorhinoplastic procedures versus submucous resection of the septum, using septum perforation as an indicator. Schønsted-Madsen U, et al. **Rhinology** 1989 Mar;27(1):63–6

IMMUNOLOGY

[Allergic phenomena in the eyes, ear, nose and throat and the gastro-intestinal system] **Dapim Refuiim** 1969 Mar; 28(2-3):179–205 **(Heb)**

METABOLISM

Clinical significance of atrial natriuretic peptide in different diseases of the nose. Yue WL. **J Otolaryngol** 1989 Jun; 18(4):181–3

MICROBIOLOGY

Rhinocerebral zygomycosis caused by Saksenaea vasiformis. Kaufman L, et al. **J Med Vet Mycol** 1988;26(4):237–41

PARASITOLOGY

[Nasal infection with Leishmania. Apropos of a case] Roura i Moreno J, et al. **An Otorrinolaringol Ibero Am** 1988; 15(3):291–8 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Pathologic quiz case 1. Invasive aspergillosis of the maxillary sinus and nose. Boutros A, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jan;115(1):114–6

Pigmented nasopalatine duct cyst. Report of 2 cases. el-Bardaie A, et al. **Int J Oral Maxillofac Surg** 1989 Jun; 18(3):138–9

Aspergillosis of the nose and paranasal sinuses. Milroy CM, et al. **J Clin Pathol** 1989 Feb;42(2):123–7

Allergic necrotizing eosinophilic granulomatosis. Gaffney MG, et al. **J Dermatol Surg Oncol** 1988 Nov;14(11):1282–5 (12 ref.)

Nasal granuloma gravidarum. McShane DP, et al. **J Laryngol Otol** 1988 Sep;102(9):828–30

Multiple keratoacanthomas involving the head and neck. Stewart RG, et al. **Otolaryngol Head Neck Surg** 1988 Jul; 99(1):55–8

[The disease picture of verruciform xanthoma] Landthaler M, et al. **Hautarzt** 1988 Nov;39(11):727–30 (20 ref.) (Eng. Abstr.) **(Ger)**

[Verruciform xanthoma. Presentation of a case and review of the literature] Manzini BM, et al. **G Ital Dermatol Venereol** 1989 Jan-Feb;124(1-2):41–4 (27 ref.) (Eng. Abstr.) **(Ita)**

PHYSIOPATHOLOGY

Nasal mucus clearance in nasal and para nasal sinus disorders. Wig U, et al. **Indian J Chest Dis Allied Sci** 1988 Jul-Sep; 30(3):177–82

Nasorespiratory function and orofacial development. Cooper BC. **Otolaryngol Clin North Am** 1989 Apr;22(2):413–41 (119 ref.)

Influence of nasal obstruction on smell function. Doty RL, et al. **Otolaryngol Clin North Am** 1989 Apr;22(2):397–411 (50 ref.)

PREVENTION & CONTROL

Prevention of post-operative intra-nasal adhesions (a new material). Eliopoulos PN, et al. **J Laryngol Otol** 1989 Jul; 103(7):664–6

SURGERY

Endoscopy and the KTP/532 laser for nasal sinus disease. Levine HL. **Ann Otol Rhinol Laryngol** 1989 Jan;98(1 Pt 1):46–51

The effect of submucous resection of the nasal septum on mucociliary transport and nasal airway. Barr GS. **Clin Otolaryngol** 1989 Apr;14(2):127–30

The use of carbon dioxide laser in lichen myxedematosus. Kaymen AH, et al. **J Dermatol Surg Oncol** 1989 Aug; 15(8):862–5

Surgical management of nasal airway obstruction in children. White P, et al. **J Otolaryngol** 1989 Jun;18(4):155–7 (11 ref.)

Fatal and major complications secondary to nasal and sinus

surgery. Maniglia AJ. **Laryngoscope** 1989 Mar;99(3):276–83
Rhinocerebral mucormycosis: results of aggressive surgical debridement and amphotericin B. Ochi JW, et al. **Laryngoscope** 1988 Dec;98(12):1339–42
Repair of nasal septal perforations with tragal cartilage and perichondrium grafts. Eviatar A, et al. **Otolaryngol Head Neck Surg** 1989 Apr;100(4):300–2
[Submucosal resection of the inferior nasal turbinates] Rivière F, et al. **Ann Otolaryngol Chir Cervicofac** 1989; 106(5):297–303 (13 ref.) (Eng. Abstr.) (Fre)
[Changes in bronchial resistance after surgical treatment of obstruction of the upper airways] Gaĭtman A, et al. **Vestn Otorinolaringol** 1989 May–Jun;(3):21–3 (Eng. Abstr.) (Rus)
[Fixed drainage in the treatment of abscesses of the nasal septum] Telezhkina VI, et al. **Vestn Otorinolaringol** 1988 Jul–Aug;(4):82–3 (Rus)
[Use of a surgical laser for removal of rhinophyma] Zakharian RG. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):65 (Rus)

THERAPY

Aggressive combined modality treatment of progressive sinonasal fungal infections in immunocompromised patients. Goering P, et al. **Am J Med** 1988 Nov;85(5):619–23
Nasal myiasis: review of 10 years experience. Sharma H, et al. **J Laryngol Otol** 1989 May;103(5):489–91

TRANSMISSION

Orf: contagious pustular dermatitis. Maki A Jr, et al. **Can Med Assoc J** 1988 Nov 15;139(10):971–2

VETERINARY

Eosinophilic granuloma of the nasal skin in a dog. da Silva Curiel JM, et al. **J Am Vet Med Assoc** 1988 Sep 1; 193(5):566–7
Phaeohyphomycosis caused by Alternaria alternata in a cat. Dhein CR, et al. **J Am Vet Med Assoc** 1988 Nov 1; 193(9):1101–3
Use of ketoconazole in the treatment of canine nasal aspergillosis. Sharp NJ, et al. **J Am Vet Med Assoc** 1989 Mar 15;194(6):782–6
Squamous-cell carcinoma and oral, pharyngeal and nasal lesions caused by foreign bodies in feed. Cases from a long-term study in rats. Madsen C. **Lab Anim** 1989 Jul; 23(3):241–7
Rhinoscopy in small animal clinics: an analysis of the results of 233 rhinoscopies and 97 bacterial cultures from nasal swabs. van Oosterhout IC, et al. **Tijdschr Diergeneeskd** 1989 Apr;114 Suppl 1:94S–95S
The pathogenesis of turbinate atrophy in pigs caused by Bordetella bronchiseptica. Magyar T, et al. **Vet Microbiol** 1988 Oct;18(2):135–46
Monitoring for atrophic rhinitis: the problem of higher snout scores. Goodwin RF. **Vet Rec** 1988 Nov 26;123(22):566–8
Leech infestation of livestock [letter] Mahato SN. **Vet Rec** 1989 Jun 17;124(24):641–2
Repair of a traumatically induced oronasal fistula in a cat with a rostral tongue flap. Robertson JJ, et al. **Vet Surg** 1987 Mar–Apr;16(2):164–6

NOSE NEOPLASMS

Cytologic and immunohistochemical diagnosis of neuroendocrine (Merkel cell) carcinoma in cerebrospinal fluid. Dudley TH Jr, et al. **Am J Clin Pathol** 1989 Jun; 91(6):714–7
Esthesioneuroblastoma metastatic to the trachea. Franklin D, et al. **Head Neck Surg** 1987 Nov–Dec;10(2):102–6
Nasal septal melanoma [clinical conference] Suen JY, et al. **Head Neck Surg** 1988 Jul–Aug;10(6):432–5
Fibrosarcoma of the nose and the paranasal sinuses. Olekszyk J, et al. **J Am Osteopath Assoc** 1989 Jul;89(7):901–4
Giant arteriovenous hemangioma (cirsoid aneurysm) of the nose. Neumann RA, et al. **J Dermatol Surg Oncol** 1989 Jul;15(7):739–42
Schneiderian papilloma. Schultz RC, et al. **J La State Med Soc** 1988 Nov;140(11):11–4 (12 ref.)
Nasal septal carcinoma: initial symptom of nasal septal perforation. Echeverria-Zumarraga M, et al. **J Laryngol Otol** 1988 Sep;102(9):834–5 (7 ref.)
Vascular leiomyoma of the inferior turbinate—report of a case and review of the literature. Hanna GS, et al. **J Laryngol Otol** 1988 Dec;102(12):1159–60 (8 ref.)
Haemangiopericytoma of the nasal septum. Al-Khalifa S, et al. **J Laryngol Otol** 1988 Dec;102(12):1161–3
Alveolar soft part sarcoma of the nasal cavity: report of a case and a review of the literature. Rubinstein MI, et al. **Laryngoscope** 1988 Nov;98(11):1246–50 (23 ref.)
[Nasal septal hemangioma of pregnancy] Wang MT, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1988 Jul; 4(7):426–30 (Eng. Abstr.) (Chi)
[Inverted papillomas] Klozar J, et al. **Sb Lek** 1989 Jun; 91(6):177–85 (Eng. Abstr.) (Cze)
[19th German Cancer Congress. 1988, Frankfurt. Symposium 6: Malignant tumor of the inner nose and paranasal sinuses. Proceedings] **Strahlenther Onkol** 1989 Jun;165(6):415–80 (Ger)
[Malignant histiocytosis arising in the upper respiratory tract] Watanabe Y. **Nippon Rinsho** 1989 Mar;47(3):648–52 (Jpn)
[Cementoma of the nasal cavity and paranasal sinuses] Akopian RG, et al. **Vestn Otorinolaringol** 1988 Jul–Aug; (4):63–5 (Rus)
[A case of aberrant thyroid goiter in the nasal cavity and paranasal sinuses] Boenko SK, et al. **Vestn Otorinolaringol** 1988 Jul–Aug;(4):72–3 (Rus)
[Melanoma of the nasal cavity and paranasal sinuses] Shtil' AA, et al. **Vestn Otorinolaringol** 1988 Jul–Aug;(4):55–60 (Eng. Abstr.) (Rus)
[Glioma of the nose in a child] Tsvetkov EA, et al. **Vestn Otorinolaringol** 1988 Jul–Aug;(4):70–2 (Rus)
[Malignant melanomas of the nasal mucosa and paranasal sinuses] Danić D, et al. **Med Pregl** 1988;41(3–4):135–7 (Eng. Abstr.) (Scr)
[Angiofibroma of the nasal cavity] Stojičić G, et al. **Med Pregl** 1988;41(1–2):47–50 (Eng. Abstr.) (Scr)

CHEMICALLY INDUCED

Use of nasal preparations and the incidence of sinonasal cancer. Strader CH, et al. **J Epidemiol Community Health** 1988 Sep;42(3):243–8
[Induction of precancerous changes and carcinoma of the nasopharynx in rats and the inhibitory effect of RI on carcinogenesis] Cai HY. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Jun;17(2):98–101 (Eng. Abstr.) (Chi)

CLASSIFICATION

[Classification and documentation of malignoma of the inner nose and paranasal sinuses] Clasen B, et al. **Strahlenther Onkol** 1989 Jun;165(6):416–9 (Eng. Abstr.) (Ger)

COMPLICATIONS

Nasal obstruction due to benign and malignant neoplasms. Komisar A. **Otolaryngol Clin North Am** 1989 Apr; 22(2):351–65 (14 ref.)
[A case of cancer of the nasal cavity associated with giant cyst of the maxillary sinus] Lipovich MM, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):74–6 (Rus)

DIAGNOSIS

Esthesioneuroblastoma or malignant lymphoma? A case report. Falkson CB. **Am J Clin Oncol** 1988 Dec; 11(6):669–71
Inverted papilloma: a follow-up study including primarily unacknowledged cases. Buchwald C, et al. **Am J Otolaryngol** 1989 Jul–Aug;10(4):273–81
Olfactory neuroblastoma: imaging by magnetic resonance, CT and conventional techniques. Woodhead P, et al. **Clin Otolaryngol** 1988 Oct;13(5):387–94
Aggressive intranasal carcinoma mimicking infection or inflammation. Stanley RJ, et al. **Cutis** 1988 Oct;42(4):288–93
Diagnostic significance of mean numbers of nucleolar organizer regions in benign and malignant transitional tumours of nose. Egan M, et al. **Histopathology** 1988 Nov; 13(5):579–81
MR imaging of normal nasal cycle: comparison with sinus pathology. Zinreich SJ, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):1014–9
Angiomyolipoma of the nasal cavity. Dawlatly EE, et al. **J Laryngol Otol** 1988 Dec;102(12):1156–8
Malignant melanoma of the nasal cavity. Going JJ, et al. **J Laryngol Otol** 1989 Feb;103(2):231–3
Pleomorphic adenoma of the nasal septum. Haberman RS 2d, et al. **Otolaryngol Head Neck Surg** 1989 Jun; 100(6):610–2
Benign and malignant sinonasal lesions with intracranial extension: differentiation with MR imaging. Som PM, et al. **Radiology** 1989 Sep;172(3):763–6
Massive schwannoma of the nose and paranasal sinuses. Ross C, et al. **South Med J** 1988 Dec;81(12):1588–91 (12 ref.)
[Diagnostic delay in cancer of the nasal cavity and the paranasal sinuses] Charabi S, et al. **Nord Med** 1989; 104(8–9):221–2 (Eng. Abstr.) (Dan)
[Extracranial meningioma: a rare differential diagnosis of an intranasal tumor] Spindler MB, et al. **HNO** 1989 Apr; 37(4):162–4 (Eng. Abstr.) (Ger)
[Ultrasonics in the diagnosis and follow-up of tumors of the inner nose and paranasal sinuses] Hamann KF. **Strahlenther Onkol** 1989 Jun;165(6):452–4 (Eng. Abstr.) (Ger)
[The value of MR tomography in tumorous diseases of the inner nose and paranasal sinuses] Held P, et al. **Strahlenther Onkol** 1989 Jun;165(6):447–51 (Eng. Abstr.) (Ger)
[A case of juvenile angiofibroma of the nasal vestibule] Sienkiewicz H, et al. **Otolaryngol Pol** 1988;42(4):284–6 (Eng. Abstr.) (Pol)
[A case of chondroma of the nasal cavity and maxillary sinus] Szmeja Z, et al. **Otolaryngol Pol** 1988;42(5):365–8 (Eng. Abstr.) (Pol)
[Wegener's granulomatosis or Hodgkin's disease—diagnostic error or one of the forms of Wegener's granulomatosis? (letter)] Szmurło-Zabolicka B. **Pol Tyg Lek** 1988 Aug 15; 43(33):1072 (Pol)
[The value of the ophthalmologic examination in detecting rhinosinusal lesions of tumor origin] Popa DP, et al. **Rev Chir [Oftalmol]** 1988 Oct–Dec;32(4):249–53 (Eng. Abstr.) (Rum)
[A rhinophyma-like form of squamous cell skin cancer] Il'in II, et al. **Vestn Dermatol Venerol** 1988;(6):54–7 (Eng. Abstr.) (Rus)
[Diagnosis and treatment of malignant tumors of the nasal cavity and paranasal sinuses] Pogosov VS, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):56–60 (Eng. Abstr.) (Rus)
[Chondroma of the nose and paranasal sinuses and its clinical characteristics] Revskoĭ IuK, et al. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):54–7 (Eng. Abstr.) (Rus)

EPIDEMIOLOGY

Case-control study of nasal cancer in workers employed in wood-related industries. Viren JR, et al. **J Occup Med** 1989 Jan;31(1):35–40
[Malignant diseases of the inner nose—epidemiology and occupational medicine aspects] Hartung M. **Strahlenther Onkol** 1989 Jun;165(6):441–3 (Eng. Abstr.) (Ger)
[Squamous epithelial carcinoma and undifferentiated carcinoma of the inner nose and paranasal sinuses] Wustrow J, et al. **Strahlenther Onkol** 1989 Jun;165(6):468–73 (Eng. Abstr.) (Ger)
[Analysis of cases of cancer of the upper respiratory tract classified as occupational disease in Poland 1971–1986] Sułkowski W, et al. **Pol Tyg Lek** 1988 Jun 27;43(26):839–42 (Eng. Abstr.) (Pol)

ETIOLOGY

Induction of malignant nasal cavity tumours in Wistar rats fed Chinese salted fish. Yu MC, et al. **Br J Cancer** 1989 Aug;60(2):198–201
Snuff-induced carcinogenesis: effect of snuff in rats initiated with 4-nitroquinoline N-oxide. Johansson SL, et al. **Cancer Res** 1989 Jun 1;49(11):3063–9
Nasal tumours in rats after severe injury to the nasal mucosa and prolonged exposure to 10 ppm formaldehyde. Woutersen RA, et al. **J Appl Toxicol** 1989 Feb;9(1):39–46
What's new in tumours of the nasal cavity? Adenocarcinomas arising after exposure to wood dust. Kleinsasser O, et al. **Pathol Res Pract** 1989 May;184(5):554–8
[Occupational hazards in the wood manufacturing industry] Cui SG, et al. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Jan;23(1):27–8 (17 ref.) (Chi)
[Tumors of the inner nose and paranasal sinuses due to asbestos exposure?] Deitmer T. **Strahlenther Onkol** 1989 Jun;165(6):444–6 (Eng. Abstr.) (Ger)
[Esthesioneuroblastoma: histogenesis and diagnosis] Vollrath M, et al. **Strahlenther Onkol** 1989 Jun;165(6):461–7 (Eng. Abstr.) (Ger)

METABOLISM

Esthesioneuroblastoma: a nasal catecholamine-producing tumor of neural crest origin. Demonstration of tyrosine hydroxylase-immunoreactive tumor cells. Takahashi H, et al. **Acta Neuropathol (Berl)** 1988;76(5):522–7

MICROBIOLOGY

Human papillomavirus 6/11 and 16/18 in Schneiderian inverted papillomas. In situ hybridization with human papillomavirus RNA probes. Brandwein M, et al. **Cancer** 1989 May 1;63(9):1708–13

PATHOLOGY

Malignant lymphoma presenting as pseudoepitheliomatous hyperplasia. A report of two cases. Krasne DL, et al. **Am J Surg Pathol** 1988 Nov;12(11):835–42
Pathologic quiz case 1. Leiomyosarcoma. Goldberg SH, et al. **Arch Otolaryngol Head Neck Surg** 1988 Nov; 114(11):1330–2
Pathologic quiz case 2. Leiomyosarcoma of the nasal cavity. Kahn J, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jan; 115(1):114–5, 117
Pathologic quiz case 2. Leiomyoma of the nasal vestibule. Nam HK, et al. **Arch Otolaryngol Head Neck Surg** 1989 Feb;115(2):244–5, 247
Acinic cell carcinoma originating in the nasal cavity. Hanada T, et al. **Arch Otorhinolaryngol** 1988;245(6):344–7
Nasal astrocytoma or nasal glial heterotopia? Chan JK, et al. **Arch Pathol Lab Med** 1989 Aug;113(8):943–5
Olfactory neuroblastoma. Durham JC. **Ear Nose Throat J** 1989 Mar;68(3):185–6, 190, 195–6, passim (15 ref.)
Histiocytic malignant lymphoma arising in the midfacial soft tissues. Fletcher SM, et al. **Ear Nose Throat J** 1989 Mar; 68(3):245–6, 248, 250 (16 ref.)
Clear cell rhabdomyosarcoma of the nasal cavity and paranasal sinuses. Chan JK, et al. **Histopathology** 1989 Apr; 14(4):391–9
Ganglioneuroblastic transformation of olfactory neuroblastoma. Chan JK, et al. **Histopathology** 1989 Apr; 14(4):425–8
Malignant triton tumor of the nose and paranasal sinuses: a case study. Shajrawi I, et al. **Hum Pathol** 1989 Aug; 20(8):811–4
T-cell lymphoma of palatal midline. Report of 2 cases. Nadimi H, et al. **Int J Oral Maxillofac Surg** 1988 Dec; 17(6):377–81
Nasal haemangiopericytoma. Arora B, et al. **J Indian Med Assoc** 1988 Aug;86(8):220
Nasal lipoma. Preece JM, et al. **J Laryngol Otol** 1988 Nov;

102(11):1044–6
Co-existent inverted papilloma and squamous carcinoma of the nasal septum. Sim DW. **J Laryngol Otol** 1989 Aug; 103(8):774–5
Leiomyoma of the nasal cavity. Tang SO, et al. **J Laryngol Otol** 1988 Sep;102(9):831–3 (12 ref.)
Olfactory neuroblastoma: report of a case and review of the literature. Anavi Y, et al. **J Oral Maxillofac Surg** 1989 May; 47(5):514–7 (33 ref.)
X-radiation-induced differentiation of xenotransplanted human undifferentiated rhabdomyosarcoma. Takizawa T, et al. **Lab Invest** 1989 Jan;60(1):22–9
Polymorphic reticulosis: a malignant lymphoma of B-cell lineage. Lin CZ, et al. **Laryngoscope** 1989 Mar;99(3):307–10
Malignant non-Hodgkin's lymphomas of the nose and paranasal sinuses. Tan J, et al. **Med J Malaysia** 1988 Mar; 43(1):49–54
Mucosal origin of sinonasal tract adenomatous neoplasms. Gnepp DR, et al. **Mod Pathol** 1989 Jul;2(4):365–71
Immune deficiency with polymorphic reticulosis. Najjar T, et al. **Oral Surg Oral Med Oral Pathol** 1989 Mar;67(3):322–6
Oncocytoma in the nasal vestibule. Buchanan JA, et al. **Otolaryngol Head Neck Surg** 1988 Jul;99(1):63–5
Alveolar soft part sarcoma of the nasal cavity. Barbareschi M, et al. **Pathologica** 1988 May-Jun;80(1067):363–70
Alveolar rhabdomyosarcoma arising in the nasal cavity of a 3-year-old child. Pardo RJ, et al. **Pediatr Dermatol** 1988 Nov;5(4):254–6
Malignant lymphomas of the nasal cavity and paranasal sinuses. Fellbaum C, et al. **Virchows Arch [A]** 1989; 414(5):399–405
[Malignant eccrine poroma. Apropos of 2 facial sites] Labbé D, et al. **Ann Chir Plast Esthet** 1989;34(2):146–52 (34 ref.) (Eng. Abstr.) **(Fre)**
[Primary malignant melanoma of ORL mucosa. Apropos of 5 cases] Stoll D, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(2):229–31 (Eng. Abstr.) **(Fre)**
[Basalioma of the forehead, dorsum of the nose, eyelid area] Burk R, et al. **Fortschr Ophthalmol** 1988;85(5):523–5 (Eng. Abstr.) **(Ger)**
[The pathology and clinical picture of adenocarcinoma of the nose after wood dust exposure] Kleinsasser O, et al. **Strahlenther Onkol** 1989 Jun;165(6):437–40 (Eng. Abstr.) **(Ger)**
[Esthesioneuroblastoma: a comparative study of tumor and matrix tissue with derived histogenesis] Vollrath M, et al. **Verh Dtsch Ges Pathol** 1988;72:288–91 (Eng. Abstr.) **(Ger)**
[Keratoacanthoma of the nose] Giudice M, et al. **Minerva Stomatol** 1988 Apr;37(4):255–60 (Eng. Abstr.) **(Ita)**
[Nasal cavity paraganglioma with intracranial extension. Case report] Shimoda M, et al. **Neurol Med Chir (Tokyo)** 1989 Feb;29(2):132–6 (Eng. Abstr.) **(Jpn)**
[A clinico-pathological study of adenocarcinomas of the nasal cavity and paranasal sinuses] Ogawa T. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Mar;92(3):317–33 (Eng. Abstr.) **(Jpn)**
[A clinico-pathological study of squamous cell carcinomas of the sino-nasal cavity metaplasia and dysplasia] Ogawa T. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Mar;92(3):334–46 (Eng. Abstr.) **(Jpn)**
[Clinical studies on eleven patients with nasal and paranasal lymphoma, with special reference to staging evaluation] Shimizu K, et al. **Rinsho Ketsueki** 1989 Feb;30(2):181–4 (Eng. Abstr.) **(Jpn)**
[Esthesioblastoma] Katenkamp D, et al. **Arkh Patol** 1988; 50(12):12–7 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Computed tomographic features of esthesioneuroblastoma. Hurst RW, et al. **Neuroradiology** 1989;31(3):253–7
[Lymphoma of the nasal sinus] Daele J, et al. **Acta Otorhinolaryngol Belg** 1988;42(4):502–12 (Eng. Abstr.) **(Fre)**

RADIOTHERAPY

Olfactory neuroblastoma. Observations on seven patients treated with radiation therapy and review of the literature. Urdaneta N, et al. **Am J Clin Oncol** 1988 Dec;11(6):672–8 (35 ref.)
Carcinoma of the nasal cavity--results of primary and adjuvant radiotherapy. Hawkins RB, et al. **Int J Radiat Oncol Biol Phys** 1988 Nov;15(5):1129–33
Nasopharyngeal impression technique for fabrication of a radiation carrier. Cano ER, et al. **J Prosthet Dent** 1989 Mar;61(3):340–2
Malignant melanoma of the nasal cavity. Hills P. **Radiography** 1988 May-Jun;54(615):111–2
Radiation therapy of carcinomas of the skin of nose and nasal vestibule: a report of 1676 cases by the Groupe Europeen de Curiethérapie. Mazeron JJ, et al. **Radiother Oncol** 1988 Nov;13(3):165–73
[Radiotherapy results in malignant tumors of the inner nose and paranasal sinuses with special reference to neutron therapy] Schwarz R, et al. **Strahlenther Onkol** 1989 Jun; 165(6):478–80 (Eng. Abstr.) **(Ger)**
[A long waiting time for radiotherapy. Not acceptable for patients with neoplasms] Klausen OG, et al. **Tidsskr Nor Laegeforen** 1989 Aug 20;109(23):2324–5 (Eng. Abstr.) **(Nor)**

SECONDARY

Metastatic renal cell carcinoma of the nasal septum. Lim RY, et al. **W V Med J** 1989 Apr;85(4):143–5

SECRETION

[A case of adenocarcinoma of the nasal cavity associated with syndrome of inappropriate secretion of antidiuretic hormone(SIADH)] Tatemoto K, et al. **Gan No Rinsho** 1989 Sep;35(10):1153–9 (Eng. Abstr.) **(Jpn)**
[Immuno-secreting nasal lymphoma in childhood] Alemany Monraval P, et al. **An Esp Pediatr** 1989 Apr;30(4):320–2 **(Spa)**

SURGERY

Complications following rhinotomy. Review of 148 patients. Bernard PJ, et al. **Ann Otol Rhinol Laryngol** 1989 Sep; 98(9):684–92
Forehead expansion and total nasal reconstruction. Bolton LL, et al. **Ann Plast Surg** 1988 Sep;21(3):210–6
Subcutaneous V-Y advancement flap for closure of nasal tip defect. Hauben DJ. **Ann Plast Surg** 1989 Sep; 23(3):239–44
Anterior craniofacial resection for ethmoid and nasal cancer with free flap reconstruction. Bridger GP, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar;115(3):308–12
The transfacial approach for combined anterior craniofacial tumor ablation. Panje WR, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar;115(3):301–7
Rhinectomy for malignant disease. A 20-year experience. Stanley RJ, et al. **Arch Otolaryngol Head Neck Surg** 1988 Nov;114(11):1307–11
Reconstruction of the alar groove. Chait LA, et al. **Br J Plast Surg** 1989 May;42(3):281–4
The transverse forked flap in columella reconstruction. Earley MJ, et al. **Br J Plast Surg** 1989 May;42(3):270–3
Razor blade excision of Mohs specimens for superficial basal cell carcinomas of the distal nose. Grabski WJ, et al. **J Dermatol Surg Oncol** 1988 Nov;14(11):1290–2
The perialar arc rotation skin flap. Hill TG. **J Dermatol Surg Oncol** 1989 Jan;15(1):78–83
Basal cell carcinoma in a patient with acquired immunodeficiency syndrome: treatment with Mohs micrographic surgery fixed-tissue technique. Hruza GJ, et al. **J Dermatol Surg Oncol** 1989 May;15(5):545–51
Tumefactive fibroinflammatory lesion of the head and neck. Said H, et al. **J Laryngol Otol** 1988 Nov;102(11):1064–7
Transcranial resection of tumors of the paranasal sinuses and nasal cavity. Blacklock JB, et al. **J Neurosurg** 1989 Jul; 71(1):10–5
The role of surgery in the treatment of squamous cell carcinoma of the nasal vestibule. Weinberger JM, et al. **J Otolaryngol** 1988 Dec;17(7):372–5
Neonatal surgical casebook: nasal glioma. Lorch V, et al. **J Perinatol** 1987 Winter;7(1):62–3
Nasal alar reconstruction with an ear helix free flap. Shenaq SM, et al. **J Reconstr Microsurg** 1989 Jan;5(1):63–7
Septal chondromucosal flap with preservation of septal integrity. Weisman RA. **Laryngoscope** 1989 Mar; 99(3):267–71
Craniofacial dermoids. Pensler JM, et al. **Plast Reconstr Surg** 1988 Dec;82(6):953–8
[Hatchet-form flap as a method of esthetic reconstruction of the nose] Horwath H, et al. **Fortschr Kiefer Gesichtschir** 1989;34:151–3 **(Ger)**
[Importance and status of esthetics in defect coverage following skin tumor surgery of the nose] Lentrodt J, et al. **Fortschr Kiefer Gesichtschir** 1989;34:147 **(Ger)**
[Esthetic challenges in covering tumor-induced nose defects] Radtke J, et al. **Fortschr Kiefer Gesichtschir** 1989;34:148–50 **(Ger)**
[The lateral forehead flap in the management of defects of the exterior aspect of the nose] Rauchfuss A. **Laryngol Rhinol Otol (Stuttg)** 1988 Nov;67(11):590–2 (Eng. Abstr.) **(Ger)**
[Surgical therapy of malignoma of the inner nose and paranasal sinuses] Glanz H. **Strahlenther Onkol** 1989 Jun; 165(6):420–4 (Eng. Abstr.) **(Ger)**
[A case of hemangioma of the nasal pyramid treated by cryotherapy with liquid nitrogen in an infant] Olariu B, et al. **Rev Chir [Otorinolaringol]** 1988 Jul-Sep;33(3):205–11 (Eng. Abstr.) **(Rum)**

THERAPY

High-dose chemotherapy and autologous marrow transplantation for esthesioneuroblastoma and sinonasal undifferentiated carcinoma. Stewart FM, et al. **Am J Clin Oncol** 1989 Jun;12(3):217–21
Olfactory neuroblastoma. O'Connor TA, et al. **Cancer** 1989 Jun 15;63(12):2426–8
[Tumors of the nasal fossa. Retrospective study of a series of 67 cases] Bonfils P, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(4):225–31 (Eng. Abstr.) **(Fre)**
[A clinical study of non-Hodgkin's lymphoma of the nasal cavity and paranasal sinus] Takenaka T, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Dec 20;23(11):2779–84 (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

Chemically induced esthesioneuroepithelioma: ultrastructural findings. Vollrath M, et al. **Ann Otol Rhinol Laryngol** 1989 Apr;98(4 Pt 1):256–66
Comparative aspects of cell fine structure in three cases of inverted, Schneiderian papilloma. Reger JF, et al. **J Submicrosc Cytol Pathol** 1989 Apr;21(2):329–38
Ultrastructural morphometry distinguishes Burkitt's-like lymphomas from neuroendocrine neoplasms: useful criteria applied to the evaluation of a poorly differentiated neuroendocrine neoplasm of the nasal cavity masquerading as Burkitt's-like lymphoma. Payne CM, et al. **Mod Pathol** 1989 Jan;2(1):35–45
Clear-cell mucoepidermoid carcinoma arising in the nasal cavity: case report with ultrastructural observations. Peison B, et al. **Mt Sinai J Med (NY)** 1988 Oct;55(5):417–20

VETERINARY

Immunoglobulin lambda-light-chain-derived amyloidosis (A lambda) in two horses. Linke RP, et al. **Blut** 1989 Mar; 58(3):129–32
Prognostic factors and survival after radiotherapy for intranasal neoplasms in dogs: 70 cases (1974–1985). Evans SM, et al. **J Am Vet Med Assoc** 1989 May 15;194(10):1460–3
X-ray computed tomography-aided diagnosis of nasal adenocarcinoma, with extension to the skull and central nervous system, in a dog. Sackman JE, et al. **J Am Vet Med Assoc** 1989 Apr 15;194(8):1073–6
Neurologic abnormalities as the predominant signs of neoplasia of the nasal cavity in dogs and cats: seven cases (1973–1986). Smith MO, et al. **J Am Vet Med Assoc** 1989 Jul 15;195(2):242–5
Tumor-associated erythrocytosis in a dog with nasal fibrosarcoma. Couto CG, et al. **J Vet Intern Med** 1989 Jul-Sep;3(3):183–5
Olfactory neuroblastomas in two cats. Cox NR, et al. **Vet Pathol** 1989 Jul;26(4):341–3
Nasal cavernous haemangioma in an American short haired cat. Anderson WI, et al. **Vet Rec** 1989 Jan 14;124(2):41

NOSEBLEED see **EPISTAXIS**

NOSEMA CUNICULI see under **SPOROZOA**

NOSOCOMIAL INFECTIONS see **CROSS INFECTION**

NOSTRUMS

Salmonella arizona infections associated with ingestion of rattlesnake capsules [letter] Fleischman S, et al. **Arch Intern Med** 1989 Mar;149(3):701, 705
Revici Method. **CA** 1989 Mar-Apr;39(2):119–22

NOTOCHORD see under **EMBRYO**

NOTOPHTHALMUS VIRIDESCENS see under **SALAMANDRIDAE**

NOVELTY-SEEKING BEHAVIOR see **EXPLORATORY BEHAVIOR**

NOVOBIOCIN

METABOLISM

Novobiocin affinity purification of a mitochondrial type II topoisomerase from the trypanosomatid Crithidia fasciculata. Melendy T, et al. **J Biol Chem** 1989 Jan 25; 264(3):1870–6

PHARMACOLOGY

Differential effects of DNA gyrase inhibitors on the genetic transformation of Neisseria gonorrhoeae. Parham C, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1788–92
Unique sensitivity of nitrogen mustard-resistant human Burkitt lymphoma cells to novobiocin. Tan KB, et al. **Biochem Pharmacol** 1988 Nov 15;37(22):4411–3
Novobiocin- and phorbol-12-myristate-13-acetate-induced differentiation of human leukemia cells associated with a reduction in topoisomerase II activity. Constantinou A, et al. **Cancer Res** 1989 Mar 1;49(5):1110–7
Effect of novobiocin on the antitumor activity and tumor cell and bone marrow survivals of three alkylating agents. Eder JP, et al. **Cancer Res** 1989 Feb 1;49(3):595–8
Novobiocin-induced ultrastructural changes and antagonism of DNA synthesis in Trypanosoma cruzi amastigotes growing in cell-free medium. Kerschmann RL, et al. **J Protozool** 1989 Jan-Feb;36(1):14–20
Cross-resistance of novobiocin-resistant BHK cell line to topoisomerase II inhibitors. Ishida R, et al. **Somat Cell Mol Genet** 1988 Sep;14(5):489–97
[Interactions of DNA topoisomerase inhibitors novobiocin and nalidixic acid with some cytotoxic agents. In vitro investigations in rat thymic and splenic cells] Tempel K. **Z Naturforsch [C]** 1989 Jul-Aug;44(7-8):673–9 (Eng. Abstr.) **(Ger)**
[Features of glycolysis and pentose phosphate pathway in novobiocin sensitive and novobiocin resistant staphylococci] Vinnikov AI, et al. **Antibiot Khimioter** 1989 Jan;34(1):34–8 (Eng. Abstr.) **(Rus)**
[Reduced frequency of homologous recombination in

Bacillus subtilis mutants resistant to novobiocin] Barabanshchikov BI, et al. **Mol Gen Mikrobiol Virusol** 1988 Sep;(9):39–43 (Eng. Abstr.) (Rus)

THERAPEUTIC USE

[Albamycin T in the treatment of gonorrhea] Owsińska H, et al. **Przegl Dermatol** 1988 May–Jun;75(3):204–9 (Eng. Abstr.) (Pol)

NOXYTHIOLIN see under **THIOUREA**

NTR GENES see **GENES, NITROGEN FIXATION**

NUCLEAR ENERGY

see related
RADIATION PROTECTION
RADIOACTIVE WASTE

Cancer mortality around La Hague nuclear facilities. Dousset M. **Health Phys** 1989 Jun;56(6):875–84

Mortality and career radiation doses for workers at a commercial nuclear power plant: feasibility study. Goldsmith R, et al. **Health Phys** 1989 Feb;56(2):139–50

Risks of radioactive material transportation accidents in Oregon. Humphries LL, et al. **Health Phys** 1989 Jul; 57(1):131–9

Particle size distributions for airborne radionuclides in Ginna steam generator work environments. Mis FJ, et al. **Health Phys** 1989 Feb;56(2):233–8

Health physics measurement of Princeton Tokamaks, 1977–1987. Stencel JR, et al. **Health Phys** 1989 Jun; 56(6):915–28

Con–fusion [editorial] **Lancet** 1989 May 6;1(8645):1000

Harbouring a health risk. van Lieshout T. **Med J Aust** 1988 Dec 5–19;149(11–12):672–3

[Possibility of the development of the means of protecting individuals from gamma radiation of fission products] Gol'dshtein DS, et al. **Gig Sanit** 1989 Apr;(4):61–2 (4 ref.) (Rus)

[Radiation–hygienic principles of optimal radiation monitoring in the surveillance areas of atomic power stations] Piskunov LI, et al. **Gig Sanit** 1988 Jul;(7):44–8 (Rus)

NUCLEAR ENVELOPE see **NUCLEAR MEMBRANE**

NUCLEAR FAMILY see under **FAMILY**

NUCLEAR FISSION

Teratogenic effect of fission neutron and tritium water on rat embryo. Satow Y, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:416–31

[RBE of low–dose fission neutrons evaluated on the basis of cytogenetic changes in the corneal epithelial cells of mice] Vorozhtsova SV, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):91–3 (Rus)

NUCLEAR FUSION see under **NUCLEAR ENERGY**

NUCLEAR GAMMA RESONANCE SPECTROSCOPY see **SPECTROSCOPY, MOSSBAUER**

NUCLEAR MAGNETIC RESONANCE

see related
MAGNETIC RESONANCE IMAGING

The role of magnetic resonance imaging in the examination of the cardiovascular system. Lambrecht LJ, et al. **Acta Clin Belg** 1988;43(4):282–90

Pathophysiological investigation of experimental cerebral ischaemia using in vivo 31P–NMR spectroscopy and 1H–MRI. Higuchi T, et al. **Acta Neurochir Suppl (Wien)** 1988;43:172–6

The investigation of experimental brain tumours using 31P–MRS and 1H–MRI. Hirakawa K, et al. **Acta Neurochir Suppl (Wien)** 1988;43:140–4

Phosphorus–31 nuclear magnetic resonance spectroscopic study of the canine pancreas: applications to acute alcoholic pancreatitis. Janes N, et al. **Adv Alcohol Subst Abuse** 1988; 7(3–4):213–9

Cardiovascular applications of nuclear magnetic resonance spectroscopy. Schaefer S. **Am J Cardiol** 1989 Sep 5; 64(9):38E–45E (39 ref.)

Hypophosphatemia and respiratory failure: prolonged abnormal energy metabolism demonstrated by nuclear magnetic resonance spectroscopy. Lewis JF, et al. **Am J Med** 1987 Dec;83(6):1139–43

Assessment of lung water distribution by nuclear magnetic resonance. A new method for quantifying and monitoring experimental lung injury. Cutillo AG, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1371–8

Isolation and characterization of the diastereoisomers of a series of phosphate–ethylated dinucleoside monophosphates. Weinfeld M, et al. **Anal Biochem** 1989 Apr;178(1):93–101

Metabolic changes in rabbit spinal cord after trauma: magnetic resonance spectroscopy studies. Vink R, et al. **Ann Neurol** 1989 Jan;25(1):26–31

High–resolution solid–state NMR of proteins. Smith SO, et al. **Annu Rev Phys Chem** 1988;39:511–35 (127 ref.)

Brain phosphorus magnetic resonance spectroscopy in acute bacterial meningitis. Matthews PM, et al. **Arch Neurol** 1989 Sep;46(9):994–6

Correlation of phosphorus–31 magnetic resonance spectroscopy and morphologic findings in Alzheimer's disease. Pettegrew JW, et al. **Arch Neurol** 1988 Oct; 45(10):1093–6

In vivo phosphorus 31 magnetic resonance spectroscopy of rat hind limb skeletal muscle during sepsis. Jacobs DO, et al. **Arch Surg** 1988 Nov;123(11):1425–8

500 MHz 1H NMR of chlorophylls in the major light–harvesting chlorophyll–protein complex of photosystem II. Dijkema C, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1085–92

Heteronuclear three–dimensional NMR spectroscopy applied to CMP–KDO synthetase (27.5 kD). Fesik SW, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):842–7

In vivo 31P NMR spectroscopy of energy rich phosphates in the brain of the hyperammonemic rat. Friolet R, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):815–20

A measurement of cerebral glucose uptake rate by 31P MRS. Koga K, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1258–63

Experimental evidence of an alpha helix in Desulfovibrio desulfuricans Norway ferredoxin I: a two–dimensional NMR study. Marion D, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):592–8

Sequence determination in oligosaccharides by relayed NOE experiments in the rotating frame. Poppe L, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):618–23

Reaction of 3–dehydroecdysone with certain n.m.r. solvents. Howarth OW, et al. **Biochem J** 1989 Apr 1;259(1):299–302

Assignment of histidine resonances in the 1H NMR (500 MHz) spectrum of subtilisin BPN' using site–directed mutagenesis. Bycroft M, et al. **Biochemistry** 1988 Sep 20; 27(19):7390–4

Assignments of 31P NMR resonances in oligodeoxyribonucleotides: origin of sequence–specific variations in the deoxyribose phosphate backbone conformation and the 31P chemical shifts of double–helical nucleic acids. Gorenstein DG, et al. **Biochemistry** 1988 Sep 20;27(19):7223–37

Concerted two–dimensional NMR approaches to hydrogen–1, carbon–13, and nitrogen–15 resonance assignments in proteins. Stockman BJ, et al. **Biochemistry** 1989 Jan 10;28(1):230–6

One– and two–dimensional nuclear Overhauser effect studies of the electronic/molecular structure of the heme cavity of ferricytochrome b5. McLachlan SJ, et al. **Biochim Biophys Acta** 1988 Dec 2;957(3):430–45

The Na+/K+–ATPase reaction of human erythrocytes is not near equilibrium. A 31P–NMR study. Petersen A, et al. **Biochim Biophys Acta** 1989 Aug 15;1012(3):267–71

Regulation of intracellular pH in rat uterine smooth muscle, studied by 31P NMR spectroscopy. Wray S. **Biochim Biophys Acta** 1988 Dec 9;972(3):299–301

Traumatic spinal cord injury in rabbits decreases intracellular free magnesium concentration as measured by 31P MRS. Vink R, et al. **Brain Res** 1989 Jun 19;490(1):144–7

On the utility of 13C–n.m.r. spectroscopy in the identification of the primary structures of manno–oligosaccharides and glycopeptides. Cumming DA, et al. **Carbohydr Res** 1988 Aug 15;179:369–80 (34 ref.)

Nuclear magnetic resonance spectra of heparin in admixture with dermatan sulfate and other glycosaminoglycans. 2–D spectra of the chondroitin sulfates. Holme KR, et al. **Carbohydr Res** 1989 Mar 15;186(2):301–12

The determination of the structure of blood group oligosaccharides from fully assigned 1H–n.m.r. spectra for solutions in non–aqueous solvents. Rao BN, et al. **Carbohydr Res** 1988 Sep 1;180(1):111–28

Elucidation of the structure of the Pasteurella haemolytica serotype T10 lipopolysaccharide O–antigen by n.m.r. spectroscopy. Richards JC, et al. **Carbohydr Res** 1989 Mar 15;186(2):275–86

Response of myocardial metabolites to graded regional ischemia: 31P NMR spectroscopy of porcine myocardium in vivo. Schaefer S, et al. **Circ Res** 1989 May;64(5):968–76

31P nuclear magnetic resonance determination of changes in energy state in lung preservation. Hall TS, et al. **Circulation** 1988 Nov;78(5 Pt 2):III95–8

Rapid, reliable in vivo assays of human phosphate metabolites by nuclear magnetic resonance. Bottomley PA, et al. **Clin Chem** 1989 Mar;35(3):392–5

Nuclear magnetic resonance: principles and applications to pathology. Ballon D, et al. **Clin Lab Med** 1988 Dec; 8(4):737–51 (17 ref.)

Nuclear magnetic resonance measurements—clinical applications. Gutierrez G, et al. **Crit Care Med** 1989 Jan; 17(1):73–82 (75 ref.)

The response of liver to lactobionate/raffinose (University of Wisconsin—UW) solution during hypothermic preservation: a study using 31phosphorus nuclear magnetic resonance. Busza AL, et al. **Cryobiology** 1989 Jun; 26(3):273–6

The application of nuclear magnetic resonance spectroscopy to assess viability in stored tissues and organs. Fuller BJ, et al. **Cryobiology** 1989 Jun;26(3):248–55 (24 ref.)

Structure analysis of bovine lens calf gamma–II crystallin: residue assignments of the five histidine CE1 resonances observed by proton–nuclear magnetic resonance spectroscopy. Garner WH, et al. **Curr Eye Res** 1988 Aug; 7(8):777–88

Correlation between 31P NMR phosphomonoester and biochemically determined phosphorylethanolamine and phosphatidylethanolamine during development of the rat brain. Burri R, et al. **Dev Neurosci** 1988;10(4):213–21

Correlation between NMR scans of extraocular muscles and clinical symptoms in Graves' ophthalmopathy. Troelstra A, et al. **Doc Ophthalmol** 1988 Oct–Nov;70(2–3):243–9

Effect of pH on the nuclear magnetic resonance relaxivity of encapsulated solid paramagnetic substances. Braybrook JH, et al. **Drug Des Deliv** 1989 Mar;4(2):93–5

Muscle bio–energetics in acute glycolytic block: in vivo phosphorus–nuclear magnetic resonance study of iodo–acetate injected rats. Argov Z, et al. **Eur J Appl Physiol** 1989;58(8):808–15

Investigation of protein structure by means of 19F–NMR. A study of hen egg–white lysozyme. Adriaensens P, et al. **Eur J Biochem** 1988 Nov 1;177(2):383–94

NMR studies of the interactions of substrates with enzymes and their peptide fragments. Mildvan AS. **FASEB J** 1989 Apr;3(6):1705–14 (43 ref.)

Sequencing of peracetylated oligosaccharides by rotating–frame nuclear Overhauser enhancement spectroscopy. Dabrowski J, et al. **FEBS Lett** 1989 Mar 27;246(1–2):229–32

NMR study of the alkaline isomerization of ferricytochrome c. Hong XL, et al. **FEBS Lett** 1989 Mar 27;246(1–2):105–8

Monitoring the transport and phosphorylation of 2–deoxy–D–glucose in tumor cells in vivo and in vitro by 13C nuclear magnetic resonance spectroscopy. Navon G, et al. **FEBS Lett** 1989 Apr 10;247(1):86–90

In vivo 19F nuclear magnetic resonance spectroscopy: a potential monitor of 5–fluorouracil pharmacokinetics and metabolism. Evelhoch JL. **Invest New Drugs** 1989 Apr; 7(1):5–12 (28 ref.)

Metabolic products of microorganisms. 246. 2880–II, a metabolite related to ferulic acid from Streptomyces griseoflavus. Grote R, et al. **J Antibiot (Tokyo)** 1988 Sep; 41(9):1275–6

In vivo magnetic resonance spectroscopy of muscle metabolism. Achten R, et al. **J Belge Radiol** 1988; 71(2):255–7

High resolution proton NMR studies of gangliosides. Structure of two types of GD3 lactones and their reactivity with monoclonal antibody R24. Ando S, et al. **J Biol Chem** 1989 Feb 25;264(6):3478–83

The poly–beta–hydroxybutyrate granule in vivo. A new insight based on NMR spectroscopy of whole cells. Barnard GN, et al. **J Biol Chem** 1989 Feb 25;264(6):3286–91

Transport and phosphorylation of choline in higher plant cells. Phosphorus–31 nuclear magnetic resonance studies. Bligny R, et al. **J Biol Chem** 1989 Mar 25;264(9):4888–95

The flexible region of protein L12 from bacterial ribosomes studied by proton nuclear magnetic resonance. Bushuev VN, et al. **J Biol Chem** 1989 Mar 15;264(8):4498–505

Chemical modification of bovine pancreatic trypsin inhibitor for single site coupling of immunogenic peptides for NMR conformational analysis. Ebina S, et al. **J Biol Chem** 1989 May 15;264(14):7882–8

113Cd NMR of Cd2+–substituted carboxypeptidase. Support for a hexa–coordinate metal ion in the presence of inhibitors. Ellis PD. **J Biol Chem** 1989 Feb 25; 264(6):3108–10

Study of the 5–oxoprolinase reaction by 13C NMR. Li LY, et al. **J Biol Chem** 1989 Feb 25;264(6):3096–101

18th annual UCLA symposium. Abstracts: Frontiers of NMR in molecular biology. **J Cell Biochem Suppl** 1989;13A:1–37

Assessment of postischemic cerebral energy metabolism in cat by 31P NMR: the cumulative effects of secondary hypoxia and ischemia. Alger JR, et al. **J Cereb Blood Flow Metab** 1989 Aug;9(4):506–14

Combined 1H–MR imaging and localized 31P–spectroscopy of intracranial tumors in 43 patients. Heindel W, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):907–16

Proton magnetic resonance spectroscopy of plasma from patients with dyslipoproteinemia: identification of factors governing methyl and methylene proton line widths. Herring FG, et al. **J Lipid Res** 1989 Apr;30(4):521–8

31P NMR of tissue phospholipids: a comparison of three tissue pre–treatment procedures. Meneses P, et al. **J Lipid Res** 1989 Mar;30(3):458–61

Comparison of the high–resolution structures of the alpha–amylase inhibitor tendamistat determined by nuclear magnetic resonance in solution and by X–ray diffraction in single crystals. Billeter M, et al. **J Mol Biol** 1989 Apr 20;206(4):677–87

Solution of the phase problem in the X–ray diffraction method for proteins with the nuclear magnetic resonance solution structure as initial model. Patterson search and refinement for the alpha–amylase inhibitor tendamistat. Braun W, et al. **J Mol Biol** 1989 Apr 20;206(4):669–76

Identification and description of alpha–helical regions in horse muscle acylphosphatase by 1H nuclear magnetic resonance spectroscopy. Saudek V, et al. **J Mol Biol** 1989 Jan 5;205(1):229–39

Determining stereo–specific 1H nuclear magnetic resonance assignments from distance geometry calculations. Weber PL, et al. **J Mol Biol** 1988 Nov 20;204(2):483–7

1H nuclear magnetic resonance assignments and secondary structure of porcine C5ades Arg. Williamson MP. **J Mol Biol** 1989 Mar 20;206(2):407–10

Assessment of the purity of d,l HM–PAO from diastereomeric mixtures using NMR techniques.

Feinstein-Jaffe I, et al. **J Nucl Med** 1989 Jan;30(1):106–9
Application of MR spectroscopy to the study of tumor biology. Boddie AW Jr, et al. **J Surg Res** 1989 Jan; 46(1):90–7 (63 ref.)
Preservation of high-energy phosphates in human myocardium. A phosphorus 31-nuclear magnetic resonance study of the effect of temperature on atrial appendages. Deslauriers R, et al. **J Thorac Cardiovasc Surg** 1989 Sep; 98(3):402–12
P-31 nuclear magnetic resonance spectral changes in obstructed or dehydrated kidney. Shapiro JI, et al. **Kidney Int** 1989 Mar;35(3):830–5
NMR imaging of fluid dynamics in reservoir core. Baldwin BA, et al. **Magn Reson Imaging** 1988 Sep–Oct;6(5):493–500
Regional variation in rat brain proton relaxation times and water content. Besson JA, et al. **Magn Reson Imaging** 1989 Mar–Apr;7(2):141–3
In vitro 4 MHz NMR proton relaxation times and in vitro mechanical behavior at low extension of human common carotid arterial wall. Constantinesco A, et al. **Magn Reson Imaging** 1989 Mar–Apr;7(2):173–7
Application of the maximum likelihood principle to separate exponential terms in T2 relaxation of nuclear magnetic resonance [letter] Joseph PM. **Magn Reson Imaging** 1988 Nov–Dec;6(6):723–4
In vivo muscle magnetic resonance spectroscopy in a family with mitochondrial cytopathy: a defect in fat metabolism. Narayana PA, et al. **Magn Reson Imaging** 1989 Mar–Apr; 7(2):133–9
In vivo measurements of T1 relaxation times of 31P-metabolites in human skeletal muscle. Thomsen C, et al. **Magn Reson Imaging** 1989 Mar–Apr;7(2):231–4
Problems in the assessment of magnesium depletion in the rat by in vivo 31P NMR. Adam WR, et al. **Magn Reson Med** 1988 Jul;7(3):300–10
Continuous-flow 13C-filtered 1H NMR spectroscopy of ethanol metabolism in rat liver perfusate. Albert K, et al. **Magn Reson Med** 1989 Sep;11(3):309–15
Two-dimensional correlated spectroscopy (COSY) of intact frog muscle: spectral pattern characterization and lactate quantitation. Alonso J, et al. **Magn Reson Med** 1989 Sep; 11(3):316–30
In vivo localized ESR spectroscopy reflecting metabolism. Bacic G, et al. **Magn Reson Med** 1989 May;10(2):266–72
Quantitative and qualitative fat analysis in human leg muscle of neuromuscular diseases by 1H MR spectroscopy in vivo. Bárány M, et al. **Magn Reson Med** 1989 May;10(2):210–26
Relaxometry of lens homogenates. II. Temperature dependence and comparison with other proteins. Beaulieu CF, et al. **Magn Reson Med** 1989 Jun;10(3):362–72
Power deposition and noise correlation in NMR samples. Carlson JW. **Magn Reson Med** 1989 Jun;10(3):399–403
Preliminary results of nuclear magnetic resonance studies of healthy human saliva. Coudert JL, et al. **Magn Reson Med** 1989 May;10(2):157–71
Pulse sequence and parameter choice in NMR imaging as a problem of constrained multidimensional nonlinear optimization. Dreher W, et al. **Magn Reson Med** 1988 Sep; 8(1):16–24
31P NMR studies of the thermodynamics and kinetics of the creatine kinase reaction. Eldar H, et al. **Magn Reson Med** 1989 Jul;11(1):121–6
A method for direct in vivo measurement of drug concentrations from a single 2H NMR spectrum. Evelhoch JL, et al. **Magn Reson Med** 1989 Mar;9(3):402–10
The uncommon longitudinal relaxation dispersion of human brain white matter. Fischer HW, et al. **Magn Reson Med** 1989 Mar;9(3):441–6
The effect of aging and storage conditions on excised tissues as monitored by longitudinal relaxation dispersion profiles. Fischer HW, et al. **Magn Reson Med** 1989 Mar;9(3):315–24
13C nuclear magnetic resonance spectroscopy of glucose metabolism in human red blood cells. Ghai G, et al. **Magn Reson Med** 1988 Nov;8(3):340–4
NMR relaxation of water in hydrogel polymers: a model for tissue. Gore JC, et al. **Magn Reson Med** 1989 Mar; 9(3):325–32
An analysis of magnetic cross-relaxation between water and methylene protons in a model system. Gore JC, et al. **Magn Reson Med** 1989 Mar;9(3):333–42
Interleaved 31P NMR with transcutaneous nerve stimulation (TNS): a method of monitoring compliance-independent skeletal muscle metabolic response to exercise. Helpern JA, et al. **Magn Reson Med** 1989 Apr;10(1):50–6
Sodium influxes in renal epithelial LLC-PK1/Cl4 cells monitored by 23Na NMR. Jans AW, et al. **Magn Reson Med** 1988 Jul;7(3):292–9
A 31P NMR study of the GI tract: effect of fructose loading and measurement of transverse relaxation times. Karczmar GS, et al. **Magn Reson Med** 1989 Jan;9(1):8–15
Double-quantum filtered volume-selective NMR spectroscopy. Knüttel A, et al. **Magn Reson Med** 1989 Jun; 10(3):404–10
Single-scan volume-selective editing of NMR spectra with the aid of a split-pathway technique for homonuclear applications. Knüttel A, et al. **Magn Reson Med** 1989 Jun; 10(3):411–7
Identification of a characteristic 31P NMR signal in acute experimental pancreatitis with the aid of 1H-31P correlated 2D measurements of intact pancreas. Kushnir T, et al. **Magn Reson Med** 1989 Apr;10(1):119–24
Water proton NMR relaxation mechanisms in lung tissue. Kveder M, et al. **Magn Reson Med** 1988 Aug;7(4):432–41
An automated iterative algorithm for the quantitative analysis of in vivo spectra based on the simplex optimization method. Lenkinski RE, et al. **Magn Reson Med** 1989 Jun; 10(3):338–48
Study of proton spin-lattice relaxation variation induced by paramagnetic antibodies. Macri MA, et al. **Magn Reson Med** 1989 Sep;11(3):283–7
Myocardial creatine kinase exchange rates and 31P NMR relaxation rates in intact pigs. Martin JF, et al. **Magn Reson Med** 1989 Jul;11(1):64–72
Nuclear magnetic relaxation studies of the compartmentalized water in crosslinked polymer gels. Murase N, et al. **Magn Reson Med** 1989 Jan;9(1):1–7
Therapeutic response of breast carcinoma monitored by 31P MRS in situ. Ng TC, et al. **Magn Reson Med** 1989 Apr; 10(1):125–34
Assessment of the NMR visibility of intraerythrocytic sodium by flame photometric and ion-competitive studies. Nissen H, et al. **Magn Reson Med** 1989 Jun;10(3):388–98
High-resolution 1H NMR spectral signature from human atheroma. Pearlman JD, et al. **Magn Reson Med** 1988 Jul; 7(3):262–79
Transmural metabolite distribution in regional myocardial ischemia as studied with 31P NMR. Robitaille PM, et al. **Magn Reson Med** 1989 Apr;10(1):108–18
1H image-guided localized 31P MR spectroscopy of human brain: quantitative analysis of 31P MR spectra measured on volunteers and on intracranial tumor patients. Segebarth CM, et al. **Magn Reson Med** 1989 Sep;11(3):349–66
In vivo 31P nuclear magnetic resonance spectroscopy of rat 9L gliosarcoma treated with BCNU: dose response of spectral changes. Steen RG, et al. **Magn Reson Med** 1989 Aug;11(2):258–66
1H and 31P NMR measurement of cerebral lactate, high-energy phosphate levels, and pH in humans during voluntary hyperventilation: associated EEG, capnographic, and Doppler findings. van Rijen PC, et al. **Magn Reson Med** 1989 May;10(2):182–93
Androgen sensitivity of rat prostate carcinoma studied by 31P NMR spectroscopy, 1H MR imaging, and 23Na MR imaging. Vigneron DB, et al. **Magn Reson Med** 1989 Aug; 11(2):152–60
Phase alterations of spin echoes by motion along magnetic field gradients. Wendt RE 3d, et al. **Magn Reson Med** 1985 Dec;2(6):527–33
Relative contributions of chemical exchange and other relaxation mechanisms in protein solutions and tissues. Zhong JH, et al. **Magn Reson Med** 1989 Sep;11(3):295–308
Phospholipid and energy metabolism of cancer cells monitored by 31P magnetic resonance spectroscopy: possible clinical significance. Cohen JS. **Mayo Clin Proc** 1988 Dec;63(12):1199–207 (24 ref.)
The density matrix formalism of nuclear relaxation: a review. Harpen MD. **Med Phys** 1988 Jul–Aug;15(4):538–50 (49 ref.)
Prediction by 31P-NMR of the irreversibility of ischemic injury in rat skeletal muscle after ligation of the femoral artery. Authier B, et al. **Muscle Nerve** 1989 Jan;12(1):20–5
Effect of triglyceride levels on methyl and methylene envelope line widths in proton nuclear magnetic resonance spectroscopy of human plasma. Mims MP, et al. **N Engl J Med** 1989 Jun 1;320(22):1452–7
Dynamics of the multidomain fibrinolytic protein urokinase from two-dimensional NMR. Oswald RE, et al. **Nature** 1989 Feb 9;337(6207):579–82
Metabolic acidosis induced by N-methyl-D-aspartate in brain slices of the neonatal rat: 31P- and 1H-magnetic resonance spectroscopy. Jacquin T, et al. **Neurosci Lett** 1988 Oct 17;92(3):285–90
Correlation between intracellular pH and lactate levels in the rat brain during potassium cyanide induced metabolism blockade: a combined 31P-1H in vivo nuclear magnetic spectroscopy study. Lotito S, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):91–6
The value of Tc-DTPA transit times and NMR T1 measurements in monitoring the progress of renal transplants. Gemmell HG, et al. **Nucl Med Commun** 1985 Feb;6(2):67–74
Preliminary results on phosphorus-31 nuclear magnetic resonance evaluation of human uveal melanoma in enucleated eyes. Kolodny NH, et al. **Ophthalmology** 1988 May;95(5):666–73
Bioenergy recovery phenomenon in the myocardium following ischemia and factors contributing to the recovery studied by 31P magnetic resonance spectroscopy. Yoshiyama M. **Osaka City Med J** 1988 Oct;34(2):201–21
Enhanced membrane phospholipid metabolism in human pancreatic adenocarcinoma cell lines detected by low-resolution 1H nuclear magnetic resonance spectroscopy. Murat C, et al. **Pancreas** 1989;4(2):145–52
Metabolic and anatomic development of the chick embryo as studied by phosphorus-31 magnetic resonance spectroscopy and proton MRI. Moseley ME, et al. **Pediatr Radiol** 1989;19(6–7):400–5
Theoretical basis for equivalent circuit descriptions of the electric coupling between NMR coils and samples. Harpen MD. **Phys Med Biol** 1989 Jul;34(7):843–9
Metabolic studies using localized magnetic resonance spectroscopy. Gadian DG. **Proc Nutr Soc** 1988 Sep; 47(3):349–52
The structure of proteins and their binding sites: NMR and artificial intelligence. Jardetzky O, et al. **Prog Clin Biol Res** 1989;289:145–56
Selective proton labelling of amino acids in deuterated bovine calbindin D9K. A way to simplify 1H-NMR spectra. Brodin P, et al. **Protein Eng** 1989 Jan;2(5):353–7
Three-dimensional structures of proteins in solution by nuclear magnetic resonance spectroscopy. Gronenborn AM, et al. **Protein Seq Data Anal** 1989;2(1):1–8
Creation of a nuclear magnetic resonance data repository and literature database. Ulrich EL, et al. **Protein Seq Data Anal** 1989;2(1):23–37
19F magnetic resonance imaging and spectroscopy of a fluorinated neuroleptic ligand: in vivo and in vitro studies. Arndt DC, et al. **Psychiatry Res** 1988 Jul;25(1):73–9
Whole-body MR imaging and spectroscopy at 4 T: where do we go from here? [editorial] Ortendahl DA. **Radiology** 1988 Dec;169(3):864–5
Osteosarcoma: use of MR imaging and MR spectroscopy in clinical decision making. Redmond OM, et al. **Radiology** 1989 Sep;172(3):811–5
Effect of intravenous fructose on the P-31 MR spectrum of the liver: dose response in healthy volunteers. Terrier F, et al. **Radiology** 1989 May;171(2):557–63
New horizons in medicine [editorial] Abelson PH. **Science** 1988 Nov 25;242(4882):1109
Crystal versus solution structures of enzymes: NMR spectroscopy of a crystalline serine protease. Smith SO, et al. **Science** 1989 May 26;244(4907):961–4
Cerebral lactate detected by regional proton magnetic resonance spectroscopy in a patient with cerebral infarction. Berkelbach van der Sprenkel JW, et al. **Stroke** 1988 Dec;19(12):1556–60
Magnetic resonance and clinical cerebrovascular disease. An update. Ramadan NM, et al. **Stroke** 1989 Sep;20(9):1279–83 (40 ref.)
Optimal hypothermic preservation of arrested myocardium in isolated perfused rabbit hearts: a 31P NMR study. Whitman GJ, et al. **Surgery** 1989 Jan;105(1):100–8
Preliminary clinical experience with pretransplant assessment of renal viability by phosphorus-31 magnetic resonance spectroscopy (31P-MRS). Bretan PN Jr, et al. **Transplant Proc** 1988 Oct;20(5):852–3
Assessment of renal viability for transplantation by high field 31P-NMR. Pomer S, et al. **Transplant Proc** 1988 Oct; 20(5):899–901
High resolution NMR in vivo. Shulman RG. **Trends Biochem Sci** 1988 Feb;13(2):37–9
Assessment of male infertility: correlation between results of semen analysis and phosphorus-31 magnetic resonance spectroscopy [published erratum appears in Urology 1989 Apr;33(4):259M] Bretan PN, et al. **Urology** 1989 Feb; 33(2):116–9
[Overview of nuclear magnetic resonance terminology] Van de Vyver FL, et al. **J Belge Radiol** 1988;71(2):273–93 **(Dut)**
[Muscular energetics studied by nuclear magnetic resonance spectroscopy of phosphorus (cardiac and skeletal muscles)] Rossi A. **Arch Int Physiol Biochim** 1988 Sep; 96(4):A393–409 (80 ref.) **(Fre)**
[Contribution of nuclear magnetic resonance spectroscopy of phosphorus-31 and carbon-13 in the study of myocardial metabolism] Bernard M, et al. **Arch Mal Coeur** 1988 Oct; 81 Spec No:61–8 (Eng. Abstr.) **(Fre)**
[H-NMR spectroscopy of plasma cannot be used for cancer screening] Tran Dinh S, et al. **Bull Cancer (Paris)** 1988; 75(8):795–800 (Eng. Abstr.) **(Fre)**
[Abridged lexicon of terms in nuclear magnetic resonance] Muller RN. **J Belge Radiol** 1988;71(2):259–71 **(Fre)**
[Modern radiologic imaging in the diagnosis of abdominal diseases. Magnetic resonance imaging and spectroscopy] Fuchs WA. **Helv Chir Acta** 1989 Apr;55(6):799–805 (19 ref.) (Eng. Abstr.) **(Ger)**
[Magnetic resonance in pediatric research and clinical practice. II. Studies on the development and pathology of the brain in neonates, infants and young children] Martin E, et al. **Helv Paediatr Acta** 1988 Aug;43(1–2):75–86 (Eng. Abstr.) **(Ger)**
[Diagnosis of tumor metabolism using positron emission tomography and magnetic resonance spectroscopy (editorial)] van Kaick G. **Radiologe** 1989 Jul;29(7):313–4 **(Ger)**
[Bone marrow changes in Hodgkin's disease: MR tomography and chemical shift imaging] Gückel F, et al. **ROFO** 1989 Jun;150(6):670–3 (Eng. Abstr.) **(Ger)**
[In vivo 31 phosphorus spectroscopy of tumors: pre-, intra- and post-therapy] Semmler W, et al. **ROFO** 1988 Oct; 149(4):369–77 (Eng. Abstr.) **(Ger)**
[In vivo 31P magnetic resonance spectroscopy and MRI in patients with superficial tumors] Vogl T, et al. **ROFO** 1989 Jan;150(1):58–65 (Eng. Abstr.) **(Ger)**
[Visualizing muscular phosphorus metabolites in peripheral arterial occlusive disease] Rexroth W, et al. **Vasa Suppl** 1988;23:115–20 **(Ger)**
[Clinical use of magnetic resonance spectroscopy and positron emission tomography in oncology] Schlag P, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:162–3 **(Ger)**
[Clinical use of magnetic resonance spectroscopy in tumor patients] Semmler W, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:158–61 **(Ger)**
[Therapy monitoring of regional chemotherapy by magnetic resonance spectroscopy] Semmler W, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:202–3 **(Ger)**
[Analysis of 13C-NMR spectra of oligosaccharides using

microcomputers] Shibaev VN. **Bioorg Khim** 1988 Jul; 14(7):926–37 (Eng. Abstr.) **(Rus)**

[Principles of quantitative analysis of two-dimensional spectra of nuclear Overhauser effect in evaluation of protein and peptide conformation] Sobol' AG, et al. **Bioorg Khim** 1988 Aug;14(8):997–1013 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Enthusiasm for MRI 'P Chem' reservations [letter] Honour LC. **Hosp Pract [Off]** 1989 Jan 15;24(1):17

DIAGNOSTIC USE

Magnetic resonance imaging and spectroscopy of thigh muscles in cruciate ligament insufficiency. Kariya Y, et al. **Acta Orthop Scand** 1989 Jun;60(3):322–5

In vivo measurement of intracellular pH in human brain during different tensions of carbon dioxide in arterial blood. A 31P–NMR study. Jensen KE, et al. **Acta Physiol Scand** 1988 Oct;134(2):295–8

Characterization of CNS lesions by using high-resolution 1H MR spectroscopy of CSF: preliminary results. Koschorek F, et al. **AJNR** 1989 May–Jun;10(3):523–7

31P spectroscopy in thrombolytic treatment of experimental cerebral infarct. Lee BC, et al. **AJR** 1989 Mar;152(3):623–8

1989 ARRS Executive Council Award. Exercise-enhanced MR imaging of variations in forearm muscle anatomy and use: importance in MR spectroscopy. Fleckenstein JL, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):693–8

In vivo MR spectroscopic imaging of the adrenal glands: distinction between adenomas and carcinomas larger than 15 mm based on lipid content. Leroy-Willig A, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):771–3

Assessment of myocardial infarct size by means of T2-weighted 1H nuclear magnetic resonance imaging. Bouchard A, et al. **Am Heart J** 1989 Feb;117(2):281–9

Regional metabolism during coronary occlusion, reperfusion, and reocclusion using phosphorus31 nuclear magnetic resonance spectroscopy in the intact rabbit. Kavanaugh KM, et al. **Am Heart J** 1989 Jan;117(1):53–9

Nuclear magnetic resonance in the clinical laboratory. Bock JL. **Am J Clin Pathol** 1989 Apr;91(4 Suppl 1):S19–26

Assessing the value of identifying the presence of malignant disease in human plasma by proton nuclear magnetic resonance spectroscopy. Buchthal SD, et al. **Am J Med** 1988 Oct;85(4):528–32

Phosphorus 31 nuclear magnetic resonance examination of female reproductive tissues. Noyszewski EA, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):282–8

Nuclear magnetic resonance spectroscopy of plasma for the detection of head and neck cancer. Dawson DE, et al. **Am J Otolaryngol** 1989 Jul–Aug;10(4):244–9

Nuclear magnetic resonance study of obsessive-compulsive disorder. Garber HJ, et al. **Am J Psychiatry** 1989 Aug; 146(8):1001–5

In vivo study of tissue oxygen metabolism using optical and nuclear magnetic resonance spectroscopies. Tamura M, et al. **Annu Rev Physiol** 1989;51:813–34 (169 ref.)

Magnetic resonance and near infrared spectroscopy for investigation of perinatal hypoxic–ischaemic brain injury. Wyatt JS, et al. **Arch Dis Child** 1989 Jul;64(7):953–63 (40 ref.)

Nuclear magnetic resonance spectroscopy [editorial] Cox IJ. **Br J Hosp Med** 1988 Sep;40(3):165

1H nuclear magnetic resonance investigation of synovial fluid components in osteoarthritis, rheumatoid arthritis and traumatic effusions. Williamson MP, et al. **Br J Rheumatol** 1989 Feb;28(1):23–7

In vivo [31P]NMR studies on the influence of age on rat brain hypoxia. Stolk JA, et al. **Brain Res** 1989 Mar 13; 482(1):1–11

Brain pH in migraine: an in vivo phosphorus-31 magnetic resonance spectroscopy study. Welch KM, et al. **Cephalalgia** 1988 Dec;8(4):273–7

Clinical implications of nuclear magnetic resonance lung research. Cutillo AG, et al. **Chest** 1989 Sep;96(3):643–52 (115 ref.)

Magnetic resonance spectroscopy in biology and medicine. Smith IC. **Clin Biochem** 1989 Feb;22(1):69–76

Commentary on 'Detection of Tumors with Nuclear Magnetic Resonance Spectroscopy of Plasma' by S. Berger, K.-H. Pflüger, W.A. Etzel, J. Fischer. Fossel ET. **Eur J Cancer Clin Oncol** 1989 Jun;25(6):925–7

Chemical shift imaging of atherosclerosis at 7.0 Tesla. Maynor CH, et al. **Invest Radiol** 1989 Jan;24(1):52–60

NMR spectroscopic investigation of the recovery of energy and acid-base homeostasis in the cat brain after prolonged ischemia. Behar KL, et al. **J Cereb Blood Flow Metab** 1989 Oct;9(5):655–65

Use of phosphorus-31 MR spectroscopy to monitor response to chemotherapy in non-Hodgkin lymphoma. Bryant DJ, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):770–4

Analysis of the magnitude of susceptibility effects in disease of the brain: implications for MR spectroscopy. Collins AG, et al. **J Comput Assist Tomogr** 1988 Sep–Oct; 12(5):775–7

Metabolic response of glioblastoma to adoptive immunotherapy: detection by phosphorus MR spectroscopy. Ross BD, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):189–93

1H NMR spectroscopy: an approach to evaluation of diseased skin in vivo. Kim YH, et al. **J Invest Dermatol** 1989 Feb; 92(2):210–6

The water-holding capacity of the stratum corneum measured by 1H-NMR. Yamamura T, et al. **J Invest Dermatol** 1989 Jul;93(1):160–4

Observation of cerebral metabolites in an animal model of acute liver failure in vivo: a 1H and 31P nuclear magnetic resonance study. Bates TE, et al. **J Neurochem** 1989 Jul; 53(1):102–10

Changes in intracellular free magnesium during hypoglycaemia and hypoxia in cerebral tissue as calculated from 31P-nuclear magnetic resonance spectra. Brooks KJ, et al. **J Neurochem** 1989 Aug;53(2):331–4

Magnetic resonance imaging and 31P magnetic resonance spectroscopy for evaluating focal cerebral ischemia. Germano IM, et al. **J Neurosurg** 1989 Apr;70(4):612–8

Changes in cellular bioenergetic state following graded traumatic brain injury in rats: determination by phosphorus 31 magnetic resonance spectroscopy. Vink R, et al. **J Neurotrauma** 1988;5(4):315–30

Magnetic resonance spectroscopy may hold promise in studying metabolites, tissues [news] Kirn TF. **JAMA** 1989 Feb 24;261(8):1103, 1107

The alterations of magnetic resonance relaxation parameters in excised myocardial tissue during NMR spectroscopy: the effects of time, environmental exposure and TTC staining. Liu P, et al. **Magn Reson Imaging** 1989 Jan–Feb; 7(1):109–13

31P and 1H magnetic resonance spectroscopy of acute alcohol cardiac depression in rats. Auffermann W, et al. **Magn Reson Med** 1988 Sep;8(1):58–69

Reactive hyperemia monitored on rat muscle using perfluorocarbons and 19F NMR. Authier B. **Magn Reson Med** 1988 Sep;8(1):80–3

Relaxometry of calf lens homogenates, including cross-relaxation by crystallin NH groups. Beaulieu CF, et al. **Magn Reson Med** 1988 Sep;8(1):45–57

High-resolution 1H NMR spectroscopy in the diagnosis of breast cancer. Bradamante S, et al. **Magn Reson Med** 1988 Dec;8(4):440–9

In vivo proton nuclear magnetic resonance imaging and spectroscopy studies of halocarbon-induced liver damage. Brauer M, et al. **Magn Reson Med** 1989 Feb;9(2):229–39

31P NMR Bayesian spectral analysis of rat brain in vivo. Bretthorst GL, et al. **Magn Reson Med** 1989 Feb;9(2):282–7

Cerebral metabolism in man after acute stroke: new observations using localized proton NMR spectroscopy. Bruhn H, et al. **Magn Reson Med** 1989 Jan;9(1):126–31

NMR characteristics of "visible" intracellular myocardial potassium in perfused rat hearts. Burstein D, et al. **Magn Reson Med** 1989 Jan;9(1):66–78

Determination of triacylglycerol lipase activity using carbon-13-labeled triacylglycerols and nuclear magnetic resonance spectroscopy: evidence that hepatic lipase hydrolyzes medium-chain triacylglycerols. Dimand RJ, et al. **Magn Reson Med** 1989 Feb;9(2):273–7

1H NMR studies on human plasma lipids from newborn infants, healthy adults, and adults with tumors. Eskelinen S, et al. **Magn Reson Med** 1989 Jan;9(1):35–8

Deuterium NMR cerebral imaging in situ. Ewy CS, et al. **Magn Reson Med** 1988 Sep;8(1):35–44

31P NMR study of insulin effects on the isolated perfused rabbit urinary bladder. Fisher MJ, et al. **Magn Reson Med** 1989 Jan;9(1):53–65

Localized high-resolution proton NMR spectroscopy using stimulated echoes: initial applications to human brain in vivo. Frahm J, et al. **Magn Reson Med** 1989 Jan;9(1):79–93

Analysis by the Carr-Purcell-Meiboom-Gill sequence of the influence of P388 leukemia and of cis-diamminedichloroplatinum(II) nephrotoxicity on water compartmentalization in kidneys and spleens of mice. François A, et al. **Magn Reson Med** 1988 Aug;7(4):449–62

In vivo high-resolution volume-selected proton spectroscopy and T1 measurements in the dog brain. Galloway GJ, et al. **Magn Reson Med** 1989 Feb;9(2):288–95

Differentiation of human tumors from nonmalignant tissue by natural-abundance 13C NMR spectroscopy. Halliday KR, et al. **Magn Reson Med** 1988 Aug;7(4):384–411

Rapid 31P spectroscopy on a 4-T whole-body system. Hardy CJ, et al. **Magn Reson Med** 1988 Sep;8(1):104–9

Serial changes in nuclear magnetic resonance relaxation times after myocardial infarction in the rabbit: relationship to water content, severity of ischemia, and histopathology over a six-month period. Johnston DL, et al. **Magn Reson Med** 1988 Dec;8(4):363–79

23Na NMR measurement of the maximal rate of active sodium efflux from human red blood cells. Knubovets TL, et al. **Magn Reson Med** 1989 Feb;9(2):261–72

Integrated volume-selective/spectral editing 1H NMR and postdetection signal processing for the sensitive determination of lactate. Knüttel A, et al. **Magn Reson Med** 1988 Sep;8(1):70–9

Snapshot head imaging at 0.5 T using the echo planar technique. Ordidge RJ, et al. **Magn Reson Med** 1988 Sep; 8(1):110–5

In vivo functioning of creatine phosphokinase in human forearm muscle, studied by 31P NMR saturation transfer. Rees D, et al. **Magn Reson Med** 1989 Jan;9(1):39–52

In vivo 1H NMR spectroscopy of an intracerebral glioma in the rat. Remy C, et al. **Magn Reson Med** 1989 Mar; 9(3):395–401

Application of a T2-filtered COSY experiment to identify the origin of slowly relaxing species in normal and malignant tissue. Williams PG, et al. **Magn Reson Med** 1988 Aug;7(4):463–71

Determination of halothane distribution in the rat head using 19F NMR technique. Wyrwicz AM, et al. **Magn Reson Med** 1989 Feb;9(2):219–28

Phosphorus nuclear magnetic resonance evidence of abnormal skeletal muscle metabolism in chronic alcoholics. Bollaert PE, et al. **Neurology** 1989 Jun;39(6):821–4

Use of 31P magnetic resonance spectroscopy to characterize evolving brain damage after perinatal asphyxia. Laptook AR, et al. **Neurology** 1989 May;39(5):709–12

High-field proton magnetic resonance spectroscopy of human cerebrum obtained during surgery for epilepsy. Petroff OA, et al. **Neurology** 1989 Sep;39(9):1197–202

1H nuclear magnetic resonance spectroscopy study of neonatal hypoglycemia. Petroff OA, et al. **Pediatr Neurol** 1988 Jan–Feb;4(1):31–4

Intracellular pH during secretion in the perfused rabbit mandibular salivary gland measured by 31P NMR spectroscopy. Steward MC, et al. **Pflugers Arch** 1989 Jun; 414(2):200–7

Early stage detection of chemotherapeutic effect on 203 GL glioma in mice as studied by P-31 NMR and flow cytometry. Itoh M, et al. **Radiat Med** 1988 Jul–Aug; 6(4):192–6

Human leg neuromuscular diseases: P-31 MR spectroscopy. Bárány M, et al. **Radiology** 1989 Aug;172(2):503–8

Whole-body MR imaging and spectroscopy with a 4-T system. Barfuss H, et al. **Radiology** 1988 Dec;169(3):811–6

Variations in the in vivo P-31 MR spectra of the developing human brain during postnatal life. Work in progress. Boesch C, et al. **Radiology** 1989 Jul;172(1):197–9

Human in vivo NMR spectroscopy in diagnostic medicine: clinical tool or research probe? Bottomley PA. **Radiology** 1989 Jan;170(1 Pt 1):1–15 (164 ref.)

Noninvasive differentiation of tumors with use of localized H-1 MR spectroscopy in vivo: initial experience in patients with cerebral tumors [see comments] Bruhn H, et al. **Radiology** 1989 Aug;172(2):541–8. **Comment in:** Radiology 1989 Aug;172(2):318–20

Gated cardiac MR imaging and P-31 MR spectroscopy in humans at 1.5 T. Work in progress. Grist TM, et al. **Radiology** 1989 Feb;170(2):357–61

Application of image-guided surface coil P-31 MR spectroscopy to human liver, heart, and kidney. Matson GB, et al. **Radiology** 1988 Nov;169(2):541–7

Bone and soft-tissue lesions: diagnosis with combined H-1 MR imaging and P-31 MR spectroscopy. Negendank WG, et al. **Radiology** 1989 Oct;173(1):181–8

Human neoplasm pH and response to radiation therapy: P-31 MR spectroscopy studies in situ. Ng TC, et al. **Radiology** 1989 Mar;170(3 Pt 1):875–8

Reperfused-viable and reperfused-infarcted myocardium: differentiation with in vivo P-31 MR spectroscopy. Rehr RB, et al. **Radiology** 1989 Jul;172(1):53–8

Human breast cancer in vivo: H-1 and P-31 MR spectroscopy at 1.5 T. Sijens PE, et al. **Radiology** 1988 Dec;169(3):615–20

P-31 MR spectroscopy in assessing testicular torsion: rat model. Tzika AA, et al. **Radiology** 1989 Sep;172(3):753–7

The power of the proton [editorial; comment] Weiner MW, et al. **Radiology** 1989 Aug;172(2):318–20. **Comment on:** Radiology 1989 Aug;172(2):541–8

Cerebral blood flow measured by NMR indicator dilution in cats. Ewing JR, et al. **Stroke** 1989 Feb;20(2):259–67

Nicardipine reduces ischemic brain injury. Magnetic resonance imaging/spectroscopy study in cats. Kucharczyk J, et al. **Stroke** 1989 Feb;20(2):268–74

Magnetic resonance imaging and spectroscopy of intraocular tumors. Kolodny NH, et al. **Surv Ophthalmol** 1989 May–Jun;33(6):502–14 (54 ref.)

[Nuclear magnetic resonance spectroscopy in medicine] Kauppinen RA. **Duodecim** 1989;105(4):319–22 (18 ref.) **(Fin)**

[NMR research on blood plasma for tumor detection—a method for mass screening?] Fritzsche H, et al. **Arch Geschwulstforsch** 1989;59(2):129–33 (Eng. Abstr.) **(Ger)**

[Nuclear magnetic resonance spectroscopy in medicine] Timm G, et al. **Radiol Diagn (Berl)** 1988;29(5):741–6 (Eng. Abstr.) **(Ger)**

[Imaging diagnosis of ischemic cardiopathy. The role of magnetic resonance] Casolo GC, et al. **Radiol Med (Torino)** 1988 Sep;76(3):137–45 **(Ita)**

[MRI and MRS in the diagnosis of cancer] Itai Y. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 2):639–45 (15 ref.) (Eng. Abstr.) **(Jpn)**

[NMR spectroscopy of tumors] Itoh M, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-1):1167–72 (6 ref.) (Eng. Abstr.) **(Jpn)**

[Selected aspects of the use of nuclear magnetic resonance in medicine] Winnicki C. **Pol Tyg Lek** 1989 Jan 2;44(1):15–9 **(Pol)**

INSTRUMENTATION

Reproducible nuclear magnetic resonance surface coil fabrication by combining computer-aided design and a photoresist process. Fan TW, et al. **Anal Chem** 1989 Mar 15;61(6):636–8

Changing views of NMR: automated high-resolution NMR with a sample changer. Wade CG, et al. **Anal Chem** 1989

Jan 15;61(2):107A–111A

Pulse, a PC-based graphics pulse sequence editor for NMR and MRI. Wang H, et al. **Australas Phys Eng Sci Med** 1989 Jun;12(2):69–72

New NMR probe designs for neonatal, immature and adult heart research. With a brief review. Kost GJ, et al. **Biomater Artif Cells Artif Organs** 1989;17(1):45–59

An incremental phase shifter and frequency modulator for magnetic resonance imaging and spectroscopy. Jensen DJ, et al. **IEEE Trans Biomed Eng** 1987 Apr;34(4):310–3

Introduction to magnetic resonance imaging [published erratum appears in J Am Osteopath Assoc 1989 Jun;89(6):716] Gift DA, et al. **J Am Osteopath Assoc** 1989 Mar;89(3):315–20, 321 (12 ref.)

Doubly tuned solenoidal resonators for small animal imaging and spectroscopy at 1.5 Tesla. Ballon D, et al. **Magn Reson Imaging** 1989 Mar–Apr;7(2):155–62

Calibrated uncoupling of tightly coupled concentric surface coils for in vivo NMR. Bendall MR. **Magn Reson Med** 1988 Dec;8(4):380–93

Human in vivo phosphate metabolite imaging with 31P NMR. Bottomley PA, et al. **Magn Reson Med** 1988 Jul; 7(3):319–36

A dual-tuned probe and multiband receiver front end for X-nucleus spectroscopy with proton scout imaging in vivo. Tropp J, et al. **Magn Reson Med** 1989 Sep;11(3):405–12

[Principles of magnetic resonance spectroscopy] Gückel F, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:155–7 (6 ref.) **(Ger)**

METHODS

Analysis of membrane lipids by 500 MHz 1H NMR. Sparling ML, et al. **Anal Biochem** 1989 Apr;178(1):67–76

Two-dimensional NMR and protein structure. Bax A. **Annu Rev Biochem** 1989;58:223–56 (173 ref.)

Distance estimation from NOE data in macromolecular systems: a quadratic approach. Majumdar A, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):886–92

Propionate metabolism in the rat heart by 13C n.m.r. spectroscopy. Sherry AD, et al. **Biochem J** 1988 Sep 1; 254(2):593–8

Protein structures from NMR. Kaptein R, et al. **Biochemistry** 1988 Jul 26;27(15):5389–95 (48 ref.)

Ligand-binding effects on the kringle 4 domain from human plasminogen: a study by laser photo-CIDNP 1H-NMR spectroscopy. De Marco A, et al. **Biochim Biophys Acta** 1989 Feb 2;994(2):121–37

The role of sophisticated instruments in biological research: examples from nuclear magnetic resonance. Becker ED. **Biosci Rep** 1988 Dec;8(6):509–18

Magnetic resonance spectroscopy of the heart. Schaefer S, et al. **Cardiol Clin** 1989 Aug;7(3):697–712 (117 ref.)

NMR chemical shift imaging. Brink HF, et al. **Comput Med Imaging Graph** 1989 Jan–Feb;13(1):93–104 (60 ref.)

NMR studies of mobility within protein structure. Williams RJ. **Eur J Biochem** 1989 Aug 15;183(3):479–97 (78 ref.)

High resolution NMR spectroscopy using a recursive algorithm. Nishiyama K, et al. **IEEE Trans Biomed Eng** 1989 Feb;36(2):222–31

Particular utility of the HMBC technique to polypropionate derived metabolites as exemplified by erythromycin A. Seto H, et al. **J Antibiot (Tokyo)** 1988 Aug;41(8):1158–60

Magnetic resonance spectroscopy in vivo. Porter DA, et al. **J Biomed Eng** 1988 Nov;10(6):562–8 (22 ref.)

Two-dimensional 1H nuclear magnetic resonance study of pike pI 5.0 parvalbumin (Esox lucius). Sequential resonance assignments and folding of the polypeptide chain. Padilla A, et al. **J Mol Biol** 1988 Dec 20;204(4):995–1017

Proton magnetic resonance in myelin deficient brains of mutant mice. Jolesz FA, et al. **J Neurol Sci** 1989 Jun; 91(1–2):85–96

Chemical exchange magnetic resonance imaging (CHEMI). McFarland EW, et al. **Magn Reson Imaging** 1988 Sep–Oct; 6(5):507–15

Lactate observation in vivo by spectral editing in real time. Vinitski S, et al. **Magn Reson Imaging** 1988 Nov–Dec; 6(6):707–11

Evaluation of a newly discovered water suppression pulse sequence for high-field in vivo 1H surface coil NMR spectroscopy. Alger JR, et al. **Magn Reson Med** 1989 Jul; 11(1):73–84

Comparison of the signal-to-noise ratio at 1.5 and 2.0 T using a whole-body system. Beckmann N, et al. **Magn Reson Med** 1989 Mar;9(3):391–4

Proton NMR characteristics of a biological system useful for developing in vivo spectroscopy and imaging techniques for tumors. Block RE, et al. **Magn Reson Med** 1985 Dec;2(6):576–82

High-flux signals and spatial localization in high-resolution 1H spectroscopy with surface coils. Bourgeois D, et al. **Magn Reson Med** 1989 Aug;11(2):275–81

Water suppression with B0 field gradient homospoil pulses in high-resolution NMR spectroscopy. Brereton IM, et al. **Magn Reson Med** 1989 Jan;9(1):118–25

A novel double-surface coil approach to phosphorus-31 spectroscopy: a study of hemispheric brain injury in the rat. Chew WM, et al. **Magn Reson Med** 1985 Dec; 2(6):567–75

The unequivocal determination of lactic acid using a one-dimensional zero-quantum coherence-transfer technique. Doddrell DM, et al. **Magn Reson Med** 1989 Jan; 9(1):132–8

Nodal inhomogeneity mapping by localized excitation—the "NIMBLE" shimming technique for high-resolution in vivo NMR spectroscopy. Doddrell DM, et al. **Magn Reson Med** 1988 Jul;7(3):352–7

A method for chemical-shift-selective imaging. Dumoulin CL. **Magn Reson Med** 1985 Dec;2(6):583–5

Localized proton NMR spectroscopy in different regions of the human brain in vivo. Relaxation times and concentrations of cerebral metabolites. Frahm J, et al. **Magn Reson Med** 1989 Jul;11(1):47–63

1H COSY spectra of superfused brain slices of rat: ex vivo direct assignment of resonances. Gillet B, et al. **Magn Reson Med** 1989 Sep;11(3):288–94

SLIM: spectral localization by imaging. Hu X, et al. **Magn Reson Med** 1988 Nov;8(3):314–22

Spectral editing techniques for 31P NMR spectroscopy of blood. Jayasundar R, et al. **Magn Reson Med** 1989 Apr; 10(1):89–95

Boron-11 MRI and MRS of intact animals infused with a boron neutron capture agent. Kabalka GW, et al. **Magn Reson Med** 1988 Oct;8(2):231–7

Multicompartment analysis of blood flow and tissue perfusion employing D2O as a freely diffusible tracer: a novel deuterium NMR technique demonstrated via application with murine RIF-1 tumors. Kim SG, et al. **Magn Reson Med** 1988 Dec;8(4):410–26

Single-scan volume-selective spectral editing by homonuclear polarization transfer. Knüttel A, et al. **Magn Reson Med** 1989 Feb;9(2):254–60

Detection of exchange reactions involving small metabolite pools using NMR magnetization transfer techniques: relevance to subcellular compartmentation of creatine kinase. Koretsky AP, et al. **Magn Reson Med** 1985 Dec; 2(6):586–94

Computer simulation of MRS localization techniques: an analysis of ISIS. Lawry TJ, et al. **Magn Reson Med** 1989 Mar;9(3):299–314

Experimental approaches to image localized human 31P NMR spectroscopy. Luyten PR, et al. **Magn Reson Med** 1989 Jul;11(1):1–21

A one-shot lactate-editing sequence for localized whole-body spectroscopy. McKinnon GC, et al. **Magn Reson Med** 1988 Nov;8(3):355–61

A perfusion system developed for 31P NMR study of melanoma cells at tissue-like density. Minichiello MM, et al. **Magn Reson Med** 1989 Apr;10(1):96–107

Transrectal probe for 1H MRI and 31P MR spectroscopy of the prostate gland. Narayan P, et al. **Magn Reson Med** 1989 Aug;11(2):209–20 (35 ref.)

On the use of double-quantum coherence from an AX3 system (protons in lactate) for spectral editing. Nosel W, et al. **Magn Reson Med** 1989 Sep;11(3):398–404

A general approach to selection of multiple cubic volume elements using the ISIS technique. Ordidge RJ, et al. **Magn Reson Med** 1988 Nov;8(3):323–31

Time-multiplexed multislice inversion-recovery techniques for NMR imaging. Park HW, et al. **Magn Reson Med** 1985 Dec;2(6):534–9

A method for correctly setting the rf flip angle. Perman WH, et al. **Magn Reson Med** 1989 Jan;9(1):16–24

Spectroscopic imaging and spatial localization using adiabatic pulses and applications to detect transmural metabolite distribution in the canine heart. Robitaille PM, et al. **Magn Reson Med** 1989 Apr;10(1):14–37

In vitro NMR characterization of mammalian myocardium: effect of specimen integrity on relaxation times. Scholz TD, et al. **Magn Reson Med** 1989 Sep;11(3):367–70

Conformal NMR spectroscopy: accurate localization to noncuboidal volumes with optimum SNR. Sharp JC, et al. **Magn Reson Med** 1989 Sep;11(3):376–88

In vivo 13C NMR spectroscopy of the human prostate. Sillerud LO, et al. **Magn Reson Med** 1988 Oct;8(2):224–30

A volume-localized, two-dimensional NMR method for the determination of lactate using zero-quantum coherence created in a stimulated echo pulse sequence. Sotak CH. **Magn Reson Med** 1988 Jul;7(3):364–70

Rapid 31P NMR test of liver function. Thoma WJ, et al. **Magn Reson Med** 1988 Oct;8(2):220–3

High field localized proton spectroscopy in small volumes: greatly improved localization and shimming using shielded strong gradients. van Zijl PC, et al. **Magn Reson Med** 1989 May;10(2):256–65

Phosphorus nuclear magnetic resonance spectroscopy in neonatal disorders. Younkin DP. **Mead Johnson Symp Perinat Dev Med** 1987;(25):19–25

Nuclear magnetic resonance microscopy with 4-microns resolution: theoretical study and experimental results. Cho ZH, et al. **Med Phys** 1988 Nov–Dec;15(6):815–24

Automatic shimming for localized spectroscopy. Holz D, et al. **Med Phys** 1988 Nov–Dec;15(6):898–903

The use of n.m.r. spectroscopy in the structure determination of natural products: two-dimensional methods. Derome AE. **Nat Prod Rep** 1989 Apr;6(2):111–41 (117 ref.)

The use of n.m.r. spectroscopy in the structure determination of natural products: one-dimensional methods. Sadler IH. **Nat Prod Rep** 1988 Apr;5(2):101–27 (102 ref.)

Metabolite specific proton magnetic resonance imaging. Hurd RE, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4402–6

Potential use of in vivo proton spectroscopy for head and neck lesions. Mafee MF, et al. **Radiol Clin North Am** 1989 Mar;27(2):243–54 (66 ref.)

Effects of pulse shaping in laser spectroscopy and nuclear magnetic resonance. Warren WS. **Science** 1988 Nov 11; 242(4880):878–84 (50 ref.)

What can two-dimensional NMR tell us about proteins? Wright PE. **Trends Biochem Sci** 1989 Jul;14(7):255–60 (43 ref.)

The application of nuclear magnetic resonance spectroscopy to drug metabolism studies. Malet-Martino MC, et al. **Xenobiotica** 1989 Jun;19(6):583–607 (74 ref.)

[Fundamentals and technical aspects of magnetic resonance spectroscopy in relation to patients] Gückel F, et al. **Radiologe** 1989 Jul;29(7):322–[illegible] (33 ref.) (Eng. Abstr.) **(Ger)**

[Application of multinuclear in vivo magnetic resonance spectroscopy in oncology] Semmler W, et al. **Radiologe** 1989 Jul;29(7):330–5 (40 ref.) (Eng. Abstr.) **(Ger)**

[31-phosphorus magnetic resonance spectroscopy—a new research instrument in urology. Determination of current status and outlook for clinical use] Pomer S. **Urologe [A]** 1989 Jul;28(4):223–30 (44 ref.) (Eng. Abstr.) **(Ger)**

[31P-NMR spectroscopy of the human liver and bile] Khristianovich DS, et al. **Biull Eksp Biol Med** 1988 Dec; 106(12):678–81 (Eng. Abstr.) **(Rus)**

NUCLEAR MEDICINE

see related

RADIOISOTOPES

Low-level radioactive waste from U.S. biomedical and academic institutions: policies, strategies, and solutions. Wilkerson A, et al. **Annu Rev Public Health** 1989; 10:299–317 (87 ref.)

Effect of smear method on detection of 99mTc radiopharmaceuticals. Kawano T, et al. **Health Phys** 1989 Apr;56(4):543–6

Education and research foundation honors Mark A. Mintun, MD, with 9th annual Tetalman Memorial Award. Tilyou SM. **J Nucl Med** 1989 Jul;30(7):1141–2, 1146

DOE's suspension of enriched uranium shipments at Savannah River puts Mo-99/Tc-99m supply in jeopardy [news] Tilyou SM. **J Nucl Med** 1989 Jul;30(7):1139–40, 1146

Evolution of functional imaging in nuclear medicine [editorial] Mariani G. **J Nucl Med Allied Sci** 1988 Oct–Dec; 32(4):223–5

Nuclear medicine. Wagner HN Jr. **JAMA** 1989 May 19; 261(19):2860–2

The collection of information about nuclear medicine in the health service. Britton KE. **Nucl Med Commun** 1985 Feb; 6(2):63–6

A brief overview of nuclear medicine in China. Wang SC, et al. **Semin Nucl Med** 1989 Apr;19(2):144–51

[Committee of the German Society for Nuclear Medicine. Clinical quality control of in-vivo studies in nuclear medicine. 1. Recommendations] **Nuklearmedizin** 1989 Aug; 28(4):suppl 1–32 **(Ger)**

[SPECT—single photon emission computer tomography. A new imaging method in isotope diagnosis] Csernay L. **Orv Hetil** 1989 Mar 19;130(12):603–12 (46 ref.) (Eng. Abstr.) **(Hun)**

[SIRMN: Italian Association of Medical Radiology and Nuclear Medicine. Official directory of members, updated 31 December 1988] **Radiol Med (Torino)** 1988;Suppl:1–64 **(Ita)**

ECONOMICS

Nuclear medicine: procedural and cognitive [news] Goldsmith SJ. **J Nucl Med** 1989 Mar;30(3):276

Magnitude estimation is coming [news] Henkin RE. **J Nucl Med** 1989 Aug;30(8):1294–5

EDUCATION

Clinical nuclear pharmacy practice in the U.S. Army. Dydek GJ. **Milit Med** 1988 Dec;153(12):609–11

[The teaching of nuclear medicine at medical schools] Dienstbier Z. **Cas Lek Cesk** 1987 Jun 12;126(24):737–9 (Eng. Abstr.) **(Cze)**

HISTORY

John G. McAfee to receive SNM Hevesy Nuclear Medicine Pioneer Award. Arnold RJ. **J Nucl Med** 1989 May; 30(5):577–8

A city of nuclear medicine landmarks and innovators. Tilyou SM. **J Nucl Med** 1989 May;30(5):569–71, 579

[Nuclear medicine in Germany: a look back at the beginning] Winkler C. **Nuklearmedizin** 1989 Feb;28(1):1–10 (Eng. Abstr.) **(Ger)**

LEGISLATION & JURISPRUDENCE

SNM/ACNP petition NRC to change 10 CFR 35 [news] **J Nucl Med** 1989 Aug;30(8):1296

MANPOWER

Manpower requirements for clinical PET [letter; comment] Lambrecht RM, et al. **J Nucl Med** 1989 Jun;30(6):1132. **Comment on:** J Nucl Med 1988 Nov;29(11):1751–7

ORGANIZATION & ADMINISTRATION

Transfer of medical technology from a developed to a

developing country. Kouris K, et al. **J Biomed Eng** 1988 Jul;10(4):326–30

STANDARDS

Irradiation of volunteers in nuclear medicine. Huda W, et al. **J Nucl Med** 1989 Feb;30(2):260–4
Quality assurance in nuclear medicine [editorial] Coakley AJ. **Nucl Med Commun** 1989 Mar;10(3):139–40
A postal survey of quality assurance in nuclear medicine imaging in the UK during 1988. Williams ED, et al. **Nucl Med Commun** 1989 Mar;10(3):181–9
Quality assurance and control of radiation medicine procedures—an important factor in medical care improvement. Milu C. **Sante Publique (Bucur)** 1988 Oct–Dec;31(4):331–5

STATISTICS & NUMERICAL DATA

Nuclear medicine staff and patient doses in Manitoba (1981–1985). Huda W, et al. **Health Phys** 1989 Mar; 56(3):277–85
[Estimation of frequency, population doses and stochastic risks in medical uses of radiopharmaceuticals in Japan, 1982. 1. The number of medical examinations using radiopharmaceuticals] Maruyama T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jul 25; 48(7):911–20 (Eng. Abstr.) **(Jpn)**
[The present state of nuclear medicine practice in Japan—a report of the 2d nationwide survey in 1987. Subcommittee for Surveillance of Nuclear Medicine Practice, Medical and Pharmaceutical Committee, Japan Radioisotope Association] **Radioisotopes** 1989 Apr;38(4):219–28 **(Jpn)**

TRENDS

Nuclear medicine in the 1990s: a quantitative physiological approach. Ott RJ. **Br J Radiol** 1989 May;62(737):421–32
SNM highlights—1989: "Why not?". Wagner HN Jr. **J Nucl Med** 1989 Aug;30(8):1283–93, 1295
[The development of nuclear medicine in Japan in comparison with trends in foreign countries (2)] Kakei H. **Kaku Igaku** 1988 Apr;25(4):345–50 **(Jpn)**
[Nuclear cardiology—a continuously developing discipline] Rosfors S. **Lakartidningen** 1989 Jul 26;86(30–31):2589 **(Swe)**

NUCLEAR MEDICINE DEPARTMENT, HOSPITAL see under **HOSPITAL DEPARTMENTS**

NUCLEAR MEMBRANE

ANALYSIS

A histone 1–like antigen is a component of the nuclear envelope. Venkatraman JT, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):675–80
Nucleolar and nuclear envelope proteins of the yeast Saccharomyces cerevisiae. Hurt EC, et al. **Eur J Cell Biol** 1988 Aug;46(3):554–63
Primary structure analysis of an integral membrane glycoprotein of the nuclear pore. Wozniak RW, et al. **J Cell Biol** 1989 Jun;108(6):2083–92
Characterization of a novel nuclear envelope protein restricted to certain cell types. Lord JM, et al. **J Cell Sci** 1988 Jun;90 (Pt 2):237–45
Localization of Epstein–Barr virus envelope glycoproteins on the inner nuclear membrane of virus–producing cells. Torrisi MR, et al. **J Virol** 1989 Feb;63(2):828–32
Partial cDNA sequence encoding a nuclear pore protein modified by O–linked N–acetylglucosamine. D'Onofrio M, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9595–9

DRUG EFFECTS

Nuclear envelope breakdown and mitosis in sand dollar embryos is inhibited by microinjection of calcium buffers in a calcium–reversible fashion, and by antagonists of intracellular Ca2+ channels. Silver RB. **Dev Biol** 1989 Jan; 131(1):11–26

ENZYMOLOGY

Selective inhibition of membrane ATPases by hydrogen peroxide in the lens of the eye. Borchman D, et al. **Basic Life Sci** 1988;49:1029–33
Properties of membrane–bound bilirubin UDP–glucuronyltransferase in rough and smooth endoplasmic reticulum and in the nuclear envelope from rat liver. Vanstapel F, et al. **Biochem J** 1989 May 1; 259(3):659–63
Nuclear envelope glycoprotein with poly(A) polymerase activity of rat liver: isolation, characterization, and immunohistochemical localization. Kurl RN, et al. **Biochemistry** 1988 Dec 13;27(25):8974–80
Biochemical and histochemical localization of succinate dehydrogenase on nuclear membrane of rat thymocytes and splenocytes. Arifuddin M, et al. **Indian J Exp Biol** 1988 May;26(5):397–9
Localization of the membrane–associated CTP:phosphocholine cytidylyltransferase in Chinese hamster ovary cells with an altered membrane composition. Morand JN, et al. **J Biol Chem** 1989 Aug 15; 264(23):13785–92
Type 3 protein kinase C localization to the nuclear envelope of phorbol ester–treated NIH 3T3 cells. Leach KL, et al. **J Cell Biol** 1989 Aug;109(2):685–95

IMMUNOLOGY

A novel autoantibody causing a peripheral fluorescent antinuclear antibody pattern is specific for nuclear pore complexes. Dagenais A, et al. **Arthritis Rheum** 1988 Oct; 31(10):1322–7
Liver diseases associated with autoantibodies directed to nuclear envelope components [letter] Lassoued K, et al. **Hepatology** 1989 Jun;9(6):911–2
Yeast nuclear envelope proteins cross react with an antibody against mammalian pore complex proteins. Aris JP, et al. **J Cell Biol** 1989 Jun;108(6):2059–67
Annulate lamellae: comparison of antigenic epitopes of annulate lamellae membranes with the nuclear envelope. Chen TY, et al. **J Cell Biol** 1988 Oct;107(4):1299–306
A monoclonal antibody against the nuclear pore complex inhibits nucleocytoplasmic transport of protein and RNA in vivo. Featherstone C, et al. **J Cell Biol** 1988 Oct; 107(4):1289–97
Developmental and mitotic behaviour of two novel groups of nuclear envelope antigens of Drosophila melanogaster. Frasch M, et al. **J Cell Sci** 1988 Jun;90 (Pt 2):247–63

METABOLISM

Nuclear membrane lipid peroxidation products bind to nuclear macromolecules. Vaca CE, et al. **Arch Biochem Biophys** 1989 Mar;269(2):548–54
Karyophilic peptides: applications to the study of nuclear transport. Goldfarb DS. **Cell Biol Int Rep** 1988 Sep; 12(9):809–32 (46 ref.)
Structure and transport of a specific premessenger RNP particle. Mehlin H, et al. **Cell Biol Int Rep** 1988 Sep; 12(9):729–36
Nuclear protein accumulation: envelope transport or phase affinity mechanisms? Paine PL. **Cell Biol Int Rep** 1988 Sep; 12(9):691–708 (68 ref.)
Lamin B methylation and assembly into the nuclear envelope. Chelsky D, et al. **J Biol Chem** 1989 May 5;264(13):7637–43
Protein inport through the nuclear pore complex is a multistep process. Akey CW, et al. **J Cell Biol** 1989 Sep; 109(3):971–82
The effects of variations in the number and sequence of targeting signals on nuclear uptake. Dworetzky SI, et al. **J Cell Biol** 1988 Oct;107(4):1279–87
Lamin A, lamin B, and lamin B receptor analogues in yeast. Georgatos SD, et al. **J Cell Biol** 1989 Jun;108(6):2069–82
The permeability of nuclear membranes. Riedel N, et al. **Mol Aspects Med** 1988;10(3):239–48
Identification of specific binding proteins for a nuclear location sequence. Adam SA, et al. **Nature** 1989 Jan 19; 337(6204):276–9
A lamin B receptor in the nuclear envelope. Worman HJ, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8531–4

PHYSIOLOGY

Functional organization of the nuclear envelope. Gerace L, et al. **Annu Rev Cell Biol** 1988;4:335–74 (185 ref.)
The pore complex in nucleocytoplasmic exchange. Feldherr CM, et al. **Cell Biol Int Rep** 1988 Sep;12(9):791–808 (54 ref.)
Disassembly of the nuclear envelope of spisula oocytes in a cell–free system. Dessev G, et al. **Dev Biol** 1989 Feb; 131(2):496–504
Meiotic breakdown of nuclear envelope in oocytes of Spisula solidissima involves phosphorylation and release of nuclear lamin. Dessev G, et al. **Dev Biol** 1988 Dec;130(2):543–50
Nuclear envelope disassembly and nuclear lamina depolymerization during germinal vesicle breakdown in starfish. Stricker SA, et al. **Dev Biol** 1989 Sep;135(1):87–98
A monoclonal antibody against the nuclear pore complex inhibits nucleocytoplasmic transport of protein and RNA in vivo. Featherstone C, et al. **J Cell Biol** 1988 Oct; 107(4):1289–97
Statin, a nonproliferation–specific protein, is associated with the nuclear envelope and is heterogeneously distributed in cells leaving quiescent state. Wang E. **J Cell Physiol** 1989 Sep;140(3):418–26

ULTRASTRUCTURE

Functional organization of the nuclear envelope. Gerace L, et al. **Annu Rev Cell Biol** 1988;4:335–74 (185 ref.)
The reconstitution of nuclear envelopes in cell–free extracts. Lohka MJ. **Cell Biol Int Rep** 1988 Sep;12(9):833–48 (32 ref.)
The nuclear envelope and the organization of the pore complexes. Scheer U, et al. **Cell Biol Int Rep** 1988 Sep; 12(9):669–89 (42 ref.)
Binding parameters of rat liver nuclear receptors for T3 after partial hepatectomy or bilateral adrenalectomy and serum T4 and T3 levels. Brtko J, et al. **Endocrinol Exp** 1988 Dec; 22(4):211–20
Spatial relationship between the nucleolus and the nuclear envelope: structural aspects and functional significance. Bourgeois CA, et al. **Int Rev Cytol** 1988;111:1–52 (262 ref.)
Interactions and structure of the nuclear pore complex revealed by cryo–electron microscopy. Akey CW. **J Cell Biol** 1989 Sep;109(3):955–70
Integral membrane proteins specific to the inner nuclear membrane and associated with the nuclear lamina. Senior A, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2029–36
Quick–freeze, deep–etch visualization of the nuclear pore complex. Fujitani Y, et al. **J Electron Microsc (Tokyo)** 1989; 38(1):34–40
Preparation of shadowed nuclear envelopes from Xenopus oocyte germinal vesicles for electron microscopy. Whytock S, et al. **J Microsc** 1988 Aug;151 (Pt 2):115–26
Quantification of nuclear pores in tumor promoter–induced hepatic nodules in rats: a freeze–fracture study. Evans MG. **J Toxicol Environ Health** 1988;25(4):471–7

NUCLEAR PHYSICS

Superstring theory [editorial] **Lancet** 1989 Aug 19; 2(8660):426–7

NUCLEAR POLYHEDROSIS VIRUSES see **POLYHEDROSIS VIRUSES**

NUCLEAR PORE see **NUCLEAR MEMBRANE**

NUCLEAR PROTEINS

Phosphohistidine is found in basic nuclear proteins of Physarum polycephalum. Pesis KH, et al. **FEBS Lett** 1988 Oct 24;239(1):151–4
DNAse I footprint analysis of nuclear proteins from pituitary and nonpituitary cells that specifically bind to the rat growth hormone promoter and 5'-regulatory region. Guérin SL, et al. **Mol Endocrinol** 1988 Nov;2(11):1101–7

ANALYSIS

Effects of several commonly used fixatives on DNA and total nuclear protein analysis by flow cytometry. Herbert DJ, et al. **Am J Clin Pathol** 1989 May;91(5):535–41
A method for measuring lymphocyte proliferation in mixed lymphocyte cultures using a nuclear proliferation antigen, Ki–67, and flow cytometry. Palutke M, et al. **Am J Clin Pathol** 1989 Apr;91(4):417–21
Rapid detection of cytomegalovirus by 24–well plate centrifugation with the use of a monoclonal antibody to an early nuclear antigen. Woods GL, et al. **Am J Clin Pathol** 1989 Jun;91(6):695–700
Relationship between Ki–67 positive cells, growth rate and histological type of human intracranial tumors. Patsouris E, et al. **Anticancer Res** 1988 Jul–Aug;8(4):537–44
Flow cytometric measurements of proliferation–associated nuclear antigen p105 and DNA content in non–Hodgkin's lymphomas. Turner RR, et al. **Arch Pathol Lab Med** 1989 Aug;113(8):907–11
The nucleolar protein, B–36, contains a glycine and dimethylarginine–rich sequence conserved in several other nuclear RNA–binding proteins. Christensen ME, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1278–83
An evolutionarily conserved protein fraction stably linked to DNA. Avramova Z, et al. **Biochim Biophys Acta** 1989 Jan 23;1007(1):109–11
Comparison between counterimmunoelectrophoresis and double radial immunodiffusion in the detection of antibodies to topoisomerase I in sera from scleroderma patients. Asero R, et al. **Boll Ist Sieroter Milan** 1988; 67(2):159–61
An assessment of the value of Ag NOR staining in the identification of dysplastic and other borderline melanocytic naevi. MacKie RM, et al. **Br J Dermatol** 1989 Apr;120(4):511–6
Flow cytometric analysis of pituitary tumors. Correlation of nuclear antigen p105 and DNA content with clinical behavior. Fitzgibbons PL, et al. **Cancer** 1988 Oct 15; 62(8):1556–60
Prognostic significance of Ki–67 reactivity in soft tissue sarcomas. Ueda T, et al. **Cancer** 1989 Apr 15;63(8):1607–11
Characterization of a nuclear antigen (Mr 150,000) associated with cell proliferation. Chatterjee A, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7159–63
Normal hepatocytes exhibiting histone H3 with antibody accessible sites that are cryptic in carcinogen–altered hepatocytes. Munir KM, et al. **Cancer Res** 1989 Jan 15; 49(2):424–32
Sex–specific proteins in normal chick embryo gonads and testis feminized by oestrogen treatment: a two–dimensional gel electrophoresis investigation. Samsel J, et al. **Cell Differ Dev** 1988 Dec;25(3):223–8
The distribution of nucleoplasmin in early development and organogenesis of Xenopus laevis. Wedlich D, et al. **Cell Tissue Res** 1988 Nov;254(2):295–300
A group of non–Y encoded Drosophila hydei primary spermatocyte nuclear glycoproteins exhibits epitopes depending on formation of Y chromosomal giant lampbrush loops. Tischendorf G, et al. **Chromosoma** 1989 Aug; 98(2):144–52
Testing for antibodies to ENA and to dsDNA is not indicated in FANA–negative sera. Manoussakis MN, et al. **Clin Rheumatol** 1988 Dec;7(4):465–9
Limitations in the measurement of c–myc oncoprotein and other nuclear antigens by flow cytometry. Lincoln ST, et al. **Cytometry** 1989 Jul;10(4):456–62
Proliferation antigens in cutaneous melanocytic tumors—an immunohistochemical study comparing the transferrin receptor and the Ki 67 antigen. Soyer HP, et al. **Dermatologica** 1989;179(1):3–9

Visualization of a filamentous nucleoskeleton with a 23 nm axial repeat. Jackson DA, et al. **EMBO J** 1988 Dec 1; 7(12):3667–77

Characterization of a 48–kDa nucleic–acid–binding fragment of nucleolin. Sapp M, et al. **Eur J Biochem** 1989 Feb 15; 179(3):541–8

Amino acid sequence and molecular characterization of murine lamin B as deduced from cDNA clones. Höger TH, et al. **Eur J Cell Biol** 1988 Dec;47(2):283–90

Nucleolar and nuclear envelope proteins of the yeast Saccharomyces cerevisiae. Hurt EC, et al. **Eur J Cell Biol** 1988 Aug;46(3):554–63

Herpes simplex virus type 1–induced modifications in the distribution of nucleolar B–36 protein. López–Iglesias C, et al. **Eur J Cell Biol** 1988 Jun;46(2):259–69

Lack of lamins A and C in mammalian hemopoietic cell lines devoid of intermediate filament proteins. Paulin–Levasseur M, et al. **Eur J Cell Biol** 1988 Oct;47(1):121–31

Quantitation and subcellular localization of proliferating cell nuclear antigen (PCNA/cyclin) in oocytes and eggs of Xenopus laevis. Zuber M, et al. **Exp Cell Res** 1989 Jun; 182(2):384–93

Changes in nucleus, nucleolus and cell size accompanying somatic emb.yogenesis of Theobroma cacao L. I. Relationship between DNA and total protein content and size of nucleus, nucleolus and cell. Kononowicz H, et al. **Folia Histochem Cytobiol** 1988;26(4):237–47

Changes in nucleus, nucleolus and cell size accompanying somatic embryogenesis of Theobroma cacao L. II. Relation between basic protein content and size of nucleus, nucleolus and cell. Kononowicz H, et al. **Folia Histochem Cytobiol** 1988;26(4):249–56

Histones of nucleolar–associated chromatin from hamster liver. Lipińska A, et al. **Gen Physiol Biophys** 1989 Apr; 8(2):177–81

The use of a monoclonal antibody against a proliferating cell nuclear matrix antigen in the study of solid human tumors. Yankulov KY, et al. **Int J Cancer** 1989 May 15;43(5):800–4

The nucleolar organizer regions associated protein (Ag–NORs) in salivary gland tumors. Matsumura K, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):76–8

Protein import through the nuclear pore complex is a multistep process. Akey CW, et al. **J Cell Biol** 1989 Sep; 109(3):971–82

Characterization of a novel nuclear envelope protein restricted to certain cell types. Lord JM, et al. **J Cell Sci** 1988 Jun;90 (Pt 2):237–45

Evolutionary conservation in various mammalian species of the human proliferation–associated epitope recognized by the Ki–67 monoclonal antibody. Falini B, et al. **J Histochem Cytochem** 1989 Oct;37(10):1471–8

Scl–70 antigen stability and its effect on antibody detection in scleroderma. Kumar V, et al. **J Rheumatol** 1988 Oct; 15(10):1499–502

"Cytoplasmic" expression of nuclear antigens [letter] [see comments] Campana D, et al. **Leukemia** 1989 Mar; 3(3):239–40. **Comment in:** Leukemia 1989 May;3(5):397

Cytoplasmic Ki–67 expression: a reply to Dario Campana, Elaine Coustan–Smith, and George Janossy [letter; comment] Scott CS, et al. **Leukemia** 1989 May;3(5):397. **Comment on:** Leukemia 1989 Mar;3(3):239–40

Argyrophil organizer region proteins (AgNORs) in adenohypophysial cells and adenomas of the human pituitary. Stefaneanu L, et al. **Mod Pathol** 1989 May; 2(3):192–9

Identification of the binding sites for potential regulatory proteins in the upstream enhancer element of the Drosophila fushi tarazu gene [published erratum appears in Nucleic Acids Res 1989 Jan 25;17(2):830] Harrison SD, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11403–16

Ki–67 immunoreactivity in breast carcinomas in relation to transferrin receptor expression, estrogen receptor status and morphological criteria. An immunohistochemical study. Wrba F, et al. **Oncology** 1989;46(4):255–9

Prediction of the conformation of ice–nucleation protein by conformational energy calculation. Mizuno H. **Proteins** 1989;5(1):47–65

Staining of the nucleolus with protein and RNA stains for automatic measurement of nucleolar size in paraffin sections. Boon ME, et al. **Stain Technol** 1988 Sep; 63(5):289–97

Recruitment to the cytoplasm of a cellular lamin–like protein from the nucleus during a poxvirus infection. Bloom DC, et al. **Virology** 1989 Mar;169(1):115–26

Association of Autographa californica nuclear polyhedrosis virus (AcMNPV) with the nuclear matrix. Wilson ME, et al. **Virology** 1988 Nov;167(1):233–41

[A study on the hepatitis B virus associated nuclear antigen in a hepatocellular carcinoma cell line CZHC8571] Chen ZP. **Chung Hua I Hsueh Tsa Chih** 1988 Oct;68(10):572–4, 40 (Eng. Abstr.) **(Chi)**

[Determination of the growth fraction using monoclonal antibody Ki–67 in breast cancers] Lellé RJ, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(4):485–9 (Eng. Abstr.) **(Fre)**

[Anti–Scl–70 and anti–centromere autoantibodies. Biological markers of 2 forms of systemic scleroderma] Johanet C, et al. **Presse Med** 1989 Feb 11;18(5):207–11 (Eng. Abstr.) **(Fre)**

[Specific nuclear binding pattern of the scleroderma–70 antibody in immunofluorescence detection of antinuclear factors] Kühn G, et al. **Dermatol Monatsschr** 1988; 174(8):498–501 **(Ger)**

[The immunohistochemical growth fraction (Ki–67) of breast cancers: relations to tumor spread, tumor morphology and receptor testing] Weikel W, et al. **Geburtshilfe Frauenheilkd** 1989 Mar;49(3):277–82 (Eng. Abstr.) **(Ger)**

[Investigation of nucleoprotein fixation method in immunohistology] Sasaki J, et al. **Rinsho Byori** 1989 Jan; 37(1):102–6 **(Jpn)**

BIOSYNTHESIS

Cyclin/PCNA is a cell cycle modulated nuclear protein with a role in DNA replication. Celis JE, et al. **Arch Biol Med Exp (Santiago)** 1988 Dec;21(3–4):417–21

Synthesis of nuclear lamins in BHK–21 cells synchronized with aphidicolin. Foisy S, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):205–10

Characterization of pp64, a nuclear phosphoprotein induced by platelet–derived growth factor. Shawver LK, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1118–25

Biological activity in the repopulating rat spermatocyte after the withdrawal of gossypol treatment: II. The activity for the synthesis of cellular and nuclear basic proteins. Ye BK, et al. **Contraception** 1989 Aug;40(2):243–50

Expression of the SmB' splicing protein in rodent cells capable of following an alternative RNA splicing pathway. Sharpe NG, et al. **FEBS Lett** 1989 Jan 30;243(2):132–6

Nuclear protein synthesis in thymocytes of X–irradiated rats. Zhivotovsky BD, et al. **Int J Radiat Biol** 1988 Dec; 54(6):999–1006

Purification and characterization of a platelet–derived growth factor and heavy metal–modulated nuclear protein. Disa S, et al. **J Biol Chem** 1989 Sep 25;264(27):15993–9

Regulation of proliferating cell nuclear antigen during the cell cycle. Morris GF, et al. **J Biol Chem** 1989 Aug 15; 264(23):13856–64

Cyclin mRNA and protein expression in recombinant interleukin 2–stimulated cloned murine T lymphocytes. Shipman PM, et al. **J Cell Biochem** 1988 Nov;38(3):189–98

The nuclear matrix protein, numatrin (B23), is associated with growth factor–induced mitogenesis in Swiss 3T3 fibroblasts and with T lymphocyte proliferation stimulated by lectins and anti–T cell antigen receptor antibody. Feuerstein N, et al. **J Cell Biol** 1988 Nov;107(5):1629–42

Cyclin synthesis drives the early embryonic cell cycle. Murray AW, et al. **Nature** 1989 May 25;339(6222):275–80

Overexpression of normal human p53 in established fibroblasts leads to their tumorigenic conversion. Tuck SP, et al. **Oncogene Res** 1989;4(2):81–96

Neonatal induction of a nuclear protein that binds to the c–fos enhancer. Levi BZ, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2262–6

[Stimulation with triiodothyronine of the synthesis of DNA, total proteins, nuclear proteins and nuclear matrix proteins in cultured cells of hepatoma Morris 7777] Adylova AT, et al. **Vopr Med Khim** 1988 Nov–Dec;34(6):113–7 (Eng. Abstr.) **(Rus)**

BLOOD

Nuclear phosphotyrosyl–protein with DNA–binding ability in peripheral blood mononuclear cells from systemic lupus erythematosus patients. Deguchi Y, et al. **Clin Exp Immunol** 1989 Mar;75(3):343–8

Changes in inducible nuclear factors with specific binding ability to c–myc gene fragments in peripheral blood mononuclear cells from systemic lupus erythematosus patients. Deguchi Y, et al. **J Clin Lab Immunol** 1989 Feb; 28(2):61–7

The purification of an erythroid protein which binds to enhancer and promoter elements of haemoglobin genes. Perkins ND, et al. **Nucleic Acids Res** 1989 Feb 25; 17(4):1299–314

A lamin B receptor in the nuclear envelope. Worman HJ, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8531–4

GENETICS

Regulation of the expression of cell cycle genes. Baserga R, et al. **Ann N Y Acad Sci** 1988;551:283–9

The nucleotide sequence of a human cDNA encoding the highly conserved nucleolar phosphoprotein B23. Li XZ, et al. **Biochem Biophys Res Commun** 1989 Aug 30; 163(1):72–8

Gene expression of PCNA/cyclin in adult tissues and the R3230AC mammary tumor of rat. Liu YC, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):873–82

Characterization of the cDNA encoding human nucleophosmin and studies of its role in normal and abnormal growth. Chan WY, et al. **Biochemistry** 1989 Feb 7;28(3):1033–9

Requirement for proliferating cell nuclear antigen expression during stages of the Chinese hamster ovary cell cycle. Liu YC, et al. **Biochemistry** 1989 Apr 4;28(7):2967–74

Nucleotide sequence of the full–length mouse lamin C cDNA and its deduced amino–acid sequence. Riedel W, et al. **Biochim Biophys Acta** 1989 Jun 1;1008(1):119–22

Cell cycle–related proteins: a flow cytofluorometric study in human tumors. Danova M, et al. **Biol Cell** 1988; 64(1):23–8

Isolation and characterization of complementary DNA to proliferating cell nucleolar antigen P40. Reddy AB, et al. **Cancer Res** 1989 Apr 1;49(7):1763–7

Major nucleolar proteins shuttle between nucleus and cytoplasm. Borer RA, et al. **Cell** 1989 Feb 10;56(3):379–90

Transformation by activated ras or fos prevents myogenesis by inhibiting expression of MyoD1. Lassar AB, et al. **Cell** 1989 Aug 25;58(4):659–67

Expression and function of Drosophila cyclin A during embryonic cell cycle progression. Lehner CF, et al. **Cell** 1989 Mar 24;56(6):957–68

Translation of cyclin mRNA is necessary for extracts of activated xenopus eggs to enter mitosis. Minshull J, et al. **Cell** 1989 Mar 24;56(6):947–56

Isolation and properties of cDNA clones encoding SRF, a transcription factor that binds to the c–fos serum response element. Norman C, et al. **Cell** 1988 Dec 23;55(6):989–1003

Isolation of a human cyclin cDNA: evidence for cyclin mRNA and protein regulation in the cell cycle and for interaction with p34cdc2. Pines J, et al. **Cell** 1989 Sep 8; 58(5):833–46

The homeotic gene fork head encodes a nuclear protein and is expressed in the terminal regions of the Drosophila embryo. Weigel D, et al. **Cell** 1989 May 19;57(4):645–58

Transcriptional activation by the v–myb oncogene and its cellular progenitor, c–myb. Weston K, et al. **Cell** 1989 Jul 14;58(1):85–93

DNA cloning and amino acid sequence determination of a major constituent protein of mammalian nucleoli. Correspondence of the nucleoplasmin–related protein N038 to mammalian protein B23. Schmidt–Zachmann MS, et al. **Chromosoma** 1988;96(6):417–26

Composition and genetic variability of proteins from nuclear fractions of mouse (DBA/2J and C57BL/6J) liver and brain. Jungblut P, et al. **Electrophoresis** 1989 Jul; 10(7):464–72

The human beta–globin promoter; nuclear protein factors and erythroid specific induction of transcription. deBoer E, et al. **EMBO J** 1988 Dec 20;7(13):4203–12

Evidence for a nuclear factor(s), IRF–1, mediating induction and silencing properties to human IFN–beta gene regulatory elements. Fujita T, et al. **EMBO J** 1988 Nov; 7(11):3397–405

An initiation site of DNA replication with transcriptional enhancer activity present upstream of the c–myc gene. Iguchi–Ariga SM, et al. **EMBO J** 1988 Oct;7(10):3135–42

A yeast DNA repair gene partially complements defective excision repair in mammalian cells. Lambert C, et al. **EMBO J** 1988 Oct;7(10):3245–53

Mutations in the nuclear lamin proteins resulting in their aberrant assembly in the cytoplasm. Loewinger L, et al. **EMBO J** 1988 Aug;7(8):2301–9

Purification of a NF1–like DNA–binding protein from rat liver and cloning of the corresponding cDNA. Paonessa G, et al. **EMBO J** 1988 Oct;7(10):3115–23

cDNA cloning of the developmentally regulated lamin LIII of Xenopus laevis. Stick R. **EMBO J** 1988 Oct; 7(10):3189–97

Transcriptional and post–transcriptional regulation of c–myc, c–myb, and p53 during proliferation and differentiation of murine erythroleukemia cells treated with DFMO and DMSO. Klinken SP, et al. **Exp Cell Res** 1988 Oct; 178(2):185–98

Evidence that a nuclear matrix protein participates in premessenger RNA splicing. Smith HC, et al. **Exp Cell Res** 1989 Jun;182(2):521–33

Cloning and sequencing of the human nucleolin cDNA. Srivastava M, et al. **FEBS Lett** 1989 Jun 19;250(1):99–105

Sequence and structure of the nucleolin promoter in rodents: characterization of a strikingly conserved CpG island. Bourbon HM, et al. **Gene** 1988 Aug 15;68(1):73–84

A variation in the structure of the protein–coding region of the human p53 gene. Buchman VL, et al. **Gene** 1988 Oct 30;70(2):245–52

A Drosophila melanogaster gene encodes a protein homologous to the mouse t complex polypeptide 1. Ursic D, et al. **Gene** 1988 Sep 7;68(2):267–74

Nucleolin from Xenopus laevis: cDNA cloning and expression during development. Caizergues–Ferrer M, et al. **Genes Dev** 1989 Mar;3(3):324–33

A gene with homology to the myc similarity region of MyoD1 is expressed during myogenesis and is sufficient to activate the muscle differentiation program. Edmondson DG, et al. **Genes Dev** 1989 May;3(5):628–40

The human c–fos serum response factor and the yeast factors GRM/PRTF have related DNA–binding specificities. Hayes TE, et al. **Genes Dev** 1988 Dec;2(12B):1713–22

Isolation of a recombinant copy of the gene encoding C/EBP. Landschulz WH, et al. **Genes Dev** 1988 Jul; 2(7):786–800

Expression of a histone H1–like protein is restricted to early Xenopus development. Smith RC, et al. **Genes Dev** 1988 Oct;2(10):1284–95

The ubiquitous octamer–binding protein Oct–1 contains a POU domain with a homeo box subdomain. Sturm RA, et al. **Genes Dev** 1988 Dec;2(12a):1582–99

Coevolution of the major histocompatibility complex and the t–complex in the mouse. I. Generation and maintenance of high complementarity associations. Uyenoyama MK. **Genetics** 1989 Jan;121(1):139–51

Coevolution of the major histocompatibility complex and the t–complex in the mouse. II. Modification of response to sharing of histocompatibility antigens. Uyenoyama MK. **Genetics** 1989 Jan;121(1):153–61

Human homologs of two testes–expressed loci on mouse

chromosome 17 map to opposite arms of chromosome 6. Bibbins KB, et al. **Genomics** 1989 Jul;5(1):139–43

Isolation and sequencing of cDNA clones encoding Drosophila chromosomal protein D1. A repeating motif in proteins which recognize at DNA. Ashley CT, et al. **J Biol Chem** 1989 May 15;264(14):8394–401

A single gene codes for two forms of rat nucleolar protein B23 mRNA. Chang JH, et al. **J Biol Chem** 1989 Jul 15; 264(20):11732–7

Interaction of nuclear factors with multiple sites in the somatic cytochrome c promoter. Characterization of upstream NRF-1, ATF, and intron Sp1 recognition sequences. Evans MJ, et al. **J Biol Chem** 1989 Aug 25; 264(24):14361–8

Structure of the human gene for the proliferating cell nuclear antigen. Travali S, et al. **J Biol Chem** 1989 May 5; 264(13):7466–72

Higher order chromosome structure is affected by cold-sensitive mutations in a Schizosaccharomyces pombe gene crm1+ which encodes a 115-kD protein preferentially localized in the nucleus and its periphery. Adachi Y, et al. **J Cell Biol** 1989 Apr;108(4):1195–207

The XLR gene product defines a novel set of proteins stabilized in the nucleus by zinc ions. Garchon HJ, et al. **J Cell Biol** 1989 Mar;108(3):779–87

Cloning and sequencing of the cyclin-related cdc13+ gene and a cytological study of its role in fission yeast mitosis. Hagan I, et al. **J Cell Sci** 1988 Dec;91 (Pt 4):587–95

Human cytomegalovirus ICP22, the product of the HWLF1 reading frame, is an early nuclear protein that is released from cells. Mocarski ES, et al. **J Gen Virol** 1988 Oct;69 (Pt 10):2613–21

The type-specific epitopes of the Epstein-Barr virus nuclear antigen 2 are near the carboxy terminus of the protein. Rowe DT, et al. **J Gen Virol** 1989 May;70 (Pt 5):1217–29

Human cytomegalovirus ie1 transactivates the alpha promoter-enhancer via an 18-base-pair repeat element. Cherrington JM, et al. **J Virol** 1989 Mar;63(3):1435–40

Mutational analysis of the conserved basic domain of human immunodeficiency virus tat protein. Hauber J, et al. **J Virol** 1989 Mar;63(3):1181–7

Intragenic complementation among partial peptides of herpes simplex virus regulatory protein ICP4. Shepard AA, et al. **J Virol** 1989 Mar;63(3):1203–11

Evolution of homologous domains of cytoplasmic intermediate filament proteins and lamins. Blumenberg M. **Mol Biol Evol** 1989 Jan;6(1):53–65

The sarcomeric actin CArG-binding factor is indistinguishable from the c-fos serum response factor. Boxer LM, et al. **Mol Cell Biol** 1989 Feb;9(2):515–22

Multiple hepatocyte-enriched nuclear factors function in the regulation of transthyretin and alpha 1-antitrypsin genes. Costa RH, et al. **Mol Cell Biol** 1989 Apr;9(4):1415–25

Identification of the human c-myc protein nuclear translocation signal. Dang CV, et al. **Mol Cell Biol** 1988 Oct;8(10):4048–54

The human L-myc gene encodes multiple nuclear phosphoproteins from alternatively processed mRNAs. De Greve J, et al. **Mol Cell Biol** 1988 Oct;8(10):4381–8

Characterization of mutant p53-hsp72/73 protein-protein complexes by transient expression in monkey COS cells. Stürzbecher HW, et al. **Mol Cell Biol** 1988 Sep;8(9):3740–7

A cysteine-rich nuclear protein activates yeast metallothionein gene transcription. Szczypka MS, et al. **Mol Cell Biol** 1989 Feb;9(2):421–9

Interaction of nuclear proteins with a positive cis-acting element of rat embryonic myosin heavy-chain promoter: identification of a new transcriptional factor. Yu YT, et al. **Mol Cell Biol** 1989 May;9(5):1839–49

Viral proliferating cell nuclear antigen [letter] O'Reilly DR, et al. **Nature** 1989 Feb 16;337(6208):606

The Caenorhabditis elegans heterochronic gene lin-14 encodes a nuclear protein that forms a temporal developmental switch. Ruvkun G, et al. **Nature** 1989 Mar 23;338(6213):313–9

Transcripts of one of two Drosophila cyclin genes become localized in pole cells during embryogenesis. Whitfield WG, et al. **Nature** 1989 Mar 23;338(6213):337–40

Point mutational analysis of the human c-fos serum response factor binding site. Leung S, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1177–95

Nucleotide sequence of a cDNA encoding the chicken p53 nuclear oncoprotein. Soussi T, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11383

Nucleotide sequence of a cDNA encoding the rat p53 nuclear oncoprotein. Soussi T, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11384

Expression, methylation and chromatin structure of the p53 gene in untransformed and human T-cell leukemia virus type I-transformed human T-lymphocytes. Lübbert M, et al. **Oncogene** 1989 May;4(5):643–51

Inactivation of the N-myc gene product by single amino acid substitution of leucine residues located in the leucine-zipper region. Nakajima H, et al. **Oncogene** 1989 Aug;4(8):999–1002

Alterations in the p53 gene and the clonal evolution of the blast crisis of chronic myelocytic leukemia. Ahuja H, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6783–7

A gene activated in mouse 3T3 cells by serum growth factors encodes a protein with "zinc finger" sequences. Christy BA, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(21):7857–61

A family of cyclin homologs that control the G1 phase in yeast. Hadwiger JA, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6255–9

Chromosome mapping of the human gene encoding the 68-kDa nuclear antigen (p68) by using the polymerase chain reaction. Iggo R, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6211–4

Targeting of a chromosomal protein to the nucleus and to lampbrush chromosome loops. Roth MB, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1269–72

A CACGTG motif of the Antirrhinum majus chalcone synthase promoter is recognized by an evolutionarily conserved nuclear protein. Staiger D, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6930–4

Gene for proliferating-cell nuclear antigen (DNA polymerase delta auxiliary protein) is present in both mammalian and higher plant genomes. Suzuka I, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3189–93

Cell-specific transcriptional control of the mouse DNA-binding protein mC/EBP. Xanthopoulos KG, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4117–21

Xeroderma pigmentosum group E cells lack a nuclear factor that binds to damaged DNA. Chu G, et al. **Science** 1988 Oct 28;242(4878):564–7

5-bromo-2'-deoxyuridine blocks myogenesis by extinguishing expression of MyoD1. Tapscott SJ, et al. **Science** 1989 Aug 4;245(4917):532–6

MyoD1: a nuclear phosphoprotein requiring a Myc homology region to convert fibroblasts to myoblasts. Tapscott SJ, et al. **Science** 1988 Oct 21;242(4877):405–11

Human gene for proliferating cell nuclear antigen has pseudogenes and localizes to chromosome 20. Ku DH, et al. **Somat Cell Mol Genet** 1989 Jul;15(4):297–307

Human papillomavirus type 16 E7 protein expressed in Escherichia coli and monkey COS-1 cells: immunofluorescence detection of the nuclear E7 protein. Sato H, et al. **Virology** 1989 May;170(1):311–5

Characterization of a latent protein encoded by the large internal repeats and the BamHI Y fragment of the Epstein-Barr virus (EBV) genome. Sauter M, et al. **Virology** 1988 Oct;166(2):586–90

Structure and nuclear localization signal of the SKI3 antiviral protein of Saccharomyces cerevisiae. Rhee SK, et al. **Yeast** 1989 May-Jun;5(3):149–58

[Nuclear proteins from Drosophila melanogaster specifically binding to simple homopolymeric sequences of poly[d(T-G)].poly[d(C-A)] type] Vashakidze RP, et al. **Mol Biol (Mosk)** 1988 May-Jun;22(3):700–5 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Analysis of proliferative grade using anti-PCNA/cyclin monoclonal antibodies in fixed, embedded tissues. Comparison with flow cytometric analysis. Garcia RL, et al. **Am J Pathol** 1989 Apr;134(4):733–9

Autoantibodies to the major nucleolar phosphoprotein B23 define a novel subset of patients with anticardiolipin antibodies. Li XZ, et al. **Arthritis Rheum** 1989 Sep; 32(9):1165–9

Human autoantibodies against a nucleolar protein. Kindås-Mügge I. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):1119–27

Autoimmune serum containing an antibody against a 94 kDa nucleolar protein. Hernandez-Verdun D, et al. **Biol Cell** 1988;64(3):331–41

Serum monoclonal antibodies derived from patients with multiple myeloma react with mycobacterial phosphoinositides and nuclear antigens. Buskila D, et al. **Clin Exp Immunol** 1989 Jun;76(3):378–83

T lymphocyte activation in systemic lupus erythematosus analysed by proliferative response to nucleoplasmic proteins on nitrocellulose immunoblots. Pham BN, et al. **Clin Exp Immunol** 1989 Aug;77(2):168–74

Epstein-Barr virus (EBV) antigen-specific leukocyte migration inhibition in infectious mononucleosis. II. Kinetics of sensitization against five EBV-encoded nuclear proteins and the latent membrane protein. Szigeti R, et al. **Clin Immunol Immunopathol** 1989 Jun;51(3):396–405

Nucleolar proteins identified in human cells as antigens by sera from dogs with autoimmune disorders. Soulard M, et al. **Exp Cell Res** 1989 Jun;182(2):482–98

Immunological evidence for the role of phosphoprotein p68/pI = 7.3 in premessenger RNA splicing. Liew CC, et al. **FEBS Lett** 1989 May 8;248(1-2):101–4

Characteristic nucleolar-reticular immunofluorescence staining pattern on touch prints of hamster liver: a marker for Scl-70 antibody. Kühn G, et al. **Int Arch Allergy Appl Immunol** 1989;89(2-3):181–7

The use of ELISA for the measurement of autoantibodies to nuclear antigens: comparison with other methodologies. Firer MA, et al. **Isr J Med Sci** 1988 Dec;24(12):747–50

Lamin A, lamin B, and lamin B receptor analogues in yeast. Georgatos SD, et al. **J Cell Biol** 1989 Jun;108(6):2069–82

A dot-blot method for screening polyclonal and monoclonal antisera to poly(ADP-ribose). Prasad S, et al. **J Immunol Methods** 1989 Jan 6;116(1):79–85

Distinction between Epstein-Barr virus type A (EBNA 2A) and type B (EBNA 2B) isolates extends to the EBNA 3 family of nuclear proteins. Rowe M, et al. **J Virol** 1989 Mar;63(3):1031–9

Detection of nuclear protein antigens to antinuclear antibodies in serum of NOD mouse. Arai T, et al. **Jikken Dobutsu** 1989 Apr;38(2):159–62

KIN, a mammalian nuclear protein immunologically related to E. coli RecA protein. Angulo JF, et al. **Mutat Res** 1989 Mar;217(2):123–34

[Antibodies against extractable nuclear antigens. Clinico-biological correlations in 100 cases] Barbouch MR, et al. **Rev Rhum Mal Osteoartic** 1989 Apr;56(5):389–94 (Eng. Abstr.) **(Fre)**

[Anti-Sm and anti-RNP antibodies detected by immunoblotting in disseminated lupus erythematosus] Lussiez V, et al. **Rev Rhum Mal Osteoartic** 1989 Jan; 56(1):35–8 **(Fre)**

[The Scl-70 antibody and its clinical significance] Kühn G, et al. **Dermatol Monatsschr** 1989;175(3):133–47 (98 ref.) (Eng. Abstr.) **(Ger)**

[Diagnosis of rheumatologic diseases. Significance of autoantibodies against nuclear antigens] Poralla T, et al. **Fortschr Med** 1988 Dec 20;106(36):726–9 (19 ref.) (Eng. Abstr.) **(Ger)**

ISOLATION & PURIFICATION

Sequential two-dimensional and acetic acid/urea/Triton X-100 gel electrophoresis of proteins. Vanfleteren JR. **Anal Biochem** 1989 Mar;177(2):388–91

DNA-protein complexes of the nuclear matrix: visualization and partial characterization of the protein component. Chernokhvostov VV, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):175–83

Purification and characterization of CAF-I, a human cell factor required for chromatin assembly during DNA replication in vitro. Smith S, et al. **Cell** 1989 Jul 14; 58(1):15–25

Sequence and characterization of the sperm-specific protein phi 3 from Mytilus californianus. Ausio J, et al. **Eur J Biochem** 1989 Jul 1;182(3):569–76

Analysis of supra-nucleosome particles from unfertilized eggs of sea urchins. Imschenetzky M, et al. **Exp Cell Res** 1989 Jun;182(2):436–44

The protein composition of the nuclear matrix of murine P19 embryonal carcinoma cells is differentiation-stage dependent. Stuurman N, et al. **Exp Cell Res** 1989 Feb; 180(2):460–6

Identification of attachment proteins for DNA in Chinese hamster ovary cells. Cress AE, et al. **J Biol Chem** 1988 Dec 25;263(36):19678–83

Additional members of the rat liver lamin polypeptide family. Structural and immunological characterization. Kaufmann SH. **J Biol Chem** 1989 Aug 15;264(23):13946–55

Purification and characterization of an Acanthamoeba nuclear actin-binding protein. Rimm DL, et al. **J Cell Biol** 1989 Aug;109(2):585–91

Electrophoretic analyses of nucleosomes and other protein-DNA complexes. Huang SY, et al. **Methods Enzymol** 1989;170:116–42

Purification of Xenopus egg nucleoplasmin and its use in chromatin assembly in vitro. Sealy L, et al. **Methods Enzymol** 1989;170:612–30

Purification of multiple erythroid cell proteins that bind the promoter of the alpha-globin gene. Kim CG, et al. **Mol Cell Biol** 1988 Oct;8(10):4270–81

Large scale co-isolation of vimentin and nuclear lamins from ehrlich ascites tumor cells cultured in vitro. Traub P, et al. **Prep Biochem** 1988;18(4):381–404

METABOLISM

Nuclear membrane lipid peroxidation products bind to nuclear macromolecules. Vaca CE, et al. **Arch Biochem Biophys** 1989 Mar;269(2):548–54

Studies of histidine phosphorylation by a nuclear protein histidine kinase show that histidine-75 in histone H4 is masked in nucleosome core particles and in chromatin. Wei YF, et al. **Arch Biochem Biophys** 1989 Feb 1;268(2):546–50

Increased phosphorylation of two 48 kDa nuclear proteins in fibroblasts derived from psoriatic patients. Spader M, et al. **Arch Dermatol Res** 1989;281(1):19–23

Alteration of nuclear lamina protein in human fibroblasts infected with cytomegalovirus (HCMV). Radsak K, et al. **Arch Virol** 1989;105(1-2):103–12

The 65 K DNA binding protein appears early in HSV-1 replication. Schenk P, et al. **Arch Virol** 1988; 102(1-2):119–23

DNA-stimulated protein phosphorylation in HeLa whole cell and nuclear extracts. Carter TH, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):535–40

Identification of a cell cycle-dependent gene product as a sialic acid-binding protein. Gabius HJ, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):506–12

Interferon-induced early changes in nuclear protein interactions with the interferon consensus sequence. Roy C, et al. **Biochem Biophys Res Commun** 1989 Aug 30; 163(1):370–7

Nucleolin (C23), a physiological substrate for casein kinase II. Schneider HR, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1390–7

Minor lamin polypeptides from rat liver nuclei can be cross-linked into heteropolymers by disulfide bridges. Raymond Y, et al. **Biochem Cell Biol** 1988 Dec; 66(12):1295–302

Interaction of rat testis protein, TP, with nucleosome core particle. Singh J, et al. **Biochem Int** 1988 Oct;17(4):701–10

Experimental values of the ionization constants for

L-3,5-di-iodotyrosine and a model for ionic interactions of thyroid hormone (T3) and its nuclear receptor. Gent WL, et al. **Biochem Pharmacol** 1989 Jan 15;38(2):343-6

In vitro characterization of tissue-specific nuclear proteins preferentially bound to the mouse beta-globin gene during MEL cell terminal differentiation. Lelong JC, et al. **Biochemistry** 1989 May 30;28(11):4594-600

Protein-protein interactions of yeast DNA polymerase III with mammalian and yeast proliferating cell nuclear antigen (PCNA)/cyclin. Bauer GA, et al. **Biochim Biophys Acta** 1988 Dec 20;951(2-3):274-9

Poly(ADP-ribosylation) of nuclear proteins in rat testis correlates with active spermatogenesis. Quesada P, et al. **Biochim Biophys Acta** 1989 Mar 1;1007(2):167-75

Nuclear location signal-mediated protein transport. Roberts B. **Biochim Biophys Acta** 1989 Aug 14;1008(3):263-80 (92 ref.)

The protein CDP, but not CP1, footprints on the CCAAT region of the gamma-globin gene in unfractionated B-cell extracts. Superti-Furga G, et al. **Biochim Biophys Acta** 1989 Mar 1;1007(2):237-42

Nucleologenesis: use of non-isotopic in situ hybridization and immunocytochemistry to compare the localization of rDNA and nucleolar proteins during mitosis. Jiménez-García LF, et al. **Biol Cell** 1989;65(3):239-46

Light and electron microscopic immunolocalization of two nuclear antigens in the liver of Pleurodeles waltl using monoclonal antibodies. Pyne CK, et al. **Biol Cell** 1988; 64(3):343-52

Cross-linkage of nucleophosmin in tumor cells by nitrogen mustard. Chan PK. **Cancer Res** 1989 Jun 15;49(12):3271-5

Cyclosporin A and verapamil enhancement of daunorubicin-produced nucleolar protein B23 translocation in daunorubicin-resistant and -sensitive human and murine tumor cells. Sweet P, et al. **Cancer Res** 1989 Feb 1; 49(3):677-80

Species differences in the interaction between CCl4 reactive metabolites and liver DNA or nuclear protein fractions. Castro GD, et al. **Carcinogenesis** 1989 Feb;10(2):289-94

A 60 kd cdc2-associated polypeptide complexes with the E1A proteins in adenovirus-infected cells. Giordano A, et al. **Cell** 1989 Sep 8;58(5):981-90

Mechanisms of nuclear localization of the progesterone receptor: evidence for interaction between monomers. Guiochon-Mantel A, et al. **Cell** 1989 Jun 30;57(7):1147-54

SV40 large T antigen binds preferentially to an underphosphorylated member of the retinoblastoma susceptibility gene product family. Ludlow JW, et al. **Cell** 1989 Jan 13;56(1):57-65

The t complex polypeptide 1 (TCP-1) is associated with the cytoplasmic aspect of Golgi membranes. Willison K, et al. **Cell** 1989 May 19;57(4):621-32

Androgen-dependent nuclear proteins in rat ventral prostate are glycoproteins associated with the nuclear matrix. Carmo-Fonseca M. **Cell Biol Int Rep** 1988 Aug; 12(8):607-20

Karyophilic peptides: applications to the study of nuclear transport. Goldfarb DS. **Cell Biol Int Rep** 1988 Sep; 12(9):809-32 (46 ref.)

Nuclear protein accumulation: envelope transport or phase affinity mechanisms? Paine PL. **Cell Biol Int Rep** 1988 Sep; 12(9):691-708 (68 ref.)

Effect of a diet low in methionine-cysteine on rat liver chromatin and nuclear proteins. Norell M, et al. **Cell Mol Biol** 1989;35(1):63-74

Proliferating cell nuclear antigen (PCNA/cyclin) immunocytochemistry as a labeling index in mouse lung tissues. Thaete LG, et al. **Cell Tissue Res** 1989 Apr; 256(1):167-73

Monoclonal antibodies to a Mr 68,000 pore complex glycoprotein interfere with nuclear protein uptake in Xenopus oocytes. Dabauvalle MC, et al. **Chromosoma** 1988 Nov;97(3):193-7

Nuclear protein transport. Silver P, et al. **Crit Rev Biochem Mol Biol** 1989;24(4):419-35 (131 ref.)

Differential accumulation of oocyte nuclear proteins by embryonic nuclei of Xenopus. Dreyer C. **Development** 1987 Dec;101(4):829-46

A variant nuclear protein in dedifferentiated hepatoma cells binds to the same functional sequences in the beta fibrinogen gene promoter as HNF-1. Baumhueter S, et al. **EMBO J** 1988 Aug;7(8):2485-93

Association of the Drosophila melanogaster engrailed protein with specific soluble nuclear protein complexes. Gay NJ, et al. **EMBO J** 1988 Dec 20;7(13):4291-7

Binding site requirements for pea nuclear protein factor GT-1 correlate with sequences required for light-dependent transcriptional activation of the rbcS-3A gene. Green PJ, et al. **EMBO J** 1988 Dec 20;7(13):4035-44

A novel nucleoskeletal-like protein located at the nuclear periphery is required for the life cycle of Saccharomyces cerevisiae. Hurt EC. **EMBO J** 1988 Dec 20;7(13):4323-34

Nuclear protein p68 is an RNA-dependent ATPase. Iggo RD, et al. **EMBO J** 1989 Jun;8(6):1827-31

Identification of domains involved in nuclear uptake and histone binding of protein N1 of Xenopus laevis. Kleinschmidt JA, et al. **EMBO J** 1988 Jun;7(6):1605-14

Two proteins crosslinked to RNA containing the adenovirus L3 poly(A) site require the AAUAAA sequence for binding. Moore CL, et al. **EMBO J** 1988 Oct;7(10):3159-69

Interaction of nuclear factors with the upstream region of the alpha-subunit gene of chicken muscle acetylcholine receptor: variations with muscle differentiation and denervation. Piette J, et al. **EMBO J** 1989 Mar;8(3):687-94

Nuclear transport kinetics depend on phosphorylation-site-containing sequences flanking the karyophilic signal of the Simian virus 40 T-antigen. Rihs HP, et al. **EMBO J** 1989 May;8(5):1479-84

The -117 mutation in Greek HPFH affects the binding of three nuclear factors to the CCAAT region of the gamma-globin gene. Superti-Furga G, et al. **EMBO J** 1988 Oct;7(10):3099-107

Effects of the cellular p53 protein on Simian-virus-40-T-antigen-catalyzed DNA unwinding in vitro. Kienzle H, et al. **Eur J Biochem** 1989 Sep 1; 184(1):181-6

DNA-dependent mono(ADP-ribosyl)ation of p33, an acceptor protein in hen liver nuclei. Mishima K, et al. **Eur J Biochem** 1989 Feb 1;179(2):267-73

Tightly bound DNA-protein complexes representing stable attachment sites of large DNA loops to components of the matrix. Patriotis C, et al. **Eur J Biochem** 1989 Sep 1; 184(1):157-64

Specific dephosphorylation by phosphatases 1 and 2A of a nuclear protein structurally and immunologically related to nucleolin. Possible influence on the regulation of rRNA synthesis. Schneider HR, et al. **Eur J Biochem** 1989 Mar 15;180(2):449-55

The nucleolar RNA-binding protein B-36 is highly conserved among plants. Guiltinan MJ, et al. **Eur J Cell Biol** 1988 Aug;46(3):547-53

Differential sensitivity of vimentin and nuclear lamins from Ehrlich ascites tumor cells toward Ca2+ -activated neutral thiol proteinase. Traub P, et al. **Eur J Cell Biol** 1988 Aug; 46(3):478-90

Characterization of cytoplasmic and nuclear polypeptides induced by interferon-gamma in a murine pre-B cell leukemia. Franco A, et al. **Eur J Immunol** 1989 Jul; 19(7):1171-6

In vivo crosslinking of nuclear proteins to DNA by cis-diamminedichloroplatinum (II) in differentiating rat myoblasts. Wedrychowski A, et al. **Exp Cell Res** 1989 Aug; 183(2):376-87

Nuclear protein import: specificity for transport across the nuclear pore. Wolff B, et al. **Exp Cell Res** 1988 Oct; 178(2):318-34

A liver-specific nuclear protein that binds to the distal promoter element of the rat tyrosine aminotransferase gene. Lobanenkov VV, et al. **FEBS Lett** 1989 Jan 30; 243(2):318-22

Human nuclear protein interacting with a conservative sequence motif of Alu-family DNA repeats. Tomilin NV, et al. **FEBS Lett** 1989 Jul 17;251(1-2):79-83

Nuclear protein transitions in cuttle-fish spermiogenesis: immunocytochemical localization of a protein specific for the spermatid stage. Rousseaux-Prévost R, et al. **Gamete Res** 1988 Mar;19(3):277-90

Binding of mercuric chloride to nuclear proteins in human peripheral blood T lymphocytes. Holst M, et al. **Int Arch Allergy Appl Immunol** 1988;87(4):381-3

RNA polymerase of influenza virus: role of NP in RNA chain elongation. Honda A, et al. **J Biochem (Tokyo)** 1988 Dec; 104(6):1021-6

Tissue-specific DNA binding of nuclear proteins that bind to the adenovirus inverted terminal repeat. Matsumoto K, et al. **J Biochem (Tokyo)** 1989 Jun;105(6):927-32

Characterization of the cAMP responsive elements from the genes for the alpha-subunit of glycoprotein hormones and phosphoenolpyruvate carboxykinase (GTP). Conserved features of nuclear protein binding between tissues and species. Bokar JA, et al. **J Biol Chem** 1988 Dec 25; 263(36):19740-7

Identification and characterization of a factor that binds to two human sarcomeric actin promoters. Boxer LM, et al. **J Biol Chem** 1989 Jan 15;264(2):1284-92

Lamin B methylation and assembly into the nuclear envelope. Chelsky D, et al. **J Biol Chem** 1989 May 5;264(13):7637-43

Cloning and sequence analysis of a rat liver cDNA encoding acyl-peptide hydrolase. Kobayashi K, et al. **J Biol Chem** 1989 May 25;264(15):8892-9

Transcriptional control of the rat heme oxygenase gene by a nuclear protein that interacts with adenovirus 2 major late promoter. Sato M, et al. **J Biol Chem** 1989 Jun 15; 264(17):10251-60

Specific binding of nuclear proteins to the promoter region of a maize nuclear rRNA gene unit. Schmitz ML, et al. **J Biol Chem** 1989 Jan 25;264(3):1467-72

Platelet-derived growth factor induces phosphorylation of a 64-kDa nuclear protein. Shawver LK, et al. **J Biol Chem** 1989 Jan 15;264(2):1046-50

Binding of nuclear proteins to promoter elements of the mouse alpha A-crystallin gene. Sommer B, et al. **J Biol Chem** 1988 Oct 25;263(30):15666-72

Retinoic acid acylation (retinoylation) of a nuclear protein in the human acute myeloid leukemia cell line HL60. Takahashi N, et al. **J Biol Chem** 1989 Mar 25; 264(9):5159-63

Proteolytic activity associated with the nuclear scaffold. The effect of self-digestion on lamins. Tökés ZA, et al. **J Biol Chem** 1989 Sep 5;264(25):15059-65

Thyroid hormone and circadian regulation of the binding activity of a liver-specific protein associated with the 5'-flanking region of the S14 gene. Wong NC, et al. **J Biol Chem** 1989 Mar 15;264(8):4466-70

Multiple protein-DNA interactions within the human interferon-beta regulatory element. Xanthoudakis S, et al. **J Biol Chem** 1989 Jan 15;264(2):1139-45

Incorporation of a product of mevalonic acid metabolism into proteins of Chinese hamster ovary cell nuclei. Beck LA, et al. **J Cell Biol** 1988 Oct;107(4):1307-16

Annulate lamellae: comparison of antigenic epitopes of annulate lamellae membranes with the nuclear envelope. Chen TY, et al. **J Cell Biol** 1988 Oct;107(4):1299-306

Expression of nuclear lamin A and muscle-specific proteins in differentiating muscle cells in ovo and in vitro. Lourim D, et al. **J Cell Biol** 1989 Aug;109(2):495-504

Yeast proteins that recognize nuclear localization sequences. Silver P, et al. **J Cell Biol** 1989 Sep;109(3):983-9

Interconversion of Drosophila nuclear lamin isoforms during oogenesis, early embryogenesis, and upon entry of cultured cells into mitosis. Smith DE, et al. **J Cell Biol** 1989 Feb; 108(2):255-65

Intranuclear distribution of the human myeloid cell nuclear differentiation antigen in HL-60 cells. Duhl DM, et al. **J Cell Physiol** 1989 Oct;141(1):148-53

Specific interactions of histone H1 and a 45 kilodalton nuclear protein with a putative matrix attachment site in the distal promoter region of a cell cycle-regulated human histone gene. Pauli U, et al. **J Cell Physiol** 1989 May;139(2):320-8

c-fos expression and (14C) 2-deoxyglucose uptake in the caudal cerebellum of the rat during motor/sensory cortex stimulation. Sharp FR, et al. **J Comp Neurol** 1989 Jun 22; 284(4):621-36

Simultaneous immunoelectron microscopic visualization of protein B23 and C23 distribution in the HeLa cell nucleolus. Biggiogera M, et al. **J Histochem Cytochem** 1989 Sep;37(9):1371-4

Specific binding of a hepatoma nuclear factor to the NF kappa B/H2TF1 recognition motif found in the C4 promoter, but not in the Slp promoter. Yu DY, et al. **J Immunol** 1989 Oct 1;143(7):2395-400

Protein-induced bending of the simian virus 40 origin of replication. Baur CP, et al. **J Mol Biol** 1988 Oct 20; 203(4):1009-19

Nuclear proteins from the rat pituitary gland bind to regulatory sequences of the thyrotrophin-beta gene. Ahlquist JA, et al. **J Mol Endocrinol** 1989 Mar;2(2):85-91

Overlapping octamer and TAATGARAT motifs in the VF65-response elements in herpes simplex virus immediate-early promoters represent independent binding sites for cellular nuclear factor III. apRhys CM, et al. **J Virol** 1989 Jun;63(6):2798-812

Identification of nuclear proteins that specifically interact with adeno-associated virus type 2 inverted terminal repeat hairpin DNA. Ashktorab H, et al. **J Virol** 1989 Jul; 63(7):3034-9

Characterization of DNA sequence-common and sequence-specific proteins binding to cis-acting sites for cleavage of the terminal a sequence of the herpes simplex virus 1 genome. Chou J, et al. **J Virol** 1989 Mar; 63(3):1059-68

Isolation and characterization of a viable adenovirus mutant defective in nuclear transport of the DNA-binding protein. Cleghon V, et al. **J Virol** 1989 May;63(5):2289-99

Numerous nuclear proteins bind the long control region of human papillomavirus type 16: a subset of 6 of 23 DNase I-protected segments coincides with the location of the cell-type-specific enhancer. Gloss B, et al. **J Virol** 1989 Mar;63(3):1142-52

Mapping DNA-protein interactions by cross-linking. Mirzabekov AD, et al. **Methods Enzymol** 1989;170:386-408

Nuclear proteins that bind the human gamma-globin gene promoter: alterations in binding produced by point mutations associated with hereditary persistence of fetal hemoglobin. Gumucio DL, et al. **Mol Cell Biol** 1988 Dec; 8(12):5310-22

Regulated expression of nuclear protein(s) in myogenic cells that binds to a conserved 3' untranslated region in pro alpha 1 (I) collagen cDNA. Herget T, et al. **Mol Cell Biol** 1989 Jul;9(7):2828-36

The first intron of the 4F2 heavy-chain gene contains a transcriptional enhancer element that binds multiple nuclear proteins. Karpinski BA, et al. **Mol Cell Biol** 1989 Jun;9(6):2588-97

The NF-kappa B-binding site mediates phorbol ester-inducible transcription in nonlymphoid cells. Nelsen B, et al. **Mol Cell Biol** 1988 Aug;8(8):3526-31

Context affects nuclear protein localization in Saccharomyces cerevisiae. Nelson M, et al. **Mol Cell Biol** 1989 Feb; 9(2):384-9

Interaction of a hepatoma-specific nuclear factor with transcription-regulatory sequences of the human alpha-fetoprotein and albumin genes. Sawadaishi K, et al. **Mol Cell Biol** 1988 Dec;8(12):5179-87

Subnuclear localization and antitransforming activity of N-myc:beta-galactosidase fusion proteins. Ueno K, et al. **Mol Cell Biol** 1988 Oct;8(10):4529-32

Nuclear proteins binding to a cauliflower mosaic virus 35S truncated promoter. Prat S, et al. **Mol Gen Genet** 1989 Jun;217(2-3):209-14

Identification of specific binding proteins for a nuclear location sequence. Adam SA, et al. **Nature** 1989 Jan 19; 337(6204):276-9

The role of cyclin synthesis and degradation in the control of maturation promoting factor activity. Murray AW, et al. **Nature** 1989 May 25;339(6222):280-6

Protein kinase NII and the regulation of rDNA transcription in mammalian cells. Belenguer P, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6625–36

Nuclear protein factors and erythroid transcription of the human A gamma-globin gene. Catala F, et al. **Nucleic Acids Res** 1989 May 25;17(10):3811–27

Enhancer functions and in vitro protein binding of native and mutated interferon-responsive sequences. Cohen B, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1679–95

Interaction of DNA-binding proteins with the tissue-specific human apolipoprotein-AII enhancer. Lucero MA, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2283–300

Different liver nuclear proteins binds to similar DNA sequences in the 5' flanking regions of three hepatic genes. Ochoa A, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):119–33

Detection of a nuclear protein that interacts with a metal regulatory element of the mouse metallothionein 1 gene. Séguin C, et al. **Nucleic Acids Res** 1988 Nov 25; 16(22):10547–60

Binding of the Rb1 protein to E1A products is required for adenovirus transformation. Egan C, et al. **Oncogene** 1989 Mar;4(3):383–8

Brain protein kinase C phosphorylating poly(arginine,serine) or lamin B is stimulated by anions and by an activator purified from bovine serum albumin preparations. Abdel-Ghany M, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1761–5

Selective displacement of nuclear proteins by antitumor drugs having affinity for nucleic acids. Bartkowiak J, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5151–4

The yeast analog of mammalian cyclin/proliferating-cell nuclear antigen interacts with mammalian DNA polymerase delta. Bauer GA, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7506–10

Specific binding of a HeLa cell nuclear protein to RNA sequences in the human immunodeficiency virus transactivating region. Gaynor R, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4858–62

Two interferon-induced nuclear factors bind a single promoter element in interferon-stimulated genes. Kessler DS, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(22):8521–5

Tumor necrosis factor alpha and interleukin 1 stimulate the human immunodeficiency virus enhancer by activation of the nuclear factor kappa B. Osborn L, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2336–40

Phosphorylation of serum response factor, a factor that binds to the serum response element of the c-FOS enhancer. Prywes R, et al. **Proc Natl Acad Sci U S A** 1988 Oct; 85(19):7206–10

Drosophila nuclear proteins bind to regions of alternating C and T residues in gene promoters. Gilmour DS, et al. **Science** 1989 Sep 29;245(4925):1487–90

The DNA binding domain of the rat liver nuclear protein C/EBP is bipartite. Landschulz WH, et al. **Science** 1989 Mar 31;243(4899):1681–8

Antibodies to Asp-Asp-Glu-Asp can inhibit transport of nuclear proteins into the nucleus. Yoneda Y, et al. **Science** 1988 Oct 14;242(4876):275–8

Nuclear protein kinase substrates in AtT-20 cells: translocation of a 14 kDa phosphoprotein. Bishop JF, et al. **Synapse** 1988;2(3):244–53

Mitosis comes apart. Blow J. **Trends Genet** 1989 Jun; 5(6):166–7 (0 ref.)

[Poly(ADP-ribosylation) of nuclear proteins in rat thymocytes] Beletskiĭ IP, et al. **Biokhimiia** 1988 Jul; 53(7):1144–52 (Eng. Abstr.) **(Rus)**

[ADP-ribosylation of nuclear proteins in the rat brain] Zaalishvili TM, et al. **Biokhimiia** 1988 Jun;53(6):931–5 (Eng. Abstr.) **(Rus)**

[Nuclear matrix proteins of the rat liver at various levels of body thyroid status] Adylova AT. **Biol Nauki** 1989; (1):33–7 **(Rus)**

[Protein factors, interacting with the octamer sequence of immunoglobulin genes] Stepchenko AG, et al. **Mol Biol (Mosk)** 1989 May-Jun;23(3):708–16 (Eng. Abstr.) **(Rus)**

[Metabolism of nuclear proteins of the thymus and bone marrow cells in mice with hepatoma 22] Savina MI, et al. **Vopr Med Khim** 1989 Jan-Feb;35(1):111–4 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

An inhibitor of the in vitro elongation reaction of simian virus 40 DNA replication is overcome by proliferating-cell nuclear antigen. Lee SH, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9469–73

PHYSIOLOGY

A nuclear casein type II kinase from maize endosperm phosphorylating HMG proteins. Grasser KD, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):456–63

Transcriptional activation and repression by Ultrabithorax proteins in cultured Drosophila cells. Krasnow MA, et al. **Cell** 1989 Jun 16;57(6):1031–43

DNA binding activities of three murine Jun proteins: stimulation by Fos. Nakabeppu Y, et al. **Cell** 1988 Dec 2;55(5):907–15

The cdc2 kinase is a nuclear protein that is essential for mitosis in mammalian cells. Riabowol K, et al. **Cell** 1989 May 5;57(3):393–401

The mouse type IV c-abl gene product is a nuclear protein, and activation of transforming ability is associated with cytoplasmic localization. Van Etten RA, et al. **Cell** 1989 Aug 25;58(4):669–78

Are nuclear lectins and nuclear glycoproteins involved in the modulation of nuclear functions? Hubert J, et al. **Cell Differ Dev** 1989 Jul;27(2):69–81 (102 ref.)

Analysis of serum response element function in vitro. Norman C, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:719–26

Transcriptional regulation of c-fos. Prywes R, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:739–48

Nuclear oncoproteins determine the genetic program in response to external stimuli. Schönthal A, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:779–87 (60 ref.)

Meiotic breakdown of nuclear envelope in oocytes of Spisula solidissima involves phosphorylation and release of nuclear lamin. Dessev G, et al. **Dev Biol** 1988 Dec;130(2):543–50

Nuclear localization of a DNA-binding C-terminal domain from Balbiani ring coded secretory protein. Botella L, et al. **EMBO J** 1988 Dec 1;7(12):3881–8

Proteins bound at adjacent DNA elements act synergistically to regulate human proenkephalin cAMP inducible transcription. Comb M, et al. **EMBO J** 1988 Dec 1; 7(12):3793–805

Nuclear factor NF-kappa B can interact functionally with its cognate binding site to provide lymphoid-specific promoter function. Wirth T, et al. **EMBO J** 1988 Oct; 7(10):3109–13

Effects of anti-C23 (nucleolin) antibody on transcription of ribosomal DNA in Chironomus salivary gland cells. Egyhazi E, et al. **Exp Cell Res** 1988 Oct;178(2):264–72

Statin expression associated with terminally differentiating and postreplicative lens epithelial cells. Muggleton-Harris AL, et al. **Exp Cell Res** 1989 May;182(1):152–9

Loss in transformed cells of cell cycle regulation of expression of a nuclear protein recognized by SLE patient antisera. Nikaido T, et al. **Exp Cell Res** 1989 May; 182(1):284–9

The interaction of nuclear proteins with essential promoter element of the chicken cardiac myosin light chain 2 gene is involved in muscle-specific transcription. Braun T, et al. **FEBS Lett** 1988 Nov 7;239(2):309–12

Presplicing complex formation requires two proteins and U2 snRNP. Krämer A. **Genes Dev** 1988 Sep;2(9):1155–67

Interaction of a nuclear factor-1-like protein with the regulatory region of the human polyomavirus JC virus. Amemiya K, et al. **J Biol Chem** 1989 Apr 25; 264(12):7025–32

Identification of rat ovarian nuclear factors that interact with the cAMP-inducible lactate dehydrogenase A subunit promoter. Kwast-Welfeld J, et al. **J Biol Chem** 1989 Apr 25;264(12):6941–7

Induction of nuclear protein factors specific for hormone-responsive region during activation of thyroglobulin gene by thyrotropin in rat thyroid FRTL-5 cells. Lee NT, et al. **J Biol Chem** 1989 May 5; 264(13):7523–30

Characterization of a large form of DNA polymerase delta from HeLa cells that is insensitive to proliferating cell nuclear antigen. Syvaoja J, et al. **J Biol Chem** 1989 Feb 15;264(5):2489–97

Changes in cyclin/proliferating cell nuclear antigen distribution during DNA repair synthesis. Toschi L, et al. **J Cell Biol** 1988 Nov;107(5):1623–8

Developmental and tissue-specific expression of nuclear proteins that bind the regulatory element of the major histocompatibility complex class I gene. Burke PA, et al. **J Exp Med** 1989 Apr 1;169(4):1309–21

Estrogen-inducible binding of a nuclear factor to the vitellogenin upstream region. Bakker O, et al. **Mol Cell Biol** 1988 Oct;8(10):4557–60

Thermal stabilization of putative karyoskeletal protein-enriched fractions from Saccharomyces cerevisiae. Berrios S, et al. **Mol Cell Biol** 1988 Oct;8(10):4573–5

Interaction of nuclear proteins with muscle-specific regulatory sequences of the human cardiac alpha-actin promoter. Gustafson TA, et al. **Mol Cell Biol** 1988 Oct; 8(10):4110–9

Multiple hepatic trans-acting factors are required for in vitro transcription of the human alpha-1-antitrypsin gene. Li Y, et al. **Mol Cell Biol** 1988 Oct;8(10):4362–9

A common factor regulates skeletal and cardiac alpha-actin gene transcription in muscle. Muscat GE, et al. **Mol Cell Biol** 1988 Oct;8(10):4120–33

Involvement of proliferating cell nuclear antigen (cyclin) in DNA replication in living cells. Zuber M, et al. **Mol Cell Biol** 1989 Jan;9(1):57–66

RNA helicase activity associated with the human p68 protein. Hirling H, et al. **Nature** 1989 Jun 15;339(6225):562–4

Dual function of a nuclear factor I binding site in MMTV transcription regulation. Buetti E, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3065–78

Calf thymus DNA polymerase delta independent of proliferating cell nuclear antigen (PCNA). Focher F, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):1805–21

Anti-OTF-1 antibodies inhibit NFIII stimulation of in vitro adenovirus DNA replication. Pruijn JM, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):1845–63

Studies on the DNA elongation inhibitor and its proliferating cell nuclear antigen-dependent control in simian virus 40 DNA replication in vitro. Lee SH, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4877–81

Saturation mutagenesis of the octopine synthase enhancer: correlation of mutant phenotypes with binding of a nuclear protein factor. Singh K, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3733–7

The relationship of increased nuclear protein content induced by hyperthermia to killing of HeLa S3 cells. Kampinga HH, et al. **Radiat Res** 1989 Mar;117(3):511–22

A c-myb antisense oligodeoxynucleotide inhibits normal human hematopoiesis in vitro. Gewirtz AM, et al. **Science** 1988 Dec 2;242(4883):1303–6

The human immunodeficiency virus rev protein is a nuclear phosphoprotein. Cochrane A, et al. **Virology** 1989 Jul; 171(1):264–6

RADIATION EFFECTS

Nuclear protein organization and the repair of radiation damage. Cress AE, et al. **Carcinogenesis** 1989 May; 10(5):939–43

[The effect of gamma-irradiation on the poly(ADP-ribosylation) of nuclear proteins in rat thymocytes] Beletskiĭ IP, et al. **Radiobiologiia** 1988 Sep-Oct;28(5):611–6 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Functional probing of glucocorticoid receptor structure. Carlstedt-Duke J, et al. **J Steroid Biochem** 1988 Oct; 31(4B):593–7 (31 ref.)

NUCLEAR RADIOLOGY see **NUCLEAR MEDICINE**

NUCLEAR REACTORS

The Chernobyl accident. Transport of radionuclides to man living in northern Sweden. Olofsson L, et al. **Acta Oncol** 1988;27(6b):841–9

Recent radiation accidents. Chernobyl and Goiania: their impact and global implications. A presentation by Robert Peter Gale, MD, PhD. Gale RP, et al. **Ala J Med Sci** 1988 Oct;25(4):439–44

Radiation accident response in Pennsylvania. Changes since Three Mile Island. Reilly MA. **Ala J Med Sci** 1988 Oct; 25(4):448–52

Differences in American and Soviet nuclear reactors. Strauss KA. **Ala J Med Sci** 1988 Oct;25(4):445–8

Re: "Radiation doses and cause-specific mortality among workers at a nuclear materials fabrication plant" [letter; comment] Mole RH. **Am J Epidemiol** 1989 Mar; 129(3):639–40. **Comment on:** Am J Epidemiol 1988 Feb;127(2):255–66

Mortality among workers at a nuclear fuels production facility. Cragle DL, et al. **Am J Ind Med** 1988;14(4):379–401

Radiation accidents and nuclear energy: medical consequences and therapy [clinical conference] Champlin RE, et al. **Ann Intern Med** 1988 Nov 1;109(9):730–44 (112 ref.)

Dose information needed to assess effect of exposure to radiation in utero [letter] Dolk H, et al. **BMJ** 1989 Jun 24;298(6689):1710

Health effects of Chernobyl [letter] Dutton S, et al. **BMJ** 1989 Jan 14;298(6666):119

Incidence of leukaemia in young people in the vicinity of Hinkley Point nuclear power station, 1959–86. Ewings PD, et al. **BMJ** 1989 Jul 29;299(6694):289–93

The accident at Chernobyl and outcome of pregnancy in Finland. Harjulehto T, et al. **BMJ** 1989 Apr 15; 298(6679):995–7

The accident at Chernobyl and outcome of pregnancy in Finland [letter] Joffe M. **BMJ** 1989 May 20;298(6684):1384

Health effects of Chernobyl [editorial] Pershagen G. **BMJ** 1988 Dec 10;297(6662):1488–9

The role of bone marrow transplantation following nuclear accidents. Gale RP. **Bone Marrow Transplant** 1987 Jun; 2(1):1–6

Geographical variation in mortality from leukaemia and other cancers in England and Wales in relation to proximity to nuclear installations, 1969–78 [published erratum appears in Br J Cancer 1989 Aug;60(2):270] Cook-Mozaffari PJ, et al. **Br J Cancer** 1989 Mar;59(3):476–85

Chernobyl radiocaesium in an upland sheep farm ecosystem. Howard BJ, et al. **Br Vet J** 1989 May-Jun;145(3):212–9

Managing a radioactive fall-out: the Swedish experience after Chernobyl. Jones BE. **Br Vet J** 1989 May-Jun;145(3):220–5

An assessment of the risks to the health of grazing animals from the radioactive contamination of pastures. Sansom BF. **Br Vet J** 1989 May-Jun;145(3):206–11

What response did district medical officers make to the Chernobyl disaster? Bickler G, et al. **Community Med** 1988 Nov;10(4):314–8

Potassium iodide as a thyroid blocker—Three Mile Island to today. Halperin JA. **DICP** 1989 May;23(5):422–7

Development and use of an air-cooled suit for work in nuclear reactors. Featherstone G. **Ergonomics** 1988 Jul; 31(7):1025–9

Nuclear accidents—harmonization of the public health response. Report on a WHO meeting. **EURO Rep Stud** 1989;(110):1–111

Chernobyl fallout on Alpine glaciers. Ambach W, et al. **Health Phys** 1989 Jan;56(1):27–31

The environmental behavior of 131I in northwestern Greece

following the nuclear reactor accident at Chernobyl. Assimakopoulos PA, et al. **Health Phys** 1988 Nov; 55(5):783–91

Radiocesium levels measured in breast milk one year after the reactor accident at Chernobyl. Assimakopoulos PA, et al. **Health Phys** 1989 Jan;56(1):103–6

Radiocesium concentration in migratory birds wintering in Spain after the Chernobyl accident. Baeza A, et al. **Health Phys** 1988 Dec;55(6):863–7

Estimates of radiation dose and health risks to the United States population following the Chernobyl nuclear plant accident. Broadway JA, et al. **Health Phys** 1988 Sep; 55(3):533–9

Cesium-137 urinary excretion by northeastern (Pordenone) Italian people following the Chernobyl nuclear accident. Capra E, et al. **Health Phys** 1989 Jul;57(1):99–106

Radiation does from medical in-vivo prompt gamma-ray activation using a mobile nuclear reactor. Chung C, et al. **Health Phys** 1988 Oct;55(4):671–83

Environmental radioactivity and dose evaluation in Taiwan after the Chernobyl accident. Chung CE. **Health Phys** 1989 Apr;56(4):465–71

Radiological health effects models for nuclear power plant accident consequence analysis. Evans JS, et al. **Health Phys** 1989 Apr;56(4):397–413

Cesium-137 levels in breast milk and placentae after fallout from the reactor accident at Chernobyl. Gattavecchia E, et al. **Health Phys** 1989 Feb;56(2):245–8

Chernobyl radioactivity in Turkish tea. Gedikoğlu A, et al. **Health Phys** 1989 Jan;56(1):97–101

Chernobyl-derived 137Cs and 134Cs in heather plants in northwest England. Jackson D. **Health Phys** 1989 Sep; 57(3):485–9

Cesium-137, 134Cs and 110mAg in lambs grazing pasture in NE Scotland contaminated by Chernobyl fallout. Martin CJ, et al. **Health Phys** 1989 Apr;56(4):459–64

Role of the public sector in prevention and management of radiation accidents. Modan B. **Health Phys** 1989 Mar; 56(3):345–7

Reassessment of 137Cs in soils from Chernobyl fallout [letter] Moran D. **Health Phys** 1989 Sep;57(3):493–4

Artificial radioactivity in fuel peat and peat ash in Finland after the Chernobyl accident. Mustonen RA, et al. **Health Phys** 1989 Apr;56(4):451–8

Sugar as an emergency populace dosimeter for radiation accidents. Nakajima T. **Health Phys** 1988 Dec;55(6):951–5

Monitoring of 131I in milk and rain water in Japan following the reactor accident at Chernobyl and estimates of human thyroidal dose equivalents. Nishizawa K, et al. **Health Phys** 1988 Nov;55(5):773–7

Cesium-137 in soils from Chernobyl fallout. Papastefanou C, et al. **Health Phys** 1988 Dec;55(6):985–7

Effects of bentonite on transfer of radionuclides from forage to milk. Piva G, et al. **Health Phys** 1989 Jul;57(1):181–2

Comments on internal dose resulting from drinking Turkish tea harvested in 1986 [letter] Scott LM, et al. **Health Phys** 1989 Jul;57(1):205–6

Nuclear accident dosimetry intercomparison studies. Sims CS. **Health Phys** 1989 Sep;57(3):439–48

Neutron personnel dosimetry intercomparison studies at the Oak Ridge National Laboratory: a summary (1981–1986). Swaja RE, et al. **Health Phys** 1988 Sep;55(3):549–64

Transfer to milk of 131I and 137Cs released during the Chernobyl reactor accident. Tracy BL, et al. **Health Phys** 1989 Feb;56(2):239–43

Cesium-137 and 131I in thyroids of cattle and sheep after nuclear accidents and weapons tests. Van Middlesworth L, et al. **Health Phys** 1988 Nov;55(5):809–11

Chernobyl radioactivity in Turkish tea: a response [letter] Yule L, et al. **Health Phys** 1989 Sep;57(3):495

Hungarian surveillance of germinal mutations. Lack of detectable increase in indicator conditions caused by germinal mutations following the Chernobyl accident. Czeizel A. **Hum Genet** 1989 Jul;82(4):359–66

Caesium-137 and caesium-134 levels in soil in a tea plantation in Turkey after the Chernobyl accident. Yeşin T, et al. **Int J Rad Appl Instrum [A]** 1989;40(3):209–11

Investigation of the possible effect of the Chernobyl accident on Irish mortality rates. Crowley MJ, et al. **Ir J Med Sci** 1989 May;158(5):114–6

Report of radionuclides in Aedes communis pupae from central Sweden, 1986. Dahl C, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):328–31

Effects of the Chernobyl accident on animal husbandry and production, from a Swedish perspective. Jones BE. **J Am Vet Med Assoc** 1989 Apr 1;194(7):900–2

Medical experience and preparedness for handling radiation injuries. Linnemann RE. **J Med Assoc Ga** 1989 Feb; 78(2):95–100

Swedish thyroid cancer risk from Chernobyl? [letter] Holm LE, et al. **J Nucl Med** 1989 May;30(5):721–2

Thyroid uptake of iodine-131 and iodine-133 from Chernobyl in the population of southern Sweden. Strand SE, et al. **J Nucl Med** 1988 Oct;29(10):1719–23

Three Mile Island—ten years later. No health consequences seen, but studies continue to assess potential effects. Tilyou S. **J Nucl Med** 1989 Apr;30(4):427–30

Mortality among employees of a nuclear power company. Dreyer NA, et al. **J Occup Med** 1988 Dec;30(12):988–9

Chernobyl: the lessons learnt. Carmichael RJ. **J R Nav Med Serv** 1988 Spring;74(1):11–7

Psychological symptoms of residents in the aftermath of the Three Mile Island nuclear accident and restart. Prince-Embury S, et al. **J Soc Psychol** 1988 Dec; 128(6):779–90

Infective cause of childhood leukaemia [letter] **Lancet** 1989 Feb 11;1(8633):331

Childhood leukaemia mortality before 1970 among populations near two US nuclear installations [letter] Goldsmith JR. **Lancet** 1989 Apr 8;1(8641):793

Evidence for an infective cause of childhood leukaemia: comparison of a Scottish new town with nuclear reprocessing sites in Britain [see comments] Kinlen L. **Lancet** 1988 Dec 10;2(8624):1323–7. **Comment in:** Lancet 1989 Jan 14;1(8629):94–5

Childhood leukaemia mortality before 1970 among populations near two US nuclear installations [letter] Milham S Jr. **Lancet** 1989 Jun 24;1(8652):1443–4

Leukaemia near Pilgrim nuclear power plant, Massachusetts [letter] Poole C, et al. **Lancet** 1988 Dec 3;2(8623):1308

Bone marrow transplantation after the Chernobyl nuclear accident [see comments] Baranov A, et al. **N Engl J Med** 1989 Jul 27;321(4):205–12. **Comment in:** N Engl J Med 1989 Jul 27;321(4):254–5

Chernobyl: learning from experience [editorial; comment] Cassel CK, et al. **N Engl J Med** 1989 Jul 27;321(4):254–5 . **Comment on:** N Engl J Med 1989 Jul 27;321(4):205–12

Gorbachev's first Chernobyl visit since disaster [news] **Nature** 1989 Mar 2;338(6210):9

Uncensored Nature [editorial] **Nature** 1988 Nov 24; 336(6197):294

Soviet nuclear dissent [news] **Nature** 1989 Jan 26; 337(6205):292

With dosimetry in the sarcophagus [news] Kanin Y. **Nature** 1989 May 18;339(6221):171–2

Clean bill of health for Sellafield and Dounreay reactors? [news] McGourty C. **Nature** 1988 Dec 15;336(6200):613

Epidemiology: nuclear overhaul [news] McGourty C. **Nature** 1989 Aug 10;340(6233):419

Chernobyl. Soviet data made public [news] Rich V. **Nature** 1989 Mar 30;338(6214):367

Chernobyl fallout: continuing plans for evacuation [news] Rich V. **Nature** 1989 Aug 10;340(6233):415

Chernobyl fallout. Byelorussia collects dose [news] Rich V. **Nature** 1989 Jul 27;340(6231):255

Legacy of Three Mile Island [news] Shulman S. **Nature** 1989 Mar 16;338(6212):190

Leukaemia increase sets puzzle [news] Webb B. **Nature** 1989 Aug 10;340(6233):419

Could mosses be used for the subsequent mapping of the Chernobyl fallout? Daróczy S, et al. **Naturwissenschaften** 1988 Nov;75(11):569–70

Preliminary evaluation of the impact of the Chernobyl radiological contamination on the frequency of central nervous system malformations in 18 regions of Europe. The EUROCAT Working Group. **Paediatr Perinat Epidemiol** 1988 Jul;2(3):253–64

Neural tube defects and Chernobyl? [letter] Akar N, et al. **Paediatr Perinat Epidemiol** 1989 Jan;3(1):102–3

Changing incidence of neural tube defects in Aegean Turkey. Caglayan S, et al. **Paediatr Perinat Epidemiol** 1989 Jan; 3(1):62–5

Chernobyl in retrospect. Young RW. **Pharmacol Ther** 1988; 39(1–3):27–32

Displacement of Chernobyl fallout in snow layers of temperate Alpine glaciers. Ambach W, et al. **Sci Total Environ** 1988 Oct 15;76(2–3):101–7

Interception and retention of Chernobyl-derived 134Cs, 137Cs and 106Ru in a spruce stand. Bunzl K, et al. **Sci Total Environ** 1989 Jan;78:77–87

Time-dependent radioactive concentrations of fallout following the Chernobyl reactor accident. Papastefanou C, et al. **Sci Total Environ** 1989 Aug;84:283–9

The global impact of the Chernobyl reactor accident. Anspaugh LR, et al. **Science** 1988 Dec 16;242(4885):1513–9

Longitudinal study of appraisal at Three Mile Island: implications for life event research. Goldsteen R, et al. **Soc Sci Med** 1989;28(4):389–98

Reactor physics design for an epithermal neutron beam at the Power Burst reactor Facility. Wheeler FJ, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2–3):69–71

A backward look at Chernobyl [news] **Vet Rec** 1988 Oct 22;123(17):432

Radioactivity in total diet before and after the Chernobyl reactor accident. The situation in the Federal Republic of Germany. Diehl JF, et al. **Z Lebensm Unters Forsch** 1989 Jul;189(1):36–8

[It was 1 year ago...Chernobyl] Gharbi HA, et al. **Tunis Med** 1987 Feb;65(2):77–85 **(Fre)**

[Exposure to radioactivity in the perinatal period following the reactor accident in Chernobyl] Dadak C, et al. **Geburtshilfe Frauenheilkd** 1989 Feb;49(2):169–71 (Eng. Abstr.) **(Ger)**

[Exposure of the fetoplacental unit, breast milk and cow's milk to radionuclides 1 year after Chernobyl] Schlotter CM, et al. **Geburtshilfe Frauenheilkd** 1989 Jun;49(6):557–60 (Eng. Abstr.) **(Ger)**

[The radiation accident] Stögmann W. **Wien Klin Wochenschr** 1988 Aug 26;100(16):542–6 (Eng. Abstr.) **(Ger)**

[Medical consequences of the Chernobyl nuclear accident] Gold B, et al. **Harefuah** 1988 Oct;115(7–8):184–7 (22 ref.) **(Heb)**

[Teratogenic and mutagenic effect of ionizing radiation] Czeizel E, et al. **Orv Hetil** 1988 Sep 11;129(37):1979–81 (Eng. Abstr.) **(Hun)**

[Once more on the effects of the Chernobyl accident] Liniecki J, et al. **Pol Przegl Radiol (Warszawa)** 1987 Nov-Dec;51(6):285–9 (Eng. Abstr.) **(Pol)**

[Transplantation of the bone marrow after total body irradiation of the victims after the accident at the Chernobyl atomic power plant] Baranov AE, et al. **Gematol Transfuziol** 1989 Mar;34(3):3–16 (Eng. Abstr.) **(Rus)**

[Neurologic syndromes in patients with acute radiation sickness of extreme severity] Gus'kova AK, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):6–10 (Eng. Abstr.) **(Rus)**

[Scientific conference on the "Medical Aspects of the Accident at the Chernobyl Atomic Electric Power Station"] Burtsev VI, et al. **Klin Med (Mosk)** 1988 Aug; 66(8):155–7 **(Rus)**

[Strategy of the NCRP (National Commission on Radiation Protection) in establishing time limits on annual radiation dosages of the population following the accident at the Chernobyl AES. Concept of a lifetime dosage] Avetisov GM, et al. **Med Radiol (Mosk)** 1989 Aug;34(8):3–11 **(Rus)**

[RBE of neutrons from the BR-10 reactor based on their antitumor effect and on acute radiation reactions of the skin] Kuznetsova MN, et al. **Med Radiol (Mosk)** 1989 May; 34(5):45–8 (Eng. Abstr.) **(Rus)**

[Estimation of absorbed dose based on the results of cytogenetic studies of lymphocyte cultures from subjects exposed in the accident at the Chernobyl Atomic Power Station] Piatkin EK, et al. **Med Radiol (Mosk)** 1989 Jun; 34(6):52–7 (Eng. Abstr.) **(Rus)**

[The development of an all-Union registry of persons exposed to radiation resulting from the accident at the Chernobyl atomic power station] Tsyb AF, et al. **Med Radiol (Mosk)** 1989 Jul;34(7):3–6 **(Rus)**

[Automated medical systems aboard atomic submarines (a review of the literature)] Bulkin EI, et al. **Voen Med Zh** 1988 Sep;(9):46–8 (16 ref.) **(Rus)**

[Mental disadaptation in emergency situations (accident at the Chernobyl nuclear power station)] Aleksandrovskiĭ IuA, et al. **Zh Nevropatol Psikhiatr** 1989;89(5):111–7 (Eng. Abstr.) **(Rus)**

[Status of the nervous system in victims of the accident at the Chernobyl atomic power plant] Torubarov FS, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):48–52 (Eng. Abstr.) **(Rus)**

[Nuclear accidents. Real and potential dangers (editorial)] Biete A. **Med Clin (Barc)** 1988 Nov 26;91(18):699–701 **(Spa)**

NUCLEAR RNA see **RNA, NUCLEAR**

NUCLEAR WARFARE

see related
RADIOACTIVE FALLOUT

Sequential development of polycythemia vera and chronic myelocytic leukemia in a patient following radiation exposure from nuclear weapons tests. Weinberg JB. **Am J Med** 1989 Jul;87(1):121–3

Plutonium from atmospheric weapons testing: fission track analysis of urine samples. Moorthy AR, et al. **Anal Chem** 1988 Jul 15;60(14):857A–860A

Nuclear war and anxiety [letter] Mashford ML. **Aust Fam Physician** 1988 Sep;17(9):733

Physicians and nuclear war [letter] Wyatt M. **Aust Fam Physician** 1988 Oct;17(10):842

Mortality of employees of the Atomic Weapons Establishment, 1951–82. Beral V, et al. **BMJ** 1988 Sep 24; 297(6651):757–70

IPPNW: forum for Soviet anti-American propaganda? [letter] **Can Med Assoc J** 1988 Oct 15;139(8):698–700

Studies of cancer among the Japanese A-bomb survivors. Beebe GW. **Cancer Invest** 1988;6(4):417–26

Detection of somatic mutations at the glycophorin A locus in erythrocytes of atomic bomb survivors using a single beam flow sorter. Kyoizumi S, et al. **Cancer Res** 1989 Feb 1;49(3):581–8

Living in the nuclear age: an Australian study of children's and adolescent's fears. Slee PT, et al. **Child Psychiatry Hum Dev** 1989 Summer;19(4):270–8

Molecular analyses of in vivo hprt mutant T cells from atomic bomb survivors. Hakoda M, et al. **Environ Mol Mutagen** 1989;13(1):25–33

Growth and differentiation of circulating hemopoietic stem cells with atomic bomb irradiation-induced chromosome abnormalities. Amenomori T, et al. **Exp Hematol** 1988 Nov; 16(10):849–54

Reply to comments on estimates of external gamma exposure [letter] Anspaugh LR, et al. **Health Phys** 1988 Sep; 55(3):581–2

Radionuclide transport from soil to air, native vegetation, kangaroo rats and grazing cattle on the Nevada test site. Gilbert RO, et al. **Health Phys** 1988 Dec;55(6):869–87

A proposal concerning "the new dosimetry" [letter] Gofman JW. **Health Phys** 1988 Sep;55(3):580–1

Comments on 'Alternatives to the BEIR relative risk model for explaining atomic bomb survivor cancer mortality' [letter] Nambi KS, et al. **Health Phys** 1988 Sep;55(3):579–80

Cesium-137 and 131I in thyroids of cattle and sheep after

nuclear accidents and weapons tests. Van Middlesworth L, et al. **Health Phys** 1988 Nov;55(5):809–11
Chromosome aberrations and transforming genes in leukemic and non-leukemic patients with a history of atomic bomb exposure. Kamada N, et al.
Int Symp Princess Takamatsu Cancer Res Fund 1987; 18:125–34
Radiation-induced cancer and its modifying factor among A-bomb survivors. Kato H.
Int Symp Princess Takamatsu Cancer Res Fund 1987; 18:117–24
A longitudinal study of the hopes and worries of adolescents. Gillies P. **J Adolesc** 1989 Mar;12(1):69–81
Relationships between the life values of U.S. college students and their cognitive/affective responses to the threat of nuclear war. Hamilton SB, et al. **J Adolesc** 1989 Mar; 12(1):55–68
Everybody's scared—but life goes on: coping, defense and action in the face of nuclear threat. Haste H. **J Adolesc** 1989 Mar;12(1):11–26 (33 ref.)
The global world—a domain for development in adolescence? Solantaus T. **J Adolesc** 1989 Mar;12(1):27–40
Old and new paradigms: research on young people's response to the nuclear threat. Tizard B. **J Adolesc** 1989 Mar; 12(1):1–10 (20 ref.)
Transitions in the nuclear age: late adolescence to early adulthood. Van Hoorn J, et al. **J Adolesc** 1989 Mar; 12(1):41–53
Social and health effects of a nuclear weapons exchange [letter] Fletcher JL Jr. **J Med Assoc Ga** 1988 Sep;77(9):686
A one megaton nuclear explosion over Atlanta—the immediate effects. Kaplan JE, et al. **J Med Assoc Ga** 1988 Jul;77(7):551–5
Health care consequences for Atlanta of a nuclear explosion. Koplan JP, et al. **J Med Assoc Ga** 1988 Jul;77(7):557–60
Nursing education and the nuclear age. McKay S.
J Prof Nurs 1989 May–Jun;5(3):152–8 (24 ref.)
Health Workers for Peace Day, October 1, 1989 [editorial]
J Public Health Policy 1989 Summer;10(2):153–6
Study of stomach cancer in atomic bomb survivors. Report 1. Histological findings and prognosis. Ito C, et al.
J Radiat Res (Tokyo) 1989 Jun;30(2):164–75
Measurements of neutron fluence from the Hiroshima atomic bomb. Kato K, et al. **J Radiat Res (Tokyo)** 1988 Dec; 29(4):261–6
Nuclear war as a source of adolescent worry: relationships with age, gender, trait emotionality, and drug use. Hamilton SB, et al. **J Soc Psychol** 1988 Dec;128(6):745–63
Ethical choices after a nuclear attack [letter] Dawson J. **JAMA** 1989 Jun 23–30;261(24):3552
A piece of my mind. Savannah River Parkway. Goldstein AO. **JAMA** 1989 Aug 4;262(5):686
Nuclear weapons facilities face attacks from environmentalists, government agencies [news] Merz B. **JAMA** 1989 Aug 4;262(5):604–5
Weapons of mass destruction: the greatest threat to public health. Sidel VW. **JAMA** 1989 Aug 4;262(5):680–2
Mutation and cancer in relation to the atomic-bomb radiation effects. Kondo S. **Jpn J Cancer Res** 1988 Jul;79(7):785–99 (68 ref.)
Ciguatera and military activity [letter] Conway GW, et al. **Lancet** 1989 Apr 15;1(8642):848
Youth and threat of nuclear war [letter] Goldenring JM, et al. **Lancet** 1988 Nov 12;2(8620):1140
Physicians and peace prospects [letter] Holdstock D. **Lancet** 1988 Dec 24–31;2(8626–8627):1494
Medical education and nuclear war. McCally M, et al. **Lancet** 1988 Oct 8;2(8615):834–7
Criticism of IPPNW [letter] Mole RH. **Lancet** 1989 Feb 4; 1(8632):278
International Physicians for the Prevention of Nuclear War: Messiahs of the nuclear age? Orient JM. **Lancet** 1988 Nov 19;2(8621):1185–6
Ciguatera in the Pacific: a link with military activities. Ruff TA. **Lancet** 1989 Jan 28;1(8631):201–5
Criticism of IPPNW [letter] Zupanc ML. **Lancet** 1989 Jan 7;1(8628):48–9
Attitudes that predict antinuclear-war activity in medical students. Halford WK, et al. **Med J Aust** 1988 Dec 5–19; 149(11–12):599–602
Healing our planet: a global prescription. Ruff TA.
Med J Aust 1988 Dec 5–19;149(11–12):689–91
The threat of nuclear war [letter] Williams R.
Med J Aust 1989 Feb 20;150(4):228
Selection of casualties after nuclear attack: a doctor's dilemma of the future? [editorial] Holdstock D.
Med War 1988 Oct–Dec;4(4):195–7
Medical Campaign Against Nuclear Weapons symposium: what should the IPPNW prescription be after the INF treaty? Holdstock D. **Med War** 1988 Oct–Dec;4(4):233–4
In vivo mutant T cell frequency in atomic bomb survivors carrying outlying values of chromosome aberration frequencies. Hakoda M, et al. **Mutat Res** 1988 Nov; 202(1):203–8
A chromosome study of 6-thioguanine-resistant mutants in T lymphocytes of Hiroshima atomic bomb survivors. Kodama Y, et al. **Mutat Res** 1989 Sep;227(1):31–8
Teenagers' concerns about nuclear war [letter]
N Engl J Med 1989 Jan 12;320(2):127
Anthropology. A tale of three cities [news] Jones JS.
Nature 1989 May 18;339(6221):176–7
Dental radiography exposure of the Hiroshima and Nagasaki populations. Antoku S, et al.
Oral Surg Oral Med Oral Pathol 1989 Mar;67(3):354–60
Facial electromyogram and heart-rate correlates of a paradoxical attitude change to antinuclear war information. Vigne JJ, et al. **Percept Mot Skills** 1988 Dec;67(3):755–62
International medical concern about nuclear war. Haines A.
Practitioner 1988 Apr 22;232(1447):472–5
Preventing the "final epidemic". Josephs D, et al.
Practitioner 1988 Mar 8;232(1444):266–9
Nuclear winter. Percival I. **Practitioner** 1988 Feb 8; 232(1442):140–1
Effects of nuclear war: new findings. Rotblat J.
Practitioner 1987 Nov 9;231(1438):1499–501
Doctors and nuclear war. Stableforth D. **Practitioner** 1987 Oct 8;231(1436):1249–50
Psychological perspectives on the nuclear age. West M.
Practitioner 1988 Jan;232(1441):58, 60, 63–5
The medical ethics of nuclear war. Zealley H.
Practitioner 1988 May 23;232(1449):618–21
Age and dose related alteration of in vitro mixed lymphocyte culture response of blood lymphocytes from A-bomb survivors. Akiyama M, et al. **Radiat Res** 1989 Jan; 117(1):26–34
Immunological responses of aging Japanese A-bomb survivors. Bloom ET, et al. **Radiat Res** 1988 Nov; 116(2):343–55
Comments on "It is Time to Reopen the Question of Thresholds in Radiation Exposure Responses" by J. R. Totter [letter] Delpla M. **Radiat Res** 1989 Sep; 119(3):578–81
Studies of the mortality of A-bomb survivors. 9. Mortality, 1950–1985: Part 1. Comparison of risk coefficients for site-specific cancer mortality based on the DS86 and T65DR shielded kerma and organ doses. Shimizu Y, et al. **Radiat Res** 1989 Jun;118(3):502–24
Analysis of the DS86 atomic bomb radiation dosimetry methods using data on severe epilation. Stram DO, et al.
Radiat Res 1989 Jan;117(1):93–113
Civilian casualties from counterforce attacks. von Hippel FN, et al. **Sci Am** 1988 Sep;259(3):36–42
Fallout from Pacific tests reaches Congress [news] Marshall E. **Science** 1989 Jul 14;245(4914):123–4
Adolescents and nuclear arms issues. Sheffet AM, et al.
Soc Sci Med 1988;27(9):995–8
Youthful worries about nuclear war. Goldenring JM.
Tex Med 1988 Oct;84(10):38–41
[Is nuclear war a threat?] Melezínek I, et al.
Cas Lek Cesk 1989 Mar 31;128(14):417–21 **(Cze)**
[Information for children and adolescents about nuclear warfare] Isager T, et al. **Ugeskr Laeger** 1989 Mar 27; 151(13):853–4 **(Dan)**
[A new assessment of the data from Hiroshima and Nagasaki] Kellerer AM. **Strahlenschutz Forsch Prax** 1988;30:63–91 **(Ger)**
[The radioecology of the grapevine. 1. The transfer of nuclear weapons fallout from the soil into wine] Hellmuth KH, et al. **Z Lebensm Unters Forsch** 1989 Apr;188(4):317–23 (Eng. Abstr.) **(Ger)**
[A review of colorectal cancer in atomic bomb survivors—treated cases at Nagasaki Genbaku Hospital from 1971–1984] Nakao S, et al. **Gan No Rinsho** 1989 May; 35(6):696–700 (Eng. Abstr.) **(Jpn)**
[Let us cure our planet!] Srsen S. **Cesk Pediatr** 1989 Jun; 44(6):321 (Eng. Abstr.) **(Slo)**

PREVENTION & CONTROL

Peace: an unprecedented opportunity. Martinez R.
Colo Med 1988 Sep 1;85(16):354–5
Security in the nuclear age [editorial] Foege WH.
J Med Assoc Ga 1988 Jul;77(7):546–7

NUCLEAR WASTE see **HAZARDOUS WASTE**

NUCLEASES, DNA see **DEOXYRIBONUCLEASES**

NUCLEASES, RNA see **RIBONUCLEASES**

NUCLEIC ACID CONFORMATION

DNA packing in chromatine, a manifestation of the Bonnet transformation. Blum Z, et al. **Acta Chem Scand [B]** 1988 Aug;42(7):417–22
Use of reverse transcription to determine the exact locations of psoralen photochemical crosslinks in RNA. Ericson G, et al. **Anal Biochem** 1988 Oct;174(1):215–23
Detection of unusual nucleic acids with monoclonal antibodies specific for triplexes, poly(ADP-ribose), DNA-RNA hybrids, and Z-DNA. Lee JS, et al.
Anal Biochem 1989 May 1;178(2):373–7
Perturbation of DNA tertiary structure by physical and chemical carcinogens: effects on DNA repair processes. Pedrini AM, et al. **Ann Ist Super Sanita** 1989;25(1):91–7
DNA conformation and protein binding. Travers AA.
Annu Rev Biochem 1989;58:427–52 (123 ref.)
Recent studies of DNA in the crystal. Drew HR, et al.
Annu Rev Cell Biol 1988;4:1–20 (79 ref.)
Unusual DNA structures at the integration site of an HIV provirus. Gama Sosa MA, et al.
Biochem Biophys Res Commun 1989 May 30;161(1):134–42
Supercoil-induced Z-DNA formation within 5'-end of chicken myb proto-oncogene. Vlach J, et al.
Biochem Biophys Res Commun 1989 Feb 15;158(3):737–42
Flanking AT-rich sequences may lower the activation energy of cruciform extrusion in supercoiled DNA. Wang Y, et al. **Biochem Biophys Res Commun** 1989 Jan 31; 158(2):423–31
Interactions between structure transitions in a torsionally constrained DNA. Wang Y, et al.
Biochem Biophys Res Commun 1989 Feb 15;158(3):696–704
N.m.r. assignments and temperature-dependent conformational transitions of a mutant trp operator-promoter in solution. Lane AN. **Biochem J** 1989 May 1;259(3):715–24
Conformation and dynamics of a left-handed Z-DNA hairpin: studies of d(CGCGCGTTTTCGCGCG) in solution. Benight AS, et al. **Biochemistry** 1989 Apr 18; 28(8):3323–32
The emerging three-dimensional structure and function of 16S ribosomal RNA. Brimacombe R. **Biochemistry** 1988 Jun 14;27(12):4207–14 (61 ref.)
Conformational studies of d-(AAAAATTTTT)2 using constraints from nuclear overhauser effects and from quantitative analysis of the cross-peak fine structures in two-dimensional 1H nuclear magnetic resonance spectra. Celda B, et al. **Biochemistry** 1989 Feb 21;28(4):1462–71
Quantification of DNA structure from NMR data: conformation of d-ACATCGATGT. Chary KV, et al.
Biochemistry 1989 Jun 13;28(12):5240–9
Construction and analysis of monomobile DNA junctions. Chen JH, et al. **Biochemistry** 1988 Aug 9;27(16):6032–8
Solid-phase synthesis and high-resolution NMR studies of two synthetic double-helical RNA dodecamers: r(CGCGAAUUCGCG) and r(CGCGUAUACGCG). Chou SH, et al. **Biochemistry** 1989 Mar 21;28(6):2422–35
High-resolution NMR study of a synthetic DNA-RNA hybrid dodecamer containing the consensus pribnow promoter sequence: d(CGTTATAATGCG).r(CGCAUUAUAACG). Chou SH, et al. **Biochemistry** 1989 Mar 21;28(6):2435–43
Conformational properties of branched RNA fragments in aqueous solution. Damha MJ, et al. **Biochemistry** 1988 Aug 23;27(17):6403–16
Circular dichroism spectra of DNA oligomers show that short interior stretches of C.C+ base pairs do not form in duplexes with A.T base pairs. Edwards EL, et al.
Biochemistry 1988 Jul 12;27(14):5166–74
UV-induced pyrimidine dimers and trimethylpsoralen cross-links do not alter chromatin folding in vitro. Gale JM, et al. **Biochemistry** 1988 Sep 20;27(19):7197–205
Complete assignment of the deoxyribose 5'/5" proton resonances of the EcoRI DNA sequence using isotropic mixing. Glaser SJ, et al. **Biochemistry** 1989 Feb 21; 28(4):1483–7
Assignments of 31P NMR resonances in oligodeoxyribonucleotides: origin of sequence-specific variations in the deoxyribose phosphate backbone conformation and the 31P chemical shifts of double-helical nucleic acids. Gorenstein DG, et al. **Biochemistry** 1988 Sep 20;27(19):7223–37
Thermal stability of RNA hairpins containing a four-membered loop and a bulge nucleotide. Groebe DR, et al. **Biochemistry** 1989 Jan 24;28(2):742–7
Site-specific interaction of intercalating drugs with a branched DNA molecule. Guo Q, et al. **Biochemistry** 1989 Mar 21;28(6):2355–9
On the question of DNA bending: two-dimensional NMR studies on d(GTTTTAAAAC)2 in solution. Gupta G, et al. **Biochemistry** 1988 Oct 4;27(20):7909–19
Cooperativity in A-tract structure and bending properties of composite TnAn blocks. Haran TE, et al.
Biochemistry 1989 Apr 4;28(7):2763–7
Structural variation in d(CTCTAGAG). Implications for protein-DNA interactions. Hunter WN, et al.
Biochemistry 1989 Mar 21;28(6):2444–51
Base only binding of spermine in the deep groove of the A-DNA octamer d(GTGTACAC). Jain S, et al.
Biochemistry 1989 Mar 21;28(6):2360–4
Effects of charge modification on the helical period of duplex DNA. Kilkuskie R, et al. **Biochemistry** 1988 Jun 14; 27(12):4377–86
Complementary oligodeoxynucleotide probes of RNA conformation within the Escherichia coli small ribosomal subunit. Lasater LS, et al. **Biochemistry** 1988 Jun 28; 27(13):4687–95
Evidence from base-pair kinetics for two types of adenine tract structures in solution: their relation to DNA curvature. Leroy JL, et al. **Biochemistry** 1988 Dec 13; 27(25):8894–8
Specificity in formation of triple-stranded nucleic acid helical complexes: studies with agarose-linked polyribonucleotide affinity columns. Letai AG, et al. **Biochemistry** 1988 Dec 27;27(26):9108–12
Helix stability in prokaryotic promoter regions. Margalit H, et al. **Biochemistry** 1988 Jul 12;27(14):5179–88
Chemical probes of the conformation of DNA modified by cis-diamminedichloroplatinum(II). Marrot L, et al.
Biochemistry 1989 Feb 21;28(4):1454–61
Probing the surface of Z-DNA with anti-nucleoside antibodies. Nahon E, et al. **Biochemistry** 1988 Jul 12; 27(14):5193–8
DNA bending by the bulge defect. Rice JA, et al.
Biochemistry 1989 May 16;28(10):4512–6
Temperature-dependent CD and NMR studies on a synthetic oligonucleotide containing a B–Z junction at high salt.

Sheardy RD, et al. **Biochemistry** 1989 Jan 24;28(2):720–5

Effect of pulsed and reversing electric fields on the orientation of linear and supercoiled DNA molecules in agarose gels. Stellwagen NC. **Biochemistry** 1988 Aug 23; 27(17):6417–24

Sequence-targeted cleavage of nucleic acids by oligo–alpha–thymidylate–phenanthroline conjugates: parallel and antiparallel double helices are formed with DNA and RNA, respectively. Sun JS, et al. **Biochemistry** 1988 Aug 9;27(16):6039–45

Effects of the O2' hydroxyl group on Z–DNA conformation: structure of Z–RNA and (araC)–[Z–DNA] Teng MK, et al. **Biochemistry** 1989 Jun 13;28(12):4923–8

Sugar pucker and phosphodiester conformations in viral genomes of filamentous bacteriophages: fd, If1, IKe, Pf1, Xf, and Pf3. Thomas GJ Jr, et al. **Biochemistry** 1988 Jun 14;27(12):4350–7

Multinuclear NMR studies of DNA hairpins. 1. Structure and dynamics of d(CGCGTTGTTCGCG). Williamson JR, et al. **Biochemistry** 1989 Apr 4;28(7):2819–31

Multinuclear NMR studies of DNA hairpins. 2. Sequence-dependent structural variations. Williamson JR, et al. **Biochemistry** 1989 Apr 4;28(7):2831–6

Conformational analysis of d(C3G3), a B–family duplex in solution. Wolk S, et al. **Biochemistry** 1989 Mar 21; 28(6):2452–9

Comparison of the B– and Z–form hairpin loop structures formed by d(CG)5T4(CG)5. Wolk SK, et al. **Biochemistry** 1988 Sep 6;27(18):6960–7

Interaction of chloroquine with linear and supercoiled DNAs. Effect on the torsional dynamics, rigidity, and twist energy parameter. Wu PG, et al. **Biochemistry** 1988 Oct 18;27(21):8128–44

Oligodeoxynucleotide folding in solution: loop size and stability of B–hairpins. Xodo LE, et al. **Biochemistry** 1988 Aug 23;27(17):6321–6

The B–Z conformational transition in folded oligodeoxynucleotides: loop size and stability of Z–hairpins. Xodo LE, et al. **Biochemistry** 1988 Aug 23;27(17):6327–31

Adenovirus DNA replication in vitro: duplication of single-stranded DNA containing a panhandle structure. Leegwater PA, et al. **Biochim Biophys Acta** 1988 Dec 20; 951(2–3):403–10

The role of sequence in the stabilization of left–handed DNA helices in vitro and in vivo. McLean MJ, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):243–54 (92 ref.)

DNA conformational variations in the in vitro torsionally strained Ig kappa light chain gene localize on consensus sequences. Venditti S, et al. **Biochim Biophys Acta** 1988 Nov 10;951(1):139–48

Valylation of tRNA–like transcripts from cloned cDNA of turnip yellow mosaic virus RNA demonstrate that the L–shaped region at the 3' end of the viral RNA is not sufficient for optimal aminoacylation. Dreher TW, et al. **Biochimie** 1988 Dec;70(12):1719–27

Particular behavior of the adenine and guanine ring–breathing modes upon the DNA conformational transitions. Ghomi M, et al. **Biochimie** 1988 Jun;70(6):841–6

Alpha are more stable than beta anomer oligonucleotides in 3T3 cellular extracts. Thenet S, et al. **Biochimie** 1988 Dec; 70(12):1729–32

Hairpin structures in synthetic oligodeoxynucleotides: sequence effects on the duplex–to–hairpin transition. Xodo LE, et al. **Biochimie** 1989 Jul;71(7):793–803

An unusual electrooptical effect observed for DNA fragments and its apparent relation to a permanent electric moment associated with bent DNA. Antosiewicz J, et al. **Biophys Chem** 1989 Mar;33(1):19–30

Reinterpretation of fluorescence of terbium ion–DNA complexes. Balcarová Z, et al. **Biophys Chem** 1989 Mar; 33(1):55–61

Sequence-dependent emission from stacked forms of ApC and CpA. Evidence for stacked base ('dimer') absorption and left–handed stacked conformation. Daniels M, et al. **Biophys Chem** 1988 Dec;32(2–3):229–37

A theoretical model of DNA curvature. De Santis P, et al. **Biophys Chem** 1988 Dec;32(2–3):305–17

Specific interactions between DNA left–handed supercoils and actinomycin D. Leoni L, et al. **Biophys Chem** 1989 Mar;33(1):11–7

Quasi–continuum models of twist–like and accordion–like low–frequency motions in DNA. Chou KC, et al. **Biophys J** 1989 Aug;56(2):295–305

Helix–coil dynamics of a Z–helix hairpin. Antosiewicz J, et al. **Biopolymers** 1988 Aug;27(8):1319–27

Molecular mechanics studies on poly(purine).poly(pyrimidine) sequences in DNA: polymorphism and local variability. Bansal M, et al. **Biopolymers** 1989 Feb;28(2):531–48

A 2H–NMR study of the A–DNA conformation in films of oriented Na–DNA: evidence of a disordered B–DNA contribution. Brandes R, et al. **Biopolymers** 1988 Jul; 27(7):1159–70

Collective motion in DNA and its role in drug intercalation. Chou KC, et al. **Biopolymers** 1988 Nov;27(11):1795–815

Ions around DNA: Monte Carlo estimates of distribution with improved electrostatic potentials. Conrad J, et al. **Biopolymers** 1988 Nov;27(11):1711–32

CD spectra of isoionic DNA solutions. Davydova OV, et al. **Biopolymers** 1989 Feb;28(2):605–15

Hydration of B–DNA: comparison between the water network around poly(dG).poly(dC) and poly(dG–dC).poly(dG–dC) on the basis of Monte Carlo computations. Eisenhaber F, et al. **Biopolymers** 1989 Mar; 28(3):741–61

Excluded–volume effect on the bidimensional conformation of DNA molecules adsorbed to protein films. Frontali C. **Biopolymers** 1988 Aug;27(8):1329–31

CD studies of double–stranded polydeoxynucleotides composed of repeating units of contiguous homopurine residues. Gudibande SR, et al. **Biopolymers** 1988 Dec; 27(12):1905–15

Modeling DNA supercoils and knots with B–spline functions. Hao MH, et al. **Biopolymers** 1989 Apr;28(4):873–900

Prediction of DNA structure from sequence: a build–up technique. Hingerty BE, et al. **Biopolymers** 1989 Jul; 28(7):1195–222

Relaxation effects in the gel electrophoresis of DNA in intermittent fields. Jamil T, et al. **Biopolymers** 1989 Aug; 28(8):1413–27

The electrostatic potential of B–DNA. Jayaram B, et al. **Biopolymers** 1989 May;28(5):975–93

Low–frequency dynamics and Raman scattering of crystals, of B–, A–, and Z–DNA, and fibers of C–DNA. Lamba OP, et al. **Biopolymers** 1989 Feb;28(2):667–78

Reversal of the Mg++–induced B–to–Z transition of poly[d(G–C)] with hydrostatic pressure. Macgregor RB Jr. **Biopolymers** 1988 Oct;27(10):1687–90

Helix–coil transition of plasmid DNA by adiabatic differential scanning microcalorimetry. Maeda Y, et al. **Biopolymers** 1988 Dec;27(12):1917–25

Base and conformational specificity of an amine modification of DNA. Maibenco D, et al. **Biopolymers** 1989 Feb; 28(2):549–71

Three persistence lengths for a stiff polymer with an application to DNA B–Z junctions. Manning GS. **Biopolymers** 1988 Oct;27(10):1529–42

Sequence dependence of the B–A conformational transition of DNA. Mazur J, et al. **Biopolymers** 1989 Jul;28(7):1223–33

Counterion exchange reactions on DNA: Monte Carlo and Poisson–Boltzmann analysis. Paulsen MD, et al. **Biopolymers** 1988 Aug;27(8):1249–65

Study of furanose ring flexibility in polynucleotide chains using Raman spectra analysis. Pechenaya VI, et al. **Biopolymers** 1988 Nov;27(11):1817–29

The ligation and flexibility of four–arm DNA junctions. Petrillo ML, et al. **Biopolymers** 1988 Sep;27(9):1337–52

Electric dichroism and bending amplitudes of DNA fragments according to a simple orientation function for weakly bent rods. Porschke D. **Biopolymers** 1989 Aug; 28(8):1383–96

Molecular dynamics of structural transitions and intercalation in DNA. Prabhakaran M, et al. **Biopolymers** 1988 Aug; 27(8):1239–48

The amplitude of local angular motions of intercalated dyes and bases in DNA. Schurr JM, et al. **Biopolymers** 1988 Oct;27(10):1543–69

Metal–induced sequential transitions among DNA conformations. Shin YA, et al. **Biopolymers** 1988 Sep; 27(9):1415–32

Structure of DNA hydration shells studied by Raman spectroscopy. Tao NJ, et al. **Biopolymers** 1989 May; 28(5):1019–30

Dynamic coupling between DNA and its primary hydration shell studied by Brillouin scattering. Tao NJ, et al. **Biopolymers** 1988 Oct;27(10):1655–71

Models for the solution state structure of the (6–4) photoproduct of thymidylyl–(3'——5')–thymidine derived via a distance– and angle–constrained conformation search procedure. Taylor JS, et al. **Biopolymers** 1988 Oct; 27(10):1571–93

Conformation of a bulge–containing oligomer from a hot–spot sequence by NMR and energy minimization. Woodson SA, et al. **Biopolymers** 1989 Jun;28(6):1149–77

ABC of clinical genetics. Gene structure and function. Kingston HM. **BMJ** 1989 Jun 17;298(6688):1629–31 (0 ref.)

A continuous analog for RNA folding. Ferretti V, et al. **Bull Math Biol** 1989;51(1):167–71

The metaphase scaffold is helically folded: sister chromatids have predominantly opposite helical handedness. Boy de la Tour E, et al. **Cell** 1988 Dec 23;55(6):937–44

The structure of the Holliday junction, and its resolution. Duckett DR, et al. **Cell** 1988 Oct 7;55(1):79–89

Chromatin folding modulates nucleosome positioning in yeast minichromosomes. Thoma F, et al. **Cell** 1988 Dec 23; 55(6):945–53

Immunofluorescent staining of mammalian nuclei and chromosomes with a monoclonal antibody to triplex DNA. Burkholder GD, et al. **Chromosoma** 1988 Nov;97(3):185–92

RNA secondary structures: comparison and determination of frequently recurring substructures by consensus. Le SY, et al. **Comput Appl Biosci** 1989 Jul;5(3):205–10

An extension of the graph theoretical approach to predict the secondary structure of large RNAs: the complex of 16S and 23S rRNAs from E. coli as a case study. Thanaraj TA, et al. **Comput Appl Biosci** 1989 Jul;5(3):211–8

Tree graphs of RNA secondary structures and their comparisons. Le SY, et al. **Comput Biomed Res** 1989 Oct; 22(5):461–73

Presence of a 16S rRNA pseudogene in the bi–molecular plastid genome of the primitive brown alga Pylaiella littoralis. Evolutionary implications. Markowicz Y, et al. **Curr Genet** 1988 Dec;14(6):599–608

Temperature–gradient gel electrophoresis of nucleic acids: analysis of conformational transitions, sequence variations, and protein–nucleic acid interactions. Riesner D, et al. **Electrophoresis** 1989 May–Jun;10(5–6):377–89

Use of the hydroxyl radical and gel electrophoresis to study DNA structure. Shafer GE, et al. **Electrophoresis** 1989 May–Jun;10(5–6):397–404

Definitions and nomenclature of nucleic acid structure parameters. **EMBO J** 1989 Jan;8(1):1–4

Functional domains of the RNA component of ribonuclease P revealed by chemical probing of mutant RNAs. Shiraishi H, et al. **EMBO J** 1988 Dec 1;7(12):3817–21

The functional significance of DNA sequence structure in a site–specific genetic recombination reaction. Umlauf SW, et al. **EMBO J** 1988 Jun;7(6):1845–52

Effect of anti–cruciform DNA monoclonal antibodies on DNA replication. Zannis–Hadjopoulos M, et al. **EMBO J** 1988 Jun;7(6):1837–44

Effect of DNA conformation on the transcription of mitochondrial DNA. Barat–Gueride M, et al. **Eur J Biochem** 1989 Aug 1;183(2):297–302

Correlation of pause sites in MDV–1 RNA replication with kinetic refolding of the growing chain. A Monte Carlo simulation of the Markov process. Fernández A. **Eur J Biochem** 1989 Jun 1;182(1):161–3

Molecular structure of an A–DNA decamer d(ACCGGCCGGT). Frederick CA, et al. **Eur J Biochem** 1989 May 1;181(2):295–307

Staining with pyronin Y detects changes in conformation of RNA during mitosis and hyperthermia of CHO cells. Traganos F, et al. **Exp Cell Res** 1988 Dec;179(2):535–44

Reflections on the ambivalent helix. Galloway JW. **Experientia** 1989 Sep 15;45(9):859–72 (74 ref.)

One left–handed strand in DNA–oligonucleotide complexes? Gago F, et al. **FEBS Lett** 1989 Jan 2;242(2):270–4

Parallel stranded DNA with AT base pairing. Shchyolkina AK, et al. **FEBS Lett** 1989 Feb 13;244(1):39–42

Free radicals in irradiated oriented DNA fibers: results from B–form DNA and from deuterated DNA samples. Zell I, et al. **Free Radic Res Commun** 1989;6(2–3):105–6

Characterization of the base stacking interactions in DNA by means of Lennard–Jones empirical potentials. Sponer J, et al. **Gen Physiol Biophys** 1989 Jun;8(3):257–72

Recognition of structural perturbations in DNA by human DNA(cytosine–5)methyltransferase. Baker DJ, et al. **Gene** 1988 Dec 25;74(1):207–10

In vivo existence of left–handed DNA. Jaworski A, et al. **Gene** 1988 Dec 25;74(1):215–20

Role of the potential secondary structures in phage G4 origin of complementary DNA strand synthesis. Sakai H, et al. **Gene** 1988 Nov 30;71(2):323–30

The role of bases upstream of the Shine–Dalgarno region and in the coding sequence in the control of gene expression in Escherichia coli: translation and stability of mRNAs in vivo. Schauder B, et al. **Gene** 1989 May 15;78(1):59–72

Cytosine methylation as an effector of right–handed to left–handed DNA structural transitions. Zacharias W, et al. **Gene** 1988 Dec 25;74(1):221–4

Structure and copy number of gene clusters related to the pap P–adhesin operon of uropathogenic Escherichia coli. Arthur M, et al. **Infect Immun** 1989 Feb;57(2):314–21

Changes in the structure of nucleoids isolated from heat–shocked HeLa cells. Kampinga HH, et al. **Int J Radiat Biol** 1989 Sep;56(3):369–82

mRNA secondary structure in an open reading frame reduces translation efficiency in Bacillus subtilis. Kubo M, et al. **J Bacteriol** 1989 Jul;171(7):4080–2

Practical aspects of 2D NMR for assigning the non–exchangeable protons in DNA–RNA fragments. Remaud G. **J Biochem Biophys Methods** 1988 Dec; 17(4):253–76

Why do all lariat RNA introns have adenosine as the branch–point nucleotide? Conformational study of naturally–occurring branched trinucleotides and its eleven analogues by 1H–, 31P–NMR and CD spectroscopy. Remaud G, et al. **J Biochem Biophys Methods** 1989 Feb; 18(1):1–35

Multiple DNA secondary structures in perfect inverted repeat inserts in plasmids. Right–handed B–DNA, cruciforms, and left–handed Z–DNA. Blaho JA, et al. **J Biol Chem** 1988 Oct 5;263(28):14446–55

Purification and characterization of an inducible Escherichia coli DNA polymerase capable of insertion and bypass at abasic lesions in DNA. Bonner CA, et al. **J Biol Chem** 1988 Dec 15;263(35):18946–52

The helix–turn–helix DNA binding motif. Brennan RG, et al. **J Biol Chem** 1989 Feb 5;264(4):1903–6 (44 ref.)

Methylation of the EcoRI recognition site does not alter DNA conformation: the crystal structure of d(CGCGAm6ATTCGCG) at 2.0–A resolution. Frederick CA, et al. **J Biol Chem** 1988 Nov 25;263(33):17872–9

The molecular structure of the left–handed Z–DNA double helix at 1.0–A atomic resolution. Geometry, conformation, and ionic interactions of d(CGCGCG). Gessner RV, et al. **J Biol Chem** 1989 May 15;264(14):7921–35

Predicted structures of apolipoprotein II mRNA constrained by nuclease and dimethyl sulfate reactivity: stable secondary structures occur predominantly in local domains via intraexonic base pairing. Hwang SP, et al. **J Biol Chem** 1989 May 15;264(14):8410–8

Effect of crystal packing environment on conformation of the DNA duplex. Molecular structure of the A–DNA octamer d(G–T–G–T–A–C–A–C) in two crystal forms.

Jain S, et al. **J Biol Chem** 1989 Aug 5;264(22):12780-4

Conformation of adenosine bulge-containing deoxytridecanucleotide duplexes in solution. Extra adenosine stacks into duplex independent of flanking sequence and temperature. Kalnik MW, et al. **J Biol Chem** 1989 Mar 5;264(7):3702-12

Sequence dependence of DNA structure. The B, Z, and A conformations of polydeoxynucleotides containing repeating units of 6 to 16 base pairs. Luthman K, et al. **J Biol Chem** 1988 Oct 25;263(30):15535-9

Intramolecular DNA triplexes in supercoiled plasmids. I. Effect of loop size on formation and stability. Shimizu M, et al. **J Biol Chem** 1989 Apr 5;264(10):5944-9

Equilibrium between a wobble and ionized base pair formed between fluorouracil and guanine in DNA as studied by proton and fluorine NMR. Sowers LC, et al. **J Biol Chem** 1988 Oct 15;263(29):14794-801

DNA supercoiling facilitates formation of the transcription initiation complex on the fibroin gene promoter. Tabuchi H, et al. **J Biol Chem** 1988 Oct 25;263(30):15282-7

Asymmetric DNA bending induced by the yeast multifunctional factor TUF. Vignais ML, et al. **J Biol Chem** 1989 May 25;264(15):8463-6

Slight changes in conditions influence the family of non-B-DNA conformations of the herpes simplex virus type 1 DR2 repeats. Wohlrab F, et al. **J Biol Chem** 1989 May 15;264(14):8207-13

A transcriptional map of visna virus: definition of the second intron structure suggests a rev-like gene product. Sargan DR, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):1995-2006

Reduction of alkali-induced white blood cell DNA unwinding rate: a potential biomarker of aging. Hartnell JM, et al. **J Gerontol** 1989 Sep;44(5):B125-30

Application of tris(2,2'-bipyridyl)ruthenium(III) for the investigation of DNA spatial structure by a chemical modification method. Fedorova OS, et al. **J Inorg Biochem** 1988 Nov;34(3):149-55

Static disorder and librational motions of the purine bases in films of oriented Li-DNA. Brandes R, et al. **J Mol Biol** 1988 Jul 20;202(2):321-32

Influence of DNA sequence and supercoiling on the process of cruciform formation. Courey AJ, et al. **J Mol Biol** 1988 Jul 5;202(1):35-43

DNA curvature in native and modified EcoRI recognition sites and possible influence upon the endonuclease cleavage reaction. Diekmann S, et al. **J Mol Biol** 1988 Aug 20; 202(4):823-34

Model for the three-dimensional folding of 16 S ribosomal RNA. Stern S, et al. **J Mol Biol** 1988 Nov 20;204(2):447-81

Stereochemical complementary of DNA and steroid agonists and antagonists. Hendry LB. **J Steroid Biochem** 1988 Oct; 31(4B):493-523 (160 ref.)

Nonlinear waves in DNA and regulation of transcription. Polozov RV, et al. **J Theor Biol** 1988 Feb 21;130(4):423-30

DNA binding and gene regulation by the herpes simplex virus type 1 protein ICP4 and involvement of the TATA element. DiDonato JA, et al. **J Virol** 1989 Sep; 63(9):3737-47

Insertion sequence IS5 contains a sharply curved DNA structure at its terminus. Muramatsu S, et al. **Mol Gen Genet** 1988 Nov;214(3):433-8

Single-stranded DNA gaps, tails, and loops are repaired in Escherichia coli. Campbell CK, et al. **Mutat Res** 1989 Mar; 211(1):181-8

Scanning tunnelling microscopy of Z-DNA. Arscott PG, et al. **Nature** 1989 Jun 8;339(6224):484-6

Coexistence of A- and B-form DNA in a single crystal lattice. Doucet J, et al. **Nature** 1989 Jan 12;337(6203):190-2

Aminoacylation of RNA minihelices with alanine. Francklyn C, et al. **Nature** 1989 Feb 2;337(6206):478-81

DNA and the hydration economy [letter] Fuller W, et al. **Nature** 1988 Oct 13;335(6191):596

The highly concentrated liquid-crystalline phase of DNA is columnar hexagonal. Livolant F, et al. **Nature** 1989 Jun 29;339(6227):724-6

Phasing of protein-induced DNA bends in a recombination complex. Snyder UK, et al. **Nature** 1989 Sep 21; 341(6239):255-7

DNA helical repeats [letter] Stasiak A, et al. **Nature** 1989 Mar 2;338(6210):24

DNA structure. Curves with a function [news] Travers A. **Nature** 1989 Sep 21;341(6239):184-5

Molecular analysis of eight U1 RNA gene candidates from tomato that could potentially be transcribed into U1 RNA sequence variants differing from each other in similar regions of secondary structure. Abel S, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6319-37

The propeller DNA conformation of poly(dA).poly(dT). Aymami J, et al. **Nucleic Acids Res** 1989 Apr 25; 17(8):3229-45

A difference in the importance of bulged nucleotides and their parent base pairs in the binding of transcription factor IIIA to Xenopus 5S RNA and 5S RNA genes. Baudin F, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2043-56

A new method to find a set of energetically optimal RNA secondary structures. Benedetti G, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5149-61

The contrasting structures of mismatched DNA sequences containing looped-out bases (bulges) and multiple mismatches (bubbles). Bhattacharyya A, et al. **Nucleic Acids Res** 1989 Sep 12;17(17):6821-40

Codon usage and secondary structure of MS2 phage RNA. Bulmer M. **Nucleic Acids Res** 1989 Mar 11;17(5):1839-43

Chemical reactivity of matched cytosine and thymine bases near mismatched and unmatched bases in a heteroduplex between DNA strands with multiple differences. Cotton RG, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4223-33

Refined crystal structure of an octanucleotide duplex with I.T. mismatched base pairs. Cruse WB, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):55-72

Definitions and nomenclature of nucleic acid structure components. Dickerson RE. **Nucleic Acids Res** 1989 Mar 11;17(5):1823-37

Oligothymidylates covalently linked to an acridine derivative and with modified phosphodiester backbone: circular dichroism studies of their interactions with complementary sequences. Durand M, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):1823-37

Solvent interactions stabilising nucleic acid conformers. Elliott RJ, et al. **Nucleic Acids Res** 1989 Jan 11; 17(1):389-404

The GTm6AC sequence is overwound and bent. Fazakerley GV, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2541-56

Sequence-specific recognition of the major groove of DNA by oligodeoxynucleotides via triple helix formation. Footprinting studies. François JC, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11431-40

Characterization of RNA hairpin loop stability. Groebe DR, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11725-35

DNA stem-loop structures in oligopurine-oligopyrimidine triplexes. Harvey SC, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11795-809

Forks and combs and DNA: the synthesis of branched oligodeoxyribonucleotides. Horn T, et al. **Nucleic Acids Res** 1989 Sep 12;17(17):6959-67

Modelling basic features of specificity in the binding of a dicationic steroid diamine to double-stranded oligonucleotides. Hui XW, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4177-87

Dihydrothymidine and thymidine glycol triphosphates as substrates for DNA polymerases: differential recognition of thymine C5-C6 bond saturation and sequence specificity of incorporation. Ide H, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11339-54

Conformation and dynamics of Z-DNA oligomer duplex of d[(CG)3TATA(CG)3] in solution. Ikuta S, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4131-44

DNA bending and binding factors of the human beta-actin promoter. Kawamoto T, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):523-37

DNA topology of the ordered chromatin domain 5' to the human c-myc gene. Kumar S, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2819-33

Thermodynamic stability and statistical significance of potential stem-loop structures situated at the frameshift sites of retroviruses. Le SY, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6143-52

Stereospecific relationships between elements in an SV40/adenovirus-2 heterologous promoter. Lennard AC, et al. **Nucleic Acids Res** 1989 Sep 12;17(17):6903-14

Stereoselective synthesis of P-homochiral oligo(thymidine methanephosphonates). Lesnikowski ZJ, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11675-89

Determination of secondary structure in the initiation region of ovalbumin mRNA. Liarakos CD, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11249-65

Sequence criteria for Z-DNA formation: studies on poly d(ACGT). Majumder K, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):450

Detection of common motifs in RNA secondary structures. Margalit H, et al. **Nucleic Acids Res** 1989 Jun 26; 17(12):4829-45

Secondary structure analysis of the RepA mRNA leader transcript involved in control of replication of plasmid R1. Ohman M, et al. **Nucleic Acids Res** 1989 Apr 11; 17(7):2557-79

Complex structural behavior of oligopurine-oligopyrimidine sequence cloned within the supercoiled plasmid. Parniewski P, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):617-29

Three regions in the DNA of plasmid pLS1 show sequence-directed static bending. Pérez-Martín J, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9113-26

Conformational and thermodynamic consequences of the introduction of a nick in duplexed DNA fragments: an NMR study augmented by biochemical experiments. Pieters JM, et al. **Nucleic Acids Res** 1989 Jun 26; 17(12):4551-65

Immunochemical detection of multiple conformations within a 36 base pair oligonucleotide. Sanford DG, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10643-55

Alternating d(G-C)3 and d(C-G)3 hexanucleotides containing 7-deaza-2'-deoxyguanosine or 8-aza-7-deaza-2'-deoxyguanosine in place of dG. Seela F, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):901-10

Cyclic oxyphosphoranes as model intermediates during splicing and cleavage of RNA: ab initio molecular orbital calculations on the conformational analysis. Taira K, et al. **Nucleic Acids Res** 1989 May 25;17(10):3699-708

Direct evidence for the presence of left-handed conformation in a supramolecular assembly of polynucleotides. Thomas TJ, et al. **Nucleic Acids Res** 1989 May 25;17(10):3795-810

Definition of a second dimeric subfamily of human alpha satellite DNA. Thompson JD, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2769-82

Empirical estimation of protein-induced DNA bending angles: applications to lambda site-specific recombination complexes. Thompson JF, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9687-705

Energy-structure correlations of plasmid DNA in different topological forms. Thumm W, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11737-57

Use of homopolymer tailing to improve the assembly efficiency of synthetic DNA sequences. Tröbner W, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4898

DNA conformational change in Gal repressor-operator complex: involvement of central G-C base pair(s) of dyad symmetry. Wartell RM, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11531-41

DNA curvature in front of the human mitochondrial L-strand replication origin with specific protein binding. Welter C, et al. **Nucleic Acids Res** 1989 Aug 11; 17(15):6077-86

Compensatory mutations demonstrate that P8 and P6 are RNA secondary structure elements important for processing of a group I intron. Williamson CL, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):675-89

Distinct mouse DNA sequences enable establishment and persistence of plasmid DNA polymers in mouse cells. Zastrow G, et al. **Nucleic Acids Res** 1989 Mar 11; 17(5):1867-79

Single-stranded DNA fragments holding unusual conformation. Hirao I, et al. **Nucleic Acids Symp Ser** 1988; (19):145-7

Analysis of superhelical structures of nucleic acid-lipid conjugates by image processing. Yanagawa H, et al. **Nucleic Acids Symp Ser** 1988;(19):189-92

Regulation of the function of eukaryotic DNA topoisomerase I: topological conditions for inactivity. Camilloni G, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3080-4

Crystal lattice packing is important in determining the bend of a DNA dodecamer containing an adenine tract. DiGabriele AD, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1816-20

Structural basis for DNA bending. Nadeau JG, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2622-6

Determination of DNA structures by NMR and distance geometry techniques: a computer simulation. Pardi A, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):8785-9

Energetic coupling between DNA bending and base pair opening. Ramstein J, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7231-5

Influence of abasic and anucleosidic sites on the stability, conformation, and melting behavior of a DNA duplex: correlations of thermodynamic and structural data. Vesnaver G, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(10):3614-8

Evidence for several higher order structural elements in ribosomal RNA. Woese CR, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3119-22

Direct observation of native DNA structures with the scanning tunneling microscope. Beebe TP Jr, et al. **Science** 1989 Jan 20;243(4889):370-2

Specific recognition of cruciform DNA by nuclear protein HMG1. Bianchi ME, et al. **Science** 1989 Feb 24;243(4894 Pt 1):1056-9

Recognition of thymine adenine.base pairs by guanine in a pyrimidine triple helix motif. Griffin LC, et al. **Science** 1989 Sep 1;245(4921):967-71

Topology and formation of triple-stranded H-DNA. Htun H, et al. **Science** 1989 Mar 24;243(4898):1571-6 (38 ref.)

Single strands, triple strands, and kinks in H-DNA. Htun H, et al. **Science** 1988 Sep 30;241(4874):1791-6

The S1-sensitive form of d(C-T)n.d(A-G)n: chemical evidence for a three-stranded structure in plasmids. Johnston BH. **Science** 1988 Sep 30;241(4874):1800-4

Defining the inside and outside of a catalytic RNA molecule. Latham JA, et al. **Science** 1989 Jul 21;245(4915):276-82

Images of the DNA double helix in water. Lindsay SM, et al. **Science** 1989 Jun 2;244(4908):1063-4

Association of transfer RNA acceptor identity with a helical irregularity [published erratum appears in Science 1989 Mar 10;243(4896):1256] McClain WH, et al. **Science** 1988 Dec 23;242(4886):1681-4

On finding all suboptimal foldings of an RNA molecule. Zuker M. **Science** 1989 Apr 7;244(4900):48-52 (32 ref.)

The 3'-terminal sequence of a wound tumor virus transcript can influence conformational and functional properties associated with the 5'-terminus. Xu ZK, et al. **Virology** 1989 Jun;170(2):511-22

[Structure of the hydration envelope of the B-form of polydeoxyribonucleotides poly(dA-dC).poly(dG-dT) and poly(dA-dG).poly(dTs-dT) from the data of Monte-Carlo simulation] Eisenhaber F, et al. **Biofizika** 1988 May-Jun; 33(3):422-9 (Eng. Abstr.) **(Rus)**

[Possibility of spectrophotometric registration of conformation changes of polynucleotides in the system poly(A:U)-pyronine G] Kruglova EB, et al. **Biofizika** 1988 Sep-Oct;33(5):763-6 (Eng. Abstr.) **(Rus)**

[Anomalous optical activity induced during condensation of various spatial forms of double-stranded circular DNA] Salianov VI, et al. **Biofizika** 1989 Jan-Feb;34(1):20-7 (Eng. Abstr.) **(Rus)**

[DNA-recognizing structure helix-turn-helix in replication initiators from polyomavirus large T antigens] Shestopalov BV. **Biofizika** 1989 Jan-Feb;34(1):130-2 (Eng. Abstr.) **(Rus)**

[A theoretical model of the mechanism of DNA compactization by polycations] Sivolob AV, et al. **Biofizika** 1989 Jan–Feb;34(1):28–33 (Eng. Abstr.) **(Rus)**

[Complementary addressed modification of a hairpin-shaped model oligodeoxyribonucleotide] Bazhina IuN, et al. **Bioorg Khim** 1989 Mar;15(3):370–8 (Eng. Abstr.) **(Rus)**

[Effectiveness of distal gene translation in polycistrons depends upon the arrangement of regulatory signals on a template] Kravchenko VV, et al. **Bioorg Khim** 1988 Oct; 14(10):1372–86 (Eng. Abstr.) **(Rus)**

[Synthesis and properties of DNA duplexes containing hydrocarbon bridges instead of a nucleoside residue] Kuznetsova SA, et al. **Bioorg Khim** 1988 Dec; 14(12):1656–62 (Eng. Abstr.) **(Rus)**

[Parallel DNA: the possibility of its existence] Churikov NA, et al. **Dokl Akad Nauk SSSR** 1988;303(5):1254–8 **(Rus)**

[Effect of alternative secondary structures on the effectiveness of translation of polycistron mRNA] Kravchenko VV, et al. **Dokl Akad Nauk SSSR** 1988; 301(2):480–3 **(Rus)**

[Experimental evidence of the existence of a parallel DNA double helix] Shchelkina AK, et al. **Dokl Akad Nauk SSSR** 1989;304(2):476–80 **(Rus)**

[Isolation and structural characteristics of cDNA coding the major protein of squid lens] Tomarev SI, et al. **Dokl Akad Nauk SSSR** 1989 Mar–Apr;305(1):232–7 **(Rus)**

[Fixation of poly(dG–dC).poly(dG–dC) in the Z-conformation] Ulanov BP, et al. **Dokl Akad Nauk SSSR** 1988 Jul–Aug;301(1):230–3 **(Rus)**

[Structural heterogeneity of transitional regions between B- and Z-sites of DNA] Ulanov BP, et al. **Dokl Akad Nauk SSSR** 1988;300(6):1494–7 **(Rus)**

[DNA helix–coil transition in alkaline medium] Akhrem AA, et al. **Mol Biol (Mosk)** 1989 Mar–Apr;23(2):518–25 (Eng. Abstr.) **(Rus)**

[Conformation and thermostability of double-stranded nucleic acids in aqueous urea solutions] Babaian IuS. **Mol Biol (Mosk)** 1988 Sep–Oct;22(5):1204–10 (Eng. Abstr.) **(Rus)**

[A theoretical analysis of structural restructuring during formation of secondary RNA structures] Mironov AA, et al. **Mol Biol (Mosk)** 1989 Jan–Feb;23(1):61–72 (Eng. Abstr.) **(Rus)**

[The effect of hydrogen ions on the B–A transition in DNA] Montrel' MM, et al. **Mol Biol (Mosk)** 1989 May–Jun; 23(3):699–707 (Eng. Abstr.) **(Rus)**

[Parallel double helical DNA. 1. Evidence for the existence of a spiral A–T-paired base] Shchelkina AK, et al. **Mol Biol (Mosk)** 1989 Jan–Feb;23(1):295–305 (Eng. Abstr.) **(Rus)**

[B–A and B–Z transitions in deoxyoligoduplexes containing 4- and 5- methylcytosine] Shchelkina AK, et al. **Mol Biol (Mosk)** 1988 Nov–Dec;22(6):1562–70 (Eng. Abstr.) **(Rus)**

[Binding of polyamines by the double-helical DNA molecule in unfolded and compact forms] Slonitskiĭ SV, et al. **Mol Biol (Mosk)** 1989 Mar–Apr;23(2):507–17 (Eng. Abstr.) **(Rus)**

[Effect of ionic strength of a solution on the protonation of DNA molecule] Slonitskiĭ SV, et al. **Mol Biol (Mosk)** 1988 May–Jun;22(3):741–59 (Eng. Abstr.) **(Rus)**

[Calculation of the stability of mini-duplexes of DNA in an electrolyte solution using a molecular mechanics method in approximating a statistical model of the environment] Vorob'ev IuN. **Mol Biol (Mosk)** 1989 Jan–Feb;23(1):80–92 (Eng. Abstr.) **(Rus)**

[The Z-form of bacteriophage lambda DNA, modified in situ] Ulanov BP, et al. **Mol Gen Mikrobiol Virusol** 1989 Feb;(2):29–35 (Eng. Abstr.) **(Rus)**

[DNA complexes with synthetic oligopeptides: a model for studying the regularity of DNA compactization in vivo] Vengerov IuIu, et al. **Mol Gen Mikrobiol Virusol** 1989 Jan; (1):3–10 (46 ref.) (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Phased psoralen cross-links do not bend the DNA double helix. Haran TE, et al. **Biochemistry** 1988 Sep 6; 27(18):6967–71

Reaction of nucleic acid bases with alpha-acetylenic esters. Part IV. Preparation of an alkylating derivative of tRNA(Phe) by conformation-specific chemical modification. Roques P, et al. **Biochim Biophys Acta** 1988 Nov 10;951(1):71–7

In vitro DNA modification by the ultimate carcinogen of 4-nitroquinoline-1-oxide: influence of superhelicity. Menichini P, et al. **Carcinogenesis** 1989 Sep;10(9):1589–93

Plasticity of DNA conformation around the Drosophila melanogaster alcohol dehydrogenase gene under torsional stress. Miyahara K, et al. **J Mol Biol** 1989 Mar 20; 206(2):281–93

Actinomycin D induced DNase I cleavage enhancement caused by sequence specific propagation of an altered DNA structure. Huang YQ, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11125–39

DNA looping generated by DNA bending protein IHF and the two domains of lambda integrase. Moitoso de Vargas L, et al. **Science** 1989 Jun 23;244(4911):1457–61

[DNA liquid crystals as a possible system of testing the interactions between DNA and biologically active compounds of platinum (II) and various antibiotics] Evdokimov IuM, et al. **Antibiot Khimioter** 1988 Dec; 33(12):903–5 (Eng. Abstr.) **(Rus)**

[Effect of aflatoxin B1 on DNA enzymatic methylation and secondary structures of the rat liver] Aslanian VM, et al. **Vopr Onkol** 1989;35(1):48–52 (Eng. Abstr.) **(Rus)**

NUCLEIC ACID DENATURATION

Thermal denaturation profiles of deoxypolynucleotide–ligand complexes: semiempirical studies. Rodriguez AT, et al. **Arch Biochem Biophys** 1989 Feb 1;268(2):426–37

Thermodynamics of the various forms of the dodecamer d(ATTACCGGTAAT) and of its constituent hexamers from proton nmr chemical shifts and UV melting curves: three-state and four-state thermodynamic models. Pieters JM, et al. **Biopolymers** 1989 Mar;28(3):717–40

Time-resolved synchrotron radiation X-ray solution scattering study of DNA melting. Puigdomenech J, et al. **Biopolymers** 1989 Sep;28(9):1505–14

Statistical mechanical theory of melting transition in supercoiled DNA. Sen S, et al. **Biopolymers** 1988 Sep; 27(9):1479–89

Effect of alkylated and intercalated DNA on the generation of superoxide anion by riboflavin. Naseem I, et al. **Biosci Rep** 1988 Oct;8(5):485–92

Detection of single-base mutations in DNA molecules using the solution melting method. Latham T, et al. **DNA** 1989 Apr;8(3):223–31

Localization of melted regions in supercoiled DNA. Voloshin ON, et al. **FEBS Lett** 1989 Jan 30;243(2):377–80

A thermal denaturation study of genomic DNAs from North American minnows (Cyprinidae: Teleostei). Karel WJ, et al. **Genetica** 1987 Oct 30;74(3):181–7

In physiological salt conditions the core proteins of the nucleosomes in large chromatin fragments denature at 73 degrees C and the DNA unstacks at 85 degrees C. Almagor M, et al. **J Biol Chem** 1989 Apr 15;264(11):6515–9

Detection of base mutations in genomic DNA using denaturing gradient gel electrophoresis (DGGE) followed by transfer and hybridization with gene-specific probes. Børresen AL, et al. **Mutat Res** 1988 Nov;202(1):77–83

23Na NMR study of DNA thermal transconformation in presence of cysteamine radioprotector. Lematre J, et al. **Physiol Chem Phys Med NMR** 1988;20(3):213–9

[Localization of melted regions in supercoiled DNA by means of chemical modification] Voloshin ON, et al. **Bioorg Khim** 1988 Dec;14(12):1700–3 (Eng. Abstr.) **(Rus)**

[Study of the DNA structure of peripheral blood leukocytes, proliferating lymphoid and tumor cells according to the rate of alkaline denaturation of DNA lysates] Moskaleva EIu, et al. **Gematol Transfuziol** 1989 Apr;34(4):40–2 (Eng. Abstr.) **(Rus)**

[Conformation and thermostability of double-stranded nucleic acids in aqueous urea solutions] Babaian IuS. **Mol Biol (Mosk)** 1988 Sep–Oct;22(5):1204–10 (Eng. Abstr.) **(Rus)**

[Why is the denaturation process of super-helical DNA so uncooperative?] Belintsev BN, et al. **Mol Biol (Mosk)** 1989 Jan–Feb;23(1):52–60 (Eng. Abstr.) **(Rus)**

NUCLEIC ACID HETERODUPLEXES

A PCR artifact: generation of heteroduplexes [letter] Nagamine CM, et al. **Am J Hum Genet** 1989 Aug; 45(2):337–9

Construction and analysis of monomobile DNA junctions. Chen JH, et al. **Biochemistry** 1988 Aug 9;27(16):6032–8

Effect of crystal packing environment on conformation of the DNA duplex. Molecular structure of the A–DNA octamer d(G–T–G–T–A–C–A–C) in two crystal forms. Jain S, et al. **J Biol Chem** 1989 Aug 5;264(22):12780–4

Transcriptional activation of pBR322 DNA can lead to duplex DNA unwinding catalyzed by the Escherichia coli preprimosome. Parada CA, et al. **J Biol Chem** 1989 Sep 5;264(25):15120–9

Chemical reactivity of matched cytosine and thymine bases near mismatched and unmatched bases in a heteroduplex between DNA strands with multiple differences. Cotton RG, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4223–33

Conformational and thermodynamic consequences of the introduction of a nick in duplexed DNA fragments: an NMR study augmented by biochemical experiments. Pieters JM, et al. **Nucleic Acids Res** 1989 Jun 26; 17(12):4551–65

Efficient oligonucleotide-directed construction of mutations in expression vectors by the gapped duplex DNA method using alternating selectable markers. Stanssens P, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4441–54

[Structural heterogeneity of transitional regions between B- and Z-sites of DNA] Ulanov BP, et al. **Dokl Akad Nauk SSSR** 1988;300(6):1494–7 **(Rus)**

[B–A and B–Z transitions in deoxyoligoduplexes containing 4- and 5- methylcytosine] Shchelkina AK, et al. **Mol Biol (Mosk)** 1988 Nov–Dec;22(6):1562–70 (Eng. Abstr.) **(Rus)**

ANALYSIS

Identification by heteroduplex analysis of an invertible element (Min) common among IncM group plasmids. Karste G, et al. **J Basic Microbiol** 1988;28(6):381–4

BIOSYNTHESIS

The roles of RecBCD, Ssb and RecA proteins in the formation of heteroduplexes from linear-duplex DNA in vitro. Wang TC, et al. **Mol Gen Genet** 1989 Apr; 216(2–3):315–20

CHEMICAL SYNTHESIS

[Synthesis and properties of DNA duplexes containing hydrocarbon bridges instead of a nucleoside residue] Kuznetsova SA, et al. **Bioorg Khim** 1988 Dec; 14(12):1656–62 (Eng. Abstr.) **(Rus)**

GENETICS

Interstrand duplexes in nuclear RNA. Pogo AO, et al. **Bioessays** 1986 Oct;5(4):162–5 (24 ref.)

Simple and highly efficient site-specific mutagenesis, by ligation of an oligodeoxyribonucleotide into gapped heteroduplex DNA in which the template strand contains deoxyuridine. Terwilliger TC. **Gene** 1988 Sep 30; 69(2):317–24

Transcription termination directed by heteroduplex thr attenuator templates. Evidence that the transcript stem and loop structure is the termination signal. Yang MT, et al. **J Biol Chem** 1989 Feb 15;264(5):2634–9

METABOLISM

DNA ring closure mediated by protein HU. Hodges-Garcia Y, et al. **J Biol Chem** 1989 Sep 5;264(25):14621–3

[T4–DNA ligase: substrate properties of synthetic DNA–duplexes with structural anomalies] Tsytovich AV, et al. **Mol Biol (Mosk)** 1988 May–Jun;22(3):690–9 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Effects of nicks on repair of single-stranded loops in heteroduplex DNA in mammalian cells. Weiss U, et al. **Somat Cell Mol Genet** 1989 Jan;15(1):13–8

NUCLEIC ACID HYBRIDIZATION

see related

BLOTTING, SOUTHERN

Melanocytic proliferation in condylomata acuminata. A report of two cases and investigation by in situ hybridisation. Blessing K, et al. **Acta Derm Venereol (Stockh)** 1989;69(3):238–41

Quantitative in-situ hybridization histochemistry of anterior pituitary hormone mRNA species in human pituitary adenomas. Levy A, et al. **Acta Endocrinol (Copenh)** 1988 Nov;119(3):397–404

Microquantitative methods in enzyme histochemistry–In situ hybridization. Proceedings of the Society for Histochemistry, 29th symposium. Basel, 23–26 September 1987. **Acta Histochem Suppl (Jena)** 1989;37:1–246

Flow cytometry of fluorescent in situ hybridization to detect specific RNA and DNA sequences. Bauman JG, et al. **Acta Histochem Suppl (Jena)** 1989;37:65–9

mRNA detection by in situ hybridization with radioactive probes. Höfler H, et al. **Acta Histochem Suppl (Jena)** 1989; 37:79–82

Three dimensional reconstruction of human chromosomes in hybrid and human cell line nuclei using fluorescence in situ hybridization. van Dekken H, et al. **Acta Histochem Suppl (Jena)** 1989;37:91–4

Visualization and quantitation of poly A+-mRNA by using in situ hybridization with biotinylated oligonucleotides. Wehner K, et al. **Acta Histochem Suppl (Jena)** 1989;37:83–8

Detection of human papillomavirus DNA in anogenital exophytic lesions by in situ hybridization to paraffin sections. Yun K, et al. **Acta Pathol Jpn** 1988 Sep; 38(9):1131–9

Genetic relatedness of the Kemerovo serogroup viruses: III. RNA–RNA blot hybridization and gene reassortment in vitro of the Chenuda serocomplex. Brown SE, et al. **Acta Virol (Praha)** 1989 May;33(3):221–34

Genetic relatedness of the kemerovo serogroup viruses: II. RNA–RNA blot hybridization and gene reassortment in vitro of the Great Island serocomplex. Brown SE, et al. **Acta Virol (Praha)** 1989 May;33(3):206–20

Cellular localization of messenger RNA encoding amyloid–beta–protein in normal tissue and in Alzheimer disease. Schmechel DE, et al. **Alzheimer Dis Assoc Disord** 1988;2(2):96–111

Localization of nucleic acid sequences by EM in situ hybridization using colloidal gold labels. Hamkalo BA, et al. **Am J Anat** 1989 Jun–Jul;185(2–3):197–204

Detection of hepatitis delta virus in serum and liver tissue by molecular hybridization. Validation of a rapid spot–hybridization technique. Gupta S, et al. **Am J Clin Pathol** 1989 Aug;92(2):218–21

Beyond hybridomas. Cell identification by in situ nucleic acid hybridization. Lambert WC. **Am J Dermatopathol** 1988 Apr;10(2):144–54 (33 ref.)

Cutaneous cytomegalovirus infection in a liver transplant patient. Diagnosis by in situ DNA hybridization. Patterson JW, et al. **Am J Dermatopathol** 1988 Dec;10(6):524–30

Hemoglobin constant spring defined by specific oligonucleotide hybridization and hemoglobin D Punjab (beta 121——Gln) in a Batak Indonesian family. Kosasih EN, et al. **Am J Hematol** 1988 Sep;29(1):22–6

Application of DNA-DNA hybridization of dual labeled probes to the detection of trisomy 21, monosomy 21, and sex determination. Dahl HH, et al. **Am J Hum Genet** 1988 Oct;43(4):502–10

Evaluation of fibronectin gene expression by in situ hybridization. Differential expression of the fibronectin gene among populations of human alveolar macrophages. Adachi K, et al. **Am J Pathol** 1988 Nov;133(2):193–203

Localization of cytomegalovirus DNA in plastic-embedded sections by in situ hybridization. A methodologic study. Cao M, et al. **Am J Pathol** 1989 Feb;134(2):457–63

Human growth hormone and prolactin secreting pituitary adenomas analyzed by in situ hybridization. Lloyd RV, et al. **Am J Pathol** 1989 Mar;134(3):605–13

Detection of viral genomes in the liver by in situ hybridization using 35S-, bromodeoxyuridine-, and biotin-labeled probes. Niedobitek G, et al. **Am J Pathol** 1989 Mar;134(3):633–9

Buffered formalin is the superior fixative for the detection of HPV DNA by in situ hybridization analysis. Nuovo GJ, et al. **Am J Pathol** 1989 Apr;134(4):837–42

Cellular localization of simian immunodeficiency virus in lymphoid tissues. II. In situ hybridization. Wyand MS, et al. **Am J Pathol** 1989 Feb;134(2):385–93

In situ hybridization of prepro-epidermal growth factor mRNA in the mouse kidney. Salido EC, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):F632–8

Rapid identification of viral infections in liver, heart, and kidney allograft biopsies by in situ hybridization [letter] Kemnitz J, et al. **Am J Surg Pathol** 1989 Jan;13(1):80–2

Viral infections [letter] Weiss LM, et al. **Am J Surg Pathol** 1989 Oct;13(10):902

Analysis of lymphoepithelioma and lymphoepithelioma-like carcinomas for Epstein-Barr viral genomes by in situ hybridization. Weiss LM, et al. **Am J Surg Pathol** 1989 Aug;13(8):625–31

Detection of La Crosse and snowshoe hare viral nucleic acids by in situ hybridization. Chandler LJ, et al. **Am J Trop Med Hyg** 1989 May;40(5):561–8

The development of nonradioactive total genomic probes for strain and egg differentiation in taeniid cestodes. Yap KW, et al. **Am J Trop Med Hyg** 1988 Nov;39(5):472–7

In situ hybridization studies of adenoviral infections of the lung and their relationship to follicular bronchiectasis. Hogg JC, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1531–5

A rapid procedure for cell colony hybridization using DNA probes. Avraham H, et al. **Anal Biochem** 1989 Jun; 179(2):217–21

A cross-hybridization method for DNA mapping with photobiotin-labeled probes. Chetrit P, et al. **Anal Biochem** 1989 May 1;178(2):273–5

Rapid identification of microorganisms by nucleic acid hybridization after labeling the test sample. Dattagupta N, et al. **Anal Biochem** 1989 Feb 15;177(1):85–9

A sensitive nonisotopic hybridization assay for HIV-1 DNA. Keller GH, et al. **Anal Biochem** 1989 Feb 15;177(1):27–32

Detection of unusual nucleic acids with monoclonal antibodies specific for triplexes, poly(ADP-ribose), DNA-RNA hybrids, and Z-DNA. Lee JS, et al. **Anal Biochem** 1989 May 1;178(2):373–7

Two strands of DNA are not equivalent as probes in hybridizations at low stringency. Rafalski JA. **Anal Biochem** 1988 Sep;173(2):383–6

The anonymous PAS45 probe detects RFLPs in 13q31. Gross MS, et al. **Ann Genet** 1989;32(2):73–7

A photochemical investigation of the dynamics of oligonucleotide hybridization. Hearst JE. **Annu Rev Phys Chem** 1988;39:291–315 (43 ref.)

Detection of human Ha-ras transcripts in tumor cells by in situ hybridization. Lang SM, et al. **Anticancer Res** 1989 May-Jun;9(3):805–10

Comparison of two methods in the determination of the sensitivity of 84 herpes simplex virus (HSV) type 1 and 2 clinical isolates to acyclovir and alpha-interferon. Brisebois JJ, et al. **Antiviral Res** 1989 Mar;11(2):67–75

Evaluation of varicella-zoster antiviral drugs by a nucleic acid hybridization assay. Stanberry LR, et al. **Antiviral Res** 1988 Sep;9(6):367–77

Biotinylated nucleic acid hybridization probes for potato virus detection. Hopp HE, et al. **Arch Virol** 1988; 103(3–4):231–41

The use of nucleic acid hybridization to detect human coronaviruses. Myint S, et al. **Arch Virol** 1989; 104(3–4):335–7

A simple and rapid method for the preparation of homologous DNA oligonucleotide hybridization probes from heterologous gene sequences and probes. Maxwell ES, et al. **Biochem Biophys Res Commun** 1988 Nov 30; 157(1):154–9

Titration of variant DNA sequences differing by a single point-mutation by selective dot-blot hybridization with synthetic oligonucleotides. Nicoloso M, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1233–41

Effect of ionic strength on the hybridization of oligodeoxynucleotides with reduced charge due to methylphosphonate linkages to unmodified oligodeoxynucleotides containing the complementary sequence. Quartin RS, et al. **Biochemistry** 1989 Feb 7; 28(3):1040–7

Simple chemical synthesis and hybridization properties of non-radioactive DNA probes. Le Brun S, et al. **Biochimie** 1989 Mar;71(3):319–24

In situ hybridization histochemistry localization of interleukin-3 mRNA in mouse brain. Farrar WL, et al. **Blood** 1989 Jan;73(1):137–40

Quantitation of erythropoietin-producing cells in kidneys of mice by in situ hybridization: correlation with hematocrit, renal erythropoietin mRNA, and serum erythropoietin concentration. Koury ST, et al. **Blood** 1989 Aug 1; 74(2):645–51

HIV viral sequences in seronegative people at risk detected by in situ hybridisation and polymerase chain reaction. Pezzella M, et al. **BMJ** 1989 Mar 18;298(6675):713–6

Detection of minimal residual disease in acute myelogenous leukemia by RNA-in situ hybridization. Evinger-Hodges MJ, et al. **Bone Marrow Transplant** 1989 Jan;4 Suppl 1:13–5

Identification of the origin of cells in human basal cell carcinoma xenografts in mice using in situ hybridization. Hales SA, et al. **Br J Dermatol** 1989 Mar;120(3):351–7

In situ hybridization histochemistry: localisation of vasopressin mRNA in rat brain using a biotinylated oligonucleotide probe. Arai H, et al. **Brain Res** 1988 Aug; 464(1):63–9

Localization of vasopressin mRNA in the rat brain using in situ hybridization with short cRNA probes made from synthetic DNA templates. Emson PC, et al. **Brain Res** 1988 Nov;464(3):255–8

Use of DNA reassociation in bacterial classification. Grimont PA. **Can J Microbiol** 1988 Apr;34(4):541–6 (40 ref.)

Chromosomal in situ hybridization and Southern blot analyses using c-abl, c-sis, or bcr probe in chronic myelogenous leukemia cells with variant Philadelphia translocations. Abe S, et al. **Cancer Genet Cytogenet** 1989 Mar;38(1):61–74

Oncogene expression detected by in situ hybridization in human primary lung cancer. Lee JH, et al. **Chest** 1988 Nov; 94(5):1046–9

A non-radioactive in situ hybridization method for the localization of specific RNAs in Drosophila embryos reveals translational control of the segmentation gene hunchback. Tautz D, et al. **Chromosoma** 1989 Aug; 98(2):81–5

Enzymatic production of single-stranded DNA as a target for fluorescence in situ hybridization. van Dekken H, et al. **Chromosoma** 1988;97(1):1–5

Diagnosis of HPV infection by recombinant DNA technology. Schneider A, et al. **Clin Obstet Gynecol** 1989 Mar;32(1):127–40

Hybridization histochemistry or in situ hybridization in the study of neuronal gene expression. Emson PC. **Comp Biochem Physiol [A]** 1989;93(1):233–9 (23 ref.)

In situ hybridization. **Curr Top Microbiol Immunol** 1989; 143:1–90

Colorimetric in-situ hybridization in clinical virology: development of automated technology. Unger ER, et al. **Curr Top Microbiol Immunol** 1989;143:21–31

In situ hybridization of two cloned chromosome 7 sequences tightly linked to the cystic fibrosis locus. Duncan AM, et al. **Cytogenet Cell Genet** 1988;49(4):309–10

A new application of in situ hybridization: detection of numerical and structural chromosome aberrations with a combination centromeric-telomeric DNA probe. van Dekken H, et al. **Cytogenet Cell Genet** 1988;48(3):188–9

Flow cytometric detection of ribosomal RNA in suspended cells by fluorescent in situ hybridization. Bauman JG, et al. **Cytometry** 1988 Nov;9(6):517–24

Three-color fluorescence in situ hybridization for the simultaneous detection of multiple nucleic acid sequences. Nederlof PM, et al. **Cytometry** 1989 Jan;10(1):20–7

Identification of flow-sorted chromosomes by G-banding and in situ hybridization. Rommel B, et al. **Cytometry** 1988 Sep;9(5):504–7

Temporal resolution and sequential expression of muscle-specific genes revealed by in situ hybridization. Lawrence JB, et al. **Dev Biol** 1989 May;133(1):235–46

Xenopus oocyte poly(A) RNAs that hybridize to a cloned interspersed repeat sequence are not translatable. McGrew LL, et al. **Dev Biol** 1989 Jul;134(1):267–70

In situ hybridization reveals differential spatial distribution of mRNAs for type I and type II collagen in the chick limb bud. Devlin CJ, et al. **Development** 1988 May; 103(1):111–8

Detection of enteroviruses using subgenomic probes of Coxsackie virus B4 by hybridization. Chatterjee NK, et al. **Diagn Microbiol Infect Dis** 1988 Nov;11(3):129–36

Identification of Neisseria gonorrhoeae with the ORTHOProbe DNA probe test. Kuritza AP, et al. **Diagn Microbiol Infect Dis** 1989 Mar-Apr;12(2):129–32

The relative abundances of specific RNA sequences can be used to classify the myeloid leukaemias. Mills KI, et al. **Dis Markers** 1987 Mar;5(1):19–29

Hepatic expression of rat P450 mRNA assessed by in situ hybridization to oligomer probes. Hassett C, et al. **DNA** 1989 Jan-Feb;8(1):29–37

Specific oligodeoxynucleotide probes obtained through RNA sequencing. Köhrer K, et al. **DNA** 1989 Mar;8(2):143–7

Gene cloning using cDNA libraries in a differential competition hybridization strategy: application to cloning XP-A related genes. Rinaldy A, et al. **DNA** 1988 Oct; 7(8):563–70

Molecular cloning of mammalian 28,000 Mr vitamin D-dependent calcium binding protein (calbindin-D28K): expression of calbindin-D28K RNAs in rodent brain and kidney. Wood TL, et al. **DNA** 1988 Nov;7(9):585–93

Direct analysis of single nucleotide variation in human DNA and RNA using in situ dot hybridization. Wu DY, et al. **DNA** 1989 Mar;8(2):135–42

Optimized oligonucleotide probes for DNA fingerprinting. Schäfer R, et al. **Electrophoresis** 1988 Aug;9(8):369–74

A system for automated DNA electrophoresis, molecular hybridization and electronic detection: II. Electronic detection. Zapolski EJ, et al. **Electrophoresis** 1989 Jan; 10(1):1–6

In situ hybridization detection of marked differences in pre-proopiomelanocortin messenger ribonucleic acid content of individual corticotropes and melanotropes. Hatfield JM, et al. **Endocrinology** 1989 Mar;124(3):1359–64

Accumulation of carbamoylphosphate-synthetase and phosphoenolpyruvate-carboxykinase mRNA in embryonic rat hepatocytes. Evidence for translational control during the initial phases of hepatocyte-specific gene expression in vitro. van Roon MA, et al. **Eur J Biochem** 1988 Dec 1;178(1):191–6

Detection of tetracycline-resistant strains of Ureaplasma urealyticum by hybridization assays. Brunet B, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jul;8(7):636–8

Comparison of nucleic acid hybridization with enzyme immunoassay and isolation for detection of Chlamydia trachomatis [letter] Tuokko H, et al. **Eur J Clin Microbiol Infect Dis** 1989 Apr;8(4):320–1

Double in situ hybridization in combination with digital image analysis: a new approach to study interphase chromosome topography. Emmerich P, et al. **Exp Cell Res** 1989 Mar;181(1):126–40

Nonradioactive detection of vasopressin mRNA with in situ hybridization histochemistry. Baldino F Jr, et al. **Exp Neurol** 1989 Jun;104(3):200–7

Hybridisation histochemistry. Penschow JD, et al. **Experientia Suppl** 1989;56:51–69 (115 ref.)

Sex determination of blood stains with a recombinant DNA probe: comparison with radioactive and non-radioactive labeling methods. Yokoi T, et al. **Forensic Sci Int** 1989 Apr-May;41(1-2):117–24

Campylobacter jejuni chromosomal sequences that hybridize to Vibrio cholerae and Escherichia coli LT enterotoxin genes. Calva E, et al. **Gene** 1989 Feb 20;75(2):243–51

A cautionary note on the use of blot hybridization for RNA size determination. Hauge BM. **Gene** 1988 Nov 15; 71(1):225–30

Hybridization analysis of specific RNAs by electrophoretic separation in agarose gels and transfer to diazobenzyloxymethyl paper. Alwine JC. **Gene Amplif Anal** 1981;2:565–72

Dot hybridization and hybrid-selected translation: methods for determining nucleic acid concentrations and sequence homologies. Kafatos FC, et al. **Gene Amplif Anal** 1981; 2:537–50

Comparison and optimization of in situ hybridization procedures yielding rapid, sensitive mRNA detections. Bresser J, et al. **Gene Anal Tech** 1987 Sep-Oct;4(5):89–104

Hybridization of oligo(dT) to RNA on nitrocellulose. Harley CB. **Gene Anal Tech** 1987 Mar-Apr;4(2):17–22

In situ hybridization analysis of chromosomal homologies in Drosophila melanogaster and Drosophila virilis. Whiting JH Jr, et al. **Genetics** 1989 May;122(1):99–109

Sequencing of megabase plus DNA by hybridization: theory of the method. Drmanac R, et al. **Genomics** 1989 Feb; 4(2):114–28

An efficient method for selecting unique-sequence clones from DNA libraries and its application to fluorescent staining of human chromosome 21 using in situ hybridization. Fuscoe JC, et al. **Genomics** 1989 Jul; 5(1):100–9

Detection and location of single-base mutations in large DNA fragments by immunomicroscopy. Ganguly A, et al. **Genomics** 1989 May;4(4):530–8

In situ hybridization for procollagen types I, III and IV mRNA in normal and fibrotic rat liver: evidence for predominant expression in nonparenchymal liver cells. Milani S, et al. **Hepatology** 1989 Jul;10(1):84–92

A simple fixation and embedding method for use in hybridization histochemistry on plant tissues. McFadden GI, et al. **Histochem J** 1988 Oct;20(10):575–86

Simultaneous application of in situ DNA hybridization and immunohistochemistry on one tissue section. Van der Loos CM, et al. **Histochem J** 1989 May;21(5):279–84

Oligo-riboprobes. Tools for in situ hybridisation. Denny P, et al. **Histochemistry** 1988;89(5):481–3

Immunocytochemistry of 5-bromo-2'-deoxyuridine labelled oligonucleotide probes. A novel technique for in situ hybridization. Jirikowski GF, et al. **Histochemistry** 1989; 91(1):51–3

In situ DNA-RNA hybridization using in vivo bromodeoxyuridine-labeled DNA probe. Kitazawa S, et al. **Histochemistry** 1989;92(3):195–9

Two colour DNA in situ hybridization for the detection of two viral genomes using non-radioactive probes. Mullink H, et al. **Histochemistry** 1989;91(3):195–8

In situ hybridization using 32P labelled oligodeoxyribonucleotides for the cellular localisation of mRNA in neuronal and endocrine tissue. An analysis of procedural variables. Priestley JV, et al. **Histochemistry** 1988;89(5):467–79

Regional mapping to 4q32.1 by in situ hybridization of a DNA domain rearranged in human liver cancer. Blanquet V, et al. **Hum Genet** 1988 Nov;80(3):274–6

Detection of single-copy genes by nonisotopic in situ hybridization on human chromosomes. Cherif D, et al. **Hum Genet** 1989 Mar;81(4):358–62

Isolation of human chromosome 21 sequences and their application to in situ hybridization. Choo KH, et al. **Hum Genet** 1988 Dec;81(1):49–53

Detection of chromosome aberrations in metaphase and interphase tumor cells by in situ hybridization using chromosome-specific library probes. Cremer T, et al. **Hum Genet** 1988 Nov;80(3):235–46

Delineation of individual human chromosomes in metaphase and interphase cells by in situ suppression hybridization using recombinant DNA libraries. Lichter P, et al. **Hum Genet** 1988 Nov;80(3):224–34

Localization of human c-mos to chromosome band 8q11 in leukemic cells with the t(8;21) (q22;q22). Morris CM, et al. **Hum Genet** 1989 Mar;81(4):339–42

Trisomy 21q223 and Down's phenotype correlation evidenced by in situ hybridization. Pellissier MC, et al. **Hum Genet** 1988 Nov;80(3):277–81

Assignment of human desmin gene to band 2q35 by nonradioactive in situ hybridization. Viegas-Péquignot E, et al. **Hum Genet** 1989 Aug;83(1):33–6

Digoxigenated oligonucleotide probes specific for simple repeats in DNA fingerprinting and hybridization in situ. Zischler H, et al. **Hum Genet** 1989 Jun;82(3):227–33

Identification of Epstein-Barr virus-infected cells in tonsils of acute infectious mononucleosis by in situ hybridization. Niedobitek G, et al. **Hum Pathol** 1989 Aug;20(8):796–9

HPV and cervical cancer [letter] v.d. Berg VD, et al. **Hum Pathol** 1989 Aug;20(8):817–8

Sexing whole human pre-embryos by in-situ hybridization with a Y-chromosome specific DNA probe. West JD, et al. **Hum Reprod** 1988 Nov;3(8):1010–9

Diagnosis of HPV by DNA hybridization techniques. Lancaster WD, et al. **IARC Sci Publ** 1989;(94):87–103 (55 ref.)

Hybridization of Escherichia coli producing Shiga-like toxin I, Shiga-like toxin II, and a variant of Shiga-like toxin II with synthetic oligonucleotide probes. Brown JE, et al. **Infect Immun** 1989 Sep;57(9):2811–4

Cloning and characterization of a Chlamydia trachomatis L3 DNA fragment that codes for an antigenic region of the major outer membrane protein and specifically hybridizes to the C- and C-related-complex serovars. Carlson EJ, et al. **Infect Immun** 1989 Feb;57(2):487–94

Detection by in situ hybridization of messenger RNAs of collagen types I and IV in murine mammary cancer. Clavel C, et al. **Int J Cancer** 1989 Sep 15;44(3):548–53

Repetitive DNA sequence of Mycobacterium tuberculosis: analysis of differential hybridization pattern with other mycobacteria. Reddi PP, et al. **Int J Lepr Other Mycobact Dis** 1988 Dec;56(4):592–8

A biotinylated DNA probe to detect bacterial cells in artificially contaminated foodstuffs. Dovey S, et al. **J Appl Bacteriol** 1989 Jan;66(1):43–7

Comparison of dot blot with in-situ hybridization for the detection of Neisseria gonorrhoeae in urethral exudate. Schoone GJ, et al. **J Appl Bacteriol** 1989 May;66(5):401–5

Hydroxyapatite-mediated transfer of DNA from diluted solutions to nitrocellulose or nylon membranes. Lichtenstein AV, et al. **J Biochem Biophys Methods** 1989 Feb;18(1):77–83

Detection of colony-stimulating factor messenger RNA in single T cells by in situ hybridization. Williamson DJ, et al. **J Cell Physiol** 1989 May;139(2):245–52

The application of a photon-counting camera in sensitive, bioluminescence-enhanced detection systems for nucleic acid hybridization. Ultrasensitive detection systems for protein blotting and DNA hybridization, III. Hauber R, et al. **J Clin Chem Clin Biochem** 1989 Jun;27(6):361–3

HLA gene amplification and hybridization analysis of polymorphism. HLA matching for bone marrow transplantation of a patient with HLA-deficient severe combined immunodeficiency syndrome. Baxter-Lowe LA, et al. **J Clin Invest** 1989 Aug;84(2):613–8

Nucleic acid analysis by sandwich hybridization. Nicholls PJ, et al. **J Clin Lab Anal** 1989;3(2):122–35 (108 ref.)

Detection of rotavirus by hybridization with a nonradioactive synthetic DNA probe and comparison with commercial enzyme immunoassays and silver-stained polyacrylamide gels. Arens M, et al. **J Clin Microbiol** 1989 Jun;27(6):1277–9

DNA hybridization assay for congenital cytomegalovirus infection. Buffone GJ, et al. **J Clin Microbiol** 1988 Oct; 26(10):2184–6

Comparison of colorimetric, fluorescent, and enzymatic amplification substrate systems in an enzyme immunoassay for detection of DNA-RNA hybrids. Coutlee F, et al. **J Clin Microbiol** 1989 May;27(5):1002–7

Examination of colonies and stool blots for detection of enteropathogens by DNA hybridization with eight DNA probes. Echeverria P, et al. **J Clin Microbiol** 1989 Feb; 27(2):331–4

Detection of group B rotavirus in fecal specimens by dot hybridization with a cloned cDNA probe. Eiden JJ, et al. **J Clin Microbiol** 1989 Mar;27(3):422–6

Simple genetic method to identify viridans group streptococci by colorimetric dot hybridization and fluorometric hybridization in microdilution wells. Ezaki T, et al. **J Clin Microbiol** 1988 Sep;26(9):1708–13

Characterization of Vibrio metschnikovii and Vibrio gazogenes by DNA-DNA hybridization and phenotype. Farmer JJ 3d, et al. **J Clin Microbiol** 1988 Oct; 26(10):1993–2000

Nucleic acid hybridization for detection of cell culture-amplified adenovirus. Huang C, et al. **J Clin Microbiol** 1988 Dec;26(12):2652–6

Characterization of Borrelia burgdorferi isolates by restriction endonuclease analysis and DNA hybridization. LeFebvre RB, et al. **J Clin Microbiol** 1989 Apr;27(4):636–9

Comparison of in situ hybridization and monoclonal antibodies for early detection of cytomegalovirus in cell culture. McClintock JT, et al. **J Clin Microbiol** 1989 Jul; 27(7):1554–9

Dot blot hybridization assay of B19 virus DNA in clinical specimens. Mori J, et al. **J Clin Microbiol** 1989 Mar; 27(3):459–64

Detection of human papillomaviruses in exfoliated cervicovaginal cells by in situ DNA hybridization analysis. Pao CC, et al. **J Clin Microbiol** 1989 Jan;27(1):168–73

DNA probes for the identification of Haemophilus ducreyi. Parsons LM, et al. **J Clin Microbiol** 1989 Jul;27(7):1441–5

Synthetic exfoliative toxin A and B DNA probes for detection of toxigenic Staphylococcus aureus strains. Rifai S, et al. **J Clin Microbiol** 1989 Mar;27(3):504–6

Species-specific detection of Legionella pneumophila in water by DNA amplification and hybridization. Starnbach MN, et al. **J Clin Microbiol** 1989 Jun;27(6):1257–61

Detection of respiratory syncytial virus in nasopharyngeal secretions by DNA-RNA hybridization. Van Dyke RB, et al. **J Clin Microbiol** 1989 Aug;27(8):1739–43

Monoclonal antibody solution hybridization assay for detection of human immunodeficiency virus nucleic acids. Viscidi RP, et al. **J Clin Microbiol** 1989 Jan;27(1):120–5

In situ hybridization for quantitative assay of infectious hepatitis A virus. Xi JN, et al. **J Clin Microbiol** 1989 May; 27(5):874–9

Direct identification of serotypes of natural human rotavirus isolates by hybridization using cDNA probes derived from segment 9 of the rotavirus genome. Zheng BJ, et al. **J Clin Microbiol** 1989 Mar;27(3):552–7

Diagnosis of progressive multifocal leucoencephalopathy by hybridisation techniques. Boerman RH, et al. **J Clin Pathol** 1989 Feb;42(2):153–61

Comparison of human papillomavirus type 1 serotyping by monoclonal antibodies with genotyping by in situ hybridization of plantar warts. Jenson AB, et al. **J Cutan Pathol** 1989 Apr;16(2):54–9

Analysis of naturally occurring delayed-type hypersensitivity reactions in leprosy by in situ hybridization. Cooper CL, et al. **J Exp Med** 1989 May 1;169(5):1565–81

An assessment of taxonomic congruence between DNA-DNA hybridization and pyrolysis gas-liquid chromatographic classifications. O'Donnell AG, et al. **J Gen Microbiol** 1988 Mar;134 (Pt 3):743–9

In situ hybridization using PEG-embedded tissue and riboprobes: increased cellular detail coupled with high sensitivity. Clayton DF, et al. **J Histochem Cytochem** 1989 Mar;37(3):389–93

Detection of mRNA molecules coding for neuropeptide hormones of the pond snail Lymnaea stagnalis by radioactive and non-radioactive in situ hybridization: a model study for mRNA detection. Dirks RW, et al. **J Histochem Cytochem** 1989 Jan;37(1):7–14

In situ hybridization and immunocytochemistry in serial sections of rabbit skeletal muscle to detect myosin expression. Dix DJ, et al. **J Histochem Cytochem** 1988 Dec; 36(12):1519–26

Analysis of vasopressin gene expression by in situ hybridization and immunohistochemistry in semi-thin sections. Guitteny AF, et al. **J Histochem Cytochem** 1988 Nov;36(11):1373–8

Regulation of tyrosine hydroxylase mRNA in catecholaminergic cells of embryonic rat: analysis by in situ hybridization. Jonakait GM, et al. **J Histochem Cytochem** 1989 Jan;37(1):1–5

Localization of alpha-casein gene transcription in sections of epoxy resin-embedded mouse mammary tissues by in situ hybridization. Liscia DS, et al. **J Histochem Cytochem** 1988 Dec;36(12):1503–10

Combined immuno- and non-radioactive hybridocytochemistry on cells and tissue sections: influence of fixation, enzyme pre-treatment, and choice of chromogen on detection of antigen and DNA sequences. Mullink H, et al. **J Histochem Cytochem** 1989 May; 37(5):603–9

Detection of phosphoenolpyruvate and ribulose 1,5-bisphosphate carboxylase transcripts in maize leaves by in situ hybridization with sulfonated cDNA probes. Perrot-Rechenmann C, et al. **J Histochem Cytochem** 1989 Apr;37(4):423–8

Ultrastructural localization of herpes simplex virus RNA by in situ hybridization. Wolber RA, et al. **J Histochem Cytochem** 1989 Jan;37(1):97–104

Detection of IL-1 alpha and IL-1 beta gene expression by in situ hybridization. Tissue localization of IL-1 mRNA in the normal C57BL/6 mouse. Takács L, et al. **J Immunol** 1988 Nov 1;141(9):3081–95

Localization of collagen alpha 1(I) gene expression during wound healing by in situ hybridization. Scharffetter K, et al. **J Invest Dermatol** 1989 Sep;93(3):405–12

Use of DNA hybridizations probes for detection of the plague bacillus (Yersinia pestis) in fleas (Siphonaptera: Pulicidae and Ceratophyllidae). Thomas RE, et al. **J Med Entomol** 1989 Jul;26(4):342–8

Use of a non-radioactive hybridisation assay for direct detection of gram-negative bacteria carrying TEM beta-lactamase genes in infected urine. Carter GI, et al. **J Med Microbiol** 1989 Feb;28(2):113–7

Detection of human cytomegalovirus by slot-blot hybridisation assay employing oligo-primed 32P-labelled probe. Agha SA, et al. **J Med Virol** 1988 Dec;26(4):419–27

Nucleic acid spot hybridization with nonradioactive labeled probes in screening for human papillomavirus DNA sequences. Melki R, et al. **J Med Virol** 1988 Oct; 26(2):137–43

Detection of enterovirus RNA in experimentally infected mice by molecular hybridisation: specificity of subgenomic probes in quantitative slot blot and in situ hybridisation. Zhang HY, et al. **J Med Virol** 1988 Dec;26(4):375–86

In situ hybridization analysis of myelin gene transcripts in developing mouse spinal cord. Jordan C, et al. **J Neurosci** 1989 Jan;9(1):248–57

Regional expression of myelin protein genes in the developing mouse brain: in situ hybridization studies. Verity AN, et al. **J Neurosci Res** 1988 Oct-Dec;21(2–4):238–48

In situ hybridization demonstration of poly-adenylated RNA sequences in formalin-fixed paraffin sections using a biotinylated oligonucleotide poly d(T) probe. Pringle JH, et al. **J Pathol** 1989 Aug;158(4):279–86

Functional activity of intestinal epithelium demonstrated by mRNA in situ hybridization. Talbot IC, et al. **J Pathol** 1989 Aug;158(4):287–91

JC virus genomes in progressive multifocal leukoencephalopathy: detection using a sensitive non-radioisotopic in situ hybridization method. Teo CG, et al. **J Pathol** 1989 Feb;157(2):135–40

Lack of hybridization between Yersinia enterocolitica and HLA-B27 DNA. Viitanen AM, et al. **J Rheumatol** 1988 Jul;15(7):1123–5

A novel method for nucleic acid sequence determination. Bains W, et al. **J Theor Biol** 1988 Dec 7;135(3):303–7

Polymerase chain reaction amplification and in situ hybridization for the detection of human B-lymphotropic virus. Buchbinder A, et al. **J Virol Methods** 1988 Sep; 21(1–4):191–7

Rapid identification of bluetongue virus by nucleic acid hybridization in solution. Dangler CA, et al. **J Virol Methods** 1988 Aug;20(4):353–65

Filter in situ hybridisation: an evaluation of the FISH technique for HPV detection in cervical swabs. Hørding U, et al. **J Virol Methods** 1989 Apr-May;24(1–2):123–30

Detection of cytomegalovirus DNA in short term cultures. Janssen HP, et al. **J Virol Methods** 1989 Feb;23(2):205–10

A rapid and sensitive solution hybridisation assay for the quantitative determination of specific viral RNA sequences. Johnson MA, et al. **J Virol Methods** 1988 Dec; 22(2–3):247–54

DNA probes bind non-specifically to eosinophils during in situ hybridization: carbol chromotrope blocks binding to eosinophils but does not inhibit hybridization to specific nucleotide sequences. Patterson S, et al. **J Virol Methods** 1989 Feb;23(2):105–9

Biotinyated RNA probes for the detection of potato spindle tuber viroid (PSTV) in plants. Roy BP, et al. **J Virol Methods** 1989 Feb;23(2):149–55

Detection of genes of interest in tissues and cells by in situ hybridization. Seibel NL, et al. **J Virol Methods** 1988 Sep; 21(1–4):171–7 (18 ref.)

Effects of lipofuscin on in situ hybridization in human neuronal tissue. Steiner I, et al. **J Virol Methods** 1989 Apr-May;24(1–2):1–9

Human immunodeficiency virus (HIV) detection by molecular hybridization. Lewin MB, et al. **JAMA** 1988 Nov 4;260(17):2592

A molecular deletion study with southern hybridization on typical Prader-Willi syndrome (PWS) patients with various chromosome abnormalities involving 15q11–12 and on an atypical PWS patient with apparently normal karyotype. Kamei T, et al. **Jinrui Idengaku Zasshi** 1988 Dec; 33(4):477–86

In situ hybridization for the detection of low copy numbers of c-abl oncogene mRNA in lymphoma cells: technical approach and comparison with results with anti-oncoprotein antibodies. Greil R, et al. **Lab Invest** 1989 Apr;60(4):574–82

Specific detection of Taenia saginata eggs by DNA hybridisation [letter] Flisser A, et al. **Lancet** 1988 Dec 17; 2(8625):1429–30

Assessment of biological and colony hybridization assays for detection of the aerobactin system in Escherichia coli from urinary tract infections. Orskov I, et al. **Med Microbiol Immunol (Berl)** 1989;178(3):143–8

High-resolution in situ hybridization histochemistry. Baldino F Jr, et al. **Methods Enzymol** 1989;168:761–77

Nonradioactive methods of in situ hybridization: visualization of neuroendocrine mRNA. Emson PC, et al. **Methods Enzymol** 1989;168:753–61

Solution hybridization-nuclease protection assays for sensitive detection of differentially spliced substance P- and neurokinin A-encoding messenger ribonucleic acids. Krause JE, et al. **Methods Enzymol** 1989;168:634–52

Quantitation and digital representation of in situ hybridization histochemistry. Lewis ME, et al. **Methods Enzymol** 1989; 168:808–21

Graphical and statistical approaches to data analysis for in

situ hybridization. McCabe JT, et al. **Methods Enzymol** 1989;168:822–48

In situ hybridization histochemistry combined with markers of neuronal connectivity. Schwaber JS, et al. **Methods Enzymol** 1989;168:778–91

In situ hybridization: quantitation using radiolabeled hybridization probes. Uhl GR. **Methods Enzymol** 1989; 168:741–52

Use of RNA–DNA hybridization in chemical probing of large RNA molecules. Van Stolk BJ, et al. **Methods Enzymol** 1988;164:475–81

In situ hybridization histochemical detection of neuropeptide mRNA using DNA and RNA probes. Young WS 3d. **Methods Enzymol** 1989;168:702–10

Detection of yellow fever virus nucleic acid in infected mosquitoes by RNA:RNA in situ hybridization. Ballinger ME, et al. **Mol Cell Probes** 1988 Dec;2(4):331–8

Nucleic acid sandwich hybridization: enhanced reaction rate with magnetic microparticles as carriers. Jungell–Nortamo A, et al. **Mol Cell Probes** 1988 Dec;2(4):281–8

Modification of the DNA colony hybridization technique for multiple filter analysis. Kaysner CA, et al. **Mol Cell Probes** 1988 Dec;2(4):255–60

Non–isotopic hybridization assays for bacterial DNA samples. Kennedy KE, et al. **Mol Cell Probes** 1989 Jun; 3(2):167–77

Detection of Chlamydia trachomatis in culture and urogenital smears by in situ DNA hybridization using a biotinylated DNA probe. Meddens MJ, et al. **Mol Cell Probes** 1988 Dec;2(4):261–9

Nucleic acid hybridization assays employing dA–tailed capture probes. Single capture methods. Morrissey DV, et al. **Mol Cell Probes** 1989 Jun;3(2):189–207

Sandwich hybridization in solution: a rapid method to screen HPV 16 DNA in cervical scrapes. Parkkinen S, et al. **Mol Cell Probes** 1989 Mar;3(1):1–11

Rapid identification of Mycoplasma gallisepticum using a simple method of nucleic acid hybridization. Stipkovits L, et al. **Mol Cell Probes** 1988 Dec;2(4):339–44

Combined immunohistochemistry for gonadotropin–releasing hormone (GnRH) and pro–GnRH, and in situ hybridization for GnRH messenger ribonucleic acid in rat brain. Ronnekleiv OK, et al. **Mol Endocrinol** 1989 Feb;3(2):363–71

Triiodothyronine nuclear binding capacity in rat tissues correlates with a 6.0 kilobase (kb) and not a 2.6 kb messenger ribonucleic acid hybridization signal generated by a human c–erbA probe. Santos A, et al. **Mol Endocrinol** 1988 Oct;2(10):992–8

Chemiluminescence lights up. Bronstein I, et al. **Nature** 1989 Apr 13;338(6216):599–600

Detection of vasopressin messenger RNA in cells within the bed nucleus of the stria terminalis by in situ hybridization histochemistry. Miller MA, et al. **Neurosci Lett** 1988 Dec 5;94(3):264–8

Morphological demonstration of retinal neuroreceptors and mRNA: immunohistochemical demonstration of adrenergic receptor and visualization of preprotachykinin A mRNA by in situ hybridization histochemistry. Kiyama H, et al. **Neurosci Res Suppl** 1988;8:S167–81 (41 ref.)

In situ hybridization demonstrates vasopressin gene transcription in hypothalamic neurons of crossbred hypertensive x diabetes insipidus rats. McCabe JT, et al. **Neuroscience** 1988 Oct;27(1):159–67

In situ hybridization in hematology. Boffa MC. **Nouv Rev Fr Hematol** 1989;31(2):137–8 (16 ref.)

Monoadduct forming photochemical reagents for labeling nucleic acids for hybridization. Albarella JP, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4293–308

Chemiluminescent detection of DNA: application for DNA sequencing and hybridization. Beck S, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5115–23

A rapid procedure for colony screening using nylon filters. Buluwela L, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):452

Comparison of different non–isotopic methods for hepatitis B virus detection in human serum. Casacuberta JM, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11834

Cloning of homologous sequences after filter hybridization. Colgan DJ. **Nucleic Acids Res** 1988 Nov 11;16(21):10360

Protein–DNA conjugates produced by UV irradiation and their use as probes for hybridization. Czichos J, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1563–72

The use of filter–bound DNA fragments as templates for radiolabelling by random priming. Hirst MC, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2872

Forks and combs and DNA: the synthesis of branched oligodeoxyribonucleotides. Horn T, et al. **Nucleic Acids Res** 1989 Sep 12;17(17):6959–67

Molecular cloning of a Drosophila potential Z–DNA forming sequence hybridizing in situ to a developmentally regulated subdivision of the polytene chromosomes. Jimenez–Ruiz A, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4579–88

A new vector and RNase H method for the subtractive hybridization. Kuze K, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):807

The signal intensity on Southern blots developed by nonisotopic methods is linear with time and quantity of DNA. Lee AS, et al. **Nucleic Acids Res** 1989 Mar 25; 17(6):2364

Detection of specific DNA sequences using antibodies recognizing UV–labelled DNA. Lund V, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):539–51

Assessment of methods for covalent binding of nucleic acids to magnetic beads, Dynabeads, and the characteristics of the bound nucleic acids in hybridization reactions. Lund V, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10861–80

Two hour DNA hybridizations using a new transfer membrane. Mann W, et al. **Nucleic Acids Res** 1989 Jul 11; 17(13):5410

Exonuclease digestion of chromosomes for in situ hybridization. Schmidt ER. **Nucleic Acids Res** 1988 Nov 11;16(21):10381

Hybrid DNA artifact from PCR of closely related target sequences. Shuldiner AR, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4409

A simple subtractive hybridization technique employing photoactivatable biotin and phenol extraction. Sive HL, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10937

Quantification of polymerase chain reaction products by affinity–based hybrid collection. Syvänen AC, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11327–38

Purification and characterization of two serine isoacceptor tRNAs from bovine mitochondria by using a hybridization assay method. Yokogawa T, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2623–38

Quantitation of beta–tubulin mRNA in mouse brain by RNA–RNA hybridization kinetics with single–stranded riboprobes. Nagao Y, et al. **Nucleic Acids Symp Ser** 1988; (19):89–92

Applications of universal probe on DNA hybridization. Yamane A, et al. **Nucleic Acids Symp Ser** 1988;(19):93–5

Hybridization of DNA probes to A. marginale isolates from different sources and detection in Dermacentor andersoni ticks. Ambrosio RE, et al. **Onderstepoort J Vet Res** 1988 Dec;55(4):227–9

In situ hybridization using biotinylated probes. An evaluation of different detection systems. Niedobitek G, et al. **Pathol Res Pract** 1989 Mar;184(3):343–8

Comparative evaluation of non–radioactive in situ hybridization techniques for pathologic diagnosis of viral infection. Seyda M, et al. **Pathol Res Pract** 1988 Dec; 184(1):18–26

Analysis of B–G and immune response genes in the Iowa State University S1 chicken line by hybridization of sperm deoxyribonucleic acid with a major histocompatibility complex class II probe. Pitcovski J, et al. **Poult Sci** 1989 Jan;68(1):94–9

Rapid sexing of human embryos by non–radioactive in situ hybridization: potential for preimplantation diagnosis of X–linked disorders. Penketh RJ, et al. **Prenat Diagn** 1989 Jul;9(7):489–99

Detection of HSV–2 DNA–related sequences in cervical carcinoma tissues using nucleic acid hybridization technique. Cui HY, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(1):55–8

Detection of nucleic acid hybridization by nonradiative fluorescence resonance energy transfer. Cardullo RA, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):8790–4

Mapping of single–copy DNA sequences on human chromosomes by in situ hybridization with biotinylated probes: enhancement of detection sensitivity by intensified–fluorescence digital–imaging microscopy. Viegas–Pequignot E, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):582–6

Assessment of an rDNA probe filter hybridization assay for the detection of Rift Valley fever virus RNA in human serum samples from the Mauritanian epidemic. Knauert FK, et al. **Res Virol** 1989 Jan–Feb;140(1):47–57

BK virus (BKV) detection in urine specimens of immunocompromised patients: comparison between the DNA–DNA hybridization assay, the immunofluorescence test and the dot enzyme immunoassay. Marrero M, et al. **Res Virol** 1989 Jul–Aug;140(4):293–301

Comparison of a quantitative standardized HBV–DNA assay and a classical spot hybridization test in chronic active hepatitis B patients undergoing antiviral therapy. Zarski JP, et al. **Res Virol** 1989 Jul–Aug;140(4):283–91

Nucleic acid hybridization in viral hepatitis research. Bonino F, et al. **Ric Clin Lab** 1988 Apr–Sep;18(2–3):121–42 (33 ref.)

Strategies for in situ hybridization. Gowans EJ. **Ric Clin Lab** 1988 Apr–Sep;18(2–3):171–6 (25 ref.)

In situ hybridization: perspectives of its clinical application in hepatitis B and delta virus infections. Negro F, et al. **Ric Clin Lab** 1988 Apr–Sep;18(2–3):177–91 (54 ref.)

Application of nucleic acid hybridization to the hepatitis delta virus research. Smedile A, et al. **Ric Clin Lab** 1988 Apr–Sep;18(2–3):143–60 (25 ref.)

Characterization of the blood mononuclear leucocytes producing alpha interferon after stimulation with herpes simplex virus in vitro, by means of combined immunohistochemical staining and in situ RNA–RNA hybridization. Sandberg K, et al. **Scand J Immunol** 1989 Jun;29(6):651–8

Conflict over the molecular clock [letter] Kirsch JA, et al. **Science** 1988 Dec 23;242(4886):1624

In situ hybridization of biotinylated DNA probes to cotton meiotic chromosomes. Bergey DR, et al. **Stain Technol** 1989 Jan;64(1):25–37

Recent developments in the use of synthetic oligonucleotides for in situ hybridization histochemistry. Lewis ME, et al. **Synapse** 1988;2(3):308–16 (87 ref.)

Diagnosis of parasitic diseases using DNA–to–DNA hybridization. Ashall F, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):235–6

Morphologic changes in the fine needle aspiration cytology of renal transplants during virus infection as detected by DNA in situ hybridization. Harfmann P, et al. **Transplant Proc** 1989 Aug;21(4):3588–90

In situ hybridization using biotin–labeled probes. Albertson DG. **Trends Genet** 1989 Jan;5(1):3

The detection of mycobacterial DNA sequences in uncultured clinical specimens with cloned Mycobacterium tuberculosis DNA as probes. Pao CC, et al. **Tubercle** 1988 Mar;69(1):27–36

Human papillomavirus (HPV) cervical lesions: results from 300 Italian women studied with DNA hybridization techniques and morphology. Nuzzo F, et al. **Tumori** 1988 Dec 31;74(6):745–9

In situ hybridization [editorial] Nesland JM, et al. **Ultrastruct Pathol** 1989 Jan–Feb;13(1):iii

In situ hybridization—a useful tool for studies on collagen gene expression in cell culture as well as in normal and altered tissue. Scharffetter K, et al. **Virchows Arch [B]** 1989; 56(5):299–306

Molecular hybridization with DNA probes as a laboratory diagnosis test for influenza viruses: further investigations on the possibilities of the method. Pljusnin AZ, et al. **Virologie** 1989 Jan–Mar;40(1):39–42

Anatomic viral detection is automated: the application of a robotic molecular pathology system for the detection of DNA viruses in anatomic pathology substrates, using immunocytochemical and nucleic acid hybridization techniques. Montone KT, et al. **Yale J Biol Med** 1989 Mar–Apr;62(2):141–58

Inter– and intra–species crosses between Candida albicans and Candida guilliermondii. Suzuki T, et al. **Yeast** 1986 Mar;2(1):53–8

Application of a dot blot hybridization assay for the diagnosis of CMV infection or reactivation. Stöckl E, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):288–94

Rapid diagnosis of Aujeszky's disease in pigs by improved in situ hybridization using biotinylated probes on paraffin–embedded tissue sections. Belák K, et al. **Zentralbl Veterinarmed [B]** 1989 Feb;36(1):10–20

[Molecular hybridization methods for the diagnosis of papillomavirus infections] Mincheva A. **Akush Ginekol (Sofiia)** 1988;27(5):63–8 (46 ref.) **(Bul)**

[DNA fragments labeled with biotin] Wang SW. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Dec; 10(6):430–4 (Eng. Abstr.) **(Chi)**

[The preparation of a biotin–labeled HDV cDNA probe and its application to spot hybridization] Zhou SL, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Jun;19(2):109–11 (Eng. Abstr.) **(Chi)**

[Hybridization in situ in cytogenetics] Michalová K, et al. **Cas Lek Cesk** 1988 Jul 22;127(30):946–9 (Eng. Abstr.) **(Cze)**

[Detection of papillomaviruses by in situ hybridization with sulfonated probes] Clavel C, et al. **Ann Pathol** 1989; 9(2):137–9 (Eng. Abstr.) **(Fre)**

[Dysentery caused by Shigella and enteroinvasive Escherichia coli. Diagnosis by DNA/DNA hybridization] D'Hauteville H, et al. **Arch Inst Pasteur Madagascar** 1988; 54(1):75–82 **(Fre)**

[In situ hybridization: principles and applications] Feldmann G, et al. **Bull Assoc Anat (Nancy)** 1989 Mar;73(220):17–26 (48 ref.) (Eng. Abstr.) **(Fre)**

[Ultrastructural localization of mRNA coding for oxytocin by in situ hybridization. Study by high resolution autoradiography using a tritiated oligonucleotide probe] Trembleau A, et al. **C R Acad Sci [III]** 1988;307(20):869–74 (Eng. Abstr.) **(Fre)**

[Detection of HPV 6/11 and 16/18 in normal cervix epithelia and in condylomatous lesions. Comparative study of in situ hybridization and dot–blot hybridization using the streptavidin–alkaline phosphatase system] Kühler C, et al. **Acta Histochem Suppl (Jena)** 1989;37:95–101 **(Ger)**

[HPV infections in tumors of the upper respiratory and digestive tract. In situ hybridization and dot–blot hybridization with biotinylated DNA probes] Milde–Langosch KM, et al. **Acta Histochem Suppl (Jena)** 1989;37:103–8 **(Ger)**

[Detection of viral nucleic acid sequences in paraffin and cryostat sections of clinical study samples using in situ hybridization] Neumann R, et al. **Acta Histochem Suppl (Jena)** 1989;37:109–12 **(Ger)**

[In situ hybridization in detecting virus infections in biopsies following orthotopic liver transplantation] Wittekind C, et al. **Acta Histochem Suppl (Jena)** 1989;37:113–6 (Eng. Abstr.) **(Ger)**

[Probe seeks gene: nucleic acid hybridization as a current contribution to virologic diagnosis] Haas L, et al. **DTW** 1989 Feb;96(2):66–9 (Eng. Abstr.) **(Ger)**

[Selective detection of cytomegalovirus by in situ hybridization] Cremer U. **Z Rechtsmed** 1988;100(4):237–42 (Eng. Abstr.) **(Ger)**

[Techniques in molecular biology for cancer research. RNA blot hybridization and S1 mapping] Shirakata Y, et al. **Gan To Kagaku Ryoho** 1989 Feb;16(2):281–6 **(Jpn)**

[Technics in molecular biology in cancer research. DNA blot . hybridization] Takada S, et al. **Gan To Kagaku Ryoho** 1989 Jan;16(1):143–8 **(Jpn)**

[Application of a nonisotopic southern hybridization method for sex determination from bloodstains found in criminal

spots] Kobayashi R, et al. **Nippon Hoigaku Zasshi** 1989 Feb;43(1):58–63 (Eng. Abstr.) **(Jpn)**

[Gene expression of gonadotropin releasing hormone in the rat brain—an in situ hybridization technic using an oligoRNA probe] Ikeda M. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Dec; 40(12):1845–50 (Eng. Abstr.) **(Jpn)**

[In situ hybridization study on the localization of HPV DNA in the precancerous lesions of uterine cervix] Nagai N, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Mar; 41(3):313–20 (Eng. Abstr.) **(Jpn)**

[Detection of HBV DNA by an in situ hybridization method—its distribution in relation to other HBV markers] Michitaka K. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jun; 85(6):1260–8 (Eng. Abstr.) **(Jpn)**

[Hybridization in situ. A new technic for the demonstration of viruses and gene products in histologic and cytologic specimens] Naess O, et al. **Tidsskr Nor Laegeforen** 1989 Jan 20;109(2):183–5 (Eng. Abstr.) **(Nor)**

[Methods of restriction analysis, hybridization and cloning of nucleic acids] Kasprzak W. **Wiad Parazytol** 1988; 34(4–6):679–82 **(Pol)**

[Processing of the results of experiments on molecular DNA–DNA hybridization by using the Elektronika BZ–34 programmable microcomputer] Petrov NB. **Biol Nauki** 1988;(5):105–10 (Eng. Abstr.) **(Rus)**

[Determination of the nucleotide sequence of DNA using hybridization with oligonucleotides. A new method] Lysov IuP, et al. **Dokl Akad Nauk SSSR** 1988;303(6):1508–11 **(Rus)**

[Quantitative analysis of chromosomal localization of two human cloned satellite DNA III sequences by in situ hybridization] Kruminia AR, et al. **Genetika** 1989 Mar; 25(3):521–30 (Eng. Abstr.) **(Rus)**

[Correlation of polymorphism of heterochromatin segments with hybridization on chromosome preparations of various cloned repeated human DNA sequences] Kruminia AR, et al. **Genetika** 1989 May;25(5):902–9 (Eng. Abstr.) **(Rus)**

[Genomic fingerprinting of microorganisms: its use as a hybridization probe of phage M13 DNA] Ryskov AP, et al. **Genetika** 1988 Jul;24(7):1310–3 (Eng. Abstr.) **(Rus)**

[Demonstration of the tick-borne encephalitis virus in ticks by means of nucleic acid hybridization] Pukhovskaia NM, et al. **Med Parazitol (Mosk)** 1989 May–Jun;(3):11–4 (Eng. Abstr.) **(Rus)**

[Organization of simple sequences in the Drosophilia melanoga ter genome] Vashakidze RP, et al. **Mol Biol (Mosk)** 1988 Nov–Dec;22(6):1599–604 (Eng. Abstr.) **(Rus)**

[Identification of Listeria using molecular DNA–DNA hybridization] Bakulov IA, et al. **Mol Gen Mikrobiol Virusol** 1988 Jul;(7):31–5 (Eng. Abstr.) **(Rus)**

[Construction of probes for hybridization with hepatitis A virus RNA based on phage M13] Karginov VA, et al. **Mol Gen Mikrobiol Virusol** 1988 Jul;(7):39–42 (Eng. Abstr.) **(Rus)**

[Detection of hepatitis A virus RNA by molecular hybridization] Kusov IuIu, et al. **Vopr Virusol** 1988 Sep–Oct;33(5):548–54 (Eng. Abstr.) **(Rus)**

[Use of the DNA–DNA hybridization method on filters for determining the toxic potency of atypical strains of Vibrio cholerae isolated from natural sources] Demkin VV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Feb;(2):41–5 (Eng. Abstr.) **(Rus)**

[Molecular hybridization of nucleic acids as a method for the laboratory diagnosis of influenza in model experiments on cell cultures and in research on nasopharyngeal smears obtained from patients] Pliusnin AZ, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Aug;(8):19–23 (Eng. Abstr.) **(Rus)**

[Diagnosis by DNA analysis in familial isolated growth hormone deficiency type I–A] Campos JL, et al. **Med Clin (Barc)** 1989 Feb 25;92(7):261–3 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Effect of NaOH on hybridization efficiency of DNA. Broad TE, et al. **Trends Genet** 1988 May;4(5):146

Effect of NaOH on hybridization efficiency of southern-transferred DNA. Schneeberger RG, et al. **Trends Genet** 1988 Dec;4(12):328

NUCLEIC ACID PRECURSORS

GENETICS

The AU-rich sequences present in the introns of plant nuclear pre-mRNAs are required for splicing. Goodall GJ, et al. **Cell** 1989 Aug 11;58(3):473–83

METABOLISM

Site selection by Xenopus laevis RNAase P. Carrara G, et al. **Cell** 1989 Jul 14;58(1):37–45

Electron microscopic identification of the yeast spliceosome. Clark MW, et al. **EMBO J** 1988 Dec 1;7(12):3829–36

Two proteins crosslinked to RNA containing the adenovirus L3 poly(A) site require the AAUAAA sequence for binding. Moore CL, et al. **EMBO J** 1988 Oct;7(10):3159–69

Wheat germ splicing endonuclease is highly specific for plant pre-tRNAs. Stange N, et al. **EMBO J** 1988 Dec 1; 7(12):3823–8

A precursor for a small stable RNA (10Sa RNA) of Escherichia coli. Subbarao MN, et al. **Mol Gen Genet** 1989 Jun;217(2–3):499–504

PHARMACOLOGY

Nutritional folate deficiency in Chinese hamster ovary cells. I. Characterization of the pleiotropic response and its modulation by nucleic acid precursors. Borman LS, et al. **J Cell Physiol** 1989 Aug;140(2):335–43

NUCLEIC ACID PROBES

see related

NUCLEIC ACID HYBRIDIZATION

Nuclei acid probes: definition and diagnosis of human disease. Proceedings of the twelfth annual Arnold O. Beckman Conference in Clinical Chemistry. January 16–19, 1989, Ft. Lauderdale, Florida. **Clin Chem** 1989 Jul;35(7 Suppl):B3–54

Quantitative assays based on the use of replicatable hybridization probes. Lomeli H, et al. **Clin Chem** 1989 Sep; 35(9):1826–31

Use and applications of nucleic acid probes in the clinical laboratory. Mifflin TE. **Clin Chem** 1989 Sep;35(9):1819–25 (53 ref.)

Cloning of macromomycin apoprotein gene from Streptomyces macromomyceticus by use of 50-mer deoxynucleotide probes. Hori M, et al. **J Antibiot (Tokyo)** 1988 Oct;41(10):1462–70

DNA hybridization with oligodeoxyribonucleotide probes for identifying enterotoxin-producing Escherichia coli. Cravioto A, et al. **Mol Cell Probes** 1988 Jun;2(2):125–30

Nucleic acids or immunoglobulins: which are the molecular probes of the future? Yolken RH. **Mol Cell Probes** 1988 Jun;2(2):87–96 (38 ref.)

New methodologies. Their role in pediatric pathology. Buffone GJ, et al. **Pediatr Clin North Am** 1989 Feb; 36(1):227–56 (85 ref.)

[DNA probes in the diagnosis of infectious diseases] Martinotti MG. **G Batteriol Virol Immunol** 1987 Jan–Dec; 80(1–12):267–76 (37 ref.) (Eng. Abstr.) **(Ita)**

NUCLEIC ACID REGULATORY SEQUENCES see **REGULATORY SEQUENCES, NUCLEIC ACID**

NUCLEIC ACID RENATURATION

Comparative DNA reassociation kinetics of cranes. Krajewski C. **Biochem Genet** 1989 Apr;27(3–4):131–6

Use of DNA reassociation in bacterial classification. Grimont PA. **Can J Microbiol** 1988 Apr;34(4):541–6 (40 ref.)

Xenopus transcription factor IIIA–dependent DNA renaturation. Fiser-Littell RM, et al. **J Biol Chem** 1988 Nov 15;263(32):17136–41

Renaturation of DNA by a Saccharomyces cerevisiae protein that catalyzes homologous pairing and strand exchange. Heyer WD, et al. **J Biol Chem** 1988 Oct 15; 263(29):15189–95

DRUG EFFECTS

Ethidium bromide-mediated renaturation of denatured closed circular DNAs: mechanistic aspects and fractionation of DNA on a molecular weight basis. Lau PP, et al. **Biochim Biophys Acta** 1989 Jan 23;1007(1):73–9

NUCLEIC ACID REPETITIVE SEQUENCES see **REPETITIVE SEQUENCES, NUCLEIC ACID**

NUCLEIC ACIDS

Iodo-Gen-mediated radioiodination of nucleic acids. Piatyszek MA, et al. **Anal Biochem** 1988 Aug 1;172(2):356–9

Self-assembly of porphyrins on nucleic acid templates. Gibbs EJ, et al. **Biochem Biophys Res Commun** 1988 Nov 30; 157(1):350–8

"Post-assay" covalent labeling of phosphorothioate-containing nucleic acids with multiple fluorescent markers. Hodges RR, et al. **Biochemistry** 1989 Jan 10;28(1):261–7

Interactions of the dimethyldiazaperopyrenium dication with nucleic acids. 1. Binding to nucleic acid components and to single-stranded polynucleotides and photocleavage of single-stranded oligonucleotides. Slama-Schwok A, et al. **Biochemistry** 1989 Apr 18;28(8):3227–34

Interactions of the dimethyldiazaperopyrenium dication with nucleic acids. 2. Binding to double-stranded polynucleotides. Slama-Schwok A, et al. **Biochemistry** 1989 Apr 18;28(8):3234–42

Electrical conduction in some nucleic acid base complexes with acridine orange dye: study of localized levels. Sarkar D, et al. **Biomaterials** 1989 Apr;10(3):202–5

Interactions of antitumor drug ditercalinium with nucleic acids in solutions and in situ. Kapuscinski J, et al. **Cancer Lett** 1988 Nov;42(3):185–91

Nucleic acids and nuclear magnetic resonance. Van de Ven FJ, et al. **Eur J Biochem** 1988 Dec 1;178(1):1–38 (410 ref.)

The size, operation, and technical capabilities of protein and nucleic acid core facilities. Williams KR, et al. **FASEB J** 1988 Dec;2(15):3124–30

The reaction of sulfite radical anion with nucleic acid components. Erben-Russ M, et al. **Free Radic Res Commun** 1987;2(4–6):285–8

Abstracts of papers presented at the eight meeting of the "Nucleotides and Nucleic Acids" group of the Italian Biochemical Society. May 19–20, 1988, Ancona. **Ital J Biochem** 1989 Mar–Apr;38(2):123A–157A

Symposium on nucleic acids technology. Okayama, Japan, February 20th–21st, 1988. Proceedings. **Nucleic Acids Symp Ser** 1988;(19):1–207

[Degradation of nucleic acids by active oxygen species] Nagano T, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):3094–101 **(Jpn)**

ADMINISTRATION & DOSAGE

[Treatment of patients with destructive pulmonary tuberculosis with chemotherapeutic preparations combined with sodium nucleinate] Kharakter ZhZ, et al. **Probl Tuberk** 1989;(4):27–30 (Eng. Abstr.) **(Rus)**

ANALYSIS

Degree of biotinylation in nucleic acids estimated by a gel retardation assay. Theissen G, et al. **Anal Biochem** 1989 May 15;179(1):98–105

Ultraviolet shadowing nucleic acids on nylon membranes. Thurston SJ, et al. **Anal Biochem** 1989 Apr;178(1):41–2

1,3'-Diethyl-4,2'-quinolylthiacyanine iodide as a "thiazole orange" analogue for nucleic acid staining. Van Bockstaele DR, et al. **Cytometry** 1989 Mar;10(2):214–6

Temperature-gradient gel electrophoresis of nucleic acids: analysis of conformational transitions, sequence variations, and protein–nucleic acid interactions. Riesner D, et al. **Electrophoresis** 1989 May–Jun;10(5–6):377–89

Structural analysis of nucleic acids. **Gene Amplif Anal** 1981; 2:1–594

Dot hybridization and hybrid-selected translation: methods for determining nucleic acid concentrations and sequence homologies. Kafatos FC, et al. **Gene Amplif Anal** 1981; 2:537–50

Crown ethers as ligands for high-performance liquid chromatography of proteins and nucleic acids. Josić D, et al. **J Chromatogr** 1989 Aug 4;476:309–18

Improved separation speed and efficiency for proteins, nucleic acids and viruses in asymmetrical flow field flow fractionation. Litzén A, et al. **J Chromatogr** 1989 Aug 4; 476:413–21

Retention modification of nucleic acid constituents in reversed-phase high-performance liquid chromatography. Ramsey RS, et al. **J Chromatogr** 1989 May 12;468:167–79

Fast separation of biological macromolecules on non-porous, microparticulate columns. Rozing GP, et al. **J Chromatogr** 1989 Aug 4;476:3–19

Ethidium bromide- and propidium iodide-PTA staining of nucleic acids at the electron microscopic level. Biggiogera M, et al. **J Histochem Cytochem** 1989 Jul;37(7):1161–6

Determination of protein and nucleic acid concentration and localization of specific elements by scanning transmission electron microscopy. Reichelt R, et al. **Scanning Microsc** 1989 Mar;3(1):43–54; discussion 54–5

BIOSYNTHESIS

Evidence that alterations in small molecule permeability are involved in the Clostridium perfringens type A enterotoxin-induced inhibition of macromolecular synthesis in Vero cells. Hulkower KI, et al. **J Cell Physiol** 1989 Sep;140(3):498–504

[Rat liver energetics according to data of 31P-NMR in extreme states of the processes of biosynthesis of proteins and nucleic acids] Khristianovich DS, et al. **Biokhimiia** 1988 Nov;53(11):1900–5 (Eng. Abstr.) **(Rus)**

BLOOD

Plasma nucleic acid adsorption on charcoal sorbents in patients with leukemia. Kozak V, et al. **Biomater Artif Cells Artif Organs** 1988–89;16(5):985–90

CEREBROSPINAL FLUID

[Nucleic acids of the cerebrospinal fluid in acute disorders of cerebral circulation] Andriuk LV, et al. **Zh Nevropatol Psikhiatr** 1988;88(7):32–4 (Eng. Abstr.) **(Rus)**

CHEMICAL SYNTHESIS

Nucleic acid synthesis and protein engineering. Ikehara M. **Nucleic Acids Symp Ser** 1988;(19):143

GENETICS

Cotransfection of nucleic acid segments by Sendai virus envelopes. Bartzatt R. **Biotechnol Appl Biochem** 1989 Feb; 11(1):133–5

On structural analysis of chemical mutations. Lall RS. **Indian J Biochem Biophys** 1988 Aug;25(4):364–7

HISTORY

Early nucleic acid chemistry. Schlenk F. **Trends Biochem Sci** 1988 Feb;13(2):67–9

[Moments from the history of the nucleic acids. I. The chemistry of the nucleic acids] Eşanu V. **Virologie** 1988 Jul–Sep;39(3):221–34 **(Fre)**

ISOLATION & PURIFICATION

Hydrophobic chromatography of nucleic acids and proteins on tritylated agarose. Cashion P, et al. **Gene Amplif Anal** 1981;2:551–63

High-resolution chromatography of nucleic acids on the Gen-Pak FAX column. Stowers DJ, et al. **J Chromat qr** 1988 Jul 1;444:47–65

Vacuum blotting enhances nucleic acid transfer. Olszewska E, et al. **Trends Genet** 1988 Apr;4(4):92–4

METABOLISM

Protein–nucleic acid interaction in reactions catalyzed with DNA polymerases. Knorre DG, et al. **Biochimie** 1988 May; 70(5):655–61

Relaxed sequence specificities of Eco RI endonuclease and methylase: mechanisms, possible practical applications, and uses in defining protein–nucleic acid recognition mechanisms. Woodbury CP Jr, et al. **Gene Amplif Anal** 1981;1:181–207 (40 ref.)

Determination of diphenhydramine in rat milk and plasma and its effects on milk composition and mammary gland nucleic acids. Dostal LA, et al. **J Pharm Sci** 1989 May; 78(5):423–6

The role of magnesium in nucleic-acid and protein metabolism. Vernon WB. **Magnesium** 1988;7(5–6):234–48 (57 ref.)

Zone-interference gel electrophoresis: a new method for studying weak protein–nucleic acid complexes under native equilibrium conditions. Abrahams JP, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10099–108

Interaction of porphyrins and metalloporphyrins with nucleic acids. Gibbs EJ, et al. **Semin Hematol** 1989 Apr;26(2):77–85 (52 ref.)

PHARMACOLOGY

Mechanism of action of alpha–methylene–gamma–lactone derivatives of substituted nucleic acid bases in tumour cells. Panda CK, et al. **Chemotherapy** 1989;35(3):174–80

"A clinical trial of topical nucleic acid and lipoprotein complex in treatment of herpes simplex keratitis". Dhage SS. **Indian J Ophthalmol** 1987;35(5–6):137–8

Molecular monkeywrench. Beardsley TM. **Sci Am** 1989 Jun; 260(6):34–5

[The effects and properties of sodium nucleinate as a pyrogen working standard. 5. Interactions between pyrogens and corticotropin] Dressel H. **Pharmazie** 1988 Oct; 43(10):707–10 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

The relationship of the resonant recognition model to effects of low-intensity light on cell growth. Cosic I, et al. **Int J Radiat Biol** 1989 Aug;56(2):179–91

RADIATION EFFECTS

[Activation by laser irradiation of a "switched on" oligonucleotide reagent for an addressed modification of nucleic acids] Oshevskii SN. **Bioorg Khim** 1989 Mar; 15(3):387–91 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

[BCG–polysaccharides–nucleic acid and its effect in the prophylactic treatment of the common cold] Wang H. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1989 Feb; 12(1):20–3, 61 (Eng. Abstr.) **(Chi)**

[Effect of dekaris and sodium nucleinate on the blood antioxidant system of guinea pigs exposed to paprin inhalation] Shlefkin AG, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):426–8 (Eng. Abstr.) **(Rus)**

[The role of sodium nucleinate in clinical practice] Keleberda KIa, et al. **Probl Tuberk** 1988;(8):69–72 (55 ref.) **(Rus)**

[The efficacy of combined immunomodulatory therapy with timoptin and sodium nucleinate in patients with chronic obstructive bronchitis] Zemskov AM, et al. **Ter Arkh** 1989; 61(3):65–8 (Eng. Abstr.) **(Rus)**

[Immunocorrective therapy of herpetic keratitis] Stukalov ES, et al. **Vestn Oftalmol** 1988 Jul–Aug;104(4):74–6 **(Rus)**

ULTRASTRUCTURE

Preparation and length measurements of the total DNA content of T2 bacteriophages: a commentary on 'Darstellung und Längenmessungen des gesamten Desoxyribonucleinsäure-Inhaltes von T2-Bakteriophagen'. Kleinschmidt AK. **Biochim Biophys Acta** 1989;1000:35–40

Electron microscopy of nucleic acids. Garon CF. **Gene Amplif Anal** 1981;2:573–89

NUCLEOLAR ORGANIZER see NUCLEOLUS ORGANIZER REGION

NUCLEOLAR PROTEINS see NUCLEAR PROTEINS

NUCLEOLUS ORGANIZER REGION

dNORs and meiotic nondisjunction. Schwartz S, et al. **Am J Hum Genet** 1989 May;44(5):627–30

The role of cytologic NOR variants in the etiology of trisomy 21. Spinner NB, et al. **Am J Hum Genet** 1989 May; 44(5):631–8 (29 ref.)

Nucleolar organiser regions as indicators of post-surgical prognosis in canine spontaneous mast cell tumours. Bostock DE, et al. **Br J Cancer** 1989 Jun;59(6):915–8

Variant nucleolus organizing regions and the risk of Down syndrome. Green JE, et al. **Clin Genet** 1989 Apr; 35(4):243–50

Visualization of NORs in relation to the precise chromosomal localization of ribosomal RNA genes. Cheung SW, et al. **Cytogenet Cell Genet** 1989;50(2–3):93–7

A Drosophila rRNA gene located in euchromatin is active in transcription and nucleolus formation. Karpen GH, et al. **Genes Dev** 1988 Dec;2(12B):1745–63

Cytogenetic studies on Cervus elaphus. II. Synaptonemal complexes and NOR activity during spermatogenesis. Lunghi R, et al. **Genetica** 1987 Oct 15;74(2):119–24

Rex-induced recombination implies bipolar organization of the ribosomal RNA genes of Drosophila melanogaster. Robbins LG, et al. **Genetics** 1988 Dec;120(4):1053–9

Nucleolus organizer regions (NORs) inserted in 6q15. Prieto F, et al. **Hum Genet** 1989 Feb;81(3):289–90

Nucleolar organiser regions in squamous tumours of the pharynx and larynx [letter] Bryan RL, et al. **J Clin Pathol** 1989 Feb;42(2):218

Nucleolar organizing regions in cervical squamous pathology [letter] Ramsden KL, et al. **J Clin Pathol** 1989 Jul; 42(7):781–2

Use of nucleolar organiser regions (NOR's) for diagnosing gynaecological neoplasia [letter] Wood AJ. **J Clin Pathol** 1989 Jul;42(7):782–4

Regulation of cytosine methylation in ribosomal DNA and nucleolus organizer expression in wheat. Flavell RB, et al. **J Mol Biol** 1988 Dec 5;204(3):523–34

DNase I sensitivity of ribosomal RNA genes in chromatin and nucleolar dominance in wheat. Thompson WF, et al. **J Mol Biol** 1988 Dec 5;204(3):535–48

The utility of Ki67 immunostaining, nuclear organizer region counting, and morphology in the assessment of follicular lymphomas. Cibull ML, et al. **J Pathol** 1989 Jul; 158(3):189–93

How should we count AgNORS? Proposals for a standardized approach. Crocker J, et al. **J Pathol** 1989 Jul; 158(3):185–8

Effects of age, sex and multiple endocrine neoplasia type–II on silver stained nucleolar organizer regions. Butler MG, et al. **Mech Ageing Dev** 1989 Jan;47(1):17–24

[Nucleolus organizer region—centromere translocation] de Blois MC, et al. **Ann Genet** 1989;32(2):106–8 (Eng. Abstr.) **(Fre)**

[Silver staining of nucleolus organizer regions (NORs). Application to the study of nucleolar structure and value in pathology] Ploton D, et al. **Ann Pathol** 1988;8(3):248–52 (Eng. Abstr.) **(Fre)**

ANALYSIS

An assessment of the value of Ag NOR staining in the identification of dysplastic and other borderline melanocytic naevi. MacKie RM, et al. **Br J Dermatol** 1989 Apr;120(4):511–6

Differential silver–positive nucleolus organizer region activity in normal and malignant murine tissues. Arden KC, et al. **Cancer Genet Cytogenet** 1989 Jan;37(1):55–60

Formation and function of accessory nuclei in the oocytes of the bird louse, Eomenacanthus stramineus (Insecta, Mallophaga). I. Ultrastructural and histochemical studies. Biliński SM. **Chromosoma** 1989 Jan;97(4):321–6

Immunocytogenetics: localization of transcriptionally active rRNA genes in nucleoli and nucleolus organizer regions by use of human autoantibodies to RNA polymerase I. Haaf T, et al. **Cytogenet Cell Genet** 1988;48(1):35–42

Nucleolar and nuclear envelope proteins of the yeast Saccharomyces cerevisiae. Hurt EC, et al. **Eur J Cell Biol** 1988 Aug;46(3):554–63

Localization of NORs in spermatogonial metaphase chromosomes of six species of grasshoppers. Yadav JS, et al. **Genetica** 1987 Oct 15;74(2):155–60

AgNORs in melanocytic dysplasia [letter] Howat AJ, et al. **Histopathology** 1989 Mar;14(3):327–8

The value of NOR numbers in neoplastic and non-neoplastic epithelium of the stomach. Suarez V, et al. **Histopathology** 1989 Jan;14(1):61–6

Silver staining of nucleolar organizer regions in malignant melanoma and melanotic nevi. Leong AS, et al. **Hum Pathol** 1989 Mar;20(3):257–62

The nucleolar organizer regions associated protein (Ag–NORs) in salivary gland tumors. Matsumura K, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):76–8

Limited value of AgNOR enumeration in assessment of thyroid neoplasms [letter] Nairn ER, et al. **J Clin Pathol** 1988 Oct;41(10):1136

Demonstration of AgNOR–related proteins in microwave–fixed tissues [letter] Leong AS, et al. **J Pathol** 1988 Dec;156(4):352

Argyrophil organizer region proteins (AgNORs) in adenohypophysial cells and adenomas of the human pituitary. Stefaneanu L, et al. **Mod Pathol** 1989 May; 2(3):192–9

Staining of the nucleolus with protein and RNA stains for automatic measurement of nucleolar size in paraffin sections. Boon ME, et al. **Stain Technol** 1988 Sep; 63(5):289–97

Sequential estimation of nuclear DNA and silver staining of nucleoli in plant cells. Doležel J, et al. **Stain Technol** 1989 Jan;64(1):9–13

Differentiation of malignant from normal and reactive mesothelial cells by the argyrophil technique for nucleolar organiser region associated proteins. Ayres JG, et al. **Thorax** 1988 May;43(5):366–70

Argyrophilic proteins of the nucleolar organizer region in bladder–tumours. Ooms EC, et al. **Virchows Arch [A]** 1989; 414(4):365–9

[Nucleolar organizers: value in pathologic anatomy and in clinical cytology (editorial)] Adnet JJ. **Ann Pathol** 1989; 9(1):3–6 **(Fre)**

CYTOLOGY

Evidence of mendelian inheritance of the nucleolar organizer regions in the Spanish common rabbit. Arruga MV, et al. **J Hered** 1989 Jan–Feb;80(1):85–6

METABOLISM

Localization of replicated DNA–containing sites in preimplantation bovine embryo in relation to the onset of RNA synthesis. Kopečný V, et al. **Biol Cell** 1989; 65(3):231–8

Immunoelectron microscopic localization of the nucleolar protein B–36 (fibrillarin) during the cell cycle of Physarum polycephalum. Pierron G, et al. **Biol Cell** 1989;65(2):119–26

AgNOR numbers in rat pituitary corticotrophs following adrenalectomy or corticotrophin releasing factor administration. Peebles SE, et al. **Virchows Arch [B]** 1989; 57(4):209–12

PATHOLOGY

Nucleolar organiser regions in pituitary adenomas. McNicol AM, et al. **Acta Neuropathol (Berl)** 1989;77(5):547–9

Association of double NOR variant with Turner syndrome. Jones C, et al. **Am J Med Genet** 1988 Jul;30(3):725–32

Stability of cell size and nucleolar size in tangle–bearing neurons of the hippocampus in Alzheimer's disease. Gertz HJ, et al. **Brain Res** 1989 May 22;487(2):373–5

The value of nucleolar organizer region staining in the differential diagnosis of borderline melanocytic lesions. Fallowfield ME, et al. **Histopathology** 1989 Mar; 14(3):299–304

Nucleolar organizer regions relate to growth fractions in human breast carcinoma. Raymond WA, et al. **Hum Pathol** 1989 Aug;20(8):741–6

Nucleolar organiser regions in normal, cirrhotic, and carcinomatous livers. Crocker J, et al. **J Clin Pathol** 1988 Oct;41(10):1044–8

Nucleolar organiser regions and proliferative index in glandular and squamous carcinomas of the cervix. Newbold KM, et al. **J Clin Pathol** 1989 Apr;42(4):441–2

Correlation between NOR sizes and numbers in non–Hodgkin's lymphomas. Crocker J, et al. **J Pathol** 1988 Nov;156(3):233–9

Silver–stained nucleoli and nucleolar organizer region counts are of no prognostic value in thick cutaneous malignant melanoma. Howat AJ, et al. **J Pathol** 1988 Nov; 156(3):227–32

The relationship between number of interphase nors and nor–bearing chromosomes in non–Hodgkin's lymphoma. Jan–Mohamed RM, et al. **J Pathol** 1989 May;158(1):3–7

Application of the AgNOR method to cell imprints [letter] Rüschoff J, et al. **J Pathol** 1989 Aug;158(4):333

PHYSIOLOGY

Differential nucleolus organizer activity in normal and leukemic bone marrow. Arden KC, et al. **Am J Hematol** 1989 Mar;30(3):164–73

Comparison between the molecular characteristics and the potential activity of X and Y nucleolar organizers from various Drosophila melanogaster laboratory lines. Rosenberg–Bourgin M, et al. **Biol Cell** 1988;64(1):3–11

Seasonal changes in the nucleoli of Purkinje cells of the hedgehog cerebellum. Giacometti S, et al. **Brain Res** 1989 May 29;488(1–2):365–8

Premeiotic change of nucleolus organizer size in Neurospora. Butler DK, et al. **Genetics** 1989 Aug;122(4):783–91

RADIATION EFFECTS

Study on mechanism of micronucleoli formation by laser microirradiation. Hu YH, et al. **Cell Biophys** 1989 Jun; 14(3):257–69

ULTRASTRUCTURE

Distribution of silver–stained interphase nucleolar organizer regions as a parameter to distinguish neoplastic from nonneoplastic reactive cells in human effusions. Derenzini M, et al. **Acta Cytol** 1989 Jul–Aug;33(4):491–8

Relationship between interphasic nucleolar organizer regions and growth rate in two neuroblastoma cell lines. Derenzini M, et al. **Am J Pathol** 1989 Apr;134(4):925–32

A comparative study of morphometric measurements of nucleoli in uveal melanomas from electron micrographs and plastic–embedded and paraffin–embedded sections. Mikel UV, et al. **Anal Quant Cytol Histol** 1989 Apr; 11(2):111–4

Nucleolar organizer regions in Spitz nevi and malignant melanomas. Howat AJ, et al. **Cancer** 1989 Feb 1;63(3):474–8

Temporal variation in nucleolar organizer region expression in bone marrow cells of individuals with leukemia. Kessler

LG, et al. **Cancer Genet Cytogenet** 1988 Oct 1;35(1):109–17
Spontaneous in vitro neoplastic evolution of cultured Chinese hamster cells. Nucleolus organizing region activity. Schwarzacher-Robinson T, et al.
Cancer Genet Cytogenet 1988 Oct 1;35(1):119–28
Ag-NOR staining in the Bennett wallaby, Macropus rufogriseus: evidence for dosage compensation. Dhaliwal MK, et al. **Cytobios** 1988;56(224):29–38
Differential silver staining in lymphocytes and lymphoblastoid cell cultures. Martin-DeLeon PA, et al. **Cytobios** 1988;55(221):113–23
Cytogenetic study of silver-staining NOR in 8-cell-stage mouse blastomeres fused to 1-cell-stage embryos. Dyban AP, et al. **Development** 1988 Nov;104(3):453–63
Paragonimus ohirai: identification of nucleolar organizer regions (NORs) and silver nitrate staining pattern in spermatogenesis. Hirai H. **Exp Parasitol** 1988 Dec; 67(2):281–6
Genetic studies on nucleolus organizer regions (NORs) in cattle. Mayr B, et al. **Genet Res** 1989 Apr;53(2):111–8
Nucleolus-organizer regions and heterochromatin in three species of bovidae. Mayr B, et al. **Genetica** 1987 Dec 15; 75(3):207–12
Diagnostic significance of mean numbers of nucleolar organizer regions in benign and malignant transitional tumours of nose. Egan M, et al. **Histopathology** 1988 Nov; 13(5):579–81
Nucleolar organizer regions in melanocytic dysplasia and melanoma. Fallowfield ME, et al. **Histopathology** 1988 Jul; 13(1):95–9
Nucleolar organizer regions in the normal and carcinomatous epithelium of the uterine cervix. A morphometric study. Marbaix E, et al. **Int J Gynecol Pathol** 1989;8(3):237–45
Changes in the number and volume of fibrillar centres with the inactivation of nucleoli at erythropoiesis. Zatsepina OV, et al. **J Cell Sci** 1988 Nov;91 (Pt 3):439–48
Nucleolar organiser regions in lymphocytes of patients with chronic lymphocytic leukaemia [letter] Kaur P, et al. **J Clin Pathol** 1988 Dec;41(12):1338
Nucleolar organising regions in cervical intraepithelial neoplasia. Rowlands DC. **J Clin Pathol** 1988 Nov; 41(11):1200–2
Fixatives and silver stainability of NOR proteins at the light microscopic level [letter] Derenzini M, et al. **J Histochem Cytochem** 1988 Nov;36(11):1453–4
Nucleolar organization in granule cell neurons of the rat cerebellum. Lafarga M, et al. **J Neurocytol** 1989 Feb; 18(1):19–26
Silver-binding nucleolar organizer regions (AgNORs) in benign and malignant breast lesions: correlations with ploidy and growth phase by DNA flow cytometry. Giri DD, et al. **J Pathol** 1989 Apr;157(4):307–13
Combined immunocytochemistry and nucleolar organizer region staining: some technical aspects. McMeekin W, et al. **Med Lab Sci** 1989 Jan;46(1):11–5
Cytological and molecular studies of nucleolar organizing region variants and recombination in trisomy 21. Roulston D, et al. **Prog Clin Biol Res** 1989;311:81–100
Color differential staining of NOR-associated heterochromatic segments using acridine orange. Sato S. **Stain Technol** 1988 Jul;63(4):235–40
Nucleolar organizer regions in myogenic stromal tumours of the stomach. Sinn HP, et al. **Virchows Arch [A]** 1989; 415(4):317–21
AgNOR numbers in rat pituitary corticotrophs following adrenalectomy or corticotrophin releasing factor administration. Peebles SE, et al. **Virchows Arch [B]** 1989; 57(4):209–12
[Regions of the nucleolar organizer in cytological and histological diagnosis of malignant neoplasms] Derenzini M, et al. **Recenti Prog Med** 1988 Nov;79(11):463–6 (Eng. Abstr.) **(Ita)**
[Nucleolar apparatus function and the ribosomal gene activity of mouse embryonic fibroblasts infected by the SA7(C8) virus] Kotel'nikova IN, et al. **Eksp Onkol** 1989;11(2):22–5 (Eng. Abstr.) **(Rus)**
[Interindividual and intercellular differences in the total activity of ribosomal genes detectable by the Ag staining of nucleolus organizer regions in human acrocentric chromosomes] Liapunova NA, et al. **Genetika** 1988 Jul; 24(7):1282–8 (Eng. Abstr.) **(Rus)**
[Morphometric study of nucleolus-organizing regions of chromosomes from swine embryo kidney cells during Go-, G2-period and mitosis] Zatsepina OV, et al. **Mol Biol (Mosk)** 1988 Jul-Aug;22(4):1015–25 (Eng. Abstr.) **(Rus)**
[Changes in the number and size of fibrillar centers in nucleolus inactivation during erythropoiesis] Zatsepina OV, et al. **Ontogenez** 1989 Jan-Feb;20(1):40–6 (Eng. Abstr.) **(Rus)**
[Correlation of the nucleolar organizer and the fibrillar center of the nucleolus] Sabaneeva EV. **Tsitologiia** 1988 Dec; 30(12):1395–401 (35 ref.) (Eng. Abstr.) **(Rus)**
[The specificity of silver nitrate staining of nucleolar organizers] Sabaneeva EV. **Tsitologiia** 1989 Jan;31(1):5–14 (86 ref.) (Eng. Abstr.) **(Rus)**

NUCLEOLYSIS, INTERVERTEBRAL DISK see **INTERVERTEBRAL DISK CHEMOLYSIS**

NUCLEOPROTEINS

Polynucleotide-protein cross-links induced by ultraviolet light and their use for structural investigation of nucleoproteins. Budowsky EI, et al. **Prog Nucleic Acid Res Mol Biol** 1989;37:1–65 (216 ref.)

ANALYSIS

Antigenic reactivity of matrix protein and nucleoprotein of influenza virus as detected by EIA after dissociation with different detergents. Khristova ML, et al. **Acta Virol (Praha)** 1989 Jan;33(1):1–7
Intraepithelial neoplasia, human papilloma virus infection and argyrophilic nucleoprotein in cervical epithelium. Egan M, et al. **Histopathology** 1988 Nov;13(5):561–7
Rapid diagnosis of influenza infection of NP antigen using an immunocapture ELISA test. Chomel JJ, et al. **J Virol Methods** 1989 Jul;25(1):81–91
Viral and cellular deoxyribonucleases are associated with herpes simplex virus replicative intermediates. Turco A, et al. **Microbiologica** 1988 Oct;11(4):321–8
[Study of the nucleoprotein fraction of lung tissue in experimental berylliosis using gel filtration] Vasil'eva EV. **Vopr Med Khim** 1971 Jul-Aug;17(4):361–4 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Nuclear protein synthesis in animal and vegetal hemispheres of Xenopus oocytes. Feldherr CM, et al. **Exp Cell Res** 1988 Dec;179(2):527–34

GENETICS

Comparison of the nucleoprotein genes of a chicken and a mink influenza A H 10 virus. Reinhardt U, et al. **Arch Virol** 1988;103(1-2):139–45
A gene amplified in a transformed mouse cell line undergoes complex transcriptional processing and encodes a nuclear protein. Snyder LC, et al. **J Biol Chem** 1988 Nov 15; 263(32):17150–8
Biological and genetic evolution of the nucleoprotein gene of human influenza A viruses. Altmüller A, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2111–9
Expression of measles virus nucleoprotein in Escherichia coli: use of deletion mutants to locate the antigenic sites. Buckland R, et al. **J Gen Virol** 1989 Feb;70 (Pt 2):435–41
A complex nucleoprotein structure involved in activation of transcription of two divergent Escherichia coli promoters. Raibaud O, et al. **J Mol Biol** 1989 Feb 5; 205(3):471–85
Cloning and sequencing of the nucleoprotein gene of measles virus (Hallé strain). Buckland R, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11821
Pathways of nucleoprotein assembly on 5S RNA genes in a Xenopus oocyte S-150 extract. Razik MA, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4117–30
Sequence of the nucleoprotein (NP) gene of the influenza A virus reassortant 81/HO, carrying the NP originally derived from A/Hong Kong/1/68 (H3N2). Reinhardt U, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6721
Sequence of a cDNA clone of the nucleoprotein gene of influenza B/Ann Arbor/1/86. Rota PA. **Nucleic Acids Res** 1989 May 11;17(9):3595
High voltage E. coli electro-transformation with DNA following ligation. Willson TA, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11820
Two subtypes of nucleoproteins (NP) of influenza A viruses. Gammelin M, et al. **Virology** 1989 May;170(1):71–80
The nucleoprotein gene of Ebola virus: cloning, sequencing, and in vitro expression. Sanchez A, et al. **Virology** 1989 May;170(1):81–91
Complementation and analysis of an NP mutant of influenza virus. Li RA, et al. **Virus Res** 1989 Feb;12(2):97–111
Localisation of the temperature-sensitive defect in the nucleoprotein of an influenza A/FPV/Rostock/34 virus. Mandler J, et al. **Virus Res** 1989 Feb;12(2):113–21
[Identification of the stable DNA-matrix complex (type II) as a site of replication fork] Zaboĭkin MM, et al. **Mol Biol (Mosk)** 1988 Jul-Aug;22(4):1119–27 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Antigenic reactivity of matrix protein and nucleoprotein of influenza virus as detected by EIA after dissociation with different detergents. Khristova ML, et al. **Acta Virol (Praha)** 1989 Jan;33(1):1–7
Proteins responsible for anticentromere activity found in the sera of patients with CREST-associated Raynaud's phenomenon. Kremer L, et al. **Clin Exp Immunol** 1988 Jun; 72(3):465–9
Anti-viral protection and prevention of lymphocytic choriomeningitis or of the local footpad swelling reaction in mice by immunization with vaccinia-recombinant virus expressing LCMV-WE nucleoprotein or glycoprotein. Hany M, et al. **Eur J Immunol** 1989 Mar;19(3):417–24
Recognition of oligonucleotide-encoded T cell epitopes introduced into a gene unrelated to the original antigen. Chimini G, et al. **J Exp Med** 1989 Jan 1;169(1):297–302
A 15 amino acid fragment of influenza nucleoprotein synthesized in the cytoplasm is presented to class I-restricted cytotoxic T lymphocytes. Gould K, et al. **J Exp Med** 1989 Sep 1;170(3):1051–6
Antiviral immunity induced by recombinant nucleoprotein of influenza A virus. I. Characteristics and cross-reactivity of T cell responses. Tite JP, et al. **J Immunol** 1988 Dec 1;141(11):3980–7
Consequences of self-presentation of peptide antigen by cytolytic T lymphocytes. Vitiello A, et al. **J Immunol** 1989 Sep 1;143(5):1512–7
Immunoassay for serologic diagnosis of influenza type A using recombinant DNA produced nucleoprotein antigen and monoclonal antibody to human IgG. Harmon MW, et al. **J Med Virol** 1989 Jan;27(1):25–30
Protection of guinea pigs from Lassa fever by vaccinia virus recombinants expressing the nucleoprotein or the envelope glycoproteins of Lassa virus. Morrison HG, et al. **Virology** 1989 Jul;171(1):179–88

ISOLATION & PURIFICATION

Affinity chromatography of RecA protein and RecA nucleoprotein complexes on RecA protein-agarose columns. Freitag N, et al. **J Biol Chem** 1988 Dec 25; 263(36):19525–34
Differential phosphorylation of the nucleoprotein of influenza A viruses. Kistner O, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2421–31

METABOLISM

Glycosylation in the nucleus and cytoplasm. Hart GW, et al. **Annu Rev Biochem** 1989;58:841–74 (184 ref.)
Primary structure of the chromosomal protein MC1 from the archaebacterium Methanosarcina sp. CHTI 55. Chartier F, et al. **Biochim Biophys Acta** 1989 Aug 14;1008(3):309–14
The terminal protein of minute virus of mice is an 83 kilodalton polypeptide linked to specific forms of double-stranded and single-stranded viral DNA. Gunther M, et al. **FEBS Lett** 1988 Dec 19;242(1):22–6
Ordered assembly of nucleoprotein structures at the bacteriophage lambda replication origin during the initiation of DNA replication. Alfano C, et al. **J Biol Chem** 1989 Jun 25;264(18):10699–708
Heat shock protein-mediated disassembly of nucleoprotein structures is required for the initiation of bacteriophage lambda DNA replication. Alfano C, et al. **J Biol Chem** 1989 Jun 25;264(18):10709–18
Nuclear factors from expressing tissues interact in vitro with a rat alpha-2u globulin gene intron. Choy HA, et al. **J Biol Chem** 1989 Jan 25;264(3):1754–9
Specialized nucleoprotein structures at the origin of replication of bacteriophage lambda. Protein association and disassociation reactions responsible for localized initiation of replication. Dodson M, et al. **J Biol Chem** 1989 Jun 25;264(18):10719–25
Dissociation pathway for recA nucleoprotein filaments formed on linear duplex DNA. Lindsley JE, et al. **J Mol Biol** 1989 Feb 20;205(4):695–711
Oxytricha telomeric nucleoprotein complexes reconstituted with synthetic DNA. Raghuraman MK, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4235–53
[Stability of DNA-protein interactions in chromatin fractions with different sensitivity to nucleases] S"lakste NI, et al. **Mol Gen Mikrobiol Virusol** 1988 Oct;(10):30–4 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Cytolytic T-lymphocyte response to isolated class I H-2 proteins and influenza peptides. Kane KP, et al. **Nature** 1989 Jul 13;340(6229):157–9

PHYSIOLOGY

A nucleoprotein complex mediates the integration of retroviral DNA. Bowerman B, et al. **Genes Dev** 1989 Apr; 3(4):469–78

RADIATION EFFECTS

Effects of radioprotectors on DNA damage and repair, proteins, and cell-cycle progression. Grdina DJ, et al. **Pharmacol Ther** 1988;39(1-3):133–7 (22 ref.)

ULTRASTRUCTURE

Physical properties of the Creutzfeldt-Jakob disease agent. Sklaviadis TK, et al. **J Virol** 1989 Mar;63(3):1212–22

NUCLEOSIDASES

Crystallographic quaternary structural analysis of AMP nucleosidases from Escherichia coli and Azotobacter vinelandii. Giranda VL, et al. **J Biol Chem** 1989 Sep 15; 264(26):15674–80
Crystallization and preliminary X-ray diffraction studies of 3-methyladenine-DNA glycosylase II from Escherichia coli. Yamagata Y, et al. **J Mol Biol** 1988 Dec 20; 204(4):1055–6
The RNA N-glycosidase activity of ricin A-chain. Endo Y, et al. **Nucleic Acids Symp Ser** 1988;(19):139–42

ANALYSIS

Immunocytochemical localization of the base excision repair enzyme uracil DNA glycosylase in quiescent and proliferating normal human cells. Cool BL, et al. **Cancer Res** 1989 Jun 1;49(11):3029–36

[Intracellular localization and tissue specificity of human uracil-DNA glycosylase] Kuz'min IA, et al. **Tsitologiia** 1989 Feb;31(2):202-8 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Uracil-DNA glycosylase inhibitor gene of bacteriophage PBS2 encodes a binding protein specific for uracil-DNA glycosylase. Wang Z, et al. **J Biol Chem** 1989 Jan 15; 264(2):1163-71

Changes in the size of pulse-labelled DNA fragments induced in human cells by inhibitors of uracil-DNA glycosylase and DNA methylation. Aprelikova ON, et al. **Mutat Res** 1989 Aug;213(2):135-40

BIOSYNTHESIS

Repair of imidazole ring-opened purines in DNA: overproduction of the formamidopyrimidine-DNA glycosylase of Escherichia coli using plasmids containing the fpg+ gene. O'Connor TR, et al. **Ann Ist Super Sanita** 1989;25(1):27-31

GENETICS

Evidence for unique DNA repair activity encoded by a cloned Serratia marcescens gene: suppression of Escherichia coli mutations that reduce repair of alkylated DNA. Murphy KE, et al. **J Bacteriol** 1989 Sep; 171(9):5179-82

Molecular cloning and primary structure of the uracil-DNA-glycosylase gene from Saccharomyces cerevisiae. Percival KJ, et al. **J Biol Chem** 1989 Feb 15; 264(5):2593-8

Gene UL2 of herpes simplex virus type 1 encodes a uracil-DNA glycosylase. Mullaney J, et al. **J Gen Virol** 1989 Feb;70 (Pt 2):449-54

Identification of the coding sequence for herpes simplex virus uracil-DNA glycosylase. Worrad DM, et al. **J Virol** 1988 Dec;62(12):4774-7

Isolation of a formamidopyrimidine-DNA glycosylase (fpg) mutant of Escherichia coli K12. Boiteux S, et al. **Mol Gen Genet** 1989 Jan;215(2):300-5

Molecular cloning and characterization of a genetic region from Serratia marcescens involved in DNA repair. Murphy KE, et al. **Mol Microbiol** 1989 Feb;3(2):249-55

Characterization of the ung1 mutation of Escherichia coli. Varshney U, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):813

Comparison of phage T4 denV endonuclease V and M. luteus UV-DNA endonuclease by serology and DNA hybridization. Yarosh DB, et al. **Photochem Photobiol** 1989 Jan;49(1):53-7

ISOLATION & PURIFICATION

Pyrimidine 5'-nucleosidase in Neisseria meningitidis. An enzyme specific for uridine 5'-monophosphate. Jyssum S. **APMIS** 1989 Apr;97(4):343-6

Purification and properties of mitochondrial uracil-DNA glycosylase from rat liver. Domena JD, et al. **Biochemistry** 1988 Sep 6;27(18):6742-51

Purification and determination of the NH2-terminal amino acid sequence of uracil-DNA glycosylase from human placenta. Wittwer CU, et al. **Biochemistry** 1989 Jan 24; 28(2):780-4

Purification and characterization of 5-hydroxymethyluracil-DNA glycosylase from calf thymus. Its possible role in the maintenance of methylated cytosine residues. Cannon-Carlson SV, et al. **J Biol Chem** 1989 Aug 5;264(22):13306-12

[Purification and various properties of uracil-DNA-glycosylase from human placenta] Kuz'min IA, et al. **Biokhimiia** 1988 Jun;53(6):1002-8 (Eng. Abstr.) **(Rus)**

METABOLISM

Release of 7-alkylguanines from haloethylnitrosourea-treated DNA by E. coli 3-methyladenine-DNA glycosylase II. Carter CA, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1261-5

Bacteriophage-T4 and Micrococcus luteus UV endonucleases are not endonucleases but beta-elimination and sometimes beta delta-elimination catalysts. Bailly V, et al. **Biochem J** 1989 May 1;259(3):751-9

Crystal structure of formycin 5'-phosphate: an explanation for its tight binding to AMP nucleosidase. Giranda VL, et al. **Biochemistry** 1988 Jul 26;27(15):5813-8

Cytosine photoproduct-DNA glycosylase in Escherichia coli and cultured human cells. Weiss RB, et al. **Biochemistry** 1989 Feb 21;28(4):1488-92

In vitro drug delivery mediated by ecto-NAD+-glycohydrolase ligand-targeted liposomes. Salord J, et al. **Biochim Biophys Acta** 1988 Sep 16; 971(2):197-206

Physical association of base excision repair enzymes with parental and replicating DNA in BHK-21 cells. Lee KA, et al. **Cancer Res** 1989 Jun 1;49(11):3037-44

AP endonucleases and DNA glycosylases that recognize oxidative DNA damage. Wallace SS. **Environ Mol Mutagen** 1988;12(4):431-77 (346 ref.)

The mechanism of action of the cytotoxic lectin from Phoradendron californicum: the RNA N-glycosidase activity of the protein. Endo Y, et al. **FEBS Lett** 1989 May 8;248(1-2):115-8

Latex beads phagocytosis capacity and ecto-NAD+ glycohydrolase activity of rat brain microglia cells in vitro. Bocchini V, et al. **Int J Dev Neurosci** 1988;6(6):525-34

Role of exonuclease III and endonuclease IV in repair of pyrimidine dimers initiated by bacteriophage T4 pyrimidine dimer-DNA glycosylase. Saporito SM, et al. **J Bacteriol** 1989 May;171(5):2542-6

Uracil-DNA glycosylase in insects. Drosophila and the locust. Morgan AR, et al. **J Biol Chem** 1989 Jun 15; 264(17):9911-4

Shiga toxin, Shiga-like toxin II variant, and ricin are all single-site RNA N-glycosidases of 28 S RNA when microinjected into Xenopus oocytes. Saxena SK, et al. **J Biol Chem** 1989 Jan 5;264(1):596-601

Age-dependent modulation of tissue-specific repair activity for 3-methyladenine and O6-methylguanine in DNA in inbred mice. Washington WJ, et al. **Mech Ageing Dev** 1989 Apr;48(1):43-52

On the possible role of cytosine deamination in delayed photoreversal mutagenesis targeted at thymine-cytosine dimers in E. coli. Ruiz-Rubio M, et al. **Mutat Res** 1989 Jan;210(1):93-102

Normal uracil-DNA glycosylase activity in Bloom's syndrome cells. Vilpo JA, et al. **Mutat Res** 1989 Jan; 210(1):59-62

Developmental pattern of poly (ADP-ribose) synthetase and NAD glycohydrolase in the brain of the fetal and neonatal rat. Shambaugh GE 3d, et al. **Neurochem Res** 1988 Oct; 13(10):973-81

The use of thioglycolate to distinguish between 3' AP (apurinic/apyrimidinic) endonucleases and AP lyases. Bricteux-Grégoire S, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6269-82

Wavelength dependence of DNA incision by a human ultraviolet endonuclease. Gallagher PE, et al. **Photochem Photobiol** 1989 Mar;49(3):363-7

Physical association of the 2,6-diamino-4-hydroxy-5N-formamidopyrimidine-DNA glycosylase of Escherichia coli and an activity nicking DNA at apurinic/apyrimidinic sites. O'Connor TR, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5222-6

PHARMACOLOGY

Release of chloroethyl ethyl sulfide-modified DNA bases by bacterial 3-methyladenine-DNA glycosylases I and II. Habraken Y, et al. **Carcinogenesis** 1989 Mar;10(3):489-92

PHYSIOLOGY

Uracil-DNA glycosylases and DNA uracil repair. Tomilin NV, et al. **Int Rev Cytol** 1989;114:125-79 (150 ref.)

NUCLEOSIDE DEAMINASES

Time-resolved fluorescence spectroscopy of human adenosine deaminase: effects of enzyme inhibitors on protein conformation. Philips AV, et al. **Biochemistry** 1989 Mar 7;28(5):2040-50

Incomplete factorial search for conditions leading to high quality crystals of Escherichia coli cytidine deaminase complexed to a transition state analog inhibitor. Betts L, et al. **J Biol Chem** 1989 Apr 25;264(12):6737-40

ANALYSIS

Evaluation of ligand induced relative change in the bimolecular quenching constant of protein fluorescence: applications to lysozyme and adenosine deaminase. Somogyi B, et al. **Acta Biochim Biophys Hung** 1988; 23(2):135-48

Adenosine deaminase-'like' immunoreactivity in cerebellar Purkinje cells of rat. Nagy JI, et al. **Brain Res** 1988 Aug 2;457(1):21-8

Adenosine deaminase in bronchoalveolar lavage fluid [letter] Bovornkitti S, et al. **Chest** 1988 Nov;94(5):1113

Molecular forms of adenosine deaminase in pleural effusions. Ungerer JP, et al. **Enzyme** 1988;40(1):7-13

Microassay for adenosine deaminase, the enzyme lacking in some forms of immunodeficiency, in mouse preimplantation embryos. Benson C, et al. **Hum Reprod** 1988 Nov; 3(8):1004-9

Adenosine deaminase, alpha 1 antitrypsin, alpha 1 acid glycoprotein, ceruloplasmin and protein in the diagnosis of tuberculous pleural effusion. Sulochana G, et al. **Indian J Chest Dis Allied Sci** 1988 Jan-Mar;30(1):15-8

Guillain-Barré syndrome and tularemia pleuritis with high adenosine deaminase activity in pleural fluid. Syrjälä H, et al. **Infection** 1989 May-Jun;17(3):152-3

Determination of adenosine deaminase and purine nucleoside phosphorylase activities using high-performance liquid chromatographic and radiochromatographic methods. Boháček J, et al. **J Chromatogr** 1988 Dec 30;434(2):439-45

Diagnostic value of ascites adenosine deaminase in tuberculous peritonitis. Voigt MD, et al. **Lancet** 1989 Apr 8;1(8641):751-4

Further observations on the relationship between adenosine deaminase-containing axons and trigeminal mesencephalic neurons: an electron microscopic, immunohistochemical and anterograde tracing study. Yamamoto T, et al. **Neuroscience** 1988 Aug;26(2):669-80

[Determination of adenosine deaminase in 295 samples of pleural fluid] Kuhn M, et al. **Rev Mal Respir** 1988; 5(6):641-4 (Eng. Abstr.) **(Fre)**

[Differentiation and ADA (adenosine deaminase) isozymes] Kurata N, et al. **Rinsho Byori** 1989 Mar;37(3):336-8 **(Jpn)**

[A simple method of determining adenosine deaminases in bacteria] Maiskiĭ BG. **Lab Delo** 1988;(12):71-2 (Eng. Abstr.) **(Rus)**

[Rheumatoid pleural effusion and adenosine deaminase (letter)] Nolla JM, et al. **Med Clin (Barc)** 1989 Apr 1; 92(12):478 **(Spa)**

[Analysis of adenosine deaminase and its subfractions as a diagnostic parameter in tuberculous pleural effusion] Blanco Vaca F, et al. **Rev Clin Esp** 1989 Jan;184(1):7-11 (33 ref.) (Eng. Abstr.) **(Spa)**

ANTAGONISTS & INHIBITORS

Mechanism of adenosine triphosphate catabolism induced by deoxyadenosine and by nucleoside analogues in adenosine deaminase-inhibited human erythrocytes. Bontemps F, et al. **Cancer Res** 1989 Sep 15;49(18):4983-9

Clinical, pharmacologic, and immunologic effects of 2'-deoxycoformycin. Cummings FJ, et al. **Clin Pharmacol Ther** 1988 Nov;44(5):501-9

Metabolic and functional consequences of inhibiting adenosine deaminase during renal ischemia in rats. Stromski ME, et al. **J Clin Invest** 1988 Nov;82(5):1694-9

Pentostatin in chronic lymphocytic leukemia: a phase II trial of Cancer and Leukemia group B. Dillman RO, et al. **J Clin Oncol** 1989 Apr;7(4):433-8

Inhibition of adenosine deaminase from several sources by deaza derivatives of adenosine and EHNA. Lupidi G, et al. **J Enzym Inhib** 1985;1(1):67-75

Enzyme activities of leukemic cells and biochemical changes induced by deoxycoformycin in vitro--lack of correlation with clinical response. Ho AD, et al. **Leuk Res** 1989; 13(4):269-78

BIOSYNTHESIS

Pyrimidine, purine and nitrogen control of cytosine deaminase synthesis in Escherichia coli K 12. Involvement of the glnLG and purR genes in the regulation of codA expression. Andersen L, et al. **Arch Microbiol** 1989; 152(2):115-8

BLOOD

Adenosine deaminase in stroma-free hemoglobin solution is not responsible for coronary vasoconstriction. Lawless K, et al. **Adv Exp Med Biol** 1989;248:365-70

Circadian rhythm of serum cytidine deaminase in patients with rheumatoid arthritis during rest and exercise. Thompson PW, et al. **Ann Rheum Dis** 1989 Jun;48(6):502-4

Decreased B lymphocyte ecto-5'nucleotidase and increased adenosine deaminase in mononuclear cells from patients infected with human immunodeficiency virus. Dalh Christensen L, et al. **APMIS** 1988 Oct;96(10):882-8

Determination of plasma cytidine deaminase activity by HPLC. Richards DA, et al. **Biomed Chromatogr** 1987; 2(4):148-51

Erythrocyte adenosine deaminase overproduction in hereditary hemolytic anemia. Chottiner EG, et al. **Blood** 1989 Jul;74(1):448-53

Patterns of adenosine deaminase, ecto-5'-nucleotidase, poly(A)polymerase and surface light chain expression in chronic lymphocytic leukemias. Trangas T, et al. **Blut** 1989 Apr;58(4):187-93

Assay of adenosine deaminase in serum by flow-injection analysis with fluorescence detection. Zaitsu K, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4488-93

Serum adenosine deaminase activity with Mycoplasma pneumoniae [letter] Nishikawa H, et al. **Chest** 1988 Dec; 94(6):1315

Depressed activities of purine enzymes in lymphocytes of patients infected with human immunodeficiency virus. Renouf JA, et al. **Clin Chem** 1989 Jul;35(7):1478-81

Activity of adenosine deaminase and purine nucleoside phosphorylase in erythrocytes and lymphocytes of man, horse and cattle. Tax WJ, et al. **Comp Biochem Physiol [B]** 1978;61(3):439-41

Prognostic value of adenosine deaminase activity in children with acute lymphoblastic leukaemia. Lastowska MA. **Folia Haematol (Leipz)** 1989;116(2):261-7

Adenosine deaminase activity in leprosy (a preliminary study). Chaudhary SD, et al. **Indian J Lepr** 1988 Jan; 60(1):17-20

Adenosine deaminase and tuberculous peritonitis [letter] **Lancet** 1989 Jun 3;1(8649):1260-1

Studies on the energy metabolism of opossum Didelphis virginiana erythrocytes--IV. Red cells have low adenosine deaminase activity and high levels of deoxyadenosine nucleotides. Bethlenfalvay NC, et al. **Life Sci** 1989; 44(14):963-70

Ecto-enzyme activity of human erythrocyte adenosine deaminase. Bielat K, et al. **Mol Cell Biochem** 1989 Apr 11;86(2):135-42

Diagnosis and analysis of the clinical course of T-phenotype acute lymphoblastic leukemia. Babušíková O, et al. **Neoplasma** 1988;35(6):683-90

[The determination of adenosine deaminase activity in the diagnosis of tuberculous pleuritis (letter)] van Keimpema AR, et al. **Ned Tijdschr Geneeskd** 1988 Oct 22; 132(43):1990-1 **(Dut)**

[Clinical significance of measurement of serum adenosine

deaminase activity in patients with various liver diseases] Toyama M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec;85(12):2633–41 (Eng. Abstr.) **(Jpn)**

[Changes in the activities of enzymes of metabolism of DNA precursors in peptic ulcer and cancer of the stomach] Borzenko BG. **Klin Med (Mosk)** 1989 May;67(5):87–91 (Eng. Abstr.) **(Rus)**

[Age-related dynamics of the activity of the enzymes involved in the metabolism of adenosine in normal subjects and in oncologic patients] Borzenko BG, et al. **Lab Delo** 1988;(11):53–7 (Eng. Abstr.) **(Rus)**

[Adenosine deaminase and boutonneuse fever (letter)] Soriano V, et al. **Med Clin (Barc)** 1989 Jan 28;92(3):119 **(Spa)**

CEREBROSPINAL FLUID

Adenosine deaminase activity in cerebrospinal fluid: a useful test for meningeal tuberculosis, even in patients with AIDS [letter] Ena J, et al. **J Infect Dis** 1988 Oct;158(4):896

Sarcoid meningitis, high adenosine deaminase levels in CSF and results of cranial irradiation [letter] Garcia-Moncó C, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec; 51(12):1594–6

[Measurement of adenosine deaminase activity (ADA) of the cerebrospinal fluid in patients with tuberculous meningitis] Wang BN. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Oct;11(5):263–4, 317 (Eng. Abstr.) **(Chi)**

DEFICIENCY

High risk screening of adenosine deaminase and purine nucleoside phosphorylase deficiency in Japan. Kishi T, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Feb;29(1):152–4

Differential deoxyadenosine toxicity to immature rabbit cartilage in vitro. A model for the chondro-osseous dysplasia of adenosine deaminase deficiency. Wortmann RL, et al. **Arthritis Rheum** 1989 Aug;32(8):1014–21

Purine metabolism in a bone-marrow transplanted adenosine deaminase deficient patient. Boulieu R, et al. **Clin Chim Acta** 1988 Dec 30;178(3):349–52

Rejection of bone marrow transplant and resistance of alloantigen reactive cells to in vivo deoxyadenosine in adenosine deaminase deficiency. Cowan MJ, et al. **Clin Immunol Immunopathol** 1988 Nov;49(2):242–50

Interleukin 2 responsive lymphocytes in patients with adenosine deaminase deficiency. Cowan MJ, et al. **Clin Immunol Immunopathol** 1989 Oct;53(1):59–67

Establishment and characterization of adenosine deaminase-deficient human T cell lines. Kohn DB, et al. **J Immunol** 1989 Jun 1;142(11):3971–7

Substrate inhibition of adenosine phosphorylation in adenosine deaminase deficiency and adenosine-mediated inhibition of PP-ribose-P dependent nucleotide synthesis in hypoxanthine phosphoribosyltransferase deficient erythrocytes. Snyder FF, et al. **J Inherited Metab Dis** 1988; 11(2):174–83

[Immune deficiencies secondary to enzymopathies] Pérignon JL, et al. **Ann Pediatr (Paris)** 1989 Jun;36(6):381–5 (14 ref.) (Eng. Abstr.) **(Fre)**

GENETICS

Human gene expression in murine hemopoietic cells in vivo. Fletcher FA, et al. **Adv Exp Med Biol** 1988;241:123–7

A high proportion of ADA point mutations associated with a specific alanine-to-valine substitution. Markert ML, et al. **Am J Hum Genet** 1989 Sep;45(3):354–61

Identification and characterization of nine RFLPs at the adenosine deaminase (ADA) locus. Tzall S, et al. **Am J Hum Genet** 1989 Jun;44(6):864–75

Expression of human adenosine deaminase from various strong promoters after gene transfer into human hematopoietic cell lines. Hock RA, et al. **Blood** 1989 Aug 1;74(2):876–81

Localization of human adenosine deaminase (ADA) gene sequences to the q12——q13.11 region of chromosome 20 by in situ hybridization. Jhanwar SC, et al. **Cytogenet Cell Genet** 1989;50(2-3):168–71

Interaction at clinical level between erythrocyte acid phosphatase and adenosine deaminase genetic polymorphisms. Gloria-Bottini F, et al. **Hum Genet** 1989 Jun;82(3):213–5

Erythrocyte acid phosphatase (ACP1) activity. In vitro modulation by adenosine and inosine and effects of adenosine deaminase (ADA) polymorphism. Lucarini N, et al. **Hum Genet** 1989 Jan;81(2):185–7

Genetic evidence for a repressor of synthesis of cytosine deaminase and purine biosynthesis enzymes in Escherichia coli. Kilstrup M, et al. **J Bacteriol** 1989 Apr;171(4):2124–7

Mutant human adenosine deaminase alleles and their expression by transfection into fibroblasts. Akeson AL, et al. **J Biol Chem** 1988 Nov 5;263(31):16291–6

Adenosine deaminase gene expression. Tissue-dependent regulation of transcriptional elongation. Chinsky JM, et al. **J Biol Chem** 1989 Aug 25;264(24):14561–5

Expression of a multidrug resistance-adenosine deaminase fusion gene. Germann UA, et al. **J Biol Chem** 1989 May 5;264(13):7418–24

Normal and mutant human adenosine deaminase genes. Akeson AL, et al. **J Cell Biochem** 1989 Mar;39(3):217–28 (40 ref.)

Identification of a point mutation resulting in a heat-labile adenosine deaminase (ADA) in two unrelated children with partial ADA deficiency. Hirschhorn R, et al. **J Clin Invest** 1989 Feb;83(2):497–501

The simultaneous phenotyping of erythrocyte acid phosphatase, esterase D, phosphoglucomutase and adenosine deaminase by isoelectric focusing. Zamir A. **J Forensic Sci Soc** 1988 Jul-Aug;28(4):219–25

Expression of human adenosine deaminase in murine hematopoietic cells. Belmont JW, et al. **Mol Cell Biol** 1988 Dec;8(12):5116–25

Chromosomal location, cloning and nucleotide sequence of the Bacillus subtilis cdd gene encoding cytidine/deoxycytidine deaminase. Song BH, et al. **Mol Gen Genet** 1989 Apr;216(2-3):462–8

Identification of an Apa I polymorphism within the human adenosine deaminase (ADA) gene. Gribbin T, et al. **Nucleic Acids Res** 1989 May 11;17(9):3626

Cell type-specific transcriptional regulation of the human adenosine deaminase gene. Lattier DL, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1061–76

Activity of the adenosine deaminase promoter in transgenic mice. Valerio D, et al. **Nucleic Acids Res** 1988 Nov 11; 16(21):10083–97

Retroviral vector-mediated high-efficiency expression of adenosine deaminase (ADA) in hematopoietic long-term cultures of ADA-deficient marrow cells. Bordignon C, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6748–52

Improved gene expression upon transfer of the adenosine deaminase minigene outside the transcriptional unit of a retroviral vector. Hantzopoulos PA, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3519–23

Isolation and characterization of S49 mouse lymphoma cell mutants deficient in adenosine deaminase. Chan TS, et al. **Somat Cell Mol Genet** 1989 Sep;15(5):411–20

Hypomethylation and ADA gene expression in mouse CAK cells. Stallings RL, et al. **Somat Cell Mol Genet** 1989 Jan; 15(1):1–11

[Genetic study of human adenosine deaminase] Song WH, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec; 19(4):434–6 (Eng. Abstr.) **(Chi)**

ISOLATION & PURIFICATION

Implantable enzyme capsules for cancer chemotherapy from bakers' yeast cytosine deaminase immobilized on epoxy-acrylic resin and urethane prepolymer. Katsuragi T, et al. **Appl Biochem Biotechnol** 1987 Sep-Dec;16:61–9

Purification and properties of the adenosine deaminase from the midgut gland of a marine bivalved mollusc, Atrina spp. Aikawa T, et al. **Comp Biochem Physiol [B]** 1977; 58(4):357–64

[Use of affinity chromatography for purification of adenosine deaminase from the thyroid gland of swine] Jaroszewicz L, et al. **Rocz Akad Med Bialymstoku** 1984–85;29–30:9–20 (Eng. Abstr.) **(Pol)**

METABOLISM

Potentiometric homogeneous enzyme-linked competitive binding assays using adenosine deaminase as the label. Kjellström TL, et al. **Anal Chem** 1989 Aug 1;61(15):1728–32

IMP synthesis using immobilized adenosine (phosphate) deaminase. Carvalho Júnior LB, et al. **Appl Biochem Biotechnol** 1988 Oct;19(1):21–5

Changes in the activities of adenosine-metabolizing enzymes in six regions of the rat brain on chemical induction of hypothyroidism. Mazurkiewicz D, et al. **Biochem J** 1989 Jul 15;261(2):667–72

Transition-state stabilization by adenosine deaminase: 1,6-addition of water to purine ribonucleoside, the enzyme's affinity for 6-hydroxy-1,6-dihydropurine ribonucleoside, and the effective concentration of substrate water at the active site. Jones W, et al. **Biochemistry** 1989 Feb 7;28(3):1242–7

Developmental expression of adenosine deaminase in placental tissues of the early postimplantation mouse embryo and uterine stroma. Knudsen TB, et al. **Biol Reprod** 1988 Nov;39(4):937–51

Differential expression of adenosine deaminase isozymes in acute leukemia. Ratech H, et al. **Blood** 1988 Nov; 72(5):1627–32

Adenosine deaminase containing fiber pathway from the superior colliculus to the lateral posterior nucleus of the rat. Miguel-Hidalgo JJ, et al. **Brain Res** 1989 Jan 2; 476(1):189–93

Distinct adenosine deaminase-containing inputs to the substantia nigra from the striatum and tuberomammillary nucleus. Yamamoto T, et al. **Brain Res** 1988 Nov 22; 474(1):112–24

Deoxycoformycin antagonizes ischemia-induced neuronal degeneration. Phillis JW, et al. **Brain Res Bull** 1989 Mar; 22(3):537–40

Adenosine deaminase in body fluids: a useful diagnostic tool in tuberculosis. Segura RM, et al. **Clin Biochem** 1989 Apr; 22(2):141–8

A comparative study of some properties of cytidine deaminase from Escherichia coli and chicken liver. Vita A, et al. **Comp Biochem Physiol [B]** 1989;93(3):591–4

Enzymes involved in adenine nucleotide metabolism of developing chick embryo liver. Wegelin I, et al. **Comp Biochem Physiol [B]** 1978;61(2):327–9

Degradation of adenosine by extracellular adenosine deaminase in the rat duodenum. Franco R, et al. **Gen Pharmacol** 1988;19(5):679–81

Adenosine deaminase in cell transformation. Biophysical manifestation of membrane dynamics. Porat N, et al. **J Biol Chem** 1988 Oct 15;263(29):14608–11

Laminar and segregated distribution of immunoreactivities for some neuropeptides and adenosine deaminase in the superior colliculus of the rat. Miguel-Hidalgo JJ, et al. **J Comp Neurol** 1989 Feb 15;280(3):410–23

Evidence for receptor-mediated uptake of adenosine deaminase in rabbit kidney. Schrader WP, et al. **J Histochem Cytochem** 1988 Dec;36(12):1481–7

The evaluation of ADA activity in pleural effusion for the diagnosis of tuberculous pleural effusion. Kao SJ, et al. **Kekkaku** 1988 Jun;63(6):441–6

5'-Nucleotidase and adenosine deaminase in developing fetal guinea pig brain and the effect of maternal hypoxia. Mishra OP, et al. **Neurochem Res** 1988 Nov;13(11):1055–60

Adenosine deaminase activity in joint effusions. Pettersson T, et al. **Scand J Rheumatol** 1988;17(5):365–9

Major enhancement of the affinity of an enzyme for a transition-state analog by a single hydroxyl group. Kati WM, et al. **Science** 1989 Mar 24;243(4898):1591–3

Adenosine deaminase for removing adenosine: how much is enough? Linden J. **Trends Pharmacol Sci** 1989 Jul; 10(7):260–2 (20 ref.)

[Adenosine deaminase assay for the diagnosis of tuberculous pleural effusion] Yiin KT, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;42(3):201–4 (Eng. Abstr.) **(Chi)**

[Determination of ADA activity in amniotic fluid by ammonia gas-sensing electrode] Wei SX, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Sep;19(3):249–51 (Eng. Abstr.) **(Chi)**

[Value of determining the activity of adenosine deaminase in tuberculous meningitis (letter)] Burnat P, et al. **Presse Med** 1989 May 27;18(21):1077 **(Fre)**

[Substrate specificity of adenosine deaminase. The role of methyl groups at 2', 3', and 5'-carbon atoms of adenosine] Kalinichenko EN, et al. **Bioorg Khim** 1988 Sep; 14(9):1157–61 (Eng. Abstr.) **(Rus)**

[Enzyme activity of adenosine metabolism in human natural killers (NK cells) during the activation and suppression of their cytotoxic activity] Umanskiĭ VIu, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):438–40 (Eng. Abstr.) **(Rus)**

[Effect of the prostaglandin E produced by tumor cells on the enzymatic activity of adenosine metabolism and on human natural killer cytotoxic activity] Umanskiĭ VIu, et al. **Eksp Onkol** 1989;11(3):60–3 (Eng. Abstr.) **(Rus)**

[Effect of splenin and splenic protein-free extracts on the adenosine deaminase activity in various organs of the rat] Korpachev VV, et al. **Ukr Biokhim Zh** 1989 May-Jun; 61(3):114–7 (Eng. Abstr.) **(Rus)**

[The effect of somatotropin on adenosine deaminase activity in tissues of rats with hypo- and hyperthyroidism] Litvinenko EA. **Ukr Biokhim Zh** 1988 Jul-Aug;60(4):46–50 (Eng. Abstr.) **(Rus)**

[Activity of adenosine metabolism enzymes and spontaneous chemiluminescence in macrophages in the tumor growth process] Umanskiĭ VIu, et al. **Ukr Biokhim Zh** 1989 Mar-Apr;61(2):109–11 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Adenosine deaminase attenuates canine coronary vasodilatation during regional non-ischaemic myocardial hypoxia. Merrill GF, et al. **Cardiovasc Res** 1988 May; 22(5):345–50

Theoretical study of the protonation and tautomerization of adenosine, formycin, and their 2-NH2 and 2-F derivatives: functional implications in the mechanism of reaction of adenosine deaminase. Orozco M, et al. **Mol Pharmacol** 1989 Feb;35(2):257–64

Endogenous adenosine improves work rate to oxygen consumption ratio in catecholamine stimulated isovolumic rat heart. Headrick J, et al. **Pflugers Arch** 1989 Feb; 413(4):354–8

Short-time adenosine deaminase interventions upon underperfused rat hearts in vitro—a test for the role of adenosine in the coronary flow control. Serban DN, et al. **Physiologie** 1989 Jan-Mar;26(1):17–23

PHYSIOLOGY

Functional significance of AMP deaminase and adenosine deaminase in the aestivating freshwater snail, Pila globosa (swainson): possible neuroendocrine involvement. Reddy GR, et al. **Biochem Int** 1989 Jul;19(1):53–8

Effects of adenosine analogues on force and cAMP in the heart. Influence of adenosine deaminase. Heller T, et al. **Eur J Pharmacol** 1989 May 19;164(2):179–87

The erythrocyte as instigator of inflammation. Generation of amidated C3 by erythrocyte adenosine deaminase. Hostetter MK, et al. **J Clin Invest** 1989 Aug;84(2):665–71

RADIATION EFFECTS

Purine metabolizing enzyme activities in radiosensitive tissues of mice after sublethal whole-body irradiation. Hošek B, et al. **Gen Physiol Biophys** 1989 Feb;8(1):63–71

NUCLEOSIDE DIPHOSPHATE KINASES see under **PHOSPHOTRANSFERASES, ATP**

NUCLEOSIDE DIPHOSPHATE SUGARS

ANALYSIS

Detection of unusual nucleic acids with monoclonal antibodies specific for triplexes, poly(ADP-ribose), DNA–RNA hybrids, and Z-DNA. Lee JS, et al. **Anal Biochem** 1989 May 1;178(2):373–7

Topological orientation of mitochondrial GDPmannose: dolichyl-monophosphate mannosyltransferase in the outer membrane. Gasnier F, et al. **Biochim Biophys Acta** 1989 Apr 28;980(3):339–47

ANTAGONISTS & INHIBITORS

Elevation of polycyclic aromatic hydrocarbon-inducible aryl hydrocarbon hydroxylase activity in rat hepatocytes in primary culture by inhibitors of poly(ADP-ribose) polymerase. Nemoto N, et al. **Carcinogenesis** 1988 Oct; 9(10):1823–7

BIOSYNTHESIS

Potentiation by lithium of CMP-phosphatidate formation in carbachol-stimulated rat cerebral-cortical slices and its reversal by myo-inositol. Godfrey PP. **Biochem J** 1989 Mar 1;258(2):621–4

Species pattern of phosphatidic acid, diacylglycerol, CDP-diacylglycerol and phosphatidylglycerol synthesized de novo in rat liver mitochondria. Rüstow B, et al. **Biochim Biophys Acta** 1989 Apr 3;1002(2):261–3

3'-Deoxy-NAD+ as a substrate for poly(ADP-ribose)polymerase and the reaction mechanism of poly(ADP-ribose) elongation. Alvarez-Gonzalez R. **J Biol Chem** 1988 Nov 25;263(33):17690–6

Glucocorticoid enhances alkylating agent-induced fragmentation of DNA through suppression of poly(ADP-ribosyl)ation in L-1210 cells. Kitamura A, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Oct 20; 23(10):2525–31

BLOOD

Altered metabolism of poly(ADP-ribose) in the peripheral blood lymphocytes of patients with systemic lupus erythematosus. Sibley JT, et al. **Arthritis Rheum** 1989 Aug; 32(8):1045–9

CHEMICAL SYNTHESIS

[Introduction of modified hexose residues into O-specific polysaccharides of Salmonella of serotype E, B, C2 and C3 using synthetic nucleotide sugars] Druzhinina TN, et al. **Bioorg Khim** 1988 Sep;14(9):1242–9 (Eng. Abstr.) **(Rus)**

GENETICS

Length heterogeneity in rat salivary gland alpha 2 mu globulin mRNAs: multiple splice-acceptors and polyadenylation sites. Gao F, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4629–36

IMMUNOLOGY

Antibody to poly(ADP-ribose) is an indicator of obstetric complications in pregnant patients with systemic lupus erythematosus. Kanai Y, et al. **Immunol Lett** 1989 Jun 1; 21(3):217–22

A dot-blot method for screening polyclonal and monoclonal antisera to poly(ADP-ribose). Prasad S, et al. **J Immunol Methods** 1989 Jan 6;116(1):79–85

METABOLISM

Labeling methods for the study of poly- and mono(ADP-ribose) metabolism in cultured cells. Aboul-Ela N, et al. **Anal Biochem** 1988 Oct;174(1):239–50

ADP-ribosylation of ADPR-transferase and topoisomerase I in intact mouse epidermal cells JB6. Krupitza G, et al. **Biochemistry** 1989 Mar 7;28(5):2034–40

Poly(ADP-ribosylation) of histones in intact human keratinocytes. Krupitza G, et al. **Biochemistry** 1989 May 2;28(9):4054–60

Poly(ADP-ribosylation) of nuclear proteins in rat testis correlates with active spermatogenesis. Quesada P, et al. **Biochim Biophys Acta** 1989 Mar 1;1007(2):167–75

Specificity of GDP-Man:dolichyl-phosphate mannosyltransferase for the guanosine diphosphate esters of mannose analogues containing deoxy and deoxyfluoro substituents. McDowell W, et al. **FEBS Lett** 1989 Jan 30; 243(2):413–6

The effect of poly(ADP-ribosyl)ation on native and H1-depleted chromatin. A role of poly(ADP-ribosyl)ation on core nucleosome structure. Huletsky A, et al. **J Biol Chem** 1989 May 25;264(15):8878–86

Poly ADP-ribosylation of proteins. Processivity of a post-translational modification. Naegeli H, et al. **J Biol Chem** 1989 Aug 25;264(24):14382–5

Poly(ADP-ribose) catabolism in mammalian cells exposed to DNA-damaging agents. Alvarez-Gonzalez R, et al. **Mutat Res** 1989 Sep;218(2):67–74

Topography of glycosylation in yeast: characterization of GDPmannose transport and lumenal guanosine diphosphatase activities in Golgi-like vesicles. Abeijon C, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6935–9

Inhibition of terminal N- and O-glycosylation specific for herpesvirus-infected cells: mechanism of an inhibitor of sugar nucleotide transport across Golgi membranes. Olofsson S, et al. **Virology** 1988 Oct;166(2):440–50

[Poly(ADP-ribosylation) of nuclear proteins in rat thymocytes] Beletskiĭ IP, et al. **Biokhimiia** 1988 Jul; 53(7):1144–52 (Eng. Abstr.) **(Rus)**

[Reaction of poly(ADP)-ribosylation of histone H1 in the presence of P1,P4-bis(5'-adenosyl)tetraphosphate and its phosphonate analogs] Karabashian LV, et al. **Mol Biol (Mosk)** 1988 Sep-Oct;22(5):1211–6 (Eng. Abstr.) **(Rus)**

[The effect of gamma-irradiation on the poly(ADP-ribosylation) of nuclear proteins in rat thymocytes] Beletskiĭ IP, et al. **Radiobiologiia** 1988 Sep-Oct;28(5):611–6 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Inhibition of prolyl hydroxylase by poly(ADP-ribose) and phosphoribosyl-AMP. Possible role of ADP-ribosylation in intracellular prolyl hydroxylase regulation. Hussain MZ, et al. **J Biol Chem** 1989 May 15;264(14):7850–5

PHYSIOLOGY

Inhibition of poly(ADP-ribosyl)ation does not prevent lymphocyte entry into the cell cycle. Marini M, et al. **FEBS Lett** 1989 Aug 14;253(1-2):146–50

Influence of benzamide on killing and mutation of density-inhibited V79 cells by MNNG. Ghosh R, et al. **Mutat Res** 1989 Mar;225(3):137–41

NUCLEOSIDE MONOPHOSPHATE KINASES see under **PHOSPHOTRANSFERASES, ATP**

NUCLEOSIDE Q see under **GUANOSINE**

NUCLEOSIDES

Depurination and imidazole ring-opening in nucleosides and DNA alkylated by styrene oxide. Vodička P, et al. **Chem Biol Interact** 1988;68(1-2):117–26

Interaction of vanadate with monosaccharides and nucleosides: a multinuclear NMR study. Geraldes CF, et al. **J Inorg Biochem** 1989 Feb;35(2):79–93

Sequence-defined dimer block synthesis from unprotected nucleoside. Shimidzu T, et al. **Nucleic Acids Symp Ser** 1988; (19):1–4

[Synthesis and properties of DNA duplexes containing hydrocarbon bridges instead of a nucleoside residue] Kuznetsova SA, et al. **Bioorg Khim** 1988 Dec; 14(12):1656–62 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

[Effects of a nucleoside and nucleotide mixture on metabolism in hepatectomized rats] Mizobuchi S. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1655–61 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Separation of synthetic cycloalkylated bases, nucleosides and nucleotides by reversed-phase high-performance liquid chromatography. Alick B, et al. **J Chromatogr** 1988 Sep 9;430(2):309–17

Nucleoside analysis of DNA from Trypanosoma brucei and Trypanosoma equiperdum. Crozatier M, et al. **Mol Biochem Parasitol** 1988 Nov;31(2):127–31

BLOOD

Classification of lung cancer patients and controls by chromatography of modified nucleosides in serum. McEntire JE, et al. **Cancer Res** 1989 Feb 15;49(4):1057–62

Nucleoside transport across red cell membranes. Cabantchik ZI. **Methods Enzymol** 1989;173:250–63

CHEMICAL SYNTHESIS

Enzymatic process for the production of pharmacologically useful nucleosides. Shimizu S, et al. **Ann N Y Acad Sci** 1988;542:423–7

Synthesis of pseudo-C-nucleosides. Rauter AP, et al. **Carbohydr Res** 1989 Jun 1;188:19–24

Synthesis and antiviral activity of 3'-C-cyano-3'-deoxynucleosides. Camarasa MJ, et al. **J Med Chem** 1989 Aug;32(8):1732–8

Synthesis of acyclonucleoside hydroxamic acids as inhibitors of ribonucleotide reductase. Farr RA, et al. **J Med Chem** 1989 Aug;32(8):1879–85

Synthesis and biological evaluation of certain C-4 substituted pyrazolo[3,4-b]pyridine nucleosides. Sanghvi YS, et al. **J Med Chem** 1989 May;32(5):945–51

[Compounds similar to acyclovir. I. Synthesis of "complete" analogs of nucleosides] Kochetkova SV, et al. **Bioorg Khim** 1988 Jun;14(6):820–3 (Eng. Abstr.) **(Rus)**

DIAGNOSTIC USE

The in vitro evaluation of nucleoside analogues as probes for use in the noninvasive diagnosis of herpes simplex encephalitis. Tovell DR, et al. **Drug Des Deliv** 1988 Nov; 3(3):213–21

ISOLATION & PURIFICATION

Extraction of intracellular nucleosides and nucleotides with acetonitrile. Au JL, et al. **Clin Chem** 1989 Jan;35(1):48–51

Cytotoxic, fungicidal nucleosides from blue green algae belonging to the Scytonemataceae. Stewart JB, et al. **J Antibiot (Tokyo)** 1988 Aug;41(8):1048–56

METABOLISM

DNA synthesis and nucleoside metabolism in human tonsillar lymphocyte subpopulations. Staub M, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:118–24

Active transport of nucleosides and nucleoside drugs. Jarvis SM, et al. **Biochem Soc Trans** 1989 Jun;17(3):448–50

Structures and functions of mammalian nucleoside transporters. Young JD. **Biochem Soc Trans** 1989 Jun; 17(3):444–7 (44 ref.)

Nucleoside transport in acute leukaemia and lymphoma: close relation to proliferative rate. Wiley JS, et al. **Br J Haematol** 1989 Feb;71(2):203–7

Heterogeneity of nucleoside transport inhibitory sites in heart: a quantitative autoradiographical analysis. Parkinson FE, et al. **Br J Pharmacol** 1989 Jun;97(2):361–70

Methotrexate and dipyridamole combination chemotherapy based upon inhibition of nucleoside salvage in humans. Willson JK, et al. **Cancer Res** 1989 Apr 1;49(7):1866–70

Renal transepithelial transport of nucleosides. Nelson JA, et al. **Drug Metab Dispos** 1988 Nov-Dec;16(6):789–92

Anticonvulsant action of the nucleoside transport inhibitor, soluflazine, on synaptic and non-synaptic epileptogenesis in the guinea-pig hippocampus. Ashton D, et al. **Epilepsy Res** 1988 Mar-Apr;2(2):65–71

Characterization of the nucleoside-binding site inside the Tsx channel of Escherichia coli outer membrane. Reconstitution experiments with lipid bilayer membranes. Benz R, et al. **Eur J Biochem** 1988 Oct 1;176(3):699–705

Inhibition of nucleoside transport by a new series of compounds related to lidoflazine and mioflazine. Ijzerman AP, et al. **Eur J Pharmacol** 1989 Aug 15;172(3):273–81

Subtypes of nucleoside transport inhibitory sites in heart: a quantitative autoradiographical analysis. Parkinson FE, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):69–75

Detection and characterization of a nucleoside transport system in human fibroblast lysosomes. Pisoni RL, et al. **J Biol Chem** 1989 Mar 25;264(9):4850–6

Sodium-dependent nucleoside transport in mouse intestinal epithelial cells. Two transport systems with differing substrate specificities. Vijayalakshmi D, et al. **J Biol Chem** 1988 Dec 25;263(36):19419–23

Biochemical and functional effects of nucleoside transport inhibition in the isolated cat heart. Van Belle H, et al. **J Mol Cell Cardiol** 1989 Aug;21(8):797–805

Nucleoside uptake in Trypanosoma cruzi: analysis of a mutant resistant to tubercidin. Finley RW, et al. **Mol Biochem Parasitol** 1988 Nov;31(2):133–40

Antimalarial action of nitrobenzylthioinosine in combination with purine nucleoside antimetabolites. Gero AM, et al. **Mol Biochem Parasitol** 1989 Apr;34(1):87–97

Assessment of nucleotides, nucleosides, and oxypurines in human donor kidneys. Maessen JG, et al. **Transplant Proc** 1988 Oct;20(5):889–90

PHARMACOKINETICS

Use of formycin B as a general substrate for measuring facilitated nucleoside transport in mammalian cells. Plagemann PG, et al. **Biochim Biophys Acta** 1989 Jan 17; 1010(1):7–15

Nucleoside and nucleobase transport in animal cells. Plagemann PG, et al. **Biochim Biophys Acta** 1988 Oct 11; 947(3):405–43 (247 ref.)

Nucleoside uptake and membrane fluidity studies on N-trifluoroacetyladriamycin-14-O-hemiadipate-treated human leukemia and lymphoma cells. Lameh J, et al. **Cancer Res** 1989 Jun 1;49(11):2905–8

Sodium-dependent uptake of nucleosides by dissociated brain cells from the rat. Johnston ME, et al. **J Neurochem** 1989 Jan;52(1):75–81

PHARMACOLOGY

Inhibition of proliferation and induction of differentiation of human myeloid leukemia cells by novel nucleoside analogs. Honma Y, et al. **Anticancer Res** 1988 Jul-Aug;8(4):695–9

Effects of various nucleosides on antiviral activity and metabolism of 1-beta-D-arabinofuranosyl-E-5-(2-bromovinyl)uracil against herpes simplex virus types 1 and 2. Suzutani T, et al. **Antimicrob Agents Chemother** 1988 Oct; 32(10):1547–51

Efficacies of antiherpesvirus nucleosides against two strains of herpes simplex virus type 1 in Vero and human embryo lung fibroblast cells. Suzutani T, et al. **Antimicrob Agents Chemother** 1988 Jul;32(7):1046–52

A newly developed immunofluorescent assay for determining the Pichinde virus-inhibitory effects of selected nucleoside analogues. Burns NJ 3d, et al. **Antiviral Res** 1988 Nov; 10(1-3):89–98

Inhibition of DNA synthesis causes stem cell differentiation: induction of teratocarcinoma F9 cell differentiation with nucleoside analogues of DNA-synthesis inhibitors and their inducing abilities counterbalanced specifically by normal nucleosides. Nishimune Y, et al.

Biochem Biophys Res Commun 1989 Sep 29;163(3):1290–7
Enucleation of phagocytic cells with adenine, guanine, and their nucleosides in combination with centrifugation. Saito T, et al. Biol Cell 1988;63(3):287–96
Application of non–hypoxic cell sensitizers in radiobiology and radiotherapy: rationale and future prospects. Iliakis G, et al. Int J Radiat Oncol Biol Phys 1989 May;16(5):1235–41 (55 ref.)
Radiosensitization by a new nucleoside analogue: 1–[2–hydroxy–1–(hydroxymethyl)ethoxy]methyl–2–nitroimidazole (R.P–170). Murayama C, et al. Int J Radiat Oncol Biol Phys 1989 Sep;17(3):575–81
Nucleoside antibiotics: structure, biological activity, and biosynthesis. Isono K. J Antibiot (Tokyo) 1988 Dec; 41(12):1711–39 (176 ref.)
Nucleosides of azathioprine and thiamiprine as antiarthritics. Krenitsky TA, et al. J Med Chem 1989 Jul;32(7):1471–5
Effects of nucleosides and a nucleotide on DNA and RNA syntheses by the salvage and de novo pathway in primary monolayer cultures of hepatocytes and hepatoma cells. Ohyanagi H, et al. JPEN J Parenter Enteral Nutr 1989 Jan–Feb;13(1):51–8
Correlation between preferred sugar ring conformation and activity of nucleoside analogues against human immunodeficiency virus. Van Roey P, et al. Proc Natl Acad Sci U S A 1989 Jun;86(11):3929–33
[The development of pharmacophore models for thymidine kinase–dependent virostatic nucleoside analogs] Folkers G, et al. Arch Pharm (Weinheim) 1989 Jul;322(7):395–8 (Eng. Abstr.) (Ger)

PHYSIOLOGY

Regulation of purine deoxynucleoside phosphorylation by deoxycytidine kinase from human leukemic blast cells. Sarup JC, et al. Biochem Pharmacol 1989 Aug 15; 38(16):2601–7

THERAPEUTIC USE

New prodrugs of acyclic nucleosides with antiviral activity. Winkelmann E, et al. Arzneimittelforschung 1988 Nov; 38(11):1545–8
Testing of nucleoside analogues in cats infected with feline leukemia virus: a model. Tavares L, et al. Intervirology 1989;30 Suppl 1:26–35

TOXICITY

In vitro bone marrow toxicity of nucleoside analogs against human immunodeficiency virus. Inoue T, et al. Antimicrob Agents Chemother 1989 Apr;33(4):576–9

NUCLEOSOMES

Molecular flexibility of extended and compacted polynucleosomes. A steady–state fluorescence polarization study. Härd T, et al. Eur Biophys J 1988;16(4):231–41
A proposal for a possible role of nucleosome positioning in the evolutionary adjustment of introns. Csordas A. Int J Biochem 1989;21(5):455–61 (70 ref.)
Competitive nucleosome reconstitution of polydeoxynucleotides containing oligoguanosine tracts. Jayasena SD, et al. J Mol Biol 1989 Jul 20;208(2):297–306
Linkage reduction allows reconstitution of nucleosomes on DNA microdomains. Negri R, et al. J Mol Biol 1989 Jun 5;207(3):615–9
Generation of different nucleosome spacing periodicities in vitro. Possible origin of cell type specificity. Stein A, et al. J Mol Biol 1988 Oct 20;203(4):1029–43
Effect of nucleosome distortion on the linking deficiency in relaxed minichromosomes. White JH, et al. J Mol Biol 1989 May 5;207(1):193–9
Nucleosomes. Methods Enzymol 1989;170:1–683
[Anticooperative interactions between the nearest neighbor chromatosomes] Nechipurenko IuD. Biofizika 1988 Jul–Aug;33(4):580–3 (Eng. Abstr.) (Rus)
[The structure of nucleosomes containing the mutant H2B histone] Lishanskaia AI, et al. Dokl Akad Nauk SSSR 1988; 300(2):482–5 (Rus)

ANALYSIS

Nucleosomal fragments in serum may directly reflect cell–mediated cytotoxic activity in vivo. Boender PJ, et al. Clin Immunol Immunopathol 1989 Oct;53(1):87–98
Chromatin reorganization during emergence of malignant Friend tumors: early changes in H2A and H2B variants and nucleosome repeat length. Leonardson KE, et al. Exp Cell Res 1989 Jan;180(1):209–19
Digestion of nucleosomes with deoxyribonucleases I and II. Lutter LC. Methods Enzymol 1989;170:264–9
The structure of nucleosomal core particles within transcribed and repressed gene regions. Studitsky VM, et al. Nucleic Acids Res 1988 Dec 9;16(23):11187–205
[Comparative study of nucleosome particles in chromatin from normal and tumor cells. I. Structural parameters] Sapozhnikova NA, et al. Mol Biol (Mosk) 1988 Sep–Oct; 22(5):1345–52 (Eng. Abstr.) (Rus)
[Comparative study of nucleosome particles in chromatin from normal and tumor cells. II. Reconstitution, compaction and association induced by ionic strength of a solution] Sapozhnikova NA, et al. Mol Biol (Mosk) 1988 Sep–Oct;22(5):1353–8 (Eng. Abstr.) (Rus)
[The structure of nucleosomal core particles located on the transcribed genome regions] Studitskiĭ VM, et al. Mol Biol (Mosk) 1988 May–Jun;22(3):706–17 (Eng. Abstr.) (Rus)

DRUG EFFECTS

Release of nucleosomes from nuclei by bleomycin–induced DNA strand scission. Hamana K, et al. Biochem Int 1989 May;18(5):971–9
Internucleosomal cleavage and chromosomal degradation by bleomycin and phleomycin in yeast. Moore CW. Cancer Res 1988 Dec 1;48(23):6837–43
Internucleosomal DNA cleavage precedes diphtheria toxin–induced cytolysis. Evidence that cell lysis is not a simple consequence of translation inhibition. Chang MP, et al. J Biol Chem 1989 Sep 15;264(26):15261–7

GENETICS

Photofootprint of nucleosome core DNA in intact chromatin having different structural states. Gale JM, et al. J Mol Biol 1988 Dec 20;204(4):949–58

IMMUNOLOGY

A monoclonal anti–double–stranded DNA autoantibody binds to a 94–kDa cell–surface protein on various cell types via nucleosomes or a DNA–histone complex. Jacob L, et al. Proc Natl Acad Sci U S A 1989 Jun;86(12):4669–73

METABOLISM

Interaction of rat testis protein, TP, with nucleosome core particle. Singh J, et al. Biochem Int 1988 Oct;17(4):701–10
Heparin binds to intact mononucleosomes and induces a novel unfolded structure. Brotherton TW, et al. Biochemistry 1989 Apr 18;28(8):3518–25
Changes in nucleosome repeat lengths precede replication in the early replicating metallothionein II gene region of cells synchronized in early S phase. D'Anna JA, et al. Biochemistry 1989 Apr 4;28(7):2895–902
Interparticle interactions and structural changes of nucleosome core particles in low–salt solution. Hirai M, et al. Biochemistry 1988 Oct 4;27(20):7924–31
Salt–induced release of DNA from nucleosome core particles. Yager TD, et al. Biochemistry 1989 Mar 7; 28(5):2271–81
Nucleosome loss activates yeast downstream promoters in vivo. Han M, et al. Cell 1988 Dec 23;55(6):1137–45
Histone acetylation reduces nucleosome core particle linking number change. Norton VG, et al. Cell 1989 May 5; 57(3):449–57
Transcriptional regulation by the immediate early protein of pseudorabies virus during in vitro nucleosome assembly. Workman JL, et al. Cell 1988 Oct 21;55(2):211–9
Specific glucocorticoid receptor binding to DNA reconstituted in a nucleosome. Perlmann T, et al. EMBO J 1988 Oct;7(10):3073–9
Metabolic behaviors of the core histones in proliferating Friend cells. Tsvetkov S, et al. Exp Cell Res 1989 Jan; 180(1):94–105
Accessibility of histone H1(0) and its structural domains to antibody binding in mononucleosomes. Banchev T, et al. FEBS Lett 1989 Mar 13;245(1–2):245–8
Differences among chicken erythrocyte histones H1 and H5 in associating with H1–depleted polynucleosomes. Klingholz R, et al. Int J Biochem 1988;20(11):1321–5
Analysis of the binding of high mobility group protein 17 to the nucleosome core particle by 1H NMR spectroscopy. Cook GR, et al. J Biol Chem 1989 Jan 25;264(3):1799–803
Site–specific aflatoxin B1 adduction of sequence–positioned nucleosome core particles. Moyer R, et al. J Biol Chem 1989 Jul 25;264(21):12226–31
Enhanced DNA repair synthesis in hyperacetylated nucleosomes. Ramanathan B, et al. J Biol Chem 1989 Jul 5;264(19):11026–34
The assembly of regularly spaced nucleosomes in the Xenopus oocyte S–150 extract is accompanied by deacetylation of histone H4. Shimamura A, et al. J Biol Chem 1989 Aug 25;264(24):14524–30
Mobile histone tails in nucleosomes. Assignments of mobile segments and investigations of their role in chromatin folding. Smith RM, et al. J Biol Chem 1989 Jun 25; 264(18):10574–81
Association of nucleosome core particle DNA with different histone oligomers. Transfer of histones between DNA–(H2A,H2B) and DNA–(H3,H4) complexes. Aragay AM, et al. J Mol Biol 1988 Nov 5;204(1):141–54
Use of selectively trypsinized nucleosome core particles to analyze the role of the histone "tails" in the stabilization of the nucleosome. Ausio J, et al. J Mol Biol 1989 Apr 5;206(3):451–63
Statistical positioning of nucleosomes by specific protein–binding to an upstream activating sequence in yeast. Fedor MJ, et al. J Mol Biol 1988 Nov 5; 204(1):109–27
Formation, stability and core histone positioning of nucleosomes reassembled on bent and other nucleosome–derived DNA. Pennings S, et al. J Mol Biol 1989 May 5;207(1):183–92
Mapping DNA–protein interactions by cross–linking. Mirzabekov AD, et al. Methods Enzymol 1989;170:386–408
Binding of the transition metal ion [(H2O)(NH3)5Ru(II)]2+ to nucleosomal core and internucleosomal DNA. Marx KA, et al. Mol Cell Biochem 1989 Apr 11;86(2):155–62
Studies on DNA topoisomerase activity during in vitro chromatin assembly. Sekiguchi JA, et al. Mol Cell Biochem 1988 Oct;83(2):195–205
Assembly of RNA polymerase II preinitiation complexes before assembly of nucleosomes allows efficient initiation of transcription on nucleosomal templates. Knezetic JA, et al. Mol Cell Biol 1988 Aug;8(8):3114–21
Multistep pathway for replication–dependent nucleosome assembly. Fotedar R, et al. Proc Natl Acad Sci U S A 1989 Sep;86(17):6459–63
[Mechanism of incorporation of DNA, RNA and reconstituted nucleosomes into neutrophils] Zakharian RA, et al. Dokl Akad Nauk SSSR 1988;302(6):1498–500 (Rus)
[Mechanism of formation of associated oligonucleosomes during electrophoresis] Spirin KS, et al. Mol Biol (Mosk) 1988 Nov–Dec;22(6):1530–8 (Eng. Abstr.) (Rus)

PHYSIOLOGY

On the displacement of histones from DNA by transcription. Lorch Y, et al. Cell 1988 Dec 2;55(5):743–4
Thermal stability of nucleosomes studied in situ by flow cytometry: effect of ionic strength and n–butyrate. Darzynkiewicz Z, et al. Exp Cell Res 1989 Feb;180(2):551–6
In physiological salt conditions the core proteins of the nucleosomes in large chromatin fragments denature at 73 degrees C and the DNA unstacks at 85 degrees C. Almagor M, et al. J Biol Chem 1989 Apr 15;264(11):6515–9
Characterization of the repressed 5S DNA minichromosomes assembled in vitro with a high–speed supernatant of Xenopus laevis oocytes. Shimamura A, et al. Mol Cell Biol 1988 Oct;8(10):4257–69
Generation of a nucleosome–free promoter region in SV40 does not require T–antigen binding to site I. Kube D, et al. Virology 1989 Sep;172(1):100–5

RADIATION EFFECTS

[Electrophoretic analysis of the internucleosome fragmentation of DNA in irradiated thymocytes of rats] Riabchenko NI, et al. Radiobiologiia 1989 Jan–Feb; 29(1):48–53 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

Studies of histidine phosphorylation by a nuclear protein histidine kinase show that histidine–75 in histone H4 is masked in nucleosome core particles and in chromatin. Wei YF, et al. Arch Biochem Biophys 1989 Feb 1;268(2):546–50
Preparation and structural characterization of nucleosomal core particles lacking one H2A.H2B dimer. de la Escalera S, et al. Biochem Biophys Res Commun 1988 Dec 15; 157(2):541–7
Nucleosome reconstitution of core–length poly(dG).poly(dC) and poly(rG–dC).poly(rG–dC). Jayasena SD, et al. Biochemistry 1989 Feb 7;28(3):975–80
Structural changes of nucleosomal particles and isolated core–histone octamers induced by chemical modification of lysine residues. Nieto MA, et al. Biochemistry 1988 Jul 26;27(15):5635–40
Reconstitution of nucleosomes in vitro with a plasmid carrying the long terminal repeat of Moloney murine leukemia virus. Kimura T, et al. Biochim Biophys Acta 1989 Apr 12;1007(3):318–24
Nonhistone proteins HMG1 and HMG2 suppress the nucleosome assembly at physiological ionic strength. Waga S, et al. Biochim Biophys Acta 1989 Mar 1;1007(2):209–14
The helical repeat of nucleosome–wrapped DNA [letter] Cell 1989 Jan 13;56(1):9–11
Change in the pattern of histone binding to DNA upon transcriptional activation. Nacheva GA, et al. Cell 1989 Jul 14;58(1):27–36
Chromatin folding modulates nucleosome positioning in yeast minichromosomes. Thoma F, et al. Cell 1988 Dec 23; 55(6):945–53
Asymmetry and polarity of nucleosomes in chicken erythrocyte chromatin. Satchwell SC, et al. EMBO J 1989 Jan;8(1):229–38
Footprinting of linker histones H5 and H1 on the nucleosome. Staynov DZ, et al. EMBO J 1988 Dec 1;7(12):3685–91
The superstructure of chromatin and its condensation mechanism. V. Effect of linker length, condensation by multivalent cations, solubility and electric dichroism properties. Koch MH, et al. Eur Biophys J 1988; 16(3):177–85
Analysis of supra–nucleosome particles from unfertilized eggs of sea urchins. Imschenetzky M, et al. Exp Cell Res 1989 Jun;182(2):436–44
Nucleosomelike structures associated with chromosomes of the archaebacterium Halobacterium salinarium. Shioda M, et al. J Bacteriol 1989 Aug;171(8):4514–7
The effect of poly(ADP–ribosyl)ation on native and H1–depleted chromatin. A role of poly(ADP–ribosyl)ation on core nucleosome structure. Huletsky A, et al. J Biol Chem 1989 May 25;264(15):8878–86
During latency, herpes simplex virus type 1 DNA is associated with nucleosomes in a chromatin structure. Deshmane SL, et al. J Virol 1989 Feb;63(2):943–7
Preparation and application of immunological probes for nucleosomes. Bustin M. Methods Enzymol 1989;170:214–51
Use of fluorescent probes to study nucleosomes. Daban JR,

et al. **Methods Enzymol** 1989;170:192–214
Electrophoretic analyses of nucleosomes and other protein–DNA complexes. Huang SY, et al. **Methods Enzymol** 1989;170:116–42
Preparation of nucleosomes and chromatin. Kornberg RD, et al. **Methods Enzymol** 1989;170:3–14
Use of antihistone antibodies with nucleosomes. Muller S, et al. **Methods Enzymol** 1989;170:251–63
Analysis of nucleosome positioning by indirect end–labeling and molecular cloning. Nedospasov SA, et al. **Methods Enzymol** 1989;170:408–20
Analysis of nucleosome positioning by in vitro reconstitution. Neubauer B, et al. **Methods Enzymol** 1989;170:630–44
Sucrose gradient techniques and applications to nucleosome structure. Noll H, et al. **Methods Enzymol** 1989;170:55–116
Electron microscopy of simian virus 40 minichromosomes. Oudet P, et al. **Methods Enzymol** 1989;170:166–79
Assembly of nucleosomes and chromatin in vitro. Rhodes D, et al. **Methods Enzymol** 1989;170:575–85
Crystallization of nucleosome core particles. Rhodes D, et al. **Methods Enzymol** 1989;170:420–8
Chemical radiolabeling of lysines that interact strongly with DNA in chromatin. Thomas JO. **Methods Enzymol** 1989; 170:369–85
Immunoelectron microscopy of nucleosomes. Woodcock CL. **Methods Enzymol** 1989;170:180–92
The effects of transcription on the nucleosome structure of four Dictyostelium genes. Pavlovic J, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2315–32
Dependence of the linking deficiency of supercoiled minichromosomes upon nucleosome distortion. White JH, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5827–35

NUCLEOTIDASES

Structural comparison of the 68 kDa laminin–binding protein and 5'-nucleotidase from chicken muscular sources: evidence against a gross structural similarity of both proteins. Risse G, et al. **Biochim Biophys Acta** 1989 Feb 23;994(3):258–63
Determination of base composition of DNA by high performance liquid chromatography of its nuclease P1 hydrolysate. Kumagai M, et al. **Nucleic Acids Symp Ser** 1988;(19):65–8

ANALYSIS

Ecto–5'-nucleotidase: localization in rat kidney by light microscopic histochemical and immunohistochemical methods. Dawson TP, et al. **J Histochem Cytochem** 1989 Jan;37(1):39–47
Histochemical observations on unique rod–like cells in the developing retina of the normal rat. Araki M, et al. **J Neurocytol** 1988 Apr;17(2):179–88
Delayed astrocyte reaction following facial nerve axotomy. Graeber MB, et al. **J Neurocytol** 1988 Apr;17(2):209–20
Cytochemical localization of plasma membrane enzyme markers during interiorization of tachyzoites of Toxoplasma gondii by macrophages. de Carvalho L, et al. **J Protozool** 1989 Mar–Apr;36(2):164–70
Histochemical localization of 5'-nucleotidase in the reeler mutant mouse. Eisenman LM. **Neurosci Lett** 1988 Nov 22; 94(1–2):70–5
Ecto–5'-nucleotidase of cultured rat mesangial cells. Stefanovic V, et al. **Renal Physiol Biochem** 1988 Jan–Feb; 11(1–2):89–102

ANTAGONISTS & INHIBITORS

Protection of the kidney against ischemic injury by inhibition of 5'-nucleotidase. Van Waarde A, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):F298–305
Inhibition of lymphocyte 5'-nucleotidase by lectins: effects of lectin specificity and cross–linking ability. Sharom FJ, et al. **Biochem Cell Biol** 1988 Jul;66(7):715–23
Low level lead and inhibition of erythrocyte pyrimidine nucleotidase. Angle CR, et al. **Environ Res** 1978 Oct; 17(2):296–302
The effects of some possible inhibitors of ectonucleotidases on the breakdown and pharmacological effects of ATP in the guinea–pig urinary bladder. Hourani SM, et al. **Gen Pharmacol** 1989;20(4):413–6
Levamisole inhibition of alkaline phosphatase and 5'-nucleotidase of bovine milk fat globule membranes. Khodaparast–Sharifi SH, et al. **Int J Biochem** 1989; 21(4):401–5
New 5'-nucleotidase inhibitors, NPF–86IA, NPF–86IB, NPF–86IIA, and NPF–86IIB from Areca catechu; Part II. Anti–tumor effects. Iwamoto M, et al. **Planta Med** 1988 Oct;54(5):422–5
New 5'-nucleotidase inhibitors, NPF–86IA, NPF–86IB, NPF–86IIA, and NPF–86IIB from Areca catechu; Part I. Isolation and biological properties. Uchino K, et al. **Planta Med** 1988 Oct;54(5):419–22

BIOSYNTHESIS

The effect of sorbose on NAD(P)ase production by Aspergillus nidulans. da–Silva R, et al. **Braz J Med Biol Res** 1988;21(4):735–45
Cloning and expression of the 5'-nucleotidase gene of Vibrio parahaemolyticus in Escherichia coli and overproduction of the enzyme. Sakai Y, et al. **J Biochem (Tokyo)** 1989 May;105(5):841–6

BLOOD

Decreased B lymphocyte ecto–5'nucleotidase and increased adenosine deaminase in mononuclear cells from patients infected with human immunodeficiency virus. Dalh Christensen L, et al. **APMIS** 1988 Oct;96(10):882–8
Effect of lead exposure on some biological indices related to porphyrin metabolism and the activity of erythrocyte pyrimidine 5'-nucleotidase in the mice. Tomokuni K, et al. **Arch Toxicol** 1989;63(1):23–8
Patterns of adenosine deaminase, ecto–5'-nucleotidase, poly(A)polymerase and surface light chain expression in chronic lymphocytic leukemias. Trangas T, et al. **Blut** 1989 Apr;58(4):187–93
Response of erythrocyte pyrimidine 5'-nucleotidase (P5N) activity in workers exposed to lead. Ichiba M, et al. **Br J Ind Med** 1988 Oct;45(10):718–9
Recommended methods for an additional red cell enzyme (pyrimidine 5'–nucleotidase) assay and the determination of red cell adenosine–5'-triphosphate, 2,3–diphosphoglycerate and reduced glutathione. International Committee for Standardization in Haematology. **Clin Lab Haematol** 1989;11(2):131–8
Serum enzymes in head and neck cancer. IV: 5–nucleotidase. Lal H, et al. **J Laryngol Otol** 1989 Feb;103(2):200–2
Early changes in bile secretion following relief of short–term biliary obstruction in the rat. Roma MG, et al. **Medicina (B Aires)** 1988;48(4):381–8
Observations on gamma–glutamyl transferase, 5'-nucleotidase and leucine aminopeptidase activities in the plasma of the horse. West HJ. **Res Vet Sci** 1989 May; 46(3):301–6
[Diagnostic value of 5'nucleotidase in primary and secondary neoplasms of the liver] Tozzoli R, et al. **Chir Ital** 1988 Apr;40(2):146–51 (Eng. Abstr.) **(Ita)**
[Relationship between activity of erythrocyte pyrimidine 5'-nucleotidase (P5N) and concentration of magnesium or zinc in blood in workers exposed to lead] Ichiba M, et al. **Sangyo Igaku** 1988 Sep;30(5):408–9 **(Jpn)**
[5'-nucleotidase activity in the blood serum of women with malignant neoplasms of the genital organs and chronic inflammatory conditions of the adnexa uteri] Sieroń G, et al. **Ginekol Pol** 1988 Jul;59(7):435–9 (Eng. Abstr.) **(Pol)**
[Changes in the activities of enzymes of metabolism of DNA precursors in peptic ulcer and cancer of the stomach] Borzenko BG. **Klin Med (Mosk)** 1989 May;67(5):87–91 (Eng. Abstr.) **(Rus)**
[Age–related dynamics of the activity of the enzymes involved in the metabolism of adenosine in normal subjects and in oncologic patients] Borzenko BG, et al. **Lab Delo** 1988;(11):53–7 (Eng. Abstr.) **(Rus)**
[5'-nucleotidase activity in the blood in chronic diseases of the liver and biliary tract] Loginov AS, et al. **Sov Med** 1989;(1):10–2 (Eng. Abstr.) **(Rus)**
[Assessment of erythrocyte pyrimidine 5'-nucleotidase activity in the detection and early diagnosis of lead poisoning. A comparison with zinc–protoporphyrin] Brunet M, et al. **Med Clin (Barc)** 1988 Oct 29;91(14):521–4 (Eng. Abstr.) **(Spa)**

DEFICIENCY

Aplastic crisis due to human B19 parvovirus infection in red cell pyrimidine–5'-nucleotidase deficiency. Rechavi G, et al. **Acta Haematol (Basel)** 1989;82(1):46–9
Pyrimidine nucleotides impair phosphoribosylpyrophosphate (PRPP) synthetase subunit aggregation by sequestering magnesium. A mechanism for the decreased PRPP synthetase activity in hereditary erythrocyte pyrimidine 5'-nucleotidase deficiency. Lachant NA, et al. **Biochim Biophys Acta** 1989 Jan 19;994(1):81–8
Recommended screening test for pyrimidine 5'-nucleotidase deficiency. International Committee for Standardization in Haematology. **Clin Lab Haematol** 1989;11(1):55–6
Emergence of activated lymphocytes in CD4 and CD8 subpopulations of multiple myeloma: correlation with the expansion of suppressor T–cells (CD8+ OKM1+) and ecto–5'nucleotidase deficiency. Massaia M, et al. **J Clin Lab Immunol** 1988 Jun;26(2):89–95

GENETICS

Assignment of ecto–5'-nucleotidase to human chromosome 6. Boyle JM, et al. **Hum Genet** 1988 Dec;81(1):88–92
Regional localization of human ecto–5' nucleotidase to chromosome 6q14–q21. Boyle JM, et al. **Hum Genet** 1989 Sep;83(2):179–80
Isolation, molecular characterization and expression of the ushB gene of Salmonella typhimurium which encodes a membrane–bound UDP–sugar hydrolase. Garrett AR, et al. **Mol Microbiol** 1989 Feb;3(2):177–86

IMMUNOLOGY

Antibodies to 5'-nucleotidase (CD73), a glycosyl–phosphatidylinositol–anchored protein, cause human peripheral blood T cells to proliferate. Thompson LF, et al. **J Immunol** 1989 Sep 15;143(6):1815–21
Functional characterization of ecto–5'-nucleotidase–positive and –negative human T lymphocytes. Thompson LF, et al. **J Immunol** 1989 Mar 1;142(5):1518–22

ISOLATION & PURIFICATION

Purification and characterization of nuclease I associated with rye germ ribosomes. Siwecka MA, et al. **Acta Biochim Pol** 1989;36(1):45–62
Identification and characteristics of a novel mitochondrial 5'-nucleotidase in rat liver. Henke W, et al. **Biochem Int** 1989 Apr;18(4):833–44
Human placental ecto–5'-nucleotidase: isoforms and chemical crosslinking products of the membrane–bound and isolated enzyme. Buschette–Brambrink S, et al. **Biol Chem Hoppe Seyler** 1989 Jan;370(1):67–74
Purification and properties of a 5'-nucleotidase from rat renal membranes. Le Hir M, et al. **Enzyme** 1989;41(2):87–93
Purification and characterization of membrane–bound 5'-nucleotidase of Vibrio parahaemolyticus. Itami H, et al. **J Biochem (Tokyo)** 1989 May;105(5):785–9

METABOLISM

Cerium–induced light–microscopic demonstration of 5'-nucleotidase activity in the lymphatic capillaries of the proximal oesophagus of the rat. Werner JA, et al. **Acta Histochem (Jena)** 1989;85(1):15–21
AMP and IMP dephosphorylation by soluble high– and low–Km 5'-nucleotidases. Spychala J, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):E386–91
Assessment of enzyme inhibition or stimulation in plasma membrane preparations. Mackinnon WB, et al. **Anal Biochem** 1988 Dec;175(2):386–9
Solubilization, characterization, and detergent interactions of lymphocyte 5'-nucleotidase. Loe DW, et al. **Biochem Cell Biol** 1989 Apr–May;67(4–5):214–23
Further serum related alterations in the activities of some membrane marker enzymes in normal and virus transformed cells. Tenang EM, et al. **Biochem Int** 1989 Jan; 18(1):197–202
5'-Nucleotidase activity and adenosine formation in stimulated, hypoxic and underperfused rat heart. Headrick JP, et al. **Biochem J** 1989 Jul 15;261(2):541–50
Changes in the activities of adenosine–metabolizing enzymes in six regions of the rat brain on chemical induction of hypothyroidism. Mazurkiewicz D, et al. **Biochem J** 1989 Jul 15;261(2):667–72
Purification and properties of a novel nucleotide–hydrolysing enzyme (5'-nucleotidase) from Boophilus microplus. Willadsen P, et al. **Biochem J** 1989 Feb 15;258(1):79–85
Stimulation by glycerate 2,3–bisphosphate: a common property of cytosolic IMP–GMP 5'-nucleotidase in rat and human tissues. Bontemps F, et al. **Biochim Biophys Acta** 1989 Jul 27;997(1–2):131–4
Activity of myelin membrane Na+/K+–ATPase and 5'-nucleotidase in relation to phospholipid acyl profiles, ganglioside composition and phosphoinositides in developing brains of undernourished rats. Shantharam P, et al. **Biochim Biophys Acta** 1989 Jun 26;982(1):115–22
Evidence for the direct interaction of chicken gizzard 5'-nucleotidase with laminin and fibronectin. Stochaj U, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):385–92
5'-nucleotidase activity in prostatic carcinoma and benign prostatic hyperplasia. Rackley RR, et al. **Cancer Res** 1989 Jul 1;49(13):3702–7
Ring–opened 7–methylguanine nucleotides are resistant to nuclease P1 digestion and good substrates to polynucleotide kinase. Hemminki K. **Carcinogenesis** 1989 Sep;10(9):1761–3
A new sensitive 32P–postlabeling assay based on the specific enzymatic conversion of bulky DNA lesions to radiolabeled dinucleotides and nucleoside 5'-monophosphates. Randerath K, et al. **Carcinogenesis** 1989 Jul;10(7):1231–9
Enzymes involved in adenine nucleotide metabolism of developing chick embryo liver. Wegelin I, et al. **Comp Biochem Physiol [B]** 1978;61(2):327–9
Differences in the release of 5'-nucleotidase and alkaline phosphatase from plasma membrane of several cell types by PI–PLC. Zekri M, et al. **Comp Biochem Physiol [B]** 1989;93(3):673–9
Recycling of 5'-nucleotidase in a rat hepatoma cell line. van den Bosch RA, et al. **EMBO J** 1988 Nov;7(11):3345–51
Insulin–induced decrease in 5'-nucleotidase activity in skeletal muscle membranes. Klip A, et al. **FEBS Lett** 1988 Oct 10;238(2):419–23
A quantitative histochemical study of 5'-nucleotidase activity in rat liver using the lead salt method and polyvinyl alcohol. Frederiks WM, et al. **Histochem J** 1988 Apr; 20(4):207–14
Role of inositol starvation on ecto–5'-nucleotidase activity during mitogen–induced lymphocyte activation. Hauschildt S, et al. **Immunol Lett** 1988 Sep;19(1):71–6
Difference in cell surface 5'-nucleotidase activity, protein iodination and membrane properties between mouse lymphoma and rat adenocarcinoma cell variants with low and high–metastatic potential. Haeffner EW, et al. **Int J Biochem** 1988;20(9):929–35
Rat spleen cytoplasmic nucleotidase: characterization and its physiological significance. Hokari S, et al. **Int J Biochem** 1988;20(12):1405–10
Cytochemical localization of beta–NADPase and TMPase in B cells of pancreas. Beaudoin AR, et al. **Int J Pancreatol** 1989 Mar;4(2):199–205
5'-Nucleotidase of human placental trophoblastic microvilli possesses cobalt–stimulated FAD pyrophosphatase activity. Lee RS, et al. **J Biol Chem** 1988 Oct 15;263(29):14878–83
Enzymatic analysis of isomeric trithymidylates containing ultraviolet light–induced cyclobutane pyrimidine dimers. I. Nuclease P1–mediated hydrolysis of the intradimer phosphodiester linkage. Liuzzi M, et al. **J Biol Chem** 1989

Apr 15;264(11):6355–63
High Km soluble 5'-nucleotidase from human placenta. Properties and allosteric regulation by IMP and ATP. Spychala J, et al. **J Biol Chem** 1988 Dec 15; 263(35):18759–65
Ultrastructural localization of CMPase, TPPase, and NADPase activity in neurons, satellite cells, and Schwann cells in frog dorsal root ganglia. Bennett G, et al. **J Histochem Cytochem** 1989 Feb;37(2):165–72
The generation of alloreactive cytotoxic T lymphocytes requires the expression of ecto-5'nucleotidase activity. Massaia M, et al. **J Immunol** 1988 Dec 1;141(11):3768–75
Disparate effects of dietary fatty acids on activity of 5'-nucleotidase of rat liver plasma membrane. Zuniga ME, et al. **J Nutr** 1989 Feb;119(2):152–60
Macrophages selectively stimulate ecto-5'-nucleotidase activity of cultured mesangial cells. Stefanovic V, et al. **Kidney Int** 1989 Aug;36(2):249–56
The role of 5'nucleotidase in therapy–resistance of childhood leukemia. Pieters R, et al. **Med Hypotheses** 1988 Sep; 27(1):77–80
Leishmania mexicana amazonensis: heterogeneity in 5'-nucleotidase and peroxidase activities of mononuclear phagocytes during in vivo and in vitro infection. Côrte-Real S, et al. **Mem Inst Oswaldo Cruz** 1988 Jan–Mar; 83(1):113–21
Phosphorylation of 2',3'-dideoxyinosine by cytosolic 5'-nucleotidase of human lymphoid cells. Johnson MA, et al. **Mol Pharmacol** 1989 Aug;36(2):291–5
5'-Nucleotidase and adenosine deaminase in developing fetal guinea pig brain and the effect of maternal hypoxia. Mishra OP, et al. **Neurochem Res** 1988 Nov;13(11):1055–60
5'-Nucleotidase and the mabQ113 antigen share a common distribution in the cerebellar cortex of the mouse. Eisenman LM, et al. **Neuroscience** 1989;31(1):231–5
Enzyme–histochemical visualization of lymphatic capillaries in the mouse tongue: light and electron microscopic study. Kato S, et al. **Okajimas Folia Anat Jpn** 1989 Mar; 65(6):391–403
Comparison of 5'-nucleotidase activities among cultured murine melanoma cell lines. Moody D, et al. **Pigment Cell Res** 1989 Jan–Feb;2(1):14–6
[Influence of electro acupuncture and electroacupuncture–adrenalectomy upon 5'-nucleotidase in the nuclets supraopticus] Wang ZY, et al. **Chen Tzu Yen Chiu** 1988;13(2):110–3, 118 (Eng. Abstr.) **(Chi)**
[Observation on ultrastructural enzyme cytochemistry of activated macrophages] Guo SY. **Chung–hua Ping Li Hsueh Tsa Chih** 1988 Sep;17(3):210–2 (Eng. Abstr.) **(Chi)**
[Histocytochemical studies on hematoporphyrin photoradiation effect on two enzymes of human liver cancer cells in nude mice] Peng Q, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 May;9(3):272–5 (Eng. Abstr.) **(Chi)**
[P–chiral phosphates—the tools for studying the stereochemistry of enzymatic reactions of the transfer of phosphate or nucleotidyl groups] Niewiarowski W. **Postepy Biochem** 1988;34(1–2):81–114 (75 ref.) **(Pol)**
[Enzyme activity of adenosine metabolism in human natural killers (NK cells) during the activation and suppression of their cytotoxic activity] Umanskiĭ VIu, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):438–40 (Eng. Abstr.) **(Rus)**
[Effect of the prostaglandin E produced by tumor cells on the enzymatic activity of adenosine metabolism and on human natural killer cytotoxic activity] Umanskiĭ VIu, et al. **Eksp Onkol** 1989;11(3):60–3 (Eng. Abstr.) **(Rus)**
[Activity of adenosine metabolism enzymes and spontaneous chemiluminescence in macrophages in the tumor growth process] Umanskiĭ VIu, et al. **Ukr Biokhim Zh** 1989 Mar–Apr;61(2):109–11 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Cytosolic purine 5'-nucleotidases of rat liver and human red blood cells: regulatory properties and role in AMP dephosphorylation. Van den Berghe G, et al. **Adv Enzyme Regul** 1988;27:297–311

NUCLEOTIDE DEAMINASES

ANALYSIS

Two forms of AMP deaminase in bovine heart. Składanowski AC, et al. **Acta Biochim Pol** 1988;35(1):29–37

ANTAGONISTS & INHIBITORS

The influence of phosphatidate bilayers on pig heart AMP deaminase. Crucial role of pH–dependent lipid–phase transition. Woźniak M, et al. **Biochem J** 1988 Nov 1; 255(3):977–81

BLOOD

Radioisotopic assay for erythrocyte adenosine 5'-monophosphate deaminase. Dale GL. **Clin Chim Acta** 1989 Jun 15;182(1):1–7
Regulation of avian erythrocyte AMP–deaminase. Kruckeberg WC, et al. **Comp Biochem Physiol [B]** 1979; 62(3):251–8
Erythrocyte AMP–deaminase: an investigation of the increase in activity during chick maturation. Kruckeberg WC, et al. **Comp Biochem Physiol [B]** 1978;61(4):559–63
Activation by calcium of AMP deaminase from the human red cell. Almaraz L, et al. **FEBS Lett** 1989 Feb 27; 244(2):417–20

DEFICIENCY

The deamination of adenosine and adenosine monophosphate in Plasmodium falciparum–infected human erythrocytes: in vitro use of 2'deoxycoformycin and AMP deaminase–deficient red cells. Roth E Jr, et al. **Blood** 1989 Aug 15;74(3):1121–5
Myoadenylate deaminase deficiency: fact and fancy [letter] Fishbein WN. **Muscle Nerve** 1989 Feb;12(2):158–9
Myoadenylate deaminase deficiency in children. Ashwal S, et al. **Pediatr Neurol** 1985 May–Jun;1(3):185–91 (25 ref.)

GENETICS

Expression of three stage–specific transcripts of AMP deaminase during myogenesis. Sabina RL, et al. **Mol Cell Biol** 1989 May;9(5):2244–6

ISOLATION & PURIFICATION

Dimeric structure of rat skeletal muscle AMP–deaminase subunit. Haroutunian AV, et al. **Biochem Int** 1988 Aug; 17(2):279–86
Comparative studies on muscle AMP–deaminase—I. Purification, molecular weight, subunit structure and metal content of the enzymes from rat, rabbit, hen, frog and pikeperch. Stankiewicz A, et al. **Comp Biochem Physiol [B]** 1979;62(4):363–9
[Subunit structure of AMP–deaminase from skeletal muscles] Airapetian RL, et al. **Ukr Biokhim Zh** 1988 Sep–Oct; 60(5):9–14 (Eng. Abstr.) **(Rus)**

METABOLISM

Molecular forms of pigeon skeletal muscle AMP deaminase. Kaletha K. **Acta Biochim Pol** 1988;35(4):405–14
Comparative aspects of adenylic acid deaminase and aspartate–2–oxoglutarate aminotransferase. Chandrasena SI, et al. **Comp Biochem Physiol [B]** 1978;61(2):191–4
AMP deaminase in the gill of trout (Salmo gairdneri R.). Modalities of an activation by cellular proteolytic enzymes. Raffin JP, et al. **Comp Biochem Physiol [B]** 1979;62(1):23–9
Comparative studies on muscle AMP–deaminase—II. Regulation by monovalent cations, ATP and orthophosphate of the enzyme from hen, frog and pikeperch muscle. Stankiewicz A, et al. **Comp Biochem Physiol [B]** 1979;62(4):371–4
Enzymes involved in adenine nucleotide metabolism of developing chick embryo liver. Wegelin I, et al. **Comp Biochem Physiol [B]** 1978;61(2):327–9
Properties of 5'-AMP deaminase and its inhibitors with the aid of a continuous fluorimetric assay with formycin-5'-phosphate as substrate. Bzowska A, et al. **Z Naturforsch [C]** 1989 Jul–Aug;44(7–8):581–9

PHYSIOLOGY

Functional significance of AMP deaminase and adenosine deaminase in the aestivating freshwater snail, Pila globosa (swainson): possible neuroendocrine involvement. Reddy GR, et al. **Biochem Int** 1989 Jul;19(1):53–8

NUCLEOTIDE MAPPING

Zygosity determination of multiple pregnancy by deoxyribonucleic acid fingerprints. Azuma C, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):734–6
DNA fingerprints of poultry. Hillel J, et al. **Anim Genet** 1989; 20(2):145–55
An alternative method of oligonucleotide fingerprinting for resolving Newcastle disease virus–specific RNA fragments. Palmieri S, et al. **Avian Dis** 1989 Apr–Jun;33(2):345–50
Analysis of mRNA heterogeneity by ribonuclease H mapping: application to the insulin receptor. Goldstein BJ, et al. **Biochem Biophys Res Commun** 1989 Mar 15; 159(2):664–9
Somatic changes in B–lymphoproliferative disorders (B–LPD) detected by DNA–fingerprinting. de Jong D, et al. **Br J Cancer** 1988 Dec;58(6):773–5
Cross–contamination of human esophageal squamous carcinoma cell lines detected by DNA fingerprint analysis. van Helden PD, et al. **Cancer Res** 1988 Oct 15; 48(20):5660–2
Demonstration of spontaneous XX/XY chimerism by DNA fingerprinting. Farber CM, et al. **Hum Genet** 1989 May; 82(2):197–8
Oligonucleotide fingerprinting of chikungunya virus strains. Banerjee K, et al. **Indian J Med Res** 1988 Jun;87:531–41
Use of DNA bar codes to resolve a canine paternity dispute. Georges M, et al. **J Am Vet Med Assoc** 1988 Nov 1; 193(9):1095–8
Assessment of clonality in gastrointestinal cancer by DNA fingerprinting. Fey MF, et al. **J Clin Invest** 1988 Nov; 82(5):1532–7
RNA fingerprinting of respiratory syncytial virus using ribonuclease protection. Application to molecular epidemiology. Storch GA, et al. **J Clin Invest** 1989 Jun; 83(6):1894–902
Genome fingerprinting of Pseudomonas aeruginosa indicates colonization of cystic fibrosis siblings with closely related strains. Grothues D, et al. **J Clin Microbiol** 1988 Oct; 26(10):1973–7
A transcriptional map of visna virus: definition of the second intron structure suggests a rev–like gene product. Sargan DR, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):1995–2006
Fine mapping of an H–2Kk restricted cytotoxic T lymphocyte epitope in SV40 T antigen by using in–frame deletion mutants and a synthetic peptide. Rawle FC, et al. **J Immunol** 1988 Oct 15;141(8):2734–9
Molecular characterization of serologic recognition sites in the human HLA–A2 molecule. Santos–Aguado J, et al. **J Immunol** 1988 Oct 15;141(8):2811–8
Mapping of the transcriptional regulatory domains responsible for the difference in the promoter activity between mouse C4 and Slp (sex–limited protein) genes. Yu DY, et al. **J Immunol** 1988 Dec 15;141(12):4381–7
Outbreak of poliomyelitis in South Africa investigated by oligonucleotide mapping. Tsilimigras CW, et al. **J Med Virol** 1989 May;28(1):52–6
Contaminated enteral nutrition solutions as a cause of nosocomial bloodstream infection: a study using plasmid fingerprinting. Levy J, et al. **JPEN J Parenter Enteral Nutr** 1989 May–Jun;13(3):228–34
Differences in DNA–fingerprints between remission and relapse in childhood acute lymphoblastic leukemia. Pakkala S, et al. **Leuk Res** 1988;12(9):757–62
Estimation of relatedness by DNA fingerprinting. Lynch M. **Mol Biol Evol** 1988 Sep;5(5):584–99
Fingerprinting trials. **Nature** 1989 Jun 15;339(6225):491–2
DNA fingerprinting. Judge backs technique [news] Anderson A. **Nature** 1989 Aug 24;340(6235):582
Dna fingerprinting. Pitfalls come to light [news] Barinaga M. **Nature** 1989 May 11;339(6220):89
DNA fingerprints: profiles bank on the way [news] McGourty C. **Nature** 1989 Jun 1;339(6223):327
Genomic footprinting with Taq polymerase. Saluz HP, et al. **Nature** 1989 Mar 16;338(6212):277
DNA fingerprinting [letter] Taylor G. **Nature** 1989 Aug 31; 340(6236):672
A general method for efficient non–isotopic labeling of DNA probes cloned in M13 vectors: application to DNA fingerprinting. Macedo AM, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4414
Non–radioactive oligonucleotide fingerprinting in the gel. Zischler H, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4411
Genomic footprinting in mammalian cells with ultraviolet light. Becker MM, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5315–9
Two–dimensional DNA fingerprinting of human individuals. Uitterlinden AG, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2742–6
Misprints. Seeking new methods for forensic DNA typing. Kinoshita J. **Sci Am** 1989 Aug;261(2):12, 12B
Limits to DNA fingerprinting [news] Lewin R. **Science** 1989 Mar 24;243(4898):1549–51
Caution urged on DNA fingerprinting [news] Norman C. **Science** 1989 Aug 18;245(4919):699
[Molecular analysis of R–plasmids harboring in Salmonella typhimurium epidemics in hospital] Chen MJ, et al. **Wei Sheng Wu Hsueh Pao** 1988 Jun;28(2):155–60 (Eng. Abstr.) **(Chi)**
[Genetic fingerprinting as a tool in identification and in the study of paternity] Vassart G, et al. **Rev Med Brux** 1988 Nov;9(9):411–4 (Eng. Abstr.) **(Fre)**
[Epidemiologic study of 2 S. typhimurium outbreaks using plasmid fingerprints] Baumgartner A, et al. **Schweiz Med Wochenschr** 1989 Apr 5;119(13–14):430–3 (Eng. Abstr.) **(Ger)**
[DNA fingerprints and hypervariable regions: genetic marker with many application potentials in medicine and biology] Fey MF. **Schweiz Med Wochenschr** 1989 Jun 10; 119(23):815–25 (56 ref.) (Eng. Abstr.) **(Ger)**
[DNA fingerprinting of Rattus norvegicus: a new approach in genetic analysis] Ivanov PL, et al. **Genetika** 1989 Feb; 25(2):238–49 (Eng. Abstr.) **(Rus)**
[DNA fingerprinting: hypervariable loci and genetic marking] Ivanov PL. **Mol Biol (Mosk)** 1989 Mar–Apr; 23(2):341–7 (16 ref.) (Eng. Abstr.) **(Rus)**
[Deoxyribonucleic acid (DNA) in tests of filiation, paternity and forensic medicine] Pérez–Comas A. **Bol Asoc Med P R** 1989 Apr;81(4):130–3 (22 ref.) (Eng. Abstr.) **(Spa)**

METHODS

Optimized oligonucleotide probes for DNA fingerprinting. Schäfer R, et al. **Electrophoresis** 1988 Aug;9(8):369–74
A high–resolution, fluorescence–based, semiautomated method for DNA fingerprinting. Carrano AV, et al. **Genomics** 1989 Feb;4(2):129–36
Digoxigenated oligonucleotide probes specific for simple repeats in DNA fingerprinting and hybridization in situ. Zischler H, et al. **Hum Genet** 1989 Jun;82(3):227–33
DNA fingerprinting on trial. Lander ES. **Nature** 1989 Jun 15;339(6225):501–5
Improved genetic fingerprinting using RNA probes. Carter RE, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5867
Uranyl mediated photofootprinting reveals strong E. coli RNA polymerase—DNA backbone contacts in the +10 region of the DeoP1 promoter open complex. Jeppesen C, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):4947–56
DNA sequencing with Thermus aquaticus DNA polymerase

and direct sequencing of polymerase chain reaction-amplified DNA. Innis MA, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9436-40

NUCLEOTIDE SEQUENCE see **BASE SEQUENCE**

NUCLEOTIDES

Conformational properties of branched RNA fragments in aqueous solution. **Damha MJ, et al. Biochemistry** 1988 Aug 23;27(17):6403-16

Abstracts of papers presented at the eight meeting of the "Nucleotides and Nucleic Acids" group of the Italian Biochemical Society. May 19-20, 1988, Ancona. **Ital J Biochem** 1989 Mar-Apr;38(2):123A-157A

Crystal structure and stability of a DNA duplex containing A(anti).G(syn) base-pairs. Brown T, et al. **J Mol Biol** 1989 May 20;207(2):455-7

Cyclization of nucleotide analogues as an obstacle to polymerization. **Hill AR Jr, et al. J Mol Evol** 1988 Dec-1989 Feb;28(1-2):170-1

[Additional possibilities of the formation of incorrect nucleotide pairs] Shteinberg SV, et al. **Biofizika** 1988 Nov-Dec;33(6):922-5 (Eng. Abstr.) **(Rus)**

[Ethylation of internucleotide phosphite groups by the oligodeoxyribonucleotide method of oxidative phosphorylation] Griaznov SM, et al. **Bioorg Khim** 1989 Apr;15(4):566-9 (Eng. Abstr.) **(Rus)**

[Substrate specificity of T4 RNA-ligase. The effect of the nucleotide composition of substrates and the size of phosphate donor on the effectiveness of intermolecular ligation] Zhenodarova SM, et al. **Bioorg Khim** 1989 Apr; 15(4):478-83 (Eng. Abstr.) **(Rus)**

[Physico-chemical basis of the genetic code origin: stereochemical analysis of interactions of amino acids and nucleotides based on the progene hypothesis] Al'shtein AD, et al. **Mol Biol (Mosk)** 1988 Sep-Oct;22(5):1411-29 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

[Effects of a nucleoside and nucleotide mixture on metabolism in hepatectomized rats] Mizobuchi S. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1655-61 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Low nanogram detection of nucleotides using fast atom bombardment-mass spectrometry. Weng QM, et al. **Anal Biochem** 1989 Apr;178(1):102-6

Differing effects of chromium(III) and chromium(VI) on nucleotides and DNA. Wolf T, et al. **Arch Toxicol Suppl** 1989;13:48-51

Effects of the O2'hydroxyl group on Z-DNA conformation: structure of Z-RNA and (araC)-[Z-DNA] Teng MK, et al. **Biochemistry** 1989 Jun 13;28(12):4923-8

Sequence effect on the slow degradations of dinucleotides by fast atom bombardment tandem mass spectrometry. Liguori A, et al. **Biomed Environ Mass Spectrom** 1988 Oct; 16(1-12):451-4

A new sensitive 32P-postlabeling assay based on the specific enzymatic conversion of bulky DNA lesions to radiolabeled dinucleotides and nucleoside 5'-monophosphates. Randerath K, et al. **Carcinogenesis** 1989 Jul;10(7):1231-9

The predicted secondary structures of the nucleotide-binding sites of six cation-transporting ATPases lead to a probable tertiary fold. Taylor WR, et al. **Eur J Biochem** 1989 Jan 15;179(1):241-8 (56 ref.)

Synthesis of spin-labeled 2-azido-ATP: evidence for distinct nucleotide-binding sites in calcium pump protein from sarcoplasmic reticulum. Jakobs P, et al. **FEBS Lett** 1989 Aug 28;254(1-2):8-12

Cathepsin D and 2',3'-cyclic nucleotide 3'-phosphohydrolase in developing human foetal brain. Mahajan RG, et al. **Int J Dev Neurosci** 1988;6(2):117-23

Single-step high-performance liquid chromatographic analysis of nucleoside monophosphates for ribonuclease specificity. Abel S, et al. **J Chromatogr** 1988 Jul 27; 446:187-9

Separation of synthetic cycloalkylated bases, nucleosides and nucleotides by reversed-phase high-performance liquid chromatography. Alick B, et al. **J Chromatogr** 1988 Sep 9;430(2):309-17

Kinetics of reaction of cis-diamminedichloroplatinum(II) with DNA. Försti A, et al. **Pharmacol Toxicol** 1989 Jan; 64(1):120-5

BIOSYNTHESIS

Endotoxin shock influence the biosynthesis of free nucleotides and RNA in rat adrenals. Boyadjiev SI, et al. **Agressologie** 1988 Mar;29(3):163-4

Production of a streptomycin-Park nucleotide complex by Streptomyces griseus. Szabó I, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):58-62

Substrate flux through methylenetetrahydrofolate dehydrogenase: predicted effects of the concentration of methylenetetrahydrofolate on its partitioning into pathways leading to nucleotide biosynthesis or methionine regeneration. Green JM, et al. **Biochemistry** 1988 Oct 18; 27(21):8014-22

Substrate inhibition of adenosine phosphorylation in adenosine deaminase deficiency and adenosine-mediated inhibition of PP-ribose-P dependent nucleotide synthesis in hypoxanthine phosphoribosyltransferase deficient erythrocytes. Snyder FF, et al. **J Inherited Metab Dis** 1988; 11(2):174-83

BLOOD

Red-cell pH in tench. Interacting effects of cellular nucleoside triphosphates, Hb-oxygenation and extracellular pH. Jensen FB. **Acta Physiol Scand** 1988 Mar;132(3):431-7

Patterns of purine nucleotides in fish erythrocytes. Leray C. **Comp Biochem Physiol [B]** 1979;64(1):77-82

Nucleotides in lymphocytes of human subjects with zinc deficiency. Meftah S, et al. **J Lab Clin Med** 1989 Aug; 114(2):114-9

[A method of quantitative evaluation of inflammatory-regenerative reactions in clinical traumatology] Okhotskii VP, et al. **Sov Med** 1988;(5):34-5 (Eng. Abstr.) **(Rus)**

CHEMICAL SYNTHESIS

A new synthetic route to nucleotide adducts derived from N-acetylated and unacetylated 4-aminobiphenyl. Underwood GR, et al. **Carcinogenesis** 1988 Oct; 9(10):1817-21

Synthesis and properties of caged nucleotides. Walker JW, et al. **Methods Enzymol** 1989;172:288-301

Sequence-defined dimer block synthesis from unprotected nucleoside. Shimidzu T, et al. **Nucleic Acids Symp Ser** 1988; (19):1-4

[Synthesis of new terminator substrates for DNA-polymerases--- nucleoside-5'-triphosphates with modified carbohydrate residue] Diatkina NB, et al. **Bioorg Khim** 1988 Jun;14(6):815-9 (Eng. Abstr.) **(Rus)**

GENETICS

Specific recognition nucleotides and their DNA context determine the affinity of E2 protein for 17 binding sites in the BPV-1 genome. Li R, et al. **Genes Dev** 1989 Apr; 3(4):510-26

Nucleotide variation and divergence in the histone multigene family in Drosophila melanogaster. Matsuo Y, et al. **Genetics** 1989 May;122(1):87-97

Deviations from expected frequencies of CpG dinucleotides in herpesvirus DNAs may be diagnostic of differences in the states of their latent genomes. Honess RW, et al. **J Gen Virol** 1989 Apr;70 (Pt 4):837-55

Identification of nucleotides critical for activity of the Pseudomonas putida catBC promoter. Aldrich TL, et al. **Mol Gen Genet** 1989 Aug;218(2):266-71

IMMUNOLOGY

Patterns of nucleotide substitutions and implications for the immunological diversity of human immunodeficiency virus. Shimizu N, et al. **FEBS Lett** 1989 Jul 3;250(2):591-5

ISOLATION & PURIFICATION

Extraction of intracellular nucleosides and nucleotides with acetonitrile. Au JL, et al. **Clin Chem** 1989 Jan;35(1):48-51

Application of the fast protein liquid chromatographic system and MonoQ HR 5/5 anion exchanger to the separation of nucleotides. Kremmer T, et al. **J Chromatogr** 1989 Aug 25;493(1):45-52

METABOLISM

Detection of thymidine kinase activity using an assay based on the precipitation of nucleoside monophosphates with lanthanum chloride. Wolcott RM, et al. **Anal Biochem** 1989 Apr;178(1):38-40

Characterization of G25K, a GTP-binding protein containing a novel putative nucleotide binding domain. Polakis PG, et al. **Biochem Biophys Res Commun** 1989 Apr 14; 160(1):25-32

Interaction of different nucleotides with Ca-release channels from heavy sarcoplasmic reticulum. Rubtsov AM, et al. **Biochem Int** 1988 Oct;17(4):629-36

Studies on the unusual behaviour of bovine liver UDP-glucose dehydrogenase in assays at acid and neutral pH and on the presence of tightly bound nucleotide material in purified preparations of this enzyme. Dickinson FM. **Biochem J** 1988 Nov 1;255(3):775-80

Translocation of nucleotide sugars and nucleotide sulphate across membranes of the endoplasmic reticulum and Golgi apparatus. Milla M, et al. **Biochem Soc Trans** 1989 Jun; 17(3):447-8

Flexibility of the myosin heavy chain: direct evidence that the region containing SH1 and SH2 can move 10 A under the influence of nucleotide binding. Huston EE, et al. **Biochemistry** 1988 Dec 13;27(25):8945-52

Interaction of spin-labeled nucleotides with sarcoplasmic reticulum adenosinetriphosphatase. Oliveira CR, et al. **Biochemistry** 1988 Aug 9;27(16):5923-7

Fate of nucleotides bound to reconstituted Fo-F1 during adenosine 5'-triphosphate synthesis activation or hydrolysis: role of protein inhibitor and hysteretic inhibition. Penin F, et al. **Biochemistry** 1988 Dec 13; 27(25):8969-74

Temperature-induced states of isolated F1-ATPase affect catalysis, enzyme conformation and high-affinity nucleotide binding sites. Baracca A, et al. **Biochim Biophys Acta** 1989 Aug 17;976(1):77-84

Nucleotide excision by E. coli DNA polymerase I in proofreading and non-proofreading modes. Lecomte PJ, et al. **Biochim Biophys Acta** 1988 Dec 20;951(2-3):255-60

Adenine salvage enzymes and intracellular nucleotide triphosphate content in Physarum flavicomum amoebae during growth and development. Cumaraswamy A, et al. **Can J Microbiol** 1989 May;35(5):554-8

Diet-induced DNA damage and altered nucleotide metabolism in lymphocytes from methyl-donor-deficient rats. James SJ, et al. **Carcinogenesis** 1989 Jul;10(7):1209-14

Molecular interaction of different chromium species with nucleotides and nucleic acids. Wolf T, et al. **Carcinogenesis** 1989 Apr;10(4):655-9

Substrate regulation of the nucleotide pool during regional ischaemia and reperfusion in an isolated rat heart preparation: a phosphorus-31 magnetic resonance spectroscopy analysis. Camacho SA, et al. **Cardiovasc Res** 1988 Mar;22(3):193-203

Changes of nucleotide contents and of energy charge induced by contraction, catch and relaxation in smooth molluscan muscle fibres. An analysis using reversed-phase ion-pair high-performance liquid chromatography. Gies A. **Comp Biochem Physiol [B]** 1988;91(3):483-7

Enzymes of nucleotide metabolism: the significance of subunit size and polymer size for biological function and regulatory properties. Traut TW. **CRC Crit Rev Biochem** 1988;23(2):121-69 (342 ref.)

The complex of actin and deoxyribonuclease I as a model system to study the interactions of nucleotides, cations and cytochalasin D with monomeric actin. Polzar B, et al. **Eur J Biochem** 1989 Jun 15;182(2):267-75

Effects of hydrostatic pressure (HP = 101 ATA) on nucleotides and pyridine dinucleotides tissue contents in trout. Cann-Moisan C, et al. **Exp Biol** 1988;47(4):239-42

Changes in the polyamine and nucleotide metabolism of P388 leukemia cells treated with DL-alpha-difluoromethylornithine in culture. Kremmer T, et al. **Exp Cell Biol** 1988;56(3):131-7

Nucleotide levels in human lens: regional distribution in different forms of senile cataract. Deussen A, et al. **Exp Eye Res** 1989 Jan;48(1):37-47

Free radical generation by ultrasound in aqueous solutions of DNA constituents. Kondo T, et al. **Free Radic Res Commun** 1989;6(2-3):109-10

H2O2 formation during nucleotide degradation in the hypoxic rat liver: a quantitative approach. Siems W, et al. **Free Radic Res Commun** 1986;1(5):289-95

Structural aspects of skeletal muscle F-actin as studied by tryptic digestion: evidence for a second nucleotide interacting site. Hozumi T. **J Biochem (Tokyo)** 1988 Aug; 104(2):285-8

Studies on the active site of the Neurospora crassa plasma membrane H+-ATPase with periodate-oxidized nucleotides. Bidwai AP, et al. **J Biol Chem** 1989 Jul 15; 264(20):11790-5

Nucleotide specificity of canine cardiac sarcoplasmic reticulum. Differential alteration of enzyme properties by detergent treatment. Tate CA, et al. **J Biol Chem** 1989 May 15;264(14):7809-13

Reversibility of nucleotide incorporation by Escherichia coli RNA polymerase, and its effect on fidelity. Kahn JD, et al. **J Mol Biol** 1989 Jan 20;205(2):291-314

Angiogenic potency of nucleotide metabolites: potential role in ischemia-induced vascular growth. Morris PB, et al. **J Mol Cell Cardiol** 1989 Apr;21(4):351-8

An NTP-binding motif is the most conserved sequence in a highly diverged monophyletic group of proteins involved in positive strand RNA viral replication. Gorbalenya AE, et al. **J Mol Evol** 1989 Mar;28(3):256-68

[Behavior of nucleotides in the liver of the rat after castration and treatment with testosterone] Pizzichini M, et al. **Boll Soc Ital Biol Sper** 1988 Mar;64(3):265-8 (Eng. Abstr.) **(Ita)**

[P-chiral phosphates---the tools for studying the stereochemistry of enzymatic reactions of the transfer of phosphate or nucleotidyl groups] Niewiarowski W. **Postepy Biochem** 1988;34(1-2):81-114 (75 ref.) **(Pol)**

[Studies of interactions between the active enzyme center and substrate by the stereochemical method] Niewiarowski W. **Postepy Biochem** 1988;34(1-2):59-79 (103 ref.) **(Pol)**

PHARMACOLOGY

Effects of nucleotides and divalent cations on phospholipase activity in Saccharomyces cerevisiae. Witt W, et al. **Arch Microbiol** 1989;151(2):154-8

The effect of nucleotide upon a specific isomerization of actomyosin subfragment 1. Geeves MA, et al. **Biochem J** 1988 Nov 15;256(1):41-6

Effect of nucleotides on the activity of dinitrogenase reductase ADP-ribosyltransferase from Rhodospirillum rubrum. Lowery RG, et al. **Biochemistry** 1989 Jun 13; 28(12):4956-61

Activation of rat liver cytosolic phosphatidic acid phosphatase by nucleoside diphosphates. Berglund L, et al. **Biochim Biophys Acta** 1989 Apr 26;1002(3):382-7

The effects of some nucleosides and dithiothreitol on the stability and activity of liver phenylalanine hydroxylase. Bublitz C. **Biochim Biophys Acta** 1971 May 12; 235(2):311-21

Effects of sulphonylureas and diazoxide on insulin secretion and nucleotide-sensitive channels in an insulin-secreting cell line. Sturgess NC, et al. **Br J Pharmacol** 1988 Sep;

95(1):83–94
Nucleotide regulation of growth hormone–releasing factor binding to rat pituitary receptors. Struthers RS, et al. **Endocrinology** 1989 Jan;124(1):24–9
Stimulation of prostacyclin release from aortic smooth muscle cells by purine and pyrimidine nucleotides. Demolle D, et al. **Eur J Pharmacol** 1988 Oct 18;155(3):339–43
Interaction of F1–ATPase and its inhibitor peptide. Effect of dinitrophenol, nucleotides and anions. de Miguel C, et al. **Int J Biochem** 1988;20(9):983–7
The gating of nucleotide–sensitive K+ channels in insulin–secreting cells can be modulated by changes in the ratio ATP4–/ADP3– and by nonhydrolyzable derivatives of both ATP and ADP. Dunne MJ, et al. **J Membr Biol** 1988 Sep;104(2):165–77
Changes in the fatty acids pattern of red blood cell phospholipids induced by type of milk, dietary nucleotide supplementation, and postnatal age in preterm infants. Pita ML, et al. **J Pediatr Gastroenterol Nutr** 1988 Sep–Oct; 7(5):740–7
Effects of nucleosides and a nucleotide on DNA and RNA syntheses by the salvage and de novo pathway in primary monolayer cultures of hepatocytes and hepatoma cells. Ohyanagi H, et al. **JPEN J Parenter Enteral Nutr** 1989 Jan–Feb;13(1):51–8
Effects of hormones and nucleotides on ciliary beating in frog esophagus and guinea pig trachea. Carlson HE, et al. **Life Sci** 1974 Jun 16;14(12):2413–26
Nucleotides, oxygen free radical scavengers, and brain protection: mouse model. Abadir AR, et al. **Proc West Pharmacol Soc** 1989;32:91–3
Expression of immune cell surface markers in vivo and immune competence in mice by dietary nucleotides. Kulkarni A, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):121–4
[Nucleotide incorporation into liposomes] Otroshchenko VA, et al. **Izv Akad Nauk SSSR [Biol]** 1988 Sep–Oct;(5):772–6 (Eng. Abstr.) (Rus)
[Inhibitory effect of 3'-azido-3'-azido-3'-deoxy-ribavirin-5'-triphosphate on RNA synthesis catalyzed by RNA polymerase from influenza A virus and by cellular DNA–dependent RNA polymerase II] Pravdina NF, et al. **Vopr Med Khim** 1989 Jan–Feb;35(1):104–6 (Eng. Abstr.) (Rus)
[Effect of macroergic nucleotides and lysolecithin on the cholinergic reception of the heart muscle in the frog Rana temporaria] Suslova IV. **Zh Evol Biokhim Fiziol** 1988 Sep–Oct;24(5):650–6 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Regulation of purine deoxynucleoside phosphorylation by deoxycytidine kinase from human leukemic blast cells. Sarup JC, et al. **Biochem Pharmacol** 1989 Aug 15; 38(16):2601–7
RNA unwinding activity of SV40 large T antigen. Scheffner M, et al. **Cell** 1989 Jun 16;57(6):955–63
The importance of highly conserved nucleotides in the binding region of chloramphenicol at the peptidyl transfer centre of Escherichia coli 23S ribosomal RNA. Vester B, et al. **EMBO J** 1988 Nov;7(11):3577–87
Role of nucleotide hydrolysis in the dynamics of actin filaments and microtubules. Carlier MF. **Int Rev Cytol** 1989; 115:139–70 (142 ref.)
Activation of protease–constitutive recA proteins of Escherichia coli by all of the common nucleoside triphosphates. Wang WB, et al. **J Bacteriol** 1988 Oct; 170(10):4816–22
Regulation of hepatic metabolism by extracellular nucleotides and eicosanoids. The role of cell heterogeneity. Häussinger D. **J Hepatol** 1989 Mar;8(2):259–66 (43 ref.)

RADIATION EFFECTS

Secondary reaction in irradiated nucleotides: possible significance for chemical "repair" mechanisms. Raleigh JA. **Free Radic Res Commun** 1989;6(2–3):141–3
Polynucleotide–protein cross–links induced by ultraviolet light and their use for structural investigation of nucleoproteins. Budowsky EI, et al. **Prog Nucleic Acid Res Mol Biol** 1989;37:1–65 (216 ref.)

SECRETION

Characterization of calcium involvement in the Clostridium perfringens type A enterotoxin–induced release of 3H–nucleotides from Vero cells. McClane BA. **Microb Pathog** 1989 Jan;6(1):17–28
Cultures of glial cells release purines under field electrical stimulation: the possible ionic mechanisms. Caciagli F, et al. **Pharmacol Res Commun** 1988 Nov;20(11):935–47

NUCLEOTIDES, CYCLIC

Formation of cyclopyrimidines via the direct effects of gamma radiation of pyrimidine nucleosides. Shaw AA, et al. **Int J Radiat Biol** 1988 Dec;54(6):987–97
The biogeochemical cycle of the adsorbed template. II: Selective adsorption of mononucleotides on adsorbed polynucleotide templates. Lazard D, et al. **Orig Life Evol Biosph** 1988;18(4):347–57

ANALYSIS

Isocratic reversed–phase high–performance liquid chromatography of ribonucleotides, deoxynucleotides, cyclic nucleotides and deoxycyclic nucleotides. Lim CK, et al. **J Chromatogr** 1989 Jan 6;461:259–66
[The nature of the neurohormonal reorganizations in patients with neuroses] Mgaloblishvili BI, et al. **Zh Nevropatol Psikhiatr** 1988;88(11):87–92 (Eng. Abstr.) (Rus)

BLOOD

Intracellular contents of cyclic nucleotides in neutrophils and lymphocytes from patients with systemic lupus erythematosus. Shingu M, et al. **Arch Dermatol Res** 1989; 281(3):203–5
Acute metabolic and cardiovascular effects of human and salmon calcitonin in gene–derived products. Gennari C, et al. **Kidney Int Suppl** 1988 Sep;25:S61–3
[Changes in thrombocyte–vascular hemostasis and cyclic nucleotide levels after anti–arrhythmia therapy in patients with ischemic heart disease] Liusov VA, et al. **Kardiologiia** 1989 Jan;29(1):9–13 (Eng. Abstr.) (Rus)
[Clinical significance of cyclic nucleotide metabolism and calcium level in children with arrhythmia] Ternova TI, et al. **Kardiologiia** 1989 Jan;29(1):13–7 (Eng. Abstr.) (Rus)
[The hormone–cyclase system and its possible role in disorders of the absorptive function of the intestines] Vakhrushev IaM. **Vestn Akad Med Nauk SSSR** 1989; (3):61–6 (Eng. Abstr.) (Rus)
[Correlations between lysosomal enzymes and cyclic nucleotides during allergies in children] Gerasimov AA, et al. **Vopr Med Khim** 1988 Sep–Oct;34(5):104–7 (Eng. Abstr.) (Rus)

METABOLISM

Cyclic nucleotides in nervous tissue. Wiegant VM. **Brain Res Bull** 1978 Nov–Dec;3(6):611–22 (192 ref.)
Systemic effects of single hindlimb burn injury on skeletal muscle function and cyclic nucleotide levels in the murine model. Tomera JF, et al. **Burns Incl Therm Inj** 1988 Jun; 14(3):210–9
Cyclic nucleotide metabolism in atopic dermatitis. Archer CB. **Clin Exp Dermatol** 1987 Nov;12(6):424–31 (95 ref.)
Effect of diapause hormone on cyclic nucleotide metabolism in developing ovaries of the silkworm, Bombyx mori. Chen JH, et al. **Comp Biochem Physiol [B]** 1988;91(4):631–7
The cyclic nucleotide specificity of eight cAMP–binding proteins in Dictyostelium discoideum is correlated into three groups. Van Ments–Cohen M, et al. **J Biol Chem** 1989 May 25;264(15):8717–22
Biochemical events in spontaneous seizures in the Mongolian gerbil. Wolf–Dieter R, et al. **Metab Brain Dis** 1989 Mar; 4(1):3–7
Subcellular localization of muscarinic effects on enzymes of cyclic nucleotide metabolism in cultured corneal epithelial cells of the rabbit. Colley AM, et al. **Metab Pediatr Syst Ophthalmol** 1987;10(2):36–8
Cerebral ischemia: changes in monoamines are independent of energy metabolism. Mrsulja BB, et al. **Neurochem Res** 1989 Jan;14(1):1–7
Flash photolysis of caged compounds: new tools for cellular physiology [published erratum appears in Trends Neurosci 1989 Apr;12(4):158] Kaplan JH, et al. **Trends Neurosci** 1989 Feb;12(2):54–9 (55 ref.)
[The content of cyclic nucleotides in an organ culture of normal and atherosclerosis–affected human aorta] Tertov VV, et al. **Biull Eksp Biol Med** 1989 May;107(5):575–7 (Eng. Abstr.) (Rus)
[The participation of serotonin in regulating cyclic nucleotide levels in early sea urchin embryos] Sadokova IE. **Ontogenez** 1989 Jan–Feb;20(1):63–9 (Eng. Abstr.) (Rus)
[The effect of vestibuloprotectors on the cyclic nucleotide system in experimental motion sickness] Leshchiniuk II, et al. **Patol Fiziol Eksp Ter** 1989 Jan–Feb;(1):26–8 (Eng. Abstr.) (Rus)
[Interrelation of changes in the levels of calcium, calmodulin and cyclic nucleotides in children with ectopic types of arrhythmia] Bakanov MI, et al. **Pediatriia** 1989;(4):40–3 (Eng. Abstr.) (Rus)
[Changes in microelement, prostaglandin and cyclic nucleotide levels in the bile of patients at the early periods after cholecystectomy] Vygodner EB, et al. **Ter Arkh** 1989; 61(2):55–8 (Eng. Abstr.) (Rus)
[Prostaglandins and cyclic nucleotides in the dynamic development of an experimental poisoning syndrome caused by Yersinia pestis lipopolysaccharide] Cherkasova TD, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jan; (1):3–6 (Eng. Abstr.) (Rus)

PHARMACOLOGY

Cyclic nucleotide–dependent phosphorylation of proteins in rabbit ciliary processes. Yoshimura N, et al. **Invest Ophthalmol Vis Sci** 1989 May;30(5):875–81
Relaxation of vascular and tracheal smooth muscle by cyclic nucleotide analogs that preferentially activate purified cGMP–dependent protein kinase. Francis SH, et al. **Mol Pharmacol** 1988 Oct;34(4):506–17
Effect of cyclic nucleotides on bombesin–evoked gastrin release from isolated perfused rat stomach. Guo YS, et al. **Regul Pept** 1988 Sep;22(4):361–9

PHYSIOLOGY

Cyclic nucleotides and polyamines in prolactin stimulation of lactose biosynthesis. Oppat CA, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):E318–22
Characterization of cyclic nucleotide and inositol 1,4,5–trisphosphate–sensitive calcium–exchange activity of smooth muscle cells cultured from the human corpora cavernosa. Krall JF, et al. **Biol Reprod** 1988 Nov; 39(4):913–22
Cyclic nucleotides and the rapid inhibitions of bone 45Ca uptake in response to bovine parathyroid hormone and 16,16–dimethyl prostaglandin E2 in chicks. Shaw AJ, et al. **Calcif Tissue Int** 1989 Mar;44(3):209–13
Augmentation of lymphocyte responses by monoclonal antibodies to the gangliosides GD3 and GD2: the role of protein kinase C, cyclic nucleotides, and intracellular calcium. Hersey P, et al. **Cell Immunol** 1989 Apr 1; 119(2):263–78
Release of tumor necrosis factor–alpha from macrophages. Enhancement and suppression are dose–dependently regulated by prostaglandin E2 and cyclic nucleotides. Renz H, et al. **J Immunol** 1988 Oct 1;141(7):2388–93

NUCLEOTIDYLTRANSFERASES

Heteronuclear three–dimensional NMR spectroscopy applied to CMP–KDO synthetase (27.5 kD). Fesik SW, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):842–7
Rotational diffusion of mitochondrial ADP/ATP carrier studied by saturation–transfer electron spin resonance. Horváth LI, et al. **Biochemistry** 1989 Jan 10;28(1):407–14
Nuclear envelope glycoprotein with poly(A) polymerase activity of rat liver: isolation, characterization, and immunohistochemical localization. Kurl RN, et al. **Biochemistry** 1988 Dec 13;27(25):8974–80
5' end labeling of RNA with capping and methylating enzymes. Moss B. **Gene Amplif Anal** 1981;2:253–66 (74 ref.)
Crystallization and preliminary diffraction data of Escherichia coli ADP glucose pyrophosphorylase. Mulichak AM, et al. **J Biol Chem** 1988 Nov 25; 263(33):17237–8

ANALYSIS

Radioactive–electrophoretic assay of adenosine 5'-triphosphate sulfurylase activity in crude extracts with sulfate or selenate as a substrate. Hanna ML, et al. **Anal Biochem** 1989 Feb 1;176(2):294–302
Cholinephosphate cytidylyltransferase in fetal rat lung cells: activity and subcellular distribution in response to dexamethasone, triiodothyronine, and fibroblast–conditioned medium. Viscardi RM, et al. **Exp Lung Res** 1989 Mar;15(2):223–37
Galactose–1–phosphate uridyl transferase activity associated with age at menopause and reproductive history. Cramer DW, et al. **Fertil Steril** 1989 Apr;51(4):609–15

ANTAGONISTS & INHIBITORS

Accumulation of incomplete metabolic side products of lipid A in Salmonella typhimurium during inhibition of 3–deoxy–D–manno–octulosonate incorporation by a new class of antibacterial agents. Kadam SK, et al. **Can J Microbiol** 1989 Jun;35(6):646–50
Inhibitor analysis of synapsis by resolvase. Flanagan PM, et al. **J Biol Chem** 1989 Oct 5;264(28):16892–6
Specific labeling of beef heart mitochondrial ADP/ATP carrier with N–(3–iodo–4–azidophenylpropionamido)cysteinyl–5–(2'-thiopyridyl)cysteine–coenzyme A (ACT–CoA), a newly synthesized 125I–coenzyme A derivative photolabel. Ruoho AE, et al. **J Biol Chem** 1989 Mar 5;264(7):4168–72
Complement attack of altered outer membrane areas synthesized after inhibition of the 3–deoxy–D–manno–octulosonate pathway leads to cell death. Goldman RC, et al. **J Immunol** 1989 Jan 1; 142(1):185–94
A novel prodrug of an impermeant inhibitor of 3–deoxy–D–manno–2–octulosonate cytidylyltransferase has antibacterial activity. Norbeck DW, et al. **J Med Chem** 1989 Mar;32(3):625–9
Synthesis of 8–substituted derivatives of the 2–deoxy analogue of 3–deoxy–beta–D–manno–2–octulopyranosonic acid (2–deoxy–beta–KDO) as inhibitors of 3–deoxy–D–manno–octulosonate cytidylyltransferase. Pring BG, et al. **J Med Chem** 1989 May;32(5):1069–74
New inhibitors for aminoglycoside–adenylyltransferase. Saleh NA, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov;270(1–2):66–75

BIOSYNTHESIS

Occurrence of 4'-O–aminoglycoside–nucleotidyltransferase in clinical strains of Enterobacteriaceae [letter] Kettner M, et al. **Infection** 1989 Mar–Apr;17(2):100–1
Association of newly synthesized poly(A) polymerase with four distinct polypeptides. Hengst JA, et al. **J Biol Chem** 1988 Dec 25;263(36):19270–3
The L protein of vesicular stomatitis virus modulates the response of the polyadenylic acid polymerase to S–adenosylhomocysteine. Hunt DM, et al. **J Gen Virol** 1988 Oct;69 (Pt 10):2555–61

BLOOD

Regulation of phosphatidylcholine biosynthesis in Plasmodium-infected erythrocytes. Ancelin ML, et al. **Biochim Biophys Acta** 1989 Jan 23;1001(1):82–9

Relation between the activity of poly(A)polymerase and the levels of protein synthesis in the lymphocytes of patients with chronic lymphocytic leukemia. Gounaris A, et al. **Blut** 1988 Nov;57(5):293–6

Patterns of adenosine deaminase, ecto-5'-nucleotidase, poly(A)polymerase and surface light chain expression in chronic lymphocytic leukemias. Trangas T, et al. **Blut** 1989 Apr;58(4):187–93

Idiopathic presenile cataract formation and galactosaemia. Stevens RE, et al. **Br [illegible]ophthalmol** 1989 Jan;73(1):48–51

Gonadal failure in young women and galactose-1-phosphate uridyl transferase activity. Hagenfeldt K, et al. **Fertil Steril** 1989 Jan;51(1):177–8

Galactose-1-phosphate uridyl transferase in density-fractionated erythrocytes. Studies of normal and mutant enzymes. Kelley RI, et al. **Hum Genet** 1989 May; 82(2):99–103

DEFICIENCY

Evaluation of reduced activity galactose-1-phosphate uridyl transferase by combined radioisotopic assay and high-resolution isoelectric focusing. Kelley RI, et al. **J Lab Clin Med** 1989 Aug;114(2):152–6

[Metabolic cooperation in cocultures of fibroblasts from patients with various abnormalities of galactose metabolism] Kadhom N, et al. **C R Acad Sci [III]** 1989; 308(17):453–8 (Eng. Abstr.) (Fre)

[Double heterozygosity (transferase-/epimerase-defect) and galactosemia cataract] Heyne K, et al. **Monatsschr Kinderheilkd** 1988 Dec;136(12):828–30 (Eng. Abstr.) (Ger)

GENETICS

Study of five haemogenetic markers (Gc, C3, Bf, Ag, and GALT) in six Indonesian populations and in 12 subgroups of Balinese. Scherz R, et al. **Am J Phys Anthropol** 1988 Aug;76(4):489–96

Two bovine genes for mitochondrial ADP/ATP translocase expressed differences in various tissues. Powell SJ, et al. **Biochemistry** 1989 Jan 24;28(2):866–73

Site-specific DNA endonuclease and RNA maturase activities of two homologous intron-encoded proteins from yeast mitochondria. Delahodde A, et al. **Cell** 1989 Feb 10; 56(3):431–41

A latent intron-encoded maturase is also an endonuclease needed for intron mobility. Wenzlau JM, et al. **Cell** 1989 Feb 10;56(3):421–30

Two genes encode the adenine nucleotide translocator of maize mitochondria. Isolation, characterisation and expression of the structural genes. Bathgate B, et al. **Eur J Biochem** 1989 Aug 1;183(2):303–10

Nucleotide sequence of the chromosomal gene coding for the aminoglycoside 6-adenylyltransferase from Bacillus subtilis Marburg 168. Ohmiya K, et al. **Gene** 1989 May 30;78(2):377–8

Length of the chromosomal segment marked by galactose-1-phosphate uridyl transferase and soluble aconitase and conserved since divergence of lineages leading to mouse and man. Nadeau JH. **Genet Res** 1988 Oct;52(2):141–4

Orientation of IS50 transposase gene and IS50 transposition. Makris JC, et al. **J Bacteriol** 1989 Sep;171(9):5212–4

The encoded primary sequence of a rice seed ADP-glucose pyrophosphorylase subunit and its homology to the bacterial enzyme. Anderson JM, et al. **J Biol Chem** 1989 Jul 25;264(21):12238–42

Biosynthesis of bacterial glycogen. Determination of the amino acid changes that alter the regulatory properties of a mutant Escherichia coli ADP-glucose synthetase. Kumar A, et al. **J Biol Chem** 1989 Jun 25;264(18):10464–71

Separate genes encode functionally equivalent ADP/ATP carrier proteins in Saccharomyces cerevisiae. Isolation and analysis of AAC2. Lawson JE, et al. **J Biol Chem** 1988 Oct 15;263(29):14812–8

The Escherichia coli primosome can translocate actively in either direction along a DNA strand. Lee MS, et al. **J Biol Chem** 1989 Aug 25;264(24):14531–42

A human muscle adenine nucleotide translocator gene has four exons, is located on chromosome 4, and is differentially expressed. Li K, et al. **J Biol Chem** 1989 Aug 25; 264(24):13998–4004

Sequence of the cloned Escherichia coli K1 CMP-N-acetylneuraminic acid synthetase gene. Zapata G, et al. **J Biol Chem** 1989 Sep 5;264(25):14769–74

DNA sequences of two expressed nuclear genes for human mitochondrial ADP/ATP translocase. Cozens AL, et al. **J Mol Biol** 1989 Mar 20;206(2):261–80

Protein encoded by the third intron of cytochrome b gene in Saccharomyces cerevisiae is an mRNA maturase. Analysis of mitochondrial mutants, RNA transcripts proteins and evolutionary relationships. Lazowska J, et al. **J Mol Biol** 1989 Jan 20;205(2):275–89

Thyroid hormone effect on gene expression of the adenine nucleotide translocase in different rat tissues. Höppner W, et al. **Mol Endocrinol** 1988 Nov;2(11):1127–31

The bI4 RNA mitochondrial maturase of Saccharomyces cerevisiae can stimulate intra-chromosomal recombination in Escherichia coli. Goguel V, et al. **Mol Gen Genet** 1989 Mar;216(1):70–4

Identification and characterization of Tn4653, a transposon covering the toluene transposon Tn4651 on TOL plasmid pWW0. Tsuda M, et al. **Mol Gen Genet** 1988 Jul; 213(1):72–7

Cloning of a gene involved in cellulose biosynthesis in Acetobacter xylinum: complementation of cellulose-negative mutants by the UDPG pyrophosphorylase structural gene. Valla S, et al. **Mol Gen Genet** 1989 May;217(1):26–30

Nucleotide sequence analysis of 2"-aminoglycoside nucleotidyl-transferase ANT(2") from Tn4000: its relationship with AAD(3") and impact on Tn21 evolution. Schmidt FR, et al. **Mol Microbiol** 1988 Nov;2(6):709–17

Autoregulation of phage mu transposase at the level of translation. Parsons RL, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11285–301

DNA sequence of the transposase gene of the class II transposon, Tn3926. Turner AK, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1757

Plasmid pColBM-Cl139 does not encode a colicin lysis protein but contains sequences highly homologous to the D protein (resolvase) and the oriV region of the miniF plasmid. Thumm G, et al. **Plasmid** 1988 Jul;20(1):75–82

Frameshifting is required for production of the transposase encoded by insertion sequence 1. Sekine Y, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4609–13

Primary structure of the Saccharomyces cerevisiae GAL7 gene. Tajima M, et al. **Yeast** 1985 Sep;1(1):67–77

IMMUNOLOGY

Antibodies to the ADP/ATP carrier, an autoantigen in myocarditis and dilated cardiomyopathy, penetrate into myocardial cells and disturb energy metabolism in vivo. Schulze K, et al. **Circ Res** 1989 Feb;64(2):179–92

Antibody-mediated enhancement of calcium permeability in cardiac myocytes. Schultheiss HP, et al. **J Exp Med** 1988 Dec 1;168(6):2105–19

The significance of autoantibodies against the ADP/ATP carrier for the pathogenesis of myocarditis and dilated cardiomyopathy—clinical and experimental data. Schultheiss HP. **Springer Semin Immunopathol** 1989; 11(1):15–30

ISOLATION & PURIFICATION

Rat liver ATP-sulfurylase: purification, kinetic characterization, and interaction with arsenate, selenate, phosphate, and other inorganic oxyanions. Yu M, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):156–74

Kinetic and biochemical properties of CTP:choline-phosphate cytidylyltransferase from the rat brain. Mages F, et al. **Eur J Biochem** 1988 Dec 15; 178(2):367–72

The isolation and reconstitution of the ADP/ATP carrier from wild-type Saccharomyces cerevisiae. Identification of primarily one type (AAC-2). Knirsch M, et al. **FEBS Lett** 1989 Feb 27;244(2):427–32

Localization of the membrane-associated CTP:phosphocholine cytidylyltransferase in Chinese hamster ovary cells with an altered membrane composition. Morand JN, et al. **J Biol Chem** 1989 Aug 15; 264(23):13785–92

METABOLISM

Photoaffinity labeling of hamster brown adipose tissue mitochondria by an [125I] coenzyme A derivative: differential interaction with the uncoupling protein and ADP/ATP carrier. Woldegiorgis G, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):502–7

Fatty acids stimulate phosphatidylcholine synthesis and CTP:choline-phosphate cytidylyltransferase in type II pneumocytes isolated from adult rat lung. Burkhardt R, et al. **Biochem J** 1988 Sep 1;254(2):495–500

Hormonal regulation of phosphatidylcholine synthesis by reversible modulation of cytidylyltransferase. Kelly KL, et al. **Biochem J** 1988 Oct 15;255(2):693–8

2-Aminoethylarsonic acid as an analogue of ethanolamine phosphate. Endowment of ethanolamine-phosphate cytidylyltransferase with CTP pyrophosphatase activity. Visedo-Gonzalez E, et al. **Biochem J** 1989 May 15; 260(1):299–301

Orientation of the N-terminal region of the membrane-bound ADP/ATP carrier protein explored by antipeptide antibodies and an arginine-specific endoprotease. Evidence that the accessibility of the N-terminal residues depends on the conformational state of the carrier. Brandolin G, et al. **Biochemistry** 1989 Feb 7;28(3):1093–100

Mapping of the nucleotide-binding sites in the ADP/ATP carrier of beef heart mitochondria by photolabeling with 2-azido[alpha-32P]adenosine diphosphate. Dalbon P, et al. **Biochemistry** 1988 Jul 12;27(14):5141–9

Interaction of phospholipids with the detergent-solubilized ADP/ATP carrier protein as studied by spin-label electron spin resonance. Drees M, et al. **Biochemistry** 1988 Nov 15;27(23):8584–91

Galactose-1-phosphate uridylyltransferase: identification of histidine-164 and histidine-166 as critical residues by site-directed mutagenesis. Field TL, et al. **Biochemistry** 1989 Mar 7;28(5):2094–9

Adenine nucleotide transport and adenosine production in isolated rat heart mitochondria during acetate metabolism. Kiviluoma KT, et al. **Biochim Biophys Acta** 1989 May 30; 974(3):274–81

Stimulation of CTP: phosphocholine cytidylyltransferase and phosphatidylcholine synthesis by calcium in rat hepatocytes. Sanghera JS, et al. **Biochim Biophys Acta** 1989 Jun 28;1003(3):284–92

A minimum structured adenine nucleotide for ADP/ATP transport in mitochondria. Schlimme E, et al. **Biol Chem Hoppe Seyler** 1988 Oct;369(10):1105–8

Flux control coefficients for Pi- and adenine nucleotide translocator in rat liver mitochondria after Fe2+/ascorbate induced oxidative stress. Trümper L, et al. **Biomed Biochim Acta** 1989;48(2–3):S44–7

Relationship between oxidative phosphorylation and adenine nucleotide translocase activity of two populations of cardiac mitochondria and mechanical recovery of ischemic hearts following reperfusion. Duan J, et al. **Can J Physiol Pharmacol** 1989 Jul;67(7):704–9

Synthesis of analogs of N-acetylneuraminic acid and their effect on CMP-sialate synthase. Petrie CR 3d, et al. **Carbohydr Res** 1989 Mar 15;186(2):326–34

Interaction of proteins located at a distance along DNA: mechanism of target immunity in the Mu DNA strand-transfer reaction. Adzuma K, et al. **Cell** 1989 Apr 7;57(1):41–7

Efficient Mu transposition requires interaction of transposase with a DNA sequence at the Mu operator: implications for regulation. Mizuuchi M, et al. **Cell** 1989 Jul 28; 58(2):399–408

Site-specific recombination by Tn3 resolvase: topological changes in the forward and reverse reactions. Stark WM, et al. **Cell** 1989 Aug 25;58(4):779–90

Enzymes of galactose utilization in the rat tapeworm, Hymenolepis diminuta. Komuniecki RW, et al. **Comp Biochem Physiol [B]** 1977;58(1):35–8

Isolation and characterization of the Tn3 resolvase synaptic intermediate. Benjamin HW, et al. **EMBO J** 1988 Jun; 7(6):1897–905

The gamma delta resolvase bends the res site into a recombinogenic complex. Salvo JJ, et al. **EMBO J** 1988 Nov;7(11):3609–16

Gamma delta transposase and integration host factor bind cooperatively at both ends of gamma delta. Wiater LA, et al. **EMBO J** 1988 Jun;7(6):1907–11

Effect of uridine on hepatic galactose-1-phosphate uridyltransferase. Rogers S, et al. **Enzyme** 1989;42(1):53–60

The ATP/ADP-antiporter is involved in the uncoupling effect of fatty acids on mitochondria. Andreyev AYu, et al. **Eur J Biochem** 1989 Jul 1;182(3):585–92

Enzymatic introduction of a fluorescent sialic acid into oligosaccharide chains of glycoproteins. Gross HJ, et al. **Eur J Biochem** 1988 Nov 15;177(3):583–9

Metabolites controlling the rate of starch synthesis in the chloroplast of C3 plants. Pettersson G, et al. **Eur J Biochem** 1989 Jan 15;179(1):169–72

The ADP/ATP carrier from yeast (AAC-2) is uniquely suited for the assignment of the binding center by photoaffinity labeling. Mayinger P, et al. **FEBS Lett** 1989 Feb 27;244(2):421–6

A 22 kDa ras-related G-protein is the substrate for an ADP-ribosyltransferase from Clostridium botulinum. Quilliam LA, et al. **FEBS Lett** 1988 Sep 26;238(1):22–6

Activity of CMP-2-keto-3-deoxyoctulosonic acid synthetase in Escherichia coli strains expressing the capsular K5 polysaccharide implication for K5 polysaccharide biosynthesis. Finke A, et al. **J Bacteriol** 1989 Jun; 171(6):3074–9

Cyclic-AMP-dependent switch in initiation of transcription from the two promoters of the Escherichia coli gal operon: identification and assay of 5'-triphosphate ends of mRNA by GTP:RNA guanyltransferase. Irani M, et al. **J Bacteriol** 1989 Mar;171(3):1623–30

Inactivation of lincosaminide antibiotics in Staphylococcus. Identification of lincosaminide O-nucleotidyltransferases and comparison of the corresponding resistance genes. Brisson-Noël A, et al. **J Biol Chem** 1988 Nov 5; 263(31):15880–7

Chemical cross-linking reveals a dimeric structure for CTP:phosphocholine cytidylyltransferase. Cornell R. **J Biol Chem** 1989 May 25;264(15):9077–82

Metabolic interconnection between the human malarial parasite Plasmodium falciparum and its host erythrocyte. Regulation of ATP levels by means of an adenylate translocator and adenylate kinase. Kanaani J, et al. **J Biol Chem** 1989 Feb 25;264(6):3194–9

Biosynthesis of bacterial glycogen. Use of site-directed mutagenesis to probe the role of tyrosine 114 in the catalytic mechanism of ADP-glucose synthetase from Escherichia coli. Kumar A, et al. **J Biol Chem** 1988 Oct 15;263(29):14634–9

The "regulatory" sulfhydryl group of Penicillium chrysogenum ATP sulfurylase. Cooperative ligand binding after SH modification; chemical and thermodynamic properties. Martin RL, et al. **J Biol Chem** 1989 Jul 15; 264(20):11768–75

Sulfate-activating enzymes of Penicillium chrysogenum. The ATP sulfurylase.adenosine 5'-phosphosulfate complex does not serve as a substrate for adenosine 5'-phosphosulfate kinase. Renosto F, et al. **J Biol Chem** 1989 Jun 5; 264(16):9433–7

CTP:phosphocholine cytidylyltransferase is a substrate for

cAMP-dependent protein kinase in vitro. Sanghera JS, et al. **J Biol Chem** 1989 Jan 15;264(2):1215–23
Assay of ATP-sulfurylase activity from rat liver by high-performance liquid chromatography. Mina M, et al. **J Chromatogr** 1988 Dec 9;433:63–72
The gtaB marker in Bacillus subtilis 168 is associated with a deficiency in UDPglucose pyrophosphorylase. Pooley HM, et al. **J Gen Microbiol** 1987 Dec;133 (Pt 12):3481–93
Analysis of inhibitors of the site-specific recombination reaction mediated by Tn3 resolvase. Flanagan PM, et al. **J Mol Biol** 1989 Mar 20;206(2):295–304
Effect of the plasticizer di-(2-ethylhexyl)phthalate on oxidative phosphorylation in rat liver mitochondria: modification of the function of the adenine nucleotide translocator. Kora S, et al. **J Pharmacobiodyn** 1988 Dec; 11(12):773–8
Whether Zn2+ for the polymerase system was selected inevitably or by historical accident. Toh H, et al. **J Theor Biol** 1989 Jan 9;136(1):79–85
Age-related changes in respiration coupled to phosphorylation. I. Hepatic mitochondria. Kim JH, et al. **Mech Ageing Dev** 1988 Dec;46(1–3):263–77
Age-related changes in respiration coupled to phosphorylation. II. Cardiac mitochondria. Kim JH, et al. **Mech Ageing Dev** 1988 Dec;46(1–3):279–90
Galactose as a regulatory factor of its own metabolism by rat liver. Rogers SR, et al. **Metabolism** 1989 Aug; 38(8):810–5
Poly(A) polymerase purified from HeLa cell nuclear extract is required for both cleavage and polyadenylation of pre-mRNA in vitro. Christofori G, et al. **Mol Cell Biol** 1989 Jan;9(1):193–203
Role of poly(A) polymerase in the cleavage and polyadenylation of mRNA precursor. Terns MP, et al. **Mol Cell Biol** 1989 Apr;9(4):1435–44
Interaction of distinct domains in Mu transposase with Mu DNA ends and an internal transpositional enhancer. Leung PC, et al. **Nature** 1989 Apr 20;338(6217):656–8
DNA supercoiling determines the activation energy barrier for site specific recombination by Tn21 resolvase. Castell SE, et al. **Nucleic Acids Res** 1989 Sep 12;17(17):7045–58
The 43 residue DNA binding domain of gamma delta resolvase binds adjacent major and minor grooves of DNA. Rimphanitchayakit V, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1035–50
Activity of hepatic galactose-metabolizing enzymes in the pregnant rat and fetus. Rogers SR, et al. **Pediatr Res** 1989 Feb;25(2):161–6
Factors that affect transposition mediated by the Tn21 transposase. Grinsted J, et al. **Plasmid** 1988 Jul;20(1):54–60
Recombination of knotted substrates by Tn3 resolvase. Dröge P, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6062–6
A beginning to the biochemistry of polyadenylation. Humphrey T, et al. **Trends Genet** 1988 Sep;4(9):243–5 (40 ref.)
[The role of adenine nucleotide translocator in the regulation of oxidative phosphorylation in heart mitochondria] Kholodenko BN, et al. **Biokhimiia** 1988 Jun;53(6):1009–12 (Eng. Abstr.) **(Rus)**
[Enzymes involved in the metabolism of flavin nucleotides in Streptomyces olivaceus] Bilinskaia IS, et al. **Mikrobiologiia** 1989 Jan–Feb;58(1):5–8 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Antibodies against ADP-ATP carrier enhance Ca2+ current in isolated cardiac myocytes. Morad M, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H960–4
Polyadenylate polymerases from normal and cancer cells and their potential role in messenger RNA processing: a review. Jacob ST, et al. **Cancer Res** 1989 Jun 1;49(11):2827–33 (79 ref.)
Regulation of colominic acid biosynthesis by temperature: role of cytidine 5'-monophosphate N-acetylneuraminic acid synthetase. González-Clemente C, et al. **FEBS Lett** 1989 Jul 3;250(2):429–32
Effects of variation of inverted-repeat sequences on reactions mediated by the transposase of Tn21. Martin C, et al. **J Bacteriol** 1989 Jul;171(7):3996–4001
Functional domains of vaccinia virus mRNA capping enzyme. Analysis by limited tryptic digestion. Shuman S. **J Biol Chem** 1989 Jun 5;264(16):9690–5
Temporary complementation of temperature-sensitive mutants of the cell cycle by transfection with a wild-type or a mutant cDNA of ADP/ATP translocase. Alder H, et al. **J Cell Physiol** 1989 Oct;141(1):90–6

NUCLEUS ACCUMBENS see under **SEPTAL NUCLEI**

NUCLEUS BASALIS, OLIVARY see **OLIVARY NUCLEUS**

NUDE MICE see **MICE, NUDE**

NULL CELLS see **LYMPHOCYTES, NULL**

NUMERICAL ANALYSIS, COMPUTER-ASSISTED see under **MATHEMATICAL COMPUTING**

NUMISMATICS

Presentation of the Academy Medal to Paul F. Cranefield, M.D., and Brian F. Hoffman, M.D. Ferrer MI. **Bull N Y Acad Med** 1988 Nov;64(8):884–6
[Albert Hustin, the pioneer of blood transfusion] de Marneffe R. **Rev Med Brux** 1989 Mar;10(3):107–10 **(Fre)**
[Benchmark memorial medal dedicated to Avgust Kirkhenshtein (1872–1963)] Barshtein IuA. **Mikrobiol Zh** 1987 Nov–Dec;49(6):92–3 **(Rus)**
[Benchmark memorial medals dedicated to anniversary dates in the history of the sciences of microbiology and epidemiology] Barshtein IuA. **Mikrobiol Zh** 1988 Jul–Aug; 50(4):109–111 **(Rus)**

HISTORY

[Numismatic history of the von Graefe Medal of the German Ophthalmological Society] Jaeger W. **Klin Oczna** 1988 Apr–May;90(4–5):186–7 **(Ger)**
[Soviet memorial medals dedicated to the scientists of the Academy of Medical Sciences of the USSR and its scientific institutions] Barshtein IuA. **Vestn Akad Med Nauk SSSR** 1989;(2):87–95 **(Rus)**

NURSE ADMINISTRATORS see under **ADMINISTRATIVE PERSONNEL**

NURSE ANESTHETISTS

ECONOMICS

Perspectives: a nurse anesthetist. Beutler JM. **Health Aff (Millwood)** 1988 Fall;7(4):26–31
A profile of anesthesia practice patterns. Rosenbach ML, et al. **Health Aff (Millwood)** 1988 Fall;7(4):118–31
CRNA rates linked to surgical access. Koska MT. **Hospitals** 1989 Feb 5;63(3):59

HISTORY

Anesthetist and anesthesiologist: technology in the social context of a medical and nursing specialty. Davis AB. **Trans Stud Coll Physicians Phila** 1989 Jun;11(2):123–34

UTILIZATION

When do anesthesiologists delegate? Rosenbach ML, et al. **Med Care** 1989 May;27(5):453–65

NURSE CLINICIANS

Organizational strategies to improve influenza vaccine delivery. A standing order in a general medicine clinic. Margolis KL, et al. **Arch Intern Med** 1988 Oct; 148(10):2205–7
Integrating nursing theory, practice and research through collaborative research. Denyes MJ, et al. **J Adv Nurs** 1989 Feb;14(2):141–5
Care of very low birth weight infants by neonatal nurse clinicians. Sims ME, et al. **J Perinatol** 1987 Winter; 7(1):55–7
The clinical nurse specialist on the psychiatric team. Yoest MA. **J Psychosoc Nurs Ment Health Serv** 1989 Mar; 27(3):27–32
The role of the addictions nurse specialist in a general hospital setting. Leiker TL. **Nurs Clin North Am** 1989 Mar; 24(1):137–49
A research nurse: enhancing participation in clinical trials. O'Halloran LJ, et al. **Prog Clin Biol Res** 1989;293:355–60

TRENDS

The psychiatric nurse in liaison psychiatry. Hicks S. **Aust N Z J Psychiatry** 1989 Mar;23(1):89–96

UTILIZATION

Caring for a child with diabetes: the effect of specialist nurse care on parents' needs and concerns. Moyer A. **J Adv Nurs** 1989 Jul;14(7):536–45

NURSE MIDWIVES

Nurse-midwifery practice in the United States, 1982 and 1987. Adams CJ. **Am J Public Health** 1989 Aug; 79(8):1038–9
Prenatal care: a comparative evaluation of nurse-midwives and family physicians [letter] **Can Med Assoc J** 1989 Jan 15;140(2):107, 110–1
Prenatal care: a comparative evaluation of nurse-midwives and family physicians [with correction] [letter] **Can Med Assoc J** 1988 Nov 15;139(10):930–1
Prenatal care: a comparative evaluation of nurse-midwives and family physicians [letter] Lofsky S. **Can Med Assoc J** 1989 Jan 1;140(1):14
Closing of the Nurse-Midwifery Service at Boston City Hospital: What Were the Issues Involved? [letter] **J Nurse Midwifery** 1989 Mar–Apr;34(2):97–8
Coping with the sexual health interview. Andrews S. **J Nurse Midwifery** 1983 Nov–Dec;33(6):269–73
Closing of the nurse-midwifery service at Boston City Hospital. What were the issues involved? Breece C, et al. **J Nurse Midwifery** 1989 Jan–Feb;34(1):41–8
Raising our HIV consciousness [editorial] Burgin K. **J Nurse Midwifery** 1989 Sep–Oct;34(5):229–30
Closing of the nurse-midwifery service at Boston City Hospital: another perspective. Chan AL. **J Nurse Midwifery** 1989 Mar–Apr;34(2):95–6
Water birth: one birthing center's observations. Church LK. **J Nurse Midwifery** 1989 Jul–Aug;34(4):165–70
A code of ethics for nurse-midwives. A second proposal. Clark-Coller T. **J Nurse Midwifery** 1988 Nov–Dec; 33(6):274–9
Managing the HIV-positive patient and her newborn in a CNM service. Fekety SE. **J Nurse Midwifery** 1989 Sep–Oct;34(5):253–8 (11 ref.)
Challenges of neonatal resuscitation for nurse-midwives. Graves BW. **J Nurse Midwifery** 1988 Sep–Oct;33(5):217–24
VBAC program in a nurse-midwifery service. Five years of experience. Hangsleben KL, et al. **J Nurse Midwifery** 1989 Jul–Aug;34(4):179–84
Epidemiology and transmission of HIV infection in women. Considerations for nurse-midwives. Holman S. **J Nurse Midwifery** 1989 Sep–Oct;34(5):233–41 (79 ref.)
Outcomes of mature primiparas in an out-of-hospital birth center. Holz K, et al. **J Nurse Midwifery** 1989 Jul–Aug; 34(4):185–9
Integrating HIV/AIDS risk assessment into a nurse-midwifery practice. Krutsky C, et al. **J Nurse Midwifery** 1989 Sep–Oct;34(5):275–6
A context for HIV testing in pregnancy. Kurth A, et al. **J Nurse Midwifery** 1989 Sep–Oct;34(5):259–66 (52 ref.)
Interpreting research for clinical practice [editorial] Murphy PA. **J Nurse Midwifery** 1988 Nov–Dec;33(6):249–51
Nurse-midwives speak out on research. Results of the 1987–88 needs assessment survey, Part 2. Paine LL, et al. **J Nurse Midwifery** 1989 Mar–Apr;34(2):66–70
Effects of changes in professional liability insurance on certified nurse-midwives. Patch FB, et al. **J Nurse Midwifery** 1989 May–Jun;34(3):131–6
Confidentiality in the HIV antibody testing process. Preston JB. **J Nurse Midwifery** 1989 Sep–Oct;34(5):283–6
Physician surcharge. Another barrier to practice. Sinquefield G. **J Nurse Midwifery** 1989 Jan–Feb;34(1):1–2
Use of prostaglandins in nurse-midwifery practice. Sinquefield G. **J Nurse Midwifery** 1989 May–Jun; 34(3):137–43
The impact of AIDS on women's lives and implications for nurse-midwifery practice. Taylor PK. **J Nurse Midwifery** 1989 Sep–Oct;34(5):273–4
A code of ethics for nurse-midwives: a second proposal [letter] Thompson JE, et al. **J Nurse Midwifery** 1989 Jan–Feb;34(1):49–50
Theory building in nurse-midwifery. The care process. Thompson JE, et al. **J Nurse Midwifery** 1989 May–Jun; 34(3):120–30
Certified nurse-midwife effectiveness in the health maintenance organization obstetric team. Bell KE, et al. **Obstet Gynecol** 1989 Jul;74(1):112–6
[The midwives' work in intrauterine death should be easier if better cooperation with physicians existed] Rådestad I, et al. **Lakartidningen** 1989 May 24;86(21):2021–3 **(Swe)**

EDUCATION

"The best laid schemes...": an evaluation of the extension of midwifery training in Scotland. Mander R. **Int J Nurs Stud** 1989;26(1):27–41
A collaborative intercampus model for graduate studies in primary care nursing. Weiss S, et al. **Int J Nurs Stud** 1988; 25(4):261–70
Innovations in Nurse-Midwifery Education [letter] **J Nurse Midwifery** 1989 Jul–Aug;34(4):214
Innovations in nurse-midwifery education [editorial] Hsia L. **J Nurse Midwifery** 1989 Mar–Apr;34(2):63–5
Achieving quality education. Use of the external examiner system in African Universities. Raisler J. **J Nurse Midwifery** 1989 May–Jun;34(3):144–5

HISTORY

Midwifery: past to present. Lops VR. **J Prof Nurs** 1988 Nov–Dec;4(6):402–7

LEGISLATION & JURISPRUDENCE

HIV seropositivity. Legal issues for patient and nurse-midwife. Cohn SD. **J Nurse Midwifery** 1989 Sep–Oct;34(5):267–72 (39 ref.)
Childbearing and women's choice of nurse-midwives in Washington, D.C. hospitals. Langton PA, et al. **Women Health** 1989;15(2):49–65

METHODS

Adapting universal precautions in a CNM service. Zeidenstein L. **J Nurse Midwifery** 1989 Sep–Oct; 34(5):280–3

ORGANIZATION & ADMINISTRATION

Midwifery service at Boston City Hospital [letter] **J Nurse Midwifery** 1989 May–Jun;34(3):147–8
Nurse-midwives speak out on the ACNM. Results of the 1987–88 Needs Assessment Survey, Part 1. Greener DL, et al. **J Nurse Midwifery** 1989 Jan–Feb;34(1):21–30

PSYCHOLOGY

Clinical judgment in nurse-midwifery. A review of the research with implications for education. Greener D. **J Nurse Midwifery** 1988 Nov–Dec;33(6):261–8 (48 ref.)
Incorporating water birth into nurse-midwifery practice. Jackson V, et al. **J Nurse Midwifery** 1989 Jul–Aug;

34(4):193–7

STANDARDS

Criterion-referenced competency assessment and the national certification examination in nurse-midwifery. Fullerton JT, et al. **J Nurse Midwifery** 1989 Mar–Apr;34(2):71–4

SUPPLY & DISTRIBUTION

[Efficiency indexes of human resources in the technical area of a health service. II: Needs of nursery, midwifery and service personnel] Dragicevic JG, et al. **Rev Med Chil** 1988 Feb;116(2):187–93 (Eng. Abstr.) **(Spa)**

UTILIZATION

Nurse-midwives and obstetricians: alternative models of care and client "fit". Aaronson LS. **Res Nurs Health** 1987 Aug; 10(4):217–26

NURSE-PATIENT RELATIONS

Managing Myra's madness. Calarco MM. **Am J Nurs** 1989 Mar;89(3):346–9

Dialogues with excellence. The paper crane. Dyck B. **Am J Nurs** 1989 Jun;89(6):824–5

Heart sounds and one-liners. Edwards BS. **Am J Nurs** 1989 Apr;89(4):616

Can nurses care too much? Gemma PB. **Am J Nurs** 1989 May;89(5):743–4

How to send quit-smoking signals. McMahon A, et al. **Am J Nurs** 1988 Nov;88(11):1498–9

Listening with care. Magnan MA, et al. **Am J Nurs** 1989 Feb;89(2):219–21

Approaching an adolescent about a pelvic exam. Szydlo VL. **Am J Nurs** 1988 Nov;88(11):1502–6

Unexpected miracles. Wilson D. **Am J Nurs** 1989 Feb; 89(2):306

Nursing considerations related to withdrawal of mechanical ventilatory support. Simpson T. **Am Rev Respir Dis** 1989 Aug;140(2 Pt 2):S41–3

Patient contracting. Boehm S. **Annu Rev Nurs Res** 1989; 7:143–53 (26 ref.)

Covenantal relationships: grounding for the nursing ethic [letter] Salsberry PJ. **ANS** 1989 Oct;12(1):ix–x

The dilemma of keeping confidences. Haddad AM. **AORN J** 1989 Jul;50(1):159, 162–4

Enacting corrective interpersonal experiences with the depressed client: an intervention model. Beeber LS. **Arch Psychiatr Nurs** 1989 Aug;3(4):211–7 (9 ref.)

A nursing reformulation of Bowen's family systems theory. McFarlane AJ. **Arch Psychiatr Nurs** 1988 Oct;2(5):319–24 (19 ref.)

Does contact with the mentally ill affect nurses' attitudes to mental illness? Weller L, et al. **Br J Med Psychol** 1988 Sep;61 (Pt 3):277–84

A prospective study of patient assaults on nursing staff in a psychogeriatric unit. Cooper AJ, et al. **Can J Psychiatry** 1989 Jun;34(5):399–404

Listening. Martinez C. **Geriatr Nurs (New York)** 1989 May–Jun;10(3):143

Abuse of patients in nursing homes: findings from a survey of staff. Pillemer K, et al. **Gerontologist** 1989 Jun; 29(3):314–20

Effect of nursing contact on the stress response of patients being weaned from mechanical ventilation. Henneman EA. **Heart Lung** 1989 Sep;18(5):483–9

Affectional touch in critical care nursing: a descriptive study. Schoenhofer SO. **Heart Lung** 1989 Mar;18(2):146–54

Person-centered counseling: application in an intensive care setting. Stockdale LL. **Heart Lung** 1989 Mar;18(2):139–45

Caring makes the difference. White SK. **Heart Lung** 1989 Jul;18(4):25A–26A, 29A

Lip function and eating after a stroke: a nursing perspective. Carr EK, et al. **J Adv Nurs** 1988 Jul;13(4):447–51

Conceptualizing for transcultural health visiting: the concept of transcultural reciprocity. Dobson SM. **J Adv Nurs** 1989 Feb;14(2):97–102

Comparative analysis of Orem's and King's theories. Hanucharurnkul S. **J Adv Nurs** 1989 May;14(5):365–72

Students' and trained nurses' perceptions of their own interpersonal skills: a report and comparison. Morrison P, et al. **J Adv Nurs** 1989 Apr;14(4):321–9

The effects of patient weight and sex on nurses' perceptions: a proposed model of nurse withdrawal. Peternelj-Taylor CA. **J Adv Nurs** 1989 Sep;14(9):744–54 (41 ref.)

Nursing care as a moral, practical, communicative and creative activity. Sarvimäki A. **J Adv Nurs** 1988 Jul; 13(4):462–7

The concept of reassurance in nursing. Teasdale K. **J Adv Nurs** 1989 Jun;14(6):444–50

An inventory to measure medical staff knowledge of behavioral methods with pediatric pain patients. Tarnowski KJ, et al. **J Behav Ther Exp Psychiatry** 1988 Dec; 19(4):281–4

Keeping the caring in nursing [editorial] Stewart-Amidei C. **J Neurosci Nurs** 1988 Aug;20(4):211–2

Concept of the month: implementing King's Conceptual Framework at the bedside. Byrne E, et al. **J Nurs Adm** 1989 Feb;19(2):28–32

Responding to patients: the unit hostess. Sheedy S. **J Nurs Adm** 1989 Apr;19(4):31–3

Realistic expectations of the labor coach. Berry LM. **J Obstet Gynecol Neonatal Nurs** 1988 Sep–Oct;17(5):354–5

Medication refusal: what does it mean? Beeber LS. **J Psychosoc Nurs Ment Health Serv** 1988 Dec;26(12):31–2

Bibliotherapy. The right book at the right time. Cohen LJ. **J Psychosoc Nurs Ment Health Serv** 1988 Aug;26(8):6–12

Crosstalk. Assimilation of conflicting information among mental health professionals. Earl WL, et al. **J Psychosoc Nurs Ment Health Serv** 1989 Jan;27(1):20–5

Establishing a nurse-client relationship. Forchuk C, et al. **J Psychosoc Nurs Ment Health Serv** 1989 Feb;27(2):30–4

Incest. Nursing interventions for group therapy. Krach P, et al. **J Psychosoc Nurs Ment Health Serv** 1988 Oct; 26(10):32–4

Caring: commitment to excellence or condemnation to conformity? Sherman JB, et al. **J Psychosoc Nurs Ment Health Serv** 1989 Aug;27(8):25–9

Clinical subjectivity. Advocacy with silent patients. Gadow S. **Nurs Clin North Am** 1989 Jun;24(2):535–41

Cross-cultural perspectives on patient teaching. Tripp-Reimer T, et al. **Nurs Clin North Am** 1989 Sep; 24(3):613–9

Nursing care of children with HIV infection. Ward-Wimmer D. **Nurs Clin North Am** 1988 Dec;23(4):719–29 (11 ref.)

Enhancing self care through active negotiation. Roberts SJ, et al. **Nurse Pract** 1988 Aug;13(8):44, 47, 50–2

Attitudes of nurses toward obesity and obese patients. Bagley CR, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):954

Preliminary validation of a nurse-patient interaction tool. Krouse HJ, et al. **Percept Mot Skills** 1988 Aug;67(1):281–2

Power in client and nurse-therapist relationships. Hardin SB, et al. **Perspect Psychiatr Care** 1985;23(3):91–8

The assaulted nurse: strategies for healing. Morrison EF. **Perspect Psychiatr Care** 1987–88;24(3–4):120–6 (15 ref.)

Determinants of the nurse-patient relationship revisited. Ujhely GB. **Perspect Psychiatr Care** 1985;23(4):131–40

Communication in the hospital setting: a survey of medical and everyday language use amongst patients, nurses and doctors. Bourhis RY, et al. **Soc Sci Med** 1989;28(4):339–46

Patient-handling skill, back injuries, and back pain. An intervention study in nursing. Videman T, et al. **Spine** 1989 Feb;14(2):148–56

Assessing nurses' communication: a cross-sectional study. Harrison TM, et al. **West J Nurs Res** 1989 Feb;11(1):75–91

Person-centered communication and social perspective taking. Kasch CR, et al. **West J Nurs Res** 1988 Jun; 10(3):317–26

Nurse-patient agreement and outcomes after surgery. Kovner CT. **West J Nurs Res** 1989 Feb;11(1):7–17; discussion 17–9

Development of a vignette—a data collection instrument about patient assault. Lanza ML. **West J Nurs Res** 1988 Jun;10(3):346–51

[100 cases of investigations on the psychological needs of in-patients] Liu XH. **Chung Hua Hu Li Tsa Chih** 1989 Apr; 24(4):221–2 **(Chi)**

[The nurse's interviewing skills with a patient] Wang WZ, et al. **Chung Hua Hu Li Tsa Chih** 1988 Aug;23(8):490–1 **(Chi)**

[The patient's mental demands of a nurse] Zhong XL. **Chung Hua Hu Li Tsa Chih** 1988 Aug;23(8):454–6 **(Chi)**

NURSE PRACTITIONERS

Effects of a geriatric nurse practitioner on process and outcome of nursing home care. Kane RL, et al. **Am J Public Health** 1989 Sep;79(9):1271–7

Video endoscopy by nurse practitioners: a model for colorectal cancer screening. Schroy PC, et al. **Gastrointest Endosc** 1988 Sep–Oct;34(5):390–4

Nurse-managed approach to care. Igou JF, et al. **Geriatr Nurs (New York)** 1989 Jan–Feb;10(1):32–4

Against all odds. Modigh A, et al. **Geriatr Nurs (New York)** 1988 Sep–Oct;9(5):289–91

Geriatric nurse practitioners as nursing home employees: implementing the role. Kane RA, et al. **Gerontologist** 1988 Aug;28(4):469–77

Faculty practice: unifier of nursing education and nursing service? Lambert CE Jr, et al. **J Prof Nurs** 1988 Sep–Oct; 4(5):345–55 (102 ref.)

A nurse practitioner in general practice: patient perceptions and expectations. Drury M, et al. **J R Coll Gen Pract** 1988 Nov;38(316):503–5

Nurse practitioner perceptions of facilitators and constraints to practice. Ventura MR, et al. **Milit Med** 1989 Jun; 154(6):303–11

Returning to the roots of the nurse practitioner role [letter] Ford LC. **Nurs Outlook** 1989 Mar–Apr;37(2):66

Pushing the outside of the envelope. Masson V. **Nurs Outlook** 1989 Mar–Apr;37(2):64

Examination of a survey methodology: Dillman's Total Design Method. Crosby FE, et al. **Nurs Res** 1989 Jan–Feb; 38(1):56–8

Patient smoking cessation—treatment strategies. Alexander LL. **Nurse Pract** 1988 Oct;13(10):27, 30–1, 34–6 passim

Ambulatory care centers: a unique opportunity for nurse practitioners. Henne SJ, et al. **Nurse Pract** 1988 Oct; 13(10):43, 46–7, 50–1 passim

Marketing strategies of nurse practitioners in New York State. Nolan CM, et al. **Nurse Pract** 1988 Aug;13(8):37, 41–2

Let's capitalize on our successes (and avoid naiveté) [editorial] Pearson LJ. **Nurse Pract** 1988 Nov;13(11):6–7

Enhancing self care through active negotiation. Roberts SJ, et al. **Nurse Pract** 1988 Aug;13(8):44, 47, 50–2

The workplace: an innovative and cost-effective practice site. Touger GN, et al. **Nurse Pract** 1989 Jan;14(1):35, 38, 40–2

Developing the role of the practice nurse in diabetic care. Reading S. **Practitioner** 1987 Nov 23;231(1439):1559–60, 1562

Collaborative practice: a critical theory perspective. McLain BR. **Res Nurs Health** 1988 Dec;11(6):391–8

ECONOMICS

Direct Medicaid/Medicare reimbursement to NPs sought [news] **Nurse Pract** 1989 Apr;14(4):7

Workers Comp reimbursement is available for NP services [letter] Cook BP. **Nurse Pract** 1988 Oct;13(10):76, 79

Direct reimbursement to nurse practitioners: the importance of the Federal Employees Health Care Freedom of Choice Act (H.R. 382). Knox JT. **Nurse Pract** 1988 Nov; 13(11):52–4

How many states provide third-party reimbursement for NPs? [letter] McLoughlin SS. **Nurse Pract** 1988 Aug; 13(8):6, 10

Donnelly seeks reimbursement for NPs. Morris BK. **Nurse Pract** 1989 Aug;14(8):6

Employment and salary characteristics of nurse practitioners. Rogers B, et al. **Nurse Pract** 1989 Sep;14(9):56, 59–63, 66

EDUCATION

Continuing education practices of Alabama certified registered nurse practitioners. Flowers JS, et al. **Ala J Med Sci** 1988 Oct;25(4):486–90

A collaborative intercampus model for graduate studies in primary care nursing. Weiss S, et al. **Int J Nurs Stud** 1988; 25(4):261–70

LEGISLATION & JURISPRUDENCE

Differing views: how to enable N.Y. NPs to diagnose, treat and prescribe [letter] **Nurse Pract** 1988 Oct;13(10):74–6

How each state stands on legislative issues affecting advanced nursing practice. **Nurse Pract** 1989 Jan;14(1):27–34

NPs: distinct providers of a distinct service [letter] Callan ME. **Nurse Pract** 1988 Aug;13(8):10

Prescriptive authority: debunking common assumptions. Harkless GE. **Nurse Pract** 1989 Aug;14(8):57–8, 60–1

Direct-reimbursement proposal may not live. Morris BK. **Nurse Pract** 1989 Jul;14(7):4

METHODS

The geriatric nurse practitioner in home care. Challenges, stressors, and rewards. Burns-Tisdale S, et al. **Nurs Clin North Am** 1989 Sep;24(3):809–17

PSYCHOLOGY

Interactional styles of nurse practitioners and physicians regarding patient decision making. Taylor SG, et al. **Nurs Res** 1989 Jan–Feb;38(1):50–5

Nurse-physician conflicts as barriers to the enactment of nursing roles. Katzman EM, et al. **West J Nurs Res** 1988 Oct;10(5):576–90

STANDARDS

Peer review for the nurse-directed health service. Woolard D, et al. **J Am Coll Health** 1989 Sep;38(2):91–3

SUPPLY & DISTRIBUTION

Changes in the advertised demand for nurse practitioners in the United States, 1975–1986. Shanks-Meile SL, et al. **Nurse Pract** 1989 Sep;14(9):41–4, 49

UTILIZATION

Speaking out. Should nurses substitute for house staff? [see comments] Silver HK, et al. **Am J Nurs** 1988 Dec; 88(12):1671–3. **Comment in:** Am J Nurs 1989 Jul;89(7):931

Comparison of the work of a nurse practitioner with that of a general practitioner. Salisbury CJ, et al. **J R Coll Gen Pract** 1988 Jul;38(312):314–6

NURSERIES

[The work of the physician in nurseries] Zahálková M. **Cesk Pediatr** 1989 Jun;44(6):364–5 **(Cze)**

[Morbidity among children attending nursery schools] Hasle H, et al. **Ugeskr Laeger** 1989 Aug 21;151(34):2148–50 (Eng. Abstr.) **(Dan)**

[Allergy presumed by parents of children in nursery schools and day care in relation to conditions of care] Viskum B, et al. **Ugeskr Laeger** 1989 Aug 21;151(34):2146–8 (Eng. Abstr.) **(Dan)**

STANDARDS

[Exposure to noise in nurseries and nursery schools] Koszarny Z, et al. **Rocz Panstw Zakl Hig** 1988;39(3):239–46 (Eng. Abstr.) **(Pol)**

NURSERIES, HOSPITAL

Neonatology —then and now. Neonatal sepsis (1960). Two outbreaks of neonatal skin sepsis caused by Staphylococcus aureus, phage type 71. Howells CH, et al. **Arch Dis Child** 1988 Dec;63(12):1506

Salmonella infantis in a hospital obstetrical department—Ontario. Page WE, et al. **Can Dis Wkly Rep** 1988 Mar 12;14(10):42–3 **(Eng, Fre)**

Chlamydial conjunctivitis—an outbreak in neonatal ward. Hardas UD, et al. **Indian J Ophthalmol** 1987 Jul–Aug; 35(4):186–9

Lethargy in the neonate: a diagnostic and therapeutic approach. Pandit AN, et al. **Indian Pediatr** 1988 Dec; 25(12):1193–8

Shigellosis occurring in newborn nursery staff. Beers LM, et al. **Infect Control Hosp Epidemiol** 1989 Apr;10(4):147–9

Shigellosis in the nursery [editorial] Gold R. **Infect Control Hosp Epidemiol** 1989 Apr;10(4):145–6

China—a nursery nurse's view. Williams CE. **J R Soc Health** 1989 Jun;109(3):86–7

Hepatitis B in jaundiced neonates admitted to a special care nursery. Nem-Yun B, et al. **Med J Malaysia** 1988 Jun; 43(2):162–5

Nursery privileges of the private attending pediatrician in the care of critically sick neonates in New York state. Harper RG, et al. **Pediatrics** 1989 Jun;83(6):940–4

[An epidemic caused by Salmonella typhimurium at a neonatal unit] Moreno AB, et al. **AMB Rev Assoc Med Bras** 1988 Sep–Oct;34(5):160–4 (Eng. Abstr.) **(Por)**

[Epidemiologic characteristics of suppurative-septic diseases in newborn infants at obstetrical hospitals keeping mother and child together and separated] Mordvinova NB, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Dec;(12):67–70 (Eng. Abstr.) **(Rus)**

ECONOMICS

Cost-analysis of neonatal intensive and special care. Tudehope DI, et al. **Aust Paediatr J** 1989 Apr;25(2):61–5

ORGANIZATION & ADMINISTRATION

The nursery network—an option to deregionalization [editorial] Butterfield LJ. **J Perinatol** 1987 Winter;7(1):1

STANDARDS

Status of newborn care in India. Guha DK, et al. **Indian Pediatr** 1989 Feb;26(2):144–9

NURSERY SCHOOLS see **SCHOOLS, NURSERY**

NURSES

Patients making decisions—do specialist nurses help? [letter] Fenlon D. **Acta Oncol** 1988;27(6b):862–4

Physician and nurse awareness of drug-use-review activities [letter] Bunz D, et al. **Am J Hosp Pharm** 1989 Jun; 46(6):1125–6

Attitudes of pharmacists and nurses toward their responsibilities in the drug treatment process [letter] Thompson DF, et al. **Am J Hosp Pharm** 1989 Feb; 46(2):257–8

The last nurse. Allison MM. **Am J Nurs** 1989 Aug;89(8):1104

Are you a lark or an owl on the night shift? Alward RR. **Am J Nurs** 1988 Oct;88(10):1337–9

How nurses would change U.S. health care. Huey FL. **Am J Nurs** 1988 Nov;88(11):1482–93

Nurses as barometers for women's health [news] Morrow C. **Am J Nurs** 1988 Oct;88(10):1324–5

Rocky Mountain jobfocus. Rocky mountain highs. Nash M. **Am J Nurs** 1989 Jul;89(7):982–3

Pacific jobfocus. Pacific prizes. Nash M. **Am J Nurs** 1989 Jul;89(7):969–72, 974, 976

A capitol day. Power and politics 101. Reinhard SC. **Am J Nurs** 1989 Feb;89(2):263–4

To registry/agency nurses [letter] Simon BG. **Am J Nurs** 1989 Apr;89(4):480

People without land. Smith S. **Am J Nurs** 1989 Feb; 89(2):208–9

Nurses accused of murder [see comments] Yorker BC. **Am J Nurs** 1988 Oct;88(10):1327–8, 1332. **Comment in:** Am J Nurs 1989 Jul;89(7):931

Legal considerations in RN monitoring of intravenous sedation. Murphy EK. **AORN J** 1988 Dec;48(6):1184–7

The changing role of nurses: the perspective of Medical Services Branch. Doucette S. **Can J Public Health** 1989 Mar–Apr;80(2):92–4

Factors involved in nurses' teaching breast self-examination. Clarke DE, et al. **Cancer Nurs** 1989 Feb;12(1):41–6

Safe handling of antineoplastic agents. Self-learning module. Dunne CF. **Cancer Nurs** 1989 Apr;12(2):120–7

Ethnic variations in the prevalence of smoking among registered nurses. Gritz ER, et al. **Cancer Nurs** 1989 Feb; 12(1):16–20

Hepatitis B virus vaccine. Cost-benefit analysis of its use in a children's hospital. Hicks RA, et al. **Clin Pediatr (Phila)** 1989 Aug;28(8):359–65

Patch tests with occupational contactants in nurses, doctors and dentists. Rudzki E, et al. **Contact Dermatitis** 1989 Apr; 20(4):247–50

Nursing personnel taking care of brachytherapy patients: to be or not to be classified as radiation workers? Datta R, et al. **Health Phys** 1989 Jul;57(1):199–201

Smoking practices of critical care nurses. Haughey BP, et al. **Heart Lung** 1989 Jan;18(1):29–35

Sleep disorder symptoms among nurses and nursing aides. Infante-Rivard C, et al. **Int Arch Occup Environ Health** 1989;61(5):353–8

Perception of nurses in expanded role. Olade RA. **Int J Nurs Stud** 1989;26(1):15–25

WHO recognizes changing role of nurses. **Int Nurs Rev** 1988 Sep–Oct;35(5):136, 146, 151

A study to compare the practice style of graduate and non-graduate nurses and midwives: the pilot study. Bircumshaw D, et al. **J Adv Nurs** 1988 Sep;13(5):605–14

Patient/client advocates [editorial] Clarke M. **J Adv Nurs** 1989 Jul;14(7):513–4

Food refusal amongst nursing home patients as conceptualized by nurses' aids and enrolled nurses: an interview study. Norberg A, et al. **J Adv Nurs** 1988 Jul; 13(4):478–83

Study of information given by nurses for catheter care to patients and their carers. Roe BH. **J Adv Nurs** 1989 Mar; 14(3):203–10

Staff carriage of epidemic methicillin-resistant Staphylococcus aureus. Cookson B, et al. **J Clin Microbiol** 1989 Jul;27(7):1471–6

Legislative activity is a nurse's job—let's wake up [editorial] McQuide PA. **J Neurosci Nurs** 1989 Feb;21(1):3–4

Professional liability insurance. Feutz SA. **J Nurs Adm** 1989 Feb;19(2):5–7, 27

Nurses, nuances, and non-communication: a humorous look at language. Grimes RM, et al. **J Nurs Adm** 1989 Sep; 19(9):22, 28

Impaired nurses: a cost analysis. LaGodna GE, et al. **J Nurs Adm** 1989 Sep;19(9):13–8

Enhancing the image of nursing. Porter RT, et al. **J Nurs Adm** 1989 Feb;19(2):36–40

An elective course on AIDS. Hale PJ. **J Nurs Educ** 1989 May;28(5):232–4

A comparison of the clinical judgment process in experienced registered nurses and student nurses. Itano JK. **J Nurs Educ** 1989 Mar;28(3):120–6

Nurses' beliefs about cause and prevention of occupational back pain. Harber P, et al. **J Occup Med** 1988 Oct; 30(10):797–800

Maternal-infant competencies for new nurses. A joint effort by educators and practitioners. Sherwen LN. **J Perinatol** 1989 Jun;9(2):173–7

International nursing consultation: a perspective on ethical issues. Andrews MM, et al. **J Prof Nurs** 1986 Sep–Oct; 2(5):302–8

Can you see me? Carter MA. **J Prof Nurs** 1989 Jan–Feb;5(1):3

Do consumers have a right to know the disciplinary actions taken against nurses who violate the nursing practice act? Do consumers have a right to know the identity of nurses who violate the nursing practice act? Eason FR, et al. **J Prof Nurs** 1986 Sep–Oct;2(5):274, 333–4

Consultation: a review and analysis of the literature. Rutherford DE. **J Prof Nurs** 1988 Sep–Oct;4(5):339–44 (15 ref.)

Collaboration: needed more than ever [editorial] Bishop BE. **MCN** 1989 May–Jun;14(3):153

How nurses can lay the planks of a successful publicity campaign. Holliday D. **MCN** 1989 May–Jun;14(3):200, 202

A test of medical problem-solving scored by nurses and doctors: the handicap of expertise. de Graaff E. **Med Educ** 1989 Jul;23(4):381–6

Nurses' attitudes toward conventional and automated vital signs measurement methods. Campbell-Heider N, et al. **Med Instrum** 1988 Oct;22(5):257–62

Screening for congenital dislocation of the hip by child-health nurses in Western Australia. Bower C, et al. **Med J Aust** 1989 Jan 16;150(2):61–5

Himself, Mrs. Plucker, and the rites of spring [letter] Silich RJ. **N Y State J Med** 1989 Aug;89(8):484

Nursing's image [letter] **Nurs Outlook** 1989 May–Jun; 37(3):146

Tort reform [letter] Murphy EK. **Nurs Outlook** 1989 Mar–Apr;37(2):66

Are you a doctor or a nurse? [letter] Porterfield LM. **Nurs Outlook** 1989 Jan–Feb;37(1):8–9

Lesbian nurse. Stephany TM. **Nurs Outlook** 1988 Nov–Dec; 36(6):295

Nurses' involvement in smoking cessation [letter] Pearson L. **Nurse Pract** 1989 Feb;14(2):8, 11

Occupational safety and health issues affect registered nurses. Neuberger JS, et al. **Occup Health Saf** 1988 Sep; 57(10):25–7, 75–6

Who governs? [editorial] Shamansky SL. **Public Health Nurs** 1989 Mar;6(1):1–2

Nurse-initiated health promotion prompting system in an internal medicine residents' clinic. Gonzalez JJ, et al. **South Med J** 1989 Mar;82(3):342–4

Correspondence analysis and logistic modelling: complementary use in the analysis of a health survey among nurses. Leclerc A, et al. **Stat Med** 1988 Sep;7(9):983–95

Veterinary nurses [letter] Paradise GP. **Vet Rec** 1988 Nov 5;123(19):499

Understanding of elderly patients' resuscitation preferences by physicians and nurses. Uhlmann RF, et al. **West J Med** 1989 Jun;150(6):705–7

Nurses' perceptions of individualized care in nursing practice. van Servellen G. **West J Nurs Res** 1988 Jun;10(3):291–306

[Taking active measures to strengthen nurses' condition—health condition of 374 nurses] Yang YH. **Chung Hua Hu Li Tsa Chih** 1988 Aug;23(8):451–3 **(Chi)**

[Teratogenic effect of thio-tepa despite use of safety rules (letter)] Krarup-Hansen A. **Ugeskr Laeger** 1988 Oct 3; 150(40):2416–7 **(Dan)**

[Contact allergy to ethylenediamine] Rudzki E, et al. **Pneumonol Pol** 1988 Nov;56(11):531–3 (Eng. Abstr.) **(Pol)**

[Occupational allergy in nurses] Rudzki E, et al. **Pol Tyg Lek** 1988 Oct 17–24;43(42–43):1374–6 (Eng. Abstr.) **(Pol)**

[Support integrity of nurses] Einhorn J. **Lakartidningen** 1989 Jan 18;86(3):111–2 **(Swe)**

[Stress and bad personnel policy made nurses to quit their jobs] Lilja A, et al. **Lakartidningen** 1989 Mar 29; 86(13):1145–6 **(Swe)**

MANPOWER

When hanging is imminent... [editorial] Kelly LS. **Nurs Outlook** 1989 Sep–Oct;37(5):213

What do nurses want? Priorities for action. Minnick A, et al. **Nurs Outlook** 1989 Sep–Oct;37(5):214–8

PSYCHOLOGY

Sheer numbers. Adams JP. **Am J Nurs** 1989 Jul;89(7):1014

Lives that sing [editorial] Mallison MB. **Am J Nurs** 1989 May;89(5):637

A mid-life crisis for baby-boomer nurses. Stegman CB. **Am J Nurs** 1989 Mar;89(3):342–3

Handle with care. Worth C. **Am J Nurs** 1989 Feb;89(2):196–8

Recognizing and helping alcoholics. **AORN J** 1988 Sep; 48(3):538, 540

Accepting criticism. A positive process. Davidhizar RE. **AORN J** 1989 Sep;50(3):609–12

No daughter of mine [editorial] Gaberson KB. **AORN J** 1989 Sep;50(3):517–8

Nurses' networks: obstacles and challenge. Kavanagh KH. **Arch Psychiatr Nurs** 1989 Aug;3(4):226–33

Computer-oriented patient care. A comparison of nurses' attitudes and perceptions. Bongartz C. **Comput Nurs** 1988 Sep–Oct;6(5):204–10

Computers in nursing practice. A comparison of the attitudes of nurses and nursing students. Schwirian PM, et al. **Comput Nurs** 1989 Jul–Aug;7(4):168–77

Development of diabetes attitude scale for health-care professionals. Anderson RM, et al. **Diabetes Care** 1989 Feb; 12(2):120–7

Nursing education and importance of professional status in the nurse role. Expectations and knowledge of the nurse role. Olsson HM, et al. **Int J Nurs Stud** 1988;25(4):287–93

Preparation of nurse managers. del Bueno DJ. **Int Nurs Rev** 1989 Jul–Aug;36(4):117–20

Teaching nurses about torture. Dind C. **Int Nurs Rev** 1989 May–Jun;36(3):81–2

Stress among disaster nurses and relief workers. Errington G. **Int Nurs Rev** 1989 May–Jun;36(3):90–1, 80

Dispelling nurses' fears about primary health care. Van den Bergh-Braam A. **Int Nurs Rev** 1988 Sep–Oct;35(5):133–6

Attitudes and behaviours of nurses towards the elderly in an acute care setting. Armstrong-Esther CA, et al. **J Adv Nurs** 1989 Jan;14(1):34–41

Nursing turnover: literature review and methodological critique. Cavanagh SJ. **J Adv Nurs** 1989 Jul;14(7):587–96 (58 ref.)

The effects of training and social orientation on attitudes towards psychiatric treatments. Clarke L. **J Adv Nurs** 1989 Jun;14(6):485–93 (41 ref.)

Stressor frequency, tension, tiredness and coping: some measurement issues and a comparison across nursing groups. Dewe PJ. **J Adv Nurs** 1989 Apr;14(4):308–20 (44 ref.)

Do nurses smoke because of stress? Elkind AK. **J Adv Nurs** 1988 Nov;13(6):733–45

Job satisfaction and attitudes of nursing staff on a unit for the elderly severely mentally infirm, with change of location. Humphris GM, et al. **J Adv Nurs** 1989 Apr; 14(4):298–307

An investigation of the developmental influences on nurses' motivation for their continuing education. Mackereth P. **J Adv Nurs** 1989 Sep;14(9):776–87

The Job Context Index: a guide for improving the fit between nurses and their work environment. Mansfield PK, et al. **J Adv Nurs** 1989 Jun;14(6):501–8

Nursing and caring: a personal construct theory study of some nurses' self-perceptions. Morrison P. **J Adv Nurs** 1989 May;14(5):421–6

Students' and trained nurses' perceptions of their own interpersonal skills: a report and comparison. Morrison P, et al. **J Adv Nurs** 1989 Apr;14(4):321–9

The effects of patient weight and sex on nurses' perceptions: a proposed model of nurse withdrawal. Peternelj-Taylor CA. **J Adv Nurs** 1989 Sep;14(9):744–54 (41 ref.)

The use of profile similarity indices and the Bem sex role inventory in determining the sex role characterization of a group of male and female nurses. Pontin DJ. **J Adv Nurs** 1988 Nov;13(6):768–74

Self concept: improving the image of nursing. Strasen L. **J Nurs Adm** 1989 Jan;19(1):4–5

Nursing, nursing education, and anxiety. Biggers T, et al. **J Nurs Educ** 1988 Nov;27(9):411–7

An elective course on AIDS. Hale PJ. **J Nurs Educ** 1989 May;28(5):232–4

Motivational orientations of registered nurse baccalaureate students in rural New England. Lethbridge DJ. **J Nurs Educ** 1989 May;28(5):203–9 (18 ref.)

Nurses and abortion [editorial] Frye BS. **J Obstet Gynecol Neonatal Nurs** 1989 May-Jun;18(3):193
First impressions of a women's center. Armstrong M. **J Perinatol** 1988 Spring;8(2):134–5
Neonatal nurses' attitudes, beliefs, and feelings toward the care and management of fetal-infants. Richey DA. **J Perinatol** 1988 Spring;8(2):145–53
The connotative meanings of the term "psychosomatic". Bartol GM, et al. **J Prof Nurs** 1988 Nov-Dec;4(6):453–7
To be a nurse. Carter MA. **J Prof Nurs** 1989 May-Jun; 5(3):122
The relationship among organizational climate variables and nurse stability in critical care units. Hart SK, et al. **J Prof Nurs** 1989 May-Jun;5(3):124–31 (15 ref.)
Knowledge and attitudes about acquired immunodeficiency syndrome in nursing and nonnursing groups. Lawrence SA, et al. **J Prof Nurs** 1989 Mar-Apr;5(2):92–101
A study of values of baccalaureate nursing students and graduate nurses from a secular and a nonsecular program. Schank MJ, et al. **J Prof Nurs** 1989 Jan-Feb;5(1):17–22
The relationship of characteristics, experiences, and attitudes of nursing alumnae to their giving behavior. Swanson EA. **J Prof Nurs** 1988 Sep-Oct;4(5):356–65
Caring: commitment to excellence or condemnation to conformity? Sherman JB, et al. **J Psychosoc Nurs Ment Health Serv** 1989 Aug;27(8):25–9
Health care is a team effort. Ayres J. **JAMA** 1988 Nov 4; 260(17):2589–90
Doctors and nurses: friends or foes? Hallenbeck P. **JAMA** 1988 Nov 4;260(17):2589
CSF in neonatal unit [letter] Hetherington J. **Lancet** 1989 Sep 9;2(8663):632
Supporting the deliverers of care: strategies to support nurses and prevent burnout. Bolle JL. **Nurs Clin North Am** 1988 Dec;23(4):843–50 (14 ref.)
Can caring behavior be taught? Forsyth D, et al. **Nurs Outlook** 1989 Jul-Aug;37(4):164–6
A little more nursing homework [editorial] Kelly LS. **Nurs Outlook** 1989 Jul-Aug;37(4):163
Case management and follow-up of a chemically impaired nurse. Stefanik-Campisi C, et al. **Perspect Psychiatr Care** 1987–88;24(3–4):114–9
Perceived goal-difficulty, locus of control, and performance ratings. Bigoness WJ, et al. **Psychol Rep** 1988 Oct; 63(2):475–82
Reflections and remembrances. Carpenter MK, et al. **R I Med J** 1989 Jul;72(7):255–6
Nurses' attributions about rape victims. Damrosch SP, et al. **Res Nurs Health** 1987 Aug;10(4):245–51
Ego defensiveness and its relationship to attitudes of registered nurses toward older people. McCabe BW. **Res Nurs Health** 1989 Apr;12(2):85–91
Stress and coping in a NICU. Rosenthal SL, et al. **Res Nurs Health** 1989 Aug;12(4):257–65
Personality hardiness, occupational stress, and burnout in critical care nurses. Topf M. **Res Nurs Health** 1989 Jun; 12(3):179–86
Empathy and burnout in male and female helping professionals. Williams CA. **Res Nurs Health** 1989 Jun; 12(3):169–78
Autonomy, job satisfaction and professional self-image among nurses in the context of a physicians' strike. Shoham-Yakubovich I, et al. **Soc Sci Med** 1989; 28(12):1315–20
Sex role identity and perceptions of nurse role discrepancy. Forrester DA. **West J Nurs Res** 1988 Oct;10(5):600–12
The wartime experience of military nurses in Vietnam, 1965–1973. Norman EM. **West J Nurs Res** 1989 Apr; 11(2):219–33
Smoking habits and smoking cessation among North Carolina nurses. Swenson IE. **Women Health** 1989;15(2):29–48

STATISTICS & NUMERICAL DATA

The magnitude of low-back problem in nursing. Owen BD. **West J Nurs Res** 1989 Apr;11(2):234–42

SUPPLY & DISTRIBUTION

Moral distress and the shortage of critical care nurses. Fowler MD. **Heart Lung** 1989 May;18(3):314–5
Shortage of professional nursing practice: a reframing of the shortage problem. Prescott PA. **Heart Lung** 1989 Sep; 18(5):436–43
Who will be emptying bedpans [letters] Gaulkin LA. **J Fla Med Assoc** 1988 Sep;75(9):583–4
What went wrong with nursing? [letter] Samartino GT. **J Fla Med Assoc** 1988 Jul;75(7):417–8
An additional viewpoint: what went wrong with nursing? [letter] Tompkins JS. **J Fla Med Assoc** 1988 Oct; 75(10):662–3
A dilemma for physicians and surgeons [editorial] Smith EB. **J Natl Med Assoc** 1989 Jul;81(7):758
Medicine speaks again [editorial] Blancett SS. **J Nurs Adm** 1989 Apr;19(4):3
Mentor program for high school students. Bookchin S, et al. **J Nurs Adm** 1989 Sep;19(9):37–40
Meeting the needs for health workers: proportions, prerogatives, and priorities. **J Public Health Policy** 1988 Autumn;9(3):309–18
Immigration: a short-term strategy, not a long-term cure. Nelson AC. **Nurs Outlook** 1989 May-Jun;37(3):143
Project 2000 [letter] Godber GE. **Public Health** 1988 Sep; 102(5):501–2
RCTs [editorial] Ward SD. **W V Med J** 1988 Oct;84(10):461
[Efficiency indexes of human resources in the technical area of a health service. II: Needs of nursery, midwifery and service personnel] Dragicevic JG, et al. **Rev Med Chil** 1988 Feb;116(2):187–93 (Eng. Abstr.) **(Spa)**

UTILIZATION

Nursing's role in cancer prevention and detection. Vital contributions to attainment of the Year 2000 Goal. Frank-Stromborg M. **Cancer** 1988 Oct 15;62(8 Suppl):1833–8

NURSES' AIDES

The gang that couldn't listen straight [editorial] Mallinson MB. **Am J Nurs** 1989 Feb;89(2):161
Occupational lifting by nursing aides and warehouse workers. Ljungberg AS, et al. **Ergonomics** 1989 Jan;32(1):59–78
What you can expect of nurse's aides. Woolfork CH. **Geriatr Nurs (New York)** 1989 Jul-Aug;10(4):178–80
Quality of care and the burden of two cultures: when the world of the nurse's aide enters the world of the nursing home. Tellis-Nayak V, et al. **Gerontologist** 1989 Jun; 29(3):307–13
Sleep disorder symptoms among nurses and nursing aides. Infante-Rivard C, et al. **Int Arch Occup Environ Health** 1989;61(5):353–8
The nursing auxiliary service and the care of elderly patients. Badger F, et al. **J Adv Nurs** 1989 Jun;14(6):471–7
Food refusal amongst nursing home patients as conceptualized by nurses' aids and enrolled nurses: an interview study. Norberg A, et al. **J Adv Nurs** 1988 Jul; 13(4):478–83
Conflict resolution: applying the political model to the RCT proposal. Goodyear R, et al. **Nurse Pract** 1989 Sep;14(9):50, 53–4, 56

EDUCATION

National, state efforts address nurse shortage. Koska MT. **Hospitals** 1989 Feb 5;63(3):58–9
Nursing shortage: a deepening dilemma. Bryant FW. **Mich Med** 1988 Aug;87(8):524
The Omnibus Budget Reconciliation Act of 1987. A policy analysis. Kelly M. **Nurs Clin North Am** 1989 Sep; 24(3):791–4
[Training of auxiliary nursing personnel in the health services: Brazil] Vieira TC, et al. **Educ Med Salud** 1988;22(1):35–46 (Eng. Abstr.) **(Por)**
[Training and participation of nurses' aides in the development of health services: report of a task force] **Educ Med Salud** 1988;22(1):12–9 **(Spa)**
[A method of education at a distance for nurses' aides in the community area of Guatemala] García Pastor de Domínguez E, et al. **Educ Med Salud** 1988;22(1):20–34 (Eng. Abstr.) **(Spa)**

MANPOWER

Nursing shortage: "the key is to move ahead". Hotchkiss WS. **Va Med** 1989 May;116(5):229–30

STANDARDS

The right tool for the job. Davis C. **Geriatr Nurs (New York)** 1989 Jul-Aug;10(4):194–5

UTILIZATION

AMA aims to pilot RTC project in four sites. **Am J Nurs** 1988 Dec;88(12):1717, 1720
RCTs: a physician's viewpoint. Whinery RD. **Iowa Med** 1989 Feb;79(2):60–1
The unit service clerk. Dale RL, et al. **J Nurs Adm** 1989 Jun;19(6):22–4

NURSES, HEAD see **NURSING, SUPERVISORY**

NURSING

see related
NURSING, SUPERVISORY
OFFICE NURSING

Florida jobfocus. **Am J Nurs** 1988 Dec;88(12):1697–700
Midwest job focus heart in the heartland. Nash M. **Am J Nurs** 1988 Oct;88(10):1387–94
Southeast jobfocus. Southeastern hospitality. Nash M. **Am J Nurs** 1988 Dec;88(12):1691–6
Good nursing takes more than good intentions. Powell AH. **Am J Nurs** 1989 Jun;89(6):902
Reproductive technology [letter] **ANS** 1989 Jan;11(2):vii–ix
Nursing 'too feminine' for men? [letter] **AORN J** 1989 Feb; 49(2):474, 476
Professional maturity. The stages of developing self-esteem. Mannahan CA. **AORN J** 1989 Feb;49(2):593–4, 596
What nurses need to know about depositions [published erratum appears in AORN J 1988 Dec;48(6):1127] Murphy EK. **AORN J** 1988 Oct;48(4):742–4
Computerized databases in nursing. Information at your fingertips. Fried AK, et al. **Comput Nurs** 1988 Nov-Dec; 6(6):244–52
Computer graphics. A tool for decision making in nursing. Laborde JM, et al. **Comput Nurs** 1989 Jan-Feb;7(1):15–20
Encouraging the growth of computer applications in nursing. Monheim BJ. **Comput Nurs** 1989 Jan-Feb;7(1):35, 34
Computer networking for nurses. Is it time yet? Rankin J. **Comput Nurs** 1988 Sep-Oct;6(5):227–8
Critical care nurses' role with families: a descriptive study. Hickey M, et al. **Heart Lung** 1988 Nov;17(6 Pt 1):670–6
Information currently available to the nurse [letter] Kilby S, et al. **Heart Lung** 1989 Mar;18(2):215
Interinstitutional collaboration for nursing excellence: Part 1, Creating the partnership. Baker CM, et al. **J Nurs Adm** 1989 Feb;19(2):8–12
Interinstitutional collaboration for nursing excellence: Part 2. Testing the model. Baker CM, et al. **J Nurs Adm** 1989 Mar;19(3):8–13
Finally, it's time. Balasco EM. **J Prof Nurs** 1989 Jul-Aug; 5(4):174, 236–7
Opportunity from adversity. Carter MA. **J Prof Nurs** 1988 Sep-Oct;4(5):315
Getting our act together. Carter MA. **J Prof Nurs** 1989 Jul-Aug;5(4):175
A piece of my mind. Partner in crime. Shewell L. **JAMA** 1989 Aug 18;262(7):950
The expert witness. Rhodes AM. **MCN** 1989 Jan-Feb; 14(1):49
Patient teaching. **Nurs Clin North Am** 1989 Sep;24(3):583–693
Sexual counseling of couples after a mastectomy or myocardial infarction. Whipple B. **Nurs Forum** 1987–88; 23(3):85–91
Strengthening nursing's international focus [letter] **Nurs Outlook** 1989 Sep-Oct;37(5):209
"Must" reading [letter] Abdellah FG. **Nurs Outlook** 1989 Jan-Feb;37(1):9
Nursing values and health care policy. Davis GC. **Nurs Outlook** 1988 Nov-Dec;36(6):289–92
Updating nursing's image [editorial] Kelly LS. **Nurs Outlook** 1989 Jan-Feb;37(1):17
The grass is not greener [editorial] Kelly LS. **Nurs Outlook** 1989 May-Jun;37(3):115
Nursing and health care in the U.S.S.R. Kinsey DV. **Nurs Outlook** 1989 May-Jun;37(3):120–2
Nursing's image on the university campus. Lippman DT, et al. **Nurs Outlook** 1989 Jan-Feb;37(1):24–7
Regulatory initiatives: instruments for leadership. Nichols B. **Nurs Outlook** 1989 Mar-Apr;37(2):62–3, 100
Tort reform: where does nursing stand? Northrop CE. **Nurs Outlook** 1988 Nov-Dec;36(6):304
How to use nursing information sources. Saba VK, et al. **Nurs Outlook** 1989 Jul-Aug;37(4):189–95
Objectives for the Nation: a national agenda for nursing education, research, and practice. Salmon ME, et al. **Nurs Outlook** 1989 May-Jun;37(3):110–1
Using the RCT proposal for nursing [letter] Seymour RS. **Nurs Outlook** 1989 Mar-Apr;37(2):66
What high school texts say about nursing. Smith MK, et al. **Nurs Outlook** 1989 Jan-Feb;37(1):28–30
Nursing in Korea. Um H, et al. **Nurs Outlook** 1989 May-Jun; 37(3):127–30
Glue [editorial] Downs FS. **Nurs Res** 1989 May-Jun; 38(3):133
Patient-handling skill, back injuries, and back pain. An intervention study in nursing. Videman T, et al. **Spine** 1989 Feb;14(2):148–56
Public perception of nursing and strategy formulation. Reichelt PA. **West J Nurs Res** 1988 Aug;10(4):472–6

MANPOWER

Coming to terms with the nursing shortage--asserting the role and initiatives of academic health centers [editorial] Kassebaum DG. **Acad Med** 1989 Feb;64(2):83–4
Beyond Florence Nightingale: the general professional education of the nurse. Pounds LA. **Acad Med** 1989 Feb; 64(2):67–9
The nursing crisis in Alabama, a "supplier" state. Taylor B. **Ala Med** 1989 Jul;59(1):9–10
A quick-fix solution [letter] Wursthorne DS, et al. **Am J Nurs** 1988 Oct;88(10):1335
It's time to put some 'teeth' into solutions to the nursing shortage [editorial] Palmer PN. **AORN J** 1989 Mar; 49(3):731–2
The AMA proposal for registered care technologists is ludicrous and insulting [editorial] Palmer PN. **AORN J** 1988 Sep;48(3):427–8
A nurse by any other name is still in short supply [editorial] Palmer PN. **AORN J** 1988 Nov;48(5):853–4
The shortage of nursing personnel. **Iowa Med** 1989 Feb; 79(2):83
Registered nurse shortage: a health care crisis. Baker C. **Iowa Med** 1989 Feb;79(2):56–8
Nursing shortage: focusing on priorities. Moyer D, et al. **Iowa Med** 1989 Mar;79(3):125
RCTs: a physician's viewpoint. Whinery RD. **Iowa Med** 1989 Feb;79(2):60–1
Nursing the statistics: a demonstration study of nurse turnover and retention. Barry JT, et al. **J Adv Nurs** 1989 Jul;14(7):528–35
Current shortage of qualified nursing licensees [letter] **J Ky Med Assoc** 1988 Aug;86(8):425
The "New Deal" for nursing [editorial] Stewart-Amidei C. **J Neurosci Nurs** 1989 Apr;21(2):75
Recruitment and retention of nursing students from diverse cultural backgrounds. Crawford LA, et al. **J Nurs Educ** 1988 Oct;27(8):379–81

RCT controversy [letter] Parnes YM. **J Obstet Gynecol Neonatal Nurs** 1989 Mar–Apr;18(2):90
Wagons in a circle [editorial] Copp LA. **J Prof Nurs** 1988 Sep–Oct;4(5):311–2
The nursing shortage and research opportunities. Williams CA. **J Prof Nurs** 1989 Jan–Feb;5(1):5
Commonwealth Fund: end the nursing shortage by solving the problems. **J Psychosoc Nurs Ment Health Serv** 1989 Jul;27(7):33–4
More on RCTs [letter] Walters RM, et al. **J Psychosoc Nurs Ment Health Serv** 1989 Feb;27(2):42
The nursing shortage and nursing's legal scope of practice. Northrop CE. **Nurs Outlook** 1989 Mar–Apr;37(2):104
Legislative update. Morris BK. **Nurse Pract** 1989 Jun;14(6):6
The nursing shortage: a professional's viewpoint [editorial] Sokoloff CB. **R I Med J** 1989 Feb;72(2):43–4
[Research on the work force in nursing in 6 countries] **Educ Med Salud** 1988;22(1):64–90 **(Spa)**

ORGANIZATION & ADMINISTRATION

[Psychological management of hospital nursing staffs] Zhang SY. **Chung Hua Hu Li Tsa Chih** 1988 Nov;23(11):645–6 **(Chi)**
[Experience in management of scientific researches on nursing] Zhao SG. **Chung Hua Hu Li Tsa Chih** 1988 Sep; 23(9):515–7 **(Chi)**

STANDARDS

Hallmarks of success in nursing practice. Fawcett J, et al. **ANS** 1989 Jul;11(4):1–8
Professionalization—or struggle for survival? A consideration of current proposals for the reform of nursing in the United Kingdom. Salvage J. **J Adv Nurs** 1988 Jul;13(4):515–9
Certification should not be required for hiring/promotion. delBueno DJ. **J Nurs Adm** 1989 Jul–Aug;19(7):9
Certification should be required for hiring/promotion. Nielsen BB. **J Nurs Adm** 1989 Jul–Aug;19(7):8
[Enhancing the nurse's quality is of utmost importance to good nursing service] Yu HZ. **Chung Hua Hu Li Tsa Chih** 1988 Apr;23(4):230–1 **(Chi)**
[Aids for formulating a training policy for nursing personnel, without specific qualification, employed in the public health sector, Brazil] dos Santos E, et al. **Educ Med Salud** 1988; 22(2):200–10 **(Por)**

TRENDS

Nursing education and practice. Lindeman CA. **Acad Med** 1989 Feb;64(2):70–3
Nursing is ready for great reform [editorial] Farley VM. **AORN J** 1988 Oct;48(4):640–1
Uneasy allies: as nurses march towards 2000, some MDs get nervous. Houlihan P. **Can Med Assoc J** 1988 Dec 15; 139(12):1191–2
The position of nursing. Between school medicine and alternative medicine. Glaus A. **Cancer Nurs** 1988 Aug; 11(4):250–3
The outlook for nursing in India. Mehra P. **Int Nurs Rev** 1989 Jul–Aug;36(4):121–2
The entrepreneurial nurse consultant: a Marxist analysis. Crowley MA. **J Adv Nurs** 1989 Jul;14(7):582–6
Nursing values: exploring the clichés. Wilson-Barnett J. **J Adv Nurs** 1988 Nov;13(6):790–6 (22 ref.)
An additional viewpoint: what went wrong with nursing? [letter] Tompkins JS. **J Fla Med Assoc** 1988 Oct; 75(10):662–3
Challenging yesterday's ideas. Malkemes LC. **J Nurs Adm** 1989 Oct;19(10):4–5
High school students' perceptions of nursing as a career: a pilot study. Grossman D, et al. **J Nurs Educ** 1989 Jan; 28(1):18–21
Voices in distant camps: the gap between nursing research and nursing practice. Brodie B. **J Prof Nurs** 1988 Sep–Oct; 4(5):320–8
Anticipating 2000 AD [editorial] Copp LA. **J Prof Nurs** 1989 Jan–Feb;5(1):1–2
The future of nursing practice and implications for nursing education. McCarthy SM. **J Prof Nurs** 1989 May–Jun; 5(3):121, 168
Autonomy: where are we going? Scearse P. **J Prof Nurs** 1989 Jul–Aug;5(4):176, 237
An apologist's theories for the nursing profession: adaptation and art. Rafferty C. **Nurs Forum** 1987–88;23(4):124–6
Redefining the expanded role. Mechanic HF. **Nurs Outlook** 1988 Nov–Dec;36(6):280–4
Nurses continue struggle for improvement in Nicaragua [letter] Hecht I, et al. **Nurse Pract** 1988 Oct;13(10):79
The future of nursing. Ravitch MM. **Pa Med** 1988 Oct; 91(10):51–2, 54
Making a difference [editorial] Ardery G. **West J Nurs Res** 1988 Oct;10(5):525–6

NURSING ADMINISTRATION RESEARCH see under **NURSING RESEARCH**

NURSING ASSESSMENT

At risk for suicide.... Brown BB, et al. **Am J Nurs** 1988 Oct; 88(10):1358–61
Translating nursing diagnosis into ICD code. Fitzpatrick JJ, et al. **Am J Nurs** 1989 Apr;89(4):493–5
Nursing diagnosis. Kim MJ. **Annu Rev Nurs Res** 1989; 7:117–42 (67 ref.)
Perioperative documentation. Incorporating nursing diagnoses into the intraoperative record. Edel EM, et al. **AORN J** 1989 Sep;50(3):596–600
Developing nursing diagnoses for a perioperative care plan. A classroom research project. Kleinbeck SV. **AORN J** 1989 Jun;49(6):1613–25
Could it be Ganser's syndrome? Cosgray RE, et al. **Arch Psychiatr Nurs** 1989 Aug;3(4):241–5
Psychosocial nursing diagnosis. Loomis ME. **Arch Psychiatr Nurs** 1988 Dec;2(6):357–9
Identifying akinesia and akathisia: the relationship between patient's self-report and nurse's assessment. Michaels RA, et al. **Arch Psychiatr Nurs** 1989 Apr;3(2):97–101
Psychosocial nursing diagnosis—issues and research. Wolf-Wilets VC. **Arch Psychiatr Nurs** 1988 Dec;2(6):328–9
The ER nurse: "can't everyone see I'm doing as much as I can"? Mendham L. **Can Med Assoc J** 1988 Nov 1; 139(9):881–2
A comparison of nurses' recorded assessments of pain with perceptions of pain as described by cancer patients. Camp LD. **Cancer Nurs** 1988 Aug;11(4):237–43
A computer program to support patient assessment and clinical decision-making in nursing education. Hirsch M, et al. **Comput Nurs** 1989 Jul–Aug;7(4):157–60
Nursing consideration in acute spinal cord injury. Reed MA. **Crit Care Clin** 1987 Jul;3(3):679–91 (22 ref.)
Care for life. Resnick BM. **Geriatr Nurs (New York)** 1989 May–Jun;10(3):130–2
The referral process in health visiting. Luker KA, et al. **Int J Nurs Stud** 1989;26(2):173–85
Assessment of the person with AIDS in the emergency department. Jordan KS. **Int Nurs Rev** 1989 Mar–Apr; 36(2):57–9
The yield of a home visit in the assessment of geriatric patients. Ramsdell JW, et al. **J Am Geriatr Soc** 1989 Jan; 37(1):17–24
Computerized telephone assessment of the "concrete" needs of chemotherapy outpatients: a feasibility study. Siegel K, et al. **J Clin Oncol** 1988 Nov;6(11):1760–7
A nursing process approach to epidural analgesia. Henrikson ML, et al. **J Obstet Gynecol Neonatal Nurs** 1988 Sep–Oct; 17(5):316–20
Nursing diagnoses in wellness childbearing settings. Stevens KA. **J Obstet Gynecol Neonatal Nurs** 1988 Sep–Oct; 17(5):329–36
Nursing diagnoses for the postpartum woman. Tribotti S, et al. **J Obstet Gynecol Neonatal Nurs** 1988 Nov–Dec; 17(6):410–6
'Reductionism' or invisibility for nursing? Conway ME. **J Prof Nurs** 1989 Mar–Apr;5(2):61, 112
Nursing diagnosis in graduate curricula. Shoemaker JK. **J Prof Nurs** 1989 May–Jun;5(3):140–3
Tardive dyskinesia. A reader responds. Beeber LS. **J Psychosoc Nurs Ment Health Serv** 1989 Mar;27(3):35–6
Client classification. A "needs" approach. Hay MA, et al. **J Psychosoc Nurs Ment Health Serv** 1988 Dec;26(12):23–30
Neuroleptic malignant syndrome: recognizing an unrecognized killer. Hooper JF, et al. **J Psychosoc Nurs Ment Health Serv** 1989 Jul;27(7):13–5
Assessment and education to prevent preterm labor. Johnson FF. **MCN** 1989 May–Jun;14(3):157–60
Cultural assessment in rehabilitation nursing practice. Hoeman SP. **Nurs Clin North Am** 1989 Mar;24(1):277–89 (25 ref.)
Identifying the alcoholic client. Tweed SH. **Nurs Clin North Am** 1989 Mar;24(1):13–32 (71 ref.)
Detection of neonatal hypoglycemia—a comparison of three reagent strips. Brown MS, et al. **Nurse Pract** 1988 Oct; 13(10):15–6, 18, 23–4
Diagnosing urinary incontinence in adults. Ruff CC, et al. **Nurse Pract** 1989 Jun;14(6):8–10, 12–4, 16–8 (20 ref.)
Neonatal apnea: diagnosis by nurse versus computer. Muttitt SC, et al. **Pediatrics** 1988 Nov;82(5):713–20
Analysis of infant risk factors documented by public health nurses. von Windeguth B, et al. **Public Health Nurs** 1988 Sep;5(3):165–9
A nursing perspective on the assessment of function in persons with arthritis. Goeppinger J, et al. **Res Nurs Health** 1988 Oct;11(5):321–31
The effect of verbalization of cognitive processes on clinical decision making. Henry SB, et al. **Res Nurs Health** 1989 Jun;12(3):187–93
Increasing the rate of identification of battered women in an emergency department: use of a nursing protocol. Tilden VP, et al. **Res Nurs Health** 1987 Aug;10(4):209–15
The interpretation of self-care: a difference in outlook between clients and home-nurses. van Agthoven WM, et al. **Soc Sci Med** 1989;29(2):245–52
Nursing assessment: what do nurses want to know? Morrison EG. **West J Nurs Res** 1989 Aug;11(4):469–76
Visual estimation accuracy. Moss JR, et al. **West J Nurs Res** 1989 Jun;11(3):352–60
Computer use and nursing research. A computerized taxonomy of nursing diagnoses for use in ambulatory care nursing education, practice, and research—Part 1: Development and major headings. Ver Steeg DF. **West J Nurs Res** 1988 Aug;10(4):506–9

CLASSIFICATION

Computer use and nursing research. A computerized taxonomy of nursing diagnoses for use in ambulatory care nursing education, practice, and research—Part 2: The use of modifiers. Ver Steeg DF. **West J Nurs Res** 1988 Dec; 10(6):778–81

METHODS

Daily living and functional health status: a perspective for nursing diagnosis and treatment. Carnevali DL. **Arch Psychiatr Nurs** 1988 Dec;2(6):330–3
A guide for nursing assessment of the psychiatric inpatient. Sanger E, et al. **Arch Psychiatr Nurs** 1988 Dec;2(6):334–8
Development of a tool for assessing posttrauma response. Tanaka K. **Arch Psychiatr Nurs** 1988 Dec;2(6):350–6 (62 ref.)
Nursing diagnosis of patients with manic and thought disorders. Thomas MD, et al. **Arch Psychiatr Nurs** 1988 Dec;2(6):339–44
A validation study of the nursing diagnosis "somatization". Whitney JD, et al. **Arch Psychiatr Nurs** 1988 Dec; 2(6):345–9
Assessment of renal function in the patient receiving chemotherapy. Lydon J. **Cancer Nurs** 1989 Jun; 12(3):133–43
Issues in evaluation: evaluating assessments of elderly people using a combination of methods. McEwan RT. **J Adv Nurs** 1989 Feb;14(2):103–10
Health assessment of the elderly at home: the case for shared learning. Runciman P. **J Adv Nurs** 1989 Feb;14(2):111–9
Validation of defining characteristics: clinical design. Woodtli AO. **J Neurosci Nurs** 1988 Oct;20(5):324–6 (11 ref.)
Integrating HIV/AIDS risk assessment into a nurse-midwifery practice. Krutsky C, et al. **J Nurse Midwifery** 1989 Sep–Oct;34(5):275–6
From models to measures in assessment of mature families. Quayhagen MP, et al. **J Prof Nurs** 1989 May–Jun; 5(3):144–51

ORGANIZATION & ADMINISTRATION

[primary nursing is thorough investigations of patients] Wang WZ, et al. **Chung Hua Hu Li Tsa Chih** 1989 Apr;24(4):193–5 **(Chi)**

STANDARDS

Nurses' perception of stress in preoperative surgical patients. Biley FC. **J Adv Nurs** 1989 Jul;14(7):575–81
Identification of nursing diagnoses and defining characteristics: two research models. Woodtli A. **Res Nurs Health** 1988 Dec;11(6):399–406

STATISTICS & NUMERICAL DATA

Who's using nursing diagnoses? Bruncknorst L, et al. **Am J Nurs** 1989 Feb;89(2):267–8

NURSING AUDIT

Adaptation of the nursing audit to community health nursing. Stewart MJ, et al. **Nurs Forum** 1987–88;23(4):134–53 (70 ref.)

METHODS

Development of a public health nursing quality assessment measure. Ervin NE, et al. **QRB** 1989 May;15(5):138–43

NURSING CARE

Nurse...or Scarlet Pimpernel? Golder DJ. **Am J Nurs** 1989 Jan;89(1):154
My Florence Nightingale code of ethics [letter] Herrera J. **Am J Nurs** 1988 Nov;88(11):1480
Sketches in the snow. Landsean E. **Am J Nurs** 1988 Dec; 88(12):1738
Putting your patient-care philosophy to the test [editorial] Mallison M. **Am J Nurs** 1989 Aug;89(8):1021
A turnaround toward caring? [editorial] Mallison M. **Am J Nurs** 1989 Sep;89(9):1111
Unsinkable nurses [editorial] Mallison MB. **Am J Nurs** 1988 Oct;88(10):1317
Comfort versus cure. Nishioka E. **Am J Nurs** 1989 Sep; 89(9):1125–6
Common problems and state of the art in nursing care of the mechanically ventilated patient. Norton LC, et al. **Am Rev Respir Dis** 1988 Oct;138(4):1055–6
A new perspective on nursing and caring in a corporate context. MacPherson KI. **ANS** 1989 Jul;11(4):32–9
Perioperative clinical simulations. Development and use in nursing education. Thiele JE, et al. **AORN J** 1989 Aug; 50(2):370–3, 376–8
Head position in low-risk premature infants. Impact of nursing routines. Vles JS, et al. **Biol Neonate** 1988; 54(6):307–13
Motivational factors in breast self-examination. Implications for nurses. Cretain GK. **Cancer Nurs** 1989 Aug;12(4):250–6
The psychodynamics of prolonged treatment in a patient with cancer of the hypopharynx. Feldman JE, et al. **Cancer Nurs** 1988 Dec;11(6):362–7
Caring for the revolution. Shirley JL. **Cancer Nurs** 1989 Apr; 12(2):118–9
Computerized management program for the skills laboratory of a school of nursing. Hodson KE, et al. **Comput Nurs** 1988 Sep–Oct;6(5):215–21

Holistic health care: the roles of the self and the nurse. Keiley M. **Dimens Health Serv** 1989 May;66(4):17-9, 33
Life as a bell-shaped curve. Trocchio J. **Geriatr Nurs (New York)** 1989 Mar-Apr;10(2):71
NTI research abstracts. Sixteenth annual National Teaching Institute. Atlanta, Ga., May 15 to 18, 1989. **Heart Lung** 1989 May;18(3):291-309
Touch: a nursing strategy in the intensive care unit. Estabrooks CA. **Heart Lung** 1989 Jul;18(4):392-401
Cardiac transplantation: a comprehensive nursing perspective. Part 2. Futterman LG. **Heart Lung** 1988 Nov; 17(6 Pt 1):631-8 (35 ref.)
Reflections on the philosophy of caring in mental health. Barker P. **Int J Nurs Stud** 1989;26(2):131-41 (66 ref.)
The competency quagmire: clarification of the nursing perspective concerning the issues of competence and informed consent. Davis AJ, et al. **Int J Nurs Stud** 1989; 26(3):271-9
Treatment of torture survivors and their families: the nurse's function. Jacobsen L, et al. **Int Nurs Rev** 1989 May-Jun; 36(3):75-80
The concept of family nursing. Friedemann ML. **J Adv Nurs** 1989 Mar;14(3):211-6
Rethinking patient education. Luker K, et al. **J Adv Nurs** 1989 Sep;14(9):711-8 (59 ref.)
Preceptorship: a viable alternative clinical teaching strategy? Myrick F. **J Adv Nurs** 1988 Sep;13(5):588-91
Nursing care as a moral, practical, communicative and creative activity. Sarvimäki A. **J Adv Nurs** 1988 Jul; 13(4):462-7
Humour and the older adult: implications for nursing. Simon JM. **J Adv Nurs** 1988 Jul;13(4):441-6
Marginality and the role of the clinical teacher. Smyth T. **J Adv Nurs** 1988 Sep;13(5):621-30
An investigation of the dependence of severely disabled people in a hospital. Stride NM. **J Adv Nurs** 1988 Sep; 13(5):556-64
When the patient requires observation not hospitalization. Balik B, et al. **J Nurs Adm** 1988 Oct;18(10):20-3
Practice partnerships: the newest concept in care delivery. Manthey M. **J Nurs Adm** 1989 Feb;19(2):33-5
Take time to touch. Ridzon P. **J Nurs Adm** 1989 Sep;19(9):3
The business of nursing: management traps. Wolf GA. **J Nurs Adm** 1989 Sep;19(9):9-10
Clinical teaching is more than evaluation alone! Flagler S, et al. **J Nurs Educ** 1988 Oct;27(8):342-8
Baccalaureate nursing student preceptorship programs and the development of clinical competence. Scheetz LJ. **J Nurs Educ** 1989 Jan;28(1):29-35
Theory building in nurse-midwifery. The care process. Thompson JE, et al. **J Nurse Midwifery** 1989 May-Jun; 34(3):120-30
Nursing interventions for the first three postpartum months. Hampson SJ. **J Obstet Gynecol Neonatal Nurs** 1989 Mar-Apr;18(2):116-22
Influence of diagnosis-related groups on discharge planning, professional practice, and patient care [published erratum appears in J Prof Nurs 1989 Mar-Apr;5(2):111] Bull MJ. **J Prof Nurs** 1988 Nov-Dec;4(6):415-21
How do you keep charting and documenting from interfering with direct patient care? **J Psychosoc Nurs Ment Health Serv** 1989 Aug;27(8):36
Breaking the cycle of abuse: how nurses can intervene. Bullock LF, et al. **J Psychosoc Nurs Ment Health Serv** 1989 Aug;27(8):11-3
Seclusion and restraint: decreasing the discomfort. Craig C, et al. **J Psychosoc Nurs Ment Health Serv** 1989 Jul; 27(7):16-9
Dying, God, & anger. Comforting through spiritual care. Henderson KJ. **J Psychosoc Nurs Ment Health Serv** 1989 May;27(5):17-21
Nursing care of patients with Parkinson's disease. Szigeti E. **Neurosci Biobehav Rev** 1988 Fall-Winter;12(3-4):307-9
Essays on the art of caring in nursing: I. The human spirit in stress management. Dugan DO. **Nurs Forum** 1987-88; 23(3):108-17
Student attitudes toward treating AIDS patients [letter] Eisner D. **Nurs Outlook** 1989 Jan-Feb;37(1):8
Lip-reading the bedside care shortage [editorial] Bristow LR. **West J Med** 1989 Jul;151(1):76-7
[Nursing perspective on the differentiation of symptoms and signs of exterior syndrome patients treated by relieving the exterior syndrome] Gu QH. **Chung Hua Hu Li Tsa Chih** 1988 Jul;23(7):410-1 **(Chi)**
[Preliminary study on computerized management of medical orders] Luan XN. **Chung Hua Hu Li Tsa Chih** 1988 Jun; 23(6):352-3 **(Chi)**
[Realization of auxiliary management system of clinical nursing by computers] Wang CF. **Chung Hua Hu Li Tsa Chih** 1988 May;23(5):299-300 **(Chi)**
[Enhancing the nurse's quality is of utmost importance to good nursing service] Yu HZ. **Chung Hua Hu Li Tsa Chih** 1988 Apr;23(4):230-1 **(Chi)**
[Observation of patient's tongue presentation in clinical nursing] Zhang GM. **Chung Hua Hu Li Tsa Chih** 1988 Sep; 23(9):536-7 **(Chi)**
[Nursing problems in traditional Chinese medicine] Zhang SL. **Chung Hua Hu Li Tsa Chih** 1988 Jun;23(6):340-1 **(Chi)**
[The role of nursing for elderly patients] Kamata K. **Nippon Ronen Igakkai Zasshi** 1988 May;25(3):263-6 (Eng. Abstr.) **(Jpn)**
[Special care services--an advantage or a disadvantage?] Eskerud J, et al. **Tidsskr Nor Laegeforen** 1988 Oct 30; 108(30):2753-5 (Eng. Abstr.) **(Nor)**

CLASSIFICATION

The effects of nursing and physician services: some preliminary results. Hogan AJ, et al. **Soc Sci Med** 1989; 29(4):527-36

ECONOMICS

Comparative costs of a cooperative care program versus hospital inpatient care for gynecology patients. Saywell RM, et al. **J Nurs Adm** 1989 Mar;19(3):29-35

HISTORY

Matronized nursing service at Mobile City Hospital in the mid-19th century: a paradigm of altruism and indigent patient care. Salley RK, et al. **South Med J** 1989 Aug; 82(8):1017-25
[Fascist ideology and health care in Germany 1933 to 1945] Hahn S. **Z Arztl Fortbild (Jena)** 1989;83(7):359-61 **(Ger)**

INSTRUMENTATION

A benefit of clinical trials [letter] Farling PA. **Anaesthesia** 1989 Mar;44(3):264

MANPOWER

Nursing resources and the delivery of patient care: the National Center for Nursing Research Perspective. Moritz P, et al. **J Nurs Adm** 1989 May;19(5):12-7
Nursing shortage: "the key is to move ahead". Hotchkiss WS. **Va Med** 1989 May;116(5):229-30

METHODS

Infection control. Larson EL. **Annu Rev Nurs Res** 1989; 7:95-113 (55 ref.)
Merging nursing research and practice: a case of multiple identities. Jennings BM, et al. **J Adv Nurs** 1988 Nov; 13(6):752-8
Action research: philosophy, methods and personal experiences. Webb C. **J Adv Nurs** 1989 May;14(5):403-10
The healing touch. Leduc E. **MCN** 1989 Jan-Feb;14(1):41-3
Nurses' perceptions of individualized care in nursing practice. van Servellen G. **West J Nurs Res** 1988 Jun;10(3):291-306

ORGANIZATION & ADMINISTRATION

Computer-oriented patient care. A comparison of nurses' attitudes and perceptions. Bongartz C. **Comput Nurs** 1988 Sep-Oct;6(5):204-10
The functioning of nursing routines in the management of a transient workforce. Procter S. **J Adv Nurs** 1989 Mar; 14(3):180-9
[Management of nursing at an intensive care unit] Huang SR. **Chung Hua Hu Li Tsa Chih** 1988 Nov;23(11):643-4 **(Chi)**
[Goal-oriented administrative management in nursing care] Zhang ZD, et al. **Chung Hua Hu Li Tsa Chih** 1989 Mar; 24(3):129-31 **(Chi)**

PSYCHOLOGY

Comparative analysis of the perceptions of patients and nurses about the importance of nursing activities in a postpartum unit. Morales-Mann ET. **J Adv Nurs** 1989 Jun;14(6):478-84
Nursing students' attitudes toward AIDS. Lester LB, et al. **J Nurs Educ** 1988 Nov;27(9):399-404
Why do we care? Carter MA. **J Prof Nurs** 1989 Mar-Apr; 5(2):65
Magnitude estimation: issues and practical applications. Sennott-Miller L, et al. **West J Nurs Res** 1988 Aug; 10(4):414-24

STANDARDS

Nursing gets no support in fighting unsafe practices [letter] Rinker K. **Am J Nurs** 1988 Nov;88(11):1479
Corporate standards for nursing care. An integral part of a computerized care plan. Hinson DK, et al. **Comput Nurs** 1988 Jul-Aug;6(4):141-6
Central station data displays: an experimental evaluation of observer performance. Part 1: Number of displays and observation time. Crew AD, et al. **Intensive Care Med** 1989; 15(5):314-8
Determinants of patient care: nursing process or nursing attitudes? Moss AR. **J Adv Nurs** 1988 Sep;13(5):615-20
Food refusal amongst nursing home patients as conceptualized by nurses' aids and enrolled nurses: an interview study. Norberg A, et al. **J Adv Nurs** 1988 Jul; 13(4):478-83
Expert witness. Janulis DM. **J Neurosci Nurs** 1989 Jun; 21(3):195-7
Concept of the month: implementing King's Conceptual Framework at the bedside. Byrne E, et al. **J Nurs Adm** 1989 Feb;19(2):28-32
Patient classification system evaluation. Part 1: Essential system elements. De Groot HA. **J Nurs Adm** 1989 Jun; 19(6):30-5
A nursing diagnosis based model: guiding nursing practice. Krenz M, et al. **J Nurs Adm** 1989 May;19(5):32-6
Values and vision in chaotic times. Strasen L. **J Nurs Adm** 1989 Mar;19(3):4-5, 25
Intervening in interventions [editorial] Smoyak SA. **J Psychosoc Nurs Ment Health Serv** 1989 Aug;27(8):3
Judging nursing practice. Rhodes AM. **MCN** 1989 Mar-Apr; 14(2):123
[The concept of quality assessment and quality assurance in nursing care] Neukirch E, et al. **Z Gesamte Hyg** 1988 Aug; 34(8):466-8 (Eng. Abstr.) **(Ger)**

SUPPLY & DISTRIBUTION

A study of staffing levels in hospital wards for severely physically disabled patients. Stride NM, et al. **Int J Nurs Stud** 1989;26(2):143-54

TRENDS

What's right with nursing? [editorial] Stewart-Amidei C. **J Neurosci Nurs** 1988 Dec;20(6):341-2

NURSING CARE PLANS see **PATIENT CARE PLANNING**

NURSING DIAGNOSIS see under **NURSING ASSESSMENT**

NURSING EDUCATION RESEARCH see under **NURSING RESEARCH**

NURSING ETHICS see **ETHICS, NURSING**

NURSING EVALUATION RESEARCH see under **NURSING RESEARCH**

NURSING FACULTY PRACTICE

The faculty fellowship program: uniting service and education. Turner DM, et al. **J Nurs Adm** 1989 Oct; 19(10):18-22
Faculty practice: nurse educators' views and proposed models. Just G, et al. **J Nurs Educ** 1989 Apr;28(4):161-8
Effects of faculty practice on student learning outcomes. Kramer M, et al. **J Prof Nurs** 1986 Sep-Oct;2(5):289-301
Faculty practice: unifier of nursing education and nursing service? Lambert CE Jr, et al. **J Prof Nurs** 1988 Sep-Oct; 4(5):345-55 (102 ref.)
Academically based practice: seizing opportunities, enhancing outcomes. Littlefield VM, et al. **J Prof Nurs** 1988 Sep-Oct;4(5):329-38
An exploratory study of nursing services provided by schools of nursing. Maurin JT. **J Prof Nurs** 1986 Sep-Oct; 2(5):277-81
Faculty practice and knowledge development: will there be a linkage? Williams CA. **J Prof Nurs** 1988 Sep-Oct;4(5):317

ORGANIZATION & ADMINISTRATION

The development of a practising nursing faculty. Stainton MC, et al. **J Adv Nurs** 1989 Jan;14(1):20-6
Strategies for faculty practice. Fenton MV, et al. **Nurse Pract** 1988 Nov;13(11):54, 57-8, 60

TRENDS

Faculty practice. Issues and applications for perioperative nurses. Keithley JK, et al. **AORN J** 1989 Sep;50(3):587-90, 592, 594

NURSING, HOME see **HOME NURSING**

NURSING HOMES

A model for oral health care for elderly persons in nursing homes with an estimate of the resources needed. Vigild M. **Acta Odontol Scand** 1989 Aug;47(4):199-204
Psychiatric illness in elderly residents of Part III homes in one London Borough: prognosis and review. Ames D, et al. **Age Ageing** 1988 Jul;17(4):249-56
The need for a more rational approach to drug prescribing for elderly people in nursing homes. Nolan L, et al. **Age Ageing** 1989 Jan;18(1):52-6
Use of a hearing assistance device in nursing homes. Rizzolo PJ, et al. **Am Fam Physician** 1989 Mar;39(3):227-9
Upper respiratory tract infection and serum antibody responses in nursing home patients. Arroyo JC, et al. **Am J Infect Control** 1988 Aug;16(4):152-8
Survey of nursing personnel attitudes toward infections and their control in the elderly. LeClair SM, et al. **Am J Infect Control** 1988 Aug;16(4):159-66
High rates of immunization in a nursing home. Siewert M, et al. **Am J Infect Control** 1988 Oct;16(5):228-30
An Alzheimer day-care center for nursing home patients. Clendaniel BP, et al. **Am J Nurs** 1989 Jul;89(7):944-5
High rate of fractures for men in nursing homes. Rudman IW, et al. **Am J Phys Med Rehabil** 1989 Feb;68(1):2-5
Suicide in New York City nursing homes: 1980-1986 [letter] Abrams RC, et al. **Am J Psychiatry** 1988 Nov; 145(11):1487-8
Effects of a geriatric nurse practitioner on process and outcome of nursing home care. Kane RL, et al. **Am J Public Health** 1989 Sep;79(9):1271-7
Diabetics in long-term care. Effect of sweetness on dietary intake. Endres J, et al. **Ann N Y Acad Sci** 1989;561:157-61
Variability of serum phenytoin concentrations in nursing

home patients. Mooradian AD, et al. **Arch Intern Med** 1989 Apr;149(4):890–2
The prevalence of urethral catheterization in Maryland nursing homes. Warren JW, et al. **Arch Intern Med** 1989 Jul;149(7):1535–7
Status of communication services in nursing homes in New York State. Lubinski R, et al. **ASHA** 1988 Sep;30(9):69–72
Discharge to nursing homes [letter] Collings AD, et al. **BMJ** 1989 Jul 22;299(6693):262
Control of influenza in long–term care facilities, including use of amantadine. **Can Dis Wkly Rep** 1988 Oct 8; 14(40):184–6 **(Eng, Fre)**
Outbreak of Shigella flexneri in a nursing home—Alberta. Eng SB, et al. **Can Dis Wkly Rep** 1988 Jun 11;14(23):99–101 **(Eng, Fre)**
Probable outbreak of influenza B in a nursing home—Ontario. Findlay E, et al. **Can Dis Wkly Rep** 1988 May 14; 14(19):83–4 **(Eng, Fre)**
Outbreak of Campbell de Morgan spots in a nursing home—Alberta. Honish A, et al. **Can Dis Wkly Rep** 1988 Nov 19;14(46):211–2 **(Eng, Fre)**
Influenza B outbreak in a nursing home—Alberta. Robinson H, et al. **Can Dis Wkly Rep** 1988 Nov 26;14(47):213–5 **(Eng, Fre)**
Influenza B outbreak in a home for the aged—Ontario. Simor AE, et al. **Can Dis Wkly Rep** 1988 Oct 8;14(40):181–4 **(Eng, Fre)**
A magic mix: after–school programs in a nursing home. Ziemba J, et al. **Child Today** 1988 Nov–Dec;17(6):9–13
Special problems in tuberculosis. Tuberculosis in the elderly and in residents of nursing homes, correctional facilities, long–term care hospitals, mental hospitals, shelters for the homeless, and jails. Stead WW. **Clin Chest Med** 1989 Sep; 10(3):397–405 (27 ref.)
Use of benzodiazepines among residents of aged–care accommodation. Gilbert A, et al. **Community Health Stud** 1988;12(4):394–9
Intermittent care for old patients—when should it be offered? Berthold H, et al. **Compr Gerontol [B]** 1988 Dec;2(3):135–40
Relationship between depression and agitation in nursing home residents. Cohen–Mansfield J, et al. **Compr Gerontol [B]** 1988 Dec;2(3):141–6
Bacterial resistance to antibiotics: mechanisms and prevalence in hospitals and nursing homes. Bosso JA. **DICP** 1989 Jul–Aug;23(7–8):556–61 (51 ref.)
Temazepam and diphenhydramine in nursing homes [letter] Lisi DM. **DICP** 1989 Feb;23(2):178–80
Heat wave mortality in nursing homes. Marmor M. **Environ Res** 1978 Aug;17(1):102–15
Continuity of care and outcome in nursing home patients transferred to a community hospital. Susman J, et al. **Fam Med** 1989 Mar–Apr;21(2):118–21
How elders adjust. Brooke V. **Geriatr Nurs (New York)** 1989 Mar–Apr;10(2):66–8
Just being neighborly. Grossman HD, et al. **Geriatr Nurs (New York)** 1989 Mar–Apr;10(2):88–9
Nursing home: Part III [letter] Keep G, et al. **Geriatr Nurs (New York)** 1989 Jul–Aug;10(4):177
A past well remembered.... Miller CM. **Geriatr Nurs (New York)** 1989 Jan–Feb;10(1):28–9
Making the family a partner in quality assurance. Neubauer JA, et al. **Geriatr Nurs (New York)** 1989 Jan–Feb;10(1):35–7
Wheelchair karate. Portnoy FL, et al. **Geriatr Nurs (New York)** 1989 Mar–Apr;10(2):76–7
The future of teaching nursing homes. Walsh MB, et al. **Geriatr Nurs (New York)** 1988 Nov–Dec;9(6):354–6
The wheel of care. Weisberg J, et al. **Geriatr Nurs (New York)** 1989 Mar–Apr;10(2):86–7
Infection control in the long–term healthcare facility. Smith PW. **Geriatrics** 1989 Aug;44 Suppl A:11–4
Physician checklist for visually impaired elderly in nursing homes. Stoehr AJ, et al. **Geriatrics** 1989 Jul;44(7):87–91
The nursing home physician's image: time for a face–lift. Turnbull JM. **Geriatrics** 1989 Aug;44(8):83–4, 87, 90
The impact of nursing home admission agreements on resident autonomy. Ambrogi DM, et al. **Gerontologist** 1988 Jun;28 Suppl:82–9
A mental health training program in nursing homes. Chartock P, et al. **Gerontologist** 1988 Aug;28(4):503–7
Hispanic and non–Hispanic elderly on admission to the nursing home: a pilot study. Espino DV, et al. **Gerontologist** 1988 Dec;28(6):821–4
Family involvement on a dementia unit: the Resident Enrichment and Activity Program. Hansen SS, et al. **Gerontologist** 1988 Aug;28(4):508–10
Enhancing the autonomy of mentally impaired nursing home residents. Hegeman C, et al. **Gerontologist** 1988 Jun;28 Suppl:71–5
Geriatric nurse practitioners as nursing home employees: implementing the role. Kane RA, et al. **Gerontologist** 1988 Aug;28(4):469–77
A Wanderer's Lounge Program for nursing home residents with Alzheimer's disease. McGrowder–Lin R, et al. **Gerontologist** 1988 Oct;28(5):607–9
Peer counselor training for nursing home residents. Scharlach AE. **Gerontologist** 1988 Aug;28(4):499–502
Factors associated with presence of decubitus ulcers at admission to nursing homes. Spector WD, et al. **Gerontologist** 1988 Dec;28(6):830–4
Psychological correlates of survival in nursing home cancer patients. Stein S, et al. **Gerontologist** 1989 Apr;29(2):224–8
Nursing home resident participation in medical decisions: perceptions and preferences. Wetle T, et al. **Gerontologist** 1988 Jun;28 Suppl:32–8
The impact of a resident dog on an institution for the elderly: effects on perceptions and social interactions. Winkler A, et al. **Gerontologist** 1989 Apr;29(2):216–23
A reconceptualization of the "negative staff attitudes and poor care in nursing homes" assumption. Wright LK. **Gerontologist** 1988 Dec;28(6):813–20 (49 ref.)
Nursing homes [letter] Loebel P, et al. **Hosp Community Psychiatry** 1988 Sep;39(9):997–8
Nursing homes [letter] Rylee KE, et al. **Hosp Community Psychiatry** 1989 Jun;40(6):650–1
Prevention and control of influenza in institutional settings. Fedson DS. **Hosp Pract [Off]** 1989 Sep 30;24(9A):87–91, 94–6
Proteeae groin skin carriage among nursing home residents—resistance to antiseptics. Eckert DG, et al. **Infect Control Hosp Epidemiol** 1989 Apr;10(4):155–60
Documentation and evaluation of fevers in hospital–based and community–based nursing homes. Franson TR, et al. **Infect Control Hosp Epidemiol** 1988 Oct;9(10):447–50
Chemical sterilization in nursing homes [letter] Silver HJ. **Infect Control Hosp Epidemiol** 1988 Aug;9(8):342
Observed changes in the functioning of nursing home residents after relocation. Bonardi E, et al. **Int J Aging Hum Dev** 1989;28(4):295–304
Effect of nursing home staff training on quality of patient survival. Linn MW, et al. **Int J Aging Hum Dev** 1989; 28(4):305–15
The illusory home, or the 24 percent fallacy. Retsinas J, et al. **Int J Aging Hum Dev** 1989;28(3):175–83
Ending one's life in a nursing home: a note on Swedish findings. Samuelsson G, et al. **Int J Aging Hum Dev** 1988; 27(2):81–8
Life satisfaction of elderly individuals in regular community housing, in low–cost community housing, and high and low self–determination nursing homes. Vallerand RJ, et al. **Int J Aging Hum Dev** 1989;28(4):277–83
Absenteeism of nursing staff in a nursing home. Cohen–Mansfield J, et al. **Int J Nurs Stud** 1989;26(2):187–94
Sources of satisfaction and stress in nursing home caregivers: preliminary results. Cohen–Mansfield J. **J Adv Nurs** 1989 May;14(5):383–8
Prompted voiding therapy for urinary incontinence in aged female nursing home residents. Creason NS, et al. **J Adv Nurs** 1989 Feb;14(2):120–6
Bacteriuria and urinary incontinence in aged female nursing home residents. Whippo CC, et al. **J Adv Nurs** 1989 Mar; 14(3):217–25
Prevalence of Sarcoptes scabiei in the homes and nursing homes of scabietic patients. Arlian LG, et al. **J Am Acad Dermatol** 1988 Nov;19(5 Pt 1):806–11
Nutritional support for the elderly [letter] **J Am Coll Nutr** 1988 Dec;7(6):519
Weight loss and senile dementia in an institutionalized elderly population. Franklin CA, et al. **J Am Diet Assoc** 1989 Jun; 89(6):790–2
Prescribing of psychotropics in elderly nursing home patients. Beardsley RS, et al. **J Am Geriatr Soc** 1989 Apr; 37(4):327–30
Air–fluidized bed treatment of nursing home patients with pressure sores. Bennett RG, et al. **J Am Geriatr Soc** 1989 Mar;37(3):235–42
More on problems in nursing home care [letter] Corcoran RM. **J Am Geriatr Soc** 1989 Sep;37(9):918
Implementing a "Do–Not–Resuscitate" (DNR) policy in a nursing home. Fader AM, et al. **J Am Geriatr Soc** 1989 Jun;37(6):544–8
What's really the problem in nursing homes? [letter] Ferris M. **J Am Geriatr Soc** 1989 Apr;37(4):392
Facilitating transfer to a nursing home [letter] Goff NW Jr. **J Am Geriatr Soc** 1989 May;37(5):488–9
Two–step PPD testing for nursing home patients [letter] Lefton E. **J Am Geriatr Soc** 1989 Jul;37(7):666–7
Effectiveness of influenza vaccine when given during an outbreak of influenza A/H3N2 in a nursing home. Meiklejohn G, et al. **J Am Geriatr Soc** 1989 May; 37(5):407–10
Treatment of an influenza A outbreak in a teaching nursing home. Effectiveness of a protocol for prevention and control. Peters NL, et al. **J Am Geriatr Soc** 1989 Mar; 37(3):210–8
Disease—disability—mortality [letter] Rozzini R, et al. **J Am Geriatr Soc** 1988 Dec;36(12):1164
Protein–calorie undernutrition in the nursing home. Rudman D, et al. **J Am Geriatr Soc** 1989 Feb;37(2):173–83 (152 ref.)
CPR in the nursing home: a delusion? [letter] Thompson RF. **J Am Geriatr Soc** 1989 May;37(5):487–8
Full moon: does it influence agitated nursing home residents? Cohen–Mansfield J, et al. **J Clin Psychol** 1989 Jul; 45(4):611–4
Causes of death of patients in an institution for the developmentally disabled. Blisard KS, et al. **J Forensic Sci** 1988 Nov;33(6):1457–62
The prevalence of neuropsychiatric disorders in a nursing home population. Chandler JD, et al. **J Geriatr Psychiatry Neurol** 1988 Apr–Jun;1(2):71–6
A description of agitation in a nursing home. Cohen–Mansfield J, et al. **J Gerontol** 1989 May; 44(3):M77–84
Measuring caregiving appraisal. Lawton MP, et al. **J Gerontol** 1989 May;44(3):P61–71
Depression among institutionalized aged: assessment and prevalence estimation. Parmelee PA, et al. **J Gerontol** 1989 Jan;44(1):M22–9
Maltreatment of patients in nursing homes: overview and research agenda. Pillemer K. **J Health Soc Behav** 1988 Sep; 29(3):227–38 (124 ref.)
An outbreak of giardiasis in a nursing home with evidence for multiple modes of transmission. White KE, et al. **J Infect Dis** 1989 Aug;160(2):298–304
Our boneyard industry [editorial] Smith RE. **J Med Assoc Ga** 1988 Sep;77(9):690–1
Using an interdisciplinary team for geriatric education in a nursing home. Thompson RF, et al. **J Med Educ** 1988 Oct; 63(10):796–8
Optimizing mental health in the nursing home setting. Stevens GL, et al. **J Psychosoc Nurs Ment Health Serv** 1988 Oct; 26(10):27–31 (15 ref.)
Psychoactive medication use in intermediate–care facility residents. Beers M, et al. **JAMA** 1988 Nov 25; 260(20):3016–20
A clinical trial of a behavioral therapy to reduce urinary incontinence in nursing homes. Outcome and implications. Hu TW, et al. **JAMA** 1989 May 12;261(18):2656–62
Influenza vaccine efficacy in a Maryland nursing home. Currier M, et al. **Md Med J** 1988 Oct;37(10):781–3
The Sickness Impact Profile as a measure of the health status of noncognitively impaired nursing home residents. Rothman ML, et al. **Med Care** 1989 Mar;27(3 Suppl):S157–67
Assessment of patients for nursing–home care [letter] Harrison AW, et al. **Med J Aust** 1989 Mar 6;150(5):286–7
Patients' socioeconomic background: influence on selection of inpatient or domiciliary hospice terminal–care programmes. Komesaroff PA, et al. **Med J Aust** 1989 Aug 21;151(4):196, 199–201
Clinical characteristics and outcomes in a cohort of patients who were assessed as in need of nursing–home care. Lazarus R, et al. **Med J Aust** 1988 Oct 17;149(8):410–1, 414–5
Functional characteristics of elderly persons with mental retardation in community settings and nursing homes. Seltzer GB, et al. **Ment Retard** 1988 Aug;26(4):213–7
Biomedical ethics. A quest for balance. Cassidy RC. **N J Med** 1989 Jan;86(1):35–7
Nursing homes and ethics committees. Somers AR. **N J Med** 1989 Jan;86(1):45–9
Increase in reimbursement should improve nursing home care. Cosin AJ. **N Y State Dent J** 1988 Dec;54(10):8
The Teaching Nursing Home Program, 1982–87: a report card. Mezey MD, et al. **Nurs Outlook** 1988 Nov–Dec; 36(6):285–8, 292
Eye disease in a geriatric nursing home population. Whitmore WG. **Ophthalmology** 1989 Mar;96(3):393–8
Delivery of optometric care in nontraditional settings: the long–term care facility. Mancil GL. **Optom Vis Sci** 1989 Jan;66(1):9–11
Sensory integration activity in nursing home residents' cognitions, affect, self–esteem and behavior. Gielow D, et al. **Percept Mot Skills** 1986 Apr;62(2):637–8
The use of digoxin in 55 residential homes for elderly people. Weedle PB, et al. **Postgrad Med J** 1988 Apr;64(750):292–6
Agitation and touch in the nursing home. Marx MS, et al. **Psychol Rep** 1989 Jun;64(3 Pt 2):1019–26
Relationships between sensory decline among the elderly and the physical environment: implications for health care. Maximizing the wellbeing of the elderly through environmental change is of great importance. Kalymun M. **R I Med J** 1989 May;72(5):161–7
The shrinking sensory world of the elderly [editorial] Shield RR, et al. **R I Med J** 1989 May;72(5):159
A medical director speaks on physician remuneration for nursing home services. Smith DA. **S D J Med** 1988 Dec; 41(12):17–8
Nursing home–acquired pneumonia. Crossley KB, et al. **Semin Respir Infect** 1989 Mar;4(1):64–72 (52 ref.)
The effects of mental dysfunction on nursing home care. Rohrer JE, et al. **Soc Sci Med** 1989;28(4):399–403
Defensive work in nursing homes: accountability gone amok. Wiener CL, et al. **Soc Sci Med** 1989;28(1):37–44
Helping family and patients decide between home care and nursing home care. Powers JS. **South Med J** 1989 Jun; 82(6):723–6
Salmonella and nursing home residents. Gradus MS, et al. **Wis Med J** 1988 Dec;87(12):19–22
[Elderly people in homes for the aged and long–term care nursing facilities (medical and social aspects)] Nováková H, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(1):1–82 **(Cze)**
[Consumption of psychopharmaceuticals by residents at nursing homes. Significance of the environment at the nursing home] Hasle H, et al. **Ugeskr Laeger** 1989 May 22;151(21):1313–6 (Eng. Abstr.) **(Dan)**
[Functional levels in nursing homes residents assessed by the Gottfries–Bråne–Steen scale] Skausig OB, et al. **Ugeskr Laeger** 1989 Feb 6;151(6):387–9 (Eng. Abstr.) **(Dan)**
[Placing of patients with dementia in nursing homes as evaluated by the Gottfries–Bråne–Steen scale] Skausig OB, et al. **Ugeskr Laeger** 1989 Feb 6;151(6):389–90 (Eng. Abstr.) **(Dan)**
[Increasing drug use in nursing homes] van Zuylen C, et

al. **Ned Tijdschr Geneeskd** 1988 Sep 10;132(37):1692–5 (Eng. Abstr.) **(Dut)**

[Autopsies at a nursing home] Wabeke E, et al. **Ned Tijdschr Geneeskd** 1989 Apr 15;133(15):765–7 (Eng. Abstr.) **(Dut)**

[Homes for the aged: a source of increasing concern (4). The evaluation of a group care program] van Loveren-Huyben CM, et al. **Tijdschr Gerontol Geriatr** 1989 Jun;20(3):107–14 (Eng. Abstr.) **(Dut)**

[The hospital nursing home as a partner and supplement of district neurology clinics] Donalies C. **Psychiatr Neurol Med Psychol Beih** 1988;39:24–5 **(Ger)**

[Activating group work with residents of retirement and nursing homes] Hensel I. **Z Arztl Fortbild (Jena)** 1989; 83(8):411–3 **(Ger)**

[What is acceptable—intervention in the nursing home? Critical considerations on a method] Kuhlmey J. **Z Arztl Fortbild (Jena)** 1988;82(17):833–5 **(Ger)**

[Application for admission to a nursing home—personal motives and possibilities for medical intervention] Pohrt U, et al. **Z Arztl Fortbild (Jena)** 1989;83(8):409–10 **(Ger)**

[The health status of elderly citizens—results of a survey of applicants of a retirement or nursing home] Bansemir G, et al. **ZFA** 1988 Jul-Aug;43(4):213–28 (Eng. Abstr.) **(Ger)**

[Need and consent for stomatologic treatment in elderly citizens. A comparative analysis of elderly persons in their own home and residents of retirement and nursing homes in the Hildburghausen district] Hofmann R, et al. **ZFA** 1989 Mar-Apr;44(2):67–71 (Eng. Abstr.) **(Ger)**

[How do we deal with the mentally retarded in nursing homes?] Kuhlmey J. **ZFA** 1989 May-Jun;44(3):169–79 (51 ref.) (Eng. Abstr.) **(Ger)**

[Activating group work with residents of retirement and nursing homes] Löschner K, et al. **ZFA** 1989 Mar-Apr; 44(2):109–11 (Eng. Abstr.) **(Ger)**

[Effects of room temperature on body movements of the aged in a special nursing home during sleep] Ohnaka T, et al. **Nippon Eiseigaku Zasshi** 1988 Jun;43(2):622–7 (Eng. Abstr.) **(Jpn)**

[Injuries in nursing homes (editorial)] Nygaard HA. **Tidsskr Nor Laegeforen** 1989 Aug 10;109(22):2107 **(Nor)**

[Injuries in nursing homes. Hospital-based registration of injuries of patients in nursing homes] Wasmuth HH. **Tidsskr Nor Laegeforen** 1989 Aug 10;109(22):2164–6 (Eng. Abstr.) **(Nor)**

[Alternative assistance in geriatrics (letter)] Fernández F, et al. **Rev Clin Esp** 1988 Oct;183(6):331–2 **(Spa)**

[Admission to nursing homes: alternative to hospitalization for the aged (letter)] Villanueva Marcos JI, et al. **Rev Clin Esp** 1988 Oct;183(6):331 **(Spa)**

[Nursing home patients and patients with home care services and the differences in their ability to take care of themselves] Andersson M, et al. **Lakartidningen** 1988 Dec 28;85(52):4619–24 **(Swe)**

[Experiences from Medelpad I: To cut down the number of beds in institutions while the number of elderly people is increasing] Thorslund M. **Lakartidningen** 1988 Nov 23; 85(47):4023–6 **(Swe)**

[Home nursing or nursing homes? Both are needed] Winblad B, et al. **Lakartidningen** 1988 Dec 14;85(50):4447–8 **(Swe)**

ECONOMICS

Guidelines for legal and financial counseling of Alzheimer's disease patients and their families. Overman W Jr, et al. **Am J Psychiatry** 1988 Dec;145(12):1495–500 (34 ref.)

Medicare and nursing home services. White SC. **ASHA** 1989 Apr;31(4):75, 59

As time goes by—there is an impact [letter] Ladd RC. **Gerontologist** 1989 Jun;29(3):411

Linear programming models for cost reimbursement. Diehr G, et al. **Health Serv Res** 1989 Aug;24(3):329–47

Nursing home reimbursement and the allocation of rehabilitation therapy resources. Murtaugh CM, et al. **Health Serv Res** 1988 Oct;23(4):467–93

The effect of competition on nursing home expenditures under prospective reimbursement. Nyman JA. **Health Serv Res** 1988 Oct;23(4):555–74

Medicare coverage in the nursing home. Cogen R. **J Am Geriatr Soc** 1989 Aug;37(8):774–6

Nursing home case mix in Wisconsin. Findings and policy implications. Arling G, et al. **Med Care** 1989 Feb; 27(2):164–81

The effects of an internal analgesic formulary restriction on Medicaid drug expenditures in Wisconsin. Kreling DH, et al. **Med Care** 1989 Jan;27(1):34–44

Private long-term care insurance. Simulations of a potential market. Rubin RM, et al. **Med Care** 1989 Feb;27(2):182–93

The impact of prospective reimbursement on nursing home efficiency. Sexton TR, et al. **Med Care** 1989 Feb; 27(2):154–63

Prescribing efficiently in nursing homes. Curtis JR, et al. **Psychosomatics** 1989 Spring;30(2):198–202

Description and analysis of preadmission screening. Lathrop L, et al. **Public Health Nurs** 1989 Mar;6(1):23–7

The effects of nursing and physician services: some preliminary results. Hogan AJ, et al. **Soc Sci Med** 1989; 29(4):527–36

Effects of the prospective payment system on nursing homes. Hing E. **Vital Health Stat [13]** 1989 Mar;(98):1–38

LEGISLATION & JURISPRUDENCE

Discharge to nursing homes [letter] Millard PH. **BMJ** 1989 Jun 24;298(6689):1710–1

HHS sued over preadmission screening [news] **Geriatr Nurs (New York)** 1989 Jul-Aug;10(4):174

When whiting out won't work [editorial] Huey FL. **Geriatr Nurs (New York)** 1989 Jul-Aug;10(4):173

LTC reforms good but difficult to implement. Eubanks P. **Hospitals** 1989 May 5;63(9):54

Nursing home regulations released by HCFA. **J Am Diet Assoc** 1989 Mar;89(3):348

The real meaning of "home" in nursing home [letter] Katz PR. **J Am Geriatr Soc** 1989 Jul;37(7):665

The Omnibus Budget Reconciliation Act of 1987. A policy analysis. Kelly M. **Nurs Clin North Am** 1989 Sep; 24(3):791–4

Nurses 'disturbed' by new regulations [news] **Occup Health Saf** 1989 Mar;58(3):12–3

Ohio's nursing homes must take AIDS patients [news] **Ohio Med** 1989 Mar;85(3):175

New nursing home law creates confusion. **Wis Med J** 1989 Apr;88(4):44

ORGANIZATION & ADMINISTRATION

Pragmatic and explanatory trials in the evaluation of the experimental National Health Service nursing homes. Bond J, et al. **Age Ageing** 1989 Mar;18(2):89–95 (25 ref.)

The implementation of a multicentred randomized controlled trial in the evaluation of the experimental National Health Service nursing homes. Bond J, et al. **Age Ageing** 1989 Mar;18(2):96–102

Against all odds. Modigh A, et al. **Geriatr Nurs (New York)** 1988 Sep-Oct;9(5):289–91

Special units for Alzheimer's disease patients: a critical look. Ohta RJ, et al. **Gerontologist** 1988 Dec;28(6):803–8

Psychiatric services to nursing homes: a liaison model. Bienenfeld D, et al. **Hosp Community Psychiatry** 1989 Aug; 40(8):793–4

Hospitals, nursing homes must work together [interview by Dona De Sanctis] Goldberg SL. **Hospitals** 1989 Jul 20; 63(14):60–1

Private sector courts low-cost subacute care. Koska MT. **Hospitals** 1989 Feb 5;63(3):62

The nursing home medical director. Fanale JE. **J Am Geriatr Soc** 1989 Apr;37(4):369–75 (25 ref.)

Deciding about resuscitation in a nursing home. Theory and practice. Finucane TE, et al. **J Am Geriatr Soc** 1989 Aug; 37(8):684–8

Organizational and staff attitudinal determinants of falls in nursing home residents. Harris PB. **Med Care** 1989 Jul; 27(7):737–49

Use of psychoactive medication in rest homes [letter; comment] **N Engl J Med** 1989 Jul 6;321(1):54–5. **Comment on:** N Engl J Med 1989 Jan 26;320(4):227–32

The teaching nursing home program. Outcomes of care. Mezey MD, et al. **Nurs Clin North Am** 1989 Sep; 24(3):769–80

STANDARDS

A survey of private nursing home residents in Weston Super Mare. Hepple J, et al. **Age Ageing** 1989 Jan;18(1):61–3

Analysis of drug-drug interactions among nursing home residents. Tamai IY, et al. **Am J Hosp Pharm** 1989 Aug; 46(8):1567–9

A test of infection control reporting. Rouse G, et al. **Aust Clin Rev** 1989 Mar;8(32):236–7

The right tool for the job. Davis C. **Geriatr Nurs (New York)** 1989 Jul-Aug;10(4):194–5

Looking at HCFA's snapshot of nursing homes [editorial] Huey FL. **Geriatr Nurs (New York)** 1989 Jan-Feb;10(1):15

Excess demand, consumer rationality, and the quality of care in regulated nursing homes. Nyman JA. **Health Serv Res** 1989 Apr;24(1):105–27

Critics seek changes in nursing home survey. Eubanks P. **Hospitals** 1989 Feb 5;63(3):68

Food refusal amongst nursing home patients as conceptualized by nurses' aids and enrolled nurses: an interview study. Norberg A, et al. **J Adv Nurs** 1988 Jul; 13(4):478–83

Design of new building for the elderly. Gray G. **J R Soc Health** 1989 Feb;109(1):18–20

Residential care for the elderly—time for review? Green W. **J R Soc Health** 1989 Feb;109(1):12–5

A view of elderly care from the Little Sisters of the Poor. Roseline Sister. **J R Soc Health** 1989 Feb;109(1):16–7

Improving the quality of nursing home outcomes. Are adequacy- or incentive-oriented policies more effective? Nyman JA. **Med Care** 1988 Dec;26(12):1158–71

Reforming nursing home quality regulation. Impact on cited deficiencies and nursing home outcomes. Spector WD, et al. **Med Care** 1989 Aug;27(8):789–801

Use of psychoactive medication and the quality of care in rest homes. Findings and policy implications of a statewide study [see comments] Avorn J, et al. **N Engl J Med** 1989 Jan 26;320(4):227–32. **Comment in:** N Engl J Med 1989 Jul 6;321(1):54–5

Care of the nursing home patient. Libow LS, et al. **N Engl J Med** 1989 Jul 13;321(2):93–6 (53 ref.)

STATISTICS & NUMERICAL DATA

Survival patterns of nursing home admissions and their policy implications. Shapiro E, et al. **Can J Public Health** 1988 Jul-Aug;79(4):268–74

Home care and intermittent care—a realistic alternative to nursing-home care? Berthold H, et al. **Compr Gerontol [B]** 1988 Apr;2(1):24–30

Nursing home characteristics: 1986 inventory of long-term care places. Sirrocco A. **Vital Health Stat [14]** 1989 Mar; (33):1–32

SUPPLY & DISTRIBUTION

Nursing homes: expansion, assessment of need and the cost of care—a Scottish perspective. Primrose WR. **Health Bull (Edinb)** 1988 Sep;46(5):282–5

Board and care housing. An analysis of state differences. Benjamin AE, et al. **Res Aging** 1986 Sep;8(3):388–406

TRENDS

Psychotropic drug patterns in a large ICF/MR facility: a ten-year experience. Poindexter AR. **Am J Ment Retard** 1989 May;93(6):624–6

ICF/general: an alternative for older ICF/MR residents with geriatric care needs. Redjali SM, et al. **Ment Retard** 1988 Aug;26(4):209–12

Long-term care for the elderly. The future of nursing homes. Vladeck BC. **West J Med** 1989 Feb;150(2):215–20 (17 ref.)

UTILIZATION

Older people in the United States who receive help with basic activities of daily living. Kovar MG, et al. **Am J Public Health** 1989 Jun;79(6):778–9

Institutional and home-based long-term care alternatives: the 1965–1985 Swedish experience. Berg S, et al. **Gerontologist** 1988 Dec;28(6):825–9

Patterns of nursing home use in a prepaid managed care system: the continuing care retirement community. Cohen MA, et al. **Gerontologist** 1989 Feb;29(1):74–80

The effect of nursing home use on Medicaid eligibility. Liu K, et al. **Gerontologist** 1989 Feb;29(1):59–66

Determinants of hospital-to-nursing home placement delays: a pilot study. Weissert WG, et al. **Health Serv Res** 1988 Dec;23(5):619–47

Longitudinal patterns in ICF-MR utilization, 1977–1986. Lakin KC, et al. **Ment Retard** 1989 Jun;27(3):149–58

The National Nursing Home Survey: 1985 summary for the United States. Hing E, et al. **Vital Health Stat [13]** 1989 Jan;(97):1–249

['You can go home'] van der Wulp JC. **Ned Tijdschr Geneeskd** 1989 Apr 8;133(14):705–8 **(Dut)**

NURSING METHODOLOGY RESEARCH see under **NURSING RESEARCH**

NURSING, MILITARY AND NAVAL see **MILITARY NURSING**

NURSING, ONCOLOGIC see **ONCOLOGIC NURSING**

NURSING, PRACTICAL

Nurse administration of sleep medication: a comparison of registered nurses and licensed practical nurses. Robers PA, et al. **Am J Public Health** 1988 Dec;78(12):1581–3

Primary and recurrent herpes simplex infection in a pediatric nurse resulting from a human bite. Fuortes L, et al. **Infect Control Hosp Epidemiol** 1989 Mar;10(3):120

EDUCATION

[Vocational orientation of schoolchildren towards medical professions] Grebniak NP, et al. **Sov Zdravookhr** 1988; (12):42–4 **(Rus)**

NURSING PROCESS

Decision making. A step-by-step process. McConnell EA. **AORN J** 1989 May;49(5):1382–5

Nurses' intuition. Can it coexist with the nursing process? Rew L, et al. **AORN J** 1989 Aug;50(2):353–4, 356, 358 (11 ref.)

Timely detection of colorectal cancer in the elderly. Implications of the aging process. Weinrich SP, et al. **Cancer Nurs** 1989 Jun;12(3):170–6

Computer applications in nursing. A prototypical model for planning nursing care. Bailey DR. **Comput Nurs** 1988 Sep-Oct;6(5):199–203

A model for nursing using anthropological literature. Littlewood J. **Int J Nurs Stud** 1989;26(3):221–9 (30 ref.)

Determinants of patient care: nursing process or nursing attitudes? Moss AR. **J Adv Nurs** 1988 Sep;13(5):615–20

An administrative marketing strategy: a different perspective on the nursing process. Beaupre BA. **J Nurs Adm** 1988 Nov;18(11):37–41

Soviet hospital nursing: a model for self-care. Dennis LI. **J Nurs Educ** 1989 Feb;28(2):76–7

Extending the roles of practice nurses and facilitators in preventing heart disease. Fullard E. **Practitioner** 1987 Oct 8;231(1436):1283–6

LEGISLATION & JURISPRUDENCE

Nursing procedures and their function as policies for effective practice. Crow RA, et al. **Int J Nurs Stud** 1988;25(3):217–24

METHODS

The impact of institutions on nursing process instruction: a critical analysis. Brown BD. **J Nurs Educ** 1989 Feb; 28(2):77–9

Elder–family caregiver relationships. Determining appropriate nursing interventions. Phillips LR. **Nurs Clin North Am** 1989 Sep;24(3):795–807

ORGANIZATION & ADMINISTRATION

Professional practice for the extended care environment: learning from one model and its implementation. Maas ML. **J Prof Nurs** 1989 Mar–Apr;5(2):66–76

NURSING RECORDS

Perioperative documentation. Incorporating nursing diagnoses into the intraoperative record. Edel EM, et al. **AORN J** 1989 Sep;50(3):596–600

Use of flow–charts by nurses dealing with mental patients: an evaluation in Lesotho. Meursing K, et al. **Bull WHO** 1988;66(4):507–14

How do you keep charting and documenting from interfering with direct patient care? **J Psychosoc Nurs Ment Health Serv** 1989 Aug;27(8):36

STANDARDS

Nursing needs its own minimum data set. Werley HH, et al. **Am J Nurs** 1988 Dec;88(12):1651–3

Nursing care documentation. Creating a perioperative nursing record. Slone LA, et al. **AORN J** 1989 Mar; 49(3):808–13

NURSING RESEARCH

Research on every rung of the clinical ladder. Holmes SB, et al. **Am J Nurs** 1989 Feb;89(2):246, 248, 250

Parent–child nursing education. Alexander CS, et al. **Annu Rev Nurs Res** 1989;7:157–70 (29 ref.)

Patient contracting. Boehm S. **Annu Rev Nurs Res** 1989; 7:143–53 (26 ref.)

Physiological responses to stress. Doswell WM. **Annu Rev Nurs Res** 1989;7:51–69 (54 ref.)

Moral reasoning and ethical practice. Ketefian S. **Annu Rev Nurs Res** 1989;7:173–95 (79 ref.)

Nursing diagnosis. Kim MJ. **Annu Rev Nurs Res** 1989; 7:117–42 (67 ref.)

Infection control. Larson EL. **Annu Rev Nurs Res** 1989; 7:95–113 (55 ref.)

Patient education: Part II. Lindeman CA. **Annu Rev Nurs Res** 1989;7:199–212 (33 ref.)

Neurologic nursing research. Parsons LC, et al. **Annu Rev Nurs Res** 1989;7:3–25 (46 ref.)

Sleep. Shaver JL, et al. **Annu Rev Nurs Res** 1989;7:71–93 (50 ref.)

Endotracheal suctioning. Stone KS, et al. **Annu Rev Nurs Res** 1989;7:27–49 (46 ref.)

The necessity for and evolution of multiple paradigms for nursing research: a poststructuralist perspective. Dzurec LC. **ANS** 1989 Jul;11(4):69–77 (19 ref.)

Ethical inquiry and the concept of research. Jameton A, et al. **ANS** 1989 Apr;11(3):11–24 (38 ref.)

A Heideggerian phenomenologic perspective on the concept of the person. Leonard VW. **ANS** 1989 Jul;11(4):40–55 (23 ref.)

A critique of compromise: beyond the method debate [letter; comment] Norman EM. **ANS** 1989 Apr;11(3):ix. **Comment on:** ANS 1988 Jul;10(4):1–9

The hardiness characteristic: a motivating factor in adaptation. Pollock SE. **ANS** 1989 Jan;11(2):53–62

AORN policy, plan and priority statement on nursing research. **AORN J** 1988 Sep;48(3):436–9

Perioperative nursing research. Part IV: Intraoperative phase. Bailes BK. **AORN J** 1989 May;49(5):1397–9, 1402–5, 1408–9 passim (51 ref.)

Perioperative nursing research. Part VIII: Issues in perioperative nursing. Bargagliotti LA. **AORN J** 1989 Sep; 50(3):613–6, 618–22 (29 ref.)

Perioperative nursing research. Part III: Potential intraoperative biological hazards to personnel. Kneedler JA, et al. **AORN J** 1989 Apr;49(4):1066–7, 1070–3, 1076–9 passim

Perioperative nursing research. Part VII: Postoperative care. Noriega L, et al. **AORN J** 1989 Aug;50(2):379–81, 384–5, 387–9 passim (47 ref.)

Perioperative nursing research. Part VI: Postoperative phase. Richards ML. **AORN J** 1989 Jul;50(1):120–3, 125–8, 134–7 (73 ref.)

Perioperative nursing research. Part V: Intraoperative recommended practices. Silo HM. **AORN J** 1989 Jun; 49(6):1627–36 (57 ref.)

Bridging the gap between the nurse researcher and clinician [editorial] Jones SL. **Arch Psychiatr Nurs** 1989 Aug; 3(4):181–2

Changing paradigms within psychiatry: implications for nursing research. Liaschenko J. **Arch Psychiatr Nurs** 1989 Jun;3(3):153–8

In search of applications of nursing theories: the Nursing Citation Index. Johnson ED. **Bull Med Libr Assoc** 1989 Apr;77(2):176–84

Cancer nursing for the elderly. A target for research. Given B, et al. **Cancer Nurs** 1989 Apr;12(2):71–7 (27 ref.)

Computer applications in qualitative research. Baker CA. **Comput Nurs** 1988 Sep–Oct;6(5):211–4

How to use word processing software to conduct content analysis. Norman EM. **Comput Nurs** 1989 May–Jun; 7(3):127–8

Development and use of a database management system for longitudinal research. Parks PL. **Comput Nurs** 1989 May–Jun;7(3):110–1

Cardiac rhythm responses. 2. Review of 22 years of nursing research. Drew BJ. **Heart Lung** 1989 Mar;18(2):184–91 (64 ref.)

The cosmic continuum: research is not finished until it is published [editorial] Janson–Bjerklie S. **Heart Lung** 1988 Nov;17(6 Pt 1):716–7

Collaborative nursing research—advantages and obstacles. Chenger PL. **Int J Nurs Stud** 1988;25(4):295–300

Health education in the scientific production of the graduate program of the Nursing School of Ribeirão Preto, University of São Paulo, Brazil. Pela NT, et al. **Int J Nurs Stud** 1989;26(3):287–93

Target populations of nursing research on social support. Stewart MJ. **Int J Nurs Stud** 1989;26(2):115–29 (146 ref.)

Social support intervention studies: a review and prospectus of nursing contributions. Stewart MJ. **Int J Nurs Stud** 1989; 26(2):93–114 (36 ref.)

Omissions in nursing research: another look. Bergman R. **Int Nurs Rev** 1988 Nov–Dec;35(6):165–8, 164

Preparing teachers for the performance and evaluation of gaming–simulation in experiential learning climates. Barber P, et al. **J Adv Nurs** 1989 Feb;14(2):146–51

Nursing turnover: literature review and methodological critique. Cavanagh SJ. **J Adv Nurs** 1989 Jul;14(7):587–96 (58 ref.)

Variables related to research utilization in nursing: an empirical investigation. Champion VL, et al. **J Adv Nurs** 1989 Sep;14(9):705–10

Perceptions and attitudes of academic nursing students to research. Eckerling S, et al. **J Adv Nurs** 1988 Nov; 13(6):759–67 (36 ref.)

Merging nursing research and practice: a case of multiple identities. Jennings BM, et al. **J Adv Nurs** 1988 Nov; 13(6):752–8

Research ethics and nursing science: an empirical example. Leino–Kilpi H, et al. **J Adv Nurs** 1989 Jun;14(6):451–8

A plea for replication studies [editorial] Ryland RK. **J Adv Nurs** 1989 Sep;14(9):699

Community psychiatric nursing—a research–based profession? Simpson K. **J Adv Nurs** 1989 Apr;14(4):274–80 (55 ref.)

Observation and literature review: the key and lock to research endeavors. Sayner NC. **J Neurosci Nurs** 1989 Apr; 21(2):133–4

Staff nurse attitudes and the development of a nursing research program. Bostrom AC. **J Nurs Adm** 1989 Jul–Aug; 19(7):16, 30

The Nursing Research Program at Children's Hospital, Boston. Hegedus KS, et al. **J Nurs Adm** 1989 Jun;19(6):9–10

Advanced concepts in networking: the Nursing Research Network of Boston revisited. Hunt V, et al. **J Nurs Adm** 1989 Apr;19(4):8, 33

Developing investigators who will generate clinically relevant science. Lawson L. **J Nurs Adm** 1989 Jan;19(1):6–7

Nursing research image at Beth Israel Hospital, Boston. Rempusheski VF, et al. **J Nurs Adm** 1989 Oct;19(10):6–7

A multiple–strategy based research program for staff nurse involvement. Stark JL. **J Nurs Adm** 1989 Sep;19(9):7–8

Developing a nursing research manual. Yeager BJ, et al. **J Nurs Adm** 1988 Oct;18(10):8–9, 23, 28

The master's prepared mental health nurse: an assessment of employer expectations. Brophy EB, et al. **J Nurs Educ** 1989 Apr;28(4):156–60

Nursing student novice to expert—Benner's research applied to education. Carlson L, et al. **J Nurs Educ** 1989 Apr; 28(4):188–90

Professional autonomy and ethical decision making among graduate and undergraduate nursing majors. Cassidy VR, et al. **J Nurs Educ** 1988 Nov;27(9):405–10

Faculty practice: nurse educators' views and proposed models. Just G, et al. **J Nurs Educ** 1989 Apr;28(4):161–8

Baccalaureate students learn research and teamwork in a community setting. Malloy C, et al. **J Nurs Educ** 1989 Jan; 28(1):36–8

Guided design: evaluation of a model for teaching nursing research. Selby ML, et al. **J Nurs Educ** 1988 Sep; 27(7):303–8

Research preceptorship for degree–seeking RNs: a strategy for resocialization. Viar V, et al. **J Nurs Educ** 1988 Sep; 27(7):329–31

Focus of research for PhD in nursing. Wiley K. **J Nurs Educ** 1989 Apr;28(4):190–2

Nurse–midwives speak out on research. Results of the 1987–88 needs assessment survey, Part 2. Paine LL, et al. **J Nurse Midwifery** 1989 Mar–Apr;34(2):66–70

Fundamentals of obstetric, gynecologic, and neonatal nursing research: Part II. Beck CT. **J Obstet Gynecol Neonatal Nurs** 1989 Jul–Aug;18(4):288–94 (17 ref.)

Voices in distant camps: the gap between nursing research and nursing practice. Brodie B. **J Prof Nurs** 1988 Sep–Oct; 4(5):320–8

National Center for Nursing Research. Bullough B. **J Prof Nurs** 1986 Sep–Oct;2(5):270

The clinical nurse researcher: new perspectives. Hagle ME, et al. **J Prof Nurs** 1986 Sep–Oct;2(5):282–8 (28 ref.)

Evaluation for the Nursing Research Emphasis Grants for Doctoral Programs in Nursing Grant Program, 1979 to 1984. Holzemer WL, et al. **J Prof Nurs** 1988 Sep–Oct; 4(5):381–6

The emergence of clinical scholarship as a professional imperative. Palmer IS. **J Prof Nurs** 1986 Sep–Oct; 2(5):318–25 (76 ref.)

Education. Educational counseling for research careers. Shannon MD. **J Prof Nurs** 1988 Nov–Dec;4(6):399

Establishing a research program and teaching undergraduates: are they compatible? Williams CA. **J Prof Nurs** 1989 Mar–Apr;5(2):60

Facilities for nursing research: a critical need, an emerging challenge. Williams CA. **J Prof Nurs** 1989 Jul–Aug;5(4):177

The nursing shortage and research opportunities. Williams CA. **J Prof Nurs** 1989 Jan–Feb;5(1):5

Doctoral programs in nursing and the development of research careers. Williams CA. **J Prof Nurs** 1989 May–Jun; 5(3):117, 168

Research & clinical practice. Building a nursing research culture. Polk GC. **J Psychosoc Nurs Ment Health Serv** 1989 Apr;27(4):24–7

Intervening in interventions [editorial] Smoyak SA. **J Psychosoc Nurs Ment Health Serv** 1989 Aug;27(8):3

Beyond idle speculation. Haller KB. **MCN** 1988 Sep–Oct; 13(5):386

Preparing the research proposal: half science, half art. Haller KB. **MCN** 1989 May–Jun;14(3):230

Building a research team. Haller KB. **MCN** 1989 Jul–Aug; 14(4):296

Research priorities for the care of the veteran patient. Ventura MR, et al. **Milit Med** 1989 Jan;154(1):32–5

Nurse practitioner perceptions of facilitators and constraints to practice. Ventura MR, et al. **Milit Med** 1989 Jun; 154(6):303–11

Nursing research opportunities in enteral nutrition. Heitkemper MM, et al. **Nurs Clin North Am** 1989 Jun; 24(2):415–26 (57 ref.)

Overview of patient education. Opportunities and challenges for the twenty–first century. Smith CE. **Nurs Clin North Am** 1989 Sep;24(3):583–7

Development of nursing science in Scandinavia. Gortner SR, et al. **Nurs Outlook** 1989 May–Jun;37(3):123–6

Clinical scholarship and the pragmatic practitioner. Masson V. **Nurs Outlook** 1989 Jul–Aug;37(4):160

International research: a need or a luxury? Meleis AI. **Nurs Outlook** 1989 May–Jun;37(3):138–42

Educational level and job performance [letter; comment] Schutzenhofer K. **Nurs Outlook** 1989 Jan–Feb;37(1):8. **Comment on:** Nurs Outlook 1988 Nov–Dec;36(6):275–9

How to present your research. Part I: What they didn't teach you in nursing school about planning and organizing the content of your speech. Selby ML, et al. **Nurs Outlook** 1989 Jul–Aug;37(4):172–5

Organizational integrative mechanisms and adoption of innovations by nurses. Brett JL. **Nurs Res** 1989 Mar–Apr; 38(2):105–10

Re: Conversion to SI units [letter] Corbett JV. **Nurs Res** 1989 May–Jun;38(3):161

Examination of a survey methodology: Dillman's Total Design Method. Crosby FE, et al. **Nurs Res** 1989 Jan–Feb; 38(1):56–8

A meterstone [editorial] Downs FS. **Nurs Res** 1989 Jan–Feb; 38(1):3

Analysis of a decade of nursing practice research: 1977–1986. Moody LE, et al. **Nurs Res** 1988 Nov–Dec;37(6):374–9

QUAL: a mainframe program for qualitative data analysis. Morse JM, et al. **Nurs Res** 1989 May–Jun;38(3):188–9

The potential uses of pilot work. Prescott PA, et al. **Nurs Res** 1989 Jan–Feb;38(1):60–2

Interfacing bioinstruments with computers for data collection in nursing research. Harrison LL. **Res Nurs Health** 1989 Apr;12(2):129–33

Some ethical implications of qualitative research. Ramos MC. **Res Nurs Health** 1989 Feb;12(1):57–63

Artful design: writing the proposal for research in the naturalist paradigm. Sandelowski M, et al. **Res Nurs Health** 1989 Apr;12(2):77–84

Implications for nursing [editorial] Williams MA. **Res Nurs Health** 1987 Aug;10(4):207

Nursing and minority research [editorial] Williams MA. **Res Nurs Health** 1989 Aug;12(4):iii–iv

Dissertation topics [editorial] Williams MA. **Res Nurs Health** 1988 Oct;11(5):iii–iv

Research and the acute care setting [editorial] Williams MA. **Res Nurs Health** 1989 Apr;12(2):iii–iv

Strategies for teaching nursing research. The use of modeling in teaching nursing research on the graduate level. Beal JA. **West J Nurs Res** 1989 Apr;11(2):247–50

Nursing research and the discipline of ethological science. Cressler DL, et al. **West J Nurs Res** 1988 Dec;10(6):743–56

Baccalaureate nursing students' explanations of success and failure in a research course. Damrosch SP, et al. **West J Nurs Res** 1988 Aug;10(4):463–71

Research in cultural diversity. Institute for the Study of Culture and Nursing—I. DeSantis L, et al.

West J Nurs Res 1988 Dec;10(6):786–9
The interviewer's experience as data in phenomenological research. Drew N. West J Nurs Res 1989 Aug;11(4):431–9
Strategies for teaching nursing research. Even in research, the medium is the message. Fawdry MK, et al. West J Nurs Res 1989 Aug;11(4):502–5
Strategies for teaching nursing research. The critique. Feldman HR. West J Nurs Res 1988 Aug;10(4):515–8
A model for improving the dissemination of nursing research. Funk SG, et al. West J Nurs Res 1989 Jun;11(3):361–72
Application and evaluation of dissemination model. Funk SG, et al. West J Nurs Res 1989 Aug;11(4):486–91
Strategies for teaching nursing research. Role-play to simulate application of research findings. Levin RF. West J Nurs Res 1988 Dec;10(6):782–5
Designing a research poster with impact. Lippman DT, et al. West J Nurs Res 1989 Aug;11(4):477–85
Developing questions of substance for nursing science. Moody L, et al. West J Nurs Res 1989 Aug;11(4):393–404
Age: a truly confounding variable. Phillips LR. West J Nurs Res 1989 Apr;11(2):181–95 (41 ref.)
Multiple triangulation and contemporary nursing research. Sohier R. West J Nurs Res 1988 Dec;10(6):732–42
Strategies for teaching nursing research. Writing to learn nursing research. Sorrell J. West J Nurs Res 1988 Aug; 10(4):510–4
Computer use and nursing research. The entrepreneurial nurse researcher. Uman GC. West J Nurs Res 1989 Apr; 11(2):243–6
Issues related to the unit of analysis in family nursing research. Uphold CR, et al. West J Nurs Res 1989 Aug; 11(4):405–17
Computer use and nursing research. A computerized taxonomy of nursing diagnoses for use in ambulatory care nursing education, practice, and research—Part 1: Development and major headings. Ver Steeg DF. West J Nurs Res 1988 Aug;10(4):506–9
[Experience in management of scientific researches on nursing] Zhao SG. Chung Hua Hu Li Tsa Chih 1988 Sep; 23(9):515–7 (Chi)
[Opinions on the current state of scientific nursing research] Zheng WY, et al. Chung Hua Hu Li Tsa Chih 1988 Oct; 23(10):613–4 (Chi)
[Research on the work force in nursing in 6 countries] Educ Med Salud 1988;22(1):64–90 (Spa)

ECONOMICS

Fogarty International Center: a resource for international nursing. Glittenberg JE. J Prof Nurs 1989 Jan–Feb;5(1):7, 55–6
The costs of research to nursing. Haller KB. MCN 1988 Nov–Dec;13(6):460

METHODS

Nursing research. Components of a clinical research study. Bargagliotti LA. AORN J 1988 Sep;48(3):499, 502–10
Development of a Database Management System for an obstetrics unit. Schroeder MA, et al. Comput Nurs 1989 May–Jun;7(3):112–8
Instrument reliability and validity: how much needs to be published? Lynn MR. Heart Lung 1989 Jul;18(4):421–3
An approach to evaluating the introduction of primary nursing in an acute medical unit for the elderly—II. Operationalizing the principles. MacGuire J. Int J Nurs Stud 1989;26(3):253–60
Nursing research: some guidelines for practitioners. Beckingham C. Int Nurs Rev 1988 Nov–Dec;35(6):169–71, 174
Integrating nursing theory, practice and research through collaborative research. Denyes MJ, et al. J Adv Nurs 1989 Feb;14(2):141–5
Psychomotor skills laboratories as self-directed learning: a study of nursing students' perceptions. McAdams C, et al. J Adv Nurs 1989 Sep;14(9):788–96
Action research: philosophy, methods and personal experiences. Webb C. J Adv Nurs 1989 May;14(5):403–10
Fundamentals of obstetric, gynecologic, and neonatal nursing research: Part I. Beck CT. J Obstet Gynecol Neonatal Nurs 1989 May–Jun; 18(3):216–21 (17 ref.)
Quantitative versus qualitative research? [editorial] Ramer L. J Obstet Gynecol Neonatal Nurs 1989 Jan–Feb;18(1):7–8
Research. Evolving clinical nursing research priorities: a national endeavor. Hinshaw AS, et al. J Prof Nurs 1988 Nov–Dec;4(6):398, 458–9
Programmatic research: a collaborative model. Tomlinson PS, et al. J Prof Nurs 1986 Sep–Oct;2(5):309–17
Determining causality. Haller KB. MCN 1989 Jan–Feb; 14(1):66
Nonexperimental approaches to determining causality. Haller KB. MCN 1989 Mar–Apr;14(2):148
Perspectives on research in patient teaching. Oberst MT. Nurs Clin North Am 1989 Sep;24(3):621–8
Longitudinal studies as intervention. Collins C, et al. Nurs Res 1989 Jul–Aug;38(4):251–3
Methodological issues related to gerontological nursing research. Gueldner SH, et al. Nurs Res 1989 May–Jun; 38(3):183–5
Contextual regression analysis. Holzemer WL, et al. Nurs Res 1989 Mar–Apr;38(2):124–5
Managing measurement error. Jennings BM, et al. Nurs Res 1989 May–Jun;38(3):186–7
Insights from "the glorious whitewasher" [editorial] Vessey JA, et al. Nurs Res 1989 Mar–Apr;38(2):67
Life-span developmental methods: application to nursing research. Weekes DP, et al. Nurs Res 1988 Nov–Dec; 37(6):380–3
The hidden fallacies in longitudinal designs [editorial] Oberst MT. Res Nurs Health 1989 Feb;12(1):iii–iv
Identification of nursing diagnoses and defining characteristics: two research models. Woodtli A. Res Nurs Health 1988 Dec;11(6):399–406
Research in cultural diversity. Qualitative methods in cultural research. II. Cohen MZ, et al. West J Nurs Res 1989 Aug; 11(4):495–7
The newspaper as a tool for introducing research. Coppens NM. West J Nurs Res 1988 Oct;10(5):677–9
Strategies for accessment and recruitment of subjects for nursing research. Diekmann JM, et al. West J Nurs Res 1989 Aug;11(4):418–30
Method triangulation to index change in clinical phenomena. Hinds PS. West J Nurs Res 1989 Aug;11(4):440–7
Archives as sources of treasure in historical research. Sorensen ES. West J Nurs Res 1988 Oct;10(5):666–70
Q-sort update. Tetting DW. West J Nurs Res 1988 Dec; 10(6):757–65
Computer use and nursing research. A computerized taxonomy of nursing diagnoses for use in ambulatory care nursing education, practice, and research—Part 2: The use of modifiers. Ver Steeg DF. West J Nurs Res 1988 Dec; 10(6):778–81
[Prospective analysis of nursing education] Educ Med Salud 1989 Apr–Jun;23(2):119–54 (Spa)

ORGANIZATION & ADMINISTRATION

The nursing research committee. Krouse HJ, et al. J Nurs Adm 1988 Dec;18(12):37–40

STANDARDS

Improving peer review of nursing research. Cason GJ, et al. Comput Nurs 1988 Nov–Dec;6(6):253–62
Informed consent process in research protocols: dilemmas for clinical nurses. Davis AJ. West J Nurs Res 1989 Aug; 11(4):448–57
Strategies to promote valid and reliable nursing interventions in research. Miller P, et al. West J Nurs Res 1989 Jun; 11(3):373–8

STATISTICS & NUMERICAL DATA

Nursing research in midwestern hospitals. Pettengill MM, et al. West J Nurs Res 1988 Dec;10(6):705–17

NURSING SERVICE, HOSPITAL

Putting your patient-care philosophy to the test [editorial] Mallison M. Am J Nurs 1989 Aug;89(8):1021
Five years of fewer falls. Morton D. Am J Nurs 1989 Feb; 89(2):204–5
Hospital and community liaison links in nursing: the role of the liaison nurse. Jowett S, et al. J Adv Nurs 1988 Sep; 13(5):579–87
Nursing research image at Beth Israel Hospital, Boston. Rempusheski VF, et al. J Nurs Adm 1989 Oct;19(10):6–7
Issues surrounding RN/BSN education: a view from nursing service. Fralic MF. J Prof Nurs 1989 Mar–Apr;5(2):64, 113
Planning for cancer patient care and teaching to enhance the oncology product line. Blauvelt N, et al. Prog Clin Biol Res 1988;278:211–8
Patient acuity systems and productivity. Piper LR. Top Health Care Financ 1989 Spring;15(3):43–53

ECONOMICS

Comparing the costs of i.v. drug delivery systems. Smith CF, et al. Am J Nurs 1989 Apr;89(4):500–1
Examining nursing personnel costs: controlled versus noncontrolled oral analgesic agents. Kitz DS, et al. J Nurs Adm 1989 Jan;19(1):10–4

EDUCATION

Computer-certified CPR. Shehee A. Am J Nurs 1989 Apr; 89(4):548

HISTORY

American nursing and the road not taken [letter] Bullough VL. J Hist Med Allied Sci 1989 Jul;44(3):375–8

MANPOWER

Seizing the initiative [editorial] Carlson RW. Heart Lung 1989 Sep;18(5):433–5
National, state efforts address nurse shortage. Koska MT. Hospitals 1989 Feb 5;63(3):58–9
The unit service clerk. Dale RL, et al. J Nurs Adm 1989 Jun;19(6):22–4
Conflict resolution: applying the political model to the RCT proposal. Goodyear R, et al. Nurse Pract 1989 Sep;14(9):50, 53–4, 56
A shortage of bedside nurses. Kabler JD. Wis Med J 1988 Sep;87(9):3–4

METHODS

Who's using nursing diagnoses? Brunckhorst L, et al. Am J Nurs 1989 Feb;89(2):267–8

ORGANIZATION & ADMINISTRATION

Using computers in nursing. Documented benefits and needed studies. Staggers N. Comput Nurs 1988 Jul–Aug;6(4):164–70
Study finds bedside terminals prove their worth. Cerne F. Hospitals 1989 Feb 5;63(3):72
Inpatient bedside system enters the computer age. Lappa K. Hospitals 1989 Jul 5;63(13):76
Nursing information systems not up to par—yet. Packer CL. Hospitals 1989 May 5;63(9):60
Why the quick fix won't fix today's nurse shortage. Fagin CM. Inquiry 1988 Fall;25(3):309–14
JONA's semiannual directory of consultants to nursing administration. J Nurs Adm 1989 Jul–Aug;19(7):39–79
Professionalism of hospital nurses linked to staff structure. J Nurs Adm 1988 Nov;18(11):44
An administrative marketing strategy: a different perspective on the nursing process. Beaupre BA. J Nurs Adm 1988 Nov;18(11):37–41
Computers: meeting the challenge of the information age. Bell EA. J Nurs Adm 1989 Jan;19(1):8–9
A computerized system for staffing, billing and productivity measurement. Budd MC, et al. J Nurs Adm 1989 Jul–Aug; 19(7):17–22
Patient classification system evaluation. Part 1: Essential system elements. De Groot HA. J Nurs Adm 1989 Jun; 19(6):30–5
Patient classification system evaluation: Part 2, System selection and implementation. De Groot HA. J Nurs Adm 1989 Jul–Aug;19(7):24–30
Nursing in a service line organization. Hesterly SC, et al. J Nurs Adm 1988 Nov;18(11):32–6
Implementing differentiated practice: the Sioux Valley Hospital experience. Koerner JG, et al. J Nurs Adm 1989 Feb;19(2):13–20
Electronic mail basics. Staggers N. J Nurs Adm 1989 Oct; 19(10):31–5
Developing new models of care, roles, and responsibilities. Strasen L. J Nurs Adm 1989 Jun;19(6):7–8, 24
Redesigning hospital nursing practice: the Professionally Advanced Care Team (ProACT) model, Part 1. Tonges MC. J Nurs Adm 1989 Jul–Aug;19(7):31–8
Redesigning hospital nursing practice: the Professionally Advanced Care Team (ProACT) model, Part 2. Tonges MC. J Nurs Adm 1989 Sep;19(9):19–22
[Bring the role of nursing command system into full play] Bai MR. Chung Hua Hu Li Tsa Chih 1988 Nov;23(11):641–2 (Chi)
[Organization and management of nursing care for admission of a batch of burn patients] Mu XL, et al. Chung Hua Hu Li Tsa Chih 1988 Sep;23(9):521–2 (Chi)
[Experience in maintaining a regular meeting system for head nurses] Yang Z. Chung Hua Hu Li Tsa Chih 1988 Jul; 23(7):392–3 (Chi)
[Work characteristics of sector nurses in pediatric polyclinics] Manafov IT, et al. Sov Zdravookhr 1988;(6):27–9 (Rus)

STANDARDS

Expert practice: trading examples over pizza. Tofias L. Am J Nurs 1989 Sep;89(9):1193–4
RN shortage puts experience in forefront. Koska MT. Hospitals 1989 May 5;63(9):22
Legal implications of institutional standards for nurses. Feutz SA. J Nurs Adm 1989 Jul–Aug;19(7):4–7
Ownership imbalance [editorial] Jackson BS. J Nurs Adm 1989 Sep;19(9):4–5
Incorporating patient satisfaction standards into quality of care measures. Strasen L. J Nurs Adm 1988 Nov;18(11):5–6

NURSING SERVICES

Identifying the components of a nursing service philosophy. Poteet GW, et al. J Nurs Adm 1988 Oct;18(10):29–33

ECONOMICS

Let's set the payment record straight. Griffith HM, et al. Am J Nurs 1989 Aug;89(8):1051–2
Converting nursing care cost to revenue. Stepura BA, et al. J Nurs Adm 1989 May;19(5):18–22

MANPOWER

Help wanted: nurses, nurses, nurses! Jones DB. Tex Med 1989 Feb;85(2):28–31

ORGANIZATION & ADMINISTRATION

Nursing needs its own minimum data set. Werley HH, et al. Am J Nurs 1988 Dec;88(12):1651–3
Making the case for nurses as managers of nursing resources. Kadandara JC. Int Nurs Rev 1989 Jul–Aug;36(4):109–12
Epidemiology, resources, and collaboration: an international perspective [editorial] Henry B. J Nurs Adm 1989 May; 19(5):5–7
A retrospective on Japanese management in nursing. Smith HL, et al. J Nurs Adm 1989 Jan;19(1):27–37 (37 ref.)

STANDARDS

Care of the elderly: the nurse's role. Wright SG. **J R Soc Health** 1989 Feb;109(1):21–2

SUPPLY & DISTRIBUTION

The moral dilemma of rationing nursing resources. LaRochelle DR. **J Prof Nurs** 1989 Jul–Aug;5(4):173, 236

NURSING STAFF

Nurse administration of sleep medication: a comparison of registered nurses and licensed practical nurses. Robers PA, et al. **Am J Public Health** 1988 Dec;78(12):1581–3

Occupational asthma in nurses caused by chlorhexidine and alcohol aerosols. Waclawski ER, et al. **BMJ** 1989 Apr 8; 298(6678):929–30

Absenteeism of nursing staff in a nursing home. Cohen–Mansfield J, et al. **Int J Nurs Stud** 1989;26(2):187–94

Telephone communication with the primary physician by staff of a long–term care facility [letter] Rezvan A. **J Am Geriatr Soc** 1989 Mar;37(3):289–90

Sex and health promotion [letter] **J R Coll Gen Pract** 1988 Mar;38(308):125

Patient and nursing staff perceptions of living and working on a spinal injuries unit. Krishnan KR, et al. **Paraplegia** 1988 Oct;26(5):287–92

LEGISLATION & JURISPRUDENCE

Nurses 'disturbed' by new regulations [news] **Occup Health Saf** 1989 Mar;58(3):12–3

ORGANIZATION & ADMINISTRATION

A short term in long–term [letter] Kelly FL. **Am J Nurs** 1988 Nov;88(11):1479–80

Shared governance. Reality or sham? O'Grady TP. **Am J Nurs** 1989 Mar;89(3):350–1

PSYCHOLOGY

Survey of nursing personnel attitudes toward infections and their control in the elderly. LeClair SM, et al. **Am J Infect Control** 1988 Aug;16(4):159–66

Abuse of patients in nursing homes: findings from a survey of staff. Pillemer K, et al. **Gerontologist** 1989 Jun; 29(3):314–20

Sources of satisfaction and stress in nursing home caregivers: preliminary results. Cohen–Mansfield J. **J Adv Nurs** 1989 May;14(5):383–8

A comparison of sources of nursing stress and job satisfaction among mental handicap and hospice nursing staff. Power KG, et al. **J Adv Nurs** 1988 Nov;13(6):726–32

Preventing drug dependency: Part I, Recognizing risk factors. Clark MD. **J Nurs Adm** 1988 Dec;18(12):12–5

Perception of opportunity and job attitudes. Oriol MD. **J Nurs Adm** 1989 Jul–Aug;19(7):30

Mutual support groups for hospice staff: planned or ad hoc? Parry JK. **J Palliat Care** 1989 Mar;5(1):34–6

Failure to collaborate? Massey JA, et al. **J Prof Nurs** 1986 Sep–Oct;2(5):276

STANDARDS

Home health agency preferences for staff nurse qualifications, and practices in hiring and orientation. Kalnins I. **Public Health Nurs** 1989 Jun;6(2):55–61

SUPPLY & DISTRIBUTION

The nursing crisis in Alabama, a "supplier" state. Taylor B. **Ala Med** 1989 Jul;59(1):9–10

Nursing resources and the delivery of patient care: the National Center for Nursing Research Perspective. Moritz P, et al. **J Nurs Adm** 1989 May;19(5):12–7

TRENDS

AMA aims to pilot RTC project in four sites. **Am J Nurs** 1988 Dec;88(12):1717, 1720

NURSING STAFF, HOSPITAL

Evaluation of emergency medicine residents by nurses. Tintinalli JE. **Acad Med** 1989 Jan;64(1):49–50

AIDS–infected RN wins "confidentiality" fight [news] **Am J Nurs** 1989 Sep;89(9):1234

Follow–up phone calls after discharge. Cave LA. **Am J Nurs** 1989 Jul;89(7):942–3

How to discharge a patient in the AM. Connolly ML. **Am J Nurs** 1989 May;89(5):731

A career day—with a difference. Grant P. **Am J Nurs** 1989 Mar;89(3):354–5

Research on every rung of the clinical ladder. Holmes SB, et al. **Am J Nurs** 1989 Feb;89(2):246, 248, 250

More from the night owls. Janowski MJ. **Am J Nurs** 1988 Oct;88(10):1340–1

The gang that couldn't listen straight [editorial] Mallinson MB. **Am J Nurs** 1989 Feb;89(2):161

To the new interns on July 1 [editorial] Mallison MB. **Am J Nurs** 1989 Jun;89(6):791

Florida jobfocus. Florida boom times and beaches. Nash M. **Am J Nurs** 1989 May;89(5):734–5

Washington metro job focus. Capital attractions. Nash M. **Am J Nurs** 1989 Aug;89(8):1075–6, 1078, 1080

Northeast jobfocus. Northeastern high points. Nash M. **Am J Nurs** 1989 Jan;89(1):91–6, 98–100, 102

Texas jobfocus. Lone Star stars. Nash M. **Am J Nurs** 1989 Jun;89(6):849–55

Southeast jobfocus. Heading south by southeast. Nash M. **Am J Nurs** 1989 May;89(5):707–16, 719–24

Midwest jobfocus. The midwest plains and simple. Nash M. **Am J Nurs** 1989 Mar;89(3):383, 385–91

Pennsylvania jobfocus. Pennsylvania profile. Nash M. **Am J Nurs** 1989 Sep;89(9):1211, 1213

Michigan jobfocus. Michigan's magic. Nash M. **Am J Nurs** 1989 Mar;89(3):402–4

Georgia jobfocus. Georgia on your mind. Nash M. **Am J Nurs** 1989 May;89(5):725–8

New York jobfocus. The sweetness of the Big Apple—and vicinity. Nash M. **Am J Nurs** 1989 Apr;89(4):525–30, 532, 534

California jobfocus. California: with a special section on the western Sunbelt. Nash M. **Am J Nurs** 1989 Feb;89(2):233, 235–44, 255–60

New Jersey jobfocus. The Garden State's greener grass. Nash M. **Am J Nurs** 1989 Apr;89(4):545–7

Boston jobfocus. Boston basics. Nash M. **Am J Nurs** 1989 Sep;89(9):1202, 1204, 1206

Northeast jobfocus. A Northeast primer. Nash M. **Am J Nurs** 1989 Sep;89(9):1177, 1179–88

To registry/agency nurses [letter] Simon BG. **Am J Nurs** 1989 Apr;89(4):480

Manager, staff nurse—each role has its pluses and minuses. Applegeet CJ. **AORN J** 1989 Jun;49(6):1508–10

Personal safety. It is a matter of awareness. Moore LR, et al. **AORN J** 1989 Aug;50(2):328, 330–1, 334–5

Survey of falls of inpatients at the Ryde Hospital in 1986. Lake M, et al. **Aust Clin Rev** 1989 Mar;8(32):242–6

Nurses' preparedness for health promotion through linkage with mutual–aid self–help groups. Stewart MJ. **Can J Public Health** 1989 Mar–Apr;80(2):110–4

Deviations in the time of administration of antibiotics by nurses. Awad AS, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):554–6

One nurse's transfer to hospital information services. Pinsky MS. **Comput Nurs** 1989 Mar–Apr;7(2):55–7

Accuracy of nurses in performing capillary blood glucose monitoring. Lawrence PA, et al. **Diabetes Care** 1989 Apr; 12(4):298–301

Column response [letter] Giovinazzo N. **Dimens Health Serv** 1989 Feb;66(1):7

The effect of a nurses' strike on the functioning of chronic patients. Sigal M, et al. **Hosp Community Psychiatry** 1989 Apr;40(4):409–11

Telecommunications. Efficient nurses. Eubanks P. **Hospitals** 1989 Aug 5;63(15):50

Sex difference in the morningness–eveningness preference in student and hospital nurse samples. Motohashi Y. **Ind Health** 1988;26(4):245–9

Handling of cytostatic drugs and urine mutagenesis. Poyen D, et al. **Int Arch Occup Environ Health** 1988;61(3):183–8

Student nurse perception of the staff nurse role. Buckenham MA. **J Adv Nurs** 1988 Sep;13(5):662–70

The rehabilitation nurse: an able, but often overlooked, member of the burn team. Stearns G, et al. **J Burn Care Rehabil** 1988 Jul–Aug;9(4):422

An epidemiological study of non–A non–B viral hepatitis in nurses' hostel, Raipur, Madhya Pradesh—1985. Sharma RS, et al. **J Commun Dis** 1987 Dec;19(4):349–58

Laundering of nurses' dresses at home. Ayliffe GA, et al. **J Hosp Infect** 1989 Jan;13(1):91

Creating a safe environment in the AIDS era. Hodges LC, et al. **J Neurosci Nurs** 1988 Oct;20(5):329–32

Staff nurse attitudes and the development of a nursing research program. Bostrom AC. **J Nurs Adm** 1989 Jul–Aug; 19(7):16, 30

Focus groups: a program planning technique. DesRosier MB, et al. **J Nurs Adm** 1989 Mar;19(3):20–5

Stoplight Grid: a color–coded visual system for per diem staff assignment. Ernst P. **J Nurs Adm** 1989 Feb;19(2):23–7

The Nursing Research Program at Children's Hospital, Boston. Hegedus KS, et al. **J Nurs Adm** 1989 Jun;19(6):9–10

The emotional and behavioral process of staff nurse turnover. Landstrom GL, et al. **J Nurs Adm** 1989 Sep;19(9):23–8

Intrapreneurship: tapping employee creativity. Marszalek–Gaucher E, et al. **J Nurs Adm** 1988 Dec; 18(12):20–2

The quality management maturity grid: a diagnostic method. Schmele JA, et al. **J Nurs Adm** 1989 Sep;19(9):29–34

A design for recruitment and feedback. Schutzenhofer KK, et al. **J Nurs Adm** 1989 Sep;19(9):5

A multiple–strategy based research program for staff nurse involvement. Stark JL. **J Nurs Adm** 1989 Sep;19(9):7–8

Soviet hospital nursing: a model for self–care. Dennis LI. **J Nurs Educ** 1989 Feb;28(2):76–7

The clinical teaching associate model: advantages and disadvantages in practice. De Voogd R, et al. **J Nurs Educ** 1989 Jun;28(6):276–7

Practices and policies in the initiation of breastfeeding. Houston MJ, et al. **J Obstet Gynecol Neonatal Nurs** 1988 Nov–Dec;17(6):418–24

Evaluation of exposure of health care personnel to ribavirin. Gladu JM, et al. **J Toxicol Environ Health** 1989;28(1):1–12

Occupational exposure to ribavirin aerosols [news] **Lancet** 1988 Oct 22;2(8617):976

Human parvovirus B19 infection among hospital staff members after contact with infected patients [see comments] Bell LM, et al. **N Engl J Med** 1989 Aug 24; 321(8):485–91. **Comment in:** N Engl J Med 1989 Aug 24;321(8):536–8

AIDS and the health care worker. Tobias MI. **N Z Med J** 1989 Feb 22;102(862):80–2

The role of the nurse on hospital ethics committees. Murphy P. **Nurs Clin North Am** 1989 Jun;24(2):551–6 (15 ref.)

No evidence of hospital–acquired cytomegalovirus infection in a pregnant pediatric nurse using restriction endonuclease analysis. Hökeberg I, et al. **Pediatr Infect Dis J** 1988 Nov; 7(11):812–4

Attitudes to a hospital based terminal care scheme. McKee CM, et al. **Postgrad Med J** 1988 Sep;64(755):678–80

Varying antibody response in hospital staff vaccinated against hepatitis B. Ljunggren K, et al. **Scand J Infect Dis** 1988; 20(5):485–8

Nursing research in midwestern hospitals. Pettengill MM, et al. **West J Nurs Res** 1988 Dec;10(6):705–17

[Plasmodium falciparum malaria: a difficult diagnostic and therapeutic problem] Kocięcka W, et al. **Wiad Parazytol** 1988;34(4–6):649–53 (Eng. Abstr.) **(Pol)**

ECONOMICS

'89 salary update [news] **Am J Nurs** 1989 Jan;89(1):16–7

Issues in nursing labor costs allocation. Barhyte DY, et al. **J Nurs Adm** 1988 Dec;18(12):16–9

Impaired nurses: a cost analysis. LaGodna GE, et al. **J Nurs Adm** 1989 Sep;19(9):13–8

EDUCATION

Monitoring system to verify activation of ADD–Vantage system doses [letter] DeRon MS, et al. **Am J Hosp Pharm** 1989 Apr;46(4):702

Pharmacy participation in nursing orientation programs [letter] Fink RM, et al. **Am J Hosp Pharm** 1989 Apr; 46(4):701–2

Helping staff nurses become mini–specialists. Feller NG, et al. **Am J Nurs** 1989 Jul;89(7):991–2

Skills in basic life support [letter] Langton JA. **Anaesthesia** 1989 Mar;44(3):258

The orientation process. Strategies to ensure success. Sullins ML. **AORN J** 1989 Feb;49(2):536–7, 540–2

Opening an outpatient facility. Conducting a mock run. Walz MJ. **AORN J** 1989 Sep;50(3):583–5

Impact of staff education on pressure sore development in elderly hospitalized patients. Moody BL, et al. **Arch Intern Med** 1988 Oct;148(10):2241–3

Perceived and actual level of knowledge of diabetes mellitus among nurses. Drass JA, et al. **Diabetes Care** 1989 May; 12(5):351–6

The introduction of a quality assessment scheme for extra–laboratory blood glucose analysis. Hamilton AD, et al. **Diabetic Med** 1989 Jul;6(5):444–7

Thinking aloud [letter] Hauser D. **Heart Lung** 1989 May; 18(3):321–2

Retention of cardiopulmonary resuscitation skills among nursing personnel: what makes the difference? Yakel ME. **Heart Lung** 1989 Sep;18(5):520–5

Writing behavioural objectives: an evaluation of a simple, inexpensive method. Sturmey P, et al. **J Adv Nurs** 1988 Jul;13(4):496–500

The role of communication in the alteration of patient–care practices in hospital—a prospective study. Seto WH, et al. **J Hosp Infect** 1989 Jul;14(1):29–37

Preventing drug dependency: Part 2, Educating and supporting staff. Clark MD. **J Nurs Adm** 1989 Jan; 19(1):21–6

Keeping staff up on electronic fetal monitoring. Pheigaru JL. **MCN** 1988 Sep–Oct;13(5):334–5

LEGISLATION & JURISPRUDENCE

Federal judge upholds RN's firing over AIDS test [news] **Am J Nurs** 1989 Jun;89(6):868, 873

Legal briefs: new AIDS, harassment charges [news] **Am J Nurs** 1988 Nov;88(11):1570

"Jane Doe, RN" fights to keep HIV status secret [news] **Am J Nurs** 1989 Jun;89(6):869

Statistics alone can't prove murder [letter; comment] Carl LC. **Am J Nurs** 1989 Jul;89(7):931. **Comment on:** Am J Nurs 1988 Oct;88(10):1327–8, 1332

Refusing an unreasonable assignment. Part 2: Strategies for problem solving. Cushing M. **Am J Nurs** 1988 Dec; 88(12):1635–7

Finding fault when patients fall. Cushing M. **Am J Nurs** 1989 Jun;89(6):808–9

Accepting or rejecting an assignment. Part I: Are you abandoning your patients? Cushing M. **Am J Nurs** 1988 Nov;88(11):1470, 1475–6

The effect of shortened statutes of limitations on nurses. Murphy EK. **AORN J** 1988 Sep;48(3):547–50

Hospital's demand for AIDS test is upheld. Holthaus D. **Hospitals** 1989 May 20;63(10):60, 62

The roles of the office and hospital nurse. Stratton WT. **Kans Med** 1989 Mar;90(3):66–7

ORGANIZATION & ADMINISTRATION

Restructuring nursing unit inspections as a quality assurance activity. Arrison CJ. **Am J Hosp Pharm** 1989 Feb; 46(2):313–5

Hospitals that succeed with nurses [editorial] Mallison MB. **Am J Nurs** 1989 Mar;89(3):313
How to keep floats afloat. Norman N. **Am J Nurs** 1989 Apr; 89(4):537–8, 540, 542
Nursing staff development and facility design for medical–psychiatry units [corrected and republished article originally printed in Gen Hosp Psychiatry 1989 Jan;11(1):36–47] Cowart T, et al. **Gen Hosp Psychiatry** 1989 Mar;11(2):125–36
The functioning of nursing routines in the management of a transient workforce. Procter S. **J Adv Nurs** 1989 Mar; 14(3):180–9
Burn nurse retention. Elements of success. Dembicki R, et al. **J Burn Care Rehabil** 1989 Mar–Apr;10(2):177–80
Staff nurse retention: strategies for success. Lassiter SS. **J Neurosci Nurs** 1989 Apr;21(2):104–7
The International Nurse Exchange Program. Brooks AM. **J Nurs Adm** 1989 Apr;19(4):12–3
Effecting change through the stream analysis process. Cashman J. **J Nurs Adm** 1989 May;19(5):37–44
Participative staff retention program. Horrigan K. **J Nurs Adm** 1989 Apr;19(4):14
From LPN to RN. Jacobson RB. **J Nurs Adm** 1989 Apr; 19(4):9–10
An evaluation of nurse recruitment methods. Jolma DJ, et al. **J Nurs Adm** 1989 Apr;19(4):20–4
Implementing differentiated practice: the Sioux Valley Hospital experience. Koerner JG, et al. **J Nurs Adm** 1989 Feb;19(2):13–20
A nursing diagnosis based model: guiding nursing practice. Krenz M, et al. **J Nurs Adm** 1989 May;19(5):32–6
Responding to patients: the unit hostess. Sheedy S. **J Nurs Adm** 1989 Apr;19(4):31–3
Nursing leadership. The effects of organizational structure. Singleton EK, et al. **J Nurs Adm** 1988 Oct;18(10):10–4
Recognizing and rewarding excellence: a program for marketing the image of your nursing department. Stolzfus CL, et al. **J Nurs Adm** 1989 Apr;19(4):11
Empowering nurses. Trofino J. **J Nurs Adm** 1989 Apr; 19(4):13
Targeting recruitment efforts for increased retention. Whaley BA, et al. **J Nurs Adm** 1989 Apr;19(4):34–8
Organizational integrative mechanisms and adoption of innovations by nurses. Brett JL. **Nurs Res** 1989 Mar–Apr; 38(2):105–10
[Flight over a nest of psychiatric nurses] Cornu C. **Rev Med Suisse Romande** 1988 Oct;108(10):843–6 **(Fre)**
[Work characteristics of sector nurses in pediatric polyclinics] Manafov IT, et al. **Sov Zdravookhr** 1988;(6):27–9 **(Rus)**

PSYCHOLOGY

AIDS, attitudes, and infection control. Andre BC. **Am J Infect Control** 1988 Dec;16(6):272–3
Barriers to influenza vaccine acceptance. A survey of physicians and nurses. Weingarten S, et al. **Am J Infect Control** 1989 Aug;17(4):202–7
Surviving the stages of peer consultation. Bilderback B. **Am J Nurs** 1989 Jan;89(1):113–4, 116
Managing ICU–induced stress. Doran MO. **Am J Nurs** 1988 Nov;88(11):1559–60, 1562
Fighting over a critically ill patient. Elston–Hurdle BJ, et al. **Am J Nurs** 1989 Mar;89(3):327–8
Can nurses care too much? Gemma PB. **Am J Nurs** 1989 May;89(5):743–4
Nurse...or Scarlet Pimpernel? Golder DJ. **Am J Nurs** 1989 Jan;89(1):154
Heart transplant. Impact on CCU nurses. Riether AM, et al. **Am J Nurs** 1988 Nov;88(11):1521–4
Recovering from alcoholism—one shift at a time. Saxe DM. **Am J Nurs** 1988 Nov;88(11):1618
Smoking among hospital nurses [letter] Cooreman J, et al. **Am J Public Health** 1989 Jun;79(6):782
Reviewing nursing stress according to a proposed coping–adaption framework. Harris RB. **ANS** 1989 Jan; 11(2):12–28 (59 ref.)
Developing a multidimensional turnover prevention program. Hutchinson SJ, et al. **Arch Psychiatr Nurs** 1988 Dec;2(6):373–8
Organizational characteristics, occupational stress, and mental health in nurses. Revicki DA, et al. **Behav Med** 1989 Spring;15(1):30–6
Sources of stress and dissatisfaction among nurses in four hospital environments. Hipwell AE, et al. **Br J Med Psychol** 1989 Mar;62 (Pt 1):71–9
Job stress and satisfaction among the staff members at a cancer center. Peteet JR, et al. **Cancer** 1989 Aug 15; 64(4):975–82
The psychological aspects of bone marrow transplant. A staff's perspective. Brack G, et al. **Cancer Nurs** 1988 Aug; 11(4):221–9
Work satisfaction, unionism and militancy amongst nurses. Arch M, et al. **Community Health Stud** 1989;13(2):177–85
Nursing staff response to a facility's relocation. Rosen E, et al. **Dimens Health Serv** 1988 Sep;65(6):27–31
Consultation on the medical frontier. A preliminary survey of the attitudes of infant intensive care nurses. Brack G, et al. **Gen Hosp Psychiatry** 1989 May;11(3):174–81
Personality factors of critical care nurses [letter] Rectanus EF Jr. **Heart Lung** 1989 May;18(3):321
How nursing staff respond to the label "borderline personality disorder". Gallop R, et al. **Hosp Community Psychiatry** 1989 Aug;40(8):815–9
Attitudes and perceptions of health professionals toward substance use disorders and substance–dependent individuals. Moodley–Kunnie T. **Int J Addict** 1988 May; 23(5):469–75
Primary nursing: opinions of nursing staff before and during implementation. Perälä ML, et al. **Int J Nurs Stud** 1989; 26(3):231–42
Burnout and coping strategies among hospital staff nurses. Ceslowitz SB. **J Adv Nurs** 1989 Jul;14(7):553–8
Nursing staff's perceptions of work in acute and long–term care hospitals. Heiskanen TA. **J Adv Nurs** 1988 Nov; 13(6):716–25
Graduate nurses' adjustment to initial employment: natural field work. Horsburgh M. **J Adv Nurs** 1989 Aug; 14(8):610–7
How hospital ward members treat learner nurses: an investigation of learners' perceptions in a British hospital. Hyland ME, et al. **J Adv Nurs** 1988 Jul;13(4):472–7
Determinants of patient care: nursing process or nursing attitudes? Moss AR. **J Adv Nurs** 1988 Sep;13(5):615–20
Association of management style with job satisfaction of nursing caregivers. Gillies DA, et al. **J Nurs Adm** 1988 Nov;18(11):43–4
Understanding organizational culture: a key to management decision–making. Van Ess Coeling H, et al. **J Nurs Adm** 1988 Nov;18(11):16–23
Nurses' and physicians' perceptions of nursing authority. Katzman EM. **J Prof Nurs** 1989 Jul–Aug;5(4):208–14
The chemically dependent nurse. Green P. **Nurs Clin North Am** 1989 Mar;24(1):81–94 (24 ref.)
Shared values: impact on staff nurse job satisfaction and perceived productivity. Kramer M, et al. **Nurs Res** 1989 May–Jun;38(3):172–7
Don't treat nurses as if they were invisible. Magee M. **Postgrad Med** 1989 Jan;85(1):67–8
Nurses' job satisfaction: a longitudinal analysis. Blegen MA, et al. **Res Nurs Health** 1987 Aug;10(4):227–37
Subjective stress, job satisfaction, and job performance of hospital nurses. Packard JS, et al. **Res Nurs Health** 1987 Aug;10(4):253–61
Nursing turnover: an integrated model. Parasuraman S. **Res Nurs Health** 1989 Aug;12(4):267–77
Occupational influences on burnout phenomenon among hospital nurses. Hisashige A, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:454–66
Job satisfaction, powerlessness, and locus of control. Bush JP. **West J Nurs Res** 1988 Dec;10(6):718–31
Schedule–related effects on nurse retention. Choi T, et al. **West J Nurs Res** 1989 Feb;11(1):92–107
Informed consent process in research protocols: dilemmas for clinical nurses. Davis AJ. **West J Nurs Res** 1989 Aug; 11(4):448–57
[Psychological management of hospital nursing staffs] Zhang SY. **Chung Hua Hu Li Tsa Chih** 1988 Nov;23(11):645–6 **(Chi)**
[Selected results of occupational psychological studies of nurses] Ammer M, et al. **Z Gesamte Hyg** 1989 Apr; 35(4):232–4 (Eng. Abstr.) **(Ger)**
[Psychological characteristics of various categories of medical personnel and the problems of their professional selection] Korotin LP, et al. **Gig Sanit** 1988 Oct;(10):46–8 **(Rus)**

STANDARDS

Pictures of performance: the key to improved nursing productivity. Helmer FT, et al. **Health Care Manage Rev** 1988 Fall;13(4):65–70
Why are so many critical care nurses unable to recognize ventricular tachycardia in the 12–lead electrocardiogram? Cooper J, et al. **Heart Lung** 1989 May;18(3):243–7
American Association of Critical–Care Nurses Demonstration Project: profile of excellence in critical care nursing. Mitchell PH, et al. **Heart Lung** 1989 May; 18(3):219–37
Setting standards and evaluating nursing performance with a single tool. Fosbinder D, et al. **J Nurs Adm** 1989 Oct; 19(10):23–30
Agency nursing: costs and quality [editorial] Jackson BS. **J Nurs Adm** 1989 Jun;19(6):5, 12
Values and vision in chaotic times. Strasen L. **J Nurs Adm** 1989 Mar;19(3):4–5, 25
Quality assurance of hospital transfusion practices: the role of nursing staff. Devine P, et al. **QRB** 1988 Aug;14(8):250–3
The basic and advanced cardiopulmonary resuscitation skills of trained hospital nursing staff. Seidelin PH, et al. **Scott Med J** 1989 Feb;34(1):393–4
Job effectiveness of foreign nurse graduates. McCloskey JC, et al. **West J Nurs Res** 1988 Aug;10(4):477–91

SUPPLY & DISTRIBUTION

Hospitals seek support for thinning RN ranks; primary nursing under pressure, say recruiters [news] **Am J Nurs** 1988 Oct;88(10):1412, 1418–9
Why I'm an agency nurse. McElreath BJ. **Am J Nurs** 1989 May;89(5):678–9
Southwest jobfocus. Southwest style. Nash M. **Am J Nurs** 1988 Nov;88(11):1539–40, 1542, 1544 passim
Incentives for the nursing profession. DeRosario J. **Dimens Health Serv** 1989 Jun;66(5):24–5
Simultaneous strategies for solving the nursing shortage. Friss L. **Health Care Manage Rev** 1988 Fall;13(4):71–80
Management strategies to minimize nursing turnover. Helmer FT, et al. **Health Care Manage Rev** 1989 Winter;14(1):73–80 (15 ref.)
Physician exec offers remedy for nurse crisis. Cerne F. **Hospitals** 1988 Dec 5;62(23):64
Nursing shortage eases: AHA data. Powills S. **Hospitals** 1989 May 5;63(9):32–7
Why the quick fix won't fix today's nurse shortage. Fagin CM. **Inquiry** 1988 Fall;25(3):309–14
A study of staffing levels in hospital wards for severely physically disabled patients. Stride NM, et al. **Int J Nurs Stud** 1989;26(2):143–54
The burn nurse shortage. A national survey. Carrougher GJ. **J Burn Care Rehabil** 1989 Mar–Apr;10(2):180–2
Registered nurses and burn care facilities. Factors associated with turnover rates. Fields C, et al. **J Burn Care Rehabil** 1989 Jan–Feb;10(1):94–8
Factors affecting the outcome of maternity care. 1. Relationship between staffing and perinatal deaths at the hospital of birth. Stilwell J, et al. **J Epidemiol Community Health** 1988 Jun;42(2):157–69
Agency nursing: the hospital's response [editorial] Adams R. **J Nurs Adm** 1989 Jun;19(6):4, 12
One more time—solutions to the nursing shortage. Helmer FT, et al. **J Nurs Adm** 1988 Nov;18(11):7–15
Nursing retention—preventing the domino effect. Lynch MA. **J Nurs Adm** 1989 Oct;19(10):3, 5
A human capital approach to ICU nurse retention. Mann EE. **J Nurs Adm** 1989 Oct;19(10):8–16
Absenteeism–retention links. Taunton RL, et al. **J Nurs Adm** 1989 Jun;19(6):13–20
Nursing shortage: a deepening dilemma. Bryant FW. **Mich Med** 1988 Aug;87(8):524
American nurse—on the endangered list? Athy D. **Ohio Med** 1989 Jun;85(6):430–4, 436
The hospital nursing shortage. A paradox of increasing supply and increasing vacancy rates. Aiken LH. **West J Med** 1989 Jul;151(1):87–92 (25 ref.)
Lip–reading the bedside care shortage [editorial] Bristow LR. **West J Med** 1989 Jul;151(1):76–7
Additional thoughts on the hospital nursing shortage [editorial] King SS. **West J Med** 1989 Jul;151(1):77–8

TRENDS

Pay equity—a "cockamamie idea?" The future of health care may depend upon it. Lupica LR. **Am J Law Med** 1988; 13(4):597–620 (144 ref.)
Unlicensed persons in patient care settings. Administrative, policy, and ethical issues. Sullivan PA, et al. **Nurs Clin North Am** 1989 Jun;24(2):557–69
When hanging is imminent... [editorial] Kelly LS. **Nurs Outlook** 1989 Sep–Oct;37(5):213
What do nurses want? Priorities for action. Minnick A, et al. **Nurs Outlook** 1989 Sep–Oct;37(5):214–8

UTILIZATION

Nurses as house staff? Surely they jest [letter; comment] White EM. **Am J Nurs** 1989 Jul;89(7):931. **Comment on:** Am J Nurs 1988 Dec;88(12):1671–3
Efficient allocation of resources: support services, systems, and personnel [editorial] Searle LD, et al. **Heart Lung** 1989 Mar;18(2):27A–28A
Evaluating labour ward services: the art of the possible. Brown C, et al. **J Adv Nurs** 1989 Jul;14(7):559–68

NURSING, SUPERVISORY

Great head nurses. Katzin L. **Am J Nurs** 1989 Jan;89(1):42–7
Who really manages hospitals? [editorial] Mallison MB. **Am J Nurs** 1989 Jan;89(1):7
Enjoying management. The positive benefits of liking the job. Davidhizar RE. **AORN J** 1989 Feb;49(2):576–8
Is clinical experience for OR nursing managers necessary? Dieffenbach MS, et al. **AORN J** 1989 Mar;49(3):886, 888, 890–2
A survey of the attitudes of senior nurses towards graduate nurses. Bircumshaw D. **J Adv Nurs** 1989 Jan;14(1):68–72
How hospital ward members treat learner nurses: an investigation of learners' perceptions in a British hospital. Hyland ME, et al. **J Adv Nurs** 1988 Jul;13(4):472–7
Association of management style with job satisfaction of nursing caregivers. Gillies DA, et al. **J Nurs Adm** 1988 Nov;18(11):43–4
Head nurses: leadership skills project. Peterson M. **J Nurs Adm** 1989 Jun;19(6):6
Definitions and descriptions of the nursing middle manager and nurse executive. Wilhite M. **J Nurs Adm** 1988 Oct; 18(10):6–7, 14

LEGISLATION & JURISPRUDENCE

First assistant article clarification [letter] Briggs P. **AORN J** 1989 Aug;50(2):218, 220

METHODS

Managing in a unionized setting. Part I: The discipline process. Julius DJ. **AORN J** 1988 Nov;48(5):919–29

ORGANIZATION & ADMINISTRATION

[Bring the role of nursing command system into full play] Bai MR. **Chung Hua Hu Li Tsa Chih** 1988 Nov;23(11):641–2

(Chi)

[Effective work of head nurses] Huo LJ. **Chung Hua Hu Li Tsa Chih** 1988 Oct;23(10):579–80 (Chi)

[Experience in maintaining a regular meeting system for head nurses] Yang Z. **Chung Hua Hu Li Tsa Chih** 1988 Jul; 23(7):392–3 (Chi)

STANDARDS

Educational needs of community health nursing supervisors. Duffy SA, et al. **Public Health Nurs** 1989 Mar;6(1):16–22

NURSING, TEAM

The development, use, and reliability of the brief psychiatric rating scale (nursing modification)—an assessment procedure for the nursing team in clinical and research settings. McGorry PD, et al. **Compr Psychiatry** 1988 Nov–Dec;29(6):575–87

ADNs as managers? Evans BC. **Geriatr Nurs (New York)** 1989 Mar–Apr;10(2):82–3

A comparison of primary nursing and team nursing in a geriatric long-term care setting. Wilson NM, et al. **Int J Nurs Stud** 1989;26(1):1–13

ORGANIZATION & ADMINISTRATION

Redesigning hospital nursing practice: the Professionally Advanced Care Team (ProACT) model, Part 1. Tonges MC. **J Nurs Adm** 1989 Jul–Aug;19(7):31–8

STANDARDS

Pictures of performance: the key to improved nursing productivity. Helmer FT, et al. **Health Care Manage Rev** 1988 Fall;13(4):65–70

NURSING THEORY

Comfort versus cure. Nishioka E. **Am J Nurs** 1989 Sep; 89(9):1125–6

What language do we speak? [editorial] Chinn PL. **ANS** 1989 Oct;12(1):xi

Health and illness self-care in adolescents with IDDM: a test of Orem's theory. Frey MA, et al. **ANS** 1989 Oct; 12(1):67–75

Toward a theory of nursing ethics. Fry ST. **ANS** 1989 Jul; 11(4):9–22

Self-care agency: conceptualizations and operationalizations. Gast HL, et al. **ANS** 1989 Oct;12(1):26–38 (33 ref.)

The Moral Foundation of Nursing [editorial] McElmurry BJ, et al. **ANS** 1989 Apr;11(3):xi–xii

An analysis of the concept of self-neglect. Reed PG, et al. **ANS** 1989 Oct;12(1):39–53 (50 ref.)

Nursing theorizing as an ethical endeavor. Reed PG. **ANS** 1989 Apr;11(3):1–9 (40 ref.)

A critical social reconceptualization of environment in nursing: implications for methodology. Stevens PE. **ANS** 1989 Jul;11(4):56–68 (34 ref.)

Integration of nursing theory and nursing ethics. Yeo M. **ANS** 1989 Apr;11(3):33–42 (34 ref.)

Theory development in psychiatric-mental health nursing: an analysis of Orem's theory. Dashiff CJ. **Arch Psychiatr Nurs** 1988 Dec;2(6):366–72 (46 ref.)

Closing the gap between grand theory and mental health practice with families. Part 1: The framework of systemic organization for nursing of families and family members. Friedemann ML. **Arch Psychiatr Nurs** 1989 Feb;3(1):10–9

In search of applications of nursing theories: the Nursing Citation Index. Johnson ED. **Bull Med Libr Assoc** 1989 Apr;77(2):176–84

Caring for the revolution. Shirley JL. **Cancer Nurs** 1989 Apr; 12(2):118–9

Collaboration between nurse educators in Australia and New Zealand extends educational opportunities for nurses. Chick N, et al. **Int J Nurs Stud** 1988;25(4):279–86

Health: a concept analysis. Simmons SJ. **Int J Nurs Stud** 1989;26(2):155–61 (24 ref.)

Theory development in perspective: the role of conceptual frameworks and models in theory development. Botha ME. **J Adv Nurs** 1989 Jan;14(1):49–55

The theoretical basis for nursing at the community level: a comparison of three models. Chalmers K, et al. **J Adv Nurs** 1989 Jul;14(7):569–74

Nursing knowledge: women's knowledge. A sociological perspective. Hagell EI. **J Adv Nurs** 1989 Mar;14(3):226–33

Comparative analysis of Orem's and King's theories. Hanucharurnkul S. **J Adv Nurs** 1989 May;14(5):365–72

Application of King's Theory of Nursing to the care of the adult with diabetes. Husband A. **J Adv Nurs** 1988 Jul; 13(4):484–8

Strategies and conditions for teaching theoretical nursing: an international perspective. Meleis AI, et al. **J Adv Nurs** 1988 Sep;13(5):592–604

Comprehensive health seeking and coping paradigm. Nyamathi A. **J Adv Nurs** 1989 Apr;14(4):281–90 (52 ref.)

Concepts, analysis and the development of nursing knowledge: the evolutionary cycle. Rodgers BL. **J Adv Nurs** 1989 Apr;14(4):330–5 (22 ref.)

Depression: viewed from a transcultural nursing theoretical perspective. Rosenbaum JN. **J Adv Nurs** 1989 Jan; 14(1):7–12 (26 ref.)

Evaluating Antonovsky's Salutogenic Model for its adaptability to nursing. Sullivan GC. **J Adv Nurs** 1989 Apr; 14(4):336–42

The concept of reassurance in nursing. Teasdale K. **J Adv Nurs** 1989 Jun;14(6):444–50

Theory building in nurse-midwifery. The care process. Thompson JE, et al. **J Nurse Midwifery** 1989 May–Jun; 34(3):120–30

Conceptual models and theory development. Fawcett J. **J Obstet Gynecol Neonatal Nurs** 1988 Nov–Dec; 17(6):400–3

Gilligan's different voice: a perspective for nursing. Cooper MC. **J Prof Nurs** 1989 Jan–Feb;5(1):10–6 (32 ref.)

Curricular considerations for teaching nursing theory. Jacobs-Kramer MK, et al. **J Prof Nurs** 1988 Sep–Oct; 4(5):373–80

Learning styles of baccalaureate nursing students and attitudes toward theory-based nursing. Laschinger HK, et al. **J Prof Nurs** 1989 Jul–Aug;5(4):215–23

Drug abuse. A self-care deficit. Compton P. **J Psychosoc Nurs Ment Health Serv** 1989 Mar;27(3):22–6

Humor in nursing. Did you hear the one about...? Ferguson S, et al. **J Psychosoc Nurs Ment Health Serv** 1989 Apr; 27(4):29–34 (21 ref.)

Incorporating Peplau's theory and case management. Forchuk C, et al. **J Psychosoc Nurs Ment Health Serv** 1989 Feb;27(2):35–8

Intervening in interventions [editorial] Smoyak SA. **J Psychosoc Nurs Ment Health Serv** 1989 Aug;27(8):3

Beyond idle speculation. Haller KB. **MCN** 1988 Sep–Oct; 13(5):386

An apologist's theories for the nursing profession: adaptation and art. Rafferty C. **Nurs Forum** 1987–88;23(4):124–6

Person-centered communication and social perspective taking. Kasch CR, et al. **West J Nurs Res** 1988 Jun; 10(3):317–26

NUTCRACKER ESOPHAGUS see **ESOPHAGEAL MOTILITY DISORDERS**

NUTRITION

see related
DIET
FOOD

Physicians' and medical students' knowledge of nutrition. Mlodinow SG, et al. **Acad Med** 1989 Feb;64(2):105–6

The Belgian Interuniversity Research on Nutrition and Health (B.I.R.N.H.). **Acta Cardiol** 1989;44(2):89–194

Developing a strategy for understanding adolescent nutrition concerns. Amos RJ, et al. **Adolescence** 1989 Spring; 24(93):119–24

Nutrition and protease activity. Kopple JD. **Adv Exp Med Biol** 1988;240:411–9 (32 ref.)

Ageing and nutrition: questions needing answers. Evans JG. **Age Ageing** 1989 May;18(3):145–7

Nutritional counseling. U.S. Preventive Services Task Force. **Am Fam Physician** 1989 Aug;40(2):125–33 (112 ref.)

Task force sets nutrition guidelines in HIV infection. **Am Fam Physician** 1989 Apr;39(4):376, 378

First International Conference on Nutrition and Fitness. Proceedings of a conference. Ancient Olympia, Greece, May 21–26, 1988. **Am J Clin Nutr** 1989 May;49(5 Suppl):909–1140

Some nutrition policies in China. Chen JD. **Am J Clin Nutr** 1989 May;49(5 Suppl):1060–2

Genetic variation and nutrition. Childs B. **Am J Clin Nutr** 1988 Dec;48(6):1500–4 (2 ref.)

Policies and programs in nutrition and physical fitness in Australia. Dwyer T. **Am J Clin Nutr** 1989 May;49(5 Suppl):1030–4

Policies and programs in nutrition and physical fitness: framework for a national physical activity policy. Edwards RA. **Am J Clin Nutr** 1989 May;49(5 Suppl):934–6

Policies and programs in nutrition and physical fitness in Italy. Fidanza F. **Am J Clin Nutr** 1989 May;49(5 Suppl):1035–8

The American Society for Clinical Nutrition as an academic society. Halsted CH. **Am J Clin Nutr** 1989 Aug; 50(2):215–20

United States government policies and programs in nutrition and physical fitness. Hayes AE. **Am J Clin Nutr** 1989 May; 49(5 Suppl):1039–41

Metabolic fuels, utilization, and exercise. Horton ES. **Am J Clin Nutr** 1989 May;49(5 Suppl):931–2

Nutritional effects on work performance. Hultman E. **Am J Clin Nutr** 1989 May;49(5 Suppl):949–57 (54 ref.)

The role of nutrition and fitness in chronic diseases. James WP. **Am J Clin Nutr** 1989 May;49(5 Suppl):933–4

A European view of nutrition and emerging problems in the Third World. James WP. **Am J Clin Nutr** 1989 May;49(5 Suppl):985–92 (25 ref.)

What constitutes good nutrition for the athlete and postathlete. Leaf A. **Am J Clin Nutr** 1989 May;49(5 Suppl):936–7

Eating for health or for athletic performance? Leaf A, et al. **Am J Clin Nutr** 1989 May;49(5 Suppl):1066–9

The Surgeon General's Report on Nutrition and Health: policy implications and implementation strategies. McGinnis JM, et al. **Am J Clin Nutr** 1989 Jan;49(1):23–8

Unbalanced diets as a cause of chronic diseases. Nissinen A, et al. **Am J Clin Nutr** 1989 May;49(5 Suppl):993–8 (36 ref.)

Nutrition as a component in community control of cardiovascular disease (the North Karelia Project). Pietinen P, et al. **Am J Clin Nutr** 1989 May;49(5 Suppl):1017–24

International Olympic Committee Medical Commission's policies and programs in nutrition and physical fitness. Prokop L. **Am J Clin Nutr** 1989 May;49(5 Suppl):1065

Nutrient-gene interactions: the gene is not the disease and vice versa. Scriver CR. **Am J Clin Nutr** 1988 Dec; 48(6):1505–9 (19 ref.)

Opening address. Nutrition and fitness from the first Olympiad in 776 BC to 393 AD and the concept of positive health. Simopoulos AP. **Am J Clin Nutr** 1989 May;49(5 Suppl):921–6

A priority for the World Health Organization: promoting healthy ways of life. Stroot P. **Am J Clin Nutr** 1989 May; 49(5 Suppl):1063–4

Folate intake and food sources in the US population. Subar AF, et al. **Am J Clin Nutr** 1989 Sep;50(3):508–16

Fitness and nutrition policy in developing nations: Kenya's example. Thairu K. **Am J Clin Nutr** 1989 May;49(5 Suppl):1054–6

Effects of nutrition and diabetes mellitus on the regulation of metabolic fuels during exercise. Wallberg-Henriksson H, et al. **Am J Clin Nutr** 1989 May;49(5 Suppl):938–43 (53 ref.)

A theoretical basis for increasing current estimates of the amino acid requirements in adult man, with experimental support. Young VR, et al. **Am J Clin Nutr** 1989 Jul; 50(1):80–92

Interactions of alcohol and nutrition [letter] [published erratum appears in Am J Dis Child 1989 Sep;143(9):1110] Ferreira RM. **Am J Dis Child** 1989 May;143(5):519

Response to Mogadam on cancer and nutrition [letter] Kallman B. **Am J Gastroenterol** 1989 Sep;84(9):1128–9

Cancer and nutritional misconceptions: a perspective [published erratum appears in Am J Gastroenterol 1989 Mar;84(3):344] Mogadam M. **Am J Gastroenterol** 1988 Dec; 83(12):1346–51 (71 ref.)

Variability in body physique, ecology, and subsistence in the Fly River region of Papua New Guinea. Hyndman DC, et al. **Am J Phys Anthropol** 1989 May;79(1):89–101

Combating nutrition quackery: the San Bernardino County experience [news] **Am J Public Health** 1989 May; 79(5):652–3

Nutrition guidelines for AIDS patients [news] **Am Pharm** 1989 May;NS29(5):18–9

Comparison of fast atom bombardment mass spectrometry and thermal ionization quadrupole mass spectrometry for the measurement of zinc absorption in human nutrition studies. Eagles J, et al. **Anal Chem** 1989 May 1;61(9):1023–5

The Ok Tedi Health and Nutrition Project, Papua New Guinea: adult physique of three populations in the North Fly region. Ulijaszek SJ, et al. **Ann Hum Biol** 1989 Jan–Feb; 16(1):61–74

Nutrition in the elderly [clinical conference] Morley JE, et al. **Ann Intern Med** 1988 Dec 1;109(11):890–904 (173 ref.)

Nutrition and the chemical senses in aging: recent advances and current research needs. **Ann N Y Acad Sci** 1989; 561:1–339

Measurement of food perception, food preference, and nutrient selection. Booth DA, et al. **Ann N Y Acad Sci** 1989;561:226–42

Nutrient intakes and health status of older Americans. Data from the NHANES II. Fanelli MT, et al. **Ann N Y Acad Sci** 1989;561:94–103

Nutrition and the chemical senses. Problems and opportunities. Hegsted DM. **Ann N Y Acad Sci** 1989; 561:1–11

Aging, nutrient choice, activity, and behavioral responses to nutrients. Lieberman HR, et al. **Ann N Y Acad Sci** 1989; 561:196–208

Longitudinal relationships between nutrition and oral health. Papas AS, et al. **Ann N Y Acad Sci** 1989;561:124–42

Second Créteil Symposium on Lipids, Lipoproteins and Nutrition. Nutritional control of enzymes of lipoprotein and lipid metabolism. March 25, 1988, Créteil, France. Abstracts. **Ann Nutr Metab** 1988;32(4):245–64

Effect of altered nutritional states on insulin receptors. Adamo M, et al. **Annu Rev Nutr** 1988;8:149–66 (83 ref.)

Nutrition policy: building the bridge between science and politics. Austin J, et al. **Annu Rev Nutr** 1988;8:1–20 (49 ref.)

Nutrient supply and mitochondrial function. Aw TY, et al. **Annu Rev Nutr** 1989;9:229–51 (128 ref.)

Fetal nutrition. Battaglia FC, et al. **Annu Rev Nutr** 1988; 8:43–61 (115 ref.)

Nutritional and metabolic aspects of glutathione. Beutler E. **Annu Rev Nutr** 1989;9:287–302 (166 ref.)

Hypochlorhydria: a factor in nutrition. Kassarjian Z, et al. **Annu Rev Nutr** 1989;9:271–85 (84 ref.)

The Surgeon General's report on nutrition and health. Nestle M. **ASDC J Dent Child** 1989 Jan–Feb;56(1):44–6

National nutrition objectives for the years 1990 and 2000. Nestle M. **ASDC J Dent Child** 1989 Jan–Feb;56(1):47–9

A 2 year experience of a nutritional support service: prospective study of 229 non-intensive care patients receiving parenteral nutrition. Fletcher JP, et al. **Aust N Z J Surg** 1989 Mar;59(3):223–8

The importance of fibers in child nutrition. Giovannini M, et al. **Beitr Infusionther** 1989;22:35–45 (42 ref.)

Nutrition in the prevention of gastrointestinal diseases. Rubino A, et al. **Beitr Infusionther** 1989;22:107–16 (38 ref.)

Presence of a diurnal rhythm in fetal prolactin secretion and influence of maternal nutrition. Bassett NS, et al. **Biol Neonate** 1989;55(3):164–70

The role of the Journal in the 1900s [editorial] Gurr MI. **Br J Nutr** 1989 Jan;61(1):3–6

Nutritional support in the perioperative period. Burns HJ. **Br Med Bull** 1988 Apr;44(2):357–73 (87 ref.)

The information resources of the food and nutrition information center. Irving HB. **Bull Med Libr Assoc** 1989 Jan;77(1):72–3

Caribbean Food and Nutrition Institute at 21. **Bull Pan Am Health Organ** 1988;22(2):202–6

Diet and nutrition research. Kritchevsky D. **Cancer** 1988 Oct 15;62(8 Suppl):1839–43

The relationship between serum lipid levels and nutrient intake in healthy inhabitants of urban and rural Shanghai. Chen HZ, et al. **Chin Med J [Engl]** 1989 Jan;102(1):60–6

Nervous system damage and nutritional factors in chronic alcoholics. Melgaard B, et al. **Clin Neurol Neurosurg** 1989; 91(2):129–34

Effects of their nutrient precursors on the synthesis and release of serotonin, the catecholamines, and acetylcholine: implications for behavioral disorders. Wurtman RJ. **Clin Neuropharmacol** 1988;11 Suppl 1:S187–93 (44 ref.)

Evaluation of prenatal vitamin–mineral supplements. Newman V, et al. **Clin Pharm** 1987 Oct;6(10):770–7

Metabolic and nutritional aspects of weaning from mechanical ventilation. Benotti PN, et al. **Crit Care Med** 1989 Feb;17(2):181–5 (45 ref.)

Public health nutrition: helping individuals, serving communities. Muir AM, et al. **Del Med J** 1988 Dec; 60(12):709–10

Importance of nutrient balance in body weight regulation. Flatt JP. **Diabetes Metab Rev** 1988 Sep;4(6):571–81 (27 ref.)

Intestinal ion and nutrient transport in health and infectious diarrhoeal diseases. Guandalini S. **Drugs** 1988;36 Suppl 4:26–38 (63 ref.)

Effects of neonatal nutrition on glucagon binding and glucagon stimulated cAMP production in isolated rat hepatocytes. Ficková M, et al. **Endocrinol Exp (Bratisl)** 1988 Sep;22(3):131–41

Nutritional regulation of the placental lactogen receptor in fetal liver: implications for fetal metabolism and growth. Freemark M, et al. **Endocrinology** 1989 Sep;125(3):1504–12

Nutritional intake of pre- and postmenopausal Australian women with special reference to calcium. Angus RM, et al. **Eur J Clin Nutr** 1988 Jul;42(7):617–25

Cytokines: their relevance to nutrition. Grimble RF. **Eur J Clin Nutr** 1989 Apr;43(4):217–30 (117 ref.)

Nutritional adaptation and variability. Sukhatme PV. **Eur J Clin Nutr** 1989 Feb;43(2):75–87

Is the sky the limit for nutrition? Marquardt DN. **Fam Med** 1989 Jul–Aug;21(4):245, 309

Directory of food and nutrition institutions in the Near East. **FAO Food Nutr Pap** 1987;40:1–87

The nutritionist in food aid. Proja FR. **Food Nutr (Roma)** 1987;13(2):2–11

Viewpoint: let's hear it for good eating. Brown M. **Health Care Manage Rev** 1988 Summer;13(3):91–3

Promoting nutrition at the point of choice: a review. Mayer JA, et al. **Health Educ Q** 1989 Spring;16(1):31–43 (35 ref.)

Nutritional modulation of intestinal mucosal immunity. Chandra RK, et al. **Immunol Invest** 1989 Jan–May; 18(1–4):119–26 (20 ref.)

Nutritional regulation of immunity and risk of infection in old age. Chandra RK. **Immunology** 1989 Jun;67(2):141–7 (68 ref.)

Nutritional indicators during pregnancy. Bhatia BD, et al. **Indian Pediatr** 1988 Oct;25(10):952–9

Nutrition beliefs, practices, and perceptions of young dancers. Sawyer-Morse MK, et al. **J Adolesc Health Care** 1989 May; 10(3):200–2

Symposium on Advances in Clinical Nutrition. The American College of Nutrition's 29th annual meeting. September 14–16, 1988, New Orleans, Louisiana. Abstracts. **J Am Coll Nutr** 1988 Oct;7(5):389–437

Thermogenic response to an oral glucose load in man: comparison between young and elderly subjects. Bloesch D, et al. **J Am Coll Nutr** 1988 Dec;7(6):471–83

Nutrition and behavior [editorial] Kanarek RB. **J Am Coll Nutr** 1989 Feb;8(1):1–2

The role of albumin in nutritional support [editorial] Moss G. **J Am Coll Nutr** 1988 Dec;7(6):441–2

Nutritional support, albumin, and diarrhea [editorial] Russell RI, et al. **J Am Coll Nutr** 1988 Dec;7(6):443–4

Position of the American Dietetic Association: nutrition management of adolescent pregnancy. **J Am Diet Assoc** 1989 Jan;89(1):104

Position of the American Dietetic Association: nutrition monitoring of the home parenteral and enteral patient. **J Am Diet Assoc** 1989 Feb;89(2):263–5

Visions become realities: you make the difference! The American Dietetic Association, 72nd annual meeting. October 23–27, 1989, Kansas City, Missouri. Abstracts. **J Am Diet Assoc** 1989 Sep;89(9 Suppl):A11–204

ADA testifies in support of nutrition monitoring. **J Am Diet Assoc** 1989 Aug;89(8):1054–7

Position of The American Dietetic Association: nutrition intervention in the treatment of human immunodeficiency virus infection. **J Am Diet Assoc** 1989 Jun;89(6):839–41

Position of The American Dietetic Association: identifying food and nutrition misinformation. **J Am Diet Assoc** 1988 Dec;88(12):1589–91

Nutrition management of adolescent pregnancy: technical support paper. **J Am Diet Assoc** 1989 Jan;89(1):105–9 (33 ref.)

Nutrient intake in young, highly competitive gymnasts. Benardot D, et al. **J Am Diet Assoc** 1989 Mar;89(3):401–3

Relationship between nutrient intake, body mass index, menstrual function, and ballet injury. Benson JE, et al. **J Am Diet Assoc** 1989 Jan;89(1):58–63

Work-site health promotion: the effects of a goal-setting program on nutrition-related behaviors. Berry MW, et al. **J Am Diet Assoc** 1989 Jul;89(7):914–20, 923

Food group contributions to nutrient intake in whites, blacks, and Mexican Americans in Texas. Borrud LG, et al. **J Am Diet Assoc** 1989 Aug;89(8):1061–9

Improving pregnancy outcomes in the United States: the importance of preventive nutrition services. Brown JE. **J Am Diet Assoc** 1989 May;89(5):631–3 (24 ref.)

Nutritional factors relevant to Alzheimer's disease. Claggett MS. **J Am Diet Assoc** 1989 Mar;89(3):392–6 (35 ref.)

President's page: grass roots involvement in nutrition policy. Dougherty DA. **J Am Diet Assoc** 1989 Feb;89(2):269–71

Comparison of family interaction patterns related to food and nutrition. Gillespie AH, et al. **J Am Diet Assoc** 1989 Apr;89(4):509–12

Extension of health and nutrition services via advanced telecommunications. Gooder JB, et al. **J Am Diet Assoc** 1989 Jun;89(6):821–5

Implementing food policy: Calorie Conscious Consumer Project. Haughton B, et al. **J Am Diet Assoc** 1989 Mar; 89(3):351–3

Impact of the Higgins Nutrition Intervention Program on birth weight: a within-mother analysis. Higgins AC, et al. **J Am Diet Assoc** 1989 Aug;89(8):1097–103

Dietary intake of calcium, iron, folacin, alcohol, and fat for college students in central Michigan. Hoffman CJ. **J Am Diet Assoc** 1989 Jun;89(6):836–8

Using behavior modification in nutrition counseling. Holli BB. **J Am Diet Assoc** 1988 Dec;88(12):1530–6 (52 ref.)

Social marketing of nutrition education to cardiac patients in acute care. Huebner VD, et al. **J Am Diet Assoc** 1989 Apr;89(4):540–2

Nutrition services in state and local public health agencies: how do we measure up in 1987? Kaufman M, et al. **J Am Diet Assoc** 1988 Dec;88(12):1576–80

Nutrition promotion in a university foodservice: reduced fat, sodium, and energy content of menus. Kubena KS, et al. **J Am Diet Assoc** 1988 Nov;88(11):1412–6

Culture and ecology in dietetics and nutrition. Kuhnlein HV. **J Am Diet Assoc** 1989 Aug;89(8):1059–60

Assessing productivity of foodservice systems in nutrition programs for the elderly. Lieux EM, et al. **J Am Diet Assoc** 1989 Jun;89(6):826–9

Federal nutrition policies: impact on dietetic practice. Nestle M, et al. **J Am Diet Assoc** 1989 Jul;89(7):944–7

Nutritional elements in U.S. diets: results from the Total Diet Study, 1982 to 1986. Pennington JA, et al. **J Am Diet Assoc** 1989 May;89(5):659–64

Call to action on the global poverty reduction act [letter] Phillips J. **J Am Diet Assoc** 1989 Mar;89(3):336

Evaluation of the nutrition counseling environment of hospitalized patients. Picus SS. **J Am Diet Assoc** 1989 Mar; 89(3):403–5

Relationship of body image and dietary intake of competitive ice skaters. Rucinski A. **J Am Diet Assoc** 1989 Jan; 89(1):98–100

RDs work together on AIDS recommendations [letter] Scalzo G. **J Am Diet Assoc** 1989 Jul;89(7):909

Sources of data for developing and maintaining a nutrient database. Schakel SF, et al. **J Am Diet Assoc** 1988 Oct; 88(10):1268–71

Client profile assessment of a private nutrition practice. Shovic AC, et al. **J Am Diet Assoc** 1988 Oct;88(10):1279–80

Broadening students' perspectives on literature review. Vickery CE, et al. **J Am Diet Assoc** 1989 Sep;89(9):1286–9

Energy and nutrient intakes of soldiers consuming MRE operational rations: physiological correlates. Wenkam NS, et al. **J Am Diet Assoc** 1989 Mar;89(3):407–9

Operation Everest. II: Nutrition and body composition. Rose MS, et al. **J Appl Physiol** 1988 Dec;65(6):2545–51

Determinants of intrauterine growth retardation: evidence against maternal depletion. Miller JE. **J Biosoc Sci** 1989 Apr;21(2):235–43

Interaction of calcium nutrition and physical activity on bone mass in young women. Kanders B, et al. **J Bone Miner Res** 1988 Apr;3(2):145–9

Curriculum guidelines for Dental Nutrition. American Association of Dental Schools. Section on Biochemistry and Nutrition. **J Dent Educ** 1989 Apr;53(4):255–6

Calorie and nutrient intakes of elderly and young subjects measured under identical conditions. Wurtman JJ, et al. **J Gerontol** 1988 Nov;43(6):B174–80

n–6 and n–3 fatty acids during early human development. Crawford MA, et al. **J Intern Med Suppl** 1989; 225(731):159–69

Use of a predictor for total body potassium content: application to nutrition and hypertension. Goldenberg K, et al. **J Med** 1988;19(3–4):215–27

The future direction of nutrition research: science, public health, public policy. Atkinson RL. **J Nutr** 1989 Apr; 119(4):669–70

The future direction of nutrition research: nutrition science reflects the principals of biological organization. Bronner F. **J Nutr** 1989 Mar;119(3):515–7

The future direction of nutrition research: "And a little cell (child) shall lead them". Broquist HP. **J Nutr** 1989 Jul; 119(7):1071–4 (11 ref.)

The future direction of nutrition research: unraveling the diet–disease connection. Feldman EB. **J Nutr** 1989 Feb; 119(2):323–4

Some aspects of the chronobiology of nutrition: more work is needed on "when to eat". Halberg F. **J Nutr** 1989 Mar; 119(3):333–43 (47 ref.)

Molecular biology and nutrition research. Hanson RW, et al. **J Nutr** 1989 Jul;119(7):957–64 (52 ref.)

The future direction of nutrition research: five issues confronting nutrition research [published erratum appears in J Nutr 1989 Jun;119(6):955] Harris ED. **J Nutr** 1989 Apr;119(4):671–3

Nutritional aspects of leukocytic cytokines. Klasing KC. **J Nutr** 1988 Dec;118(12):1436–46 (121 ref.)

The future direction of nutrition research: increasing our scope and the application of new technology to nutritional science. McCormick DB. **J Nutr** 1989 Jan;119(1):140–1

The future direction of nutrition research: strong inference. Prohaska JR. **J Nutr** 1989 Feb;119(2):325–6

The future direction of nutrition research: a nutrition and food sciences agency is the key to progress. Simopoulos AP. **J Nutr** 1989 Jan;119(1):137–9

The use of stable isotopes in mineral nutrition research. Turnlund JR. **J Nutr** 1989 Jan;119(1):7–14 (69 ref.)

Analysis of energy and macronutrient balance in the postoperative infant. Winthrop AL, et al. **J Pediatr Surg** 1989 Jul;24(7):686–8; discussion 688–9

Some recent advances in nutrition. Bender AE. **J R Soc Health** 1988 Dec;108(6):191–8 (28 ref.)

Taste discrimination of traditional and 'health' modified recipes. Chauhan J. **J R Soc Health** 1989 Apr;109(2):39–41

Nutritional misnomers and misconceptions. Moore T. **J R Soc Health** 1988 Aug;108(4):146–8

Differences in health, knowledge and attitudes between vegetarians and meat eaters in a random population sample. Shickle D, et al. **J R Soc Med** 1989 Jan;82(1):18–20

Comparison of body composition, exercise and nutritional profiles of female and male body builders at competition. Sandoval WM, et al. **J Sports Med Phys Fitness** 1989 Mar; 29(1):63–70

Nutrition and fitness. Simopoulos AP. **JAMA** 1989 May 19; 261(19):2862–3

Primary prevention of hypertension by nutritional–hygienic means. Final report of a randomized, controlled trial. Stamler R, et al. **JAMA** 1989 Oct 6;262(13):1801–7

"High tech" metabolic measurements: useful in daily clinical practice? [published erratum appears in JPEN J Parenter Enteral Nutr 1989 Mar–Apr;13(2):156] Campbell SM, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec; 12(6):610–2

Rhoads lecture—1988. Bulk or bounce—the object of nutritional support. Jeejeebhoy KN. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6):539–49 (67 ref.)

Dietary and nutritional influences on cancer: a review of epidemiologic and experimental data. Rogers AE, et al. **Lab Invest** 1988 Dec;59(6):729–59 (344 ref.)

Nutrition and the metabolic response to injury. **Lancet** 1989 May 6;1(8645):995–7 (27 ref.)

Dr Koop's diet [editorial] **Lancet** 1989 Feb 11;1(8633):306–7

Pharmacologic issues in adolescence. Berger-Roochvarg LR. **Md Med J** 1988 Dec;37(12):959–61

Morphometrical and biochemical analysis on autofluorescent granules in various tissues and cells of the rats under several nutritional conditions. Sato T, et al. **Mech Ageing Dev** 1988 Jun;43(3):229–38

The Victorian Nutrition Survey [letter; comment] **Med J Aust** 1989 Jan 16;150(2):110–2. **Comment on:** Med J Aust 1988 Jul 4;149(1):12–5, 18–20

Nutrition and somatomedin. XIX. Molecular regulation of insulin-like growth factor-1 in streptozotocin-diabetic rats. Goldstein S, et al. **Mol Endocrinol** 1988 Nov;2(11):1093–100

Food and nutrition sciences—scientific information service in the German Democratic Republic. **Nahrung** 1988; 32(5):521–2

Gastrointestinal manifestations of the acquired immunodeficiency syndrome. Crocker KS. **Nurs Clin North Am** 1989 Jun;24(2):395–406 (44 ref.)

Nutritional support of the ventilator-dependent patient. Spector N. **Nurs Clin North Am** 1989 Jun;24(2):407–14 (37 ref.)

The relationship between weight gain and nutrition in pregnancy. Aaronson LS, et al. **Nurs Res** 1989 Jul–Aug; 38(4):223–7

The WHO strategy and community nutrition in the UK. Scott-Samuel A. **Nutr Health** 1989;6(3):129–33

Nutrition around conception and the prevention of low birthweight. Wynn M, et al. **Nutr Health** 1988;6(1):37–52 (29 ref.)

Nutritional significance of the ultratrace elements. Nielsen FH. **Nutr Rev** 1988 Oct;46(10):337–41 (35 ref.)

Clinical metabolic studies in cancer research. Taylor PR, et al. **Prev Med** 1989 Mar;18(2):194–202 (16 ref.)

Future developments in the UK food composition tables. Buss DH, et al. **Proc Nutr Soc** 1988 Jul;47(2):185–90 (19 ref.)

Nutrition, coronary heart disease and preventive medicine.

Lewis B. **Proc Nutr Soc** 1988 Sep;47(3):269–75 (23 ref.)
The Maillard reaction in aging, diabetes, and nutrition. Proceedings of an NIH conference. Bethesda, Maryland, September 22–23, 1988. Dedicated to John E. Hodge on the occasion of his 75th birthday. **Prog Clin Biol Res** 1989; 304:1–410
Mathematical modeling in experimental nutrition. San Diego, California, U.S.A., June 15–16, 1987. Proceedings of the second conference. **Prog Food Nutr Sci** 1988;12(3):211–338
Modeling in nutrition and metabolism. Bergman RN. **Prog Food Nutr Sci** 1988;12(3):211–25 (39 ref.)
The effect of random measurement errors on kinetic transport parameter estimation. Collins JC, et al. **Prog Food Nutr Sci** 1988;12(3):297–314
Nutrition and immunity. Chandra RK. **Recenti Prog Med** 1988 Jul–Aug;79(7–8):305–9
Nutrition and health. Kesteloot H. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:13–29 (21 ref.)
Nutrition and health: patterns and policy perspectives in food-rich countries. Milio N. **Soc Sci Med** 1989; 29(3):413–23 (116 ref.)
Sports nutrition. Approaching the nineties. Burke LM, et al. **Sports Med** 1989 Aug;8(2):80–100 (104 ref.)
Nutrition and immunity. Chandra RK. **Trop Geogr Med** 1988 Jul;40(3):S46–51 (14 ref.)
Cancer as risk indicator of cardiovascular disease. The role of nutrition. Joossens JV, et al. **Verh K Acad Geneeskd Belg** 1988;50(5):397–428 (58 ref.)
Nutrition and AIDS [news] **W V Med J** 1989 Jul;85(7):297
Aspects of nutritional physiology. **World Rev Nutr Diet** 1988; 56:1–262
Aspects of human nutrition. **World Rev Nutr Diet** 1988; 57:1–334
The knowledge of human nutrition and the peoples of the world. Banerji D. **World Rev Nutr Diet** 1988;57:1–23 (68 ref.)
Nutrition and respiration. Rothkopf MM, et al. **World Rev Nutr Diet** 1988;56:43–55 (31 ref.)
Is our knowledge of human nutrition soundly based? Shorland FB. **World Rev Nutr Diet** 1988;57:126–213 (182 ref.)
[Clinical evaluation of aggressive nutritional care to head and neck cancer patients during radiation therapy] Chin CJ, et al. **Chang Keng I Hsueh** 1989 Mar 20;12(1):37–44 (Eng. Abstr.) **(Chi)**
[Nutrition and respiratory muscles] Wan D, et al. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Aug; 11(4):241–4 (17 ref.) **(Chi)**
[The frequency of questions about nutrition during office consultation] van Dusseldorp M, et al. **Ned Tijdschr Geneeskd** 1988 Dec 17;132(51):2325–8 (Eng. Abstr.) **(Dut)**
[An intercenter study of the validity of nutritional evaluation] David M, et al. **Ann Biol Clin (Paris)** 1988;46(8):675–81 (Eng. Abstr.) **(Fre)**
[The family and health: the example of nutrition practices] Marenco C. **Cah Sociol Demogr Med** 1988 Apr–Jun; 28(2):155–62 **(Fre)**
[Moving and eating—two activities which age well] Kronner D. **Hygie** 1989 Jun;8(2):17–8 (Eng. Abstr.) **(Fre)**
[Nutrition: are the physicians interested?] Pomerleau J, et al. **Union Med Can** 1988 Aug;118(3):227–30 (Eng. Abstr.) **(Fre)**
[Food quality and "health nutrition"—a challenge for agriculture and food processing] Erbersdobler HF. **Berl Munch Tierarztl Wochenschr** 1989 Apr 1;102(4):112–7 (20 ref.) (Eng. Abstr.) **(Ger)**
[Principles and practice of nutrition following trauma] Leutenegger A. **Schweiz Med Wochenschr** 1989 Mar 18; 119(11):361–4 (Eng. Abstr.) **(Ger)**
[From knowledge about nutrition to nutrition behavior] Ritzel G. **Soz Praventivmed** 1989;34(2):49–52 **(Ger)**
[The contribution of nutrition to the pathogenesis of osteoporosis] Hötzel D, et al. **Z Ernahrungswiss** 1989 Mar; 28(1):17–31 (52 ref.) (Eng. Abstr.) **(Ger)**
[Clinical nutrition as a medical specialty] Berner Y. **Harefuah** 1989 Feb 15;116(4):218–20 (27 ref.) **(Heb)**
[Nutritional support in infection] Pannarale OC. **Ann Ital Chir** 1988;60(1):25–8 **(Ita)**
[Nutrition and health of the aged] Cairella M. **Clin Ter** 1989 Feb 15;128(3):207–11 **(Ita)**
[Proper nutrition for good health: what our patients should know] Cairella M, et al. **Clin Ter** 1988 Dec 31;127(6):473–5 **(Ita)**
[Relationships between serum total cholesterol and bodily constitution and daily nutrients intake in the aged] Okamoto K, et al. **Nippon Ronen Igakkai Zasshi** 1988 Nov; 25(6):586–90 (Eng. Abstr.) **(Jpn)**
[Nutritional knowledge and its relation to the food habits of Warsaw families] Narojek L, et al. **Rocz Panstw Zakl Hig** 1988;39(2):99–106 (Eng. Abstr.) **(Pol)**
[Daily nutrition of young workers, vocational school students at large industrial plants] Szponar L, et al. **Rocz Panstw Zakl Hig** 1988;39(3):176–85 (Eng. Abstr.) **(Pol)**
[Food habits of women in Poland 1975–1985 (review and analysis of the literature)] Szponar L, et al. **Rocz Panstw Zakl Hig** 1988;39(4):272–81 (21 ref.) (Eng. Abstr.) **(Pol)**
[Characteristics of nutrition in social welfare homes and in hospitals] Szponar L, et al. **Rocz Panstw Zakl Hig** 1988; 39(6):454–62 (Eng. Abstr.) **(Pol)**
[Problems of nutrition in neoplasms of the digestive system] Hasik J. **Wiad Lek** 1988 Aug 1;41(15):1019–23 (10 ref.) (Eng. Abstr.) **(Pol)**
[Vitamin C requirements of schoolchildren and vocational school and secondary school students in various seasons of the year] Dudenko NV, et al. **Gig Sanit** 1988 Nov; (11):20–1 (Eng. Abstr.) **(Rus)**
[Current studies of energy expenditure and the quantitative and qualitative adequacy of nutrition of female textile workers] Smoliar VI, et al. **Gig Sanit** 1989 Feb;(2):25–8 (Eng. Abstr.) **(Rus)**
[Nutrition and beverage standards for miners in deep coal mines] Vankhanen VV, et al. **Gig Tr Prof Zabol** 1988 Nov; (11):18–21 (Eng. Abstr.) **(Rus)**
[Effect of plant products of nutrition (radish and carrot tops) on various indicators of metabolism in humans] Sivuk AK, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):56–9 (Eng. Abstr.) **(Rus)**
[Subjective ideas on nutrition and obesity of puerperae] Bal' LV, et al. **Sov Med** 1988;(12):90–3 **(Rus)**
[Ways to rationalize the nutrition of workers in the paint and varnish industry] Aldashev AA, et al. **Vopr Pitan** 1988 Sep–Oct;(5):34–7 **(Rus)**
[Dietary services in the homes for the aged in the Ukraine and the ways of their rationalization] Grigorov IuG, et al. **Vopr Pitan** 1988 May–Jun;(3):22–5 (Eng. Abstr.) **(Rus)**
[B. I. Zbarskii and his role in the development of nutritional science] Shtenberg AI. **Vopr Pitan** 1989 Jan–Feb;(1):75–7 **(Rus)**
[Institute of Nutrition, Academy of Medical Sciences of the USSR in the World War II] Shtenberg AI. **Vopr Pitan** 1988 May–Jun;(3):75–9 **(Rus)**
[Phosphorous in the rations of modern man and possible consequences of its consumption with a calcium imbalance] Spirichev VB, et al. **Vopr Pitan** 1989 Jan–Feb;(1):4–9 (62 ref.) **(Rus)**
[Evaluation of actual nutrition of reindeer breeders] Stepchuk MA. **Vopr Pitan** 1988 May–Jun;(3):73 **(Rus)**

DRUG EFFECTS

Drug and nutrient interactions in elderly cardiac patients. Roe DA. **Drug Nutr Interact** 1988;5(4):205–12 (33 ref.)
Drug and nutrient interactions in the elderly diabetic. Roe DA. **Drug Nutr Interact** 1988;5(4):195–203 (29 ref.)
Effects of drugs on nutrition. Roe DA. **Life Sci** 1974 Oct 1;15(7):1219–34 (89 ref.)

EDUCATION

Use of student self-involvement to enhance nutrition education for first-year medical students. Banks WJ Jr. **Acad Med** 1989 Apr;64(4):186
Competencies in nutrition that U.S. medical students should acquire. Chamberlain VM, et al. **Acad Med** 1989 Feb; 64(2):95–8
Effect of nutrition education on nutrition counseling practices of family physicians. Murphy PS. **Acad Med** 1989 Feb; 64(2):98–102
Teaching and funding nutrition instruction in family practice education. Nuhlicek DR, et al. **Acad Med** 1989 Feb; 64(2):103–4
Nutrition education [editorial] Swanson AG. **Acad Med** 1989 Feb;64(2):84
The sense-making approach for audience assessment of adolescents. Betts NM, et al. **Adolescence** 1989 Summer; 24(94):393–402
Recommended core educational guidelines on nutrition for family practice residents. **Am Fam Physician** 1989 Jul; 40(1):265–6
Thoughts on training and employment opportunities in clinical nutrition. Bistrian BR. **Am J Clin Nutr** 1989 Jan; 49(1):180–2
Creation of a regional medical-nutrition education network. Feldman EB, et al. **Am J Clin Nutr** 1989 Jan;49(1):1–16
Training in clinical nutrition programs [letter] Pencharz PB. **Am J Clin Nutr** 1989 Sep;50(3):558
Would primary health care workers give appropriate dietary advice after cholesterol screening? Francis J, et al. **BMJ** 1989 Jun 17;298(6688):1620–2
Food consumption patterns and bowel movements of final-year nursing students in Ile-Ife, Nigeria: an implication for applied nutrition in the nursing curriculum. Ojofeitimi EO. **Eur J Clin Nutr** 1988 Jul;42(7):611–6
Environmental interventions to promote healthy eating: a review of models, programs, and evidence. Glanz K, et al. **Health Educ Q** 1988 Winter;15(4):395–415 (78 ref.)
Hypertension prevention through nutrition education in youth: a school-based program involving parents. Luepker RV, et al. **Health Psychol** 1988;7 Suppl:233–45
Efficacy of nutrition and health component of the Bal-Sevika (pre-school teachers) training programme. Puri R, et al. **Indian Pediatr** 1988 Oct;25(10):982–6
Peer educators reach college students with nutrition information. Gates G, et al. **J Am Coll Health** 1989 Sep; 38(2):95–6
The dietitian as the nutrition counselor: the 1989 Journal [editorial] **J Am Diet Assoc** 1989 Jan;89(1):43–4
Factors that influence learner readiness. Achterberg C. **J Am Diet Assoc** 1988 Nov;88(11):1426–8
A nutrition/health training program for Peace Corps volunteers. Bahl SM, et al. **J Am Diet Assoc** 1989 Jan; 89(1):82–4
Nutrition knowledge and attitudes and menu planning skills of family day-home providers. Briley ME, et al. **J Am Diet Assoc** 1989 May;89(5):694–5
Does it pay to change answers on objective tests? Brittin HC, et al. **J Am Diet Assoc** 1988 Oct;88(10):1283–4
Nutrition education: a review of results and a report of activities provided by Army dietitians. Johnson KD, et al. **J Am Diet Assoc** 1988 Dec;88(12):1582–4
Food stamp use and the nutrition practices of participants in the Colorado Expanded Food and Nutrition Education Program. Lopez L, et al. **J Am Diet Assoc** 1989 Sep; 89(9):1312–3
A strategy for designing effective patient education materials. McCabe BJ, et al. **J Am Diet Assoc** 1989 Sep;89(9):1290–2, 1295
International viewpoint: educating medical students, standardizing the term "dietitian" [letter] Montandon C. **J Am Diet Assoc** 1989 Sep;89(9):1234
Nutrition-related backgrounds and counseling practices of doctors of chiropractic. Newman CF, et al. **J Am Diet Assoc** 1989 Jul;89(7):939–43
A dynamic family approach for the prevention of cardiovascular disease. Nicklas TA, et al. **J Am Diet Assoc** 1988 Nov;88(11):1438–40
Nutrition education at the work site: a team approach. Sandoval WM, et al. **J Am Diet Assoc** 1989 Apr;89(4):543–4
Inclusion of geriatric nutrition in ADA-approved undergraduate programs. Shoaf LR, et al. **J Am Diet Assoc** 1989 Sep;89(9):1282–5
Integration of the nutrition care review in a coordinated undergraduate program. Vickery CE. **J Am Diet Assoc** 1988 Nov;88(11):1429–31
Computerized nutrition analysis: a nutrition education model for cardiovascular health. Walt MA, et al. **J Am Diet Assoc** 1989 Sep;89(9):1303–4
America's kids say they know they should eat better—but don't know why [news] Smigel K. **J Natl Cancer Inst** 1989 Sep 6;81(17):1278–80
The future direction of nutrition research: predicting the future is problematical, but planning for it is possible. Ross AC. **J Nutr** 1989 Jun;119(6):948–9
Recent developments in clinical nutrition. A review. Garrow JS. **J R Coll Physicians Lond** 1989 Jan;23(1):15–8 (27 ref.)
Sciences' basic to psychiatry. Teaching nutrition to medical students [letter] Mayne D. **J R Soc Med** 1988 Oct; 81(10):618
Changing the course: a school nutrition and cancer education curriculum developed by the American Cancer Society and the National Cancer Institute. Light L, et al. **J Sch Health** 1989 May;59(5):205–9 (20 ref.)
Leads from the MMWR. Progress toward the 1990 objectives for improved nutrition. **JAMA** 1988 Dec 23–30; 260(24):3570, 3575–6
Nutrition education in medical school. Eyberg CJ. **Med Teach** 1987;9(4):457–63
Nutrition intervention program in a prenatal clinic. Bruce L, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):310–2
Development of a nutrition education program for a blue collar community. Balshem M, et al. **Prog Clin Biol Res** 1988;278:65–76

HISTORY

Recollections of pioneers in nutrition: establishment of the first Department of Nutrition in a medical center. Stare FJ. **J Am Coll Nutr** 1989 Jun;8(3):248–52
The New England Journal of Medicine, Volume 213, 1935: The energy requirement in strenuous muscular exercise [classical article] Edwards HT, et al. **Nutr Rev** 1989 May; 47(5):138–41

LEGISLATION & JURISPRUDENCE

Patterns of dietary change: the Scandinavian experience. Thelle DS. **Proc Nutr Soc** 1988 Sep;47(3):307–14

STANDARDS

Clinical nutrition accreditation [letter] Young EA. **Am J Clin Nutr** 1989 Jan;49(1):183
Accuracy and reliability of nutrient intake estimates. Schlundt DG. **J Nutr** 1988 Dec;118(12):1432–5

NUTRITION DISORDERS

Magnitude of body-cell-mass depletion and the timing of death from wasting in AIDS. Kotler DP, et al. **Am J Clin Nutr** 1989 Sep;50(3):444–7
Malnutrition—a problem of industrial societies? Stresa, October 15 and 16, 1987. Proceedings. **Bibl Nutr Dieta** 1988;(42):1–117
Symposium on Advances in Clinical Nutrition. The American College of Nutrition's 29th annual meeting. September 14–16, 1988, New Orleans, Louisiana. Abstracts. **J Am Coll Nutr** 1988 Oct;7(5):389–437
Nutrition for the elderly. Kvale JN, et al. **Prim Care** 1989 Jun;16(2):489–500 (23 ref.)
[Problems of mineral therapy in pregnancy] Piccione E. **Clin Ter** 1988 Jun 15;125(5):375–8 (22 ref.) **(Ita)**

BLOOD

Nitrogen and energy relationships in malnourished patients with emphysema. Goldstein SA, et al. **Am Rev Respir Dis** 1988 Sep;138(3):636–44

Increased suppression of luteinizing hormone secretion by chronic and acute estradiol administration in underfed adult female rats. Sprangers SA, et al. **Biol Reprod** 1988 Aug; 39(1):81–7

Amino acid profiles in tumor-bearing and pair-fed nontumor-bearing malnourished rats. Kurzer M, et al. **Cancer** 1988 Oct 15;62(8):1492–6

Protein binding of salicylic and salicyluric acid in serum from malnourished children: the influence of albumin, competitive binding and non-esterified fatty acids. Ashton JM, et al. **J Pharm Pharmacol** 1989 Jul;41(7):474–80

[Evaluation of hematologic and biochemical indicators of the nutritional status of children aged 15–23 months in Lódź] Rafalski H, et al. **Pediatr Pol** 1988 Apr;63(4):209–15 (Eng. Abstr.) **(Pol)**

[Prealbumin and gastric neoplasms] Rodríguez Cuartero A, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 1):323–6 (Eng. Abstr.) **(Spa)**

CHEMICALLY INDUCED

Malnutrition and sensitivity to toxic substances. Periquet A, et al. **Ann Trop Paediatr** 1988 Sep;8(3):193–5

Effects of drugs on nutrition. Roe DA. **Life Sci** 1974 Oct 1;15(7):1219–34 (89 ref.)

CLASSIFICATION

Comparison of Gomez and Waterlow classifications in a follow-up study among pre-school children. Rao S, et al. **Eur J Clin Nutr** 1988 Oct;42(10):863–9

COMPLICATIONS

Influence of malnutrition on cognitive development assessed by Piagetian tasks. Agarwal DK, et al. **Acta Paediatr Scand** 1989 Jan;78(1):115–22

Increased complications and prolonged hospital stay in elderly cardiac surgical patients with low serum albumin. Rich MW, et al. **Am J Cardiol** 1989 Mar 15;63(11):714–8

Nutritional supplementation: effects on child stunting because of diarrhea. Lutter CK, et al. **Am J Clin Nutr** 1989 Jul; 50(1):1–8

Bronchopulmonary dysplasia, undernutrition, and iron [letter] Sullivan JL. **Am Rev Respir Dis** 1989 Mar; 139(3):850

Immunoreactive somatomedin C in children from Morocco: a biological marker of nutritional growth retardation? Bouhaddioui L, et al. **Biomed Pharmacother** 1989; 43(1):59–63

Dementia secondary to metabolic and nutritional abnormalities. Gambert SR. **Clin Geriatr Med** 1988 Nov; 4(4):831–9

Malnourished or overinfected. An analysis of the determinants of acute measles mortality. Aaby P. **Dan Med Bull** 1989 Apr;36(2):93–113 (133 ref.)

Low prevalence of ICA in MRDM [letter] Mohan V, et al. **Diabetes Res Clin Pract** 1989 Jan 3;6(1):79, 81

High frequency of autonomic as well as peripheral neuropathy in patients with malnutrition-related diabetes mellitus. Sutjahjo A, et al. **Diabetes Res Clin Pract** 1988 Sep 5;5(3):197–200

The presence of islet cell antibodies in malnutrition-related diabetes mellitus. Wiyono P, et al. **Diabetes Res Clin Pract** 1989 Jan 3;6(1):75–8

Interaction of malnutrition and difluoromethylornithine-induced intestinal mucosal damage: degree of severity and subsequent recovery. Alarcon P, et al. **Digestion** 1988;41(2):68–77

The serum amino acid spectrum of insulin-dependent diabetics and controls from Ethiopia. Peters WH, et al. **Exp Clin Endocrinol** 1988 Aug;91(3):271–6

Studies on arboviruses—infection of undernourished mice by cocal virus. Duarte F, et al. **Exp Pathol** 1988;35(3):189–95

Natural selection is not related to reduced body size in a rural subsistence agricultural community in southern Mexico. Little BB, et al. **Hum Biol** 1989 Apr;61(2):287–96

Interactions between xerophthalmia and morbidity among underfive rural children. Katiyar GP, et al. **Indian Pediatr** 1988 Oct;25(10):939–45

Diarrhea is a nutritional disease. Rohde J, et al. **Indian Pediatr** 1988 Oct;25(10):914–29

Xerophthalmia malnutrition and diarrhea in urban Bangladesh: a clinic based study. Sikder ZU, et al. **Indian Pediatr** 1988 Oct;25(10):946–51

Association of malnutrition with nosocomial infection. Gorse GJ, et al. **Infect Control Hosp Epidemiol** 1989 May; 10(5):194–203 (39 ref.)

Malnutrition and nosocomial infection [editorial] Scrimshaw NS. **Infect Control Hosp Epidemiol** 1989 May;10(5):192–3

Effectiveness of antibiotic prophylaxis according to the nutritional status in patients undergoing contaminated procedures. Di Palo S, et al. **Ital J Surg Sci** 1988; 18(3):223–6

Transient vitamin B12 malabsorption in a patient with mixed nutritional anemia. Pagnotta I. **J Am Board Fam Pract** 1989 Apr–Jun;2(2):130–3

Nutrition in kidney disease. Metcoff J. **J Am Coll Nutr** 1989 Aug;8(4):267–70

Nutritional impact of acquired immune deficiency syndrome: a unique counseling opportunity. Hyman C, et al. **J Am Diet Assoc** 1989 Apr;89(4):520–4 (33 ref.)

Short stature and malnutrition in cystic fibrosis [letter] Dodge JA, et al. **Lancet** 1989 Feb 11;1(8633):331–2

Short stature and malnutrition in cystic fibrosis [letter] Tedeschi A, et al. **Lancet** 1989 Jan 14;1(8629):100

Is malnutrition necessary for the development of alcoholic fatty liver in the rat? Derr RF, et al. **Med Hypotheses** 1988 Dec;27(4):277–80

On the possible relationship between AIDS and nutrition. Hebert JR, et al. **Med Hypotheses** 1988 Sep;27(1):51–4

Displacement of nutritional receptors on cell membrane as an initiation factor in carcinogenesis. Narasimhan P, et al. **Med Hypotheses** 1988 Aug;26(4):275–80

Neurologic manifestations of gastrointestinal disease. Albers JW, et al. **Neurol Clin** 1989 Aug;7(3):525–48 (128 ref.)

Magnesium and other nutrient deficiencies as possible causes of hypertension and low birthweight. Wynn A, et al. **Nutr Health** 1988;6(2):69–88 (92 ref.)

Nutrition and alcoholic liver damage [letter] Rao GA, et al. **Nutr Rev** 1989 Feb;47(2):63–4

Gastrointestinal aspects of malnutrition in children. Gracey M. **Paediatr Indones** 1988 Mar–Apr;28(3–4):85–96 (90 ref.)

Delayed cutaneous hypersensitivity: epidemiologic factors affecting and usefulness in predicting diarrheal incidence in young Peruvian children. Black RE, et al. **Pediatr Infect Dis J** 1989 Apr;8(4):210–5

Alcohol and nutrition. Morgan MY, et al. **Proc Nutr Soc** 1988 Jul;47(2):85–98 (109 ref.)

Nutritional assessment in rheumatoid arthritis. Mody GM, et al. **S Afr Med J** 1989 Sep 16;76(6):255–7

Hepatobiliary complications of malabsorption and malnutrition. Quigley EM, et al. **Semin Liver Dis** 1988 Aug; 8(3):218–28 (155 ref.)

Maternal malnutrition and the fetus. Viteri FE, et al. **Semin Perinatol** 1989 Jun;13(3):236–49 (43 ref.)

Mild malnutrition and child development in the Philippines. Williams PD, et al. **West J Nurs Res** 1989 Jun;11(3):310–9

Nutrition and respiration. Rothkopf MM, et al. **World Rev Nutr Diet** 1988;56:43–55 (31 ref.)

[Positive urine cultures in malnourished children (letter)] Schoeman EM, et al. **S Afr Med J** 1989 Mar 4;75(5):249 **(Afr)**

[Nutrition and neoplasms] Chen RB. **Sheng Li Ko Hsueh Chin Chan** 1988 Oct;19(4):373–6 (14 ref.) **(Chi)**

[Nutrition and aging] Schlierf G. **Z Gerontol** 1989 Jan–Feb; 22(1):1 **(Ger)**

[Role of postoperative peripheral parenteral nutrition in gastric surgery in malnourished patients with cancer] Talpacci A, et al. **Minerva Chir** 1988 Sep 30;43(18):1463–7 (Eng. Abstr.) **(Ita)**

[Nutritional chronic pancreatitis] Guarita DR, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Mar–Apr; 43(2):85–6 **(Por)**

DIAGNOSIS

Surgical nutrition: time for some clinical common sense. Hill GL. **Br J Surg** 1988 Aug;75(8):729–30

Thigh circumference in assessing malnutrition in preschool children. Mohan M, et al. **Indian Pediatr** 1988 Mar; 25(3):255–7

Nutritional support, albumin, and diarrhea [editorial] Russell RI, et al. **J Am Coll Nutr** 1988 Dec;7(6):443–4

Nutritional assessment of intensive-care unit patients [letter] O'Keefe SJ. **Mayo Clin Proc** 1989 Apr;64(4):476–7

Evaluation of nutritional status. Curtas S, et al. **Nurs Clin North Am** 1989 Jun;24(2):301–13 (56 ref.)

Hospital malnutrition still abounds. **Nutr Rev** 1988 Sep; 46(9):315–7

Nutrition surveillance by QUAC stick. Brown RC. **Trans R Soc Trop Med Hyg** 1987;81(6):1038–9

[Evaluation of the nutritional status of infants in hospital practice (anthropometric methods)] Tláskal P. **Cesk Pediatr** 1988 Aug;43(8):462–8 (Eng. Abstr.) **(Cze)**

DIET THERAPY

Hypophosphatemia in the nutritional recovery syndrome. Mezoff AG, et al. **Am J Dis Child** 1989 Sep;143(9):1111–2

The effect of supplementary oral nutrition in poorly nourished patients with chronic obstructive pulmonary disease. Efthimiou J, et al. **Am Rev Respir Dis** 1988 May; 137(5):1075–82

Carnitine supplementation vs. medium-chain triglycerides in postburn nutritional support. Trocki O, et al. **Burns Incl Therm Inj** 1988 Oct;14(5):379–87

Approaches to nutritional care in the elderly. Henderson CT. **Compr Ther** 1989 Jun;15(6):25–30 (13 ref.)

Influence of dietary intervention on artificially increased activity in marginally undernourished Colombian boys. Spurr GB, et al. **Eur J Clin Nutr** 1988 Oct;42(10):835–46

[A method of using fasting-diet therapy in patients with acute surgical diseases of the abdominal organs] Dergachev SV, et al. **Vestn Khir** 1988 May;140(5):28–31 (Eng. Abstr.) **(Rus)**

[Therapeutic and preventive diet and various indicators of health and work capacity of workers at the industrial plant "Sintez"] Pal'mova LA, et al. **Vopr Pitan** 1988 Jul–Aug; (4):41–5 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Body mass repletion during ganciclovir treatment of cytomegalovirus infections in patients with acquired immunodeficiency syndrome. Kotler DP, et al. **Arch Intern Med** 1989 Apr;149(4):901–5

Correction of malnutrition and maldigestion with enzyme supplementation in patients with surgical suppression of exocrine pancreatic function. Braga M, et al. **Surg Gynecol Obstet** 1988 Dec;167(6):485–92

ECONOMICS

Malnutrition in the hospital: impact on costs, DRG coding for nutrition reimbursement [letter] **J Am Diet Assoc** 1989 Jun;89(6):762, 764

More reflections on the 100th monkey [letter] **J Am Diet Assoc** 1989 Jan;89(1):14

Diagnosis-related group impact of nutrition support in cardiac surgery patients. Flancbaum L, et al. **JPEN J Parenter Enteral Nutr** 1988 Sep–Oct;12(5):473–7

ENZYMOLOGY

Activity of myelin membrane Na+/K+-ATPase and 5'-nucleotidase in relation to phospholipid acyl profiles, ganglioside composition and phosphoinositides in developing brains of undernourished rats. Shantharam P, et al. **Biochim Biophys Acta** 1989 Jun 26;982(1):115–22

The cholinergic system in developing cerebellum: comparative study of normal, hypothyroid and underfed rats. Clos J, et al. **Dev Neurosci** 1989;11(3):188–204

[The liver monooxygenase system in nutritional deficiency in rats in early ontogeny] Khakimov ZZ, et al. **Vopr Pitan** 1988 Nov–Dec;(6):62–5 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Epidemiological aspects of malnutrition in industrial societies. Menotti A. **Bibl Nutr Dieta** 1988;(42):110–7 (16 ref.)

Markers of the nutritional status in acutely ill elderly patients. Finucane P, et al. **Gerontology** 1988;34(5–6):304–10

The association between inadequate rations, undernutrition prevalence, and mortality in refugee camps: case studies of refugee populations in eastern Thailand, 1979–1980, and eastern Sudan, 1984–1985. Toole MJ, et al. **J Trop Pediatr** 1988 Oct;34(5):218–24

Malnutrition among Semai children. Khor GL. **Med J Malaysia** 1988 Dec;43(4):318–26

Examining neighbourhood confounding in a survey: an example using the National Health and Nutrition Examination Survey II. Korn EL, et al. **Stat Med** 1988 Oct;7(10):1087–98

The knowledge of human nutrition and the peoples of the world. Banerji D. **World Rev Nutr Diet** 1988;57:1–23 (68 ref.)

ETHNOLOGY

Energy metabolism and requirements in different ethnic groups. de Boer JO, et al. **Eur J Clin Nutr** 1988 Dec; 42(12):983–97

The plight of modern Bushmen. O'Keefe SJ, et al. **Lancet** 1989 Jul 29;2(8657):255–8

ETIOLOGY

Nutritional status in alcoholics with and without chronic skeletal muscle myopathy. Duane P, et al. **Alcohol Alcohol** 1988;23(4):271–7

Prevalence and hemodynamic correlates of malnutrition in severe congestive heart failure secondary to ischemic or idiopathic dilated cardiomyopathy. Carr JG, et al. **Am J Cardiol** 1989 Mar 15;63(11):709–13

The impact of Haemophilus influenzae type b meningitis on nutritional status. Sherry B, et al. **Am J Clin Nutr** 1989 Sep;50(3):425–34

Nutritional consequences of gastrointestinal disease. Powell-Tuck J. **Baillieres Clin Gastroenterol** 1988 Oct; 2(4):715–27 (72 ref.)

Small bowel bacterial overgrowth: a cause of malnutrition in the elderly? Haboubi NY, et al. **Eur J Clin Nutr** 1988 Dec;42(12):999–1005

Undernutrition in lepromatous leprosy. V. Severe nutritional deficit in lepromatous patients co-infected with pulmonary tuberculosis. Saha K, et al. **Eur J Clin Nutr** 1989 Feb; 43(2):117–28

Undernutrition and lepromatous leprosy. Serum vitamin A and E levels in leprosy spectrum. Rao KN, et al. **Indian J Lepr** 1988 Jan;60(1):66–70

Eating problems and nutritional status during hospital stay of patients with severe stroke. Axelsson K, et al. **J Am Diet Assoc** 1989 Aug;89(8):1092–6

Malnutrition: an important determinant of fatal outcome in surgically treated pulmonary suppurative disease. Nwiloh J, et al. **J Natl Med Assoc** 1989 May;81(5):525–9

Catastrophic weight loss after vertical banded gastroplasty: malnutrition and neurologic alterations. Albina JE, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6):619–20

Home total parenteral nutrition in a pregnant diabetic after jejunoileal bypass for obesity. Gray DS, et al. **JPEN J Parenter Enteral Nutr** 1989 Mar–Apr;13(2):214–7

Functional duodenal obstruction (superior mesenteric artery or cast syndrome) in cerebral palsy. Vaisman N, et al. **JPEN J Parenter Enteral Nutr** 1989 May–Jun;13(3):326–8

Prolonged breastfeeding [letter] Brakohiapa LA. **Lancet** 1988

Dec 10;2(8624):1360–1
Ecological upheavals with special reference to desertification and predicting health impact. Were MK. **Soc Sci Med** 1989; 29(3):357–67
Nutrition and alcoholism: problems and therapies. Carey GB. **State Art Rev Occup Med** 1989 Apr–Jun;4(2):311–26 (115 ref.)
When the rains fail.... Prost A. **World Health Forum** 1988; 9(1):98–103
Relationships between nutrient intake, nutritional status and activity levels in an elderly and in a younger population; a comparison of physically more active and more inactive people. Mensink GB, et al. **Z Gerontol** 1989 Jan–Feb; 22(1):16–25
[Psychogenic malnutrition occurring in Gayet–Wernicke encephalopathy with retrobulbar optic neuritis in a deficient schizophrenic patient] Beaufils B, et al. **Ann Med Psychol (Paris)** 1988 May;146(5):471–5 **(Fre)**
[Is malnutrition a problem in industrial society? Introduction to the topic] Somogyi JC. **Bibl Nutr Dieta** 1988;(42):17–25 (32 ref.) **(Ger)**
[Dietary habits of the aged—frequency of intake of foods of high nutritive value] Frauenrath C, et al. **Z Gerontol** 1989 Jan–Feb;22(1):11–5 (Eng. Abstr.) **(Ger)**
[Malnutrition in geriatric patients: the Bethanien nutritional study] Schlierf G, et al. **Z Gerontol** 1989 Jan–Feb;22(1):2–5 (Eng. Abstr.) **(Ger)**
[Energy and vitamin requirements in long–term patients] Seiler WO, et al. **Z Gerontol** 1989 Jan–Feb;22(1):26–33 (64 ref.) (Eng. Abstr.) **(Ger)**
[Malnutrition in the aged—effect of physical, mental, psychological and social factors] Volkert D, et al. **Z Gerontol** 1989 Jan–Feb;22(1):6–10 (Eng. Abstr.) **(Ger)**
[Evaluation of the nutritional status of patients after gastrectomy by the Billroth II method for peptic ulcer] Piecuch T, et al. **Wiad Lek** 1988 Apr 1;41(7):437–42 (Eng. Abstr.) **(Pol)**

HISTORY

[Causes of pediatric mortality in a medieval skeletal series] Hühne–Osterloh G. **Anthropol Anz** 1989 Mar;47(1):11–25 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

The potential role of nutritional factors in the induction of immunologic abnormalities in HIV–positive homosexual men. Moseson M, et al. **J Acquir Immune Defic Syndr** 1989; 2(3):235–47 (149 ref.)
The effects on complement component 3 of dietary variation of protein, fat and vitamin E during growth of young mice. Messiha N, et al. **Life Sci** 1989;44(1):49–55
[Three cases of transient elevation of serum carcinoembryonic antigen associated with severe malnutrition] Yamato E, et al. **Nippon Naika Gakkai Zasshi** 1989 Jan;78(1):87–8 **(Jpn)**

METABOLISM

Biochemical and morphological changes in the digestive tract of rats after prenatal and postnatal malnutrition. Firmansyah A, et al. **Am J Clin Nutr** 1989 Aug;50(2):261–8
Oxygen consumption of the respiratory muscles in normal and in malnourished patients with chronic obstructive pulmonary disease. Donahoe M, et al. **Am Rev Respir Dis** 1989 Aug;140(2):385–91
Breast feeding and post–partum amenorrhea in Serere women in Senegal. Rosetta L. **Ann Hum Biol** 1989 Jul–Aug; 16(4):311–20
Infusion of human insulin–like growth factor I (IGF–I) into malnourished rats reduces hepatic IGF–I mRNA abundance. Schalch DS, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):795–800
Effect of two different types of malnutrition on the rate of elimination of ethanol in rats. da Silva VA, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4235–8
Relations between plasma non–esterified fatty acid metabolism and body tissue mobilization during chronic undernutrition in goats. Dunshea FR, et al. **Br J Nutr** 1988 Nov;60(3):633–44
Utilization of 14C–tyrosine in brain and peripheral tissues of developmentally protein malnourished rats. Miller M, et al. **Brain Res Bull** 1978 Nov–Dec;3(6):681–6
Effects of malnutrition on rat myocardial beta–adrenergic and muscarinic receptors. Ransnäs L, et al. **Circ Res** 1989 May;64(5):949–56
Patterns of daily energy expenditure in normal and marginally undernourished school–aged Colombian children. Spurr GB, et al. **Eur J Clin Nutr** 1988 Oct; 42(10):819–34
Nutritional deficiency, starvation, and tissue antioxidant status. Godin DV, et al. **Free Radic Biol Med** 1988; 5(3):165–76 (146 ref.)
Isolated colonocyte metabolism of glucose, glutamine, n–butyrate, and beta–hydroxybutyrate in malnutrition. Firmansyah A, et al. **Gastroenterology** 1989 Sep;97(3):622–9
Polyamine–directed preferential nutritional repletion of normal tissues in tumor–bearing hosts. Nishioka K, et al. **Int J Cancer** 1988 Nov 15;42(5):744–7
Single dose kinetics of rifampicin and isoniazid in well–nourished and malnourished patients of tuberculosis. Garg SK, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Aug;26(8):417–20
Developing rat cerebellum—I. Effects of abnormal thyroid states and undernutrition on sulfated glycosaminoglycans. Normand G, et al. **Int J Dev Neurosci** 1989;7(4):323–8
Developing rat cerebellum—II. Effects of abnormal thyroid states and undernutrition on hyaluronic acid. Normand G, et al. **Int J Dev Neurosci** 1989;7(4):329–34
Developing rat cerebellum—III. Effects of abnormal thyroid states and undernutrition on gangliosides. Vitiello F, et al. **Int J Dev Neurosci** 1989;7(4):335–41
The effect of total enteral tube feeding on the vitamin status of malnourished patients with inflammatory bowel disease. Abad–Lacruz A, et al. **Int J Vitam Nutr Res** 1988; 58(4):428–35
Comparison of medium and long chain triglyceride metabolism in intensive care patients on parenteral nutrition. Ball MJ, et al. **Intensive Care Med** 1989; 15(4):250–4
Resting energy expenditure in patients with alcoholic hepatitis. John WJ, et al. **JPEN J Parenter Enteral Nutr** 1989 Mar–Apr;13(2):124–7
Insulin–like growth factor–I in human malnutrition: relationship with some body composition and nutritional parameters. Minuto F, et al. **JPEN J Parenter Enteral Nutr** 1989 Jul–Aug;13(4):392–6
Long chain fatty acid deficits in brain myelin sphingolipids of undernourished rat pups. Yeh YY. **Lipids** 1988 Dec; 23(12):1114–8
Dietary supplementation of undernourished rats with soy or safflower oil: effects on myelin polyunsaturated fatty acids. Divakaran P, et al. **Metab Brain Dis** 1986 Jun;1(2):157–64
[Free–radical lipid oxidation in rabbits with the alimentary peroxidation syndrome] Bobyrev VN, et al. **Vopr Pitan** 1988 Sep–Oct;(5):57–9 (Eng. Abstr.) **(Rus)**
[Criteria for assessment of nutritional status] Pietrzik K. **Vopr Pitan** 1989 Jan–Feb;(1):69–75 **(Rus)**

MICROBIOLOGY

Patterns and routes of tracheobronchial colonization in mechanically ventilated patients. The role of nutritional status in colonization of the lower airway by Pseudomonas species. Niederman MS, et al. **Chest** 1989 Jan;95(1):155–61
Frequency and density of yeasts in the mouths of malnourished children. Aldred MJ, et al. **Community Dent Oral Epidemiol** 1989 Jun;17(3):136–8

MORTALITY

Predicting mortality based on body composition analysis. Tellado JM, et al. **Ann Surg** 1989 Jan;209(1):81–7

NURSING

Managing nutrition problems in advanced cancer. D'Agostino NS. **Am J Nurs** 1989 Jan;89(1):50–6

PATHOLOGY

Cutaneous manifestations of nutritional disorders. Delahoussaye AR, et al. **Dermatol Clin** 1989 Jul;7(3):559–70 (85 ref.)
The effects of malnutrition on murine peritoneal macrophages. Papadimitriou JM, et al. **Exp Mol Pathol** 1988 Oct;49(2):161–70
The bone marrow in nutritional deficiencies. Krause JR. **Hematol Oncol Clin North Am** 1988 Dec;2(4):557–66 (48 ref.)
The effects of a lengthy period of undernutrition from birth and subsequent nutritional rehabilitation on the granule–to–Purkinje cell ratio in the rat cerebellum. Warren MA, et al. **J Anat** 1988 Aug;159:147–53
Short–term malnutrition in neonatal rabbits: effect on gastrointestinal epithelial proliferation. Baker SS, et al. **J Nutr** 1989 May;119(5):785–9
[Ultrahistochemical differentiation of the plaque matrix on 2 dietary regimens] Müller RF, et al. **Zahn Mund Kieferheilkd** 1988;76(8):838–9 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Effect of pinealectomy on the undernutrition–induced suppression of the reproductive axis in rats. Chik CL, et al. **Acta Endocrinol (Copenh)** 1989 May;120(5):569–73
Gonadotropin–releasing hormone sensitivity in underfed prepubertal female rats. Lively KM, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):E482–7
Postnatal undernutrition slows development of bronchiolar epithelium in rats. Massaro GD, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):R521–6
The adolescent growth spurt of height among rural Indian boys in relation to childhood nutritional background: an 18 year longitudinal study. Satyanarayana K, et al. **Ann Hum Biol** 1989 Jul–Aug;16(4):289–300
Undernutrition during suckling and latent learning ability of rehabilitated adult male rats. Mello CF, et al. **Behav Neural Biol** 1989 Jul;52(1):39–50
Effects of early postnatal undernutrition on brainstem auditory evoked potentials in weanling rats. Kawai S, et al. **Biol Neonate** 1989;55(4–5):268–74
Circadian rhythm of sleep in normal and undernourished rats. Cintra L, et al. **Bol Estud Med Biol** 1988;36(1–4):3–17
Deviations in brain development of F2 generation on caloric undernutrition and scope of their prevention by rehabilitation: alterations in dendritic spine production and pruning of pyramidal neurons of lower laminae of motor cortex and visual cortex. Gundappa G, et al. **Brain Res** 1988 Jul 26;456(2):205–23
Effects of altered thyroid states and undernutrition on the calbindin–D28K (calcium–binding protein) content of the hippocampal formation in the developing rat. Rami A, et al. **Brain Res** 1989 Apr 17;485(1):20–8
Postnatal nutritional status influences development of cardiac adrenergic receptor binding sites. Bell JM, et al. **Brain Res Bull** 1988 Dec;21(6):893–6
Early malnutrition alters the effect of chlordiazepoxide on inhibitory avoidance. Almeida SS, et al. **Braz J Med Biol Res** 1988;21(5):1033–6
Effect of subnutrition on normalized muscle force and relaxation rate in human subjects using voluntary contractions. Bruce SA, et al. **Clin Sci** 1989 Jun; 76(6):637–41
Different methods for producing neonatal undernutrition in rats cause different brain changes in the face of equivalent somatic growth parameters. Tonkiss J, et al. **Dev Neurosci** 1988;10(3):141–51
Stunting, severe malnutrition and mental development in young children. Grantham–McGregor S, et al. **Eur J Clin Nutr** 1989 Jun;43(6):403–9
Reduced thermoregulatory thermogenesis in undernutrition. Kurpad AV, et al. **Eur J Clin Nutr** 1989 Jan;43(1):27–33
Malnutrition and peak expiratory flow rate. Primhak R, et al. **Eur Respir J** 1988 Oct;1(9):801–3
Undernutrition during early adult life significantly affects neuronal connectivity in rat visual cortex. Warren MA, et al. **Exp Neurol** 1989 Mar;103(3):290–2
Vascular adrenoceptor sensitivity to graded doses of norepinephrine infusions in undernourished subjects. Kulkarni RN, et al. **Indian J Med Res** 1988 Nov;88:427–33
The pattern of plasma volume changes in well–nourished and in food– or protein–restricted pregnant rats. Lederman SA, et al. **J Am Coll Nutr** 1989 Jun;8(3):215–24
Effects of undernutrition on diaphragm fiber size, SDH activity, and fatigue resistance. Sieck GC, et al. **J Appl Physiol** 1989 May;66(5):2196–205
Relationship between nutrition and development in Kenyan toddlers. Sigman M, et al. **J Pediatr** 1989 Sep;115(3):357–64
Rhoads lecture—1988. Bulk or bounce—the object of nutritional support. Jeejeebhoy KN. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6):539–49 (67 ref.)
Effect of malnutrition during different periods on the small intestine of the rat. Firmansyah A, et al. **Jpn J Exp Med** 1989 Feb;59(1):1–7
Effect of early malnutrition on muscle function and metabolism in rats. Raju NV. **Life Sci** 1974 Sep 1; 15(5):949–60
Effects of early undernutrition and handling on the adrenocortical activity of neonatal rats. Walker CD, et al. **Life Sci** 1988;43(24):1983–90
Effect of chronic undernutrition on susceptibility to cold stress in young adult and aged rats. Campbell BA, et al. **Mech Ageing Dev** 1988 Aug;44(2):193–202
Metabolic response to starvation at late gestation in chronically ethanol–treated and pair–fed undernourished rats. Testar X, et al. **Metabolism** 1988 Nov;37(11):1008–14
Effects of undernutrition during suckling and of training on the hypothalamic beta–endorphin of young and adult rats. Vendite D, et al. **Peptides** 1988 Jul–Aug;9(4):751–5
Refeeding after various times of ingestion of a low protein diet: effects on food intake and body weight in rats. Beck B, et al. **Physiol Behav** 1989 Apr;45(4):761–5
The effects of undernutrition during early life on spatial learning. Campbell LF, et al. **Physiol Behav** 1989 May; 45(5):883–90
[Influence of malnutrition on insulin resistance in cirrhotic patients, studied with the euglycemic clamp (letter)] **Gastroenterol Clin Biol** 1989 May;13(5):527–8 **(Fre)**
[Reversible acute renal failure with tubular oxalosis. Possible role of nutritional factors] Esnault V, et al. **Nephrologie** 1988;9(6):277–80 (Eng. Abstr.) **(Fre)**
[Aging of the pancreas. Its implication in malnutrition states in elderly persons] Vellas B, et al. **Presse Med** 1988 Nov 5;17(39):2067–70 (Eng. Abstr.) **(Fre)**
[Intellectual development and somatic growth in students suffering from malnutrition early in life] Vega–Franco L, et al. **Bol Med Hosp Infant Mex** 1989 May;46(5):328–35 (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

Nutrition in the prevention of disease. 26th symposium of the Group of European Nutritionists. Prague, March 28–29, 1988. Proceedings. **Bibl Nutr Dieta** 1989;(44):1–188
National nutrition objectives for the years 1990 and 2000. Nestle M. **Bol Asoc Med P R** 1989 Feb;81(2):65–6
Recent developments in clinical nutrition. A review. Garrow JS. **J R Coll Physicians Lond** 1989 Jan;23(1):15–8 (27 ref.)
A rational approach to the nutritional care of patients with cystic fibrosis. Durie PR, et al. **J R Soc Med** 1989;82 Suppl 16:11–20 (67 ref.)
Adequacy of refugee relief rations [letter] Toole MJ, et al. **Lancet** 1989 Jul 29;2(8657):268
Health maintenance issues of the elderly. Nutrition. Rogers EL. **Md Med J** 1989 Feb;38(2):124–6
What energy level is required to avoid nutrient depletion after surgery in oropharyngeal cancer? Zurlo F, et al. **ORL J Otorhinolaryngol Relat Spec** 1988;50(4):236–45

[Malnutrition in hospitals—action possibilities (letter)] Bentzen-Bilkvist B, et al. **Ugeskr Laeger** 1989 Jul 31; 151(31):1995–6 **(Dan)**

[Nutrition in the aged] Weiner R. **Z Arztl Fortbild (Jena)** 1989;83(11):575–8 (0 ref.) **(Ger)**

PSYCHOLOGY

Effects of missing breakfast on the cognitive functions of school children of differing nutritional status. Simeon DT, et al. **Am J Clin Nutr** 1989 Apr;49(4):646–53

Mental depression is associated with malnutrition in patients with head and neck cancer. Westin T, et al. **Arch Otolaryngol Head Neck Surg** 1988 Dec; 114(12):1449–53

Maternal–child interaction in survivors of severe malnutrition who received psychosocial stimulation. Grantham-McGregor S, et al. **Eur J Clin Nutr** 1989 Jan; 43(1):45–52

Social support, stressful events, strain, dietary intake, and the elderly. McIntosh WA, et al. **Med Care** 1989 Feb; 27(2):140–53

Studies in behaviour and malnutrition in Jamaica. Grantham-McGregor S. **Trans R Soc Trop Med Hyg** 1988; 82(1):7–9 (18 ref.)

THERAPY

Absorptive capacity for dietary fat in elderly patients with debilitating disorders [published erratum appears in Arch Intern Med 1989 Sep;149(9):2100] Simko V, et al. **Arch Intern Med** 1989 Mar;149(3):557–60

Effectiveness of two methods of parenteral nutrition support in improving muscle mass of children with neuroblastoma or Wilms' tumor. A randomized study. Rickard KA, et al. **Cancer** 1989 Jul 1;64(1):116–25

Nutritionist barred from practicing medicine. **Indiana Med** 1988 Oct;81(10):844

Nutritional support for pediatric patients with inflammatory bowel disease. Kleinman RE, et al. **J Pediatr Gastroenterol Nutr** 1989 Jan;8(1):8–12

Invited comment: the role of synthetic compounds in clinical nutrition. Birkhahn RH. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6 Suppl):89S–90S

Nutritional repletion in malnourished patients with emphysema. Otte KE, et al. **JPEN J Parenter Enteral Nutr** 1989 Mar–Apr;13(2):152–6

[Continuous enteral feeding at a digestive intensive care unit] Frileux P, et al. **Chirurgie** 1988;114(5):432–40 (34 ref.) (Eng. Abstr.) **(Fre)**

[Parenteral nutrition at home: 2 years' experience] Van Gossum A, et al. **Rev Med Brux** 1989 Jun;10(6):225–32 (Eng. Abstr.) **(Fre)**

[Evaluation of the efficacy of enteral nutrition carried out through various routes of administration] Cebrelli T, et al. **Minerva Dietol Gastroenterol** 1988 Oct–Dec;34(4):229–34 (Eng. Abstr.) **(Ita)**

[Crohn disease of the colon with acute onset at the 17th week of pregnancy. Description of a clinical case] Domeniconi D, et al. **Minerva Dietol Gastroenterol** 1989 Apr–Jun; 35(2):135–7 (Eng. Abstr.) **(Ita)**

[Problems of nutrition in neoplasms of the digestive system] Hasik J. **Wiad Lek** 1988 Aug 1;41(15):1019–23 (10 ref.) (Eng. Abstr.) **(Pol)**

[Intensive psychosensorial stimulation of malnourished children. I. Effects on psychomotor development and physical growth] Puentes-Rojas R, et al. **Bol Med Hosp Infant Mex** 1989 May;46(5):308–15 (Eng. Abstr.) **(Spa)**

URINE

Increased urinary excretion of cortisol and catecholami-NES in malnourished cancer patients. Drott C, et al. **Ann Surg** 1988 Nov;208(5):645–50

VETERINARY

Clinical nutrition. **Vet Clin North Am Small Anim Pract** 1989 May;19(3):387–626

NUTRITION DISORDERS, CHILD see **CHILD NUTRITION DISORDERS**

NUTRITION DISORDERS, INFANT see **INFANT NUTRITION DISORDERS**

NUTRITION LABELING see **FOOD LABELING**

NUTRITION SURVEYS

Dietary survey of the FINMONICA project in 1982. Pietinen P, et al. **Acta Med Scand Suppl** 1988;728:169–77

Fortification of curry powder with NaFe(111)EDTA in an iron-deficient population: initial survey of iron status. Ballot DE, et al. **Am J Clin Nutr** 1989 Jan;49(1):156–61

Macronutrient intake of US athletes compared with the general population and recommendations made for athletes. Grandjean AC. **Am J Clin Nutr** 1989 May;49(5 Suppl):1070–6

Food consumption patterns in the 1960s in seven countries. Kromhout D, et al. **Am J Clin Nutr** 1989 May;49(5):889–94

Dose–response relationships regarding vitamin B–6 in elderly people: a nationwide nutritional survey (Dutch Nutritional Surveillance System). Löwik MR, et al. **Am J Clin Nutr** 1989 Aug;50(2):391–9

Nutritional evaluation of Huntington disease patients. Morales LM, et al. **Am J Clin Nutr** 1989 Jul;50(1):145–50

Between- and within-subject variation in nutrient intake from infancy to old age: estimating the number of days required to rank dietary intakes with desired precision. Nelson M, et al. **Am J Clin Nutr** 1989 Jul;50(1):155–67

Food consumption trends of US women: patterns and determinants between 1977 and 1985. Popkin BM, et al. **Am J Clin Nutr** 1989 Jun;49(6):1307–19

Changes of nutrition patterns and health indicators at the population level in Greece. Trichopoulou AD, et al. **Am J Clin Nutr** 1989 May;49(5 Suppl):1042–7

A dietary and risk factor questionnaire and analysis system for personal computers. Smucker R, et al. **Am J Epidemiol** 1989 Feb;129(2):445–9

Validation of a retrospective questionnaire assessing diet 10–15 years ago. Sobell J, et al. **Am J Epidemiol** 1989 Jul; 130(1):173–87

Errors in reported dietary intakes. II. Long-term recall. Wu ML, et al. **Am J Epidemiol** 1988 Nov;128(5):1137–45

Selection of elderly controls using random digit dialing. Olsen GW, et al. **Am J Public Health** 1988 Nov; 78(11):1487–8

How far is the Belgian population from the recommended nutritional goals and ideal serum cholesterol? Belgian Interuniversity Research on Nutrition and Health Study Group. Kornitzer MD, et al. **Ann Med** 1989 Jun;21(3):247–8

Nutrition and growth. A review. Susanne C. **Arztl Jugendkd** 1989;80(1):37–40 (30 ref.)

Trace nutrients. 5. Minerals and vitamins in the British household food supply. Lewis J, et al. **Br J Nutr** 1988 Nov; 60(3):413–24

Results from a comparative dietary assessment in Europe: I. Comparison of dietary information derived from concurrently applied frequency questionnaires and quantitative measurement instruments. Boeing H, et al. **Eur J Clin Nutr** 1989 Jun;43(6):367–77

Results from a comparative dietary assessment in Europe: II. Feasibility of pooling individual-based dietary data between countries. Wahrendorf J, et al. **Eur J Clin Nutr** 1989 Jun;43(6):379–90

Review of food consumption surveys—1988. **FAO Food Nutr Pap** 1988;44:1–197

Nutrient sources in the English diet: quantitative data from three English towns. Cade JE, et al. **Int J Epidemiol** 1988 Dec;17(4):844–8

Nutrient misclassification: bias in the odds ratio and loss of power in the Mantel test for trend. Freudenheim JL, et al. **Int J Epidemiol** 1989 Mar;18(1):232–8

Recall of a child's intake from one meal: are parents accurate? Eck LH, et al. **J Am Diet Assoc** 1989 Jun;89(6):784–9

Distributional shape of nutrition data. Emrich LJ, et al. **J Am Diet Assoc** 1989 May;89(5):665–70

Mean proportion and population proportion: two answers to the same question? Krebs-Smith SM, et al. **J Am Diet Assoc** 1989 May;89(5):671–6

Educational attainment and nutrient consumption patterns: the Minnesota Heart Survey. Kushi LH, et al. **J Am Diet Assoc** 1988 Oct;88(10):1230–6

Dietary supplement use in a randomly selected group of elderly Australians. Results from a large nutrition and health survey. Horwath CC, et al. **J Am Geriatr Soc** 1989 Aug;37(8):689–96

A review of the methods used by studies of dietary measurement. Lee-Han H, et al. **J Clin Epidemiol** 1989; 42(3):269–79 (86 ref.)

Dietary intake levels and food sources of magnesium and calcium for selected segments of the US population. Morgan KJ, et al. **Magnesium** 1988;7(5–6):225–33

The Victorian Nutrition Survey [letter] Ingram D, et al. **Med J Aust** 1988 Oct 17;149(8):449

Children's diets: what do parents add and avoid? Ford RP, et al. **N Z Med J** 1989 Aug 23;102(874):443–5

Development of a food frequency instrument: ethnic differences in food sources. Borrud LG, et al. **Nutr Cancer** 1989;12(3):201–11

A comparison of two diet history questionnaires that measure usual food intake. Boutron MC, et al. **Nutr Cancer** 1989; 12(1):83–91

Interpretation of data on dietary intake. Guthrie HA. **Nutr Rev** 1989 Feb;47(2):33–8 (11 ref.)

Nutritional status of young children—the 1982/83 National Nutrition Survey. Heywood P, et al. **P N G Med J** 1988 Jun;31(2):91–101

A comparative study of smoking, drinking and dietary habits in population samples in France, Italy, Spain and Switzerland. I. Study design and dietary habits. Riboli E, et al. **Rev Epidemiol Sante Publique** 1988;36(3):151–65

Preventive effect of fish-rich diet on hypertensive diseases—nutrition survey in Tokushima. Kishino Y, et al. **Tokushima J Exp Med** 1988 Dec;35(3–4):107–13

[A health and nutrition survey of 211 Uygur centenarians in Xinjiang Uygur Autonomous Region] Wang XY. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Nov; 22(6):324–7 (Eng. Abstr.) **(Chi)**

[Validity of a dietary survey in adiposity (letter)] Astrup A, et al. **Ugeskr Laeger** 1988 Oct 3;150(40):2417 **(Dan)**

[A diet survey at a long-term care department] Rasmussen HH. **Ugeskr Laeger** 1989 Apr 24;151(17):1043–5 (Eng. Abstr.) **(Dan)**

[Is vitamin intake by the elderly in The Netherlands precarious?] Löwik MR, et al. **Ned Tijdschr Geneeskd** 1989 Feb 11;133(6):298–302 (Eng. Abstr.) **(Dut)**

[The nutritional behavior of school children. An epidemiologic interval study] Möhr M. **Arztl Jugendkd** 1989;80(1):41–9 (Eng. Abstr.) **(Ger)**

[Nutrition survey of adults using a 7-day protocol—a pilot study in the Augsburg MONICA project] Colling M, et al. **Off Gesundheitswes** 1989 Feb;51(2):94–7 (Eng. Abstr.) **(Ger)**

[Dietary habits of school children: breakfast] Pranzetti P, et al. **Boll Soc Ital Biol Sper** 1989 Jan;65(1):1–8 (Eng. Abstr.) **(Ita)**

[Nutritional status indicators in the Polonoroeste area. IV. Diet surveys in families in 6 cities of the Polonoroeste area, Mato Grosso, Brazil, 1983] da Silva RR, et al. **Rev Inst Med Trop Sao Paulo** 1988 May–Jun;30(3):185–91 (Eng. Abstr.) **(Por)**

[The health status of children in the municipality of São Paulo, SP (Brazil), 1984/1985. X. Food intake] Szarfarc SC, et al. **Rev Saude Publica** 1988 Aug;22(4):266–72 (Eng. Abstr.) **(Por)**

[Practical experiences with food composition tables in Latin America] Flores M. **Arch Latinoam Nutr** 1987 Dec; 37(4):653–65 **(Spa)**

[The feeding of young children with mild diarrhea. Study of the behavior of 20 mothers in a periurban area of Guatemala City] García B, et al. **Bol Med Hosp Infant Mex** 1989 Jun;46(6):399–408 (Eng. Abstr.) **(Spa)**

[Fat consumption in the autonomous community of Madrid] Moreiras-Varela O, et al. **Rev Clin Esp** 1989 Feb; 184(3):154–7 (Eng. Abstr.) **(Spa)**

METHODS

[Can one obtain data on infant feeding retrospectively?] Colomer Revuelta P, et al. **Gac Sanit** 1988 Sep–Oct; 2(8):235–6 (Eng. Abstr.) **(Spa)**

NUTRITIONAL AVAILABILITY see **NUTRITIVE VALUE**

NUTRITIONAL REQUIREMENTS

Milk protein quantity and quality and protein requirements during development. Räihä NC. **Adv Pediatr** 1989; 36:347–68 (83 ref.)

Nutritional support in head-injured patients. Tomaselli P, et al. **Agressologie** 1988 May;29(6):419–21

Nutritional problems and measures in elite and amateur athletes. Chen JD, et al. **Am J Clin Nutr** 1989 May;49(5 Suppl):1084–9

Macronutrient intake of US athletes compared with the general population and recommendations made for athletes. Grandjean AC. **Am J Clin Nutr** 1989 May;49(5 Suppl):1070–6

Genetic variation in nutritional requirements and susceptibility to disease: policy implications. Holtzman NA. **Am J Clin Nutr** 1988 Dec;48(6):1510–6 (23 ref.)

Measured energy expenditure in pediatric intensive care patients. Tilden SJ, et al. **Am J Dis Child** 1989 Apr; 143(4):490–2

The essentiality of n-3 fatty acids for the development and function of the retina and brain. Neuringer M, et al. **Annu Rev Nutr** 1988;8:517–41 (170 ref.)

Chromium in human nutrition. Offenbacher EG, et al. **Annu Rev Nutr** 1988;8:543–63 (119 ref.)

Molybdenum: an essential trace element in human nutrition. Rajagopalan KV. **Annu Rev Nutr** 1988;8:401–27 (100 ref.)

Oats in human nutrition. Schürch A. **Arch Tierernahr** 1989 Jul;39(7):603–10 (27 ref.)

Nutritional requirements and energy expenditure by indirect calorimetry in uremic patients during conservative management. Di Paolo N, et al. **Contrib Nephrol** 1988; 65:60–71

The 'normal' food intake. Strauch M, et al. **Contrib Nephrol** 1989;72:1–10 (42 ref.)

Nutritional requirements of the aged. Bidlack WR, et al. **CRC Crit Rev Food Sci Nutr** 1988;27(3):189–218 (238 ref.)

Guidelines for administration of total parenteral nutrition: measured versus predicted energy needs. Vignati P, et al. **Curr Surg** 1988 Nov–Dec;45(6):481–3

Nutrition and oral health in the elderly. Knapp A. **Dent Clin North Am** 1989 Jan;33(1):109–25 (45 ref.)

Is pyridoxine an essential nutrient for bone? Massé P, et al. **Int J Vitam Nutr Res** 1988;58(3):295–9

Nutritional consequences of inflammatory bowel disease on growth. Kirschner BS. **J Am Coll Nutr** 1988 Aug;7(4):301–8 (56 ref.)

The nutrient intake of a group of older South African hospitalized persons. Gouws E, et al. **J Am Diet Assoc** 1989 Feb;89(2):255–7

Use of indirect calorimetry in burn care. Ireton-Jones CS. **J Burn Care Rehabil** 1988 Sep–Oct;9(5):526–9 (22 ref.)

Actual burn nutrition care practices. A national survey (Part II). Williamson J. **J Burn Care Rehabil** 1989 Mar–Apr; 10(2):185–94

Nutritional support in sickle cell anemia: theoretical considerations. Enwonwu CO. **J Natl Med Assoc** 1988 Feb; 80(2):139–44 (51 ref.)

Nutrients as nutrients and nutrients as prophylactic drugs. Draper HH. **J Nutr** 1988 Nov;118(11):1420–1

Demonstration of a choline requirement for optimal keratinocyte growth in a defined culture medium. Gordon

PR, et al. **J Nutr** 1988 Dec;118(12):1487–94
Amino acid requirements for growth of Nile tilapia. Santiago CB, et al. **J Nutr** 1988 Dec;118(12):1540–6
Dietary biotin requirements of young rainbow trout (Salmo gairdneri) determined by weight gain, hepatic biotin concentration and maximal biotin–dependent enzyme activities in liver and white muscle. Woodward B, et al. **J Nutr** 1989 Jan;119(1):54–60
Dietary guidelines for infants [letter] Dewey KG, et al. **Lancet** 1989 Mar 4;1(8636):504
Lack of effects of trans fatty acids on eicosanoid biosynthesis with adequate intakes of linoleic acid. Zevenbergen JL, et al. **Lipids** 1989 Jun;24(6):555–63
Health maintenance issues of the elderly. Nutrition. Rogers EL. **Md Med J** 1989 Feb;38(2):124–6
Vitamin E and human health: is our diet adequate? [letter] McIntosh GH. **Med J Aust** 1989 May 15;150(10):607–8
The activities of the nutrition section: alternatives to intersectoral nutrition planning. Ross JS, et al. **P N G Med J** 1988 Jun;31(2):141–5
Nutrition of marsupial herbivores. Hume ID. **Proc Nutr Soc** 1989 Jan;48(1):69–79 (38 ref.)
Nutrition of farmed rabbits. Partridge GG. **Proc Nutr Soc** 1989 Jan;48(1):93–101 (41 ref.)
Energy requirements of obese children and young adults. Schoeller DA, et al. **Proc Nutr Soc** 1988 Sep;47(3):241–6 (33 ref.)
The use of conventional and unconventional supplements in the Thoroughbred horse. Snow DH, et al. **Proc Nutr Soc** 1989 Jan;48(1):135–9 (27 ref.)
NAS weighs in with 7–lb diet guide [news] Culliton BJ. **Science** 1989 Mar 10;243(4896):1282–3
Maternal and fetal nutrition. **Semin Perinatol** 1989 Jun; 13(3):161–249
Mineral needs of the very–low–birthweight infant. Ehrenkranz RA. **Semin Perinatol** 1989 Apr;13(2):142–59 (136 ref.)
Studies of the dietary habits, food consumption and nutrient intakes of adolescents and young adults. Bull NL. **World Rev Nutr Diet** 1988;57:24–74 (133 ref.)
Nutritional requirements of preterm infants. De Curtis M, et al. **World Rev Nutr Diet** 1989;58:33–60 (77 ref.)
Intake, requirements and metabolism of nutrients in infants. Szotowa W. **World Rev Nutr Diet** 1989;58:61–102 (222 ref.)
[Is vitamin intake by the elderly in The Netherlands precarious?] Löwik MR, et al. **Ned Tijdschr Geneeskd** 1989 Feb 11;133(6):298–302 (Eng. Abstr.) **(Dut)**
[Dietetic principles and family functioning. An analysis of the formation and diffusion of standards in nutritional matters] Cardia–Voneche L, et al. **Cah Sociol Demogr Med** 1988 Apr–Jun;28(2):135–54 **(Fre)**
[Energy metabolism in the pregnant woman] Schutz Y. **Soz Praventivmed** 1989;34(2):63–6 (17 ref.) (Eng. Abstr.) **(Fre)**
[Recommendations for a healthy diet. Scientific principles No. 1. Swiss Society for Social and Preventive Medicine] **Soz Praventivmed** 1989;34(2):94–5 **(Ger)**
[Should dietary recommendations be revised?] Eichholzer M, et al. **Soz Praventivmed** 1989;34(2):81–4 (Eng. Abstr.) **(Ger)**
[Controlled artificial nutrition in advanced age] Weiner R. **ZFA** 1988 Jul–Aug;43(4):179–84 (12 ref.) (Eng. Abstr.) **(Ger)**
[Nutritional recommendations for the healthy adult population in Hungary] **Orv Hetil** 1988 Dec 18; 129(51):2751–2 **(Hun)**
[Report from Brazil—tables of nutrient composition of foods: status in Brazil and requirements] Lajolo FM, et al. **Arch Latinoam Nutr** 1987 Dec;37(4):702–13 **(Por)**
[Use of food chemical composition tables] Dárdano C. **Arch Latinoam Nutr** 1987 Dec;37(4):618–37 **(Spa)**
[Recommendations of the Nutrition Branch] Schilling E, et al. **Rev Chil Pediatr** 1988 Mar–Apr;59(2):139–43 **(Spa)**
[Nutritional requirements for athletes] Chávez A, et al. **Rev Invest Clin** 1969 Apr–Jun;21(2):131–41 (0 ref.) (Eng. Abstr.) **(Spa)**
[Controlled nutritional support in hospitalized patients] Hirsch S, et al. **Rev Med Chil** 1988 Apr;116(4):318–24 (Eng. Abstr.) **(Spa)**

NUTRITIONAL STATUS

Anthropometric parameters for preoperative screening to predict high–risk patients. Brenner U, et al. **Acta Chir Belg** 1989 Jan–Feb;89(1):19–24
Nutritional status in patients with acute stroke. Axelsson K, et al. **Acta Med Scand** 1988;224(3):217–24
Growth and nutritional status of rural preschool children in Saudi Arabia. Serenius F, et al. **Acta Paediatr Scand Suppl** 1988;346:104–20
Growth and nutritional status of less privileged urban children in Saudi Arabia. Serenius F, et al. **Acta Paediatr Scand Suppl** 1988;346:93–103
A trial of assessment of the interrelated action of metabolic and sensory factors in the choice of food by rats in various states of protein and calcium nutrition. Gawęcki J, et al. **Acta Physiol Pol** 1988 Jul–Aug;39(4):288–93
Predictive ability of various nutritional variables for mortality in elderly people. Agarwal N, et al. **Am J Clin Nutr** 1988 Nov;48(5):1173–8
Nutritional status, tooth eruption, and dental caries: a review. Alvarez JO, et al. **Am J Clin Nutr** 1989 Mar;49(3):417–26 (100 ref.)
Fortification of curry powder with NaFe(111)EDTA in an iron–deficient population: initial survey of iron status. Ballot DE, et al. **Am J Clin Nutr** 1989 Jan;49(1):156–61
Normal vitamin E status in sickle hemoglobinopathies in Colorado. Broxson EH Jr, et al. **Am J Clin Nutr** 1989 Sep; 50(3):497–503
Nutritional survey of the US Navy SEAL trainees. DeBolt JE, et al. **Am J Clin Nutr** 1988 Nov;48(5):1316–23
Zinc status of highly trained women runners and untrained women. Deuster PA, et al. **Am J Clin Nutr** 1989 Jun; 49(6):1295–301
Nutrition studies in Thailand: effects of calories, nutrient supplements, and health interventions on growth of preschool Thai village children. Gershoff SN, et al. **Am J Clin Nutr** 1988 Nov;48(5):1214–8
Biotin nutritional status of vegans, lactoovovegetarians, and nonvegetarians. Lombard KA, et al. **Am J Clin Nutr** 1989 Sep;50(3):486–90
Dose–response relationships regarding vitamin B–6 in elderly people: a nationwide nutritional survey (Dutch Nutritional Surveillance System). Löwik MR, et al. **Am J Clin Nutr** 1989 Aug;50(2):391–9
Nutrition and fitness in elderly people. Rudman D. **Am J Clin Nutr** 1989 May;49(5 Suppl):1090–8 (89 ref.)
Fasting plasma amino acids in elderly men. Rudman D, et al. **Am J Clin Nutr** 1989 Mar;49(3):559–66
Long–term nutritional status of an enterally nourished institutionalized population. Van Calcar SC, et al. **Am J Clin Nutr** 1989 Aug;50(2):381–90
Nutritional status of free–living Alzheimer's patients. Renvall MJ, et al. **Am J Med Sci** 1989 Jul;298(1):20–7
Nutritional status of Efe pygmies and Lese horticulturists. Dietz WH, et al. **Am J Phys Anthropol** 1989 Apr; 78(4):509–18
The evaluation of erythrocyte thiamin diphosphate as an indicator of thiamin status in man, and its comparison with erythrocyte transketolase activity measurements. Baines M, et al. **Ann Clin Biochem** 1988 Nov;25 (Pt 6):698–705
Effect of olfactory deficits on nutritional status. Does age predict persons at risk? Ferris AM, et al. **Ann N Y Acad Sci** 1989;561:113–23
Use of flavor–amplified foods to improve nutritional status in elderly patients. Schiffman SS, et al. **Ann N Y Acad Sci** 1989;561:267–76
Nutritional status and psychometric test scores in cognitively impaired elders. Spindler AA, et al. **Ann N Y Acad Sci** 1989;561:167–77
Predicting mortality based on body composition analysis. Tellado JM, et al. **Ann Surg** 1989 Jan;209(1):81–7
The impact of nutrition on thyroid hormone physiology and action. Danforth E Jr, et al. **Annu Rev Nutr** 1989;9:201–27 (116 ref.)
Cachectin: its impact on metabolism and nutritional status. Moldawer LL, et al. **Annu Rev Nutr** 1988;8:585–609 (136 ref.)
Making sense of the hair zinc literature: where do we go from here? Dorea JG, et al. **Arch Latinoam Nutr** 1988 Mar; 38(1):93–112 (202 ref.)
Preschool child feeding, health and nutritional status in Gualaceo, Ecuador. Novotny R. **Arch Latinoam Nutr** 1987 Sep;37(3):417–43
Circulating levels of selenium and zinc in relation to nutritional status in patients with head and neck cancer. Westin T, et al. **Arch Otolaryngol Head Neck Surg** 1989 Sep;115(9):1079–82
Nutritional status during the acute stage of spinal cord injury. Laven GT, et al. **Arch Phys Med Rehabil** 1989 Apr; 70(4):277–82
The cadmium status of horses from central Europe depending on breed, sex, age and living area. Anke M, et al. **Arch Tierernahr** 1989 Jul;39(7):657–83
Independent effects of diet and nutritional status on apoprotein B gene expression in rabbit. Fisher EA, et al. **Arterioscler Thromb** 1988 Nov–Dec;8(6):797–803
Nutrition and growth. A review. Susanne C. **Arztl Jugendkd** 1989;80(1):37–40 (30 ref.)
Impact of a school milk programme on the nutritional status of school children. Chen ST. **Asia Pac J Public Health** 1989;3(1):19–25
Nutritional status of home hemodialysis patients. Talemaitoga AS, et al. **Aust N Z J Med** 1989 Aug;19(4):303–9
Protein depletion and surgical risk. Windsor JA, et al. **Aust N Z J Surg** 1988 Sep;58(9):711–5
Effect of nutritional status on insulin sensitivity in vivo and tissue enzyme activities in the rat. Kruszynska YT, et al. **Biochem J** 1989 Mar 15;258(3):699–707
Effect of nutritional status on acute phase protein response to elective surgery. Cruickshank AM, et al. **Br J Surg** 1989 Feb;76(2):165–8
Surgical nutrition: time for some clinical common sense. Hill GL. **Br J Surg** 1988 Aug;75(8):729–30
Symposium on nutrition and AIDS. **Bull Pan Am Health Organ** 1989;23(1–2):206–7
Anthropometric assessment of the nutritional status of preschool–age children in Cape Verde. Wennberg A. **Bull WHO** 1988;66(3):375–86
Assessment of nutritional status: effects of different methods to determine age on the classification of undernutrition. Gorstein J. **Bull WORLD Health Organ** 1989;67(2):143–50
Nutritional interventions through primary health care: impact of the ICDS projects in India. Tandon BN. **Bull WORLD Health Organ** 1989;67(1):77–80
Changes in cellular immunity and nutritional status in mice after thermal injury. Guo CJ, et al. **Burns Incl Therm Inj** 1988 Dec;14(6):429–34
Nutritional status of firefighters. Friel JK, et al. **Can J Public Health** 1988 Jul–Aug;79(4):275–6
Symptoms potentially influencing weight loss in a cancer population. Correlations with primary site, nutritional status, and chemotherapy administration. Grosvenor M, et al. **Cancer** 1989 Jan 15;63(2):330–4
Nutritional status of 6,867 primary school children in the Masvingo District. Schuon R, et al. **Cent Afr J Med** 1988 Aug;34(8):185–9
Inventory of nutritional status in patients with COPD. Schols A, et al. **Chest** 1989 Aug;96(2):247–9
Usefulness of data on albumin and prealbumin concentrations in determining effectiveness of nutritional support. Bernstein LH, et al. **Clin Chem** 1989 Feb;35(2):271–4
Short–term and long–term variability of indices related to nutritional status. I: Ca, Cu, Fe, Mg, and Zn. Gallagher SK, et al. **Clin Chem** 1989 Mar;35(3):369–73
Nutritional status of patients with acquired immunodeficiency syndrome. Huang CM, et al. **Clin Chem** 1988 Oct; 34(10):1957–9
Quantifying manganese in lymphocytes to assess manganese nutritional status. Matsuda A, et al. **Clin Chem** 1989 Sep; 35(9):1939–41
More on albumin and thyroid hormones [letter] Price A, et al. **Clin Chem** 1989 Sep;35(9):2017
TSF, RBP and TBPA as nutritional indices in surgical patients with gynecological cancer. Pittoni G, et al. **Clin Exp Obstet Gynecol** 1989;16(1):48–51
An attempt to identify and describe a group of non–institutionalised elderly with the lowest nutrient score. Sem SW, et al. **Compr Gerontol [A]** 1988 Jun;2(2):60–6
Prealbumin: a biochemical marker of nutritional support. Pleban WE. **Conn Med** 1989 Jul;53(7):405–7 (12 ref.)
The assessment of nutritional status in chronically uremic patients. Guarnieri G, et al. **Contrib Nephrol** 1989;72:73–103 (157 ref.)
Nutritional monitoring in the ICU: rational and practical application. Negro F, et al. **Crit Care Clin** 1988 Jul; 4(3):559–72 (47 ref.)
Relationship of visceral proteins to nutritional status in chronic and acute stress. Boosalis MG, et al. **Crit Care Med** 1989 Aug;17(8):741–7
Nutrition in pulmonary tuberculosis: a comparison of African patients from Malawi and Nigeria. Nkhoma WA, et al. **East Afr Med J** 1987 Oct;64(10):643–7
Comparison of anamnestic history, alcohol intake and smoking, nutritional status, and liver dysfunction between thorotrast patients who developed primary liver cancer and those who did not. Kiyosawa K, et al. **Environ Res** 1989 Aug;49(2):166–72
The nutritional status of pregnant and non–pregnant mares grazing South East Queensland pastures. Gallagher JR, et al. **Equine Vet J** 1988 Nov;20(6):414–6
Nutritional adaptation and variability. Three commentaries on the paper by Professor P.V. Sukhatme. **Eur J Clin Nutr** 1989 Mar;43(3):203–10
Nutritional status of infants aged 4 to 18 months on macrobiotic diets and matched omnivorous control infants: a population–based mixed–longitudinal study. I. Weaning pattern, energy and nutrient intake. Dagnelie PC, et al. **Eur J Clin Nutr** 1989 May;43(5):311–23
Nutritional status of infants aged 4 to 18 months on macrobiotic diets and matched omnivorous control infants: a population–based mixed–longitudinal study. II. Growth and psychomotor development. Dagnelie PC, et al. **Eur J Clin Nutr** 1989 May;43(5):325–38
Between–group differences in basal metabolic rates: an analysis of data collected in Scotland, the Gambia and Thailand. Lawrence M, et al. **Eur J Clin Nutr** 1988 Oct; 42(10):877–91
Dietary intakes and nutritional status of old people with dementia living at home in Oslo. Nes M, et al. **Eur J Clin Nutr** 1988 Jul;42(7):581–93
Comparison of Gomez and Waterlow classifications in a follow–up study among pre–school children. Rao S, et al. **Eur J Clin Nutr** 1988 Oct;42(10):863–9
Vitamin A and E status in healthy elderly Chinese in Hong Kong. Woo J, et al. **Eur J Clin Nutr** 1988 Aug;42(8):689–95
Investigation of the nutritional state of children in a Congolese village. I. Anthropometrical data, plasma prealbumin, albumin, immunoglobulins, ferritin, C–reactive protein, circulating immune complexes. Leichsenring M, et al. **Eur J Pediatr** 1988 Nov;148(2):155–8
Investigation of the nutritional state of children in a Congolese village. II. Plasma fatty acid composition. Leichsenring M, et al. **Eur J Pediatr** 1988 Nov; 148(2):159–63
Nutritional and pathological changes in male and female rats fed modifications of the AIN–76A diet. Mitchell GV, et al. **Food Chem Toxicol** 1989 Mar;27(3):185–91
Nutrition assessment in the adult day care center. Vickery CE, et al. **Geriatr Nurs (New York)** 1988 Sep–Oct; 9(5):292–5
What is the nutritional status of the elderly? Zheng JJ, et al. **Geriatrics** 1989 Jun;44(6):57–8, 60, 63–4
Markers of the nutritional status in acutely ill elderly patients. Finucane P, et al. **Gerontology** 1988;34(5–6):304–10

Differential correlates of nutritional status in Kinshasa, Zaire. Bertrand WE, et al. **Int J Epidemiol** 1988 Sep;17(3):556–67

Nutritional status of poor preschool children in a defined area in Java—can weight monitoring influence nutrition? Geefhuysen J, et al. **Int J Epidemiol** 1988 Dec;17(4):849–57

Food intake and body composition in novice athletes during a training period to run a marathon. Janssen GM, et al. **Int J Sports Med** 1989 May;10 Suppl 1:S17–21

Anemia and iron status in the free-living and institutionalized elderly in Kentucky. Chen LH, et al. **Int J Vitam Nutr Res** 1989;59(2):207–13

Nutrition of the elderly in a Mediterranean city in Spain: effects of life-style patterns. Fernández-Ballart J, et al. **Int J Vitam Nutr Res** 1989;59(1):8–13

Comparison of methods for thiamin and riboflavin nutriture in man. Fidanza F, et al. **Int J Vitam Nutr Res** 1989; 59(1):40–7

Intrahepatic distribution of vitamin A in humans and rats. Flores H, et al. **Int J Vitam Nutr Res** 1988;58(3):276–80

Relationship between serum ferritin, erythrocyte protoporphyrin and transferrin saturation in Mauritanian free living children. Galan P, et al. **Int J Vitam Nutr Res** 1989;59(2):214–8

Nutritional status, grip strength, and immune function in institutionalized elderly. Subotičanec K, et al. **Int J Vitam Nutr Res** 1989;59(1):20–8

Nutritional status in Linxian, China: effects of season and supplementation. Zheng SF, et al. **Int J Vitam Nutr Res** 1989;59(2):190–9

Applied kinesiology—what does the term mean? [letter] **J Am Diet Assoc** 1989 Apr;89(4):476, 478

Eating problems and nutritional status during hospital stay of patients with severe stroke. Axelsson K, et al. **J Am Diet Assoc** 1989 Aug;89(8):1092–6

The nutrient intake of a group of older South African hospitalized persons. Gouws E, et al. **J Am Diet Assoc** 1989 Feb;89(2):255–7

Nutritional status and phytate:zinc and phytate x calcium:zinc dietary molar ratios of lacto-ovo vegetarian Trappist monks: 10 years later. Harland BF, et al. **J Am Diet Assoc** 1988 Dec;88(12):1562–6

Nutritional risk screening: development of a standardized protocol using dietetic technicians. Hedberg AM, et al. **J Am Diet Assoc** 1988 Dec;88(12):1553–6

Validation of a nutrient adequacy score for use with women and children. Krebs-Smith SM, et al. **J Am Diet Assoc** 1989 Jun;89(6):775–83

Demographic profile and nutrient intake assessment of individuals using emergency food programs. Lenhart NM, et al. **J Am Diet Assoc** 1989 Sep;89(9):1269–72

Food stamp use and the nutrition practices of participants in the Colorado Expanded Food and Nutrition Education Program. Lopez L, et al. **J Am Diet Assoc** 1989 Sep; 89(9):1312–3

Nutrient intake of marathon runners. Nieman DC, et al. **J Am Diet Assoc** 1989 Sep;89(9):1273–8

Nutrition and growth retardation in 10 children with congenital deaf-blindness. Thommessen M, et al. **J Am Diet Assoc** 1989 Jan;89(1):69–73

Effect of household size on nutritional patterns among the Dutch elderly. Westenbrink S, et al. **J Am Diet Assoc** 1989 Jun;89(6):793–9

Using plasma proteins for nutrition assessment [letter] Wunderlich SM. **J Am Diet Assoc** 1989 Sep;89(9):1236

Infection in bone allografts. Incidence, nature, and treatment [letter] Gaines ST. **J Bone Joint Surg [Am]** 1988 Oct; 70(9):1430–1

Assessment of nutritional status in burn patients. Murphy M, et al. **J Burn Care Rehabil** 1988 Jul–Aug;9(4):432–3

Absence of relation between nutritional parameters and renal function in non-seminomatous testicular cancer patients. Gietema JA, et al. **J Cancer Res Clin Oncol** 1988; 114(6):618–22

Vitamin C status and other nutritional indices in patients with stroke and other acute illnesses: a case-control study. Barer D, et al. **J Clin Epidemiol** 1989;42(7):625–31

A preliminary survey of parasitic infections and nutritional status among school children in Riyadh, Saudi Arabia. Ahmed MM, et al. **J Egypt Soc Parasitol** 1989 Jun; 19(1):101–5

Influence of nutritional status and oestradiol-17 beta on plasma growth hormone, insulin-like growth factors-I and -II and the response to exogenous growth hormone in young steers. Breier BH, et al. **J Endocrinol** 1988 Aug; 118(2):243–50

Influence of nutritional state on the disposal of orally and intramuscularly administered iodized oil to iodine repleted older children and adult women. Fierro-Benitez R, et al. **J Endocrinol Invest** 1989 Jun;12(6):405–7

Biochemical and nutritional status of children with hyperphenylalaninaemia. Nord AM, et al. **J Inherited Metab Dis** 1988;11(4):431–2

Visceral organ size and hepatocyte metabolic activity in fed and fasted rats. Burrin DG, et al. **J Nutr** 1988 Dec; 118(12):1547–52

Biochemical markers for assessment of niacin status in young men: urinary and blood levels of niacin metabolites. Jacob RA, et al. **J Nutr** 1989 Apr;119(4):591–8

Minerals and vitamin-A status in relation to gustatory functions for salt in healthy female college students. Suzuki T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Apr; 34(2):209–22

A nutritional evaluation of vitamin E status in very low birth weight infants with respect to changes in plasma and red blood cell tocopherol levels. Tanaka H, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Jun;34(3):293–307

Optimal protein intake estimated by the resistance to streptococcal infection and the nutritional indices in mice. Yamamoto S, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Aug; 34(4):423–32

Nutritional effects of postgastrectomy reconstruction: a clinical evaluation. Zelnick R, et al. **J Surg Oncol** 1989 Apr;40(4):219–21

Urinary cadmium and beta 2-microglobulin: correlation with nutrition and smoking history. Kowal NE. **J Toxicol Environ Health** 1988;25(2):179–83

Relationship between maternal and infant nutritional status. Christian PS, et al. **J Trop Pediatr** 1989 Apr;35(2):71–6

Specific antibodies in colostrum of north Indian mothers with special reference to their nutritional status. Garg M, et al. **J Trop Pediatr** 1989 Apr;35(2):60–5

A study on nutritional status of adolescent and adult pregnant and lactating women and growth of their infants. Geervani P, et al. **J Trop Pediatr** 1988 Oct;34(5):234–7

Food and nutrient intake of preschool children of coastal India [letter] Madhyastha MS, et al. **J Trop Pediatr** 1988 Dec;34(6):332–3

Nutritional anaemia in the urban poor: a community-based study of under fives in an Indian slum. Malin AS, et al. **J Trop Pediatr** 1988 Oct;34(5):257–9

The nutritional status of breast-fed infants in a rural Peruvian community. Rosenblatt WH, et al. **J Trop Pediatr** 1988 Dec;34(6):319–22

Effects of artificial nutrition on the nutritional status of cancer patients. Bozzetti F. **JPEN J Parenter Enteral Nutr** 1989 Jul–Aug;13(4):406–20 (118 ref.)

Comparison of forearm muscle dynamometry with nutritional prognostic index, as a preoperative indicator in cancer patients. Kalfarentzos F, et al. **JPEN J Parenter Enteral Nutr** 1989 Jan–Feb;13(1):34–6

Insulin-like growth factor-I in human malnutrition: relationship with some body composition and nutritional parameters. Minuto F, et al. **JPEN J Parenter Enteral Nutr** 1989 Jul–Aug;13(4):392–6

Improvement of nutritional measures during preoperative parenteral nutrition in patients selected by the prognostic nutritional index: a randomized controlled trial. Smith RC, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec; 12(6):587–91

Preoperative nutritional assessment to predict postoperative complication in gastric cancer patients. Yamanaka H, et al. **JPEN J Parenter Enteral Nutr** 1989 May–Jun; 13(3):286–91

Malnutrition of children under 5—findings from Mahmoodabad survey. Qureshi F, et al. **JPMA** 1989 Jan; 39(1):3–6

Effect of energy intake on nutritional status in maintenance hemodialysis patients. Slomowitz LA, et al. **Kidney Int** 1989 Feb;35(2):704–11

Diarrhoea and malnutrition [letter] **Lancet** 1989 Sep 16; 2(8664):691–2

Nutritional improvement without better health: Santa Maria Cauqué, 15 years later [letter] Delgado HL, et al. **Lancet** 1988 Dec 3;2(8623):1303–4

Nutritional lessons from war-time Sierra Leone [letter] Yudkin J. **Lancet** 1989 Aug 19;2(8660):452–3

Assessment of nutritional status of patients with end-stage liver disease undergoing liver transplantation. DiCecco SR, et al. **Mayo Clin Proc** 1989 Jan;64(1):95–102

Nutritional assessment of intensive-care unit patients. Murray MJ, et al. **Mayo Clin Proc** 1988 Nov;63(11):1106–15

Unsatisfactory nutritional parameters in non-insulin-dependent diabetes mellitus. Campbell LV, et al. **Med J Aust** 1989 Aug 7;151(3):146, 149–50

Nutritional, physiological, and menstrual status of distance runners. Kaiserauer S, et al. **Med Sci Sports Exerc** 1989 Apr;21(2):120–5

Nutritional status of Somali refugees—eastern Ethiopia, September 1988–May 1989. **MMWR** 1989 Jul 7; 38(26):455–6, 461–3

Nutritional and health assessment of Mozambican refugees in two districts of Malawi, 1988. **MMWR** 1988 Oct 28; 37(42):641–3

Feeding the elderly patient. Pories WJ. **N C Med J** 1988 Dec;49(12):632–5

Diet, nutritional status, and cancer risk in American blacks. Hargreaves MK, et al. **Nutr Cancer** 1989;12(1):1–28 (102 ref.)

The state of food production and nutrition in the developing countries. Ghebremeskel K. **Nutr Health** 1989;6(3):121–8 (17 ref.)

Nutritional monitoring and counselling for cancer patients during chemotherapy. Henquin N, et al. **Oncology** 1989; 46(3):173–7

Nutrition, health and education of women in Papua New Guinea. Groos AD, et al. **P N G Med J** 1988 Jun; 31(2):117–23 (37 ref.)

Nutritional status of young children—the 1982/83 National Nutrition Survey. Heywood P, et al. **P N G Med J** 1988 Jun;31(2):91–101

Laboratory tests and nutritional assessment. Protein-energy status. Benjamin DR. **Pediatr Clin North Am** 1989 Feb; 36(1):139–61 (101 ref.)

The effects of altered nutritional status upon insulin-like growth factors and their binding proteins in neonatal rats. Philipps A, et al. **Pediatr Res** 1989 Aug;26(2):128–34

Dietary intake and clinical, anthropometric and biochemical indices of malnutrition in elderly demented patients and non-demented subjects. Burns A, et al. **Psychol Med** 1989 May;19(2):383–91

Nutritional assessment of surgical patients. Brown CS, et al. **QRB** 1988 Oct;14(10):302–6

Prognostic significance of nutritional status in cancer surgery. Schlag P, et al. **Recent Results Cancer Res** 1988;108:154–9

Effects of a cysteine precursor, L-2-oxothiazolidine-carboxylate, nutritional status, and sex on tissue glutathione and hepatic GSH-utilizing enzymes of CD-1 mice [published erratum appears in Res Commun Chem Pathol Pharmacol 1988 Sep;61(3):432] Moslen MT, et al. **Res Commun Chem Pathol Pharmacol** 1988 Jul;61(1):49–63

Nutritional status of institutionalized children and adolescents with developmental disabilities. Pesce KA, et al. **Res Dev Disabil** 1989;10(1):33–52

Relationship between milk lactose tolerance and body mass in teenage Tswana schoolchildren. de Villiers FP. **S Afr Med J** 1988 Nov 19;74(10):499–501

A critical assessment of the width coefficient, K, as an indicator of nutritional status [letter] de Villiers FP. **S Afr Med J** 1988 Nov 19;74(10):533–4

Preoperative nutrition. Sandstedt S. **Scand J Gastroenterol Suppl** 1988;149:90–2

Nutrition and the commoditization of food in sub-Saharan Africa. Bryceson DF. **Soc Sci Med** 1989;28(5):425–40 (143 ref.)

Nutrition and the commoditization of food systems in Latin America and the Caribbean. Dewey KG. **Soc Sci Med** 1989; 28(5):415–24 (32 ref.)

Commodity relations and nutrition under apartheid: a note on South Africa. Wisner B. **Soc Sci Med** 1989;28(5):441–6 (69 ref.)

Assessment of nutritional status in noninstitutionalized elderly. Powers JS, et al. **South Med J** 1989 Aug; 82(8):990–4

Comparison of diet and nutritional status between normal and diabetic subjects. Tai TY, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Sep;87(9):877–84

Parasitism and nutritional status of poor suburban Jamaican toddlers. Figaro-Fletcher PD, et al. **West Indian Med J** 1988 Sep;37(3):152–7

The use of anthropometry to assess nutritional status. Gorstein J, et al. **World Health Stat Q** 1988;41(2):48–58

Relationships between nutrient intake, nutritional status and activity levels in an elderly and in a younger population; a comparison of physically more active and more inactive people. Mensink GB, et al. **Z Gerontol** 1989 Jan–Feb; 22(1):16–25

[Nutrition and neoplasms] Chen RB. **Sheng Li Ko Hsueh Chin Chan** 1988 Oct;19(4):373–6 (14 ref.) **(Chi)**

[Socioeconomic differences in nutrition and nutritional status in 10–11-year-old boys] van Poppel G, et al. **Ned Tijdschr Geneeskd** 1989 Jun 17;133(24):1223–7 (Eng. Abstr.) **(Dut)**

[Nutritional evaluation after serious head injury] Millet A, et al. **Agressologie** 1988 May;29(6):413–8 (Eng. Abstr.) **(Fre)**

[Anorexia nervosa: absence of sensitivity to nutritional protein markers. Study of 23 patients and comparison to a paired group with colonic Crohn's disease] Rigaud D, et al. **Ann Med Interne (Paris)** 1989;140(2):86–90 (Eng. Abstr.) **(Fre)**

[Characterization of the nutritional status of wild boars in forest surroundings on the basis of mesenteric fat and blood parameters] Mauget R, et al. **Reprod Nutr Dev** 1988; 28(4A):969–78 (Eng. Abstr.) **(Fre)**

[The prevalence of emaciation in 2 populations (nomadic herdsmen and sedentary agricultural workers) of the Gao region in Mali] Villeneuve P. **Rev Epidemiol Sante Publique** 1988;36(6):421–8 (Eng. Abstr.) **(Fre)**

[The effect of the nutritional status of rats on the protein biosynthetic activity in a cell-free system] Schröder A, et al. **Arch Tierernahr** 1988 Sep;38(9):727–34 (Eng. Abstr.) **(Ger)**

[Preoperative nutritional status of neurosurgery patients] Piek J, et al. **Infusionstherapie** 1989 Jun;16(3):102–5 (Eng. Abstr.) **(Ger)**

[Effect of an egg-milk-vegetarian diet on nutritional and blood status. II. Findings of a study on circulation, blood status; discussion] Wirths W, et al. **Z Ernahrungswiss** 1988 Jun;27(2):84–100 (Eng. Abstr.) **(Ger)**

[Evaluation of the nutritional status in relation to age at dialysis] Bernardi A, et al. **G Clin Med** 1988 Mar; 69(3):169–73 (Eng. Abstr.) **(Ita)**

[Proposal for a computerized program in the evaluation of nutritional status] Pinto E, et al. **Minerva Dietol Gastroenterol** 1988 Apr–Jun;34(2):69–72 (Eng. Abstr.) **(Ita)**

[Effects of various nutritional conditions on IgE antibody formation in mice] Kobayashi N, et al. **Arerugi** 1988 Oct; 37(10):1022–6 (Eng. Abstr.) **(Jpn)**

[Nutritional assessments in the long-term survivors following massive resection of the small intestine] Hatakeyama K, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1414–7 (Eng. Abstr.) **(Jpn)**

[Effect of nutritional treatment of esophageal cancer patients on pre and post-operative hemodynamic changes and postoperative lung complications] Yoshihara H. **Nippon Geka Gakkai Zasshi** 1988 Jun;89(6):815–21 (Eng. Abstr.) **(Jpn)**

[Nutritional assessment of postoperative gastric cancer patients using rapid-turnover proteins] Takada Y, et al. **Nippon Geka Hokan** 1988 Jul 1;57(4):287–92 (Eng. Abstr.) **(Jpn)**

[Levels of selected mineral components in the hair as a criterion in the evaluation of nutritional status] Hamulka J, et al. **Rocz Panstw Zakl Hig** 1988;39(4):264–71 (Eng. Abstr.) **(Pol)**

[Pregnancy and nutrition: a case-control study in Ribeira de Pena] Loureiro I. **Acta Med Port** 1988 Jan–Feb; 1(1):37–44 (Eng. Abstr.) **(Por)**

[Nutrition in hemodialysis patients] Riella MC. **AMB Rev Assoc Med Bras** 1987 Sep–Oct;33(9–10):191–3 **(Por)**

[Nutritional status indicators in the Polonoroeste area. III. Clinico-nutritional study] Albuquerque MC, et al. **Rev Inst Med Trop Sao Paulo** 1988 May–Jun;30(3):179–84 (Eng. Abstr.) **(Por)**

[Nutritional status indicators in the Polonoroeste area. VII. A prevalence study of malnutrition and diarrhea, 1985] da Silva MH, et al. **Rev Inst Med Trop Sao Paulo** 1988 May–Jun;30(3):202–7 (Eng. Abstr.) **(Por)**

[Nutritional status indicators in the Polonoroeste area. IV. Diet surveys in families in 6 cities of the Polonoroeste area, Mato Grosso, Brazil, 1983] da Silva RR, et al. **Rev Inst Med Trop Sao Paulo** 1988 May–Jun;30(3):185–91 (Eng. Abstr.) **(Por)**

[Nutritional status indicators in the Polonoroeste area. V. Protein-calorie malnutrition and intestinal parasitic diseases in a group of children from 3 to 72 months in Mirassol D'Oeste city, Mato Grosso, Brazil] Latorraca MQ, et al. **Rev Inst Med Trop Sao Paulo** 1988 May–Jun;30(3):192–6 (Eng. Abstr.) **(Por)**

[Nutritional status indicators in the Polonoroeste area. VI. Anthropometric study, 1985] Spinelli MA, et al. **Rev Inst Med Trop Sao Paulo** 1988 May–Jun;30(3):197–201 (Eng. Abstr.) **(Por)**

[Nutritional status indicators in the Polonoroeste area. I. Methodologic aspects and socioeconomic characteristics] Spinelli MA, et al. **Rev Inst Med Trop Sao Paulo** 1988 May–Jun;30(3):169–73 (Eng. Abstr.) **(Por)**

[Nutritional status indicators in the Polonoroeste area. II. Anthropometric study—1983] Yokoo EM, et al. **Rev Inst Med Trop Sao Paulo** 1988 May–Jun;30(3):174–8 (Eng. Abstr.) **(Por)**

[Subjective nutritional assessment of surgical patients with cancer. Preliminary results] Faintuch J, et al. **Rev Paul Med** 1988 May–Jun;106(3):155–60 (Eng. Abstr.) **(Por)**

[Histochemical study of the skeletal muscle in malnourished patients] Lancellotti CL, et al. **Rev Paul Med** 1988 Jul–Aug; 106(4):190–6 (Eng. Abstr.) **(Por)**

[Growth and nutritional status of children (letter)] dos Anjos LA. **Rev Saude Publica** 1988 Oct;22(5):464–5 **(Por)**

[Evaluation of the nutritional status of children under 5 years of age in the State of Rondônia-Brazil] Ferreira H da S, et al. **Rev Saude Publica** 1988 Jun;22(3):179–83 (Eng. Abstr.) **(Por)**

[Growth profile of children attending a supplementary food program] Lerner BR, et al. **Rev Saude Publica** 1988 Oct; 22(5):436–40 (Eng. Abstr.) **(Por)**

[Relation of the nutritional characteristics of the population to the blood plasma level of high-density lipoprotein cholesterol] Davydenko NV, et al. **Ter Arkh** 1988; 60(12):118–21 (Eng. Abstr.) **(Rus)**

[The nutrition of cyclists during training exercises and competitions] Korovnikov KA, et al. **Vopr Pitan** 1988 Sep–Oct;(5):40–3 (Eng. Abstr.) **(Rus)**

[Criteria for assessment of nutritional status] Pietrzik K. **Vopr Pitan** 1989 Jan–Feb;(1):69–75 **(Rus)**

[Nutritional status of workers with different levels of work capacity] Zemlianskaia TA, et al. **Vopr Pitan** 1988 Sep–Oct; (5):30–4 (Eng. Abstr.) **(Rus)**

[The effect of nutrition and planned physical activity on the nutritional status, development and physical fitness in soldiers] Pavlica M, et al. **Vojnosanit Pregl** 1988 Jul–Aug; 45(4):254–8 (Eng. Abstr.) **(Scr)**

[Nutritional status, physical development and physical fitness of soldiers before and after training] Sovtić P, et al. **Vojnosanit Pregl** 1989 Jan–Feb;46(1):7–10 (Eng. Abstr.) **(Scr)**

[Politico-administrative distribution of nutritional status according to a height census of 1st grade school children in Panama] Parillón C, et al. **Arch Latinoam Nutr** 1988 Mar;38(1):42–54 (Eng. Abstr.) **(Spa)**

[Nutrition and catabolism in critically ill medical patients] Gazitúa R, et al. **Rev Med Chil** 1987 Oct;115(10):925–30 (Eng. Abstr.) **(Spa)**

[Controlled nutritional support in hospitalized patients] Hirsch S, et al. **Rev Med Chil** 1988 Apr;116(4):318–24 (Eng. Abstr.) **(Spa)**

[Program of care of the diabetic patient at the primary level] Valenzuela MA, et al. **Rev Med Chil** 1987 Oct; 115(10):1001–3 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Effectiveness of enteric-coated preparations on nutritional parameters in cystic fibrosis. A long-term study. Carroccio A, et al. **Digestion** 1988;41(4):201–6

Nutritional and haematological status of Chinese farmers: the influence of 13.5 months treatment with riboflavin, retinol and zinc. Thurnham DI, et al. **Eur J Clin Nutr** 1988 Aug; 42(8):647–60

Re: The influence of vitamin supplements of micronutrient levels in healthy elderly subjects [letter] Powers JS, et al. **J Am Coll Nutr** 1989 Apr;8(2):171–2

[Influence of twice-daily injections of GRF 1–29 on production, feed intake and nutritional status of lactating goats] Sauvant D, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:179–80 (Eng. Abstr.) **(Fre)**

STANDARDS

[New norms and advices in the evaluation of anthropometric parameters in our population: adipose tissue-muscle index, weight indices and percentile tables of anthropometric data useful in nutritional assessment] Alastrué Vidal A, et al. **Med Clin (Barc)** 1988 Jul 2;91(6):223–36 **(Spa)**

STATISTICS & NUMERICAL DATA

Leads from the MMWR. Progress toward the 1990 objectives for improved nutrition. **JAMA** 1988 Dec 23–30; 260(24):3570, 3575–6

NUTRITIVE VALUE

Nutritional evaluation of roasted, flaked and popped A. caudatus. Bressani R, et al. **Arch Latinoam Nutr** 1987 Sep; 37(3):525–31

Oats in human nutrition. Schürch A. **Arch Tierernahr** 1989 Jul;39(7):603–10 (27 ref.)

Manufactured foods that fulfill guidelines. Korver O. **Bibl Nutr Dieta** 1989;(43):232–6

Food biotechnology review: traditional solid-state fermentations of plant raw materials—application, nutritional significance, and future prospects. Paredes-López O, et al. **CRC Crit Rev Food Sci Nutr** 1988; 27(3):159–87 (67 ref.)

Nutrition information on food labels (ADA timely statement). **J Am Diet Assoc** 1989 Feb;89(2):266–8

Development and testing of a statistical and graphics-enhanced nutrient analysis program. Manore MM, et al. **J Am Diet Assoc** 1989 Feb;89(2):246–50

Calculating the nutrient composition of recipes with computers. Powers PM, et al. **J Am Diet Assoc** 1989 Feb; 89(2):224–32

Use of a four-parameter logistic model to evaluate the quality of the protein from three insect species when fed to rats. Finke MD, et al. **J Nutr** 1989 Jun;119(6):864–71

Biological actions of carotenoids. Olson JA. **J Nutr** 1989 Jan; 119(1):94–5

Variability of selected nutrients and contaminants monitored in rodent diets: a 6-year study. Oller WL, et al. **J Toxicol Environ Health** 1989;27(1):47–56

Availability of body magnesium during magnesium deficiency. Wallach S. **Magnesium** 1988;7(5–6):262–70 (43 ref.)

Nutritive value of acetylated and hydrolysed rapeseed proteins in rats. Delisle J, et al. **Plant Foods Hum Nutr** 1987;37(3):265–74

Nutritive value of different grape musts (Vitis vinifera L.). Juhász O, et al. **Plant Foods Hum Nutr** 1987;37(3):275–81

Nutritional evaluation of pigeon pea meal. Nwokolo E. **Plant Foods Hum Nutr** 1987;37(4):283–90

Effect of blanching and drying methods on the nutritional and sensory quality of leafy vegetables. Onayemi O, et al. **Plant Foods Hum Nutr** 1987;37(4):291–8

Chemical composition and nutritional value of Mexican varieties of chickpea (Cicer arietinum L.). Sotelo A, et al. **Plant Foods Hum Nutr** 1987;37(4):299–306

Nutritional and health properties of yogurt. Bourlioux P, et al. **World Rev Nutr Diet** 1988;56:217–58 (96 ref.)

[Effect of processing on the nutritive value of foods. Status in Latin America and the Caribbean, and importance for the preparation of composition tables] Lajolo FM. **Arch Latinoam Nutr** 1987 Dec;37(4):666–72 **(Por)**

[Use of the fruit of pijiguao (Guilielma gasipaes) in human nutrition. I. Antecedents, nutritional and energetic potential and characteristics of the plant and fruit] Delgado CL, et al. **Acta Cient Venez** 1988;39(1):90–5 (Eng. Abstr.) **(Spa)**

[Preparation and evaluation of fish portions from shrimp by-catch] Acosta J, et al. **Arch Latinoam Nutr** 1987 Sep; 37(3):560–77 (Eng. Abstr.) **(Spa)**

[Report of the Instituto Nacional de Nutrición of Venezuela] Adam GE. **Arch Latinoam Nutr** 1987 Dec;37(4):735–50 **(Spa)**

[Report from Ecuador—food composition data in Ecuador] Alvarado JD, et al. **Arch Latinoam Nutr** 1987 Dec; 37(4):723–9 **(Spa)**

[Use of food chemical composition tables] Dárdano C. **Arch Latinoam Nutr** 1987 Dec;37(4):618–37 **(Spa)**

[Effects of treatment with polyvinylpyrrolidone on nutritional quality of sorghum] de Mucciarelli SI, et al. **Arch Latinoam Nutr** 1987 Sep;37(3):547–50 (Eng. Abstr.) **(Spa)**

[Supplementation of wheat flour with chickpea (Cicer arietinum) flour. II. Chemical composition and biological quality of breads made with blends of the same] Estevez AM, et al. **Arch Latinoam Nutr** 1987 Sep;37(3):515–24 (Eng. Abstr.) **(Spa)**

[Report from Colombia] Fajardo L, et al. **Arch Latinoam Nutr** 1987 Dec;37(4):751–62 **(Spa)**

[Report from Perú—chemical composition and nutritive value of native Andean foods] Hernández EM. **Arch Latinoam Nutr** 1987 Dec;37(4):719–22 **(Spa)**

[Report from Venezuela—use of the official table of food composition at present] Jaffé WG, et al. **Arch Latinoam Nutr** 1987 Dec;37(4):730–4 **(Spa)**

[Report from Chile—current status of the food composition tables in Chile] Masson L, et al. **Arch Latinoam Nutr** 1987 Dec;37(4):683–90 **(Spa)**

[INFOODS and food composition data] Rand WM. **Arch Latinoam Nutr** 1987 Dec;37(4):609–17 **(Spa)**

[Use of chigo (Campsiandra comosa Benth) seeds in human nutrition. III. Energetic value of chiga flour] Sánchez JE, et al. **Arch Latinoam Nutr** 1987 Sep;37(3):454–67 (Eng. Abstr.) **(Spa)**

[Use of chickpea (Cicer arietinum L.) in non-dairy formulas. I. Chemical composition and nutritive quality of chickpeas and a comparison with commercial infant formulas] Sotelo A, et al. **Arch Latinoam Nutr** 1987 Sep;37(3):551–9 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

[Effects of the treatment of coffee pulp, fresh or ensilaged, with calcium hydroxide, on its nutritive value] Gómez-Brenes R, et al. **Arch Latinoam Nutr** 1988 Mar; 38(1):173–87 (Eng. Abstr.) **(Spa)**

NUTS

Evaluation of the carcinogenicity of different preparations of areca nut in mice. Rao AR, et al. **Int J Cancer** 1989 Apr 15;43(4):728–32

Immunochemical characterization of cocos nucifera pollen. Jaggi KS, et al. **J Allergy Clin Immunol** 1989 Sep; 84(3):378–85

Infant feeding formulas using coconut oil and the medium chain triglycerides [letter] Blackburn GL, et al. **J Am Coll Nutr** 1989 Jun;8(3):253–4

The effect of cola acuminata and cola nitida on gastric acid secretion. Ibu JO, et al. **Scand J Gastroenterol Suppl** 1986; 124:39–45

Coconut water in the culture of Trypanosomatidae [letter] Marzochi MC, et al. **Trans R Soc Trop Med Hyg** 1988; 82(3):511–2

[Molluscacidal activity of Anacardium occidentale L. (Anacardiaceae)] Laurens A, et al. **Ann Pharm Fr** 1987; 45(6):471–3 (Eng. Abstr.) **(Fre)**

[Use of the fruit of pijiguao (Guilielma gasipaes) in human nutrition. I. Antecedents, nutritional and energetic potential and characteristics of the plant and fruit] Delgado CL, et al. **Acta Cient Venez** 1988;39(1):90–5 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Pine nut allergy in perspective. Falliers CJ. **Ann Allergy** 1989 Mar;62(3):186–9

Poison ivy, mangoes, cashews, and dermatitis [letter] Geller M. **Ann Intern Med** 1989 Jun 15;110(12):1036–7

ANALYSIS

Lipids of high-yielding varieties of cashew (Anacardium occidentale L.). Nagaraja KV. **Plant Foods Hum Nutr** 1987; 37(4):307–11

Action of a thionin isolated from nuts of Pyrularia pubera on human erythrocytes. Osorio e Castro VR, et al. **Toxicon** 1989;27(5):501–10

Hemolytic activity of thionin from Pyrularia pubera nuts and snake venom toxins of Naja naja species: Pyrularia thionin and snake venom cardiotoxin compete for the same membrane site. Osorio e Castro VR, et al. **Toxicon** 1989; 27(5):511–7

[Procyanidin polymers, the crucial ingredients of the almond seed coat] Brieskorn CH, et al. **Z Lebensm Unters Forsch** 1988 Oct;187(4):347–53 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Hyposensitization to poison ivy after working in a cashew nut shell oil processing factory. Reginella RF, et al. **Contact Dermatitis** 1989 Apr;20(4):274–9

POISONING

Anaphylactic reaction to injected hazelnut [letter] Brostoff J. **Lancet** 1989 Aug 19;2(8660):459

NUX VOMICA see **STRYCHNINE**

NYCETIBUS see **LORISIDAE**

NYCTALOPIA

CONGENITAL

Aland Island eye disease (Forsius-Eriksson syndrome) associated with contiguous deletion syndrome at Xp21. Similarity to incomplete congenital stationary night blindness. Weleber RG, et al. **Arch Ophthalmol** 1989 Aug; 107(8):1170–9 (75 ref.)

Large rod-like photopic signals in a possible new form of congenital night blindness. Marmor MF.
Doc Ophthalmol 1989 Mar;71(3):265–9
Incomplete congenital stationary night blindness: electroretinogram c-wave and electrooculogram light rise. Takahashi Y, et al. **Doc Ophthalmol** 1988 Sep;70(1):67–75
Oscillatory potentials of X-linked carriers of congenital stationary night blindness. Young RS, et al.
Invest Ophthalmol Vis Sci 1989 May;30(5):806–12
Rayleigh match in congenital stationary night blindness. Abraham FA, et al. **Metab Pediatr Syst Ophthalmol** 1988; 11(1–2):97–9

DIAGNOSIS

[A variety of stable night blindness—a type of Oguchi disease] Nakova AK. **Vestn Oftalmol** 1989 Jan–Feb; 105(2):67–9 **(Rus)**

ETIOLOGY

Vitamin A deficiency secondary to pancreatic carcinoid. Case report. Rowe PH, et al. **Acta Chir Scand** 1988 Jul–Aug;154(7–8):487–8
Night blindness and conjunctival xerosis caused by vitamin A deficiency in patients with cystic fibrosis. Rayner RJ, et al. **Arch Dis Child** 1989 Aug;64(8):1151–6
The molecular basis of retinoic acid induced night blindness. Law WC, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):825–9
[Visual assessment in reduced background illumination and glare] Nowak MR, et al. **Fortschr Ophthalmol** 1988; 85(5):555–6 (Eng. Abstr.) **(Ger)**

GENETICS

X-linked congenital stationary night blindness. Review and report of a family with hyperopia. Khouri G, et al.
Arch Ophthalmol 1988 Oct;106(10):1417–22 (28 ref.)
X-linked congenital stationary night blindness [letter] Miyake Y. **Arch Ophthalmol** 1989 May;107(5):635–6
Gene of X-chromosomal congenital stationary night blindness is closely linked to DXS7 on Xp. Gal A, et al. **Hum Genet** 1989 Mar;81(4):315–8

PHYSIOPATHOLOGY

Paradoxic pupillary phenomena. A review of patients with pupillary constriction to darkness. Frank JW, et al.
Arch Ophthalmol 1988 Nov;106(11):1564–6
Mechanisms of rod–cone interaction: evidence from congenital stationary nightblindness. Alexander KR, et al. **Vision Res** 1988;28(5):575–83

NYCTIPHANES see **CRUSTACEA**

NYCTOHEMERAL RHYTHM see **CIRCADIAN RHYTHM**

NYLIDRIN

PHARMACOLOGY

The effects of beta-adrenergic agonists on cone systems in the cat eye. Uji Y, et al. **Doc Ophthalmol** 1988 Sep; 70(1):77–87

NYLONS

Cannula thrombophlebitis: a study in volunteers comparing polytetrafluoroethylene, polyurethane, and polyamide–ether–elastomer cannulae. Larsson N, et al.
Acta Anaesthesiol Scand 1989 Apr;33(3):223–31
Nylon affinity tubes. Modification of nylon for coupling nonprotein antigens and its use in affinity trapping of antibodies. Sundaram PV, et al. **Ann N Y Acad Sci** 1988; 542:497–501
A new double-armed microsuture. Hallock GG, et al.
Ann Plast Surg 1988 Aug;21(2):183–5
Sutures for inguinal herniorrhaphy—a comparison of monofilaments with PTFE. Cahill J, et al.
Ann R Coll Surg Engl 1989 Mar;71(2):128–30
Use of a new plasma separation membrane for plasma donation. Technical and biological results. Schooneman F, et al. **Artif Organs** 1988 Dec;12(6):526–9
Surfasoft used for meshed skin grafts [letter] Teepe RG, et al. **Burns Incl Therm Inj** 1988 Jun;14(3):254
Hydroxyapatite-mediated transfer of DNA from diluted solutions to nitrocellulose or nylon membranes. Lichtenstein AV, et al. **J Biochem Biophys Methods** 1989 Feb;18(1):77–83
Comparison of suture materials for closure of the scleral pocket incision. Masket S. **J Cataract Refract Surg** 1988 Sep;14(5):548–51
The nylon wool adherence of rat mononuclear cells: physical, chemical and biological influences. McFadden RG.
J Clin Lab Immunol 1988 Aug;26(4):201–8
Metacarpal fracture fixation with interosseous nylon suture in a patient with metal allergies. Haas SB, et al.
J Hand Surg [Am] 1989 Jan;14(1):107–10
Effect of formulation factors on the matrix pH of nylon microcapsules. Cuff GW, et al. **J Microencapsul** 1984 Jan–Mar;1(1):27–32
Preparation of microencapsulated liposomes, II. Systems containing nylon–gelatin and nylon–gelatin–acacia walling material. Nixon JR, et al. **J Microencapsul** 1989 Jan–Mar; 6(1):43–52
Quantifying thread tension is of clinical use in Stamey bladder neck suspension: analysis of clinical parameters. Kondo A, et al. **J Urol** 1989 Jan;141(1):38–42
Nonabsorbable suture material in corneoscleral sections—a comparison of novafil and nylon. McClellan KA, et al.
Ophthalmic Surg 1989 Jul;20(7):480–5
A simple method for controlling hemorrhage during hepatectomy. Mies S, et al. **Surg Gynecol Obstet** 1989 Mar; 168(3):265–6
[Experiences with transplantation of artificial hair in the replacement of scalp hair and beard hair] Künzler A, et al. **Fortschr Kiefer Gesichtschir** 1989;34:85–7 **(Ger)**
[Microbial contamination of drinking water by a polyamide feedpipe] Schoenen D, et al. **Off Gesundheitswes** 1989 Jun; 51(6):296–8 (Eng. Abstr.) **(Ger)**
[Experimental study of motor nerve repair: comparison of nylon suture and two component fibrin adhesive techniques] Nishihira S.
Nippon Jibiinkoka Gakkai Kaiho 1988 Aug;91(8):1208–12 (Eng. Abstr.) **(Jpn)**
[Development of the orbit in children after removal of the eyeball and the use of a modified Bangerter implant] Golińska A. **Klin Oczna** 1988 Mar;90(3):106–7 (Eng. Abstr.) **(Pol)**
[Fixation of screws in spongy bones using plastic pins] Kramer V, et al. **Ortop Travmatol Protez** 1988 Aug;(8):32–5 (Eng. Abstr.) **(Rus)**
[Our experience with polymeric osteosynthesis in fracture treatment] Rublenik IM, et al. **Ortop Travmatol Protez** 1988 Jul;(7):20–3 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

[Antibacterial sutures "Capromed DQ" in abdominal surgery] Polous IuM, et al. **Klin Khir** 1989;(1):13–5 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Long-term corneal astigmatism related to selected elastic, monofilament, nonabsorbable sutures. Cravy TV.
J Cataract Refract Surg 1989 Jan;15(1):61–9
Nylon suture toxicity after cataract surgery [see comments] Balyeat HD, et al. **Ophthalmology** 1988 Nov;95(11):1509–14 . **Comment in:** Ophthalmology 1989 Jun;96(6):927–8
Suture toxicity [letter; comment] Salamon SM.
Ophthalmology 1989 Jun;96(6):927–8. **Comment on:** Ophthalmology 1988 Nov;95(11):1509–14

ANALYSIS

The in vivo biodegradation of nylon 6 utilized in a particular IUD. Hudson JA, et al. **J Biomater Appl** 1987 Apr; 1(4):487–501

THERAPEUTIC USE

Therapeutic effects of silver nylon dressings with weak direct current on Pseudomonas aeruginosa-infected burn wounds. Chu CS, et al. **J Trauma** 1988 Oct;28(10):1488–92

TOXICITY

[Hygienic evaluation of adhesive materials made of modified polyamide] Chudinskaia TA, et al. **Gig Sanit** 1989 Apr; (4):83–4 **(Rus)**

NYMPH see under **INSECTS**

NYSTAGMUS

see related
ELECTRONYSTAGMOGRAPHY
Excitatory input to burst neurons from the labyrinth and its mediating pathway in the cat: location and functional characteristics of burster-driving neurons. Ohki Y, et al.
Exp Brain Res 1988;72(3):457–72

CHEMICALLY INDUCED

Lithium-induced downbeat nystagmus. Halmagyi GM, et al.
Am J Ophthalmol 1989 Jun 15;107(6):664–70
Primidone/phenobarbital-induced periodic alternating nystagmus. Schwankhaus JD, et al. **Ann Ophthalmol** 1989 Jun;21(6):230–2
Permanent lithium-induced downbeating nystagmus [letter] Rosenberg ML. **Arch Neurol** 1989 Aug;46(8):839
Downbeating nystagmus and other ocular motor defects caused by lithium toxicity. Corbett JJ, et al. **Neurology** 1989 Apr;39(4):481–7 (40 ref.)
[Downbeat nystagmus in lithium medication] Engelhardt A, et al. **Nervenarzt** 1988 Oct;59(10):624–7 **(Ger)**

COMPLICATIONS

Rotatory nystagmus in infantile esotropia. Clarke WN, et al. **Can J Ophthalmol** 1988 Oct;23(6):270–2
Infantile esotropia with abduction nystagmus. Ciancia AO.
Int Ophthalmol Clin 1989 Spring;29(1):24–9 (29 ref.)
[Nodding spasm] Rodriguez Pereira R.
Ned Tijdschr Geneeskd 1988 Nov 19;132(47):2158–9 (Eng. Abstr.) **(Dut)**
[Opso-myoclonic syndrome and Coxsackie B3 (letter)] Hervé F, et al. **Arch Fr Pediatr** 1988 Oct;45(8):597–8 **(Fre)**
[Spinocerebellar degeneration with oculopalatal myoclonus: a study on palato-ocular synchrony] Yokota T, et al.
Rinsho Shinkeigaku 1988 Apr;28(4):382–7 (Eng. Abstr.) **(Jpn)**

CONGENITAL

Superimposition of ENG recording on video eye movements (congenital nystagmus). Longridge NS, et al.
Adv Otorhinolaryngol 1988;42:85–9
Value of the ERG in congenital nystagmus. Good PA, et al. **Br J Ophthalmol** 1989 Jul;73(7):512–5
Is the geniculostriate system a prerequisite for nystagmus? Fielder AR, et al. **Eye** 1988;2 (Pt 6):628–35
Spectral analysis of pendular waveforms in congenital nystagmus. Reccia R, et al. **Ophthalmic Res** 1989; 21(2):83–92
Amount of surgery in congenital nystagmus. D'Esposito M, et al. **Ophthalmologica** 1989;198(3):145–51
Visual sensory disorders in congenital nystagmus. Weiss AH, et al. **Ophthalmology** 1989 Apr;96(4):517–23
[Nystagmus with double neutral zone and double torticollis. Value of artificial divergence surgery] Dahan A, et al.
Bull Soc Ophtalmol Fr 1988 Feb;88(2):287–90 (Eng. Abstr.) **(Fre)**
[Leber's congenital amaurosis and hypermetropia] Khune F, et al. **Bull Soc Ophtalmol Fr** 1988 Jun–Jul;88(6–7):829–31 **(Fre)**
[Mechanism of "inversion" of optokinetic nystagmus and pursuit movement in congenital nystagmus] Mehdorn E, et al. **Fortschr Ophthalmol** 1988;85(3):285–8 (Eng. Abstr.) **(Ger)**
[A study of visual function in congenital nystagmus—mechanism of visual improvement after stereotactic superior colliculectomy] Funahashi K.
No To Shinkei 1988 Sep;40(9):841–8 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Vestibular and non-vestibular nystagmus in examination of dizzy patients. Bergstedt M.
Acta Otolaryngol Suppl (Stockh) 1988;455:14–6
Testing vestibular function: problems with the Southern California Postrotary Nystagmus Test. Cohen H.
Am J Occup Ther 1989 Jul;43(7):475–7
Periodic alternating nystagmus. DiBartolomeo JR, et al.
Otolaryngol Head Neck Surg 1988 Dec;99(6):552–7
[Amblyopia-strabismus-nystagmus. Contribution of automatic refractometry without their optical correction] Quere MA, et al. **Bull Soc Ophtalmol Fr** 1988 Nov; 88(11):1301–4 (Eng. Abstr.) **(Fre)**
[Latent nystagmus in asymmetrical binocular vision] Belousova ZF, et al. **Oftalmol Zh** 1988;(5):316–7 **(Rus)**

DRUG THERAPY

The effects of baclofen on periodic alternating nystagmus and experimentally induced nystagmus. Uemura T, et al.
Adv Otorhinolaryngol 1988;42:254–9
Treatment of acquired nystagmus with botulinum A toxin. Helveston EM, et al. **Am J Ophthalmol** 1988 Nov 15; 106(5):584–6
Effectiveness of trihexyphenidyl against pendular nystagmus and palatal myoclonus: evidence of cholinergic dysfunction. Jabbari B, et al. **Mov Disord** 1987;2(2):93–8

ETIOLOGY

Primary midbrain hemorrhage with upbeat nystagmus. Yura S, et al. **Acta Neurol (Napoli)** 1988 Aug–Oct;10(4–5):239–45
Experimental study of nystagmus induced by injecting various solutions into the middle ear cavity. Shigeno K, et al. **Acta Otolaryngol (Stockh)** 1989 Jul–Aug; 108(1–2):31–7
Positional nystagmus. Rosenhall U.
Acta Otolaryngol Suppl (Stockh) 1988;455:17–20 (15 ref.)
Primary position upbeat nystagmus in man and cats. Harada K, et al. **Adv Otorhinolaryngol** 1988;42:190–4
Otoneurological symptomatology in Lyme disease. Krejcova H, et al. **Adv Otorhinolaryngol** 1988;42:210–2
Torsional nystagmus in the lateral medullary syndrome. Morrow MJ, et al. **Ann Neurol** 1988 Sep;24(3):390–8
Downbeat nystagmus secondary to multiple sclerosis. Masucci EF, et al. **Ann Ophthalmol** 1988 Sep;20(9):347–8
Downbeat nystagmus associated with dolichoectasia of the vertebrobasilar artery. Jacobson DM, et al. **Arch Neurol** 1989 Sep;46(9):1005–8
Nystagmus after medulloblastoma. Elliott AJ, et al.
Dev Med Child Neurol 1989 Feb;31(1):43–6
Oculoclonic status epilepticus. Kanazawa O, et al.
Epilepsia 1989 Jan–Feb;30(1):121–3
Benign nocturnal childhood occipital epilepsy: a new syndrome with nocturnal seizures, tonic deviation of the eyes, and vomiting. Panayiotopoulos CP.
J Child Neurol 1989 Jan;4(1):43–9
Paraneoplastic downbeating nystagmus. A sign of occult malignancy. Guy JR, et al. **J Clin Neuro Ophthalmol** 1988 Dec;8(4):269–72
Seesaw nystagmus. Role of visuovestibular interaction in its pathogenesis. Nakada T, et al. **J Clin Neuro Ophthalmol** 1988 Sep;8(3):171–7 (39 ref.)
Persisting nystagmus following vestibular nerve section for Menière's disease. Shotton JC, et al. **J Laryngol Otol** 1989 Mar;103(3):263–8

Catastrophic weight loss after vertical banded gastroplasty: malnutrition and neurologic alterations. Albina JE, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6):619–20

Atypical spasmus nutans as an initial sign of thalamic neoplasm. Baram TZ, et al. **Pediatr Neurol** 1986 Nov–Dec; 2(6):375–6

[Indications for electronystagmography. When should the ENT physician indicate electronystagmography?] Reker U. **HNO** 1988 Nov;36(11):431–6 (18 ref.) (Eng. Abstr.) **(Ger)**

[Contribution of the pediatrician in the early diagnosis of eye diseases] Deufrains A, et al. **Kinderarztl Prax** 1989 May; 57(5):213–21 (8 ref.) (Eng. Abstr.) **(Ger)**

[Rebound nystagmus: clinical aspects] Pagnini P, et al. **Acta Otorhinolaryngol Ital** 1986 Sep–Oct;6(5):515–26 (Eng. Abstr.) **(Ita)**

[Bilateral horizontal gaze palsy due to hemi–tegmental lesion in a case of pontine infarction] Okazawa H, et al. **Rinsho Shinkeigaku** 1988 Jul;28(7):803–7 (Eng. Abstr.) **(Jpn)**

[Positional nystagmus and other otoneurological symptoms in transient vascular disorders of the vertebrobasilar system] Tanchev KS. **Vestn Otorinolaringol** 1988 Jul–Aug; (4):32–5 (Eng. Abstr.) **(Rus)**

GENETICS

Fast–phase instabilities in normally sighted relatives of congenital nystagmus patients—autosomal dominant and x–chromosome recessive modes of inheritance. Shallo–Hoffmann J, et al. **Neurosurg Rev** 1988;11(2):151–8

PHYSIOPATHOLOGY

Effects of flunarizine on induced nystagmus and cochlear blood flow. Shiozaki S, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;460:50–60

Considerations on vestibular physiopathology with special reference to comparison of irritative state and paralytic state. Hozawa J, et al. **Adv Otorhinolaryngol** 1988;42:135–8

Paradoxic pupillary phenomena. A review of patients with pupillary constriction to darkness. Frank JW, et al. **Arch Ophthalmol** 1988 Nov;106(11):1564–6

Mechanisms of recovery following unilateral labyrinthectomy: a review. Smith PF, et al. **Brain Res Brain Res Rev** 1989 Apr–Jun;14(2):155–80 (190 ref.)

The unequal nystagmus test. Jan JE, et al. **Dev Med Child Neurol** 1988 Aug;30(4):441–3

Nystagmus induced by off–vertical rotation axis in the cat. Darlot C, et al. **Exp Brain Res** 1988;73(1):78–90

Modulatory roles of GABAergic mechanisms in post–rotatory nystagmus in the rabbit. Ishikawa M, et al. **Gen Pharmacol** 1989;20(2):229–32

Visual pathway abnormalities in albinism and infantile nystagmus: VECPs and stereoacuity measurements. Guo SQ, et al. **J Pediatr Ophthalmol Strabismus** 1989 Mar–Apr; 26(2):97–104

Wave form characteristics of vertical oscillations in longstanding vision loss. Pritchard C, et al. **J Pediatr Ophthalmol Strabismus** 1988 Sep–Oct;25(5):233–6

Unilateral pursuit–induced congenital nystagmus. Kelly BJ, et al. **Neurology** 1989 Mar;39(3):414–6

Electronystagmographic findings in profoundly hearing–impaired children. Suonpiää J. **Scand Audiol Suppl** 1988;30:111–3

[The role of convergence excess and nystagmus in esodeviations] Spielmann A. **Bull Soc Ophtalmol Fr** 1988 Mar;88(3):449–53 (Eng. Abstr.) **(Fre)**

[Neuro–ophthalmologic findings in hemangioblastoma of the cerebellum and brain stem—downbeat nystagmus as the first symptom of hemangioblastoma in Hippel–Lindau disease] Schmidt D, et al. **Fortschr Ophthalmol** 1988; 85(4):427–33 (50 ref.) (Eng. Abstr.) **(Ger)**

[Pseudo–spontaneous nystagmus with Frenzel eyeglasses] Blessing R, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Sep; 67(9):453–6 (Eng. Abstr.) **(Ger)**

[Oculomotor disorders in Parinaud's syndrome] Pérez–Garrigues H, et al. **An Otorrinolaringol Ibero Am** 1989;16(4):349–56 (Eng. Abstr.) **(Spa)**

THERAPY

Geometrical optics of the retinal image stabilisation device [letter] Rushton DN. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):137–8

NYSTAGMUS, PHYSIOLOGIC

see related
ELECTRONYSTAGMOGRAPHY

Body position and caloric nystagmus response. Clarke AH, et al. **Acta Otolaryngol (Stockh)** 1988 Nov–Dec; 106(5–6):339–47

Vestibular and non–vestibular nystagmus in examination of dizzy patients. Bergstedt M. **Acta Otolaryngol Suppl (Stockh)** 1988;455:14–6

Rotatory test in otoneurology. Fluur E. **Acta Otolaryngol Suppl (Stockh)** 1988;455:33–47

Broad–frequency rotatory testing. Hydén D, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;455:48–52

Clinical considerations concerning horizontal optokinetic nystagmus. Magnusson M, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;455:53–7

Vestibular disturbances after neck muscle sectioning in rat. Niklasson M, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 449:85–8

Clinical aspects of eye tracking test. Schalén L, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;455:28–32

Inner ear blood flow in the rabbit after caloric stimulation. Angelborg C, et al. **Adv Otorhinolaryngol** 1988;42:39–42

Effect of VOR gain changes on OKR gain control in human subjects. Aoki H, et al. **Adv Otorhinolaryngol** 1988;41:58–62

Linear displacement can be derived from otolithic information and stored on spatial maps controlling the saccadic system. Berthoz A, et al. **Adv Otorhinolaryngol** 1988;41:76–81

Caloric testing of the vestibular function during orbital flight. Clarke AH, et al. **Adv Otorhinolaryngol** 1988;42:31–5

Vestibulo–ocular reflex and optokinetic nystagmus in microgravity. Clément G, et al. **Adv Otorhinolaryngol** 1988; 42:1–4

Eye movements induced by calorization of the vertical semicircular canals. A study in pigeon. de Jong HA, et al. **Adv Otorhinolaryngol** 1988;42:36–8

Vertical canal stimulation abolishes horizontal velocity storage: effects on optokinetic nystagmus and eye movements evoked by a rotating linear acceleration. Harris LR. **Adv Otorhinolaryngol** 1988;41:49–52

Impaired discharge of the eye velocity storage mechanism in patients with lesions of the vestibulo–cerebellum. Heide W, et al. **Adv Otorhinolaryngol** 1988;41:44–8

Effects of pretectal lesions in monkeys on two components of optokinetic nystagmus. Ikarashi T, et al. **Adv Otorhinolaryngol** 1988;41:98–103

Comparison of caloric and OKAN tests in patients with vestibular deficits. Jell RM, et al. **Adv Otorhinolaryngol** 1988;41:201–5

Computer analysis of nystagmus using a syntactic pattern recognition. Juhola M, et al. **Adv Otorhinolaryngol** 1988; 42:55–8

Diagnostic confirmation of lesions in cerebellar peduncles by combined use of optokinetic nystagmus and fixation–suppression of caloric nystagmus. Kato I, et al. **Adv Otorhinolaryngol** 1988;42:202–4

The role of cervical inputs in compensation of unilateral labyrinthectomized patients. Kobayashi Y, et al. **Adv Otorhinolaryngol** 1988;42:185–9

The effect of alertness on the velocity storage mechanism. Magnusson M, et al. **Adv Otorhinolaryngol** 1988;41:53–7

Neurotological differentiation between cerebellar and brain stem lesions. Mineda H, et al. **Adv Otorhinolaryngol** 1988; 42:195–201

Visual modulatory influences of vestibulo–ocular reflex in patients with vertigo. Mizukoshi K, et al. **Adv Otorhinolaryngol** 1988;41:63–70

Studies on voluntary and reflexive optokinetic nystagmus in cerebellar disorders: with qualitative and quantitative tests. Mizuta K, et al. **Adv Otorhinolaryngol** 1988;42:205–9

The influence of hyperventilation on caloric and optokinetic responses in normal and pathological subjects. Modugno GC, et al. **Adv Otorhinolaryngol** 1988;42:108–15

Abnormalities of visually induced eye movements in thalamic lesions. Nakamura T, et al. **Adv Otorhinolaryngol** 1988; 41:104–8

Spaceflight affects the 1–g postrotatory vestibulo–ocular reflex. Oman CM, et al. **Adv Otorhinolaryngol** 1988;42:5–8

Beat–to–beat variability of nystagmus. A clinical study. Pyykkö I, et al. **Adv Otorhinolaryngol** 1988;41:196–200

The role of the vestibular system in eye–head coordination and the generation of vestibular nystagmus. Schmid R, et al. **Adv Otorhinolaryngol** 1988;41:89–94

Variations of biphasic head shake response: physiology and clinical significance. Spindler J, et al. **Adv Otorhinolaryngol** 1988;42:95–103

Dementia and eye movements. Takemori S, et al. **Adv Otorhinolaryngol** 1988;42:213–6

A new visual suppression test using postrotatory nystagmus. Teramoto K, et al. **Adv Otorhinolaryngol** 1988;42:104–7

Distribution of retinal ganglion cells projecting into the nucleus of the optic tract in rat. Urushibata T, et al. **Adv Otorhinolaryngol** 1988;41:95–7

Gravitational effects on nystagmus and on perception of orientation. Lackner JR, et al. **Ann N Y Acad Sci** 1988; 545:93–104

Organizational principles of velocity storage in three dimensions. The effect of gravity on cross–coupling of optokinetic after–nystagmus. Raphan T, et al. **Ann N Y Acad Sci** 1988;545:74–92

Optokinetic afternystagmus in humans: normal values of amplitude, time constant, and asymmetry. Tijssen MA, et al. **Ann Otol Rhinol Laryngol** 1989 Sep;98(9):741–6

Caloric stimulation during short episodes of microgravity. Clarke AH, et al. **Arch Otorhinolaryngol** 1988;245(3):175–9

Vestibular habituation in student pilots. Schwarz U, et al. **Aviat Space Environ Med** 1989 Aug;60(8):755–61

Optokinetic eye and head movements in the unrestrained cat. Schweigart G, et al. **Behav Brain Res** 1988 Dec 1; 31(2):121–30

Stereopsis impairment during smooth pursuit eye tracking. Vardi N, et al. **Brain Behav Evol** 1989;33(2–3):99–103

Role of the nucleus of the optic tract of monkeys in optokinetic nystagmus and optokinetic after–nystagmus. Kato I, et al. **Brain Res** 1988 Nov 22;474(1):16–26

Effect of active head movements about the pitch, roll, and yaw axes on human optokinetic afternystagmus. Lafortune SH, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):689–96

Optokinetic nystagmus in homonymous hemianopia due to a strictly occipital lesion. Kölmel HW, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(4):199–202

Horizontal optokinetic ocular nystagmus in wildtype (B6CBA+/+) and weaver mutant mice. Grüsser–Cornehls U, et al. **Exp Brain Res** 1988;72(1):29–36

Effects of kainic acid lesions of the nucleus reticularis tegmenti pontis on fast and slow phases of vestibulo–ocular and optokinetic reflexes in the pigmented rat. Hess BJ, et al. **Exp Brain Res** 1989;74(1):63–79

Observations bearing upon semi–circular canal dynamics. Hood JD, et al. **Exp Brain Res** 1989;74(3):603–8

Suppression of OKN and VOR by afterimages and imaginary objects. Howard IP, et al. **Exp Brain Res** 1989;75(1):139–45

A fuzzy set theoretical approach to automatic analysis of nystagmic eye movements. Arzi M, et al. **IEEE Trans Biomed Eng** 1989 Sep;36(9):954–63

Cortical areas involved in horizontal OKN in cats: metabolic activity. Herdman SJ, et al. **J Neurosci** 1989 Apr; 9(4):1150–62

Cortical areas involved in OKN and VOR in cats: cortical lesions. Tusa RJ, et al. **J Neurosci** 1989 Apr;9(4):1163–78

Changes in the time constants of the vestibulo–ocular reflex and optokinetic afternystagmus following unilateral ablative vestibular surgery. Blakley BW, et al. **J Otolaryngol** 1989 Aug;18(5):210–7

Preliminary evaluation of a Weibull function for fitting slow–component eye velocity over the time course of caloric–induced nystagmus. Formby C, et al. **J Speech Hear Res** 1989 Sep;32(3):681–7

Intentionally induced abnormalities in optokinetic pattern tests. Gyo K. **Laryngoscope** 1989 Mar;99(3):335–8

Localized metabolic responses to optokinetic stimulation in the brain stem nuclei and the cerebellum investigated with the [14C]2–deoxyglucose method in rats. Mori K, et al. **Neuroscience** 1989;30(2):271–81

Automatic electronystagmus analysis and documentation: recent advances in the study of vestibular, optokinetic and pursuit tracking function. Allum JH, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(1):14–32

Gain of the adaptation mechanism in the human vestibulo–ocular reflex system. Boumans LJ, et al. **ORL J Otorhinolaryngol Relat Spec** 1988;50(5):319–29

Asymmetry of vertical optokinetic nystagmus and afternystagmus. Igarashi M, et al. **ORL J Otorhinolaryngol Relat Spec** 1988;50(4):219–24 (32 ref.)

Assessment of head shaking test in neuro–otological practice. Vicini C, et al. **ORL J Otorhinolaryngol Relat Spec** 1989; 51(1):8–13

Abnormal optokinetic and perceptual span parameters in cerebellar–vestibular dysfunction and learning disabilities or dyslexia [published erratum appears in Percept Mot Skills 1989 Feb;68(1):2] Levinson HN. **Percept Mot Skills** 1989 Feb;68(1):35–54

Induced motion and optokinetic afternystagmus: parallel response dynamics with prolonged stimulation. Heckmann T, et al. **Vision Res** 1988;28(6):681–94

Optokinetic nystagmus thresholds of dark–adapted RCS rats. McGill MG, et al. **Vision Res** 1988;28(7):761–4

[Optokinetic nystagmus and stimulated visual field. Neuro–otological significance] Samain P, et al. **Acta Otorhinolaryngol Belg** 1988;42(4):483–93 (Eng. Abstr.) **(Fre)**

[Quantifying the stimulus parameters in the neck torsion test] Holtmann S, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Sep; 67(9):460–4 (Eng. Abstr.) **(Ger)**

[Differential heat diffusion as a factor in the etiology of the caloric nystagmus phenomenon] Lothaller R. **Wien Klin Wochenschr** 1989 May 26;101(11):395–7 (Eng. Abstr.) **(Ger)**

[Effect of adaptive VOR gain changes on OKR gain control] Aoki H. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Sep; 91(9):1435–43 (Eng. Abstr.) **(Jpn)**

[Role of the nucleus of the optic tract on optokinetic nystagmus and optokinetic after–nystagmus in monkeys] Hasegawa T. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Dec; 91(12):2039–50 (Eng. Abstr.) **(Jpn)**

[Oculomotor abnormalities in amyotrophic lateral sclerosis] Yoshii F. **Rinsho Shinkeigaku** 1988 Sep;28(9):983–91 (Eng. Abstr.) **(Jpn)**

[Spontaneous and optokinetic nystagmus in lesions of the cerebellar hemispheres] Nakiela J. **Neurol Neurochir Pol** 1988 Jul–Aug;22(4):316–20 (Eng. Abstr.) **(Pol)**

[Directional preponderance in post–traumatic vestibular syndrome] Kaźmierczak H, et al. **Otolaryngol Pol** 1988; 42(4):246–52 (Eng. Abstr.) **(Pol)**

[Horizontal optokinetic nystagmus in lesions of the cerebellar hemispheres] Nakiela J. **Otolaryngol Pol** 1988;42(5):338–41 (Eng. Abstr.) **(Pol)**

[Vestibular hyperactivity in patients with damaged cerebellar hemispheres] Nakiela J. **Wiad Lek** 1988 Oct 1;41(19):1293–6 (Eng. Abstr.) **(Pol)**

[Spectrum analysis of vestibular nystagmus] Telezhnikov AV, et al. **Fiziol Zh** 1989 Mar–Apr;35(2):18–23 (Eng. Abstr.) **(Rus)**

[Relation of optokinetic nystagmus and the width of the visual field] Todorova VS, et al. **Fiziol Zh SSSR** 1989 Mar; 75(3):312–7 (Eng. Abstr.) **(Rus)**

[Autocorrelation analysis of electronystagmograms] Telezhnikov AV, et al. **Kosm Biol Aviakosm Med** 1989

May-Jun;23(3):68-71 (Rus)
[Electronystagmographic characteristics of peripheral vestibular asymmetries in compensation development stage II] Skliut IA, et al. **Vestn Otorinolaringol** 1989 Mar-Apr; (2):6-9 (Eng. Abstr.) (Rus)
[Posture nystagmus and other otoneurologic symptoms in cranio-cerebral trauma] Tanchev KS.
Vestn Otorinolaringol 1988 Nov-Dec;(6):76 (Rus)

DRUG EFFECTS

Effects of centrally acting muscle relaxants on post-rotatory nystagmus in the rabbit. Ishikawa M, et al.
Gen Pharmacol 1989;20(1):47-51
Analysis of vertebrate eye movements following intravitreal drug injections. III. Spontaneous nystagmus is modulated by the GABAa receptor. Ariel M. **J Neurophysiol** 1989 Aug;62(2):469-80
Analysis of vertebrate eye movements following intravitreal drug injections. II. Spontaneous nystagmus induced by picrotoxin is mediated subcortically. Ariel M, et al.
J Neurophysiol 1988 Sep;60(3):1022-35
Analysis of vertebrate eye movements following intravitreal drug injections. I. Blockade of retinal ON-cells by 2-amino-4-phosphonobutyrate eliminates optokinetic nystagmus. Knapp AG, et al. **J Neurophysiol** 1988 Sep; 60(3):1010-21
Effects of afloqualone on vestibular nystagmus and the lateral vestibular nucleus. Kudo Y, et al. **Jpn J Pharmacol** 1989 Aug;50(4):515-9
Ethanol inhibits vestibular and caloric nystagmus without affecting optokinetic nystagmus in rabbits. Matsui Y, et al. **Jpn J Pharmacol** 1989 Jun;50(2):119-24
Is a retinal input involved in the generation of eye resetting fast phases in the frog eye optokinetic nystagmus? Yücel YH, et al. **Neurosci Lett** 1989 Feb 13;97(1-2):80-4

NYSTATIN

Unnecessary addition of ethylenediamine hydrochloride to "generic" nystatin creams. Fisher AA.
J Am Acad Dermatol 1989 Jan;20(1):129-30
The structure of nystatin A3, a component of nystatin complex. Zielinski J, et al. **J Antibiot (Tokyo)** 1988 Sep; 41(9):1289-91

ADMINISTRATION & DOSAGE

Clinical evaluation of a nystatin pastille for treatment of denture-related oral candidiasis. Johnson GH, et al.
J Prosthet Dent 1989 Jun;61(6):699-703
Selective decontamination of the digestive tract and fungal infection in acute leukemia patients. Günther I, et al.
Recent Results Cancer Res 1988;108:82-8
[Efficacy and tolerance of a preparation containing triamcinolone acetonide, nystatin and neomycin] Flati G, et al. **Clin Ter** 1987 Nov 15;123(3):185-9 (Eng. Abstr.) (Ita)
[Activity and tolerance of a dermatologic preparation with a triamcinolone acetonide and nystatin base in skin diseases caused by Candida albicans] Rozzoni M, et al. **Clin Ter** 1987 Dec 15;123(5):363-8 (Eng. Abstr.) (Ita)

ANTAGONISTS & INHIBITORS

[Yeast resistance to polyene antibiotics. VII. The interaction of the mutant alleles of the nystatin resistance genes in Saccharomyces cerevisiae] Ogorodnikova TE, et al.
Genetika 1988 Aug;24(8):1364-70 (Eng. Abstr.) (Rus)

BIOSYNTHESIS

[Dynamics of the changes in microelement composition (cations of iron, copper and arsenic) during the biosynthesis of nystatin] Sher AA, et al. **Antibiot Khimioter** 1989 Mar; 34(3):186-9 (Eng. Abstr.) (Rus)

PHARMACOLOGY

Nystatin stimulates prostaglandin E synthesis and formation of diacylglycerol in human monocytes. Wiegand R, et al.
Agents Actions 1988 Jul;24(3-4):343-50
The effects of new nystatin and polyfungin derivatives as compared to original antibiotics on Candida strains isolated from patients with recurrent mycoses. Kwaśniewska J.
Mater Med Pol 1988 Oct-Dec;20(4):233-7
Characteristics of certain features of Candida strains with reduced nystatin sensitivity and assessment of the activity of new derivatives of nystatin and polyfungin against these strains. Kwaśniewska J. **Mater Med Pol** 1988 Oct-Dec; 20(4):239-41
Effect of nystatin and chlorhexidine digluconate on Candida albicans. Barkvoll P, et al.
Oral Surg Oral Med Oral Pathol 1989 Mar;67(3):279-81
[Mycostatic activity of new nystatin and polyfungin derivatives against fungi isolated from patients with recurrent mycoses] Kwaśniewska J. **Pol Tyg Lek** 1988 Dec 5;43(49):1599-602 (Pol)

THERAPEUTIC USE

Treatment of angular cheilitis. The significance of microbial analysis, antimicrobial treatment, and interfering factors. Ohman SC, et al. **Acta Odontol Scand** 1988 Oct; 46(5):267-72
A double-blind comparative study to compare the efficacy of Locoid C with Tri-Adcortyl in children with infected eczema. Meenan FO. **Br J Clin Pract** 1988 May;42(5):200-2
Comparison of clotrimazole with nystatin in preventing oral candidiasis in neutropaenic patients. Charak BS, et al.
Indian J Med Res 1988 Nov;88:416-20
Nystatin for treatment of acne vulgaris [letter] Newbold HL.
J Am Acad Dermatol 1989 May;20(5 Pt 1):861
Comparison of ketoconazole suspension and nystatin in the treatment of newborns and infants with oral candidosis. Boon JM, et al. **Mycoses** 1989 Jun;32(6):312-5
[Clinical efficacy of Auricularum compared with its bacteriologic efficacy in vitro] Frèche C, et al.
Ann Otolaryngol Chir Cervicofac 1988;105(8):635-41 (Eng. Abstr.) (Fre)
[Multicenter study of auricularum in chronic otitis] Portmann M, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988; 109(5):489-91 (Eng. Abstr.) (Fre)

OATS see **CEREALS**

OBESE MICE see **MICE, OBESE**

OBESITY

see related
APPETITE DEPRESSANTS
DIET, REDUCING
LIPECTOMY
SKINFOLD THICKNESS

Effects of smoking and being overweight on current earnings. Leigh JP, et al. **Am J Prev Med** 1989 Jan-Feb;5(1):8-14
Obesity and food intake in children: evidence for a role of metabolic and/or behavioral daily rhythms. Bellisle F, et al. **Appetite** 1988 Oct;11(2):111-8
Obesity, restrained eating and the cumulative intake curve. Westerterp KR, et al. **Appetite** 1988 Oct;11(2):119-28
Obesity. Suskind RM, et al. **Beitr Infusionther** 1989;22:62-79 (26 ref.)
A method of weighing an obese, trolley-bound patient [letter] Chalmers N, et al. **Br J Radiol** 1988 Sep;61(729):861
2nd European Congress on Obesity. Oxford, England, 30 March-2 April, 1989. Abstracts. **Int J Obes** 1989;13 Suppl 1:242 abstracts
Association for the Study of Obesity. Meeting of 30 June 1988. Abstracts. **Int J Obes** 1988;12(5):491-4
Studies in the distribution of body fat: I. Effects of age, sex, and obesity. Shimokata H, et al. **J Gerontol** 1989 Mar; 44(2):M66-73
[Validity of a dietary survey in adiposity (letter)] Astrup A, et al. **Ugeskr Laeger** 1988 Oct 3;150(40):2417 (Dan)
[Value of animal models for understanding human obesity] Guy-Grand B. **Journ Annu Diabetol Hotel Dieu** 1988; :55-61 (2 ref.) (Fre)
[French Society of Phlebology. Plenary session. 19 March 1988, Paris. Proceedings] **Phlebologie** 1988 Jul-Oct; 41(3):487-622 (Fre)
[Effects of low calorie regimen in blood pressure of obese hypertensive subjects: relation to sympathetic activity] Koyama K, et al. **Nippon Jinzo Gakkai Shi** 1988 Aug; 30(8):1047-52 (Eng. Abstr.) (Jpn)
[Obesity as a risk factor in uterine cancer] Arai T, et al. **Nippon Rinsho** 1988 Nov;46(11):2462-6 (Jpn)
[Experimental models of obesity] Baba S, et al.
Nippon Rinsho 1988 Nov;46(11):2517-25 (Jpn)
[Clinical significance of obesity and standard body weight] Kataoka K, et al. **Nippon Rinsho** 1988 Nov;46(11):2349-55 (Jpn)
[Obesity as a risk factor in cerebral infarction] Kishino B, et al. **Nippon Rinsho** 1988 Nov;46(11):2448-52 (Jpn)
[Obesity as a risk factor in breast cancer] Sakamoto G.
Nippon Rinsho 1988 Nov;46(11):2458-61 (Jpn)
[Obesity as a risk factor in coronary diseases] Tamura T, et al. **Nippon Rinsho** 1988 Nov;46(11):2453-7 (Jpn)
[Pregnancy and labor in obesity] Yamamoto T, et al.
Nippon Rinsho 1988 Nov;46(11):2512-6 (Jpn)
[Obesity as a risk factor in gout] Yamanouchi T, et al.
Nippon Rinsho 1988 Nov;46(11):2467-70 (Jpn)
[Effects of obesity and weight gain during pregnancy on obstetrical factors] Aisaka K, et al.
Nippon Sanka Fujinka Gakkai Zasshi 1988 Dec; 40(12):1851-8 (Eng. Abstr.) (Jpn)

BLOOD

Gastric inhibitory polypeptide (GIP) hypersecretion in obesity depends on meal size and is not related to hyperinsulinemia. Ebert R, et al. **Acta Diabetol Lat** 1989 Jan-Mar;26(1):1-15
Erythrocyte insulin receptor: normalization of binding data for the average cell age by the red cell creatine determination in obese, diabetic and acromegalic patients. Lerario AC, et al. **Acta Diabetol Lat** 1988 Oct-Dec; 25(4):315-23
Effects of guar-pasta on serum lipid levels in obese diabetic and non-diabetic women with normal lipids. Tognarelli M, et al. **Acta Diabetol Lat** 1988 Jul-Sep;25(3):243-6
Low plasma levels of vitamin A and E during weight reduction. Zwiauer K, et al. **Acta Paediatr Scand** 1988 Sep; 77(5):760-1
Plasma pyridoxal 5'-phosphate concentrations in obese and nonobese black women residing near Petersburg, VA. Driskell JA, et al. **Am J Clin Nutr** 1989 Jul;50(1):37-40
In vitro evidence for an inhibitor of lipogenesis in serum from overfed obese rats. Harris RB, et al.
Am J Physiol 1989 Aug;257(2 Pt 2):R326-36
Tumor necrosis factor and obesity [letter] Chollet-Martin S, et al. **Ann Intern Med** 1989 Apr 15;110(8):666-7
Obesity and the erythrocyte sedimentation rate [letter] Richter WO, et al. **Ann Intern Med** 1988 Dec 1; 109(11):928-9
Metabolic response to short term starvation in non-pregnant and late pregnant cafeteria-obese rats. Roca P, et al.
Arch Int Physiol Biochim 1989 Feb;97(1):29-35
Role of hepatic-triglyceride lipase activity in the association between intra-abdominal fat and plasma HDL cholesterol in obese women. Després JP, et al. **Arteriosclerosis** 1989 Jul-Aug;9(4):485-92
Adipose tissue distribution and plasma lipoprotein levels in obese women. Importance of intra-abdominal fat. Després JP, et al. **Arteriosclerosis** 1989 Mar-Apr;9(2):203-10
Low high density lipoprotein-2 concentrations in obese male subjects. Bertière MC, et al. **Atherosclerosis** 1988 Sep; 73(1):57-61
Altered properties of platelet membrane in childhood obesity. Tangorra A, et al. **Biochem Int** 1988 Nov;17(5):837-46
Low circulating vitamin D in obesity. Liel Y, et al.
Calcif Tissue Int 1988 Oct;43(4):199-201
The cortisol response to corticotrophin-releasing factor is blunted in obesity. Kopelman PG, et al.
Clin Endocrinol (Oxf) 1988 Jan;28(1):15-8
Lymphocyte (Na,K) ATPase-dependent 86Rb+ uptake in human obesity. Bozzo C, et al. **Diabete Metab** 1988 Sep-Oct;14(5):646-52
Glucose disposal in obese non-diabetic and diabetic type II patients. A study by indirect calorimetry and euglycemic insulin clamp. Golay A, et al. **Diabete Metab** 1988 Jul-Aug; 14(4):443-51
Increased basal glucose production and utilization in children with recent obesity versus adults with long-term obesity. Bougnères PF, et al. **Diabetes** 1989 Apr;38(4):477-83
Profound peripheral insulin resistance, independent of obesity, in polycystic ovary syndrome. Dunaif A, et al.
Diabetes 1989 Sep;38(9):1165-74
Blood levels of insulin, glucagon and gastrin following intravenous and oral glucose administration in children with simple obesity. Sztefko K, et al. **Endokrynol Pol** 1988; 39(5):253-61
Plasma beta-endorphin levels in obese and non-obese patients with polycystic ovarian disease. Nappi C, et al.
Eur J Obstet Gynecol Reprod Biol 1989 Feb;30(2):151-6
Reduced insulin removal and erythrocyte insulin binding in obese children. Knip M, et al. **Eur J Pediatr** 1988 Dec; 148(3):233-7
The relationship of insulin to sex hormone-binding globulin: role of adiposity. Peiris AN, et al. **Fertil Steril** 1989 Jul; 52(1):69-72
Free testosterone levels during the menstrual cycle in obese versus normal women. Wajchenberg BL, et al.
Fertil Steril 1989 Mar;51(3):535-7
Evidence of increased levels of substance P in obese children. Baroncelli GI, et al. **Funct Neurol** 1989 Apr-Jun;4(2):183-4
Effect of GnRH administration on blood polyamines and LH levels in normal and obese children. Bernasconi S, et al.
Horm Metab Res 1988 Oct;20(10):648-51
Platelet alpha 2-adrenoceptors and adrenergic adipose tissue responsiveness after moderate hypocaloric diet in obese subjects. Crampes F, et al. **Int J Obes** 1989 Feb; 13(1):99-110
Deficiency of the insulin, glucose-mediated decrease in serum triglycerides in normolipidemic obese subjects. Eckel RH, et al. **Int J Obes** 1988;12(5):369-76
Apolipoprotein concentrations in obese subjects with upper and lower body fat mass distribution. Van Gaal L, et al.
Int J Obes 1989 Jun;13(3):255-63
Prolactin and thyroid status in prepubertal children with mild to moderate obesity. Lala VR, et al. **J Am Coll Nutr** 1988 Oct;7(5):361-6
Spontaneous growth hormone and somatomedin-C/insulin-like growth factor-I secretion in obese subjects during puberty. Minuto F, et al.
J Endocrinol Invest 1988 Jul-Aug;11(7):489-95
Scrapie-induced alterations in glucose tolerance in mice. Carp RI, et al. **J Gen Virol** 1989 Apr;70 (Pt 4):827-35
Serum lipoprotein profiles in mice: effects of early over- and undernutrition. Aubert R, et al. **J Nutr** 1988 Oct; 118(10):1190-6
The concentration of serum lipids and lipoprotein in children with high and normal blood pressure and in obese and normal weight children. Wu HR, et al.
J Tongji Med Univ 1988;8(2):110-3
The effect of immersion in water on the levels of plasma renin activity and aldosterone, vasopressin, ACTH, cortisol, adrenaline and noradrenaline in serum of persons with simple obesity. Szurkowski M, et al.
Mater Med Pol 1988 Jul-Sep;20(3):150-5
Study of the purine metabolism in obese patients during a slimming diet. Dumitrescu C, et al. **Med Interne** 1982 Jan-Mar;20(1):19-24
Normalization of serum sex hormone-binding globulin by L-thyroxine in obese women. Belgorosky A, et al.
Medicina (B Aires) 1988;48(4):361-4
Effect of cholinergic enhancement by pyridostigmine on growth hormone secretion in obese adults and children. Ghigo E, et al. **Metabolism** 1989 Jul;38(7):631-3
The influence of caloric deprivation and food composition

on TSH, thyroid hormones and nuclear binding of T3 in mononuclear blood cells in obese women. Matzen LE, et al. **Metabolism** 1989 Jun;38(6):555–61

Effect of insulin on plasma norepinephrine and 3,4–dihydroxyphenylalanine in obese men. O'Hare JA, et al. **Metabolism** 1989 Apr;38(4):322–9

The metabolic clearance rate of corticosterone in lean and obese male Zucker rats. White BD, et al. **Metabolism** 1989 Jun;38(6):530–6

Changes of plasma testosterone, estradiol and prolactin levels in severe adult–onset obesity. Bellastella A, et al. **Minerva Endocrinol** 1988 Apr–Jun;13(2):107–10

Effect of experimental obesity and subsequent weight reduction upon circulating atrial natriuretic peptide. Crandall DL, et al. **Proc Soc Exp Bioi Med** 1989 Sep; 191(4):352–6

TSH, thyroid hormones and nuclear–binding of T3 in mononuclear blood cells from obese and non–obese women. Matzen LE, et al. **Scand J Clin Lab Invest** 1989 May;49(3):249–53

Platelet function and plasma fibrinogen and their relations to gender, smoking habits, obesity and beta–blocker treatment in young survivors of myocardial infarction. Berglund U, et al. **Thromb Haemost** 1988 Aug 30;60(1):21–4

[The level of glycosylated hemoglobin in obese patients] Petkova M, et al. **Vutr Boles** 1988;27(4):21–4 (Eng. Abstr.) **(Bul)**

[Fatty acid composition of platelet phospholipids and plasma lipids in obese Zucker rats] Blond JP, et al. **Arch Int Physiol Biochim** 1988 Mar;96(1):41–9 (Eng. Abstr.) **(Fre)**

[Endogenous opiate modulators of insulin secretion in the obese] Satta MA, et al. **C R Soc Biol (Paris)** 1988; 182(6):538–43 (Eng. Abstr.) **(Fre)**

[Endogenous insulin secretion during the insulin–glucose test in obesity] Custro N, et al. **Boll Soc Ital Biol Sper** 1988 Apr;64(4):301–8 (Eng. Abstr.) **(Ita)**

[Endocrine aspects of obesity: evaluation of beta–endorphin during insulin hypoglycemia] Signorini AM, et al. **Boll Soc Ital Biol Sper** 1988 Mar;64(3):243–50 (Eng. Abstr.) **(Ita)**

[Lipid markers of ischemic cardiopathy risk in obese women] Alessandri C, et al. **Clin Ter** 1987 Jun 30;121(6):467–9 (Eng. Abstr.) **(Ita)**

[Hormones of the pituitary–thyroid axis in obese subjects on free and low–calorie diet] Custro N, et al. **Clin Ter** 1987 Feb 15;120(3):199–203 (Eng. Abstr.) **(Ita)**

[Incidence of reduced fibrinolytic activity and fibrinogen increase in the pathogenesis of vascular risk in obese subjects. Study of fibrinolytic activity of plasma, fibrinogen, erythrocyte aggregation and plasma viscosity] Craveri A, et al. **Minerva Cardioangiol** 1988 Nov;36(11):563–7 (Eng. Abstr.) **(Ita)**

[Relationships between obesity and BPH, serum estrogen, and estrogen formation in adipose tissue] Takahashi Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Feb;79(2):302–8 (Eng. Abstr.) **(Jpn)**

[Blood coagulation and fibrinolytic activities in obesity] Terada H. **Nippon Rinsho** 1988 Nov;46(11):2412–6 **(Jpn)**

[Studies on serum lipids in obese children. I. Changes in serum total cholesterol, triglycerides, lipoprotein–cholesterols and apoproteins] Igari J, et al. **Rinsho Byori** 1988 Sep;36(9):1061–4 **(Jpn)**

[Studies on serum lipids in obese children. II. Changes in serum apolipoprotein A–I, A–II and B, and atherogenic index] Igari J, et al. **Rinsho Byori** 1988 Dec;36(12):1417–20 **(Jpn)**

[Comparative evaluation of serum apolipoprotein B (apo B) levels in obese and normosthenic children] Urban M, et al. **Pediatr Pol** 1988 Jun;63(6):358–63 (Eng. Abstr.) **(Pol)**

[Plasma renin activity and aldosteronemia in patients with simple obesity and in persons with normal body weight at rest and after stimulation with furosemide and upright posture] Cheba L, et al. **Pol Tyg Lek** 1988 Oct 3; 43(40):1291–3 (Eng. Abstr.) **(Pol)**

[Circadian rhythms of cortisol and insulin in nutritional obesity in children] González Morán I, et al. **An Esp Pediatr** 1989 Feb;30(2):79–84 (Eng. Abstr.) **(Spa)**

CHEMICALLY INDUCED

Prevalence of obesity in patients receiving depot antipsychotics. Silverstone T, et al. **Br J Psychiatry** 1988 Aug;153:214–7

Development of hypothalamic obesity in growing rats. Remke H, et al. **Exp Pathol** 1988;33(4):223–32

Sucrose–induced hyperphagia and obesity in rats fed a macronutrient self–selection diet. Ackroff K, et al. **Physiol Behav** 1988;44(2):181–7

CLASSIFICATION

Validity of anthropometry in classifying youths as obese. Himes JH, et al. **Int J Obes** 1989 Apr;13(2):183–93

Classification and evaluation of the obesities. Bray GA. **Med Clin North Am** 1989 Jan;73(1):161–84 (97 ref.)

[Classification of obesity and its problems] Fujioka S, et al. **Nippon Rinsho** 1988 Nov;46(11):2356–60 **(Jpn)**

COMPLICATIONS

Relation of body mass to ischaemic heart disease in diabetics. Karpowicz H, et al. **Acta Med Pol** 1987;28(1–4):53–62

The association of knee injury and obesity with unilateral and bilateral osteoarthritis of the knee. Davis MA, et al. **Am J Epidemiol** 1989 Aug;130(2):278–88

Association of obesity and ovarian cancer in a case–control study. Farrow DC, et al. **Am J Epidemiol** 1989 Jun; 129(6):1300–4

Central adiposity and gallbladder disease in Mexican Americans. Haffner SM, et al. **Am J Epidemiol** 1989 Mar; 129(3):587–95

Body weight and prognostic indicators in breast cancer. Modifying effect of estrogen receptors. Verreault R, et al. **Am J Epidemiol** 1989 Feb;129(2):260–8

Obesity and cholecystectomy among women: implications for prevention. Petitti DB, et al. **Am J Prev Med** 1988 Nov–Dec;4(6):327–30

Failure of test for tracheal intubation [letter] Thean K, et al. **Anaesth Intensive Care** 1989 May;17(2):236–7

Adiposity, fat distribution, and cardiovascular risk. Peiris AN, et al. **Ann Intern Med** 1989 Jun 1;110(11):867–72

An unusual case of floppy eyelid syndrome. Fleishman JA, et al. **Ann Ophthalmol** 1988 Dec;20(12):468–9

The deadly quartet. Upper–body obesity, glucose intolerance, hypertriglyceridemia, and hypertension. Kaplan NM. **Arch Intern Med** 1989 Jul;149(7):1514–20 (76 ref.)

Obesity and nevocellular nevi. Leung AK. **Br J Clin Pract** 1988 Apr;42(4):172–3

Obesity and breast disease. The role of the female sex hormones. Ingram D, et al. **Cancer** 1989 Sep 1; 64(5):1049–53

Influence of age, sex, and obesity on blood pressure of Hutterites in South Dakota. Schlenker EH, et al. **Chest** 1989 Jun;95(6):1269–73

High blood pressure and hyperinsulinaemia in acromegaly and in obesity. Słowińska–Srzednicka J, et al. **Clin Exp Hypertens [A]** 1989;11(3):407–25

The impact of obesity on the pathogenesis of non–insulin–dependent diabetes mellitus: a review of current hypotheses. Pedersen O. **Diabetes Metab Rev** 1989 Sep;5(6):495–509 (109 ref.)

Pathogenesis of hyperglycemia in genetically obese–hyperglycemic rats, Wistar fatty: presence of hepatic insulin resistance. Sugiyama Y, et al. **Endocrinol Jpn** 1989 Feb;36(1):65–73

Sites and sizes of fat deposits around the pharynx in obese patients with obstructive sleep apnoea and weight matched controls. Horner RL, et al. **Eur Respir J** 1989 Jul; 2(7):613–22

The joint effect of overweight and familial predisposing factors on the occurrence of hypertension in the industrial population. The Pavia study. Pollini G, et al. **G Ital Med Lav** 1987 May–Jul;9(3–4):163–71

Obesity and hypertension: a review. Imam K, et al. **Henry Ford Hosp Med J** 1988;36(2):82–7 (82 ref.)

Overweight and pregnancy complications. Abrams B, et al. **Int J Obes** 1988;12(4):293–303 (18 ref.)

The relationship between subsets of anthropometric upper versus lower body measurements and coronary heart disease risk in middle–aged men. The Paris Prospective Study. I. Ducimetiere P, et al. **Int J Obes** 1989 Feb; 13(1):111–21

Coronary heart disease mortality risk: plasma insulin level is a more sensitive marker than hypertension or abnormal glucose tolerance in overweight males. The Paris Prospective Study. Fontbonne A, et al. **Int J Obes** 1988; 12(6):557–65

The relationship between social status and body mass index in the Minnesota Heart Health Program. Jeffery RW, et al. **Int J Obes** 1989 Feb;13(1):59–67

Cardiovascular risk factors and age of onset of obesity in severely obese patients. Borrelli R, et al. **Int J Vitam Nutr Res** 1988;58(2):236–40

Low frequency of adverse sequelae of obesity in South African rural black women. Walker AR, et al. **Int J Vitam Nutr Res** 1989;59(2):224–8

Errors in biochemical and haemodynamic data obtained using introducer lumen and proximal port of Swan Ganz catheter [letter] Böhrer H, et al. **Intensive Care Med** 1989; 15(5):330–1

Prevention of myocardial disease in JCR:LA–corpulent rats by running. Russell JC, et al. **J Appl Physiol** 1989 Apr; 66(4):1649–55

Clinical and hormonal characteristics of obese amenorrheic hyperandrogenic women before and after weight loss. Pasquali R, et al. **J Clin Endocrinol Metab** 1989 Jan; 68(1):173–9

The relationship between obesity–related metabolic factors and vascular changes in early hypertension. Berglund G, et al. **J Hum Hypertens** 1987 Jun;1(1):25–30

Hypertension and associated diseases in elderly patients. Pathy SJ. **J Hypertens Suppl** 1988 Nov;6(1):S37–40 (37 ref.)

Obesity as a risk factor in drug–induced organ injury. IV. Increased gentamicin nephrotoxicity in the obese overfed rat. Corcoran GB, et al. **J Pharmacol Exp Ther** 1989 Jan; 248(1):17–22

The role of metabolic factors and blood pressure in the association of obesity with osteoarthritis of the knee. Davis MA, et al. **J Rheumatol** 1988 Dec;15(12):1827–32

Osteoarthritis and obesity in the general population. A relationship calling for an explanation. van Saase JL, et al. **J Rheumatol** 1988 Jul;15(7):1152–8

Altered basal C–peptide/insulin molar ratios in obese patients with fatty liver. Inokuchi T, et al. **Jpn J Med** 1988 Aug; 27(3):272–6

40–year follow–up of overweight children. Mossberg HO. **Lancet** 1989 Aug 26;2(8661):491–3

Health risks of obesity. Kissebah AH, et al. **Med Clin North Am** 1989 Jan;73(1):111–38 (174 ref.)

Nutritional assessment in rheumatoid arthritis. Mody GM, et al. **S Afr Med J** 1989 Sep 16;76(6):255–7

Hepatobiliary effects of obesity and weight–reducing surgery. Faloon WW. **Semin Liver Dis** 1988 Aug;8(3):229–36 (77 ref.)

Lifestyle and low–back pain. The influence of smoking and obesity. Deyo RA, et al. **Spine** 1989 May;14(5):501–6

[Metabolic ketoacidosis in obese subjects resulting from dietetic and exercise regimens to reduce excess body weight] Orbetsova V, et al. **Vutr Boles** 1989;28(1):56–60 (Eng. Abstr.) **(Bul)**

[Autonomic disorders and thermography using liquid crystals in obesity] Staikusheva T, et al. **Vutr Boles** 1988; 27(3):97–101 (Eng. Abstr.) **(Bul)**

[Incidence of obesity in childhood urolithiasis] Nečasová D, et al. **Cesk Pediatr** 1989 Jun;44(6):362–4 **(Cze)**

[Orthopedic problems in obese children and adolescents] Schejbalová A, et al. **Cesk Pediatr** 1989 Jun;44(6):358–60 **(Cze)**

[Gastroesophageal reflux during++ sleep in obese patients] Tardif C, et al. **Neurophysiol Clin** 1988 Aug;18(4):323–32 (Eng. Abstr.) **(Fre)**

[Chronic venous insufficiency of the adipose limb] Bassi G, et al. **Phlebologie** 1988 Jul–Oct;41(3):603–8 **(Fre)**

[Difficulties of functional exploration of the veins in the obese. Problems that may be posed in its interpretation] Boccalon H, et al. **Phlebologie** 1988 Jul–Oct;41(3):509–25 (Eng. Abstr.) **(Fre)**

[Leg ulcers in the obese: data from the literature] Boivin P, et al. **Phlebologie** 1988 Jul–Oct;41(3):609–18 (131 ref.) (Eng. Abstr.) **(Fre)**

[The limits of effective sclerotherapy in the obese] Griton P. **Phlebologie** 1988 Jul–Oct;41(3):563–72 (Eng. Abstr.) **(Fre)**

[Phlebographic data of the lower extremities in the obese] Picard JD. **Phlebologie** 1988 Jul–Oct;41(3):539–41 **(Fre)**

[Functional explorations of the veins in the obese with superficial venous insufficiency] Schadeck M. **Phlebologie** 1988 Jul–Oct;41(3):533–7 **(Fre)**

[The postphlebitic syndrome in the obese] Stemmer R. **Phlebologie** 1988 Jul–Oct;41(3):527–31 (Eng. Abstr.) **(Fre)**

[Difficulties of clinical tests of the veins in an obese subject] Vin F. **Phlebologie** 1988 Jul–Oct;41(3):501–7 **(Fre)**

[Difficulties with compression dressings in the obese] Wallois P. **Phlebologie** 1988 Jul–Oct;41(3):559–62 **(Fre)**

["Diabetic" proliferative retinopathy and nodular glomerulosclerosis without diabetes mellitus] Biesenbach G, et al. **Dtsch Med Wochenschr** 1988 Dec 16; 113(50):1968–71 (Eng. Abstr.) **(Ger)**

[Juvenile obesity and fitness for military service] Frehner C, et al. **Schweiz Med Wochenschr** 1988 Oct 8; 118(40):1427–36 (Eng. Abstr.) **(Ger)**

[Obesity as a risk factor in children] Cacciari E. **An Esp Pediatr** 1988 Sep;29 Suppl 32:267–71 **(Ita)**

[Treatment of hypertension associated with metabolic anomalies] Mancini M, et al. **Cardiologia** 1988 Dec; 33(12):1157–62 (24 ref.) (Eng. Abstr.) **(Ita)**

[Obesity as an infarction risk factor] Verga S, et al. **Cardiologia** 1988 Oct;33(10):917–9 **(Ita)**

[Obesity and cardiovascular pathology] Gava R, et al. **G Clin Med** 1989 Feb;70(2):109–13 **(Ita)**

[Different prevalence of some indices of cardiac and vascular impairment in normal weight and obese patients with essential arterial hypertension] Salerno L, et al. **Minerva Cardioangiol** 1989 Apr;37(4):143–7 (Eng. Abstr.) **(Ita)**

[Sleep–related respiratory disturbance with special reference to sleep apnea syndrome] Tashiro T, et al. **Kokyu To Junkan** 1989 Jan;37(1):21–4 **(Jpn)**

[Feasibility of CHOP chemotherapy—with special reference to age, diabetes mellitus, liver cirrhosis and obesity] Kuribayashi T, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Jan 20;24(1):109–16 (Eng. Abstr.) **(Jpn)**

[Obesity as a risk factor in diabetes mellitus] Amemiya T, et al. **Nippon Rinsho** 1988 Nov;46(11):2438–42 **(Jpn)**

[Obesity as a risk factor in hypertension] Fujiwara S, et al. **Nippon Rinsho** 1988 Nov;46(11):2434–7 **(Jpn)**

[Obesity as a risk factor in hepatobiliary diseases] Oguma M, et al. **Nippon Rinsho** 1988 Nov;46(11):2443–7 **(Jpn)**

[Course of pregnancy and labor in obesity] Szysz J, et al. **Ginekol Pol** 1988 Apr;59(4):186–91 (Eng. Abstr.) **(Pol)**

[Ischemic heart disease. Its incidence and association with risk factors] Nordet P, et al. **Przegl Lek** 1989;46(2):261–5 (Eng. Abstr.) **(Pol)**

[Arrhythmia in children with simple obesity] Małecka–Tendera E, et al. **Wiad Lek** 1988 Jul 1; 41(13):846–50 (Eng. Abstr.) **(Pol)**

[Excessive body weight as one of the major risk factors of cardiovascular diseases in rural population] Akanov AA, et al. **Kardiologiia** 1988 Dec;28(12):106–8 **(Rus)**

[Lymphedema of the anterior abdominal wall in an obese female patient] Savchenko TV, et al. **Khirurgiia (Mosk)** 1989 May;(5):128–9 **(Rus)**

[Android and gynecoid types of obesity as factors in the onset of certain related diseases] Simić BS, et al.

Acta Med Iugosl 1989;43(2):95–102 (Eng. Abstr.) (Scr)

DIAGNOSIS

A weight-related intravenous dexamethasone suppression test distinguishes obese controls from patients with Cushing's syndrome. Atkinson AB, et al.
Acta Endocrinol (Copenh) 1989 Jun;120(6):753–9

Circumference-estimated percent body fat vs. weight-height indices: relationships to physical fitness. Conway TL, et al. Aviat Space Environ Med 1989 May;60(5):433–7

Weight control in the workplace [letter] White F.
Can J Public Health 1989 May–Jun;80(3):230

Indices of physical build, nutrition and obesity in school-going children. Sundaram KR, et al.
Indian J Pediatr 1988 Nov–Dec;55(6):889–98

The use of skinfold measurements to judge obesity during the early phase of Prader–Labhart–Willi syndrome. Butler MG, et al. Int J Obes 1988;12(5):417–22

Overweight and anthropometric changes in adulthood: a prospective study of 17,000 Finns. Rissanen A, et al.
Int J Obes 1988;12(5):391–401

Diagnosis and prevalence of obesity. Gray DS.
Med Clin North Am 1989 Jan;73(1):1–13

Body mass index in practice. Romanic BM. S D J Med 1989 Mar;42(3):19–20

[Problems in evaluating obesity in childhood] Bláha P, et al. Cesk Pediatr 1989 Apr;44(4):223–6 (Eng. Abstr.) (Cze)

[The contribution of epidemiology to the definition of obesity and its risk factors] Héraïef E. Ther Umsch 1989 May; 46(5):275–80 (27 ref.) (Eng. Abstr.) (Fre)

[The normal values of gamma-glutamyltransferase are falsely defined up to now: on the diagnosis of hypertension, obesity and diabetes with reference to "normal" consumption of alcohol] Kornhuber J, et al. Versicherungsmedizin 1989 May 1;41(3):78–81 (Eng. Abstr.) (Ger)

[Clinical, biochemical and anthropometric studies and determination of biological age in relation to body mass in a longitudinal study] Hunecke I, et al.
Z Gesamte Inn Med 1989 Jan 15;44(2):68–72 (Eng. Abstr.) (Ger)

[Juvenile obesity and its characteristics] Yamazaki K, et al. Nippon Rinsho 1988 Nov;46(11):2502–7 (Jpn)

[The system for identifying groups at risk of delivering large fetuses] Mezinova NN, et al. Akush Ginekol (Mosk) 1988 Jul;(7):64–5 (Rus)

[Determining the "critical" level of body mass index in dietary preventive programs] Eganian RA, et al.
Vopr Pitan 1988 Jul–Aug;(4):21–5 (Eng. Abstr.) (Rus)

[The diagnosis of obesity] Pumarino H, et al.
Rev Med Chil 1988 Aug;116(8):793–801 (Eng. Abstr.) (Spa)

DIET THERAPY

Partner weight status and subject weight loss: implications for cost-effective programs and public health. Black DR, et al. Addict Behav 1989;14(3):279–89

Weight loss in 108 obese women on a diet supplying 800 kcal/d for 21 d. Webster JD, et al. Am J Clin Nutr 1989 Jul;50(1):41–5

Short- and long-term effects of hypocaloric diets containing proteins of different sources on plasma lipids and apoproteins of obese subjects. Bosello O, et al.
Ann Nutr Metab 1988;32(4):206–14

Gallstone formation during weight-reduction dieting. Liddle RA, et al. Arch Intern Med 1989 Aug;149(8):1750–3

The role of low-calorie foods in weight reduction. Opening of the discussion. Somogyi JC. Bibl Nutr Dieta 1989; (44):45–50

Management of childhood obesity. Poskitt EM.
Indian J Pediatr 1988 Jul–Aug;55(4):470–2

The energy density of weight loss in semistarvation. Alpert SS. Int J Obes 1988;12(6):533–42

Changes in intraventricular septal thickness, left ventrical wall thickness and left ventricular volume in obese adolescents on a high protein weight reducing diet. Archibald EH, et al. Int J Obes 1989 Jun;13(3):265–9

A dietary fibre supplement and weight maintenance after weight reduction: a randomized, double-blind, placebo-controlled long-term trial. Ryttig KR, et al.
Int J Obes 1989 Apr;13(2):165–71

Variable effects of weight loss on serum lipids and lipoproteins in obese patients. Stevenson DW, et al.
Int J Obes 1988;12(6):495–502

Contribution of decreased body mass to diminished thermic effect of exercise in reduced-obese men. Weigle DS.
Int J Obes 1988;12(6):567–78

Long-term body weight fluctuation in an overweight population. Williamson PS, et al. Int J Obes 1988; 12(6):579–83

A multifactorial weight control program in a corporate setting. Hermann-Nickell DM, et al. J Am Diet Assoc 1989 Apr;89(4):534–7

Freedom from fat: a contemporary multi-component weight loss program for the general population of obese adults. Stevens VJ, et al. J Am Diet Assoc 1989 Sep;89(9):1254–8

Relapse crises and coping among dieters. Grilo CM, et al. J Consult Clin Psychol 1989 Aug;57(4):488–95

Controlling the intake of calories with the intake of food. Broomes EL. J Natl Med Assoc 1987 Aug;79(8):882–3, 887

Use of very low calorie diets in obesity [editorial] Flinn J, et al. J R Coll Gen Pract 1988 Jul;38(312):294–5

Weight cycling for profit: countering the claims of diet clinics. Collins ME. J Sch Health 1989 Aug;59(6):264–8

A natural food, the Malabar Tamarind, may be effective in the treatment of obesity. Sergio W. Med Hypotheses 1988 Sep;27(1):39–40

Some answers to patients' questions about food [letter] Roddick IC. Med J Aust 1989 May 15;150(10):605–6

Formula diets for obesity. Med Lett Drugs Ther 1989 Mar 10;31(787):22–3

Rate of weight loss during underfeeding: relation to level of physical activity. Heymsfield SB, et al. Metabolism 1989 Mar;38(3):215–23

Reductions of body weight and blood pressure in obese hypertensive patients treated by diet. A retrospective study. Novi RF, et al. Panminerva Med 1989 Jan–Mar;31(1):13–5

Chewing and spitting associated with a protein sparing modified fast and psychosocial stressors. Smith GR Jr, et al. Psychosomatics 1989 Spring;30(2):224–6

Changes of some lipid and lipid peroxidation characteristics in obese people as a result of a low energy diet. Dworschák E, et al. Z Ernahrungswiss 1988 Dec;27(4):207–15

[The effect of a low-energy protein diet in short-term ambulatory treatment of obese women] Sucharda P, et al. Cas Lek Cesk 1989 Jun 16;128(25):784–6 (Eng. Abstr.) (Cze)

[Common sense and nonsense in diet therapy. Obesity] Ditschuneit H. Verh Dtsch Ges Inn Med 1988;94:378–81 (15 ref.) (Ger)

[Results of diet therapy of obesity in relation to the event that triggered the onset of the disease. Considerations 10 years after the withdrawal of the treatment] Giovannini C, et al. Clin Ter 1987 Jan 15;120(1):17–23 (Eng. Abstr.) (Ita)

[Diet therapy of obese and hypertensive patients. Efficacy and modality of the hypotensive action] Palumbo G, et al. Clin Ter 1987 Feb 15;120(3):247–51 (34 ref.) (Eng. Abstr.) (Ita)

[Results of diet treatment in 100 adult obese patients after 1-year follow-up] Antonini Canterin A, et al.
G Clin Med 1989 May;70(5):357–61 (Eng. Abstr.) (Ita)

[Experience in diet therapy of child obesity] Livieri C, et al. Pediatr Med Chir 1988 Nov–Dec;10(6):577–80 (Eng. Abstr.) (Ita)

[Effect of a low-calorie diet on serum lipid levels and metabolic function of the liver in obese women during the climacteric period] Chojnowska-Jezierska J, et al.
Wiad Lek 1989 Dec 1;41(23):1566–70 (Eng. Abstr.) (Pol)

[Effect of diet on major risk factors in an organized population] Khaltaev NG, et al. Kardiologiia 1988 Oct; 28(10):76–80 (Eng. Abstr.) (Rus)

[Special preserved products for children with obesity] Reznik Bla, et al. Vopr Pitan 1988 May–Jun;(3):74–5 (Rus)

DRUG THERAPY

Metformin improves peripheral but not hepatic insulin action in obese patients with type II diabetes. Hother-Nielsen O, et al. Acta Endocrinol (Copenh) 1989 Mar;120(3):257–65

New approaches to the control of obesity in animals and their clinical potential. Stock MJ. Bibl Nutr Dieta 1989; (44):32–7 (22 ref.)

A clinical trial of the efficacy and acceptability of D-fenfluramine in the treatment of neuroleptic-induced obesity. Goodall E, et al. Br J Psychiatry 1988 Aug; 153:208–13

Brain and nutrition. Dexfenfluramine weight control and regulation of eating patterns. Satellite symposium to the Collegium Internationale Neuro-Psychopharmacologicum, 15th C.I.N.P. congress. Puerto Rico, U.S.A., December 14–17, 1987. Proceedings. Clin Neuropharmacol 1988;11 Suppl 1:S1–223

On the mechanism of action of dexfenfluramine: effect on alliesthesia and appetite motivation in lean and obese subjects. Blundell JE, et al. Clin Neuropharmacol 1988;11 Suppl 1:S121–34

Efficacy and safety of dexfenfluramine in obese patients: a multicenter study. Enzi G, et al. Clin Neuropharmacol 1988; 11 Suppl 1:S173–8

Effect of 6 months therapy with dexfenfluramine in obese patients: studies in the United Kingdom. Finer N, et al. Clin Neuropharmacol 1988;11 Suppl 1:S179–86

Place of dexfenfluramine in the management of obesity. Guy-Grand BJ. Clin Neuropharmacol 1988;11 Suppl 1:S216–23 (26 ref.)

Hypolipidemic, antiobesity, and hypoglycemic-hypoinsulinemic effects of beta,beta'-methyl-substituted hexadecanedioic acid in sand rats. Tzur R, et al. Diabetes 1988 Dec;37(12):1618–24

Slowed gastric evacuation accounts for the reduction of food intake by anorectic drugs. Jonderko K, et al.
Eur J Clin Nutr 1988 Jul;42(7):627–31

Effects of fenfluramine in hypertriglyceridemic obese subjects. Brun LD, et al. Int J Obes 1988;12(5):423–31

Partial reversal of the hypogonadotropic hypogonadism of obese men by administration of corticosuppressive doses of dexamethasone. Zumoff B, et al. Int J Obes 1988; 12(6):525–31

Properly timed injections of cortisol and prolactin produce long-term reductions in obesity, hyperinsulinaemia and insulin resistance in the Syrian hamster (Mesocricetus auratus). Cincotta AH, et al. J Endocrinol 1989 Mar; 120(3):385–91

The effects of oral 5-hydroxytryptophan administration on feeding behavior in obese adult female subjects. Ceci F, et al. J Neural Transm 1989;76(2):109–17

An experimental study by single blind method on the anti-obesity effect of Xiaopangmei. Qin ZY, et al.
J Tradit Chin Med 1989 Mar;9(1):5–8

Drug treatment of obesity. Weintraub M, et al.
Med Clin North Am 1989 Jan;73(1):237–49 (36 ref.)

The possible role of new beta-adrenoceptor agonists in the treatment of obesity [editorial] Meinders AE.
Neth J Med 1989 Feb;34(1–2):1–2

[Psychiatric complications in the treatment of obesity using fenfluramine] Klompenhouwer JL, et al.
Ned Tijdschr Geneeskd 1988 Nov 12;132(46):2114–7 (Eng. Abstr.) (Dut)

[Isomeride and treatment of overweight] Louvet JP.
Ann Med Interne (Paris) 1989;140 Suppl 1:17–21 (Eng. Abstr.) (Fre)

[International study of the effect of dexfenfluramine in obesity (ISIS): 6 months' results] Guy-Grand B, et al.
Rev Med Interne 1989 May–Jun;10(3):271–7 (Eng. Abstr.) (Fre)

[Drug treatment of obesity] Héraïef E, et al. Ther Umsch 1989 May;46(5):309–18 (66 ref.) (Eng. Abstr.) (Fre)

[Anorexigenic drugs: when, how and why (editorial)] Cairella M. Clin Ter 1989 May 31;129(4):239–41 (Ita)

[Drug therapy of obesity: current status and future prospectives] Cairella M, et al. Clin Ter 1988 Jun 15; 125(5):333–5 (Eng. Abstr.) (Ita)

[Pharmacological treatment of obesity. Drugs with predominantly anorectic action] Ortensio A, et al.
Minerva Dietol Gastroenterol 1988 Apr–Jun;34(2):109–16 (37 ref.) (Eng. Abstr.) (Ita)

[Drug therapy in obesity] Ishii J. Nippon Rinsho 1988 Nov; 46(11):2491–6 (Jpn)

ENZYMOLOGY

Obesity as a risk factor for drug-induced organ injury. VI. Increased hepatic P450 concentration and microsomal ethanol oxidizing activity in the obese overfed rat. Salazar DE, et al. Biochem Biophys Res Commun 1988 Nov 30; 157(1):315–20

Obesity as a risk factor in drug induced organ injury. II. Increased renal cytochrome P-450 in the obese overfed rat. Corcoran GB, et al. Drug Metab Dispos 1988 Nov–Dec; 16(6):898–900

Regional differences in adipose tissue lipoprotein lipase activity in relation to body fat distribution and menopausal status in obese women. Raison J, et al. Int J Obes 1988; 12(5):465–72

Mitochondrial storage forms of acetyl CoA carboxylase: mobilization/activation accounts for increased activity of the enzyme in liver of genetically obese Zucker rats. Allred JB, et al. J Nutr 1989 Mar;119(3):478–83

Regulation of lipoprotein lipase activity in the sand rat: effect of nutritional state and cAMP modulation. Chajek-Shaul T, et al. Metabolism 1988 Dec;37(12):1152–8

The regulation of adenylate cyclase in liver membranes of lean and obese mice. Bégin-Heick N, et al.
Mol Cell Endocrinol 1988 Oct;59(3):187–94

Regulation of the gene expression of a glycolytic enzyme in the Zucker rat. Nutr Rev 1989 Feb;47(2):59–61 (11 ref.)

Persistent alanine aminotransferase elevation in healthy Swedish blood donors—mainly caused by obesity. Wejstål R, et al. Vox Sang 1988;55(3):152–6

[Moderate and prolonged increase of transaminases serum activity. Management] Capron JP. Presse Med 1989 May 6;18(18):913–6 (Fre)

[Intracellular enzymes of glucose metabolism in obesity and diabetes] Bonora E, et al. Minerva Endocrinol 1988 Oct–Dec;13(4):275–8 (Eng. Abstr.) (Ita)

EPIDEMIOLOGY

Television viewing and obesity in adult males. Tucker LA, et al. Am J Public Health 1989 Apr;79(4):516–8

Obesity, adipose tissue distribution and health in women—results from a population study in Gothenburg, Sweden. Lapidus L, et al. Appetite 1989 Aug;13(1):25–35

Obesity, adipose tissue distribution and health in men—the study of men born in 1913. Larsson B, et al. Appetite 1989 Aug;13(1):37–44

Prevalence of overweight and obesity in The Netherlands in relation to sociodemographic variables, lifestyle and eating behavior: starting points for the prevention and treatment of obesity. Deurenberg P, et al.
Bibl Nutr Dieta 1989;(44):8–21 (39 ref.)

Problems in a country with a high prevalence of obesity. Hejda S, et al. Bibl Nutr Dieta 1989;(44):22–31 (32 ref.)

Prevalence of obesity in Europe. Seidell JC.
Bibl Nutr Dieta 1989;(44):1–7 (7 ref.)

Anthropometry of North Sea helicopter pilots. Light IM, et al. Ergonomics 1988 Jun;31(6):905–13

A follow-up study of adiposity and growth of Jerusalem schoolchildren from age 6 to 14 years. Knishkowy BN, et al. J Adolesc Health Care 1989 May;10(3):192–9

Blood pressure, smoking, obesity and alcohol consumption in black and white patients in general practice. Haines AP, et al. J Hum Hypertens 1987 Jun;1(1):39–46

Overweight and obesity in black women: a review of published data from the National Center for Health

Statistics. Gillum RF. **J Natl Med Assoc** 1987 Aug; 79(8):865–71

The value of Quetelet's Index in the assessment of obesity in 7 and 12 year old obese Chinese children. Ho TF, et al. **J Singapore Paediatr Soc** 1988;30(1–2):67–71

Proportion of newly obese and chronic obese at different ages [letter] Gara SM, et al. **Lancet** 1989 Jun 24; 1(8652):1450–1

Obesity in Italy. Pagano R, et al. **Public Health** 1988 Nov; 102(6):555–63

Anthropometric data and prevalence of overweight for Hispanics: 1982–84. Najjar MF, et al. **Vital Health Stat [11]** 1989 Mar;(239):1–106

Fatter than ever [editorial] **W V Med J** 1989 Mar;85(3):104

The global prevalence of obesity—an initial overview of available data. Gurney M, et al. **World Health Stat Q** 1988; 41(3–4):251–4

[The prevalence of hyperlipidemia and obesity in Vienna health examinations 1986] Schwarz B, et al. **Wien Med Wochenschr** 1989 Feb 15;139(3):51–5 (Eng. Abstr.) **(Ger)**

[Trends in obesity] Hara M. **Nippon Rinsho** 1988 Nov; 46(11):2361–4 **(Jpn)**

[Clustering of simple obesity] Yoshida K, et al. **Sangyo Igaku** 1988 May;30(3):171–8 (Eng. Abstr.) **(Jpn)**

[Incidence of ischemic heart disease in relation to major risk factors among Moscow male residents aged 20–29 years] Konstantinov VV, et al. **Kardiologiia** 1988 Oct;28(10):80–4 (Eng. Abstr.) **(Rus)**

[Prevalence of thinness and excessive fatness in a group of school children of the city of Cordoba, Argentina] Agrelo F, et al. **Arch Latinoam Nutr** 1988 Mar;38(1):69–80 (Eng. Abstr.) **(Spa)**

[The frequency of obesity in some areas of Mexico] Chávez A, et al. **Rev Invest Clin** 1967 Apr–Jun;19(2):119–29 (Eng. Abstr.) **(Spa)**

ETHNOLOGY

Special health problems of Mexican-Americans: obesity, gallbladder disease, diabetes mellitus, and cardiovascular disease. Diehl AK, et al. **Adv Intern Med** 1989;34:73–96 (105 ref.)

Obesity in northern Canadian Indians: patterns, determinants, and consequences. Young TK, et al. **Am J Clin Nutr** 1989 May;49(5):786–93

Effects of acculturation and socioeconomic status on obesity and diabetes in Mexican Americans. The San Antonio Heart Study. Hazuda HP, et al. **Am J Epidemiol** 1988 Dec; 128(6):1289–301

Diabetes, gallbladder disease, obesity, and hypertension among Hispanics in New Mexico. Samet JM, et al. **Am J Epidemiol** 1988 Dec;128(6):1302–11

ETIOLOGY

Persistent obesity and short final height after corticoid overtreatment for congenital adrenal hyperplasia (CAH) in infancy. Knorr D, et al. **Acta Paediatr Jpn Overseas Ed** 1988;30 Suppl:89–92

Rapidly developing overweight in school children as an indicator of psychosocial stress. Mellbin T, et al. **Acta Paediatr Scand** 1989 Jul;78(4):568–75

Further evidence of an association between psychosocial problems and increase in relative weight between 7 and 10 years of age. Mellbin T, et al. **Acta Paediatr Scand** 1989 Jul;78(4):576–80

Failure of dietary fat intake to promote fat oxidation: a factor favoring the development of obesity. Schutz Y, et al. **Am J Clin Nutr** 1989 Aug;50(2):307–14

The relation between ponderosity and coronary risk factors in children and their relatives. The Muscatine Ponderosity Family Study. Burns TL, et al. **Am J Epidemiol** 1989 May; 129(5):973–87

Obesity in achondroplasia. Hecht JT, et al. **Am J Med Genet** 1988 Nov;31(3):597–602

Metabolic effects of continuous ambulatory peritoneal dialysis. Morrison G. **Annu Rev Med** 1989;40:163–72 (50 ref.)

Sweeteners, appetite and obesity. Workshop on "The effect of sweeteners on food intake". Meeting of the North American Association for the Study of Obesity. Boston, Massachusetts, 14 October 1987. Proceedings. **Appetite** 1988;11 Suppl 1:1–102

The Salmon lecture. Some perspectives on human obesity: its causes. Stunkard AJ. **Bull N Y Acad Med** 1988 Nov; 64(8):902–23 (37 ref.)

Non-shivering thermogenesis and obesity in adult diabetic Wistar fatty rats. Tulp OL, et al. **Comp Biochem Physiol [A]** 1989;92(1):37–41

Hyperinsulinemia induced by canine distemper virus infection of mice and its correlation with the appearance of obesity. Bernard A, et al. **Comp Biochem Physiol [B]** 1988; 91(4):691–6

Are regional metabolic differences of adipose tissue responsible for different risks of obesity? Björntorp P. **Horm Metab Res Suppl** 1988;19:23–5 (22 ref.)

Glucose-induced sympathetic activation in obesity-prone and resistant rats. Levin BE, et al. **Int J Obes** 1989 Apr; 13(2):235–46

Social class and changes in weight-for-height between childhood and early adulthood. Power C, et al. **Int J Obes** 1988;12(5):445–53

Is obesity an eating disorder? Garrow JS. **J Psychosom Res** 1988;32(6):585–90 (17 ref.)

Evidence that a GABAergic mechanism influences the development of obesity in obese Zucker rats. Squadrito F, et al. **Pharmacol Res Commun** 1988 Dec;20(12):1087–8

New facts about fat [editorial] Bierman EL. **West J Med** 1988 Oct;149(4):455–6

Obesity. Part I—Pathogenesis. Bray GA, et al. **West J Med** 1988 Oct;149(4):429–41 (77 ref.)

Interrelationships among alcohol abuse, obesity, and type II diabetes mellitus: focus on Native Americans. Mohs ME, et al. **World Rev Nutr Diet** 1988;56:93–172 (287 ref.)

[Childhood obesity as a symptom of genetic syndromes] Seemanová E, et al. **Cesk Pediatr** 1989 May;44(5):268–74 (Eng. Abstr.) **(Cze)**

[Semiology of obesity] Guy-Grand B. **Ann Med Interne (Paris)** 1989;140 Suppl 1:5–7 (Eng. Abstr.) **(Fre)**

[Obesity and eating behavior] Cairella M. **Clin Ter** 1989 Jun 15;129(5):401–4 **(Ita)**

[Etiology of obesity] Goto Y, et al. **Nippon Rinsho** 1988 Nov; 46(11):2365–8 **(Jpn)**

[The role of metabolic disorders in the pathogenesis of obesity] Zahorska-Markiewicz B, et al. **Przegl Lek** 1988; 45(8):641–4 (32 ref.) **(Pol)**

[The incidence and etiology of obesity in children] Bojić-Miličević G. **Med Pregl** 1988;41(7–8):332–3 (Eng. Abstr.) **(Scr)**

[Nutritional obesity] Fleta J, et al. **An Esp Pediatr** 1988 Sep; 29 Suppl 32:7–12 **(Spa)**

GENETICS

Component distributions of body mass index defining moderate and extreme overweight in Danish women and men. Price RA, et al. **Am J Epidemiol** 1989 Jul; 130(1):193–201

A family with the Bardet-Biedl syndrome and diabetes mellitus. Escallon F, et al. **Arch Ophthalmol** 1989 Jun; 107(6):855–7

Genetics of obesity in adult adoptees and their biological siblings. Sørensen TI, et al. **BMJ** 1989 Jan 14; 298(6666):87–90

Association of apolipoprotein epsilon 4 allele with hypertriglyceridemia in obesity. Fumeron F, et al. **Clin Genet** 1988 Oct;34(4):258–64

Immunogenetic analysis of spontaneous autoimmune thyroiditis of obese strain chickens. Kroemer G, et al. **Clin Immunol Immunopathol** 1989 Aug;52(2):202–13

Obesity, genetics, and ponderal set point. Van Itallie TB. **Clin Neuropharmacol** 1988;11 Suppl 1:S1–7 (7 ref.)

Glucagon-insulin balance in genetically lean or fat chickens. Leclercq B, et al. **Diabete Metab** 1988 Sep–Oct;14(5):641–5

Somatostatin concentrations in discrete hypothalamic nuclei of genetically obese Zucker rats. Huupponen R, et al. **Exp Clin Endocrinol** 1988 Aug;91(3):277–81

Identification of a variant growth hormone haplotype in mice selected for high body weight. Salmon RK, et al. **Genet Res** 1988 Aug;52(1):7–15

Evidence of genetic influence on central body fat in middle-aged twins. Selby JV, et al. **Hum Biol** 1989 Apr; 61(2):179–94

Influence of genetic obesity and of fat-feeding on hepatic FABP concentration and activity. Malewiak MI, et al. **Int J Obes** 1988;12(6):543–6

Regional and genotypic differences in stromal-vascular cells from obese and lean Zucker rats. Turkenkopf IJ, et al. **Int J Obes** 1988;12(6):515–24

Adrenal glucocorticoids regulate adipsin gene expression in genetically obese mice. Spiegelman BM, et al. **J Biol Chem** 1989 Jan 25;264(3):1811–5

18th annual UCLA symposium. Abstracts: Obesity: towards a molecular approach. **J Cell Biochem Suppl** 1989; 13E:219–50

Obesity and abnormal behaviour associated with interstitial deletion of chromosome 18 (q12.2q21.1). Wilson GN, et al. **J Med Genet** 1989 Jan;26(1):62–3

Variation of apolipoprotein-B gene is associated with obesity, high blood cholesterol levels, and increased risk of coronary heart disease. Rajput-Williams J, et al. **Lancet** 1988 Dec 24–31;2(8626–8627):1442–6

Genetic factors in obesity. Bouchard C. **Med Clin North Am** 1989 Jan;73(1):67–81 (68 ref.)

Obesity- and sex-related alterations in growth hormone messenger RNA levels. Ahmad I, et al. **Mol Cell Endocrinol** 1989 Aug;65(1–2):103–9

Effect of the genetic background and specific mutation on adenylate cyclase activity in obesity syndromes. Bégin-Heick N, et al. **Mol Cell Endocrinol** 1988 Oct; 59(3):171–8

Obesity: time for sanity and humanity. Hall A, et al. **N Z Med J** 1989 Mar 22;102(864):134–6 (28 ref.)

Thinness—not obesity—has a genetic component. Costanzo PR, et al. **Neurosci Biobehav Rev** 1989 Spring;13(1):55–8 (26 ref.)

Circadian feeding and drinking patterns of genetically obese mice fed solid chow diet. Ho A et al. **Physiol Behav** 1988; 43(5):651–6

Regulation of gene expression in the adipocyte: implications for obesity and proto-oncogene function. Spiegelman BM. **Trends Genet** 1988 Jul;4(7):203–7 (29 ref.)

[Genetics and obesity in man] Bouchard C. **Diabete Metab** 1988 Jul–Aug;14(4):407–13 (24 ref.) (Eng. Abstr.) **(Fre)**

[Hereditary disease associated with obesity] Tsuda K, et al. **Nippon Rinsho** 1988 Nov;46(11):2471–6 **(Jpn)**

IMMUNOLOGY

Adipsin and complement factor D activity: an immune-related defect in obesity. Rosen BS, et al. **Science** 1989 Jun 23;244(4911):1483–7

[Influence of different types of experimental obesity on resistance of the mouse to infection by Salmonella typhimurium and Klebsiella pneumoniae] Conge GA, et al. **Ann Nutr Metab** 1988;32(3):113–20 (Eng. Abstr.) **(Fre)**

[Evaluation of selected immunological parameters in obese children from nurseries in the city of Katowice] Koehler B, et al. **Pediatr Pol** 1988 Apr;63(4):243–8 (Eng. Abstr.) **(Pol)**

[Immune-endocrine relations in obesity in children] Kravets EB. **Probl Endokrinol (Mosk)** 1988 Sep–Oct;34(5):11–4 (Eng. Abstr.) **(Rus)**

[Changes of the immunologic indices in patients with hypertension combined with obesity] Drozdov DD, et al. **Vrach Delo** 1989 Apr;(4):50–2 (Eng. Abstr.) **(Rus)**

METABOLISM

Mineral metabolism in obese children. Zamboni G, et al. **Acta Paediatr Scand** 1988 Sep;77(5):741–6

Zinc in hair and serum of obese individuals in Taiwan. Chen MD, et al. **Am J Clin Nutr** 1988 Nov;48(5):1307–9

Metabolic response to low- and very-low-calorie diets. Davies HJ, et al. **Am J Clin Nutr** 1989 May;49(5):745–51

Normal caffeine consumption: influence on thermogenesis and daily energy expenditure in lean and postobese human volunteers. Dulloo AG, et al. **Am J Clin Nutr** 1989 Jan; 49(1):44–50

Sustained depression of the resting metabolic rate after massive weight loss. Elliot DL, et al. **Am J Clin Nutr** 1989 Jan;49(1):93–6

Resting metabolic rate in lean and obese children: relationship to child and parent weight and percent-overweight change. Epstein LH, et al. **Am J Clin Nutr** 1989 Feb;49(2):331–6

Adipogenic activity in sera from obese children before and after weight reduction. Hauner H, et al. **Am J Clin Nutr** 1989 Jul;50(1):63–7

Fatness, fat distribution, and glucose tolerance in second-generation Japanese-American (Nisei) men. Newell-Morris LL, et al. **Am J Clin Nutr** 1989 Jul; 50(1):3–18

Relative contribution of obesity and body fat distribution to alterations in glucose insulin homeostasis: predictive values of selected indices in premenopausal women. Peiris AN, et al. **Am J Clin Nutr** 1989 May;49(5):758–64

Fat distribution, androgens, and metabolism in nonobese women. Seidell JC, et al. **Am J Clin Nutr** 1989 Aug; 50(2):269–73

Hypocaloric feeding in obese women: metabolic effects of medium-chain triglyceride substitution. Yost TJ, et al. **Am J Clin Nutr** 1989 Feb;49(2):326–30

HDL subfractions and adipose tissue metabolism in the reduced-obese state. Eckel RH, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):E740–6

Influence of age, fat cell weight, and obesity on O2 consumption of human adipose tissue. Hallgren P, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):E467–74

Site of action of putative lipostatic factor: hypothalamic metabolism of parabiotic rats. Kasser TR, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R224–8

Effects of obesity and ovarian steroids on insulin secretion and removal in sheep. McCann JP, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E116–28

Impact of body fat mass and percent fat on metabolic rate and thermogenesis in men. Segal KR, et al. **Am J Physiol** 1989 May;256(5 Pt 1):E573–9

Pharmacodynamics of vecuronium and atracurium in the obese surgical patient. Weinstein JA, et al. **Anesth Analg** 1988 Dec;67(12):1149–53

Metabolism of halothane in obese Fischer 344 rats. Biermann JS, et al. **Anesthesiology** 1989 Sep;71(3):431–7

Effects of sodium restriction and energy reduction on erythrocyte sodium transport in obese hypertensive men. Herlitz H, et al. **Ann Clin Res** 1988;20 Suppl 48:61–5

Effect of environmental temperature on dietary obesity in Osborne-Mendel rats. Goubern M, et al. **Ann Nutr Metab** 1988;32(5–6):340–6

Adaptive response of rats with diet-induced adiposity to energy restriction. Panemangalore M, et al. **Ann Nutr Metab** 1989;33(1):39–48

In vitro hepatic drug and anesthetic metabolism of rats with dietary-induced obesity. Rice SA, et al. **Arch Int Pharmacodyn Ther** 1989 May-Jun;299:286–93

Increased level of apolipoprotein B mRNA in the liver of ventromedial hypothalamus lesioned obese rats. Inui Y, et al. **Biochem Biophys Res Commun** 1989 Sep 15; 163(2):1107–12

Changes in the lipogenic response to feeding of liver, white adipose tissue and brown adipose tissue during the development of obesity in the gold-thioglucose-injected mouse. Cooney GJ, et al. **Biochem J** 1989 May 1; 259(3):651–7

Adipose-tissue-specific increase in glyceraldehyde-3-phosphate dehydrogenase activity and

mRNA amounts in suckling pre-obese Zucker rats. Effect of weaning [published erratum appears in Biochem J 1989 Feb 1;257(3):following 934] Dugail I, et al. **Biochem J** 1988 Sep 1;254(2):483–7

Guanine-nucleotide-binding proteins Gi and Gs in fat-cells from normal, hypothyroid and obese human subjects. Ohisalo JJ, et al. **Biochem J** 1989 Jun 15;260(3):843–7

Effect of fenofibrate treatment on linoleic acid desaturation in liver of obese Zucker rats. Biond JP, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2741–4

The effects of dietary fat content on the growth and body composition of lean and genetically obese Zucker rats adrenalectomized before weaning. Fletcher JM, et al. **Br J Nutr** 1988 Nov;60(3):563–9

Immunocytochemical analysis of somatostatin in the hypothalamus of obese and non-obese Zucker rats. DonCarlos LL, et al. **Brain Res** 1988 Aug 23;458(2):372–6

Differences in saccharin-induced cerebral glucose utilization between obesity-prone and -resistant rats. Levin BE, et al. **Brain Res** 1989 May 29;488(1–2):221–32

Goldthioglucose causes brain norepinephrine and serotonin depletion correlated with increased body weight. Silva E, et al. **Brain Res** 1989 Jun 19;490(1):192–5

Effect of food deprivation on regional brain glucose utilization in lean and fatty Zucker rats. Tsujii S, et al. **Brain Res** 1988 Dec 20;475(2):371–5

Effects of food intake and body weight on a serotonergic turnover index in rat hypothalamus. Gardier AM, et al. **Brain Res Bull** 1989 Mar;22(3):531–5

Abnormal cell calcium concentrations in cultured bone cells obtained from femurs of obese and noninsulin-dependent diabetic rats. Levy J, et al. **Calcif Tissue Int** 1989 Feb; 44(2):131–7

The effect of a weight-reducing diet on the nitrogen metabolism of obese adolescents. Pencharz PB, et al. **Can J Physiol Pharmacol** 1988 Dec;66(12):1469–74

Insulin resistance in obesity and noninsulin dependent diabetes mellitus. Wang LM, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Jan;43(1):15–20

Role of deep abdominal fat in the association between regional adipose tissue distribution and glucose tolerance in obese women. Després JP, et al. **Diabetes** 1989 Mar; 38(3):304–9

Decreased activation rate of insulin-stimulated glucose transport in adipocytes from obese subjects. Molina JM, et al. **Diabetes** 1989 Aug;38(8):991–5

Mechanisms of impaired insulin action in isolated adipocytes from obese and diabetic subjects. Foley JE. **Diabetes Metab Rev** 1988 Aug;4(5):487–505

Metabolic basis of obesity and noninsulin-dependent diabetes mellitus. Golay A, et al. **Diabetes Metab Rev** 1988 Dec; 4(8):727–47

Phenytoin dosing in obese patients: two case reports. de Oca GM, et al. **Drug Intell Clin Pharm** 1988 Sep;22(9):708–10

Hepatic cytochrome P-450 and in vitro drug metabolism in an overfed rat model of obesity. Matsumoto RM, et al. **Drug Nutr Interact** 1988;5(4):236–47

Lower metabolic rates of post-obese versus lean women: thermogenesis, basal metabolic rate and genetics. Shah M, et al. **Eur J Clin Nutr** 1988 Sep;42(9):741–52

Effect of clonidine on beta-endorphin, ACTH and cortisol secretion in essential hypertension and obesity. Słowinska-Srzednicka J, et al. **Eur J Clin Pharmacol** 1988; 35(2):115–21

Influence of obesity on sulfonamide disposition in Zucker rats. Kaul S, et al. **Eur J Drug Metab Pharmacokinet** 1988 Oct-Dec;13(4):273–83

Gas exchange during exercise in obese children. Zanconato S, et al. **Eur J Pediatr** 1989 Jun;148(7):614–7 (31 ref.)

Impaired growth hormone response to clonidine in obesity. Altomonte L, et al. **Exp Clin Endocrinol** 1988 Dec; 92(2):231–4

Glucagon response to insulin-induced hypoglycemia in obese men. Coiro V, et al. **Horm Metab Res** 1988 Oct; 20(10):656–7

Sparteine sulfate prevalently stimulates B rather than A cell secretion in obese subjects. Paolisso G, et al. **Horm Metab Res** 1988 Oct;20(10):658–9

Energy intake of obese women. Andersson I, et al. **Int J Obes** 1989 Apr;13(2):247–53

Pharmacokinetic characteristics of the obese overfed rat. Corcoran GB, et al. **Int J Obes** 1989 Feb;13(1):69–79

Relationship of sex hormone binding globulin to overall adiposity and body fat distribution in a biethnic population. Haffner SM, et al. **Int J Obes** 1989 Feb;13(1):1–9

Effects of weight loss and weight maintenance on the serum lipids, lipoprotein lipase and hepatic triglyceride lipase activities in obese rats. Kasim S, et al. **Int J Obes** 1989 Jun;13(3):279–88

Metabolic improvements associated with a reduction of abdominal visceral fat caused by a new alpha-glucosidase inhibitor, AO-128, in Zucker fatty rats. Kobatake T, et al. **Int J Obes** 1989 Apr;13(2):147–54

Effects of dexamethasone on glucose transport by skeletal muscles of obese (ob/ob) mice. Ohshima K, et al. **Int J Obes** 1989 Apr;13(2):155–63

Immunoreactive beta-endorphin and met- and leu-enkephalin contents in pancreas and pituitary of corpulent (cp/cp) rats. Timmers K, et al. **Int J Obes** 1989 Jun;13(3):337–45

Metabolic characteristics of postobese individuals. Tremblay A, et al. **Int J Obes** 1989 Jun;13(3):257–66

The effects of dietary sucrose on opiate receptor binding in genetically obese (ob/ob) and lean mice. Marks-Kaufman R, et al. **J Am Coll Nutr** 1989 Feb; 8(1):9–14

Skeletal muscle glucose transport in obese Zucker rats after exercise training. Ivy JL, et al. **J Appl Physiol** 1989 Jun; 66(6):2635–41

Evidence of a probable role for 25-hydroxyvitamin D in the regulation of human calcium metabolism. Bell NH, et al. **J Bone Miner Res** 1988 Oct;3(5):489–95

Abnormal fatty acid utilization by cultured cardiac cells from 7-day-old obese Zucker rats. Quignard-Boulange A, et al. **J Cell Physiol** 1989 Sep;140(3):449–54

Metabolic clearance rates of synthetic human growth hormone in lean and obese male rhesus monkeys. Dubey AK, et al. **J Clin Endocrinol Metab** 1988 Nov;67(5):1064–7

Obesity in male and female rhesus monkeys: fat distribution, glucoregulation, and serum androgen levels. Kemnitz JW, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):287–93

Circulating amino acids and pancreatic endocrine function after ingestion of a protein-rich meal in obese subjects. Schmid R, et al. **J Clin Endocrinol Metab** 1989 Jun; 68(6):1106–10

Effect of feeding and obesity on lipoprotein lipase activity, immunoreactive protein, and messenger RNA levels in human adipose tissue. Ong JM, et al. **J Clin Invest** 1989 Jul;84(1):305–11

Obesity and beta-blockers: influence of body fat on their kinetics and cardiovascular effects. Galletti F, et al. **J Clin Pharmacol** 1989 Mar;29(3):212–6

Increased skeletal muscle Na/K-ratio in obese men, but not in women, with glucose intolerance. Landin K, et al. **J Intern Med** 1989 Feb;225(2):89–94

Plasma lipoprotein metabolism in lean and in fat chickens produced by divergent selection for plasma very low density lipoprotein concentration. Griffin H, et al. **J Lipid Res** 1989 Aug;30(8):1243–50

Insulin resistant glucose transport activity in adipose cells from the SHR/N-corpulent rat. Baly DL, et al. **J Nutr** 1989 Apr;119(4):628–32

Evidence for abnormal prostaglandin synthesis in obese Zucker rat adipose cell cultures. Gaskins HR, et al. **J Nutr** 1989 Mar;119(3):458–62

Postprandial resting metabolic rate and body composition in the moderately obese and normal-weight adult subjects at sitting posture. Kashiwazaki H, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Aug;34(4):399–411

Metabolic evaluation of obese and nonobese siblings. Elliot DL, et al. **J Pediatr** 1989 Jun;114(6):957–62

Pharmacokinetics and pharmacodynamics of prednisolone in obese rats. Nichols AI, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):963–70

Obesity modifies the adrenergic status of dog adipose tissue. Taosis M, et al. **J Pharmacol Exp Ther** 1989 Sep; 250(3):1067–6

Elevated pancreatic glucagon in moderately obese patients: relationship of fatty liver and hypertriglyceridemia. Inokuchi T, et al. **Jpn J Med** 1989 May-Jun;28(3):355–61

Effects on weight and metabolic rate of obese women of a 3.4 MJ (800 kcal) diet. Garrow JS, et al. **Lancet** 1989 Jun 24;1(8652):1429–31

Central mu, delta, and kappa opioid binding sites, and brain and pituitary beta-endorphin and met-enkephalin in genetically obese (ob/ob) and lean mice. Khawaja XZ, et al. **Life Sci** 1989;44(16):1097–105

Glutathione depletion by hyperphagia-induced obesity. Sastre J, et al. **Life Sci** 1989;45(2):183–7

Effect of body weight on the volume of distribution of theophylline. Rizzo A, et al. **Lung** 1988;166(5):269–76

Storage and expenditure of energy in obesity and their implications for management. Sims EA. **Med Clin North Am** 1989 Jan;73(1):97–110 (69 ref.)

Prostaglandins, brown fat and weight loss. Heleniak EP, et al. **Med Hypotheses** 1989 Jan;28(1):13–33 (192 ref.)

Pancreatic hypersensitivity to glucose by young obese Zucker rats (fa/fa). Kuffert A, et al. **Metabolism** 1988 Oct; 37(10):952–7

Importance of obesity for the metabolic abnormalities associated with an abdominal fat distribution. Landin K, et al. **Metabolism** 1989 Jun;38(6):572–6

The effects of islet activating protein on oral glucose tolerance in the genetically obese fa/fa rat. Proietto J, et al. **Metabolism** 1989 Apr;38(4):338–42

Computation of the effective body mass for metabolic studies of lean and obese rats. Refinetti R. **Metabolism** 1989 Aug; 38(8):763–6

Fat distribution and plasminogen activator inhibitor activity in nondiabetic obese women. Vague P, et al. **Metabolism** 1989 Sep;38(9):913–5

Prediction of the distribution volumes of cefazolin and tobramycin in obese children based on physiological pharmacokinetic concepts. Koshida R, et al. **Pharm Res** 1989 Jun;6(6):486–91

Brain 3-hydroxybutyrate, glutamate, and GABA in a rat model of dietary obesity. Fisler JS, et al. **Physiol Behav** 1989 Mar;45(3):571–7

Energy requirements of obese children and young adults. Schoeller DA, et al. **Proc Nutr Soc** 1988 Sep;47(3):241–6 (33 ref.)

Changes in lipogenesis and lipolysis associated with recovery from reversible obesity in mature female rats. Harris RB, et al. **Proc Soc Exp Biol Med** 1989 May;191(1):82–9

Developmental changes of selected minerals in Zucker rats. Serfass RE, et al. **Proc Soc Exp Biol Med** 1988 Nov; 189(2):229–39

Distribution of alpha-aminoisobutyric acid in tissues of lean and genetically obese mice. Tews JK, et al. **Proc Soc Exp Biol Med** 1989 May;191(1):18–22

Energy metabolism in human obesity. Jéquier E. **Soz Praventivmed** 1989;34(2):58–62

Serum and hair zinc concentration in juvenile obesity. Lin WH, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Jul; 87(7):742–4

Bayesian forecasting of aminoglycoside dosing requirements in obese patients: influence of subpopulation versus general population pharmacokinetic parameters as the internal estimates. McClellan SD, et al. **Ther Drug Monit** 1989; 11(4):431–6

The effect of obesity on cyclosporine pharmacokinetics in uremic patients. Flechner SM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1446–8

The impact of body weight on cyclosporine pharmacokinetics in renal transplant recipients. Flechner SM, et al. **Transplantation** 1989 May;47(5):806–10

[Insulin sensitivity and secretion in obesity] Peng FK, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Dec;42(6):437–42 (Eng. Abstr.) **(Chi)**

[Insulin resistance of muscles in the Zucker rat during obesity] Doré E, et al. **Reprod Nutr Dev** 1988;28(3B):823–4 **(Fre)**

[Glucose utilization in adipose tissue of rats in chronic somatotropin deficiency] Wilsdorf A, et al. **Biomed Biochim Acta** 1989;48(1):51–6 (Eng. Abstr.) **(Ger)**

[Clinical significance of energy metabolism. Obesity and cachexia] Müller MJ, et al. **Dtsch Med Wochenschr** 1988 Nov 25;113(47):1853–8 (36 ref.) **(Ger)**

[X-ray fluorescent analytic determination of extracellular fluid in malignant tumors and adiposity] Berdov BA, et al. **Radiobiol Radiother (Berl)** 1988;29(4):475–80 (Eng. Abstr.) **(Ger)**

[Nucleation time and lithogenic index in obese patients and in patients with cholecystolithiasis] Janowitz P, et al. **Z Gastroenterol** 1988 Dec;26(12):750–4 (Eng. Abstr.) **(Ger)**

[Basal lipid energy utilization in obese women and men] Verga S, et al. **Recenti Prog Med** 1989 Apr;80(4):177–9 (Eng. Abstr.) **(Ita)**

[Relationship of body fat distribution and serum lipid concentration in middle-aged obesity women] Okamoto K, et al. **Nippon Eiseigaku Zasshi** 1988 Dec;43(5):1028–35 (Eng. Abstr.) **(Jpn)**

[Abnormal mineral metabolism in obesity] Kono S, et al. **Nippon Rinsho** 1988 Nov;46(11):2423–8 **(Jpn)**

[Gonadal dysfunctions in obesity] Minowada S, et al. **Nippon Rinsho** 1988 Nov;46(11):2400–4 **(Jpn)**

[Various characteristics of fatty tissues in obesity] Miyada T, et al. **Nippon Rinsho** 1988 Nov;46(11):2369–73 **(Jpn)**

[Abnormal lipid metabolism in obesity] Omoto A, et al. **Nippon Rinsho** 1988 Nov;46(11):2417–22 **(Jpn)**

[Autonomic nervous disorders in obesity] Yamada R. **Nippon Rinsho** 1988 Nov;46(11):2380–4 **(Jpn)**

[Hydroxyproline indicators in the evaluation of nutritional status of children with various metabolic diseases] Goncerzewicz M, et al. **Pediatr Pol** 1974 Feb;49(2):157–64 (Eng. Abstr.) **(Pol)**

[Data on the buffer effect of food based on the study of intragastric proteolytic activity in patients metabolic-alimentary obesity] Sintsova NV. **Vopr Pitan** 1988 May-Jun;(3):17–20 (Eng. Abstr.) **(Rus)**

[Effects of age and obesity on the conversion of androstenedione to estrone in postmenopausal women] Ortega E, et al. **Rev Esp Fisiol** 1988 Mar;44(1):13–6 (Eng. Abstr.) **(Spa)**

MORTALITY

Multivariate prediction of total and cardiovascular mortality in an obese Polynesian population. Crews DE. **Am J Public Health** 1989 Aug;79(8):982–6

Longevity of man: relative weight and fatness in middle age. Keys A. **Ann Med** 1989 Jun;21(3):163–8

Prognosis of lean and fat hypertensives. Menotti A, et al. **Cardiology** 1988;75(6):448–57

Mortality rate, causes and predictive factors of death in severely obese patients. Borrelli R, et al. **Int J Vitam Nutr Res** 1988;58(3):343–50

PATHOLOGY

Relationship of body fat distribution to metabolic complications in obese prepubertal boys: gender related differences. Legido A, et al. **Acta Paediatr Scand** 1989 May; 78(3):440–6

Body fat distribution and weight loss in obese women [letter] Pasquali R, et al. **Am J Clin Nutr** 1989 Jan;49(1):185–7

Accurate assessment of body composition in obese females. Weltman A, et al. **Am J Clin Nutr** 1988 Nov;48(5):1179–83

Precursors of essential hypertension. The role of body fat distribution pattern. Selby JV, et al. **Am J Epidemiol** 1989 Jan;129(1):43–53

Maternal weight gain: effect on infant birth weight among overweight and average-weight low-income women. Frentzen BH, et al. **Am J Obstet Gynecol** 1988 Nov; 159(5):1114–7

Massive necrosis of fat and skin as complication of obesity. Janigan DT, et al. **Can Med Assoc J** 1989 Mar 15; 140(6):665–8

Differentiation of adipocyte precursor cells from obese and nonobese adult women and from different adipose tissue sites. Hauner H, et al. **Horm Metab Res Suppl** 1988;19:35–9

Alveolar enlargement in obesity-induced hyperplastic lung growth. Inselman LS, et al. **J Appl Physiol** 1988 Nov; 65(5):2291–6

Elastic fibers in striae distensae. Tsuji T, et al. **J Cutan Pathol** 1988 Aug;15(4):215–22

Scanning electron microscopy of very small fat cells and mature fat cells in human obesity. Julien P, et al. **J Lipid Res** 1989 Feb;30(2):293–9

[Graphic imaging of fat deposits in obese children] Lisá L, et al. **Cesk Pediatr** 1988 Nov;43(11):682–3 **(Cze)**

[Obesity and anthropometric measurements: some advice for the practical physician] Cairella M, et al. **Clin Ter** 1989 Mar 31;128(6):429–33 (0 ref.) **(Ita)**

PHYSIOPATHOLOGY

Dietary-induced thermogenesis in obesity. Response to mixed and carbohydrate meals. De Palo C, et al. **Acta Diabetol Lat** 1989 Apr–Jun;26(2):155–62

Pyridostigmine counteracts the blunted growth hormone response to growth hormone-releasing hormone of obese children. Loche S, et al. **Acta Endocrinol (Copenh)** 1989 May;120(5):624–8

GH responsiveness to GHRH in obese children before and after weight loss. Sartorio A, et al. **Acta Paediatr Scand** 1989 Mar;78(2):329–30

Pain sensitivity in obesity. Zahorska-Markiewicz B, et al. **Acta Physiol Pol** 1988 May–Jun;39(3):183–7

Pathophysiology of childhood obesity. Rosenbaum M, et al. **Adv Pediatr** 1988;35:73–137 (486 ref.)

Technique for cranial CT scanning of excessively obese patients. Finch IJ, et al. **AJNR** 1989 Mar–Apr;10(2):434

Correlation of intraabdominal fat accumulation and left ventricular performance in obesity. Nakajima T, et al. **Am J Cardiol** 1989 Aug 1;64(5):369–73

Changes in bioelectrical impedance during fasting. Gray DS. **Am J Clin Nutr** 1988 Nov;48(5):1184–7

Effect of obesity on bioelectrical impedance. Gray DS, et al. **Am J Clin Nutr** 1989 Aug;50(2):255–60

Body composition and energy intake: do overweight women overeat and underreport? Lissner L, et al. **Am J Clin Nutr** 1989 Feb;49(2):320–5

Energy balance, smoking, and fatness [letter] Romieu I. **Am J Clin Nutr** 1988 Nov;48(5):1344–5

Regional hemodynamic abnormalities in overweight men. Focus on alpha-adrenergic vascular responses. Egan BM, et al. **Am J Hypertens** 1989 Jun;2(6 Pt 1):428–34

Obesity, metabolism, and the sympathetic nervous system. Landsberg L, et al. **Am J Hypertens** 1989 Mar;2(3 Pt 2):125S–132S (72 ref.)

Intracerebroventricular infusions of 3-OHB and insulin in a rat model of dietary obesity. Arase K, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):R974–81

Energy expenditure during carbohydrate overfeeding in obese and nonobese adolescents. Bandini LG, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):E357–67

Dietary obesity and weight cycling: effects on blood pressure and heart rate in rats. Contreras RJ, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1209–19

Sleep patterns in the genetically obese Zucker rat: effect of acarbose treatment. Danguir J. **Am J Physiol** 1989 Jan; 256(1 Pt 2):R281–3

Food restriction normalizes somatic growth and diabetes in adrenalectomized ob/ob mice. Dubuc PU, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R787–93

Brown adipose tissue of mice with GTG-induced obesity: altered circadian control. Eley J, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):E773–9

Initiation and perpetuation of obesity and obesity resistance in rats. Levin BE, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):R766–71

Development of VMH obesity: in vivo insulin secretion and tissue insulin sensitivity. Pénicaud L, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):E255–60

Effect of ambient temperature on respiratory quotient of lean and obese Zucker rats. Refinetti R. **Am J Physiol** 1989 Jan;256(1 Pt 2):R236–9

Effect of cold rearing on metabolic rate and growth rate of obese (ob/ob) mice. Houlden M, et al. **Ann Nutr Metab** 1988;32(4):200–5

Intake of greasy diets in hypothalamic obesity: a re-assessment. Coscina DV, et al. **Appetite** 1989 Aug; 13(1):15–24

Responses of lean and obese subjects to preloads, deprivation, and palatability. Spiegel TA, et al. **Appetite** 1989 Aug; 13(1):45–69

Lipoprotein secretion in lean and obese Zucker female rats in vivo and in a single-pass-perfused liver preparation. Petit D, et al. **Arch Int Physiol Biochim** 1988 Mar; 96(1):51–62

Changes of erythrocyte membrane fluidity associated with childhood obesity: a molecular study using fluorescence spectroscopy. Ferretti G, et al. **Biochem Med Metab Biol** 1988 Oct;40(2):101–8

Metabolic control of food intake. Friedman MI. **Bol Asoc Med P R** 1989 Mar;81(3):111–3

Attenuated response to cold of brown adipose tissue of mice made obese with gold thioglucose. Eley J, et al. **Can J Physiol Pharmacol** 1989 Feb;67(2):116–21

Role of thermogenesis in the regulation of energy balance in relation to obesity. Himms-Hagen J. **Can J Physiol Pharmacol** 1989 Apr;67(4):394–401 (75 ref.)

Blood pressure in the left lateral position [letter] Mitchell RS. **Can Med Assoc J** 1989 May 15;140(10):1132

Chronobiological aspects of weight loss in obesity: effects of different meal timing regimens. Sensi S, et al. **Chronobiol Int** 1987;4(2):251–61

Neuroendocrine function in obesity. Kopelman PG. **Clin Endocrinol (Oxf)** 1988 Jun;28(6):675–89 (91 ref.)

Obese Zucker rats, though still normotensive, already have impaired chronotropic baroreflexes. Buñag RD, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:257–62

Progress in assessing the role of serotonin in the control of food intake. Garattini S, et al. **Clin Neuropharmacol** 1988; 11 Suppl 1:S8–32 (82 ref.)

Cardiac autonomic dysfunction in obese subjects. Rossi M, et al. **Clin Sci** 1989 Jun;76(6):567–72

Obesity is associated with increased post-prandial GIP levels which are not reduced by dietary restriction and weight loss. Jones IR, et al. **Diabete Metab** 1989 Jan–Feb; 15(1):11–22

Comparison of insulin secretory patterns in obese nondiabetic LA/N-cp and obese diabetic SHR/N-cp rats. Role of hyperglycemia. Recant L, et al. **Diabetes** 1989 Jun; 38(6):691–7

Control of lipolysis and its relevance to development of obesity in man. Arner P. **Diabetes Metab Rev** 1988 Aug; 4(5):507–15 (76 ref.)

Abdominal obesity and the development of noninsulin-dependent diabetes mellitus. Björntorp P. **Diabetes Metab Rev** 1988 Sep;4(6):615–22 (55 ref.)

Energy expenditure in obesity and diabetes. Jéquier E, et al. **Diabetes Metab Rev** 1988 Sep;4(6):583–93 (70 ref.)

Obesity and insulin resistance: lessons learned from the Pima Indians. Lillioja S, et al. **Diabetes Metab Rev** 1988 Aug; 4(5):517–40 (87 ref.)

Brown adipose tissue: does it play a role in the development of obesity? Rothwell NJ, et al. **Diabetes Metab Rev** 1988 Sep;4(6):595–601 (68 ref.)

Insulin sensitivity in anorexia nervosa: a mirror image of obesity? Scheen AJ, et al. **Diabetes Metab Rev** 1988 Nov; 4(7):681–90 (30 ref.)

Application of prazosin is associated with an increase of insulin sensitivity in obese patients with hypertension. Pollare T, et al. **Diabetologia** 1988 Jul;31(7):415–20

Orocecal transit delay in obese patients. Basilisco G, et al. **Dig Dis Sci** 1989 Apr;34(4):509–12

Repeatability of lactulose hydrogen breath test in subjects with normal or prolonged orocecal transit. Camboni G, et al. **Dig Dis Sci** 1988 Dec;33(12):1525–7

Reduced brown adipose tissue thermogenesis of obese rats after ovariectomy. Yoshioka K, et al. **Endocrinol Jpn** 1988 Aug;35(4):537–43

Lung volume-related changes in the pharyngeal area of obese females with and without obstructive sleep apnoea. Rubinstein I, et al. **Eur Respir J** 1989 Apr;2(4):344–51

Pectin delays gastric emptying and increases satiety in obese subjects. Di Lorenzo C, et al. **Gastroenterology** 1988 Nov; 95(5):1211–5

Visceral obesity and diabetes. Enzi G, et al. **Horm Metab Res Suppl** 1988;19:30–4

Effects of fenfluramine and ritanserin on prolactin response to insulin-induced hypoglycemia in obese patients: evidence for failure of the serotoninergic system. Bernini GP, et al. **Horm Res** 1989;31(3):133–7

The Zucker fatty rat as a genetic model of obesity and hypertension. Kurtz TW, et al. **Hypertension** 1989 Jun;13(6 Pt 2):896–901

Exercise end-expiratory lung volumes in lean and moderately obese women. Babb TG, et al. **Int J Obes** 1989 Feb; 13(1):11–9

Impaired effects of interleukin-1 beta on fever and thermogenesis in genetically obese rats. Dascombe MJ, et al. **Int J Obes** 1989 Jun;13(3):367–73

Evidence that obesity does not influence the vitamin D-endocrine system in blacks. Epstein S, et al. **J Bone Miner Res** 1986 Apr;1(2):181–4

Cholinergic receptor activation by pyridostigmine restores growth hormone (GH) responsiveness to GH-releasing hormone administration in obese subjects: evidence for hypothalamic somatostatinergic participation in the blunted GH release of obesity. Cordido F, et al. **J Clin Endocrinol Metab** 1989 Feb;68(2):290–3

Dietary carbohydrate content determines responsiveness to growth hormone in energy-restricted humans. Snyder DK, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):745–52

Metabolic responses to intense exercise in lean and obese subjects. Yale JF, et al. **J Clin Endocrinol Metab** 1989 Feb; 68(2):438–45

Possible role of cytosolic free calcium concentrations in mediating insulin resistance of obesity and hyperinsulinemia. Draznin B, et al. **J Clin Invest** 1988 Dec; 82(6):1848–52

Influence of body fat distribution on free fatty acid metabolism in obesity. Jensen MD, et al. **J Clin Invest** 1989 Apr;83(4):1168–73

Development of the epididymal adipose tissue in monosodium glutamate-induced obese mice. Ochi M, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Jun;34(3):317–26

Evaluation of lung function in Singapore obese children. Ho TF, et al. **J Singapore Paediatr Soc** 1989;31(1-2):46–52

Nutrient balance and obesity: an approach to control of food intake in humans. Bray GA. **Med Clin North Am** 1989 Jan; 73(1):29–45 (89 ref.)

Endocrine aspects of obesity. Glass AR. **Med Clin North Am** 1989 Jan;73(1):139–60 (249 ref.)

Physiological regulation of body weight and the issue of obesity. Keesey RE. **Med Clin North Am** 1989 Jan; 73(1):15–27

Subcapsular steatonecrosis in response to peritoneal insulin delivery: a clue to the pathogenesis of steatonecrosis in obesity. Wanless IR, et al. **Mod Pathol** 1989 Mar;2(2):69–74

The effect of weight loss on the sensitivity of blood pressure to sodium in obese adolescents. Rocchini AP, et al. **N Engl J Med** 1989 Aug 31;321(9):580–5

Protein meal-stimulated pancreatic polypeptide secretion in Prader-Willi syndrome of adults. Tomita T, et al. **Pancreas** 1989;4(4):395–400

Obesity in childhood. Rosenbaum M, et al. **Pediatr Rev** 1989 Aug;11(2):43–55 (0 ref.)

Physiological arousal of obese persons to food stimuli. Gardner RM, et al. **Percept Mot Skills** 1988 Dec; 67(3):804–6

The effects of the kappa agonist PD-117302 on feeding behaviour in obese and lean Zucker rats. Leighton GE, et al. **Pharmacol Biochem Behav** 1988 Oct;31(2):425–9

The effect of increased adiposity on food intake of juvenile rats. Drewry MM, et al. **Physiol Behav** 1989 Feb; 45(2):381–6

Gastric distension and gastric capacity in relation to food intake in humans. Geliebter A. **Physiol Behav** 1988; 44(4–5):665–8

Adrenal involvement in scrapie-induced obesity. Kim YS, et al. **Proc Soc Exp Biol Med** 1988 Oct;189(1):21–7

Thyroid function in male Zucker rats exposed to cold. Whitaker EM, et al. **Q J Exp Physiol** 1988 Nov; 73(6):1029–31

Gastrin release in obese Zucker rats. Pederson RA, et al. **Regul Pept** 1989 Feb;24(2):131–42

Gastric and oesophageal emptying in obesity. Maddox A, et al. **Scand J Gastroenterol** 1989 Jun;24(5):593–8

Fatness and fertility [letter] Paque C. **Sci Am** 1988 Oct; 259(4):8

Continuity of leanness/obesity from childhood to adolescence. Nakatsuka H, et al. **Tohoku J Exp Med** 1989 Apr;157(4):381–92

Obesity as a risk factor in drug-induced organ injury. III. Increased liver and kidney injury by furosemide in the obese overfed rat. Corcoran GB, et al. **Toxicol Appl Pharmacol** 1989 Mar 15;98(1):12–24

[Serotonin, food intake and body weight] Rowland NE, et al. **Ann Med Interne (Paris)** 1989;140 Suppl 1:8–11 (19 ref.) (Eng. Abstr.) **(Fre)**

[Comparison of 3 methods of blood pressure measurement in obesity] Julien J, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:241–5 (Eng. Abstr.) **(Fre)**

[Regional hemodynamics of the forearm. Comparison between obese and non-obese hypertensive patients] Raison J, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:65–9 (Eng. Abstr.) **(Fre)**

[The physiology and physiopathology of the venous system in the obese] Klüken N. **Phlebologie** 1988 Jul–Oct; 41(3):487–91 (Eng. Abstr.) **(Fre)**

[The flow of venous blood in the obese] Lemaire R. **Phlebologie** 1988 Jul–Oct;41(3):493–9 (Eng. Abstr.) **(Fre)**

[Thermogenesis and obesity: molecular aspects] Ricquier D. **Phlebologie** 1988 Jul–Oct;41(3):543–9 (Eng. Abstr.) **(Fre)**

[Gonarthrosis and obesity] Massé JP, et al. **Rev Rhum Mal Osteoartic** 1988 D[illegible]55(12):973–8 (Eng. Abstr.) **(Fre)**

[The role of physical inactivity in the etiology of obesity] Schutz Y. **Ther Umsch** 1989 May;46(5):281–90 (33 ref.) (Eng. Abstr.) **(Fre)**

[Results of a gerontologic longitudinal study—consequences] Hunecke I, et al. **Z Arztl Fortbild (Jena)** 1989;83(11):561–7 **(Ger)**

[Physiopathologic problems of obesity related to anesthesia] Pierdominici S, et al. **Minerva Anestesiol** 1989 Jan–Feb; 55(1–2):1–10 (69 ref.) (Eng. Abstr.) **(Ita)**

[Body proportions in obesity during growth] Rusconi R. **Minerva Pediatr** 1988 Oct;40(10):612 **(Ita)**

[Effect of obesity on blood pressure, serum lipid, liver function, blood sugar and uric acid] Saito Y, et al. **Nippon Eiseigaku Zasshi** 1988 Dec;43(5):962–8 (Eng. Abstr.) **(Jpn)**

[Endocrine disorders in obesity—with special reference to the pituitary, thyroid and adrenal functions] Inoue S, et al. **Nippon Rinsho** 1988 Nov;46(11):2395–9 **(Jpn)**

[Gastrointestinal functions in obesity] Kashimura H, et al. **Nippon Rinsho** 1988 Nov;46(11):2429–33 **(Jpn)**

[Hemodynamics in obesity] Ohtani Y, et al. **Nippon Rinsho** 1988 Nov;46(11):2385–9 **(Jpn)**

[Respiratory function in obesity] Taguchi O, et al. **Nippon Rinsho** 1988 Nov;46(11):2390–4 **(Jpn)**

[Gonadal dysfunctions in female obesity] Takasaki K, et al. **Nippon Rinsho** 1988 Nov;46(11):2405–11 **(Jpn)**

[Effect of eating and mazindol on the pain threshold in obese and lean persons] Zahorska-Markiewicz B, et al. **Pol Arch Med Wewn** 1985 Sep;74(3):203–6 (Eng. Abstr.) **(Pol)**

[Evaluation of various parameters of the pituitary

gland–adrenal cortex axis in obese persons and in those with normal body weight] Cheba L, et al. **Pol Tyg Lek** 1988 Oct 3;43(40):1288–90 (Eng. Abstr.) **(Pol)**

[Evaluation of hepatic blood supply in obesity] Hartleb M, et al. **Pol Tyg Lek** 1988 Sep 12;43(37):1184–6 (Eng. Abstr.) **(Pol)**

[Effect of water immersion on plasma renin activity and aldosterone and vasopressin levels in the blood of patients with simple obesity] Szurkowski M, et al. **Pol Tyg Lek** 1988 Apr 25;43(17):542–7 (Eng. Abstr.) **(Pol)**

[Effect of water immersion on blood adrenaline and noradrenaline levels in patients with obesity] Szurkowski M, et al. **Pol Tyg Lek** 1988 Oct 3;43(40):1297–300 **(Pol)**

[Status of the feto–placental system in obese pregnant women] Chernukha GE, et al. **Akush Ginekol (Mosk)** 1988 Oct;(10):40–3 (Eng. Abstr.) **(Rus)**

[Neuroendocrine syndrome with disorders of the reproductive functions: their clinical problems and pathogenesis] Serov VN, et al. **Akush Ginekol (Mosk)** 1989 Feb;(2):10–4 (57 ref.) **(Rus)**

[Water–excreting and ion–regulating functions of the kidneys in children with constitutional–exogenous obesity] Kliorin AI, et al. **Fiziol Cheloveka** 1988 Jul–Aug;14(4):640–6 **(Rus)**

[Functional characteristics of the cardiovascular system in youths at puberty with increased body weight in relation to elevated fatness] Zaev AP, et al. **Fiziol Cheloveka** 1988 Jan–Feb;14(1):153–6 **(Rus)**

[The relation of central blood circulation and the values of fatty and non–fatty body weight in men with normo– and hyperlipoproteinemia] Aleksenko AS, et al. **Kardiologiia** 1988 Aug;28(8):68–72 (Eng. Abstr.) **(Rus)**

[Body constitution of patients of different somatotypes with hypertension] Kaplan MA, et al. **Kardiologiia** 1988 Dec; 28(12):37–41 (Eng. Abstr.) **(Rus)**

[Isotope nephrography in patients with obesity] Vlakhov N, et al. **Klin Med (Mosk)** 1989 Apr;67(4):98–9 (Eng. Abstr.) **(Rus)**

[Complex evaluation of microcirculatory disorders in obese children] Rapoport ZhZh, et al. **Pediatriia** 1988;(4):20–4 (Eng. Abstr.) **(Rus)**

[The renin–angiotensin system in childhood obesity] Tribol OB, et al. **Pediatriia** 1988;(4):25–7 (Eng. Abstr.) **(Rus)**

[Psycho–endocrine interrelations in patients in a state of emotional stress during cerebral obesity] Voznesenskaia TG, et al. **Probl Endokrinol (Mosk)** 1989 Jan–Feb;35(1):3–7 (Eng. Abstr.) **(Rus)**

[Function of fatty and muscle tissues in women with alimentary obesity] Belinskiĭ VP. **Vrach Delo** 1988 Sep; (9):75–7 (Eng. Abstr.) **(Rus)**

[Growth in obese children] Bojić–Miličević G. **Med Pregl** 1988;41(9–10):379–82 (Eng. Abstr.) **(Scr)**

PREVENTION & CONTROL

French fries, fake food or fresh fruit? [editorial] Rössner S. **Acta Med Scand** 1988;224(6):505–6

Weight cycling: the experience of human dieters. Blackburn GL, et al. **Am J Clin Nutr** 1989 May;49(5 Suppl):1105–9

Use of an expanded–whole–wheat product in the reduction of body weight and serum lipids in obese females. Fordyce–Baum MK, et al. **Am J Clin Nutr** 1989 Jul; 50(1):30–6

Calorie–restricted low–fat diet and exercise in obese women. Hammer RL, et al. **Am J Clin Nutr** 1989 Jan;49(1):77–85

Physical activity as a supplement to a weight–loss dietary regimen. Pavlou KN, et al. **Am J Clin Nutr** 1989 May;49(5 Suppl):1110–4

Exercise as an adjunct to weight loss and maintenance in moderately obese subjects. Pavlou KN, et al. **Am J Clin Nutr** 1989 May;49(5 Suppl):1115–23

The effect of weight control on lipid changes in obese children. Epstein LH, et al. **Am J Dis Child** 1989 Apr; 143(4):454–7

Adrenalectomy prevents obesity in glutamate–treated mice. Tokuyama K, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):E139–44

Weight control in the workplace: a needs assessment for men. Reid DJ, et al. **Can J Public Health** 1989 Jan–Feb; 80(1):24–7

Preventing weight gain in adults: a pound of prevention. Forster JL, et al. **Health Psychol** 1988;7(6):515–25

Comparison of dehydroepiandrosterone and clofibric acid treatments in obese Zucker rats. Mohan PF, et al. **J Nutr** 1989 Mar;119(3):496–501

[Somatotyping of children in the preschool age—the key to prevention of obesity] Omelka F, et al. **Cesk Pediatr** 1988 Oct;43(10):622–4 **(Cze)**

[Evaluation of bioelectrical impedance method for fat measurement in corporate fitness program] Doya S, et al. **Sangyo Igaku** 1989 Jan;31(1):3–8 (Eng. Abstr.) **(Jpn)**

[Subjective ideas on nutrition and obesity of puerperae] Bal' LV, et al. **Sov Med** 1988;(12):90–3 **(Rus)**

[Implementation of an integrated program of prevention of chronic nonspecific diseases in the Kaishiador region of the Lithuaniaĭ SSR] Misiavichene IS, et al. **Sov Zdravookhr** 1989;(4):31–4 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

An investigation of the construct validity of the Dutch Restrained Eating Scale. Corrigan SA, et al. **Addict Behav** 1988;13(3):303–6

Accuracy of self–reports of food intake in obese and normal–weight individuals: effects of parental obesity on reports of children's dietary intake. Klesges RC, et al. **Am J Clin Nutr** 1988 Nov;48(5):1252–6

Accuracy of self–reports of food intake in obese and normal–weight individuals: effects of obesity on self–reports of dietary intake in adult females. Myers RJ, et al. **Am J Clin Nutr** 1988 Nov;48(5):1248–51

Pediatricians' perceptions and practices regarding childhood obesity. Price JH, et al. **Am J Prev Med** 1989 Mar–Apr; 5(2):95–103

Incest and anorexia nervosa [letter] Kumar A, et al. **Br J Psychiatry** 1988 May;152:713–4

Mirror image of environmental deprivation: severe childhood obesity of psychosocial origin. Christoffel KK, et al. **Child Abuse Negl** 1989;13(2):249–56

Psychological and social adjustment of obese children and their families. Banis HT, et al. **Child Care Health Dev** 1988 May–Jun;14(3):157–73

Behavioral factors in obesity. Rodin J, et al. **Diabetes Metab Rev** 1988 Dec;4(8):701–25 (210 ref.)

A decisional balance measure and the stages of change model for weight loss. O'Connell D, et al. **Int J Addict** 1988 Jul; 23(7):729–50

Disruption of light–dark cycle of feeding and drinking behavior, and ambulatory activity induced by development of obesity in the Zucker rat. Fukagawa K, et al. **Int J Obes** 1988;12(5):481–90

The cognitive orientation of obesity. Kreitler S, et al. **Int J Obes** 1988;12(5):403–15

Dissatisfaction with weight and figure in obese girls: discontent but not depression. Wadden TA, et al. **Int J Obes** 1989 Feb;13(1):89–97

Adolescent self–assessment of sexual maturation. Effects of fatness classification and actual sexual maturation stage. Williams RL, et al. **J Adolesc Health Care** 1988 Nov; 9(6):480–2

The effects of patient weight and sex on nurses' perceptions: a proposed model of nurse withdrawal. Peternelj–Taylor CA. **J Adv Nurs** 1989 Sep;14(9):744–54 (41 ref.)

Obesity: a psychoanalytic challenge. Glucksman ML. **J Am Acad Psychoanal** 1989 Spring;17(1):151–71

Nutritional dwarfing: growth, dieting, and fear of obesity. Lifshitz F, et al. **J Am Coll Nutr** 1988 Oct;7(5):367–76 (47 ref.)

Accuracy of food portion estimation by overweight and normal–weight subjects. Blake AJ, et al. **J Am Diet Assoc** 1989 Jul;89(7):962–4

Self–esteem of adolescents enrolled in a weight reduction program. Drake MA. **J Am Diet Assoc** 1988 Dec; 88(12):1581–2

Dietary restraint and obesity: their effects on dietary intake. Weber JM, et al. **J Behav Med** 1988 Apr;11(2):185–99

Temperamental factors associated with rapid weight gain and obesity in middle childhood. Carey WB, et al. **J Dev Behav Pediatr** 1988 Aug;9(4):194–8

Fat cats [letter] **J Miss State Med Assoc** 1988 Sep;29(9):275

Interaction in families with obese children. Kinston W, et al. **J Psychosom Res** 1988;32(4–5):513–32

Psychological features of obesity. Rodin J, et al. **Med Clin North Am** 1989 Jan;73(1):47–66 (164 ref.)

Fear of obesity among adolescent girls. Moses N, et al. **Pediatrics** 1989 Mar;83(3):393–8

Attitudes of nurses toward obesity and obese patients. Bagley CR, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):954

Perception of attractiveness by obesity and hair color. Clayson DE, et al. **Percept Mot Skills** 1989 Feb; 68(1):199–202

Characteristics of psychomotor performance and time cognition in moderately obese patients. Etou H, et al. **Physiol Behav** 1989 May;45(5):985–8

Overeating, overweight and obesity induced by an unpreferred diet. Ramirez I. **Physiol Behav** 1988; 43(4):501–6

Socioeconomic status and obesity: a review of the literature. Sobal J, et al. **Psychol Bull** 1989 Mar;105(2):260–75 (275 ref.)

The relationship between body–image and body–fat in adult women. Brodie DA, et al. **Psychol Med** 1988 Aug; 18(3):623–31

Distortion of body image in the obese: a sensory phenomenon. Gardner RM, et al. **Psychol Med** 1988 Aug; 18(3):633–41

Development of a screening questionnaire to study attrition in weight–control programs. Pratt CA. **Psychol Rep** 1989 Jun;64(3 Pt 1):1007–16 (21 ref.)

Level of object representation and psychic structure deficit in obese persons. Raynes E, et al. **Psychol Rep** 1989 Feb; 64(1):291–4

Alexithymia and symbolic function in the obese. Legorreta G, et al. **Psychother Psychosom** 1988;50(2):88–94

[Psychosocial aspects of obesity] Radvila A. **Ther Umsch** 1989 May;46(5):291–6 (Eng. Abstr.) **(Ger)**

[Eating behavior in obesity] Canton G, et al. **G Clin Med** 1988 Apr;69(4):271, 273–5 (Eng. Abstr.) **(Ita)**

[Feeding behavior and body image in anorexia and obesity] Fagiani MB. **Minerva Psichiatr** 1988 Oct–Dec;29(4):217–21 (Eng. Abstr.) **(Ita)**

[Mental symptoms in obesity] Ohara K, et al. **Nippon Rinsho** 1988 Nov;46(11):2374–9 **(Jpn)**

[The role of psychological factors in obesity in children] Zubtsova TI, et al. **Pediatriia** 1988;(5):111–2 **(Rus)**

[Emotional aspects of obesity] Knežević A. **Med Pregl** 1988; 41(3–4):142–3 (Eng. Abstr.) **(Scr)**

RADIOGRAPHY

Assessment of adipose tissue distribution by computed axial tomography in obese women: association with body density and anthropometric measurements. Ferland M, et al. **Br J Nutr** 1989 Mar;61(2):139–48

Regional distribution of muscle and fat mass in men—new insight into the risk of abdominal obesity using computed tomography. Seidell JC, et al. **Int J Obes** 1989 Jun; 13(3):289–303

[Study of abdominal adipose tissue distribution using CAT in android type obesity] Corradini P, et al. **Medicina (Firenze)** 1988 Apr–Jun;8(2):182–3 (Eng. Abstr.) **(Ita)**

SURGERY

Radical abdominoplasty, including body shaping: representative cases. Mühlbauer W. **Aesthetic Plast Surg** 1989 Spring;13(2):105–10

Further advantages of the "vest over pants" abdominoplasty. Planas J, et al. **Aesthetic Plast Surg** 1988 Aug;12(3):123–7

Aortoiliac occlusive disease. Treatment for the obese patient. Friedman SG, et al. **AORN J** 1989 Sep;50(3):564–6, 568–70

Estimating the ideal peak flow rate [letter] Glass R. **Aust Fam Physician** 1989 Feb;18(2):168

[Postoperative complications of surgery of the veins of the lower extremities in the obese] Brünner U, et al. **Phlebologie** 1988 Jul–Oct;41(3):592–5 (Eng. Abstr.) **(Fre)**

[Precautions to be taken from the anesthesiologic point of view during venous surgery in the obese] Duruble M. **Phlebologie** 1988 Jul–Oct;41(3):596–602 (Eng. Abstr.) **(Fre)**

[The thigh of the obese] Nicoletis C. **Phlebologie** 1988 Jul–Oct;41(3):585–8 **(Fre)**

[Does obesity modify surgical indications in the treatment of varices?] Perrin M. **Phlebologie** 1988 Jul–Oct;41(3):573–5 **(Fre)**

[Does obesity modify surgical technics?] Rettori R. **Phlebologie** 1988 Jul–Oct;41(3):576–84 (Eng. Abstr.) **(Fre)**

THERAPY

Ringing in the new year: the change processes and reported outcomes of resolutions. Norcross JC, et al. **Addict Behav** 1989;14(2):205–12

Medical and surgical management of obesity. Lerman RH, et al. **Adv Intern Med** 1989;34:127–63 (123 ref.)

Evaluation of an alternating–calorie diet with and without exercise in the treatment of obesity. Hill JO, et al. **Am J Clin Nutr** 1989 Aug;50(2):248–54

Repetitive weight loss and weight regain: effects on weight reduction, resting metabolic rate, and lipolytic activity before and after exercise and/or diet treatment. van Dale D, et al. **Am J Clin Nutr** 1989 Mar;49(3):409–16

Limited weight losses with a gastric balloon. Kramer FM, et al. **Arch Intern Med** 1989 Feb;149(2):411–3

Stability of food preferences during weight control. A study with 8– to 12–year–old children and their parents. Epstein LH, et al. **Behav Modif** 1987 Jan;11(1):87–101

Intervention study on obese school–aged children. Bächlin A, et al. **Bibl Nutr Dieta** 1989;(44):38–44

The Salmon lecture. Some perspectives on human obesity: treatment. Stunkard AJ. **Bull N Y Acad Med** 1988 Nov; 64(8):924–40 (29 ref.)

Weight control in the management of hypertension. World Hypertension League. **Bull WORLD Health Organ** 1989; 67(3):245–52 (29 ref.)

Obesity management via diet and exercise intervention. Hills AP, et al. **Child Care Health Dev** 1988 Nov–Dec; 14(6):409–16

Severe metabolic acidosis induced in a patient during fasting by KCl administration. Leiter LA, et al. **Clin Invest Med** 1988 Aug;11(4):266–70

The effect of the Garren–Edwards Gastric Bubble on solid and liquid gastric emptying. Ziessman HA, et al. **Clin Nucl Med** 1988 Aug;13(8):586–9

Treatment of obesity in adults. AMA Council on Scientific Affairs. **Conn Med** 1989 Jan;53(1):21–6

Treatment of obesity: an overview. Bray GA, et al. **Diabetes Metab Rev** 1988 Nov;4(7):653–79 (117 ref.)

Use and misuse of intragastric balloons in the management of obesity. A review. Kirby DF, et al. **Dig Dis** 1989; 7(3):147–58 (35 ref.)

Obesity: basic considerations and clinical approaches. Bray GA. **Dis Mon** 1989 Jul;35(7):449–537 (182 ref.)

Quantitative therapeutic plan for the treatment of obesity and a simple method for estimating appropriate caloric intake by using previous rate of weight loss. Oimomi M, et al. **Endocrinol Jpn** 1988 Oct;35(5):769–73

Effect of the gastric balloon versus sham procedure on weight loss in obese subjects. Ramhamadany EM, et al. **Gut** 1989 Aug;30(8):1054–7

Morbidity and treatment of clinically important obesity: an internal medicine perspective. Fachnie JD. **Henry Ford Hosp Med J** 1988;36(2):108–12

Long–term follow–up of behavioral treatment for obesity: patterns of weight regain among men and women. Kramer FM, et al. **Int J Obes** 1989 Apr;13(2):123–36 (43 ref.)

Identification of high–risk situations in a behavioral weight

loss program: application of the relapse prevention model. Schlundt DG, et al. **Int J Obes** 1989 Apr;13(2):223–34
Fiber and exercise in the treatment of obese adolescents. Peña M, et al. **J Adolesc Health Care** 1989 Jan;10(1):30–4
Rational weight loss programs: a clinician's guide. Morgan SL. **J Am Coll Nutr** 1989 Jun;8(3):186–94 (49 ref.)
Long-term follow-up of weight status of subjects in a behavioral weight control program. Lavery MA, et al. **J Am Diet Assoc** 1989 Sep;89(9):1259–64
Adapting a community group weight reduction program to a work-site setting. Markenson DM, et al. **J Am Diet Assoc** 1988 Nov;88(11):1436–7
Weight changes in a couples program: negative association of marital adjustment. Black DR. **J Behav Ther Exp Psychiatry** 1988 Jun;19(2):103–11
Effect of length of treatment on weight loss. Perri MG, et al. **J Consult Clin Psychol** 1989 Jun;57(3):450–2
Effects of four maintenance programs on the long-term management of obesity. Perri MG, et al. **J Consult Clin Psychol** 1988 Aug;56(4):529–34
Three-year follow-up of the treatment of obesity by very low calorie diet, behavior therapy, and their combination. Wadden TA, et al. **J Consult Clin Psychol** 1988 Dec; 56(6):925–8
An analytic review of current therapies for obesity. Holmes MD, et al. **J Fam Pract** 1989 May;28(5):610–6 (65 ref.)
Clinical application of lactate threshold to the treatment of obesity. Tanaka K, et al. **J Hum Ergol (Tokyo)** 1987 Dec; 16(2):145–50
"Just push away from the table"! Cooper JT. **J Med Assoc Ga** 1989 Apr;78(4):209–11
Cognitive-behavioural treatments for obesity. Bennett GA. **J Psychosom Res** 1988;32(6):661–5 (15 ref.)
The treatment of obesity in adults [letter] **JAMA** 1989 Apr 21;261(15):2199–200
Treatment of obesity in adults. Council on Scientific Affairs. **JAMA** 1988 Nov 4;260(17):2547–51 (35 ref.)
Low and very low calorie diets. Atkinson RL. **Med Clin North Am** 1989 Jan;73(1):203–15 (63 ref.)
Behavioral management of obesity. Brownell KD, et al. **Med Clin North Am** 1989 Jan;73(1):185–201 (42 ref.)
Exercise and obesity. Segal KR, et al. **Med Clin North Am** 1989 Jan;73(1):217–36 (66 ref.)
Changes in plasma lipids and lipoproteins in overweight men during weight loss through dieting as compared with exercise. Wood PD, et al. **N Engl J Med** 1988 Nov 3; 319(18):1173–9
Childhood obesity: how to treat it, how to prevent it. Carlson MJ. **Ohio Med** 1989 Mar;85(3):186–90
Behavioral weight reduction program for mentally retarded adult females. Fisher E. **Percept Mot Skills** 1986 Apr; 62(2):359–62
Effects of a gastric implant on body weight and gastrointestinal hormones in cafeteria diet obese rats. Northway MG, et al. **Physiol Behav** 1989 Feb;45(2):331–5
How I treat ... the obese patient. Hooper J, et al. **Practitioner** 1988 Dec;232(1460):1353–6
An evaluation and follow-up investigation of a behavioural group treatment programme for obesity. Griffiths RA, et al. **Psychother Psychosom** 1987;48(1–4):157–64
Long-term care of obese individuals in a community-based primary health care program. Björvell H, et al. **Scand J Prim Health Care Suppl** 1988;1:113–8
Aerobic exercise and resistance weight-training during weight reduction. Implications for obese persons and athletes. Walberg JL. **Sports Med** 1989 Jun;7(6):343–56 (64 ref.)
Obesity. Part II—Treatment. Bray GA, et al. **West J Med** 1988 Nov;149(5):555–71 (109 ref.)
[Multidisciplinary consultation for patients with excess weight: observations following a 6-month pilot experience] Crausaz FM, et al. **Ther Umsch** 1989 May;46(5):319–24 (Eng. Abstr.) **(Fre)**
[The intragastric balloon: a logical and attractive idea, but probably ineffective] Héraief E, et al. **Ther Umsch** 1989 May;46(5):329–33 (Eng. Abstr.) **(Fre)**
[Evaluation and treatment of obesity in clinical practice] Keller U, et al. **Ther Umsch** 1989 May;46(5):297–308 (Eng. Abstr.) **(Ger)**
[Advise for the general practitioner: information for the obese patient] Cairella M. **Clin Ter** 1989 May 15;129(3):219–21 **(Ita)**
[Psychological problems in the treatment of obese patients] Cairella M, et al. **Clin Ter** 1987 Dec 15;123(5):333–9 (Eng. Abstr.) **(Ita)**
[Comparison of treatment only with diet and diet + diethylaminoethyl dextran (DEAE-D) of obese subjects] Gizzi S, et al. **Minerva Dietol Gastroenterol** 1988 Jul–Sep; 34(3):187–9 (Eng. Abstr.) **(Ita)**
[Behavior therapy in obesity] Arai K, et al. **Nippon Rinsho** 1988 Nov;46(11):2484–90 **(Jpn)**
[Diet therapy and exercise therapy in obesity] Nomura K, et al. **Nippon Rinsho** 1988 Nov;46(11):2477–83 **(Jpn)**
[Dietotherapy of obesity combined with group autogenic training exercises at a sanatorium] Panchenko MF, et al. **Voen Med Zh** 1989 Feb;(2):45 **(Rus)**
[Treatment of obesity using a gastric balloon] Kovač T, et al. **Med Pregl** 1988;41(5–6):219–22 (Eng. Abstr.) **(Scr)**
[Therapeutic indications in obesity] Björntorp P. **Lakartidningen** 1988 Oct 26;85(43):3551–3 **(Swe)**

URINE

The assessment of the dopaminergic tonus by urinary determinations of homovanillic acid (HVA) and dihydroxyphenylacetic acid (DOPAC) in normal, obese and GH-deficient short children. Popa M, et al. **Endocrinologie** 1988 Jul–Sep;26(3):211–20
Low level of urinary 5-hydroxyindole acetic acid (5 HIAA) in obese children having concomitantly high 3-methoxy-4-hydroxyphenyl glycol (MHPG) excretion. Popa M, et al. **Endocrinologie** 1989 Jan–Mar;27(1):29–34
Thyroid hormone-induced reduction of urinary 5-hydroxyindole acetic acid (5 HIAA) in obese children. Comparison with hypothyroid patients of similar age having either pituitary dwarfism or congenital myxedema. Popa M, et al. **Endocrinologie** 1989 Jan–Mar;27(1):35–41

VETERINARY

Sera-controlled preadipocyte growth in culture: an ontogeny study with sera from lean and obese pigs. Jewell DE, et al. **J Anim Sci** 1988 Sep;66(9):2393–400
Glycerolipid biosynthesis in porcine adipose tissue in vitro: effect of adiposity and depot site. Rule DC, et al. **J Anim Sci** 1989 Feb;67(2):364–73
Energy metabolism in genetically fat and lean chickens: diet- and cold-induced thermogenesis. Geraert PA, et al. **J Nutr** 1988 Oct;118(10):1232–9
Comparative response of lean or genetically obese swine and their progeny to severe feed restriction during gestation. Pond WG, et al. **J Nutr** 1988 Oct;118(10):1223–31
Characteristics of spontaneous obesity in the Cayo Santiago rhesus macaque: preliminary report. Schwartz SM. **P R Health Sci J** 1989 Apr;8(1):103–6
Obesity: occurrence, treatment, and prevention. Hand MS, et al. **Vet Clin North Am Small Anim Pract** 1989 May; 19(3):447–74 (112 ref.)

OBESITY IN DIABETES

Obesity and diabetes. **Diabetes Metab Rev** 1988 Nov; 4(7):623–700

BLOOD

Blood lactate behavior after glucose load in diabetes mellitus. Prando R, et al. **Acta Diabetol Lat** 1988 Jul–Sep; 25(3):247–56
Effects of guar-pasta on serum lipid levels in obese diabetic and non-diabetic women with normal lipids. Tognarelli M, et al. **Acta Diabetol Lat** 1988 Jul–Sep;25(3):243–6
Effect of alpha-inhibitors on blood glucose and insulin levels. Laube H, et al. **Adv Exp Med Biol** 1988;246:287–93
Glucose disposal in obese non-diabetic and diabetic type II patients. A study by indirect calorimetry and euglycemic insulin clamp. Golay A, et al. **Diabete Metab** 1988 Jul–Aug; 14(4):443–51
Impaired insulin-induced erythrocyte magnesium accumulation is correlated to impaired insulin-mediated glucose disposal in type 2 (non-insulin-dependent) diabetic patients. Paolisso G, et al. **Diabetologia** 1988 Dec; 31(12):910–5
Lipid-bound sialic acid in diabetes. Gavella M, et al. **Horm Metab Res** 1989 May;21(5):280–1
The metabolic consequences of long-term human obesity. Felber JP, et al. **Int J Obes** 1988;12(5):377–89
Changes in insulin responses and binding in adipocytes from monkeys with obesity progressing to diabetes. Hansen BC, et al. **Int J Obes** 1988;12(5):433–43
Effect of carbohydrate refeeding on free fatty acids after a fast in obese diabetic and obese non-diabetic females. Gray DS, et al. **Metabolism** 1989 Mar;38(3):208–14
Differential glycemic effects of morphine in diabetic and normal mice. Surwit RS, et al. **Metabolism** 1989 Mar; 38(3):282–5
Naltrexone potentiates glycemic responses during stress and epinephrine challenge in genetically obese mice. McCubbin JA, et al. **Psychosom Med** 1989 Jul–Aug;51(4):441–8
[Blood uric acid levels and overweight: correlations in clinical cases of diabetic patients] Sinagra D, et al. **Medicina (Firenze)** 1988 Jan–Mar;8(1):77–8 (Eng. Abstr.) **(Ita)**

CHEMICALLY INDUCED

[Effect of androgen on the onset of diabetes in the KK mice treated with monosodium aspartate] Higuchi N, et al. **Jikken Dobutsu** 1989 Jan;38(1):25–9 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Effects of castration and androgen on glycosuria appearance in the diabetic KK mice induced by monosodium glutamate administration. Nonaka T, et al. **Nippon Juigaku Zasshi** 1988 Oct;50(5):1121–3
[Acanthosis nigricans marker of severe insulinoresistance in 2 diabetic patients with android obesity (letter)] Grimaldi A, et al. **Presse Med** 1988 Nov 5;17(39):2089 **(Fre)**

DIAGNOSIS

The relation of body fat distribution, as assessed by six girth measurements, to diabetes mellitus in women. Freedman DS, et al. **Am J Public Health** 1989 Jun;79(6):715–20

DIET THERAPY

Skeletal muscle potassium increases after diet and weight reduction in obese subjects with normal and impaired glucose tolerance. Landin K, et al. **Acta Endocrinol (Copenh)** 1989 Jul;121(1):21–6
Effects of diet-therapy on urinary protein excretion albuminuria and renal haemodynamic function in obese diabetic patients with overt nephropathy. Solerte SB, et al. **Int J Obes** 1989 Apr;13(2):203–11
Limitations of diet therapy in patients with non-insulin-dependent diabetes mellitus. Wolffenbuttel BH, et al. **Int J Obes** 1989 Apr;13(2):173–82

DRUG THERAPY

Combination of two sulfonylureas. Does it make sense [letter] Salo S, et al. **Diabetes Care** 1988 Oct;11(9):751–3
In vivo action of glibenclamide in obese subjects with mild type 2 (non-insulin dependent) diabetes. Hother-Nielsen O, et al. **Diabetes Res** 1988 Jun;8(2):63–70

ENZYMOLOGY

The glucose-6-phosphatase/glucokinase ratio in the liver of obese-diabetic subjects. Belfiore F, et al. **Biochem Med Metab Biol** 1989 Feb;41(1):77–80

EPIDEMIOLOGY

Diabetes, the ice free corridor, and the Paleoindian settlement of North America. Wendorf M. **Am J Phys Anthropol** 1989 Aug;79(4):503–20 (79 ref.)
Adiposity or longevity: which factor accounts for the increase in type II diabetes mellitus when populations acculturate to an industrial technology? Wiedman DW. **Med Anthropol** 1989 Jun;11(3):237–53

ETHNOLOGY

Are racial differences in the prevalence of diabetes in adults explained by differences in obesity? O'Brien TR, et al. **JAMA** 1989 Sep 15;262(11):1485–8

GENETICS

Obesity and heredity in the etiology of non-insulin-dependent diabetes mellitus in 32,662 adult white women. Morris RD, et al. **Am J Epidemiol** 1989 Jul; 130(1):112–21
Analysis of the HepG2/erythrocyte glucose transporter locus in a family with type 2 (non-insulin-dependent) diabetes and obesity. O'Rahilly S, et al. **Diabetologia** 1989 Apr; 32(4):266–9

METABOLISM

Insulin binding in erythrocyte from patients with obese diabetics. Hsiao TS, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Jan;41(1):17–20
Metabolic and thyroidal responses to mild cold are abnormal in obese diabetic women. Lean ME, et al. **Clin Endocrinol (Oxf)** 1988 Jun;28(6):665–73
Effects of basal insulin supplementation on disposition of mixed meal in obese patients with NIDDM. McMahon M, et al. **Diabetes** 1989 Mar;38(3):291–303
Effects of streptozocin-induced diabetes on glucose metabolism and lactate release by isolated fat cells from young lean and older, moderately obese rats. Newby FD, et al. **Diabetes** 1989 Feb;38(2):237–43
Regulation of glucose storage in obesity and diabetes: metabolic aspects. Felber JP, et al. **Diabetes Metab Rev** 1988 Nov;4(7):691–700 (33 ref.)
Mechanisms of impaired insulin action in isolated adipocytes from obese and diabetic subjects. Foley JE. **Diabetes Metab Rev** 1988 Aug;4(5):487–505
Correlation of in vivo and in vitro actions of insulin in obesity and noninsulin-dependent diabetes mellitus: role of the glucose transport system. Garvey WT, et al. **Diabetes Metab Rev** 1988 Sep;4(6):543–69 (86 ref.)
Metabolic basis of obesity and noninsulin-dependent diabetes mellitus. Golay A, et al. **Diabetes Metab Rev** 1988 Dec; 4(8):727–47
Characterisation of insulin-like growth factor I receptor in skeletal muscles of normal and insulin resistant subjects. Livingston N, et al. **Diabetologia** 1988 Dec;31(12):871–7
Derangement in hepatic enzymes caused by sucrose-drinking and its implication for the development of hyperglycemia in female Wistar fatty rats. Sugiyama Y, et al. **Endocrinol Jpn** 1989 Apr;36(2):245–51
Liver insulin receptor tyrosine kinase activity in a rat model of type II diabetes mellitus and obesity. Adamo M, et al. **J Nutr** 1989 Mar;119(3):484–9
Effect of acarbose (BAY-g-5421) on expression of noninsulin-dependent diabetes mellitus in sucrose-fed SHR/N-corpulent rats. Carswell N, et al. **J Nutr** 1989 Mar; 119(3):388–94
Effects of hypocaloric diet and insulin therapy on metabolic control and mechanisms of hyperglycemia in obese non-insulin-dependent diabetic subjects. Laakso M, et al. **Metabolism** 1988 Nov;37(11):1092–100
Impaired insulin action in adipocytes of New Zealand obese mice: a role for postbinding defects in pyruvate dehydrogenase and insulin mediator activity. Macaulay SL, et al. **Metabolism** 1988 Oct;37(10):958–65

PATHOLOGY

Capillary basement membrane thickness and capillary density in sedentary and trained obese Zucker rats. Lash JM, et al. **Diabetes** 1989 Jul;38(7):854–60

PHYSIOPATHOLOGY

Food restriction normalizes somatic growth and diabetes in adrenalectomized ob/ob mice. Dubuc PU, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R787–93

Comparison of insulin secretory patterns in obese nondiabetic LA/N-cp and obese diabetic SHR/N-cp rats. Role of hyperglycemia. Recant L, et al. **Diabetes** 1989 Jun; 38(6):691–7

Abdominal obesity and the development of noninsulin-dependent diabetes mellitus. Björntorp P. **Diabetes Metab Rev** 1988 Sep;4(6):615–22 (55 ref.)

Effects of very-low-calorie diet weight reduction on glucose tolerance, insulin secretion, and insulin resistance in obese non-insulin-dependent diabetics. Fukuda M, et al. **Diabetes Res Clin Pract** 1989 Jun 20;7(1):61–7

Influence of B-cell impairment on pancreatic acini in NOD mice and streptozotocin-induced diabetic rats. Yokoyama J, et al. **Endocrinol Jpn** 1988 Aug;35(4):549–56

[The effect of obesity on glomerular hyperfiltration as a sign of incipient diabetic nephropathy] Erben J, et al. **Vnitr Lek** 1988 Jul;34(7):639–45 (Eng. Abstr.) (Cze)

[Physiopathology of insulin resistance, obesity and type II diabetes in animals] Jeanrenaud B, et al. **Journ Annu Diabetol Hotel Dieu** 1988;:7–14 (32 ref.) (Fre)

REHABILITATION

Group education for obese patients with type 2 diabetes: greater success at less cost. Heller SR, et al. **Diabetic Med** 1988 Sep;5(6):552–6

Clinical strategies for obesity management. Lean M, et al. **Diabetic Med** 1988 Sep;5(6):515–8

THERAPY

Exercise in a behavioural weight control programme for obese patients with Type 2 (non-insulin-dependent) diabetes. Wing RR, et al. **Diabetologia** 1988 Dec; 31(12):902–9

URINE

Twenty-four hour excretion of urinary C-peptide in gestational diabetic women before and after treatment with diet or diet and insulin. Nordlander E, et al. **Diabetes Res** 1989 Jan;10(1):25–30

OBESITY, MORBID

see related
GASTRIC BYPASS
GASTROPLASTY
JEJUNOILEAL BYPASS

Hydrostatic weighing without head submersion in morbidly obese females. Evans PE, et al. **Am J Clin Nutr** 1989 Aug; 50(2):400–3

Re: Percutaneous lithotripsy in morbid obesity [letter] Tomera K. **J Urol** 1989 Apr;141(4):959

BLOOD

The concentration of ionised calcium in plasma. Measurement and some clinical applications. Fogh-Andersen N. **Dan Med Bull** 1988 Dec;35(6):575–82 (121 ref.)

Preoperative coagulation indices in patients with morbid obesity. Gleysteen JJ, et al. **Int J Obes** 1989 Apr; 13(2):195–201

Serum selenium and zinc concentrations in morbid obesity. Comparison of controls and patients with jejunoileal bypass. Gjørup I, et al. **Scand J Gastroenterol** 1988 Dec; 23(10):1250–2

[Glucose tolerance test in morbidly obese children and adolescents] Zwiauer K, et al. **Klin Padiatr** 1989 Mar–Apr; 201(2):118–22 (Eng. Abstr.) (Ger)

COMPLICATIONS

Weight loss in sleep apnea [letter] **Chest** 1989 Sep;96(3):703–4

Ultrasound evaluation of cholelithiasis in the morbidly obese. Silidker MS, et al. **Gastrointest Radiol** 1988 Oct;13(4):345–6

Obese hypoventilation syndrome of early childhood requiring ventilatory support. Bourne RA, et al. **Int J Pediatr Otorhinolaryngol** 1988 Oct;16(1):61–8

Liver injury tests in hazardous waste workers: the role of obesity. Hodgson MJ, et al. **J Occup Med** 1989 Mar; 31(3):238–42

Liver pathology in diabetes mellitus and morbid obesity. Clinical, pathological, and biochemical considerations. Silverman JF, et al. **Pathol Annu** 1989;24 Pt 1:275–302 (125 ref.)

Ventral hernia in a massively obese patient: diagnosis by computerized tomography. Rubio PA, et al. **South Med J** 1988 Oct;81(10):1307–8

[A case from practice (135). Patient: Mr. S. P., born 8-12-1952, independently employed as a health services planner. Morbid obesity with hypercholesterolemia and hypertension with proximal humeral shaft fracture] Cavin C. **Schweiz Rundsch Med Prax** 1989 Mar 28;78(13):376–7 (Ger)

DIET THERAPY

[Follow-up study of severely overweight adolescents 4 years following inpatient weight loss with a low calorie protein-carbohydrate diet] Nanoff C, et al. **Infusionstherapie** 1989 Jun;16(3):141–4 (Eng. Abstr.) (Ger)

[Weight-reducing diet in the treatment of severe forms of obesity] Konev SF, et al. **Klin Med (Mosk)** 1988 Aug; 66(8):120–2 (Eng. Abstr.) (Rus)

ETIOLOGY

Glucagonoma presenting as morbid obesity. Martin FM, et al. **J Surg Oncol** 1988 Dec;39(4):256–9

Hypothalamic sarcoidosis: a new cause of morbid obesity. Vesely DL. **South Med J** 1989 Jun;82(6):758–61

METABOLISM

17-beta-estradiol increases mitogenic activity of medium from cultured preadipocytes of massively obese persons. Cooper SC, et al. **J Clin Invest** 1989 Jun;83(6):1925–9

The effect of ASP on the adipocyte of the morbidly obese. Walsh MJ, et al. **J Surg Res** 1989 May;46(5):470–3

PHYSIOPATHOLOGY

Pyridostigmine counteracts the blunted growth hormone response to growth hormone-releasing hormone of obese children. Loche S, et al. **Acta Endocrinol (Copenh)** 1989 May;120(5):624–8

Effect of exercise on left ventricular systolic function and reserve in morbid obesity. Alpert MA, et al. **Am J Cardiol** 1989 Jun 15;63(20):1478–82

Calculation of heparin dosage in a morbidly obese woman. Ellison MJ, et al. **Clin Pharm** 1989 Jan;8(1):65–8

Maximum respiratory pressures in morbidly obese subjects. Kelly TM, et al. **Respiration** 1988;54(2):73–7

Gastric and oesophageal emptying in obesity. Maddox A, et al. **Scand J Gastroenterol** 1989 Jun;24(5):593–8

Respiratory function in the morbidly obese before and after weight loss. Thomas PS, et al. **Thorax** 1989 May; 44(5):382–6

[The relation of anthropometric parameters and echocardiography findings in the evaluation of left ventricular form and function in extreme obesity] Kinner B, et al. **Z Gesamte Inn Med** 1989 Mar 1;44(5):152–7 (Eng. Abstr.) (Ger)

PREVENTION & CONTROL

Physiologic approaches to the control of obesity. Powers MA, et al. **Ann Surg** 1989 Mar;209(3):255–60 (77 ref.)

PSYCHOLOGY

Minnesota multiphasic personality profiles of the morbidly obese. Lanzisera PJ, et al. **Henry Ford Hosp Med J** 1988; 36(2):78–81

Psychobiological effects of gastric restriction surgery for morbid obesity. Peace K, et al. **N Z Med J** 1989 Feb 22; 102(862):76–8

Alexithymia and symbolic function in the obese. Legorreta G, et al. **Psychother Psychosom** 1988;50(2):88–94

SURGERY

Gastric banding in the treatment of morbid obesity. Factors influencing immediate and long-term results. Sjøberg EJ, et al. **Acta Chir Scand** 1989;155(1):31–4

Medical and surgical management of obesity. Lerman RH, et al. **Adv Intern Med** 1989;34:127–63 (123 ref.)

Gastric restrictive operations for morbid obesity. Benotti PN, et al. **Am J Surg** 1989 Jan;157(1):150–5

Weight loss with vertical banded gastroplasty and Roux-Y gastric bypass for morbid obesity with selective versus random assignment. Sugerman HJ, et al. **Am J Surg** 1989 Jan;157(1):93–102

Incisional closure in morbidly obese patients. Cleveland RD, et al. **Am Surg** 1989 Jan;55(1):61–3

Continuous intravenous infusion of atracurium in idiopathic obesity [letter] Papadimitriou L, et al. **Anaesthesia** 1988 Oct;43(10):900

Preoxygenation in the morbidly obese: a comparison of two techniques. Goldberg ME, et al. **Anesth Analg** 1989 Apr; 68(4):520–2

Gastric surgery for morbid obesity. Complications and long-term weight control. Yale CE. **Arch Surg** 1989 Aug; 124(8):941–6

Absence of luminal intrinsic factor after gastric bypass surgery for morbid obesity. Marcuard SP, et al. **Dig Dis Sci** 1989 Aug;34(8):1238–42

Use of thoracoabdominal incision for cancer of the splenic flexure in the obese patient. Walfisch S, et al. **Dis Colon Rectum** 1989 Feb;32(2):169–70

Marlex mesh erosion: a complication of horizontal banded gastroplasty. Fardy J, et al. **Gastrointest Endosc** 1988 Nov-Dec;34(6):461–2

Surgery for morbid obesity: a continuing challenge. Bivins BA, et al. **Henry Ford Hosp Med J** 1988;36(2):103–7 (54 ref.)

American Society for Bariatric Surgery, 5th annual meeting. Iowa City, Iowa, June 1–3, 1988. Abstracts. **Int J Obes** 1988;12(6):599–608

Body composition in subjects with surgically obtained stable body weight normalization. Adami GF, et al. **Int J Obes** 1989 Feb;13(1):55–8

The dynamics of weight loss after gastric partition for gross obesity. McFarland RJ, et al. **Int J Obes** 1989 Feb; 13(1):81–8

Elevated plasma levels of oxytocin in obese subjects before and after gastric banding. Stock S, et al. **Int J Obes** 1989 Apr;13(2):213–22

Weight loss after gastroplasty: psychological sequelae in relation to clinical and metabolic observations. Rydén O, et al. **J Am Coll Nutr** 1989 Feb;8(1):15–23

Vertical banded gastroplasty for the treatment of morbid obesity. Bogokowsky H, et al. **J Clin Gastroenterol** 1988 Dec;10(6):655–8

Is there anything new in obesity surgery? [editorial] Wright HK. **J Clin Gastroenterol** 1988 Dec;10(6):608

Evolution and current status of surgery for morbid obesity: Part I. Results of over 1400 surgical procedures spanning 22 years. Headley WM, et al. **J Med Assoc Ga** 1989 Feb; 78(2):75–83 (55 ref.)

Evolution and current status of surgery for morbid obesity: Part II. Headley WM, et al. **J Med Assoc Ga** 1989 Mar; 78(3):133–40

Surgical management of the morbidly obese: some personal comments [editorial] Rosenbloom SJ. **J Med Assoc Ga** 1989 Feb;78(2):70

Diagnostic and therapeutic technology assessment. Gastric restrictive surgery. **JAMA** 1989 Mar 10;261(10):1491–4

Home total parenteral nutrition in a pregnant diabetic after jejunoileal bypass for obesity. Gray DS, et al. **JPEN J Parenter Enteral Nutr** 1989 Mar–Apr;13(2):214–7

Surgical treatment of obesity. Kral JG. **Med Clin North Am** 1989 Jan;73(1):251–64 (66 ref.)

Routine cholecystectomy in the morbidly obese. Mooney MJ, et al. **Milit Med** 1989 Aug;154(8):409–11

Surgical treatment of morbid obesity. **Natl Inst Health Consensus Dev Conf Summ** 1977–78; 1:39–41 (0 ref.)

Prevention of wound dehiscence in severely obese patients with jejuno-ileal by-pass: the role of hyaluronic acid. Trabucchi E, et al. **Pharmatherapeutica** 1988;5(4):233–9

The effect of gastric banding on body weight in experimental animals. Badura R, et al. **Pol Arch Weter** 1987;27(2–3):5–14

When to advise surgery for severe obesity. Garrow JS. **Postgrad Med J** 1989 Jan;65(759):10–3

Food intake in relation to pouch volume, stoma diameter, and pouch emptying after gastroplasty for morbid obesity. Andersen T, et al. **Scand J Gastroenterol** 1988 Nov; 23(9):1057–62

Conversion surgery for morbid obesity: complications and long-term weight control. Yale CE. **Surgery** 1989 Sep; 106(3):474–80

[Liposuction for treating localized adiposity—report of 24 cases] Zhou SJ. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Jun;4(2):85–6, 156 (Eng. Abstr.) (Chi)

[Surgical treatment of exogenous morbid obesity: results of Mason's vertical gastroplasty] Jayet A, et al. **Ther Umsch** 1989 May;46(5):325–8 (Eng. Abstr.) (Fre)

[Surgical therapy in obesity] Morioka Y, et al. **Nippon Rinsho** 1988 Nov;46(11):2497–501 (Jpn)

[Surgical cases of obesity and postoperative complications] Onishi K, et al. **Nippon Rinsho** 1988 Nov;46(11):2508–11 (Jpn)

[Distal esophageal banding. A modified method of surgical treatment of obesity] Haarberg G, et al. **Tidsskr Nor Laegeforen** 1989 Aug 10;109(22):2133–5 (Eng. Abstr.) (Nor)

[Hazards and complications of the surgical treatment of patients with extreme forms of obesity] Lebedev LV, et al. **Khirurgiia (Mosk)** 1988 Aug;(8):111–5 (Rus)

[Gastric shunting in correcting constitutional alimentary obesity] Polous IuM, et al. **Klin Khir** 1989;(2):59 (Rus)

[Epidural anesthesia in patients with morbid obesity] Borovskikh NA. **Vestn Khir** 1988 Jun;140(6):126–9 (Eng. Abstr.) (Rus)

THERAPY

The effects of morbid obesity and the Garren-Edwards gastric bubble on solid phase gastric emptying. Barkin JS, et al. **Am J Gastroenterol** 1988 Dec;83(12):1364–7

A simplified technique for the extirpation of the gastric bubble using an endo-overtube. O'Loughlin KC, et al. **Am Surg** 1989 Feb;55(2):116–8

The Salmon lecture. Some perspectives on human obesity: treatment. Stunkard AJ. **Bull N Y Acad Med** 1988 Nov; 64(8):924–40 (29 ref.)

A novel device for removal of the gastric remnant after intragastric balloon implantation for obesity. Elsborg L. **Endoscopy** 1989 Mar;21(2):79–80

Balloon extraction in 12 minutes—a new method of removing gastric balloons [letter] Weiss H. **Endoscopy** 1988 Sep; 20(5):282

Small bowel obstruction and the Garren-Edwards gastric bubble: an iatrogenic bezoar. Benjamin SB. **Gastrointest Endosc** 1988 Nov-Dec;34(6):463–7

Comparison of weight loss with short term dietary and intragastric balloon treatment. Durrans D, et al. **Gut** 1989 May;30(5):565–8

Long-term (5-year) results after either horizontal

gastroplasty or very-low-calorie diet for morbid obesity. Andersen T, et al. **Int J Obes** 1988;12(4):277–84
"Reversible gastric banding" in surgical treatment of morbid obesity—results of animal experiments. Szinicz G, et al. **Res Exp Med (Berl)** 1989;189(1):55–60
[Effect of the complex treatment conducted in the rehabilitation center in the city of Loznitsa on oral glucose tolerance and insulin secretion in patients with morbid obesity] Orbetsova V, et al. **Vutr Boles** 1988;27(3):89–93 (Eng. Abstr.) **(Bul)**
[Vertical gastroplasty: surgical treatment of choice in exogenous morbid obesity] Gazzola LM, et al. **Helv Chir Acta** 1988 Jun;55(1–2):7–14 (Eng. Abstr.) **(Fre)**
[Technical complications at midterm of Mason gastroplasty] Merlini M, et al. **Helv Chir Acta** 1988 Jun;55(1–2):15–7 (Eng. Abstr.) **(Fre)**
[Therapy of obesity using a gastric balloon. A critical statement] Wechsler JG. **Dtsch Med Wochenschr** 1989 May 12;114(19):759–61 (23 ref.) **(Ger)**
[Does the stomach balloon modify the function of the esophagus and lower esophageal sphincter, stomach emptying and release of gastrointestinal peptides?] Lepsien K, et al. **Z Gastroenterol** 1989 May;27(5):247–53 (Eng. Abstr.) **(Ger)**
[Forced reduction of body weight in obese persons] Cerič B, et al. **Lijec Vjesn** 1988 Jun–Jul;110(6–7):215–8 (Eng. Abstr.) **(Scr)**

OBIDOXIME see under **OXIMES**

OBJECT ATTACHMENT

Offspring of women with nonorganic psychosis: antecedents of anxious attachment to the mother at one year of age. Persson-Blennow I, et al. **Acta Psychiatr Scand** 1988 Jul; 78(1):66–71
Early separation and suicidal behaviour in the parental homes of 40 consecutive suicide attempters. Wasserman D, et al. **Acta Psychiatr Scand** 1989 Mar;79(3):296–302
James Joyce and Stephen Dedalus: object and selfobject relationships in the successful and blocked creative process. Baker HS. **Adolesc Psychiatry** 1988;15:258–78
Creativity and the transformational process. Rotenberg CT. **Adolesc Psychiatry** 1988;15:247–57
Severity of depression and developmental levels of psychological functioning in 8–16-year-old girls. Goldberg EH. **Am J Orthopsychiatry** 1989 Apr;59(2):167–78
Are "primitive" object relations really preoedipal? Westen D. **Am J Orthopsychiatry** 1989 Jul;59(3):331–45 (60 ref.)
Splitting in hospital treatment. Gabbard GO. **Am J Psychiatry** 1989 Apr;146(4):444–51 (47 ref.)
Oscillations of attachment in borderline personality disorder. Melges FT, et al. **Am J Psychiatry** 1989 Sep;146(9):1115–20
Mental development. Najeeb S. **Am J Psychoanal** 1988 Fall; 48(3):235–46
Intimacy and cultural pressures. Rubin TI. **Am J Psychoanal** 1989 Mar;49(1):1–4
The reverse selfobject experience. Lee RR. **Am J Psychother** 1988 Jul;42(3):416–24
Attachments beyond infancy. Ainsworth MD. **Am Psychol** 1989 Apr;44(4):709–16
The effects of pet therapy on the social behavior of institutionalized Alzheimer's clients. Kongable LG, et al. **Arch Psychiatr Nurs** 1989 Aug;3(4):191–8
Sexual decision making and object relations theory. Randolph BJ, et al. **Arch Sex Behav** 1988 Oct;17(5):389–409
Prediction of schizophrenic relapse using the parental bonding instrument. Parker G, et al. **Aust N Z J Psychiatry** 1988 Sep;22(3):283–92
Object relations, Holocaust survival and family therapy. Müller UF, et al. **Br J Med Psychol** 1989 Mar;62 (Pt 1):13–21
Becoming a constant object for the borderline patient. Cohen CP, et al. **Bull Menninger Clin** 1989 Jul;53(4):287–99
The inability to name a child. Steinberg PI, et al. **Can J Psychiatry** 1989 Apr;34(3):221–6
Attachment theory and brief psychotherapy: applying current research to clinical interventions. West M, et al. **Can J Psychiatry** 1989 Jun;34(5):369–75
Risk factors in infant–mother attachment. Goldberg S. **Can J Psychol** 1988 Jun;42(2):173–88
The effects of object orientation and object type on children's interpretation of the word big. Coley JD, et al. **Child Dev** 1989 Apr;60(2):372–80
Mothers' internal models of relationships and children's behavioral and developmental status: a study of mother–child interaction. Crowell JA, et al. **Child Dev** 1988 Oct;59(5):1273–85
Maternal self-efficacy and infant attachment: integrating physiology, perceptions, and behavior. Donovan WL, et al. **Child Dev** 1989 Apr;60(2):460–72
Maternal separation in bonnet monkey infants: altered attachment and social support. Reite M, et al. **Child Dev** 1989 Apr;60(2):473–80
Maternal sensitivity and patterns of infant–mother attachment. Smith PB, et al. **Child Dev** 1988 Aug; 59(4):1097–101
Temperament, emotion, and social interactive behavior in the strange situation: a component process analysis of attachment system functioning. Thompson RA, et al. **Child Dev** 1988 Aug;59(4):1102–10
Attachment behavior, attachment security, and temperament during infancy. Vaughn BE, et al. **Child Dev** 1989 Jun; 60(3):728–37
Fostering intergenerational relationships for at-risk youth. Freedman M. **Child Today** 1989 Mar–Apr;18(2):10–5
Attachment, loss and rediscovery. Vaillant GE. **Hillside J Clin Psychiatry** 1988;10(2):148–64
That which patients bring to analysis. Rey JH. **Int J Psychoanal** 1988;69 (Pt 4):457–70
Companion animals in society [editorial] Smith JP. **J Adv Nurs** 1989 Apr;14(4):257–8
Social attachments in autistic children. Sigman M, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jan;28(1):74–81
Affect attunement, attachment, temperament, and zygosity: a twin study. Szajnberg NM, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Mar;28(2):249–53
Object attachment, thumbsucking, and the passage to sleep. Wolf AW, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Mar;28(2):287–92
Fairbairn's 'basic endopsychic situation' considered in terms of 'classical' and 'deficit' metapsychological models. Rinsley DB. **J Am Acad Psychoanal** 1988 Oct;16(4):461–77
The relationship of models of the mind to clinical work: object relations theory. Panel report. **J Am Psychoanal Assoc** 1988;36(3):749–57
Psychoanalysis, marital therapy, and object-relations theory. Finkelstein L. **J Am Psychoanal Assoc** 1988;36(4):905–31
On a type of heterosexuality, and the fluidity of object relations. Hershey DW. **J Am Psychoanal Assoc** 1989; 37(1):147–71
Cardiovascular effects of human-pet dog interactions. Vormbrock JK, et al. **J Behav Med** 1988 Oct;11(5):509–17
Eliminating chronic thumb sucking by preventing a covarying response. Friman PC. **J Behav Ther Exp Psychiatry** 1988 Dec;19(4):301–4
Infant day care and socioemotional development: the United States. Belsky J. **J Child Psychol Psychiatry** 1988 Jul; 29(4):397–406 (60 ref.)
Parental bonding and depressive disorders in adolescents. Burbach DJ, et al. **J Child Psychol Psychiatry** 1989 May; 30(3):417–29
Severity of early separation and later abusive mothering in monkeys: what is the pathogenic threshold? Troisi A, et al. **J Child Psychol Psychiatry** 1989 Mar;30(2):277–84
Do object relations deficits distinguish BPD from other diagnostic groups? Bell M, et al. **J Clin Psychol** 1988 Jul; 44(4):511–6
Object representations and symptomatology: preliminary findings in young adult psychiatric inpatients. Procidano ME, et al. **J Clin Psychol** 1989 Mar;45(2):309–16
Chronic illness and infant–mother attachment: cystic fibrosis. Fischer-Fay A, et al. **J Dev Behav Pediatr** 1988 Oct; 9(5):266–70
Early postpartum rooming-in and maternal attachment behaviors in a group of medically indigent primiparas. Norr KF, et al. **J Nurse Midwifery** 1989 Mar–Apr;34(2):85–91
Object relations and ego development: comparison and correlates in middle childhood. Avery RR, et al. **J Pers** 1988 Sep;56(3):547–69
Early childhood antecedents of aggression and passive-withdrawal in early elementary school. Renken B, et al. **J Pers** 1989 Jun;57(2):257–81
Boyhood separation anxiety disorder: thought disorder and object relations psychopathology as manifested in Rorschach imagery. Goddard R, et al. **J Pers Assess** 1989 Summer;53(2):239–52
Pet project. Monday M. **JAMA** 1989 Jan 6;261(1):136
Sources of father-infant bonding beliefs: implications for childbirth educators. Palkovitz R. **Matern Child Nurs J** 1988 Summer;17(2):101–13
Individual differences in empathy among preschoolers: relation to attachment history. Kestenbaum R, et al. **New Dir Child Dev** 1989 Summer;(44):51–64
Development of maternal–fetal attachment during pregnancy. Grace JT. **Nurs Res** 1989 Jul–Aug;38(4):228–32
Dog day afternoons. Athy D. **Ohio Med** 1989 Mar; 85(3):177–9
Mother-child holding therapy and autism. Welch MG, et al. **Pa Med** 1988 Oct;91(10):33–8
Elderly-animal friendship bonds. Peretti PO. **Panminerva Med** 1988 Jul–Sep;30(3):188–91
Social development. Lamb ME. **Pediatr Ann** 1989 May; 18(5):292, 294–7 (44 ref.)
Quality of mother-infant attachment and pediatric health care use. Harris ES, et al. **Pediatrics** 1989 Aug;84(2):248–54
Intergenerational transmission of maltreatment: insights from attachment theory and research. Zeanah CH, et al. **Psychiatry** 1989 May;52(2):177–96 (114 ref.)
Object relations theory in clinical practice. **Psychoanal Q** 1988 Oct;57(4):481–708
Transitional phenomena, projective identification, and the essential ambiguity of the psychoanalytic situation. Adler G. **Psychoanal Q** 1989 Jan;58(1):81–104
The clinical popularity of object relations concepts. Friedman L. **Psychoanal Q** 1988 Oct;57(4):667–91
Object relations in clinical practice. Joseph B. **Psychoanal Q** 1988 Oct;57(4):626–42
Object relations theory in clinical practice. Kernberg OF. **Psychoanal Q** 1988 Oct;57(4):481–504
The developmental context of internalized preoedipal object relations. Clinical applications of Mahler's theory of symbiosis and separation-individuation. Kramer S, et al. **Psychoanal Q** 1988 Oct;57(4):547–76
The limitations of the object relations model. Lussier A. **Psychoanal Q** 1988 Oct;57(4):528–46
The centrality of the psychoanalytic setting and the changing aims of treatment. A perspective from a theory of object relations. Modell AH. **Psychoanal Q** 1988 Oct;57(4):577–96
Misrecognitions and the fear of not knowing. Ogden TH. **Psychoanal Q** 1988 Oct;57(4):643–66
The indivisibility of Freudian object relations and drive theories. Spruiell V. **Psychoanal Q** 1988 Oct;57(4):597–625
Multisensory bridges in response to object loss during the Holocaust. Brenner I. **Psychoanal Rev** 1988 Winter; 75(4):573–87
The psychoanalytic process in adults and children. Abrams S. **Psychoanal Study Child** 1988;43:245–61
On the early formation of the mind. II. From differentiation to self and object constancy. Tähkä V. **Psychoanal Study Child** 1988;43:101–34 (75 ref.)
Attitudes toward animals and personal violence (suicide and homicide). Lester D. **Psychol Rep** 1988 Dec;63(3):810
Level of object representation and psychic structure deficit in obese persons. Raynes E, et al. **Psychol Rep** 1989 Feb; 64(1):291–4
Fetal sex identification and prenatal bonding. Wu JH, et al. **Psychol Rep** 1988 Aug;63(1):199–202
Father types of anorexia nervosa patients: the 'bonding', the 'brutal', the 'weak' and the 'absent' father. An empirical study based on a comparison with fathers of a representative normal group. Engel K, et al. **Psychother Psychosom** 1988;49(3–4):145–52
Maternal attachment to handicapped infants and the relationship to social support. Capuzzi C. **Res Nurs Health** 1989 Jun;12(3):161–7
Long-term effect on mother-infant behaviour of extra contact during the first hour post partum. V. Follow-up at three years. Wiberg B, et al. **Scand J Soc Med** 1989; 17(2):181–91
Certifying temperament [letter] Stockman MJ. **Vet Rec** 1989 Apr 1;124(13):356
[Interaction between the veterinarian, the client and the patient] Odendaal JS, et al. **J S Afr Vet Assoc** 1989 Mar; 60(1):15–9 (Eng. Abstr.) **(Afr)**
[To the welfare of man and animals] Rozemond H. **Tijdschr Diergeneeskd** 1989 Jan 15;114(2):65–75 (Eng. Abstr.) **(Dut)**
[Animals: their medical and social role] Gagnon AC. **Bull Acad Natl Med (Paris)** 1988 Oct;172(7):957–68 (6 ref.) (Eng. Abstr.) **(Fre)**
[Recent data on the interaction between a child and its family pet] Montagner H, et al. **Bull Acad Natl Med (Paris)** 1988 Oct;172(7):951–5 (17 ref.) (Eng. Abstr.) **(Fre)**
[Maternal behavior toward her newborn infant. Potential modification by peridural analgesia or childbirth preparation] Wagner A, et al. **Rev Fr Gynecol Obstet** 1989 Jan;84(1):29–35 (Eng. Abstr.) **(Fre)**
[Significance of bond security of the child to the mother for the psychological and physical development of failure to thrive children] Brinich EB, et al. **Prax Kinderpsychol Kinderpsychiatr** 1989 Mar;38(3):70–7 (Eng. Abstr.) **(Ger)**
[The body and food as objects in anorexia and bulimia] Hirsch M. **Prax Kinderpsychol Kinderpsychiatr** 1989 Mar; 38(3):78–82 (Eng. Abstr.) **(Ger)**
[Object related function of pain and depression] Ahrens S, et al. **Psychother Psychosom Med Psychol** 1989 Jun; 39(6):219–22 (Eng. Abstr.) **(Ger)**
[Psychogenic pain as a representation of the maternal object] Hirsch M. **Psychother Psychosom Med Psychol** 1989 Jun; 39(6):202–8 (43 ref.) (Eng. Abstr.) **(Ger)**
[We and our patient—the "temporal symbiosis" of the psychiatrist with his patients] Müller P. **Psychother Psychosom Med Psychol** 1988 Jul;38(7):247–50 (Eng. Abstr.) **(Ger)**
[Peculiarities of exotic animals in human-pet relations] Hollmann P. **Tierarztl Prax** 1989;17(1):1–11 (32 ref.) (Eng. Abstr.) **(Ger)**
[The psychology of the relationship between house pets, pet owners and veterinarians] Bergler R. **Zentralbl Veterinarmed [B]** 1988 Jul;35(6):443–61 (2 ref.) (Eng. Abstr.) **(Ger)**

OBJECT RELATIONS see **OBJECT ATTACHMENT**

OBLIGATION, SOCIAL see **SOCIAL RESPONSIBILITY**

OBSESSIVE BEHAVIOR see under **COMPULSIVE BEHAVIOR**

OBSESSIVE-COMPULSIVE DISORDER

see related **COMPULSIVE BEHAVIOR**

Obsessive-compulsive disorder. March JS, et al. **Am Fam Physician** 1989 May;39(5):175–82
Trichotillomania. Singhal PK, et al. **Indian Pediatr** 1988 Mar; 25(3):290–2
Obsessive-compulsive and related disorders: a hidden epidemic [editorial; comment] Jenike MA. **N Engl J Med** 1989 Aug 24;321(8):539–41. **Comment on:** N Engl J Med 1989 Aug 24;321(8):497–501

BLOOD

Vitamin B12 and folic acid serum levels in obsessive compulsive disorder. Hermesh H, et al. **Acta Psychiatr Scand** 1988 Jul;78(1):8–10

Thyroid function in obsessive-compulsive disorder. Joffe RT, et al. **Psychiatr J Univ Ottawa** 1988 Nov;13(4):215–6

CHEMICALLY INDUCED

Obsessive-compulsive disorder in people that abuse codeine. Senjo M. **Acta Psychiatr Scand** 1989 Jun;79(6):619–20

Obsessive-compulsive disorder occurring as a complication in benzodiazepine withdrawal. Drummond LM, et al. **J Nerv Ment Dis** 1988 Nov;176(11):688–91

COMPLICATIONS

Coexisting obsessive compulsive disorder and alcoholism. Eisen JL, et al. **J Clin Psychiatry** 1989 Mar;50(3):96–8

Catatonic signs in severe obsessive compulsive disorder. Hermesh H, et al. **J Clin Psychiatry** 1989 Aug;50(8):303–5

Obsessive-compulsive disorder in mentally retarded patients. Vitiello B, et al. **J Nerv Ment Dis** 1989 Apr;177(4):232–6

[Obsessive psychoneuroses. Clinical aspects] Ravizza L, et al. **Minerva Psichiatr** 1988 Jul-Sep;29(3):111–6 (Eng. Abstr.) **(Ita)**

[Recurrent trichobezoar of the gastrointestinal tract in a child] Lysak ZD, et al. **Vestn Khir** 1988 Jun;140(6):93–4 **(Rus)**

DIAGNOSIS

Nuclear magnetic resonance study of obsessive-compulsive disorder. Garber HJ, et al. **Am J Psychiatry** 1989 Aug; 146(8):1001–5

High prevalence of obsessive-compulsive symptoms in patients with Sydenham's chorea. Swedo SE, et al. **Am J Psychiatry** 1989 Feb;146(2):246–9

Cerebral glucose metabolism in childhood-onset obsessive-compulsive disorder. Swedo SE, et al. **Arch Gen Psychiatry** 1989 Jun;46(6):518–23

Obsessive-compulsive disorder in children and adolescents. Clinical phenomenology of 70 consecutive cases. Swedo SE, et al. **Arch Gen Psychiatry** 1989 Apr;46(4):335–41

Fear of AIDS [letter] Kamlana SH, et al. **Br J Psychiatry** 1988 Jul;153:129

Sherlock Holmes: a suitable case for treatment? Rollin HR. **Br J Psychiatry** 1988 Aug;153:241–2

Dexamethasone suppression test and primary obsessional compulsive disorder. Vallejo J, et al. **Compr Psychiatry** 1988 Sep-Oct;29(5):498–502

The survey form of the Leyton Obsessional Inventory-Child Version: norms from an epidemiological study. Berg CZ, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Nov; 27(6):759–63

Obsessive compulsive disorder in adolescence: an epidemiological study. Flament MF, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Nov; 27(6):764–71

Delusion or obsession: implications for treatment [letter] Munro A. **J Am Acad Child Adolesc Psychiatry** 1988 Sep; 27(5):663–4

The neurobiology of obsessive-compulsive disorder [clinical conference] Rapoport JL. **JAMA** 1988 Nov 18; 260(19):2888–90

Obsessive-compulsive disorder. How primary care physicians can help. Rifkin A. **Postgrad Med** 1989 Jul; 86(1):157–8, 163–8 (24 ref.)

DRUG THERAPY

Improvement in female patients with severe obsessions and/or compulsions treated with cyproterone acetate [letter] Feldman JD, et al. **Acta Psychiatr Scand** 1988 Aug; 78(2):254

Obsessive-compulsive disorder: a double-blind, placebo-controlled trial of clomipramine in 27 patients. Jenike MA, et al. **Am J Psychiatry** 1989 Oct; 146(10):1328–30

Open trial of fluoxetine in obsessive-compulsive disorder. Jenike MA, et al. **Am J Psychiatry** 1989 Jul;146(7):909–11

Clomipramine for bowel obsessions [letter] Kahne GJ, et al. **Am J Psychiatry** 1989 Jan;146(1):120–1

Return of symptoms after discontinuation of clomipramine in patients with obsessive-compulsive disorder. Pato MT, et al. **Am J Psychiatry** 1988 Dec;145(12):1521–5

Buspirone in obsessive-compulsive disorder [letter] Watts VS, et al. **Am J Psychiatry** 1988 Dec;145(12):1606

Clomipramine in obsessive-compulsive disorder. Further evidence for a serotonergic mechanism of action. Benkelfat C, et al. **Arch Gen Psychiatry** 1989 Jan;46(1):23–8

Efficacy of fluvoxamine in obsessive-compulsive disorder. A double-blind comparison with placebo. Goodman WK, et al. **Arch Gen Psychiatry** 1989 Jan;46(1):36–44

Obsessive-compulsive rituals [letter] Katz R, et al. **Br J Psychiatry** 1988 Dec;153:845

More on self mutilation and obsessive compulsive disorder [letter] Hollander E, et al. **Can J Psychiatry** 1988 Oct; 33(7):675

Carbamezapine in obsessive-compulsive disorder. Khanna S. **Clin Neuropharmacol** 1988 Oct;11(5):478–81

Fluoxetine overdose in an adolescent. Riddle MA, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jul;28(4):587–8

Clonazepam in the treatment of obsessive compulsive disorder associated with panic disorder in one patient. Bodkin JA, et al. **J Clin Psychiatry** 1989 Jul;50(7):265–6

Fluoxetine-induced akathisia: clinical and theoretical implications. Lipinski JF Jr, et al. **J Clin Psychiatry** 1989 Sep;50(9):339–42

Long-term fluoxetine treatment of a large number of obsessive-compulsive patients. Levine R, et al. **J Clin Psychopharmacol** 1989 Aug;9(4):281–3

Psychopharmacologic treatment of obsessive-compulsive disorder. Thorneloe WF. **J Med Assoc Ga** 1988 Nov; 77(11):825–6 (8 ref.)

Clomipramine for obsessive compulsive disorder. **Med Lett Drugs Ther** 1988 Nov 4;30(778):102–4

New findings in obsessive-compulsive disorder. Kim SW, et al. **Minn Med** 1989 Feb;72(2):91–3, 110 (36 ref.)

A double-blind comparison of clomipramine and desipramine in the treatment of trichotillomania (hair pulling) [see comments] Swedo SE, et al. **N Engl J Med** 1989 Aug 24; 321(8):497–501. **Comment in:** N Engl J Med 1989 Aug 24;321(8):539–41

Obsessive-compulsive beliefs and treatment outcome. Lelliott PT, et al. **Psychol Med** 1988 Aug;18(3):697–702

Preliminary results from a multicenter trial of clomipramine in obsessive-compulsive disorder. DeVeaugh-Geiss J, et al. **Psychopharmacol Bull** 1989;25(1):36–40

Fluvoxamine as an antiobsessional agent. Goodman WK, et al. **Psychopharmacol Bull** 1989;25(1):31–5 (23 ref.)

[The obsessive-compulsive disorder. Pharmacotherapeutic and neurobiological aspects and the relation to affective pathology] Fornaro P. **Minerva Psichiatr** 1988 Apr-Jun; 29(2):95–103 (99 ref.) (Eng. Abstr.) **(Ita)**

ENZYMOLOGY

One-carbon cycle metabolism in obsessive-compulsive disorder [letter] Alarcon RD, et al. **Biol Psychiatry** 1988 Oct;24(6):721–3

Pseudocholinesterase in obsessive-compulsive patients. Aizenberg D, et al. **Psychiatry Res** 1989 Jan;27(1):65–9

EPIDEMIOLOGY

The epidemiology of obsessive-compulsive disorder in five US communities. Karno M, et al. **Arch Gen Psychiatry** 1988 Dec;45(12):1094–9

Three types of obsessive compulsive disorder in a community sample. Henderson JG Jr, et al. **J Clin Psychol** 1988 Sep; 44(5):747–52

ETIOLOGY

Causes of compulsive shoplifting [editorial] Gudjonsson GH. **Br J Hosp Med** 1988 Sep;40(3):169

Delayed emergence of obsessive-compulsive neurosis following head injury. Case report and review of its theoretical implications. Drummond LM, et al. **Br J Psychiatry** 1988 Dec;153:839–42

Obsessive-compulsive symptoms in a patient with multiple sclerosis. George MS, et al. **J Nerv Ment Dis** 1989 May; 177(5):304–5

[Loss of psychic self-activation and stereotyped mental activity caused by a frontal lesion. Relation of the obsessive-compulsive disorder] Laplane D, et al. **Rev Neurol (Paris)** 1988;144(10):564–70 (Eng. Abstr.) **(Fre)**

HISTORY

Obsessive-compulsive disorder: its conceptual history in France during the 19th century. Berrios GE. **Compr Psychiatry** 1989 Jul-Aug;30(4):283–95

PHYSIOPATHOLOGY

Cerebral glucose metabolic rates in nondepressed patients with obsessive-compulsive disorder. Baxter LR Jr, et al. **Am J Psychiatry** 1988 Dec;145(12):1560–3

Growth rate in adolescents with obsessive-compulsive disorder. Hamburger SD, et al. **Am J Psychiatry** 1989 May; 146(5):652–5

Pathophysiology of obsessive-compulsive disorder [letter] McDougle CJ, et al. **Am J Psychiatry** 1989 Oct; 146(10):1350–1

Obsessive-compulsive disorder: is there a frontal lobe dysfunction? Khanna S. **Biol Psychiatry** 1988 Sep; 24(5):602–13 (86 ref.)

Middle latency evoked potentials in obsessive-compulsive disorder [letter] Khanna S, et al. **Biol Psychiatry** 1989 Apr 1;25(7):980–3

Animal models of compulsive behavior. Pitman RK. **Biol Psychiatry** 1989 Jun;26(2):189–98 (66 ref.)

Transient feelings of compulsion caused by hemispheric lesions in three cases [letter] Laplane D. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):423

Topographic evoked potential mapping in obsessive-compulsive disorder: evidence of frontal lobe dysfunction. Malloy P, et al. **Psychiatry Res** 1989 Apr; 28(1):63–71

The biology of obsessions and compulsions. Rapoport JL. **Sci Am** 1989 Mar;260(3):82–9 (3 ref.)

[EEG frequency analyses in children and adolescents with obsessive-compulsive neuroses] Knölker U. **Z Kinder Jugenpsychiatr** 1988 Dec;16(4):180–5 (Eng. Abstr.) **(Ger)**

[Test using dexamethasone suppression of cortisol secretion in obsessive patients] Vallejo J, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1988 Jul-Aug;16(4):279–84 **(Spa)**

PSYCHOLOGY

Obsessive-compulsive symptoms in childhood and adolescence. Honjo S, et al. **Acta Psychiatr Scand** 1989 Jul;80(1):83–91

Obsessive-compulsive neurosis in relation to parental child-rearing patterns amongst the Greek, Italian, and Anglo-Australian subjects. Ehiobuche I. **Acta Psychiatr Scand Suppl** 1988;344:115–20

Psychological assessment and discussion of female adolescents with trichotillomania. Schnurr RG. **Adolesc Psychiatry** 1988;15:463–70

Obsessive-compulsive disorder apparently related to abortion. McCraw RK. **Am J Psychother** 1989 Apr; 43(2):269–76

Anxiety and cerebral blood flow during behavioral challenge. Dissociation of central from peripheral and subjective measures. Zohar J, et al. **Arch Gen Psychiatry** 1989 Jun; 46(6):505–10

Obsessive compulsive disorder: a sufferer's viewpoint. Tiller J. **Aust N Z J Psychiatry** 1989 Jun;23(2):279–81

Are prepared fears less severe, but more resistant to treatment? Merckelbach H, et al. **Behav Res Ther** 1988; 26(6):527–30

Memory deficits in compulsive checkers: replication and extension in a clinical sample. Sher KJ, et al. **Behav Res Ther** 1989;27(1):65–9

Deficit in cognitive shifting ability in patients with obsessive-compulsive disorder. Head D, et al. **Biol Psychiatry** 1989 Apr 1;25(7):929–37

Samson's complex: the compulsion to re-enact betrayal and rage. Kutz I. **Br J Med Psychol** 1989 Jun;62 (Pt 2):123–34

A case of self-inflicted leucotomy. Solyom L, et al. **Br J Psychiatry** 1987 Dec;151:855–7

A previously-untranslated report by Freud of a lecture on the mechanism of obsessional ideas and phobias. Solms M. **Int J Psychoanal** 1989;70 (Pt 1):91–4

Obsessive-compulsive disorder: a questionnaire survey of a self-help group. Hafner RJ. **Int J Soc Psychiatry** 1988 Winter;34(4):310–5

Life events and onset of obsessive compulsive disorder. Khanna S, et al. **Int J Soc Psychiatry** 1988 Winter; 34(4):305–9

Obsessive compulsive disorders in adolescence. Apter A, et al. **J Adolesc** 1988 Sep;11(3):183–94

Childhood obsessive compulsive disorder: a two-year prospective follow-up of a community sample. Berg CZ, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jul; 28(4):528–33

Obsessive-compulsive symptoms in childhood inflammatory bowel disease and cystic fibrosis. Burke P, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jul;28(4):525–7

Psychoanalysis and general psychiatry: obsessive-compulsive disorder as paradigm. Esman AH. **J Am Psychoanal Assoc** 1989;37(2):319–36 (50 ref.)

Sexual history, attitudes and functioning of obsessive-compulsive patients. Freund B, et al. **J Sex Marital Ther** 1989 Spring;15(1):31–41

The compulsion to repeat the trauma. Re-enactment, revictimization, and masochism. van der Kolk BA. **Psychiatr Clin North Am** 1989 Jun;12(2):389–411 (147 ref.)

Religious compulsions and the spectrum concept of psychopathology. Hoffnung R, et al. **Psychopathology** 1989; 22(2-3):141–4

Childhood obsessive-compulsive disorder. 1. Psychopathology. Khanna S, et al. **Psychopathology** 1988; 21(6):254–8

Phenomenology of obsessions in obsessive-compulsive neurosis. Khanna S, et al. **Psychopathology** 1988;21(1):12–8

[Obsessive personality and criminality] Lôo P, et al. **Ann Med Psychol (Paris)** 1988 Oct;146(10):974–7 **(Fre)**

[Anamnestic and psychopathologic studies of obsessive-compulsive patients] Stieglitz RD, et al. **Fortschr Neurol Psychiatr** 1989 Apr;57(4):132–41 (Eng. Abstr.) **(Ger)**

[Neuropsychological disorders in Parkinson disease. Relations to psychomotor inhibition and obsessive-compulsive disease] Lees AJ. **Nervenarzt** 1989 Feb;60(2):71–9 (64 ref.) **(Ger)**

[Compulsion and personality organization in childhood and adolescence] Streeck-Fischer A. **Prax Kinderpsychol Kinderpsychiatr** 1988 Dec; 37(10):367–73 (Eng. Abstr.) **(Ger)**

[Obsession and delusion. A case report of clinical psychopathology] Spitzer M. **Schweiz Arch Neurol Psychiatr** 1988;139(6):61–85 **(Ger)**

[Life and freedom as a compulsion? Considerations of the relation of the phenomenology of life and analysis of existence] Kühn R. **Z Klin Psychol Psychopathol Psychother** 1988;36(4):361–7 (Eng. Abstr.) **(Ger)**

THERAPY

Daseinsanalytic therapy with a patient suffering from compulsion neurosis and writer's cramp. Condrau G. **Am J Psychoanal** 1988 Fall;48(3):211–34

Cognitive-behavioral and insight-oriented psychotherapy of an eleven-year-old boy with obsessive-compulsive

disorder. Willmuth ME. **Am J Psychother** 1988 Jul; 42(3):472–8
Behavioral treatment of childhood obsessive–compulsive disorder. Wolff R, et al. **Behav Modif** 1988 Apr; 12(2):252–66 (40 ref.)
Home–based treatment of obsessive–compulsive patients: intersession interval and therapist involvement. Emmelkamp PM, et al. **Behav Res Ther** 1989;27(1):89–93
Behaviour therapy and obsessional ruminations: can failure be turned into success? Salkovskis PM, et al. **Behav Res Ther** 1989;27(2):149–60
Behavioral treatment of obsessive–compulsives: inpatient vs outpatient. van den Hout M, et al. **Behav Res Ther** 1988; 26(4):331–2
The significance of the patient–therapist relationship in the treatment of obsessive–compulsive neurosis. Hoogduin CA, et al. **Br J Clin Psychol** 1989 May;28 (Pt 2):185–6
Paradoxical intention and anti–exposure in a non–compliant, obsessive–compulsive ritualiser. Adshead G, et al. **Br J Psychiatry** 1988 Dec;153:821–3
A decision model in the treatment of obsessive–compulsive neuroses. Hoogduin CA, et al. **Br J Psychiatry** 1988 Apr; 152:516–21
Drugs and psychological treatments for agoraphobia/panic and obsessive–compulsive disorders: a review. Marks I, et al. **Br J Psychiatry** 1988 Nov;153:650–8 (71 ref.)
Clomipramine, self–exposure and therapist–aided exposure for obsessive–compulsive rituals. Marks IM, et al. **Br J Psychiatry** 1988 Apr;152:522–34
Hospitalization of obsessive–compulsive patients: the "forgotten" factor in the behavior therapy literature. Megens J, et al. **Compr Psychiatry** 1989 Mar–Apr; 30(2):161–9 (50 ref.)
Behavioural intervention in the treatment of trichotillomania. Mathew A, et al. **Indian J Pediatr** 1988 May–Jun; 55(3):451–3
Use of a portable computer program to assist behavioral treatment in a case of obsessive compulsive disorder. Baer L, et al. **J Behav Ther Exp Psychiatry** 1988 Sep; 19(3):237–40
Childhood trichotillomania treated indirectly by punishing thumb sucking. Knell SM, et al. **J Behav Ther Exp Psychiatry** 1988 Dec;19(4):305–10
Obsessive compulsive disorder. **J Clin Psychiatry** 1989 Jun; 50(6):231–2
Technique and countertransference in Freud's analysis of the Rat Man. Gottlieb RM. **Psychoanal Q** 1989 Jan;58(1):29–62
The biology of obsessions and compulsions [letter] Byrne TP. **Sci Am** 1989 Jun;260(6):11–2
[Exposure therapy of phobic and compulsive disorders] Bergem M, et al. **Tidsskr Nor Laegeforen** 1989 Mar 30; 109(9):953–6, 967 (Eng. Abstr.) **(Nor)**

OBSTETRICAL FORCEPS

see related
EXTRACTION, OBSTETRICAL
North Staffordshire/Wigan assisted delivery trial. Johanson R, et al. **Br J Obstet Gynaecol** 1989 May;96(5):537–44
A device for measurement of radius of curvature of obstetric forceps. Gough NA, et al. **Clin Phys Physiol Meas** 1988 Nov;9(4):371–4
The effects of epidural anesthesia on type of delivery. Niehaus LS, et al. **J Am Board Fam Pract** 1988 Oct–Dec; 1(4):238–44
Comparison of midforceps, low–forceps, and spontaneous vaginal deliveries. Tedesco JH. **J Am Osteopath Assoc** 1989 Apr;89(4):461–4
Workshop for teaching fundamentals of obstetric forceps. Eggertsen SC. **J Fam Pract** 1989 Mar;28(3):313–4
Polemics in perinatology: disengaging forceps. Schifrin BS. **J Perinatol** 1988 Summer;8(3):242–5
Epidural hematoma of the newborn due to birth trauma. Gama CH, et al. **Pediatr Neurol** 1985 Jan–Feb;1(1):52–3
Efficacy of prophylactic antibiotics for the prevention of endomyometritis after forceps delivery. Heitmann JA, et al. **South Med J** 1989 Aug;82(8):960–2
[A new instrument for locating an intrauterine device in the uterus] Norell NE, et al. **Lakartidningen** 1989 Jun 21; 86(25):2367–8 **(Swe)**

OBSTETRICAL NURSING

Unexpected miracles. Wilson D. **Am J Nurs** 1989 Feb; 89(2):306
HIV precautions update [letter] Wiley K. **J Obstet Gynecol Neonatal Nurs** 1988 Sep–Oct;17(5):305
Nursing interventions: caring for parents of a newborn transferred to a regional intensive care nursery—a challenge for low risk obstetric specialists. Weingarten CT. **J Perinatol** 1988 Summer;8(3):271–5
The patient education bridge. Harrison LL. **MCN** 1989 Jan–Feb;14(1):51
Planning time for combined care [letter] Johansen T. **MCN** 1989 Mar–Apr;14(2):130
In moments of crisis. Novak S. **MCN** 1988 Sep–Oct; 13(5):349–51
Rehumanizing maternal–child nursing. Phillips CR. **MCN** 1988 Sep–Oct;13(5):313–4, 316, 318
An orthodox approach. Siegel T. **MCN** 1989 Jan–Feb; 14(1):16
Certified nurse–midwife effectiveness in the health maintenance organization obstetric team. Bell KE, et al. **Obstet Gynecol** 1989 Jul;74(1):112–6
Newborn screening for sickle cell disease and other hemoglobinopathies. Nursing perspective. Earles A. **Pediatrics** 1989 May;83(5 Pt 2):901–2
Maternal role competence. Flagler S. **West J Nurs Res** 1988 Jun;10(3):274–90

EDUCATION
Parent–child nursing education. Alexander CS, et al. **Annu Rev Nurs Res** 1989;7:157–70 (29 ref.)
Second skill educational development of personnel for a single–room maternity care system. Gerlach C, et al. **J Obstet Gynecol Neonatal Nurs** 1988 Nov–Dec; 17(6):388–93
Keeping staff up on electronic fetal monitoring. Pheigaru JL. **MCN** 1988 Sep–Oct;13(5):334–5

STANDARDS
Evaluating labour ward services: the art of the possible. Brown C, et al. **J Adv Nurs** 1989 Jul;14(7):559–68

TRENDS
Midlife crisis in nursing [letter] Sewall G. **J Obstet Gynecol Neonatal Nurs** 1988 Sep–Oct;17(5):305

OBSTETRICS

see related
PREGNANCY COMPLICATIONS
Prenatal diagnosis and the Canadian collaborative randomized trial of chorionic villi sampling: the physician's view. Fahy MJ, et al. **Am J Med Genet** 1988 Dec; 31(4):953–61
Requirements for submission of manuscripts [editorial] **Am J Obstet Gynecol** 1989 Jan;160(1):1–2
Roster of American obstetric and gynecologic societies. **Am J Obstet Gynecol** 1989 Jan;160(1):279–80
Gynecologic screening examinations: does the obstetrician–gynecologist's spouse comply? Petrikovsky B, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):82–5
Ethics in obstetrics. Quilligan EJ. **Am J Obstet Gynecol** 1989 Jun;160(6):1413–5; discussion 1419–24
Avoiding the fixed period and Thanatos syndrome: obstetrics past, present, and future. Schulman H. **Am J Obstet Gynecol** 1989 Jan;160(1):54–8
Appraising a clinical journal article in obstetrics and gynecology. Seifer DB, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):198–201
A national survey on preterm labor. Taslimi MM, et al. **Am J Obstet Gynecol** 1989 Jun;160(6):1352–7; discussion 1357–60
Format of an obstetrics and gynecology journal club and four years' experience. Thurnau GR, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):313–6
Planning a maternal–fetal medicine program. Relationship to obstetricians. Lorenz RP. **Am J Perinatol** 1989 Apr;6 Suppl:15–6
New Zealand obstetricians' management of hypertension in pregnancy. A questionnaire survey. Hutton JD, et al. **Aust N Z J Obstet Gynaecol** 1989 Feb;29(1):5–8
Anti–hormones in obstetrics and gynaecology: ethical and social issues. Wood EC. **Baillieres Clin Obstet Gynaecol** 1988 Sep;2(3):541–4
General practitioner obstetrics [letter; comment] **BMJ** 1989 Apr 29;298(6681):1177–8. **Comment on:** BMJ 1989 Mar 18;298(6675):690–1
Relevance of experience abroad: obstetrics in Pakistan. Mann M. **BMJ** 1989 Apr 1;298(6677):877–8
General practitioner obstetricians. Zander L, et al. **BMJ** 1989 May 27;298(6685):1451–2
Presentation of the 1988 Academy Plaque to Bernard J. Pisani, M.D. Riddle JW. **Bull N Y Acad Med** 1988 Nov; 64(8):881–3
Relation of family physician or specialist care to obstetric interventions and outcomes in patients at low risk: a western Canadian cohort study. Krikke EH, et al. **Can Med Assoc J** 1989 Mar 15;140(6):637–43
Research in obstetric care: questions and methods [editorial] Morgan PP. **Can Med Assoc J** 1989 Mar 15;140(6):591–2
Ultrasound in obstetrics and gynecology. Keller JM. **Chic Med Sch Q** 1971;30(2–4):86–94
Urinary tract infections in primary care obstetrics and gynecology. Fihn SD. **Clin Obstet Gynecol** 1988 Dec; 31(4):1003–18 (38 ref.)
Computers in obstetrics and gynecology. Zador I. **Contrib Gynecol Obstet** 1989;17:86–95
Obstetrics in family medicine: effects on physician work load, income, and age of practice population. Bredfeldt RC, et al. **Fam Med** 1989 Jul–Aug;21(4):279–82
Obstetric practices: of facts and fads [letter] Moehring R. **Hosp Pract [Off]** 1989 Apr 15;24(4):23
The advantages and disadvantages of subspecialization. Jansen RP. **Int J Gynaecol Obstet** 1988 Oct;27(2):293–6
Obstetric care in a rural family practice. Allen W. **J Am Board Fam Pract** 1989 Jan–Mar;2(1):30–3
Perinatal outcomes in obstetric and family medicine services in a county hospital. Kurata JH, et al. **J Am Board Fam Pract** 1989 Apr–Jun;2(2):82–6
Self–reported referral patterns in practices of family/general practitioners, internists, and obstetricians/gynecologists. Sobal J, et al. **J Community Health** 1988 Fall;13(3):171–83
Present status of obstetrics in family practice and the effects of malpractice issues. Bredfeldt R, et al. **J Fam Pract** 1989 Mar;28(3):294–7
Obstetric outcomes in rural practice [letter] Fallis G, et al. **J Fam Pract** 1989 May;28(5):510
Obstetrics in family practice [letter] Fletcher JL Jr, et al. **J Fam Pract** 1989 Sep;29(3):239–40
Access to obstetric care: a growing crisis [editorial] Robertson WO. **J Fam Pract** 1988 Oct;27(4):361–2
Obstetrics in family practice [letter] Ruane TJ. **J Fam Pract** 1989 Jul;29(1):16
Obstetric risk assessment [letter] Sayres WG Jr. **J Fam Pract** 1989 Mar;28(3):266, 328–9
Obstetric privileges for family physicians: a national study. Schmittling G, et al. **J Fam Pract** 1989 Aug;29(2):179–84
Empty lockers [editorial] Taylor J. **J Fla Med Assoc** 1988 Sep;75(9):580–1
Why family practice residents choose not to practice obstetrics. Fletcher JL Jr, et al. **J Med Assoc Ga** 1989 Aug; 78(8):559–61
Ethical principles: application to an obstetric case. Bushy A, et al. **J Obstet Gynecol Neonatal Nurs** 1989 May–Jun; 18(3):207–12 (14 ref.)
Perinatal medical negligence closed claims from the St. Paul Company, 1980–1982. Ogburn PL Jr, et al. **J Reprod Med** 1988 Jul;33(7):608–11
Obstetrics and gynecology. Huggins GR. **JAMA** 1989 May 19;261(19):2864–5
A piece of my mind. At Nisqually. Neher JO. **JAMA** 1989 Mar 24–31;261(12):1796
Called to account. Obstetrics. Pediatrics. **Lancet** 1989 Mar 25;1(8639):661–2
Obstetric protest [letter; comment] Corbishley H. **Lancet** 1989 Jul 15;2(8655):162. **Comment on:** Lancet 1989 Jun 10;1(8650):1303–4
The legal liability of the medical consultant in pregnancy. Cetrulo CL, et al. **Med Clin North Am** 1989 May; 73(3):557–65
MMIE OB risk management guidelines approved. **Minn Med** 1988 Sep;71(9):567–8
The physician factor in cesarean birth rates. Goyert GL, et al. **N Engl J Med** 1989 Mar 16;320(11):706–9
Improving a university hospital obstetric clinic: better but not best. Dans PE, et al. **Obstet Gynecol** 1989 Aug; 74(2):262–6
Information management needs of the obstetrician–gynecologist—a survey. Jelovsek FR, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):395–9
Old bedfellows: ethics and obstetrics and gynecology. Park RC. **Obstet Gynecol** 1989 Jan;73(1):1–3
Ethics in obstetrics and gynecology: a practitioner's review and opinion. Jennings JC. **Obstet Gynecol Surv** 1989 Sep; 44(9):656–61 (14 ref.)
Ultrasonography in obstetrics. Stone P. **Paediatr Perinat Epidemiol** 1987 Sep;1(2):135–6
Where is the woman in obstetrics and gynecology? King CR. **Pharos** 1989 Summer;52(3):8–11
Nurse–midwives and obstetricians: alternative models of care and client "fit". Aaronson LS. **Res Nurs Health** 1987 Aug; 10(4):217–26
Antenatal care in general practice in Sweden. II. A study of work allocation between district physician and obstetrician. Håkansson A. **Scand J Prim Health Care** 1988 Sep;6(3):143–8
Glasgow Obstetrical and Gynaecological Society Centenary 1885–1985. Black WP. **Scott Med J** 1988 Dec;33(6):378–80
[A questionnaire on the satisfaction of obstetrical and surgical patients] Cepický P, et al. **Cesk Gynekol** 1989 Apr; 54(3):218–21 **(Cze)**
[Promotion of conditions for good gynecologic practice within the regional framework] Křešnička J. **Cesk Gynekol** 1988 Dec;53(10):713–5 **(Cze)**
[Contributions of echography in obstetrics. Consensus conference. Paris, 2–3 December 1987] Arnold–Richez F, et al. **Arch Fr Pediatr** 1989 Apr;46(4):307–9 (0 ref.) **(Fre)**
[The obstetrical record] Lewin D. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(6):770–5 **(Fre)**
[Medical records in gynecology and obstetrics. Administrative and medico–legal aspects] Magnin G, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(6):775–84 **(Fre)**
[The value of a large obstetrical database] Lewin D. **Rev Fr Gynecol Obstet** 1989 Apr;84(4):317–8 (Eng. Abstr.) **(Fre)**
[Is an expert system indispensable in obstetrical decisions?] Pastor J, et al. **Rev Fr Gynecol Obstet** 1989 Apr;84(4):343–6 **(Fre)**
[Computerized management of the obstetrical record] Pierre F, et al. **Rev Fr Gynecol Obstet** 1989 Apr;84(4):305–10 **(Fre)**
[From the management of the medical record to clinical research in obstetrics] Viel JF, et al. **Rev Fr Gynecol Obstet** 1989 Apr;84(4):310–2 **(Fre)**
[Obstetrics and molecular genetics] Papp Z. **Orv Hetil** 1988 Oct 9;129(41):2175–84 (32 ref.) (Eng. Abstr.) **(Hun)**
[Proposal of a 5–letter obstetric formula] Paradiso S, et al. **Minerva Ginecol** 1988 May;40(5):339 (Eng. Abstr.) **(Ita)**
[Psychosocial gynecology and obstetrics. A need for its own specialty] Sundby J, et al. **Tidsskr Nor Laegeforen** 1989

Feb 10;109(4):479–81 (Eng. Abstr.) (Nor)
[Study of the use of literature on obstetrics and gynecology by medical specialists] Bokan MG, et al. **Akush Ginekol (Mosk)** 1988 Sep;(9):77–9 (Rus)
[Role of qualifying characteristics of the obstetrician–gynecologist in the evaluation of the level of professional competence during certification proceedings] Murav'ev MV, et al. **Akush Ginekol (Mosk)** 1989 Jun; (6):78–9 (Rus)
[Cerebral injury and the obstetrician] Morales Pereira A. **Bol Asoc Med P R** 1988 Dec;80(12):463–5 (21 ref.) (Spa)

ECONOMICS

Analysis of the claims submitted to the patient insurance (PI) scheme in Sweden during 1975–1979 in obstetrical and gynaecological cases. Ryde–Blomqvist E. **Acta Obstet Gynecol Scand Suppl** 1989;146:1–108
Specialty bias in obstetric care for high–risk socioeconomic groups in Maine. Onion DK, et al. **J Fam Pract** 1988 Oct; 27(4):423–7
Private and public sectors form partnership to solve indigent maternity care crisis. Deju J. **J Fla Med Assoc** 1988 Nov; 75(11):725–6

EDUCATION

Obstetric training in family practice [letter] Zervanos NJ. **Am Fam Physician** 1989 Sep;40(3):53, 56, 61
The end of the beginning.Presidential address. Dilts PV Jr. **Am J Obstet Gynecol** 1989 Jun;160(6):1311–5
Fifth year of residency versus fourth year of medical school and residency [editorial] Dilts PV Jr. **Am J Obstet Gynecol** 1989 Jun;160(6):1532–3
Breast disease programs in obstetrics and gynecology: a plea for training in mammography. Gleicher N. **Am J Obstet Gynecol** 1989 Aug;161(2):267–70
Educational challenges for the professions. Smith RH. **Aust N Z J Obstet Gynaecol** 1988 Feb;28(1):1–6
Workshop for teaching fundamentals of obstetric forceps. Eggertsen SC. **J Fam Pract** 1989 Mar;28(3):313–4
An experimental case–conference programme for obstetrics and gynaecology clinical students. ten Have H, et al. **J Med Ethics** 1989 Jun;15(2):94–8
Microcomputer–aided instruction for ob–gyn education. Jelovsek FR. **J Perinat Med** 1988;16(4):339–44
Student evaluation in obstetrics and gynecology clerkships in the United States and Canada, 1985. Beckmann CR, et al. **J Reprod Med** 1989 May;34(5):349–52
The effect of practical training in obstetrics among medical students: symphysis–fundal height measurements. Johnsen TS, et al. **Med Educ** 1988 Sep;22(5):438–44
The development of the obligatory education and certification programme of the Royal Australian College of Obstetricians and Gynaecologists: a practical response to the increasing challenges of a modern society. Hewson AD. **Med Teach** 1989;11(1):27–37
Integration of undergraduate teaching in obstetrics/gynaecology and paediatrics. Purdie DW. **Med Teach** 1988;10(2):159–64
The O & G Society: an experiment in postgraduate education [letter] Brenner B, et al. **N Z Med J** 1989 Mar 8; 102(863):113–4
O & G textbooks revised [letter] Mantell CD. **N Z Med J** 1989 Feb 22;102(862):85
Educating the obstetrician–gynecologist for the future [letter] **Obstet Gynecol** 1989 Jul;74(1):133–4
Opinions and approaches to continuing education among obstetrician/gynecologists. Herbert WN, et al. **Obstet Gynecol** 1989 Jul;74(1):125–30
Educating the obstetrician–gynecologist for the future. Willson JR. **Obstet Gynecol** 1989 Jan;73(1):125–9
Obstetrics–gynecology in the physical therapy curriculum: a follow–up study. Hulme JB, et al. **Phys Ther** 1989 Apr; 69(4):264–7
[The need of specialization training of level II obstetricians and gynecologists in subdisciplines resulting from the progress in these basic branches of medicine] Cekański A. **Ginekol Pol** 1988 May;59(5):317–20 (Eng. Abstr.) (Pol)
[Postgraduate training of administrators of women's referral centers based on a problem–related program] Aliab'eva LIa, et al. **Akush Ginekol (Mosk)** 1988 Sep;(9):76–7 (Rus)
[Effectiveness of postgraduate training of the heads of women's consultation clinics] Kozachenko MA, et al. **Sov Zdravookhr** 1989;(3):53–7 (Eng. Abstr.) (Rus)

HISTORY

The sin of pride: research in obstetrics and gynecology. Little B. **Am J Obstet Gynecol** 1989 Apr;160(4):771–81 (65 ref.)
F. J. Browne and his influence on Australian obstetrics. Cope I. **Aust N Z J Obstet Gynaecol** 1988 May;28(2):85–9
A medieval Hebrew treatise on obstetrics. Barkai R. **Med Hist** 1989 Jan;33(1):96–119
Professor Dennis Bonham and the South Pacific [letter] Gyaneshwar R. **N Z Med J** 1988 Dec 14;101(859):834
Culture and class conflict at the New York Asylum for Lying–In Women, 1823–1850. Metaxas Quiroga VA. **Trans Stud Coll Physicians Phila** 1989 Jun;11(2):105–21
[Labor induction: yesterday and today] Thiery M. **Verh K Acad Geneeskd Belg** 1988;50(6):509–18 (Eng. Abstr.) (Dut)
[The sabbatical year of a young French gynecologist–obstetrician in 1880] Dumont M. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(4):427–34 (Eng. Abstr.) (Fre)
[The long and difficult birth of symphysiotomy or from Severin Pineau to Jean–Rene Sigault] Dumont M. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(1):11–21 (Eng. Abstr.) (Fre)
[Nicolas Puzos: an obstetrician of the 18th century. From military surgery to obstetrics and from milk fever to placenta praevia] Dumont M. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(4):431–7 (Eng. Abstr.) (Fre)
[Dissension: Velpeau, midwives and others] Logeay R. **Rev Fr Gynecol Obstet** 1988 Nov;83(11):731–5 (Eng. Abstr.) (Fre)
[Centennial of the foundation of obstetric and gynecologic clinics at the Devich'em Pole in Moscow] Granat NE, et al. **Akush Ginekol (Mosk)** 1989 Jun;(6):3–6 (Rus)

INSTRUMENTATION

A two–dimensional self–retaining vaginal retractor for high obstetric trauma. Phipps JH. **Br J Obstet Gynaecol** 1989 Aug;96(8):1003–5
[Graduated ruler for making a transverse suprapubic incision] Toussaint MN, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(1):99–101 (Eng. Abstr.) (Fre)
[The DU–1 dynamo–uterograph] Chikhetov VV, et al. **Med Tekh** 1989 Jan–Feb;(1):54 (Rus)

LEGISLATION & JURISPRUDENCE

Law and the modern obstetrician–gynecologist. Dworkin RB. **Am J Obstet Gynecol** 1989 Jun;160(6):1339–43
Surrogacy and Shakespeare: the Merchant's contract revisited. La Puma J, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):59–62
Change the tort system: expose it to patients. Freedman M. **J Med Assoc Ga** 1989 Apr;78(4):201–4
The obstetrician's dilemma [editorial] Sweet R. **Med J Aust** 1989 May 15;150(10):545–6
Medical professional liability and the delivery of obstetrical care. Rostow VP, et al. **N Engl J Med** 1989 Oct 12; 321(15):1057–60
Malpractice—the syndrome of the 80s [letter; comment] Sandmire HF. **Obstet Gynecol** 1989 Jan;73(1):145–6. **Comment on:** Obstet Gynecol 1988 Jul;72(1):130–5
Jurisprudent obstetrics [letter] Edwards BL. **Vet Rec** 1988 Aug 27;123(9):236

MANPOWER

Family physicians' involvement in obstetric care. Rural northeastern Minnesota and northwestern Wisconsin. Crouse BJ. **J Fam Pract** 1989 Jun;28(6):724, 727
Family practice obstetrics in Michigan. Factors affecting physician participation. Smith MA, et al. **J Fam Pract** 1989 Apr;28(4):433–7
Obstetrical manpower in Mississippi: where are the babies being born? Wiygul FM, et al. **J Miss State Med Assoc** 1988 Nov;29(11):333–

METHODS

How Swedish obstetricians manage premature rupture of the membranes in preterm gestations. Olofsson P, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1028–34
Differences in intrapartum obstetric care provided to women at low risk by family physicians and obstetricians. Reid AJ, et al. **Can Med Assoc J** 1989 Mar 15;140(6):625–33
Operative laparoscopy: time for acceptance. Gomel V. **Fertil Steril** 1989 Jul;52(1):1–11 (82 ref.)
Efficacy of routine postpartum uterine exploration and manual sponge curettage. Epperly TD, et al. **J Fam Pract** 1989 Feb;28(2):172–6
Blood flow in obstetrics using Doppler ultrasound. Griffin D, et al. **J Med Eng Technol** 1988 May–Jun;12(3):97–105 (61 ref.)
Polarity within beneficence. Additional thoughts on nonaggressive obstetric management. Abrams FR. **JAMA** 1989 Jun 16;261(23):3454–5
Nonaggressive obstetric management. An option for some fetal anomalies during the third trimester. Chervenak FA, et al. **JAMA** 1989 Jun 16;261(23):3439–40
The validity of gestational age estimation by menstrual dating in term, preterm, and postterm gestations. Kramer MS, et al. **JAMA** 1988 Dec 9;260(22):3306–8
A comparison of early and delayed induction of labor with spontaneous rupture of membranes at term. Wagner MV, et al. **Obstet Gynecol** 1989 Jul;74(1):93–7
'New style' care in labour. Marsh GN. **Practitioner** 1988 Nov 8;232(1458):1189–93
A comparative study between the use of analgesia/anaesthesia and of episiotomy in women delivered under consultant supervision or general practitioner care. McCracken FM, et al. **Public Health** 1989 Jul;103(4):245–50

ORGANIZATION & ADMINISTRATION

Does 24–hour supervisory staff coverage in the labour and delivery area change the fetal outcome? A preliminary observation. Chuong CJ, et al. **Br J Clin Pract** 1988 Jun; 42(6):238–40
Factors influencing changes in obstetric care provided by family physicians: a national study. Kruse J, et al. **J Fam Pract** 1989 May;28(5):597–602
[Organization of obstetrics and prenatal care in Sweden] Bistoletti P, et al. **Off Gesundheitswes** 1988 Nov; 50(11):630–4 (Eng. Abstr.) (Ger)

STANDARDS

Are perinatal and maternal mortality the best measures of quality in obstetrics? Hudson CN. **Aust Clin Rev** 1988 Dec; 8(31):181–4
General practitioner obstetrics [see comments] Jewell D. **BMJ** 1989 Mar 18;298(6675):690–1. **Comment in:** BMJ 1989 Apr 29;298(6681):1177–8
Audit of 26 years of obstetrics in general practice [see comments] Marsh GN, et al. **BMJ** 1989 Apr 22; 298(6680):1077–80. **Comment in:** BMJ 1989 May 13;298(6683):1313
Audit of 26 years of obstetrics in general practice [letter] Marsh GN. **BMJ** 1989 Jun 10;298(6687):1579
Audit of 26 years of obstetrics in general practice [letter; comment] Prentice A, et al. **BMJ** 1989 May 13; 298(6683):1313. **Comment on:** BMJ 1989 Apr 22;298(6680):1077–80
Giving birth in America, 1988. Ryan KJ. **Fam Plann Perspect** 1988 Nov–Dec;20(6):298–301
Obstetric outcomes in a rural family practice: an eight–year experience. Kriebel SH, et al. **J Fam Pract** 1988 Oct; 27(4):377–84
Bitter reinstatement [editorial] **Lancet** 1989 Aug 5; 2(8658):308–9
Apgar score and audit [letter] Samra JS, et al. **Lancet** 1989 Jun 24;1(8652):1444
Management of pregnancy and childbirth in England and Wales and in France. Kaminski M, et al. **Paediatr Perinat Epidemiol** 1988 Jan;2(1):13–24 (45 ref.)

TRENDS

NHS review. Obstetrics after the white paper. Chamberlain G. **BMJ** 1989 Jun 24;298(6689):1702–3
Obstetrics: state of the science, 1988 [editorial] Chez RA. **J Perinatol** 1988 Fall;8(4):301–2
UK obstetrics and the new health service [editorial] [see comments] **Lancet** 1989 Jun 10;1(8650):1303–4. **Comment in:** Lancet 1989 Jul 15;2(8655):162
Obstetrics and social change. **Lancet** 1989 Sep 16; 2(8664):657–8 (24 ref.)
Academic obstetrics and gynaecology [letter] Grudzinskas JG. **Lancet** 1989 Apr 8;1(8641):789
Whose baby is it anyway? Wagner MG. **Paediatr Perinat Epidemiol** 1988 Apr;2(2):118–23
Recent advances in obstetric care. Tipton RH. **Practitioner** 1987 Oct 22;231(1437):1365–8
Reflections [editorial] Mutch MG Jr. **S D J Med** 1989 Jun; 42(6):9–11
[Determining factors in the increased frequency of utilization of abdominal delivery and its prospects in present–day obstetrics] Golota VIa, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):3–5 (37 ref.) (Rus)
[Evolution of surgical delivery during the past 35 years according to the data of the All–Union Research Center for Maternal and Child Health of the Ministry of Public Health of the USSR] Kulakov VI, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):13–8 (Eng. Abstr.) (Rus)
[Differential approach to cesarean section in current obstetrics] Strizhova NV, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):27–30 (Eng. Abstr.) (Rus)

OBSTETRICS AND GYNECOLOGY DEPARTMENT, HOSPITAL see under **HOSPITAL DEPARTMENTS**

OBTURATOR NERVE

Obturator nerve block in preventing bladder perforation during endoscopic transurethral bladder surgery. Moulaert P, et al. **Acta Urol Belg** 1988;56(4):523–5

SURGERY

Femoral obturator and sciatic neurectomy with iliacus and psoas muscle section for spasticity following spinal cord injury. Benzel EC, et al. **Spine** 1988 Aug;13(8):905–8

OBTURATORS, PALATAL see **PALATAL OBTURATORS**

OCCIPITAL BONE

Chondromyxoid fibroma of the mastoid invading the occipital bone. Kitamura K, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar;115(3):384–6
Fatal acute pontocerebellar hemorrhage due to an unsuspected spheno–occipital chordoma. Franquemont DW, et al. **Arch Pathol Lab Med** 1989 Sep;113(9):1075–8
Tecto–cerebellar dysraphia with occipital encephalocele. Chowdhary UM, et al. **Surg Neurol** 1989 Apr;31(4):310–4
Giant cranial intradiploic epidermoid cyst. Bhaskar MS, et al. **West Indian Med J** 1988 Jun;37(2):119–22
[Cranial metastasis of hepatocellular carcinoma: case report] Ogasawara H, et al. **No Shinkei Geka** 1988 Dec; 16(13):1479–82 (Eng. Abstr.) (Jpn)

ABNORMALITIES

An occipital dermoid tumor and sinus. Wiemer DR. **Ann Plast Surg** 1988 Nov;21(5):465–7

Persistent plagiocephaly with congenital dislocation of hip. Bhatia KK, et al. **Indian Pediatr** 1988 Aug;25(8):800–2

Morphology and embryological interpretation of a congenital occipito-atlanto-axial malformation in a dog. Watson AG, et al. **Teratology** 1988 Nov;38(5):451–9

[The care of patients with basilar invagination] Li YQ. **Chung Hua Hu Li Tsa Chih** 1988 Dec;23(12):708–9 (Chi)

[X-ray diagnosis of occipitocervical malformations. II. Dysplasia of occipital condyles, occipital vertebral manifestations] Biedermann F, et al. **Radiol Diagn (Berl)** 1988;29(3):373–81 (0 ref.) (Eng. Abstr.) (Ger)

[Neurologic syndromes in craniovertebral dysplasias] Lobzin VS, et al. **Zh Nevropatol Psikhiatr** 1988;88(9):12–6 (Eng. Abstr.) (Rus)

INJURIES

Isolated basilar artery occlusion associated with a clivus fracture. Guha A, et al. **Can J Neurol Sci** 1989 Feb; 16(1):81–3

Basilar skull fractures in children. Liu–Shindo M, et al. **Int J Pediatr Otorhinolaryngol** 1989 May;17(2):109–17

Occult occipital condyle fractures presenting as tumors. Deeb ZL, et al. **J Comput Tomogr** 1988 Oct;12(4):261–3

Three-dimensional computed tomography in evaluation of occipital condyle fracture. Savolaine ER, et al. **J Orthop Trauma** 1989;3(1):71–5

Growing fractures: an unusual complication of head injuries in pediatric patients. Locatelli D, et al. **Neurochirurgia (Stuttg)** 1989 Jul;32(4):101–4

Morphology and treatment of occipital condyle fractures. Anderson PA, et al. **Spine** 1988 Jul;13(7):731–6

Late hypoglossal nerve palsy following fracture of the occipital condyle. Orbay T, et al. **Surg Neurol** 1989 May; 31(5):402–4

[The growing fracture in children] Schultz J, et al. **ROFO** 1989 Jul;151(1):112–3 (Ger)

[Bilateral rupture of two head flexors with synchondrolysis of the base of the skull in a horse] Durchfeld B, et al. **Tierarztl Prax** 1989;17(1):71–2 (Eng. Abstr.) (Ger)

PATHOLOGY

Use of the cranial base in the identification of fire victims. Holland TD. **J Forensic Sci** 1989 Mar;34(2):458–60

View from beneath—pathology in focus. Primary intracranial mesenchymal chondrosarcoma. Shuangshoti S, et al. **J Laryngol Otol** 1989 May;103(5):545–9

[Diagnosis and surgical strategy in 3 cases of benign and unusual tumors of the occipito-cervical skeleton] Chabannes J, et al. **Neurochirurgie** 1988;34(3):173–8 (Eng. Abstr.) (Fre)

RADIOGRAPHY

Diagnostic imaging of the occipito-cervical junction in patients with rheumatoid arthritis. Plain films, computed tomography, magnetic resonance imaging. Fezoulidis I, et al. **Eur J Radiol** 1989 Feb;9(1):5–11

[Lacunae of the occipital bone. Radiological aspects of normal anatomical variants] Sciascia R, et al. **Radiol Med (Torino)** 1988 Sep;76(3):164–7 (Eng. Abstr.) (Ita)

SURGERY

Foramen magnum decompression in an infant with homozygous achondroplasia. Case report. Moskowitz N, et al. **J Neurosurg** 1989 Jan;70(1):126–8

Occipito-cervical fusion reinforced by Luque's segmental spinal instrumentation for rheumatoid diseases. Itoh T, et al. **Spine** 1988 Nov;13(11):1234–8

OCCIPITAL LOBE

Mononeuritis multiplex and occipital infarction complicating giant cell arteritis. McAlindon TE, et al. **Br J Rheumatol** 1989 Jun;28(3):257–8

Late pleuropulmonary metastases of a cerebral ependymoma. Lioté HA, et al. **Chest** 1988 Nov;94(5):1097–8

Occipital lobe infarction following descending transtentorial herniation. Chungpieboonpatana A, et al. **J Med Assoc Thai** 1988 Oct;71(10):553–60

Subtorcular occipital encephaloceles. Anatomical considerations relevant to operative management. Chapman PH, et al. **J Neurosurg** 1989 Sep;71(3):375–81

Congenital quadrantanopia with occipital lobe ganglioglioma. Fletcher WA, et al. **Neurology** 1988 Dec;38(12):1892–4

Occipital infarction with hemianopsia from carotid occlusive disease. Pessin MS, et al. **Stroke** 1989 Mar;20(3):409–11

Occipital transtentorial approach for removal of pineal region tumors: report of 64 consecutive cases. Luo SQ, et al. **Surg Neurol** 1989 Jul;32(1):36–9

[Myelodysplastic syndromes and solid neoplasms. Presentation of a case showing an association of refractory anemia and glioblastoma multiforme (letter)] Pascual Velasco F, et al. **Med Clin (Barc)** 1989 May 6;92(17):676 (Spa)

ANATOMY & HISTOLOGY

Projections from the claustrum to the occipital cortex in the guinea pig. Druga R. **Folia Morphol (Praha)** 1989; 37(1):57–63

BLOOD SUPPLY

Permanent cerebral blindness after cardiac catheterization. Thomas TD, et al. **Cathet Cardiovasc Diagn** 1989 Aug; 17(4):228–30

CYTOLOGY

Effects of elevated potassium on neuronal death and network formation in neocortical cultures. Baker RE, et al. **Pflugers Arch** 1989;414 Suppl 1:S126

METABOLISM

Development of vasoactive-intestinal-polypeptide-immunoreactive neurons in the rat occipital cortex: a combined immunohistochemical-autoradiographic study. Cavanagh ME, et al. **J Comp Neurol** 1989 Jun 22;284(4):637–45

Ultrastructural analysis of somatostatin-immunoreactive neurons and synapses in the temporal and occipital cortex of the macaque monkey. de Lima AD, et al. **J Comp Neurol** 1989 May 8;283(2):212–27

Release of 3H-5-hydroxytryptamine by amiflamine and related phenylalkylamines from rat occipital cortex slices. Ask AL, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jun;339(6):684–9

MICROBIOLOGY

Eikenella corrodens as a cause of brain abscess. Cheng AF, et al. **Scand J Infect Dis** 1988;20(6):667–71

PATHOLOGY

Alzheimer's disease: areal and laminar pathology in the occipital isocortex. Braak H, et al. **Acta Neuropathol (Berl)** 1989;77(5):494–506

Balint's syndrome in Alzheimer's disease: specific disruption of the occipito-parietal visual pathway. Hof PR, et al. **Brain Res** 1989 Jul 31;493(2):368–75

Optokinetic nystagmus in homonymous hemianopia due to a strictly occipital lesion. Kölmel HW, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(4):199–202

Gliomatosis cerebri with formation of a glioblastoma multiform. Study and follow-up by magnetic resonance and computed tomography. Romero FJ, et al. **J Comput Tomogr** 1988 Oct;12(4):253–7

Blindness in eclampsia: CT and MR imaging. Duncan R, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):899–902

Role of MRI scanning in the diagnosis of cerebral visual disturbance. Van Nieuwenhuizen O, et al. **Pediatr Neurol** 1986 Nov–Dec;2(6):363–6

PHYSIOLOGY

Color and spatial error in block design in stone-age Auca Indians: ecological underuse of occipital-parietal system in men and of frontal lobes in women. Pontius AA. **Brain Cogn** 1989 May;10(1):54–75

Lesion of the PGO pathways in the kitten. II. Impairment of physiological and morphological maturation of the lateral geniculate nucleus. Davenne D, et al. **Brain Res** 1989 Apr 24;485(2):267–77

Differential enhancement of rapid eye movement sleep signs in the cat: a comparison of microinjection of the cholinergic agonist carbachol and the beta-adrenergic antagonist propranolol on pontogeniculo-occipital wave clusters. Denlinger SL, et al. **Brain Res** 1988 Nov 8;473(1):116–26

The blockage of ponto-geniculo-occipital waves in the cat lateral geniculate nucleus by nicotinic antagonists. Hu B, et al. **Brain Res** 1988 Nov 15;473(2):394–7

The origin of the occipital lambda wave in man. Billings RJ. **Electroencephalogr Clin Neurophysiol** 1989 Feb; 72(2):95–113

The effects of tones on PGO waves in slow wave sleep and paradoxical sleep. Ball WA, et al. **Exp Neurol** 1989 Jun; 104(3):251–6

Deficits of visual attention and saccadic eye movements after lesions of parietooccipital cortex in monkeys. Lynch JC, et al. **J Neurophysiol** 1989 Jan;61(1):74–90

Phasic activation of lateral geniculate and perigeniculate thalamic neurons during sleep with ponto-geniculo-occipital waves. Steriade M, et al. **J Neurosci** 1989 Jul;9(7):2215–29

The cellular mechanism of thalamic ponto-geniculo-occipital waves. Hu B, et al. **Neuroscience** 1989;31(1):25–35

PGO waves and insomnia in PCPA-treated rats. Marks GA, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):509–13

PHYSIOPATHOLOGY

Benign childhood epilepsy with occipital paroxysms: a 15-year prospective study. Panayiotopoulos CP. **Ann Neurol** 1989 Jul;26(1):51–6

Visual seizures in children. Aso K, et al. **Epilepsy Res** 1987 Jul;1(4):246–53

Intermittently occurring right-posterior slow waves (IRP) in psychiatric patients. An electroencephalographic indicator of cerebral dysfunction. Ulrich G, et al. **Eur Arch Psychiatry Neurol Sci** 1988;237(5):258–63

Transient cortical blindness with occipital lobe epilepsy. Jaffe SJ, et al. **J Clin Neuro Ophthalmol** 1988 Dec;8(4):221–4

Visual manifestations of occipital lobe infarction in three patients on a geriatric psychiatry unit. La Mancusa JC, et al. **J Geriatr Psychiatry Neurol** 1988 Oct–Dec;1(4):231–4

Psychophysiological characteristics of visual perception of schizophrenic patients with polarization of the occipital and frontal cortex. Korsakov IA. **Neurosci Behav Physiol** 1989 Mar–Apr;19(2):135–8

Transient cortical blindness and occipital seizures with cyclosporine toxicity. Rubin AM. **Transplantation** 1989 Mar;47(3):572–3

[Clinical aspects, differential diagnosis and evolution of visual epileptic seizures in children] Nalin A, et al. **Neurophysiol Clin** 1989 Mar;19(1):25–36 (Eng. Abstr.) (Fre)

[Epileptic activity of the occipital lobe. Clinico-electroencephalographic contribution] Schäffler L, et al. **Fortschr Neurol Psychiatr** 1988 Sep;56(9):286–99 (Eng. Abstr.) (Ger)

[Residual visual abilities in man after a lesion in the occipital lobe] Corbetta M, et al. **Ann Ist Super Sanita** 1988; 24(4):587–9 (Eng. Abstr.) (Ita)

[Occipital epilepsy: a non-benign pediatric syndrome] De Romanis F, et al. **Clin Ter** 1988 Jan 15;124(1):25–32 (Eng. Abstr.) (Ita)

RADIOGRAPHY

Occipital lobe hemorrhages; clinical-computed tomographic correlations. Weisberg LA, et al. **Comput Med Imaging Graph** 1988 Nov–Dec;12(6):353–8

SURGERY

Pathological findings in suboccipital decompression in 63 patients with syringomyelia. Bidziński J. **Acta Neurochir Suppl (Wien)** 1988;43:26–8

Effect of excision of occipital lobe tissue on about the 70th day of gestation on the growth and development of the sheep's brain. Chapman SA, et al. **Surg Neurol** 1989 Aug; 32(2):98–104

OCCLUSAL EQUILIBRATION see **DENTAL OCCLUSION, BALANCED**

OCCLUSIVE DRESSINGS

Patch testing with nickel sulphate under occlusion for five hours. Bruze M. **Acta Derm Venereol (Stockh)** 1988; 68(4):361–4

Treatment of psoriasis and other dermatoses with a single application of a corticosteroid left under a hydrocolloid occlusive dressing for one week. Juhlin L. **Acta Derm Venereol (Stockh)** 1989;69(4):355–7

A smart way to secure an i.v. Negron SB. **Am J Nurs** 1989 May;89(5):687

'Hypafix': new technique of skin graft fixation. Cassey JG, et al. **Aust N Z J Surg** 1989 Jun;59(6):479–83

Methodology to measure the transient effect of occlusion on skin penetration and stratum corneum hydration in vivo. Ryatt KS, et al. **Br J Dermatol** 1988 Sep;119(3):307–12

Inelastic tape to treat problems of tissue expansion [letter] Saxby PJ. **Br J Plast Surg** 1988 Nov;41(6):666–7

Ambulatory management of burns in children. Cockington RA. **Burns** 1989 Aug;15(4):271–3

Uses and abuses of a biosynthetic dressing for partial skin thickness burns. Phillips LG, et al. **Burns** 1989 Aug; 15(4):254–6

A comparison of Biobrane vs. homograft for coverage of contaminated burn wounds. Gonce S, et al. **Burns Incl Therm Inj** 1988 Oct;14(5):409–12

Treatment of donor sites—Duoderm or Omiderm? Leicht P, et al. **Burns Incl Therm Inj** 1989 Feb;15(1):7–10

Biosynthetic compound dressings—management of hand burns. Smith DJ, et al. **Burns Incl Therm Inj** 1988 Oct; 14(5):405–8

Use of Omiderm in treatment of low-degree pressure sores in terminally ill cancer patients. Goren D. **Cancer Nurs** 1989 Jun;12(3):165–9

Effect of punctal occlusion by Freeman silicone plug insertion on tear osmolarity in dry eye disorders. Gilbard JP, et al. **CLAO J** 1989 Jul–Sep;15(3):216–8

Enterostomal hydrocolloid materials [letter] Krugman ME, et al. **Ear Nose Throat J** 1988 Sep;67(9):696

Esotropic children with amblyopia: effects of patching on acuity. Fulton AB, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(4):309–12

Visilon and perforated corneal injuries. Patel CK, et al. **Indian J Ophthalmol** 1987;35(5–6):394–5

The effects of an occlusive zinc medicated dressing on the bacterial flora in excised wounds in the rat. Söderberg T, et al. **Infection** 1989 Mar–Apr;17(2):81–5

Use of occlusive membrane in the treatment of prurigo nodularis [letter] Meyers LN. **Int J Dermatol** 1989 May; 28(4):275–6

Use of the hydrocolloidal dressing duoderm for skin donor sites for burns. Donati L, et al. **Int J Tissue React** 1988; 10(4):267–72

Psoriasis therapy: comparative studies with a hydrocolloid dressing, plastic film occlusion, and triamcinolone acetonide cream. David M, et al. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 1):511–4

Effects of occlusive and semiocclusive dressings on the return of barrier function to transepidermal water loss in standardized human wounds. Silverman RA, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 1):755–60

Hydrocolloid for deep wound dehiscence. Latham W, et al. **J Am Podiatr Med Assoc** 1989 Feb;79(2):74–6

Reduced wound contraction after grafting of full-thickness burns with a collagen and chondroitin-6-sulfate (GAG) dermal skin substitute and coverage with biobrane. Boyce ST, et al. **J Burn Care Rehabil** 1988 Jul–Aug;9(4):364–70

The efficacy of adhesives in the application of wound dressings. Mikhail GR, et al. **J Burn Care Rehabil** 1989 May–Jun;10(3):216–9

Use of collagen shields as a surgical adjunct. Aquavella JV, et al. **J Cataract Refract Surg** 1988 Sep;14(5):492–5

Collagen shield symposium [editorial] Kaufman HE. **J Cataract Refract Surg** 1988 Sep;14(5):487–8

Therapeutic and protective properties of the corneal collagen shield. Marmer RH. **J Cataract Refract Surg** 1988 Sep; 14(5):496–9

Use of collagen corneal shields versus soft contact lenses to enhance penetration of topical tobramycin. O'Brien TP, et al. **J Cataract Refract Surg** 1988 Sep;14(5):505–7

Clinical uses of collagen shields. Poland DE, et al. **J Cataract Refract Surg** 1988 Sep;14(5):489–91

Collagen shield drug delivery: therapeutic concentrations of tobramycin in the rabbit cornea and aqueous humor. Unterman SR, et al. **J Cataract Refract Surg** 1988 Sep; 14(5):500–4

Comparison of the effects of moist and dry conditions on dermal repair. Dyson M, et al. **J Invest Dermatol** 1988 Nov; 91(5):434–9

Comparison of an occlusive and a semi-occlusive dressing and the effect of the wound exudate upon keratinocyte proliferation. Madden MR, et al. **J Trauma** 1989 Jul; 29(7):924–30; discussion 930–1

Sustained gentamicin release by presoaked medicated bandage contact lenses. Busin M, et al. **Ophthalmology** 1988 Jun;95(6):796–8

Placing granules of hydrocolloid into wounds [letter] Couper G, et al. **Plast Reconstr Surg** 1989 May;83(5):925

How to stop a nosebleed. Petruzzelli GJ, et al. **Postgrad Med** 1989 Sep 15;86(4):44–6, 51, 55–6

[Results of therapy studies with anti-inflammatory substances in occlusive conditions in psoriasis] Wozel G, et al. **Dermatol Monatsschr** 1988;174(7):421–3 **(Ger)**

[Wound dressings] Breuninger H. **Z Hautkr** 1988;63 Suppl 2:20–1 (5 ref.) (Eng. Abstr.) **(Ger)**

[Antipsoriatic effect of (tape) occlusion] Wollina U. **Z Hautkr** 1988 Nov 15;63(11):935–9 (Eng. Abstr.) **(Ger)**

[Favorable outcome of the treatment of Mibelli's porokeratosis linearis using occlusive dressings with retinoic acid] Ratkà P, et al. **Przegl Dermatol** 1988 Mar–Apr;75(2):149–53 (Eng. Abstr.) **(Pol)**

[Treatment with Varihesive dressings of various types of leg ulcers] Ibáñez Esquembre V. **Angiologia** 1989 May–Jun; 41(3):118–24 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Occlusion-induced contralateral afferent pupillary defect. DuBois LG, et al. **Am J Ophthalmol** 1989 Mar 15; 107(3):306–7

Relative afferent pupillary defect induced by patching. Lam BL, et al. **Am J Ophthalmol** 1989 Mar 15;107(3):305–6

Iatrogenic compartment syndrome, A follow-up of four cases caused by elastic bandage. Danner R, et al. **Clin Neurol Neurosurg** 1989;91(1):37–43

Difficulty in removal of silicone punctum plugs [letter] White WL, et al. **Ophthalmic Surg** 1989 Jul;20(7):523

VETERINARY

Bandaging and wounds [letter] Lansdown AB. **Vet Rec** 1988 Jul 16;123(3):87

OCCULT BLOOD

see related

MELENA

Occult gastrointestinal bleeding: newer techniques and diagnosis and therapy. Moncure AC, et al. **Adv Surg** 1989; 22:141–77 (55 ref.)

Substances that interfere with guaiac card tests: implications for gastric aspirate testing. Gogel HK, et al. **Am J Emerg Med** 1989 Sep;7(5):474–80

Hemoccult screening for colorectal cancer. Chang FC, et al. **Am J Surg** 1988 Dec;156(6):457–9

Observer variance in the reporting of faecal occult blood results using the Okokit II method. Coyle SJ, et al. **Ann Clin Biochem** 1989 May;26 (Pt 3):296–7

Occult haemolacria in Eskimos. Norn M. **Arctic Med Res** 1988 Apr;47(2):89–91

Gastrointestinal blood loss from a new buffered aspirin (Ostoprin): measurement by radiochromium and Hemoquant techniques. Lynch NM, et al. **Aust N Z J Med** 1989 Apr;19(2):89–96

Rescreening of a group at high risk for colorectal neoplasia using immunochemical tests for faecal occult blood. Hunter R, et al. **Aust N Z J Surg** 1988 Oct;58(10):791–4

Patterns of occult bleeding in asymptomatic colorectal cancer. Ahlquist DA, et al. **Cancer** 1989 May 1; 63(9):1826–30

Reverse passive hemagglutination for detection of fecal occult blood. A comparison with Japanese Immudia-Hem SP Kit. Zhu WX, et al. **Chin Med J [Engl]** 1988 Jul; 101(7):519–22

The "Fecatwin Sensitive" test for fecal occult blood is not intended for use without testing positives with the FECA-EIA assay [letter] Adlercreutz H, et al. **Clin Chem** 1989 Jul;35(7):1555–6

Coloscreen VPI test kit evaluated for detection of fecal occult blood. Scriven AJ, et al. **Clin Chem** 1989 Jan; 35(1):156–8

Occult gastrointestinal bleeding in high-risk intensive care unit patients receiving antacid prophylaxis: frequency and significance. Derrida S, et al. **Crit Care Med** 1989 Feb; 17(2):122–5

Negative Haemoccult test in malignant and premalignant lesions of the colon. Validation of the Haemoccult test with total colonoscopy. Kimmig JM, et al. **Endoscopy** 1989 May; 21(3):136–40

Effect of iron on the guaiac reaction. McDonnell WM, et al. **Gastroenterology** 1989 Jan;96(1):74–8

Sensitivity, specificity, and positive predictivity of the Hemoccult test in screening for colorectal cancers. The University of Minnesota's Colon Cancer Control Study. Mandel JS, et al. **Gastroenterology** 1989 Sep;97(3):597–600

Screening of colorectal tumours using an improved faecal occult blood test. Quantitative aspects. Häkkinen I, et al. **Gut** 1988 Sep;29(9):1194–7

Testicular choriocarcinoma. An unusual presentation as occult gastrointestinal blood loss. Stokes EW, et al. **J Adolesc Health Care** 1989 Mar;10(2):146–50

US Preventive Services Task Force. Occult blood screening for colorectal cancer. Knight KK, et al. **JAMA** 1989 Jan 27;261(4):586–93 (99 ref.)

Faecal occult blood screening for colorectal cancer [letter] **Lancet** 1989 Aug 5;2(8658):329

Occult blood tests [letter] Hardcastle JD, et al. **Lancet** 1989 Sep 16;2(8664):672

Randomised, controlled trial of faecal occult blood screening for colorectal cancer. Results for first 107,349 subjects. Hardcastle JD, et al. **Lancet** 1989 May 27;1(8648):1160–4

Oral iron and the Hemoccult test: a controversy on the teaching wards [letter] Kulbaski MJ, et al. **N Engl J Med** 1989 Jun 1;320(22):1500

Fecal occult blood testing. Problems, pitfalls, and diagnostic concerns. Johnson DA. **Postgrad Med** 1989 Apr; 85(5):287–8, 293–9 (31 ref.)

An analysis of factors associated with non-compliance with follow-up recommendations after a positive fecal occult blood test. Tressler C, et al. **Prog Clin Biol Res** 1989; 293:307–22

Repeated screening for colorectal cancer with fecal occult blood test. A prospective randomized study at Funen, Denmark. Kronborg O, et al. **Scand J Gastroenterol** 1989 Jun;24(5):599–606

Diagnosis of colorectal cancer screening—risk groups. Ekelund GR. **Scand J Gastroenterol Suppl** 1988;149:39–42

[Results of screening for colorectal carcinoma in the Bruntál District using the Haemoccult Test 1985–1986] Zoubek V, et al. **Cas Lek Cesk** 1989 Apr 7;128(15):460–2 (Eng. Abstr.) **(Cze)**

[Repeat screening for colorectal carcinoma in a population of asymptomatic individuals after 2 years] Zoubek V, et al. **Cas Lek Cesk** 1989 Apr 7;128(15):463–4 (Eng. Abstr.) **(Cze)**

[Experience with screening for colorectal carcinoma using the Haemoccult Test] Zoubek V, et al. **Cesk Zdrav** 1989 Mar;37(3):117–21 (Eng. Abstr.) **(Cze)**

[Screening for colorectal tumors using fecal occult blood studies] Restellini A, et al. **Ther Umsch** 1989 Jun; 46(6):389–97 (72 ref.) (Eng. Abstr.) **(Fre)**

[A new latex agglutination test for the immunologic detection of occult blood in stool] Herzog P, et al. **Klin Wochenschr** 1989 Mar 1;67(5):291–6 (Eng. Abstr.) **(Ger)**

[Screening for cancer of the large intestine] Gnauck R. **Wien Med Wochenschr** 1988 Jun 30;138(11–12):257–60 (0 ref.) (Eng. Abstr.) **(Ger)**

[Screening for colorectal neoplasms at a regional corporation] Giacchero A, et al. **Epidemiol Prev** 1988 Mar;10(34):33–5 (Eng. Abstr.) **(Ita)**

[A new immunochemical fecal occult blood test—combination assay of hemoglobin and transferrin] Uchida K, et al. **Rinsho Byori** 1989 Jan;37(1):58–62 **(Jpn)**

[Evaluation of immunological fecal occult blood test] Yamaguchi N, et al. **Rinsho Byori** 1988 Jul;36(7):751–8 **(Jpn)**

[Fundamental studies and clinical evaluation of fecal occult blood by immunological detection] Yoshida R, et al. **Rinsho Byori** 1989 Jan;37(1):63–6 **(Jpn)**

[Quantitative determination of blood loss from the gastrointestinal tract using Metol in chronic diseases of the digestive organs] Kanishchev PA, et al. **Lab Delo** 1989; (3):36–8 (Eng. Abstr.) **(Rus)**

[Early detection of colorectal carcinoma using the Hemdetect Test] Kneževic S, et al. **Acta Med Iugosl** 1989;43(1):3–12 (Eng. Abstr.) **(Scr)**

OCCULT PRIMARY NEOPLASMS see **NEOPLASMS, UNKNOWN PRIMARY**

OCCUPATIONAL AIR POLLUTANTS see **AIR POLLUTANTS, OCCUPATIONAL**

OCCUPATIONAL DERMATITIS

Occupational dermatoses—an update. Goh CL. **Ann Acad Med Singapore** 1988 Oct;17(4):557–62 (75 ref.)

Occupational dermatoses. Mathias CG. **J Am Acad Dermatol** 1988 Dec;19(6):1107–14

Cutaneous sporotrichosis. Tan TQ, et al. **J La State Med Soc** 1988 Sep;140(9):41–5

BLOOD

[Cytochemical and immunological indices of patients with occupational dermatoses of chemical etiology] Mekhraliev AA, et al. **Vestn Dermatol Venerol** 1989;(4):47–51 (Eng. Abstr.) **(Rus)**

CHEMICALLY INDUCED

Prevalence of cement eczema in Denmark before and since addition of ferrous sulfate to Danish cement. Avnstorp C. **Acta Derm Venereol (Stockh)** 1989;69(2):151–5

Metal allergy in cashiers. An in vitro and in vivo study for the presence of metal allergy. Gilboa R, et al. **Acta Derm Venereol (Stockh)** 1988;68(4):317–24

Occupational dermatoses from colour developing agents. Clinical and histopathological observations. Lidén C, et al. **Acta Derm Venereol (Stockh)** 1988;68(6):514–22

Skin notation in the context of workplace exposure standards. Scansetti G, et al. **Am J Ind Med** 1988;14(6):725–32

Health status of funeral service workers exposed to formaldehyde. Holness DL, et al. **Arch Environ Health** 1989 Jul–Aug;44(4):222–8

Dermatosis from resorcinal in tyre makers. Abbate C, et al. **Br J Ind Med** 1989 Mar;46(3):212–4

Ultralow volume application of organophosphate concentrate in grain terminals: a new occupational health hazard. Gun RT, et al. **Br J Ind Med** 1988 Dec;45(12):834–7

Skin injury following contact with a complex amine. Sagi A, et al. **Burns Incl Therm Inj** 1988 Dec;14(6):495–6

Follow-up of workers from the prefabricated concrete industry after the addition of ferrous sulphate to Danish cement. Avnstorp C. **Contact Dermatitis** 1989 May; 20(5):365–71

Allergic contact dermatitis from 1,2-dichloropropane. Baruffini A, et al. **Contact Dermatitis** 1989 May; 20(5):379–80

Occupational dermatoses in workers exposed to resins based on phenol and formaldehyde. Bruze M, et al. **Contact Dermatitis** 1988 Oct;19(4):272–7

Contact allergy to dichlorinated methylisothiazolinone. Bruze M, et al. **Contact Dermatitis** 1989 Mar;20(3):219–20

Isophoronediamine (IPD) dermatitis in Spain. Camarasa JG, et al. **Contact Dermatitis** 1989 May;20(5):382

Allergic contact dermatitis from tetrafluoroterephthalonitrile and TFX diamine. Carmichael AJ, et al. **Contact Dermatitis** 1989 Mar;20(3):233–4

Occupational dermatitis due to sodium hypophosphite. Costa C, et al. **Contact Dermatitis** 1988 Oct;19(4):313–4

Chronic chromium poisoning with dermatitis in the leather industry. Das M, et al. **Contact Dermatitis** 1989 Mar; 20(3):221–2

Dermatoses in metal workers. (I). Irritant contact dermatitis. de Boer EM, et al. **Contact Dermatitis** 1989 Mar;20(3):212–8

Silver polish: another source of contact dermatitis reactions to thiourea. Dooms-Goossens A, et al. **Contact Dermatitis** 1988 Aug;19(2):133–5

Occupational sensitization to ethylenediamine in a floor polish remover. English JS, et al. **Contact Dermatitis** 1989 Mar;20(3):220–1

Contact leucoderma from paraquat dichloride? George AO. **Contact Dermatitis** 1989 Mar;20(3):225

Outcome of investigation of cutting fluid dermatitis. Grattan CE, et al. **Contact Dermatitis** 1989 May;20(5):377–8

Cutting fluid dermatitis. Grattan CE, et al. **Contact Dermatitis** 1989 May;20(5):372–6

Allergic contact dermatitis from thiamine. Ingemann Larsen A, et al. **Contact Dermatitis** 1989 May;20(5):387–8

Occupational eczema with photosensitivity due to Japanese sargassum [letter] Jeanmougin M, et al. **Contact Dermatitis** 1988 Nov;19(5):394

Contact allergy to antioxidants in industrial greases. Kalimo K, et al. **Contact Dermatitis** 1989 Feb;20(2):151–2

Allergic contact dermatitis from dental composite resins due to aromatic epoxy acrylates and aliphatic acrylates. Kanerva L, et al. **Contact Dermatitis** 1989 Mar;20(3):201–11

Allergic contact dermatitis from para-chloro-meta-xylenol in Lurosep soap. Libow LF, et al. **Contact Dermatitis** 1989 Jan;20(1):67–8

Occupational dermatoses at a film laboratory. Follow-up after modernization. Lidén C. **Contact Dermatitis** 1989 Mar; 20(3):191–200

Contact dermatitis due to Ziram and Maneb. Manuzzi P, et al. **Contact Dermatitis** 1988 Aug;19(2):148

Contact reaction to flame retardant. Nicholls DS, et al. **Contact Dermatitis** 1988 Aug;19(2):153–4

Occupational contact allergy to triglycidyl isocyanurate (TGIC, Tepic). Nishioka K, et al. **Contact Dermatitis** 1988 Nov;19(5):379–80

Occupational allergic contact dermatitis from triphenyl phosphite. O'Driscoll JB, et al. **Contact Dermatitis** 1989

May;20(5):392–3
Rubber contact urticaria. Allergenic properties of 19 brands of latex gloves. Turjanmaa K, et al. **Contact Dermatitis** 1988 Nov;19(5):362–7
Occupational sensitization to epichlorohydrin and epoxy resin. van Joost T. **Contact Dermatitis** 1988 Oct; 19(4):278–80
Dermatitis from crystal violet [letter] Whitehead PN. **Contact Dermatitis** 1988 Aug;19(2):141–2
Contact dermatitis from azodicarbonamide in earplugs. Yates VM, et al. **Contact Dermatitis** 1988 Aug;19(2):155–6
The release of nickel from blackboard chalk may cause contact dermatitis. Zanca A, et al. **Contact Dermatitis** 1988 Aug;19(2):143
Management of hairdressers sensitized to hair dyes or permanent wave solutions. Fisher AA. **Cutis** 1989 Apr; 43(4):316–8
Milk tester's dermatitis. Herzog J, et al. **J Am Acad Dermatol** 1988 Sep;19(3):503–8
Contact allergic dermatitis to dicyclohexylcarbodiimide used in protein synthesis. Hoffman TE, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 2):436–7
Occupational hazard in hospital staff exposed to 2 per cent glutaraldehyde in an endoscopy unit. Jachuck SJ, et al. **J Soc Occup Med** 1989 Summer;39(2):69–71
Skin and respiratory symptoms from exposure to alkaline glutaraldehyde in medical services. Norbäck D. **Scand J Work Environ Health** 1988 Dec;14(6):366–71
Dermal exposure to kerosene. Upreti RK, et al. **Vet Hum Toxicol** 1989 Feb;31(1):16–20
[Benign symmetrical lipomatosis—an occupational disease following exposure to tar?] Röcken M. **Derm Beruf Umwelt** 1988 Nov–Dec;36(6):188–90 (42 ref.) (Eng. Abstr.) (Ger)
[Metallic nickel on skin and in artificial sweat. Case studies] Hums R, et al. **Dermatol Monatsschr** 1988;174(12):723–9 (Eng. Abstr.) (Ger)
[Contact eczema caused by pesticides in East Germany] Jung HD, et al. **Dermatol Monatsschr** 1989;175(4):203–14 (Eng. Abstr.) (Ger)
[Cobalt allergy with special reference to the hard metal industry] Metzner HH. **Dermatol Monatsschr** 1988; 174(12):713–22 (Eng. Abstr.) (Ger)
[Allergic contact dermatitis caused by rubber. Evidence of a new group sensitization to p-phenylenediamine derivatives] Beretta E, et al. **Med Lav** 1988 Nov–Dec; 79(6):482–8 (Eng. Abstr.) (Ita)
[Pathologic skin changes in workers at electric and thermoelectric power plants] Kieć-Swierczyńska M, et al. **Med Pr** 1988;39(6):423–8 (Eng. Abstr.) (Pol)
[Contact allergy to ethylenediamine] Rudzki E, et al. **Pneumonol Pol** 1988 Nov;56(11):531–3 (Eng. Abstr.) (Pol)
[Occupational allergy in nurses] Rudzki E, et al. **Pol Tyg Lek** 1988 Oct 17–24;43(42–43):1374–6 (Eng. Abstr.) (Pol)
[A proposed new method of determining the properties of allergenic substances used in industry] Rudzki E, et al. **Pol Tyg Lek** 1988 Oct 17–24;43(42–43):1369–70 (Eng. Abstr.) (Pol)
[Occupational allergy in dentists] Rudzki E, et al. **Pol Tyg Lek** 1988 Oct 17–24;43(42–43):1371–3 (Eng. Abstr.) (Pol)
[The role of metals in the development of allergy in workers in the electrotechnical industry] Kieć-Swierczyńska M. **Przegl Dermatol** 1988 Jul–Aug;75(4):272–6 (Eng. Abstr.) (Pol)
[Characteristics of immunologic reactivity of workers at an epoxy resin plant] Chernykh LV, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):48–50 (Rus)
[Problems of occupational hygiene in the production of synthetic detergents (review of the literature)] Kalashnikov AA. **Gig Tr Prof Zabol** 1988 Oct;(10):37–9 (19 ref.) (Rus)
[A case of bullous contact dermatitis caused by butifos] Karimov AM, et al. **Gig Tr Prof Zabol** 1988 Nov;(11):57 (Rus)
[Hygienic assessment of lubricant coolants used at machine manufacturing plants] Shershova NA. **Gig Tr Prof Zabol** 1989;(1):42–3 (Rus)
[Sensitization to chemical substances in workers of the rubber industry] Sidorenko EN, et al. **Vrach Delo** 1989 Jun; (6):109–12 (Eng. Abstr.) (Rus)
[Allergic dermatitis caused by gold. Description of a new case] Camarasa JG, et al. **Med Cutan Ibero Lat Am** 1989; 17(3):187–8 (Eng. Abstr.) (Spa)
[Contact dermatitis caused by isophorone diamine] Serra-Baldrich E, et al. **Med Cutan Ibero Lat Am** 1989; 17(3):175–7 (Eng. Abstr.) (Spa)
[Occupational atopic hand eczema] Wahlberg JE. **Lakartidningen** 1989 Mar 1;86(9):703 (Swe)

DIAGNOSIS

Diagnosis of occupational dermatitis by general practitioners and employment medical advisors: a pilot study. Jacob A, et al. **J R Coll Gen Pract** 1988 May;38(310):215–6
[Allergic occupational dermatoses in karakul sheep breeders] Shadiev KhSh. **Vestn Dermatol Venerol** 1988;(9):32–4 (Eng. Abstr.) (Rus)

DRUG THERAPY

Iontophoretic treatment of herpetic whitlow. Gangarosa LP Sr, et al. **Arch Phys Med Rehabil** 1989 Apr;70(4):336–40

ECONOMICS

Contact dermatitis and workers' compensation: criteria for establishing occupational causation and aggravation. Mathias CG. **J Am Acad Dermatol** 1989 May;20(5 Pt 1):842–8 (17 ref.)
[Occupational skin diseases (letter)] Svarrer FB. **Ugeskr Laeger** 1989 Jun 5;151(23):1484–5 (Dan)

EPIDEMIOLOGY

Assessing dermatitis in epidemiologic studies: occupational skin disease among California grape and tomato harvesters. McCurdy SA, et al. **Am J Ind Med** 1989;16(2):147–57
Distribution of lost-work-time claims for skin disease in California agriculture: 1978–1983. O'Malley MA, et al. **Am J Ind Med** 1988;14(6):715–20
Dermatoses in metal workers. (II). Allergic contact dermatitis. de Boer EM, et al. **Contact Dermatitis** 1989 Apr; 20(4):280–6
[Clinical experiences of occupational dermatoses in recent years] Sun CC. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1988 Jul; 4(7):378–85 (Eng. Abstr.) (Chi)
[Occupational dermatoses in Poland] Grzegorczyk L. **Derm Beruf Umwelt** 1989 May–Jun;37(3):93–5 (Eng. Abstr.) (Ger)
[Longitudinal study of a selected population with occupational allergic contact dermatitis] Albertini G, et al. **G Ital Dermatol Venereol** 1988 Jul–Aug;123(7–8):373–8 (Eng. Abstr.) (Ita)
[Occupational contact dermatitis: analysis of clinical case reports, 1972–1985] Maranelli G, et al. **G Ital Med Lav** 1987 Jan;9(1):25–9 (Eng. Abstr.) (Ita)

ETIOLOGY

Skin problems from visual display units. Provocation of skin symptoms under experimental conditions. Swanbeck G, et al. **Acta Derm Venereol (Stockh)** 1989;69(1):46–51
Dermatoses among poultry slaughterhouse workers. Hayashi M, et al. **Am J Ind Med** 1989;15(5):601–5
Allergic contact dermatitis to mace tear gas. Goh CL. **Australas J Dermatol** 1987 Dec;28(3):115–6
Contact urticaria and anaphylactoid reaction from cornstarch surgical glove powder. Assalve D, et al. **Contact Dermatitis** 1988 Jul;19(1):61
Occupational airborne allergic contact dermatitis from tylosin. Barberá E, et al. **Contact Dermatitis** 1989 Apr; 20(4):308–9
Skin problems in workers using visual display terminals. A study of 201 patients. Berg M. **Contact Dermatitis** 1988 Nov;19(5):335–41
Irritant contact dermatitis and chrome-passivated metal. Bruynzeel DP, et al. **Contact Dermatitis** 1988 Sep; 19(3):175–9
Contact dermatitis due to Paeonia (peony). Bruynzeel DP. **Contact Dermatitis** 1989 Feb;20(2):152–3
Imidazole cross-sensitivity to sulconazole. Carmichael AJ, et al. **Contact Dermatitis** 1988 Sep;19(3):237–8
Contact dermatitis from madder. Castelain M, et al. **Contact Dermatitis** 1988 Sep;19(3):228–9
Occupational allergic contact dermatitis from amethocaine. Condé-Salazar L, et al. **Contact Dermatitis** 1988 Jul; 19(1):69–70
Dyshidrotic eczema as an occupational dermatitis in metal workers. de Boer EM, et al. **Contact Dermatitis** 1988 Sep; 19(3):184–8
Contact dermatitis from glutaraldehyde. Di Prima T, et al. **Contact Dermatitis** 1988 Sep;19(3):219–20
Short communications. Allergic contact dermatitis from cobalt in the rubber industry. Foussereau J, et al. **Contact Dermatitis** 1988 Sep;19(3):217
Allergic contact dermatitis from "Varn Ecol - OJ wash" in a litho printer. Garioch JJ, et al. **Contact Dermatitis** 1988 Sep;19(3):229
Occupational allergic contact dermatitis from metallic mercury. Goh CL, et al. **Contact Dermatitis** 1988 Sep; 19(3):232–3
An investigation of the irritant and allergenic properties of daffodils (Narcissus pseudonarcissus L., Amaryllidaceae). A review of daffodil dermatitis. Gude M, et al. **Contact Dermatitis** 1988 Jul;19(1):1–10
Skin temperature and skin symptoms among workers in the fish processing industry. Halkier-Sørensen L, et al. **Contact Dermatitis** 1988 Sep;19(3):206–9
Erythema multiforme-like reaction to "rosewood". Irvine C, et al. **Contact Dermatitis** 1988 Sep;19(3):224–5
Contact dermatitis from acrylamide. Lambert J, et al. **Contact Dermatitis** 1988 Jul;19(1):65
Unusual occupational allergic contact dermatitis in a nurse. Lombardi P, et al. **Contact Dermatitis** 1989 Apr;20(4):302–3
Chromium dermatitis caused by epoxy resin. Lück H, et al. **Contact Dermatitis** 1988 Aug;19(2):154–5
Allergic contact dermatitis from triglycidyl isocyanurate in polyester paint pigments. Mathias CG. **Contact Dermatitis** 1988 Jul;19(1):67–8
Generalized eruption with severe liver dysfunction associated with occupational exposure to trichloroethylene. Nakayama H, et al. **Contact Dermatitis** 1988 Jul;19(1):48–51
Occupational allergic contact dermatitis from Kathon WT. O'Driscoll JB, et al. **Contact Dermatitis** 1988 Jul;19(1):63
Patch tests with occupational contactants in nurses, doctors and dentists. Rudzki E, et al. **Contact Dermatitis** 1989 Apr; 20(4):247–50
Photoallergic contact dermatitis due to mineral oil. Sakakibara S, et al. **Contact Dermatitis** 1989 Apr; 20(4):291–4
Allergic contact dermatitis from selenite. Senff H, et al. **Contact Dermatitis** 1988 Jul;19(1):73–4
Contact dermatitis from B. subtilis-derived protease enzymes. Smith DJ, et al. **Contact Dermatitis** 1989 Jan;20(1):58–9
Contact allergy to Nephrolepsis ferns. Stoof TJ, et al. **Contact Dermatitis** 1989 Mar;20(3):234–5
Protein contact dermatitis in food handlers. Tosti A, et al. **Contact Dermatitis** 1988 Aug;19(2):149–50
Occupational airborne contact dermatitis due to epoxy resin. Tosti A, et al. **Contact Dermatitis** 1988 Sep;19(3):220–2
Occupational irritant contact dermatitis from fibreboard containing urea-formaldehyde resin. Vale PT, et al. **Contact Dermatitis** 1988 Jul;19(1):62
Allergic contact urticaria of the hands due to seafood in food handlers. Fisher AA. **Cutis** 1988 Nov;42(5):388–9
Allergic bakers' dermatitis due to benzoyl peroxide [news] Fisher AA. **Cutis** 1989 Feb;43(2):128–9
Environment versus man II. Argyria. Karakashian GV, et al. **Cutis** 1989 Mar;43(3):209
Occupational contact psoriasis. Moroni P, et al. **Derm Beruf Umwelt** 1988 Sep–Oct;36(5):163–4
An overexposure in industrial radiography using an 192Ir radionuclide. Jalil A, et al. **Health Phys** 1989 Jul; 57(1):117–9
Hypersensitivity to natural latex. Spaner D, et al. **J Allergy Clin Immunol** 1989 Jun;83(6):1135–7
Occupational dermatitis in food handlers and bakers. Nethercott JR, et al. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 1):485–90
Occupational contact dermatitis due to epoxy resin in a fiberglass binder. Holness DL, et al. **J Occup Med** 1989 Feb;31(2):87–9
South Carolina florists dermatitis: case report and survey results. Bethea LK, et al. **J S C Med Assoc** 1988 Sep; 84(9):446–8
Allergic contact dermatitis to Bryozoa and photosensitivity. Leroy D, et al. **Photodermatol** 1988 Oct;5(5):227–9
[Occupational eczema due to contact with Alstromeria (Inca lily)] Mikkelsen S, et al. **Ugeskr Laeger** 1989 Apr 3; 151(14):898 (Eng. Abstr.) (Dan)
[Allergic contact eczema caused by Sargassum muticum in professional fishermen on Lake Grevelingen] van der Willigen AH, et al. **Ned Tijdschr Geneeskd** 1988 Dec 24; 132(52):2355–6 (Eng. Abstr.) (Dut)
[Occupationally-induced allergic and photoallergic reactions to epoxide resins in railroad employees] Bachurzewska B, et al. **Derm Beruf Umwelt** 1988 Jul–Aug;36(4):125–7 (Eng. Abstr.) (Ger)
[Pitfalls in occupational dermatology: airborne contact eczema caused by plants] Diepgen TL, et al. **Derm Beruf Umwelt** 1989 Jan–Feb;37(1):23–5 (Eng. Abstr.) (Ger)
[The incidence of occupationally-induced allergic skin diseases in a large flower market] Hausen BM, et al. **Derm Beruf Umwelt** 1988 Jul–Aug;36(4):117–24 (Eng. Abstr.) (Ger)
[Determination of irritant dose 50 and irritant time 50 in various study conditions] Kühne G, et al. **Dermatol Monatsschr** 1988;174(11):674–80 (Eng. Abstr.) (Ger)
[Hairdressers' eczema--results of expert assessment 1984–1987] Gehse M, et al. **Z Hautkr** 1989 Mar 15; 64(3):172–8 (Eng. Abstr.) (Ger)
[Type I allergy to rubber gloves containing latex] Mayerhausen W, et al. **Z Hautkr** 1989 Jun 15;64(6):495–6 (Eng. Abstr.) (Ger)
[The significance of dermatologic management in computer-assisted occupational dermatology consultation] Rakoski J, et al. **Z Hautkr** 1989 Jan 15;64(1):31–3 (Eng. Abstr.) (Ger)
[Dermatologic problems of workers in clean rooms] Viehbeck G. **Z Hautkr** 1988;63 Suppl 4:79–81 (Eng. Abstr.) (Ger)
[Fungal diseases of the feet in farmers] Nowicki R. **Przegl Dermatol** 1988 Sep–Oct;75(5):372–5 (Eng. Abstr.) (Pol)
[A new type of contact allergens: airborne allergens] Rudzki E, et al. **Przegl Dermatol** 1988 Jul–Aug;75(4):260–5 (Eng. Abstr.) (Pol)
[Problem of outbreaks of dermatitis associated with collecting and processing of flavoring herbs] Bullo II, et al. **Gig Sanit** 1989 Feb;(2):73 (Rus)
[Study of possible reproduction of causative agents of suppurative skin diseases in the lubricating-cooling liquid "Ukrinol-1M"] Solovarov VP, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):42–3 (Rus)
[Occupational skin diseases in rolling-mill workers in aluminum mills] Balić J, et al. **Ljec Vjesn** 1989 Apr–May; 111(4–5):139–43 (Eng. Abstr.) (Scr)
[Contact dermatitis caused by heterologous proteins] Kvitko EB, et al. **Med Cutan Ibero Lat Am** 1989;17(2):111–2 (Eng. Abstr.) (Spa)

IMMUNOLOGY

Allergic contact dermatitis from potato flesh. Carmichael AJ, et al. **Contact Dermatitis** 1989 Jan;20(1):64–5

Contact sensitivity to lettuce in a chef. Mitchell D, et al. **Contact Dermatitis** 1989 May;20(5):398–9

Allergic contact dermatitis resulting from sensitivity to citrus peel, geraniol, and citral. Cardullo AC, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 2):395–7

Skin test survey in castor bean allergic working population in eastern Sudan, with frequency response of first dilutions giving skin reactions. Fakhri ZI, et al. **J Soc Occup Med** 1988 Winter;38(4):128–33

[Current immunologic and functional research on the skin in occupational contact dermatitis] Madzhunov N, et al. **Probl Khig** 1988;13:182–8 (Eng. Abstr.) **(Bul)**

[Functional activity of nonspecific suppressors and indicators of lymphocyte blast transformation in patients with occupational allergy] Dovzhanskii IS. **Gig Tr Prof Zabol** 1988 Nov;(11):51–3 **(Rus)**

[Immunologic indices of patients with occupational dermatoses caused by organophosphate pesticides] Fedorov SM, et al. **Vestn Dermatol Venerol** 1988;(8):46–8 (Eng. Abstr.) **(Rus)**

[The effect of occupational factors on immunologic indices in workers in the petroleum-refining industry] Guseĭn-zade KM, et al. **Vestn Dermatol Venerol** 1989;(3):44–7 (Eng. Abstr.) **(Rus)**

[Immunologic shifts in tanners under the influence of potassium bichromate contact] Medvid' IV, et al. **Vestn Dermatol Venerol** 1989;(5):39–43 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

[Etiology of pathogen-induced changes between the toes in patients working under moist conditions] Gründer K, et al. **Z Hautkr** 1988 Nov 15;63(11):958–65 (Eng. Abstr.) **(Ger)**

PATHOLOGY

[Detection of quartz in scleroderma skin] Ziegler V, et al. **Dermatol Monatsschr** 1988;174(11):688–9 **(Ger)**

[Demonstration of epidermal Langerhans cells] Laub R, et al. **Z Gesamte Hyg** 1989 Jan;35(1):10–1 (Eng. Abstr.) **(Ger)**

[Argyria universalis] Chistiakova IA, et al. **Vestn Dermatol Venerol** 1988;(9):53–5 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

[Skin protection as an occupational dermatologic problem] Vocks E. **Z Hautkr** 1988;63 Suppl 4:82–6 (16 ref.) (Eng. Abstr.) **(Ger)**

[Effectiveness of introducing individual protection measures for workers in the phenazone industry] Busygin AN, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):44–5 **(Rus)**

PSYCHOLOGY

A pseudo-epidemic of allergy of sodium selenate. Rudzki E, et al. **Contact Dermatitis** 1989 Jan;20(1):59–60

OCCUPATIONAL DISEASES

see related

OCCUPATIONAL MEDICINE

Late asthmatic reaction in a hairdresser, due to the inhalation of ammonium persulphate salts. Gamboa PM, et al. **Allergol Immunopathol (Madr)** 1989 Mar–Apr;17(2):109–11

Death certificate occupation and industry data [letter] Archibald RM. **Am J Ind Med** 1989;15(2):237

Can the birth certificate yield clues to parental occupational exposures? Milham S Jr. **Am J Ind Med** 1989;16(2):235–7

"Jane Doe, RN" fights to keep HIV status secret [news] **Am J Nurs** 1989 Jun;89(6):869

AIDS-infected RN wins "confidentiality" fight [news] **Am J Nurs** 1989 Sep;89(9):1234

The sociologic context of occupational health in South Africa. Myers JE, et al. **Am J Public Health** 1989 Feb; 79(2):216–24

Occupational exposures: evidence for a causal association with chronic obstructive pulmonary disease. Becklake MR. **Am Rev Respir Dis** 1989 Sep;140(3 Pt 2):S85–91 (63 ref.)

Seal finger—diagnosis, prevention and treatment. Bergholt A, et al. **Arctic Med Res** 1989 Jan;48(1):3–5

Orthopaedic basis for occupationally related arm and neck pain. Sikorski JM, et al. **Aust N Z J Surg** 1989 Jun; 59(6):471–8

The prevention of cross-infection. Progress in the West Midlands. Glenwright HD, et al. **Br Dent J** 1989 Feb 25; 166(4):125–7

Prior employment as a welder associated with the development of chronic myeloid leukaemia. Preston-Martin S, et al. **Br J Cancer** 1988 Jul;58(1):105–8

Work and pregnancy [published erratum appears in Br J Ind Med 1988 Dec;45(12):846] McDonald AD. **Br J Ind Med** 1988 Sep;45(9):577–80 (39 ref.)

Occupational asthma: recommendations for diagnosis, management and assessment of impairment. Ad Hoc Committee on Occupational Asthma of the Standards Committee, Canadian Thoracic Society. **Can Med Assoc J** 1989 May 1;140(9):1029–32 (14 ref.)

Hepatitis, HIV infection and AIDS: some issues for the practitioner. Cottone JA, et al. **Int Dent J** 1989 Jun; 39(2):103–7

Discussing the implications of HIV infection in health care workers [letter] Potterat JJ, et al. **J Acquir Immune Defic Syndr** 1989;2(3):308–9

Vibratory urticaria associated with bladder-wall infection with the yeast Torulopsis glabrata [letter] Rose MH. **J Allergy Clin Immunol** 1989 Sep;84(3):408

AIDS in the dental office [letter] **J Am Dent Assoc** 1989 Jun;118(6):680, 682

Occupational asthma. Slonim NB. **J Asthma** 1988;25(5):293–9

American College of Occupational Medicine, 74th annual meeting. April 29–May 5, 1989, Boston, MA. Abstracts. **J Occup Med** 1989 Apr;31(4):373–88

Genesis of mesothelioma. **J Occup Med** 1989 Aug;31(8):643–4

Nurses' beliefs about cause and prevention of occupational back pain. Harber P, et al. **J Occup Med** 1988 Oct; 30(10):797–800

Uranium effects—an "enlightening" exchange [letter] Lieben J. **J Occup Med** 1981 Mar;23(3):156

Lung volume reference values for blue collar workers not exposed to occupational respiratory hazards. Petersen MR, et al. **J Occup Med** 1988 Aug;30(8):626–32

Critiquing a critique [letter] Yodaiken RE. **J Occup Med** 1981 Mar;23(3):156–7, 160

Neonatal intensive care units can be hazardous to nurses' health. Sosnowitz BG, et al. **J Perinatol** 1988 Summer; 8(3):253–7

Ladder limb: a case of pretibial tumefaction [letter] Gray RG, et al. **J Rheumatol** 1988 Sep;15(9):1454–5

Medical management of occupational poisoning: report of 10 cases. Salvi RM. **J Toxicol Clin Exp** 1988 May–Jun; 8(3):205–10

Lyme disease: prevalence and clinical importance of Borrelia burgdorferi specific IgG in forestry workers. Guy EC, et al. **Lancet** 1989 Mar 4;1(8636):484–6

Musicians' maladies [letter; comment] **N Engl J Med** 1989 Jul 6;321(1):51–3. **Comment on:** N Engl J Med 1989 Jan 26;320(4):221–7

Performing arts medicine [editorial] Lederman RJ. **N Engl J Med** 1989 Jan 26;320(4):246–8

Environmental and occupational health. Goldstein BD. **N J Med** 1988 Nov;85(11):892

The dentist and the nine healthcare workers who tested positive for HIV. Neiburger EJ. **N Y State Dent J** 1988 Oct;54(8):6,8

Claw hand in a ropemaker—an occupational overuse syndrome [letter] Chew CK. **N Z Med J** 1988 Sep 28; 101(854):617

Industrial deafness [editorial] Moore PW. **N Z Med J** 1988 Oct 12;101(855):627–8

Is empathy unhealthy? [letter] Thomson A. **N Z Med J** 1989 Sep 13;102(875):479

Dimple sign in mail carrier's ulnar neuropathy. Massey EW. **Neurology** 1989 Aug;39(8):1132

Risks of industrial mercury exposure in pregnancy. Melkonian R, et al. **Obstet Gynecol Surv** 1988 Nov; 43(11):637–41

Employers must consider legal aspects of reproductive hazards. Leffert KA. **Occup Health Saf** 1989 Jul;58(7):24–5

Occupational hand injuries. **Occup Med** 1989 Jul–Sep; 4(3):393–574

Occupational asthma. Newman Taylor AJ. **Postgrad Med J** 1988 Jul;64(753):505–10 (25 ref.)

Occupational and post-traumatic arthritis. Kern D, et al. **Radiol Clin North Am** 1988 Nov;26(6):1349–58 (57 ref.)

Occupational hazards and health workers [letter] Coombs WM. **S Afr Med J** 1989 Feb 18;75(4):196

Occupational asthma—time for scheduling as a compensable disease [editorial] [published erratum appears in S Afr Med J 1989 Feb 4;75(3):148] Louw SJ, et al. **S Afr Med J** 1988 Dec 3;74(11):545–6

International Conference on Industrial Health and the VIIIth UOEH International Symposium—Health Surveillance of Workers. University of Occupational and Environmental Health. 24–26 October 1988, Kitakyusu, Japan. Proceedings. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:1–745

Sickness absenteeism in an engineering industry—an analysis with special reference to absence for neck and upper extremity symptoms. Dimberg L, et al. **Scand J Soc Med** 1989;17(1):77–84

Southwood calls for monitoring of BSE risk in veterinarians [news] **Vet Rec** 1989 Mar 4;124(9):207–10

[Adenocarcinoma of the paranasal sinuses in workers in the wood-processing industry] Veselý J, et al. **Cesk Otolaryngol** 1988 Dec;37(6):352–5 (Eng. Abstr.) **(Cze)**

[Reporting of occupational diseases to the Labour Department I] Larsen AI, et al. **Ugeskr Laeger** 1988 Oct 17;150(42):2547–8 **(Dan)**

[Reporting of occupational diseases to the Labour Department II] Larsen AI, et al. **Ugeskr Laeger** 1988 Oct 17;150(42):2548–50 **(Dan)**

[International medico-legal aspects of occupational asthma] Gervais P, et al. **Rev Mal Respir** 1988;5(5):491–5 (Eng. Abstr.) **(Fre)**

[Systemic infection caused by Streptococcus suis] Kaufhold A, et al. **Dtsch Med Wochenschr** 1988 Oct 21; 113(42):1642–3 (Eng. Abstr.) **(Ger)**

[Visceral paracoccidioidomycosis in a gold miner from Brazil] Köhler C, et al. **Mycoses** 1988 Aug;31(8):395–403 (Eng. Abstr.) **(Ger)**

[Allergic manifestations following medications and occupational materials] **Dapim Refuiim** 1969 Mar; 28(2–3):158–78 **(Heb)**

[Adenocarcinoma of the ethmoid] Altissimi G, et al. **Acta Otorhinolaryngol Ital** 1986 Sep–Oct;6(5):541–52 (39 ref.) (Eng. Abstr.) **(Ita)**

[Pathology and prevention of cadmium poisoning] Melino C, et al. **Clin Ter** 1987 Jun 30;121(6):525–32 **(Ita)**

[Relations between alcoholism and work] Melino C, et al. **Clin Ter** 1987 Jun 15;121(5):429–37 **(Ita)**

[Occupational bronchopneumopathies] Sartorelli E. **G Clin Med** 1988 Aug–Sep;69(8–9):483–92 **(Ita)**

[The concept of disease and causality relations] De Ferrari F. **G Ital Med Lav** 1987 Sep–Nov;9(5–6):205–9 (Eng. Abstr.) **(Ita)**

[Risk of HIV infection in health personnel involved in tasks of assistance, diagnosis and treatment. Description of 2 cases: one, of ascertained infection, the other under observation] Cimino T, et al. **Minerva Med** 1988 Sep; 79(9):799–804 (Eng. Abstr.) **(Ita)**

[AIDS: medico-legal problems in the odontostomatology area] Montalto B, et al. **Minerva Stomatol** 1988 May; 37(5):347–53 (Eng. Abstr.) **(Ita)**

[Aerospace psychology with notes on psychopathology. 3] Sparvieri F. **Riv Med Aeronaut Spaz** 1985 Oct–Dec; 52(4):323–65 **(Ita)**

[Aerospace psychology with notes on psychopathology. 1] Sparvieri F. **Riv Med Aeronaut Spaz** 1985 Apr–Jun; 52(2):157–94 **(Ita)**

[Aerospace psychology with notes on psychopathology. 2] Sparvieri F. **Riv Med Aeronaut Spaz** 1985 Jul–Sep; 52(3):235–70 **(Ita)**

[Proceedings of the 61st annual meeting of the Japan Association of Industrial Health. 11–14 April, 1989, Kanazawa. Abstracts] **Sangyo Igaku** 1988 Dec; 30(7):533–810 **(Jpn)**

[Use of expert methods in evaluating scientific works in the field of occupational hygiene and occupational pathology] Korbakova AI, et al. **Gig Tr Prof Zabol** 1988 Dec;(12):46–7 **(Rus)**

[Causes of primary disability of miners at the iron ore mining-processing plants] Pavlenko ME, et al. **Gig Tr Prof Zabol** 1989;(6):4–6 (Eng. Abstr.) **(Rus)**

[Planning and coordination of the research carried out by medical institutes on the problem of the scientific bases of industrial hygiene and occupational pathology] Solodova RA, et al. **Gig Tr Prof Zabol** 1989;(2):55 **(Rus)**

[Occupational hearing loss] Simonović M. **Srp Arh Celok Lek** 1986 Apr;114(4):447–52 **(Scc)**

BLOOD

Organophosphate exposure inhibits non-specific esterase staining in human blood monocytes. Mandel JS, et al. **Am J Ind Med** 1989;15(2):207–12

32P-postlabelling of DNA adducts in white blood cells of foundry workers. Savela K, et al. **Arch Toxicol Suppl** 1989; 13:101–3

Serum type III procollagen peptide in asbestos workers: an early indicator of pulmonary fibrosis. Cavalleri A, et al. **Br J Ind Med** 1988 Dec;45(12):818–23

Correlation between lead and prolactin in males exposed and unexposed to lead in Buenos Aires (Argentina) area. Roses OE, et al. **Bull Environ Contam Toxicol** 1989 Mar; 42(3):438–42

Blood lead and blood pressure: some implications for the situation in The Netherlands. de Kort WL, et al. **Environ Health Perspect** 1988 Jun;78:67–70

Selenium status in females with occupational cervico-brachial complaints. Ohlsson K, et al. **Int Arch Occup Environ Health** 1988;61(3):167–9

[Protein fractions in workers with vestibular disorders] Savov A, et al. **Probl Khig** 1988;13:164–72 (Eng. Abstr.) **(Bul)**

[Physiological changes in white blood cell count in peripheral blood of radiation workers] Akiyama S, et al. **Sangyo Igaku** 1989 Jan;31(1):18–9 **(Jpn)**

[Taxonomic analysis of the distribution of peripheral blood indicators in workers in chemical plants and automobile transport] Chinchaladze TsV, et al. **Gematol Transfuziol** 1989 May;34(5):33–9 (Eng. Abstr.) **(Rus)**

[The principle of an occupational approach in expert evaluation of carbon monoxide poisoning during the investigation of aviation accidents] Iastrebov VE. **Sud Med Ekspert** 1989 Apr–Jun;32(2):26–8 (Eng. Abstr.) **(Rus)**

CHEMICALLY INDUCED

Seamen exposed to organic solvents. A cross-sectional study with special reference to the nervous system. Moen BE, et al. **Acta Neurol Scand** 1988 Aug;78(2):123–35

Mixed solvent exposure and organic damage: the missing table [letter] Mortensen EL, et al. **Acta Neurol Scand** 1989 Jun;79(6):517–20

Risk of tumors of the nervous system among mercury and other seed disinfectant applicators in Swedish agriculture [letter] Wiklund K, et al. **Acta Oncol** 1988;27(6b):865

Posturography findings in workers exposed to industrial solvents. Ledin T, et al. **Acta Otolaryngol (Stockh)** 1989 May–Jun;107(5–6):357–61

Vestibulo-oculomotor disturbances caused by occupational

hazards. Wenngren BI, et al.
Acta Otolaryngol Suppl (Stockh) 1988;455:7-10 (23 ref.)

A prospective and immunologic study of factory workers exposed to TDI (toluene diisocyanate). Duce F, et al.
Allergol Immunopathol (Madr) 1988 May-Jun;16(3):139-44

Reactive airways dysfunction syndrome. Lerman S, et al.
Am Fam Physician 1988 Dec;38(6):135-8

Elevated serum zinc levels in metal fume fever. Noel NE, et al. **Am J Emerg Med** 1988 Nov;6(6):609-10

A comparison of several measures of exposure to arsenic. Matched case-control study of copper smelter employees. Lee-Feldstein A. **Am J Epidemiol** 1989 Jan;129(1):112-24

Acute health effects among firefighters exposed to a polyvinyl chloride (PVC) fire. Markowitz JS, et al.
Am J Epidemiol 1989 May;129(5):1023-31

Cardiac arrest in an explosives factory worker due to withdrawal from nitroglycerin exposure. Ben-David A.
Am J Ind Med 1989;15(6):719-22

Exposure to organic solvents and hypertensive disorders of pregnancy. Eskenazi B, et al. **Am J Ind Med** 1988; 14(2):177-88

Neurotoxic effects of organic solvents in exposed workers: two controlled follow-up studies after 5.5 and 10.6 years. Gregersen P. **Am J Ind Med** 1988;14(6):681-701

Cancer mortality among a cohort of chromium pigment workers. Hayes RB, et al. **Am J Ind Med** 1989;16(2):127-33

Validity and reliability of a method for retrospective evaluation of chlorophenate exposure in the lumber industry. Hertzman C, et al. **Am J Ind Med** 1988; 14(6):703-13

Relationship between vapor exposure and urinary metabolite excretion among workers exposed to trichloroethylene. Inoue O, et al. **Am J Ind Med** 1989;15(1):103-10

Occupational hydrocarbon exposure and risk of renal cell carcinoma. Kadamani S, et al. **Am J Ind Med** 1989; 15(2):131-41

Acute pulmonary responses among automobile workers exposed to aerosols of machining fluids. Kennedy SM, et al. **Am J Ind Med** 1989;15(6):627-41

An examination of factors that could affect choice reaction time in histology technicians. Kilburn KH, et al.
Am J Ind Med 1989;15(6):679-86

Lead exposure among lead-acid battery workers in Jamaica. Matte TD, et al. **Am J Ind Med** 1989;16(2):167-77

Encephalopathy: an uncommon manifestation of workplace arsenic poisoning? Morton WE, et al. **Am J Ind Med** 1989; 15(1):1-5

Acute nonlymphatic leukemia among deck officers on coastal tankers: a report of two cases. Nilsson RI, et al.
Am J Ind Med 1988;14(6):657-9

Potroom asthma: New Zealand experience and follow-up. O'Donnell TV, et al. **Am J Ind Med** 1989;15(1):43-9

Neurasthenic complaints and psychometric function of toluene-exposed rotogravure printers. Orbaek P, et al.
Am J Ind Med 1989;16(1):67-77

Regulate 4,4'Methylene-bis(2-chloroaniline) [editorial] Ringen K. **Am J Ind Med** 1988;14(3):255-6

Respiratory morbidity in workers exposed to asbestos in the primary manufacture of building materials. Robins TG, et al. **Am J Ind Med** 1988;14(4):433-48

Industry-related urothelial carcinogens: application of a job-exposure matrix to census data. Steineck G, et al.
Am J Ind Med 1989;16(2):209-24

Deaths and tumors among workers grinding stainless steel. Svensson BG, et al. **Am J Ind Med** 1989;15(1):51-9

Cardiovascular malformations, work attendance, and occupational exposures during pregnancy in Finland. Tikkanen J, et al. **Am J Ind Med** 1988;14(2):197-204

Bladder tumors in two young males occupationally exposed to MBOCA. Ward E, et al. **Am J Ind Med** 1988; 14(3):267-72

Effects of exposure to ethylene glycol ethers on shipyard painters: II. Male reproduction [published erratum appears in Am J Ind Med 1989;15(2):239] Welch LS, et al.
Am J Ind Med 1988;14(5):509-26

Effect of exposure to ethylene glycol ethers on shipyard painters: III. Hematologic effects. Welch LS, et al.
Am J Ind Med 1988;14(5):527-36

Benzene and lymphoma. Young N. **Am J Ind Med** 1989; 15(5):495-8

Is carbaryl as safe as its reputation? [letter] Avashia BH.
Am J Med 1987 Dec;83(6):1168-9

Cacosmia and neurobehavioral dysfunction associated with occupational exposure to mixtures of organic solvents. Ryan CM, et al. **Am J Psychiatry** 1988 Nov;145(11):1442-5

Does aluminum smelting cause lung disease? Abramson MJ, et al. **Am Rev Respir Dis** 1989 Apr;139(4):1042-57 (92 ref.)

Diffuse interstitial lung disease associated with hydrogen peroxide inhalation in a dairy worker. Kaelin RM, et al.
Am Rev Respir Dis 1988 May;137(5):1233-5

Clinical and laboratory features of acute sulfur dioxide inhalation poisoning: two-year follow-up. Rabinovitch S, et al. **Am Rev Respir Dis** 1989 Feb;139(2):556-8

Cobalt exposure and lung disease in tungsten carbide production. A cross-sectional study of current workers. Sprince NL, et al. **Am Rev Respir Dis** 1988 Nov; 138(5):1220-6

Histopathology of sinonasal and lung cancers in nickel refinery workers. Sunderman FW Jr, et al.
Ann Clin Lab Sci 1989 Jan-Feb;19(1):44-50

Hyperbaric oxygen for methylene chloride poisoning: report on two cases. Rioux JP, et al. **Ann Emerg Med** 1989 Jun; 18(6):691-5

Hypersensitivity pneumonitis induced by toluene diisocyanate: sequelae of continuous exposure. Yoshizawa Y, et al. **Ann Intern Med** 1989 Jan 1;110(1):31-4

Neurological abnormalities associated with remote occupational elemental mercury exposure. Albers JW, et al. **Ann Neurol** 1988 Nov;24(5):651-9

Cadmium and cancer: the current position. Report of an international meeting in London, September 1988. Sullivan K, et al. **Ann Occup Hyg** 1988;32(4):557-60

Bone and joint pathology in fluoride-exposed workers. Czerwinski E, et al. **Arch Environ Health** 1988 Sep-Oct; 43(5):340-3

Health effects three years after potential exposure to the toxic contaminants of an electrical transformer fire. Fitzgerald EF, et al. **Arch Environ Health** 1989 Jul-Aug;44(4):214-21

Health status of funeral service workers exposed to formaldehyde. Holness DL, et al. **Arch Environ Health** 1989 Jul-Aug;44(4):222-8

Acute lead poisoning in construction workers: the failure of current protective standards. Marino PE, et al.
Arch Environ Health 1989 May-Jun;44(3):140-5

Self-reported short- and long-term respiratory effects among PVC-exposed firefighters. Markowitz JS.
Arch Environ Health 1989 Jan-Feb;44(1):30-3

Renal function and long-term low mercury vapor exposure. Piikivi L, et al. **Arch Environ Health** 1989 May-Jun; 44(3):146-9

Epidemiologic and toxicologic evidence for chronic health effects and the underlying biologic mechanisms involved in sub-lethal exposures to acidic pollutants. Soskolne CL, et al. **Arch Environ Health** 1989 May-Jun;44(3):180-91 (160 ref.)

Liver disease associated with exposure to 1,1,1-trichloroethane. Hodgson MJ, et al.
Arch Intern Med 1989 Aug;149(8):1793-8 (62 ref.)

Occupational exposure to organic solvents causing chronic tubulointerstitial nephritis. Narvarte J, et al.
Arch Intern Med 1989 Jan;149(1):154-8

Neurobehavioural symptoms among workers occupationally exposed to toluene. Foo SC, et al.
Asia Pac J Public Health 1988;2(3):192-7

Occupational skeletal fluorosis. Németh L, et al.
Baillieres Clin Rheumatol 1989 Apr;3(1):81-8 (34 ref.)

Environmentally-induced systemic sclerosis-like illness. Straniero NR, et al. **Baillieres Clin Rheumatol** 1989 Apr; 3(1):63-79 (68 ref.)

Long-term psychological distress among chemically exposed firefighters. Markowitz JS. **Behav Med** 1989 Summer; 15(2):75-83

Toluene-associated myelofibrosis [letter] Bosch X, et al.
Blut 1989 Apr;58(4):219-20

Opiate inhalation and occupational asthma [letter] Agius R.
BMJ 1989 Feb 4;298(6669):323

Occupational asthma in nurses caused by chlorhexidine and alcohol aerosols. Waclawski ER, et al. **BMJ** 1989 Apr 8; 298(6678):929-30

Cancer risk and occupational exposure to aflatoxins in Denmark. Olsen JH, et al. **Br J Cancer** 1988 Sep; 58(3):392-6

Occupational exposure to zeranol, an animal growth promoter. Aw TC, et al. **Br J Ind Med** 1989 May; 46(5):341-6

Occupational bladder cancer and the hospital clinician [editorial] Baxter PJ. **Br J Ind Med** 1989 Feb;46(2):73

Morbidity among employees engaged in the manufacture or formulation of chlorpyrifos. Brenner FE, et al.
Br J Ind Med 1989 Feb;46(2):133-7

Renal tubular function of workers exposed to low levels of cadmium. Chia KS, et al. **Br J Ind Med** 1989 Mar; 46(3):165-70

Gliomas and exposure to wood preservatives. Cordier S, et al. **Br J Ind Med** 1988 Oct;45(10):705-9

Acute renal failure due to trichloroethylene poisoning. David NJ, et al. **Br J Ind Med** 1989 May;46(5):347-9

Natural history of pleural thickening after exposure to crocidolite. de Klerk NH, et al. **Br J Ind Med** 1989 Jul; 46(7):461-7

Pleural mesothelioma in a lift mechanic. Huncharek M, et al. **Br J Ind Med** 1989 Jul;46(7):500-1

Changes in lung function after working with the shotcrete lining method under compressed air conditions. Kessel R, et al. **Br J Ind Med** 1989 Feb;46(2):128-32

Risk of cancer from the use of tar bitumen in road works. Knecht U, et al. **Br J Ind Med** 1989 Jan;46(1):24-30

Occupational asthma due to tylosin tartrate. Lee HS, et al.
Br J Ind Med 1989 Jul;46(7):498-9

Halothane related liver affection in an anaesthetist. Lings S.
Br J Ind Med 1988 Oct;45(10):716-7

Occupational asthma after exposure to azodicarbonamide: report of four cases. Normand JC, et al. **Br J Ind Med** 1989 Jan;46(1):60-2

Phenoxy herbicides and non-Hodgkin's lymphoma in New Zealand: frequency and duration of herbicide use [letter] Pearce N. **Br J Ind Med** 1989 Feb;46(2):143-4

Reversible airways obstruction and interstitial pneumonitis due to acetic acid. Rajan KG, et al. **Br J Ind Med** 1989 Jan;46(1):67-8

Mortality and incidence of cancer among oil exposed workers in a Norwegian cable manufacturing company. Part I. Exposure conditions 1920-79. Rønneberg A, et al.
Br J Ind Med 1988 Sep;45(9):589-94

Hepatocellular carcinoma and exposure to hexachlorobenzene: a case report. Seldén A, et al.
Br J Ind Med 1989 Feb;46(2):138-40

Incidence of laryngeal cancer and exposure to acid mists. Steenland K, et al. **Br J Ind Med** 1988 Nov;45(11):766-76

Prenarcotic and neuraesthenic symptoms among Dutch workers exposed to organic solvents. van Vliet C, et al.
Br J Ind Med 1989 Aug;46(8):586-90

Low molecular weight chemicals, hypersensitivity, and direct toxicity: the acid anhydrides. Venables KM.
Br J Ind Med 1989 Apr;46(4):222-32 (112 ref.)

Estimation of occupational hazards of the employees of a phosphate fertilizers plant. Renke W, et al.
Bull Inst Marit Trop Med Gdynia 1987;38(1-2):5-16

Nitrogen dioxide poisoning at a skating rink—Quebec. Dewailly E, et al. **Can Dis Wkly Rep** 1988 Apr 16; 14(15):61-2 **(Eng, Fre)**

Case-control study of hydrocarbon exposures in patients with renal cell carcinoma. Sharpe CR, et al.
Can Med Assoc J 1989 Jun 1;140(11):1309-18

Role of inhalation challenge testing in the diagnosis of isocyanate-induced asthma. Banks DE, et al. **Chest** 1989 Feb;95(2):414-23

Irritant-induced occupational asthma. Tarlo SM, et al.
Chest 1989 Aug;96(2):297-300

Asthma caused by bromelain: an occupational allergy. Gailhofer G, et al. **Clin Allergy** 1988 Sep;18(5):445-50

Airway inflammation and occupational asthma. Fine JM, et al. **Clin Chest Med** 1988 Dec;9(4):577-90 (93 ref.)

Nail changes secondary to environmental influences. Positano RG, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):417-29 (82 ref.)

Generalized eruption with severe liver dysfunction associated with occupational exposure to trichloroethylene. Nakayama H, et al. **Contact Dermatitis** 1988 Jul;19(1):48-51

Lung cancer in rubber manufacturing workers: two case reports. Sokas RK, et al. **Del Med J** 1988 Oct;60(10):573-6

A critical view of the mechanism(s) of toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin. Implications for human safety assessment. Rozman K.
Derm Beruf Umwelt 1989 May-Jun;37(3):81-92 (86 ref.)

Neurohumoral blood pressure regulation in lead exposure. Boscolo P, et al. **Environ Health Perspect** 1988 Jun;78:101-6

Blood lead and blood pressure: analysis of cross-sectional and longitudinal data from Canada. Neri LC, et al.
Environ Health Perspect 1988 Jun;78:123-6

Blood pressure and blood lead concentration in bus drivers. Sharp DS, et al. **Environ Health Perspect** 1988 Jun;78:131-7

Comparison of potency of human carcinogens: vinyl chloride, chloromethylmethyl ether and bis(chloromethyl)ether. Van Duuren BL. **Environ Res** 1989 Aug;49(2):143-51 (41 ref.)

Ureteral tumor with multiple Bowen's disease forty-two years after exposure to arsenic. Koh E, et al. **Eur Urol** 1989;16(5):398-400

A barley flour inhibitor of insect alpha-amylase is a major allergen associated with baker's asthma disease. Barber D, et al. **FEBS Lett** 1989 May 8;248(1-2):119-22

The effect of prolonged occupational exposure to the low concentrations of nitrogen oxides in combination with ammonia on chronic bronchitis and the lung function. Jędrychowski W, et al. **G Ital Med Lav** 1987 May-Jul; 9(3-4):147-51

Occupational toxicology. Carter JT. **Hum Toxicol** 1988 Sep; 7(5):429-32 (14 ref.)

Acute resin phenol-formaldehyde intoxication. A life threatening occupational hazard. Cohen N, et al.
Hum Toxicol 1989 May;8(3):247-50

Occupational exposures in petroleum refining; crude oil and major petroleum fuels. IARC Working Group on the Evaluation of Carcinogenic Risks to Humans.
IARC Monogr Eval Carcinog Risks Hum 1989;45:1-322 (592 ref.)

Epidemiological studies on ethylene oxide and cancer: an updating. Hogstedt LC. **IARC Sci Publ** 1988;(89):265-70

A report of a worker suffering from pneumatosis cystoides intestinalis following trichloroethylene exposure. Ogata M, et al. **Ind Health** 1988;26(3):179-82

Enzymuria in workers exposed to inorganic mercury. Barregård L, et al. **Int Arch Occup Environ Health** 1988; 61(1-2):65-9

Assessing the health impact of total exposure at and off work: methodological problems in occupational epidemiology. Hernberg S. **Int Arch Occup Environ Health** 1988; Suppl:124-7

Behavioral studies in petrol pump workers. Kumar P, et al.
Int Arch Occup Environ Health 1988;61(1-2):35-8

Small airways function in workers processing polyvinylchloride. Nielsen J, et al.
Int Arch Occup Environ Health 1989;61(7):427-30

Reproductive hazards related to perchloroethylene. A review. van der Gulden JW, et al.
Int Arch Occup Environ Health 1989;61(4):235-42 (67 ref.)

Towards a dynamic model of exposure, susceptibility and effect. van Dijk FJ, et al.
Int Arch Occup Environ Health 1988;Suppl:144-50 (20 ref.)

Lack of nephrotoxicity of styrene at current TLV level (50 ppm). Vyskocil A, et al.
Int Arch Occup Environ Health 1989;61(6):409-11

Cancer risks due to occupational exposure to formaldehyde: results of a multi-site case-control study in Montreal. Gérin M, et al. **Int J Cancer** 1989 Jul 15;44(1):53-8

The vitamin B1 status among Egyptians occupationally

exposed to pesticides. Arafah A, et al. **Int J Vitam Nutr Res** 1988;58(3):351

Parkinson disease in farm workers [letter] Stefano E, et al. **Ital J Neurol Sci** 1989 Jun;10(3):379

Concerned about safe use of flea control products [letter] Ostrowski SR. **J Am Vet Med Assoc** 1988 Oct 1; 193(7):758–9

Effects of vinyl chloride on liver function of exposed workers, evaluated by measurements of plasma clearance of the 99mTc-N-2,4-dimethylacetanilido-iminodiacetate complex. Studniarek M, et al. **J Appl Toxicol** 1989 Aug; 9(4):213–8

Late onset isofenphos neurotoxicity. Catz A, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1338–40

Acute encephalopathy in adult as delayed presentation of occupational lead intoxication [letter] Guijarro C, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):127–8

Cancer and coal tar epoxy resins [letter] **J Occup Med** 1989 Jul;31(7):582–3

Compensating bladder cancer victims employed in aluminum reduction plants. Armstrong B, et al. **J Occup Med** 1988 Oct;30(10):771–5

Update of mortality among chemical workers with potential exposure to the higher chlorinated dioxins. Bond GG, et al. **J Occup Med** 1989 Feb;31(2):121–3

Liver structure and function in print workers exposed to toluene. Guzelian P, et al. **J Occup Med** 1988 Oct; 30(10):791–6

Encephalopathy and vestibulopathy following short-term hydrocarbon exposure. Hodgson MJ, et al. **J Occup Med** 1989 Jan;31(1):51–4

Lung injury in dimethyl sulfate poisoning. Ip M, et al. **J Occup Med** 1989 Feb;31(2):141–3

Don't close the door: some observations on cancer cluster investigation [letter] Kipen H, et al. **J Occup Med** 1988 Aug;30(8):661–2

A method for monitoring the fertility of workers. 2. Validation of the method among workers exposed to dibromochloropropane. Levine RJ, et al. **J Occup Med** 1981 Mar;23(3):183–8

Focal epilepsy and exposure to organic solvents: a case-referent study. Littorin ME, et al. **J Occup Med** 1988 Oct;30(10):805–8

An epidemiologic investigation of forced expiratory volume at 1 second and respiratory symptoms among employees of a toluene diisocyanate production plant. Olsen GW, et al. **J Occup Med** 1989 Aug;31(8):664–7

Reanalysis of lung cancer mortality in a National Cancer Institute study on mortality among industrial workers exposed to formaldehyde. Sterling TD, et al. **J Occup Med** 1988 Nov;30(11):895–901

Diphenylmethane diisocyanate hypersensitivity pneumonitis: a serologic evaluation. Walker CL, et al. **J Occup Med** 1989 Apr;31(4):315–9

A case-control study of cancer among du pont employees with potential for exposure to dimethylformamide. Walrath J, et al. **J Occup Med** 1989 May;31(5):432–8

Lung cancer due to chloromethyl ethers: bias in cohort definition. Weiss W. **J Occup Med** 1989 Feb;31(2):102–5

Soft tissue sarcoma risk in Swedish licensed pesticide applicators. Wiklund K, et al. **J Occup Med** 1988 Oct; 30(10):801–4

Mortality from leukemia and other diseases among workers at a petroleum refinery. Wongsrichanalai C, et al. **J Occup Med** 1989 Feb;31(2):106–11

Encephalopathy and polyneuropathy induced by organic solvents. Berstad J, et al. **J Oslo City Hosp** 1989 Jun-Jul; 39(6-7):81–6

Chronic toxic encephalopathy among house painters with disability pension. Tvedt B, et al. **J Oslo City Hosp** 1989 Jun-Jul;39(6-7):74–80

Health effects among workers involved in the manufacture of hexachlorocyclohexane. Chattopadhyay P, et al. **J Soc Occup Med** 1988 Autumn;38(3):77–81

Arsenic and old glass. Ide CW, et al. **J Soc Occup Med** 1988 Autumn;38(3):85–8

Occupational hazard in hospital staff exposed to 2 per cent glutaraldehyde in an endoscopy unit. Jachuck SJ, et al. **J Soc Occup Med** 1989 Summer;39(2):69–71

Inhalation of degraded sulphur hexafluoride resulting in pulmonary oedema. Pilling KJ, et al. **J Soc Occup Med** 1988 Autumn;38(3):82–4

Lung cancer in chromate workers: high-risk group for multiple lung cancer. Uyama T, et al. **J Surg Oncol** 1989 Aug;41(4):213–8

Peripheral neuropathy in two workers exposed to 1,1,1-trichloroethane [letter] Liss GM. **JAMA** 1988 Oct 21;260(15):2217

Recommended safe practices for using the neurotoxin MPTP in animal experiments. Yang SC, et al. **Lab Anim Sci** 1988 Oct;38(5):563–7

Motoneuron disease: a disorder secondary to solvent exposure? Hawkes CH, et al. **Lancet** 1989 Jan 14; 1(8629):73–6

Myelodysplasia, chemical exposure, and other environmental factors. Farrow A, et al. **Leukemia** 1989 Jan;3(1):33–5

Liver angiosarcoma in a vinyl chloride polymerization plant worker. Report of the seventh Italian case. Brugnami G, et al. **Med Lav** 1988 Jan-Feb;79(1):34–41

Inter-rater agreement in the assessment of occupational exposure to herbicides. Ciccone G, et al. **Med Lav** 1988 Sep-Oct;79(5):363–7

Carcinogenicity of exposure to industrial chemicals. Misconceptions and realities. McMichael AJ. **Med Toxicol Adverse Drug Exp** 1988 Nov-Dec;3(6):425–9

Occupational and paraoccupational exposure to lead—Colorado. **MMWR** 1989 May 19;38(19):338–40, 345

Dystonia and tremor following exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. Klawans HL. **Mov Disord** 1987;2(4):255–61

Chemical and dust-related diseases. Stanbury M, et al. **N J Med** 1988 Nov;85(11):929–35

Acute mercury vapour intoxication: report of six cases. Aguado S, et al. **Nephrol Dial Transplant** 1989;4(2):133–6

Chronic renal tubular effects in relation to urine cadmium levels. Mueller PW, et al. **Nephron** 1989;52(1):45–54

Boeing worker safety checked by computer-controlled warning system. Poli K. **Occup Health Saf** 1988 Dec; 57(13):22, 24

Health hazards of working with ceramics. Recommendations for reducing risks. Fuortes LJ. **Postgrad Med** 1989 Jan; 85(1):133–6

Pharmacokinetically based risk assessment of workplace exposure to benzene. Beliles RP, et al. **Regul Toxicol Pharmacol** 1989 Apr;9(2):186–95 (20 ref.)

A case of chronic obstructive pulmonary disease after antimony exposure [letter] Gaillard MC, et al. **S Afr Med J** 1988 Oct 15;74(8):426

Health hazards of tertiary amine catalysts. Albrecht WN, et al. **Scand J Work Environ Health** 1988 Aug;14(4):209–19 (45 ref.)

Triazine herbicides and ovarian epithelial neoplasms. Donna A, et al. **Scand J Work Environ Health** 1989 Feb; 15(1):47–53

Regional cerebral blood flow at the time of diagnosis of chronic toxic encephalopathy induced by organic-solvent exposure and after the cessation of exposure. Hagstadius S, et al. **Scand J Work Environ Health** 1989 Apr;15(2):130–5

Cancer incidence in an occupational cohort exposed to bitumen fumes. Hansen ES. **Scand J Work Environ Health** 1989 Apr;15(2):101–5

Neurological and electroneuromyographic assessment of the adverse effects of acrylamide on occupationally exposed workers. He FS, et al. **Scand J Work Environ Health** 1989 Apr;15(2):125–9

Increased risk for primary liver cancer among women exposed to solvents. Hernberg S, et al. **Scand J Work Environ Health** 1988 Dec;14(6):356–65

Cardiovascular diseases and the work environment. A critical review of the epidemiologic literature on chemical factors. Kristensen TS. **Scand J Work Environ Health** 1989 Aug; 15(4):245–64 (296 ref.)

Allergic airway disease caused by methyl tetrahydrophthalic anhydride in epoxy resin. Nielsen J, et al. **Scand J Work Environ Health** 1989 Apr;15(2):154–5

Skin and respiratory symptoms from exposure to alkaline glutaraldehyde in medical services. Norbäck D. **Scand J Work Environ Health** 1988 Dec;14(6):366–71

Risk of non-Hodgkin's lymphoma among men occupationally exposed to organic solvents. Olsson H, et al. **Scand J Work Environ Health** 1988 Aug;14(4):246–51

Absence of toxic effects in silver reclamation workers. Pifer JW, et al. **Scand J Work Environ Health** 1989 Jun; 15(3):210–21

Subjective symptoms and psychological performance of chlorine-alkali workers. Piikivi L, et al. **Scand J Work Environ Health** 1989 Feb;15(1):69–74

Health effects due to occupational exposure to cobalt blue dye among plate painters in a porcelain factory in Denmark. Raffn E, et al. **Scand J Work Environ Health** 1988 Dec; 14(6):378–84

Amosite mesothelioma in a cohort of asbestos workers. Ribak J, et al. **Scand J Work Environ Health** 1989 Apr; 15(2):106–10

Isocyanate exposure and hypersensitivity pneumonitis—report of a probable case and prevalence of specific immunoglobulin G antibodies among exposed individuals. Seldén AI, et al. **Scand J Work Environ Health** 1989 Jun;15(3):234–7

Menstrual disorders among dry-cleaning workers [letter] Zielhuis GA, et al. **Scand J Work Environ Health** 1989 Jun;15(3):238

Recurrent asthma induced by toluene diisocyanate. Banks DE, et al. **Thorax** 1988 Aug;43(8):660–2

Occupational asthma in a pharmaceutical worker exposed to penicillamine. Lagier F, et al. **Thorax** 1989 Feb; 44(2):157–8

Occupational asthma in workers of a pharmaceutical company processing spiramycin. Malo JL, et al. **Thorax** 1988 May;43(5):371–7

Occupational asthma due to soft corrosive soldering fluxes containing zinc chloride and ammonium chloride. Weir DC, et al. **Thorax** 1989 Mar;44(3):220–3

Epidemiological application of early markers of nephrotoxicity. Bernard A, et al. **Toxicol Lett** 1989 Mar; 46(1-3):293–306

Occupational phosphine exposure in Indian workers. Misra UK, et al. **Toxicol Lett** 1988 Sep;42(3):257–63

Acroosteolysis and Raynaud's phenomenon after vinyl chloride exposure. Freudiger H, et al. **Vasa** 1988; 17(3):216–8

[Health conditions and the development of mandibular injuries in workers at a yellow phosphorus factory] Teng HQ. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Jul; 23(4):242–3 (Chi)

[The effects of vinyl chloride on pregnancy parturition and fetal development among female workers] Bao YS. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Nov; 22(6):343–6 (Eng. Abstr.) (Chi)

[Atmospheric pollution and mercury poisoning caused by peasants mercury smelting] Wu DL. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Mar;23(2):83–6 (Eng. Abstr.) (Chi)

[Proteinuria caused by occupational exposure to mercury] Zhao JY. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 May; 22(3):140–2 (Eng. Abstr.) (Chi)

[Teratogenic effect of thio-tepa despite use of safety rules (letter)] Krarup-Hansen A. **Ugeskr Laeger** 1988 Oct 3; 150(40):2416–7 (Dan)

[Organic dementia among dental technicians. A cross-sectional study of dental technicians with opticians as the control group] Prescott E, et al. **Ugeskr Laeger** 1989 Jul 17;151(29):1868–71 (Eng. Abstr.) (Dan)

[Bronchial asthma caused by isocyanate in the internal/external environment] Rasmussen K, et al. **Ugeskr Laeger** 1989 May 8;151(19):1193–5 (Eng. Abstr.) (Dan)

[Toxic effects of gas pollutants in anesthesia (letter)] Sonander HG. **Ugeskr Laeger** 1989 May 22;151(21):1333–4 (Dan)

[Protracted vitamin D poisoning] Mäki M, et al. **Duodecim** 1988;104(13):997–1000 (Fin)

[Asthma and isocyanates] Lauwers D, et al. **Allerg Immunol (Paris)** 1989 Jan;21(1):12–3 (Eng. Abstr.) (Fre)

[Asthma in industry: what products? What professions?] Bergeret A, et al. **J Toxicol Clin Exp** 1989;9(1 Pt 2):35–9 (Eng. Abstr.) (Fre)

[Coronary and vascular pathology in dynamite workers] Vandevoir D, et al. **Phlebologie** 1989 Apr-Jun;42(2):223–32 (Eng. Abstr.) (Fre)

[A new cause of occupational asthma in a pharmacist (letter)] Breton JL, et al. **Presse Med** 1989 Feb 25;18(8):433 (Fre)

[Lipid pneumopathy caused by occupational exposure to cutting oil] Perol M, et al. **Rev Mal Respir** 1989;6(3):271–4 (Eng. Abstr.) (Fre)

[Pulmonary pathology due to cobalt and hard metals] van den Eeckhout AV, et al. **Rev Mal Respir** 1989;6(3):201–7 (34 ref.) (Eng. Abstr.) (Fre)

[The genotoxic effect of epichlorohydrin and epoxy resins] Bittersohl G, et al. **Arch Geschwulstforsch** 1989;59(3):171–5 (32 ref.) (Eng. Abstr.) (Ger)

[The importance of liver changes in workers with chronic benzene exposure] Damrau J, et al. **Gastroenterol J** 1989; 49(1):17–9 (Eng. Abstr.) (Ger)

[Recommendations for the handling of anticarcinogenic agents in research, production, and application] Barth A, et al. **Pharmazie** 1989 Feb;44(2):150–2 (Ger)

[Persulfate asthma in hairdressers] Pankow W, et al. **Pneumologie** 1989 Mar;43(3):173–5 (Eng. Abstr.) (Ger)

[Toxic lung edema following inhalation of polyurethane vapors—a case report] Walther G. **Prax Klin Pneumol** 1988 Jul;42(7):564–6 (Eng. Abstr.) (Ger)

[Tar, bitumen, benzopyrene—an assessment of health risk at the work site] Bleichert J, et al. **Z Gesamte Hyg** 1988 Oct; 34(10):567–9 (Eng. Abstr.) (Ger)

[Occupations and the sense of smell] Fikentscher R, et al. **Z Gesamte Hyg** 1989 Feb;35(2):78–81 (Eng. Abstr.) (Ger)

[Are requirements for increased safety in dealing with antineoplastic drugs exaggerated?] Kusch N, et al. **Z Gesamte Hyg** 1988 Dec;34(12):734–6 (Eng. Abstr.) (Ger)

[Damage to the respiratory system caused by varnishes and paints] Maintz G, et al. **Z Gesamte Hyg** 1988 May; 34(5):274–8 (82 ref.) (Eng. Abstr.) (Ger)

[Changed manifestation of fluorosis as an occupational disease within the past 15 years] Runge H. **Z Gesamte Hyg** 1988 Jul;34(7):396–8 (Eng. Abstr.) (Ger)

[Heavy metal exposure of the dental technician] Vollmer D, et al. **Z Gesamte Hyg** 1988 May;34(5):317–9 (Eng. Abstr.) (Ger)

[Regression of skeletal fluorosis following termination of non-occupationally-induced exposure] Schmidt CW, et al. **Z Gesamte Inn Med** 1989 Apr 1;44(7):221–3 (Eng. Abstr.) (Ger)

[Pesticides: organophosphorus compounds] De Luca D'Alessandro E, et al. **Clin Ter** 1988 Sep 30;126(6):435–44 (25 ref.) (Ita)

[Aplastic anemia induced by drugs and industrial chemical agents] Fossati C. **Clin Ter** 1987 Jul 15;122(1):47–53 (201 ref.) (Eng. Abstr.) (Ita)

[Aromatic amines: pathology and prevention] Melino C, et al. **Clin Ter** 1987 Sep 15;122(5):379–86 (Ita)

[Organochlorine pesticides] Melino C, et al. **Clin Ter** 1988 Mar 15;124(5):397–404 (21 ref.) (Ita)

[Tumor mortality in a cohort of glass industry workers] Cordioli G, et al. **Epidemiol Prev** 1987 Mar;9(30):16–8 (Eng. Abstr.) (Ita)

[Criteria of the evaluation of the cause-effect relationship of toxic substances in the industrial environment] Ambrosi L. **G Ital Med Lav** 1987 Jan;9(1):3–6 (Eng. Abstr.) (Ita)

[Vitiligo appearing after contact with mud containing solvents: an occupational cause?] Cirasino L, et al. **G Ital Med Lav** 1988 Jan;10(1):43–5 (Eng. Abstr.) (Ita)

[Anesthetics vapors and gases and health hazards: results of an environmental survey] Ravagli A, et al. **G Ital Med Lav** 1987 Jan;9(1):39–44 (Eng. Abstr.) **(Ita)**

[Cardiocirculatory findings in a group of workers exposed to nitro derivatives. A pathogenetic hypothesis of withdrawal hazard] Taccola A, et al. **G Ital Med Lav** 1987 May–Jul;9(3–4):153–8 (Eng. Abstr.) **(Ita)**

[Indicators in human biological materials for assessing exposure to and/or biological effects of genotoxic chemical substances] **Med Lav** 1988 May–Jun;79(3):241–9 **(Ita)**

[Hepatic angiosarcoma caused by vinyl chloride: a new Italian case] Chiozzini G, et al. **Med Lav** 1988 Jan–Feb; 79(1):24–33 (Eng. Abstr.) **(Ita)**

[Death risk due to tumors of the respiratory system in workers employed in chromate production] de Marco R, et al. **Med Lav** 1988 Sep–Oct;79(5):368–76 (Eng. Abstr.) **(Ita)**

[Risk of exposure to solvents in people working at home] Discalzi GL, et al. **Med Lav** 1988 May–Jun;79(3):234–6 (Eng. Abstr.) **(Ita)**

[Observations on a case load of workers occupationally exposed to corticosteroids] Moroni P, et al. **Med Lav** 1988 Mar–Apr;79(2):142–9 (Eng. Abstr.) **(Ita)**

[Selenious acid poisoning in galvanization. Description of a clinical case] Pisati G, et al. **Med Lav** 1988 Mar–Apr; 79(2):127–35 (Eng. Abstr.) **(Ita)**

[Tosylchloramide-induced asthma: description of a case] Romeo L, et al. **Med Lav** 1988 May–Jun;79(3):237–40 (Eng. Abstr.) **(Ita)**

[Risks and respiratory pathology in a metal manufacturing factory] Talini D, et al. **Med Lav** 1988 Sep–Oct; 79(5):377–85 (Eng. Abstr.) **(Ita)**

[A case of edematous pharyngolaryngitis in a man occupationally exposed to inhalation of freon gas] Tanturri G, et al. **Med Lav** 1988 May–Jun;79(3):219–22 (Eng. Abstr.) **(Ita)**

[Pirenzepine in the treatment of chronic gastritis in patients exposed to organic solvents] Spisni R, et al. **Minerva Dietol Gastroenterol** 1988 Oct–Dec;34(4):265–8 (Eng. Abstr.) **(Ita)**

[Dust pollution at dental technical laboratories] Valerio M, et al. **Minerva Stomatol** 1988 Jul;37(7):575–7 (Eng. Abstr.) **(Ita)**

[The clinical aspect of pneumatosis cystoides coli with special reference to association of trichloroethylene exposure] Yamaguchi K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Oct;85(10):2161–7 (Eng. Abstr.) **(Jpn)**

[A case of acute pneumonitis following nitric acid gas inhalation] Kitahara M. **Sangyo Igaku** 1988 Sep;30(5):412–3 **(Jpn)**

[A case study of acute cadmium poisoning by welding work] Ohshiro H, et al. **Sangyo Igaku** 1988 May;30(3):210–1 **(Jpn)**

[Visual disorders due to organic solvent poisoning] Takeuchi Y. **Sangyo Igaku** 1988 Jul;30(4):236–47 (82 ref.) (Eng. Abstr.) **(Jpn)**

[Semi-malignant pitch-acanthoma on the hand of a coke oven worker] Take N, et al. **Sangyo Ika Daigaku Zasshi** 1989 Jun 1;11(2):189–92 (Eng. Abstr.) **(Jpn)**

[Exposure to mercury—an evaluation of occupational risk factors] Aaseth J, et al. **Tidsskr Nor Laegeforen** 1989 May 30;109(15):1642–4 (Eng. Abstr.) **(Nor)**

[Occupational diseases among personnel at a radiology department] Bakke JV, et al. **Tidsskr Nor Laegeforen** 1989 Jan 30;109(3):345–9 (Eng. Abstr.) **(Nor)**

[Photochemicals and their effects on health] Bakke JV. **Tidsskr Nor Laegeforen** 1989 Jan 30;109(3):361–2 (Eng. Abstr.) **(Nor)**

[Cancer—occupational exposure and genetics] Haugen A, et al. **Tidsskr Nor Laegeforen** 1989 May 20;109(14):1529–34 (Eng. Abstr.) **(Nor)**

[Late sequelae after occupational exposure to organic solvents. Exposure assessment in diagnosing chronic toxic encephalopathy] Kristensen P, et al. **Tidsskr Nor Laegeforen** 1989 Jun 30;109(19–21):2012–6 (Eng. Abstr.) **(Nor)**

[Carcinogenic metals] Norseth T. **Tidsskr Nor Laegeforen** 1989 May 30;109(15):1638–41 (Eng. Abstr.) **(Nor)**

[H2S poisoning and nervous system damage] Tvedt B, et al. **Tidsskr Nor Laegeforen** 1989 Jun 30;109(19–21):2007–11 (Eng. Abstr.) **(Nor)**

[Nervous system damage caused by H2S poisoning without unconsciousness] Tvedt B, et al. **Tidsskr Nor Laegeforen** 1989 Mar 10;109(7–8):845–6 (Eng. Abstr.) **(Nor)**

[Practical and disputable aspects of the effect of benzene-containing organic solvents exemplified by the case of hairy cell leukemia] Byczkowska Z, et al. **Med Pr** 1988;39(3):206–11 (Eng. Abstr.) **(Pol)**

[Evaluation of occupational exposure to nickel and other metals based on the analysis of air in the production of nickel alloys] Dobecki M, et al. **Med Pr** 1988;39(6):399–405 (Eng. Abstr.) **(Pol)**

[Evaluation of the health status of dry cleaning plant workers exposed to tetrachloroethylene] Głuszczowa M. **Med Pr** 1988;39(3):200–5 (Eng. Abstr.) **(Pol)**

[Exposure to beta-naphthylamine in the Polish industry] Gromiec JP, et al. **Med Pr** 1988;39(5):359–64 (Eng. Abstr.) **(Pol)**

[Principles of the diagnosis and medical prevention of lead poisoning] Marek K. **Med Pr** 1988;39(2):115–24 (Eng. Abstr.) **(Pol)**

[Clinical picture of dentition, periodontium and mouth mucosa in pharmaceutical industry workers] Nowicka J, et al. **Med Pr** 1988;39(2):130–6 (Eng. Abstr.) **(Pol)**

[Status of the nervous system and bioelectric activity of the brain in dry cleaning plant workers exposed to tetrachloroethylene] Sińczuk-Walczak H. **Med Pr** 1988; 39(2):91–9 (Eng. Abstr.) **(Pol)**

[Effect of work in coke-processing plants on the efficiency of selected cognitive processes] Urbaniec W, et al. **Med Pr** 1989;40(1):44–8 (Eng. Abstr.) **(Pol)**

[Megaloblastic anemia and occupational exposure (letter)] Lisiewicz J. **Przegl Lek** 1988;45(6):546 **(Pol)**

[Hematologic effects of exposure to ozone] Lisiewicz J, et al. **Przegl Lek** 1989;46(3):363–8 (61 ref.) **(Pol)**

[Changes in protein fractions and serum immunoglobulins in persons occupationally exposed to lead] Sroczyński J, et al. **Przegl Lek** 1988;45(7):570–3 (Eng. Abstr.) **(Pol)**

[Hygienic evaluation of working conditions and health status of workers in the department of dehydration of the sediment of the water purification system] Pozin SG, et al. **Gig Sanit** 1989 Feb;(2):82–3 **(Rus)**

[Surface-active agents in the environment and human health] Voloshchenko OI, et al. **Gig Sanit** 1988 Nov;(11):58–61 (36 ref.) **(Rus)**

[Problem of the evaluation of working conditions and morbidity of workers in copper, zinc and lead industries] Abdazimov AD. **Gig Tr Prof Zabol** 1989;(5):18–21 (Eng. Abstr.) **(Rus)**

[The late sequelae of occupational vinyl chloride poisoning] Antoniuzhenko VA. **Gig Tr Prof Zabol** 1989;(2):39–41 **(Rus)**

[The role of occupational and various social factors in the development of diseases among workers in the chemical fiber industry] DobzhanskiieIS. **Gig Tr Prof Zabol** 1988 Dec;(12):59–60 **(Rus)**

[Significance of immunocytochemical indices of body reactivity of workers engaged in the production of carbonic plastics on the base of formaldehyde-containing and epoxide resins] Dueva LA, et al. **Gig Tr Prof Zabol** 1989; (6):14–7 (Eng. Abstr.) **(Rus)**

[Hygienic evaluation of the working conditions in the manufacture of graphite goods] Dymova EG, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):19–21 (Eng. Abstr.) **(Rus)**

[Problem of correlating the effect of carbon fiber dust on the body and the degree of migration of residual monomers and the products of their thermal destruction in a model biological media] Fediakina RP, et al. **Gig Tr Prof Zabol** 1989;(4):53–4 **(Rus)**

[A probability approach to evaluating the results of epidemiologic research in the hygienic regulation of chemical carcinogens (the example of vinyl chloride)] Fedotova IV, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):10–3 (Eng. Abstr.) **(Rus)**

[A complex study on the effects of workplace air pollution in acid-digestion plants manufacturing sulphite cellulose on the health status of workers] Karelin OA. **Gig Tr Prof Zabol** 1989;(6):28–30 (Eng. Abstr.) **(Rus)**

[Clinico-electroneuromyographic characteristics of occupational polyneuropathies of toxico-allergic origin] Krasheninnikova ON. **Gig Tr Prof Zabol** 1989;(4):54–5 **(Rus)**

[A case of acute methylchlorformiate poisoning] Penknovich AA, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):57–8 **(Rus)**

[Various approaches to the study of the late effects of occupational diseases] Penknovich AA, et al. **Gig Tr Prof Zabol** 1989;(5):43–4 **(Rus)**

[Chronic gastritis in patients with methylmethacrylate poisoning] Sharova TG. **Gig Tr Prof Zabol** 1989;(3):12–6 (Eng. Abstr.) **(Rus)**

[Carcinogenic and nonspecific harmful factors in the rubber industry] Solenova LG, et al. **Gig Tr Prof Zabol** 1989; (5):25–8 (Eng. Abstr.) **(Rus)**

[A case of pneumonia caused by aspiration of diesel fuel] Vertkin IuI, et al. **Gig Tr Prof Zabol** 1989;(3):41–4 (Eng. Abstr.) **(Rus)**

[The initial manifestations of central nervous system involvement in prolonged contact with antibiotics] Gerasimova MM. **Klin Med (Mosk)** 1988 Sep;66(9):72–5 **(Rus)**

[Primary disability at petroleum chemical plants] Sumenkov KS. **Sov Zdravookhr** 1988;(9):30–2 **(Rus)**

[Evaluation of the carcinogenic hazard in the manufacture of graphite articles] Kasparov AA, et al. **Vopr Onkol** 1989; 35(4):445–50 (Eng. Abstr.) **(Rus)**

[Professional diseases caused by the action of antibiotics] Gerasimova MM, et al. **Vrach Delo** 1989 May;(5):109–12 (Eng. Abstr.) **(Rus)**

[Effect of the working conditions in the production of iodine and its preparations on workers' health] Krasniuk EP, et al. **Vrach Delo** 1988 Jul;(7):103–5 (Eng. Abstr.) **(Rus)**

[Pretumorous states of the stomach in workers manufacturing organic glass] Sharova TG, et al. **Vrach Delo** 1988 Sep; (9):105–7 (Eng. Abstr.) **(Rus)**

[Premorbid conditions in workers in the manufacture of polyethylene polyamine] Shpak BIu. **Vrach Delo** 1988 Oct; (10):109–10 (Eng. Abstr.) **(Rus)**

[The viscoelastic properties of the arterial vessels in workers in contact with cyanuric chloride] Soboleva LP. **Vrach Delo** 1988 Sep;(9):103–5 (Eng. Abstr.) **(Rus)**

[Digestive organ diseases in workers in contact with trinitrotoluene] Vysochin VI, et al. **Vrach Delo** 1989 Apr; (4):101–2 (Eng. Abstr.) **(Rus)**

[Gamma-glutamyltranspeptidase in occupational exposure to hepatotoxic material and certain diseases] Orešković-Dulizibarić D, et al. **Med Pregl** 1988; 41(9–10):359–61 (Eng. Abstr.) **(Scr)**

[Hyperthermia in chlorinated solvent poisoning (letter)] Rodriguez Pérez JC, et al. **Med Clin (Barc)** 1988 Sep 17; 91(8):314–5 **(Spa)**

[Occupational toxicity secondary to inhalant anesthetics] Moral V, et al. **Rev Esp Anestesiol Reanim** 1988 Jul–Aug; 35(4):199–204 (Eng. Abstr.) **(Spa)**

[Mercury poisoning in goldsmiths after working with dental gold] Blomqvist AM, et al. **Lakartidningen** 1989 Aug 23; 86(34):2782–3 **(Swe)**

[Cytostatics are handled carelessly. Inspections in health facilities are announced] Lennholm B. **Lakartidningen** 1988 Oct 5;85(40):3295–6 **(Swe)**

[Amalgam sickness in dental care personnel—a pilot study] Lindberg E, et al. **Lakartidningen** 1989 Aug 23; 86(34):2735–8 **(Swe)**

CLASSIFICATION

Occupation and leukemia: response to Dr. William E. Morton [letter] Linet MS, et al. **Am J Ind Med** 1989;15(5):609–11

Leukemias and occupation in Sweden [letter] Morton WE. **Am J Ind Med** 1989;15(5):607–8

[Clinical systematization of diseases of the locomotor apparatus caused by functional overstrain] Kol'tsov VA. **Vrach Delo** 1988 Dec;(12):89–91 (Eng. Abstr.) **(Rus)**

COMPLICATIONS

Renal dysfunction and lead exposure [letter] Nuyts GD, et al. **Am J Nephrol** 1989;9(1):85–6

Qualitative analysis of the handicap associated with occupational hearing loss. Hétu R, et al. **Br J Audiol** 1988 Nov;22(4):251–64

Congenital defects and work in pregnancy. McDonald AD, et al. **Br J Ind Med** 1988 Sep;45(9):581–8

Chronic upper limb pain syndrome (repetitive strain injury) in the Australian workforce: a systematic cross sectional rheumatological study of 229 patients. Miller MH, et al. **J Rheumatol** 1988 Nov;15(11):1705–12

Intracranial aneurysm rupture as an occupational accident [letter] Russegger L, et al. **Lancet** 1988 Oct 15;2(8616):899

Disseminated Fusarium oxysporum infection in patient with heatstroke [letter] Sturm AW, et al. **Lancet** 1989 Apr 29; 1(8644):968

ACC specialists [letter] Turner WE. **N Z Med J** 1989 Aug 23;102(874):450

Possible foetotoxic effects of mercury vapour: a case report. Gelbier S, et al. **Public Health** 1989 Jan;103(1):35–40

Visceral complications of electrical burn injury. A report of two cases and review of the literature. Branday JM, et al. **West Indian Med J** 1989 Jun;38(2):110–3

[The origin of bronchial carcinoma in siderofibrosis] Wiemann B, et al. **Z Erkr Atmungsorgane** 1988;171(1):82–4 (Eng. Abstr.) **(Ger)**

[Characteristics of the course of appendicitis in miners exposed to trinitrotoluene-containing substances] Vysochin VI. **Klin Khir** 1989;(4):63 **(Rus)**

DIAGNOSIS

Problems of the evaluation of occupational vasoneurosis in medical practice—a case report. Zák J. **Acta Univ Palacki Olomuc Fac Med** 1987;117:211–8

Screening vs. individual detection of industrial fluorosis: a decision analysis model. Morabia A, et al. **Am J Ind Med** 1989;15(6):657–67

Occupational illness: case detection by poison control surveillance. Blanc PD, et al. **Ann Intern Med** 1989 Aug 1;111(3):238–44

In search of occupational illness. Gould KG Jr, et al. **Ann Intern Med** 1989 Aug 1;111(3):195–7

Mycobacterium bovis as an occupational hazard in abattoir workers. Robinson P, et al. **Aust N Z J Med** 1988 Aug; 18(5):701–3

Cases from the aerospace medicine residents' teaching file. Case #31. A special operations person with methemoglobinemia is discussed, with attention to operation of nuclear weapons [clinical conference] Parmet AJ, et al. **Aviat Space Environ Med** 1989 May;60(5):465–6

Health of men on long term exposure to pyrethrins. Gombe S, et al. **East Afr Med J** 1988 Nov;65(11):734–42

The development of a motor performance method for the measurement of pain. Satow A, et al. **Ergonomics** 1989 Mar; 32(3):307–16

Acute exposure to sawdust does not alter airway calibre and responsiveness to histamine in asthmatic subjects. De Luca S, et al. **Eur Respir J** 1988 Jun;1(6):540–6

Occupational lead poisoning among silver jewellery workers. Kachru DN, et al. **Indian J Med Sci** 1989 Apr;43(4):89–91

Serological studies on health care workers caring for patients with human immunodeficiency virus. Evans R, et al. **J Hosp Infect** 1988 Aug;12(2):85–9

The correlation between work environment and the occurrence of cervicobrachial symptoms. Dimberg L, et al. **J Occup Med** 1989 May;31(5):447–53

Predicate calculus, artificial intelligence, and workers' compensation. Harber P, et al. **J Occup Med** 1989 May; 31(5):484–9

Liver injury tests in hazardous waste workers: the role of

obesity. Hodgson MJ, et al. **J Occup Med** 1989 Mar; 31(3):238–42

Follow-up study of pulmonary function and respiratory tract symptoms in workers in a Swedish iron ore mine. Jörgensen HS, et al. **J Occup Med** 1988 Dec;30(12):953–8

Liver function testing in a working population: three strategies to reduce false-positive results. Wright C, et al. **J Occup Med** 1988 Sep;30(9):693–7

A review of 132 consecutive patients referred for assessment of vibration white finger. James CA, et al. **J Soc Occup Med** 1989 Summer;39(2):61–4 (13 ref.)

Neurological evaluation of occupational hand pain. Corwin HM, et al. **Occup Med** 1989 Jul–Sep;4(3):393–403 (8 ref.)

Tendonitis of the wrist and elbow. Thorson EP, et al. **Occup Med** 1989 Jul–Sep;4(3):419–31 (51 ref.)

Focal dystonia (occupational cramp) masquerading as nerve entrapment or hysteria. Fry H, et al. **Plast Reconstr Surg** 1988 Nov;82(5):908–10

Isometric lifting strength as a predictor of industrial back pain reports. Battié MC, et al. **Spine** 1989 Aug;14(8):851–6

[Diseases of the nose and paranasal sinuses in workers of the woodworking industry] Savov A. **Probl Khig** 1988; 13:173–82 (Eng. Abstr.) (Bul)

[The development of occupational perceptual deafness in blacksmiths] Marková M. **Cesk Otolaryngol** 1989 Jan; 38(1):25–31 (Eng. Abstr.) (Cze)

[Preventive stabilizing examinations in workers in the Czechoslovak Uranium Industry Enterprise] Ripová L, et al. **Cesk Otolaryngol** 1988 Dec;37(6):338–44 (Eng. Abstr.) (Cze)

[Unrecognized occupational diseases among unskilled workers having chosen early retirement] Haale H, et al. **Ugeskr Laeger** 1988 Sep 19;150(38):2253–5 (Eng. Abstr.) (Dan)

[Limits of IgE serodiagnosis of occupational respiratory allergies] Chapelle H, et al. **Allerg Immunol (Paris)** 1988 Sep;20(7):252–3 (Eng. Abstr.) (Fre)

[Challenge provocation tests and nonspecific bronchial hyperreactivity in occupational asthma] Balland S, et al. **J Toxicol Clin Exp** 1989;9(1 Pt 2):15–23 (Eng. Abstr.) (Fre)

[Occupational asthma and rhinitis: challenge tests and nasal hyperreactivity: current practice and future perspectives] Grosclaude M, et al. **J Toxicol Clin Exp** 1989;9(1 Pt 2):7–13 (6 ref.) (Eng. Abstr.) (Fre)

[Digital vibration syndrome and carpal tunnel syndrome: possible neurophysiological differences?] Vecchierini-Blineau MF, et al. **Neurophysiol Clin** 1988 Dec;18(6):541–8 (Eng. Abstr.) (Fre)

[Occupational asthma: methods of diagnosis and principle etiologies] Pauli G, et al. **Rev Mal Respir** 1988;5(5):505–9 (26 ref.) (Eng. Abstr.) (Fre)

[Diagnosis and therapy of Raynaud's phenomenon in occupationally-induced vibration trauma] Roeser BE, et al. **Derm Beruf Umwelt** 1989 May–Jun;37(3):78–81 (Eng. Abstr.) (Ger)

[Occupationally induced bronchial asthma] Fruhmann G. **Dtsch Med Wochenschr** 1989 Feb 24;114(8):306–11 (35 ref.) (Ger)

[Quantitative evaluation of hearing disorders in expert assessment. A recent recommendation for calculating the percentage of hearing loss] Feldmann H. **Laryngol Rhinol Otol (Stuttg)** 1988 Jul;67(7):319–25 (11 ref.) (Eng. Abstr.) (Ger)

[Possibilities and limits of speech audiometry in non-German speaking foreigners (published erratum appears in Laryngol Rhinol Otol (Stuttg) 1988 Oct;68(10):549)] Pazdzierniak B. **Laryngol Rhinol Otol (Stuttg)** 1988 Jul;67(7):326–30 (Eng. Abstr.) (Ger)

[Exogenous allergic alveolitis as a difficult-to-recognize disease] Baur X, et al. **Med Klin** 1988 Oct 28;83(21):710–5 (Eng. Abstr.) (Ger)

[Eligibility determination for indications-related disability evaluation] Baumgarten R. **Z Arztl Fortbild (Jena)** 1989; 83(12):603–4 (Ger)

[Quantitation of manganese and vanadium levels in the lung of "normal" and occupationally exposed persons] Kraus T, et al. **Zentralbl Hyg Umweltmed** 1989 May; 188(1–2):108–26 (Eng. Abstr.) (Ger)

[Medico-legal evaluation of vestibular damage] Puxeddu P, et al. **Acta Otorhinolaryngol Ital** 1988 May–Jun;8(3):205–55 (Ita)

[Evaluation of stress indicators in 2 groups of video display terminal operators] Modiano A, et al. **G Ital Med Lav** 1987 Jan;9(1):31–7 (Eng. Abstr.) (Ita)

[Evaluation of damage in subjects exposed to nephrotoxic substances] Tranchina G, et al. **G Ital Med Lav** 1988 Mar; 10(2):77–9 (Eng. Abstr.) (Ita)

[Is malignant mesothelioma of the pleura only an occupational disease?] Foresti V, et al. **Minerva Med** 1989 Feb;80(2):145–8 (Eng. Abstr.) (Ita)

[Urinary enzymes: early biochemical indicators in the biological monitoring study of subjects exposed to styrene] Malaguti Aliberti L, et al. **Minerva Med** 1989 Apr; 80(4):383–8 (Eng. Abstr.) (Ita)

[Gynecologic examinations of women working in the metallurgy industry] Kula B, et al. **Ginekol Pol** 1988 Jul; 59(7):450–4 (Eng. Abstr.) (Pol)

[Analysis of formal and substantial errors in the diagnosis of occupational diseases in Poland 1985–1987] Iżycki J, et al. **Med Pr** 1988;39(6):416–22 (Eng. Abstr.) (Pol)

[Plasmodium falciparum malaria: a difficult diagnostic and therapeutic problem] Kocięcka W, et al. **Wiad Parazytol** 1988;34(4–6):649–53 (Eng. Abstr.) (Pol)

[Methodology of studying immunodeficiency states in industrial workers] Alekseeva OG, et al. **Gig Tr Prof Zabol** 1989;(6):47–9 (Rus)

[Use of erythrocytes for evaluating the action of chemical compounds on the body of workers] Gabulgalimova RA, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):28–30 (Eng. Abstr.) (Rus)

[Pulmonary surfactant system in dust-induced bronchitis] Kleiner AI, et al. **Gig Tr Prof Zabol** 1989;(1):24–7 (Eng. Abstr.) (Rus)

[Methodologic approach to the detection and evaluation of early signs of unfavorable effects of occupational factors on health] Monaenkova AM. **Gig Tr Prof Zabol** 1988 Oct; (10):1–5 (Eng. Abstr.) (Rus)

[Experience with the use of corporal electroacupuncture diagnosis in the evaluation of health status of persons exposed to electromagnetic fields] Nikitina VN, et al. **Gig Tr Prof Zabol** 1989;(6):39–40 (Rus)

[Signs of chronic overheating in miners of deep coal mines] Peftiev IF, et al. **Gig Tr Prof Zabol** 1989;(6):7–9 (Eng. Abstr.) (Rus)

[Latent fatigue] Smirnov KM. **Gig Tr Prof Zabol** 1989; (2):28–31 (Eng. Abstr.) (Rus)

[Functional disorders in workers in noisy manufacturing depending on the intensity and mobility of the neural processes] Zvereva GS, et al. **Gig Tr Prof Zabol** 1988 Jul; (7):44–5 (Rus)

[Clinico-functional characteristics of the course of ischemic heart disease in miners working in deep coal mines] Kobets GP, et al. **Kardiologiia** 1989 Apr;29(4):110–1 (Rus)

[Early diagnosis and mass screening of patients with initial signs of pathology of the brachiocephalic arteries using an automated screening system at industrial plants] Vilianskiĭ MP, et al. **Kardiologiia** 1988 Sep;28(9):96–7 (Rus)

[Diagnosis of cardiac rhythm disorders in pilots using 24-hour ECG monitoring] Sinopal'nikov VI, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):80–3 (Eng. Abstr.) (Rus)

[Detection of tuberculosis and nonspecific lung diseases in chemical industrial enterprises] Tolstykh SA. **Probl Tuberk** 1988;(10):8–13 (Eng. Abstr.) (Rus)

[Various aspects of the differential diagnosis of pulmonary dissemination in managing occupational diseases] Palagushina AI, et al. **Ter Arkh** 1989;61(5):94–9 (Rus)

[Diagnosis of drug allergy under industrial conditions] Tabakova TV, et al. **Ter Arkh** 1988;60(9):124–6 (Eng. Abstr.) (Rus)

[The state of the organ of vision in employees engaged in precision work] Kovalenko VV. **Vestn Oftalmol** 1989 May–Jun;105(3):66–9 (Rus)

[Instrument-associated myopia and its effect on the work capacity of microscopists] Niurenberg OIu. **Vestn Oftalmol** 1988 Sep–Oct;104(5):52–4 (Eng. Abstr.) (Rus)

[Possibility of the diagnosis of occupational hearing loss during preventive mass screening] Pankova VB, et al. **Vestn Otorinolaringol** 1988 Sep–Oct;(5):52–5 (Rus)

[Diagnostic importance of the Holter ECG monitoring of miners under industrial conditions] Cherkesov VV, et al. **Vrach Delo** 1988 Jul;(7):100–2 (Eng. Abstr.) (Rus)

[Secondary prevention of neuroses in workers at industrial enterprises] Gladkova KI, et al. **Vrach Delo** 1988 Nov; (11):103–5 (Eng. Abstr.) (Rus)

[Clinical symptoms of chronic hyperthermia in miners of deep coal mines] Peftiev IF, et al. **Vrach Delo** 1989 May; (5):104–6 (Eng. Abstr.) (Rus)

[Laboratory-confirmed case of human infection with ratpox (cowpox)] Marennnikova SS, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Jun;(6):30–2 (Eng. Abstr.) (Rus)

[Vertebral diseases in dock workers] Frković A, et al. **Arh Hig Rada Toksikol** 1988 Jun;39(2):235–40 (Eng. Abstr.) (Scr)

[Ventilatory function in aluminum extraction workers: a 4-year follow-up study] Gomzi M. **Arh Hig Rada Toksikol** 1988 Sep;39(3):289–96 (Eng. Abstr.) (Scr)

[The effect of occupational damage registered in the metalworking industry on the basis of pulmonary function in workers] Popović V, et al. **Arh Hig Rada Toksikol** 1988 Jun;39(2):203–13 (Eng. Abstr.) (Scr)

[Toxoplasma antibody titers in workers with a potentially increased risk for toxoplasma infection] Nemec R, et al. **Bratisl Lek Listy** 1988 Oct;89(10):779–83 (Eng. Abstr.) (Slo)

[Occupational diseases and their early diagnosis in industrial medicine] Legaspi-Velasco JA. **Gac Med Mex** 1988 Jul–Aug;124(7–8):297–302 (Spa)

[Assessment of erythrocyte pyrimidine 5'-nucleotidase activity in the detection and early diagnosis of lead poisoning. A comparison with zinc-protoporphyrin] Brunet M, et al. **Med Clin (Barc)** 1988 Oct 29;91(14):521–4 (Eng. Abstr.) (Spa)

DRUG THERAPY

Protective effect of Legalon in workers exposed to organic solvents. Szilárd S, et al. **Acta Med Hung** 1988;45(2):249–56

Zopiclone in insomniac shiftworkers. Evaluation of its hypnotic properties and its effects on mood and work performance. Monchesky TC, et al. **Int Arch Occup Environ Health** 1989;61(4):255–9

Therapeutic narcotics in the workplace [letter] **J Occup Med** 1989 Jul;31(7):583

Effect of chronic chromolyn sodium therapy in a beautician with occupational asthma. Schwartz HJ. **J Occup Med** 1989 Feb;31(2):112–4

Cutaneous alternariosis responding to ketoconazole [letter] Aznar R, et al. **Lancet** 1989 Mar 25;1(8639):667–8

Management of combined bacterial and fungal foot infection in coal miners. Hay RJ, et al. **Mycoses** 1988 Jun;31(6):316–9

Hand infections seen in the industrial clinic. Kasdan ML, et al. **Occup Med** 1989 Jul–Sep;4(3):463–71 (36 ref.)

[Evaluation of the therapeutic and preventive effectiveness of the use of a polymer film in periodontal lesions in workers in the aluminum industry] Karagezian TA, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):40–2 (Rus)

[Effect of ascorbic acid and thiamine on the development and course of mycogenic sensitization] Maniashin IuA, et al. **Gig Tr Prof Zabol** 1988 Nov;(11):50–1 (Rus)

[Treatment of vibration-induced disease with corinfar] Sukharevskaia TM, et al. **Gig Tr Prof Zabol** 1989;(4):37–9 (Eng. Abstr.) (Rus)

[Use of beta adrenergic receptor blockaders in industrial workers with neurocirculatory asthenia of the hypertensive type] Mazii SA, et al. **Sov Med** 1988;(7):96–9 (Rus)

[Significance of reflexogenic areas of the larynx in the treatment of professional singers] Charkhalashvili GE. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):59 (Rus)

ECONOMICS

Compensation for occupational disease: hidden agendas. Brandt-Rauf SI, et al. **Health Aff (Millwood)** 1988 Fall; 7(4):73–82

Costs of workers' compensation claims for hearing loss. Alleyne BC, et al. **J Occup Med** 1989 Feb;31(2):134–8

Compensating victims of occupational lung disease: the physician's role in the system. Richman SI. **J Occup Med** 1989 Apr;31(4):335–8

Industrial production, health and disease in sub-Saharan Africa. Packard RM. **Soc Sci Med** 1989;28(5):475–96 (99 ref.)

The effects of compensation on recovery from low-back injury. Greenough CG, et al. **Spine** 1989 Sep;14(9):947–55

[Compensation of occupational skin diseases] Nielsen M, et al. **Ugeskr Laeger** 1988 Dec 12;150(50):3121–3 (Eng. Abstr.) (Dan)

[Compensation for occupational asthma. Practical aspects] Prost G. **J Toxicol Clin Exp** 1989;9(1 Pt 2):31–4 (Eng. Abstr.) (Fre)

[Military insurance. Military insurance regulations and the handling of diseases/injuries among draftees] Dobloug I. **Tidsskr Nor Laegeforen** 1989 Jan 30;109(3):363–4 (Eng. Abstr.) (Nor)

[Productivity loss of at least 5 billion Swedish crowns in 1986 because of disability and early age retirement of patients with low back disorders] Nygren A, et al. **Lakartidningen** 1989 Jan 18;86(3):146–8 (Swe)

ENZYMOLOGY

Elevation of urinary N-acetyl-beta-D-glucosaminidase and beta-galactosidase activities in workers with long-term exposure to aromatic nitro-amino compounds. Yoshida M, et al. **Bull Environ Contam Toxicol** 1989 Jul;43(1):1–8

Blood levels of angiotensin converting enzyme (ACE) and gallium scintigraphic findings in a group of patients with Shaver's disease. Avolio G, et al. **Panminerva Med** 1988 Apr–Jun;30(2):73–6

EPIDEMIOLOGY

Legionnaires' disease in the work environment: implications for environmental health. Muraca PW, et al. **Am Ind Hyg Assoc J** 1988 Nov;49(11):584–90

Hematologic evaluation of employees with leukopenia. Naval Weapons Center, China Lake, California. Luiken GA, et al. **Am J Clin Pathol** 1988 Dec;90(6):679–84

A computer program for incidence density sampling of controls in case-control studies nested within occupational cohort studies. Beaumont JJ, et al. **Am J Epidemiol** 1989 Jan;129(1):212–9

Report of an illness outbreak at the Harry S Truman State Office Building. Donnell HD Jr, et al. **Am J Epidemiol** 1989 Mar;129(3):550–8

An outbreak of psittacosis in Minnesota turkey industry workers: implications for modes of transmission and control. Hedberg K, et al. **Am J Epidemiol** 1989 Sep; 130(3):569–77

Assessment of the working lifetime risk of exposure in an occupational cohort [letter] Walter SD. **Am J Epidemiol** 1989 Jan;129(1):230–1

Design and conduct of occupational epidemiology studies: I. Design aspects of cohort studies. Checkoway H, et al. **Am J Ind Med** 1989;15(4):363–73 (44 ref.)

Design and conduct of occupational epidemiology studies: II. Analysis of cohort data. Checkoway H, et al. **Am J Ind Med** 1989;15(4):375–94 (69 ref.)

Bladder cancer among workers in the textile industry: results of a Spanish case-control study. Gonzales CA, et al. **Am J Ind Med** 1988;14(6):673–80

Injuries on the fireground: risk factors for traumatic injuries among professional fire fighters. Heineman EF, et al.

Am J Ind Med 1989;15(3):267–82
Case-control study of lung cancer in Los Angeles county welders. Hull CJ, et al. **Am J Ind Med** 1989;16(1):103–12
Leukemias and occupation in Sweden: a registry-based analysis. Linet MS, et al. **Am J Ind Med** 1988;14(3):319–30
Occupational injury and illness in the semiconductor manufacturing industry. McCurdy SA, et al. **Am J Ind Med** 1989;15(5):499–510
Lung cancer among Dutch coal miners: a case-control study. Meijers JM, et al. **Am J Ind Med** 1988;14(5):597–604
Design and conduct of occupational epidemiology studies: III. Design aspects of case-control studies. Pearce N, et al. **Am J Ind Med** 1989;15(4):395–402 (23 ref.)
Design and conduct of occupational epidemiology studies: IV. The analysis of case-control data. Pearce N, et al. **Am J Ind Med** 1989;15(4):403–16 (21 ref.)
Work-related injuries in minors. Schober SE, et al. **Am J Ind Med** 1988;14(5):585–95
Cancer morbidity in lamp manufacturing workers. Shannon HS, et al. **Am J Ind Med** 1988;14(3):281–90
Critical review of cancer epidemiology in petroleum industry employees, with a quantitative meta-analysis by cancer site. Wong O, et al. **Am J Ind Med** 1989;15(3):283–310
Health and socioeconomic consequences of occupational respiratory allergies: a pilot study using workers' compensation data. Yassi A. **Am J Ind Med** 1988; 14(3):291–8
Pulmonary functional impairment from years of arc welding. Kilburn KH, et al. **Am J Med** 1989 Jul;87(1):62–9
Hard-rock mining exposures affect smokers and nonsmokers differently. Results of a community prevalence study. Kreiss K, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1487–93
Should we continue using questionnaires on breathlessness in epidemiologic surveys? Vestbo J, et al. **Am Rev Respir Dis** 1988 May;137(5):1114–8
Occupational risk of HIV infection [letter] Zeman MG, et al. **Ann Emerg Med** 1989 Jul;18(7):798–9
Asthma in respiratory therapists. Kern DG, et al. **Ann Intern Med** 1989 May 15;110(10):767–73
Work and cardiovascular health: viewpoint of occupational physiology. Ilmarinen J. **Ann Med** 1989 Jun;21(3):209–14
Cumulative damage models in cancer epidemiology: application to human incidence and mortality data. Becker N. **Arch Environ Health** 1989 Jul-Aug;44(4):260–6
Illness and absenteeism among California highway patrol officers responding to hazardous material spills. English PB, et al. **Arch Environ Health** 1989 Mar-Apr;44(2):117–9
Non-Hodgkin's lymphomas in U.S. Navy personnel. Garland FC, et al. **Arch Environ Health** 1988 Nov-Dec;43(6):425–9
Spectrum of occupational disease in an academic hospital-based referral center in Connecticut from 1979 to 1987. Cullen MR, et al. **Arch Intern Med** 1989 Jul; 149(7):1621–6
Waldenström's macroglobulinaemia: three cases in shoe repairers [published erratum appears in BMJ 1989 Mar 18;298(6675):710] Williamson LM, et al. **BMJ** 1989 Feb 25;298(6672):498–9
Risk of recurrence of occupational back pain over three year follow up. Abenhaim L, et al. **Br J Ind Med** 1988 Dec; 45(12):829–33
Confounding from smoking in occupational epidemiology. Axelson O. **Br J Ind Med** 1989 Aug;46(8):505–7 (10 ref.)
Respiratory symptoms and impairment in shipyard welders and caulker/burners. Cotes JE, et al. **Br J Ind Med** 1989 May;46(5):292–301
Occupation, smoking, and lung cancer. Dave SK, et al. **Br J Ind Med** 1988 Nov;45(11):790–2
Increased incidence of malignant melanoma of the skin in workers in a telecommunications industry. De Guire L, et al. **Br J Ind Med** 1988 Dec;45(12):824–8
Lung cancer among glass fibre production workers: a case-control study. Gardner MJ, et al. **Br J Ind Med** 1988 Sep;45(9):613–8
Disability, mortality, and incidence of cancer among Geneva painters and electricians: a historical prospective study. Gubéran E, et al. **Br J Ind Med** 1989 Jan;46(1):16–23
Excess of cancer in Swedish chimney sweeps. Gustavsson P, et al. **Br J Ind Med** 1988 Nov;45(11):777–81
Health of vermiculite miners exposed to trace amounts of fibrous tremolite. McDonald JC, et al. **Br J Ind Med** 1988 Sep;45(9):630–4
Respiratory hazards in hard metal workers: a cross sectional study. Meyer-Bisch C, et al. **Br J Ind Med** 1989 May; 46(5):302–9
Cancer and other mortality patterns among United States furniture workers. Miller BA, et al. **Br J Ind Med** 1989 Aug;46(8):508–15
Incidence of cancer and mortality among employees in the asbestos cement industry in Denmark. Raffn E, et al. **Br J Ind Med** 1989 Feb;46(2):90–6
Mortality and incidence of cancer among oil exposed workers in a Norwegian cable manufacturing company. Part 2. Mortality and cancer incidence 1953–84. Rønneberg A, et al. **Br J Ind Med** 1988 Sep;45(9):595–601
Cancer incidence and mortality among Swedish smelter workers. Sandström AI, et al. **Br J Ind Med** 1989 Feb; 46(2):82–9
Influence of design characteristics on the outcome of retrospective cohort studies. Swaen GM, et al. **Br J Ind Med** 1988 Sep;45(9):624–9
Limited, intragroup epidemics of acute infectious diseases of the upper respiratory tracts and throat among workers of a Polish construction site in a tropical country. Jaremin B. **Bull Inst Marit Trop Med Gdynia** 1987;38(1–2):42–9
Problem of heart rhythm disturbances in seafarers. Tomaszewski R. **Bull Inst Marit Trop Med Gdynia** 1988; 39(1–2):17–21
Historical employment records as data bases for occupational disease research—a case study. Embree VC, et al. **Can J Public Health** 1989 Jan-Feb;80(1):50–3
Cancer cluster investigation: toward a more rational approach [editorial] Leech JA. **Can Med Assoc J** 1989 Jul 15;141(2):105–6
Epidemic of "shocks" in telephone operators: lessons for the medical community. Yassi A, et al. **Can Med Assoc J** 1989 Apr 1;140(7):816–20
Colon cancer, physical activity, and occupational exposures. A case-control study. Fredriksson M, et al. **Cancer** 1989 May 1;63(9):1838–42
Lung cancer risk, occupational exposure, and the debrisoquine metabolic phenotype. Caporaso N, et al. **Cancer Res** 1989 Jul 1;49(13):3675–9
Asthma due to the complex salts of platinum—a cross-sectional survey of workers in a platinum refinery. Merget R, et al. **Clin Allergy** 1988 Nov;18(6):569–80
Tinnitus prevalence in industrial hearing loss compensation claimants. McShane DP, et al. **Clin Otolaryngol** 1988 Oct; 13(5):323–30
The arguments about RSI: an examination. Bammer G, et al. **Community Health Stud** 1988;12(3):348–58
Occupational exposure to Streptococcus suis type 2. Robertson ID, et al. **Epidemiol Infect** 1989 Aug; 103(1):157–64
Persistence of musculoskeletal symptoms: a longitudinal study. Berg M, et al. **Ergonomics** 1988 Sep;31(9):1281–5
Back pain in physiotherapists involved in back care education. Scholey M, et al. **Ergonomics** 1989 Feb; 32(2):179–90
Questionnaire of the European Community for Coal and Steel (ECSC) on respiratory symptoms. 1987—updating of the 1962 and 1967 questionnaires for studying chronic bronchitis and emphysema. Minette A. **Eur Respir J** 1989 Feb;2(2):165–77
Health surveillance of individual workers exposed to chemical agents. **Int Arch Occup Environ Health** 1988; Suppl:1–161
Prevalence of vibration-induced white finger and assessment of vibration exposure among travertine workers in Italy. Bovenzi M, et al. **Int Arch Occup Environ Health** 1988; 61(1–2):25–34
Orthopaedic diseases among transport workers. Luttmann A, et al. **Int Arch Occup Environ Health** 1988;61(3):197–205
Arc welders' respiratory health evolution over five years. Mur JM, et al. **Int Arch Occup Environ Health** 1989; 61(5):321–7
Cancer incidence among urban bus drivers in Denmark. Netterstrøm B. **Int Arch Occup Environ Health** 1988; 61(3):217–21
International Working Group on the Epidemiology of the Chronic Neurobehavioral Effects of Organic Solvents. A need for further research! Triebig G, et al. **Int Arch Occup Environ Health** 1989;61(6):423–4
Proportion of lung cancers in males, due to occupation, in different areas of the USA. Vineis P, et al. **Int J Cancer** 1988 Dec 15;42(6):851–6
Video display terminal use and spontaneous abortion risk. Bryant HE, et al. **Int J Epidemiol** 1989 Mar;18(1):132–8
An outbreak of foodborne hepatitis A in a factory: a possible shift in age of patients in Japan. Hayashi H, et al. **Int J Epidemiol** 1988 Dec;17(4):870–3
Use of surveillance systems for occupational cancer: data from the Danish National system. Lynge E, et al. **Int J Epidemiol** 1988 Sep;17(3):493–500
Case-control studies of cancer in New Zealand electrical workers. Pearce N, et al. **Int J Epidemiol** 1989 Mar; 18(1):55–9
Mesothelioma in South Africa, 1976–84: incidence and case characteristics. Zwi AB, et al. **Int J Epidemiol** 1989 Jun; 18(2):320–9
Occupational health risks for Mexican women: the case of the maquiladora along the Mexican-United States border. Hovell MF, et al. **Int J Health Serv** 1988;18(4):617–27
Viral hepatitis in females in Delhi. Gupta HL, et al. **J Commun Dis** 1987 Dec;19(4):359–61
Firm size and occupational injury and illness incidence rates in manufacturing industries. Leigh JP. **J Community Health** 1989 Spring;14(1):44–52
Negative health selection into physically light occupations. Ostlin P. **J Epidemiol Community Health** 1988 Jun; 42(2):152–6
Occupation and cancer of the prostate [letter] Severson RK, et al. **J Epidemiol Community Health** 1988 Jun;42(2):207–8
Viral hepatitis among the hospital staff. Polz M, et al. **J Hyg Epidemiol Microbiol Immunol** 1989;33(2):157–61
The incidence of amphetamine use among truck drivers from various regions of Thailand. Mongkolsirichaikul D, et al. **J Med Assoc Thai** 1988 Sep;71(9):471–4
Cytomegalovirus infection in day care centers in Rome, Italy: viral excretion in children and occupational risk among workers. Volpi A, et al. **J Med Virol** 1988 Oct;26(2):119–25
Occupational risks of bladder cancer in the United States: I. White men. Silverman DT, et al. **J Natl Cancer Inst** 1989 Oct 4;81(19):1472–80
Occupational risks of bladder cancer in the United States: II Nonwhite men. Silverman DT, et al. **J Natl Cancer Inst** 1989 Oct 4;81(19):1480–3
Use of group health insurance claims data to assess morbidity among employed persons. Bernacki EJ, et al. **J Occup Med** 1989 Aug;31(8):677–8 (21 ref.)
Cancer incidence of workers exposed to dimethylformamide and/or acrylonitrile. Chen JL, et al. **J Occup Med** 1988 Oct;30(10):813–8
Modernization and occupational cancer [editorial] Christiani DC. **J Occup Med** 1988 Dec;30(12):975–6
Asbestosis among electricians. Hodgson MJ, et al. **J Occup Med** 1988 Aug;30(8):638–40
Organic brain syndrome and long-term exposure to toluene: a clinical, psychiatric study of vocationally active printing workers. Larsen F, et al. **J Occup Med** 1988 Nov; 30(11):875–8
Have we overlooked important cohorts for follow-up studies? Report of the Chemical Industry Institute of Toxicology Conference of World War II-era Industrial Health Specialists. Levine RJ, et al. **J Occup Med** 1988 Aug;30(8):655–60 (15 ref.)
Health insurance claims as a source of morbidity data. Du Pont Company's experience. Pell S. **J Occup Med** 1989 Aug;31(8):679–80
Degree of confounding bias related to smoking, ethnic group, and socioeconomic status in estimates of the associations between occupation and cancer. Siemiatycki J, et al. **J Occup Med** 1988 Aug;30(8):617–25
Case-control study of nasal cancer in workers employed in wood-related industries. Viren JR, et al. **J Occup Med** 1989 Jan;31(1):35–40
Occupational health today and tomorrow: a view from two shipyards. The Milroy lecture 1988. Cotes JE. **J R Coll Physicians Lond** 1988 Oct;22(4):232–6
Case control study of chronic bronchitis in glass bangle workers. Srivastava AK, et al. **J Soc Occup Med** 1988 Winter;38(4):134–6
Health effects on workers in the pharmaceutical industry: a review. Teichman RF, et al. **J Soc Occup Med** 1988 Autumn;38(3):55–7 (19 ref.)
Musculoskeletal disorders in shipyard workers. Torell G, et al. **J Soc Occup Med** 1988 Winter;38(4):109–12
From the Centers for Disease Control. Occupational disease surveillance: carpal tunnel syndrome. **JAMA** 1989 Aug 18; 262(7):886, 889
Notifiable disease reporting in Kansas. Wood C. **Kans Med** 1988 Nov;89(11):314–7
Amyotrophic lateral sclerosis in Sweden 1970–83 and solvent exposure [letter] Gunnarsson LG, et al. **Lancet** 1989 Apr 29;1(8644):958
"Repetition strain injury": an iatrogenic epidemic of simulated injury. Bell DS. **Med J Aust** 1989 Sep 4; 151(5):280–4 (48 ref.)
A cluster of cases of lymphoma in an underground colliery. Corbett S, et al. **Med J Aust** 1988 Aug 15;149(4):178–9, 181–2, 184–5
Testicular cancer in leather workers—Fulton County, New York. **MMWR** 1989 Feb 24;38(7):105–6, 111–4
Occupational disease surveillance: carpal tunnel syndrome. **MMWR** 1989 Jul 21;38(28):485–9
An approach to the investigation of cancer in tool and die workers. I. Epidemiologic findings in a suspected cancer cluster among tool and die workers. Garry VF, et al. **Mutat Res** 1989 Mar;225(3):107–13
Surveillance of health care workers exposed to blood from patients infected with the human immunodeficiency virus. Marcus R. N **Engl J Med** 1988 Oct 27;319(17):1118–23
Industrial deafness [letter] Glennie HR. **N Z Med J** 1988 Nov 9;101(857):773
Sickness absence in the freezing industry. Turner WE. **N Z Med J** 1988 Oct 26;101(856 Pt 1):663–6
Risk of multiple sclerosis in relation to industrial activities: an ecological study in four European countries. Lauer K. **Neuroepidemiology** 1989;8(1):38–42
Study shows work environments, job tasks may cause back pain. Glad I, et al. **Occup Health Saf** 1989 Feb;58(2):44–6
Occupational safety and health issues affect registered nurses. Neuberger JS, et al. **Occup Health Saf** 1988 Sep; 57(10):25–7, 75–6
Is the color of your skin dangerous to your health and safety at work? [editorial] Polakoff PL. **Occup Health Saf** 1989 Feb;58(2):15
Despite appearances, no clean bill of health for semiconductor trade. Polakoff PL. **Occup Health Saf** 1989 Jan;58(1):14
Eye morbidity among welders in Benin City, Nigeria. Alakija W. **Public Health** 1988 Jul;102(4):381–4
A comparison of the concepts used to develop and apply occupational exposure limits for ionizing radiation and hazardous chemical substances. Halton DM. **Regul Toxicol Pharmacol** 1988 Sep;8(3):343–55
Fibrositis/fibromyalgia syndrome in the workplace. Littlejohn GO. **Rheum Dis Clin North Am** 1989 Feb; 15(1):45–60 (56 ref.)
Lung cancer cell type and mining exposure. Davies JC, et al. **S Afr Med J** 1988 Dec 17;74(12):607–10
Linkage of absenteeism with disease data—first experience from Germany. Frentzel-Beyme R. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:316–22
Factors which influence the incidence and course of peptic ulcer. Sonnenberg A. **Scand J Gastroenterol Suppl** 1988; 155:119–40 (157 ref.)

Development of a community intervention programme on miners' health and working environment in Nicaragua. Aragon A, et al. **Scand J Soc Med** 1988;16(4):237–40

Sickness absenteeism in an engineering industry—an analysis with special reference to absence for neck and upper extremity symptoms. Dimberg L, et al. **Scand J Soc Med** 1989;17(1):77–84

Low back trouble among urban bus drivers in Denmark. Netterstrøm B, et al. **Scand J Soc Med** 1989;17(2):203–6

Problems with cross-sectional data in research on working environment and health. Ostlin P, et al. **Scand J Soc Med** 1988;16(3):139–43

Lung cancer incidence among Swedish bakers and pastrycooks: geographical variation. Wicksell L, et al. **Scand J Soc Med** 1988;16(3):183–6

Cancer incidence among Danish stone workers. Guénel P, et al. **Scand J Work Environ Health** 1989 Aug;15(4):265–70

Cancer incidence of workers in a Finnish sawmill. Jäppinen P, et al. **Scand J Work Environ Health** 1989 Feb;15(1):18–23

Risk of lung, larynx, pharynx and buccal cavity cancers among carbon electrode manufacturing workers. Moulin JJ, et al. **Scand J Work Environ Health** 1989 Feb;15(1):30–7

Cancer risks among New Zealand meat workers. Reif JS, et al. **Scand J Work Environ Health** 1989 Feb;15(1):24–9

Prediction of low-back trouble frequency in a working population. Burton AK, et al. **Spine** 1989 Sep;14(9):939–46

Occupational low-back injury in a hospital employee population: an epidemiologic analysis of multiple risk factors of a high-risk occupational group. Ryden LA, et al. **Spine** 1989 Mar;14(3):315–20 (36 ref.)

Issues in analysing the effects of occupational exposure to low levels of radiation. Gilbert ES. **Stat Med** 1989 Feb; 8(2):173–87

The psychiatric epidemic in the American workplace. Brodsky CM. **State Art Rev Occup Med** 1988 Oct–Dec; 3(4):653–62 (29 ref.)

The magnitude of the occupational disease problem: an investigation in New York State. Markowitz S, et al. **Toxicol Ind Health** 1989 Jul;5(4):9–30; discussion 79–84

Blood dyscrasia in unofficial vendors of petrol and heavy oil and motor mechanics in Nigeria. Niazi GA, et al. **Trop Doct** 1989 Apr;19(2):55–8

Pulmonary tuberculosis in health service staff—is it still a problem? Capewell S, et al. **Tubercle** 1988 Jun;69(2):113–8

Tuberculosis in hospital doctors. Goldman KP. **Tubercle** 1988 Dec;69(4):237–40 (24 ref.)

Descriptive occupational morbidity statistics. Ng TK. **World Health Stat Q** 1988;41(3–4):200–8

Retrospective cohort study of cancer morbidity in furniture makers exposed to wood dust. Barthel E, et al. **Z Gesamte Hyg** 1989 May;35(5):279–81

[Gynecologic morbidity in workers engaged in the manufacture of nitrogen fertilizers and caprolactam] Angelov A. **Akush Ginekol (Sofiia)** 1988;27(5):51–4 (Eng. Abstr.) (Bul)

[Gynecological morbidity in teachers] Dimitrov I. **Akush Ginekol (Sofiia)** 1989;28(2):42–7 (Eng. Abstr.) (Bul)

[Epidemiologic studies of the prevalence of arterial hypertension among industrial workers in Stara Zagora] Kürnolski I, et al. **Vutr Boles** 1989;28(3):48–52 (Eng. Abstr.) (Bul)

[An outbreak of ammonia poisoning in a seafood factory] Yang GY, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Oct; 40(4):397–400 (Eng. Abstr.) (Chi)

[Study of the development of specific damage to health related to work in the South Moravian Region] Brhel P, et al. **Cesk Zdrav** 1989 May;37(5):228–33 (Eng. Abstr.) (Cze)

[Work disability due to back disorders in various occupational groups] Vrbík J, et al. **Cesk Zdrav** 1989 Jan; 37(1):26–36 (Eng. Abstr.) (Cze)

[The incidence of occupational diseases in the health services within the catchment area of the Clinic for Occupational Diseases of the School of Medicine in Prague] Kuklová D, et al. **Vnitr Lek** 1989 May;35(5):472–8 (Eng. Abstr.) (Cze)

[Occupational diseases and their reporting] **Ugeskr Laeger** 1989 May 22;151(21):1344–8 (Dan)

[The significance of working conditions with regard to disability pensions. A case-controlled study among unskilled workers] Hasle H, et al. **Ugeskr Laeger** 1989 Jul 24;151(30):1929–31 (Eng. Abstr.) (Dan)

[Psychiatric admissions among city bus drivers. A prospective study] Netterstrøm B, et al. **Ugeskr Laeger** 1989 Jan 30;151(5):302–5 (Eng. Abstr.) (Dan)

[Suicide among physicians] Nordentoft M. **Ugeskr Laeger** 1988 Oct 10;150(41):2440–3 (Eng. Abstr.) (Dan)

[Notification of occupational diseases from general practice during the period 1978–1987] Strunk KW. **Ugeskr Laeger** 1989 Mar 6;151(10):659–63 (Dan)

[The other side of curls (letter)] Ringelberg JA. **Ned Tijdschr Geneeskd** 1989 Apr 1;133(13):692–3 (Dut)

[The changing spectrum of occupational diseases of the lung] Nordman H, et al. **Duodecim** 1988;104(6):473–9 (11 ref.) (Fin)

[The public health status of occupational cancer in Finland] Sankila R, et al. **Duodecim** 1988;104(21):1699–704 (Fin)

[Absence from work as an indicator of health: significance, measures and conditions for use] Bourbonnais R, et al. **Rev Epidemiol Sante Publique** 1989;37(2):173–82 (69 ref.) (Eng. Abstr.) (Fre)

[Professional dancing and coxarthrosis] Revel M, et al. **Rev Rhum Mal Osteoartic** 1989 Mar 15;56(4):321–3 (Fre)

[Evaluation of occupational risk factors in the occurrence of ischemic cardiopathy among workers in a large mechanical engineering factory] Muică N, et al. **Sante Publique (Bucur)** 1988 Jul–Sep;31(3):199–204 (Eng. Abstr.) (Fre)

[Temporary work incapacity due to essential arterial hypertension] Poll N. **Sante Publique (Bucur)** 1988 Jul–Sep; 31(3):225–30 (Eng. Abstr.) (Fre)

[The incidence and social medicine significance of chronic obstructive respiratory tract diseases in West Germany] Lauber B. **Pneumologie** 1989 Jan;43(1):10–9 (Eng. Abstr.) (Ger)

[Malignant diseases of the inner nose—epidemiology and occupational medicine aspects] Hartung M. **Strahlenther Onkol** 1989 Jun;165(6):441–3 (Eng. Abstr.) (Ger)

[Epidemiology and prevention of occupationally-induced and chronic diseases of employed females in East Germany] Bräunlich A, et al. **Z Ärztl Fortbild (Jena)** 1988; 82(21):1049–53 (8 ref.) (Ger)

[The extent of morbidity in the retirement and pre-retirement age] Stach H, et al. **Z Gesamte Hyg** 1988 Oct;34(10):576–8 (Eng. Abstr.) (Ger)

[Viral warts in butchers. A clinico-statistical study] Aloi FG, et al. **G Ital Dermatol Venereol** 1988 Jul–Aug; 123(7–8):341–4 (Eng. Abstr.) (Ita)

[Probably thousands rather than tens (letter)] **Med Lav** 1988 Mar–Apr;79(2):161–72 (Ita)

[Searching for lost tumors: continuation of the discussion (letter)] **Med Lav** 1988 Sep–Oct;79(5):411–21 (Ita)

[Research on "lost" tumors (letter)] Gaffuri E. **Med Lav** 1988 Jan–Feb;79(1):82 (Ita)

[Development and validation of a questionnaire in the study of spinal changes in a working population] Occhipinti E, et al. **Med Lav** 1988 Sep–Oct;79(5):390–402 (Eng. Abstr.) (Ita)

[Longitudinal epidemiologic survey on respiratory disorders among workers of the wood industry] Vellutini M, et al. **Medicina (Firenze)** 1988 Oct–Dec;8(4):453–4 (Eng. Abstr.) (Ita)

[Farmer's lung disease; relationship between prevalence and dairy farming] Tamura M. **Nippon Naika Gakkai Zasshi** 1988 Dec;77(12):1837–41 (Jpn)

[The method for stress assessment of workers (Part 1). Stress score by self-rating method] Natsume M, et al. **Sangyo Igaku** 1988 Jul;30(4):266–79 (Eng. Abstr.) (Jpn)

[The general population as a reference group. A discussion of the concept of the healthy worker effect] Melkild A. **Tidsskr Nor Laegeforen** 1989 Feb 10;109(4):470–1 (Eng. Abstr.) (Nor)

[Causes and rates of absenteeism in selected branches of industry during the years 1970–1987] Szubert Z, et al. **Med Pr** 1988;39(6):446–54 (Eng. Abstr.) (Pol)

[Analysis of cases of cancer of the upper respiratory tract classified as occupational disease in Poland 1971–1986] Sułkowski W, et al. **Pol Tyg Lek** 1988 Jun 27;43(26):839–42 (Eng. Abstr.) (Pol)

[Brucellosis—1987] Seroka D, et al. **Przegl Epidemiol** 1989; 43(1):102–6 (Pol)

[Morbidity with temporary disability among sailors] Netudykhatka Olu. **Gig Sanit** 1988 Oct;(10):48–50 (Rus)

[Epidemiologic assessment of the cancer risk in the manufacture of graphite goods] Gurvich EB. **Gig Tr Prof Zabol** 1988 Jul;(7):16–8 (Eng. Abstr.) (Rus)

[Occupational diseases in foreign countries in the 1980's] Gurvich EB, et al. **Gig Tr Prof Zabol** 1989;(5):40–2 (Rus)

[Dependence of the levels of morbidity with temporary loss of work capacity on the body functional state of those working in hypokinesia] Iakovleva TP, et al. **Gig Tr Prof Zabol** 1989;(2):20–2 (Eng. Abstr.) (Rus)

[Occupational morbidity of workers of the Krivbass iron ore works: ways of its reduction and prevention] Makarenko NA, et al. **Gig Tr Prof Zabol** 1989;(6):1–4 (Eng. Abstr.) (Rus)

[Characteristics of morbidity among sailors] Netudykhatka Olu. **Gig Tr Prof Zabol** 1989;(5):16–8 (Eng. Abstr.) (Rus)

[Characteristics of cancer morbidity among workers engaged in the manufacture of hot-laid asphalt concrete] Povarov AV, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):13–5 (Eng. Abstr.) (Rus)

[The prevalence of risk factors for ischemic heart disease among professional drivers] Vaisman AI, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):5–7 (Eng. Abstr.) (Rus)

[Tuberculosis morbidity in workers of industrial enterprises] Rodin LN. **Probl Tuberk** 1989;(3):67–70 (Rus)

[Relationship between industrial environmental factors and the state of general and mental health] Beliaeva GG. **Sov Zdravookhr** 1988;(7):28–33 (Eng. Abstr.) (Rus)

[Hospitalization of farm workers with lesions of the nervous system] Kuptsov VV. **Sov Zdravookhr** 1989;(2):47–9 (Eng. Abstr.) (Rus)

[Comparative analysis of morbidity with temporary loss of work capacity in dental workers] Kataeva VA, et al. **Stomatologiia (Mosk)** 1989 Jan–Feb;68(1):80–2 (Rus)

[Stomatological morbidity among the crews of the Northern Marine Steamship Company] Opravin AS, et al. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):68–9 (Rus)

[Prevalence of arterial hypertension, ischemic heart disease and their risk factors in geologists in various regions of the USSR] Sokolina LL, et al. **Ter Arkh** 1988;60(9):91–4 (Eng. Abstr.) (Rus)

[Streptococcal infections, anti-streptococcal immunity and rheumatism in the builders and operators of Baikal-Amur trunk line] Satybaldyev AM, et al. **Vestn Akad Med Nauk SSSR** 1989;(6):91–5 (Eng. Abstr.) (Rus)

[Epidemiology and the characteristics of foot mycoses in metallurgy workers] Kovalenko IuB, et al. **Vestn Dermatol Venerol** 1988;(7):53–7 (Eng. Abstr.) (Rus)

[A trial using cancer registries in epidemiologic research] Gurvich EB, et al. **Vopr Onkol** 1989;35(3):280–5 (Rus)

[Risk factors for the development of bronchopulmonary diseases in workers at a machine-building plant] Butenko GE, et al. **Vrach Delo** 1988 Oct;(10):100–2 (Eng. Abstr.) (Rus)

[Incidence of risk factors for ischemic heart disease in coal miners] Kopytina RA, et al. **Vrach Delo** 1988 Oct; (10):102–4 (Eng. Abstr.) (Rus)

[Standardized methods for detecting arterial hypertension and ischemic heart disease among the workers of industrial enterprises] Kovalenko VN, et al. **Vrach Delo** 1989 Jan; (1):104–5 (Eng. Abstr.) (Rus)

[Absenteeism from work among asbestos-textile workers] Krstev S, et al. **Arh Hig Rada Toksikol** 1988 Mar; 39(1):39–46 (Eng. Abstr.) (Scr)

[Occupational exposure in cancer of the mouth, pharynx and larynx] Oreggia F, et al. **An Otorrinolaringol Ibero Am** 1989;16(4):365–76 (Eng. Abstr.) (Spa)

[Occupational risk of infection by human immunodeficiency virus] Hernández E, et al. **Med Clin (Barc)** 1988 May 14; 90(19):767–8 (Eng. Abstr.) (Spa)

[Epidemiology of brucellosis. Retrospective study of 246 hospital cases] Arribas Llorente JL, et al. **Rev Clin Esp** 1989 Jun;185(2):60–4 (Eng. Abstr.) (Spa)

[Prevalence of tuberculosis infections among hospital staff (letter)] Olona M, et al. **Rev Clin Esp** 1989 Jun;185(1):44–5 (Spa)

[A study of middle-aged men in Gothenburg. Workers run twice as high a risk of myocardial infarction as middle class office employees] Rosengren A, et al. **Lakartidningen** 1989 May 31;86(22):2102–5 (Swe)

ETHNOLOGY

Ethnic differences in the prevalence of pulmonary airflow obstruction among grain workers. Horne SL, et al. **Chest** 1989 May;95(5):992–6

ETIOLOGY

Occupational near-work myopia. Nyman KG. **Acta Ophthalmol Suppl (Copenh)** 1988;185:167–71

Accommodation and visual fatigue in visual display terminal (VDT) work. Shen CS, et al. **Acta Ophthalmol Suppl (Copenh)** 1988;185:175–6

Effect of visual display terminal (VDT) work on myopia progression. Tokoro T. **Acta Ophthalmol Suppl (Copenh)** 1988;185:172–4

Hypersensitivity to wheat flour in bakers. Valero Santiago A, et al. **Allergol Immunopathol (Madr)** 1988 Sep–Oct; 16(5):309–14

Occupational asthma caused by iroko wood. Azofra J, et al. **Allergy** 1989 Feb;44(2):156–8

Occupationally related respiratory symptoms in trout-processing workers. Sherson D, et al. **Allergy** 1989 Jul;44(5):336–41

On welding, wheezing, and whimsy. Morgan WK. **Am Ind Hyg Assoc J** 1989 Feb;50(2):59–69 (75 ref.)

Bilateral hypothenar hammer syndrome: an unusual and preventable cause of digital ischemia. Wernick R, et al. **Am J Emerg Med** 1989 May;7(3):302–6

Occupational strain and the incidence of coronary heart disease. Reed DM, et al. **Am J Epidemiol** 1989 Mar; 129(3):495–502

Heart disease mortality among bridge and tunnel officers exposed to carbon monoxide. Stern FB, et al. **Am J Epidemiol** 1988 Dec;128(6):1276–88

Lung cancer case-control study in a rubber manufacturing plant. Andjelkovich DA, et al. **Am J Ind Med** 1988; 14(5):559–74

Vibration white finger, digital blood pressure, and some biochemical findings on workers operating vibrating tools in the engine manufacturing industry. Bovenzi M. **Am J Ind Med** 1988;14(5):575–84

On the statement by Jacques Dunnigan. Davis JM. **Am J Ind Med** 1988;14(5):629–30

Medical surveillance of hazardous waste workers: ability of laboratory tests to discriminate exposure. Favata EA, et al. **Am J Ind Med** 1989;15(3):255–65

Relative risk of mesothelioma among railroad machinists exposed to chrysotile [letter; comment] Higgins I. **Am J Ind Med** 1989;15(4):483–6. **Comment on:** Am J Ind Med 1988;13(6):639–57

Obfuscation: a reply to Dr. Dunnigan. Lilienfeld DE. **Am J Ind Med** 1988;14(5):625–8

Mesothelioma in railroad workers [letter] McDonald C, et al. **Am J Ind Med** 1989;15(4):487–90

Is chrysotile a significant risk factor for mesothelioma? Ohlson CG. **Am J Ind Med** 1989;15(3):351–6

Occupation and bladder cancer in Utah. Schumacher MC, et al. **Am J Ind Med** 1989;16(1):89–102

Linking chrysotile asbestos with mesothelioma [letter] Sluis-Cremer GK. **Am J Ind Med** 1988;14(5):631–2

Asbestos and kidney cancer: the evidence supports a causal association. Smith AH, et al. **Am J Ind Med** 1989; 16(2):159–66 (18 ref.)

Self-reported musculoskeletal complaints among garment workers. Sokas RK, et al. **Am J Ind Med** 1989; 15(2):197–206

Prevalence of hazardous exposures in veterinary practice. Wiggins P, et al. **Am J Ind Med** 1989;16(1):55–66

Respiratory symptoms among Swedish swine producers. Wilhelmsson J, et al. **Am J Ind Med** 1989;15(3):311–8

Respiratory symptoms and lung function in furriers. Zuskin E, et al. **Am J Ind Med** 1988;14(2):187–96

Susceptibility of hospital-based health care personnel to varicella-zoster virus infections. McKinney WP, et al. **Am J Infect Control** 1989 Feb;17(1):26–30

Delayed endolymphatic hydrops syndrome after heavy exposure to impulse noise. Ylikoski J. **Am J Otol** 1988 Jul; 9(4):282–5

Computer-generated headache. Brachiocephalgia at first byte. LaBan MM, et al. **Am J Phys Med Rehabil** 1989 Aug; 68(4):183–5

Reducing knee morbidity among carpetlayers. Tanaka S, et al. **Am J Public Health** 1989 Mar;79(3):334–5

Occupational exposure to human immunodeficiency virus (HIV) and hepatitis B virus (HBV) among embalmers: a pilot seroprevalence study. Turner SB, et al. **Am J Public Health** 1989 Oct;79(10):1425–6

The mystery of RSI. Kiesler S, et al. **Am Psychol** 1988 Dec; 43(12):1004–15

The lung matrix and inflammation: Part II. Biochemical and molecular mechanisms of fibrogenesis: implications for environmental lung disease. Brody AR, et al. **Am Rev Respir Dis** 1988 Oct;138(4):1056–7

Firefighting acutely increases airway responsiveness. Sherman CB, et al. **Am Rev Respir Dis** 1989 Jul; 140(1):185–90

Occupational asthma and contact urticaria caused by buckwheat flour. Valdivieso R, et al. **Ann Allergy** 1989 Aug;63(2):149–52

AIDS: implications for emergency physicians [editorial] Baraff LJ. **Ann Emerg Med** 1988 Oct;17(10):1102–3

Reanalysis of surveillance data regarding health care worker risk of nosocomial acquisition of HIV. Kelen GD. **Ann Emerg Med** 1988 Oct;17(10):1101–2

Occupational risk of Lyme disease in endemic areas of New York State. Smith PF, et al. **Ann N Y Acad Sci** 1988; 539:289–301

Exposure to shock and vibration and symptoms in workers using impact power tools. Musson Y, et al. **Ann Occup Hyg** 1989;33(1):85–96

Building sickness, are symptoms related to the office lighting? Robertson AS, et al. **Ann Occup Hyg** 1989;33(1):47–59

Endotoxins in inhalation research. Summary of conclusions of a workshop held at Clearwater, Florida, U.S.A., 28–30 September 1987. Rylander R, et al. **Ann Occup Hyg** 1988; 32(4):553–6

Occupational hazards in the OR. A historical perspective. Trotti JC, et al. **AORN J** 1989 Jan;49(1):276–83

B virus (Herpesvirus simiae) and human infection. Benson PM, et al. **Arch Dermatol** 1989 Sep;125(9):1247–8

Who killed Cock Robin? Causal relationships in occupational cancer. Christie D. **Asia Pac J Public Health** 1989;3(1):7–10

Mycobacterium bovis as an occupational hazard in abattoir workers [letter] **Aust N Z J Med** 1989 Aug;19(4):409–10

Occupational back pain: issues in prevention and treatment. Carey TS. **Baillieres Clin Rheumatol** 1989 Apr;3(1):143–56 (48 ref.)

Dysbaric disorders: aseptic bone necrosis in tunnel workers and divers. Davidson JK. **Baillieres Clin Rheumatol** 1989 Apr;3(1):1–23 (39 ref.)

Occupation and osteoarthritis. Genti G. **Baillieres Clin Rheumatol** 1989 Apr;3(1):193–204 (84 ref.)

Occupational spondylolysis and spondylolisthesis. Jakab G. **Baillieres Clin Rheumatol** 1989 Apr;3(1):89–98 (23 ref.)

Vibration disease. Kákosy T. **Baillieres Clin Rheumatol** 1989 Apr;3(1):25–50 (162 ref.)

Locomotor consequences of electrical and radiation injuries, burns and freezings. Kolář J. **Baillieres Clin Rheumatol** 1989 Apr;3(1):99–110 (27 ref.)

Occupational aspects of rheumatoid arthritis. Leistner K. **Baillieres Clin Rheumatol** 1989 Apr;3(1):211–8 (22 ref.)

Occupation-related infectious arthritis. Madkour MM. **Baillieres Clin Rheumatol** 1989 Apr;3(1):157–92 (105 ref.)

Locomotor problems of supersonic aviation and astronautics. Remes P. **Baillieres Clin Rheumatol** 1989 Apr;3(1):111–9 (40 ref.)

Overuse injuries in musicians. Bird H. **BMJ** 1989 Apr 29; 298(6681):1129–30 (21 ref.)

Acute schistosomiasis (Katayama fever) among British air crew. Chapman PJ, et al. **BMJ** 1988 Oct 29;297(6656):1101

Periareolar pilonidal abscesses in a hairdresser. Gannon MX, et al. **BMJ** 1988 Dec 24–31;297(6664):1641–2

Overuse injuries in musicians [letter] Parry CB. **BMJ** 1989 Jul 1;299(6690):55

Mental illness in doctors. Pilowski L, et al. **BMJ** 1989 Feb 4;298(6669):269–70

Seamstress's finger: a cause of Heberden's nodes. Turner WH, et al. **BMJ** 1988 Dec 24–31;297(6664):1636

Myofascial pain dysfunction and viola playing. Bryant GW. **Br Dent J** 1989 May 6;166(9):335–6

Alveolar cell carcinoma in a cook. Wardle EN. **Br J Clin Pract** 1988 Apr;42(4):173–4

Possible health effects of working with VDUs. Bergqvist U. **Br J Ind Med** 1989 Apr;46(4):217–21 (50 ref.)

Health hazards of firefighters: acute pulmonary effects after toxic exposures. Brandt-Rauf PW, et al. **Br J Ind Med** 1989 Mar;46(3):209–11

Two cases of Streptococcus suis meningitis. Hay PE, et al. **Br J Ind Med** 1989 May;46(5):352–3

Pleural mesothelioma in a brake mechanic. Huncharek M, et al. **Br J Ind Med** 1989 Jan;46(1):69–71

Asbestos associated tumours in car mechanics. Järvholm B, et al. **Br J Ind Med** 1988 Sep;45(9):645–6

Occupational allergy in an entomological research centre. I. Clinical aspects of reactions to the sheep blowfly Lucilia cuprina. Kaufman GL, et al. **Br J Ind Med** 1989 Jul; 46(7):473–8

Occupational class, physical workload, and musculoskeletal morbidity in the engineering industry. Leino P, et al. **Br J Ind Med** 1988 Oct;45(10):672–81

Tea asthma: response to specific and non-specific challenges. Lewis J, et al. **Br J Ind Med** 1989 May;46(5):350–1

Respiratory and allergic symptoms in wool textile workers. Love RG, et al. **Br J Ind Med** 1988 Nov;45(11):727–41

Silica, silicosis, and lung cancer. McDonald JC. **Br J Ind Med** 1989 May;46(5):289–91 (30 ref.)

Malignant lymphomas and occupational exposures. Persson B, et al. **Br J Ind Med** 1989 Aug;46(8):516–20

Respiratory cancer in chrysotile textile and mining industries: exposure inferences from lung analysis. Sebastien P, et al. **Br J Ind Med** 1989 Mar;46(3):180–7

Smoking, atopy, and laboratory animal allergy. Venables KM, et al. **Br J Ind Med** 1988 Oct;45(10):667–71

Laboratory animal allergy in a pharmaceutical company. Venables KM, et al. **Br J Ind Med** 1988 Oct;45(10):660–6

Carpal tunnel syndrome (CTS) and exposure to vibration, repetitive wrist movements, and heavy manual work: a case-referent study. Wieslander G, et al. **Br J Ind Med** 1989 Jan;46(1):43–7

The aetiology of post-traumatic morbidity: predisposing, precipitating and perpetuating factors. McFarlane AC. **Br J Psychiatry** 1989 Feb;154:221–8

The unseen radiation hazards of ultrasound [letter] Havard AC. **Br J Radiol** 1989 Mar;62(735):295–6

Psychological and somatic factors and the conditions of service at sea in relation to the different stages of coronary heart disease among sailors. Jerzemowski J. **Bull Inst Marit Trop Med Gdynia** 1987;38(1–2):33–41

Influence of physical factors on the ro–ro vessel over selected parameters of the circulatory system. Otto B, et al. **Bull Inst Marit Trop Med Gdynia** 1987;38(3–4):175–80

Etiology of cardiac arrhythmias in seafarers. Tomaszewski R. **Bull Inst Marit Trop Med Gdynia** 1988;39(1–2):23–30

AIDS and the workplace. **Bull Pan Am Health Organ** 1989; 23(1–2):187–90

Occupational death due to heat stroke: report of two cases. Sherman R, et al. **Can Med Assoc J** 1989 May 1; 140(9):1057–8

Occupational pollution. Becklake MR. **Chest** 1989 Sep;96(3 Suppl):372S–378S (65 ref.)

Relationship between number of asbestos bodies in autopsy lung and pleural plaques on chest X-ray film. Kishimoto T, et al. **Chest** 1989 Mar;95(3):549–52

Hypersensitivity pneumonitis due to mushroom (Pholiota nameko) spores. Nakazawa T, et al. **Chest** 1989 May; 95(5):1149–51

Occupational asthma from cobalt sensitivity in workers exposed to hard metal dust. Shirakawa T, et al. **Chest** 1989 Jan;95(1):29–37

Prevalence and coincidence of degenerative changes of the hands and feet in middle age and their relationship to occupational work load, intelligence, and social background. Bergenudd H, et al. **Clin Orthop** 1989 Feb; (239):306–10

Nail discoloration due to mahogany. Harris AO, et al. **Cutis** 1989 Jan;43(1):55–6

Monocyte-derived growth factors in asbestos-induced interstitial fibrosis. Schwartz DA, et al. **Environ Res** 1989 Aug;49(2):283–94

Immunological and respiratory findings in spice-factory workers. Zuskin E, et al. **Environ Res** 1988 Oct; 47(1):95–108

Cardiac strain among women workers in an industrial laundry. Brabant C, et al. **Ergonomics** 1989 Jun;32(6):615–28

The prevalence of musculo-skeletal symptoms in supermarket workers. Ryan GA. **Ergonomics** 1989 Apr; 32(4):359–71

Chemical and physical agents of work-related cardiovascular diseases. Petronio L. **Eur Heart J** 1988 Nov;9 Suppl L:26–34 (58 ref.)

Effects of occupational exposure and smoking on respiratory symptomatology and PFT in healthy panelists and COPD patients. Goren AI, et al. **Eur J Epidemiol** 1989 Mar; 5(1):58–64

Fungal air-borne spores as health risk factors among workers in alimentary industries. Palmas F, et al. **Eur J Epidemiol** 1989 Jun;5(2):239–43

Occupational asthma caused by exposure to ash wood dust (Fraxinus americana). Malo JL, et al. **Eur Respir J** 1989 Apr;2(4):385–7 (7 ref.)

Tea-dust induced asthma. Roberts JA, et al. **Eur Respir J** 1988 Aug;1(8):769–70

Survey on subjective symptoms in office workers using visual display terminals. Shimai S, et al. **Fukushima J Med Sci** 1988 Jun;34(1):45–54

Radon progeny exposure and lung cancer risk in New Mexico U miners: a case-control study. Samet JM, et al. **Health Phys** 1989 Apr;56(4):415–21

Bias in United States U miners' exposure data. Schiager KJ. **Health Phys** 1989 Jul;57(1):169–70

Fibre carcinogenesis and environmental hazards. Peto J. **IARC Sci Publ** 1989;(90):457–70 (21 ref.)

Correlation between lung fibre content and disease in East London asbestos factory workers. Wagner JC, et al. **IARC Sci Publ** 1989;(90):444–8

Pros and cons of dust-induced bronchitis as an occupational disease. Flechsig R. **Ind Health** 1989;27(1):27–30

Risks of airborne particulate exposure in a copper mine in Chile. Romo-Kröger CM, et al. **Ind Health** 1989;27(2):95–9

Serum dopamine-beta-hydroxylase activity in women occupationally exposed to carbon disulphide. Wasilewska E, et al. **Ind Health** 1989;27(2):89–93

Long-term sickness absence due to back disorders in crane operators exposed to whole-body vibration. Bongers PM, et al. **Int Arch Occup Environ Health** 1988;61(1–2):59–64

Laryngeal cancer and occupational exposure to asbestos. Edelman DA. **Int Arch Occup Environ Health** 1989; 61(4):223–7 (31 ref.)

Raynaud's phenomenon of fingers and toes of miners exposed to local and whole-body vibration and cold. Hedlund U. **Int Arch Occup Environ Health** 1989;61(7):457–61

Hearing of forest workers with vibration-induced white finger: a five-year follow-up. Iki M, et al. **Int Arch Occup Environ Health** 1989;61(7):437–42

Respiratory health assessment by questionnaire of 2024 workers involved in man-made mineral fiber production. Moulin JJ, et al. **Int Arch Occup Environ Health** 1988; 61(3):171–8

Risk assessment of vibration exposure and white fingers among platers. Nilsson T, et al. **Int Arch Occup Environ Health** 1989;61(7):473–81

Lung function and respiratory symptoms among workers in a soft paper mill. Thorén K, et al. **Int Arch Occup Environ Health** 1989;61(7):467–71

Erythema multiforme-like eruption from trinitrotoluene allergy. Goh CL. **Int J Dermatol** 1988 Nov;27(9):650–1

Chronic non-specific lung disease and occupational exposures estimated by means of a job exposure matrix: the Zutphen Study. Heederik D, et al. **Int J Epidemiol** 1989 Jun;18(2):382–9

Hearing loss due to partly impulsive industrial noise exposure at levels between 87 and 90 dB(A). Thiery L, et al. **J Acoust Soc Am** 1988 Aug;84(2):651–9

Occupational sensitivity to Alphitobius diaperinus (Panzer) (lesser mealworm). Schroeckenstein DC, et al. **J Allergy Clin Immunol** 1988 Dec;82(6):1081–8

Temporal relationships of lumbar herniated disk injuries. McCrary BF. **J Am Osteopath Assoc** 1988 Dec; 88(12):1483–6

Occupational risks from exposure to HIV in the health care environment. Gerberding JL. **J Am Podiatr Med Assoc** 1988 Mar;78(3):143–6 (16 ref.)

Severe acute mountain sickness (AMS) in a permanent resident of Shimla. Kashyap S, et al. **J Assoc Physicians India** 1988 Oct;36(10):618–9

Occupational health problems and adverse patient reactions in periodontics. Jacobsen N, et al. **J Clin Periodontol** 1989 Aug;16(7):428–33

Vibration syndrome—with special reference to the effects of temperature on vibration-induced white finger. Yu HS, et al. **J Dermatol (Tokyo)** 1988 Dec;15(6):466–72

Some peculiarities of the physiological validity of shift work schedules for the crews of floating oil drilling platforms. Alekperov II, et al. **J Hyg Epidemiol Microbiol Immunol** 1988;32(4):385–90

Predictors of stress-related illness in city bus drivers. Bartone PT. **J Occup Med** 1989 Aug;31(8):657–63 (62 ref.)

Lead exposure in an outdoor firing range [letter] Brewer F. **J Occup Med** 1989 Apr;31(4):409–10

Effects of episodic air hammer usage on digital artery hemodynamics of foundry workers with vibration white finger disease. Brown TD, et al. **J Occup Med** 1988 Nov; 30(11):853–62

Does seasonal employment in grain elevators increase nonspecific airways responsiveness? Dales RE, et al. **J Occup Med** 1988 Aug;30(8):613–6

Spontaneous abortions among semiconductor manufacturers [letter] Gaffey WR. **J Occup Med** 1989 Feb;31(2):200–1

Reproductive hazards of semiconductor industry [letter] Greenberg GN. **J Occup Med** 1989 Mar;31(3):280–1

A case study of stress and mass psychogenic illness in industrial workers. Hall EM, et al. **J Occup Med** 1989 Mar; 31(3):243–50 (18 ref.)

Relationship of cumulative trauma disorders of the upper extremity to degree of hand preference. Kucera JD, et al. **J Occup Med** 1989 Jan;31(1):17–22

On the potential for spurious associations in epidemiologic studies [letter] Loomis DP, et al. **J Occup Med** 1988 Oct; 30(10):834–5

Pulmonary alveolar proteinosis and cement dust: a case report. McCunney RJ, et al. **J Occup Med** 1989 Mar; 31(3):233–7

Health and occupational correlates of perceived occupational stress in symphony orchestra musicians. Middlestadt SE, et al. **J Occup Med** 1988 Sep;30(9):687–92

Interpretation and communication of the results of medical field investigations. Schulte PA, et al. **J Occup Med** 1989 Jul;31(7):589–94

Occupational allergic rhinitis reaction to psyllium. Schwartz HJ, et al. **J Occup Med** 1989 Jul;31(7):624–6

Primary torsion of the omentum in a jackhammer operator: another vibration-related injury [see comments] Shields PG, et al. **J Occup Med** 1988 Nov;30(11):892–4. **Comment in:** J Occup Med 1989 Jun;31(6):563

Clinical ecology in the workplace. Terr AI. **J Occup Med** 1989 Mar;31(3):257–61

Jackhammer usage and the omentum [letter; comment] Wasserman DE. **J Occup Med** 1989 Jun;31(6):563. **Comment on:** J Occup Med 1988 Nov;30(11):892–4

Back and neck problems in a teaching institution. Chan KK, et al. **J R Soc Health** 1988 Oct;108(5):182–4, 187

Diving: occupation or physiological experiment? [editorial] Cox RA. **J R Soc Med** 1989 Feb;82(2):63

Long-term sequelae of diving. Elliott DH. **J R Soc Med** 1989 Feb;82(2):79–80

Diving: occupation or physiological experiment? Török Z. **J R Soc Med** 1989 Feb;82(2):72–4 (11 ref.)

Induction of thoracic malignancy in inorganic dust pneumoconiosis. Scatarige JC, et al. **J Thorac Imaging** 1988 Oct;3(4):67–79 (72 ref.)

Somatic mutation in peripheral lymphocytes of former workers at the Okunojima poison gas factory. Yanagida J, et al. **Jpn J Cancer Res** 1988 Dec;79(12):1276–83

Occupational asthma in a chicory grower [letter] Nemery B, et al. **Lancet** 1989 Mar 25;1(8639):672–3

Chronic sinusitis and woodworking as risk factors for cancer of the maxillary sinus in northeast Japan. Shimizu H, et al. **Laryngoscope** 1989 Jan;99(1):58–61

Near-fatal septicaemia with Chromobacterium violaceum. Georghiou PR, et al. **Med J Aust** 1989 Jun 19;150(12):720–1

Chronic bronchitis in the iron and steel industry: prevalence study. Scotti PG, et al. **Med Lav** 1989 Mar–Apr; 80(2):123–31

Occupational and environmental lead poisoning associated with battery repair shops--Jamaica. **MMWR** 1989 Jul 14; 38(27):474, 479–81

Urinary and faecal mutagenicity in car mechanics exposed to diesel exhaust and in unexposed office workers. Willems MI, et al. **Mutat Res** 1989 Apr;222(4):375–91

When a house officer gets AIDS. Aoun H. **N Engl J Med** 1989 Sep 7;321(10):693–6

Human parvovirus B19 infection among hospital staff members after contact with infected patients [see comments] Bell LM, et al. **N Engl J Med** 1989 Aug 24; 321(8):485–91. **Comment in:** N Engl J Med 1989 Aug 24;321(8):536–8

Medical problems of musicians [see comments] Lockwood AH. **N Engl J Med** 1989 Jan 26;320(4):221–7 (71 ref.). **Comment in:** N Engl J Med 1989 Jul 6;321(1):51–3

Passive smoking and accident compensation [letter] Kent D. **N Z Med J** 1989 Apr 12;102(865):171

Is empathy unhealthy? [letter] Thomson A. **N Z Med J** 1989 Sep 13;102(875):479

Educational needs of physicians and public regarding asbestos exposure. **Natl Inst Health Consensus Dev Conf Summ** 1977–78;1:9–12 (0 ref.)

VFWS threatens your most valuable tools: employee hands. Erdreich J. **Occup Health Saf** 1989 Jun;:26–7

Your worksite lunch may be lethal if you're a construction welder. Rekus JF. **Occup Health Saf** 1988 Oct;57(11):30–4

Outside stress factors may underlie variations in workplace productivity [editorial] Strasser AL. **Occup Health Saf** 1989 Mar;58(3):20

Higher radiation exposure levels dictate limiting work-place hazard. Vincoli JW. **Occup Health Saf** 1989 Aug;58(8):8, 12–4

Contact injuries to the hand. Hankin FM. **Occup Med** 1989 Jul–Sep;4(3):473–84 (34 ref.)

Ergonomic considerations and job design in upper extremity disorders. Joseph BS. **Occup Med** 1989 Jul–Sep;4(3):547–57 (22 ref.)

Secretary back syndrome. Wehby JH. **Ohio Med** 1989 May; 85(5):396–7

Cherry pitter's thumb. Case report and review of the literature. Viegas SF, et al. **Orthop Rev** 1989 Mar; 18(3):336–8 (12 ref.)

The risk of skin cancer from occupational exposure to ultraviolet radiation in hospitals. Diffey BL. **Phys Med Biol** 1988 Oct;33(10):1187–93

Baking additives as new allergens in baker's asthma. Baur X, et al. **Respiration** 1988;54(1):70–2

Pathogenesis of tuberculosis: clinical and epidemiologic perspective. Stead WW. **Rev Infect Dis** 1989 Mar–Apr;11 Suppl 2:S366–8

Medical diagnostic X-ray irradiation and risk of leukemia in urban adult population of Poland. I. Design of the study. Gajewski AK, et al. **Rocz Panstw Zakl Hig** 1988; 39(4):249–57

Long-term effect of occupational dust exposure. Neuberger M, et al. **Sangyo Igaku** 1988 Sep;30(5):362–70

Work environment and cardiovascular diseases. A short review of the literature. Kristensen TS. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:120–33 (14 ref.)

Study of the effects of simultaneous exposure to noise and carbon disulfide on workers' hearing. Morata TC. **Scand Audiol** 1989;18(1):53–8

Occupational lung function impairment in never-smoking Danish welders. Lyngenbo O, et al. **Scand J Soc Med** 1989; 17(2):157–64

A review of the epidemiologic literature on magnetic fields and cancer. Ahlbom A. **Scand J Work Environ Health** 1988 Dec;14(6):337–43 (36 ref.)

Lung cancer, smoking, and employment in foundries. Becher H, et al. **Scand J Work Environ Health** 1989 Feb; 15(1):38–42

Respiratory symptoms and pathophysiological effects of occupational exposure to formaldehyde and wood dust. Holmström M, et al. **Scand J Work Environ Health** 1988 Oct;14(5):306–11

Combined effects of job strain and social isolation on cardiovascular disease morbidity and mortality in a random sample of the Swedish male working population. Johnson JV, et al. **Scand J Work Environ Health** 1989 Aug; 15(4):271–9

Peripheral nerve injury and Raynaud's syndrome following electric shock. Kinnunen E, et al. **Scand J Work Environ Health** 1988 Oct;14(5):332–3

Cardiovascular diseases and the work environment. A critical review of the epidemiologic literature on nonchemical factors. Kristensen TS. **Scand J Work Environ Health** 1989 Jun;15(3):165–79 (213 ref.)

Re: "Office Employment, Work with Video Display Terminals, and Course of Pregnancy: Reference Mothers' Experience from a Finnish Case-Referent Study of Birth Defects" by T Nurminen, K Kurppa [letter] Marcus M. **Scand J Work Environ Health** 1989 Apr;15(2):156–8

Malignant pleural mesothelioma among Swiss furniture workers. A new high-risk group. Minder CE, et al. **Scand J Work Environ Health** 1988 Aug;14(4):252–6

Respiratory health of brickworkers in Cape Town, South Africa. Background, aims and dust exposure determinations. Myers JE, et al. **Scand J Work Environ Health** 1989 Jun;15(3):180–7

Respiratory health of brickworkers in Cape Town, South Africa. Symptoms, signs and pulmonary function abnormalities. Myers JE, et al. **Scand J Work Environ Health** 1989 Jun;15(3):188–94

Impact of work-related and psychosocial factors on the development of ischemic heart disease among urban bus drivers in Denmark. Netterstrøm B, et al. **Scand J Work Environ Health** 1988 Aug;14(4):231–8

Self-reported symptoms in the neck and upper limbs of female assembly workers. Impact of length of employment, work pace, and selection. Ohlsson K, et al. **Scand J Work Environ Health** 1989 Feb;15(1):75–80

Oral conditions among workers in the Danish granite industry. Petersen PE, et al. **Scand J Work Environ Health** 1988 Oct;14(5):328–31

Radiographically detectable lumbar degenerative changes as risk indicators of back pain. A cross-sectional epidemiologic study of concrete reinforcement workers and house painters. Riihimäki H, et al. **Scand J Work Environ Health** 1989 Aug;15(4):280–5

Influence of personal characteristics, job-related factors and psychosocial factors on the sick building syndrome. Danish Indoor Climate Study Group. Skov P, et al. **Scand J Work Environ Health** 1989 Aug;15(4):286–95

Impulse noise and hand-arm vibration in relation to sensory neural hearing loss. Starck J, et al. **Scand J Work Environ Health** 1988 Aug;14(4):265–71

Neck and shoulder symptoms among men in machine operating, dynamic physical work and sedentary work. Tola S, et al. **Scand J Work Environ Health** 1988 Oct; 14(5):299–305

Occupational causes of low-back pain. Walsh K, et al. **Scand J Work Environ Health** 1989 Feb;15(1):54–9

Case report 495: Osteochondroma-like femoral lesions due to chronic professional stress in a Swiss cheese-maker. Ballmer PE, et al. **Skeletal Radiol** 1988;17(5):382–4

Major industrial risks and compensation of victims: the role for insurance. Smets H. **Soc Sci Med** 1988;27(10):1085–95 (21 ref.)

A prospective study of the role of cardiovascular risk factors and fitness in industrial back pain complaints. Battié MC, et al. **Spine** 1989 Feb;14(2):141–7

Low-back pain and occupation. A cross-sectional questionnaire study of men in machine operating, dynamic physical work, and sedentary work. Riihimäki H, et al. **Spine** 1989 Feb;14(2):204–9

The relationship of low-back pain, work history, work environment, and stress. A retrospective cross-sectional study of 38- to 64-year-old women. Svensson HO, et al. **Spine** 1989 May;14(5):517–22

Assessing the effect of psychiatric disorders on work function. Enelow AJ. **State Art Rev Occup Med** 1988 Oct–Dec;3(4):621–7 (1 ref.)

Cumulative injury in workers' compensation. LaDou J. **State Art Rev Occup Med** 1988 Oct–Dec;3(4):611–9 (10 ref.)

Workers' compensation and psychiatric disability. London DB, et al. **State Art Rev Occup Med** 1988 Oct–Dec; 3(4):595–609 (24 ref.)

Brucellosis and thrombocytopenic purpura: case report and review. Todd KH, et al. **Tex Med** 1989 Mar;85(3):37–8 (14 ref.)

Asthma induced by ivory dust: a new occupational cause. Armstrong RA, et al. **Thorax** 1988 Sep;43(9):737–8

Health assessment of environmental pollutants: proliferative and degenerative diseases. Stuart BO. **Toxicol Ind Health** 1988 Dec;4(4):461–7

Manifestations and treatment of 793 cases of decompression sickness in a compressed air tunneling project in Hong Kong. Lam TH, et al. **Undersea Biomed Res** 1988 Sep; 15(5):377–88

Analysis of some individual risk factors for decompression sickness in Hong Kong. Lam TH, et al. **Undersea Biomed Res** 1989 Jul;16(4):283–92

Alternobaric vertigo in professional divers. Molvaer OI, et al. **Undersea Biomed Res** 1988 Jul;15(4):271–82

Dysbaric osteonecrosis and its radiographic classification in China. Xue HL. **Undersea Biomed Res** 1988 Sep; 15(5):389–95

Salmonella infection in a vet [letter] Hopper D. **Vet Rec** 1988 Nov 26;123(22):583–4

Workers under stress. Self-reported health and well-being of Weirton steel workers before and after becoming an ESOP company. Levine A, et al. **W V Med J** 1988 Dec; 84(12):561–7

Pregnancy complications of physicians. Katz VL, et al. **West J Med** 1988 Dec;149(6):704–7 (41 ref.)

Physician stress [letter] Lowinger P. **West J Med** 1989 Jan; 150(1):92

Health hazards related to ergonomic work conditions. Kilbom A, et al. **Women Health** 1988;13(3–4):81–93

AIDS in the workplace [news] **World Health Forum** 1988; 9(4):625–6

[Occupational hazards in the wood manufacturing industry] Cui SG, et al. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Jan;23(1):27–8 (17 ref.) **(Chi)**

[Research on the dose-response relationship of hand transmitted vibration and its hygienic standard] Zhou DL, et al. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Jan; 23(1):23–6 (Eng. Abstr.) **(Chi)**

[Lead intoxication in shipscrapping employees in Taiwan] Chiang HC, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 May; 5(5):284–90 (Eng. Abstr.) **(Chi)**

[Occupational damage to the back--accident or occupational disease] Boss AH, et al. **Ugeskr Laeger** 1988 Oct 3; 150(40):2412–3 **(Dan)**

[Toxic effects of anesthetic waste gases] Christensen C. **Ugeskr Laeger** 1989 Feb 20;151(8):480–3 (Eng. Abstr.) **(Dan)**

[Toxic effects of waste gases and intravenous anesthesia (letter)] Hommelgaard P. **Ugeskr Laeger** 1989 Jul 10; 151(28):1827 **(Dan)**

[Allergic alveolitis (farmer's lung) caused by looking after a furnace fired with straw] Jespersen TW, et al. **Ugeskr Laeger** 1988 Oct 17;150(42):2530–1 (Eng. Abstr.) **(Dan)**

[Toxic effects of waste gases in anesthesia (letter)] Larsen K. **Ugeskr Laeger** 1989 Jul 10;151(28):1827–8 **(Dan)**

[Anterior dislocation of the shoulder caused by electric shock] Lohmann M, et al. **Ugeskr Laeger** 1989 Jan 9; 151(2):99–100 (Eng. Abstr.) **(Dan)**

[Leptospirosis in cattle; milker's fever in cattle farmers] Hartman EG, et al. **Tijdschr Diergeneeskd** 1989 Feb 1; 114(3):131–5 (0 ref.) (Eng. Abstr.) **(Dut)**

[Cold weather work] Hassi J, et al. **Duodecim** 1989; 105(5):481–92 (51 ref.) **(Fin)**

[Perspectives for an epidemiological study of hairy cell leukemia] Flandrin G, et al. **C R Acad Sci [III]** 1988; 307(3):105–7 (Eng. Abstr.) **(Fre)**

[The histopathological substrate of the empty fingers phenomenon in vibration disease] Trickovic K. **G Ital Med Lav** 1987 Jan;9(1):7–10 (Eng. Abstr.) **(Fre)**

[Stress phlebitis of the upper extremity. Medico-legal aspect] Hodara M. **Phlebologie** 1989 Apr–Jun;42(2):293–8 (Eng. Abstr.) **(Fre)**

[Occupational angioneurotic disorders provoked by vinyl monochloride and vibration] Letourneux M, et al. **Phlebologie** 1989 Apr–Jun;42(2):233–43 (Eng. Abstr.) **(Fre)**

[Bone infarcts and vibration] Penanhoat B. **Phlebologie** 1989 Apr–Jun;42(2):281–2 **(Fre)**

[The role of alpha-amylase in baker's asthma] Birnbaum J, et al. **Rev Mal Respir** 1988;5(5):519–21 (Eng. Abstr.) **(Fre)**

[A case of semi-delayed hypersensitivity to dry sausage dust] Dalphin JC, et al. **Rev Mal Respir** 1988;5(6):633–5 (Eng. Abstr.) **(Fre)**

[Identification of the precise etiologic agent in occupational asthma. Constraints and necessity (editorial)] Pauli G, et al. **Rev Mal Respir** 1988;5(5):415–6 **(Fre)**

[Occupational asthma in the food industry] Moneret-Vautrin DA, et al. **Rev Med Interne** 1988 Nov–Dec;9(5):495–500 (58 ref.) **(Fre)**

[Late occupational disease (letter)] Buronfosse D, et al. **Rev Pneumol Clin** 1988;44(4):217 **(Fre)**

[Ergonomic study of neuropsychic impairment in relation to health status in printing occupations] Cristescu M, et al. **Sante Publique (Bucur)** 1989 Apr–Jun;32(2):169–83 (Eng. Abstr.) **(Fre)**

[Professional risk of infection by the AIDS virus] Culand H. **Schweiz Monatsschr Zahnmed** 1989;99(1):127 **(Fre)**

[Adenocarcinoma of the paranasal sinuses: the situation in Switzerland and Geneva] Coquoz E, et al.

Soz Praventivmed 1989;34(1):38–41 (26 ref.) (Eng. Abstr.) (Fre)

[Skin cancer and occupational exposure] Durocher LP, et al. **Union Med Can** 1988 Nov–Dec;117(6):345, 349–50, 353, passim (24 ref.) (Fre)

[Coxarthrosis in dancers—an occupational disease?] Krause E, et al. **Beitr Orthop Traumatol** 1988 Oct;35(10):495–9 (21 ref.) (Eng. Abstr.) (Ger)

[Ergonomic aspects of visual conditions in microscope work] Krueger H, et al. **Biomed Tech (Berlin)** 1988 Sep; 33(9):196–202 (Eng. Abstr.) (Ger)

[Occupationally-induced skin tumors in East Germany. Increased risk of basalioma in furriers and hide processors?] Ziegler V, et al. **Dermatol Monatsschr** 1989;175(2):76–81 (Eng. Abstr.) (Ger)

[Otologic aspects of diving] Strutz J. **HNO** 1988 May; 36(5):198–205 (14 ref.) (Eng. Abstr.) (Ger)

[Exposure and disposition in the genesis of bronchial cancer] Nowak D, et al. **Pneumologie** 1989 Mar;43(3):135–46 (172 ref.) (Ger)

[Hidden inhalation and food allergens: legume proteins] Baur X, et al. **Prax Klin Pneumol** 1988 Sep;42(9):701–4 (Eng. Abstr.) (Ger)

[Bronchial asthma due to allergy to African maple] Weber N, et al. **Prax Klin Pneumol** 1988 Oct;42(10):759–61 (Eng. Abstr.) (Ger)

[Changes in the skeleton of the middle foot caused by professional classical dancing] Huwyler J. **Sportverletz Sportschaden** 1989 Mar;3(1):14–20 (Eng. Abstr.) (Ger)

[Radiation injuries] Hohenberg JK. **Strahlenschutz Forsch Prax** 1988;30:151–67 (Ger)

[Compensation practice of trade associations in relation to radiation-induced diseases: probability of causation] Renz K, et al. **Strahlenschutz Forsch Prax** 1988;30:137–49 (Ger)

[Risk of leukemia and cancer in persons occupationally exposed to radiation] Streffer C. **Strahlenschutz Forsch Prax** 1988;30:93–120 (18 ref.) (Ger)

[Tumors of the inner nose and paranasal sinuses due to asbestos exposure?] Deitmer T. **Strahlenther Onkol** 1989 Jun;165(6):444–6 (Eng. Abstr.) (Ger)

[Arguments against the recognition of arthroses of the knee joint following occupational stress as an occupational disease] Greinemann H. **Unfallchirurg** 1988 Aug; 91(8):374–80 (Eng. Abstr.) (Ger)

[Coronary risk factors at the work site. Identification, prevention, compensation] Kentner M. **Versicherungsmedizin** 1988 Nov 1;40(6):163–8 (31 ref.) (Eng. Abstr.) (Ger)

[Late industrial damage: closed access for obtaining compensation?] Woitowitz HJ. **Versicherungsmedizin** 1989 Jul 1;41(4):111–6 (Eng. Abstr.) (Ger)

[Status determination of group V occupational diseases: "Diseases caused by progressive mechanical stress on the locomotor system"] Höhndorf H, et al. **Z Arztl Fortbild (Jena)** 1988;82(21):1071–5 (Ger)

[Occupational medicine aspects of kidney diseases] Schimmelpfennig R, et al. **Z Arztl Fortbild (Jena)** 1988; 82(23):1195–200 (17 ref.) (Ger)

[Shift work and ischemic heart disease] Wagner U. **Z Arztl Fortbild (Jena)** 1989;83(5):229–33 (32 ref.) (Ger)

[Effect of the composition of dust and dust exposure on the sensitizing effect of poultry dust] Breternitz H. **Z Gesamte Hyg** 1988 Aug;34(8):483–5 (Eng. Abstr.) (Ger)

[The possible role of occupational factors in influencing the manifestation of idiopathic femur head necrosis] Knauf G, et al. **Z Gesamte Hyg** 1989 Jan;35(1):31–3 (Eng. Abstr.) (Ger)

[Assessment and evaluation of stresses—progress and trends in East Germany] Rublack K, et al. **Z Gesamte Hyg** 1988 May;34(5):287–91 (20 ref.) (Eng. Abstr.) (Ger)

[Factors influencing the health status of teachers] Vogel H, et al. **Z Gesamte Hyg** 1988 Nov;34(11):642–3 (Eng. Abstr.) (Ger)

[The effect of occupational stress on blood pressure of miners in ore mines] Zwingenberger W, et al. **Z Gesamte Hyg** 1989 May;35(5):269–71 (Eng. Abstr.) (Ger)

[Backache as an occupational disease?] Debrunner HU. **Z Unfallchir Versicherungsmed Berufskr** 1988;81(4):277–86 (Ger)

[Aspects of roentgen ray burden in endourologic surgery] Andersen C, et al. **Z Urol Nephrol** 1989 Jun;82(6):301–6 (Eng. Abstr.) (Ger)

[Asbestos-induced malignant tumors] Kühne W, et al. **Zentralbl Allg Pathol** 1988;134(8):703–12 (27 ref.) (Eng. Abstr.) (Ger)

[Effect of heavy metal ions on male fertility] Matthies J, et al. **Zentralbl Gynakol** 1989;111(3):155–66 (Eng. Abstr.) (Ger)

[Frequency of blood contamination of the dentist during conservative and prosthetic treatment] Bori Z, et al. **Fogorv Sz** 1989 Jan;82(1):19–22 (Eng. Abstr.) (Hun)

[Tumors of the lung attributable to occupational exposure] Merler E, et al. **Epidemiol Prev** 1988 Jun;10(35):4–6 (Ita)

[The proportion of tumors of the lung caused by occupational exposure: updating] Vineis P, et al. **Epidemiol Prev** 1988 Jun;10(35):7–10 (27 ref.) (Ita)

[Ocular symptoms and video display terminals: study of a group of video-terminal operators] Belisario A, et al. **G Ital Med Lav** 1988 Jan;10(1):39–42 (Eng. Abstr.) (Ita)

[Acute hepatonephritis in a subject occupationally exposed to chloroform] Belotti L, et al. **G Ital Med Lav** 1988 Mar; 10(2):73–5 (Eng. Abstr.) (Ita)

[Work posture and spinal changes in porphyry miners] Colombini D, et al. **Med Lav** 1988 May–Jun;79(3):223–33 (Eng. Abstr.) (Ita)

[Temporary myopia and subjective symptoms in video display terminal operators] Luberto F, et al. **Med Lav** 1989 Mar–Apr;80(2):155–63 (Eng. Abstr.) (Ita)

[Mesotheliomas among mechanics of the railways in Italy: a current problem] Maltoni C, et al. **Med Lav** 1989 Mar–Apr;80(2):103–10 (Eng. Abstr.) (Ita)

[Risk conditions caused by formaldehyde and phenols at a plywood factory] Mariotti F, et al. **Med Lav** 1988 Nov–Dec;79(6):468–73 (Eng. Abstr.) (Ita)

[Work posture and changes in the spine of coffin-carriers] Occhipinti E, et al. **Med Lav** 1988 Nov–Dec;79(6):452–9 (Eng. Abstr.) (Ita)

[Peripheral neuropathy caused by incongruous posture in shoe manufacture workers] Perbellini L, et al. **Med Lav** 1989 Mar–Apr;80(2):140–7 (Eng. Abstr.) (Ita)

[Depressive states in workers using computers] Mino Y, et al. **Sangyo Igaku** 1989 Mar;31(2):68–9 (Jpn)

[Mechanism of development of so-called "curvature of the fingers" (Heberden's nodes)] Tsujita Y, et al. **Sangyo Igaku** 1988 Nov;30(6):486–7 (Jpn)

[Deformity of the fingers among women workers at a papermaking mill] Tsujita Y, et al. **Sangyo Igaku** 1989 Mar; 31(2):70–6 (Eng. Abstr.) (Jpn)

[A case of rapidly developed myopia among VDT-workers] Yoshikawa H, et al. **Sangyo Igaku** 1989 Jan;31(1):24–5 (Jpn)

[Occupational HIV infection—a discrepancy between knowledge and measures?] Brattebø G, et al. **Lakartidningen** 1988 Nov 30;85(48):4201 (Nor)

[Use of occupational anamnesis at a lung department] Bakke P, et al. **Tidsskr Nor Laegeforen** 1988 Oct 30; 108(30):2729–30 (Eng. Abstr.) (Nor)

[Health damage caused by asbestos and other mineral fibers] Skaug V, et al. **Tidsskr Nor Laegeforen** 1989 Jun 10; 109(16):1786–9 (Eng. Abstr.) (Nor)

[Effects of petroleum derivatives and psychological stress on eye changes in prospective studies] Krawczykowa Z, et al. **Med Pr** 1988;39(3):212–6 (Eng. Abstr.) (Pol)

[Coexistence of cervico-brachial neuralgia and backache among textile industry workers] Szymańska R. **Med Pr** 1988;39(2):125–9 (Eng. Abstr.) (Pol)

[Presence of potentially pathogenic bacteria and fungi in the cooling-lubricating emulsion used in the aluminum sheet rolling process] Włodarczak K, et al. **Med Pr** 1989; 40(1):24–7 (Eng. Abstr.) (Pol)

[2 cases of limited cutaneo-muscular atrophy of occupational origin] Kieć-Swierczyńska M, et al. **Przegl Dermatol** 1986 Jul–Aug;73(4):290–2 (Eng. Abstr.) (Pol)

[Mental and emotional stress in railroad locomotive drivers in one- and two-member crews] Kiczka K, et al. **Rocz Akad Med Bialymstoku** 1984–85;29–30:261–74 (Eng. Abstr.) (Pol)

[Selected psychosomatic and environmental aspects in patients with irritable bowel syndrome] Jerzemowski J. **Wiad Lek** 1988 Jun 15;41(12):770–5 (Eng. Abstr.) (Pol)

[Socioeconomic conditions of pregnant women and the incidence of premature labor] Krasomski G, et al. **Wiad Lek** 1988 Jun 1;41(11):708–11 (Eng. Abstr.) (Pol)

[Cutaneous leishmaniasis among the cases of the Institute of Infectious and Parasitic Diseases, Medical Academy, in Warsaw] Dziubek Z, et al. **Wiad Parazytol** 1988; 34(4–6):663–4 (Pol)

[Our experiences regarding imported malaria] Nahorski W, et al. **Wiad Parazytol** 1988;34(4–6):655–62 (Pol)

[The impact of occupational effects on workers' health. I. Morbidity] Mendes R. **Rev Saude Publica** 1988 Aug; 22(4):311–26 (148 ref.) (Eng. Abstr.) (Por)

[Osteoarticular changes in vibration disease] Ablamunets Kla, et al. **Gig Sanit** 1988 Oct;(10):24–6 (Eng. Abstr.) (Rus)

[Questionnaire survey in the study of working conditions of machine operators in the agriculture] Bolsunova MIa. **Gig Sanit** 1989 Feb;(2):11–5 (Eng. Abstr.) (Rus)

[Hygienic evaluation of working conditions of workers engaged in the production of decorative enamel] Bondar' NA, et al. **Gig Sanit** 1989 Feb;(2):74–5 (Rus)

[Study of bacterial and mycotic contamination of objects in the surface technological complex of coal mines under construction] Ivanchenko VN, et al. **Gig Sanit** 1988 Sep; (9):77–8 (Rus)

[Status of lipid metabolism in the administrative personnel of the ministries and departments] Pavlovskaia NA, et al. **Gig Sanit** 1988 Nov;(11):37–40 (Eng. Abstr.) (Rus)

[Characteristics of local overexertion of the hands] Vasil'eva TN, et al. **Gig Sanit** 1988 Sep;(9):85–6 (Rus)

[Tunnel syndromes in vibration disease after exposure to local vibration] Balan GM, et al. **Gig Tr Prof Zabol** 1988 Dec; (12):15–8 (Eng. Abstr.) (Rus)

[Reaction of the pituitary gland-adrenal cortex system of miners to vibration and noise] ChatskiiGIa, et al. **Gig Tr Prof Zabol** 1988 Dec;(12):52–3 (Rus)

[The role of the occupational environment in the development of diseases of the knee joints in miners working in the mining of thin coal layers] Deinega VG, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):28–30 (Eng. Abstr.) (Rus)

[Acute and chronic changes in the respiratory system of workers exposed to tobacco dust] Dzhoze S, et al. **Gig Tr Prof Zabol** 1988 Aug;(8):24–8 (Rus)

[Aerogenic microflora in animal husbandry and poultry breeding areas, criteria of its harmful effect and hygienic regulation] Erman MI, et al. **Gig Tr Prof Zabol** 1989; (4):19–22 (Eng. Abstr.) (Rus)

[Prevalence of chronic background and precancerous diseases in the manufacture of graphite articles] Gladkova EV, et al. **Gig Tr Prof Zabol** 1988 Aug;(8):21–4 (Eng. Abstr.) (Rus)

[Effect of working conditions and various social and living factors of the incidence of nervous system diseases with temporary disability among farmers] Kuptsov VV. **Gig Tr Prof Zabol** 1989;(3):22–5 (Eng. Abstr.) (Rus)

[The questions of the combined action on the body of industrial chemical compounds and ionizing radiations] Kustov VV. **Gig Tr Prof Zabol** 1989;(2):35–9 (43 ref.) (Eng. Abstr.) (Rus)

[Functional status of the visual analyzer in operators working with displays] Liman AD, et al. **Gig Tr Prof Zabol** 1989; (6):30–3 (Eng. Abstr.) (Rus)

[Occupational hazards and the digestive system (review of the literature)] Liubchenko PN. **Gig Tr Prof Zabol** 1988 Nov;(11):36–41 (99 ref.) (Rus)

[Status of visual function in persons working at metal-rolling hot shops of a metallurgic combine] Mambetov EK, et al. **Gig Tr Prof Zabol** 1989;(4):55–6 (Rus)

[Working conditions of female workers in the system of "Soiuzgostsirk" (the Soviet State Circus)] Mekhova MM, et al. **Gig Tr Prof Zabol** 1989;(5):21–4 (Eng. Abstr.) (Rus)

[Hygienic evaluation of the combined effects of ammonia and low temperatures on chemical industry workers] Mikhailuts AP, et al. **Gig Tr Prof Zabol** 1989;(4):31–4 (Eng. Abstr.) (Rus)

[Hygienic evaluation of the work capacity of workers retiring from chemical nitrogen production plants] Mikhailuts AP, et al. **Gig Tr Prof Zabol** 1989;(3):4–7 (Eng. Abstr.) (Rus)

[Methodologic approaches to the problem of late sequelae of exposure to occupational factors] Monaenkova AM, et al. **Gig Tr Prof Zabol** 1988 Dec;(12):1–5 (Eng. Abstr.) (Rus)

[Carcinogenic activity of asbestos cement dust] Pylev LN, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):55–7 (Rus)

[Hygienic characteristics and ways of improving working conditions at a rug-making factory] Rumiantsev GI, et al. **Gig Tr Prof Zabol** 1989;(4):27–30 (Eng. Abstr.) (Rus)

[Effect of microclimate heating and occupational noise and their combination with lead aerosols on the incidence of cardiovascular diseases] Shcherbak EA. **Gig Tr Prof Zabol** 1988 Nov;(11):25–7 (Eng. Abstr.) (Rus)

[Evaluation of impulse noise at an industrial blacksmith's shop] Soletski L. **Gig Tr Prof Zabol** 1988 Dec;(12):22–4 (Eng. Abstr.) (Rus)

[Relation of intensive occupational noise and the incidence of cardiovascular pathology in organized women's collectives of Moscow and Havana (data of simultaneous epidemiologic studies] Vermel' AE, et al. **Gig Tr Prof Zabol** 1988 Dec;(12):18–22 (Eng. Abstr.) (Rus)

[Epidemiologic studies of the effect of microwaves (neurophysiologic, hematologic and ophthalmologic aspects)] Davydov BI, et al. **Kosm Biol Aviakosm Med** 1989 Jan–Feb;23(1):4–11 (35 ref.) (Eng. Abstr.) (Rus)

[Reactions of the auditory, vestibular and visual analyzers in man to intermittent noise] Svistunov NT, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):86–8 (Rus)

[Diseases of the locomotor system in workers in the timber-processing industry] Druz' RA, et al. **Ortop Travmatol Protez** 1989 Feb;(2):61–4 (Rus)

[Prevalence of arterial hypertension among shift schedule workers of the oil and gas complexes of the Western Siberia] Levitskiĭ EF, et al. **Sov Med** 1988;(10):79–80 (Rus)

[Varicose veins of the lower extremities in construction workers] Riabtsev VG, et al. **Sov Med** 1989;(2):66–8 (Rus)

[Urgent problems of occupational pathology] Izmerov NF, et al. **Ter Arkh** 1988;60(9):13–7 (Rus)

[Humidifier fever] Lebedev SV, et al. **Ter Arkh** 1988; 60(11):90–3 (Eng. Abstr.) (Rus)

[Clinical aspects of occupational pathology caused by noise and vibration] Tarasova LA, et al. **Ter Arkh** 1988; 60(9):84–7 (15 ref.) (Eng. Abstr.) (Rus)

[Effects of display-associated work on the visual organ] Lantsburg ME, et al. **Vestn Oftalmol** 1988 May–Jun; 104(3):69–73 (98 ref.) (Rus)

[Clinical picture and early diagnosis of lesions of the upper respiratory tract in workers exposed to industrial aerosols] Akhmedli TA, et al. **Vestn Otorinolaringol** 1988 Sep–Oct; (5):31–4 (Eng. Abstr.) (Rus)

[Characteristics of the development of neurosensory hearing loss caused by noise and vibration] Pankova VB, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):63–7 (Eng. Abstr.) (Rus)

[Occupational origin of upper respiratory tract diseases in workers in dusty industries] Pankova VB, et al.

Vestn Otorinolaringol 1988 Nov-Dec;(6):20-3 (Eng. Abstr.) **(Rus)**

[Precancerous conditions of the larynx in workers exposed to dust and their prevention] Podol'skaia EV. **Vestn Otorinolaringol** 1989 Mar-Apr;(2):67-9 (Eng. Abstr.) **(Rus)**

[Diagnosis and treatment of noise-induced vestibular disorders] Shidlovskaia TV, et al. **Vestn Otorinolaringol** 1988 Jul-Aug;(4):28-31 (Eng. Abstr.) **(Rus)**

[Causes of the deterioration in the general state of health of pilots in flight (1)] Istrebov VE, et al. **Voen Med Zh** 1989 Apr;(4):53-5 (16 ref.) **(Rus)**

[Cancer risk factors and cancer in workers in the rubber industry] Korosteleva TA, et al. **Vopr Onkol** 1989; 35(5):536-44 (74 ref.) **(Rus)**

[The role of lipid peroxidation in the pathogenesis of ischemic heart disease in miners in deep coal mines] Ursakiĭ TN, et al. **Vrach Delo** 1989 Apr;(4):98-100 **(Rus)**

[Respiratory and immunologic changes in tea workers] Zulkin E, et al. **Arh Hig Rada Toksikol** 1988 Sep; 39(3):297-305 (Eng. Abstr.) **(Scr)**

["Occupational" infection caused by the human immunodeficiency virus in 6 members of a single family] Marín-López A, et al. **Rev Invest Clin** 1989 Apr-Jun; 41(2):103-5 (Eng. Abstr.) **(Spa)**

[Psychosocial factors concerning the occupational environment are often causes of low back pain] Axelsson JA, et al. **Lakartidningen** 1988 Dec 14;85(50):4431-4 **(Swe)**

[Health personnel in a health care district. 41 cases of contact with HIV positive blood] Jörbeck H, et al. **Lakartidningen** 1988 Sep 21;85(38):3044-5 **(Swe)**

[Health personnel and HIV infection. 14 cases were reported in the world. Injuries caused by injection needles are the most frequent cause] Jörbeck H, et al. **Lakartidningen** 1988 Sep 21;85(38):3041-2 (20 ref.) **(Swe)**

[Can the occupational environment at community care facilities be accepted? Load injuries among the nursing staff caused by lifting] Nord K, et al. **Lakartidningen** 1988 Dec 14;85(50):4435-7 **(Swe)**

GENETICS

Occupational history and involvement of chromosomes 5 and 7 in acute nonlymphocytic leukemia. Narod SA, et al. **Cancer Genet Cytogenet** 1989 Apr;38(2):261-9 (37 ref.)

Chromosome aberrations and sister chromatid exchanges in workers of the blast furnace division of a metallurgical plant. Rudek Z. **Folia Biol (Krakow)** 1988;36(3-4):203-11

Urinary mutagenicity tests in lead-exposed workers. Apostoli P, et al. **Mutat Res** 1989 Mar;222(3):245-51

Sister-chromatid exchanges in lymphocytes of workers exposed to trichloroethylene. Nagaya T, et al. **Mutat Res** 1989 Mar;222(3):279-82

Detection of 6-thioguanine resistance in human peripheral blood lymphocytes (PBL) of industrial workers and lung cancer patients. Tompa A, et al. **Mutat Res** 1989 Feb; 210(2):345-51

[Use of complex assessment of dermatoglyphic signs for prediction of the risk of development of occupational diseases] Kochneva MIu, et al. **Tsitol Genet** 1988 Sep-Oct; 22(5):55-9 (Eng. Abstr.) **(Rus)**

HISTORY

Were the hatters of New Jersey "mad"? Wedeen RP. **Am J Ind Med** 1989;16(2):225-33

The pain of 'RSI'. A historical perspective. Quintner JL. **Aust Fam Physician** 1989 Aug;18(8):1003-6, 1008-9 (26 ref.)

Occupational health aspects of the arsenic extractive industry in Britain (1868-1925). Harper M. **Br J Ind Med** 1988 Sep; 45(9):602-5

Britannia rules the seas: the health of seamen, Edinburgh, 1791-1800. Risse GB. **J Hist Med Allied Sci** 1988 Oct; 43(4):426-46

Urbanization, occupation and disease in the United States, 1870-1920: the case of New York City. Rosen G. **J Hist Med Allied Sci** 1988 Oct;43(4):391-425

"Hope in another direction": compensation for work-related illness among women, 1900-1960—Part II. Bale A. **Women Health** 1989;15(2):99-115

IMMUNOLOGY

Formaldehyde exposure reports [letter] Beavers JD. **Am J Ind Med** 1989;16(3):331-6

Formaldehyde case reports [letter] Greenberg GN, et al. **Am J Ind Med** 1989;16(3):329-30, 333-6

Predisposing factors in laboratory animal allergy: a study of atopy and environmental factors. Sjöstedt L, et al. **Am J Ind Med** 1989;16(2):199-208

Building-related illness and antibodies to albumin conjugates of formaldehyde, toluene diisocyanate, and trimellitic anhydride. Thrasher JD, et al. **Am J Ind Med** 1989; 15(2):187-95

Antibodies and immune profiles of individuals occupationally exposed to formaldehyde: six case reports. Thrasher JD, et al. **Am J Ind Med** 1988;14(4):479-88

Immunological abnormalities 17 years after accidental exposure to 2,3,7,8-tetrachlorodibenzo-p-dioxin. Jennings AM, et al. **Br J Ind Med** 1988 Oct;45(10):701-4

The existence of specific antibodies to cobalt in hard metal asthma. Shirakawa T, et al. **Clin Allergy** 1988 Sep; 18(5):451-60

Occupational allergy in an entomological research centre. II. Identification of IgE-binding proteins from developmental stages of the blowfly Lucilia cuprina and other species of adult flies. Baldo BA, et al. **Clin Exp Allergy** 1989 Jul;19(4):411-7

The relationship between exposure to rats and antibody production in man: IgG antibody levels to rat urinary protein. Botham JW, et al. **Clin Exp Allergy** 1989 Jul; 19(4):437-41

Indomethacin augments lymphokine-activated killer cell generation by patients with malignant mesothelioma. Manning LS, et al. **Clin Immunol Immunopathol** 1989 Oct; 53(1):68-77

Serum antibodies to Pseudomonas pseudoalcaligenes in metal workers exposed to infected metal-working fluids. Mattsby-Baltzer I, et al. **Int Arch Allergy Appl Immunol** 1989;88(3):304-11

Sensitization to green coffee bean (GCB) and castor bean (CB) allergens among dock workers. De Zotti R, et al. **Int Arch Occup Environ Health** 1988;61(1-2):7-12

Cryptococcal antigen survey among racing pigeon workers and patients with cryptococcosis, pythiosis, histoplasmosis and penicilliosis. Tanphaichitra D, et al. **Int J Clin Pharmacol Res** 1988;8(6):433-9

Allergic respiratory disease in grain workers: the role of storage mites. Blainey AD, et al. **J Allergy Clin Immunol** 1989 Sep;84(3):296-303

Prospective immunologic and clinical study of a population exposed to hexamethylene diisocyanate. Grammer LC, et al. **J Allergy Clin Immunol** 1988 Oct;82(4):627-33

Immunologic specificity of isocyanate-induced IgE antibodies in serum from 10 sensitized workers. Wass U, et al. **J Allergy Clin Immunol** 1989 Jan;83(1):126-35

A health hazard evaluation of pheasant handlers. Goldstein MD, et al. **J Occup Med** 1989 May;31(5):473-6

Baker's asthma: report of an unusual case. Walker CL, et al. **J Occup Med** 1989 May;31(5):439-42

Allergy, occupation and the lung. Newman Taylor A. **Postgrad Med J** 1988;64 Suppl 4:41-7 (34 ref.)

[Correlations of HLA antigens with the level of specific antibodies in patients with occupational allergy] Dobzhanskiĭ IS, et al. **Gig Tr Prof Zabol** 1989;(5):48-9 **(Rus)**

[Significance of immunocytochemical indices of body reactivity of workers engaged in the production of carbonic plastics on the base of formaldehyde-containing and epoxide resins] Dueva LA, et al. **Gig Tr Prof Zabol** 1989; (6):14-7 (Eng. Abstr.) **(Rus)**

[Changes in lysozyme activity as a factor of natural immunity] Paran'ko NM, et al. **Gig Tr Prof Zabol** 1989;(6):53-5 **(Rus)**

[Clinical and immunological comparisons of different patterns of croupous and focal pneumonia in miners in deep coal mines of the Donetsk region] Gniliskaia VB, et al. **Ter Arkh** 1988;60(7):61-3 **(Rus)**

METABOLISM

Levels of polychlorinated dibenzo-p-dioxins and dibenzofurans in workers exposed to 2,3,7,8-tetrachlorodibenzo-p-dioxin. Patterson DG Jr, et al. **Am J Ind Med** 1989;16(2):135-46

Theophylline disposition in foundry workers exposed to coke oven effluent. Haughey DB, et al. **Biopharm Drug Dispos** 1988 Jul-Aug;9(4):405-9

A simple field test for assessing salt balance in heat-stressed miners. Cross RB, et al. **J Occup Med** 1989 Aug; 31(8):668-73

Persistent mercury in nerve cells 16 years after metallic mercury poisoning. Hargreaves RJ, et al. **Neuropathol Appl Neurobiol** 1988 Nov-Dec;14(6):443-52

MICROBIOLOGY

Fungal and actinomycete spores as pollutants of the workplace and occupational allergens. Lacey J, et al. **Ann Occup Hyg** 1988;32(4):515-33 (167 ref.)

Response of workers to airborne microorganisms at a paper manufacturing plant. Rosas I, et al. **Arch Invest Med (Mex)** 1988 Jan-Mar;19(1):23-31

Warts in fish handlers. Rüdlinger R, et al. **Br J Dermatol** 1989 Mar;120(3):375-81

Antibodies to arboviruses in an Alaskan population at occupational risk of infection. Stansfield SK, et al. **Can J Microbiol** 1988 Nov;34(11):1213-6

Fatal Streptococcus suis septicemia in an abattoir worker. Büngener W, et al. **Eur J Clin Microbiol Infect Dis** 1989 Apr;8(4):306-8

Foot infections due to Hendersonula toruloidea and Scytalidium hyalinum in coal miners. Gugnani HC, et al. **J Med Vet Mycol** 1989;27(3):167-79

Prevalence of hepatitis B markers among hospital workers in Senegal. Romieu I, et al. **J Med Virol** 1989 Apr; 27(4):282-7

Salmonella infection in a vet [letter] **Vet Rec** 1988 Nov 12; 123(20):528

Salmonella infection in a vet [letter] Collyer JH. **Vet Rec** 1988 Oct 29;123(18):476

[Type 2 Streptococcus suis (R-Streptococci) as pathogens of occupational diseases. Report of a case and a review of the literature] Köhler W, et al. **Z Gesamte Inn Med** 1989 Mar 1;44(5):144-8 (54 ref.) (Eng. Abstr.) **(Ger)**

[Fungal spores as risk factors at confectionery work places] Cosentino S, et al. **Nuovi Ann Ig Microbiol** 1988 Jan-Feb; 39(1):33-41 (Eng. Abstr.) **(Ita)**

MORTALITY

Emerging public health issues in Alaska: occupational and environmental health. Weiss LD, et al. **Alaska Med** 1989 May-Jun;31(3):97-102 (24 ref.)

Re: "Sample Size Estimation in Occupational Mortality Studies With Use of Confidence Interval Theory" [letter] Garner JB. **Am J Epidemiol** 1989 May;129(5):1091-3

Re: "Mortality of lead Smelter Workers [letter] Greenberg SR. **Am J Epidemiol** 1989 May;129(5):1086

Re: "Radiation doses and cause-specific mortality among workers at a nuclear materials fabrication plant" [letter; comment] Mole RH. **Am J Epidemiol** 1989 Mar; 129(3):639-40. **Comment on:** Am J Epidemiol 1988 Feb;127(2):255-66

Cancer mortality among a group of fluorspar miners exposed to radon progeny. Morrison HI, et al. **Am J Epidemiol** 1988 Dec;128(6):1266-75

Minnesota Highway Maintenance Worker Study: cancer mortality. Bender AP, et al. **Am J Ind Med** 1989; 15(5):545-56

Diesel exhaust exposure and mortality among males in the American Cancer Society prospective study. Boffetta P, et al. **Am J Ind Med** 1988;14(4):403-15

Mortality comparisons of chemical workers hired before, during, and after World War II (1941-1945). Bond GG, et al. **Am J Ind Med** 1989;15(3):335-42

Mortality among employees of an Ontario factory that manufactured construction materials using chrysotile asbestos and coal tar pitch. Finkelstein MM. **Am J Ind Med** 1989;16(3):281-7

Mortality among workers at a municipal waste incinerator. Gustavsson P. **Am J Ind Med** 1989;15(3):245-53

Occupational cancer mortality in Illinois white and black males, 1979-1984, for seven cancer sites. Mallin K, et al. **Am J Ind Med** 1989;15(6):699-717 (97 ref.)

Using multiple cause of death coding in occupational mortality studies. Milham S Jr. **Am J Ind Med** 1988; 14(3):341-4

Minnesota highway maintenance worker cohort mortality study: methods and noncancer mortality. Parker DL, et al. **Am J Ind Med** 1989;15(5):531-43

Comparison of death certificate occupation and industry data with lifetime occupational histories obtained by interview: variations in the accuracy of death certificate entries. Schade WJ, et al. **Am J Ind Med** 1988;14(2):121-36

Mortality odds ratio, proportionate mortality ratio, and healthy worker effect. Stewart W, et al. **Am J Ind Med** 1988;14(3):345-53

Primary liver cancer death and occupation in Texas. Suarez L, et al. **Am J Ind Med** 1989;15(2):167-75

A cohort mortality study of employees exposed to chlorinated chemicals. Wong O. **Am J Ind Med** 1988; 14(4):417-31

A study of the mortality patterns of taxi drivers in Singapore. Koh D, et al. **Ann Acad Med Singapore** 1988 Oct; 17(4):579-82

Mortality among forest and soil conservationists. Alavanja MC, et al. **Arch Environ Health** 1989 Mar-Apr;44(2):94-101

Mortality of employees of the Atomic Weapons Establishment, 1951-82. Beral V, et al. **BMJ** 1988 Sep 24; 297(6651):757-70

Lung cancer in the meat industry. Coggon D, et al. **Br J Ind Med** 1989 Mar;46(3):188-91

Cancer mortality in relation to measures of occupational exposure to crocidolite at Wittenoom Gorge in Western Australia. de Klerk NH, et al. **Br J Ind Med** 1989 Aug; 46(8):529-36

Cancers of the respiratory tract in mustard gas workers. Easton DF, et al. **Br J Ind Med** 1988 Oct;45(10):652-9

Further results from a census based mortality study of fertiliser manufacturers. Fraser P, et al. **Br J Ind Med** 1989 Jan;46(1):38-42

Cancer mortality in the asphalt industry: a ten year follow up of an occupational cohort. Hansen ES. **Br J Ind Med** 1989 Aug;46(8):582-5

A mortality study of workers manufacturing friction materials: 1941-86. Newhouse ML, et al. **Br J Ind Med** 1989 Mar;46(3):176-9

Respiratory disease mortality patterns among South African iron moulders. Sitas F, et al. **Br J Ind Med** 1989 May; 46(5):310-5

Cancer mortality in a cohort of United Kingdom steel foundry workers: 1946-85. Sorahan T, et al. **Br J Ind Med** 1989 Feb;46(2):74-81

Mortality in the British rubber industry 1946-85. Sorahan T, et al. **Br J Ind Med** 1989 Jan;46(1):1-10

Deaths from asphyxiation and poisoning at work in the United States 1984-6. Suruda A, et al. **Br J Ind Med** 1989 Aug;46(8):541-6

Mortality from asthma and chronic obstructive pulmonary disease among workers in a soft paper mill: a case-referent study. Thorén K, et al. **Br J Ind Med** 1989 Mar;46(3):192-5

Smoking, occupational exposure to rubber, and lung cancer. Zhang ZF, et al. **Br J Ind Med** 1989 Jan;46(1):12-5

Cancer morbidity and mortality in phosphate workers. Block G, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7298-303

A computer program for analyses of vital statistics-based occupational mortality data. Singleton JA, et al. **Comput Biomed Res** 1989 Oct;22(5):488-96

Deaths from chronic renal disease in U.S. battery and lead production workers. Cooper WC. **Environ Health Perspect** 1988 Jun;78:61–3

Lead and hypertension in a mortality study of lead smelter workers. Selevan SG, et al. **Environ Health Perspect** 1988 Jun;78:65–6

A retrospective cohort mortality study on workers of two thermoelectric power plants: fourteen-year follow-up results. Petrelli G, et al. **Eur J Epidemiol** 1989 Mar; 5(1):87–9

Mortality of workers at the Hanford site: 1945–1981. Gilbert ES, et al. **Health Phys** 1989 Jan;56(1):11–25

Mortality study of cancer risk among oil refinery workers. Bertazzi PA, et al. **Int Arch Occup Environ Health** 1989; 61(4):261–70

Mortality and cancer morbidity in workers exposed to sulphur dioxide in a sulphuric acid plant. Englander V, et al. **Int Arch Occup Environ Health** 1988;61(3):157–62

Mortality in a historical cohort of bus drivers. Paradis G, et al. **Int J Epidemiol** 1989 Jun;18(2):397–402

Multistage modelling of lung cancer mortality in asbestos textile workers. Pearce N. **Int J Epidemiol** 1988 Dec; 17(4):747–52

Mortality patterns among men exposed to methyl methacrylate. Collins JJ, et al. **J Occup Med** 1989 Jan; 31(1):41–6

Mortality patterns among employees exposed to acrylonitrile. Collins JJ, et al. **J Occup Med** 1989 Apr;31(4):368–71

Mortality patterns among workers exposed to acrylamide. Collins JJ, et al. **J Occup Med** 1989 Jul;31(7):614–7

Update to vinyl chloride mortality study. Dahar WS, et al. **J Occup Med** 1988 Aug;30(8):648–9

A follow-up study of workers at a dye and resin manufacturing plant. Delzell E, et al. **J Occup Med** 1989 Mar;31(3):273–8

Ischemic heart disease and acute myocardial infarction mortality among police officers. Dubrow R, et al. **J Occup Med** 1988 Aug;30(8):650–4

Mortality among nonwhite men in the meat industry. Johnson ES. **J Occup Med** 1989 Mar;31(3):270–2

Alcohol, other drugs, and fatal work-related injuries. Lewis RJ, et al. **J Occup Med** 1989 Jan;31(1):23–8

Mortality in the US rayon industry. MacMahon B, et al. **J Occup Med** 1988 Sep;30(9):698–705

A prospective study of mortality and morbidity among carpenters in the Honolulu Heart Program Cohort. Miller FD, et al. **J Occup Med** 1988 Nov;30(11):879–82

Mortality experience of a cohort of Louisiana chemical workers. Olsen GW, et al. **J Occup Med** 1989 Jan; 31(1):32–4

Mortality among men employed between 1943 and 1947 at a uranium-processing plant. Polednak AP, et al. **J Occup Med** 1981 Mar;23(3):169–78

Mortality among bearing plant workers exposed to metalworking fluids and abrasives. Silverstein M, et al. **J Occup Med** 1988 Sep;30(9):706–14

Patterns of mortality in pulp and paper workers. Solet D, et al. **J Occup Med** 1989 Jul;31(7):627–30

Counting recognized occupational deaths in the United States. Suruda A, et al. **J Occup Med** 1988 Nov; 30(11):868–72

Locations of fatal work injuries in the United States: 1980 to 1985. Trent RB. **J Occup Med** 1989 Aug;31(8):674–6

Cohort and case-control analyses of workers exposed to vinyl chloride: an update. Wu WA, et al. **J Occup Med** 1989 Jun;31(6):518–23

Occupational cancer epidemiology in the People's Republic of China. Wu WA. **J Occup Med** 1988 Dec;30(12):968–74 (18 ref.)

Continuing high lung cancer mortality among ex-amosite asbestos factory workers and a pilot study of individual anti-smoking advice. Gardner MJ, et al. **J Soc Occup Med** 1988 Autumn;38(3):69–72

Occupations, deaths, and coroners' inquests [letter] Slater D. **Lancet** 1989 Apr 8;1(8641):789

Occupations, deaths, and coroners' inquiries [letter] Taylor JH. **Lancet** 1989 Mar 25;1(8639):677

Asbestos inhalation and cigarette smoking make a lethal combination. Kronenberg RS. **Occup Health Saf** 1989 Mar; 58(3):50–6, 68

Radiation risk of Japanese and Chinese low dose-repeatedly irradiated population. Aoyama T. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:432–42

Cause specific mortality among workers exposed to welding fumes and gases: a historical prospective study. Merlo F, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:302–15

Mortality among pyrite miners with low-level exposure to radon daughters. Battista G, et al. **Scand J Work Environ Health** 1988 Oct;14(5):280–5

Mortality of auto mechanics. A ten-year follow-up. Hansen ES. **Scand J Work Environ Health** 1989 Feb;15(1):43–6

Mortality of cadmium-exposed workers. A five-year update. Kazantzis G, et al. **Scand J Work Environ Health** 1988 Aug;14(4):220–3

Occupation, marriage and disease-specific mortality concordance. Fletcher B. **Soc Sci Med** 1988;27(6):615–22

Proceedings of the Workshop on Needs and Resources for Occupational Mortality Data. January 21–22, 1987. **Vital Health Stat** [4] 1988 Aug;(26):1–63

Epidemiology of work-related diseases and accidents. Tenth report of the Joint ILO/WHO Committee on Occupational Health. **WHO Tech Rep Ser** 1989;777:1–71

Lung cancer risks of underground miners: cohort and case-control studies. Archer VE. **Yale J Biol Med** 1988 May-Jun;61(3):183–93 (36 ref.)

Models for the analysis of radon-exposed populations. Lubin JH. **Yale J Biol Med** 1988 May-Jun;61(3):195–214 (58 ref.)

[Assessment of the reasons for disability in workers using a model of work potential] Scholz RD, et al. **Z Gesamte Hyg** 1988 Oct;34(10):574–5 (Eng. Abstr.) **(Ger)**

[Tumor mortality in a cohort of glass industry workers] Cordioli G, et al. **Epidemiol Prev** 1987 Mar;9(30):16–8 (Eng. Abstr.) **(Ita)**

[Assessment of causes of death in follow-up studies: comparison of procedures that can be used in Italy] Lagorio S, et al. **Epidemiol Prev** 1987 Jun;9(31):57–61 (Eng. Abstr.) **(Ita)**

[Carcinogenic risk for resin producers exposed to formaldehyde: extension of follow-up] Bertazzi PA, et al. **Med Lav** 1989 Mar-Apr;80(2):111–22 (Eng. Abstr.) **(Ita)**

[Lung tumors and occupational exposure in an industrial area of northern Italy] Ciccone G, et al. **Med Lav** 1988 Jan-Feb; 79(1):54–64 (Eng. Abstr.) **(Ita)**

[Mortality caused by pleural mesothelioma in the 1979–1983 lustre in Italy regarding provinces and single local health districts] Facchini U, et al. **Med Lav** 1989 Mar-Apr; 80(2):148–54 (Eng. Abstr.) **(Ita)**

[Clinical and control studies of cancer of the lungs. Smoking and employment in metallurgy] Jędrychowski W, et al. **Przegl Lek** 1989;46(3):329–33 (Eng. Abstr.) **(Pol)**

[The impact of occupational effects on worker's health. II. Mortality] Mendes R. **Rev Saude Publica** 1988 Oct; 22(5):441–57 (112 ref.) (Eng. Abstr.) **(Por)**

[Causes of death reflecting inequality in studies on mortality associated with occupational categories and social levels] Rumel D. **Rev Saude Publica** 1988 Aug;22(4):335–40 (Eng. Abstr.) **(Por)**

[The prognosis of the immediate and late sequelae of irradiation by ionizing radiations (a review of the literature)] Lisovskiĭ IV, et al. **Voen Med Zh** 1988 Dec; (12):44–6 (20 ref.) **(Rus)**

[Mortality related to occupation: a necessary information] Segura Benedicto A. **Gac Sanit** 1989 Jan-Feb;3(10):309–10 (14 ref.) **(Spa)**

PATHOLOGY

Muscle changes in work-related chronic myalgia. Larsson SE, et al. **Acta Orthop Scand** 1988 Oct;59(5):552–6

Histologic types of lung cancers among male Japanese copper smelter workers. Tokudome S, et al. **Am J Ind Med** 1988; 14(2):137–43

Giant-cell interstitial pneumonia and hard-metal pneumoconiosis. A clinicopathologic study of four cases and review of the literature. Ohori NP, et al. **Am J Surg Pathol** 1989 Jul;13(7):581–7 (25 ref.)

Correlation between fibre content of lung and disease in east London asbestos factory workers [letter] Rudd RM. **Br J Ind Med** 1989 May;46(5):358–9

[Imaging of infrared cataract and infrared lamella with Scheimpflug photography] Kluxen G. **Fortschr Ophthalmol** 1988;85(4):390–3 (Eng. Abstr.) **(Ger)**

[The pathology and clinical picture of adenocarcinoma of the nose after wood dust exposure] Kleinsasser O, et al. **Strahlenther Onkol** 1989 Jun;165(6):437–40 (Eng. Abstr.) **(Ger)**

[Clinical picture, diagnosis, and prevention of occupational allergic diseases] Ozhiganova VN, et al. **Ter Arkh** 1988; 60(9):79–84 (15 ref.) (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Motor neuron disease in textile factory workers. Abarbanel JM, et al. **Acta Neurol Scand** 1989 Apr;79(4):347–9

Otoneurological findings in psycho-organic syndrome caused by industrial solvent exposure. Möller C, et al. **Acta Otolaryngol (Stockh)** 1989 Jan-Feb;107(1-2):5–12

Lung functions in phosphate miners in Jordan: a pilot study. Samara N, et al. **Am J Ind Med** 1989;16(3):297–304

Wrist ratio correlation with carpal tunnel syndrome in industry. Gordon C, et al. **Am J Phys Med Rehabil** 1988 Dec;67(6):270–2

Lung function impairment as a guide to exercise limitation in work-related lung disorders. Cotes JE, et al. **Am Rev Respir Dis** 1988 May;137(5):1089–93

Correspondence between neurological symptoms and outcome of quantitative sensory testing in the hand-arm vibration syndrome. Ekenvall L, et al. **Br J Ind Med** 1989 Aug;46(8):570–4

Evaluation of right and left ventricular function in hard metal workers. Horowitz SF, et al. **Br J Ind Med** 1988 Nov; 45(11):742–6

Occupational exposures and changes in pulmonary function over 13 years among residents of Cracow. Krzyżanowski M, et al. **Br J Ind Med** 1988 Nov;45(11):747–54

A survey into the respiratory effects of prolonged exposure to pulverised fuel ash. Schilling CJ, et al. **Br J Ind Med** 1988 Dec;45(12):810–7

Reciprocal inhibition between forearm muscles in patients with writer's cramp and other occupational cramps, symptomatic hemidystonia and hemiparesis due to stroke. Nakashima K, et al. **Brain** 1989 Jun;112 (Pt 3):681–97

Field survey of circadian rhythm in PEF of electronics workers suffering from colophony-induced asthma. Randem B, et al. **Chronobiol Int** 1987;4(2):263–71

Occupational accessory and suprascapular nerve palsy. A clinical and electrophysiological study. Cruz Martínez A, et al. **Electromyogr Clin Neurophysiol** 1988 Aug-Oct; 28(6):347–52

Detection of hand tremor in workers exposed to mercury vapor: a comparative study of three methods. Roels H, et al. **Environ Res** 1989 Aug;49(2):152–65

Postural angles as an indicator of postural load and muscular injury in occupational work situations. Aarås A, et al. **Ergonomics** 1988 Jun;31(6):915–33

The effects of different pause types on neck and shoulder EMG activity during VDU work. Sundelin G, et al. **Ergonomics** 1989 May;32(5):527–37

Shoulder posture and localized muscle fatigue and discomfort. Wiker SF, et al. **Ergonomics** 1989 Feb; 32(2):211–37

Dynamic study of respiratory functions in tobacco workers. Yanev I. **Folia Med (Plovdiv)** 1987;29(3):33–41

Experience with Doppler investigations in vibration syndrome. Mackiewicz Z, et al. **Int Angiol** 1988 Oct-Dec; 7(4):305–8

Quantitative estimation of aesthesiometric thresholds for assessing impaired tactile sensation in workers exposed to vibration. Bovenzi M, et al. **Int Arch Occup Environ Health** 1989;61(7):431–5

Finger systolic pressure during local cooling in normal subjects aged 20 to 60 years: reference values for the assessment of digital vasospasm in Raynaud's phenomenon of occupational origin. Bovenzi M. **Int Arch Occup Environ Health** 1988;61(3):179–81

Heart rate variation and serum dopamine-beta-hydroxylase activity in workers exposed to vibration. Harada N, et al. **Int Arch Occup Environ Health** 1989;61(6):369–73

Tactile sensory changes in hands occupationally exposed to vibration. Brammer AJ, et al. **J Acoust Soc Am** 1988 Nov; 84(5):1940–1

Relationship of lung function loss to level of initial function: correcting for measurement error using the reliability coefficient. Irwig L, et al. **J Epidemiol Community Health** 1988 Dec;42(4):383–9

Chronic pain: a difficult problem. Chaplin ER. **Occup Med** 1989 Jul-Sep;4(3):433–47 (49 ref.)

Roles of hyperresponsiveness and airway inflammation in bronchial asthma. Magnussen H, et al. **Respiration** 1989; 55(2):65–74 (70 ref.)

Progressive isoinertial lifting evaluation. II. A comparison with isokinetic lifting in a disabled chronic low-back pain industrial population. Mayer TG, et al. **Spine** 1988 Sep; 13(9):998–1002

Relation of airway responsiveness to duration of work in a dusty environment. Ernst P, et al. **Thorax** 1989 Feb; 44(2):116–20

Increased subjective symptom prevalence among workers exposed to trichloroethylene at sub-OEL levels. Liu YT, et al. **Tohoku J Exp Med** 1988 Jun;155(2):183–95

[Relation of hearing loss in wood cutters with the duration of power saw use] Rački Z, et al. **Arh Hig Rada Toksikol** 1988 Sep;39(3):319–27 (Eng. Abstr.) **(Cze)**

[Relation between the auditory threshold and threshold of the middle ear reflex induced by contralateral stimulation in occupational hearing loss] Janisch R, et al. **Cesk Otolaryngol** 1988 Jul;37(4):249–58 (Eng. Abstr.) **(Cze)**

[The relation between the auditory threshold and the threshold of middle ear reflexes induced by ipsilateral stimulation in occupational deafness] Janisch R, et al. **Cesk Otolaryngol** 1989 Jan;38(1):32–7 (Eng. Abstr.) **(Cze)**

[Development of occupational asthma. Based on E.F.R. monitoring of 23 cases] Grange F, et al. **J Toxicol Clin Exp** 1989;9(1 Pt 2):25–9 (Eng. Abstr.) **(Fre)**

[The effect of noise on arterial hypertension in textile workers] Gîdiuță C, et al. **Sante Publique (Bucur)** 1988 Oct-Dec;31(4):299–302 (Eng. Abstr.) **(Fre)**

[The "exposure-specific" stress-strain concept in relation to the effect of partial body vibration on the hand-arm system] Oeser R. **Z Arztl Fortbild (Jena)** 1989;83(12):617–9 (29 ref.) **(Ger)**

[Modeling of dose-response relations in exposure-related changes of the locomotor system] Enderlein G, et al. **Z Gesamte Hyg** 1989 Apr;35(4):215–8 (Eng. Abstr.) **(Ger)**

[Electrophysiologic studies of hearing: current methods in clinical and occupational audiology. I. Brain stem evoked response audiometry (ABR)] Sułkowski W. **Med Pr** 1988; 39(5):347–58 (Eng. Abstr.) **(Pol)**

[Limitation of hand function in workers with Dupuytren's contracture] Trybus M, et al. **Med Pr** 1989;40(1):49–53 (Eng. Abstr.) **(Pol)**

[Incidence of anemia in pregnancy and the condition of newborn infants born to women working in industrial plants in Białystok] Bielecki M, et al. **Rocz Akad Med Bialymstoku** 1984–85;29–30:245–9 (Eng. Abstr.) **(Pol)**

[Long-term observation of patients with ischemic heart disease and its risk in the brown coal mines in Bełchatów] Markiewicz K, et al. **Wiad Lek** 1988 May 15;41(10):617–23

(Eng. Abstr.) (Pol)
[The probability of disorders in the control system as a criterion of stress in an operator's activities] Gritsevskii MA, et al. **Fiziol Cheloveka** 1988 May-Jun;14(3):424–7 (Rus)
[Electrophysiologic research on the central and peripheral nervous systems of workers in contact with ultrasound] Ginzburg DA, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):45–6 (Rus)
[Brain function and cerebral and peripheral circulation in vibration-induced disease from exposure to local vibration] Lipenetskaia TD, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):42–4 (Rus)
[Effect of the work process on the genital sphere in female workers] Oshchepkov VI, et al. **Gig Tr Prof Zabol** 1989; (2):11–3 (Eng. Abstr.) (Rus)
[Characteristics of the physiological functions in the operators of foundry transfer lines in the course of the work day and week] Solov'eva LP, et al. **Gig Tr Prof Zabol** 1989; (2):17–20 (Eng. Abstr.) (Rus)
[Characteristics of the bioelectrical activity of respiratory muscles in patients with occupational allergosis of the upper respiratory tract] Pankova VB, et al. **Vestn Otorinolaringol** 1988 Jul-Aug;(4):49–52 (Eng. Abstr.) (Rus)
[Measuring heat exchange in the exhaled air of patients with chronic rhinosinusitis] Shaparenko BA, et al. **Vestn Otorinolaringol** 1988 Sep-Oct;(5):22–5 (Eng. Abstr.) (Rus)
[Physiologo-hygienic characteristics of the work of hot glass cutters] Lashchuk AA. **Vrach Delo** 1989 May;(5):112–4 (Rus)
[Ventilatory function in soybean processing workers] Zuškin E, et al. **Arh Hig Rada Toksikol** 1988 Jun;39(2):195–202 (Eng. Abstr.) (Scr)
[The tussiphonogram in workers in a dusty theater environment] Sadloňová J, et al. **Bratisl Lek Listy** 1988 Sep;89(9):660–3 (Eng. Abstr.) (Slo)

PREVENTION & CONTROL

The confined space. A review of a recently discerned medical entity. Greenberg SR. **Am J Forensic Med Pathol** 1989 Mar;10(1):31–6 (57 ref.)
Pharmacy implications of the revised OSHA Hazard Communication Standard. Myers CE. **Am J Hosp Pharm** 1989 May;46(5):990–1
Criteria for containers for used injection, incision, and blood-testing materials [letter] Vincent-Ballereau FN. **Am J Hosp Pharm** 1988 Oct;45(10):2073–4
Threshold limit values: a balanced report [letter] Cox GV. **Am J Ind Med** 1988;14(2):233–4
Carcinogens in Belgium [letter] Degreve J, et al. **Am J Ind Med** 1988;14(2):251–2
Threshold limit values: a timely look. Finklea JA. **Am J Ind Med** 1988;14(2):211–2
Improvement in the occupational health program in a Finnish construction company by means of systematic workplace investigation of job load and hazard analysis. Mattila M. **Am J Ind Med** 1989;15(1):61–72
Swedish occupational exposure limits: developments in scientific evaluation and documentation. Nordberg GF, et al. **Am J Ind Med** 1988;14(2):217–21
An international viewpoint on exposure limits. Parmeggiani L. **Am J Ind Med** 1988;14(2):213–4
Medical appraisal during health hazard evaluations involving workers exposed to lead. Sharp GB, et al. **Am J Ind Med** 1989;15(4):449–61
Threshold limit values: any alternative? [letter] Stokinger HE. **Am J Ind Med** 1988;14(2):231–2
Significance and use of threshold limit values with reference to "Corporate Influence on Threshold Limit Values" by Castleman and Ziem. Tsuchiya K. **Am J Ind Med** 1988; 14(2):215–6
Upgrading occupational epidemiology and standard setting by improved exposure monitoring. Vanhoorne M. **Am J Ind Med** 1988;14(6):733–4
Social and economic determinants of occupational health policies and services. Walker B Jr. **Am J Ind Med** 1989; 16(3):321–8
Maximum concentrations at the workplace in the Federal Republic of Germany. Woitowitz HJ. **Am J Ind Med** 1988; 14(2):223–9
Blood exposure and protection in funeral homes. McDonald L. **Am J Infect Control** 1989 Aug;17(4):193–5
Exposure to and precautions for blood and body fluids among workers in the funeral home franchises of Fort Worth, Texas. Nwanyanwu OC, et al. **Am J Infect Control** 1989 Aug;17(4):208–12
Hepatitis B vaccination programs for hospital workers: results of a statewide survey. Sienko DG, et al. **Am J Infect Control** 1988 Oct;16(5):193–7
AIDS Task Force policy statement. Section on Public Health and Occupational Vision of the American Academy of Optometry. **Am J Optom Physiol Opt** 1988 Jul; 65(7):599–601
Acceptance of hepatitis B vaccine among dentists [letter] Maguire B, et al. **Am J Public Health** 1989 Jan;79(1):101–2
Individual monitoring for intakes of radionuclides by workers: design and interpretation. Task Group of Committee 4 of the International Commission on Radiological Protection. **Ann ICRP** 1988;19(1-3):1–315
A pragmatic approach to standard setting—the example of coal tar products and asphalt. Chong JP, et al. **Ann Occup Hyg** 1989;33(2):197–208 (30 ref.)
The Society of Thoracic Surgeons ad hoc Committee on AIDS. Report to the membership. Stiles QR, et al. **Ann Thorac Surg** 1989 Jun;47(6):946–8
Perioperative nursing research. Part III: Potential intraoperative biological hazards to personnel. Kneedler JA, et al. **AORN J** 1989 Apr;49(4):1066–7, 1070–3, 1076–9 passim
Impact of AIDS on neonatal care [letter] Isaacs D. **Arch Dis Child** 1989 Jun;64(6):892
Toxicity assessment of hydrazine fuels. Keller WC. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 2):A100–6
Estimation of chemical hazards in breast milk. Poitrast BJ, et al. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 2):A87–92
Control of substances hazardous to health [editorial] Seaton A. **BMJ** 1989 Apr 1;298(6677):846–7
Prophylaxis against B virus infection. Wansbrough-Jones MH, et al. **BMJ** 1988 Oct 8;297(6653):909
'The control of cross-infection in dentistry' [letter] **Br Dent J** 1989 Jan 21;166(2):35
The control of cross-infection in dentistry. **Br Dent J** 1988 Nov 19;165(10):353–4
'The elimination of cross-infection in dental practice—a 5-year follow-up' [letter] Brook I, et al. **Br Dent J** 1989 May 20;166(10):361–2
Oral surgery: staying healthy. Caplin RL. **Br Dent J** 1989 Jan 21;166(2):57–61
The prevention of cross-infection. Progress in the West Midlands. Glenwright HD, et al. **Br Dent J** 1989 Feb 25; 166(4):125–7
Dentistry's role in the AIDS epidemic. Greenspan J. **Br Dent J** 1988 Nov 5;165(9):336
'Cross-infection control in dental practice' [letter] Lovelock DJ. **Br Dent J** 1988 Nov 19;165(10):356
'The control of cross-infection in dentistry' [letter] Marshall KF. **Br Dent J** 1989 Feb 25;166(4):110
'AIDS and dentistry' [letter] Morris RE. **Br Dent J** 1988 Dec 10;165(11):391
An elective in San Francisco. HIV infection: comparing attitudes, knowledge and cross-infection control amongst dentists in San Francisco and Great Britain. Nattrass C. **Br Dent J** 1988 Dec 10;165(11):412–4
'The control of cross-infection in dentistry' [letter] Scully C. **Br Dent J** 1989 Mar 25;166(6):198–9
AIDS and dentistry [letter] Scully C, et al. **Br Dent J** 1989 Feb 11;166(3):71
'HIV infection: comparing attitudes, knowledge and cross-infection control amongst dentists in San Francisco and Great Britain' [letter] Walsh J. **Br Dent J** 1989 Feb 11;166(3):69–70
Hand in glove with the orthodontist? Usiskin LA. **Br J Orthod** 1989 Feb;16(1):49–51
Attitudes of operating theatre staff to inoculation-risk cases. Johnson CD, et al. **Br J Surg** 1989 Feb;76(2):195–7
Screening of deep-sea fishermen for cardiovascular disease. Gockowski K, et al. **Bull Inst Marit Trop Med Gdynia** 1988; 39(1-2):31–8
Many-year observation of the circulatory system in the selected groups of harbour workers with the Minnesota Code 1982 employed. Waśkiewicz J. **Bull Inst Marit Trop Med Gdynia** 1988;39(1-2):5–16
An example of burn prevention: the 'Urim' factory fire. Benmeir P, et al. **Burns** 1989 Aug;15(4):252–3
The 'gloves in dentistry' controversy [letter] **Can Dent Assoc J** 1989 Aug;55(8):610
Recommendations for infection control procedures. Canadian Dental Association. **Can Dent Assoc J** 1989 Apr;55(4):8p.
AIDS risk to dental personnel: a realistic approach. Daley TD. **Can Dent Assoc J** 1988 Nov;54(11):825–8
'To shave or not to shave' [letter] Freedman GL. **Can Dent Assoc J** 1989 Jan;55(1):20
Infection control survey—1988: a Canadian Dental Association project. Hardie J. **Can Dent Assoc J** 1989 Apr; 55(4):299–301
Re: AIDS and gloves [letter] Hardie J. **Can Dent Assoc J** 1989 Feb;55(2):107
Why isn't the hepatitis B vaccine being used? Hardie J. **Can Dent Assoc J** 1988 Nov;54(11):821–3
Universal precautions for prevention of transmission of human immunodeficiency virus, hepatitis B virus, and other bloodborne pathogens in health-care settings. **Can Dis Wkly Rep** 1988 Jul 9;14(27):117–24 (Eng, Fre)
Eliminating needle stick injuries [letter] Kempen PM. **Can J Anaesth** 1989 May;36(3 Pt 1):361–2
Shift work may be hazardous to your health, doctors warned. Paré M. **Can Med Assoc J** 1989 Aug 1;141(3):243–4
Cancer prevention in the workplace and natural environment. A review of etiology, research design, and methods of risk reduction. Swanson GM. **Cancer** 1988 Oct 15;62(8 Suppl):1725–46 (116 ref.)
Hepatitis B virus vaccine. Cost-benefit analysis of its use in a children's hospital. Hicks RA, et al. **Clin Pediatr (Phila)** 1989 Aug;28(8):359–65
A broader approach to reducing back disability. McLarnon D, et al. **Colo Med** 1989 Jul 1;86(13):211–2
Evaluation of a dental preventive program for Danish chocolate workers. Petersen PE. **Community Dent Oral Epidemiol** 1989 Apr;17(2):53–9
AIDS as an occupational disease: whose right to know? Gostin L. **Del Med J** 1988 Sep;60(9):479–83
A back care program for health care workers. Shim M, et al. **Dimens Health Serv** 1989 Mar;66(2):24–5
Personal radiation monitoring services in Kenya. Oyoo SP. **East Afr Med J** 1988 Sep;65(9):630–5
Training in handling: an evaluative study. St-Vincent M, et al. **Ergonomics** 1989 Feb;32(2):191–210
Inactivation of human immunodeficiency virus in serum specimens as a safety measure for diagnostic immunoassays. Ukkonen P, et al. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):518–23
A prospective trial of an anti-splatter device for the protection of endoscopic personnel from potentially AIDS-infective fluids. Laine L. **Gastrointest Endosc** 1988 Nov-Dec;34(6):470–1
Preventing occupational disease [letter] Mulvihill JE, et al. **Health Aff (Millwood)** 1989 Spring;8(1):228
Nursing personnel taking care of brachytherapy patients: to be or not to be classified as radiation workers? Datta R, et al. **Health Phys** 1989 Jul;57(1):199–201
Passive-active immunoprophylaxis after percutaneous exposure to hepatitis B virus. Dienstag JL. **Hepatology** 1989 Sep;10(3):385–7 (19 ref.)
Protection against the transmission of hepatitis B virus in dental practitioners: better gloves, earlier vaccination, or both? Koff RS. **Hepatology** 1989 Jun;9(6):902
Combined hepatitis B immune globulin and vaccine for postexposure prophylaxis of accidental hepatitis B virus infection in hemodialysis staff members: comparison with immune globulin without vaccine in historical controls. Mitsui T, et al. **Hepatology** 1989 Sep;10(3):324–7
APA guidelines cover AIDS precautions in outpatient services, HIV-infected psychiatrists [news] **Hosp Community Psychiatry** 1988 Dec;39(12):1317
Hospitals ready for OSHA worker-safety rules. Holthaus D. **Hospitals** 1989 Jul 5;63(13):50, 52
A protective device for performing cranial autopsies. Towfighi J, et al. **Hum Pathol** 1989 Mar;20(3):288–9
Management of HIV-1 infection in the hospital setting. Weber DJ, et al. **Infect Control Hosp Epidemiol** 1989 Jan; 10(1):3–7
Priority setting for health surveys of workers. Hunter WJ. **Int Arch Occup Environ Health** 1988;Suppl:135–43
Screening models in occupational health practice to detect and to assess individuals and groups at risk because of exposure and/or with decreased capacities to cope with workplace chemicals. Lahaye D. **Int Arch Occup Environ Health** 1988;Suppl:96–101
Intra- and interindividual variability of biochemical and haematological parameters in periodical health surveillance. van Geen F. **Int Arch Occup Environ Health** 1988;Suppl:65–75
Recommendations on dental mercury hygiene. Revision of FDI Technical Report No. 7. **Int Dent J** 1988 Sep; 38(3):191–2
Action research on occupational stress: involving workers as researchers. Israel BA, et al. **Int J Health Serv** 1989; 19(1):135–55
The right to refuse in Québec: five-year evolution of a new mode of expressing risk. Renaud M, et al. **Int J Health Serv** 1988;18(3):401–17
Vinyl versus latex gloves as barriers to transmission of viruses in the health care setting. Zbitnew A, et al. **J Acquir Immune Defic Syndr** 1989;2(2):201–4
Infection control and barrier techniques [letter] Giles JL. **J Am Dent Assoc** 1989 May;118(5):522
Assessment of the effectiveness of glove use as a barrier technique in the dental operatory. Gonzalez E, et al. **J Am Dent Assoc** 1988 Sep;117(3):467–9
The dentist and infectious diseases: a national survey of attitudes and behavior [published erratum appears in J Am Dent Assoc 1989 Jun;118(6):684] Verrusio AC, et al. **J Am Dent Assoc** 1989 May;118(5):553–62
Infection control guidelines for podiatric practice. Lusby GI. **J Am Podiatr Med Assoc** 1988 Mar;78(3):147–52 (12 ref.)
Coping with a buildup of waste anesthetic gases [letter] Manning NF. **J Am Vet Med Assoc** 1989 Aug 1;195(3):288
AVMA guidelines for dealing with AIDS-infected persons in the veterinary workplace. Tennyson AV. **J Am Vet Med Assoc** 1989 Jul 15;195(2):190–3
Absence of antibodies to human immunodeficiency virus (HIV) in health workers after hepatitis B vaccination [letter] Israel Z, et al. **J Assoc Physicians India** 1988 Feb; 36(2):179
Benefits of a back care and light duty health promotion program in a hospital setting. Ryden LA, et al. **J Community Health** 1988 Winter;13(4):222–30
Precautions reported to be used against cross-infection and attitudes to the dental treatment of HIV-positive patients in routine clinical dental practice in Scotland. Pitts NB, et al. **J Dent** 1988 Dec;16(6):258–63
Labor union involvement in occupational safety and health, 1957-1987. Robinson JC. **J Health Polit Policy Law** 1988 Fall;13(3):453–68
Prophylactic zidovudine after occupational exposure to the human immunodeficiency virus: an interim analysis. Henderson DK, et al. **J Infect Dis** 1989 Aug;160(2):321–7
An avoidable occupational hazard during mastoid surgery. Lannigan FJ, et al. **J Laryngol Otol** 1989 Jun;103(6):566
Infection control when servicing medical and laboratory equipment. Corner GA, et al. **J Med Eng Technol** 1989 May-Jun;13(3):177–80
Guidelines for the prevention of simian immunodeficiency

virus infection in laboratory workers and animal handlers. Lairmore MD, et al. **J Med Primatol** 1989;18(3–4):167–74 (12 ref.)

Creating a safe environment in the AIDS era. Hodges LC, et al. **J Neurosci Nurs** 1988 Oct;20(5):329–32

Adapting universal precautions in a CNM service. Zeidenstein L. **J Nurse Midwifery** 1989 Sep–Oct; 34(5):280–3

HIV precautions update [letter] Wiley K. **J Obstet Gynecol Neonatal Nurs** 1988 Sep–Oct;17(5):305

Prevention of occupational deafness: a coming crisis? [editorial] Atherley G. **J Occup Med** 1989 Feb;31(2):139–40

Strategies for risk evaluation of sudden cardiac incapacitation in men in occupations affecting public safety. Bruce RA, et al. **J Occup Med** 1989 Feb;31(2):124–33

Evaluation of a work site relaxation training program using ambulatory blood pressure monitoring. Fiedler N, et al. **J Occup Med** 1989 Jul;31(7):595–602

Periodic examination of South African mine workers [comment] Frumkin H, et al. **J Occup Med** 1989 Jun; 31(6):563–5. **Comment on:** J Occup Med 1988 Jul;30(7):580–6

Effect of overuse injury and the importance of training on the use of adjustable workstations by keyboard operators. Green RA, et al. **J Occup Med** 1989 Jun;31(6):557–62

Human immunodeficiency virus and the health care worker [editorial] Lewy R. **J Occup Med** 1989 Jun;31(6):535

A study of the rate of postexposure human immunodeficiency virus testing in a hospital requiring written informed consent. Miller PJ, et al. **J Occup Med** 1989 Jun;31(6):524–7

Effectiveness of the United Steel Workers of America Coke Oven Intervention Program. Parkinson DK, et al. **J Occup Med** 1989 May;31(5):464–72

Factors associated with participation in an occupational program for colorectal cancer screening. Vernon SW, et al. **J Occup Med** 1989 May;31(5):458–63

Development of the Occupational Safety and Health Administration's proposed standard to protect workers from contracting bloodborne diseases in the workplace. Sandler BH, et al. **J Public Health Dent** 1989 Spring; 49(2):87–9

The industrial toxicology of antimony. The Ernestine Henry lecture 1987. McCallum RI. **J R Coll Physicians Lond** 1989 Jan;23(1):28–32

The new occupational health? Carter JT. **J Soc Occup Med** 1989 Spring;39(1):7–8

AIDS and your patients [letter] Crowder CG. **J Tenn Med Assoc** 1988 Dec;81(12):754

Precautions against human immunodeficiency virus infection for workers in blood donor centers [letter] Leparc GF. **JAMA** 1988 Oct 21;260(15):2215

Reducing job exposure to blood-borne pathogens [news] Marwick C. **JAMA** 1989 Jan 6;261(1):17

Guidelines for prevention of herpesvirus simiae (B-virus) infection in monkey handlers [letter] DiGiacomo RF. **Lab Anim Sci** 1988 Oct;38(5):558

Putting on gloves to box out AIDS [editorial] Bishop BE. **MCN** 1988 Sep–Oct;13(5):311

Health care for health-care workers [letter] Flander L. **Med J Aust** 1988 Nov 21;149(10):564–5

A fresh start. Report of a one-day workshop on occupational asthma in the aluminium industry. Winder C, et al. **Med J Aust** 1989 Sep 4;151(5):273–6

AIDS guidelines for emergency workers [news] **Minn Med** 1989 Apr;72(4):237

Guidelines to prevent simian immunodeficiency virus infection in laboratory workers and animal handlers. **MMWR** 1988 Nov 18;37(45):693–4, 699–704

Low occupational risk of AIDS [news] **N Y J Dent** 1988 Sep–Oct;58(5):194

On infection control [letter] Carl W. **N Y State Dent J** 1989 Jan;55(1):6, 8

On barrier protection [letter] Feit VW. **N Y State Dent J** 1988 Aug–Sep;54(7):6

To release stress—exercise! Liebowitz CS. **N Y State Dent J** 1989 May;55(5):36–7

Gloves and infection prevention [letter] Ostreicher HP. **N Y State Dent J** 1988 Aug–Sep;54(7):6, 8

The risk of hepatitis B [letter] Daniels WL. **N Z Med J** 1988 Sep 28;101(854):614

Occupational HIV risk [letter] Goldwater PN. **N Z Med J** 1989 May 10;102(867):231

HIV infection: risks to health care workers and infection control. Henderson DJ. **Nurs Clin North Am** 1988 Dec; 23(4):767–77 (53 ref.)

Antiviral trial conducted [news] **Occup Health Saf** 1989 Apr; 58(4):11

Logging standard under review [news] **Occup Health Saf** 1989 Jul;58(7):8

CDC issues guidelines [news] **Occup Health Saf** 1989 Apr; 58(4):12

OSHA updates standard [news] **Occup Health Saf** 1989 Mar; 58(3):11

Experts respond to proposal [news] **Occup Health Saf** 1989 Jul;58(7):12

OSHA issues PEL standard [news] **Occup Health Saf** 1989 Mar;58(3):11–2

Work-place preventive programs cut costs of illness and injuries. Allers V. **Occup Health Saf** 1989 Aug;58(8):26–29

Endangered species. Baier EJ. **Occup Health Saf** 1989 Jul; 58(7):20–3

Asbestos can be safe. Branson HK. **Occup Health Saf** 1988 Sep;57(10):42, 44

Identifying stressors is necessary to combat potential health problems. Brodsky R. **Occup Health Saf** 1989 Mar;58(3):30, 32, 34

Effective hearing programs require assessment, testing, enforcement. Caple GE. **Occup Health Saf** 1989 Jan; 58(1):48–9, 52

Multiple factors affect speech communication in the work place. Casali JG. **Occup Health Saf** 1989 Jul;58(7):32–4, 36, 40–2

Prescription VDT lenses alleviate visual discomfort of display users. Densmore G. **Occup Health Saf** 1989 Jan; 58(1):35, 38, 58

Space-age technology sends hearing protection industry into orbit. Gasaway DC. **Occup Health Saf** 1988 Dec;57(13):26, 28–9, 32

Comprehensive health programs should include stress management. Knight EA, et al. **Occup Health Saf** 1988 Oct;57(11):46–50

Gloves deserve applause. Leary MM. **Occup Health Saf** 1988 Dec;57(13):20, 37

Carpal tunnel syndrome sufferers find relief with ergonomic designs. Pinkham J. **Occup Health Saf** 1988 Aug; 57(9):49–53

Audiometric monitoring may reduce hearing loss, compensation awards. Sawyer C. **Occup Health Saf** 1989 Jan;58(1):50–2

Musculoskeletal injuries demand new treatment model. Tramposh A. **Occup Health Saf** 1989 Apr;58(4):20–4, 38

Personal protection is a vital issue in the fight against infection. Young GS, et al. **Occup Health Saf** 1988 Aug; 57(9):38, 41–3

AIDS: not the only infectious killer. Carlson MJ. **Ohio Med** 1989 Aug;85(8):625–7

American Academy of Pediatrics. Task Force on Pediatric AIDS: Perinatal human immunodeficiency virus infection. **Pediatrics** 1988 Dec;82(6):941–4

Risk management, public policy and informed consent: a case study. Kee F. **Public Health** 1989 Jul;103(4):281–7

New universal precaution aspiration tray. Mueller PR, et al. **Radiology** 1989 Oct;173(1):278–9

Inactivation of HIV and safety precautions for the workplace. Saltzman BR, et al. **Recent Results Cancer Res** 1988; 112:75–83

Needlesticks and HIV infection [editorial] Van Demark RE Sr. **S D J Med** 1989 Mar;42(3):15

Epidemiological and experimental applications to occupational cancer prevention. Vainio H, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:323–45 (55 ref.)

Strategy for the primary and secondary prevention of occupational diseases in the German Democratic Republic. Bachmann W. **Scand J Work Environ Health** 1988 Oct; 14(5):273–9

NIH offers AZT to exposed workers [news] Booth W. **Science** 1989 Mar 3;243(4895):1137

Workers' perceptions, knowledge and responses regarding occupational health and safety: a report on a Canadian study. Walters V, et al. **Soc Sci Med** 1988;27(11):1189–96

Occupational health and safety in South Africa: the perspectives of capital, state and unions. Zwi A, et al. **Soc Sci Med** 1988;27(7):691–702 (50 ref.)

Role of the occupational physician in mental health services. Felton JS. **State Art Rev Occup Med** 1988 Oct–Dec; 3(4):707–17 (28 ref.)

Occupational HIV transmission: risk reduction. Gerberding JL. **State Art Rev Occup Med** 1989;4 Suppl:21–4

Infection control issues for the dental professional. Greenspan D. **State Art Rev Occup Med** 1989;4 Suppl:71–5 (16 ref.)

Infection control issues for laboratory personnel. Hadley WK. **State Art Rev Occup Med** 1989;4 Suppl:77–83 (19 ref.)

Federal regulations for implementing infection control policies to reduce health-care workers' risks. Harwood SE. **State Art Rev Occup Med** 1989;4 Suppl:115–6

Occupational health and safety: a future unlike the present. Matthias SJ, et al. **State Art Rev Occup Med** 1989 Jan–Mar; 4(1):177–90 (6 ref.)

HIV transmission to surgeons. Assessment of risk, infection control precautions, and standards of conduct. Schecter WP. **State Art Rev Occup Med** 1989;4 Suppl:65–9

Trouble on the border: international health problems merge at the Rio Grande. Jones DB. **Tex Med** 1989 Aug; 85(8):28–33

BSE safety precautions [letter] Madeiros CA. **Vet Rec** 1989 Jul 15;125(3):73–4

Salmonella infection in a vet [letter] Spalton DE. **Vet Rec** 1989 Jan 14;124(2):47

Few physicians vaccinated against hepatitis B. **Wis Med J** 1989 Apr;88(4):14

The organization of work in Sweden. Carlsson B. **Women Health** 1988;13(3–4):159–65

[Investigation of the personal dose monitoring by radiation workers in Beijing area in 1980–1985] Bai JX, et al. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Nov; 22(6):341–2 (Eng. Abstr.) **(Chi)**

[Working with visual displays and the eye] Svěrák J, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1988;31(5):627–9 (Eng. Abstr.) **(Cze)**

[How can neck, shoulder and upper arm problems be reduced in the workplace?] Viikari-Juntura E, et al. **Duodecim** 1989; 105(2):129–36 (60 ref.) **(Fin)**

[Evaluation of and trends in hearing surveillance programs in industry] Malchaire J. **Acta Otorhinolaryngol Belg** 1988; 42(4):529–37 (Eng. Abstr.) **(Fre)**

[Drug prevention and physical protection in occupational asthma] Bessot JC. **Allerg Immunol (Paris)** 1988 Oct; 20(8):293–7 (27 ref.) (Eng. Abstr.) **(Fre)**

[Is protective therapy possible in occupational asthma? Role of immunotherapy] Herman D. **Allerg Immunol (Paris)** 1988 Oct;20(8):289, 291–2 (6 ref.) (Eng. Abstr.) **(Fre)**

[Intervention by Mme S. Chappellon-Briançon. Education of staff in drug addiction and of health care personnel of seropositive and/or patients with AIDS] **Arch Belg** 1988; 46(5–6):259–63 **(Fre)**

[AIDS; 2 precise details affecting precautions to take (letter)] Pérusse R. **Can Dent Assoc J** 1989 Feb;55(2):107–8 **(Fre)**

[Preventive role of the occupational physician faced with cardiovascular risk factors] Perret J. **Phlebologie** 1989 Apr–Jun;42(2):311–21 (Eng. Abstr.) **(Fre)**

[AIDS and anesthesia] Hitzler W, et al. **Anasth Intensivther Notfallmed** 1988 Aug;23(4):175–82 (118 ref.) (Eng. Abstr.) **(Ger)**

[Fitness evaluation and preliminary occupational medicine examination in employment with increased mechanical stress on the spine] Blankenburg H, et al. **Beitr Orthop Traumatol** 1988 Jun;35(6):276–80 (Eng. Abstr.) **(Ger)**

[AIDS. Gloves in emergency kits!] **Fortschr Med** 1988 Sep 10;106(26):17 **(Ger)**

[AIDS. Secondary prevention in HIV-contaminated clinic personnel] **Fortschr Med** 1989 Apr 20;107(12):87 **(Ger)**

[Prevention of HIV infections in surgery (editorial)] Farthmann EH. **Fortschr Med** 1988 Dec 20;106(36):12–3 **(Ger)**

[Measures for preventing infection in general practice. 2: Special hygiene in relation to AIDS] Kimmig P. **Fortschr Med** 1989 Mar 15;107(8):181–2 **(Ger)**

[AIDS. Medical personnel: HIV infection can be prevented by careful behavior (news)] Marcus U. **Fortschr Med** 1989 Mar 10;107(7):13 **(Ger)**

[Electronic noise compensation for improving speech discrimination in airplane pilots] Matschke RG, et al. **Laryngorhinootologie** 1989 Feb;68(2):101–9 (Eng. Abstr.) **(Ger)**

[Heart-lung resuscitation by the first-aid clinician] Knothe M. **Med Klin** 1988 Oct 28;83(21):732 **(Ger)**

[Rubella, measles, mumps—epidemiologic, occupational medicine significance and efficacy of adult vaccination] Hofmann F, et al. **Off Gesundheitswes** 1989 Jun; 51(6):299–302 (Eng. Abstr.) **(Ger)**

[Preventive hepatitis B vaccination of professional firefighters as an occupational medicine responsibility of the public health service] Hoss J. **Off Gesundheitswes** 1989 Apr; 51(4):186–7 (Eng. Abstr.) **(Ger)**

[A check list for monitoring facilities within the scope of federal legislation for the prevention of blood contact infections] Klee P. **Off Gesundheitswes** 1989 Mar; 51(3):147–51 (Eng. Abstr.) **(Ger)**

[Alcohol in training and occupation—possible preventive management strategies by the public health service] Ziegler H. **Off Gesundheitswes** 1988 Aug–Sep;50(8–9):526–9 (Eng. Abstr.) **(Ger)**

[Risk of AIDS and prevention in the hospital and general practice] Möse JR. **Wien Med Wochenschr** 1988 Oct 31; 138(19–20):531–4 (0 ref.) (Eng. Abstr.) **(Ger)**

[Assuring health care for our deep sea fishermen as a public health goal for all areas of the health service] Ebert H, et al. **Z Arztl Fortbild (Jena)** 1988;82(13):627–9 **(Ger)**

[Education on health-promoting behaviors in groups of workers] Pasig P. **Z Arztl Fortbild (Jena)** 1988; 82(17):839–42 **(Ger)**

[AIDS and gastroenterologic endoscopy. Survey of current practice] Riemann JF, et al. **Z Gastroenterol** 1988 Jun; 26(6):293–6 (Eng. Abstr.) **(Ger)**

[Occupational medicine monitoring of workers exposed to benzene] Bittersohl G. **Z Gesamte Hyg** 1989 Jan;35(1):28–30 (0 ref.) (Eng. Abstr.) **(Ger)**

[Organization and occupational health monitoring of army personnel] Hollenbach K, et al. **Z Gesamte Hyg** 1988 Jul; 34(7):400–3 (11 ref.) (Eng. Abstr.) **(Ger)**

[The value of determining delta-aminolevulinic acid in urine (method II, East German occupational monitoring) as a screening procedure for the assessment of internal residues in occupational exposure to lead] Pannier R, et al. **Z Gesamte Hyg** 1989 Jan;35(1):22–3 (Eng. Abstr.) **(Ger)**

[Relations between age, health status and occupational health measures in exposed workers] Ruppe K, et al. **Z Gesamte Hyg** 1988 Jul;34(7):431–4 (Eng. Abstr.) **(Ger)**

[Social health contribution to the assessment of health status of workers within the scope of industrial mass screening] Werner K, et al. **Z Gesamte Hyg** 1988 Jul;34(7):419–21 (Eng. Abstr.) **(Ger)**

[Prevalence, degree of recognition and detection of hypertension and the quality of blood pressure control at the Wismut industrial branch] Zwingenberger W, et al. **Z Gesamte Inn Med** 1989 Apr 1;44(7):211–4 (Eng. Abstr.) **(Ger)**

[Reduction of radiation exposure by protective measures in heart catheter studies and interventional cardiology] Prachar H, et al. **Z Kardiol** 1989 Apr;78(4):271–5 (Eng. Abstr.) **(Ger)**

[Knowledge of health professionals about AIDS and their opinion about patient care as well as their own safety] Csépe P, et al. **Orv Hetil** 1988 Dec 4;129(49):2629–31 (26 ref.) (Eng. Abstr.) **(Hun)**

[Incidence of somatic mutations of the lymphocytes in subjects working in an environment with cancer risk] Tompa A, et al. **Orv Hetil** 1989 Jul 23;130(30):1603–7 (Eng. Abstr.) **(Hun)**

[Health surveillance of workers] Alessio L, et al. **G Ital Med Lav** 1987 Sep–Nov;9(5–6):189–94 (Eng. Abstr.) **(Ita)**

[Proposal of the biological monitoring of inhalation anesthetics] Pezzagno G, et al. **G Ital Med Lav** 1987 May–Jul;9(3–4):111–8 (Eng. Abstr.) **(Ita)**

[Work fitness and HIV infection] Curti R, et al. **Med Lav** 1988 Sep–Oct;79(5):343–50 (Eng. Abstr.) **(Ita)**

[Immunologic prophylaxis and the health professions] Boccia A, et al. **Nuovi Ann Ig Microbiol** 1988 Jul–Oct; 39(4–5):379–95 **(Ita)**

[AIDS: professional risk and means of prevention] Boccia A, et al. **Nuovi Ann Ig Microbiol** 1988 Jul–Oct; 39(4–5):347–65 **(Ita)**

[Studies on prevention of health hazard due to hand-held tools (vibration tools, tools with triggers) operation] Kurosawa S. **Nippon Eiseigaku Zasshi** 1988 Oct; 55(5):452–64 (Eng. Abstr.) **(Jpn)**

[Automated HPLC method for determining zinc protoporphyrin IX and protoporphyrin IX in erythrocytes of workers exposed to lead] Sakai T, et al. **Sangyo Igaku** 1988 Nov;30(6):467–74 (Eng. Abstr.) **(Jpn)**

[Sleep–wakefulness rhythm disturbance due to changes in occupational environment and the countermeasures] Sasaki M. **Seishin Shinkeigaku Zasshi** 1988;90(10):899–908 **(Jpn)**

[Occupational medicine and work environment (editorial)] Skaug V. **Tidsskr Nor Laegeforen** 1989 May 20;109(14):1495 **(Nor)**

[Opinions of occupational health physicians with regard to preventive examinations of persons exposed to substances harmful to the respiratory system] Hanke W. **Pneumonol Pol** 1988 Dec;56(12):536–63 (Eng. Abstr.) **(Pol)**

[Use of vitamins E and C for the prevention of toxic effects of lead on electronic industry workers] Malec J, et al. **Wiad Lek** 1988 Sep 15;41(18):1210–7 (Eng. Abstr.) **(Pol)**

[Surveillance and control of occupational contamination by the human immunodeficiency virus. Possible prevention measures] Ciufecu C, et al. **Rev Ig [Bacteriol]** 1989 Apr–Jun; 34(2):97–106 **(Rum)**

[Ways of improving working conditions and reducing morbidity at plastic-processing plants] Asaenok IS, et al. **Gig Sanit** 1989 May;(5):24–6 (Eng. Abstr.) **(Rus)**

[Status and prospects of research on the problem of preventing unfavorable effects of occupational noise and vibration] Izmerov NF, et al. **Gig Sanit** 1988 Sep;(9):4–6 **(Rus)**

[Experience of the preventive services department in conducting mass screening of workers at a railroad junction] Naidenov SP. **Gig Sanit** 1988 Sep;(9):28–31 **(Rus)**

[Improving mass screening of the personnel of marine transportation ships] Vasil'eva TV. **Gig Sanit** 1989 May; (5):90–2 **(Rus)**

[Significance of electrocardiographic studies in the detection of coronary pathology during prophylactic mass screening of miners working in polymetal mines] Abdrashitova GA, et al. **Gig Tr Prof Zabol** 1989;(6):49–50 **(Rus)**

[Improving working conditions during the use of electroerosion equipment in the trimming and stripping of diamond wheels] Beliavskii EM, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):47–8 **(Rus)**

[Bases of measures aimed at improving working conditions for women employed in manufacturing of television sets] Gruznevich AP. **Gig Tr Prof Zabol** 1989;(6):19–22 (Eng. Abstr.) **(Rus)**

[Problems of the reorganization of scientific research in public health] Izmerov NF, et al. **Gig Tr Prof Zabol** 1989; (5):1–5 **(Rus)**

[Problems of mass screening of oilmen on dispatcher–watchmen's duty] Karamova LM, et al. **Gig Tr Prof Zabol** 1988 Nov;(11):44–5 **(Rus)**

[The most important aspects of preventing noise and vibration–induced pathology in coal mines] Kolganov AV, et al. **Gig Tr Prof Zabol** 1988 Nov;(11):22–4 (Eng. Abstr.) **(Rus)**

[Urgent tasks of hygienic research and practice regarding improving working conditions of miners in the coal mining industry in the Ukrainian S.S.R.] Mukharskil MS. **Gig Tr Prof Zabol** 1988 Nov;(11):1–4 (Eng. Abstr.) **(Rus)**

[Problem of improving regular medical examinations] Penknovich AA, et al. **Gig Tr Prof Zabol** 1988 Nov; (11):33–6 (Eng. Abstr.) **(Rus)**

[Occupational selection in the prevention of respiratory platinosis] Rapoport ZhZh, et al. **Gig Tr Prof Zabol** 1989; (1):8–11 (Eng. Abstr.) **(Rus)**

[Experience with joint work of the sanitary–epidemiologic station and the Institute of Occupational Hygiene and Occupational Diseases in the prevention of vibration disease and occupational hearing loss in miners of Krivoi Rog] Shushkovskii BZ, et al. **Gig Tr Prof Zabol** 1988 Nov; (11):42–3 **(Rus)**

[Health problems related to the reconstruction of copper smelting plants] Vartazarian LD. **Gig Tr Prof Zabol** 1989; (6):9–12 (Eng. Abstr.) **(Rus)**

[Current objectives of occupational hygiene and pathology in Georgian SSR] Vashakidze VI. **Gig Tr Prof Zabol** 1988 Aug;(8):1–3 **(Rus)**

[Hygienic assessment of working conditions at the experimental production line of semidry pressing of ceramic argillite bricks] Zaltseva NN, et al. **Gig Tr Prof Zabol** 1989; (6):42–3 **(Rus)**

[Socio–hygienic aspects of preventing diseases among workers in deep coal mines] Zinger FKh, et al. **Gig Tr Prof Zabol** 1988 Nov;(11):11–4 (Eng. Abstr.) **(Rus)**

[The role of medical examinations in the mass screening and treatment of miners] Grabovoi AF, et al. **Ortop Travmatol Protez** 1988 Jun;(6):64–8 **(Rus)**

[Mass screening of railway workers] Erpelev FA. **Sov Zdravookhr** 1989;(2):42–4 (Eng. Abstr.) **(Rus)**

[Analysis of the preventive activities of medical units in coal mines] Kobets GP, et al. **Sov Zdravookhr** 1989;(1):29–33 (Eng. Abstr.) **(Rus)**

[Joint work of the Department of Social Insurance of the Regional Trade Union Committee of the agro–industrial complex and the regional clinical hospital with regard to the health protection of rural workers] Novoselov VP. **Sov Zdravookhr** 1988;(6):57–9 (Eng. Abstr.) **(Rus)**

[Activities of regional agricultural medical teams] Novoselov VP. **Sov Zdravookhr** 1988;(11):38–41 (Eng. Abstr.) **(Rus)**

[Prevention of nervous system diseases in workers manufacturing rubber products] Danilenko LP, et al. **Vrach Delo** 1989 Mar;(3):109–10 (Eng. Abstr.) **(Rus)**

[Expert evaluation of preliminary and periodic occupational examinations of miners in the Don Basin coal mines] Kobets GP, et al. **Vrach Delo** 1988 Jul;(7):97–9 (Eng. Abstr.) **(Rus)**

[More studies on strength training should be done] Hagberg M, et al. **Lakartidningen** 1989 Aug 9;86(32–33):2655 **(Swe)**

[Microbreaks preventing musculoskeletal disorders] Karlsson GB, et al. **Lakartidningen** 1988 Oct 19;85(42):3463–4 **(Swe)**

[Can the number of myocardial infarctions be reduced by improving the psychosocial work environment?] Theorell T, et al. **Lakartidningen** 1989 Apr 19;86(16):1455–6 **(Swe)**

PSYCHOLOGY

Prolonged disability from job–related injury. Goodwin PA. **Am Fam Physician** 1988 Nov;38(5):165–70

Social support in the workplace: tests of six theoretical models. Dignam JT, et al. **Am J Community Psychol** 1988 Oct;16(5):701–24

Managing ICU–induced stress. Doran MO. **Am J Nurs** 1988 Nov;88(11):1559–60, 1562

Managing AIDS at work. Psychology's role. Backer TE. **Am Psychol** 1988 Nov;43(11):983–7

Quantification of the psychosocial disadvantages experienced by workers in a noisy industry and their nearest relatives: perspectives for rehabilitation. Lalande NM, et al. **Audiology** 1988;27(4):196–206

Cognitive–behavior therapy in the management of chronic, occupational pain of the upper limbs. Spence SH. **Behav Res Ther** 1989;27(4):435–46

Psychical and adaptive mechanisms in seasickness. Szeluga J, et al. **Bull Inst Marit Trop Med Gdynia** 1988; 39(1–2):39–44

Calenture—a psychopathological syndrome of a long–lasting sea voyage. Szeluga J, et al. **Bull Inst Marit Trop Med Gdynia** 1988;39(1–2):45–9

Occupational stress reactions: lessons for management [editorial] Morgan PP. **Can Med Assoc J** 1989 Apr 1; 140(7):795–6

Perceived job–stress and blood pressure increase among Japanese blue collar workers: one–year follow–up study. Kawakami N, et al. **Ind Health** 1989;27(2):71–81

Sex differences in occupational stress: a meta–analytic review. Martocchio JJ, et al. **J Appl Psychol** 1989 Jun; 74(3):495–501

AIDS–phobia, contact with AIDS, and AIDS–related job stress in hospital workers. Pleck JH, et al. **J Homosex** 1988; 15(3–4):41–54

Posttraumatic adjustment of Australian firefighters [letter] Lyons JA. **J Nerv Ment Dis** 1989 Apr;177(4):248

Risk factors in the psychosocial work environment for neck and shoulder pain in secretaries. Linton SJ, et al. **J Occup Med** 1989 Jul;31(7):609–13

Teacher stress and health; examination of a model. DeFrank RS, et al. **J Psychosom Res** 1989;33(1):99–109

Inquiry mode, occupational stress, and preferred leadership style among American elementary school teachers. Kagan DM. **J Soc Psychol** 1989 Jun;129(3):297–305

The psychological performance profile in occupational intoxications. Hänninen H. **Neurotoxicol Teratol** 1988 Sep–Oct;10(5):485–8 (13 ref.)

Reversibility of psychological performance in subclinical lead absorption. Yokoyama K, et al. **Neurotoxicology** 1988 Fall; 9(3):405–10

Cancerphobia liability: will this be "tort of the decade" in the '90s? Willmore RL. **Occup Health Saf** 1989 Jan;58(1):18

Treatment outcome in low back pain patients: do compensation benefits make a difference? Jamison RN, et al. **Orthop Rev** 1988 Dec;17(12):1210–5

Psychiatric symptoms and related factors in a sample of Japanese workers. Iwata N, et al. **Psychol Med** 1988 Aug; 18(3):659–63

Comparative analysis of the influence of stress–related variables on adaptation to a new work setting. Zahrly J, et al. **Psychol Rep** 1988 Dec;63(3):767–77

Cardiovascular responses to occupational stress and caffeine in telemarketing employees. France C, et al. **Psychosom Med** 1989 Mar–Apr;51(2):145–51

Orthopedic surgeons' attitudes and practices concerning treatment of patients with HIV infection. Arnow PM, et al. **Public Health Rep** 1989 Mar–Apr;104(2):121–9

Psychometric properties of the center for epidemiologic studies depression scale of Japanese workers. Iwata N, et al. **Sangyo Igaku** 1989 Jan;31(1):20–1

A psychosociomedical prediction model of response to treatment by chronically disabled workers with low–back pain. Polatin PB, et al. **Spine** 1989 Sep;14(9):956–61

Psychiatric injury in the workplace. **State Art Rev Occup Med** 1988 Oct–Dec;3(4):587–730

Stress reactions in the job setting: case examples. McLean AA. **State Art Rev Occup Med** 1988 Oct–Dec;3(4):639–51

Psychological testing of the psychiatrically injured worker. Morgenthaler ES. **State Art Rev Occup Med** 1988 Oct–Dec; 3(4):629–38 (21 ref.)

Occupational stress. Warshaw LJ. **State Art Rev Occup Med** 1988 Oct–Dec;3(4):587–93 (12 ref.)

Violence and trauma response. White SG, et al. **State Art Rev Occup Med** 1988 Oct–Dec;3(4):677–94 (11 ref.)

[Behavioral changes in workers exposed to organic solvents] Cassitto MG, et al. **J Toxicol Clin Exp** 1985 Jul–Aug; 5(4):273–82 (20 ref.) (Eng. Abstr.) **(Fre)**

[How dentists deal with occupational stress] Heim E, et al. **Schweiz Monatsschr Zahnmed** 1988;98(10):1057–66 contd (Eng. Abstr.) **(Ger)**

[Selected results of occupational psychological studies of nurses] Ammer M, et al. **Z Gesamte Hyg** 1989 Apr; 35(4):232–4 (Eng. Abstr.) **(Ger)**

[The relation of qualifications, performance standards and psychological stress in trainees in the control service] Biermann E, et al. **Z Gesamte Hyg** 1989 May;35(5):266–8 (Eng. Abstr.) **(Ger)**

[Factor analysis of psychoneuronal disorders in pedagogues— professional communication. Studies of the causes of psychoneuronal disorders in pedagogues—a factor analytic consideration of assessments of the supervisor and pedagogic activity] Fikentscher E, et al. **Z Gesamte Hyg** 1988 Jul;34(7):427–31 (Eng. Abstr.) **(Ger)**

[Some aspects of the complaint problem in occupational medicine] Scheuch K, et al. **Z Gesamte Hyg** 1988 Jul; 34(7):404–6 (0 ref.) (Eng. Abstr.) **(Ger)**

[Psychological effects of long–term occupational whole body vibration] Schneider H, et al. **Z Gesamte Hyg** 1989 Apr; 35(4):206–8 (Eng. Abstr.) **(Ger)**

[Stress caused by shift work in relation to automated production] Seibt A, et al. **Z Gesamte Hyg** 1988 Jul; 34(7):409–12 (Eng. Abstr.) **(Ger)**

[Work psychopathology] Cabral CA. **Acta Psiquiatr Psicol Am Lat** 1988 Sep;34(3):237–42 (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

Roentgenographic evidence for predominant left–sided location of unilateral pleural plaques. Withers BF, et al. **Chest** 1989 Jun;95(6):1262–4

Triple primary lung cancer: a case report [letter] Barnes DJ, et al. **Med J Aust** 1989 Aug 21;151(4):236–7

Asbestos–related focal lung masses: manifestations on conventional and high–resolution CT scans. Lynch DA, et al. **Radiology** 1988 Dec;169(3):603–7

The use of CT in the examination of asbestos–exposed persons [editorial] McLoud TC. **Radiology** 1988 Dec;169(3):862–3

Respiratory health of brickworkers in Cape Town, South Africa. Radiographic abnormalities. Myers JE, et al. **Scand J Work Environ Health** 1989 Jun;15(3):195–7

Relationship of lung function to radiographic reading (ILO) in patients with asbestos related lung disease. Cotes JE, et al. **Thorax** 1988 Oct;43(10):777–83

[Pulmonary infiltration and pronounced asthma] Hettich R, et al. **Internist (Berlin)** 1988 Dec;29(12):832–5 **(Ger)**

[Roentgenologic diagnosis of osteoporotic changes of the bone structure in persons occupationally exposed to vibration] Druzhinin VN, et al. **Gig Tr Prof Zabol** 1988 Dec;(12):12–5 (Eng. Abstr.) **(Rus)**

[Roentgenologic diagnosis of bone lesions in divers using densitometry] Khachkuruzov SG, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):31–4 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Radionuclide angiography of the hand in occupational vasoneurosis. Zák J, et al. **Acta Univ Palacki Olomuc Fac Med** 1987;117:219–24

[State of pulmonary circulation in dust–induced bronchitis as shown by perfusion pulmonary scintigraphy] Livergant IuE, et al. **Gig Tr Prof Zabol** 1989;(6):52–3 **(Rus)**

REHABILITATION

Perceived benefits of a lifestyles modification program in the rehabilitation of Worker's Compensation recipients. Hannah TE, et al. **Can J Public Health** 1988 Sep–Oct; 79(5):323–6

Occupational hearing loss: an aural rehabilitation program for workers and their spouses, characteristics of the program and target group (participants and nonparticipants). Lalande NM, et al. **Ear Hear** 1988 Oct; 9(5):248–55

Predicting rehabilitation outcomes from clinical and statistical data: a probability model. Gay DA, et al. **Int J Rehabil Res** 1988;11(1):11–9

Return to work certification [letter] Ash WH. **J Fam Pract** 1988 Nov;27(5):464–5

Occupational medicine and worker's compensation in Oklahoma. Paul DW. **J Okla State Med Assoc** 1989 Mar; 82(3):112–7

The role of psychological evaluations in occupational hand injuries. Johnson RK. **Occup Med** 1989 Jul–Sep;4(3):405–18 (30 ref.)

Return-to-work programs following occupational hand injuries. Kasdan AS, et al. **Occup Med** 1989 Jul–Sep; 4(3):539–45 (18 ref.)

[Adaptation disorders and rehabilitation of drillers working on the shift-expedition schedule in Western Siberia] Mazurik MF, et al. **Sov Med** 1989;(4):66–8 **(Rus)**

SURGERY

Indications for replantation in the adult upper extremity. Goldner RD, et al. **Occup Med** 1989 Jul–Sep;4(3):525–38 (16 ref.)

Indications for surgery in work-related compression neuropathies of the upper extremity. Harter BT Jr. **Occup Med** 1989 Jul–Sep;4(3):485–95 (27 ref.)

[Interdigital pilonidal sinus or barber's disease] De Wilde P, et al. **Acta Chir Belg** 1987 Sep–Oct;87(5):298–9 (Eng. Abstr.) **(Dut)**

[The socio-economic costs of finger replantation. Apropos of 40 replantations of the thumb] Dap F, et al. **Ann Chir Main** 1989;8(1):78–83 (Eng. Abstr.) **(Fre)**

[Bilateral stenosing tenosynovitis of the long flexors of the great toe in a dancer. Apropos of a bilateral case] Lamata Iturria M, et al. **Rev Chir Orthop** 1988;74(2):190–2 (Eng. Abstr.) **(Fre)**

[Treatment of paronychia in miners] Borisov Bf, et al. **Klin Khir** 1989;(1):24–5 (Eng. Abstr.) **(Rus)**

[Treatment of bursitis] Kubyshkovskiĭ AL, et al. **Vestn Khir** 1988 Aug;141(8):128–9 **(Rus)**

THERAPY

Intramuscular administration of iron during long-term chelation therapy with 2,3-dimercaptosuccinic acid in a man with severe lead poisoning. Haust HL, et al. **Clin Biochem** 1989 Jun;22(3):189–96

A model of consultation in occupational psychiatry. Rigaud MC. **Hosp Community Psychiatry** 1989 Jul;40(7):745–7

On-site work evaluations: desensitisation for avoidance reactions following severe hand injuries. Grunert BK, et al. **J Hand Surg [Br]** 1989 May;14(2):239–41

The treatment of overuse syndrome in musicians. Results in 175 patients. Fry HJ. **J R Soc Med** 1988 Oct;81(10):572–5

Treatment of compressed-air decompression accidents. McIver NK. **J R Soc Med** 1989 Feb;82(2):74–9 (47 ref.)

Subcutaneous deposition of elemental mercury. Tanner DC, et al. **J Tenn Med Assoc** 1988 Nov;81(11):698–9

The lead-exposed worker. Rempel D. **JAMA** 1989 Jul 28; 262(4):532–4 (19 ref.)

Raynaud's symptoms improved by cold [letter] Dormandy JA, et al. **Lancet** 1989 Apr 22;1(8643):905

Personal energy profiles determine stress-management capabilities. Poe CA. **Occup Health Saf** 1989 Aug; 58(8):33–4

Hand and wrist fractures in occupational medicine. Bodell LS, et al. **Occup Med** 1989 Jul–Sep;4(3):497–524 (144 ref.)

Finger tip and nail bed injuries. Ditmars DM Jr. **Occup Med** 1989 Jul–Sep;4(3):449–61 (30 ref.)

Ethical issues in psychiatry and occupational medicine. Larsen RC. **State Art Rev Occup Med** 1988 Oct–Dec; 3(4):719–26 (15 ref.)

The EAP and workplace psychiatric injury. Lawton B. **State Art Rev Occup Med** 1988 Oct–Dec;3(4):695–706 (18 ref.)

[Various criticisms of the article entitled "Scientific method of evaluation and treatment of spinal disorders in laborers" (letter)] Hobden R, et al. **Union Med Can** 1988 Nov–Dec; 117(6):341–3 **(Fre)**

[Evaluation of the results of conservative treatment in cases of chronic lateral epicondylitis of the humerus in workers in the metal industry] Bicz-Kubiatowicz M, et al. **Med Pr** 1988;39(3):217–21 (Eng. Abstr.) **(Pol)**

[Therapeutic and resuscitation measures in encephalopathy caused by acute methane poisoning] Novikova RI, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):40–2 (Eng. Abstr.) **(Rus)**

[Treatment of tendovaginitis crepitans of the forearm by the method of local ethyl chloride hypothermia] Il'inskiĭ IS, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):116–7 **(Rus)**

[The effect of reflexotherapy on the functional state of the eyes in workers engaged in precision labor] Kovalenko VV, et al. **Vestn Oftalmol** 1989 Jan–Feb;105(2):69–71 **(Rus)**

[Therapeutic and prophylactic measures in patients with dust-induced bronchitis complicated by pulmonary emphysema] Kleĭner AI, et al. **Vrach Delo** 1989 Apr; (4):103–5 (Eng. Abstr.) **(Rus)**

[Chronotherapy of chronic bronchitis in coal miners] Lavrenova GV, et al. **Vrach Delo** 1988 Sep;(9):100–2 (Eng. Abstr.) **(Rus)**

[A psychotherapist's experience with conducting emotional and psychological relaxation] Grabovskiĭ IaA. **Zh Nevropatol Psikhiatr** 1989;89(3):84–5 (Eng. Abstr.) **(Rus)**

TRANSMISSION

Occupational infection with human immunodeficiency virus (HIV). Risks and risk reduction. Becker CE, et al. **Ann Intern Med** 1989 Apr 15;110(8):653–6 (17 ref.)

Human immunodeficiency virus infection in health care workers. A method for estimating individual occupational risk. Hagen MD, et al. **Arch Intern Med** 1989 Jul; 149(7):1541–4

"HIV-infected health care workers". **BMJ** 1988 Oct 29; 297(6656):1132

Risk to Metropolitan police officers from exposure to hepatitis B. Welch J, et al. **BMJ** 1988 Oct 1;297(6652):835–6

AIDS: the contamination risk in urological surgery. McNicholas TA, et al. **Br J Urol** 1989 Jun;63(6):565–8

Human immunodeficiency virus infections: considerations for health care workers. Wormser GP, et al. **Bull N Y Acad Med** 1988 Apr;64(3):203–15 (54 ref.)

Occupational exposure to the human immunodeficiency virus among health-care workers in Canada. Elmslie K, et al. **Can Dis Wkly Rep** 1988 Oct 29;14(43):197–200 **(Eng, Fre)**

Occupational exposure to HIV infection among health-care workers at the Toronto General Hospital. Strickler AC. **Can Dis Wkly Rep** 1988 Aug 13;14(32):141–6 **(Eng, Fre)**

Barrier protection against the human immunodeficiency virus. Tyler DS, et al. **Curr Surg** 1989 Jul–Aug;46(4):301–4

Emergency department thoracotomy. Wasserberger J, et al. **Emerg Med Clin North Am** 1989 Feb;7(1):103–15

Do hospital personnel in hyperendemic areas require immunization against hepatitis B virus (HBV) infection? Is vertical transmission of HBV infection common in this group? Tsega E, et al. **Ethiop Med J** 1989 Jul;27(3):101–6

Endoscopic procedures in the AIDS patient: risks, precautions, indications, and obligations. Raufmann JP, et al. **Gastroenterol Clin North Am** 1988 Sep;17(3):495–506 (28 ref.)

Primary and recurrent herpes simplex infection in a pediatric nurse resulting from a human bite. Fuortes L, et al. **Infect Control Hosp Epidemiol** 1989 Mar;10(3):120

Occupational health issues for providers of care to patients with HIV infection. Gerberding JL. **Infect Dis Clin North Am** 1988 Jun;2(2):321–8 (29 ref.)

HIV risk (still) low for health care workers [news] **Int Nurs Rev** 1988 Nov–Dec;35(6):161

Risk of transmission of the human immunodeficiency virus to health care workers exposed to HIV-infected patients: a review. Verrusio AC. **J Am Dent Assoc** 1989 Mar; 118(3):339–42 (45 ref.)

Cryptosporidiosis in veterinary students. Levine JF, et al. **J Am Vet Med Assoc** 1988 Dec 1;193(11):1413–4

An epidemiological study of non-A non-B viral hepatitis in nurses' hostel, Raipur, Madhya Pradesh—1985. Sharma RS, et al. **J Commun Dis** 1987 Dec;19(4):349–58

HIV-infected needles [news] **Minn Med** 1989 Mar;72(3):175

Mycobacterium tuberculosis transmission in a health clinic—Florida, 1988. **MMWR** 1989 Apr 21;38(15):256–8, 263–4

Exposure of health care workers to the blood of patients infected with the human immunodeficiency virus [letter] **N Engl J Med** 1989 May 18;320(20):1350–1

Low occupational risk of AIDS [news] **N Y State Dent J** 1988 Aug–Sep;54(7):9

AIDS and the health care worker. Tobias MI. **N Z Med J** 1989 Feb 22;102(862):80–2

Infection affects workers [news] **Occup Health Saf** 1989 Mar; 58(3):14

Groundless fears [news] **Occup Health Saf** 1989 Apr; 58(4):11–2

Doctor exposed to AIDS [news] **Occup Health Saf** 1989 Mar; 58(3):16–7

Judge refuses to quash AIDS suit [news] **Occup Health Saf** 1989 Jan;58(1):9

No evidence of hospital-acquired cytomegalovirus infection in a pregnant pediatric nurse using restriction endonuclease analysis. Hökeberg I, et al. **Pediatr Infect Dis J** 1988 Nov; 7(11):812–4

HIV and hepatitis B infection in an international cohort of dental hygienists. Doblough JH, et al. **Scand J Dent Res** 1988 Oct;96(5):448–50

Increased incidence of Campylobacter pylori infection in gastroenterologists: further evidence to support person-to-person transmission of C. pylori. Mitchell HM, et al. **Scand J Gastroenterol** 1989 May;24(4):396–400

Occupational HIV infection: risks and risk reduction. **State Art Rev Occup Med** 1989;4 Suppl:1–116

Perspectives on the risks for occupational transmission of HIV-1 in the health-care workplace. Henderson DK. **State Art Rev Occup Med** 1989;4 Suppl:7–12 (34 ref.)

Workers' compensation and AIDS. Adaptation to new occupational diseases. Shor GM. **State Art Rev Occup Med** 1989;4 Suppl:95–102 (12 ref.)

[A German Public Health Service study. The risk of HIV in dental practice? (news)] **Fortschr Med** 1988 Jun 20; 106(18):13 **(Ger)**

[HIV infections. AIDS: danger caused by emergency patients?] Sefkow S. **Fortschr Med** 1989 Apr 10;107(11):8 **(Ger)**

[Health policy considerations on the AIDS problems and risks in surgery] Fuchs C. **Langenbecks Arch Chir** 1988; Suppl 2:51–6 (Eng. Abstr.) **(Ger)**

[AIDS—current significance in surgery] Gürtler L, et al. **Langenbecks Arch Chir** 1989;374(1):60–4 **(Ger)**

[AIDS: means of transmission in the hospital and preventive measures] Laufs R, et al. **Langenbecks Arch Chir** 1988;Suppl 2:39–45 **(Ger)**

[Epidemiology and means of transmission of HIV infection] Lüthy R. **Langenbecks Arch Chir** 1988;Suppl 2:47–50 (Eng. Abstr.) **(Ger)**

[Hepatitis diseases in health occupations (exemplified by Lower Saxony federal land)] Windorfer A, et al. **Off Gesundheitswes** 1989 Mar;51(3):118–21 (Eng. Abstr.) **(Ger)**

[Mycobacterial zooanthroponoses] Jentgens H. **Pneumologie** 1989 Aug;43(8):433–9 **(Ger)**

[Human immunodeficiency virus (HIV). 2: HIV infections caused by accidental exposure in medical personnel] Lätzsch I. **Z Arztl Fortbild (Jena)** 1988;82(12):553–6 (19 ref.) **(Ger)**

[Procedural regulations in the physicians office and clinic in relation to gynecologico-obstetric patients infected by HIV and AIDS patients] Weissenbacher ER. **Zentralbl Gynakol** 1988;110(20):1319–24 **(Ger)**

[Suspected airport malaria in Israel] Shpilberg O, et al. **Harefuah** 1988 Sep;115(5–6):117–9 (Eng. Abstr.) **(Heb)**

[Domiciliary and occupational contact with dogs as risk factors of human infection by Toxocara larvae] Chieffi PP, et al. **Rev Inst Med Trop Sao Paulo** 1988 Sep–Oct; 30(5):379–82 (Eng. Abstr.) **(Por)**

[Alimentary outbreak of tonsillitis] Sheĭnkman EV, et al. **Klin Med (Mosk)** 1989 Feb;67(2):129–30 **(Rus)**

[Transmission of HIV in a health population at risk] García Buey L, et al. **Rev Clin Esp** 1988 Apr;182(7):360–1 (Eng. Abstr.) **(Spa)**

URINE

Biological monitoring of exposure to ethylene glycol ethers. Johanson G, et al. **Arch Toxicol Suppl** 1989;13:108–11

The significance of urinary thioethers as indicators of exposure to alkylating agents. Karakaya AE, et al. **Arch Toxicol Suppl** 1989;13:117–9

Ethylenethiourea as an indicator of exposure to ethylenebisdithiocarbamate fungicides. Savolainen K, et al. **Arch Toxicol Suppl** 1989;13:120–3

Comparison between the fluorometric HPLC method and the conventional method for determining urinary delta-aminolevulinic acid and coproporphyrin as indices of lead exposure. Tomokuni K, et al. **Int Arch Occup Environ Health** 1988;61(3):153–6

Mutagens in urine of non-smoking and smoking workers in an aircraft tyre retreading plant. Skin exposure as a causal factor? Bos RP, et al. **Mutat Res** 1989 May;223(1):41–8

[Preliminary data on the biological significance of urinary dimethylamine in workers with chronic occupational exposure to alkylamines] Scutaru B, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Jul–Sep;92(3):593–6 (Eng. Abstr.) **(Rum)**

OCCUPATIONAL EXPOSURE see **ENVIRONMENTAL EXPOSURE**

OCCUPATIONAL HEALTH NURSING

The impact of health professionals should be judged by variety of factors. Chenoweth D. **Occup Health Saf** 1988 Aug;57(9):23

Measuring occupational health nurses' counseling on health promotion. Jordan-Marsh M. **Public Health Nurs** 1988 Sep; 5(3):177–85

Occupational health nursing in developing countries. Phillips ER. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:186–96

TRENDS

Opposing the RCT proposal [letter] Wilson MR, et al. **Minn Med** 1989 Feb;72(2):77

Occupational health nursing—present situation and how to develop in the future. From the result of research on the actual situation of occupational health care worker in Kanagawa pref. Kono K. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:197–209

Recent developments in occupational health nursing with particular reference to Australia. Wyatt A. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:210–20

OCCUPATIONAL HEALTH SERVICES

Catastrophe modeling of the accident process: evaluation of an accident reduction program using the occupational hazards survey. Guastello SJ. **Accid Anal Prev** 1989 Feb; 21(1):61–77

The effects of contingent payment and frequent workplace monitoring on smoking abstinence. Rand CS, et al. **Addict Behav** 1989;14(2):121–8

Joiners and non-joiners in worksite smoking treatment: pretreatment smoking, smoking by significant others, and expectation to quit as predictors. Sussman S, et al. **Addict Behav** 1989;14(2):113–9

Hospital pharmacy employment considerations for the chemically dependent health-care professional. Smith RL, et al. **Am J Hosp Pharm** 1988 Oct;45(10):2102–7

Corporate response to reproductive hazards in the workplace: results of the Family, Work, and Health Survey. Paul M, et al. **Am J Ind Med** 1989;16(3):267–80

Frequency of health risk assessment activities at U.S. worksites. Fielding JE. **Am J Prev Med** 1989 Mar–Apr; 5(2):73–81

A randomized comparison of Worksite-sponsored smoking cessation programs. Omenn GS, et al. **Am J Prev Med** 1988 Sep–Oct;4(5):261–7

Frequency of worksite health promotion activities. Fielding JE, et al. **Am J Public Health** 1989 Jan;79(1):16–20

Worksite health promotion [editorial] Levenstein C. **Am J Public Health** 1989 Jan;79(1):11

Weight control in the workplace: a needs assessment for men. Reid DJ, et al. **Can J Public Health** 1989 Jan–Feb; 80(1):24–7

Re: Employee fitness: state of the art [letter] Yarsi A, et al. **Can J Public Health** 1988 Sep–Oct;79(5):396

Community control of hypertension at the worksite in a metallurgical factory: results of 1-year follow-up. Fogari R, et al. **Eur J Epidemiol** 1989 Jun;5(2):164–9

Cervical screening: the potential contribution of workplace examinations. Morris GJ. **Health Bull (Edinb)** 1988 May; 46(3):156–9

Issues of control and responsibility in workers' health. Green KL. **Health Educ Q** 1988 Winter;15(4):473–86

Hazard communication in a large U.S. manufacturing firm: the ecology of health education in the workplace. Robins TG, et al. **Health Educ Q** 1988 Winter;15(4):451–72

Personal radiation monitoring services in Kenya. Oyoo SP. **Health Phys** 1989 Sep;57(3):477–9

Factors associated with participation, attrition, and outcome in a smoking cessation program at the workplace. Klesges RC, et al. **Health Psychol** 1988;7(6):575–89

Screening models in occupational health practice for assessment of combined exposure to chemicals at work. de Mik G, et al. **Int Arch Occup Environ Health** 1988; Suppl:54–62

Screening models in occupational health practice to detect and to assess individuals and groups at risk because of exposure and/or with decreased capacities to cope with workplace chemicals. Lahaye D. **Int Arch Occup Environ Health** 1988;Suppl:96–101

Screening models in occupational health practice for assessment of individual exposure and health risk by means of biological monitoring in exposure to solvents. Monster AC, et al. **Int Arch Occup Environ Health** 1988;Suppl:46–53 (19 ref.)

Oral health promotion at worksites. Schou L. **Int Dent J** 1989 Jun;39(2):122–8 (52 ref.)

Survival analysis to explore the characteristics of employee assistance program (EAP) referrals that remain employed. Macdonald S, et al. **Int J Addict** 1989 Feb;24(2):113–22

The role of union democracy in the struggle for workers' health in Mexico. Laurell AC. **Int J Health Serv** 1989; 19(2):279–93

The management of epilepsy at work. Floyd M, et al. **Int J Rehabil Res** 1988;11(1):3–10

WHO/ILO: statement on AIDS in the workplace [news] **Int Nurs Rev** 1988 Sep–Oct;35(5):124

Work-site health promotion: the effects of a goal-setting program on nutrition-related behaviors. Berry MW, et al. **J Am Diet Assoc** 1989 Jul;89(7):914–20, 923

A multifactorial weight control program in a corporate setting. Hermann-Nickell DM, et al. **J Am Diet Assoc** 1989 Apr;89(4):534–7

Adapting a community group weight reduction program to a work-site setting. Markenson DM, et al. **J Am Diet Assoc** 1988 Nov;88(11):1436–7

Nutrition education at the work site: a team approach. Sandoval WM, et al. **J Am Diet Assoc** 1989 Apr;89(4):543–4

Functional model of an eye protection program: guide for the clinical optometrist. Nakagawara VB. **J Am Optom Assoc** 1988 Dec;59(12):925–8

Individuals' attitudes toward organizational drug testing policies and practices. Stone DL, et al. **J Appl Psychol** 1989 Jun;74(3):518–21

Correlates of participation in a worksite stop-smoking contest. Cummings KM, et al. **J Behav Med** 1988 Jun; 11(3):267–77

Variables associated with participation and outcome in a worksite smoking control program. Glasgow RE, et al. **J Consult Clin Psychol** 1988 Aug;56(4):617–20

Preventing drug dependency: Part 2, Educating and supporting staff. Clark MD. **J Nurs Adm** 1989 Jan; 19(1):21–6

Work site blood pressure control: the evolution of a program. Brown HR Jr, et al. **J Occup Med** 1989 Apr;31(4):354–7

Factors associated with enrollment in an employee fitness center. Eakin JM, et al. **J Occup Med** 1988 Aug;30(8):633–7

Comparison of participants and nonparticipants in a work site cancer awareness and screening program. Laville EA, et al. **J Occup Med** 1989 Mar;31(3):221–32

Can in-plant exercise control musculoskeletal symptoms? Silverstein BA, et al. **J Occup Med** 1988 Dec;30(12):922–7

Corporate perspectives on work site wellness programs: a report on the seventh Pew Fellows conference. Walsh DC, et al. **J Occup Med** 1989 Jun;31(6):551–6

AIDS/HIV infection and employment: the role of occupational health services. Cockcroft A. **J Soc Occup Med** 1989 Summer;39(2):49–50

Pre-employment screening: use or ornament? Houghton AM, et al. **J Soc Occup Med** 1989 Summer;39(2):51–5

Evaluation of a worksite programme for the modification of cardiovascular risk factors. Edye BV, et al. **Med J Aust** 1989 May 15;150(10):574, 576–8, 581

The workplace: an innovative and cost-effective practice site. Touger GN, et al. **Nurse Pract** 1989 Jan;14(1):35, 38, 40–2

Fools rush in... Butler WH Jr. **Occup Health Saf** 1988 Nov; 57(12):16–9

Companies reap benefits, student interns learn worksite strategies. Chenoweth D. **Occup Health Saf** 1988 Nov; 57(12):28

Centralizing supplies saves lives. Hawkins AR. **Occup Health Saf** 1989 May;58(5):44

Comprehensive health programs should include stress management. Knight EA, et al. **Occup Health Saf** 1988 Oct;57(11):46–50

Hygienists, risk managers develop closer worker relationships. LeRoux D. **Occup Health Saf** 1989 May; 58(5):75–6, 88

Visible difference. Martin DL. **Occup Health Saf** 1989 Apr; 58(4):25, 29–30

Small industry trains workers in emergency response skills. Osborne GG. **Occup Health Saf** 1989 May;58(5):40, 45–6

Concentric circles of healthcare are neither practical nor desirable. Polakoff PL. **Occup Health Saf** 1989 May; 58(5):26

Worksite smoking cessation programs: clinical and methodological issues. Klesges RC, et al. **Prog Behav Modif** 1988;23:36–61

Behavioral impact and cost analysis of a worksite self-help smoking cessation program. Windsor RA, et al. **Prog Clin Biol Res** 1989;293:231–42

One-session worksite smoking-cessation and discouragement. Dawley HH Jr, et al. **Psychol Rep** 1988 Aug;63(1):77–8

Alcohol problems at work: a new approach? Cyster R, et al. **Public Health** 1988 Jul;102(4):373–9

Computers and epidemiology in occupational health services in South Africa [letter] Kocks DJ. **S Afr Med J** 1989 Jun 3;75(11):552–3

International Conference on Industrial Health and the VIIIth UOEH International Symposium—Health Surveillance of Workers. University of Occupational and Environmental Health. 24–26 October 1988, Kitakyusu, Japan. Proceedings. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:1–745

Evaluation of cardiovascular disease control programmes in selected working population in Japan. Shibata S, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:75–83

Occupational health services in Japan. Tati M. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:243–7

Results of a one-year worksite and mass media based intervention on health behaviour and chronic disease risk factors. Puska P, et al. **Scand J Soc Med** 1988;16(4):241–50

Trace element analysis in environmental and occupational health: box plot representation of elemental composition results. Nicolaou G, et al. **Sci Total Environ** 1989 May 15; 80(2–3):167–74

Worksite-screenings for hypertension with follow-up: experiences from the Munich Blood Pressure Program. Hense HW, et al. **Soz Praventivmed** 1989;34(1):15–8

Alcoholism and chemical dependency in the workplace. **State Art Rev Occup Med** 1989 Apr–Jun;4(2):195–390

Management perspectives on alcoholism: the employer's stake in alcoholism treatment. Bernstein M, et al. **State Art Rev Occup Med** 1989 Apr–Jun;4(2):223–32 (26 ref.)

Alcoholism in the workplace. Harig PT. **State Art Rev Occup Med** 1989 Apr–Jun;4(2):213–21 (43 ref.)

Experience from the Occupational Health Clinic at San Francisco. Guerriero J. **Toxicol Ind Health** 1989 Jul; 5(4):57–9; discussion 79–84

Poison centers: a resource for occupational health services. Bonfiglio JF, et al. **Vet Hum Toxicol** 1988 Dec;30(6):569–71

[Preventive role of the occupational physician faced with cardiovascular risk factors] Perret J. **Phlebologie** 1989 Apr–Jun;42(2):311–21 (Eng. Abstr.) **(Fre)**

[Physical examination preceding entry into apprenticeship: preventive measure or administrative burden?] Michaud PA, et al. **Schweiz Rundsch Med Prax** 1989 Feb 28; 78(9):228–31 (Eng. Abstr.) **(Fre)**

[The alcohol problem in the occupational world] Weller R. **Z Gastroenterol** 1988 Oct;26 Suppl 3:19–21 **(Ger)**

[The occupational health physician in the factory] Losito B. **G Ital Med Lav** 1987 Sep–Nov;9(5–6):195–8 (Eng. Abstr.) **(Ita)**

[Evaluation of bioelectrical impedance method for fat measurement in corporate fitness program] Doya S, et al. **Sangyo Igaku** 1989 Jan;31(1):3–8 (Eng. Abstr.) **(Jpn)**

[Experience in using cytological screening studies of working women for the early detection of tumorous and pretumorous diseases of the cervix uteri] Lapenkova NB, et al. **Akush Ginekol (Mosk)** 1988 May;(5):57–8 **(Rus)**

[Outpatient care of workers at the Ufa Bakery Products Mill] Surkova VK, et al. **Vestn Oftalmol** 1988 Nov–Dec; 104(6):67–8 (Eng. Abstr.) **(Rus)**

[Occupational health services are not primary health services at work places] Edström R. **Lakartidningen** 1988 Nov 23; 85(47):4034 **(Swe)**

[By whom should patients at occupational health services be treated?] Falck G. **Lakartidningen** 1989 Jan 25; 86(4):209–10 **(Swe)**

ECONOMICS

Corporate fitness programmes and health enhancement. Gibbons LW. **Ann Acad Med Singapore** 1989 May; 18(3):272–8

Selling Health Promotion to Corporate America: Uses and Abuses of the Economic Argument [letter] O'Donnell MP. **Health Educ Q** 1989 Spring;16(1):13–5

Can organizations benefit from worksite health promotion? Leviton LC. **Health Serv Res** 1989 Jun;24(2):159–89 (56 ref.)

In response to the economic argument: a commentary [editorial] Golaszewski T, et al. **J Occup Med** 1988 Oct; 30(10):824–5

Health promotion at work [editorial] **Lancet** 1988 Oct 8; 2(8615):832

Businesses should share strategies for health-care cost management. Chenoweth D. **Occup Health Saf** 1989 Jul; 58(7):17

Occupational medicine. Corporate health cost management. Fielding J. **State Art Rev Occup Med** 1989 Jan–Mar; 4(1):121–44 (56 ref.)

[The present share of health services financing provided by state enterprises] Stastná M. **Cesk Zdrav** 1989 Jan; 37(1):17–25 (Eng. Abstr.) **(Cze)**

[Cost estimation as a form of analysis of the rationality of managing the resources of occupational health services] Rydlewska I, et al. **Med Pr** 1988;39(4):282–7 (Eng. Abstr.) **(Pol)**

[Analysis of personnel expenditures in the industrial health care system] Rydlewska I, et al. **Med Pr** 1988;39(6):455–60 (Eng. Abstr.) **(Pol)**

HISTORY

[The role of Party organizations of the Don River area in the health education of workers during the first years of Soviet power] Kozubenko ID. **Sov Zdravookhr** 1988; (7):58–60 **(Rus)**

LEGISLATION & JURISPRUDENCE

Occupational physicians and the Access to Medical Reports Act [letter] Dixon WM. **BMJ** 1989 Apr 22;298(6680):1101

Compensation for occupational disease: hidden agendas. Brandt-Rauf SI, et al. **Health Aff (Millwood)** 1988 Fall; 7(4):73–82

Testing for drugs of abuse in urine. Turk J. **Mo Med** 1989 Jun;86(6):337–40

Industrial physicians take note [news] **Occup Health Saf** 1989 Mar;58(3):10

Integration, not confidentiality the issue in employee assistance. Read HP 3d. **Occup Health Saf** 1988 Dec; 57(13):41–3

Alcohol in the workplace: legal issues facing physicians. Feitshans IL. **State Art Rev Occup Med** 1989 Apr–Jun; 4(2):339–56 (52 ref.)

The organization of work in Sweden. Carlsson B. **Women Health** 1988;13(3–4):159–65

[The rights and duties of the occupational health physician and of the employer in employee mental illnesses] Möllhoff G. **Dtsch Med Wochenschr** 1989 Jun 23;114(25):1005–7 **(Ger)**

MANPOWER

Current and future needs for occupational medicine physicians in nonindustrial settings: a survey of multispecialty group medical practices and health maintenance organizations. Brandt-Rauf PW, et al. **J Occup Med** 1988 Dec;30(12):928–33

[Proceedings: "Competencies and responsibilities of the physician and medico-legal obligations in the health surveillance of workers. Current operational problems". Brescia, 28 February 1987] **G Ital Med Lav** 1987 Sep–Nov; 9(5–6):175–231 **(Ita)**

[The occupational health physician in the public health structure] Bodini L. **G Ital Med Lav** 1987 Sep–Nov; 9(5–6):199–204 (Eng. Abstr.) **(Ita)**

[Tasks and responsibilities of the occupational health physician employed in health services] Buzzi F. **G Ital Med Lav** 1987 Sep–Nov;9(5–6):215–8 (Eng. Abstr.) **(Ita)**

[Obligations and penal responsibilities of physicians, especially factory doctors, in regard to the protection of workers' health] Cottinelli V. **G Ital Med Lav** 1987 Sep–Nov;9(5–6):219–28 (Eng. Abstr.) **(Ita)**

[The professional responsibility of the factory physician] Tavani M. **G Ital Med Lav** 1987 Sep–Nov;9(5–6):211–3 (Eng. Abstr.) **(Ita)**

[Questionnaire survey of full-time occupational health physicians in Japan] Takahashi K, et al. **Sangyo Igaku** 1989 Mar;31(2):77–83 (Eng. Abstr.) **(Jpn)**

[HIV testing in occupational health physicians (letter)] Bedriftslegeforening N, et al. **Tidsskr Nor Laegeforen** 1988

Nov 10;108(31):2879–80 (Nor)

ORGANIZATION & ADMINISTRATION

Improvement in the occupational health program in a Finnish construction company by means of systematic workplace investigation of job load and hazard analysis. Mattila M. **Am J Ind Med** 1989;15(1):61–72

Report on the role of the emergency physician in occupational medicine. American College of Emergency Physicians. **Ann Emerg Med** 1988 Oct;17(10):1112–4

Treatment of hypertension at the workplace: an opportunity to link service and research. Alderman MH, et al. **Health Psychol** 1988;7 Suppl:283–95 (29 ref.)

Employers want more substance-abuse services. Droste T. **Hospitals** 1989 May 5;63(9):24, 26–8, 30

Health promotion and allied health professionals: considerations for program design. Maki D, et al. **J Allied Health** 1988 Aug;17(3):231–41

Periodic examination of South African mine workers [comment] Frumkin H, et al. **J Occup Med** 1989 Jun; 31(6):563–5. **Comment on:** J Occup Med 1988 Jul;30(7):580–6

Effectiveness of the United Steel Workers of America Coke Oven Intervention Program. Parkinson DK, et al. **J Occup Med** 1989 May;31(5):464–72

Health promotion in a scheduled cyclical format. Schneider WJ, et al. **J Occup Med** 1989 May;31(5):443–6

Factors associated with participation in an occupational program for colorectal cancer screening. Vernon SW, et al. **J Occup Med** 1989 May;31(5):458–63

Industrial health care complexes--basic institutions of the working population health care system in Poland. Bryla M, et al. **Med Lav** 1988 Jul–Aug;79(4):298–302

Vaccines, health counseling needed when employees travel overseas. Strasser AL. **Occup Health Saf** 1988 Oct;57(11):18

Return-to-work programs following occupational hand injuries. Kasdan AS, et al. **Occup Med** 1989 Jul–Sep; 4(3):539–45 (18 ref.)

The occupational medicine clinic of the National Centre for Occupational Health. Ehrlich RI. **S Afr Med J** 1989 Mar 4;75(5):227–30

A newly developing occupational health service system in Korea. Cho KS. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20; 11 Suppl:248–57

Occupational health services in the Federal Republic of Germany. Schulte A. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:173–85

Occupational health services in the Nordic countries--organization, tasks, trends and problems. Westerholm P. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20; 11 Suppl:137–49 (8 ref.)

The political economy of workers' health and safety. Elling RH. **Soc Sci Med** 1989;28(11):1171–82 (39 ref.)

Role of the employee assistance program in helping the troubled worker. Fitzgerald ST, et al. **State Art Rev Occup Med** 1989 Apr–Jun;4(2):233–43 (40 ref.)

The occupational health care system: an overview. Guidotti TL, et al. **State Art Rev Occup Med** 1989 Jan–Mar; 4(1):153–69 (28 ref.)

Occupational health and safety: a future unlike the present. Matthias SJ, et al. **State Art Rev Occup Med** 1989 Jan–Mar; 4(1):177–90 (6 ref.)

Occupational chemical dependency programs: the business of alcohol and drug dependencies. Wright C. **State Art Rev Occup Med** 1989 Apr–Jun;4(2):195–212 (39 ref.)

[Disabling respiratory diseases: sociomedical and organizational problems] Catena E, et al. **Arch Monaldi Mal Torace** 1987 Jan–Feb;42(1):25–50 (8 ref.) (Eng. Abstr.) (Ita)

[General practice as occupational physician] Syvertsen JO. **Tidsskr Nor Laegeforen** 1988 Oct 25;108(29B):2640–4 (Nor)

[Results of periodic cytologic screening of women at one work place] Grys E. **Ginekol Pol** 1988 Aug;59(8):493–8 (Eng. Abstr.) (Pol)

[Opinions of occupational health physicians with regard to preventive examinations of persons exposed to substances harmful to the respiratory system] Hanke W. **Pneumonol Pol** 1988 Dec;56(12):556–63 (Eng. Abstr.) (Pol)

[Arterial hypertension in a population of working men--6 years' observation] Sznajd J, et al. **Przegl Lek** 1989; 46(2):275–6 (Pol)

[Health education of various population groups] Krasil'shchikov MI, et al. **Gig Sanit** 1988 Oct;(10):50–3 (Rus)

[Experience of the preventive services department in conducting mass screening of workers at a railroad junction] Naidenov SP. **Gig Sanit** 1988 Sep;(9):28–31 (Rus)

[Determining the level of ascorbic acid in the urine in hygienic studies] Petrova GA. **Gig Sanit** 1989 May; (5):49–50 (Rus)

[Improving mass screening of the personnel of marine transportation ships] Vasil'eva TV. **Gig Sanit** 1989 May; (5):90–2 (Rus)

[Experience with differentiated mass screening and treatment of workers in petrochemical plants with diseases of the liver and biliary tract] Bulatova FD, et al. **Gig Tr Prof Zabol** 1988 Sep;(9):18–20 (Eng. Abstr.) (Rus)

[Ways of further solving theoretical and practical problems regarding the prevention of dust-induced occupational diseases of the respiratory organs (data of the 2nd international symposium. Czechoslovakia, September 22–27, 1986)] Elovskaia LT. **Gig Tr Prof Zabol** 1988 Nov; (11):4–7 (Eng. Abstr.) (Rus)

[Basic principles of mass screening of patients with asbestosis] Gladkova EV. **Gig Tr Prof Zabol** 1989;(4):4–7 (Eng. Abstr.) (Rus)

[The main results and prospects of the development of the physiology of work of miners in coal mines of the Donets Basin] Grebniak VP. **Gig Tr Prof Zabol** 1988 Nov;(11):7–11 (Eng. Abstr.) (Rus)

[Problems of the reorganization of scientific research in public health] Izmerov NF, et al. **Gig Tr Prof Zabol** 1989; (5):1–5 (Rus)

[The main propositions for the elaboration of an alternative system of occupational medicine in the Estonian SSR] Kakhn KhV. **Gig Tr Prof Zabol** 1988 Oct;(10):35–7 (Eng. Abstr.) (Rus)

[Organizational and methodologic aspects of preventing ischemic heart disease in coal miners] Kobets GP, et al. **Gig Tr Prof Zabol** 1989;(4):1–4 (Eng. Abstr.) (Rus)

[Methodologic approach to the detection and evaluation of early signs of unfavorable effects of occupational factors on health] Monaenkova AM. **Gig Tr Prof Zabol** 1988 Oct; (10):1–5 (Eng. Abstr.) (Rus)

[Urgent tasks of hygienic research and practice regarding improving working conditions of miners in the coal mining industry in the Ukrainian S.S.R.] Mukharskii MS. **Gig Tr Prof Zabol** 1988 Nov;(11):1–4 (Eng. Abstr.) (Rus)

[Physiologic and hygienic substantiation of rational systems of work and rest during shaft sinking in iron ore mines] Shevtsova VM, et al. **Gig Tr Prof Zabol** 1988 Nov;(11):14–8 (Eng. Abstr.) (Rus)

[Current objectives of occupational hygiene and pathology in Georgian SSR] Vashakidze VI. **Gig Tr Prof Zabol** 1988 Aug;(8):1–3 (Rus)

[Various principles of the development of an automated operational health management system for construction workers] Zhilov IuD, et al. **Gig Tr Prof Zabol** 1988 Dec; (12):9–11 (Eng. Abstr.) (Rus)

[Socio-hygienic aspects of preventing diseases among workers in deep coal mines] Zinger FKh, et al. **Gig Tr Prof Zabol** 1988 Nov;(11):11–4 (Eng. Abstr.) (Rus)

[Early diagnosis of cardiovascular diseases using expert personal computer systems] Balliuzek FV, et al. **Kardiologiia** 1988 Jun;28(6):104–6 (Rus)

[Early diagnosis and mass screening of patients with initial signs of pathology of the brachiocephalic arteries using an automated screening system at industrial plants] Vilianskii MP, et al. **Kardiologiia** 1988 Sep;28(9):96–7 (Rus)

[The potentials for optimizing the treatment process at a small eye department of a medical unit] Oreshkin VA. **Oftalmol Zh** 1988;(5):311–2 (Rus)

[The role of medical examinations in the mass screening and treatment of miners] Grabovoĭ AF, et al. **Ortop Travmatol Protez** 1988 Jun;(6):64–8 (Rus)

[Organization of phthisiological and pulmonological services at industrial plants] Smirnova LA, et al. **Probl Tuberk** 1989; (4):6–9 (Eng. Abstr.) (Rus)

[Experience with the organization of work on tuberculosis prevention in industrial enterprises] Tubalets NI, et al. **Probl Tuberk** 1989;(1):59–61 (Rus)

[Use of the automated management system "Manpower" for solving the problems of ambulatory care and improving working conditions of workers and employees at large industrial plants] Borokhov DZ, et al. **Sov Zdravookhr** 1989; (6):11–4 (Eng. Abstr.) (Rus)

[Health education of workers on preventing cardiovascular diseases] Dmitrieva NV. **Sov Zdravookhr** 1989;(5):32–7 (Rus)

[Mass screening of railway workers] Erpelev FA. **Sov Zdravookhr** 1989;(2):42–4 (Eng. Abstr.) (Rus)

[Significance of the socio-psychological climate of workers' teams] Flek VO. **Sov Zdravookhr** 1988;(11):23–6 (Eng. Abstr.) (Rus)

[The factory-territorial principle of medical services for industrial workers] Lekhan VN, et al. **Sov Zdravookhr** 1988; (9):12–6 (Eng. Abstr.) (Rus)

[Activities of regional agricultural medical teams] Novoselov VP. **Sov Zdravookhr** 1988;(11):38–41 (Eng. Abstr.) (Rus)

[Problems of preventing ischemic heart disease among naval personnel] Vinnikova VN, et al. **Sov Zdravookhr** 1989; (4):34–7 (Eng. Abstr.) (Rus)

[Characteristics of the dynamic outpatient observation of workers at an industrial enterprise] Kamysheva EP, et al. **Ter Arkh** 1988;60(11):128–31 (Eng. Abstr.) (Rus)

[Experience with the ophthalmological examination of workers in refrigerator-manufacturing plants] Iakovlev IuG, et al. **Vestn Oftalmol** 1988 Jul–Aug;104(4):71–4 (Rus)

[Possibility of the diagnosis of occupational hearing loss during preventive mass screening] Pankova VB, et al. **Vestn Otorinolaringol** 1988 Sep–Oct;(5):52–5 (Rus)

[Improving the organization of dietary services in a sanatorium-preventorium] Sizyk TM, et al. **Vopr Pitan** 1988 Jul–Aug;(4):76–8 (Rus)

[Medical services for workers in the mining industry] Pavlenko ME, et al. **Vrach Delo** 1988 Sep;(9):117–8 (Rus)

[A psychotherapist's experience with conducting emotional and psychological relaxation] Grabovskiĭ IaA. **Zh Nevropatol Psikhiatr** 1989;89(3):84–5 (Eng. Abstr.) (Rus)

STANDARDS

Standard setting, science, and politics. Frumkin H. **Am J Ind Med** 1989;15(3):347–50

OSHA inspection policy: a fresh start. Boden LI. **J Public Health Policy** 1988 Autumn;9(3):321–6

Assessing the effects of employee assistance programs: a review of employee assistance program evaluations. Colantonio A. **Yale J Biol Med** 1989 Jan–Feb;62(1):13–22

[Evaluation of and trends in hearing surveillance programs in industry] Malchaire J. **Acta Otorhinolaryngol Belg** 1988; 42(4):529–37 (Eng. Abstr.) (Fre)

[Effectiveness of preliminary medical examinations in evaluating the status of the nervous system in persons to be exposed to organic solvents] Polakowska B. **Med Pr** 1988;39(6):429–33 (Eng. Abstr.) (Pol)

[Introduction of hygienic recommendations in the construction of health centers at the Iu.V. Andropov Novolipetsk metallurgical combine] Libanov AS, et al. **Gig Tr Prof Zabol** 1989;(5):34–5 (Rus)

[Problem of improving regular medical examinations] Penknovich AA, et al. **Gig Tr Prof Zabol** 1988 Nov; (11):33–6 (Eng. Abstr.) (Rus)

[An information test as a method of increasing the effectiveness and quality of pre-trip medical examinations of locomotive engineers] Prazdnov AS, et al. **Gig Tr Prof Zabol** 1989;(5):35–6 (Rus)

[Therapeutic and preventive diet and various indicators of health and work capacity of workers at the industrial plant "Sintez"] Pal'mova LA, et al. **Vopr Pitan** 1988 Jul–Aug; (4):41–5 (Eng. Abstr.) (Rus)

[Expert evaluation of preliminary and periodic occupational examinations of miners in the Don Basin coal mines] Kobets GP, et al. **Vrach Delo** 1988 Jul;(7):97–9 (Eng. Abstr.) (Rus)

STATISTICS & NUMERICAL DATA

[Current problems of the prophylactic medical examination of miners who work in coal mines and the evaluation of its efficacy] Tkachov AD, et al. **Sante Publique (Bucur)** 1988 Jul–Sep;31(3):193–8 (Eng. Abstr.) (Fre)

SUPPLY & DISTRIBUTION

Occupational health services in South African manufacturing industries: a pilot survey. Sitas F, et al. **Am J Ind Med** 1988;14(5):545–57

Audiologists providing services to industry and dispensing products. **ASHA** 1988 Dec;30(12):37

TRENDS

Some trends in worker access to health care in the United States (1974–1983). Pedersen DH, et al. **Am J Ind Med** 1989;15(2):151–65

Employer-sponsored health insurance in America. Gabel J, et al. **Health Aff (Millwood)** 1989 Summer;8(2):116–28

Occupational health service in the hospitals: its importance in the context of health for all by 2000 AD. Dasgupta AK. **J Indian Med Assoc** 1988 Jul;86(7):187–91

Changing employees' dietary and exercise practices: an experimental study in a small company. Ostwald SK. **J Occup Med** 1989 Feb;31(2):90–7

The idea of an activist is, today, almost synonymous with radical politics [editorial] D'Auria D. **J Soc Occup Med** 1989 Summer;39(2):43–4

Human immunodeficiency virus (HIV) and the occupational physician. Searle SJ. **J Soc Occup Med** 1989 Summer; 39(2):45–8

Health management personnel choice requires careful definition of needs. Chenoweth D. **Occup Health Saf** 1988 Dec;57(13):36–7

Employee health programs will thrive if they reflect employees' interests. Chenoweth D. **Occup Health Saf** 1989 Mar;58(3):19

Occupational health services in the United States. Felton JS. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:231–42 (18 ref.)

Current perspectives on the economics of fitness and sport with particular reference to worksite programmes. Shephard RJ. **Sports Med** 1989 May;7(5):286–309 (50 ref.)

Role of the occupational physician in mental health services. Felton JS. **State Art Rev Occup Med** 1988 Oct–Dec; 3(4):707–17 (28 ref.)

The EAP and workplace psychiatric injury. Lawton B. **State Art Rev Occup Med** 1988 Oct–Dec;3(4):695–706 (18 ref.)

[The expanded participation of women in society and the impact to industrial health (editorial)] Kasuya M. **Sangyo Igaku** 1988 May;30(3):169 (Jpn)

[Current problems of medical health care for animal breeders] Grigor'eva FG, et al. **Sov Zdravookhr** 1988;(7):15–20 (Eng. Abstr.) (Rus)

UTILIZATION

Is there a need for a place-of-work cervical smear service?

Reid G, et al. **Health Bull (Edinb)** 1988 May;46(3):153–5
Participation in workplace health promotion programs: the contribution of health and organizational factors. Sloan RP, et al. **Health Educ Q** 1988 Fall;15(3):269–88
Do only the healthy intend to participate in worksite health promotion? Zavela KJ, et al. **Health Educ Q** 1988 Fall; 15(3):259–67
Interns assess use of facilities, participation in health programs. Chenoweth D. **Occup Health Saf** 1989 Apr; 58(4):16

OCCUPATIONAL MEDICINE

see related
OCCUPATIONAL DISEASES
OCCUPATIONAL HEALTH SERVICES
PROTECTIVE DEVICES

Mixed solvent exposure and organic brain damage. A study of painters. Mikkelsen S, et al.
Acta Neurol Scand Suppl 1988;118:1–143 (74 ref.)
Foam at inner eye canthus in office workers, compared with an average Danish population as control group. Franck C, et al. **Acta Ophthalmol (Copenh)** 1989 Feb;67(1):61–8
American Industrial Hygiene Association. January 1989. Consultants listing. **Am Ind Hyg Assoc J** 1989 Jan; 50(1):A55–71
1988 Yant memorial award lecture. The industrial hygiene profession—adapting to changes. Jones T.
Am Ind Hyg Assoc J 1988 Dec;49(12):593–9
Privacy, profit, and the physician. Cohen SR.
Am J Dermatopathol 1988 Feb;10(1):87–8
Mortality among employees of an Ontario factory manufacturing insulation materials from amosite asbestos. Finkelstein MM. **Am J Ind Med** 1989;15(4):477–81
Assessment and management of occupational risks in the Nordic (Scandinavian) countries. Holmberg B, et al.
Am J Ind Med 1989;15(6):615–26
On "Corporate influence on threshold limit values" by Castleman and Ziem. Richter ED. **Am J Ind Med** 1988; 14(3):365–8
What's in a name? The occupational hygienist's problem with threshold limit values. Sass R. **Am J Ind Med** 1988; 14(3):355–63
Re: Robinson, AE (1989): standard setting and protection of human health and safety. Weeks JL. **Am J Ind Med** 1989;15(6):723–5
The sociologic context of occupational health in South Africa. Myers JE, et al. **Am J Public Health** 1989 Feb; 79(2):216–24
Report on the role of the emergency physician in occupational medicine. American College of Emergency Physicians. **Ann Emerg Med** 1988 Oct;17(10):1112–4
Occupational hygiene aspects of the use of oil–based drilling fluids. Davidson RG, et al. **Ann Occup Hyg** 1988; 32(3):325–32
The challenge of teaching occupational and environmental medicine in internal medicine residencies. Cullen MR, et al. **Arch Intern Med** 1988 Nov;148(11):2401–4
Occupational health research [letter] Blain PG. **BMJ** 1988 Oct 22;297(6655):1043–4
Ethical conflict in the practice of occupational medicine. Brandt–Rauf PW. **Br J Ind Med** 1989 Jan;46(1):63–6
Social class as indicated by area of residence: a mortality study within an Australian industrial population. Gordon I, et al. **Community Health Stud** 1989;13(2):170–6
Conditioned clothing: the needs of industry and the wearer. Proctor TD. **Ergonomics** 1988 Jul;31(7):987–90
Return to work after rehabilitation in coronary bypass patients. Role of the occupational medicine specialist during rehabilitation. Monpere C, et al. **Eur Heart J** 1988 Nov;9 Suppl L:48–53
Mortality and career radiation doses for workers at a commercial nuclear power plant: feasibility study. Goldsmith R, et al. **Health Phys** 1989 Feb;56(2):139–50
Nuclear medicine staff and patient doses in Manitoba (1981–1985). Huda W, et al. **Health Phys** 1989 Mar; 56(3):277–85
Particle size distributions for airborne radionuclides in Ginna steam generator work environments. Mis FJ, et al.
Health Phys 1989 Feb;56(2):233–8
Guidelines for an AIDS policy in the workplace.
Int Nurs Rev 1988 Nov–Dec;35(6):164
The use of respirators in the workplace [clinical conference] Schneid JA, et al. **J Fam Pract** 1989 Jul;29(1):21–3, 27–8
Career options of occupational physicians [letter] Forman SA. **J Occup Med** 1989 Mar;31(3):279–80
Critiquing a critique [letter] Yodaiken RE. **J Occup Med** 1981 Mar;23(3):156–7, 160
Factors influencing alcohol consumption in a workplace setting. Roberts R. **J Soc Occup Med** 1988 Winter; 38(4):118–22
Human immunodeficiency virus (HIV) and the occupational physician. Searle SJ. **J Soc Occup Med** 1989 Summer; 39(2):45–8
Employment prospects for patients with intestinal stomas: the attitude of occupational physicians. Wyke RJ, et al. **J Soc Occup Med** 1989 Spring;39(1):19–24
Survey on resources for occupational health research in European Community countries. Vanhoorne M, et al.
Med Lav 1988 Jan–Feb;79(1):3–18
Quantitative muscle strength testing: a comparison of job strength requirements and actual worker strength among military technicians. Pedersen DM, et al. **Milit Med** 1989 Jan;154(1):14–8
Lung function and health attitudes and habits in professional wind musicians and vocalists. Schorr–Lesnick B.
Mt Sinai J Med (NY) 1988 Sep;55(4):346–52
Chromosomal aberrations and sister–chromatid exchanges in tool and die workers. Garry VF, et al. **Mutat Res** 1989 Jan–Feb;225(1–2):1–9
Multiple sclerosis in relation to industrial and commercial activities in the Faroe Islands. Lauer K.
Neuroepidemiology 1988;7(4):228–33
Occupational Health & Safety 1989/90 purchasing sourcebook. **Occup Health Saf** 1989 Aug;58(9):7–184
Valid medical standards reduce hiring hassles, costs for employers. Carmean G, et al. **Occup Health Saf** 1989 May; 58(5):83–5, 88
Concentric circles of healthcare are neither practical nor desirable. Polakoff PL. **Occup Health Saf** 1989 May; 58(5):26
Historic merger of medical groups may affect board certification exams. Strasses AL. **Occup Health Saf** 1989 Apr;58(4):79
Occupational medicine and the clinician [editorial] McCallum RI. **Postgrad Med J** 1989 Feb;65(760):65–6
Occupational medicine as a specialty. Slattery DA.
Postgrad Med J 1989 Feb;65(760):89–93
Mortality among migrant tunnel workers. Une H, et al.
Sangyo Igaku 1988 Nov;30(6):481–5
Industrial physician's responsibilities to his patients and to management—confidential records. Beard RR.
Sangyo Ika Daigaku Zasshi 1989 Mar 1;11(1):83–9
Stressful conditions of work: the participative ergonomics approach. Corlett EN, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:541–8 (3 ref.)
Physicians' stress in the coronary care units. Hasegawa A, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:474–9
Basic pattern of daily life stress and work condition. Hayashi S, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:519–27
Occupational influences on burnout phenomenon among hospital nurses. Hisashige A, et al.
Sangyo Ika Daigaku Zasshi 1989 Mar 20;11 Suppl:454–66
Work environment and cardiovascular diseases. A short review of the literature. Kristensen TS.
Sangyo Ika Daigaku Zasshi 1989 Mar 20;11 Suppl:120–33 (14 ref.)
Psychological stress in the workplace. Lazarus RS.
Sangyo Ika Daigaku Zasshi 1989 Mar 20;11 Suppl:528–40 (34 ref.)
Occupational stressors, biological stress and workers' health. Levi L. **Sangyo Ika Daigaku Zasshi** 1989 Jun 1;11(2):229–45 (48 ref.)
Occupational stressors, biological stress reactions, and worker's health. Levi L. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:480–1
Silent hepatitis–B immunization in laboratory technicians. Ingerslev J, et al. **Scand J Clin Lab Invest** 1988 Jun; 48(4):333–6
Limitations in the use of job exposure matrices. Olsen J.
Scand J Soc Med 1988;16(4):205–8
Work conditions and urinary excretion of catecholamines—a study of prison staff in Sweden. Härenstam AB, et al.
Scand J Work Environ Health 1988 Aug;14(4):257–64
Office employment, work with video display terminals, and course of pregnancy. Reference mothers' experience from a Finnish case–referent study of birth defects. Nurminen T, et al. **Scand J Work Environ Health** 1988 Oct;14(5):293–8
The role of personal beliefs and social influences as determinants of respirator use among construction painters. White MC, et al. **Scand J Work Environ Health** 1988 Aug; 14(4):239–45
How an occupational medicine physician views current blood–borne disease risks in health–care workers. Rosenberg J, et al. **State Art Rev Occup Med** 1989;4 Suppl:3–6
Public responsibilities and opportunities in educating professionals and workers. Robbins A.
Toxicol Ind Health 1989 Jul;5(4):123–4; discussion 125–30
The role of the private sector in innovative approaches to research and training. Whiting BJ. **Toxicol Ind Health** 1989 Jul;5(4):115–21; discussion 125–30
Early worker and employer training initiatives at OSHA. Whiting BJ. **Toxicol Ind Health** 1989 Jul;5(4):87–95; discussion 111–4
Quantitative sensory assessment in toxicology and occupational medicine: applications, theory, and critical appraisal. Maurissen JP. **Toxicol Lett** 1988 Oct; 43(1–3):321–43 (96 ref.)
[Health problems and and implementation of the law regarding state enterprises] Bouček K. **Cas Lek Cesk** 1988 Nov 4;127(45):1377–9 **(Cze)**
[The incidence of occupational diseases in the health services within the catchment area of the Clinic for Occupational Diseases of the School of Medicine in Prague] Kuklová D, et al. **Vnitr Lek** 1989 May;35(5):472–8 (Eng. Abstr.) **(Cze)**
[The effect of physical working conditions on female reproduction] Molsted K, et al. **Nord Med** 1989; 104(5):158–60 (Eng. Abstr.) **(Dan)**
[Waiting time and function at a department for occupational medicine] Gyntelberg F, et al. **Ugeskr Laeger** 1989 May 29;151(22):1419–20 **(Dan)**
[The occupational situation of patients with pacemakers] Petersen J, et al. **Ugeskr Laeger** 1988 Nov 21; 150(47):2896–8 (Eng. Abstr.) **(Dan)**
[Fertility among painters according to questionnaires (letter)] Sherson DL. **Ugeskr Laeger** 1988 Oct 3;150(40):2415–6 **(Dan)**
[Cardiac arrhythmia observed in 400 workers without obvious heart disease by Holter monitoring] Massin N, et al. **Arch Mal Coeur** 1988 Nov;81(11):1361–7 (Eng. Abstr.) **(Fre)**
[Methodology of personal dosimetry] Drexler G.
Strahlenschutz Forsch Prax 1988;30:1–10 **(Ger)**
[Results of dosimetric measurements of personnel in nuclear medicine] Havlik E. **Strahlenschutz Forsch Prax** 1988; 30:55–61 **(Ger)**
[Results of TL–personal dosimetry in Austria] Hefner A, et al. **Strahlenschutz Forsch Prax** 1988;30:41–53 **(Ger)**
[Results of film dosimetry in Austria] Nell M.
Strahlenschutz Forsch Prax 1988;30:19–27 **(Ger)**
[Results of personal dosimetry in the Federal Republic of Germany] Ritzenhoff KH. **Strahlenschutz Forsch Prax** 1988;30:29–40 **(Ger)**
[Selected aspects of individual dosage monitoring] Schalch D, et al. **Strahlenschutz Forsch Prax** 1988;30:11–8 (19 ref.) **(Ger)**
[Guidelines for return to work of patients with infarction and coronary disease treated by angioplasty and/or by–pass] Denolin H, et al. **G Ital Cardiol** 1989 Feb; 19(2):176–6 **(Ita)**
[Proceedings: "Competencies and responsibilities of the physician and medico–legal obligations in the health surveillance of workers. Current operational problems". Brescia, 28 February 1987] **G Ital Med Lav** 1987 Sep–Nov; 9(5–6):175–231 **(Ita)**
[Chronobiology and industrial medicine: approach to the evaluation of the toxicological risk in occupational exposure to xenobiotics] Franco G, et al.
G Ital Med Lav 1987 May–Jul;9(3–4):125–40 (105 ref.) (Eng. Abstr.) **(Ita)**
[Proposal for a protocol for the biological monitoring and health surveillance of workers exposed to inorganic lead] Alessio L, et al. **Med Lav** 1988 Jan–Feb;79(1):78–81 (Eng. Abstr.) **(Ita)**
[Thyroidal 125I monitoring system using a survey meter for 125I] Nishizawa K, et al. **Radioisotopes** 1989 Apr; 38(4):203–8 (Eng. Abstr.) **(Jpn)**
[Proceedings of the 61st annual meeting of the Japan Association of Industrial Health. 11–14 April, 1989, Kanazawa. Abstracts] **Sangyo Igaku** 1988 Dec; 30(7):533–810 **(Jpn)**
[Assessment of occupational exposures to industrial hazardous substances. II. Interday fluctuations of the daily exposure averages among workers exposed to lead] Kumagai S, et al. **Sangyo Igaku** 1988 May;30(3):186–95 (Eng. Abstr.) **(Jpn)**
[Assessment of occupational exposures to industrial hazardous substances. I. A proposed method based on interday fluctuation of contaminant concentrations for evaluating employee's exposure averages (TWAs)] Matsunaga I, et al. **Sangyo Igaku** 1988 May;30(3):179–85 (Eng. Abstr.) **(Jpn)**
[Epidemiological findings for occupational psychiatry: occupational environment, physical health, sex, age and mental conditions] Abe K, et al.
Seishin Shinkeigaku Zasshi 1988;90(10):893–9 **(Jpn)**
[Importance of weekly mental health services tied in early diagnosis and therapy of occupational mental disorders viewed from a sixteen–year experience as occupational psychiatrist] Hirose T. **Seishin Shinkeigaku Zasshi** 1988; 90(10):887–92 **(Jpn)**
[Present status and countermeasures for problems in occupational mental health] Miyasato K.
Seishin Shinkeigaku Zasshi 1988;90(10):881–6 **(Jpn)**
[Primary health care in occupational medicine] Faye–Lund P. **Tidsskr Nor Laegeforen** 1988 Aug 30;108(24):1944–5 **(Nor)**
[Physicians and the psychosocial occupational environment] Larsen O. **Tidsskr Nor Laegeforen** 1989 May 30; 109(15):1611 **(Nor)**
[General practice as occupational physician] Syvertsen JO. **Tidsskr Nor Laegeforen** 1988 Oct 25;108(29B):2640–4 **(Nor)**
[Reaction time to single and double stimuli in operators of mining equipment] Gosk A, et al. **Med Pr** 1988;39(5):322–8 (Eng. Abstr.) **(Pol)**
[Studies of the correlation of physiologic energy out put and efficiency and physical work capacity (VO2max) of turners] Jopkiewicz A. **Med Pr** 1988;39(4):271–5 (Eng. Abstr.) **(Pol)**
[Effect of work performed by pregnant women on birth weight and fetal hypotrophy] Malinowski W, et al.
Med Pr 1988;39(2):137–41 (Eng. Abstr.) **(Pol)**
[Evaluation of the usefulness of thin–layer chromatography and orientation tests detecting various addictive drugs in biological specimens] Mielczarska J. **Med Pr** 1989; 40(1):12–7 (Eng. Abstr.) **(Pol)**
[A strategy for measuring air pollution in the work environment (letter)] Szewczyk G. **Med Pr** 1989;40(1):54–8 **(Pol)**
[Correlation of mental fatigue due to work load and professional qualifications of physicians] Wichrowski A,

et al. **Med Pr** 1988;39(4):246–52 (Eng. Abstr.) (Pol)
[Reply to the letter of Dr. G. Szewczyk regarding his article "A strategy for measuring air pollution in the work environment" (Medycyna pracy, vol. 37 p. 369, 1986) (letter)] Więcek E. **Med Pr** 1989;40(1):59–61 (Pol)
[Lead level of the hair in persons occupationally exposed to it in selected work places] Zaborowska W, et al. **Med Pr** 1989;40(1):38–43 (Eng. Abstr.) (Pol)
[Roentgenologic and CT signs of asbestosis. Comparison of the methods in our caseload] Dobek J, et al. **Pol Przegl Radiol (Warszawa)** 1988 May–Jun;52(3):135–46 (Eng. Abstr.) (Pol)
[Daily nutrition of young workers, vocational school students at large industrial plants] Szponar L, et al. **Rocz Panstw Zakl Hig** 1988;39(3):176–85 (Eng. Abstr.) (Pol)
[The professional work of women as a fetal risk] Zdziennicki A. **Wiad Lek** 1988 May 15;41(10):652–4 (20 ref.) (Eng. Abstr.) (Pol)
[Effect of complex methods of relieving neuro-emotional stress on cardiorespiratory indicators of workers] Gumeniuk VA, et al. **Fiziol Cheloveka** 1988 Jul–Aug; 14(4):664–71 (Rus)
[Anomaloscopy as a method of evaluation of fatigue during work] Oshchepkov VI, et al. **Fiziol Cheloveka** 1988 Jul–Aug;14(4):706–8 (Rus)
[Status of the body's functional systems in mine rescue workers in extreme conditions] Tarasenko VT, et al. **Fiziol Cheloveka** 1988 Jul–Aug;14(4):693–7 (Rus)
[Physiological determinants of functional conditions of human body during watchmen's work schedules] Urazaev AM, et al. **Fiziol Cheloveka** 1988 Jul–Aug;14(4):679–85 (Rus)
[Various indicators of health status during 3-month watchmans' duty period] Valov R, et al. **Fiziol Cheloveka** 1988 Jul–Aug;14(4):672–8 (Rus)
[Characteristics of the mobilization of psychophysiologic functions in various degrees of effectiveness in occupational activity] Diadichkin VP. **Fiziol Zh** 1989 Mar–Apr; 35(2):23–7 (Eng. Abstr.) (Rus)
[Use of a method of systematic analysis for intensification of hygienic studies] Chernilovskaia FM, et al. **Gig Sanit** 1988 Nov;(11):51–4 (Rus)
[Physiologic and hygienic prerequisites for the development of criteria of professional aptitude of adolescents for operating sewing machines] Kalinina MP. **Gig Sanit** 1988 Nov;(11):13–6 (Eng. Abstr.) (Rus)
[Indicators of mental status, catecholamine excretion, lipid metabolism and hemostasis in air-traffic controllers at automated and non-automated stations during their non-work days] Kan GS, et al. **Gig Sanit** 1989 Mar;(3):35–7 (Eng. Abstr.) (Rus)
[Principles of setting up a multipurpose system of data collection for an automated information system on occupational medicine, the environment and public health] Leshchenko IaA, et al. **Gig Sanit** 1988 Sep;(9):24–8 (Rus)
[Characteristics of the functional status of the cardiovascular system of female workers at an assembly plant] Makarychev VA, et al. **Gig Sanit** 1988 Dec;(12):85–6 (Rus)
[Physical development of workers in various categories of engineering industry] Ovcharenko SA. **Gig Sanit** 1988 Jun; (6):80–1 (Rus)
[Evaluation of the functional state of the cardiovascular system in watchmen on a shift-work schedule] Shmerling PM, et al. **Gig Sanit** 1989 Apr;(4):90–2 (Rus)
[Evaluation of the degree of irradiation of accelerator operators by using EC-1033 computer] Suslin VP, et al. **Gig Sanit** 1989 Feb;(2):74 (Rus)
[Neuropsychological methods of evaluating systems of organization of motor and attention functions in hygiene studies] Tairov OP, et al. **Gig Sanit** 1988 Jun;(6):53–6 (55 ref.) (Rus)
[Physiologic, hygienic and pedagogic aspects of the use of computers in the process of improving the qualifications of specialists in vocational training] Zbarovskiĭ VS, et al. **Gig Sanit** 1989 Apr;(4):12–4 (Rus)
[Criteria of the evaluation of thermal status of persons living in humid, hot and moderate climate] Afanas'eva RF, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):16–9 (Eng. Abstr.) (Rus)
[Status of immunologic reactivity and prospects of the implementation of occupational selection of workers at a microbiological plant] Artamonova VG, et al. **Gig Tr Prof Zabol** 1989;(1):5–8 (Eng. Abstr.) (Rus)
[Use of preventive reflexotherapy in workers at an electrode-manufacturing plant] Avilov OV, et al. **Gig Tr Prof Zabol** 1989;(4):39–41 (Eng. Abstr.) (Rus)
[Effect of occupational factors of deep coal mines on the immunological status of miners] Donchenko LI, et al. **Gig Tr Prof Zabol** 1988 Aug;(8):53–4 (Rus)
[Evaluation of oncologic risk of patients with asbestosis based on an epidemiologic study] Gladkova EV, et al. **Gig Tr Prof Zabol** 1988 Dec;(12):32–4 (Eng. Abstr.) (Rus)
[Microbial contamination of the work area air at the tricot knitting mills] Ikonomova ZL, et al. **Gig Tr Prof Zabol** 1989;(1):16–9 (Eng. Abstr.) (Rus)
[Vanadium level in the urine of workers on a shift-work schedule during drilling of oil wells for high-vanadium petroleum] Karimov MA, et al. **Gig Tr Prof Zabol** 1989; (3):9–12 (Eng. Abstr.) (Rus)
[The working conditions of microscope operators and the ways for their sanitary improvement in the manufacture of microelectronic devices] Liman AD, et al. **Gig Tr Prof Zabol** 1989;(2):14–6 (Eng. Abstr.) (Rus)
[The air conditioning system in locomotive compartments] Melidi GE, et al. **Gig Tr Prof Zabol** 1989;(4):41–2 (Eng. Abstr.) (Rus)
[Physiologic and hygienic characteristics of the work of video display terminal operators] Obelianis VB. **Gig Tr Prof Zabol** 1988 Dec;(12):29–31 (Eng. Abstr.) (Rus)
[Adaptation of construction workers to regular and increased occupational work loads] Semenov AB. **Gig Tr Prof Zabol** 1989;(3):20–2 (Eng. Abstr.) (Rus)
[Experience with joint work of the sanitary-epidemiologic station and the Institute of Occupational Hygiene and Occupational Diseases in the prevention of vibration disease and occupational hearing loss in miners of Krivoĭ Rog] Shushkovskiĭ BZ, et al. **Gig Tr Prof Zabol** 1988 Nov; (11):42–3 (Rus)
[Planning and coordination of the research carried out by medical institutes on the problem of the scientific bases of industrial hygiene and occupational pathology] Solodova RA, et al. **Gig Tr Prof Zabol** 1989;(2):55 (Rus)
[A method for assessing reliability of different rates of morbidity with temporary disability in small contingents of workers] Stenin AN, et al. **Gig Tr Prof Zabol** 1989; (6):33–6 (Eng. Abstr.) (Rus)
[Current state of the use of short-term tests in identifying potential carcinogenicity of industrial mineral dusts (review of the literature)] Vanchugova NN. **Gig Tr Prof Zabol** 1989; (1):34–8 (57 ref.) (Rus)
[Characteristics of functional reorganization of the body after exposure to noise in the initial period of work activity] Zvereva GS. **Gig Tr Prof Zabol** 1988 Dec;(12):25–8 (Eng. Abstr.) (Rus)
[Value of rheovasography and thermography in the diagnosis of varicose veins of the legs in the practice of expert evaluation of work capacity] Kosichkin MM, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):27–31 (Eng. Abstr.) (Rus)
[Various aspects of applied biochemical studies in aviation medicine] Dlusskaia IG, et al. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):15–21 (76 ref.) (Eng. Abstr.) (Rus)
[Development of spatial orientation during pilot training] Ivanov VV, et al. **Kosm Biol Aviakosm Med** 1988 Jul–Aug; 22(4):31–5 (Eng. Abstr.) (Rus)
[Diagnosis of cardiac rhythm disorders in pilots using 24-hour ECG monitoring] Sinopal'nikov VI, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):80–3 (Eng. Abstr.) (Rus)
[Anomalies of refraction and optimal correction of ametropia in workers in the metallurgy industry] Mambetov EK, et al. **Oftalmol Zh** 1989;(1):33–4 (Eng. Abstr.) (Rus)
[Agricultural trauma: its real meaning, determination of the causes and their classification] Zava'niuk AKh. **Ortop Travmatol Protez** 1989 May;(5):61–5 (Rus)
[Activities of health personnel trade unions concerning health care of women and children (editorial)] Novak LI. **Pediatriia** 1988;(12):4–7 (Rus)
[Phthisio-pulmonological tasks in an industrial region] Sokolov VA. **Probl Tuberk** 1988;(12):3–5 (Eng. Abstr.) (Rus)
[Detection of arterial hypertension in workers in the rubber manufacturing industry] Vinogradova LA, et al. **Sov Med** 1988;(9):60–3 (Rus)
[Analysis of the preventive activities of medical units in coal mines] Kobets GP, et al. **Sov Zdravookhr** 1989;(1):29–33 (Eng. Abstr.) (Rus)
[A method of automated classification of the working collective of an industrial plant by socio-hygienic factors] Kochin IV, et al. **Sov Zdravookhr** 1989;(6):8–10 (Eng. Abstr.) (Rus)
[Scientific and technical progress: working conditions and the health of the workers] Chikin SIa. **Vestn Akad Med Nauk SSSR** 1989;(4):9–14 (Rus)
[Methods for assessing the combined action on the body of environmental factors and work activities] Navakatikian AO, et al. **Vrach Delo** 1989 Mar;(3):106–8 (Rus)
[Was it right to break secrecy? A discordant board issued a warning of intervention against an HIV-seropositive pilot] **Lakartidningen** 1988 Nov 16;85(46):3973–6 (Swe)
[The future and health—an examination of an organization test] Engström K, et al. **Lakartidningen** 1989 Jul 12; 86(28–29):2519–21 (Swe)
[Hazardous work and predictors of hand eczema—vocational guidance of patients with atopic allergy] Rystedt I, et al. **Lakartidningen** 1989 Mar 1;86(9):714–7 (Swe)
[Physicians feel stress, anxiety and anger more often than other employees] Theorell T, et al. **Lakartidningen** 1988 Oct 5;85(40):3268–71 (Swe)

ECONOMICS

Cost reduction trend forces new practices in occupational medicine [editorial] Strasser AL. **Occup Health Saf** 1989 Feb;58(2):14
Occupational medicine. Marketing. Small RJ, et al. **State Art Rev Occup Med** 1989 Jan–Mar;4(1):83–92 (9 ref.)

EDUCATION

Using hospital site visits for teaching occupational health. Ben-David A, et al. **Acad Med** 1989 Jun;64(6):327–9
A program of management training for residents. Cordes DH, et al. **Acad Med** 1989 Jan;64(1):45–6
An update on the accreditation of academic programs in industrial hygiene. Garber BT. **Am Ind Hyg Assoc J** 1988 Nov;49(11):A688, A690
Education and training in occupational hygiene in Europe: an example of Anglo-Hellenic co-operation. Walters DR, et al. **Ann Occup Hyg** 1988;32(3):411–7
Mexico, maquiladoras, and occupational medicine training. Cordes DH, et al. **Asia Pac J Public Health** 1989;3(1):61–7
Some reflections on the global and Asia-Pacific situations in occupational health education and training. Phoon WO, et al. **Asia Pac J Public Health** 1988;2(4):224–9
Occupational health research [letter] Smith CE. **BMJ** 1988 Aug 13;297(6646):487
Academic occupational health under threat [editorial] Waldron HA. **BMJ** 1989 Jul 8;299(6691):74
Undergraduate teaching of occupational health [editorial] Snashall D. **Br J Ind Med** 1989 Jul;46(7):433–4
Education in management aspects of occupational and environmental health and safety programs. Moser R Jr, et al. **J Occup Med** 1989 Mar;31(3):251–6
Undergraduate occupational health teaching in British medical schools. Harrington JM, et al. **J R Coll Physicians Lond** 1989 Jan;23(1):24–7
Occupational medicine [editorial] D'Auria D. **J Soc Occup Med** 1989 Spring;39(1):5–6
Multi-disciplinary, problem-based, self-directed training in occupational health. Verma DK, et al. **J Soc Occup Med** 1988 Winter;38(4):101–4
Training and education in occupational health in Saudi Arabia. Ballal S, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:279–86
A conference on environmental/occupational health training. Cincinnati, Ohio, April 28–29, 1987. Proceedings. **Toxicol Ind Health** 1989 Jul;5(4):1–145
Training under Superfund. Dement J. **Toxicol Ind Health** 1989 Jul;5(4):103–10; discussion 111–4
A Kellogg-supported program at the University of Iowa. Merchant J. **Toxicol Ind Health** 1989 Jul;5(4):61–77; discussion 79–84
NIOSH training in occupational health. Pierce J. **Toxicol Ind Health** 1989 Jul;5(4):39–48; discussion 79–84
NIEHS training in environmental toxicology. Rall DP. **Toxicol Ind Health** 1989 Jul;5(4):35–7; discussion 79–84
Ills from work, environment challenge physician skills. Greeley A. **Vet Hum Toxicol** 1989 Feb;31(1):65–6
An occupational/environmental services training program for poison information specialists. Sigell LT, et al. **Vet Hum Toxicol** 1988 Oct;30(5):474–5
[Continuing education and residency program of occupational medicine in U. S. A.] Kayama F. **Sangyo Ika Daigaku Zasshi** 1989 Mar 1;11(1):77–82 (Eng. Abstr.) (Jpn)
[Workshop on training in occupational health in the medical field] **Educ Med Salud** 1988;22(2):211–26 (Spa)

HISTORY

Dr Tom Garland—a pioneer in occupational health. Glass WI. **N Z Med J** 1989 Mar 8;102(863):109–10
Review of experience gained in 40 years occupational medicine and over 20 years teaching. Thiess AM. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:150–64
The development of occupational medicine in Ulster—a personal memoir. Smiley JA. **Ulster Med J** 1988 Oct; 57(2):184–94
[From industrial health to occupational and environmental health] Foà V. **Med Lav** 1989 Jan–Feb;80(1):6–7 (Ita)
[The work of Nicola Zurlo] Metrico L. **Med Lav** 1989 Jan–Feb;80(1):3–5 (Ita)
[Brunon Nowakowski, a distinguished representative of Polish occupational medicine and the organizer and first rector of the Silesian Medical Academy] Puzio A. **Arch Hist Filoz Med** 1988;51(3):359–72 (Eng. Abstr.) (Pol)
[The contribution of Prof. E. Ts. Andreeva-Galanina to the study of occupational vibration and noise (on the centenary of her birth)] Artamonova VG, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):1–5 (Rus)
[Lenin and science] Potulov BM. **Klin Med (Mosk)** 1989 Apr; 67(4):3–7 (Rus)

LEGISLATION & JURISPRUDENCE

Legislation and the employer's liability. Sykes JM. **Ergonomics** 1988 Jul;31(7):983–5
The legal status of AIDS at the workplace in the United States. Thomas DK. **Med Anthropol** 1989 Mar; 10(2–3):193–201
Who is liable when worker is exposed to harm? Goerth CR. **Occup Health Saf** 1988 Sep;57(10):63
Government and occupational health practice: the perspective of a regulatory authority. Carter JT. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:221–4
[Obligations and penal responsibilities of physicians, especially factory doctors, in regard to the protection of workers' health] Cottinelli V. **G Ital Med Lav** 1987 Sep–Nov;9(5–6):219–28 (Eng. Abstr.) (Ita)
[The concept of disease and causality relations] De Ferrari

F. G Ital Med Lav 1987 Sep-Nov;9(5-6):205-9 (Eng. Abstr.) (Ita)
[Periodic visits to the doctor? (letter)] Grazioli D, et al. Med Lav 1988 Jul-Aug;79(4):331-4 (Ita)
[Control of exposure to asbestos in buildings in the United States: legislation and industrial hygiene procedures] Quinn M. Med Lav 1988 Sep-Oct;79(5):403-10 (Eng. Abstr.) (Ita)
[Principles of the diagnosis and medical prevention of lead poisoning] Marek K. Med Pr 1988;39(2):115-24 (Eng. Abstr.) (Pol)
[Urgent problems of forensic medical expert evaluation of disability in civil suits] Zagriadskaia AP. Sud Med Ekspert 1989 Jan-Mar;32(1):7-9 (Eng. Abstr.) (Rus)

MANPOWER

Occupational physicians in UK—numbers, training requirements and qualifications. Gardner AW. Sangyo Ika Daigaku Zasshi 1989 Mar 20;11 Suppl:225-30
[Let's convert the occupational health personnel into a constructive team!] Lundberg G. Lakartidningen 1988 Sep 21;85(38):3028 (Swe)

METHODS

Intra- and interindividual variability of biochemical and haematological parameters in periodical health surveillance. van Geen F. Int Arch Occup Environ Health 1988;Suppl:65-75

ORGANIZATION & ADMINISTRATION

An approach to occupational health risk management for a diversified international corporation. Andersen GH, et al. Am Ind Hyg Assoc J 1989 Apr;50(4):224-8
Safety professionals need education to address multifaceted challenges. Della-Guistina DE. Occup Health Saf 1989 Aug;58(8):31
Occupational medicine and occupational health: the French organization. Caillard JF. Sangyo Ika Daigaku Zasshi 1989 Mar 20;11 Suppl:165-72
Occupational medicine. The management perspective. State Art Rev Occup Med 1989 Jan-Mar;4(1):1-194
The occupational health care system: an overview. Guidotti TL, et al. State Art Rev Occup Med 1989 Jan-Mar; 4(1):153-69 (28 ref.)
Occupational medicine. Labor relations. Young DM, et al. State Art Rev Occup Med 1989 Jan-Mar;4(1):105-20 (37 ref.)
[Occupational medicine can be professionally managed (interview by T.U. Keil)] Stollenz E. Fortschr Med 1988 Jun 30;106(19):24 (Ger)

STANDARDS

Response to "Corporate Influence on Threshold Limit Values" [letter] Elkins HB. Am J Ind Med 1988; 14(6):737-40
The nature and significance of the corporate influence on threshold limit values. Morton WE. Am J Ind Med 1988; 14(6):721-3
Standard setting and protection of human health and safety. Robinson AE. Am J Ind Med 1989;15(2):213-31 (15 ref.)
Skin notation in the context of workplace exposure standards. Scansetti G, et al. Am J Ind Med 1988;14(6):725-32
Upgrading occupational epidemiology and standard setting by improved exposure monitoring. Vanhoorne M. Am J Ind Med 1988;14(6):733-4
A laser radiation occupational health standard for the People's Republic of China. Li ZZ, et al. Health Phys 1989 May;56(5):725-8
Management of ethical issues in the practice of occupational medicine. Brandt-Rauf PW, et al. State Art Rev Occup Med 1989 Jan-Mar;4(1):171-6 (18 ref.)
[Occupational medicine and work environment (editorial)] Skaug V. Tidsskr Nor Laegeforen 1989 May 20;109(14):1495 (Nor)
[Safety of patients and personnel at a department of MR tomography, a new method of imaging in medicine] Gomet B. Med Pr 1988;39(3):193-9 (Eng. Abstr.) (Pol)
[Evaluation of the optical properties of video display terminals] Grzesik J, et al. Med Pr 1989;40(1):18-23 (Eng. Abstr.) (Pol)
[Whole blood and plasma viscosity and erythrocyte aggregation in power plant repairmen] Kossmann S, et al. Med Pr 1988;39(5):329-37 (Eng. Abstr.) (Pol)
[Errors in expert testimony] Marek Z, et al. Przegl Lek 1988; 45(4):392-5 (Eng. Abstr.) (Pol)
[Ways of improving working conditions and reducing morbidity at plastic-processing plants] Asaenok IS, et al. Gig Sanit 1989 May;(5):24-6 (Eng. Abstr.) (Rus)
[Questionnaire survey in the study of working conditions of machine operators in the agriculture] Bolsunova MIa. Gig Sanit 1989 Feb;(2):11-5 (Eng. Abstr.) (Rus)
[Specific work processes in sailors of the Arctic navy at "ice moorages" and their effect on various body systems] Bychikhin NP, et al. Gig Sanit 1989 May;(5):22-4 (Eng. Abstr.) (Rus)
[Possibility of the development of the means of protecting individuals from gamma radiation of fission products] Gol'dshtein DS, et al. Gig Sanit 1989 Apr;(4):61-2 (4 ref.) (Rus)
[Various subjective and objective indicators of intellectual and emotional stress in air traffic controllers during different work shifts] Kan EL, et al. Gig Sanit 1989 Feb; (2):28-31 (Eng. Abstr.) (Rus)
[Experience of the Ufa Research Institute of Hygiene and Occupational Diseases with improving the system of introduction of scientific developments into practice] Karamova LM. Gig Sanit 1988 Jul;(7):18-21 (Rus)
[Hygienic evaluation of occupational quantization of the activities of finishing shop workers] Khramtsova AD. Gig Sanit 1989 May;(5):15-9 (Eng. Abstr.) (Rus)
[Hygienic problems of protecting the environment in relation to the production and use of microbiological products for plant protection] Korolik VV, et al. Gig Sanit 1988 Dec; (12):52-4 (Rus)
[Experiences in conducting studies of toxicologic evaluation of industrial microorganisms for the purpose of their hygienic standardization] Kviatkovskaia IIa, et al. Gig Sanit 1989 Mar;(3):87-8 (Rus)
[A method of evaluating industrial strains of microorganisms in the microbiological synthesis industry] Mialina LI. Gig Sanit 1988 Nov;(11):46-8 (Rus)
[Working conditions at the final stages in the production of water-soluble vitamins] Nemchinov NN, et al. Gig Sanit 1989 Apr;(4):79-80 (Rus)
[Estimation of the instability of emissions of chemical substances in evaluating sanitary and hygienic conditions] Oganezov KA, et al. Gig Sanit 1989 May;(5):72-3 (Rus)
[Calculation of maximum permissible level of beryllium in the air based on the criterion of its carcinogenic effect] Parfenov IuD. Gig Sanit 1988 Jun;(6):59-62 (Rus)
[Health education of workers in food supply network and public nutrition in a rural area] Purina EA, et al. Gig Sanit 1989 Feb;(2):38-40 (Rus)
[Current studies of energy expenditure and the quantitative and qualitative adequacy of nutrition of female textile workers] Smoliar VI, et al. Gig Sanit 1989 Feb;(2):25-8 (Eng. Abstr.) (Rus)
[Complex engineering and hygienic examination of railway facilities] Turkov PN, et al. Gig Sanit 1989 May;(5):19-21 (Eng. Abstr.) (Rus)
[Improving mass screening of the personnel of marine transportation ships] Vasil'eva TV. Gig Sanit 1989 May; (5):90-2 (Rus)
[New health standards for microclimate of industrial premises] Afanas'eva RF, et al. Gig Tr Prof Zabol 1989; (1):41-2 (Rus)
[The role of sanitary-hygienic specialists in the certification of work places at industrial plants] Aleksandrov VN, et al. Gig Tr Prof Zabol 1988 Nov;(11):41-2 (Rus)
[Evaluation of the electric field in the work area of operators of manual electric painting equipment] Artamonov AF, et al. Gig Tr Prof Zabol 1988 Dec;(12):39-41 (Eng. Abstr.) (Rus)
[Comparative evaluation of regulated and non-regulated periods of work and rest in a high-temperature microclimate in the glass industry] Arutiunian LG, et al. Gig Tr Prof Zabol 1989;(3):25-8 (Eng. Abstr.) (Rus)
[Possibility of using standardized models of work organization in the activities of a practicing physician] Bochenkova TD, et al. Gig Tr Prof Zabol 1988 Aug; (8):37-9 (Eng. Abstr.) (Rus)
[Photometric determination of calcium-carboxymethylcellulose in the air of the work area] Dorogova VB, et al. Gig Tr Prof Zabol 1989;(5):39-40 (Rus)
[Aerogenic microflora in animal husbandry and poultry breeding areas, criteria of its harmful effect and hygienic regulation] Erman MI, et al. Gig Tr Prof Zabol 1989; (4):19-22 (Eng. Abstr.) (Rus)
[Use of a chromatographic model for predicting the toxicity and hazards of non-electrolytes] Esin MS, et al. Gig Tr Prof Zabol 1988 Oct;(10):25-7 (Eng. Abstr.) (Rus)
[Physiologic and hygienic substantiation of shift-work schedules in combined effects of noise, local vibration and microclimate heating] Gorban' VS. Gig Tr Prof Zabol 1988 Nov;(11):48-50 (Rus)
[The main results and prospects of the development of the physiology of work of miners in coal mines of the Donets Basin] Grebniak VP. Gig Tr Prof Zabol 1988 Nov;(11):7-11 (Eng. Abstr.) (Rus)
[Experimental complex for studying the biological effect of exposure to ultrahigh frequency irradiation at a ship's radar station] Grigorenko AV, et al. Gig Tr Prof Zabol 1989; (5):49-50 (Rus)
[Hygienic characteristics of agricultural dust] Gromova VS. Gig Tr Prof Zabol 1989;(4):13-6 (Eng. Abstr.) (Rus)
[Use of expert methods in evaluating scientific works in the field of occupational hygiene and occupational pathology] Korbakova AI, et al. Gig Tr Prof Zabol 1988 Dec;(12):46-7 (Rus)
[Creating optimal working conditions for persons of older age groups] Korobkin IuI. Gig Tr Prof Zabol 1988 Dec; (12):55-6 (Rus)
[Hygienic evaluation of factors of the occupational environment at an industrial plant synthesizing microbiological enzyme preparations] Kuchuk AA, et al. Gig Tr Prof Zabol 1989;(4):16-8 (Eng. Abstr.) (Rus)
[Hygienic characteristics of working conditions and their effect on the functional state of workers engaged in the manufacture of reinforced concrete products] Kurashvili ME, et al. Gig Tr Prof Zabol 1989;(5):11-4 (Eng. Abstr.) (Rus)
[Hygienic evaluation of working conditions of operators of floating hydraulic equipment] Kuratov LE. Gig Tr Prof Zabol 1988 Aug;(8):54-5 (Rus)
[Microelement composition of the hair of workers in the ceramic paint industry] Liubchenko PN, et al. Gig Tr Prof Zabol 1989;(3):7-9 (Eng. Abstr.) (Rus)
[Substantiation of hygienic requirements for microclimate conditions using a radiant low-temperature heating system] Losik TK, et al. Gig Tr Prof Zabol 1988 Oct;(10):19-23 (Eng. Abstr.) (Rus)
[Determining physical and psychological occupational stress in women performing physical work on the basis of subjective evaluation] Makovska Z, et al. Gig Tr Prof Zabol 1989;(5):8-11 (Rus)
[Working conditions of female workers in the system of "Soiuzgostsirk" (the Soviet State Circus)] Mekhova MM, et al. Gig Tr Prof Zabol 1989;(5):21-4 (Eng. Abstr.) (Rus)
[Various problems of occupational hygiene in gold mines in relation to the introduction of new technology in high-altitude Armenian S.S.R.] Melkonian AM, et al. Gig Tr Prof Zabol 1989;(5):44-6 (Rus)
[Planning of working conditions and tasks in creating optimal standards of technology in coal mines] Meniailo NI, et al. Gig Tr Prof Zabol 1989;(5):5-8 (Eng. Abstr.) (Rus)
[Criteria of hygienic evaluation of variable noise] Mukhin VV, et al. Gig Tr Prof Zabol 1988 Dec;(12):48-9 (Rus)
[Characteristics of physiologic reactions of persons with increased individual sensitivity to noise after exposure to general low-frequency vibration] Nazarenko VI. Gig Tr Prof Zabol 1988 Dec;(12):49-51 (Rus)
[Hygienic characteristics and ways of improving working conditions at a rug-making factory] Rumiantsev GI, et al. Gig Tr Prof Zabol 1989;(4):27-30 (Eng. Abstr.) (Rus)
[Physiologic and hygienic evaluation of the work of operators of mechanical milking] Shenkman GS, et al. Gig Tr Prof Zabol 1989;(5):14-6 (Eng. Abstr.) (Rus)
[Problem of the use of epoxide coating at a clothing factory] Shevchenko AM, et al. Gig Tr Prof Zabol 1989;(5):36-8 (Rus)
[Maximum permissible levels of skin contamination of the hands of persons working with harmful substances (approved by the Ministry of Public Health of the USSR in 1988)] Sidorov KK. Gig Tr Prof Zabol 1989;(3):32 (Rus)
[Current objectives of occupational hygiene and pathology in Georgian SSR] Vashakidze VI. Gig Tr Prof Zabol 1988 Aug;(8):1-3 (Rus)
[Information interaction of the man-aircraft system as a problem in aviation medicine] Lapa VV. Kosm Biol Aviakosm Med 1989 May-Jun;23(3):28-32 (Eng. Abstr.) (Rus)
[The first experience using soft contact lenses during long-term space flights] Pliasova-Bakulina IA, et al. Kosm Biol Aviakosm Med 1989 May-Jun;23(3):32-4 (Eng. Abstr.) (Rus)
[Adaptation disorders and rehabilitation of drillers working on the shift-expedition schedule in Western Siberia] Mazurik MF, et al. Sov Med 1989;(4):66-8 (Rus)
[Knowledge of workers and engineering and technical personnel of industrial plants concerning the risk factors of various chronic diseases] Dmitrieva NV, et al. Sov Zdravookhr 1988;(6):53-6 (Rus)
[Determining the optimal period of temporary disability in various diseases of the internal organs] Petrov MN. Sov Zdravookhr 1988;(11):20-2 (Eng. Abstr.) (Rus)
[Experience with the organization of sanitary control of cooperative activities] Smirnova OE, et al. Sov Zdravookhr 1989;(4):45-7 (Rus)

STATISTICS & NUMERICAL DATA

[Analysis of formal and substantial errors in the diagnosis of occupational diseases in Poland 1985-1987] Iżycki J, et al. Med Pr 1988;39(6):416-22 (Eng. Abstr.) (Pol)
[Causes and rates of absenteeism in selected branches of industry during the years 1970-1987] Szubert Z, et al. Med Pr 1988;39(6):446-54 (Eng. Abstr.) (Pol)
[Occupational diseases in foreign countries in the 1980's] Gurvich EB, et al. Gig Tr Prof Zabol 1989;(5):40-2 (Rus)
[Multiple injuries among sailors on ships] Shapovalov KA. Ortop Travmatol Protez 1988 Dec;(12):44-5 (Rus)

TRENDS

Industrial hygiene is a viable profession. Cralley LJ. Am Ind Hyg Assoc J 1988 Oct;49(10):479-84
Current issues in occupational lung disease. Lockey JE, et al. Am Rev Respir Dis 1988 Oct;138(4):1047-50
Safety and health co-operation in a changing world. Pendergrass JA. Ann Occup Hyg 1988;32(4):445-9
A strategy to define the role of the primary care physician in occupational and environmental medicine. Kottke TE. J Gen Intern Med 1989 Jul-Aug;4(4):320-4
Career options of occupational physicians [letter] J Occup Med 1989 Jul;31(7):631
Current and future needs for occupational medicine physicians in nonindustrial settings: a survey of multispecialty group medical practices and health maintenance organizations. Brandt-Rauf PW, et al.

J Occup Med 1988 Dec;30(12):928–33
Modernization and occupational cancer [editorial] Christiani DC. J Occup Med 1988 Dec;30(12):975–6
Career options of occupational physicians. Ducatman AM. J Occup Med 1988 Oct;30(10):776–9
Occupational health today and tomorrow: a view from two shipyards. The Milroy lecture 1988. Cotes JE. J R Coll Physicians Lond 1988 Oct;22(4):232–6
The Thackrah lecture 1988. Toward the year 2000—challenge to the occupational physician. Warshaw LJ. J Soc Occup Med 1989 Spring;39(1):9–14 (8 ref.)
Bush, Dukakis presidential race: all quiet on health and safety front. Read HP 3d. Occup Health Saf 1988 Oct;57(11):21, 23–6
Current state of occupational health in the Philippines. Reverente BR Jr. Sangyo Ika Daigaku Zasshi 1989 Mar 20;11 Suppl:258–78
Medicine in the industrial battle: early workers' compensation. Bale A. Soc Sci Med 1989;28(11):1113–20 (25 ref.)
An agenda for the future. Ashford NA. Toxicol Ind Health 1989 Jul;5(4):131–2
Public health—theory and practice in occupational medicine programs. Cone JE. Toxicol Ind Health 1989 Jul;5(4):49–55; discussion 79–84
[Present-day occupational medicine: reality and needs] Boillat MA. Rev Med Suisse Romande 1989 May; 109(5):399–402 (Fre)
[Clinical occupational medicine—a determination of its status] Schimmelpfennig W, et al. Z Arztl Fortbild (Jena) 1989;83(5):223–7 (0 ref.) (Ger)
[Problems of the reorganization of scientific research in public health] Izmerov NF, et al. Gig Tr Prof Zabol 1989; (5):1–5 (Rus)
[The main propositions for the elaboration of an alternative system of occupational medicine in the Estonian SSR] Kakhn KhV. Gig Tr Prof Zabol 1988 Oct;(10):35–7 (Eng. Abstr.) (Rus)
[The 19th Party Conference and the tasks in the field of industrial hygiene and protection] Tarasenko NIu. Gig Tr Prof Zabol 1989;(2):1–3 (Rus)
[Occupational medicine in Mexico (editorial)] Legaspi-Velasco J. Gac Med Mex 1988 Nov-Dec; 124(11-12):403–4 (Spa)

OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (U.S.) see **UNITED STATES OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION**

OCCUPATIONAL THERAPY

Roles of occupational therapists and occupational therapy assistants in schools. Am J Occup Ther 1987 Dec; 41(12):798–803
Occupational therapy services in early intervention and preschool services (position paper). Am J Occup Ther 1988 Dec;42(12):793–4
The Wilma L. West Library goes on-line. Binderman MS. Am J Occup Ther 1989 Apr;43(4):269–70
Affective responses to activities: a comparative study. Boyer J, et al. Am J Occup Ther 1989 Feb;43(2):81–8
Making a difference: a premise of occupation and health. Breines EB. Am J Occup Ther 1989 Jan;43(1):51–2
Motor control and the role of occupational therapy: past, present, and future. Burgess MK. Am J Occup Ther 1989 May;43(5):345–8
An efficacy study of occupational therapy with high-risk neonates. Case-Smith J. Am J Occup Ther 1988 Aug; 42(8):499–506
Testing vestibular function: problems with the Southern California Postrotary Nystagmus Test. Cohen H. Am J Occup Ther 1989 Jul;43(7):475–7
Occupational therapy and motor control [editorial] Cohen H. Am J Occup Ther 1989 May;43(5):289–90
Special education and occupational therapy: making the relationship work. Coutinho MJ, et al. Am J Occup Ther 1988 Nov;42(11):706–12
Pregnancy and quadriplegia: an occupational therapy home program. Creighton C. Am J Occup Ther 1989 Jan; 43(1):44–6
Perceived autonomy and job satisfaction in occupational therapists. Davis GL, et al. Am J Occup Ther 1988 Sep; 42(9):591–5
Specialty choice in occupational therapy. Ezersky S, et al. Am J Occup Ther 1989 Apr;43(4):227–33
Living with Ménière disease: an occupational therapist's perspective. Farber SD. Am J Occup Ther 1989 May; 43(5):341–3
Creative partnerships: the profession's plan (Presidential Address). Gilfoyle EM. Am J Occup Ther 1987 Dec; 41(12):779–81
Not by age alone: gerontology as a specialty in occupational therapy. Hasselkus BR, et al. Am J Occup Ther 1989 Feb; 43(2):77–9
Occupational therapy knowledge: from practice to theory. 1988 Eleanor Clarke Slagle lecture. Henderson A. Am J Occup Ther 1988 Sep;42(9):567–76 (61 ref.)
The scholarly productivity of occupational therapy faculty members: results of a regional study. Holcomb JD, et al. Am J Occup Ther 1989 Jan;43(1):37–43
Nationally speaking—Hand rehabilitation. Kasch MC. Am J Occup Ther 1989 Mar;43(3):145–7
Loewenstein Occupational Therapy Cognitive Assessment (LOTCA) battery for brain-injured patients: reliability and validity. Katz N, et al. Am J Occup Ther 1989 Mar; 43(3):184–92
Occupational therapy's role in improving the quality of life for persons with cerebral palsy. Kibele A. Am J Occup Ther 1989 Jun;43(6):371–7
Development and investigation of the occupational performance history interview. Kielhofner G, et al. Am J Occup Ther 1988 Aug;42(8):489–98
Pointers on purposeful activity study argued [letter] Kircher MA. Am J Occup Ther 1988 Sep;42(9):611–2
Occupational therapy treatment in home health care. Kunstaetter D. Am J Occup Ther 1988 Aug;42(8):513–9
Pain management by occupational therapists. McCormack GL. Am J Occup Ther 1988 Sep;42(9):582–90 (69 ref.)
Sustaining the art of practice in occupational therapy. Peloquin SM. Am J Occup Ther 1989 Apr;43(4):219–26
Grip strength and hand dominance: challenging the 10% rule. Petersen P, et al. Am J Occup Ther 1989 Jul;43(7):444–7
Promoting occupational therapy in the schools. Royeen CB, et al. Am J Occup Ther 1988 Nov;42(11):713–7
Occupational therapy management: accepting the challenge. Schell BA. Am J Occup Ther 1989 Apr;43(4):215–7
Psychosocial occupational therapy intervention with AIDS patients. Schindler VJ. Am J Occup Ther 1988 Aug; 42(8):507–12
Organizational resources for the occupational therapist in the public schools. Sears CJ. Am J Occup Ther 1988 Nov; 42(11):740–50
The biomechanics of prehension. Spaulding SJ. Am J Occup Ther 1989 May;43(5):302–7
Alcohol abuse and perceptual-motor dysfunction: the occupational therapist's role. Van Deusen J. Am J Occup Ther 1989 Jun;43(6):384–90 (57 ref.)
Occupational therapy and the postpolio syndrome. Young GR. Am J Occup Ther 1989 Feb;43(2):97–103
Work in rehabilitation [letter] Black BJ. Hosp Community Psychiatry 1989 Aug;40(8):858
The place of work in psychiatric rehabilitation. Palmer F. Hosp Community Psychiatry 1989 Mar;40(3):222–4
Perceptual evaluation in occupational therapy. Mohl E, et al. Int J Rehabil Res 1987;10(4 Suppl 5):271–6
Interdisciplinary activity between occupational therapists and speech language pathologists. Edwards S, et al. J Allied Health 1989 Summer;18(4):375–87
Research values of occupational and physical therapists. Fisher AG, et al. J Allied Health 1989 Winter;18(2):143–55
PT/OT abstracts needed [letter] Ward RS. J Burn Care Rehabil 1988 Jul-Aug;9(4):338
A simple inexpensive post-operative management regime following surgery for Dupuytren's contracture. Jain AS, et al. J Hand Surg [Br] 1988 Aug;13(3):259–61
Functional outcomes and rehabilitation: an acute care field study. Ostrow P, et al. J Rehabil Res Dev 1989 Summer; 26(3):17–26
Lead poisoning traced to a ceramic glaze workshop. Vacanti MP, et al. Ment Retard 1989 Jun;27(3):175–7
A third party assessment of work capabilities. McPhee SD. Milit Med 1989 Feb;154(2):76–80
Stress in relation to satisfaction with leisure experienced by those performing in therapeutic recreation. Cunningham PH. Psychol Rep 1989 Apr;64(2):652
Occupational therapy in alcoholism. Rotert DA. State Art Rev Occup Med 1989 Apr-Jun;4(2):327–37 (38 ref.)
[Effect of occupational therapy on the mental state of patients with myocardial infarction at the hospital stage of rehabilitation] Rozykhodzhaeva GA, et al. Kardiologiia 1988 Nov;28(11):107–9 (Rus)
[Effect of occupational therapy on the psychosocial status of patients with myocardial infarction at the second stage of rehabilitation] Smirnov EK. Kardiologiia 1989 Apr; 29(4):88–91 (Eng. Abstr.) (Rus)

ECONOMICS

Letter writers missed the point [letter] Crabtree JL. Am J Occup Ther 1989 Jun;43(6):412–3
Managing changes in reimbursement patterns, Part 2. Foto M. Am J Occup Ther 1988 Oct;42(10):629–31
Blue Cross reviewers clarify statements in Medicare article [letter] Foto M, et al. Am J Occup Ther 1989 Feb; 43(2):125–6
Reimbursement restrictions in home health [letter] Steinhauer M. Am J Occup Ther 1989 Jun;43(6):413

EDUCATION

Videotaped versus live instruction in demonstrating evaluation skills to occupational therapy students. Bazyk S, et al. Am J Occup Ther 1989 Jul;43(7):465–8
My occupational therapy education as a person with visual and physical disabilities. Bennett SH. Am J Occup Ther 1989 Apr;43(4):263–6
Media education based on the philosophy of pragmatism. Breines EB. Am J Occup Ther 1989 Jul;43(7):461–4
Fieldwork education: shaping a foundation for clinical reasoning. Cohn ES. Am J Occup Ther 1989 Apr; 43(4):240–4
Evaluating clinical competence with the new Fieldwork Evaluation. Crist PA, et al. Am J Occup Ther 1988 Dec; 42(12):771–3
Entry level and specialized practice: a professional encounter. Dunn W, et al. Am J Occup Ther 1989 Jan;43(1):7–9
Progress in education: 1970–1988. Grant HK, et al. Am J Occup Ther 1989 Mar;43(3):193–5
Developing information-seeking skills in occupational therapy students. Mularski CA, et al. Am J Occup Ther 1989 Feb;43(2):110–4
Independent living skills groups in a level I fieldwork experience. Neistadt ME, et al. Am J Occup Ther 1988 Dec;42(12):782–6
The educational preparation and professional activities of occupational therapists. Rogers JC, et al. Am J Occup Ther 1988 Oct;42(10):642–6

HISTORY

Moral treatment: contexts considered. Peloquin SM. Am J Occup Ther 1989 Aug;43(8):537–44
Bird T. Baldwin: a holistic scientist in occupational therapy's history. Wish-Baratz S. Am J Occup Ther 1989 Apr; 43(4):257–60

INSTRUMENTATION

Equipment adaptations to improve workshop performance. Chase J. Am J Occup Ther 1989 Aug;43(8):545–8
A dynamic finger flexion loop. Dovelle S, et al. Am J Occup Ther 1988 Aug;42(8):535–7
Early controlled motion following flexor tendon graft. Dovelle S, et al. Am J Occup Ther 1988 Jul;42(7):457–63
Two augmentative communication systems for speechless disabled patients. Newman GC, et al. Am J Occup Ther 1989 Aug;43(8):529–34
Cloth sling for treatment of infant gastroesophageal reflux. Nordstrom DG. Am J Occup Ther 1988 Jul;42(7):465–8
Occupational engagement of low-functioning individuals: extending the applicability of a computer-aided programme. Lancioni GE, et al. J Ment Defic Res 1989 Aug;33 (Pt 4):313–22
Design and preliminary evaluation of a portable instrument for assisting physiotherapists and occupational therapists in the rehabilitation of the hand. Durand LG, et al. J Rehabil Res Dev 1989 Spring;26(2):47–54

LEGISLATION & JURISPRUDENCE

Louisiana's criteria of eligibility for occupational therapy services in the public school system. Carr SH. Am J Occup Ther 1989 Aug;43(8):503–6
The evolution of occupational therapy in the public schools: the laws mandating practice. Colman W. Am J Occup Ther 1988 Nov;42(11):701–5

MANPOWER

Occupational therapy: a study of supply and demand in Georgia. Morris LV. Am J Occup Ther 1989 Apr; 43(4):234–9
Is relief for personnel shortages in sight? [letter] Neeman RL. Am J Occup Ther 1989 Jan;43(1):55–6

METHODS

Using a single-subject research design to evaluate the effectiveness of treatment. Campbell PH. Am J Occup Ther 1988 Nov;42(11):732–8
The relationship of cognitive skills performance to activities of daily living in stroke patients. Carter LT, et al. Am J Occup Ther 1988 Jul;42(7):449–55
Models of occupational therapy service provision in the school system. Dunn W. Am J Occup Ther 1988 Nov; 42(11):718–23
Treating the whole child: rhetoric or reality? Florey LL. Am J Occup Ther 1989 Jun;43(6):365–9 (42 ref.)
Internal and external validity in two studies that compared treatment methods. Gliner JA. Am J Occup Ther 1989 Jun; 43(6):403–7
A comparison of treatment approaches used after carpal tunnel release surgery. Groves EJ, et al. Am J Occup Ther 1989 Jun;43(6):398–402
Stroke rehabilitation: sensorimotor integrative treatment versus functional treatment. Jongbloed L, et al. Am J Occup Ther 1989 Jun;43(6):391–7
A standing belt. King TI 2d. Am J Occup Ther 1989 Jul; 43(7):471–3
A critical review of scales of activities of daily living. Law M, et al. Am J Occup Ther 1989 Aug;43(8):522–8 (40 ref.)
Normal adult performance on constructional praxis training tasks. Neistadt ME. Am J Occup Ther 1989 Jul;43(7):448–55
Occupational therapy for adults with perceptual deficits. Neistadt ME. Am J Occup Ther 1988 Jul;42(7):434–40 (54 ref.)
The effect of positioning on the hand function of boys with cerebral palsy. Noronha J, et al. Am J Occup Ther 1989 Aug;43(8):507–12
Linking purpose to procedure during interactions with patients. Peloquin SM. Am J Occup Ther 1988 Dec; 42(12):775–81
Perspectives on the status of sensory integration theory. Tickle-Degnen L. Am J Occup Ther 1988 Jul;42(7):427–33 (20 ref.)
Unilateral neglect: suggestions for research by occupational therapists. Van Deusen J. Am J Occup Ther 1988 Jul; 42(7):441–8 (45 ref.)

Comparing treatment approaches [editorial] Viseltear E. **Am J Occup Ther** 1989 Jun;43(6):363
Occupational therapy program development for medical–psychiatry units: a cognitive model. Kiernan K, et al. **Gen Hosp Psychiatry** 1989 Mar;11(2):109–18
Assessing the patient's functional performance. Denton P. **Hosp Community Psychiatry** 1988 Sep;39(9):933–6
[Occupational therapy in neurology—results of 7 years' experience] Kittel J, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Jul;41(7):385–91 (Eng. Abstr.) (Ger)
[Psychopathology–oriented ergotherapy. An example of the treatment of negative schizophrenic symptoms using the batik technic] Linden M, et al. **Psychiatr Prax** 1989 Jul; 16(4):141–7 (Eng. Abstr.) (Ger)

PSYCHOLOGY

Burnout in occupational therapists. Rogers JC, et al. **Am J Occup Ther** 1988 Dec;42(12):787–92

STANDARDS

Standards of practice for occupational therapy services in schools. **Am J Occup Ther** 1987 Dec;41(12):804–8
Occupational therapy code of ethics. **Am J Occup Ther** 1988 Dec;42(12):795–6

TRENDS

Working the system: a perspective for managing change. Fine SB. **Am J Occup Ther** 1988 Jul;42(7):417–9
Diversional activity: does it deserve its bad name? Friedland J. **Am J Occup Ther** 1988 Sep;42(9):603–8
Early intervention: issues in specialization. Hanft BE. **Am J Occup Ther** 1989 Jul;43(7):431–4
Home health care revisited: challenges for the future. Stoffel SA, et al. **Am J Occup Ther** 1989 Aug;43(8):499–502
The continua of scientific research designs. Zemke R. **Am J Occup Ther** 1989 Aug;43(8):551–3

OCCUPATIONAL THERAPY DEPARTMENT, HOSPITAL see under HOSPITAL DEPARTMENTS

OCCUPATIONS

see related
HEALTH OCCUPATIONS

Occupational risk of colon cancer. An analysis by anatomic subsite. Brownson RC, et al. **Am J Epidemiol** 1989 Oct; 130(4):675–87
Components and modifiers of the healthy worker effect: evidence from three occupational cohorts and implications for industrial compensation. Howe GR, et al. **Am J Epidemiol** 1988 Dec;128(6):1364–75
The relation of psychosocial dimensions of work with coronary heart disease risk factors: a meta–analysis of five United States data bases. Pieper C, et al. **Am J Epidemiol** 1989 Mar;129(3):483–94
Effect of parents' occupational exposures on risk of stillbirth, preterm delivery, and small–for–gestational–age infants. Savitz DA, et al. **Am J Epidemiol** 1989 Jun;129(6):1201–18
Paternal occupational exposures and the risk of Down syndrome. Olshan AF, et al. **Am J Hum Genet** 1989 May; 44(5):646–51
Occupation on the death certificate: to use or not to use, that is the question [editorial] Lilienfeld DE. **Am J Ind Med** 1988;14(2):119–20
Comparison of death certificate occupation and industry data with lifetime occupational histories obtained by interview: variations in the accuracy of death certificate entries. Schade WJ, et al. **Am J Ind Med** 1988;14(2):121–36
Bladder cancer and occupation among Swedish women [letter] Silverman DT, et al. **Am J Ind Med** 1989; 16(2):239–40
Paternal occupation and brain cancer in offspring: a mortality–based case–control study. Wilkins JR 3d, et al. **Am J Ind Med** 1988;14(3):299–318
Study of lung cancer histologic types, occupation, and smoking in Missouri. Zahm SH, et al. **Am J Ind Med** 1989; 15(5):565–78
Occupation: form and performance. Nelson DL. **Am J Occup Ther** 1988 Oct;42(10):633–41 (34 ref.)
Occupational disruption and adaptation: a study of house fire victims. Rosenfeld MS. **Am J Occup Ther** 1989 Feb; 43(2):89–96
Employment, unemployment, occupation, and smoking. Waldron I, et al. **Am J Prev Med** 1989 May–Jun;5(3):142–9
The accuracy of industry data from death certificates for workplace homicide victims. Davis H. **Am J Public Health** 1988 Dec;78(12):1579–81
The effect of occupational, marital and parental roles on mortality: the Alameda County Study. Kotler P, et al. **Am J Public Health** 1989 May;79(5):607–12
Coronary heart disease and mortality in middle aged men from different occupational classes in Sweden. Rosengren A, et al. **BMJ** 1988 Dec 10;297(6662):1497–500
Alcohol drinking patterns and work areas: epidemiological study of factory and rural workers in Florence, Italy. Allamani A, et al. **Br J Addict** 1988 Oct;83(10):1169–78
Work in pregnancy and birth weight for gestational age. Armstrong BG, et al. **Br J Ind Med** 1989 Mar;46(3):196–9
Job demands, job decision latitude, job support, and social network factors as predictors of mortality in a Swedish pulp and paper company. Astrand NE, et al. **Br J Ind Med** 1989 May;46(5):334–40
Fathers' occupation and pregnancy outcome. McDonald AD, et al. **Br J Ind Med** 1989 May;46(5):329–33
Physical stress and strain in catering work on the Baltic car ferries. Saarni H, et al. **Bull Inst Marit Trop Med Gdynia** 1987;38(1–2):25–31
Nutritional status of firefighters. Friel JK, et al. **Can J Public Health** 1988 Jul–Aug;79(4):275–6
Parental occupation and Wilms' tumor: results of a case–control study. Bunin GR, et al. **Cancer Res** 1989 Feb 1;49(3):725–9
A case–control study of occupational and dietary factors in colorectal cancer in young men by subsite. Peters RK, et al. **Cancer Res** 1989 Oct 1;49(19):5459–68
Diet and other risk factors for fissure–in–ano. Prospective case control study. Jensen SL. **Dis Colon Rectum** 1988 Oct; 31(10):770–3
The influence of the type of occupation on return to work after myocardial infarction, coronary angioplasty and coronary bypass surgery. Gehring J, et al. **Eur Heart J** 1988 Nov;9 Suppl L:109–14
Influence of occupation and living habits on semen quality in men (scrotal insulation and semen quality). Laven JS, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Oct; 29(2):137–41
Retirement differences by industry and occupation. Mitchell OS, et al. **Gerontologist** 1988 Aug;28(4):545–51
Retirement financial planning among black professionals. Richardson V, et al. **Gerontologist** 1989 Feb;29(1):32–7
Study of skin ageing as a function of social and professional conditions: modification of the rheological parameters measured with a noninvasive method—indentometry. Robert C, et al. **Gerontology** 1988;34(5–6):284–90
The effects of occupation, leisure activities, and body composition on aerobic fitness in western Samoan men. Pelletier DL. **Hum Biol** 1988 Dec;60(6):889–99
Occupational status variations in disagreements on the diagnosis of cause of death. Bloor MJ, et al. **Hum Pathol** 1989 Feb;20(2):144–8
Micronuclei in cytokinesis–blocked lymphocytes as an index of occupational exposure to alkylating cytostatic drugs. Yager JW, et al. **IARC Sci Publ** 1988;(89):213–6
Life–cycle effects of alcoholism on education, earnings, and occupation. Mullahy J, et al. **Inquiry** 1989 Summer; 26(2):272–82
Smoking–adjusted incidence of lung cancer among Swedish men in different occupations. Carstensen JM, et al. **Int J Epidemiol** 1988 Dec;17(4):753–8
Socioeconomic groups and cancer risk at death in the Swiss Canton of Vaud. Levi F, et al. **Int J Epidemiol** 1988 Dec; 17(4):711–7
Cardiovascular risk factors predicting all causes of death in an occupational population sample. Menotti A, et al. **Int J Epidemiol** 1988 Dec;17(4):773–8
Advantages of a standard method for research on reproductive effects of occupation. Joffe M. **J Epidemiol Community Health** 1988 Sep;42(3):209–12
Agreement of latest and longest occupation and industry as reported in the 1980 National Health Interview Survey. Burnett CA, et al. **J Occup Med** 1989 Apr;31(4):339–46
Occupational differences in disability awards, benefit application, and awareness of the Social Security Administration Disability Program. Murphy LR, et al. **J Occup Med** 1989 Apr;31(4):358–62
Blood lead and carbon monoxide levels in Mersey Tunnel workers. Hardy K, et al. **J R Coll Physicians Lond** 1989 Jul;23(3):170
The impact of occupation, performance, and sex on sex role stereotyping. Hartman SJ, et al. **J Soc Psychol** 1988 Aug; 128(4):451–63
Divorce among physicians. Comparisons with other occupational groups. Doherty WJ, et al. **JAMA** 1989 Apr 28;261(16):2374–7
Crash crashes stockbroker [letter] Richmond JS, et al. **JAMA** 1988 Nov 4;260(17):2506
Inferring cortical function from the patient's job: he made grass trimmer, but could he have made Vice President? [letter] Roberts AH 2d. **JAMA** 1989 Oct 13;262(14):1951–2
Instituting a smoking policy [news] **Lancet** 1988 Oct 29; 2(8618):1036
The hazards of wool–presses [letter] Gun RT. **Med J Aust** 1989 Feb 20;150(4):221
Evaluating the occupational physical fitness of Canadian forces infantry personnel. Jetté M, et al. **Milit Med** 1989 Jun;154(6):318–22
Injury prevalence and associated costs among participants of an employee fitness program. Tsai SP, et al. **Prev Med** 1988 Jul;17(4):475–82
Occupation, impaired health, and the functional capacity of men to continue working. Chirikos TN, et al. **Res Aging** 1989 Jun;11(2):174–205
Chagas' disease and social security. A case–control study in an urban area, Goiás, Brazil. Zicker F. **Rev Saude Publica** 1988 Aug;22(4):281–7
Autopsy statistics on the relative frequency of acute myocardial infarction in the Japanese mental workers and the unemployed during the two oil–crises periods. Chang NC, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:106–19
Problems with cross–sectional data in research on working environment and health. Ostlin P, et al. **Scand J Soc Med** 1988;16(3):139–43
The impact of the physical environment on the psychological well–being of office workers. Klitzman S, et al. **Soc Sci Med** 1989;29(6):733–42
Piecework, repetitive work and medicine use in the clothing industry. Vinet A, et al. **Soc Sci Med** 1989;28(12):1283–8
The relationship of low–back pain, work history, work environment, and stress. A retrospective cross–sectional study of 38– to 64–year–old women. Svensson HO, et al. **Spine** 1989 May;14(5):517–22
Health characteristics by occupation and industry of longest employment. Cooper SP, et al. **Vital Health Stat [10]** 1989 Jun;(168):1–105
Women, work and computers. Bradley G. **Women Health** 1988;13(3–4):117–32
[The profession variable in mortality statistics] Gispert Magarolas RG. **Gac Sanit** 1989 Mar–Apr;3(11):371–6 (Eng. Abstr.) (Cat, Spa)
[The occupation of the pregnant woman in relation to the course and outcome of pregnancy] Mareš P, et al. **Cesk Gynekol** 1989 Feb;54(1):1–6 (Eng. Abstr.) (Cze)
[Working ability of patients with various forms and stages of glaucoma] Bartošová L, et al. **Cesk Oftalmol** 1989 Mar; 45(2):127–37 (Eng. Abstr.) (Cze)
[Congenital malformations and socio–occupational status] Mur JM, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989; 18(1):32–8 (Eng. Abstr.) (Fre)
[Nutritional recommendations for the healthy adult population in Hungary] **Orv Hetil** 1988 Dec 18; 129(51):2751–2 (Hun)
[Relationship between elemental composition of particulate matters accumulated in human lung and occupational histories] Ohshima S, et al. **Sangyo Igaku** 1988 Sep; 30(5):404–5 (Jpn)
[Correlations between arterial hypertension and the social situation of the population of Ochota 1978–1984. II. Results of multivariate analysis] Kopczyński J, et al. **Przegl Epidemiol** 1988;42(4):394–401 (Eng. Abstr.) (Pol)
[The structure of the incidence of tuberculosis by occupation in the last 3 years in Constanţa County] Didilescu C, et al. **Rev Ig [Pneumoftiziol]** 1988 Jan–Mar;37(1):53–8 (Eng. Abstr.) (Rum)
[Eye protection of reindeer breeders in the Far North from the dazzling brightness of solar radiation] Gavrishchuk VI, et al. **Gig Tr Prof Zabol** 1989;(6):55–6 (Rus)
[Effects of vitamin prophylaxis on morbidity with temporary disability in workers of locomotive teams of the Moscow metro] Sheptalov NN, et al. **Gig Tr Prof Zabol** 1989; (6):40–2 (Rus)
[The importance of outpatient care and job orientation in preventing late complications of corneal prosthesis] Iakimenko SA. **Oftalmol Zh** 1988;(6):321–5 (Eng. Abstr.) (Rus)
[Possibilities of psychophysiological prediction of success in professional activities] Liakh IuE, et al. **Voen Med Zh** 1989 May;(5):55–6 (Rus)
[Methodological approaches to studying the influence of parental occupation on the development of malignant neoplasms in children] Beliakova SV, et al. **Vopr Onkol** 1989;35(1):12–6 (Rus)
[The relation between occupation and coronary heart disease] Terzić D. **Arh Hig Rada Toksikol** 1988 Mar;39(1):23–6 (Eng. Abstr.) (Scr)
[Socioeconomic and nutritional localization, quantification and characterization of functional groups in Panama] Parillón C, et al. **Arch Latinoam Nutr** 1988 Mar;38(1):55–68 (Eng. Abstr.) (Spa)
[Occupation in the analysis of mortality based on vital statistics: the English example] de Sanjosé Llongueras S, et al. **Gac Sanit** 1989 Jan–Feb;3(10):333–8 (38 ref.) (Spa)
[Implications of AIDS in the work force in Mexico] Christenson BA. **Salud Publica Mex** 1988 Jul–Aug; 30(4):619–28 (Eng. Abstr.) (Spa)

CLASSIFICATION

Limitations in the use of job exposure matrices. Olsen J. **Scand J Soc Med** 1988;16(4):205–8
[Physical occupational activity and colonic carcinoma mortality in Swiss men 1979–1982] Marti B, et al. **Soz Praventivmed** 1989;34(1):30–7 (Eng. Abstr.) (Ger)

TRENDS

Agricultural opportunity and marriage: the United States at the turn of the century. Landale NS. **Demography** 1989 May;26(2):203–18

OCEANOGRAPHY

see related
MARINE BIOLOGY
SUBMARINE MEDICINE

METHODS

Overview of flow cytometry and image analysis in biological oceanography and limnology. Legendre L, et al. **Cytometry** 1989 Sep;10(5):501–10
Flow cytometry in oceanography. Platt T. **Cytometry** 1989 Sep;10(5):500

OCHRATOXINS

ANALYSIS

Spontaneous occurrence of ochratoxin A residues in porcine kidneys in Belgium. Rousseau DM, et al. **Bull Environ Contam Toxicol** 1989 Feb;42(2):181–6

A study of the contamination by ochratoxin A of green and roasted coffee beans. Micco C, et al. **Food Addit Contam** 1989 Jul–Sep;6(3):333–9

Determination of ochratoxin A by monoclonal antibody–based enzyme immunoassay. Candlish AA, et al. **J Assoc Off Anal Chem** 1988 Sep–Oct;71(5):961–4

Liquid chromatographic determination of aflatoxins, ochratoxin A, and zearalenone in grains, oilseeds, and animal feeds by post–column derivatization and on–line sample cleanup. Chamkasem N, et al. **J Assoc Off Anal Chem** 1989 Mar–Apr;72(2):336–41

Quantitation of ochratoxin A: use of reverse phase thin–layer chromatography for sample cleanup followed by liquid chromatography or direct fluorescence measurement. Frohlich AA, et al. **J Assoc Off Anal Chem** 1988 Sep–Oct; 71(5):949–53

A sensitive enzyme–linked immunosorbent assay of ochratoxin A based on monoclonal antibodies. Kawamura O, et al. **Toxicon** 1989;27(8):887–97

[Fungi producing aflatoxin B1, B2, G1, G2 and ochratoxin A in pre–packaged foods] Leoni E, et al. **Nuovi Ann Ig Microbiol** 1987 May–Aug;38(3–4):193–205 (Eng. Abstr.) **(Ita)**

METABOLISM

Polymorphic ochratoxin A hydroxylation in rat strains phenotyped as poor and extensive metabolizers of debrisoquine. Castegnaro M, et al. **Xenobiotica** 1989 Feb; 19(2):225–30

PHARMACOKINETICS

Effects of plasma ochratoxin A and luminal pH on the jejunal absorption of ochratoxin A in rats. Kumagai S. **Food Chem Toxicol** 1988 Sep;26(9):753–8

Distribution of 14C–ochratoxin A in the mouse monitored by whole–body autoradiography. Fuchs R, et al. **Pharmacol Toxicol** 1988 Nov;63(5):355–60

Uptake of ochratoxin A by slices of pig kidney cortex. Friis C, et al. **Toxicology** 1988 Nov 14;52(1–2):209–17

PHARMACOLOGY

Ochratoxin A decreases the activity of phosphoenolpyruvate carboxykinase and its mRNA content in primary cultures of rat kidney proximal convoluted tubule cells. Thekkumkara TJ, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):916–20

Perturbation of liver microsomal calcium homeostasis by ochratoxin A. Khan S, et al. **Biochem Pharmacol** 1989 Jan 1;38(1):67–72

Conditioned saccharin taste aversion induced by mycotoxins in rats: lack of effect of ochratoxin A. Clark DE, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):819–21

Effects of ochratoxin A alone and in combination with citrinin on kidney function of single comb White Leghorn pullets. Glahn RP, et al. **Poult Sci** 1988 Jul;67(7):1034–42

Influence of ochratoxin B on the ochratoxin A inhibition of phenylalanyl–tRNA formation in vitro and protein synthesis in hepatoma tissue culture cells. Roth A, et al. **Toxicol Lett** 1989 Feb;45(2–3):307–13

TOXICITY

Ochratoxin A as a suppressor of mitogen–induced blastogenesis of porcine blood lymphocytes. Holmberg T, et al. **Acta Vet Scand** 1988;29(2):219–23

Evaluation of diets contaminated with aflatoxin and ochratoxin fed to growing pigs. Harvey RB, et al. **Am J Vet Res** 1989 Aug;50(8):1400–5

The effects of ochratoxin A on postimplantation rat embryos in culture. Mayura K, et al. **Arch Environ Contam Toxicol** 1989 May–Jun;18(3):411–5

Organ weights, liver constituents, and serum components in growing chicks fed ochratoxin A. Sreemannarayana O, et al. **Arch Environ Contam Toxicol** 1989 May–Jun; 18(3):404–10

Lipid peroxidation as a possible cause of ochratoxin A toxicity. Rahimtula AD, et al. **Biochem Pharmacol** 1988 Dec 1;37(23):4469–77

Ochratoxin A toxicity on carbohydrate metabolism in rats. Subramanian S, et al. **Bull Environ Contam Toxicol** 1989 Aug;43(2):180–4

Mycotoxin interactions in poultry and swine. Huff WE, et al. **J Anim Sci** 1988 Sep;66(9):2351–5

Toxicokinetics of ochratoxin A in several species and its plasma–binding properties. Hagelberg S, et al. **J Appl Toxicol** 1989 Apr;9(2):91–6

Neurochemical effects of prenatal treatment with ochratoxin A on fetal and adult mouse brain. Tamaru M, et al. **Neurochem Res** 1988 Dec;13(12):1139–47

Progression of ochratoxicosis in broiler chickens. Huff WE, et al. **Poult Sci** 1988 Aug;67(8):1139–46

Influence of ochratoxin A and T–2 toxin singly and in combination on broiler chickens. Kubena LF, et al. **Poult Sci** 1989 Jul;68(7):867–72

Nephrotoxicity assessment by measuring cellular ATP content. II. Intranephron site of ochratoxin A nephrotoxicity. Jung KY, et al. **Toxicol Appl Pharmacol** 1989 Sep 15;100(3):383–90

Residual hematopoietic effect in mice exposed to ochratoxin A prior to irradiation [published erratum appears in Toxicology 1989 Feb;54(2):227] Hong HH, et al. **Toxicology** 1988 Dec 16;53(1):57–67

[The sperm quality of 4 boars during the assimilation of mycotoxin–containing feed (ochratoxin A) amd after changing the feed—a case study] Ewald C, et al. **Berl Munch Tierarztl Wochenschr** 1989 Aug 1;102(8):261–6 (Eng. Abstr.) **(Ger)**

[Ochratoxin A: toxicologic problems and risks for public health] Massaro A, et al. **Ann Ist Super Sanita** 1988; 24(4):613–20 (57 ref.) (Eng. Abstr.) **(Ita)**

OCHRONOSIS

CHEMICALLY INDUCED

Tetracycline treatment for sarcoid–like ochronosis due to hydroquinone. Fisher AA. **Cutis** 1988 Jul;42(1):19–20

COMPLICATIONS

Rapidly progressive hip osteoarthrosis—an unusual presentation of ochronosis. Cunningham TJ, et al. **Clin Exp Rheumatol** 1989 May–Jun;7(3):315–8 (10 ref.)

Cervico–medullary compression secondary to ochronotic arthritis affecting cranio–vertebral joints syndesmo–dental ochronotic arthritis. Sharma RR, et al. **J Postgrad Med** 1988 Oct;34(4):253–7

EPIDEMIOLOGY

Exogenous ochronosis: an epidemiological study [published erratum appears in Br J Dermatol 1989 Jul;121(1):153] Hardwick N, et al. **Br J Dermatol** 1989 Feb;120(2):229–38

ETIOLOGY

Alkaptonuria—a rare presentation [letter] Sharma JK, et al. **J Assoc Physicians India** 1988 May;36(5):353–4

GENETICS

Alkaptonuria and ochronosis in three siblings. Ascorbic acid treatment monitored by urinary HGA excretion. Forslind K, et al. **Clin Exp Rheumatol** 1988 Jul–Sep;6(3):289–92

PATHOLOGY

Ochronosis. Findlay GH. **Clin Dermatol** 1989 Apr–Jun; 7(2):28–35 (12 ref.)

The pathology of alkaptonuric ochronosis [published erratum appears in Hum Pathol 1989 May;20(5):500] Gaines JJ Jr. **Hum Pathol** 1989 Jan;20(1):40–6 (44 ref.)

[Ochronosis oculi] Stürmer J, et al. **Pathologe** 1988 Sep; 9(5):295–301 (30 ref.) **(Ger)**

[Ochronosis, based on a case] Fölker T. **Morphol Igazsagugyi Orv Sz** 1989 Apr;29(2):119–23 (Eng. Abstr.) **(Hun)**

SURGERY

[The ochronosis disease picture and conservative and operative therapy. Presented in relation to a case report] Skuginna A, et al. **Z Orthop** 1988 Dec;126(6):643–6 (Eng. Abstr.) **(Ger)**

THERAPY

Probable coexisting exogenous ochronosis and mercurial pigmentation managed by dermabrasion. Lang PG Jr. **J Am Acad Dermatol** 1988 Nov;19(5 Pt 2):942–6

OCTADECANOIC ACIDS see **STEARIC ACIDS**

OCTADECENOIC ACIDS see **OLEIC ACIDS**

OCTANES

TOXICITY

The fate of inhaled octane and the nephrotoxicant, isooctane, in rats. Dahl AR. **Toxicol Appl Pharmacol** 1989 Sep 1; 100(2):334–41

Aviation gasoline: comparative subchronic nephrotoxicity study in the male rat. Gérin M, et al. **Toxicol Lett** 1988 Nov;44(1–2):13–9

OCTANOATES see **CAPRYLATES**

OCTANOIC ACIDS see under **CAPRYLATES**

OCTANOLS see **ALCOHOLS, OCTYL**

OCTODON see **RODENTIA**

OCTOGENARIAN see **AGED, 80 AND OVER**

P-OCTOPAMINE see **NORSYNEPHRINE**

OCTOPUS

Toxic exposure to ethylene dibromide and mercuric chloride: effects on laboratory–reared octopuses. Adams PM, et al. **Neurotoxicol Teratol** 1988 Nov–Dec;10(6):519–23

ANALYSIS

Structure and function of the carboxyl–terminal oxygen–binding domain from the subunit of Octopus dofleini hemocyanin. Miller KI, et al. **Biochemistry** 1988 Sep 20;27(19):7282–8

GENETICS

cDNA cloning of the Octopus dofleini hemocyanin: sequence of the carboxyl–terminal domain. Lang WH. **Biochemistry** 1988 Sep 20;27(19):7276–82

METABOLISM

Microscopic and biochemical characterization of lectin binding sites in the cephalopod retina. Taba A, et al. **J Comp Neurol** 1989 May 22;283(4):559–67

An investigation of the nature of Bohr, Root, and Haldane effects in Octopus dofleini hemocyanin. Miller KI, et al. **J Comp Physiol [B]** 1988;158(5):547–52

PHYSIOLOGY

Chronotropic and inotropic effects of atrial peptides on the isolated systemic heart of Octopus vulgaris. Agnisolo C, et al. **J Comp Physiol [B]** 1989;158(6):637–41

Why octopuses? Have we learned anything from studying their brains? Messenger JB. **Sci Prog** 1988;72(287 Pt 3):297–320

OCTOPUS VENOMS see **MOLLUSK VENOMS**

OCTREOTIDE

The development of dependence to an octapeptide somatostatin analog: contribution to the study of somatostatin analgesia. Paunović VR, et al. **Biol Psychiatry** 1989 May;26(1):97–101

Octreotide [editorial] **Lancet** 1989 Sep 2;2(8662):541–2

[Somatostatin analogue (SMS 201–995)] Eisenstein Z. **Harefuah** 1989 Feb 1;116(3):176–7 **(Heb)**

ADMINISTRATION & DOSAGE

Antidiuretic effect of Sandostatin (SMS 201–995) in healthy volunteers. Berthold H, et al. **Acta Endocrinol (Copenh)** 1989 Jun;120(6):708–14

Continuous subcutaneous octreotide infusion markedly suppresses IGF–I levels whilst only partially suppressing GH secretion in diabetics with retinopathy. Hyer SL, et al. **Acta Endocrinol (Copenh)** 1989 Feb;120(2):187–94

The effect of the long–acting somatostatin analogue SMS 201–995 on ACTH secretion in Nelson's syndrome and Cushing's disease. Lamberts SW, et al. **Acta Endocrinol (Copenh)** 1989 Jun;120(6):760–6

Short–term administration of SMS 201–995 in the management of an external pancreatic fistula. Kwan D, et al. **Am J Gastroenterol** 1989 Mar;84(3):326–8

Intravenous and subcutaneous administration of a long–acting somatostatin analogue: effects on glucose metabolism and splanchnic haemodynamics in healthy subjects. Eriksson LS, et al. **Eur J Clin Invest** 1989 Apr;19(2):213–9

Failure of somatostatin or an analog to promote closure of end pancreatic fistulae. Miller BM, et al. **Int J Pancreatol** 1989 Feb;4(1):65–72

Long term effects of continuous subcutaneous infusion of the somatostatin analog octreotide in the treatment of acromegaly. Tauber JP, et al. **J Clin Endocrinol Metab** 1989 May;68(5):917–24

Comparison of the effectiveness of 2–hourly versus 8–hourly subcutaneous injections of a somatostatin analog (SMS 201–995) in the treatment of acromegaly. Wang C, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):670–7

Long–acting somatostatin analog in refractory neonatal hypoglycemia: follow–up information [letter] Jackson JA, et al. **J Pediatr** 1988 Dec;113(6):1118

ADVERSE EFFECTS

Aggravation of hypoglycemia in insulinoma patients by the long–acting somatostatin analogue octreotide (Sandostatin). Stehouwer CD, et al. **Acta Endocrinol (Copenh)** 1989 Jul; 121(1):34–40

Complications of long–acting somatostatin analogue therapy [letter] Jackson JA. **Am J Med** 1989 Apr;86(4):512–3

Severe hypoglycemia as a short–term side–effect of the somatostatin analog SMS 201–995 in insulin–dependent diabetes mellitus. Navascuès I, et al. **Horm Metab Res** 1988 Dec;20(12):749–50

Hypoglycaemia in acromegalic patients treated with long acting somatostatin analogue (SMS 201–995). Popović V, et al. **Horm Metab Res** 1989 May;21(5):282–4

Acute hepatitis after treatment of acromegaly with octreotide [letter] Arosio M, et al. **Lancet** 1988 Dec 24–31; 2(8626–8627):1498

ANALOGS & DERIVATIVES

Localisation of endocrine–related tumours with radioiodinated analogue of somatostatin. Krenning EP, et al. **Lancet** 1989 Feb 4;1(8632):242–4

Protective effect of an orally administered, highly potent somatostatin analog (RC–121) against absolute

ethanol-induced hemorrhagic erosions of the rat gastric mucosa. László F, et al. **Life Sci** 1989;44(21):1573–8

ANALYSIS

Potential incompatibility of insulin and octreotide in total parenteral nutrient solutions [letter] Rosen GH. **Am J Hosp Pharm** 1989 Jun;46(6):1128

DIAGNOSTIC USE

Gastrin-producing ovarian cystadenocarcinoma: sensitivity to secretin and SMS 201-995. Heyd J, et al. **Gastroenterology** 1989 Aug;97(2):464–7

PHARMACOKINETICS

Diminishing efficacy of octreotide (SMS 201-995) on gastric functions of healthy subjects during one-week administration. Londong W, et al. **Gastroenterology** 1989 Mar;96(3):713–22

Distribution of a somatostatin analog after continuous intraventricular administration. Kroin JS, et al. **Neurosurgery** 1989 May;24(5):744–8

PHARMACOLOGY

Differential regulation of membrane receptors sensitive to histamine (H2-type), isoproterenol (beta 2-type) and glucagon-like peptides by the somatostatin analogue Sandostatin in rat gastric glands. Gespach C, et al. **Agents Actions** 1989 Apr;27(1–2):169–72

Effect of octreotide acetate on pancreatic exocrine function. Williams ST, et al. **Am J Surg** 1989 May;157(5):459–62

Synthesis of somatostatin by breast cancer cells and their inhibition by exogenous somatostatin and sandostatin. Nelson J, et al. **Br J Cancer** 1989 May;59(5):739–42

Further studies of the effects of somatostatin and related peptides in area CA1 of rabbit hippocampus. Scharfman HE, et al. **Cell Mol Neurobiol** 1988 Dec;8(4):411–29

Effect of a new somatostatin analogue SMS 201-995 (Sandostatin) on the renin-aldosterone axis. Sieber C, et al. **Clin Endocrinol (Oxf)** 1988 Jan;28(1):25–32

Octreotide, a new somatostatin analogue. Katz MD, et al. **Clin Pharm** 1989 Apr;8(4):255–73 (208 ref.)

Effects of the somatostatin analogue SMS 201-995 (sandostatin) on mouth-to-caecum transit time and absorption of fat and carbohydrates in normal man. Møller N, et al. **Clin Sci** 1988 Oct;75(4):345–50

Somatostatin analogue administration prevents increase in kidney somatomedin C and initial renal growth in diabetic and uninephrectomized rats. Flyvbjerg A, et al. **Diabetologia** 1989 Apr;32(4):261–5

Effect of somatostatin analog (SMS 201-995) on in vivo intestinal fluid transport in rats. A limited systemic effect. Fedorak RN, et al. **Dig Dis Sci** 1989 Apr;34(4):567–72

Octreotide: a synthetic analog of somatostatin. Rosenberg JM. **Drug Intell Clin Pharm** 1988 Oct;22(10):748–54 (52 ref.)

Direct inhibitory effects of a somatostatin analog, SMS 201-995, on AR4-2J cell proliferation via pertussis toxin-sensitive guanosine triphosphate-binding protein-independent mechanism. Viguerie N, et al. **Endocrinology** 1989 Feb;124(2):1017–25

Action of somatostatin analogue (SMS 201-995) on the growth-promoting effect resulting from sustained achlorhydria in rat gastric mucosa, with special reference to endocrine cell behaviour. Cadiot G, et al. **Eur J Clin Invest** 1988 Aug;18(4):360–8

Effect of a long-acting somatostatin analogue (octreotide) on circulating tachykinins and the pentagastrin-induced carcinoid flush. Balks HJ, et al. **Eur J Clin Pharmacol** 1989; 36(2):133–7

Somatostatin and SMS 201-995 reverse the impairment of cognitive functions induced by cysteamine depletion of brain somatostatin. Schettini G, et al. **Eur J Pharmacol** 1988 Jul 14;151(3):399–407

Diminishing efficacy of octreotide (SMS 201-995) on gastric functions of healthy subjects during one-week administration. Londong W, et al. **Gastroenterology** 1989 Mar;96(3):713–22

Effect of a somatostatin analog (SMS 201-995) in perfusion on basal and pentagastrin-stimulated calcitonin levels in medullary thyroid carcinoma. Modigliani E, et al. **Horm Metab Res** 1988 Dec;20(12):773–5

The effects of SMS 201-995 (sandostatin) on metabolic profiles in insulin-dependent diabetes mellitus. Grossman LD, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):63–7

Heterogeneity of growth hormone (GH) release by individual pituitary adenoma cells from acromegalic patients, as determined by the reverse hemolytic plaque assay: effects of SMS 201-995, GH-releasing hormone and thyrotropin-releasing hormone. Hofland LJ, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):613–20

Somatostatin analog octreotide (SMS 201-995) prevents the decrease in blood pressure after oral glucose loading in the elderly. Jansen RW, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):752–6

The somatostatin analog octreotide inhibits the secretion of growth hormone (GH)-releasing hormone, thyrotropin, and GH in man. Masuda A, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):906–9

Octreotide suppresses both growth hormone (GH) and GH-releasing hormone (GHRH) in acromegaly due to ectopic GHRH secretion. Moller DE, et al. **J Clin Endocrinol Metab** 1989 Feb;68(2):499–504

Effect of a new long-acting somatostatin analogue (SMS 201-995) on glycemic and hormonal profiles in insulin-treated type II diabetic patients. Candrina R, et al. **J Endocrinol Invest** 1988 Jul-Aug;11(7):501–7

Effects of a somatostatin derivative (SMS 201-995) on postprandial hyperglycemia in insulin-dependent diabetics studied by means of a closed-loop device. Nosari I, et al. **J Endocrinol Invest** 1989 Jun;12(6):413–7

SMS 201-995 prevents postprandial blood pressure reduction in normotensive and hypertensive elderly subjects. Jansen RW, et al. **J Hypertens Suppl** 1988 Dec;6(4):S669–72

Enhancement of renal function by a long-acting somatostatin analogue in patients with decompensated cirrhosis. Mountokalakis T, et al. **Nephrol Dial Transplant** 1988; 3(5):604–7

Neurobehavioral effects of intrathecal somatostatinergic treatment in subhuman primates. Leblanc R, et al. **Neurology** 1988 Dec;38(12):1887–90

Reversal of desipramine-induced suppression of paradoxical sleep by a long-acting somatostatin analogue (octreotide) in rats. Danguir J, et al. **Neurosci Lett** 1989 Mar 27; 98(2):154–8

Scopolamine-induced suppression of paradoxical sleep is reversed by the somatostatin analogue SMS 201-995 in rats. Danguir J, et al. **Pharmacol Biochem Behav** 1988 Jun; 30(2):295–7

Effect of the long-acting somatostatin analogue SMS 201-995 on small-intestinal interdigestive motility in the dog. Peeters TL, et al. **Scand J Gastroenterol** 1988 Sep; 23(7):769–74

Suppression of primary and secondary peptides with somatostatin analog in the therapy of functional endocrine tumors. Woltering EA, et al. **Surg Gynecol Obstet** 1988 Dec;167(6):453–62

The effect of somatostatin analogue (SMS 201-995) on pancreatic blood flow. Conway DR, et al. **Surgery** 1988 Dec;104(6):1024–30

Inhibition of growth of human breast carcinomas in vivo by somatostatin analog SMS 201-995: treatment of nude mouse xenografts. Weber C, et al. **Surgery** 1989 Aug; 106(2):416–22

[Effects on growth hormone secretion of a new somatostatin analogue (SMS 201-995) and nonspecific releasing hormones in patients with acromegaly] Candrina R. **Medicina (Firenze)** 1988 Apr-Jun;8(2):180–1 (Eng. Abstr.) **(Ita)**

[Inhibitory effects of somatostatin analog (SMS 201-995) on pancreatic hormones in patients with malignant islet-cell carcinoma] Fukushima H, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Aug 20;64(8):666–76 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Development of resistance to a long-acting somatostatin analogue during treatment of two patients with metastatic endocrine pancreatic tumours. Lamberts SW, et al. **Acta Endocrinol (Copenh)** 1988 Dec;119(4):561–6

Medical treatment of neuroendocrine gut and pancreatic tumors. Oberg K, et al. **Acta Oncol** 1989;28(3):425–31 (32 ref.)

Clinical features of carcinoid syndrome and the use of somatostatin analogue in its management. Vinik AI, et al. **Acta Oncol** 1989;28(3):389–402 (78 ref.)

Octreotide: a somatostatin analog. Salman K, et al. **Am Fam Physician** 1989 Jun;39(6):207–11 (22 ref.)

Successful treatment of unstable angina in malignant carcinoid syndrome using the long-acting somatostatin analogue SMS 201-995 (Sandostatin). Bluming AZ, et al. **Am J Med** 1988 Dec;85(6):872–4

Short-term recovery of visual field loss in acromegaly during treatment with a long-acting somatostatin analogue. Cobb WE, et al. **Am J Med** 1989 Apr;86(4):496–8

Effect of the somatostatin analogue SMS-201-995 on the adrenergic response to glucose ingestion in patients with postprandial hypotension. Hoeldtke RD, et al. **Am J Med** 1989 Jun;86(6 Pt 1):673–7

Somatostatin analogue: use in the treatment of vipoma with hypercalcemia. Venkatesh S, et al. **Am J Med** 1989 Sep; 87(3):356–7

Effect of SMS201-995 (a long-acting somatostatin analog) on bile-induced acute hemorrhagic pancreatitis in the dog. Augelli NV, et al. **Am Surg** 1989 Jun;55(6):389–91

Carcinoid syndrome: the combined use of ketanserin and octreotide in the management of an acute crisis during anaesthesia. Hughes EW, et al. **Anaesth Intensive Care** 1989 Aug;17(3):367–70

SMS 201-995 and provocation tests in preparation of patients with carcinoids for surgery or hepatic arterial embolization. Ahlman H, et al. **Anesth Analg** 1988 Dec;67(12):1142–8

NIH conference. Somatostatin and somatostatin analogue (SMS 201-995) in treatment of hormone-secreting tumors of the pituitary and gastrointestinal tract and non-neoplastic diseases of the gut. Gorden P, et al. **Ann Intern Med** 1989 Jan 1;110(1):35–50 (153 ref.)

Amyloidosis, diarrhea, and a somatostatin analogue [letter] O'Connor CR, et al. **Ann Intern Med** 1989 Apr 15; 110(8):665–6

Treatment of 27 postoperative enterocutaneous fistulas with the long half-life somatostatin analogue SMS 201-995. Nubiola P, et al. **Ann Surg** 1989 Jul;210(1):56–8

Long-acting analogue of somatostatin--SMS 201-995--is highly effective in the prevention of clinical symptoms related to the dumping syndrome [letter] Tulassay Z, et al. **Ann Surg** 1989 Aug;210(2):250–2

Effect of the long-acting somatostatin analogue SMS 201-995 (Sandostatin) in advanced breast cancer. Vennin P, et al. **Anticancer Res** 1989 Jan-Feb;9(1):153–5

Treatment of malignant carcinoid syndrome with a long-acting somatostatin analogue. Altman AR, et al. **Arch Dermatol** 1989 Mar;125(3):394–6

Somatostatin and a long-acting analogue, octreotide acetate. Relevance to dermatology. Camisa C. **Arch Dermatol** 1989 Mar;125(3):407–12 (60 ref.)

Somatostatin analogue in short term management of hyperinsulinism. Kirk JM, et al. **Arch Dis Child** 1988 Dec; 63(12):1493–4

Reversible shrinkage of a growth hormone-secreting pituitary adenoma by a long-acting somatostatin analogue, octreotide. Barakat S, et al. **Arch Intern Med** 1989 Jun; 149(6):1443–5

Effective treatment of recurrent acromegaly with a long-active somatostatin analogue (sandostatin). Miranda R, et al. **Arch Invest Med (Mex)** 1988 Oct-Dec;19(4):445–8

Somatostatin analogue SMS 201-995 in the short-term management of neonatal hyperinsulinism due to nesidioblastosis. Sullivan MJ, et al. **Aust Paediatr J** 1988 Dec;24(6):375–8

Evaluation of the synthetic somatostatin analogue SMS 201-995 in patients with hypoglycaemia associated with hepatocellular carcinoma. Joffe BI, et al. **Br J Cancer** 1988 Jul;58(1):91–2

Treatment of pancreatic fistula [letter] Fielding GA, et al. **Br J Surg** 1988 Oct;75(10):1044

Pre-treatment with octreotide as an adjuvant to surgical resection in Zollinger-Ellison syndrome. Kingsnorth AN, et al. **Br J Surg** 1989 Jan;76(1):75–6

Somatostatin analogue SMS 201-995 (octreotide) as a possible solution to the dumping syndrome after gastrectomy or vagotomy. Primrose JN, et al. **Br J Surg** 1989 Feb;76(2):140–4

Lung carcinoid with Cushing's syndrome: control of serum ACTH and cortisol levels using SMS 201-995 (sandostatin). Hearn PR, et al. **Clin Endocrinol (Oxf)** 1988 Feb;28(2):181–5

Therapy of acromegaly with sandostatin: the predictive value of an acute test, the value of serum somatomedin-C measurements in dose adjustment and the definition of a biochemical 'cure'. Lamberts SW, et al. **Clin Endocrinol (Oxf)** 1988 Oct;29(4):411–20

FDA approves marketing of octreotide [news] **Clin Pharm** 1989 Jan;8(1):4

Somatostatin analogue improves survival in conscious cirrhotic rats subjected to gastrointestinal bleeding. Cerini R, et al. **Clin Sci** 1989 Jul;77(1):7–9

Metabolic effects of long-acting somatostatin analogue (sandostatin) in type I diabetic patients on conventional therapy. Osei K, et al. **Diabetes** 1989 Jun;38(6):704–9

Ineffectiveness of SMS 201-995 in severe hyperinsulinemia. Boden G, et al. **Diabetes Care** 1988 Sep;11(8):664–8

Somatostatin analogues in diabetes mellitus. Davies RR, et al. **Diabetic Med** 1989 Mar;6(2):103–11 (87 ref.)

Use of long-acting somatostatin analog SMS 201-995 in patients with pancreatic islet cell tumors. Maton PN, et al. **Dig Dis Sci** 1989 Mar;34(3 Suppl):28S–39S (100 ref.)

Use of somatostatin analog in management of carcinoid syndrome. Vinik A, et al. **Dig Dis Sci** 1989 Mar;34(3 Suppl):14S–27S

Octreotide (SMS 201-995) in the treatment of metastatic glucagonoma: report of one case and review of the literature. Rosenbaum A, et al. **Digestion** 1989;42(2):116–20 (12 ref.)

Treatment of acromegaly with long acting somatostatin analogue SMS 201-995. Horikawa R, et al. **Endocrinol Jpn** 1988 Oct;35(5):741–51

Placebo-controlled trial with the somatostatin analogue SMS 201-995 in peptic ulcer bleeding. Christiansen J, et al. **Gastroenterology** 1989 Sep;97(3):568–74

Pharmacotherapy of bleeding peptic ulcer—is it time to give up the search? [editorial] Peterson WL. **Gastroenterology** 1989 Sep;97(3):796–7

Clinical response to the long acting somatostatin analogue SMS 201-995 in a child with congenital microvillus atrophy. Couper RT, et al. **Gut** 1989 Jul;30(7):1020–4

Effect of a long acting somatostatin analogue SMS 201-995 on jejunostomy effluents in patients with severe short bowel syndrome. Ladefoged K, et al. **Gut** 1989 Jul; 30(7):943–9

Effects of the long-acting somatostatin analogue SMS 201-995 in an infant with intractable diarrhea. Hunziker UA, et al. **Helv Paediatr Acta** 1988 Aug;43(1–2):103–9

The use of SMS 201-995 (somatostatin analogue) in insulinomas. Additional case report and literature review. Hearn PR, et al. **Horm Res** 1988;29(5–6):211–3 (19 ref.)

Experience of a six-month treatment with sandostatin at increasing doses in acromegaly. Sassolas G, et al. **Horm Res** 1989;31(1–2):51–4

Treatment of psoriasis with long-term administration of somatostatin analog 201-995. Camisa C, et al. **J Am Acad Dermatol** 1989 Jul;21(1):139–41

Preoperative treatment of acromegaly with long-acting somatostatin analog SMS 201-995: shrinkage of invasive pituitary macroadenomas and improved surgical remission rate. Barkan AL, et al. **J Clin Endocrinol Metab** 1988 Nov;

67(5):1040–8
Treatment of hyperthyroidism due to inappropriate secretion of thyrotropin with the somatostatin analog SMS 201–995. Beck-Peccoz P, et al. **J Clin Endocrinol Metab** 1989 Jan; 68(1):208–14
Suppression of ectopic adrenocorticotropin secretion by the long-acting somatostatin analog octreotide. Bertagna X, et al. **J Clin Endocrinol Metab** 1989 May;68(5):988–91
Treatment of orthostatic hypotension with octreotide. Hoeldtke RD, et al. **J Clin Endocrinol Metab** 1989 Jun; 68(6):1051–9
Successful treatment with SMS 201–995 of Cushing's syndrome caused by ectopic adrenocorticotropin secretion from a metastatic gastrin-secreting pancreatic islet cell carcinoma. Lamberts SW, et al.
J Clin Endocrinol Metab 1988 Nov;67(5):1080–3
Effects of sandostatin on plasma chromogranin-A levels in neuroendocrine tumors. Moattari AR, et al.
J Clin Endocrinol Metab 1989 Oct;69(4):902–5
The effects of octreotide on basal and stimulated hormone levels in patients with carcinoid syndrome. Oberg K, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):796–800
Dose-response study and long term effect of the somatostatin analog octreotide in patients with therapy-resistant acromegaly. Quabbe HJ, et al. **J Clin Endocrinol Metab** 1989 May;68(5):873–81
The growth hormone responses to octreotide in acromegaly correlate with adenoma somatostatin receptor status. Reubi JC, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):844–50
Postprandial gallbladder motility during long term treatment with the long-acting somatostatin analog SMS 201–995 in acromegaly. van Liessum PA, et al.
J Clin Endocrinol Metab 1989 Sep;69(3):557–62
Long-acting somatostatin analog controls acid and gastrin secretion in benign, not in malignant, Zollinger-Ellison syndrome. Bauer FE, et al. **J Clin Gastroenterol** 1989 Jun; 11(3):282–6
Clinical use of the somatostatin analog SMS 201–995 in endocrinology. Cozzi R, et al. **J Endocrinol Invest** 1988 Nov;11(10):737–40
Successful treatment with a long-acting somatostatin analogue (SMS201–995) in a patient with malignant carcinoid syndrome. Tsuda M, et al. **Jpn J Med** 1988 Aug; 27(3):311–6
Treatment of secretory diarrhea in AIDS with the somatostatin analogue SMS 201–995. Füessl HS, et al.
Klin Wochenschr 1989 Apr 17;67(8):452–5
Heart failure responding to octreotide in patient with acromegaly [letter] Chanson P, et al. **Lancet** 1989 Jun 3; 1(8649):1263–4
Treatment of meningioma with octreotide [letter] Rünzi MW, et al. **Lancet** 1989 Jul 22;2(8656):217–8
Successful treatment of meningioma with octreotide [letter] Rünzi MW, et al. **Lancet** 1989 May 13;1(8646):1074
Octreotide—a synthetic somatostatin.
Med Lett Drugs Ther 1989 Jul 14;31(796):66–8
Successful pregnancy in a previously infertile woman treated with SMS-201–995 for acromegaly [letter] Landolt AM, et al. **N Engl J Med** 1989 Mar 9;320(10):671–2
Response of a GH- and TSH-secreting pituitary adenoma to a somatostatin analogue (SMS 201–995): evidence that GH and TSH coexist in the same cell and secretory granules. Malarkey WB, et al. **Neuroendocrinology** 1989 Mar;49(3):267–74
Spontaneous postoperative normalization of growth hormone levels in two patients with acromegaly not cured by transsphenoidal surgery. Landolt AM, et al.
Neurosurgery 1988 Nov;23(5):634–7
A case of somatostatinoma: responses to food and SMS 201–995 administration. Davis TM, et al. **Pancreas** 1988; 3(6):729–33
Treatment of prolactinomas and growth hormone-producing adenomas with an injectable bromocriptine retard preparation and a somatostatin analogue delivered by an implantable pump. Schatz H, et al. **Pathol Res Pract** 1988 Sep;183(5):546–51
Long-term symptomatic relief of postprandial hypoglycaemia following gastric surgery with a somatostatin analogue. D'Cruz DP, et al.
Postgrad Med J 1989 Feb;65(760):116–7
Somatostatin analogue (SMS 201–995) in patients with gastrinomas. Vinik AI, et al. **Surgery** 1988 Nov; 104(5):834–42
Successful treatment of a high-output fistula with a somatostatin analogue following pancreas transplantation. Cooper MM, et al. **Transplant Proc** 1989 Aug;21(4):3738–41
Attempts to reduce post-transplant pancreatitis in rats and dogs with the somatostatin analogue SMS 201–995. Spillenaar Bilgen EJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2829–30
[Symptomatic treatment of the malignant carcinoid syndrome with octreotide] Alberts AS, et al. **S Afr Med J** 1989 Jan 7;75(1):30–1 (Eng. Abstr.) **(Afr)**
[Effect of repeated injections of sandostatine, with increasing doses, in the treatment of 40 acromegalics. French Group for the study of Sandostatine in Acromegaly]
Ann Endocrinol (Paris) 1988;49(4–5):323–30 (Eng. Abstr.) **(Fre)**
[Attempt in treating benign insulinoma by delayed somatostatin. 2 cases (letter)] Picq R, et al. **Presse Med** 1988 Nov 5;17(39):2087 **(Fre)**
[Long-acting somatostatin analog SMS 201–955 (Sandostatin) and its application in clinical gastroenterological practice] Meier R, et al.
Schweiz Rundsch Med Prax 1988 Aug 2;77(31–32):813–9 (67 ref.) (Eng. Abstr.) **(Ger)**
[Therapy of metastatic carcinoid with the somatostatin analog octreotide and with recombinant interferon alfa 2b] Linkesch M, et al. **Wien Klin Wochenschr** 1989 Jun 23; 101(13):455–7 (Eng. Abstr.) **(Ger)**
[Treatment of gastrointestinal neuroendocrine tumors with the somatostatin analog octreotide (Sandostatin)] Stöckmann F, et al. **Z Gastroenterol** 1988 Oct;26(10):665–75 (95 ref.) (Eng. Abstr.) **(Ger)**
[Role of a prolonged-action analog of somatostatin SMS 201–995 in the therapy of type 2 diabetes mellitus] Candrina R, et al. **Medicina (Firenze)** 1988 Jul–Sep;8(3):313–5 (Eng. Abstr.) **(Ita)**
[Short-term treatment of a VIPoma with somatostatin analogue in advance of curative operation] Yoshioka M, et al. **Nippon Naika Gakkai Zasshi** 1988 Aug;77(8):1276–7 **(Jpn)**
[Treatment of acromegaly with SMS 201–995] Jorde R, et al. **Tidsskr Nor Laegeforen** 1988 Nov 10;108(31):2844–5 (Eng. Abstr.) **(Nor)**
[Treatment of acromegaly with a long-acting synthetic analog of somatostatin] Miranda R, et al.
Arch Invest Med (Mex) 1988 Apr–Jun;19(2):113–8 (Eng. Abstr.) **(Spa)**
[Treatment of pancreatic apudomas with a somatostatin analog SMS 201–995 (letter)] Varas Lorenzo MJ.
Med Clin (Barc) 1988 Dec 10;91(20):796 **(Spa)**

OCULAR DISPARITY see **VISION DISPARITY**

OCULAR FIXATION see **FIXATION, OCULAR**

OCULAR HERPES ZOSTER VIRUS see **VARICELLA-ZOSTER VIRUS**

OCULAR HYPERTENSION

BLOOD

Blood viscosity in ocular hypertension. Garcia-Salinas P, et al. **Can J Ophthalmol** 1988 Dec;23(7):305–7

CHEMICALLY INDUCED

Steroid-induced ocular hypertension in the rabbit: a model using subconjunctival injections. Hester DE, et al.
J Ocul Pharmacol 1987 Fall;3(3):185–9
Effects of adrenergic agents on alpha-chymotrypsin-induced ocular hypertension in albino and pigmented rabbits: a comparative study. Himber J, et al. **J Ocul Pharmacol** 1989 Summer;5(2):93–8

COMPLICATIONS

The relationship between the fluoroangiographic aspect of the optic disk and the visual field in patients with the exfoliation syndrome with and without intraocular hypertension. Part I: Bilateral cases. Cambiaggi A, et al. **Acta Ophthalmol Suppl (Copenh)** 1988;184:62–5
Possibly reduced prevalence of peripapillary crescents in ocular hypertension. Kasner O, et al. **Can J Ophthalmol** 1989 Aug;24(5):211–5
Extracapsular cataract extraction and posterior chamber implantation in primary ocular hypertension: preliminary report. Pignalosa B, et al. **Doc Ophthalmol** 1989 Jan; 71(1):55–9
Is there general reduction of sensitivity in glaucoma? Langerhorst CT, et al. **Int Ophthalmol** 1989 Jan; 13(1–2):31–5
Optic disc pallor and visual field defect in exfoliative and non-exfoliative, untreated ocular hypertension. Linnér E, et al. **Int Ophthalmol** 1989 Jan;13(1–2):21–4
Dissociation of visual deficits in ocular hypertension. Trick GL, et al. **Invest Ophthalmol Vis Sci** 1988 Oct; 29(10):1486–91
Anterior ischemic optic neuropathy and increased intraocular pressure. Tomsak RL, et al. **J Clin Neuro Ophthalmol** 1989 Jun;9(2):116–8
Assessing the utility of reliability indices for automated visual fields. Testing ocular hypertensives. Bickler-Bluth M, et al. **Ophthalmology** 1989 May;96(5):616–9
[Effect of ocular hypertension on the optic nerve and the lamina cribrosa in cats] Xu Y.
Chung Hua Yen Ko Tsa Chih 1988 Sep;24(5):286–8 (Eng. Abstr.) **(Chi)**
[Congenital aniridia and ocular hypertension. Apropos of 8 cases and review of the literature] Grange JD, et al.
Ophtalmologie 1988 Jul–Sep;2(3):205–8 (23 ref.) (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Ocular hypertension, glaucoma suspect, preglaucoma, or glaucoma? Synopsis of views [editorial] Johnson TD, et al. **Ann Ophthalmol** 1986 Nov;18(11):313–4
The glaucoma suspect: differentiation of the future glaucomatous eye from the non-glaucomatous suspect eye. 1. Ultrasonic measurements and eye-wall stress. Chisholm IA, et al. **Graefes Arch Clin Exp Ophthalmol** 1989; 227(1):17–20
The glaucoma suspect: differentiation of the future glaucoma eye from the non-glaucomatous suspect eye. 2. Visual field decay. Chisholm IA, et al.
Graefes Arch Clin Exp Ophthalmol 1989;227(2):110–3
Full threshold versus quantification of defects for visual field testing in glaucoma. Stewart WC, et al.
Graefes Arch Clin Exp Ophthalmol 1989;227(1):51–4
Space-occupying orbital lesions: can critical increases in intraorbital pressure be predicted clinically? Stanley RJ, et al. **Laryngoscope** 1989 Jan;99(1):19–22
[Automated campimetry with video screen: analysis of 565 cases with ocular hypertension.] Rouland JF, et al.
Ophthalmologica 1988;197(3):151–8 (Eng. Abstr.) **(Fre)**
[Tonometry following lamellating refractive corneal surgery] Böhnke M, et al. **Fortschr Ophthalmol** 1988;85(3):243–7 (Eng. Abstr.) **(Ger)**
[Pallor of the optic papilla—an early sign of glaucoma. A clinical controlled study of optic disk pallor and papillar cupping in glaucoma simplex, ocular hypertension and normal eyes with the optic nerve head analyzer] Siebert M, et al. **Klin Monatsbl Augenheilkd** 1989 Jun;194(6):433–6 (Eng. Abstr.) **(Ger)**
[Early diagnosis, treatment and prevention of disorders of intraocular pressure and hydrodynamics in patients with hypothyroidism in the Carpathian region] Pestereva AA. **Oftalmol Zh** 1988;(4):215–8 (Eng. Abstr.) **(Rus)**
[The importance of a new compression test in the diagnosis of preglaucoma and initial glaucoma] Vodovozov AM, et al. **Oftalmol Zh** 1989;(2):81–4 (Eng. Abstr.) **(Rus)**
[A method of ophthalmosphygmography in studying the blood supply to the eyes in patients with glaucoma] Pomerantseva ID. **Vestn Oftalmol** 1989 Jan–Feb; 105(2):74–7 (57 ref.) **(Rus)**
[True tolerant intraocular pressure in glaucoma, ocular hypertension and low-tension glaucoma] Vodovozov AM, et al. **Vestn Oftalmol** 1989 Jan–Feb;105(1):5–7 (Eng. Abstr.) **(Rus)**
[Ocular hypertension, suspected glaucoma, preglaucoma or glaucoma? The points of view of scientists] Volkov VV. **Vestn Oftalmol** 1988 Nov–Dec;104(6):71–3 (19 ref.) **(Rus)**

DRUG THERAPY

A limited comparison of apraclonidine's dose response in subjects with normal or increased intraocular pressure. Abrams DA, et al. **Am J Ophthalmol** 1989 Sep 15; 108(3):230–7
The time-course of intraocular pressure in timolol-treated and untreated glaucoma suspects. Chauhan BC, et al.
Am J Ophthalmol 1989 May 15;107(5):471–5
Hypotony following instillation of apraclonidine for increased intraocular pressure after trabeculoplasty. Jampel HD. **Am J Ophthalmol** 1989 Aug 15;108(2):191–2
MK-927: a topically effective carbonic anhydrase inhibitor in patients. Bron AM, et al. **Arch Ophthalmol** 1989 Aug; 107(8):1143–6
A comparison of the efficacy of betaxolol and timolol in ocular hypertension with or without adrenaline. Clark JB, et al. **Aust N Z J Ophthalmol** 1989 May;17(2):173–7
Effect of acute medical reduction of intraocular pressure on the visual field and optic disc in ocular hypertension. Farinelli AC, et al. **Can J Ophthalmol** 1988 Aug;23(5):216–8
Efficacy and safety of once-daily levobunolol for glaucoma therapy. Rakofsky SI, et al. **Can J Ophthalmol** 1989 Feb; 24(1):2–6
Ocular metipranolol. A preliminary review of its pharmacodynamic and pharmacokinetic properties, and therapeutic efficacy in glaucoma and ocular hypertension. Battershill PE, et al. **Drugs** 1988 Nov;36(5):601–15 (44 ref.)
Celiprolol versus timolol and placebo: a two week double-blind comparison. Elman J, et al.
J Ocul Pharmacol 1987 Spring;3(1):5–10
Aminozolamide suspension: the role of the vehicle in a topical carbonic anhydrase inhibitor. Lewis RA, et al.
J Ocul Pharmacol 1988 Fall;4(3):215–9
Use of apraclonidine to reduce acute intraocular pressure rise following Q-switched Nd:YAG laser iridotomy. Kitazawa Y, et al. **Ophthalmic Surg** 1989 Jan;20(1):49–52
Levobunolol. A four-year study of efficacy and safety in glaucoma treatment. The Levobunolol Study Group.
Ophthalmology 1989 May;96(5):642–5
Maintained reduction of intraocular pressure by prostaglandin F2 alpha-1-isopropyl ester applied in multiple doses in ocular hypertensive and glaucoma patients. Camras CB, et al. **Ophthalmology** 1989 Sep; 96(9):1329–36; discussion 1336–7
Is it worthwhile to add dipivefrin HCl 0.1% to topical beta 1-, beta 2-blocker therapy? Parrow KA, et al.
Ophthalmology 1989 Sep;96(9):1338–41; discussion 1341–2
A comparison of the ocular hypotensive efficacy of once-daily and twice-daily levobunolol treatment. Rakofsky SI, et al. **Ophthalmology** 1989 Jan;96(1):8–11
Ocular hypotensive efficacy of 0.25% levobunolol instilled once daily. Wandel T, et al. **Ophthalmology** 1988 Feb; 95(2):252–5
Topical timolol and the human retinal circulation. Grunwald JE. **Surv Ophthalmol** 1989 Apr;33 Suppl:415–6; discussion 421–2
Reversibility by timolol of optic nerve disc cupping and pallor in ocular hypertensives. Schwartz B.
Surv Ophthalmol 1989 Apr;33 Suppl:419–20; discussion 421–2
[Comparative study of levobunolol and timolol in the

treatment of chronic open-angle glaucoma and chronic ocular hypertension] Savelsbergh-Fillette MP, et al. **J Fr Ophtalmol** 1988;11(8-9):587-90 (Eng. Abstr.) (Fre)

[Comparison of the effectiveness and safety of levobunolol and timolol in ocular hypertension and chronic open-angle glaucoma] Freyler H, et al. **Klin Monatsbl Augenheilkd** 1988 Sep;193(3):257-60 (Eng. Abstr.) (Ger)

ETHNOLOGY

Juvenile glaucoma, race, and refraction. Lotufo D, et al. **JAMA** 1989 Jan 13;261(2):249-52

ETIOLOGY

Ocular hypertensive responses in pigmented rabbits following different methods of waterloading. Flach AJ, et al. **J Ocul Pharmacol** 1986 Fall;2(4):313-7

[Nd:YAG laser treatment complications of after-cataract] Yang WH, et al. **Yen Ko Hsueh Pao** 1987 Jun;3(2):81-4 (Eng. Abstr.) (Chi)

[Posner-Schlossmann syndrome. A cytomegalovirus infection?] Bloch-Michel E, et al. **Bull Soc Ophtalmol Fr** 1988 Jan;88(1):75-6 (Fre)

[Ocular hypertonia after laser YAG] Guldenfels Y, et al. **Bull Soc Ophtalmol Fr** 1988 Oct;88(10):1205-8 (8 ref.) (Eng. Abstr.) (Fre)

[Hypertensive reaction after argon laser trabecular retraction in the treatment of open-angle glaucoma] Pedrotti M. **Ophtalmologie** 1988 Nov-Dec;2(5):443-5 (Eng. Abstr.) (Fre)

[Ocular hypertension after cataract surgery (intra- and extra-capsular)] Redor JY, et al. **Ophtalmologie** 1988 Apr-Jun;2(2):85-7 (Eng. Abstr.) (Fre)

[Posterior chamber lens implantation in glaucoma--course of postoperative intraocular pressure and long-term follow-up] Weickert C. **Fortschr Ophthalmol** 1988; 85(3):270-2 (Eng. Abstr.) (Ger)

PATHOLOGY

Evaluation of the nerve fiber layer and peripapillary atrophy in ocular hypertension. Honrubia F, et al. **Int Ophthalmol** 1989 Jan;13(1-2):57-62

Peripapillary crescents and halos in normal-tension glaucoma and ocular hypertension. Buus DR, et al. **Ophthalmology** 1989 Jan;96(1):16-9

Nerve fiber layer and optic disc fluorescein defects in glaucoma and ocular hypertension. Nanba K, et al. **Ophthalmology** 1988 Sep;95(9):1227-33

[Effect of ocular hypertension on the retinal vessels and tissues in the cat] Xu Y. **Chung Hua Yen Ko Tsa Chih** 1988 Jan;24(1):37-40 (Eng. Abstr.) (Chi)

[Comparison of manual and computer-assisted analysis of the optic papilla in primary chronic glaucoma] Dannheim F. **Fortschr Ophthalmol** 1988;85(5):445-7 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

The consensual ophthalmotonic reaction. Gibbens MV. **Br J Ophthalmol** 1988 Oct;72(10):746-9

Sympathetic influences on the consensual ophthalmotonic reaction. Gibbens MV. **Br J Ophthalmol** 1988 Oct; 72(10):750-3

Retinal circulation during a spontaneous rise of intraocular pressure. Grunwald JE, et al. **Br J Ophthalmol** 1988 Oct; 72(10):754-8

Pattern electroretinograms in ocular hypertension. Ambrosio G, et al. **Doc Ophthalmol** 1988 Jun;69(2):161-5

Ocular perfusion pressures in different types of glaucoma. Pillunat LE, et al. **Int Ophthalmol** 1989 Jan;13(1-2):37-42

The effect of long-term intraocular pressure reduction on the differential light sensitivity in glaucoma suspects. Chauhan BC, et al. **Invest Ophthalmol Vis Sci** 1988 Oct; 29(10):1478-85

Argon laser-induced ocular hypertension: animal model of ocular inflammation. Gherezghiher T, et al. **J Ocul Pharmacol** 1989 Spring;5(1):7-17

The effects of experimental ocular hypertension on the electroretinogram and ultrastructure of the retina in rabbits. Youn DH, et al. **Korean J Ophthalmol** 1987 Jun;1(1):1-7

The effect of Goldmann applanation tonometry on automated static threshold perimetry. Ruben JB, et al. **Ophthalmology** 1988 Feb;95(2):267-70

Contrast sensitivity changes in ocular hypertension and early glaucoma. Bron AJ. **Surv Ophthalmol** 1989 Apr;33 Suppl:405-6; discussion 409-11

[Very early neuroretinal and functional changes in ocular hypertension] Bertoni G, et al. **Ophtalmologie** 1988 Jul-Sep; 2(3):209-11 (Eng. Abstr.) (Fre)

[Automatic perimetry and visual evoked potentials in the study of glaucoma. Analysis of 364 examinations performed with the same instrument] Hache JC, et al. **Ophtalmologie** 1988 Apr-Jun;2(2):93-4 (Eng. Abstr.) (Fre)

[Morphodynamics of the iris circulation in experimentally-induced changes in intraocular pressure] Latinovic S, et al. **Ophtalmologie** 1988 Nov-Dec; 2(5):419-22 (Eng. Abstr.) (Fre)

[Papillo-retino-choroidal hemodynamics during experimental ocular hypertension in normal and glaucomatous subjects] Pizzino A, et al. **Ophtalmologie** 1988 Jul-Sep;2(3):219-20 (Eng. Abstr.) (Fre)

[Physiologic sensory studies in glaucoma] Lachenmayr B, et al. **Fortschr Ophthalmol** 1988;85(6):756-62 (Eng. Abstr.) (Ger)

[Hemodynamics of the eye in chronic simple glaucoma and low tension glaucoma--a videoangiography study] Richard G, et al. **Fortschr Ophthalmol** 1988;85(4):369-72 (Eng. Abstr.) (Ger)

[Evaluating the pressure tolerance of the optic nerve with facilitated transient visual evoked cortical potentials] Stodtmeister R, et al. **Fortschr Ophthalmol** 1988;85(4):402-6 (Eng. Abstr.) (Ger)

[Correlation between optic nerve and visual field changes among ocular hypertensives and glaucoma suspects] Yamamoto T, et al. **Nippon Ganka Gakkai Zasshi** 1988 Aug; 92(8):1369-74 (Eng. Abstr.) (Jpn)

[Effectiveness of mesopic color perimetry in early glaucoma] Fedorovskaia LI. **Vestn Oftalmol** 1988 Jul-Aug;104(4):12-4 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

Effects of carbachol and acetylcholine on intraocular pressure after cataract extraction. Ruiz RS, et al. **Am J Ophthalmol** 1989 Jan 15;107(1):7-10

Prevention of IOP-rise following Nd-YAG laser capsulotomy with topical timolol and indomethacin. Van der Feltz van der Sloot D, et al. **Doc Ophthalmol** 1988 Oct-Nov;70(2-3):209-14

ALO 2145 reduces the intraocular pressure elevation after anterior segment laser surgery. Brown RH, et al. **Ophthalmology** 1988 Mar;95(3):378-84

Value of intraocular pressure measurement as a screening tool for glaucoma. Le Blanc R. **Surv Ophthalmol** 1989 Apr; 33 Suppl:445-6; discussion 449-50

[Effects of indomethacin in ocular hypertension after cataract operation. A double-blind study] Noske W, et al. **Ophtalmologie** 1988 Nov-Dec;2(5):399-402 (Eng. Abstr.) (Fre)

SURGERY

Role of Nd:YAG peripheral iridectomy in the management of ocular hypertension with a narrow angle. Romano JH, et al. **Ophthalmic Surg** 1988 Nov;19(11):814-6

[Surgical results of dissection of the superficial temporal artery in patients with preglaucoma and initial open-angle glaucoma] Shilkin GA, et al. **Oftalmol Zh** 1989;(2):93-6 (Eng. Abstr.) (Rus)

THERAPY

Effect of IOP on the visual field in ocuLar hypertension and glaucoma. Heijl A. **Int Ophthalmol** 1989 Jan; 13(1-2):119-24

Therapeutic problems in ocular hypertension. Reddy PS. **Yen Ko Hsueh Pao** 1988 Mar;4(1):4-10

[Treatment of ocular hypertonia with ultrasonics (Sonocare): principles and application] Haut J, et al. **Bull Soc Ophtalmol Fr** 1988 Mar;88(3):307-10 (Eng. Abstr.) (Fre)

[Treatment of ocular hypertension with ultrasonics (Sonocare). Preliminary results] Haut J, et al. **Bull Soc Ophtalmol Fr** 1988 Mar;88(3):311-4 (Eng. Abstr.) (Fre)

OCULAR LARVA MIGRANS see **LARVA MIGRANS**

OCULAR PROSTHESIS see **EYE, ARTIFICIAL**

OCULAR TENSION see **INTRAOCULAR PRESSURE**

OCULOCEREBRORENAL SYNDROME see under **RENAL TUBULAR TRANSPORT, INBORN ERRORS**

OCULOMOTOR MUSCLES

Representation of three-dimensional space in the vestibular, oculomotor, and visual systems. Introduction. Henn V. **Ann N Y Acad Sci** 1988;545:1-9 (20 ref.)

Long-term follow-up of traumatic unilateral superior oblique palsy. Teller J, et al. **Ann Ophthalmol** 1988 Nov; 20(11):424-5

Joubert's syndrome associated with congenital ocular fibrosis and histidinemia. Appleton RE, et al. **Arch Neurol** 1989 May;46(5):579-82

Opsoclonus secondary to an Epstein-Barr virus infection [letter] Delreux V, et al. **Arch Neurol** 1989 May;46(5):480-1

Opsoclonus in organophosphate poisoning. Pullicino P, et al. **Arch Neurol** 1989 Jun;46(6):704-5

Loss of spontaneous blinking in a patient with Balint's syndrome. Watson RT, et al. **Arch Neurol** 1989 May; 46(5):567-70

Orbital injury complicated by entrapment of the superior oblique tendon: a case report. Al-Qurainy IA, et al. **Br J Oral Maxillofac Surg** 1988 Aug;26(4):336-40

Asymmetry in congenital ocular motor apraxia. Catalano RA, et al. **Can J Ophthalmol** 1988 Dec;23(7):318-21

Superior oblique myokymia. Zhong NC, et al. **Chin Med J [Engl]** 1988 Nov;101(11):815-7

Pattern- and flash-evoked potentials in patients with dissociated vertical deviation. Kriss A, et al. **Doc Ophthalmol** 1988 Jul;69(3):283-91

Simulated superior oblique tendon sheath syndrome. Folk ER, et al. **Graefes Arch Clin Exp Ophthalmol** 1988; 226(5):410-3

Bilateral vertical retraction syndrome in horizontal bilateral Duane's syndrome. Spielmann A. **Graefes Arch Clin Exp Ophthalmol** 1988;226(5):425-7

Differences between ocular and generalized myasthenia gravis: binding characteristics of anti-acetylcholine receptor antibody against bovine muscles. Hayashi M, et al. **J Neuroimmunol** 1989 Feb;21(2-3):227-33

Positional oculogyric crises. Case report. Heimburger RF. **J Neurosurg** 1988 Dec;69(6):951-3

Acquired divergent strabismus: presumed metastatic gastric carcinoma to the medial rectus muscle. Arnold RW, et al. **J Pediatr Ophthalmol Strabismus** 1989 Jan-Feb; 26(1):50-1

Diplopia due to 4th nerve palsy and enlargement of the right medial rectus muscle [letter] Goldman JA, et al. **J Rheumatol** 1989 Jul;16(7):1010-1

Retrograde transneuronal labeling of premotor neurons of horizontal eye movement system in the cat using wheat germ agglutinin conjugated with horseradish peroxidase. Ozaki M, et al. **Jpn J Ophthalmol** 1989;33(1):85-94

Ptosis and supranuclear downgaze paralysis. Büttner-Ennever JA, et al. **Neurology** 1989 Mar; 39(3):385-9

Ocular pseudomyasthenia or ocular myasthenia 'plus': a warning to clinicians. Moorthy G, et al. **Neurology** 1989 Sep;39(9):1150-4

Nuclear inclusions in innervated cultured muscle fibers from patients with oculopharyngeal muscular dystrophy. Tomé FM, et al. **Neurology** 1989 Jul;39(7):926-32

Intractable orbicularis myokymia: treatment alternatives. Jordan DR, et al. **Ophthalmic Surg** 1989 Apr;20(4):280-3

Orbital myositis involving the oblique muscles. An echographic study. Wan WL, et al. **Ophthalmology** 1988 Nov;95(11):1522-8

Influence of extraocular muscle imbalance on binocular performance. Sucher DF. **Optom Vis Sci** 1989 Aug; 66(8):558-62

[Difficulty in the diagnosis and treatment of sequelae of orbital roof fractures: apropos of a case] Riss I, et al. **Bull Soc Ophtalmol Fr** 1988 Jun-Jul;88(6-7):841-2 (Fre)

[Post-traumatic oculomotor sequelae of orbital roof and floor fractures: apropos of 2 cases] Riss I, et al. **Bull Soc Ophtalmol Fr** 1988 Jun-Jul;88(6-7):843-4, 847-8 (Fre)

ABNORMALITIES

Absent or hypoplastic extraocular muscles? [letter; comment] Romano PE. **J Med Genet** 1989 Mar;26(3):216. **Comment on:** J Med Genet 1988 Feb;25(2):122-5

ANATOMY & HISTOLOGY

Histochemistry of intrafusal fibers in extraocular muscles of the sheep and pig. Lalatta Costerbosa G, et al. **Boll Soc Ital Biol Sper** 1988 Nov;64(11):1013-5

Scleral spur and ciliary muscle in man and monkey. Hamanaka T. **Jpn J Ophthalmol** 1989;33(2):221-36

The ora serrata and the spiral of Tillaux. Anatomic relationship and clinical correlation. White MH, et al. **Ophthalmology** 1989 Apr;96(4):508-11

[Determination of the peripheral field of several trigeminal afferent fibers present in the oculomotor nerve] Bortolami R, et al. **Boll Soc Ital Biol Sper** 1988 Dec;64(12):1067-70 (Eng. Abstr.) (Ita)

[Comparative evaluation of morphometric and intravital measurements of the intraorbital portion of the optic nerve and of the distance from the posterior pole of the eyeball to the common tendinous ring] Shengeliia DG, et al. **Oftalmol Zh** 1989;(2):112-3 (Eng. Abstr.) (Rus)

[Age-related morphometry of the intraorbital part of the optic nerve and the distance from the point of its emergence from the eye to the tendinous annulus] Shengelia DG, et al. **Vestn Oftalmol** 1989 Jan-Feb;105(1):47-8 (Rus)

BLOOD SUPPLY

Volkmann's ischemic contractures and blowout fractures. Lisman RD, et al. **Adv Ophthalmic Plast Reconstr Surg** 1987;7:117-31

DRUG EFFECTS

Ocular alterations induced by hyperproteinic diet in growing rats. Bonavolontà O, et al. **Int J Vitam Nutr Res** 1988; 58(3):335-8

Ultrastructure of mepivacaine-induced damage and regeneration in rat extraocular muscle. Okland S, et al. **Invest Ophthalmol Vis Sci** 1989 Jul;30(7):1643-51

Botulinum toxin injection into the superior rectus muscle of the non-dominant eye for dissociated vertical deviation. McNeer KW. **J Pediatr Ophthalmol Strabismus** 1989 Jul-Aug;26(4):162-4

Histopathological changes in the extraocular muscles after retrobulbar anesthesia. I GU, et al. **Korean J Ophthalmol** 1987 Dec;1(2):109-16

IMMUNOLOGY

Immunohistochemical analysis of the retrobulbar tissues in Graves' ophthalmopathy. Weetman AP, et al. **Clin Exp Immunol** 1989 Feb;75(2):222-7

Proprioceptive reflexes in exodeviations. Garg R, et al. **Indian J Ophthalmol** 1988 Oct-Dec;36(4):168-70

Cross-reaction of eye muscle antibodies with thyroid tissue in thyroid-associated ophthalmopathy. Weightman D, et al. **J Endocrinol** 1989 Jul;122(1):201–6

[A case of dysthyroid ophthalmopathy with chronic thyroiditis and anti-extraocular muscle antibody] Miyagi K, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):396–400 (Eng. Abstr.) **(Jpn)**

[Autoantibodies of the G and M classes directed against eyeball antigens in patients with Graves-Basedow disease] Adler G, et al. **Endokrynol Pol** 1988;39(2):59–66 (Eng. Abstr.) **(Pol)**

INJURIES

Photo essay. Avoiding inferior oblique injury during lower blepharoplasty. Jordan DR, et al. **Arch Ophthalmol** 1989 Sep;107(9):1382–3

Denervation of primate extraocular muscle. A unique pattern of structural alterations. Porter JD, et al. **Invest Ophthalmol Vis Sci** 1989 Aug;30(8):1894–908

Acquired Brown's syndrome caused by frontal sinus osteoma. Biedner B, et al. **J Pediatr Ophthalmol Strabismus** 1988 Sep–Oct;25(5):226–9

[Experience with the treatment of blow-out fractures associated with pinching of the oculomotor nerve] Katona J, et al. **Fogorv Sz** 1989 Aug;82(8):243–6 (Eng. Abstr.) **(Hun)**

[Traumatic lesions of the rectus lateralis muscle of the eye. Description of a clinical case] Cascone P, et al. **Minerva Stomatol** 1988 Oct;37(10):771–3 (Eng. Abstr.) **(Ita)**

INNERVATION

Distribution of motoneurones innervating extraocular muscles in the brain of the marmoset (Callithrix jacchus). Clarke RJ, et al. **Acta Anat (Basel)** 1987;130(2):191–6

Apnoea after retrobulbar block. Rigg JD, et al. **Anaesthesia** 1989 Jan;44(1):26–7

Adaptive changes of vertical vestibulo-ocular reflex induced by tenectomy of vertical recti muscles and neuronal behavior related to vertical eye movement in the region of the interstitial nucleus of Cajal in alert cats. Fukushima K, et al. **Brain Behav Evol** 1989;33(6):356–64

Direct parasympathetic pathway to the eye: revisited. Burde RM. **Brain Res** 1988 Oct 25;463(1):158–62

Direct projection from the supplementary eye field to the nucleus raphe interpositus. Shook BL, et al. **Exp Brain Res** 1988;73(1):215–8

Olivocerebellar and cerebelloolivary connections of the oculomotor region of the fastigial nucleus in the macaque monkey. Ikeda Y, et al. **J Comp Neurol** 1989 Jun 15; 284(3):463–88

Neural misdirection in congenital ocular fibrosis syndrome: implications and pathogenesis. Brodsky MC, et al. **J Pediatr Ophthalmol Strabismus** 1989 Jul–Aug; 26(4):159–61

An electrophysiologically defined trigemino-reticulo-facial pathway related to the blink reflex in the cat. Inagaki M, et al. **Neurosci Lett** 1989 Jan 2;96(1):64–9

Chemodenervation of strabismic children. A 2- to 5-year follow-up study compared with shorter follow-up. Magoon EH. **Ophthalmology** 1989 Jul;96(7):931–4

Primary inferior oblique overaction in congenital esotropia, accommodative esotropia, and intermittent exotropia. Wilson ME, et al. **Ophthalmology** 1989 Jul;96(7):950–5; discussion 956–7

[Prenatal development of muscle spindles in pig extraocular muscles and its significance] Matsuyama S. **Kaibogaku Zasshi** 1988 Oct;63(5):419–31 (Eng. Abstr.) **(Jpn)**

[Methodologic bases of the study of the oculomotor reflex of the neck] Likhachev SA, et al. **Vestn Otorinolaringol** 1988 Nov–Dec;(6):8–10 (Eng. Abstr.) **(Rus)**

METABOLISM

Cholinergic receptors in the extraocular rectus muscle of the rabbit. Rondas AA, et al. **Ophthalmic Res** 1989;21(3):162–6

PATHOLOGY

Graves' ophthalmopathy: I. Simple CT estimates of extraocular muscle volume. Hallin ES, et al. **Br J Ophthalmol** 1988 Sep;72(9):674–7

Graves' ophthalmopathy: II. Correlation of clinical signs with measures derived from computed tomography. Hallin ES, et al. **Br J Ophthalmol** 1988 Sep;72(9):678–82

Correlation between NMR scans of extraocular muscles and clinical symptoms in Graves' ophthalmopathy. Troelstra A, et al. **Doc Ophthalmol** 1988 Oct–Nov;70(2–3):243–9

Dysthyroid optic neuropathy without extraocular muscle involvement. Anderson RL, et al. **Ophthalmic Surg** 1989 Aug;20(8):568–74

Graves ophthalmopathy: MR imaging of the orbits. Hosten N, et al. **Radiology** 1989 Sep;172(3):759–62

Bumpy muscles [clinical conference] Slamovits TL, et al. **Surv Ophthalmol** 1988 Nov–Dec;33(3):189–99

[Orbital disease and hyperthyroidism. Means syndrome. Apropos of 2 cases] Maurin JF, et al. **Ophtalmologie** 1988 Oct;2(4):369–71 (Eng. Abstr.) **(Fre)**

[Facial hemiatrophy with monolateral fibrosis of all extraocular muscles] Schmidt T, et al. **Klin Monatsbl Augenheilkd** 1989 Feb;194(2):117–9 (Eng. Abstr.) **(Ger)**

[A case of hypothyroidism with marked hypertrophy of external ocular muscles and highly elevated thyroid-stimulating antibody (TSAb)] Itabashi H, et al. **Nippon Naika Gakkai Zasshi** 1988 May;77(5):695–9 **(Jpn)**

PHYSIOLOGY

The orienting ocular-following reflex in pretrigeminal cats with lesions of visual and oculomotor systems. Zernicki B. **Acta Neurobiol Exp (Warsz)** 1988;48(5):223–38

Computer simulation of eye movements for teaching and training in ocular motor pathology. Huygen PL. **Adv Otorhinolaryngol** 1988;42:81–4

Some mechanisms in the predictive control of smooth pursuit eye movements. Kornhuber AW, et al. **Adv Otorhinolaryngol** 1988;41:116–7

Representation of three-dimensional space in the vestibular, oculomotor, and visual systems. A symposium of the Bárány Society. Bologna, Italy, June 3, 1987. Proceedings. **Ann N Y Acad Sci** 1988;545:1–263

Representation of three-dimensional space in the vestibular, oculomotor, and visual systems. Concluding remarks. Cohen B. **Ann N Y Acad Sci** 1988;545:239–47 (36 ref.)

Age-related loss of morphologic responses to pilocarpine in rhesus monkey ciliary muscle. Lütjen-Drecoll E, et al. **Arch Ophthalmol** 1988 Nov;106(11):1591–8

Changes of EMG activity patterns of extraocular muscles and the tonic control of eye position during the postnatal development of the rabbit. Tegetmeyer H. **Biomed Biochim Acta** 1989;48(3–6):S471–4

A linear muscle model predicts the hyperbolic force-velocity relationship. Enderle JD, et al. **Biomed Sci Instrum** 1989; 25:149–53

Agonist and antagonist muscle tension during horizontal saccadic eye movements. Enderle JD, et al. **Biomed Sci Instrum** 1989;25:155–61

The oculorespiratory reflex revisited. Blanc VF, et al. **Can J Anaesth** 1988 Sep;35(5):468–72

Development of the kitten visual cortex depends on the relationship between the plane of eye movements and visual inputs. Buisseret P, et al. **Exp Brain Res** 1988;72(1):83–94

Hypersensitivity to light of the iris (Sphincter pupillae) of the albino axolotl (Ambystoma mexicanum). Barr L. **J Exp Biol** 1988 Jul;137:589–96

Speed and accuracy of saccadic eye movements: characteristics of impulse variability in the oculomotor system. Abrams RA, et al. **J Exp Psychol [Hum Percept]** 1989 Aug;15(3):529–43

Electrical properties and innervation of fibers in the orbital layer of rat extraocular muscles. Jacoby J, et al. **J Neurophysiol** 1989 Jan;61(1):116–25

Time-of-day variations in oculomotor function: I. Tonic accommodation and tonic vergence. Amerson TL, et al. **Ophthalmic Physiol Opt** 1988;8(4):415–22

Time-of-day variations in oculomotor function: II. Steady-state accommodation to square-wave gratings. Amerson TL. **Ophthalmic Physiol Opt** 1988;8(4):423–6

Asymptomatic physiologic hyperdeviation in peripheral gaze. Slavin ML, et al. **Ophthalmology** 1988 Jun;95(6):778–81

The contractile properties and movement dynamics of pigeon eye muscle. Stelling J, et al. **Pflugers Arch** 1988 Aug; 412(3):314–21

Substance P as a transmitter in the human ciliary muscle. Lograno MD, et al. **Pharmacol Res Commun** 1988 Oct; 20(10):901–5

[Structure and sensory innervation of the extraocular muscles] Buisseret P. **Agressologie** 1988 Oct;29(9):643–8 (41 ref.) (Eng. Abstr.) **(Fre)**

[Visuomotor behavior and extraocular proprioception] Gary-Bobo E. **Agressologie** 1988 Oct;29(9):637–41 (22 ref.) (Eng. Abstr.) **(Fre)**

[A generalized coefficient of the signal asymmetry of the electrooculogram as an index of the human functional state] Volkov VG, et al. **Zh Vyssh Nerv Deiat** 1988 Jul–Aug; 38(4):777–81 **(Rus)**

PHYSIOPATHOLOGY

The relationship between caloric response, oculomotor dysfunction and size of cerebello-pontine angle tumours. Bergenius J, et al. **Acta Otolaryngol (Stockh)** 1988 Nov–Dec;106(5–6):361–7

Oculomotor disturbances in patients with tension headache. Carlsson J, et al. **Acta Otolaryngol (Stockh)** 1988 Nov–Dec; 106(5–6):354–60

Transient ocular motor paresis associated with acute internal carotid artery occlusion. Wilson WB, et al. **Ann Neurol** 1989 Mar;25(3):286–90

'Normal' overaction of inferior oblique muscles [letter] Fleming AW. **Arch Ophthalmol** 1989 Aug;107(8):1113

Joubert syndrome. Lambert SR, et al. **Arch Ophthalmol** 1989 May;107(5):709–13

The length-tension diagrams of human oblique muscles in trochlear palsy and strabismus sursoadductorius. Simonsz HJ, et al. **Doc Ophthalmol** 1988 Oct–Nov;70(2–3):227–36

Oculomotor defects in patients with Huntington's disease and their offspring. Collewijn H, et al. **J Neurol Sci** 1988 Sep; 86(2–3):307–20

Measurements of active and passive force of horizontal muscles in strabismus. Iwashige H, et al. **Jpn J Ophthalmol** 1988;32(2):223–35

[Results of surgical treatment of alphabetical syndromes in esotropia. Apropos of 98 cases] Julou J, et al. **J Fr Ophtalmol** 1988;11(12):825–9 (Eng. Abstr.) **(Fre)**

[Ocular myositis--morphology and function--long-term studies of 15 patients] Guthoff R, et al. **Klin Monatsbl Augenheilkd** 1988 Oct;193(4):393–400 (Eng. Abstr.) **(Ger)**

[Electromyographical activity of the four horizontal rectus muscles and refraction in intermittent exotropia] Kimura H, et al. **Nippon Ganka Gakkai Zasshi** 1988 Jun; 92(6):1002–8 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

Computed tomography in Graves' ophthalmopathy--evaluation regarding the muscle size and density units. Uhlenbrock D. **Neurosurg Rev** 1988; 11(1):45–51

Computed tomographic features of nonthyroid extraocular muscle enlargement. Patrinely JR, et al. **Ophthalmology** 1989 Jul;96(7):1038–47

[Roentgenometric evaluation of the orbital content in thyroid-related ophthalmopathy by computerized tomography] Sosnowski P. **Pol Przegl Radiol (Warszawa)** 1987 Sep–Oct;51(5):229–33 (Eng. Abstr.) **(Pol)**

SURGERY

Transposition procedures in strabismus. Hiatt RL. **Ann Ophthalmol** 1986 Nov;18(11):332–6

Vertical rectus muscle transposition and botulinum toxin (Oculinum) to medial rectus for abducens palsy. Rosenbaum AL, et al. **Arch Ophthalmol** 1989 Jun; 107(6):820–3

Passive limitation of adduction after Cüppers's 'Fadenoperation' on medial recti. Paliaga GP, et al. **Br J Ophthalmol** 1989 Aug;73(8):633–5

Inferior rectus muscle restriction after retrobulbar anesthesia for cataract extraction. Ong-Tone L, et al. **Can J Ophthalmol** 1989 Jun;24(4):162–5

Microsurgery for strabismus. Roth A. **Dev Ophthalmol** 1989; 18:36–49 (12 ref.)

Recession and anterior transposition of the inferior oblique for treatment of superior oblique palsy. May MA, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(5):407–9

Superior oblique overaction. Prieto-Díaz J. **Int Ophthalmol Clin** 1989 Spring;29(1):43–50 (38 ref.)

Hang-back lateral rectus recessions for exotropia. Capó H, et al. **J Pediatr Ophthalmol Strabismus** 1989 Jan–Feb; 26(1):31–4

Residual incomitant DVD following large bilateral superior rectus recession. Freeman RS, et al. **J Pediatr Ophthalmol Strabismus** 1989 Mar–Apr; 26(2):76–80

"Which eye will you be straightening, doctor?" [editorial] Simon JW, et al. **J Pediatr Ophthalmol Strabismus** 1989 Mar–Apr;26(2):55

Applications of combination wavelength (1060-nm and 530-nm) and pulsed Nd:YAG laser for contact laser surgery. Liu KR, et al. **Jpn J Ophthalmol** 1989;33(1):43–56

Inferior oblique overaction. Chang BL, et al. **Korean J Ophthalmol** 1988 Dec;2(2):77–81

Surgical treatment of essential blepharospasm. Kim YD. **Korean J Ophthalmol** 1988 Dec;2(2):90–4

Large recession of one lateral rectus muscle. Park C, et al. **Korean J Ophthalmol** 1988 Dec;2(2):82–5

The Gass hook as an aid in inferior oblique recession. Parker AV, et al. **Ophthalmic Surg** 1989 Apr;20(4):294–5

Length-tension diagrams of medial rectus muscles after Cüppers' fadenoperation. Surgical assessment of the reversibility of posterior fixation sutures. Castanera AM. **Ophthalmologica** 1989;198(1):46–52

Preservation of the anterior ciliary vessels during extraocular muscle surgery. McKeown CA, et al. **Ophthalmology** 1989 Apr;96(4):498–506

Comparison of hang-back medial rectus recession with conventional recession. Repka MX, et al. **Ophthalmology** 1988 Jun;95(6):782–7

Anterior segment ischemia after three rectus muscle surgery. Saunders RA, et al. **Ophthalmology** 1988 Apr;95(4):533–7

Enlargement of levator palpebrae superioris muscle fibers in Graves' ophthalmopathy. Small RG. **Ophthalmology** 1989 Apr;96(4):424–30

[Retro-fixation suture of the medial rectus muscle] Duan YX. **Chung Hua Yen Ko Tsa Chih** 1988 Jan;24(1):28–30 (Eng. Abstr.) **(Chi)**

[Surgical transposition of the inferior oblique muscle] Kong LY. **Chung Hua Yen Ko Tsa Chih** 1988 Jan;24(1):24–7 (Eng. Abstr.) **(Chi)**

[Substitution technics in traumatic VI paralysis] Retout A, et al. **Bull Soc Ophtalmol Fr** 1988 Aug–Sep;88(8–9):1073–6 (12 ref.) (Eng. Abstr.) **(Fre)**

[Choice and surgical strategy in case of so-called concomitant strabismus (conference)] Roth A. **Bull Soc Ophtalmol Fr** 1988 Mar;88(3):363–7 (Eng. Abstr.) **(Fre)**

[Adjustable surgery in strabismus] Putteman A, et al. **J Fr Ophtalmol** 1988;11(2):219–26 (Eng. Abstr.) **(Fre)**

[Structural surgery in strabismology. 2 years' experience] Stein A, et al. **Ophtalmologie** 1988 Oct;2(4):299–301 (Eng. Abstr.) **(Fre)**

[Adjustable procedures in eye muscle operations]

Roggenkämper P, et al. **Fortschr Ophthalmol** 1988; 85(5):484–5 (Eng. Abstr.) **(Ger)**

[Fibrin gluing of the extraocular eye muscles. Experimental use in the rabbit] Aichmair MW, et al. **Klin Monatsbl Augenheilkd** 1988 Nov;193(5):499–503 (Eng. Abstr.) **(Ger)**

[Eye position and function following late surgical correction of consecutive strabismus following primary tenotomy] Aust W. **Klin Monatsbl Augenheilkd** 1988 Aug;193(2):165–8 (Eng. Abstr.) **(Ger)**

[Torsional shift operation, a tool in complete early childhood strabismus] de Decker W, et al. **Klin Monatsbl Augenheilkd** 1988 Dec;193(6):615–21 (Eng. Abstr.) **(Ger)**

[Severed musculus rectus internus caused by a dog bite] Reese PD, et al. **Klin Monatsbl Augenheilkd** 1988 Nov; 193(5):504–5 (Eng. Abstr.) **(Ger)**

[Polyglactin 910 implants in muscle revision surgery for the reconstruction of physiologic limits in Tenon's capsule] Schmidt T, et al. **Klin Monatsbl Augenheilkd** 1988 Sep; 193(3):271–4 (Eng. Abstr.) **(Ger)**

TRANSPLANTATION

Surgical management of oculomotor nerve palsy with lateral rectus transplantation to the medial side of globe. Taylor JN. **Aust N Z J Ophthalmol** 1989 Feb;17(1):27–31

[Intrascleral anteposition of the shortened muscle] Krwawicz L. **Klin Oczna** 1988 Mar;90(3):104–5 (Eng. Abstr.) **(Pol)**

ULTRASTRUCTURE

Different intrafusal fiber composition of spindles in sheep and pig extraocular muscles [published erratum appears in Experientia 1989 Aug 15;45(8):784] Lalatta Costerbosa G, et al. **Experientia** 1989 Jun 15;45(6):563–7

OCULOMOTOR NERVE

Cryptogenic oculomotor nerve palsy. The need for repeated neuroimaging studies. Abdul-Rahim AS, et al. **Arch Ophthalmol** 1989 Mar;107(3):387–90

Möbius and Möbius-like syndromes (TTV-OFM, OMLH). Miller MT, et al. **J Pediatr Ophthalmol Strabismus** 1989 Jul–Aug;26(4):176–88 (69 ref.)

[Rehabilitative treatment in functional disorder of the oculomotor nerve in patients with intracranial arterial aneurysm] Zadoiannyĭ LV, et al. **Vrach Delo** 1989 Jun; (6):62–4 (Eng. Abstr.) **(Rus)**

ANALYSIS

Axon–myelin relationships in rat cranial nerves III, IV, and VI: a morphometric study of large- and small-fibre classes. Fraher JP. **J Comp Neurol** 1989 Aug 15;286(3):384–90

ANATOMY & HISTOLOGY

Projections from the auditory cortex to the nucleus of the oculomotor nerve. Silver impregnation and radioautographical study. Paloff AM, et al. **Anat Anz** 1988; 167(1):39–46

The central-peripheral transitional regions of cranial nerves. Oculomotor nerve. Fraher JP, et al. **J Anat** 1988 Dec; 161:103–13

[Determination of the peripheral field of several trigeminal afferent fibers present in the oculomotor nerve] Bortolami R, et al. **Boll Soc Ital Biol Sper** 1988 Dec;64(12):1067–70 (Eng. Abstr.) **(Ita)**

BLOOD SUPPLY

[Infarcts of the nucleus of the 3d nerve] Drábek P. **Cesk Neurol Neurochir** 1988 Nov;51(6):400–5 (Eng. Abstr.) **(Cze)**

CYTOLOGY

GABA innervation in adult rat oculomotor nucleus: a radioautographic and immunocytochemical study. Soghomonian JJ, et al. **J Neurocytol** 1989 Jun;18(3):319–31

A double-label study of efferent projections from the Edinger–Westphal nucleus in goldfish and kelp bass. Wathey JC, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):121–6

DRUG EFFECTS

Temporary paralysis of cranial nerves III, IV, and VI after a Gow–Gates injection. Fish LR, et al. **J Am Dent Assoc** 1989 Jul;119(1):127–8, 130; discussion 129

Downbeating nystagmus and other ocular motor defects caused by lithium toxicity. Corbett JJ, et al. **Neurology** 1989 Apr;39(4):481–7 (40 ref.)

GROWTH & DEVELOPMENT

[The development of acetylcholinesterase activity and the effect of visual deprivation in the pretectal nucleus and the Edinger–Westphal nucleus of rats] Hayakawa S. **Nippon Ganka Gakkai Zasshi** 1988 Dec;92(12):2063–70 (Eng. Abstr.) **(Jpn)**

[Development of neurons in the rat oculomotor complex] Kairada K, et al. **Nippon Ganka Gakkai Zasshi** 1988 Jun; 92(6):1009–15 (Eng. Abstr.) **(Jpn)**

INJURIES

[Partial recovery of the oculomotor nerve after section and repair during the excision of a tumor] Deruty R, et al. **Neurochirurgie** 1988;34(4):287–92 (Eng. Abstr.) **(Fre)**

PATHOLOGY

Intracranial aneurysms with superior division paresis of the oculomotor nerve. Guy JR, et al. **Ophthalmology** 1989 Jul; 96(7):1071–6

PHYSIOLOGY

On the nature of the afferent fibers of oculomotor nerve. Manni E, et al. **Arch Ital Biol** 1989 Mar;127(2):99–108

Neurosignal analysis during saccadic eye movements. Weigel RB, et al. **Biomed Sci Instrum** 1989;25:135–40

Stochastic variables responsible for observed saccadic variability. Westine DM, et al. **Biomed Sci Instrum** 1989; 25:141–8

Size constancy and oculomotor modulation of perifoveal light–difference threshold. Pöppel E. **Naturwissenschaften** 1988 Sep;75(9):463–5

The third nerve transection and regeneration in rats with preliminary results on the sixth nerve transection and regeneration in guinea pigs. Fernandez E, et al. **Neurol Res** 1988 Dec;10(4):221–4

Oculomotor nucleus afferents from the interstitial nucleus of Cajal and the region surrounding the fasciculus retroflexus in the rabbit. Labandeira-Garcia JL, et al. **Neurosci Lett** 1989 Jun 5;101(1):11–6

A neurophysiological study of prepositus hypoglossi neurons projecting to oculomotor and preoculomotor nuclei in the alert cat. Delgado-García JM, et al. **Neuroscience** 1989; 29(2):291–307

Intracellular study of oculomotor neurons in the rat. Durand J. **Neuroscience** 1989;30(3):639–49

PHYSIOPATHOLOGY

Familial recurrent cranial nerve palsies. Sørensen TT. **Acta Neurol Scand** 1988 Dec;78(6):542–3

Transient ocular motor paresis associated with acute internal carotid artery occlusion. Wilson WB, et al. **Ann Neurol** 1989 Mar;25(3):286–90

Acquired contralateral oculomotor synkinesis. Guy J, et al. **Arch Neurol** 1989 Sep;46(9):1021–3

Are there any abnormalities of the supranuclear ocular motor control systems in learning-disabled children? Hoyt CS. **Int Ophthalmol Clin** 1989 Spring;29(1):22–3 (6 ref.)

Supranuclear disorders of horizontal eye motion. Sharpe JA. **Semin Neurol** 1986 Jun;6(2):155–66 (101 ref.)

SURGERY

Surgical management of oculomotor nerve palsy [letter] O'Day J. **Aust N Z J Ophthalmol** 1989 May;17(2):199

OCULOMOTOR PARALYSIS see **OPHTHALMOPLEGIA**

OCYTOCIN see **OXYTOCIN**

ODDI'S SPHINCTER see under **VATER'S AMPULLA**

ODONTOBLASTS

ANALYSIS

Localization of 28 kDa calbindin in human odontoblasts. Magloire H, et al. **Cell Tissue Res** 1988 Nov;254(2):341–6

Ultrastructural localization of dentine phosphoprotein in rat tooth germs by immunogold staining. Gorter de Vries I, et al. **Histochemistry** 1989;91(1):69–75

Comparison of the calcium distribution pattern among several kinds of hard tissue forming cells of some living vertebrates. Kogaya Y, et al. **Scanning Microsc** 1988 Dec;2(4):2029–43

CYTOLOGY

Differentiation of odontoblasts in grafted recombinants of murine epithelial root sheath and dental mesenchyme. Thomas HF, et al. **Arch Oral Biol** 1989;34(1):27–35

DRUG EFFECTS

Effects of glycosaminoglycans on in vitro mouse dental cells. Tziafas D, et al. **Arch Oral Biol** 1988;33(10):735–40

ENZYMOLOGY

Histochemical demonstration of carbonic anhydrase activity in the odontogenic cells of the rat incisor. Sugimoto T, et al. **J Dent Res** 1988 Oct;67(10):1271–4

METABOLISM

Morphological evidence of the formation of intracellular collagen fibrils in the embryonic mouse molar odontoblasts induced by colchicine administration Ishizeki K, et al. **Acta Anat (Basel)** 1989;134(2):133–40

Phosphoprotein synthesis and secretion by odontoblasts in rat incisors as revealed by electron microscopic radioautography. Inage T, et al. **Am J Anat** 1988 Aug; 182(4):369–80

Immunoperoxidase localization of fibronectin during odontoblast differentiation. An ultrastructural study. Meyer JM, et al. **Biol Struct Morphog** 1989;2(1):19–24

Effect of tunicamycin on glycogen accumulation in the stratum intermedium and odontoblasts of rat incisor. Chardin H, et al. **Cell Tissue Res** 1989 Jun;256(3):519–27

1H and 13C NMR studies of the interaction of eugenol, phenol, and triethyleneglycol dimethacrylate with phospholipid liposomes as a model system for odontoblast membranes. Fujisawa S, et al. **J Dent Res** 1988 Nov; 67(11):1438–41

Na+/Ca2+ antiports in membranes of rat incisor odontoblasts. Lundgren T, et al. **J Oral Pathol** 1988 Nov; 17(9–10):560–3

Immunoelectron microscopic localization of dentin gamma-carboxyglutamic acid-containing proteins in differentiating rat odontoblasts. Andujar MB, et al. **Matrix** 1989 Jan;9(1):17–20

PATHOLOGY

A probable common disturbance in the early stage of odontoblast differentiation in Dentinogenesis imperfecta type I and type II. Takagi Y, et al. **J Oral Pathol** 1988 May;17(5):208–12

ULTRASTRUCTURE

Ultrastructural duality of extracellular fibrillar components of the odontoblast layer in the mouse molar. Meyer JM, et al. **Arch Oral Biol** 1988;33(1):25–31

ODONTOCLASTS see **OSTEOCLASTS**

ODONTOGENESIS

Localization of microfilaments and microtubules during dental development in the rat. Diekwisch T. **Acta Histochem Suppl (Jena)** 1989;37:209–12

Molecular determinants of cranial neural crest-derived odontogenic ectomesenchyme during dentinogenesis. Slavkin HC, et al. **Am J Med Genet Suppl** 1988;4:7–22 (76 ref.)

Developmental-specific expression and immunoreactivity of keratins during odontogenesis in rat embryos. Couwenhoven R, et al. **Arch Oral Biol** 1988;33(1):57–63

Mouse molar cell proliferation kinetics in vivo and in vitro. Ahmad N, et al. **Bull Assoc Anat (Nancy)** 1988 Mar; 72(216):3–13

Mineral and protein concentrations in enamel of the developing permanent porcine dentition. Robinson C, et al. **Caries Res** 1988;22(6):321–6

Factors influencing the expression of dental extracellular matrix biomineralization. Slavkin HC, et al. **Ciba Found Symp** 1988;136:22–41 (36 ref.)

Tooth maturation in cleft lip, cleft palate, or both. Loevy HT, et al. **Cleft Palate J** 1988 Oct;25(4):343–7

Spatial organization of the epithelium and the role of neural crest cells in the initiation of the mammalian tooth germ. Lumsden AG. **Development** 1988;103 Suppl:155–69

Spatial- and temporal-restricted pattern for amelogenin gene expression during mouse molar tooth organogenesis. Snead ML, et al. **Development** 1988 Sep;104(1):77–85

Rate and growth pattern of cementum apposition as compared to dentine and root formation in a fluorochrome-labelled monkey (Macaca fascicularis). Bosshardt D, et al. **J Biol Buccale** 1989 Mar;17(1):3–13

Ultrastructural evidence of directed cell migration during initial cementoblast differentiation in root formation. Cho MI, et al. **J Periodont Res** 1988 Jul;23(4):268–76

Dental age and asymmetry in the formation of mandibular teeth in twins concordant or discordant for oral clefts. Nyström M, et al. **Scand J Dent Res** 1988 Oct;96(5):393–8

[Significance of the curve of the sagittal odontogenic trajectory of facial points during odontogenesis in the gorilla, in the vestibular plane] Fustier PH, et al. **Orthod Fr** 1987;58 Pt 2:845–52 (Eng. Abstr.) **(Fre)**

[Dental odontogenic trajectories, in the gorilla, in the vestibular 3-dimensional reference plane] Pajoni-Duport D, et al. **Orthod Fr** 1987;58 Pt 2:833–43 (Eng. Abstr.) **(Fre)**

[Epidemiologic study on the content of some trace elements in saliva in relation to caries pathology during the developing age] Cantoni E, et al. **Minerva Stomatol** 1988 Dec;37(12):935–45 (Eng. Abstr.) **(Ita)**

[Effect of ontogenetic factors on the formation of acid-resistant or acid-susceptible enamel in children's teeth] Suntsov VG, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):70–3 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Influence of 1,25-dihydroxyvitamin D3 on cell proliferation during odontogenesis of the mouse embryonic molars in vitro. Sakakura Y, et al. **Calcif Tissue Int** 1988 Jul; 43(1):46–9

Effect of systemic fluoride on rat molar morphology. Stereophotogrammetric analysis. Creath CJ, et al. **Caries Res** 1989;23(1):26–31

RADIATION EFFECTS

Hypodontia in the beagle after perinatal whole-body 60Co gamma irradiation. Lee AC, et al. **Radiat Res** 1989 Jun; 118(3):467–75

[Odontogenesis and dentition development following irradiation of pediatric tumors of the maxillofacial area]

Kahl B. **Fortschr Kieferorthop** 1989 Apr;50(2):127–35 (Eng. Abstr.) **(Ger)**

ODONTOGENESIS IMPERFECTA

Regional odontodysplasia: a bibliography. Crawford PJ, et al. **J Oral Pathol Med** 1989 May;18(5):251–63 (119 ref.)

PATHOLOGY

Ghost teeth. Case report. Lian CB, et al. **Aust Dent J** 1988 Aug;33(4):291–4

'Regional odontodysplasia' [letter] Allen FJ. **Br Dent J** 1988 Nov 5;165(9):317

Regional odontodysplasia: an evaluation of three cases based on clinical, microradiographic and histopathological findings. Kinirons MJ, et al. **Br Dent J** 1988 Aug 20; 165(4):136–9

Regional odontodysplasia: new histopathological data. Kerebel B, et al. **J Biol Buccale** 1989 Jun;17(2):121–8

Regional odontodysplasia presenting as a soft tissue swelling. Neupert EA 3d, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):193–6

ODONTOGENIC CYSTS

ANALYSIS

Quantification and analysis of the glycosaminoglycans in human odontogenic cyst linings. Smith G, et al. **Arch Oral Biol** 1988;33(9):623–6

Quantitation of lactoferrin in odontogenic cyst fluids. Douglas CW, et al. **J Clin Pathol** 1989 Feb;42(2):180–3

Lactoferrin in aspirates of odontogenic cyst fluid. Smith AJ, et al. **J Clin Pathol** 1988 Oct;41(10):1117–9

Cytokeratin expression of the odontogenic epithelia in dental follicles and developmental cysts. Gao Z, et al. **J Oral Pathol Med** 1989 Feb;18(2):63–7

BLOOD

Inability to distinguish ameloblastomas from odontogenic cysts based on expression of blood cell carbohydrates. Gardner DG, et al. **Oral Surg Oral Med Oral Pathol** 1988 Oct;66(4):480–2

COMPLICATIONS

Recurrent keratocysts in basal cell nevus syndrome: review of the literature and report of a case. Mustaciuolo VW, et al. **J Oral Maxillofac Surg** 1989 Aug;47(8):870–3 (9 ref.)

DIAGNOSIS

Granular cell odontogenic cyst: a unicystic ameloblastoma with late recurrence as follicular ameloblastoma. Abaza NA, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):168–75

ETIOLOGY

[Immunopathologic mechanisms associated with granulomas and odontogenic cysts: a general review] Kalusokoma K, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1989 Jun; 32(2):73–8 (45 ref.) (Eng. Abstr.) **(Fre)**

IMMUNOLOGY

Epithelial cell markers and proliferating cells in odontogenic jaw cysts. Matthews JB, et al. **J Pathol** 1988 Dec; 156(4):283–90

METABOLISM

Expression of cytokeratin in the epithelium of dentigerous cysts and odontogenic keratocysts: an aid to diagnosis. MacDonald AW, et al. **J Clin Pathol** 1989 Jul;42(7):736–9

CEA immunoreactivity in odontogenic tumors and keratocysts. Howell RE, et al. **Oral Surg Oral Med Oral Pathol** 1988 Nov;66(5):576–80

PATHOLOGY

Squamous cell carcinoma arising in an odontogenic cyst. Bradley N, et al. **Int J Oral Maxillofac Surg** 1988 Aug; 17(4):260–3 (27 ref.)

A botryoid odontogenic cyst with multiple recurrences. Heikinheimo K, et al. **Int J Oral Maxillofac Surg** 1989 Feb; 18(1):10–3

Facial deformity and rash [clinical conference] Zerin JM, et al. **Invest Radiol** 1989 Feb;24(2):159–61

Proliferation kinetics–study of the growth of keratocysts. Morpho–functional explanation for recurrences. Scharffetter K, et al. **J Craniomaxillofac Surg** 1989 Jul; 17(5):226–33 (72 ref.)

The paradental cyst: a clinicopathologic study of six new cases and review of the literature. Fowler CB, et al. **J Oral Maxillofac Surg** 1989 Mar;47(3):243–8 (16 ref.)

The glandular odontogenic cyst: an apparent entity. Gardner DG, et al. **J Oral Pathol** 1988 Sep;17(8):359–66

Mast cells in human odontogenic cysts. Smith G, et al. **J Oral Pathol Med** 1989 May;18(5):274–8

Recurrent botryoid odontogenic cyst (lateral periodontal cyst). Phelan JA, et al. **Oral Surg Oral Med Oral Pathol** 1988 Sep;66(3):345–8

Primary intraosseous carcinoma of the mandible with probable origin in an odontogenic cyst. Waldron CA, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):716–24 (20 ref.)

RADIOGRAPHY

A maxillary fourth molar? Howe GS. **Br J Orthod** 1988 Aug; 15(3):205–6

Odontogenic keratocyst involving the maxillary antrum. Shenoy P, et al. **J Laryngol Otol** 1988 Dec;102(12):1168–71

Signs without symptoms. Hatton MN, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):365–6

[Giant keratocyst localized in the mandible. Clinical case] Pomatto E, et al. **Minerva Stomatol** 1988 Jul;37(7):543–6 (Eng. Abstr.) **(Ita)**

SURGERY

A comparative study of treatment of keratocysts by enucleation or enucleation combined with cryotherapy. A preliminary report. Jensen J, et al. **J Craniomaxillofac Surg** 1988 Nov;16(8):362–5

[Radical cystectomy with secondary epithelialization. Considerations and personal experience] Berrone S, et al. **Minerva Stomatol** 1988 Jun;37(6):469–72 (Eng. Abstr.) **(Ita)**

[Replacement of bone cavities in the lower jaw by a pedicled muscle flap] Luk'ianenko VT, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):75–7 **(Rus)**

[Use of brepho–osteoplasty for filling bone cavities in oral medical and surgical practice] Panikarovskiĭ VV, et al. **Stomatologiia (Mosk)** 1988 Nov–Dec;67(6):22–4 (Eng. Abstr.) **(Rus)**

[Preservation of the germs of the permanent teeth in the surgical treatment of tooth–containing cysts in children] Simanovskaia EIu, et al. **Stomatologiia (Mosk)** 1989 Jan–Feb;68(1):70–2 (Eng. Abstr.) **(Rus)**

THERAPY

[A plugging method for maxillary cysts of large size with powders of deproteinized teeth] Vercellino V, et al. **Minerva Stomatol** 1988 Jun;37(6):465–8 (Eng. Abstr.) **(Ita)**

ULTRASTRUCTURE

Lectin histochemistry of ameloblastomas and odontogenic keratocysts. Aguirre A, et al. **J Oral Pathol Med** 1989 Feb; 18(2):68–73

ODONTOGENIC TUMORS

Dentinoma of the mandible. Anker AH, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):731–3

[Diagnosis and therapy of benign neoplasms of the dental system and jaw bones] Basso Ricci S, et al. **Minerva Stomatol** 1988 May;37(5):385–95 (18 ref.) (Eng. Abstr.) **(Ita)**

[Odontomas. Description of a clinical case] Giannoni M, et al. **Minerva Stomatol** 1989 Jun;38(6):617–22 (Eng. Abstr.) **(Ita)**

[Cementoma of the nasal cavity and paranasal sinuses] Akopian RG, et al. **Vestn Otorinolaringol** 1988 Jul–Aug; (4):63–5 **(Rus)**

ANALYSIS

Immunohistochemical localization of intermediate filament proteins in calcifying epithelial odontogenic tumors. Mori M, et al. **J Oral Pathol** 1988 May;17(5):236–40

CEA immunoreactivity in odontogenic tumors and keratocysts. Howell RE, et al. **Oral Surg Oral Med Oral Pathol** 1988 Nov;66(5):576–80

Immunostaining of involucrin in odontogenic epithelial tumors and cysts. Yamada K, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):564–8

Adenomatoid odontogenic tumour: co–expression of keratin and vimentin. Tatemoto Y, et al. **Virchows Arch [A]** 1988; 413(4):341–7

BLOOD SUPPLY

Vascular degeneration in adenomatoid odontogenic tumour: an ultrastructural study. el–Labban NG, et al. **J Oral Pathol** 1988 Jul;17(6):298–305

CHEMICALLY INDUCED

Methylnitrosourea induction of rat odontomas [letter] Berman JJ. **Toxicol Pathol** 1988;16(2):309

COMPLICATIONS

Ameloblastic fibrodentinoma: report of case. Brandt SK, et al. **ASDC J Dent Child** 1988 Sep–Oct;55(5):372–5

Delayed eruption of a maxillary central incisor associated with an odontome: report of case. Oliver RG, et al. **ASDC J Dent Child** 1988 Sep–Oct;55(5):368–71

A case of gigantiform cementoma associated with multiple unerupted teeth. Chen CH. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 May; 5(5):299–303

DIAGNOSIS

Undiagnosed benign cementoblastoma in a patient with a 6–year pain condition. Report of a case. Forsslund HG, et al. **Oral Surg Oral Med Oral Pathol** 1988 Aug; 66(2):243–8

Adamantinoma of the humerus with early metastases and death. A case report with autopsy findings. Clarke RP, et al. **Orthopedics** 1989 Aug;12(8):1121–5

Diagnosis and management of odontogenic tumors. Lownie JF, et al. **Surg Annu** 1989;21:73–96 (57 ref.)

EPIDEMIOLOGY

[Monocystic ameloblastoma and plexiform epithelial hyperplasia II. Clinical course and therapy] Bucci E, et al. **Minerva Stomatol** 1988 Jul;37(7):547–52 (62 ref.) (Eng. Abstr.) **(Ita)**

ETIOLOGY

Odontogenic sarcoma following radiation treatment of tongue cancer—a case report [letter] Monzen Y, et al. **Acta Oncol** 1988;27(6b):858–9

GENETICS

Multicentric familial squamous odontogenic tumor. Leider AS, et al. **Oral Surg Oral Med Oral Pathol** 1989 Aug; 68(2):175–81 (25 ref.)

PATHOLOGY

Peripheral calcifying odontogenic cyst. Case report. Keszler A, et al. **Ann Dent** 1988 Winter;47(2):28–30

Dentinogenic ghost cell tumor presenting as a gingival mass. McClatchey KD, et al. **Ann Dent** 1988 Summer;47(1):31–2 (6 ref.)

Ameloblastic fibro–odontoma. Case report. Günhan O, et al. **Aust Dent J** 1989 Feb;34(1):29–31

Aggressive calcifying odontogenic cyst—a possible variant of ameloblastoma. Scott J, et al. **Br J Oral Maxillofac Surg** 1989 Feb;27(1):53–9

Florid cemento–osseous dysplasia (gigantiform cementoma) in a Caucasian woman. Wolf J, et al. **Br J Oral Maxillofac Surg** 1989 Feb;27(1):46–52

Mixed odontogenic tumors: an analysis of 23 new cases. Hansen LS, et al. **Head Neck Surg** 1988 May–Jun; 10(5):330–43

Odontogenic epithelial hamartomas in periodontal structures. Moskow BS, et al. **J Clin Periodontol** 1989 Feb;16(2):92–7

Peripheral odontogenic fibroma. Report of 5 cases. Buchner A. **J Craniomaxillofac Surg** 1989 Apr;17(3):134–8 (25 ref.)

Odontogenic carcinoma with sarcomatous proliferation. A case report. Yoshida T, et al. **J Craniomaxillofac Surg** 1989 Apr;17(3):139–42

An erupted odontoma: case report. Gomel M, et al. **J Oral Maxillofac Surg** 1989 Sep;47(9):999–1000

Epithelial odontogenic ghost cell tumor: report of a case. Günhan O, et al. **J Oral Maxillofac Surg** 1989 Aug; 47(8):864–7

Comparison between the peripheral ossifying fibroma and peripheral odontogenic fibroma. Kenney JN, et al. **J Oral Maxillofac Surg** 1989 Apr;47(4):378–82

Intraosseous and extraosseous calcifying odontogenic cyst (Gorlin cyst). Shamaskin RG, et al. **J Oral Maxillofac Surg** 1989 Jun;47(6):562–5

Ameloblastic fibroma: growth potentiality of odontogenic epithelium and coexpression of intermediate filament proteins in fibromatous cells. Tatemoto Y, et al. **J Oral Pathol** 1988 Apr;17(4):168–74

Clear cell odontogenic carcinoma: report of three cases with pulmonary and lymph node metastases. Bang G, et al. **J Oral Pathol Med** 1989 Feb;18(2):113–8

Peripheral ameloblastic carcinoma: a case report of a rare neoplasm. McClatchey KD, et al. **J Otolaryngol** 1989 Apr; 18(3):109–11

A case of benign cementoblastoma. Fujita S, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jul;68(1):64–8

Odontomas. Kaugars GE, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):172–6

Central odontogenic fibroma, granular cell variant. A case report with S–100 immunohistochemistry and a review of the literature. Shiro BC, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):725–30 (24 ref.)

Squamous odontogenic tumor: immunohistochemical identification of keratins. Tatemoto Y, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jan;67(1):63–7

Primary intraosseous carcinoma of the mandible with probable origin in an odontogenic cyst. Waldron CA, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):716–24 (20 ref.)

[Ameloblastic fibroma: clinico–pathologic analysis] Wu QG. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Nov; 23(6):328–30, 384 (Eng. Abstr.) **(Chi)**

[Histogenetic relations in ameloblastic fibroma and odontoma. Apropos of 2 cases] Auriol M, et al. **Arch Anat Cytol Pathol** 1988;36(5–6):235–7 (6 ref.) (Eng. Abstr.) **(Fre)**

[The cytoskeleton in odontogenic tumors] Bertelli E, et al. **Minerva Stomatol** 1988 Oct;37(10):745–9 (Eng. Abstr.) **(Ita)**

RADIOGRAPHY

Well–circumscribed, radiopaque, and radiolucent lesion of the anterior maxilla. Dunn RH, et al. **J Am Dent Assoc** 1989 Apr;118(4):467–8

Asymptomatic expansion of the mandible. Ward TO, et al.

J Am Dent Assoc 1989 Jul;119(1):169–70

Well-circumscribed mixed-density lesion coronal to an unerupted permanent tooth. Warnock GR, et al. J Am Dent Assoc 1989 Aug;119(2):311–2

[Pindborg tumor in the maxillary sinus. An unusual case of atypical facial pain] Larsen PO, et al. Ugeskr Laeger 1989 Jan 2;151(1):32 (Eng. Abstr.) (Dan)

[Odontomas: radiological surprises] Carnevali R, et al. Minerva Stomatol 1988 Apr;37(4):269–72 (Eng. Abstr.) (Ita)

RADIOTHERAPY

Proper treatment of odontogenic myxoma [letter] Zohar Y. J Oral Maxillofac Surg 1989 May;47(5):546

SURGERY

Surgical management of a large, complex mandibular odontoma by unilateral sagittal split osteotomy. Wong GB. J Oral Maxillofac Surg 1989 Feb;47(2):179–84

[Compound odontoma. Presentation of a clinical case] Benech A, et al. Minerva Stomatol 1989 Feb;38(2):187–90 (Eng. Abstr.) (Ita)

VETERINARY

[Ameloblastic odontoma in a Sprague-Dawley rat] Ernst H, et al. DTW 1989 Apr;96(4):207–9 (Eng. Abstr.) (Ger)

ODONTOID PROCESS see under **AXIS**

ODONTOMA see under **ODONTOGENIC TUMORS**

ODONTOMETRY

Allocation and discrimination based on human odontometric data. Kieser JA, et al. Am J Phys Anthropol 1989 Jul; 79(3):331–7

[The examination about agreement or disagreement among the dental findings—on personal identification] Miyazawa T, et al. Nippon Hoigaku Zasshi 1988 Dec;42(6):529–38 (Eng. Abstr.) (Jpn)

METHODS

Principal component analysis of intercusp distances on the lower first molars of three human populations. Sekikawa M, et al. Arch Oral Biol 1988;33(8):535–41

STATISTICS & NUMERICAL DATA

[Recent comparative statistical correlation studies on predicting the space requirement of the cuspid and bicuspid region using multiple regression comparisons] Gross A, et al. Fortschr Kieferorthop 1989 Apr;50(2):109–17 (Eng. Abstr.) (Ger)

ODORS

see related
SMELL

Ultrastructural characteristics of sustentacular cells in control and odorant-treated olfactory mucosae of the salamander. Zielinski BS, et al. Anat Rec 1988 Jul;221(3):769–79

Fetor from ulcerated head and neck tumors: causation and therapy. Brusis T, et al. Ann Otol Rhinol Laryngol 1989 Aug;98(8 Pt 1):615–7

Removal of methanethiol, dimethyl sulfide, dimethyl disulfide, and hydrogen sulfide from contaminated air by Thiobacillus thioparus TK-m. Kanagawa T, et al. Appl Environ Microbiol 1989 Mar;55(3):555–8

Sensory evidence for olfactory receptors with opposite chiral selectivity. Polak EH, et al. Behav Brain Res 1989 Jan 1; 31(3):199–206

Acute alcohol intoxication paired with aversive reinforcement: ethanol odor as a conditioned reinforcer in rat pups. Molina JC, et al. Behav Neural Biol 1989 Jul; 52(1):1–19

Odor and taste aversions conditioned in anesthetized rats. Bermudez-Rattoni F, et al. Behav Neurosci 1988 Oct; 102(5):726–32

Changes in electrical activity of rabbit olfactory bulb and cortex to conditioned odor stimulation. Bressler SL. Behav Neurosci 1988 Oct;102(5):740–7

Alcohol aversion generalization in rats: specific disruption of taste and odor cues with gustatory neocortex or olfactory bulb ablations. Kiefer SW, et al. Behav Neurosci 1988 Oct;102(5):733–9

Antagonism of NMDA receptors impairs acquisition but not retention of olfactory memory. Staubli U, et al. Behav Neurosci 1989 Feb;103(1):54–60

Asparagus and malodorous urine [letter] Mitchell SC. Br J Clin Pharmacol 1989 May;27(5):641–2

Odorous urine in man after asparagus [letter] Richer C, et al. Br J Clin Pharmacol 1989 May;27(5):640–1

Modulations of EEG activity in the entorhinal cortex and forebrain olfactory areas during odour sampling. Boeijinga PH, et al. Brain Res 1989 Jan 30;478(2):257–68

Effects of unilateral naris closure on the olfactory epithelia of adult mice. Maruniak JA, et al. Brain Res 1989 Jun 26; 490(2):212–8

Early postnatal differentiation of granule cell dendrites in the olfactory bulbs of normal and unilaterally odor-deprived rats. Frazier-Cierpial LL, et al. Brain Res Dev Brain Res 1989 May 1;47(1):129–36

NGF receptor increase in the olfactory bulb of the rat after early odor deprivation. Gómez-Pinilla F, et al. Brain Res Dev Brain Res 1989 Aug 1;48(2):161–5

Attractiveness of lactating females' breast odors to neonates. Makin JW, et al. Child Dev 1989 Aug;60(4):803–10

Adult-like odor preferences and aversions in three-year-old children. Schmidt HJ, et al. Child Dev 1988 Aug; 59(4):1136–43

Field potential response changes in the rabbit olfactory bulb accompany behavioral habituation during the repeated presentation of unreinforced odors. Gray CM, et al. Exp Brain Res 1988;73(1):189–97

Olfactory function in zinc-deficient adult mice. Mackay-Sim A, et al. Exp Brain Res 1989;76(1):207–12

Is there directional smelling? Kobal G, et al. Experientia 1989 Feb 15;45(2):130–2

Contribution of coffee aroma constituents to the mutagenicity of coffee. Aeschbacher HU, et al. Food Chem Toxicol 1989 Apr;27(4):227–32

Mitigation of poison shyness in desert gerbil by adding conspecific sebum of ventral scent marking gland and urine in poison baits. Soni GR, et al. Indian J Exp Biol 1988 Jun;26(6):476–8

Urine odor eliminators [letter] Price PM. J Am Vet Med Assoc 1989 Aug 15;195(4):424

A comparative study of the cutaneous microflora of normal feet with low and high levels of odour. Marshall J, et al. J Appl Bacteriol 1988 Jul;65(1):61–8

Morphology and physiological properties of interneurons in the olfactory midbrain of the crayfish. Arbas EA, et al. J Comp Physiol [A] 1988 Dec;164(2):231–41

The influence of early odour experience on the neural response of the olfactory bulb in laboratory mice. Schmidt U, et al. J Comp Physiol [A] 1988 Oct;163(6):771–6

A comparison of the discriminatory ability and sensitivity of the trigeminal and olfactory systems to chemical stimuli in the tiger salamander. Silver WL, et al. J Comp Physiol [A] 1988 Nov;164(1):55–66

Odorant response of isolated olfactory receptor cells is blocked by amiloride. Frings S, et al. J Membr Biol 1988 Nov;105(3):233–43

Chemosensory identity of H-2 heterozygotes. Yamazaki K, et al. J Mol Cell Immunol 1984;1(2):79–82

Patterns of intracellular potentials in salamander mitral/tufted cells in response to odor stimulation. Hamilton KA, et al. J Neurophysiol 1989 Sep;62(3):609–25

Whole cell recording from lobster olfactory receptor cells: responses to current and odor stimulation. Schmiedel-Jakob I, et al. J Neurophysiol 1989 May; 61(5):994–1000

Discrimination among odorants by single neurons of the rat olfactory bulb. Wellis DP, et al. J Neurophysiol 1989 Jun; 61(6):1161–77

Physical symptoms after neurotoxic exposure [letter] Ziem G. J Occup Med 1989 Apr;31(4):410–1

Affect and memory: effects of pleasant and unpleasant odors on retrieval of happy and unhappy memories. Ehrlichman H, et al. J Pers Soc Psychol 1988 Nov;55(5):769–79

Bad breath [letter] JAMA 1988 Nov 11;260(18):2665

Preliminary studies on rat olfactory tissue: effects of odorants on NA+-K+ atpase activity. Koch RB, et al. Life Sci 1974 Sep 1;15(5):1005–16

Feeding or exposure to food odors increases extracellular DOPAC levels (as measured by in vivo voltammetry) in the prefrontal cortex of food-deprived rats. D'Angio M, et al. Neurosci Lett 1989 Jan 16;96(2):223–8

Induction of odorant-evoked current transients in Xenopus oocytes injected with mRNA isolated from the olfactory mucosa of Rana pipiens. Getchell TV. Neurosci Lett 1988 Aug 31;91(2):217–21

Effects of two ACTH analogs on successive odor discrimination learning in rats. Roman F, et al. Peptides 1989 Mar-Apr;10(2):303–7

Identification of self through olfaction. Lord T, et al. Percept Mot Skills 1989 Aug;69(1):219–24

The discrimination of human odour by the dog. Hepper PG. Perception 1988;17(4):549–54

Individual odors of rats are discriminable independently of changes in gonadal hormone levels. Brown RE. Physiol Behav 1988;43(3):359–63

A role for the hamster's flank gland in heterosexual communication. Montgomery-St. Laurent T, et al. Physiol Behav 1988;44(6):759–62

Male odors that influence the preference of female mice: roles of urinary and preputial factors. Ninomiya K, et al. Physiol Behav 1988;44(6):791–5

Cell cultures of neuroblasts from rat olfactory epithelium that show odorant responses. Coon HG, et al. Proc Natl Acad Sci U S A 1989 Mar;86(5):1703–7

Adenylate cyclase mediates olfactory transduction for a wide variety of odorants. Lowe G, et al. Proc Natl Acad Sci U S A 1989 Jul;86(14):5641–5

QSAR in olfaction: ambergris-type odorants. Winter B. Prog Clin Biol Res 1989;291:401–5

Odor-induced membrane currents in vertebrate-olfactory receptor neurons. Firestein S, et al. Science 1989 Apr 7; 244(4900):79–82

Golf: an olfactory neuron specific-G protein involved in odorant signal transduction. Jones DT, et al. Science 1989 May 19;244(4906):790–5

Carrier-bound odorant delivery to olfactory receptors [news] Schofield PR. Trends Neurosci 1988 Nov;11(11):471–2 (16 ref.)

[Comparison of the attractive power of Zébu and Baoulé cattle for Glossina tachinoides Westwood, 1850 and Glossina morsitans submorsitans Newstead, 1910 in Sudano-Guinean savanna, Burkina Faso] Filledier J, et al. Rev Elev Med Vet Pays Trop 1988;41(2):191–6 (Eng. Abstr.) (Fre)

[Attractive property of chemical products isolated from animal odors for Glossina tachinoides] Merot P, et al. Rev Elev Med Vet Pays Trop 1988;41(1):79–85 (Eng. Abstr.) (Fre)

[Microbial flora and odor of the healthy human skin] Korting HC, et al. Hautarzt 1988 Sep;39(9):564–8 (49 ref.) (Eng. Abstr.) (Ger)

[Rhinitis and osmylogenic asthma caused by prickly pear. Presentation of a clinical case] Vargas VH, et al. Rev Alerg Mex 1989 Mar-Apr;36(2):69–71 (Spa)

ANALYSIS

The design of an olfactometer and a method for quantitative stud on the effect of odours on insect behaviour. Lux S. Acta Physiol Pol 1988 Sep-Dec;39(5–6):504–12

Vaginal odor chromatographic assays; changes caused by douche or suppository—preliminary data. Keith L, et al. Chic Med Sch Q 1970;30(1):1–11

Structural and electronic origin of meat odour of organic hetero-atomic compounds. Dimoglo AS, et al. Nahrung 1988;32(5):461–73

[A case of intermittent hypermethioninemia as the cause of disagreeable body odour] Påby P, et al. Ugeskr Laeger 1989 Jun 12;151(24):1551–2 (Eng. Abstr.) (Dan)

PREVENTION & CONTROL

Effectiveness of products in eliminating cat urine odors from carpet. Beaver BV, et al. J Am Vet Med Assoc 1989 Jun 1;194(11):1589–91

[Can chlorophyll reduce fecal odor in colostomy patients?] Christiansen SB, et al. Ugeskr Laeger 1989 Jul 3; 151(27):1753–4 (Eng. Abstr.) (Dan)

OEDIPUS COMPLEX see under **PSYCHOANALYTIC THEORY**

OESOPHAGOSTOMIASIS

PATHOLOGY

[Dapaong "tumor". Helminthiasis caused by Oesophagostomum] Pagès A, et al. Ann Pathol 1988; 8(4–5):332–5 (Eng. Abstr.) (Fre)

VETERINARY

Oesophagostomum radiatum: successful vaccination of calves with high molecular weight antigens. East IJ, et al. Int J Parasitol 1989 May;19(3):271–4

A comparison of worm burden and faecal egg count for measuring the efficacy of vaccination against Oesophagostomum radiatum. East IJ, et al. Int J Parasitol 1988 Sep;18(6):863–4

A dose-response investigation on the level of resistance to pyrantel citrate in nodular worms of pigs. Bjørn H, et al. Vet Parasitol 1989 Jun;31(3–4):259–67

OESOPHAGOSTOMUM

GROWTH & DEVELOPMENT

A comparison of worm burden and faecal egg count for measuring the efficacy of vaccination against Oesophagostomum radiatum. East IJ, et al. Int J Parasitol 1988 Sep;18(6):863–4

IMMUNOLOGY

Oesophagostomum radiatum: successful vaccination of calves with high molecular weight antigens. East IJ, et al. Int J Parasitol 1989 May;19(3):271–4

PHYSIOLOGY

Abundance and survival of infective larvae of the cattle nematodes Cooperia punctata, Haemonchus placei and Oesophagostomum radiatum from faecal pats in a wet tropical climate. Fabiyi JP, et al. Aust Vet J 1988 Aug; 65(8):229–31

OFFICE AUTOMATION

BIOMCH-L. An electronic mail discussion list for biomechanics and kinesiology [letter] van den Bogert AJ, et al. J Biomech Eng 1989 Feb;111(1):93–4

Electronic mail basics. Staggers N. J Nurs Adm 1989 Oct; 19(10):31–5

Effect of overuse injury and the importance of training on the use of adjustable workstations by keyboard operators. Green RA, et al. J Occup Med 1989 Jun;31(6):557–62

The Medical Manager, Version 6: an update. Cushing M Jr. MD Comput 1989 Mar-Apr;6(2):94–6

A study of the effects by the office automation on Japanese industrial workers. Horie Y, et al. Sangyo Ika Daigaku Zasshi 1989 Mar 20;11 Suppl:506–11

[Automated work stations in managing a multiprofile medical facility] Diadyk GN, et al. **Voen Med Zh** 1989 May; (5):19–21 **(Rus)**

INSTRUMENTATION

[The computer on the physician's desk] Günterberg K. **Z Arztl Fortbild (Jena)** 1989;83(9):477–81 **(Ger)**

METHODS

TurboMED: a medical billing package for the small office. Lighter DE. **MD Comput** 1988 Nov–Dec;5(6):152–5

STANDARDS

Computerization of the urologic office. Billing, record keeping, and education. Andrassy JJ, et al. **Urol Clin North Am** 1988 Nov;15(4):705–13 (4 ref.)

OFFICE MANAGEMENT

Test selection for the pediatric office laboratory. Todd JK. **Adv Pediatr Infect Dis** 1988;3:111–24 (22 ref.)

How to dictate a discharge summary [letter] **BMJ** 1989 Jun 17;298(6688):1646

Save the general practice record [editorial] Loudon I, et al. **BMJ** 1989 Mar 25;298(6676):772

A vendor protests [editorial] McCarthy JT. **Cutis** 1989 Jul; 44(1):17

Combined training in procedural and behavioral counseling skills. Hainer BL, et al. **Fam Med** 1989 Mar–Apr; 21(2):114–7

Formphobia [letter] Dauber LG, et al. **JAMA** 1989 Jul 28; 262(4):500

From the Food and Drug Administration. Nightingale SL. **JAMA** 1989 Sep 8;262(10):1296

MSMS legal counsel explains physician access to HCFA, MPRO records. Williams TR. **Mich Med** 1989 Apr;88(4):27

Fundamental principles of veterinary commerce: management for results. Riegger MH. **Tijdschr Diergeneeskd** 1989 Apr;114 Suppl 1:75S–87S

Development of a microcomputer system for recording veterinary visits, preparing accounts, and as an aid to herd fertility and herd health schemes. Williams PC, et al. **Vet Rec** 1989 Mar 18;124(11):265–8

[A new organizational form for increasing the efficiency of treatment of the principal dental diseases] Iatsenko LS, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):88–9 **(Rus)**

ECONOMICS

Turn account settlement into a PR exercise. North J. **Aust Fam Physician** 1989 Jun;18(6):713

Be cautious in the office: lawsuits can originate there too. Milne P. **Can Med Assoc J** 1988 Nov 15;139(10):997–8

Good financial management keeps physicians competitive. Anthony J. **Mich Med** 1988 Aug;87(8):494–5

LEGISLATION & JURISPRUDENCE

Informed consent: procedure specific. Caterine JM, et al. **Iowa Med** 1989 May;79(5):231–3

METHODS

A record-keeping format for training systemic therapists. Bernstein RM, et al. **Fam Process** 1988 Sep;27(3):339–49

Triplicate prescription: an idea whose time has yet to come. Troisi AJ, et al. **Md Med J** 1989 Jan;38(1):45–6

Automation: how not to do. Hoek D. **Tijdschr Diergeneeskd** 1989 Apr;114 Suppl 1:89S–90S

STANDARDS

New cervical cytology request form is unusable. Clark JV, et al. **BMJ** 1989 Feb 11;298(6670):371–2

ENDO-LAB: an integrated, portable endocrinology laboratory software system. Mitchel EF Jr, et al. **Comput Methods Programs Biomed** 1988 Nov–Dec; 27(3):241–8

Immunization, practice records and the white paper. Pennington E, et al. **J R Coll Gen Pract** 1988 Nov; 38(316):515–6

OFFICE NURSING

Patient education by a family nurse as a model for training residents. Solberg LI, et al. **Fam Pract** 1989 Jun;6(2):114–9

The work of the family practice nurse: an audit in an inner city practice. Fallon CW, et al. **Health Bull (Edinb)** 1988 May;46(3):176–81

A joint approach to smoking cessation clinics [letter] Littlejohns P, et al. **J R Coll Gen Pract** 1988 Aug; 38(313):372–3

The roles of the office and hospital nurse. Stratton WT. **Kans Med** 1989 Mar;90(3):66–7

OFFICE OF TECHNOLOGY ASSESSMENT (U.S.) see **UNITED STATES OFFICE OF TECHNOLOGY ASSESSMENT**

OFFICE SURGERY see **AMBULATORY SURGERY**

OFFICE VISITS

Office hypertension [letter] Soicher ER, et al. **Aviat Space Environ Med** 1989 Apr;60(4):376

Office practice of sports medicine. **Clin Sports Med** 1989 Jul; 8(3):361–632

Length of consultations in general practice in Sweden: views of doctors and patients. Andersson SO, et al. **Fam Pract** 1989 Jun;6(2):130–4

The clinical assessment of a child's social and physical environment during health visits. Casey PH, et al. **J Dev Behav Pediatr** 1988 Dec;9(6):333–8

How patients and physicians address each other in the office [see comments] Bergman JJ, et al. **J Fam Pract** 1988 Oct; 27(4):399–402. **Comment in:** J Fam Pract 1989 Apr;28(4):388

Reliability of drug histories in a specialized geriatric outpatient clinic. Jackson JE, et al. **J Gen Intern Med** 1989 Jan–Feb;4(1):39–43

Ethical problems in the medical office [letter; comment] **JAMA** 1989 Feb 24;261(8):1150. **Comment on:** JAMA 1988 Aug 12;260(6):812–5

Time and time again. Formica PE. **N J Med** 1988 Aug; 85(8):647

Patient waiting times [letter] Chan MJ. **N Z Med J** 1988 Oct 12;101(855):644

Office visits to psychiatrists. Gardocki GJ. **Vital Health Stat [13]** 1988 May;(94):1–40

Evolving principles of office quality assurance. Norman LA. **West J Med** 1988 Aug;149(2):230–3 (38 ref.)

[Physician consultation and use of drugs for rheumatic symptoms] Wasmus A, et al. **Soz Praventivmed** 1988; 33(4–5):202–9 (Eng. Abstr.) **(Ger)**

ECONOMICS

Reimbursement and declines in internal medicine training [letter] Roberts AD. **Ann Intern Med** 1989 Sep 15; 111(6):544

STATISTICS & NUMERICAL DATA

Visits to physicians before and after exposure to urea formaldehyde foam insulation. L'Abbé KA, et al. **Am J Public Health** 1988 Nov;78(11):1489–91

TRENDS

The changing nature of physicians' office visits. Mitchell JB, et al. **Health Serv Res** 1988 Oct;23(4):575–91

UTILIZATION

Medicaid policy and the substitution of hospital outpatient care for physician care. Cohen JW. **Health Serv Res** 1989 Apr;24(1):33–66

Visit frequency for essential hypertension: observed associations. Lichtenstein MJ, et al. **J Fam Pract** 1989 Jun; 28(6):667–72

Who comes back to a paediatric outpatient clinic? Ford RP, et al. **N Z Med J** 1989 Mar 8;102(863):102–4

Recent general practice contacts of hospitalised suicide attempters. Petrie K. **N Z Med J** 1989 Mar 22; 102(864):130–1

[Periodic visits to the doctor? (letter)] Grazioli D, et al. **Med Lav** 1988 Jul–Aug;79(4):331–4 **(Ita)**

[The structure and dynamics of ophthalmic pathology based on office visit data in the city of Kineshma] Kozlova LP, et al. **Vestn Oftalmol** 1988 Nov–Dec;104(6):65–7 **(Rus)**

OFLOXACIN

Focus on ofloxacin—a new 4-quinolone antimicrobial agent. An international workshop. London, 11–12 January 1988. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:1–178

[Ofloxacin (Tarivid)] Eriksen NH, et al. **Ugeskr Laeger** 1988 Nov 28;150(48):2984–6 **(Dan)**

ADMINISTRATION & DOSAGE

Low dose oral ofloxacin to treat gonorrhoea in Hong Kong [letter] Heap BJ. **Genitourin Med** 1989 Jun;65(3):198

ADVERSE EFFECTS

Ofloxacin and warfarin [letter] Leor J, et al. **Ann Intern Med** 1988 Nov 1;109(9):761

Hypersensitivity vasculitis due to ofloxacin. Huminer D, et al. **BMJ** 1989 Jul 29;299(6694):303

Psychotoxic effects of ofloxacin. Zaudig M, et al. **Pharmacopsychiatry** 1989 Jan;22(1):11–5

ANALOGS & DERIVATIVES

The pharmacokinetics of ofloxacin, desmethyl ofloxacin and ofloxacin N-oxide in haemodialysis patients with end-stage renal failure. White LO, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:65–72

ANALYSIS

High-performance liquid chromatographic determination of ofloxacin in plasma and urine. Mignot A, et al. **J Chromatogr** 1988 Aug 19;430(1):192–7

Method for the determination of ofloxacin, a quinolone carboxylic acid antimicrobial, by high-performance liquid chromatography. Notarianni LJ, et al. **J Chromatogr** 1988 Oct 14;431(2):461–4

BLOOD

Fluorometric measurement of ofloxacin uptake by human polymorphonuclear leukocytes. Pascual A, et al. **Antimicrob Agents Chemother** 1989 May;33(5):653–6

Serum bactericidal activity against Enterobacteriaceae producing broad-spectrum beta-lactamases in volunteers administered ofloxacin and cefotaxime, alone or combined. Weber P, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jun; 8(6):524–6

Simultaneous determination of ofloxacin, fenbufen and felbinac in rat plasma by high-performance liquid chromatography. Katagiri Y, et al. **J Chromatogr** 1988 Sep 23;431(1):135–42

CEREBROSPINAL FLUID

Diffusion of ofloxacin into cerebrospinal fluid of patients with purulent meningitis or ventriculitis. Pioget JC, et al. **Antimicrob Agents Chemother** 1989 Jun;33(6):933–6

CHEMICAL SYNTHESIS

New "ofloxacin" type antibacterial agents. Incorporation of the spiro cyclopropyl group at N-1. Kiely JS, et al. **J Med Chem** 1988 Oct;31(10):2004–8

ISOLATION & PURIFICATION

Separation of pyridone carboxylic acid enantiomers by high-performance liquid chromatography using copper(II)-L-amino acid as the eluent. Arai T, et al. **J Chromatogr** 1988 Sep 16;448(3):439–44

METABOLISM

Determination of ofloxacin in plasma and urine by liquid chromatography. Le Coguic A, et al. **J Chromatogr** 1988 Dec 29;434(1):320–3

Thin-layer chromatographic separation and in situ fluorimetric determination of ofloxacin in plasma and pleural fluid. Warlich R, et al. **J Chromatogr** 1989 May 30;490(2):395–403

PHARMACOKINETICS

Pharmacokinetics of ofloxacin after single and multiple intravenous infusions in healthy subjects. Farinotti R, et al. **Antimicrob Agents Chemother** 1988 Oct;32(10):1590–2

New regression function for absorption kinetics. Koeppe P. **Arzneimittelforschung** 1988 Sep;38(9):1375–7

Penetrability of ofloxacin into cultured epithelial cells and macrophages. Une T, et al. **Arzneimittelforschung** 1988 Sep; 38(9):1265–7

Penetration of ciprofloxacin and ofloxacin into pancreatic juice. Brattström C, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):295–7

Ofloxacin pharmacokinetics in renal failure. Couet W, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):313–4

Pharmacokinetic studies in rats with ofloxacin and MF-934, a new fluorinated quinolone. Mattina R, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):302–3

Diffusion of ofloxacin in human tissues. Noel F, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):300–1

Pharmacokinetics of ofloxacin in severe chronic renal failure. Bandai H, et al. **Clin Ther** 1989 Mar–Apr;11(2):210–8

Serum and prostatic tissue concentrations of ofloxacin. Fujita K, et al. **Clin Ther** 1988;10 Spec No:32–5

Ofloxacin concentration in human benign prostatic tissue after oral administration. Asakawa M, et al. **Hinyokika Kiyo** 1988 Jun;34(6):1097–9

Pharmacokinetics and tissue distribution of ofloxacin in human subjects during a multiple dose regimen. De Bernardis E, et al. **Int J Clin Pharmacol Res** 1988; 8(4):239–45

Preliminary pharmacokinetic and clinical evaluation of ofloxacin in dental and oral cavity diseases. Pappalardo G, et al. **Int J Clin Pharmacol Res** 1989;9(3):229–32

Penetration of ciprofloxacin and ofloxacin into human allograft pancreatic juice. Brattström C, et al. **J Antimicrob Chemother** 1988 Aug;22(2):213–9

Ofloxacin penetration into cerebrospinal fluid [letter] Drancourt M, et al. **J Antimicrob Chemother** 1988 Aug; 22(2):263–5

Pharmacokinetics of ofloxacin and the effect on the faecal flora of healthy volunteers. Leigh DA, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:115–25

Comparative pharmacokinetics of intravenous ofloxacin and ciprofloxacin. Lode H, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:73–9

Ofloxacin penetration into bile and pancreatic juice. Pederzoli P, et al. **J Antimicrob Chemother** 1989 May;23(5):805–7

The penetration of ofloxacin into bronchial secretions. Symonds J, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:91–5

Pharmacokinetic evaluation of ofloxacin in serum and tonsils. Van Landuyt HW, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:81–3

The pharmacokinetics of ofloxacin, desmethyl ofloxacin and ofloxacin N-oxide in haemodialysis patients with end-stage renal failure. White LO, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:65–72

The penetration of ofloxacin into lung tissue. Wijnands WJ, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:85–9

The pharmacokinetics of ofloxacin and a review of its tissue penetration. Wise R, et al. **J Antimicrob Chemother** 1988

Sep;22 Suppl C:59–64

Entry of the new quinolone antibacterial agents of ofloxacin and NY–198 into the central nervous system in rats. Sato H, et al. **J Pharmacobiodyn** 1988 Jun;11(6):386–94

Stereoselective metabolic disposition of enantiomers of ofloxacin in rats. Okazaki O, et al. **Xenobiotica** 1989 Apr; 19(4):419–29

[Ofloxacin concentration in human prostatic tissue after 3 days of administration] Morita M, et al. **Hinyokika Kiyo** 1989 Jan;35(1):187–90 (Eng. Abstr.) **(Jpn)**

[Comparison of enoxacin, ofloxacin, and norfloxacin concentration in human benign prostatic tissue] Yasumoto R, et al. **Hinyokika Kiyo** 1988 Aug;34(8):1519–21 (Eng. Abstr.) **(Jpn)**

[Studies on the maintenance of antimicrobial agents in aqueous humor following topical administration] Tomii T. **Nippon Ganka Gakkai Zasshi** 1988 May;92(5):850–6 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Effectiveness of ofloxacin against Mycobacterium tuberculosis and Mycobacterium avium, and rifampin against M. tuberculosis in cultured human macrophages. Crowle AJ, et al. **Am Rev Respir Dis** 1988 May; 137(5):1141–6

The bactericidal effect on Pseudomonas strains of adriamycin associated with quinolones. Castelli M, et al. **Anticancer Res** 1989 May–Jun;9(3):611–4

Development of resistance to nalidixic acid and the fluoroquinolones after the introduction of norfloxacin and ofloxacin. Kresken M, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1285–8

In vitro activities of ofloxacin and four other new quinoline–carboxylic acids against Chlamydia trachomatis. Nagayama A, et al. **Antimicrob Agents Chemother** 1988 Nov;32(11):1735–7

In vitro activity of S–ofloxacin. Neu HC, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):1105–7

Influence of two quinolones, ofloxacin and pefloxacin, on human myelopoiesis in vitro. Pallavicini F, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):122–3

Susceptibility of Coxiella burnetii to pefloxacin and ofloxacin in ovo and in persistently infected L929 cells. Raoult D, et al. **Antimicrob Agents Chemother** 1989 May;33(5):621–3

Pharmacodynamic evaluation of ofloxacin and trimethoprim–sulfamethoxazole in vaginal fluid of women treated for acute cystitis. Tartaglione TA, et al. **Antimicrob Agents Chemother** 1988 Nov;32(11):1640–3

In vitro activity of DR–3355, an optically active ofloxacin. Une T, et al. **Antimicrob Agents Chemother** 1988 Sep; 32(9):1336–40

The in vitro activity of norfloxacin, ofloxacin and ciprofloxacin and other antibiotics in current use against Neisseria gonorrhoeae. Melby K, et al. **APMIS** 1989 Apr; 97(4):347–50

Sub–inhibitory and post–antibiotic effects of an optically active isomer of ofloxacin. Tanaka M, et al. **Arzneimittelforschung** 1989 Jul;39(7):750–4

In vitro activity of ciprofloxacin, norfloxacin, and ofloxacin against multi–resistant Enterobacteriaceae. Niculescu E, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):132–3

In vitro susceptibility of urinary pathogens to quinolones compared to other antimicrobial agents. Osman LM, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):147–8

The comparative in vitro activity of ofloxacin (RU 43 280) and other quinolone derivatives against 722 bacteria of clinical interest. Santos Ferreira M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):145–7

Plasmid "curing" by some recently synthetized 4–quinolone compounds. Selan L, et al. **Chemioterapia** 1988 Oct; 7(5):292–4

Effect of ciprofloxacin and ofloxacin on human polymorphonuclear leukocyte activity against staphylococci. Pascual A, et al. **Chemotherapy** 1989; 35(1):17–22

Prediction of the effect of ofloxacine on intestinal absorption: effect of the body weight and substrate concentration. Prieto JG, et al. **Comp Biochem Physiol [C]** 1988; 90(1):179–81

Antibacterial activity after a single–dose of norfloxacin, ofloxacin and pipemidic acid detected in urine of volunteers. Cruciani M, et al. **Drugs Exp Clin Res** 1988; 14(8):533–7

Inhibitory effect of enoxacin, ofloxacin and norfloxacin on renal excretion of theophylline in humans. Sano M, et al. **Eur J Clin Pharmacol** 1989;36(3):323–4

Effects of enoxacin, ofloxacin and norfloxacin on theophylline disposition in humans. Sano M, et al. **Eur J Clin Pharmacol** 1988;35(2):161–5

Susceptibility of epidemic strains of Shigella to ofloxacin and other antimicrobials. Sen D, et al. **Indian J Pathol Microbiol** 1988 Oct;31(4):306–10

Influence of ofloxacin and pefloxacin on human lymphocyte immunoglobulin secretion and on polymorphonuclear leucocyte superoxide anion production. Fantoni M, et al. **J Antimicrob Chemother** 1988 Aug;22(2):193–6

Resistance studies with ofloxacin. Felmingham D, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:27–34

The effect of ofloxacin on the intracellular growth of Legionella pneumophila in guinea pig alveolar phagocytes. Fitzgeorge RB, et al. **J Antimicrob Chemother** 1988 Sep; 22 Suppl C:53–7

The comparative in–vitro activity of ofloxacin. Grüneberg RN, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:9–19

Bactericidal mechanisms of ofloxacin. Lewin CS, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:1–8

In–vitro activity of ofloxacin against isolates of Neisseria gonorrhoeae. McEwen A, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:21–5

The selection and frequency of streptococci with decreased susceptibility to ofloxacin compared with other quinolones. Piddock LJ, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:45–51

Comparative studies of fleroxacin and ofloxacin in experimental pyelonephritis. Ritzerfeld W. **J Antimicrob Chemother** 1988 Oct;22 Suppl D:119–22

In–vitro activity of lomefloxacin in comparison with pefloxacin and ofloxacin. Van der Auwera P, et al. **J Antimicrob Chemother** 1989 Feb;23(2):209–19

Gut decontamination by oral ofloxacin and ciprofloxacin in healthy volunteers. van Saene HK, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:127–34

A Belgian multicentre in–vitro study of ofloxacin [published erratum appears in J Antimicrob Chemother 1989 Mar;23(3):471–3] Verbist L. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:35–43

Interaction between the fluoroquinolones and the bronchodilator theophylline. Wijnands WJ, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:109–14 (20 ref.)

Effect of a new fluorinated quinolone (ofloxacin) on the chemiluminescence of phagocytosing human neutrophils. Aquilini D, et al. **J Biolumin Chemilumin** 1989 Apr–Jun; 3(2):85–7

The influence of ofloxacin versus trimethoprim–sulfamethoxazole on the aerobic flora in granulocytopenic subjects. Bartoloni A, et al. **J Chemother** 1989 Apr;1(2):91–4

Ofloxacin: in vitro activity against recently isolated gram–negative bacterial strains. Chiaradia V, et al. **J Chemother** 1989 Apr;1(2):80–3

Ofloxacin susceptibility testing quality control parameters for microdilution and disk diffusion, and confirmation of disk diffusion interpretive criteria. Fuchs PC, et al. **J Clin Microbiol** 1989 Jan;27(1):49–52

The influence of ofloxacin and enoxacin on the metabolic pathways of theophylline in healthy volunteers. A pilot study. Wijnands WJ, et al. **Pharm Weekbl [Sci]** 1988 Dec 9;10(6):272–6

Morphological changes in Mycobacterium fortuitum induced by ofloxacin. Saito H, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Jun; 268(4):448–55

[Comparison of the antibacterial effects of ofloxacin, oxolinic acid and nalidixic acid] Langšádl L, et al. **Cesk Epidemiol Mikrobiol Imunol** 1988 Sep;37(5):297–308 (Eng. Abstr.) **(Cze)**

[Drug information on ofloxacin] Pedersen SS. **Ugeskr Laeger** 1989 Jun 12;151(24):1566 **(Dan)**

[In vitro bactericidal effects of ofloxacin on S. aureus] Korting HC, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(3):387–94 (Eng. Abstr.) **(Ger)**

[The antibacterial effect of ciprofloxacin, ofloxacin and norfloxacin in vitro] Rotter M, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):145–52 (Eng. Abstr.) **(Ger)**

[Susceptibilities of clinical isolates to antibacterial agents. A study mainly focused on ofloxacin (the second report). Reported by the Research Group for Testing ofloxacin Susceptibility on Clinical Isolates] Kosakai N. **Jpn J Antibiot** 1989 May;42(5):1125–65 (Eng. Abstr.) **(Jpn)**

[Antimycoplasmal activities of ofloxacin and commonly used antimicrobial agents on Mycoplasma gallisepticum] Takahashi I, et al. **Jpn J Antibiot** 1989 May;42(5):1166–72 (Eng. Abstr.) **(Jpn)**

[Effect of fluoroquinolones on Chlamydia trachomatis as revealed by electron microscopy] Mitsui Y, et al. **Nippon Ganka Gakkai Zasshi** 1988 Jun;92(6):973–80 (Eng. Abstr.) **(Jpn)**

[Effects of vancomycin and ofloxacin on rabbit ERG in vivo] Mochizuki K, et al. **Nippon Ganka Gakkai Zasshi** 1989 Mar; 93(3):322–8 (Eng. Abstr.) **(Jpn)**

[Susceptibility of gram negative bacteria to TMP–SMX and ofloxacin] Unal S, et al. **Mikrobiyol Bul** 1988;22(4):316–21 (Eng. Abstr.) **(Tur)**

THERAPEUTIC USE

Drugs recently released in Belgium: goserelin—ofloxacin. Harvengt C. **Acta Clin Belg** 1988;43(4):317–20

Multicenter randomized study of single–dose ofloxacin versus amoxicillin–probenecid for treatment of uncomplicated gonococcal infection. Black JR, et al. **Antimicrob Agents Chemother** 1989 Feb;33(2):167–70

Chemotherapeutic efficacy of ofloxacin against experimental pneumonia with Pseudomonas aeruginosa in guinea pigs. Otani T, et al. **Arzneimittelforschung** 1989 Jun;39(6):694–7

Bacteriological and clinical experiences with ofloxacin in urinary tract infections. Fröhlich G, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):525–6

Clinical safety and efficacy of ofloxacin. Marone P, et al. **Chemioterapia** 1988 Oct;7(5):320–2

Combination of ofloxacin and amikacin in the treatment of sternotomy wound infection. Yew WW, et al. **Chest** 1989 May;95(5):1051–5

Safety profile of ofloxacin in elderly patients. Fostini R, et al. **Drugs Exp Clin Res** 1988;14(6):393–5

Therapeutic efficacy of ofloxacin, ciprofloxacin and NY–198 in experimentally infected normal and alloxan–induced diabetic mice. Obana Y, et al. **Drugs Exp Clin Res** 1988; 14(5):327–31

In vitro and clinical evaluation of ofloxacin in urinary tract infection and enteric fever. Tanphaichitra D, et al. **Drugs Exp Clin Res** 1988;14(8):529–31

Quinolones. Oral antibiotics of the future. Demoleas SE, et al. **J Am Podiatr Med Assoc** 1988 Oct;78(10):522–5 (17 ref.)

Oral treatment of peritonitis in CAPD patients with two dosage regimens of ofloxacin. Chan MK, et al. **J Antimicrob Chemother** 1988 Sep;22(3):371–5

A clinical comparative study of ofloxacin and pivampicillin in acute exacerbations of chronic bronchitis. Egede F, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:139–42

Overview of postmarketing experience with ofloxacin in Germany. Jüngst G, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:167–75

Use of ofloxacin in open fractures and in the treatment of post–traumatic osteomyelitis. Ketterl R, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:159–66

Ofloxacin compared with ciprofloxacin in the treatment of complicated lower urinary tract infections. Kromann–Andersen B, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:143–7

Efficacy of ofloxacin in the treatment of lower respiratory tract infections in general practice. Moorhouse EC, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:135–8

Efficacy of ofloxacin in the treatment of non–gonococcal urethritis in men and genital infections caused by Chlamydia trachomatis in men and women. Nayagam AT, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:155–8

Single low–dose ofloxacin for the treatment of uncomplicated urinary tract infection in young women. Raz R, et al. **J Antimicrob Chemother** 1988 Dec;22(6):945–9

The efficacy of ofloxacin against infection caused by Neisseria gonorrhoeae and Chlamydia trachomatis. Richmond SJ, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:149–53

Treatment of typhoid fever with ofloxacin. Wang F, et al. **J Antimicrob Chemother** 1989 May;23(5):785–8

Clinical experience with ofloxacin (DL–8280) in the therapy of various infections. Cristiano P, et al. **J Chemother** 1989 Apr;1(2):107–9

Evaluation of ofloxacin in the treatment of mucopurulent cervicitis: response of chlamydia–positive and chlamydia–negative forms. Chandeying V, et al. **J Med Assoc Thai** 1989 Jun;72(6):331–7

The effect of ofloxacin on experimental periodontitis in hamsters infected with Actinomyces viscosus ATCC 15987. Kametaka S, et al. **J Periodontol** 1989 May;60(5):285–91

Oral treatment of peritonitis in CAPD patients with ofloxacin. Chan MK, et al. **Nephrol Dial Transplant** 1988; 3(2):194–7

A prospective randomized trial of ofloxacin vs. doxycycline in the treatment of uncomplicated male urethritis. Boslego JW, et al. **Sex Transm Dis** 1988 Oct–Dec;15(4):186–91

Treatment of nongonococcal urethritis: comparison of ofloxacin and erythromycin. Ibsen HH, et al. **Sex Transm Dis** 1989 Jan–Mar;16(1):32–5

Clinical efficacy of new quinolones for therapy of nongonococcal urethritis. Perea EJ, et al. **Sex Transm Dis** 1989 Jan–Mar;16(1):7–10

[Clinical trial of ofloxacin (Tarivid R)] Belovezhdov N, et al. **Vutr Boles** 1988;27(3):67–71 (Eng. Abstr.) **(Bul)**

[Treatment of osteo–articular infections with ofloxacin. Preliminary study] Brouqui P, et al. **Pathol Biol (Paris)** 1989 May;37(5):468–71 (Eng. Abstr.) **(Fre)**

[Efficacy of injectable ofloxacin in treating septicemia. Multicenter study] Doco–Lecompte T, et al. **Pathol Biol (Paris)** 1989 May;37(5):465–7 (Eng. Abstr.) **(Fre)**

[Experience with Tarivid (Ofloxacin) in maxillofacial surgery] Szabó G, et al. **Orv Hetil** 1988 Aug 21; 129(34):1811–3 (Eng. Abstr.) **(Hun)**

[Clinical study of ofloxacin in complicated urinary tract infection] Akazawa N, et al. **Hinyokika Kiyo** 1988 Jul; 34(7):1279–82 (Eng. Abstr.) **(Jpn)**

[Treatment of chlamydial urethritis—studies on clinical effects of ofloxacin] Asano H, et al. **Hinyokika Kiyo** 1989 Jan;35(1):191–7 (Eng. Abstr.) **(Jpn)**

[Ofloxacin for the treatment of chlamydial urethritis] Yuri K, et al. **Hinyokika Kiyo** 1988 Sep;34(9):1687–90 (Eng. Abstr.) **(Jpn)**

[Efficacy of ofloxacin in sexually transmitted male urethritis and cervicitis] Kumamoto Y, et al. **Jpn J Antibiot** 1988 Oct;41(10):1445–79 (Eng. Abstr.) **(Jpn)**

[Clinical experience with ofloxacin in the treatment of chronic respiratory tract disease aggravated by acute infection] Muraki N, et al. **Jpn J Antibiot** 1988 Sep; 41(9):1231–6 (Eng. Abstr.) **(Jpn)**

[Second report of ofloxacin: clinical study] Seiga K, et al. **Jpn J Antibiot** 1988 Oct;41(10):1430–44 (Eng. Abstr.) **(Jpn)**

[Therapeutic effect of Ofloxacin on intractable pulmonary tuberculosis. Chest disease cooperative study unit of

National Sanatoriums in Kinki District] Matsumoto T, et al. **Kekkaku** 1988 Jun;63(6):469–74 **(Jpn)**

[Exacerbation of pulmonary tuberculosis after diagnostic bronchoscopy and its preventive medication] Sakatani M, et al. **Kekkaku** 1988 Dec;63(12):773–7 (Eng. Abstr.) **(Jpn)**

[Effectiveness of ofloxacin in the treatment of bacterial infections of the respiratory tract] Musial J, et al. **Pol Tyg Lek** 1988 Dec 5;43(49):1580–2 (Eng. Abstr.) **(Pol)**

[The role of ofloxacin (Tarivid) therapy in respiratory and urinary tract infections] Hasçelik G. **Mikrobiyol Bul** 1987 Jul;21(3):165–71 (Eng. Abstr.) **(Tur)**

[The effect of ofloxacin therapy in acute salmonellosis on the duration of fecal excretion of Salmonella] Ulutan F, et al. **Mikrobiyol Bul** 1988;22(3):222–9 (Eng. Abstr.) **(Tur)**

TOXICITY

Morphological investigation of cavity formation in articular cartilage induced by ofloxacin in rats. Kato M, et al. **Fundam Appl Toxicol** 1988 Jul;11(1):110–9

Morphological investigation of osteochondrosis induced by ofloxacin in rats. Kato M, et al. **Fundam Appl Toxicol** 1988 Jul;11(1):120–31

Effect of ofloxacin on the uptake of [3H]thymidine by articular cartilage cells in the rat. Kato M, et al. **Toxicol Lett** 1988 Nov;44(1–2):131–42

URINE

Absence of crystalluria and estimation of renal parameters after oral and intravenous ofloxacin as compared to placebo in healthy volunteers. Verho M, et al. **Drugs Exp Clin Res** 1988;14(8):539–45

OIL OF CLOVES see **EUGENOL**

OILS

An oil–well method for time–resolved microfluorescence assays. Rüegg JC, et al. **Pflugers Arch** 1989 Sep; 414(5):597–9

To the third and the fourth generations [editorial] Thomison JB. **South Med J** 1989 Jun;82(6):675–7

[Experimental animal studies of absorption of vitamin A palmitate dissolved in various plant oils] Blaskovits A, et al. **Acta Pharm Hung** 1988 May;58(3):115–20 (Eng. Abstr.) **(Hun)**

[Cholesterol: olive oil or seed oil] Pollari G, et al. **Riv Eur Sci Med Farmacol** 1987 Dec;9(4):423–5 (Eng. Abstr.) **(Ita)**

[Spectral sensitivities of cone photoreceptors containing oil droplet] Ohtsuka T. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):605–13 **(Jpn)**

ADMINISTRATION & DOSAGE

Multiple sclerosis: the lipid relationship. Swank RL, et al. **Am J Clin Nutr** 1988 Dec;48(6):1387–93

Intake of greasy diets in hypothalamic obesity: a re–assessment. Coscina DV, et al. **Appetite** 1989 Aug; 13(1):15–24

ADVERSE EFFECTS

Allergic contact dermatitis from "Varn Ecol – OJ wash" in a litho printer. Garioch JJ, et al. **Contact Dermatitis** 1988 Sep;19(3):229

Haemolytic anaemia associated with ingestion of naphthalene–containing anointing oil. Ostlere L, et al. **Postgrad Med J** 1988 Jun;64(752):444–6

Health effects of oil mists: a brief review. Mackerer CR. **Toxicol Ind Health** 1989 May;5(3):429–40 (31 ref.)

[So–called "oleoscleroma." Clinical and radiographic contribution] Lazzari A. **Chir Organi Mov** 1988 Jan–Mar; 73(1):71–4 (Eng. Abstr.) **(Ita)**

ANALYSIS

Determination of fat–soluble vitamins in oil matrices by multidimensional high–performance liquid chromatography. Brown–Thomas JM, et al. **Anal Chem** 1988 Sep 15;60(18):1929–33

Analysis of seed oils containing cyclopentenyl fatty acids by combined chromatographic procedures [published erratum appears in Lipids 1989 Jun;24(6):564] Christie WW, et al. **Lipids** 1989 Feb;24(2):116–20

POISONING

[Twelfth reports of the study on yusho and PCB] **Fukuoka Igaku Zasshi** 1989 May;80(5):179–341 **(Jpn)**

THERAPEUTIC USE

Computed tomographic appearance of an oleothorax. Deboisblanc BP, et al. **Thorax** 1988 Jul;43(7):572–3

[Oil treatment in disturbed peripheral circulation has been tested by many district nurses] Vickhoff T. **Lakartidningen** 1989 May 17;86(20):1884 **(Swe)**

TOXICITY

The carcinogenic initiating and promoting properties of a lightly refined paraffinic oil. McKee RH, et al. **Fundam Appl Toxicol** 1989 May;12(4):748–56

The dermal carcinogenic potential of unrefined and hydrotreated lubricating oils. McKee RH, et al. **J Appl Toxicol** 1989 Aug;9(4):265–70

OILS, ESSENTIAL see **OILS, VOLATILE**

OILS, IODIZED see **IODIZED OILS**

OILS, PLANT see **PLANT OILS**

OILS, UNSATURATED see **FATS, UNSATURATED**

OILS, VEGETABLE see **PLANT OILS**

OILS, VOLATILE

ANALYSIS

Application of gas–liquid chromatography to the analysis of essential oils. Part XIV. Monographs for five essential oils. Analytical Methods Committee. **Analyst** 1988 Jul; 113(7):1125–36

The volatiles of Chaerophyllum bulbosum L. ssp. bulbosum growing wild in Greece. Kokkalou E, et al. **Pharm Acta Helv** 1989;64(5–6):133–4

Comparative study of different essential oils of Bupleurum gibraltaricum Lamarck. Gil ML, et al. **Pharmazie** 1989 Apr; 44(4):284–7

The essential oil of Hyptis pectinata. Malan K, et al. **Planta Med** 1988 Dec;54(6):531–2

Volatile constituents of Eugenia uniflora leaf oil. Weyerstahl P, et al. **Planta Med** 1988 Dec;54(6):546–9

[Studies on the histology and essential oil of the Chinese drug sharen and its adulterants in Amomum] Chen SW, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Jan;14(1):9–12, 61 (Eng. Abstr.) **(Chi)**

[Chemical constituents of essential oil from Xinjiang gaoben (the rhizome of Conioselium tataricum Hoffm.) by GC–MS analysis] Dai B. **Chung Yao Tung Pao** 1988 Sep;13(9):33–5, 63 (Eng. Abstr.) **(Chi)**

[Identification of essential oil from semen litchi] Shen J. **Chung Yao Tung Pao** 1988 Aug;13(8):31–2, 63 (Eng. Abstr.) **(Chi)**

[GC–MS analysis of the essential oils in pine needles in Northeast China] Yan ZK, et al. **Chung Yao Tung Pao** 1988 Jul;13(7):34–6, 63 (Eng. Abstr.) **(Chi)**

[Comparison of chemical constituents of essential oils from four species of gaoben (Ligusticum) by GC–MS analysis] Dai B. **Yao Hsueh Hsueh Pao** 1988 May;23(5):361–9 (Eng. Abstr.) **(Chi)**

[Studies on the original plants of the traditional drug haifengteng: comparative studies between piper hancei Maxim. var hancei Maxim. and piper hancei Maxim. var. squamiglanduferum Fan] Fan ST, et al. **Yao Hsueh Hsueh Pao** 1988;23(12):944–52 (Eng. Abstr.) **(Chi)**

[The fingerprint spectrum analysis of GC relative retention values for essential oil of 19 species of Bupleurum genus] Hong XK, et al. **Yao Hsueh Hsueh Pao** 1988 Nov; 23(11):839–45 (Eng. Abstr.) **(Chi)**

[Studies on the chemical components of the essential oil from the rhizome of Ligusticum sinense Oliv. cv. Chuanxiong hort.] Huang YZ, et al. **Yao Hsueh Hsueh Pao** 1988 Jun; 23(6):426–9 (Eng. Abstr.) **(Chi)**

[Studies on the chemical constituents of the volatile oil of Hippophae rhamnoides L. subsp. sinensis Rousi] Yu JG, et al. **Yao Hsueh Hsueh Pao** 1988 Jun;23(6):456–9 (Eng. Abstr.) **(Chi)**

[Chemical composition of the essential oil of Cryptocarya alba (Mol.) Looser (Lauraceae) in Chile] Montes M, et al. **Ann Pharm Fr** 1988;46(1):41–7 (Eng. Abstr.) **(Fre)**

ISOLATION & PURIFICATION

[Study of azulen in 3 subspecies of Achillea millefolium L.] Lamaison JL, et al. **Ann Pharm Fr** 1988;46(2):139–43 (Eng. Abstr.) **(Fre)**

[Composition of essential oils from native Hungarian camomile] Marczal G, et al. **Acta Pharm Hung** 1989 Jul; 59(4):145–56 **(Hun)**

PHARMACOLOGY

Experimental study of the cholagogic and choleretic actions of essential oils extracted from locally grown and introduced plants. Rangelov A, et al. **Folia Med (Plovdiv)** 1987;29(4):30–40

Effect of certain volatile oils on ejaculated human spermatozoa. Buch JG, et al. **Indian J Med Res** 1988 Apr; 87:361–3

Antimicrobial activities of some Ocimum species grown in Rwanda. Janssen AM, et al. **J Ethnopharmacol** 1989 Jun; 26(1):57–63

Pharmacologic screening and antimicrobial activity of the essential oil of Calamintha sylvatica subsp. ascendens. Ortiz de Urbina AV, et al. **J Ethnopharmacol** 1988 Jul–Aug; 23(2–3):323–8

Sedating and antipyretic activity of the essential oil of Calamintha sylvatica subsp. ascendens. Ortiz de Urbina AV, et al. **J Ethnopharmacol** 1989 Apr;25(2):165–71

Bioactivity of the essential oil of Bupleurum fruticosum. Lorente I, et al. **J Nat Prod** 1989 Mar–Apr;52(2):267–72

Antimicrobial activity of "Cörtük" (Echinophora sibthorpiana Guss.) spice, its essential oil and methyl–eugenol. Kivanç M. **Nahrung** 1988;32(6):635–7

Screening of some essential oils for their activities on dermatophytes [published erratum appears in Pharm Weekbl [Sci] 1989 Feb 24;11(1):32] Janssen AM, et al. **Pharm Weekbl [Sci]** 1988 Dec 9;10(6):277–80

Activity of lavandino essential oil against non–tubercular opportunistic rapid grown mycobacteria. Gabbrielli G, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:37–40

Sedative, anti–inflammatory and anti–diuretic effects induced in rats by essential oils of varieties of Anthemis nobilis: a comparative study. Rossi T, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:71–4

Antimicrobial activity screening of 32 common constituents of essential oils. Hinou JB, et al. **Pharmazie** 1989 Apr; 44(4):302–3

Pharmacological activity of essential oils on Oddi's sphincter. Giachetti D, et al. **Planta Med** 1988 Oct;54(5):389–92

[Comparative characteristics of the antimicrobial activity of essential oils] Iurchak LD, et al. **Mikrobiol Zh** 1987 Mar–Apr;49(2):94–5 (Eng. Abstr.) **(Rus)**

TOXICITY

Teratological evaluation of Juniperus sabina essential oil in mice. Pages N, et al. **Planta Med** 1989 Apr;55(2):144–6

Teratological evaluation of Plectranthus fruticosus leaf essential oil. Pages N, et al. **Planta Med** 1988 Aug; 54(4):296–8

OINTMENT BASES see under **PHARMACEUTIC AIDS**

OINTMENTS

Bioactivity of some chemotherapeutic agents in selected polyethylene glycol ointment bases. Farouk A, et al. **Acta Pharm Hung** 1989 Mar;59(2):87–94

Formulation of polyethylene glycol ointment bases suitable for tropical and subtropical climates. I. Hadi IA, et al. **Acta Pharm Hung** 1989 May;59(3):137–42

Formulation of Polyethylene Glycol ointment bases suitable for tropical and subtropical climates. II. Ugrinė Hunyadvári E, et al. **Acta Pharm Hung** 1989 Jul;59(4):157–65

Influence of drug solubility in the vehicle on clinical efficacy of ointments. Malzfeldt E, et al. **Arch Dermatol Res** 1989; 281(3):193–7

Effects of skin preparation on data collected using an EMG muscle–scanning procedure. Cram JR, et al. **Biofeedback Self Regul** 1989 Mar;14(1):75–82

The global extrapolation of numerical methods for computing concentration profiles in percutaneous drug absorption. Twizell EH. **Comput Biol Med** 1989;19(3):163–71

Supplier survives 140 years of change. Souhrada L. **Hospitals** 1989 Sep 20;63(18):94

Improved high–performance liquid chromatographic determination of bacterial collagenase activity in ointments. Biondi PA, et al. **J Chromatogr** 1988 Dec 28;459:337–40

Oxygen diffusion coefficients in commonly used topical semisolid creams. Wang JC, et al. **Pharm Res** 1988 Feb; 5(2):92–8

[Evaluation of a drug combination in the postoperative course of surgical trauma to the nasal fossa] Vallés Varela H, et al. **An Otorrinolaringol Ibero Am** 1988;15(3):277–89 (Eng. Abstr.) **(Spa)**

THERAPEUTIC USE

[The use of sibicort in the combined therapy of patients with eczema, neurodermatitis and allergic dermatitis] Iagovdik NZ, et al. **Vestn Dermatol Venerol** 1989;(2):60–2 (Eng. Abstr.) **(Rus)**

OLD AGE ASSISTANCE see under **PUBLIC ASSISTANCE**

OLD AGE HOMES see **HOMES FOR THE AGED**

OLDEST OLD see **AGED, 80 AND OVER**

OLEANDOCETIN see **TRIACETYLOLEANDOMYCIN**

OLEANDOMYCIN

ANALOGS & DERIVATIVES

Synthesis of the intact aglycone of oleandomycin, oleandolide, and deoleandrosyl–oleandomycin. Tatsuta K, et al. **J Antibiot (Tokyo)** 1988 Oct;41(10):1520–3

[Oleandomycin and its natural and synthetic analogs. I. Dissociative ionization of oleandomycin and its derivatives] Beliakova IuG, et al. **Antibiot Khimioter** 1989 Mar; 34(3):194–9 (Eng. Abstr.) **(Rus)**

[Oleandomycin and its natural and synthetic analogs. II. Structure and properties of oleandomycin B, a new compound of the oleandomycin group] Beliakova IuG, et al. **Antibiot Khimioter** 1989 Mar;34(3):199–202 (Eng. Abstr.) **(Rus)**

ANALYSIS

[Oleandomycin and its natural and synthetic analogs. II. Structure and properties of oleandomycin B, a new compound of the oleandomycin group] Beliakova IuG, et al. **Antibiot Khimioter** 1989 Mar;34(3):199–202 (Eng.

Abstr.) (Rus)

BIOSYNTHESIS

[Biosynthesis of oleandomycin by cultures of Streptomyces antibioticus obtained after regeneration and fusion of protoplasts] Shevchenko AA, et al. **Mikrobiol Zh** 1989 Mar-Apr;51(2):22-5 (Eng. Abstr.) (Rus)

METABOLISM

In vitro interaction of rat liver cytochromes P-450 with erythromycin, oleandomycin and erythralosamine derivatives. Importance of structural factors. Sartori E, et al. **Biochem Pharmacol** 1989 Jul 1;38(13):2061-8

Microbial O-phosphorylation of macrolide antibiotics. Marshall VP, et al. **J Antibiot (Tokyo)** 1989 Jan;42(1):132-4

PHARMACOLOGY

[Study of the process of inactivating oleandomycin phosphate preparations] Serova IP, et al. **Antibiot Khimioter** 1989 Apr; 34(4):258-61 (Eng. Abstr.) (Rus)

OLEANOLIC ACID see under SAPOGENINS

OLEFINS see ALKENES

OLEIC ACIDS

Fenton reactions in lipid phases: iron solubility, .OH production, and initiation of lipid oxidation. Schaich KM, et al. **Basic Life Sci** 1988;49:153-6

Characterization of plasma-stabilized liposomes composed of dioleoylphosphatidylethanolamine and oleic acid. Liu DX, et al. **Biochem Biophys Res Commun** 1989 Jul 14; 162(1):326-33

Characteristic effects of taste-compounds on the dynamic behavior of oleate-monolayer. Yoshikawa K, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):699-704

Pressure study on thermal transitions of oleic acid polymorphs by high-pressure differential thermal analysis. Hiramatsu N, et al. **Chem Phys Lipids** 1989 Jul;51(1):47-53

Oleic acid allows more apoprotein A-1 to bind with higher affinity to large emulsion particles saturated with cholesterol. Derksen A, et al. **J Biol Chem** 1989 Apr 25; 264(12):6935-40

[A rat model of chronic pancreatic insufficiency induced by injection of zein-oleic acid-linoleic acid solution into the pancreatic duct] Kataoka K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jul;85(7):1431 (Jpn)

ADMINISTRATION & DOSAGE

The effect of oleate on pancreatic and bile secretion in the conscious rat. Miyasaka K, et al. **Proc Soc Exp Biol Med** 1988 Oct;189(1):94-9

Fat and pancreatic secretion. Olsen O, et al. **Scand J Gastroenterol** 1989 Jan;24(1):74-80

ADVERSE EFFECTS

Influence of aspirin and steroids on acute lung injury after i.v. Injection of a sclerosing agent. Sigurdsson GH, et al. **Acta Chir Scand** 1989 Mar;155(3):163-70

Abnormalities of pathways of fibrin turnover in lung lavage of rats with oleic acid and bleomycin-induced lung injury support alveolar fibrin deposition. Idell S, et al. **Am J Pathol** 1989 Aug;135(2):387-99

Can eardrops induce a shampoo dermatitis? A case study. Dooms-Goossens A, et al. **Contact Dermatitis** 1988 Aug; 19(2):143-5

Anaphylactic reaction to ethanolamine oleate injection in sclerotherapy of esophageal varices [letter] Bordas JM, et al. **Endoscopy** 1989 Jan;21(1):50

Acute renal failure after endoscopic injection sclerotherapy: a report of two cases [letter] Yamaga H, et al. **Endoscopy** 1989 Jan;21(1):43

Pericarditis complicating esophageal sclerotherapy [letter] Lewis P, et al. **Gastroenterology** 1989 Jun;96(6):1625-6

High-frequency jet ventilation during oleic-acid induced pulmonary oedema. Hachenberg T, et al. **Intensive Care Med** 1989;15(2):105-10

Catalase pretreatment attenuates oleic acid-induced edema in isolated rabbit lung. Katz SA, et al. **J Appl Physiol** 1988 Sep;65(3):1301-6

ANALYSIS

Simultaneous high-performance liquid chromatographic analysis of oleic acid and simple glycerides of oleic acid. Chang PS, et al. **J Chromatogr** 1989 Mar 31;465(2):438-41

[Studies on methods of measurement of percentage of drug entrapped in intravenous injection of polyphase liposome (139) in the form of suspension] Deng YJ, et al. **Yao Hsueh Hsueh Pao** 1988 Jul;23(7):539-44 (Eng. Abstr.) (Chi)

BLOOD

Erythrocyte membrane stearic and oleic acid ratios in breast cancer. Thomas BS, et al. **Br J Surg** 1988 Nov; 75(11):1078-9

ISOLATION & PURIFICATION

[9,12,13-Trihydroxy-10(E)-octadecenoic and 9,12,13-trihydroxy-10,11-epoxy-octadecanoic acids--new antistress substances isolated from licorice] Shirinian EA, et al. **Izv Akad Nauk SSSR [Biol]** 1988 Nov-Dec;(6):932-6 (Eng. Abstr.) (Rus)

METABOLISM

Increased levels of vaccenic acid in bronchogenic carcinoma tissue. Lawson N, et al. **Ann Clin Biochem** 1989 Mar;26 (Pt 2):125-31

Influence of unsaturated fatty acid membrane component on sensitivity of an Escherichia coli fatty acid auxotroph to conditions of nutrient depletion. Massa EM, et al. **Appl Environ Microbiol** 1988 Aug;54(8):2107-11

Rates of utilization of glucose, glutamine and oleate and formation of end-products by mouse peritoneal macrophages in culture. Newsholme P, et al. **Biochem J** 1989 Jul 1;261(1):211-8

Induction of an endothermic transition in the Arrhenius plot of fatty acid uptake by lipid-depleted ascites tumor cells. Haeffner EW, et al. **Biochim Biophys Acta** 1989 Sep 11; 1005(1):27-33

Fatty acid requirements of breeding turkeys. Whitehead CC, et al. **Br Poult Sci** 1988 Dec;29(4):761-8

Metabolism of oleic, linoleic and linolenic acids in gourami (Trichogaster cosby) fry and mature females. Rahn CH, et al. **Comp Biochem Physiol [B]** 1977;58(1):17-20

Syncytia formation in HIV-1 infected cells is associated with an increase in cellular oleic acid. Apostolov K, et al. **FEBS Lett** 1989 Jul 3;250(2):241-4

Insulin antagonism of catecholamine stimulation of fatty acid transport in the adipocyte. Studies on its mechanism of action. Abumrad NA, et al. **J Biol Chem** 1988 Oct 15; 263(29):14678-83

Effects of mepacrine on the oxidation of [1-14C]oleate in isolated rat hepatocytes. Chihara M, et al. **Jpn J Pharmacol** 1989 Jul;50(3):350-3

Incorporation of trans-8- and cis-8-octadecenoic acid isomers in human plasma and lipoprotein lipids. Emken EA, et al. **Lipids** 1989 Jan;24(1):61-9

Effect of calcium and magnesium ions on the intestinal absorption of oleic acid in vitro. Bernard A, et al. **Reprod Nutr Dev** 1989;29(1):63-73

PHARMACOKINETICS

Rat intestinal lymph osmolarity during glucose and oleic acid absorption. Bohlen HG, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):G438-46

Hepatic oleate uptake. Electrochemical driving forces in intact rat liver. Weisiger RA, et al. **J Clin Invest** 1989 Feb; 83(2):411-20

PHARMACOLOGY

Synthesis and contents of pancreatic exportable enzymes. Effect of oleic acid intraduodenal administration. Calvo EL, et al. **Acta Physiol Pharmacol Latinoam** 1988; 38(2):145-50

Effects of oleic acid-, alpha-naphthylthiourea-, and phorbol myristate acetate-induced microvascular damage on indexes of pulmonary endothelial function in anesthetized dogs. Gardaz JP, et al. **Am Rev Respir Dis** 1988 Jun; 137(6):1350-5

Oleate-induced translocation of protein kinase C to hepatic microsomal membranes. Boscá L, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1243-9

Fatty acyl esters potentiate fatty acid induced activation of protein kinase C. Holian O, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1110-6

Inhibitors of sterol synthesis. Exogenous oleate reduces the inhibitory effect of 5 alpha-cholest-8(14)-en-3 beta-ol-15-one on the growth of CHO-K1 cells. Pinkerton FD, et al. **Biochem Biophys Res Commun** 1988 Oct 31; 156(2):689-94

Binding activities of thyroxine binding globulin versus thyroxine binding prealbumin in rat sera: differential modulation by thyroid hormone ligands, oleic acid and pharmacological drugs. Savu L, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):919-26

Effect of oleic acid on mitochondrial cytochrome c oxidase activity. Nagami M, et al. **Biochem Int** 1988 Oct; 17(4):763-71

Effect of oleic acid on mitochondrial oxidative phosphorylation in rat brain slices. Ogawa M, et al. **Biochem Int** 1988 Oct;17(4):773-82

Stimulation of hepatic cholesterol biosynthesis by fatty acids. Effects of oleate on cytoplasmic acetoacetyl-CoA thiolase, acetoacetyl-CoA synthetase and hydroxymethylglutaryl-CoA synthase. Salam WH, et al. **Biochem J** 1989 Mar 1;258(2):563-8

Inactivation of soybean lipoxygenase 1 by 12-iodo-cis-9-octadecenoic acid. Rotenberg SA, et al. **Biochemistry** 1988 Nov 29;27(24):8813-8

Inhibition of platelet-activating factor biosynthesis via the acetyltransferase by arachidonic and oleic acids in ionophore A23187-stimulated bovine neutrophils. Remy E, et al. **Biochim Biophys Acta** 1989 Sep 11;1005(1):87-92

Effect of Cu2+ and Zn2+ on the inhibition of human leucocyte elastase by 6-alkyl-3-(omega-carboxyalkyl)-2-pyrone, oleic acid and sulindac sulfide. Cook L, et al. **Biol Chem Hoppe Seyler** 1989 Jan;370(1):11-9

Effects of toxin II from the scorpion Androctonus australis Hector on sodium current in neuroblastoma cells and their modulation by oleic acid. Jourdon P, et al. **Eur Biophys J** 1989;16(6):351-6

Carnitine cycle in brown adipose tissue mitochondria as a tool for studying the regulatory role of fatty acids in the uncoupling protein function. Ježek P, et al. **FEBS Lett** 1989 Jan 16;243(1):37-40

Studies on the mechanism of inhibition of nuclear triiodothyronine binding by fatty acids. van der Klis FR, et al. **FEBS Lett** 1989 Mar 27;246(1-2):6-12

Release of neurotensin by selective perfusion of the jejunum with oleic acid in dogs. Fujimura M, et al. **Gastroenterology** 1989 Jun;96(6):1502-5

Effect of pancreatic juice and trypsin on oleic acid-stimulated pancreatic secretion and plasma secretin in dogs. Shiratori K, et al. **Gastroenterology** 1989 May;96(5 Pt 1):1330-6

Oleic acid reduces pulmonary microvascular sieving capacity in sheep. Smith L, et al. **J Appl Physiol** 1989 Jun; 66(6):2866-72

Growth-inhibition effects of oleic acid, linoleic acid, and their methyl esters on transplanted tumors in mice. Zhu YP, et al. **J Natl Cancer Inst** 1989 Sep 6;81(17):1302-6

Effects of free fatty acids and acyl-coenzyme A on diacylglycerol kinase in rat brain. Kelleher JA, et al. **J Neurosci Res** 1989 May;23(1):87-94

Relative effects of dietary oleic- and linoleic-rich oils on plasma lipoprotein composition in rats. Ney DM, et al. **J Nutr** 1989 Jun;119(6):857-63

Effects of oleic acid and bile salts on canine villous motility. Mailman D, et al. **Life Sci** 1989;45(5):455-61

cis-unsaturated fatty acids stimulate catecholamine secretion, tyrosine hydroxylase and protein kinase C in adrenal medullary cells. Koda Y, et al. **Neuroscience** 1989; 29(2):495-502

Effect of fatty acid on secretin release and cholinergic dependence of pancreatic secretion in rats. Shiratori K, et al. **Pancreas** 1989;4(4):452-8

Effect of trypsin on the hormonal regulation of the fat-stimulated human exocrine pancreas. Olsen O, et al. **Scand J Gastroenterol** 1988 Sep;23(7):875-81

Effects of oleic acid and oleyl alcohol on cholecystokinin and secretin in plasma and pancreatobiliary secretion. Olsen O, et al. **Scand J Gastroenterol** 1989 Jun;24(5):529-32

PHYSIOLOGY

[Interaction between oleic acid and human antithrombin III] Hirahara K, et al. **Yakugaku Zasshi** 1988 Sep;108(9):860-6 (Eng. Abstr.) (Jpn)

THERAPEUTIC USE

Human thrombin plus 5 per cent ethanolamine oleate injected to sclerose oesophageal varices: a prospective randomized trial. Kitano S, et al. **Br J Surg** 1989 Jul;76(7):715-8

Ethanolamine oleate as a sclerosant for testicular hydroceles and epididymal cysts. Hellström P, et al. **Br J Urol** 1988 Nov;62(5):445-8

A prospective randomized study comparing the effects of large and small volumes of the sclerosant 5% ethanolamine oleate injected into esophageal varices. Iso Y, et al. **Endoscopy** 1988 Nov;20(6):285-8

Injection sclerotherapy for bleeding esophageal varices in cirrhotic patients with hepatocellular carcinoma. Ng WD, et al. **Gastrointest Endosc** 1989 Jan-Feb;35(1):69-70

A comparative study of 50% alcohol and ethanolamine oleate for oesophageal sclerotherapy. Vij JC, et al. **Indian J Gastroenterol** 1988 Oct;7(4):211-3

Bleeding stomal varices treated by sclerotherapy. Mosquera DA, et al. **J R Coll Surg Edinb** 1988 Dec;33(6):337

[Efficacy of elective endoscopic sclerotherapy of hemorrhage from esophageal varices. 2-year follow-up] Cabriada J, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 2):429-34 (Eng. Abstr.) (Spa)

TOXICITY

Synergistic inhibition of metabolic cooperation by oleic acid or 12-O-tetradecanoylphorbol-13-acetate and dichlorodiphenyltrichlorethane (DDT) in Chinese hamster V79 cells: implication of a role for protein kinase C in the regulation of gap junctional intercellular communication. Aylsworth CF, et al. **Cell Biol Toxicol** 1989 Jan;5(1):27-37

Free radicals appear to affect survival of hepatocytes at 4 degrees C. Lund P, et al. **Free Radic Res Commun** 1985; 1(1):69-75

Pulmonary blood flow distribution after lobar oleic acid injury: a PET study. Velazquez M, et al. **J Appl Physiol** 1988 Nov;65(5):2228-35

Oleic acid lung injury increases plasma prostaglandin levels. Hageman JR, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Mar; 35(3):157-64

OLFACTORY BULB

ANALYSIS

Neuropeptide Y-like immunoreactive neurons in the human olfactory bulb. Ohm TG, et al. **Brain Res** 1988 Jun 7; 451(1-2):295-300

Glutamate-like immunoreactivity revealed in rat olfactory bulb, hippocampus and cerebellum by monoclonal antibody and sensitive staining method. Liu CJ, et al. **Histochemistry** 1989;90(6):427–45

Origin of luteinizing hormone-releasing hormone neurons. Schwanzel-Fukuda M, et al. **Nature** 1989 Mar 9; 338(6211):161–4

ANATOMY & HISTOLOGY

Somatostatin-14-like immunoreactive neurons and fibres in the human olfactory bulb. Ohm TG, et al. **Anat Embryol (Berl)** 1988;179(2):165–71

Projections of the olfactory bulb and nervus terminalis in the silver lamprey. Northcutt RG, et al. **Brain Behav Evol** 1988;32(2):96–107

Topographical projection of the septal organ to the main olfactory bulb in rats: ontogenetic study. Astic L, et al. **Brain Res** 1988 Aug 1;470(2):297–303

Single neurones of the basal forebrain and laterodorsal tegmental nucleus project by collateral axons to the olfactory bulb and the mediodorsal nucleus in the rat. Cornwall J, et al. **Brain Res** 1989 Jul 3;491(1):194–8

Persistence of the pars externa system of the anterior olfactory nucleus in a microsmatic primate, Callithrix jacchus. Reyher CK. **Brain Res** 1988 Aug 2;457(1):169–75

Comparative study of the anatomy and laminar organization in the olfactory bulb of three orders of freshwater teleosts. Alonso JR, et al. **Gegenbaurs Morphol Jahrb** 1989; 135(2):241–54

Connections of the olfactory bulb and nucleus olfactorius anterior in the hedgehog (Erinaceus europaeus): fluorescent tracers and HRP study. De Carlos JA, et al. **J Comp Neurol** 1989 Jan 22;279(4):601–18

Chemoanatomical organization of the noradrenergic input from locus coeruleus to the olfactory bulb of the adult rat. McLean JH, et al. **J Comp Neurol** 1989 Jul 15; 285(3):339–49

Feline islands of Calleja complex: I. Cytoarchitectural organization and comparative anatomy. Talbot K, et al. **J Comp Neurol** 1988 Sep 22;275(4):553–79

Structure of the nucleus olfactorius anterior of the hedgehog (Erinaceus europaeus). Valverde F, et al. **J Comp Neurol** 1989 Jan 22;279(4):581–600

Electrophysiological connections of neurons in ventral pallidal regions of the olfactory tubercle with the main olfactory bulb and piriform cortex. Barragán E, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):214–9

Olfactory bulb size, odor discrimination and magnetic insensitivity in hummingbirds. Ioalé P, et al. **Physiol Behav** 1989 May;45(5):995–9

[Immunoreactive somatostatin in the peripheral olfactory system and nasal mucosa of the human] Müller W, et al. **Laryngol Rhinol Otol (Stuttg)** 1989 Jan;68(1):29–32 (Eng. Abstr.) **(Ger)**

CYTOLOGY

The effect of amitriptyline on growth of olfactory and cerebral neurons in vitro. Farbman AI, et al. **Brain Res** 1988 Aug 9;457(2):281–6

Terminal field of cholecystokinin-8-like immunoreactive projection neurons of the rat main olfactory bulb. Matsutani S, et al. **J Comp Neurol** 1989 Jul 1;285(1):73–82

"Necklace olfactory glomeruli" form unique components of the rat primary olfactory system. Shinoda K, et al. **J Comp Neurol** 1989 Jun 15;284(3):362–73

Feline islands of Calleja complex: II. Cholinergic and cholinesterasic features. Talbot K, et al. **J Comp Neurol** 1988 Sep 22;275(4):580–603

Three-dimensional scanning electron microscopic study of the normal hamster olfactory epithelium. Costanzo RM, et al. **J Neurocytol** 1989 Jun;18(3):381–91

Postmitotic, postmigrational expression of tyrosine hydroxylase in olfactory bulb dopaminergic neurons. McLean JH, et al. **J Neurosci** 1988 Oct;8(10):3658–69

Two anatomically specific classes of candidate cholinoceptive neurons in the rat olfactory bulb. Nickell WT, et al. **J Neurosci** 1988 Dec;8(12):4482–91

A Golgi study on the main olfactory bulb in the snake Elaphe quadrivirgata. Iwahori N, et al. **Neurosci Res** 1989 Jun; 6(5):411–25

Cholinergic and peptidergic projections from the medial septum and the nucleus of the diagonal band of Broca to dorsal hippocampus, cingulate cortex and olfactory bulb: a combined wheatgerm agglutinin-apohorseradish peroxidase-gold immunohistochemical study. Senut MC, et al. **Neuroscience** 1989;30(2):385–403

Inward rectifier produced by Xenopus oocytes injected with mRNA extracted from carp olfactory epithelium. Yoshii K, et al. **Synapse** 1989;3(3):234–8

DRUG EFFECTS

Neuromorphological changes in mouse olfactory bulb after neonatal exposure to phenobarbital. Rosselli-Austin L, et al. **Neurotoxicol Teratol** 1989 May-Jun;11(3):227–30

Two different release mechanisms of 3H-GABA induced by glutamate in the rat olfactory bulb. Jaffe EH, et al. **P R Health Sci J** 1988 Aug;7(2):99–101

EMBRYOLOGY

Development of the nerve fiber layer in the olfactory bulb of mouse embryos. Doucette R. **J Comp Neurol** 1989 Jul 22;285(4):514–27

ENZYMOLOGY

Cholinergic innervation of the main and the accessory olfactory bulbs of the rat as revealed by a monoclonal antibody against choline acetyltransferase. Ojima H, et al. **Anat Embryol (Berl)** 1988;178(6):481–8

NADPH diaphorase staining within the developing olfactory bulbs of normal and unilaterally odor-deprived rats. Croul-Ottman CE, et al. **Brain Res** 1988 Sep 20; 460(2):323–8

Nonneuronal localization for steroid converting enzyme: 3 alpha-hydroxysteroid oxidoreductase in olfactory tubercle of rat brain. Krieger NR, et al. **J Neurochem** 1989 Jun; 52(6):1866–70

GROWTH & DEVELOPMENT

Early postnatal differentiation of granule cell dendrites in the olfactory bulbs of normal and unilaterally odor-deprived rats. Frazier-Cierpial LL, et al. **Brain Res Dev Brain Res** 1989 May 1;47(1):129–36

Prepubescent hormonal control of the development of accessory olfactory bulbs in the male rat. Roos J, et al. **Brain Res Dev Brain Res** 1989 Jun 1;47(2):309–12

Postnatal neurogenesis in the olfactory bulbs of a lizard. A tritiated thymidine autoradiographic study. Garcia-Verdugo JM, et al. **Neurosci Lett** 1989 Apr 10; 98(3):247–52

IMMUNOLOGY

Antigenic abnormalities in fiber tract astrocytes of myelin-deficient rats: an immunocytochemical study in the olfactory cortex. Friedman B, et al. **Dev Neurosci** 1989; 11(2):99–111

Monoclonal antibody immunohistochemistry of adult rabbit olfactory structures. Onoda N, et al. **Neuroscience** 1988 Sep;26(3):993–1002

[GABA immunoreactivity in the main olfactory bulb of the frog Rana temporaria] Kratskin IL, et al. **Zh Evol Biokhim Fiziol** 1989 Jan-Feb;25(1):115–9 (Eng. Abstr.) **(Rus)**

METABOLISM

Autoradiographic localization of high affinity uptake sites for 3H-D-aspartate in the rat olfactory bulb. Halász N. **Acta Biol Hung** 1987;38(3–4):383–92

NCAM and Thy-1 in special sense organs of the developing mouse. Terkelsen OB, et al. **Anat Embryol (Berl)** 1989; 179(4):311–8

Distribution of vasoactive intestinal polypeptide-like immunoreactivity in the olfactory bulb of the rainbow trout (Salmo gairdneri). Alonso JR, et al. **Brain Res** 1989 Jun 26;490(2):385–9

Cholecystokinin attenuates basal and drug-induced increases of limbic and striatal dopamine release. Altar CA, et al. **Brain Res** 1988 Sep 13;460(1):76–82

Autoradiographic characterization of high-affinity adenosine A2 receptors in the rat brain. Jarvis MF, et al. **Brain Res** 1989 Apr 10;484(1–2):111–8

Experimental studies on the olfactory marker protein. V. Olfactory marker protein in the olfactory neurons transplanted within the olfactory bulb. Monti Graziadei AG, et al. **Brain Res** 1989 Apr 10;484(1–2):157–67

A comparative study of 2-deoxyglucose patterns of glomerular activation in the olfactory bulbs of C57 BL/6J and AKR/J mice. Sicard G, et al. **Brain Res** 1989 Mar 6;481(2):325–34

NGF receptor increase in the olfactory bulb of the rat after early odor deprivation. Gómez-Pinilla F, et al. **Brain Res Dev Brain Res** 1989 Aug 1;48(2):161–5

Spatiotemporal cell expression of luteinizing hormone-releasing hormone in the prenatal mouse: evidence for an embryonic origin in the olfactory placode. Wray S, et al. **Brain Res Dev Brain Res** 1989 Apr 1; 46(2):309–18

Biochemical studies of soluble atrial natriuretic peptide (ANP) receptors from rat olfactory bulb and vascular smooth muscle cells. Glembotski CC, et al. **Cell Mol Neurobiol** 1989 Mar;9(1):57–73

Expression of L1 and N-CAM cell adhesion molecules during development of the mouse olfactory system. Miragall F, et al. **Dev Biol** 1989 Oct;135(2):272–86

Pharmacology of electrically evoked dopamine release studied in the rat olfactory tubercle by in vivo electrochemistry. Suaud-Chagny MF, et al. **Eur J Pharmacol** 1989 May 19;164(2):273–83

Putative glutamatergic and/or aspartatergic cells in the main and accessory olfactory bulbs of the rat. Fuller TA, et al. **J Comp Neurol** 1988 Oct 8;276(2):209–18

Distribution of neuropeptidelike immunoreactivities in the guinea pig olfactory bulb. Matsutani S, et al. **J Comp Neurol** 1989 Feb 22;280(4):577–86

Distribution of radioactive leucine following uptake by olfactory sensory neurons in normal and heteromorphic crayfish antennules. Mellon D Jr, et al. **J Comp Neurol** 1989 Feb 22;280(4):645–62

Tyrosine phosphorylation in the postnatal rat brain: a developmental, immunohistochemical study. Tillotson ML, et al. **J Comp Neurol** 1989 Apr 1;282(1):133–41

Release of gamma-[3H]aminobutyric acid from rat olfactory bulb and substantia nigra: differential modulation by glutamic acid. Jaffé EH, et al. **J Neurochem** 1989 Jun; 52(6):1766–74

Interleukin-1 interaction with neuroregulatory systems: selective enhancement by recombinant human and mouse interleukin-1 of in vitro opioid peptide receptor binding in rat brain. Wiedermann CJ. **J Neurosci Res** 1989 Feb; 22(2):172–80

Receptive female rats stimulate norepinephrine release from olfactory bulbs of freely behaving male rats. Dluzen DE, et al. **Neuroendocrinology** 1989 Jan;49(1):28–32

Correlation between changes in LH-RH content in the synaptosomal fraction of the olfactory bulb and some hypothalamic zones and level of sexual activity in male rats. El'tseva TV, et al. **Neurosci Behav Physiol** 1989 May-Jun;19(3):212–6

Vasoactive intestinal polypeptide-immunoreactive neurons in the main olfactory bulb of the hedgehog (Erinaceus europaeus). López-Mascaraque L, et al. **Neurosci Lett** 1989 Mar 13;98(1):19–24

Ulex europeus agglutinin I binds exclusively to primary olfactory neurons in the rat nervous system. Barber PC. **Neuroscience** 1989;30(1):1–9

Serotonergic projections to the spinal cord but not those to the olfactory bulb also contain substance P. A combined immunocytochemical and autoradiographic study following retrograde axonal transport of [3H]serotonin labeled products. Magoul R, et al. **Neuroscience** 1988 Sep; 26(3):959–69

Monoclonal antibody immunohistochemistry of rabbit olfactory receptor neurons during development. Onoda N. **Neuroscience** 1988 Sep;26(3):1003–12

Distribution of dopamine D1 receptors in rat cortical areas, neostriatum, olfactory bulb and hippocampus in relation to endogenous dopamine contents. Diop L, et al. **Synapse** 1988;2(4):395–405

[Cholecystokinin-8-like immunoreactive structures in the olfactory bulb of the rat] Pfister C, et al. **J Hirnforsch** 1989; 30(3):257–64 (Eng. Abstr.) **(Ger)**

[Dependence of changes in the luliberin level in the synaptosomal fraction of the olfactory bulbs and various areas of the hypothalamus on the level of sexual activity in male rats] El'tseva TV, et al. **Probl Endokrinol (Mosk)** 1988 Sep-Oct;34(5):48–51 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Olfactory bulb involvement in Pick's disease. Yoshimura N. **Acta Neuropathol (Berl)** 1988;77(2):202–5

MR imaging of olfactory bulbs and tracts. Suzuki M, et al. **AJNR** 1989 Sep-Oct;10(5):955–7

Unilateral naris closure in adult mice: atrophy of the deprived-side olfactory bulbs. Maruniak JA, et al. **Brain Res Dev Brain Res** 1989 May 1;47(1):27–33

Scanning electron microscopic study of degeneration and regeneration in the olfactory epithelium after axotomy. Morrison EE, et al. **J Neurocytol** 1989 Jun;18(3):393–405

Olfactory hamartomas in tuberous sclerosis. de León GA, et al. **J Neurol Sci** 1988 Nov;87(2–3):187–94

PHYSIOLOGY

Changes in [3H]-imipramine binding sites in relation to muricide following olfactory bulbectomy and the effect of nomifensine in brain of rats. Al-Khatib IM, et al. **Arch Int Pharmacodyn Ther** 1988 Nov-Dec;296:282–92

An investigation of some temporal aspects of olfactory coding with the model of multi-site electrical stimulation of the olfactory bulb in the rat. Monod B, et al. **Behav Brain Res** 1989 May 1;33(1):51–63

Changes in electrical activity of rabbit olfactory bulb and cortex to conditioned odor stimulation. Bressler SL. **Behav Neurosci** 1988 Oct;102(5):740–7

Spatial EEG correlates of nonassociative and associative olfactory learning in rabbits. Grajski KA, et al. **Behav Neurosci** 1989 Aug;103(4):790–804

Alcohol aversion generalization in rats: specific disruption of taste and odor cues with gustatory neocortex or olfactory bulb ablations. Kiefer SW, et al. **Behav Neurosci** 1988 Oct;102(5):733–9

Role of the central nucleus of the amygdala in olfactory heart rate conditioning. Sananes CB, et al. **Behav Neurosci** 1989 Jun;103(3):519–25

Influences of the paraventricular and suprachiasmatic nuclei and olfactory bulbs on melatonin responses in the golden hamster. Bittman EL, et al. **Biol Reprod** 1989 Jan; 40(1):118–26

Ultrastructural alterations of the thyroid follicular cells in domestic fowls following neonatal olfactory bulbectomy. Yamauchi K, et al. **Br Poult Sci** 1989 Jun;30(2):393–401

Modulations of EEG activity in the entorhinal cortex and forebrain olfactory areas during odour sampling. Boeijinga PH, et al. **Brain Res** 1989 Jan 30;478(2):257–68

Influence of GABA, baclofen and bicuculline on the extracellular K+ activity in the olfactory bulb of the developing rat. Math F, et al. **Brain Res** 1988 Oct 4; 461(2):384–7

Bilateral transection of the lateral olfactory tract but not removal of the vomeronasal organs inhibits short-photoperiod-induced testicular regression in golden hamsters. Pieper DR, et al. **Brain Res** 1989 Apr 24;

485(2):382–90
Large mechanical changes in the bullfrog olfactory bulb evoked by afferent fiber stimulation. Tasaki I, et al. **Brain Res** 1988 Dec 13;475(1):173–6
Oestrogenic influences on the electrical activity of the olfactory pathway. Cartas-Heredia L, et al. **Brain Res Bull** 1978 Nov-Dec;3(6):623–30
The effects of cryogenic blockade of the centrifugal, bulbopetal pathways on the dynamic and static response characteristics of goldfish olfactory bulb mitral cells. Fischer T, et al. **Exp Brain Res** 1989;75(2):390–400
Field potential response changes in the rabbit olfactory bulb accompany behavioral habituation during the repeated presentation of unreinforced odors. Gray CM, et al. **Exp Brain Res** 1988;73(1):189–97
The involvement of excitatory amino acid receptors within the prepiriform cortex in pilocarpine-induced limbic seizures in rats. Millan MH, et al. **Exp Brain Res** 1988; 72(3):517–22
Seizures evoked from area tempestas are subject to control by GABA and glutamate receptors in substantia nigra. Maggio R, et al. **Exp Neurol** 1989 Aug;105(2):184–8
Ultrastructure of synaptic remodeling in piriform cortex of adult rats after neonatal olfactory bulb removal: an immunocytochemical study. Westenbroek RE, et al. **J Comp Neurol** 1988 Aug 15;274(3):334–46
The influence of early odour experience on the neural response of the olfactory bulb in laboratory mice. Schmidt U, et al. **J Comp Physiol [A]** 1988 Oct;163(6):771–6
Evidence that olfactory bulbectomy does not influence testicular regression in golden hamsters on short photoperiod by altering pineal melatonin production. Pieper DR, et al. **J Comp Physiol [B]** 1988;158(3):301–5
Amplifying role of convergence in olfactory system a comparative study of receptor cell and second-order neuron sensitivities. Duchamp-Viret P, et al. **J Neurophysiol** 1989 May;61(5):1085–94
Patterns of intracellular potentials in salamander mitral/tufted cells in response to odor stimulation. Hamilton KA, et al. **J Neurophysiol** 1989 Sep;62(3):609–25
Discrimination among odorants by single neurons of the rat olfactory bulb. Wellis DP, et al. **J Neurophysiol** 1989 Jun; 61(6):1161–77
Neurophysiology of magnocellular forebrain inputs to the olfactory bulb in the rat: frequency potentiation of field potentials and inhibition of output neurons. Nickell WT, et al. **J Neurosci** 1988 Dec;8(12):4492–502
Expression of dopaminergic phenotypes in the mouse olfactory bulb induced by the calcitonin gene-related peptide. Denis-Donini S. **Nature** 1989 Jun 29; 339(6227):701–3
Developmental neurobiology. Neuropeptides find a role? [news] Mudge AW. **Nature** 1989 Jun 29;339(6227):663
Evidence for an absence of K+ spread in the glomerular layer of the rat olfactory bulb. Khayari A, et al. **Neurosci Lett** 1988 Oct 31;93(1):56–60
Excitatory influence of the accessory olfactory bulb on tuberoinfundibular arcuate neurons of female mice and its modulation by oestrogen. Li CS, et al. **Neuroscience** 1989; 29(1):201–8
Monoclonal antibody immunohistochemistry of degenerative and renewal patterns in rabbit olfactory receptor neurons following unilateral olfactory bulbectomy. Onoda N. **Neuroscience** 1988 Sep;26(3):1013–22
Importance of noradrenergic mechanisms in the olfactory bulbs for the maternal behaviour of mice. Dickinson C, et al. **Physiol Behav** 1988;43(3):313–6
Olfactory and visceral projections to the nucleus of the solitary tract. Garcia-Diaz DE, et al. **Physiol Behav** 1988; 44(4-5):619–24
Behavioral and neural correlates of postnatal olfactory conditioning: I. Effect of respiration on conditioned neural responses. Sullivan RM, et al. **Physiol Behav** 1988; 44(1):85–90
Memory deficit in passive-avoidance learning in bulbectomized Long-Evans hooded rats. Thorne BM, et al. **Physiol Behav** 1988;44(3):339–45
Functional recovery after olfactory bulbectomy in rats: effect of embryonal brain grafts. Amemori T, et al. **Physiol Bohemoslov** 1988;37(5):385–94
The chronic effects of desipramine and sertraline on platelet and synaptosomal 5HT uptake in olfactory bulbectomised rats. Butler J, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(5):585–94
Exocrine pancreatic secretion: effect of subarachnoidal application of cholecystokinin octapeptide in rats. Ormai S, et al. **Regul Pept** 1988 Oct;23(1):51–5
Are we really studying olfactory transduction? [letter] Shirley SG, et al. **Trends Neurosci** 1988 Dec;11(12):532–3
[Synaptic ribbons in pinealocytes of olfactory bulbectomized rats under experimental conditions] Cos S, et al. **J Hirnforsch** 1989;30(1):91–8 (Eng. Abstr.) **(Ger)**
[Rhythmic activity of the olfactory bulb of the carp under nembutal anesthesia] Kaplan AIa. **Biol Nauki** 1988; (10):50–4 **(Rus)**
[Slow potentials of the olfactory bulb in the carp] Potapov AA. **Biol Nauki** 1988;(8):45–53 (Eng. Abstr.) **(Rus)**
[Neuromediators of centrifugal innervation of the main olfactory bulb] Kratskin IL. **Zh Evol Biokhim Fiziol** 1989 Mar-Apr;25(2):262–77 (135 ref.) **(Rus)**
[Comparison of electrophysiologic characteristics of the accessory and main olfactory systems] Voronkov GS, et al. **Zh Evol Biokhim Fiziol** 1989 May-Jun;25(3):390–7 (29 ref.) **(Rus)**

PHYSIOPATHOLOGY

Tremorogenesis by LON-954 [N-carbamoyl-2-(2,6-dichlorophenyl) acetamidine hydrochloride]: evidence for the involvement of 5-hydroxytryptamine. Mohanakumar KP, et al. **Brain Res Bull** 1989 Feb;22(2):191–5
A non-stereotaxic method for olfactory bulb kindling reveals distinct kindling rates among inbred mouse strains. Green RC, et al. **J Neurosci Methods** 1989 Mar;27(2):109–13
Prenatal ethanol exposure impairs lesion-induced plasticity in a dopaminergic synapse after maturity. Gottesfeld Z, et al. **Neuroscience** 1989;29(3):715–23

SURGERY

Paroxysmal unilateral dysosmia: a cured patient. Kaufman MD, et al. **Ann Neurol** 1988 Sep;24(3):450–1
A surgical approach to the canine olfactory bulb for meningioma removal. Kostolich M, et al. **Vet Surg** 1987 Jul-Aug;16(4):273–7

TRANSPLANTATION

Brain transplants enhance rather than reduce the impairment of spatial memory and olfaction in bulbectomized rats. Amemori T, et al. **Behav Neurosci** 1989 Feb;103(1):61–70
Functional recovery from neuroendocrine deficits: studies with the hypogonadal mutant mouse. Gibson MJ, et al. **Prog Brain Res** 1988;78:117–24

ULTRASTRUCTURE

Myelinated neurons in the central nervous system of the hedgehog. Pospíšilová E, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;120:97–115
Post-traumatic anosmia. Ultrastructural correlates. Jafek BW, et al. **Arch Neurol** 1989 Mar;46(3):300–4
Plasticity of intra-amygdaloid connections following the denervation of fibers from accessory olfactory bulb to medial amygdaloid nucleus in adult rat: immunohistochemical study of anterogradely transported lectin (Phaseolus vulgaris leucoagglutinin). Ichikawa M. **Brain Res** 1988 Jun 7;451(1-2):248–54
Electron microscopic immunocytochemical localization of nerve growth factor in developing mouse olfactory neurons. Williams R, et al. **Brain Res** 1988 Oct 25; 463(1):21–7
Ruffed cells in the olfactory bulb of freshwater teleosts. I. Golgi impregnation. Alonso JR, et al. **J Anat** 1987 Dec; 155:101–7
High voltage electron microscopic studies on mitral, tufted, and granule cells in the mouse olfactory bulb. Nagata H. **J Electron Microsc (Tokyo)** 1989;38(2):111–25
Atypical olfactory glomeruli contain original olfactory axon terminals: an ultrastructural horseradish peroxidase study in the rat. Zheng LM, et al. **Neuroscience** 1988 Aug; 26(2):367–78
[High-voltage electron microscopic observations on mouse olfactory bulb neurons] Nagata H. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Jan;92(1):7–20 (Eng. Abstr.) **(Jpn)**

OLFACTORY MUCOSA

ANALYSIS

Expression of intermediate filaments and desmoplakin in vertebrate olfactory mucosa. Ophir D, et al. **Anat Rec** 1988 Jul;221(3):754–60

ANATOMY & HISTOLOGY

Effects of unilateral naris closure on the olfactory epithelia of adult mice. Maruniak JA, et al. **Brain Res** 1989 Jun 26; 490(2):212–8
[Macroscopic study of the peripheral organ of olfaction in the rat] Gil-Carcedo LM, et al. **An Otorrinolaringol Ibero Am** 1988;15(4):387–95 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Olfactory function in chemical workers exposed to acrylate and methacrylate vapors. Schwartz BS, et al. **Am J Public Health** 1989 May;79(5):613–8
Early cell proliferative and cytotoxic effects of phenacetin on rat nasal mucosa. Bogdanffy MS, et al. **Toxicol Appl Pharmacol** 1989 Mar 15;98(1):100–12

ENZYMOLOGY

Olfactory cytochrome P-450. Studies with suicide substrates of the haemoprotein. Reed CJ, et al. **Biochem J** 1988 Jul 15;253(2):569–76
The detergent Solulan C-24 reveals properties of the olfactory adenylate cyclase system. Robinson CJ, et al. **Biochem J** 1989 Jun 15;260(3):683–7
Functional reconstitution of the olfactory membrane: incorporation of the olfactory adenylate cyclase in liposomes. Anholt RR. **Biochemistry** 1988 Aug 23; 27(17):6464–8
The cyanide-metabolizing enzyme rhodanese in rat nasal respiratory and olfactory mucosa. Dahl AR. **Toxicol Lett** 1989 Feb;45(2-3):199–205

GROWTH & DEVELOPMENT

Selective effects of thyroid hormonal deprivation on growth and development of olfactory receptor sheet during the early postnatal period: a morphometric and cell count study in the rat. Paternostro M, et al. **Int J Dev Neurosci** 1989; 7(3):243–55

IMMUNOLOGY

Rat olfactory cells and a central nervous system neuronal subpopulation share a cell surface antigen. Akeson RA, et al. **Brain Res** 1989 May 29;488(1-2):202–12
Developmental expression of reactivity to monoclonal antibodies generated against olfactory epithelia. Carr VM, et al. **J Neurosci** 1989 Apr;9(4):1179–98
Monoclonal antibody immunohistochemistry of adult rabbit olfactory structures. Onoda N, et al. **Neuroscience** 1988 Sep;26(3):993–1002

INNERVATION

Sensory evidence for olfactory receptors with opposite chiral selectivity. Polak EH, et al. **Behav Brain Res** 1989 Jan 1; 31(3):199–206
Action potentials initiated by single channels opening in a small neuron (rat olfactory receptor). Lynch JW, et al. **Biophys J** 1989 Apr;55(4):755–68
Electron microscopic immunocytochemical localization of nerve growth factor in developing mouse olfactory neurons. Williams R, et al. **Brain Res** 1988 Oct 25; 463(1):21–7
Ultrastructural evidence for peptidergic innervation of the apical region of frog olfactory epithelium. Zielinski BS, et al. **Brain Res** 1989 Jul 17;492(1-2):361–5
A proposed relationship between increases in the number of olfactory receptor neurons, convergence ratio and sensitivity in the developing rat. Meisami E. **Brain Res Dev Brain Res** 1989 Mar 1;46(1):9–19
Tachykinins and calcitonin gene-related peptide: co-existence in sensory nerves of the nasal mucosa and effects on blood flow. Stjärne P, et al. **Cell Tissue Res** 1989 Jun;256(3):439–46
"Necklace olfactory glomeruli" form unique components of the rat primary olfactory system. Shinoda K, et al. **J Comp Neurol** 1989 Jun 15;284(3):362–73
Monoclonal antibody immunohistochemistry of degenerative and renewal patterns in rabbit olfactory receptor neurons following unilateral olfactory bulbectomy. Onoda N. **Neuroscience** 1988 Sep;26(3):1013–22
Cell cultures of neuroblasts from rat olfactory epithelium that show odorant responses. Coon HG, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1703–7
Golf: an olfactory neuron specific-G protein involved in odorant signal transduction. Jones DT, et al. **Science** 1989 May 19;244(4906):790–5
Carrier-bound odorant delivery to olfactory receptors [news] Schofield PR. **Trends Neurosci** 1988 Nov;11(11):471–2 (16 ref.)
[Immunoreactive somatostatin in the peripheral olfactory system and nasal mucosa of the human] Müller W, et al. **Laryngol Rhinol Otol (Stuttg)** 1989 Jan;68(1):29–32 (Eng. Abstr.) **(Ger)**

METABOLISM

NCAM and Thy-1 in special sense organs of the developing mouse. Terkelsen OB, et al. **Anat Embryol (Berl)** 1989; 179(4):311–8
Immunohistochemical analysis of the olfactory mucosa by use of antibodies to brain proteins and cytokeratin. Yamagishi M, et al. **Ann Otol Rhinol Laryngol** 1989 May; 98(5 Pt 1):384–8
Electron-microscopic demonstration of olfactory-marker protein with protein G-gold in freeze-substituted, Lowicryl K11M-embedded rat olfactory-receptor cells. Menco BP. **Cell Tissue Res** 1989;256(2):275–81
Ligand binding specificity of a neutral L-amino acid olfactory receptor. Bruch RC, et al. **Comp Biochem Physiol [B]** 1988;91(3):535–40
Expression of L1 and N-CAM cell adhesion molecules during development of the mouse olfactory system. Miragall F, et al. **Dev Biol** 1989 Oct;135(2):272–86
Ion channels from chemosensory olfactory neurons. Labarca P, et al. **J Bioenerg Biomembr** 1988 Oct;20(5):551–69 (36 ref.)
Induction of odorant-evoked current transients in Xenopus oocytes injected with mRNA isolated from the olfactory mucosa of Rana pipiens. Getchell TV. **Neurosci Lett** 1988 Aug 31;91(2):217–21
Ulex europeus agglutinin I binds exclusively to primary olfactory neurons in the rat nervous system. Barber PC. **Neuroscience** 1989;30(1):1–9
Monoclonal antibody immunohistochemistry of rabbit olfactory receptor neurons during development. Onoda N. **Neuroscience** 1988 Sep;26(3):1003–12
Binding of cocaine in the liver, olfactory mucosa, eye, and fur of pigmented mice. Brittebo EB. **Toxicol Appl Pharmacol** 1988 Nov;96(2):315–23

PATHOLOGY

Examination and classification of human olfactory mucosa in patients with clinical olfactory disturbances. Yamagishi M, et al. **Arch Otorhinolaryngol** 1988;245(5):316–20

Olfactory neuroblastoma: report of a case and review of the literature. Anavi Y, et al. **J Oral Maxillofac Surg** 1989 May; 47(5):514–7 (33 ref.)

PHYSIOLOGY

Calcium and olfactory transduction. Winegar BD, et al. **Comp Biochem Physiol [A]** 1988;91(2):309–15

Olfactory function in zinc–deficient adult mice. Mackay–Sim A, et al. **Exp Brain Res** 1989;76(1):207–12

Olfactory–specific cytochrome P–450. cDNA cloning of a novel neuroepithelial enzyme possibly involved in chemoreception. Nef P, et al. **J Biol Chem** 1989 Apr 25; 264(12):6780–5

[Role of divalent cations in the genesis of the frog electro–olfactogram] Leveteau J, et al. **C R Acad Sci [III]** 1988;307(6):369–74 (Eng. Abstr.) **(Fre)**

[Spatial distribution of electrical responses in the olfactory epithelium of mice] Troitskaia VT. **Neirofiziologiia** 1988; 20(5):597–602 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Olfactory sensitivity, nasal resistance, and autonomic function in patients with multiple chemical sensitivities. Doty RL, et al. **Arch Otolaryngol Head Neck Surg** 1988 Dec; 114(12):1422–7

RADIATION EFFECTS

Microwave effect on camphor binding to rat olfactory epithelium. Philippova TM, et al. **Bioelectromagnetics** 1988; 9(4):347–54

SECRETION

Peptidergic regulation of secretory activity in amphibian olfactory mucosa: immunohistochemistry, neural stimulation, and pharmacology. Getchell ML, et al. **Cell Tissue Res** 1989;256(2):381–9

TRANSPLANTATION

Experimental studies on the olfactory marker protein. V. Olfactory marker protein in the olfactory neurons transplanted within the olfactory bulb. Monti Graziadei AG, et al. **Brain Res** 1989 Apr 10;484(1–2):157–67

ULTRASTRUCTURE

Ultrastructural characteristics of sustentacular cells in control and odorant–treated olfactory mucosae of the salamander. Zielinski BS, et al. **Anat Rec** 1988 Jul;221(3):769–79

Chemically induced esthesioneuroepithelioma: ultrastructural findings. Vollrath M, et al. **Ann Otol Rhinol Laryngol** 1989 Apr;98(4 Pt 1):256–66

Gap junctions in the human olfactory mucosa as demonstrated by freeze–fracture electron microscopy. Köling A, et al. **Cell Biol Int Rep** 1988 Jul;12(7):563

Preliminary observations on rapidly–frozen, freeze–fractured and deep–etched rat olfactory cilia rotary–replicated with tantalum/tungsten. Menco BP, et al. **J Electron Microsc Tech** 1988 Apr;8(4):441–2

Olfactory and nasal respiratory epithelia, and foliate taste buds visualized with rapid–freeze freeze–substitution and Lowicryl K11M embedding. Ultrastructural and initial cytochemical studies. Menco BP. **Scanning Microsc** 1989 Mar;3(1):257–72

OLFACTORY NERVE

[Neuroblastoma of the olfactory nerve. Radiotherapy experiences in 6 patients] Herzog J, et al. **Strahlenther Onkol** 1988 Sep;164(9):515–26 (Eng. Abstr.) **(Ger)**

ANATOMY & HISTOLOGY

The nervus terminalis in amphibians: anatomy, chemistry and relationship with the hypothalamic gonadotropin–releasing hormone system. Muske LE, et al. **Brain Behav Evol** 1988; 32(3):141–50

Projections of the olfactory bulb and nervus terminalis in the silver lamprey. Northcutt RG, et al. **Brain Behav Evol** 1988;32(2):96–107

Persistence of the nervus terminalis in adult bats: a morphological and phylogenetical approach. Oelschläger HA. **Brain Behav Evol** 1988;32(6):330–9

[Immunoreactive somatostatin in the peripheral olfactory system and nasal mucosa of the human] Müller W, et al. **Laryngol Rhinol Otol (Stuttg)** 1989 Jan;68(1):29–32 (Eng. Abstr.) **(Ger)**

DRUG EFFECTS

[Effect of hydrocortisone on synaptic transmission in surviving slices of the olfactory cortex from the rat brain] Mokrushin AA, et al. **Probl Endokrinol (Mosk)** 1988 Nov–Dec;34(6):52–6 (Eng. Abstr.) **(Rus)**

INJURIES

The immunopathology of olfactory nerve injury and hemorrhage in gerbils. Nakashima T, et al. **Am J Otolaryngol** 1989 Jan–Feb;10(1):32–7

METABOLISM

Expression of L1 and N–CAM cell adhesion molecules during development of the mouse olfactory system. Miragall F, et al. **Dev Biol** 1989 Oct;135(2):272–86

[Infiltration of India ink from subarachnoid space to nasal mucosa along olfactory nerves in rabbits] Yamazumi H. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Apr;92(4):608–16 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

Spread of a neurotropic murine coronavirus into the CNS via the trigeminal and olfactory nerves. Perlman S, et al. **Virology** 1989 Jun;170(2):556–60

PATHOLOGY

MR imaging of olfactory bulbs and tracts. Suzuki M, et al. **AJNR** 1989 Sep–Oct;10(5):955–7

PHYSIOLOGY

Rapid mechanical and thermal changes in the garfish olfactory nerve associated with a propagated impulse. Tasaki I, et al. **Biophys J** 1989 Jun;55(6):1033–40

Electrical stimulation of primary olfactory nerve induces two types of variations in the extracellular potassium activity within the glomerulus of the rat olfactory bulb in vivo. Khayari A, et al. **Brain Res** 1988 Aug 2;457(1):188–91

Large mechanical changes in the bullfrog olfactory bulb evoked by afferent fiber stimulation. Tasaki I, et al. **Brain Res** 1988 Dec 13;475(1):173–6

Odor stimuli modulate retinal excitability in fish. Weiss O, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):209–13

ULTRASTRUCTURE

Post–traumatic anosmia. Ultrastructural correlates. Jafek BW, et al. **Arch Neurol** 1989 Mar;46(3):300–4

Atypical olfactory glomeruli contain original olfactory axon terminals: an ultrastructural horseradish peroxidase study in the rat. Zheng LM, et al. **Neuroscience** 1988 Aug; 26(2):367–78

OLFACTORY PATHWAYS see under **CENTRAL NERVOUS SYSTEM**

2',5'-OLIGOADENYLATE POLYMERASE see **2',5'-OLIGOADENYLATE SYNTHETASE**

2',5'-OLIGOADENYLATE SYNTHETASE

BIOSYNTHESIS

2'-5' oligo–A–synthetase activity in bovine peripheral blood leukocytes and alveolar macrophages exposed to recombinant interferons and tumor necrosis factor–alpha. Ohmann HB, et al. **Can J Vet Res** 1989 Apr;53(2):161–6

Alpha–interferon receptors in malignant B–cells from patients with chronic lymphocytic leukemia: relation to induction of 2'-5'-oligoadenylate synthetase and blast transformation. Ostlund L, et al. **Cancer Res** 1989 Jun 15;49(12):3425–30

Structure/function studies on recombinant human gamma interferon. Fish EN, et al. **Drug Des Deliv** 1988 Feb; 2(3):191–206

Induction of (2'-5')oligoadenylate synthetase in serum–starved HeLa S3 cells by growth factors and its role in growth regulation. Iwata A, et al. **J Biochem (Tokyo)** 1988 Aug;104(2):247–50

A functional protein kinase C is required for induction of 2–5A synthetase by recombinant interferon–alpha A in Daudi cells. Faltynek CR, et al. **J Biol Chem** 1989 Aug 25;264(24):14305–11

In vivo and in vitro induction of (2'-5') oligoadenylate synthetase by human interferons in leukocytes from healthy donors and patients with renal cancer and hairy cell leukemia. Ferbus D, et al. **J Biol Regul Homeost Agents** 1987 Jul–Sep;1(3):147–53

Investigations on the interferon–induced 2'-5' oligoadenylate system using analytical capillary isotachophoresis. Bruchelt G, et al. **J Chromatogr** 1989 May 24;470(1):185–90

Antiviral activity of tumour necrosis factor. Synergism with interferons and induction of oligo–2',5'–adenylate synthetase. Mestan J, et al. **J Gen Virol** 1988 Dec;69 (Pt 12):3113–20

Production of two human 2',5'–oligoadenylate synthetase enzymes in Escherichia coli. Mory Y, et al. **J Interferon Res** 1989 Jun;9(3):295–304

Induction of 2',5' oligo(A) synthetase in Vero cells. Lambropoulos AF, et al. **Microbiologica** 1989 Apr; 12(2):105–11

Induction of 2'-5' oligoadenylate synthetase by 17 beta–oestradiol in a human breast cancer cell line. Silvestro L, et al. **Pharmacol Res** 1989 Jan–Feb;21(1):99–100

Human lung cancer nodules in organotypic culture: no evidence of correlation between the antiproliferative effects of interferons and the induction of 2',5'–oligoadenylate synthetase. Martyré MC, et al. **Tumour Biol** 1988;9(5):263–9

[Serum interferon level and (2'-5')–oligo(A) synthetase activity in pityriasis rosea, basalioma, melanoma and molluscum contagiosum] Lang MH, et al. **Z Hautkr** 1988 Dec 15;63(12):1028–36 (Eng. Abstr.) **(Ger)**

BLOOD

Immunological recovery and dose evaluation in IFN–alpha treatment of hairy cell leukemia: analysis of leukocyte differentiation antigens, NK and 2',5'–oligoadenylate synthetase activity. Nielsen B, et al. **Eur J Haematol** 1989 Jan;42(1):50–9

Serum 2'-5'oligoadenylate synthetase as a monitoring marker of anti–viral effect during interferon therapy for chronic type B hepatitis. Karino Y, et al. **Gastroenterol Jpn** 1989 Apr;24(2):164–9

Changes in 2',5'–oligoadenylate synthetase activity in peripheral blood mononuclear cells from patients with fulminant hepatitis. Nishino S, et al. **Gastroenterol Jpn** 1989 Jun;24(3):337

Elevated levels of 2',5'–oligoadenylate synthetase activity in peripheral blood mononuclear cells and serum during acute exacerbation of chronic hepatitis B. Shindo M, et al. **Hepatology** 1989 May;9(5):715–9

2',5' oligoadenylate synthetase activity in bovine peripheral blood mononuclear cells following bovine herpesvirus type–1–induced respiratory disease: a prognostic indicator? Bielefeldt Ohmann H, et al. **J Interferon Res** 1989 Apr; 9(2):159–66

A comparison of interferon levels with leukocyte (2'-5') oligoadenylate synthetase activity as markers of viral encephalopathies. Kennedy CR, et al. **J Interferon Res** 1988 Oct;8(5):609–15

[Activity of 2, 5–oligoadenylate synthetase in non–A, non–B hepatitis] Karino Y, et al. **Nippon Rinsho** 1988 Dec; 46(12):2715–9 **(Jpn)**

[Non–specific immune response in acute viral hepatitis: studies from serum 2,5–oligoadenylate synthetase activity and serum and histochemical changes in beta 2 microglobulin] Suzuki H. **Nippon Shokakibyo Gakkai Zasshi** 1988 Aug;85(8):1508–17 (Eng. Abstr.) **(Jpn)**

GENETICS

Interferon and growth factor modulation of nuclear factors binding to 5' upstream elements of the 2–5A synthetase gene. Williams BR, et al. **J Cell Biochem** 1988 Dec; 38(4):261–7

Immune interferon inhibits proliferation and induces 2'-5'-oligoadenylate synthetase gene expression in human vascular smooth muscle cells. Warner SJ, et al. **J Clin Invest** 1989 Apr;83(4):1174–82

2'-5'-oligoadenylate synthetase gene expression in normal and murine sarcoma virus–transformed NIH 3T3 cells. David S, et al. **J Virol** 1989 Mar;63(3):1116–22

Regulation of 2',5'–oligoadenylate synthetase gene expression by interferons and platelet–derived growth factor. Garcia–Blanco MA, et al. **Mol Cell Biol** 1989 Mar; 9(3):1060–8

Signal transduction pathways in the induction of 2',5'–oligoadenylate synthetase gene expression by interferon alpha/beta. Yan C, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2243–7

Cloning and chromosomal location of human genes inducible by type I interferon. Wathelet MG, et al. **Somat Cell Mol Genet** 1988 Sep;14(5):415–26

IMMUNOLOGY

Preparation and characterization of polyclonal antibodies specific for the 69 and 100 k–dalton forms of human 2–5A synthetase. Marié I, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):580–7

Production of polyclonal antibodies against the 40 kDa form of human 2'-5' oligoadenylate synthetase. Gribaudo G, et al. **J Biol Regul Homeost Agents** 1987 Jul–Sep;1(3):143–6

METABOLISM

2– and 8–azido photoaffinity probes. 2. Studies on the binding process of 2–5A synthetase by photosensitive ATP analogues. Suhadolnik RJ, et al. **Biochemistry** 1988 Nov 29;27(24):8846–51

2– and 8–azido photoaffinity probes. 1. Enzymatic synthesis, characterization, and biological properties of 2– and 8–azido photoprobes of 2–5A and photolabeling of 2–5A binding proteins. Suhadolnik RJ, et al. **Biochemistry** 1988 Nov 29;27(24):8840–6

Alteration of nuclear (2'-5')oligoriboadenylate synthetase and nuclease activities preceding replication of human immunodeficiency virus in H9 cells. Schröder HC, et al. **Biol Chem Hoppe Seyler** 1988 Sep;369(9):985–95

Role of 2'-5'–oligoadenylate synthetase in gamma–interferon–mediated growth inhibition of A431 cells. Kumar R, et al. **Cancer Res** 1989 Sep 15;49(18):5180–4

Enhancement of interferon–induced 2–5 oligoadenylate synthetase activity by retinoic acid in human histiocytic lymphoma U937 cells and WISH cells. Ho CK, et al. **Differentiation** 1989 Mar;40(1):70–5

Interferon–associated lymphocyte 2',5'–oligoadenylate synthetase in acute and chronic viral hepatitis. Heathcote J, et al. **Hepatology** 1989 Jan;9(1):105–9

Relationship of the effects of interferon on chronic hepatitis B and the induction of 2',5'-oligoadenylate synthetase. Nishiguchi S, et al. **Hepatology** 1989 Jul;10(1):29–33

Effect of mouse interferon alpha/beta on the expression of H-2 (class I) antigens and on the levels of 2'-5' oligoadenylate synthetase activity in interferon-sensitive and interferon-resistant Friend leukemia cell tumors in mice. Locardi C, et al. **J Biol Regul Homeost Agents** 1987 Oct–Dec;1(4):189–94

Regulation of MuIFN-alpha/beta and MuIFN-gamma-induced antiviral states: differential effects with different challenge viruses and lack of correlation with 2'5' oligoadenylate synthetase levels. Ramamurthy V, et al. **J Biol Regul Homeost Agents** 1988 Jan–Mar;2(1):7–14

Elevation of 2',5'-oligoadenylate synthetase activity and HLA-I associated beta 2-microglobulin in response to recombinant interferon-gamma administration in chronic HBeAg-positive hepatitis. Quiroga JA, et al. **J Interferon Res** 1988 Dec;8(6):755–63

Cell cycle regulation (G1) by autocrine interferon and dissociation between autocrine interferon and 2',5'-oligoadenylate synthetase expression. Wells V, et al. **J Interferon Res** 1988 Dec;8(6):793–802

Combined effects of interferon and steroid hormones on 2',5'-oligoadenylate synthetase activity in chronic lymphocytic leukemia cells. Triozzi PL, et al. **Leuk Res** 1989;13(6):437–43

Activation of 2',5'-oligoadenylate synthetase activity on induction of HL-60 leukemia cell differentiation. Schwartz EL, et al. **Mol Cell Biol** 1989 Sep;9(9):3897–903

(2'-5')Oligoadenylate synthetase activity in intestinal mononuclear and epithelial cells of inflammatory bowel disease patients. Rachmilewitz D, et al. **Scand J Gastroenterol** 1988 Oct;23(8):941–7

OLIGOCHAETA

Sedimentation coefficient and minimum molecular weight of extracellular hemoglobin of Glossoscolex paulistus (Oligochaeta). Costa MC, et al. **Braz J Med Biol Res** 1988; 21(1):115–8

ANALYSIS

Isolation from earthworms of a proteinaceous chemoattractant to garter snakes. Wang D, et al. **Arch Biochem Biophys** 1988 Dec;267(2):459–66

The molecular weight of the extracellular haemoglobin of Lumbricus terrestris determined by electron microscopy. Vinogradov SN, et al. **Comp Biochem Physiol [B]** 1988; 91(3):577–9

The effect of lead incorporation on the elemental composition of earthworm (Annelida, Oligochaeta) chloragosome granules. Morgan JE, et al. **Histochemistry** 1989; 92(3):237–41

Anti-inflammatory effect of two earthworm potions in carrageenan pedal oedema test in rats [letter] Yegnanarayan R, et al. **Indian J Physiol Pharmacol** 1988 Jan–Mar; 32(1):72–4

Isolation and initial characterization of myelin-like membrane fractions from the nerve cord of earthworms (Lumbricus terrestris L). Pereyra PM, et al. **Neurochem Res** 1988 Sep; 13(9):893–901

CYTOLOGY

Identification of the two cell groups in the longitudinal muscle layer of the earthworm Amynthas hawayanus by a single microelectrode with lucifer yellow-CH. Chang YC, et al. **Braz J Med Biol Res** 1988;21(2):385–7

Fluorescence-histochemical and ultrastructural research on the monoaminergic neurosecretory cells of the earthworm Octolasium complanatum (Annelida: Oligochaeta). Bianchi S, et al. **Gen Comp Endocrinol** 1988 Aug;71(2):243–56

IMMUNOLOGY

In vitro agglutinin production by earthworm leukocytes. Stein EA, et al. **Dev Comp Immunol** 1988 Summer; 12(3):531–47

METABOLISM

Toxicity and bioaccumulation of chlorophenols in earthworms, in relation to bioavailability in soil. van Gestel CA, et al. **Ecotoxicol Environ Safety** 1988 Jun;15(3):289–97

High-performance liquid chromatographic determination of lombricine and N-phosphoryl lombricine in the earthworm by pre-column fluorescence derivatisation with o-phthaldialdehyde-ethanethiol. Euerby MR, et al. **J Chromatogr** 1988 Jul 22;445(2):433–40

PARASITOLOGY

Experimental transmission of two Myxobolus spp. developing bisporogeny via tubificid worms. el-Matbouli M, et al. **Parasitol Res** 1989;75(6):461–4

PHYSIOLOGY

Enchytraeus albidus (Enchytraeidae, Oligochaeta) as a test organism in terrestrial laboratory systems. Römbke J. **Arch Toxicol Suppl** 1989;13:402–5

A rhythmically discharging neuron in the earthworm ventral cord nerve as identified by lucifer yellow-CH injection. Assmé Z, et al. **Braz J Med Biol Res** 1988;21(2):391–3

Responses to electrical and mechanical stimuli of the epithelium in earthworm giant axons identified by lucifer yellow-CH dye. Chang YC, et al. **Braz J Med Biol Res** 1988;21(2):395–8

ULTRASTRUCTURE

Lucifer yellow-CH identification of a primary neuron connecting the first segmental nerve to the three giant axons in the nerve cord of the earthworm Amynthas hawayanus. Assmé Z, et al. **Braz J Med Biol Res** 1988; 21(2):389–90

Zinc sequestration by earthworm (Annelida: Oligochaeta) chloragocytes. An in vivo investigation using fully quantitative electron probe X-ray micro-analysis. Morgan JE, et al. **Histochemistry** 1989;90(5):405–11

OLIGODENDROGLIA see under **NEUROGLIA**

OLIGODENDROGLIOMA

[Oligodendroglioma in children—a case report and a review of the literature] Lai TH, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Jul;42(1):71–4 (Eng. Abstr.) **(Chi)**

ANALYSIS

[Clinicopathological study of oligodendroglioma with special reference to immunohistochemical investigation] Kubo O, et al. **No Shinkei Geka** 1988 Aug;16(9):1029–35 (Eng. Abstr.) **(Jpn)**

CLASSIFICATION

Uniform lineage of oligodendrogliomas. de la Monte SM. **Am J Pathol** 1989 Sep;135(3):529–40

COMPLICATIONS

[A case of isolated gonadotropin deficiency secondary to glioma in septum pellucidum] Kitamura M, et al. **Hinyokika Kiyo** 1988 Dec;34(12):2193–5 (Eng. Abstr.) **(Jpn)**

[Gelastic crises. Apropos of a case associated with a frontal oligodendroglioma (letter)] Tejeiro Martínez J, et al. **Rev Clin Esp** 1988 Jun;183(1):51–2 **(Spa)**

DIAGNOSIS

Cytology of neuroectodermal tumors of the brain in crush preparations. A review of 56 cases of deep-seated tumors sampled by CT-guided stereotactic needle biopsy. Nguyen GK, et al. **Acta Cytol** 1989 Jan–Feb;33(1):67–73

Intracranial oligodendrogliomas: imaging findings in 35 untreated cases. Lee YY, et al. **AJR** 1989 Feb;152(2):361–9

[Rolandic spikes as an electroencephalography manifestation of oligodendroglioma] Kaschnitz W, et al. **Padiatr Padol** 1988;23(4):313–9 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Treatment of oligodendrogliomas [letter] Cairncross JG, et al. **J Neurosurg** 1989 Jan;70(1):155

ENZYMOLOGY

Solubilization and partial purification of hyaluronate synthetase from oligodendroglioma cells. Ng KF, et al. **J Biol Chem** 1989 Jul 15;264(20):11776–83

GENETICS

Prognosis in malignant glioma: a retrospective study of biopsy specimens by flow cytometry. Jimenez O, et al. **Neuropathol Appl Neurobiol** 1989 Jul–Aug;15(4):331–8

Flow cytometric analysis of cellular DNA content in human astrocytomas and oligodendrogliomas. Ahyai A. **Neurosurg Rev** 1988;11(2):177–87

METABOLISM

Myelin basic protein as a possible marker for oligodendroglioma. Tanaka J, et al. **Acta Pathol Jpn** 1988 Oct;38(10):1297–303

Cytokeratin immunoreactivity in gliomas. Ng HK, et al. **Histopathology** 1989 Apr;14(4):359–68

Production of and response to interleukin 1 by cloned human oligodendroglioma cell lines. Merrill JE, et al. **J Biol Regul Homeost Agents** 1988 Apr–Jun;2(2):77–86

PATHOLOGY

Multiple neuroectodermal tumors arising in a mature cystic teratoma of the ovary. Oláh KS, et al. **Gynecol Oncol** 1989 Aug;34(2):222–5

The proliferation rate of intracranial tumors as defined by the monoclonal antibody KI 67. Application of the method to paraffin embedded specimens. Böker DK, et al. **Neurosurg Rev** 1988;11(3–4):267–72

Intramedullary spread of a cerebral oligodendroglioma. Van Velthoven V, et al. **Surg Neurol** 1988 Dec;30(6):476–81

[Multifocal, multilocular, multiple or multicentric gliomas?] Hildebrandt G, et al. **Nervenarzt** 1988 Sep;59(9):539–44 **(Ger)**

[Histological diagnosis of brain tumors: (2). Oligodendroglioma] Mori T. **No Shinkei Geka** 1989 Mar; 17(3):213–22 (46 ref.) **(Jpn)**

[Cell kinetics of oligodendroglioma and oligo-astrocytoma—Ki-67 PaP study] Shibata T, et al. **No To Shinkei** 1988 Aug;40(8):779–85 (Eng. Abstr.) **(Jpn)**

SURGERY

Benign astrocytic and oligodendrocytic tumors of the cerebral hemispheres in children. Hirsch JF, et al. **J Neurosurg** 1989 Apr;70(4):568–72

THERAPY

Photodynamic therapy of malignant brain tumors: clinical results of, difficulties with, questions about, and future prospects for the neurosurgical applications. Perria C, et al. **Neurosurgery** 1988 Nov;23(5):557–63

[Diagnostic problems in children treated for brain tumors] Muis N, et al. **Ned Tijdschr Geneeskd** 1988 Sep 24; 132(39):1777–80 **(Dut)**

OLIGODENDROMA see **OLIGODENDROGLIOMA**

OLIGODEOXYRIBONUCLEOTIDE PROBES see **OLIGONUCLEOTIDE PROBES**

OLIGODEOXYRIBONUCLEOTIDES

A high capacity, reusable oligodeoxythymidine affinity column. Chow T, et al. **Anal Biochem** 1988 Nov 15; 175(1):63–6

Sequence specificity in spermine-induced structural changes in CG-oligomers. Majumder K, et al. **Biochem Int** 1989 Feb;18(2):455–65

Conformational studies of d-(AAAAATTTTT)2 using constraints from nuclear overhauser effects and from quantitative analysis of the cross-peak fine structures in two-dimensional 1H nuclear magnetic resonance spectra. Celda B, et al. **Biochemistry** 1989 Feb 21;28(4):1462–71

DNA cross-linking by intermediates in the mitomycin activation cascade. Cera C, et al. **Biochemistry** 1989 Jun 27;28(13):5665–9

Binding specificities of actinomycin D to self-complementary tetranucleotide sequences -XGCY-. Chen FM. **Biochemistry** 1988 Aug 23;27(17):6393–7

Molecular structure of the netropsin-d(CGCGATATCGCG) complex: DNA conformation in an alternating AT segment. Coll M, et al. **Biochemistry** 1989 Jan 10;28(1):310–20

Determination of equilibrium binding affinity of distamycin and netropsin to the synthetic deoxyoligonucleotide sequence d(GGTATACC)2 by quantitative DNase I footprinting. Fish EL, et al. **Biochemistry** 1988 Aug 9; 27(16):6026–32

Analysis of the relative contributions of the nuclear Overhauser interproton distance restraints and the empirical energy function in the calculation of oligonucleotide structures using restrained molecular dynamics. Gronenborn AM, et al. **Biochemistry** 1989 Jul 11;28(14):5978–84

Cooperativity in A-tract structure and bending properties of composite TnAn blocks. Haran TE, et al. **Biochemistry** 1989 Apr 4;28(7):2763–7

Structural variation in d(CTCTAGAG). Implications for protein-DNA interactions. Hunter WN, et al. **Biochemistry** 1989 Mar 21;28(6):2444–51

Base only binding of spermine in the deep groove of the A-DNA octamer d(GTGTACAC). Jain S, et al. **Biochemistry** 1989 Mar 21;28(6):2360–4

An NMR investigation of the binding of the anticancer drug actinomycin D to oligodeoxyribonucleotides with isolated 5'd(GC)3' binding sites. Jones RL, et al. **Biochemistry** 1988 Aug 9;27(16):6021–6

Identification of 2-deoxyribonolactone at the site of neocarzinostatin-induced cytosine release in the sequence d(AGC). Kappen LS, et al. **Biochemistry** 1989 Feb 7; 28(3):1027–32

NMR studies of exocyclic 1,N2-propanodeoxyguanosine adducts (X) opposite purines in DNA duplexes: protonated X(syn).A(anti) pairing (acidic pH) and X(syn).G(anti) pairing (neutral pH) at the lesion site. Kouchakdjian M, et al. **Biochemistry** 1989 Jun 27;28(13):5647–57

13C NMR of the bases of three DNA oligonucleotide duplexes: assignment methods and structural features. LaPlante SR, et al. **Biochemistry** 1988 Oct 4;27(20):7902–9

Complementary oligodeoxynucleotide probes of RNA conformation within the Escherichia coli small ribosomal subunit. Lasater LS, et al. **Biochemistry** 1988 Jun 28; 27(13):4687–95

Sequence-specific, strand-selective, and directional binding of neocarzinostatin chromophore to oligodeoxyribonucleotides. Lee SH, et al. **Biochemistry** 1989 Feb 7;28(3):1019–26

Use of EDTA derivatization to characterize interactions between oligodeoxyribonucleoside methylphosphonates and nucleic acids. Lin SB, et al. **Biochemistry** 1989 Feb 7;28(3):1054–61

Chemical probes of the conformation of DNA modified by cis-diamminedichloroplatinum(II). Marrot L, et al. **Biochemistry** 1989 Feb 21;28(4):1454–61

Structural modeling of the distamycin A-d(CGCGAATTCGCG)2 complex using 2D NMR and molecular mechanics. Pelton JG, et al. **Biochemistry** 1988

Oct 18;27(21):8088–96

Effect of ionic strength on the hybridization of oligodeoxynucleotides with reduced charge due to methylphosphonate linkages to unmodified oligodeoxynucleotides containing the complementary sequence. Quartin RS, et al. **Biochemistry** 1989 Feb 7; 28(3):1040–7

2D NMR investigation of the binding of the anticancer drug actinomycin D to duplexed dATGCGCAT: conformational features of the unique 2:1 adduct. Scott EV, et al. **Biochemistry** 1988 Oct 4;27(20):7940–51

Temperature–dependent CD and NMR studies on a synthetic oligonucleotide containing a B–Z junction at high salt. Sheardy RD, et al. **Biochemistry** 1989 Jan 24;28(2):720–5

DNA sequence specificity of mitomycin cross–linking. Teng SP, et al. **Biochemistry** 1989 May 2;28(9):3901–7

Non–Watson–Crick structures in oligodeoxynucleotides: self–association of d(TpCpGpA) stabilized at acidic pH. Topping RJ, et al. **Biochemistry** 1988 Sep 20;27(19):7216–22

Laser temperature–jump, spectroscopic, and thermodynamic study of salt effects on duplex formation by dGCATGC. Williams AP, et al. **Biochemistry** 1989 May 16; 28(10):4283–91

Multinuclear NMR studies of DNA hairpins. 1. Structure and dynamics of d(CGCGTTGTTCGCG). Williamson JR, et al. **Biochemistry** 1989 Apr 4;28(7):2819–31

Multinuclear NMR studies of DNA hairpins. 2. Sequence–dependent structural variations. Williamson JR, et al. **Biochemistry** 1989 Apr 4;28(7):2831–6

Conformational analysis of d(C3G3), a B–family duplex in solution. Wolk S, et al. **Biochemistry** 1989 Mar 21; 28(6):2452–9

Oligodeoxynucleotide folding in solution: loop size and stability of B–hairpins. Xodo LE, et al. **Biochemistry** 1988 Aug 23;27(17):6321–6

The B–Z conformational transition in folded oligodeoxynucleotides: loop size and stability of Z–hairpins. Xodo LE, et al. **Biochemistry** 1988 Aug 23;27(17):6327–31

Deoxyribose ring conformation of [d(GGTATACC)]2: an analysis of vicinal proton–proton coupling constants from two–dimensional proton nuclear magnetic resonance. Zhou N, et al. **Biochemistry** 1988 Aug 9;27(16):6013–20

Negative ion fast atom bombardment mass spectrometry of oligodeoxynucleotide carbamate analogs. Griffin D, et al. **Biomed Environ Mass Spectrom** 1988 Aug;17(2):105–11

Quasi–continuum models of twist–like and accordion–like low–frequency motions in DNA. Chou KC, et al. **Biophys J** 1989 Aug;56(2):295–305

Site–specific laser modification (cleavage) of oligodeoxynucleotides. Benimetskaya LZ, et al. **Biopolymers** 1989 Jun;28(6):1129–47

CD studies of double–stranded polydeoxynucleotides composed of repeating units of contiguous homopurine residues. Gudibande SR, et al. **Biopolymers** 1988 Dec; 27(12):1905–15

Low–frequency dynamics and Raman scattering of crystals, of B–, A–, and Z–DNA, and fibers of C–DNA. Lamba OP, et al. **Biopolymers** 1989 Feb;28(2):667–78

Sequence dependence of the B–A conformational transition of DNA. Mazur J, et al. **Biopolymers** 1989 Jul;28(7):1223–33

Thermodynamics of the various forms of the dodecamer d(ATTACCGGTAAT) and of its constituent hexamers from proton nmr chemical shifts and UV melting curves: three–state and four–state thermodynamic models. Pieters JM, et al. **Biopolymers** 1989 Mar;28(3):717–40

Harmonic dynamics of a DNA hexamer in the absence and presence of the intercalator ethidium. Rudolph BR, et al. **Biopolymers** 1989 Apr;28(4):851–71

A temperature–dependent Z to B to single–strand transition in d(CGCG). Thomas GA, et al. **Biopolymers** 1989 Sep; 28(9):1625–36

Binding of nogalamycin to model tetranucleotides. Trinquier G, et al. **Biopolymers** 1988 Sep;27(9):1491–517

Conformation of a bulge–containing oligomer from a hot–spot sequence by NMR and energy minimization. Woodson SA, et al. **Biopolymers** 1989 Jun;28(6):1149–77

Formation and structure of reaction products of cis–PtCl2(NH3)2 with d(ApG) and/or d(GpA) in di–, tri– and penta–nucleotides. Preference for GpA chelation over ApG chelation. Dijt FJ, et al. **Eur J Biochem** 1989 Feb 1;179(2):335–44

Molecular structure of an A–DNA decamer d(ACCGGCCGGT). Frederick CA, et al. **Eur J Biochem** 1989 May 1;181(2):295–307

A 19F–NMR study of 2–fluoro–4–demethoxydaunomycin intercalation complexes with the decanucleotides d(G–C)5 and d(A–T)5. Hammer BC, et al. **Eur J Biochem** 1989 Jan 2;178(3):683–8

Oligodeoxynucleotide analogs with 5'–linked anthraquinone. Mori K, et al. **FEBS Lett** 1989 Jun 5;249(2):213–8

Site–specific cleavage of single–stranded and double–stranded DNA sequences by oligodeoxyribonucleotides covalently linked to an intercalating agent and an EDTA–Fe chelate. Boidot–Forget M, et al. **Gene** 1988 Dec 10;72(1–2):361–71

Simple and highly efficient site–specific mutagenesis, by ligation of an oligodeoxyribonucleotide into gapped heteroduplex DNA in which the template strand contains deoxyuridine. Terwilliger TC. **Gene** 1988 Sep 30; 69(2):317–24

Sequence–specific chemical modification of double–stranded DNA with alkylating oligodeoxyribonucleotide derivatives. Vlassov VV, et al. **Gene** 1988 Dec 10; 72(1–2):313–22

Hybridization of oligo(dT) to RNA on nitrocellulose. Harley CB. **Gene Anal Tech** 1987 Mar–Apr;4(2):17–22

Sequence–targeted cleavage of single– and double–stranded DNA by oligothymidylates covalently linked to 1,10–phenanthroline. François JC, et al. **J Biol Chem** 1989 Apr 5;264(10):5891–8

Methylation of the EcoRI recognition site does not alter DNA conformation: the crystal structure of d(CGCGAm6ATTCGCG) at 2.0–A resolution. Frederick CA, et al. **J Biol Chem** 1988 Nov 25;263(33):17872–9

The molecular structure of the left–handed Z–DNA double helix at 1.0–A atomic resolution. Geometry, conformation, and ionic interactions of d(CGCGCG). Gessner RV, et al. **J Biol Chem** 1989 May 15;264(14):7921–35

Conformation of adenosine bulge–containing deoxytridecanucleotide duplexes in solution. Extra adenosine stacks into duplex independent of flanking sequence and temperature. Kalnik MW, et al. **J Biol Chem** 1989 Mar 5;264(7):3702–12

13C NMR assignments of the bases in oligodeoxynucleotides: an automated procedure using Bayesian statistics. Hyman TJ, et al. **J Chem Inf Comput Sci** 1988 Nov;28(4):226–30

Crystallization and preliminary analysis of the deoxyoligonucleotide d(CGTAGATCTACG). Hunter WN, et al. **J Mol Biol** 1988 Aug 20;202(4):921–2

Measurement of anomalously high hydration of (dA)n.(dT)n double helices in dilute solution. Buckin VA, et al. **Nature** 1989 Jul 27;340(6231):321–2

Coexistence of A– and B–form DNA in a single crystal lattice. Doucet J, et al. **Nature** 1989 Jan 12;337(6203):190–2

Triple–strand formation in the homopurine:homopyrimidine DNA oligonucleotides d(G–A)4 and d(T–C)4 [published erratum appears in Nature 1989 Jul 27;340(6231):322] Rajagopal P, et al. **Nature** 1989 Jun 22;339(6226):637–40

Chemiluminescent detection of DNA: application for DNA sequencing and hybridization. Beck S, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5115–23

Inhibition of DNA synthesis by cross–linking the template to platinum–thiol derivatives of complementary oligodeoxynucleotides. Chu BC, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4783–98

Refined crystal structure of an octanucleotide duplex with I.T. mismatched base pairs. Cruse WB, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):55–72

Oligothymidylates covalently linked to an acridine derivative and with modified phosphodiester backbone: circular dichroism studies of their interactions with complementary sequences. Durand M, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):1823–37

Solvent interactions stabilising nucleic acid conformers. Elliott RJ, et al. **Nucleic Acids Res** 1989 Jan 11; 17(1):389–404

Extraordinary stable structure of short single–stranded DNA fragments containing a specific base sequence: d(GCGAAAGC). Hirao I, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2223–31

DNA microstructural requirements for neocarzinostatin chromophore–induced direct strand cleavage. Lee SH, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5809–25

Regiospecific inhibition of DNA duplication by antisense phosphate–methylated oligodeoxynucleotides. Moody HM, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4769–82

Alpha–DNA VIII: thermodynamic parameters of complexes formed between the oligo–alpha–deoxynucleotides: alpha–d(GGAAGG) and alpha–d(CCTTCC) and their complementary oligo–beta–deoxynucleotides: beta–d(CCTTCC) and beta–d(GGAAGG) are different. Paoletti J, et al. **Nucleic Acids Res** 1989 Apr 11; 17(7):2693–704

Psoralen covalently linked to oligodeoxyribonucleotides: synthesis, sequence specific recognition of DNA and photo–cross–linking to pyrimidine residues of DNA. Pieles U, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):285–99

Immunochemical detection of multiple conformations within a 36 base pair oligonucleotide. Sanford DG, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10643–55

Construction of cDNA libraries from small numbers of cells using sequence independent primers. Tam AW, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1269

Conformations in crystals and solutions of d(CACGTG), d(CCGCGG) and d(GGCGCC) studied by vibrational spectroscopy. Urpi L, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6669–80

Single–stranded DNA fragments holding unusual conformation. Hirao I, et al. **Nucleic Acids Symp Ser** 1988; (19):145–7

On the DNA bending by psoralen interstrand crosslinking. A gel electrophoretic study. Zhen WP, et al. **Photochem Photobiol** 1988 Nov;48(5):643–6

Detection of nucleic acid hybridization by nonradiative fluorescence resonance energy transfer. Cardullo RA, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):8790–4

Crystal lattice packing is important in determining the bend of a DNA dodecamer containing an adenine tract. DiGabriele AD, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1816–20

Repair of 4,5',8–trimethylpsoralen monoadducts and cross–links by the Escherichia coli UvrABC endonuclease. Jones BK, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(22):8410–4

Structural basis for DNA bending. Nadeau JG, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2622–6

Structural characterization of a 2:1 distamycin A.d(CGCAAATTGGC) complex by two–dimensional NMR. Pelton JG, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5723–7

Binding of actinomycin D to DNA: evidence for a nonclassical high–affinity binding mode that does not require GpC sites. Snyder JG, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):3968–72

Normalization of RNA dot blots with oligo(dT). Harley CB. **Trends Genet** 1988 Jun;4(6):152

[Complementary addressed modification of a hairpin–shaped model oligodeoxyribonucleotide] Bazhina IuN, et al. **Bioorg Khim** 1989 Mar;15(3):370–8 (Eng. Abstr.) **(Rus)**

[Ethylation of internucleotide phosphite groups by the oligodeoxyribonucleotide method of oxidative phosphorylation] Griaznov SM, et al. **Bioorg Khim** 1989 Apr;15(4):566–9 (Eng. Abstr.) **(Rus)**

[Sequence specificity modification of double–stranded DNA with an alkylating derivative of oligodeoxyribonucleotide pT(CT)6] Podust LM, et al. **Bioorg Khim** 1989 Mar; 15(3):363–9 (Eng. Abstr.) **(Rus)**

[Controlled ligation of oligodeoxyribonucleotides of DNA–ligase of the T4 phage] Koroleva ON, et al. **Mol Biol (Mosk)** 1988 Nov–Dec;22(6):1632–41 (Eng. Abstr.) **(Rus)**

ANALOGS & DERIVATIVES

Inhibition of deoxyribonucleases by phosphorothioate groups in oligodeoxyribonucleotides. Spitzer S, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11691–704

ANALYSIS

Structure of the intrastrand cis–[Pt(NH3)2(d(GpCpG))] adduct in a dodecanucleotide duplex: II. A molecular mechanics modeling study. Mazeau K, et al. **Anticancer Drug Des** 1989 Jun;4(1):63–78

Structure of the intrastrand cis–[Pt(NH3)2(d(GpCpG))] adduct in a dodecanucleotide duplex: I. A 1H and 31P n.m.r. study. Ptak M, et al. **Anticancer Drug Des** 1989 Jun; 4(1):53–61

Atypical abasic sites generated by neocarzinostatin at sequence–specific cytidylate residues in oligodeoxynucleotides. Kappen LS, et al. **Biochemistry** 1988 Jun 14;27(12):4331–40

Alpha are more stable than beta anomer oligonucleotides in 3T3 cellular extracts. Thenet S, et al. **Biochimie** 1988 Dec; 70(12):1729–32

Alterations in the d(CpGpT) structure in solution as a result of [PtCl(diethylenetriamine)]+ binding. van Garderen CJ, et al. **Eur J Biochem** 1988 Dec 1;178(1):115–21

Detection of cyclobutane thymine dimers in DNA of human cells with monoclonal antibodies raised against a thymine dimer–containing tetranucleotide. Roza L, et al. **Photochem Photobiol** 1988 Nov;48(5):627–33

BIOSYNTHESIS

A method for the cloning of unpurified single–stranded oligonucleotides. Weiner MP, et al. **Nucleic Acids Res** 1989 Sep 12;17(17):7113

CHEMICAL SYNTHESIS

Synthesis of N7–ethyldeoxyguanosine 5'–triphosphate and placement of N7–ethylguanine in a specific site in a synthetic oligodeoxyribonucleotide. Farrance IK, et al. **Anal Biochem** 1989 May 15;179(1):60–5

Sequence specificity of Z–DNA formation in oligonucleotides [published erratum appears in Biochem Int 1988 Nov;17(5):988] Kadalayil LP, et al. **Biochem Int** 1988 Jul;17(1):121–31

Solid–phase synthesis and side reactions of oligonucleotides containing O–alkylthymine residues. Borowy–Borowski H, et al. **Biochemistry** 1989 Feb 21;28(4):1471–7

Comparison of polymerase insertion and extension kinetics of a series of O2–alkyldeoxythymidine triphosphates and O4–methyldeoxythymidine triphosphate. Singer B, et al. **Biochemistry** 1989 Feb 21;28(4):1478–83

The 9–fluorenylmethyloxycarbonyl group as a 5'–OH protection in oligonucleotide synthesis. Ma Y, et al. **Biopolymers** 1989 May;28(5):965–73

Random mutagenesis using degenerate oligodeoxyribonucleotides. Hübner P, et al. **Gene** 1988 Dec 20;73(2):319–25

FokI method of gene synthesis. Mandecki W, et al. **Gene** 1988 Aug 15;68(1):101–7

Synthesis of phosphorothioate analogues of oligodeoxyribonucleotides and their antiviral activity against human immunodeficiency virus (HIV). Matsukura M, et al. **Gene** 1988 Dec 10;72(1–2):343–7

A method for cloning mixtures of long, synthetic oligodeoxynucleotides. Carter–Muenchau P, et al. **Gene Anal Tech** 1987 Sep–Oct;4(5):105–10

Formation of O6–methyldeoxyguanosine at specific sites in a synthetic oligonucleotide designed to resemble a known mutagenic hotspot. Richardson FC, et al. **J Biol Chem** 1989 Jan 15;264(2):838–41

Chemical synthesis of DNA oligomers containing cytosine arabinoside. Beardsley GP, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9165–76

Synthesis and properties of oligonucleotides containing 4-thiothymidine, 5-methyl-2-pyrimidinone-1-beta-D(2'-deoxyriboside) and 2-thiothymidine. Connolly BA, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):4957-74

Improved chemistry for oligodeoxyribonucleotide synthesis substantially improves restriction enzyme cleavage of a synthetic 35mer. Farrance IK, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1231-45

A simple method for the introduction of thiol group at 5'-termini of oligodeoxynucleotides. Gaur RK, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4404

The synthesis of 2-pyrimidinone nucleosides and their incorporation into oligodeoxynucleotides. Gildea B, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2261-81

Forks and combs and DNA: the synthesis of branched oligodeoxyribonucleotides. Horn T, et al. **Nucleic Acids Res** 1989 Sep 12;17(17):6959-67

Pre-activation strategy for oligodeoxyribonucleotide synthesis using triaryloxydichlorophosphoranes in the phosphotriester method. Hotoda H, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5291-305

Synthetic repeating sequence DNAs containing phosphorothioates: nuclease sensitivity and triplex formation. Latimer LJ, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1549-61

Synthesis and selective cleavage of oligodeoxyribonucleotides containing non-chiral internucleotide phosphoramidate linkages. Mag M, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):5973-88

Highly efficient synthesis of oligodeoxyribonucleotides using alpha-phenyl cinnamoyl group for selective amino protection. Nagaich AK, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5125-34

Use of homopolymer tailing to improve the assembly efficiency of synthetic DNA sequences. Tröbner W, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4898

The isopropoxyacetic group for convenient base protection during solid-support synthesis of oligodeoxyribonucleotides and their triester analogs. Uznanski B, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4863-71

Tris(2,4,6-tribromophenoxy)dichlorophosphorane as a condensing agent: a new type of activation of phosphodiester components in the phosphotriester method. Hotoda H, et al. **Nucleic Acids Symp Ser** 1988;(19):17-20

Application of allyloxycarbonyl group as a protecting group to oligodeoxyribonucleotide synthesis. Mitsuhira Y, et al. **Nucleic Acids Symp Ser** 1988;(19):25-8

Sequence-defined dimer block synthesis from unprotected nucleoside. Shimidzu T, et al. **Nucleic Acids Symp Ser** 1988;(19):1-4

Recent developments in the use of synthetic oligonucleotides for in situ hybridization histochemistry. Lewis ME, et al. **Synapse** 1988;2(3):308-16 (87 ref.)

[Synthesis of 5'-phosphorylated oligodeoxyribonucleotides by the H-phosphonate method] Filippov SA, et al. **Bioorg Khim** 1989 Apr;15(4):527-9 (Eng. Abstr.) **(Rus)**

[Introduction of tri- and tetraphosphate internucleotide bonds into oligodeoxyribonucleotides] Purmal' AA, et al. **Bioorg Khim** 1988 Sep;14(9):1183-7 (Eng. Abstr.) **(Rus)**

[Automated synthesis of oligodeoxyribonucleotides with terminal phosphate groups] Volkov EM, et al. **Bioorg Khim** 1988 Aug;14(8):1034-9 (Eng. Abstr.) **(Rus)**

DIAGNOSTIC USE

Techniques for using antisense oligodeoxyribonucleotides to study gene expression. Marcus-Sekura CJ. **Anal Biochem** 1988 Aug 1;172(2):289-95 (81 ref.)

Use of synthetic oligodeoxyribonucleotides for type-specific identification of coxsackie B viruses. Alksnis M, et al. **Mol Cell Probes** 1989 Jun;3(2):103-8

GENETICS

Hairpin structures in synthetic oligodeoxynucleotides: sequence effects on the duplex-to-hairpin transition. Xodo LE, et al. **Biochimie** 1989 Jul;71(7):793-803

An alternative approach in gene synthesis: use of long selfpriming oligodeoxynucleotides for the construction of double-stranded DNA. Uhlmann E. **Gene** 1988 Nov 15;71(1):29-40

ISOLATION & PURIFICATION

New reversed-phase high-performance liquid chromatographic column for oligonucleotide separation. Moriyama H, et al. **J Chromatogr** 1988 Jul 8;445(1):225-33

Modified method for double stranded DNA sequencing and synthetic oligonucleotide purification. Chi HC, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10382

METABOLISM

Cleavage of dT8 and dT8 phosphorothioyl analogues by Escherichia coli DNA topoisomerase I: product and rate analysis. Domanico PL, et al. **Biochemistry** 1988 Aug 23;27(17):6365-71

Carcinogen-nucleic acid interactions: equilibrium binding studies of aflatoxin B1 with the oligodeoxynucleotide d(ATGCAT)2 and with plasmid pBR322 support intercalative association with the B-DNA helix. Gopalakrishnan S, et al. **Biochemistry** 1989 Jan 24;28(2):726-34

Photochemical cross-linking of psoralen-derivatized oligonucleoside methylphosphonates to rabbit globin messenger RNA. Kean JM, et al. **Biochemistry** 1988 Dec 27;27(26):9113-21

Binding of 9-aminoacridine to bulged-base DNA oligomers from a frame-shift hot spot. Woodson SA, et al. **Biochemistry** 1988 Dec 13;27(25):8904-14

Repair of O6-methylguanine, O6-ethylguanine, O6-isopropylguanine and O4-methylthymine in synthetic oligodeoxynucleotides by Escherichia coli ada gene O6-alkylguanine-DNA-alkyltransferase. Graves RJ, et al. **Carcinogenesis** 1989 Apr;10(4):661-6

Phosphodiester cleavage in apurinic dinucleotides. Vodička P, et al. **Chem Biol Interact** 1988;68(3-4):153-64

A DNA binding protein that recognizes oligo(dA).oligo(dT) tracts. Winter E, et al. **EMBO J** 1989 Jun;8(6):1867-77

DNA-binding properties of gene-5 protein encoded by bacteriophage M13. 2. Further characterization of the different binding modes for poly- and oligodeoxynucleic acids. Bulsink H, et al. **Eur J Biochem** 1988 Oct 1;176(3):597-608

Interaction of the EcoDam methyltransferase with synthetic oligodeoxyribonucleotides. Buryanov YI, et al. **Gene** 1988 Dec 25;74(1):67-9

Phosphorothioate and normal oligodeoxyribonucleotides with 5'-linked acridine: characterization and preliminary kinetics of cellular uptake. Stein CA, et al. **Gene** 1988 Dec 10;72(1-2):333-41

In situ hybridization using 32P labelled oligodeoxyribonucleotides for the cellular localisation of mRNA in neuronal and endocrine tissue. An analysis of procedural variables. Priestley JV, et al. **Histochemistry** 1988;89(5):467-79

alpha-Oligodeoxynucleotide stability in serum, subcellular extracts and culture media. Bacon TA, et al. **J Biochem Biophys Methods** 1988 Aug;16(4):311-8

Use of psoralen-modified oligonucleotides to trap three-stranded RecA-DNA complexes and repair of these cross-linked complexes by ABC excinuclease. Cheng S, et al. **J Biol Chem** 1988 Oct 15;263(29):15110-7

Affinity of single- or double-stranded oligodeoxyribonucleotides containing a thymine photodimer for T4 endonuclease V. Inaoka T, et al. **J Biol Chem** 1989 Feb 15;264(5):2609-14

Stimulation of RecA-mediated cleavage of phage phi 80 cI repressor by deoxydinucleotides. Eguchi Y, et al. **J Mol Biol** 1988 Nov 5;204(1):69-77

DNA hybridization with oligodeoxyribonucleotide probes for identifying enterotoxin-producing Escherichia coli. Cravioto A, et al. **Mol Cell Probes** 1988 Jun;2(2):125-30

Alpha-DNA.IX: Parallel annealing of alpha-anomeric oligodeoxyribonucleotides to natural mRNA is required for interference in RNase H mediated hydrolysis and reverse transcription. Gagnor C, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5107-14

Affinity purification and characterization of human O6-alkylguanine-DNA alkyltransferase complexed with BCNU-treated, synthetic oligonucleotide. Gonzaga PE, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6581-90

Mechanism of oligonucleotide uptake by cells: involvement of specific receptors? Yakubov LA, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6454-8

[Artificial nucleases: specific cleavage of the double helix of DNA by oligonucleotides linked to copper-phenanthroline complex] François JC, et al. **C R Acad Sci [III]** 1988;307(20):849-54 (Eng. Abstr.) **(Fre)**

[Netropsin does not bind with the oligonucleotide d(GCGATCGC)] Babaian IuS, et al. **Bioftizika** 1988 Jul-Aug;33(4):716-7 (Eng. Abstr.) **(Rus)**

[Effect of the structure of oligonucleotide substrates on interaction with methylase Eco dam] Malygin EG, et al. **Biokhimiia** 1988 Oct;53(10):1639-47 (Eng. Abstr.) **(Rus)**

[Ligase joining of oligodeoxynucleotides on a oligodeoxynucleotide analog matrix containing P-S-C(5')-internucleotide bonds] Rybakov VN, et al. **Bioorg Khim** 1989 Jun;15(6):796-9 (Eng. Abstr.) **(Rus)**

[Binding of oligodeoxyribonucleotides by Mycoplasma RNA polymerase related to gene promotors of various microorganisms] Sokolenko AA, et al. **Dokl Akad Nauk SSSR** 1989;305(2):490-3 **(Rus)**

[Interaction between Eco dam methylase and double-stranded oligodeoxyribonucleotide] Tuzikov FV, et al. **Dokl Akad Nauk SSSR** 1989 Jan-Feb;304(1):231-4 **(Rus)**

[Binding of RNA-polymerase from Escherichia coli with oligodeoxyribonucleotides homologous to transcribed and non-transcribed DNA stands in the "-10"-promoter region of bacterial genes] Savinkova LK, et al. **Mol Biol (Mosk)** 1988 May-Jun;22(3):807-12 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Inhibition of Moloney murine leukemia virus reverse transcriptase by alpha-anomeric oligonucleotides. Lavignon M, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1184-90

Stepwise mechanism of HIV reverse transcriptase: primer function of phosphorothioate oligodeoxynucleotide. Majumdar C, et al. **Biochemistry** 1989 Feb 7;28(3):1340-6

The inhibitory effect of oligodeoxynucleotides complementary to different fragments of tRNA structure on the enzymatic binding of Phe-tRNA to poly-U-programmed eukaryotic ribosomes. Pulikowska J, et al. **Biofactors** 1988 Jul;1(2):193-6

Inhibition of expression of SV40 virus large T-antigen by antisense oligodeoxyribonucleotides. Westermann P, et al. **Biomed Biochim Acta** 1989;48(1):85-93

Specific inhibition of beta-tubulin synthesis in Xenopus oocytes using anti-sense oligodeoxyribonucleotides. Jessus C, et al. **Gene** 1988 Dec 10;72(1-2):311-2

Antiviral activity of conjugates between poly(L-lysine) and synthetic oligodeoxyribonucleotides. Leonetti JP, et al. **Gene** 1988 Dec 10;72(1-2):323-32

The inhibition of neurite outgrowth in PC12 cells by tubulin antisense oligodeoxyribonucleotides. Teichman-Weinberg A, et al. **Gene** 1988 Dec 10;72(1-2):297-307

Interaction of psoralen-derivatized oligodeoxyribonucleoside methylphosphonates with synthetic DNA containing a promoter for T7 RNA polymerase. Lee BL, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10681-97

Oligodeoxynucleoside phosphoramidates and phosphorothioates as inhibitors of human immunodeficiency virus [published erratum appears in Proc Natl Acad Sci U S A 1989 Mar;86(5):1504] Agrawal S, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7079-83

Cholesteryl-conjugated oligonucleotides: synthesis, properties, and activity as inhibitors of replication of human immunodeficiency virus in cell culture. Letsinger RL, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6553-6

Phosphorothioate and cordycepin analogues of 2',5'-oligoadenylate: inhibition of human immunodeficiency virus type 1 reverse transcriptase and infection in vitro. Montefiori DC, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7191-4

Inhibition of DNA binding proteins by oligonucleotide-directed triple helix formation. Maher LJ 3d, et al. **Science** 1989 Aug 18;245(4919):725-30

RADIATION EFFECTS

Degradation of oligonucleotides by vacuum-UV radiation in solid: roles of the phosphate group and bases [published erratum appears in Photochem Photobiol 1989 Jun;49(6):845] Ito T, et al. **Photochem Photobiol** 1988 Nov;48(5):567-72

TOXICITY

[Mutagenic properties of phosphotriester analogs of oligodeoxyribonucleotides] Petrenko VA, et al. **Mol Biol (Mosk)** 1988 Sep-Oct;22(5):1226-37 (Eng. Abstr.) **(Rus)**

OLIGO-1,6-GLUCOSIDASE see under **GLYCOSIDE HYDROLASES**

OLIGOMENORRHEA see under **MENSTRUATION DISORDERS**

OLIGOMYCINS

PHARMACOLOGY

Mitochondrial sulfhydryl groups under oligomycin-inhibited, aging, and uncoupling conditions: beneficial influence of cardioprotective drugs. Fuchs J, et al. **Arch Biochem Biophys** 1988 Oct;266(1):83-8

Chlordecone is a potent in vitro inhibitor of oligomycin-insensitive Mg2+ -ATPase of rat bile canaliculi-enriched fraction. Curtis LR. **J Biochem Toxicol** 1988 Winter;3:321-8

OLIGONUCLEOTIDE PROBES

see related

NUCLEIC ACID HYBRIDIZATION

Visualization and quantitation of poly A+-mRNA by using in situ hybridization with biotinylated oligonucleotides. Wehner K, et al. **Acta Histochem Suppl (Jena)** 1989;37:83-8

Detection of messenger RNA in routinely processed tissue sections with biotinylated oligonucleotide probes. Hankin RC, et al. **Am J Clin Pathol** 1989 Aug;92(2):166-71

Identification of Vibrio anguillarum in fish by using partial 16S rRNA sequences and a specific 16S rRNA oligonucleotide probe. Rehnstam AS, et al. **Appl Environ Microbiol** 1989 Aug;55(8):1907-10

Apolipoprotein E2(Arg158——Cys) frequency in a hyperlipidemic French-Canadian population of apolipoprotein E2/2 subjects. Determination by synthetic oligonucleotide probes. Weisgraber KH, et al. **Arteriosclerosis** 1989 Jan-Feb;9(1):50-7

Detection of ras point mutations by polymerase chain reaction using mutation-specific, inosine-containing oligonucleotide primers. Ehlen T, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):441-7

Titration of variant DNA sequences differing by a single point-mutation by selective dot-blot hybridization with synthetic oligonucleotides. Nicoloso M, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1233-41

Apolipoprotein E genotyping using the polymerase chain reaction and allele-specific oligonucleotide probes. Weisgraber KH, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1212-7

A simplified procedure for cDNA and genomic library construction using nonpalindromic oligonucleotide adaptors. D'Souza CR, et al. **Biochem Cell Biol** 1989 Apr-May;67(4-5):205-9

Rapid prenatal diagnosis of beta thalassemia using DNA amplification and nonradioactive probes. Cai SP, et al. **Blood** 1989 Feb;73(2):372-4

Use of synthetic oligonucleotides in the characterization of antithrombin III Northwick Park (393 CGT——TGT) and antithrombin III Glasgow (393 CGT——CAT). Thein SL, et al. **Blood** 1988 Nov;72(5):1817-21

Genotypic analysis of engraftment in thalassemia following bone marrow transplantation using synthetic oligonucleotides. Ugozzoli L, et al. **Bone Marrow Transplant** 1989 Mar;4(2):173-80

Application of a rapid non-radioisotopic nucleic acid analysis system to the detection of sexually transmitted disease-causing organisms and their associated antimicrobial resistances. Urdea MS, et al. **Clin Chem** 1989 Aug;35(8):1571-5

Southern analysis of genomic DNA with unique and degenerate oligonucleotide probes: a method for reducing probe degeneracy. Devlin PE, et al. **DNA** 1988 Sep; 7(7):499-507

Optimized oligonucleotide probes for DNA fingerprinting. Schäfer R, et al. **Electrophoresis** 1988 Aug;9(8):369-74

Mutagenesis directed by phosphotriester analogues of oligonucleotides: a way to site-specific mutagenesis in vivo. Petrenko VA, et al. **FEBS Lett** 1988 Sep 26;238(1):109-12

Antisense oligodeoxyribonucleotide-directed cleavage of maternal mRNA in Xenopus oocytes and embryos. Shuttleworth J, et al. **Gene** 1988 Dec 10;72(1-2):267-75

Analysis of closely related genes by the use of synthetic oligonucleotide probes labeled to a high specific activity. Hellman L, et al. **Gene Anal Tech** 1987 Jan-Feb;4(1):9-13

HLA class II typing using oligonucleotide probes. Robinson DM, et al. **Genet Epidemiol** 1989;6(1):27-30

Genotyping of mitochondrial aldehyde dehydrogenase in blood samples using allele-specific oligonucleotides: comparison with phenotyping in hair roots. Goedde HW, et al. **Hum Genet** 1989 Mar;81(4):305-7

Hybridization of Escherichia coli producing Shiga-like toxin I, Shiga-like toxin II, and a variant of Shiga-like toxin II with synthetic oligonucleotide probes. Brown JE, et al. **Infect Immun** 1989 Sep;57(9):2811-4

Definition of Brucella A and M epitopes by monoclonal typing reagents and synthetic oligosaccharides. Bundle DR, et al. **Infect Immun** 1989 Sep;57(9):2829-36

Chromosomally-encoded gentamicin resistance in 'epidemic' methicillin-resistant Staphylococcus aureus: detection with a synthetic oligonucleotide probe. Jordens JZ, et al. **J Antimicrob Chemother** 1989 Mar;23(3):327-34

Affinity isolation of transcriptionally active murine erythroleukemia cell DNA using a cleavable biotinylated nucleotide analog. Dawson BA, et al. **J Biol Chem** 1989 Aug 5;264(22):12830-7

Recognition and binding of template-primers containing defined abasic sites by Drosophila DNA polymerase alpha holoenzyme. Ng L, et al. **J Biol Chem** 1989 Aug 5; 264(22):13018-23

Studies on the role of actin's aspartic acid 3 and aspartic acid 11 using oligodeoxynucleotide-directed site-specific mutagenesis. Solomon TL, et al. **J Biol Chem** 1988 Dec 25;263(36):19662-9

Primer-mediated enzymatic amplification of cytomegalovirus (CMV) DNA. Application to the early diagnosis of CMV infection in marrow transplant recipients. Cassol SA, et al. **J Clin Invest** 1989 Apr;83(4):1109-15

Nonisotopic oligomeric probes for the human enteroviruses. Rotbart HA, et al. **J Clin Microbiol** 1988 Dec; 26(12):2669-71

Species-specific oligonucleotide probes for rRNA of Clostridium difficile and related species. Wilson KH, et al. **J Clin Microbiol** 1988 Dec;26(12):2484-8

High-resolution in situ hybridization histochemistry. Baldino F Jr, et al. **Methods Enzymol** 1989;168:761-77

Probing ribosome structure and function using short oligodeoxyribonucleotides. Hill WE, et al. **Methods Enzymol** 1988;164:401-19

Improved characterization of Theileria parva isolates using the polymerase chain reaction and oligonucleotide probes. Allsopp B, et al. **Mol Biochem Parasitol** 1989 Jun 15; 35(2):137-47

An oligonucleotide probe specific for Onchocerca volvulus. Harnett W, et al. **Mol Biochem Parasitol** 1989 Jun 15; 35(2):119-25

A general approach to isolating Plasmodium falciparum genes using non-redundant oligonucleotides inferred from protein sequences of other organisms. Hyde JE, et al. **Mol Biochem Parasitol** 1989 Jan 15;32(2-3):247-61

A non-radioactive diagnostic test for the detection of HBV DNA sequences in serum at the single molecule level. Larzul D, et al. **Mol Cell Probes** 1989 Mar;3(1):45-57

Nucleic acid hybridization assays employing dA-tailed capture probes. Single capture methods. Morrissey DV, et al. **Mol Cell Probes** 1989 Jun;3(2):189-207

Northern blot normalization with a 28S rRNA oligonucleotide probe. Barbu V, et al. **Nucleic Acids Res** 1989 Sep 12;17(17):7115

Cloning of synthetic oligodeoxynucleotides may result in high frequency promoter mutations in E. coli. Bauer BF, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):812

Comparative inhibition of rabbit globin mRNA translation by modified antisense oligodeoxynucleotides. Cazenave C, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4255-73

Labelling oligonucleotides to high specific activity (I). Craig AG, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4605-10

Multiple primer pairs for the detection of HTLV-I by PCR. De BK, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2142

Rapid detection of DNA-binding factors using protein-blotting and digoxigenin-dUTP marked probes. Dooley S, et al. **Nucleic Acids Res** 1988 Dec 23; 16(24):11839

Analysis of the recognition mechanism involved in the EcoRV catalyzed cleavage of DNA using modified oligodeoxynucleotides. Fliess A, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11781-93

Sequence-specific recognition of the major groove of DNA by oligodeoxynucleotides via triple helix formation. Footprinting studies. François JC, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11431-40

Polymerase chain reaction for detection of the pMP6d-9/MspI RFLP, a marker closely linked to the cystic fibrosis mutation. Huth A, et al. **Nucleic Acids Res** 1989 Sep 12;17(17):7118

Highly degenerate, inosine-containing primers specifically amplify rare cDNA using the polymerase chain reaction. Knoth K, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10932

A method for introducing random single point deletions in specific DNA target sequences using oligonucleotides. Ner SS, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4015-23

Oligonucleotide-targeted degradation of U1 and U2 snRNAs reveals differential interactions of simian virus 40 pre-mRNAs with snRNPs. Pan ZQ, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6553-68

DNA amplification for detection of the XV-2c polymorphism linked to cystic fibrosis. Rosenbloom CL, et al. **Nucleic Acids Res** 1989 Sep 12;17(17):7117

DNA fingerprinting using non-radioactive oligonucleotide probes specific for simple repeats. Schäfer R, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9344

A rapid method for determining the orientation of poly (A) containing cDNAs. Skipper J, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1782

Efficient oligonucleotide-directed construction of mutations in expression vectors by the gapped duplex DNA method using alternating selectable markers. Stanssens P, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4441-54

Quantification of polymerase chain reaction products by affinity-based hybrid collection. Syvänen AC, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11327-38

Construction of cDNA libraries from small numbers of cells using sequence independent primers. Tam AW, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1269

Direct genomic fluorescent on-line sequencing and analysis using in vitro amplification of DNA. Voss H, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2517-27

Non-radioactive oligonucleotide fingerprinting in the gel. Zischler H, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4411

The use of oligonucleotide-directed mutagenesis to probe molecular mechanisms of mutagenesis. Kunkel TA. **Nucleic Acids Symp Ser** 1988;(19):43

Genetic analysis of amplified DNA with immobilized sequence-specific oligonucleotide probes. Saiki RK, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6230-4

A strategy for high-volume sequencing of cosmid DNAs: random and directed priming with a library of oligonucleotides. Studier FW. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6917-21

Phylogenetic stains: ribosomal RNA-based probes for the identification of single cells [published erratum appears in Science 1989 Sep 22;245(4924):1312] DeLong EF, et al. **Science** 1989 Mar 10;243(4896):1360-3

Follow-up of chimeric state during early hematopoietic reconstitution after allogeneic bone marrow transplantation using oligonucleotide probes from minisatellite gene regions. Dörre S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3089-91

Normalization of RNA dot blots with oligo(dT). Harley CB. **Trends Genet** 1988 Jun;4(6):152

[Ultrastructural localization of mRNA coding for oxytocin by in situ hybridization. Study by high resolution autoradiography using a tritiated oligonucleotide probe] Trembleau A, et al. **C R Acad Sci [III]** 1988;307(20):869-74 (Eng. Abstr.) **(Fre)**

[Primer-dependent amplification of 2 sites of human beta-globin gene] Shvarts EI, et al. **Bioorg Khim** 1988 Nov; 14(11):1577-9 (Eng. Abstr.) **(Rus)**

[Determination of the nucleotide sequence of DNA using hybridization with oligonucleotides. A new method] Lysov IuP, et al. **Dokl Akad Nauk SSSR** 1988;303(6):1508-11 **(Rus)**

ANALYSIS

Rapid identification of Campylobacter species using oligonucleotide probes to 16S ribosomal RNA. Romaniuk PJ, et al. **Mol Cell Probes** 1989 Jun;3(2):133-42

CHEMICAL SYNTHESIS

Synthesis of 5'-oligonucleotide hydrazide derivatives and their use in preparation of enzyme-nucleic acid hybridization probes. Ghosh SS, et al. **Anal Biochem** 1989 Apr;178(1):43-51

Chemical development in the design of oligonucleotide probes for binding to DNA and RNA. Shabarova ZA. **Biochimie** 1988 Oct;70(10):1323-34 (30 ref.)

N-(2-hydroxyethyl)phenazinium derivatives of oligonucleotides as effectors of the sequence-specific modification of nucleic acids with reactive oligonucleotide derivatives. Kutyavin IV, et al. **FEBS Lett** 1988 Sep 26; 238(1):35-8

Digoxigenated oligonucleotide probes specific for simple repeats in DNA fingerprinting and hybridization in situ. Zischler H, et al. **Hum Genet** 1989 Jun;82(3):227-33

Synthetic oligodeoxynucleotide probes for the rapid detection of bacteria associated with human periodontitis. Chuba PJ, et al. **J Gen Microbiol** 1988 Jul;134 (Pt 7):1931-8

DIAGNOSTIC USE

Non-radioactive oligonucleotide probe for detection of clinical enterotoxigenic Escherichia coli isolates of bovine origin. Kumar A, et al. **Ann Inst Pasteur Microbiol** 1988 May-Jun;139(3):315-23

Oligonucleotide gene probes may detect enterotoxigenic Escherichia coli directly in fecal smears. Sommerfelt H, et al. **APMIS** 1989 Jan;97(1):91-4

Use of synthetic oligonucleotide probes to detect rhinovirus RNA. Bruce CB, et al. **Arch Virol** 1989;105(3-4):179-87

Oligo-riboprobes. Tools for in situ hybridisation. Denny P, et al. **Histochemistry** 1988;89(5):481-3

Evaluation of oligonucleotide probes for identification of shiga-like-toxin-producing Escherichia coli. Karch H, et al. **J Clin Microbiol** 1989 Jun;27(6):1180-6

GENETICS

Structural requirements for IgM assembly and cytolytic activity. Effects of mutations in the oligosaccharide acceptor site at Asn402. Muraoka S, et al. **J Immunol** 1989 Jan 15;142(2):695-701

Synthetic oligonucleotide probes complementary to the HLA-B variable region hybridize with Klebsiella pneumoniae. Williams KM, et al. **Microb Pathog** 1989 Apr; 6(4):277-86

ISOLATION & PURIFICATION

Solid supported hydrolysis of apurinic sites in synthetic oligonucleotides for rapid and efficient purification on reverse-phase cartridges. Horn T, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11559-71

OLIGONUCLEOTIDES

A simple and efficient method for the oligonucleotide-directed mutagenesis using plasmid DNA template and phosphorothioate-modified nucleotide. Sugimoto M, et al. **Anal Biochem** 1989 Jun;179(2):309-11

A photochemical investigation of the dynamics of oligonucleotide hybridization. Hearst JE. **Annu Rev Phys Chem** 1988;39:291-315 (43 ref.)

Synthesis and characterization of a bovine hexokinase 1 cDNA probe by mixed oligonucleotide primed amplification of cDNA using high complexity primer mixtures. Griffin LD, et al. **Biochem Med Metab Biol** 1989 Apr;41(2):125-31

High-resolution NMR study of a synthetic DNA-RNA hybrid dodecamer containing the consensus pribnow promoter sequence: d(CGTTATAATGCG).r(CGCAUUAUAACG). Chou SH, et al. **Biochemistry** 1989 Mar 21;28(6):2435-43

The distribution of the frequency of occurrence of nucleotide subsequences, based on their overlap capability. Gentleman JF, et al. **Biometrics** 1989 Mar;45(1):35-52

Specific oligodeoxynucleotide probes obtained through RNA sequencing. Köhrer K, et al. **DNA** 1989 Mar;8(2):143-7

Generation of multiple independent substitution mutants by M13 in vitro mutagenesis using a single mutagenic oligonucleotide. Reyes AA, et al. **DNA** 1988 Oct; 7(8):579-84

Conformational analysis of brominated pA2'-5'A2'-5'A analogs. An NMR and model-building study. van den Hoogen YT, et al. **Eur J Biochem** 1989 Jul 1;182(3):629-37

One left-handed strand in DNA-oligonucleotide complexes? Gago F, et al. **FEBS Lett** 1989 Jan 2;242(2):270-4

In situ hybridization demonstration of poly-adenylated RNA sequences in formalin-fixed paraffin sections using a biotinylated oligonucleotide poly d(T) probe. Pringle JH, et al. **J Pathol** 1989 Aug;158(4):279-86

The GTm6AC sequence is overwound and bent. Fazakerley GV, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2541-56

Detection of single DNA base differences by competitive oligonucleotide priming. Gibbs RA, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2437-48

Modelling basic features of specificity in the binding of a dicationic steroid diamine to double-stranded oligonucleotides. Hui XW, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4177-87

Oligonucleotide-directed restriction endonuclease digestion. Milavetz B. **Nucleic Acids Res** 1989 Apr 25;17(8):3322

Conformational and thermodynamic consequences of the introduction of a nick in duplexed DNA fragments: an NMR study augmented by biochemical experiments. Pieters JM, et al. **Nucleic Acids Res** 1989 Jun 26; 17(12):4551-65

Immunochemical detection of multiple conformations within

a 36 base pair oligonucleotide. Sanford DG, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10643–55

Analysis of superhelical structures of nucleic acid–lipid conjugates by image processing. Yanagawa H, et al. **Nucleic Acids Symp Ser** 1988;(19):189–92

[Reactivity of oligonucleotide derivatives, containing a methylphosphate group. Affinity modification of target DNA by 4–N–(methyl–N–2–chlorethylamino)benzyl 3'- and 5'–phosphamide derivatives of octathymidylate containing methylphosphonate residues] Amirkhanov NV, et al. **Bioorg Khim** 1989 Mar;15(3):379–86 (Eng. Abstr.) **(Rus)**

[Immobilized oligonucleotides as affinity sorbents for restriction endonucleases] Degtiarev SKh, et al. **Bioorg Khim** 1989 Mar;15(3):358–62 (Eng. Abstr.) **(Rus)**

[Activation by laser irradiation of a "switched on" oligonucleotide reagent for an addressed modification of nucleic acids] Oshevskil SN. **Bioorg Khim** 1989 Mar; 15(3):387–91 (Eng. Abstr.) **(Rus)**

[Complete assignment of signals in 1D and 2D H–NMR spectra of a 17–member oligonucleotide, a model symmetrical analog of lambda operators] Kurochkin AV, et al. **Mol Biol (Mosk)** 1989 Jan–Feb;23(1):135–52 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Delivery of c–myc antisense phosphorothioate oligodeoxynucleotides to hematopoietic cells in culture by liposome fusion: specific reduction in c–myc protein expression correlates with inhibition of cell growth and DNA synthesis. Loke SL, et al. **Curr Top Microbiol Immunol** 1988;141:282–9

ANALYSIS

Use of a volatile buffer system in ion–exchange high–performance liquid chromatography of oligonucleotides. Munholland JM, et al. **Anal Biochem** 1989 May 1;178(2):320–3

Fluorescent oligonucleotides and deoxynucleotide triphosphates: preparation and their interaction with the large (Klenow) fragment of Escherichia coli DNA polymerase I. Allen DJ, et al. **Biochemistry** 1989 May 30; 28(11):4601–7

Quantification of DNA structure from NMR data: conformation of d–ACATCGATGT. Chary KV, et al. **Biochemistry** 1989 Jun 13;28(12):5240–9

Effects of functional group changes in the EcoRV recognition site on the cleavage reaction catalyzed by the endonuclease. Mazzarelli J, et al. **Biochemistry** 1989 May 30;28(11):4616–22

Binding of actinomycin D to [d(ATCGAT)]2: NMR evidence of multiple complexes. Zhou N, et al. **Biochemistry** 1989 Jun 13;28(12):5231–9

Characterization and sequencing of normal and modified oligonucleotides by 252Cf plasma desorption mass spectrometry. Viari A, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):225–8

Probing the structure and function of U2 snRNP with antisense oligonucleotides made of 2'–OMe RNA. Lamond AI, et al. **Cell** 1989 Jul 28;58(2):383–90

The frequency of oligonucleotides in mammalian genic regions. Volinia S, et al. **Comput Appl Biosci** 1989 Feb; 5(1):33–40

Computer–assisted retention prediction system for oligonucleotides in gradient anion–exchange chromatography. Baba Y, et al. **J Chromatogr** 1988 Dec 23;458:385–94

High–performance liquid chromatography of amino acids, peptides, proteins and polynucleotides. XCIV. Solid–phase hybridization of complementary oligonucleotides. Guthridge M, et al. **J Chromatogr** 1989 Aug 4;476:445–53

Co–localization of rare oligonucleotides and regulatory elements in mammalian upstream gene regions. Volinia S, et al. **J Mol Biol** 1988 Sep 20;203(2):385–90

A method of HLA class II typing using nonradioactive labelled oligonucleotides. Eliaou JF, et al. **Tissue Antigens** 1989 Apr;33(4):475–85

Analysis of some swine influenza H1N1 viruses by oligonucleotide fingerprinting. Abusugra IA, et al. **Zentralbl Veterinarmed [B]** 1989 Feb;36(1):63–8

CHEMICAL SYNTHESIS

Oligonucleotide N–alkylphosphoramidates: synthesis and binding to polynucleotides. Jäger A, et al. **Biochemistry** 1988 Sep 20;27(19):7237–46

Synthesis of alkylating oligonucleotide derivatives containing cholesterol or phenazinium residues at their 3'–terminus and their interaction with DNA within mammalian cells. Boutorin AS, et al. **FEBS Lett** 1989 Aug 28;254(1–2):129–32

Effective method for obtaining long nucleotide chains on partially complementary templates. Processed bovine gamma–interferon gene obtained from human gamma–interferon gene. Rostapshov VM, et al. **FEBS Lett** 1989 Jun 5;249(2):379–82

Deoxyoligonucleotide synthesis via the phosphoramidite method. Caruthers MH, et al. **Gene Amplif Anal** 1983;3:1–26 (48 ref.)

Polymer support synthesis. XV. Behaviour of non–porous surface–coated silica gel microbeads in oligonucleotide synthesis. Seliger H, et al. **J Chromatogr** 1989 Aug 4; 476:49–57

Studies on the role of tetrazole in the activation of phosphoramidites. Berner S, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):853–64

Synthesis of the nucleopeptides H–Phe–Tyr(pGC)–NH2 and H–Phe–Ser(pGC)–Ala–OH via a phosphotriester approach. Kuyl–Yeheskiely E, et al. **Nucleic Acids Res** 1989 Apr 25; 17(8):2897–905

Stereoselective synthesis of P–homochiral oligo(thymidine methanephosphonates). Lesnikowski ZJ, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11675–89

Uncharged stereoregular nucleic acid analogs: 2. Morpholino nucleoside oligomers with carbamate internucleoside linkages. Stirchak EP, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6129–41

Specificity of site directed psoralen addition to RNA. Teare J, et al. **Nucleic Acids Res** 1989 May 11;17(9):3359–72

Nucleic acid synthesis and protein engineering. Ikehara M. **Nucleic Acids Symp Ser** 1988;(19):143

Synthesis and application of a new phosphorylating agent: S–(N–monomethoxytritylaminoethyl)–O–(o–chlorophenyl)phosphorothi oate. Tanaka T, et al. **Nucleic Acids Symp Ser** 1988;(19):21–4

Oligonucleotide analogues as potential chemotherapeutic agents. Zon G. **Pharm Res** 1988 Sep;5(9):539–49 (164 ref.)

[Synthesis of modified oligonucleotides and applications for the study of nucleic acids] Ohtsuka E, et al. **Seikagaku** 1988 May;60(5):339–47 (93 ref.) **(Jpn)**

DIAGNOSTIC USE

Hemoglobin constant spring defined by specific oligonucleotide hybridization and hemoglobin D Punjab (beta 121——Gln) in a Batak Indonesian family. Kosasih EN, et al. **Am J Hematol** 1988 Sep;29(1):22–6

Immunocytochemistry of 5–bromo–2'–deoxyuridine labelled oligonucleotide probes. A novel technique for in situ hybridization. Jirikowski GF, et al. **Histochemistry** 1989; 91(1):51–3

Chromosomally–encoded gentamicin resistance in 'epidemic' methicillin–resistant Staphylococcus aureus: detection with a synthetic oligonucleotide probe. Jordens JZ, et al. **J Antimicrob Chemother** 1989 Mar;23(3):327–34

Identification of apolipoprotein E polymorphism by using synthetic oligonucleotides. Smeets HJ, et al. **J Lipid Res** 1988 Sep;29(9):1231–7

GENETICS

Gene synthesis by serial cloning of oligonucleotides. Hayden MA, et al. **DNA** 1988 Oct;7(8):571–7

Simple and efficient oligonucleotide–directed mutagenesis using one primer and circular plasmid DNA template. Marotti KR, et al. **Gene Anal Tech** 1989 Jul–Aug;6(4):67–70

Pathways of evolution of influenza A (H1N1) viruses from 1977 to 1986 as determined by oligonucleotide mapping and sequencing studies. Cox NJ, et al. **J Gen Virol** 1989 Feb;70 (Pt 2):299–313

Random oligonucleotide mutagenesis: application to a large protein coding sequence of a major histocompatibility complex class I gene, H–2DP. Murray R, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9761–73

Modulation of ras expression by anti–sense, nonionic deoxyoligonucleotide analogs. Brown D, et al. **Oncogene Res** 1989;4(4):243–52

[Mutagenesis directed by phosphotriester analogs of oligonucleotides: a way to site–specific mutagenesis in vivo] Petrenko VA, et al. **Mol Gen Mikrobiol Virusol** 1989 Mar; (3):35–9 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Separation of oligonucleotides by high–performance ion–exchange chromatography on a non–porous ion exchanger. Kato Y, et al. **J Chromatogr** 1988 Aug 5; 447(1):212–20

Purification of synthetic oligonucleotides on a weak ion–exchange column. Liautard J, et al. **J Chromatogr** 1989 Aug 4;476:439–43

Quantitative precipitation of short oligonucleotides with low concentrations of cetyltrimethylammonium bromide. Jost JP, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2143

METABOLISM

Rapid cloning of rearranged immunoglobulin genes from human hybridoma cells using mixed primers and the polymerase chain reaction. Larrick JW, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1250–6

Free radical and radiation–induced DNA damage to oligonucleotides. Téoule R, et al. **Free Radic Res Commun** 1989;6(2–3):121–2

The binding in vitro of the intermediate filament protein vimentin to synthetic oligonucleotides containing telomere sequences. Shoeman RL, et al. **J Biol Chem** 1988 Dec 15; 263(35):18744–9

Negative co–operativity in Escherichia coli single strand binding protein–oligonucleotide interactions. I. Evidence and a quantitative model. Bujalowski W, et al. **J Mol Biol** 1989 May 5;207(1):249–68

Negative co–operativity in Escherichia coli single strand binding protein–oligonucleotide interactions. II. Salt, temperature and oligonucleotide length effects. Bujalowski W, et al. **J Mol Biol** 1989 May 5;207(1):269–88

Ionized and wobble base–pairing for bromouracil–guanine in equilibrium under physiological conditions. A nuclear magnetic resonance study on an oligonucleotide containing a bromouracil–guanine base–pair as a function of pH. Sowers LC, et al. **J Mol Biol** 1989 Jan 20;205(2):437–47

Defining the sequence specificity of DNA–binding proteins by selecting binding sites from random–sequence oligonucleotides: analysis of yeast GCN4 protein. Oliphant AR, et al. **Mol Cell Biol** 1989 Jul;9(7):2944–9

Arrangement of Dam methylation sites (GATC) in the Escherichia coli chromosome. Barras F, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9821–38

Measurement of the binding of transcription factor Sp1 to a single GC box recognition sequence. Letovsky J, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2639–53

On the mechanism of action of ribonucleases: dinucleotide cleavage catalyzed by imidazole and Zn2+. Breslow R, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1746–50

Characterization of oligonucleotide transport into living cells. Loke SL, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(10):3474–8

Chemical and computer graphics studies on the topography of the ribonuclease A active site cleft. A model of the enzyme–pentanucleotide substrate complex. de Llorens R, et al. **Protein Eng** 1989 Mar;2(6):417–29

PHARMACOLOGY

Oligonucleotide–directed mutagenesis: a sequence–based screening. Duilio A, et al. **Anal Biochem** 1988 Nov 1; 174(2):618–22

The 1988 Walter Hubert lecture. Artificial control of gene expression by oligodeoxynucleotides covalently linked to intercalating agents. Hélène C. **Br J Cancer** 1989 Aug; 60(2):157–60 (62 ref.)

Nuclear–organelle interactions: nuclear antisense gene inhibits ribulose bisphosphate carboxylase enzyme levels in transformed tobacco plants. Rodermel SR, et al. **Cell** 1988 Nov 18;55(4):673–81

The effect of oligonucleotides complementary to the 3' end of the 16S rRNA on the formation of the bacterial 30S initiation complex. Eckert V, et al. **Eur J Biochem** 1989 Jul 1;182(3):557–62

Oligonucleotide duplexes containing CC(A/T)GG stimulate cleavage of refractory DNA by restriction endonuclease EcoRII. Pein CD, et al. **FEBS Lett** 1989 Mar 13; 245(1–2):141–4

Antisense compounds: potential role in cancer therapy. Stein CA, et al. **Important Adv Oncol** 1989;:79–97 (66 ref.)

Anti–c–myc DNA increases differentiation and decreases colony formation by HL–60 cells. Wickstrom EL, et al. **In Vitro Cell Dev Biol** 1989 Mar;25(3 Pt 1):297–302

Oligonucleotide linked to human gammaglobulin specifically diminishes anti–DNA antibody formation in cultured lymphoid cells from patients with systemic lupus erythematosus. Borel Y, et al. **J Clin Invest** 1988 Dec; 82(6):1901–7

Inhibition of human immunodeficiency virus (HIV–1) replication by synthetic oligo–RNA derivatives. Shibahara S, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):239–52

Retinoid receptor antisense DNAs inhibit alkaline phosphatase induction and clonogenicity in malignant keratinocytes. Cope FO, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5590–4

Site specificity of the inhibitory effects of oligo(nucleoside methylphosphonate)s complementary to the acceptor splice junction of herpes simplex virus type 1 immediate early mRNA 4. Kulka M, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6868–72

[Derivatives of oligonucleotides complementary to viral RNA inhibit replication of tick–borne encephalitis virus in a cell culture] Pogodina VV, et al. **Dokl Akad Nauk SSSR** 1988;301(5):1257–60 **(Rus)**

[Antisense polynucleotides and prospects for their use in fighting viruses] Tikhonenko TI. **Mol Biol (Mosk)** 1989 May–Jun;23(3):629–38 (40 ref.) (Eng. Abstr.) **(Rus)**

[Complementary addressed modification of single– and double–stranded DNA by alkylating derivatives of oligonucleotides isolated by partial DNA fragmentation] Gaidamakov SA, et al. **Mol Gen Mikrobiol Virusol** 1988 Jul;(7):42–7 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Studies of radiation damage using DNA oligomers. Box HC, et al. **Free Radic Res Commun** 1989;6(2–3):123–6

TOXICITY

[Site–specific mutagenesis in vivo directed by phosphoester analogs of oligonucleotides] Petrenko VA, et al. **Dokl Akad Nauk SSSR** 1989;304(4):1002–4 **(Rus)**

[Diastereomers of nonionic analogs of nucleic acids. V. Alkylation of nucleic acids in the living cells by ethylated derivatives of oligonucleotides containing the residue of nitrous yperite. The effect of the phosphotriester fragment configuration] Abramova TV, et al. **Mol Biol (Mosk)** 1988 Sep–Oct;22(5):1285–92 (Eng. Abstr.) **(Rus)**

OLIGOPEPTIDES

Covalent attachment of an Arg–Gly–Asp sequence peptide to derivatizable polyacrylamide surfaces: support of fibroblast adhesion and long–term growth. Brandley BK, et al. **Anal Biochem** 1988 Jul;172(1):270–8

Inhibition of coronary artery transplant atherosclerosis in rabbits with angiopeptin, an octapeptide. Foegh ML, et al. **Atherosclerosis** 1989 Aug;78(2–3):229–36

ESR evidence for superoxide, hydroxyl radicals and singlet oxygen produced from hydrogen peroxide and nickel(II) complex of glycylglycyl–L–histidine. Inoue S, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):445–51

Identification and characterization of adipokinetic hormone (Locusta migratoria)–like immunoreactivity in the human cerebrospinal fluid. Suzuki H, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):534–40

Conformational studies of a synthetic peptide corresponding to the repeat motif of C hordein. Tatham AS, et al. **Biochem J** 1989 Apr 15;259(2):471–6

The nature of the hydrophobic binding of small peptides at the bilayer interface: implications for the insertion of transbilayer helices. Jacobs RE, et al. **Biochemistry** 1989 Apr 18;28(8):3421–37

Role of peptide conformation in the rate and mechanism of deamidation of asparaginyl residues. Lura R, et al. **Biochemistry** 1988 Oct 4;27(20):7671–7

NMR studies of the influence of dodecyl sulfate on the amide hydrogen exchange kinetics of a micelle–solubilized hydrophobic tripeptide. O'Neil JD, et al. **Biochemistry** 1989 Jan 24;28(2):699–707

Interaction between a growth–hormone releasing hexapeptide and phospholipids spread as monolayers at the air/water interface. Issaurat B, et al. **Biochim Biophys Acta** 1988 Oct 20;944(3):516–20

A study of the conformational equilibrium of DL–oligophenylalanines in nonpolar solvents in the presence and absence of lipids by high–performance liquid chromatography. Baño MC, et al. **Biophys Chem** 1988 Aug; 31(1–2):3–9

Determination of the structure of a membrane–incorporated ion channel. Solid–state nuclear magnetic resonance studies of gramicidin A. Smith R, et al. **Biophys J** 1989 Aug; 56(2):307–14

Pseudopeptides and beta folding: x–ray structures compared with structures in solution. Aubry A, et al. **Biopolymers** 1989 Jan;28(1):109–22

Solid–state conformations of aminosuccinyl peptides: crystal structure of tert–butyloxycarbonyl–L–leucyl–L–aminosuccinyl–L–phenylalaninami de. Capasso S, et al. **Biopolymers** 1989 Jan; 28(1):139–47

Structure–activity relationship of tetrapeptides related to dermorphin: a 500–MHz 1H–nmr study. Castiglione–Morelli MA, et al. **Biopolymers** 1988 Sep; 27(9):1353–61

NMR studies of a series of dehydrodermorphins. Castiglione–Morelli MA, et al. **Biopolymers** 1989 Jan; 28(1):129–38

Conformations of dehydrophenylalanine containing peptides: nmr studies of an acyclic hexapeptide with two delta Z–Phe residues. Chauhan VS, et al. **Biopolymers** 1989 Mar; 28(3):763–71

Two–dimensional 1H–NMR study of synthetic peptides containing the main immunogenic region of the Torpedo acetylcholine receptor. Cung MT, et al. **Biopolymers** 1989 Jan;28(1):465–78

Structure and stability of the Boc(D–Pro–L–Pro)2OCH3 Na+ complex: a model of poly(D,L–proline), an alkali ion channel across membranes. De Santis P, et al. **Biopolymers** 1989 Jan;28(1):285–96

Mono and two–dimensional 500–MHz characterization of synthetic bombesin and related peptides in DMSO and DMSO–water. Di Bello C, et al. **Biopolymers** 1989 Jan; 28(1):421–40

Regularly alternating L,D–peptides. I. The double–stranded left–handed antiparallel beta–helix in the structure of Boc–(L–Val–D–Val)4–OMe. Di Blasio B, et al. **Biopolymers** 1989 Jan;28(1):193–201

Regularly alternating L,D–peptides. II. The double–stranded right–handed antiparallel beta–helix in the structure of t–Boc–(L–Phe–D–Phe)4–OMe. Di Blasio B, et al. **Biopolymers** 1989 Jan;28(1):203–14

Conformationally constrained D,L–alternating oligopeptides. Fenude E, et al. **Biopolymers** 1989 Jan;28(1):185–92

Solvated helical backbones: x–ray diffraction study of Boc–Ala–Leu–Aib–Ala–Leu–Aib–OMe.H2O. Karle IL, et al. **Biopolymers** 1989 Mar;28(3):773–81

Ca2+ binding cyclic octapeptides having an alternating Sar and a hydrophobic amino acid in the sequence. Kimura S, et al. **Biopolymers** 1989 Jul;28(7):1235–46

Ca2+ transport through lipid membrane by diastereomer cyclic octapeptides. Kimura S, et al. **Biopolymers** 1989 Jul; 28(7):1247–57

Conformational analysis of peptide T and of its C–pentapeptide fragment. Motta A, et al. **Biopolymers** 1989 Jan;28(1):479–86

Regularly alternating L,D–peptides. III. Hexacyclic peptides from valine or phenylalanine. Pavone V, et al. **Biopolymers** 1989 Jan;28(1):215–23

Role of water molecules in the crystal structure of Gly–L–Ala–L–Phe: a possible sequence preference for nucleation of alpha–helix? Ramasubbu N, et al. **Biopolymers** 1989 Jul;28(7):1259–69

High–resolution solid–state 13C–NMR of peptides: a study of chain–length dependence for 3(10)–helix formation. Saitô H, et al. **Biopolymers** 1988 Oct;27(10):1607–17

Structure of conformationally constrained peptides: from model compounds to bioactive peptides. Toniolo C. **Biopolymers** 1989 Jan;28(1):247–57

Molecular structure of L–lysyl–L–alanyl–L–alanine: a tripeptide found in histone H1. Verdaguer N, et al. **Biopolymers** 1988 Dec;27(12):1887–96

Sensitive assay of cysteine proteinases using new peptide p–nitroanilides. Fukal L, et al. **Biotechnol Appl Biochem** 1988 Oct;10(5):473–5

Tumor cytotoxicity of human monocyte membrane–bound interleukin–1 alpha induced by synergistic actions of interferon–gamma and synthetic acyltripeptide, FK–565. Inamura N, et al. **Cancer Immunol Immunother** 1989; 28(3):164–70

Sequence–dependent reactivity of model peptides with glyceraldehyde. Mori N, et al. **Carbohydr Res** 1989 Jun 15;189:49–63

Determination of the pepsin activity in human gastric juice, using defined oligopeptides as substrates. Schnaith E. **Clin Biochem** 1989 Apr;22(2):91–8

2H and 31P NMR study of pentalysine interaction with headgroup deuterated phosphatidylcholine and phosphatidylserine. Roux M, et al. **Eur Biophys J** 1988; 16(5):267–73

Secondary structure of the Arg–Gly–Asp recognition site in proteins involved in cell–surface adhesion. Evidence for the occurrence of nested beta–bends in the model hexapeptide GRGDSP. Reed J, et al. **Eur J Biochem** 1988 Dec 1;178(1):141–54

New fluoroketones as human renin inhibitors. Tarnus C, et al. **FEBS Lett** 1989 May 22;249(1):47–50

Unpaired electron migration between aromatic and sulfur peptide units. Prütz WA, et al. **Free Radic Res Commun** 1986;2(1–2):69–75

Prevention of acute gastric erosions in the rat by novel semi–synthetic amphipathic analogues of pepstatin. Huddy SP, et al. **Gut** 1988 Nov;29(11):1569–77

Scanning microfluorometric measurement of TRITC–phalloidin labelled F–actin. Dependence of F–actin content on density of normal and transformed cells. Bereiter–Hahn J, et al. **Histochemistry** 1988;90(4):271–6

Aggregation studies in crystals of apolar helical peptides: Boc–Aib–Val–Ala–Leu–Aib–Val–Ala–Leu–Aib–OMe. Karle IL, et al. **Int J Pept Protein Res** 1988 Dec; 32(6):536–43

Peptides as potential virus inhibitors. Synthesis and bioassay of five respiratory syncytial virus peptide analogs with antimeasles activity. Lobl TJ, et al. **Int J Pept Protein Res** 1988 Nov;32(5):326–30

N.m.r. and computer–simulated conformational analyses of a nonapeptide found in a human salivary proline–rich glycoprotein. Loomis RE, et al. **Int J Pept Protein Res** 1988 Aug;32(2):130–40

Conformational effects of chiral alpha,alpha–dialkyl amino acids. I. C–terminal tetrapeptides of emerimicin containing alpha–ethylalanine. Marshall GR, et al. **Int J Pept Protein Res** 1988 Dec;32(6):544–55

Structure determination of alphostatin, a novel alkaline phosphatase inhibitor. Kojiri K, et al. **J Antibiot (Tokyo)** 1989 Mar;42(3):489–90

N–succinyl–alanyl–methionyl–S–benzylcysteine p–nitroanilide as a sensitive substrate for assaying activity of cysteine proteinases. Fukal L, et al. **J Biochem Biophys Methods** 1988 Aug;16(4):323–5

Succinimide formation from aspartyl and asparaginyl peptides as a model for the spontaneous degradation of proteins. Stephenson RC, et al. **J Biol Chem** 1989 Apr 15; 264(11):6164–70

Single–step, chromogenic Limulus amebocyte lysate assay for endotoxin. Lindsay GK, et al. **J Clin Microbiol** 1989 May;27(5):947–51

Renin inhibitory peptides: a study of structural modifications in the peptide backbone. Thaisrivongs S, et al. **J Hypertens Suppl** 1989 Apr;7(2):S21–3

Synthesis of the novel pi–(benzyloxymethyl)–protected histidine analogue of statine. Inhibition of penicillopepsin by pepstatin–derived peptides containing different statine side–chain derivatives. Maibaum J, et al. **J Med Chem** 1989 Jul;32(7):1571–6

Surface, subunit interfaces and interior of oligomeric proteins. Janin J, et al. **J Mol Biol** 1988 Nov 5;204(1):155–64

Crystallization of the periplasmic oligopeptide–binding protein of Salmonella typhimurium [letter] Tolley SP, et al. **J Mol Biol** 1988 Nov 20;204(2):493–4

Some factors that influence the nonenzymatic glycation of peptides and polypeptides by glyceraldehyde. Bai Y, et al. **J Protein Chem** 1989 Apr;8(2):299–315

Species relationships for plasma angiotensin converting enzyme activity using a furanacryloyl tripeptide substrate. Evans GO. **Jikken Dobutsu** 1989 Apr;38(2):163–4

Photoaffinity labeling of opioid delta receptors with an iodinated azido–ligand: [125I][D–Thr2,pN3Phe4,Leu5]enkephalyl–Thr6. Bochet P, et al. **Mol Pharmacol** 1988 Oct;34(4):436–43

Conformational studies of dermorphin. Renugopalakrishnan V, et al. **NIDA Res Monogr** 1988;87:74–82

Proton magnetic resonance studies of the binding of oligopeptides containing tryptophan to polyribonucleotides poly A, poly U and poly C. Barthwal R, et al. **Physiol Chem Phys Med NMR** 1988;20(2):145–57

Addition of a foreign oligopeptide to the major capsid protein of poliovirus. Colbère–Garapin F, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8668–72

Reaction path study of conformational transitions and helix formation in a tetrapeptide. Czerminski R, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6963–7

Alpha–helix and mixed 3(10)/alpha–helix in cocrystallized conformers of Boc–Aib–Val–Aib–Aib–Val–Val–Val–Aib–Val–Aib–OMe. Karle IL, et al. **Proc Natl Acad Sci U S A** 1989 Feb; 86(3):765–9

M2 delta, a candidate for the structure lining the ionic channel of the nicotinic cholinergic receptor. Oiki S, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8703–7

Oligopeptide biases in protein sequences and their use in predicting protein coding regions in nucleotide sequences. McCaldon P, et al. **Proteins** 1988;4(2):99–122

[DNA complexes with synthetic oligopeptides: a model for studying the regularity of DNA compactization in vivo] Vengerov IuIu, et al. **Mol Gen Mikrobiol Virusol** 1989 Jan; (1):3–10 (46 ref.) (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Experimental oral anticoagulation by a directly acting thrombin inhibitor (RGH–2958). Bagdy D, et al. **Folia Haematol (Leipz)** 1988;115(1–2):136–40

RGDV peptide selectively inhibits platelet–dependent thrombus formation in vivo. Studies using a baboon model. Cadroy Y, et al. **J Clin Invest** 1989 Sep;84(3):939–44

Clinical remission and disappearance of radiologic manifestations in Crohn's disease after oligopeptide diet treatment. Pfeil AB, et al. **J Pediatr Gastroenterol Nutr** 1988 Nov–Dec;7(6):926–30

Comparison of efficacy of a glucose/glycine/glycylglycine electrolyte solution versus the standard WHO/ORS in diarrheic dehydrated children. Pizarro D, et al. **J Pediatr Gastroenterol Nutr** 1988 Nov–Dec;7(6):882–8

An endogenous colon mitosis inhibitor and dietary calcium inhibit the increased colonic cell proliferation induced by cholic acid. Skraastad O, et al. **Scand J Gastroenterol** 1988 Sep;23(7):801–7

ADVERSE EFFECTS

Radiation exposure by technitium–99m MAG3 [letter] Bubeck B. **J Nucl Med** 1989 May;30(5):720–1

[Study of the mechanism of hypertensive effect of FMRF–like peptides] Zhukovskiĭ SV, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(1):45–7 (Eng. Abstr.) **(Rus)**

ANALYSIS

Daughter ion mass spectra from cationized molecules of small oligopeptides in a reflecting time–of–flight mass spectrometer. Tang XJ, et al. **Anal Chem** 1988 Sep 1; 60(17):1791–9

Fixation of amino acids and oligopeptides by freeze–drying in polyacrylamide gel electrophoresis. Nishizawa H, et al. **Electrophoresis** 1989 Jul;10(7):498–500

The TRH–related peptide pyroglutamylglutamylprolinamide is present in human semen. Cockle SM, et al. **FEBS Lett** 1989 Jul 31;252(1–2):113–7

Characterization of vesicles, containing an acylated oligopeptide, released by human colon adenocarcinoma cells. NMR and biochemical studies. Masella R, et al. **FEBS Lett** 1989 Mar 27;246(1–2):25–9

N.m.r studies of internal mobility in a cyclic tetrapeptide. Kopple KD, et al. **Int J Pept Protein Res** 1989 Feb; 33(2):82–5

Crystal structure and conformation of glycyl–glycyl–sarcosine. Subramanian E, et al. **Int J Pept Protein Res** 1989 May;33(5):345–7

Pacidamycins, a novel series of antibiotics with anti–Pseudomonas aeruginosa activity. II. Isolation and structural elucidation. Chen RH, et al. **J Antibiot (Tokyo)** 1989 Apr;42(4):512–20

A novel peptide, pyroglutamylglutamylproline amide, in the rabbit prostate complex, structurally related to thyrotrophin–releasing hormone. Cockle SM, et al. **J Biol Chem** 1989 May 15;264(14):7788–91

Determination of impurity profiles in drugs and related materials. II. Detection and quantification of a diastereomeric impurity in the peptide RGH–0205 (Arg–Lys–Asp). Görög S, et al. **J Chromatogr** 1988 Oct 28;452:317–21

Simultaneous analysis of different species involved in hexaglycine hydrolysis. Kalonia DS, et al. **J Chromatogr** 1989 Jul 28;475:416–20

Comparative X–ray crystallographic evidence for a beta–bend conformation as the active structure for peptide T in T4 receptor recognition. Chen J, et al. **J Protein Chem** 1989 Feb;8(1):87–100

Dermorphin and related peptides in rat tissues. Mor A, et al. **Neuropeptides** 1989 Jan;13(1):51–7

Changes in levels of the tripeptide Tyr–Gly–Gly as an index of enkephalin release in the spinal cord: effects of noxious stimuli and parenterally–active peptidase inhibitors. Llorens–Cortes C, et al. **Peptides** 1989 May–Jun; 10(3):609–14

Reversed–phase high–performance liquid chromatographic analysis of oligoglycines (one to six amino acid residues). Tucker IG, et al. **Pharm Res** 1989 Jan;6(1):100–2

Further studies on the biological characteristics of an endogenous colon mitosis inhibitor: comparison with some structurally related peptides. Skraastad O, et al.

Virchows Arch [B] 1989;56(5):321–5
[Dopamine and enkephalins. Effects of dopaminergic agents on the levels of striatal tyrosyl–glycyl–glycine] Llorens–Cortes C, et al. **Encephale** 1989 Jan–Feb;15 Spec No:105–9 **(Fre)**

ANTAGONISTS & INHIBITORS

Antagonism of dermorphin–induced catalepsy with naloxone, TRH–analog CG3703 and the benzodiazepine antagonist, Ro 15–1788. Paakkari P, et al. **Neuropharmacology** 1988 Oct;27(10):1007–12

BIOSYNTHESIS

D–lysergic acid activation and cell–free synthesis of D–lysergyl peptides in enzyme fractions from the ergot fungus Claviceps purpurea. Keller U, et al. **Biochemistry** 1988 Aug 9;27(16):6164–70

Pacidamycins, a novel series of antibiotics with anti–Pseudomonas aeruginosa activity. I. Taxonomy of the producing organism and fermentation. Karwowski JP, et al. **J Antibiot (Tokyo)** 1989 Apr;42(4):506–11

delta–(L–alpha–aminoadipyl)–L–cysteinyl–D–valine synthetase from Aspergillus nidulans. The first enzyme in penicillin biosynthesis is a multifunctional peptide synthetase. van Liempt H, et al. **J Biol Chem** 1989 Mar 5;264(7):3680–4

Biosynthesis of adipokinetic hormones (AKHs): further characterization of precursors and identification of novel products of processing. Hekimi S, et al. **J Neurosci** 1989 Mar;9(3):996–1003

Xenopsin–related peptide generated in avian gastric extracts. Carraway RE, et al. **Regul Pept** 1988 Sep;22(4):303–14

BLOOD

Ionophoretic activities of oligopeptide lactones and resin–glycosides in human erythrocytes. Kitagawa I, et al. **Chem Pharm Bull (Tokyo)** 1989 Jun;37(6):1679–81

Serum succinyltrialanine p–nitroanilide–hydrolytic activity in workers occupationally exposed to lead. Ito Y, et al. **Toxicol Lett** 1989 Jul;48(1):83–91

[Determination of the level of middle molecules in diseases of the respiratory organs] Iakovleva OA, et al. **Vrach Delo** 1989 Jun;(6):73–4 (Eng. Abstr.) **(Rus)**

CEREBROSPINAL FLUID

Identification and characterization of adipokinetic hormone (Locusta migratoria)–like immunoreactivity in the human cerebrospinal fluid. Suzuki H, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):534–40

CHEMICAL SYNTHESIS

Synthesis and activity of dermorphin–growth hormone releasing factor hybrid peptides. Marastoni M, et al. **Arzneimittelforschung** 1989 Jun;39(6):639–41

The synthesis and properties of peptidylmethylsulphonium salts with two cationic residues as potential inhibitors of prohormone processing. Zumbrunn A, et al. **Biochem J** 1988 Dec 15;256(3):989–94

Synthetic peptide substrates for casein kinase 2. Assessment of minimum structural requirements for phosphorylation. Marchiori F, et al. **Biochim Biophys Acta** 1988 Oct 7; 971(3):332–8

Simple peptides. III. Syntheses and properties of taurine–oligopeptides containing an acidic alpha–amino acid. Ienaga K, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug; 36(8):2796–801

Amino acids and peptides. XX. Inhibition of papain by succinyl–Gln–Val–Val–Ala–Ala–p–nitroanilide, a common sequence of endogenous thiol proteinase inhibitors. Okada Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):1982–9

Amino acids and peptides. XXI. Synthesis of N–terminal heptapeptide of mammalian metallothionein (MT) and evaluation of its immunoreactivity. Okada Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Sep;36(9):3614–8

Studies on analgesic oligopeptides. V. Structure–activity relationship of tripeptide alkylamides, Tyr–D–Arg–Phe–X. Suzuki K, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec; 36(12):4834–40

Efficient mapping and characterization of a T cell epitope by the simultaneous synthesis of multiple peptides. Van der Zee R, et al. **Eur J Immunol** 1989 Jan;19(1):43–7

Synthesis of somatostatin analogs resistant to the action of trypsin. Allen MC, et al. **Int J Pept Protein Res** 1988 Aug; 32(2):89–97

Chymotrypsin–catalyzed peptide synthesis. Kinetic analysis of the kinetically controlled peptide–bond formation. Bizzozero SA, et al. **Int J Pept Protein Res** 1988 Jul; 32(1):64–73

Synthesis and conformational study in solution and in solid state of oligopeptides containing L–leucine and glycine. D'Alagni M, et al. **Int J Pept Protein Res** 1988 Sep; 32(3):230–40

Synthesis and biological evaluation of pNPY fragments. Danho W, et al. **Int J Pept Protein Res** 1988 Dec; 32(6):496–505

Immunochemistry of scorpion toxins. Synthesis and antigenic properties of a model of a loop region specific to alpha–toxins. Fourquet P, et al. **Int J Pept Protein Res** 1988 Aug;32(2):81–8

Multiple continuous–flow solid–phase peptide synthesis. Synthesis of an HIV antigenic peptide and its omission analogues. Krchňák V, et al. **Int J Pept Protein Res** 1989 Mar;33(3):209–13

Malaria invasion of human erythrocytes. Synthesis of peptides relevant to glycophorin A and evaluation of their inhibitory properties. Lacombe JM, et al. **Int J Pept Protein Res** 1988 Aug;32(2):104–16

Evidence for negative control in protein kinase C substrate specificity. Ricouart A, et al. **Int J Pept Protein Res** 1989 Apr;33(4):304–7

Synthesis and biological studies of dermorphin and its analogs substituted at positions 5 and 7. Sivanandaiah KM, et al. **Int J Pept Protein Res** 1989 Jun;33(6):463–7

Continuous fluorogenic substrates for atrial dipeptidyl carboxyhydrolase. Importance of Ser in the P1 position. Soler DF, et al. **Int J Pept Protein Res** 1988 Jul;32(1):35–40

Conformational modification of the PRP–hexapeptide by a direct covalent attachment of aromatic side chain groups. Szewczuk Z, et al. **Int J Pept Protein Res** 1988 Aug; 32(2):98–103

Synthesis of the bis–cystinyl–fragment 225–232/225'–232' of the human IgG1 hinge region. Wünsch E, et al. **Int J Pept Protein Res** 1988 Nov;32(5):368–83

Use of synthetic oligopeptides in identification and characterization of immunological functions in the amino acid sequence of the envelope protein of HIV–1. Modrow S, et al. **J Acquir Immune Defic Syndr** 1989;2(1):21–7

Immunogenicity of synthetic peptides corresponding to flexible and antibody–accessible segments of mouse lactate dehydrogenase (LDH)–C4. Hogrefe HH, et al. **J Biol Chem** 1989 Jun 25;264(18):10513–9

Interaction of mouse submaxillary gland renin with a statine–containing, subnanomolar, competitive inhibitor. Poe M, et al. **J Enzym Inhib** 1985;1(1):13–23

Renin inhibitors containing hydrophilic groups. Tetrapeptides with enhanced aqueous solubility and nanomolar potency. Bock MG, et al. **J Med Chem** 1988 Oct;31(10):1918–23

Synthesis, DNA binding, and biological evaluation of synthetic precursors and novel analogues of netropsin. Debart F, et al. **J Med Chem** 1989 May;32(5):1074–83

Peripherally acting enkephalin analogues. 2. Polar tri– and tetrapeptides. Hardy GW, et al. **J Med Chem** 1989 May; 32(5):1108–18

Dermorphin analogues carrying an increased positive net charge in their "message" domain display extremely high mu opioid receptor selectivity. Schiller PW, et al. **J Med Chem** 1989 Mar;32(3):698–703

Synthesis of chemotactic peptides. Muthukumaraswamy N, et al. **Methods Enzymol** 1988;162:132–9

Synthesis of the nucleopeptides H–Phe–Tyr(pGC)–NH2 and H–Phe–Ser(pGC)–Ala–OH via a phosphotriester approach. Kuyl–Yeheskiely E, et al. **Nucleic Acids Res** 1989 Apr 25; 17(8):2897–905

A retroviral Cys–Xaa2–Cys–Xaa4–His–Xaa4–Cys peptide binds metal ions: spectroscopic studies and a proposed three–dimensional structure. Green LM, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4047–51

[Synthesis and anti–Candida albicans activity of L–4–oxalysine–containing oligopeptides] Lu YL, et al. **Yao Hsueh Hsueh Pao** 1988 Jul;23(7):504–10 (Eng. Abstr.) **(Chi)**

[Synthesis of N–alpha–(arylsulfonyl)–4–amidino–phenylalanyl–prolines and N–alpha–(arylsulfonylglycyl)–4–amidino–phenylalanyl–prolines and testing of them as inhibitors of serine proteinases. 33. Synthetic inhibitors of serine proteinases] Voigt B, et al. **Pharmazie** 1988 Jun;43(6):412–4 (Eng. Abstr.) **(Ger)**

DIAGNOSTIC USE

Using the "integral spleen" method of radiorenogram analysis and a baboon model to compare the diagnostic usefulness of technetium–99m–diethylenetriamine pentaacetic acid to that of various technetium–99m–mercaptoacetyltriglycene formulations and iodine–123–hippuran. Dormehl IC, et al. **Am J Physiol Imaging** 1989;4(1):23–7

Fluorescence microscopic localization of actin in pollen tubes: comparison of actin antibody and phalloidin staining. Tang XJ, et al. **Cell Motil Cytoskeleton** 1989;12(4):216–24

Clinical experience with 99mTc–MAG3, mercaptoacetyltriglycine, and a comparison with 99mTc–DTPA. Al–Nahhas AA, et al. **Eur J Nucl Med** 1988;14(9–10):453–62

Quantitation of renal function with technetium–99m MAG3. Russell CD, et al. **J Nucl Med** 1988 Dec;29(12):1931–3

Abnormal captopril renogram with a technetium–99m–labeled hippuran analog. Thorstad BL, et al. **J Nucl Med** 1988 Oct;29(10):1730–7

Clinical efficacy of 99mtechnetium mercaptoacetylglycine kit formulation in routine renal scintigraphy. duCret RP, et al. **J Urol** 1989 Jul;142(1):19–22

Comparison of 99Tcm–mercaptoacetyltriglycine and 131I–orthoiodohippurate in determination of effective renal plasma flow (ERPF). Abdel–Dayem HM, et al. **Nucl Med Commun** 1989 Feb;10(2):99–107

The kidney: imaging with Tc–99m mercaptoacetyltriglycine, a technetium–labeled analog of iodohippurate. Russell CD, et al. **Radiology** 1989 Aug;172(2):427–30

Clinical comparison of I–131 orthoiodohippurate and the kit formulation of Tc–99m mercaptoacetyltriglycine. Taylor A Jr, et al. **Radiology** 1989 Mar;170(3 Pt 1):721–5

Assay of factor XII in human plasma using prekallikrein or the chromogenic peptide S–2222 as substrates—significance of the functional state of plasma kallikrein. Hoem NO, et al. **Thromb Res** 1989 May 1;54(3):197–205

[Preparation and primary application of a new renal function imaging 99mTc–MAG3] Deng HF, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Sep;19(3):279–81 (Eng. Abstr.) **(Chi)**

[New indications of kidney function by gamma imaging] Soini I, et al. **Duodecim** 1989;105(9):839–45 **(Fin)**

[Parametric representation of kidney function using 99mTc–mercaptoacetyltriglycine (MAG3)] Szabó Z, et al. **Nuklearmedizin** 1989 Jun;28(3):73–83 (Eng. Abstr.) **(Ger)**

[The use of a tripeptide chromogenic substrate for simultaneous determination of 4 indices of kallikrein–kinin system] Dotsenko VL, et al. **Vopr Med Khim** 1989 Mar–Apr;35(2):128–33 (Eng. Abstr.) **(Rus)**

GENETICS

Molecular biology of bombesin–like peptides. Comparison of cDNAs encoding human gastrin–releasing peptide, human neuromedin B, and amphibian ranatensin. Spindel ER, et al. **Ann N Y Acad Sci** 1988;547:10–20 (28 ref.)

Adipokinetic hormone gene sequence from Manduca sexta. Bradfield JY, et al. **J Biol Chem** 1989 Aug 5; 264(22):12791–3

Dermorphin gene sequence peptide with high affinity and selectivity for delta–opioid receptors. Lazarus LH, et al. **J Biol Chem** 1989 Feb 25;264(6):3047–50

Structure of cCF10, a peptide sex pheromone which induces conjugative transfer of the Streptococcus faecalis tetracycline resistance plasmid, pCF10. Mori M, et al. **J Biol Chem** 1988 Oct 5;263(28):14574–8

IMMUNOLOGY

Anti–(Arg–Gly–Asp–Ser) antibody and its interaction with fibronectin, fibrinogen and platelets. Cierniewski CS, et al. **Eur J Biochem** 1988 Oct 15;177(1):109–15

Inhibition of T cell response with peptides is influenced by both peptide–binding specificity of major histocompatibility complex molecules and susceptibility of T cells to blocking. Lehmann PV, et al. **Eur J Immunol** 1989 Jun;19(6):1071–7

The identification of two peptide sequences of light subunits of the Lathyrus ochrus isolectins containing a sequential epitope. Lueken K, et al. **Immunol Lett** 1988 Dec; 19(4):309–12

Analysis of a subclass–restricted HIV–1 gp41 epitope by omission peptides. Mathiesen T, et al. **Immunology** 1989 May;67(1):1–7

Placental prolactin–like protein A. Identification and characterization of two major glycoprotein species with antipeptide antibodies. Deb S, et al. **J Biol Chem** 1989 Aug 25;264(24):14348–53

A branched, synthetic octapeptide of ubiquitinated histone H2A as target of autoantibodies. Plaué S, et al. **J Exp Med** 1989 May 1;169(5):1607–17

Antigenicity of the measles virus haemagglutinin studied by using synthetic peptides. Mäkelä MJ, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):603–14

Interaction of putative vasopressin receptor proteins of rat brain and bovine pituitary gland with an antibody against a nanopeptide encoded by the reverse message of the complementary mRNA to vasopressin. Abood LG, et al. **J Recept Res** 1989;9(1):19–25

Abrogation of the biological activity of the CFU–S inhibitor AcSDKP by a polyclonal antiserum. Lauret E, et al. **Leukemia** 1989 Apr;3(4):315–7

A murine monoclonal anti–metallothionein autoantibody recognizes a chemically synthesized amino–terminal heptapeptide common to various animal metallothioneins. Kikuchi Y, et al. **Mol Immunol** 1988 Oct;25(10):1033–6

Anti–sporozoite antibodies and immunity to malaria in a rural Gambian population. Marsh K, et al. **Trans R Soc Trop Med Hyg** 1988;82(4):532–7

[Long–term changes in the physiologic and biochemical status of the body through immunization with endogenous regulators] Ashmarin IP, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Jan–Feb;(1):11–8 (28 ref.) (Eng. Abstr.) **(Rus)**

[Neutralization of foot–and–mouth disease virus O1 Campos by antibodies induced by a synthetic peptide] Piccone M, et al. **Rev Argent Microbiol** 1988 Apr–Jun;20(2):69–75 (Eng. Abstr.) **(Spa)**

ISOLATION & PURIFICATION

Immobilized artificial membrane chromatography: supports composed of membrane lipids. Pidgeon C, et al. **Anal Biochem** 1989 Jan;176(1):36–47

Nontoxic and toxic oligopeptides with D–amino acids and unusual residues in Microcystis aeruginosa PCC 7806. Birk IM, et al. **Arch Microbiol** 1989;151(5):411–5

Primary structure of a protein C activator from Agkistrodon contortrix contortrix venom. McMullen BA, et al. **Biochemistry** 1989 Jan 24;28(2):674–9

A novel group of sperm activating peptides from the sea urchin Glyptocidaris crenularis. Suzuki N, et al. **Comp Biochem Physiol [C]** 1988;90(2):305–11

Preparation and in vitro cytotoxicity of a methotrexate–anti–MM46 monoclonal antibody conjugate

via an oligopeptide spacer. Umemoto N, et al. **Int J Cancer** 1989 Apr 15;43(4):677–84

Alphostatin, an inhibitor of alkaline phosphatase of bovine liver produced by Bacillus megaterium. Aoyagi T, et al. **J Antibiot (Tokyo)** 1989 Mar;42(3):486–8

Isolation and amino-terminal sequence of a novel cellular growth inhibitor (inhibitory diffusible factor 45) secreted by 3T3 fibroblasts. Blat C, et al. **J Biol Chem** 1989 Apr 15;264(11):6021–4

Reversed-phase preparative chromatography of [D-Ala1]-peptide T amide. Knight M, et al. **J Chromatogr** 1988 Jul 1;444:345–8

Preparative high-performance liquid chromatography of peptides on a new reversed-phase packing material, Kromasil C18. Larsson K, et al. **J Chromatogr** 1988 Oct 19;450(1):71–80

Biologically active casein peptides implicated in immunomodulation. Migliore-Samour D, et al. **J Dairy Res** 1989;56(3):357–62

Food intake suppression in rats by a substance isolated from human feces. Plata-Salamán CR, et al. **Physiol Behav** 1988; 43(3):365–9

Deltorphins: a family of naturally occurring peptides with high affinity and selectivity for delta opioid binding sites. Erspamer V, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(13):5188–92

Inhibitor of hematopoietic pluripotent stem cell proliferation: purification and determination of its structure. Lenfant M, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):779–82

Isolation and structure analysis of components from venom of the spider Argiope lobata. Grishin EV, et al. **Toxicon** 1989;27(5):541–9

[Glutamate receptor antagonists from the spider Argiope lobata venom] Grishin EV, et al. **Bioorg Khim** 1988 Jul; 14(7):883–92 (Eng. Abstr.) **(Rus)**

METABOLISM

Effect of transit time on metabolism of a pulmonary endothelial enzyme substrate. Dawson CA, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H853–65

Dermorphin analogs: resistance to in vitro enzymatic degradation is not always increased by additional D-amino acid substitutions. Darlak K, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):125–30

Peptide substrates and inhibitors of the HIV-1 protease. Moore ML, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):420–5

Differential contribution of C-terminal regions of dermorphin and dermenkephalin to opioid-sites selection and binding potency. Sagan S, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):726–32

Modulation of an RGDS binding site on the platelet membrane glycoprotein IIb-IIIa complex. Santoro SA, et al. **Biochem Biophys Res Commun** 1989 Apr 14; 160(1):189–95

5,6-Dichloro-1-beta-D-ribofuranosylbenzimidazole inhibits a HeLa protein kinase that phosphorylates an RNA polymerase II-derived peptide. Stevens A, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):508–15

A key functional role for the insulin-like growth factor 1 N-terminal pentapeptide. Bagley CJ, et al. **Biochem J** 1989 May 1;259(3):665–71

Preferential ADP-ribosylation of arginine-3 in synthetic heptapeptide Leu-Arg-Arg-Ala-Ser-Leu-Gly. Matsuura R, et al. **Biochem J** 1988 Aug 1;253(3):923–6

Identification of a human neutrophil protein of Mr 24 000 that binds N-formyl peptides: co-sedimentation with specific granules. Allen RA, et al. **Biochim Biophys Acta** 1989 Apr 25;991(1):123–33

Collagen binding proteins derived from the embryonic fibroblast cell surface recognize arginine-glycine-aspartic acid. Ogle RC, et al. **Biosci Rep** 1989 Jun;9(3):329–40

Rat brain regional distribution and spinal cord neuronal pathway of FLFQPQRF-NH2, a mammalian FMRF-NH2-like peptide. Majane EA, et al. **Brain Res** 1989 Aug 7;494(1):1–12

Heterogeneity of [3H]neurotensin bindings: studies with dynorphin, L-156,903 and levocabastine. Pettibone DJ, et al. **Brain Res** 1988 Aug 9;457(2):212–8

Identification of nanopeptide from HTLV-III, ARV-2 and LAVBRU envelope gp120 determining binding to T4 cell surface protein. Veljković V, et al. **Cancer Biochem Biophys** 1988 Nov;10(2):91–106

Role of dipeptidylpeptidase IV in renal handling of peptides. Miyamoto Y, et al. **Contrib Nephrol** 1988;68:1–5

SPKK, a new nucleic acid-binding unit of protein found in histone. Suzuki M. **EMBO J** 1989 Mar;8(3):797–804

Enzymatic methyl esterification of synthetic tripeptides: structural requirements of the peptide substrate. Detection of the reaction products by fast-atom-bombardment mass spectrometry. Galletti P, et al. **Eur J Biochem** 1988 Oct 15;177(1):233–9

Substrate-specificity determinants for a membrane-bound casein kinase of lactating mammary gland. A study with synthetic peptides. Meggio F, et al. **Eur J Biochem** 1988 Nov 1;177(2):281–4

Deltorphin, a novel amphibian skin peptide with high selectivity and affinity for delta opioid receptors. Kreil G, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):123–8

A collagen-binding protein involved in the differentiation of myoblasts recognizes the Arg-Gly-Asp sequence. Nandan D, et al. **Exp Cell Res** 1988 Nov;179(1):289–97

Interaction of a hydrophobic model peptide and its fatty acid derivative with lipid vesicles. Joseph M, et al. **FEBS Lett** 1988 Oct 10;238(2):411–4

Binding of mRNA by an oligopeptide containing an evolutionarily conserved sequence from RNA binding proteins. Schwemmle M, et al. **FEBS Lett** 1989 Jul 17; 251(1-2):117–20

Conformational properties of deltorphin: new features of the delta-opioid receptor. Temussi PA, et al. **FEBS Lett** 1989 Apr 24;247(2):283–8

Hydroxyl radical-induced crosslinking between double-stranded poly(dA-dT) and tripeptides containing an aromatic residue. Favaudon V. **Free Radic Res Commun** 1989;6(2-3):157–9

Actin synthesis is not regulated by granulosa cells in mouse growing and preovulatory oocytes. Canipari R, et al. **Gamete Res** 1988 Jun;20(2):115–24

Xenopsin immunoreactivity in antral G-cells may reside in the N-terminus of gastrin 17. Johnston CF, et al. **Histochemistry** 1988;90(2):161–4

Characterization of the receptor binding profile of (3H)-dermorphin in the rat brain. Amiche M, et al. **Int J Pept Protein Res** 1988 Dec;32(6):506–11

Structural requirements for dermorphin opioid receptor binding. Amiche M, et al. **Int J Pept Protein Res** 1988 Jul;32(1):28–34

Opioid peptides. Synthesis and binding properties of dermorphin related heptapeptides. Salvadori S, et al. **Int J Pept Protein Res** 1989 Feb;33(2):94–102

Plasma protein binding and endothelial enzyme interactions in the lung. Linehan JH, et al. **J Appl Physiol** 1989 Jun; 66(6):2617–28

Membrane-bound protein kinase C modulates receptor affinity and chemotactic responsiveness of Lewis lung carcinoma sublines to an elastin-derived peptide. Blood CH, et al. **J Biol Chem** 1989 Jun 25;264(18):10614–20

Effects of modifications of the RGD sequence and its context on recognition by the fibronectin receptor. Hautanen A, et al. **J Biol Chem** 1989 Jan 25;264(3):1437–42

Evidence for ecto-protein kinase activity that phosphorylates Kemptide in a cyclic AMP-dependent mode. Kübler D, et al. **J Biol Chem** 1989 Aug 25;264(24):14549–55

Active and inactive forms of the transition-state analog protease inhibitor leupeptin: explanation of the observed slow binding of leupeptin to cathepsin B and papain. Schultz RM, et al. **J Biol Chem** 1989 Jan 25;264(3):1497–507

The Arg-Gly-Asp binding domain of the vitronectin receptor. Photoaffinity cross-linking implicates amino acid residues 61-203 of the beta subunit. Smith JW, et al. **J Biol Chem** 1988 Dec 15;263(35):18726–31

Comparison of vertebrate collagenase and gelatinase using a new fluorogenic substrate peptide. Stack MS, et al. **J Biol Chem** 1989 Mar 15;264(8):4277–81

Ca2+-dependent binding of a synthetic Arg-Gly-Asp (RGD) peptide to a single site on the purified platelet glycoprotein IIb-IIIa complex. Steiner B, et al. **J Biol Chem** 1989 Aug 5;264(22):13102–8

Protease Ti from Escherichia coli requires ATP hydrolysis for protein breakdown but not for hydrolysis of small peptides. Woo KM, et al. **J Biol Chem** 1989 Feb 5; 264(4):2088–91

Identification of a tumor cell receptor for VGVAPG, an elastin-derived chemotactic peptide. Blood CH, et al. **J Cell Biol** 1988 Nov;107(5):1987–93

Identification and distribution of a proctolin-like neuropeptide in the nervous system of the gypsy moth, Lymantria dispar, and in other Lepidoptera. Davis NT, et al. **J Comp Neurol** 1989 May 1;283(1):71–85

ESR studies of the interaction of copper(II)GHK, histidine, and Ehrlich cells. Antholine WE, et al. **J Inorg Biochem** 1989 Mar;35(3):215–24

In vitro study of the action of adipokinetic hormone in locusts. Chino H, et al. **J Lipid Res** 1989 Apr;30(4):571–8

Development of conformationally constrained linear peptides exhibiting a high affinity and pronounced selectivity for delta opioid receptors. Gacel G, et al. **J Med Chem** 1988 Oct;31(10):1891–7

Inhibition of 125I-labeled ristocetin binding to Micrococcus luteus cells by the peptides related to bacterial cell wall mucopeptide precursors: quantitative structure-activity relationships. Kim KH, et al. **J Med Chem** 1989 Jan; 32(1):84–93

A modulatory proctolin-containing neuron (MPN). I. Identification and characterization. Nusbaum MP, et al. **J Neurosci** 1989 May;9(5):1591–9

A modulatory proctolin-containing neuron (MPN). II. State-dependent modulation of rhythmic motor activity. Nusbaum MP, et al. **J Neurosci** 1989 May;9(5):1600–7

Oligopeptide mixtures produced from soy protein by enzymatic modification and their nutritional qualities evaluated by feeding tests with normal and malnourished rats. Kimura H, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Aug;34(4):375–86

Is peptide T, an octapeptide sequence found in the external glycoprotein coat of the human immunodeficiency virus (HIV), a fragment of a retro-copy of the gamma-3-MSH neuropeptide? Dominy SS. **Med Hypotheses** 1988 Sep; 27(1):1–4

Acetylcholinesterase converts Met5-enkephalin-containing peptides to Met5-enkephalin. Dowton M, et al. **Neurosci Lett** 1988 Nov 22;94(1-2):151–5

Further characterization of Helix FMRFamide receptors: kinetics, tissue distribution, and interactions with the endogenous heptapeptides. Payza K, et al. **Peptides** 1989 May-Jun;10(3):657–61

Transport characteristics of ceftibuten, a new oral cephem, in rat intestinal brush-border membrane vesicles: relationship to oligopeptide and amino beta-lactam transport. Muranushi N, et al. **Pharm Res** 1989 Apr; 6(4):308–12

Cloning of the mRNA for the protein that crosslinks to the egg peptide speract. Dangott LJ, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2128–32

Sequence-specific peptide cleavage catalyzed by an antibody. Iverson BL, et al. **Science** 1989 Mar 3;243(4895):1184–8

PHARMACOKINETICS

Comparison of the clearance of technetium-99m MAG3 and iodine-131 OIH [letter] Kim CK, et al. **J Nucl Med** 1988 Nov;29(11):1878–9

Technetium-99m MAG-3 clearances after captopril in experimental renovascular hypertension. Lee HB, et al. **J Nucl Med** 1989 May;30(5):666–71

Reproducibility of quantitative 99Tcm-MAG 3 measurements in rats. Tondeur M, et al. **Nucl Med Commun** 1989 Jun;10(6):431–4

PHARMACOLOGY

Phalloidin-induced alterations of bile canaliculi. Yamamoto K, et al. **Acta Med Okayama** 1988 Aug;42(4):207–13

Oligopeptides and phagocytosis in mice. Dénes L, et al. **Acta Paediatr Hung** 1988-89;29(1-2):45–8

Data on the evolution of hormones. Investigations on imprinting evoked by oligopeptides exhibiting no hormonal activity. Csaba G, et al. **Acta Physiol Hung** 1988;72(2):151–8

The effects of different receptor blockers on the H-Phe-Ile-Tyr-His-Ser-Tyr-Lys-OH induced inhibition of extinction of active avoidance behaviour. Telegdy G, et al. **Acta Physiol Hung** 1988;72(3-4):315–20

Increased mortality in septic rats after leupeptin application. Kovats E, et al. **Adv Exp Med Biol** 1988;240:515–8

Stimulation of histamine release by the peptide kinetensin. Sydbom A, et al. **Agents Actions** 1989 Apr;27(1-2):68–71

The proteinase inhibitor pepstatin A inhibits formation of reverse transcriptase in H9 cells infected with human immunodeficiency virus 1. Grinde B, et al. **AIDS Res Hum Retroviruses** 1989 Jun;5(3):269–74

Inhibition of platelet hemostatic plug formation by trigramin, a novel RGD-peptide. Cook JJ, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1038–43

Intrarenal renin inhibition increases renal function by an angiotensin II-dependent mechanism. Siragy HM, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):F749–54

Functional interactions between TRH and 5-hydroxytryptamine (5-HT) and proctolin in rat brain and spinal cord. Marsden CA, et al. **Ann N Y Acad Sci** 1989; 553:121–34

Use of antiadhesive peptide and swainsonine to inhibit metastasis. Olden K, et al. **Ann N Y Acad Sci** 1988; 551:421–41; discussion 441-2 (157 ref.)

Synthesis, biological activity and DNA interaction of anilinoacridine and bithiazole peptide derivatives related to the anti-tumor drugs m-AMSA and bleomycin. Morier-Teissier E, et al. **Anticancer Drug Des** 1989 Jun; 4(1):37–52

Visualization of time-dependent inactivation of human tumor cathepsin B isozymes by a peptidyl fluoromethyl ketone using a fluorescent print technique. Smith RE, et al. **Anticancer Res** 1988 Jul-Aug;8(4):525–9

Identification of a second active site in laminin for promotion of cell adhesion and migration and inhibition of in vivo melanoma lung colonization. Kleinman HK, et al. **Arch Biochem Biophys** 1989 Jul;272(1):39–45

A synthetic tetrapeptide as a novel platelet-preserving agent during cardiopulmonary bypass. Tatsumi E, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):813–6

The fibrinogen-derived peptide (RGDS) prevents proteolytic degradation of protein kinase C in platelets by inhibiting platelet aggregation. Krishnamurthi S, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1256–64

Affinity purification of endothia protease with a novel renin inhibitor SQ 32,970. Norman JA, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):1–7

Chemotactic monoclonal antibody conjugates: a comparison of four different f-Met-peptide-conjugates. Obrist R, et al. **Biochem Biophys Res Commun** 1988 Sep 30; 155(3):1139–44

N-acylated pentapeptides antagonists of substance P on guinea-pig ileum. Schmitt P, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):323–7

Influence of leupeptin on protein and amino-acid metabolism in septic rats. Kovats E, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:157–62

The effect of peptides and monoclonal antibodies that bind to platelet glycoprotein IIb-IIIa complex on the development of clot tension. Cohen I, et al. **Blood** 1989 May 15;73(7):1880–7

Inhibition of platelet-von Willebrand factor binding to platelets by adhesion site peptides. Parker RI, et al. **Blood** 1989 Sep;74(4):1226–30

Pharmacological investigations of a new renin inhibitor in normal sodium-unrestricted volunteers. de Gasparo M, et al. **Br J Clin Pharmacol** 1989 May;27(5):587–96

Antinociception and physical dependence produced by [D-Arg2] dermorphin tetrapeptide analogues and morphine in rats. Chaki K, et al. **Br J Pharmacol** 1988 Sep;95(1):15–22

Effect of intrathecal proctolin administration on the behaviour evoked by the thyrotrophin-releasing hormone (TRH) analogue (RX 77368) and the indoleamine, TRH, substance P and calcitonin gene-related peptide levels and choline acetyltransferase activity in the rat spinal cord. Fone KC, et al. **Brain Res** 1988 Sep 13;460(1):22–8

Inhibition of proteolysis blocks anterograde-retrograde conversion of axonally transported vesicles. Sahenk Z, et al. **Brain Res** 1988 Sep 13;460(1):199–203

Electrophysiological studies on the spinal effects of dermorphin, an endogenous mu-opioid agonist. Sullivan AF, et al. **Brain Res** 1988 Sep 27;461(1):182–5

Effects of the proteinase inhibitors leupeptin and E-64 on osteoclastic bone resorption. Everts V, et al. **Calcif Tissue Int** 1988 Sep;43(3):172–8

Immunomodulatory and therapeutic properties of FK-565 in mice. Talmadge JE, et al. **Cancer Immunol Immunother** 1989;28(2):93–100

Antipain-mediated suppression of X-ray-induced chromosomal aberrations in human lymphocytes. Afzal V, et al. **Carcinogenesis** 1989 Jul;10(7):1193–6

Enhancement of methylnitrosourea-induced skin tumorigenesis and carcinogenesis in hairless mice by pretreatment with a mitosis-inhibiting epidermal pentapeptide. Iversen OH, et al. **Carcinogenesis** 1989 Feb; 10(2):241–4

An endogenous colon mitosis inhibitor reduces the increased cell proliferation in colonic epithelium induced by dietary cholic acid and treatment with 1,2-dimethylhydrazine. Skraastad O, et al. **Carcinogenesis** 1989 Jan;10(1):79–82

Suppression of the radiation-induced expression of a tumor-associated antigen in human cell hybrids by the protease inhibitor antipain. Sun C, et al. **Carcinogenesis** 1988 Dec;9(12):2333–5

A role for Lys-His-Gly-NH2 in avian and murine B cell development. Lassila O, et al. **Cell Immunol** 1989 Sep; 122(2):319–28

Effect of N-3-(4-hydroxyphenyl)propionyl Pro-Pro-Gly-Ala-Gly on calcium-induced arrhythmias. Kohama Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov; 36(11):4597–9

Synthesis of tripeptide amide derivatives and examination of their inhibitory effect on human leukocyte elastase (HLE). Tsuda Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug; 36(8):3119–24

Effect of phalloidin on structure and permeability of rete capillaries in the normal and hypoxic state. Rasio EA, et al. **Circ Res** 1989 Sep;65(3):591–9

Controversy over effects of peptide T on AIDS virus intensifies [news] **Clin Pharm** 1987 Oct;6(10):752, 754

Inhibition of starfish oocyte maturation by leupeptin analogs, potent trypsin inhibitors. Sawada MT, et al. **Dev Biol** 1989 Jun;133(2):609–12

The synergistic effects of His-D-Trp-Ala-Trp-D-Phe-Lys-NH2 on growth hormone (GH)-releasing factor-stimulated GH release and intracellular adenosine 3',5'-monophosphate accumulation in rat primary pituitary cell culture. Cheng K, et al. **Endocrinology** 1989 Jun;124(6):2791–8

Cell attachment properties of collagen type VI and Arg-Gly-Asp dependent binding to its alpha 2(VI) and alpha 3(VI) chains. Aumailley M, et al. **Exp Cell Res** 1989 Apr;181(2):463–74

Enhancement of the adherence of hematopoietic stem cells to mouse bone marrow-derived stromal cell line MS-1-T by a tetrapeptide acetyl-N-Ser-Asp-Lys-Pro. Lenfant M, et al. **Exp Hematol** 1989 Sep;17(8):898–902

Suppressive biological activity of a synthetic pentapeptide on highly enriched human and murine marrow hematopoietic progenitors: synergism with recombinant human tumor necrosis factor-alpha and interferon-gamma. Lu L, et al. **Exp Hematol** 1989 Oct;17(9):935–41

Antiarrhythmic peptide has no direct cardiac actions. Argentieri T, et al. **Experientia** 1989 Aug 15;45(8):737–8

Catch-relaxing peptide (CARP) decreases the Ca-permeability of snail neuronal membrane. Kiss T. **Experientia** 1988 Dec 1;44(11–12):998–1000

In vivo effects of immunostimulating lipopeptides on mouse liver microsomal cytochromes P-450 and on paracetamol-induced toxicity. Migliore-Samour D, et al. **Experientia** 1989 Sep 15;45(9):882–6

Leupeptin does not affect the normal signal transduction mechanism in platelets. Alonso MT, et al. **FEBS Lett** 1989 Feb 27;244(2):407–10

Identification of a neurite outgrowth-promoting domain of laminin using synthetic peptides [published erratum appears in **FEBS Lett** 1989 Jul 17;251(1-2):283] Liesi P, et al. **FEBS Lett** 1989 Feb 13;244(1):141–8

The effect of pepstatin A, an inhibitor of the pro-opiomelanocortin (POMC)-converting enzyme, on POMC processing in mouse intermediate pituitary. Loh YP. **FEBS Lett** 1988 Sep 26;238(1):142–6

Stimulation of collagen synthesis in fibroblast cultures by the tripeptide-copper complex glycyl-L-histidyl-L-lysine-Cu2+. Maquart FX, et al. **FEBS Lett** 1988 Oct 10;238(2):343–6

Synthetic peptide from lipocortin I has no phospholipase A2 inhibitory activity. van Binsbergen J, et al. **FEBS Lett** 1989 Apr 24;247(2):293–7

Inhibition of HIV replication in cell culture by the specific aspartic protease inhibitor pepstatin A. von der Helm K, et al. **FEBS Lett** 1989 Apr 24;247(2):349–52

Cell-dependent chemiluminescence. Modulation of the N-formyl chemotactic peptide (FNLPNTL) mediated oxidative burst in human polymorphonuclear leukocytes (PMNL) by murine monoclonal antibody NMS-1. Schmitt M, et al. **Free Radic Res Commun** 1987;2(4–6):359–68

Immunocytochemical localization of myosin in normal and phalloidin-treated rat hepatocytes. Yasuura S, et al. **Gastroenterology** 1989 Oct;97(4):982–9

Calcium ion uptake, somatotropin release, and fine structure of somatotrophs in cultures of the rat anterior pituitary upon the action of an oligopeptide (Boc-Gln-Leu-Lysinal). Rappay G, et al. **Histochemistry** 1989;91(6):517–21

Histochemical localization of octopamine- and proctolin-sensitive adenylate cyclase activity in a locust skeletal muscle. Swales LS, et al. **Histochemistry** 1988; 90(3):233–9

Inhibition by leupeptin and antipain of the intracellular proteolysis of Ii. Nguyen QV, et al. **Hum Immunol** 1989 Mar;24(3):153–63

Hemodynamic and biochemical consequences of renin inhibition by infusion of CGP 38560A in normal volunteers. Nussberger J, et al. **Hypertension** 1989 Jun;13(6 Pt 2):948–53

Renin inhibitor and converting enzyme inhibitors suppress vascular angiotensin II. Saito H, et al. **Hypertension** 1989 Jun;13(6 Pt 2):749–53

Phosphatidylinositol metabolism and protein kinase C activation in leukocytes by lipopeptides. Hauschildt S, et al. **Immunobiology** 1988 Jul;177(3):267–77

In vivo depression of lymphocyte traffic in sheep by VIP and HIV (AIDS)-related peptides. Moore TC, et al. **Immunopharmacology** 1988 Nov-Dec;16(3):181–9

In vitro effects of an acyltripeptide, FK565, on NK-cell activity, LAK-cell generation and cytokine production by human mononuclear cells. Wang YL, et al. **Immunopharmacology** 1989 May-Jun;17(3):175–85

Kinetics of in vivo inhibition of tissue cathepsin D by pepstatin A. Leto G, et al. **Int J Biochem** 1988;20(9):917–20

Differences in induction of lysosomal protease activity by protease inhibitors in B16 melanoma cell lines. Nakao H, et al. **Int J Biochem** 1989;21(2):139–42

Inhibition of experimental metastasis of murine fibrosarcoma cells by oligopeptide analogues to the fibronectin cell-binding site. Bretti S, et al. **Int J Cancer** 1989 Jan 15; 43(1):102–6

Immunopotentiating activities of a low molecular weight lipopeptide, RP 56 142—studies in infectious models. Floc'h F, et al. **Int J Immunopharmacol** 1988;10(7):863–73

Neurotrophic action of leupeptin, a protease inhibitor on ventral spinal cord in culture. Iwasaki Y, et al. **Int J Neurosci** 1989 Jun;46(3–4):97–100

The influence of cathepsin B and leupeptin on potentially lethal damage repair in mammalian cells. Osmak M, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):707–14

A peptide from fibronectin cell-binding domain inhibits attachment of epithelial cells. Nishida T, et al. **Invest Ophthalmol Vis Sci** 1988 Dec;29(12):1820–5

Inhibitory effect of FK-565 alone and in combination with zidovudine on retroviral infection by Friend leukemia virus in mice. Yokota Y, et al. **J Antibiot (Tokyo)** 1988 Oct; 41(10):1479–87

Dermorphin inhibits micturition reflex in rats at a central site of action. Maggi CA, et al. **J Auton Nerv Syst** 1989 Feb;26(1):11–6

Peptide boronic acids, substrate analogs, inhibit chymase, and histamine release from rat mast cells. Kato Y, et al. **J Biochem (Tokyo)** 1988 May;103(5):820–2

Inhibitory diffusible factor 45 bifunctional activity. As a cell growth inhibitor and as an insulin-like growth factor I-binding protein. Blat C, et al. **J Biol Chem** 1989 Jul 25; 264(21):12449–54

Specific overproduction of very late antigen 1 integrin in two human neuroblastoma cell lines selected for resistance to detachment by an Arg-Gly-Asp-containing synthetic peptide. Dedhar S, et al. **J Biol Chem** 1989 Mar 25; 264(9):4832–6

Primary structural determinants essential for potent inhibition of cAMP-dependent protein kinase by inhibitory peptides corresponding to the active portion of the heat-stable inhibitor protein. Glass DB, et al. **J Biol Chem** 1989 May 25;264(15):8802–10

Syncatalytic inactivation of prolyl 4-hydroxylase by synthetic peptides containing the unphysiologic amino acid 5-oxaproline. Günzler V, et al. **J Biol Chem** 1988 Dec 25; 263(36):19498–504

Dimeric dermorphin analogues as mu-receptor probes on rat brain membranes. Correlation between central mu-receptor potency and suppression of gastric acid secretion. Lazarus LH, et al. **J Biol Chem** 1989 Jan 5;264(1):354–62

Mechanism of inhibition of herpes simplex virus (HSV) ribonucleotide reductase by a nonapeptide corresponding to the carboxyl terminus of its subunit 2. Specific binding of a photoaffinity analog, [4'-azido-Phe6] HSV H2-6(6–15), to subunit 1. Paradis H, et al. **J Biol Chem** 1988 Nov 5;263(31):16045–50

Peptide analogues compete with the binding of alpha-factor to its receptor in Saccharomyces cerevisiae. Raths SK, et al. **J Biol Chem** 1988 Nov 25;263(33):17333–41

A synthetic peptide containing the IKVAV sequence from the A chain of laminin mediates cell attachment, migration, and neurite outgrowth. Tashiro K, et al. **J Biol Chem** 1989 Sep 25;264(27):16174–82

Chemoattractant-stimulated GTPase activity is decreased on membranes from polymorphonuclear leukocytes incubated in chemoattractant. Wilde MW, et al. **J Biol Chem** 1989 Jan 5;264(1):190–6

Immunomodulating and antitumor activities of a synthetic lauroyltripeptide (RP 56 142). Fizames C, et al. **J Biol Response Mod** 1989 Aug;8(4):397–408

CGP 38 560: orally active, low-molecular-weight renin inhibitor with high potency and specificity. Wood JM, et al. **J Cardiovasc Pharmacol** 1989 Aug;14(2):221–6

Tenascin mediates cell attachment through an RGD-dependent receptor. Bourdon MA, et al. **J Cell Biol** 1989 Mar;108(3):1149–55

RGD-containing peptides inhibit the synthesis of myelin-like membrane by cultured oligodendrocytes. Cardwell MC, et al. **J Cell Biol** 1988 Oct;107(4):1551–9

A novel member of the integrin receptor family mediates Arg-Gly-Asp-stimulated neutrophil phagocytosis. Gresham HD, et al. **J Cell Biol** 1989 May;108(5):1935–43

Effect of a new synthetic hexapeptide to selectively stimulate growth hormone release in healthy human subjects. Ilson BE, et al. **J Clin Endocrinol Metab** 1989 Jul;69(1):212–4

Prolonged duration of gonadotropin inhibition by a third generation GnRH antagonist. Leal JA, et al. **J Clin Endocrinol Metab** 1988 Dec;67(6):1325–7

Effects of the somatostatin analog BIM 23014 on the secretion of growth hormone, thyrotropin, and digestive peptides in normal men. Sassolas G, et al. **J Clin Endocrinol Metab** 1989 Feb;68(2):239–46

Opioid antagonist peptides derived from kappa-casein. Chiba H, et al. **J Dairy Res** 1989;56(3):363–6

Biologically active peptides of casein and lactotransferrin implicated in platelet function. Fiat AM, et al. **J Dairy Res** 1989;56(3):351–5

Similarity between active and trypsin-activated inactive renin in dog plasma by means of renin inhibition: the dog as an animal model for studies of inactive renin. Tonolo G, et al. **J Hypertens** 1988 Dec;6(12):975–80

Characteristics of the blood pressure lowering action of renin inhibition and comparison with angiotensin converting enzyme inhibition. Blaine EH. **J Hypertens Suppl** 1989 Apr; 7(2):S47–9

Synthetic peptide inhibitors of prorenin activation. Dubin D, et al. **J Hypertens Suppl** 1989 Apr;7(2):S71–3

Effects of renin inhibitors on the expression of kidney renin gene and tissue renin-like activity. Kokubu T, et al. **J Hypertens Suppl** 1989 Apr;7(2):S29–32

Angiotensin converting enzyme inhibition and renin inhibition. Nussberger J, et al. **J Hypertens Suppl** 1989 Apr; 7(2):S75–9

Systemic and renal haemodynamic effects of renin or angiotensin converting enzyme inhibition in non-human primates. Pals DT, et al. **J Hypertens Suppl** 1989 Apr; 7(2):S43–6

Effects of the renin inhibitor H77 on angiotensin II, arterial pressure and cardiac function in conscious dogs: comparison with captopril. Tree M, et al. **J Hypertens Suppl** 1989 Apr;7(2):S51–5

Inhibition of tumor cell-induced platelet aggregation and experimental tumor metastasis by the synthetic Gly-Arg-Gly-Asp-Ser peptide. Ugen KE, et al. **J Natl Cancer Inst** 1988 Nov 16;80(18):1461–6

Primary afferent responses of a crustacean mechanoreceptor are modulated by proctolin, octopamine, and serotonin. Pasztor VM, et al. **J Neurobiol** 1989 Jun;20(4):234–54

Peptidergic modulation of a multioscillator system in the lobster. I. Activation of the cardiac sac motor pattern by the neuropeptides proctolin and red pigment-concentrating hormone. Dickinson PS, et al. **J Neurophysiol** 1989 Apr; 61(4):833–44

Neurohormonal regulation of ion transport in the porcine distal jejunum. Actions of neurotensin and its natural homologs. Brown DR, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):348–57

Novel peptidic mu opioid antagonists: pharmacologic characterization in vitro and in vivo. Kramer TH, et al. **J Pharmacol Exp Ther** 1989 May;249(2):544–51

Mechanisms of central hemodynamic and sympathetic regulation by mu opioid receptors: effects of dermorphin in the conscious rat. Sirén AL, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):596–604

Bovine pineal tripeptide threonylseryllysine retards puberty in female rats. Benson B. **J Pineal Res** 1989;6(4):351–7

Role of renin as a blood-borne hormone tested by infusion of renin inhibitor (H.77). Tree M, et al. **Kidney Int Suppl** 1988 Sep;25:S33–7

Effects of streptozotocin-induced diabetes on feeding stimulated by centrally administered opioid agonists. Gosnell BA, et al. **Life Sci** 1989;45(1):31–40

Leucokinins, a new family of ion transport stimulators and inhibitors in insect Malpighian tubules. Hayes TK, et al. **Life Sci** 1989;44(18):1259–66

Development of lipofuscin-like fluorescence in the retinal pigment epithelium in response to protease inhibitor treatment. Katz ML, et al. **Mech Ageing Dev** 1989 Jul; 49(1):23–40

Effect of bombesin, dermorphin and salmon calcitonin on gastric acid secretion in rats. Guglietta A, et al. **Methods Find Exp Clin Pharmacol** 1988 Aug;10(8):481–5

Reduction of muscle protein degradation by leupeptin in acutely uremic rats. Schaefer RM, et al. **Miner Electrolyte Metab** 1988;14(5):308–12

Leupeptin alters the proteolytic processing of P126, the major parasitophorous vacuole antigen of Plasmodium falciparum. Debrabant A, et al. **Mol Biochem Parasitol** 1989 Mar 1;33(2):151–8

Dermenkephalin (Tyr–D–Met–Phe–His–Leu–Met–Asp–NH2): a potent and fully specific agonist for the delta opioid receptor. Amiche M, et al. **Mol Pharmacol** 1989 Jun;35(6):774–9

Bacterial growth blocked by a synthetic peptide based on the structure of a human proteinase inhibitor. Björck L, et al. **Nature** 1989 Jan 26;337(6205):385–6

A new class opioid peptide, [D–Arg2, beta–Ala4]–dermorphin tetrapeptide; physical dependence liability in mice. Chaki K, et al. **Neuropeptides** 1989 Feb–Mar;13(2):83–8

Kelatorphan, a potent enkephalinases inhibitor, and opioid receptor agonists DAGO and DTLET, differentially modulate self–stimulation behaviour depending on the site of administration. de Witte P, et al. **Neuropharmacology** 1989 Jul;28(7):667–76

One receptor type mediates two independent effects of FMRFa on neurosecretory cells of Lymnaea. Brussaard AB, et al. **Peptides** 1989 Mar–Apr;10(2):289–97

Angiotensin converting enzyme: substrate inhibition. Schullek JR, et al. **Peptides** 1989 Mar–Apr;10(2):431–4

Analgesic activity of morphiceptin, beta–casomorphin–4, and deltakephalin in normotensive Wistar–Glaxo and spontaneously hypertensive rats. Widy–Tyszkiewicz E, et al. **Peptides** 1989 May–Jun;10(3):539–44

Comparison of the antinociceptive effects of new [D–Arg2]–dermorphin tetrapeptide analogs and morphine in mice. Chaki K, et al. **Pharmacol Biochem Behav** 1988 Oct;31(2):439–44

Effects of the neuropeptide PLG (L–prolyl–leucyl–glycinamide) on writing pressure and speed in healthy subjects. Steinwachs KC, et al. **Pharmacopsychiatry** 1988 Nov;21(6):459–60

Neuromuscular recovery using calcium protease inhibition after median nerve repair in primates. Badalamente MA, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5983–7

Antide and related antagonists of luteinizing hormone release with long action and oral activity. Ljungqvist A, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8236–40

CD4 antigen–based antireceptor peptides inhibit infectivity of human immunodeficiency virus in vitro at multiple stages of the viral life cycle. Nara PL, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7139–43

Decompression inducible platelet aggregation (DIPA) is inhibited by Arg–Gly–Asp. Murayama M. **Prog Clin Biol Res** 1988;283:203–9

Peptide T does not affect induction of pineal N–acetyltransferase by vasoactive intestinal peptide. Yuwiler A, et al. **Regul Pept** 1989 Apr;25(1):69–73

Demonstration of Ac–Arg–Gly–Asp–Ser–NH2 as an antiaggregatory agent in the dog by intracoronary administration. Shebuski RJ, et al. **Thromb Haemost** 1989 Apr 25;61(2):183–8

Inhibition of 3H–thymidine incorporation by angiopeptin in the aorta of rabbits after balloon angioplasty. Asotra S, et al. **Transplant Proc** 1989 Aug;21(4):3695–6

Peptide inhibition of myointimal proliferation following angioplasty in rabbits. Conte JV, et al. **Transplant Proc** 1989 Aug;21(4):3686–8

Peptide inhibition of accelerated transplant atherosclerosis. Foegh ML, et al. **Transplant Proc** 1989 Aug;21(4):3674–6

Angiopeptin inhibits thymidine incorporation in rat carotid artery in vitro. Vargas R, et al. **Transplant Proc** 1989 Aug; 21(4):3702–3

An endogenous colon mitosis inhibitor reduces proliferation of colon carcinoma cells (HT 29) in serum–restricted medium. Skraastad O, et al. **Virchows Arch [B]** 1989; 56(6):393–6

[The effect of leupeptin on lysosomal hydrolases in the visceral vitelline sack of the rat. Histo– and biochemical studies] Greiner A, et al. **Z Mikrosk Anat Forsch** 1988; 102(5):817–28 (Eng. Abstr.) **(Ger)**

[Effect on uptake of D–glucose, L–leucine and L–leucylglycine into intestinal brush border membrane vesicles isolated from rats fed either oligopeptide or amino acid elemental diet] Obata H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Apr;86(4):865–75 (Eng. Abstr.) **(Jpn)**

[Effect of various peptides on the growth of Mycobacterium tuberculosis] Malski M. **Med Dosw Mikrobiol** 1989; 41(1):9–14 (Eng. Abstr.) **(Pol)**

[Dependence of the thrombocyte aggregation reaction on plasma fibronectin and the tripeptide arginyl–glycyl–asparagilin] Iuranek IO, et al. **Biull Eksp Biol Med** 1989 May;107(5):536–7 (Eng. Abstr.) **(Rus)**

[Peptide Arg–Gly–Asp–Ser amplifies the functional activity of phagocytes, caused by adhesion and phorbol myristate acetate] Zemskov VM, et al. **Dokl Akad Nauk SSSR** 1989; 306(3):748–51 **(Rus)**

[Comparison of the opioid activity of a number of enkephalin and dermorphin analogs] Chichenkov ON, et al. **Farmakol Toksikol** 1988 Sep–Oct;51(5):17–20 (Eng. Abstr.) **(Rus)**

[The structural organization of interferon molecules as precursors of immuno– and neuroactive oligopeptides] Chipens GI, et al. **Fiziol Zh SSSR** 1989 May;75(5):638–45 (20 ref.) (Eng. Abstr.) **(Rus)**

[The role of the brain monoaminergic systems in the anti–alcohol action of dermorphin and the delta–sleep peptide] Gromova EA, et al. **Fiziol Zh SSSR** 1989 May; 75(5):633–7 (Eng. Abstr.) **(Rus)**

[Increasing myocardial tolerance of global ischemia and reperfusion injury using a synthetic peptide] Dvortsin GF, et al. **Kardiologiia** 1989 Jun;29(6):85–8 (Eng. Abstr.) **(Rus)**

[Effect of a brain extract containing the postural asymmetry factor on the frog neuromuscular synapse] Drabkina TM, et al. **Neirofiziologiia** 1988;20(4):554–7 (Eng. Abstr.) **(Rus)**

[Changes in the functional parameters of the brain structures under the influence of enkephalin–like tetrapeptidamide] Adrianov OS, et al. **Zh Vyssh Nerv Deiat** 1988 Sep–Oct; 38(5):905–13 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Covalent attachment of an Arg–Gly–Asp sequence peptide to derivatizable polyacrylamide surfaces: support of fibroblast adhesion and long–term growth. Brandley BK, et al. **Anal Biochem** 1988 Jul;172(1):270–8

Structure and function of growth inhibitory epidermal pentapeptide. Elgjo K, et al. **Ann N Y Acad Sci** 1988; 548:197–203

Phyllolitorins: a new family of bombesin–like peptides. Negri L, et al. **Ann N Y Acad Sci** 1988;547:415–28

A possible physiological function of pancreatic pro–colipase activation peptide in appetite regulation. Erlanson–Albertsson C, et al. **Biochimie** 1988 Sep; 70(9):1245–50

Mechanism of fibronectin–mediated cell migration: dependence or independence of cell migration susceptibility on RGDS–directed receptor (integrin). Straus AH, et al. **Exp Cell Res** 1989 Jul;183(1):126–39

Vasopressin– and proctolin–like immunoreactive efferent neurons in blowfly abdominal ganglia: development and ultrastructure. Nässel DR, et al. **J Comp Neurol** 1989 May 15;283(3):450–63

Insect cardioactive peptides: neurohormonal regulation of cardiac activity by two cardioacceleratory peptides during flight in the tobacco hawkmoth, Manduca sexta. Tublitz N. **J Exp Biol** 1989 Mar;142:31–48

Staphylococcus aureus tetrapeptide with high chemotactic potency and efficacy for human leukocytes. Rot A, et al. **J Leukoc Biol** 1989 Feb;45(2):114–20

Proctolin: a review with emphasis on insects. Orchard I, et al. **J Neurobiol** 1989 Jul;20(5):470–96 (125 ref.)

The physiological role of the endogenous colony forming units–spleen (CFU–S) inhibitor acetyl–N–Ser–Asp–Lys–Pro (AcSDKP). Frindel E, et al. **Leukemia** 1989 Oct;3(10):753–4

Some aspects of protozoan parasite–host cell interactions with special reference to RGD–mediated recognition process. Ouaissi A, et al. **Microb Pathog** 1989 Jan;6(1):1–5 (27 ref.)

Effect of the thyrotropin–releasing hormone analogue on an electrographic picture of sleep. Sidneva LN, et al. **Neurosci Behav Physiol** 1988 Jul–Aug;18(4):282–6

Antibodies to Asp–Asp–Glu–Asp can inhibit transport of nuclear proteins into the nucleus. Yoneda Y, et al. **Science** 1988 Oct 14;242(4876):275–8

[The activity of postural asymmetry factors in symmetrical sections of the rat spinal cord] Vartanian GA, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):404–7 (Eng. Abstr.) **(Rus)**

[Oligopeptides in the mechanisms of resistance to emotional stress] Sudakov KV. **Patol Fiziol Eksp Ter** 1989 Jan–Feb; (1):3–11 **(Rus)**

[Alcohol addiction: the role of oligopeptides in its central mechanisms] Kelesheva LF, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Mar;(3):101–8 (50 ref.) **(Rus)**

POISONING

Prophylaxis of cyanobacterial and mushroom cyclic peptide toxins. Adams WH, et al. **J Pharmacol Exp Ther** 1989 May; 249(2):552–6

RADIATION EFFECTS

Radiation–induced crosslinking between poly(deoxyadenylic–deoxythymidylic acid) and tripeptides containing aromatic residues. Favaudon V. **Int J Radiat Biol** 1989 Mar;55(3):353–64

[Radiochemical transformation of glycyl–containing peptides] Duzhenkova NA. **Radiobiologiia** 1988 Sep–Oct; 28(5):579–83 (Eng. Abstr.) **(Rus)**

SECRETION

Stretch–induced release of proctolin from the dendrites of a lobster sense organ. Pasztor VM, et al. **Brain Res** 1988 Aug 16;458(1):199–203

THERAPEUTIC USE

Peptide–T in the treatment of psoriasis and psoriatic arthritis. A case report. Marcusson JA, et al. **Acta Derm Venereol (Stockh)** 1989;69(1):86–8

Antiarrhythmic and antithrombotic effect of antiarrhythmic peptide and its synthetic analogues. Dikshit M, et al. **Indian J Exp Biol** 1988 Nov;26(11):874–6

Inhibitors of renin as potential therapeutic agents. Wood JM, et al. **J Enzym Inhib** 1987;1(3):169–85 (98 ref.)

Improvement in AIDS patients on peptide T [letter] Bridge TP, et al. **Lancet** 1989 Jul 22;2(8656):226–7

[Cardiovascular effects of peptide inhibitors of the renin–substrate reaction in rats with renovascular hypertension. Goldblatt: 2 kidneys—1 clip] Labbé T, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:183–7 (Eng. Abstr.) **(Fre)**

[Anti–alcoholic effect of the opioid peptide dermorphin in rats and its interaction with brain biogenic amine metabolism] Gromova EA, et al. **Dokl Akad Nauk SSSR** 1988;303(3):746–9 **(Rus)**

TOXICITY

Degeneration of neuronal processes in rats induced by a protease inhibitor, leupeptin. Takauchi S, et al. **Acta Neuropathol (Berl)** 1989;78(4):380–7

Isolated rat liver perfusion studies with cyclic heptapeptide toxins of Microcystis and Oscillatoria (freshwater cyanobacteria). Berg K, et al. **Toxicon** 1988;26(9):827–37

Naming of cyclic heptapeptide toxins of cyanobacteria (blue–green algae). Carmichael WW, et al. **Toxicon** 1988; 26(11):971–3

URINE

Peptiduria presumably caused by aminopeptidase–P deficiency. A new inborn error of metabolism. Blau N, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:240–2

OLIGORIBONUCLEOTIDE PROBES see **OLIGONUCLEOTIDE PROBES**

OLIGORIBONUCLEOTIDES

Thermodynamic parameters of the binding of an oligo–alpha–thymidylate to its complementary oligo–beta–adenylate sequences. Durand M, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):505–10

Thermal stability of RNA hairpins containing a four–membered loop and a bulge nucleotide. Groebe DR, et al. **Biochemistry** 1989 Jan 24;28(2):742–7

Oligonucleotide fingerprinting of chikungunya virus strains. Banerjee K, et al. **Indian J Med Res** 1988 Jun;87:531–41

Why do all lariat RNA introns have adenosine as the branch–point nucleotide? Conformational study of naturally–occurring branched trinucleotides and its eleven analogues by 1H–, 31P–NMR and CD spectroscopy. Remaud G, et al. **J Biochem Biophys Methods** 1989 Feb; 18(1):1–35

Prevention of chain cleavage in the chemical synthesis of 2'–silylated oligoribonucleotides. Wu T, et al. **Nucleic Acids Res** 1989 May 11;17(9):3501–17

ANALYSIS

Analysis of repeating oligonucleotide sequences in ribonucleic acids using an Apple II microcomputer. Pandit MW, et al. **Comput Appl Biosci** 1986 Sep;2(3):189–94

High–performance ion–exchange chromatography of oligoribonucleotides using linear and hyperbolic salt gradients. Tsygankov AYu, et al. **J Chromatogr** 1989 Mar 31;465(2):325–9

BIOSYNTHESIS

[Kinetics of inhibition by 8–oxy–GTP and 8–bromo–GTP of Escherichia coli RNA–polymerase synthesis of pppApU dinucleotide on the promotor a1 of phage T7deltaD111 DNA in a limited set of substrates] Kuriavyi VV, et al. **Mol Biol (Mosk)** 1989 May–Jun;23(3):822–9 (Eng. Abstr.) **(Rus)**

CHEMICAL SYNTHESIS

Solid–phase synthesis and high–resolution NMR studies of two synthetic double–helical RNA dodecamers: r(CGCGAAUUCGCG) and r(CGCGUAUACGCG). Chou SH, et al. **Biochemistry** 1989 Mar 21;28(6):2422–35

Template–directed synthesis of acyclic oligonucleotide analogues. Visscher J, et al. **J Mol Evol** 1988 Dec–1989 Feb;28(1–2):3–6

5'–Levulinyl and 2'–tetrahydrofuranyl protection for the synthesis of oligoribonucleotides by the phosphoramidite approach. Iwai S, et al. **Nucleic Acids Res** 1988 Oct 25; 16(20):9443–56

Solid–phase synthesis of oligoribonucleotides using 9–fluorenylmethoxycarbonyl (Fmoc) for 5'–hydroxyl protection. Lehmann C, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2379–90

Solid phase synthesis of oligoribonucleotides using the 1–[(2–chloro–4–methyl)phenyl]–4–methoxypiperidin–4–yl (Ctmp) group for the protection of the 2'–hydroxy functions and the H–phosphonate approach. Sakatsume O, et al. **Nucleic Acids Res** 1989 May 25;17(10):3689–97

Highly efficient chemical synthesis of 2'–O–methyloligoribonucleotides and tetrabiotinylated derivatives; novel probes that are resistant to degradation by RNA or DNA specific nucleases. Sproat BS, et al. **Nucleic Acids Res** 1989 May 11;17(9):3373–86

Studies on the t-butyldimethylsilyl group as 2'-O-protection in oligoribonucleotide synthesis via the H-phosphonate approach. Stawinski J, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9285-98

Synthesis of RNA oligomer using 9-fluorenylmethoxycarbonyl (Fmoc) group for 5'-hydroxyl protection. Fukuda T, et al. **Nucleic Acids Symp Ser** 1988;(19):13-6

Efficient oligoadenylate synthesis catalyzed by uranyl ion complex in aqueous solution. Sawai H, et al. **Nucleic Acids Symp Ser** 1988;(19):5-7

(Butylthio)carbonyl group: a new protecting group for the guanine and uracil residues in oligoribonucleotide synthesis. Yamakage S, et al. **Nucleic Acids Symp Ser** 1988;(19):9-12

[Synthesis of oligoribonucleotides with the use of RNA polymerases of E. coli and immobilized synthetic DNA-templates] Denisova LIa, et al. **Bioorg Khim** 1989 Apr;15(4):562-5 (Eng. Abstr.) **(Rus)**

[Directed synthesis of 2',5'-oligoadenylates with increased stability towards phosphodiesterases] Itkes AV, et al. **Mol Biol (Mosk)** 1988 Sep-Oct;22(5):1393-8 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Rapid separation and purification of oligonucleotides by high-performance capillary gel electrophoresis. Cohen AS, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9660-3

[Preparation of homologs of oligoribouridylic acid by selective partial hydrolysis of RNA] Schott H. **J Chromatogr** 1988 Jul 8;445(1):155-74 (Eng. Abstr.) **(Ger)**

METABOLISM

2- and 8-azido photoaffinity probes. 1. Enzymatic synthesis, characterization, and biological properties of 2- and 8-azido photoprobes of 2-5A and photolabeling of 2-5A binding proteins. Suhadolnik RJ, et al. **Biochemistry** 1988 Nov 29;27(24):8840-6

Sequence-specific endoribonuclease activity of the Tetrahymena ribozyme: enhanced cleavage of certain oligonucleotide substrates that form mismatched ribozyme-substrate complexes. Zaug AJ, et al. **Biochemistry** 1988 Dec 13;27(25):8924-31

Intracellular metabolism of the interferon mediator, 2-5A, using permeabilized cells. Luxembourg A. **Biochim Biophys Acta** 1988 Nov 10;951(1):175-81

Mechanisms of degradation of 2'-5' oligoadenylates. Trujillo MA, et al. **Biochimie** 1988 Dec;70(12):1733-44

Modulation of nuclear matrix-associated 2',5'-oligoadenylate metabolism and ribonuclease L activity in H9 cells by human immunodeficiency virus. Schröder HC, et al. **J Biol Chem** 1989 Apr 5;264(10):5669-73

[Degradation of messenger RNA, ribosomal RNA and 2-5A-dependent inhibition of protein biosynthesis] Toots UE, et al. **Mol Biol (Mosk)** 1988 Nov-Dec;22(6):1473-81 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

The elongation factor Tu.GTPase reaction: effect of 2'(3')-O-aminoacyl oligoribonucleotides. Tezuka M, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):463-5

Mechanism of inhibition of eukaryotic translational initiation by the trinucleotide ApUpG. Wagner T, et al. **FEBS Lett** 1989 Jul 3;250(2):147-52

Interferon and (2'-5')oligoadenylate enhance the expression of low affinity receptors for IgE (Fc epsilon R2/CD23) on the human monoblast cell line U937. Mayumi M, et al. **Mol Immunol** 1989 Mar;26(3):241-7

Phosphorothioate and cordycepin analogues of 2',5'-oligoadenylate: inhibition of human immunodeficiency virus type 1 reverse transcriptase and infection in vitro. Montefiori DC, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7191-4

Microinjection of antisense c-mos oligonucleotides prevents meiosis II in the maturing mouse egg. O'Keefe SJ, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7038-42

OLIGOSACCHARIDES

Mass spectrometry of hexosamine containing oligosaccharides as permethylated N-trifluoroacetyl derivatives. Nilsson B. **Adv Exp Med Biol** 1988;228:803-13

N-linked oligosaccharides are responsible for rat striatal dopamine D2 receptor heterogeneity. Clagett-Dame M, et al. **Arch Biochem Biophys** 1989 Oct;274(1):145-54

Chemotaxis to chitin oligosaccharides by Vibrio furnissii, a chitinivorous marine bacterium. Bassler B, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1172-6

Sequence determination in oligosaccharides by relayed NOE experiments in the rotating frame. Poppe L, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):618-23

Improved procedure for the construction of neoglycolipids having antigenic and lectin-binding activities, from reducing oligosaccharides. Stoll MS, et al. **Biochem J** 1988 Dec 1;256(2):661-4

Fast atom bombardment-mass spectrometry strategies for analysing glycoprotein glycans. Thomas-Oates JE, et al. **Biochem Soc Trans** 1989 Feb;17(1):243-5 (16 ref.)

Structural analyses of asparagine-linked oligosaccharides of porcine pancreatic kallikrein. Tomiya N, et al. **Biochemistry** 1988 Sep 6;27(18):7146-54

1H- and 13C-n.m.r. assignments for structural elements of xylose-containing N-linked oligosaccharides, using 1D- and 2D-n.m.r. experiments. Bouwstra JB, et al. **Carbohydr Res** 1989 Feb 15;186(1):39-49

On the utility of 13C-n.m.r. spectroscopy in the identification of the primary structures of manno-oligosaccharides and glycopeptides. Cumming DA, et al. **Carbohydr Res** 1988 Aug 15;179:369-80 (34 ref.)

Aleuria aurantia agglutinin. A new isolation procedure and further study of its specificity towards various glycopeptides and oligosaccharides. Debray H, et al. **Carbohydr Res** 1989 Jan 15;185(1):15-26

Structural studies on oncofetal carbohydrate antigens (Ca 19-9, Ca 50, and Ca 125) carried by O-linked sialyloligosaccharides on human amniotic mucins. Hanisch FG, et al. **Carbohydr Res** 1988 Jul 15;178:29-47

Structural analysis by fast-atom-bombardment mass spectrometry of the mixture of alditols derived from the O-linked oligosaccharides of murine glycophorins. Krotkiewski H, et al. **Carbohydr Res** 1988 Dec 31;184:27-38

Long-range carbon-proton coupling constants: application to conformational studies of oligosaccharides. Mulloy B, et al. **Carbohydr Res** 1988 Dec 31;184:39-46

The determination of the structure of blood group oligosaccharides from fully assigned 1H-n.m.r. spectra for solutions in non-aqueous solvents. Rao BN, et al. **Carbohydr Res** 1988 Sep 1;180(1):111-28

An improved method for the preparation of derivatives of reducing oligosaccharide with 2-(4-aminophenyl)ethylamine. Semprevivo LH. **Carbohydr Res** 1988 Jun 15;177:222-7

Complete 1H- and 13C-n.m.r. assignments for two sulphated oligosaccharide alditols of hen ovomucin. Strecker G, et al. **Carbohydr Res** 1989 Jan 15;185(1):1-13

The response of liver to lactobionate/raffinose (University of Wisconsin--UW) solution during hypothermic preservation: a study using 31phosphorus nuclear magnetic resonance. Busza AL, et al. **Cryobiology** 1989 Jun; 26(3):273-6

Sequencing of peracetylated oligosaccharides by rotating-frame nuclear Overhauser enhancement spectroscopy. Dabrowski J, et al. **FEBS Lett** 1989 Mar 27;246(1-2):229-32

Sulfated N-linked carbohydrate chains in porcine thyroglobulin. Kamerling JP, et al. **FEBS Lett** 1988 Dec 5;241(1-2):246-50

Structure of the O-polysaccharide chain of lipopolysaccharide from Pseudomonas aeruginosa IID 1001 (ATCC 27577). Yokota S, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):671-8

Structural studies on phosphorylated oligosaccharides derived from yeast mannan by 1H(31P) relayed spin-echo difference spectroscopy (RESED). de Waard P, et al. **J Biol Chem** 1989 Jul 25;264(21):12141-4

The asparagine-linked oligosaccharides on bovine fetuin. Structural analysis of N-glycanase-released oligosaccharides by 500-megahertz 1H NMR spectroscopy. Green ED, et al. **J Biol Chem** 1988 Dec 5; 263(34):18253-68

A new Saccharomyces cerevisiae mnn mutant N-linked oligosaccharide structure. Hernández LM, et al. **J Biol Chem** 1989 Jul 15;264(20):11849-56

Effect of oligosaccharide chain length, exposed terminal group, and hapten loading on the antibody response of human adults and infants to vaccines consisting of Haemophilus influenzae type b capsular antigen unterminally coupled to the diphtheria protein CRM197. Anderson PW, et al. **J Immunol** 1989 Apr 1;142(7):2464-8

Effects of galactose depletion from oligosaccharide chains on immunological activities of human IgG. Tsuchiya N, et al. **J Rheumatol** 1989 Mar;16(3):285-90

Importance of a 3-O-sulfate group in a heparin pentasaccharide for antithrombotic activity. Walenga JM, et al. **Thromb Res** 1988 Dec 15;52(6):553-63

ANALYSIS

A high-performance liquid chromatography method for the analysis of picomole amounts of oligosaccharides. Hall NA, et al. **Anal Biochem** 1989 May 1;178(2):378-84

The identification of furanose and pyranose ring forms of the reducing units of oligosaccharides. Pazur JH, et al. **Anal Biochem** 1988 Oct;174(1):46-53

High-performance anion-exchange chromatography of oligosaccharides using pellicular resins and pulsed amperometric detection. Townsend RR, et al. **Anal Biochem** 1988 Nov 1;174(2):459-70

Sequence analysis of highly sulfated, heparin-derived oligosaccharides using fast atom bombardment mass spectrometry. Mallis LM, et al. **Anal Chem** 1989 Jul 1; 61(13):1453-8

Determination of mono- and oligosaccharides in fermentation broths by liquid chromatographic separation and amperometric detection using immobilized enzyme reactors and a chemically modified electrode. Marko-Varga GA. **Anal Chem** 1989 Apr 15;61(8):831-8

Structural study of the sugar chains of human platelet thrombospondin. Furukawa K, et al. **Arch Biochem Biophys** 1989 Apr;270(1):302-12

The structures of the asparagine-linked sugar chains of human apolipoprotein B-100. Taniguchi T, et al. **Arch Biochem Biophys** 1989 Aug 15;273(1):197-205

Studies on the structure of the oligosaccharide chains of alpha 1-acid glycoprotein associated with rough membranes from rat liver. Silvanovich A, et al. **Biochem Cell Biol** 1989 Jan; 67(1):1-7

In vitro sulfation of sublingual salivary gland mucin: structures of 35S-labeled oligosaccharides. Slomiany A, et al. **Biochem Int** 1989 Mar;18(3):589-97

Identification of a novel oligosaccharide backbone structure with a galactose residue monosubstituted at C-6 in human foetal gastrointestinal mucins. Hounsell EF, et al. **Biochem J** 1988 Dec 1;256(2):397-401

Mapping and quantification of the major oligosaccharide components of heparin. Linhardt RJ, et al. **Biochem J** 1988 Sep 15;254(3):781-7

Carbohydrate structures of the human-immunodeficiency-virus (HIV) recombinant envelope glycoprotein gp120 produced in Chinese-hamster ovary cells. Mizuochi T, et al. **Biochem J** 1988 Sep 1; 254(2):599-603

The oligosaccharide component of alpha 1-adrenergic receptors from BC3H1 and DDT1 muscle cells. Studies with glycosidases and photoaffinity labelling of intact cells. Terman BI, et al. **Biochem J** 1988 Jul 15;253(2):363-70

Sialic acids and penultimate oligosaccharides on metastatic tumour cell surfaces. Passaniti A, et al. **Biochem Soc Trans** 1989 Feb;17(1):33-6 (24 ref.)

Influence of glycolipid oligosaccharide and long-chain base composition on the thermotropic properties of dipalmitoylphosphatidylcholine large unilamellar vesicles containing gangliosides. Masserini M, et al. **Biochemistry** 1989 Jun 13;28(12):5029-34

Oligosaccharide structure and amino acid sequence of the major glycopeptides of mature human beta-hexosaminidase. O'Dowd BF, et al. **Biochemistry** 1988 Jul 12;27(14):5216-26

Thermodynamics of intersubunit interactions in cholera toxin upon binding to the oligosaccharide portion of its cell surface receptor, ganglioside GM1. Schön A, et al. **Biochemistry** 1989 Jun 13;28(12):5019-24

Comparative structural study of N-linked oligosaccharides of urinary and recombinant erythropoietins. Tsuda E, et al. **Biochemistry** 1988 Jul 26;27(15):5646-54

Efficient HPLC separation of N-p-nitrophenylglycosylamines derived from complex oligosaccharide mixtures. Human orosomucoid as a model. Kurth H, et al. **Biomed Chromatogr** 1986 Apr;1(2):58-63

Structural characterization by chromatographic profiling of the oligosaccharides of human immunodeficiency virus (HIV) recombinant envelope glycoprotein gp120 produced in Chinese hamster ovary cells. Mizuochi T, et al. **Biomed Chromatogr** 1988 Nov;2(6):260-70

Measurement of the rate of assimilation of oligo- and polysaccharides by 13CO2 breath tests and isotope ratio mass spectrometry. Hiele M, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1-12):133-5

Scope and limitations of rotating-frame nuclear Overhauser enhancement spectroscopy applied to oligosaccharides. Breg J, et al. **Carbohydr Res** 1988 Nov 15;183(1):19-34

Structural analysis of the preponderant high-mannose oligosaccharide of human Tamm-Horsfall glycoprotein. Dall'Olio F, et al. **Carbohydr Res** 1988 Jul 15;178:327-32

Oligosaccharides from faeces of a blood-group B, breast-fed infant. Sabharwal H, et al. **Carbohydr Res** 1988 Jul 15; 178:145-54

Separation by liquid chromatography (under elevated pressure) of benzyl and nitrophenyl glycosides of oligosaccharides. Thomas RL, et al. **Carbohydr Res** 1989 Jun 15;189:13-9

G.L.C.-M.S. of N-(1-deoxyalditol-1-yl)octadecylamine derivatives in the analysis of methanolysates of neoglycolipids obtained by reductive amination. van Dam JE, et al. **Carbohydr Res** 1989 Apr 1;187(1):25-34

Liquid ion-exchange chromatography under pressure of milk oligosaccharides using a pulsed amperometric detector. Wang WT, et al. **Carbohydr Res** 1989 Jun 15;189:1-11

Correlation of mRNA hybridization and cell membrane oligosaccharide profile with colon carcinoma metastatic aggressiveness. Hakim AA, et al. **Cell Mol Biol** 1988; 34(5):483-505

Characterization of N-linked oligosaccharides attached to human renin expressed in COS cells. Hori H, et al. **Clin Exp Hypertens [A]** 1988;10(6):1147-55

Type analysis of oligosaccharide chains on human and murine MHC class II alpha chains by the lectin-nitrocellulose sheet method. Katagiri YU, et al. **Comp Biochem Physiol [B]** 1989;93(2):259-63

Heterogeneous nature of human complement factor B: an electrophoretic approach for the analysis of its oligosaccharide chain structure and its physiological breakdown products. Garnier G, et al. **Electrophoresis** 1989 Jul;10(7):501-12

Characterization and charge distribution of the asparagine-linked oligosaccharides on secreted mouse thyrotropin and free alpha-subunits. Gesundheit N, et al. **Endocrinology** 1989 Jun;124(6):2967-77

Analysis of N-acetyl-4-O-acetylneuraminic-acid-containing N-linked carbohydrate chains released by peptide-N4-(N-acetyl-beta-glucosaminyl)asparagine amidase F. Application to the structure determination of the carbohydrate chains of equine fibrinogen. Damm JB, et al. **Eur J Biochem** 1989 Mar 1;180(1):101-10

Primary structure of twenty three neutral and monosialylated oligosaccharides O-glycosidically linked to the human

secretory immunoglobulin A hinge region determined by a combination of permethylation analysis and 400-MHz 1H-NMR spectroscopy. Pierce-Crétel A, et al. **Eur J Biochem** 1989 Jun 15;182(2):457-76

400-MHz 1H-NMR spectroscopy of fucosylated tetrasialyl oligosaccharides isolated from normal and cirrhotic alpha 1-acid glycoprotein. Wieruszeski JM, et al. **FEBS Lett** 1988 Oct 10;238(2):390-4

Antigenic evidence for simultaneous expression of two different lipooligosaccharides by some strains of Haemophilus influenzae type b. Patrick CC, et al. **Infect Immun** 1989 Jul;57(7):1971-8

Structures of asparagine-linked oligosaccharides of human placental fibronectin. Takamoto M, et al. **J Biochem (Tokyo)** 1989 May;105(5):742-50

Free sialooligosaccharides found in the unfertilized eggs of a freshwater trout, Plecoglossus altivelis. A large storage pool of complex-type bi-, tri-, and tetraantennary sialooligosaccharides. Ishii K, et al. **J Biol Chem** 1989 Jan 25;264(3):1623-30

Complex-type asparagine-linked oligosaccharides in glycoproteins synthesized by Schistosoma mansoni adult males contain terminal beta-linked N-acetylgalactosamine. Nyame K, et al. **J Biol Chem** 1989 Feb 25;264(6):3235-43

Structural determinants of heparin's growth inhibitory activity. Interdependence of oligosaccharide size and charge. Wright TC Jr, et al. **J Biol Chem** 1989 Jan 25; 264(3):1534-42

Oligosaccharide heterogeneity of glycoproteins sulfated during the vegetative growth of Dictyostelium discoideum. Davis SJ. **J Cell Biochem** 1988 Oct;38(2):77-86

A calcium-binding, asparagine-linked oligosaccharide is involved in skeleton formation in the sea urchin embryo. Farach-Carson MC, et al. **J Cell Biol** 1989 Sep; 109(3):1289-99

Evaluation of the liquid chromatographic separation of monosaccharides, disaccharides, trisaccharides, tetrasaccharides, deoxysaccharides and sugar alcohols with stable cyclodextrin bonded phase columns. Armstrong DW, et al. **J Chromatogr** 1989 Jan 13;462:219-32

Analysis of tissue glycoprotein sugar chains by two-dimensional high-performance liquid chromatographic mapping. Hase S, et al. **J Chromatogr** 1988 Dec 29;434(1):51-60

A post-column co-immobilized galactose oxidase/peroxidase reactor for fluorometric detection of saccharides in a liquid chromatographic system. Kiba N, et al. **J Chromatogr** 1989 Jan 20;463(1):183-7

High-performance anion-exchange chromatography of homogeneous D-gluco-oligosaccharides and -polysaccharides (polymerization degree greater than or equal to 50) with pulsed amperometric detection. Koizumi K, et al. **J Chromatogr** 1989 Mar 3;464(2):365-73

High-performance liquid chromatography of sialooligosaccharides and gangliosides. el Rassi Z, et al. **J Chromatogr** 1989 Mar 17;488(1):229-36

Size fractionation of oligosaccharides by liquid chromatography on a cation-exchange column. Seto Y, et al. **J Chromatogr** 1989 Mar 3;464(2):323-31

Identification of protein-bound oligosaccharides on the surface of growth cones that bind to muscle cells. Ambron RT, et al. **J Neurobiol** 1989 Sep;20(6):549-68

Poly(N-acetyllactosaminyl) oligosaccharides of chromaffin granule membrane glycoproteins. Margolis RU, et al. **J Neurochem** 1988 Dec;51(6):1819-24

Cell surface oligosaccharide modulation during differentiation: III. Lectin affinity class distributions. Mann PL, et al. **Mech Ageing Dev** 1988 Jul;44(1):1-16

Cell surface oligosaccharide modulation during differentiation: IV. Normal and transformed cell growth control. Mann PL, et al. **Mech Ageing Dev** 1988 Jul; 44(1):17-33

The relationship between the (beta 1-3) N-acetylglucosaminyltransferase and the presence of oligosaccharides containing lacto-N-triose II structure in bovine and human milk. Hosomi O, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):1-6

Oncogenes conferring metastatic potential induce increased branching of Asn-linked oligosaccharides in rat2 fibroblasts. Dennis JW, et al. **Oncogene** 1989 Jul;4(7):853-60

Characterization of oligosaccharides by lectin affinity high-performance liquid chromatography. Green ED, et al. **Trends Biochem Sci** 1989 May;14(5):168-72

Size distribution and general structural features of N-linked oligosaccharides from the methylotrophic yeast, Pichia pastoris. Grinna LS, et al. **Yeast** 1989 Mar-Apr;5(2):107-15

[Analysis of 13C-NMR spectra of oligosaccharides using microcomputers] Shibaev VN. **Bioorg Khim** 1988 Jul; 14(7):926-37 (Eng. Abstr.) **(Rus)**

[The core oligosaccharides of Pseudomonas fluorescens lipopolysaccharides] Veremeichenko SN. **Mikrobiol Zh** 1987 Sep-Oct;49(5):18-22 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Inhibitors of asparagine-linked oligosaccharide processing alter the kinetics of the nicotinic acetylcholine receptor. Covarrubias M, et al. **J Gen Physiol** 1989 May;93(5):765-83

BIOSYNTHESIS

Synthesis of dolichol derivatives and protein glycosylation in trypanosomatids. Bosch M, et al. **Biochem Soc Trans** 1988 Jun;16(3):268-71

Oncodevelopmental expression of--GlcNAc beta 1-6Man alpha 1-6Man beta 1--branched asparagine-linked oligosaccharides in murine tissues and human breast carcinomas. Dennis JW, et al. **Cancer Res** 1989 Feb 15; 49(4):945-50

Asn-linked oligosaccharide processing and malignant potential. Dennis JW. **Cancer Surv** 1988;7(4):573-95 (114 ref.)

Biosynthesis, in calf pancreas microsomes, of three lipid-linked oligosaccharide diphosphates from a synthetic dolichyl diphosphate tetrasaccharide. Goussault Y, et al. **Carbohydr Res** 1988 Aug 15;179:381-92

Enzymatic introduction of a fluorescent sialic acid into oligosaccharide chains of glycoproteins. Gross HJ, et al. **Eur J Biochem** 1988 Nov 15;177(3):583-9

N-linked oligosaccharide changes with oncogenic transformation require sialylation of multiantennae. Santer UV, et al. **Eur J Biochem** 1989 Apr 15;181(1):249-60

Molecular analysis of lipooligosaccharide biosynthesis in Neisseria gonorrhoeae. Petricoin EF 3d, et al. **Infect Immun** 1989 Sep;57(9):2847-52

In vitro synthesis of a lipid-linked trisaccharide involved in synthesis of enterobacterial common antigen [published erratum appears in J Bacteriol 1989 May;171(5):2913] Barr K, et al. **J Bacteriol** 1989 Mar;171(3):1326-32

Biosynthesis of bi-, tri-, and tetraantennary oligosaccharides containing alpha-D-galactosyl residues at their nonreducing termini. Branch specificity of the Ehrlich tumor cell alpha(1,3)-galactosyltransferase. Elices MJ, et al. **J Biol Chem** 1989 Jan 25;264(3):1375-80

Two mutants of Dictyostelium discoideum that lack a sulfated carbohydrate antigenic determinant synthesize a truncated lipid-linked precursor of N-linked oligosaccharides. Freeze HH, et al. **J Biol Chem** 1989 Apr 5;264(10):5653-9

Alteration of terminal glycosylation sequences on N-linked oligosaccharides of Chinese hamster ovary cells by expression of beta-galactoside alpha 2,6-sialyltransferase. Lee EU, et al. **J Biol Chem** 1989 Aug 15;264(23):13848-55

Dolichol-linked oligosaccharide and glycoprotein biosyntheses in glial cells in primary culture: development and enzymatic correlates. Ishii S, et al. **J Neurosci Res** 1988 Aug;20(4):463-72

BLOOD

Selective purification of reduced oligosaccharides using a phenylboronic acid bond elut column: potential application in HPLC, mass spectrometry, reductive amination procedures and antigenic/serum analysis. Stoll MS, et al. **Biomed Chromatogr** 1988 Nov;2(6):249-53

Changes in oligosaccharides of human blood cells measured by tritium- and FITC-labeled lectins after in vitro- and in vivo-irradiation--lectin binding as a biological dosemeter? Schreiber GA, et al. **Int J Radiat Biol** 1989 May;55(5):843-59

CHEMICAL SYNTHESIS

Chemically synthesized heparin-derived oligosaccharides. Choay J. **Ann N Y Acad Sci** 1989;556:61-74 (48 ref.)

Lactose hydrolysis and oligosaccharide formation catalyzed by beta-galactosidase. Kinetics and mathematical modeling. Yang ST, et al. **Ann N Y Acad Sci** 1988; 542:417-22

Further use of O-(2,3,4-tri-O-acetyl-alpha-L-fucopyranosyl)-(1----3)-O-(2-acetamido-4 ,6-di-O-acetyl-2-deoxy-beta-D-glucopyranosyl)-(1----3)-2,4,6-tri-O-acetyl-a lph a-D- galactopyranosyl bromide as a glycosyl donor. Synthesis of two mucin-type tetrasaccharides. Dubey R, et al. **Carbohydr Res** 1988 Oct 1;181:236-41

Synthesis of a fully protected derivative of O-(N-acetyl-alpha-D-neuraminyl)-(2----3)-O-beta-D-galactopyranosyl-(1- ---3)-O-[(N-acetyl-alpha-D-neuraminyl)-(2----6)]-O-(2-acetamido-2-deoxy-alpha-D-galactopyranosyl)-(1----3)-L-serine. Iijima H, et al. **Carbohydr Res** 1989 Feb 15;186(1):107-18

Synthesis of a mucin-type O-glycosylated amino acid, beta-Gal-(1----3)-[alpha-Neu5Ac-(2----6)]-alpha-GalNAc-(1----3)- Ser. Iijima H, et al. **Carbohydr Res** 1989 Feb 15;186(1):95-106

Synthetic mucin fragments. Synthesis of a tetra- and two penta-saccharides containing the O-beta-D-galactopyranosyl-(1----3)-O-(2-acetamido-2-deoxy-beta-D-glucopyranosyl)-(1----3)-D-galactopyranose ("lacto-N-triose 1") unit. Jain RK, et al. **Carbohydr Res** 1988 Nov 1;182(2):290-6

Synthesis of four structural elements of xylose-containing carbohydrate chains from N-glycoproteins. Kerékgyártó J, et al. **Carbohydr Res** 1989 Feb 15;186(1):51-62

Systematic chemical synthesis and n.m.r. spectra of methyl alpha-glycosides of isomalto-oligosaccharides and related compounds. Kováč P, et al. **Carbohydr Res** 1988 Dec 31; 184:87-112

Malto-oligosaccharide homologues of 3,7-anhydro-2-azi-1,2-dideoxy-D-glycero-D-gulo-octitol+ ++: improved photoaffinity reagents for labelling the malto-oligosaccharide-binding protein of Escherichia coli. Lehmann J, et al. **Carbohydr Res** 1988 Dec 31;184:113-20

Synthesis of a dimeric Lewis X hexasaccharide derivative corresponding to a tumor-associated glycolipid. Nilsson M, et al. **Carbohydr Res** 1988 Nov 15;183(1):71-82

Binding of heparin to antithrombin III: a chemical proof of the critical role played by a 3-sulfated 2-amino-2-deoxy-D-glucose residue. Petitou M, et al. **Carbohydr Res** 1988 Aug 15;179:163-72

Synthesis of a di-, tri-, and tetra-saccharide unit of the group B streptococcal common antigen. Pozsgay V, et al. **Carbohydr Res** 1988 Aug 15;179:61-75

Synthetic mucin fragments. Benzyl O-(2-acetamido-2-deoxy-alpha-D-glucopyranosyl)-(1----3)-O-beta-D-galactopyranosyl-(1----3)-O-[(2-acetamido-2-deoxy-beta-D-glucopyran osy l)-(1----6)]-2-acetamido-2-deoxy-alpha-D-galactopyranoside and benzyl O-(2-acetamido-2-deoxy-beta-D-glucopyranosyl)-(1----3)-O-beta-D-galactopyranosyl-(1----3)-O-[beta-D-galactopyranosyl-(1----6)]-2-ac eta mido-2-deoxy-alpha-D-galactopyranoside. Thomas RL, et al. **Carbohydr Res** 1988 Dec 1;183(2):163-73

[Synthesis of a tetrasaccharide unit of the capsular polysaccharide of Streptococcus pneumoniae type 9V] Paulsen H, et al. **Carbohydr Res** 1989 Mar 15; 186(2):189-205 (Eng. Abstr.) **(Ger)**

DIAGNOSTIC USE

New type of adhesive specificity revealed by oligosaccharide probes in Escherichia coli from patients with urinary tract infection. Rosenstein IJ, et al. **Lancet** 1988 Dec 10; 2(8624):1327-30

GENETICS

Functional activity of oligosaccharide-deficient (Na,K)ATPase expressed in Xenopus oocytes. Takeda K, et al. **FEBS Lett** 1988 Sep 26;238(1):201-4

Regulation of glycosylation. The influence of protein structure on N-linked oligosaccharide processing. Hubbard SC. **J Biol Chem** 1988 Dec 25;263(36):19303-17

Caseins of various origins and biologically active casein peptides and oligosaccharides: structural and physiological aspects. Fiat AM, et al. **Mol Cell Biochem** 1989 May 4; 87(1):5-30 (132 ref.)

IMMUNOLOGY

Presence of the HNK-1 epitope on poly(N-acetyllactosaminyl) oligosaccharides and identification of multiple core proteins in the chondroitin sulfate proteoglycans of brain. Gowda DC, et al. **Biochemistry** 1989 May 16;28(10):4468-74

Natural killer cells discriminate between high mannose- and complex-type asparagine-linked oligosaccharides. Ahrens PB, et al. **Biochimie** 1988 Nov;70(11):1619-25

Different class I antigen oligosaccharides on a murine tumor and a lectin-resistant variant are not responsible for the differential recognition of the tumors by CTL. Degen E, et al. **Int J Cancer** 1989 May 15;43(5):828-36

A monoclonal antibody that recognizes sialyl-Lea oligosaccharide, but is distinct from NS 19-9 as to epitope recognition. Kitagawa H, et al. **J Biochem (Tokyo)** 1988 Nov;104(5):817-21

Synthetic antigens as immunogens: Part III. Specificity analysis of an anti-anti-idiotypic antibody to a carbohydrate tumor-associated antigen. Diakun KR, et al. **J Immunol** 1989 Mar 15;142(6):2037-40

CD15 monoclonal antibodies react with a phosphotyrosine-containing protein on the surface of human neutrophils. Skubitz KM, et al. **J Immunol** 1988 Dec 15;141(12):4318-23

Distribution of some Gal beta 1-3(4)GlcNAc related carbohydrate antigens on the mouse uterine epithelium in relation to the peri-implantational period. Kimber SJ, et al. **J Reprod Immunol** 1988 Mar;12(4):297-313

ISOLATION & PURIFICATION

Accumulation of dolichol-linked oligosaccharides in ceroid-lipofuscinosis (Batten disease). Hall NA, et al. **Am J Med Genet Suppl** 1988;5:221-32

Separation of neutral reducing oligosaccharides derived from glycoproteins by HPLC on a hydroxylated polymeric support. Bendiak B, et al. **Anal Biochem** 1988 Nov 15; 175(1):96-105

Chromogenic labeling of milk oligosaccharides: purification by affinity chromatography and structure determination. Towbin H, et al. **Anal Biochem** 1988 Aug 15;173(1):1-9

Separation of oligosaccharides containing terminal alpha-linked galactose residues by affinity chromatography on Griffonia simplicifolia I bound to concanavalin A-sepharose. Wang WC, et al. **Anal Biochem** 1988 Dec; 175(2):390-6

Structural differences found in the sugar chains of eutopic and ectopic free alpha-subunits of human glycoprotein hormone. Kawano T, et al. **Arch Biochem Biophys** 1988 Dec;267(2):787-96

Structural studies of the asparagine-linked sugar chains of two immunoglobulin M's purified from a patient with

Waldenström's macroglobulinemia. Ohbayashi H, et al. **Arch Biochem Biophys** 1989 Mar;269(2):463–75

A novel sialylhexasaccharide from human milk: purification by affinity chromatography on immobilized wheat germ agglutinin. Tarrago MT, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):353–62

Determination of the structure of a novel acidic oligosaccharide with blood-group activity isolated from bovine submaxillary-gland mucin. D'Arcy SM, et al. **Biochem J** 1989 Jun 1;260(2):389–93

Type analysis of the oligosaccharide chains on microheterogeneous components of bovine pancreatic DNAase by the lectin-nitrocellulose sheet method. Kijimoto-Ochiai S, et al. **Biochem J** 1989 Jan 1;257(1):43–9

Purification of two glycoproteins expressing beta 1–6 branched Asn-linked oligosaccharides from metastatic tumour cells. Laferte S, et al. **Biochem J** 1989 Apr 15; 259(2):569–76

Goat milk oligosaccharides: purification and characterization by HPLC and high-field 1H-NMR spectroscopy. Chaturvedi P, et al. **Biochim Biophys Acta** 1988 Oct 13; 967(1):115–21

Isolation and partial purification of lipid-linked oligosaccharides from calf pancreas. Badet J, et al. **Carbohydr Res** 1988 Jul 15;178:49–65

Separation of fucosylated oligosaccharides using high-pH anion-exchange chromatography with pulsed-amperometric detection. Hardy MR, et al. **Carbohydr Res** 1989 Jun 1;188:1–7

Structure of a neutral polymer isolated from the lipopolysaccharide of the reference strain (C.D.C. 4523–60) for Serratia marcescens serogroup O15. Oxley D, et al. **Carbohydr Res** 1988 Jun 15;177:285–8

Simple isolation of alpha-D-Neup5Ac-(2——3)-beta-D-Galp-(1——4)-D-Glcp(GM3o. s.) from bovine colostrum through lactonization. Roy R, et al. **Carbohydr Res** 1989 Feb 15; 186(1):c1–5

Isolation and structural studies of phosphate-containing oligosaccharides from alkaline and acid hydrolysates of Streptococcus pneumoniae type 6B capsular polysaccharide. van Dam JE, et al. **Carbohydr Res** 1989 Apr 15;187(2):267–86

Structures of O-glycosidically linked oligosaccharides isolated from human meconium glycoproteins. Capon C, et al. **Eur J Biochem** 1989 Jun 1;182(1):139–52

Isolation and structural characterization of low-molecular-mass monosialyl oligosaccharides derived from respiratory-mucus glycoproteins of a patient suffering from bronchiectasis. Van Halbeek H, et al. **Eur J Biochem** 1988 Nov 1;177(2):443–60

Storage of sialic acid-containing carbohydrates in the placenta of a human galactosialidosis fetus. Isolation and structural characterization of 16 sialyloligosaccharides. Van Pelt J, et al. **Eur J Biochem** 1988 Nov 1;177(2):327–38

Immunoaffinity isolation of a sialyl-Le(a) oligosaccharide from human milk. Kitagawa H, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):591–4

Novel O-linked carbohydrate chains in the cellulase complex (cellulosome) of Clostridium thermocellum. 3-O-Methyl-N-acetylglucosamine as a constituent of a glycoprotein. Gerwig GJ, et al. **J Biol Chem** 1989 Jan 15; 264(2):1027–35

Structures of neutral O-linked polylactosaminoglycans on human skim milk mucins. A novel type of linearly extended poly-N-acetyllactosamine backbones with Gal beta(1–4)GlcNAc beta(1–6) repeating units. Hanisch FG, et al. **J Biol Chem** 1989 Jan 15;264(2):872–83

Structure of the phosphorylated N-linked oligosaccharides from the mnn9 and mnn10 mutants of Saccharomyces cerevisiae. Hernandez LM, et al. **J Biol Chem** 1989 Aug 15;264(23):13648–59

A new core tetrasaccharide component from the lipopolysaccharide of Rhizobium trifolii ANU 843. Hollingsworth RI, et al. **J Biol Chem** 1989 Jun 5; 264(16):9294–9

Comparative study of the asparagine-linked sugar chains of natural human interferon-beta 1 and recombinant human interferon-beta 1 produced by three different mammalian cells. Kagawa Y, et al. **J Biol Chem** 1988 Nov 25; 263(33):17508–15

Carbohydrate structures of human tissue plasminogen activator expressed in Chinese hamster ovary cells. Spellman MW, et al. **J Biol Chem** 1989 Aug 25; 264(24):14100–11

Altered glycosylation of serum transferrin of patients with hepatocellular carcinoma. Yamashita K, et al. **J Biol Chem** 1989 Feb 15;264(5):2415–23

Carbohydrate binding specificity of immobilized Allomyrina dichotoma lectin II. Yamashita K, et al. **J Biol Chem** 1988 Nov 25;263(33):17482–9

Separation by high-performance liquid chromatography of oligosaccharides obtained after mild acid hydrolysis of Klebsiella pneumoniae O1K2 (NCTC 5055) lipopolysaccharides. Kol O, et al. **J Chromatogr** 1989 Jul 19;474(2):452–6

Oligosaccharide composition, localization, and developmental changes of a CNS-specific (F3–87–8) glycoprotein. Ripellino JA, et al. **J Neurochem** 1989 Oct; 53(4):1103–8

Structure and heterogeneity of the oligosaccharides from the lipopolysaccharides of a pyocin-resistant Neisseria gonorrhoeae. Gibson BW, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):17–21

Structure, oligosaccharide structures, and posttranslationally modified sites of the nicotinic acetylcholine receptor. Poulter L, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(17):6645–9

METABOLISM

Arylsulfatase A from human tissues contains an endo-beta-N-acetylglucosaminidase F-resistant oligosaccharide. Laidler PM, et al. **Acta Biochim Pol** 1988; 35(4):343–56

Immunohistochemical analysis of LNT, NeuAc2——3LNT, and Lex carbohydrate antigens in human tumors and normal tissues. Garin-Chesa P, et al. **Am J Pathol** 1989 Jun;134(6):1315–27

Biogenesis of lysosomal enzymes in the alpha-glucosidase II-deficient modA mutant of Dictyostelium discoideum: retention of alpha-1,3-linked glucose on N-linked oligosaccharides delays intracellular transport but does not alter sorting of alpha-mannosidase or beta-glucosidase. Ebert DL, et al. **Arch Biochem Biophys** 1989 Sep; 273(2):479–90

Characteristics of the sulfation of N-linked oligosaccharides in vesicles from Dictyostelium discoideum: in vitro sulfation of lysosomal enzymes. Lacoste CH, et al. **Arch Biochem Biophys** 1989 Sep;273(2):505–15

Liberation of oligosaccharides from glycosphingolipids on PC12 cell surface with endoglycoceramidase. Rasilo ML, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1093–9

Control of glycoprotein synthesis. The use of oligosaccharide substrates and HPLC to study the sequential pathway for N-acetylglucosaminyltransferases I, II, III, IV, V, and VI in the biosynthesis of highly branched N-glycans by hen oviduct membranes. Brockhausen I, et al. **Biochem Cell Biol** 1988 Oct;66(10):1134–51

Inhibition of glycoprotein oligosaccharide processing in vitro and in influenza-virus-infected cells by alpha-D-mannopyranosylmethyl-p-nitrophenyltriazene. McDowell W, et al. **Biochem J** 1988 Nov 1;255(3):991–8

Oligosaccharides in molecular recognition. Feizi T. **Biochem Soc Trans** 1988 Dec;16(6):930–4

Incompletely processed LH molecules synthesized by rat gonadotrophs treated with inhibitors of oligosaccharide processing. Hattori M, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):272–80

Mutagenesis and gene transfer define site-specific roles of the gonadotropin oligosaccharides. Matzuk MM, et al. **Biol Reprod** 1989 Jan;40(1):48–53 (70 ref.)

Processing enzymes acting on carbohydrate moiety of lysosomal hydrolases in leukemic cells: elevated activity of N-acetylglucosamine-1-phosphotransferase. Uehara Y, et al. **Blood** 1989 May 15;73(7):1957–62

Examination, by 1H-n.m.r. spectroscopy, of the binding of a synthetic, high-affinity heparin pentasaccharide to human antithrombin III. Gettins P, et al. **Carbohydr Res** 1989 Jan 15;185(1):69–76

Malto-oligosaccharide homologues of 3,7-anhydro-2-azi-1,2-dideoxy-D-glycero-D-gulo-octitol+ ++: improved photoaffinity reagents for labelling the malto-oligosaccharide-binding protein of Escherichia coli. Lehmann J, et al. **Carbohydr Res** 1988 Dec 31;184:113–20

Preparation of branched hexasaccharides by the action of a viral lyase on Klebsiella K14 polysaccharide. Parolis H, et al. **Carbohydr Res** 1988 Oct 15;182(1):127–34

The accumulation of oligosaccharides in tissues and body fluids of cats with alpha-mannosidosis. Warren CD, et al. **Carbohydr Res** 1988 Sep 15;180(2):325–38

Studies on Fe complexes produced by yeast. III. Characteristics of Fe absorption from an Fe(II)-oligosaccharide complex in the rat gastrointestinal tract. Tabata S, et al. **Chem Pharm Bull (Tokyo)** 1988 Sep; 36(9):3546–56

Protein-oligosaccharide interactions: lysozyme, phosphorylase, amylases. Johnson LN, et al. **Curr Top Microbiol Immunol** 1988;139:81–134 (154 ref.)

Interactions of concanavalin A with asparagine-linked glycopeptides. Structure/activity relationships of the binding and precipitation of oligomannose and bisected hybrid-type glycopeptides with concanavalin A. Bhattacharyya L, et al. **Eur J Biochem** 1989 Jan 2; 178(3):721–6

Effects of tunicamycin and N-linked oligosaccharide-processing inhibitors on the morphology of cultured porcine thyroid cells. Giraud A, et al. **Eur J Cell Biol** 1989 Feb;48(1):128–34

Sialo-oligosaccharide receptors for Mycoplasma pneumoniae and related oligosaccharides of poly-N-acetyllactosamine series are polarized at the cilia and apical-microvillar domains of the ciliated cells in human bronchial epithelium. Loveless RW, et al. **Infect Immun** 1989 Apr;57(4):1285–9

A comparison of the modes of actions of human salivary and pancreatic alpha-amylases on modified maltooligosaccharides. Nagamine Y, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):667–70

Investigation of the active site of human salivary alpha-amylase from the modes of action on modified maltooligosaccharides. Nagamine Y, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):409–15

Bowringia milbraedii agglutinin. Specificity of binding to early processing intermediates of asparagine-linked oligosaccharide and use as a marker of endoplasmic reticulum glycoproteins. Animashaun T, et al. **J Biol Chem** 1989 Mar 15;264(8):4657–63

Biosynthesis of a variant surface glycoprotein of Trypanosoma brucei. Processing of the glycolipid membrane anchor and N-linked oligosaccharides. Bangs JD, et al. **J Biol Chem** 1988 Nov 25;263(33):17697–705

Formation of highly ordered cross-linked lattices between asparagine-linked oligosaccharides and lectins observed by electron microscopy. Bhattacharyya L, et al. **J Biol Chem** 1989 Jul 15;264(20):11543–5

Mannose processing is an important determinant in the assembly of phosphorylated high mannose-type oligosaccharides. Lazzarino DA, et al. **J Biol Chem** 1989 Mar 25;264(9):5015–23

Asynchronous transport to the cell surface of intestinal brush border hydrolases is not due to differential trimming of N-linked oligosaccharides. Matter K, et al. **J Biol Chem** 1989 Aug 5;264(22):13131–9

Asparagine-linked oligosaccharides containing poly-N-acetyllactosamine chains are preferentially bound by immobilized calf heart agglutinin. Merkle RK, et al. **J Biol Chem** 1988 Nov 5;263(31):16143–9

A library of oligosaccharide probes (neoglycolipids) from N-glycosylated proteins reveals that conglutinin binds to certain complex-type as well as high mannose-type oligosaccharide chains. Mizuochi T, et al. **J Biol Chem** 1989 Aug 15;264(23):13834–9

Binding of Vibrio cholera toxin and the heat-labile enterotoxin of Escherichia coli to GM1, derivatives of GM1, and nonlipid oligosaccharide polyvalent ligands. Schengrund CL, et al. **J Biol Chem** 1989 Aug 5; 264(22):13233–7

Identification of an N-acetylglucosaminyltransferase in Dictyostelium discoideum that transfers an "intersecting" N-acetylglucosamine residue to high mannose oligosaccharides. Sharkey DJ, et al. **J Biol Chem** 1989 Jun 25;264(18):10411–9

Addition of truncated oligosaccharides to influenza virus hemagglutinin results in its temperature-conditional cell-surface expression. Hearing J, et al. **J Cell Biol** 1989 Feb;108(2):355–65

Selective retention of monoglucosylated high mannose oligosaccharides by a class of mutant vesicular stomatitis virus G proteins. Suh K, et al. **J Cell Biol** 1989 Mar; 108(3):811–9

Cytochemical detection of receptors specific for N-linked oligosaccharides of glycoproteins in the membrane of the human spermatozoon and their distribution in the different zones of that membrane. de Cerezo JM, et al. **J Reprod Immunol** 1988 Dec;14(3):213–23

Varicella-zoster virus glycoprotein oligosaccharides are phosphorylated during posttranslational maturation. Gabel CA, et al. **J Virol** 1989 Oct;63(10):4264–76

Interplay between carbohydrate in the stalk and the length of the connecting peptide determines the cleavability of influenza virus hemagglutinin. Kawaoka Y, et al. **J Virol** 1989 Aug;63(8):3296–300

Fecal alpha 1-antitrypsin concentration and gastrointestinal permeability to oligosaccharides in atopic dermatitis. Pike MG, et al. **Pediatr Dermatol** 1989 Mar;6(1):10–2

Role of oligosaccharides in the processing and maturation of envelope glycoproteins of human immunodeficiency virus type 1. Pal R, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3384–8

Brefeldin A inhibits oligosaccharide processing of glycoproteins in mouse hypothyroid pituitary tissue at several subcellular sites. Perkel VS, et al. **Proc Soc Exp Biol Med** 1989 Mar;190(3):286–93

Circulatory life time and organ distribution of differently glycosylated forms (unglycosylated, high-mannose type, hybrid type, complex type) of rat alpha-1-acid glycoprotein. Gross V, et al. **Prog Clin Biol Res** 1989; 300:231–4

Synthesis and release of glycoconjugates bearing N-linked oligosaccharides by ovarian carcinoma cells isolated from effusions. Allen HJ, et al. **Tumour Biol** 1989;10(2):95–102

[Biological function of the carbohydrate component of human sex hormone-binding globulin] Avvakumov GV, et al. **Biokhimiia** 1988 May;53(5):838–41 (Eng. Abstr.) **(Rus)**

[The significance of the structure of dietary oligosaccharides in their metabolism into liver lipids] Virovets OA, et al. **Vopr Pitan** 1989 Jan–Feb;(1):49–52 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Studies on Fe complexes produced by yeast. IV. Mechanism of Fe transport from an Fe(II)-oligosaccharide complex across the mucosal membrane of the rat intestine. Tabata S, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb;37(2):382–7

Utilization and excretion of a new sweetener, fructooligosaccharide (Neosugar), in rats. Tokunaga T, et al. **J Nutr** 1989 Apr;119(4):553–9

PHARMACOLOGY

Inhibition of proinsulin biosynthesis and conversion by a putative insulin mediator. Camara J, et al. **Biochem Int** 1989 Apr;18(4):865–9

The inhibition of goose lysozyme by oligosaccharides from the cell wall of Micrococcus lysodeikticus. Allen AK, et

al. **Biochim Biophys Acta** 1971 Jun 16;235(3):539–41

Sugar binding specificities of anti-H(O) lectins disclosed by use of fucose-containing human milk oligosaccharides as binding inhibitors. Konami Y, et al. **Chem Pharm Bull (Tokyo)** 1989 Mar;37(3):729–31

The effect of hyaluronate and its oligosaccharides on endothelial cell proliferation and monolayer integrity. West DC, et al. **Exp Cell Res** 1989 Jul;183(1):179–96

Functional effects of asparagine-linked oligosaccharide on natural and variant human tissue-type plasminogen activator. Hansen L, et al. **J Biol Chem** 1988 Oct 25; 263(30):15713–9

Antithrombin III-dependent anti-prothrombinase activity of heparin and heparin fragments. Schoen P, et al. **J Biol Chem** 1989 Jun 15;264(17):10002–7

High molecular weight polymers block cortical granule exocytosis in sea urchin eggs at the level of granule matrix disassembly. Chandler DE, et al. **J Cell Biol** 1989 Sep; 109(3):1269–78

Protective effect of N-acetyl chitohexaose on Listeria monocytogenes infection in mice. Tokoro A, et al. **Microbiol Immunol** 1989;33(4):357–67

The oligosaccharide chains of cobra venom factor are required for complement activation. Grier AH, et al. **Mol Immunol** 1989 Jun;26(6):563–74

PHYSIOLOGY

Maturation of asparagine-linked oligosaccharides in Dictyostelium discoideum analyzed with modification-specific probes. Judelson HS, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):151–7

Asparagine-linked oligosaccharides in malignant tumour growth. Dennis JW, et al. **Biochem Soc Trans** 1989 Feb; 17(1):29–31

Senescence-induced alteration in cell surface carbohydrates correlated using proton NMR spectroscopy and a lectin-based affinity-binding assay. Busse SC, et al. **Biochim Biophys Acta** 1989 Sep 4;984(2):183–7

Effect of a phospho-oligosaccharidic putative insulin messenger on insulin release in rats. Malaisse WJ, et al. **Diabetologia** 1989 May;32(5):295–9

Phagocytosis in Dictyostelium discoideum is inhibited by antibodies directed primarily against common carbohydrate epitopes of a major cell-surface plasma membrane glycoprotein. Chia CP, et al. **Exp Cell Res** 1989 Mar; 181(1):11–26

Specific interaction between Lex and Lex determinants. A possible basis for cell recognition in preimplantation embryos and in embryonal carcinoma cells. Eggens I, et al. **J Biol Chem** 1989 Jun 5;264(16):9476–84

Site specificity of the chorionic gonadotropin N-linked oligosaccharides in signal transduction. Matzuk MM, et al. **J Biol Chem** 1989 Feb 15;264(5):2409–14

Carbohydrates on human Fc gamma receptors. Interdependence of the classical IgG and nonclassical lectin-binding sites on human Fc gamma RIII expressed on neutrophils. Kimberly RP, et al. **J Immunol** 1989 Jun 1;142(11):3923–30

IgE receptor on human lymphocytes. IV. Further analysis of its structure and of the role of N-linked carbohydrates. Letellier M, et al. **J Immunol** 1988 Oct 1;141(7):2374–81

Effects of inhibitors of glycoprotein processing on oligodendroglial differentiation in primary cultures of embryonic rat brain cells. Bhat NR. **J Neurosci Res** 1988; 20(2):158–64

N-linked oligosaccharides are not required for neuron-neuron interactions mediated by neural cell adhesion molecule. Cole GJ, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):170–5

THERAPEUTIC USE

Antithrombotic effects of heparin oligosaccharides. Mattsson C, et al. **Ann N Y Acad Sci** 1989;556:323–32

The relative antithrombotic effectiveness of heparin, a low molecular weight heparin, and a pentasaccharide fragment in an animal model. Thomas DP, et al. **Thromb Haemost** 1989 Apr 25;61(2):204–7

URINE

Structural and immunochemical analysis of three alpha-limit dextrin oligosaccharides. Kumlien J, et al. **Arch Biochem Biophys** 1989 Mar;269(2):678–89

Isolation and structural characterization of twenty-one sialyloligosaccharides from galactosialidosis urine. An intact N,N^1-diacetylchitobiose unit at the reducing end of a diantennary structure. van Pelt J, et al. **Biol Chem Hoppe Seyler** 1989 Mar;370(3):191–203

Urinary excretion of a glucose-containing tetrasaccharide. A parameter for increased degradation of glycogen. Kumlien J, et al. **Clin Chim Acta** 1988 Aug 15;176(1):39–48

Severity of GM1 gangliosidosis and urinary oligosaccharide excretion. Takahashi Y, et al. **Clin Chim Acta** 1989 Feb 15;179(2):153–62

Diagnosis of subtypes of GM1 gangliosidosis in vitro and in vivo—using urinary oligosaccharides as substrates. Takahashi Y, et al. **Clin Chim Acta** 1989 Feb 22; 179(3):219–27

Determination of a glucose-containing tetrasaccharide in urine of patients with acute pancreatitis. Kumlien J, et al. **Int J Pancreatol** 1989 Mar;4(2):139–47

The structures of oligosaccharides excreted by sheep with swainsonine toxicosis. Warren CD, et al. **J Biol Chem** 1988 Oct 15;263(29):15041–9

Beta-mannosidosis in two brothers with hearing loss. Dorland L, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:255–8

[Screening for oligosaccharides in the urine of infants and toddlers] Zeman L, et al. **Cesk Pediatr** 1988 Oct; 43(10):590–3 (Eng. Abstr.) **(Cze)**

OLIGOSPERMIA

Fertilization of human oocytes in vitro by spermatozoa from oligozoospermic and normospermic men. Matson PL, et al. **Int J Androl** 1989 Apr;12(2):117–23

Primary mucociliary transport failure. Umeki S. **Respiration** 1988;54(4):220–5 (35 ref.)

[Clinical application of intrauterine insemination] Wang XX. **Chung Hua Fu Chan Ko Tsa Chih** 1989 Mar;24(2):87–8, 124 (Eng. Abstr.) **(Chi)**

BLOOD

Increased levels of serum follicle-stimulating hormone and luteinizing hormone associated with intrinsic testicular hyperthermia in oligospermic infertile men. Mieusset R, et al. **J Clin Endocrinol Metab** 1989 Feb;68(2):419–25

[Azoospermia with normal plasma FSH and unlowered seminal carnitine. Utilization for diagnosis and treatment] Soufir JC, et al. **Reprod Nutr Dev** 1988;28(5):1363–74 (Eng. Abstr.) **(Fre)**

CHEMICALLY INDUCED

Effects of exposure to ethylene glycol ethers on shipyard painters: II. Male reproduction [published erratum appears in Am J Ind Med 1989;15(2):239] Welch LS, et al. **Am J Ind Med** 1988;14(5):509–26

Sustained azoospermia in squirrel monkey, Saimiri sciureus, resulting from a single intratesticular glycerol injection. Wiebe JP, et al. **Contraception** 1989 Apr;39(4):447–57

Semen cryopreservation for patients surviving malignant disease: implications of proposed legislation [letter] Selby P, et al. **Lancet** 1988 Nov 19;2(8621):1197

COMPLICATIONS

Immotile-cilia syndrome with azoospermia: a case report and review of the literature. Bashi S, et al. **Br J Dis Chest** 1988 Apr;82(2):194–6 (10 ref.)

Investigation of the cause of low sperm motility in asthenozoospermic patients by multiple quantitative tests. Yeung CH, et al. **Int J Androl** 1988 Aug;11(4):289–99

Young's syndrome accompanied by medullary sponge kidney. Umeki S, et al. **Respiration** 1989;55(1):60–4

DIAGNOSIS

The clinical value of conventional semen analysis. Dunphy BC, et al. **Fertil Steril** 1989 Feb;51(2):324–9

[Comment on the response by C. Schirren to the inquiry from general practice: Definition of oligozoospermia] Krause W. **Hautarzt** 1989 Jul;40(7):462–3 **(Ger)**

[The OAT syndrome in fathers in retrospect to reproduction and birth of a child] Studer H. **Helv Chir Acta** 1988 Jul; 55(3):277–9 (Eng. Abstr.) **(Ger)**

[Transient obstructive aspermia and transient obstructive oligospermia] Goriunov VG, et al. **Urol Nefrol (Mosk)** 1989 Jan-Feb;(1):63–6 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Pentoxifyllin treatment of oligoasthenospermic men. Mičič S, et al. **Acta Eur Fertil** 1988 May-Jun;19(3):135–7

Captopril—a new approach for treatment of male subfertility? Parsch EM, et al. **Andrologia** 1988 Nov-Dec;20(6):537–8

Oral treatment of oligozoospermia with testosterone-undecanoate: results of a double-blind-placebo-controlled trial. Pusch HH. **Andrologia** 1989 Jan-Feb;21(1):76–82

Tamoxifen and testolactone in therapy of oligozoospermia: results of a randomized study. Maier U, et al. **Eur Urol** 1988;14(6):447–9

Effect of diclofenac sodium (Voltaren) on spermatogenesis of infertile oligospermic patients. Moskovitz B, et al. **Eur Urol** 1988;14(5):395–7

Hormonal changes in tamoxifen treated men with idiopathic oligozoospermia. Hampl R, et al. **Exp Clin Endocrinol** 1988 Dec;92(2):211–6

Clomiphene citrate treatment in oligozoospermia: comparison between two regimens of low-dose treatment. Homonnai ZT, et al. **Fertil Steril** 1988 Nov;50(5):801–4

Induction of spermatogenesis and fertility in hypogonadotropic azoospermic men by intravenous pulsatile gonadotropin-releasing hormone (GnRH). Blumenfeld Z, et al. **Gynecol Endocrinol** 1988 Jun; 2(2):151–64

Treatment of men with idiopathic oligozoospermic infertility using the aromatase inhibitor, testolactone. Results of a double-blinded, randomized, placebo-controlled trial with crossover. Clark RV, et al. **J Androl** 1989 May-Jun; 10(3):240–7

Improvement of spermatogenesis after treatment with the antiestrogen tamoxifen in a man with the incomplete androgen insensitivity syndrome. Gooren L. **J Clin Endocrinol Metab** 1989 Jun;68(6):1207–10

[Clinical efficacy of mecobalamin in the treatment of oligozoospermia—results of double-blind comparative clinical study] Kumamoto Y, et al. **Hinyokika Kiyo** 1988 Jun;34(6):1109–32 (Eng. Abstr.) **(Jpn)**

[Raveron in the treatment of male infertility] Stekhun FI. **Urol Nefrol (Mosk)** 1988 May-Jun;(3):36–8 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

The effect of spermine, spermidine and kallikrein on the triple adenosine triphosphatase enzyme activity of spermatozoa in males with oligoasthenozoospermia. Karacagil M, et al. **Br J Urol** 1989 Jan;63(1):84–6

Correlation between sperm creatine phosphokinase activity and sperm concentrations in normospermic and oligospermic men. Huszar G, et al. **Gamete Res** 1988 Jan; 19(1):67–75

EPIDEMIOLOGY

Azoospermic infertile men. Mbizvo MT, et al. **Br J Urol** 1989 Apr;63(4):423–7

ETIOLOGY

Oligo/azoospermia in Nigeria. Kuku SF, et al. **Arch Androl** 1989;22(3):233–8 (56 ref.)

Hormonal and biochemical evaluation of azoospermic men in Cameroon. Fomulu JN, et al. **East Afr Med J** 1987 Nov; 64(11):751–8

Subfertile men with severe oligospermia: outcome of management. Onuora VC, et al. **East Afr Med J** 1988 Jul; 65(7):490–4

Results of microsurgical vasoepididymostomy: role of epididymis in sperm maturation. Silber SJ. **Hum Reprod** 1989 Apr;4(3):298–303

The influence of various aetiopathogenetic factors on testicular function. Lábady F, et al. **Int Urol Nephrol** 1989; 21(1):63–72

Evaluation of the azoospermic patient. Jarow JP, et al. **J Urol** 1989 Jul;142(1):62–5

Infertility in a man with 21-hydroxylase deficient congenital adrenal hyperplasia. Mirsky HA, et al. **J Urol** 1989 Jul; 142(1):111–3

[Andrologic findings in adolescents with retractile testes] Raboch J, et al. **Cesk Pediatr** 1988 Aug;43(8):489–91 **(Cze)**

[Obstructive conditions of the seminal vesicles] Di Martino P, et al. **Acta Urol Belg** 1989;57(1):63–75 (Eng. Abstr.) **(Fre)**

[Etiologic evaluation of oligo-astheno-teratospermia] Rollet J. **Rev Fr Gynecol Obstet** 1989 Feb;84(2):91–5 (Eng. Abstr.) **(Fre)**

[The role of disorders of mineralocorticoid function of the adrenal glands in the development of infertility in patients with left-side varicocele] Mazo EB, et al. **Urol Nefrol (Mosk)** 1989 Mar-Apr;(2):38–45 (Eng. Abstr.) **(Rus)**

GENETICS

Meiotic analysis of two human reciprocal X-autosome translocations. Quack B, et al. **Cytogenet Cell Genet** 1988; 48(1):43–7

Azoospermic male with a balanced Y-autosome translocation. Matsuda T, et al. **Urol Int** 1989;44(1):43–6 (22 ref.)

[Chromosome anomalies and male infertility. A study of 1,444 subjects] Bourrouillou G, et al. **Bull Assoc Anat (Nancy)** 1987 Dec;71(215):29–31 (9 ref.) (Eng. Abstr.) **(Fre)**

[The karyotype of sterile and infertile men] Croquette MF, et al. **Bull Assoc Anat (Nancy)** 1987 Dec;71(215):35–9 (7 ref.) **(Fre)**

[Incidence of sister chromatid exchanges (SCEs) in idiopathic male sterility. Preliminary study] Rafat A, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(4):455–8 (Eng. Abstr.) **(Fre)**

[Male infertility with chromosomal abnormalities. III. 46, XYq-] Hazama M, et al. **Hinyokika Kiyo** 1988 Jun; 34(6):1063–8 (18 ref.) (Eng. Abstr.) **(Jpn)**

[Chromosome anomalies in human azoospermia] Sozanskiĭ OA, et al. **Genetika** 1988 Jul;24(7):1299–303 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Antispermatozoal antibodies in three men with infertility due to congenital aplasia of the vasa deferentia. Kay DJ, et al. **Am J Reprod Immunol Microbiol** 1988 Jun;17(2):48–52

Immunoglobulin E in serum and semen of infertile men. Ekladios EM, et al. **Andrologia** 1988 Nov-Dec;20(6):485–91

Gonadotropin-releasing hormone (GnRH) antibodies formation in hypogonadotropic azoospermic men treated with pulsatile GnRH—diagnosis and possible alternative treatment. Blumenfeld Z, et al. **Fertil Steril** 1988 Oct; 50(4):622–9

METABOLISM

Biochemical exploration of azoospermia: interest of the seminal transferrin assay. Dadoun C, et al. **Hum Reprod** 1989 Apr;4(3):265–9

Seminal plasma transferrin concentration in normozoospermic fertile men and oligozoospermic men

associated with varicocele. Yoshida KI, et al. **Int J Fertil** 1988 Nov-Dec;33(6):432-6

Analysis of the relationship between defective sperm function and the generation of reactive oxygen species in cases of oligozoospermia. Aitken RJ, et al. **J Androl** 1989 May-Jun; 10(3):214-20

Seminal plasma transferrin concentration in idiopathic oligozoospermia. Yoshida K, et al. **Urology** 1989 May; 33(5):395-8

PATHOLOGY

Computer assisted measurement in normal and pathological human semen, fresh and post swim-up technique. Calamera JC, et al. **Andrologia** 1989 Jul-Aug;21(4):340-5

Seminal fructose in normal and infertile men. Rajalakshmi M, et al. **Contraception** 1989 Mar;39(3):299-306

Restoration of advanced spermatogenic cells in the experimentally regressed rat testis: quantitative relationship to testosterone concentration within the testis. Awoniyi CA, et al. **Endocrinology** 1989 Mar;124(3):1217-23

[Quantitative detection of spermatogenesis cells and qualitative assessment of meiosis stages in the ejaculate of normo- and oligozoospermia] Weise W, et al. **Zentralbl Gynakol** 1988;110(14):877-83 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Hypofertility in males due to a secretion anomaly of the seminal vesicles and its treatment. Lobel B, et al. **Acta Urol Belg** 1989;57(1):59-62

Quantitative restoration of advanced spermatogenic cells in adult male rats made azoospermic by active immunization against luteinizing hormone or gonadotropin-releasing hormone. Awoniyi CA, et al. **Endocrinology** 1989 Sep; 125(3):1303-9

Intrauterine insemination is not useful in oligoasthenospermia. Ho PC, et al. **Fertil Steril** 1989 Apr;51(4):682-4

[Epididymal oligospermia] Schoysman R. **Reprod Nutr Dev** 1988;28(5):1339-45 (Eng. Abstr.) **(Fre)**

[Evaluation of the probability of the occurrence of pregnancy during oligo-astheno-teratospermia] Barrière P, et al. **Rev Fr Gynecol Obstet** 1989 Feb;84(2):101-5 (19 ref.) (Eng. Abstr.) **(Fre)**

[The value of fertilization in vitro and derived technics in oligo-astheno-teratospermia] Vialard J, et al. **Rev Fr Gynecol Obstet** 1989 Feb;84(2):129-33 (8 ref.) (Eng. Abstr.) **(Fre)**

[Endocrinological profile of human spermatogenic impairment--evaluation of function of Leydig and Sertoli cells in vivo or in vitro studies] Okuyama A, et al. **Hinyokika Kiyo** 1988 Nov;34(11):1943-8 (Eng. Abstr.) **(Jpn)**

[Evaluation of seminal carnitine as a marker of epididymal function] Salinas Sánchez AS, et al. **Actas Urol Esp** 1989 May-Jun;13(3):181-4 (Eng. Abstr.) **(Spa)**

SURGERY

Prognostic factors in the surgical treatment of azoospermia. Kapur MM, et al. **Br J Urol** 1989 Jul;64(1):69-71

Transvasovasostomy--an alternative operation for obstructive azoospermia. Hamidinia A. **J Urol** 1988 Dec; 140(6):1545-8

Epididymal microsurgery: current techniques and new horizons. Southwick GJ, et al. **Microsurgery** 1988; 9(4):266-77

Applications of microsurgery in urology. Belker AM, et al. **Surg Clin North Am** 1988 Oct;68(5):1157-78 (100 ref.)

[Obstructive azoospermia treated by epididymovasostomy following vasovasostomy: a case report] Matsuda T, et al. **Hinyokika Kiyo** 1988 May;34(5):889-91 (Eng. Abstr.) **(Jpn)**

THERAPY

[Intra-tubal embryo transfer. A new therapy in andrologic sterility] Diedrich K, et al. **Geburtshilfe Frauenheilkd** 1989 Jan;49(1):28-32 (Eng. Abstr.) **(Ger)**

[Microinjection of spermatozoa into the oocyte. An experimental model for assisted conjugation in oligo-asthenozoospermia as a cause of sterility] Mettler L, et al. **Geburtshilfe Frauenheilkd** 1988 Sep;48(9):625-9 (Eng. Abstr.) **(Ger)**

[Treatment of oligospermic patients with varicocele] Shinoda M, et al. **Hinyokika Kiyo** 1988 Nov;34(11):1989-94 (Eng. Abstr.) **(Jpn)**

OLIGURIA see under **ANURIA**

OLIVARY NUCLEUS

Colchicine administered into the area of the nucleus basalis decreases cortical nicotinic cholinergic receptors labelled by [3H]-acetylcholine. Tilson HA, et al. **Neuropharmacology** 1989 Aug;28(8):855-61

ABNORMALITIES

Congenital apnea with medullary and olivary hypoplasia: a pathologic study with computer reconstructions. Kinney HC, et al. **Clin Neuropathol** 1989 Jul-Aug;8(4):163-73

ANALYSIS

Neural connections identified with PHA-L anterograde and HRP retrograde tract-tracing techniques. Thompson AM, et al. **J Neurosci Methods** 1988 Aug;25(1):13-7

Substance P-like immunoreactive retinal terminals found in two retinorecipient areas of the Japanese monkey. Nakagawa S, et al. **Neurosci Lett** 1988 Oct 31;93(1):32-7

Demonstration of GABA immunoreactive cells in the inferior olive of baboons (Papio papio and Papio anubis). Walberg F, et al. **Neurosci Lett** 1989 Jun 19;101(2):149-55

ANATOMY & HISTOLOGY

The rat inferior olive as seen with immunostaining for glutamate decarboxylase. Nelson BJ, et al. **Anat Embryol (Berl)** 1988;179(2):109-27

Topographic organization of the corticonuclear fibers from the tuber vermis and paramedian lobule in the albino rat. Umetani T. **Brain Behav Evol** 1989;33(6):334-41

Bilateral projections from the medial superior olivary nucleus to the inferior colliculus in the mole (Mogera robusta). Kudo M, et al. **Brain Res** 1988 Nov 1;463(2):352-6

Cochlear nucleus inputs to olivocochlear neurones revealed by combined anterograde and retrograde labelling in the guinea pig. Robertson D, et al. **Brain Res** 1988 Oct 11; 462(1):47-55

Neuronal organization of the stapedius reflex pathways in the rat: a retrograde HRP and viral transneuronal tracing study. Rouiller EM, et al. **Brain Res** 1989 Jan 2;476(1):21-8

Distribution of cochlear efferents and olivo-collicular neurons in the brainstem of rat and guinea pig. A double labeling study with fluorescent tracers. Aschoff A, et al. **Exp Brain Res** 1988;71(2):241-51

Origin of cochlea efferents in some gerbil species. A comparative anatomical study with fluorescent tracers. Aschoff A, et al. **Exp Brain Res** 1988;71(2):252-61

Brainstem branches from olivocochlear axons in cats and rodents. Brown MC, et al. **J Comp Neurol** 1988 Dec 22; 278(4):591-603

Connections of the superior olivary complex in the rufous horseshoe bat Rhinolophus rouxi. Casseday JH, et al. **J Comp Neurol** 1988 Dec 15;278(3):313-29

Superior olivary and lateral lemniscal neurons projecting to the cochlea in the guinea pig. Tokunaga A. **Neurosci Res** 1988 Oct;6(1):20-30

Regional and topographic organization of the olivocerebellar projection in homozygous staggerer (sg/sg) mutant mice: an anterograde and retrograde tracing study. Blatt GJ, et al. **Neuroscience** 1989;30(3):703-15

CYTOLOGY

The cerebral and cerebellar connections of pretecto-thalamic and pretecto-olivary neurons in the anterior pretectal nucleus of the cat. Kitao Y, et al. **Brain Res** 1989 Apr 10;484(1-2):304-13

Evidence for the delayed expression of a brainstem abnormality in albino ferrets. Baker GE, et al. **Exp Brain Res** 1989;74(3):658-62

Olivary branching projections to the flocculus, nodulus and uvula in the rabbit. II. Retrograde double labeling study with fluorescent dyes. Takeda T, et al. **Exp Brain Res** 1989; 76(2):323-32

Ultrastructural study of the GABAergic, cerebellar, and mesodiencephalic innervation of the cat medial accessory olive: anterograde tracing combined with immunocytochemistry. de Zeeuw CI, et al. **J Comp Neurol** 1989 Jun 1;284(1):12-35

Axonal branching of the olivocerebellar projection in the rat: a double-labeling study. Hrycyshyn AW, et al. **J Comp Neurol** 1989 Jun 1;284(1):48-59

Olivocerebellar and cerebelloolivary connections of the oculomotor region of the fastigial nucleus in the macaque monkey. Ikeda Y, et al. **J Comp Neurol** 1989 Jun 15; 284(3):463-88

Zonal organization of climbing fiber projections to the uvula in the cat. Kanda K, et al. **J Comp Neurol** 1989 Jan 1; 279(1):138-48

Glycine-immunoreactive projection of the cat lateral superior olive: possible role in midbrain ear dominance. Saint Marie RL, et al. **J Comp Neurol** 1989 Jan 15; 279(3):382-96

Structural and functional properties distinguish two types of multipolar cells in the ventral cochlear nucleus. Smith PH, et al. **J Comp Neurol** 1989 Apr 22;282(4):595-616

Collateral branches of cerebellopontine axons reach the thalamus, superior colliculus, or inferior olive: a double-fluorescence and combined fluorescence-horseradish peroxidase study in the rat. Lee HS, et al. **Neuroscience** 1989;28(3):725-34

DRUG EFFECTS

The effectiveness of different isomers of octanol as blockers of harmaline-induced tremor. Sinton CM, et al. **Pflugers Arch** 1989 May;414(1):31-6

ENZYMOLOGY

Comparative study of glutamate decarboxylase immunoreactive boutons in the mammalian inferior olive. Nelson BJ, et al. **J Comp Neurol** 1989 Aug 22;286(4):514-39

GROWTH & DEVELOPMENT

Evidence for an alteration of the tonotopic map in the gerbil cochlea during development. Sanes DH, et al. **J Comp Neurol** 1989 Jan 15;279(3):436-44

Development of ionic conductances in neurons of the inferior olive in the rat: an in vitro study. Pettigrew AG, et al. **Proc R Soc Lond [Biol]** 1988 Jul 22;234(1275):199-218

[The postnatal development of the pont- and olivocerebellar neurons in the rat] Ikarashi T. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Dec;91(12):2096-109 (Eng. Abstr.) **(Jpn)**

METABOLISM

Synaptology of the cerebello-olivary pathway. Double labelling with anterograde axonal tracing and GABA immunocytochemistry in the rat. Angaut P, et al. **Brain Res** 1989 Feb 13;479(2):361-5

Corticotropin-releasing factor in olivocerebellar climbing-fiber system of monkey (Saimiri sciureus and Macaca fascicularis): parasagittal and regional organization visualized by immunohistochemistry. Cha CI, et al. **J Neurosci** 1988 Nov;8(11):4121-37

PATHOLOGY

Hypertrophy of the inferior olivary nucleus. A clinico-pathological observation. De Bleecker J, et al. **Acta Neurol Belg** 1988 Aug-Oct;88(4):221-8

Progressive supranuclear palsy with hypertrophy of the olives. An immunocytochemical study of the cytoskeleton of argyrophilic neurons. Giaccone G, et al. **Acta Neuropathol (Berl)** 1988;77(1):14-20

Solitary midbrain toxoplasmosis and olivary hypertrophy in a patient with acquired immunodeficiency syndrome. Kure K, et al. **Clin Neuropathol** 1989 Jan-Feb;8(1):35-40

MRI findings of inferior olives in palatal myoclonus. Yokota T, et al. **J Neurol** 1989 Feb;236(2):115-6

The effects on auditory function of damage to the pontine olivo-cochlear bundle in man. Cohen M, et al. **Scand Audiol** 1988;17(3):185-9

[Unilateral palatal myoclonus with peculiar ocular movements--neurotological studies and MRI] Yokota T, et al. **Rinsho Shinkeigaku** 1989 Feb;29(2):159-63 (Eng. Abstr.) **(Jpn)**

[Palatal myoclonus and hypertrophy of the olivary nucleus. Case report] Olejniczak P. **Neuropatol Pol** 1988; 26(3):377-83 (Eng. Abstr.) **(Pol)**

PHYSIOLOGY

Sound localization, use of binaural cues and the superior olivary complex in pigs. Heffner RS, et al. **Brain Behav Evol** 1989;33(4):248-58

Electrophysiological analysis of the trigemino-olivo-cerebellar (crura I and II, lobulus simplex) projection in the rat. Akaike T. **Brain Res** 1989 Mar 20; 482(2):402-6

Behavioral evidence for increased acetylcholine receptor sensitivity after nucleus basalis magnocellularis lesions in the rat. Mastropaolo J, et al. **Eur J Pharmacol** 1988 Aug 24;153(2-3):301-4

Evidence for a GABA-mediated cerebellar inhibition of the inferior olive in the cat. Andersson G, et al. **Exp Brain Res** 1988;72(3):450-6

Olivary branching projections to the flocculus, nodulus and uvula in the rabbit. I. An electrophysiological study. Takeda T, et al. **Exp Brain Res** 1989;74(1):47-62

Cortical muscarinic receptor function following quinolinic acid-induced lesion of the nucleus basalis magnocellularis. Scarth BJ, et al. **Exp Neurol** 1989 Feb;103(2):158-64

Morphology and response properties of single olivocochlear fibers in the guinea pig. Brown MC. **Hear Res** 1989 Jun 15;40(1-2):93-109

Synaptic potentials of chinchilla lateral superior olivary neurons. Finlayson PG, et al. **Hear Res** 1989 Apr; 38(3):221-8

Rapid assessment of sound-evoked olivocochlear feedback: suppression of compound action potentials by contralateral sound. Liberman MC. **Hear Res** 1989 Mar;38(1-2):47-56

Contralateral cochlear destruction mediates protection from monoaural loud sound exposures through the crossed olivocochlear bundle. Rajan R, et al. **Hear Res** 1989 Jun 1;39(3):263-77

Spatial organization of visual messages of the rabbit's cerebellar flocculus. I. Typology of inferior olive neurons of the dorsal cap of Kooy. Leonard CS, et al. **J Neurophysiol** 1988 Dec;60(6):2073-90

Effect of electrical stimulation of the crossed olivocochlear bundle on temporary threshold shifts in auditory sensitivity. I. Dependence on electrical stimulation parameters. Rajan R. **J Neurophysiol** 1988 Aug;60(2):549-68

Effect of electrical stimulation of the crossed olivocochlear bundle on temporary threshold shifts in auditory sensitivity. II. Dependence on the level of temporary threshold shifts. Rajan R. **J Neurophysiol** 1988 Aug;60(2):569-79

Yaw direction neurons in the cat inferior olive. Robinson FR, et al. **J Neurophysiol** 1988 Nov;60(5):1739-52

Analogue signal representation in the medial superior olive of the cat. Bojanowski T, et al. **J Otolaryngol** 1989 Feb; 18(1):3-9

Tolerance to the tremorogenic effects of harmaline: evidence for altered olivo-cerebellar function. Lutes J, et al.

Neuropharmacology 1988 Aug;27(8):849–55
Lesions of the inferior olive do not affect long- or short-term habituation of the acoustic startle response in rats. de Sperati C, et al. **Neurosci Lett** 1989 May 22; 100(1–3):164–8

PHYSIOPATHOLOGY

Tonic activity of the crossed olivocochlear bundle in guinea pigs with idiopathic losses in auditory sensitivity. Rajan R. **Hear Res** 1989 Jun 1;39(3):299–308

ULTRASTRUCTURE

Ultrastructural characterization of gerbil olivocochlear neurons based on differential uptake of 3H-D-aspartic acid and a wheatgerm agglutinin-horseradish peroxidase conjugate from the cochlea. Helfert RH, et al. **J Neurosci** 1988 Sep;8(9):3111–23
Sagittal organization of the olivocerebellonuclear pathway in the rat. I. Connections with the nucleus fastigii and the nucleus vestibularis lateralis. Buisseret-Delmas C. **Neurosci Res** 1988 Aug;5(6):475–93
Sagittal organization of the olivocerebellonuclear pathway in the rat. II. Connections with the nucleus interpositus. Buisseret-Delmas C. **Neurosci Res** 1988 Aug;5(6):494–512
Ultrastructural heterogeneity of spinal terminations in the cat inferior olive. Molinari HH. **Neuroscience** 1988 Nov; 27(2):425–35
[Light microscopic and ultrastructural study of the lower olivary complex in the pigeon (Columba livia)] Bozhilova-Pastirova, et al. **Eksp Med Morfol** 1989; 28(2):9–15 (Eng. Abstr.) **(Bul)**

OLIVOMYCINS

DIAGNOSTIC USE

[Use of olivomycin for the diagnosis of Ureaplasma infection of the sperm] Karpenko AE. **Vrach Delo** 1988 Jul; (7):109–11 (Eng. Abstr.) **(Rus)**

METABOLISM

Modelling basic features of specificity in DNA-aureolic acid-derived antibiotic interactions. Chen KX, et al. **FEBS Lett** 1989 Mar 13;245(1–2):145–9

OLIVOPONTOCEREBELLAR ATROPHY see under **SPINOCEREBELLAR DEGENERATION**

OMASUM

METABOLISM

Transport of Na and Cl across the epithelium of ruminant forestomachs: rumen and omasum. A review. Martens H, et al. **Comp Biochem Physiol [A]** 1988;90(4):569–75 (33 ref.)
Flux of inorganic phosphate and calcium across the isolated mucosa of the sheep omasum. Höller H, et al. **Zentralbl Veterinarmed [A]** 1988 Nov;35(9):709–16

PATHOLOGY

Mycotic omasitis and rumenitis as sequelae to sepsis in dairy cattle: six cases (1979–1986). Sweeney RW, et al. **J Am Vet Med Assoc** 1989 Feb 15;194(4):552–3

PHYSIOLOGY

[Retention of large-size particles in the reticulum of the cow] Dardillat C, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:137–8 (Eng. Abstr.) **(Fre)**

PHYSIOPATHOLOGY

Failure of omasal transport attributable to perireticular abscess formation in cattle: 29 cases (1980–1986). Fubini SL, et al. **J Am Vet Med Assoc** 1989 Mar 15;194(6):811–4

OMEGA PROTEINS see **DNA UNTWISTING PROTEINS**

OMENTUM

Primary omental torsion [letter] Ghent WR. **Can J Surg** 1989 May;32(3):149
Post-irradiation angiosarcoma of the greater omentum. Westenberg AH, et al. **Eur J Surg Oncol** 1989 Apr; 15(2):175–8
Actinomycosis of the greater omentum. Wan YL, et al. **Gastrointest Radiol** 1989 Winter;14(1):38–40
Jackhammer usage and the omentum [letter; comment] Wasserman DE. **J Occup Med** 1989 Jun;31(6):563.
Comment on: J Occup Med 1988 Nov;30(11):892–4
Massive acquired omental cyst as a complication of ventriculo-peritoneal shunting. Gamal R, et al. **J Pediatr Surg** 1988 Nov;23(11):1041–2
A case of intestinal obstruction due to a hernia traversing the lesser sac. Yasuda S, et al. **Jpn J Surg** 1989 Jan; 19(1):70–3
Experimental tissue molding for soft-tissue reconstruction: a preliminary report. Fisher J, et al. **Plast Reconstr Surg** 1988 Nov;82(5):857–64
Primary appendicitis epiploicae mimicking acute appendicitis. McMahon AJ, et al. **Postgrad Med J** 1988 Nov; 64(757):903–5
Intermittent omental torsion—an unusual cause of recurrent abdominal pain? Parr NJ, et al. **Postgrad Med J** 1989 Feb; 65(760):114–5
Acute bleeding from leiomyoblastoma of the greater omentum. A case report. Rye BA, et al. **Tumori** 1989 Jun 30;75(3):296–8 (10 ref.)
Omental cyst masquerading as ascites. Noah PK, et al. **West Indian Med J** 1988 Jun;37(2):114–8
[Peritoneo-parietal fistula as a result of early amniocentesis. Apropos of a case. Review of the literature] Gounot E, et al. **Chir Pediatr** 1989;30(1):52–3 (11 ref.) (Eng. Abstr.) **(Fre)**
[Omental cyst in a child] Mogilner JC, et al. **Harefuah** 1988 Dec 15;115(12):372–3 (Eng. Abstr.) **(Heb)**
[Fibromyoma of the greater omentum. Our experience] Amatucci G, et al. **Minerva Chir** 1988 Apr 15;43(7):629–31 (Eng. Abstr.) **(Ita)**
[Primary torsion of the greater omentum. Presentation of a case] Basilico V, et al. **Minerva Chir** 1988 Oct 15; 43(19):1635–7 (Eng. Abstr.) **(Ita)**
[Clinical features of a case of cysts of the hepatogastric ligament] De Martino A, et al. **Minerva Chir** 1988 Aug 31;43(15–16):1287–9 (Eng. Abstr.) **(Ita)**
[Hemoperitoneum caused by cavernous angioma of the omentum] Ritossa C, et al. **Minerva Chir** 1989 Mar 15; 44(5):907–8 (Eng. Abstr.) **(Ita)**
[A case of intrathoracic omental herniation through the esophageal hiatus] Tamura A, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Sep; 26(9):1010–4 (Eng. Abstr.) **(Jpn)**
[A case of malignant fibrous histiocytoma with primary site in greater omentum] Shimazaki M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Feb;86(2):275–9 (12 ref.) **(Jpn)**
[Actinomycosis of the greater omentum] Alimov TU, et al. **Khirurgiia (Mosk)** 1988 Nov;(11):118–9 **(Rus)**
[Burso-omentoscopy] Kozlov VA, et al. **Khirurgiia (Mosk)** 1989 Feb;(2):109–10 **(Rus)**
[Combination of suppurative and uncomplicated cysts of the omentum majus, phlegmonous appendicitis and ascariasis] Bukhaliuk NA, et al. **Klin Khir** 1988;(6):69 **(Rus)**
[Torsion of the greater omentum in a child] Degovtsov EN. **Klin Khir** 1989;(6):75–6 **(Rus)**
[Secondary omentitis in children following appendectomy] Iudin IaB, et al. **Klin Khir** 1989;(6):40–2 (Eng. Abstr.) **(Rus)**
[A case of an accessory spleen in the greater omentum mimicking a tumor of the abdominal cavity in a child] Zhurilo IP, et al. **Klin Khir** 1989;(6):66 **(Rus)**
[Laparoscopic diagnosis of diseases of the epiploic appendages of the colon] Abdulzhavadov IM. **Vestn Khir** 1989 Jan;142(1):115–6 **(Rus)**

ANALYSIS

Purification of acidic fibroblast growth factor from bovine omentum. Ohtaki T, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):169–75

BLOOD SUPPLY

Myocardial revascularization with combined arterial grafts utilizing the internal mammary and the gastroepiploic arteries. Suma H, et al. **Ann Thorac Surg** 1989 May; 47(5):712–5
Angiography of right gastroepiploic artery for coronary artery bypass graft. Tanimoto Y, et al. **Cathet Cardiovasc Diagn** 1989 Jan;16(1):35–8
Omental lengthening. Report of 70 patients. Wu WL, et al. **Chin Med J [Engl]** 1988 Jun;101(6):423–6
Cobblestone monolayer cells from human omental adipose tissue are possibly mesothelial, not endothelial. Takahashi K, et al. **In Vitro Cell Dev Biol** 1989 Feb;25(2):109–11
Ruptured gastroepiploic artery aneurysm and vascular collapse in a patient with thoracic aneurysm. Rosengart TK, et al. **J Cardiovasc Surg (Torino)** 1989 May-Jun; 30(3):514–6
[Ruptured aneurysm of the greater omentum in fibromuscular dysplasia] Aschwanden M, et al. **Vasa** 1989;18(2):157–61 (Eng. Abstr.) **(Ger)**

INJURIES

Conservative treatment of abdominal stab wounds with omental protrusion. Duus BR, et al. **Injury** 1987 Mar; 18(2):87–8

METABOLISM

[Experimental studies and clinical application of the absorption function of the greater omentum] Zhao BC. **Chung Hua Wai Ko Tsa Chih** 1988 Dec;26(12):752–4, 783 (Eng. Abstr.) **(Chi)**

PATHOLOGY

Intraperitoneal granulomatous foreign body reaction after accidental perforation of the abdominal wall. Case report. Lanng C, et al. **Acta Chir Scand** 1988 Nov-Dec; 154(11–12):683–4
Immunological characteristics of milky spots in the omentum of rats. Beelen RH, et al. **Adv Exp Med Biol** 1988; 237:745–50
Primary omental torsion [letter] Appleby JP, et al. **Can J Surg** 1989 Jan;32(1):7
Sonographic features of turberculous omental cakes in peritoneal tuberculosis. Wu CC, et al. **JCU** 1988 Mar-Apr; 16(3):195–8
Leiomyoblastoma of the lesser omentum sac. A case report. Laky D, et al. **Morphol Embryol (Bucur)** 1989 Jan-Mar; 35(1):45–8
[Carcinoma peritoneal dissemination and milky spots of the greater omentum: preliminary report] Shimotsuma M, et al. **Nippon Geka Gakkai Zasshi** 1988 Dec;89(12):2032 **(Jpn)**
[Cytomorphological diagnosis of secondary omentitis in destructive appendicitis in children] Tsvetkova EI, et al. **Pediatriia** 1989;(1):80–5 **(Rus)**
[Pathology of the greater omentum and fatty appendages of the colon in emergency surgery] Svitich IuM, et al. **Vestn Khir** 1988 Sep;141(9):63–4 **(Rus)**

RADIOGRAPHY

Omental cakes in American Burkitt lymphoma. Computed tomography demonstration. Goodman P, et al. **Clin Imaging** 1989 Jun;13(2):117–8

SURGERY

The role of surgery in advanced carcinoma of the breast. Bennett RC, et al. **Ann Acad Med Singapore** 1988 Jan; 17(1):29–35
Abdominoperineal and anterior resection of the rectum with retrocolic omentoplasty and no drainage. Smith SR, et al. **Br J Surg** 1988 Oct;75(10):1012–5
Functional value of omental autotransplanted splenic tissue in rabbits. Mizrahi S, et al. **Isr J Med Sci** 1988 Dec; 24(12):706–9
Lung allografts with and without omentopexy in canines—bronchofiberscopic and histologic observation of bronchial anastomosis healing. Shirakusa T, et al. **Jpn J Surg** 1989 Mar;19(2):246–50
One stage repair for an oesophageal fistula after pneumonectomy using an omental pedicle flap. Asaoka M, et al. **Thorax** 1988 Nov;43(11):943–4
[Omental pedicle plombage in the treatment of chronic empyema and bronchial fistula] Ge BS. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Dec; 11(6):356–8, 386–7 (Eng. Abstr.) **(Chi)**
[Treatment by omentoplasty of vesicorectovaginal and rectovaginal fistulae] Kiricuta I. **J Urol (Paris)** 1988; 94(5–6):289–93 (Eng. Abstr.) **(Fre)**
[Obstruction of strangulated intestine as a complication of autotransplantation of the spleen after its injury] Kleba T, et al. **Wiad Lek** 1988 Aug 15;41(16):1112–5 (Eng. Abstr.) **(Pol)**
[Acute omentitis] Butsenko VN, et al. **Klin Khir** 1989;(1):34–6 (Eng. Abstr.) **(Rus)**
[Torsion of the epiploic appendages of the colon] Afendylov SA, et al. **Vestn Khir** 1989 Jan;142(1):113–4 **(Rus)**
[Tamponade of the presacral and perineal region with an omental flap in proctectomy] Potić D, et al. **Srp Arh Celok Lek** 1988 Apr;116(4):305–10 (Eng. Abstr.) **(Scc)**

TRANSPLANTATION

Intraventricular transplantation of omentum for treatment of hydrocephalus. An experimental study in dogs. González-Darder JM, et al. **Acta Neurochir Suppl (Wien)** 1988;43:159–61
Transpericardial bronchial closure with omentopexy for postpneumonectomy bronchopleural fistula. Saito H, et al. **Ann Thorac Surg** 1989 Feb;47(2):312–3
Omental transposition in the treatment of locally advanced and recurrent breast cancer. Williams RJ, et al. **Br J Surg** 1989 Jun;76(6):559–63
Omental pedicle grafting in the treatment of poststernotomy mediastinitis. Bédard JP, et al. **Can J Surg** 1989 Sep; 32(5):328–30
The greater omentum: its use in the surgical management of severely infected leg soft tissue and bone injuries. Report of two cases. Song D. **Cent Afr J Med** 1989 Jun;35(6):423–5
Omentum graft for intractable subdural empyema. Barnett GH, et al. **Cleve Clin J Med** 1989 May;56(3):311–5
The effect of viable omentum on early bile leakage and healing of liver lacerations. Trooskin SZ, et al. **J Trauma** 1989 Jan;29(1):47–50
Neurolized nerve padding in actinic lesions: omentum versus muscle use. An experimental study. Brunelli GA, et al. **Microsurgery** 1988;9(3):177–80
Free omental flap reconstruction of complicated head and neck wounds. Panje WR, et al. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):588–93
Use of the omentum in chest-wall reconstruction. Fix RJ, et al. **Surg Clin North Am** 1989 Oct;69(5):1029–46
Reconstruction of a functional hemidiaphragm with use of omentum and latissimus dorsi flaps. Edington HD, et al. **Surgery** 1989 Mar;105(3):442–5
Experimental tracheal allotransplantration using omentopexy. Moriyama S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2596–600
[Repair of burnt metacarpal and phal inges with free greater omentum grafting (a case report)] Sun YH, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Mar;1(1):43–4 (Eng. Abstr.) **(Chi)**
[Observations on the effect of omental transplantation to the traumatized spinal cord] Ma JK.

Chung Hua Wai Ko Tsa Chih 1989 Jan;27(1):48–51, 62–3 (Eng. Abstr.) (Chi)
[Experimental study on the treatment of spinal cord injury with transplantation of the greater omentum] Zheng WJ. Chung Hua Wai Ko Tsa Chih 1989 Feb;27(2):93–5, 125 (Eng. Abstr.) (Chi)
[Omentoplasty in oncologic surgery] Zaloudík J, et al. Rozhl Chir 1988 Dec;67(12):797–803 (Eng. Abstr.) (Cze)
[Pedicled omentum in primary closure of the perineum after amputation of the rectum for cancer] Lo Schiavo F, et al. Chirurgie 1988;114(5):387–93 (24 ref.) (Eng. Abstr.) (Fre)
[Epiplooplasty with microsurgery. Apropos of 96 cases] Patricio J, et al. Chirurgie 1988;114(5):394–404 (56 ref.) (Eng. Abstr.) (Fre)
[Coverage of skin loss of substance of the lower limbs with pedicled transfers of the omentum. Value in the emergency treatment of type III open fractures of the leg] Vichard P, et al. Chirurgie 1988;114(2):145–9 (Eng. Abstr.) (Fre)
[What does the omentum plug accomplish in colorectal tumor surgery? A 10-year follow-up] Liebermann-Meffert D, et al. Schweiz Med Wochenschr 1989 May 27;119(21):739–41 (Eng. Abstr.) (Ger)
[Management of critical ischemia of the leg by omentum transplantation in Buerger's disease] László G. Orv Hetil 1989 Sep 10;130(37):1993–4 (Eng. Abstr.) (Hun)
[Surgical proposals concerning omental mesh graft. Experimental studies] Caramanico L, et al. Minerva Chir 1989 Apr 15;44(7):1075–7 (Eng. Abstr.) (Ita)
[One-stage repair of esophageal fistula after left pneumonectomy using omental pedicle flap] Asaoka M, et al. Nippon Kyobu Geka Gakkai Zasshi 1988 Aug; 36(8):1417–21 (18 ref.) (Eng. Abstr.) (Jpn)
[Clinical significance of omental pedicle flap closure method in chronic empyema with bronchopleural fistula] Kitano M, et al. Nippon Kyobu Geka Gakkai Zasshi 1988 Aug; 36(8):1255–63 (Eng. Abstr.) (Jpn)
[Pedunculated flap from the greater omentum in reconstructive operations after the treatment of neoplasms] Kulakowski A, et al. Nowotwory 1988 May–Jun;38(3):180–6 (Eng. Abstr.) (Pol)
[A complex arm wound resolved by an epiploon autograft—microsurgical technics] Ciuce C, et al. Rev Chir [Chir] 1988 Jul–Aug;37(4):289–95 (Eng. Abstr.) (Rum)
[Autotransplantation of the greater omentum in patients with radiation injuries of the integumentary tissues] Milanov NO, et al. Khirurgiia (Mosk) 1989 May;(5):84–7 (Eng. Abstr.) (Rus)
[Microsurgical autograft of the omentum majus for closing a defect in the integument of the skull] Shilov BL, et al. Khirurgiia (Mosk) 1988 Aug;(8):132–3 (Rus)

OMEPRAZOLE

ADMINISTRATION & DOSAGE

Effect of 'weekend therapy' with omeprazole on basal and stimulated acid secretion and fasting plasma gastrin in duodenal ulcer patients. Hewson EG, et al. Gut 1988 Dec; 29(12):1715–20
Gastric acid antisecretory effect of two different dosage forms of omeprazole during prolonged oral treatment in the gastric fistula dog. Larsson H, et al. Scand J Gastroenterol 1988 Oct;23(8):1013–9
Relationship between reduction of gastric acid secretion and plasma gastrin concentration during omeprazole treatment. Lind T, et al. Scand J Gastroenterol 1988 Dec; 23(10):1259–66

ADVERSE EFFECTS

Lichen spinulosus after the ingestion of omeprazole [letter] Lee ML, et al. Med J Aust 1989 Apr 3;150(7):410
Omeprazole: its influence on gastric acid secretion, gastrin and ECL cells. Larsson H, et al. Toxicol Pathol 1988; 16(2):267–72
[Omeprazole long-term therapy: how great is the risk of developing a carcinoid tumor?] Koop H. Z Gastroenterol 1988 Dec;26(12):769–71 (Ger)

ANALOGS & DERIVATIVES

Identification of two main urinary metabolites of [14C]omeprazole in humans. Renberg L, et al. Drug Metab Dispos 1989 Jan–Feb;17(1):69–76
Possible mechanism for the inhibition of gastric (H+ + K+)-adenosine triphosphatase by the proton pump inhibitor AG-1749. Nagaya H, et al. J Pharmacol Exp Ther 1989 Feb;248(2):799–805
Antisecretory and antiulcer activities of a novel proton pump inhibitor AG-1749 in dogs and rats. Satoh H, et al. J Pharmacol Exp Ther 1989 Feb;248(2):806–15
[AG1749: a study of its inhibition of gastric pH after morning or evening dosage] Kihira K. Nippon Shokakibyo Gakkai Zasshi 1988 Dec;85(12):2693 (Jpn)

METABOLISM

Identification of two main urinary metabolites of [14C]omeprazole in humans. Renberg L, et al. Drug Metab Dispos 1989 Jan–Feb;17(1):69–76
Oxygen dependence of omeprazole clearance and sulfone and sulfide metabolite formation in the isolated perfused rat liver. Angus PW, et al. J Pharmacol Exp Ther 1989 Sep; 250(3):1043–7

PHARMACOKINETICS

The effect of antacids and metoclopramide on omeprazole absorption and disposition. Howden CW, et al. Br J Clin Pharmacol 1988 Jun;25(6):779–81
Acid activation of omeprazole in isolated gastric vesicles, oxyntic cells, and gastric glands. Morii M, et al. Gastroenterology 1989 Jun;96(6):1453–61

PHARMACOLOGY

Carbonic anhydrase in the normal rat stomach and duodenum and after treatment with omeprazole and ranitidine. Lönnerholm G, et al. Acta Physiol Scand 1989 Jun; 136(2):253–62
Omeprazole and cimetidine versus pentagastrin in canine ex vivo gastric chamber. Larsen KR, et al. Am J Physiol 1989 Feb;256(2 Pt 1):G390–5
Effects of omeprazole on rat gastric mucus glycoproteins with acetylsalicylic acid–induced gastric damage. Ohara S, et al. Arch Int Pharmacodyn Ther 1988 Nov–Dec; 296:192–201
Omeprazole, SCH 28080 and doxepin differ in their characteristics to inhibit H+/K+-ATPase driven proton accumulation by parietal cell membrane vesicles. Beil W, et al. Biochem Pharmacol 1988 Dec 1;37(23):4487–93
In vivo and in vitro studies of the site of inhibitory action of omeprazole on adrenocortical steroidogenesis. Dowie LJ, et al. Eur J Clin Pharmacol 1988;35(6):625–9
Effect of high dose omeprazole on gastric pepsin secretion and serum pepsinogen levels in man. Ten Kate RW, et al. Eur J Clin Pharmacol 1988;35(2):173–6
Time-course of development and reversal of gastric endocrine cell hyperplasia after inhibition of acid secretion. Studies with omeprazole and ranitidine in intact and antrectomized rats. Larsson H, et al. Gastroenterology 1988 Dec;95(6):1477–86
Effect of acute suppression of acid secretion by omeprazole on postprandial gastrin release in conscious dogs. Simoens C, et al. Gastroenterology 1989 Oct;97(4):837–45
Proliferation of enterochromaffinlike cells in omeprazole-treated hypergastrinemic rats. Tielemans Y, et al. Gastroenterology 1989 Mar;96(3):723–9
Effect of cimetidine, ranitidine, famotidine and omeprazole on hepatocyte proliferation in vitro. Francavilla A, et al. J Hepatol 1989 Jan;8(1):32–41
Acute effects of ranitidine, famotidine and omeprazole on plasma gastrin in the rat. Decktor DL, et al. J Pharmacol Exp Ther 1989 Apr;249(1):1–5
Effects of topical application of acidified omeprazole on acid secretion and transmucosal potential difference in anesthetized rat stomachs. Takeuchi K, et al. Jpn J Pharmacol 1988 Aug;47(4):397–408
Omeprazole: mode of action and effect on acid secretion in animals. Wallmark B. Methods Find Exp Clin Pharmacol 1989;11 Suppl 1:101–6 (27 ref.)
Omeprazole and ranitidine, antisecretagogues with different modes of action, are equally effective in causing hyperplasia of enterochromaffin-like cells in rat stomach. Ryberg B, et al. Regul Pept 1989 May;25(2):235–46
Effect of cimetidine, ranitidine and omeprazole on postprandial gastrin and somatostatin release in conscious dogs. Simoens C, et al. Regul Pept 1988 Aug;22(3):285–93
Effect of omeprazole treatment on feed intake and blood gastrin and pepsinogen levels in the calf. Fox MT, et al. Res Vet Sci 1989 Mar;46(2):280–2
Protection of gastric epithelial cell monolayers from a human cell line by omeprazole in vitro. Romano M, et al. Scand J Gastroenterol 1989 Jun;24(5):513–21
No effect of omeprazole-induced hypoacidity on the bioavailability of amoxycillin or bacampicillin. Paulsen O, et al. Scand J Infect Dis 1989;21(2):219–23
Stereoselective interaction of omeprazole with warfarin in healthy men. Sutfin T, et al. Ther Drug Monit 1989; 11(2):176–84
[Omeprazole, a gastric proton pump inhibitor] Lewin MJ. Rev Med Interne 1988 Nov–Dec;9(5):461–2 (Fre)
[The second generation of gastric antisecretory agents: omeprazole] Souquet JC. Rev Med Interne 1988 Nov–Dec; 9(5):538–44 (41 ref.) (Eng. Abstr.) (Fre)
[The effects of famotidine and omeprazole on 24-hour intragastric pH of normal subjects] Ohara S, et al. Nippon Shokakibyo Gakkai Zasshi 1988 Jul;85(7):1353–9 (Eng. Abstr.) (Jpn)
[Effect of an H+, K+-ATPase inhibitor, omeprazole (OPZ), on gastric acid secretion and gastric or duodenal lesion. Comparison with an H2-receptor antagonist, famotidine (FMD)] Haga K, et al. Nippon Yakurigaku Zasshi 1988 Jul;92(1):39–47 (Eng. Abstr.) (Jpn)
[Effects of omeprazole and famotidine on (H+-K+) ATPase and acid secretion in rabbit gastric glands] Tomoi M, et al. Nippon Yakurigaku Zasshi 1988 Aug;92(2):105–11 (Eng. Abstr.) (Jpn)

THERAPEUTIC USE

Effect of single-dose omeprazole on intragastric acidity and volume during obstetric anaesthesia. Moore J, et al. Anaesthesia 1989 Jul;44(7):559–62
Omeprazole. Walan A. Baillieres Clin Gastroenterol 1988 Jul; 2(3):629–40 (34 ref.)
Omeprazole and cimetidine in the treatment of ulcers of the body of the stomach: a double blind comparative trial. Danish Omeprazole Study Group. BMJ 1989 Mar 11; 298(6674):645–7
Duodenal ulcers that are difficult to treat [letter] Arnold JD. BMJ 1989 Feb 11;298(6670):388
Omeprazole and cimetidine in treating ulcers of the body of the stomach [letter] Savarino V, et al. BMJ 1989 May 6;298(6682):1249–50
Effects of prostaglandin D2 and omeprazole on indomethacin-induced gastric ulcers in rats. Fukui A, et al. Clin Exp Pharmacol Physiol 1988 Dec;15(12):919–26
Therapeutic evaluation of omeprazole. Adams MH, et al. Clin Pharm 1988 Oct;7(10):725–45 (113 ref.)
Beneficial effect of omeprazole in a patient with severe bronchial asthma and gastro-oesophageal reflux. Depla AC, et al. Eur Respir J 1988 Dec;1(10):966–8
Effects of antimuscarinic agents, H2-blockers and omeprazole on rat chronic gastric ulcer after long- and short-term administration. Chiavarini M, et al. Farmaco [Sci] 1988 May;43(5):479–87
Does early antisecretory treatment limit ulcer development? [letter] Duchateau A, et al. Gastroenterology 1989 Mar; 96(3):961–2
Long-term efficacy and safety of omeprazole in patients with Zollinger-Ellison syndrome: a prospective study. Maton PN, et al. Gastroenterology 1989 Oct;97(4):827–36
Acute haemorrhagic gastritis controlled by omeprazole [letter] Collier DS, et al. Lancet 1989 Apr 8;1(8641):776
Gastric carcinoid tumours in patients with Zollinger-Ellison syndrome on long-term omeprazole [letter] Goldfain D, et al. Lancet 1989 Apr 8;1(8641):776–7
Omeprazole, campylobacter pylori, and duodenal ulcer [letter] Mainguet P, et al. Lancet 1989 Aug 12; 2(8659):389–90
Clinical utility and safety of omeprazole. Walan A. Methods Find Exp Clin Pharmacol 1989;11 Suppl 1:107–11 (30 ref.)
Omeprazole versus ranitidine for gastric ulcer [letter; comment] N Engl J Med 1989 Jul 20;321(3):191–2. Comment on: N Engl J Med 1989 Jan 12;320(2):69–75
Regression of Barrett's epithelium with omeprazole [letter] Deviere J, et al. N Engl J Med 1989 Jun 1;320(22):1497–8
Effect of omeprazole and ranitidine on ulcer healing and relapse rates in patients with benign gastric ulcer [see comments] Walan A, et al. N Engl J Med 1989 Jan 12; 320(2):69–75. Comment in: N Engl J Med 1989 Jul 20;321(3):191–2
New drug effective [news] Occup Health Saf 1989 Mar; 58(3):16
Relapse of gastric ulcers after healing with omeprazole and cimetidine. A double-blind follow-up study. Danish Omeprazole Study Group. Scand J Gastroenterol 1989 Jun; 24(5):557–60
The effect of omeprazole or ranitidine treatment on 24-hour esophageal acidity in patients with reflux esophagitis. Ruth M, et al. Scand J Gastroenterol 1988 Nov;23(9):1141–6
Effect of omeprazole and cimetidine on healing of chronic gastric ulcers and gastric acid secretion in rats. Skov Olsen P, et al. Tohoku J Exp Med 1988 Aug;155(4):305–10
[Omeprazole. An effective antisecretory agent in ulcerative disease and reflux esophagitis] Lauritsen K, et al. Ugeskr Laeger 1989 Jul 10;151(28):1831–3 (Dan)
[Protective effect of omeprazole on gastric lesions induced by a single dose of aspirin in man (letter)] Bigard MA. Gastroenterol Clin Biol 1988 Oct;12(10):770–1 (Fre)
[Omeprazole (20 mg daily) compared to ranitidine (150 mg twice daily) in the treatment of esophagitis caused by reflux. Results of a double-blind randomized multicenter trial in France and Belgium] Zeitoun P, et al. Gastroenterol Clin Biol 1989 May;13(5):457–62 (Eng. Abstr.) (Fre)
[Long-term suppression of acid secretion with omeprazole use in metastatic gastrinoma] Schaub N, et al. Schweiz Med Wochenschr 1988 Nov 12;118(45):1660–6 (48 ref.) (Eng. Abstr.) (Ger)
[Therapy of peptic ulcer. ATPase inhibitors] Arnold R. Verh Dtsch Ges Inn Med 1988;94:276–81 (29 ref.) (Ger)
[Successful treatment of severe reflux esophagitis with omeprazole: a therapeutic success?] Müller-Lissner S. Z Gastroenterol 1989 Feb;27(2):131–2 (Ger)
[Healing of esophageal ulcer after treatment with omeprazole in a patient with scleroderma and Barrett's esophagus] Fiorucci S, et al. Medicina (Firenze) 1988 Jul–Sep; 8(3):306–9 (Eng. Abstr.) (Ita)
[A case of Zollinger-Ellison syndrome successfully treated with an H+-K+ ATPase inhibitor] Sakakibara T, et al. Gan No Rinsho 1989 Sep;35(10):1171–5 (Eng. Abstr.) (Jpn)
[Inhibitory effects of omeprazole and cimetidine on the formation of gastric ulcer in rats with obstructive jaundice and acute renal failure] Namba S. Nippon Shokakibyo Gakkai Zasshi 1988 Jun;85(6):1223–32 (Eng. Abstr.) (Jpn)
[Omeprazole. A new inhibitor of gastric secretion] Farup PG. Tidsskr Nor Laegeforen 1989 Aug 10;109(22):2156–7 (Nor)

TOXICITY

Hypergastrinaemia evoked by omeprazole stimulates growth of gastric mucosa but not of pancreas or intestines in hamster, guinea pig and chicken. Håkanson R, et al. **Regul Pept** 1988 Oct;23(1):105–15

Gastric ECL-cell hyperplasia and carcinoids in rodents following chronic administration of H2-antagonists SK&F 93479 and oxmetidine and omeprazole. Betton GR, et al. **Toxicol Pathol** 1988;16(2):288–98

OMP PROTEINS see **BACTERIAL OUTER MEMBRANE PROTEINS**

OMPHALOCELE see **HERNIA, UMBILICAL**

OMPHALOMESENTERIC DUCT see **VITELLINE DUCT**

ON-LINE SYSTEMS see **ONLINE SYSTEMS**

ONCHOCERCA

Body size of Culicoides variipennis (Diptera: Ceratopogonidae) in relation to bloodmeal size estimates and the ingestion of Onchocerca cervicalis (Nematoda: Filarioidea) microfiliariae. Leprince DJ, et al. **J Am Mosq Control Assoc** 1989 Mar;5(1):100–3

ANATOMY & HISTOLOGY

Morphological differences between Venezuelan and African microfilariae of Onchocerca volvulus. Botto C, et al. **J Helminthol** 1988 Dec;62(4):345–51

The Onchocerca nodule and the adult filariae: normal structure, changes during chemotherapy and optimal recovery of worm material. Proceedings of a scientific workshop, Hamburg, FRG, 29 June–3 July 1987. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:329–486

Histological examination of adult Onchocerca volvulus and comparison with the collagenase technique. Büttner DW, et al. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:390–417

The in vitro determination of the visual resolution in onchocercal nodules of bovine and human origin by a portable ophthalmologic ultrasound scanner. Poltera AA, et al. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:349–55

Vascular perfusion of Onchocerca volvulus nodules. Smith RJ, et al. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:418–21

Proposed form to evaluate some histological aspects of macrofilarial morphology, its age dependent alterations and drug related changes in nodules of Onchocerca volvulus and O. gibsoni. Striebel HP. **Trop Med Parasitol** 1988 Dec; 39 Suppl 4:367–89

DRUG EFFECTS

The chemotherapy of onchocerciasis. XII. The prediction of microfilarial loads in patients with onchocerciasis after treatment with diethylcarbamazine in northern Ghana. Fulford AJ, et al. **Ann Trop Med Parasitol** 1987 Dec; 81(6):701–11

The efficacy of 22,23-dihydroavermectin B1 (Ivermectin) acting singly or in combination with a benzodiazepine on microfilariae of Onchocerca species and Brugia pahangi (an in vitro study). Estambale BB, et al. **Int J Med Microbiol** 1989 Jul;271(2):249–55

Effects of high doses of diethylcarbamazine on adult Onchocerca volvulus examined by the collagenase technique and by histology. Albiez EJ, et al. **Trop Med Parasitol** 1988 Jun;39(2):87–92

Histological examination of onchocercomata after therapy with ivermectin. Albiez EJ, et al. **Trop Med Parasitol** 1988 Jun;39(2):93–9

Emergence of Onchocerca volvulus microfilariae from skin snips before and after treatment of patients with ivermectin. Mössinger J, et al. **Trop Med Parasitol** 1988 Dec; 39(4):313–6

Comparative effects of anthelmintics on motility in vitro of Onchocerca gutturosa, Brugia pahangi and Acanthocheilonema viteae. Satti MZ, et al. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:480–3

Studies on the activity of the Ciba Geigy compounds CGP 6140, 20376, 20309 and 21833 against third and fourth stage larvae of Onchocerca volvulus. Strote G. **Trop Med Parasitol** 1989 Mar;40(1):51–6

An evaluation of implanted male Onchocerca gibsoni in mice as a screen for macrofilaricides against Onchocerca volvulus. Vankan DM, et al. **Trop Med Parasitol** 1988 Dec; 39 Suppl 4:472–4

ENZYMOLOGY

Extracellular proteases of Onchocerca. Lackey A, et al. **Exp Parasitol** 1989 Feb;68(2):176–85

GENETICS

Genetic characterization of three species of Onchocerca at 23 enzyme loci. Andrews RH, et al. **J Helminthol** 1989 Jun;63(2):87–92

Construction of Onchocerca volvulus cDNA libraries and partial characterization of the cDNA for a major antigen. Donelson JE, et al. **Mol Biochem Parasitol** 1988 Dec; 31(3):241–50

An oligonucleotide probe specific for Onchocerca volvulus. Harnett W, et al. **Mol Biochem Parasitol** 1989 Jun 15; 35(2):119–25

Cloning and characterization of a species-specific repetitive DNA sequence from Onchocerca armillata. Murray KA, et al. **Mol Biochem Parasitol** 1988 Sep;30(3):209–15

Major sperm protein genes from Onchocerca volvulus. Scott AL, et al. **Mol Biochem Parasitol** 1989 Sep;36(2):119–26

Isolation and in vitro translation of Onchocerca volvulus mRNA. Connor VM, et al. **Trop Med Parasitol** 1988 Dec; 39 Suppl 4:460–2

GROWTH & DEVELOPMENT

Vector density, parasite prevalence, and transmission of Onchocerca volvulus in Guatemala. Porter CH, et al. **Am J Trop Med Hyg** 1988 Dec;39(6):567–74

Surface carbohydrate changes on Onchocerca lienalis larvae as they develop from microfilariae to the infective third-stage in Simulium ornatum. Ham PJ, et al. **J Helminthol** 1988 Sep;62(3):195–205

A semi-automated system of intrathoracic injection for the large-scale production of Onchocerca lienalis infective larvae. Bianco AE, et al. **Trop Med Parasitol** 1989 Mar; 40(1):57–64

The development of a laboratory model for onchocerciasis using Onchocerca gutturosa: in vitro culture, collagenase effects, drug studies and cryopreservation. Townson S. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:475–9

IMMUNOLOGY

Evaluation of a specific enzyme immunoassay for onchocerciasis using a low molecular weight antigen fraction of Onchocerca volvulus. Weiss N, et al. **Am J Trop Med Hyg** 1989 Mar;40(3):261–7

Experimental interstitial keratitis induced by Onchocerca volvulus antigens. Gallin MY, et al. **Arch Ophthalmol** 1988 Oct;106(10):1447–52

Molecular cloning of an immunodominant antigen of Onchocerca volvulus. Lucius R, et al. **J Exp Med** 1988 Sep 1;168(3):1199–204

Onchocerca volvulus recombinant antigen: physical characterization and clinical correlates with serum reactivity. Gallin MY, et al. **J Infect Dis** 1989 Sep; 160(3):521–9

Biochemical and immunochemical characterisation of a 20-kilodalton complex of surface-associated antigens from adult Onchocerca gutturosa filarial nematodes. Bradley JE, et al. **Mol Biochem Parasitol** 1989 May 15;34(3):197–208

Onchocerca volvulus heat shock protein 70 is a major immunogen in amicrofilaremic individuals from a filariasis-endemic area. Rothstein NM, et al. **Mol Biochem Parasitol** 1989 Mar 15;33(3):229–35

Experimental ocular onchocerciasis in cynomolgus monkeys. III. Roles of IgG and IgE antibody and autoantibody and cell-mediated immunity in the chorioretinitis elicited by intravitreal Onchocerca lienalis microfilariae. Donnelly JJ, et al. **Trop Med Parasitol** 1988 Jun;39(2):111–6

Handling of Onchocerca volvulus nodules and isolated worms for immunologic studies. Greene BM. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:464

Immunity to Onchocerca volvulus. Serum mediated leucocyte adherence to infective larvae in vitro. Leke RG, et al. **Trop Med Parasitol** 1989 Mar;40(1):39–41

Antigen detection in onchocerciasis: correlation with worm burden. Schlie-Guzmán MA, et al. **Trop Med Parasitol** 1989 Mar;40(1):47–50

[Observation on indirect hemagglutination test with adult Onchocerca armillata antigen in the diagnosis of filariasis] Han JJ, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(3):205–7 (Eng. Abstr.) **(Chi)**

[Analysis of the common antigen component between Brugia malayi adults and Onchocerca armillata adults] Li YL, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(4):259–60 (Eng. Abstr.) **(Chi)**

ISOLATION & PURIFICATION

Evaluation of skin biopsies from different body regions of onchocerciasis patients in Central Nigeria. Ufomadu GO, et al. **Acta Trop (Basel)** 1988 Sep;45(3):257–62

Transmission of Onchocerca volvulus by secondary vectors in Guatemala. Porter CH, et al. **Am J Trop Med Hyg** 1988 Dec;39(6):559–66

Special requirements for use of adult Onchocerca volvulus in molecular biology. Duke BO. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:463

The collagenase technique: how to isolate and examine adult Onchocerca volvulus for the evaluation of drug effects. Schulz-Key H. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:423–40 (44 ref.)

Preparation and shipping of Onchocerca volvulus material. Walter RD. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:447

Distribution of Onchocerca spp. microfilariae in the dermis of cattle. Ferenc SA, et al. **Vet Parasitol** 1989 Jun; 31(3-4):345–9

Onchocerca armillata Railliet and Henry, 1909 and Onchocerca gutturosa (Neumann, 1910) in camels (Camelus dromedarius L.) in the Sudan. Hussein HS, et al. **Vet Res Commun** 1988;12(6):475–80

METABOLISM

The polyamine metabolism of filarial worms as chemotherapeutic target. Müller S, et al. **Adv Exp Med Biol** 1988;250:737–43 (26 ref.)

An in vitro radiolabel uptake viability assay for Onchocerca microfilariae. Callahan HL, et al. **J Parasitol** 1989 Feb; 75(1):142–4

Radiorespirometric detection of macrofilaricidal activity in vitro. Comley JC, et al. **Parasitology** 1989 Apr;98 Pt 2:259–64

PHYSIOLOGY

The effect of multiple ivermectin treatments on infection of Simulium ochraceum with Onchocerca volvulus. Cupp EW, et al. **Am J Trop Med Hyg** 1989 May;40(5):501–6

The application of biochemical criteria to the assessment of macrofilarial viability. Comley JC, et al. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:456–9 (14 ref.)

The relationship between innate susceptibility to Onchocerca, and haemolymph attenuation of microfilarial motility in vitro using British and west African blackflies. Ham PJ, et al. **Trop Med Parasitol** 1988 Sep;39(3):230–4

Investigations of enzymatically isolated male Onchocerca volvulus: qualitative and quantitative aspects of spermatogenesis. Kläger S. **Trop Med Parasitol** 1988 Dec; 39 Suppl 4:441–5

In vitro motility of isolated adults and segments of Onchocerca volvulus, Brugia pahangi and Acanthocheilonema viteae. Pax RA, et al. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:450–5

Reproduction in female Onchocerca gibsoni. Vankan DM, et al. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:469–71

In vitro maintenance of Onchocerca volvulus for harvest of excretory and secretory products. Walter RD. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:448–9

ULTRASTRUCTURE

Onchocerca gutturosa and Onchocerca lienalis in cattle: variation in length of microfilariae by site of recovery. Harty TM, et al. **Am J Vet Res** 1989 Jan;50(1):169–72

The fine structure of male and female Onchocerca gibsoni. Franz M, et al. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:466–8

The morphology of adult Onchocerca volvulus based on electron microscopy. Franz M. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:359–66

Isolation and biochemical composition of the cuticle of Onchocerca volvulus. Titanji VP, et al. **Trop Med Parasitol** 1988 Jun;39(2):100–4

ONCHOCERCIASIS

Onchocerciasis and dracunculosis. Elgart ML. **Dermatol Clin** 1989 Apr;7(2):323–30 (19 ref.)

BLOOD

Plasma testosterone levels in human onchocerciasis. Ogunrinade AF, et al. **Trans R Soc Trop Med Hyg** 1988; 82(5):725

COMPLICATIONS

A major cause of third world rheumatism largely overlooked--onchocerciasis. Pearson CA. **Br J Rheumatol** 1988 Oct;27(5):414–6

[A survey of visual deficiencies in a focus of endemic onchocerciasis] Toufic N. **Rev Int Trach Pathol Ocul Trop Subtrop Sante Publique** 1988;65(1-2):129–36 (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Evaluation of skin biopsies from different body regions of onchocerciasis patients in Central Nigeria. Ufomadu GO, et al. **Acta Trop (Basel)** 1988 Sep;45(3):257–62

Evaluation of a specific enzyme immunoassay for onchocerciasis using a low molecular weight antigen fraction of Onchocerca volvulus. Weiss N, et al. **Am J Trop Med Hyg** 1989 Mar;40(3):261–7

Biochemical and immunochemical characterisation of a 20-kilodalton complex of surface-associated antigens from adult Onchocerca gutturosa filarial nematodes. Bradley JE, et al. **Mol Biochem Parasitol** 1989 May 15;34(3):197–208

A curable cause of musculoskeletal pain. Pearson A. **Practitioner** 1987 Dec;231(1440):1596–7

Diagnosis and extirpation of nodules in human onchocerciasis. Albiez EJ, et al. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:331–46 (38 ref.)

The use of a topical Mazzotti test in the diagnosis of onchocerciasis. Kilian HD. **Trop Med Parasitol** 1988 Sep; 39(3):235–8

The in vitro determination of the visual resolution in onchocercal nodules of bovine and human origin by a portable ophthalmologic ultrasound scanner. Poltera AA, et al. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:349–55

[Detection of subcutaneous nodules with ultrasound in onchocerciasis (letter)] Ares Vidal J, et al. **Med Clin (Barc)** 1989 Mar 4;92(8):316 **(Spa)**

DRUG THERAPY

The skin-dwelling microfilariae of Monanema martini in

Lemniscomys striatus as potential drug screening model for onchocerciasis: midazolam effect in vitro. Laukamm-Josten U, et al. **Acta Trop** (Basel) 1988 Dec; 45(4):373–7

The effect of multiple ivermectin treatments on infection of Simulium ochraceum with Onchocerca volvulus. Cupp EW, et al. **Am J Trop Med Hyg** 1989 May;40(5):501–6

Ivermectin in loiasis and concomitant O. volvulus and M. perstans infections. Richard-Lenoble D, et al. **Am J Trop Med Hyg** 1988 Nov;39(5):480–3

Ivermectin treatment of patients with severe ocular onchocerciasis. Taylor HR, et al. **Am J Trop Med Hyg** 1989 May;40(5):494–500

Chloroquine and onchocerciasis. Cooper P. **Br J Hosp Med** 1989 Mar;41(3):280–2

Chemotherapy of Onchocerca lienalis microfilariae in mice: a model for the evaluation of novel compounds for the treatment of onchocerciasis. Townson S, et al. **J Helminthol** 1988 Sep;62(3):181–94

Side-effects of ivermectin in treatment of onchocerciasis. Rothova A, et al. **Lancet** 1989 Jun 24;1(8652):1439–41

Activity of thiocarbamazine in patients dually infected with Schistosoma and Onchocerca volvulus [letter] Soula G, et al. **Lancet** 1989 Apr 1;1(8640):726

Drug treatment of onchocerciasis. Orme M, et al. **Q J Med** 1988 Mar;66(251):195–201 (32 ref.)

Effects of high doses of diethylcarbamazine on adult Onchocerca volvulus examined by the collagenase technique and by histology. Albiez EJ, et al. **Trop Med Parasitol** 1988 Jun;39(2):87–92

Histological examination of onchocercomata after therapy with ivermectin. Albiez EJ, et al. **Trop Med Parasitol** 1988 Jun;39(2):93–9

Emergence of Onchocerca volvulus microfilariae from skin snips before and after treatment of patients with ivermectin. Mössinger J, et al. **Trop Med Parasitol** 1988 Dec; 39(4):313–6

An evaluation of implanted male Onchocerca gibsoni in mice as a screen for macrofilaricides against Onchocerca volvulus. Vankan DM, et al. **Trop Med Parasitol** 1988 Dec; 39 Suppl 4:472–4

[After ivermectin, is it necessary to look again for a macrofilaricide?] Gayral P, et al. **Bull Soc Pathol Exot Filiales** 1989 Jan;82(1):82–7 (Eng. Abstr.) **(Fre)**

[A study in the Ivory Coast (1985–1987) of the efficacy and tolerance of ivermectin (Mectizan) in human onchocerciasis. I. A comparative double-blind study of 220 patients with onchocerciasis treated with a single oral dose of 100, 150 or 200 mcg/kg] Larivière M, et al. **Bull Soc Pathol Exot Filiales** 1989 Jan;82(1):35–47 (Eng. Abstr.) **(Fre)**

[A study in the Ivory Coast (1985–1987) of the efficacy and tolerance of ivermectin (Mectizan) in human onchocerciasis. III. The tolerance and efficacy of a single oral dose of 150 mcg/kg in children] Larivière M, et al. **Bull Soc Pathol Exot Filiales** 1989 Jan;82(1):58–64 (Eng. Abstr.) **(Fre)**

[The efficacy and tolerance of ivermectin (Mectizan) prescribed for the patient with multiple filarial infections (Loa loa/Onchocerca and/or M. perstans)] Richard-Lenoble D, et al. **Bull Soc Pathol Exot Filiales** 1989 Jan;82(1):65–71 (Eng. Abstr.) **(Fre)**

[Ivermectin. A new drug against onchocerciasis] Otterlei O. **Tidsskr Nor Laegeforen** 1989 Jun 30;109(19–21):1999–2000 (Eng. Abstr.) **(Nor)**

EPIDEMIOLOGY

A multidisciplinary study of onchocerciasis in Bure area, Ethiopia. Yeneneh H, et al. **Ethiop Med J** 1989 Jul; 27(3):121–8

Onchocerciasis in the Blue Nile Valley of western Ethiopia. Gundersen SG, et al. **Trans R Soc Trop Med Hyg** 1988; 82(1):122–7

Onchocerciasis in Sierra Leone.2: A comparison of forest and savanna villages. McMahon JE, et al. **Trans R Soc Trop Med Hyg** 1988;82(4):595–600

Epidemiological studies of onchocerciasis in forest villages of Sierra Leone. McMahon JE, et al. **Trop Med Parasitol** 1988 Sep;39(3):251–9

Epidemiological studies of onchocerciasis in savanna villages of Sierra Leone. McMahon JE, et al. **Trop Med Parasitol** 1988 Sep;39(3):260–8

IMMUNOLOGY

Unique recognition of a low molecular weight Onchocerca volvulus antigen by IgG3 antibodies in chronic hyper-reactive oncho-dermatitis (Sowda). Cabrera Z, et al. **Clin Exp Immunol** 1988 Nov;74(2):223–9

Eosinophils and human disease. Gleich GJ, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):59–62 (23 ref.)

Molecular cloning of an immunodominant antigen of Onchocerca volvulus. Lucius R, et al. **J Exp Med** 1988 Sep 1;168(3):1199–204

Experimental ocular onchocerciasis in cynomolgus monkeys. III. Roles of IgG and IgE antibody and autoantibody and cell-mediated immunity in the chorioretinitis elicited by intravitreal Onchocerca lienalis microfilariae. Donnelly JJ, et al. **Trop Med Parasitol** 1988 Jun;39(2):111–6

Immunity to Onchocerca volvulus. Serum mediated leucocyte adherence to infective larvae in vitro. Leke RG, et al. **Trop Med Parasitol** 1989 Mar;40(1):39–41

Antigen detection in onchocerciasis: correlation with worm burden. Schlie-Guzmán MA, et al. **Trop Med Parasitol** 1989 Mar;40(1):47–50

[Subpopulations of lymphocytes in onchocercal nodules] Mbakop A, et al. **Pathol Biol (Paris)** 1989 Apr;37(4):259–61 (Eng. Abstr.) **(Fre)**

PARASITOLOGY

The chemotherapy of onchocerciasis. XII. The prediction of microfilarial loads in patients with onchocerciasis after treatment with diethylcarbamazine in northern Ghana. Fulford AJ, et al. **Ann Trop Med Parasitol** 1987 Dec; 81(6):701–11

Onchodermatitis—correlation between skin disease and parasitic load in an endemic focus in Ecuador. Hay RJ, et al. **Br J Dermatol** 1989 Aug;121(2):187–98

Onchocerciasis in Sierra Leone 3: Relationships between eye lesions and microfilarial prevalence and intensity. McMahon JE, et al. **Trans R Soc Trop Med Hyg** 1988; 82(4):601–5

Ultrasound detection of changes in the vitreous humor of onchocerciasis patients from Guatemala. Reyna O, et al. **Trans R Soc Trop Med Hyg** 1988;82(4):606

The Onchocerca nodule and the adult filariae: normal structure, changes during chemotherapy and optimal recovery of worm material. Proceedings of a scientific workshop, Hamburg, FRG, 29 June–3 July 1987. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:329–486

Histological examination of adult Onchocerca volvulus and comparison with the collagenase technique. Büttner DW, et al. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:390–417

Special requirements for use of adult Onchocerca volvulus in molecular biology. Duke BO. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:463

Handling of Onchocerca volvulus nodules and isolated worms for immunologic studies. Greene BM. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:464

Deep onchocercomata close to the thigh bones of a Liberian patient. Kilian HD. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:347–8

The collagenase technique: how to isolate and examine adult Onchocerca volvulus for the evaluation of drug effects. Schulz-Key H. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:423–40 (44 ref.)

Proposed form to evaluate some histological aspects of macrofilarial morphology, its age dependent alterations and drug related changes in nodules of Onchocerca volvulus and O. gibsoni. Striebel HP. **Trop Med Parasitol** 1988 Dec; 39 Suppl 4:367–89

The development of a laboratory model for onchocerciasis using Onchocerca gutturosa: in vitro culture, collagenase effects, drug studies and cryopreservation. Townson S. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:475–9

Preparation and shipping of Onchocerca volvulus material. Walter RD. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:447

[Onchocerciasis in travelers and migrants—latent ocular lesions] Vérin P, et al. **Bull Soc Ophtalmol Fr** 1988 Jan; 88(1):49–52 **(Fre)**

PATHOLOGY

Experimental ocular onchocerciasis in cynomolgus monkeys. II. Chorioretinitis elicited by intravitreal Onchocerca lienalis microfilariae. Semba RD, et al. **Invest Ophthalmol Vis Sci** 1988 Nov;29(11):1642–51

Onchocerciasis in north Yemen: retrospective diagnosis of five cases in lymph node biopsies. Abdel-Hameed AA. **Trop Geogr Med** 1988 Oct;40(4):373–5

Forest and savanna onchocerciasis: comparative morphometric histopathology of skin lesions. Vuong PN, et al. **Trop Med Parasitol** 1988 Jun;39(2):105–10

[The onchocercal nodule] Nozais JP. **Ann Pathol** 1988; 8(3):169–74 (16 ref.) (Eng. Abstr.) **(Fre)**

PHYSIOPATHOLOGY

Vascular perfusion of Onchocerca volvulus nodules. Smith RJ, et al. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:418–21

PREVENTION & CONTROL

The control of onchocerciasis [editorial] Winter FC. **Am J Ophthalmol** 1989 Jul 15;108(1):84–5

[A study in the Ivory Coast (1985–1987) of the efficacy and tolerance of ivermectin (Mectizan) in human onchocerciasis. II. Evaluation in the light of mass campaigns on the effect of yearly or half-yearly administration of single oral doses of 100, 150 or 200 mcg/kg] Larivière M, et al. **Bull Soc Pathol Exot Filiales** 1989 Jan;82(1):48–57 (Eng. Abstr.) **(Fre)**

[Onchocerciasis as a health problem in the southeastern Mexico] Rivas Alcalá A, et al. **Bol Chil Parasitol** 1987 Jul–Dec;42(3–4):58–63 (Eng. Abstr.) **(Spa)**

SURGERY

Effects of nodulectomy in onchocerciasis in Ecuador. Guderian RH. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:356–7

TRANSMISSION

Zoonotic Onchocerca in a Japanese child. Beaver PC, et al. **Am J Trop Med Hyg** 1989 Mar;40(3):298–300

Transmission of Onchocerca volvulus by secondary vectors in Guatemala. Porter CH, et al. **Am J Trop Med Hyg** 1988 Dec;39(6):559–66

Vector density, parasite prevalence, and transmission of Onchocerca volvulus in Guatemala. Porter CH, et al. **Am J Trop Med Hyg** 1988 Dec;39(6):567–74

The vectoral role of several blackfly species (Diptera: Simuliidae) in relation to human onchocerciasis in the Sierra Parima and Upper Orinoco regions of Venezuela. Basáñez MG et al. **Ann Trop Med Parasitol** 1988 Dec; 82(6):597–611

Identification of vector species (Diptera:Simuliidae) of human onchocerciasis in the amazonia focus of Brazil and Venezuela. Shelley AJ, et al. **Mem Inst Oswaldo Cruz** 1987 Oct–Dec;82(4):461–5

Anthropophily, zoophily and roles in onchocerciasis transmission of the Djodji form of Simulium sanctipauli and S. squamosum in a forest zone of Togo. Cheke RA, et al. **Trop Med Parasitol** 1988 Jun;39(2):123–7

VETERINARY

Efficacy of ivermectin in paste and injectable formulations against microfilariae of Onchocerca cervicalis and resolution of associated dermatitis in horses. French DD, et al. **Am J Vet Res** 1988 Sep;49(9):1550–4

Onchocerca gutturosa and Onchocerca lienalis in cattle: variation in length of microfilariae by site of recovery. Harty TM, et al. **Am J Vet Res** 1989 Jan;50(1):169–72

Factors influencing the ingestion of Onchocerca cervicalis microfilariae by Culicoides variipennis (Diptera: Ceratopogonidae). Higgins JA, et al. **J Am Mosq Control Assoc** 1988 Sep;4(3):242–7

Distribution of Onchocerca spp. microfilariae in the dermis of cattle. Ferenc SA, et al. **Vet Parasitol** 1989 Jun; 31(3–4):345–9

Ivermectin in equine lichen tropicus [letter] Raisinghani PM, et al. **Vet Rec** 1988 Nov 26;123(22):583

Onchocerca armillata Railliet and Henry, 1909 and Onchocerca gutturosa (Neumann, 1910) in camels (Camelus dromedarius L.) in the Sudan. Hussein HS, et al. **Vet Res Commun** 1988;12(6):475–80

ONCOGENE PROTEINS, VIRAL

Endogenous retroviral env genes after N-methyl-N'-nitro-N-nitrosoguanidine treatment of mouse tumor cells: stable DNA amplification and rearrangement. Apt D, et al. **Cancer Res** 1989 Jul 15; 49(14):3966–71

Perturbations of lens development in the transgenic mouse. Westphal H. **Cell Differ Dev** 1988 Nov;25 Suppl:33–7 (11 ref.)

trans activation of type 1 interferon promoters by simian virus 40 T antigen. Hiscott J, et al. **Mol Cell Biol** 1988 Aug; 8(8):3397–405

The three-dimensional structure of c-H-ras p21: implications for oncogene and G protein studies [published erratum appears in Trends Biochem Sci 1988 Oct;13(10):397] Jurnak F. **Trends Biochem Sci** 1988 Jun;13(6):195–8

[The application of oncogene probes to studying the activation of Ha-ras in stomach cancer cells] Deng GR. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;68(9):503–5, 36 (Eng. Abstr.) **(Chi)**

ANALYSIS

Anti-peptide antibodies to oncoproteins: the predetermined specificity and detection of gene products predicted by nucleotide sequence analyses. Tanaka T, et al. **Adv Biotechnol Processes** 1988;10:61–80 (36 ref.)

Adenovirus transcriptional complexes contain E1a encoded tumour antigens physically bound to cellular proteins. Mirza A. **Arch Virol** 1988;102(3–4):245–62

Expression of ras oncogene p21 protein in relation to regional spread of human breast carcinomas. Czerniak B, et al. **Cancer** 1989 May 15;63(10):2008–13

Ras oncogene and the acquisition of metastasizing properties by rectal adenocarcinoma. Michelassi F, et al. **Dis Colon Rectum** 1989 Aug;32(8):665–8

RAP-5 binding in formalin-fixed samples [letter] Altavilla G, et al. **Hum Pathol** 1989 Jun;20(6):608–9

Evidence of enhancement of the ras oncogene protein product (p21) in a spectrum of human tumors. De Biasi F, et al. **Int J Cancer** 1989 Mar 15;43(3):431–5

HER-2/neu oncogene protein and prognosis in breast cancer. Tandon AK, et al. **J Clin Oncol** 1989 Aug;7(8):1120–8

A karyophilic signal sequence in adenovirus type 5 E1A is functional in Xenopus oocytes but not in somatic cells. Slavicek JM, et al. **J Virol** 1989 Sep;63(9):4047–50

Differential distribution of the adenovirus E1A proteins and colocalization of E1A with the 70-kilodalton cellular heat shock protein in infected cells. White E, et al. **J Virol** 1988 Nov;62(11):4153–66

The expression of Ad12 E1B 19K protein on the surface of adenovirus transformed and infected human cells. Smith KJ, et al. **Oncogene** 1989 Apr;4(4):489–97

Functional similarity between HPV16E7, SV40 large T and adenovirus E1a proteins. Vousden KH, et al. **Oncogene** 1989 Feb;4(2):153–8

[Expression of ras gene product p21 in human lung adenocarcinoma] Funato T, et al. **Rinsho Byori** 1988 Oct;

36(10):1182–6 (Jpn)

ANTAGONISTS & INHIBITORS

Modulation of major histocompatibility complex (MHC) class I genes in adenovirus 12 transformed cells: interferon–gamma increases class I expression by a mechanism that circumvents E1A induced–repression and tumor necrosis factor enhances the effect of interferon–gamma. Eager KB, et al. **Oncogene** 1989 Jan; 4(1):39–44

BIOSYNTHESIS

High–level expression of oncogenes in Escherichia coli. Lautenberger JA, et al. **Gene Amplif Anal** 1983;3:147–74

Colony–stimulating factor–1 receptor (c–fms). Sherr CJ, et al. **J Cell Biochem** 1988 Nov;38(3):179–87 (69 ref.)

p21 ras protein expression in benign and malignant human breast. Walker RA, et al. **J Pathol** 1988 Oct;156(2):147–53

GENETICS

Regulation of the metastatic phenotype by the E1A gene of adenovirus–2. Pozzatti R, et al. **Adv Exp Med Biol** 1988; 233:293–301

Topography of early HPV 16 transcription in high–grade genital precancers. Crum CP, et al. **Am J Pathol** 1989 Jun; 134(6):1183–8

Chemical synthesis and expression of a gene encoding HIV–1 TAT protein. Ferguson BQ, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1429–37

Chromatin structure and levels of expression and DNA methylation in the E3 region of chromosomally integrated adenovirus type 12 DNA. Bartnik E, et al. **Biochim Biophys Acta** 1989 Mar 1;1007(2):228–32

Cis– and trans–acting factors for transcription of the adenovirus 12 E1A gene. Shibata H, et al. **Biochim Biophys Acta** 1989 Mar 1;1007(2):184–91

Endogenous retroviral env genes after N–methyl–N'–nitro–N–nitrosoguanidine treatment of mouse tumor cells: stable DNA amplification and rearrangement. Apt D, et al. **Cancer Res** 1989 Jul 15; 49(14):3966–71

Transcriptional activation by the v–myb oncogene and its cellular progenitor, c–myb. Weston K, et al. **Cell** 1989 Jul 14;58(1):85–93

Continued expression of HPV–16 E7 protein is required for maintenance of the transformed phenotype of cells co–transformed by HPV–16 plus EJ–ras. Crook T, et al. **EMBO J** 1989 Feb;8(2):513–9

Structural and mutational analysis of E2 trans–activating proteins of papillomaviruses reveals three distinct functional domains. Giri I, et al. **EMBO J** 1988 Sep; 7(9):2823–9

The ras–related mouse ypt1 protein can functionally replace the YPT1 gene product in yeast. Haubruck H, et al. **EMBO J** 1989 May;8(5):1427–32

Transformation of mouse mammary epithelial cells with the Ha–ras but not with the neu oncogene results in a gene dosage–dependent increase in transforming growth factor–alpha production. Ciardiello F, et al. **FEBS Lett** 1989 Jul 3;250(2):474–8

An adenovirus early region 4 gene product is required for induction of the infection–specific form of cellular E2F activity. Hardy S, et al. **Genes Dev** 1989 Jul;3(7):1062–74

DNA–binding activity of the adenovirus–induced E4F transcription factor is regulated by phosphorylation. Raychaudhuri P, et al. **Genes Dev** 1989 May;3(5):620–7

The significance of oncogene amplification in primary breast cancer. Seshadri R, et al. **Int J Cancer** 1989 Feb 15; 43(2):270–2 (16 ref.)

Adenovirus persistence in man. Defective E1A gene product targeting of infected cells for elimination by natural killer cells. Routes JM, et al. **J Immunol** 1989 Jun 1; 142(11):4022–6

Reactivation of the methylation–inactivated late E2A promoter of adenovirus type 2 by E1A (13 S) functions. Weisshaar B, et al. **J Mol Biol** 1988 Jul 20;202(2):255–70

Conformational effects of the substitution of Arg for Gly 13 in the ras oncogene–encoded P21 protein. Brandt–Rauf PW, et al. **J Protein Chem** 1988 Aug;7(4):349–54

The cellular transcription factor E2f requires viral E1A and E4 gene products for increased DNA–binding activity and functions to stimulate adenovirus E2A gene expression. Babiss LE. **J Virol** 1989 Jun;63(6):2709–17

Adeno–associated virus P5 promoter contains an adenovirus E1A–inducible element and a binding site for the major late transcription factor. Chang LS, et al. **J Virol** 1989 Aug; 63(8):3479–88

Differential induction of cytolytic susceptibility by E1A, myc, and ras oncogenes in immortalized cells. Cook JL, et al. **J Virol** 1989 Aug;63(8):3408–15

Structure, origin, and transforming activity of feline leukemia virus–myc recombinant provirus FTT. Doggett DL, et al. **J Virol** 1989 May;63(5):2108–17

A point mutational analysis of human papillomavirus type 16 E7 protein. Edmonds C, et al. **J Virol** 1989 Jun; 63(6):2650–6

Genetic dissection of the transactivating domain of the E1a 289R protein of adenovirus type 2. Fahnestock ML, et al. **J Virol** 1989 Apr;63(4):1495–504

Limited temperature–sensitive transactivation by mutant adenovirus type 2 E1a proteins. Fahnestock ML, et al. **J Virol** 1989 May;63(5):2348–51

Regulation of adenovirus and cellular gene expression and of cellular transformation by the E1B–encoded 175–amino–acid protein. Herbst RS, et al. **J Virol** 1988 Dec; 62(12):4634–43

Upstream DNA sequences determine different autoregulatory responses of the adenovirus types 5 and 3 E1A promoters. Jones SN, et al. **J Virol** 1989 Apr; 63(4):1833–8

Susceptibility to raf and raf/myc retroviruses is governed by different genetic loci. Klinken SP, et al. **J Virol** 1989 May;63(5):2411–4

Reactivation of a methylation–silenced gene in adenovirus–transformed cells by 5–azacytidine or by E1A trans activation. Knust B, et al. **J Virol** 1989 Aug; 63(8):3519–24

Genetic assignment of multiple E2 gene products in bovine papillomavirus–transformed cells. Lambert PF, et al. **J Virol** 1989 Jul;63(7):3151–4

Independent cyclic AMP and E1A induction of adenovirus early region 4 expression. Leza MA, et al. **J Virol** 1989 Jul;63(7):3057–64

Responsiveness of the Epstein–Barr virus NotI repeat promoter to the Z transactivator is mediated in a cell–type–specific manner by two independent signal regions. Lieberman PM, et al. **J Virol** 1989 Jul; 63(7):3040–50

Differential requirements of gag and gamma–actin domains for transforming potential of Gardner–Rasheed feline sarcoma virus. Miyoshi J, et al. **J Virol** 1989 Mar; 63(3):1174–80

c–myc products trans–activate the adenovirus E4 promoter in EC stem cells by using the same target sequence as E1A products. Onclercq R, et al. **J Virol** 1988 Dec;62(12):4533–7

Multiple transcription factor binding sites mediate adenovirus E1A transactivation. Pei R, et al. **J Virol** 1989 Aug; 63(8):3499–506

Transduction of proto–src sequences in tissue culture by a molecular clone of transformation–defective Rous sarcoma virus with an internal src deletion. Phares W. **J Virol** 1988 Dec;62(12):4791–6

Mutational analysis of autonomously functioning trans–activating peptides encoded by adenovirus E1A: evidence for two subdomains. Pusztai R, et al. **J Virol** 1989 Aug;63(8):3516–8

The adenovirus E4 gene, in addition to the E1A gene, is important for trans–activation of E2 transcription and for E2F activation. Reichel R, et al. **J Virol** 1989 Sep; 63(9):3643–50

The spliced BZLF1 gene of Epstein–Barr virus (EBV) transactivates an early EBV promoter and induces the virus productive cycle. Rooney CM, et al. **J Virol** 1989 Jul; 63(7):3109–16

Phosphorylation of serine residue 89 of human adenovirus E1A proteins is responsible for their characteristic electrophoretic mobility shifts, and its mutation affects biological function [published erratum appears in J Virol 1989 Aug;63(8):3560] Smith CL, et al. **J Virol** 1989 Apr; 63(4):1569–77

Oncogenic and nononcogenic human genital papillomaviruses generate the E7 mRNA by different mechanisms. Smotkin D, et al. **J Virol** 1989 Mar; 63(3):1441–7

The actin domain of Gardner–Rasheed feline sarcoma virus inhibits kinase and transforming activities. Sugita K, et al. **J Virol** 1989 Apr;63(4):1715–20

Adenovirus E1A represses transcription of the cellular JE gene. Timmers HT, et al. **J Virol** 1989 Mar;63(3):1470–3

Harvey murine sarcoma virus: influences of coding and noncoding sequences on cell transformation in vitro and oncogenicity in vivo. Velu TJ, et al. **J Virol** 1989 Mar; 63(3):1384–92

HER2/neu amplification and comedo type breast carcinoma [letter] Borg A, et al. **Lancet** 1989 Jun 3;1(8649):1268–9

Fusion of adenovirus E1A to the glucocorticoid receptor by high–resolution deletion cioning creates a hormonally inducible viral transactivator. Becker DM, et al. **Mol Cell Biol** 1989 Sep;9(9):3878–87

Competition between splicing and polyadenylation reactions determines which adenovirus region E3 mRNAs are synthesized. Brady HA, et al. **Mol Cell Biol** 1988 Aug; 8(8):3291–7

The myristylation signal of p60v–src functionally complements the N–terminal fps–specific region of P130gag–fps. Brooks–Wilson AR, et al. **Mol Cell Biol** 1989 May;9(5):2214–9

Concentration dependence of transcriptional transactivation in inducible E1A–containing human cells. Brunet LJ, et al. **Mol Cell Biol** 1988 Nov;8(11):4799–807

The six amino–terminal amino acids of p60src are sufficient to cause myristylation of p21v–ras. Buss JE, et al. **Mol Cell Biol** 1988 Sep;8(9):3960–3

Mapping of cellular protein–binding sites on the products of early–region 1A of human adenovirus type 5. Egan C, et al. **Mol Cell Biol** 1988 Sep;8(9):3955–9

44–amino–acid E5 transforming protein of bovine papillomavirus requires a hydrophobic core and specific carboxyl–terminal amino acids. Horwitz BH, et al. **Mol Cell Biol** 1988 Oct;8(10):4071–8

Adenovirus transcriptional regulatory regions are conserved in mammalian cells and Saccharomyces cerevisiae. Kornuc M, et al. **Mol Cell Biol** 1988 Sep;8(9):3717–25

Growth factor induction by the adenovirus type 5 E1A 12S protein is required for immortalization of primary epithelial cells. Quinlan MP, et al. **Mol Cell Biol** 1988 Aug; 8(8):3191–203

Selective enhancement of bovine papillomavirus type 1 DNA replication in Xenopus laevis eggs by the E6 gene product. Romanczuk H, et al. **Mol Cell Biol** 1989 Feb;9(2):406–14

The amino–terminal region of the adenovirus serotype 5 E1a protein performs two separate functions when expressed in primary baby rat kidney cells. Smith DH, et al. **Mol Cell Biol** 1988 Sep;8(9):3882–90

The v–ski oncogene encodes a truncated set of c–ski coding exons with limited sequence and structural relatedness to v–myc. Stavnezer E, et al. **Mol Cell Biol** 1989 Sep; 9(9):4038–45

Presence of the adenovirus E1A–like activity in preimplantation stage mouse embryos. Suemori H, et al. **Mol Cell Biol** 1988 Aug;8(8):3553–5

Expression and phenotypic alterations caused by an inducible transforming ras oncogene introduced into rat liver epithelial cells. Huber BE, et al. **Oncogene** 1988 Sep; 3(3):245–56

Activation of the ret–II oncogene without a sequence encoding a transmembrane domain and transforming activity of two ret–II oncogene products differing in carboxy–termini due to alternative splicing. Ishizaka Y, et al. **Oncogene** 1989 Jun;4(6):789–94

Harvey–ras mediated neoplastic development in the mouse mammary gland. Strange R, et al. **Oncogene** 1989 Mar; 4(3):309–15

Enhanced ras oncogene mediated cell transformation and tumorigenesis by adenovirus 2 mutants lacking the C–terminal region of E1a protein. Subramanian T, et al. **Oncogene** 1989 Apr;4(4):415–20

A human sequence homologous to v–sea maps to chromosome 11, band q13. Williams BP, et al. **Oncogene** 1988 Sep;3(3):345–8

Negative regulation of c–myc transcription involves myc family proteins. Cleveland JL, et al. **Oncogene Res** 1988; 3(4):357–75

An invariant asparagine residue belonging to a highly conserved domain in all protein kinases is instrumental in the protein kinase activity of the v–mil gene product. Denhez F, et al. **Oncogene Res** 1988 Sep;3(2):199–205

A point mutation in the DNA binding domain of the v–myb oncogene of E26 virus confers temperature sensitivity for transformation of myelomonocytic cells. Frykberg L, et al. **Oncogene Res** 1988;3(4):313–22

Acceleration of B–lymphoid tumorigenesis in E mu–myc transgenic mice by v–H–ras and v–raf but not v–abl. Langdon WY, et al. **Oncogene Res** 1989;4(4):253–8

E1A products of adenoviruses reduce the expression of cellular proliferation–associated genes. Timmers HT, et al. **Oncogene Res** 1988;3(1):67–76

The E7 open reading frame of human papillomavirus type 16 encodes a transforming gene. Vousden KH, et al. **Oncogene Res** 1988 Sep;3(2):167–75

Characterization of a cDNA clone encoding the visna virus transactivating protein. Davis JL, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):414–8

Specific binding of a HeLa cell nuclear protein to RNA sequences in the human immunodeficiency virus transactivating region. Gaynor R, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4858–62

Bioassay for trans–activation using purified human immunodeficiency virus tat–encoded protein: trans–activation requires mRNA synthesis. Gentz R, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):821–4

Transgenic mouse model for human gastric carcinoma. Koike K, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5615–9

Cyclic AMP induction of early adenovirus promoters involves sequences required for E1A trans–activation. Sassone–Corsi P. **Proc Natl Acad Sci U S A** 1988 Oct; 85(19):7192–6

The v–sea oncogene of avian erythroblastosis retrovirus S13: another member of the protein–tyrosine kinase gene family. Smith DR, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(14):5291–5

Genomic sequencing reveals a 5–methylcytosine–free domain in active promoters and the spreading of preimposed methylation patterns. Toth M, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3728–32

The human papilloma virus–16 E7 oncoprotein is able to bind to the retinoblastoma gene product. Dyson N, et al. **Science** 1989 Feb 17;243(4893):934–7

Detection of ras oncogenes by analysis of p21 proteins in human tumor cell lines. Fujita J, et al. **Urol Res** 1988; 16(6):415–8

Sequences in E1A proteins of human adenovirus 5 required for cell transformation, repression of a transcriptional enhancer, and induction of proliferating cell nuclear antigen. Jelsma TN, et al. **Virology** 1989 Jul;171(1):120–30

Complementation of enteric adenovirus type 40 for lytic growth in tissue culture by E1B 55K function of adenovirus types 5 and 12. Mautner V, et al. **Virology** 1989 Aug; 171(2):619–22

Human papillomavirus type 16 E7 protein expressed in Escherichia coli and monkey COS–1 cells: immunofluorescence detection of the nuclear E7 protein. Sato H, et al. **Virology** 1989 May;170(1):311–5

IMMUNOLOGY

Analysis of ras gene expression in stomach cancer by anti-ras p21 monoclonal antibodies. Yoshida K, et al. **Cancer Detect Prev** 1988;12(1-6):369-76

Monoclonal antibodies to oncogene products. Niman HL. **Prog Clin Biol Res** 1989;288:35-52 (81 ref.)

Lack of a serologic response to an E1B protein of adenovirus 12 in coeliac disease. Howdle PD, et al. **Scand J Gastroenterol** 1989 Apr;24(3):282-6

Monoclonal antibodies to oncogene encoded proteins. Immunologic modulation of cell growth, differentiation, and function. Myers JN, et al. **Year Immunol** 1989;5:178-94 (101 ref.)

ISOLATION & PURIFICATION

Phosphorylation at serine 89 induces a shift in gel mobility but has little effect on the function of adenovirus type 5 E1A proteins. Dumont DJ, et al. **J Virol** 1989 Feb; 63(2):987-91

METABOLISM

Internalization and degradation of insulin by a human insulin receptor-v-ros hybrid in Chinese hamster ovary cells. Hari J, et al. **Biochem Biophys Res Commun** 1989 Feb 15; 158(3):705-11

Comparison of the conformation and GTP hydrolysing ability of N-terminal ras p21 protein segments. Niu CH, et al. **Biochem Biophys Res Commun** 1989 Apr 14; 160(1):282-8

Secretion, glycosylation, and phosphorylation of rat-specific, transformation-associated proteins in Moloney murine sarcoma virus-transformed rat cells. Li WJ, et al. **Cancer Res** 1989 Apr 1;49(7):1746-51

The cellular 107K protein that binds to adenovirus E1A also associates with the large T antigens of SV40 and JC virus. Dyson N, et al. **Cell** 1989 Jul 28;58(2):249-55

A 60 kd cdc2-associated polypeptide complexes with the E1A proteins in adenovirus-infected cells. Giordano A, et al. **Cell** 1989 Sep 8;58(5):981-90

Rapid turnover of adenovirus E1A is determined through a co-translational mechanism that requires an aminoterminal domain. Slavicek JM, et al. **EMBO J** 1988 Oct;7(10):3171-80

Repression of cytochrome P-450c gene expression by cotransfection with adenovirus E1a DNA. Sogawa K, et al. **Eur J Biochem** 1989 May 15;181(3):539-44

Papillomavirus polypeptides E6 and E7 are zinc-binding proteins. Barbosa MS, et al. **J Virol** 1989 Mar;63(3):1404-7

Isolation and characterization of a viable adenovirus mutant defective in nuclear transport of the DNA-binding protein. Cleghon V, et al. **J Virol** 1989 May;63(5):2289-99

Regulation of kinase activity [letter] Grandori C. **Nature** 1989 Apr 6;338(6215):467

Binding of the Rb1 protein to E1A products is required for adenovirus transformation. Egan C, et al. **Oncogene** 1989 Mar;4(3):383-8

E6 protein of human papillomavirus type 18 binds zinc. Grossman SR, et al. **Oncogene** 1989 Sep;4(9):1089-93

The marriage of oncogenes and anti-oncogenes. Linzer DI. **Trends Genet** 1988 Sep;4(9):245-7 (28 ref.)

Mapping of a phosphorylation site in the 176R (19 kDa) early region 1B protein of human adenovirus type 5. McGlade CJ, et al. **Virology** 1989 Jan;168(1):119-27

Analysis of phosphorylation sites in the exon 1 region of E1A proteins of human adenovirus type 5. Tremblay ML, et al. **Virology** 1989 Apr;169(2):397-407

PHARMACOLOGY

Scrape-loaded p21ras down-regulates agonist-stimulated inositol phosphate production by a mechanism involving protein kinase C. Price BD, et al. **Biochem J** 1989 May 15;260(1):157-61

Adenovirus type 12 E1A down regulates expression of a transgene under control of a major histocompatibility complex class I promoter: evidence for transcriptional control. Meijer I, et al. **J Virol** 1989 Sep;63(9):4039-42

Trans activation by the bovine papillomavirus E2 protein in Saccharomyces cerevisiae. Morrissey LC, et al. **J Virol** 1989 Oct;63(10):4422-5

The adenovirus-inducible factor E2F stimulates transcription after specific DNA binding. Yee AS, et al. **Mol Cell Biol** 1989 Feb;9(2):578-85

PHYSIOLOGY

Early cellular responses to the activation of a mitogenic/oncogenic viral K-RAS protein. Durkin JP, et al. **Ann N Y Acad Sci** 1988;551:186-200

Epidermal growth factor receptor is down-regulated by a 10,400 MW protein encoded by the E3 region of adenovirus. Carlin CR, et al. **Cell** 1989 Apr 7;57(1):135-44

Interaction with normal cells suppresses the transformed phenotype of v-myc-transformed quail muscle cells. La Rocca SA, et al. **Cell** 1989 Jul 14;58(1):123-31

Cellular targets for transformation by the adenovirus E1A proteins. Whyte P, et al. **Cell** 1989 Jan 13;56(1):67-75

Ras-mediated cell cycle arrest is altered by nuclear oncogenes to induce Schwann cell transformation. Ridley AJ, et al. **EMBO J** 1988 Jun;7(6):1635-45

Comparison of the in vitro transforming activities of human papillomavirus types. Storey A, et al. **EMBO J** 1988 Jun; 7(6):1815-20

cAMP acts in synergy with E1A protein to activate transcription of the adenovirus early genes E4 and E1A. Engel DA, et al. **Genes Dev** 1988 Dec;2(12a):1517-28

The adenovirus EIIA enhancer. Analysis of regulatory sequences and changes in binding activity of ATF and EIIF following adenovirus infection. Loeken MR, et al. **J Biol Chem** 1989 Apr 15;264(11):6572-9

Protein kinase C and a viral K-RAS protein cooperatively enhance the response of adenylate cyclase to stimulators. Franks DJ, et al. **J Cell Physiol** 1989 Sep;140(3):409-7

Role of adenovirus type 2 early region 1B 19K protein stability in expression of the cyt and deg phenotypes. Kumai H, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):1975-86

Mouse anti-adenovirus cytotoxic T lymphocytes. Inhibition of lysis by E3 gp19K but not E3 14.7K. Rawle FC, et al. **J Immunol** 1989 Sep 15;143(6):2031-7

Two nuclear oncogenic proteins, P135gag-myb-ets and p61/63myc, cooperate to induce transformation of chicken neuroretina cells. Amouyel P, et al. **J Virol** 1989 Aug; 63(8):3382-8

Functions of the two adenovirus early E1A proteins and their conserved domains in cell cycle alteration, actin reorganization, and gene activation in rat cells. Bellett AJ, et al. **J Virol** 1989 Jan;63(1):303-10

The human papillomavirus type 18 (HPV18) E2 gene product is a repressor of the HPV18 regulatory region in human keratinocytes. Bernard BA, et al. **J Virol** 1989 Oct; 63(10):4317-24

Ability of p53 and the adenovirus E1b 58-kilodalton protein to form a complex is determined by p53. Braithwaite AW, et al. **J Virol** 1989 Apr;63(4):1792-9

Functional significance of phosphorylation to the human immunodeficiency virus Rev protein. Cochrane AW, et al. **J Virol** 1989 Oct;63(10):4438-40

Human papillomavirus type 16 transformation of primary human embryonic fibroblasts requires expression of open reading frames E6 and E7. Watanabe S, et al. **J Virol** 1989 Feb;63(2):965-9

E1a transactivation of the human HSP70 promoter is mediated through the basal transcriptional complex. Williams GT, et al. **Mol Cell Biol** 1989 Jun;9(6):2574-87

Adenovirus E1A-mediated negative control of genes activated during F9 differentiation. Young KS, et al. **Mol Cell Biol** 1989 Jul;9(7):3109-13

Transcription activation by the adenovirus E1a protein. Lillie JW, et al. **Nature** 1989 Mar 2;338(6210):39-44

In vivo photocrosslinking reveals that transcription factor binding to the mammalian ATF recognition sequence is required for E1A-induced transactivation in injected Xenopus laevis oocytes. Richter JD. **Nucleic Acids Res** 1989 Jun 26;17(12):4503-16

The multiple membrane-spanning segments of the BNLF-1 oncogene from Epstein-Barr virus are required for transformation. Baichwal VR, et al. **Oncogene** 1989 Jan; 4(1):67-74

Trans-activation of human MYC: the second promoter is target for the stimulation by adenovirus E1a proteins. Lipp M, et al. **Oncogene** 1989 May;4(5):535-41

Scrape-loading of Swiss 3T3 cells with ras protein rapidly activates protein kinase C in the absence of phosphoinositide hydrolysis. Morris JD, et al. **Oncogene** 1989 Jan;4(1):27-31

The adenovirus-5 12S E1a protein, but not the 13S induces expression of the endoA differentiation marker in F9 cells. Velcich A, et al. **Oncogene** 1989 Jun;4(6):707-13

Anatomy of fos proteins. Vingron M, et al. **Oncogene Res** 1988;3(1):1-7 (32 ref.)

E1A-dependent trans-activation of the human MYC promoter is mediated by the E2F factor. Hiebert SW, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3594-8

The functions of oncogene products. Hunter T. **Prog Clin Biol Res** 1989;288:25-34 (7 ref.)

A small deletion in the carboxy terminus of the viral myc gene renders the virus MC29 partially transformation defective in avian fibroblasts. Enrietto PJ. **Virology** 1989 Feb;168(2):256-66

The human cytomegalovirus major immediate early promoter can be trans-activated by adenovirus early proteins. Gorman CM, et al. **Virology** 1989 Aug;171(2):377-85

ONCOGENES

Tumour growth factors. Ernberg IT. **Acta Chir Scand Suppl** 1989;549:11-6 (14 ref.)

DNA sequence specificity of antitumor agents. Oncogenes as possible targets for cancer therapy. Hartley JA, et al. **Acta Oncol** 1988;27(5):503-10 (31 ref.)

Oncogenes and tumor suppressor genes. Klein G. **Acta Oncol** 1988;27(4):427-37 (123 ref.)

Oncogene activation in chemical carcinogenesis. Balmain A, et al. **Adv Cancer Res** 1988;51:147-82 (173 ref.)

Biology of growth factors. Molecular biology, oncogenes, signal transduction, and clinical implications. Proceedings of the triennial symposium of the Banting and Best Diabetes Centre. June 17-19, 1987, Toronto, Canada. **Adv Exp Med Biol** 1988;234:1-238

Do oncogenes play a role in tumor metastasis? Eisenbach L, et al. **Adv Exp Med Biol** 1988;233:281-91

Structure-function relationships in cellular and viral fps/fes cytoplasmic protein-tyrosine kinases. Pawson T, et al. **Adv Exp Med Biol** 1988;234:55-64 (33 ref.)

Regulation of the metastatic phenotype by the E1A gene of adenovirus-2. Pozzatti R, et al. **Adv Exp Med Biol** 1988; 233:293-301

The viral and cellular forms of the Abelson (abl) oncogene. Rosenberg N, et al. **Adv Virus Res** 1988;35:39-81 (199 ref.)

Growth factor receptors and oncogene expression in prostate cells. Davies P, et al. **Am J Clin Oncol** 1988;11 Suppl 2:S1-7 (24 ref.)

Oncogenes and their applications in epidemiologic studies. Taylor JA. **Am J Epidemiol** 1989 Jul;130(1):6-13 (64 ref.)

Oncogenes and human breast cancer. Hall JM, et al. **Am J Hum Genet** 1989 Apr;44(4):577-84

Temporal and constitutive expression of homeobox-2 gene (Hu-2), human heat shock gene (hsp-70), and oncogenes C-sis and N-myc in early human trophoblast. Su BC, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1195-9

Altered junctional permeability between cells transformed by v-ras, v-mos, or v-src. Atkinson MM, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):C674-83

Oncogenes, hormones, and free-radical processes in malignant transformation in vitro. Borek C. **Ann N Y Acad Sci** 1988;551:95-101; discussion 102

Molecular cloning of PTC, a new oncogene found activated in human thyroid papillary carcinomas and their lymph node metastases. Grieco M, et al. **Ann N Y Acad Sci** 1988; 551:380-1

Amino acid and sugar transport in mouse 3T3 cells expressing activated ras and neu oncogenes. Longo N, et al. **Ann N Y Acad Sci** 1988;551:374-7

Growth factor and oncogene influences on cell growth regulation. Serunian LA, et al. **Ann N Y Acad Sci** 1988; 551:309-19 (34 ref.)

Dissecting multistep tumorigenesis in transgenic mice. Hanahan D. **Annu Rev Genet** 1988;22:479-519 (106 ref.)

Molecular pathogenesis of Ph-positive leukemias. Clark SS, et al. **Annu Rev Med** 1989;40:113-22 (49 ref.)

Immortalization of neural cells via retrovirus-mediated oncogene transduction. Cepko CL. **Annu Rev Neurosci** 1989;12:47-65 (75 ref.)

Novel neurotrophic factors, receptors, and oncogenes. Walicke PA. **Annu Rev Neurosci** 1989;12:103-26 (195 ref.)

Abstracts of the symposium: Oncogenes and onco-suppressor genes. March 30-April 1, 1989, Athens, Greece. **Anticancer Res** 1989 Mar-Apr;9(2):511-33

Onco-suppressor genes and their involvement in cancer (review). Anderson ML, et al. **Anticancer Res** 1988 Sep-Oct;8(5A):873-9 (79 ref.)

Oncogene expression and regulation in normal lymphocytes and lymphocytes from patients with autoimmune diseases. Eoumpas DT, et al. **Anticancer Res** 1988 Sep-Oct; 8(5A):977-84 (51 ref.)

Proto-neoplasia revisited: the molecular biology of mouse mammary hyperplasia. Cardiff RD, et al. **Anticancer Res** 1988 Sep-Oct;8(5A):925-33 (122 ref.)

Oncogene transformation and the metastatic phenotype. Chambers AF, et al. **Anticancer Res** 1988 Sep-Oct; 8(5A):861-71 (120 ref.)

Amplification of oncogenes in lung carcinoma grafted in nude mice. Chauvin C, et al. **Anticancer Res** 1989 Mar-Apr; 9(2):449-52

Cooperation of oncogenes in the multistep transformation of established fibroblasts in culture. Davenport EA, et al. **Anticancer Res** 1988 Sep-Oct;8(5A):959-69

Differential activity of two oncogenes from chromosome #7 in human glioblastoma cell lines. Göttert E, et al. **Anticancer Res** 1989 May-Jun;9(3):653-7

The cell biology of ras-induced transformation: insights from studies utilizing an inducible hybrid oncogene system. Haliotis T, et al. **Anticancer Res** 1988 Sep-Oct; 8(5A):935-45 (81 ref.)

Phenotypic and genetic alterations in pre-cancerous cells in the colon. Lundy J, et al. **Anticancer Res** 1988 Sep-Oct; 8(5A):1005-13 (58 ref.)

Oncodevelopmental expression and structure of alkaline phosphatase genes. Millán JL. **Anticancer Res** 1988 Sep-Oct;8(5A):995-1004 (90 ref.)

PA-1, a human cell model for multistage carcinogenesis: oncogenes and other factors. Tainsky MA, et al. **Anticancer Res** 1988 Sep-Oct;8(5A):899-913 (65 ref.)

Oncogenes in malignancy. Malcolm S. **Arch Dis Child** 1988 Sep;63(9):1099-103 (16 ref.)

Flow cytometric analysis of oncogene expression in human neoplasias. Stewart CC. **Arch Pathol Lab Med** 1989 Jun; 113(6):634-40 (112 ref.)

Provirus tagging as an instrument to identify oncogenes and to establish synergism between oncogenes. Berns A. **Arch Virol** 1988;102(1-2):1-18 (133 ref.)

Inhibition of glycosylation processing alters the growth parameters of cells transformed by the oncogene of simian sarcoma virus. Hadwiger-Fangmeier A, et al. **Arch Virol** 1989;104(3-4):339-45

Modulation of polyamine biosynthesis and transport by oncogene transfection. Chang BK, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):264-70

Internalization and degradation of insulin by a human insulin receptor-v-ros hybrid in Chinese hamster ovary cells. Hari J, et al. **Biochem Biophys Res Commun** 1989 Feb 15; 158(3):705-11

Irreversible inhibition of v-src tyrosine kinase activity by herbimycin A and its abrogation by sulfhydryl compounds. Uehara Y, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):803-9

Two homologous oncogenes, HST1 and INT2, are closely located in human genome. Wada A, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):828–35

Expression of the HST1 oncogene in human germ cell tumors [published erratum appears in Biochem Biophys Res Commun 1988 Dec 15;157(2):850] Yoshida T, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1324–9

A truncated v-abl-derived tyrosine-specific tyrosine kinase expressed in Escherichia coli. Pritchard ML, et al. **Biochem J** 1989 Jan 15;257(2):321–9

Oncogenes in transgenic mice. Compere SJ, et al. **Biochim Biophys Acta** 1988 Nov 15;948(2):129–49 (167 ref.)

Cyclic-AMP-induced c-fos expression and its relevance to differentiation of a transformed mast cell line. Goulding MD, et al. **Biochim Biophys Acta** 1989 Jan 23; 1007(1):99–108

Constitutive c-myc expression enhances proliferation of differentiating F9 teratocarcinoma cells. Schulz WA, et al. **Biochim Biophys Acta** 1989 Sep 19;1013(2):125–32

The fms oncogene. Sherr CJ. **Biochim Biophys Acta** 1988 Nov 15;948(2):225–43 (155 ref.)

Interferons and oncogenes in the control of cell growth and differentiation: working hypothesis and experimental facts. Mechti N, et al. **Biochimie** 1988 Jul;70(7):869–75 (43 ref.)

Susceptibility of Xeroderma pigmentosum cells to transformation with oncogenes. Suarez H, et al. **Biochimie** 1988 Jul;70(7):969–73

Steroid hormone receptors and oncogenes. Shepel LA, et al. **Biofactors** 1988 Jan;1(1):71–83 (151 ref.)

Epidemiologic studies of the molecular genetics of cancer. Taylor JA. **Birth Defects** 1989;25(2):83–93 (49 ref.)

Lack of involvement of the c-fms and N-myc genes by chromosomal translocation t(2;5)(p23;q35) common to malignancies with features of so-called malignant histiocytosis. Morgan R, et al. **Blood** 1989 Jun; 73(8):2155–64

The Rb gene and the negative regulation of cell growth. Weinberg RA. **Blood** 1989 Aug 1;74(2):529–32 (25 ref.)

Oncogenes in the myelodysplastic syndrome. Jacobs A. **Blood Rev** 1989 Jun;3(2):105–9 (34 ref.)

Estrogen increases c-myc RNA in human thyroids. Hanau S, et al. **Boll Soc Ital Biol Sper** 1988 Sep;64(9):791–4

N-myc gene expression and oncoprotein characterisation in medulloblastoma. Garson JA, et al. **Br J Cancer** 1989 Jun; 59(6):889–94

Viral and cellular oncogenes in papillomavirus-associated cancers. Campo MS. **Br J Cancer Suppl** 1988 Dec;9:80–4 (59 ref.)

Transcriptional regulation of the human c-myc gene. Lang JC, et al. **Br J Cancer Suppl** 1988 Dec;9:62–6 (34 ref.)

Oncogenes and the pathogenesis of human cancers: implications for cancer diagnosis and management. Cline MJ. **Br J Clin Pract Symp Suppl** 1988 Mar;62:2–4 (10 ref.)

Serum screening for oncogene proteins in workers exposed to PCBs. Brandt-Rauf PW, et al. **Br J Ind Med** 1988 Oct; 45(10):689–93

Retroviruses and oncogenes. Dalgleish AG. **Br J Rheumatol** 1989 Aug;28(4):350–7 (36 ref.)

Expression of c-myc oncogene in colorectal polyps as a biological marker for monitoring malignant potential. Imaseki H, et al. **Cancer** 1989 Aug 1;64(3):704–9

Hereditary cancers disclose a class of cancer genes. Knudson AG Jr. **Cancer** 1989 May 15;63(10):1888–91

ras oncogene expression and prognosis of invasive squamous cell carcinomas of the uterine cervix. Sagae S, et al. **Cancer** 1989 Apr 15;63(8):1577–82

The N-myc gene product in primary retinoblastomas. Yokoyama T, et al. **Cancer** 1989 Jun 1;63(11):2134–8

Simultaneous existence of double minute chromosomes and a homogeneously staining region in a retinoblastoma cell line (Y79) and amplification of N-myc at HSR. Inazawa J, et al. **Cancer Genet Cytogenet** 1989 Jan;37(1):133–7

KRAS2 oncogene overexpression in myelodysplastic syndrome with translocation 5;12. Srivastava A, et al. **Cancer Genet Cytogenet** 1988 Oct 1;35(1):61–71

Oncogenes in human leukemias. Butturini A, et al. **Cancer Invest** 1988;6(3):305–16 (90 ref.)

Oncogene ras p21- and v-src pp60-transformed cells exhibit altered expression of proteases. DiStefano JF, et al. **Cancer Invest** 1988;6(5):487–98

Human KRAS oncogene expression in meningioma. Carstens C, et al. **Cancer Lett** 1988 Dec 1;43(1-2):37–41

A model to account for the effects of oncogenes, TPA, and retinoic acid on the regulation of genes involved in metastasis. Pohl J, et al. **Cancer Metastasis Rev** 1988 Dec; 7(4):347–56 (102 ref.)

myc family gene abnormality in lung cancers and its relation to xenotransplantability. Gemma A, et al. **Cancer Res** 1988 Nov 1;48(21):6025–8

Presence of a constitutive paracrine beta-interferon in v-mos-bearing nonmalignant reverted cells. Gerfaux J, et al. **Cancer Res** 1989 Mar 1;49(5):1241–6

Induction of fos RNA by DNA-damaging agents. Hollander MC, et al. **Cancer Res** 1989 Apr 1;49(7):1687–92

Modification of myc gene amplification in human somatic cell hybrids. Iman DS, et al. **Cancer Res** 1989 Aug 15; 49(16):4417–22

Amplification of the integrated viral transforming genes of human papillomavirus 18 and its 5'-flanking cellular sequence located near the myc protooncogene in HeLa cells. Lazo PA, et al. **Cancer Res** 1989 Aug 1; 49(15):4305–10

Incidence and possible clinical significance of K-ras oncogene activation in adenocarcinoma of the human lung. Rodenhuis S, et al. **Cancer Res** 1988 Oct 15;48(20):5738–41

Gene regulation and oncogenes. AACR special conference in cancer research. American Association for Cancer Research. Sharp PA. **Cancer Res** 1989 Apr 15; 49(8):2188–94

Correlation between long-term survival in breast cancer patients and amplification of two putative oncogene-coamplification units: hst-1/int-2 and c-erbB-2/ear-1. Tsuda H, et al. **Cancer Res** 1989 Jun 1; 49(11):3104–8

Mouse retroviral sequences acquired by cell lines after passaging through nude mice detected by hybridization of the fms probe pSM3. Walker C, et al. **Cancer Res** 1989 Feb 1;49(3):625–8

Oncogenes, antioncogenes, and the molecular bases of multistep carcinogenesis. Weinberg RA. **Cancer Res** 1989 Jul 15;49(14):3713–21 (97 ref.)

Expression of growth factors and oncogenes in normal and tumor-derived human mammary epithelial cells. Zajchowski D, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7041–7

Genes controlling the metastatic phenotype. Feldman M, et al. **Cancer Surv** 1988;7(4):555–72 (29 ref.)

The action of oncogenes and growth factors in tumour initiation and promotion. Akhurst R, et al. **Carcinog Compr Surv** 1989;11:243–55 (34 ref.)

Transformation of rat liver epithelial cells with v-H-ras or v-raf causes expression of MDR-1, glutathione-S-transferase-P and increased resistance to cytotoxic chemicals. Burt RK, et al. **Carcinogenesis** 1988 Dec;9(12):2329–32

Alterations in transformation efficiency by the ADPRT-inhibitor 3-aminobenzamide are oncogene specific. Diamond AM, et al. **Carcinogenesis** 1989 Feb; 10(2):383–5

Expression of the oncogenes mil and ras abolishes the in vivo differentiation of mammary epithelial cells. Günzburg WH, et al. **Carcinogenesis** 1988 Oct;9(10):1849–56

Transformation of diploid human fibroblasts by transfection of N-ras-oncogenes. Wilson DM, et al. **Carcinogenesis** 1989 Apr;10(4):635–40

daughterless, a Drosophila gene essential for both neurogenesis and sex determination, has sequence similarities to myc and the achaete-scute complex. Caudy M, et al. **Cell** 1988 Dec 23;55(6):1061–7

Fos and Jun: the AP-1 connection. Curran T, et al. **Cell** 1988 Nov 4;55(3):395–7 (47 ref.)

A single point mutation in the v-ets oncogene affects both erythroid and myelomonocytic cell differentiation. Golay J, et al. **Cell** 1988 Dec 23;55(6):1147–58

When the products of oncogenes and anti-oncogenes meet. Green MR. **Cell** 1989 Jan 13;56(1):1–3 (0 ref.)

Activation of c-myc by woodchuck hepatitis virus insertion in hepatocellular carcinoma. Hsu T, et al. **Cell** 1988 Nov 18;55(4):627–35

Interaction with normal cells suppresses the transformed phenotype of v-myc-transformed quail muscle cells. La Rocca SA, et al. **Cell** 1989 Jul 14;58(1):123–31

MyoD is a sequence-specific DNA binding protein requiring a region of myc homology to bind to the muscle creatine kinase enhancer. Lassar AB, et al. **Cell** 1989 Sep 8; 58(5):823–31

Isolation and properties of cDNA clones encoding SRF, a transcription factor that binds to the c-fos serum response element. Norman C, et al. **Cell** 1988 Dec 23;55(6):989–1003

GM-CSF and oncogene mRNA stabilities are independently regulated in trans in a mouse monocytic tumor. Schuler GD, et al. **Cell** 1988 Dec 23;55(6):1115–22

C-myc gene expression in heat-adapted and heat-shocked cells. Cajone F, et al. **Cell Biol Int Rep** 1988 Jul; 12(7):549–53

Embryonic inducers, growth factors, transcription factors and oncogenes. Knöchel W, et al. **Cell Differ Dev** 1989 May;26(3):163–71 (90 ref.)

Immortalized phenotype and the presence of active oncogenes correlate with the capacity of culture cells to induce reactivation of DNA synthesis in macrophage nuclei in heterokaryons. Prudovsky IA, et al. **Cell Differ Dev** 1989 May;26(3):221–8

Immortalization of cloned mouse splenic macrophages with a retrovirus containing the v-raf/mil and v-myc oncogenes. Roberson SM, et al. **Cell Immunol** 1988 Oct 15;116(2):341–51

Oncogenes and genetic abnormalities in lung cancer. Carney DN. **Chest** 1989 Jul;96(1 Suppl):25S–27S (20 ref.)

Oncogene expression detected by in situ hybridization in human primary lung cancer. Lee JH, et al. **Chest** 1988 Nov; 94(5):1046–9

Genetic events in the pathogenesis of lung cancer. Minna JD. **Chest** 1989 Jul;96(1 Suppl):17S–23S (126 ref.)

Expression of c-myc and N-ras oncogenes in human hepatocellular carcinoma and pancreatic adenocarcinoma. A biochemical and immunocytochemical study. Lin Y, et al. **Chin Med J [Engl]** 1988 Jul;101(7):523–8

Oncogene induction of metastases. Liotta LA. **Ciba Found Symp** 1988;141:94–108 (28 ref.)

Transgenic mice and host cell mutants resistant to transformation as model systems for identifying multiple components in oncogenesis. Varmus H. **Ciba Found Symp** 1989;142:20–6; discussion 26–35 (23 ref.)

Association of near-diploid DNA content and N-myc amplification in neuroblastomas. Dominici C, et al. **Clin Exp Metastasis** 1989 Mar-Apr;7(2):201–11

Oncogenes: past, present and future. Klinken SP. **Clin Exp Pharmacol Physiol** 1989 Jun;16(6):505–9 (30 ref.)

Jun: oncogene and transcriptional regulator. Ball AR Jr, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:687–93

Regulating cell growth: casein-kinase-II-dependent phosphorylation of nuclear oncoproteins. Carroll D, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:91–5

Beyond the second messenger: oncogenes and transcription factors. Curran T, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:769–77 (37 ref.)

Anti-oncogenes and the negative regulation of cell growth. Horowitz JM, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:843–7

Oncogenes and growth factors. Sinkovics JG. **CRC Crit Rev Immunol** 1988;8(4):217–98 (651 ref.)

Mechanisms in B-cell neoplasia. Workshop at the National Cancer Institute, National Institutes of Health, Bethesda, MD, USA, March 23–25, 1988. Proceedings. **Curr Top Microbiol Immunol** 1988;141:1–340

Differential expression of myc-family genes during development: normal and deregulated N-myc expression in transgenic mice. Dildrop R, et al. **Curr Top Microbiol Immunol** 1988;141:100–9

Analysis of the leukemogenic properties of the bcr-v-abl and GM-CSF genes using a new retroviral vector. Hariharan IK, et al. **Curr Top Microbiol Immunol** 1989; 149:99–107

Bursal stem cells as targets for myc-induced preneoplastic proliferation and maturation arrest. Neiman PE, et al. **Curr Top Microbiol Immunol** 1988;141:67–74

Alternate forms of myb: consequences of virus insertion in myeloid tumorigenesis and alternative splicing in normal development. Shen-Ong GL. **Curr Top Microbiol Immunol** 1989;149:71–6 (11 ref.)

Closely related BCR/ABL oncogenes are associated with the distinctive clinical biologies of Philadelphia chromosome positive chronic myelogenous and acute lymphocytic leukemia. Witte ON. **Curr Top Microbiol Immunol** 1988;141:42–9 (31 ref.)

A system for deriving revertants of oncogene-transformed human cells. Talbot N, et al. **Cytogenet Cell Genet** 1988; 48(2):112–6

Regional localization of the LCA oncogene to human chromosome region 2q14——q21. Tokino T, et al. **Cytogenet Cell Genet** 1988;48(1):63–4

Comparative analysis of oncogene expression and chromosome abnormalities between metastatic and nonmetastatic B16 melanoma clones. Funasaka Y, et al. **Dermatologica** 1988;177(4):200–11

Molecular cloning of the lethal(1)discs large-1 oncogene of Drosophila. Woods DF, et al. **Dev Biol** 1989 Jul; 134(1):222–35

Differentiation and oncogenes. Adinolfi M. **Dev Med Child Neurol** 1988 Aug;30(4):543–6 (23 ref.)

Nullisomic deletion of the mcf.2 transforming gene in two haemophilia B patients. Anson DS, et al. **EMBO J** 1988 Sep;7(9):2795–9

IgH enhancer-mediated deregulation of N-myc gene expression in transgenic mice: generation of lymphoid neoplasias that lack c-myc expression. Dildrop R, et al. **EMBO J** 1989 Apr;8(4):1121–8

A novel oncogene related to c-mil is transduced in chicken neuroretina cells induced to proliferate by infection with an avian lymphomatosis virus. Marx M, et al. **EMBO J** 1988 Nov;7(11):3369–73

Ras-mediated cell cycle arrest is altered by nuclear oncogenes to induce Schwann cell transformation. Ridley AJ, et al. **EMBO J** 1988 Jun;7(6):1635–45

N-myc is frequently activated by proviral insertion in MuLV-induced T cell lymphomas. van Lohuizen M, et al. **EMBO J** 1989 Jan;8(1):133–6

Transforming but not immortalizing oncogenes activate the transcription factor PEA1. Wasylyk C, et al. **EMBO J** 1988 Aug;7(8):2475–83

Human neuroblastoma cell lines as models for the in vitro study of neoplastic and neuronal cell differentiation. Abemayor E, et al. **Environ Health Perspect** 1989 Mar; 80:3–15 (147 ref.)

c-myc protooncogene expression in mouse erythroleukemia cells. Lachman HM. **Environ Health Perspect** 1989 Mar; 80:161–72 (93 ref.)

Oncogene activation in spontaneous and chemically induced rodent tumors: implications for risk analysis. Reynolds SH, et al. **Environ Health Perspect** 1988 Jun;78:175–7

Nuclear oncogene amplification or rearrangement is not involved in human colorectal malignancies. Dolcetti R, et al. **Eur J Cancer Clin Oncol** 1988 Aug;24(8):1321–8

Recurrent breast cancer and an adenocarcinoma of the lung occurring in one patient: c-myc oncogene amplification and K-ras codon 12 point mutation as tumour markers [letter] Slebos RJ, et al. **Eur J Cancer Clin Oncol** 1988 Sep;24(9):1529–30

Oncogenes in gynaecological cancers. Minucci D. **Eur J Gynaecol Oncol** 1989;10(4):235–9

Decline in c-myc mRNA expression but not the induction of c-fos mRNA expression is associated with differentiation of SH-SY5Y human neuroblastoma cells. Jalava AM, et al. **Exp Cell Res** 1988 Nov;179(1):10–7

In vitro proliferation of human large granular lymphocytes with v-raf/v-myc recombinant retrovirus. Peppoloni S, et al. **Experientia** 1988 Dec 1;44(11-12):1013-5
Transgenic mouse models and peptide producing endocrine tumours: morpho-functional aspects. Rindi G, et al. **Experientia Suppl** 1989;56:210-9 (42 ref.)
Oncogene-associated tumor antigens as targets for immunotherapy. Hellström KE, et al. **FASEB J** 1989 Apr; 3(6):1715-22 (65 ref.)
Therapeutic opportunities involving cellular oncogenes: novel approaches fostered by biotechnology. Huber BE. **FASEB J** 1989 Jan;3(1):5-13 (42 ref.)
Chromosomal approaches to oncogenes and oncogenesis. Nowell PC, et al. **FASEB J** 1988 Dec;2(15):3054-60 (40 ref.)
Characterization of DNA rearrangements of N-myc gene amplification in three neuroblastoma cell lines by pulsed-field gel electrophoresis. Kato H, et al. **FEBS Lett** 1989 Jul 3;250(2):529-35
Differential sensitivity to pertussis toxin of 3T3 cells transformed with different oncogenes. Rey I, et al. **FEBS Lett** 1988 Sep 12;237(1-2):203-7
Avian nephroblastomas induced by a retrovirus (MAV-2) lacking oncogene. III. Presence of defective MAV-2 proviruses in tumour DNA. Pečenka V, et al. **Folia Biol (Praha)** 1988;34(4):215-32
Hypomethylation of the c-myc oncogene in liver cirrhosis and chronic hepatitis. Aiba N, et al. **Gastroenterol Jpn** 1989 Jun;24(3):270-6
Oncogenes. **Gene Amplif Anal** 1986;4:1-293
Oncogenes: molecular probes for clinical application in malignant diseases. Ascione R, et al. **Gene Amplif Anal** 1986;4:253-77 (117 ref.)
Activation of ras oncogenes by chemical carcinogens. Barbacid M, et al. **Gene Amplif Anal** 1986;4:21-38
Serum-free selection of onc genes. Beggs AH, et al. **Gene Amplif Anal** 1986;4:177-95
High-level expression of oncogenes in Escherichia coli. Lautenberger JA, et al. **Gene Amplif Anal** 1983;3:147-74
The myb oncogene. Lipsick JS, et al. **Gene Amplif Anal** 1986; 4:73-98 (109 ref.)
Viral myc genes and their cellular homologs. Papas TS, et al. **Gene Amplif Anal** 1986;4:109-42 (30 ref.)
Involvement of oncogene-coded growth factors in the neoplastic process. Robbins KC, et al. **Gene Amplif Anal** 1986;4:161-76 (44 ref.)
Structure and mechanism of activation of the myb oncogene. Rosson D, et al. **Gene Amplif Anal** 1986;4:99-108 (21 ref.)
Properties of the met oncogene. Vande Woude GF, et al. **Gene Amplif Anal** 1986;4:239-52
Ha-ras and c-myc oncogene expression interferes with morphological and functional differentiation of mammary epithelial cells in single and double transgenic mice. Andres AC, et al. **Genes Dev** 1988 Nov;2(11):1486-95
Regulated expression at high copy number allows production of a growth-inhibitory oncogene product in Drosophila Schneider cells. Johansen H, et al. **Genes Dev** 1989 Jun; 3(6):882-9
Expression of v-src induces a myeloproliferative disease in bone-marrow-reconstituted mice. Keller G, et al. **Genes Dev** 1989 Jun;3(6):827-37
Embryonic expression of a Drosophila src gene: alternate forms of the protein are expressed in segmental stripes and in the nervous system. Vincent WS 3d, et al. **Genes Dev** 1989 Mar;3(3):334-47
Linear order of the four BCR-related loci in 22q11. Budarf M, et al. **Genomics** 1988 Aug;3(2):168-71
A 1.5-megabase restriction map surrounding MYC does not include the translocation breakpoint in familial renal cell carcinoma. Gemmill RM, et al. **Genomics** 1989 Jan; 4(1):28-35
Mapping and characterization of an X-linked processed gene related to MYCL1. Morton CC, et al. **Genomics** 1989 Apr; 4(3):367-75
The ETS genes on chromosome 21 are distal to the breakpoint of the acute myelogenous leukemia translocation (8;21). Sacchi N, et al. **Genomics** 1988 Aug; 3(2):110-6
N-myc amplification and neuron-specific enolase production of a neuroblastoma cell line and germ cell tumor cell lines. Ishiwata I, et al. **Gynecol Oncol** 1989 Jun;33(3):356-9
Poly(A+)RNA levels of growth-, differentiation- and transformation-associated genes in the progressive development of hepatocellular carcinoma in the rat. Huber BE, et al. **Hepatology** 1989 May;9(5):756-62
Tumour suppressor genes: oncogenesis update. Paul J. **Histopathology** 1989 Jul;15(1):1-9 (33 ref.)
In situ hybridization localizes the human putative oncogene GLI to chromosome subbands 12q13.3-14.1. Arheden K, et al. **Hum Genet** 1989 Apr;82(1):1-2
Chromosomal aberrations as markers of oncogene amplification. Wolman SR, et al. **Hum Pathol** 1989 Apr; 20(4):308-15 (53 ref.)
Cooperativity of viral oncogenes in avian leukaemia. Graf T, et al. **IARC Sci Publ** 1988;(92):165-70
Structure and expression of the ret transforming gene. Takahashi M. **IARC Sci Publ** 1988;(92):189-97 (37 ref.)
A novel transforming gene, hst. Terada M, et al. **IARC Sci Publ** 1988;(92):133-8
Oncogenes and the mitogenic signal pathway. Fisher RJ, et al. **Important Adv Oncol** 1989;:3-27 (216 ref.)
Amplification of c-ras-Ki oncogene in human ovarian tumours. Boltz EM, et al. **Int J Cancer** 1989 Mar 15; 43(3):428-30
Changes in in vitro growth behaviour of the mammary epithelial cell line NMuMG caused by the v-fos oncogene. Bradbury JM, et al. **Int J Cancer** 1988 Dec 15;42(6):923-9
Search for human papillomavirus, herpes simplex virus and c-myc oncogene in human genital tumors. Di Luca D, et al. **Int J Cancer** 1989 Apr 15;43(4):570-7
Co-regulation of metastatic and transforming activity of normal and mutant ras genes. Egan SE, et al. **Int J Cancer** 1989 Mar 15;43(3):443-8
Extinction of expression of the translocated myc gene in somatic cell hybrids between mouse myeloma and L-cells. Greenberg A, et al. **Int J Cancer** 1989 Jan 15;43(1):87-92
Diverse responses to retinoid in morphological differentiation, tumorigenesis and N-myc expression in human neuroblastoma sublines. Hino T, et al. **Int J Cancer** 1989 Aug 15;44(2):286-91
Levels of myc protein, as analyzed by flow cytometry, correlate with cell growth potential in malignant B-cell lymphomas. Holte H, et al. **Int J Cancer** 1989 Jan 15; 43(1):164-70
Differential expression of N-myc and c-src proto-oncogenes during neuronal and schwannian differentiation of human neuroblastoma cells. Horii Y, et al. **Int J Cancer** 1989 Feb 15;43(2):305-9
Restriction fragment length polymorphism of the L-myc gene and susceptibility to metastasis in renal cancer patients. Kakehi Y, et al. **Int J Cancer** 1989 Mar 15; 43(3):391-4
Acquisition of tumorigenic potential in the human myoepithelial HBL100 cell line is associated with decreased expression of HLA class I, class II and integrin beta 3 and increased expression of c-myc. Krief P, et al. **Int J Cancer** 1989 Apr 15;43(4):658-64
Amplification of the EGF receptor and c-myc genes in human esophageal cancers. Lu SH, et al. **Int J Cancer** 1988 Oct 15;42(4):502-5
Relationship between tumorigenicity and the dosage of lymphoma- vs. normal-parent-derived chromosome 15 in somatic cell hybrids between lymphoma cells with rearranged pvt-1 gene and normal cells. Uno M, et al. **Int J Cancer** 1989 Aug 15;44(2):353-9
Expression of the c-Ha-ras and neu oncogenes in DMBA-induced, anti-estrogen-treated rat mammary tumors. Vuorio T, et al. **Int J Cancer** 1988 Nov 15; 42(5):774-9
Conditional immortalization and/or transformation of rat cells carrying v-abl or EJras oncogene in the presence or absence of glucocorticoid hormone. Yamashita T, et al. **Int J Cancer** 1988 Dec 15;42(6):930-8
Oncogenes in hematologic neoplasia. Cline MJ. **Int J Cell Cloning** 1989 Jul;7(4):213-22 (49 ref.)
The Fine Page: antioncogenes and familial cancer. Fine RM. **Int J Dermatol** 1989 Jun;28(5):311-2
The effect of exogenous human ras and myc oncogenes in morphological differentiation of the rat pheochromocytoma PC12 cells. Spandidos DA. **Int J Dev Neurosci** 1989;7(1):1-4
raf involvement in the simultaneous genetic transfer of the radioresistant and transforming phenotypes. Pirollo KF, et al. **Int J Radiat Biol** 1989 May;55(5):783-96
Chromosome aberrations and transforming genes in leukemic and non-leukemic patients with a history of atomic bomb exposure. Kamada N, et al. **Int Symp Princess Takamatsu Cancer Res Fund** 1987; 18:125-34
Effects of cellular transformation on expression of plasminogen activator inhibitors 1 and 2. Evidence for independent regulation. Cohen RL, et al. **J Biol Chem** 1989 May 15;264(14):8375-83
Transforming growth factor beta 1 and cAMP inhibit transcription of epidermal growth factor- and oncogene-induced transin RNA. Kerr LD, et al. **J Biol Chem** 1988 Nov 15;263(32):16999-7005
The two Xenopus laevis SRC genes are co-expressed and each produces functional pp60src. Steele RE, et al. **J Biol Chem** 1989 Jun 25;264(18):10649-53
A simple and precise aberrant translocation of the rat c-myc gene into the epsilon-heavy chain switch region of the IgE-producing immunocytoma, IR162. Tian SS, et al. **J Biol Chem** 1989 Jan 25;264(3):1846-53
Molecular cloning of a novel human leukemia-associated gene. Evidence of conservation in animal species. Zhu XX, et al. **J Biol Chem** 1989 Aug 25;264(24):14556-60
Expression of myc and ras oncogenes in two newly established neuroblastoma cell lines. Csaikl F, et al. **J Cancer Res Clin Oncol** 1989;115(3):242-6
Distinct mechanisms of interferon-gamma and tumor necrosis factor-alpha action in oncogene-transformed mouse fibroblasts. Seliger B, et al. **J Cell Biochem** 1988 Nov; 38(3):205-12
18th annual UCLA symposium. Abstracts: Biotechnology and human genetic predisposition to disease. **J Cell Biochem Suppl** 1989;13D:1-59
N-myc proto-oncogene expression during organogenesis in the developing mouse as revealed by in situ hybridization. Mugrauer G, et al. **J Cell Biol** 1988 Oct;107(4):1325-35
Induction of cyclic AMP synthesis by forskolin is followed by a reduction in the expression of c-myc messenger RNA and inhibition of 3H-thymidine incorporation in human fibroblasts. Heldin NE, et al. **J Cell Physiol** 1989 Jan; 138(1):17-23
Latent cellular oncogenes: the paradox dissolves. Duesberg PH. **J Cell Sci Suppl** 1987;7:169-87
Insertion of the v-Ha-ras oncogene induces differentiation of calcitonin-producing human small cell lung cancer. Mabry M, et al. **J Clin Invest** 1989 Jul;84(1):194-9
N-myc gene product expression in neuroblastoma. Hashimoto H, et al. **J Clin Pathol** 1989 Jan;42(1):52-5
C-myc oncogene product P62c-myc in ovarian mucinous neoplasms: immunohistochemical study correlated with malignancy. Polacarz SV, et al. **J Clin Pathol** 1989 Feb; 42(2):148-52
Cytokines and oncogenes. Black RJ. **J Exp Pathol** 1989 Summer;4(3):109-21 (101 ref.)
Cooperation in oncogenesis between BK virus early region gene and the activated human c-Harvey ras oncogene. Corallini A, et al. **J Gen Virol** 1988 Oct;69 (Pt 10):2671-9
Characterization of lymphoid tumors induced by a recombinant murine retrovirus carrying the avian v-myc oncogene. Identification of novel (B-lymphoid) tumors in the thymus. Brightman BK, et al. **J Immunol** 1988 Oct 15;141(8):2844-54
Isolation of murine fetal thymus cell lines after infection with recombinant retroviruses containing the v-myc and v-Ha-ras oncogenes. Cattermole JA, et al. **J Immunol** 1989 Jun 1;142(11):3746-53
Immunohistologic demonstration of platelet-derived growth factor (PDGF) and sis-oncogene expression in scleroderma. Gay S, et al. **J Invest Dermatol** 1989 Feb; 92(2):301-3
Probability that the commitment of murine erythroleukemia cell differentiation is determined by the c-myc level. Kume TU, et al. **J Mol Biol** 1988 Aug 20;202(4):779-86
Cellular oncogenes in cardiovascular disease. Mulvagh SL, et al. **J Mol Cell Cardiol** 1988 Jul;20(7):657-62 (38 ref.)
A review: new discoveries allow oncogenes to reclaim limelight. Blume E. **J Natl Cancer Inst** 1989 May 3; 81(9):656-8
Keeping cells in their place: the role of tumor suppressor genes [news] Blume E. **J Natl Cancer Inst** 1989 Oct 4; 81(19):1440-1
Oncogene links seen to heart disease, cholesterol [news] Blume E. **J Natl Cancer Inst** 1989 Oct 4;81(19):1442-3
Heterogeneity of hematopoietic cells immortalized by v-myc/v-raf recombinant retrovirus infection of bone marrow or fetal liver. Cox GW, et al. **J Natl Cancer Inst** 1989 Oct 4;81(19):1492-6
X-ray-induced changes in gene expression in normal and oncogene-transformed rat cell lines. Lambert M, et al. **J Natl Cancer Inst** 1988 Nov 16;80(18):1492-7
The search for oncogene targets. Racker E. **J Natl Cancer Inst** 1989 Feb 15;81(4):247-51 (37 ref.)
Tumorigenicity of human mesothelial cell line transfected with EJ-ras oncogene. Reddel RR, et al. **J Natl Cancer Inst** 1989 Jun 21;81(12):945-8
A recessive tumor gene function in Drosophila is involved in cell adhesion. Schmidt O. **J Neurogenet** 1989 May; 5(2):95-8 (22 ref.)
Oncogene-related growth factors and growth factor receptors in human malignant glioma-derived cell lines. Harsh GR 4th, et al. **J Neurooncol** 1989 May;7(1):47-56
Oncogenes and onco-suppressor genes: their involvement in cancer. Spandidos DA, et al. **J Pathol** 1989 Jan;157(1):1-10 (70 ref.)
Expression of the nuclear oncogene p53 in colon tumours. van den Berg FM, et al. **J Pathol** 1989 Mar;157(3):193-9
The continuum model and c-myc synthesis during the division cycle. Cooper S. **J Theor Biol** 1988 Dec 7; 135(3):393-400
Differential hypomethylation of the c-myc protooncogene in bladder cancers at different stages and grades. Del Senno L, et al. **J Urol** 1989 Jul;142(1):146-9
Re: Wilms Tumor: Past, Present, Future [letter] Moldwin RM, et al. **J Urol** 1989 Jul;142(1):141
The LTR, v-src, LTR provirus generated in the mammalian genome by src mRNA reverse transcription and integration. Bodor J, et al. **J Virol** 1989 Feb;63(2):1015-8
Differential induction of cytolytic susceptibility by E1A, myc, and ras oncogenes in immortalized cells. Cook JL, et al. **J Virol** 1989 Aug;63(8):3408-15
Structure, origin, and transforming activity of feline leukemia virus-myc recombinant provirus FTT. Doggett DL, et al. **J Virol** 1989 May;63(5):2108-17
Transduction of the cellular src gene and 3' adjacent sequences in avian sarcoma virus PR2257. Geryk J, et al. **J Virol** 1989 Feb;63(2):481-92
Integration of Friend murine leukemia virus into both alleles of the p53 oncogene in an erythroleukemic cell line. Hicks GG, et al. **J Virol** 1988 Dec;62(12):4752-5
Mutation is required to activate the p53 gene for cooperation with the ras oncogene and transformation. Hinds P, et al. **J Virol** 1989 Feb;63(2):739-46
raf/myc-infected erythroid cells are restricted in their ability to terminally differentiate. Klinken SP, et al. **J Virol** 1989 Mar;63(3):1489-92
Susceptibility to raf and raf/myc retroviruses is governed by different genetic loci. Klinken SP, et al. **J Virol** 1989 May;63(5):2411-4
Cooperative transforming activities of ras, myc, and src viral oncogenes in nonestablished rat adrenocortical cells. MacAuley A, et al. **J Virol** 1988 Dec;62(12):4712-21
Activation and transduction of c-mil sequences in chicken

neuroretina cells induced to proliferate by infection with avian lymphomatosis virus. Marx M, et al. **J Virol** 1988 Dec;62(12):4627–33

Identification of two murine loci homologous to the v-cbl oncogene. Regnier DC, et al. **J Virol** 1989 Sep; 63(9):3678–82

Multiple regions in the Rous sarcoma virus src gene intron act in cis to affect the accumulation of unspliced RNA. Stoltzfus CM, et al. **J Virol** 1989 Apr;63(4):1669–76

Identification of a transforming gene of human papillomavirus type 16. Tanaka A, et al. **J Virol** 1989 Mar; 63(3):1465–9

Harvey murine sarcoma virus: influences of coding and noncoding sequences on cell transformation in vitro and oncogenicity in vivo. Velu TJ, et al. **J Virol** 1989 Mar; 63(3):1384–92

A mutation in v-src that removes a single conserved residue in the SH-2 domain of pp60v-src restricts transformation in a host-dependent manner. Verderame MF, et al. **J Virol** 1989 Jan;63(1):338–48

Properties of a murine retroviral recombinant of avian acute leukemia virus E26: a murine fibroblast assay for v-ets function. Yuan CC, et al. **J Virol** 1989 Jan;63(1):205–15

The Japan Society of Human Genetics award lecture. Cytogenetic aspects of cancer-predisposing genes. Sasaki MS. **Jinrui Idengaku Zasshi** 1989 Mar;34(1):1–16 (67 ref.)

A simple and useful method for simultaneous screening of elevated levels of expression of a variety of oncogenes in malignant cells. Nakamori S, et al. **Jpn J Cancer Res** 1988 Dec;79(12):1311–7

HST1 and INT2 gene coamplification in a squamous cell carcinoma of the gallbladder. Tsuda T, et al. **Jpn J Clin Oncol** 1989 Mar;19(1):26–9

Amplification of N-myc oncogene in various childhood cancers. Jinbo T, et al. **Jpn J Exp Med** 1989 Feb;59(1):43–6

Immortalization and malignant transformation of hepatocytes by transforming genes of polyoma virus and of SV40 virus in vitro and in vivo. Paul D, et al. **Klin Wochenschr** 1988; 66 Suppl 11:134–9 (54 ref.)

Molecular mechanisms of oncogenesis. Seemayer TA, et al. **Lab Invest** 1989 May;60(5):585–99 (199 ref.)

Oncogene expression in Rauscher murine leukemia virus induced erythroid, myeloid and lymphoid cell lines. de Both NJ, et al. **Leuk Res** 1989;13(1):53–64

The oncogene ETS1 is distant from the chromosome 11 breakpoint in leukaemic cells with the t(11;19)(q23;p13). Kennedy MA, et al. **Leuk Res** 1989;13(6):459–63

Molecular cloning of a 5' segment of the genomic phl gene defines a new breakpoint cluster region (bcr2) in Philadelphia-positive acute leukemias. Chen SJ, et al. **Leukemia** 1988 Oct;2(10):634–41

Expression of oncogenes and cell cycle related genes in acute and chronic leukemias. Ferrari S, et al. **Leukemia** 1988 Dec; 2(12 Suppl):160S–166S

bcr rearrangement: potential false positive secondary to an Eco RI restriction fragment length polymorphism. Fishleder AJ, et al. **Leukemia** 1989 Oct;3(10):746–8

bcr-abl oncogene activation in Philadelphia chromosome-positive acute lymphoblastic leukemia. Hermans A, et al. **Leukemia** 1988 Oct;2(10):628–33

c-myc amplification coexistent with activating N-ras point mutation in the biphenotypic leukemic cell line RED-3. Mallet MK, et al. **Leukemia** 1989 Jul;3(7):511–5

Retroviral src gene expression in continuous marrow culture increases the self-renewal capacity of multilineage hematopoietic stem cells. Ohta M, et al. **Leukemia** 1989 Mar;3(3):206–26

A search for bcl1, bcl2, and c-myc oncogene rearrangements in chronic lymphocytic leukemia. Rechavi G, et al. **Leukemia** 1989 Jan;3(1):57–60

Cooperation of V-oncogenes in human epithelial cell transformation. Rhim JS, et al. **Leukemia** 1988 Dec;2(12 Suppl):151S–159S

The role of the CSF-1 receptor gene (C-fms) in cell transformation. Sherr CJ. **Leukemia** 1988 Dec;2(12 Suppl):132S–142S

Induction of B-cell lymphomas in athymic NIH Swiss nu/nu mice. Yang SS, et al. **Leukemia** 1988 Dec;2(12 Suppl):114S–124S

Transforming DNA sequences of human hepatocellular carcinomas, their distribution and relationship with hepatitis B virus sequence in human hepatomas. Yang SS, et al. **Leukemia** 1988 Dec;2(12 Suppl):102S–113S

Theoretical mechanisms for synthesis of carcinogen-induced embryonic protein: XXI. Oncogenes interpreted as embryonic genes. Hancock RL. **Med Hypotheses** 1988 Oct; 27(2):93–7 (24 ref.)

Similar chromosomal patterns and lack of N-myc gene amplification in localized and IV-S stage neuroblastomas in infants. Hayashi Y, et al. **Med Pediatr Oncol** 1989; 17(2):111–5

Immortalization of murine leukocytes by oncogenes. II. Phenotypic characterization of transformants immortalized by v-src or Ha-ras oncogenes: expression of B220, a B-cell lineage specific antigen. Komatsubara S, et al. **Microbiol Immunol** 1988;32(8):869–75

Detection of amplified N-myc gene in neuroblastoma by in situ hybridization using the single-step silver enhancement method. Noguchi M, et al. **Mod Pathol** 1988 Nov; 1(6):428–32

Specific viral oncogenes cause differential effects on cell-to-cell communication, relevant to the suppression of the transformed phenotype by normal cells. Bignami M, et al. **Mol Carcinog** 1988;1(1):67–75

Activated Ki-ras genes in bladder epithelial cell lines transformed by treatment of primary mouse bladder explant cultures with 7,12-dimethylbenz[a]anthracene. Brookes P, et al. **Mol Carcinog** 1988;1(2):82–8

Malignant progression of papilloma-derived keratinocytes: differential effects of the ras, neu, and p53 oncogenes. Dotto GP, et al. **Mol Carcinog** 1988;1(3):171–9

Comparison of three recombinant murine leukemia viruses carrying the v-src oncogene of avian sarcoma virus: differences in in vitro transformation and in vivo pathogenicity. Feuerman MH, et al. **Mol Carcinog** 1988; 1(1):57–66

Neoplastic transformation and lineage switching of rat liver epithelial cells by retrovirus-associated oncogenes. Garfield S, et al. **Mol Carcinog** 1988;1(3):189–95

Malignant conversion of murine squamous papilloma cell lines by transfection with the fos oncogene. Greenhalgh DA, et al. **Mol Carcinog** 1988;1(2):134–43

Detection of novel non-ras oncogenes in rat nasal squamous cell carcinomas. Hochwalt AE, et al. **Mol Carcinog** 1988; 1(1):4–6

Modified responsiveness of v-Ha-ras-transfected rat fibroblasts to growth factors and a tumor promoter. Huang M, et al. **Mol Carcinog** 1988;1(2):109–15

Increased expression of glycolysis-associated genes in oncogene-transformed and growth-accelerated states. Persons DA, et al. **Mol Carcinog** 1989;2(2):88–94

Malignant transformation of human bladder epithelial cells by DNA transfection with the v-raf oncogene. Skouv J, et al. **Mol Carcinog** 1989;2(2):59–62

Oncogene cooperation in lymphocyte transformation: malignant conversion of E mu-myc transgenic pre-B cells in vitro is enhanced by v-H-ras or v-raf but not v-abl. Alexander WS, et al. **Mol Cell Biol** 1989 Jan;9(1):67–73

Early pre-B-cell transformation induced by the v-fms oncogene in long-term mouse bone marrow cultures. Borzillo GV, et al. **Mol Cell Biol** 1989 Sep;9(9):3973–81

The human L-myc gene encodes multiple nuclear phosphoproteins from alternatively processed mRNAs. De Greve J, et al. **Mol Cell Biol** 1988 Oct;8(10):4381–8

Phosphorylation of cellular proteins in Rous sarcoma virus-infected cells: analysis by use of anti-phosphotyrosine antibodies. Hamaguchi M, et al. **Mol Cell Biol** 1988 Aug; 8(8):3035–42

Isolation and sequence analysis of a novel human tyrosine kinase gene. Hao QL, et al. **Mol Cell Biol** 1989 Apr; 9(4):1587–93

A bcr-v-abl oncogene induces lymphomas in transgenic mice. Hariharan IK, et al. **Mol Cell Biol** 1989 Jul; 9(7):2798–805

Structure and expression of B-myc, a new member of the myc gene family. Ingvarsson S, et al. **Mol Cell Biol** 1988 Aug;8(8):3168–74

Intrinsic sites of transcription termination and pausing in the c-myc gene. Kerppola TK, et al. **Mol Cell Biol** 1988 Oct; 8(10):4389–94

Multiple mechanisms for transcriptional regulation of the myc gene family in small-cell lung cancer. Krystal G, et al. **Mol Cell Biol** 1988 Aug;8(8):3373–81

High incidence of lung, bone, and lymphoid tumors in transgenic mice overexpressing mutant alleles of the p53 oncogene. Lavigueur A, et al. **Mol Cell Biol** 1989 Sep; 9(9):3982–91

The BCR-ABL oncogene transforms Rat-1 cells and cooperates with v-myc. Lugo TG, et al. **Mol Cell Biol** 1989 Mar;9(3):1263–70

Alternative forms of the BCR-ABL oncogene have quantitatively different potencies for stimulation of immature lymphoid cells. McLaughlin J, et al. **Mol Cell Biol** 1989 May;9(5):1866–74

Desensitization of the Ca2+-mobilizing system to serum growth factors by Ha-ras and v-mos. Maly K, et al. **Mol Cell Biol** 1988 Oct;8(10):4212–6

Increased amount of a 25-kilodalton phosphoprotein after v-mos transfection of CHO cells. Mayo JK, et al. **Mol Cell Biol** 1988 Nov;8(11):4685–91

Autocrine induction of major histocompatibility complex class I antigen expression results from induction of beta interferon in oncogene-transformed BALB/c-3T3 cells. Offermann MK, et al. **Mol Cell Biol** 1989 May;9(5):1969–77

Transformation by viral and cellular oncogenes of a mouse BALB/3T3 cell mutant resistant to transformation by chemical carcinogens. Ono M, et al. **Mol Cell Biol** 1988 Oct;8(10):4190–6

Genetic dissection of functional domains within the avian erythroblastosis virus v-erbA oncogene. Privalsky ML, et al. **Mol Cell Biol** 1988 Oct;8(10):4510–7

Abelson murine leukemia virus induces platelet-derived growth factor-independent fibroblast growth: correlation with kinase activity and dissociation from full morphologic transformation. Rees-Jones RW, et al. **Mol Cell Biol** 1989 Jan;9(1):278–87

Transformation-specific tyrosine phosphorylation of a novel cellular protein in chicken cells expressing oncogenic variants of the avian cellular src gene. Reynolds AB, et al. **Mol Cell Biol** 1989 Feb;9(2):629–38

Different structural alterations upregulate in vitro tyrosine kinase activity and transforming potency of the erbB-2 gene. Segatto O, et al. **Mol Cell Biol** 1988 Dec;8(12):5570–4

The PVT gene frequently amplifies with MYC in tumor cells. Shtivelman E, et al. **Mol Cell Biol** 1989 Mar;9(3):1148–54

Definition of the human raf amino-terminal regulatory region by deletion mutagenesis. Stanton VP Jr, et al. **Mol Cell Biol** 1989 Feb;9(2):639–47

The v-ski oncogene encodes a truncated set of c-ski coding exons with limited sequence and structural relatedness to v-myc. Stavnezer E, et al. **Mol Cell Biol** 1989 Sep; 9(9):4038–45

Expression of raf oncogenes activates the PEA1 transcription factor motif. Wasylyk C, et al. **Mol Cell Biol** 1989 May; 9(5):2247–50

Selective transformation of primitive lymphoid cells by the BCR/ABL oncogene expressed in long-term lymphoid or myeloid cultures. Young JC, et al. **Mol Cell Biol** 1988 Oct; 8(10):4079–87

The human FGF-5 oncogene encodes a novel protein related to fibroblast growth factors. Zhan X, et al. **Mol Cell Biol** 1988 Aug;8(8):3487–95

Steroid receptors as oncogenes? Fuller PJ. **Mol Cell Endocrinol** 1988 Oct;59(3):161–4 (34 ref.)

Structural and functional aspects of platelet-derived growth factor and its role in the pathogenesis of glioblastoma. Betsholtz C, et al. **Mol Chem Neuropathol** 1989 Feb; 10(1):27–36 (44 ref.)

Transiently elevated levels of c-fos and c-myc oncogene messenger ribonucleic acids in cultured murine Leydig tumor cells after addition of human chorionic gonadotropin. Czerwiec FS, et al. **Mol Endocrinol** 1989 Jan;3(1):105–9

Transforming growth factor alpha production and epidermal growth factor receptor expression in normal and oncogene transformed human mammary epithelial cells. Valverius EM, et al. **Mol Endocrinol** 1989 Jan;3(1):203–14

Phosphorylation of a C-SRC-related protein in macrophages activated in vitro with lymphokine. Soong MM, et al. **Mol Immunol** 1988 Dec;25(12):1251–60

Cell transformation: the role of oncogenes and growth factors. Bradshaw TK. **Mutagenesis** 1986 Mar;1(2):91–7 (67 ref.)

bcl-2 and other genomic alterations in the prognosis of large-cell lymphoma. Yunis JJ, et al. **N Engl J Med** 1989 Apr 20;320(16):1047–54

Oncomouse released [news] Anderson A. **Nature** 1988 Nov 24;336(6197):300

Viral myb oncogene encodes a sequence-specific DNA-binding activity. Biedenkapp H, et al. **Nature** 1988 Oct 27;335(6193):835–7

Very high frequency of lymphoma induction by a chemical carcinogen in pim-1 transgenic mice. Breuer M, et al. **Nature** 1989 Jul 6;340(6228):61–3

Protein encoded by v-erbA functions as a thyroid-hormone receptor antagonist. Damm K, et al. **Nature** 1989 Jun 22; 339(6226):593–7

Oncomouse seeks European protection [news] Dickman S. **Nature** 1989 Jul 13;340(6229):85

Gasp: not just another oncogene [news] McCormick F. **Nature** 1989 Aug 31;340(6236):678–9

Glucocorticoid-dependent oncogenic transformation by type 16 but not type 11 human papilloma virus DNA. Pater MM, et al. **Nature** 1988 Oct 27;335(6193):832–5

Oncogenic potential of bcl-2 demonstrated by gene transfer. Reed JC, et al. **Nature** 1988 Nov 17;336(6196):259–61

Repression of transcription mediated at a thyroid hormone response element by the v-erb-A oncogene product. Sap J, et al. **Nature** 1989 Jul 20;340(6230):242–4

Negative regulation of serum-responsive enhancer elements. Subramaniam M, et al. **Nature** 1989 Jul 6;340(6228):64–6

A point mutation in the neu oncogene mimics ligand induction of receptor aggregation. Weiner DB, et al. **Nature** 1989 May 18;339(6221):230–1

Gene involvement in Japanese 14q+ marker-positive cancer. Ohno H, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec; 51(8):1522–7

ETS-1 gene in human leukemia cells. Ohyashiki JH, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec;51(8):1515–21

Philadelphia chromosome-positive leukemia: molecular analysis of bcr and abl genes and transforming genes. Okabe M, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec; 51(8):1471–80

Taq I RFLP linked to the human ets-1 gene. Aparicio JM, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4913

The mouse homologue of hst/k-FGF: sequence, genome organization and location relative to int-2. Brookes S, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4037–45

An Eco RI restriction length polymorphism at the murine L-myc locus. Dolcetti R, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11853

Complete nucleotide sequence of IC10, a retrovirus containing the Rmil oncogene transduced in chicken neuroretina cells infected with avian retrovirus RAV-1. Eychène A, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1250

The first BCR gene intron contains breakpoints in Philadelphia chromosome positive leukemia. Heisterkamp N, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10069–81

The nucleotide sequence of the region of src gene deletion in transformation-defective Rous sarcoma virus adapted to semi-permissive host cells. Kashuba VI, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2120

The nucleotide sequence of the region of src gene deletion in transformation-defective Rous sarcoma virus adapted to semi-permissive host cells. Kashuba VI, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3294

Isolation of human cDNA clones of ski and the ski-related gene, sno. Nomura N, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5489–500

RFLP for TaqI of the human thyroid papillary carcinoma (PTC) oncogene. Radice P, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9062

Oncogene detection by enzymatic amplification on flow sorted chromosomes. Schmitz A, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):816

Alternate structures and stabilities of c-myc RNA in a bursal lymphoma cell line. Schubach WH, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11171–86

An HinfI polymorphism at the MET locus in inbred mice. Sweet AM, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4907

Identification by a random linker insertion method of a region which suppresses the transforming activity of the raf oncogene. Ishikawa F, et al. **Nucleic Acids Symp Ser** 1988; (19):39–42

Juxtaposition of human bcl-2 and immunoglobulin lambda light chain gene in chronic lymphocytic leukemia is the result of a reciprocal chromosome translocation between chromosome 18 and 22. Adachi M, et al. **Oncogene** 1989 Sep;4(9):1073–5

Lymphomagenesis in E mu-myc transgenic mice can involve ras mutations. Alexander WS, et al. **Oncogene** 1989 May; 4(5):575–81

The amplification unit on chromosome 11q13 in aggressive primary human breast tumors entails the bcl-1, int-2 and hst loci. Ali IU, et al. **Oncogene** 1989 Jan;4(1):89–92

Molecular requirements for transcriptional initiation of the murine c-myc gene. Asselin C, et al. **Oncogene** 1989 May; 4(5):549–58

The multiple membrane-spanning segments of the BNLF-1 oncogene from Epstein-Barr virus are required for transformation. Baichwal VR, et al. **Oncogene** 1989 Jan; 4(1):67–74

Activation of the trk oncogene by alternatively spliced muscle and non-muscle tropomyosin sequences. Barnes D, et al. **Oncogene** 1989 Feb;4(2):259–62

Altered myc gene transcription and intron-induced stabilization of myc RNAs in two mouse plasmacytomas. Bauer SR, et al. **Oncogene** 1989 May;4(5):615–23

Frequent amplification of the bcl-1 locus in head and neck squamous cell carcinomas. Berenson JR, et al. **Oncogene** 1989 Sep;4(9):1111–6

Retroviral v-myc infection of primary fetal liver cells: transformation of monocytes in vitro. Birchenall-Roberts MC, et al. **Oncogene** 1989 Jun;4(6):731–5

Activation of the c-fos gene by UV and phorbol ester: different signal transduction pathways converge to the same enhancer element. Büscher M, et al. **Oncogene** 1988 Sep;3(3):301–11

Oncogenes conferring metastatic potential induce increased branching of Asn-linked oligosaccharides in rat2 fibroblasts. Dennis JW, et al. **Oncogene** 1989 Jul;4(7):853–60

Detection of amplified oncogenes by differential polymerase chain reaction. Frye RA, et al. **Oncogene** 1989 Sep; 4(9):1153–7

Introduction of a Ha-ras oncogene into rat liver epithelial cells and parenchymal hepatocytes confers resistance to the growth inhibitory effects of TGF-beta. Houck KA, et al. **Oncogene** 1989 Jan;4(1):19–25

Activation of the ret-II oncogene without a sequence encoding a transmembrane domain and transforming activity of two ret-II oncogene products differing in carboxy-termini due to alternative splicing. Ishizaka Y, et al. **Oncogene** 1989 Jun;4(6):789–94

Metastatic conversion of factor-dependent lung fibroblasts (CCL39) requires over-expression of oncogenes which induce high rate of autonomous replication. Lagarde AE. **Oncogene** 1989 Jul;4(7):889–95

Molecular lesions involved in the progression of a human breast cancer. Liu E, et al. **Oncogene** 1988 Sep;3(3):323–7

Baculovirus expression of functional P210 BCR-ABL oncogene product. Pendergast AM, et al. **Oncogene** 1989 Jun;4(6):759–66

Deregulated BCL2 expression enhances growth of a human B cell line. Reed JC, et al. **Oncogene** 1989 Sep;4(9):1123–7

Generation of new oncogenic murine retroviruses by cotransfection of cloned AKR and MH2 proviruses. Righi M, et al. **Oncogene** 1989 Feb;4(2):223–30

Alternative 5' end of the bcr-abl transcript in chronic myelogenous leukemia. Romero P, et al. **Oncogene** 1989 Jan;4(1):93–8

The N-terminal region of proto-dbl down regulates its transforming activity. Ron D, et al. **Oncogene** 1989 Sep; 4(9):1067–72

NIH3T3 fibroblasts transformed by the dbl oncogene show altered expression of bradykinin receptors: effect on inositol lipid turnover. Ruggiero M, et al. **Oncogene** 1989 Jun; 4(6):767–71

Oncogene-induced liver neoplasia in transgenic mice. Sandgren EP, et al. **Oncogene** 1989 Jun;4(6):715–24

V-sis gene (SSV) is expressed transiently and independently of v-gag (SSAV) after infection of fibroblasts with SSV/SSAV. Schätzl HM, et al. **Oncogene** 1989 Sep; 4(9):1095–101

Harvey-ras mediated neoplastic development in the mouse mammary gland. Strange R, et al. **Oncogene** 1989 Mar; 4(3):309–15

Genomic organization of the human retinoblastoma gene. T'Ang A, et al. **Oncogene** 1989 Apr;4(4):401–7

Expression of v-src arrests murine glial cell differentiation. Trotter J, et al. **Oncogene** 1989 Apr;4(4):457–64

Src homology 2 domain deletion mutants of p60v-src do not phosphorylate cellular proteins of 120–150 kDa. Wendler PA, et al. **Oncogene** 1989 Feb;4(2):231–6

Disordered metabolism of microfilament proteins, tropomyosin and actin, in mouse mammary epithelial cells expressing the Ha-ras oncogene. Bhattacharya B, et al. **Oncogene Res** 1988;3(1):51–65

Negative regulation of c-myc transcription involves myc family proteins. Cleveland JL, et al. **Oncogene Res** 1988; 3(4):357–75

Expression of oncogenes in normal and transformed murine B lymphocytes. DeCino P, et al. **Oncogene Res** 1988; 3(1):33–7

An invariant asparagine residue belonging to a highly conserved domain in all protein kinases is instrumental in the protein kinase activity of the v-mil gene product. Denhez F, et al. **Oncogene Res** 1988 Sep;3(2):199–205

Increase in ribosomal protein S6 phosphorylation is due to v-erbB-transforming activity and not to v-erbA mitogenic activity in avian erythroblastosis virus-infected chicken embryo fibroblasts. Diaz JJ, et al. **Oncogene Res** 1989; 4(3):163–75

Phosphatidylinositol kinase type I activity associates with various oncogene products. Fukui Y, et al. **Oncogene Res** 1989;4(4):283–92

Increased rates of specific RNA polymerase III transcription precede overexpression of cellular oncogenes upon induction of transformation. Gallant JW, et al. **Oncogene Res** 1989;4(1):39–46

The FGF-related oncogene, K-FGF, maps to human chromosome region 11q13, possibly near int-2. Huebner K, et al. **Oncogene Res** 1988;3(3):263–70

Transforming potential and growth stimulating activity of the v-fos and c-fos genes carried by avian retrovirus vectors. Iba H, et al. **Oncogene Res** 1988;2(2):121–33

Molecular cloning and characterization of human ret-II oncogene. Ishizaka Y, et al. **Oncogene Res** 1988 Sep; 3(2):193–7

Most of the substrates of oncogenic viral tyrosine protein kinases can be phosphorylated by cellular tyrosine protein kinases in normal cells. Kamps MP, et al. **Oncogene Res** 1988 Sep;3(2):105–15

Erythroproliferation in vitro can be induced by abl, fes, src, ras, bas, raf, raf/myc, erb B and cbl oncogenes but not by myc, myb and fos. Klinken SP. **Oncogene Res** 1988 Sep; 3(2):187–92

Expression of a novel gene encoding a 51.5 kD precursor protein is induced by different retroviral oncogenes in quail neuroretinal cells. Michel D, et al. **Oncogene Res** 1989; 4(2):127–36

Tumorigenic transformation of rat FR3T3 fibroblasts carrying an activated myc oncogene requires subsequent mutational events. Mougneau E, et al. **Oncogene Res** 1988; 2(2):177–88

Common sites of viral integration in lymphomas arising in AKXD recombinant inbred mouse strains. Mucenski ML, et al. **Oncogene Res** 1987;2(1):33–48

Expression in E. coli of erg: a novel gene in humans related to the ets oncogene. Rao VN, et al. **Oncogene Res** 1987; 2(1):95–101

Human oncogenes in mouse/human microcell hybrids. Sanford JA, et al. **Oncogene Res** 1989;4(3):195–204

Expression of human and viral ets genes in E. coli production of human ets-2-specific monoclonal antibodies. Seth A, et al. **Oncogene Res** 1989;5(1):61–6

Antibodies detecting abnormalities of the retinoblastoma susceptibility gene product (pp110RB) in osteosarcomas and synovial sarcomas. Shew JY, et al. **Oncogene Res** 1989; 4(3):205–14

Activation of N-ras induced by ultraviolet irradiation in vitro. Van der Lubbe JL, et al. **Oncogene Res** 1988; 3(1):9–20

High frequency of mas oncogene activation detected in the NIH3T3 tumorigenicity assay. van 't Veer LJ, et al. **Oncogene Res** 1988;3(3):247–54

Preferential and novel activation of H-ras in human bladder carcinomas. Visvanathan KV, et al. **Oncogene Res** 1988; 3(1):77–86

Growth factor independence and indefinite growth ("immortalization") appear simultaneously after crisis in murine myelocytes expressing v-myc. Vogt M, et al. **Oncogene Res** 1989;4(1):19–28

The induction of growth factor-independence in murine myelocytes by oncogenes results in monoclonal cell lines and is correlated with cell crisis and karyotypic instability. Vogt M, et al. **Oncogene Res** 1987;2(1):49–63

Effect of oncogenes on chondrogenesis. Boettiger D, et al. **Pathol Immunopathol Res** 1988;7(1-2):32–7

The sea oncogene of the avian erythroblastosis virus S13. Hayman MJ. **Pathol Immunopathol Res** 1987;6(5–6):390–9 (31 ref.)

Oncogenes and cellular signal transduction. Macara IG. **Physiol Rev** 1989 Jul;69(3):797–820 (145 ref.)

Oncogenes and growth factors. Shooter EM. **Proc Annu Meet Med Sect Am Counc Life Insur** 1988;:9–27

Restoration of growth potential in paraclones of human keratinocytes by a viral oncogene. Barrandon Y, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4102–6

Structure and expression of the murine retinoblastoma gene and characterization of its encoded protein. Bernards R, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6474–8

Short, direct repeats at the breakpoints of deletions of the retinoblastoma gene. Canning S, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5044–8

Human papillomavirus type 16 cooperates with activated ras and fos oncogenes in the hormone-dependent transformation of primary mouse cells. Crook T, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):8820–4

Transformation of an interleukin 3-dependent hematopoietic cell line by the chronic myelogenous leukemia-specific P210bcr/abl protein. Daley GQ, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9312–6

Beta-cell lines derived from transgenic mice expressing a hybrid insulin gene-oncogene. Efrat S, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9037–41

Transfection of fetal rat intestinal epithelial cells by viral oncogenes: establishment and characterization of the E1A-immortalized SLC-11 cell line. Emami S, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3194–8

Chromosomal translocation in T-cell leukemia line HUT 78 results in a MYC fusion transcript. Finger LR, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9158–62

Evolution of B-cell malignancy: pre-B-cell leukemia resulting from MYC activation in a B-cell neoplasm with a rearranged BCL2 gene. Gauwerky CE, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8548–52

Early reversible induction of leukotriene synthesis in chicken myelomonocytic cells transformed by a temperature-sensitive mutant of avian leukemia virus E26. Habenicht AJ, et al. **Proc Natl Acad Sci U S A** 1989 Feb; 86(3):921–4

Serum- and oncoprotein-mediated induction of a gene with sequence similarity to the gene encoding carcinoembryonic antigen. Klemenz R, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5708–12

In vitro-derived leukemic erythroid cell lines induced by a raf- and myc-containing retrovirus differentiate in response to erythropoietin. Klinken SP, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8506–10

v-cbl, an oncogene from a dual-recombinant murine retrovirus that induces early B-lineage lymphomas. Langdon WY, et al. **Proc Natl Acad Sci U S A** 1989 Feb; 86(4):1168–72

Generation of fibrosarcomas in vivo by a retrovirus that expresses the normal B chain of platelet-derived growth factor and mimics the alternative splice pattern of the v-sis oncogene. Pech M, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2693–7

Brain-specific src oncogene mRNA mapped in rat brain by in situ hybridization. Ross CA, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9831–5

The v-sea oncogene of avian erythroblastosis retrovirus S13: another member of the protein-tyrosine kinase gene family. Smith DR, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(14):5291–5

Evidence that v-src and v-fps gene products use a protein kinase C-mediated pathway to induce expression of a transformation-related gene. Spangler R, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7017–21

Genetic determinants of neoplastic transformation by the retroviral oncogene v-erbB. Wells A, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7597–601

Cardiac and neurological abnormalities in v-fps transgenic mice. Yee SP, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(15):5873–7

The expression of oncogenes in germ cells. Cooper GM, et al. **Prog Clin Biol Res** 1988;267:275–89 (47 ref.)

The functions of oncogene products. Hunter T. **Prog Clin Biol Res** 1989;288:25–34 (7 ref.)

Monoclonal antibodies to oncogene products. Niman HL. **Prog Clin Biol Res** 1989;288:35–52 (81 ref.)

Molecular analysis of chromosome breakpoints. Groffen J, et al. **Prog Nucleic Acid Res Mol Biol** 1989;36:281–300 (74 ref.)

Modulation of cellular genes by oncogenes. Lebovitz RM, et al. **Prog Nucleic Acid Res Mol Biol** 1988;35:73–94 (137 ref.)

General tumour biology. Pontén J. **Scand J Urol Nephrol Suppl** 1988;110:13–4

A tiny mouse came forth. Corcoran E. **Sci Am** 1989 Feb; 260(2):73

Finding the anti-oncogene. Weinberg RA. **Sci Am** 1988 Sep; 259(3):44–51 (4 ref.)

Transforming genes in duck hepatic carcinoma—mht(raf) and Ha-ras. Tan H, et al. **Sci Sin [B]** 1988 Nov;31(11):1325–32

Studies on the regulation of malignant phenotype and gene expression in human promyelocytic leukemia cell mutant (HL-60-AR). Xue SP, et al. **Sci Sin [B]** 1988 Sep; 31(9):1095–108

Point mutational inactivation of the retinoblastoma antioncogene. Horowitz JM, et al. **Science** 1989 Feb 17; 243(4893):937–40

jun Is bustin' out all over [news] Marx JL. **Science** 1988 Dec 9;242(4884):1377–8

elk, tissue-specific ets-related genes on chromosomes X and 14 near translocation breakpoints. Rao VN, et al. **Science** 1989 Apr 7;244(4900):66–70

MyoD1: a nuclear phosphoprotein requiring a Myc homology region to convert fibroblasts to myoblasts. Tapscott SJ, et al. **Science** 1988 Oct 21;242(4877):405–11

Induction of mesoderm by a viral oncogene in early Xenopus embryos. Whitman M, et al. **Science** 1989 May 19;

244(4906):803–6
Oncogene structure, function, and expression in breast cancer. Yee LD, et al. **Semin Diagn Pathol** 1989 May; 6(2):110–25
The neu (c–erbB–2) oncogene. Maguire HC Jr, et al. **Semin Oncol** 1989 Apr;16(2):148–55 (54 ref.)
Growth factors, oncogenes and the autocrine hypothesis. Wong RS, et al. **Surg Gynecol Obstet** 1989 May; 168(5):468–73 (66 ref.)
Oncogenes and tumor suppressor genes. Weinberg RA. **Trans Stud Coll Physicians Phila** 1988 Dec;10(1–4):83–94 (20 ref.)
The three–dimensional structure of c–H–ras p21: implications for oncogene and G protein studies [published erratum appears in Trends Biochem Sci 1988 Oct;13(10):397] Jurnak F. **Trends Biochem Sci** 1988 Jun;13(6):195–8
Transforming potential of fibroblast growth factor genes. Thomas KA. **Trends Biochem Sci** 1988 Sep;13(9):327–8 (17 ref.)
Oncogenes take a place in pattern formation. Tsonis PA. **Trends Biochem Sci** 1988 Jan;13(1):4–5 (17 ref.)
Nuclear' oncogenes convert extracellular stimuli into changes in the genetic program. Herrlich P, et al. **Trends Genet** 1989 Apr;5(4):112–5 (40 ref.)
The marriage of oncogenes and anti–oncogenes. Linzer DI. **Trends Genet** 1988 Sep;4(9):245–7 (28 ref.)
Chromosomal abnormalities in lymphoid tumours: mechanism and role in tumour pathogenesis. Rabbitts TH, et al. **Trends Genet** 1988 Nov;4(11):300–4 (28 ref.)
neus about c–erb–B–2 and HER2. Sefton BM. **Trends Genet** 1988 Sep;4(9):247–8 (27 ref.)
Immortalization of neural cells via oncogene transduction [news] Cepko C. **Trends Neurosci** 1988 Jan;11(1):6–8 (24 ref.)
Growth factors, oncogenes and anti–oncogenes in cancer. Dickson RB. **Trends Pharmacol Sci** 1989 Apr;10(4):125–7 (0 ref.)
Oncogenes and urological malignancies: implications for the future. Schalken JA, et al. **Urol Res** 1988;16(5):333–9 (77 ref.)
Oncogene expression in endocrine pancreatic tumors. Höfler H, et al. **Virchows Arch [B]** 1988;55(6):355–61
A small deletion in the carboxy terminus of the viral myc gene renders the virus MC29 partially transformation defective in avian fibroblasts. Enrietto PJ. **Virology** 1989 Feb;168(2):256–66
Inefficient expression in rat cells of transforming gene of BK virus with 68–bp tandem repeats in the viral promoter–enhancer. Watanabe S, et al. **Virology** 1989 Mar; 169(1):204–12
Functional dissociation of transforming genes of human papillomavirus type 16. Yutsudo M, et al. **Virology** 1988 Oct;166(2):594–7
Viral oncogenes and signal transduction. Storms RW, et al. **Virus Res** 1989 Mar;12(3):251–82 (314 ref.)
[Transforming gene in human esophageal carcinoma tissue] Jiang W. **Chung Hua Chung Liu Tsa Chih** 1988 Sep; 10(5):330–4 (Eng. Abstr.) **(Chi)**
[The application of oncogene probes to studying the activation of Ha–ras in stomach cancer cells] Deng GR. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;68(9):503–5, 36 (Eng. Abstr.) **(Chi)**
[Effects of homoharringtonine on several oncogene mRNAs in HL–60 cells] Liu J, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Nov;9(6):565–69 (Eng. Abstr.) **(Chi)**
[Epidermal growth factor and cancer] Huang P. **Sheng Li Ko Hsueh Chin Chan** 1989 Jan;20(1):22–5 (26 ref.) **(Chi)**
[Studies on the transformation of NIH 3 T 3 cells with v–fos gene] Jin JJ, et al. **Shih Yen Sheng Wu Hsueh Pao** 1988 Dec;21(4):467–79 (Eng. Abstr.) **(Chi)**
[Recent findings on the effect and role of oncogenes in carcinogenesis] Křemen J. **Cas Lek Cesk** 1989 Apr 28; 128(18):545–54 (44 ref.) (Eng. Abstr.) **(Cze)**
[Paracrine and autocrine regulation of reproduction—growth factors and cellular "oncogenes"] Bukovský A, et al. **Cesk Gynekol** 1988 May;53(4):297–313 **(Cze)**
[The clinical significance of oncogenes] Lehtola L, et al. **Duodecim** 1988;104(22):1847–63 (85 ref.) **(Fin)**
[Genomic changes and oncogenesis. Present functional theories. Anti–oncogenes] Grandjouan S, et al. **Ann Med Interne (Paris)** 1988;139(4):258–64 (24 ref.) **(Fre)**
[Cell proliferation and cooperation of v–mil and v–myc oncogenes] Dozier C, et al. **Biochimie** 1988 Jul;70(7):885–94 (Eng. Abstr.) **(Fre)**
[Research on the molecular basis of neoplasms: malignant melanoma as an example] Birnbaum D, et al. **Bull Cancer (Paris)** 1989;76(3):227–36 (72 ref.) (Eng. Abstr.) **(Fre)**
[From oncogene to anti–oncogene. Recent findings apropos of the retinoblastoma susceptibility gene] Harel J. **Bull Cancer (Paris)** 1989;76(4):339–46 (38 ref.) **(Fre)**
[Genes of hereditary diseases that predispose to tumors] Thomas G. **Bull Cancer (Paris)** 1988;75(9):871–8 (Eng. Abstr.) **(Fre)**
[Augmentation of the expression of c–myc and c–fos oncogenes as a function of the mechanical activity of the isolated adult rat heart] Bauters C, et al. **C R Acad Sci [III]** 1988;306(20):597–600 (Eng. Abstr.) **(Fre)**
[FGF gene family and their role in human tumors] de Lapeyrière O, et al. **Pathol Biol (Paris)** 1988 Sep; 36(7):863–5 (15 ref.) **(Fre)**
[Oncogenes: risk and prognostic factors in cancer of the breast (editorial)] Lidereau R. **Pathol Biol (Paris)** 1988 Oct; 36(8):953–5 **(Fre)**
[(Proto)–oncogenes, cellular growth and development] Morello D. **Reprod Nutr Dev** 1988;28(6B):1687–98 (23 ref.) (Eng. Abstr.) **(Fre)**
[Oncogenes and bronchial cancer] Brambilla E, et al. **Rev Mal Respir** 1988;5(6):535–49 (67 ref.) (Eng. Abstr.) **(Fre)**
[The oncogene concept: molecular biological methods and parameters for characterizing gastrointestinal tumors] Kalthoff H. **Immun Infekt** 1988 Dec;16(6):203–12 (78 ref.) (Eng. Abstr.) **(Ger)**
[Oncogene expression as prognostic factor in malignant tumors] Höfler H. **Verh Dtsch Ges Pathol** 1988;72:174–87 (62 ref.) (Eng. Abstr.) **(Ger)**
[Oncogenes and cell differentiation] Mölling K. **Verh Dtsch Ges Pathol** 1988;72:1–9 (0 ref.) (Eng. Abstr.) **(Ger)**
[Oncogene expression in colonic cancers] Höfler H. **Wien Med Wochenschr** 1988 Jun 30;138(11–12):271–3 (15 ref.) (Eng. Abstr.) **(Ger)**
[What is the significance of the multi–hit theory of the viral origin of malignant tumors?] Wunderlich V. **Zentralbl Gynakol** 1988;110(18):1179–80 **(Ger)**
[Activation of cellular N–myc oncogene in neuroblastoma] Sansone R, et al. **Clin Ter** 1988 Feb 29;124(4):269–78 (101 ref.) (Eng. Abstr.) **(Ita)**
[Recent findings on the role of oncogenes in neoplasms] Pogliani EM, et al. **Recenti Prog Med** 1989 May; 80(5):276–80 (22 ref.) (Eng. Abstr.) **(Ita)**
[Oncogenes and differential diagnosis among non–neoplastic, precancerous lesions and early and advances cancers] Kitagawa T. **Gan No Rinsho** 1988 Aug;34(10):1259–63 (Eng. Abstr.) **(Jpn)**
[Antioncogene] Akiyama T. **Gan To Kagaku Ryoho** 1989 May;16(5):1969–75 (22 ref.) (Eng. Abstr.) **(Jpn)**
[Oncogene of human papillomavirus] Hakura A, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 2):542–8 (13 ref.) (Eng. Abstr.) **(Jpn)**
[Recessive oncogene and loss of heterozygosity] Sasaki M, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 2):624–31 (11 ref.) (Eng. Abstr.) **(Jpn)**
[Expression of cell surface transformation–associated antigens TAAs on activated oncogene–transfected rat fibroblast and antitumor immunity by hosts] Sato N, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 2):653–61 (Eng. Abstr.) **(Jpn)**
[Oncogenes in human gastric carcinoma] Tahara E. **Gan To Kagaku Ryoho** 1989 Jun;16(6):2149–55 (23 ref.) (Eng. Abstr.) **(Jpn)**
[Oncogenes in human leukemia] Takaku F. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 2):617–23 (Eng. Abstr.) **(Jpn)**
[ret gene from a human stomach cancer] Koda T. **Hokkaido Igaku Zasshi** 1988 Nov;63(6):913–24 (Eng. Abstr.) **(Jpn)**
[Viral oncogenesis of brain tumors] Nagashima K. **Hokkaido Igaku Zasshi** 1989 May;64(3):227–31 **(Jpn)**
[Expression of c–myc product in gastric cancer: preliminary report] Ninomiya I, et al. **Nippon Geka Gakkai Zasshi** 1989 Apr;90(4):628 **(Jpn)**
[Study of oncogene mRNA in carcinoma of the esophagus by in situ hybridization: preliminary report] Tanaka I, et al. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1754 **(Jpn)**
[Analysis of the c–fms gene in hematopoietic neoplasia with changes of chromosome 5] Ohyashiki JH, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Nov;51(7):1109–14 (Eng. Abstr.) **(Jpn)**
[Review on internal medicine (1986). Recent progress in hematology. 1. Oncogene] Hoshino H. **Nippon Naika Gakkai Zasshi** 1987 May;76(5):629–34 (0 ref.) **(Jpn)**
[General concept of myelodysplastic syndromes and genetic diagnosis] Takaku F. **Nippon Rinsho** 1988 Jul;46(7):1637–45 (20 ref.) **(Jpn)**
[Recessive human cancer susceptibility genes] Wada M, et al. **Nippon Rinsho** 1988 Nov;46(11):2551–9 (44 ref.) **(Jpn)**
[Oncogene of brain tumor] Yamamoto T. **No To Shinkei** 1988 Sep;40(9):817–23 **(Jpn)**
[DNA analysis in chronic myelogenous leukemia, especially in clinical application of bcr gene rearrangement] Funato T, et al. **Rinsho Byori** 1989 Mar;37(3):306–10 **(Jpn)**
[Oncogens and tumor makers in thyroid cancer] Hashimoto T, et al. **Rinsho Byori** 1989 Feb;37(2):122–30 **(Jpn)**
[Detection of c–myc gene expression in human coronary arteriosclerosis by immunohistochemistry and in situ hybridization method] Nagamine M, et al. **Rinsho Byori** 1989 Mar;37(3):311–5 **(Jpn)**
[The c–sis gene expression in acute megakaryoblastic leukemia cells] Sunami S, et al. **Rinsho Ketsueki** 1988 Aug; 29(8):1194–9 (Eng. Abstr.) **(Jpn)**
[Hematologic diseases and oncogenes] Takaku F. **Rinsho Ketsueki** 1988 Nov;29(11):1960–4 (13 ref.) **(Jpn)**
[Molecular mechanism of initiation of DNA replication in eukaryotic cells] Ariga H. **Seikagaku** 1988 Jul;60(7):517–31 (84 ref.) **(Jpn)**
[Structure and expression of human endogenous retroviral genes] Kato N, et al. **Tanpakushitsu Kakusan Koso** 1988 Oct;33(13):2357–70 (92 ref.) **(Jpn)**
[DNA replication and RNA transcription regulated by c–myc protein] Sanae M, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep;33(11):1758–65 **(Jpn)**
[Transcriptional control of endogenous c–myc gene by antisense RNA] Yokoyama K. **Tanpakushitsu Kakusan Koso** 1988 Jul;33(8):1255–70 (17 ref.) **(Jpn)**
[Anticancer agents and oncogene function inhibitors of microbial origin] Umezawa K, et al. **Yakugaku Zasshi** 1988 Dec;108(12):1129–40 (72 ref.) (Eng. Abstr.) **(Jpn)**
[The role of oncogenes in carcinogenesis] Ratajczak MZ, et al. **Pol Tyg Lek** 1988 Nov 21;43(47):1519–23 (39 ref.) (Eng. Abstr.) **(Pol)**
[Trigger mechanism of temperature switching off of Src oncogene TS–mutant in the Georgiev model] Kovarskii VA, et al. **Biofizika** 1989 Mar–Apr;34(2):259–62 (Eng. Abstr.) **(Rus)**
[Segments of the human genome, containing analogs of oncogenes and retrovirus genes. 4. Primary structure of the mos–related AO section of the ORAgp5 locus] Bliskovskiĭ VV, et al. **Bioorg Khim** 1989 Apr;15(4):484–91 (Eng. Abstr.) **(Rus)**
[Complementary–addressed elimination of E1a sequence of simian adenovirus oncogene SA7 from circular single–stranded DNA of recombinant phage M13] Sats NV, et al. **Bioorg Khim** 1988 Sep;14(9):1188–96 (Eng. Abstr.) **(Rus)**
[Hormonal regulation of expression of the oncogene v–src in mouse fibroblasts NIH 3T3] Kolobkov SL, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):341–4 (Eng. Abstr.) **(Rus)**
[Change in the activity of sphingomyelinase and the level of expression of nuclear oncogenes in reversible inhibition of protein synthesis by cycloheximide] Alesenko AV, et al. **Dokl Akad Nauk SSSR** 1989;306(2):486–8 **(Rus)**
[Exon–intron structure and organization of the 5'–terminal region of the human p53 gene] Bukhman VL, et al. **Genetika** 1988 Nov;24(11):1909–17 (Eng. Abstr.) **(Rus)**
[Two allelic genes of human p53 code for proteins differing with respect to amino acid sequence] Bukhman VL, et al. **Genetika** 1988 Dec;24(12):2101–9 (Eng. Abstr.) **(Rus)**
[The mutagenic action of the DNA fragments of bovine adenovirus type 3 (BAV–3) containing early E1 (oncogene) and E4 regions] Charikova EV. **Izv Akad Nauk SSSR [Biol]** 1989 May–Jun;(3):401–7 (Eng. Abstr.) **(Rus)**
[Transcription and expression in Escherichia coli of src gene cloned sequences of rous sarcoma virus] Ambartsumian NS, et al. **Mol Biol (Mosk)** 1989 Jan–Feb;23(1):127–34 (Eng. Abstr.) **(Rus)**
[Expression of oncogenes in the rat liver under conditions of template biosynthesis uncoupling by sublethal doses of cycloheximide] Filippova GN, et al. **Mol Biol (Mosk)** 1989 May–Jun;23(3):843–50 (Eng. Abstr.) **(Rus)**
[Injection of gene p53 into the pronuclei of mouse zygotes] Sergienko VG, et al. **Ontogenez** 1989 May–Jun;20(3):323–6 (Eng. Abstr.) **(Rus)**
[Viral myc oncogene in the genome of transgenic mice and their progeny] Ermilov AN, et al. **Tsitologiia** 1988 May; 30(5):589–96 (Eng. Abstr.) **(Rus)**
[Positive Philadelphia chromosome in childhood ALL] Gil C, et al. **An Esp Pediatr** 1988 Oct;29 Suppl 34:145–7 **(Spa)**
[Antioncogenes (editorial)] Grisolía S, et al. **Rev Clin Esp** 1989 Mar;184(5):223–4 **(Spa)**
[Carcinogenic genes and antitumoral genes (editorial)] Arias Vallejo E. **Rev Esp Enferm Apar Dig** 1988 Dec;74(6):651 **(Spa)**

DRUG EFFECTS

Effects of colony–stimulating factors on leukemia progenitor cells and oncogene expression. Watson JD, et al. **Behring Inst Mitt** 1988 Aug;(83):154–64 (42 ref.)
Neoplastic transformation of 3T3 mouse embryo cells with c–myc– and c–Ha–ras–1 oncogenes. Armelin HA, et al. **Braz J Med Biol Res** 1988;21(6):1155–61 (25 ref.)
Regulation of human estrogen receptor gene, epidermal growth factor receptor gene, and oncogenes by estrogen and antiestrogen in MCF–7 breast cancer cells. Murayama Y, et al. **Cancer Detect Prev** 1988;13(2):103–7
Endogenous retroviral env genes after N–methyl–N'–nitro–N–nitrosoguanidine treatment of mouse tumor cells: stable DNA amplification and rearrangement. Apt D, et al. **Cancer Res** 1989 Jul 15; 49(14):3966–71
raf family serine/threonine protein kinases in mitogen signal transduction. Rapp UR, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:173–84
Response modification in carcinogenesis. Cerutti PA. **Environ Health Perspect** 1989 May;81:39–43 (64 ref.)
Oncogene activation in experimental carcinogenesis: the role of carcinogen and tissue specificity. Garte SJ, et al. **Environ Health Perspect** 1989 May;81:29–31
The same external signal differentially induced the c–myc expression in Burkitt lymphoma and B–lymphoblastoid cell lines. Numoto M. **Eur J Cancer Clin Oncol** 1988 Nov; 24(11):1727–35
Clinical significance of gene amplification studied in human

neuroblastoma xenografts: relationship with tumor growth rate, chemotherapeutic sensitivities and levels of neuron-specific enolase. Tsuchida Y, et al. **Exp Cell Biol** 1988;56(5):277–84

Regulation of pim and myb mRNA accumulation by interleukin 2 and interleukin 3 in murine hematopoietic cell lines. Dautry F, et al. **J Biol Chem** 1988 Nov 25; 263(33):17615–20

Modulation of oncogene expression by epidermal growth factor and gamma-interferon in A431 squamous carcinoma cells. Black RJ, et al. **J Biol Regul Homeost Agents** 1988 Jan-Mar;2(1):35–44

Differential expression of c-myc and c-fos oncogenes during the differentiation of human leukemic cells by Ara-C. Chomienne C, et al. **J Biol Regul Homeost Agents** 1987 Apr-Jun;1(2):69–72

Oncogene expression and cytotoxic activity of tumor necrosis factor against human cancer cells. Dhingra K, et al. **J Biol Response Mod** 1989 Aug;8(4):337–43

Tumor necrosis factor-alpha affects LTR-controlled oncogene expression in transformed mouse fibroblasts at the post-transcriptional level. Seliger B, et al. **J Immunol** 1988 Sep 15;141(6):2138–44

Rapid inhibition of c-myc gene expression by a glucocorticoid in the avian oviduct. Rories C, et al. **Mol Endocrinol** 1989 Jun;3(6):991–1001

RADIATION EFFECTS

Molecular analysis of DNA isolated from the different stages of x-ray-induced transformation in vitro. Krolewski B, et al. **Mol Carcinog** 1989;2(1):27–33

Detecting dominant transforming genes in cells transformed in utero. Borek C, et al. **Toxicol Ind Health** 1988 Dec; 4(4):541–5

ONCOGENIC VIRUSES

see related
TUMOR VIRUS INFECTIONS

GENETICS

The sea oncogene of the avian erythroblastosis virus S13. Hayman MJ. **Pathol Immunopathol Res** 1987;6(5–6):390–9 (31 ref.)

[Viral oncogenesis of brain tumor] Nagashima K. **No To Shinkei** 1988 Sep;40(9):807–15 **(Jpn)**

IMMUNOLOGY

Vaccines against tumor antigens. Arlinghaus RB. **Adv Vet Sci Comp Med** 1989;33:377–95 (70 ref.)

ISOLATION & PURIFICATION

[Isolation of sarcoma virus from noninbred rats] Merekalova ZI, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):476–8 (Eng. Abstr.) **(Rus)**

ONCOGENS see **CARCINOGENS**

ONCOLOGIC NURSING

The nurse's role in cancer rehabilitation. Review of the literature. Anderson JL. **Cancer Nurs** 1989 Apr;12(2):85–94 (64 ref.)

Humor. A therapeutic approach in oncology nursing. Bellert JL. **Cancer Nurs** 1989 Apr;12(2):65–70

Caring for the revolution. Shirley JL. **Cancer Nurs** 1989 Apr; 12(2):118–9

The effect of chemotherapy on the gastrointestinal tract. Ghazi CM, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):728–30

EDUCATION

Education and training in Switzerland for nurses with different levels of knowledge in cancer nursing [letter] Bachmann-Mettler I. **Acta Oncol** 1988;27(6b):864–5

Improve the counselling skills of doctors and nurses in cancer care. Maguire P, et al. **BMJ** 1988 Oct 1;297(6652):847–9

Oncology nurses' knowledge of graft-versus-host disease in bone marrow transplant patients. Copel LC, et al. **Cancer Nurs** 1989 Aug;12(4):243–9

Education and training in cancer. A European perspective. Copp KA. **Cancer Nurs** 1988 Aug;11(4):255–8

Towards a European school of oncology nursing. De Haas AA. **Cancer Nurs** 1988 Aug;11(4):259–61

Welcome innovations in education for cancer nurses in the United Kingdom [editorial] Smith JP. **J Adv Nurs** 1989 Mar;14(3):167

Psychosocial support of cancer patients: a training program for oncology staff. Hürny C. **Recent Results Cancer Res** 1988;108:295–300

METHODS

Relaxation techniques. A self-learning module for nurses: Unit I. Mast D, et al. **Cancer Nurs** 1987 Jun;10(3):141–7

TRENDS

The changing role of the oncology nurse. Hughes CB, et al. **J Med Assoc Ga** 1988 Sep;77(9):720–2

ONCOLOGY, MEDICAL see **MEDICAL ONCOLOGY**

ONCOLYTIC VIRUSES

[Mechanisms of the antineoplastic action of viruses and the problem of the immunotherapy of tumors] Ferdat AK, et al. **Vopr Onkol** 1988;34(11):1291–300 (68 ref.) **(Rus)**

ONCORHYNCHUS see **SALMON**

ONCORNAVIRUSES see **RETROVIRIDAE**

ONCOVIRUSES see **RETROVIRIDAE**

ONDATRA see **CRICETIDAE**

ONDINE'S CURSE see **SLEEP APNEA SYNDROMES**

ONIONS see **ALLIUM**

ONIUM COMPOUNDS

CHEMICAL SYNTHESIS

The synthesis and properties of peptidylmethylsulphonium salts with two cationic residues as potential inhibitors of prohormone processing. Zumbrunn A, et al. **Biochem J** 1988 Dec 15;256(3):989–94

PHARMACOKINETICS

Membrane potential in liposomes measured by the transmembrane distribution of 86Rb+, tetraphenylphosphonium or triphenylmethylphosphonium: effect of cholesterol in the lipid bilayer. Nakazato K, et al. **Biochim Biophys Acta** 1988 Dec 8;946(1):143–50

Effects of medium amino acids on ouabain-sensitive 86Rb+ -uptake and membrane-potential dependent [3H]tetraphenylphosphonium accumulation in Friend erythroleukemia cells. Schaefer A, et al. **Eur J Cell Biol** 1988 Aug;46(3):453–7

Age and growth-related changes in cyclopiazonic acid-potentiated lipophilic cation accumulation by cultured cells and binding to freeze-thaw lysed cells. Riley RT, et al. **J Biochem Toxicol** 1987 Fall-Winter;2:251–64

PHARMACOLOGY

Carboxyl residue(s) at the ligand-binding site of rat muscarinic receptors. Galron R, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1203–8

Inhibition of cancer procoagulant by peptidyl diazomethyl ketones and peptidyl sulfonium salts. Falanga A, et al. **Thromb Res** 1989 Jun 1;54(5):389–98

[Antihypertensive and hemodynamic effects of 3,6-dimethamidodibenzopyriodonium citrate (I-65)] Tan DX, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jan; 9(1):69–73 (Eng. Abstr.) **(Chi)**

[Antimicrobial properties of phosphorus- and nitrogen-containing onium compounds and their derivatives] Patratii VK, et al. **Mikrobiol Zh** 1983 May-Jun; 45(3):59–62 (Eng. Abstr.) **(Rus)**

ONLAYS see **INLAYS**

ONLINE SYSTEMS

Electronic information for physicians: a new dimension in solving traditional problems. Part 1. Yasnoff WA. **Alaska Med** 1988 Jul-Aug;30(4):135–6

The Wilma L. West Library goes on-line. Binderman MS. **Am J Occup Ther** 1989 Apr;43(4):269–70

An on-line detection system for aerosols of proteolytic enzymes. Behizad M, et al. **Ann Occup Hyg** 1988; 32(4):499–508

The information resources of the food and nutrition information center. Irving HB. **Bull Med Libr Assoc** 1989 Jan;77(1):72–3

In search of applications of nursing theories: the Nursing Citation Index. Johnson ED. **Bull Med Libr Assoc** 1989 Apr;77(2):176–84

Preparing to search on-line. Goldbaum MH. **CLAO J** 1989 Apr-Jun;15(2):103–4, 106, 112–4

Computerized databases in nursing. Information at your fingertips. Fried AK, et al. **Comput Nurs** 1988 Nov-Dec; 6(6):244–52

Comprehension aids for on-line reading of expository text. Lachman R. **Hum Factors** 1989 Feb;31(1):1–15

A predictive instrument for acute ischemic heart disease to improve coronary care unit admission practices: a potential on-line tool in a computerized electrocardiograph. Selker HP, et al. **J Electrocardiol** 1988;21 Suppl:S11–7

Electronic information for physicians: a new dimension in solving traditional problems. Yasnoff WA. **J La State Med Soc** 1988 Sep;140(9):47–50

Online information on AIDS [letter] McWilliams A, et al. **J R Coll Gen Pract** 1988 Sep;38(314):422

Online medical database searching. Wood N, et al. **J Soc Occup Med** 1988 Autumn;38(3):73–6

Prescription drug diversion: "what Lola wants, Lola gets" [editorial] Thomison JB. **J Tenn Med Assoc** 1989 Jan; 82(1):35–7

Electronic information for physicians: a new dimension in solving traditional problems. Yasnoff WA. **Kans Med** 1989 Feb;90(2):34, 36

Anesthesiology job openings online [letter] Zimmerman BL. **MD Comput** 1989 Mar-Apr;6(2):65

Online measurement of ocular accommodation using a low-cost microcomputer system. Eadie AS, et al. **Med Biol Eng Comput** 1988 Mar;26(2):143–6

MDs prefer books, despite hike in on-line data. Korcok M. **Minn Med** 1989 Mar;72(3):151–3

Electronic information: a new dimension. Yasnoff WA. **Pa Med** 1989 Mar;92(3):48–50

Electronic information: Part II. Yasnoff WA. **Wis Med J** 1989 Jan;88(1):31, 35

[An on-line computer procedure for the analysis of pressure-volume relations in ventilated intensive care patients] Heinrichs W, et al. **Anaesthesist** 1988 Oct; 37(10):642–7 (Eng. Abstr.) **(Ger)**

[Online patent searching—rapid responses to critical questions] Blunck M, et al. **Naturwissenschaften** 1989 Mar; 76(3):96–8 (Eng. Abstr.) **(Ger)**

[On-line identification of the circulatory system driven by the left ventricular assist device] Yoshizawa M, et al. **Iyodenshi To Seitai Kogaku** 1988 Jun;26(2):83–91 (Eng. Abstr.) **(Jpn)**

[Electronic information bank for health services in Norway] Ostbye T. **Tidsskr Nor Laegeforen** 1989 Feb 28;109(6):715–8 (Eng. Abstr.) **(Nor)**

[Access to North American online libraries and networks from a medical practice] Ostbye T. **Tidsskr Nor Laegeforen** 1989 Jan 30;109(3):350–3 (Eng. Abstr.) **(Nor)**

[Selective dissemination of information in support of priority health problems] Macías-Chapula CA, et al. **Salud Publica Mex** 1988 Nov-Dec;30(6):827–35 (Eng. Abstr.) **(Spa)**

ECONOMICS

Effects of cost sharing and end-user searching on a clinical medical librarian program. Miller N. **Bull Med Libr Assoc** 1989 Jan;77(1):71–2

EDUCATION

Integrating and evaluating online bibliographic searching with clinical experiences of third year medical students. France CL, et al. **Proc Annu Conf Res Med Educ** 1988; 27:106–11

INSTRUMENTATION

BIOLAB—a computerized on-line system for physiological measurements in experimental animals. Axenborg JE. **Comput Methods Programs Biomed** 1989 Feb;28(2):75–85

Membrane plasmapheresis with plasma cryofiltration: characterization of cryogel and clinical response. Smith JW, et al. **Life Support Syst** 1983;1 Suppl 1:439–42

ORGANIZATION & ADMINISTRATION

On-line medical command in theory and practice. Erder MH, et al. **Ann Emerg Med** 1989 Mar;18(3):261–8

Online support functions of prescription order system and prescription audit in an integrated hospital information system. Ogura H, et al. **Med Inf (Lond)** 1988 Jul-Sep; 13(3):161–9

[Automated information search systems in medicine] Zhakov IG, et al. **Sov Zdravookhr** 1988;(6):30–4 (Eng. Abstr.) **(Rus)**

STANDARDS

[Literature storage and retrieval for library users using a microcomputer (letter)] Eger AJ. **Ned Tijdschr Geneeskd** 1989 Apr 15;133(15):789 **(Dut)**

TRENDS

Impact of DOCLINE on interlibrary loan service at the National Library of Medicine. Lacroix EM, et al. **Bull Med Libr Assoc** 1989 Jan;77(1):42–7

Accessing the biomedical literature: the South Dakota Med-Fax Network. Lang EA, et al. **S D J Med** 1989 Feb; 42(2):5–8

UTILIZATION

Backup of online public access catalogs in academic health sciences libraries [letter] Carrigan E, et al. **Bull Med Libr Assoc** 1989 Jan;77(1):65–7

Characteristics of early adopters of end-user online searching in the health professions. Marshall JG. **Bull Med Libr Assoc** 1989 Jan;77(1):48–55

ONLY CHILD

The intellectual achievement of only children. Polit DF, et al. **J Biosoc Sci** 1988 Jul;20(3):275–85 (17 ref.)

PSYCHOLOGY

The well-being of only children. Veenhoven R, et al. **Adolescence** 1989 Spring;24(93):155–66

ONYCHOMYCOSIS see **TINEA UNGUIUM**

ONYCHOPHAGIA see **NAIL BITING**

OOCYTES

Ultrasound directed oocyte recovery in an IVF program. Wong PC, et al. **Asia Oceania J Obstet Gynaecol** 1988 Dec; 14(4):433–5

Oocyte donation: a review. Cameron IT, et al. **Br J Obstet Gynaecol** 1989 Aug;96(8):893–9 (23 ref.)

Establishment of 22 pregnancies after oocyte and embryo donation. Devroey P, et al. **Br J Obstet Gynaecol** 1989 Aug;96(8):900–6

A comparison of the transabdominal and transvaginal methods of ultrasound-guided aspiration of pre-ovulatory oocytes for in vitro fertilisation. Mao KR, et al. **Clin Reprod Fertil** 1987 Dec;5(6):373–7

Transcriptional characteristics of in vitro assembled chromatin assayed by microinjection into Xenopus laevis oocytes. Steinbeisser H, et al. **FEBS Lett** 1989 Jun 5; 249(2):367–70

Selective oocyte retrieval: a new approach to ovarian hyperstimulation. Belaisch-Allart J, et al. **Fertil Steril** 1988 Oct;50(4):654–6

Recovery of two human oocytes surrounded by a single zona pellucida. Fishel S, et al. **Fertil Steril** 1989 Aug;52(2):325–7

A program for matched, anonymous oocyte donation. Kennard EA, et al. **Fertil Steril** 1989 Apr;51(4):655–60

Artificial agonadism and hormone replacement for oocyte donation. Meldrum DR, et al. **Fertil Steril** 1989 Sep; 52(3):509–11

Establishment of a nonanonymous donor oocyte program: preliminary experience at the University of Southern California. Sauer MV, et al. **Fertil Steril** 1989 Sep; 52(3):433–6

Cleavage characteristics of mouse embryos inseminated and cultured after zona pellucida drilling. Talansky BE, et al. **Gamete Res** 1988 Nov;21(3):277–87

Positive and negative regulation of the gene for transcription factor IIIA in Xenopus laevis oocytes. Scotto KW, et al. **Genes Dev** 1989 May;3(5):651–62

Physical factors are involved in the destruction of embryos and oocytes during freezing and thawing procedures. Ashwood-Smith MJ, et al. **Hum Reprod** 1988 Aug; 3(6):795–802

Chromosome anomalies in human oocytes failing to fertilize after insemination in vitro. Bongso A, et al. **Hum Reprod** 1988 Jul;3(5):645–9

Cryopreservation of human and rabbit oocytes and one-cell embryos: a comparison of DMSO and propanediol. Siebzehnruebl ER, et al. **Hum Reprod** 1989 Apr;4(3):312–7

Evaluation of stimulated cycles with multiple follicular development but low oocyte retrieval. Pellicer A, et al. **Int J Fertil** 1989 Jan–Feb;34(1):37–41

Expression of the thyroid sodium/iodide symporter in Xenopus laevis oocytes. Vilijn F, et al. **J Biol Chem** 1989 Jul 15;264(20):11901–3

Transvaginal oocyte aspiration and pelvic infection [letter] Børlum KG, et al. **Lancet** 1989 Jul 1;2(8653):53

Oocyte donation in 61 patients. Serhal PF, et al. **Lancet** 1989 May 27;1(8648):1185–7

Oocyte retrieval in an in vitro fertilization–embryo transfer program: comparison of four methods. Wiseman DA, et al. **Radiology** 1989 Oct;173(1):99–102

[Comparative evaluation of 2 methods of detecting oocytes of Cryptosporidium in human feces (letter)] Beauvais B, et al. **Ann Biol Clin (Paris)** 1989;47(1):45–6 (Eng. Abstr.) **(Fre)**

[Timing of ovocyte collection and maintaining pregnancy rate in fertilization in vitro (letter)] Barriere P, et al. **Presse Med** 1989 Feb 25;18(8):436 **(Fre)**

[Solutions provided by the freezing of embryos and questions posed by the freezing of human ovocytes] Mandelbaum J, et al. **Rev Fr Gynecol Obstet** 1988 Oct;83(10):619–22 (Eng. Abstr.) **(Fre)**

[Chromosome analysis of ovocytes and human embryos collected after fertilization in vitro. A model of natural selection against aneuploidy] Plachot M, et al. **Rev Fr Gynecol Obstet** 1988 Oct;83(10):613–7 (Eng. Abstr.) **(Fre)**

[Transvaginal follicle puncture in local anesthesia for collecting oocytes] Degenhardt F, et al. **Fortschr Med** 1988 Jul 10;106(20):422–4 (Eng. Abstr.) **(Ger)**

[The evaluation of ultrasonic oocyte collection techniques for IVF-ET—comparing the transabdominal and transvaginal methods] Mio Y, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Feb;41(2):129–36 (Eng. Abstr.) **(Jpn)**

[The transcriptional efficiency of loach oocyte 5S rRNA genes depends on the region of 5'-flanking spacer] Sedman IuE, et al. **Dokl Akad Nauk SSSR** 1988;303(3):736–7 **(Rus)**

[Oocyte recovery by aspiration of preovulatory follicles in heifers] Laurinčík J, et al. **Vet Med (Praha)** 1988 Dec; 33(12):727–34 (Eng. Abstr.) **(Slo)**

ANALYSIS

Failed fertilization in human in vitro fertilization analyzed with the deoxyribonucleic acid-specific fluorochrome Hoechst 33342. Gwatkin RB, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):31–5

Evidence for a novel growth factor in Xenopus oocytes. Théry C, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):615–22

Purification and characterization of biotin-binding protein II from chicken oocytes. Bush L, et al. **Biochem J** 1988 Dec 15;256(3):797–805

Genetic analysis of DNA from single human oocytes: a model for preimplantation diagnosis of cystic fibrosis. Coutelle C, et al. **BMJ** 1989 Jul 1;299(6690):22–4

Xenopus oocyte poly(A) RNAs that hybridize to a cloned interspersed repeat sequence are not translatable. McGrew LL, et al. **Dev Biol** 1989 Jul;134(1):267–70

Vimentin expression in oocytes, eggs and early embryos of Xenopus laevis. Tang P, et al. **Development** 1988 Jun; 103(2):279–87

The finger motif defines a multigene family represented in the maternal mRNA of Xenopus laevis oocytes. Köster M, et al. **EMBO J** 1988 Jun;7(6):1735–41

A 15,000-Mr protein proteolytically derived from vitellogenin within oocyte of Perinereis cultrifera (polychaete annelid). Identification, purification and partial characterization. Baert JL. **Eur J Biochem** 1988 Nov 15; 177(3):625–30

The jelly layers and cortex of the unfertilized Xenopus laevis egg: carbohydrate, phospholipid and protein analysis. Tilley L, et al. **Eur J Cell Biol** 1988 Oct;47(1):47–52

Induction of metaphase chromosome condensation in human sperm by Xenopus egg extracts. Lohka MJ, et al. **Exp Cell Res** 1988 Nov;179(1):303–9

Purification of a p47 phosphoprotein from Xenopus laevis oocytes and identification as an in vivo and in vitro p34cdc2 substrate. Mulner-Lorillon O, et al. **FEBS Lett** 1989 Jul 17;251(1–2):219–24

Molecular cloning and sequence determination of a cDNA coding for the alpha-subunit of a Go-type protein of Xenopus laevis oocytes. Olate J, et al. **FEBS Lett** 1989 Feb 13;244(1):188–92

Filipin-labelled complexes are polarized in their distribution in the cytoplasm of meiotically mature mouse eggs. Allworth A, et al. **Gamete Res** 1988 Aug;20(4):475–89

Intracellular localization of argyrophilic proteins in the maturing oocyte, fertilized egg, and spermatozoa of the starfish, Asterina pectinifera. Amikura RM, et al. **Gamete Res** 1987 Apr;16(4):291–301

A novel actin filament-capping protein from sea urchin eggs: a 20,000-molecular-weight protein-actin complex. Ishidate S, et al. **J Biochem (Tokyo)** 1988 Jul;104(1):72–80

Free sialooligosaccharides found in the unfertilized eggs of a freshwater trout, Plecoglossus altivelis. A large storage pool of complex-type bi-, tri-, and tetraantennary sialooligosaccharides. Ishii K, et al. **J Biol Chem** 1989 Jan 25;264(3):1623–30

Oocytes from the mutant restricted ovulator hen lack receptor for very low density lipoprotein. Nimpf J, et al. **J Biol Chem** 1989 Jan 25;264(3):1393–8

G-proteins in mammalian gametes: an immunocytochemical study. Garty NB, et al. **J Cell Sci** 1988 Sep;91 (Pt 1):21–31

Differential cytolocalization of prosomes in axolotl during oogenesis and meiotic maturation. Gautier J, et al. **J Cell Sci** 1988 Aug;90 (Pt 4):543–53

Pathways of nucleoprotein assembly on 5S RNA genes in a Xenopus oocyte S-150 extract. Razik MA, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4117–30

Localized maternal mRNA related to transforming growth factor beta mRNA is concentrated in a cytokeratin-enriched fraction from Xenopus oocytes. Pondel MD, et al. **Proc Natl Acad Sci U S A** 1988 Oct; 85(20):7612–6

CYTOLOGY

The development of an efficient ambulatory in vitro fertilization (IVF) and embryo transfer (ET) program using ultrasonically guided oocyte retrieval. Barak Y, et al. **Acta Obstet Gynecol Scand** 1988;67(7):585–8

Pregnancies after human oocyte cryopreservation. Chen C. **Ann N Y Acad Sci** 1988;541:541–9

Regulation of oocyte maturation. The role of cAMP. Dekel N. **Ann N Y Acad Sci** 1988;541:211–6

The transvaginal method for oocyte retrieval. An update on our experience (1984–1987). Dellenbach P, et al. **Ann N Y Acad Sci** 1988;541:111–24

Primary ovarian failure. Embryo donation after substitution therapy. Devroey P, et al. **Ann N Y Acad Sci** 1988; 541:755–60

Successful in vitro fertilization of frozen-thawed rabbit and human oocytes. Diedrich K, et al. **Ann N Y Acad Sci** 1988; 541:562–70

Growth and development of mouse oocytes in vitro. Eppig JJ, et al. **Ann N Y Acad Sci** 1988;541:205–10

Fertilization in trypsin-treated oocytes. Kiessling AA, et al. **Ann N Y Acad Sci** 1988;541:614–20

The fertilizability of human oocytes at different stages of meiotic maturation. Lopata A, et al. **Ann N Y Acad Sci** 1988;541:324–36

Cryopreservation of immature and mature hamster and human oocytes. Mandelbaum J, et al. **Ann N Y Acad Sci** 1988;541:550–61

Stopping biological time. The freezing of living cells. Mazur P. **Ann N Y Acad Sci** 1988;541:514–31 (41 ref.)

Microinjection of spermatozoa into oocytes. Mettler L, et al. **Ann N Y Acad Sci** 1988;541:591–600

Regulation of the meiotic cycle in oocytes of domestic mammals. Moor RM. **Ann N Y Acad Sci** 1988;541:248–58

Improved oocyte quality through improved ovulation induction regimen. Pellicer A, et al. **Ann N Y Acad Sci** 1988;541:46–59

Chromosomal analysis of human oocytes and embryos in an in vitro fertilization program. Plachot M, et al. **Ann N Y Acad Sci** 1988;541:384–97

Oocyte donation. The Norfolk Program. Rosenwaks Z, et al. **Ann N Y Acad Sci** 1988;541:728–41

Factors affecting the developmental capacity of mouse oocytes undergoing maturation in vitro. Schroeder AC, et al. **Ann N Y Acad Sci** 1988;541:197–204

Protein synthetic patterns in immature and mature human oocytes. Schultz GA, et al. **Ann N Y Acad Sci** 1988; 541:237–47

Role of protein phosphorylation in meiotic maturation of mouse oocytes in vitro. Schultz RM. **Ann N Y Acad Sci** 1988;541:217–27

Ultrasound-guided peritoneal oocyte and sperm transfer. Sharma V, et al. **Ann N Y Acad Sci** 1988;541:767–72

Cytoplasmic factors in oocyte maturation, fertilization, and early development. Suzuki S, et al. **Ann N Y Acad Sci** 1988; 541:349–66

Survey on cryopreservation. van Steirteghem AC, et al. **Ann N Y Acad Sci** 1988;541:571–4

Oocyte assessment and biological performance. Veeck LL. **Ann N Y Acad Sci** 1988;541:259–74

Oocyte retrieval under the guidance of a vaginal transducer. Wikland M, et al. **Ann N Y Acad Sci** 1988;541:103–10

Chromosome analysis of preovulatory human oocytes and oocytes failing to cleave following insemination in vitro. Wramsby H. **Ann N Y Acad Sci** 1988;541:228–36

Progesterone induces transient changes in plasma membrane fluidity of amphibian oocytes during the first meiotic division. Morrill GA, et al. **Arch Biochem Biophys** 1989 Mar;269(2):690–4

Proto-oncogenes and embryonic development. Méchali M, et al. **Biochimie** 1988 Jul;70(7):895–8

Fluorescence microscopy of nuclear DNA in oocytes and zygotes during in vitro fertilization and development of early embryos in mice. Mori C, et al. **Biol Reprod** 1988 Oct;39(3):737–42

Morphological observations on follicular oocytes recovered during pregnancy in sheep and goats. Dell'Aquila ME, et al. **Boll Soc Ital Biol Sper** 1988 Jun;64(6):515–22

Purification of MPF from starfish: identification as the H1 histone kinase p34cdc2 and a possible mechanism for its periodic activation. Labbe JC, et al. **Cell** 1989 Apr 21; 57(2):253–63

Translation of cyclin mRNA is necessary for extracts of activated xenopus eggs to enter mitosis. Minshull J, et al. **Cell** 1989 Mar 24;56(6):947–56

Micromanipulation studies of the asymmetric positioning of the maturation spindle in Chaetopterus sp. oocytes: I. Anchorage of the spindle to the cortex and migration of a displaced spindle. Lutz DA, et al. **Cell Motil Cytoskeleton** 1988;11(2):83–96

Formation and function of accessory nuclei in the oocytes of the bird louse, Eomenacanthus stramineus (Insecta, Mallophaga). I. Ultrastructural and histochemical studies. Biliński SM. **Chromosoma** 1989 Jan;97(4):321–6

Pattern and frequency of nondisjunction in oocytes from the Djungarian hamster are determined by the stage of first meiotic spindle inhibition. Hummler E, et al. **Chromosoma** 1988 Nov;97(3):224–30

Further examination of the production-line hypothesis in mouse foetal oocytes. II. T(14; 15)6Ca heterozygotes. Tease C, et al. **Chromosoma** 1989 Jan;97(4):315–20

Cytology of oocytes in ground squirrels (Citellus citellus L.). Tsvetkov T, et al. **Cryobiology** 1989 Feb;26(1):93–9

Pachytene pairing in relation to sperm and oocyte numbers in a male-fertile reciprocal translocation in the mouse. Setterfield LA, et al. **Cytogenet Cell Genet** 1988;49(4):293–9

Intrafollicular factors regulating human ovarian follicular development and oocyte meiosis. Westergaard LG. **Dan Med Bull** 1988 Jun;35(3):270–81 (118 ref.)

MPF-induced breakdown of cytokeratin filament organization in the maturing Xenopus oocyte depends upon the translation of maternal mRNAs. Klymkowsky MW, et al. **Dev Biol** 1989 Aug;134(2):479–85

In vitro and in vivo studies reveal that hamster oocyte meiotic arrest is maintained only transiently by follicular fluid, but persistently by membrana/cumulus granulosa cell contact. Racowsky C, et al. **Dev Biol** 1989 Aug; 134(2):297–306

6-Dimethylaminopurine (6-DMAP), a reversible inhibitor of the transition to metaphase during the first meiotic cell division of the mouse oocyte. Rime H, et al. **Dev Biol** 1989 May;133(1):169–79

Cold-induced changes in amphibian oocytes. Angelier N, et al. **Exp Cell Res** 1989 Aug;183(2):508–13

Dynamics of chromatin changes in live one-cell mouse embryos: a continuous follow-up by fluorescence microscopy. Debey P, et al. **Exp Cell Res** 1989 Aug; 183(2):413–33

The interaction of lithium with forskolin-inhibited meiotic maturation of denuded mouse oocytes. Gavin AC, et al. **Exp Cell Res** 1988 Nov;179(1):298–302

Evidence for a pertussis toxin-sensitive G protein involved in the control of meiotic reinitiation of Xenopus laevis oocytes. Pellaz V, et al. **Exp Cell Res** 1989 Jul; 183(1):245–50

Quantitation and subcellular localization of proliferating cell nuclear antigen (PCNA/cyclin) in oocytes and eggs of Xenopus laevis. Zuber M, et al. **Exp Cell Res** 1989 Jun; 182(2):384–93

Colcemid effects on homologue pairing and crossing over during fetal mouse oogenesis. Jagiello G, et al. **Experientia** 1989 May 15;45(5):482–4

The fertilization and cleavage rates of eggs recovered from the cul-de-sac. Dirnfeld M, et al. **Fertil Steril** 1989 Mar; 51(3):523–5

Chromosome analysis of human oocytes failing to fertilize in vitro. Ma S, et al. **Fertil Steril** 1989 Jun;51(6):992–7

Transfer of human sperm into the perivitelline space of human oocytes after zona-drilling or zona-puncture. Ng SC, et al. **Fertil Steril** 1989 Jul;52(1):73–8

Influence of the calcium ionophore A23187 on rat egg behavior and cortical F-actin. Battaglia DE, et al. **Gamete Res** 1987 Oct;18(2):141–52

Behavior of sperm nuclei in intact and bisected metaphase II mouse oocytes fertilized in the presence of colcemid. Borsuk E, et al. **Gamete Res** 1988 Jul;20(3):365–76

Effect of follicle-stimulating hormone on metabolism and maturation in Bufo arenarum oocytes. Budeguer de Atenor MS, et al. **Gamete Res** 1989 Jul;23(3):349–56

Maintenance of meiotic arrest in mouse oocytes by purines: modulation of cAMP levels and cAMP phosphodiesterase activity. Downs SM, et al. **Gamete Res** 1989 Jul; 23(3):323–34

Role of protein kinase C activation in oocyte maturation and steroidogenesis in ovarian follicles of Rana pipiens: studies with phorbol 12-myristate 13-acetate. Kleis-San Francisco S, et al. **Gamete Res** 1988 Nov;21(3):323–34

Phagocytosis of yeast by human oocytes: fine structural observations. Koehler JK, et al. **Gamete Res** 1987 Jul; 17(3):237–44

Cytogenetic technique for mouse metaphase II oocytes. Mailhes JB, et al. **Gamete Res** 1987 Sep;18(1):77–83

Ovulation and fertilization of primary and secondary oocytes in LT/Sv strain mice. O'Neill GT, et al. **Gamete Res** 1987 Sep;18(1):27–36

Inhibition of progesterone-mediated maturation of oocytes of Xenopus laevis by oocyte maturation inhibitor from pig follicular fluid: development of a routine assay for the inhibitor with Xenopus oocytes. Pomerantz SH, et al. **Gamete Res** 1987 Jul;17(3):267–78

Distribution of microtubules during the first meiotic cell division in the mouse oocyte: effect of taxol. Rime H, et al. **Gamete Res** 1987 May;17(1):1–13

Sperm-egg interaction in the mouse using live and glutaraldehyde-fixed eggs. Soldani P, et al. **Gamete Res** 1987 Nov;18(3):225–35

Failure of hamster eggs fertilized in vitro to extrude the second polar body correlates with high levels of polyspermy. Stewart-Savage J, et al. **Gamete Res** 1987 Dec; 18(4):333–8

Effects of follicle-stimulating hormone and ovarian steroids during in vitro meiotic maturation on fertilization of rat oocytes. Zhang X, et al. **Gamete Res** 1989 Jul;23(3):267–77

Destruction of a translationally controlled mRNA in Xenopus oocytes delays progesterone-induced maturation. Smith RC, et al. **Genes Dev** 1988 Oct;2(10):1296–306

Transvaginal sonographically guided oocyte retrieval for in-vitro fertilization. Gembruch U, et al. **Hum Reprod** 1988 Oct;3 Suppl 2:59–63

The importance of an early diagnosis of fertilization disorders. Kessler HH, et al. **Hum Reprod** 1988 Aug; 3(6):767–72

Factors associated with accidental fractures of the zona pellucida and multipronuclear human oocytes following in-vitro fertilization. Lowe B, et al. **Hum Reprod** 1988 Oct; 3(7):901–4

Cytoskeletal organization in fresh, aged and spontaneously activated human oocytes. Pickering SJ, et al. **Hum Reprod** 1988 Nov;3(8):978–89

Premature chromosome condensation after in-vitro fertilization. Schmiady H, et al. **Hum Reprod** 1989 Aug; 4(6):689–95

Cytogenetic analysis of living human oocytes: cellular basis and developmental consequences of perturbations in chromosomal organization and complement. Van Blerkom J, et al. **Hum Reprod** 1988 Aug;3(6):777–90

Pneumoperitoneum induced pH changes in follicular and Douglas fluids during laparoscopic oocyte retrieval in humans. Verbessem D, et al. **Hum Reprod** 1988 Aug; 3(6):751–4

Hyaluronidase removal of the cumulus oophorus increases in vitro fertilization. Lavy G, et al. **J In Vitro Fert Embryo Transf** 1988 Oct;5(5):257–60

The fate of supernumerary oocytes in gamete intrafallopian transfer (GIFT) is not predictive of a poor outcome: the effect of oocyte selection. McKenna KM, et al. **J In Vitro Fert Embryo Transf** 1988 Oct;5(5):261–4

Significance of the recovery of fractured-zona oocytes in an in vitro fertilization program. Romeu A, et al. **J In Vitro Fert Embryo Transf** 1988 Aug;5(4):216–24

Programmed ovulation induction and oocyte retrieval for in vitro fertilization. Salat-Baroux J, et al. **J In Vitro Fert Embryo Transf** 1988 Jun;5(3):153–7

Correlation of follicular diameter with oocyte recovery and maturity at the time of transvaginal follicular aspiration. Scott RT, et al. **J In Vitro Fert Embryo Transf** 1989 Apr; 6(2):73–5

Cytogenetics of unfertilized human oocytes. Djalali M, et al. **J Reprod Fertil** 1988 Nov;84(2):647–52

Inhibin as an oocyte meiotic inhibitor. O WS, et al. **Mol Cell Endocrinol** 1989 Apr;62(2):307–11

Mitosis-specific monoclonal antibody MPM-2 inhibits Xenopus oocyte maturation and depletes maturation-promoting activity. Kuang J, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4982–6

Microinjection of antisense c-mos oligonucleotides prevents meiosis II in the maturing mouse egg. O'Keefe SJ, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7038–42

Meiotic inhibition: molecular control of meiosis. Proceedings from a symposium. Bethesda, Maryland, January 1987. Dedicated to Cornelia Post Channing. **Prog Clin Biol Res** 1988;267:1–401

Gene expression during growth and meiotic maturation of mouse oocytes. Bachvarova R, et al. **Prog Clin Biol Res** 1988;267:67–85 (46 ref.)

Oocyte maturation is regulated by modulation of the action of FSH in cumulus cells. Behrman HR, et al. **Prog Clin Biol Res** 1988;267:115–35 (70 ref.)

Developmental expression of ZP3, a mouse zona pellucida gene. Dean J, et al. **Prog Clin Biol Res** 1989;294:21–32 (13 ref.)

Spatial relationship of follicular cells in the control of meiosis. Dekel N. **Prog Clin Biol Res** 1988;267:87–101 (50 ref.)

Mullerian inhibiting substance in the ovary. Donahoe PK, et al. **Prog Clin Biol Res** 1988;267:153–75 (62 ref.)

The role of purines in the maintenance of meiotic arrest in mammalian oocytes. Eppig JJ, et al. **Prog Clin Biol Res** 1988;267:103–13 (25 ref.)

Cytoplasmic control of oocyte maturation and species differences in the development of maturational competence. First NL, et al. **Prog Clin Biol Res** 1988;267:1–46 (193 ref.)

New concepts for old problems in meiosis. Haseltine FP. **Prog Clin Biol Res** 1989;294:3–19 (21 ref.)

Molecular mechanisms in the hormonal regulation of plasminogen activator activity in ovarian granulosa cells and cumulus-oocyte complexes. Hsueh AJ, et al. **Prog Clin Biol Res** 1988;267:227–57 (41 ref.)

Constituents of human follicular fluid: a non-invasive method for the assessment of the maturation and quality of oocytes. Laufer N, et al. **Prog Clin Biol Res** 1988;267:315–34 (48 ref.)

Oocyte maturation in amphibians and the regulation of meiosis and mitosis. Maller J. **Prog Clin Biol Res** 1988; 267:259–74 (44 ref.)

Regulatory functions of protein phosphorylation in meiotic maturation of mouse oocytes in vitro. Schultz RM. **Prog Clin Biol Res** 1988;267:137–51 (19 ref.)

Human oocyte and embryo freezing. Trounson A, et al. **Prog Clin Biol Res** 1989;296:355–66

Morphodynamics of nuclear and cytoplasmic reorganization during the resumption of arrested meiosis in the mouse oocyte. Van Blerkom J. **Prog Clin Biol Res** 1989;294:33–51 (26 ref.)

The origin and detection of chromosomal abnormalities in meiotically mature human oocytes obtained from stimulated follicles and after failed fertilization in vitro. Van Blerkom J. **Prog Clin Biol Res** 1989;296:299–310

Effects of severity and duration of infections on oocyst size of Eimeria necatrix, a coccidium of chicken. Majaro OM. **Rev Elev Med Vet Pays Trop** 1988;41(2):167–70

Vitrification of mouse oocytes results in aneuploid zygotes and malformed fetuses. Kola I, et al. **Teratology** 1988 Nov; 38(5):467–74

A new method to prepare sections from amphibian embryos for immunohistology. Hausen P. **Z Naturforsch [C]** 1988 Sep-Oct;43(9-10):765–8

[Our experience in the in vitro fertilization of human ovocytes] Mirkov K, et al. **Akush Ginekol (Sofiia)** 1989; 28(2):23–6 (Eng. Abstr.) **(Bul)**

[Impregnated oocytes—objects for research?] Schirren C. **Z Hautkr** 1988 Nov 15;63(11):889 **(Ger)**

[Fertilization in vitro—embryo transfer (IVF-ET). I. Evaluation of the quality and degree of maturity of oocytes after patients' stimulation with clomiphene, hMG and hCG] Wołczyński S, et al. **Ginekol Pol** 1988 May;59(5):237–44 (Eng. Abstr.) **(Pol)**

[Interrelation of the hormonal indices and the cytologic characteristics of the germ cells] Kitaev EM, et al. **Fiziol Zh SSSR** 1988 Jun;74(6):871–7 (Eng. Abstr.) **(Rus)**

[Structural and functional indices of disturbances of oocyte maturation in androgenized rats after induction of ovulation with pregnant mare's serum and luliberin] Kitaev EM, et al. **Tsitologiia** 1988 Nov;30(11):1379–83 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Human antral fluid IGF-I and oocyte maturity: effect of stimulation therapy. Roussi M, et al. **Acta Endocrinol (Copenh)** 1989 Jul;121(1):90–4

Effects of progesterone and a progesterone antagonist (RU486) on germinal vesicle breakdown in the mouse. Batten BE, et al. **Anat Rec** 1989 Apr;223(4):387–92

Oocyte atresia and reproductive success in fathead minnows (Pimephales promelas) exposed to acidified hardwater environments. McCormick JH, et al. **Arch Environ Contam Toxicol** 1989 Jan-Apr;18(1-2):207–14

The effects of follicle-stimulating hormone and cyclic guanosine 3',5'-monophosphate on cyclic adenosine 3',5'-monophosphate-phosphodiesterase and resumption of meiosis in hamster cumulus-oocyte complexes. Hubbard CJ, et al. **Biol Reprod** 1988 Nov;39(4):829–38

Ultrastructural observations of human and mouse oocytes treated with cryopreservatives. Schalkoff ME, et al. **Biol Reprod** 1989 Feb;40(2):379–93

In vitro inhibition of oocyte nuclear maturation in the bovine. Sirard MA, et al. **Biol Reprod** 1988 Sep;39(2):229–34

Effects of an antiandrogen, flutamide, on oocyte quality and embryo development in rats superovulated with pregnant mare's serum gonadotropin. Yun YW, et al. **Biol Reprod** 1988 Sep;39(2):279–86

Weak bases mimic the fertilization-associated chloride conductance increase and induce morphological changes in the cortex of Xenopus laevis eggs. Charbonneau M. **Cell Differ Dev** 1989 Jan;26(1):39–51

Suppression of chromosome condensation during meiotic maturation induces parthenogenetic development of mouse oocytes. Clarke HJ, et al. **Development** 1988 Sep; 104(1):97–103

Follicular atresia associated with concurrent initiation of gonadotropin-releasing hormone agonist and follicle-stimulating hormone for oocyte recruitment. Brzyski RG, et al. **Fertil Steril** 1988 Dec;50(6):917–21

Hypoxanthine and cyclic adenosine 5'-monophosphate maintain meiotic arrest of rhesus monkey oocytes in vitro. Warikoo PK, et al. **Fertil Steril** 1989 May;51(5):886–9

Influence of human chorionic gonadotropin (hCG) and hCG internalization by granulosa cells on the rate of in vitro fertilization and embryonic development of human oocytes. Whitman G, et al. **Fertil Steril** 1988 Oct;50(4):607–11

A gonadotropin-releasing hormone agonist and an activator of protein kinase C improve in vitro oocyte maturation in Macaca fascicularis. Lefèvre B, et al. **Gamete Res** 1988 Oct;21(2):193–7

Cytogenetic technique for mouse metaphase II oocytes. Mailhes JB, et al. **Gamete Res** 1987 Sep;18(1):77–83

Effects of a superovulatory dose of pregnant mare serum gonadotropin on follicular steroid contents and oocyte maturation in rats. Yun YW, et al. **Gamete Res** 1989 Jul; 23(3):289–98

Structure-activity relationships of C21 steroids in an in vitro oocyte maturation bioassay in rainbow trout, Salmo gairdneri. Canario AV, et al. **Gen Comp Endocrinol** 1988 Aug;71(2):338–48

In vitro effects of cyanoketone and epostane on LH-induced germinal vesicle breakdown in oocytes of Indian major carps. Haider S, et al. **Gen Comp Endocrinol** 1989 Jan; 73(1):92–5

In vitro effect of actinomycin D and cycloheximide on LH- or 17 alpha,20 beta-dihydroxy-4-pregnen-3-one-induced germinal vesicle breakdown in oocytes of Indian major carps. Haider S, et al. **Gen Comp Endocrinol** 1989 Feb; 73(2):325–9

Structure-activity relationships of steroids in inducing germinal vesicle breakdown of Atlantic croaker oocytes in vitro. Trant JM, et al. **Gen Comp Endocrinol** 1988 Aug; 71(2):307–17

Effects of varying doses of HCG on the evolution of preovulatory rabbit follicles and oocytes. Bomsel-Helmreich O, et al. **Hum Reprod** 1989 Aug; 4(6):636–42

Embryo quality and uterine receptivity in in-vitro fertilization cycles with or without agonists of gonadotrophin-releasing hormone. Testart J, et al. **Hum Reprod** 1989 Feb;4(2):198–201

Influence of different stimulation treatments on oocyte characteristics and in-vitro fertilizing ability. Testart J, et al. **Hum Reprod** 1989 Feb;4(2):192–7

Effects of preovulatory tamoxifen in regularly cycling women on folliculogenesis, oocyte recovery and luteal function. Thatcher SS, et al. **Hum Reprod** 1988 Nov; 3(8):935–8

Effect of 1,2-propanediol and dimethylsulphoxide on the meiotic spindle of the mouse oocyte. Van der Elst J, et al. **Hum Reprod** 1988 Nov;3(8):960–7

In vitro effectiveness of estradiol-17 beta, androgens, corticosteroids, progesterone, and other pregnene derivatives on germinal vesicle breakdown in oocytes of the exotic common carp Cyprinus carpio (L.). Inbaraj RM, et al. **Indian J Exp Biol** 1988 Aug;26(8):583–5

Alpha-sarcin causes a specific cut in 28 S rRNA when microinjected into Xenopus oocytes. Ackerman EJ, et al. **J Biol Chem** 1988 Nov 15;263(32):17076–83

Microinjection of inositol 1,2-(cyclic)-4,5-trisphosphate, inositol 1,3,4,5-tetrakisphosphate, and inositol 1,4,5-trisphosphate into intact Xenopus oocytes can induce membrane currents independent of extracellular calcium. Stith BJ, et al. **J Cell Biochem** 1989 Jul;40(3):321–30

Initiation of the cortical reaction in hamster and sheep oocytes in response to inositol trisphosphate. Cran DG, et al. **J Cell Sci** 1988 Sep;91 (Pt 1):139–44

Chemicals influencing maturation, activation, and degeneration of bovine oocytes in culture. Sato E, et al. **J Dairy Sci** 1988 Dec;71(12):3482–8

Spermatolysins in Bufo arenarum: their activity on oocyte surface. Cabada MO, et al. **J Exp Zool** 1989 Feb; 249(2):229–34

Inhibition of LH-induced and spontaneous meiotic maturation in mouse oocytes by N alpha-tosyl-L-lysine chloromethylketone. Hashimoto N, et al. **J Exp Zool** 1988 Aug;247(2):177–82

Caffeine promotes in vitro fertilization of mouse ova within 15 minutes. Pomeroy KO, et al. **J Exp Zool** 1988 Nov; 248(2):207–12

Enhancement of the developmental potential of mouse

oocytes matured in vitro by gonadotropins and ethylenediaminetetraacetic acid (EDTA). Jinno M, et al. **J In Vitro Fert Embryo Transf** 1989 Feb;6(1):36–40

The effect of clomiphene citrate on human preovulatory oocyte maturation in vivo. Seibel MM, et al. **J In Vitro Fert Embryo Transf** 1989 Feb;6(1):3–6

Inositol trisphosphate-induced membrane potential oscillations in Xenopus oocytes. Berridge MJ. **J Physiol (Lond)** 1988 Sep;403:589–99

Effects of dibutyryl cyclic AMP on oocyte maturation and ovulation in the perfused rabbit ovary. Hosoi Y, et al. **J Reprod Fertil** 1989 Mar;85(2):405–11

FSH-induced ovulation in intact and hypophysectomized mice. Montgomery V, et al. **J Reprod Fertil** 1988 Sep; 84(1):1–6

Receptor number determines latency and amplitude of the thyrotropin-releasing hormone response in Xenopus oocytes injected with pituitary RNA. Straub RE, et al. **Mol Endocrinol** 1989 Jun;3(6):907–14

Induction of specific-locus mutations in female mice by 1-ethyl-1-nitrosourea and procarbazine. Ehling UH, et al. **Mutat Res** 1988 Nov;202(1):139–46

Chromosome malsegregation and embryonic lethality induced by treatment of normally ovulated mouse oocytes with nocodazole. Generoso WM, et al. **Mutat Res** 1989 Feb;210(2):313–22

Meiotic arrest and aneuploidy induced by vinblastine in mouse oocytes. Russo A, et al. **Mutat Res** 1988 Nov; 202(1):215–21

Final maturation and ovulation provoked by supply of homologous hypophysis in Hoplias m. malabaricus (Pisces, Erythrinidae). Matkovic M, et al. **Rev Bras Biol** 1989 Feb; 49(1):213–20

LH-stimulation of the adenylyl cyclase system in follicles and oocytes of Xenopus laevis. Mancebo MJ. **Rev Esp Fisiol** 1989 Jun;45(2):111–6

Characterization of voltage-gated calcium channels in Xenopus oocytes after injection of RNA from electrically excitable tissues. Snutch TP, et al. **Soc Gen Physiol Ser** 1987;42:153–66

[In vitro studies on changes in the response to progesterone stimulation of ovarian oocytes obtained from toads reared at high temperatures] Zhao JX, et al. **Shih Yen Sheng Wu Hsueh Pao** 1988 Jun;21(2):169–77 (Eng. Abstr.) **(Chi)**

[Fertilization in vitro with frozen donor sperm after ovocyte stimulation with an LH-RH analog, HMG, and HCG using a short-term protocol] Sagot P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(5):677–85 (Eng. Abstr.) **(Fre)**

[Quantitative evaluation for murine oocyte toxicity following intraperitoneal treatment with chemotherapeutic agents] Takizawa K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun;41(6):715–22 (Eng. Abstr.) **(Jpn)**

[Transmembrane currents in Xenopus oocytes after an injection of brain mRNA] Fedulova SA, et al. **Neirofiziologiia** 1988;20(6):829–32 (Eng. Abstr.) **(Rus)**

[Activation of in vitro maturing oocytes of the Spanish newt as affected by cycloheximide] Bilinkis AA. **Ontogenez** 1988 May-Jun;19(3):276–8 (Eng. Abstr.) **(Rus)**

[The action of serotonin and its analogs on the in vitro maturation of amphibian oocytes] Nikitina LA, et al. **Ontogenez** 1988 Sep-Oct;19(5):499–507 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Identification of the ATP + Mg-dependent and polycation-stimulated protein phosphatases in the germinal vesicle of the Xenopus oocyte. Jessus C, et al. **Biochem J** 1989 May 15;260(1):45–51

Involvement of protein kinase A and casein kinase II in the in vivo protein kinase activities in prophase arrested Xenopus oocytes. Cormier P, et al. **Biosci Rep** 1989 Jun; 9(3):351–8

Activation of myelin basic protein kinases during echinoderm oocyte maturation and egg fertilization. Pelech SL, et al. **Dev Biol** 1988 Nov;130(1):28–36

Insulin and progesterone activate a common synthetic ribosomal protein S6 peptide kinase in Xenopus oocytes. Cicirelli MF, et al. **FEBS Lett** 1988 Dec 5;241(1-2):195–201

Rat oocyte tissue plasminogen activator is a catalytically efficient enzyme in the absence of fibrin. Endogenous potentiation of enzyme activity. Bicsak TA, et al. **J Biol Chem** 1989 Jan 5;264(1):630–4

Expression of the yeast aspartyl protease, proteinase A. Phosphorylation and binding to the mannose 6-phosphate receptor are altered by addition of cathepsin D sequences. Faust PL, et al. **J Biol Chem** 1989 Jan 5;264(1):479–88

A similar pool of cyclic AMP phosphodiesterase in Xenopus oocytes is stimulated by insulin, insulin-like growth factor 1, and [Val12,Thr59]Ha-ras protein. Sadler SE, et al. **J Biol Chem** 1989 Jan 15;264(2):856–61

Expression of type I iodothyronine 5'-deiodinase in Xenopus laevis oocytes. St. Germain DL, et al. **J Biol Chem** 1989 Feb 25;264(6):3054–6

The two Xenopus laevis SRC genes are co-expressed and each produces functional pp60src. Steele RE, et al. **J Biol Chem** 1989 Jun 25;264(18):10649–53

Bioluminescent assay of ATPase activity in embryonic material using firefly luciferase. Hanocq-Quertier J, et al. **J Biolumin Chemilumin** 1988 Jan-Mar;2(1):17–24

Synthesis and activity of Xenopus laevis oocyte tyrosinase. Kidson SH, et al. **J Exp Zool** 1989 Feb;249(2):203–12

S6 phosphorylation is regulated at multiple levels in Xenopus laevis oocytes. Wasserman WJ, et al. **J Exp Zool** 1988 Sep; 247(3):263–70

Neuroendocrine regulation of oocyte tissue plasminogen activator. Bicsak TA, et al. **Methods Enzymol** 1989; 168:422–30

Expression in Xenopus oocytes of rat liver mRNA coding for a bile salt-dependent cholesteryl ester hydrolase. Zolfaghari R, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(18):6913–6

[Intracellular localization of casein kinase of type II in oocytes of Rana temporaria] Kandror KV, et al. **Mol Biol (Mosk)** 1988 Jul-Aug;22(4):1097–107 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Starfish oocyte maturation: evidence for a cyclic AMP-dependent inhibitory pathway. Meijer L, et al. **Dev Biol** 1989 May;133(1):58–66

Fertilization and cleavage of mouse oocytes exposed to the conditions of human oocyte retrieval for in vitro fertilization. Jackson KV, et al. **Fertil Steril** 1989 Apr; 51(4):675–81

Validation of the hemizona assay in a monkey model: influence of oocyte maturational stages. Oehninger S, et al. **Fertil Steril** 1989 May;51(5):881–5

3NTPT—a newly discovered anti-fertility agent. IV. Tumour-like growth in the ovary of Dysdercus koenigii (Fabr.). Kaur H, et al. **Folia Morphol (Praha)** 1988; 36(3):248–9

A gonadotropin-releasing hormone agonist and an activator of protein kinase C improve in vitro oocyte maturation in Macaca fascicularis. Lefèvre B, et al. **Gamete Res** 1988 Oct;21(2):193–7

Effect of follicle somatic cells during pig oocyte maturation on egg penetrability and male pronucleus formation. Mattioli M, et al. **Gamete Res** 1988 Jun;20(2):177–83

Effects of porcine follicular fluid on male pronucleus formation in porcine oocytes matured in vitro. Naito K, et al. **Gamete Res** 1988 Nov;21(3):289–95

Interactions between oocytes of different maturational stages in the carp Cyprinus carpio: effects on maturational and steroidogenic activity in vitro. Kime DE, et al. **Gen Comp Endocrinol** 1989 Apr;74(1):45–9

Effect of cumulus cell mass and follicle quality on in-vitro maturation of cynomolgus monkey oocytes. Lefèvre B, et al. **Hum Reprod** 1988 Oct;3(7):891–3

Meiotic and cytoplasmic maturation of oocytes collected in stimulated cycles is asynchronous. Sundström P, et al. **Hum Reprod** 1988 Jul;3(5):613–9

Effects of sera and steroid hormones on development of bovine oocytes matured and fertilized in vitro and co-cultured with bovine oviduct epithelial cells. Fukui Y. **J Anim Sci** 1989 May;67(5):1318–23

Microinjection of a 19-kDa guanine nucleotide-binding protein inhibits maturation of Xenopus oocytes. Bahnson TD, et al. **J Biol Chem** 1989 Sep 5;264(25):14824–8

Effects of cyclic AMP on the spontaneous meiotic maturation of cumulus-free bovine oocytes cultured in chemically defined medium. Homa ST. **J Exp Zool** 1988 Nov; 248(2):222–31

In vitro fertilization: a comparative study of cleavage rates under epidural and general anesthesia—interest for gamete intrafallopian transfer [letter] Lefebvre G, et al. **J In Vitro Fert Embryo Transf** 1988 Oct;5(5):305–6

A Mobile Oocyte Incubation Unit (MOIU): a device for improvement of the gamete intrafallopian transfer (GIFT) program. Shih MT, et al. **J In Vitro Fert Embryo Transf** 1988 Aug;5(4):188–94

Scientists discover proto-oncogene role in normal development [news] Newman PA. **J Natl Cancer Inst** 1988 Dec 7;80(19):1515–6

The developmental history of female germ cells in mammals. McLaren A. **Oxf Rev Reprod Biol** 1988;10:162–79 (88 ref.)

In vitro maturation of sheep ovarian oocytes. Szöllösi D, et al. **Reprod Nutr Dev** 1988;28(4B):1047–80

Maturation competence and chromatin behaviour in growing and fully grown cattle oocytes. Führer F, et al. **Zentralbl Veterinarmed [A]** 1989 Apr;36(4):285–91

Ovarian serotonin during oocyte development and ovulation in the domestic hen (Gallus domesticus). Paczoska-Eliasiewicz H, et al. **Zentralbl Veterinarmed [A]** 1988 Sep;35(8):617–21

[Effects of pyrimethamine on the oocyst formation of Plasmodium yoelii yoelii] Zhu XP, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(2):111–4 (Eng. Abstr.) **(Chi)**

[The effect of calcium on toad oocyte maturation induced by progesterone] Gu QB, et al. **Shih Yen Sheng Wu Hsueh Pao** 1988 Jun;21(2):179–88 (Eng. Abstr.) **(Chi)**

[Studies on toad oocytes maturation induced by microinjection of progesterone-loaded human red blood cell ghosts] Gu QB, et al. **Shih Yen Sheng Wu Hsueh Pao** 1988 Sep;21(3):337–44 (Eng. Abstr.) **(Chi)**

[The hormonal micromilieu and oocyte status in the stimulated in vitro fertilization cycle] Sudik R, et al. **Zentralbl Gynakol** 1989;111(9):587–603 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Specific antibody against the Aujeszky's disease virus in the complex cumulus oophorus-oocyte of sows. Jeřábek J, et al. **Acta Histochem (Jena)** 1989;85(1):101–8

The effects of antibody sperm-egg interaction. Alexander NJ. **Ann N Y Acad Sci** 1988;541:317–23

Incorporation and dispersal of sperm surface antigens in plasma membranes of inseminated sea urchin (Arbacia punctulata) eggs and oocytes. Longo FJ. **Dev Biol** 1989 Jan;131(1):37–43

METABOLISM

Expression of cardiac sarcolemmal Na+-Ca2+ exchange activity in Xenopus laevis oocytes. Longoni S, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C870–3

Expression of voltage-dependent Ca channels from skeletal muscle in Xenopus oocytes. Lotan I, et al. **Ann N Y Acad Sci** 1989;560:183–4 (4 ref.)

Lipoxygenase metabolism of polyunsaturated fatty acids in oocytes of the frog Xenopus laevis. Hawkins DJ, et al. **Arch Biochem Biophys** 1989 Feb 1;268(2):447–55

Polylysine and polyamine stimulation of the phosphatidylinositol kinases of amphibian oocyte membranes. Carrasco D, et al. **Biochem Int** 1988 Aug; 17(2):319–27

Evidence for intracellular sodium pumps in permeabilized Xenopus laevis oocytes. Schmalzing G, et al. **Biochem J** 1989 Jun 1;260(2):395–9

Translation of the human C3b/C4b receptor mRNA in a cell-free system and by Xenopus oocytes. Kumar V, et al. **Biochemistry** 1989 May 2;28(9):4040–6

Characterisation of cis-acting DNA sequences required for the expression of the chicken 5-aminolevulinate synthase gene in Xenopus oocytes. Loveridge JA, et al. **Biochim Biophys Acta** 1988 Nov 10;951(1):166–74

Activity of a cloned Xenopus albumin gene promoter in the homologous frog oocyte system. Old RW, et al. **Biochim Biophys Acta** 1988 Nov 10;951(1):220–5

Assembly of a protein sharing epitopes with sperm dynein heavy chains into meiotic spindle in the prometaphase starfish oocyte. Ogawa K, et al. **Biol Cell** 1988;64(1):57–66

Expression of the human serum apolipoprotein AI and AII genes in Xenopus laevis oocytes. Lipid-associated secretion of gene products. Haase A, et al. **Biol Chem Hoppe Seyler** 1988 Jul;369(7):585–93

Timing of nuclear progression and protein synthesis necessary for meiotic maturation of bovine oocytes. Sirard MA, et al. **Biol Reprod** 1989 Jun;40(6):1257–63

Functional expression of brain cholecystokinin and bombesin receptors in Xenopus oocytes. Moriarty TM, et al. **Brain Res** 1988 Aug;464(1):75–9

Effect of tunicamycin on the expression of functional brain neurotransmitter receptors and voltage-operated channels in Xenopus oocytes. Sumikawa K, et al. **Brain Res** 1988 Nov;464(3):191–9

Formation of gap junctions by expression of connexins in Xenopus oocyte pairs. Swenson KI, et al. **Cell** 1989 Apr 7;57(1):145–55

Activation of masked neural determinants in amphibian eggs and embryos and their release from the inducing tissue. Born J, et al. **Cell Differ Dev** 1989 Jun;27(1):1–7

Genomic multipotentiality of differentiated somatic cells. DiBerardino MA. **Cell Differ Dev** 1988 Nov;25 Suppl:129–36 (42 ref.)

Molecular analysis of a cytoplasmic factor essential for pole cell formation in Drosophila embryos. Kobayashi S, et al. **Cell Differ Dev** 1988 Nov;25 Suppl:25–9 (18 ref.)

Spatial reorganization of actin, tubulin and histone mRNAs during meiotic maturation and fertilization in Xenopus oocytes. Perry BA, et al. **Cell Differ Dev** 1988 Nov; 25(2):99–108

A comparative study of the distribution of fluorescently labeled calmodulin and tubulin in the meiotic apparatus of the mouse oocyte. Hamaguchi Y, et al. **Cell Struct Funct** 1989 Apr;14(2):241–8

Monoclonal antibodies to a Mr 68,000 pore complex glycoprotein interfere with nuclear protein uptake in Xenopus oocytes. Dabauvalle MC, et al. **Chromosoma** 1988 Nov;97(3):193–7

Factors that regulate the activity of the phosphatidylinositol kinase present in oocyte membranes of Xenopus laevis. Carrasco D, et al. **Comp Biochem Physiol [B]** 1989; 92(3):487–91

Osmotic response of oocytes using a microscope diffusion chamber: a preliminary study comparing murine and human ova. Bernard A, et al. **Cryobiology** 1988 Dec;25(6):495–501

Metabolic regulation during early frog development: glycogenic flux in Xenopus oocytes, eggs, and embryos. Dworkin MB, et al. **Dev Biol** 1989 Apr;132(2):512–23

Metabolic regulation during early frog development: flow of glycolytic carbon into phospholipids in Xenopus oocytes and fertilized eggs. Dworkin MB, et al. **Dev Biol** 1989 Apr; 132(2):524–8

Differential accumulation of oocyte nuclear proteins by embryonic nuclei of Xenopus. Dreyer C. **Development** 1987 Dec;101(4):829–46

The appearance of glycoconjugates associated with cortical granule release during mouse fertilization. Lee SH, et al. **Development** 1988 Mar;102(3):595–604

Expression of human estrogen receptor mutants in Xenopus oocytes: correlation between transcriptional activity and

ability to form protein–DNA complexes. Theulaz I, et al. **EMBO J** 1988 Jun;7(6):1653–60

Tissue–type plasminogen activator in rat oocytes: expression during the periovulatory period, after fertilization, and during follicular atresia. Bicsak TA, et al. **Endocrinology** 1989 Jan;124(1):187–94

Expression of yeast invertase in oocytes from Xenopus laevis. Secretion of active enzyme differing in glycosylation. Roitsch T, et al. **Eur J Biochem** 1989 May 15;181(3):733–9

The endogenous muscarinic acetylcholine receptor in Xenopus oocytes is of the M3 subtype. Van Wezenbeek LA, et al. **Eur J Pharmacol** 1988 Jul 14;151(3):497–500

Protein phosphorylation during 1–methyladenine–induced maturation of Asterias oocytes. Haneji T, et al. **Exp Cell Res** 1989 Jun;182(2):664–7

Calcium mobilization by angiotensin II and neurotransmitter receptors expressed in Xenopus laevis oocytes. Sandberg K, et al. **FEBS Lett** 1988 Dec 5;241(1–2):177–80

Potassium channels expressed from rat brain cDNA have delayed rectifier properties. Stühmer W, et al. **FEBS Lett** 1988 Dec 19;242(1):199–206

Functional activity of oligosaccharide–deficient (Na,K)ATPase expressed in Xenopus oocytes. Takeda K, et al. **FEBS Lett** 1988 Sep 26;238(1):201–4

Cyclic nucleotide content and protein phosphorylation during maturation of Spisula oocytes. Adeyemo O, et al. **Gamete Res** 1987 Mar;16(3):251–8

Actin synthesis is not regulated by granulosa cells in mouse growing and preovulatory oocytes. Canipari R, et al. **Gamete Res** 1988 Jun;20(2):115–24

Influence of cumulus cell processes on oolemma permeability and lethality of isolated mouse oocytes cultured in Ca2+–free medium. De Felici M, et al. **Gamete Res** 1989 Jul;23(3):245–53

Gonadotropin–induced murine oocyte maturation in vivo is not associated with decreased cyclic adenosine monophosphate in the oocyte–cumulus cell complex. Eppig JJ, et al. **Gamete Res** 1988 Jun;20(2):125–31

Effect of defolliculation and 17 alpha–hydroxy, 20 beta–dihydroprogesterone on cyclic AMP level in full–grown oocytes of the rainbow trout, Salmo gairdneri. Finet B, et al. **Gamete Res** 1988 Mar;19(3):241–52

Protein synthesis in mature human oocytes. Gifford DJ, et al. **Gamete Res** 1987 Oct;18(2):97–107

Distribution and role of microfilaments during early events of sheep fertilization. Le Guen P, et al. **Gamete Res** 1989 Apr;22(4):411–25

Incorporation and fate of specific sperm plasma membrane components following insemination as revealed by ultrastructural immunocytochemistry. Longo FJ. **Gamete Res** 1989 Jun;23(2):215–28

DNA synthesis following microinjection of heterologous sperm and somatic cell nuclei into hamster oocytes. Naish SJ, et al. **Gamete Res** 1987 Oct;18(2):109–20

Specific inhibition of beta–tubulin synthesis in Xenopus oocytes using anti–sense oligodeoxyribonucleotides. Jessus C, et al. **Gene** 1988 Dec 10;72(1–2):311–2

Antisense oligodeoxyribonucleotide–directed cleavage of maternal mRNA in Xenopus oocytes and embryos. Shuttleworth J, et al. **Gene** 1988 Dec 10;72(1–2):267–75

An excised SV40 intron accumulates and is stable in Xenopus laevis oocytes. Michaeli T, et al. **Genes Dev** 1988 Aug; 2(8):1012–20

A 3'exonuclease activity degrades the pseudogene 5S RNA transcript and processes the major oocyte 5S RNA transcript in Xenopus oocytes. Xing YY, et al. **Genes Dev** 1989 Jul;3(7):1008–18

Polarized distribution of binding sites for concanavalin A and wheat–germ agglutinin in the zona pellucida of goodeid oocytes (teleostei). Schindler JF, et al. **Histochemistry** 1989; 91(5):413–7

Non–invasive measurement of glucose and pyruvate uptake by individual human oocytes and preimplantation embryos [published erratum appears in Hum Reprod 1989 Apr;4(3):348] Hardy K, et al. **Hum Reprod** 1989 Feb; 4(2):188–91

Chicken oocytes and fibroblasts express different apolipoproteins–B–specific receptors [published erratum appears in J Biol Chem 1989 Jun 15;264(17):10326] Hayashi K, et al. **J Biol Chem** 1989 Feb 25;264(6):3131–9

Stimulation of protein synthesis in stage IV Xenopus oocytes by microinjected insulin. Miller DS. **J Biol Chem** 1989 Jun 25;264(18):10438–46

Coupling of exogenous receptors to phospholipase C in Xenopus oocytes through pertussis toxin–sensitive and –insensitive pathways. Cross–talk through heterotrimeric G–proteins. Moriarty TM, et al. **J Biol Chem** 1989 Aug 15;264(23):13524–30

Methylation of microinjected isoaspartyl peptides in Xenopus oocytes. Competition with protein carboxyl methylation reactions. Romanik EA, et al. **J Biol Chem** 1989 Aug 25; 264(24):14050–6

Synthesis and accumulation of hyaluronic acid and proteoglycans in the mouse cumulus cell–oocyte complex during follicle–stimulating hormone–induced mucification. Salustri A, et al. **J Biol Chem** 1989 Aug 15;264(23):13840–7

Shiga toxin, Shiga–like toxin II variant, and ricin are all single–site RNA N–glycosidases of 28 S RNA when microinjected into Xenopus oocytes. Saxena SK, et al. **J Biol Chem** 1989 Jan 5;264(1):596–601

The assembly of regularly spaced nucleosomes in the Xenopus oocyte S–150 extract is accompanied by deacetylation of histone H4. Shimamura A, et al. **J Biol Chem** 1989 Aug 25;264(24):14524–30

mRNA–induced expression of the cardiac Na+–Ca2+ exchanger in Xenopus oocytes. Sigel E, et al. **J Biol Chem** 1988 Oct 15;263(29):14614–6

Expression and tissue–specific assembly of human butyrylcholine esterase in microinjected Xenopus laevis oocytes. Soreq H, et al. **J Biol Chem** 1989 Jun 25; 264(18):10608–13

Chloride current modulation during meiosis in Xenopus oocytes. Vilain JP, et al. **J Exp Zool** 1989 Apr;250(1):100–8

Cortical granule–specific components are present within oocytes and accessory cells during sea urchin oogenesis. Wessel GM. **J Histochem Cytochem** 1989 Sep;37(9):1409–20

A nonselective cation channel activated by membrane deformation in oocytes of the ascidian Boltenia villosa. Moody WJ, et al. **J Membr Biol** 1989 Feb;107(2):179–88

Voltage dependence of Na/K pump current in Xenopus oocytes. Rakowski RF, et al. **J Membr Biol** 1988 Dec; 106(2):173–82

Expression of functional sodium channels in stage II–III Xenopus oocytes. Krafte DS, et al. **J Neurosci Methods** 1989 Jan;26(3):211–5

Two calcium–activated chloride conductances in Xenopus laevis oocytes permeabilized with the ionophore A23187. Boton R, et al. **J Physiol (Lond)** 1989;408:511–34

Rat brain glutamate receptors activate chloride channels in Xenopus oocytes coupled by inositol trisphosphate and Ca2+. Oosawa Y, et al. **J Physiol (Lond)** 1989;408:223–32

Measurement of erythroid band 3 protein–mediated anion transport in mRNA–injected oocytes of Xenopus laevis. Grygorczyk R, et al. **Methods Enzymol** 1989;173:453–66

Promoter sequences required for transcription of Xenopus laevis histone genes in injected frog oocyte nuclei. Heindl LM, et al. **Mol Cell Biol** 1988 Sep;8(9):3676–82

Effect of sequence differences between somatic and oocyte 5S RNA genes on transcriptional efficiency in an oocyte S150 extract. Reynolds WF. **Mol Cell Biol** 1988 Nov; 8(11):5056–8

The material mRNA Vg1 is correctly localized following injection into Xenopus oocytes. Yisraeli JK, et al. **Nature** 1988 Dec 8;336(6199):592–5

Expression of glycine and other amino acid receptors by rat spinal cord mRNA in Xenopus oocytes. Akagi H, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):262–8

Induction of odorant–evoked current transients in Xenopus oocytes injected with mRNA isolated from the olfactory mucosa of Rana pipiens. Getchell TV. **Neurosci Lett** 1988 Aug 31;91(2):217–21

Differential expression of glutamate receptors in Xenopus oocytes injected with messenger RNA from lobster muscle. Kawai N, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):203–7

Characterization of glutamate receptors induced in Xenopus oocytes after injection of rat brain mRNA. Hirono C, et al. **Neurosci Res** 1988 Dec;6(2):106–14

Characteristics of synaptic receptors translated by Xenopus oocyte after injection of chick retina mRNA. Ando H, et al. **Neurosci Res Suppl** 1988;8:S15–25

A test of 'polymerase handover' as a mechanism for stimulating initiation by RNA polymerase I. Lucchini R, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):373–87

An oocyte–expressed alpha–tubulin gene in Xenopus laevis; sequences required for the initiation of transcription. Middleton KM, et al. **Nucleic Acids Res** 1989 Jul 11; 17(13):5041–55

In vivo photocrosslinking reveals that transcription factor binding to the mammalian ATF recognition sequence is required for E1A–induced transactivation in injected Xenopus laevis oocytes. Richter JD. **Nucleic Acids Res** 1989 Jun 26;17(12):4503–16

Characterization of early DNA synthesis in Xenopus eggs after injection of circular plasmid DNA. Yasui W, et al. **Nucleic Acids Res** 1989 May 25;17(10):3709–23

The yes proto–oncogene is present in amphibians and contributes to the maternal RNA pool in the oocyte. Steele RE, et al. **Oncogene Res** 1989;4(3):223–33

Synthesis and secretion of rat pancreatic proteins by Xenopus laevis oocytes. Moessner J, et al. **Pancreas** 1988; 3(5):499–507

Expression of Ba currents in Xenopus oocyte injected with pregnant rat myometrium mRNA. Fournier F, et al. **Pflugers Arch** 1989 Apr;413(6):682–4

Dual regulation by protein kinase C of the muscarinic response in Xenopus oocytes. Lupu–Meiri M, et al. **Pflugers Arch** 1989 Mar;413(5):498–504

Voltage dependence of the Na–K ATPase: measurements of ouabain–dependent membrane current and ouabain binding in oocytes of Xenopus laevis. Schweigert B, et al. **Pflugers Arch** 1988 Oct;412(6):579–88

Expression of neurotransmitter transport from rat brain mRNA in Xenopus laevis oocytes. Blakely RD, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9846–50

Mismatch repair involving localized DNA synthesis in extracts of Xenopus eggs. Brooks P, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4425–9

Control of Torpedo acetylcholine receptor biosynthesis in Xenopus oocytes. Buller AL, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8717–21

Expression of a bovine rhodopsin gene in Xenopus oocytes: demonstration of light–dependent ionic currents. Khorana HG, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(21):7917–21

Specific postendocytic proteolysis of apolipoprotein B in oocytes does not abolish receptor recognition. Nimpf J, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):906–10

A signal peptide encoded within the precore region of hepatitis B virus directs the secretion of a heterogeneous population of e antigens in Xenopus oocytes. Standring DN, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(22):8405–9

Egg–induced modifications of the mouse zona pellucida. Schultz RM, et al. **Prog Clin Biol Res** 1988;284:77–92 (30 ref.)

Expression of a cloned rat brain potassium channel in Xenopus oocytes. Christie MJ, et al. **Science** 1989 Apr 14; 244(4901):221–4

Properties of two classes of rat brain acidic amino acid receptors induced by distinct mRNA populations in Xenopus oocytes. Fong TM, et al. **Synapse** 1988; 2(6):657–65

Cloning of serotonin and substance K receptors by functional expression in frog oocytes [news] Levitan ES. **Trends Neurosci** 1988 Feb;11(2):41–3 (16 ref.)

The use of Xenopus oocytes to probe synaptic communication. Snutch TP. **Trends Neurosci** 1988 Jun; 11(6):250–6 (55 ref.)

[Plasminogen activator activity in mouse ovaries during periovulatory period] Liu YX, et al. **Sheng Li Hsueh Pao** 1989 Jun;41(3):284–90 (Eng. Abstr.) **(Chi)**

MICROBIOLOGY

Spontaneous germ–line ecotropic murine leukemia virus infection: implications for retroviral insertional mutagenesis and germ–line gene transfer. Copeland NG, et al. **Prog Nucleic Acid Res Mol Biol** 1989;36:221–34

PATHOLOGY

Ovarian tumorlike structures, biovular follicles, and binucleated oocytes in children: their frequency and possible pathologic significance. Manivel JC, et al. **Pediatr Pathol** 1988;8(3):283–92

PHYSIOLOGY

Transvaginal ultrasound or laparoscopy for oocyte retrieval (experiences in the Ljubljana IVF program). Tomaževič T, et al. **Acta Eur Fertil** 1988 Jul–Aug;19(4):209–11

Oocyte retrieval in an IVF program. A comparison of laparoscopic and transvaginal ultrasound–guided follicular puncture. Tanbo T, et al. **Acta Obstet Gynecol Scand** 1988; 67(3):243–6

The serum protein content of human follicular fluid and its correlation with the maturity of oocytes. Nagy B, et al. **Acta Physiol Hung** 1989;73(1):71–5

The effects of progesterone antagonist RU 486 on mouse oocyte maturation, ovulation, fertilization, and cleavage. Roh SI, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1584–9

Murine oocyte cryopreservation: comparison between fertilization success rates of fresh and frozen metaphase I and II oocytes. Hamlett DK, et al. **Arch Androl** 1989; 23(1):27–31

Expression of size–selected messenger RNA encoding the brain and adrenal gland angiotensin–II receptor in Xenopus laevis oocytes. Inestrosa NC, et al. **Arch Biol Med Exp (Santiago)** 1988 Dec;21(3–4):423–8

Calcium–dependent chloride transient currents in the immature oocyte of the frog, Rana esculenta. Toselli M, et al. **Arch Ital Biol** 1989 Mar;127(2):69–80

Angiotensin II stimulates an endogenous response in Xenopus laevis ovarian follicles. Lacy MP, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):658–63

E–series prostaglandins activate cAMP–mediated potassium currents in follicle–enclosed Xenopus oocyte. Mori K, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1535–40

Polyamine levels during Xenopus laevis oogenesis: a role in oocyte competence to meiotic resumption. Osborne HB, et al. **Biochem Biophys Res Commun** 1989 Jan 31; 158(2):520–6

Differences in membrane properties between unfertilised and fertilised single rabbit oocytes demonstrated by electro–rotation. Comparison with cells from early embryos [published erratum appears in Biochim Biophys Acta 1989 Mar 13;979(3):379] Arnold WM, et al. **Biochim Biophys Acta** 1989 Feb 13;979(1):142–6

Post–translational modifications of tubulin and the dynamics of microtubules in mouse oocytes and zygotes. de Pennart H, et al. **Biol Cell** 1988;64(3):375–8

Effect of microtubule reactive drugs on steroid– and centrifugation–induced germinal vesicle migration during goldfish oocyte meiosis. Lessman CA, et al. **Biol Cell** 1988; 64(3):293–9

Developmental competence of domestic cat follicular oocytes after fertilization in vitro. Goodrowe KL, et al. **Biol Reprod** 1988 Sep;39(2):355–72

Luteinizing hormone–independent luteinization and ovulation in the hypophysectomized rat: a possible role for the oocyte? Hubbard GM, et al. **Biol Reprod** 1988 Aug; 39(1):183–94

The culture of bovine oocytes to obtain developmentally competent embryos. Sirard MA, et al. **Biol Reprod** 1988 Oct;39(3):546–52

Nuclear reprogramming in nuclear transplant rabbit embryos.

Stice SL, et al. **Biol Reprod** 1988 Oct;39(3):657–64
The development of porcine zona pellucida using monoclonal antibodies: II. Electron microscopy. Takagi J, et al. **Biol Reprod** 1989 May;40(5):1103–8
Vasoactive intestinal peptide stimulates oocyte maturation, steroidogenesis, and cyclic adenosine 3',5'-monophosphate production in isolated preovulatory rat follicles. Törnell J, et al. **Biol Reprod** 1988 Sep;39(2):213–20
Role of cumulus cells and serum on the in vitro maturation, fertilization, and subsequent development of rat oocytes. Vanderhyden BC, et al. **Biol Reprod** 1989 Apr;40(4):720–8
Intracellular magnesium blocks sodium outward currents in a voltage- and dose-dependent manner. Pusch M, et al. **Biophys J** 1989 Jun;55(6):1267–71
Taurine and beta-alanine act on both GABA and glycine receptors in Xenopus oocyte injected with mouse brain messenger RNA. Horikoshi T, et al. **Brain Res** 1988 Sep; 464(2):97–105
Taurine modulates glycine response in Xenopus oocytes injected with messenger RNA from mouse brain. Horikoshi T, et al. **Brain Res** 1988 Nov;464(3):243–6
Activation of ionic currents in Xenopus oocytes by corticotropin-releasing peptides. Moriarty TM, et al. **Brain Res** 1988 Nov;464(3):201–5
Low-concentration N-acetylaspartylglutamate suppresses the climbing fiber response of Purkinje cells in guinea pig cerebellar slices and the responses to excitatory amino acids of Xenopus laevis oocytes injected with cerebellar mRNA. Sekiguchi M, et al. **Brain Res** 1989 Mar 13;482(1):87–96
Protein kinase C modulates neurotransmitter responses in Xenopus oocytes injected with rat brain RNA. Moran O, et al. **Brain Res Mol Brain Res** 1989 May;5(3):193–202
Cytodifferentiation of ovarian follicle cells during oocyte growth and maturation. Nagahama Y. **Cell Differ Dev** 1988 Nov;25 Suppl:9–14 (22 ref.)
Small B2 RNAs in mouse oocytes, embryos, and somatic tissues. Bachvarova R. **Dev Biol** 1988 Dec;130(2):513–23
Somatic cell-oocyte interactions in mouse oogenesis: stage-specific regulation of mouse oocyte protein phosphorylation by granulosa cells. Colonna R, et al. **Dev Biol** 1989 May;133(1):305–8
Meiotic breakdown of nuclear envelope in oocytes of Spisula solidissima involves phosphorylation and release of nuclear lamin. Dessev G, et al. **Dev Biol** 1988 Dec;130(2):543–50
The development of mouse oocyte cortical reaction competence is accompanied by major changes in cortical vesicles and not cortical granule depth. Ducibella T, et al. **Dev Biol** 1988 Dec;130(2):789–92
Inhibition of starfish oocyte maturation by leupeptin analogs, potent trypsin inhibitors. Sawada MT, et al. **Dev Biol** 1989 Jun;133(2):609–12
Ionic currents underlying the action potential of Rana pipiens oocytes. Schlichter LC. **Dev Biol** 1989 Jul;134(1):59–71
Pertussis toxin inhibits 1-methyladenine-induced maturation in starfish oocytes. Shilling F, et al. **Dev Biol** 1989 Jun; 133(2):605–8
Casein kinase II from Rana temporaria oocytes. Intracellular localization and activity during progesterone-induced maturation. Kandror KV, et al. **Eur J Biochem** 1989 Mar 15;180(2):441–8
Microtubule and centrosome distribution during sheep fertilization. Le Guen P, et al. **Eur J Cell Biol** 1989 Apr; 48(2):239–49
Down-regulation of membrana granulosa cell gap junctions is correlated with irreversible commitment to resume meiosis in golden Syrian hamster oocytes. Racowsky C, et al. **Eur J Cell Biol** 1989 Aug;49(2):244–51
Prostaglandin F2 alpha, progesterone and estradiol concentrations in human follicular fluid and their relation to success of in vitro fertilization. Suchanek E, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Aug;28(4):331–9
Expression of K channels in Xenopus laevis oocytes injected with poly(A+) mRNA from the insulin-secreting beta-cell line, HIT T15. Ashcroft FM, et al. **FEBS Lett** 1988 Nov 7;239(2):185–9
Okadaic acid, a specific protein phosphatase inhibitor, induces maturation and MPF formation in Xenopus laevis oocytes. Goris J, et al. **FEBS Lett** 1989 Mar 13; 245(1-2):91–4
Expression and electrophysiological identification of the receptor for bombesin and gastrin-releasing peptide in Xenopus laevis oocytes injected with polyA+ RNA from rat brain. Meyerhof W, et al. **FEBS Lett** 1988 Oct 24; 239(1):109–12
Enhanced viability after in vitro fertilization of bovine oocytes matured in vitro with high concentrations of luteinizing hormone. Brackett BG, et al. **Fertil Steril** 1989 Aug;52(2):319–24
Correlation of pregnancy after gamete intrafallopian transfer with fertilization and cleavage of sibling oocytes. Curole DN, et al. **Fertil Steril** 1988 Nov;50(5):811–2
Induction of the human sperm acrosome reaction by human oocytes. De Jonge CJ, et al. **Fertil Steril** 1988 Dec; 50(6):949–53
Human follicular fluid protease and antiprotease activities: a suggested correlation with ability of oocytes to undergo in vitro fertilization. Milwidsky A, et al. **Fertil Steril** 1989 Aug;52(2):274–80
Morphologic and functional studies of immature rat oocyte-cumulus complexes after cryopreservation. Pellicer A, et al. **Fertil Steril** 1988 Nov;50(5):805–10
Time-lapse cinematography study of the germinal vesicle behaviour in mouse primary oocytes treated with activators of protein kinases A and C. Alexandre H, et al. **Gamete Res** 1988 Dec;21(4):359–65
Intracellular pH change does not appear as a prerequisite for triggering activation of Barnea candida (Mollusca, Pelecypoda) oocytes. Brassard M, et al. **Gamete Res** 1988 May;20(1):43–52
Impaired ability of human spermatozoa to penetrate zona-free hamster oocytes: is a postacrosomal sheath anomaly involved? Courtot AM, et al. **Gamete Res** 1987 Jun;17(2):145–56
Homospermic versus heterospermic insemination of zona-free hamster eggs to assess fertility of fluorochrome-labeled acrosome-reacted bull spermatozoa. Davis AP, et al. **Gamete Res** 1987 Aug;17(4):343–54
Lectin binding sites in the vitelline envelope of Bufo arenarum oocytes: role in fertilization. del Pino EJ, et al. **Gamete Res** 1987 Aug;17(4):333–42
Use of salt-stored zonae pellucidae for assessing rabbit sperm capacitation for in vitro fertilization. Fayrer-Hosken RA, et al. **Gamete Res** 1987 Jul;17(3):191–201
Hemizona assay using salt-stored human oocytes: evaluation of zona pellucida capacity for binding human spermatozoa. Franken DR, et al. **Gamete Res** 1989 Jan;22(1):15–26
Strontium supports capacitation and the acrosome reaction in mouse sperm and rapidly activates mouse eggs. Fraser LR. **Gamete Res** 1987 Dec;18(4):363–74
Does autocatalytic amplification of maturation-promoting factor (MPF) exist in mammalian oocytes? Fulka J Jr, et al. **Gamete Res** 1988 Oct;21(2):185–92
Incidence of chromosome anomalies in first-cleavage mouse embryos obtained from frozen-thawed oocytes fertilized in vitro. Glenister PH, et al. **Gamete Res** 1987 Mar; 16(3):205–16
Mechanism of egg attachment stalk formation in the lobster, Homarus. Goudeau M, et al. **Gamete Res** 1987 Dec; 18(4):279–89
Gamete processing in an environmental chamber: effect on in vitro fertilization outcome. Gwatkin RB, et al. **Gamete Res** 1989 Jun;23(2):229–32
Cytogenetic study of parthenogenetically activated bovine oocytes matured in vivo and in vitro. King WA, et al. **Gamete Res** 1988 Jul;20(3):265–74
Time sequence of germinal vesicle breakdown in pig oocytes after cycloheximide and P-aminobenzamidine block. Kubelka M, et al. **Gamete Res** 1988 Apr;19(4):423–31
Fertilization cone formation in starfish oocytes: the role of the egg cortex actin microfilaments in sperm incorporation. Kyozuka K, et al. **Gamete Res** 1988 Jul;20(3):275–85
In vitro fertilization of hamster and human oocytes by microinjection of human sperm. Lassalle B, et al. **Gamete Res** 1987 Jan;16(1):69–78
Human sperm injection into the perivitelline space (SI-PVS) of hamster oocytes: effect of sperm pretreatment by calcium-ionophore A23187 and freezing-thawing on the penetration rate and polyspermy. Lassalle B, et al. **Gamete Res** 1988 Jul;20(3):301–11
Monospermy and polyspermy after partial zona dissection of reinseminated human oocytes. Malter H, et al. **Gamete Res** 1989 Aug;23(4):377–86
Follicular factors influence oocyte fertilizability by modulating the intercellular cooperation between cumulus cells and oocyte. Mattioli M, et al. **Gamete Res** 1988 Nov; 21(3):223–32
Effect of in vitro storage of bovine spermatozoa on acrosomal integrity, proteolytic activity, binding, and initiation of penetration of oocytes. Miller BJ, et al. **Gamete Res** 1988 May;20(1):53–65
Parthenogenetic activation of cattle follicular oocytes in vitro with ethanol. Nagai T. **Gamete Res** 1987 Mar;16(3):243–9
Parthenogenetic activation of mouse and rabbit eggs by electric stimulation in vitro. Onodera M, et al. **Gamete Res** 1989 Mar;22(3):277–83
Cumulus cell dispersion induced by estradiol in mouse oviduct in vitro. Roblero LS, et al. **Gamete Res** 1989 Aug; 23(4):467–73
Morphology and fertilizability of frozen human oocytes. Sathananthan AH, et al. **Gamete Res** 1987 Apr;16(4):343–54
Effect of exogenous hormones on the ovulation of primary and secondary oocytes in LT/Sv strain mice. Speirs S, et al. **Gamete Res** 1988 Oct;21(2):179–84
Age dependence of bovine oocyte activation. Ware CB, et al. **Gamete Res** 1989 Mar;22(3):265–75
Meiotic resumption and gap junction modulation in the cultured rat cumulus-oocyte complex. Wert SE, et al. **Gamete Res** 1989 Feb;22(2):143–62
Development of sensitivity to maturation-inducing steroids in the oocytes of the daily spawning teleost, the kisu Sillago japonica. Kobayashi M, et al. **Gen Comp Endocrinol** 1988 Nov;72(2):264–71
Starfish sperm-oocyte jelly binding triggers functional changes in cortical granules. A study using acid phosphatase and ruthenium red ultrastructural histochemistry. Sousa M, et al. **Histochemistry** 1989; 90(5):353–7
The hypo-osmotic swelling test and the sperm mucus penetration test in determining fertilization of the human oocyte. Barratt CL, et al. **Hum Reprod** 1989 May;4(4):430–4
Successful embryo transfer of cryopreserved and in-vitro fertilized rabbit oocytes. al-Hasani S, et al. **Hum Reprod** 1989 Jan;4(1):77–9
Serum follicle-stimulating hormone inhibition is a marker for preovulatory oocytes in in-vitro fertilization and embryo transfer. Kreiner D, et al. **Hum Reprod** 1989 May; 4(4):381–3
The effects of cooling human oocytes. Sathananthan AH, et al. **Hum Reprod** 1988 Nov;3(8):968–77
Regulation of oocyte maturation: communication in the rat cumulus-oocyte complex. Sherizly I, et al. **Hum Reprod** 1988 Aug;3(6):761–6
The presence of zonae pellucidae influences fusion rates between spermatozoa and zona free hamster oocytes. van Kooij RJ, et al. **Hum Reprod** 1988 Aug;3(6):773–5
Differences between mature ovarian and oviductal oocytes: a study using the golden hamster. Yang CH, et al. **Hum Reprod** 1989 Jan;4(1):63–71
In vivo phosphorylation and activation of ribosomal protein S6 kinases during Xenopus oocyte maturation. Erikson E, et al. **J Biol Chem** 1989 Aug 15;264(23):13711–7
Proteins regulating actin assembly in oogenesis and early embryogenesis of Xenopus laevis: gelsolin is the major cytoplasmic actin-binding protein. Ankenbauer T, et al. **J Cell Biol** 1988 Oct;107(4):1489–98
Activators of protein kinase C trigger cortical granule exocytosis, cortical contraction, and cleavage furrow formation in Xenopus laevis oocytes and eggs. Bement WM, et al. **J Cell Biol** 1989 Mar;108(3):885–92
Presence and distribution of specific prosome antigens change as a function of embryonic development and tissue-type differentiation in Pleurodeles waltl. Pal JK, et al. **J Cell Sci** 1988 Aug;90 (Pt 4):555–67
Sodium channels from human brain RNA expressed in Xenopus oocytes. Basic electrophysiologic characteristics and their modification by diphenylhydantoin. Tomaselli GF, et al. **J Clin Invest** 1989 May;83(5):1724–32
Spontaneous zona reaction in the mouse as a limiting factor for the time in which an oocyte may be fertilized. Dodson MG, et al. **J In Vitro Fert Embryo Transf** 1989 Apr; 6(2):101–6
The influence of handling procedures during mouse oocyte and embryo recovery on viability and subsequent development in vitro. George MA, et al. **J In Vitro Fert Embryo Transf** 1989 Apr;6(2):69–72
Pharmacological profile of NPC 12626, a novel, competitive N-methyl-D-aspartate receptor antagonist. Ferkany JW, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):100–9
A study of stretch-activated channels in the membrane of frog oocytes: interactions with Ca2+ ions. Taglietti V, et al. **J Physiol (Lond)** 1988 Dec;407:311–28
Effects of streptozotocin- and alloxan-induced diabetes mellitus on mouse follicular and early embryo development. Diamond MP, et al. **J Reprod Fertil** 1989 May;86(1):1–10
Effects of sera, hormones and granulosa cells added to culture medium for in-vitro maturation, fertilization, cleavage and development of bovine oocytes. Fukui Y, et al. **J Reprod Fertil** 1989 Jul;86(2):501–6
Translational capacity of sheep oocytes microinjected with messenger RNA. Moor RM, et al. **J Reprod Fertil** 1989 May;86(1):289–95
In-vitro fertilization of pig oocytes by frozen boar spermatozoa. Nagai T, et al. **J Reprod Fertil** 1988 Nov; 84(2):585–91
Purification of Xenopus egg nucleoplasmin and its use in chromatin assembly in vitro. Sealy L, et al. **Methods Enzymol** 1989;170:612–30
Assembly of chromatin with oocyte extracts. Shimamura A, et al. **Methods Enzymol** 1989;170:603–12
Properties of the kainate channel in rat brain mRNA injected Xenopus oocytes: ionic selectivity and blockage. Randle JC, et al. **Mol Cell Biochem** 1988 Mar-Apr;80(1-2):121–32
A specific quisqualate agonist inhibits kainate responses induced in Xenopus oocytes injected with rat brain RNA. Rassendren FA, et al. **Neurosci Lett** 1989 May 8;99(3):333–9
Oocyte and somatic 5S ribosomal RNA and 5S RNA encoding genes in Xenopus tropicalis. Nietfeld W, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):8803–15
Xenopus homolog of the mos protooncogene transforms mammalian fibroblasts and induces maturation of Xenopus oocytes. Freeman RS, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5805–9
Functional expression of the amiloride-sensitive sodium channel in Xenopus oocytes. George AL Jr, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7295–8
Xenopus oocyte germinal-vesicle breakdown induced by [Val12]Ras is inhibited by a cytosol-localized Ras mutant. Gibbs JB, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(17):6630–4
Membranous intermediates in endocytosis are labile, as shown in a temperature-sensitive mutant. Kessell I, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4968–72
Beta gamma subunits of GTP-binding proteins inhibit muscarinic receptor stimulation of phospholipase C. Moriarty TM, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):8865–9
Mouse Mos protooncogene product is present and functions during oogenesis. Paules RS, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5395–9
Change in desensitization of cat muscle acetylcholine receptor caused by coexpression of Torpedo acetylcholine receptor subunits in Xenopus oocytes. Sumikawa K, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):367–71
Gating of single Shaker potassium channels in Drosophila muscle and in Xenopus oocytes injected with Shaker

mRNA. Zagotta WN, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7243–7
Ionic and charge–displacement currents evoked by temperature jumps in Xenopus oocytes. Parker I. **Proc R Soc Lond [Biol]** 1989 Aug 22;237(1288):379–87
The expression of oncogenes in germ cells. Cooper GM, et al. **Prog Clin Biol Res** 1988;267:275–89 (47 ref.)
Binding of ouabain to the Na–K–ATPase in oocytes of Xenopus laevis is voltage–independent. Lafaire AV, et al. **Prog Clin Biol Res** 1988;268B:409–16
The ontogeny of primordial follicles in the mouse ovary. Merchant–Larios H, et al. **Prog Clin Biol Res** 1989; 296:55–63
Sequential changes in cytoplasmatic features during maturation of the human oocyte. Sundström P, et al. **Prog Clin Biol Res** 1989;296:327–33
The product of the mos proto–oncogene as a candidate "initiator" for oocyte maturation. Sagata N, et al. **Science** 1989 Aug 11;245(4918):643–6
Block of stretch–activated ion channels in Xenopus oocytes by gadolinium and calcium ions. Yang XC, et al. **Science** 1989 Feb 24;243(4894 Pt 1):1068–71
Inward rectifier produced by Xenopus oocytes injected with mRNA extracted from carp olfactory epithelium. Yoshii K, et al. **Synapse** 1989;3(3):234–8

RADIATION EFFECTS

Effect of tritiated water on female germ cells: mouse oocyte killing and RBE. Satow Y, et al. **Int J Radiat Biol** 1989 Sep;56(3):293–9
Light exposure of oocytes and pregnancy rates after their transfer in the rabbit. Bedford JM, et al. **J Reprod Fertil** 1989 Mar;85(2):477–81
Gamma–ray–induced numerical and structural chromosome anomalies in mouse immature oocytes. Griffin CS, et al. **Mutat Res** 1988 Nov;202(1):209–13
Lack of effect of maternal age on UV–induced DNA repair in mouse oocytes. Guli CL, et al. **Mutat Res** 1989 Feb; 210(2):323–8
Repair capacity of fertilized mouse eggs for X–ray damage induced in sperm and mature oocytes. Matsuda Y, et al. **Mutat Res** 1989 Jan;210(1):35–47
Size of lethality target in mouse immature oocytes determined with accelerated heavy ions. Straume T, et al. **Radiat Environ Biophys** 1989;28(2):131–9

SECRETION

[Fertilization in vitro—embryo transfer (IVF–ET). II. Secretion of progesterone, estradiol and testosterone by the "oocyte–corona radiata–cumulus" complex in the in vitro culture during in vitro fertilization] Kulikowski M, et al. **Ginekol Pol** 1988 May;59(5):245–9 (Eng. Abstr.) **(Pol)**

TRANSPLANTATION

Egg donation and medical ethics. Abdalla H, et al. **BMJ** 1989 Jul 8;299(6691):120
A program of oocyte donation and gamete intra–fallopian transfer. Borrero C, et al. **Hum Reprod** 1989 Apr;4(3):275–9
Oocyte donation in patients without ovarian function. Devroey P, et al. **Hum Reprod** 1988 Aug;3(6):699–704
Synchronization of donor's and recipient's cycles with GnRH analogues in an oocyte donation programme. Devroey P, et al. **Hum Reprod** 1989 Apr;4(3):270–4
Abdominal ultrasonography versus transvaginal scanning: accuracy in follicular development evaluation and prediction for oocyte retrieval in stimulated cycles. Bonilla–Musoles F, et al. **JCU** 1989 Sep;17(7):469–73

ULTRASTRUCTURE

Ultrastructural evidence that specialized regions of the murine oviduct contribute a glycoprotein to the extracellular matrix of mouse oocytes. Kapur RP, et al. **Anat Rec** 1988 Jul;221(3):720–9
Ultrastructure of human unfertilized oocytes and polyspermic embryos in an IVF–ET program. Motta PM, et al. **Ann N Y Acad Sci** 1988;541:367–83
Ultrastructure of the oocyst wall formation in Eimeria? beauchampi Leger and Duboscq, 1917, a coccidian parasite of Glossobalanus minutus (Kow.) (Enteropneusta, Hemichordata). Fernandez I, et al. **Ann Parasitol Hum Comp** 1988;63(4):253–62 (32 ref.)
Ultrastructural and cytochemical studies on extranucleolar bodies in rat oocytes at the preovulatory follicle stage. Antoine N, et al. **Biol Cell** 1989;65(1):61–6
Taxol reveals cortical sites of microtubule assembly in Xenopus oocytes. Role of the nucleus. Jessus C, et al. **Cell Differ Dev** 1988 Sep;25(1):57–63
Structural and functional relationships between nuclear bodies and the nucleolus–DNA body complex in the oocyte of Amphiporus lactifloreus. Rué G, et al. **Cell Differ Dev** 1988 Sep;25(1):11–22
Specialized cytoskeletal elements in mammalian eggs: structural and biochemical evidence for their composition. McGaughey RW, et al. **Cell Motil Cytoskeleton** 1989; 13(2):104–11
Reproductive capacity of sea urchin centrosomes without centrioles. Sluder G, et al. **Cell Motil Cytoskeleton** 1989; 13(4):264–73
Intracellular signals trigger ultrastructural events characteristic of meiotic maturation in oocytes of Xenopus laevis. Bement WM, et al. **Cell Tissue Res** 1989 Jan; 255(1):183–91
Presence of microtubules in isolated cortices of prophase I and metaphase II oocytes in Xenopus laevis. Huchon D, et al. **Cell Tissue Res** 1988 Nov;254(2):415–20
Sea urchin oocytes possess elaborate cortical arrays of microfilaments, microtubules, and intermediate filaments. Boyle JA, et al. **Dev Biol** 1989 Jul;134(1):72–84
Disassembly of the nuclear envelope of spisula oocytes in a cell–free system. Dessev G, et al. **Dev Biol** 1989 Feb; 131(2):496–504
Quantitative studies of changes in cortical granule number and distribution in the mouse oocyte during meiotic maturation. Ducibella T, et al. **Dev Biol** 1988 Nov; 130(1):184–97
The coelomic envelope of Xenopus laevis eggs: a quick–freeze, deep–etch analysis. Larabell CA, et al. **Dev Biol** 1989 Jan;131(1):126–35
Acetylated alpha–tubulin in microtubules during mouse fertilization and early development. Schatten G, et al. **Dev Biol** 1988 Nov;130(1):74–86
Identification of a component of Drosophila polar granules. Hay B, et al. **Development** 1988 Aug;103(4):625–40
Nuclear protein synthesis in animal and vegetal hemispheres of Xenopus oocytes. Feldherr CM, et al. **Exp Cell Res** 1988 Dec;179(2):527–34
Hemispheric asymmetry of rapid chloride responses to inositol trisphosphate and calcium in Xenopus oocytes. Lupu–Meiri M, et al. **FEBS Lett** 1988 Nov 21;240(1–2):83–7
The distribution of organelles in mammalian oocytes following centrifugation prior to injection of foreign DNA. Cran DG. **Gamete Res** 1987 Sep;18(1):67–76
Fine structure of sheep fertilization in vitro. Crozet N. **Gamete Res** 1988 Mar;19(3):291–303
Ultrastructure of in vivo fertilization in the goat. Crozet N, et al. **Gamete Res** 1987 Oct;18(2):191–9
Refertilization in eggs of the sea urchin Strongylocentrotus purpuratus. Kubota LF, et al. **Gamete Res** 1988 Sep; 21(1):29–40
Ultrastructural analysis of abnormalities in the morphology of the second meiotic spindle in ethanol–induced parthenogenones. O'Neill GT, et al. **Gamete Res** 1989 Mar; 22(3):285–99
Human antral follicles: oocyte nucleus and the karyosphere formation (electron microscopic and autoradiographic data). Parfenov V, et al. **Gamete Res** 1989 Feb;22(2):219–31
The effects of ultrarapid freezing on meiotic and mitotic spindles of mouse oocytes and embryos. Sathananthan AH, et al. **Gamete Res** 1988 Dec;21(4):385–401
Electrofusion for the pronuclear transplantation of mouse eggs. Tsunoda Y, et al. **Gamete Res** 1987 May;17(1):15–20
Sequential study of the synaptonemal complex in rat (Rattus norvegicus) oocytes by light and electron microscopy. Pujol R, et al. **Genetica** 1988 Nov 30;77(3):179–87
Quadrivalent formation in a tetraploid chicken oocyte. Solari AJ, et al. **Genome** 1988 Dec;30(6):900–2
The microtubular cytoskeleton and chromosomes of unfertilized human oocytes aged in vitro. Eichenlaub–Ritter U, et al. **Hum Genet** 1988 Nov; 80(3):259–64
Nucleolar structures in chromosome and SC preparations from human oocytes at first meiotic prophase. García M, et al. **Hum Genet** 1989 May;82(2):147–53
Cytogenetic analysis of in vitro fertilization (IVF) failures. Pieters MH, et al. **Hum Genet** 1989 Mar;81(4):367–70
Human fertilization by micro–injection of immotile spermatozoa. Bongso TA, et al. **Hum Reprod** 1989 Feb; 4(2):175–9
Initial stages of sperm–egg interaction in a heterospecific system: fate of the post–acrosomal sheath and appearance of a particular material within the oocyte. Courtot AM, et al. **Hum Reprod** 1988 Jul;3(5):651–5
Are clinical and biological IVF parameters correlated with chromosomal disorders in early life: a multicentric study. Plachot M, et al. **Hum Reprod** 1988 Jul;3(5):627–35
Reconstitution of the Golgi apparatus after microinjection of rat liver Golgi fragments into Xenopus oocytes. Paiement J, et al. **J Cell Biol** 1989 Apr;108(4):1257–69
Fertilization of zona–drilled mouse oocytes treated with a monoclonal antibody to the zona glycoprotein, ZP3. Conover JC, et al. **J Exp Zool** 1988 Jul;247(1):113–8
Influence of postovulatory aging on chromosome segregation during the second meiotic division in mouse oocytes: a parthenogenetic analysis. O'Neill GT, et al. **J Exp Zool** 1988 Oct;248(1):125–31
Recovery of a preovulatory binucleate oocyte in a patient following induction of ovulation for in vitro fertilization. Mahadevan MM, et al. **J In Vitro Fert Embryo Transf** 1988 Oct;5(5):299–300
Effects of aging on the zona pellucida surface of mouse oocytes. Nogués C, et al. **J In Vitro Fert Embryo Transf** 1988 Aug;5(4):225–9
Isolation of plasma membrane complexes from Xenopus oocytes. Wall DA, et al. **J Membr Biol** 1989 Feb; 107(2):189–201
Preparation of shadowed nuclear envelopes from Xenopus oocyte germinal vesicles for electron microscopy. Whytock S, et al. **J Microsc** 1988 Aug;151 (Pt 2):115–26
Functional expression of the oxytocin receptor in Xenopus laevis oocytes primed with mRNA from bovine endometrium. Morley SD, et al. **J Mol Endocrinol** 1988 Jul;1(1):77–81
Increase in digyny explains polyploidy after in–vitro fertilization of frozen–thawed mouse oocytes. Carroll J, et al. **J Reprod Fertil** 1989 Mar;85(2):489–94
Human oocyte–cumulus complexes stimulate the human acrosome reaction. Stock CE, et al. **J Reprod Fertil** 1989 Jul;86(2):723–30
Nucleocytoplasmic transport of ribosomes in a eukaryotic system: is there a facilitated transport process? Khanna–Gupta A, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1791–5
Ultrastructure and quantitative analysis of mouse and human oocytes. Dvořák M. **Prog Clin Biol Res** 1989;296:273–80
The spindle of mammalian oocytes: alterations in morphology and progression through meiosis with maternal age. Eichenlaub–Ritter U. **Prog Clin Biol Res** 1989;311:199–220
Human in vitro fertilization: the fine three–dimensional architecture of the zona pellucida. Familiari G, et al. **Prog Clin Biol Res** 1989;296:335–44
Ultrastructure of oocyte maturation and fertilization in superovulated cattle. Hyttel P, et al. **Prog Clin Biol Res** 1989;296:287–97
The role of the cumulus–corona cells surrounding in vitro human oocytes and polypronuclear ova: an ultrastructural study. Nottola SA, et al. **Prog Clin Biol Res** 1989; 296:345–54
The development of microtubular arrays in the germ tissue of an insect telotrophic ovary. Valdimarsson G, et al. **Tissue Cell** 1989;21(1):123–38
[The distribution of vimentin filaments in CHO cells after enucleation by centrifugation] Sun Q. **Shih Yen Sheng Wu Hsueh Pao** 1988 Jun;21(2):209–21 (Eng. Abstr.) **(Chi)**
[A cytogenetic study of human gametes] Sele B, et al. **Bull Assoc Anat (Nancy)** 1987 Dec;71(215):77–8 **(Fre)**
[The value of centrifugation for the study of cytoplasmic changes related to the maturation and fertilization of mammalian oocytes] Mulnard J, et al. **Bull Mem Acad R Med Belg** 1987;142(11–12):507–16 (Eng. Abstr.) **(Fre)**
[Ultrastructural observations of follicular oocytes inseminated in vitro in squirrel monkeys (Saimiri sciureus)] Yorozu Y. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep; 40(9):1417–24 (Eng. Abstr.) **(Jpn)**
[Incidence of anovulation, chromosomal gametopathies and embryo development after chronic poisoning of female rats with alcohol before pregnancy] Narzullaeva MS, et al. **Akush Ginekol (Mosk)** 1988 Jul;(7):72–4 **(Rus)**
[Characteristics of oocyte ultrastructure during the large growth period in mammals] Mardanova GV, et al. **Arkh Anat Gistol Embriol** 1989 Feb;96(2):70–7 (71 ref.) **(Rus)**

OOGENESIS

Polyamine levels during Xenopus laevis oogenesis: a role in oocyte competence to meiotic resumption. Osborne HB, et al. **Biochem Biophys Res Commun** 1989 Jan 31; 158(2):520–6
The development of a large nucleolus during oogenesis in Acanthocyclops vernalis (Crustacea, Copepoda) and its possible relationship to chromatin diminution. Standiford DM. **Biol Cell** 1988;63(1):35–40
Changes in the protein components of vitelline envelope during oogenesis of a tubiculous polychaete, Schizobranchia insignis. Lee YR. **Cell Differ Dev** 1988 Sep; 25(1):23–35
Somatic cell–oocyte interactions in mouse oogenesis: stage–specific regulation of mouse oocyte protein phosphorylation by granulosa cells. Colonna R, et al. **Dev Biol** 1989 May;133(1):305–8
Quantitative studies of changes in cortical granule number and distribution in the mouse oocyte during meiotic maturation. Ducibella T, et al. **Dev Biol** 1988 Nov; 130(1):184–97
Activation of myelin basic protein kinases during echinoderm oocyte maturation and egg fertilization. Pelech SL, et al. **Dev Biol** 1988 Nov;130(1):28–36
Nuclear envelope disassembly and nuclear lamina depolymerization during germinal vesicle breakdown in starfish. Stricker SA, et al. **Dev Biol** 1989 Sep;135(1):87–98
The role of polyfusomes in generating branched chains of cystocytes during Drosophila oogenesis. Storto PD, et al. **Dev Genet** 1989;10(2):70–86
Monitoring positional information during oogenesis in adult Drosophila. Fasano L, et al. **Development** 1988 Oct; 104(2):245–53
Oogenesis of the mayfly Habrophlebia eldae: synthesis of vitelline and chorionic envelopes. Mazzini M, et al. **Gamete Res** 1988 Dec;21(4):439–50
Developmental changes in the properties of gonadotropin receptors in the ovarian follicles of amago salmon (Oncorhynchus rhodurus) during oogenesis. Kanamori A, et al. **Gen Comp Endocrinol** 1988 Oct;72(1):25–38
Influence of follicular development on steroid production in the medaka (Oryzias latipes) ovarian follicle in response to exogenous substrates. Sakai N, et al. **Gen Comp Endocrinol** 1988 Sep;71(3):516–23
Poly(A) elongation during Xenopus oocyte maturation is required for translational recruitment and is mediated by a short sequence element. McGrew LL, et al. **Genes Dev** 1989 Jun;3(6):803–15

Proteins regulating actin assembly in oogenesis and early embryogenesis of Xenopus laevis: gelsolin is the major cytoplasmic actin-binding protein. Ankenbauer T, et al. **J Cell Biol** 1988 Oct;107(4):1489–98

Interconversion of Drosophila nuclear lamin isoforms during oogenesis, early embryogenesis, and upon entry of cultured cells into mitosis. Smith DE, et al. **J Cell Biol** 1989 Feb; 108(2):255–65

Developmental and mitotic behaviour of two novel groups of nuclear envelope antigens of Drosophila melanogaster. Frasch M, et al. **J Cell Sci** 1988 Jun;90 (Pt 2):247–63

Differential cytolocalization of prosomes in axolotl during oogenesis and meiotic maturation. Gautier J, et al. **J Cell Sci** 1988 Aug;90 (Pt 4):543–53

Cortical granule-specific components are present within oocytes and accessory cells during sea urchin oogenesis. Wessel GM. **J Histochem Cytochem** 1989 Sep;37(9):1409–20

Inputs to the hormonal control of egg development in Rhodnius prolixus. Davey KG. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 3:103–8

The roles of haemolymphatic lipoproteins in the oogenesis of Rhodnius prolixus. Gondim KC, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 3:89–92

The product of the Drosophila gene vasa is very similar to eukaryotic initiation factor-4A. Lasko PF, et al. **Nature** 1988 Oct 13;335(6191):611–7

Mouse Mos protooncogene product is present and functions during oogenesis. Paules RS, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5395–9

Antisense ribosomal protein gene expression specifically disrupts oogenesis in Drosophila melanogaster. Qian S, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9601–5

Oogenesis and ovulation in normal conditions or induced by homologous hypophysis in Hoplias m. malabaricus (Pisces, Erythrynidae). Matkovic M, et al. **Rev Bras Biol** 1989 Feb;49(1):203–12

Proto-oncogene expression in germ cell development. Propst F, et al. **Trends Genet** 1988 Jul;4(7):183–7 (32 ref.)

[Ultrastructure of the germ cells in the prefollicular stages of oogenesis in mammals] Kurilo LF, et al. **Arkh Anat Gistol Embriol** 1988 Aug;95(8):90–3 (41 ref.) **(Rus)**

[Morphofunctional changes in the ovarioles of blood-sucking mosquitoes (Diptera, Culicidae) during oogenesis. I. Normal oogenesis] Lange AB, et al. **Med Parazitol (Mosk)** 1989 Jan–Feb;(1):22–6 (Eng. Abstr.) **(Rus)**

[Morphofunctional changes of the ovarioles of blood-sucking mosquitoes (Diptera, Culicidae) during oogenesis. 2. Abortive oogenesis] Sokolova MI, et al. **Med Parazitol (Mosk)** 1989 May–Jun;(3):55–60 (25 ref.) (Eng. Abstr.) **(Rus)**

[Recognition of germinal plasma in oocytes of Bufo arenarum] Rengel D, et al. **Rev Bras Biol** 1988 Aug; 48(3):497–505 (62 ref.) (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Effect of microtubule reactive drugs on steroid- and centrifugation-induced germinal vesicle migration during goldfish oocyte meiosis. Lessman CA, et al. **Biol Cell** 1988; 64(3):293–9

Colcemid effects on homologue pairing and crossing over during fetal mouse oogenesis. Jagiello G, et al. **Experientia** 1989 May 15;45(5):482–4

Induction and inhibition of amphibian (Rana pipiens) oocyte maturation by protease inhibitor (TPCK). Ishikawa K, et al. **Gamete Res** 1989 Mar;22(3):339–54

Influence of serum and hormones on bovine oocyte maturation and fertilization in vitro. Younis AI, et al. **Gamete Res** 1989 Jun;23(2):189–201

Developmental changes in steroidogenic responses of ovarian follicles of amago salmon (Oncorhynchus rhodurus) to chum salmon gonadotropin during oogenesis. Kanamori A, et al. **Gen Comp Endocrinol** 1988 Oct;72(1):13–24

Microinjection of a 19-kDa guanine nucleotide-binding protein inhibits maturation of Xenopus oocytes. Bahnson TD, et al. **J Biol Chem** 1989 Sep 5;264(25):14824–8

RADIATION EFFECTS

Gamma irradiation effect on oogenesis in Culex quinquefasciatus Say exposed as pupa. Dey B, et al. **J Commun Dis** 1987 Dec;19(4):304–9

OOGONIA see under **OVUM**

OOMYCETES see under **MASTIGOMYCOTINA**

OOPHORECTOMY see **OVARIECTOMY**

OOPHORITIS

COMPLICATIONS

Ureteral obstruction and hydronephrosis as a complication of tuboovarian abscess. A case report. Nguyen HN, et al. **J Reprod Med** 1988 Oct;33(10):835–7

Cystic ovarian enlargement resulting from autoimmune oophoritis. Biscotti CV, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):492–5

DIAGNOSIS

Microheterogeneity of alpha 1-acid glycoprotein in the sera of patients with cancer or inflammatory states of the ovaries. Kątnik I, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(1):1–6

[The importance of laparoscopy in the diagnosis of chronic salpingo-oophoritis] Antonova LV, et al. **Akush Ginekol (Mosk)** 1988 May;(5):37–40 (Eng. Abstr.) **(Rus)**

[Criteria of the severity of the course of acute nonspecific salpingo-oophoritis] Kulavskiĭ VA, et al. **Akush Ginekol (Mosk)** 1989 Feb;(2):30–3 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Cytomegalovirus oophoritis with cortical necrosis during remission of acute lymphocytic leukemia. Iwasaki T, et al. **Acta Pathol Jpn** 1988 Aug;38(8):1069–76

[Necrotic oophoritis due to cytomegalovirus] Ribaux C, et al. **Schweiz Med Wochenschr** 1988 Feb 4;119(5):160–3 (Eng. Abstr.) **(Fre)**

IMMUNOLOGY

[Analysis of experimental autoimmune oophoritis as a model of premature ovarian failure] Miyake T, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Aug 20;64(8):645–54 (Eng. Abstr.) **(Jpn)**

[Changes in the functional status of lymphocytes in patients with chronic salpingo-oophoritis treated by normobaric hypoxia] Burlev VA, et al. **Akush Ginekol (Mosk)** 1989 Feb;(2):27–9 (Eng. Abstr.) **(Rus)**

[Autoimmune oophoritis and anti-ovarian antibodies] Selva O'Callaghan A, et al. **Med Clin (Barc)** 1989 Apr 8; 92(13):501–2 (29 ref.) **(Spa)**

MICROBIOLOGY

Isolation of mumps virus from vaginal secretions in association with oophoritis. Taparelli F, et al. **J Infect** 1988 Nov;17(3):255–8

THERAPY

[Use of sinusoidal modulated currents with various parameters in treating tubal sterility] Slavelkova O, et al. **Akush Ginekol (Sofiia)** 1989;28(1):52–8 (Eng. Abstr.) **(Bul)**

[Pathogenetic therapy of chronic salpingo-oophoritis] Dubossarskaia ZM. **Akush Ginekol (Mosk)** 1989 Feb; (2):24–6 (Eng. Abstr.) **(Rus)**

OPERATING ROOM INFORMATION SYSTEMS see under **HOSPITAL INFORMATION SYSTEMS**

OPERATING ROOM NURSING

AORN policy, plan and priority statement on nursing research. **AORN J** 1988 Sep;48(3):436–9

Recommended practices. Product evaluation and selection for perioperative patient care. **AORN J** 1989 Apr; 49(4):1097–100

Perioperative nursing research. Part IV: Intraoperative phase. Bailes BK. **AORN J** 1989 May;49(5):1397–9, 1402–5, 1408–9 passim (51 ref.)

Electrical injuries. Considerations for the perioperative nurse. Bailey SL. **AORN J** 1989 Mar;49(3):773–6, 778–81, 784–7

Nursing research. Components of a clinical research study. Bargagliotti LA. **AORN J** 1988 Sep;48(3):499, 502–10

Perioperative nursing research. Part VIII: Issues in perioperative nursing. Bargagliotti LA. **AORN J** 1989 Sep; 50(3):613–6, 618–22 (29 ref.)

Preoperative patient teaching. Producing a video account. Barrett JB, et al. **AORN J** 1989 Sep;50(3):602–3, 605, 607–8

Volumetric interstitial hyperthermia. Perioperative nursing care. Baumann CK, et al. **AORN J** 1989 Aug;50(2):258–60, 264–6, 268–70 passim (20 ref.)

Transposition of the great arteries. The Jatene procedure. Blonshine SK. **AORN J** 1989 Apr;49(4):973–6, 978–81, 984–7

Percutaneous lumbar discectomy. An alternative to lumbar laminectomy. Brooks BJ. **AORN J** 1989 May;49(5):1332–8, 1340–1, 1344

Is clinical experience for OR nursing managers necessary? Dieffenbach MS, et al. **AORN J** 1989 Mar;49(3):886, 888, 890–2

Midazolam: saint or sinner? Eubanks JR Jr. **AORN J** 1989 Jul;50(1):155–6

Congenital absence of the vagina. Surgical treatment and perioperative care. Fliegner JR, et al. **AORN J** 1989 Mar; 49(3):789, 791–5, 798–800

Perioperative nursing care of the multiple trauma patient. When seconds count [published erratum appears in AORN J 1989 Sep;50(3):600] Freeman MC, et al. **AORN J** 1989 Jul;50(1):40–1, 43–4, 46–50

Aortoiliac occlusive disease. Treatment for the obese patient. Friedman SG, et al. **AORN J** 1989 Sep;50(3):564–6, 568–70

Thoracoscopy. An endoscopic look into the thorax. Golanowski M. **AORN J** 1989 Jul;50(1):80–5

Microvascular reconstruction. Nursing management. Goodman T, et al. **AORN J** 1988 Oct;48(4):666–9, 672–6

Mandibular reconstruction. An example of microvascular bone grafting. Goodman T, et al. **AORN J** 1988 Oct; 48(4):678–81, 684–7, 690

Pacemaker battery change. An outpatient procedure. Huffman M. **AORN J** 1988 Oct;48(4):733–9

Developing nursing diagnoses for a perioperative care plan. A classroom research project. Kleinbeck SV. **AORN J** 1989 Jun;49(6):1613–25

Perioperative nursing research. Part III: Potential intraoperative biological hazards to personnel. Kneedler JA, et al. **AORN J** 1989 Apr;49(4):1066–7, 1070–3, 1076–9 passim

Perioperative nursing research. Part II: Intraoperative chemical and physical hazards to personnel. Kneedler JA, et al. **AORN J** 1989 Mar;49(3):829–31, 834, 836–8 passim (89 ref.)

Coping with culture. 'Health for All' affects or nursing in developing countries. McInerney TG. **AORN J** 1988 Dec; 48(6):1104–8, 1110–2

Tetralogy of Fallot. Using pulmonary allograft conduits to reconstruct the right ventricular outflow tract. Maloney SM. **AORN J** 1989 Sep;50(3):554–5, 557–9, 561–2

Motor point blocks in children. A technique to relieve spasticity using phenol injections. Morrison JE Jr, et al. **AORN J** 1989 May;49(5):1346–7, 1349–51, 1354 (6 ref.)

Endometriosis. Obtaining relief via 'near-contact' laparoscopy. Petersen NF, et al. **AORN J** 1988 Oct; 48(4):700–7, 710–2

Perioperative nursing research. Part VI: Postoperative phase. Richards ML. **AORN J** 1989 Jul;50(1):120–3, 125–8, 134–7 (73 ref.)

Nurses are responsible for the image of nursing. Roller SR. **AORN J** 1989 Jun;49(6):1673–8

Professional self-image. A research study of perioperative nursing students. Rothrock JC. **AORN J** 1989 May; 49(5):1419–25

Practicing in a university hospital. Perioperative nurses focus on patient care in a teaching setting. Ruof SM, et al. **AORN J** 1989 Apr;49(4):1088–92, 1094–5

Subclavian-external carotid artery bypass graft. Restoring blood flow to the brain. Senkowsky J, et al. **AORN J** 1989 Aug;50(2):361–6, 368

OR Nurse Day: skill and compassion combine. Shanks GD. **AORN J** 1988 Oct;48(4):740–1

Perioperative nursing research. Part V: Intraoperative recommended practices. Silo HM. **AORN J** 1989 Jun; 49(6):1627–36 (57 ref.)

Nursing care documentation. Creating a perioperative nursing record. Slone LA, et al. **AORN J** 1989 Mar; 49(3):808–13

Impacted third molars. A team approach to surgical intervention. Steuer K, et al. **AORN J** 1989 May; 49(5):1363–9

Orthognathic surgery. Restoring form and function of the jaw. Steuer K, et al. **AORN J** 1989 Sep;50(3):536–7, 539–43, 546–51 (5 ref.)

Microvascular tissue transfer. Perioperative nursing considerations. Swain D, et al. **AORN J** 1989 Apr; 49(4):1032–6, 1038–40, 1042–3

Touch. The beneficial effects for the surgical patient. Tovar MK, et al. **AORN J** 1989 May;49(5):1356–61

Endoscopic retrograde cholangiopancreatography. A diagnostic outpatient procedure. Urban MH. **AORN J** 1989 Sep;50(3):572–3, 576–7, 579–81

Malignant hyperthermia. Potential crisis in patient care. Wlody GS. **AORN J** 1989 Aug;50(2):286–7, 289–93, 295 passim (31 ref.)

Multichannel cochlear implants. Help for the profoundly deaf. Yeager JA, et al. **AORN J** 1989 Aug;50(2):299–300, 302–5, 307–9

Arterial blood gases. As easy as ABG. York K, et al. **AORN J** 1989 May;49(5):1308–10, 1312–4, 1316–7 passim (16 ref.)

Needlestick injuries at operations for trauma. Are surgical gloves an effective barrier? McLeod GG. **J Bone Joint Surg [Br]** 1989 May;71(3):489–91

[Advances of modern ear micro-surgery and the skill requirements of operating nurses] Li P. **Chung Hua Hu Li Tsa Chih** 1988 May;23(5):303–4 **(Chi)**

[The coordination of scoliosis correction] Liu YJ. **Chung Hua Hu Li Tsa Chih** 1988 Nov;23(11):650–1 **(Chi)**

[Experience in coordinating the radical correction of tetralogy of Fallot] Yao BY. **Chung Hua Hu Li Tsa Chih** 1988 Oct;23(10):534–5 **(Chi)**

[Nursing care of 296 patients undergoing neurosurgery in a sitting position] Zhang GX. **Chung Hua Hu Li Tsa Chih** 1989 Mar;24(3):138–40 **(Chi)**

EDUCATION

Curriculum terms. Speaking the language. Ammon-Gaberson KB. **AORN J** 1989 Jan;49(1):268–74

The orientation process. A learner's view. Britton E. **AORN J** 1989 Feb;49(2):543–4

Using a survey to assess perioperative staff learning needs. Byrne MM. **AORN J** 1989 Jan;49(1):307–10

Preceptors in the OR. Learning to evaluate others. deBlois CA. **AORN J** 1989 May;49(5):1387, 1390–1, 1394–5

Perioperative nursing in the college curriculum. A custom fit. Gutierrez K, et al. **AORN J** 1989 Apr;49(4):1052–8, 1060, 1062–4

Undergraduate OR experience. Are we meeting students'

needs? Jones JM, et al. **AORN J** 1989 Aug;50(2):316, 318–20, 322 passim
Photoguides offer nurses an easy, cost-effective review. Mangum S. **AORN J** 1988 Oct;48(4):774–5, 778
Perioperative study for nurses. An on-site, independent study program. Rothrock JC, et al. **AORN J** 1988 Sep;48(3):490, 492–3, 495–7
In-service education. Designing a cost-effective program. Sanger M. **AORN J** 1988 Oct;48(4):727–31
Perioperative clinical simulations. Development and use in nursing education. Thiele JE, et al. **AORN J** 1989 Aug; 50(2):370–3, 376–8
Fire safety training. A program for the operating room. Vidor KK, et al. **AORN J** 1989 Apr;49(4):1045–9

HISTORY

AORN history. How we shaped our future. Driscoll J. **AORN J** 1989 Jan;49(1):189–97, 200–13

LEGISLATION & JURISPRUDENCE

Informed consent raises more questions. Murphy EK. **AORN J** 1989 Jun;49(6):1647–9
Legal aspects of whistle-blowing. Murphy EK. **AORN J** 1989 Feb;49(2):480, 482, 484

METHODS

Perioperative documentation. Incorporating nursing diagnoses into the intraoperative record. Edel EM, et al. **AORN J** 1989 Sep;50(3):596–600
A draping technique for spinal surgery using the Stagnara wake-up test. Huss GK, et al. **AORN J** 1988 Sep; 48(3):530–5
Perioperative nursing research. Part I: Preoperative psychoeducational interventions. Rothrock JC. **AORN J** 1989 Feb;49(2):597, 599, 601–2 passim (54 ref.)
Total temporal bone resection. A radical but life-saving procedure. Sataloff RT, et al. **AORN J** 1988 Nov; 48(5):932–48
Pacemaker implant. Implications for perioperative nurses. Welch TC. **AORN J** 1989 Jan;49(1):257–67
Adrenal medullary transplant as a treatment for Parkinson's disease: perioperative considerations. Berry P, et al. **J Neurosci Nurs** 1988 Dec;20(6):356–61

ORGANIZATION & ADMINISTRATION

Delegating intraoperative activities. A pilot study. Abbott CA, et al. **AORN J** 1989 Aug;50(2):338, 340–1, 344–6 passim
Manager, staff nurse—each role has its pluses and minuses. Applegeet CJ. **AORN J** 1989 Jun;49(6):1508–10
Nursing in England. A view from across the Atlantic. Dawson BJ. **AORN J** 1989 Feb;49(2):547, 550–2, 554 passim
[Primary nursing and management of the operating room] Liu YZ. **Chung Hua Hu Li Tsa Chih** 1988 Jul;23(7):394 **(Chi)**
[Quality administration of the operating room at the hospital] Zhang GX, et al. **Chung Hua Hu Li Tsa Chih** 1988 Jun; 23(6):326–7, 341 **(Chi)**

STANDARDS

Proposed recommended practices. Laser safety in the operating room. Association of Operating Room Nurses. **AORN J** 1989 Jan;49(1):284–93
Proposed recommended practices. Sponge, sharp, and instrument counts. **AORN J** 1989 Jun;49(6):1638–43
Recommended practices. Traffic patterns in the surgical suite. **AORN J** 1989 Mar;49(3):865–6, 870
Proposed recommended practices. Safe care through identification of potential hazards in the surgical environment. **AORN J** 1989 Aug;50(2):396–7, 401–4
Proposed recommended practices. Surgical attire. **AORN J** 1989 Aug;50(2):409–10, 412–5
Recommended practices. Monitoring the patient receiving local anesthesia. **AORN J** 1989 Sep;50(3):624–6
Clinical ladders. A plan that works. Davis JL. **AORN J** 1989 Mar;49(3):802–6
The definition and purpose of professional licensure. Murphy EK. **AORN J** 1989 Apr;49(4):1106–9
Perioperative nurses must prepare themselves to monitor patients receiving local anesthesia. Petrone S. **AORN J** 1989 Aug;50(2):442, 444, 446
Occupational hazards in the OR. A historical perspective. Trotti JC, et al. **AORN J** 1989 Jan;49(1):276–83

TRENDS

Faculty practice. Issues and applications for perioperative nurses. Keithley JK, et al. **AORN J** 1989 Sep;50(3):587–90, 592, 594
Perioperative nursing research. Part VII: Postoperative care. Noriega L, et al. **AORN J** 1989 Aug;50(2):379–81, 384–5, 387–9 passim (47 ref.)

OPERATING ROOM TECHNICIANS

LEGISLATION & JURISPRUDENCE

First assistant article clarification [letter] Briggs P. **AORN J** 1989 Aug;50(2):218, 220

ORGANIZATION & ADMINISTRATION

Delegating intraoperative activities. A pilot study. Abbott CA, et al. **AORN J** 1989 Aug;50(2):338, 340–1, 344–6 passim

OPERATING ROOMS

The confined space. A review of a recently discerned medical entity. Greenberg SR. **Am J Forensic Med Pathol** 1989 Mar;10(1):31–6 (37 ref.)
Justification of an operating-room satellite pharmacy. Ziter CA, et al. **Am J Hosp Pharm** 1989 Jul;46(7):1353–61
To go or not to go [letter] **Am J Surg Pathol** 1989 Oct; 13(10):900–1
Go to the operating room [editorial] Burger PC. **Am J Surg Pathol** 1988 Dec;12(12):961
Occupational exposure to nitrous oxide in four hospitals. Gray WM. **Anaesthesia** 1989 Jun;44(6):511–4
Comparison of anxiety before induction of anaesthesia in the anaesthetic room or operating theatre. Soni JC, et al. **Anaesthesia** 1989 Aug;44(8):651–5
Volume monitor malfunction caused by an overhead operating room light [letter] Cotter TP, et al. **Anesthesiology** 1989 Jun;70(6):1022
Clinical evaluation of a Raman scattering multiple gas analyzer for the operating room. Westenskow DR, et al. **Anesthesiology** 1989 Feb;70(2):350–5
Inhalation anaesthetics—exposure and control: a statistical comparison of personal exposures in operating theatres with and without anaesthetic gas scavenging. Gardner RJ. **Ann Occup Hyg** 1989;33(2):159–73
Proposed recommended practices. Radiological safety in the operating room. **AORN J** 1989 Feb;49(2):630, 632–3, 635 passim
Using an ice cream maker to make sterile slush. Anderson DS. **AORN J** 1989 Jul;50(1):152–4
Using a chaplain in the OR. Bryce BE. **AORN J** 1988 Dec; 48(6):1178–9
Operating room practices: myth or science? Lehr PS, et al. **AORN J** 1989 Feb;49(2):645–9
Fire safety training. A program for the operating room. Vidor KK, et al. **AORN J** 1989 Apr;49(4):1045–9
The impact of in-house surgeons and operating room resuscitation on outcome of traumatic injuries. Hoyt DB, et al. **Arch Surg** 1989 Aug;124(8):906–9; discussion 909–10
Deploying and testing an expandable surgical chamber in microgravity [letter] **Aviat Space Environ Med** 1989 Jul; 60(7):715
Deploying and testing an expandable surgical chamber in microgravity [published erratum appears in Aviat Space Environ Med 1989 Jul;60(7):715] Markham SM, et al. **Aviat Space Environ Med** 1989 Jan;60(1):76–9
Attitudes of operating theatre staff to inoculation-risk cases. Johnson CD, et al. **Br J Surg** 1989 Feb;76(2):195–7
Analysis of an anaesthetic gas scavenging system hazard. Blackstock D, et al. **Can J Anaesth** 1989 Mar;36(2):204–8
Surgery of intracranial tumors: aspects of operating room design with integration and use of technical adjuvants. Apuzzo ML. **Clin Neurosurg** 1989;35:185–214
Shortwave ultraviolet radiation in operating rooms. Berg M, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):483–5
Structured alarm systems for the operating room. Schreiber PJ, et al. **J Clin Monit** 1989 Jul;5(3):201–4
Studies on the prevalence of Pseudomonas aeruginosa in a Jordanian hospital [letter] Abussaud M. **J Hosp Infect** 1989 Jan;13(1):100–2
Is there a place for parents in the operating room? Gauderer MW, et al. **J Pediatr Surg** 1989 Jul;24(7):705–6; discussion 707
First impressions of a women's center. Armstrong M. **J Perinatol** 1988 Spring;8(2):134–5
Fathers in the cesarean section room and maternal/neonatal outcomes. Sakala EP, et al. **J Perinatol** 1988 Fall;8(4):342–6
Evaluation of exposure to isoflurane (Forane): environmental and biological measurements in operating room personnel. Imbriani M, et al. **J Toxicol Environ Health** 1988; 25(4):393–402
Chromosome analysis in operating room personnel. Lamberti L, et al. **Mutagenesis** 1989 Mar;4(2):95–7
Multiply beta-lactam resistant Enterobacter cloacae infections linked to the environmental flora in a unit for cardiothoracic and vascular surgery. Andersen BM, et al. **Scand J Infect Dis** 1989;21(2):181–91
Tracheostomy in the intensive care unit: a safe alternative to the operating room. Hawkins ML, et al. **South Med J** 1989 Sep;82(9):1096–8
[The training of anesthesiologists in Europe. Teaching in the operating room] Tammisto T. **Cah Anesthesiol** 1988 Sep; 36(5):402–5 **(Fre)**
[Evaluation of technical indoor air ventilation systems in operating departments from the health viewpoint] Bahr E, et al. **Off Gesundheitswes** 1989 Jan;51(1):21–6 (Eng. Abstr.) **(Ger)**
[Visualization of imperceptible blood contamination in operative hospital areas with the help of chemoluminescence] Brühl P, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1989 Feb; 187(3):254–60 (Eng. Abstr.) **(Ger)**
[Proposal of the biological monitoring of inhalation anesthetics] Pezzagno G, et al. **G Ital Med Lav** 1987 May-Jul;9(3–4):111–8 (Eng. Abstr.) **(Ita)**
[Anesthetics vapors and gases and health hazards: results of an environmental survey] Ravagli A, et al. **G Ital Med Lav** 1987 Jan;9(1):39–44 (Eng. Abstr.) **(Ita)**
[Computerization of the operating room service in the department of plastic surgery at the San Camillo Hospital] Caldani P, et al. **Minerva Chir** 1988 Sep 15;43(17):1385–8 (Eng. Abstr.) **(Ita)**
[Changes in homeostatic parameters during transportation of patients from the operating room to the resuscitation and intensive care unit] Gochashvili ND, et al. **Anesteziol Reanimatol** 1989 Mar-Apr;(2):19–21 (Eng. Abstr.) **(Rus)**
[Prevention and control of bacterial aerosols in the operating room] Toskin KD, et al. **Klin Khir** 1988;(11):61–2 **(Rus)**
[A comprehensive hospital operating table] Sobchuk VM, et al. **Med Tekh** 1988 Sep-Oct;(5):59–62 **(Rus)**
[An attachment for the Arman-1 x-ray apparatus for work in the operating room] Berko VG, et al. **Ortop Travmatol Protez** 1988 May;(5):64–5 **(Rus)**
[Determination of subanesthetic concentrations of halothane in the environment of operating and recovery rooms] Unceta-Barenechea Orúe B, et al. **Rev Esp Anestesiol Reanim** 1989 May-Jun;36(3):171–3 (Eng. Abstr.) **(Spa)**
[Wound infections after surgery—hospital hygiene] **Lakartidningen** 1988 Dec 7;85(49):4342–6 **(Swe)**

ECONOMICS

[Comparative economic evaluation of nonwoven and traditional woven textiles in operating rooms] Vincent-Ballereau F, et al. **Ann Chir** 1989;43(4):275–8 (Eng. Abstr.) **(Fre)**

HISTORY

Hospital delivery room: circa 1930. Newsom B. **J S C Med Assoc** 1989 Aug;85(8):393

LEGISLATION & JURISPRUDENCE

[Evaluation of occupational exposure to inhalation anesthetics. Study Group on Environmental Monitoring, Biological Monitoring and Laboratory Surveillance in Lombardia] **G Ital Med Lav** 1988 Mar;10(2):49–55 (Eng. Abstr.) **(Ita)**

MANPOWER

Does 24-hour supervisory staff coverage in the labour and delivery area change the fetal outcome? A preliminary observation. Chuong CJ, et al. **Br J Clin Pract** 1988 Jun; 42(6):238–40

ORGANIZATION & ADMINISTRATION

Product selection in the OR. A decision-making model. Baird MV. **AORN J** 1988 Sep;48(3):512–3, 516–7
Hospital creates haven for healing. A concentric surgical suite design. Belkin NL. **AORN J** 1989 Jul;50(1):92–6
Management tips. Managing people, time, paperwork. Brooks RR. **AORN J** 1988 Dec;48(6):1139–43
Is clinical experience for OR nursing managers necessary? Dieffenbach MS, et al. **AORN J** 1989 Mar;49(3):886, 888, 890–2
OR scheduling. A study of actual versus projected time. Pirnke LL. **AORN J** 1989 Apr;49(4):1083–6
Comparative analysis of computer-based operating room information systems. An evaluation research study. Warnock-Matheron AG, et al. **Comput Nurs** 1988 Jul-Aug; 6(4):147–56
Operating room scheduling data base analysis for scheduling. Hancock WM, et al. **J Med Syst** 1988 Dec;12(6):397–409
[Quality administration of the operating room at the hospital] Zhang GX, et al. **Chung Hua Hu Li Tsa Chih** 1988 Jun; 23(6):326–7, 341 **(Chi)**
[Hospital hygiene. New construction management requirements in the area of surgery and intensive care medicine] Rüden H, et al. **Fortschr Med** 1989 Mar 15; 107(8):183–4 **(Ger)**

STANDARDS

Proposed recommended practices. Safe care through identification of potential hazards in the surgical environment. **AORN J** 1989 Aug;50(2):396–7, 401–4
Recommended practices. Traffic patterns in the surgical suite. **AORN J** 1989 Mar;49(3):865–6, 870
Proposed recommended practices. Surgical attire. **AORN J** 1989 Aug;50(2):409–10, 412–5
Recommended practices. Operating room environmental sanitation. **AORN J** 1989 Mar;49(3):856–7, 860, 862–3
Hand scrubbing system in theatres and bacterial contamination [letter] Rahman M. **J Hosp Infect** 1988 Nov; 12(4):327–8
Outcome of women booked into an isolated general practice maternity unit over eight years. Garrett T, et al. **J R Coll Gen Pract** 1987 Nov;37(304):488–90
Comparison of outcome of low-risk labour in an isolated general practice maternity unit and a specialist maternity hospital. Lowe SW, et al. **J R Coll Gen Pract** 1987 Nov; 37(304):484–7

UTILIZATION

Surgical unit time utilization review: resource utilization and management implications. Gordon T, et al. **J Med Syst**

1988 Jun;12(3):169–79 (27 ref.)
Evaluation of an advance surgical scheduling system. Lowery JC, et al. **J Med Syst** 1989 Feb;13(1):11–23
The assessment of operating theatre requirements for emergency surgery. Cranfield JT, et al. **N Z Med J** 1989 Jul 12;102(871):349–50
The place of birth—striking a balance. Chamberlain G. **Practitioner** 1988 Jul;232(1452):771–4
[Effect of time of operation and clinic organization on postoperative complications] Grundmann R, et al. **Langenbecks Arch Chir** 1989;374(2):84–91 (Eng. Abstr.) **(Ger)**

OPERATIONS RESEARCH

see related
DECISION THEORY
GAME THEORY
INFORMATION THEORY

Re: "Sample Size Estimation in Occupational Mortality Studies With Use of Confidence Interval Theory" [letter] Garner JB. **Am J Epidemiol** 1989 May;129(5):1091–3
Evaluation of uncertainties for parameters in binding studies: the sum-of-squares profile and Monte Carlo estimation. Saroff HA. **Anal Biochem** 1989 Jan;176(1):161–9
Improving infant and child survival through operational research: a "training the trainers" programme. Wood DW, et al. **Asia Pac J Public Health** 1988;2(3):198–201
Assessing the significance of the correlation between two spatial processes. Clifford P, et al. **Biometrics** 1989 Mar; 45(1):123–34
A Monte Carlo investigation of homogeneity tests of the odds ratio under various sample size configurations. Jones MP, et al. **Biometrics** 1989 Mar;45(1):171–81
On testing departure from the binomial and multinomial assumptions. Paul SR, et al. **Biometrics** 1989 Mar; 45(1):231–6
Software systems to control sensitivity studies of Monte Carlo simulation models. Seaholm SK. **Comput Biomed Res** 1988 Dec;21(6):531–50
SEQUAL: an interactive computer program for sequential classification of biomedical data. Bona B, et al. **Comput Methods Programs Biomed** 1988 Nov–Dec; 27(3):213–21
On the possibility of 'real-time' Monte Carlo calculations for the estimation of absorbed dose in radioimmunotherapy. Johnson TK, et al. **Comput Methods Programs Biomed** 1989 Jul;29(3):205–10
Correlation of pause sites in MDV-1 RNA replication with kinetic refolding of the growing chain. A Monte Carlo simulation of the Markov process. Fernández A. **Eur J Biochem** 1989 Jun 1;182(1):161–3
Path analysis under generalized marital resemblance: evaluation of the assumptions underlying the mixed homogamy model by the Monte Carlo method. McGue M, et al. **Genet Epidemiol** 1989;6(2):373–88
Order of response surfaces for representation of a Monte Carlo epidemic model. Seaholm SK, et al. **Int J Biomed Comput** 1988 Oct;23(1–2):113–23
Latin hypercube sampling and the sensitivity analysis of a Monte Carlo epidemic model. Seaholm SK, et al. **Int J Biomed Comput** 1988 Oct;23(1–2):97–112
Preventing heart disease: is treating the high risk sufficient? Kottke TE, et al. **J Clin Epidemiol** 1988;41(11):1083–93
Light distributions in artery tissue: Monte Carlo simulations for finite-diameter laser beams. Keijzer M, et al. **Lasers Surg Med** 1989;9(2):148–54
Evaluation of activities in the health services. Bracale M, et al. **Med Biol Eng Comput** 1987 Nov;25(6):605–12
Use of linear models to analyze physicians' decisions. Wigton RS. **Med Decis Making** 1988 Oct–Dec;8(4):241–52 (64 ref.)
Monte Carlo simulation of the scattered radiation distribution in diagnostic radiology. Boone JM, et al. **Med Phys** 1988 Sep–Oct;15(5):713–20
A Monte Carlo study of multiple scatter effects in Compton scatter densitometry. Speller RD, et al. **Med Phys** 1988 Sep–Oct;15(5):707–12
Theoretical evaluation of dose distributions in water about models 6711 and 6702 125I seeds. Williamson JF, et al. **Med Phys** 1988 Nov–Dec;15(6):891–7
Monte Carlo evaluation of specific dose constants in water for 125I seeds. Williamson JF. **Med Phys** 1988 Sep–Oct; 15(5):686–94
A perspective on operational medical readiness. Nolan DL. **Milit Med** 1988 Oct;153(10):526–9
Dynamic Monte Carlo study of the folding of a six-stranded Greek key globular protein. Skolnick J, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1229–33
Estimation of a common odds ratio in paired-cluster randomization designs. Donner A, et al. **Stat Med** 1989 May;8(5):599–607
Sample size tables for logistic regression. Hsieh FY. **Stat Med** 1989 Jul;8(7):795–802
Operations research in schistosomiasis control. Davis A. **Trop Med Parasitol** 1989 Jun;40(2):125–9 (6 ref.)
[Structure of the hydration envelope of the B-form of polydeoxyribonucleotides poly(dA–dC).poly(dG–dT) and poly(dA–dG).poly(dTs–dT) from the data of Monte-Carlo simulation] Eisenhaber F, et al. **Biofizika** 1988 May–Jun; 33(3):422–9 (Eng. Abstr.) **(Rus)**

OPERATOR (GENETICS) see **OPERATOR REGIONS (GENETICS)**

OPERATOR REGIONS (GENETICS)

Mutation in a locus linked to penB–nmp causes suppression of the Mtr phenotype of Neisseria gonorrhoeae [published erratum appears in Antimicrob Agnets Chemother 1988 Nov;32(11):1746] Shinners EN, et al. **Antimicrob Agents Chemother** 1988 Jul;32(7):971–7
N.m.r. assignments and temperature-dependent conformational transitions of a mutant trp operator–promoter in solution. Lane AN. **Biochem J** 1989 May 1;259(3):715–24
Single and double loop formation when deoR repressor binds to its natural operator sites. Amouyal M, et al. **Cell** 1989 Aug 11;58(3):545–51
Efficient Mu transposition requires interaction of transposase with a DNA sequence at the Mu operator: implications for regulation. Mizuuchi M, et al. **Cell** 1989 Jul 28; 58(2):399–408
A threonine to alanine exchange at position 40 of Tet repressor alters the recognition of the sixth base pair of tet operator from GC to AT. Altschmied L, et al. **EMBO J** 1988 Dec 1;7(12):4011–7
OR3 operator of bacteriophage lambda in a 23 base-pair DNA fragment: sequence-specific 1H NMR assignments for the non-labile protons and comparison with the isolated 17 base-pair operator. Grütter R, et al. **Eur Biophys J** 1988; 16(5):279–86
The influence of tryptophan on mobility of residues in the trp repressor of Escherichia coli. Lane AN. **Eur J Biochem** 1989 Jun 1;182(1):95–104
Salmonella typhimurium metC operator-constitutive mutations. Park YM, et al. **FEMS Microbiol Lett** 1989 Jul 15;51(1):137–41
Conferring new specificity upon restriction endonucleases by combining repressor–operator interaction and methylation. Koob M, et al. **Gene** 1988 Dec 25;74(1):165–7
Phage lambda Cro protein and cI repressor use two different patterns of specific protein–DNA interactions to achieve sequence specificity in vivo. Benson N, et al. **Genetics** 1989 Jan;121(1):5–12
Identification and sequence analysis of the Bacillus subtilis W23 xylR gene and xyl operator. Kreuzer P, et al. **J Bacteriol** 1989 Jul;171(7):3840–5
Sequence and deletion analysis of the recombination enhancement gene (ref) of bacteriophage P1: evidence for promoter–operator and attenuator–antiterminator control. Windle BE, et al. **J Bacteriol** 1988 Oct;170(10):4881–9
Three additional operators, Op21, Op68, and Op88, of bacteriophage P1. Evidence for control of the P1 dam methylase by Op68. Citron M, et al. **J Biol Chem** 1989 Feb 25;264(6):3611–7
Identification of an operator sequence for the Bacillus subtilis gnt operon. Fujita Y, et al. **J Biol Chem** 1989 Mar 5; 264(7):4201–6
The Arc and Mnt repressors. A new class of sequence-specific DNA-binding protein. Knight KL, et al. **J Biol Chem** 1989 Mar 5;264(7):3639–42
Sequence-specific binding of arc repressor to DNA. Effects of operator mutations and modifications. Vershon AK, et al. **J Biol Chem** 1989 Feb 25;264(6):3267–73
Ribonucleoprotein complexes of R17 coat protein and a translational operator analog. Beckett D, et al. **J Mol Biol** 1988 Dec 20;204(4):927–38
Roles of operator and non-operator RNA sequences in bacteriophage R17 capsid assembly. Beckett D, et al. **J Mol Biol** 1988 Dec 20;204(4):939–47
Tet repressor–tet operator contacts probed by operator DNA–modification interference studies. Heuer C, et al. **J Mol Biol** 1988 Aug 5;202(3):407–15
trp repressor interactions with the trp aroH and trpR operators. Comparison of repressor binding in vitro and repression in vivo. Klig LS, et al. **J Mol Biol** 1988 Aug 20;202(4):769–77
LexA repressor induces operator-dependent DNA bending. Lloubès R, et al. **J Mol Biol** 1988 Dec 20;204(4):1049–54
Lambda cro repressor complex with OR3 operator DNA. 19F nuclear magnetic resonance observations. Metzler WJ, et al. **J Mol Biol** 1989 Jan 5;205(1):149–64
Transcriptional activation at adjacent operators in the divergent-overlapping ilvY and ilvC promoters of Escherichia coli. Wek RC, et al. **J Mol Biol** 1988 Oct 5; 203(3):643–63
Saturation mutagenesis of the Tn10-encoded tet operator O1. Identification of base-pairs involved in Tet repressor recognition. Wissmann A, et al. **J Mol Biol** 1988 Aug 5; 202(3):397–406
Salmonella typhimurium LT2 metF operator mutations. Stauffer GV, et al. **Mol Gen Genet** 1988 Sep;214(1):32–6
Structure of a phage 434 Cro/DNA complex. Wolberger C, et al. **Nature** 1988 Oct 27;335(6193):789–95
Tet repressor binding induced curvature of tet operator DNA. Tovar K, et al. **Nucleic Acids Res** 1989 Aug 25; 17(16):6515–22
Transfer of the inducible lac repressor/operator system from Escherichia coli to a vaccinia virus expression vector. Fuerst TR, et al. **Proc Natl Acad Sci U S A** 1989 Apr; 86(8):2549–53
Interaction of spatially separated protein–DNA complexes for control of gene expression: operator conversions. Haber R, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9683–7
Lambda repressor recognizes the approximately 2-fold symmetric half-operator sequences asymmetrically. Sarai A, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6513–7
Analysis of the sequence-specific interactions between Cro repressor and operator DNA by systematic base substitution experiments. Takeda Y, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):439–43
Recognition of a DNA operator by the repressor of phage 434: a view at high resolution. Aggarwal AK, et al. **Science** 1988 Nov 11;242(4880):899–907
Structure of the lambda complex at 2.5 A resolution: details of the repressor–operator interactions. Jordan SR, et al. **Science** 1988 Nov 11;242(4880):893–9
The role of operator position in SV40 T-antigen-mediated repression. Cox M, et al. **Virology** 1988 Nov;167(1):293–5

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Stereochemical effects of L-tryptophan and its analogues on trp repressor's affinity for operator-DNA. Marmorstein RQ, et al. **J Biol Chem** 1989 Jun 5;264(16):9149–54

OPERIDINE see **MEPERIDINE**

OPERON

Thermal denaturation of engineered tet repressor proteins and their complexes with tet operator and tetracycline studied by temperature gradient gel electrophoresis. Wagenhöfer M, et al. **Anal Biochem** 1988 Dec; 175(2):422–32
Alterations in the binding site of the cyclic AMP receptor protein at the Escherichia coli galactose operon regulatory region. Gaston K, et al. **Biochem J** 1988 Aug 1; 253(3):809–18
NMR assignments for the amino-terminal residues of trp repressor and their role in DNA binding. Arrowsmith CH, et al. **Biochemistry** 1989 May 2;28(9):3875–9
Molecular cloning and nucleotide sequence of Thermus thermophilus HB8 trpE and trpG. Sato S, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):303–12
Evidence for a translation-mediated attenuation of a spinach chloroplast rDNA operon. Laboure AM, et al. **Biochimie** 1988 Oct;70(10):1343–52
Protein phosphorylation regulates transcription of the beta-glucoside utilization operon in E. coli. Amster-Choder O, et al. **Cell** 1989 Sep 8;58(5):847–55
The E. coli bio operon: transcriptional repression by an essential protein modification enzyme. Cronan JE Jr. **Cell** 1989 Aug 11;58(3):427–9 (11 ref.)
Initiation of rrn transcription in chloroplasts of Euglena gracilis bacillaris. McGarvey P, et al. **Curr Genet** 1988 Nov; 14(5):493–500
RNA polymerase and gal repressor bind simultaneously and with DNA bending to the control region of the Escherichia coli galactose operon. Kuhnke G, et al. **EMBO J** 1989 Apr;8(4):1247–55
Regulation of the bgl operon of Escherichia coli by transcriptional antitermination. Schnetz K, et al. **EMBO J** 1988 Oct;7(10):3271–7
Mechanism of puf mRNA degradation: the role of an intercistronic stem-loop structure. Belasco JG, et al. **Gene** 1988 Dec 10;72(1–2):109–17
Secondary structure of the Escherichia coli translational operator of threonyl-tRNA synthetase and relationship to its function. Ehresmann B, et al. **Gene** 1988 Dec 10; 72(1–2):187–8
Organization of the bacteriophage P1 tail-fibre operon. Guidolin A, et al. **Gene** 1989;76(2):239–43
Nucleotide sequence of the F plasmid transfer gene, traH: identification of a new gene and a promoter within the transfer operon. Ham LM, et al. **Gene** 1989 Jan 30; 75(1):157–65
Analysis of the nucleotide sequence of the P1 operon of Mycoplasma pneumoniae. Inamine JM, et al. **Gene** 1988 Dec 15;73(1):175–83
The primary structure of the operons coding for Shigella dysenteriae toxin and temperature phage H30 shiga-like toxin. Kozlov YuV, et al. **Gene** 1988 Jul 30;67(2):213–21
Functional elements of DNA upstream from the integrase operon that are conserved in bacteriophages 434 and lambda. Limberger RJ, et al. **Gene** 1988 Dec 30;74(2):571–2
Physical identification of an internal promoter, ilvAp, in the distal portion of the ilvGMEDA operon. Lopes JM, et al. **Gene** 1989;76(2):255–69
Post-transcriptional control in Escherichia coli: translation and degradation of the atp operon mRNA. McCarthy JE, et al. **Gene** 1988 Dec 10;72(1–2):131–9
Rho-dependent transcription termination in the tyrT operon of Escherichia coli. Madden KA, et al. **Gene** 1989; 76(2):271–80
Salmonella typhimurium metE operator-constitutive mutations. Plamann LS, et al. **Gene** 1988 Dec 15; 73(1):201–8
Transcriptional regulation and gene arrangement of Escherichia coli, Citrobacter freundii and Salmonella typhimurium biotin operons. Shiuan D, et al. **Gene** 1988 Jul 30;67(2):203–11
Flexibility of the yeast alpha 2 repressor enables it to occupy the ends of its operator, leaving the center free. Sauer RT, et al. **Genes Dev** 1988 Jul;2(7):807–16
Chromosomal organization of rRNA operons in Bacillus subtilis. Jarvis ED, et al. **Genetics** 1988 Nov;120(3):625–35

Ribosomal RNA genes in B chromosomes of Crepis capillaris detected by non-radioactive in situ hybridization. Maluszynska J, et al. **Heredity (Edinburgh)** 1989 Feb;62 (Pt 1):59–65

Multiple and tandemly arranged promoters of the cell wall protein gene operon in Bacillus brevis 47. Adachi T, et al. **J Bacteriol** 1989 Feb;171(2):1010–6

Structural and functional analysis of transcriptional control of the Rhodobacter capsulatus puf operon. Adams CW, et al. **J Bacteriol** 1989 Jan;171(1):473–82

Gene replacement and retrieval with recombinant M13mp bacteriophages. Blum P, et al. **J Bacteriol** 1989 Jan; 171(1):538–46

Reduced leu operon expression in a miaA mutant of Salmonella typhimurium. Blum PH. **J Bacteriol** 1988 Nov; 170(11):5125–33

Gene encoding the alpha core subunit of Bacillus subtilis RNA polymerase is cotranscribed with the genes for initiation factor 1 and ribosomal proteins B, S13, S11, and L17. Boylan SA, et al. **J Bacteriol** 1989 May;171(5):2553–62

Homology between virF, the transcriptional activator of the Yersinia virulence regulon, and AraC, the Escherichia coli arabinose operon regulator. Cornelis G, et al. **J Bacteriol** 1989 Jan;171(1):254–62

Bacillus subtilis pur operon expression and regulation. Ebbole DJ, et al. **J Bacteriol** 1989 Apr;171(4):2136–41

Cloning, genetic characterization, and nucleotide sequence of the hemA-prfA operon of Salmonella typhimurium. Elliott T. **J Bacteriol** 1989 Jul;171(7):3948–60

The groES and groEL heat shock gene products of Escherichia coli are essential for bacterial growth at all temperatures. Fayet O, et al. **J Bacteriol** 1989 Mar; 171(3):1379–85

Effect of mutations causing gluconate kinase or gluconate permease deficiency on expression of the Bacillus subtilis gnt operon. Fujita Y, et al. **J Bacteriol** 1989 Mar; 171(3):1751–4

rpoZ, encoding the omega subunit of Escherichia coli RNA polymerase, is in the same operon as spoT. Gentry DR, et al. **J Bacteriol** 1989 Mar;171(3):1271–7

Genetic relationship of two highly studied Synechococcus strains designated Anacystis nidulans. Golden SS, et al. **J Bacteriol** 1989 Jan;171(1):24–9

Molecular characterization of the tdc operon of Escherichia coli K-12. Goss TJ, et al. **J Bacteriol** 1988 Nov; 170(11):5352–9

Structure and function of conjugative pili: inducible synthesis of functional F pili by Escherichia coli K-12 containing a lac-tra operon fusion. Grossman TH, et al. **J Bacteriol** 1989 Feb;171(2):650–6

Characterization of five genes in the upper-pathway operon of TOL plasmid pWW0 from Pseudomonas putida and identification of the gene products. Harayama S, et al. **J Bacteriol** 1989 Sep;171(9):5048–55

Translational coupling between the ilvD and ilvA genes of Escherichia coli. Harms E, et al. **J Bacteriol** 1988 Oct; 170(10):4798–807

Homologous metalloregulatory proteins from both gram-positive and gram-negative bacteria control transcription of mercury resistance operons. Helmann JD, et al. **J Bacteriol** 1989 Jan;171(1):222–9

Cyclic-AMP-dependent switch in initiation of transcription from the two promoters of the Escherichia coli gal operon: identification and assay of 5'-triphosphate ends of mRNA by GTP:RNA guanyltransferase. Irani M, et al. **J Bacteriol** 1989 Mar;171(3):1623–30

Pleiotropic effects of localized Rhodobacter capsulatus puf operon deletions on production of light-absorbing pigment-protein complexes. Klug G, et al. **J Bacteriol** 1988 Dec;170(12):5814–21

Point mutations in the regulatory region of the ilvGMEDA operon of Escherichia coli K-12. Lawther RP. **J Bacteriol** 1989 Feb;171(2):1188–91

Evidence for unlinked rrn operons in the Planctomycete Pirellula marina. Liesack W, et al. **J Bacteriol** 1989 Sep; 171(9):5025–30

Translational coupling of the two proximal genes in the S10 ribosomal protein operon of Escherichia coli. Lindahl L, et al. **J Bacteriol** 1989 May;171(5):2639–45

Multiple control mechanisms for pyrimidine-mediated regulation of pyrBI operon expression in Escherichia coli K-12. Liu CG, et al. **J Bacteriol** 1989 Jun;171(6):3337–42

Expression of Zymomonas mobilis adhB (encoding alcohol dehydrogenase II) and adhB-lacZ operon fusions in recombinant Z. mobilis. Mackenzie KF, et al. **J Bacteriol** 1989 Sep;171(9):4577–82

Nucleotide sequence of the rodA gene, responsible for the rod shape of Escherichia coli: rodA and the pbpA gene, encoding penicillin-binding protein 2, constitute the rodA operon. Matsuzawa H, et al. **J Bacteriol** 1989 Jan; 171(1):558–60

Gene cluster containing the genes for tyrocidine synthetases 1 and 2 from Bacillus brevis: evidence for an operon. Mittenhuber G, et al. **J Bacteriol** 1989 Sep;171(9):4881–7

Role of the 5' upstream sequence and tandem promoters in regulation of the rpsU-dnaG-rpoD macromolecular synthesis operon. Nesin M, et al. **J Bacteriol** 1988 Dec; 170(12):5759–64

Mercury operon regulation by the merR gene of the organomercurial resistance system of plasmid pDU1358. Nucifora G, et al. **J Bacteriol** 1989 Aug;171(8):4241–7

Nucleotide sequence of the transcriptional control region of the osmotically regulated proU operon of Salmonella typhimurium and identification of the 5' endpoint of the proU mRNA. Overdier DG, et al. **J Bacteriol** 1989 Sep; 171(9):4694–706

Mall, a novel protein involved in regulation of the maltose system of Escherichia coli, is highly homologous to the repressor proteins GalR, CytR, and LacI. Reidl J, et al. **J Bacteriol** 1989 Sep;171(9):4888–99

A protein that binds to the regulatory region of the Escherichia coli ilvIH operon. Ricca E, et al. **J Bacteriol** 1989 Mar;171(3):1658–64

Overlap between pdxA and ksgA in the complex pdxA-ksgA-apaG-apaH operon of Escherichia coli K-12. Roa BB, et al. **J Bacteriol** 1989 Sep;171(9):4767–77

Genetic analysis of transcriptional activation and repression in the Tn21 mer operon. Ross W, et al. **J Bacteriol** 1989 Jul;171(7):4009–18

Ribosome-binding sites and RNA-processing sites in the transcript of the Escherichia coli unc operon. Schaefer EM, et al. **J Bacteriol** 1989 Jul;171(7):3901–8

Genetic analysis of the tdcABC operon of Escherichia coli K-12. Schweizer HP, et al. **J Bacteriol** 1988 Nov; 170(11):5360–3

Correlation between histidine operon expression and guanosine 5'-diphosphate-3'-diphosphate levels during amino acid downshift in stringent and relaxed strains of Salmonella typhimurium. Shand RF, et al. **J Bacteriol** 1989 Feb;171(2):737–42

Identification of a umuDC locus in Salmonella typhimurium LT2. Smith CM, et al. **J Bacteriol** 1989 Jul;171(7):3860–5

Use of lacZ fusions to measure in vivo expression of the first three genes of the Escherichia coli unc operon. Solomon KA, et al. **J Bacteriol** 1989 Jun;171(6):3039–45

Initial cloning and sequencing of hydHG, an operon homologous to ntrBC and regulating the labile hydrogenase activity in Escherichia coli K-12. Stoker K, et al. **J Bacteriol** 1989 Aug;171(8):4448–56

Genetic analysis of the rnc operon of Escherichia coli. Takiff HE, et al. **J Bacteriol** 1989 May;171(5):2581–90

Control of the ccd operon in plasmid F. Tam JE, et al. **J Bacteriol** 1989 May;171(5):2353–60

Dual control of the Bradyrhizobium japonicum symbiotic nitrogen fixation regulatory operon fixR nifA: analysis of cis- and trans-acting elements. Thöny B, et al. **J Bacteriol** 1989 Aug;171(8):4162–9

Genes downstream from pucB and pucA are essential for formation of the B800-850 complex of Rhodobacter capsulatus. Tichy HV, et al. **J Bacteriol** 1989 Sep; 171(9):4914–22

Nucleotide sequence analysis of the purEK operon encoding 5'-phosphoribosyl-5-aminoimidazole carboxylase of Escherichia coli K-12. Tiedeman AA, et al. **J Bacteriol** 1989 Jan;171(1):205–12

The Bacillus subtilis spo0B stage 0 sporulation operon encodes an essential GTP-binding protein. Trach K, et al. **J Bacteriol** 1989 Mar;171(3):1362–71

Induction of the alkylation-inducible aidB gene of Escherichia coli by anaerobiosis. Volkert MR, et al. **J Bacteriol** 1989 Feb;171(2):1196–8

Nucleotide sequence of a chromosomal mercury resistance determinant from a Bacillus sp. with broad-spectrum mercury resistance. Wang Y, et al. **J Bacteriol** 1989 Jan; 171(1):83–92

Two transcribing activities are involved in expression of the Streptomyces galactose operon. Westpheling J, et al. **J Bacteriol** 1989 Mar;171(3):1355–61

Genetic regulation of the tricarboxylate transport operon (tctI) of Salmonella typhimurium. Widenhorn KA, et al. **J Bacteriol** 1989 Aug;171(8):4436–41

Transcription of pfl is regulated by anaerobiosis, catabolite repression, pyruvate, and oxrA: pfl::Mu dA operon fusions of Salmonella typhimurium. Wong KK, et al. **J Bacteriol** 1989 Sep;171(9):4900–5

Nucleotide sequence of traQ and adjacent loci in the Escherichia coli K-12 F-plasmid transfer operon. Wu JH, et al. **J Bacteriol** 1989 Jan;171(1):213–21

Spermidine biosynthesis in Escherichia coli: promoter and termination regions of the speED operon. Xie QW, et al. **J Bacteriol** 1989 Aug;171(8):4457–65

trp repressor arms contribute binding energy without occupying unique locations on DNA. Carey J. **J Biol Chem** 1989 Feb 5;264(4):1941–5

In vivo and in vitro structural analysis of the rplJ mRNA leader of Escherichia coli. Protection by bound L10-L7/L12. Climie SC, et al. **J Biol Chem** 1988 Oct 15; 263(29):15166–75

Interaction of a putative repressor protein with an extended control region of the Bacillus subtilis pur operon. Ebbole DJ, et al. **J Biol Chem** 1989 Feb 25;264(6):3553–61

Characterization of two operons encoding the cytochrome b6-f complex of the cyanobacterium Nostoc PCC 7906. Highly conserved sequences but different gene organization than in chloroplasts. Kallas T, et al. **J Biol Chem** 1988 Oct 5;263(28):14334–42

The Pseudomonas oleovorans alkBAC operon encodes two structurally related rubredoxins and an aldehyde dehydrogenase. Kok M, et al. **J Biol Chem** 1989 Apr 5; 264(10):5442–51

Attenuation in the regulation of the pyrBI operon in Escherichia coli. In vivo studies of transcriptional termination. Levin HL, et al. **J Biol Chem** 1989 Sep 5; 264(25):14638–45

Operon structure of dnaT and dnaC genes essential for normal and stable DNA replication of Escherichia coli chromosome. Masai H, et al. **J Biol Chem** 1988 Oct 15; 263(29):15083–93

The Escherichia coli biotin biosynthetic enzyme sequences predicted from the nucleotide sequence of the bio operon. Otsuka AJ, et al. **J Biol Chem** 1988 Dec 25; 263(36):19577–85

Regulation of basal level expression of the tryptophan operon of Escherichia coli. Roesser JR, et al. **J Biol Chem** 1989 Jul 25;264(21):12284–8

Ribosome release modulates basal level expression of the trp operon of Escherichia coli. Roesser JR, et al. **J Biol Chem** 1988 Oct 5;263(28):14251–5

Regulation of Escherichia coli purF. Mutations that define the promoter, operator, and purine repressor gene. Rolfes RJ, et al. **J Biol Chem** 1988 Dec 25;263(36):19649–52

Escherichia coli gene purR encoding a repressor protein for purine nucleotide synthesis. Cloning, nucleotide sequence, and interaction with the purF operator. Rolfes RJ, et al. **J Biol Chem** 1988 Dec 25;263(36):19653–61

Characterization of the cyn operon in Escherichia coli K12. Sung YC, et al. **J Biol Chem** 1988 Oct 15;263(29):14769–75

Transcriptional analysis of Bacillus subtilis rRNA-tRNA operons. I. The tRNA gene cluster of rrnB has an internal promoter. Vold BS, et al. **J Biol Chem** 1988 Oct 5; 263(28):14480–4

Transcriptional analysis of Bacillus subtilis rRNA-tRNA operons. II. Unique properties of an operon containing a minor 5 S rRNA gene. Vold BS, et al. **J Biol Chem** 1988 Oct 5;263(28):14485–90

Facilitated target location in biological systems. von Hippel PH, et al. **J Biol Chem** 1989 Jan 15;264(2):675–8 (43 ref.)

Transcription termination directed by heteroduplex thr attenuator templates. Evidence that the transcript stem and loop structure is the termination signal. Yang MT, et al. **J Biol Chem** 1989 Feb 15;264(5):2634–9

Comparison of the meta pathway operons on NAH plasmid pWW60-22 and TOL plasmid pWW53-4 and its evolutionary significance. Assinder SJ, et al. **J Gen Microbiol** 1988 Oct;134 (Pt 10):2769–78

The presence of two complete homologous meta pathway operons on TOL plasmid pWW53. Osborne DJ, et al. **J Gen Microbiol** 1988 Nov;134 (Pt 11):2965–75

Structure and function of the Salmonella typhimurium and Escherichia coli K-12 histidine operons. Carlomagno MS, et al. **J Mol Biol** 1988 Oct 5;203(3):586–606

Translational regulation of the spc operon in Escherichia coli. Identification and structural analysis of the target site for S8 repressor protein. Cerretti DP, et al. **J Mol Biol** 1988 Nov 20;204(2):309–29

Molecular interactions in the control region of the carAB operon encoding Escherichia coli carbamoylphosphate synthetase. Charlier D, et al. **J Mol Biol** 1988 Dec 20; 204(4):867–77

ban operon of bacteriophage P1. Mutational analysis of the c1 repressor-controlled operator. Heinzel T, et al. **J Mol Biol** 1989 Jan 5;205(1):127–35

Structure and expression of the ompB operon, the regulatory locus for the outer membrane porin regulon in Salmonella typhimurium LT-2. Liljeström P, et al. **J Mol Biol** 1988 Jun 20;201(4):663–73

Effect of ethylation of operator-phosphates on Gal repressor binding. DNA contortion by repressor. Majumdar A, et al. **J Mol Biol** 1989 Jul 20;208(2):217–23

Long-range translational coupling in the rplJL-rpoBC operon of Escherichia coli. Petersen C. **J Mol Biol** 1989 Mar 20;206(2):323–32

carP, a novel gene regulating the transcription of the carbamoylphosphate synthetase operon of Escherichia coli. Roovers M, et al. **J Mol Biol** 1988 Dec 20;204(4):857–65

Genetic structure of the bacteriophage P22 PL operon. Semerjian AV, et al. **J Mol Biol** 1989 May 5;207(1):1–13

Structure and regulation of controlling sequences for the Streptomyces coelicolor glycerol operon. Smith CP, et al. **J Mol Biol** 1988 Dec 5;204(3):569–80

Integration host factor binds specifically to sites in the ilvGMEDA operon in Escherichia coli. Tsui P, et al. **J Mol Biol** 1988 Oct 5;203(3):817–20

Non-autogenous control of ribosomal protein synthesis from the trmD operon in Escherichia coli. Wikström PM, et al. **J Mol Biol** 1988 Sep 5;203(1):141–52

Positive and negative regulators for glucitol (gut) operon expression in Escherichia coli. Yamada M, et al. **J Mol Biol** 1988 Oct 5;203(3):569–83

Complex behaviour of the repressible operon. Sinha S, et al. **J Theor Biol** 1988 Jun 7;132(3):307–18

The nucleotide sequence of the first two genes of the CFA/I fimbrial operon of human enterotoxigenic Escherichia coli. Hamers AM, et al. **Microb Pathog** 1989 Apr;6(4):297–309

Nitrate reductase of Escherichia coli: completion of the nucleotide sequence of the nar operon and reassessment of the role of the alpha and beta subunits in iron binding and electron transfer. Blasco F, et al. **Mol Gen Genet** 1989 Aug;218(2):249–56

Characterization of the str operon genes from Spirulina platensis and their evolutionary relationship to those of other prokaryotes. Buttarelli FR, et al. **Mol Gen Genet** 1989 May;217(1):97–104

Increased expression of the Escherichia coli umuDC operon restores SOS mutagenesis in lexA41 cells. Ennis DG, et al. **Mol Gen Genet** 1988 Aug;213(2-3):541–4

finP and fisO mutations in FinP anti-sense RNA suggest a model for FinOP action in the repression of bacterial conjugation by the Flac plasmid JCFL0. Frost L, et al. **Mol Gen Genet** 1989 Jul;218(1):152–60

The rpoA341 allele of Escherichia coli specifically impairs the transcription of a group of positively-regulated operons. Giffard PM, et al. **Mol Gen Genet** 1988 Sep; 214(1):148–52

Regulation of proline utilization in Salmonella typhimurium: molecular characterization of the put operon, and DNA sequence of the put control region. Hahn DR, et al. **Mol Gen Genet** 1988 Jul;213(1):125–33

The Escherichia coli dam gene is expressed as a distal gene of a new operon. Jonczyk P, et al. **Mol Gen Genet** 1989 May;217(1):85–96

Operon structure of flagellar genes in Salmonella typhimurium. Kutsukake K, et al. **Mol Gen Genet** 1988 Sep;214(1):11–5

Discoordinate gene expression in the dnaA–dnaN operon of Escherichia coli. Quiñones A, et al. **Mol Gen Genet** 1988 Jul;213(1):118–24

Characterization of the ndhC–psbG–ORF157/159 operon of maize plastid DNA and of the cyanobacterium Synechocystis sp. PCC6803. Steinmüller K, et al. **Mol Gen Genet** 1989 Mar;216(1):60–9

The secY–rpmJ region of the spc ribosomal protein operon in Escherichia coli: structural alterations affecting secY expression. Ueguchi C, et al. **Mol Gen Genet** 1989 May; 217(1):1–5

Genetic evidence for superoperonal organization of genes for photosynthetic pigments and pigment-binding proteins in Rhodobacter capsulatus. Young DA, et al. **Mol Gen Genet** 1989 Jul;218(1):1–12

Cotranscription of the S10- and spc-like operons in spinach chloroplasts and identification of three of their gene products. Zhou DX, et al. **Mol Gen Genet** 1989 Apr; 216(2–3):439–45

Molecular analysis of linear plasmid-encoded major surface proteins, OspA and OspB, of the Lyme disease spirochaete Borrelia burgdorferi. Bergström S, et al. **Mol Microbiol** 1989 Apr;3(4):479–86

Nucleotide sequence of the dmsABC operon encoding the anaerobic dimethylsulphoxide reductase of Escherichia coli. Bilous PT, et al. **Mol Microbiol** 1988 Nov;2(6):785–95

The Bradyrhizobium japonicum fixBCX operon: identification of fixX and of a 5' mRNA region affecting the level of the fixBCX transcript. Gubler M, et al. **Mol Microbiol** 1989 Feb;3(2):141–8

Genetic analysis of phycobilisome mutants in the cyanobacterium Synechococcus species PCC 6301. Kalla R, et al. **Mol Microbiol** 1989 Mar;3(3):339–47

Determinants of translational initiation efficiency in the atp operon of Escherichia coli. McCarthy JE, et al. **Mol Microbiol** 1988 Jul;2(4):455–65

Sequence of the nagBACD operon in Escherichia coli K12 and pattern of transcription within the nag regulon. Plumbridge JA. **Mol Microbiol** 1989 Apr;3(4):505–15

Identification of the membrane component of the anion pump encoded by the arsenical resistance operon of R-factor R773. San Francisco MJ, et al. **Mol Microbiol** 1989 Jan; 3(1):15–21

Partial nucleotide sequence of the pts operon in Salmonella typhimurium: comparative analyses in five bacterial genera. Schnierow BJ, et al. **Mol Microbiol** 1989 Jan;3(1):113–8

Functional characterization of a putative internal promoter sequence between the 16S and the 23S RNA genes within the Escherichia coli rrnB operon. Zacharias M, et al. **Mol Microbiol** 1989 Mar;3(3):405–10

Escherichia coli dicB operon includes a truncated IS2 element. Barcellini-Couget S, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10388

Flanking DNA-sequences contribute to the specific binding of cI-repressor and OR1. Brenowitz M, et al. **Nucleic Acids Res** 1989 May 25;17(10):3747–55

Delineation of the regulatory region sequences of Agrobacterium tumefaciens virB operon. Das A, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4541–50

Visualization and quantitative analysis of complex formation between E. coli RNA polymerase and an rRNA promoter in vitro. Gourse RL. **Nucleic Acids Res** 1988 Oct 25; 16(20):9789–809

The nucleotide sequence of the argT locus of Aeromonas hydrophila. Gu XR, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10936

A stable core region of the tra operon mRNA of plasmid R1-19. Koraimann G, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1283–98

Nucleotide sequence of the region encompassing the glpKF operon and its upstream region containing a bent DNA sequence of Escherichia coli. Muramatsu S, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4378

Sigma-G RNA polymerase controls forespore-specific expression of the glucose dehydrogenase operon in Bacillus subtilis. Nakatani Y, et al. **Nucleic Acids Res** 1989 Feb 11; 17(3):999–1017

Nucleotide sequence of the hemX gene, the third member of the Uro operon of Escherichia coli K12. Sasarman A, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11835

The complete nucleotide sequence of the tdc region of Escherichia coli. Schweizer HP, et al. **Nucleic Acids Res** 1989 May 25;17(10):3994

The elongation factor EF-Tu from E. coli binds to the upstream activator region of the tRNA-tufB operon. Vijgenboom E, et al. **Nucleic Acids Res** 1988 Nov 11; 16(21):10183–97

DNA conformational change in Gal repressor-operator complex: involvement of central G–C base pair(s) of dyad symmetry. Wartell RM, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11531–41

Construction of a vector for the study of regulatory mechanism of gene expression and its utilization in the melibiose operon of Escherichia coli. Shimamoto T, et al. **Nucleic Acids Symp Ser** 1988;(19):171–3

Lux C, D and E genes of the Vibrio fischeri luminescence operon code for the reductase, transferase, and synthetase enzymes involved in aldehyde biosynthesis. Boylan M, et al. **Photochem Photobiol** 1989 May;49(5):681–8

The distribution and divergence of DNA sequences related to the Tn21 and Tn501 mer operons. Gilbert MP, et al. **Plasmid** 1988 Sep;20(2):127–36

Host-specific effects of the korA–korB operon and oriT region on the maintenance of miniplasmid derivatives of broad host-range plasmid RK2. Schmidhauser TJ, et al. **Plasmid** 1989 Mar;21(2):99–112

Rhodobacter capsulatus puf operon encodes a regulatory protein (PufQ) for bacteriochlorophyll biosynthesis. Bauer CE, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7074–8

Identification of the operator of the lux regulon from the Vibrio fischeri strain ATCC7744. Devine JH, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5688–92

The virD operon of Agrobacterium tumefaciens Ti plasmid encodes a DNA-relaxing enzyme. Ghai J, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3109–13

[Regulation in the expression of alpha-galactosidase gene in raf operon in Escherichia coli] Su TZ, et al. **Wei Sheng Wu Hsueh Pao** 1989 Jun;29(3):180–6 (Eng. Abstr.) **(Chi)**

[Gluconate operon of Bacillus subtilis: a model for enzyme induction of gram-positive bacteria] Fujita Y. **Seikagaku** 1988 Jun;60(6):436–41 (9 ref.) **(Jpn)**

[Genes coding for RNA polymerase in bacteria. III. The use of modified Sanger's method for sequencing the C-terminal region of rpoB gene, N-terminal region of rpoC gene and intercistron region of RNA polymerase in Pseudomonas putida] Borodin AM, et al. **Bioorg Khim** 1988 Sep; 14(9):1179–82 (Eng. Abstr.) **(Rus)**

[Internal promoter of Escherichia coli rplJL operon exhibits high efficiency on recombinant pNM481 plasmid] Krupskaia IV, et al. **Genetika** 1989 Jan;25(1):154–7 (Eng. Abstr.) **(Rus)**

[Nucleotide sequences of mercury resistance determinants in bacteria isolated from mercury mines: detection of a family of recombinant mercury transposons in plasmids from Acinetobacter species] Lomovskaia OL, et al. **Genetika** 1988 Sep;24(9):1539–49 (Eng. Abstr.) **(Rus)**

[Complete assignment of signals in 1D and 2D H–NMR spectra of a 17-member oligonucleotide, a model symmetrical analog of lambda operators] Kurochkin AV, et al. **Mol Biol (Mosk)** 1989 Jan–Feb;23(1):135–52 (Eng. Abstr.) **(Rus)**

[Cloning and expression of the histidine operon of Salmonella typhimurium in cells of Escherichia coli] Lisenkov AF, et al. **Mol Gen Mikrobiol Virusol** 1988 Jun;(6):37–43 (Eng. Abstr.) **(Rus)**

[Study of the expression of the cya gene in Escherichia coli K12 on a model of the hybrid cya–lac operon] Lisenkov AF, et al. **Mol Gen Mikrobiol Virusol** 1988 Dec;(12):23–8 (Eng. Abstr.) **(Rus)**

[Possibility of cloning the gene of the regulatory protein of rplJL-operon of Escherichia coli on the multicopy plasmid pUC supported by convergent transcription induced by the promoter Plac of the vector] Paton EB, et al. **Mol Gen Mikrobiol Virusol** 1989 Mar;(3):39–43 (Eng. Abstr.) **(Rus)**

OPHTHALMIA

CHEMICALLY INDUCED

[The effect of vasoactive intestinal polypeptide (VIP) on ocular inflammation in rabbit ocular tissue] Katayama T. **Nippon Ganka Gakkai Zasshi** 1989 Jan;93(1):16–21 (Eng. Abstr.) **(Jpn)**

CLASSIFICATION

[A classification of intraocular bacteriologic findings following lens implantation] Wenzel M, et al. **Klin Monatsbl Augenheilkd** 1988 Dec;193(6):589–93 (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Klebsiella pneumoniae liver abscess associated with septic endophthalmitis [letter] Casanova C, et al. **Arch Intern Med** 1989 Jun;149(6):1467

Inflammation and the formation of epiretinal membranes. Gilbert C, et al. **Eye** 1988;2 Suppl:S140–56 (88 ref.)

[Eye infections endangering the sight. A retrospective study from a 6-year period with special attention to the use of contact lenses] Movin M, et al. **Ugeskr Laeger** 1988 Oct 17;150(42):2522–5 (Eng. Abstr.) **(Dan)**

DIAGNOSIS

Clinical signs, symptoms and course of endophthalmitis. Maudgal PC. **Indian J Ophthalmol** 1987;35(5–6):63–6

Challenging problems in diagnosis and management of fungal endophthalmitis. Shah RR. **Indian J Ophthalmol** 1987; 35(5–6):67–8

Meningococcal endophthalmitis without concomitant septicemia or meningitis. Auerbach SB, et al. **Pediatr Infect Dis J** 1989 Jun;8(6):411–3

[Sense and nonsense of examinations in hematogenous and exogenous intra-ocular infections] Martenet AC. **Klin Monatsbl Augenheilkd** 1989 May;194(5):359–60 (5 ref.) (Eng. Abstr.) **(Fre)**

DRUG THERAPY

Experimental evaluation of intra-vitreal therapy using various antibiotics with and without steroids. Jain MR. **Indian J Ophthalmol** 1987;35(5–6):76–82

Management of post operative inflammation in lens implant surgery. Momose A. **Indian J Ophthalmol** 1987; 35(5–6):72–4

Efficacy of liposome-bound amphotericin B for the treatment of experimental fungal endophthalmitis in rabbits. Liu KR, et al. **Invest Ophthalmol Vis Sci** 1989 Jul;30(7):1527–34

Ocular anti-inflammatory action of a lipoxygenase inhibitor in the rabbit. Chiou LY, et al. **J Ocul Pharmacol** 1985 Winter;1(4):383–90

Ocular anti-inflammatory actions of matrine. Chuang CY, et al. **J Ocul Pharmacol** 1987 Summer;3(2):129–34

Recent developments in chemotherapy of ocular diseases. Leopold IH. **J Ocul Pharmacol** 1986 Spring;2(2):185–203 (91 ref.)

Effects of topical diclofenac sodium in a rabbit model of ocular inflammation and leukotaxis. Rowland JM, et al. **J Ocul Pharmacol** 1986 Winter;2(1):23–9

Diagnosis and treatment of chronic postoperative bacterial endophthalmitis. Brady SE, et al. **Ophthalmic Surg** 1988 Aug;19(8):580–4 (20 ref.)

Experimental intravitreal ketoconazole in DMSO. Yoshizumi MO, et al. **Retina** 1988;8(3):210–5

[Antibiotherapy in endophthalmia] Boissonnot M, et al. **Bull Soc Ophtalmol Fr** 1988 May;88(5):669–70, 673–4 (13 ref.) (Eng. Abstr.) **(Fre)**

[Value of quinolones in ophthalmology. Rational approach to systemic treatment of bacterial endophthalmitis] Bron A, et al. **Ophtalmologie** 1988 Apr–Jun;2(2):107–9 (Eng. Abstr.) **(Fre)**

ENZYMOLOGY

Ferroxidase activity increases in the aqueous humor during the ocular inflammatory response. McGahan MC, et al. **Ophthalmic Res** 1989;21(3):221–5

EPIDEMIOLOGY

Possible role of preserved lemon juice in the epidemiology of candida endophthalmitis in heroin addicts [letter] Shankland GS, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jan;8(1):87–9

Incidence of post-operative endophthalmitis in India. Reddy PR. **Indian J Ophthalmol** 1987;35(5–6):60–2

Epidemiology of an outbreak of Candida endophthalmitis in heroin addicts: identification of possible source of infection by biotyping. Shankland GS, et al. **J Med Vet Mycol** 1988 Jun;26(3):199–202

[Endogenous fungal endophthalmitis in Japan reported from 1974 to 1986] Ishibashi Y, et al. **Nippon Ganka Gakkai Zasshi** 1988 Jun;92(6):952–8 (33 ref.) (Eng. Abstr.) **(Jpn)**

ETIOLOGY

Post-traumatic ophthalmitis due to Bacillus licheniformis. Thurn JR, et al. **Am J Med** 1988 Nov;85(5):708–10

Endogenous Mycobacterium chelonae endophthalmitis. Ambler JS, et al. **Am J Ophthalmol** 1989 Sep 15; 108(3):338–9

Streptococcus salivarius endophthalmitis from contaminated donor cornea after keratoplasty. Heidemann DG, et al. **Am J Ophthalmol** 1989 Apr 15;107(4):429–30

Endogenous orbital cellulitis and endogenous endophthalmitis in subacute bacterial endocarditis. Hornblass A, et al. **Am J Ophthalmol** 1989 Aug 15; 108(2):196–7

Citrobacter diversus endophthalmitis following penetrating keratoplasty. Insler MS, et al. **Am J Ophthalmol** 1988 Nov 15;106(5):632–3

Postoperative endophthalmitis and asymptomatic bacteriuria caused by group G Streptococcus. Margo CE, et al. **Am J Ophthalmol** 1989 Apr 15;107(4):430–1

Traumatic Haemophilus influenzae endophthalmitis. Pach JM. **Am J Ophthalmol** 1988 Oct 15;106(4):497–8

Unsuspected mycobacterial endophthalmitis with increased aqueous lactate dehydrogenase levels in a child. Croxatto JO, et al. **Ann Ophthalmol** 1989 Jun;21(6):233–7

Endogenous candidal endophthalmitis. Deutsch D, et al. **Ann Ophthalmol** 1989 Jul;21(7):260–5, 268

Staphylococcus epidermidis endophthalmitis complicating intravitreal antiviral therapy of cytomegalovirus retinitis. Case report. Heinemann MH. **Arch Ophthalmol** 1989 May; 107(5):643–4

A new culture method for infectious endophthalmitis. Joondeph BC, et al. **Arch Ophthalmol** 1989 Sep; 107(9):1334–7

Cure of Paecilomyces endophthalmitis with multiple intravitreal injections of amphotericin B. Case report. Minogue MJ, et al. **Arch Ophthalmol** 1989 Sep;107(9):1281

Listeria monocytogenes endophthalmitis: a case report. Brian GR, et al. **Aust N Z J Ophthalmol** 1988 Nov;16(4):329–31

Ectopic cutaneous schistosomiasis and schistosomal ocular inflammatory disease. Milligan A, et al. **Br J Dermatol** 1988 Dec;119(6):793–8

Endophthalmitis following cataract extraction [editorial] Smith RJ. **Br J Ophthalmol** 1989 Jun;73(6):401

Cause of intraocular lens removal. Seymour RG, et al. **Can J Ophthalmol** 1989 Jun;24(4):152–4

Electroretinograms in early fungal endophthalmitis. Jain VK, et al. **Doc Ophthalmol** 1988 Jul;69(3):227–35

Corneo–scleral rim cultures: donor contamination a case of fungal endophthalmitis transmitted by K–Sol stored cornea. Fong LP, et al. **Eye** 1988;2 (Pt 6):670–6

Post–operative management of endophthalmitis: definition, incidence and etiopathogenesis. Raju VK. **Indian J Ophthalmol** 1987;35(5–6):56–7

The red eye. Infectious conjunctivitis, keratitis, endophthalmitis, and periocular cellulitis. Wilhelmus KR. **Infect Dis Clin North Am** 1988 Mar;2(1):99–116 (38 ref.)

Metastatic septic endophthalmitis in pyogenic liver abscess. Chiu CT, et al. **J Clin Gastroenterol** 1988 Oct;10(5):524–7

Severe group B streptococcal eye infections in adults. Ormerod LD, et al. **J Infect** 1989 Jan;18(1):29–34

Good visual outcome after endophthalmitis in an eye previously treated successfully for amblyopia. Kushner BJ, et al. **J Pediatr Ophthalmol Strabismus** 1989 Mar–Apr; 26(2):69–71

Two cases of haematogenous Candida endophthalmitis. Schrader W, et al. **Mycoses** 1988;Suppl 1:75–80

Endoscopy and endophthalmitis [letter] Reed M, et al. **N Engl J Med** 1989 Sep 21;321(12):836

Postoperative zygomycetes endophthalmitis. Orgel IK, et al. **Ophthalmic Surg** 1989 Aug;20(8):584–7

Endogenous endophthalmitis with lenticular abscess caused by Enterobacter agglomerans (Erwinia species). Zeiter JH, et al. **Ophthalmic Surg** 1989 Jan;20(1):9–12

Bilateral anophthalmia and unilateral microphthalmia in two siblings. BenEzra D, et al. **Ophthalmologica** 1989; 198(3):140–4

Successful treatment of metastatic endophthalmitis. Case reports. Wang FD, et al. **Ophthalmologica** 1989; 198(3):124–8

Relationship between sympathetic ophthalmia, phacoanaphylatic endophthalmitis, and Vogt–Koyanagi–Harada disease. Chan CC. **Ophthalmology** 1988 May;95(5):619–24 (64 ref.)

Ophthalmia nodosa caused by tarantula hairs. Hered RW, et al. **Ophthalmology** 1988 Feb;95(2):166–9

Aspergillus flavus endophthalmitis and retinitis in an intravenous drug abuser. A therapeutic success. Lance SE, et al. **Ophthalmology** 1988 Jul;95(7):947–9

Propionibacterium–associated endophthalmitis after extracapsular cataract extraction. Review of reported cases. Meisler DM, et al. **Ophthalmology** 1989 Jan;96(1):54–61

Simultaneous aspergillus endophthalmitis and cytomegalovirus retinitis after kidney transplantation. Weiss JN, et al. **Retina** 1988;8(3):193–8

[Endophthalmos in a patient with a lens implant: septic metastasis or local inoculation?] Comte P, et al. **Bull Soc Ophtalmol Fr** 1988 Feb;88(2):261–2 **(Fre)**

[A case of Cladosporium endophthalmitis] Raspiller A, et al. **Bull Soc Ophtalmol Fr** 1988 Mar;88(3):455–7 (Eng. Abstr.) **(Fre)**

[Chronic endophthalmitis caused by Propionibacterium acnes in a pseudophakic patient] Cohen G, et al. **J Fr Ophtalmol** 1988;11(6–7):521–2 (3 ref.) (Eng. Abstr.) **(Fre)**

[Intraocular inflammations. Anamnesis and clinical study] Messerli J. **Klin Monatsbl Augenheilkd** 1989 May; 194(5):368–72 (7 ref.) (Eng. Abstr.) **(Ger)**

[Endophthalmitis and toxic lens syndrome. Differential diagnosis and therapy] Pham–Duy T, et al. **Klin Monatsbl Augenheilkd** 1988 Sep;193(3):243–8 (Eng. Abstr.) **(Ger)**

[Two cases of metastatic Klebsiella pneumoniae endophthalmitis] Kato A, et al. **Kansenshogaku Zasshi** 1988 Sep;62(9):830–4 (Eng. Abstr.) **(Jpn)**

[Role of Staphylococcus epidermidis in outer eye infections] Asaoka I. **Nippon Ganka Gakkai Zasshi** 1989 Mar; 93(3):351–7 (Eng. Abstr.) **(Jpn)**

[Pseudomonas endophthalmitis in rabbits—intravitreal inoculation of two pseudomonal strains] Hatano H, et al. **Nippon Ganka Gakkai Zasshi** 1988 Nov;92(11):1758–64 (Eng. Abstr.) **(Jpn)**

[Bilateral suppurative endophthalmitis in septicemia caused by Klebsiella pneumoniae] Bratek J, et al. **Klin Oczna** 1988 Oct;90(10):355–6 (Eng. Abstr.) **(Pol)**

[Gonorrheal ophthalmia in a woman with specific involvement of the urogenital tract] Tsveer VL, et al. **Vestn Dermatol Venerol** 1988;(5):61–2 **(Rus)**

IMMUNOLOGY

[Status of nonspecific defense factors in patients with traumatic endophthalmitis] Zhukova OV, et al. **Vestn Oftalmol** 1989 Jan–Feb;105(2):58–60 (Eng. Abstr.) **(Rus)**

METABOLISM

Effects of ocular inflammation on tear proteins. I. Thiol protease inhibitors. Davis WL, et al. **J Ocul Pharmacol** 1986 Winter;2(1):31–40

[The changes of prostaglandin E1 in the aqueous humor and the pathology in infectious and anaphylactic endophthalmitis] Hu SX, et al. **Yen Ko Hsueh Pao** 1986 Dec;2(4):253–4, 257 (Eng. Abstr.) **(Chi)**

[Anaphylatoxin in the aqueous humor of rabbit with endotoxin induced endophthalmitis] Kameda H, et al. **Nippon Ganka Gakkai Zasshi** 1989 Jan;93(1):22–7 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

An unusual case of endogenous aspergillus endophthalmitis. Khurana AK, et al. **Acta Ophthalmol (Copenh)** 1989 Jun; 67(3):315–8

Endogenous Aeromonas hydrophila endophthalmitis. Frieling JS, et al. **Ann Ophthalmol** 1989 Mar;21(3):117–8

Coagulase–negative staphylococcal endophthalmitis. Increase in antimicrobial resistance. Davis JL, et al. **Ophthalmology** 1988 Oct;95(10):1404–10

NURSING

[Postoperative care of mycotic endophthalmitis] Zhang HM. **Chung Hua Hu Li Tsa Chih** 1989 Apr;24(4):205–6 **(Chi)**

PATHOLOGY

Postoperative mycobacterial endophthalmitis. Roussel TJ, et al. **Am J Ophthalmol** 1989 Apr 15;107(4):403–6

[Infectious and neoplastic lesions of the eye in AIDS] Prantl F, et al. **Pathologe** 1988 Nov;9(6):358–62 **(Ger)**

PHYSIOPATHOLOGY

The role of inflammation in CW Nd:YAG contact transscleral photocoagulation and cryopexy. Schubert HD, et al. **Invest Ophthalmol Vis Sci** 1989 Mar;30(3):543–9

Argon laser–induced ocular hypertension: animal model of ocular inflammation. Gherezghiher T, et al. **J Ocul Pharmacol** 1989 Spring;5(1):7–17

PREVENTION & CONTROL

Pre, intra and postoperative prophylaxis to prevent endophthalmitis. Morse PH. **Indian J Ophthalmol** 1987; 35(5–6):58–9

Prevention of endophthalmitis with special reference to mobile eye camps. Reddy PS. **Indian J Ophthalmol** 1987; 35(5–6):75

Pneumococcal endophthalmitis after corneal transplantation: control by modification of harvesting techniques. Moore PJ, et al. **Infect Control Hosp Epidemiol** 1989 Mar; 10(3):102–5

Outpatient topical use of povidone–iodine in preparing the eye for surgery. Apt L, et al. **Ophthalmology** 1989 Mar; 96(3):289–92

[Intravitreal injection of human anti–pseudomonas globulin in pseudomonas endophthalmitis in rabbits] Hatano H, et al. **Nippon Ganka Gakkai Zasshi** 1988 Dec;92(12):2120–8 (Eng. Abstr.) **(Jpn)**

SURGERY

Primary vs delayed implant in evisceration [letter; comment] Holds JB, et al. **Arch Ophthalmol** 1989 Jul;107(7):952–3. **Comment on:** Arch Ophthalmol 1988 Sep;106(9):1303–8

Endophthalmitis and pars plana vitrectomy. Verbraeken H, et al. **Bull Soc Belge Ophtalmol** 1987;223 Pt 2:33–9

Post–operative management of endophthalmitis: surgical intervention when, how and the results. Lakhanpal V. **Indian J Ophthalmol** 1987;35(5–6):69–71

Treatment of endophthalmitis by pars plana vitrectomy. Verbraeken H, et al. **Ophthalmologica** 1988;197(1):19–25

Chronic vitritis with macrophagic inclusions. A sequela of treated endophthalmitis due to a coryneform bacterium. Margo CE, et al. **Ophthalmology** 1988 Feb;95(2):156–61

[Experimental study of bacterial endophthalmitis treated by vitrectomy] Cao WQ. **Chung Hua Yen Ko Tsa Chih** 1988 Jul;24(4):236–9 (Eng. Abstr.) **(Chi)**

THERAPY

Management and prevention of ocular viral and chlamydial infections. Darougar S, et al. **CRC Crit Rev Microbiol** 1989; 16(5):369–418 (281 ref.)

The treatment of postoperative endophthalmitis. Results of differing approaches to treatment. Stern GA, et al. **Ophthalmology** 1989 Jan;96(1):62–7

Management options for Propionibacterium acnes endophthalmitis. Zambrano W, et al. **Ophthalmology** 1989 Jul;96(7):1100–5

TRANSMISSION

Dangers of "eye–to–eye" contact [letter] Hibberd PL, et al. **Infect Control Hosp Epidemiol** 1989 Mar;10(3):99–101

VETERINARY

Morphology of congenital microphthalmia in chicks (Gallus gallus). Ehrlich D, et al. **J Morphol** 1989 Jan;199(1):1–13

OPHTHALMIA NEONATORUM

[Neonatal chlamydial conjunctivitis—a case report] Lo YS, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1988 Oct; 4(10):582–5 (Eng. Abstr.) **(Chi)**

EPIDEMIOLOGY

Chlamydia ophthalmia neonatorum in Cameroon. Buisman NJ, et al. **Doc Ophthalmol** 1988 Oct–Nov;70(2–3):257–64

PREVENTION & CONTROL

Source of the conjunctival bacterial flora at birth and implications for ophthalmia neonatorum prophylaxis. Isenberg SJ, et al. **Am J Ophthalmol** 1988 Oct 15; 106(4):458–62

Controversies in ocular prophylaxis of newborns [editorial] Chandler JW. **Arch Ophthalmol** 1989 Jun;107(6):814–5

Efficacy of neonatal ocular prophylaxis for the prevention of chlamydial and gonococcal conjunctivitis. Hammerschlag MR, et al. **N Engl J Med** 1989 Mar 23; 320(12):769–72

Why we need a program for the control of Chlamydia trachomatis [editorial] Schachter J. **N Engl J Med** 1989 Mar 23;320(12):802–4

[Antimicrobial prophylaxis in childhood (letter)] Vervloet E. **Ned Tijdschr Geneeskd** 1988 Sep 3;132(36):1673 **(Dut)**

OPHTHALMIA, SYMPATHETIC

Sympathetic ophthalmia. Charles NC. **Adv Ophthalmic Plast Reconstr Surg** 1987;7:239–45

COMPLICATIONS

Sympathetic ophthalmia and choroidal neovascularization. Case report. Chew EY, et al. **Arch Ophthalmol** 1988 Nov; 106(11):1507–8

DIAGNOSIS

[Sympathetic ophthalmia: current clinical data apropos of 3 cases] Dubois C, et al. **Bull Soc Ophtalmol Fr** 1988 May; 88(5):725–30 **(Fre)**

ETIOLOGY

Sympathetic ophthalmia following neodymium:YAG cyclotherapy. Edward DP, et al. **Ophthalmic Surg** 1989 Aug;20(8):544–6

Does Nd:YAG cyclotherapy cause sympathetic ophthalmia? [editorial] Minckler DS. **Ophthalmic Surg** 1989 Aug; 20(8):543

Sympathetic uveitis after giant tear repair. Maisel JM, et al. **Retina** 1989;9(2):122–6

IMMUNOLOGY

[HLA antigens and sympathetic ophthalmia] Yu Q, et al. **Yen Ko Hsueh Pao** 1988 Dec;4(4):225–7 (Eng. Abstr.) **(Chi)**

THERAPY

Twenty cases of sympathetic ophthalmia. Jennings T, et al. **Br J Ophthalmol** 1989 Feb;73(2):140–5

OPHTHALMIC ARTERY

Retinal Wada test. Horton JA, et al. **AJNR** 1988 Nov–Dec; 9(6):1167–8

Treatment of a giant carotid ophthalmic artery aneurysm by intravascular balloon embolization therapy. Higashida RT, et al. **Surg Neurol** 1988 Nov;30(5):382–6

[Traumatic ophthalmic artery–superior ophthalmic vein fistula: a case report] Tabuse J, et al. **No Shinkei Geka** 1989 Mar;17(3):291–5 (13 ref.) (Eng. Abstr.) **(Jpn)**

ABNORMALITIES

Abnormal origin of the ophthalmic artery from the anterior cerebral artery: neuroradiological and intraoperative findings. Hassler W, et al. **Neuroradiology** 1989;31(1):85–7

[An abnormal origin of the ophthalmic artery arising from the middle meningeal artery] Konishi M, et al. **Kaibogaku Zasshi** 1988 Apr;63(2):70–7 (25 ref.) (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

Vascular responses of ophthalmic arteries to exogenous and endogenous norepinephrine. Ohkubo H, et al. **Exp Eye Res** 1989 Apr;48(4):539–47

Effect of topical timolol maleate on the ophthalmic artery blood pressure. Grunwald JE, et al. **Invest Ophthalmol Vis Sci** 1989 Jun;30(6):1095–100

PATHOLOGY

Recovery following acute obstruction of the retinal and choroidal circulations. A case history. Duker JS, et al. **Retina** 1988;8(4):257–60

PHYSIOLOGY

OODG–Ulrich and OPG–Gee: a comparative study. Strik F. **Doc Ophthalmol** 1988 May;69(1):51–71

Ophthalmic artery blood flow velocity in healthy term and preterm neonates. Lindner W, et al. **Pediatr Res** 1988 Nov; 24(5):613–6

Doppler ophthalmic blood pressure measurement in the hemodynamic evaluation of occlusive carotid artery disease. Strauss AL, et al. **Stroke** 1989 Aug;20(8):1012–5

PHYSIOPATHOLOGY

[Usefulness of ultrasonic evaluation of the ophthalmic artery branches by the Doppler method in the diagnosis of marked stenosis and occlusion of the internal carotid artery] Rozenfeld A, et al. **Neurol Neurochir Pol** 1988 Sep–Oct; 22(5):377–82 (Eng. Abstr.) **(Pol)**

[Local ischemia in the basin of the superficial temporal artery as a factor activating blood flow in the ophthalmic artery] Shilkin GA, et al. **Oftalmol Zh** 1988;(6):349–53 (Eng. Abstr.) **(Rus)**

SURGERY

Combined contralateral pterional and interhemispheric approach to a subchiasmal carotid–ophthalmic aneurysm. Shiokawa Y, et al. **Acta Neurochir (Wien)** 1988; 93(3–4):154–8

OPHTHALMIC ASSISTANTS see under **PHYSICIANS' ASSISTANTS**

OPHTHALMIC SOLUTIONS

Systemic effects of ocular drugs. Salminen L, et al. **Adverse Drug React Acute Poisoning Rev** 1989 Summer; 8(2):89–96 (56 ref.)

Viability of Acanthamoeba cysts in ophthalmic solutions. Brandt FH, et al. **Appl Environ Microbiol** 1989 May; 55(5):1144–6

Drug binding of ophthalmic viscoelastic agents. McDermott ML, et al. **Arch Ophthalmol** 1989 Feb;107(2):261–3

Immunoglobulin deposition in the cornea after application of autologous serum. McDonnell PJ, et al. **Arch Ophthalmol** 1988 Oct;106(10):1423–5 (20 ref.)

Use of ophthalmic ointment to separate adhesive [letter] Morgan SJ. **Arch Ophthalmol** 1989 Jan;107(1):15

Comparison of timolol maleate and levobunolol: doses and volume per bottle [letter] Schwartz JS, et al. **Arch Ophthalmol** 1989 Jan;107(1):17

Reduction of blood glucose concentration with insulin eye drops [letter] Chiou GC, et al. **Diabetes Care** 1988 Oct; 11(9):750–1

Influence of the surface tension of eye drops on the retention of a tracer in the precorneal area of human eyes. Ludwig A, et al. **J Pharm Belg** 1988 May–Jun;43(3):157–62

Ophthalmic irrigants: a current review and update. McDermott ML, et al. **Ophthalmic Surg** 1988 Oct; 19(10):724–33 (45 ref.)

An evaluation of the effectiveness of intramuscular atropine or homatropine eyedrops in preventing the effects of physostigmine eyedrops on human vision. Kay CD, et al. **Q J Exp Physiol** 1988 Jul;73(4):511–9

The effects of physostigmine sulphate eyedrops on human visual function. Kay CD, et al. **Q J Exp Physiol** 1988 Jul; 73(4):501–10

[Composition, structure and physiologic parameters of the lacrimal system; implications for the concept of ophthalmic forms] Ibrahim H, et al. **Pharm Acta Helv** 1988;63(6):146–54 (91 ref.) (Eng. Abstr.) **(Fre)**

[Formulation and local anesthetic activity of carbizocaine in collyria] Zabka M, et al. **Cesk Farm** 1988 Dec; 37(10):457–60 (Eng. Abstr.) **(Slo)**

[Bacteriologic evaluation of ophthalmic methylcellulose preparations prepared at the hospital] Irkeç M, et al. **Mikrobiyol Bul** 1988;22(3):235–7 (Eng. Abstr.) **(Tur)**

ADMINISTRATION & DOSAGE

Administration of eyedrops in facial palsy. Rosenberg S. **Am J Ophthalmol** 1988 Oct 15;106(4):499–500

Effects of glucose and fructose added to the intraocular irrigating solutions on the rabbit ERG in vitro. Kim SY, et al. **Metab Pediatr Syst Ophthalmol** 1987;10(1):14–7

Evaluation of a method of instilling eyedrops in visually handicapped patients [letter] Ling RT, et al. **Ophthalmic Surg** 1988 Dec;19(12):907

ADVERSE EFFECTS

Use of ophthalmic medications in pregnant and nursing women. Samples JR, et al. **Am J Ophthalmol** 1988 Nov 15;106(5):616–23 (56 ref.)

Epidemiologic approach to open-angle glaucoma: 2. Survival analysis of adverse drug reactions. Report of the Canadian Ocular Adverse Drug Reaction Registry Program. The Collaborative Glaucoma Study Group. Begg IS, et al. **Can J Ophthalmol** 1989 Feb;24(1):15–9

Complications of ophthalmic drugs and solutions. **Int Ophthalmol Clin** 1989 Fall;29(3):137–211

Toxicity of surgical solutions. Glasser DB, et al. **Int Ophthalmol Clin** 1989 Fall;29(3):179–87 (54 ref.)

Complications of contact lens solutions. Sibley MJ. **Int Ophthalmol Clin** 1989 Fall;29(3):151–2 (6 ref.)

Factitious hypermineralcorticoidism by chronic use of 9-alpha-fluoroprednisolone containing collyrium [letter] Errico M, et al. **J Endocrinol Invest** 1989 Apr;12(4):277–8

Cytotoxicity and mutagenicity of ophthalmic solution preservatives and UVA radiation in L5178Y cells. Withrow TJ, et al. **Photochem Photobiol** 1989 Sep;50(3):385–9

Irritation associated with tear-replacement ophthalmic drops. A pharmaceutical and subjective investigation. Fassihi AR, et al. **S Afr Med J** 1989 Mar 4;75(5):233–5

[Asthma and beta-blocker eye drops (timolol, metipranolol, carteolol). Inhibition of chronotropic effects of isoprenaline] Le Jeunne C, et al. **Allerg Immunol (Paris)** 1988 Sep;20(7):267–9 (Eng. Abstr.) **(Fre)**

[Systemic effects of beta-blockaders in eyedrops (letter)] Tanneau R, et al. **Presse Med** 1989 Apr 1;18(13):686 **(Fre)**

[False innocuousness of eye drops. Apropos of 1 case of thyrotoxicosis induced by iodine] André F, et al. **Therapie** 1988 Aug–Sep;43(5):431–2 (Eng. Abstr.) **(Fre)**

[Systemic effects of drugs administered by conjunctival route] Palmieri N, et al. **Clin Ter** 1987 Jun 30;121(6):505–15 (65 ref.) (Eng. Abstr.) **(Ita)**

[Estimation of corneoconjunctival damage due to topical ophthalmic agents by biochemical analysis of tear fluid] Hiraki S, et al. **Nippon Ganka Gakkai Zasshi** 1988 Sep; 92(9):1553–64 (Eng. Abstr.) **(Jpn)**

[Xerosis caused by abuse of vasoconstrictor eye drops: apropos of a case] Díaz C, et al. **Rev Med Univ Navarra** 1987 Jul–Sep;31(3):141–3 (Eng. Abstr.) **(Spa)**

PHARMACOKINETICS

Corneal penetration and ocular bioavailability of drugs. Burstein NL, et al. **J Ocul Pharmacol** 1985 Fall;1(3):309–26 (108 ref.)

[Topical ophthalmic drugs] Delibes J, et al. **Therapie** 1989 Mar–Apr;44(2):97–100 (Eng. Abstr.) **(Fre)**

PHARMACOLOGY

Ophthalmic solutions, the ocular surface, and a unique therapeutic artificial tear formulation [see comments] Gilbard JP, et al. **Am J Ophthalmol** 1989 Apr 15; 107(4):348–55. **Comment in:** Am J Ophthalmol 1989 Jul 15;108(1):94–5

Ophthalmic solutions, the ocular surface, and a unique therapeutic artificial tear formulation [letter; comment] Maurice D. **Am J Ophthalmol** 1989 Jul 15;108(1):94–5. **Comment on:** Am J Ophthalmol 1989 Apr 15;107(4):348–55

Comparison of intraocular solutions on glycolysis and levels of ATP and glutathione in the retina. Winkler BS. **J Cataract Refract Surg** 1988 Nov;14(6):633–7

THERAPEUTIC USE

Ophthalmic solution, the ocular surface, and a unique therapeutic artificial tear formulation [letter] Johnson TL. **Am J Ophthalmol** 1989 Jun 15;107(6):687

Biomicroscopy of the tear film: aqueous and lipid tear substitutes in the normal and abnormal eye. Carrington S, et al. **Vet Rec** 1988 Sep 24;123(13):329–35

TOXICITY

[Evaluation of the irritability of ophthalmic preparations using colored and radioisotope indicators in laboratory rats] Mikeska J, et al. **Cesk Farm** 1988 Sep;37(7):327–30 (Eng. Abstr.) **(Cze)**

OPHTHALMODYNAMOMETRY

INSTRUMENTATION

[Automatic biometry and keratometry in comparison with the manual technic] Knorz MC, et al. **Fortschr Ophthalmol** 1989;86(2):157–8 (Eng. Abstr.) **(Ger)**

[Ocular hemodynamics following suction cup oculopression] Pillunat LE, et al. **Klin Monatsbl Augenheilkd** 1988 Nov; 193(5):476–80 (Eng. Abstr.) **(Ger)**

[Relation of negative pressure difference and artificially elevated intraocular pressure using the suction cup method] Stodtmeister R, et al. **Klin Monatsbl Augenheilkd** 1989 Mar; 194(3):178–83 (Eng. Abstr.) **(Ger)**

OPHTHALMOLOGY

see related
EYE DISEASES
ORTHOPTICS
VISION

Treatment of conjunctival lesions [letter] Sassani JW, et al. **Am Fam Physician** 1988 Oct;38(4):69, 72

The Ethics Committee of the American Academy of Ophthalmology [editorial] Beauchamp GR. **Arch Ophthalmol** 1989 Jan;107(1):33–4

Professional cards and the visually impaired [letter] Frankel CA. **Arch Ophthalmol** 1988 Dec;106(12):1649

The Hsiao study. A personal perspective. Garcia GE. **Arch Ophthalmol** 1989 Mar;107(3):342–3

Further dissemination of ophthalmic knowledge [editorial] Goldberg MF. **Arch Ophthalmol** 1988 Nov;106(11):1523

Importance of computer information systems [letter] Lewis JW. **Arch Ophthalmol** 1989 Aug;107(8):1116

How exposed are we? Is there a better way? [editorial] Olson RJ. **Arch Ophthalmol** 1989 Aug;107(8):1131

Ophthalmology in Zimbabwe. Schwab L. **Arch Ophthalmol** 1989 Feb;107(2):284–7

Ophthalmology in India. Venkataswamy G. **Arch Ophthalmol** 1989 Jun;107(6):931–2

Professional negligence. Moore MC. **Aust N Z J Ophthalmol** 1988 May;16(2):137–42

Presidential address. Royal Australian College of Ophthalmologists 19th annual congress, Perth, October 1987. Whitford RF. **Aust N Z J Ophthalmol** 1988 Aug; 16(3):161–4

Statistical methods in ophthalmology: an adjusted chi-square approach. Donner A. **Biometrics** 1989 Jun;45(2):605–11

Referral patterns to an ophthalmic outpatient clinic by general practitioners and ophthalmic opticians and the role of these professionals in screening for ocular disease. Harrison RJ, et al. **BMJ** 1988 Nov 5;297(6657):1162–7

Changes in colour contrast sensitivity associated with operating argon lasers. Gündüz K, et al. **Br J Ophthalmol** 1989 Apr;73(4):241–6

Eye care: who cares? [editorial] Schneider RJ. **Can J Ophthalmol** 1988 Aug;23(5):201–2 **(Eng, Fre)**

Lasers in ophthalmology: the basic principles. Marshall J. **Eye** 1988;2 Suppl:S98–112 (6 ref.)

Patient data storage and retrieval using dBASE III in a pediatric ophthalmology department. Friendly DS. **Graefes Arch Clin Exp Ophthalmol** 1988;226(4):323–5

Presidential address. All India Ophthalmological Society. Maskati BT. **Indian J Ophthalmol** 1987;35(5–6):1–4

Computers in ophthalmology. Neroor S, et al. **Indian J Ophthalmol** 1987;35(5–6):425–7

On presentation of the Proctor Medal of the Association for Research in Vision and Ophthalmology to Dr. Robert Machemer. Aaberg TM. **Invest Ophthalmol Vis Sci** 1988 Dec;29(12):1765–70

On presentation of the Friedenwald award of the Association for Research in Vision and Ophthalmology to Dr. Gerald J. Chader. Kupfer C. **Invest Ophthalmol Vis Sci** 1989 Jan; 30(1):1–6

Employment of optometrists by ophthalmologists [editorial] Bartlett JD. **J Am Optom Assoc** 1988 Sep;59(9):662

Survey on ophthalmic photography in Great Britain. Hancock R, et al. **J Audiov Media Med** 1988 Jul;11(3):87–90

Advertising: why, what, and how? [editorial] Emery J. **J Cataract Refract Surg** 1989 May;15(3):251–2

Practice styles and preferences of ASCRS members—1987 survey. Leaming DV. **J Cataract Refract Surg** 1988 Sep; 14(5):552–9

A piece of my mind. Mrs Rodell. Burrows A. **JAMA** 1989 Oct 6;262(13):1847

Ophthalmology. Deutsch TA. **JAMA** 1989 May 19; 261(19):2867–8

Laser and the ophthalmologist [editorial] **Lancet** 1989 Jul 1;2(8653):24

Facts are stubborn things [editorial] Javitt JC. **Ophthalmic Surg** 1988 Oct;19(10):701–2

Needlestick injuries in ophthalmology. Mansour AM. **Ophthalmic Surg** 1989 May;20(5):367–9

Cataract extractions for senior surgeons. Pizzarelio LD, et al. **Ophthalmic Surg** 1988 Sep;19(9):629–32

The medical-industrial complex and the excimer laser [editorial] Lichter PR. **Ophthalmology** 1988 Apr; 95(4):421–2

Biomedical research, conflict of interest, and the public trust [editorial] Lichter PR. **Ophthalmology** 1989 May; 96(5):575–8

The Wilmer Information System. A classification and retrieval system for information on diagnosis and therapy in ophthalmology. Miller KM, et al. **Ophthalmology** 1988 Mar;95(3):403–9

Neuroimaging in neuro-ophthalmology. Slamovits TL, et al. **Ophthalmology** 1989 Apr;96(4):555–68 (113 ref.)

Early referral to ophthalmologist and close monitoring are key to preservation of eyesight for diabetics [editorial] Richman SJ. **R I Med J** 1988 Aug;71(8):296–7

Advertising in ophthalmology. I. Advertising is a threat to professional autonomy. Margo CE. **Surv Ophthalmol** 1988 Nov–Dec;33(3):211–4

Advertising in ophthalmology [editorial] Slamovits TL. **Surv Ophthalmol** 1988 Nov–Dec;33(3):216

Advertising in ophthalmology. II. Advertising is a defensible aspect of free enterprise. Trobe JD, et al. **Surv Ophthalmol** 1988 Nov–Dec;33(3):214–6

Members. American Ophthalmological Society. **Trans Am Ophthalmol Soc** 1989;86:xv–xxix

Ophthalmology society invites members [letter] Bedford PG. **Vet Rec** 1988 Oct 8;123(15):404

[Personal experience with the Orbis Project flying hospital] Janula J. **Cesk Oftalmol** 1988 Jul;44(4):293–5 (Eng. Abstr.) **(Cze)**

[Evaluation of mental suffering in ophthalmological legal expert testimony] Coppens A. **Bull Soc Belge Ophtalmol** 1987;223 Pt 2:91–100 (Eng. Abstr.) **(Fre)**

[Lasers in ophthalmology. Development and future prospects] Charlin JF. **Bull Soc Ophtalmol Fr** 1988 Aug–Sep;88(8–9):973–6 **(Fre)**

[Improving the organization of work in the ophthalmic room of a tuberculosis clinic] Primakov FD. **Probl Tuberk** 1988; (11):63 **(Rus)**

[Current problems of optical correction of vision (information for ophthalmologists and optometrists) (editorial)] Avetisov ES, et al. **Vestn Oftalmol** 1989 Jan–Feb;105(1):3–5 **(Rus)**

ECONOMICS

Resource-based relative value scale and medicare [letter]

Copeland AM. **Arch Ophthalmol** 1989 Apr;107(4):486

Analysis of ophthalmic surgical charges for services to Medicare recipients: 1980 and 1985. Frenkel M. **Arch Ophthalmol** 1989 Aug;107(8):1132–4

The resource-based relative value scale for physician compensation under Medicare. Implications for ophthalmology. Frenkel M. **Arch Ophthalmol** 1988 Dec; 106(12):1669–71

EDUCATION

Computer simulation of eye movements for teaching and training in ocular motor pathology. Huygen PL. **Adv Otorhinolaryngol** 1988;42:81–4

A retrospective study on the selection criteria for ophthalmology residents. Lee DA, et al. **Am J Ophthalmol** 1989 Sep 15;108(3):326–7

The Association of University Professors of Ophthalmology. The organization in transition [editorial] Kalina RE. **Arch Ophthalmol** 1989 Sep;107(9):1291–2

Ranking clinical problems and ocular diseases in ophthalmology: an innovative approach to curriculum design. Harvey JT, et al. **Can J Ophthalmol** 1988 Oct; 23(6):255–8

Doctor, are you good enough? [editorial] Schneider RJ. **Can J Ophthalmol** 1989 Jun;24(4):147–9 **(Eng, Fre)**

Patrick Trevor-Roper: a born teacher. Elkington AR. **Eye** 1988;2 (Pt 6):593–9

Trabeculectomy as an introduction to intraocular surgery in an ophthalmic training program. Morrell AJ, et al. **Ophthalmic Surg** 1989 Aug;20(8):557–60

American Academy of Ophthalmology education programs. **Ophthalmology** 1989 Sep;Pt 2:28–34

Correlating factors to resident performance in an ophthalmology program. Catalano RA, et al. **Ophthalmology** 1989 Apr;96(4):552–4

Teaching ophthalmology residents about rehabilitation. Greenblatt SL. **Ophthalmology** 1988 Oct;95(10):1468–72

[Specialist training in ophthalmology. A trial with a new structure for the compulsory courses] Aasved H, et al. **Tidsskr Nor Laegeforen** 1988 Nov 20;108(32):2955–6 (Eng. Abstr.) **(Nor)**

[Independent work of students in a course on eye diseases] Kotelianskiĭ EO, et al. **Oftalmol Zh** 1988;(8):499–501 **(Rus)**

[Problems in teaching ophthalmology] Zhaboedov GD, et al. **Oftalmol Zh** 1989;(1):57–8 **(Rus)**

[Automated training system used for a course on eye diseases at a medical institute] Dzhaliashvili OA, et al. **Vestn Oftalmol** 1989 May-Jun;105(3):63–5 (Eng. Abstr.) **(Rus)**

[Microcomputers for training and monitoring of exercises in ophthalmology] Skitsiuk SV. **Vestn Oftalmol** 1989 Jan–Feb; 105(2):29–32 (Eng. Abstr.) **(Rus)**

HISTORY

125th anniversary of the New York Ophthalmological Society. Ferry AP. **Am J Ophthalmol** 1989 Jul 15; 108(1):97–9

Intraocular lens implantation and the evolution of ophthalmology in the second half of the twentieth century. Hunyor AB. **Aust N Z J Ophthalmol** 1989 Feb;17(1):3–7

Viewing ophthalmology through postage stamps. Blodi FC. **Caduceus** 1989 Spring;5(1):24–51

Ophthalmic heritage at the Foundation of the American Academy of Ophthalmology. Cronenwett SE. **Caduceus** 1989 Spring;5(1):52–67

Historical aspects of ophthalmic lasers. L'Esperance FA Jr. **Caduceus** 1989 Spring;5(1):4–23 (42 ref.)

The formation of Russian ophthalmological terminology. Henning A. **Clio Med** 1985–86;20(1–4):105–23

Public health and research in the development of Russian ophthalmology. Carson HJ. **Doc Ophthalmol** 1989 Feb; 71(2):167–93

The Lisbon Institute of Ophthalmology—Instituto de Oftalmologia Dr. Gama Pinto—its founding and history. Da Silva JR. **Doc Ophthalmol** 1989 Feb;71(2):203–4

The founding of the First University Eye Clinic in Vienna. Fanta H. **Doc Ophthalmol** 1989 Feb;71(2):195–201

On the 700th anniversary of the death of Ibn an-Nafis (b. ca. 1210, d. 1288). Hamarneh N. **Doc Ophthalmol** 1989 Feb; 71(2):143–54

Chevalier Taylor—Ophthalmiater Royal (1703–1772). Trevor-Roper P. **Doc Ophthalmol** 1989 Feb;71(2):113–22

The Utrecht Eye Clinic and the development of tonometry in the 19th century. Henkes HE, et al. **Klin Oczna** 1988 Apr–May;90(4–5):183–5

Edward Jackson, MD—a historical perspective of his contributions to refraction and to ophthalmology. Newell FW. **Ophthalmology** 1988 Apr;95(4):555–8

Robert E. Wright and the development of facial nerve akinesia. Feibel RM. **Surv Ophthalmol** 1989 May–Jun; 33(6):523–8

The first American ophthalmologist. Albert DM. **Trans Stud Coll Physicians Phila** 1989 Mar;11(1):67–73

As far as the eye can see: ophthalmology in the Historical Collections of the Library of the College of Physicians of Philadelphia. Horrocks T. **Trans Stud Coll Physicians Phila** 1989 Mar;11(1):37–49

Philadelphia seen: two centuries of ophthalmology. Worden G. **Trans Stud Coll Physicians Phila** 1989 Mar;11(1):51–66

The general development of Chinese ophthalmology. Chen YZ. **Yen Ko Hsueh Pao** 1987 Sep;3(3):139–42

[The general development of Chinese ophthalmology] Chen YZ. **Yen Ko Hsueh Pao** 1986 Mar;2(1):3–8 (Eng. Abstr.) **(Chi)**

[Professor Chen YaoZhen (Eugene Chan) and the study of history of ancient Chinese ophthalmology] Deng YP. **Yen Ko Hsueh Pao** 1988 Dec;4(4):195–8, 227 (Eng. Abstr.) **(Chi)**

[80 years' activity of the Ophthalmology Department of the hospital in Prostějov] Mašek P. **Cesk Oftalmol** 1988 Jul; 44(4):304–5 **(Cze)**

[Ophthalmology over 40 years] Norn MS. **Ugeskr Laeger** 1989 Jul 17;151(29):1891–3 **(Dan)**

[Ophthalmology in the 18th century: the "oculist seculum" in Berlin] Henning A. **Fortschr Ophthalmol** 1989; 86(3):256–8 (Eng. Abstr.) **(Ger)**

[Ophthalmologists on postage stamps. A contribution to the history of medicine] Dietrich HH. **Klin Monatsbl Augenheilkd** 1989 Feb;194(2):133–8 (Eng. Abstr.) **(Ger)**

[Numismatic history of the von Graefe Medal of the German Ophthalmological Society] Jaeger W. **Klin Oczna** 1988 Apr–May;90(4–5):186–7 **(Ger)**

[Jan Stasiński (1869–1939) in the light of world ophthalmology] Günther G. **Arch Hist Filoz Med** 1988; 51(2):243–50 (Eng. Abstr.) **(Pol)**

[Problems of science and humanism in medicine] Kapuściński WJ. **Klin Oczna** 1988 Apr–May;90(4–5):124–6 **(Pol)**

[From the bibliographer's files (XXXIII). 75 years ago] Orłowski WJ. **Klin Oczna** 1988 Mar;90(3):117 **(Pol)**

[Introduction to the 17th Retinological Symposium] Orłowski WJ. **Klin Oczna** 1988 Nov;90(11):365–78 (Eng. Abstr.) **(Pol)**

[Introduction to the 16th Retinology Symposium] Orłowski WJ. **Klin Oczna** 1988 Jun;90(6):193–9 **(Pol)**

[Memorable ophthalmology dates in 1989] Vipmanis VE. **Vestn Oftalmol** 1989 Jan–Feb;105(1):68–9 **(Rus)**

INSTRUMENTATION

Variability and reproducibility of optic disk topographic measurements with the Rodenstock Optic Nerve Head Analyzer. Bishop KI, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):696–702

Controlled delivery of perfluorocarbon liquids. Chang S, et al. **Am J Ophthalmol** 1989 Mar 15;107(3):299–300

Calibration of the Terry keratometer. House PH, et al. **Am J Ophthalmol** 1988 Oct 15;106(4):500–2

Universal 35-mm camera mount for ophthalmic ultrasound units. Whitacre MM, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):763–4

A clinical evaluation of the potential acuity meter in 210 cases. Severin TD, et al. **Ann Ophthalmol** 1988 Oct; 20(10):373–5

A modified slit lamp for examination of wheelchair-bound patients. Jarvitt JC. **Arch Ophthalmol** 1989 Mar;107(3):453–4

New spatula for epiretinal membrane separation [letter] Kuhn F. **Arch Ophthalmol** 1989 Mar;107(3):317

A modified fascia needle. Liu D. **Arch Ophthalmol** 1989 May; 107(5):769

The diffusion of ophthalmic laser in Australia. Hertzberg R. **Aust N Z J Ophthalmol** 1988 Nov;16(4):361–5

Use of a filter standard to ophthalmology [letter] McWhorter JH, et al. **Aviat Space Environ Med** 1989 Jun;60(6):619

Unusual complication of use of a Hertel exophthalmometer in a patient with Graves' ophthalmopathy. Pope RM. **BMJ** 1989 Feb 11;298(6670):365

Use of limbal ring-rod for radiological localisation of ocular foreign body. Poon KY. **Br J Ophthalmol** 1989 Aug; 73(8):645–50

New accessories for operation microscopes in ophthalmic microsurgery. Brock H. **Dev Ophthalmol** 1989;18:16–23 (3 ref.)

Three ophthalmological instruments: the rotating contact glass holder, the cutying forceps and the diamond cystotome. Huber C. **Dev Ophthalmol** 1989;18:102–6

Calibration of SR-90 ophthalmic applicators [letter] Goetsch SJ. **Int J Radiat Oncol Biol Phys** 1989 Jun;16(6):1653

Portable and inexpensive systems for ophthalmic photography based on the 35 mm SLR camera and standard 50 mm f1-8 lens. Khaw PT. **J Audiov Media Med** 1988 Jul;11(3):81–3

Magnifying loupe [letter] Rapoport A. **J Clin Neuro Ophthalmol** 1988 Dec;8(4):277

Predicting visual acuity after cataract surgery using the blue field entoptoscope and projected slides. Lischwe TD, et al. **Ophthalmology** 1988 Feb;95(2):256–60

Photographic slit-lamp biomicroscopes. Martonyi CL. **Ophthalmology** 1989 Sep;Pt 2:6–19

Reflection of laser light from ophthalmic contact lenses. Hill SJ, et al. **Phys Med Biol** 1988 Nov;33(11):1301–7

A modified illuminated membrane pick. Ryan EH Jr, et al. **Retina** 1989;9(1):77

Sterilization of ophthalmological instruments. Brouwer MR, et al. **Trop Doct** 1988 Oct;18(4):174–6 (13 ref.)

[Permanent manual magnets in microsurgery of the eye] Novák J, et al. **Cesk Oftalmol** 1989 Feb;45(1):50–5 (Eng. Abstr.) **(Cze)**

[Permanent Ormex magnets in clinical practice] Vlková E, et al. **Cesk Oftalmol** 1989 Feb;45(1):45–9 (Eng. Abstr.) **(Cze)**

[2 double-running cannulas: value in surgery of retinal detachment] Gastaud P, et al. **Bull Soc Ophtalmol Fr** 1988 Aug-Sep;88(8–9):1083–6 (Eng. Abstr.) **(Fre)**

[Presentation of an apparatus to measure lens opacity: Opacity Lensmeter 701. Preliminary study] Bosc JM, et al. **J Fr Ophtalmol** 1988;11(12):835–41 (Eng. Abstr.) **(Fre)**

[The development of standards for ophthalmologic ultrasound diagnosis] Buschmann W, et al. **Ultraschall Med** 1988 Aug;9(4):172–5 (Eng. Abstr.) **(Ger)**

[The electronic computer in ophthalmology] Bărar A, et al. **Rev Chir [Oftalmol]** 1989 Jan–Mar;33(1):1–14 (Eng. Abstr.) **(Rum)**

[An attachment to a Soviet ophthalmometer for fixation topokeratometry] Churkina MN, et al. **Oftalmol Zh** 1989; (1):62–3 **(Rus)**

[Modification of ophthalmologic electrocautery] Maevskaia GM, et al. **Oftalmol Zh** 1988;(6):380–1 **(Rus)**

[A device for determining the critical frequency of flicker fusion] Skitsiuk SV, et al. **Oftalmol Zh** 1988;(8):504–5 **(Rus)**

[Material and technical equipment for Soviet ophthalmology (editorial)] Beliaev VS. **Vestn Oftalmol** 1988 Nov–Dec; 104(6):3–4 **(Rus)**

MANPOWER

Who should treat diabetic retinopathy? [editorial] Gregor ZJ. **Eye** 1988;2 (Pt 4):vii

Cataract blindness and manpower planning [editorial] Fernandez ST. **Indian J Ophthalmol** 1988 Jul–Sep; 36(3):107–8

Intraocular lens implantation in developing countries: an ophthalmic surgical dilemma. Young PW, et al. **Ophthalmic Surg** 1989 Apr;20(4):241–4

METHODS

Acetylcholine in ophthalmology: a revisit. Gombos DS. **Ann Ophthalmol** 1988 Dec;20(12):455, 462

Comparison of conventional fluorescein angiography film images with a cathode ray tube display. Seeley GW, et al. **Arch Ophthalmol** 1989 Feb;107(2):227–31

Intravitreal phacoemulsification for luxated lenses. Laqua H. **Dev Ophthalmol** 1989;18:66–8 (0 ref.)

Dynamic analysis of head movements by means of a three-dimensional position measurement system. Watanabe Y, et al. **Graefes Arch Clin Exp Ophthalmol** 1988; 226(5):418–24

Methods for evaluation of lens changes. Brown NA, et al. **Int Ophthalmol** 1988;12(4):229–35 (56 ref.)

Collagen shield symposium [editorial] Kaufman HE. **J Cataract Refract Surg** 1988 Sep;14(5):487–8

Evaluation of lymphoproliferative disorders. The ophthalmologist's role [editorial] Grossniklaus HE. **J Clin Neuro Ophthalmol** 1988 Mar;8(1):47–8

Swinging flashlight test [letter] **Neurology** 1989 Jan; 39(1):154–6

Measurement of hyphema: a clinical method. Harman DM, et al. **Ophthalmic Res** 1988;20(5):332–6

New technology—new pressures [editorial] Spaeth GL. **Ophthalmic Surg** 1988 Sep;19(9):617–20

Errors in the three-step test in the diagnosis of vertical strabismus. Kushner BJ. **Ophthalmology** 1989 Jan; 96(1):127–32

Controlling risks of the possible transmission of human immunodeficiency virus. Notice of American Academy of Ophthalmology Clinical Alert 2/4. Lichter PR. **Ophthalmology** 1989 Jan;96(1):1

The examination of the eye. Laganowski HC. **Practitioner** 1988 Feb 8;232(1442):109–10, 112–3

The role of scanning electron microscopy in ophthalmic science. Versura P, et al. **Scanning Microsc** 1988 Sep; 2(3):1695–723 (304 ref.)

[Measurement of exophthalmos. A trial of correlating Hertel-x-ray computed tomography] George JL, et al. **Bull Soc Ophtalmol Fr** 1988 Oct;88(10):1129–32 (Eng. Abstr.) **(Fre)**

ORGANIZATION & ADMINISTRATION

Superstar ophthalmology. A modern parable [see comments] Beauchamp GR. **N Engl J Med** 1988 Oct 27; 319(17):1159–61. **Comment in:** N Engl J Med 1989 Apr 27;320(17):1150–1

Superstar ophthalmology and HMOs [letter; comment] Berman HS. **N Engl J Med** 1989 Apr 27;320(17):1150–1. **Comment on:** N Engl J Med 1988 Oct 27;319(17):1159–61

[Computers in ophthalmology] Zanen A, et al. **Bull Soc Belge Ophtalmol** 1985;216 Pt 1:1–124 **(Fre)**

[Dispensary care of children with ophthalmologic pathology in Turkmenistan] Karanov SK, et al. **Oftalmol Zh** 1988; (5):310–1 **(Rus)**

[The potentials for optimizing the treatment process at a small eye department of a medical unit] Oreshkin VA. **Oftalmol Zh** 1988;(5):311–2 **(Rus)**

STANDARDS

A quality assurance program for an inpatient department of ophthalmology. 'Indicators and criteria'. Schachat AP, et al. **Arch Ophthalmol** 1989 Sep;107(9):1293–6

Quality assurance and recertification. Murchland JB. **Aust N Z J Ophthalmol** 1988 Aug;16(3):255–7

Drug adverse reactions—why report them? [editorial] Noël

L.P. **Can J Ophthalmol** 1989 Jun;24(4):150–1 **(Eng, Fre)**
An eye on Nepal: we have much to teach, and much to learn. Spencer M. **Can Med Assoc J** 1988 Oct 15;139(8):775, 778–80
The care of diabetic patients by ophthalmologists in New York State. Olsen CL, et al. **Ophthalmology** 1989 Jun; 96(6):739–45
Guidelines and standards for surgery at eye camps. Reddy PS. **Yen Ko Hsueh Pao** 1987 Dec;3(4):232

TRENDS

Innovations and creativity in contemporary ophthalmology: preliminary experience with the phakic myopic intraocular lens. Praeger DL. **Ann Ophthalmol** 1988 Dec;20(12):456–62
Trends of the ophthalmic literature from 1955 to 1985. De Broff B, et al. **Arch Ophthalmol** 1989 Jan;107(1):35–40
Oculoplastic surgery [editorial] Rogers PA. **Aust N Z J Ophthalmol** 1988 Nov;16(4):271–2
Presidential address. Ophthalmological Society of New Zealand annual scientific meeting, Rotarua, September 1987. Sabiston DW. **Aust N Z J Ophthalmol** 1988 Aug; 16(3):165–7
Vitamin E and retinopathy of prematurity: the ophthalmologist's perspective. Schaffer DB, et al. **Birth Defects** 1988;24(1):219–35
The future of Canadian ophthalmology [editorial] Simpson ER. **Can J Ophthalmol** 1989 Aug;24(5):195–6 **(Eng, Fre)**
The future of the institute of ophthalmology. Blach RK. **Eye** 1988;2 Suppl:S284–5
Current concepts of the pathogenesis of optic neuritis associated with multiple sclerosis. Sergott RC, et al. **Surv Ophthalmol** 1988 Sep–Oct;33(2):108–16 (72 ref.)
Potential international benefits from the evolution of ophthalmic practice in the United States. Paton D. **Yen Ko Hsueh Pao** 1986 Mar;2(1):16–9
[The 1987/1988 new developments in drug therapy in ophthalmology] Olteanu M, et al. **Rev Chir [Oftalmol]** 1989 Jan–Mar;33(1):41–3 (Eng. Abstr.) **(Rum)**
[Basic trends in improving the work of a provincial pediatric eye hospital] Morozova TA. **Oftalmol Zh** 1988;(6):369–70 **(Rus)**
[Towards the All-Union Congress of Physicians of the USSR (the pathways of the development of Soviet ophthalmology)] Kovalevskiĭ EI. **Vestn Oftalmol** 1988 Sep–Oct;104(5):3–6 **(Rus)**

OPHTHALMOPLEGIA

Oculomotor nerve palsy precipitating acute angle-closure glaucoma. A case report. Mouton DP, et al. **S Afr Med J** 1989 Apr 15;75(8):397–8
[Fisher's one and half syndrome] Rossazza C, et al. **Bull Soc Ophtalmol Fr** 1988 Aug–Sep;88(8–9):981–4 (10 ref.) (Eng. Abstr.) **(Fre)**
[Two cases of painful ophthalmoplegic syndrome] Miyaishi N. **Rinsho Shinkeigaku** 1975 Feb;15(2):60–4 (Eng. Abstr.) **(Jpn)**
[Ocular syndromes in childhood: literature review and 8 case reports] Todorović S. **Neurologija** 1988;37(1–2):5–23 (Eng. Abstr.) **(Scr)**
[Kearns–Sayre syndrome. Description of a case] Nubiola A, et al. **Med Clin (Barc)** 1988 Nov 12;91(16):623–6 (Eng. Abstr.) **(Spa)**

CHEMICALLY INDUCED

Lithium-induced internuclear ophthalmoplegia. Deleu D, et al. **Clin Neuropharmacol** 1989 Jun;12(3):224–6
Lidocaine-induced unilateral internuclear ophthalmoplegia: effects on convergence and conjugate eye movements. Gamlin PD, et al. **J Neurophysiol** 1989 Jul;62(1):82–95
[Ophthalmoplegia after low-dose methotrexate] Sørensen TT, et al. **Ugeskr Laeger** 1988 Dec 19;150(51):3197–8 (Eng. Abstr.) **(Dan)**

CLASSIFICATION

Study of Duane's retraction syndrome. Ahluwalia BK, et al. **Acta Ophthalmol (Copenh)** 1988 Dec;66(6):728–30
[Studies of ocular fundus and visual functions in Kearns–Sayre syndrome—with special reference to the new stage classification] Ota I, et al. **Nippon Ganka Gakkai Zasshi** 1989 Mar;93(3):329–38 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Fisher syndrome. An infantile case. Spina A, et al. **Acta Neurol (Napoli)** 1989 Feb;11(1):38–41
Kearns–Sayre syndrome and primary open-angle glaucoma. Kalenak JW, et al. **Am J Ophthalmol** 1989 Sep 15; 108(3):335–6
Bilateral internuclear ophthalmoplegia—an unusual initial presenting sign of giant cell arteritis. Crompton JL, et al. **Aust N Z J Ophthalmol** 1989 Feb;17(1):71–4
Internuclear ophthalmoplegia in pernicious anemia [letter] Reynolds EH. **BMJ** 1989 Feb 18;298(6671):460–1
Corneal endothelium in a case of mitochondrial encephalomyopathy (Kearns–Sayre syndrome). Ohkoshi K, et al. **Cornea** 1989 Sep;8(3):210–4
Bilateral vertical retraction syndrome in horizontal bilateral Duane's syndrome. Spielmann A. **Graefes Arch Clin Exp Ophthalmol** 1988;226(5):425–7
Bilateral internuclear ophthalmoplegia due to acute cervical hyperextension without head trauma. Jammes JL. **J Clin Neuro Ophthalmol** 1989 Jun;9(2):112–5
Wildervanck's syndrome—unilateral Mondini dysplasia identified by computed tomography. West PD, et al. **J Laryngol Otol** 1989 Apr;103(4):408–11
Ophthalmologic findings associated with arthrogryposis multiplex congenita: case report and review of the literature. Zeiter JH, et al. **J Pediatr Ophthalmol Strabismus** 1989 Jul–Aug;26(4):204–8 (26 ref.)
Internuclear ophthalmoplegia in giant cell arteritis. Thomson GT, et al. **J Rheumatol** 1989 May;16(5):693–5
Partial sphingomyelinase deficiency with sea-blue histiocytosis and neurovisceral dysfunction. Konagaya M, et al. **Jpn J Med** 1989 Jan–Feb;28(1):85–8
Sphenoid sinusitis associated with meningitis, visual disturbances and total ophthalmoplegia. Mizoguchi K, et al. **Kurume Med J** 1988;35(4):211–5
Steroid danger in Kearns–Sayre syndrome (KSS). Feinsmith BM, et al. **N J Med** 1988 Aug;85(8):659–63 (44 ref.)
Duane's syndrome and focal segmental glomerulosclerosis. Sato H, et al. **Nephron** 1989;51(2):274–5
CNS dysfunction in Fisher's syndrome. Pessin MS, et al. **Neurology** 1989 Jul;39(7):998–9
Kearns–Sayre syndrome and complex II deficiency. Rivner MH, et al. **Neurology** 1989 May;39(5):693–6
Oculomotor nerve palsy precipitating acute angle-closure glaucoma. A case report. Mouton DP, et al. **S Afr Med J** 1989 Apr 15;75(8):397–8
Primary intrasellar germinoma presenting with cavernous sinus syndrome [see comments] Poon W, et al. **Surg Neurol** 1988 Nov;30(5):402–5 (14 ref.). **Comment in:** Surg Neurol 1989 Jul;32(1):81–2
[Ocular torticollis] Jensen S. **Ugeskr Laeger** 1989 Jul 24; 151(30):1942–3 (Eng. Abstr.) **(Dan)**
[Alternate red nucleus syndrome (Claude variant). Apropos of a case report] Sténuit AA, et al. **Rev Med Brux** 1989 May;10(5):173–6 (Eng. Abstr.) **(Fre)**
[Concordance of Kearns–Sayre syndrome and Klinefelter syndrome] Everding AS, et al. **Monatsschr Kinderheilkd** 1988 Oct;136(10):698–700 (Eng. Abstr.) **(Ger)**
[Report of a case of Kearns–Sayre syndrome associating with Isaacs–Mertens syndrome] Tomimoto H, et al. **No To Shinkei** 1988 Aug;40(8):771–7 (Eng. Abstr.) **(Jpn)**
[Use of electric cardiac stimulation in patients with Kearns syndrome] Zhebrauskas RI, et al. **Kardiologiia** 1989 May; 29(5):103–5 **(Rus)**

CONGENITAL

Congenital adduction palsy and synergistic divergence: a clinical and electro-oculographic study. Cruysberg JR, et al. **Br J Ophthalmol** 1989 Jan;73(1):68–75 (21 ref.)
Moebius and Poland syndromes: a report of a case. Koroluk LD, et al. **Can Dent Assoc J** 1989 Aug;55(8):647–8
Bilateral congenital third cranial nerve palsy. Flanders M, et al. **Can J Ophthalmol** 1989 Feb;24(1):28–30
Congenital myopathy with progressive external ophthalmoplegia. Riggs JE, et al. **J Child Neurol** 1989 Jul; 4(3):195–7
Moebius sequence and prenatal brainstem ischemia. Govaert P, et al. **Pediatrics** 1989 Sep;84(3):570–3

DIAGNOSIS

The Tolosa-Hunt syndrome: a problem in differential diagnosis. Hunt WE, et al. **Acta Neurochir Suppl (Wien)** 1988;42:248–52 (25 ref.)
Cerebral nuclear magnetic resonance (MRI) in Kearns syndrome. Elsås T, et al. **Acta Ophthalmol (Copenh)** 1988 Aug;66(4):469–73
MR of Kearns–Sayre syndrome. Demange P, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S91
Ocular motor paresis versus apraxia [letter] Sharpe JA, et al. **Ann Neurol** 1989 Feb;25(2):209–10
A new test for assessing ocular muscle paresis using the vestibulo-ocular reflex. Pratt AL, et al. **Arch Invest Med (Mex)** 1988 Apr–Jun;19(2):139–41
Guillain-Barré syndrome presenting as a paralysis of accommodation. Case report. DeRespinis PA, et al. **Arch Ophthalmol** 1989 Sep;107(9):1282
A paroxysmal ocular motility disorder in multiple sclerosis. Todman DH. **Aust N Z J Med** 1988 Oct;18(6):785–7
Duane's retraction syndrome: southwestern Ontario experience. Ro A, et al. **Can J Ophthalmol** 1989 Aug; 24(5):200–3
Leiomyosarcoma of a lower limb presenting with multiple cranial nerve palsies. Shotton JC. **Eur J Surg Oncol** 1989 Aug;15(4):380–2
A four-step test for diagnosis of pseudo superior oblique palsy. Véronneau-Troutman S. **Graefes Arch Clin Exp Ophthalmol** 1988;226(4):317–22
Weber's syndrome. Klopfer J, et al. **J Am Optom Assoc** 1988 Nov;59(11):889–92
Tolosa-Hunt syndrome: analysis of 24 cases. Phanthumchinda K, et al. **J Med Assoc Thai** 1988 Jul; 71(7):366–72
Torsion preventing fusion in bilateral superior oblique palsies [letter] Kolling GH, et al. **J Pediatr Ophthalmol Strabismus** 1988 Sep–Oct;25(5):256–7
Cerebral sarcoidosis presenting as supranuclear gaze palsy with hypokinetic rigid syndrome. Schlegel U, et al. **Mov Disord** 1989;4(3):274–7
A case of Miller Fisher syndrome. Banerjee A. **Practitioner** 1988 Feb 8;232(1442):96, 99
Primary Intracellular Germinoma Presenting with Cavernous Sinus Syndrome [letter; comment] Parkinson D. **Surg Neurol** 1989 Jul;32(1):81–2. **Comment on:** Surg Neurol 1988 Nov;30(5):402–5
[A new procedure for measuring the strabismus angle in both eyes] Effert R, et al. **Fortschr Ophthalmol** 1988;85(5):486–8 (Eng. Abstr.) **(Ger)**
[Differential diagnosis of superior orbital fissure syndrome] Berlit P, et al. **Schweiz Med Wochenschr** 1988 Jul 30; 118(30):1104–9 (Eng. Abstr.) **(Ger)**
[New aspects of the Kearns–Sayre syndrome] Simon K, et al. **Orv Hetil** 1989 Feb 19;130(8):405–9 (28 ref.) (Eng. Abstr.) **(Hun)**
[Painful ophthalmoplegia: the Tolosa-Hunt syndrome and orbital pseudotumor syndrome] Nishida Y, et al. **No To Shinkei** 1988 Aug;40(8):759–62 (Eng. Abstr.) **(Jpn)**
[31P NMR examination of a case of progressive external ophthalmoplegia with focal cytochrome c oxidase deficiency] Okazawa H, et al. **Rinsho Shinkeigaku** 1988 Aug;28(8):923–7 (Eng. Abstr.) **(Jpn)**
[Multi-systemic mitochondrial cytopathy in children] Belokon' NA, et al. **Pediatriia** 1988;(7):84–7 **(Rus)**

ENZYMOLOGY

Coenzyme Q in serum and muscle of 5 patients with Kearns–Sayre syndrome and 12 patients with ophthalmoplegia plus. Zierz S, et al. **J Neurol** 1989 Feb; 236(2):97–101

ETIOLOGY

Primary internal ophthalmoplegia due to head injury. Nagaseki Y, et al. **Acta Neurochir (Wien)** 1989; 97(3–4):117–22
The clinical neuro-ophthalmologic spectrum of temporal arteritis. Mehler MF, et al. **Am J Med** 1988 Dec; 85(6):839–44 (77 ref.)
Brainstem ocular motility defects and AIDS. Hamed LM, et al. **Am J Ophthalmol** 1988 Oct 15;106(4):437–42
Nonbacterial thrombotic endocarditis complicating mitral valve prolapse presenting as Parinaud's syndrome—a case report. Cook DJ, et al. **Angiology** 1989 May;40(5):494–7
Pupil-sparing oculomotor palsy from midbrain hemorrhage. Fleet WS, et al. **Ann Ophthalmol** 1988 Sep;20(9):345–6
Long-term follow-up of traumatic unilateral superior oblique palsy. Teller J, et al. **Ann Ophthalmol** 1988 Nov; 20(11):424–5
Cryptogenic oculomotor nerve palsy. The need for repeated neuroimaging studies. Abdul-Rahim AS, et al. **Arch Ophthalmol** 1989 Mar;107(3):387–90
Aneurysm causing third nerve palsy in a 15-year-old boy [letter] Pollard ZF. **Arch Ophthalmol** 1988 Dec; 106(12):1647–8
Massive benign thymoma presenting as ocular myasthenia. Goadsby PJ, et al. **Aust N Z J Med** 1989 Jun;19(3):257–8
Internuclear ophthalmoplegia in pernicious anaemia. Kandler RH, et al. **BMJ** 1988 Dec 17;297(6663):1583
Pituitary adenoma presenting as painful intermittent third nerve palsy. Cano M, et al. **Headache** 1989 Jul;29(7):451–2
Visual disorders in cerebral palsy. Govind A, et al. **Indian J Ophthalmol** 1988 Apr–Jun;36(2):88–91
Temporary paralysis of cranial nerves III, IV, and VI after a Gow-Gates injection. Fish LR, et al. **J Am Dent Assoc** 1989 Jul;119(1):127–8, 130; discussion 129
Cavernous sinus syndrome from self-inflicted gunshot wound: case report and neuroanatomical correlation. Swanson MW. **J Am Optom Assoc** 1989 Jul;60(7):541–6
Herpes zoster ophthalmoplegia. Report of six cases. Archambault P, et al. **J Clin Neuro Ophthalmol** 1988 Sep; 8(3):185–93
Amyloid ophthalmoplegia. Ophthalmoparesis secondary to primary systemic amyloidosis. Katz B, et al. **J Clin Neuro Ophthalmol** 1989 Mar;9(1):39–42
Muscular dystrophy with particular oculopharyngeal involvement. Eksantivongs S, et al. **J Med Assoc Thai** 1989 Apr;72(4):234–8
Bilateral fourth nerve palsy due to cerebellar haemangioblastoma. Sawle GV, et al. **J R Soc Med** 1989 Feb;82(2):111–2 (15 ref.)
Hypothetical explanation of selective saccadic palsy caused by pontine lesion. Kaneko CR. **Neurology** 1989 Jul; 39(7):994–5
Oculomotor nerve palsy in patients with cerebral aneurysms. Fujiwara S, et al. **Neurosurg Rev** 1989;12(2):123–32
Upward-gaze palsy [letter] Kemeny AA. **Neurosurgery** 1989 Aug;25(2):319
Neuro-ophthalmologic complications of hydrocephalus and shunting procedures. Corbett JJ. **Semin Neurol** 1986 Jun; 6(2):111–23 (61 ref.)
The orbit and neuro-ophthalmology. Glaser JS. **Semin Neurol** 1986 Jun;6(2):124–34 (20 ref.)
Diplopia and sixth nerve palsies. Savino PJ. **Semin Neurol** 1986 Jun;6(2):142–6 (19 ref.)
Isolated third nerve palsies. Trobe JD. **Semin Neurol** 1986 Jun;6(2):135–41 (36 ref.)
Metastatic laryngeal carcinoma as a cause of progressive ophthalmoplegia. Weig SG, et al. **South Med J** 1989 Aug; 82(8):1051–2

Internuclear ophthalmoplegia in tuberculous meningitis. Teoh R, et al. **Tubercle** 1989 Mar;70(1):61–4

[Isolated painful ophthalmoplegia manifesting a hypophyseal tumor] Delreux V, et al. **Acta Clin Belg** 1988;43(5):384–7 (Eng. Abstr.) **(Fre)**

[Ophthalmomyiasis: apropos of a case with involvement of the superior oblique muscle] Billotte C, et al. **Bull Soc Ophtalmol Fr** 1988 Jan;88(1):115–6, 118 (Eng. Abstr.) **(Fre)**

[Difficulty in the diagnosis and treatment of sequelae of orbital roof fractures: apropos of a case] Riss I, et al. **Bull Soc Ophtalmol Fr** 1988 Jun–Jul;88(6–7):841–2 **(Fre)**

[Oculomotor paresis after surgical treatment for retinal detachment] Denis D, et al. **Ophtalmologie** 1988 Jul–Sep; 2(3):243–5 (Eng. Abstr.) **(Fre)**

[Acquired Brown syndrome. An unusual complication of rheumatoid polyarthritis (letter)] Olivares JP, et al. **Rev Rhum Mal Osteoartic** 1988 Dec;55(12):1035 **(Fre)**

[Ocular findings in tick borreliosis] Kehl F, et al. **Klin Monatsbl Augenheilkd** 1988 Jul;193(1):66–8 (Eng. Abstr.) **(Ger)**

[Herpes zoster ophthalmicus with subsequent oculomotor paralysis and homolateral media infarct] Pfeifer B, et al. **Klin Monatsbl Augenheilkd** 1989 Mar;194(3):184–6 (47 ref.) (Eng. Abstr.) **(Ger)**

[Etiology, prognosis and therapy of isolated oculomotor paralysis] Berlit P, et al. **Nervenarzt** 1988 Sep;59(9):529–38 **(Ger)**

[Considerations on the "one and half" syndrome] Savigni P. **Riv Neurol** 1989 Jan–Feb;59(1):32–5 (20 ref.) (Eng. Abstr.) **(Ita)**

[A case of lambda light-chain multiple myeloma with bilateral ophthalmoplegia following long-term asymptomatic period] Naitoh M, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):367–73 **(Jpn)**

[A case of Kennedy-Alter-Sung syndrome associated with external ophthalmoplegia—therapeutic efficacy of fluoxymesterone] Harada T, et al. **No To Shinkei** 1989 Feb; 41(2):143–8 (Eng. Abstr.) **(Jpn)**

[Leukemic Burkitt's lymphoma with an initial symptom of ocular motor disturbance] Inoue T, et al. **Rinsho Ketsueki** 1989 Mar;30(3):338–42 (Eng. Abstr.) **(Jpn)**

[A case of recurrent Fisher's syndrome with abnormal neuro-otological findings] Arai M, et al. **Rinsho Shinkeigaku** 1988 May;28(5):489–92 (Eng. Abstr.) **(Jpn)**

[Recurrent unilateral painful oculomotor nerve palsy with an ipsilateral posterior ethmoidal mucocele] Doh-ura K, et al. **Rinsho Shinkeigaku** 1989 Feb;29(2):216–8 (Eng. Abstr.) **(Jpn)**

[A case of systemic lupus erythematosus associated with lateral medullary syndrome and unilateral internuclear ophthalmoplegia] Sugie Y, et al. **Rinsho Shinkeigaku** 1989 Jan;29(1):75–9 (Eng. Abstr.) **(Jpn)**

GENETICS

Monozygotic twins discordant for Duane's retraction syndrome. Case report. Kaufman LW, et al. **Arch Ophthalmol** 1989 Mar;107(3):324–5

Heteroplasmy of mitochondrial genomes in clonal cultures from patients with Kearns-Sayre syndrome. Moraes CT, et al. **Biochem Biophys Res Commun** 1989 Apr 28; 160(2):765–71

Multiple populations of deleted mitochondrial DNA detected by a novel gene amplification method. Sato W, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):664–72

A dominantly inherited progressive disease in a black family characterised by cerebellar and retinal degeneration, external ophthalmoplegia and abnormal mitochondria. Cooles P, et al. **J Neurol Sci** 1988 Nov;87(2–3):275–88

Identical mitochondrial DNA deletion in blood and muscle [letter] Johns DR, et al. **Lancet** 1989 Feb 18;1(8634):393–4

Mitochondrial DNA deletions in progressive external ophthalmoplegia and Kearns-Sayre syndrome. Moraes CT, et al. **N Engl J Med** 1989 May 18;320(20):1293–9

A direct repeat is a hotspot for large-scale deletion of human mitochondrial DNA. Schon EA, et al. **Science** 1989 Apr 21;244(4902):346–9

[Familial chronic progressive external ophthalmoplegia syndrome with hypertrichosis and bilateral striatal necrosis] Nishio T, et al. **Rinsho Shinkeigaku** 1988 Nov; 28(11):1266–73 (Eng. Abstr.) **(Jpn)**

METABOLISM

Kearns-Sayre syndrome: biochemical studies of mitochondrial metabolism. Martens ME, et al. **Ann Neurol** 1988 Nov;24(5):630–7

PATHOLOGY

Skeletal muscle pathology in chronic progressive external ophthalmoplegia with ragged-red fibers. Yamamoto M, et al. **Acta Neuropathol (Berl)** 1988;76(6):558–63

Chronic progressive external ophthalmoplegia. I. A quantitative histochemical study of skeletal muscles. Dias-Tosta E. **Arq Neuropsiquiatr** 1988 Jun;46(2):133–42

Chronic progressive external ophthalmoplegia. II. A qualitative and quantitative electronmicroscopy study of skeletal muscles. Dias-Tosta E. **Arq Neuropsiquiatr** 1988 Jun;46(2):143–55

Mitochondrial oculoskeletal myopathy: case report. Colombo A, et al. **Ital J Neurol Sci** 1988 Aug;9(4):385–9

Ultrastructural findings in endomyocardial biopsy of patients with Kearns-Sayre syndrome [published erratum appears in J Am Coll Cardiol 1989 Jan;13(1):264] Schwartzkopff B, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1522–8

Morphometric and biochemical study of muscle mitochondria in adult chronic progressive external ophthalmoplegia. Federico A, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:198–201

Endocrine involvement in mitochondrial encephalomyopathy with partial cytochrome c oxidase deficiency. Doriguzzi C, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan; 52(1):122–5

[Peripheral neuropathy during ocular myopathy: description of a case] Aragona F, et al. **Riv Neurol** 1988 Jul–Aug; 58(4):137–9 (Eng. Abstr.) **(Ita)**

[Oculomotor abnormalities in amyotrophic lateral sclerosis] Yoshii F. **Rinsho Shinkeigaku** 1988 Sep;28(9):983–91 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Intact Bell's phenomenon in a patient with myasthenia gravis and upward gaze paresis [letter] Miller NR, et al. **Arch Ophthalmol** 1989 Aug;107(8):1117

Millard-Gubler syndrome: electrophysiologic findings. Gandhavadi B. **Arch Phys Med Rehabil** 1988 Nov; 69(11):980–2

Vertical vestibulo-ocular reflex, smooth pursuit and eye-head tracking dysfunction in internuclear ophthalmoplegia. Ranalli PJ, et al. **Brain** 1988 Dec;111 (Pt 6):1299–317

Convergence insufficiency in brain-injured patients. Cohen M, et al. **Brain Inj** 1989 Apr–Jun;3(2):187–91

The length-tension diagrams of human oblique muscles in trochlear palsy and strabismus sursoadductorius. Simonsz HJ, et al. **Doc Ophthalmol** 1988 Oct–Nov;70(2–3):227–36

Presaccadic spike potential with congenital lateral rectus palsy. Boylan C, et al. **Electroencephalogr Clin Neurophysiol** 1989 Sep;73(3):264–7

Miller Fisher syndrome: an electrophysiologic case study. de Pablos C, et al. **Electromyogr Clin Neurophysiol** 1988 Jan;28(1):21–5

Tolosa Hunt syndrome [letter] Saksena HC, et al. **J Assoc Physicians India** 1988 Apr;36(4):293–4

Acute sixth nerve palsy following vaccination [letter] Reynolds DJ, et al. **J Infect** 1988 Jul;17(1):84–5

Complete bilateral internal ophthalmoplegia as sole clinical sign of botulism: confirmation of diagnosis by single fibre electromyography. Ehrenreich H, et al. **J Neurol** 1989 May; 236(4):243–5

Severe aggravation of blepharospasm in Fisher's syndrome [letter] Garcia-Albea E. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):130

Ophthalmoplegic migraine with bilateral involvement [letter] Hutchinson DO, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):807–8

Sixth cranial nerve palsy complicating psittacosis [letter] Zumla A, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov; 51(11):1462

Measurement of vertical deviations in different gaze positions in patients with a superior oblique palsy. Catalano RA, et al. **J Pediatr Ophthalmol Strabismus** 1988 Sep–Oct; 25(5):221–5

Oculo-facio-skeletal myorhythmia as a cerebral complication of systemic Whipple's disease. Hausser-Hauw C, et al. **Mov Disord** 1988;3(2):179–84

Oculomotor palsy with cyclic spasms. Friedman DI, et al. **Neurology** 1989 Sep;39(9):1263–4

Hyperdeviation associated with isolated unilateral abducens palsy. Slavin ML. **Ophthalmology** 1989 Apr;96(4):512–6

Electrophysiologic study of Fisher syndrome. Unishi G, et al. **Pediatr Neurol** 1988 Sep–Oct;4(5):296–300

Supranuclear disorders of horizontal eye motion. Sharpe JA. **Semin Neurol** 1986 Jun;6(2):155–66 (101 ref.)

Oblique muscle palsies fixating with the paretic eye. Dickey CF, et al. **Surv Ophthalmol** 1988 Sep–Oct;33(2):97–107 (48 ref.)

[Kearns-Sayre syndrome: complete auriculoventricular block, torsade de pointes and ventricular fibrillation] Biard F, et al. **Ann Cardiol Angeiol (Paris)** 1988 Nov;37(9):529–34 (19 ref.) (Eng. Abstr.) **(Fre)**

[Effect of pathologic gaze deviation caused by brain stem lesion on interhemispheric equilibrium. Study using a non-verbal dichotic listening test] Belin C, et al. **Neuropsychologia** 1988;26(5):753–8 (Eng. Abstr.) **(Fre)**

[Comments on anesthesia procedures in mitochondrial encephalomyopathy] Fritz T, et al. **Anasth Intensivther Notfallmed** 1988 Oct;23(5):265–70 (28 ref.) (Eng. Abstr.) **(Ger)**

[Anesthesia for eye operations in mitochondrial encephalomyelopathy] Fritz T, et al. **Klin Monatsbl Augenheilkd** 1988 Aug;193(2):174–8 (Eng. Abstr.) **(Ger)**

[Ocular myositis--morphology and function—long-term studies of 15 patients] Guthoff R, et al. **Klin Monatsbl Augenheilkd** 1988 Oct;193(4):393–400 (Eng. Abstr.) **(Ger)**

[A case of alternating Tolosa-Hunt syndrome] Ohyama M, et al. **Rinsho Shinkeigaku** 1989 Mar;29(3):315–7 (Eng. Abstr.) **(Jpn)**

[Oculomotor disorders in Parinaud's syndrome] Pérez-Garrigues H, et al. **An Otorrinolaringol Ibero Am** 1989;16(4):349–56 (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

Angiography for third nerve palsy in children [editorial] Fox AJ. **J Clin Neuro Ophthalmol** 1989 Mar;9(1):37–8

Acute oculomotor nerve palsy in childhood. Is arteriography necessary? Gabianelli EB, et al. **J Clin Neuro Ophthalmol** 1989 Mar;9(1):33–6

SURGERY

Surgical management of oculomotor nerve palsy [letter] O'Day J. **Aust N Z J Ophthalmol** 1989 May;17(2):199

Surgical management of oculomotor nerve palsy with lateral rectus transplantation to the medial side of globe. Taylor JN. **Aust N Z J Ophthalmol** 1989 Feb;17(1):27–31

Recession and anterior transposition of the inferior oblique for treatment of superior oblique palsy. May MA, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(5):407–9

[Substitution technics in traumatic VI paralysis] Retout A, et al. **Bull Soc Ophtalmol Fr** 1988 Aug–Sep;88(8–9):1073–6 (12 ref.) (Eng. Abstr.) **(Fre)**

[The result of extended thymectomy in patients with myasthenia gravis of pure ocular type] Yang DS, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb;37(2):313–7 (Eng. Abstr.) **(Jpn)**

THERAPY

Vertical rectus muscle transposition and botulinum toxin (Oculinum) to medial rectus for abducens palsy. Rosenbaum AL, et al. **Arch Ophthalmol** 1989 Jun; 107(6):820–3

Indications for pacemaker implantation in the Kearns-Sayre syndrome. Polak PE, et al. **Eur Heart J** 1989 Mar; 10(3):281–2

OPHTHALMOSCOPY

see related
FUNDUS OCULI
PAPILLEDEMA

Recording pattern reversal visual evoked response with the scanning laser ophthalmoscope. Katsumi O, et al. **Acta Ophthalmol (Copenh)** 1989 Jun;67(3):243–8

Impaired ophthalmoscopy and condensation on intraocular lens. Sappenfield D, et al. **Am J Ophthalmol** 1989 Jul 15; 108(1):88

A common sense approach to the retina. Chawla HB. **Ann Acad Med Singapore** 1989 Mar;18(2):195–203 (9 ref.)

The 'poor man's' Landers lens. Benjamin L. **Br J Ophthalmol** 1988 Oct;72(10):796–8

Physician recognition of ophthalmoscopic signs of open-angle glaucoma: effect of an educational program. Margolis KL, et al. **J Gen Intern Med** 1989 Jul–Aug; 4(4):296–9

Usefulness of ophthalmoscopy in mild to moderate hypertension. Dimmitt SB, et al. **Lancet** 1989 May 20; 1(8647):1103–6

Detection of diabetic macular edema. Ophthalmoscopy versus photography—Early Treatment Diabetic Retinopathy Study Report Number 5. The ETDRS Research Group. Kinyoun J, et al. **Ophthalmology** 1989 Jun;96(6):746–50; discussion 750–1

Ophthalmoscopy in the detection of optic disc and retinal nerve fiber layer changes in early glaucoma. Iwata K. **Surv Ophthalmol** 1989 Apr;33 Suppl:447–8; discussion 449–50

[Examination strategies in the preparative phase for cataract operations and artificial lens implantation] Artaria LG. **Klin Monatsbl Augenheilkd** 1989 May;194(5):373–5 (Eng. Abstr.) **(Ger)**

[Control of the eyes in patients with diabetes (1). An annual examination of all patients with diabetes] Overby A. **Lakartidningen** 1988 Nov 23;85(47):4048–9 **(Swe)**

HISTORY

The history of the ophthalmoscope. Sherman SE. **Doc Ophthalmol** 1989 Feb;71(2):221–8

Who really did invent the ophthalmoscope? Klingaman RL. **J Am Optom Assoc** 1989 Jul;60(7):548

[Ophthalmoscopy attempts before Helmholtz] Remky H. **Klin Monatsbl Augenheilkd** 1988 Aug;193(2):211–8 (Eng. Abstr.) **(Ger)**

INSTRUMENTATION

A simple grip/protector for gonio, fundus, and indirect ophthalmoscopic lenses [letter] Wilson RS. **Arch Ophthalmol** 1988 Dec;106(12):1650

Wide-field system for posterior segment microsurgery—an advantage? Winter R, et al. **Dev Ophthalmol** 1989;18:97–101 (6 ref.)

Examination of the male genitalia with an ophthalmoscope: a rapid and simple approach to the detection of penile venereal warts [letter] Cohen PR. **J Am Acad Dermatol** 1989 Mar;20(3):521–2

Use of the ophthalmoscope in the clinical diagnosis of cutaneous pigmented lesions [letter] Soltani K. **J Am Acad Dermatol** 1989 Mar;20(3):521

Handle for +90-diopter lens. Bode D. **Ophthalmic Surg** 1988 Sep;19(9):670–1

Pneumatic repair of primary and secondary retinal detachments using a binocular indirect ophthalmoscope laser delivery system. Friberg TR, et al. **Ophthalmology** 1988 Feb;95(2):187–93

[A new method for examining the vitreous body: the El Bayadi–Kajiura lens] Fritsch D, et al. **J Fr Ophtalmol** 1988; 11(8–9):579–84 (13 ref.) (Eng. Abstr.) **(Fre)**

[The scanning laser ophthalmoscope and its use as a fluorescein angiography instrument] Gabel VP, et al. **Fortschr Ophthalmol** 1988;85(5):569–73 (Eng. Abstr.) **(Ger)**

[Laser optic measurements of the axial length of the eye] Hitzenberger C, et al. **Fortschr Ophthalmol** 1989; 86(2):159–61 (Eng. Abstr.) **(Ger)**

[Confocal laser scan system for imaging and analysis of the fundus] Plesch A, et al. **Fortschr Ophthalmol** 1988; 85(5):565–8 (Eng. Abstr.) **(Ger)**

[The rotating contact glass holder] Huber C, et al. **Klin Monatsbl Augenheilkd** 1988 Jul;193(1):78–9 (Eng. Abstr.) **(Ger)**

[A set of ophthalmoscopic lenses] Dmitrieva AM, et al. **Med Tekh** 1988 Sep–Oct;(5):54–6 (Eng. Abstr.) **(Rus)**

[An initial trial of the clinical use of a set of ophthalmoscopic lenses] Ovchinnikov BV, et al. **Vestn Oftalmol** 1988 Sep–Oct;104(5):69–71 **(Rus)**

METHODS

An inexpensive method of indirect ophthalmoscopy. Bishai KR. **Br J Ophthalmol** 1989 Mar;73(3):235–6

Use of a convex mirror in indirect ophthalmoscopy for patients in a prone position. Hara S. **Ophthalmic Surg** 1989 Jul;20(7):517–8

[Specular microscopy] Hartmann C. **Annee Ther Clin Ophtalmol** 1987;38:65–73 (Eng. Abstr.) **(Fre)**

[A method of measuring the depth of the anterior chamber] Baranov IIa, et al. **Oftalmol Zh** 1988;(6):381–3 **(Rus)**

OPIATE DEPENDENCE see **NARCOTIC DEPENDENCE**

OPIATES see **NARCOTICS**

OPIATES, ENDOGENOUS see **ENDORPHINS**

OPIOID PEPTIDES see **ENDORPHINS**

OPISTHORCHIASIS

BLOOD

Lipid composition of serum lipoprotein in opisthorchiasis. Changbumrung S, et al. **Ann Trop Med Parasitol** 1988 Jun; 82(3):263–9

Serum protease inhibitors in opisthorchiasis, hepatoma, cholangiocarcinoma, and other liver diseases. Changbumrung S, et al. **Southeast Asian J Trop Med Public Health** 1988 Jun; 19(2):299–305

COMPLICATIONS

Generation of high yields of Syrian hamster cholangiocellular carcinomas and hepatocellular nodules by combined nitrite and aminopyrine administration and Opisthorchis viverrini infection. Thamavit W, et al. **Jpn J Cancer Res** 1988 Aug; 79(8):909–16

Incidence of bacteremia in patients with opisthorchiasis during recurrent cholangitis. Pungpak S, et al. **Southeast Asian J Trop Med Public Health** 1988 Jun; 19(2):215–8

Opisthorchis viverrini eggs and adult flukes as nidus and composition of gallstones. Riganti M, et al. **Southeast Asian J Trop Med Public Health** 1988 Dec; 19(4):633–6

[Visceral candidiasis in conjunction with "marked eosinophilia" in acute opisthorchiasis] Avtsyn AP, et al. **Arkh Patol** 1988;50(11):73–6 (Eng. Abstr.) **(Rus)**

[Pre- and intraoperative diagnosis of complications of opisthorchiasis] Al'perovich BI, et al. **Klin Khir** 1988; (9):14–5 (Eng. Abstr.) **(Rus)**

[Opisthorchiasis-induced suppurative cholangitis (clinical course and diagnosis)] Brazhnikova NA. **Klin Med (Mosk)** 1989 Feb;67(2):89–94 (Eng. Abstr.) **(Rus)**

[The hypophyseo–thyroid system in psoriatic arthritis combined with chronic opisthorchiasis] Milevskaia SG, et al. **Med Parazitol (Mosk)** 1989 Mar–Apr;(2):38–42 (Eng. Abstr.) **(Rus)**

[Diagnosis of duodenogastric reflux in patients with duodenal peptic ulcer combined with chronic opisthorchiasis] Pavlenko OA. **Med Parazitol (Mosk)** 1988 Sep–Oct;(5):24–6 (Eng. Abstr.) **(Rus)**

[Diagnosis of disorders of the bile excretory system in patients with tuberculosis in association with chronic opisthorchiasis] Strelis AK, et al. **Probl Tuberk** 1989; (1):74–5 **(Rus)**

[Tuberculosis of the lungs complicated by opisthorchiasis under conditions of the extreme north] Vasil'ev AV, et al. **Probl Tuberk** 1989;(6):41–4 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

[The clinical picture and immune status of patients with psoriatic arthritis combined with opisthorchiasis] Milevskaia SG. **Vestn Dermatol Venerol** 1988;(6):44–6 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Rate of re–infection by Opisthorchis viverrini in an endemic northeast Thai community after chemotherapy. Upatham ES, et al. **Int J Parasitol** 1988 Jul;18(5):643–9

Ultrasonographic study of the biliary system in opisthorchiasis patients after treatment with praziquantel. Pungpak S, et al. **Southeast Asian J Trop Med Public Health** 1989 Mar; 20(1):157–62

[An analysis of 4 strategies for the praziquantel treatment of persons infested with Opisthorchis felineus under conditions excluding reinfestation] Bronshtein AM, et al. **Med Parazitol (Mosk)** 1988 Sep–Oct;(5):19–24 (Eng. Abstr.) **(Rus)**

[Prasiquantel treatment of patients under ambulatory conditions in an opisthorchiasis focus in the Komi–Permyak autonomous area] Bronshtein AM, et al. **Med Parazitol (Mosk)** 1989 Mar–Apr;(2):30–3 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

[Opisthorchiasis in the Moscow and Vladimir regions] Bronshtein AM, et al. **Med Parazitol (Mosk)** 1988 Nov–Dec;(6):46–9 (Eng. Abstr.) **(Rus)**

[Assessment of the heminthologic situation along the route of the Irtysh–Karaganda canal. Public health helminthologic and malacologic studies] Chefranova IuA, et al. **Med Parazitol (Mosk)** 1989 Mar–Apr;(2):16–20 (Eng. Abstr.) **(Rus)**

[Seroepidemiologic studies for assessing infection levels in opisthorchiasis foci] Gorbunova LA, et al. **Med Parazitol (Mosk)** 1988 Nov–Dec;(6):49–53 (Eng. Abstr.) **(Rus)**

[A land survey of foci as the basis for epidemiologic surveillance of opisthorchiasis] Maier VA, et al. **Med Parazitol (Mosk)** 1988 Sep–Oct;(5):37–40 (Eng. Abstr.) **(Rus)**

[The role of population migration in the spread of opisthorchiasis from an Ob'–Irtysh invasion focus] Pustovalova VIa. **Med Parazitol (Mosk)** 1989 Mar–Apr; (2):14–6 (Eng. Abstr.) **(Rus)**

[Opisthorchiasis in the Upper Kama basin] Uchuatkin EA, et al. **Med Parazitol (Mosk)** 1988 Nov–Dec;(6):59–61 (Eng. Abstr.) **(Rus)**

[Seroepidemiologic characteristics of opisthorchiasis foci with various endemic levels] Zavoĭkin VD, et al. **Med Parazitol (Mosk)** 1989 May–Jun;(3):35–9 (Eng. Abstr.) **(Rus)**

[Opisthorchiasis at left Dnieper watersheds] Zavoĭkin VD, et al. **Med Parazitol (Mosk)** 1989 Mar–Apr;(2):9–14 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Disease hazards of irrigation schemes. Sornmani S, et al. **World Health Forum** 1988;9(2):254–7

IMMUNOLOGY

A characteristic immunoblotting pattern for Opisthorchiasis sera with metacercarial antigens. Tanvanich S, et al. **Clin Exp Immunol** 1988 Dec;74(3):355–8

Antibodies in serum and bile of hamsters experimentally infected with Opisthorchis viverrini. Chawengkirttikul R, et al. **Int J Parasitol** 1988 Sep;18(6):721–7

[Effect of an Opisthorchis infestation on the clinical course of typhoid and its outcome. 2. The effect of an Opisthorchis infestation on changes in lymphocyte blast transformation in typhoid infection] Lepekhin AV, et al. **Med Parazitol (Mosk)** 1988 Sep–Oct;(5):26–9 (Eng. Abstr.) **(Rus)**

[The effect of Opisthorchis invasion on the clinical course and outcome of abdominal typhoid. Indicators of non–specific resistance and phagocytosis in patients with abdominal typhoid combined with chronic opisthorchiasis] Lepekhin AV. **Med Parazitol (Mosk)** 1989 Mar–Apr; (2):33–8 (Eng. Abstr.) **(Rus)**

[Comparative characteristics of clinico–immunologic indices in various contingents of opisthorchiasis patients in a focus. 1. Characteristics of clinico–immunologic indices in the recently arrived population of Tyumen Province in acute and chronic stages of the disease] Parfenov SB, et al. **Med Parazitol (Mosk)** 1988 Sep–Oct;(5):29–34 (Eng. Abstr.) **(Rus)**

[Comparative characteristics of clinical and immunologic indicators of various groups of opisthorchiasis patients in a focus. Aboriginal population] Parfenov SB, et al. **Med Parazitol (Mosk)** 1989 Mar–Apr;(2):42–5 (Eng. Abstr.) **(Rus)**

[Dynamics of antibody and antigen titers in opisthorchiasis patients following effective treatment] Teplukhin IuV, et al. **Med Parazitol (Mosk)** 1988 Sep–Oct;(5):34–7 **(Rus)**

[Clinico–immunologic characteristics of opisthorchiasis in children living in a natural focus of the disease] Pomogaeva AP, et al. **Pediatriia** 1989;(4):109–10 **(Rus)**

[Clinico–immunologic characteristics of hepatitis A in children with chronic opisthorchiasis] Pomogaeva AP, et al. **Pediatriia** 1989;(7):23–7 (Eng. Abstr.) **(Rus)**

[Characteristics of the immunity in typhoid infection associated with opisthorchiasis] Obgol'ts AA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Nov;(11):75–9 (Eng. Abstr.) **(Rus)**

METABOLISM

Biliary bile acids and lipids composition in Opisthorchiasis viverrini. Wongpaitoon V, et al. **J Med Assoc Thai** 1988 Jul;71(7):394–9

PARASITOLOGY

Transient rise in Opisthorchis egg count after praziquantel treatment. Riganti M, et al. **Southeast Asian J Trop Med Public Health** 1988 Jun; 19(2):335–6

[Current aspects of the clinical course, epidemiology and prevention of opisthorchiasis] Bogoiavlenskiĭ IuK, et al. **Voen Med Zh** 1988 May;(5):44 **(Rus)**

PATHOLOGY

Human pathology of Opisthorchis viverrini infection: a comparison of adults and children. Riganti M, et al. **Southeast Asian J Trop Med Public Health** 1989 Mar; 20(1):95–100

PHYSIOPATHOLOGY

[Clinico–functional status of the small intestine in patients with chronic opisthorchiasis] Beloborodova EI, et al. **Ter Arkh** 1989;61(2):64–7 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

[Ways of improving public health education by preventing opisthorchiasis at school] Zhitnitskaia EA, et al. **Med Parazitol (Mosk)** 1988 Nov–Dec;(6):57–9 (Eng. Abstr.) **(Rus)**

TRANSMISSION

[The role of various intermediate and definitive host species in the dissemination of Opisthorchis felineus from the Ob–Irtysh focus of opisthorchiasis] Filatov VG, et al. **Med Parazitol (Mosk)** 1989 May–Jun;(3):39–41 (Eng. Abstr.) **(Rus)**

URINE

[Vitamin C metabolism of opisthorchiasis patients in various phases of the infection and in the residual period] Nalobin VA, et al. **Med Parazitol (Mosk)** 1988 Jul–Aug;(4):58–60 (Eng. Abstr.) **(Rus)**

OPISTHORCHIS

[Freshwater gastropods as eliminators of Opisthorchis felineus Riv, 1884 eggs] Krivenko VV, et al. **Med Parazitol (Mosk)** 1988 Nov–Dec;(6):53–6 (Eng. Abstr.) **(Rus)**

ANALYSIS

A characteristic immunoblotting pattern for Opisthorchiasis sera with metacercarial antigens. Tanvanich S, et al. **Clin Exp Immunol** 1988 Dec;74(3):355–8

GROWTH & DEVELOPMENT

Opisthorchis viverrini eggs and adult flukes as nidus and composition of gallstones. Riganti M, et al. **Southeast Asian J Trop Med Public Health** 1988 Dec; 19(4):633–6

IMMUNOLOGY

Antibodies in serum and bile of hamsters experimentally infected with Opisthorchis viverrini. Chawengkirttikul R, et al. **Int J Parasitol** 1988 Sep;18(6):721–7

[Dynamics of antibody and antigen titers in opisthorchiasis patients following effective treatment] Teplukhin IuV, et al. **Med Parazitol (Mosk)** 1988 Sep–Oct;(5):34–7 **(Rus)**

ISOLATION & PURIFICATION

[The distribution and ecology of Bithynia inflata mollusks, the intermediate hosts of Opisthorchis felineus, in reservoirs of the Biryusa River basin] Kolokol'tsev MM. **Med Parazitol (Mosk)** 1988 May–Jun;(3):58–60 (Eng. Abstr.) **(Rus)**

METABOLISM

[Biogenic amines and the nervous system of Opisthorchis felineus] Shishov BA, et al. **Med Parazitol (Mosk)** 1989 Mar–Apr;(2):68–72 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

[The role of various intermediate and definitive host species in the dissemination of Opisthorchis felineus from the Ob–Irtysh focus of opisthorchiasis] Filatov VG, et al. **Med Parazitol (Mosk)** 1989 May–Jun;(3):39–41 (Eng. Abstr.) **(Rus)**

[Effect of sewage on the viability of Opisthorchis eggs] Kolokol'tsev MM, et al. **Med Parazitol (Mosk)** 1989 May–Jun;(3):41–3 (Eng. Abstr.) **(Rus)**

OPISTHORCHIS FELINEUS see OPISTHORCHIS

OPISTHORCHIS SINENSIS see CLONORCHIS SINENSIS

OPISTHORCHIS VIVERRINI see OPISTHORCHIS

OPIUM

Failure of rectal diclofenac to augment opioid analgesia [letter] Derbyshire DR. **Anaesthesia** 1989 Jun;44(6):536

Cauliflower ears, opium, and Errol Flynn. Owens D, et al. **BMJ** 1988 Dec 24-31;297(6664):1643-4

Opium, heroin and South Asia [editorial] Jee A. **Br J Addict** 1989 Jan;84(1):5-6

Diet and opiate addiction: a quantitative assessment of the diet of non-institutionalized opiate addicts. Morabia A, et al. **Br J Addict** 1989 Feb;84(2):173-80

An epidemic of opium dependence among Asian refugees in Minnesota: characteristics and causes. Westermeyer J, et al. **Br J Addict** 1989 Jul;84(7):785-9

The moral myths of opium, AIDS, and MAACs [letter] MacKool RJ. **Ophthalmic Surg** 1988 Nov;19(11):825-6

[Venereal diseases in women who abuse narcotic substances] Slutskin BM, et al. **Vestn Dermatol Venerol** 1988;(10):65-7 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Electroencephalographic effects of laudanosine in an animal model of epilepsy. Tateishi A, et al. **Br J Anaesth** 1989 May;62(5):548-52

Naloxone hazard in infant of opioid abuser [letter] Gibbs J, et al. **Lancet** 1989 Jul 15;2(8655):159-60

BIOSYNTHESIS

[Production of useful compounds by plant cell cultures—de novo synthesis and biotransformation] Furuya T. **Yakugaku Zasshi** 1988 Aug;108(8):675-96 (88 ref.) (Eng. Abstr.) (Jpn)

HISTORY

Dentistry on stamps. Loevy HT, et al. **J Am Dent Assoc** 1988 Oct;117(5):594

Dinner with De Quincey. Loperamide overdose. Mack RB. **N C Med J** 1989 Apr;50(4):204-6

PHARMACOLOGY

Effect of atracurium and laudanosine on the release of 3H-noradrenaline. Kinjo M, et al. **Br J Anaesth** 1989 Jun; 62(6):683-90

Cellular and molecular mechanisms of drug dependence. Koob GF, et al. **Science** 1988 Nov 4;242(4879):715-23 (97 ref.)

POISONING

Tincture opium poisoning in a neonate [letter] Dash HH, et al. **Indian Pediatr** 1988 Sep;25(9):904-5

Opium intake in infants and children in Baluchistan [letter] Kasi M, et al. **JPMA** 1988 Aug;38(8):224

Fatal intoxications in Denmark following intake of morphine from opium poppies. Steentoft A, et al. **Z Rechtsmed** 1988; 101(3):197-204

THERAPEUTIC USE

Postoperative pain relief; a new approach: narcotics compared with non-steroidal anti-inflammatory drugs. Buchanan JM, et al. **Ann R Coll Surg Engl** 1988 Sep; 70(5):332-5

OPOSSUMS

Transplantation, growth, and regression of mouse melanoma xenografts in neonatal marsupials. Fadem BH, et al. **Cancer Invest** 1988;6(4):403-8

Mycoplasma provides for the spreading of opossum kidney cells in a serum-free, defined medium. Leiderman LJ, et al. **In Vitro Cell Dev Biol** 1989 Jul;25(7):655-8

Multiple primary neoplasms in an opossum. Barrie MT, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1160-1

Ultraviolet radiation—induced malignant melanoma in Monodelphis domestica. Ley RD, et al. **Photochem Photobiol** 1989 Jul;50(1):1-5

ANATOMY & HISTOLOGY

Sympathetic innervation of the reproductive organs of the male opossum, Didelphis albiventris (Lund, 1841). Maruch SM, et al. **Acta Anat (Basel)** 1989;134(3):257-62

A temporal analysis of the origin and distribution of serotoninergic afferents in the cerebellum of pouch young opossums. Bishop GA, et al. **Anat Embryol (Berl)** 1988; 179(1):33-48

Catecholaminergic innervation of the spinal cord in the North American opossum, Didelphis virginiana. Pindzola RR, et al. **Brain Behav Evol** 1988;32(5):281-92

The forms of argyrophilic ganglion cells in the myenteric plexus throughout the gastrointestinal tract of the opossum. Christensen J. **J Auton Nerv Syst** 1988 Oct;24(3):251-60

A cytoarchitectonic atlas of the medial geniculate body of the opossum, Didelphys virginiana, with a comment on the posterior intralaminar nuclei of the thalamus. Winer JA, et al. **J Comp Neurol** 1988 Aug 15;274(3):422-48

Fine structure of macrophages in the testicular interstitial tissue of the white-belly opossum Didelphis albiventris. Nogueira JC, et al. **Microsc Electron Biol Celular** 1988 Jun; 12(1):23-33

BLOOD

New findings on the purification and characterization of an anti-bothropic factor from Didelphis marsupialis (opossum) serum. Perales J, et al. **Braz J Med Biol Res** 1989;22(1):25-8

Plasma concentrations of progesterone and testosterone in captive woolly opossums (Caluromys philander). Perret M, et al. **J Reprod Fertil** 1989 Jan;85(1):31-41

Identification of 5 beta-pregnane and 5 beta-androstane derivatives in adrenal venous and peripheral blood plasma of the female possum (Trichosurus vulpecula). Edgar JA, et al. **J Steroid Biochem** 1989 Apr;32(4):565-72

Identification of 5 alpha-androstane-3 alpha,17 alpha-diol in adrenal venous plasma of female possum (Trichosurus vulpecula). Weiss M, et al. **J Steroid Biochem** 1989 Apr; 32(4):591-7

Studies on the energy metabolism of opossum Didelphis virginiana erythrocytes—IV. Red cells have low adenosine deaminase activity and high levels of deoxyadenosine nucleotides. Bethlenfalvay NC, et al. **Life Sci** 1989; 44(14):963-70

EMBRYOLOGY

The morphogenesis of the posterior neural tube and tail in Monodelphis domesticus. Zehr KJ, et al. **Arch Histol Cytol** 1989 May;52(2):95-108

GENETICS

Frequent derepression of G6PD and HPRT on the marsupial inactive X chromosome associated with cell proliferation in vitro. Migeon BR, et al. **Exp Cell Res** 1989 Jun; 182(2):597-609

Localization of G6PD and HPRT to different arms of the X chromosome of the North American marsupial (Didelphis virginiana) by in situ hybridization and deletion mapping: evolutionary significance. Driscoll DJ, et al. **Genomics** 1988 Nov;3(4):308-14

GROWTH & DEVELOPMENT

The early development of subcortical projections to presumptive somatic sensory-motor areas of neocortex in the North American opossum. Martin GF, et al. **Anat Embryol (Berl)** 1988;178(4):365-79

Development of the optic nerve of the opossum (Didelphis virginiana). Kirby MA, et al. **Brain Res Dev Brain Res** 1988 Nov 1;44(1):37-48

The early development of major projections to the dorsal striatum in the North American opossum. Martin GF, et al. **Brain Res Dev Brain Res** 1989 Jun 1;47(2):161-70

Astroglial differentiation in the opossum superior colliculus. Barradas PC, et al. **GLIA** 1989;2(2):103-11

Osteogenesis in two marsupial species, the bandicoot Isoodon macrourus and the possum Trichosurus vulpecula. Gemmell RT, et al. **J Anat** 1988 Aug;159:155-64

Medullary expiratory activity during opossum development. Farber JP. **J Appl Physiol** 1989 Apr;66(4):1606-12

Developmental plasticity of the rubrospinal tract in the North American opossum. Xu XM, et al. **J Comp Neurol** 1989 Jan 15;279(3):368-81

Anatomic and functional development of the suprachiasmatic nuclei in the gray short-tailed opossum. Rivkees SA, et al. **J Neurosci** 1988 Nov;8(11):4269-76

METABOLISM

Immunohistochemical study of the developing endocrine pancreas of the opossum (Didelphis virginiana). Krause WJ, et al. **Acta Anat (Basel)** 1989;135(1):84-96

Receptors and cGMP signalling mechanism for E. coli enterotoxin in opossum kidney. Forte LR, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):F1040-6

Opossum kidney contains a functional receptor for the Escherichia coli heat-stable enterotoxin. White AA, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):363-7

Control of parathyroid hormone-degrading activity in the opossum kidney cell: possible involvement of protein kinase C. Yamaguchi T, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):908-13

Ontogenesis of enkephalinergic afferent systems in the opossum cerebellum. Walker JJ, et al. **Brain Res Dev Brain Res** 1989 Jul 1;48(1):35-58

Proteins in cerebrospinal fluid and plasma of postnatal Monodelphis domestica (grey short-tailed opossum). Dziegielewska KM, et al. **Comp Biochem Physiol [B]** 1989; 92(3):569-76

Distribution of immunoreactive substance P in opossum esophagus. Christensen J, et al. **Dig Dis Sci** 1989 Apr; 34(4):513-20

High performance liquid chromatographic analysis of insulin degradation products from a cultured kidney cell line. Duckworth WC, et al. **Endocrinology** 1988 Dec; 123(6):2701-8

Parathyroid hormone degradation by chymotrypsin-like endopeptidase in the opossum kidney cell. Yamaguchi T, et al. **Endocrinology** 1988 Dec;123(6):2812-7

Distribution of corticotropin-releasing factor in the cerebellum and precerebellar nuclei of the opossum: a study utilizing immunohistochemistry, in situ hybridization histochemistry, and receptor autoradiography. Cummings SL, et al. **J Comp Neurol** 1989 Feb 22;280(4):501-21

Immunocytochemical localization of luteinizing hormone-releasing hormone (LHRH) in the brain and nervus terminalis of the adult and early neonatal gray short-tailed opossum (Monodelphis domestica). Schwanzel-Fukuda M, et al. **J Comp Neurol** 1988 Oct 1; 276(1):44-60

Brainstem origin of serotonin- and enkephalin-immunoreactive afferents to the opossum's cerebellum. Walker JJ, et al. **J Comp Neurol** 1988 Oct 22; 276(4):481-97

Flow cytometric analysis of intracellular pH in cultured opossum kidney (OK) cells. Montrose MH, et al. **J Membr Biol** 1989 Apr;108(1):31-43

Reciprocal effects of Ca2+ and Mg-ATP on the 'run-down' of the K+ channels in opossum kidney cells. Ohno-Shosaku T, et al. **Pflugers Arch** 1989 Mar; 413(5):562-4

MICROBIOLOGY

Search for leprous infection in some small wild animals of Louisiana [letter] Job CK, et al. **Int J Lepr Other Mycobact Dis** 1988 Dec;56(4):630-1

PARASITOLOGY

Epidemiology of visceral leishmaniasis in Colombia. Corredor A, et al. **Am J Trop Med Hyg** 1989 May; 40(5):480-6

Trypanosoma (Herpetosoma) leeuwenhoeki in Choloepus hoffmanni and Didelphis marsupialis of the Pacific Coast of Colombia. Travi BL, et al. **J Parasitol** 1989 Apr; 75(2):218-24

Fatal lungworm infection in an opossum. Duncan RB Jr, et al. **J Wildl Dis** 1989 Apr;25(2):266-9

Parasites and serological survey of the common brushtail possum (Trichosurus vulpecula) from Kangaroo Island, South Australia. O'Callaghan MG, et al. **J Wildl Dis** 1986 Oct;22(4):589-91

A comparison of experimental visceral leishmaniasis in the opossum, armadillo and ferret. White MR, et al. **Lab Anim Sci** 1989 Jan;39(1):47-50

Aspects of successful host-parasite association: opossum and Trypanosoma cruzi. Jansen AM. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:491-6

Presence of Trypanosoma cruzi in the anal glands of naturally infected opossum (Didelphis marsupialis) in the state of Santa Catarina, Brazil. Steindel M, et al. **Mem Inst Oswaldo Cruz** 1988 Jan-Mar;83(1):135-7

Experimental visceral leishmaniasis in the opossum. White MR, et al. **Vet Pathol** 1989 Jul;26(4):314-21

PHYSIOLOGY

Evidence for inhibition of opossum LES through intrinsic gastric nerves. Schulze-Delrieu K, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):G198-205

Control mechanisms of sphincter of Oddi contraction rate in the opossum. Suzuki T, et al. **Am J Physiol** 1988 Nov; 255(5 Pt 1):G619-26

Vasoactive intestinal polypeptide and non-adrenergic, non-cholinergic inhibition in lower oesophageal sphincter of opossum. Daniel EE, et al. **Br J Pharmacol** 1989 Mar; 96(3):746-52

The ipsilateral field representation in the striate cortex of the opossum. Volchan E, et al. **Exp Brain Res** 1988; 73(2):297-304

In vivo alkaline secretion by mammalian esophagus. Hamilton BH, et al. **Gastroenterology** 1989 Sep;97(3):640-8

Electrical correlates of peristaltic and nonperistaltic contractions in the opossum smooth muscle esophagus. Paterson WG. **Gastroenterology** 1989 Sep;97(3):665-75

Effect of sensory input from the tongue on jaw movement in normal feeding in the opossum. Thexton AJ, et al. **J Exp Zool** 1989 Jun;250(3):233-43

Ion channels activated by osmotic and mechanical stress in membranes of opossum kidney cells. Ubl J, et al. **J Membr Biol** 1988 Sep;104(3):223-32

An evaluation of three anaesthetic regimes in the gray short-tailed opossum (Monodelphis domestica). Keller LS, et al. **Lab Anim** 1988 Jul;22(3):269-75

[Functional intrinsic innervation of the circular smooth muscle of the esophagus in the opossum] Serio R. **Ann Ist Super Sanita** 1988;24(4):519-21 (Eng. Abstr.) (Ita)

OPPENHEIM-ZIEHEN DISEASE see DYSTONIA MUSCULORUM DEFORMANS

OPPORTUNISTIC INFECTIONS

Mucormycosis of the paranasal sinuses. Finn DG. **Ear Nose Throat J** 1988 Nov;67(11):813, 816-8, 821-2 (11 ref.)

Fungal infections in the immunocompromised patient. Kimmelman CP. **Ear Nose Throat J** 1988 Nov;67(11):852-5 (18 ref.)

Chronic mucocutaneous candidiasis. Kirkpatrick CH. **Eur J Clin Microbiol Infect Dis** 1989 May;8(5):448-56 (60

ref.)
Cunninghamella bertholletiae and Pneumocystis carinii pneumonia as a fatal complication of chronic lymphocytic leukemia. Reed AE, et al. **Hum Pathol** 1988 Dec; 19(12):1470–2
Malassezia furfur. Klotz SA. **Infect Dis Clin North Am** 1989 Mar;3(1):53–64 (26 ref.)
Zygomycosis. Rinaldi MG. **Infect Dis Clin North Am** 1989 Mar;3(1):19–41 (131 ref.)
Trichosporonosis. Walsh TJ. **Infect Dis Clin North Am** 1989 Mar;3(1):43–52 (65 ref.)
Bacteremia caused by non-sporulating anaerobes in cancer patients. A 12-year experience. Fainstein V, et al. **Medicine (Baltimore)** 1989 May;68(3):151–62
Clinical manifestations of systemic fungal infections. van 't Wout JW. **Mycoses** 1988;31 Suppl 2:9–14 (20 ref.)
Hairy leukoplakia: an AIDS-associated opportunistic infection. Sciubba J, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr;67(4):404–10
Opportunistic infections in "normal hosts" [letter] Matlow AG, et al. **Rev Infect Dis** 1989 Jan–Feb;11(1):152–3
Opportunist pulmonary infection with Legionella bozemanii. Swinburn CR, et al. **Thorax** 1989 May;44(5):434–5

BLOOD

Elevated phagocytosis, oxidative burst, and F-actin formation in PMNs from individuals with intraoral manifestations of HIV infection. Ryder MI, et al. **J Acquir Immune Defic Syndr** 1988;1(4):346–53

CHEMICALLY INDUCED

Nocardiosis associated with low dose methotrexate for rheumatoid arthritis [letter] Keegan JM, et al. **J Rheumatol** 1988 Oct;15(10):1585–6

COMPLICATIONS

Cryptococcal meningitis in AIDS patients. A two-case report. Orefice G, et al. **Acta Neurol (Napoli)** 1988 Feb; 10(1):25–8
Histo- and immunopathological features of terminal AIDS. An autopsy case of a Japanese man with neurological signs as initial symptoms. Miyayama H, et al. **Acta Pathol Jpn** 1988 Oct;38(10):1313–27
Glomerular lesions and opportunistic infections of the kidney in AIDS: an autopsy study of 47 cases. van der Reijden HJ, et al. **Adv Exp Med Biol** 1989;252:181–8
Esophageal candidiasis and immunodeficiency associated with acute HIV infection [letter] Cilla G, et al. **Aids** 1988 Oct;2(5):399–400
Treatment of opportunistic viral infections. Crumpacker CS. **Aids** 1988;2 Suppl 1:S191–3 (18 ref.)
Infectious complications in patients with HIV infection. Gold JW. **Aids** 1988 Oct;2(5):327–34 (68 ref.)
The treatment and prevention of mycobacterial disease in patients with HIV infection. Pitchenik AE. **Aids** 1988;2 Suppl 1:S177–82 (64 ref.)
Bacterial infections in AIDS patients. Schrager LK. **Aids** 1988;2 Suppl 1:S183–9 (64 ref.)
Visceral leishmaniasis (kala azar) in a patient with AIDS. Smith D, et al. **Aids** 1989 Jan;3(1):41–3
Pediatric infections and therapy. Wiznia A, et al. **Aids** 1988; 2 Suppl 1:S195–9 (26 ref.)
Prognostic factors and life expectancy in children with acquired immunodeficiency syndrome and Pneumocystis carinii pneumonia. Bernstein LJ, et al. **Am J Dis Child** 1989 Jul;143(7):775–8
Spontaneous resolution of Candida esophagitis in a seroconverting patient for HIV antibodies [letter] Clotet B, et al. **Am J Gastroenterol** 1988 Dec;83(12):1433
Strongyloides stercoralis hyperinfection and the acquired immunodeficiency syndrome [letter] Armignacco O, et al. **Am J Med** 1989 Feb;86(2):258
Yersinia enterocolitica bacteremia in a patient with the acquired immunodeficiency syndrome. Cohen JI, et al. **Am J Med** 1989 Feb;86(2):254–5
Pseudomonal and candidal peritonitis as a complication of continuous ambulatory peritoneal dialysis in human immunodeficiency virus-infected patients. Dressler R, et al. **Am J Med** 1989 Jun;86(6 Pt 2):787–90
Visceral leishmaniasis in immunocompromised hosts. Fernández-Guerrero ML, et al. **Am J Med** 1987 Dec; 83(6):1098–102
Invasive Scopulariopsis in the immunocompromised host. Neglia JP, et al. **Am J Med** 1987 Dec;83(6):1163–6
Infections associated with Hickman catheters in patients with acquired immunodeficiency syndrome. Raviglione MC, et al. **Am J Med** 1989 Jun;86(6 Pt 2):780–6
Cytomegalovirus infection of the laryngeal nerve presenting as hoarseness in patients with acquired immunodeficiency syndrome. Small PM, et al. **Am J Med** 1989 Jan; 86(1):108–10
Fatal hepatic necrosis caused by disseminated type 5 adenovirus infection in a renal transplant recipient. Norris SH, et al. **Am J Nephrol** 1989;9(2):101–5
Optic neuropathy associated with cryptococcal arachnoiditis in AIDS patients. Lipson BK, et al. **Am J Ophthalmol** 1989 May 15;107(5):523–7
Mycobacteria and AIDS mortality [editorial] Chaisson RE, et al. **Am Rev Respir Dis** 1989 Jan;139(1):1–3
Life-threatening opportunistic fungal infection in patients with the acquired immunodeficiency syndrome. Armstrong D. **Ann N Y Acad Sci** 1988;544:443–50 (15 ref.)
AIDS, cytomegalovirus, and the brainstem [letter] Vinters HV. **Ann Neurol** 1989 Mar;25(3):311–2
Bronchoesophageal manifestations of acquired immunodeficiency syndrome. Lucente FE, et al. **Ann Otol Rhinol Laryngol** 1988 Sep–Oct;97(5 Pt 1):530–3 (33 ref.)
Chlamydia trachomatis pneumonia in a patient with multiple myeloma [letter] Vlasveld LT, et al. **Arch Intern Med** 1988 Oct;148(10):2302–3
Branhamella keratitis resistant to penicillin and cephalosporins. Case report. Macsai MS, et al. **Arch Ophthalmol** 1988 Nov;106(11):1506–7
Disseminated penicilliosis in a patient with acquired immunodeficiency syndrome. Piehl MR, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1262–4
Disseminated toxoplasmosis in the acquired immunodeficiency syndrome. Tschirhart D, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1237–41
Occult AIDS: pneumocystis carinii pneumonia in elderly people. Hargreaves MR, et al. **BMJ** 1988 Sep 17; 297(6650):721–2
Unusual presentation of pseudomonas infection [letter] Jowitt SN, et al. **BMJ** 1988 Dec 3;297(6661):1470–1
Hyperinfection with strongyloides after treatment for adult T cell leukaemia–lymphoma in an African immigrant. Pagliuca A, et al. **BMJ** 1988 Dec 3;297(6661):1456–7
Occult AIDS [letter] Vinti H, et al. **BMJ** 1988 Nov 5; 297(6657):1196–7
Unusual presentation of pseudomonas infection. Weinbren MJ, et al. **BMJ** 1988 Oct 22;297(6655):1034–5
Arachnia propionica pneumonia in hairy cell leukaemia. Karnik AM, et al. **Br J Dis Chest** 1988 Oct;82(4):418–20
Mycobacterial infections and AIDS. Nunn PP, et al. **Br Med Bull** 1988 Jul;44(3):801–13 (62 ref.)
Tuberculosis and AIDS. Statement on AIDS and tuberculosis. Geneva, March 1989. Global Programme on AIDS and Tuberculosis Programme, World Health Organization, in collaboration with the International Union Against Tuberculosis and Lung Disease. **Bull Int Union Tuberc Lung Dis** 1989 Mar;64(1):8–11 (5 ref.)
Opportunistic infections in AIDS. Hemmer R. **Bull Soc Sci Med Grand Duche Luxemb** 1988;125(2):71–3
Chronic Shigella infection in an HIV seropositive patient—Ontario. Simor AE, et al. **Can Dis Wkly Rep** 1988 Mar 26;14(12):49–50 **(Eng, Fre)**
Progressive multifocal leukoencephalopathy with gray matter involvement. Ledoux S, et al. **Can J Neurol Sci** 1989 May;16(2):200–2
Pleural effusion as the initial manifestation of disseminated cryptococcosis in acquired immune deficiency syndrome. Diagnosis by pleural biopsy. Katz AS, et al. **Chest** 1989 Aug;96(2):440–1
Acute respiratory failure secondary to Pneumocystis carinii pneumonia in the acquired immunodeficiency syndrome. A potential role for systemic corticosteroids. Montaner JS, et al. **Chest** 1989 Apr;95(4):881–4
Skin and bone necrosis following ecthyma gangrenosum in acute leukaemia—report of three cases. Koriech OM, et al. **Clin Exp Dermatol** 1988 Mar;13(2):78–81
Pseudomonas aeruginosa pneumonia as a presenting entity in an AIDS patient. Kowal-Vern A, et al. **Clin Pediatr (Phila)** 1989 Sep;28(9):403
Clostridium septicum myonecrosis in association with colonic malignancy. Arenas RB, et al. **Conn Med** 1988 Dec; 52(12):709–10 (10 ref.)
Reinfection with varicella-zoster virus in immunocompromised patients. Junker K, et al. **Curr Probl Dermatol** 1989;18:152–7
Cryptococcosis in the immunocompromised host. Kofler H, et al. **Curr Probl Dermatol** 1989;18:193–202 (15 ref.)
Synopsis of mycotic infections in AIDS. Male O. **Curr Probl Dermatol** 1989;18:241–9 (47 ref.)
Scabies norvegica. Pichler E, et al. **Curr Probl Dermatol** 1989; 18:203–9
Herpesvirus infections in the immunocompromised host. Clinical spectrum, diagnosis, management and prophylaxis. Schuler G, et al. **Curr Probl Dermatol** 1989;18:137–51 (65 ref.)
Candidiasis and the immunodeficient host: an update. Zangerle R, et al. **Curr Probl Dermatol** 1989;18:185–92 (27 ref.)
Mycobacterium marinum infection in a patient with cryptosporidiosis and the acquired immunodeficiency syndrome. Lambertus MW, et al. **Cutis** 1988 Jul;42(1):38–40
Human immunodeficiency virus infection. Knobler RM. **Dermatol Clin** 1989 Apr;7(2):369–85 (191 ref.)
Cryptococcal hepatitis and meningitis in a patient with acquired immunodeficiency syndrome: a case report. Joshi MD, et al. **East Afr Med J** 1989 Jan;66(1):69–73
Trichosporon beigelii pneumonia in a neutropenic patient. Marin J, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jul; 8(7):631–3
Listeria monocytogenes septicemia in an AIDS patient with a brain abscess. Patey O, et al. **Eur J Clin Microbiol Infect Dis** 1989 Aug;8(8):746–8
Disseminated cryptococcosis due to Cryptococcus neoformans variety gattii in a Canadian patient with AIDS [letter] St-Germain G, et al. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):587–8
Arborescent bacterial keratopathy (infectious crystalline keratopathy). Watson AP, et al. **Eye** 1988;2 (Pt 5):517–22
Odynophagia/dysphagia in AIDS. Raufman JP. **Gastroenterol Clin North Am** 1988 Sep;17(3):599–614 (53 ref.)
Hepatobiliary abnormalities of AIDS. Schneiderman DJ. **Gastroenterol Clin North Am** 1988 Sep;17(3):615–30 (39 ref.)
Oesophageal symptoms, their causes, treatment, and prognosis in patients with the acquired immunodeficiency syndrome. Connolly GM, et al. **Gut** 1989 Aug;30(8):1033–9
An HIV-infected patient with an extraordinary rash. Dillon SM. **Hosp Pract [Off]** 1989 Mar 15;24(3):199, 202
Infections in patients with humoral immunodeficiency. Heinzel FP. **Hosp Pract [Off]** 1989 Sep 15;24(9):99–103, 106–111 passim (10 ref.)
Infections due to encapsulated bacteria, Salmonella, Shigella, and Campylobacter. Chaisson RE. **Infect Dis Clin North Am** 1988 Jun;2(2):475–84 (40 ref.)
Candidiasis [published erratum appears in Infect Dis Clin North Am 1989 Jun;3(2):following ix] Crislip MA, et al. **Infect Dis Clin North Am** 1989 Mar;3(1):103–33 (182 ref.)
Fungal infections in AIDS. Cryptococcosis. Grant IH, et al. **Infect Dis Clin North Am** 1988 Jun;2(2):457–64 (34 ref.)
Diagnosis and management of the oral manifestations of HIV infection and AIDS. Greenspan JS, et al. **Infect Dis Clin North Am** 1988 Jun;2(2):373–85 (49 ref.)
Toxoplasmic encephalitis in patients with AIDS. Israelski DM, et al. **Infect Dis Clin North Am** 1988 Jun;2(2):429–45 (69 ref.)
Mycobacterial diseases. Tuberculosis and Mycobacterium avium complex. Jacobson MA. **Infect Dis Clin North Am** 1988 Jun;2(2):465–74 (54 ref.)
AIDS and the mycoses. Macher AM, et al. **Infect Dis Clin North Am** 1988 Dec;2(4):827–39 (63 ref.)
Fungal infections in AIDS. Histoplasmosis and coccidioidomycosis. Minamoto G, et al. **Infect Dis Clin North Am** 1988 Jun;2(2):447–56 (32 ref.)
Cryptococcosis. Perfect JR. **Infect Dis Clin North Am** 1989 Mar;3(1):77–102 (244 ref.)
Emerging opportunists. Rinaldi MG. **Infect Dis Clin North Am** 1989 Mar;3(1):65–76 (20 ref.)
Cryptosporidiosis and isosporiasis in patients with AIDS. Soave R. **Infect Dis Clin North Am** 1988 Jun;2(2):485–93 (45 ref.)
Mycobacterium kansasii and Pneumocystis carinii pneumonia in a patient with the acquired immunodeficiency syndrome. Vurma-Rapp U, et al. **Infection** 1989 Mar–Apr;17(2):88–9
An unusual presentation of tuberculosis—'injury TB'. Ferris BD, et al. **Injury** 1987 Sep;18(5):347–9
Disseminated Fusarium solani infection with cutaneous nodules in a bone marrow transplant patient. Mowbray DN, et al. **Int J Dermatol** 1988 Dec;27(10):698–701 (31 ref.)
AIDS-dementia-complex: pathology, pathogenesis and future directions. Dal Canto MC. **Ital J Neurol Sci** 1989 Jun;10(3):277–87 (83 ref.)
Opportunistic fungal infections in immunocompromised hosts. Radentz WH. **J Am Acad Dermatol** 1989 Jun; 20(6):989–1003 (122 ref.)
Nutritional impact of acquired immune deficiency syndrome: a unique counseling opportunity. Hyman C, et al. **J Am Diet Assoc** 1989 Apr;89(4):520–4 (33 ref.)
Pancreatitis in patients with AIDS presumptively due to CMV. Wolf P, et al. **J Clin Lab Anal** 1989;3(3):152–5
Prognostic factors and staging classification of patients with epidemic Kaposi's sarcoma. Chachoua A, et al. **J Clin Oncol** 1989 Jun;7(6):774–80
Viral infections in the acquired immunodeficiency syndrome. Miller SE, et al. **J Electron Microsc Tech** 1988 Jan; 8(1):41–78
Mycobacterium avium-intracellulare complex infections in the acquired immunodeficiency syndrome. Perfect JR. **J Electron Microsc Tech** 1988 Jan;8(1):105–13 (64 ref.)
Protozoal infections in the acquired immunodeficiency syndrome. Sun T, et al. **J Electron Microsc Tech** 1988 Jan; 8(1):79–103 (122 ref.)
Listeria monocytogenes meningitis in a patient with AIDS-related complex [letter] Beninger PR, et al. **J Infect Dis** 1988 Dec;158(6):1396–7
Cryptococcosis of the larynx. Smallman LA, et al. **J Laryngol Otol** 1989 Feb;103(2):214–5 (4 ref.)
Infection of the central nervous system by Rhinocladiella atrovirens in a patient with acquired immunodeficiency syndrome. del Palacio-Hernanz A, et al. **J Med Vet Mycol** 1989;27(2):127–30
Cryptococcosis in AIDS patients: observations concerning CNS involvement. Weinke T, et al. **J Neurol** 1989 Jan; 236(1):38–42
Acute myeloradiculitis due to cytomegalovirus as the initial manifestation of AIDS. Mahieux F, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):270–4
Central nervous system AIDS. Tucker T. **J Neurol Sci** 1989 Feb;89(2-3):119–33 (65 ref.)
General medical consultation on the patient with HIV infection. Feinman B, et al. **J Palliat Care** 1988 Dec; 4(4):34–7 (0 ref.)
AIDS: neurological opportunist infections in central London. Guiloff RJ. **J R Soc Med** 1989 May;82(5):278–80
Bacterial prostatitis in patients infected with the human immunodeficiency virus. Leport C, et al. **J Urol** 1989 Feb; 141(2):334–6
Second infections in AIDS. A new facet to the immune

mechanism. Kelly TA. **Med Hypotheses** 1988 Dec; 27(4):253–4

HIV-associated nephropathy. A unique combined glomerular, tubular, and interstitial lesion. Cohen AH, et al. **Mod Pathol** 1988 Mar;1(2):87–97

Microbiologic correlates underscoring the diagnosis of opportunistic infections in patients with AIDS. Bottone EJ, et al. **Mt Sinai J Med (NY)** 1988 Oct;55(5):374–82 (29 ref.)

Paracoccidioidomycosis in a patient with acquired immunodeficiency syndrome. Goldani LZ, et al. **Mycopathologia** 1989 Feb;105(2):71–4

Zygomycosis (absidiomycosis) in an AIDS patient. Absidiomycosis in AIDS. Smith AG, et al. **Mycopathologia** 1989 Jan;105(1):7–10

Trichosporon beigelii infection in an immunocompromised host. Payne AL, et al. **Mycoses** 1989 Apr;32(4):183–6

Cryptococcal meningitis in AIDS. Wabitsch R, et al. **Mycoses** 1988;Suppl 1:96–101

Co-infection with Legionella pneumophila and Pneumocystis carinii in a patient with chronic lymphocytic leukemia. Dworzack DL, et al. **Nebr Med J** 1989 Apr;74(4):73–5

Neurologic manifestations of human immunodeficiency virus infections. Kieburtz K, et al. **Neurol Clin** 1989 Aug; 7(3):447–68 (119 ref.)

Evaluation of intracerebral lesions in patients with acquired immunodeficiency syndrome. Neuropathological findings and experimental data. Stavrou D, et al. **Neuropathol Appl Neurobiol** 1989 May-Jun;15(3):207–22

Opportunistic parasitic infections in patients with acquired immunodeficiency syndrome. Sun T. **Pathol Annu** 1988;23 Pt 2:1–32 (96 ref.)

Chronic Mycoplasma hominis infection complicating severe intraventricular hemorrhage, in a premature neonate. Gilbert GL, et al. **Pediatr Infect Dis J** 1988 Nov; 7(11):817–8

Mycobacterium bovis sepsis in an infant with human immunodeficiency virus infection. Houde C, et al. **Pediatr Infect Dis J** 1988 Nov;7(11):810–2

Pulmonary clofazimine crystals in a child with acquired immunodeficiency syndrome and disseminated Mycobacterium avium-intracellulare infection. Hudson V, et al. **Pediatr Infect Dis J** 1988 Dec;7(12):880–2

Lymphocytic interstitial pneumonitis in pediatric AIDS. Anderson VM, et al. **Pediatr Pathol** 1988;8(4):417–21

Neurological complications of human immunodeficiency virus infection. Kennedy PG. **Postgrad Med J** 1988 Mar; 64(749):180–7 (46 ref.)

Retinal and gastrointestinal disease due to cytomegalovirus in patients with the acquired immune deficiency syndrome: prevalence, natural history, and response to ganciclovir therapy. Jacobson MA, et al. **Q J Med** 1988 Jun; 67(254):473–86

New spectrum of fungal infections in patients with cancer. Anaissie E, et al. **Rev Infect Dis** 1989 May-Jun;11(3):369–78

Visceral leishmaniasis (kala-azar) as an opportunistic infection in patients infected with the human immunodeficiency virus in Spain. Montalban C, et al. **Rev Infect Dis** 1989 Jul-Aug;11(4):655–60

Interactions of the human immunodeficiency virus and tuberculosis and the implications for BCG vaccination. Quinn TC. **Rev Infect Dis** 1989 Mar-Apr;11 Suppl 2:S379–84 (42 ref.)

Human microsporidiosis and AIDS. Shadduck JA. **Rev Infect Dis** 1989 Mar-Apr;11(2):203–7 (58 ref.)

Cryptosporidiosis among patients with acquired immunodeficiency syndrome (AIDS) in the county of São Paulo, Brazil. Dias RM, et al. **Rev Inst Med Trop Sao Paulo** 1988 Jul-Aug;30(4):310–2

Bacteremia and candidemia in hematological malignancies: clinical findings. Hovgaard D, et al. **Scand J Infect Dis** 1988;20(5):495–501

Septic pulmonary embolism caused by Candida albicans: a fatal complication to bone marrow transplantation. Kronborg G. **Scand J Infect Dis** 1989;21(1):113–5

Branhamella catarrhalis septicemia in an infant with AIDS. Wong VK, et al. **Scand J Infect Dis** 1988;20(5):559–60

Childhood AIDS: an unusual presentation. Baber WW, et al. **South Med J** 1988 Nov;81(11):1439–41

AIDS-related mycobacterial disease. Collins FM. **Springer Semin Immunopathol** 1988;10(4):375–91 (79 ref.)

Disseminated infection of Pneumocystis carinii in a patient with the acquired immunodeficiency syndrome. Matsuda S, et al. **Virchows Arch [A]** 1989;414(6):523–7

Tuberculosis and HIV infection—new opportunities for an old pathogen [editorial] Chaisson RE. **West J Med** 1989 Jun;150(6):687–9

Tuberculosis in patients with human immunodeficiency virus infection. Review of current concepts. Theuer CP. **West J Med** 1989 Jun;150(6):700–4 (22 ref.)

Diagnosis and treatment of pulmonary disorders of patients with the acquired immunodeficiency syndrome (AIDS). Cone LA, et al. **Z Erkr Atmungsorgane** 1989;172(1):5–39 (237 ref.)

[AIDS and non-Hodgkin lymphoma, an insidious association] Haeck J, et al. **Ned Tijdschr Geneeskd** 1988 Sep 3; 132(36):1669–71 (Eng. Abstr.) **(Dut)**

[Clinical aspects of cytomegalovirus necrotizing retinitis in AIDS] Le Calve M, et al. **Bull Soc Ophtalmol Fr** 1988 Nov;88(11):1345–8 (Eng. Abstr.) **(Fre)**

[Opportunistic parasitic diseases and mycoses in AIDS. Their frequencies in Brazzaville (Congo)] Carme B, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3):311–6 (Eng. Abstr.) **(Fre)**

[Clinical manifestations of infection with (HIV) human immunodeficiency virus in Africans. Comparison of cases observed in Africa and Europe] Coulaud JP. **Med Trop (Mars)** 1988 Oct-Dec;48(4):327–35 (Eng. Abstr.) **(Fre)**

[Clinical aspects of human immunodeficiency virus (HIV) infection in Central Africa: 6 years' experience at a hospital in an endemic area] Lesbordes JL. **Med Trop (Mars)** 1988 Oct-Dec;48(4):351–7 (Eng. Abstr.) **(Fre)**

[Opportunistic pulmonary infections in immunologic deficiencies] Chretien J, et al. **Prax Klin Pneumol** 1988 Jun; 42 Suppl 1:197–200 (Eng. Abstr.) **(Fre)**

[Syphilis in HIV infection. 2 cases of neurosyphilis] Breustedt W, et al. **Dermatol Monatsschr** 1989;175(4):232–41 (Eng. Abstr.) **(Ger)**

[HIV infection. Cardiologic diseases in AIDS patients] **Fortschr Med** 1989 Mar 20;107(9):13 **(Ger)**

[AIDS manifestations in the gastrointestinal tract] Dancygier H. **Fortschr Med** 1989 Apr 10;107(11):240–3 (20 ref.) (Eng. Abstr.) **(Ger)**

[Pulmonary complications in acquired immunodeficiency syndrome] Schaberg T, et al. **Fortschr Med** 1988 Nov 20; 106(33):668, 669–70, 671 (30 ref.) (Eng. Abstr.) **(Ger)**

[Polyneuropathies in HIV infection] Neundörfer B, et al. **Fortschr Neurol Psychiatr** 1989 Apr;57(4):127–31 (45 ref.) (Eng. Abstr.) **(Ger)**

[AIDS—a challenge for dermato-venereology] Braun-Falco O. **Hautarzt** 1989 Apr;40(4):185–8 (6 ref.) **(Ger)**

[Sinusitis and other typical ENT diseases within the scope of acquired immunologic deficiency syndrome (AIDS)] Lamprecht J, et al. **HNO** 1988 Dec;36(12):489–92 (Eng. Abstr.) **(Ger)**

[Simultaneous detection of M. tuberculosis and M. avium-M. intracellulare. A contribution to the clinical aspects and diagnosis of mycobacterioses in AIDS] Ruf B, et al. **Internist (Berlin)** 1989 Jan;30(1):57–60 **(Ger)**

[Bacteria as pathogens of opportunistic infections of the gastrointestinal tract in HIV infection] Ruf B, et al. **Internist (Berlin)** 1989 Jun;30(6):352–7 (24 ref.) **(Ger)**

[Cryptococcus neoformans meningoencephalitis and multiple infections in AIDS] Zoller WG, et al. **Klin Wochenschr** 1989 Jun 1;67(11):598–604 (Eng. Abstr.) **(Ger)**

[AIDS and the lung] Rühle KH, et al. **Med Klin** 1988 Aug 12;83(16):526–7 **(Ger)**

[The status of tuberculosis in West Germany in 1988 with reference to the possible relation to AIDS] Ferlinz R, et al. **Prax Klin Pneumol** 1988 Sep;42(9):693–700 (Eng. Abstr.) **(Ger)**

[Pulmonary infections in patients with AIDS] Rust M. **Prax Klin Pneumol** 1988 Sep;42(9):689–92 (19 ref.) **(Ger)**

[Cryptococcus neoformans—infection in AIDS] Marg E. **Psychiatr Neurol Med Psychol Beih** 1988;40:70–1 **(Ger)**

[CT studies of the lung in opportunistic infections] Roos N, et al. **Rontgenblatter** 1989 Jul;42(7):302–6 (20 ref.) (Eng. Abstr.) **(Ger)**

[Opportunistic infections of the lower gastrointestinal tract in AIDS] Münch R. **Schweiz Rundsch Med Prax** 1988 Nov 1;77(44):1198–201 (44 ref.) (Eng. Abstr.) **(Ger)**

[Clinical aspects of HIV-associated diseases] Fleep M, et al. **Ther Umsch** 1988 Sep;45(9):604–10 (Eng. Abstr.) **(Ger)**

[AIDS—infection syndromes of the central nervous system] Eichenlaub D, et al. **Verh Dtsch Ges Inn Med** 1988;94:524–8 (5 ref.) **(Ger)**

[Clinical aspects of AIDS—opportunistic infections of the lung and heart] Goebel FD. **Verh Dtsch Ges Inn Med** 1988; 94:511–6 (10 ref.) **(Ger)**

[Clinical aspects of AIDS. Opportunistic infections: "abdomen"] Riecken EO. **Verh Dtsch Ges Inn Med** 1988; 94:517–24 **(Ger)**

[Initial clinical experiences in a large Austrian patient sample with immunodeficiency syndrome (AIDS): I. Type and course of encountered infections] Zielinski C, et al. **Wien Klin Wochenschr** 1988 Oct 21;100(20):668–72 (Eng. Abstr.) **(Ger)**

[Skin manifestations in HIV infection] Civatte J, et al. **Wien Med Wochenschr** 1988 Oct 31;138(19–20):508–10, 514–6 (33 ref.) (Eng. Abstr.) **(Ger)**

[Internal and neurologic manifestations of the acquired immunodeficiency syndrome] Zielinski C. **Wien Med Wochenschr** 1988 Oct 31;138(19–20):517–20 (57 ref.) (Eng. Abstr.) **(Ger)**

[Varicellas and herpes zoster in children with oncologic diseases. 1: Clinical characteristics] Heidl M, et al. **Z Arztl Fortbild (Jena)** 1989;83(3):133–5 **(Ger)**

[Diseases of the liver and bile ducts in AIDS] Hess G, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:167–70 (20 ref.) **(Ger)**

[Oral and anal manifestations of HIV infection] Petzoldt D. **Z Gastroenterol [Verh]** 1989 Jul;24:175 **(Ger)**

[Dermatologic aspects of HIV infection] Dettke T, et al. **Z Hautkr** 1989 May 15;64(5):364–6, 369–70, 373 (45 ref.) (Eng. Abstr.) **(Ger)**

[The atypical course of syphilis in HIV infection] Mahrle G, et al. **Z Hautkr** 1989 May 15;64(5):393–4, 397 (Eng. Abstr.) **(Ger)**

[Exacerbation of rosacea in HIV infection] Vocks E, et al. **Z Hautkr** 1989 Jun 15;64(6):452–4 (Eng. Abstr.) **(Ger)**

[AIDS and the nervous system. Immunologic aspects of the cerebrospinal fluid: personal data and review of the literature] Buscaino GA, et al. **Acta Neurol (Napoli)** 1989 Feb;11(1):51–62 (25 ref.) **(Ita)**

[AIDS and opportunistic infections of the central nervous system] Orefice G, et al. **Acta Neurol (Napoli)** 1989 Apr-Jun;11(2-3):117–26 (37 ref.) (Eng. Abstr.) **(Ita)**

[Fungal infections in patients with ARC with or without AIDS. Evaluation of the chemosensitivity of the isolated strains] Michelone G, et al. **G Ital Chemioter** 1987 Jan-Dec; 34(1-3):23–7 (Eng. Abstr.) **(Ita)**

[Visceral leishmaniasis as an opportunistic infection. Our experience] Masseo A, et al. **Minerva Med** 1989 Mar; 80(3):303–4 (Eng. Abstr.) **(Ita)**

[Opportunistic infections in a patient with acquired immunodeficiency syndrome] Tognetti A, et al. **Pathologica** 1987 Sep-Oct;79(1063):625–33 (Eng. Abstr.) **(Ita)**

[A case of disseminated mucormycosis] Teggi A, et al. **Recenti Prog Med** 1989 Jun;80(6):308–13 (20 ref.) (Eng. Abstr.) **(Ita)**

[AIDS and tuberculosis] Anastasatu C. **Rev Ig [Pneumoftiziol]** 1988 Apr-Jun;37(2):97–108 (60 ref.) **(Rum)**

[Opportunistic intestinal bacteria implicated in the etiology of acute diarrheas as risk factors in infant pathology] Domokos L, et al. **Rev Pediatr Obstet Ginecol [Pediatr]** 1988 Apr-Jun;37(2):145–50 (Eng. Abstr.) **(Rum)**

[The role of opportunistic microflora in the development of chronic nonulcerative colitis] Iatskiv MV, et al. **Vrach Delo** 1988 Nov;(11):16–8 (Eng. Abstr.) **(Rus)**

[Clinical manifestations of infection by human immunodeficiency virus in children] Avila-Figueroa C, et al. **Bol Med Hosp Infant Mex** 1989 Jul;46(7):448–54 (Eng. Abstr.) **(Spa)**

[Cerebral toxoplasmosis in the acquired immunodeficiency syndrome. Study of the clinical, radiological, and pathological findings in 10 cases] Bonaventura I, et al. **Med Clin (Barc)** 1988 May 28;91(1):1–6 (Eng. Abstr.) **(Spa)**

[Term pregnancy and acquired immunodeficiency syndrome. First Spanish case] Cartaña J, et al. **Med Clin (Barc)** 1988 Jun 18;91(4):145–7 (Eng. Abstr.) **(Spa)**

[Listeria monocytogenes septicemia in acquired immunodeficiency syndrome (letter)] Rello J, et al. **Med Clin (Barc)** 1989 Jun 10;93(2):79 **(Spa)**

[Diarrhea caused by Cryptosporidium and colonic neoplasia (letter)] Izquierdo J, et al. **Rev Clin Esp** 1988 Apr; 182(7):393–4 **(Spa)**

DIAGNOSIS

Cerebral toxoplasmosis masquerading as herpes encephalitis in a patient with the acquired immunodeficiency syndrome. Carrazana EJ, et al. **Am J Med** 1989 Jun;86(6 Pt 1):730–2

Community-acquired bacteremia in patients with acquired immunodeficiency syndrome: clinical presentation, bacteriology, and outcome. Krumholz HM, et al. **Am J Med** 1989 Jun;86(6 Pt 2):776–9

The diagnosis of cytomegalovirus retinitis. Bloom JN, et al. **Ann Intern Med** 1988 Dec 15;109(12):963–9 (49 ref.)

Colonic histoplasmosis simulating Crohn's disease in a patient with AIDS: case report and review of the literature. González Keelan CG, et al. **Bol Asoc Med P R** 1988 Jul; 80(7):248–50 (16 ref.)

Pulmonary infections in the immunocompromised host. Perspective on procedures [editorial] Tenholder MF. **Chest** 1988 Oct;94(4):676–8

Diagnosis of pulmonary infections in patients infected with the human immunodeficiency virus. Chave JP, et al. **Eur J Clin Microbiol Infect Dis** 1989 Feb;8(2):123–6

Diagnosis and management of HIV-infected patients with diarrhoea. Gerberding JL. **J Antimicrob Chemother** 1989 Jan;23 Suppl A:83–7 (19 ref.)

Diagnosis and successful treatment of fusariosis in the compromised host. Merz WG, et al. **J Infect Dis** 1988 Nov; 158(5):1046–55 (69 ref.)

Candida antigen latex test for detection of invasive candidiasis in immunocompromised patients. Ness MJ, et al. **J Infect Dis** 1989 Mar;159(3):495–502

Pneumocystis carinii pneumonia mimicking idiopathic pulmonary fibrosis in a patient with AIDS. Williams J, et al. **J Tenn Med Assoc** 1989 Feb;82(2):74–6

The role of the dentist in diagnosing infection in the AIDS patient. Huber MA, et al. **Milit Med** 1989 Jun;154(6):315–8

Use of bronchoalveolar lavage in immunocompromised children with pneumonia. Pattishall EN, et al. **Pediatr Pulmonol** 1988;5(1):1–5

Yield of diagnostic tests for opportunistic infections in AIDS: a survey of 33 patients. Gøtzsche PC, et al. **Scand J Infect Dis** 1988;20(4):395–402

Pneumocystis carinii pneumonia in the acquired immunodeficiency syndrome: diagnosis using minilavage samples. Yoo OH, et al. **South Med J** 1989 Jul;82(7):829–32

Circulating antigen of Toxoplasma gondii in patients with AIDS: significance of detection and structural properties. Hassl A, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov;270(1-2):302–9

[An infant with AIDS] Beishuizen A, et al. **Ned Tijdschr Geneeskd** 1989 Jan 21;133(3):123–6 (Eng. Abstr.) **(Dut)**

[Sense and nonsense of examinations in hematogenous and exogenous intra-ocular infections] Martenet AC. **Klin Monatsbl Augenheilkd** 1989 May;194(5):359–60 (5 ref.) (Eng. Abstr.) **(Fre)**

[Diagnostic and therapeutic problems in pulmonary

opportunistic infections in AIDS and chemotherapy] Lamy P, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:201–5 (Eng. Abstr.) **(Fre)**

[Laboratory diagnostic possibilities in fungus infections in intensive care patients] Marklein G, et al. **Anasth Intensivther Notfallmed** 1989 Jun;24(3):172–6 (Eng. Abstr.) **(Ger)**

[Retinitis in AIDS patients: diagnosis, follow-up and treatment] Hansen LL, et al. **Fortschr Ophthalmol** 1989; 86(3):232–8 (Eng. Abstr.) **(Ger)**

[The diagnostic significance of bronchoalveolar lavage in AIDS] Costabel U, et al. **Med Klin** 1988 Aug 12; 83(16):520–2, 540 (22 ref.) **(Ger)**

[The AIDS patient with miliary tuberculosis, toxoplasmosis and herpes infection] Zaiss AW, et al. **Med Klin** 1988 Aug 12;83(16):528–31 **(Ger)**

[Systemic salmonella infections in chemotherapy in 2 children with acute lymphoblastic leukemia] Mühlbauer B, et al. **Monatsschr Kinderheilkd** 1989 Jun;137(6):337–40 (Eng. Abstr.) **(Ger)**

[HIV infection: neuropsychiatric symptoms] Marg E. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Jun; 40(6):336–41 (Eng. Abstr.) **(Ger)**

[New knowledge regarding herpes zoster] Stary A. **Z Hautkr** 1989 Apr 15;64(4):255–6, 259–62, 265 (58 ref.) (Eng. Abstr.) **(Ger)**

[A case of Cytomegalovirus infection intravitally diagnosed on the basis of esophageal biopsy in a patient with chronic lymphoid leukemia] Ostanek L, et al. **Patol Pol** 1988 Jul–Sep;39(3):224–8 (Eng. Abstr.) **(Pol)**

[Serologic diagnosis of pulmonary mycoses caused by opportunistic organisms] López-Martínez R, et al. **Rev Latinoam Microbiol** 1988 Oct–Dec;30(4):317–20 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Treatment of gastrointestinal infections. Pape JW. **Aids** 1988; 2 Suppl 1:S161–7 (66 ref.)

Treatment of toxoplasmic encephalitis with intravenous clindamycin. Dannemann BR, et al. **Arch Intern Med** 1988 Nov;148(11):2477–82

Integrated complex combinations for the treatment of opportunistic infections in AIDS. Freerksen E, et al. **Chemotherapy** 1989;35(3):208–20

What's new in the treatment of difficult infectious diseases? Goebel FD. **Curr Probl Dermatol** 1989;18:290–7 (12 ref.)

In vitro and in vivo evaluation of antifungal agents. Espinel-Ingroff A, et al. **Eur J Clin Microbiol Infect Dis** 1989 Apr;8(4):352–61 (85 ref.)

Herpesvirus infections (cytomegalovirus, herpes simplex virus, varicella-zoster virus). How to use ganciclovir (DHPG) and acyclovir. Drew WL, et al. **Infect Dis Clin North Am** 1988 Jun;2(2):495–509 (49 ref.)

Fluconazole in the treatment of fungal infections associated with AIDS. De Wit S, et al. **Infection** 1989 May–Jun; 17(3):121–3 (18 ref.)

Treatment of nonocular infections in AIDS. Palestine AG. **Int Ophthalmol Clin** 1989 Summer;29(2):89–94 (25 ref.)

Pneumocystis carinii pneumonia and its treatment in patients with AIDS. Gazzard BG. **J Antimicrob Chemother** 1989 Jan;23 Suppl A:67–75 (26 ref.)

Antimicrobial therapy of infections in patients with AIDS—an overview. Sande MA. **J Antimicrob Chemother** 1989 Jan;23 Suppl A:63–5 (7 ref.)

Toxoplasmosis in AIDS patients. Tuazon CU. **J Antimicrob Chemother** 1989 Jan;23 Suppl A:77–82 (13 ref.)

Carbenicillin induced tremors [letter] Charak Bs, et al. **J Assoc Physicians India** 1988 Feb;36(2):184–5

Two cases of Pneumocystis carinii pneumonia occurred in human immunodeficiency virus infected patients: supplemental treatment with aerosolised pentamidine isethionate. Goto H, et al. **Jpn J Med** 1989 Jan–Feb; 28(1):105–9

Therapy of pneumocystis carinii pneumonia after trimethoprim-sulfamethoxazole desensitization. Papakonstantinou G, et al. **Klin Wochenschr** 1989 Mar 1; 67(5):316

Diclazuril for Isospora belli infection in AIDS [letter] Kayembe K, et al. **Lancet** 1989 Jun 17;1(8651):1397–8

Combination therapy with antifungal drugs. Polak A. **Mycoses** 1988;31 Suppl 2:45–53 (25 ref.)

Successful treatment with ciprofloxacin of multiresistant salmonella arthritis in a renal transplant recipient. Díaz-Tejeiro R, et al. **Nephrol Dial Transplant** 1989; 4(5):390–2

Treatment of cytomegalovirus retinitis with intravitreal ganciclovir. Long-term results. Cantrill HL, et al. **Ophthalmology** 1989 Mar;96(3):367–74

Nontypeable haemophilus influenzae supraglottitis: report of case. Baugh RF, et al. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):617–8

Managing fungal and viral infection in the immunocompromised host. Jehn U. **Recent Results Cancer Res** 1988;108:61–70 (24 ref.)

Empirical antimicrobial therapy for febrile granulocytopenic cancer patients: lessons from four EORTC trials. Klastersky J. **Recent Results Cancer Res** 1988;108:53–60 (12 ref.)

Aspects of infections in children with cancer. Viscoli C. **Recent Results Cancer Res** 1988;108:71–81 (35 ref.)

Liposome-encapsulated amphotericin B: a promising new treatment for disseminated fungal infections. Wiebe VJ, et al. **Rev Infect Dis** 1988 Nov–Dec;10(6):1097–101 (20 ref.)

Treatment of pulmonary disease caused by opportunist mycobacteria. Banks J. **Thorax** 1989 Jun;44(6):449–54 (75 ref.)

Empirical treatment without bronchoscopy for Pneumocystis carinii pneumonia in the acquired immunodeficiency syndrome. Miller RF, et al. **Thorax** 1989 Jul;44(7):559–64

Nebulised pentamidine as treatment for Pneumocystis carinii pneumonia in the acquired immunodeficiency syndrome. Miller RF, et al. **Thorax** 1989 Jul;44(7):565–9

Clinical experience in the management of pulmonary opportunist infection and rejection in recipients of heart–lung transplants. Penketh AR, et al. **Thorax** 1988 Oct; 43(10):762–9

[AIDS: bad prognosis in candidiasis. Cryptococcosis in brain involvement is usually fatal—experiences with a new therapeutic drug] Dietrich D. **Fortschr Med** 1989 Mar 15; 107(8):52 **(Ger)**

[AIDS fungus infections. Fluconazole—a new preparation in development] Keil TU. **Fortschr Med** 1989 Mar 30; 107(10):69–70 **(Ger)**

[Experiences with DHPG (ganciclovir)—treatment of cytomegalovirus retinitis in AIDS] Fabricius EM, et al. **Fortschr Ophthalmol** 1989;86(2):124–8 (Eng. Abstr.) **(Ger)**

[Therapy of pulmonary complications in AIDS] Kroegel C, et al. **Med Klin** 1988 Aug 12;83(16):523–5 (22 ref.) **(Ger)**

[Treatment of alcoholic patients with tuberculosis] Wieser O, et al. **Prax Klin Pneumol** 1988 Jul;42(7):615–7 (Eng. Abstr.) **(Ger)**

[Therapy of opportunistic infections in AIDS] Stille W, et al. **Verh Dtsch Ges Inn Med** 1988;94:528–31 **(Ger)**

[Infectious complications in the early phase following kidney transplantation] Spielberger M, et al. **Wien Klin Wochenschr** 1989 Mar 31;101(7):238–41 (Eng. Abstr.) **(Ger)**

[Varicellas and herpes zoster in children with oncologic diseases. 2: Prevention and therapy] Heidl M, et al. **Z Arztl Fortbild (Jena)** 1989;83(3):136–8 **(Ger)**

[5-(2-bromovinyl)-2'-deoxyuridine therapy of herpes zoster diseases in patients with malignant primary diseases] Wutzler P, et al. **Z Gesamte Inn Med** 1988 Dec 1; 43(23):677–80 (Eng. Abstr.) **(Ger)**

[Fluconazole in the treatment of esophageal, bronchial and oral candidiasis in patients with ARC and AIDS] Gritti FM, et al. **G Ital Chemioter** 1988 Jan–Dec;35(1–3):61–8 (Eng. Abstr.) **(Ita)**

[Fluconazole in the treatment of candidiasis of the alimentary tract. Preliminary results] Tortorano AM, et al. **G Ital Chemioter** 1988 Jan–Dec;35(1–3):49–51 **(Ita)**

[Fluconazole in the treatment of cryptococcosis] Tortorano AM, et al. **G Ital Chemioter** 1988 Jan–Dec;35(1–3):53–6 (Eng. Abstr.) **(Ita)**

[Results of the antiviral treatment of chickenpox and herpes zoster in children with neoplasms] Jankowska H, et al. **Pediatr Pol** 1988 Sep;63(9):574–80 (Eng. Abstr.) **(Pol)**

[Antibiotic sensitivity of gram-negative opportunistic bacteria isolated from the feces of newborn infants with intestinal infections] Litiaeva LA, et al. **Antibiot Khimioter** 1989 Jan;34(1):66–8 (Eng. Abstr.) **(Rus)**

[AIDS treatment problems at the 27th Interscience Conference on Antimicrobial Agents and Chemotherapy (news)] Navashin SM, et al. **Antibiot Khimioter** 1988 Aug; 33(8):637–8 **(Rus)**

EPIDEMIOLOGY

The epidemiology of disseminated nontuberculous mycobacterial infection in the acquired immunodeficiency syndrome (AIDS). Horsburgh CR Jr, et al. **Am Rev Respir Dis** 1989 Jan;139(1):4–7

Aspergillus infections in bone marrow transplant recipients. Wingard JR, et al. **Bone Marrow Transplant** 1987 Aug; 2(2):175–81

Infection control: opportunistic fungal infections—the increasing importance of Candida species. Pfaller MA. **Infect Control Hosp Epidemiol** 1989 Jun;10(6):270–3

The use of a DNA probe for epidemiological studies of candidiasis in immunocompromised hosts. Fox BC, et al. **J Infect Dis** 1989 Mar;159(3):488–94

The Chicago AIDS autopsy study: opportunistic infections, neoplasms, and findings from selected organ systems with a comparison to national data. Chicago Associated Pathologists. Miller-Catchpole R, et al. **Mod Pathol** 1989 Jul;2(4):277–94 (174 ref.)

Epidemiologic studies—Kaposi's sarcoma vs. opportunistic infections among homosexual men with AIDS. Haverkos HW. **NIDA Res Monogr** 1988;83:96–105 (27 ref.)

Guillain-Barre syndrome. Another immune-mediated disease with a predilection for young women? Riggs JE, et al. **W V Med J** 1989 Sep;85(9):382–3

[Bacterial and mycotic infections in immunosuppressed patients: studies during antineoplastic therapy] Montagna MT, et al. **Nuovi Ann Ig Microbiol** 1987 Jan–Apr; 38(1–2):107–15 (Eng. Abstr.) **(Ita)**

[Cryptosporidiosis in humans] Siński E. **Przegl Epidemiol** 1988;42(3):225–33 (Eng. Abstr.) **(Pol)**

ETIOLOGY

Terminal ileitis associated with cytomegalovirus and the acquired immune deficiency syndrome. Wajsman R, et al. **Am J Gastroenterol** 1989 Jul;84(7):790–3

Tuberculosis in living related donor renal transplant recipients. Suleiman AB, et al. **Ann Acad Med Singapore** 1988 Jul;17(3):454–6

Visceral leishmaniasis in patients infected with human immunodeficiency virus (HIV). Berenguer J, et al. **Ann Intern Med** 1989 Jul 15;111(2):129–32

Disseminated BCG in HIV infection. Ninane J, et al. **Arch Dis Child** 1988 Oct;63(10):1268–9

Invasive Trichosporon cutaneum infection: an increasing problem in immunosuppressed patients. Lowenthal RM, et al. **Bone Marrow Transplant** 1987 Oct;2(3):321–7

Serious infectious complications of corticosteroid therapy for COPD. Wiest PM, et al. **Chest** 1989 Jun;95(6):1180–4

Infections in the diabetic host. Leslie CA, et al. **Compr Ther** 1989 Jul;15(7):23–32 (39 ref.)

Progressive disseminated histoplasmosis in acquired immune deficiency syndrome: presentation as a steroid-responsive dermatosis. Greenberg RG, et al. **Cutis** 1989 Jun; 43(6):535–8

Sero group C streptococcal infection in intravenous drug abusers: a report of two cases. Kramer ED, et al. **Diagn Microbiol Infect Dis** 1988 Jul;10(3):181–4

Dysgonic fermenter-2 infections. August JR. **J Am Vet Med Assoc** 1988 Dec 15;193(12):1506–8

Effect of dexamethasone on the development of pneumocystosis in rats. Azab ME, et al. **J Egypt Soc Parasitol** 1989 Jun;19(1):107–13

Deferoxamine treatment as a risk factor for zygomycete infection [letter] Sane A, et al. **J Infect Dis** 1989 Jan; 159(1):151–2

Diffuse "encephalitic" cerebral toxoplasmosis in AIDS. Report of four cases. Gray F, et al. **J Neurol** 1989 Jul; 236(5):273–7

Legionnaires' disease in a patient with rheumatoid arthritis treated with cyclosporine. Pillemer SR, et al. **J Rheumatol** 1989 Jan;16(1):117–20

Listeriosis in hematological malignancies: report of two cases. Ikehara O, et al. **Jpn J Clin Oncol** 1989 Jun;19(2):159–62

Edwardsiella tarda septicemia complicating acute leukemia. Funada H, et al. **Jpn J Med** 1988 Aug;27(3):325–8

Zidovudine-induced neutropenia: are we too cautious? Shaunak S, et al. **Lancet** 1989 Jul 8;2(8654):91–2

Disseminated Aspergillus terreus infection in immunocompromised hosts. Hara KS, et al. **Mayo Clin Proc** 1989 Jul;64(7):770–5

Potted plants in hospitals as reservoirs of pathogenic fungi. Summerbell RC, et al. **Mycopathologia** 1989 Apr; 106(1):13–22

Neuropathology of acquired immunodeficiency syndrome. Gonzales MF, et al. **Neuropathol Appl Neurobiol** 1988 Sep–Oct;14(5):345–63 (48 ref.)

Pathology of the central nervous system in 40 cases of acquired immune deficiency syndrome (AIDS). Gray F, et al. **Neuropathol Appl Neurobiol** 1988 Sep–Oct; 14(5):365–80

Report of the Second Public Health Service AIDS Prevention and Control Conference. Report of the workgroup on clinical manifestations and pathogenesis. **Public Health Rep** 1988;103 Suppl 1:28–40

Simultaneous aspergillus endophthalmitis and cytomegalovirus retinitis after kidney transplantation. Weiss JN, et al. **Retina** 1988;8(3):193–8

Hansenula anomala fungemia. Haron E, et al. **Rev Infect Dis** 1988 Nov–Dec;10(6):1182–6 (15 ref.)

Opportunistic infections in renal allograft recipients. Rubin RH, et al. **Transplant Proc** 1988 Dec;20(6 Suppl 8):12–8 (18 ref.)

[Lung diseases during therapeutic aplasia: diagnostic and therapeutic strategy] Mayaud C, et al. **Rev Pneumol Clin** 1988;44(3):113–21 (66 ref.) (Eng. Abstr.) **(Fre)**

[Opportunistic infections and tumors of the gastrointestinal tract as manifestations of AIDS] Brühwiler J, et al. **Dtsch Med Wochenschr** 1988 Oct 7;113(40):1566–71 (45 ref.) **(Ger)**

[Comment on the response by R. Rüdlinger to a question from general practice: the importance of warts in kidney transplant patients] Göring HD. **Hautarzt** 1989 Apr; 40(4):243–4 **(Ger)**

[Vision disorders in a 42-year-old male with acquired immunodeficiency syndrome] Ritter MM, et al. **Internist (Berlin)** 1988 Aug;29(8):590–3 (11 ref.) **(Ger)**

[Asplenism and hyposplenism as an immune deficiency syndrome] Strasser-Vogel B, et al. **Monatsschr Kinderheilkd** 1988 Dec;136(12):795–807 (144 ref.) (Eng. Abstr.) **(Ger)**

[Clinical manifestations of HIV infection in the oromaxillofacial area] Rink B. **Z Arztl Fortbild (Jena)** 1988; 82(12):557–9 (33 ref.) **(Ger)**

[Pneumocystis carinii pneumonia in renal transplant recipients treated with cyclosporin] Kim CJ, et al. **Hinyokika Kiyo** 1989 Apr;35(4):653–9 (Eng. Abstr.) **(Jpn)**

[Amoebic dysentery: a relapsing case by cancer chemotherapy] Takenaka A. **Kansenshogaku Zasshi** 1989 Feb;63(2):162–5 (Eng. Abstr.) **(Jpn)**

[Immunodeficiency and pulmonary diseases] Saito A. **Kokyu To Junkan** 1988 Dec;36(12):1274–80 (45 ref.) **(Jpn)**

[Gastrointestinal involvements in a case of acquired immunodeficiency syndrome (AIDS)] Yoshida Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jun;85(6):1288–94 **(Jpn)**

[Ocular symptoms in cytomegalovirus infection] Dyszyńska-Rościszewska B, et al. **Klin Oczna** 1988 Nov; 90(11):391–2 (Eng. Abstr.) **(Pol)**

[Increased incidence of Pneumocystis carinii pneumonia in infants with congenital adrenal hyperplasia] Blaim A, et al. **Pediatr Pol** 1988 Jun;63(6):352–7 (Eng. Abstr.) **(Pol)**

[Immunologic disorder in children with hemophilia] Boguslawska-Jaworska J, et al. **Pediatr Pol** 1988 May; 63(5):319–25 (Eng. Abstr.) **(Pol)**

[Mixed infections with aerobic and anaerobic bacterial flora in children with granulocytopenia during antineoplastic therapy] Karwacki M, et al. **Pediatr Pol** 1988 Nov; 63(11):733–8 (Eng. Abstr.) **(Pol)**

[Recurrent subglottic laryngitis in children with angiomas of the head and neck] Perek D, et al. **Pediatr Pol** 1988 Apr;63(4):249–55 **(Pol)**

[Pulmonary mucormycosis caused by Absidia coerulea in a patient with lung cancer] Halweg H, et al. **Pneumonol Pol** 1988 Jul;56(7):329–35 (Eng. Abstr.) **(Pol)**

[Invasive form of pulmonary aspergillosis in a patient with chronic lymphocytic leukemia successfully treated with amphotericin B] Korzeniewska-Kosela M, et al. **Pneumonol Pol** 1988 Aug;56(8):366–71 (Eng. Abstr.) **(Pol)**

[Cryptococcal cerebrospinal meningitis as a complication of acute blast crisis of chronic myeloid leukemia] Nowicka J, et al. **Pol Tyg Lek** 1988 Jun 6;43(23):746–7 (Eng. Abstr.) **(Pol)**

[Current views on the pathogenesis of candidiasis] Piskozub E. **Postepy Hig Med Dosw** 1988 Nov–Dec;42(6):682–93 (92 ref.) (Eng. Abstr.) **(Pol)**

[Subchronic toxicity of oxytetracycline (OTC) and the products of its thermal degradation after oral administration] Tropiło J, et al. **Rocz Panstw Zakl Hig** 1988; 39(6):497–503 (Eng. Abstr.) **(Pol)**

[Antimicrobial preparations and normal microflora. Problems and possible ways of their solving] Shenderov BA. **Antibiot Khimioter** 1988 Dec;33(12):921–6 **(Rus)**

[Effect of contamination by opportunistic microflora on the incidence of wound infection in a surgical hospital] Mokhniuk IuN, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):22–3 (Eng. Abstr.) **(Rus)**

[Corticosteroid tuberculosis] Saksonov SI, et al. **Klin Med (Mosk)** 1988 Dec;66(12):93–6 **(Rus)**

[Intestinal dysbacteriosis in patients with functional and inflammatory diseases of the large intestine] Sarkisian BG, et al. **Klin Med (Mosk)** 1989 Feb;67(2):123–5 (Eng. Abstr.) **(Rus)**

[Suppurative conjunctivitis in newborn infants] Kovalevskiĭ EI, et al. **Oftalmol Zh** 1988;(5):270–3 (Eng. Abstr.) **(Rus)**

[The role of the macroorganism's resistance in the development endogenous diseases] Il'inskiĭ IuA, et al. **Sov Med** 1989;(2):22–5 **(Rus)**

[Mycotic complications in acute leukemia (personal observations and review of the literature)] Volkova MA, et al. **Ter Arkh** 1988;60(8):103–9 (57 ref.) (Eng. Abstr.) **(Rus)**

[Alcoholism and pulmonary tuberculosis] Khomenko AG, et al. **Vestn Akad Med Nauk SSSR** 1989;(2):50–8 (Eng. Abstr.) **(Rus)**

[Disseminated infection caused by Mycobacterium avium–intracellulare in a patient with acquired immunodeficiency syndrome (letter)] Oliván Ballabriga A, et al. **Med Clin (Barc)** 1988 May 14;90(19):796–7 **(Spa)**

[Clinical study of tuberculosis in immunocompromised patients] Valencia ME, et al. **Rev Clin Esp** 1989 Apr; 184(7):352–6 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

CD4 counts as predictors of opportunistic pneumonias in human immunodeficiency virus (HIV) infection. Masur H, et al. **Ann Intern Med** 1989 Aug 1;111(3):223–31

Natural killer cells and cytomegalovirus and Epstein–Barr virus infection in cardiac graft recipients. Korčáková L, et al. **Cor Vasa** 1988;30(6):435–41

Host–parasite interaction in fungal infections. Khardori N. **Eur J Clin Microbiol Infect Dis** 1989 Apr;8(4):331–51 (143 ref.)

The level of IgG and IgM in Pneumocystis carinii infection. el–Sibae MM, et al. **J Egypt Soc Parasitol** 1989 Dec; 19(2):635–9

From the National Institutes of Health. Raub W. **JAMA** 1989 Oct 6;262(13):1748

Pulmonary cell populations in recipients of bone marrow transplants with interstitial pneumonitis. Milburn HJ, et al. **Thorax** 1989 Jul;44(7):570–5

Randomized prospective trial of OKT3 for early prophylaxis of rejection after liver transplantation. Millis JM, et al. **Transplantation** 1989 Jan;47(1):82–8

[Opportunistic pulmonary infections: immunologic principles] Westhoff–Bleck M, et al. **Rontgenblatter** 1988 Nov;41(11):465–8 (20 ref.) (Eng. Abstr.) **(Ger)**

[Mechanisms of bacterial adherence in respiratory tract infections—with special reference to compromised hosts] Umeki S. **Kokyu To Junkan** 1988 Aug;36(8):810–8 (78 ref.) **(Jpn)**

MICROBIOLOGY

A pink–pigmented, oxidative, nonmotile bacterium as a cause of opportunistic infections. Korvick JA, et al. **Arch Intern Med** 1989 Jun;149(6):1449–51

Rhodococcus equi: an emerging opportunistic pathogen? Jones MR, et al. **Aust N Z J Med** 1989 Apr;19(2):103–7

Aspergillus terreus as a cause of invasive pulmonary aspergillosis. Moore CK, et al. **Chest** 1988 Oct;94(4):889–91

Emerging fungal pathogens. Anaissie EJ, et al. **Eur J Clin Microbiol Infect Dis** 1989 Apr;8(4):323–30 (71 ref.)

Candida tropicalis. Gelfand MS. **Infect Control Hosp Epidemiol** 1989 Jun;10(6):280–3 (46 ref.)

Emergence of a new opportunistic pathogen, Candida lusitaniae. Blinkhorn RJ, et al. **J Clin Microbiol** 1989 Feb; 27(2):236–40 (21 ref.)

Pathogenicity in two cases of Staphylococcus schleiferi, a recently described species. Jean–Pierre H, et al. **J Clin Microbiol** 1989 Sep;27(9):2110–1

Catheter infection caused by an unusual pathogen, Agrobacterium radiobacter. Potvliege C, et al. **J Clin Microbiol** 1989 Sep;27(9):2120–2

Phaeohyphomycotic cutaneous disease caused by Pleurophoma in a cardiac transplant patient. Dooley DP, et al. **J Infect Dis** 1989 Mar;159(3):503–7

Polymicrobial central nervous system infection in the acquired immunodeficiency syndrome [letter] Sperber AD, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):998–9

DNA probes demonstrate a single highly conserved strain of Mycobacterium avium infecting AIDS patients. Hampson SJ, et al. **Lancet** 1989 Jan 14;1(8629):65–8

Urinary tract infection caused by Hansenula anomala. Qadri SM, et al. **Mycopathologia** 1988 Nov;104(2):99–101

Phoma sorghina infection in human being. Rai MK. **Mycopathologia** 1989 Mar;105(3):167–70

Role of Brovinc catheters in infections in children with cancer. Viscoli C, et al. **Pediatr Infect Dis J** 1988 Aug; 7(8):556–60

Disseminated fusarial infection in the immunocompromised host. Richardson SE, et al. **Rev Infect Dis** 1988 Nov–Dec; 10(6):1171–81 (59 ref.)

Pathogenic yeasts. Stenderup A. **Yeast** 1989 Apr;5 Spec No:S215–24 (52 ref.)

[Parvovirus infections in dermatology] Schwarz TF, et al. **Z Hautkr** 1989 Apr 15;64(4):272–3 (17 ref.) (Eng. Abstr.) **(Ger)**

[Vaginal microbial flora and infectious pathology] Cavallo G. G **Batteriol Virol Immunol** 1987 Jan–Dec; 80(1–12):277–95 (34 ref.) (Eng. Abstr.) **(Ita)**

[Serotyping of strains of Candida albicans isolated from children with acute lymphoid leukemia] Budak A, et al. **Med Dosw Mikrobiol** 1988;40(3):161–6 (Eng. Abstr.) **(Pol)**

[Further comment on the opportunistic pathogenicity of microorganisms (a reply to an opponent)] Frolov AF, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 May;(5):96–8 **(Rus)**

[A logical definition of the concept of the "opportunistic microorganism" (a discussion apropos of the article by A. F. Frolov, A. M. Zaritskiĭ and Iu. M. Fel'dman published in Zhurnal mikrogilogii, épidemiologii i immunobiologii, 1986, No. 9, pp. 93–7)] Kalina GP. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Oct;(10):101–5 **(Rus)**

[The etiology of suppurative–inflammatory diseases caused by opportunistic microorganisms at the noninfectious disease clinic] Minukhin VV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Mar;(3):48–52 (Eng. Abstr.) **(Rus)**

[Interaction of opportunistic bacteria and factors in the body's anti–infective resistance against a background of antibacterial therapy of children with acute pneumonia] Savitskaia KI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Mar;(3):39–45 (Eng. Abstr.) **(Rus)**

MORTALITY

[Causes of death in patients with non–Hodgkin's lymphoma] Walewski J, et al. **Nowotwory** 1988 Oct–Dec;38(4):274–80 (Eng. Abstr.) **(Pol)**

PARASITOLOGY

Opportunistic Strongyloides stercoralis infection in lymphoma patients. Report of a case and review of the literature. Genta RM, et al. **Cancer** 1989 Apr 1; 63(7):1407–11 (32 ref.)

PATHOLOGY

Diffuse axonal swellings in a case of acquired immunodeficiency syndrome. Giangaspero F, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1259–62

Solitary midbrain toxoplasmosis and olivary hypertrophy in a patient with acquired immunodeficiency syndrome. Kure K, et al. **Clin Neuropathol** 1989 Jan–Feb;8(1):35–40

A review of pulmonary cytopathology in the acquired immunodeficiency syndrome. Strigle SM, et al. **Diagn Cytopathol** 1989;5(1):44–54 (88 ref.)

Clinicopathological patterns of invasive and superficial fungal infection. McDonald GS, et al. **Ir J Med Sci** 1988 Jun; 157(6):185–90

Diagnostic findings in patients with acquired immune deficiency syndrome (AIDS). Klatt EC. **J Acquir Immune Defic Syndr** 1988;1(5):459–65

Factors contributing to mortality in lung transplant recipients: an autopsy study. Cagle PT, et al. **Mod Pathol** 1989 Mar;2(2):85–9

Brainstem invasion by Aspergillus fumigatus in a child with leukemia. Barrios N, et al. **N Y State J Med** 1988 Dec; 88(12):656–8

Pathology of AIDS in children. Joshi VV. **Pathol Annu** 1989; 24 Pt 1:355–81 (54 ref.)

Clinical presentation of Bacillus Calmette–Guérin infections in patients with immunodeficiency syndromes. Gonzalez B, et al. **Pediatr Infect Dis J** 1989 Apr;8(4):201–6

Clinical aspects of cytomegalovirus retinitis. Palestine AG. **Rev Infect Dis** 1988 Jul–Aug;10 Suppl 3:S515–21 (21 ref.)

Lung biopsy evaluation of acute rejection versus opportunistic infection in lung transplant patients. Cagle PT, et al. **Transplantation** 1989 Apr;47(4):713–5

[Cutaneous alternariasis. Anatomopathologic aspects apropos of 1 case and review of the literature] Ranfaing E, et al. **Arch Anat Cytol Pathol** 1988;36(3):75–8 (19 ref.) (Eng. Abstr.) **(Fre)**

[In situ hybridization in detecting virus infections in biopsies following orthotopic liver transplantation] Wittekind C, et al. **Acta Histochem Suppl (Jena)** 1989;37:113–6 (Eng. Abstr.) **(Ger)**

[Endothelial precipitates and cytomegalovirus infection] Severin M, et al. **Fortschr Ophthalmol** 1989;86(3):227–31 (Eng. Abstr.) **(Ger)**

[Cryptococcosis of the skin] Kaben U, et al. **Hautarzt** 1989 Jan;40(1):31–3 (Eng. Abstr.) **(Ger)**

[Actinomycosis of the skin in HIV infection] Gresser U, et al. **Klin Wochenschr** 1988 Jul 15;66(14):651–3 (Eng. Abstr.) **(Ger)**

[Clinical aspects and pathologico–anatomic findings in AIDS patients with Cryptococcus neoformans meningoencephalitis] Falk S, et al. **Nervenarzt** 1988 Sep; 59(9):553–8 **(Ger)**

[Central nervous system infection caused by Aspergillus fumigatus. A complication of immunosuppressive therapy in myasthenia gravis] Nau R, et al. **Nervenarzt** 1989 Mar; 60(3):178–80 **(Ger)**

[Mycobacteriosis in AIDS. Autopsy and clinical findings] Kehrein B, et al. **Pathologe** 1988 Jul;9(4):218–27 **(Ger)**

[Infectious and neoplastic lesions of the eye in AIDS] Prantl F, et al. **Pathologe** 1988 Nov;9(6):358–62 **(Ger)**

[A clinicopathological study on opportunistic pulmonary mycoses] Tashiro T, et al. **Kansenshogaku Zasshi** 1988 Nov; 62(11):959–66 (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

Prophylactic and maintenance therapy for opportunist infections in AIDS. Pinching AJ. **Aids** 1988 Oct;2(5):335–43 (53 ref.)

Intravenous immunoglobulin may lessen all forms of infection in patients receiving allogeneic bone marrow transplantation for acute lymphoblastic leukemia: a pediatric oncology group study. Graham–Pole J, et al. **Bone Marrow Transplant** 1988 Nov;3(6):559–66

Cytomegalovirus seronegative platelets and leukocyte–poor red blood cells from random donors can prevent primary cytomegalovirus infection after bone marrow transplantation. Verdonck LF, et al. **Bone Marrow Transplant** 1987 Jun;2(1):73–8

Modulation of the host flora. van Furth R, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jan;8(1):1–7 (40 ref.)

The importance of early internal fixation in multiply injured patients to prevent late death due to sepsis. Broos PL, et al. **Injury** 1987 Jul;18(4):235–7

Surveillance cultures in the neutropenic patient. Daw MA, et al. **J Hosp Infect** 1988 Nov;12(4):251–61 (41 ref.)

The treatment of human immunodeficiency virus infected patients with intravenous immunoglobulin. Yap PL, et al. **J Hosp Infect** 1988 Aug;12 Suppl D:35–46

Sterilization and disinfection. Kobayashi H. **J Med Assoc Thai** 1989 Jul;72 Suppl 2:46–8

Childhood immunization, vaccine–preventable diseases and infection with human immunodeficiency virus. Onorato IM, et al. **Pediatr Infect Dis J** 1988 Aug;7(8):588–95 (50 ref.)

Care of infants with sickle cell disease. Brown AK, et al. **Pediatrics** 1989 May;83(5 Pt 2):897–900

Food counseling for persons infected with HIV: strategy for defensive living. Archer DL. **Public Health Rep** 1989 Mar–Apr;104(2):196–8

Selective decontamination of the digestive tract and fungal infection in acute leukemia patients. Günther I, et al. **Recent Results Cancer Res** 1988;108:82–8

[AIDS. Pneumocystis pneumonia: prevention is in sight] **Fortschr Med** 1989 Mar 30;107(10):14–5 **(Ger)**

[Prevention of cytomegalic inclusion disease in leukemia patients with a cytomegalovirus hyperimmune globulin preparation] Gerein V, et al. **Klin Padiatr** 1989 Jul–Aug; 201(4):322–9 (Eng. Abstr.) **(Ger)**

[Clinical counseling and management of HIV–positive patients—secondary individual prophylaxis in patients with HIV infection] Weber R, et al. **Schweiz Med Wochenschr** 1989 Feb 25;119(8):251–8 (56 ref.) (Eng. Abstr.) **(Ger)**

[Control of hematologic adverse effects of antineoplastic

drugs] Wiktor-Jędrzejczak W. **Pol Tyg Lek** 1988 Aug 15; 43(33):1043–6 **(Pol)**

[Practical objectives of mass immunologic screening of the population] Lebedev KA, et al. **Klin Med (Mosk)** 1989 Feb; 67(2):137–40 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Gastrointestinal imaging in AIDS—luminal gastrointestinal tract. Wall SD. **Gastroenterol Clin North Am** 1988 Sep; 17(3):523–33 (20 ref.)

Pulmonary complications in AIDS: the radiographic manifestations. Cooper NB, et al. **J Med Assoc Ga** 1989 Apr;78(4):197–200

CT of the gut in the immunocompromised host. Jones B, et al. **Radiol Clin North Am** 1989 Jul;27(4):763–71 (42 ref.)

Roentgenographic chest examination in acquired immunodeficiency syndrome (AIDS). A review. Bighi S, et al. **Rays** 1988 Sep–Dec;13(3):23–6

[Radiologic diagnosis of opportunistic pulmonary infections] Galanski M, et al. **Rontgenblatter** 1988 Nov;41(11):469–75 (26 ref.) (Eng. Abstr.) **(Ger)**

RADIONUCLIDE IMAGING

Focal lung uptake of gallium-67 in patients with acquired immunodeficiency syndrome secondary to pneumocystis carinii pneumonia. Charron M, et al. **Eur J Nucl Med** 1988; 14(7–8):424–6

[The place of 67Ga scintigraphy in the primary diagnosis and follow-up evaluation of opportunistic pneumonia in patients with AIDS] Tatsch K, et al. **Nuklearmedizin** 1988 Oct;27(5):219–25 (Eng. Abstr.) **(Ger)**

SURGERY

Survival of a recipient of renal transplantation after pulmonary phycomycosis. Hsu J, et al. **Ann Thorac Surg** 1989 Apr;47(4):617–9

Gastrointestinal surgery in the AIDS patient. Macho JR. **Gastroenterol Clin North Am** 1988 Sep;17(3):563–71 (49 ref.)

Acquired immune deficiency syndrome—to operate or not to operate? [editorial] Lowery RC Jr, et al. **J Natl Med Assoc** 1987 Aug;79(8):807–8

[Surgical problems in AIDS patients] Braun J. **Z Gastroenterol [Verh]** 1989 Jul;24:171–4 (25 ref.) **(Ger)**

THERAPY

Progress in the treatment of cytomegalovirus pneumonia. Frank I, et al. **Ann Intern Med** 1988 Nov 15;109(10):769–71 (19 ref.)

Recurrent vulvar Buschke-Löwenstein's tumor-like condylomata acuminata and Hodgkin's disease effectively treated with recombinant interferon-alpha 2c gel as adjuvant to electrosurgery. Gross G, et al. **Curr Probl Dermatol** 1989;18:178–84

Treatment of human immunodeficiency virus antibody positive children with intravenous immunoglobulin. Williams PE, et al. **J Hosp Infect** 1988 Aug;12 Suppl D:67–73

Management of AIDS-related infections with an accent on outpatient therapy and prophylaxis. Friedberg G, et al. **J Palliat Care** 1988 Dec;4(4):38–41 (0 ref.)

Immunoglobulin therapy in a patient with chronic lymphocytic leukemia and recurrent infections. Bottino GG, et al. **N Y State J Med** 1988 Nov;88(11):597–9

[Pneumonias in AIDS are in the foreground. Clinical symptoms are rarely typical—by no means waive therapy (news)] Hartung HD. **Fortschr Med** 1988 Jul 20;106(21):18 **(Ger)**

[Herpes simplex infections] Kimmig W. **Z Hautkr** 1989 Apr 15;64(4):266–8, 271 (16 ref.) (Eng. Abstr.) **(Ger)**

[Therapeutic possibilities in HIV infection and AIDS] Rasokat H. **Z Hautkr** 1989 May 15;64(5):374, 379–82, 387 (14 ref.) (Eng. Abstr.) **(Ger)**

[Therapeutic perspectives in acquired immunodeficiency syndrome] Liras Martín A. **Med Clin (Barc)** 1988 Jun 4; 91(2):66–70 (26 ref.) **(Spa)**

TRANSMISSION

Endoscopic procedures in the AIDS patient: risks, precautions, indications, and obligations. Raufmann JP, et al. **Gastroenterol Clin North Am** 1988 Sep;17(3):495–506 (28 ref.)

URINE

Use of the membrane filtration technique and Staib agar for the detection of Cryptococcus neoformans in the urine of AIDS patients—a contribution to diagnosis, therapy and pathogenesis of cryptococcosis. Staib F, et al. **Mycoses** 1989 Feb;32(2):63–72

VETERINARY

[Spontaneous mixed infections with distemper virus and Toxoplasma in dogs] Ehrensperger F, et al. **DTW** 1989 Apr;96(4):184–6 (Eng. Abstr.) **(Ger)**

OPSONINS

see related
PHAGOCYTOSIS

The human mannose-binding protein functions as an opsonin. Kuhlman M, et al. **J Exp Med** 1989 May 1;169(5):1733–45

Phagocytosis of serum-opsonized zymosan down-regulates the expression of CR3 and FcRI in the membrane of human monocytes. Wolf HM, et al. **J Immunol** 1988 Nov 15; 141(10):3537–43

Phagocytosis of opsonized fluorescent microspheres by human neutrophils. A two-color flow cytometric method for the determination of attachment and ingestion. Ogle JD, et al. **J Immunol Methods** 1988 Nov 25;115(1):17–29

Effects of fibronectin on the interaction of polymorphonuclear leukocytes with unopsonized and antibody-opsonized bacteria. Yang KD, et al. **J Infect Dis** 1988 Oct;158(4):823–30

The role of extracellular slime in opsonophagocytosis of Staphylococcus epidermidis. Kristinsson KG, et al. **J Med Microbiol** 1988 Nov;27(3):207–13

Demonstration of opsonic and protective activity of human cord sera against type III group B streptococcus that are independent of type-specific antibody. Kim KS, et al. **Pediatr Res** 1988 Nov;24(5):628–32

ADMINISTRATION & DOSAGE

Combined therapy with granulocyte transfusion, intravenous opsonins and antibiotics for overwhelming Pseudomonas aeruginosa septicemia in neutropenic cancer patients. Engelhard D, et al. **Pediatr Infect Dis J** 1989 May; 8(5):332–4

ANALYSIS

Deficient phagocytosis secondary to proteolytic breakdown of opsonins in peritonitis exudate. Billing A, et al. **Adv Exp Med Biol** 1988;240:441–8

Opsonic activity in serum from septic infants treated with intravenous immunoglobulin. Maródi L, et al. **Arch Dis Child** 1989 Apr;64(4):530–4

Flow cytometric assay for the measurement of serum opsonins to Neisseria meningitidis serogroup B, serotype 15. Sjursen H, et al. **J Immunol Methods** 1989 Jan 17; 116(2):235–43

Spontaneous M6 protein size mutants of group A streptococci display variation in antigenic and opsonogenic epitopes. Jones KF, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(21):8271–5

Cervicovaginal opsonic activity, immunoglobulins, complement, and soluble fibronectin in healthy women randomly assigned to tampon or napkin use. Chow AW, et al. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S270–4

Serum opsonins to serogroup B meningococci in meningococcal disease. Halstensen A, et al. **Scand J Infect Dis** 1989;21(3):267–76

[Neutrophil chemiluminescence in pneumoconiosis] Saburi Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jan; 27(1):57–63 (Eng. Abstr.) **(Jpn)**

[Opsonic cooperation in the neutrophil phagocytosis system in acute myeloblastic leukemia] Guseva SA. **Vrach Delo** 1989 Jan;(1):58–61 (Eng. Abstr.) **(Rus)**

BLOOD

Serum opsonins and phagocytosis of saturated and unsaturated phospholipid liposomes. Moghimi SM, et al. **Biochim Biophys Acta** 1989 Sep 18;984(3):384–7

Oxidative metabolism of polymorphonuclear leukocytes and serum opsonic activity in chronic renal failure. Lucchi L, et al. **Nephron** 1989;51(1):44–50

IMMUNOLOGY

Metabolic activation of human polymorphonuclear leukocytes by opsonized Haemophilus influenzae type b. Fleer A, et al. **Acta Paediatr Hung** 1988–89;29(1–2):131–5

Effects of serum opsonins and intravenous immunoglobulin on phagocytosis and intracellular killing of Staphylococcus saprophyticus by human granulocytes. Maródi L, et al. **Acta Paediatr Hung** 1988–89;29(1–2):147–51

Evaluation of the opsonic capacity of core lipopolysaccharide antiserum of equine origin against smooth Escherichia coli 0111:B4, using macrophage chemiluminescence. Morris DD, et al. **Am J Vet Res** 1989 Aug;50(8):1272–8

Neutrophil response, serum opsonic activity, and precipitating antibodies in human infection with Actinobacillus hominis. Friis-Møller A, et al. **APMIS** 1988 Nov;96(11):1023–8

Defective opsonization of Haemophilus influenzae by sera of elderly patients. Garbett ND, et al. **Clin Exp Immunol** 1989 Apr;76(1):73–5

Opsonic activity of a new intravenous immunoglobulin preparation: Pentaglobin compared with sandoglobulin. Garbett ND, et al. **Clin Exp Immunol** 1989 Apr;76(1):8–12

Serum opsonic capacity against Yersinia enterocolitica O:3 in yersiniosis patients with or without reactive arthritis. Tertti R, et al. **Clin Exp Immunol** 1989 May;76(2):227–32

The influence of cefepime on opsonophagocytosis of bacteria. Raponi G, et al. **Drugs Exp Clin Res** 1989;15(4):141–4

Opsonins in uterine washings influencing in vitro activity of equine neutrophils. Watson ED. **Equine Vet J** 1988 Nov; 20(6):435–7

Opsonin-dependent and independent surface phagocytosis of S. aureus proceeds independently of complement and complement receptors. Gordon DL, et al. **Immunology** 1988 Aug;64(4):709–14

Antibody to the outer membrane proteins is the dominant opsonic antibody in normal human serum against H. influenzae type b. Hetherington SV. **Immunology** 1989 May;67(1):87–91

Opsonization-enhanced phagocytosis of foot-and-mouth disease virus. McCullough KC, et al. **Immunology** 1988 Oct; 65(2):187–91

Heterogeneity in opsonic requirements of Staphylococcus epidermidis: relative importance of surface hydrophobicity, capsules and slime. van Bronswijk H, et al. **Immunology** 1989 May;67(1):81–6

Activation and binding of opsonic fragments of C3 on encapsulated Cryptococcus neoformans by using an alternative complement pathway reconstituted from six isolated proteins. Kozel TR, et al. **Infect Immun** 1989 Jul; 57(7):1922–7

Influence of subinhibitory concentrations of ceftriaxone on opsonization and killing of Pseudomonas aeruginosa by human neutrophils. Labro MT, et al. **J Antimicrob Chemother** 1988 Sep;22(3):341–52

Opsonic activity of ascitic fluids by a chemiluminescent method. Huu TP, et al. **J Biolumin Chemilumin** 1989 Apr–Jun;3(2):89–92

Requirement of leukocytic cell adhesion molecules (CD11a-c/CD18) in the enhanced NK lysis of iC3b-opsonized targets. Ramos OF, et al. **J Immunol** 1989 Jun 1;142(11):4100–4

Mechanisms of bacterial opsonization by immune globulin intravenous: correlation of complement consumption with opsonic activity and protective efficacy. Yang KD, et al. **J Infect Dis** 1989 Apr;159(4):701–7

Opsonophagocytosis of Campylobacter pylori. Das SS, et al. **J Med Microbiol** 1988 Oct;27(2):125–30

Ovine opsonins for Staphylococcus aureus cell wall and pseudocapsule. Watson DL. **Res Vet Sci** 1989 Jan; 46(1):84–9

Ingestion and killing of Streptococcus agalactiae by bovine granulocytes in the presence of natural opsonins. Rainard P, et al. **Vet Microbiol** 1988 Sep;18(1):41–50

Quantitative assessment of human neutrophil chemiluminescence induced by opsonized Escherichia coli K-12. Jungi TW, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Jan; 270(3):406–17

Investigations on the opsonin-dependent interaction of Klebsiella bacteria and human polymorphonuclear leukocytes. Przondo-Mordarska A, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):252–9

[Defects in opsonization activity of the serum of patients with chronic arthritis] Böhm U, et al. **Z Rheumatol** 1988 May–Jun;47(3):161–5 (Eng. Abstr.) **(Ger)**

[Opsonic and anti-opsonic effects of the synovial fluid in patients with rheumatoid arthritis based on its effect on the complement-dependent adhesion of neutrophils] Salikhov IG, et al. **Lab Delo** 1989;(2):9–12 (Eng. Abstr.) **(Rus)**

[The role of the opsonophagocytic system in the pathogenesis of sepsis] Belotskiĭ SM, et al. **Ter Arkh** 1988;60(5):97–9 (29 ref.) **(Rus)**

PHARMACOLOGY

Effects of bovine colostrum, foal serum immunoglobulin concentration and intravenous plasma transfusion on chemiluminescence response of foal neutrophils. Leblanc MM, et al. **Anim Genet** 1988;19(4):435–45

PHYSIOLOGY

Differential properties of organ-specific serum opsonins for liver and spleen macrophages. Moghimi SM, et al. **Biochim Biophys Acta** 1989 Sep 18;984(3):379–83

Vaccine therapy and the problem of opsonins. Keating P. **J Hist Med Allied Sci** 1988 Jul;43(3):275–96

Changes in plasma opsonization of yeast after isolation of Biomphalaria glabrata in small volumes of water. Fryer SE, et al. **J Invertebr Pathol** 1989 Sep;54(2):275–6

Opsonization of normal myelin by anti-myelin antibodies and normal serum. Goldenberg PZ, et al. **J Neuroimmunol** 1989 Jul;23(2):157–66

The role of opsonins and opsonic antibody in the prevention and treatment of neonatal infections. Fischer GW. **Mead Johnson Symp Perinat Dev Med** 1986;(28):10–5 (32 ref.)

Effect of immune globulin intravenous on opsonization of bacteria by classic and alternative complement pathways in premature serum. Shaio MF, et al. **Pediatr Res** 1989 Jun;25(6):634–40

Plasma fibronectin: a third opsonic protein involved in immune clearance and destruction of erythrocytes after infusion of incompatible blood. Hathaway TK, et al. **Transplant Proc** 1988 Dec;20(6):1096–102

[Insufficiency of intra-abdominal immunity to infection in purulent peritonitis—sequela of disordered foreign body opsonization] Billing A, et al. **Klin Wochenschr** 1989 Mar 15;67(6):349–56 (Eng. Abstr.) **(Ger)**

[Humoral and cellular changes of non-specific immune response following severe trauma] Regel G, et al. **Unfallchirurg** 1989 Jul;92(7):314–20 (Eng. Abstr.) **(Ger)**

OPTIC ATROPHY

COMPLICATIONS

Ocular findings in polycystic lipomembranous osteodysplasia with sclerosing leukoencephalopathy. Hakola HP, et al. **Acta Ophthalmol (Copenh)** 1989 Feb;67(1):97–100

Visual rehabilitation of patients with advanced stages of glaucoma, optic atrophy, myopia or retinitis pigmentosa. Nilsson UL. **Doc Ophthalmol** 1988 Dec;70(4):363–83

DIDMOAD (diabetes insipidus, diabetes mellitus, optic atrophy and deafness) syndrome associated with myocardial disease. Ito H, et al. **Jpn Heart J** 1988 May; 29(3):371–5

Inflammatory central nervous system involvement in rheumatoid arthritis. Bathon JM, et al. **Semin Arthritis Rheum** 1989 May;18(4):258–66 (41 ref.)

DIAGNOSIS

Quantitative profile of small vessels over optic nerve head. Azad R, et al. **Indian J Ophthalmol** 1987;35(5–6):445–7

Optic nerve hypoplasia associated with pupillary light–near dissociation, spastic paraparesis and other non-ocular anomalies. Doro D, et al. **Ital J Neurol Sci** 1988 Oct; 9(5):509–13

Evaluation of clinically applied visual evoked potential (VEP) in ophthalmological and neurological diseases. Kwak HW, et al. **Korean J Ophthalmol** 1987 Jun;1(1):26–30

[Correlation of intra- and para-papillary glaucomatous changes—a planimetric study of 200 normal and 450 glaucoma eyes] Jonas JB, et al. **Fortschr Ophthalmol** 1989; 86(2):95–8 (Eng. Abstr.) **(Ger)**

[Planimetry of glaucomatous, para-papillary, chorio-pigment epithelial retinal atrophy] Jonas JB, et al. **Fortschr Ophthalmol** 1989;86(2):92–4 (Eng. Abstr.) **(Ger)**

[The retinal nerve fiber layer in normal eyes and in glaucoma. I. Semiquantitative data of 398 eyes with glaucoma] Jonas JB, et al. **Klin Monatsbl Augenheilkd** 1989 Jun; 194(6):437–46 (Eng. Abstr.) **(Ger)**

[Neutron spin tomography of the optic nerve in retrobulbar neuritis and optic nerve atrophy: demonstration of inflammation and demyelination.] Wiegand W. **Ophthalmologica** 1988;197(4):193–201 (Eng. Abstr.) **(Ger)**

[Clinical criteria of the diagnosis of neurofibromatosis in children] Dats MS, et al. **Pediatriia** 1989;(5):93–4 **(Rus)**

[Correlations between clinico-functional and computerized tomography parameters in patients with optic atrophy of diverse etiology] Linnik LF, et al. **Vestn Oftalmol** 1989 May–Jun;105(3):53–5 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Optic neuropathy associated with cryptococcal arachnoiditis in AIDS patients. Lipson BK, et al. **Am J Ophthalmol** 1989 May 15;107(5):523–7

Optic atrophy in aqueduct stenosis [letter] Maruyama K, et al. **Eur J Pediatr** 1989 Jun;148(7):682

Visual disorders in cerebral palsy. Govind A, et al. **Indian J Ophthalmol** 1988 Apr–Jun;36(2):88–91

[Tuberculoma of the optic chiasm region. Apropos of 2 case reports] Hubault D, et al. **Bull Soc Ophtalmol Fr** 1988 Jan; 88(1):141–4 (Eng. Abstr.) **(Fre)**

GENETICS

An autosomal dominant form of low-tension glaucoma. Bennett SR, et al. **Am J Ophthalmol** 1989 Sep 15; 108(3):238–44

[The GAPO syndrome (growth retardation, alopecia, pseudo-anodontia, optic atrophy). A new case report] Manouvrier-Hanu S, et al. **J Genet Hum** 1988 Aug; 36(4):373–8 (8 ref.) **(Fre)**

PATHOLOGY

Optic disc morphometry in simple optic nerve atrophy. Jonas JB, et al. **Acta Ophthalmol (Copenh)** 1989 Apr;67(2):199–203

Ocular anomalies in abdominal muscle deficiency syndrome. Shorey P, et al. **Am J Ophthalmol** 1989 Aug 15;108(2):193–5

Hereditary motor and sensory neuropathy with optic atrophy. Ultrastructural and morphometric observations on nerve fibers, mitochondria, and dense-cored vesicles. Sommer C, et al. **Arch Neurol** 1989 Sep;46(9):973–7

Intraobserver and interobserver agreement in measurement of optic disc characteristics. Tielsch JM, et al. **Ophthalmology** 1988 Mar;95(3):350–6

PHYSIOPATHOLOGY

Effects of optic atrophy on retinal blood flow and oxygen saturation in humans. Sebag J, et al. **Arch Ophthalmol** 1989 Feb;107(2):222–6

Incomplete Wolfram syndrome: clinical and electrophysiologic study of two familial cases. Cillino S, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(2):131–5

[Color pattern visual evoked potential in glaucomatous optic nerve atrophy] Wu LZ, et al. **Yen Ko Hsueh Pao** 1986 Sep;2(3):154–7 (Eng. Abstr.) **(Chi)**

[Pattern electroretinography with luminance stimuli in normal persons and patients with optic atrophy] Bach M, et al. **Fortschr Ophthalmol** 1988;85(3):308–11 (Eng. Abstr.) **(Ger)**

THERAPY

[Restorative electric stimulation of the optic nerve in patients with diseases of the chiasmal–sellar area] Khi'ko VA, et al. **Zh Nevropatol Psikhiatr** 1989;89(5):51–4 (Eng. Abstr.) **(Rus)**

OPTIC ATROPHY, HEREDITARY see under **NEUROPATHIES, HEREDITARY MOTOR AND SENSORY**

OPTIC CHIASM

Familial cavernous angiomas manifesting with an acute chiasmal syndrome. Corboy JR, et al. **Am J Ophthalmol** 1989 Sep 15;108(3):245–50

Malignant glioma of the optic chiasm eight years after radiotherapy for prolactinoma. Hufnagel TJ, et al. **Arch Ophthalmol** 1988 Dec;106(12):1701–5

Primary chiasmatic lymphoma. Cantore GP, et al. **Clin Neurol Neurosurg** 1989;91(1):71–4

Multi-channel visual evoked potentials in early compressive lesions of the chiasm. Flanagan JG, et al. **Doc Ophthalmol** 1988 Jul;69(3):271–81

Ghost-cell tumor of the optic chiasm. Primary CNS lymphoma. Gray RS, et al. **J Clin Neuro Ophthalmol** 1989 Jun;9(2):98–104

Loss of vision due to cryptococcal optochiasmatic arachnoiditis and optocurative surgical exploration—case report. Maruki C, et al. **Neurol Med Chir (Tokyo)** 1988 Jul;28(7):695–7

Ectopic pinealoma in the region of the optic chiasma. Dănăilă L, et al. **Neurol Psychiatr (Bucur)** 1989 Jan–Mar;27(1):57–65

Intrachiasmal hemorrhage: a cause of delayed post-traumatic blindness. Crowe NW, et al. **Neurology** 1989 Jun; 39(6):863–5

Optic glioma associated with Beckwith-Wiedemann syndrome. Weinstein JM, et al. **Pediatr Neurol** 1986 Sep–Oct;2(5):308–10

[Malignant glioma of the chiasma in adults] Evens PA, et al. **Bull Soc Belge Ophtalmol** 1987;224:59–60 **(Fre)**

[Germinoma of the optic pathway (apropos of a case)] Chavy B, et al. **Bull Soc Ophtalmol Fr** 1988 Jan;88(1):145–8 **(Fre)**

[Tuberculoma of the optic chiasm region. Apropos of 2 case reports] Hubault D, et al. **Bull Soc Ophtalmol Fr** 1988 Jan; 88(1):141–4 (Eng. Abstr.) **(Fre)**

[A new numerical representation of visual field in patients with chiasmal tumor] Sakatani K, et al. **Neurol Med Chir (Tokyo)** 1988 Nov;28(11):1046–51 (Eng. Abstr.) **(Jpn)**

[Changes in the mnemonic functions of patients with tumors of the chiasm-sella area before and after surgical intervention and direct electrostimulation of the involved optic nerves] Nikol'skaia IM, et al. **Fiziol Cheloveka** 1988 May–Jun;14(3):364–70 **(Rus)**

[Restorative electric stimulation of the optic nerve in patients with diseases of the chiasmal–sellar area] Khi'ko VA, et al. **Zh Nevropatol Psikhiatr** 1989;89(5):51–4 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

Removal of an arteriovenous malformation in the optic chiasm. A case of Bonnet–Dechaume–Blanc syndrome without retinal involvement. Gibo H, et al. **Surg Neurol** 1989 Feb;31(2):142–8

[Chiasmatic apoplexy caused by rupture of a cavernoma] Regli LP, et al. **Neurochirurgie** 1989;35(2):102–3 **(Fre)**

CYTOLOGY

Retinotopic organization of central optic projections in Rana pipiens. Montgomery N, et al. **J Comp Neurol** 1989 May 22;283(4):526–40

EMBRYOLOGY

Cell death in suboptic necrotic centers of chick embryo diencephalon and their topographic relationship with the earliest optic fiber fascicles. Navascués J, et al. **J Comp Neurol** 1988 Dec 1;278(1):34–46

Prenatal tetrodotoxin infusion blocks segregation of retinogeniculate afferents. Shatz CJ, et al. **Science** 1988 Oct 7;242(4875):87–9

MICROBIOLOGY

Retrograde transneuronal transport of herpes simplex virus in the retina after injection in the superior colliculus, hypothalamus and optic chiasm. Norgren RB Jr, et al. **Brain Res** 1989 Feb 13;479(2):374–8

PATHOLOGY

Herniation of the suprasellar visual system and third ventricle into empty sellae: morphologic and clinical considerations. Kaufman B, et al. **AJR** 1989 Mar;152(3):597–608

Spinal metastasis of pilocytic astrocytoma of the chiasma opticum. Kocks W, et al. **Childs Nerv Syst** 1989 Apr; 5(2):118–20

Meningioma of the chiasm and optic nerves: CT and MR findings. Castillo M, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):679–81

Cavernous angioma of the optic tract. Zentner J, et al. **J Neurol** 1989 Feb;236(2):117–9

PHYSIOLOGY

Forebrain commissures and visual memory: a new approach. Doty RW, et al. **Behav Brain Res** 1988 Aug;29(3):267–80

Interocular transfer of preoperatively trained visual discriminations in goldfish (Carassius auratus) following selective commissure transections. Hemsley JP, et al. **Behav Brain Res** 1989 Apr 1;32(3):297–304

Effects of convergent strabismus on spatio-temporal response properties of neurons in cat area 18. Chino YM, et al. **Exp Brain Res** 1988;72(2):264–78

Interhemispheric transfer of visual learning in monkeys with intact optic chiasm. Eacott MJ, et al. **Exp Brain Res** 1989; 74(2):348–52

Binocular depth perception, visual acuity and visual fields in cats following neonatal section of the optic chiasm. Timney B, et al. **Exp Brain Res** 1989;74(2):272–8

Split chiasm developmentally induced in kittens: plasticity of interhemispheric transfer in visual cortex cells. Yinon U, et al. **Exp Brain Res** 1988;72(1):201–3

Postsynaptic potentials recorded in neurons of the cat's lateral geniculate nucleus following electrical stimulation of the optic chiasm. Bloomfield SA, et al. **J Neurophysiol** 1988 Dec;60(6):1924–45

Split brain acutely and chronically induced in cats causes ipsilateral eye dominance and reduced excitability of cells in the visual cortex. Yinon U, et al. **Metab Pediatr Syst Ophthalmol** 1988;11(1–2):86–96

PHYSIOPATHOLOGY

Hemianopia respecting the vertical meridian and with foveal sparing from retinal degeneration. Johnson LN, et al. **Neurology** 1989 Jun;39(6):872–3

[Indications for the use of a method of direct electrostimulation of the optic nerves in patients with pathology of the chiasmal–cell region] Shandurina AN, et al. **Vestn Oftalmol** 1989 Jan–Feb;105(2):33–7 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Neurovisual outcome following proton radiation therapy. Habrand JL, et al. **Int J Radiat Oncol Biol Phys** 1989 Jun; 16(6):1601–6

ULTRASTRUCTURE

A developmental and ultrastructural study of the optic chiasma in Xenopus. Wilson MA, et al. **Development** 1988 Mar;102(3):537–53

OPTIC DISK

Bilateral central retinal artery occlusions, disk drusen, and migraine. Newman NJ, et al. **Am J Ophthalmol** 1989 Mar 15;107(3):236–40

Acute macular neuroretinopathy and multiple evanescent white dot syndrome occurring in the same patients. Gass JD, et al. **Arch Ophthalmol** 1989 Feb;107(2):189–93

Haemangioma of the optic disc or hyperplasia of the pigment epithelium. A clinicopathological correlation. Hanssens M, et al. **Bull Soc Belge Ophtalmol** 1987;224:61–76

Optic disc cupping: prevalence findings from the WESDR. Klein BE, et al. **Invest Ophthalmol Vis Sci** 1989 Feb; 30(2):304–9

Optic disc drusen and primary megalencephaly in children. Hoover DL, et al. **J Pediatr Ophthalmol Strabismus** 1989 Mar–Apr;26(2):81–5

Disc hemorrhages in the glaucomas. Drance SM. **Surv Ophthalmol** 1989 Mar–Apr;33(5):331–7 (29 ref.)

Pigmented tumor and acute visual loss [clinical conference] Shuey TF, et al. **Surv Ophthalmol** 1988 Sep–Oct; 33(2):121–6

[Analysis of intraocular pressure, cup disc ratio and systemic blood pressure for the prediction of prognosis in glaucoma patients] Lu DP, et al. **Yen Ko Hsueh Pao** 1985 Sep; 1(1):77–80 (Eng. Abstr.) **(Chi)**

[Contribution of the scanner in the diagnosis of deep drusen of the papilla] Diallo L, et al. **Bull Soc Ophtalmol Fr** 1988 Jun–Jul;88(6–7):819–21 **(Fre)**

[Drusen of the optic disk and fascicular deficit] Risse JF, et al. **Bull Soc Ophtalmol Fr** 1988 May;88(5):685–90 (22 ref.) **(Fre)**

[Peripapillary vascular tumor. Clinical picture and diagnostic difficulties] Bartkowska-Orłowska M. **Klin Oczna** 1988 Apr–May;90(4–5):167–71 (Eng. Abstr.) **(Pol)**

[Errors in the diagnosis of drusen of the optic disk in our experience] Ziobrowski S, et al. **Klin Oczna** 1988 Oct; 90(10):353–4 (Eng. Abstr.) **(Pol)**

ABNORMALITIES

Preserved vision in a case of morning glory syndrome: some pertinent questions. Singh SV, et al. **Acta Ophthalmol (Copenh)** 1988 Oct;66(5):582–4

Morning glory syndrome associated with marked persistent hyperplastic primary vitreous and lens colobomas. Cennamo G, et al. **Br J Ophthalmol** 1989 Aug;73(8):684–6

Autosomal-dominant heredity of optic pits. A report of two families. Veugelen D, et al. **Bull Soc Belge Ophtalmol** 1987; 223 Pt 2:75–81

Situs inversus of the optic disc. Sen SC, et al. **Indian J Ophthalmol** 1988 Jan–Mar;36(1):44–5

Choroidal neovascularization in tilted disc syndrome. Prost

M, et al. **Int Ophthalmol** 1988;12(2):131–5

Optic pit, microphthalmos and orbital cyst. Sherman J, et al. **Ophthalmic Paediatr Genet** 1988 Jul;9(2):131–3

The spectrum of cavitary optic disc anomalies in a family. Slusher MM, et al. **Ophthalmology** 1989 Mar;96(3):342–7

The case of the gray optic disc! Brodsky MC, et al. **Surv Ophthalmol** 1989 Mar–Apr;33(5):367–72 (13 ref.)

[Clinical findings and treatment of optic papillary pit with serous macular detachment] Ye JJ. **Chung Hua Yen Ko Tsa Chih** 1988 Nov;24(6):344–7 (Eng. Abstr.) **(Chi)**

[Genetic optic papilla hollow] Yang CS. **Yen Ko Hsueh Pao** 1987 Dec;3(4):222 (Eng. Abstr.) **(Chi)**

[The morning-glory syndrome with contralateral strabic amblyopia] Bord G, et al. **Bull Soc Ophtalmol Fr** 1988 Mar; 88(3):443–6, 448 (33 ref.) (Eng. Abstr.) **(Fre)**

[A new case of Cohen's syndrome] Moreno-Montañés DJ, et al. **J Fr Ophtalmol** 1988;11(2):197–200 (17 ref.) (Eng. Abstr.) **(Fre)**

[Treatment of a case of retinal detachment in morning glory syndrome] Ridings B, et al. **J Fr Ophtalmol** 1988; 11(11):743–6 (6 ref.) (Eng. Abstr.) **(Fre)**

[Incidence and significance of coloboma of the optic disk] Tost M. **Klin Oczna** 1988 Apr–May;90(4–5):172–4 **(Ger)**

[Long-term observation of the optic disk pit] Adamczewska I, et al. **Klin Oczna** 1988 Aug;90(8):287–8 (Eng. Abstr.) **(Pol)**

ANALYSIS

Structural proteins of the neonatal and adult lamina cribrosa. Morrison JC, et al. **Arch Ophthalmol** 1989 Aug; 107(8):1220–4

ANATOMY & HISTOLOGY

Pseudoglaucomatous physiologic large cups. Jonas JB, et al. **Am J Ophthalmol** 1989 Feb 15;107(2):137–44

Large optic disks in the Marshallese population. Maisel JM, et al. **Am J Ophthalmol** 1989 Feb 15;107(2):145–50

Accuracy of topographic measurements with the Optic Nerve Head Analyzer. Shields MB, et al. **Am J Ophthalmol** 1989 Mar 15;107(3):273–9

Optic disc rim area, pallor, and nerve fiber course [letter] Bengtsson B, et al. **Arch Ophthalmol** 1989 Jan;107(1):18–9

Racial differences in optic nerve head parameters. Chi T, et al. **Arch Ophthalmol** 1989 Jun;107(6):836–9

Variability of the real dimensions of normal human optic discs. Jonas JB, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(4):332–6

Quantitative profile of small vessels over optic nerve head. Azad R, et al. **Indian J Ophthalmol** 1987;35(5–6):445–7

Optic nerve head measurements: the optic nerve head analyzer—its advantages and its limitations. Gramer E, et al. **Int Ophthalmol** 1989 Jan;13(1–2):3–13

Correlations of the neuroretinal rim area with ocular and general parameters in normal eyes. Jonas JB, et al. **Ophthalmic Res** 1988;20(5):298–303

BSPOT: a blind spot data evaluation program for SAPRO examinations. Funkhouser AT, et al. **Ophthalmic Surg** 1988 Aug;19(8):590–601

Neuroretinal rim area in normal eyes: a study on a randomized group of 30 subjects. Bottoni FG, et al. **Ophthalmologica** 1989;198(1):40–5

Clinical histologic correlation of human peripapillary anatomy. Fantes FE, et al. **Ophthalmology** 1989 Jan; 96(1):20–5

Reproducibility of topographic measurements of the optic nerve head with laser tomographic scanning. Kruse FE, et al. **Ophthalmology** 1989 Sep;96(9):1320–4

Reliability of assessing the cup/disc ratio using a 90 D lens photograph. Houston G 4th, et al. **Optom Vis Sci** 1989 Feb;66(2):78–81

[Determination of diameters (vertical, horizontal), areas of optic cup, optic disk and neuroretinal area of normal persons] Chang W, et al. **Yen Ko Hsueh Pao** 1988 Mar; 4(1):11–3, 44 (Eng. Abstr.) **(Chi)**

[The optic papilla. Morphological aspects (seen in 300 angiographies)] Ducasse A, et al. **Bull Soc Ophtalmol Fr** 1988 Mar;88(3):437–41 (Eng. Abstr.) **(Fre)**

[Optic disc measurements in normal subjects by computerized image analysis] Nanba K, et al. **Nippon Ganka Gakkai Zasshi** 1988 Nov;92(11):1889–95 (Eng. Abstr.) **(Jpn)**

BLOOD SUPPLY

Loss of the ocular pulse in the acute phase of temporal arteritis. Bienfang DC. **Acta Ophthalmol Suppl (Copenh)** 1989;191:35–7

The relationship between the fluoroangiographic aspect of the optic disk and the visual field in patients with the exfoliation syndrome with and without intraocular hypertension. Part I: Bilateral cases. Cambiaggi A, et al. **Acta Ophthalmol Suppl (Copenh)** 1988;184:62–5

Fibrovascular proliferation and retinal detachment after intravitreal injection of activated macrophages in the rabbit eye. Hui YN, et al. **Am J Ophthalmol** 1989 Aug 15; 108(2):176–84

Retinal thinning and regression of neovascularization [letter] Campochiaro PA. **Arch Ophthalmol** 1988 Dec; 106(12):1646–7

Intraocular neovascularization and retinal energy metabolism [letter] Wilson DJ. **Arch Ophthalmol** 1989 Jul;107(7):953–4

Sex linked juvenile retinoschisis with optic disc and peripheral retinal neovascularisation. Pearson R, et al. **Br J Ophthalmol** 1989 Apr;73(4):311–3

Prepapillary arterial loop. Report of 2 cases. Huang YQ. **Chin Med J [Engl]** 1988 Jul;101(7):510–2

Characteristics of manifest glaucoma at early stages. Bengtsson B. **Graefes Arch Clin Exp Ophthalmol** 1989; 227(3):241–3

Understanding the dynamic provoked circulatory response of the papilla. Robert Y. **Int Ophthalmol** 1989 Jan; 13(1–2):15–9

Disappearing optociliary shunt vessels and neonatal hydrocephalus. Dowhan TP, et al. **J Clin Neuro Ophthalmol** 1988 Mar;8(1):1–8

Recurrent anterior ischemic optic neuropathy in young adults. Hamed LM, et al. **J Clin Neuro Ophthalmol** 1988 Dec;8(4):239–48

Cilioretinal arteries in large optic disks. Jonas JB, et al. **Ophthalmic Res** 1988;20(5):269–74

Neovascularization of the optic disc associated with obstruction of the central retinal artery. Duker JS, et al. **Ophthalmology** 1989 Jan;96(1):87–91

Regression of disc neovascularization by photocoagulation in the acute retinal necrosis syndrome. Han DP, et al. **Retina** 1988;8(4):244–6

[Microangio-architecture of optic disc] Zhao YN, et al. **Yen Ko Hsueh Pao** 1988 Sep;4(3):150–5, 171 (Eng. Abstr.) **(Chi)**

[Papillo-retino-choroidal hemodynamics during experimental ocular hypertension in normal and glaucomatous subjects] Pizzino A, et al. **Ophtalmologie** 1988 Jul–Sep;2(3):219–20 (Eng. Abstr.) **(Fre)**

[Dynamic study of the optic papilla] Robert YC. **Fortschr Ophthalmol** 1989;86(2):99–101 (7 ref.) (Eng. Abstr.) **(Ger)**

[Parapapillary retinal vessel caliber. II. Caliber reduction in eyes with glaucoma (a papillometric study of 309 eyes with chronic simple glaucoma compared with 264 normal eyes)] Jonas JB, et al. **Klin Monatsbl Augenheilkd** 1988 Jun; 192(6):693–8 (Eng. Abstr.) **(Ger)**

[Therapy of parapapillary subretinal neovascularization] Stur M. **Klin Monatsbl Augenheilkd** 1988 Oct;193(4):407–11 (Eng. Abstr.) **(Ger)**

[Ocular chalcosis in fluorescein angiography] Szymczak J, et al. **Klin Oczna** 1988 Nov;90(11):387–90 (Eng. Abstr.) **(Pol)**

DRUG EFFECTS

Pressure compliance test of the optic nerve head: influence of different antiglaucoma drugs. Pillunat LE, et al. **Surv Ophthalmol** 1989 Apr;33 Suppl:465–6; discussion 471–2

Reversibility by timolol of optic nerve disc cupping and pallor in ocular hypertensives. Schwartz B. **Surv Ophthalmol** 1989 Apr;33 Suppl:419–20; discussion 421–2

[Effect of beta receptor blockers on the pressure tolerance of the optic nerve head] Pillunat LE, et al. **Fortschr Ophthalmol** 1988;85(3):231–4 (Eng. Abstr.) **(Ger)**

[Effect of carteolol and timolol eyedrops on the pressure tolerance of the optic nerve head.] Stodtmeister R, et al. **Ophthalmologica** 1989;198(2):64–77 (Eng. Abstr.) **(Ger)**

INJURIES

The effect of panretinal photocoagulation on optic nerve cupping. Johns KJ, et al. **Ophthalmology** 1989 Feb; 96(2):211–6

PATHOLOGY

Optic disc morphometry in simple optic nerve atrophy. Jonas JB, et al. **Acta Ophthalmol (Copenh)** 1989 Apr;67(2):199–203

Variability and reproducibility of optic disk topographic measurements with the Rodenstock Optic Nerve Head Analyzer. Bishop KI, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):696–702

A new technique for optic disk analysis in patients with glaucoma. Dobrogowski MJ. **Am J Ophthalmol** 1989 Aug 15;108(2):192–3

Reversible optic disk cupping and visual field improvement in adults with glaucoma. Katz LJ, et al. **Am J Ophthalmol** 1989 May 15;107(5):485–92

Optic disk size in ischemic optic neuropathy [see comments] Mansour AM, et al. **Am J Ophthalmol** 1988 Nov 15; 106(5):587–9. **Comment in:** Am J Ophthalmol 1989 Jun 15;107(6):685–6

Optic nerve head drusen and peripapillary central serous chorioretinopathy. Moisseiev J, et al. **Am J Ophthalmol** 1989 Aug 15;108(2):202–3

Optic disk size in ischemic optic neuropathy [letter; comment] Naumann GO, et al. **Am J Ophthalmol** 1989 Jun 15; 107(6):685–6. **Comment on:** Am J Ophthalmol 1988 Nov 15;106(5):587–9

Protracted enlargement of the blind spot in multiple evanescent white dot syndrome. Hamed LM, et al. **Arch Ophthalmol** 1989 Feb;107(2):194–8

The cup-to-disc ratio and central retinal vein occlusion. Strahlman ER, et al. **Arch Ophthalmol** 1989 Apr; 107(4):524–5

Agreement between clinicians and an image analyzer in estimating cup-to-disc ratios. Varma R, et al. **Arch Ophthalmol** 1989 Apr;107(4):526–9

Clinicopathological findings in a growing optic nerve melanocytoma. Mansour AM, et al. **Br J Ophthalmol** 1989 Jun;73(6):410–5

Effect of acute medical reduction of intraocular pressure on the visual field and optic disc in ocular hypertension. Farinelli AC, et al. **Can J Ophthalmol** 1988 Aug;23(5):216–8

Possibly reduced prevalence of peripapillary crescents in ocular hypertension. Kasner O, et al. **Can J Ophthalmol** 1989 Aug;24(5):211–5

Neuroretinal rim area and visual field in glaucoma. Funk J, et al. **Graefes Arch Clin Exp Ophthalmol** 1988; 226(5):431–4

Optic disc morphometry in chronic primary open-angle glaucoma. I. Morphometric intrapapillary characteristics. Jonas JB, et al. **Graefes Arch Clin Exp Ophthalmol** 1988; 226(6):522–30

Optic disc morphometry in chronic primary open-angle glaucoma. II. Correlation of the intrapapillary morphometric data to visual field indices. Jonas JB, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(6):531–8

Optic disk morphometry in high myopia. Jonas JB, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(6):587–90

Acquired peripapillary changes and progression in glaucoma. Rockwood EJ, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(6):510–5

Variability in digital analysis of optic disc topography. Varma R, et al. **Graefes Arch Clin Exp Ophthalmol** 1988; 226(5):435–42

Anterior ischemic optic neuropathy: nonarteritic form in small and giant cell arteritis in normal sized optic discs. Jonas JB, et al. **Int Ophthalmol** 1988;12(2):119–25

Optic disc pallor and visual field defect in exfoliative and non-exfoliative, untreated ocular hypertension. Linnér E, et al. **Int Ophthalmol** 1989 Jan;13(1–2):21–4

Quantitative assessment of the optic nerve head with the laser tomographic scanner. Weinreb RN, et al. **Int Ophthalmol** 1989 Jan;13(1–2):25–9

Parapapillary chorioretinal atrophy in normal and glaucoma eyes. I. Morphometric data. Jonas JB, et al. **Invest Ophthalmol Vis Sci** 1989 May;30(5):908–18

Parapapillary chorioretinal atrophy in normal and glaucoma eyes. II. Correlations. Jonas JB, et al. **Invest Ophthalmol Vis Sci** 1989 May;30(5):919–26

Optic disc cupping: four year follow-up from the WESDR. Klein BE, et al. **Invest Ophthalmol Vis Sci** 1989 Feb; 30(2):310–5

Optic pit versus glaucomatous cupping in a myopic patient. Romano A, et al. **Metab Pediatr Syst Ophthalmol** 1988; 11(4):149–51

Peripapillary crescents and halos in normal-tension glaucoma and ocular hypertension. Buus DR, et al. **Ophthalmology** 1989 Jan;96(1):16–9

Correlation of structure and function in glaucoma. Quantitative measurements of disc and field. Caprioli J, et al. **Ophthalmology** 1988 Jun;95(6):723–7

Nerve fiber layer and optic disc fluorescein defects in glaucoma and ocular hypertension. Nanba K, et al. **Ophthalmology** 1988 Sep;95(9):1227–33

Intraobserver and interobserver agreement in measurement of optic disc characteristics. Tielsch JM, et al. **Ophthalmology** 1988 Mar;95(3):350–6

Ophthalmoscopy in the detection of optic disc and retinal nerve fiber layer changes in early glaucoma. Iwata K. **Surv Ophthalmol** 1989 Apr;33 Suppl:447–8; discussion 449–50

Optic disc changes in early glaucoma. Kitazawa Y, et al. **Surv Ophthalmol** 1989 Apr;33 Suppl:417–8; discussion 421–2

[Effect of ocular hypertension on the optic nerve and the lamina cribrosa in cats] Xu Y. **Chung Hua Yen Ko Tsa Chih** 1988 Sep;24(5):286–8 (Eng. Abstr.) **(Chi)**

[Comparison of manual and computer-assisted analysis of the optic papilla in primary chronic glaucoma] Dannheim F. **Fortschr Ophthalmol** 1988;85(5):445–7 (Eng. Abstr.) **(Ger)**

[Correlation of intra- and para-papillary glaucomatous changes—a planimetric study of 200 normal and 450 glaucoma eyes] Jonas JB, et al. **Fortschr Ophthalmol** 1989; 86(2):95–8 (Eng. Abstr.) **(Ger)**

[Planimetry of glaucomatous, para-papillary, chorio-pigment epithelial retinal atrophy] Jonas JB, et al. **Fortschr Ophthalmol** 1989;86(2):92–4 (Eng. Abstr.) **(Ger)**

[Qualitative morphologic characteristics of normal and glaucomatous optic papillae] Jonas JB, et al. **Klin Monatsbl Augenheilkd** 1988 Nov;193(5):481–8 (Eng. Abstr.) **(Ger)**

[The parapapillary region of normal and glaucoma eyes. I. Planimetric values of 312 glaucoma and 125 normal eyes] Jonas JB, et al. **Klin Monatsbl Augenheilkd** 1988 Jul; 193(1):52–61 (Eng. Abstr.) **(Ger)**

[Parapapillary region in normal and glaucoma eyes. II. Correlation of planimetric findings to intrapapillary, perimetry and general data] Jonas JB, et al. **Klin Monatsbl Augenheilkd** 1988 Aug;193(2):182–8 (Eng. Abstr.) **(Ger)**

[Pitted optic papilla with fluorescein angiography-detected macular edema] Köhler U. **Klin Monatsbl Augenheilkd** 1988 Nov;193(5):506–9 (Eng. Abstr.) **(Ger)**

[Pallor of the optic papilla—an early sign of glaucoma. A clinical controlled study of optic disk pallor and papillar cupping in glaucoma simplex, ocular hypertension and normal eyes with the optic nerve head analyzer] Siebert M, et al. **Klin Monatsbl Augenheilkd** 1989 Jun;194(6):433–6 (Eng. Abstr.) **(Ger)**

[Glial cell changes in the rabbit optic disc in experimental glaucoma] Furuta M, et al. **Nippon Ganka Gakkai Zasshi** 1988 Sep;92(9):1450–5 (Eng. Abstr.) **(Jpn)**

[Correlation of visual field changes and optic disc measurements with computerized videographic image analyzer in glaucoma] Matsubara K, et al. **Nippon Ganka Gakkai Zasshi** 1988 Aug;92(8):1414–8 (Eng. Abstr.) **(Jpn)**

[Contributory factors for glaucomatous disc cupping. 4. Generalized expansion type and localized type] Tetsumoto K, et al. **Nippon Ganka Gakkai Zasshi** 1989 Feb;93(2):174–9 (Eng. Abstr.) **(Jpn)**

[Correlation of changes of the optic nerve disc and the field of vision in initial open-angle glaucoma] Listopadova NA, et al. **Vestn Oftalmol** 1989 Jan–Feb;105(2):3–7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Increase of the short-term fluctuation of the differential light threshold around a physiologic scotoma. Haefliger IO, et al. **Am J Ophthalmol** 1989 Apr 15;107(4):417–20

Fluorescein angiography of the optic nerve head in the elderly. Segato T, et al. **Metab Pediatr Syst Ophthalmol** 1989;12(1–3):43–5 (3 ref.)

PHYSIOPATHOLOGY

The relation between glaucomatous damage and optic nerve head mechanical compliance. Zeimer RC, et al. **Arch Ophthalmol** 1989 Aug;107(8):1232–4

A new management system for glaucoma based on improvement of the appearance of the optic disc or visual field. Spaeth GL. **Fortschr Ophthalmol** 1988;85(6):614–9 (52 ref.)

[Correlation between the neuroretinal rim area of the optic papilla and the visual field in glaucoma] Funk J, et al. **Fortschr Ophthalmol** 1988;85(5):452–5 (Eng. Abstr.) **(Ger)**

ULTRASTRUCTURE

Structure of the vitread face of the monkey optic disc (Macaca mulatta). SEM on frozen resin-cracked optic nerveheads supplemented by TEM and immunohistochemistry. Heegaard S, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(4):377–83

OPTIC LOBE

ANALYSIS

Amino acid sequence of a low molecular weight, high affinity calcium-binding protein from the optic lobe of the squid Loligo pealei. Head JF. **J Biol Chem** 1989 May 5; 264(13):7202–9

Light and electron microscopic immunocytochemistry of neurons in the blowfly optic lobe reacting with antisera to RFamide and FMRFamide. Nässel DR, et al. **Neuroscience** 1988 Oct;27(1):347–62

ANATOMY & HISTOLOGY

Projections of the dorsal and lateral terminal accessory optic nuclei and of the interstitial nucleus of the superior fasciculus (posterior fibers) in the rabbit and rat. Giolli RA, et al. **J Comp Neurol** 1988 Nov 22;277(4):608–20

Anatomical plasticity of synapses in the lamina of the optic lobe of the fly. Kral K, et al. **Philos Trans R Soc Lond [Biol]** 1989 Feb 27; 323(1214):155–83

GROWTH & DEVELOPMENT

Utilization in vivo of glucose carbon in the optic lobes and the cerebellum of the chick during postnatal growth. Lehr PR. **Comp Biochem Physiol [B]** 1979;63(2):267–73

METABOLISM

Effects of light- and dark-rearing on the postnatal development of GABA receptor sites in the chick optic lobe. Ríos H, et al. **Int J Dev Neurosci** 1987;5(4):319–25

Calcium-binding properties of two high affinity calcium-binding proteins from squid optic lobe. Sheldon A, et al. **J Biol Chem** 1988 Oct 5;263(28):14384–9

Acetylcholine in the crayfish optic lobe: concentration profile and cellular localization. Wang-Bennett LT, et al. **J Neurosci** 1989 Jun;9(6):1864–71

PHYSIOLOGY

Cholinergic synapses and the organization of contrast detection in the crayfish optic lobe. Pfeiffer C, et al. **J Neurosci** 1989 Jun;9(6):1872–82

OPTIC NERVE

Familial cavernous angiomas manifesting with an acute chiasmal syndrome. Corboy JR, et al. **Am J Ophthalmol** 1989 Sep 15;108(3):245–50

Compressive optic neuropathy secondary to chronic sinusitis. Simpson DE, et al. **Am J Optom Physiol Opt** 1988 Sep; 65(9):757–62

Orbital optic nerve glioma in adult life. Wulc AE, et al. **Arch Ophthalmol** 1989 Jul;107(7):1013–6

Optic nerve sheath meningioma [letter] Kupersmith MJ, et al. **J Neurosurg** 1989 Aug;71(2):305

The anatomy and physiology of the optic nerve: historical notes. Moro F, et al. **Metab Pediatr Syst Ophthalmol** 1989; 12(1–3):7–12

Transethmoidal decompression of the optic nerve in the case of craniocerebral trauma. Kolenda H, et al. **Neurosurg Rev** 1988;11(1):39–43

Dysthyroid optic neuropathy without extraocular muscle involvement. Anderson RL, et al. **Ophthalmic Surg** 1989 Aug;20(8):568–74

[Respective contributions of x-ray computed tomography and MRI in the diagnosis of meningioma of the optic nerve] Catros A, et al. **Bull Soc Ophtalmol Fr** 1988 Nov; 88(11):1321–2 **(Fre)**

[Compressive optic neuropathy and dysthyroidal ophthalmopathy. Therapeutic approach] Pelosse B, et al. **Bull Soc Ophtalmol Fr** 1988 Feb;88(2):201–3, 206 **(Fre)**

ABNORMALITIES

Optic nerves in cyclopic and synophthalmic embryos of Gallus domesticus. de Jager L. **Acta Anat (Basel)** 1988; 133(4):313–7

Preserved vision in a case of morning glory syndrome: some pertinent questions. Singh SV, et al. **Acta Ophthalmol (Copenh)** 1988 Oct;66(5):582–4

Response to growth hormone-releasing hormone as evidence of hypothalamic defect in optic nerve hypoplasia. Leaf AA, et al. **Acta Paediatr Scand** 1989 May;78(3):436–9

Puberty in the syndrome of septo-optic dysplasia. Hanna CE, et al. **Am J Dis Child** 1989 Feb;143(2):186–9

Porencephaly and optic hypoplasia in neonatal isoimmune thrombocytopenia. Davidson JE, et al. **Arch Dis Child** 1989 Jun;64(6):858–60

Paradoxic pupillary phenomena. A review of patients with pupillary constriction to darkness. Frank JW, et al. **Arch Ophthalmol** 1988 Nov;106(11):1564–6

Superior segmental optic hypoplasia. A sign of maternal diabetes. Kim RY, et al. **Arch Ophthalmol** 1989 Sep; 107(9):1312–5

Simple photogrammetric diagnosis of optic nerve hypoplasia. Romano PE. **Arch Ophthalmol** 1989 Jun;107(6):824–6

Visual pathway abnormalities in albinism and infantile nystagmus: VECPs and stereoacuity measurements. Guo SQ, et al. **J Pediatr Ophthalmol Strabismus** 1989 Mar–Apr; 26(2):97–104

Correlation of afferent pupillary defect with visual field loss on automated perimetry [see comments] Johnson LN, et al. **Ophthalmology** 1988 Dec;95(12):1649–55 (18 ref.). **Comment in:** Ophthalmology 1989 Apr;96(4):570–1

Treatment of sensory retinal detachment associated with optic nerve pit or coloboma. Schatz H, et al. **Ophthalmology** 1988 Feb;95(2):178–86

Septo-optic dysplasia with infantile spasms. Kuriyama M, et al. **Pediatr Neurol** 1988 Jan–Feb;4(1):62–5

[Koyanagi's retrolaminar angiomatous cavern formation in the optic nerve ("angiomatous optic nerve malformation"). Review of the literature and suspected pathogenesis] Stefani FH, et al. **Fortschr Ophthalmol** 1988;85(4):416–9 (17 ref.) (Eng. Abstr.) **(Ger)**

ANALYSIS

The extracellular matrix of the human optic nerve. Goldbaum MH, et al. **Arch Ophthalmol** 1989 Aug;107(8):1225–31

Ultrastructural location of extracellular matrix components in the optic nerve head. Morrison JC, et al. **Arch Ophthalmol** 1989 Jan;107(1):123–9

Axonal transport reductions in acute experimental allergic encephalomyelitis: qualitative analysis of the optic nerve. Guy J, et al. **Curr Eye Res** 1989 Mar;8(3):261–9

Orientation of proteolipid protein in myelin: comparison of models with X-ray diffraction measurements. Inouye H, et al. **Dev Neurosci** 1989;11(2):81–9

A biochemical study of optic nerve myelin isolated by a micromethod from different aged rats. Jacks AS, et al. **Exp Gerontol** 1989;24(3):219–25

Echographic correlation of optic nerve sheath size and cerebrospinal fluid pressure. Galetta S, et al. **J Clin Neuro Ophthalmol** 1989 Jun;9(2):79–82

[Biochemical and immunocytochemical study of the axonal domain of mature and immature microtubules] Binet S, et al. **Rev Neurol (Paris)** 1988;144(11):688–96 (Eng. Abstr.) **(Fre)**

ANATOMY & HISTOLOGY

Distribution of retinal ganglion cells projecting into the nucleus of the optic tract in rat. Urushibata T, et al. **Adv Otorhinolaryngol** 1988;41:95–7

Fat-suppression MR imaging of the orbit. Simon J, et al. **AJNR** 1988 Sep;9(5):961–8

Projections of the olfactory bulb and nervus terminalis in the silver lamprey. Northcutt RG, et al. **Brain Behav Evol** 1988;32(2):96–107

Retinal projection to mammalian telencephalon. Cooper HM, et al. **Brain Res** 1989 Jan 16;477(1–2):350–7

Normal and regenerating optic fibers in goldfish tectum: HRP-EM evidence for rapid synaptogenesis and optic fiber-fiber affinity. Hayes WP, et al. **J Comp Neurol** 1988 Aug 22;274(4):516–38

Optic synapse number but not density is constrained during regeneration onto surgically halved tectum in goldfish: HRP-EM evidence that optic fibers compete for fixed numbers of postsynaptic sites on the tectum. Hayes WP, et al. **J Comp Neurol** 1988 Aug 22;274(4):539–59

Anatomy of the optic nerve in elderly men. Munari PF, et al. **Metab Pediatr Syst Ophthalmol** 1989;12(1–3):13–6

Neuroretinal rim area in normal eyes: a study on a randomized group of 30 subjects. Bottoni FG, et al. **Ophthalmologica** 1989;198(1):40–5

The normal human optic nerve. Axon count and axon diameter distribution. Mikelberg FS, et al. **Ophthalmology** 1989 Sep;96(9):1325–8

The effect of age on normal human optic nerve fiber number and diameter. Repka MX, et al. **Ophthalmology** 1989 Jan; 96(1):26–32

[Comparative evaluation of morphometric and intravital measurements of the intraorbital portion of the optic nerve and of the distance from the posterior pole of the eyeball to the common tendinous ring] Shengeliia DG, et al. **Oftalmol Zh** 1989;(2):112–3 (Eng. Abstr.) **(Rus)**

[Age-related morphometry of the intraorbital part of the optic nerve and the distance from the point of its emergence from the eye to the tendinous annulus] Shengelia DG, et al. **Vestn Oftalmol** 1989 Jan–Feb;105(1):47–8 **(Rus)**

BLOOD SUPPLY

Progressive and recurrent nonarteritic anterior ischemic optic neuropathy. Borchert M, et al. **Am J Ophthalmol** 1988 Oct 15;106(4):443–9

Optic disk size in ischemic optic neuropathy [see comments] Mansour AM, et al. **Am J Ophthalmol** 1988 Nov 15; 106(5):587–9. **Comment in:** Am J Ophthalmol 1989 Jun 15;107(6):685–6

Scanning electron microscopy of corrosion casts of the optic nerve microcirculation in dogs. Brooks DE, et al. **Am J Vet Res** 1989 Jun;50(6):908–14

Ultrastructural changes in laminar optic nerve capillaries of beagles with primary open-angle glaucoma. Brooks DE, et al. **Am J Vet Res** 1989 Jun;50(6):929–35

Anterior ischemic optic neuropathy in Buerger's disease. Coppeto JR, et al. **Ann Ophthalmol** 1988 Sep;20(9):332–4

Anterior ischemic optic neuropathy—recurrent attacks in one eye in a bilateral case. Kao LY, et al. **Ann Ophthalmol** 1989 Feb;21(2):71–4 (6 ref.)

Studies of endothelial mitochondrial density in degenerating rat optic nerve. Schmidley JW. **Brain Res** 1989 Feb 27; 481(1):154–6

Measurement of optic nerve blood flow with iodoantipyrine: limitations caused by diffusion from the choroid. Caprioli J, et al. **Exp Eye Res** 1988 Oct;47(4):641–52

Pseudo-pseudo-Foster Kennedy syndrome. Gelwan MJ, et al. **J Clin Neuro Ophthalmol** 1988 Mar;8(1):49–52

Posterior ischemic optic neuropathy due to Aspergillus fumigatus. Weinstein JM, et al. **J Clin Neuro Ophthalmol** 1989 Mar;9(1):7–13

Anterior ischemic optic neuropathy and aging. Moro F, et al. **Metab Pediatr Syst Ophthalmol** 1989;12(1–3):46–57

Optic nerve microangioarchitecture in the aging eye. Stringa M. **Metab Pediatr Syst Ophthalmol** 1989;12(1–3):83–4

Electrophysiological findings in anterior ischemic optic neuropathy. Tormene AP, et al. **Metab Pediatr Syst Ophthalmol** 1989;12(1–3):76–9

[The blood flow in post-laminar optic nerve in monkeys was dependent on intraocular pressure level] Nitta A, et al. **Nippon Ganka Gakkai Zasshi** 1989 Feb;93(2):206–14 (Eng. Abstr.) **(Jpn)**

[Arteriosclerotic ischemic optic neuropathy. Current findings in the diagnosis and etiopathogenesis of the disease] Mureşeanu DC. **Rev Chir [Oftalmol]** 1989 Jan–Mar; 33(1):33–40 (Eng. Abstr.) **(Rum)**

[Acute post-hemorrhagic ischemic optic neuropathy with bilateral blindness] Urgün C. **Rev Chir [Oftalmol]** 1988 Jul–Sep;32(3):221–4 (Eng. Abstr.) **(Rum)**

[Outpatient care of patients with a history of acute vascular optic neuropathies] Antonova AI. **Oftalmol Zh** 1988; (6):374–6 **(Rus)**

[Visual evoked potentials in the differential diagnosis of vascular and demyelinating disorders of the optic nerve] Pokrovskaia ZA, et al. **Zh Nevropatol Psikhiatr** 1989; 89(1):12–5 (Eng. Abstr.) **(Rus)**

CYTOLOGY

The macroglial cells of the rat optic nerve. Miller RH, et al. **Annu Rev Neurosci** 1989;12:517–34 (98 ref.)

Enlargement of uncrossed retinal projections in the albino rat: additive effects of neonatal eye removal and thalamectomy. Chan SO, et al. **Brain Res** 1988 Sep 27; 461(1):163–8

De novo formation of axon-like processes from axotomized retinal ganglion cells which exhibit long distance growth in a peripheral nerve graft in adult hamsters. Cho EY, et al. **Brain Res** 1989 Apr 10;484(1–2):371–7

Anterograde labelling from the optic nerve reveals multiple central targets in teleost, Lethrinus chrysostomus (Perciformes). Collin SP. **Cell Tissue Res** 1989;

256(2):327–35
Differentiation of neuron-like cells in cultured rat optic nerves: a neuron or common neuron-glia progenitor? Omlin FX, et al. **Dev Biol** 1989 May;133(1):247–53
Ion channel expression by white matter glia: I. Type 2 astrocytes and oligodendrocytes. Barres BA, et al. **GLIA** 1988;1(1):10–30
Experimental modifications of postnatal differentiation and fate of glial cells related to axo-glial relationships. Valat J, et al. **Int J Dev Neurosci** 1988;6(3):245–60
Topographic analysis of the retinal ganglion cell layer and optic nerve in the sandlance Limnichthyes fasciatus (Creediae, Perciformes). Collin SP, et al. **J Comp Neurol** 1988 Dec 8;278(2):226–41
Retinal ganglion cell topography in teleosts: a comparison between Nissl-stained material and retrograde labelling from the optic nerve. Collin SP, et al. **J Comp Neurol** 1988 Oct 15;276(3):412–22
Prevention of optic nerve regeneration in the frog Hyla moorei transiently delays the death of some ganglion cells. Humphrey MF, et al. **J Comp Neurol** 1989 Jan 8; 279(2):187–98
Organization of astrocytes in the visual pathways of the goldfish: an immunohistochemical study. Levine RL. **J Comp Neurol** 1989 Jul 8;285(2):231–45
Origin of retinal astrocytes in the rat: evidence of migration from the optic nerve. Ling TL, et al. **J Comp Neurol** 1989 Aug 15;286(3):345–52
Retinogeniculate projection fibers in the monkey optic nerve: a demonstration of the fiber pathways by retrograde axonal transport of WGA-HRP. Naito J. **J Comp Neurol** 1989 Jun 8;284(2):174–86
Growth and differentiation properties of O-2A progenitors purified from rat cerebral hemispheres. Behar T, et al. **J Neurosci Res** 1988 Oct-Dec;21(2–4):168–80
Voltage gated ionic channels in rat cultured astrocytes, reactive astrocytes and an astrocyte-oligodendrocyte progenitor cell. Bevan S, et al. **J Physiol (Paris)** 1987; 82(4):327–35
Axon diameter distributions across the monkey's optic nerve. Reese BE, et al. **Neuroscience** 1988 Oct;27(1):205–14
Long-term tissue cultures: a tool to study functional aspects of CN glia. Omlin FX. **Schweiz Arch Neurol Psychiatr** 1989; 140(1):33–7
Glial cell diversification in the rat optic nerve. Raff MC. **Science** 1989 Mar 17;243(4897):1450–5 (52 ref.)
New roles for PDGF and CNTF in controlling the timing of glial cell differentiation in the optic nerve. Anderson DJ. **Trends Neurosci** 1989 Mar;12(3):83–5 (20 ref.)

DRUG EFFECTS

PDGF A chain homodimers drive proliferation of bipotential (O-2A) glial progenitor cells in the developing rat optic nerve. Pringle N, et al. **EMBO J** 1989 Apr;8(4):1049–56
Effects of barium and bicarbonate on glial cells of Necturus optic nerve. Studies with microelectrodes and voltage-sensitive dyes. Astion ML, et al. **J Gen Physiol** 1989 Apr;93(4):731–44
Batrachotoxin-modified sodium channels from squid optic nerve in planar bilayers. Ion conduction and gating properties. Behrens MI, et al. **J Gen Physiol** 1989 Jan; 93(1):23–41
Effects of chronic developmental lead exposure on monkey neuroanatomy: visual system. Reuhl KR, et al. **Toxicol Appl Pharmacol** 1989 Jul;99(3):501–9
[The effect of liquid silicone on the function of the optic nerve] Kellner U, et al. **Fortschr Ophthalmol** 1988; 85(5):562–4 (Eng. Abstr.) **(Ger)**
[Morphological and immunohistochemical studies on degenerative changes of the retina and the optic nerve in neonatal rats injected with monosodium-L-glutamate] Azuma N, et al. **Nippon Ganka Gakkai Zasshi** 1989 Jan; 93(1):72–9 (Eng. Abstr.) **(Jpn)**

EMBRYOLOGY

Fluorescent granular perithelial cells in the meninges and optic nerve of the human embryo. Sturrock RR. **Anat Anz** 1988;166(1–5):323–9
Combined effects of deafferentation and de-efferentation on isthmo-optic neurons during the period of their naturally occurring cell death. Clarke PG, et al. **Anat Embryol (Berl)** 1988;179(2):103–8
Developmental changes in phosphorylation state of neurofilament proteins in the chick embryonic optic nerve. Go MJ, et al. **Dev Biol** 1989 Jul;134(1):85–102
Is astrocyte laminin involved in axon guidance in the mammalian CNS? Liesi P, et al. **Dev Biol** 1988 Dec; 130(2):774–85
A study in developing visual systems with a new method of staining neurones and their processes in fixed tissue. Godement P, et al. **Development** 1987 Dec;101(4):697–713
An electron microscopic study of macrophages in the meninges of the human embryonic optic nerve. Sturrock RR. **J Anat** 1988 Apr;157:145–51
A quantitative histological study of cell division and changes in cell number in the meningeal sheath of the embryonic human optic nerve. Sturrock RR. **J Anat** 1987 Dec; 155:133–40

ENZYMOLOGY

Sphingomyelinase activity in the bovine and human eyes. Noda S, et al. **Ophthalmic Res** 1989;21(3):200–5
Lysosomal enzyme activities in ocular tissues and adnexa of rabbits. Yamaguchi K, et al. **Ophthalmic Res** 1989; 21(3):187–90

GROWTH & DEVELOPMENT

Functional development of the visual system in normal and protein-deprived rats. VIII. Post-natal development of optic nerve axons. Conradi NG, et al. **Acta Physiol Scand** 1989 Aug;136(4):597–603
Development of the optic nerve of the opossum (Didelphis virginiana). Kirby MA, et al. **Brain Res Dev Brain Res** 1988 Nov 1;44(1):37–48
The development of astrocytes in the cat retina: evidence of migration from the optic nerve. Ling TL, et al. **Brain Res Dev Brain Res** 1988 Nov 1;44(1):73–85
Effects of limited postnatal ethanol exposure on the development of myelin and nerve fibers in rat optic nerve. Phillips DE. **Exp Neurol** 1989 Jan;103(1):90–100
Regeneration of axons from the adult rat optic nerve: influence of fetal brain grafts, laminin, and artificial basement membrane. Hausmann B, et al. **J Comp Neurol** 1989 Mar 15;281(3):447–66
Membrane proteins of the nerve growth cone and their developmental regulation. Simkowitz P, et al. **J Neurosci** 1989 Mar;9(3):1004–17
[Stages in the postnatal maturation of the optic nerve: morphometric changes during the critical period] Cuenca Navarro N, et al. **Arch Neurobiol (Madr)** 1989 Jan-Feb; 52(1):1–8 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Evidence for a T-cell related factor as the cause of demyelination in mice following Semliki Forest virus infection. Jenkins HG, et al. **Brain Res** 1988 Aug 30; 459(1):145–7
Degeneration of optic axons induces the expression of major histocompatibility antigens. Rao K, et al. **Brain Res** 1989 May 29;488(1–2):332–5
Monoclonal antibody RG1 against rat Müller cells recognizes optic nerve and cerebral cortex glia in culture. Mori T, et al. **Jpn J Ophthalmol** 1988;32(4):365–74
The presence of serotonin-immunoreactive nerve fibers in the optic nerve of the mouse. Mikkelsen JD. **Neurosci Lett** 1988 Dec 5;94(3):253–8

INJURIES

Partial evulsion of the optic nerve. Delaney WV Jr, et al. **Ann Ophthalmol** 1988 Oct;20(10):371–2
Optic nerve enlargement and central retinal-artery occlusion secondary to retrobulbar anesthesia. Hersch M, et al. **Ann Ophthalmol** 1989 May;21(5):195–7
Indirect optic nerve trauma. Lessell S. **Arch Ophthalmol** 1989 Mar;107(3):382–6
Partial purification and characterization of a neurite-promoting factor from the injured goldfish optic nerve. Caday CG, et al. **Brain Res Mol Brain Res** 1989 Jan;5(1):45–50
Imaging techniques in optic nerve evulsion. Kline LB, et al. **J Clin Neuro Ophthalmol** 1988 Dec;8(4):281–2
Evidence of orbital deformation in indirect optic nerve injury. Weight lifter's optic neuropathy. Purvin V. **J Clin Neuro Ophthalmol** 1988 Mar;8(1):9–11
Axonal injury in the optic nerve: a model simulating diffuse axonal injury in the brain. Gennarelli TA, et al. **J Neurosurg** 1989 Aug;71(2):244–53
The conditioning effect of optic nerve injury upon axonal regrowth from adult rat retinal ganglion cells explanted in vitro. Johnson AR, et al. **Neurosci Lett** 1989 Feb 13; 97(1–2):63–8
Optic tract injury after anterior temporal lobectomy. Anderson DR, et al. **Ophthalmology** 1989 Jul;96(7):1065–70
Predictive value of visual evoked potentials in unilateral optic nerve injury. Mahapatra AK, et al. **Surg Neurol** 1989 May; 31(5):339–42
[A foreign body of the nasal cavity and both ethmoid labyrinths with injury of the eyeball and optic nerves] Pogosian MG. **Vestn Otorinolaringol** 1988 Sep-Oct;(5):73–4 **(Rus)**

METABOLISM

Spatial and temporal expression of phosphorylated and non-phosphorylated forms of neurofilament proteins in the developing nervous system of Xenopus laevis. Szaro BG, et al. **Brain Res Dev Brain Res** 1989 Jul 1;48(1):87–103
Effect of acclimation and fixation temperatures on the number of lamellae and periodicity of myelin in fibres of the optic nerve of goldfish. Matheson DF, et al. **Exp Brain Res** 1988;72(1):63–70
Standardized intravitreal injections: evaluation of the effect of anesthesia on rapid axonal transport in the optic nerve. Orcutt JC, et al. **Exp Eye Res** 1988 Oct;47(4):621–8
Oxygen-induced retinopathy in newborn rats: orthograde axonal transport changes in optic pathways. Ricci B, et al. **Exp Eye Res** 1988 Oct;47(4):579–86
Oligodendrocytes but not astrocytes express apolipoprotein E after injury of rat optic nerve. Stoll G, et al. **GLIA** 1989; 2(3):170–6
Riboflavin metabolism in the optic nerve of albino rabbit. Hirano H, et al. **Int J Vitam Nutr Res** 1988;58(4):470
In vivo phosphorylation of distinct domains of the 70-kilodalton neurofilament subunit involves different protein kinases [published erratum appears in J Biol Chem 1989 Mar 5;264(7):4264] Sihag RK, et al. **J Biol Chem** 1989 Jan 5;264(1):457–64
Immunohistological localization of the adhesion molecules L1, N-CAM, and MAG in the developing and adult optic nerve of mice. Bartsch U, et al. **J Comp Neurol** 1989 Jun 15;284(3):451–62
Sulfation of rat apolipoprotein E. Gebicke-Haerter PJ, et al. **J Neurochem** 1989 Sep;53(3):912–6
Relationship between phosphorylation and synthesis of goldfish optic nerve proteins during regeneration. Larrivee DC, et al. **J Neurosci** 1989 Feb;9(2):574–81
Conditioned media of regenerating fish optic nerves modulate laminin levels in glial cells. Cohen A, et al. **J Neurosci Res** 1989 Mar;22(3):269–73
Axonal transport of a clathrin uncoating ATPase (HSC70): a role for HSC70 in the modulation of coated vesicle assembly in vivo. de Waegh S, et al. **J Neurosci Res** 1989 Aug;23(4):433–40
Insights on retina and optic nerve metabolism during rat aging. Alberghina M, et al. **Metab Pediatr Syst Ophthalmol** 1989;12(1–3):17–20 (28 ref.)
Aging related changes of neurotransmitters in the visual system. Drago F, et al. **Metab Pediatr Syst Ophthalmol** 1989;12(1–3):21–3 (18 ref.)
Sorbitol metabolism in the retina, optic nerve, and sural nerve of diabetic rats treated with an aldose reductase inhibitor. Naeser P, et al. **Metabolism** 1988 Dec;37(12):1143–5
Age-related changes of RNA and lipid synthesis in vitro by retina and optic nerve of the rat. Alberghina M, et al. **Neurochem Pathol** 1988 Apr;8(2):131–48

PATHOLOGY

Observations concerning the course of glaucoma. Sonnsjö B, et al. **Acta Ophthalmol (Copenh)** 1989 Jun;67(3):261–4
Chemical shift selective magnetic resonance imaging of the optic nerve in patients with acute optic neuritis. Larsson HB, et al. **Acta Radiol** 1988 Nov-Dec;29(6):629–32
Herniation of the suprasellar visual system and third ventricle into empty sellae: morphologic and clinical considerations. Kaufman B, et al. **AJR** 1989 Mar;152(3):597–608
Magnetic resonance imaging of retrobulbar changes in optic nerve position with eye movement. Smiddy WE, et al. **Am J Ophthalmol** 1989 Jan 15;107(1):82–3
Imaging of the optic nerve with standardised echography. Atta HR. **Eye** 1988;2 (Pt 4):358–66
Effect of ageing on the nerve fibre population of rat optic nerve. Ricci A, et al. **Gerontology** 1988;34(5–6):231–5
Pattern-evoked potentials and optic nerve fiber loss in monocular laser-induced glaucoma. Johnson MA, et al. **Invest Ophthalmol Vis Sci** 1989 May;30(5):897–907
Bilateral colobomas in a horse. Schuh JC. **J Comp Pathol** 1989 Apr;100(3):331–5
Cell kinetics and cell death in the optic nerve of the myelin deficient rat. Jackson KF, et al. **J Neurocytol** 1988 Oct; 17(5):657–70
6-Aminonicotinamide selectively causes necrosis in reactive astroglia cells in vivo. Preliminary morphological observations. Politis MJ. **J Neurol Sci** 1989 Aug;92(1):71–9
The pathology of optic nerve aging. Giarelli L, et al. **Metab Pediatr Syst Ophthalmol** 1989;12(1–3):61–3
Effect of perinatal monosodium glutamate administration on visual evoked potentials of juvenile and adult rats. Rigdon GC, et al. **Neurotoxicol Teratol** 1989 Mar-Apr;11(2):121–8
Measurement of relative nerve fiber layer surface height in glaucoma. Caprioli J, et al. **Ophthalmology** 1989 May; 96(5):633–39; discussion 639–41
Frozen section of the optic nerve in retinoblastoma surgery. Karcioglu ZA, et al. **Ophthalmology** 1988 May;95(5):674–6
Chronic human glaucoma causing selectively greater loss of large optic nerve fibers. Quigley HA, et al. **Ophthalmology** 1988 Mar;95(3):357–63
Photogrammetric measurement of nerve fiber layer thickness. Takamoto T, et al. **Ophthalmology** 1989 Sep;96(9):1315–9
Septo-optic-dysplasia-schizencephaly. Radiographic and clinical features. Kuban KC, et al. **Pediatr Radiol** 1989; 19(3):145–50
Septo-optic dysplasia: MR imaging. Barkovich AJ, et al. **Radiology** 1989 Apr;171(1):189–92
Correlation of visual function with optic nerve and nerve fiber layer structure in glaucoma. Caprioli J. **Surv Ophthalmol** 1989 Feb;33 Suppl:319–30 (78 ref.)
[Effect of ocular hypertension on the optic nerve and the lamina cribrosa in cats] Xu Y. **Chung Hua Yen Ko Tsa Chih** 1988 Sep;24(5):286–8 (Eng. Abstr.) **(Chi)**
[Correlation between optic nerve and visual field changes among ocular hypertensives and glaucoma suspects] Yamamoto T, et al. **Nippon Ganka Gakkai Zasshi** 1988 Aug; 92(8):1369–74 (Eng. Abstr.) **(Jpn)**
[Bilateral carotid artery ligation in rat serial pathology of the optic nerve] Takamatsu J. **No To Shinkei** 1988 Aug; 40(8):739–46 (Eng. Abstr.) **(Jpn)**
[Morphological study of the connective tissue framework of the optic nerve in open-angle glaucoma and vascular pathology] Panormova NV. **Vestn Oftalmol** 1988 Jul-Aug; 104(4):14–8 (Eng. Abstr.) **(Rus)**
[Compression of structures in the visual pathway by arteries of the circle of Willis in suprasellar tumors] Steňo J. **Cesk Neurol Neurochir** 1989 Mar;52(2):143–7 (Eng. Abstr.)

(Slo)

PHYSIOLOGY

Optic nerve sectioning does not affect the development of the retina. Yew DT, et al. **Acta Anat (Basel)** 1989; 134(1):54–6

Effects of pretectal lesions in monkeys on two components of optokinetic nystagmus. Ikarashi T, et al. **Adv Otorhinolaryngol** 1988;41:98–103

Na+–Ca2+ exchange in squid optic nerve membrane vesicles is activated by internal calcium. Condrescu M, et al. **Biochim Biophys Acta** 1988 Dec 22;946(2):289–98

Aberrant growth of regenerating retinotectal axons subsequent to optic tract ablation in goldfish. Airhart MJ, et al. **Brain Res** 1988 Sep 20;460(2):383–8

Responses of the suprachiasmatic nucleus to retinohypothalamic tract volleys in a slice preparation of the mouse hypothalamus. Cahill GM, et al. **Brain Res** 1989 Feb 6;479(1):65–75

Effects of excitatory amino acid receptor antagonists and agonists on suprachiasmatic nucleus responses to retinohypothalamic tract volleys. Cahill GM, et al. **Brain Res** 1989 Feb 6;479(1):76–82

Enhanced axonal transport of glycosaminoglycans in regenerating goldfish optic nerve. Coughlin C, et al. **Brain Res** 1989 Jul 31;493(2):326–30

Differential turnover of tubulin and neurofilament proteins in central nervous system neuron terminals. Garner JA. **Brain Res** 1988 Aug 23;458(2):309–18

A preliminary description of the regeneration of optic nerve fibers in a reptile, Vipera aspis. Rio JP, et al. **Brain Res** 1989 Feb 6;479(1):151–6

Divergent axon collaterals in the regenerating goldfish optic tract: a fluorescence double-label study. Becker DL, et al. **Development** 1988 Oct;104(2):317–20

Retinotopic refinement of the regenerating goldfish optic tract is not linked to activity-dependent refinement of the retinotectal map. Cook JE, et al. **Development** 1988 Oct; 104(2):321–9

Orientation bias of cat retinal ganglion cells: a reassessment. Ahmed B. **Exp Brain Res** 1989;76(1):182–6

Neuropeptides and the ocular innervation. Stone RA, et al. **Experientia Suppl** 1989;56:266–91 (155 ref.)

Optical recording of electrical activity from axons and glia of frog optic nerve: potentiometric dye responses and morphometrics. Konnerth A, et al. **GLIA** 1988;1(3):225–32

Spatial distribution of glutamate, taurine and GABA in teleosts and mammals retina: in vivo and in vitro study. Lima L, et al. **Int J Dev Neurosci** 1989;7(3):295–300

Development of axonal–oligodendroglial relationships and junctions during myelination of the optic nerve. Wiggins RC, et al. **Int J Dev Neurosci** 1988;6(3):233–43

Regenerated optic fibers in goldfish reestablish a crude sectoral order in the visual pathway. Bernhardt R, et al. **J Comp Neurol** 1988 Nov 15;277(3):403–19

Axonal pathfinding during the regeneration of the goldfish optic pathway. Bernhardt R. **J Comp Neurol** 1989 Jun 1; 284(1):119–34

Fetal brain grafts rescue adult retinal ganglion cells from axotomy-induced cell death. Sievers J, et al. **J Comp Neurol** 1989 Mar 15;281(3):467–78

Light microscopic study of degenerating cobalt-filled optic axons in goldfish: role of microglia and radial glia in debris removal. Springer AD, et al. **J Comp Neurol** 1989 Apr 1;282(1):119–32

Calcium channels mediate phase shifts of the Bulla circadian pacemaker. Khalsa SB, et al. **J Comp Physiol [A]** 1988 Dec; 164(2):195–206

Optic nerve regeneration in adult fish and apolipoprotein A-I. Harel A, et al. **J Neurochem** 1989 Apr;52(4):1218–28

Defective myelination in the optic nerve of the Browman-Wyse (BW) mutant rat. Berry M, et al. **J Neurocytol** 1989 Apr;18(2):141–59

Laminin and heparan sulphate proteoglycan in the lesioned adult mammalian central nervous system and their possible relationship to axonal sprouting. Giftochristos N, et al. **J Neurocytol** 1988 Jun;17(3):385–97

A morphometric study of the retinal ganglion cell response to optic nerve severance in the frog Rana pipiens. Humphrey MF. **J Neurocytol** 1988 Jun;17(3):293–304

Convergence of retinal W-cell and corticotectal input to cells of the cat superior colliculus. Berson DM. **J Neurophysiol** 1988 Dec;60(6):1861–73

Morphology of retinogeniculate X and Y axon arbors in cats raised with binocular lid suture. Raczkowski D, et al. **J Neurophysiol** 1988 Dec;60(6):2152–67

Effect of NGF on the survival of rat retinal ganglion cells following optic nerve section. Carmignoto G, et al. **J Neurosci** 1989 Apr;9(4):1263–72

Normal numbers of retinotectal synapses during the activity-sensitive period of optic regeneration in goldfish: HRP-EM evidence implicating synapse rearrangement and collateral elimination during map refinement. Hayes WP, et al. **J Neurosci** 1989 Apr;9(4):1400–13

Impulse blockade by intraocular tetrodotoxin during optic regeneration in goldfish: HRP-EM evidence that the formation of normal numbers of optic synapses and the elimination of exuberant optic fibers is activity independent. Hayes WP, et al. **J Neurosci** 1989 Apr;9(4):1414–23

Macrophage function during Wallerian degeneration of rat optic nerve: clearance of degenerating myelin and Ia expression. Stoll G, et al. **J Neurosci** 1989 Jul;9(7):2327–35

Regeneration in the rat optic nerve after cold injury. Murakami M, et al. **J Neurosurg** 1989 Aug;71(2):254–65

Mammalian optic nerve regeneration following the application of electric fields. Politis MJ, et al. **J Trauma** 1988 Nov;28(11):1548–52

The optic nerve. Optic Nerve Study Group, second meeting. Padua, March 13–14, 1987. **Metab Pediatr Syst Ophthalmol** 1989;12(1–3):1–87

Optic nerve regeneration--new aspects. Solomon A, et al. **Metab Pediatr Syst Ophthalmol** 1988;11(1–2):31–2

Electrophysiology in optic nerve development. Steindler P, et al. **Metab Pediatr Syst Ophthalmol** 1989;12(1–3):34–6 (14 ref.)

Perimetric aspects of optic nerve aging. Zingirian M. **Metab Pediatr Syst Ophthalmol** 1989;12(1–3):32–3 (5 ref.)

Voltage-gated currents recorded from the surface of the frog optic nerve. Ortiz S, et al. **P R Health Sci J** 1988 Aug; 7(2):141–3

Exogenous laminin induces regenerative changes in traumatized sciatic and optic nerve. Politis MJ. **Plast Reconstr Surg** 1989 Feb;83(2):228–35

Substance P receptor binding sites are expressed by glia in vivo after neuronal injury. Mantyh PW, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5193–7

Low density of sodium channels supports action potential conduction in axons of neonatal rat optic nerve. Waxman SG, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1406–10

The use of a semi-permeable tube as a guidance channel for a transected rabbit optic nerve. Aebischer P, et al. **Prog Brain Res** 1988;78:599–603

Retinal ganglion cell death is not prevented by application of tetrodotoxin during optic nerve regeneration in the frog Hyla moorei. Sheard PW, et al. **Vision Res** 1988; 28(4):461–70

[The effect of central and peripheral neuroglia on the regeneration of the optic nerve] Thanos S, et al. **Fortschr Ophthalmol** 1989;86(2):172–5 (Eng. Abstr.) (Ger)

[The effects of optic nerve stimulation on nucleus reticularis tegmenti pontis cells which project to the posterior cerebellar vermis in the cat] Yo T. **Nippon Ganka Gakkai Zasshi** 1988 Dec;92(12):2094–102 (Eng. Abstr.) (Jpn)

[A method for assessing the resistance of the optic nerve to increased intraocular pressure] Gamm EG, et al. **Vestn Oftalmol** 1989 Jan–Feb;105(1):7–9 (Eng. Abstr.) (Rus)

[Findings of electrophysiological studies at various stages of combined surgical treatment of patients with proliferative diabetic retinopathy] Glinchuk IaI, et al. **Vestn Oftalmol** 1989 Jan–Feb;105(1):36–40 (Eng. Abstr.) (Rus)

[Light-optic, electron microscopic and electrophysiological study of centrifugal fibers of the retina in the lamprey Lampetra fluviatilis] Veselkin NP, et al. **Zh Evol Biokhim Fiziol** 1989 Mar–Apr;25(2):253–61 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Retinocortical conduction time in diabetics with abnormal pattern reversal electroretinograms and visual evoked potentials. Trick GL, et al. **Doc Ophthalmol** 1988 Sep; 70(1):19–28

Mechanisms of optic nerve damage in glaucoma. Drance SM. **Fortschr Ophthalmol** 1988;85(6):611–3

[Predominance of crossed optic nerve fibers is a characteristic of albinism, but not of dissociated vertical deviation] Bach M, et al. **Fortschr Ophthalmol** 1989;86(3):253–5 (Eng. Abstr.) (Ger)

[Evaluating the pressure tolerance of the optic nerve with facilitated transient visual evoked cortical potentials] Stodtmeister R, et al. **Fortschr Ophthalmol** 1988;85(4):402–6 (Eng. Abstr.) (Ger)

[Changes in the mnemonic functions of patients with tumors of the chiasm-sella area before and after surgical intervention and direct electrostimulation of the involved optic nerves] Nikol'skaia IM, et al. **Fiziol Cheloveka** 1988 May–Jun;14(3):364–70 (Rus)

RADIATION EFFECTS

Neurovisual outcome following proton radiation therapy. Habrand IL, et al. **Int J Radiat Oncol Biol Phys** 1989 Jun; 16(6):1601–6

RADIOGRAPHY

The "phantom" optic nerve. Demonstration in CT and MR scans 19 years after resection of optic glioma. Brodsky MC, et al. **J Clin Neuro Ophthalmol** 1988 Mar;8(1):67–8

[Roentgenometric evaluation of the orbital content in thyroid-related ophthalmopathy by computerized tomography] Sosnowski P. **Pol Przegl Radiol (Warszawa)** 1987 Sep–Oct;51(5):229–33 (Eng. Abstr.) (Pol)

SURGERY

Optic nerve sheath decompression for pseudotumor cerebri. Brourman ND, et al. **Arch Ophthalmol** 1988 Oct; 106(10):1378–83

Results of optic nerve sheath fenestration for pseudotumor cerebri. The lateral orbitotomy approach. Corbett JJ, et al. **Arch Ophthalmol** 1988 Oct;106(10):1391–7

Optic nerve sheath decompression. How does it work? Has its time come? Keltner JL. **Arch Ophthalmol** 1988 Oct; 106(10):1365–9 (30 ref.)

Modified optic nerve sheath decompression provides long-term visual improvement for pseudotumor cerebri. Sergott RC, et al. **Arch Ophthalmol** 1988 Oct; 106(10):1384–90

Optic nerve sheath fenestration in pseudotumor cerebri. A lateral orbitotomy approach. Tse DT, et al. **Arch Ophthalmol** 1988 Oct;106(10):1458–62 (40 ref.)

Microscopic intranasal decompression of the optic nerve. Takahashi M, et al. **Arch Otorhinolaryngol** 1989; 246(2):113–6

A net for extending the optic nerve at enucleation of the eyeball. Janev KG. **Br J Ophthalmol** 1989 May;73(5):370–2

Alterations in the morphology of ganglion cell dendrites in the adult rat retina after optic nerve transection and grafting of peripheral nerve segments. Thanos S. **Cell Tissue Res** 1988;254(3):599–609

Decompression of the orbit and the optic nerve in different diseases. Stoll W, et al. **J Craniomaxillofac Surg** 1988 Oct; 16(7):308–11

Response of axons and glia at the site of anastomosis between the optic nerve and cellular or acellular sciatic nerve grafts. Berry M, et al. **J Neurocytol** 1988 Dec;17(6):727–44

Electron microscopic study of the interaction of axons and glia at the site of anastomosis between the optic nerve and cellular or acellular sciatic nerve grafts. Hall S, et al. **J Neurocytol** 1989 Apr;18(2):171–84

[Optic nerve decompression] Huang KW, et al. **Chung Hua I Hsueh Tsa Chih** 1988 May;41(5):357–62 (Eng. Abstr.) (Chi)

TRANSPLANTATION

Peripheral nerve regeneration through optic nerve grafts. Anderson PN, et al. **Acta Neuropathol (Berl)** 1989; 77(5):525–34

ULTRASTRUCTURE

Age-related changes in the extracellular matrix of the human optic nerve head. Hernandez MR, et al. **Am J Ophthalmol** 1989 May 15;107(5):476–84

Morphologic changes in the lamina cribrosa of beagles with primary open-angle glaucoma. Brooks DE, et al. **Am J Vet Res** 1989 Jun;50(6):936–41

Quantitative analysis of the retinal ganglion cell layer and optic nerve of the barn owl Tyto alba. Wathey JC, et al. **Brain Behav Evol** 1989;33(5):279–92

Dysmyelinogenesis in caprine beta-mannosidosis: ultrastructural and morphometric studies in fetal optic nerve. Lovell KL, et al. **Int J Dev Neurosci** 1987; 5(3):243–53

An epithelium-type cytoskeleton in a glial cell: astrocytes of amphibian optic nerves contain cytokeratin filaments and are connected by desmosomes. Rungger-Brändle E, et al. **J Cell Biol** 1989 Aug;109(2):705–16

Optic nerve ultrastructure following amiodarone therapy. Mansour AM, et al. **J Clin Neuro Ophthalmol** 1988 Dec; 8(4):231–7

Macromolecular structure of axonal membrane in the optic nerve of the jimpy mouse. Black JA, et al. **J Neuropathol Exp Neurol** 1988 Nov;47(6):588–98

Ultrastructure of axons in disturbed CNS myelination in pt rabbit. Taraszewska A. **Neuropatol Pol** 1988;26(3):385–402

Bilateral idiopathic inflammation of the optic nerve sheaths. Light and electron microscopic findings. Margo CE, et al. **Ophthalmology** 1989 Feb;96(2):200–6

Taurine depletion leads to loss of rat optic nerve axons. Lake N, et al. **Vision Res** 1988;28(10):1071–6

OPTIC NERVE DISEASES

Optic-nerve glioma and pregnancy [letter] Topliss DJ. **Med J Aust** 1989 Mar 6;150(5):287–8

The optic nerve. Optic Nerve Study Group, second meeting. Padua, March 13–14, 1987. **Metab Pediatr Syst Ophthalmol** 1989;12(1–3):1–87

Neuro-ophthalmology. **Semin Neurol** 1986 Jun;6(2):111–241

BLOOD

Red cell glutathione as a marker of tobacco smoke-induced optic neuropathy. Costagliola C, et al. **Exp Eye Res** 1989 Apr;48(4):583–6

CHEMICALLY INDUCED

Pseudo-Schnabel's cavernous degeneration of the optic nerve secondary to intraocular silicone oil. Shields CL, et al. **Arch Ophthalmol** 1989 May;107(5):714–7

Optic nerve involvement in methanol poisoning [letter] Hayreh SS. **Br J Ophthalmol** 1989 Mar;73(3):238–40

Optic nerve involvement in a case of methanol poisoning. Naeser P. **Br J Ophthalmol** 1988 Oct;72(10):778–81

Irreversible ocular toxicity from single "challenge" dose of deferoxamine. Bene C, et al. **Clin Nephrol** 1989 Jan; 31(1):45–8

Acute optic neuropathy induced by thinner sniffing: inhalation of mixed organic solvent containing methyl alcohol and methyl acetate. Ogawa Y, et al. **Ind Health** 1988;26(4):239–44

Optic nerve ultrastructure following amiodarone therapy. Mansour AM, et al. **J Clin Neuro Ophthalmol** 1988 Dec;

8(4):231–7

Bilateral optic neuropathy associated with amiodarone therapy. Nazarian SM, et al. **J Clin Neuro Ophthalmol** 1988 Mar;8(1):25–8

Amiodarone optic neuropathy [editorial] Younge BR. **J Clin Neuro Ophthalmol** 1988 Mar;8(1):29

The incidence of optic neuropathy in 84 patients treated with ethambutol. De Palma P, et al. **Metab Pediatr Syst Ophthalmol** 1989;12(1–3):80–2

Aging and drug-induced optic nerve side effects. Dorigo MT, et al. **Metab Pediatr Syst Ophthalmol** 1989; 12(1–3):24–7 (11 ref.)

[Ethanol optic neuropathy in rats] Taneda Y, et al. **Nippon Ganka Gakkai Zasshi** 1988 Jul;92(7):1154–60 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Optic neuropathy in uremia. Hamed LM, et al. **Am J Ophthalmol** 1989 Jul 15;108(1):30–5

Optic glioma masquerading as optic neuritis. Ramani A, et al. **J Assoc Physicians India** 1988 May;36(5):335–7

Optic gliomas in children with neurofibromatosis type 1. Listernick R, et al. **J Pediatr** 1989 May;114(5):788–92

Branch retinal vein occlusion associated with optic nerve drusen: a case report. Richmond PP, et al. **Ophthalmic Surg** 1989 Jan;20(1):38–41

Evolving techniques in the treatment of macular detachment caused by optic nerve pits. Cox MS, et al. **Ophthalmology** 1988 Jul;95(7):889–96

Correlation of afferent pupillary defect with visual field loss on automated perimetry [see comments] Johnson LN, et al. **Ophthalmology** 1988 Dec;95(12):1649–55 (18 ref.). **Comment in:** Ophthalmology 1989 Apr;96(4):570–1

Visual obscurations: evanescent and elementary. Lepore FE. **Semin Neurol** 1986 Jun;6(2):167–75 (80 ref.)

Pigmented tumor and acute visual loss [clinical conference] Shuey TF, et al. **Surv Ophthalmol** 1988 Sep–Oct; 33(2):121–6

[Vision disorders with neurogenic causes. Exclusion of ophthalmologic causes—clinic admission is recommended] von Albert HH. **Fortschr Med** 1989 Jan 30;107(3):17 **(Ger)**

[Clinico-morphological diagnosis of temporal arteritis in acute optic vascular neuropathies] Eremenko AI, et al. **Oftalmol Zh** 1988;(4):219–21 (Eng. Abstr.) **(Rus)**

CONGENITAL

[Koyanagi's retrolaminar angiomatous cavern formation in the optic nerve ("angiomatous optic nerve malformation"). Review of the literature and suspected pathogenesis] Stefani FH, et al. **Fortschr Ophthalmol** 1988;85(4):416–9 (17 ref.) (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Optic nerve involvement as the initial manifestation of sarcoidosis. Jordan DR, et al. **Can J Ophthalmol** 1988 Aug; 23(5):232–7

Pattern electroretinogram peak times as a clinical means of discriminating retinal from optic nerve disease. Lorenz R, et al. **Doc Ophthalmol** 1989 Mar;71(3):307–20

Imaging of the optic nerve with standardised echography. Atta HR. **Eye** 1988;2 (Pt 4):358–66

Nerve fibre bundle defects and their perimetric correlation. Menon V, et al. **Indian J Ophthalmol** 1987;35(5–6):448–52

Acute sarcoid optic neuropathy with spontaneous recovery. Galetta S, et al. **J Clin Neuro Ophthalmol** 1989 Mar; 9(1):27–32

Gadolinium-DTPA enhancement of an optic nerve and chiasmal meningioma. Haik BG, et al. **J Clin Neuro Ophthalmol** 1989 Jun;9(2):122–5

Meningioma of the chiasm and optic nerves: CT and MR findings. Castillo M, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):679–81

Neuroretinitis in childhood. Weiss AH, et al. **J Pediatr Ophthalmol Strabismus** 1989 Jul–Aug; 26(4):198–203

Optic neuropathy as an initial manifestation of Sjögren's syndrome. Wise CM, et al. **J Rheumatol** 1988;15(5):799–802

Neuroophthalmological implications of the radiological finding of the transverse sinus. Puddo P, et al. **Metab Pediatr Syst Ophthalmol** 1989;12(1–3):85–7

Electrophysiological discrimination between retinal and optic nerve disorders. Ryan S, et al. **Metab Pediatr Syst Ophthalmol** 1989;12(1–3):69–73

Swinging flashlight test [letter] **Neurology** 1989 Jan; 39(1):154–6

The pattern electroretinogram: a long-term study in acute optic neuropathy. Kaufman DI, et al. **Neurology** 1988 Nov; 38(11):1767–74

Optic glioma associated with Beckwith-Wiedemann syndrome. Weinstein JM, et al. **Pediatr Neurol** 1986 Sep–Oct;2(5):308–10

Chemical shift imaging with paramagnetic contrast material enhancement for improved lesion depiction. Simon JH, et al. **Radiology** 1989 May;171(2):539–43

Optic nerve disorders. Behrens MM. **Semin Neurol** 1986 Jun; 6(2):204–16 (148 ref.)

Visual evoked potential: enhancing its utility. Kupersmith MJ. **Semin Neurol** 1986 Jun;6(2):217–30 (211 ref.)

Magnetic resonance imaging for evaluation of tumors involving the optic pathways and orbit. Svitra PP, et al. **Semin Neurol** 1986 Mar;6(1):79–83

[Metastatic carcinoma of the choroid, sclera and optic nerve: an immunohistochemical and ultrastructural diagnosis] Yi YZ, et al. **Yen Ko Hsueh Pao** 1988 Sep;4(3):181–5 (Eng. Abstr.) **(Chi)**

[Respective indications for echography, scanning and MRI in diseases of the intra-cranial optic pathways] Cabanis EA, et al. **Annee Ther Clin Ophtalmol** 1987;38:299–318 **(Fre)**

[Meningioma of the optic canal. Diagnostic aspects apropos of 3 surgically treated cases] Bazin A, et al. **Neurochirurgie** 1988;34(3):164–72 (37 ref.) (Eng. Abstr.) **(Fre)**

[Changes in amplitude and latency in pattern electroretinography in diseases of the retina and optic nerve] Lorenz R, et al. **Fortschr Ophthalmol** 1988; 85(3):296–300 (Eng. Abstr.) **(Ger)**

[Magnetic resonance imaging (MRI) in the diagnosis of optic neuritis and neuropathy] Kakisu Y, et al. **Nippon Ganka Gakkai Zasshi** 1989 Feb;93(2):281–6 (Eng. Abstr.) **(Jpn)**

[Ocular chalcosis in fluorescein angiography] Szymczak J, et al. **Klin Oczna** 1988 Nov;90(11):387–90 (Eng. Abstr.) **(Pol)**

[Errors in the diagnosis of drusen of the optic disk in our experience] Ziobrowski S, et al. **Klin Oczna** 1988 Oct; 90(10):353–4 (Eng. Abstr.) **(Pol)**

[Arteriosclerotic ischemic optic neuropathy. Current findings in the diagnosis and etiopathogenesis of the disease] Mureşeanu DC. **Rev Chir [Oftalmol]** 1989 Jan–Mar; 33(1):33–40 (Eng. Abstr.) **(Rum)**

[Differential diagnosis of the early stages of macular dystrophy and optic nerve pathology using modern electroretinographic and perimetric tests] Shamshinova AM, et al. **Vestn Oftalmol** 1988 Sep–Oct;104(5):50–2 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Massive perfusion with vasodilators for ischaemic retinopathy and optic nerve diseases—a new approach. Rao KR, et al. **Indian J Ophthalmol** 1987;35(5–6):91–3

Sarcoidosis of the anterior visual pathway: successes and failures. Gelwan MJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1473–80

ETIOLOGY

Progressive and recurrent nonarteritic anterior ischemic optic neuropathy. Borchert M, et al. **Am J Ophthalmol** 1988 Oct 15;106(4):443–9

Orbital inflammation and optic neuropathies associated with chronic sinusitis of intranasal cocaine abuse. Possible role of contiguous inflammation. Goldberg RA, et al. **Arch Ophthalmol** 1989 Jun;107(6):831–5

Acute retinal necrosis neuropathy. Clinical profile and surgical therapy. Sergott RC, et al. **Arch Ophthalmol** 1989 May;107(5):692–6

Hematoma of optic nerve glioma—a cause for sudden proptosis. Magnetic resonance imaging findings. Applegate LJ, et al. **J Clin Neuro Ophthalmol** 1989 Mar;9(1):15–9

Optic neuropathy associated with chronic lymphomatous meningitis. Coppeto JR, et al. **J Clin Neuro Ophthalmol** 1988 Mar;8(1):39–45

Embolic anterior ischemic optic neuropathy. Portnoy SL, et al. **J Clin Neuro Ophthalmol** 1989 Mar;9(1):21–5

Posterior ischemic optic neuropathy due to Aspergillus fumigatus. Weinstein JM, et al. **J Clin Neuro Ophthalmol** 1989 Mar;9(1):7–13

Surgical treatment of progressive visual loss in traumatic optic neuropathy. Report of two cases. Guy J, et al. **J Neurosurg** 1989 May;70(5):799–801

Anterior ischemic optic neuropathy and aging. Moro F, et al. **Metab Pediatr Syst Ophthalmol** 1989;12(1–3):46–57

The optic neuropathy of Alzheimer's disease. Sadun AA. **Metab Pediatr Syst Ophthalmol** 1989;12(1–3):64–8

Late onset multiple sclerosis: clinical pattern of optic nerve involvement. Safran AB. **Metab Pediatr Syst Ophthalmol** 1989;12(1–3):58–60 (27 ref.)

Electrophysiological findings in anterior ischemic optic neuropathy. Tormene AP, et al. **Metab Pediatr Syst Ophthalmol** 1989;12(1–3):76–9

Extended pterional decompression of the orbit: an alternative treatment in endocrine orbitopathy. Gilsbach JM, et al. **Neurosurg Rev** 1988;11(2):167–70

Bilateral compressive optic neuropathy secondary to bilateral sphenoethmoidal mucoceles. Newton N Jr, et al. **Ophthalmologica** 1989;198(1):13–9

Bipolaris hawaiiensis-caused phaeohyphomycotic orbitopathy. A devastating fungal sinusitis in an apparently immunocompetent host. Maskin SL, et al. **Ophthalmology** 1989 Feb;96(2):175–9

Dysthyroid optic neuropathy. The crowded orbital apex syndrome. Neigel JM, et al. **Ophthalmology** 1988 Nov; 95(11):1515–21

The orbit and neuro-ophthalmology. Glaser JS. **Semin Neurol** 1986 Jun;6(2):124–34 (20 ref.)

Compressive optic neuropathy in dysthyroid eye disease. Wong D, et al. **Yen Ko Hsueh Pao** 1986 Dec;2(4):237–9

[Retrochiasmatic lesions in multiple sclerosis. Demonstration by visual evoked potentials. Correlation with magnetic resonance imaging] Rigolet MH, et al. **Rev Neurol (Paris)** 1989;145(5):378–83 (20 ref.) (Eng. Abstr.) **(Fre)**

[Acute post-hemorrhagic ischemic optic neuropathy with bilateral blindness] Urgün C. **Rev Chir [Oftalmol]** 1988 Jul–Sep;32(3):221–4 (Eng. Abstr.) **(Rum)**

GENETICS

[Genetic optic papilla hollow] Yang CS. **Yen Ko Hsueh Pao** 1987 Dec;3(4):222 (Eng. Abstr.) **(Chi)**

METABOLISM

Positron emission tomography to study the effect of eye closure and optic nerve damage on human cerebral glucose metabolism. Kiyosawa M, et al. **Am J Ophthalmol** 1989 Aug 15;108(2):147–52

PATHOLOGY

The optic nerve as the site of initial relapse in childhood acute lymphoblastic leukemia. Schwartz CL, et al. **Cancer** 1989 Apr 15;63(8):1616–20

Anterior ischemic optic neuropathy: nonarteritic form in small and giant cell arteritis in normal sized optic discs. Jonas JB, et al. **Int Ophthalmol** 1988;12(2):119–25

Malignant optic glioma in adults. Case report. Taphoorn MJ, et al. **J Neurosurg** 1989 Feb;70(2):277–9 (15 ref.)

The role of astroglia in pathological processes characterized by myelin disintegration. II. Electron enzyme and immunocytochemistry of the astroglia in experimental injury to white matter. Goncerzewicz A. **Neuropatol Pol** 1988;26(2):127–49

Neuropathological findings in lesions of the optic nerve of different etiologies. Reinhardt V, et al. **Neurosurg Rev** 1988; 11(3–4):225–30

Isolated metastasis to optic nerve from medulloblastoma. Garrity JA, et al. **Ophthalmology** 1989 Feb;96(2):207–10

Optic nerve involvement in retinoblastoma. Magramm I, et al. **Ophthalmology** 1989 Feb;96(2):217–22

Hemangioblastoma of the optic nerve. Report of a case and review of literature. Nerad JA, et al. **Ophthalmology** 1988 Mar;95(3):398–402 (18 ref.)

Histology of optic nerve damage in ocular hypertension and early glaucoma. Minckler DS. **Surv Ophthalmol** 1989 Apr; 33 Suppl:401–2; discussion 409–11

[Effect of ocular hypertension on the optic nerve and the lamina cribrosa in cats] Xu Y. **Chung Hua Yen Ko Tsa Chih** 1988 Sep;24(5):286–8 (Eng. Abstr.) **(Chi)**

PHYSIOPATHOLOGY

Clinical analysis of non-recordable pattern VECPs in 107 patients. Adachi-Usami E, et al. **Fortschr Ophthalmol** 1988; 85(3):301–3

Pupillographic characteristics of simulated relative afferent pupillary defects. Cox TA. **Invest Ophthalmol Vis Sci** 1989 Jun;30(6):1127–31

[The Aulhorn flicker test. I: Concomitant neuritis in malignant non-Hodgkin's lymphoma and leukodystrophy] Pittke EC, et al. **Klin Monatsbl Augenheilkd** 1988 Aug; 193(2):157–64 (Eng. Abstr.) **(Ger)**

[Relative afferent pupillary defect in several types of optic neuropathy] Miyazawa H. **Nippon Ganka Gakkai Zasshi** 1988 Dec;92(12):2103–9 (Eng. Abstr.) **(Jpn)**

[Changes in the mnemonic functions of patients with tumors of the chiasm-sella area before and after surgical intervention and direct electrostimulation of the involved optic nerves] Nikol'skaia IM, et al. **Fiziol Cheloveka** 1988 May–Jun;14(3):364–70 **(Rus)**

RADIOTHERAPY

Temporal parameters of low energy laser irradiation for optimal delay of post-traumatic degeneration of rat optic nerve. Assia E, et al. **Brain Res** 1989 Jan 9;476(2):205–12

Efficacy of radiotherapy in optic gliomas. Gould RJ, et al. **Pediatr Neurol** 1987 Jan–Feb;3(1):29–32

The moyamoya syndrome associated with irradiation of an optic glioma in children: report of two cases and review of the literature. Okuno T, et al. **Pediatr Neurol** 1985 Sep–Oct;1(5):311–6 (35 ref.)

SURGERY

Medial and lateral wall decompression for thyroid ophthalmopathy. Leone CR Jr, et al. **Am J Ophthalmol** 1989 Aug 15;108(2):160–6

Graves' ophthalmopathy: III. Effect of transantral orbital decompression on optic neuropathy. Hallin ES, et al. **Br J Ophthalmol** 1988 Sep;72(9):683–7

The "phantom" optic nerve. Demonstration in CT and MR scans 19 years after resection of optic glioma. Brodsky MC, et al. **J Clin Neuro Ophthalmol** 1988 Mar;8(1):67–8

Optic nerve sheath meningioma [letter] Arbit E. **J Neurosurg** 1989 Jul;71(1):151

Primary optic nerve sheath meningiomas. Report of nine cases. Clark WC, et al. **J Neurosurg** 1989 Jan;70(1):37–40

Optic nerve decompression for osteopetrosis in early childhood. Haines SJ, et al. **Neurosurgery** 1988 Oct; 23(4):470–5

Cavernous angioma of the optic nerve. Case report. Hassler W, et al. **Surg Neurol** 1989 Jun;31(6):444–7

[Meningioma of the optic nerve in children] Manderieux N, et al. **Bull Soc Ophtalmol Fr** 1988 Aug–Sep;88(8–9):967–8, 971 **(Fre)**

[Transpalpebral decompression operation in endocrine orbitopathy (exophthalmos)] Olivari N. **Wien Med Wochenschr** 1988 Sep 30;138(18):452–5 (Eng. Abstr.) **(Ger)**

THERAPY

The management of optic nerve sheath meningiomas. Kennerdell JS, et al. **Am J Ophthalmol** 1988 Oct 15; 106(4):450–7

[Outpatient care of patients with a history of acute vascular optic neuropathies] Antonova AI. **Oftalmol Zh** 1988; (6):374–6 **(Rus)**

[Indications for the use of a method of direct electrostimulation of the optic nerves in patients with pathology of the chiasmal-cell region] Shandurina AN, et al. **Vestn Oftalmol** 1989 Jan–Feb;105(2):33–7 (Eng. Abstr.) **(Rus)**

VETERINARY

Cataracts and optic nerve hypoplasia in turkey poults. Barr BC, et al. **Avian Dis** 1988 Jul–Sep;32(3):469–77

OPTIC NEURITIS

CHEMICALLY INDUCED

Retrobulbar neuritis in a patient treated with intraarterial cisplatin for head and neck cancer. Urba S, et al. **Cancer** 1988 Nov 15;62(10):2094–7

[Toxic optic neuritis with ethambutol] Li XC, et al. **Yen Ko Hsueh Pao** 1988 Mar;4(1):45–7 (Eng. Abstr.) **(Chi)**

COMPLICATIONS

Uncomplicated retrobulbar neuritis and the development of multiple sclerosis. Anmarkrud N, et al. **Acta Ophthalmol (Copenh)** 1989 Jun;67(3):306–9

The spectrum of optic nerve disease in human immunodeficiency virus infection. Winward KE, et al. **Am J Ophthalmol** 1989 Apr 15;107(4):373–80

Lupus optic neuritis with negative serology. Deutsch TA, et al. **Ann Ophthalmol** 1988 Oct;20(10):383–4

Does neuroretinitis rule out multiple sclerosis? [letter] Wilson WB, et al. **Arch Neurol** 1989 Apr;46(4):358

A case of angioimmunoblastic lymphadenopathy associated with a long spontaneous remission, retrobulbar neuritis, a clonal rearrangement of the T-cell receptor gamma chain gene and an unusual marrow infiltration. Matthews JH, et al. **Eur J Haematol** 1988 Sep;41(3):295–301

Anterior ischemic optic neuropathy and increased intraocular pressure. Tomsak RL, et al. **J Clin Neuro Ophthalmol** 1989 Jun;9(2):116–8

Optic neuritis in the elderly: prognosis for visual recovery and long-term follow-up. Jacobson DM, et al. **Neurology** 1988 Dec;38(12):1834–7

Optic neuritis with secondary retinal venous stasis. Duker JS, et al. **Ophthalmology** 1989 Apr;96(4):475–80

Current concepts of the pathogenesis of optic neuritis associated with multiple sclerosis. Sergott RC, et al. **Surv Ophthalmol** 1988 Sep–Oct;33(2):108–16 (72 ref.)

[Psychogenic malnutrition occurring in Gayet-Wernicke encephalopathy with retrobulbar optic neuritis in a deficient schizophrenic patient] Beaufils B, et al. **Ann Med Psychol (Paris)** 1988 May;146(5):471–5 **(Fre)**

[Tapetoretinal degeneration: apropos of a case associated with bilateral optic neuritis] Vignal C, et al. **Bull Soc Ophtalmol Fr** 1988 Jun–Jul;88(6–7):913–5 **(Fre)**

[Tapetoretinal degeneration: apropos of a case associated with bilateral optic neuritis] Vignal C, et al. **Bull Soc Ophtalmol Fr** 1988 Apr;88(4):569–71 **(Fre)**

[Chronic inflammatory demyelinating polyradiculoneuropathy (CIDP) associated with acute optic neuritis] Taniwaki T, et al. **Rinsho Shinkeigaku** 1988 Jul;28(7):789–92 (Eng. Abstr.) **(Jpn)**

[A case of temporal arteritis with polyneuropathy, posterior ischemic optic neuropathy (PION), and enhanced platelet adhesion and aggregation] Kohtoku N, et al. **Ryumachi** 1988 Jun;28(3):156–63 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Acute optic neuritis—problems of diagnosis and treatment. Cerovski B, et al. **Acta Med Iugosl** 1988;42(3):149–56

Chemical shift selective magnetic resonance imaging of the optic nerve in patients with acute optic neuritis. Larsson HB, et al. **Acta Radiol** 1988 Nov–Dec;29(6):629–32

Anterior ischemic optic neuropathy—recurrent attacks in one eye in a bilateral case. Kao LY, et al. **Ann Ophthalmol** 1989 Feb;21(2):71–4 (6 ref.)

MRI in optic neuritis [letter] Blackwell CL. **Arch Ophthalmol** 1989 Jun;107(6):789

Standardization of the Tübingen flicker test. Trauzettel-Klosinski S, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(3):221–9

Multiple sclerosis following optic neuritis in Chile. Alvarez G, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan; 52(1):115–7

The early risk of multiple sclerosis after optic neuritis. Miller DH, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec; 51(12):1569–71

Optic neuritis, confirmed by visual evoked response, and the risk for multiple sclerosis: a prospective survey [letter] Sanders EA, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):799–800

Evaluation of clinically applied visual evoked potential (VEP) in ophthalmological and neurological diseases. Kwak HW, et al. **Korean J Ophthalmol** 1987 Jun;1(1):26–30

Optic neuritis due to acquired toxoplasmosis. Roach ES, et al. **Pediatr Neurol** 1985 Mar–Apr;1(2):114–6

[The haplophotometer—a new kind of instrument for measuring slight disorders of visual afference—instrument description and examples of its use] Schiefer U, et al. **Fortschr Ophthalmol** 1988;85(6):766–71 (Eng. Abstr.) **(Ger)**

[Contributions to the Aulhorn flicker test. II: The flicker test and the Pulfrich phenomenon in clinical diagnosis] Pittke EC, et al. **Klin Monatsbl Augenheilkd** 1988 Oct; 193(4):382–7 (Eng. Abstr.) **(Ger)**

[Neutron spin tomography of the optic nerve in retrobulbar neuritis and optic nerve atrophy: demonstration of inflammation and demyelination.] Wiegand W. **Ophthalmologica** 1988;197(4):193–201 (Eng. Abstr.) **(Ger)**

[Magnetic resonance imaging (MRI) in the diagnosis of optic neuritis and neuropathy] Kakisu Y, et al. **Nippon Ganka Gakkai Zasshi** 1989 Feb;93(2):281–6 (Eng. Abstr.) **(Jpn)**

[Vision disorders and fundus oculi changes as the first symptoms of subacute sclerosing panencephalitis in children] Szreterowa M, et al. **Klin Oczna** 1988 Sep; 90(9):329–30 (Eng. Abstr.) **(Pol)**

[Diagnostic and treatment problems in optic neuritis] Permiakova VV, et al. **Oftalmol Zh** 1988;(7):406–8 (Eng. Abstr.) **(Rus)**

[Evaluation of time parameters of visual perception in the diagnosis of retrobulbar neuritis] Parkanskaia VI, et al. **Vestn Oftalmol** 1989 May–Jun;105(3):49–52 (Eng. Abstr.) **(Rus)**

[Visual evoked potentials in the differential diagnosis of vascular and demyelinating disorders of the optic nerve] Pokrovskaia ZA, et al. **Zh Nevropatol Psikhiatr** 1989; 89(1):12–5 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Autoimmune optic neuropathy: evaluation and treatment [published erratum appears in J Neurol Neurosurg Psychiatry 1989 May;52(5):692] Kupersmith MJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1381–6

Megadose corticosteroids for optic neuritis [letter] **Ophthalmology** 1988 Jul;95(7):1005–7

EPIDEMIOLOGY

Epidemiologic and clinical features of optic neuritis in the 20th and 21st sanitary districts of the Sardinia (Italy). Congia S, et al. **Acta Neurol (Napoli)** 1989 Feb;11(1):10–4

ETIOLOGY

Acute monocular disturbances mimicking optic neuritis in pituitary apoplexy. Petersen P, et al. **Acta Neurol Scand** 1988 Aug;78(2):101–3

Surface-coil heat concentration in MR as a possible exacerbating factor in retrobulbar neuritis: is this a local "hot bath test"? [letter] Weintraub MI. **AJNR** 1989 Jan–Feb;10(1):207–8

Unusual eye manifestations in systemic lupus erythematosus patients. Drosos AA, et al. **Clin Rheumatol** 1989 Mar; 8(1):49–53

Reversible optic neuritis secondary to paranasal sinusitis. Awerbuch G, et al. **Eur Neurol** 1989;29(4):189–93

Optic neuritis caused by tobaccoism [letter] Murube del Castillo J. **Graefes Arch Clin Exp Ophthalmol** 1989; 227(3):300

Optic glioma masquerading as optic neuritis. Ramani A, et al. **J Assoc Physicians India** 1988 May;36(5):335–7

Recurrent anterior ischemic optic neuropathy in young adults. Hamed LM, et al. **J Clin Neuro Ophthalmol** 1988 Dec;8(4):239–48

Uremic optic neuropathy. Saini JS, et al. **J Clin Neuro Ophthalmol** 1989 Jun;9(2):131–3; discussion 134–5

Optic neuropathy in Borrelia infection [letter] Gustafson R, et al. **J Infect** 1988 Sep;17(2):187–8

Reflections on the pathogenesis of optic (retrobulbar) neuritis in multiple sclerosis. Schwyzer RU, et al. **Med Hypotheses** 1988 Nov;27(3):167–79

[Significance of the Tübingen flicker test in the differential diagnosis of optic neuritis] Trauzettel-Klosinski S, et al. **Fortschr Ophthalmol** 1988;85(5):557–61 (Eng. Abstr.) **(Ger)**

[Goodpasture's syndrome from the ophthalmologic viewpoint] Köhler U. **Internist (Berlin)** 1988 Oct; 29(10):703–5 **(Ger)**

[Periphlebitis retinae ("Rucker")—a symptom of disseminated encephalomyelitis] Steuhl KP, et al. **Klin Monatsbl Augenheilkd** 1989 Jan;194(1):22–6 (Eng. Abstr.) **(Ger)**

[A case of systemic lupus erythematosus associated with meningitis, myelitis, and bilateral optic neuritis] Ichiki S, et al. **Ryumachi** 1989 Apr;29(2):126–33 (Eng. Abstr.) **(Jpn)**

[Optic neuritis and systemic lupus erythematosus (letter)] Lahoz Rallo C, et al. **Rev Clin Esp** 1989 Mar;184(4):216 **(Spa)**

IMMUNOLOGY

Lymphocytes subclasses and function in patients with optic neuritis in childhood with special reference to multiple sclerosis. Riikonen R, et al. **Acta Neurol Scand** 1988 Jul; 78(1):58–64

Immunological studies on patients with optic neuritis without evidence of multiple sclerosis. Kinnunen E, et al. **J Neurol Sci** 1989 Mar;90(1):43–52

T-lymphocyte subpopulations in acute unilateral optic neuritis. Guy JR, et al. **Ophthalmology** 1989 Jul; 96(7):1054–7

[Histocompatibility antigens in retrobulbar neuritis and multiple sclerosis] Zavalishin IA, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):55–8 (Eng. Abstr.) **(Rus)**

METABOLISM

Antioxidant enzymes reduce loss of blood-brain barrier integrity in experimental optic neuritis. Guy J, et al. **Arch Ophthalmol** 1989 Sep;107(9):1359–63

Quantitative analysis of labelled inner retinal proteins in experimental optic neuritis. Guy J, et al. **Curr Eye Res** 1989 Mar;8(3):253–60

PATHOLOGY

Optic neuritis and multiple sclerosis: what is the relationship? [letter] Weintraub MI. **Dev Med Child Neurol** 1989 Feb; 31(1):118–9

Magnetic resonance imaging in Leber's optic neuropathy. Kermode AG, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):671–4

Bilateral idiopathic inflammation of the optic nerve sheaths. Light and electron microscopic findings. Margo CE, et al. **Ophthalmology** 1989 Feb;96(2):200–6

PHYSIOPATHOLOGY

Various stages of optic neuritis assessed by subjective brightness of flicker. Trauzettel-Klosinski S. **Arch Ophthalmol** 1989 Jan;107(1):63–8

Evolution of visual evoked potentials in optic neuritis. Heinrichs IH, et al. **Can J Neurol Sci** 1988 Nov;15(4):394–6

Electrophysiology and perimetry in acute retrobulbar neuritis. Berninger TA, et al. **Doc Ophthalmol** 1989 Mar; 71(3):293–305

Comparison of automated perimetry and pattern visually evoked cortical potentials in optic neuritis. Fujimoto N, et al. **Doc Ophthalmol** 1988 Jul;69(3):263–9

The electroretinogram in multiple sclerosis and demyelinating optic neuritis. Papakostopoulos D, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jan–Feb; 74(1):1–10

Recovery after optic neuritis in childhood. Kriss A, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1253–8

[VEP in the follow up of patients with optic neuritis] Xin DY, et al. **Yen Ko Hsueh Pao** 1988 Mar;4(1):40–4 (Eng. Abstr.) **(Chi)**

[The Aulhorn flicker test. I: Concomitant neuritis in malignant non-Hodgkin's lymphoma and leukodystrophy] Pittke EC, et al. **Klin Monatsbl Augenheilkd** 1988 Aug; 193(2):157–64 (Eng. Abstr.) **(Ger)**

[Comparison of color vision and pattern VECP in optic neuritis] Fujimoto N, et al. **Nippon Ganka Gakkai Zasshi** 1988 Sep;92(9):1485–8 (Eng. Abstr.) **(Jpn)**

[The study of the components of pattern ERG—2. Longstanding optic neuritis] Hasegawa S, et al. **Nippon Ganka Gakkai Zasshi** 1988 Oct;92(10):1582–7 (Eng. Abstr.) **(Jpn)**

[Spectrum analysis of vestibular nystagmus] Telezhnikov AV, et al. **Fiziol Zh** 1989 Mar–Apr;35(2):18–23 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

[Neuropsychological symptoms in opticochiasmatic arachnoiditis] Nikol'skaia IM. **Zh Nevropatol Psikhiatr** 1989;89(2):73–7 (Eng. Abstr.) **(Rus)**

VETERINARY

Effect of Newcastle disease virus on ocular and paraocular tissues in experimentally inoculated chickens. Obaldia N 3d, et al. **Avian Dis** 1989 Apr–Jun;33(2):285–90

Bilateral chorioretinitis, centripetal optic neuritis, and encephalitis in a llama. Paulsen ME, et al. **J Am Vet Med Assoc** 1989 May 1;194(9):1305–8

OPTIC PAPILLA see **OPTIC DISK**

OPTIC TECTUM see **SUPERIOR COLLICULUS**

OPTICAL ILLUSIONS see under **ILLUSIONS**

OPTICAL READERS see **AUTOMATIC DATA PROCESSING**

OPTICAL ROTATION

[New determinations of the eye rotation center and criteria for the formation of its membrane in terms of the floating eye model and experimental support of the latter] Galoian VR. **Biofizika** 1988 Nov–Dec;33(6):1041–53 (23 ref.) (Eng.

Abstr.) (Rus)

OPTICAL ROTATORY DISPERSION

Analytical applications of polarimetry, optical rotatory dispersion, and circular dichroism. Purdie N, et al. **Anal Chem** 1989 Jan 15;61(2):77A–89A

OPTICS

see related
LENSES
VISION

Fresnel vs. conventional prisms: their effects on the apparent fronto-parallel plane horopter. Brunnett SM, et al. **Am J Optom Physiol Opt** 1988 Jul;65(7):519–26

The International Optometric and Optical League [editorial] Grosvenor TP. **Am J Optom Physiol Opt** 1988 Dec; 65(12):972–3

Optical measurement of action potential activity in invertebrate ganglia. Cohen L, et al. **Annu Rev Physiol** 1989;51:527–41 (23 ref.)

Optical imaging of cortical activity: real-time imaging using extrinsic dye-signals and high resolution imaging based on slow intrinsic-signals. Lieke EE, et al. **Annu Rev Physiol** 1989;51:543–59 (49 ref.)

Optical recording of voltage changes in nerve terminals and in fine neuronal processes. Salzberg BM. **Annu Rev Physiol** 1989;51:507–26 (74 ref.)

In vivo study of tissue oxygen metabolism using optical and nuclear magnetic resonance spectroscopies. Tamura M, et al. **Annu Rev Physiol** 1989;51:813–34 (169 ref.)

IOL prediction: an evaluation of preoperatively determined intraocular lens power accuracy. Prior C, et al. **Aust N Z J Ophthalmol** 1988 May;16(2):111–7

Accuracy of routine intraocular lens power calculation in a district general hospital. Gregory PT, et al. **Br J Ophthalmol** 1989 Jan;73(1):57–60

Laser reflections from relatively flat specular surfaces. Marshall WJ. **Health Phys** 1989 May;56(5):753–7

The optical measurement of 1,2-propanediol for the determination of lung capillary permeability surface area. Galloway RL Jr, et al. **IEEE Trans Biomed Eng** 1989 Jun; 36(6):591–7

Progressive addition lenses [letter] Jan D. **J Am Optom Assoc** 1989 Jan;60(1):9

Clinical comparison of the TruVision Omni and four progressive addition lenses. Wittenberg S, et al. **J Am Optom Assoc** 1989 Feb;60(2):114–21

Photomicrography: a translation into the vernacular. Part IV: Producing high quality photomicrographs. Vetter JP. **J Biol Photogr** 1988 Jul;56(3):89–108

The 9 diopter surprise revisited [letter] Shammas HJ. **J Cataract Refract Surg** 1988 Sep;14(5):580

Image fidelity: characterizing the imaging transfer function. Young IT. **Methods Cell Biol** 1989;30:1–45 (21 ref.)

A parallel algorithm for real-time computation of optical flow. Bülthoff H, et al. **Nature** 1989 Feb 9;337(6207):549–55

Progressive addition and variable focus lenses: a review. Sullivan CM, et al. **Ophthalmic Physiol Opt** 1988; 8(4):402–14 (50 ref.)

Intraocular lenses with posterior convex optics: a clinical review. Story PG. **Ophthalmic Surg** 1988 Sep;19(9):658–61

The resolution of photoelectron microscopes with UV, X-ray, and synchrotron excitation sources. Rempfer GF, et al. **Ultramicroscopy** 1989 Apr;27(3):273–300

The interactions between chromatic aberration, defocus and stimulus chromaticity: implications for visual physiology and colorimetry. Flitcroft DI. **Vision Res** 1989;29(3):349–60

[Eyeglasses and prismatic effects] Prevost G. **Agressologie** 1988 Oct;29(10):697–8 (Eng. Abstr.) (Fre)

[Experimental study of posterior capsule opacification and optic decentering of various posterior chamber lenses following intercapsular implantation] Tetz M, et al. **Fortschr Ophthalmol** 1988;85(6):682–8 (Eng. Abstr.) (Ger)

[Optical consequences of implantation of a negative intraocular lens in myopic patients] van der Heijde GL, et al. **Klin Monatsbl Augenheilkd** 1988 Jul;193(1):99–102 (Eng. Abstr.) (Ger)

[Aggregation of isolated myofibrils stimulated by their contraction. I. Origin of the second phase of optical changes during myofibril contraction] Shelud'ko NS, et al. **Biofizika** 1989 May-Jun;34(3):473–7 (Eng. Abstr.) (Rus)

DIAGNOSTIC USE

Optical approaches to neuron function. Cohen L. **Annu Rev Physiol** 1989;51:487–90

HISTORY

The psychology of visual perception in Ptolemy's Optics. Smith AM. **Isis** 1988 Jun;79(297):189–207

[The first general mathematical description of optical lenses without aberrations] Merté B. **Klin Monatsbl Augenheilkd** 1989 Jan;194(1):59–61 (Eng. Abstr.) (Ger)

INSTRUMENTATION

Simplified system of Purkinje image photography for phakometry. Van Veen HG, et al. **Am J Optom Physiol Opt** 1988 Nov;65(11):905–8

Phosphorimeters for analysis of decay profiles and real time monitoring of exponential decay and oxygen concentrations. Green TJ, et al. **Anal Biochem** 1988 Oct; 174(1):73–9

New micro-optical methods to study metabolism in periportal and pericentral regions of the liver lobule. Thurman RG, et al. **Drug Metab Rev** 1988;19(3–4):263–81 (28 ref.)

A portable silicon photodiode luminometer. Marks K, et al. **J Biolumin Chemilumin** 1987 May;1(3):173–9

Theoretical research on electron optics. Ximen JY. **J Electron Microsc Tech** 1987 Dec;7(4):331–6

Geometrical optics of the retinal image stabilisation device [letter] Rushton DN. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):137–8

Unexpectedly large enhancement of a severely constricted field with reversed Galilean telescopes. Campbell MC, et al. **Optom Vis Sci** 1989 Apr;66(4):239–42

[Technical aspects of measurement for optically sophisticated eyeglasses] Guilino G. **Klin Monatsbl Augenheilkd** 1988 Jul; 193(1):103–9 (Eng. Abstr.) (Ger)

[A device for registering pupillary reflexes using reflected infrared light] Al'bertin SV. **Zh Vyssh Nerv Deiat** 1989 Jan-Feb;39(1):172–5 (Rus)

METHODS

Accuracy of lens power calculations with the biconvex and meniscus intraocular lenses [see comments] Shammas HJ. **Am J Ophthalmol** 1988 Nov 15;106(5):613–5. **Comment in:** Am J Ophthalmol 1989 Mar 15;107(3):308–9

Femtosecond optical ranging of corneal incision depth. Stern D, et al. **Invest Ophthalmol Vis Sci** 1989 Jan;30(1):99–104

Phase-transfer function of the human eye and its influence on point-spread function and wave aberration. Artal P, et al. **J Opt Soc Am [A]** 1988 Oct;5(10):1791–5

OPTOMETRY

AIDS Task Force policy statement. Section on Public Health and Occupational Vision of the American Academy of Optometry. **Am J Optom Physiol Opt** 1988 Jul; 65(7):599–601

Optometry and science. Brazelton FA. **Am J Optom Physiol Opt** 1988 Dec;65(12):919–20

The International Optometric and Optical League [editorial] Grosvenor TP. **Am J Optom Physiol Opt** 1988 Dec; 65(12):972–3

Factors influencing participation in an optometric comanagement center. Nussenblatt H. **Am J Optom Physiol Opt** 1988 Oct;65(10):819–27

On writing grant proposals: confessions of two grant reviewers. Pelli DG, et al. **Am J Optom Physiol Opt** 1988 Jul;65(7):598

Employment of optometrists by ophthalmologists [editorial] Bartlett JD. **J Am Optom Assoc** 1988 Sep;59(9):662

Establishing national research objectives in optometry: a report of the Council on Research, American Optometric Association. Bleything WB. **J Am Optom Assoc** 1989 May; 60(5):348–50

Role of optometrists in combatting high blood pressure. Good GW, et al. **J Am Optom Assoc** 1989 May;60(5):352–5

Relationship between test performance in ocular therapeutics and year of graduation. Gross LJ, et al. **J Am Optom Assoc** 1989 May;60(5):366–70

Ghost office revisited [editorial] Hale JR. **J Am Optom Assoc** 1988 Dec;59(12):920

Functional model of an eye protection program: guide for the clinical optometrist. Nakagawara VB. **J Am Optom Assoc** 1988 Dec;59(12):925–8

Certification of optometric specialties [letter] Pace LL. **J Am Optom Assoc** 1988 Aug;59(8):592

Essential factors in the care of elderly patients. Rosenbloom AA. **J Am Optom Assoc** 1988 Oct;59(10):774–9 (42 ref.)

Another cure for dyslexia? [editorial] Rosner J, et al. **J Am Optom Assoc** 1988 Nov;59(11):832–4

Child abuse and neglect: a diagnostic guide for the optometrist. Smith SK. **J Am Optom Assoc** 1988 Oct; 59(10):760–6 (34 ref.)

From the Congressional Office of Technology Assessment. **JAMA** 1989 Aug 18;262(7):883

Symposium on the Delivery of Optometric Care in Nontraditional Settings. Denver, Colorado, December, 1987. Proceedings. **Optom Vis Sci** 1989 Jan;66(1):4–28

Symposium on the delivery of optometric care in nontraditional settings. Summary and conclusions. Aston SJ. **Optom Vis Sci** 1989 Jan;66(1):26–8

Vision care in a juvenile detention facility. Berman MS. **Optom Vis Sci** 1989 Jan;66(1):23–5

Delivery of optometric care in nontraditional settings: the long-term care facility. Mancil GL. **Optom Vis Sci** 1989 Jan;66(1):9–11

Symposium on the delivery of optometric care in nontraditional settings. Introduction. Nussenblatt H. **Optom Vis Sci** 1989 Jan;66(1):4–5

Vision care for migrant workers. Roggenkamp JR. **Optom Vis Sci** 1989 Jan;66(1):20–2

Optometric care for the handicapped. Ronis MF. **Optom Vis Sci** 1989 Jan;66(1):12–6

Optometry and vision science [editorial] Sivak JG. **Optom Vis Sci** 1989 Jan;66(1):2–3

Team approach to home health care delivery: optometry as the primary vision care provider. Walters DL, et al. **Optom Vis Sci** 1989 Jan;66(1):17–9

[Current problems of optical correction of vision (information for ophthalmologists and optometrists) (editorial)] Avetisov ES, et al. **Vestn Oftalmol** 1989 Jan-Feb;105(1):3–5 (Rus)

EDUCATION

Women optometry students: how qualified? Kegel-Flom P. **Am J Optom Physiol Opt** 1988 Aug;65(8):666–73

The educated clinician [editorial] Bartlett JD. **J Am Optom Assoc** 1989 Feb;60(2):82

Evaluating the optometric literature: the educated clinician. Dunsky IL. **J Am Optom Assoc** 1989 Feb;60(2):95–104

The Havighurst Study revisited. Wild BW. **Optom Vis Sci** 1989 Apr;66(4):193–4

HISTORY

Optometry: a legal history. Classé JG. **J Am Optom Assoc** 1988 Aug;59(8):641–50

Recollections of 60 years of the history of optometry. Lang GL Jr. **J Am Optom Assoc** 1989 May;60(5):391–404

Optometry and its expanded role in health care delivery systems (1600–1987). Silverman MW. **J Am Optom Assoc** 1989 Jan;60(1):52–5

A contact lens centenary. Charman WN. **Ophthalmic Physiol Opt** 1988;8(4):465

[A rare trial eyeglass case with binocular trial lenses] Berneaud-Kötz G. **Klin Monatsbl Augenheilkd** 1988 Jun; 192(6):717–9 (Eng. Abstr.) (Ger)

INSTRUMENTATION

A clinical evaluation of the BioPen. Kristensen RM, et al. **Am J Ophthalmol** 1989 Jun 15;107(6):596–600

Modification of the Canon Auto Ref R1 for use as a continuously recording infra-red optometer. Pugh JR, et al. **Ophthalmic Physiol Opt** 1988;8(4):460–4

Assessing the effect of cataract: a clinical evaluation of the Opacity Lensmeter 701. Elliott DB, et al. **Optom Vis Sci** 1989 May;66(5):257–63

A hand optometer for measuring dark focus. Jaschinski-Kruza W. **Vision Res** 1988;28(11):1271–5

LEGISLATION & JURISPRUDENCE

The eye-opening case of Keir v. United States. Classé JG. **J Am Optom Assoc** 1989 Jun;60(6):471–6

A review of five recent cases of significance for optometrists. Classé JG, et al. **J Am Optom Assoc** 1988 Dec;59(12):964–8

Clinical and legal issues in the management of patients with diabetes. Classé JG, et al. **J Am Optom Assoc** 1988 Nov; 59(11):897–901

Tax reform legislation and the formation of optometric group practices. Cobb CH. **J Am Optom Assoc** 1989 Feb; 60(2):137–40

Computerized optometric records and the law. Dister RE, et al. **J Am Optom Assoc** 1989 Jan;60(1):56–8

A legal history of optometry. [letter] Flax N. **J Am Optom Assoc** 1989 Mar;60(3):164

Contact lens prescriptions: a clinicolegal view. Harris MG, et al. **J Am Optom Assoc** 1988 Sep;59(9):732–6

METHODS

Steady state of accommodation during observation of a Scheiner image. Jiang BC. **Am J Optom Physiol Opt** 1988 Oct;65(10):809–13

Procedure for aligning nonius lines [letter] Larson WL. **Am J Optom Physiol Opt** 1988 Sep;65(9):763–4

Intraocular lens power calculation. Hope-Ross M, et al. **Eye** 1988;2 (Pt 4):367–9

Preventing eye injuries [editorial] Bartlett JD. **J Am Optom Assoc** 1988 Dec;59(12):914

Optometric role in cardiac care [editorial] Nelson PS. **J Am Optom Assoc** 1988 Dec;59(12):915–6

Measurement of vertical deviations in different gaze positions in patients with a superior oblique palsy. Catalano RA, et al. **J Pediatr Ophthalmol Strabismus** 1988 Sep-Oct; 25(5):221–5

Twin channel infrared optometer for recording binocular accommodation. Heron G, et al. **Optom Vis Sci** 1989 Feb; 66(2):123–9

ORGANIZATION & ADMINISTRATION

Optometric comanagement centers: are they working? [editorial] Bartlett JD. **J Am Optom Assoc** 1988 Oct; 59(10):754

Vision therapy in optometric practice [letter] Graybill RL. **J Am Optom Assoc** 1988 Oct;59(10):759

Optometric utilization and level of satisfaction with a comanagement center. Nussenblatt H. **J Am Optom Assoc** 1988 Oct;59(10):767–72

1987 survey of military optometrists: activities, roles and attitudes. Shipp MD, et al. **J Am Optom Assoc** 1988 Oct; 59(10):802–14

STANDARDS

To see or not to see: routine pupillary dilation. Whitmer L. **J Am Optom Assoc** 1989 Jul;60(7):496–500

TRENDS

Optometry in the multidisciplinary setting [editorial] Bartlett

JD. **J Am Optom Assoc** 1988 Aug;59(8):586–7
Why should optometry become involved in the hospital setting? Blackman GL. **J Am Optom Assoc** 1988 Aug; 59(8):603–4
Alternative delivery systems and optometry [editorial] Dubow BW. **J Am Optom Assoc** 1989 Jan;60(1):7–8
British optometry [letter] Edgar DF, et al. **J Am Optom Assoc** 1989 Feb;60(2):87
Now it can and should be told. Eger MJ. **J Am Optom Assoc** 1989 Apr;60(4):323–6
Optometry in hospitals [editorial] Fisher GW. **J Am Optom Assoc** 1988 Aug;59(8):588–9
Optometry in transition: are its values in transition? Haffner AN. **J Am Optom Assoc** 1988 Oct;59(10):755–7
Hospitals and optometry: an evolving relationship. Myers KJ. **J Am Optom Assoc** 1988 Aug;59(8):598–602
A perspective on hospital affiliation by optometrists [editorial] Thomas RK. **J Am Optom Assoc** 1988 Aug; 59(8):590–1
Historical perspective of optometrists' and other health professionals' involvement in hospitals. Wong SG. **J Am Optom Assoc** 1988 Aug;59(8):594–7
Progressive addition and variable focus lenses: a review. Sullivan CM, et al. **Ophthalmic Physiol Opt** 1988; 8(4):402–14 (50 ref.)
Optometric services in the prison system. Verma SB. **Optom Vis Sci** 1989 Jan;66(1):6–8

ORAL CHARACTER see under **PSYCHOANALYTIC THEORY**

ORAL HEALTH

see related
DENTAL CLINICS
DENTAL HEALTH SURVEYS
DIAGNOSIS, ORAL
MOUTH DISEASES

Dental caries, visible plaque, and gingival bleeding in young adult Danes in alternative dental programs. Schwarz E. **Acta Odontol Scand** 1989 Jun;47(3):149–57
Some salivary factors in insulin-dependent diabetics. Thorstensson H, et al. **Acta Odontol Scand** 1989 Jun; 47(3):175–83
Prehistoric "fish-eaters" along the eastern Arabian coasts: dental variation, morphology, and oral health in the Ra's al-Hamra community (Qurum, sultanate of Oman, 5th–4th millennia BC). Macchiarelli R. **Am J Phys Anthropol** 1989 Apr;78(4):575–94
Orthodontic treatment, dental health, and oral health behavior in young Norwegian adults. Lervik T, et al. **Angle Orthod** 1988 Oct;58(4):381–6
Longitudinal relationships between nutrition and oral health. Papas AS, et al. **Ann N Y Acad Sci** 1989;561:124–42
The relationship of breastfeeding to oral development and dental concerns. Westover KM, et al. **ASDC J Dent Child** 1989 Mar–Apr;56(2):140–3 (26 ref.)
Our children's teeth [editorial] Hill F. **BMJ** 1989 Feb 4; 298(6669):272–3
Association between dental health and acute myocardial infarction. Mattila KJ, et al. **BMJ** 1989 Mar 25; 298(6676):779–81
Dental health month: community activities that work [news] **Can Dent Assoc J** 1989 Mar;55(3):161–3
"Celebration of the smile" [editorial] Crawford PR. **Can Dent Assoc J** 1989 Mar;55(3):159
Dental insurance and its effects among the elderly in Ontario. Locker D, et al. **Can Dent Assoc J** 1989 Jul;55(7):555–9
Dental knowledge and behaviour in native children living in northern Saskatchewan. Hoover JN, et al. **Can J Public Health** 1989 Mar–Apr;80(2):150–2
Caries experience, dental health behaviour and social status. A comparative study among Danish military recruits in 1972 and 1982. Antoft PE, et al. **Community Dent Health** 1988 Sep;5(3):255–64
The dental condition of Dutch schoolchildren assessed by a new dental health index. Carpay JJ, et al. **Community Dent Health** 1988 Sep;5(3):231–41
Potential benefits of toothpaste advertising on dental health. Kioulafas KE, et al. **Community Dent Health** 1989 Mar; 6(1):61–6
Oral health screening of elderly people attending a community care centre. Diu S, et al. **Community Dent Oral Epidemiol** 1989 Aug;17(4):212–5
Dental knowledge, attitudes, and behaviors of Indochinese and Australian-born adolescents. Durward CS, et al. **Community Dent Oral Epidemiol** 1989 Feb;17(1):14–8
Dental state and subjective chewing ability of institutionalized elderly people. Ekelund R. **Community Dent Oral Epidemiol** 1989 Feb;17(1):24–7
Analysis of complicated, multidimensional data [letter] Flack VF. **Community Dent Oral Epidemiol** 1989 Aug;17(4):218–9
Longitudinal study of dental health behaviors and other caries predictors in early childhood. Grytten J, et al. **Community Dent Oral Epidemiol** 1988 Dec;16(6):356–9
Dimensions of dietary and other health-related behaviors in a group of Danish adolescents. Hölund U, et al. **Community Dent Oral Epidemiol** 1988 Oct;16(5):278–81
Oral health of Polish children and WHO/FDI goals for the year 2000. Jańczuk Z. **Community Dent Oral Epidemiol** 1989 Apr;17(2):75–8
Impact of dental conditions on patients' quality of life. Reisine ST, et al. **Community Dent Oral Epidemiol** 1989 Feb; 17(1):7–10
Dental welfare profiles in a group of disabled Norwegian adults. Rise J, et al. **Community Dent Oral Epidemiol** 1989 Aug;17(4):165–9
Oral health promotion for institutionalised elderly. Schou L, et al. **Community Dent Oral Epidemiol** 1989 Feb;17(1):2–6
Social desirability and questioning children in dental research. Visser AP, et al. **Community Dent Oral Epidemiol** 1989 Jun;17(3):127–30
Esthetic principles; concepts, and practices in pediatric and adolescent dentistry. Isler S. **Dent Clin North Am** 1989 Apr; 33(2):171–81
Nutrition and oral health in the elderly. Knapp A. **Dent Clin North Am** 1989 Jan;33(1):109–25 (45 ref.)
Trends in oral health in the aging population. Ship JA, et al. **Dent Clin North Am** 1989 Jan;33(1):33–42 (30 ref.)
Oral health content in nursing school curricula. Jones JA, et al. **Gerontol Geriatr Educ** 1988;8(3–4):95–101
Tripartite system: working together for a common goal. **J Am Dent Assoc** 1989 Aug;119(2):241–7
Fluoride and oral health: a story of achievements and challenges. **J Am Dent Assoc** 1989 May;118(5):529–40
Relationships among dental functional status, clinical dental measures, and generic health measures. Rosenberg D, et al. **J Dent Educ** 1988 Nov;52(11):653–7
Status of dental health in black and white Americans. Sinkford JC. **J Natl Med Assoc** 1988 Oct;80(10):1127–8, 1130–1
The Rural Dental Health Program: long-term impact of two dental delivery systems on children's oral health. Feldman CA, et al. **J Public Health Dent** 1988 Fall;48(4):201–7
Oral health knowledge and attitudes of elementary schoolteachers in Michigan. Lang P, et al. **J Public Health Dent** 1989 Winter;49(1):44–50
Assessment of a dental disease prevention program after three years. Malvitz DM, et al. **J Public Health Dent** 1989 Winter;49(1):54–8
Oral hygiene instruction and health risk assessment in dental practice. Milgrom P, et al. **J Public Health Dent** 1989 Winter;49(1):24–31
Comments by the American Association of Public Health Dentistry on dental activities of the Department of Health and Human Services. Niessen LC. **J Public Health Dent** 1989 Spring;49(2):90–1
Health maintenance issues of the elderly. Oral health. Niessen LC, et al. **Md Med J** 1989 Feb;38(2):126–8
Global oral health and opportunities for international collaborations. Cohen LK. **N Y State Dent J** 1988 Nov; 54(9):42–4, 46–8
Lactovegetarian diet and dental health. Linkosalo E. **Proc Finn Dent Soc** 1988;84 Suppl 8–9:1–77
Effects of aging, diet restriction and microflora on oral health in humans and animals. Rosen S, et al. **Prog Clin Biol Res** 1989;287:75–85
NIDR—40 years of research advances in dental health. Sheridan PG. **Public Health Rep** 1988 Sep–Oct; 103(5):493–9
An evaluation of the psychological and social effects of malocclusion: some implications for dental policy making. Kenealy P, et al. **Soc Sci Med** 1989;28(6):583–91
Dental health and dental health behaviour in 8-year-old Finnish immigrant children in the north of Sweden. Ekman A, et al. **Swed Dent J** 1988;12(6):233–40
Dental health, dental health knowledge and behaviour in 14-year-old children of Finnish immigrant families in the north of Sweden. Ekman A. **Swed Dent J** 1989;13(3):95–102
Oral status and estimated treatment need in Swedish air force conscripts. Petersson LG, et al. **Swed Dent J** 1989; 13(1–2):69–76
Dental health status in Latin-American preschool children in Malmö. Vidal OP, et al. **Swed Dent J** 1989;13(3):103–9
Women's teeth. A cross-sectional and longitudinal study of women in Gothenburg, Sweden, with special reference to tooth loss and restorations. Ahlqwist M. **Swed Dent J Suppl** 1989;62:1–84
On dental health in Icelandic children. Observations during a clinical dentifrice trial. Bjarnason S. **Swed Dent J Suppl** 1989;57:1–40
Use of dental services and dental health: United States, 1986. Jack SS, et al. **Vital Health Stat [10]** 1988 Oct;(165):1–84
Monitoring and evaluation of oral health. Report of a WHO Expert Committee. **WHO Tech Rep Ser** 1989;782:1–69
Diet and nutrition: crucial factors in the dental health of children. Palmer CA. **World Rev Nutr Diet** 1989;58:131–59 (95 ref.)
[Dietetics, aging and oral health] Thomas AJ. **Rev Belge Med Dent** 1987;42(6):191–5 (Fre)
[Interview with Dr. David E. Barmes, WHO Director of Oral Health in Geneva] Barmes DE. **Schweiz Monatsschr Zahnmed** 1988;98(8):886–7 (Fre)
[Hygiene questions in orthodontic practice] Gutowski-Hesedenz M, et al. **Fortschr Kieferorthop** 1988 Aug;49(4):368–76 (Eng. Abstr.) (Ger)
[Dental status and treatment needs of 66-year-old inhabitants of the city of Zurich] Imfeld T, et al. **Schweiz Monatsschr Zahnmed** 1988;98(12):1328–35 (Eng. Abstr.) (Ger)
[Oral health—the status of knowledge 1985. An analysis of a repeated survey of 761 Swiss recruits] Oes P, et al. **Schweiz Monatsschr Zahnmed** 1989;99(3):281–91 (Eng. Abstr.) (Ger)
[How do adults evaluate their dental and oral hygiene status?] Schneider HG, et al. **Z Gesamte Hyg** 1988 May;34(5):314–6 (Eng. Abstr.) (Ger)
[How does the rate of participation in epidemiologic research affect oral health data?] Heinrich J, et al. **Zahn Mund Kieferheilkd** 1989;77(2):153–6 (Eng. Abstr.) (Ger)
[Use of health criteria for determining prospective tasks in prevention and for assessing its effectiveness] Leus PA. **Stomatologiia (Mosk)** 1988 Sep–Oct;67(5):72–5 (Rus)
[Assessment of the somatic and dental status of children with periodontitis of the deciduous teeth taking into account clinical x-ray and hematologic indices] Roginskii VV, et al. **Stomatologiia (Mosk)** 1988 Sep–Oct;67(5):64–7 (Eng. Abstr.) (Rus)

STANDARDS

[Comparison of the status of dentition of the population 35–44 years of age in Poland and other countries] Bołtacz-Rzepkowska E, et al. **Przegl Epidemiol** 1988; 42(3):269–74 (Eng. Abstr.) (Pol)
[Current methods of evaluating the status of oral health] Wochna-Sobańska M. **Przegl Epidemiol** 1988;42(3):262–8 (Eng. Abstr.) (Pol)

ORAL HYGIENE

see related
DENTAL DEVICES, HOME CARE

The effect of controlled oral hygiene in overdenture wearers. Budtz-Jørgensen E, et al. **Acta Odontol Scand** 1988 Aug; 46(4):219–5
Utilization of hypnosis to promote compliance with routine dental flossing. Kelly MA, et al. **Am J Clin Hypn** 1988 Jul;31(1):57–60
Effect of a daily 0.2% chlorhexidine rinse on the oral health of an institutionalized elderly population. Yanover L, et al. **Can Dent Assoc J** 1988 Aug;54(8):595–8
The effects of ultrasonic scaling with oral hygiene education on the distribution of pathological pockets using CPITN diagnostic standards. Takahashi Y, et al. **Community Dent Health** 1989 Mar;6(1):31–7
"Spontaneous" oral hygiene: a predictor for future preventive behavior? Alcouffe F. **Community Dent Oral Epidemiol** 1989 Jun;17(3):120–2
Correlation of manual dexterity and comprehension with oral hygiene and periodontal status in mentally handicapped adults. Shaw L, et al. **Community Dent Oral Epidemiol** 1989 Aug;17(4):187–9
Dental hygienists' influence on the patients' knowledge, motivation, self-care, and perception of change. Uitenbroek DG, et al. **Community Dent Oral Epidemiol** 1989 Apr; 17(2):87–90
Efficacy of traditional chewing sticks in plaque control. Kaimenyi JT, et al. **East Afr Med J** 1987 Sep;64(9):624–7 (17 ref.)
Endocarditis from a dental focus. Importance of oral hygiene in valvar heart disease. Verhaaren H, et al. **Int J Cardiol** 1989 Jun;23(3):343–7
Four-year investigation of salt and peroxide regimen compared with conventional oral hygiene. Wolff LF, et al. **J Am Dent Assoc** 1989 Jan;118(1):67–72
Histological and clinical parameters of human gingiva following 3 weeks of chemical (chlorhexidine) or mechanical plaque control. Brecx MC, et al. **J Clin Periodontol** 1989 Mar;16(3):150–5
The retention of newly-acquired brushing and flossing skills. Stewart JE, et al. **J Clin Periodontol** 1989 May;16(5):331–2
Effects of personal oral hygiene and subgingival scaling on bleeding interdental gingiva. Caton J, et al. **J Periodontol** 1989 Feb;60(2):84–90
The use of 0.2% chlorhexidine spray as an adjunct to oral hygiene and gingival health in physically and mentally handicapped adults. Kalaga A, et al. **J Periodontol** 1989 Jul;60(7):381–5
The effect of health beliefs on the compliance of periodontal patients with oral hygiene instructions. Kühner MK, et al. **J Periodontol** 1989 Jan;60(1):51–6
Oral hygiene and the prevalence of oral group D streptococci in medically-physically compromised and periodontal disease patients. McCrary BR, et al. **J Periodontol** 1989 May;60(5):255–8
Oral hygiene instruction and health risk assessment in dental practice. Milgrom P, et al. **J Public Health Dent** 1989 Winter;49(1):24–31
How effective is oral hygiene instruction? Results after 6 and 24 weeks. Weinstein P, et al. **J Public Health Dent** 1989 Winter;49(1):32–8
Effects of chlorhexidine mouthrinse on oral health in patients with acute leukemia. Wahlin YB. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):279–87
Gingival and mucosal reactions after intensive chlorhexidine gel treatment with or without oral hygiene measures. Almqvist H, et al. **Scand J Dent Res** 1988 Dec;96(6):557–60
Dental care habits and knowledge of oral health in insulin-dependent diabetics. Thorstensson H, et al. **Scand J Dent Res** 1989 Jun;97(3):207–15
Dental health, dental health knowledge and behaviour in 14-year-old children of Finnish immigrant families in the north of Sweden. Ekman A. **Swed Dent J** 1989;13(3):95–102
Relationships between oro-facial lesions, mutilations and periodontal status in leprosy patients at Lo-Sheng

Sanatorium at Taiwan. Wong MY, et al.
Taiwan I Hsueh Hui Tsa Chih 1988 Apr;87(4):437–44

[Cooperation between pediatric stomatology and pediatrics in the oral–preventive management of infants and preschool children] Graehn G, et al. **Padiatr Grenzgeb** 1988; 27(3):203–9 (Eng. Abstr.) **(Ger)**

[Differentiated age–adjusted oral hygiene in preschoolers] Krüger K, et al. **Zahn Mund Kieferheilkd** 1988;76(6):571–5 (Eng. Abstr.) **(Ger)**

[Study on health status and oral hygiene of children at a primary school. Health status and oral hygiene in schoolchildren] Pizzi S, et al.
Acta Biomed Ateneo Parmense 1988;59(3–4):93–102 (Eng. Abstr.) **(Ita)**

[The course of nonspecific odontogenic allergy in patients with pulmonary tuberculosis in relation to oral hygiene] Ovezov ES, et al. **Probl Tuberk** 1989;(3):18–22 (Eng. Abstr.) **(Rus)**

[Preventive practices and individual behavior in oro–dental health (letter) (published erratum appears in Gac Sanit 1989 Jan–Feb;3(10):348)] Fernández Parra A. **Gac Sanit** 1988 Sep–Oct;2(8):248–9 **(Spa)**

INSTRUMENTATION

Chewing sticks, toothpaste, and plaque removal. Danielsen B, et al. **Acta Odontol Scand** 1989 Apr;47(2):121–5

[The significance of the contamination of dental care articles. The results of a field study] Hingst V.
Zentralbl Bakteriol Mikrobiol Hyg [B] 1989 Apr; 187(4–6):337–64 (Eng. Abstr.) **(Ger)**

[Active irrigation of the oral cavity in the combined treatment and rehabilitation of maxillofacial patients] Slepchenko MA, et al. **Voen Med Zh** 1988 Oct;(10):58–9 **(Rus)**

METHODS

Oral hygiene program for orthodontic patients. Yeung SC, et al. **Am J Orthod Dentofacial Orthop** 1989 Sep; 96(3):208–13

Oral hygiene—why neglect the tongue? Ralph WJ.
Aust Dent J 1988 Jun;33(3):224–5

Investing in mouth care. Pettigrew D.
Geriatr Nurs (New York) 1989 Jan–Feb;10(1):22–4

The practical approach to improved oral hygiene. Lange DE.
Int Dent J 1988 Sep;38(3):154–62 (31 ref.)

Pulsated jet subgingival irrigation with 0.1% chlorhexidine, simplified oral hygiene and chronic periodontitis. Vignarajah S, et al. **J Clin Periodontol** 1989 Jul;16(6):365–70

The prevention of oral complications in bone–marrow transplantations by means of oral hygiene and dental intervention. Raber–Durlacher JE, et al. **Neth J Med** 1989 Feb;34(1–2):98–108 (26 ref.)

[Use of standardized oral hygiene in the prevention and therapy of mucositis in patients treated with radiochemotherapy of head and neck neoplasms] Hasenau C, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Nov; 67(11):576–9 (Eng. Abstr.) **(Ger)**

PSYCHOLOGY

Improvement of oral hygiene habits: a psychological approach. 2–year data. Alcouffe F. **J Clin Periodontol** 1988 Nov;15(10):617–20

[Oral hygiene in older patients. Psychological and practical aspects of oral hygiene in gerodontology] Kundert E, et al. **Schweiz Monatsschr Zahnmed** 1988;98(6):654–62 **(Ger, Fre)**

STANDARDS

[Clinico–statistical evaluation of oral hygiene standards in a sample of military recruits] Bianco A.
Minerva Stomatol 1988 Nov;37(11):911–4 (Eng. Abstr.) **(Ita)**

[Comparison of the status of the periodontium and oral hygiene among children 8–9 and 13–14 years of age in Poland and in other countries] Arabska–Przedpelska B, et al. **Przegl Epidemiol** 1988;42(3):279–85 (Eng. Abstr.) **(Pol)**

[Current methods of evaluating the status of oral health] Wochna–Sobańska M. **Przegl Epidemiol** 1988;42(3):262–8 (Eng. Abstr.) **(Pol)**

STATISTICS & NUMERICAL DATA

Occurrence of root caries in relation to dental health behavior. Vehkalahti MM, et al. **J Dent Res** 1988 Jun; 67(6):911–4

ORAL HYGIENE INDEX see under **DENTAL HEALTH SURVEYS**

ORAL MEDICINE see **DENTISTRY**

ORAL REHYDRATION THERAPY see **FLUID THERAPY**

ORAL STAGE see under **PSYCHOSEXUAL DEVELOPMENT**

ORAL SUBMUCOUS FIBROSIS see under **MOUTH DISEASES**

ORBICULARIS OCULI REFLEX see **BLINKING**

ORBIT

An unusual infra–orbital foreign body. McCaughey AD.
Br J Oral Maxillofac Surg 1988 Oct;26(5):426–9

Orbital haemorrhage following retrobulbar injection. Kaushik NC. **Indian J Ophthalmol** 1988 Jul–Sep; 36(3):128–30

Intra–orbital foreign bodies and their management. Sinha AK, et al. **Indian J Ophthalmol** 1987 May–Jun;35(3):126–8

Abnormal foreign body in the orbit. Verma R, et al.
Indian J Ophthalmol 1987 May–Jun;35(3):162–3

Angioedema from calcium channel blockers. Sadick NS, et al. **J Am Acad Dermatol** 1989 Jul;21(1):132–3

Ocular bruits in ischemic cerebrovascular disease. Hu HH, et al. **Stroke** 1988 Oct;19(10):1229–33

[Manual insufflation and intra–orbital air] Caudan L, et al. **Ann Fr Anesth Reanim** 1989;8(2):146 **(Fre)**

[A case of transorbital intracranial foreign bodies due to windshield impact] Sugawa N, et al. **No Shinkei Geka** 1988 Oct;16(11):1311–5 (23 ref.) (Eng. Abstr.) **(Jpn)**

[Painful ophthalmoplegia: the Tolosa–Hunt syndrome and orbital pseudotumor syndrome] Nishida Y, et al.
No To Shinkei 1988 Aug;40(8):759–62 (Eng. Abstr.) **(Jpn)**

[Localization and extraction of metallic paraocular foreign bodies] Segal N. **Rev Chir [Oftalmol]** 1988 Jul–Sep; 32(3):203–6 (Eng. Abstr.) **(Rum)**

[A long–term symptomless remaining of a wooden foreign body in the orbit] Iagudinova FSh, et al. **Oftalmol Zh** 1988; (4):256 **(Rus)**

ABNORMALITIES

Holoprosencephaly: association with interstitial deletion of 2p and review of the cytogenetic literature. Müinke M, et al. **Am J Med Genet** 1988 Aug;30(4):929–38 (89 ref.)

The Tessier number 9 cleft. David DJ, et al.
Plast Reconstr Surg 1989 Mar;83(3):520–7

A congenital orbital defect with periorbital–dural tissue adhesion. Skvaril J, et al. **Plast Reconstr Surg** 1989 Jul; 84(1):126–8

[Surgical treatment of orbital hypertelorism—a report of 5 cases] Cai YS, et al. **Yen Ko Hsueh Pao** 1986 Jun;2(2):79–81 (Eng. Abstr.) **(Chi)**

ANATOMY & HISTOLOGY

Fat–suppression MR imaging of the orbit. Simon J, et al. **AJNR** 1988 Sep;9(5):961–8

Ultrasonographic and biometric evaluation of the eye and orbit of dogs. Cottrill NB, et al. **Am J Vet Res** 1989 Jun; 50(6):898–903

The orbit—cone or pyramid? [letter] Wolfe SA.
Ann Plast Surg 1980 Oct;5(4):340

A search for lymphatic drainage of the monkey orbit. McGetrick JJ, et al. **Arch Ophthalmol** 1989 Feb; 107(2):255–60

Morphometric study of the orbit's base in male and female skulls of Spaniards. Catalina–Herrera CJ.
Bull Assoc Anat (Nancy) 1988 Jun–Sep;72(217–218):5–7

Eyelid and orbital fascial attachments and their clinical significance. Koornneef L. **Eye** 1988;2 (Pt 2):130–4

Surface coil magnetic resonance imaging of the orbit at 1.5T. Wilms G, et al. **ROFO** 1988 Nov;149(5):496–501

[Quantitative analysis of multiple spin echo MRI of normal human orbit] Nose H, et al.
Nippon Ganka Gakkai Zasshi 1988 Nov;92(11):1859–63 (Eng. Abstr.) **(Jpn)**

[Comparative evaluation of morphometric and intravital measurements of the intraorbital portion of the optic nerve and of the distance from the posterior pole of the eyeball to the common tendinous ring] Shengeliia DG, et al.
Oftalmol Zh 1989;(2):112–3 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

Scanning electron microscopy of human ocular vascular casts: the submacular choriocapillaris. Fryczkowski AW, et al. **Acta Anat (Basel)** 1988;132(4):265–9

Orbital phlebography for differentiation between multiple sclerosis and venous vasculitis in subacute blindness. Hannerz J, et al. **Acta Radiol** 1988 Sep–Oct;29(5):505–7

Ligation of an arteriovenous malformation with the Heifetz clamp. Case report. Gross ND, et al. **Arch Ophthalmol** 1989 Feb;107(2):171

Systemic symptoms associated with orbital venous vasculitis. Hannerz J. **Cephalalgia** 1988 Dec;8(4):255–63

Intermittent exophthalmos. Phanthumchinda K, et al.
J Med Assoc Thai 1989 Jun;72(6):351–4

Orbital venous anatomy of the Mongolian gerbil with comparison to the mouse, hamster and rat. Timm KI.
Lab Anim Sci 1989 May;39(3):262–4

Orbital varix—an unusual cause of proptosis. A case report. Salmenson BD, et al. **S Afr Med J** 1988 Nov 19; 74(10):529–30

[Post–traumatic carotido–cavernous fistula associated with thrombosis of the superior ipsilateral ophthalmic vein. Clinical and therapeutic characteristics: apropos of a case] Simha N, et al. **Bull Soc Ophtalmol Fr** 1988 Jun–Jul; 88(6–7):833–4, 837–40 (9 ref.) **(Fre)**

[Enophthalmos apropos of a case] Toussaint P, et al.
Bull Soc Ophtalmol Fr 1988 Aug–Sep;88(8–9):1007–8 (Eng. Abstr.) **(Fre)**

[Arteriovenous malformation of the orbit] Witschel H, et al.
Klin Monatsbl Augenheilkd 1989 Feb;194(2):97–100 (Eng. Abstr.) **(Ger)**

[Traumatic ophthalmic artery–superior ophthalmic vein fistula: a case report] Tabuse J, et al. **No Shinkei Geka** 1989 Mar;17(3):291–5 (13 ref.) (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

Peribulbar block for cataract surgery: a prospective double–blind study of two local anesthetics. Davis PL, et al. **Can J Ophthalmol** 1989 Jun;24(4):155–8

GROWTH & DEVELOPMENT

[Congenital anophthalmos. Control of osteogenesis with an expanding intraorbital prosthesis] Rodallec A, et al.
J Fr Ophtalmol 1988;11(10):661–8 (Eng. Abstr.) **(Fre)**

[Development of the orbit in children after removal of the eyeball and the use of a modified Bangerter implant] Golińska A. **Klin Oczna** 1988 Mar;90(3):106–7 (Eng. Abstr.) **(Pol)**

IMMUNOLOGY

Immunohistochemical analysis of the retrobulbar tissues in Graves' ophthalmopathy. Weetman AP, et al.
Clin Exp Immunol 1989 Feb;75(2):222–7

Immunological responses in the eyelid and orbit. van der Gaag R. **Eye** 1988;2 (Pt 2):158–63 (41 ref.)

INJURIES

Orbital trauma, Part 2.
Adv Ophthalmic Plast Reconstr Surg 1987;7:1–351

Complex orbital trauma: the role of rigid fixation and primary bone grafting. Antonyshyn O, et al.
Adv Ophthalmic Plast Reconstr Surg 1987;7:61–92

Orbital and periorbital dog bites. Gonnering RS.
Adv Ophthalmic Plast Reconstr Surg 1987;7:171–80

Ocular motility disturbances following trauma. Richards R.
Adv Ophthalmic Plast Reconstr Surg 1987;7:133–47

Gunshot wounds of the orbit. Sherman S, et al.
Adv Ophthalmic Plast Reconstr Surg 1987;7:181–92

Penetrating injuries to the orbit. Simonton JT, et al.
Adv Ophthalmic Plast Reconstr Surg 1987;7:217–27

Penetrating orbital injuries. Spoor TC.
Adv Ophthalmic Plast Reconstr Surg 1987;7:193–216

Management of orbital–cranial trauma. Wesley RE, et al.
Adv Ophthalmic Plast Reconstr Surg 1987;7:3–26

Evidence of orbital deformation in indirect optic nerve injury. Weight lifter's optic neuropathy. Purvin V.
J Clin Neuro Ophthalmol 1988 Mar;8(1):9–11

Near–miss of the optic nerve from a deep penetrating orbital injury with a kitchen knife. Volpicelli M, et al.
J Clin Neuro Ophthalmol 1989 Mar;9(1):61–2

Manic–like state after bilateral orbitofrontal and right temporoparietal injury: efficacy of clonidine. Bakchine S, et al. **Neurology** 1989 Jun;39(6):777–81

Frontobasal and orbital reconstruction following trauma and tumor removal using a compound of bone meal, antibiotic, and fibrin sealant. Knöringer P. **Neurosurg Rev** 1989; 12(1):31–9

[Intra–orbital explosion of a rocket] Cantaloube D, et al.
Rev Stomatol Chir Maxillofac 1988;89(4):248–52 (13 ref.) (Eng. Abstr.) **(Fre)**

[Isolated perforation of the orbital fundus by a fragment of tree branch wedged into the maxillary sinus] Krwawicz L. **Klin Oczna** 1988 Mar;90(3):110–1 (Eng. Abstr.) **(Pol)**

[Long–term presence of a foreign body in the orbit] Szymczyk K, et al. **Wiad Lek** 1988 Aug 1;41(15):1037–8 (Eng. Abstr.) **(Pol)**

[The role of blunt trauma in the pathogenesis of rhinogenous phlegmon of the orbit in children] Moskovchenko KP, et al. **Oftalmol Zh** 1988;(7):437–8 **(Rus)**

INNERVATION

Localization of proprioceptive neurons innervating the muscle spindles of pig extraocular muscles studied by horseradish peroxidase labelling. Kubota K, et al.
Anat Anz 1988;166(1–5):117–31

The influence of the mode of treatment of zygomatic bone fractures on the healing process of the infraorbital nerve. De Man K, et al. **Br J Oral Maxillofac Surg** 1988 Oct; 26(5):419–25

Neuro–ophthalmology. Jones SM. **Br Vet J** 1989 Mar–Apr; 145(2):99–120 (39 ref.)

Normative data on scalp responses evoked by infraorbital nerve stimulation. Leandri M, et al.
Electroencephalogr Clin Neurophysiol 1988 Nov–Dec; 71(6):415–21

Physiological and anatomical consequences of infraorbital nerve transection in the trigeminal ganglion and trigeminal spinal tract of the adult rat. Renehan WE, et al.
J Neurosci 1989 Feb;9(2):548–57

A comparative study of normal sensibility of the inferior alveolar nerve and the infraorbital nerve. Van Sickels JE, et al. **Oral Surg Oral Med Oral Pathol** 1989 Mar;67(3):255–7

[Age–related morphometry of the intraorbital part of the optic nerve and the distance from the point of its emergence from the eye to the tendinous annulus] Shengelia DG, et al. **Vestn Oftalmol** 1989 Jan–Feb;105(1):47–8 **(Rus)**

PATHOLOGY

Sclerosing orbital pseudotumor: a unique clinicopathologic

entity. Weissler MC, et al. **Ann Otol Rhinol Laryngol** 1989 Jul;98(7 Pt 1):496–501

The use of real-time orbital ultrasound in Graves' ophthalmopathy: a comparison with computed tomography. Given-Wilson R, et al. **Br J Radiol** 1989 Aug; 62(740):705–9

Changes in the orbital tissues and muscles dysthyroid ophthalmopathy. Bleeker GM. **Eye** 1988;2 (Pt 2):193–7 (8 ref.)

[Magnetic resonance tomography of the orbit in endocrine orbitopathy] Hosten N, et al. **Rontgenpraxis** 1988 Nov; 41(11):400–5 (Ger)

RADIATION EFFECTS

Long-term effects of orbital irradiation. Guyuron B, et al. **Head Neck Surg** 1987 Nov–Dec;10(2):85–7

Therapeutic outcome of prednisone medication and of orbital irradiation in patients with Graves' ophthalmopathy. Wiersinga WM, et al. **Ophthalmologica** 1988;197(2):75–84

[Quantitative results following consecutive corticoid and radiotherapy in endocrine ophthalmopathy] Esser J, et al. **Fortschr Ophthalmol** 1988;85(3):323–6 (Eng. Abstr.) (Ger)

[Step-by-step treatment of progressive edematous-infiltrative ophthalmopathy in Graves' disease. Results of the treatment by plasmapheresis (stage II) and cobalt teletherapy of orbital tissues (stage III)] Pilarska K, et al. **Endokrynol Pol** 1988;39(5):237–44 (Eng. Abstr.) (Pol)

RADIOGRAPHY

Globe tenting: a sign of increased orbital tension. Dalley RW, et al. **AJNR** 1989 Jan–Feb;10(1):181–6

Extradural nasal and orbital extension of malignant glioma. Case report. Orita T, et al. **Surg Neurol** 1989 May; 31(5):395–9

[Analysis of CT scanning of ophthalmic Graves' disease] Song GX. **Chung Hua Yen Ko Tsa Chih** 1988 Jul; 24(4):200–2 (Eng. Abstr.) (Chi)

SURGERY

Reconstruction of the anophthalmic socket: state of the art. Bosniak SL. **Adv Ophthalmic Plast Reconstr Surg** 1987; 7:313–48 (51 ref.)

Canthal fixation with a stainless steel screw: a report of ten patients. Caliahan MA.
Adv Ophthalmic Plast Reconstr Surg 1987;7:33–40

Nasolacrimal drainage system obstruction after orbital decompression [letter] **Am J Ophthalmol** 1989 Jan 15; 107(1):91–2

Medial and lateral wall decompression for thyroid ophthalmopathy. Leone CR Jr, et al. **Am J Ophthalmol** 1989 Aug 15;108(2):160–6

Custom orbital implant in the repair of late posttraumatic enophthalmos. Putterman AM, et al. **Am J Ophthalmol** 1989 Aug 15;108(2):153–9

Eye socket reconstruction with free radial forearm flap. Tahara S, et al. **Ann Plast Surg** 1989 Aug;23(2):112–6

Results of optic nerve sheath fenestration for pseudotumor cerebri. The lateral orbitotomy approach. Corbett JJ, et al. **Arch Ophthalmol** 1988 Oct;106(10):1391–7

Tandem Jaffe lid specula for external approach to the orbital floor [letter] Khan JA, et al. **Arch Ophthalmol** 1989 Jun; 107(6):791–2

Orbital surgery. The technique of coronal scalp flap approach to the qateral orbitotomy. Stewart WB, et al.
Arch Ophthalmol 1988 Dec;106(12):1724–6

Optic nerve sheath fenestration in pseudotumor cerebri. A lateral orbitotomy approach. Tse DT, et al.
Arch Ophthalmol 1988 Oct;106(10):1458–62 (40 ref.)

Lateral orbitotomy without removal of the lateral orbital rim. Wirtschafter JD, et al. **Arch Ophthalmol** 1988 Oct; 106(10):1463–8

Cerebrospinal fluid leakage complicating orbital exenteration. Wulc AE, et al. **Arch Ophthalmol** 1989 Jun;107(6):827–30

Orbital exenteration in surgery of malignant neoplasms of the paranasal sinuses. The value of preoperative computed tomography. Graamans K, et al.
Arch Otolaryngol Head Neck Surg 1989 Aug;115(8):977–80

Superior and transantral orbital decompression procedures. Effects on increased intraorbital pressure and orbital dynamics. Stanley RJ, et al.
Arch Otolaryngol Head Neck Surg 1989 Mar;115(3):369–73

Surgical management of the frozen orbit [letter] English F, et al. **Aust N Z J Ophthalmol** 1988 Nov;16(4):369–70

Rigid fixation and osteotomy design in frontal orbital advancement osteotomies. Del Campo AF.
Clin Plast Surg 1989 Jan;16(1):205–11

Surgical management of contracted socket. Betharia SM, et al. **Indian J Ophthalmol** 1988 Apr–Jun;36(2):79–81

Decompression of the orbit and the optic nerve in different diseases. Stoll W, et al. **J Craniomaxillofac Surg** 1988 Oct; 16(7):308–11

Periorbital marginotomies: anatomy and applications. Sullivan WG, et al. **J Craniomaxillofac Surg** 1989 Jul; 17(5):206–9

Orbital decompression for dysthyroid orbitopathy [letter] Kennerdell JS, et al. **J Neurosurg** 1989 May;70(5):816–7

Repair of orbital floor fractures with Marlex mesh. Scapini DA, et al. **Laryngoscope** 1989 Jul;99(7 Pt 1):697–701

Long-term follow-up and recent observations on 305 cases of orbital decompression for dysthyroid orbitopathy. Warren JD, et al. **Laryngoscope** 1989 Jan;99(1):35–40

Functional and anatomic aspects of the orbitotomy in craniofacial surgery. Mühling J, et al. **Neurosurg Rev** 1989; 12(1):21–3

Multidisciplinary approach to the management of complex bony and soft tissue orbitocranial disorders. Toth BA, et al. **Ophthalmology** 1988 Aug;95(8):1013–26

Bending but not breaking the supraorbital bar. Zide BM.
Plast Reconstr Surg 1989 Jul;84(1):140–2

Willard Parker's 1841 orbital operation. Khan JA, et al.
Surv Ophthalmol 1988 Sep–Oct;33(2):117–20

The orbital surgeon. Kennedy RE.
Trans Am Ophthalmol Soc 1989;86:136–53; discussion 153–7

Correction of orbital hypertelorism in Asian patients. Ohmori K. **World J Surg** 1989 Jul–Aug;13(4):384–95

[Severe Basedow's exophthalmia. Indications for surgical treatment apropos of a case] Péron JM, et al.
Rev Stomatol Chir Maxillofac 1988;89(6):380–2 (Eng. Abstr.) (Fre)

[Esthetic premises in the choice of the surgical approach to the orbit] Heesen J, et al. **Fortschr Kiefer Gesichtschir** 1989; 34:180–3 (Ger)

[Esthetic management of the empty orbit] Mohr C, et al.
Fortschr Kiefer Gesichtschir 1989;34:174–7 (Ger)

[Orbital surgery as a part of esthetic rehabilitation] Mühling J, et al. **Fortschr Kiefer Gesichtschir** 1989;34:177–80 (Ger)

[Esthetic reconstruction in defects of the orbital soft tissues and loss of the eye] Schumann D, et al.
Fortschr Kiefer Gesichtschir 1989;34:183–6 (Ger)

[Possibilities of orbital surgery: limits of its safety] Brovkina AF. **Vestn Oftalmol** 1989 May–Jun;105(3):40–3 (Eng. Abstr.) (Rus)

ULTRASTRUCTURE

Ultrastructure of the orbital pathway for cerebrospinal fluid drainage in rabbits. Erlich SS, et al. **J Neurosurg** 1989 Jun; 70(6):926–31

ORBITAL DISEASES

Orbital hydatid cyst of Echinococcus oligarthrus in a human in Venezuela. Lopera RD, et al. **J Parasitol** 1989 Jun; 75(3):467–70

[Aggressive sarcoidosis with orbital manifestations] Toulemont PJ, et al. **Bull Soc Ophtalmol Fr** 1988 Nov; 88(11):1329–32, 1335–6 (9 ref.) (Eng. Abstr.) (Fre)

CHEMICALLY INDUCED

Unilateral orbital edema following the intravascular injection of contrast medium [letter] Sharma S, et al. **Clin Radiol** 1989 Jan;40(1):108

CLASSIFICATION

Orbital infections: clinical and radiographic diagnosis and surgical treatment. O'Ryan F, et al.
J Oral Maxillofac Surg 1988 Nov;46(11):991–7 (31 ref.)

COMPLICATIONS

Orbital hemorrhage in a newborn. Munoz M, et al.
Am J Ophthalmol 1989 Aug 15;108(2):206–8

Orbital hemorrhage and eyelid ecchymosis in acute orbital myositis. Reifler DM, et al. **Am J Ophthalmol** 1989 Feb 15;107(2):111–3

Angiolymphoid hyperplasia with eosinophilia of the orbit associated with obstructive airway disease. Sheren SB, et al. **Am J Ophthalmol** 1989 Aug 15;108(2):167–9

Conjunctival implantation cyst of the orbit. Transient visual loss with pregnancy. Harris GJ, et al. **Arch Ophthalmol** 1989 Jun;107(6):924

Orbital mucormycosis with retinal and ciliary artery occlusions. Luo QL, et al. **Br J Ophthalmol** 1989 Aug; 73(8):680–3

Eyelid swelling and erythema as the only signs of subperiosteal abscess. Rubin SE, et al. **Br J Ophthalmol** 1989 Jul;73(7):576–8

Acute proptosis and blindness in a patient with orbital phycomycosis. Humphry RC, et al. **J R Soc Med** 1989 May;82(5):304–5

Orbital myositis and giant cell myocarditis. Klein BR, et al.
Neurology 1989 Jul;39(7):988–90

Eosinophilic granuloma of the cavernous sinus and orbital apex in an HIV-positive patient. Gross FJ, et al.
Ophthalmology 1989 Apr;96(4):462–7

Anterior chamber paracentesis [letter] Kersten RC, et al.
Plast Reconstr Surg 1989 Oct;84(4):701–3

The orbit and neuro-ophthalmology. Glaser JS.
Semin Neurol 1986 Jun;6(2):124–34 (20 ref.)

A case of Kawasaki syndrome associated with preseptal cellulitis in orbita. Demirsoy S, et al. **Turk J Pediatr** 1988 Jan–Mar;30(1):55–9

[Pseudotumor exophthalmos caused by mucorales granuloma] Awad-Michel A, et al.
Bull Soc Ophtalmol Fr 1988 May;88(5):691–4, 696 (29 ref.) (Eng. Abstr.) (Fre)

[Exophthalmos due to ethmoidal and orbital mucocele] Ivaşcu M, et al. **Rev Chir [Oftalmol]** 1988 Oct–Dec; 32(4):303–5 (Eng. Abstr.) (Rum)

CONGENITAL

Oculo-cerebro-cutaneous syndrome: description of a new case. Giorgi PL, et al. **Eur J Pediatr** 1989 Jan;148(4):325–6

Optic pit, microphthalmos and orbital cyst. Sherman J, et al. **Ophthalmic Paediatr Genet** 1988 Jul;9(2):131–3

DIAGNOSIS

Orbital inflammation as presenting sign for myelodysplastic syndrome. Rouhiainen HJ. **Acta Ophthalmol (Copenh)** 1989 Feb;67(1):109–11

Chronic hematic cysts of the orbit. Wiot JG, et al.
AJNR 1989 Sep–Oct;10(5 Suppl):S37–9

Gonococcal conjunctivitis mimicking orbital cellulitis in a young adolescent [letter] Legido A, et al.
Am J Dis Child 1989 Apr;143(4):443–4

Orbital hematoma [letter] Metlay LA.
Am J Forensic Med Pathol 1988 Sep;9(3):272

Systemic sarcoidosis presenting initially with bilateral orbital and upper lid masses. Imes RK, et al. **Ann Ophthalmol** 1988 Dec;20(12):466–7, 469

Orbital intraconal haematic cysts in young people: computed tomography and magnetic resonance imaging. Travis RC, et al. **Br J Radiol** 1989 Jun;62(738):521–5

Rhinocerebral mucormycosis: MR manifestations. Press GA, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):744–9

MR findings in rhinocerebral mucormycosis. Yousem DM, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):878–82

The differential diagnosis of inflammatory orbital pseudotumor. Blodi FC. **Klin Oczna** 1988 Apr–May; 90(4–5):165–6

Life-threatening inflammations of the orbita. Mohr AM.
Neurosurg Rev 1989;12(1):27–30

Hydatid cysts of the orbit. A review of 35 cases. Gomez Morales A, et al. **Ophthalmology** 1988 Aug;95(8):1027–32

Chronic hematic cyst of the orbit. Role of magnetic resonance imaging in diagnosis. Kersten RC, et al.
Ophthalmology 1988 Nov;95(11):1549–53

Is this orbital or periorbital cellulitis? Sinnott JT 4th, et al.
Postgrad Med 1989 May 1;85(6):267–9

Surface coil magnetic resonance imaging of the orbit at 1.5T. Wilms G, et al. **ROFO** 1988 Nov;149(5):496–501

[Imaging of pathologic masses based on type A ultrasonography in ophthalmology] Preisová J, et al.
Cesk Oftalmol 1988 Jul;44(4):247–50 (Eng. Abstr.) (Cze)

[Respective indications for echography, scanning and MRI in diseases of the eye and orbit] Catros A, et al.
Annee Ther Clin Ophtalmol 1987;38:283–98 (Fre)

[Has the scanner resolved the problem of pseudotumor of the orbit?] Catros A, et al. **Bull Soc Ophtalmol Fr** 1988 Jan;88(1):155–7 (Eng. Abstr.) (Fre)

[Indications for magnetic resonance tomography of the orbit] Wiegand W. **Fortschr Ophthalmol** 1988;85(6):777–81 (Eng. Abstr.) (Ger)

[Infrared thermovision findings in a patient with infiltrating orbitopathy] Kohlmann H, et al.
Klin Monatsbl Augenheilkd 1989 Mar;194(3):190–5 (Eng. Abstr.) (Ger)

[The development of standards for ophthalmologic ultrasound diagnosis] Buschmann W, et al.
Ultraschall Med 1988 Aug;9(4):172–5 (Eng. Abstr.) (Ger)

[Use of nuclear magnetic resonance in cranio-facial pathology. Preliminary study] Cirillo G, et al.
Minerva Stomatol 1989 Mar;38(3):307–16 (Eng. Abstr.) (Ita)

[Characteristics of the clinical course and treatment of odontogenic phlegmons of the orbit] Gruzdev NA, et al.
Oftalmol Zh 1988;(7):438–40 (Rus)

[Increased use of ultrasound in the diagnosis of eye and orbital diseases] Landau IM. **Lakartidningen** 1989 Apr 26; 86(17):1592–5 (Swe)

DRUG THERAPY

Indomethacin for the treatment of idiopathic orbital myositis. Noble AG, et al. **Am J Ophthalmol** 1989 Sep 15; 108(3):336–8

Visual recovery in orbital vasculitis. Bagegni A, et al.
Br J Ophthalmol 1988 Oct;72(10):737–40

Medical management of orbital subperiosteal abscess in children. Rubin SE, et al.
J Pediatr Ophthalmol Strabismus 1989 Jan–Feb;26(1):21–7

EPIDEMIOLOGY

Orbital cellulitis: review of 23 cases from Saudi Arabia. Hodges E, et al. **Br J Ophthalmol** 1989 Mar;73(3):205–8

ETIOLOGY

Subperiosteal intraorbital haematoma following minor head trauma. Case report. Paşaoğlu A, et al.
Acta Neurochir (Wien) 1989;97(1–2):83–5

Endogenous orbital cellulitis and endogenous endophthalmitis in subacute bacterial endocarditis. Hornblass A, et al. **Am J Ophthalmol** 1989 Aug 15; 108(2):196–7

Orbital cellulitis with abscess formation caused by sinusitis [letter] Harrison HC. **Ann Otol Rhinol Laryngol** 1989 Apr; 98(4 Pt 1):322

Orbital inflammation and optic neuropathies associated with chronic sinusitis of intranasal cocaine abuse. Possible role of contiguous inflammation. Goldberg RA, et al.

Arch Ophthalmol 1989 Jun;107(6):831–5
Destructive cysts of the maxillary sinus affecting the orbit. Kaltreider SA, et al. **Arch Ophthalmol** 1988 Oct; 106(10):1398–402
Subperiosteal orbital hematoma. An unusual complication of sinusitis. Choi S, et al.
Arch Otolaryngol Head Neck Surg 1988 Dec;114(12):1464–6
Orbital cellulitis due to mucormycosis. A case report. Kotzamanoglou K, et al.
Graefes Arch Clin Exp Ophthalmol 1988;226(6):539–41
Chronic syphilitic meningitis resulting in superior orbital fissure syndrome and posterior fossa gumma. A report of two cases followed for 20 years. Currie JN, et al.
J Clin Neuro Ophthalmol 1988 Sep;8(3):145–59 (91 ref.)
Orbital decompression for dysthyroid orbitopathy [letter] Kennerdell JS, et al. **J Neurosurg** 1989 May;70(5):816–7
Non-axial proptosis without diplopia secondary to maxillary pyomucocele. Sharp JF. **J R Soc Med** 1989 Aug; 82(8):506–7
Bipolaris hawaiiensis–caused phaeohyphomycotic orbitopathy. A devastating fungal sinusitis in an apparently immunocompetent host. Maskin SL, et al.
Ophthalmology 1989 Feb;96(2):175–9
[Endocrine orbital diseases] Sibi O, et al.
Cesk Otolaryngol 1989 May;38(3):129–36 (Eng. Abstr.) **(Cze)**
[A case of Munchausen syndrome by proxy] Feenstra J, et al. **Tijdschr Kindergeneeskd** 1988 Aug;56(4):148–53 (Eng. Abstr.) **(Dut)**
[A case of orbital asymmetry in a 3-year-old child] Lagier J, et al. **Bull Soc Ophtalmol Fr** 1988 Oct;88(10):1229–31 (Eng. Abstr.) **(Fre)**
[Orbital cellulitis following surgery of strabismus] Casu L, et al. **J Fr Ophtalmol** 1988;11(11):771–2 (Eng. Abstr.) **(Fre)**
[Orbital disease and hyperthyroidism. Means syndrome. Apropos of 2 cases] Maurin JF, et al. **Ophtalmologie** 1988 Oct;2(4):369–71 (Eng. Abstr.) **(Fre)**
[The role of blunt trauma in the pathogenesis of rhinogenous phlegmon of the orbit in children] Moskovchenko KP, et al. **Oftalmol Zh** 1988;(7):437–8 **(Rus)**
[Orbital complications of odontogenic maxillary sinusitis] Manuilov OE, et al. **Vestn Otorinolaringol** 1988 Sep–Oct; (5):15–7 (Eng. Abstr.) **(Rus)**

HISTORY

Field Marshall Radetzky's orbital abscess. Blodi FC.
Doc Ophthalmol 1989 Feb;71(2):205–19

IMMUNOLOGY

Circulating monocyte migration inhibitory factor in serum of Graves' ophthalmopathy patients: a parameter for disease activity? van der Gaag R, et al.
Clin Exp Immunol 1989 Feb;75(2):275–9
Immunohistochemical analysis of the retrobulbar tissues in Graves' ophthalmopathy. Weetman AP, et al.
Clin Exp Immunol 1989 Feb;75(2):222–7

PATHOLOGY

Lymphoid infiltrates of the orbit and conjunctiva. A morphologic and immunophenotypic study of 99 cases. Medeiros LJ, et al. **Am J Surg Pathol** 1989 Jun;13(6):459–71
Some unusual periorbital dermatoses. Fusaro RM, et al.
Ann Ophthalmol 1988 Oct;20(10):391–3
Sclerosing orbital pseudotumor: a unique clinicopathologic entity. Weissler MC, et al. **Ann Otol Rhinol Laryngol** 1989 Jul;98(7 Pt 1):496–501
Space-occupying orbital lesions: can critical increases in intraorbital pressure be predicted clinically? Stanley RJ, et al. **Laryngoscope** 1989 Jan;99(1):19–22
Double vision, visual loss, and an enhancing orbital apex [clinical conference] Burde RM, et al. **Surv Ophthalmol** 1988 Jul–Aug;33(1):55–61
[Late orbital complications following subcutaneous silicone injection] Hennekes R, et al. **Fortschr Ophthalmol** 1989; 86(3):249–50 (Eng. Abstr.) **(Ger)**
[Initial manifestation of sarcoidosis as a palpebral and para-bulbar tumor] Rossa V, et al. **Fortschr Ophthalmol** 1989;86(2):162–3 (Eng. Abstr.) **(Ger)**
[Cholesterol granuloma of the orbits—clinicopathologic study] Daus W, et al. **Klin Monatsbl Augenheilkd** 1988 Aug; 193(2):195–9 (Eng. Abstr.) **(Ger)**
[A case of bilateral phlegmon of the orbit in a 2-month-old infant] Beletskaia LV, et al. **Oftalmol Zh** 1988;(7):445–6 **(Rus)**
[A 64-year-old female patient with icterus and posterior development of a picture of right ocular disease (clinical conference)] Fernández-Guerrero M, et al.
Rev Clin Esp 1989 May;184(9):485–92 **(Spa)**

PHYSIOPATHOLOGY

[Persistent oculocardiac reflex following a retrobulbar hematoma] Negruţiu S, et al. **Rev Chir [Chir]** 1988 Jul–Aug; 37(4):309–10 **(Rum)**
[Persistent oculocardiac reflex following retrobulbar hematoma. Case report] Negruţiu S, et al.
Rev Chir [Oftalmol] 1988 Apr–Jun;32(2):149–51 (Eng. Abstr.) **(Rum)**

RADIOGRAPHY

Computerised tomography of the orbits. Talwar I, et al.
Indian J Ophthalmol 1988 Oct–Dec;36(4):171–5
CT characteristics of orbital pseudotumors and other orbital inflammatory processes. Flanders AE, et al.
J Comput Assist Tomogr 1989 Jan–Feb;13(1):40–7
[Value of x-ray computed tomography in orbital cellulitis] Mercier-Tacheix V, et al. **Bull Soc Ophtalmol Fr** 1988 Nov; 88(11):1325–8 (Eng. Abstr.) **(Fre)**
[Computerized tomography in the assessment of orbital lesions] Huber P. **Klin Monatsbl Augenheilkd** 1989 May; 194(5):341–9 (Eng. Abstr.) **(Ger)**
[New quantitative parameters for CT evaluation of orbitopathy in dysthyroid ophthalmopathy] Baba H, et al. **Nippon Ganka Gakkai Zasshi** 1989 Mar;93(3):346–50 (Eng. Abstr.) **(Jpn)**
[Personal experience with computerized tomography in the diagnosis of orbital changes] Kolˇeková O, et al.
Cesk Oftalmol 1988 Jul;44(4):263–7 (Eng. Abstr.) **(Slo)**

SURGERY

Dermis fat grafting in contracted socket. Betharia SM, et al. **Indian J Ophthalmol** 1988 Jul–Sep;36(3):110–2
A sphenoorbital encephalocele—clinical, radiological, and morphological findings. Bornemann A, et al.
Neurosurg Rev 1988;11(2):205–6
Extended pterional decompression of the orbit: an alternative treatment in endocrine orbitopathy. Gilsbach JM, et al.
Neurosurg Rev 1988;11(2):167–70
Sutureless skin graft reconstruction of the exenterated orbit. Conn H, et al. **Ophthalmic Surg** 1989 Jul;20(7):519–20
Surgical approaches to diseases of the orbital apex. Leone CR Jr, et al. **Ophthalmology** 1988 Mar;95(3):391–7
Use of the CUSA in removal of a recurrent intraorbital mucocele. Gillespie RP, et al.
Otolaryngol Head Neck Surg 1988 Jul;99(1):71–2
The orbital surgeon. Kennedy RE.
Trans Am Ophthalmol Soc 1989;86:136–53; discussion 153–7

THERAPY

Strategies for the initial management of acute preseptal and orbital cellulitis. Jones DB, et al.
Trans Am Ophthalmol Soc 1989;86:94–108; discussion 108–12

VETERINARY

Maxillofacial abscesses in captive squirrel monkeys. Langner PH, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1218
Zygomatic salivary gland mucocele in a ferret. Miller PE, et al. **J Am Vet Med Assoc** 1989 May 15;194(10):1437–8

ORBITAL FRACTURES see under **SKULL FRACTURES**

ORBITAL NEOPLASMS

Primary orbital neuroblastoma. Bullock JD, et al.
Arch Ophthalmol 1989 Jul;107(7):1031–3
Plasmacytoma of the orbit. Tung G, et al.
Arch Ophthalmol 1988 Nov;106(11):1622
Orbital optic nerve glioma in adult life. Wulc AE, et al.
Arch Ophthalmol 1989 Jul;107(7):1013–6
Intra orbital osteoma—a case report. Naidu MR, et al.
Indian J Ophthalmol 1987 Jul–Aug;35(4):214–5
Ocular and orbital tumors. Kincaid MC. **Ophthalmology** 1988 Nov;95(11):1588–95 (77 ref.)
[Primary tumors of the orbit] Slapák I, et al.
Cesk Otolaryngol 1988 Sep;37(5):298–303 (Eng. Abstr.) **(Cze)**

ANALYSIS

Identification of 1-alkyl-2-acyl-3-(2',3'-diacylglycerol)glycerols, a new type of lipid class, in harderian gland tumors of mice. Kasama K, et al. **J Biol Chem** 1989 Jun 5;264(16):9453–61

COMPLICATIONS

Adrenal suppression after corticosteroid injection of periocular hemangiomas. Weiss AH. **Am J Ophthalmol** 1989 May 15;107(5):518–22
Congenital fibromatosis (myofibromatosis) of the orbit: a rare cause of proptosis at birth. Waeltermann JM, et al.
Ann Ophthalmol 1988 Oct;20(10):394–6, 399
Primary Ewing's sarcoma of the orbit presenting with visual loss. Woodruff G, et al. **Br J Ophthalmol** 1988 Oct; 72(10):786–92
Acquired Brown's syndrome caused by frontal sinus osteoma. Biedner B, et al. **J Pediatr Ophthalmol Strabismus** 1988 Sep–Oct;25(5):226–9
Zygomaticofrontal suture defect associated with orbital dermoid cyst. Samuelson TW, et al. **Surv Ophthalmol** 1988 Sep–Oct;33(2):127–30
[Diagnostic problems of intra-orbital aneurysm] Jeancolas D, et al. **Bull Soc Ophtalmol Fr** 1988 Oct;88(10):1133–4 (Eng. Abstr.) **(Fre)**
[Peri-ocular hemangioma in children. Apropos of 25 cases] Milot J, et al. **Chir Pediatr** 1989;30(1):43–6 (Eng. Abstr.) **(Fre)**

CONGENITAL

A case of congenital orbital teratoma. Choi SH, et al.
Korean J Ophthalmol 1987 Dec;1(2):139–44
[Teratoma orbitae in the neonatal period] Schaal ST, et al. **Klin Monatsbl Augenheilkd** 1988 Sep;193(3):295–300 (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Orbital fibrous histiocytoma in an infant. Larkin DF, et al. **Acta Ophthalmol (Copenh)** 1988 Oct;66(5):585–8
STIR MR imaging of the orbit. Atlas SW, et al. **AJR** 1988 Nov;151(5):1025–30
An orbital hemangiopericytoma recurrent after 33 years. Rice CD, et al. **Arch Ophthalmol** 1989 Apr;107(4):552–6
Bilateral orbital cavernous haemangiomas. Fries PD, et al. **Br J Ophthalmol** 1988 Nov;72(11):871–3
Magnetic resonance imaging of the orbit. Berger A, et al. **Bristol Med Chir J** 1988 May;103(2):19–21
Orbital sinus histiocytosis: MR appearance. Burton EM, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):696–9
The differential diagnosis of inflammatory orbital pseudotumor. Blodi FC. **Klin Oczna** 1988 Apr–May; 90(4–5):165–6
Orbital cavernous hemangiomas. Herter T, et al.
Neurosurg Rev 1988;11(2):143–7 (10 ref.)
Primary liposarcoma of the orbit. Problems in the diagnosis and management of five cases. Jakobiec FA, et al.
Ophthalmology 1989 Feb;96(2):180–91
Benign osteoblastoma of the orbit [see comments] Leone CR Jr, et al. **Ophthalmology** 1988 Nov;95(11):1554–8.
Comment in: Ophthalmology 1989 Apr;96(4):569–70
Diagnosis of fibro-osseous bone lesions [letter; comment] Margo CE, et al. **Ophthalmology** 1989 Apr;96(4):569–70.
Comment on: Ophthalmology 1988 Nov;95(11):1554–8
Magnetic resonance imaging for evaluation of tumors involving the optic pathways and orbit. Svitra PP, et al.
Semin Neurol 1986 Mar;6(1):79–83
[Clinical analysis of orbital cavernous hemangiomas] Song GX. **Chung Hua Yen Ko Tsa Chih** 1988 May;24(3):132–5 (Eng. Abstr.) **(Chi)**
[The diagnosis and treatment of primary orbital meningioma] Song GX, et al. **Yen Ko Hsueh Pao** 1988 Sep;4(3):172–5 (Eng. Abstr.) **(Chi)**
[Clinical applications of NMRI in ophthalmology] Zhou GJ, et al. **Yen Ko Hsueh Pao** 1987 Dec;3(4):248–53 (Eng. Abstr.) **(Chi)**
[Indications for magnetic resonance tomography of the orbit] Wiegand W. **Fortschr Ophthalmol** 1988;85(6):777–81 (Eng. Abstr.) **(Ger)**
[An immunohistochemical study of primary malignant lymphomas of orbital and adnexal regions] Suenaga M, et al. **Nippon Ganka Gakkai Zasshi** 1988 Jun;92(6):1057–62 (Eng. Abstr.) **(Jpn)**
[MR imaging of orbital tumors] Irisawa M, et al.
Nippon Igaku Hoshasen Gakkai Zasshi 1989 Mar 25; 49(3):286–92 (Eng. Abstr.) **(Jpn)**
[Painful ophthalmoplegia: the Tolosa-Hunt syndrome and orbital pseudotumor syndrome] Nishida Y, et al.
No To Shinkei 1988 Aug;40(8):759–62 (Eng. Abstr.) **(Jpn)**
[Differential diagnosis of orbital tumors using cerebral angiography and radioisotope study] Bussaka H, et al.
Rinsho Hoshasen 1988 Aug;33(8):851–5 (Eng. Abstr.) **(Jpn)**
[Problem of lymphoma in children] Krzystolik Z, et al.
Klin Oczna 1988 Jul;90(7):254–6 (Eng. Abstr.) **(Pol)**

DRUG THERAPY

Eyelid depigmentation following corticosteroid injection for infantile ocular adnexal hemangioma. Cogen MS, et al.
J Pediatr Ophthalmol Strabismus 1989 Jan–Feb;26(1):35–8

EPIDEMIOLOGY

Clinical analysis of tumors of the eye and its adnexa. Roh KK, et al. **Korean J Ophthalmol** 1988 Jun;2(1):27–31 (24 ref.)
[Tumors of the visual system in children 1980–1986] Stankiewicz A, et al. **Klin Oczna** 1988 Jul;90(7):246–7 (Eng. Abstr.) **(Pol)**

ETIOLOGY

[An inflammatory process of the orbit of nasal sinus origin simulating a tumor of the orbit] Blagoveshchenskaia NS, et al. **Vestn Otorinolaringol** 1988 Nov–Dec;(6):59–60 **(Rus)**

PATHOLOGY

High risk subgroup of acute myelomonocytic leukemia (AMML) with orbito-ocular granulocytic sarcoma (OOGS) in Turkish children. Retrospective analysis of clinical, hematological, ultrastructural and therapeutical findings of thirty-three OOGS. Cavdar AO, et al.
Acta Haematol (Basel) 1989;81(2):80–5
Lymphoid infiltrates of the orbit and conjunctiva. A morphologic and immunophenotypic study of 99 cases. Medeiros LJ, et al. **Am J Surg Pathol** 1989 Jun;13(6):459–71
Sinus histiocytosis with massive lymphadenopathy: bilateral orbital involvement spanning 17 years. Marion JR, et al.
Ann Ophthalmol 1989 Feb;21(2):55–8
Primary myxoid liposarcoma of the orbit. Lane CM, et al.

Br J Ophthalmol 1988 Dec;72(12):912–7
Primary malignant melanoma of the orbit arising in a cellular blue naevus. Löffler KU, et al. Br J Ophthalmol 1989 May; 73(5):388–93
Primary orbital lymphoma: staging by computed tomographic scanning. Mills P, et al. Br J Radiol 1989 Mar; 62(735):287–9
Primary peripheral neuroepithelioma of the orbit with intracranial extension. Wilson WB, et al. Cancer 1988 Dec 15;62(12):2595–601
Diagnosis of retinoblastoma by fine-needle aspiration and aqueous cytology. Das DK, et al. Diagn Cytopathol 1989; 5(2):203–6
Malignant fibrous histiocytoma of the orbit. Betharia SM, et al. Indian J Ophthalmol 1988 Jul–Sep;36(3):116–9
Primary and secondary orbital teratomas. Weiss AH, et al. J Pediatr Ophthalmol Strabismus 1989 Jan–Feb;26(1):44–9
Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 7–1989. Unilateral exophthalmos three years after treatment of cervical and mediastinal Hodgkin's disease. N Engl J Med 1989 Feb 16;320(7):447–57
Paraganglioma of the orbit with extension to the middle cranial fossa: case report. Venkataramana NK, et al. Neurosurgery 1989 May;24(5):762–4
Simultaneous bilateral conjunctival and orbital lymphoma presenting as a conjunctival lesion. Mamalis N, et al. Ophthalmic Surg 1988 Sep;19(9):662–3
A rare case of basosquamous carcinoma of the orbit invading the maxillary sinus. Catalano GB, et al. Ophthalmologica 1988;196(4):200–3
Metachronous sarcomas in a patient with bilateral retinoblastomas. A case report. Cohen R. S Afr Med J 1989 Aug 5;76(3):117–8
[Clinical and pathologic study of lymphoid lesion in orbits] Huang QA. Chung-hua Ping Li Hsueh Tsa Chih 1988 Dec; 17(4):257–9 (Eng. Abstr.) (Chi)
[Malignant orbital degeneration of a nevus of Ota] Herdan ML, et al. Bull Soc Ophtalmol Fr 1988 Jan;88(1):89–92 (Eng. Abstr.) (Fre)
[Hemangiopericytoma of the orbit in children] Putterman M, et al. Bull Soc Ophtalmol Fr 1988 Jun–Jul;88(6–7):771–2 (Fre)
[Chemodectoma of the orbit. Apropos of a case and review of the literature] Aouidj L, et al. Neurochirurgie 1988; 34(3):201–4 (24 ref.) (Eng. Abstr.) (Fre)
[Cavernous hemangiomas of the orbit] Ducrey N. Ophtalmologie 1988 Apr–Jun;2(2):181–2 (Eng. Abstr.) (Fre)
[Chemodectoma: an anatomo-clinical and immunohistochemical study. Apropos of 2 cases] Dellagi K, et al. Tunis Med 1987 Jun–Jul;65(6–7):447–52 (Eng. Abstr.) (Fre)
[Diagnosis of orbital space-occupying lesions—a comparison of magnetic resonance imaging and computerized tomography] Grannemann D, et al. Fortschr Ophthalmol 1988;85(3):327–9 (Eng. Abstr.) (Ger)
[Benign and malignant schwannoma of the orbit—clinical picture and histopathologic diagnosis] Nieuwenhuis I, et al. Fortschr Ophthalmol 1988;85(6):782–5 (Eng. Abstr.) (Ger)
[Dendritic cell reticulosarcoma—a case report] Frasik W, et al. Patol Pol 1988 Oct–Dec;39(4):303–6 (Eng. Abstr.) (Pol)

PHYSIOPATHOLOGY

Pre- and postoperative findings of pattern VECPs and ERGs in patients of orbital tumors. Mizota A, et al. Doc Ophthalmol 1988 May;69(1):41–9
Visual evoked potentials in tumors from orbita to occipital lobe in childhood. Wenzel D, et al. Neurosurg Rev 1988; 11(3–4):279–86

RADIOGRAPHY

Ectopic lacrimal gland presenting as an orbital mass in childhood. Guy JR, et al. AJNR 1989 Sep–Oct;10(5 Suppl):S92
Three-dimensional computed tomography in orbital osteoma. Ohtsuka K, et al. Am J Ophthalmol 1988 Oct 15; 106(4):502–4
Computerised tomography of the orbits. Talwar I, et al. Indian J Ophthalmol 1988 Oct–Dec;36(4):171–5
Bilateral retroorbital chloromas in a 16-month-old child: CT features. Cohen R, et al. J Comput Assist Tomogr 1988 Sep–Oct;12(5):895–6
[The CT scanning of 54 cases of orbital cavernous hemangioma] Song GX, et al. Yen Ko Hsueh Pao 1987 Sep;3(3):152–5 (Eng. Abstr.) (Chi)
[Has the scanner resolved the problem of pseudotumor of the orbit?] Catros A, et al. Bull Soc Ophtalmol Fr 1988 Jan;88(1):155–7 (Eng. Abstr.) (Fre)
[Computerized tomography in the assessment of orbital lesions] Huber P. Klin Monatsbl Augenheilkd 1989 May; 194(5):341–9 (Eng. Abstr.) (Ger)

RADIOTHERAPY

Long-term effects of orbital irradiation. Guyuron B, et al. Head Neck Surg 1987 Nov–Dec;10(2):85–7
Primary orbital lymphomas. Reddy EK, et al. Int J Radiat Oncol Biol Phys 1988 Nov;15(5):1239–41
Primary non-Hodgkin's lymphoma of the orbit. Makepeace AR, et al. J R Soc Med 1988 Nov;81(11):640–2
Orbital and conjunctival lymphoma treatment and prognosis. Bessell EM, et al. Radiother Oncol 1988 Dec;13(4):237–44
[Radiotherapy in (localized) non-Hodgkin's lymphoma of the orbit] Pötter R, et al. Klin Monatsbl Augenheilkd 1989 Jun; 194(6):413–23 (Eng. Abstr.) (Ger)

SECONDARY

Orbital metastasis from cutaneous malignant melanoma. Ruusuvaara P, et al. Acta Ophthalmol (Copenh) 1989 Jun; 67(3):325–8
Orbital metastases from prostate carcinoma. Boldt HC, et al. Arch Ophthalmol 1988 Oct;106(10):1403–8
Rapidly expanding exophthalmos: an unusual presentation of small cell lung cancer. Spaide RF, et al. Br J Ophthalmol 1989 Jun;73(6):461–2
Ocular and orbital metastasis from systemic malignancies. Jain IS, et al. Indian J Ophthalmol 1987;35(5–6):437–41
Acquired divergent strabismus: presumed metastatic gastric carcinoma to the medial rectus muscle. Arnold RW, et al. J Pediatr Ophthalmol Strabismus 1989 Jan–Feb; 26(1):50–1
Orbital tumor as a presenting symptom of occult carcinoma of the thyroid. Moisseiev J, et al. Metab Pediatr Syst Ophthalmol 1988;11(1–2):33–4
Metastatic thyroid adenocarcinoma presenting as exophthalmos. Umbreit JN, et al. Mo Med 1988 Dec; 85(12):792–4
Visual loss in the cancer patient. Frank AR. Nebr Med J 1989 May;74(5):113–23
Melanoma metastatic to the orbit. Orcutt JC, et al. Ophthalmology 1988 Aug;95(8):1033–7
Unusual CNS and orbital metastases of neuroblastoma. Gallet BL, et al. Pediatr Radiol 1989;19(5):287–9
[Orbital metastasis—report of 5 cases] Wu ZY, et al. Yen Ko Hsueh Pao 1987 Sep;3(3):156–9 (Eng. Abstr.) (Chi)
[Apropos of 2 cases of oculo-orbital metastases of a prostatic epithelioma] Rigot JM, et al. Ann Urol (Paris) 1989; 23(1):43–5 (Eng. Abstr.) (Fre)
[Orbital involvement in neuroblastoma] Fries U, et al. Fortschr Ophthalmol 1988;85(3):317–20 (Eng. Abstr.) (Ger)
[Coexistence and risk of secondary neoplasms in Hodgkin's disease] Gabryś K, et al. Pol Tyg Lek 1988 Jul 11; 43(28):919–22 (Eng. Abstr.) (Pol)

SURGERY

Upper eyelid crease surgical approach to dermoid and epidermoid cysts in children. Kronish JW, et al. Arch Ophthalmol 1988 Nov;106(11):1625–7
Orbital exenteration in surgery of malignant neoplasms of the paranasal sinuses. The value of preoperative computed tomography. Graamans K, et al. Arch Otolaryngol Head Neck Surg 1989 Aug;115(8):977–80
Technical aspects of the cranio-facial approach to tumours of the orbit and skull base. David DJ, et al. Aust N Z J Surg 1988 Apr;58(4):315–20
Adult periorbital fibromatosis. Smoot CN, et al. Br J Ophthalmol 1989 May;73(5):373–5
Experiences in the surgical treatment of cranio-orbital neurofibromatosis. Poole MD. Br J Plast Surg 1989 Mar; 42(2):155–62
An intracranial/extracranial approach for the surgical management of haemangiomas of the orbit and eyelid. Krastinova-Lolov D, et al. J Craniomaxillofac Surg 1989 Jul;17(5):197–205
The surgical approach to orbital space-occupying lesions. Mohr C, et al. J Craniomaxillofac Surg 1989 May; 17(4):149–54
Rapid development of metastases from basal cell carcinoma presenting as cranial nerve palsies. Ambros RA, et al. J Dermatol Surg Oncol 1988 Dec;14(12):1410–2
Myxoma of the skull and orbit. Maiuri F, et al. Neurochirurgia (Stuttg) 1988 Jul;31(4):136–8
Denervation in von Recklinghausen's neurofibromatosis (NF-1) leads to fewer and smaller neurofibromas. Riccardi VM, et al. Neurology 1988 Nov;38(11):1810
Choice of surgical approach in orbital space occupations—an interdisciplinary problem. Heesen J, et al. Neurosurg Rev 1988;11(3–4):239–44
Surgical strategies for combined intraorbital and intracranial tumors. Szuwart U, et al. Neurosurg Rev 1988;11(2):131–5
Cryoprobe removal of orbital tumors [letter] Geyer O, et al. Ophthalmic Surg 1988 Oct;19(10):756
Surgical approaches to diseases of the orbital apex. Leone CR Jr, et al. Ophthalmology 1988 Mar;95(3):391–7
The use of YAG-tipped contact laser in removing orbital lymphangiomas [letter] Hornblass A. Plast Reconstr Surg 1989 Feb;83(2):397
The orbital surgeon. Kennedy RE. Trans Am Ophthalmol Soc 1989;86:136–53; discussion 153–7
[Reconstruction following an orbital tumor in children] Montandon D, et al. Ann Chir Plast Esthet 1989;34(1):15–23 (Eng. Abstr.) (Fre)
[Approach to tumors of the orbit] Catros A, et al. Bull Soc Ophtalmol Fr 1988 Jan;88(1):159–62 (Eng. Abstr.) (Fre)
[Esthetic premises in the choice of the surgical approach to the orbit] Heesen J, et al. Fortschr Kiefer Gesichtschir 1989; 34:180–3 (Ger)
[Esthetic reconstruction in defects of the orbital soft tissues and loss of the eye] Schumann D, et al. Fortschr Kiefer Gesichtschir 1989;34:183–6 (Ger)
[Orbital pseudotumor] Steinert R, et al. HNO 1989 Apr; 37(4):128–32 (Eng. Abstr.) (Ger)
[Granular cell tumor of the orbit] Kocks W, et al. Neurochirurgia (Stuttg) 1988 Nov;31(6):213–5 (Eng. Abstr.) (Ger)

THERAPY

Idiopathic inflammatory orbital pseudotumor and low-dose cyclosporine. Diaz-Llopis M, et al. Am J Ophthalmol 1989 May 15;107(5):547–8
The influence of extensive bone erosion on local control in non-orbital rhabdomyosarcoma of the head and neck. Mandell LR, et al. Int J Radiat Oncol Biol Phys 1989 Sep; 17(3):649–53
Frontobasal and orbital reconstruction following trauma and tumor removal using a compound of bone meal, antibiotic, and fibrin sealant. Knöringer P. Neurosurg Rev 1989; 12(1):31–9
Conservative management of childhood orbital lymphangioma. Wilson ME, et al. Ophthalmology 1989 Apr; 96(4):484–9
[Combined treatment of malignant neoplasms of the visual system in children] Koraszewska-Matuszewska B, et al. Klin Oczna 1988 Jul;90(7):250–1 (Eng. Abstr.) (Pol)

ULTRASTRUCTURE

Infantile subconjunctival and anterior orbital fibrous histiocytoma. Ultrastructural and immunohistochemical studies. Jakobiec FA, et al. Ophthalmology 1988 Apr; 95(4):516–25
Mucoepidermoid carcinoma of the lacrimal gland fossa: confirmation by ultrastructural study. Lawton AW, et al. South Med J 1989 May;82(5):643–6

VETERINARY

Ultrasonic identification of an orbital tumour in a horse. Freestone JF, et al. Equine Vet J 1989 Mar;21(2):135–6
Malignant intraocular medulloepithelioma in two cockatiels. Schmidt RE, et al. J Am Vet Med Assoc 1986 Nov 1; 189(9):1105–6
Maxillo-orbital lymphoma (Burkitt's-type) in an infant Macaca fascicularis. Jayo MJ, et al. Lab Anim Sci 1988 Dec;38(6):722–6
Multilobular osteosarcoma of the mandible and orbit in a dog. McCalla TL, et al. Vet Pathol 1989 Jan;26(1):92–4

ORCHIDECTOMY see ORCHIECTOMY

ORCHIECTOMY

Dichloromethylene biphosphonate retards femoral expansion in normal and castrated adult male rats. Wink CS, et al. Acta Anat (Basel) 1988;132(4):321–3
Long term experience in the treatment of advanced prostatic cancer with decapeptyl, compared to orchiectomy. De Sy WA, et al. Acta Urol Belg 1988;56(4):581–8
Total androgen blockade for metastatic cancer of the prostate. Béland G, et al. Am J Clin Oncol 1988;11 Suppl 2:S187–90
A randomized, comparative study of buserelin with DES/orchiectomy in the treatment of stage D2 prostatic cancer patients. Klioze SS, et al. Am J Clin Oncol 1988; 11 Suppl 2:S176–82
Anandron (RU 23908) associated with orchiectomy in stage D prostate cancer. Preliminary results of a randomized, double-blind study. Namer M, et al. Am J Clin Oncol 1988; 11 Suppl 2:S191–6
How would you like to have an orchidectomy for advanced prostatic cancer? Parmar H, et al. Am J Clin Oncol 1988; 11 Suppl 2:S160–8
U.K. trials of treatment for M1 prostatic cancer. The LH-RH analogue Zoladex vs. orchidectomy. Ryan PG, et al. Am J Clin Oncol 1988;11 Suppl 2:S169–72
Hepatic sexual dimorphism: ontogeny and influence of adult gonadectomy. Studer RK, et al. Am J Physiol 1989 Mar; 256(3 Pt 1):E392–400
Reconciliation of the paradox that testosterone replacement prevents the postcastration hypersecretion of follicle-stimulating hormone in male rhesus monkeys (Macaca mulatta) with an intact central nervous system but not in hypothalamic-lesioned, gonadotropin-releasing hormone-replaced animals. Abeyawardene SA, et al. Biol Reprod 1989 Mar;40(3):578–84
Short-term pituitary-testicular responses of prepubertal ram lambs to hemicastration. Brown JL, et al. Biol Reprod 1988 Nov;39(4):854–61
Changes of norepinephrine levels, tyrosine hydroxylase and dopamine-beta-hydroxylase activities after castration and testosterone treatment in vas deferens of adult rats. Bustamante D, et al. Biol Reprod 1989 Mar;40(3):541–8
Castration at birth. George S. BMJ 1988 Nov 19; 297(6659):1313–4
Increased body-weight gain and body protein in castrated and adrenalectomized rats treated with clenbuterol. Rothwell NJ, et al. Br J Nutr 1988 Sep;60(2):355–60
Re Benefits of combination therapy with flutamide in patients relapsing after castration [letter] Br J Urol 1988 Nov; 62(5):495–6

High dose polyoestradiol phosphate with and without acetosalicylic acid versus orchiectomy in the treatment of prostatic cancer. Finnprostate Group. Aro JL, et al. **Br J Urol** 1989 May;63(5):512–4

Salivary testosterone in prostatic carcinoma. Navarro MA, et al. **Br J Urol** 1989 Mar;63(3):306–8

Bilateral testicular metastases of pulmonary small cell carcinoma: a rare incidental finding following orchiectomy for prostatic carcinoma. Stein A, et al. **Br J Urol** 1989 May;63(5):552

The distribution of glial fibrillary acidic protein in the adult rat brain is influenced by the neonatal levels of sex steroids. Garcia–Segura LM, et al. **Brain Res** 1988 Jul 26; 456(2):357–63

Effects of castration, steroid replacement, and sexual experience on mesolimbic dopamine and sexual behaviors in the male rat. Mitchell JB, et al. **Brain Res** 1989 Jul 3; 491(1):116–27

Effects of estrogen on hypothalamic gonadotropin–releasing hormone release in castrated male rhesus macaques. Pau KY, et al. **Brain Res** 1988 Aug 30;459(1):70–5

Effects of castration and antiandrogens (RU 23908 and cyproterone acetate) on glandulain activity and on the secretory epithelium of the rat submandibular gland. Porto CS, et al. **Braz J Med Biol Res** 1988;21(3):591–8

A comparison of diethylstilbestrol or orchiectomy with buserelin and with methotrexate plus diethylstilbestrol or orchiectomy in newly diagnosed patients with clinical stage D2 cancer of the prostate. Huben RP, et al. **Cancer** 1988 Nov 1;62(9):1881–7

Effects of sex difference, gonadectomy and estradiol on N–ethyl–N–nitrosourea–induced trigeminal nerve tumors in rats. Aoyama H, et al. **Carcinogenesis** 1989 Aug; 10(8):1505–9

Gonadectomy and hormonal replacement changes systolic blood pressure and ventricular myosin isoenzyme pattern of spontaneously hypertensive rats. Lengsfeld M, et al. **Circ Res** 1988 Dec;63(6):1090–4

Changes in the qualitative and quantitative secretion of luteinizing hormone (LH) following orchidectomy in man. Tsatsoulis A, et al. **Clin Endocrinol (Oxf)** 1988 Aug; 29(2):189–94

Bilateral orchidectomy and concomitant testosterone replacement in the juvenile male rhesus monkey (Macaca mulatta) receiving an invariant intravenous gonadotropin–releasing hormone (GnRH) infusion results, as in the hypothalamus lesioned GnRH–driven adult male, in a selective hypersecretion of follicle–stimulating hormone. Abeyawardene SA, et al. **Endocrinology** 1989 Jul; 125(1):257–9

Institution of combined treatment with testosterone and charcoal–extracted porcine follicular fluid immediately after orchidectomy prevents the postcastration hypersecretion of follicle–stimulating hormone in the hypothalamus–lesioned rhesus monkey (Macaca mulatta) receiving an invariant intravenous gonadotropin–releasing hormone infusion. Abeyawardene SA, et al. **Endocrinology** 1989 Mar;124(3):1310–8

Effects of gonadectomy on the in vitro and in vivo gonadotropin responses to gonadotropin–releasing hormone in male and female rats. Fallest PC, et al. **Endocrinology** 1989 Mar;124(3):1370–9

Neonatal organization of the brain opioid systems controlling prolactin and luteinizing hormone secretion. Limonta P, et al. **Endocrinology** 1989 Feb;124(2):681–6

Control of gonadotropin secretion in the ovine fetus. II. A sex difference in pulsatile luteinizing hormone secretion after castration. Matwijiw I, et al. **Endocrinology** 1989 Mar; 124(3):1352–8

Thyrotropin–releasing hormone (TRH)–Gly conversion to TRH in rat ventral prostate is inhibited by castration and aging. Pekary AE, et al. **Endocrinology** 1989 Aug; 125(2):679–85

Testosterone raises neuropeptide–Y concentration in selected hypothalamic sites and in vitro release from the medial basal hypothalamus of castrated male rats. Sahu A, et al. **Endocrinology** 1989 Jan;124(1):410–4

Radioimmunoassay of inhibin: serum responses to unilateral and bilateral orchidectomy. Schanbacher B. **Endocrinology** 1988 Nov;123(5):2323–30

Castration induces luteinizing hormone (LH) secretion in hypophysectomized pituitary–grafted rats receiving pulsatile LH–releasing hormone infusions. Strobl FJ, et al. **Endocrinology** 1989 Mar;124(3):1140–4

Female–predominant rat hepatic P–450 forms j (IIE1) and 3 (IIA1) are under hormonal regulatory controls distinct from those of the sex–specific P–450 forms. Waxman DJ, et al. **Endocrinology** 1989 Jun;124(6):2954–66

Urinary output modulation of alanine aminopeptidase, gamma–glutamyl transpeptidase and N–acetyl–beta–D–glucosaminidase by castration and testosterone in male normal rat. Girolami JP, et al. **Enzyme** 1989;41(4):181–6

Repeated quantitative bone scintigraphy in patients with prostatic carcinoma treated with orchiectomy. Sundkvist GM, et al. **Eur J Nucl Med** 1988;14(4):203–6

Comparison of endocrine and radiation therapy in locally advanced prostatic cancer. Aro J, et al. **Eur Urol** 1988; 15(3–4):182–6

Hormonal consequences of orchidectomy for carcinoma of the prostate. With special reference to the measurement of free testosterone in saliva and prostatic dihydrotestosterone levels. Boccon–Gibod L, et al. **Eur Urol** 1988;15(1–2):99–102

Total androgen blockade in advanced prostatic cancer. Critical review and personal experience. Bouffioux C. **Eur Urol** 1988;15(3–4):187–92

Benign testicular tumors: a case for testis preservation? Kressel K, et al. **Eur Urol** 1988;15(3–4):200–4

Castration and erection. An animal study. Müller SC, et al. **Eur Urol** 1988;15(1–2):118–24

The evaluation of androgen circulating levels following castration in adult male rats. Andò S, et al. **Exp Clin Endocrinol** 1988 Aug;91(3):311–8

Steroid and steroid regulating hormones in human male castrates. Hampl R, et al. **Exp Clin Endocrinol** 1988 Mar; 92(3):257–61

Hormonal management of advanced adenocarcinoma of the prostate. Miles BJ. **Henry Ford Hosp Med J** 1989;37(1):16–8

Partner preference behavior of estrous female rats affected by castration of tethered male incentives. Broekman M, et al. **Horm Behav** 1988 Sep;22(3):324–37

The Ca2+–dependent protease inhibitor of rat ventral prostate: properties of the inhibitor and effects of castration on Ca2+–dependent protease and inhibitor activities. Theis JM, et al. **Int J Biochem** 1988;20(9):909–16

Feminization of rat hepatic P–450 expression by cisplatin. Evidence for perturbations in the hormonal regulation of steroid–metabolizing enzymes. LeBlanc GA, et al. **J Biol Chem** 1988 Oct 25;263(30):15732–9

Treatment of castration–induced osteoporosis by a capacitively coupled electrical signal in rat vertebrae. Brighton CT, et al. **J Bone Joint Surg [Am]** 1989 Feb; 71(2):228–36

The in–vitro transformation of [3H]dehydroepiandrosterone into its principal metabolites in the adrenal cortex of adult castrated male rats and following steroid treatment. Canonaco M, et al. **J Endocrinol** 1989 Jun;121(3):419–24

Testes are asymmetric in the testicular hemicastration response of the male rat. Frankel AI, et al. **J Endocrinol** 1989 Aug;122(2):485–8

Tissue–specific effects of castration and ovariectomy on murine epidermal growth factor and its mRNA. Pascall JC, et al. **J Endocrinol** 1989 Jun;121(3):501–6

Serum androgen levels in senescent Cr1:CD–1 (ICR)BR mice: effects of castration and testosterone treatment. Shapiro BH, et al. **J Gerontol** 1989 Jan;44(1):B15–9

Adenovirus type 9–induced tumorigenesis in the rat mammary gland related to sex hormonal state. Ankerst J, et al. **J Natl Cancer Inst** 1989 Feb 15;81(4):294–8

Testicular function in patients with testicular cancer treated with orchiectomy alone or orchiectomy plus cisplatin–based chemotherapy. Hansen PV, et al. **J Natl Cancer Inst** 1989 Aug 16;81(16):1246–50

Effect of castration on epididymal sperm storage in male musk shrews (Suncus murinus) and mice (Mus musculus). Rissman EF, et al. **J Reprod Fertil** 1989 May;86(1):219–22

Increase in epithelial cell growth by hyperprolactinemia induces delay of castration–induced involution of mouse seminal vesicle. Ayata M, et al. **J Steroid Biochem** 1989 May;32(5):719–24

Comparison of residual C–19 steroids in plasma and prostatic tissue of human, rat and guinea pig after castration: unique importance of extratesticular androgens in men. Bélanger B, et al. **J Steroid Biochem** 1989 May;32(5):695–8

Depressed translational activity in the androgen sensitive levator ani muscle of the rat. Boissonneault G, et al. **J Steroid Biochem** 1989 Apr;32(4):507–13

Effect of androgen pretreatments at adulthood on androgen–induced proliferative response of seminal vesicles in neonatally castrated mice. Li W, et al. **J Steroid Biochem** 1989 Jul;33(1):59–63

Castration levels of plasma testosterone have potent stimulatory effects on androgen–sensitive parameters in the rat prostate. Marchetti B, et al. **J Steroid Biochem** 1988 Oct;31(4A):411–9

Growth control of androgen–dependent Shionogi carcinoma cells by growth factor(s) produced from androgen–independent Shionogi carcinoma cells in a paracrine mechanism. Noguchi S, et al. **J Steroid Biochem** 1989 Apr;32(4):479–83

Effects of castration and diabetes mellitus on cholinergic responsiveness and muscarinic receptors in the rat vas deferens. Longhurst PA, et al. **J Urol** 1989 May; 141(5):1225–9

Prostate specific antigen in the diagnosis and treatment of adenocarcinoma of the prostate. IV. Anti–androgen treated patients. Stamey TA, et al. **J Urol** 1989 May;141(5):1088–90

Benign prostatic hyperplasia in a patient castrated in his youth. Yokoyama M, et al. **J Urol** 1989 Jul;142(1):134–5

Low tumorigenic response to 3,2'–dimethyl–4–aminobiphenyl administration in the prostate of rats castrated at birth. Shirai T, et al. **Jpn J Cancer Res** 1988 Dec;79(12):1293–6

Castration increases striatal D–2 dopamine receptors in mid–life rats. Watanabe H, et al. **Jpn J Pharmacol** 1989 May;50(1):79–81

Chemotherapy of a patient because of spuriously elevated alpha–fetoprotein levels. Identification of the responsible factor. Dahlmann N, et al. **Klin Wochenschr** 1989 Apr 3; 67(7):408–12

The response to analgesia testing is affected by gonadal steroids in the rat. Forman LJ, et al. **Life Sci** 1989; 45(5):447–54

Effects of testosterone and estradiol on ventral prostate and body weights of castrated rats. Karr JP, et al. **Life Sci** 1974 Aug 1;15(3):501–13

Post–castration rebound of an androgen regulated prostatic gene. Sweetland R, et al. **Mol Cell Biochem** 1988 Nov; 84(1):3–15

Radioimmunoassay of rat serum inhibin: changes after PMSG stimulation and gonadectomy. Robertson DM, et al. **Mol Cell Endocrinol** 1988 Jul;58(1):1–8

Structural and functional analysis of murine skeletal muscle after castration. Jiang B, et al. **Muscle Nerve** 1989 Jan; 12(1):67–77

Localized increase of GABA levels in brain areas of the rat and inhibition of the plasma LH rise following orchidectomy. Donoso AO. **Neuroendocrinology** 1988 Aug; 48(2):130–7

Adrenalectomy but not gonadectomy affects rat pineal beta–adrenergic receptor density. Gonzalez–Brito A, et al. **Neurosci Lett** 1988 Oct 17;92(3):330–4

Effects of castration and androgen on glycosuria appearance in the diabetic KK mice induced by monosodium glutamate administration. Nonaka T, et al. **Nippon Juigaku Zasshi** 1988 Oct;50(5):1121–3

Interactions between transplanted pituitary tumor and gonads in nude mice. Mori H, et al. **Pathol Res Pract** 1988 Sep; 183(5):642–4

Comparison of the effects of castration and streptozotocin–induced diabetes mellitus on contractile responses of the rat vas deferens. Longhurst PA, et al. **Pharmacology** 1989;38(4):253–62

Gender–specific and gonadectomy–specific effects upon swim analgesia: role of steroid replacement therapy. Romero MT, et al. **Physiol Behav** 1988;44(2):257–65

Decapeptyl in the treatment of advanced prostatic cancer: comparative study with pulpectomy. Botto H, et al. **Prog Clin Biol Res** 1989;303:53–60

Zoladex and flutamide vs orchidectomy: a phase III EORTC 30853 trial. EORTC Urological Group. Carvalho AP, et al. **Prog Clin Biol Res** 1989;303:129–43

Hormonal chemotherapy. Dunzendorfer U. **Prog Clin Biol Res** 1989;303:197–203

Combination therapy with flutamide and castration: its benefits at various stages of prostate cancer. Labrie F, et al. **Prog Clin Biol Res** 1989;303:161–7 (17 ref.)

A comparison between surgical orchidectomy and the LHRH agonist 'Zoladex' (ICI 188630) in the treatment of metastatic cancer of the prostate. Peeling WB. **Prog Clin Biol Res** 1989;303:41–5

Calcium channel antagonists delay regression of androgen–dependent tissues and suppress gene activity associated with cell death. Connor J, et al. **Prostate** 1988; 13(2):119–30

Activation of a Ca2+–Mg2+–dependent endonuclease as an early event in castration–induced prostatic cell death. Kyprianou N, et al. **Prostate** 1988;13(2):103–17

Stage II seminoma: results of postorchiectomy irradiation. Sagerman RH, et al. **Radiology** 1989 Aug;172(2):565–8

Influence of thyroidectomy on serum and pituitary FSH in control and orchidectomized rats. Ruiz M, et al. **Res Exp Med (Berl)** 1989;189(2):85–90

Orchiectomy, estrogen therapy and radiotherapy in locally advanced (T3–4 M0) prostatic cancer. Aro J, et al. **Scand J Urol Nephrol Suppl** 1988;110:103–7

The current role of hormonal therapy in the clinical treatment of prostatic cancer. Brendler CB. **Semin Urol** 1988 Nov; 6(4):269–78 (51 ref.)

Sex differences in the prolongation of allogeneic skin graft survival in rats treated with cyclosporin A: effects of orchiectomy and pregnancy. Hirasawa K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):881–4

Successful transplantation of Leydig cells in castrated inbred rats. Tai J, et al. **Transplantation** 1989 Jun;47(6):1087–9

Evaluation of total versus partial androgen blockade in the treatment of advanced prostatic cancer. Schulze H, et al. **Urol Int** 1988;43(4):193–7

Patients' choice of treatment in stage D prostate cancer. Cassileth BR, et al. **Urology** 1989 May;33(5 Suppl):57–62

Method of circumferential pressure dressing of scrotum following bilateral orchiectomy. Haas GP, et al. **Urology** 1989 May;33(5):429–30

Treatment of metastatic prostate cancer. Factors that influence treatment selection and methods to increase acceptance of orchiectomy. Merrill DC. **Urology** 1988 Nov; 32(5):408–12

Phase III studies to compare goserelin (Zoladex) with orchiectomy and with diethylstilbestrol in treatment of prostatic carcinoma. Peeling WB. **Urology** 1989 May;33(5 Suppl):45–52

Remarkable effect of endocrine therapy on brain metastasis from prostatic carcinoma. Senoh H, et al. **Urology** 1989 Mar;33(3):243–6

Extended experience with surgical treatment of stage D1 adenocarcinoma of prostate. Significant influences of immediate adjuvant hormonal treatment (orchiectomy) on outcome. Zincke H. **Urology** 1989 May;33(5 Suppl):27–36

[Prostate carcinoma and its management] Ruutu M. **Duodecim** 1989;105(3):287–92 (11 ref.) **(Fin)**

[From scrotal ultrasonography to unnecessary castration (editorial)] Timbal Y. **Ann Urol (Paris)** 1989;23(1):7 **(Fre)**

[Combination hormone–chemotherapy versus hormone therapy alone in the initial treatment of advanced prostate

carcinoma—a prospective cooperative study] Gorski J, et al. **Urologe [A]** 1988 Sep;27(5):287–90 (Eng. Abstr.) **(Ger)**

[Complete androgen blockade (orchiectomy + flutamide) versus androgen blockade with cytostasis (orchiectomy + estramustine) in the treatment of virginal advanced prostate cancer] Flamm J, et al. **Wien Klin Wochenschr** 1988 Sep 9;100(17):589–92 (Eng. Abstr.) **(Ger)**

[Treatment of patients with stage I non-seminomatous testicular tumors with general orchiectomy] Horňák M, et al. **Z Urol Nephrol** 1988 Sep;81(9):541–5 (Eng. Abstr.) **(Ger)**

[Plasma levels of testosterone and 17 beta-estradiol after castration and testosterone load in the rat] Di Stefano A, et al. **Boll Soc Ital Biol Sper** 1988 Mar;64(3):269–72 (Eng. Abstr.) **(Ita)**

[Behavior of nucleotides in the liver of the rat after castration and treatment with testosterone] Pizzichini M, et al. **Boll Soc Ital Biol Sper** 1988 Mar;64(3):265–8 (Eng. Abstr.) **(Ita)**

[Morphometric analysis of the liver of rats, castrated and treated with testosterone] Tanganelli P, et al. **Boll Soc Ital Biol Sper** 1988 Mar;64(3):257–63 (Eng. Abstr.) **(Ita)**

[Clinical studies of subcapsular orchiectomy with an intracapsular testicular prosthesis—improving the quality of life in patients with prostatic cancer] Sakamoto M, et al. **Gan No Rinsho** 1989 Sep;35(10):1143–8 (Eng. Abstr.) **(Jpn)**

[Chemoendocrine therapy of newly diagnosed advanced prostatic cancer] Numasawa K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Jan;80(1):39–47 (Eng. Abstr.) **(Jpn)**

[Predictive value of clinical, biochemical, hormonal and histologic parameters of the endocrine response in prostatic adenocarcinoma] Burgos FJ, et al. **Actas Urol Esp** 1988 Nov–Dec;12(6):500–6 (Eng. Abstr.) **(Spa)**

[Orchiectomy should be chosen instead of LHRH analogs in the treatment of prostatic cancer] Liedberg CF. **Lakartidningen** 1989 Jan 18;86(3):120 **(Swe)**

ADVERSE EFFECTS

Acute onset of scleroderma following subcapsular orchidectomy for carcinoma of prostate [letter] Palferman TG, et al. **Br J Rheumatol** 1989 Feb;28(1):79–81

Castrated men exhibit bone loss: effect of calcitonin treatment on biochemical indices of bone remodeling. Stěpán JJ, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):523–7

Light microscopic morphometric analysis of castration effects in the different lobes of the rat prostate. Kiplesund KM, et al. **Prostate** 1988;13(3):221–32

Flushing. Long-term side effect of orchiectomy in treatment of prostatic carcinoma. Charig CR, et al. **Urology** 1989 Mar; 33(3):175–8

[Cyproterone acetate in the treatment of post-orchiectomy flushing] Jansen JE, et al. **Ugeskr Laeger** 1989 Feb 27; 151(9):560–1 (Eng. Abstr.) **(Dan)**

[Effect of gonadectomy and supplementary treatment with mesterone on the adrenal cortex of male albino rats] Zarębska A, et al. **Endokrynol Pol** 1988;39(2):93–102 (Eng. Abstr.) **(Pol)**

ECONOMICS

The cost of bilateral orchiectomy as a treatment for prostatic carcinoma. McClinton S, et al. **Br J Urol** 1989 Mar; 63(3):309–12

METHODS

Subcapsular orchiectomy using the CO2 laser: a new technique. Wishnow KI, et al. **Lasers Surg Med** 1988; 8(6):604–7

VETERINARY

Sterilisation of bulls with lactic acid. Coventry J, et al. **Aust Vet J** 1989 May;66(5):156–7

Rings versus knife for docking and castration of lambs [letter] Mellor DJ, et al. **Aust Vet J** 1988 Dec;65(12):403–4

Castration and testosterone effects on endogenous and somatocrinin-induced growth hormone release in intact and castrated male pigs. Dubreuil P, et al. **Domest Anim Endocrinol** 1989 Jan;6(1):15–24

Neonatal hemiorchidectomy of bulls alters plasma growth hormone levels and advances onset of pubertal testosterone secretion. al-Haboby AH, et al. **Domest Anim Endocrinol** 1988 Jan;5(1):61–9

The influence of duration of photoperiod and hemicastration on growth and testicular and endocrine functions of boars. Minton JE, et al. **Domest Anim Endocrinol** 1988 Jan; 5(1):71–80

Surgical repair of urethral transection in a horse. Todhunter RJ, et al. **J Am Vet Med Assoc** 1988 Nov 1;193(9):1085–6

Effects of gender, time of castration, genotype and feeding regimen on lamb growth and carcass fatness. Arnold AM, et al. **J Anim Sci** 1988 Oct;66(10):2468–75

Influences of gender, time of castration, genotype, birthtype and feeding regimen on lamb longissimus fiber type proportions. Arnold AM, et al. **J Anim Sci** 1988 Oct; 66(10):2476–83

Growth and sexual characteristics of suckling beef calves as influenced by age at castration and growth implants. Bagley CP, et al. **J Anim Sci** 1989 May;67(5):1258–64

Local and general anesthetic effects on behavior and performance of two- and seven-week-old castrated and uncastrated piglets. McGlone JJ, et al. **J Anim Sci** 1988 Dec;66(12):3049–58

The influence of castration on the development of prostatic carcinoma in the dog. 43 cases (1978–1985). Obradovich J, et al. **J Vet Intern Med** 1987 Oct–Dec;1(4):183–7

The influence of castration on the development of prostatic carcinoma in the dog [letter] Ruble R. **J Vet Intern Med** 1988 Apr–Jun;2(2):108

Effects of castration on peritoneal fluid in the horse. Schumacher J, et al. **J Vet Intern Med** 1988 Jan–Mar; 2(1):22–5

Testicular function of scrotal testes after the cryptorchidectomy in dogs with unilateral cryptorchidism. Kawakami E, et al. **Nippon Juigaku Zasshi** 1988 Dec; 50(6):1239–44

Effects of tail docking and castration on behaviour and plasma cortisol concentrations in young lambs. Mellor DJ, et al. **Res Vet Sci** 1989 May;46(3):387–91

Changes in the cortisol responses of lambs to tail docking, castration and ACTH injection during the first seven days after birth. Mellor DJ, et al. **Res Vet Sci** 1989 May; 46(3):392–5

Complications of castration and ovariectomy. Nickels FA. **Vet Clin North Am [Equine Pract]** 1988 Dec;4(3):515–23 (35 ref.)

Normal and cryptorchid castration. Trotter GW. **Vet Clin North Am [Equine Pract]** 1988 Dec;4(3):493–513 (57 ref.)

Stray dog problem [letter] **Vet Rec** 1989 Apr 1;124(13):356

Scottish neutering campaign [letter] Anderson RP. **Vet Rec** 1989 May 27;124(21):571–2

Castration and docking [letter] Humphreys PN. **Vet Rec** 1989 May 13;124(19):520

A modified parainguinal approach for cryptorchidectomy in horses. An evaluation in 107 horses. Wilson DG, et al. **Vet Surg** 1987 Jan–Feb;16(1):1–4

[Veterinary expert opinion: bloodless castration of bulls (Burdizzo forceps)] Stöber M. **DTW** 1989 Apr;96(4):232–4 (Eng. Abstr.) **(Ger)**

[Electron microscopy studies of the nasal mucosa of rats after orchiectomy] Hettwer H, et al. **Z Mikrosk Anat Forsch** 1988;102(6):993–1005 (Eng. Abstr.) **(Ger)**

ORCHITIS

[A case of pyogenic orchitis with abscess formation] Numa H, et al. **Hinyokika Kiyo** 1988 Sep;34(9):1665–7 (8 ref.) (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Pyocele of scrotum: consequence of spontaneous rupture of testicular abscess. Slavis SA, et al. **Urology** 1989 Apr; 33(4):313–6

DIAGNOSIS

Sonographic features of focal orchitis. Lentini JF, et al. **J Ultrasound Med** 1989 Jul;8(7):361–5

Idiopathic macroorchidism. Truwit CL, et al. **JCU** 1989 Mar–Apr;17(3):200–5

EPIDEMIOLOGY

Epidemiology of acute epididymo-orchitis in Singapore. Lee CT, et al. **Ann Acad Med Singapore** 1989 May;18(3):320–3

ETIOLOGY

Epididymo-orchitis and Brucellosis. Khan MS, et al. **Br J Urol** 1989 Jan;63(1):87–9

Actively induced experimental allergic orchitis in Lewis-resistant (Le-R) rats: reversibility of disease resistance by immunization with Bordetella pertussis. Teuscher C, et al. **Cell Immunol** 1989 Mar;119(1):233–8

IMMUNOLOGY

Immunologic mechanisms and target antigens in testicular autoimmunity. Tung KS, et al. **Ann N Y Acad Sci** 1989; 564:267–80

The biomorphological basis of antisperm immune reaction. Dondero F, et al. **Prog Clin Biol Res** 1989;296:249–54

[Blood T-helper and T-suppressor count of patients with gonorrheal orchido-epididymitis] Glozman VN, et al. **Vestn Dermatol Venerol** 1988;(5):63–5 (Eng. Abstr.) **(Rus)**

METABOLISM

Experimental syphilitic orchitis. Relationship between Treponema pallidum infection and testis synthesis of proteoglycans. Strugnell RA, et al. **Am J Pathol** 1988 Oct; 133(1):110–7

PATHOLOGY

An immunohistological examination of inflammatory cell infiltration in primary testicular seminomas. Strutton GM, et al. **Aust N Z J Surg** 1989 Feb;59(2):169–72

Spontaneous immune complex orchitis in brown Norway rats. Fürbeth C, et al. **Virchows Arch [B]** 1989;57(1):37–45

PHYSIOPATHOLOGY

Autoimmune orchitis and thyroiditis. Bigazzi PE. **Methods Enzymol** 1988;162:461–78

RADIONUCLIDE IMAGING

Three-phase bone scan reveals epididymo-orchitis. Schauwecker DS. **Clin Nucl Med** 1989 Jun;14(6):468–9

RADIOTHERAPY

[Extracorporeal ultraviolet irradiation of autologous blood in the treatment of urological patients with acute inflammatory diseases] Kozlov VA, et al. **Urol Nefrol (Mosk)** 1988 Jul–Aug;(4):7–12 (Eng. Abstr.) **(Rus)**

THERAPY

[Choice of the treatment method in patients with acute inflammatory diseases of the scrotal organs] Arbuliev MG, et al. **Urol Nefrol (Mosk)** 1989 May–Jun;(3):17–20 (Eng. Abstr.) **(Rus)**

VETERINARY

[Chronic periorchitis and periepididymitis of cattle] Gimbo A, et al. **Schweiz Arch Tierheilkd** 1989;131(5):267–75 (Eng. Abstr.) **(Ita)**

ORCIPRENALINE

ADMINISTRATION & DOSAGE

Effect of inhaled metaproterenol on exercise performance in patients with stable "fixed" airway obstruction. Berger R, et al. **Am Rev Respir Dis** 1988 Sep;138(3):624–9

Clearance of phosphatidylcholine and cholesterol from liposomes, liposomes loaded with metaproterenol, and rabbit surfactant from adult rabbit lungs. Pettenazzo A, et al. **Am Rev Respir Dis** 1989 Mar;139(3):752–8

Delivery efficiency of metered dose aerosols given via endotracheal tubes. Crogan SJ, et al. **Anesthesiology** 1989 Jun;70(6):1008–10

Aerosol bronchodilator delivery methods. Relative impact on pulmonary function and cost of respiratory care. Summer W, et al. **Arch Intern Med** 1989 Mar;149(3):618–23

Standard and double dose ipratropium bromide and combined ipratropium bromide and inhaled metaproterenol in COPD. LeDoux EJ, et al. **Chest** 1989 May;95(5):1013–6

Comparison of beta-adrenergic agents delivered by nebulizer vs metered dose inhaler with InspirEase in hospitalized asthmatic patients. Morley TF, et al. **Chest** 1988 Dec; 94(6):1205–10

Aerosolized metaproterenol in the treatment of asthmatics with severe airflow obstruction. Comparison of two delivery methods. Salzman GA, et al. **Chest** 1989 May; 95(5):1017–20

Combined beta 1-adrenoceptor blockade and/or beta 2- or beta 1/2 adrenoceptor stimulation as treatment of essential hypertension. Schulte KL, et al. **J Hypertens Suppl** 1988 Dec;6(4):S658–61

A trial of metaproterenol by metered-dose inhaler and two spacers in preschool asthmatics. König P, et al. **Pediatr Pulmonol** 1988;5(4):247–51

ADVERSE EFFECTS

[Pulmonary edema during a cesarean] Hernández C, et al. **Rev Esp Anestesiol Reanim** 1988 Nov–Dec;35(6):341–3 (Eng. Abstr.) **(Spa)**

BLOOD

Determination of free and total metaproterenol in human plasma by high-performance liquid chromatography with fluorimetric detection. Selinger K, et al. **J Chromatogr** 1989 Aug 25;493(1):230–8

DIAGNOSTIC USE

Circadian rhythm in total pulmonary resistance of asthmatic children. Effects of a beta-agonist agent. Gaultier C, et al. **Chronobiol Int** 1988;5(3):285–90

PHARMACOLOGY

Effect of metaproterenol sulfate on mild asthmatics' response to sulfur dioxide exposure and exercise. Linn WS, et al. **Arch Environ Health** 1988 Nov–Dec;43(6):399–406

Epinephrine improves expiratory flow rates in patients with asthma who do not respond to inhaled metaproterenol sulfate. Appel D, et al. **J Allergy Clin Immunol** 1989 Jul; 84(1):90–8

Bronchodilator effects of some liposome formulations of metaproterenol sulfate in guinea pigs. McCalden TA, et al. **Proc West Pharmacol Soc** 1988;31:129–32

THERAPEUTIC USE

The inhaled bronchodilators ipratropium bromide and metaproterenol in adults with CF. Weintraub SJ, et al. **Chest** 1989 Apr;95(4):861–4

A comprehensive evaluation of metaproterenol, a new bronchodilator. Miller J. **J Clin Pharmacol J New Drugs** 1967 Jan–Feb;7(1):34–40

Effects of inhaled metaproterenol and atropine on the

pulmonary mechanics of infants with bronchopulmonary dysplasia. Kao LC, et al. **Pediatr Pulmonol** 1989;6(2):74–80
Inhaled metaproterenol is superior to inhaled cromolyn in protecting against cold-air-induced bronchospasm. Israel RH, et al. **Respiration** 1988;53(4):225–31

TOXICITY

Corticosterone induction of cleft palate in mice dosed with orciprenaline sulfate. Iida H, et al. **Teratology** 1988 Jul; 38(1):15–27

ORF see **ECTHYMA, CONTAGIOUS**

ORF VIRUS see under **POXVIRIDAE**

ORGAN CULTURE

The production of bovine interferon in foetal and adult organ cultures and in leukocytes. Kandefer-Szerszeń M, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(4):447–52
The surplus human embryo: its potential for growth, blastulation, hatching, and human chorionic gonadotropin production in culture. Lopata A, et al. **Fertil Steril** 1989 Jun;51(6):984–91
Coculture of human zygotes on fetal bovine uterine fibroblasts: embryonic morphology and implantation. Wiemer KE, et al. **Fertil Steril** 1989 Sep;52(3):503–8
Human trabecular meshwork organ culture. Urakawa Y, et al. **Jpn J Ophthalmol** 1988;32(4):401–11
Frequency of occurrence of abnormal cell types in organ-cultured fetal crystalline lenses and its dependence upon the culture medium used. Veroman S, et al. **Ophthalmic Res** 1989;21(2):101–5
Improved human fetal pancreatic tissue survival following hyperbaric oxygen culture. Hullett DA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2659–60
Sequential differentiation of human fetal pancreas in vitro and in normal and diabetic nude mice. Mandel TE, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2657–8
Functional maturation of porcine fetal pancreatic explants. Tsunoda T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2667–8
[Growing human corneal endothelium in cell culture] Engelmann K, et al. **Fortschr Ophthalmol** 1989;86(1):72–5 (Eng. Abstr.) **(Ger)**

INSTRUMENTATION

A modified roller tube technique for organotypic cocultures of embryonic rat spinal cord, sensory ganglia and skeletal muscle. Braschler UF, et al. **J Neurosci Methods** 1989 Aug; 29(2):121–9
Portable in vitro bath for an unsubmerged complete trachea. Braga PC, et al. **J Pharmacol Methods** 1988 Dec; 20(4):307–12

METHODS

The aortic intima in organ culture. Response to culture conditions and partial endothelial denudation. Jackman RW, et al. **Am J Pathol** 1988 Nov;133(2):241–51
A comparison of the specificity of phosphatidylcholine synthesis by human fetal lung maintained in either organ or organotypic culture. Caesar PA, et al. **Biochem J** 1988 Jul 15;253(2):451–7
Ventral and dorsal horn acetylcholinesterase neurons are maintained in organotypic cultures of postnatal rat spinal cord explants. Delfs J, et al. **Brain Res** 1989 May 29; 488(1–2):31–42
The effect of organ culture on human trabecular meshwork. Johnson DH, et al. **Exp Eye Res** 1989 Jul;49(1):113–27
Organ culture providing an articulating function for the temporomandibular joint. Kantomaa T, et al. **J Anat** 1988 Dec;161:195–201
In vitro culture systems for studying human esophageal carcinogenesis. I. Establishment of in vitro culture system. Pei XF, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(2):90–3

ORGAN DONORS see **TISSUE DONORS**

ORGAN FAILURE, MULTIPLE see **MULTIPLE ORGAN FAILURE**

ORGAN OF CORTI

ENZYMOLOGY

Neuron-specific enolase during the development of the organ of Corti. Whitlon DS, et al. **Int J Dev Neurosci** 1988; 6(1):77–87

GROWTH & DEVELOPMENT

Ontogeny of calcitonin gene-related peptide in the organ of Corti of the rat. Tohyama Y, et al. **Brain Res Dev Brain Res** 1989 Feb 1;45(2):309–12
Appearance of B and H blood group antigens in the developing cochlear hair cells. Gil-Loyzaga P, et al. **Cell Tissue Res** 1989 Jul;257(1):17–21
Postnatal development of the organ of Corti in the wild house mouse, laboratory mouse, and their hybrid. Burda H, et al. **Hear Res** 1988 Oct;36(1):97–105

INNERVATION

Innervation densities of inner and outer hair cells of the human organ of Corti. Evidence for auditory neural degeneration in a case of Usher's syndrome. Nadol JB Jr. **ORL J Otorhinolaryngol Relat Spec** 1988;50(6):363–70

METABOLISM

Cation distribution in the organ of Corti of the guinea pig. Mann W, et al. **Arch Otorhinolaryngol** 1988;245(3):185–90

PATHOLOGY

Hensen's cell cyst of the organ of Corti. Djeric D, et al. **Acta Otolaryngol (Stockh)** 1989 Jul-Aug;108(1–2):55–61
Retrograde cochlear neuronal degeneration in human subjects. Suzuka Y, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;450:1–20
Correlation of otosclerotic foci and degenerative changes in the organ of Corti and spiral ganglion. Kwok OT, et al. **Am J Otolaryngol** 1989 Jan-Feb;10(1):1–12

PHYSIOLOGY

Asymmetry in voltage-dependent movements of isolated outer hair cells from the organ of Corti. Santos-Sacchi J. **J Neurosci** 1989 Aug;9(8):2954–62
Stimulus-related potassium changes in the organ of Corti of guinea-pig. Johnstone BM, et al. **J Physiol (Lond)** 1989; 408:77–92
[Role of acoustic oto-emissions in a functional auditive study] Collet L, et al. **Ann Otolaryngol Chir Cervicofac** 1988; 105(8):642 **(Fre)**

ULTRASTRUCTURE

Time sequence of degeneration pattern of the organ of Corti after acoustic overstimulation. A transmission electron microscopy study. Fredelius L. **Acta Otolaryngol (Stockh)** 1988 Nov-Dec;106(5–6):373–85
Observation of the glycocalyx of the organ of Corti: an investigation by electron microscopy in the normal and gentamicin-treated guinea pig. Takumida M, et al. **J Laryngol Otol** 1989 Feb;103(2):133–6
Osmium impregnation and micromanipulation. Their association in studies using secondary or backscattered electrons. Reiss G, et al. **Prog Clin Biol Res** 1989; 295:563–70

ORGAN PRESERVATION

Cryopreservation of canine trachea: functional and histological changes. Deschamps C, et al. **Ann Thorac Surg** 1989 Feb;47(2):208–12
The effect of fluorocarbon emulsion on 24-hour canine heart preservation by coronary perfusion. Gohra H, et al. **Ann Thorac Surg** 1989 Jul;48(1):96–103
Donor deep hypothermia or donor pretreatment with prostaglandin E1 and single pulmonary artery flush for heart-lung graft preservation: an experimental primate study. Harjula A, et al. **Ann Thorac Surg** 1988 Nov; 46(5):553–5
Myocardial preservation: the role of magnesium [letter] Lonchyna VA, et al. **Ann Thorac Surg** 1989 Jul;48(1):145
Modified reperfusate after long-term preservation of the heart. Milliken JC, et al. **Ann Thorac Surg** 1989 May; 47(5):725–8
Reperfusion injury in the lung preserved for 24 hours. Paull DE, et al. **Ann Thorac Surg** 1989 Feb;47(2):187–92
Viable cryopreserved aortic homograft for aortic valve endocarditis and annular abscesses. Zwischenberger JB, et al. **Ann Thorac Surg** 1989 Sep;48(3):365–9; discussion 369–70
31P nuclear magnetic resonance determination of changes in energy state in lung preservation. Hall TS, et al. **Circulation** 1988 Nov;78(5 Pt 2):III95–8
Studies on cryoprotectant equilibration in the intact rat liver using nuclear magnetic resonance spectroscopy: a noninvasive method to assess distribution of dimethyl sulfoxide in tissues. Fuller BJ, et al. **Cryobiology** 1989 Apr; 26(2):112–8
The application of nuclear magnetic resonance spectroscopy to assess viability in stored tissues and organs. Fuller BJ, et al. **Cryobiology** 1989 Jun;26(3):248–55 (24 ref.)
Viability assays in organ preservation. Southard JH. **Cryobiology** 1989 Jun;26(3):232–8 (36 ref.)
Corneo-scleral rim cultures: donor contamination a case of fungal endophthalmitis transmitted by K-Sol stored cornea. Fong LP, et al. **Eye** 1988;2 (Pt 6):670–6
Freezing of orthopaedic specimens before mechanical testing. Ralis ZA. **J Bone Joint Surg [Br]** 1989 Jan;71(1):55–7
The fate of the freeze-preserved xenograft: an experimental study on rabbits, cats, and dogs. Siegal A, et al. **J Cardiovasc Surg (Torino)** 1989 Jan-Feb;30(1):76–80
Extended cardiopulmonary preservation for heart-lung transplantation: a comparative study of superoxide dismutase. Bando K, et al. **J Heart Transplant** 1989 Jan-Feb;8(1):59–66
Improved heart preservation with UW preservation solution. Swanson DK, et al. **J Heart Transplant** 1988 Nov-Dec; 7(6):456–67
Oxygenated perfluorocarbon, recombinant human superoxide dismutase, and catalase ameliorate free radical induced myocardial injury during heart preservation and transplantation. Bando K, et al. **J Thorac Cardiovasc Surg** 1988 Dec;96(6):930–8
Preservation of high-energy phosphates in human myocardium. A phosphorus 31-nuclear magnetic resonance study of the effect of temperature on atrial appendages. Deslauriers R, et al. **J Thorac Cardiovasc Surg** 1989 Sep; 98(3):402–12
Bradyarrhythmia with University of Wisconsin preservation solution [letter] Prien T, et al. **Lancet** 1989 Jun 10; 1(8650):1319–20
Retrospective comparative study on the influence of preservation solutions on human renal allograft function and survival. Lam FT, et al. **Nephrol Dial Transplant** 1988; 3(3):300–4
Pediatric organ donor maintenance: pathophysiologic derangements and nursing requirements. Kissoon N, et al. **Pediatrics** 1989 Oct;84(4):688–93
Transplantation of cryopreserved islet cell allografts into the renal subcapsular site. Bandlien KO, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2648–9
Preservation by pulsatile perfusion improves early renal allograft function. Barber WH, et al. **Transplant Proc** 1988 Oct;20(5):865–8
Incidence of transport medium contamination in cadaver kidney procurement. Benoit G, et al. **Transplant Proc** 1988 Oct;20(5):895
Liver perfusion in multiorgan harvesting for transplantation. Colledan M, et al. **Transplant Proc** 1988 Oct;20(5):847–8
Thromboxane flux and urinary eicosanoids as an index of reperfusion injury in pancreas transplantation after different periods of cold storage. Colomer J, et al. **Transplant Proc** 1988 Oct;20(5):1013–5
Cryopreservation of hamster pancreatic islets using a fairly rapid cooling rate. Fukushima W, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2641–3
Improved results of preservation of hepatic grafts preflushed with albumin and prostaglandins. Gaber AO, et al. **Transplant Proc** 1988 Oct;20(5):992–3
The results of cadaver kidney transplantation with prolonged cold ischemia time. Haberal M, et al. **Transplant Proc** 1988 Oct;20(5):935–7
72-hours preservation of pancreatic autotransplants in dogs using a urinary drainage technique. Heise JW, et al. **Transplant Proc** 1988 Oct;20(5):1029–30
Experimental heart preservation for 24 hours: benefits of PGE1 in a nonpulsatile coronary perfusion solution. Herreros J, et al. **Transplant Proc** 1988 Oct;20(5):1033–4
Efficacy of clinical cadaver kidney preservation by continuous perfusion. Hoffmann RM, et al. **Transplant Proc** 1988 Oct;20(5):882–4
Kidney procurement with the HTK solution of Bretschneider. Isemer FE, et al. **Transplant Proc** 1988 Oct; 20(5):885–6
The isolated perfused rabbit liver as a model for assessment of organ preservation. Jamieson NV, et al. **Transplant Proc** 1988 Oct;20(5):996–7
The effects of delayed cyclosporine administration in recipients of cadaveric renal allografts subjected to prolonged cold ischemia. Jordan ML, et al. **Transplant Proc** 1989 Apr;21(2):3319–20
Results of extended preservation of the liver for clinical transplantation. Kalayoglu M, et al. **Transplant Proc** 1989 Jun;21(3):3487–8
Improved technique for organ harvesting. Kirste G, et al. **Transplant Proc** 1988 Oct;20(5):757
Long-term mass storage of purified human pancreatic islets. Kneteman NM, et al. **Transplant Proc** 1988 Oct; 20(5):1023–5
Autotransplantation of canine pancreatic islets isolated from cryopreserved pancreas. Konishi K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2650–2
Late function in 48 cadaver renal allografts preserved for 48 to 76 hours. Kumar MS, et al. **Transplant Proc** 1988 Oct;20(5):940–1
Potentiation of ischemic injury during hypothermic storage in donor kidneys: role of energy metabolism. Maessen JG, et al. **Transplant Proc** 1988 Oct;20(5):854–7
Experimental studies on cryopreservation of pancreatic islets of Langerhans. Miura J, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 3):2644–5
Value of prostacyclin plus verapamil for obtaining 24-hour preserved liver allografts. Mora NP, et al. **Transplant Proc** 1988 Oct;20(5):980–2
Successful 24-and 48-hour cold storage of the pancreas prior to islet isolation and transplantation. Munn SR, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2635–7
Importance of pH in renal preservation. Nghiem DD, et al. **Transplant Proc** 1988 Oct;20(5):872–4
Influence of cytoprotective agents on renal function after prolonged kidney preservation. Ploeg RJ, et al. **Transplant Proc** 1988 Oct;20(5):858–60
Efficacy of 48-hour pancreas preservation with UW solution in the dog allograft model. Ploeg RJ, et al. **Transplant Proc** 1988 Oct;20(5):1026–8
Multiple organ retrieval and preservation with normothermic autoperfusion. Prieto M, et al. **Transplant Proc** 1988 Oct; 20(5):827–8
Optimizing cryopreservation of isolated islets. Rajotte RV, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2638–40
Prolonged cold ischemia time exerts an independent adverse effect on graft survival in recipients of cadaver renal transplants. Rao KV, et al. **Transplant Proc** 1988 Oct;

20(5):942–3
Preservation of rabbit livers by continuous hypothermic perfusion after donor pretreatment with chlorpromazine and methylprednisolone. Sundberg R, et al. **Transplant Proc** 1988 Oct;20(5):998
The influence of storage period and reperfusion in pancreas transplantation using lipoperoxides as a tissue damage marker. Targarona EM, et al. **Transplant Proc** 1988 Oct; 20(5):1016–8
Albumin-augmented crystalloid or hyperosmolar colloid solutions for clinical pancreas preservation. Toledo-Pereyra LH, et al. **Transplant Proc** 1988 Oct; 20(5):1021–2
Improved liver preservation by combined gravity flow perfusion and cold storage. Toledo-Pereyra LH, et al. **Transplant Proc** 1988 Oct;20(5):983–5
Extending the limits of renal preservation (greater than or equal to 40 hours)—effect of preservation method and immunosuppressive regimen. Toledo-Pereyra LH, et al. **Transplant Proc** 1988 Oct;20(5):938–9
Shipped kidneys: are they worse? A single-center study. Wagner K, et al. **Transplant Proc** 1988 Oct;20(5):869–71
Twenty-four-hour hypothermic storage of the canine pancreas before islet isolation. Warnock GL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2646–7
The usefulness of initial brief pulsatile perfusion in extending the applicability of cold storage for renal transplantation—a preliminary report. Yland MJ, et al. **Transplant Proc** 1988 Oct;20(5):875–81
Clinical organ preservation with UW solution [letter] Belzer FO. **Transplantation** 1989 Jun;47(6):1097–8
Glucose-containing organ preservation solutions and intracellular acidosis [letter] Fuller BJ, et al. **Transplantation** 1988 Dec;46(6):925
The effect of type of preservation solution and hemodilution of the recipient on postischemic erythrocyte trapping in kidney grafts. An experimental study in the rat. Jacobsson J, et al. **Transplantation** 1989 May;47(5):876–9
The absence of a deleterious effect of mechanical kidney preservation in the era of cyclosporine. Jaffers GJ, et al. **Transplantation** 1989 Apr;47(4):734–6
Preservation of the canine liver for 24–48 hours using simple cold storage with UW solution. Jamieson NV, et al. **Transplantation** 1988 Oct;46(4):517–22
Improved 72-hour renal preservation with phosphate-buffered sucrose. Lam FT, et al. **Transplantation** 1989 May;47(5):767–71
Preservation of dog liver, kidney, and pancreas using the Belzer-UW solution with a high-sodium and low-potassium content. Moen J, et al. **Transplantation** 1989 Jun;47(6):940–5
24-hour rat liver preservation using UW solution and some simplified variants. Sumimoto R, et al. **Transplantation** 1989 Jul;48(1):1–5
Hypothermic preservation of the rat liver assessed by orthotopic transplantation. III. Improved functional recovery with isotonic citrate solution and a stable prostacyclin analogue. Tamaki T, et al. **Transplantation** 1988 Oct;46(4):626–8
Preservation of livers with UW or Euro-Collins' solution [letter] Todo S, et al. **Transplantation** 1988 Dec;46(6):925–6
24-hour rabbit heart storage with UW solution. Effects of low-flow perfusion, colloid, and shelf storage. Wicomb WN, et al. **Transplantation** 1989 Jul;48(1):6–9
Comparison of cardioplegic and UW solutions for short-term rabbit heart preservation. Wicomb WN, et al. **Transplantation** 1989 Apr;47(4):733–4
Successful cold storage preservation of canine pancreas with UW-1 solution prior to islet isolation. Zucker PF, et al. **Transplantation** 1989 Jul;48(1):168–70
Transplantation of cryopreserved human pancreatic islets into diabetic nude mice. Ricordi C, et al. **World J Surg** 1988 Dec;12(6):861–5
[Preservation of the fetal pancreas and the effect of its clinical application] Qin ZY. **Chung Hua I Hsueh Tsa Chih** 1989 Jan;69(1):33–6 (Chi)
[Experiments on cryopreservation of the cornea] Qiu XZ. **Chung Hua Yen Ko Tsa Chih** 1988 Jan;24(1):41–3 (Eng. Abstr.) (Chi)
[Ultrastructural studies of the human cornea stored in M-K medium] Wang YL, et al. **Yen Ko Hsueh Pao** 1986 Jun; 2(2):129–34 (Eng. Abstr.) (Chi)
[The effect of solutions used for hypothermia on cells cultured in vitro] Klen R, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(5):669–79 (Eng. Abstr.) (Cze)
[Value of a UW solution in kidney preservation in view of transplantation (letter)] Benoit G, et al. **Presse Med** 1989 May 27;18(21):1076 (Fre)
[Solutions provided by the freezing of embryos and questions posed by the freezing of human ovocytes] Mandelbaum J, et al. **Rev Fr Gynecol Obstet** 1988 Oct;83(10):619–22 (Eng. Abstr.) (Fre)
[Effects of various energy substrates on the recovery of the hepatic energy level after cold storage] Watanabe Y. **Nippon Geka Gakkai Zasshi** 1988 Aug;89(8):1204–10 (Eng. Abstr.) (Jpn)
[Assessment of the viability of preserved hearts—birefringence test using a polarizing microscope] Yamanaka S. **Nippon Geka Gakkai Zasshi** 1988 Jul; 89(7):1105–13 (Eng. Abstr.) (Jpn)
[Induction of cardiac arrest before cold storage in Collins' solution—important role of the cardioplegic solution] Kohno H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct;36(10):2229–32 (Eng. Abstr.) (Jpn)
[Experimental studies on evaluation of myocardial viability using continuous intramyocardial pH measurements during hypothermic heart preservation] Saitoh K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug;36(8):1307–10 (Eng. Abstr.) (Jpn)
[Myocardial protection during transplantation procedure following cold storage in Collins' solution] Toshima Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb; 37(2):337–43 (Eng. Abstr.) (Jpn)

INSTRUMENTATION

Storage and transport of heart and heart-lung donor organs with inflatable cushions and eutectoid cooling. Wheeldon DR, et al. **J Heart Transplant** 1988 Jul-Aug;7(4):265–8
Flush pressure requirements for optimal cadaveric donor kidney preservation. Anaise D, et al. **Transplant Proc** 1988 Oct;20(5):891–4

METHODS

Core-cooling, heart-perfusion, lung-immersion technique provides successful cardiopulmonary preservation for heart-lung transplantation. Bando K, et al. **Ann Thorac Surg** 1988 Dec;46(6):625–30
Eighteen to 37 hours' preservation of major organs using a new autoperfusion multiorgan preparation. Chien S, et al. **Ann Thorac Surg** 1989 Jun;47(6):860–7
Using an ice cream maker to make sterile slush. Anderson DS. **AORN J** 1989 Jul;50(1):152–4
Evaluation of technical aspects of the preparation of haemopoietic cells from human fetal liver. Ratajczak MZ. **Arch Immunol Ther Exp (Warsz)** 1988;36(2):223–33
Long-term preservation of a beating heart in an artificial environment. Abe Y, et al. **ASAIO Trans** 1988 Jul-Sep; 34(3):778–81
Forty-eight hour liver preservation using an artificial blood substitute. Nakajima I, et al. **ASAIO Trans** 1988 Jul-Sep; 34(3):277–9
A new solution for liver preservation [editorial] Jamieson NV. **Br J Surg** 1989 Feb;76(2):107–8
Preservation of guinea pig hearts by hypothermic gas perfusion. Bailey LE. **Can J Physiol Pharmacol** 1989 Jul; 67(7):692–6
New autoperfusion preparation for long-term organ preservation. Chien S, et al. **Circulation** 1988 Nov;78(5 Pt 2):III58–65
Energy expenditure of autoperfusing heart-lung preparation. Riveron FA, et al. **Circulation** 1988 Nov;78(5 Pt 2):III103–9
Survival of corneal endothelium following exposure to a vitrification solution. Armitage WJ. **Cryobiology** 1989 Aug; 26(4):318–27
The response of liver to lactobionate/raffinose (University of Wisconsin—UW) solution during hypothermic preservation: a study using 31phosphorus nuclear magnetic resonance. Busza AL, et al. **Cryobiology** 1989 Jun; 26(3):273–6
Protection against oxidative damage in cold-stored rabbit kidneys by desferrioxamine and indomethacin. Gower JD, et al. **Cryobiology** 1989 Aug;26(4):309–17
Stress conditioning: a novel approach to organ preservation. Perdrizet GA, et al. **Curr Surg** 1989 Jan-Feb;46(1):23–6
Free radicals in hypothermic rat heart preservation—prevention of damage by mannitol and desferrioxamine. Wickens DG, et al. **Free Radic Res Commun** 1987;4(3):189–95
Improved hepatic function in the 24-hour preserved rat liver with UW-lactobionate solution and SRI 63-441. Ontell SJ, et al. **Gastroenterology** 1988 Dec;95(6):1617–24
Organ prolongation in anencephalic infants: ethical & medical issues. Walters JW, et al. **Hastings Cent Rep** 1988 Oct-Nov; 18(5):19–27 (30 ref.)
Protective effect of vasodilators on liver function after long hypothermic preservation: a study in the isolated perfused rat liver. Chazouillères O, et al. **Hepatology** 1989 Jun; 9(6):824–9
A comparison of storage viability of nonmeshed and meshed skin at 4 degrees C. Rosenquist MD, et al. **J Burn Care Rehabil** 1988 Nov-Dec;9(6):634–6
Improved static lung preservation with corticosteroids and hypothermia. Hall TS, et al. **J Heart Transplant** 1988 Sep-Oct;7(5):348–52
Cardiopulmonary preservation [letter] Hutter JA, et al. **J Heart Transplant** 1988 Jul-Aug;7(4):312–3
Simultaneous retrieval of the heart and liver from a single donor: an evaluation through preservation and transplantation. Morishita Y, et al. **J Heart Transplant** 1988 Jul-Aug;7(4):269–73
Triiodothyronine therapy for heart donor and recipient. Novitzky D, et al. **J Heart Transplant** 1988 Sep-Oct; 7(5):370–6
Cardiopulmonary preservation [letter] Robicsek F. **J Heart Transplant** 1988 Jul-Aug;7(4):313–4
Experimental pancreatic preservation prior to islet isolation and transplantation. Field MJ, et al. **J Surg Res** 1989 May; 46(5):474–8
Improved lung preservation using a dimethylthiourea flush. Paull DE, et al. **J Surg Res** 1989 Apr;46(4):333–8
Successful extended hypothermic cardiopulmonary preservation for heart-lung transplantation. Bando K, et al. **J Thorac Cardiovasc Surg** 1989 Jul;98(1):137–45; discussion 145–6
Lung function after prolonged lung preservation. Hachida M, et al. **J Thorac Cardiovasc Surg** 1989 Jun;97(6):911–9
A new model for assessment of lung preservation. Jones MT, et al. **J Thorac Cardiovasc Surg** 1988 Oct;96(4):608–14
Improved recovery of cardiac function after hypothermic ischemic storage with ouabain. Lagerstrom CF, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):782–8
Preservation of the lung. Comparison of topical cooling and cold crystalloid pulmonary perfusion. Locke TJ, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):789–95
The role of neural and vasoactive mediators in the regulation of the pulmonary circulation during cardiopulmonary preservation. Mashburn JP, et al. **J Thorac Cardiovasc Surg** 1989 Sep;98(3):434–42; discussion 442–3
The effect of ischemic time and temperature on lung preservation in a simple ex vivo rabbit model used for functional assessment. Wang LS, et al. **J Thorac Cardiovasc Surg** 1989 Sep;98(3):333–42
Newly approved organ preservation solution puts longer life in liver grafts [news] Merz B. **JAMA** 1989 Jul 7;262(1):14
Intracellular-type solution flush for preservation of myocardium and coronary and pulmonary artery flow surface. Lehtola A, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):121–5
Corneal preservation. Wilson SE, et al. **Surv Ophthalmol** 1989 Jan-Feb;33(4):237–59 (238 ref.)
Distant heart procurement. Impacts of storage solution composition on cardiac performance following transplantation. Hausen B, et al. **Transpl Int** 1988 Oct; 1(3):140–5
Optimal storage temperature and benefit of hypothermic cardioplegic arrest for long-term preservation of donor hearts: a study in the dog. Minten J, et al. **Transpl Int** 1988 Apr;1(1):19–25
Core cooling technique is superior to flush techniques for liver procurement. Hoshino T, et al. **Transplant Proc** 1989 Jun;21(3):3517–8
Transplantation of livers from non-heart-beating donors is possible by core cooling technique. Hoshino T, et al. **Transplant Proc** 1989 Jun;21(3):3519
The liver donor: special considerations. Klintmalm GB. **Transplant Proc** 1988 Oct;20(5 Suppl 7):9–11
Results of hormonal therapy in human brain-dead potential organ donors. Novitzky D, et al. **Transplant Proc** 1988 Oct; 20(5 Suppl 7):59–62
Liver preservation: experimental and clinical observations. Toledo-Pereyra LH. **Transplant Proc** 1988 Oct;20(5):965–8 (31 ref.)
Conventional management of the brain-dead potential multi-organ donor. Turcotte JG. **Transplant Proc** 1988 Oct; 20(5 Suppl 7):5–8
Effects of hormonal therapy on subsequent organ (kidney) storage in the experimental animal. Wicomb WN, et al. **Transplant Proc** 1988 Oct;20(5 Suppl 7):55–8
Added effects of organ (heart) storage after brain death in the experimental animal. Wicomb WN, et al. **Transplant Proc** 1988 Oct;20(5 Suppl 7):39–43
Cardiopulmonary bypass with profound hypothermia. An optimal preservation method for multiorgan procurement. Baumgartner WA, et al. **Transplantation** 1989 Jan; 47(1):123–7
Combined cold storage-perfusion preservation with a new synthetic perfusate. Hoffmann RM, et al. **Transplantation** 1989 Jan;47(1):32–7
Evidence that cold preservation-induced microcirculatory injury in liver allografts is not mediated by oxygen-free radicals or cell swelling in the rat. Holloway CM, et al. **Transplantation** 1989 Aug;48(2):179–88
A simple, working heart and lung transplant model for assessing preservation methods in the rabbit. Kaneko M, et al. **Transplantation** 1988 Oct;46(4):624–6
Seventy-two-hour preservation of the canine pancreas by the two-layer (Euro-Collins' solution/perfluorochemical) cold storage method. Kawamura T, et al. **Transplantation** 1989 May;47(5):776–8
Successful five-day perfusion preservation of the canine kidney. McAnulty JF, et al. **Transplantation** 1989 Jan; 47(1):37–41
Pyridine nucleotide fluorometry in preserved porcine liver with fluorocarbon emulsion. Ozaki N, et al. **Transplantation** 1989 Aug;48(2):198–201
The mechanism of action of retrograde oxygen persufflation in renal preservation. Pegg DE, et al. **Transplantation** 1989 Aug;48(2):210–7
A pilot clinical study of retrograde oxygen persufflation in renal preservation. Rolles K, et al. **Transplantation** 1989 Aug;48(2):339–42
Relevance of additive components of University of Wisconsin cold-storage solution. An experimental study in the rat. Wahlberg J, et al. **Transplantation** 1989 Sep;48(3):400–3
The effects of cooling rates and storage temperature on the function of 24-hour cold-preserved rabbit kidneys. Winchell RJ, et al. **Transplantation** 1988 Dec;46(6):918–9
Lack of effect of oxygen-radical scavenging systems in the preserved reperfused rabbit kidney. Winchell RJ, et al. **Transplantation** 1989 Sep;48(3):393–6
The effect of preservation fluid on the blood flow of pediatric liver allografts [letter] Yanaga K, et al. **Transplantation** 1989 Aug;48(2):358

[1 year of multiple organ procurement using the Starzl technic of rapid cooling: personal results] Huber O, et al. **Helv Chir Acta** 1989 Jan;55(5):623–8 (Eng. Abstr.) **(Fre)**

[Changed donor criteria for liver transplantation due to new preservation potentials (letter)] Bechstein WO, et al. **Dtsch Med Wochenschr** 1989 Aug 25;114(34):1305 **(Ger)**

[Organ donation from a brain-dead patient. Donor criteria, organ-preserving therapy and discussion with the relatives] Prien T, et al. **Dtsch Med Wochenschr** 1989 Jun 23; 114(25):998–1002 (26 ref.) **(Ger)**

[Kidney protection] Bretschneider HJ, et al. **Klin Wochenschr** 1988 Sep 15;66(18):817–27 (34 ref.) **(Ger)**

[Perfusion of the liver for transplantation. Comparison of technics] Colledan M, et al. **Minerva Chir** 1988 Oct 31; 43(20):1661–7 (Eng. Abstr.) **(Ita)**

[High energy phosphates and mitochondrial respiratory function after 24 hours cardiac preservation—comparison between simple hypothermic immersion and continuous hypothermic perfusion] Tago M, et al. **Kokyu To Junkan** 1989 Jan;37(1):61–3 (Eng. Abstr.) **(Jpn)**

[Perfluorochemical emulsion as a perfusate in 24-hour liver preservation prior to transplantation in the rat] Ogino K, et al. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1662–71 (Eng. Abstr.) **(Jpn)**

[The results of experimental study of six-hour heart-lung preservation by autoperfusion method—its evaluation of optimal conditions and lung function after preservation] Matsuoka M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Apr;37(4):694–701 (Eng. Abstr.) **(Jpn)**

[Preservation of the isolated canine heart in 4 degrees C air with intermittent infusion of a cardioplegic solution] Ueda T. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jan;37(1):25–33 (Eng. Abstr.) **(Jpn)**

[The possibilities of biological preservation of a multiple organ donor] Barinov EF. **Grudn Khir** 1988 Sep–Oct; (5):38–44 (Eng. Abstr.) **(Rus)**

[Substantiation and use of a new method of transorganic oxygen preservation of the kidneys] Petrovskii BV, et al. **Vestn Akad Med Nauk SSSR** 1989;(2):69–82 (Eng. Abstr.) **(Rus)**

[Preservation of swine liver during 24 hours with C2 solution and verapamil] Aller Reyero MA, et al. **Rev Esp Enferm Apar Dig** 1988 Dec;74(6):591–600 (Eng. Abstr.) **(Spa)**

[Arterial circulation in preservation of swine liver by simple perfusion and hypothermic storage] Arias Pérez J, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 1):297–303 (Eng. Abstr.) **(Spa)**

[Aspects related to extraction and preservation in 60 cases of liver transplant] Mora NP, et al. **Rev Esp Enferm Apar Dig** 1989 Feb;75(2):119–22 (Eng. Abstr.) **(Spa)**

STANDARDS

Biopsy assessment of myocardial preservation in 160 human donor hearts. Darracott-Cankovic S, et al. **Transplant Proc** 1988 Oct;20(5 Suppl 7):44–8

ORGAN PROCUREMENT

see related
TISSUE DONORS

Procurement of cadaver kidneys for transplantation. A joint university/community effort [published erratum appears in Ala J Med Sci 1988 Oct;25(4):496] Morgan C Jr, et al. **Ala J Med Sci** 1988 Jul;25(3):326–8

Commentary on guidelines for the determination of brain death in children. Shewmon DA. **Ann Neurol** 1988 Dec; 24(6):789–91

Organ donation. Rutter N, et al. **Arch Dis Child** 1989 Jun; 64(6):875–8

Egg donation and medical ethics. Abdalla H, et al. **BMJ** 1989 Jul 8;299(6691):120

Obstacles to organ donation. Wakeford RE, et al. **Br J Surg** 1989 May;76(5):436–9

Canadian doctors and Japanese tot help change Japanese attitudes on transplants. Helwig D. **Can Med Assoc J** 1988 Dec 1;139(11):1088–9

Cadaveric renal transplantation under the American organ allocation system. Shapiro R, et al. **Contrib Nephrol** 1989; 70:30–40

Ethical dilemmas in organ donation and transplantation. Grenvik A. **Crit Care Med** 1988 Oct;16(10):1012–8

Kidney retrieval from cadaver donors with disseminated intravascular coagulopathy. Shamash FS, et al. **Curr Surg** 1989 Jan–Feb;46(1):6–9

Neurosurgeons and the supply of human organs. Prottas JM, et al. **Health Aff (Millwood)** 1989 Spring;8(1):119–31

Eye donation and eye banking [editorial] Fernandez ST. **Indian J Ophthalmol** 1987 Jul–Aug;35(4):175

Kidney on sale (letter). Arya TV. **J Assoc Physicians India** 1989 Mar;37(3):241

New application of the autotrans: autologous support of the organ donor and salvage of the donor's red blood cells for the transfusion support of organ recipients. Valbonesi M, et al. **J Clin Apheresis** 1988;4(4):166–8

Georgia's two organ procurement programs. Humphries AL, et al. **J Med Assoc Ga** 1988 Oct;77(10):767–72

Organ and tissue procurement. A limiting factor in health care for Georgians. Whelchel JD. **J Med Assoc Ga** 1988 Oct;77(10):759–66

Organ donations should not be restricted to relatives. Evans M. **J Med Ethics** 1989 Mar;15(1):17–20

Harvesting cells, tissues, and organs from fetuses and anencephalic newborns. **J Med Philos** 1989 Feb;14(1):1–102

Brain life and brain death—the anencephalic as an explanatory example. A contribution to transplantation. Beller FK, et al. **J Med Philos** 1989 Feb;14(1):5–23 (40 ref.)

Moral pluralism and the use of anencephalic tissue and organs. Cutter MA. **J Med Philos** 1989 Feb;14(1):89–95

Brain life, brain death, fetal parts. Engelhardt HT Jr. **J Med Philos** 1989 Feb;14(1):1–3

Anencephalic organ donation: a Japanese case. Kimura R. **J Med Philos** 1989 Feb;14(1):97–102

Brain life and brain death: a proposal for a normative agreement. Sass HM. **J Med Philos** 1989 Feb;14(1):45–59 (27 ref.)

Anencephalic infants as organ donors and the brain death standard. Walters JW, et al. **J Med Philos** 1989 Feb; 14(1):79–87

Availability of donated oocytes from an ambulatory sterilization program. Feinman M, et al. **J Reprod Med** 1989 Jul;34(7):441–3

The effect of pancreatic warm ischemia on islet isolation in rats and dogs. Corlett MP, et al. **J Surg Res** 1988 Dec; 45(6):531–6

'Brain death' and organ retrieval. A cross-sectional survey of knowledge and concepts among health professionals. Youngner SJ, et al. **JAMA** 1989 Apr 21;261(15):2205–10

Selection for unrelated donor bone marrow transplantation [letter] **Lancet** 1989 Jun 10;1(8650):1321–2

Rising age limit for kidney donors? [letter] Donnelly PK, et al. **Lancet** 1989 Aug 12;2(8659):397

Donor kidneys of infants and very young children are unacceptable for transplantation [letter] Ruder H, et al. **Lancet** 1989 Jul 15;2(8655):168

Organ donation—are we moving in the right direction? Krom RA. **Mayo Clin Proc** 1989 Jun;64(6):705–7

Exchanging donor kidneys [letter] **N Engl J Med** 1988 Oct 20;319(16):1092–4

US anger over accusations of trafficking in infant organs [news] Palca J. **Nature** 1988 Oct 27;335(6193):754

Teaching patients with life-threatening illnesses. Cardiovascular disease, transplantation, and organ donation. Barr WJ. **Nurs Clin North Am** 1989 Sep; 24(3):639–44

Recipient selection for heart-lung transplantation. Harjula AL, et al. **Scand J Thorac Cardiovasc Surg** 1988;22(3):193–6

Proceedings of the twelfth International Congress of the Transplantation Society. August 14–19, 1988, Sydney, Australia. Book II. **Transplant Proc** 1989 Feb;21(1 Pt 2):1195–2475

Third International Symposium on Organ Procurement. December 2–4, 1987, Barcelona (Spain). Proceedings. **Transplant Proc** 1988 Oct;20(5):725–1047

Should AB kidneys be recovered routinely? Abrams J, et al. **Transplant Proc** 1988 Oct;20(5):755–6

Renal transplant experience in black African patients, with special reference to early survival rates, donor availability and cytomegalovirus. Bauling PC, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2008–9

The results of transplantation in blacks: just the tip of the iceberg. Callender CO. **Transplant Proc** 1989 Jun; 21(3):3407–10; discussion 3413–8

Sectarianism, uncertainty, and fear: mechanisms that may reverse attitudes toward organ donation. Cantarovich F, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1409–10

Problems in the policies and criteria used to allocate organs for transplantation in the United States. Caplan AL. **Transplant Proc** 1989 Jun;21(3):3381–7; discussion 3413–8

Ethics in different cultures: the 'west'. Dossetor JB. **Transplant Proc** 1989 Feb;21(1 Pt 2):1395–7

The capacity for organ generation of hospitals in Catalonia, Spain: a multicentre study. Espinel E, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1419–21

US public opinion concerning the procurement and distribution of donor organs. Evans RW, et al. **Transplant Proc** 1988 Oct;20(5):781–5

Donor criteria and procurement procedures for hearts and veins used as allograft transplants. Heacox AE, et al. **Transplant Proc** 1988 Oct;20(5):751–2

Waiting in line: should selected patients ever be moved up? Jonasson O. **Transplant Proc** 1989 Jun;21(3):3390–4; discussion 3413–8

Organ transplants: the just and human expectations of nonresidents. Kleinig J. **Transplant Proc** 1989 Jun; 21(3):3430–1; discussion 3440–4

Intravenous drug abusers as renal allograft donors: a retrospective study. Korb S, et al. **Transplant Proc** 1988 Oct;20(5):753–4

Organ transplants from out-of-hospital cardiac arrest patients. Mercatello A, et al. **Transplant Proc** 1988 Oct; 20(5):749–50

The multiple organ donor: prospective multicenter analysis of outcome in the United States of America. Peters TG, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1218–20

Multiple organ procurement and sharing: the SEOPF experience. Peters TG, et al. **Transplant Proc** 1988 Oct; 20(5):829–32

Nonresident aliens and access to organ transplant. Prottas JM. **Transplant Proc** 1989 Jun;21(3):3426–9; discussion 3440–4

The benefits of HLA matching on renal transplantation relative to cyclosporine use and organ sharing. Sanfilippo F, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):661–2

Ethics and priorities of organ procurement and allocation. Sells RA. **Transplant Proc** 1989 Feb;21(1 Pt 2):1391–4

Pancreaticoduodenal allograft procurement in combination with liver allograft procurement. Sterioff S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2767–8

Relationship between multiple organ procurement and postoperative ATN. Toledo-Pereyra LH, et al. **Transplant Proc** 1988 Oct;20(5):839–40

Multiple organ procurement is not detrimental to cadaveric kidney allograft function and survival. Vaughn WK, et al. **Transplant Proc** 1988 Oct;20(5):835–8

Equity in organ distribution: a plea for a return to reality. Waltzer WC, et al. **Transplant Proc** 1989 Jun;21(3):3388–9; discussion 3413–8

Equity, efficacy, and the point system for transplant recipient selection. Wikler D. **Transplant Proc** 1989 Jun;21(3):3437–9; discussion 3440–4

Distant organ procurement for heart and lung transplantation. Yacoub MH, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2548–50

Successful hepatic allograft procurement and transplantation from a donor after cholecystectomy. Stratta RJ, et al. **Transplantation** 1988 Oct;46(4):599–600

[Cooperation between the volunteer bone marrow donor section at the Institute of Hematology and Blood Transfusion, Prague, and the Caitlin Raymond Registry of Bone Marrow Donor Banks. 1 year experience] Láznička M, et al. **Cas Lek Cesk** 1989 Apr 21;128(17):531–2 (Eng. Abstr.) **(Cze)**

[Can the number of donor kidneys for children be increased by using the kidneys of dead newborn infants?] Devaux S, et al. **Z Urol Nephrol** 1988 Nov;81(11):671–4 (Eng. Abstr.) **(Ger)**

[Organ donation: a current problem] Chapchap P, et al. **AMB Rev Assoc Med Bras** 1988 Nov–Dec;34(6):190–2 **(Por)**

[Organ transplant from cadaver donor: organization of centers of procurement and distribution] Mocelin AJ. **AMB Rev Assoc Med Bras** 1987 Sep–Oct;33(9–10):197–8 **(Por)**

ECONOMICS

The economics and ethics of markets for human organs. Hansmann H. **J Health Polit Policy Law** 1989 Spring; 14(1):57–85 (42 ref.)

Kidney for sale by live donor. Brahams D. **Lancet** 1989 Feb 4;1(8632):285–6

Kidneys for sale [letter] Phillips M. **Lancet** 1989 Mar 11; 1(8637):559

Marketing of human organs and tissues is justified and necessary. Kevorkian J. **Med Law** 1989;7(6):557–65

London kidney exchange in trouble. **Nature** 1989 Feb 2; 337(6206):393

Multiorgan donors: a limited resource. Bradley JW, et al. **Transplant Proc** 1988 Oct;20(5):846

LEGISLATION & JURISPRUDENCE

The Human Tissue Act [editorial] Underwood J. **Br J Hosp Med** 1988 Nov;40(5):339

Canadian regulation of the medical use of fetal tissue in research and therapy [editorial] Marshall TD. **Can Med Assoc J** 1989 May 1;140(9):1021–2

Removing organs from anencephalic infants: ethical and legal considerations. Fost N. **Clin Perinatol** 1989 Jun;16(2):331–7 (24 ref.)

Required request revisited [letter] **Hastings Cent Rep** 1989 Mar–Apr;19(2):44–5

The impact of routine inquiry laws on organ donation. Andersen KS, et al. **Health Aff (Millwood)** 1988 Winter; 7(5):65–78

Anencephalic infants as organ donors. Legal and ethical perspectives. Leggans T. **J Leg Med** 1988 Sep;9(3):449–65 (119 ref.)

The status of anencephalic babies: should their bodies be used as donor banks? Davis A. **J Med Ethics** 1988 Sep; 14(3):150–3

The use of fetal and anencephalic tissue for transplantation. Cefalo RC, et al. **J Med Philos** 1989 Feb;14(1):25–43

Anencephalics as organ donors. Zaner RM. **J Med Philos** 1989 Feb;14(1):61–78 (33 ref.)

Anencephalic infants: life expectancy and organ donation. Pomerance JJ, et al. **J Perinatol** 1989 Mar;9(1):33–7

Human organ transplants bill. Brahams D. **Lancet** 1989 May 27;1(8648):1211

Kidneys for sale: legislation is needed [editorial] Brahams D. **Med Leg J** 1989;57 (Pt 2):73–5

On the use of anencephalic infants as organ donors. Medearis DN Jr, et al. **N Engl J Med** 1989 Aug 10;321(6):391–3

New kidneys [letter] Weeks JL. **Nature** 1989 Apr 27; 338(6218):698

AMA report of the Board of Trustees. Organ procurement system. **R I Med J** 1988 Sep;71(9):357–9

Organ donation and transplantation—what every physician should know. Francisco CJ 3d. **Tex Med** 1988 Dec; 84(12):92–5

Routine inquiry for organ and tissue donations. Weedn VW, et al. **Tex Med** 1988 Dec;84(12):30–7 (34 ref.)

The point system for organ distribution. Starzl TE, et al. **Transplant Proc** 1989 Jun;21(3):3432–6; discussion 3440–4
[Ethical and general problems posed by organ transplantation in children] Royer P. **Arch Fr Pediatr** 1988;45 Suppl 1:773–4 **(Fre)**
[Legal aspects of organ donation, procurement and transplantation] Liebhardt E, et al. **Chirurg** 1988 Jul; 59(7):441–3 **(Ger)**
[Consultation with the neurologist in transplantation medicine] Kascha S, et al. **Wien Med Wochenschr** 1988 Dec 31;138(23–24):617–21 (Eng. Abstr.) **(Ger)**
[Remarks on W. NasiŁowski and M. Legień's work entitled "Medico-legal aspects of cadaveric organ explantation"] Dziatkowiak AJ. **Przegl Lek** 1988;45(9):665–6 (Eng. Abstr.) **(Pol)**
[Procurement of organs for transplantation (letter)] Marek Z. **Przegl Lek** 1988;45(9):661–2 **(Pol)**
[Medico-legal aspects of cadaveric organ explantation] Nasiłowski W, et al. **Przegl Lek** 1988;45(9):663–4 (Eng. Abstr.) **(Pol)**
[Remarks on the discussion regarding the definition of death and organ donors for transplantation] Sych M. **Przegl Lek** 1988;45(9):667–9 (Eng. Abstr.) **(Pol)**

METHODS

Organ supply—whither growth? McDonald FD. **Am J Kidney Dis** 1988 Dec;12(6):552–4
Heart/heart-lung transplantation. The domino procedure. Cavarocchi NC, et al. **Ann Thorac Surg** 1989 Jul; 48(1):130–3
Organ recovery coordinators can help family work through the grieving process. Sammons BH. **AORN J** 1988 Dec; 48(6):1181–2
Cadaveric organ donation: ethical considerations for a new approach. Kleinman I, et al. **Can Med Assoc J** 1989 Jul 15;141(2):107–10
Pneumococcal endophthalmitis after corneal transplantation: control by modification of harvesting techniques. Moore PJ, et al. **Infect Control Hosp Epidemiol** 1989 Mar; 10(3):102–5
Harvesting organs for paediatric transplantation: medical features. Nivet H. **Intensive Care Med** 1989;15 Suppl 1:S64–6
Organ procurement in children—surgical, anaesthetic and logistic aspects. Otte JB, et al. **Intensive Care Med** 1989; 15 Suppl 1:S67–70
The cardiac donor, the cardiac recipient. Cook LS. **J Arkansas Med Soc** 1989 Aug;86(3):107–9
Procurement of hearts for valve homografts: one year's experience. Jones DJ, et al. **J Okla State Med Assoc** 1988 Aug;81(8):510–2
Approach to management of the heartbeating 'brain dead' organ donor. Darby JM, et al. **JAMA** 1989 Apr 21; 261(15):2222–8 (71 ref.)
Organ procurement [letter] Falcone RE, et al. **JAMA** 1989 Jan 20;261(3):380–1
The use of anencephalic infants as organ sources. A critique. Shewmon DA, et al. **JAMA** 1989 Mar 24–31; 261(12):1773–81 (129 ref.)
Fetal brain transplantation for Parkinson's disease: technique for obtaining donor tissue [letter] Gustavii B. **Lancet** 1989 Mar 11;1(8637):565
Procurement and allocation policies: should receiving depend on willingness to give? Muyskens J. **Mt Sinai J Med** 1989 May;56(3):202–6
Simple instrument occlusion of the anterior visceral branches of the aorta during en bloc renal allograft procurement. Maley WR, et al. **Surg Gynecol Obstet** 1988 Nov; 167(5):442–4
Combined hepatic and pancreaticoduodenal procurement for transplantation. Marsh CL, et al. **Surg Gynecol Obstet** 1989 Mar;168(3):254–8
A technique for concomitant whole duodenopancreatectomy and hepatectomy for transplantation in the multiple organ donor. Nghiem DD. **Surg Gynecol Obstet** 1989 Sep; 169(3):257–8
Procurement of a whole pancreas and liver from the same cadaveric donor. Delmonico FL, et al. **Surgery** 1989 Jun; 105(6):718–23
Combination harvesting procedure for liver and whole pancreas. Bunzendahl H, et al. **Transpl Int** 1988 Jul; 1(2):99–102
Simultaneous procurement of pancreas and liver from a single cadaveric donor. Delmonico FL, et al. **Transplant Proc** 1989 Jun;21(3):3521
Transplantation of livers from non-heart-beating donors is possible by core cooling technique. Hoshino T, et al. **Transplant Proc** 1989 Jun;21(3):3519
Core cooling technique is superior to flush techniques for liver procurement. Hoshino T, et al. **Transplant Proc** 1989 Jun;21(3):3517–8
Combined retrieval of liver and pancreas grafts: alternatives for organ procurement. Wright FH, et al. **Transplant Proc** 1989 Jun;21(3):3522
The benefit and underutilization of sharing kidneys for better histocompatibility. Takiff H, et al. **Transplantation** 1989 Jan; 47(1):102–5
[Organ transplantation] Leenen HJ. **Ned Tijdschr Geneeskd** 1989 May 27;133(21):1084–91 **(Dut)**
[Organ procurement in children. Surgical aspect] Revillon Y, et al. **Arch Fr Pediatr** 1988;45 Suppl 1:709–11 (Eng. Abstr.) **(Fre)**
[1 year of multiple organ procurement using the Starzl technic of rapid cooling: personal results] Huber O, et al. **Helv Chir Acta** 1989 Jan;55(5):623–8 (Eng. Abstr.) **(Fre)**
[Optimization of multiple abdominal organ procurement] Benoit G, et al. **Presse Med** 1989 Apr 22;18(16):837–40 (Eng. Abstr.) **(Fre)**
[Multi-organ procurement: an essential link in the chain of interdependence] Defraigne JO, et al. **Rev Med Liege** 1989 Feb 15;44(4):138–48 **(Fre)**
[Technic of multiple organ procurement] Gubernatis G, et al. **Chirurg** 1988 Jul;59(7):461–8 (14 ref.) **(Ger)**
[Organ donation from a brain-dead patient. Donor criteria, organ-preserving therapy and discussion with the relatives] Prien T, et al. **Dtsch Med Wochenschr** 1989 Jun 23; 114(25):998–1002 (26 ref.) **(Ger)**
[Tolerance for bone marrow procurement in autologous donors studied by myelokaryocytapheresis] Rakhmatullaeva AR, et al. **Gematol Transfuziol** 1988 Jun; 33(6):62–3 **(Rus)**

ORGANIZATION & ADMINISTRATION

Ethical criteria for procuring and distributing organs for transplantation. Childress JF. **J Health Polit Policy Law** 1989 Spring;14(1):87–113 (58 ref.)
The organization of organ procurement. Prottas JM. **J Health Polit Policy Law** 1989 Spring;14(1):41–55 (32 ref.)
Retrieval of donor livers. Sterioff S, et al. **Mayo Clin Proc** 1989 Jan;64(1):112–5
Hospital-based organ retrieval: impact of an organ procurement organization. White MG. **Tex Med** 1988 Dec; 84(12):44–6
Solid organ transplantation today: problems and possibilities. Young JB, et al. **Tex Med** 1988 Dec;84(12):27–9 (17 ref.)
Rapid changes in the work of an international organ exchange organization: Eurotransplant. Cohen B. **Transplant Proc** 1988 Oct;20(5):817–21
The impact of purposeful sharing by HLA matching in the South Eastern Organ Procurement Foundation (SEOPF). Pfaff WW, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1405–7
Role of the transplant co-ordinator and multiple organ donation in the UK. Wight C. **Transplant Proc** 1989 Feb; 21(1 Pt 2):1398–9
[Functioning of an organ procurement center in Bordeau] Lassie P, et al. **Presse Med** 1989 Jan 21;18(2):63–6 (Eng. Abstr.) **(Fre)**
[Organization of organ donation] Angstwurm H, et al. **Chirurg** 1988 Jul;59(7):444–6 **(Ger)**
[Problems of donations of organs from corpses 20 years after the first transplant in Italy] Fava E, et al. **Minerva Chir** 1989 Jan 31;44(1-2):51–3 **(Ita)**

STANDARDS

Anencephalic organ donors [editorial] Salaman JR. **BMJ** 1989 Mar 11;298(6674):622–3
Extended donor criteria for heart transplantation. Schüler S, et al. **J Heart Transplant** 1988 Sep–Oct;7(5):326–30
Ban to be lifted on research use of fetal tissue? [news] Marwick C. **JAMA** 1989 Jan 20;261(3):342
Rising age limit for kidney donors [letter] Campistol JM, et al. **Lancet** 1989 Sep 23;2(8665):744–5
Infants and very young children as kidney donors [letter] Squifflet JP, et al. **Lancet** 1989 Sep 23;2(8665):745
Identification and management of organ donors. Trinkle JK, et al. **Tex Med** 1988 Dec;84(12):38–43 (7 ref.)
Relevance of donor liver selection and graft viability in a liver transplantation program. Mora NP, et al. **Transplant Proc** 1988 Oct;20(5):978–9
The validity of clinical parameters for the selection of liver donors. Pruim J, et al. **Transplant Proc** 1988 Oct;20(5):973
Poor kidneys may negate the benefits of exchange of well-matched kidneys. Ross WB, et al. **Transplant Proc** 1988 Oct;20(5):851
[Resuscitation of children in the brain death state from the view of organ procurement for therapeutic purposes] Cochat P, et al. **Arch Fr Pediatr** 1988;45 Suppl 1:703–8 (Eng. Abstr.) **(Fre)**
[The procurement of organs of children. General aspects] Nivet H, et al. **Arch Fr Pediatr** 1988;45 Suppl 1:699–702 (Eng. Abstr.) **(Fre)**

TRENDS

Increasing number of organ donors [letter] Newstead CG. **Lancet** 1989 Mar 25;1(8639):676
Organ donation [letter] Jensen DM. **Med J Aust** 1988 Dec 5–19;149(11–12):722–3
Increasing organ donation—a review. Ross WB. **Scott Med J** 1989 Jun;34(3):451–2 (10 ref.)
Will there still be an organ shortage in the year 2000? Kootstra G. **Transplant Proc** 1988 Oct;20(5):809–11

ORGAN PROCUREMENT FOUNDATIONS see **ORGAN PROCUREMENT**

ORGAN PROCUREMENT SYSTEMS see **ORGAN PROCUREMENT**

ORGAN SPECIFICITY

Tissue-specific granularity of gap junction cytoplasmic surfaces revealed by rapid-freeze, deep-etch replicas. Shibata Y, et al. **Anat Rec** 1989 Feb;223(2):113–20
Organ-specific variation in the morphology of the fungomas (fungus balls) of Pseudallescheria boydii. Development within necrotic host tissue. Schwartz DA. **Arch Pathol Lab Med** 1989 May;113(5):476–80
The target organ and the toxic process. Proceedings of the European Society of Toxicology. Strasbourg, September 17–19, 1987. **Arch Toxicol Suppl** 1988;12:1–462
Comparison by leukocyte adherence inhibition of human immune response to cancer-associated immunogens, Thomsen-Friedenreich (T) and Tn, myelin basic protein, and organ-specific cancer neoantigens. Thomson DM, et al. **Clin Immunol Immunopathol** 1988 Nov;49(2):231–41
Target organ defects in thyroid autoimmune disease. Sundick RS. **Immunol Res** 1989;8(1):39–60 (74 ref.)
Organ-specific autoantibodies in HLA genotyped insulin-dependent diabetes mellitus families. Vexiau P, et al. **J Autoimmun** 1988 Jun;1(3):253–61
Distribution of the murine plasma cell antigen PC-1 in non-lymphoid tissues. Harahap AR, et al. **J Immunol** 1988 Oct 1;141(7):2317–20
Tissue-specific initiation of murine complement factor B mRNA transcription. Nonaka M, et al. **J Immunol** 1989 Feb 15;142(4):1377–82
Organ-specific autoimmune disease induced in mice by elimination of T cell subsets. V. Neonatal administration of cyclosporin A causes autoimmune disease. Sakaguchi S, et al. **J Immunol** 1989 Jan 15;142(2):471–80
Genes for IFN-beta-2 (IL-6), tumor necrosis factor, and IL-1 are expressed at high levels in the organs of normal individuals. Tovey MG, et al. **J Immunol** 1988 Nov 1; 141(9):3106–10
Stage- and tissue-specific expression of two homeo box genes in sea urchin embryos and adults. Dolecki GJ, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11543–58
The immunologically privileged site for islet cell transplantation. Gotoh M, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 3):2691–2
Importance of transplant site for prolongation of islet xenograft survival (rat to mouse) after low-temperature culture and cyclosporin A. Kamei T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2693–4

RADIATION EFFECTS

Radiogenic cancer induction associated with spinal radiography: a quantitative analysis [see comments] Fickel TE. **J Manipulative Physiol Ther** 1988 Aug;11(4):255–60. **Comment in:** J Manipulative Physiol Ther 1989 Feb;12(1):60–2

ORGAN SURVIVAL see **TISSUE SURVIVAL**

ORGAN TEMPERATURE see **BODY TEMPERATURE**

ORGAN WEIGHT

Sexual dimorphism of the weight of internal organs in fetal ontogenesis. Marecki B. **Anthropol Anz** 1989 Jun; 47(2):175–84
Disparity in organ masses associated with MIRD "S" factors [letter] Ponto JA. **J Nucl Med** 1989 Mar;30(3):416–7
[Japanese reference man 1988–IV. Studies on the weight and size of internal organs of Normal Japanese] Tanaka G, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Mar 25; 49(3):344–64 (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

Organ weights, liver constituents, and serum components in growing chicks fed ochratoxin A. Sreemannarayana O, et al. **Arch Environ Contam Toxicol** 1989 May–Jun; 18(3):404–10

RADIATION EFFECTS

Ovarian and body weight responses of female redheaded bunting to ultra-short photoperiods: demonstration of circadian involvement. Tripathi BK. **Exp Biol** 1989; 48(3):173–6

ORGANELLES

Rapid axonal transport as a chromatographic process: the use of immunocytochemistry of ligated nerves to investigate the biochemistry of anterogradely versus retrogradely transported organelles. Dahlström AB, et al. **Cell Motil Cytoskeleton** 1988;10(1–2):309–20
Microtubule-associated organelle and vesicle transport in fibroblasts. Hayden JH. **Cell Motil Cytoskeleton** 1988; 10(1–2):255–62
Eimeria tenella: use of a monoclonal antibody in determining the intracellular fate of the refractile body organelles and the effect on in vitro development. Danforth HD, et al. **Exp Parasitol** 1989 Jan;68(1):1–7
Organelle gene diversity under migration, mutation, and drift: equilibrium expectations, approach to equilibrium, effects of heteroplasmic cells, and comparison to nuclear genes. Birky CW Jr, et al. **Genetics** 1989 Mar;121(3):613–27
Peroxisomes and peroxisomal disorders. April 18 to 19, 1988, Vienna. Abstracts. **J Clin Chem Clin Biochem** 1989 May; 27(5):287–308
Characterization, by size, density, osmotic fragility, and

immunoaffinity, of acetylcholine- and vasoactive intestinal polypeptide-containing storage particles from myenteric neurones of the guinea-pig. Agoston DV, et al. **J Neurochem** 1989 May;52(5):1474-80

The intron of a plastid gene from a green alga contains an open reading frame for a reverse transcriptase-like enzyme. Kück U. **Mol Gen Genet** 1989 Aug;218(2):257-65

ANALYSIS

Subcellular distribution of selenium in deficient mouse liver. Reiter R, et al. **Biochem J** 1989 Mar 1;258(2):541-5

Human prostasome membranes exhibit very high cholesterol/phospholipid ratios yielding high molecular ordering. Arvidson G, et al. **Biochim Biophys Acta** 1989 Sep 4;984(2):167-73

PADGEM (GMP140) is a component of Weibel-Palade bodies of human endothelial cells. Bonfanti R, et al. **Blood** 1989 Apr;73(5):1109-12

Morphological evidence for calcium storage in the chromatoid body of rat spermatids. Andonov MD, et al. **Experientia** 1989 Apr 15;45(4):377-8

Ubiquitin--a common denominator in intermediate filament pathology of brain and liver? Denk H, et al. **Hepatology** 1989 Oct;10(4):514-5

The protein encoded by gvpC is a minor component of gas vesicles isolated from the cyanobacteria Anabaena flos-aquae and Microcystis sp. Hayes PK, et al. **Mol Microbiol** 1988 Sep;2(5):545-52

Isolation and partial characterization of rhoptries and micronemes from Eimeria nieschulzi zoites (Sporozoa, Coccidia). Dubremetz JF, et al. **Parasitol Res** 1989; 75(6):449-54

[Amyloplast DNA] Kobayashi H. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):345-53 (54 ref.) **(Jpn)**

DRUG EFFECTS

Cytochemical study of the Golgi apparatus and related organelles of the secretory ameloblasts of rat molar tooth germs cultured with and without colchicine. Matsuo S, et al. **Arch Oral Biol** 1988;33(6):433-41

Cadmium induced changes in cell organelles: an ultrastructural study using cadmium sensitive and resistant muntjac fibroblast cell lines. Ord MJ, et al. **Arch Toxicol** 1988;62(2-3):133-45

Increased endocytosis and formation of multivesicular bodies in phorbol ester-stimulated human monoblastic U-937 cells. Nilsson M, et al. **Exp Cell Res** 1989 Apr;181(2):551-65

Chloroquine and acid vesicle function. Krogstad DJ, et al. **Prog Clin Biol Res** 1989;313:53-9 (13 ref.)

ENZYMOLOGY

Sequential changes of lamellar body hydrolases during ozone-induced alveolar injury and repair. Glew RH, et al. **Am J Pathol** 1989 May;134(5):1143-50

Reduction of 5-nitroimidazoles, nitrofurazone, and 2,4-dinitrophenol to their free radical metabolites by Tritrichomonas foetus hydrogenosomes. Moreno SN, et al. **Basic Life Sci** 1988;49:759-64

Molecular and immunological characterization of plastid and cytosolic pyruvate kinase isozymes from castor-oil-plant endosperm and leaf. Plaxton WC. **Eur J Biochem** 1989 May 1;181(2):443-51

Organelles involved in the intracellular transport of newly synthesized aminopeptidase N and their acidity. Hansen GH, et al. **Eur J Cell Biol** 1989 Jun;49(1):154-61

Monoclonal antibodies to kinesin heavy and light chains stain vesicle-like structures, but not microtubules, in cultured cells. Pfister KK, et al. **J Cell Biol** 1989 Apr;108(4):1453-63

Localization of chitin synthetase in cell-free homogenates of Saccharomyces cerevisiae: chitosomes and plasma membrane. Leal-Morales CA, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8516-20

Prostasome membrane associated enzyme activities and semen parameters in men attending an infertility clinic. Ronquist G, et al. **Urol Int** 1988;43(3):133-8

[Serine: pyruvate aminotransferase of rat liver--organelle localization and multihormonal regulation of its synthesis] Ichiyama A, et al. **Seikagaku** 1988 Nov;60(11):1253-66 (29 ref.) **(Jpn)**

[The effect of hepatotoxins on the activity of organelle-specific enzymes and metabolism of liver lipids] Vengerovskiĭ AI, et al. **Vopr Med Khim** 1989 May-Jun; 35(3):87-91 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

An anti-organelle antibody in pathology. The chromatolytic reaction studied with a monoclonal antibody against the Golgi apparatus. Croul SE, et al. **Am J Pathol** 1988 Nov; 133(2):355-62

Sorting of malarial antigens into vesicular compartments within the host cell cytoplasm as demonstrated by immunoelectron microscopy. Stenzel DJ, et al. **Eur J Cell Biol** 1989 Aug;49(2):311-8

Toxoplasma gondii: characterization of monoclonal antibodies that recognize rhoptries. Schwartzman JD, et al. **Exp Parasitol** 1989 Jan;68(1):74-82

A component of an antigenic rhoptry complex of Plasmodium falciparum is modified after merozoite invasion. Lustigman S, et al. **Mol Biochem Parasitol** 1988 Sep;30(3):217-24

METABOLISM

Cl(-)-dependent ATP-driven H+ transport in rabbit renal cortical endosomes. Hilden SA, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):F885-97

Comparison of glycerolipid biosynthesis in non-green plastids from sycamore (Acer pseudoplatanus) cells and cauliflower (Brassica oleracea) buds. Alban C, et al. **Biochem J** 1989 May 1;259(3):775-83

The use of permeabilized cells to study the ion requirements of receptor-ligand dissociation in endosomes. Diaz R, et al. **Biochem J** 1989 May 15;260(1):127-34

Formation of protein bodies and glyoxysomes. Lord JM, et al. **Biochem Soc Trans** 1988 Oct;16(5):706-8 (18 ref.)

Insulin processing in primary endosomes is not responsible for insulin resistance observed in parametrial adipocytes from lactating rats. Fernig DG, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):237-45

Fluorescence studies on binding of amphiphilic drugs to isolated lamellar bodies: relevance to phospholipidosis. Joshi UM, et al. **Biochim Biophys Acta** 1989 Aug 22; 1004(3):309-20

Calcium uptake and release characteristics of the dense tubules of digitonin-permeabilized human platelets. Jy W, et al. **Biochim Biophys Acta** 1988 Oct 20;944(3):374-82

Calciosome, a sarcoplasmic reticulum-like organelle involved in intracellular Ca2+-handling by non-muscle cells: studies in human neutrophils and HL-60 cells. Krause KH, et al. **Cell Calcium** 1989 Jul;10(5):351-61 (55 ref.)

In vitro phosphorylation of Paramecium axonemes and permeabilized cells. Hamasaki T, et al. **Cell Motil Cytoskeleton** 1989;12(1):1-11

225-Kilodalton phosphoprotein associated with mitotic centrosomes in sea urchin eggs. Kuriyama R. **Cell Motil Cytoskeleton** 1989;12(2):90-103

Molecular oxygen and the state of geometric isomerism of intermediates are essential in the carotene desaturation and cyclization reactions in daffodil chromoplasts. Beyer P, et al. **Eur J Biochem** 1989 Sep 1;184(1):141-50

Biochemical properties of isolated transverse tubular membranes. Sabbadini RA, et al. **J Bioenerg Biomembr** 1989 Apr;21(2):163-213 (218 ref.)

Altered transverse tubule dihydropyridine receptor binding in malignant hyperthermia. Ervasti JM, et al. **J Biol Chem** 1989 Feb 15;264(5):2711-7

Acidification and ion permeabilities of highly purified rat liver endosomes. Fuchs R, et al. **J Biol Chem** 1989 Feb 5;264(4):2212-20

Identification of phospholipid-dependent calcium-binding proteins as constituents of matrix vesicles. Genge BR, et al. **J Biol Chem** 1989 Jun 25;264(18):10917-21

Biogenesis of the somatogenic receptor in rat liver. Husman B, et al. **J Biol Chem** 1989 Jan 15;264(2):690-7

Reconstitution of endosomal proteolysis in a cell-free system. Transfer of immune complexes internalized via Fc receptors to an endosomal proteolytic compartment. Mayorga LS, et al. **J Biol Chem** 1989 Apr 5;264(10):5392-9

L-pipecolic acid oxidation in the rabbit and cynomolgus monkey. Evidence for differing organellar locations and cofactor requirements in each species. Mihalik SJ, et al. **J Biol Chem** 1989 Feb 15;264(5):2509-17

Endolyn-78, a membrane glycoprotein present in morphologically diverse components of the endosomal and lysosomal compartments: implications for lysosome biogenesis. Croze E, et al. **J Cell Biol** 1989 May; 108(5):1597-613

Characterization of the early endosome and putative endocytic carrier vesicles in vivo and with an assay of vesicle fusion in vitro. Gruenberg J, et al. **J Cell Biol** 1989 Apr;108(4):1301-16

Acidification of endosome subpopulations in wild-type Chinese hamster ovary cells and temperature-sensitive acidification-defective mutants. Schmid S, et al. **J Cell Biol** 1989 Apr;108(4):1291-300

Coated vesicles from chicken liver bind ferritin. Passaniti A, et al. **J Cell Sci** 1989 Feb;92 (Pt 2):187-96

The Ins(1,4,5)P3-sensitive Ca2+ store of non-muscle cells: endoplasmic reticulum or calciosomes? Pozzan T, et al. **J Exp Biol** 1988 Sep;139:181-93 (38 ref.)

Functional colocalization of water channels and proton pumps in endosomes from kidney proximal tubule. Ye RG, et al. **J Gen Physiol** 1989 May;93(5):885-902

Diminished antigen processing by endosomal acidification mutant antigen-presenting cells. McCoy KL, et al. **J Immunol** 1989 Jul 1;143(1):29-38

Polarizing inclusions in some organs of children with congenital peroxisomal diseases (Zellweger's, Refsum's, chondrodysplasia punctata (rhizomelic form), X-linked adrenoleukodystrophy). Kerckaert I, et al. **J Inherited Metab Dis** 1988;11(4):372-86

Modification of the fatty acid composition of L1210 leukemia subcellular organelles. Burns CP, et al. **Lipids** 1988 Jun; 23(6):615-8

Analysis of endosome and lysosome acidification in vitro. Galloway CJ, et al. **Methods Enzymol** 1988;157:601-11

The amyloplast-targeting transit peptide of the waxy protein of maize also mediates protein transport in vitro into chloroplasts. Klösgen RB, et al. **Mol Gen Genet** 1989 May; 217(1):155-61

A possible role for Na+,K+-ATPase in regulating ATP-dependent endosome acidification. Fuchs R, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):539-43

Membrane binding sites for plasma lipoproteins on endosomes from rat liver. Jaeckle S, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1880-4

Phosphatidylserine translocation in animal cells. Voelker DR. **Prog Clin Biol Res** 1988;282:153-64

Zinc ion stimulation of ATP cleavage by prostasomes from human seminal plasma. Ronquist G. **Urol Int** 1988; 43(6):334-40

[Heparin and its antagonist--a quaternary ammonium salt of oligomer-25-conidine: distribution in subcellular organelles, effect on DNA synthesis in the regenerating rat liver] Khatsernova BIa, et al. **Vopr Med Khim** 1989 May-Jun;35(3):83-7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

The endosomal apparatus and transmembrane signalling. Bergeron JJ, et al. **Adv Exp Med Biol** 1988;234:213-24 (72 ref.)

Role of vesicular transport in ADH-stimulated aggregate delivery. Ding G, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):C641-52

Protein phosphorylation and the two stages of pigment organelle dispersion in permeabilized xanthophores: organelle protein phosphorylation alone supports only the first stage. Yu FX, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):626-32

Organelle changes in cat thoracic alpha- and gamma-motoneurons following axotomy. Johnson IP, et al. **Brain Res** 1989 Jun 12;489(2):400-5

Cultured cell extracts support organelle movement on microtubules in vitro. Dabora SL, et al. **Cell Motil Cytoskeleton** 1988;10(4):482-95

Microtubules are required for centrosome expansion and positioning while microfilaments are required for centrosome separation in sea urchin eggs during fertilization and mitosis. Schatten H, et al. **Cell Motil Cytoskeleton** 1988;11(4):248-59

Periodic organization of the contractile apparatus in smooth muscle revealed by the motion of dense bodies in single cells. Kargacin GJ, et al. **J Cell Biol** 1989 Apr; 108(4):1465-75

The role of kinesin and other soluble factors in organelle movement along microtubules. Schroer TA, et al. **J Cell Biol** 1988 Nov;107(5):1785-92

Exocytosis of vacuolar apical compartment (VAC): a cell-cell contact controlled mechanism for the establishment of the apical plasma membrane domain in epithelial cells. Vega-Salas DE, et al. **J Cell Biol** 1988 Nov; 107(5):1717-28

Chloride transport in apical membrane vesicles from bovine tracheal epithelium: characterization using a fluorescent indicator. Fong P, et al. **J Membr Biol** 1988 Sep; 104(3):233-9

Compartmentalization of anterogradely and retrogradely transported organelles in axons and growth cones from chick optic tectum. Cheng TP, et al. **J Neurosci** 1988 Sep; 8(9):3190-9

Dynamics of the endoplasmic reticulum and other membranous organelles in growth cones of cultured neurons. Dailey ME, et al. **J Neurosci** 1989 Jun; 9(6):1897-909

Real-time imaging of axonally transported subresolution organelles in vertebrate myelinated axons. Smith RS. **J Neurosci Methods** 1989 Jan;26(3):203-9

Muscle contraction and movement of cellular organelles: are there two different types of mechanisms for their generation? Morel JE, et al. **J Theor Biol** 1988 May 7; 132(1):83-96

Reconstitution of intracellular vesicle fusion in a cell-free system after receptor-mediated endocytosis. Mayorga LS, et al. **Methods Cell Biol** 1989;31:179-96

Optical measurement of membrane potential in cells, organelles, and vesicles. Freedman JC, et al. **Methods Enzymol** 1989;172:102-22

Proton electrochemical potential gradient in vesicles, organelles, and prokaryotic cells. Rottenberg H. **Methods Enzymol** 1989;172:63-84

Cell biology: biological cold fusion [news] Schatz G. **Nature** 1989 Jun 1;339(6223):336

Dynein is the motor for retrograde axonal transport of organelles. Schnapp BJ, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1548-52

Ultrastructural maturation of the luteal cell in the pregnant rat: quantitative changes in cell organelles and their relation to progesterone secretion. Meyer GT, et al. **Prog Clin Biol Res** 1989;296:131-7

The role of the plasma membrane and intracellular organelles in synaptosomal calcium regulation. Nicholls DG, et al. **Soc Gen Physiol Ser** 1987;42:31-43 (40 ref.)

[Plant organelles] Akazawa T. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):8-14 (63 ref.) **(Jpn)**

[Biogenesis of protein body] Hara-Nishimura I. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):408-19 (43 ref.) **(Jpn)**

ULTRASTRUCTURE

Cytoplasmic organelles in neurons of the dorsal lateral geniculate nucleus of aged rats. Cano J, et al. **Acta Anat (Basel)** 1989;134(3):227-31

Organelle distribution in the wedge-, spindle- and inverted wedge-shaped neuroepithelial cells during chick embryo neurulation. Fernandez JG, et al. **Acta Morphol Hung** 1988; 36(3–4):203–13

An ultrastructural and morphometric analysis of the Sertoli cell during the spermatogenic cycle of the rat. Kerr JB. **Anat Embryol (Berl)** 1988;179(2):191–203

Ultrastructural study of striated organelles in vestibular sensory cells of human fetuses. Sans A. **Anat Embryol (Berl)** 1989;179(5):457–63

Annulate lamellae–soleplate nuclei associations in skeletal muscle fibers of rats during chronic high-dose exposure to neostigmine. Kawabuchi M, et al. **Anat Rec** 1989 Sep; 225(1):1–10

Cytoplasmic stress fibers in the developing heart. Sumida H, et al. **Anat Rec** 1989 Jan;223(1):82–9

Ultrastructural and cytochemical studies on extranucleolar bodies in rat oocytes at the preovulatory follicle stage. Antoine N, et al. **Biol Cell** 1989;65(1):61–6

Changes in extracellular matrix vesicles during healing of rat tibial bone: a morphometric and biochemical study. Schwartz Z, et al. **Bone** 1989;10(1):53–60

Long-term analysis of organelle translocation in isolated axoplasm of Myxicola infundibulum. Breuer AC, et al. **Cell Motil Cytoskeleton** 1988;10(3):391–9

Cardiac gap junctions and gap junction-associated vesicles: ultrastructural comparison of in situ negative staining with conventional positive staining. Chen L, et al. **Circ Res** 1989 Mar;64(3):501–14

Mutations that disrupt the morphogenesis and localization of a sperm-specific organelle in Caenorhabditis elegans. Shakes DC, et al. **Dev Biol** 1989 Aug;134(2):307–16

Centrosome inheritance in starfish zygotes: selective loss of the maternal centrosome after fertilization. Sluder G, et al. **Dev Biol** 1989 Feb;131(2):567–79

The structure of organelles of the endocytic pathway in hydrated cryosections of cultured cells. McDowall A, et al. **Eur J Cell Biol** 1989 Aug;49(2):281–94

Endocytosis by African trypanosomes. I. Three-dimensional structure of the endocytic organelles in Trypanosoma brucei and T. congolense. Webster P. **Eur J Cell Biol** 1989 Aug;49(2):295–302

Endocytosis by African trypanosomes. II. Occurrence in different life-cycle stages and intracellular sorting. Webster P, et al. **Eur J Cell Biol** 1989 Aug;49(2):303–10

Vesicle-mediated delivery of membrane to growth cones during neuritogenesis in embryonic rat primary neuronal cultures. Shea TB, et al. **Exp Cell Biol** 1988;56(1–2):67–73

Leishmania amazonensis: acidic organelles in amastigotes. Antoine JC, et al. **Exp Parasitol** 1988 Dec;67(2):287–300

The distribution of organelles in mammalian oocytes following centrifugation prior to injection of foreign DNA. Cran DG. **Gamete Res** 1987 Sep;18(1):67–76

Platelet activation and analysis of organelles in migraineurs. Riddle JM, et al. **Headache** 1989 Jan;29(1):28–33

Organization of cytoskeletal elements and organelles preceding growth cone emergence from an identified neuron in situ. Lefcort F, et al. **J Cell Biol** 1989 May; 108(5):1737–49

The secretory vesicle in living Paramecium is acidic. Busch GR, et al. **J Cell Sci** 1989 Feb;92 (Pt 2):197–203

Quantitative ultrastructural approach to the study of the spatial relationships among cell organelles. I. Cytological organization of human exocrine epithelia. Diaz G, et al. **J Electron Microsc Tech** 1987 Nov;7(3):167–75

A simple method to observe intracellular organelles with the scanning electron microscope. Sasaki K. **J Electron Microsc (Tokyo)** 1988;37(3):171–3

Preferential distribution of apoptotic bodies in acinar zone 3 of normal human and rat liver. Benedetti A, et al. **J Hepatol** 1988 Dec;7(3):319–24

Membrane-coating granules are acidic organelles which possess proton pumps. Chapman SJ, et al. **J Invest Dermatol** 1989 Oct;93(4):466–70

Fluorescence microscopic studies on mitochondria and mitochondrial nucleoids in a wild-type strain and respiratory mutants of Candida albicans. Ito-Kuwa S, et al. **J Med Vet Mycol** 1988;26(4):207–17

The distribution and movement of organelles in maturing growth cones: correlated video-enhanced and electron microscopic studies. Burmeister DW, et al. **J Neurocytol** 1988 Dec;17(6):783–95

A morphometric analysis of the somata and organelles of regenerating hypoglossal motoneurons from the rat. Hall LL, et al. **J Neurocytol** 1988 Dec;17(6):835–44

The lost neuromotor apparatus of Chlamydomonas: rediscovered. Salisbury JL. **J Protozool** 1988 Nov; 35(4):574–7

A morphometric study of the reversal of ACTH-induced hypertrophy of rat adrenocortical cells after cessation of treatment. Rebuffat P, et al. **J Submicrosc Cytol Pathol** 1989 Jan;21(1):73–81

Poration by alpha-toxin and streptolysin O: an approach to analyze intracellular processes. Ahnert-Hilger G, et al. **Methods Cell Biol** 1989;31:63–90

Digitonin permeabilization procedures for the study of endosome acidification and function. Diaz R, et al. **Methods Cell Biol** 1989;31:25–43

Lectin–colloidal gold-induced density perturbation of membranes: application to affinity elimination of the plasma membrane. Gupta D, et al. **Methods Cell Biol** 1989; 31:247–63

Lysed chromatophores: a model system for the study of bidirectional organelle transport. Haimo LT, et al. **Methods Cell Biol** 1989;31:3–24

Immunoisolation using magnetic solid supports: subcellular fractionation for cell-free functional studies. Howell KE, et al. **Methods Cell Biol** 1989;31:265–92

Endosome and lysosome purification by free-flow electrophoresis. Marsh M. **Methods Cell Biol** 1989; 31:319–34

Fluorescence microscopy methods for yeast. Pringle JR, et al. **Methods Cell Biol** 1989;31:357–435 (237 ref.)

Fluorescent labeling of endocytic compartments. Swanson J. **Methods Cell Biol** 1989;29:137–51 (44 ref.)

Fractionation of yeast organelles. Walworth NC, et al. **Methods Cell Biol** 1989;31:335–56

Flow-cytometric analysis of endocytic compartments. Wilson RB, et al. **Methods Cell Biol** 1989;31:293–317

Gas vesicles: chemical and physical properties. Hayes PK. **Methods Enzymol** 1988;167:213–22

Isolation of triads from skeletal muscle. Mitchell RD, et al. **Methods Enzymol** 1988;157:51–68

Mepacrine-labeled platelet dense-body number in patients with chronic uremia. Komarnicki M, et al. **Nephron** 1988; 50(4):306–7

The occurrence of cytoplasmic lamellar bodies in scrapie-infected and normal hamster brains. Liberski PP. **Neuropatol Pol** 1988;26(1):79–85

Collagen fibrillogenesis in situ: fibril segments are intermediates in matrix assembly. Birk DE, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4549–53

The sphere organelle contains small nuclear ribonucleoproteins. Gall JG, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6635–9

Electron microscope studies of the early stage of the calcification process: role of matrix vesicles. Bonucci E. **Prog Clin Biol Res** 1989;295:109–14

A quick preparative method for electron microscopy observations of delicate objects using alginate embedding medium. Tamponnet C, et al. **Stain Technol** 1988 May; 63(3):155–8

[Introduction to genetic engineering. XII. Biogenesis of organelles] Kamiryo T. **Radioisotopes** 1988 Oct; 37(10):595–603 (29 ref.) **(Jpn)**

[Amyloplast] Akazawa T. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):81–5 **(Jpn)**

[Protein body] Hara-Nishimura I. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):61–72 (84 ref.) **(Jpn)**

ORGANIC BRAIN SYNDROME, NONPSYCHOTIC see **ORGANIC MENTAL DISORDERS**

ORGANIC BRAIN SYNDROME, PSYCHOTIC see **ORGANIC MENTAL DISORDERS, PSYCHOTIC**

ORGANIC BRAIN SYNDROME, SUBSTANCE-INDUCED see **ORGANIC MENTAL DISORDERS, SUBSTANCE-INDUCED**

ORGANIC HALLUCINOSIS see **ORGANIC MENTAL DISORDERS, PSYCHOTIC**

ORGANIC MENTAL DISORDERS

[Human immunodeficiency virus (HIV) infection: psychiatric aspects (letter)] Wilschut J. **Ned Tijdschr Geneeskd** 1988 Nov 12;132(46):2121–2 **(Dut)**

CEREBROSPINAL FLUID

Do concentrations of neurotransmitters in lumbar CSF reflect cerebral dysfunction in depression? Gjerris A. **Acta Psychiatr Scand Suppl** 1988;345:21–4

Cerebrospinal fluid biogenic amines and biopterin in Rett syndrome. Zoghbi HY, et al. **Ann Neurol** 1989 Jan; 25(1):56–60

CLASSIFICATION

Issues in the classification of mental retardation: differentiating among organic etiologies. Burack JA, et al. **J Child Psychol Psychiatry** 1988 Nov;29(6):765–79 (82 ref.)

[Discussion aspects of the concept "mental disease" in present-day psychiatry] Kotov VP, et al. **Zh Nevropatol Psikhiatr** 1989;89(5):145–8 **(Rus)**

COMPLICATIONS

Autism and authority. Morowitz HJ. **Hosp Pract [Off]** 1989 Apr 15;24(4):221–2

The neuropsychological aspects of HIV-1 spectrum disease. Van Gorp WG, et al. **Psychiatr Med** 1989;7(2):59–78 (46 ref.)

[Organic-psychiatric and psychoreactive disorders in AIDS] America HP, et al. **Ned Tijdschr Geneeskd** 1989 Jan 28; 133(4):145–7 **(Dut)**

[Organic psychiatric and psychoreactive disorders in AIDS (letter)] Sno HN, et al. **Ned Tijdschr Geneeskd** 1989 Apr 8;133(14):745–6 **(Dut)**

[The pathogenesis of reading-writing weakness] von Suchodoletz W, et al. **Padiatr Grenzgeb** 1988;27(5):373–9 (Eng. Abstr.) **(Ger)**

[Death caused by a bolus at a psychiatric hospital] Fehlow P, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Jun; 40(6):348–52 (Eng. Abstr.) **(Ger)**

[Psychometric and psychophysiologic studies in AIDS patients with reference to the "declining performance syndrome"—level reduction] Grünberger J, et al. **Wien Med Wochenschr** 1989 Apr 30;139(8):175–8 (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Discussion on methods for the evaluation of the personality. Normal brain/damaged brain. Sichez-Auclair N. **Acta Neurochir Suppl (Wien)** 1988;44:54–5

Magnetic resonance imaging versus computed tomographic scanning in neuropsychiatric systemic lupus erythematosus. Sewell KL, et al. **Am J Med** 1989 May;86(5):625–6

The case for the diagnosis of organic catatonic syndrome [letter] Ahuja N, et al. **Am J Psychiatry** 1989 Oct; 146(10):1351–2

Ganser syndrome in a 10 year old boy—an 8 year follow up. Adler R, et al. **Aust N Z J Psychiatry** 1989 Mar; 23(1):124–6

Post-concussional syndrome (PCS) [letter] Gordon AG. **Aust N Z J Psychiatry** 1989 Jun;23(2):154–5

Acute organic brain syndromes. Davison K. **Br J Hosp Med** 1989 Jan;41(1):89–92 (25 ref.)

Auditory evoked potential and psychiatry. Thivierge J, et al. **Can J Psychiatry** 1988 Aug;33(6):552–4

Prediction of early school-age problems by a preschool neurodevelopmental examination of children at risk neonatally. Lindahl E, et al. **Dev Med Child Neurol** 1988 Dec;30(6):723–34

An evaluation of patients who received an organic mental disorder diagnosis on a psychiatric consultation–liaison service. Hales RE, et al. **Gen Hosp Psychiatry** 1989 Mar; 11(2):88–94

Differentiating multiple personality disorder and complex partial seizures. Ross CA, et al. **Gen Hosp Psychiatry** 1989 Jan;11(1):54–8

NIMH report. Update on brain imaging. Sargent M. **Hosp Community Psychiatry** 1988 Sep;39(9):933–4 (7 ref.)

Porphyrias and neurological disease [editorial] Nath AR, et al. **J Assoc Physicians India** 1988 Oct;36(10):581–2

Neurological complications in intermittent acute porphyria. Saxena HC, et al. **J Assoc Physicians India** 1988 Oct; 36(10):585–8

Rett syndrome: qualitative and quantitative differentiation from autism. Percy AK, et al. **J Child Neurol** 1988;3 Suppl:S65–7

The clinical recognition and differential diagnosis of Rett syndrome. Trevathan E, et al. **J Child Neurol** 1988;3 Suppl:S6–16 (56 ref.)

Links between clinical and experimental neuropsychology. Oscar-Berman M. **J Clin Exp Neuropsychol** 1989 Aug; 11(4):571–88 (48 ref.)

Who needs cutting points? Lindeboom J. **J Clin Psychol** 1989 Jul;45(4):679–83

Constructing overlapping cell tables to maximize the clinical usefulness of normative test data: rationale and an example from neuropsychology. Pauker JD. **J Clin Psychol** 1988 Nov;44(6):930–3

Pediatric malingering: the capacity of children to fake believable deficits on neuropsychological testing. Faust D, et al. **J Consult Clin Psychol** 1988 Aug;56(4):578–82

Neuropsychological test performance and the attention deficit disorders: clinical utility of the Luria-Nebraska Neuropsychological Battery-Children's Revision. Schaughency EA, et al. **J Consult Clin Psychol** 1989 Feb; 57(1):112–6

Comparison of the Halstead Category Test and the revised Category Test: comment on Russell and Levy. Vanderploeg RD, et al. **J Consult Clin Psychol** 1989 Apr; 57(2):315–8

Cognitive screening tests for organic mental disorders in psychiatric inpatients. A hopeless task? Chandler JD, et al. **J Nerv Ment Dis** 1988 Nov;176(11):675–81

Encephalopathy, deafness and blindness in young women: a distinct retinocochleocerebral arteriolopathy? Bogousslavsky J, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):43–6

A brief neurobehavioral exam useful for early detection of postoperative complications in neurosurgical patients. Cammermeyer M, et al. **J Neurosci Nurs** 1988 Oct; 20(5):314–23

Delirium in the elderly patient. Lipowski ZJ. **N Engl J Med** 1989 Mar 2;320(9):578–82 (32 ref.)

Partial section of the corpus callosum: focal signs and their recovery. Castro-Caldas A, et al. **Neurosurgery** 1989 Sep; 25(3):442–7

Late magnetic resonance imaging related to neurobehavioral functioning after aneurysmal subarachnoid hemorrhage. Romner B, et al. **Neurosurgery** 1989 Sep;25(3):390–6; discussion 396–7

Confirmation of interrater reliability of the Marley Differential Diagnostic Scoring System for the Bender-Gestalt Test. DeCato CM, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):915–20

[Mother was right; a misdiagnosed syndrome] Drukker J. **Ned Tijdschr Geneeskd** 1989 Feb 4;133(5):195–8 **(Dut)**

[Diagnosis of HIV infections and neurologic-psychiatric aspects of AIDS] Glaser E. **Beitr Infusionther** 1988; 21:174–6 **(Ger)**

[Evoked potentials in psychiatry] Hegerl U. **Nervenarzt** 1988 Dec;59(12):701–83 (38 ref.) **(Ger)**

[Nosologic differentiation of idiopathic psychosyndromes--a psychiatric Sisyphus myth] Janzarik W. **Nervenarzt** 1989 Feb;60(2):86–9 (12 ref.) (Ger)

[Multiple sclerosis: atrophy of the corpus callosum and psychosyndrome] Weihe W, et al. **Nervenarzt** 1989 Jul; 60(7):414–9 (Eng. Abstr.) (Ger)

[Observation of an absence status in the EEG without clinically detected psychopathology] Atanassov K, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Jul;41(7):415–9 (Eng. Abstr.) (Ger)

[The diagnostic value of computer-assisted psychometric procedures] Krause A, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Sep; 40(9):537–41 (Eng. Abstr.) (Ger)

[HIV infection: neuropsychiatric symptoms] Marg E. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Jun; 40(6):336–41 (Eng. Abstr.) (Ger)

[Brain structure and brain function in anorexia nervosa: a computerized tomography study] Krieg JC, et al. **Psychother Psychosom Med Psychol** 1989 Jul;39(7):256–9 (Eng. Abstr.) (Ger)

[Retroviruses and their importance in neurology] Bengesser G, et al. **Wien Med Wochenschr** 1989 Jul 15;139(13):303–5 (12 ref.) (Eng. Abstr.) (Ger)

[The significance of neuropsychological test batteries for the diagnosis of disorders of brain function in childhood] Schulze C, et al. **Z Kinder Jugenpsychiatr** 1989 Mar; 17(1):23–30 (53 ref.) (Ger)

[New diagnostic methods and their significance in psychiatry] Krzymińska E, et al. **Psychiatr Pol** 1988 Jul–Aug; 22(4):321–6 (19 ref.) (Pol)

[Involvement of the central nervous system in trichinosis] Olszyńska M, et al. **Wiad Parazytol** 1988;34(4–6):621–3 (Pol)

[A method of rapid psychological diagnosis of patients with a history of myocardial infarction] Zaltsev VP, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(1):67–72 (Eng. Abstr.) (Rus)

[Neurological and electroencephalographic aspects of differential diagnosis of alcoholic delirium and delirious conditions in pancreatitis] Gudkova VV, et al. **Sov Med** 1988;(7):109–12 (Rus)

[Determination of the professional work capacity of patients with initial manifestations of cerebral circulatory insufficiency] Lebedev AA, et al. **Zh Nevropatol Psikhiatr** 1989;89(1):34–8 (Eng. Abstr.) (Rus)

[Neuro–oncologic diseases at a psychiatric hospital] Mal'tsev SN. **Zh Nevropatol Psikhiatr** 1989;89(2):90–2 (Eng. Abstr.) (Rus)

[Psychopathologic syndromes in patients with a history of stroke (characteristics of the clinical picture, course and rehabilitation)] Sadov OG. **Zh Nevropatol Psikhiatr** 1988; 88(12):53–7 (Eng. Abstr.) (Rus)

[Use of a method of evaluating interrelations of EEG components for computer-assisted diagnosis of pathologic conditions of the brain in psychiatry] Sidorenko GV, et al. **Zh Nevropatol Psikhiatr** 1989;89(6):92–8 (Eng. Abstr.) (Rus)

DIET THERAPY

The nutritional aspects of Rett syndrome. Rice MA, et al. **J Child Neurol** 1988;3 Suppl:S35–42

DRUG THERAPY

Stimulant treatment for the neurobehavioural sequelae of traumatic brain injury. Gualtieri CT, et al. **Brain Inj** 1988 Oct–Dec;2(4):273–90

Pharmacotherapy and the neurobehavioural sequelae of traumatic brain injury. Gualtieri CT. **Brain Inj** 1988 Apr–Jun;2(2):101–29 (185 ref.)

Carbamazepine–lithium toxicity in brain–damaged adolescents. Parmelee DX, et al. **Brain Inj** 1988 Oct–Dec; 2(4):305–8

Pathological brain ageing: evaluation of the efficacy of a pharmacological aid. Guarnaschelli C, et al. **Drugs Exp Clin Res** 1988;14(11):715–8

Successful treatment of acquired Tourettism and major depression. Malone DA Jr, et al. **J Geriatr Psychiatry Neurol** 1988 Jul–Sep;1(3):169–71

Psychotropic management of behavioral disorders after head trauma. O'Shanick GJ. **Psychiatr Med** 1988;6(3):67–82 (48 ref.)

[Use of psychopharmaceuticals in neurologic therapy. Suggestion for a therapeutic approach] Macek Z. **Cesk Neurol Neurochir** 1988 Sep;51(5):319–22 (Cze)

[Use of psychopharmaceuticals in neurologic therapy] Macek Z. **Cesk Neurol Neurochir** 1989 Mar;52(2):158–9 (Cze)

[Disorders of brain performance of vascular origin. Randomized double–blind study of the effectiveness of Gingko biloba extract] Halama P, et al. **Fortschr Med** 1988 Jun 30;106(19):408–12 (Eng. Abstr.) (Ger)

[Nonpsychotic involutional inhibited depressions and psycho–organic deteriorations: treatment with Viloxazine and piracetam] Borromei A, et al. **Minerva Med** 1989 May; 80(5):475–82 (Eng. Abstr.) (Ita)

[Complete recovery from severe organic brain damage in a patient with systemic lupus erythematosus] Hirohata S, et al. **Nippon Naika Gakkai Zasshi** 1987 Nov;76(11):1710–3 (Jpn)

[Tibolone (Livial) in the treatment of disorders of the postmenopausal period (preliminary report)] Radowicki S, et al. **Ginekol Pol** 1988 Nov;59(11):705–8 (Eng. Abstr.) (Pol)

[Effect of physostigmine and various nootropic drugs on various mental disorders caused by brain injury] Kocur J, et al. **Psychiatr Pol** 1988 Sep–Oct;22(5):317–21 (Eng. Abstr.) (Pol)

[Experience using nootropil in patients with chronic ischemic heart disease] Shubina TI, et al. **Klin Med (Mosk)** 1989 May;67(5):36–8 (Eng. Abstr.) (Rus)

[Results of the use of dalargin electrophoresis to correct mental disorders in patients with hypertension grades I and II] Ezhov VA, et al. **Zh Nevropatol Psikhiatr** 1989; 89(2):66–9 (Eng. Abstr.) (Rus)

EPIDEMIOLOGY

The epidemiology and public health significance of Rett syndrome. Trevathan E, et al. **J Child Neurol** 1988;3 Suppl:S17–20 (27 ref.)

Organic brain syndrome and long–term exposure to toluene: a clinical, psychiatric study of vocationally active printing workers. Larsen F, et al. **J Occup Med** 1988 Nov; 30(11):875–8

[Neuropsychiatric syndromes in childhood and adolescence among patients at neuropsychiatric ambulatory care and pediatric units of a teaching hospital in Ethiopia] Schier E, et al. **Arztl Jugendkd** 1989;80(3):140–6 (Eng. Abstr.) (Ger)

[Cases at a neuropsychiatric intensive care unit--a retrospective analysis of 20 years] Voigt W. **Psychiatr Neurol Med Psychol Beih** 1988;40:19–22 (Ger)

[Encephalopathy secondary to severe craniocerebral trauma: incidence--prognosis] Constantinovici A, et al. **Rev Med Interna Neurol Psihiatr Neurochir Dermatovenerol Neurol Psihiatr Neurochir** 1989 Jan–Mar;34(1):39–55 (Rum)

ETIOLOGY

Unexpected improvement after prolonged post–traumatic vegetative state. Arts WF, et al. **Acta Neurochir Suppl (Wien)** 1988;44:78–9

Personality change after severe head injury. Brooks N. **Acta Neurochir Suppl (Wien)** 1988;44:59–64 (11 ref.)

A relativistic cybernetic model for the personality disorders caused by head injuries. Oprescu IA, et al. **Acta Neurochir Suppl (Wien)** 1988;44:74–7

Personality traits after prolonged vegetative state. Reflections on "Unexpected Improvement after Prolonged Post–traumatic Vegetative State" by W. Arts, H. van Dongen, J. Meulstee. Thiery E. **Acta Neurochir Suppl (Wien)** 1988;44:80–3

Minor physical anomalies and recidivistic adult violent criminal behavior. Kandel E, et al. **Acta Psychiatr Scand** 1989 Jan;79(1):103–7

Basal ganglia calcification and organic mood disorder [letter] **Am J Psychiatry** 1989 Jan;146(1):129–30

Tourette–like disorder after herpes encephalitis [letter] Turley JM. **Am J Psychiatry** 1988 Dec;145(12):1604–5

Risk in infancy. Origins and implications. Kopp CB, et al. **Am Psychol** 1989 Feb;44(2):224–30 (38 ref.)

Nutrition and behavior. Lozoff B. **Am Psychol** 1989 Feb; 44(2):231–6 (13 ref.)

Acute intermittent porphyria (AIP)--an unusual cause of acute confusional state. A case report. Tan CH, et al. **Ann Acad Med Singapore** 1988 Jul;17(3):451–3

Organic reaction in AIDS. Milner GL. **Br J Psychiatry** 1989 Feb;154:255–7

A patient with insulinoma presenting for psychiatric assessment. Steinberg PI, et al. **Can J Psychiatry** 1989 Feb; 34(1):58–9

Thyroid function testing in clinical psychiatry. Miyawaki E, et al. **Hosp Community Psychiatry** 1988 Aug;39(8):830–1

Depression and hypertension [letter] Zach J, et al. **Hosp Community Psychiatry** 1988 Nov;39(11):1213–4

Psychoneurological sequelae in patients with JE virus encephalitis. Mathur GP, et al. **Indian Pediatr** 1988 Apr; 25(4):371–3

Depression and magnesium deficiency. Rasmussen HH, et al. **Int J Psychiatry Med** 1989;19(1):57–63

Nervous system involvement in systemic lupus erythematosus. Denburg JA, et al. **Isr J Med Sci** 1988 Dec; 24(12):754–8 (32 ref.)

Transient global amnesia: a personal series of 60 cases. Cattaino G. **Ital J Neurol Sci** 1988 Apr;Suppl 9:21–2

Epileptic transient amnesia. Gallassi R, et al. **Ital J Neurol Sci** 1988 Apr;Suppl 9:37–9

Research on Rett syndrome: strategy and preliminary results. Naidu S, et al. **J Child Neurol** 1988;3 Suppl:S78–86 (78 ref.)

Research in Rett syndrome: past, present, and future. Percy AK. **J Child Neurol** 1988;3 Suppl:S72–5 (17 ref.)

Subacute encephalitis and the AIDS–associated organic brain syndrome. Simpson WG, et al. **J Ky Med Assoc** 1988 Oct; 86(10):554–7 (30 ref.)

Psychiatric sequelae of severe closed head injury. Gerring JP. **Pediatr Rev** 1986 Oct;8(4):115–21 (19 ref.)

Motor and cognitive testing of bone marrow transplant patients after chemoradiotherapy. Partii P, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1227–41

The role of the medical evaluation in psychiatric inpatients. Chandler JD, et al. **Psychosomatics** 1988 Fall;29(4):410–6

[Psychological disorders and thyropathies] Stárková L. **Cesk Psychiatr** 1988 Oct;84(5):317–22 (Eng. Abstr.) (Cze)

[Craniosynostosis as a risk factor] Fehlow P. **Arztl Jugendkd** 1988;79(5):249–53 (Eng. Abstr.) (Ger)

[The Charles Bonnet syndrome] Podoll K, et al. **Fortschr Neurol Psychiatr** 1989 Feb;57(2):43–60 (67 ref.) (Eng. Abstr.) (Ger)

[The prognosis of encephalitis in childhood] Rusche T, et al. **Kinderarztl Prax** 1989 Mar;57(3):141–4 (Eng. Abstr.) (Ger)

[What conclusions can be drawn from the study of developmental courses for school admission?] Teichmann H, et al. **Psychiatr Neurol Med Psychol Beih** 1988;39:34–5 (Ger)

[Patients with AIDS–related brain diseases hospitalized in psychiatric institutions. Experiences from a regional psychiatric hospital] Vadasz F, et al. **Schweiz Rundsch Med Prax** 1988 Dec 13;77(50):1371–5 (Eng. Abstr.) (Ger)

[Clinical aspects of AIDS: early neuropsychiatric symptoms] Naber D, et al. **Verh Dtsch Ges Inn Med** 1988;94:493–8 (Ger)

[Amnestic episodes] Riedmann G, et al. **Wien Med Wochenschr** 1988 Dec 31;138(23–24):622–30 (Eng. Abstr.) (Ger)

[Neuropsychiatric–ophthalmologic and radiologic findings in sphenoid wing meningioma] Pittasch D, et al. **Zentralbl Neurochir** 1988;49(3):206–9 (Eng. Abstr.) (Ger)

[Psychosomatic aspects of neoplasms] Czubalski K. **Nowotwory** 1988 May–Jun;38(3):204–10 (Eng. Abstr.) (Pol)

[Psychological aspects of the battered child syndrome] Popielarska M, et al. **Pediatr Pol** 1988 Apr;63(4):236–42 (Eng. Abstr.) (Pol)

[Transient mental disorders in a 6–year–old child with endogenous hepatic encephalopathy in viral hepatitis] Sawaryn T, et al. **Pediatr Pol** 1988 Sep;63(9):587–9 (Pol)

[Selected psychological problems of patients with hyperthyroidism] Warmuz–Stangierska I, et al. **Pol Tyg Lek** 1988 Apr 25;43(17):548–50 (Eng. Abstr.) (Pol)

[A case of Recklinghausen's disease in the light of 14–year follow–up] Januszkiewicz–Grabias A, et al. **Psychiatr Pol** 1988 Sep–Oct;22(5):391–5 (Pol)

[Psychological factors in mitral valve leaflet prolapse syndrome] Ruszczyńska B, et al. **Psychiatr Pol** 1988 Jul–Aug;22(4):296–302 (Eng. Abstr.) (Pol)

[Forensic–psychiatric expert testimony in alcoholic intoxication] Rutkowski R, et al. **Psychiatr Pol** 1988 Sep–Oct;22(5):356–62 (Pol)

[A case of Fahr's disease in a patient with the symptoms of endogenous depression] Weterle R, et al. **Psychiatr Pol** 1988 Jul–Aug;22(4):341–3 (Pol)

[Changes in various personality features in patients with myocardial infarction after 1–month sanatorium rehabilitation] Nasiłowska–Barud A, et al. **Wiad Lek** 1988 Nov 1;41(21):1421–6 (Eng. Abstr.) (Pol)

[Relation of serum levels of serotonin and histamine and the presence of depressive syndrome in patients with duodenal ulcer] Borodavka IK. **Klin Med (Mosk)** 1989 Mar; 67(3):102–4 (Eng. Abstr.) (Rus)

[Etiology, clinical aspects and treatment of neuroses and neurosis–like conditions] Kanarelkin KF. **Klin Med (Mosk)** 1989 Jun;67(6):136–42 (Rus)

[Characteristics of personality of patients with chronic renal failure] Lebedev BA, et al. **Klin Med (Mosk)** 1989 Feb; 67(2):63–7 (Rus)

[Characteristics of the mental state of patients with newly detected tuberculosis during antibacterial therapy] Shul'gina ZL, et al. **Probl Tuberk** 1988;(6):27–30 (Eng. Abstr.) (Rus)

[Somatic and mental status in recurrent duodenal ulcer] Smirnova LE, et al. **Sov Med** 1989;(2):77–9 (Rus)

[Pathomorphosis of personality changes in patients with epilepsy] Boldyrev AI. **Zh Nevropatol Psikhiatr** 1989; 89(6):50–3 (Eng. Abstr.) (Rus)

[Mental disorders as late sequelae of closed cranio–cerebral trauma] Golodets RG, et al. **Zh Nevropatol Psikhiatr** 1989; 89(6):77–82 (Eng. Abstr.) (Rus)

[Mental disorders in patients with implanted cardiac pacemakers] Krylov VI. **Zh Nevropatol Psikhiatr** 1989; 89(2):62–6 (Eng. Abstr.) (Rus)

[Motivational–emotional disorders in astrocytoma of the temporal lobe] Madorskii VA, et al. **Zh Nevropatol Psikhiatr** 1989;89(6):82–5 (Eng. Abstr.) (Rus)

[Neuropsychological symptoms in opticochiasmatic arachnoiditis] Nikol'skaia IM. **Zh Nevropatol Psikhiatr** 1989;89(2):73–7 (Eng. Abstr.) (Rus)

[Pheochromocytoma in neuropsychiatric practice] Knežević A, et al. **Med Pregl** 1988;41(9–10):391–2 (Eng. Abstr.) (Scr)

GENETICS

Electroretinograms (ERGs) in four autistic probands and six first–degree relatives. Realmuto G, et al. **Can J Psychiatry** 1989 Jun;34(5):435–9

Genetic aspects of Rett syndrome. Zoghbi H. **J Child Neurol** 1988;3 Suppl:S76–8 (7 ref.)

The Miller–Dieker syndrome: a case report and review of

the literature. Izmeth MG, et al. **J Ment Defic Res** 1989 Jun;33 (Pt 3):267–70 (9 ref.)

A Graves' disease of identical twins with mental disorder. Mizukami K, et al. **Jpn J Psychiatry Neurol** 1988 Dec; 42(4):777–83 (25 ref.)

Metachromatic leukodystrophy: heterozygosity and psychopathology [letter] Fricchione GL, et al. **Psychosomatics** 1988 Fall;29(4):454–5

HISTORY

The history and challenge of Rett syndrome. Haas RH. **J Child Neurol** 1988;3 Suppl:S3–5

IMMUNOLOGY

Anti-CNS antibodies in neurological and psychiatric disorders [letter] Anderson NE, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):1009–10

NURSING

Nursing staff development and facility design for medical-psychiatry units [corrected and republished article originally printed in Gen Hosp Psychiatry 1989 Jan;11(1):36–47] Cowart T, et al. **Gen Hosp Psychiatry** 1989 Mar;11(2):125–36

PATHOLOGY

Neuropathological determinants of acquired attention disorders in traumatic brain injury. Trexler LE, et al. **Brain Cogn** 1988 Dec;8(3):291–302

Forebrain structure in infantile autism. Gaffney GR, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jul;28(4):534–7

Peripheral nerve findings in Rett syndrome. Haas RH, et al. **J Child Neurol** 1988;3 Suppl:S25–30

Recommendations regarding handling of the necropsy in Rett syndrome. Percy AK, et al. **J Child Neurol** 1988;3 Suppl:S91–3

[Intracranial space-occupying processes in psychiatry—30 years' of clinico-neuropathologic catamnesis] Vieregge P, et al. **Fortschr Neurol Psychiatr** 1988 Nov;56(11):373–9 (Eng. Abstr.) (Ger)

[Prospective study of the late sequelae of electroconvulsive treatment] Krause P, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Sep;40(9):532–6 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Cognitive evoked potential (P300): a metric for cerebral concussion. Pratap-Chand R, et al. **Acta Neurol Scand** 1988 Sep;78(3):185–9

Brain development, plasticity, and behavior. Kolb B. **Am Psychol** 1989 Sep;44(9):1203–12

Clinical, psychophysiological, and neurological characteristics of volunteers with impaired smooth pursuit eye movements. Siever LJ, et al. **Biol Psychiatry** 1989 May; 26(1):35–51

Treatment of lithium induced tremor with atenolol. Davé M. **Can J Psychiatry** 1989 Mar;34(2):132–3

Intermittently occurring right-posterior slow waves (IRP) in psychiatric patients. An electroencephalographic indicator of cerebral dysfunction. Ulrich G, et al. **Eur Arch Psychiatry Neurol Sci** 1988;237(5):258–63

Biologic factors in personality disorders. Zemishlany Z, et al. **Isr J Psychiatry Relat Sci** 1988;25(1):12–23 (59 ref.)

Neurobiological correlates of learning disorders. Duane DD. **J Am Acad Child Adolesc Psychiatry** 1989 May;28(3):314–8 (49 ref.)

Frontal-lobe dysfunction and antisocial behavior: a review. Kandel E, et al. **J Clin Psychol** 1989 May;45(3):404–13 (59 ref.)

Transient feelings of compulsion caused by hemispheric lesions in three cases [letter] Laplane D. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):423

Absence of central functional cholinergic deficits in myasthenia gravis. Lewis SW, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):258–61

A current analysis of behavioral problems in patients with idiopathic Parkinson's disease. Mayeux R. **Mov Disord** 1989;4 Suppl 1:S48–56 (66 ref.)

EEG and cognitive performance following closed head injury. Randolph C, et al. **Neuropsychobiology** 1988; 20(1):43–50

Functional imaging of the brain in psychiatry—mapping of EEG and evoked potentials. Maurer K, et al. **Neurosurg Rev** 1987;10(4):275–82

[EEG frequency analyses in children and adolescents with obsessive-compulsive neuroses] Knölker U. **Z Kinder Jugendpsychiatr** 1988 Dec;16(4):180–5 (Eng. Abstr.) (Ger)

[Features of the correlation of EEG components in patients with psychoorganic syndrome of varying degrees of severity] Sidorenko GV, et al. **Fiziol Cheloveka** 1989 Jan-Feb;15(1):22–33 (Rus)

[Effect of neuroses on dopamine metabolism in the brain of rats with various activities on the "open field" test] Sau'lskaia NB. **Fiziol Zh SSSR** 1989 Mar;75(3):397–400 (Rus)

PSYCHOLOGY

Personality after head injury. Frowein RA, et al. **Acta Neurochir Suppl (Wien)** 1988;44:70–3

Surgical treatment of epilepsy. Restoration of personality? Gillingham FJ. **Acta Neurochir Suppl (Wien)** 1988;44:102–5

Aphasia and personality. Seron X, et al. **Acta Neurochir Suppl (Wien)** 1988;44:113–7

Post-traumatic personality: as many cases as individuals. Sichez-Auclair N. **Acta Neurochir Suppl (Wien)** 1988; 44:65–6

Personality disorders and epilepsy. Trimble MR. **Acta Neurochir Suppl (Wien)** 1988;44:98–101 (16 ref.)

Neuropsychological assessment of functional central nervous system disorders. I. Hemispheric functioning characteristics in schizophrenia and affective illness. Bellini L, et al. **Acta Psychiatr Scand** 1988 Aug;78(2):242–6

Post-influenzal psychiatric disorder in adolescents. Meijer A, et al. **Acta Psychiatr Scand** 1988 Aug;78(2):176–81

Psychological distress and neuropsychological complications of HIV infection and AIDS. Tross S, et al. **Am Psychol** 1988 Nov;43(11):929–34 (45 ref.)

Sexual behavior after head injury in Indian men and women. Sabhesan S, et al. **Arch Sex Behav** 1989 Aug;18(4):349–56

The post-concussional syndrome then and now [published erratum appears in Aust N Z J Psychiatry 1989 Mar;23(1):131] Robertson A. **Aust N Z J Psychiatry** 1988 Dec;22(4):396–402 (22 ref.)

Epilepsy and learning. Buchanan N. **Aust Paediatr J** 1988 Dec;24(6):331–3

Combat stress in the chemical and biological warfare environment. [editorial] Ursano RJ. **Aviat Space Environ Med** 1988 Dec;59(12):1123–4

Frontal cerebral lesions and violent incidents in chronic neuropsychiatric patients. Heinrichs RW. **Biol Psychiatry** 1989 Jan 15;25(2):174–8

Psychopathological alterations in cases of symmetrical basal ganglia sclerosis. König P. **Biol Psychiatry** 1989 Feb 15; 25(4):459–68

The relation between subjective and objective memory impairment after stroke. Lincoln NB, et al. **Br J Clin Psychol** 1989 Feb;28 (Pt 1):61–5

Estimation of premorbid intelligence in organic conditions. Crawford JR, et al. **Br J Psychiatry** 1988 Aug;153:178–81

Schizophrenic first-rank symptoms in organic mental disorders. Marneros A. **Br J Psychiatry** 1988 May; 152:625–8

Memory strategies with brain damage. Hirst W, et al. **Brain Cogn** 1988 Dec;8(3):379–408

The neuropsychology of paramedian thalamic infarction. Stuss DT, et al. **Brain Cogn** 1988 Dec;8(3):348–78

Behavioural and cognitive changes in traumatic brain injury: a spouse's perspective. Bigler ED. **Brain Inj** 1989 Jan-Mar; 3(1):73–8

Processing of pragmatic and facial affective information by patients with closed-head injuries. Braun CM, et al. **Brain Inj** 1989 Jan-Mar;3(1):5–17

The response styles of post-acute traumatic brain-injured patients on the MMPI. Burke JM, et al. **Brain Inj** 1989 Jan-Mar;3(1):35–40

Assessment of distractibility in auditory comprehension after traumatic brain injury. Kewman DG, et al. **Brain Inj** 1988 Apr-Jun;2(2):131–7

Psychosexual consequences of traumatic brain injury: methodology and preliminary findings. Kreutzer JS, et al. **Brain Inj** 1989 Apr-Jun;3(2):177–86

Coping strategies and adjustment after closed-head injury: a cluster analytical approach. Moore AD, et al. **Brain Inj** 1989 Apr-Jun;3(2):171–5

Minor whiplash head injury with major debilitation. Yarnell PR, et al. **Brain Inj** 1988 Jul-Sep;2(3):255–8

Post-stroke depression: a critical review of the literature. Primeau F. **Can J Psychiatry** 1988 Nov;33(8):757–65 (145 ref.)

Charles Bonnet syndrome [letter] Signer SF. **Can J Psychiatry** 1988 Aug;33(6):570, 573

Kindergarten performance of children born at risk. Holmes DL, et al. **Can J Psychol** 1988 Jun;42(2):189–200

The value of a neuropsychiatric examination of children with complex severe epilepsy. Harvey I, et al. **Child Care Health Dev** 1988 Sep-Oct;14(5):329–40

Mechanisms of the relation between perinatal problems, early childhood illness, and psychopathology in late childhood and adolescence. Cohen P, et al. **Child Dev** 1989 Jun; 60(3):701–9

Impairment of neuropsychological functions in children with medulloblastomas and astrocytomas in the posterior fossa. Riva D, et al. **Childs Nerv Syst** 1989 Apr;5(2):107–10

Neuropsychiatric complications of human immunodeficiency virus infection. Segreti J, et al. **Compr Ther** 1988 Jul; 14(7):9–15 (15 ref.)

Serial neuropsychological follow-up of a child following craniospinal irradiation. Bendersky M, et al. **Dev Med Child Neurol** 1988 Dec;30(6):816–20

Neuropsychiatric manifestations of obstructive sleep apnea: a review. Hudgel DW. **Int J Psychiatry Med** 1989; 19(1):11–22 (35 ref.)

Transient global amnesia: case-reports. Zinelli P, et al. **Ital J Neurol Sci** 1988 Apr;Suppl 9:19–20

A comparison of 13-year-old boys with attention deficit and/or reading disorder on neuropsychological measures. McGee R, et al. **J Abnorm Child Psychol** 1989 Feb; 17(1):37–53

Self-reported delinquency, neuropsychological deficit, and history of attention deficit disorder. Moffitt TE, et al. **J Abnorm Child Psychol** 1988 Oct;16(5):553–69

Neuropsychological correlates of psychopathology in an unselected cohort of young adolescents. Frost LA, et al. **J Abnorm Psychol** 1989 Aug;98(3):307–13

Toward a theory of the genesis of violence: a follow-up study of delinquents. Lewis DO, et al. **J Am Acad Child Adolesc Psychiatry** 1989 May;28(3):431–6

Autistic spectrum disorders: clinical presentation in preschool children. Allen DA. **J Child Neurol** 1988;3 Suppl:S48–56

Cognitive profile of Rett syndrome. Fontanesi J, et al. **J Child Neurol** 1988;3 Suppl:S20–4

Role of the International Rett Syndrome Association. Hunter K. **J Child Neurol** 1988;3 Suppl:S87–8

Recruiting parents of children with a fatal disease as co-investigators. Rapin I. **J Child Neurol** 1988;3 Suppl:S89–90

Cognitive effects of cranial irradiation in leukaemia: a survey and meta-analysis. Cousens P, et al. **J Child Psychol Psychiatry** 1988 Nov;29(6):839–52 (48 ref.)

Effect of intrauterine growth retardation (IUGR) on the psychological performance of preterm children at preschool age. Matilainen R, et al. **J Child Psychol Psychiatry** 1988 Sep;29(5):601–9

Continuities and discontinuities in the development of 64 very small premature infants to 4 years of age. Minde K, et al. **J Child Psychol Psychiatry** 1989 May;30(3):391–404

Isocapnic hypoxemia and neuropsychological functioning. Berry DT, et al. **J Clin Exp Neuropsychol** 1989 Mar; 11(2):241–51

Neurobehavioral anomalies in neonates with seizures. Emory EK, et al. **J Clin Exp Neuropsychol** 1989 Mar;11(2):231–40

The relationship between learning disability, emotional disorders, and neuropsychology; some results and observations. Spreen O. **J Clin Exp Neuropsychol** 1989 Jan; 11(1):117–40

Effects of mode of presentation on head-injured patients' recall of narrative information. Agresti AA, et al. **J Clin Psychol** 1989 Mar;45(2):270–6

Rey-Auditory Verbal Learning and Rey-Osterrieth Complex Figure Design performance in Alzheimer's disease and closed head injury. Bigler ED, et al. **J Clin Psychol** 1989 Mar;45(2):277–80

A multifactor model of the Halstead-Reitan Neuropsychological Test Battery and its relationship to cognitive status and psychiatric diagnosis [published erratum appears in J Clin Psychol 1989 Jan;45(1):36] Fowler PC, et al. **J Clin Psychol** 1988 Nov;44(6):898–906

Effects of lesion laterality on the Satz-Mogel WAIS-R short form. Massad PM, et al. **J Clin Psychol** 1988 Nov; 44(6):924–9

Motivational effects on neuropsychological functioning: comparison of depressed versus nondepressed individuals. Richards PM, et al. **J Consult Clin Psychol** 1989 Jun; 57(3):396–402

Neuropsychological sequelae of central nervous system prophylaxis in survivors of childhood acute lymphoblastic leukemia. Said JA, et al. **J Consult Clin Psychol** 1989 Apr; 57(2):251–6

Depression and diabetic neuropathy: a complex relationship. Geringer ES, et al. **J Geriatr Psychiatry Neurol** 1988 Jan; 1(1):11–5

The Older Americans Resources and Services interview and the medically disabled elderly. Milligan WL, et al. **J Geriatr Psychiatry Neurol** 1988 Apr-Jun;1(2):77–83

Williams' syndrome in adulthood: a case study focusing on psychological and psychiatric aspects. Bradley EA, et al. **J Ment Defic Res** 1989 Apr;33 (Pt 2):175–84

The mentally handicapped person with epilepsy: a comparative study investigating psychosocial functioning. Espie CA, et al. **J Ment Defic Res** 1989 Apr;33 (Pt 2):123–35

Neuropsychological evaluation of adults with Down's syndrome: patterns of selective impairment in non-demented old adults. Haxby JV. **J Ment Defic Res** 1989 Jun;33 (Pt 3):193–210

Sensorimotor intelligence in severely mentally handicapped children. Macpherson F, et al. **J Ment Defic Res** 1988 Dec; 32 (Pt 6):465–78

Laypersons' knowledge about the sequelae of minor head injury and whiplash. Aubrey JB, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):842–6

Effects of radiation therapy on neuropsychological functioning in patients with nasopharyngeal carcinoma. Lee PW, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr; 52(4):488–92

Disproportionately severe memory deficit in relation to normal intellectual functioning after closed head injury. Levin HS, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct; 51(10):1294–301

Psychiatric morbidity and illness behaviour in female neurological in-patients. Metcalfe R, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1387–90

Recovery from herpes simplex encephalitis: selective impairment of specific semantic categories with neuroradiological correlation. Pietrini V, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1284–93

Memory disorder related to coma duration after head injury. Vilkki J, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov; 51(11):1452–4

Pediatric AIDS/HIV infection: an emerging challenge to pediatric psychology. Olson RA, et al. **J Pediatr Psychol** 1989 Mar;14(1):1–21 (80 ref.)

Features of Coxsackie B virus (CBV) infection in children

with prolonged physical and psychological morbidity. Wilson PM, et al. **J Psychosom Res** 1989;33(1):29–36
Neuropsychological and neuropsychiatric findings in right hemisphere damaged patients. Motomura N, et al. **Jpn J Psychiatry Neurol** 1988 Dec;42(4):747–52
The relationship between psychiatric disturbance and epilepsy type with special reference to age factor. Onuma T, et al. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):574–5
Scholastic aptitude and achievement among children with unilateral brain lesions. Aram DM, et al. **Neuropsychologia** 1988;26(6):903–16
Development of color association in normal and neurologically impaired children. Shalev RS, et al. **Pediatr Neurol** 1988 Mar–Apr;4(2):110–2
Neuropsychology of posttraumatic stress disorder: a pilot study. Everly GS, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):807–10
Behavioral aspects of thyroid disease in women. Reus VI. **Psychiatr Clin North Am** 1989 Mar;12(1):153–65 (121 ref.)
Depression in physical illnesses. Mai F. **Psychiatr J Univ Ottawa** 1989 Jun;14(2):354–5
Behavior change following head injury: clinical assessment and intervention. O'Shanick GJ. **Psychiatr Med** 1989; 7(1):1–10 (53 ref.)
Neuropsychiatric sequellae of traumatic brain injury in children and adolescents. Parmelee DX. **Psychiatr Med** 1989;7(1):11–6 (20 ref.)
The impact of parental head trauma on families with children. Urbach JR. **Psychiatr Med** 1989;7(1):17–36 (56 ref.)
Delirium. Zisook S. **Psychiatr Med** 1988;6(4):8–22
Social interaction and speed of information processing following very severe head-injury. Godfrey HP, et al. **Psychol Med** 1989 Feb;19(1):175–82
Affective symptoms and adrenoleukodystrophy: a report of two cases. Menza MA, et al. **Psychosomatics** 1988 Fall; 29(4):442–5
A psychiatric study of 247 liver transplantation candidates. Trzepacz PT, et al. **Psychosomatics** 1989 Spring; 30(2):147–53
'Head and heart'—neurological and psychological reactions to open heart surgery. Rodewald G, et al. **Thorac Cardiovasc Surg** 1988 Oct;36(5):254–61 (29 ref.)
[Neuropsychological disorders in Parkinson disease. Relations to psychomotor inhibition and obsessive-compulsive disease] Lees AJ. **Nervenarzt** 1989 Feb;60(2):71–9 (64 ref.) (Ger)
[Is there a specific cerebral organic psychosyndrome following craniocerebral trauma in childhood and adolescence? Neuropsychological and psychopathologic results] Lehmkuhl G, et al. **Nervenarzt** 1989 Feb; 60(2):106–14 (Eng. Abstr.) (Ger)
[Psychiatric symptoms and neuropsychologic manifestations in HIV-infected patients] Naber D, et al. **Nervenarzt** 1989 Feb;60(2):80–5 (Ger)
[Expert assessment of neuropsychiatric symptoms in HIV-infected patients] von Oefele K. **Off Gesundheitswes** 1989 Feb;51(2):84–8 (Eng. Abstr.) (Ger)
[Craniosynostosis and criminal behavior] Fehlow P. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Nov; 40(11):683–7 (Eng. Abstr.) (Ger)
[Types of personality disorders in oxycephaly] Fehlow P. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Mar; 41(3):157–60 (Eng. Abstr.) (Ger)
[Hysterical syndromes in a population of ambulatory neuropsychiatric patients in northwest Ethiopia. Phenomenology, psychosocial and sociocultural background] Schier E, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Mar; 41(3):161–9 (Eng. Abstr.) (Ger)
[Epilepsy from the pediatric and adolescent psychiatric viewpoint] Bettschart W. **Schweiz Arch Neurol Psychiatr** 1988;139(4):5–14 (10 ref.) (Eng. Abstr.) (Ger)
[Theoretical test problems in the diagnosis of brain damage in childhood exemplified by the validity of neuropsychological test procedures] Rees UM, et al. **Z Kinder Jugenpsychiatr** 1989 Mar;17(1):17–22 (41 ref.) (Ger)
[Disorders of short-term memory, a necessary category in the multiaxial classification scheme?] Werner GM, et al. **Z Kinder Jugenpsychiatr** 1988 Jun;16(2):74–9 (Eng. Abstr.) (Ger)
[Effect of the position and size of the postoperative brain defect on psychological outcome] Pittasch D, et al. **Zentralbl Neurochir** 1988;49(4):298–309 (Eng. Abstr.) (Ger)
[Neuropsychiatric-psychological findings in patients with hypophyseal adenoma following trans-sphenoidal surgery] Pittasch D, et al. **Zentralbl Neurochir** 1988;49(3):202–5 (Eng. Abstr.) (Ger)
[Emotional disorders in chronic glomerulonephritis] Riabov SI, et al. **Klin Med (Mosk)** 1988 Oct;66(10):130–3 (Eng. Abstr.) (Rus)
[Clinico-psychological study of deaf children and adolescents with residual organic syndromes and oligophrenia] Saraev SIa. **Zh Nevropatol Psikhiatr** 1988;88(7):119–24 (Eng. Abstr.) (Rus)

RADIOGRAPHY

[Periventricular attenuation of the density of cerebral hemisphere white matter in computerized tomography of neuropsychiatric patients in the 2d half of life. Diagnostic significance and pathogenesis] Kohlmeyer K. **Fortschr Neurol Psychiatr** 1988 Sep;56(9):279–85 (Eng. Abstr.) (Ger)

REHABILITATION

An interdisciplinary programme for cognitive rehabilitation. Conder R, et al. **Brain Inj** 1988 Oct–Dec;2(4):365–85
Remediation of attentional difficulties following brain injury: three experimental single case studies. Gray JM, et al. **Brain Inj** 1989 Apr–Jun;3(2):163–70
Supported employment and compensatory strategies for enhancing vocational outcome following traumatic brain injury. Kreutzer JS, et al. **Brain Inj** 1988 Jul–Sep; 2(3):205–23
Modification of function in head-injured patients with Sinemet. Lal S, et al. **Brain Inj** 1988 Jul–Sep;2(3):225–33
Psychiatric aspects of rehabilitating patients with organic brain disorders, a personal view; or, the psychiatrist as the neuropsychologist's helper. Levy A. **Brain Inj** 1988 Oct–Dec;2(4):347–50
Occupational therapy program development for medical-psychiatry units: a cognitive model. Kiernan K, et al. **Gen Hosp Psychiatry** 1989 Mar;11(2):109–18
Teaching socially appropriate behavior to eliminate hoarding in a brain injured adult. Lane IM, et al. **J Behav Ther Exp Psychiatry** 1989 Mar;20(1):79–82
The therapist's role in the management of girls with Rett syndrome. Lieb-Lundell C. **J Child Neurol** 1988;3 Suppl:S31–4 (5 ref.)
Behavioral assessment and treatment of the brain-injured patient. Webster JS, et al. **Prog Behav Modif** 1988;22:48–87 (130 ref.)
The use of group therapy as a treatment modality for behavioral change following head injury. Forssmann-Falck R, et al. **Psychiatr Med** 1989;7(1):43–50 (33 ref.)
[The need for cooperation of the pediatric neuropsychiatrist with rehabilitation facilities of a district] Blochmann B, et al. **Psychiatr Neurol Med Psychol Beih** 1988;39:32–3 (Ger)
[Effect of occupational therapy on the mental state of patients with myocardial infarction at the hospital stage of rehabilitation] Rozykhodzhaeva GA, et al. **Kardiologiia** 1988 Nov;28(11):107–9 (Rus)

SURGERY

The orthopedic management of Rett syndrome. Hennessy MJ, et al. **J Child Neurol** 1988;3 Suppl:S43–7
[Neuropsychiatric aspects of surgical indications of craniosynostosis and -stenosis] Fehlow P. **Zentralbl Neurochir** 1988;49(3):224–9 (Eng. Abstr.) (Ger)
[Late results of operations in patients with epilepsy with marked mental disorders] Shustin VA, et al. **Zh Vopr Neirokhir** 1988 Jul–Aug;(4):32–5 (Eng. Abstr.) (Rus)

THERAPY

What happens to medical patients with psychiatric disorder? Mayou R, et al. **J Psychosom Res** 1988;32(4–5):541–9
Clinical management of psychiatric disorders in HIV spectrum disease. Wolcott DL, et al. **Psychiatr Med** 1989; 7(2):107–27 (28 ref.)
Child neurology and child psychiatry: current and future interfaces. Eisenhauer GL, et al. **Psychosomatics** 1989 Summer;30(3):332–6 (33 ref.)
[Psychotherapeutic support for brain-damaged children] Rösler HD. **Arztl Jugendkd** 1988;79(3):158–68 (54 ref.) (Eng. Abstr.) (Ger)
[Prevention and treatment of posthypoxic encephalopathies] Alekseeva GV. **Anesteziol Reanimatol** 1988 Jul–Aug; (4):32–3 (Eng. Abstr.) (Rus)
[Prevention and treatment of neuro-psychological disorders in surgical patients] Iaremchuk AIa, et al. **Klin Khir** 1989; (1):41–3 (Eng. Abstr.) (Rus)
[Psychological rehabilitation of patients with implanted electrocardiostimulators] Krylov VI, et al. **Klin Med (Mosk)** 1989 Apr;67(4):74–7 (Eng. Abstr.) (Rus)
[Somatic disorders during psychotherapy of patients with different personality characteristics] Rutsitskii EM, et al. **Sov Med** 1988;(5):83–5 (Rus)
[Effect of pacemaker implantation on the psychoemotional status of patients] Zubarev RP, et al. **Sov Med** 1988;(7):73–6 (Rus)

ORGANIC MENTAL DISORDERS, DRUG-INDUCED see **ORGANIC MENTAL DISORDERS, SUBSTANCE-INDUCED**

ORGANIC MENTAL DISORDERS, PSYCHOTIC

see related
BRAIN DISEASES

First International Conference on Alzheimer Disease and Related Disorders. Las Vegas, Nevada, USA, September 6–9, 1988. Abstracts. **Alzheimer Dis Assoc Disord** 1988; 2(4):396–414
[Symptomatic psychoses] Pejchl J. **Cesk Psychiatr** 1989 Apr; 85(2):127–37 (Eng. Abstr.) (Cze)

CLASSIFICATION

[Reality orientation training: a method of group therapy of patients with dementia. Problems and possibilities of evaluating the effect of treatment of patients with various forms of dementia] Tariska P, et al. **Orv Hetil** 1989 Feb 26;130(9):459–61 (Eng. Abstr.) (Hun)

COMPLICATIONS

Clinical presentations of AIDS and HIV infection in state psychiatric facilities. Horwath E, et al. **Hosp Community Psychiatry** 1989 May;40(5):502–6 (33 ref.)

DIAGNOSIS

Phenomenology of organic and functional psychoses and the overlap between them. Johnstone EC, et al. **Br J Psychiatry** 1988 Dec;153:770–6
A neurodiagnostic approach to schizophrenia. Cleghorn JM. **Can J Psychiatry** 1988 Aug;33(6):555–61 (70 ref.)
The diagnostic dilemma of myxedema and madness, axis I and axis II: a longitudinal case report. Darko DF, et al. **Int J Psychiatry Med** 1988;18(3):263–70
Acute intermittent porphyria in a children's psychiatric hospital. Boon FF, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jul;28(4):606–9
Relative efficacy of the Sc-O, P-O, P-N, and Sc MMPI scales in differentiating brain-damaged, brain-damaged schizophrenic, schizophrenic, and somatoform disorders in an outpatient setting. Puente AE, et al. **J Clin Psychol** 1989 Jan;45(1):99–105
Temporal lobe structure as determined by nuclear magnetic resonance in schizophrenia and bipolar affective disorder. Johnstone EC, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):736–41
The sensitivity of the Bender-Gestalt Test as a screening instrument for neuropsychological impairment in older adults. Margolis RB, et al. **J Psychol** 1989 Mar; 123(2):179–86
The Neurological Evaluation Scale (NES): a structured instrument for the assessment of neurological signs in schizophrenia. Buchanan RW, et al. **Psychiatry Res** 1989 Mar;27(3):335–50
[Acute and subacute organic psychoses with altered consciousness. Attempt at classifying severity] Biedert S, et al. **Nervenarzt** 1989 Jun;60(6):344–8 (Eng. Abstr.) (Ger)
[Misdiagnosis of non-convulsive epileptic states as post-traumatic exogenous psychosis] Mewe R, et al. **Nervenarzt** 1989 Jul;60(7):433–6 (Ger)
[The adult form of metachromatic leukodystrophy with a predominantly psychotic manifestation] Schäffer S, et al. **Nervenarzt** 1988 Dec;59(12):731–3 (Ger)
[Forensic psychiatric criteria of posttraumatic craniocerebral syndromes (with reference to the subjective syndrome of the brain-injured)] Scripcaru G, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Apr–Jun;92(2):271–6 (Eng. Abstr.) (Rum)
[Diagnosis and forensic psychiatric expertise in traumatic cerebral arachnoiditis] Lukacher GIa, et al. **Zh Nevropatol Psikhiatr** 1988;88(12):61–4 (Eng. Abstr.) (Rus)

DRUG THERAPY

Mood disorders in the psychoneurologic borderland: three cases of responsiveness to carbamazepine. Kessler AJ, et al. **Am J Psychiatry** 1989 Jan;146(1):81–3
Gerontopsychological studies using NAI ('Nürnberger Alters-Inventar') on patients with organic psychosyndrome (DSM III, Category 1) treated with centrophenoxine in a double blind, comparative, randomized clinical trial. Pék G, et al. **Arch Gerontol Geriatr** 1989 Jul;9(1):17–30 (35 ref.)
Metachromatic leukodystrophy (MLD) in hospitalized adult schizophrenic patients resistant to drug treatment. Galbraith DA, et al. **Can J Psychiatry** 1989 May; 34(4):299–302
Neuroleptic malignant syndrome in an AIDS patient [letter] Burch EA Jr, et al. **J Clin Psychopharmacol** 1989 Jun; 9(3):228–9
Neuroleptic malignant syndrome in a patient with Wilson's disease [letter] Kontaxakis V, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):1001–2
Drug-induced dystonia in neuronal ceroid-lipofuscinosis. Gospe SM Jr, et al. **Pediatr Neurol** 1986 Jul–Aug;2(4):236–7
CT scans and neuroleptic response in schizophrenia: a multidimensional approach. Gattaz WF, et al. **Psychiatry Res** 1988 Dec;26(3):293–303
Response to drugs in schizophrenia: the influence of family history, obstetric complications and ventricular enlargement. Nimgaonkar VL, et al. **Psychol Med** 1988 Aug;18(3):583–92
Antipsychotic use in the medically ill. Silver PA, et al. **Psychother Psychosom** 1988;49(2):120–36 (76 ref.)
[Epileptic psychoses and their drug treatment] Klosterkötter J, et al. **Fortschr Neurol Psychiatr** 1989 Feb;57(2):61–9 (47 ref.) (Eng. Abstr.) (Ger)

ETIOLOGY

Post-traumatic psychoses. Violon A. **Acta Neurochir Suppl (Wien)** 1988;44:67–9
Neuropsychiatric manifestations of systemic lupus erythematosus. Buchbinder R, et al. **Aust N Z J Med** 1988

Aug;18(5):679–84
Physiogenesis and psychogenesis in the 'post-concussional syndrome'. Lishman WA. **Br J Psychiatry** 1988 Oct; 153:460–9 (44 ref.)
Deteriorating neurologic status in a young woman with schizophrenia [clinical conference] Schneiderman H, et al. **Conn Med** 1988 Jul;52(7):409–14
Catatonic syndrome associated with enteric fever. A case report. Srinivasan K, et al. **Gen Hosp Psychiatry** 1989 Jan; 11(1):71–2
Psychotic states associated with disorders of thyroid function. Davis AT. **Int J Psychiatry Med** 1989;19(1):47–56
Mania in a girl with Cushing's disease. Frank R, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jul;28(4):610–1
Perinatal complications and genetic loading in schizophrenia: preliminary findings. Schwarzkopf SB, et al. **Psychiatry Res** 1989 Mar;27(3):233–9
Congenital risk factors for schizophrenia. Lewis SW. **Psychol Med** 1989 Feb;19(1):5–13 (108 ref.)
Schizophrenic syndromes in epilepsies. Diehl LW. **Psychopathology** 1989;22(2–3):65–140 (288 ref.)
Minor physical anomalies in schizophrenia. Green MF, et al. **Schizophr Bull** 1989;15(1):91–9
Fetal neural development and schizophrenia [clinical conference] Lyon M, et al. **Schizophr Bull** 1989; 15(1):149–61
[Comments on the contribution by S. Schäffer, G. Oepen and D. Ott. Adult form of metachromatic leukodystrophy with predominantly psychotic manifestations] Jellinger K. **Nervenarzt** 1989 Jun;60(6):371–2 (Ger)
[Borrelia encephalitis and catatonia in adolescence] Neumärker KJ, et al. **Nervenarzt** 1989 Feb;60(2):115–9 (Ger)
[Reactive syndromes in Huntington's disease] Leszek J, et al. **Psychiatr Pol** 1988 Sep–Oct;22(5):387–90 (Pol)
[Manic disorders of old age] Andrusenko MP. **Zh Nevropatol Psikhiatr** 1988;88(9):131–7 (88 ref.) (Rus)
[Mental disorders in encephalitis caused by the herpes simplex virus] Maksutova EL, et al. **Zh Nevropatol Psikhiatr** 1989; 89(2):7–10 (Eng. Abstr.) (Rus)

GENETICS

Multiple exostosis, brain ventricular enlargement and schizophrenia. Aizenberg D, et al. **Psychiatr J Univ Ottawa** 1989 Mar;14(1):298–300
[Collaboration between child psychiatry and medical genetics. Genetic diseases with an atypical beginning] Brenot M, et al. **J Genet Hum** 1989 Jan;37(1):25–8 (Eng. Abstr.) (Fre)

IMMUNOLOGY

Antiseptal brain antibody in IgG of schizophrenic patients. Heath RG, et al. **Biol Psychiatry** 1989 Mar 15;25(6):725–33

MICROBIOLOGY

Lack of evidence for a role of T-cell-associated retroviruses as an etiology of schizophrenia. Feenstra A, et al. **Biol Psychiatry** 1989 Feb 15;25(4):421–30
A re-investigation of the behavioural effects of intracerebral injection in marmosets of cytopathic cerebrospinal fluid from patients with schizophrenia or neurological disease. Baker HF, et al. **Psychol Med** 1989 May;19(2):325–9

MORTALITY

Mortality from acute organic brain syndrome: a Nigerian psychiatric hospital experience. Abiodun OA. **East Afr Med J** 1988 Jun;65(6):366–71

PATHOLOGY

The neuropathology of schizophrenia [letter] Beckmann H. **Biol Psychiatry** 1988 Dec;24(8):953–4
Pancreatic encephalopathy. Menza MA, et al. **Biol Psychiatry** 1989 Mar 15;25(6):781–4
Circumventricular organs in chronic serum sickness: a model for cerebral lupus. Peress NS, et al. **Biol Psychiatry** 1989 Aug;26(4):397–407
CNS changes in Usher's syndrome with mental disorder: CT, MRI and PET findings. Koizumi J, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):987–90
Psychiatric disturbance in mitochondrial encephalomyopathy [letter] Suzuki T, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):920–2
Neuropsychiatric studies of the "pellucidumsyndrom". Mizukami K, et al. **Jpn J Psychiatry Neurol** 1989 Mar; 43(1):67–75
Ventricular size, cognitive and psychomotor performance, and laterality in schizophrenia. Classen W, et al. **Neuropsychobiology** 1988;20(2):87–90
Cerebral structure in borderline personality disorder. Lucas PB, et al. **Psychiatry Res** 1989 Feb;27(2):111–5
Standardized magnetic resonance image intensity study in schizophrenia. Rossi A, et al. **Psychiatry Res** 1988 Aug; 25(2):223–31
The spectrum of structural brain changes in schizophrenia: age of onset as a predictor of cognitive and clinical impairments and their cerebral correlates. Johnstone EC, et al. **Psychol Med** 1989 Feb;19(1):91–103
Quantitative computed tomographic study in schizophrenia: cerebral density and ventricle measures. Rossi A, et al. **Psychol Med** 1989 May;19(2):337–42
[A 35-year-old patient with necrotizing exanthema, restrictive cardiomyopathy, liver cirrhosis and acute psychosis] Schön S, et al. **Med Klin** 1989 Mar 15; 84(3):139–43 (Ger)

PHYSIOPATHOLOGY

Kluver Bucy syndrome with severe amnesia secondary to herpes encephalitis. Conlon P, et al. **Can J Psychiatry** 1988 Nov;33(8):754–6
Gender differences in the brain: are they relevant to the pathogenesis of schizophrenia? DeLisi LE, et al. **Compr Psychiatry** 1989 May–Jun;30(3):197–208 (111 ref.)
Dark condition normalization of smooth pursuit tracking: evidence of cerebellar dysfunction in psychosis. Pivik RT, et al. **Eur Arch Psychiatry Neurol Sci** 1988 Sep; 237(6):334–42
A case of temporal lobe astrocytoma associated with epileptic seizures and schizophrenia-like psychosis. Kan R, et al. **Jpn J Psychiatry Neurol** 1989 Mar;43(1):97–103
[Schizophrenia and the theory of neural networks] Massing W. **Fortschr Neurol Psychiatr** 1989 Feb;57(2):70–3 (Eng. Abstr.) (Ger)
[Melatonin and mental disturbances. A review of the neuroendocrine aspects. 1: Anatomophysiologic aspects. Melatonin and mental disorders] Cuesta MJ, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1988 Sep–Oct;16(5):301–4 (0 ref.) (Spa)

PSYCHOLOGY

Neurological soft signs in Nigerian schizophrenics: a controlled study. Gureje O. **Acta Psychiatr Scand** 1988 Oct; 78(4):505–9
Epileptic schizophrenia: clinical features and outcome. Oyebode F, et al. **Acta Psychiatr Scand** 1989 Apr; 79(4):327–31
Schizophrenia as a brain disease. Implications for psychologists and families. Johnson DL. **Am Psychol** 1989 Mar;44(3):553–5
Schizophrenia and biological determinism. Herrman H. **Aust N Z J Psychiatry** 1989 Mar;23(1):48–52 (42 ref.)
Is there atypical handedness in schizophrenia? Green MF, et al. **J Abnorm Psychol** 1989 Feb;98(1):57–61
Neuropsychological findings in toxicometabolic confusional states. Lee GP, et al. **J Clin Exp Neuropsychol** 1988 Dec; 10(6):769–78
A preliminary comparison of flat affect schizophrenics and brain-damaged patients on measures of affective processing. Borod JC, et al. **J Commun Disord** 1989 Apr; 22(2):93–104
Senile macular degeneration and psychosis. Casey DA, et al. **J Geriatr Psychiatry Neurol** 1988 Apr–Jun;1(2):108–9
The nature of psychotic symptoms in senile dementia of the Alzheimer type. Rubin EH, et al. **J Geriatr Psychiatry Neurol** 1988 Jan;1(1):16–20
Schizophrenic psychosis with a tendency of systemic ossification. Fukunishi I, et al. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):217–22
Sydenham's chorea and psychopathology. Wilcox JA, et al. **Neuropsychobiology** 1988;19(1):6–8
Psychiatric manifestations of communicating hydrocephalus in a deaf man. Kirubakaran V, et al. **Psychiatr J Univ Ottawa** 1988 Nov;13(4):227–30
Luria-Nebraska performance and symptomatology in unmedicated schizophrenic patients. Faustman WO, et al. **Psychiatry Res** 1988 Oct;26(1):29–34
Spatial attention in hypothetically psychosis-prone college students. Jutai JW. **Psychiatry Res** 1989 Feb;27(2):207–15
Delusional parasitosis. A comparative study to late-onset schizophrenia and organic mental disorders due to cerebral arteriosclerosis. Marneros A, et al. **Psychopathology** 1988; 21(6):267–74
[Neuropsychologic study of a psycho-organic syndrome secondary to idiopathic hypoparathyroidism: apropos of a case] Everett J, et al. **Psychiatr J Univ Ottawa** 1988 Nov; 13(4):208–11 (Eng. Abstr.) (Fre)
[Markers of schizophrenic language. A comparative patholinguistic study of dialogues with schizophrenic, manic, depressive and brain-damaged patients] Frommer J, et al. **Fortschr Neurol Psychiatr** 1989 Mar;57(3):85–93 (Eng. Abstr.) (Ger)
[Hyperkinetic mutism within the scope of consciousness disorder in a case of systemic lupus erythematosus] Kurokawa Y, et al. **Jpn J Psychiatry Neurol** 1989 Mar; 43(1):89–96 (Eng. Abstr.) (Ger)
[Psychopathology and cognitive disorders in chronic schizophrenic patients with tardive dyskinesia] Kaiser W. **Nervenarzt** 1989 Apr;60(4):206–12 (61 ref.) (Ger)
[Paranoid-hallucinatory psychosis as a manifestation of multiple sclerosis] Piesiur-Strehlow B, et al. **Nervenarzt** 1988 Oct;59(10):621–3 (Ger)
[Psychoses with depressive symptoms in patients with epilepsy] Broeker H, et al. **Psychiatr Neurol Med Psychol Beih** 1988;41:43–4 (Ger)
[Incidence of the endomorphic-cyclothymic axis syndrome and Berner mixed cyclothymic pictures in a patient sample of the neurologic clinic of a district hospital] Hass S, et al. **Psychiatr Neurol Med Psychol Beih** 1988;41:33–4 (Ger)
[Symptomatic mania in HIV infection. 3 cases of classified euphoric psychoses as a sequela of the AIDS disease] Peters UH, et al. **Psychiatr Prax** 1989 May;16(3):91–6 (Eng. Abstr.) (Ger)
[Suicidal tendencies in endogenous and organic depression in elderly patients] Shamiev RKh. **Zh Nevropatol Psikhiatr** 1988;88(9):80–4 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Utility of the CAT scan in a first psychotic episode. Battaglia J, et al. **Gen Hosp Psychiatry** 1988 Nov;10(6):398–401

THERAPY

Plasma exchange for cerebral lupus erythematosus [letter] Unterweger B, et al. **Biol Psychiatry** 1988 Dec;24(8):946–7

ORGANIC MENTAL DISORDERS, SUBSTANCE-INDUCED

DIAGNOSIS

Mixed solvent exposure and organic damage: the missing table [letter] Mortensen EL, et al. **Acta Neurol Scand** 1989 Jun;79(6):517–20
Graded neuropsychological impairment and elevated gamma-glutamyl transferase in chronic alcoholic men. Irwin M, et al. **Alcoholism (NY)** 1989 Feb;13(1):99–103
Identifying persistent adverse effects of anticholinergic drugs in the elderly. Katz IR, et al. **J Geriatr Psychiatry Neurol** 1988 Oct–Dec;1(4):212–7
Acute encephalopathy in adult as delayed presentation of occupational lead intoxication [letter] Guijarro C, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):127–8
Differential diagnosis of psychiatric comorbidity in substance abusers. Kosten TR, et al. **J Subst Abuse Treat** 1988; 5(4):201–6
Psychology of computer use: IX. A menu of self-administered microcomputer-based neurotoxicology tests. Kennedy RS, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1255–72

DRUG THERAPY

Treatment of alcoholic organic brain syndrome with the serotonin reuptake inhibitor fluvoxamine: a preliminary study. Stapleton JM, et al. **Adv Alcohol Subst Abuse** 1988; 7(3–4):47–51
Methylphenidate for cyclosporine-associated organic mood disorder [letter] Craven JL. **Am J Psychiatry** 1989 Apr; 146(4):553

ETIOLOGY

Prospective studies on a lithium cohort. 3. Tremor, weight gain, diarrhea, psychological complaints. Vestergaard P, et al. **Acta Psychiatr Scand** 1988 Oct;78(4):434–41
Is L-tryptophan safe? [letter] During MJ, et al. **Aust N Z J Psychiatry** 1988 Dec;22(4):339
Alcohol cognitive impairment and aging: still an uncertain relationship. Cutting JC. **Br J Addict** 1988 Sep;83(9):995–7
Sniffing of ethyl chloride—an uncommon form of abuse with serious mental and neurological symptoms. Nordin C, et al. **Int J Addict** 1988 Jun;23(6):623–7
Atypical withdrawal syndrome (organic delusional syndrome) secondary to oxycodone detoxification [letter] Fishbain DA, et al. **J Clin Psychopharmacol** 1988 Dec; 8(6):441–2
Concentration-effect relationships with carbamazepine and its epoxide on psychomotor and cognitive function in epileptic patients. Gillham RA, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):929–33
Interferon-induced organic mental disorders associated with unsuspected pre-existing neurologic abnormalities. Adams F, et al. **J Neurooncol** 1988 Dec;6(4):355–9
Neuropsychiatric symptoms following bismuth intoxication. Weller MP. **Postgrad Med J** 1988 Apr;64(750):308–10
Psychiatric side effects of steroid therapy. Kershner P, et al. **Psychosomatics** 1989 Spring;30(2):135–9 (38 ref.)
Oral contraceptives, sociocultural beliefs and psychiatric symptoms. el-Islam MF, et al. **Soc Sci Med** 1988; 27(9):941–5
[Neurotoxicity of lithium with normal lithium levels] Kemperman CJ, et al. **Ned Tijdschr Geneeskd** 1988 Nov 5;132(45):2066–70 (Eng. Abstr.) (Dut)
[Lasting neurological damage with therapeutic plasma lithium levels] van den Broek WW, et al. **Ned Tijdschr Geneeskd** 1988 Nov 5;132(45):2063–6 (Eng. Abstr.) (Dut)
[Marginal notes on ketanserin] van der Pol JM, et al. **Ned Tijdschr Geneeskd** 1989 Jan 14;133(2):82–3 (Dut)
[EEG changes in Ambilhar therapy in children with bilharziasis] Schütze I, et al. **Padiatr Grenzgeb** 1988; 27(3):175–82 (Eng. Abstr.) (Ger)
[A case from practice (136). Patient: H. U., born 1955, Turkish refugee] Lavanchy JD. **Schweiz Rundsch Med Prax** 1989 Apr 4;78(14):406–7 (Ger)
[Various central determinants of Hoigné's syndrome] Kocur J, et al. **Wiad Lek** 1988 Oct 1;41(19):1322–4 (Eng. Abstr.) (Pol)

GENETICS

No HLA association in organic brain dysfunction due to solvents. Jakobsen BK, et al. **Acta Neurol Scand** 1989 Jun;

79(6):515–6
Genotypic influences on lead-induced hyperactivity in mice. DeLuca J, et al. **Behav Genet** 1989 Mar;19(2):171–81

PHYSIOPATHOLOGY

Otoneurological findings in psycho-organic syndrome caused by industrial solvent exposure. Möller C, et al. **Acta Otolaryngol (Stockh)** 1989 Jan–Feb;107(1–2):5–12
Alcoholism: scientific basis of a neuropsychogenetic disease. Blum K, et al. **Int J Addict** 1988 Aug;23(8):781–96 (39 ref.)

PSYCHOLOGY

Neurobehavioral functioning in children exposed to narcotics in utero. Davis DD, et al. **Addict Behav** 1988;13(3):275–83
Tranquillisers: prevalence, predictors and possible consequences. Data from a large United Kingdom survey. Ashton H, et al. **Br J Addict** 1989 May;84(5):541–6
Dependence on sedative-hypnotics: neuropsychological impairment, field dependence and clinical course in a 5-year follow-up study. Bergman H, et al. **Br J Addict** 1989 May;84(5):547–53
Cannabis and cognitive functions: a re-evaluation study. Mendhiratta SS, et al. **Br J Addict** 1988 Jul;83(7):749–53
Effect of social drinking on neuropsychological performance. Waugh M, et al. **Br J Addict** 1989 Jun;84(6):659–67
Relationship between lead exposure indicators and neuropsychological performance in children. Bergomi M, et al. **Dev Med Child Neurol** 1989 Apr;31(2):181–90
Blood-lead levels and children's behaviour—results from the Edinburgh Lead Study. Thomson GO, et al. **J Child Psychol Psychiatry** 1989 Jul;30(4):515–28
A failure to find empirical support for Beardslee and Vaillant's prediction about alcoholism. Acevedo A, et al. **J Clin Psychol** 1988 Sep;44(5):837–41
Subject selection biases in alcoholic samples: effects on cognitive performance. Nixon SJ, et al. **J Clin Psychol** 1988 Sep;44(5):831–6
Assessment of cognitive functioning in poly-substance abusers. Sweeney JA, et al. **J Clin Psychol** 1989 Mar; 45(2):346–51
Risk factors for neuropsychological impairment in alcoholics: antisocial personality, age, years of drinking and gender. Malloy P, et al. **J Stud Alcohol** 1989 Sep;50(5):422–6
Alcoholism, aging, and functional cerebral asymmetries. Ellis RJ, et al. **Psychol Bull** 1989 Jul;106(1):128–47 (190 ref.)
[Suicide attempts in diabetic patients with insulin and their neuropsychiatric sequelae] Hambrecht M, et al. **Nervenarzt** 1989 Jun;60(6):367–9 **(Ger)**
[Withdrawal phenomena in stepwise withdrawal of benzodiazepines] Soyka M, et al. **Nervenarzt** 1988 Dec; 59(12):744–8 **(Ger)**

REHABILITATION

Repeated automated assessment of abstinent male alcoholics: essential fatty acid supplementation and age effects. Skinner FK, et al. **Alcohol Alcohol** 1989;24(2):129–39
Influence of improved drinking habits on brain atrophy and cognitive performance in alcoholic patients: a 5-year follow-up study. Muuronen A, et al. **Alcoholism (NY)** 1989 Feb;13(1):137–41
Treatment of chronic organic mental disorders associated with alcoholism. Martin PR, et al. **Recent Dev Alcohol** 1989; 7:329–50 (152 ref.)

ORGANIZATION AND ADMINISTRATION

A program of management training for residents. Cordes DH, et al. **Acad Med** 1989 Jan;64(1):45–6
How can patient education help attain the objectives for the nation? Bartlett EE. **Am J Prev Med** 1989 Jul–Aug; 5(4):230–9
A new perspective on nursing and caring in a corporate context. MacPherson KI. **ANS** 1989 Jul;11(4):32–9
Quality assurance in general administration. Westcott W. **Aust Clin Rev** 1988 Sep;8(30):139–52
Conflicts of interest [letter] Rudin DO. **Biol Psychiatry** 1988 Oct;24(6):724
Write a practice annual report. Cembrowicz S. **BMJ** 1989 Apr 8;298(6678):953–4
Use and abuse of performance indicators. Skinner PW, et al. **BMJ** 1988 Nov 12;297(6658):1256–9
The marketing audit: a new perspective on library services and products. Wakeley PJ, et al. **Bull Med Libr Assoc** 1988 Oct;76(4):323–7
The indignant page: techniques of neutralization in the publications of pedophile organizations. de Young M. **Child Abuse Negl** 1988;12(4):583–91
What's your malpractice exposure? Parker W. **Colo Med** 1988 Jul 15;85(14):261–6
Management and philosophy statements help set goals and objectives. Boulerice M. **Dimens Health Serv** 1989 Feb; 66(1):28–9
An audit of wart treatment in a Scottish dermatology department. Keefe M, et al. **Health Bull (Edinb)** 1989 Jan; 47(1):13–20
Physician goals: impact on hospital performance. Webb SC. **Health Care Manage Rev** 1989 Winter;14(1):81–9 (33 ref.)
Participation in workplace health promotion programs: the contribution of health and organizational factors. Sloan RP, et al. **Health Educ Q** 1988 Fall;15(3):269–88
Measurement of kinship responsibility for organizational research. Blegen MA, et al. **J Appl Psychol** 1988 Aug; 73(3):402–9
Laboratory accreditation and audit in pathology. London, February 7, 1989. Abstracts. **J Clin Pathol** 1989 Jun; 42(6):561–6
A method of audit for ward clinical waste. Lawrence JM, et al. **J Hosp Infect** 1988 Nov;12(4):323–6
Online support functions of prescription order system and prescription audit in an integrated hospital information system. Ogura H, et al. **Med Inf (Lond)** 1988 Jul–Sep; 13(3):161–9
Occupational medicine. An overview of management. Fallon LF Jr, et al. **State Art Rev Occup Med** 1989 Jan–Mar; 4(1):1–10 (9 ref.)
Organizations set goals [editorial] Cleverley WO. **Top Health Care Financ** 1989 Spring;15(3):vii–viii
Health service performance indicators. Geddis PW. **Ulster Med J** 1988 Oct;57(2):121–8
[Economic control and efficiency in hospital management] Tønum G. **Tidsskr Nor Laegeforen** 1988 Nov 30; 108(33):3119–21 (Eng. Abstr.) **(Nor)**

HISTORY

The U.S. constitution in perspective. Ward JC Jr. **J Med Assoc Ga** 1988 Jul;77(7):569–72

ORGANIZATIONAL AFFILIATION

Conflicts of interest [letter] Rudin DO. **Biol Psychiatry** 1988 Oct;24(6):724
VA cooperation strengthens vets' care, education. **Iowa Med** 1989 Apr;79(4):165–6
What made you do it? Hogg PL. **Pa Med** 1988 Nov; 91(11):40–2

ECONOMICS

AMA membership equals dollars and sense [editorial] Steckler DR. **J Miss State Med Assoc** 1988 Nov; 29(11):346–8
Affiliation: when is it the right decision? Budd GB, et al. **Top Health Care Financ** 1988 Fall;15(1):73–81

ORGANIZATIONAL CHANGE see **ORGANIZATIONAL INNOVATION**

ORGANIZATIONAL CULTURE see under **ORGANIZATION AND ADMINISTRATION**

ORGANIZATIONAL DECISION MAKING see **DECISION MAKING, ORGANIZATIONAL**

ORGANIZATIONAL INNOVATION

Organizational change and work reforms at the levels of society, trade union, work group, and task. Johansson G. **Int J Health Serv** 1989;19(2):315–7
A democratic strategy for organizational change. Svensson L. **Int J Health Serv** 1989;19(2):319–34
Organizational change and health at work. Westlander G. **Int J Health Serv** 1989;19(2):335–49

ECONOMICS

Impact analysis reduces the guesswork in budgeting. McCutcheon DJ. **Dimens Health Serv** 1988 Nov;65(8):24–5

STATISTICS & NUMERICAL DATA

Strategic orientations of small multihospital systems. Luke RD, et al. **Health Serv Res** 1988 Dec;23(5):597–618

ORGANIZATIONAL OBJECTIVES see under **ORGANIZATION AND ADMINISTRATION**

ORGANIZATIONS

The Medical Network: saying "no" to human rights abuses. Payne D. **Can Med Assoc J** 1989 Aug 1;141(3):234–8
Human Milk Banking Association of North America [letter] Asquith MT. **J Perinatol** 1989 Mar;9(1):121
A world AIM. Wolstenholme G. **J R Coll Physicians Lond** 1989 Jul;23(3):142–3
South Carolina Medical Malpractice Joint Underwriting Association. Barone BM. **J S C Med Assoc** 1989 Jan; 85(1):7–8
Open Forum for Health Information of New Zealand Association Inc [letter] Williams PR. **N Z Med J** 1989 May 10;102(867):229
Genome sequencing. HUGO to go international [news] Ezzell C. **Nature** 1989 May 4;339(6219):3
Overseas relief organizations: a guide for health care providers. Melton DE. **Nurse Pract** 1989 Apr;14(4):57–8, 60, 62
Local action groups in prevention of child accidents. Helset A, et al. **Scand J Soc Med** 1989;17(2):129–33
Academy explores use of laboratory animals [news] Holden C. **Science** 1988 Oct 14;242(4876):185
Responses of health care advisory groups to HIV infection risks. Eickhoff TC. **State Art Rev Occup Med** 1989;4 Suppl:25–9

ECONOMICS

Budgets: an underused resource. McGrail GR. **J Nurs Adm** 1988 Nov;18(11):25–31

HISTORY

The Committee on Problems of Drug Dependence: a legacy of the National Academy of Sciences. A historical account. May EL, et al. **Drug Alcohol Depend** 1989 Jun; 23(3):183–218

ORGANIZATIONS, NONPROFIT

Danish Breast Cancer Cooperative Group (DBCG). Structure and results of the organization. Fischerman K, et al. **Acta Oncol** 1988;27(6A):593–6
Women and smoking. Success in the land of Lake Wobegon. Craig ME. **J Am Med Wom Assoc** 1989 Mar–Apr; 44(2):64–5
Cancer sweepstakes [letter] Lough J. **J Natl Cancer Inst** 1989 Mar 15;81(6):459
A view of elderly care from the Little Sisters of the Poor. Roseline Sister. **J R Soc Health** 1989 Feb;109(1):16–7
[Personal experience with the Orbis Project flying hospital] Janula J. **Cesk Oftalmol** 1988 Jul;44(4):293–5 (Eng. Abstr.) **(Cze)**

ECONOMICS

Pittsburgh seeks alliance to avoid taxing hospitals. Solovy A. **Hospitals** 1988 Dec 5;62(23):30

HISTORY

Caribbean Food and Nutrition Institute at 21. **Bull Pan Am Health Organ** 1988;22(2):202–6

ORGANOCHLORINE INSECTICIDES see **INSECTICIDES, ORGANOCHLORINE**

ORGANOIDS

METABOLISM

Nuclear-organelle interactions: nuclear antisense gene inhibits ribulose bisphosphate carboxylase enzyme levels in transformed tobacco plants. Rodermel SR, et al. **Cell** 1988 Nov 18;55(4):673–81
Cleavage of parathyroid hormone in macrophage endosomes illustrates a novel pathway for intracellular processing of proteins. Diment S, et al. **J Biol Chem** 1989 Aug 15; 264(23):13403–6
Glutathione metabolism in the lung: inhibition of its synthesis leads to lamellar body and mitochondrial defects. Mårtensson J, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(14):5296–300

PHYSIOLOGY

A procedure for the culture of hair follicles as functionally intact organoids. Rogers GE, et al. **Clin Dermatol** 1988 Oct–Dec;6(4):36–41

ULTRASTRUCTURE

Endosomes differ from plasma membranes in the phospholipid molecular species composition. Urade R, et al. **Biochim Biophys Acta** 1988 Dec 8;946(1):151–63
Photoreceptor cell development in vitro: influence of pigment epithelium conditioned medium on outer segment differentiation. Spoerri PE, et al. **Eur J Cell Biol** 1988 Jun; 46(2):362–7
Localization by immunoelectron microscopy of spanning protein of triad junction in terminal cisternae/triad vesicles. Kawamoto RM, et al. **J Muscle Res Cell Motil** 1988 Aug; 9(4):334–43
[Genes of plastid genomes, their organization, structure and transcription] Goździcka-Józefiak A, et al. **Postepy Biochem** 1988;34(1–2):7–22 (120 ref.) **(Pol)**

ORGANOMERCURY COMPOUNDS

A hydroxide ion carrier in planar phospholipid bilayer membranes: (C6F5)2Hg (dipentafluorophenylmercury). Blaustein RO, et al. **Biochim Biophys Acta** 1988 Dec 22; 946(2):221–6

PHARMACOLOGY

The activation of human type IV collagenase proenzyme. Sequence identification of the major conversion product following organomercurial activation. Stetler-Stevenson WG, et al. **J Biol Chem** 1989 Jan 25;264(3):1353–6

TOXICITY

Volatilization of fluorescein mercuric acetate by marine bacteria from Minamata Bay. Nakamura K. **Bull Environ Contam Toxicol** 1989 May;42(5):785–90

ORGANOMETALLIC COMPOUNDS

see related
DIURETICS, MERCURIAL

The interaction of the cardioprotective agent ICRF-187 [+)-1,2-bis(3,5-dioxopiperazinyl-1-yL)propane); its

hydrolysis product (ICRF-198); and other chelating agents with the Fe(III) and Cu(II) complexes of adriamycin. Hasinoff BB. **Agents Actions** 1989 Mar;26(3-4):378-85

Uranaffin reaction in Merkel cells of fetal rat skin. Nindl M, et al. **Arch Dermatol Res** 1988;280(6):385-7

Ultraviolet and magnetic-circular-dichroic spectroscopic studies of Gd(III) complexed with diethylenetriaminepentaacetic acid. A contrast agent for NMR imaging. Bligh SW, et al. **Eur J Biochem** 1989 Apr 15;181(1):223-4

The stability of 99mTc-DTPA and 99mTc-HIDA following ultrasonic nebulisation. Durovic N, et al. **Eur J Nucl Med** 1988;14(7-8):400-2

Evaluation of a new leukocyte labeling procedure with 99mTc-HMPAO. Kelbaek H, et al. **Eur J Nucl Med** 1988; 14(12):621-3

Quality control of 99mTc-labeled dextran for lymphoscintigraphy. Yang KT, et al. **Eur J Nucl Med** 1989; 15(4):171-3

Progress towards in vivo glucose sensing with a ferrocene-mediated amperometric enzyme electrode. Pickup JC, et al. **Horm Metab Res Suppl** 1988;20:34-6

Photosubstitution of cymantrenylalanine as a tool in peptide chemistry. Synthesis and biological activity of new GnRH analogs. Ricouart A, et al. **Int J Pept Protein Res** 1988 Jul;32(1):56-63

Gallium-68-labeled macroaggregated human serum albumin, 68Ga-MAA. Even GA, et al. **Int J Rad Appl Instrum [B]** 1989;16(3):319-21

Factors determining the proton T1 relaxivity in solutions containing Gd-DTPA. Aime S, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S264-6

Albumin labeled with Gd-DTPA: an intravascular contrast-enhancing agent for magnetic resonance blood pool imaging: preparation and characterization [letter] Ogan MD. **Invest Radiol** 1988 Dec;23(12):961

Single photon emission computed tomography with 99mTc HM-PAO in the study of focal epilepsy. Grasso E, et al. **Ital J Neurol Sci** 1989 Apr;10(2):175-9

The modelling of nucleophilic and electrophilic additions to organometallic complexes using molecular graphics techniques. Weber J, et al. **J Comput Aided Mol Des** 1988 Oct;2(3):235-53 (43 ref.)

A comparison of an undecairon(III) complex with the ferritin iron core. Islam QT, et al. **J Inorg Biochem** 1989 May; 36(1):51-62

Technetium-99m HM-PAO stereoisomers: differences in interaction with glutathione. Ballinger JR, et al. **J Nucl Med** 1988 Dec;29(12):1998-2000

Studies on application of a lead acetate solution as filter to the photochemical reaction of ergosterol to improve the yield of vitamin D. Lu ZR, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Jun;34(3):335-42

Binding of Ru(bpy)3(2+) and Ru(phen)3(2+) to polynucleotides and DNA: effect to added salts on the absorption and luminescence properties. Görner H, et al. **J Photochem Photobiol -B-** 1988 Jul;2(1):67-89

Use of sodium iodide to overcome the eluate age restriction for Ceretec reconstitution. Bayne VJ, et al. **Nucl Med Commun** 1989 Jan;10(1):29-33

Sites of deposition of aqueous aerosols: a study of efficiency of delivery systems for lung ventilation imaging in man. Woolman PS, et al. **Nucl Med Commun** 1989 Mar; 10(3):171-80

Chemical evolution of peroxidase--amino acid pentacyanoferrate (II) complexes as model. Kamaluddin, et al. **Orig Life Evol Biosph** 1988;18(3):267-80

Evaluation of sulfonated aluminum phthalocyanines for use in photochemotherapy. A study on the relative efficiencies of photoinactivation. Berg K, et al. **Photochem Photobiol** 1989 May;49(5):587-94

Photoproperties of alkoxy-substituted phthalocyanines with deep-red optical absorbance. Ford WE, et al. **Photochem Photobiol** 1989 Sep;50(3):277-82

Biological activities of phythalocyanines--IV. Type II sensitized photooxidation of L-tryptophan and cholesterol by sulfonated metallo phthalocyanines. Langlois R, et al. **Photochem Photobiol** 1986 Aug 2;44(2):117-23

A study of some polypyridylruthenium(II) complexes as DNA binders and photocleavage reagents. Tossi AB, et al. **Photochem Photobiol** 1989 May;49(5):545-56

The production of singlet molecular oxygen by zinc(II) phthalocyanine in ethanol and in unilamellar vesicles. Chemical quenching and phosphorescence studies. Valduga G, et al. **Photochem Photobiol** 1988 Jul;48(1):1-5

Central nervous system lesions in pediatric patients: Gd-DTPA-enhanced MR imaging. Powers TA, et al. **Radiology** 1988 Dec;169(3):723-6

Colloidal bismuth subcitrate: state of the art. Proceedings from a satellite symposium during the 21st Scandinavian Conference on Gastroenterology and the 12th Scandinavian Meeting on Gastrointestinal Endoscopy. Turku, Finland, 2-4 June 1988. **Scand J Gastroenterol Suppl** 1989;157:1-22

Polymer synthesis and organotransition metal chemistry. Grubbs RH, et al. **Science** 1989 Feb 17;243(4893):907-15 (61 ref.)

Effects of certain electron-microscope stains on phospholipid monolayers [letter] Gorwyn D, et al. **Ultramicroscopy** 1989 Jan-Feb;27(1):113-4

[Ferrocene, ruthenocene and rhodocene analogs in haloperidol synthesis and organ distribution after labeling with 103Ru and 103mRh] Wenzel M, et al. **Int J Rad Appl Instrum [A]** 1988;39(12):1237-41 (Eng. Abstr.) (Ger)

[Stability of ferricinium cations and their cytostatic effect] Wenzel M, et al. **Z Naturforsch [C]** 1988 Nov-Dec; 43(11-12):963-6 (Eng. Abstr.) (Ger)

ADMINISTRATION & DOSAGE

A histological study of the use of agar as a delivery vehicle for alcohol or iron to rats. Landrigan J, et al. **Alcohol** 1989 Mar-Apr;6(2):173-8

Specific targeting and toxicity of sulphonated aluminium phthalocyanine photosensitised liposomes directed to cells by monoclonal antibody in vitro. Morgan J, et al. **Br J Cancer** 1989 Mar;59(3):366-70

Calcitonin versus cimetidine or De-Nol in gastric ulcer treatment. An endoscopically controlled trial. Janke A, et al. **Dtsch Z Verdau Stoffwechselkr** 1988;48(5):239-43

Lead distribution in rats repeatedly treated with low doses of lead acetate. P'an AY, et al. **Environ Res** 1989 Apr; 48(2):238-47

Entrapment of gadolinium-DTPA in liposomes. Characterization of vesicles by P-31 NMR spectroscopy. Devoisselle JM, et al. **Invest Radiol** 1988 Oct;23(10):719-24

Liposome-mediated delivery of gadolinium-diethylenetriaminopentaacetic acid to hepatic cells: a P-31 NMR study. Vion-Dury J, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):1113-8

Pepto-bismol and salicylate levels [letter] Shanbrom E. **Mayo Clin Proc** 1989 Jan;64(1):129

[Prevention of recurrence with bismuth subsalicylate in a patient with recurrent and H2 receptor antagonist refractory duodenal ulcer] Bayerdörffer E, et al. **Internist (Berlin)** 1989 Jun;30(6):390-2 (Ger)

[Morphologic change in Campylobacter pylori associated gastritis in and following successful antibacterial therapy] Rühl GH, et al. **Pathologe** 1989 Jan;10(1):64-5 (Ger)

[Evaluation of a combination of colloidal bismuth and pirenzepine in duodenal ulcer in non-responders to anti-H2 receptors] Manca A, et al. **Minerva Dietol Gastroenterol** 1988 Apr-Jun;34(2):135-8 (Eng. Abstr.) (Ita)

[Colloidal bismuth subcitrate (de-nol) in the treatment of peptic ulcer] Grigo'rev Pla, et al. **Klin Med (Mosk)** 1989 May;67(5):17-22 (46 ref.) (Rus)

ADVERSE EFFECTS

Myoclonic encephalopathy due to bismuth salts: treatment with dimercaprol and analysis of CSF transmitters. Molina JA, et al. **Acta Neurol Scand** 1989 Mar;79(3):200-3

Pruritus and paresthesia after i.v. administration of Gd-DTPA. Chan K, et al. **AJNR** 1989 Sep-Oct;10(5 Suppl):S53

Acute thrombocytopenia after De-Nol. Beckingham IJ, et al. **Gut** 1989 Jul;30(7):1016-7

Radiation exposure by technitium-99m MAG3 [letter] Bubeck B. **J Nucl Med** 1989 May;30(5):720-1

Neuropsychiatric symptoms following bismuth intoxication. Weller MP. **Postgrad Med J** 1988 Apr;64(750):308-10

Severe leucopenia during treatment of visceral leishmaniasis. Hiçsönmez G, et al. **Trans R Soc Trop Med Hyg** 1988; 82(3):417

[Myoclonic encephalopathy caused by bismuth salts. Efficacy of treatment with dimercaprol] Molina JA, et al. **Med Clin (Barc)** 1989 Jun 3;93(1):20-2 (Eng. Abstr.) (Spa)

ANALYSIS

Calcium-acidic phospholipid-phosphate complexes in human hydroxyapatite-containing pathologic deposits. Boskey AL, et al. **Am J Pathol** 1988 Oct;133(1):22-9

Indirect measurement of desferrioxamine and its chelated compounds aluminoxamine and ferrioxamine by Zeeman atomic absorption spectrometry. D'Haese PC, et al. **Clin Chem** 1989 May;35(5):884-7

Technetium-99m DTPA does not break down during ultrasound nebulization. Groth S, et al. **Clin Physiol** 1989 Apr;9(2):151-9

A rapid digestion method for analysis of nickel compounds in tissue by electrothermal atomic absorption spectrometry. Benson JM, et al. **J Appl Toxicol** 1989 Aug;9(4):219-22

Assessment of the arterial input curve for [99mTc]-d,l-HM-PAO by rapid octanol extraction. Andersen AR, et al. **J Cereb Blood Flow Metab** 1988 Dec; 8(6):S23-30

High-performance liquid chromatography of bis[1,2-bis-(diphenylphosphino)ethane]gold(I) chloride, a potential antineoplastic agent. Crouch FW Jr, et al. **J Chromatogr** 1988 Sep 16;448(3):333-43

Assessment of the purity of d,l HM-PAO from diastereomeric mixtures using NMR techniques. Feinstein-Jaffe I, et al. **J Nucl Med** 1989 Jan;30(1):106-9

Colloidal bismuth subcitrate: state of the art. Proceedings from a satellite symposium during the 21st Scandinavian Conference on Gastroenterology and the 12th Scandinavian Meeting on Gastrointestinal Endoscopy. Turku, Finland, 2-4 June 1988. **Scand J Gastroenterol Suppl** 1989;157:1-22

Speciation of ionic alkyllead in potable water and soil. Chakraborti D, et al. **Sci Total Environ** 1989 Aug;84:249-57

Organoleads in the environment: a review. Jarvie AW. **Sci Total Environ** 1988 Jul 1;73(1-2):121-6 (24 ref.)

BLOOD

Monoexponential analysis of plasma disappearance of 99mTc-DTPA and 131I-iodohippurate: a reliable method for measuring changes of renal function. Clifton GG, et al. **J Clin Pharmacol** 1989 May;29(5):466-71

Blood clearance of 99mTc-phytate for evaluation of hepatic dysfunction in rats. Shibata H, et al. **J Toxicol Sci** 1988 May;13(2):83-96

Effect of alpha-naphthylisothiocyanate on blood clearance of 99mTc-phytate in rats. Shibata H, et al. **J Toxicol Sci** 1989 Feb;14(1):33-42

[Metabolic products of technetium human serum albumin D (99mTc) in the human blood and urine] Shirakami Y, et al. **Kaku Igaku** 1989 Feb;26(2):279-82 (Jpn)

CHEMICAL SYNTHESIS

Technetium carboxylate complexes--III. A new synthetic route to hexakis-(isonitrile) technetium(I) salts. Kennedy CM, et al. **Int J Rad Appl Instrum [A]** 1988;39(11):1179-86

Synthesis of p-aminohippuric acid analog and its labeling by technetium-99m. Zmbova B, et al. **Int J Rad Appl Instrum [A]** 1989;40(3):225-34

Technetium-99m complexes of dimethylaminomethylene diphosphonate (DMAD)--I. Anion exchange HPLC characterization of 99mTc(NaBH4)-DMAD mixtures. Holland ME, et al. **Int J Rad Appl Instrum [B]** 1989; 16(3):301-11

Preparation and evaluation of technetium-99m labeled cardiac glycoside derivatives as potential myocardial imaging agent. Misra M, et al. **Int J Rad Appl Instrum [B]** 1988;15(4):409-17

Synthesis and biological properties of the lipophilic technetium-99m complex 99mTc(acac)3. Packard AB, et al. **Int J Rad Appl Instrum [B]** 1989;16(3):291-4

Syntheses and spectroscopic studies of potential antitumor copper(II) complexes with 5-phenylazo-3-methoxy salicylidene thiosemicarbazone and N4 substituted thiosemicarbazones. Patil BG, et al. **J Inorg Biochem** 1989 Jun;36(2):107-13

Development of phosphonate derivatives of gadolinium chelates for NMR imaging of calcified soft tissues. Adzamli IK, et al. **J Med Chem** 1989 Jan;32(1):139-44

Stability constants for Gd3+ binding to model DTPA-conjugates and DTPA-proteins: implications for their use as magnetic resonance contrast agents. Sherry AD, et al. **Magn Reson Med** 1988 Oct;8(2):180-90

The influence of experimental conditions on the preparation of 99mTc-pyrrolidino-methyl tetracycline [99mTc-PMT] in the form of an instant kit. Shafiq YF, et al. **Nuklearmedizin** 1988 Aug;27(4):154-6

Highly potent metallopeptide analogues of luteinizing hormone-releasing hormone. Bajusz S, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6313-7

[Ferrocene, ruthenocene and rhodocene analogs in haloperidol synthesis and organ distribution after labeling with 103Ru and 103mRh] Wenzel M, et al. **Int J Rad Appl Instrum [A]** 1988;39(12):1237-41 (Eng. Abstr.) (Ger)

DIAGNOSTIC USE

Gd-DTPA-enhanced cranial MR imaging in children: initial clinical experience and recommendations for its use. Elster AD, et al. **AJNR** 1989 Sep-Oct;10(5):1027-30

Transfer index of MR relaxation enhancer: a quantitative evaluation of MR contrast enhancement. Kaneoke Y, et al. **AJNR** 1989 Mar-Apr;10(2):329-33

Gd-DTPA enhancement in MR imaging of central pontine myelinolysis. Koch KJ, et al. **AJNR** 1989 Sep-Oct;10(5 Suppl):S58

Gd-DTPA-enhanced MR of suspected spinal multiple sclerosis. Larsson EM, et al. **AJNR** 1989 Sep-Oct; 10(5):1071-6

Gd-DTPA-enhanced MR of multiple cryptococcal brain abscesses. Riccio TJ, et al. **AJNR** 1989 Sep-Oct;10(5 Suppl):S65-6

Gd-DTPA enhancement of posterior epidural scar: an experimental model. Ross JS, et al. **AJNR** 1989 Sep-Oct; 10(5):1083-8

T1 and T2 measurements of meningiomas and neuromas before and after Gd-DTPA. Watabe T, et al. **AJNR** 1989 May-Jun;10(3):463-70

Dyke award. Gd-DTPA-enhanced MR imaging of experimental bacterial meningitis: evaluation and comparison with CT. Mathews VP, et al. **AJR** 1989 Jan; 152(1):131-6

Gadolinium-DTPA-enhanced MR imaging of the postoperative lumbar spine: time course and mechanism of enhancement. Ross JS, et al. **AJR** 1989 Apr; 152(4):825-34

Multicenter double-blind placebo-controlled study of gadopentetate dimeglumine as an MR contrast agent: evaluation in patients with cerebral lesions. Russell EJ, et al. **AJR** 1989 Apr;152(4):813-23

Gadolinium-DTPA-enhanced MR imaging of spinal neoplasms: preliminary investigation and comparison with unenhanced spin-echo and STIR sequences. Stimac GK, et al. **AJR** 1988 Dec;151(6):1185-92

Intramedullary disease of the spine: diagnosis using gadolinium-DTPA-enhanced MR imaging. Sze G, et al. **AJR** 1988 Dec;151(6):1193-204

Contrast enhancement in spinal MR imaging. Breger RK,

et al. **AJR Am J Roentgenol** 1989 Aug;153(2):387-91

Pancreas transplants: evaluation using perfusion scintigraphy. Kuni CC, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):57-61

Gd-DTPA-enhanced MR imaging of spinal tumors. Parizel PM, et al. **AJR Am J Roentgenol** 1989 May;152(5):1087-96

Paragangliomas of the jugular bulb and carotid body: MR imaging with short sequences and Gd-DTPA enhancement. Vogl T, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):583-7

Comparison of technetium 99m methoxy isobutyl isonitrile and thallium 201 for evaluation of coronary artery disease by planar and tomographic methods. Kiat H, et al. **Am Heart J** 1989 Jan;117(1):1-11

Contrast-enhanced magnetic resonance imaging of cardiac tumors in children. Niwa K, et al. **Am Heart J** 1989 Aug; 118(2):424-5

Cardiac imaging and myocardial kinetics of technetium-tertiary butyl-isonitrile during dipyridamole-induced hyperemia. Okada RD, et al. **Am Heart J** 1988 Oct;116(4):979-88

Radionuclide imaging of myocardial perfusion and viability in assessment of acute myocardial infarction. Berman DS, et al. **Am J Cardiol** 1989 Jul 18;64(4):9B-16B

Use of technetium-99m isonitrile (RP-30A) in assessing left ventricular perfusion and function at rest and during exercise in coronary artery disease, and comparison with coronary arteriography and exercise thallium-201 SPECT imaging. Iskandrian AS, et al. **Am J Cardiol** 1989 Aug 1; 64(5):270-5

Differentiation between renovascular and essential hypertension by means of changes in single kidney 99mTc-DTPA clearance induced by angiotensin-converting enzyme inhibition. Pedersen EB, et al. **Am J Hypertens** 1989 May;2(5 Pt 1):323-34

Using the "integral spleen" method of radiorenogram analysis and a baboon model to compare the diagnostic usefulness of technetium-99m-diethylenetriamine pentaacetic acid to that of various technetium-99m-mercaptoacetyltriglycene formulations and iodine-123-hippuran. Dormehl IC, et al. **Am J Physiol Imaging** 1989;4(1):23-7

Scintigraphic determination of the effect of metoclopramide and morphine on small intestinal transit time. Prokop EK, et al. **Am J Physiol Imaging** 1988;3(4):201-4

Chronic thromboembolic occlusion of main pulmonary artery does not reduce the lung clearance of 99mTc-DTPA. Meignan M, et al. **Am Rev Respir Dis** 1989 Jun; 139(6):1536-8

99mTC dimercaptosuccinic acid (DMSA) scan in urinary tract infection [letter] Murphy AV, et al. **Arch Dis Child** 1989 May;64(5):760

99mTc dimercaptosuccinic acid (DMSA) scan in patients with established radiological renal scarring. Smellie JM, et al. **Arch Dis Child** 1988 Nov;63(11):1315-9

99mTc dimercaptosuccinic acid (DMSA) scan as first investigation of urinary tract infection. Verber IG, et al. **Arch Dis Child** 1988 Nov;63(11):1320-5

Conformational analysis of thioredoxin using organoarsenical reagents as probes. A time-resolved fluorescence anisotropy and size exclusion chromatography study. Brown SB, et al. **Biochem Cell Biol** 1989 Jan;67(1):25-33

Epithelial cell migration on small intestinal villi in the neonatal rat. Comparison between [3H] thymidine and cytoplasmic labelling after Pu-citrate ingestion. Moutairou K, et al. **Biol Cell** 1989;65(3):265-9

Amperometric enzyme-immunosensor based on ferrocene-mediated amplification. Yao T, et al. **Biosensors** 1987-88;3(5):307-12

99Tcm-HMPAO single photon emission tomography in the diagnosis of cerebral barotrauma. Macleod MA, et al. **Br J Radiol** 1988 Dec;61(732):1106-9

Technetium-99m HMPAO imaging in patients with basal ganglia disease. Smith FW, et al. **Br J Radiol** 1988 Oct; 61(730):914-20

Magnetic resonance imaging of acoustic neuromas: the role of gadolinium-DTPA. Stack JP, et al. **Br J Radiol** 1988 Sep;61(729):800-5

The localization of myocardial ischaemia with technetium-99m methoxy isobutyl isonitrile and single photon emission computed tomography. West DJ, et al. **Br J Radiol** 1989 Apr;62(736):303-13

111In-labelled leucocyte imaging in vascular graft infection. Berridge DC, et al. **Br J Surg** 1989 Jan;76(1):41-4

Effect of unilateral vesicoureteric reflux on renal growth and the uptake of 99mTc DMSA by the kidney. An experimental study in the minipig. Godley ML, et al. **Br J Urol** 1989 Apr;63(4):340-7

Gadolinium-DTPA: a new contrast agent. Niendorf HP. **Bristol Med Chir J** 1988 May;103(2):34

Quantitative rotational tomography with 201Tl and 99mTc 2-methoxy-isobutyl-isonitrile. A direct comparison in normal individuals and patients with coronary artery disease. Kahn JK, et al. **Circulation** 1989 Jun;79(6):1282-93

Magnetic resonance imaging with gadolinium-DTPA for detecting cardiac transplant rejection in rats. Konstam MA, et al. **Circulation** 1988 Nov;78(5 Pt 2):III87-94

Tc-99m DTPA uptake in extramedullary plasmacytoma of the retroperitoneum. Aburano T, et al. **Clin Nucl Med** 1988 Dec;13(12):903-6

Results of hepatobiliary imaging using Tc-99m EHIDA. Ansari SM, et al. **Clin Nucl Med** 1989 May;14(5):354-6

Peripheral enhancement in a hepatic hemangioma seen in a technetium-99m DTPA renal image. Cabahug CJ, et al. **Clin Nucl Med** 1989 Jan;14(1):66-7

Technetium-99m pentavalent DMSA imaging detects metastases of poorly differentiated carcinoma of the thyroid. Costa DC, et al. **Clin Nucl Med** 1989 Mar; 14(3):218-21

Indium-111 labeled purified granulocytes in the diagnosis of synthetic vascular graft infection. Forstrom LA, et al. **Clin Nucl Med** 1988 Dec;13(12):859-62

Intestinal malrotation diagnosed by cholescintigraphy. Glowniak JV. **Clin Nucl Med** 1988 Nov;13(11):835-6

Comparison of delayed imaging with Tc-99m PMT and Tc-99m DEIDA for visualization of hepatoma. Hasegawa Y, et al. **Clin Nucl Med** 1989 Jul;14(7):526-31

Problems of duodenogastric reflux in Tc-99m Hexa MIBI planar, tomographic and bull's eye display. Hassan IM, et al. **Clin Nucl Med** 1989 Apr;14(4):286-9

Abnormal ventilation-perfusion scan due to swallowed DTPA aerosol and a paralyzed hemidiaphragm. Kolla I, et al. **Clin Nucl Med** 1988 Nov;13(11):842-3

Gallbladder visualization during technetium-99m RBC blood pool imaging. Case report and literature review. Kotlyarov EV, et al. **Clin Nucl Med** 1988 Jul;13(7):515-6 (3 ref.)

Scintigraphic criteria for the diagnosis of obstructive hepatobiliary diseases with Tc-99m IDA. Krishnamurthy S, et al. **Clin Nucl Med** 1988 Oct;13(10):704-9

Cerebral hypoxic injury detected by Tc-HMPAO SPECT. Lee A, et al. **Clin Nucl Med** 1989 Jul;14(7):482-3

Clinical usefulness of technetium-99m HM-PAO labeled white blood cell imaging in abscesses. Mortelmans L, et al. **Clin Nucl Med** 1989 Feb;14(2):127-9

Postcholecystectomy bile leak. Serial hepatobiliary imaging and percutaneous drainage. Patel M, et al. **Clin Nucl Med** 1988 Nov;13(11):805-7

Myocardial scintigraphy with Tc-99m TBI in a 6-month-old infant with myocardial infarction after Mustard operation. Sandrock D, et al. **Clin Nucl Med** 1989 May;14(5):381

Bile leakage accumulating in the gallbladder bed mimicking normal visualization of gallbladder in technetium-99m DISIDA hepatobiliary imaging. Shih WJ, et al. **Clin Nucl Med** 1989 Mar;14(3):222-3

Delayed accumulation (flip flop) of Tc-99m DTPA in a leiomyosarcoma. Slavin JD Jr, et al. **Clin Nucl Med** 1988 Sep;13(9):654-6

Iodine-131 metaiodobenzylguanidine uptake in infantile myofibromatosis. Stewart RE, et al. **Clin Nucl Med** 1989 May;14(5):344-6

Myocardial perfusion imaging with a new radiotracer, technetium-99m-hexamibi (methoxy isobutyl isonitrile): comparison with thallium-201 imaging. Taillefer R, et al. **Clin Nucl Med** 1989 Feb;14(2):89-96

Magnetic resonance with gadolinium DTPA for the investigation of temporal bone tumours. Phelps PD, et al. **Clin Otolaryngol** 1989 Jun;14(3):251-62

Renal parenchymal scars in adults. Split function and extent of scars at urography and DMSA scintigraphy. Thomsen HS, et al. **Dan Med Bull** 1989 Apr;36(2):185-8

Initial experience with 99m Tc-hexamethyl-propylene amine oxime (HM-PAO) single photon emission computed tomography (SPECT) in patients with focal epilepsy. Stefan H, et al. **Epilepsy Res** 1987 Mar;1(2):134-8

The evaluation of ventricular function using gated myocardial imaging with Tc-99m MIBI. Najm YC, et al. **Eur Heart J** 1989 Feb;10(2):142-8

Radiolabelling of human platelets with 99mTc-HMPAO. Vorne M, et al. **Eur J Haematol** 1989 May;42(5):487-91

Image quality and radiopharmaceutical parameters of indium-111 granulocytes in scintigraphy of inflammatory bowel disease. Arndt JW, et al. **Eur J Nucl Med** 1989; 15(4):197-200

Tc-99m-HMPAO labelled human platelets: in vitro and in vivo results. Becker W, et al. **Eur J Nucl Med** 1989; 15(6):296-301

Evaluation of six new 99mTc-IDA agents for hepatobiliary imaging. Chervu LR, et al. **Eur J Nucl Med** 1988; 14(9-10):441-5

Clinical experience with Tc-99m HM-PAO high resolution SPECT of the brain in patients with cerebrovascular accidents. De Roo M, et al. **Eur J Nucl Med** 1989; 15(1):9-15

99mTc-labelling of leucocytes with 99mTc-DPO: a complex developed for myocardial imaging. Endert G, et al. **Eur J Nucl Med** 1989;15(5):262-4

99mTc-HM-PAO and 123I-amphetamine cerebral scintigraphy: a new, non invasive method in determination of brain death in children. Galaske RG, et al. **Eur J Nucl Med** 1988;14(9-10):446-52

A comparison of Tc-99m HM-PAO and I-123 IMP cerebral SPECT images in Alzheimer's disease and multi-infarct dementia. Gemmell HG, et al. **Eur J Nucl Med** 1988; 14(9-10):463-6

Comparison of delayed hepatobiliary imaging using 99mTc-Sn-N-pyridoxyl-5-methyltryptophan and 67Ga-citrate imaging for diagnosis of hepatocellular carcinoma. Hasegawa Y, et al. **Eur J Nucl Med** 1988; 14(7-8):414-8

The visualization of femoral vessels in delayed bone scans--a sign of arteriosclerosis? A comparison of 99mTc-MDP and 99mTc-DPD. Lantto T, et al. **Eur J Nucl Med** 1989; 15(5):265-8

Parametric imaging in cerebral radionuclide angiography (RNA) by planar imaging improving presentation and objectivation of cerebral blood flow. Lerch H, et al. **Eur J Nucl Med** 1989;15(2):96-9

Clinical evaluation of the 99mTc-CPI myocardial perfusion imaging. Liu XJ, et al. **Eur J Nucl Med** 1989;15(6):277-9

Density analysis of scintigram with flow dynamics at bolus radionuclide venography: count correction with velocity. Márk B, et al. **Eur J Nucl Med** 1989;15(2):93-5

Gastrointestinal scintigraphy with 99mTc-DTPA labeled tablets in fed and fasting subjects. Maublant JC, et al. **Eur J Nucl Med** 1989;15(3):143-5

Clinical experience with 99mTc-MAG3, mercaptoacetyltriglycine, and a comparison with 99mTc-DTPA. Al-Nahhas AA, et al. **Eur J Nucl Med** 1988;14(9-10):453-62

The behavior of 99mTc-hexamethylpropyleneamineoxime (99mTc-HMPAO) in blood and brain. Nakamura K, et al. **Eur J Nucl Med** 1989;15(2):100-7

RCBF-quantification with 99mTc-HMPAO-SPECT: theory and first results. Nickel O, et al. **Eur J Nucl Med** 1989;15(1):1-8

Uptake of 99mTc-phytate in osteosarcoma cases. Rao PN, et al. **Eur J Nucl Med** 1989;15(3):162-4

Tc-99m-IDA gallbladder kinetics and response to CCK in chronic cholecystitis. Raymond F, et al. **Eur J Nucl Med** 1988;14(7-8):378-81

Semiquantitative assessment of regional cerebral perfusion using 99mTc HM-PAO and emission tomography. Spreafico G, et al. **Eur J Nucl Med** 1988;14(11):565-8

Clinical comparison between thallium-201 and Tc-99m-methoxy isobutyl isonitrile (hexamibi) myocardial perfusion imaging for detection of coronary artery disease. Taillefer R, et al. **Eur J Nucl Med** 1989;15(6):280-6

Same day injections of Tc-99m methoxy isobutyl isonitrile (hexamibi) for myocardial tomographic imaging: comparison between rest-stress and stress-rest injection sequences. Taillefer R, et al. **Eur J Nucl Med** 1989; 15(3):113-7

99mTc-DTPA clearance measured by a dual head gamma camera in healthy subjects and patients with sarcoidosis. Studies of reproducibility and relation to bronchoalveolar lavage findings. Thunberg S, et al. **Eur J Nucl Med** 1989; 15(2):71-7

Kinetics of Tc-99m hexakis t-butyl isonitrile in normal and ischemic canine myocardium. Williams SJ, et al. **Eur J Nucl Med** 1989;15(6):287-91

A progressive radiorenographic (99mTc-DTPA) presentation of surgically induced renal vein hypertension in baboons. Van Wyk F, et al. **Eur Urol** 1988;14(4):315-22

Diagnostic evaluation of hepatobiliary scintigraphy using 99mTc-N-pyridoxyl-5-methyltryptophan in acute cholecystitis. Takada T, et al. **Gastroenterol Jpn** 1988 Oct; 23(5):553-8

Scintigraphic assessment of bowel involvement and disease activity in Crohn's disease using technetium 99m-hexamethyl propylene amine oxine as leukocyte label. Schölmerich J, et al. **Gastroenterology** 1988 Nov; 95(5):1287-93

Quantitative 99mTc-DISIDA scanning and endoscopic biliary manometry in sphincter of Oddi dysfunction. Fullarton GM, et al. **Gut** 1988 Oct;29(10):1397-401

Technetium-99m-iminodiacetic acid organic anions: review of biokinetics and clinical application in hepatology. Krishnamurthy S, et al. **Hepatology** 1989 Jan;9(1):139-53 (164 ref.)

Significance of transplant perfusion index in the diagnosis of acute rejection in live related renal allograft recipients. Padhy AK, et al. **Indian J Med Res** 1989 Apr;90:113-23

Testing minimal transit time in the venous system of the lower limbs using dynamic radionuclide venography. Márk B, et al. **Int Angiol** 1988 Jul-Sep;7(3):231-3

99mTc hexakis-t-butyl isonitrile (TBI): an agent for the diagnosis of coronary artery disease. Mousa SA, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Feb;27(2):66-75

99mTc-cystine: a faster excreting 99mTc-glucoheptanoate analogue. Chattopadhyay M, et al. **Int J Rad Appl Instrum [B]** 1988;15(5):535-41

99mTc(Cu)-mannitol complex: a new agent for dynamic renal function studies. Chauhan UP, et al. **Int J Rad Appl Instrum [B]** 1989;16(3):283-9

Nuclear medicine studies of aging--V. Uptake of 67Ga and 111In in the femoral vessels. Simon TR, et al. **Int J Rad Appl Instrum [B]** 1988;15(5):531-3

A new cholescintigraphic agent: ruthenium-97-DISIDA. Zanzi I, et al. **Int J Rad Appl Instrum [B]** 1989; 16(4):397-403

Experimental study of DOTA-gadolinium. Pharmacokinetics and pharmacologic properties. Allard M, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S271-4

Indications for the use of Gd-DTPA in MRI of the central nervous system. Experiences in patients with cerebral and spinal diseases. Bauer WM, et al. **Invest Radiol** 1988 Sep; 23 Suppl 1:S286-8

The utility of contrast media in MRI at 0.02 T. A preliminary report. Kormano M, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S289-91

Gd-DOTA, a potential MRI contrast agent. Current status of physicochemical knowledge. Meyer D, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S232-5

Delayed magnetic resonance hepatic imaging with gadolinium-DTPA. Nelson RC, et al. **Invest Radiol** 1988 Jul;23(7):509-11

19F relaxation rate enhancement and frequency shift with Gd-DTPA. Ratner AV, et al. **Invest Radiol** 1989 Mar;

24(3):224–7
Magnetic resonance imaging studies on nude mice grafted with colorectal adenocarcinoma using gadolinium–labeled monoclonal antibody. Saccavini JC, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S292–3
Canine acute myocardial infarction. In vivo detection by MRI with gradient echo technique and contribution of Gd–DOTA. Schouman–Claeys E, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S254–7
Gadolinium–DTPA liposomes as a potential MRI contrast agent. Work in progress. Unger E, et al. **Invest Radiol** 1988 Dec;23(12):928–32
B–19036, a potential new hepatobiliary contrast agent for MR proton imaging. Vittadini G, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S246–8
Diagnosis of common bile duct leakage by cholescintigraphy. Lantsberg L, et al. **Isr J Med Sci** 1989 Mar;25(3):158–60
Right colonic hemangioma diagnosed by scintigraphy with 99–mTc sucralfate. A case report. Scopinaro F, et al. **Ital J Surg Sci** 1989;19(1):89–92
Quantification of myocardial infarction during coronary occlusion and myocardial salvage after reperfusion using cardiac imaging with technetium–99m hexakis 2–methoxyisobutyl isonitrile. Verani MS, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1573–81
Simultaneous measurement of lung clearance rates for Tc– and In–DTPA in normal and damaged lungs. O'Brodovich H, et al. **J Appl Physiol** 1989 May;66(5):2293–7
Effects of vinyl chloride on liver function of exposed workers, evaluated by measurements of plasma clearance of the 99mTc–N–2,4–dimethylacetanilido–iminodiacetate complex. Studniarek M, et al. **J Appl Toxicol** 1989 Aug; 9(4):213–8
Hexamethyl–propylene amine oxime (MM–PAO). Papers presented at a symposium. September 1987, Copenhagen, Denmark. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S1–126
Quantitative measurements of cerebral blood flow using SPECT and [99mTc]–d,l–HM–PAO compared to xenon–133. Andersen AR, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S69–81
CBF tomograms with [99mTc–HM–PAO in patients with dementia (Alzheimer type and HIV) and Parkinson's disease—initial results. Costa DC, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S109–15
Linearization correction of 99mTc–labeled hexamethyl–propylene amine oxime (HM–PAO) image in terms of regional CBF distribution: comparison to C15O2 inhalation steady–state method measured by positron emission tomography. Inugami A, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S52–60
Tomographic studies of rCBF with [99mTc]–HM–PAO SPECT in patients with brain tumors: comparison with C15O2 continuous inhalation technique and PET. Langen KJ, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S90–4
Technetium–99m–d,l–HM–PAO, the development of a new class of 99mTc–labeled tracers: an overview. Lassen NA, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S1–3
[99mTc]–HM–PAO SPECT in Parkinson's disease. Pizzolato G, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S101–8
SPECT measurements with 99mTc–HM–PAO in focal epilepsy. Ryding E, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S95–100
The use of technetium–99m–HM–PAO in the assessment of patients with dementia and other neuropsychiatric conditions. Smith FW, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S116–22
The use of [99mTc]–HM–PAO in the diagnosis of primary degenerative dementia. Testa HJ, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S123–6
SPECT with [99mTc]–d,l–hexamethyl–propylene amine oxime (HM–PAO) compared with regional cerebral blood flow measured by PET: effects of linearization. Yonekura Y, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S82–9
Sensitive ferrocene reagents for derivatization of amines for high–performance liquid chromatography with electrochemical detection. Shimada K, et al. **J Chromatogr** 1989 Feb 24;487(2):247–55
Delayed cholescintigraphy in the diagnosis of unilateral hepatic duct obstruction in the nonicteric patient. Thomas E, et al. **J Clin Gastroenterol** 1989 Feb;11(1):116–8
Gadolinium–DTPA enhancement of an optic nerve and chiasmal meningioma. Haik BG, et al. **J Clin Neuro Ophthalmol** 1989 Jun;9(2):122–5
Subacute and chronic cerebral infarctions: SPECT and gadolinium–DTPA enhanced MR imaging. Cordes M, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):567–71
Gadolinium DTPA enhanced MR imaging of ACTH–secreting microadenomas of the pituitary gland. Doppman JL, et al. **J Comput Assist Tomogr** 1988 Sep–Oct; 12(5):728–35
Gadolinium–DTPA enhanced dynamic MR imaging in the evaluation of cisplatinum nephrotoxicity. Frank JA, et al. **J Comput Assist Tomogr** 1989 May–Jun;13(3):448–59
Gadolinium–DTPA enhanced MR imaging of septic dural sinus thrombosis. Harris TM, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):682–4
Gadolinium–phthalein complexone as a contrast agent for hepatobiliary MR imaging. Kawamura Y, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):67–70
Vascular mapping using albumin–(Gd–DTPA), an intravascular MR contrast agent, and projection MR imaging. Moseley ME, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):215–21
Gadolinium–DOTA enhanced MR imaging of intracranial lesions. Parizel PM, et al. **J Comput Assist Tomogr** 1989 May–Jun;13(3):378–85
Gadolinium–DTPA enhanced MR imaging of intradural neurenteric cysts. Pierot L, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):762–4
Three–dimensional FLASH imaging: applications with gadolinium–DTPA. Ross JS, et al. **J Comput Assist Tomogr** 1989 May–Jun;13(3):547–52
Subtracted synthetic images in Gd–DTPA enhanced MR. Suto Y, et al. **J Comput Assist Tomogr** 1989 Sep–Oct; 13(5):925–8
Gadolinium–DTPA enhanced MR imaging of spinal dural arteriovenous fistulas. Terwey B, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):30–7
SPECT imaging of moyamoya disease using 99mTc–HM–PAO. Comparison with computed tomography findings. Mountz JM, et al. **J Comput Tomogr** 1988 Oct;12(4):247–50
Application of tris(2,2'–bipyridyl)ruthenium(III) for the investigation of DNA spatial structure by a chemical modification method. Fedorova OS, et al. **J Inorg Biochem** 1988 Nov;34(3):149–55
The development of an epileptogenic focus. A case study with 99mTc–HMPAO SPECT. Dressler D, et al. **J Neurol** 1989 Jul;236(5):300–2
MRI study of a feline model of acute cerebral ischaemia. Contribution of paramagnetic contrast media to the diagnosis. Berry I, et al. **J Neuroradiol** 1988;15(2):95–107 (Eng, Fre)
Unenhanced and gadolinium–DTPA–enhanced MR imaging in postoperative evaluation in pediatric brain tumors. Dickman CA, et al. **J Neurosurg** 1989 Jul;71(1):49–53
Simultaneous technetium–99m MIBI angiography and myocardial perfusion imaging. Baillet GY, et al. **J Nucl Med** 1989 Jan;30(1):38–44
Chemical aspects of labeling sucralfate with 99mTcO4. Billinghurst MW, et al. **J Nucl Med** 1989 Apr;30(4):523–30
Improved sarcoma imaging and reduced hepatic activity with indium–111–SCN–Bz–DTPA linked to MoAb 19–24. Blend MJ, et al. **J Nucl Med** 1988 Nov;29(11):1810–6
Pharmacokinetic evaluation of technetium–99–metallothionein–conjugated mouse monoclonal antibody B72.3 in rhesus monkeys. Burchiel SW, et al. **J Nucl Med** 1989 Aug;30(8):1351–7
Technetium–99m DISIDA hepatobiliary agent in diagnosis of hepatocellular carcinoma: relationship between detectability and tumor differentiation [see comments] Calvet X, et al. **J Nucl Med** 1988 Dec;29(12):1916–20. **Comment in:** J Nucl Med 1989 Jul;30(7):1278–80
Renal artery stenosis detection by combined Gates' technique and captopril test in hypertensive patients. Cuocolo A, et al. **J Nucl Med** 1989 Jan;30(1):51–6
Evaluation of hypertensive patients by means of captopril enhanced renal scintigraphy with technetium–99m DTPA. Dondi M, et al. **J Nucl Med** 1989 May;30(5):615–21
Comparison of technetium–99m MIBI and thallium–201 chloride myocardial scintigraphy in infants. Flynn B, et al. **J Nucl Med** 1989 Jul;30(7):1176–81
Tracer kinetic modeling approaches for the quantification of hepatic function with technetium–99m DISIDA and scintigraphy. Gambhir SS, et al. **J Nucl Med** 1989 Sep; 30(9):1507–18
Quantitation of renal uptake of technetium–99m DMSA using SPECT. Groshar D, et al. **J Nucl Med** 1989 Feb; 30(2):246–50
Filling out phenomenon with technetium–99m HM–PAO brain SPECT at the site of mild cerebral ischemia. Hayashida K, et al. **J Nucl Med** 1989 May;30(5):591–8
Imaging with pentavalent [99mTc]DMSA in patients with medullary cancer of the thyroid [letter] Hilditch TE, et al. **J Nucl Med** 1988 Oct;29(10):1746–7
Biodistribution, dosimetry, and clinical evaluation of technetium–99m ethyl cysteinate dimer in normal subjects and in patients with chronic cerebral infarction. Holman BL, et al. **J Nucl Med** 1989 Jun;30(6):1018–24
Comparison of technetium–99m pyrophosphate and technetium–99m DTPA aerosols for SPECT ventilation lung imaging. Isitman AT, et al. **J Nucl Med** 1988 Nov; 29(11):1761–7
Demonstration of reperfusion after thrombolysis with technetium–99m isonitrile myocardial imaging. Kayden DS, et al. **J Nucl Med** 1988 Nov;29(11):1865–7
Technetium–99m DISIDA hepatobiliary agent in diagnosis of hepatocellular carcinoma, adenoma, and focal nodular hyperplasia [letter; comment] Kotzerke J, et al. **J Nucl Med** 1989 Jul;30(7):1278–80. **Comment on:** J Nucl Med 1988 Dec;29(12):1916–20
Quantitative measurement of renal perfusion following transplant surgery [published erratum appears in J Nucl Med 1988 Dec;29(12):2021] Lear JL, et al. **J Nucl Med** 1988 Oct;29(10):1656–61
Evaluation of cerebral collateral circulation by technetium–99m HM–PAO brain SPECT during Matas test: report of three cases. Matsuda H, et al. **J Nucl Med** 1988 Oct;29(10):1724–9
Comparison between 180 degrees and 360 degrees data collection in technetium–99m MIBI SPECT of the myocardium. Maublant JC, et al. **J Nucl Med** 1989 Mar; 30(3):295–300
Comparison of hypoxia and ouabain effects on the myocardial uptake kinetics of technetium–99m hexakis 2–methoxyisobutyl isonitrile and thallium–201. Meerdink DJ, et al. **J Nucl Med** 1989 Sep;30(9):1500–6
More on [99mTc](V)DMSA scintigraphy in patients with medullary carcinoma of the thyroid [letter] Mojiminiyi OA, et al. **J Nucl Med** 1989 Aug;30(8):1420
In vivo tracing of indium–111 oxine–labeled human peripheral blood mononuclear cells in patients with lymphatic malignancies. Müller C, et al. **J Nucl Med** 1989 Jun;30(6):1005–11
Dynamic SPECT with technetium–99m HM–PAO in meningiomas—a comparison with iodine–123 IMP. Nakano S, et al. **J Nucl Med** 1989 Jun;30(6):1101–5
Comparative study of regional cerebral blood flow images by SPECT using xenon–133, iodine–123 IMP, and technetium–99m HM–PAO. Nakano S, et al. **J Nucl Med** 1989 Feb;30(2):157–64
Comparison of the biodistribution of gadolinium–153 DTPA and technetium–99m DTPA in rats. Prato FS, et al. **J Nucl Med** 1988 Oct;29(10):1683–7
Quantitation of renal function with technetium–99m MAG3. Russell CD, et al. **J Nucl Med** 1988 Dec;29(12):1931–3
Myocardial perfusion imaging with technetium–99m SQ30217: comparison with thallium–201 and coronary anatomy. Seldin DW, et al. **J Nucl Med** 1989 Mar; 30(3):312–9
Quantitative planar imaging with technetium–99m methoxyisobutyl isonitrile: comparison of uptake patterns with thallium–201. Sinusas AJ, et al. **J Nucl Med** 1989 Sep; 30(9):1456–63
Abnormal captopril renogram with a technetium–99m–labeled hippuran analog. Thorstad BL, et al. **J Nucl Med** 1988 Oct;29(10):1730–7
Technetium–99m HM–PAO–labeled leukocytes in detection of inflammatory lesions: comparison with gallium–67 citrate. Vorne M, et al. **J Nucl Med** 1989 Aug;30(8):1332–6
Technetium–99m hexakis 2–methoxyisobutyl isonitrile: human biodistribution, dosimetry, safety, and preliminary comparison to thallium–201 for myocardial perfusion imaging. Wackers FJ, et al. **J Nucl Med** 1989 Mar; 30(3):301–11
Technetium–99m (v) dimercaptosuccinic acid uptake in patients with head and neck squamous carcinoma: experience in imaging. Watkinson JC, et al. **J Nucl Med** 1989 Feb;30(2):174–80
A radiopharmaceutical for the study of the liver: 99mTc–DTPA–asialo–orosomucoid. II: Human dynamic and imaging studies. Galli G, et al. **J Nucl Med Allied Sci** 1988 Apr–Jun;32(2):117–26
A radiopharmaceutical for the study of the liver: 99mTc–DTPA–asialo–orosomucoid. I: Radiochemical and animal distribution studies. Galli G, et al. **J Nucl Med Allied Sci** 1988 Apr–Jun;32(2):110–6
The use of 99mTc(V)DMSA as imaging for the medullary thyroid carcinoma (MTC). Guerra U, et al. **J Nucl Med Allied Sci** 1988 Oct–Dec;32(4):242–7
Gd–DISIDA—a potential contrast agent for magnetic resonance imaging of the hepatobiliary system. Saha GB, et al. **J Nucl Med Allied Sci** 1989 Jan–Mar;33(1):1–6
Hepatobiliary scintigraphy and the string test in the evaluation of neonatal cholestasis. Rosenthal P, et al. **J Pediatr Gastroenterol Nutr** 1989 Apr;8(3):292–6
Functional assessment of colonic interposition with 99Tcm–labeled milk. Sutton R, et al. **J Pediatr Surg** 1989 Sep;24(9):874–81
Blood clearance of 99mTc–phytate for evaluation of hepatic dysfunction in dogs. Shibata H, et al. **J Toxicol Sci** 1988 Aug;13(3):151–9
Clinical efficacy of 99mtechnetium mercaptoacetylglycine kit formulation in routine renal scintigraphy. duCret RP, et al. **J Urol** 1989 Jul;142(1):19–22
Correlates of diuretic renography in experimental hydronephrosis. Kekomäki M, et al. **J Urol** 1989 Feb; 141(2):391–4
99mtechnetium–dimercapto–succinic acid renal scanning and excretory urography in diagnosis of renal scars in children. McLorie GA, et al. **J Urol** 1989 Sep;142(3):790–2
Evaluation of 99mtechnetium–dimercapto–succinic acid renal scans in experimental acute pyelonephritis in piglets. Rushton HG, et al. **J Urol** 1988 Nov;140(5 Pt 2):1169–74
Tc–99m DTPA dynamic renal scintigraphy in the evaluation of renal transplants: the importance of perfusion index in the diagnosis of renal allograft rejection. Siraj QH, et al. **JPMA** 1988 May;38(5):139–48
Indium–111–oxinate labeled swine platelets and their survival in vivo. Zoghbi SS, et al. **Lab Anim Sci** 1988 Aug; 38(4):444–7
Cerebral perfusion deficits in dysbaric illness. Adkisson GH, et al. **Lancet** 1989 Jul 15;2(8655):119–22
99mTc–HMPAO washout in prognosis of stroke [letter] [published erratum appears in Lancet 1989 Feb 4;1(8632):288] [see comments] Costa DC, et al. **Lancet** 1989 Jan 28;1(8631):213–4. **Comment in:** Lancet 1989 Feb 18;1(8634):380–1
Role of routine functional brain imaging in temporal lobe epilepsy [letter] Ell PJ, et al. **Lancet** 1989 Apr 29; 1(8644):959
Postictal SPET in epilepsy [letter] Rowe CC, et al. **Lancet** 1989 Feb 18;1(8634):389–90
Interpretation of 99mTc–HMPAO washout after stroke [letter; comment] Smith FW. **Lancet** 1989 Feb 18; 1(8634):380–1. **Comment on:** Lancet 1989 Jan

28;1(8631):213–4

Gadolinium–enhanced magnetic resonance imaging in temporal bone lesions. Millen SJ, et al. **Laryngoscope** 1989 Mar;99(3):257–60

Assessment of T1 time course changes and tissue–blood ratios after Gd–DTPA administration in brain tumors. Yoshida K, et al. **Magn Reson Imaging** 1989 Jan–Feb;7(1):9–15

Gadolinium–labeled liposomes containing paramagnetic amphipathic agents: targeted MRI contrast agents for the liver. Kabalka GW, et al. **Magn Reson Med** 1988 Sep; 8(1):89–95

MRI detection of myocardial perfusion changes by gadolinium–DTPA infusion during dipyridamole hyperemia. Miller DD, et al. **Magn Reson Med** 1989 May; 10(2):246–55

Paramagnetic contrast enhancement at 0.02 T: an experimental study using Gd–DOTA in normal and hydronephrotic kidneys. Niemi P, et al. **Magn Reson Med** 1988 Jul;7(3):311–8

Improved radiotherapy treatment planning for spinal cord tumors using gadolinium enhanced MR imaging. Griffin BR, et al. **Med Dosim** 1989;14(1):5–8

Captopril–enhanced 99mTc DTPA scintigraphy in the detection of renal–artery stenosis. Maher ER, et al. **Nephrol Dial Transplant** 1988;3(5):608–11

Filtration fraction.noninvasive measurement with Tc–99m DTPA and changes induced by angiotensin–converting enzyme inhibition in hypertension. Peters AM, et al. **Nephron** 1989;51(4):470–3

Sucralphate–technetium scintigraphy in inflammatory bowel disease: experience in 23 patients. Zeijen RN, et al. **Neth J Med** 1989 Aug;35(1–2):76–85

Gadolinium–DTPA–enhanced magnetic resonance imaging in intractable partial epilepsy. Cascino GD, et al. **Neurology** 1989 Aug;39(8):1115–8

Gadolinium–enhanced MRI: a superior technique for the diagnosis of intraspinal metastases. Fredericks RK, et al. **Neurology** 1989 May;39(5):734–6

Magnetic resonance imaging of cerebral infarction: time course of Gd–DTPA enhancement and CT comparison. Imakita S, et al. **Neuroradiology** 1988;30(5):372–8

The value of paramagnetic contrast agent gadolinium–DTPA in the diagnosis of pituitary adenomas. Nakamura T, et al. **Neuroradiology** 1988;30(6):481–6

Gd–DTPA–enhanced MR in thoracic disc herniations. Parizel PM, et al. **Neuroradiology** 1989;31(1):75–9

Comparison of 99Tcm–mercaptoacetyltriglycine and 131I–orthoiodohippurate in determination of effective renal plasma flow (ERPF). Abdel–Dayem HM, et al. **Nucl Med Commun** 1989 Feb;10(2):99–107

99Tcm hexamethylpropyleneamineoxime (HMPAO) as a platelet label: evaluation of labelling parameters and first in vivo results. Becker W, et al. **Nucl Med Commun** 1988 Oct;9(10):831–42

Comparison of 99Tcm–labelled MDP and DMAD bone scanning agents in patients with advanced breast cancer. Coleman RE, et al. **Nucl Med Commun** 1988 Jul;9(7):481–5

Is radiolabelled sucralphate scintigraphy of any use in the diagnosis of inflammatory bowel disease? Crama–Bohbouth GE, et al. **Nucl Med Commun** 1988 Aug;9(8):591–5

DISIDA kinetics measure liver function in dogs. Fraser IA, et al. **Nucl Med Commun** 1989 Jun;10(6):435–47

The value of Tc–DTPA transit times and NMR T1 measurements in monitoring the progress of renal transplants. Gemmell HG, et al. **Nucl Med Commun** 1985 Feb;6(2):67–74

Parasternal lymphoscintigraphy using 99Tcm–dextran. Karayalcin B, et al. **Nucl Med Commun** 1988 Sep; 9(9):657–62

Gallbladder function and fasting enterogastric bile reflux. Kennedy NS, et al. **Nucl Med Commun** 1989 Mar; 10(3):193–8

Investigations of brain tumours with 99Tcm–HMPAO SPECT. Langen KJ, et al. **Nucl Med Commun** 1989 May; 10(5):325–34

Direct autoradiographic comparison of 99Tcm–HMPAO with 125I–IMP in experimental brain ischaemia. Matsuda H, et al. **Nucl Med Commun** 1988 Nov;9(11):891–7

A study of leucocyte labelling efficiencies obtained with 111In–oxine. Mountford PJ, et al. **Nucl Med Commun** 1985 Feb;6(2):109–14

Appropriate selection of background for 99Tcm–DTPA renography. Peters AM, et al. **Nucl Med Commun** 1988 Dec;9(12):973–85

Background in 99Tcm DTPA renography evaluated by the impact of its components on individual kidney glomerular filtration rate. Peters AM, et al. **Nucl Med Commun** 1988 Aug;9(8):545–52

The effect of various antibiotics on the labelling efficiency of human white blood cells with 111In–oxine. Sinzinger H, et al. **Nucl Med Commun** 1988 Aug;9(8):597–601

A rapid method for the preparation of 99Tcm hexametazime–labelled leucocytes. Solanki KK, et al. **Nucl Med Commun** 1988 Oct;9(10):753–61

Comparison of 123I monoclonal granulocyte antibody and 99Tcm–HMPAO–labelled leucocytes in the detection of inflammation. Vorne M, et al. **Nucl Med Commun** 1988 Sep;9(9):623–9

99Tcm hexamethylpropyleneamineoxime–labelled leucocyte scanning for detection of infection in orthopaedic surgery—first results. Winker KH, et al. **Nucl Med Commun** 1988 Oct;9(10):771–4

99mTc–aminohexylidendiphosphonate and 99mTc–pyrophosphate in the scintigraphic diagnosis of experimental myocardial infarction in dogs. Duska F, et al. **Nuklearmedizin** 1988 Oct;27(5):226–7

Deconvolution analysis of renograms obtained with simultaneously administered 99mTc–DTPA and 131I–hippuran. Kempi V. **Nuklearmedizin** 1988 Oct; 27(5):188–94

99mTc–DPD uptake in juvenile hemarthrosis. Scintimetry and autoradiography of the knee in dogs. Hansen ES, et al. **Orthopedics** 1989 Mar;12(3):441–7

Additional extrarenal abnormalities seen in Tc–99m DTPA renal flow study. Shih WJ, et al. **Radiat Med** 1988 Mar–Apr;6(2):49–53

Gd–DTPA enhanced high resolution MR imaging of pituitary adenomas. Steiner E, et al. **Radiographics** 1989 Jul;9(4):587–98

Clinical significance of 99mTc–N–pyridoxyl–5–methyltryptophan (99mTc–PMT) in the diagnosis of intrahepatic masses. Oyamada H, et al. **Radioisotopes** 1989 May;38(5):244–51

Gd–DTPA as a contrast agent in CT. Bloem JL, et al. **Radiology** 1989 May;171(2):578–9

Use of Gd–DTPA and fast gradient–echo and spin–echo MR imaging to demonstrate renal function in the rabbit. Carvlin MJ, et al. **Radiology** 1989 Mar;170(3 Pt 1):705–11

Dynamic Gd–DTPA–enhanced MR imaging of the kidney: experimental results. Choyke PL, et al. **Radiology** 1989 Mar; 170(3 Pt 1):713–20

Reperfused and nonreperfused myocardial infarction: diagnostic potential of Gd–DTPA—enhanced MR imaging. de Roos A, et al. **Radiology** 1989 Sep; 172(3):717–20

Intradural spinal cord lesions: Gd–DTPA–enhanced MR imaging. Dillon WP, et al. **Radiology** 1989 Jan;170(1 Pt 1):229–37

Is Gd–DTPA required for routine cranial MR imaging? Elster AD, et al. **Radiology** 1989 Oct;173(1):231–8

Musculoskeletal neoplasms: static and dynamic Gd–DTPA—enhanced MR imaging. Erlemann R, et al. **Radiology** 1989 Jun;171(3):767–73

MR imaging of the breast with Gd–DTPA: use and limitations. Heywang SH, et al. **Radiology** 1989 Apr; 171(1):95–103

MR imaging of the breast: fast imaging sequences with and without Gd–DTPA. Preliminary observations. Kaiser WA, et al. **Radiology** 1989 Mar;170(3 Pt 1):681–6

Adrenal masses: evaluation with fast gradient–echo MR imaging and Gd–DTPA–enhanced dynamic studies. Krestin GP, et al. **Radiology** 1989 Jun;171(3):675–80

Urinary bladder neoplasms: evaluation with contrast–enhanced MR imaging. Neuerburg JM, et al. **Radiology** 1989 Sep;172(3):739–43

Extracranial lesions of the head and neck: preliminary experience with Gd–DTPA–enhanced MR imaging. Robinson JD, et al. **Radiology** 1989 Jul;172(1):165–70

The kidney: imaging with Tc–99m mercaptoacetyltriglycine, a technetium–labeled analog of iodohippurate. Russell CD, et al. **Radiology** 1989 Aug;172(2):427–30

Chemical shift imaging with paramagnetic contrast material enhancement for improved lesion depiction. Simon JH, et al. **Radiology** 1989 May;171(2):539–43

Spinal lesions: quantitative and qualitative temporal evolution of gadopentetate dimeglumine enhancement in MR imaging. Sze G, et al. **Radiology** 1989 Mar;170(3 Pt 1):849–56

Clinical comparison of I–131 orthoiodohippurate and the kit formulation of Tc–99m mercaptoacetyltriglycine. Taylor A Jr, et al. **Radiology** 1989 Mar;170(3 Pt 1):721–5

Cerebral Erdheim–Chester disease: persistent enhancement with Gd–DTPA on MR images. Tien RD, et al. **Radiology** 1989 Sep;172(3):791–2

Liposomal Gd–DTPA: preparation and characterization of relaxivity. Tilcock C, et al. **Radiology** 1989 Apr; 171(1):77–80

Hepatic metastases: liposomal Gd–DTPA–enhanced MR imaging. Unger EC, et al. **Radiology** 1989 Apr;171(1):81–5

Small hepatocellular carcinoma and cavernous hemangioma: differentiation with dynamic FLASH MR imaging with Gd–DTPA. Yoshida H, et al. **Radiology** 1989 May; 171(2):339–42

Comparison between 99mTc–DTPA renal scan and excretory urography in the clinical staging of invasive cancer of the uterine cervix. Rodari A, et al. **Rays** 1988 May–Aug;13(2):33–8

The technetium–99m DTPA partition test in the diagnosis of tuberculous meningitis. von Wenzel KS, et al. **S Afr Med J** 1989 May 20;75(10):488–9

Renal parenchymal damage on DMSA–scintigraphy in pelviureteric obstruction. Kullendorff CM, et al. **Scand J Urol Nephrol** 1989;23(2):127–30

Prospective management of neonates with pelviureteric junction stenosis. Therapeutic strategy based on 99m Tc–DPTA studies. Piepsz A, et al. **Scand J Urol Nephrol** 1989;23(1):31–6

Extrarenal abnormalities seen in 99mTc DTPA renal flow study. Shih WJ, et al. **Semin Nucl Med** 1989 Jan;19(1):69–71

Scintigraphic differentiation of congenital soft–tissue extremity enlargement with Tc–99m DTPA. Mandell GA, et al. **Skeletal Radiol** 1989;18(1):33–41

Gadolinium–DTPA enhancement of soft tissue tumors in magnetic resonance imaging—preliminary clinical experience in five patients. Pettersson H, et al. **Skeletal Radiol** 1988;17(5):319–23

Gadolinium–enhanced magnetic resonance imaging in multiple infarction [letter; comment] Yu YL. **Stroke** 1989 Feb;20(2):299. **Comment on:** Stroke 1988 Jul;19(7):834–9

Gadolinium–DPTA enhancement of a recurrent intramedullary ependymoma: a case report. Baldwin H, et al. **Surg Neurol** 1989 Mar;31(3):220–3

Tc–NGA imaging in liver transplantation: preliminary clinical experience. Woodle ES, et al. **Surgery** 1989 Mar; 105(3):401–7

Diagnosis of pancreatic rejection with Tc–99m DTPA scintigraphy. Nghiem DD, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 3):2791–2

Serial radionuclide determinations of graft perfusion in pancreas transplantation. Teule GJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2795–6

The use of technetium diethylenetriaminepentaacetate for detecting posttransplantation urinary extravasation. Petronis J, et al. **Transplantation** 1988 Dec;46(6):910–2

Spontaneous perforation of the ureter diagnosed on technetium 99m DTPA excretory urography. Barasch E, et al. **Urol Radiol** 1988;10(2):107–9

Evaluation of Tc–99m–DTPA for renal clearance studies in the pig. Worthley CS, et al. **Urol Res** 1988;16(6):449–54

[Delayed Tc–99m–PMT imaging in the specific diagnosis of hepatocellular carcinoma] Wu ZM. **Chung Hua Chung Liu Tsa Chih** 1988 Sep;10(5):360–3 (Eng. Abstr.) **(Chi)**

[Comparative study of nuclear imaging with 99mTc–PMT, B ultrasound and CT in the diagnosis of hepatic tumors] Wu ZM. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Dec; 22(6):329–33 (Eng. Abstr.) **(Chi)**

[Hepatobiliary scintigraphy with Tc–99m–EHIDA in patients with obstructive jaundice] Hu YZ. **Chung Hua Wai Ko Tsa Chih** 1988 Oct;26(10):631–2, 640 (Eng. Abstr.) **(Chi)**

[Preparation and primary application of a new renal function imaging 99mTc–MAG3] Deng HF, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Sep;19(3):279–81 (Eng. Abstr.) **(Chi)**

[Clinical evaluation of 99mTc–dextran internal mammary lymphoscintigraphy] Guan CT, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec;19(4):426–9 (Eng. Abstr.) **(Chi)**

[Initial experience with autologous thrombocytes labeled with 111indium–oxine] Fikrle A, et al. **Cas Lek Cesk** 1989 Feb 17;128(8):238–44 (Eng. Abstr.) **(Cze)**

[New indications of kidney function by gamma imaging] Soini I, et al. **Duodecim** 1989;105(9):839–45 **(Fin)**

[Isolated fever disclosing Crohn disease. Diagnostic contribution of scintigraphy with Tc 99m HMPAO labelled leukocytes (letter)] Raoul JL, et al. **Gastroenterol Clin Biol** 1989 Mar;13(3):315–6 **(Fre)**

[Specific and non–specific contrast media for MRI of tumors. Experimental study of human breast carcinoma] Revel D, et al. **J Radiol** 1989 Feb;70(2):115–21 (Eng. Abstr.) **(Fre)**

[Contribution of gadolinium DOTA in primary tumors of bone and soft tissue] Vanel D, et al. **J Radiol** 1988 Dec; 69(12):735–9 (Eng. Abstr.) **(Fre)**

[Evaluation of surgical renal revascularization in renovascular arterial hypertension. Measurement by 99m Tc DTPA scintigraphy] Guérin C, et al. **Nephrologie** 1988; 9(5):207–10 (Eng. Abstr.) **(Fre)**

[Tomographical use of Tc hexamethylpropylene amine–oxime. First experience (78 studies)] Steinling M, et al. **Presse Med** 1988 Sep 17;17(31):1565–9 (Eng. Abstr.) **(Fre)**

[The peroperative isotopic location of osteoid osteomas and other lesions exhibiting increased uptake on scintigraphy] Augereau B, et al. **Rev Chir Orthop** 1988;74(8):764–70 (Eng. Abstr.) **(Fre)**

[Improved scintigraphic imaging using cell separator–enriched. indium–111–oxinate marked granulocytes] Taborski U, et al. **Beitr Infusionther** 1988; 21:130–2 **(Ger)**

[The value of magnetic resonance tomography using gadolinium–DTPA in the diagnosis of the post–lumbar disk surgery syndrome] Beyer HK, et al. **Digitale Bilddiagn** 1989 Mar;9(1):22–30 (Eng. Abstr.) **(Ger)**

[Magnetic resonance tomography of the parotid gland: plain diagnosis and Gd–DTPA] Vogl T, et al. **Digitale Bilddiagn** 1989 Jun;9(2):59–68 (Eng. Abstr.) **(Ger)**

[Improved diagnosis using deuterated radiopharmaceuticals?—A comparison of the brain affinity of amphetamine analogs] Wenzl M, et al. **Int J Rad Appl Instrum [A]** 1988;39(10):1023–7 (Eng. Abstr.) **(Ger)**

[HMPAO–SPECT in cerebral seizures] Grünwald F, et al. **Nuklearmedizin** 1988 Dec;27(6):248–51 (Eng. Abstr.) **(Ger)**

[SPECT findings in the hemiparkinson syndrome using 99mTc–HMPAO] Neumann C, et al. **Nuklearmedizin** 1989 Jun;28(3):92–4 (Eng. Abstr.) **(Ger)**

[Parametric representation of kidney function using 99mTc–mercaptoacetyltriglycine (MAG3)] Szabó Z, et al. **Nuklearmedizin** 1989 Jun;28(3):73–83 (Eng. Abstr.) **(Ger)**

[Preliminary results of 99mTc–HMPAO–SPECT studies in endogenous psychoses] Wilhelm KR, et al. **Nuklearmedizin** 1989 Jun;28(3):88–91 (Eng. Abstr.) **(Ger)**

[99mTc-HMPAO leukocyte scintigraphy in the diagnosis of inflammations of the skeletal system. Initial experiences] Winker H, et al. **Nuklearmedizin** 1988 Aug;27(4):121–6 (Eng. Abstr.) (Ger)

[Use of contrast media in MR tomography of soft tissue sarcomas. Follow-up studies after multimodal therapy] Fürst G, et al. **Radiologe** 1989 Jul;29(7):336–42 (Eng. Abstr.) (Ger)

[The use of contrast media in magnetic resonance tomography of head and neck tumors] Fürst G, et al. **ROFO** 1988 Nov;149(5):489–95 (Eng. Abstr.) (Ger)

[Space-occupying lesions in the pineal region—MRT using Gd-DTPA] Kahn T, et al. **ROFO** 1989 Jun;150(6):657–62 (Eng. Abstr.) (Ger)

[Contrast medium enhanced MRT of tumors of the posterior fossa in children and adolescents] Kahn T, et al. **ROFO** 1989 Aug;151(2):216–24 (Eng. Abstr.) (Ger)

[NMR tomography with gadolinium-DTPA of the trunk in pediatric oncology] Kahn T, et al. **ROFO** 1989 May; 150(5):592–7 (Eng. Abstr.) (Ger)

[Gd-DTPA-supported magnetic resonance tomographic perfusion follow-up of shockwave-treated tumors] Naegele M, et al. **ROFO** 1989 May;150(5):602–5 (Eng. Abstr.) (Ger)

[Gd-DTPA in the MR diagnosis of pituitary adenomas] Steiner E, et al. **ROFO** 1989 Mar;150(3):323–7 (Eng. Abstr.) (Ger)

[MR tomography following lumbar disk surgery: differential diagnostic potentials using Gd-DTPA] Steiner H. **ROFO** 1989 Aug;151(2):179–85 (Eng. Abstr.) (Ger)

[MRI of the nasopharynx with Gd-DTPA: its value and differential diagnostic criteria] Vogl T, et al. **ROFO** 1989 May;150(5):516–22 (Eng. Abstr.) (Ger)

[Late intramedullary metastases of a medulloblastoma with primary extramedullary seeded metastases—magnetic resonance tomographic detection using gadolinium-DTPA] Glathe S, et al. **Rontgenblatter** 1988 Dec;41(12):484–7 (Eng. Abstr.) (Ger)

[Visualization of multiple neurofibromas using gadolinium-DTPA assisted MRT: a case report] Kaminsky S, et al. **Rontgenblatter** 1988 Dec;41(12):492–4 (Eng. Abstr.) (Ger)

[Study of myocardial perfusion at rest using technetium Tc 99m methoxy-isobutylisonitrile: comparison with labeled microspheres and thallium 201] Santoro GM, et al. **G Ital Cardiol** 1988 Nov;18(11):907–13 (Eng. Abstr.) (Ita)

[Hepato-cholescintigraphy using technetium Tc 99m diethyl IDA in the follow-up of biliodigestive anastomoses] Spisni R, et al. **Minerva Chir** 1989 Jun 15;44(11):1553–6 (Eng. Abstr.) (Ita)

[99mTc-gluconate in the scintigraphy of the renal system] Toti A, et al. **Ric Clin Lab** 1976 Jan-Mar;6 Suppl 1:52–60 (Ita)

[Clinical application of MRI for urological malignancy. 3: A new trial of MRI for bladder cancer and prostatic cancer; surface coil and GD-DTPA] Nishimura K, et al. **Hinyokika Kiyo** 1988 Dec;34(12):2097–100 (Eng. Abstr.) (Jpn)

[The influence of percutaneous nephrolithotomy on renal function evaluated by 99m-Tc-DTPA renoscintigram] Tsuboi N, et al. **Hinyokika Kiyo** 1988 Oct;34(10):1717–21 (Eng. Abstr.) (Jpn)

[Clinical application of Tc-99m DTPA-HSA to cardiac pool scan in pediatrics] Hayashida K, et al. **Kaku Igaku** 1988 Oct;25(10):1155–62 (Jpn)

[Clinical evaluation of platelet scintigraphy using indium-111 oxine] Ishikawa N, et al. **Kaku Igaku** 1988 Nov; 25(11):1245–54 (Eng. Abstr.) (Jpn)

[Unusual accumulation of I-123 IMP and Tc-99m HMPAO in glioblastoma multiforme] Maeda H, et al. **Kaku Igaku** 1988 Jul;25(7):655–8 (Eng. Abstr.) (Jpn)

[Estimation of total liver uptake and liver uptake per unit of liver volume of Tc-99m(Sn)-N-pyridoxyl-5-methyltryptophan (Tc-99m-PMT) using SPECT] Nakamura K, et al. **Kaku Igaku** 1988 Dec;25(12):1363–9 (Eng. Abstr.) (Jpn)

[Tc-99m-HMPAO brain scintigraphy: a comparative study with I-123-IMP] Nishimoto H, et al. **Kaku Igaku** 1989 Apr; 26(4):545–50 (Jpn)

[Clinical evaluation of 99mTc-DTPA-HSA in patients with cerebrovascular diseases: assessment of perfusion reserve with SPECT] Nishizawa S, et al. **Kaku Igaku** 1988 Nov; 25(11):1189–200 (Eng. Abstr.) (Jpn)

[Clinical usefulness of physiologic components obtained by factor analysis—application to 99mTc-DTPA renography] Ohtake E, et al. **Kaku Igaku** 1989 Jan;26(1):89–93 (Eng. Abstr.) (Jpn)

[Single photon emission computed tomography by using N-isopropyl-p-[123I]-iodoamphetamine and 99mTc-hexamethyl propyleneamine oxime in a patient with herpes simplex encephalitis] Ono S, et al. **Kaku Igaku** 1989 Feb;26(2):239–51 (Eng. Abstr.) (Jpn)

[Single photon emission computed tomography (SPECT) using 99mTc-hexamethylpropyleneamine oxime in brain tumor: comparison of N-isopropyl-[123I]-p-iodoamphetamine and 99mTc-DTPA SPECT] Ono S, et al. **Kaku Igaku** 1988 Dec;25(12):1371–9 (Eng. Abstr.) (Jpn)

[A case of Creutzfeldt-Jakob disease followed up by N-isopropyl-[123I]-p-iodoamphetamine and 99mTc-hexamethylpropyleneamine oxime SPECT] Ono S, et al. **Kaku Igaku** 1989 Jan;26(1):77–88 (Eng. Abstr.) (Jpn)

[Three-dimensional functional imaging by deconvolution analysis in Tc-99m-PMT hepatobiliary dynamic SPECT imaging] Sakuma H, et al. **Kaku Igaku** 1988 Oct; 25(10):1061–71 (Eng. Abstr.) (Jpn)

[A multi-center clinical trial on 99mTc-DTPA-HSA, a new radiopharmaceutical for cardiovascular system imaging] Torizuka K, et al. **Kaku Igaku** 1988 Nov;25(11):1201–13 (Eng. Abstr.) (Jpn)

[Clinical studies of radionuclide angiography with a new radioactive tracer, 99mTc-DTPA-human serum albumin] Yamada M, et al. **Kaku Igaku** 1988 Nov;25(11):1291–7 (Jpn)

[A clinical study of the influence of percutaneous nephroureterolithotomy on renal function using 99mTc-DMSA renal scintigraphy] Chiba Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Sep;79(9):1479–87 (Eng. Abstr.) (Jpn)

[Studies on the evaluation of renal function in hydronephrosis with 99mTc-DMSA renal uptake—effect of the relief of urinary tract obstruction] Takeda M, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Aug;79(8):1406–12 (Eng. Abstr.) (Jpn)

[The detection of the dynamic renal function using MRI by gadolinium-DTPA] Torii S, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Mar;79(3):413–22 (Eng. Abstr.) (Jpn)

[The detection of the dynamic renal function using MRI by gadolinium-DTPA] Torii S, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Jun;79(6):1063–9 (Eng. Abstr.) (Jpn)

[Diagnostic value of the reflux sign in cholescintigraphy after administration of a gallbladder contracting agent—a comparison with X-ray cholangiography] Itoh H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Jan 25; 49(1):66–72 (Eng. Abstr.) (Jpn)

[Measurement of effective hepatic blood flow using 99mTc-PMT SPECT and single blood sampling] Sakuma H, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Jan 25;49(1):62–5 (Eng. Abstr.) (Jpn)

[The influence of ursodeoxycholic acid on hepatobiliary scintigraphy with 99mTc-N-pyridoxyl-5-methyltryptophan in chronic liver diseases] Hayakawa T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Nov; 85(11):2389–95 (Eng. Abstr.) (Jpn)

[Changes in tissue T1 of brain tumor following GD-DTPA administration—differences in T1 time course and tissue-blood ratio by histological types] Yoshida K, et al. **No To Shinkei** 1988 Jun;40(6):531–7 (Eng. Abstr.) (Jpn)

[Evaluation of gallbladder emptying in patients with chronic liver disease by 99mTc-EHIDA hepatobiliary scintigraphy] Kurihara N, et al. **Radioisotopes** 1989 Jun; 38(6):269–74 (Eng. Abstr.) (Jpn)

[Clinical comparison of 99mTc-diethylenetriaminepentaacetic acid-human serum albumin (99mTc-HSA-D) and 99mTc-human serum albumin (99mTc-HSA) for cardiac blood pool imaging] Mabuchi N, et al. **Radioisotopes** 1988 Jul;37(7):380–6 (Eng. Abstr.) (Jpn)

[Basic and clinical evaluation of regional cerebral perfusion scintigraphy of 99mTc-HM-PAO] Tsukatani Y, et al. **Rinsho Hoshasen** 1988 Jul;33(7):741–9 (Eng. Abstr.) (Jpn)

[Regional cerebrocerebellar perfusion imaging in spinocerebellar degeneration using technetium-99m-HM-PAO] Tanaka M, et al. **Rinsho Shinkeigaku** 1988 Jul;28(7):769–74 (Eng. Abstr.) (Jpn)

[Radioisotope infusion cisternography in the diagnosis of cerebrospinal rhinorrhea] Królicki L, et al. **Pol Przegl Radiol (Warszawa)** 1987 Nov-Dec;51(6):306–9 (Eng. Abstr.) (Pol)

[Comparison of the diagnostic usefulness of Tc-HEPIDA and Tc 99m p-butyl-IDA complexes] Studniarek M, et al. **Pol Przegl Radiol (Warszawa)** 1987 Sep-Oct;51(5):245–9 (Eng. Abstr.) (Pol)

[Visualization of subcutaneous metastases of hypernephroid cancer using 99mTc-dimercaptosuccinic acid] Smirnov IuN, et al. **Med Radiol (Mosk)** 1989 Jun;34(6):63–5 (Rus)

[Indium-111-antimyosin for the evaluation of myocardial damage in patients with suspected myocarditis and cardiac rejection] Carrió I, et al. **Rev Esp Cardiol** 1988;41 Suppl 2:70–6 (Eng. Abstr.) (Spa)

[Simultaneous tests of ventricular function and myocardial perfusion during exercise using a new agent labeled with TC-99m] Pérez Baliño N, et al. **Rev Esp Cardiol** 1988 May; 41(5):271–7 (Eng. Abstr.) (Spa)

[Scintigraphy of the biliary tract with 99Tc DISIDA in patients with symptomatic chronic cholecystitis. Prospective study] Lobo G, et al. **Rev Med Chil** 1988 Apr; 116(4):343–9 (Eng. Abstr.) (Spa)

ISOLATION & PURIFICATION

Improvement of the reproducibility of ion-pair HPLC of 99mTc(Sn)EHDP complexes and the influence of the Sn(II) concentration on the composition of the reaction mixture. Nieuwland RJ, et al. **Int J Rad Appl Instrum [A]** 1989;40(2):153–7

METABOLISM

Dual pathway clearance of 99mTc-DTPA from the bronchial mucosa. Bennett WD, et al. **Am Rev Respir Dis** 1989 May;139(5):1132–8

Permeability of the bronchial mucosa to 99mTc-DTPA in asthma. Ilowite JS, et al. **Am Rev Respir Dis** 1989 May; 139(5):1139–43

Identification of microsomal metabolites of spirogermanium. Benfenati E, et al. **Anticancer Res** 1989 Mar-Apr; 9(2):507–10

Organometallic estrogens: synthesis, interaction with lamb uterine estrogen receptor, and detection by infrared spectroscopy. Vessières A, et al. **Biochemistry** 1988 Sep 6;27(18):6659–66

Comparison of the myocardial uptake of a technetium-labeled isonitrile analogue and thallium. Leppo JA, et al. **Circ Res** 1989 Sep;65(3):632–9

Altered clearance of inhaled 99mTc-pentetate aerosols following exposure to cadmium chloride aerosols in ferrets. Platner JW, et al. **Exp Lung Res** 1989;15(1):77–91

Comparison of the biodistribution of 153Gd-labeled Gd(DTPA)2-, Gd(DOTA)-, and Gd(acetate)n in mice. Wedeking P, et al. **Int J Rad Appl Instrum [B]** 1988; 15(4):395–402

Extraction of [99mTc]-d,l-HM-PAO across the blood-brain barrier. Andersen AR, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S44–51

Bifunctional antitumor compounds: interaction of adriamycin with metallocene dichlorides. Moustatih A, et al. **J Med Chem** 1989 Feb;32(2):336–42

Uptake of perfusion imaging agents by transplanted hearts: an experimental study in rats. Bergsland J, et al. **J Surg Res** 1989 Feb;46(2):184–6

99mTc-HMPAO washout from brain [letter] Ell PJ, et al. **Lancet** 1989 Mar 25;1(8639):665–6

99mTc-HMPAO washout in prognosis of stroke [letter] Limburg M, et al. **Lancet** 1989 Apr 15;1(8642):839–40

Photoexcitation of zinc phthalocyanine in mouse myeloma cells: the observation of triplet states but not of singlet oxygen. Firey PA, et al. **Photochem Photobiol** 1988 Sep; 48(3):357–60

Stability, protein binding and clearance studies of [99mTc]DTPA. Evaluation of a commercially available dry-kit. Rehling M. **Scand J Clin Lab Invest** 1988 Nov; 48(7):603–9

Binding and diffusion characteristics of 14C EDTA and 99mTc DTPA in respiratory tract mucus glycoprotein from patients with chronic bronchitis. Cheema MS, et al. **Thorax** 1988 Sep;43(9):669–73

PHARMACOKINETICS

Process of carbonyl iron absorption from the rat duodenal mucosa. Nakamura T, et al. **Acta Pathol Jpn** 1988 Nov; 38(11):1377–90

Gadolinium-DPTA: a radiographic contrast agent [letter] Janon EA. **AJR Am J Roentgenol** 1989 Jun;152(6):1348

A comparison of the pharmacokinetics of 14C-labelled APD and 99mTc-labelled APD in the mouse. Daley-Yates PT, et al. **Calcif Tissue Int** 1988 Aug;43(2):125–7

Evaluation of sulfonated aluminum phthalocyanines for use in photochemotherapy. Cellular uptake studies [published erratum appears in Cancer Lett 1989 Apr;45(1):81] Berg K, et al. **Cancer Lett** 1989 Jan;44(1):7–15

Effect of tumour location on selective uptake and retention of phthalocyanines. Chan WS, et al. **Cancer Lett** 1989 Jan; 44(1):73–7

Liver-spleen visualization following aerosol lung ventilation with technetium-99m DTPA. Goyer P, et al. **Clin Nucl Med** 1989 Feb;14(2):141–2

Uptake and kinetics of Tc-99m hexakis 2-methoxy isobutyl isonitrile in benign and malignant lesions in the lungs. Hassan IM, et al. **Clin Nucl Med** 1989 May;14(5):333–40

Pharmacokinetic studies of DISIDA disposition. I. Animal studies. Fraser IA, et al. **Eur J Nucl Med** 1988; 14(9–10):431–5

Pharmacokinetic studies of DISIDA disposition. II. Clinical studies. Love JE, et al. **Eur J Nucl Med** 1988; 14(9–10):436–40

Uptake and release of two new Tc-99m labeled myocardial blood flow imaging agents in cultured cardiac cells. Maublant JC, et al. **Eur J Nucl Med** 1989;15(4):180–2

Two routes for 99mTc-DMSA uptake into the renal cortical tubular cell. Peters AM, et al. **Eur J Nucl Med** 1988; 14(11):555–61

Pulmonary permeability in primary ciliary dyskinesia. Groth S, et al. **Eur Respir J** 1989 Jan;2(1):64–70

Technetium-99m-iminodiacetic acid organic anions: review of biokinetics and clinical application in hepatology. Krishnamurthy S, et al. **Hepatology** 1989 Jan;9(1):139–53 (164 ref.)

The Noah's Ark experiment: species dependent biodistributions of cationic 99mTc complexes. Deutsch E, et al. **Int J Rad Appl Instrum [B]** 1989;16(3):191–232 (31 ref.)

Technetium-99m complexes of dimethylaminomethylene diphosphonate (DMAD)—II. Biological distributions of 99mTc-DMAD components isolated by anion exchange HPLC. Holland ME, et al. **Int J Rad Appl Instrum [B]** 1989;16(3):313–7

Radiopharmacological profiles of tracers under pathophysiological conditions. Bone uptake of

99mTc-phytate in vitamin D deficient rats. Noronha OP, et al. **Int J Rad Appl Instrum [B]** 1989;16(3):261-7

Biodistribution of two 99mTc-cardiac glycosides with end glucose unit: effect of lipophilicity on their relative myocardial accumulation. Sarkar HS, et al. **Int J Rad Appl Instrum [B]** 1989;16(1):41-6

Comparative pharmacokinetics of gadolinium DTPA and gadolinium chloride. Dean PB, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S258-60

Comparative myocardial uptake characteristics of hexakis (alkylisonitrile) technetium(I) complexes. Effect of lipophilicity. Piwnica-Worms D, et al. **Invest Radiol** 1989 Jan;24(1):25-9

Retention of [99mTc]-d,l-HM-PAO in rat brain: an autoradiographic study. Hoffman TJ, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S38-43

The retention of [99mTc]-d,l-HM-PAO in the human brain after intracarotid bolus injection: a kinetic analysis. Lassen NA, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S13-22

Initial cerebral HM-PAO distribution compared to LCBF: use of a model which considers cerebral HM-PAO trapping kinetics. Lear JL. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S31-7

Determination of flow and rate constants in a kinetic model of [99mTc]-hexamethyl-propylene amine oxime in the human brain. Matsuda H, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S61-8

The retention mechanism of technetium-99m-HM-PAO: intracellular reaction with glutathione. Neirinckx RD, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S4-12

Reversed-phase liquid chromatographic determination of chloroaluminum phthalocyanine tetrasulfonate in canine tissues and fluids. Zuk MM, et al. **J Chromatogr** 1988 Dec 9;433:367-72

Renal handling of technetium-99m DMSA: evidence for glomerular filtration and peritubular uptake. de Lange MJ, et al. **J Nucl Med** 1989 Jul;30(7):1219-23

Comparison of the clearance of technetium-99m MAG3 and iodine-131 OIH [letter] Kim CK, et al. **J Nucl Med** 1988 Nov;29(11):1878-9

Technetium-99m MAG-3 clearances after captopril in experimental renovascular hypertension. Lee HB, et al. **J Nucl Med** 1989 May;30(5):666-71

Technetium-99m ECD: a new brain imaging agent: in vivo kinetics and biodistribution studies in normal human subjects. Vallabhajosula S, et al. **J Nucl Med** 1989 May; 30(5):599-604

Kinetic sensitivity of a receptor-binding radiopharmaceutical: technetium-99m galactosyl-neoglycoalbumin. Vera DR, et al. **J Nucl Med** 1989 Sep;30(9):1519-30

Effect of alpha-naphthylisothiocyanate on blood clearance of 99mTc-phytate in dogs. Shibata H, et al. **J Toxicol Sci** 1989 May;14(2):67-75

99mTc-HMPAO uptake and washout in stroke [letter] Bowler JV, et al. **Lancet** 1989 May 20;1(8647):1140-1

Bismuth absorption from the colloidal subcitrate [letter] Hespe W, et al. **Lancet** 1988 Nov 26;2(8622):1258

99mTc-HMPAO washout in prognosis of stroke [letter] Steinling M, et al. **Lancet** 1989 Mar 18;1(8638):619-20

In vitro photosensitization I. Cellular uptake and subcellular localization of mono-L-aspartyl chlorin e6, chloro-aluminum sulfonated phthalocyanine, and photofrin II. Roberts WG, et al. **Lasers Surg Med** 1989;9(2):90-101

99Tcm-diastereomeric dimercaptosuccinic acid complexes: comparison of their biodistribution. Awh OD, et al. **Nucl Med Commun** 1989 Jun;10(6):449-54

The influence of age on the pulmonary clearance of 99Tcm-DTPA radioaerosol. Pigorini F, et al. **Nucl Med Commun** 1988 Dec;9(12):965-71

Reproducibility of quantitative 99Tcm-MAG 3 measurements in rats. Tondeur M, et al. **Nucl Med Commun** 1989 Jun;10(6):431-4

A novel means of comparing the bioequivalence of two formulations of tripotassium dicitrato bismuthate (De-Noltab). Coghill SB, et al. **Postgrad Med J** 1988 Oct; 64(756):761-3

Ozone-induced accelerated lung clearance of 99mTc-DTPA aerosol in conscious sheep. Hornof WJ, et al. **Respir Physiol** 1989 Sep;77(3):277-90

Organ distribution and pharmacokinetics of titanium after treatment with titanocene dichloride. Köpf-Maier P, et al. **Toxicology** 1988 Oct;51(2-3):291-8

Pharmacokinetics of antimony during treatment of visceral leishmaniasis with sodium stibogluconate or meglumine antimoniate. Chulay JD, et al. **Trans R Soc Trop Med Hyg** 1988;82(1):69-72

Radioisotopic transit parameters in obstruction of pelviureteral junction. Verboven M, et al. **Urology** 1988 Oct;32(4):370-4

[Studies of distribution and myocardial imaging on 99mTc-CPI in animals] Wu H. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Jun; 10(3):219-22 (Eng. Abstr.) **(Chi)**

[Comparison of the renal clearance of 99mTc-DTPA and inulin, 131I-hippurate and PAH and creatinine clearance in Wistar rats] Hagemann J, et al. **Radiobiol Radiother (Berl)** 1988;29(4):497-505 (Eng. Abstr.) **(Ger)**

[Percutaneous reabsorption of Tc 99m heparinoid] Klug W, et al. **Z Exp Chir Transplant Kunstliche Organe** 1988; 21(5):281-4 (Eng. Abstr.) **(Ger)**

[The behavior of metabolites, methylated selenium, in mouse after oral administration of sodium selenite] Oyamada N. **Nippon Eiseigaku Zasshi** 1988 Aug;43(3):754-62 (Eng. Abstr.) **(Jpn)**

[99mTc-fosfon distribution in the hip joints and femoral arteries in femur head osteochondropathy in children] Kovalenko IuD, et al. **Med Radiol (Mosk)** 1989 Jul; 34(7):29-36 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Central action of sanumgerman administered orally in mice. Kleinrok Z, et al. **Acta Physiol Pol** 1988 Jul-Aug; 39(4):244-53

The effect of bismuth subsalicylate on the histologic gastritis seen with Campylobacter pylori: a placebo-controlled, randomized study. Lanza FL, et al. **Am J Gastroenterol** 1989 Sep;84(9):1060-4

Colloidal bismuth subcitrate (De-Nol) inhibits degradation of gastric mucus by Campylobacter pylori protease. Sarosiek J, et al. **Am J Gastroenterol** 1989 May;84(5):506-10

Pharmacological activities of spirogermanium and other structurally related azaspiranes: effects on tumor cell and macrophage functions. Mirabelli CK, et al. **Anticancer Drug Des** 1989 Mar;3(4):231-42

The antiinflammatory and immunosuppressive activity of HEPIDA-Ca and HEPIDA-Zn complex compounds. Samochocka K, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(3):377-80

Antitumor activity of an ionic titanocene tetrachloroferrate derivative against some solid experimental tumors. Köpf-Maier P, et al. **Arzneimittelforschung** 1989 Apr; 39(4):488-90

Lead inhibits oxidative metabolism of macrophages exposed to macrophage-activating factor. Buchmüller-Rouiller Y, et al. **Biochem J** 1989 Jun 1;260(2):325-32

Adriamycin and its iron(III) and copper(II) complexes. Glutathione-induced dissociation; cytochrome c oxidase inactivation and protection; binding to cardiolipin. Hasinoff BB, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3663-9

Ionic titanocene complexes: a new type of antitumor agent. Köpf-Maier P, et al. **Cancer Chemother Pharmacol** 1989; 24(1):23-7

Renal proton magnetic resonance and bound and free water distribution in the normal, angiotensin II-and ADH-infused rats, before and after Gd DTPA paramagnetic enhancement. Iaina A, et al. **Child Nephrol Urol** 1988-89; 9(1-2):6-10

Mechanism of action of nonantisecretory agents [letter] De Wal J. **Dig Dis Sci** 1988 Oct;33(10):1342

Colloidal bismuth subcitrate. A review of its pharmacodynamic and pharmacokinetic properties, and its therapeutic use in peptic ulcer disease. Wagstaff AJ, et al. **Drugs** 1988 Aug;36(2):132-57 (136 ref.)

Effect of bismuth subcitrate on amphibian gastroduodenal bicarbonate secretion. Shorrock CJ, et al. **Gut** 1989 Jul; 30(7):917-21

Immunomodulatory activity and non-specific suppressor cell generation by spirogermanium in murine and rat models of cell-mediated immunity. Badger AM, et al. **Immunopharmacology** 1988 Jul-Aug;16(1):33-43

Morphologic evaluation of gastric mucosal protection by colloidal bismuth subcitrate (De-Nol). van den Hoven WE, et al. **Int J Tissue React** 1988;10(5):297-304

In vitro interactions of gadolinium DOTA meglumine and gadolinium DTPA meglumine on hemostasis. Corot C, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S261-3

Serum iron and serum bilirubin after administration of Gd-DTPA-dimeglumine. A pharmacologic study in healthy volunteers. Niendorf HP, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S275-80

The adriamycin-iron(III) complex is a potent inhibitor of protein kinase C. Hannun YA, et al. **J Biol Chem** 1989 Jun 15;264(17):9960-6

Antiviral activity of carboxyethylgermanium sesquioxide (Ge-132) in mice infected with influenza virus. Aso H, et al. **J Biol Response Mod** 1989 Apr;8(2):180-9

Iron-induced lipid peroxidation and inhibition of proliferation in Ehrlich ascites tumor cells. Tillian HM, et al. **J Cancer Res Clin Oncol** 1989;115(1):79-83

Sensitivity of Campylobacter pylori to colloidal bismuth subcitrate [letter] Goodwin CS, et al. **J Clin Pathol** 1989 Feb;42(2):216-7

Activation of Hageman factor (factor XII) by bismuth subgallate, a hemostatic agent. Thorisdottir H, et al. **J Lab Clin Med** 1988 Oct;112(4):481-6

Chloride-dependent uncoupling of oxidative phosphorylation by triethyllead and triethyltin increases cytosolic free calcium in guinea pig cerebral cortical synaptosomes [published erratum appears in J Neurochem 1989 Feb;52(2):661] Kauppinen RA, et al. **J Neurochem** 1988 Nov;51(5):1617-25

Effect of EDTA and zinc-methionine complex on zinc absorption by rat intestine. Hempe JM, et al. **J Nutr** 1989 Aug;119(8):1179-87

Effect of metal containing compounds on superoxide release from phorbol myristate acetate stimulated murine peritoneal macrophages: inhibition by auranofin and spirogermanium. Mirabelli CK, et al. **J Rheumatol** 1988 Jul;15(7):1064-9

The effect of gadolinium DTPA on tissue water compartments in slow- and fast-twitch rabbit muscles. Adzamli IK, et al. **Magn Reson Med** 1989 Aug;11(2):172-81

Effects of lead treatment on intracellular iron and copper concentrations in cultured astroglia. Tiffany-Castiglioni E, et al. **Metab Brain Dis** 1987 Mar;2(1):61-79

Microcalorimetric studies of the effects of platinum group metal complexes on bacterial growth. Bunker JC, et al. **Microbios** 1989;58(235):83-93

The interaction of triethyl lead with tubulin and microtubules. Zimmermann HP, et al. **Mutat Res** 1988 Oct; 201(2):293-302

Simultaneous induction of neuropeptide Y and gonadotropin-releasing hormone release in the rabbit hypothalamus. Pau KY, et al. **Neuroendocrinology** 1989 Feb;49(2):197-201

Alteration of the visual evoked potential and the electroretinogram in lead-treated monkeys. Lilienthal H, et al. **Neurotoxicol Teratol** 1988 Sep-Oct;10(5):417-22

Lead acutely reduces glucose utilization in the rat brain especially in higher auditory centers. Bertoni JM, et al. **Neurotoxicology** 1988 Summer;9(2):235-42

Chemical reactions occurring between metal-containing antineoplastic drugs and biological molecules. Litterst CL. **Pharmacol Ther** 1988;38(2):215-51 (198 ref.)

Selective inhibition of endothelium-dependent relaxation by gold-containing compounds. Ohlstein EH, et al. **Pharmacology** 1989;38(2):93-100

Cytotoxic and mutagenic effects of the photodynamic action of chloroaluminum phthalocyanine and visible light in L5178Y cells. Evans HH, et al. **Photochem Photobiol** 1989 Jan;49(1):43-7

Induction of DNA-protein cross-links in Chinese hamster cells by the photodynamic action of chloroaluminum phthalocyanine and visible light. Ramakrishnan N, et al. **Photochem Photobiol** 1988 Sep;48(3):297-303

Mouse skin photosensitivity with dihaematoporphyrin ether (DHE) and aluminium sulphonated phthalocyanine (AlSPc): a comparative study. Tralau CJ, et al. **Photochem Photobiol** 1989 Mar;49(3):305-12

Review of the modes of action of colloidal bismuth subcitrate. Hall DW. **Scand J Gastroenterol Suppl** 1989;157:3-6; discussion 21-2 (24 ref.)

Tris acetylacetonate aluminium(III) induces osmotic fragility and acanthocyte formation in suspended erythrocytes. Zatta P, et al. **Toxicol Lett** 1989 Jan;45(1):15-21

Protective effect of an organic germanium compound on warm ischemia and prolonged kidney preservation. Masaki Y, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1250-1

Subcellular distribution of titanium in the liver after treatment with the antitumor agent titanocene dichloride. A study using electron spectroscopic imaging. Köpf-Maier P, et al. **Virchows Arch [B]** 1989;57(4):213-22

[Antagonistic effects of zinc on the inhibition of delta-aminolevulinic acid dehydratase by lead] Ding XC, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Mar;9(2):185-8 (Eng. Abstr.) **(Chi)**

[Anti-inflammatory activity of four copper complexes of alpha-amino acids] Arnaud C, et al. **Ann Pharm Fr** 1987; 45(6):453-7 (Eng. Abstr.) **(Fre)**

[The effect of a calcium carbonate-bismuth subsalicylate combination on intragastric acidity over the course of 24 hours. A randomized study of healthy probands] Hopert R, et al. **Med Klin** 1989 Mar 15;84(3):135-8 (Eng. Abstr.) **(Ger)**

[1-Oxovanadatrane--an inhibitor of experimental cholesterolemia] Kononova NS, et al. **Dokl Akad Nauk SSSR** 1988;302(2):468-9 **(Rus)**

[Transmembrane transport of chlorine anions by coordination-unsaturated cobalt (II) complexes with o-phenanthroline] Omel'chenko AM, et al. **Dokl Akad Nauk SSSR** 1988;301(5):1238-41 **(Rus)**

[Isopropoxyhermatran--an inhibitor of the development of experimental atherosclerosis of the aorta and an anticoagulant] Rasulov MM, et al. **Dokl Akad Nauk SSSR** 1989;305(2):487-90 **(Rus)**

[Fungicidal activity of bis-arene-chromium derivatives] Shevchenko IV, et al. **Dokl Akad Nauk SSSR** 1988; 301(2):487-9 **(Rus)**

POISONING

Reversible toxicity in poisoning with colloidal bismuth subcitrate. Hudson M, et al. **BMJ** 1989 Jul 15;299(6692):159

Treatment of experimental acute uranium poisoning by chelating agents. Ortega A, et al. **Pharmacol Toxicol** 1989 Mar;64(3):247-51

Neuropsychiatric symptoms following bismuth intoxication [letter] Eskens GT. **Postgrad Med J** 1988 Sep;64(755):724

STANDARDS

Routine determination of radiochemical purity of 99mTc-MIBI. Proulx A, et al. **Int J Rad Appl Instrum [A]** 1989;40(1):95-7

THERAPEUTIC USE

The pharmacologic activity of complexes and mixtures with copper and salicylates or aminopyrine following oral dosing in rats. Korolkiewicz Z, et al. **Agents Actions** 1989 Mar; 26(3-4):355-9

Phase II trial of spirogermanium and vindesine in malignant glioma. Alavi JB, et al. **Am J Clin Oncol** 1989 Feb; 12(1):8-10

Kala azar with disseminated dermal leishmaniasis. Kumar PV, et al. **Am J Trop Med Hyg** 1989 Feb;40(2):150-3

Photodynamic therapy for experimental intraocular melanoma using chloroaluminum sulfonated phthalocyanine. Panagopoulos JA, et al. **Arch Ophthalmol** 1989 Jun;107(6):886–90

Assessment of the preclinical activity of budotitane in three different transplantable tumor systems, its lack of mutagenicity, and first results of clinical phase I studies. Keppler BK, et al. **Arzneimittelforschung** 1989 Jun; 39(6):706–9

Tumor inhibition by ferricenium complexes. Activity against some solid experimental tumors. Köpf-Maier P, et al. **Arzneimittelforschung** 1989 Mar;39(3):369–71

Antiinflammatory, analgesic, and antiulcer activities of copper complexes suggest their use in a physiologic approach to treatment of arthritic diseases. Sorenson JR. **Basic Life Sci** 1988;49:591–4

Tumor inhibition by titanocene complexes: influence on xenografted human adenocarcinomas of the gastrointestinal tract. Köpf-Maier P. **Cancer Chemother Pharmacol** 1989; 23(4):225–30

Effects of two pyridinalalkyliminerhodium(I) complexes in mice bearing MCa mammary carcinoma. Sava G, et al. **Cancer Chemother Pharmacol** 1989;24(5):302–6

Retention of antimony in hair during leishmaniasis treatment. Dorea JG, et al. **Clin Chim Acta** 1989 Feb 22;179(3):341–5

Effects of antibacterial treatment of Campylobacter pylori-associated gastritis in children [letter] De Giacomo C, et al. **Gastroenterology** 1988 Dec;95(6):1699

Non-ulcer dyspepsia and short term De-Nol therapy: a placebo controlled trial with particular reference to the role of Campylobacter pylori. Rokkas T, et al. **Gut** 1988 Oct;29(10):1386–91

Chemotherapy of antimonial compounds in kala-azar infection. Part IV. Further observations on the therapeutic values of urea stibamine. By U.N. Brahmachari, 1922 [classical article] Brahmachari UN. **Indian J Med Res** 1989 Jan;89:393–404

Antitumor properties of organometallic metallocene complexes of tin and germanium. Köpf-Maier P, et al. **J Cancer Res Clin Oncol** 1988;114(5):502–6

Chemotherapy of experimental visceral leishmaniasis in the opossum. White MR, et al. **J Parasitol** 1989 Feb;75(1):176–8

Treatment of Campylobacter pylori-associated antral gastritis in children with bismuth subsalicylate and ampicillin. Drumm B, et al. **J Pediatr** 1988 Nov; 113(5):908–12

Phase II study of N-methylformamide, spirogermanium, and 4-demethoxydaunorubicin in the treatment of non-small cell lung cancer (EST 3583): an Eastern Cooperative Oncology Group study. Ettinger DS, et al. **Med Pediatr Oncol** 1989;17(3):197–201

Treatment of Campylobacter pylori gastritis: a pilot study using pirenzepine dihydrochloride (Gastrozepin) and three formulations of colloidal bismuth subcitrate (De-Nol). Morris A, et al. **N Z Med J** 1988 Oct 26;101(856 Pt 1):651–4

114Inm oxine-labelled lymphocytes—therapeutic applications. Hamilton D, et al. **Nucl Med Commun** 1988 Oct;9(10):797–802

Effect of photodynamic therapy on anti-tumor immune defenses: comparison of the photosensitizers hematoporphyrin derivative and chloro-aluminum sulfonated phthalocyanine. Marshall JF, et al. **Photochem Photobiol** 1989 May;49(5):627–32

Low dose glucantime therapy in Leishmania viannia braziliensis (Lvb) infections. Costa JM, et al. **Rev Soc Bras Med Trop** 1988 Apr–Jun;21(2):85–6

Tripotassium dicitrate bismuthate and ranitidine in duodenal ulcer. Healing and influence on recurrence. Bianchi Porro G, et al. **Scand J Gastroenterol** 1988 Dec;23(10):1232–6

Effects of colloidal bismuth subcitrate on aspirin-induced gastric microbleeding, DNA loss, and prostaglandin formation in humans. Konturek SJ, et al. **Scand J Gastroenterol** 1988 Sep;23(7):861–6

Colloidal bismuth in the treatment of duodenal ulceration: the benefit for the patient. Miller JP. **Scand J Gastroenterol Suppl** 1989;157:16–20; discussion 21–2 (41 ref.)

Bismuth is better. Tytgat GN. **Scand J Gastroenterol Suppl** 1988;155:16–7

[Campylobacter pylori in chronic gastritis and the therapeutic efficacy of colloidal bismuthate] Chen SP, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Apr;27(4):202–4, 259 (Eng. Abstr.) **(Chi)**

[Transmucosal potential difference in erosive duodenitis and its changes after treatment with colloidal bismuth subcitrate] Huang JF. **Chung Hua Nei Ko Tsa Chih** 1988 Sep;27(9):566–8, 589 (Eng. Abstr.) **(Chi)**

[Comparative study of the efficacy of De-Nol and ranitidine in treating duodenal ulcer] Oproiu A, et al. **Rev Med Interna [Med Interna]** 1988 Jul–Aug;40(4):375–84 (Eng. Abstr.) **(Rum)**

[Glucantime and allopurinol in the treatment of persistent infantile visceral leishmaniasis] de la Cruz Amorós E, et al. **An Esp Pediatr** 1988 Jul;29(1):77–9 **(Spa)**

[Gastroduodenal ulcer and Campylobacter pylori. Behavior under treatment with de-nol or metronidazole] Velasco Elizalde C, et al. **GEN** 1987 Jul–Sep;41(3):99–103 (21 ref.) (Eng. Abstr.) **(Spa)**

TOXICITY

Cirrhosis of the liver induced by cupric nitrilotriacetate in Wistar rats. An experimental model of copper toxicosis. Toyokuni S, et al. **Am J Pathol** 1989 Jun;134(6):1263–74

The effects of lead on the male rat reproductive system. Barratt CL, et al. **Andrologia** 1989 Mar–Apr;21(2):161–6

Anti-cancer action of metal complexes: electron transfer and oxidative stress? Kovacic P, et al. **Anticancer Drug Des** 1988 Dec;3(3):205–16 (107 ref.)

Effects of organic and inorganic lead on the oxygen equilibrium curves of the fresh water field crab, Barytelphusa guerini. Tulasi SJ, et al. **Bull Environ Contam Toxicol** 1989 Feb;42(2):247–53

Hepatic mitochondrial oxidative metabolism and lipid peroxidation in experimental hexachlorobenzene-induced porphyria with dietary carbonyl iron overload. Feldman ES, et al. **Hepatology** 1989 May;9(5):686–92

Mode of action of iron on arylsulphatases under acute lead acetate treated conditions in rats. Santra M, et al. **Indian J Biochem Biophys** 1989 Apr;26(2):92–7

Kinetic parameters of the inhibition of red blood cell aminolevulinic acid dehydratase by triethyl lead and its reversal by dithiothreitol and zinc. Yagminas AP, et al. **J Biochem Toxicol** 1987 Summer;2:115–24

Mechanism of toxicity of an experimental bidentate phosphine gold complexed antineoplastic agent in isolated rat hepatocytes. Smith PF, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):944–50

Triethyllead-induced peroxidative damage in various regions of the rat brain. Ali SF, et al. **J Toxicol Environ Health** 1989;26(2):235–42

Responses of dopaminergic and serotonergic systems to triethyllead intoxication. DeHaven-Hudkins DL, et al. **Neurotoxicol Teratol** 1988 Jul–Aug;10(4):279–85

Lead exposure, environmental temperature, nesting and consummatory behavior of adult male mice of two ages. DeLuca J, et al. **Neurotoxicol Teratol** 1989 Jan–Feb; 11(1):7–11

Effects of triethyl lead chloride on oestradiol metabolism in the female rat liver microsomal fraction. Odenbro A, et al. **Pharmacol Toxicol** 1988 Oct;63(4):248–52

Perinatal growth retardation caused by triethyl lead chloride treatment of mice during late gestation. Odenbro A, et al. **Pharmacol Toxicol** 1988 Oct;63(4):253–6

Comparative pneumotoxicity of cyclopentadienyl manganese tricarbonyl and methylcyclopentadienyl manganese tricarbonyl. Clay RJ, et al. **Toxicol Appl Pharmacol** 1989 May;98(3):434–43

In vivo and in vitro cardiotoxicity of a gold-containing antineoplastic drug candidate in the rabbit. Hoke GD, et al. **Toxicol Appl Pharmacol** 1989 Sep 1;100(2):293–306

The mechanism of acute cytotoxicity of triethylphosphine gold(I) complexes. III. Chlorotriethylphosphine gold(I)-induced alterations in isolated rat liver mitochondrial function. Hoke GD, et al. **Toxicol Appl Pharmacol** 1989 Jun 1;99(1):50–60

[Data regarding the substantiation of MPEL of fungicides phyton (cartocide) and phyton C (cercocide) in the air of the work area] Gurova AI, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):54 **(Rus)**

[Biocompatibility of microsurgical suture material modified with element-organic compounds] Makeev SD, et al. **Klin Khir** 1989;(1):19–20 (Eng. Abstr.) **(Rus)**

URINE

[Comparison of the renal clearance of 99mTc-DTPA, inulin 131I-hippurate and PAH and also creatinine clearance in Wistar rats] Hagemann I, et al. **Radiol Diagn (Berl)** 1988; 29(3):437–44 (Eng. Abstr.) **(Ger)**

ORGANOPHOSPHORUS COMPOUNDS

see related
INSECTICIDES, ORGANOPHOSPHATE

Formation of directly mutagenic alpha-hydroxy-N-nitrosopiperidine phosphate ester by near-ultraviolet irradiation of N-nitrosopiperidine in phosphate buffer. Arimoto S, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1140–6

Binding energetics of phosphorus-containing inhibitors of thermolysin. Grobelny D, et al. **Biochemistry** 1989 Jun 13; 28(12):4948–51

Use of EDTA derivatization to characterize interactions between oligodeoxyribonucleoside methylphosphonates and nucleic acids. Lin SB, et al. **Biochemistry** 1989 Feb 7;28(3):1054–61

Effect of ionic strength on the hybridization of oligodeoxynucleotides with reduced charge due to methylphosphonate linkages to unmodified oligodeoxynucleotides containing the complementary sequence. Quartin RS, et al. **Biochemistry** 1989 Feb 7; 28(3):1040–7

Effect of poly(ethylene glycol) on the Ca2+-induced fusion of didodecyl phosphate vesicles. Rupert LA, et al. **Biochemistry** 1988 Oct 18;27(21):8232–9

Virus removal or inactivation in hemoglobin solutions by ultrafiltration or detergent/solvent treatment. Bechtel MK, et al. **Biomater Artif Cells Artif Organs** 1988;16(1–3):123–8

Hydrophilic polyphosphazenes as hydrogels: radiation cross-linking and hydrogel characteristics of poly[bis(methoxyethoxyethoxy)phosphazene] Allcock HR, et al. **Biomaterials** 1988 Nov;9(6):509–13

A comparative study of the permeation of dihexadecyl phosphate vesicles by various carboxylic acids and some of their tetrazole analogues. Pernice P, et al. **Biophys Chem** 1988 Oct;32(1):15–20

Reaction of organic phosphate esters with chlorine in aqueous solution. Ishikawa S, et al. **Bull Environ Contam Toxicol** 1988 Jul;41(1):143–50

Radiation-induced release of undamaged uracil from polyuridylic acid and the formation of phosphomonoester end groups in irradiated polynucleotides. Deeble DJ, et al. **Free Radic Res Commun** 1989;6(2–3):133–5

Complex of N-phosphonacetyl-L-aspartate with aspartate carbamoyltransferase. X-ray refinement, analysis of conformational changes and catalytic and allosteric mechanisms. Ke HM, et al. **J Mol Biol** 1988 Dec 5; 204(3):725–47

Oligothymidylates covalently linked to an acridine derivative and with modified phosphodiester backbone: circular dichroism studies of their interactions with complementary sequences. Durand M, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):1823–37

Improved chemistry for oligodeoxyribonucleotide synthesis substantially improves restriction enzyme cleavage of a synthetic 35mer. Farrance IK, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1231–45

5'-Levulinyl and 2'-tetrahydrofuranyl protection for the synthesis of oligoribonucleotides by the phosphoramidite approach. Iwai S, et al. **Nucleic Acids Res** 1988 Oct 25; 16(20):9443–56

In vitro investigation of shear bond strength of a phosphate based dentinal bonding agent. Huang GT, et al. **Scand J Dent Res** 1989 Feb;97(1):84–92

[Reactivity of oligonucleotide derivatives, containing a methylphosphate group. Affinity modification of target DNA by 4-N-(methyl-N-2-chlorethylamino)benzyl 3'- and 5'-phosphamide derivatives of octathymidylate containing methylphosphonate residues] Amirkhanov NV, et al. **Bioorg Khim** 1989 Mar;15(3):379–86 (Eng. Abstr.) **(Rus)**

[Enzyme reamination of phosphororganic analogs of aspartate and glutamate] Khurs EN, et al. **Bioorg Khim** 1989 Apr;15(4):552–5 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Sensitivity of cytomegalovirus to intravenous foscarnet treatment. Akesson-Johansson A, et al. **Bone Marrow Transplant** 1986 Dec;1(2):215–20

Foscarnet infusion at home [letter] Heley A. **Lancet** 1988 Dec 3;2(8623):1311

Foscarnet infusion at home [letter] Wood G, et al. **Lancet** 1989 Jan 21;1(8630):156

[Effect of the inhalation of tributyl phosphate on the behavior of Pu-239 in the bodies of rats] Chudin VA. **Gig Sanit** 1989 Apr;(4):71–2 **(Rus)**

[Distribution of plutonium in the body of rats after its intratracheal administration in the form of a Pu(IV)-TBP complex] Khalturin GV, et al. **Radiobiologiia** 1988 Sep–Oct;28(5):700–2 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Organophosphate exposure inhibits non-specific esterase staining in human blood monocytes. Mandel JS, et al. **Am J Ind Med** 1989;15(2):207–12

A study of nerve conduction velocity, late responses and neuromuscular synapse functions in organophosphate workers in India. Misra UK, et al. **Arch Toxicol** 1988; 61(6):496–500

Occupational allergic contact dermatitis from triphenyl phosphite. O'Driscoll JB, et al. **Contact Dermatitis** 1989 May;20(5):392–3

[Lysosomal enzyme activity in the nerve tissue of various species of animals after administration of a neurotoxic pesticide aphos] Kuz'minskaia UA, et al. **Gig Sanit** 1988 Nov;(11):86–8 **(Rus)**

ANALYSIS

Determination of isopentenyl diphosphate and farnesyl diphosphate in tissue samples with a comment on secondary regulation of polyisoprenoid biosynthesis. Bruenger E, et al. **Anal Biochem** 1988 Sep;173(2):321–7

Simultaneous determination of fenamiphos, its sulphoxide and sulphone in water by high-performance liquid chromatography. Singh R. **Analyst** 1989 Apr;114(4):425–7

HPLC determination of orthophosphate coexisting with large amounts of organophosphates in biological samples. Koshiishi I, et al. **Biomed Chromatogr** 1986 Aug;1(4):169–72

Application of thermospray liquid chromatography/mass spectrometry for determination of organophosphorus pesticides and trialkyl and triaryl phosphates. Barceló D. **Biomed Environ Mass Spectrom** 1988 Nov;17(5):363–9

Triaryl/alkyl phosphate residues in human adipose autopsy samples from six Ontario municipalities. LeBel GL, et al. **Bull Environ Contam Toxicol** 1989 Aug;43(2):225–30

Analysis of dimethyl hydrogen phosphite and its stability under simulated physiological conditions. Nomeir AA, et al. **J Anal Toxicol** 1988 Nov–Dec;12(6):334–8

Occurrence of 2-aminoethylphosphonic acid in feeds, ruminal bacteria and duodenal digesta from defaunated sheep. Ankrah P, et al. **J Anim Sci** 1989 Apr;67(4):1061–9

Anion-exchange high-performance liquid chromatography of technetium-labeled phosphonoacetic acid skeletal imaging agent preparations. Abdelnasser MA, et al.

J Chromatogr 1989 Mar 24;488(2):463–9
High–performance liquid and gas chromatography of dialkylphosphates, dialkylthiophosphates and dialkyldithiophosphates as their pentafluorobenzyl derivatives. Bardarov V, et al. **J Chromatogr** 1989 Jan 13; 462:233–41
High–performance liquid chromatography of bis[1,2–bis–(diphenylphosphi::o)ethane]gold(I) chloride, a potential antineoplastic agent. Crouch FW Jr, et al. **J Chromatogr** 1988 Sep 16;448(3):333–43
Resolution of neuroactive non–protein amino acid enantiomers by high–performance liquid chromatography utilising pre–column derivatisation with o–phthaldialdehyde–chiral thiols. Application to 2–amino–omega–phosphonoalkanoic acid homologues and alpha–amino–beta–N–methylaminopropanoic acid (beta–methylaminoalanine). Euerby MR, et al. **J Chromatogr** 1989 May 19;469:412–9
Analysis of glyphosate and (aminomethyl) phosphonic acid in a suspected poisoning case. Kageuka M, et al. **Nippon Hoigaku Zasshi** 1988 Apr;42(2):128–32
[The determination of the herbicide glyphosate and its chief metabolite aminomethylphosphonic acid (AMPA) in drinking water with the aid of HPLC] Gauch R, et al. **Z Lebensm Unters Forsch** 1989 Jan;188(1):36–8 (Eng. Abstr.) (Ger)

ANTAGONISTS & INHIBITORS

The bispyridinium–dioxime HLö–7. A potent reactivator for acetylcholinesterase inhibited by the stereoisomers of tabun and soman. de Jong LP, et al. **Biochem Pharmacol** 1989 Feb 15;38(4):633–40
Hormone– and dose schedule–dependent protection by HI–6 against soman and tabun poisoning. Lundy PM, et al. **Fundam Appl Toxicol** 1989 Apr;12(3):595–603

BIOSYNTHESIS

Formation and utilization of formyl phosphate by N10–formyltetrahydrofolate synthetase: evidence for formyl phosphate as an intermediate in the reaction. Mejillano MR, et al. **Biochemistry** 1989 Jun 13; 28(12):5136–45
Studies on the biosynthesis of bialaphos (SF–1293). 9. Biochemical mechanism of C–P bond formation in bialaphos: discovery of phosphoenolpyruvate phosphomutase which catalyzes the formation of phosphonopyruvate from phosphoenolpyruvate. Hidaka T, et al. **J Antibiot (Tokyo)** 1989 Mar;42(3):491–4
Studies on the biosynthesis of bialaphos (SF–1293). 8. Purification and characterization of 2–phosphinomethylmalic acid synthase from Streptomyces hygroscopicus SF–1293. Shimotohno KW, et al. **J Antibiot (Tokyo)** 1988 Aug;41(8):1057–65

BLOOD

Determination of phosphonoformate (foscarnet) in biological fluids by ion–pair reversed–phase liquid chromatography. Pettersson KJ, et al. **J Chromatogr** 1989 Mar 24; 488(2):447–55

CHEMICAL SYNTHESIS

Synthesis of polyconjugated aldehydes using a new Horner—Wadsworth—Emmons reagent. Rein T, et al. **Acta Chem Scand [B]** 1988 Sep;42(8):569–72
Application of the synthetic method to other amines. Sparkes MJ, et al. **Biochem J** 1989 May 15;260(1):296–7
Oligonucleotide N–alkylphosphoramidates: synthesis and binding to polynucleotides. Jäger A, et al. **Biochemistry** 1988 Sep 20;27(19):7237–46
Synthesis and antiviral activity of the nucleotide analogue (S)–1–[3–hydroxy–2–(phosphonylmethoxy)= propyl]cytosine. Bronson JJ, et al. **J Med Chem** 1989 Jul; 32(7):1457–63
Synthesis and antiviral activity of phosphonoacetic and phosphonoformic acid esters of 5–bromo–2'–deoxyuridine and related pyrimidine nucleosides and acyclonucleosides. Lambert RW, et al. **J Med Chem** 1989 Feb;32(2):367–74
Synthesis and pharmacology of a series of 3– and 4–(phosphonoalkyl)pyridine– and –piperidine–2–carboxylic acids. Potent N–methyl–D–aspartate receptor antagonists. Ornstein PL, et al. **J Med Chem** 1989 Apr;32(4):827–33

DIAGNOSTIC USE

99mTc–aminohexylidendiphosphonate and 99mTc–pyrophosphate in the scintigraphic diagnosis of experimental myocardial infarction in dogs. Duška F, et al. **Nuklearmedizin** 1988 Oct;27(5):226–7

ISOLATION & PURIFICATION

Liquid chromatographic separation of phosphorus oxo acids and other anions with postcolumn indirect fluorescence detection by aluminum–morin. Meek SE, et al. **Anal Chem** 1988 Jul 15;60(14):1397–400
Separation of three commercial forms of vitamin C (ascorbic acid, ascorbic–2–sulfate and ascorbate–2–polyphosphate) by HPLC. Felton SP, et al. **Proc Soc Exp Biol Med** 1989 Feb;190(2):217–8

METABOLISM

NMR studies of renal phosphate metabolites in vivo: effects of hydration and dehydration. Wolff SD, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):F581–9
Dissimilar plasmids isolated from Pseudomonas diminuta MG and a Flavobacterium sp. (ATCC 27551) contain identical opd genes. Harper LL, et al. **Appl Environ Microbiol** 1988 Oct;54(10):2586–9
Detection of carbon–phosphorus lyase activity in cell free extracts of Enterobacter aerogenes. Murata K, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):190–5
Analysis of kinetic data for irreversible enzyme inhibition. Gray PJ, et al. **Biochem J** 1989 Jan 15;257(2):419–24
Partial characterization of an enzyme that hydrolyzes sarin, soman, tabun, and diisopropyl phosphorofluoridate (DFP). Little JS, et al. **Biochem Pharmacol** 1989 Jan 1;38(1):23–9
Degradation by rat tissues in vitro of organophosphorus esters which inhibit cholinesterase. Pla A, et al. **Biochem Pharmacol** 1989 May 1;38(9):1527–33
Na+ and pH dependent transport of foscarnet via the phosphate carrier system across intestinal brush–border membrane. Tsuji A, et al. **Biochem Pharmacol** 1989 Mar 15;38(6):1019–22
Conformational differences between aged and nonaged pyrenebutyl–containing organophosphoryl conjugates of chymotrypsin as detected by optical spectroscopy. Steinberg N, et al. **Biochemistry** 1989 Feb 7;28(3):1248–53
Phosphonoglycoprotein from Metridium senile—heterogeneity of glycoproteins containing aminoethylphosphonic acid. Hurley JC, et al. **Comp Biochem Physiol [B]** 1977;58(3):253–9
A novel acid phosphatase excreted by Penicillium funiculosum that hydrolyzes both phosphodiesters and phosphomonoesters with aryl leaving groups. Yoshida H, et al. **J Biochem (Tokyo)** 1989 May;105(5):794–8
Cooperative binding of the bisubstrate analog N–(phosphonacetyl)–L–aspartate to aspartate transcarbamoylase and the heterotropic effects of ATP and CTP. Newell JO, et al. **J Biol Chem** 1989 Feb 15; 264(5):2476–81
Activation of glutamate by gamma–glutamate kinase: formation of gamma–cis–cycloglutamyl phosphate, an analog of gamma–glutamyl phosphate. Seddon AP, et al. **J Biol Chem** 1989 Jul 5;264(19):11326–35
Methyl acetyl phosphate as a covalent probe for anion–binding sites in human and bovine hemoglobins. Ueno H, et al. **J Biol Chem** 1989 Jul 25;264(21):12344–51
Proton motive force–dependent and –independent protein translocation revealed by an efficient in vitro assay system of Escherichia coli. Yamada H, et al. **J Biol Chem** 1989 Jan 25;264(3):1723–8
Body fluid analysis of a phosphonic acid angiotensin–converting enzyme inhibitor using high–performance liquid chromatography and post–column derivatization with o–phthalaldehyde. Kadin H, et al. **J Chromatogr** 1989 Jan 27;487(1):135–41
"Body burden" of phosphonoformic acid after topical and vaginal administration to rabbits and beagle dogs. Hussain AS, et al. **Methods Find Exp Clin Pharmacol** 1989 Feb; 11(2):111–4
Binding of some organophosphorus compounds at adenosine receptors in guinea pig brain membranes. Lau WM, et al. **Neurosci Lett** 1988 Nov 22;94(1–2):125–30
Conformational differences between aged and non–aged organophosphoryl conjugates of chymotrypsin. Steinberg N, et al. **Prog Clin Biol Res** 1989;289:293–304
Metabolism of N–nitroso–hydroxyethyl–alkylamine phosphate esters in the rat. Frank N, et al. **Toxicology** 1989 Jul 3;57(1):59–67
[P–chiral phosphates—the tools for studying the stereochemistry of enzymatic reactions of the transfer of phosphate or nucleotidyl groups] Niewiarowski W. **Postepy Biochem** 1988;34(1–2):81–114 (75 ref.) (Pol)
[Enzymes of the phosphogluconate pathway in amebas] Sopina VA, et al. **Tsitologiia** 1989 Jan;31(1):85–96 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

Pharmacokinetics of intermittently administered intravenous foscarnet in the treatment of acquired immunodeficiency syndrome patients with serious cytomegalovirus retinitis. Aweeka F, et al. **Antimicrob Agents Chemother** 1989 May; 33(5):742–5
Pharmacokinetics of foscarnet and distribution to cerebrospinal fluid after intravenous infusion in patients with human immunodeficiency virus infection. Sjövall J, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):1023–31
Pharmacokinetics of fosfosal in rats and dogs. Ramis J, et al. **Arzneimittelforschung** 1989 Jan;39(1):74–7
Carrot cells detoxify N–phosphonoacetyl–L–aspartate by esterification. Cole SC, et al. **Biochem J** 1988 Nov 1; 255(3):813–6
Membrane potential in liposomes measured by the transmembrane distribution of 86Rb+, tetraphenylphosphonium or triphenylmethylphosphonium: effect of cholesterol in the lipid bilayer. Nakazato K, et al. **Biochim Biophys Acta** 1988 Dec 8;946(1):143–50
Distribution of [3H]diisopropylfluorophosphate, [3H]soman, [3H]sarin, and their metabolites in mouse brain. Little PJ, et al. **Drug Metab Dispos** 1988 Jul–Aug;16(4):515–20
Effects of medium amino acids on ouabain–sensitive 86Rb+ –uptake and membrane–potential dependent [3H]tetraphenylphosphonium accumulation in Friend erythroleukemia cells. Schaefer A, et al. **Eur J Cell Biol** 1988 Aug;46(3):453–7
Bioavailability study of fosfosal and codeine administered alone or in combination. Ramis J, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Jul;27(7):352–7
Pharmacokinetics of fosfosal after single and multiple oral doses in man. Ramis J, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Sep;26(9):421–7
Age and growth–related changes in cyclopiazonic acid–potentiated lipophilic cation accumulation by cultured cells and binding to freeze–thaw lysed cells. Riley RT, et al. **J Biochem Toxicol** 1987 Fall–Winter;2:251–64
Influence of dimethylacetamide, N–N–diethyl–m–toluamide and 1–dodecylazacycloheptan–2–one on ex vivo permeation of phosphonoformic acid through rat skin. Hussain AS, et al. **Methods Find Exp Clin Pharmacol** 1988 Nov;10(11):691–4
Foscarnet in the treatment of cytomegalovirus retinitis in acquired immune deficiency syndrome. Lehoang P, et al. **Ophthalmology** 1989 Jun;96(6):865–73; discussion 873–4
[99mTc–fosfon distribution in the hip joints and femoral arteries in femur head osteochondropathy in children] Kovalenko IuD, et al. **Med Radiol (Mosk)** 1989 Jul; 34(7):29–36 (Eng. Abstr.) (Rus)

PHARMACOLOGY

Methyl acetyl phosphate, a new type of antisickling agent: site–specific acetylating agent toward the 2,3–DPG binding site in hemoglobin S. Ueno H, et al. **Am J Pediatr Hematol Oncol** 1988 Winter;10(4):348–50
Mechanism of phosphaturia elicited by administration of phosphonoformate in vivo. VanScoy M, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):F984–94
In vitro deacetylation studies with isomeric acetamidobiphenyls using selective carboxylesterase inhibitors. Sertkaya NN, et al. **Anticancer Res** 1988 Nov–Dec;8(6):1345–50
Combinations of 3'–azido–3'–deoxythymidine (zidovudine) and phosphonoformate (foscarnet) against human immunodeficiency virus type 1 and cytomegalovirus replication in vitro. Eriksson BF, et al. **Antimicrob Agents Chemother** 1989 May;33(5):663–9
Inhibition of human immunodeficiency virus in vitro by combinations of 3'–azido–3'–deoxythymidine and foscarnet. Koshida R, et al. **Antimicrob Agents Chemother** 1989 May; 33(5):778–80
(S)–1–(3–hydroxy–2–phosphonylmethoxypropyl)cytosine, a potent and selective inhibitor of human cytomegalovirus replication. Snoeck R, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1839–44
Reverse transcriptases from human immunodeficiency virus type 1 (HIV–1), HIV–2, and simian immunodeficiency virus (SIVMAC) are susceptible to inhibition by foscarnet and 3'–azido–3'–deoxythymidine triphosphate. Vrang L, et al. **Antimicrob Agents Chemother** !988 Nov;32(11):1733–4
A kinetic study of the effects of phosphate and organic phosphates on the activity of phosphoenolpyruvate carboxylase from Crassula argentea. Meyer CR, et al. **Arch Biochem Biophys** 1989 May 15;271(1):84–97
Irreversible inhibition of serine proteases by peptidyl derivatives of alpha–aminoalkylphosphonate diphenyl esters. Oleksyszyn J, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):143–9
Ionization states of the complex formed between 2–benzyl–3–phosphonopropionic acid and carboxypeptidase A. Goli UB, et al. **Biochem J** 1988 Sep 15;254(3):847–53
Isolation of an active form of the ATP + Mg2+–dependent protein phosphatase stimulated by the deinhibitor protein and by p–nitrophenyl phosphate. Goris J, et al. **Biochem J** 1988 Sep 1;254(2):501–7
The effect of the plasticizers TBEP (tris–(2–butoxyethyl)–phosphate) and DEHP (di–(2–ethylhexyl)–phthalate) on beta–adrenergic ligand binding to alpha 1–acid glycoprotein and mononuclear leukocytes. Sager G, et al. **Biochem Pharmacol** 1989 Aug 1;38(15):2551–7
Inhibition of alanine racemase by alanine phosphonate: detection of an imine linkage to pyridoxal 5'–phosphate in the enzyme–inhibitor complex by solid–state 15N nuclear magnetic resonance. Copié V, et al. **Biochemistry** 1988 Jul 12;27(14):4966–70
Inhibition of aminopeptidases by aminophosphonates. Lejczak B, et al. **Biochemistry** 1989 Apr 18;28(8):3549–55
Design of a selective insulin receptor tyrosine kinase inhibitor and its effect on glucose uptake and metabolism in intact cells. Saperstein R, et al. **Biochemistry** 1989 Jun 27; 28(13):5694–701
Effect of phosphonoformic acid, dietary phosphate and the Hyp mutation on kinetically distinct phosphate transport processes in mouse kidney. Tenenhouse HS, et al. **Biochim Biophys Acta** 1989 Sep 4;984(2):207–13
Effects of soman and sarin on high affinity choline uptake by rat brain synaptosomes. Whalley CE, et al. **Brain Res Bull** 1989 May;22(5):853–8
Comparison of foscarnet and foscarnet esters as anti–influenza virus agents. Strid S, et al. **Chemotherapy** 1989;35(1):69–76
Investigations into the application of tri(n–butyl)phosphate/detergent mixtures to blood derivatives. Horowitz B.

Curr Stud Hematol Blood Transfus 1989;(56):83–96 (17 ref.)
Screening with a shell vial assay for antiviral activity against cytomegalovirus. Telenti A, et al.
Diagn Microbiol Infect Dis 1989 Jan–Feb;12(1):5–8
The herbicidally active experimental compound Hoe 704 is a potent inhibitor of the enzyme acetolactate reductoisomerase. Schulz A, et al. FEBS Lett 1988 Oct 10;238(2):375–8
Species differences in the hydrolysis of meperidine and its inhibition by organophosphate compounds. Luttrell WE, et al. Fundam Appl Toxicol 1988 Aug;11(2):323–32
Physical exercise affects cholinesterases and organophosphate response. Ryhänen R, et al. Gen Pharmacol 1988; 19(6):815–8
Drug resistance in KHT fibrosarcoma cell lines with different metastatic ability. Cillo C, et al. Int J Cancer 1989 Jan 15;43(1):107–11
The bialaphos resistance gene (bar) plays a role in both self-defense and bialaphos biosynthesis in Streptomyces hygroscopicus. Kumada Y, et al. J Antibiot (Tokyo) 1988 Dec;41(12):1838–45
Inactivation of beta-lactamases from Enterobacter cloacae by monophosphams. Bush K, et al.
J Antimicrob Chemother 1988 Dec;22(6):801–9
Structure and dynamics of serine hydrolase–organophosphate adducts. Kovach IM. J Enzym Inhib 1988;2(3):199–208
Antimicrobial and anticancer activity of tetrahedral, chelated, diphosphine silver(I) complexes: comparison with copper and gold. Berners-Price SJ, et al.
J Inorg Biochem 1988 Aug;33(4):285–95
Exploration of phenyl-spaced 2-amino-(5–9)-phosphonoalkanoic acids as competitive N-methyl-D-aspartic acid antagonists. Bigge CF, et al. J Med Chem 1989 Jul;32(7):1580–90
Isoprenoid (phosphinylmethyl)phosphonates as inhibitors of squalene synthetase. Biller SA, et al. J Med Chem 1988 Oct;31(10):1869–71
In vitro inhibition of human herpesvirus-6 by phosphonoformate. Streicher HZ, et al.
J Virol Methods 1988 Sep;21(1–4):301–4
Induction of CAD gene amplification by restriction endonucleases in V79,B7 Chinese hamster cells. Cavolina P, et al. Mutat Res 1989 Jan–Feb;225(1–2):61–4
Tacrine slows the rate of ageing of sarin-inhibited acetylcholinesterase. Dawson RM. Neurosci Lett 1989 May 22;100(1–3):227–30
The biventer cervicis nerve–muscle preparation of adult hens: effects of phenyl saligenin phosphate administration. el-Fawal HA, et al. Neurotoxicology 1988 Winter; 9(4):625–36
Inhibition of acetyl- and butyrylcholinesterase and amylase release from canine pancreas. Oguchi Y, et al. Pancreas 1989;4(4):423–8
Efficacy of 5-vinyl-1-beta-D-arabinofuranosyluracil (VaraU) against herpes simplex virus type 2 strains in cell cultures and against experimental herpes encephalitis in mice: comparison with acyclovir and foscarnet. Reefschläger J, et al. Pharm Res 1987 Jun;4(3):200–6
Antiviral effects of phosphonoformate (PFA, foscarnet sodium). Oberg B. Pharmacol Ther 1989;40(2):213–85 (245 ref.)
Effects of phosphonoformic and phosphonoacetic acids on developing enamel of rat molars. Caracatsanis M, et al. Scand J Dent Res 1989 Apr;97(2):139–49
Interaction of Epstein-Barr virus DNA polymerase with aphidicolin, phosphonoformate and 5'-GMP. Li JS, et al. Virus Genes 1988 Jul;1(4):369–75
Inhibition of human immunodeficiency virus reverse transcriptase by 2',3'-dideoxynucleoside triphosphates: template dependence, and combination with phosphonoformate. Starnes MC, et al. Virus Genes 1989 May;2(3):241–51
[Post- and presynaptic mechanisms of restoring nerve–muscle transmission with tubocurarine after the effect of an organophosphorous inhibitor of acetylcholinesterase] Krivoĭ II, et al.
Dokl Akad Nauk SSSR 1989;306(2):499–502 (Rus)
[Effect of dimephosphon on the blood circulation and oxygen tension in the brain of normal waking rabbits and in motion sickness] Beketov AI, et al. Farmakol Toksikol 1988 Sep–Oct;51(5):35–8 (Eng. Abstr.) (Rus)
[Effect of dimephosphon on the adenine nucleotide system] Ziganshin AU, et al. Farmakol Toksikol 1988 Jul–Aug; 51(4):80–2 (Eng. Abstr.) (Rus)
[Restoration of neuromuscular transmission in the rat diaphragm after the action of an organophosphorus inhibitor of acetylcholinesterase by using curare] Krivoĭ II, et al. Fiziol Zh SSSR 1988 Dec;74(12):1751–8 (Eng. Abstr.) (Rus)
[Distribution of plutonium-239 in the bodies of rats after its administration together with tributyl phosphate combined with organic solvents] Kuz'menko OV, et al. Gig Sanit 1989 Apr;(4):17–9 (Eng. Abstr.) (Rus)
[Reaction of poly(ADP)-ribosylation of histone H1 in the presence of P1,P4-bis(5'-adenosyl)tetraphosphate and its phosphonate analogs] Karabashian LV, et al.
Mol Biol (Mosk) 1988 Sep–Oct;22(5):1211–6 (Eng. Abstr.) (Rus)
[Anticholinesterase activity of alkyl esters of perfluoroalkyl phosphonic and perfluoroalkyl phosphinic acids] Brestkin AP, et al. Ukr Biokhim Zh 1988 Nov–Dec;60(6):38–42 (Eng. Abstr.) (Rus)
[biological activity of phosphorus analogs of amino acids] Kukhar' VP, et al. Ukr Biokhim Zh 1988 Nov–Dec; 60(6):95–111 (106 ref.) (Eng. Abstr.) (Rus)

POISONING

Opsoclonus in organophosphate poisoning. Pullicino P, et al. Arch Neurol 1989 Jun;46(6):704–5
HI-6 therapy of soman and tabun poisoning in primates and rodents. Hamilton MG, et al. Arch Toxicol 1989;63(2):144–9
Acetylcholinesterase prophylaxis against organophosphate poisoning. Quantitative correlation between protection and blood–enzyme level in mice. Raveh L, et al.
Biochem Pharmacol 1989 Feb 1;38(3):529–34
Prolonged suxamethonium-induced neuromuscular block associated with organophosphate poisoning [letter] Weeks DB, et al. Br J Anaesth 1989 Feb;62(2):237
Structure–activity relationship of reversible cholinesterase inhibitors: activation, channel blockade and stereospecificity of the nicotinic acetylcholine receptor–ion channel complex. Albuquerque EX, et al.
Braz J Med Biol Res 1988;21(6):1173–96 (53 ref.)
A study of organophosphate poisoning cases at one rural and one urban hospital. Nhachi CF. Cent Afr J Med 1988 Aug;34(8):180–5
CNS involvement in acute organophosphate poisoning: specific pattern of toxicity, clinical correlates and antidotal treatment. Finkelstein Y, et al. Ital J Neurol Sci 1988 Oct; 9(5):437–46 (72 ref.)
Binary antidotes for organophosphate poisoning: aprophen analogues that are both antimuscarinics and carbamates. Leader H, et al. J Med Chem 1989 Jul;32(7):1522–8
The use of respiratory stimulants in organophosphates' intoxication. Lerman Y, et al. Med Hypotheses 1988 Aug; 26(4):267–9 (23 ref.)
Delayed chronic polyneuropathy following organophosphate poisoning: a case report. Low ET, et al.
Med J Malaysia 1987 Jun;42(2):113–4
End-plate dysfunction in acute organophosphate intoxication. Besser R, et al. Neurology 1989 Apr; 39(4):561–7
Side effects of therapeutic drugs against organophosphate poisoning. Wolthuis OL, et al. Neurotoxicol Teratol 1989 May–Jun;11(3):221–5
The role of hypoxia in organophosphorus nerve agent intoxication. Millis RM, et al. Neurotoxicology 1988 Summer;9(2):273–85 (83 ref.)
Allosteric stabilization of 3H-N-methylscopolamine binding in guinea-pig myocardium by an antidote against organophosphate intoxication. Jepsen K, et al.
Pharmacol Toxicol 1988 Sep;63(3):163–8
[Study of mortality rate in acute poisoning and its characteristics in a region with developed agriculture] Tashev TS, et al. Vutr Boles 1988;27(3):84–8 (Eng. Abstr.) (Bul)
[Studies on antidotes for organophosphate poisoning synthesis and structure–activity relationship of bispyridinium salts] Gao FL, et al.
Yao Hsueh Hsueh Pao 1988 May;23(5):336–42 (Eng. Abstr.) (Chi)
[ECG repolarization disorder (QT lengthening) in organophosphate poisoning] Marosi G, et al. Orv Hetil 1989 Jan 15;130(3):111–5 (20 ref.) (Eng. Abstr.) (Hun)
[Use of serum cholinesterases in severe organophosphorus poisoning. Our experience] Cascio C, et al.
Minerva Anestesiol 1988 Jul–Aug;54(7–8):337–8 (Eng. Abstr.) (Ita)
[Efficacy of several oximes on organophosphorus poisoning] Yamanaka S, et al. Nippon Eiseigaku Zasshi 1988 Aug; 43(3):707–16 (Eng. Abstr.) (Jpn)
[Mental disorders in the acute period of household poisoning by organophosphorus compounds] Smirnov VK, et al.
Voen Med Zh 1988 Aug;(8):38–9 (Rus)
[Intermediate syndrome in organophosphorus poisoning (letter)] Gómez Aguinaga MA, et al. Med Clin (Barc) 1988 Sep 10;91(7):279 (Spa)

RADIATION EFFECTS

Amphiphilic polyphosphazenes as membrane materials: influence of side group on radiation cross-linking. Allcock HR, et al. Biomaterials 1988 Nov;9(6):500–8

THERAPEUTIC USE

Foscarnet therapy for severe acyclovir-resistant herpes simplex virus type-2 infections in patients with the acquired immunodeficiency syndrome (AIDS). An uncontrolled trial. Erlich KS, et al. Ann Intern Med 1989 May 1; 110(9):710–3
Foscarnet treatment of cytomegalovirus retinitis in patients with the acquired immunodeficiency syndrome. Jacobson MA, et al. Antimicrob Agents Chemother 1989 May; 33(5):736–41
Failure of antiviral therapy for acquired immunodeficiency syndrome-related cytomegalovirus myelitis. Jacobson MA, et al. Arch Neurol 1988 Oct;45(10):1090–2
Sensitivity of HSV clinical isolates to foscarnet and in vitro dual combination of foscarnet and acyclovir. Al-Samarai A, et al. Chemioterapia 1987 Jun;6(2 Suppl):665–6
Effect of Foscarnet therapy on infection with human immunodeficiency virus in patients with AIDS. Jacobson MA, et al. J Infect Dis 1988 Oct;158(4):862–5
Successful treatment with foscarnet of an acyclovir-resistant mucocutaneous infection with herpes simplex virus in a patient with acquired immunodeficiency syndrome. Chatis PA, et al. N Engl J Med 1989 Feb 2;320(5):297–300
Acyclovir-resistant, foscarnet-sensitive oral herpes simplex type 2 lesion in a patient with AIDS. MacPhail LA, et al. Oral Surg Oral Med Oral Pathol 1989 Apr;67(4):427–32
Foscarnet as treatment for cytomegalovirus retinitis following bone marrow transplantation. Ganly PS, et al.
Postgrad Med J 1988 May;64(751):389–91
[Treatment of cytomegalovirus infections in immunosuppressed patients] Michon C, et al.
Ann Med Interne (Paris) 1988;139(7):511–5 (25 ref.) (Fre)
[Non-nucleoside antiherpetic agents] Nishiyama Y.
Nippon Rinsho 1989 Feb;47(2):390–4 (Jpn)
[Chemotherapy of cytomegalovirus infections] Sakuma T, et al. Nippon Rinsho 1989 Feb;47(2):384–9 (Jpn)
[Experience using dimephosphon in the complex treatment of pneumonia in newborn infants] Pikuza OI, et al.
Pediatriia 1989;(3):39–41 (Rus)
[Antiallergic action of dimephosphon and its use in the treatment of atopic bronchial asthma and pollinosis in children] Sviatkina OB, et al. Pediatriia 1989;(1):85–8 (Rus)
[Effect of dimephosphon on the immune status of children with pyelonephritis] Zernov IN, et al. Pediatriia 1988; (5):23–5 (Eng. Abstr.) (Rus)
[Antiherpetic activity of Soviet-made phosphonic acid derivatives and their combinations with interferon inducers in a model of ophthalmic herpes] L'vov ND, et al.
Vopr Virusol 1989 Mar–Apr;34(2):186–92 (Eng. Abstr.) (Rus)

TOXICITY

Triphenyl phosphite neurotoxicity in the hen: inhibition of neurotoxic esterase and of prophylaxis by phenylmethylsulfonyl fluoride. Carrington CD, et al.
Arch Toxicol 1988;62(5):375–80
Prophylaxis and the mechanism for the initiation of organophosphorous compound-induced delayed neurotoxicity. Carrington CD. Arch Toxicol 1989; 63(3):165–72 (62 ref.)
Iso-OMPA-induced potentiation of soman toxicity in rat correlates with the inhibition of plasma carboxylesterases.[letter] Grubič Z, et al. Arch Toxicol 1988;62(5):398–9
Spontaneous and oxime-induced reactivation of acetylcholinesterase inhibited by phosphoramidates. Langenberg JP, et al. Arch Toxicol 1988;62(4):305–10
Degeneration patterns in the chicken central nervous system induced by ingestion of the organophosphorus delayed neurotoxin tri-ortho-tolyl phosphate. A silver impregnation study. Tanaka D Jr, et al. Brain Res 1989 Apr 10;484(1–2):240–56
Effects of a low OP dose on seed/bead discrimination in the kangaroo rat, Dipodomys. Peterle TJ, et al.
Bull Environ Contam Toxicol 1989 Jul;43(1):95–100
EEG and pesticides. Bernad PG. Clin Electroencephalogr 1989 Apr;20(2):ix–x (10 ref.)
Investigations on the acute toxic, cytogenetic, and embryotoxic activity of phenyl isocyanate and diethoxyphosphoryl isocyanate. Nehéz M, et al.
Ecotoxicol Environ Safety 1989 Apr;17(2):258–63
The neuropathology of leptophos in the hen: a chronologic study. Preissig SH, et al. Environ Res 1978 Oct;17(2):242–50
Ethylenediaminetetra(methylenephosphonic acid): genotoxicity, biodistribution, and subchronic and chronic toxicity in rats. Calvin G, et al. Food Chem Toxicol 1988 Jul;26(7):601–10
Development of kidney tumors in the male F344/N rat after treatment with dimethyl methylphosphonate. Dunnick JK, et al. Fundam Appl Toxicol 1988 Jul;11(1):91–9
Effect of the cold environment on organophosphate toxicity and inhibition of cholinesterase activity. Ryhänen R, et al. Gen Pharmacol 1988;19(5):741–5
Toxicity of intravitreal injection of foscarnet in the rabbit eye. She SC, et al. Int Ophthalmol 1988;12(2):151–4
Tris (2,3-dibromopropyl) phosphate nephrotoxicity in the rat: histological and biochemical changes in renal components by 13C-NMR spectra. Fukuoka M, et al.
J Appl Toxicol 1988 Dec;8(6):411–6
Direct actions of organophosphate anticholinesterases on nicotinic and muscarinic acetylcholine receptors. Bakry NM, et al. J Biochem Toxicol 1988 Winter;3:235–59
Neuropathy target esterase in hens after sarin and soman. Crowell JA, et al. J Biochem Toxicol 1989 Spring; 4(1):15–20
Mechanism of toxicity of an experimental bidentate phosphine gold complexed antineoplastic agent in isolated rat hepatocytes. Smith PF, et al.
J Pharmacol Exp Ther 1989 Jun;249(3):944–50
Concerted role of carboxylesterases in the potentiation of carbofuran toxicity by iso-OMPA pretreatment. Gupta RC, et al. J Toxicol Environ Health 1989;26(4):447–57
Comparison of the effects of diisopropylfluorophosphate, sarin, soman, and tabun on toxicity and brain acetylcholinesterase activity in mice. Tripathi HL, et al.
J Toxicol Environ Health 1989;26(4):437–46
Importance of multiple hydroxylated metabolites in hexamethylphosphoramide (HMPA)-mediated mutagenesis in Drosophila melanogaster. Zijlstra JA, et al.
Mutat Res 1989 Jun;212(2):193–211

Histopathological assessment of triphenyl phosphite neurotoxicity in the hen. Carrington CD, et al. **Neurotoxicology** 1988 Summer;9(2):223–33

Segmental synaptic depression caused by diisopropylphosphorofluoridate and sarin is reversed by thyrotropin-releasing hormone in the neonatal rat spinal cord. Das Gupta S, et al. **Toxicol Appl Pharmacol** 1988 Sep 30;95(3):499–506

The mechanism of acute cytotoxicity of triethylphosphine gold(I) complexes. III. Chlorotriethylphosphine gold(I)-induced alterations in isolated rat liver mitochondrial function. Hoke GD, et al. **Toxicol Appl Pharmacol** 1989 Jun 1;99(1):50–60

In vivo and in vitro cardiotoxicity of a gold-containing antineoplastic drug candidate in the rabbit. Hoke GD, et al. **Toxicol Appl Pharmacol** 1989 Sep 1;100(2):293–306

The reversible carbamate, (–)physostigmine, reduces the size of synaptic end plate lesions induced by sarin, an irreversible organophosphate. Kawabuchi M, et al. **Toxicol Appl Pharmacol** 1989 Jan;97(1):98–106

Delayed neurotoxicity of triphenyl phosphite in hens: pharmacokinetic and biochemical studies. Konno N, et al. **Toxicol Appl Pharmacol** 1989 Sep 15;100(3):440–50

Changes in spinal cord reflexes following subchronic exposure to soman and sarin. Goldstein BD. **Toxicol Lett** 1989 Apr;47(1):1–8

Cresylbenzodioxaphosphorin oxide pretreatment alters soman-induced toxicity and inhibition of tissue cholinesterase activity of the rat. Jimmerson VR, et al. **Toxicol Lett** 1989 Jul;48(1):93–103

[Site-specific mutagenesis in vivo directed by phosphoester analogs of oligonucleotides] Petrenko VA, et al. **Dokl Akad Nauk SSSR** 1989;304(4):1002–4 **(Rus)**

[Experimental substantiation of maximum permissible levels of DPF-1 and DPF-1N in reservoir water] Dergacheva TS, et al. **Gig Sanit** 1988 Jun;(6):77–8 **(Rus)**

[Toxicologic evaluation of Fokaptam E after its cutaneous administration] Gracheva NIa, et al. **Gig Sanit** 1989 Jan;(1):78–9 **(Rus)**

[Scientific substantiation of hygienic standards of octyldichloropropyl phosphate in a water medium] Zaitsev NA, et al. **Gig Sanit** 1988 Sep;(9):7–10 (Eng. Abstr.) **(Rus)**

[Diastereomers of nonionic analogs of nucleic acids. V. Alkylation of nucleic acids in the living cells by ethylated derivatives of oligonucleotides containing the residue of nitrous yperite. The effect of the phosphotriester fragment configuration] Abramova TV, et al. **Mol Biol (Mosk)** 1988 Sep–Oct;22(5):1285–92 (Eng. Abstr.) **(Rus)**

[Mutagenic properties of phosphotriester analogs of oligodeoxyribonucleotides] Petrenko VA, et al. **Mol Biol (Mosk)** 1988 Sep–Oct;22(5):1226–37 (Eng. Abstr.) **(Rus)**

ORGANOPLATINUM COMPOUNDS

Carboplatin. A preliminary review of its pharmacodynamic and pharmacokinetic properties and therapeutic efficacy in the treatment of cancer. Wagstaff AJ, et al. **Drugs** 1989 Feb;37(2):162–90 (131 ref.)

[Present status of cisplatin (CDDP) analogues in Japan] Majima H. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-2):1373–8 (Eng. Abstr.) **(Jpn)**

ADMINISTRATION & DOSAGE

Phase II trial of continuous-infusion iproplatin (CHIP) and 5-fluorouracil (5-FU) in advanced colorectal carcinoma. Petrelli NJ, et al. **Cancer Chemother Pharmacol** 1989; 23(1):61–2

Infusion carboplatin treatment of relapsed and refractory acute leukemia: evidence of efficacy with minimal extramedullary toxicity at intermediate doses. Meyers FJ, et al. **J Clin Oncol** 1989 Feb;7(2):173–8

Cyclophosphamide–cisplatin versus cyclophosphamide–carboplatin in stage III–IV ovarian carcinoma: a comparison of equally myelosuppressive regimens. Edmonson JH, et al. **J Natl Cancer Inst** 1989 Oct 4;81(19):1500–4

Optimal dosing with carboplatin. Ozols RF. **Semin Oncol** 1989 Apr;16(2 Suppl 5):14–8 (17 ref.)

[Significance of intra-arterial CDDP as preoperative treatment of osteosarcoma] Masuda S, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-3):1755–63 (Eng. Abstr.) **(Jpn)**

[Two-route chemotherapy with cisplatinum (ip) and its antidote, sodium thiosulfate (iv) against carcinomatous peritonitis following alimentary tract cancers] Takao s, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Aug 20; 23(8):1696–709 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

A comparison of the toxicity and efficacy of cisplatin and carboplatin in advanced ovarian cancer. The Swons Gynaecological Cancer Group. Adams M, et al. **Acta Oncol** 1989;28(1):57–60

Carboplatin and renal dysfunction [letter] Reed E, et al. **Ann Intern Med** 1989 Mar 1;110(5):409

Carboplatin and renal function [letter] Smit EF, et al. **Ann Intern Med** 1989 Jun 15;110(12):1034

Carboplatin-associated thrombotic microangiopathic hemolytic anemia. Walker RW, et al. **Cancer** 1989 Sep 1; 64(5):1017–20

Phase II study of carboplatin in recurrent ovarian cancer: severe hematologic toxicity in previously treated patients. Colombo N, et al. **Cancer Chemother Pharmacol** 1989; 23(5):323–8

A phase I clinical and pharmacokinetic study of carboplatin and autologous bone marrow support [published erratum appears in J Clin Oncol 1989 Aug;7(8):1177] Shea TC, et al. **J Clin Oncol** 1989 May;7(5):651–61

ANALYSIS

Extent of cisplatin formation in carboplatin admixtures [letter] Perrone RK, et al. **Am J Hosp Pharm** 1989 Feb; 46(2):258–9

CHEMICAL SYNTHESIS

Tumor inhibiting properties of stereoisomeric [1,2-bis(3-hydroxyphenyl)= ethylenediamine]dichloroplatinum(II)–compl exe s, Part I: Synthesis. Jennerwein M, et al. **Arch Pharm (Weinheim)** 1989 Jan;322(1):25–9

Tumor inhibiting properties of stereoisomeric [1,2-bis(3-hydroxyphenyl) ethylenediamine]dichloroplatinum(II)–complexes, Part II: Biological properties. Jennerwein M, et al. **Arch Pharm (Weinheim)** 1989 Feb;322(2):67–73

Reaction products of a new anti-cancer agent, Pt(IV)(cyclohexyldiamine)Cl4, with guanosine and 9-methylguanine: first crystal structures of Pt(cyclohexyldiamine) complexes with a nucleobase and a nucleoside. Choi HK, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1120–4

Octahedral complexes of anti-cancer Pt(IV)(cyclohexyldiamine) agents with 9-methylguanine. Choi HK, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1125–9

Synthesis of Pt(II) complexes containing D-glucuronate, D-gluconate, or their acetyl derivatives and evaluation of antitumor activity against murine leukemia L1210. Noji M, et al. **Chem Pharm Bull (Tokyo)** 1988 Sep;36(9):3439–46

Synthesis and antitumor activity of riboflavin and flavin mononucleotide Pt(II) complexes. Suzuki K, et al. **Chem Pharm Bull (Tokyo)** 1988 May;36(5):1895–8

The synthesis and characterization of N-substituted iminodiacetato cis-, trans-R, R- and trans-S, S-1, 2-diaminocyclohexane platinum(II) complexes: steric effects on the diastereomeric ratios. Khokhar AR, et al. **J Inorg Biochem** 1988 Aug;33(4):247–55

A new family of water-soluble, third generation antitumor platinum complexes. Bitha P, et al. **J Med Chem** 1989 Sep; 32(9):2063–7

Water-soluble third generation antitumor platinum complexes, [2,2-bis (aminomethyl)-1,3-propanediol-N,N']-[1,1-cyclobutanedicarboxylato (2-)-O,O']platinum(II) and [1,1-cyclobutanedicarboxylato(2-)-O,O'] [tetrahydro-4H-pyran-4,4-dimethanamine-N,N']platinum(II). Bitha P, et al. **J Med Chem** 1989 Aug; 32(8):2015–20

Synthesis and P-388 antitumor properties of the four diastereomeric 1-hydroxy-3,4-diaminocyclohexane-Cl2PtII complexes. Witiak DT, et al. **J Med Chem** 1989 Jan;32(1):214–7

[The antineoplastic action of o-substituted [1,2-bis(4-hydroxyphenyl)-ethylenediamine]dichloroplatinum (II) complexes and their methylethers] Karl J, et al. **Arch Pharm (Weinheim)** 1988 Jul;321(7):405–10 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

[Antigenicity study of carboplatin in guinea pigs and mice] Kawano S, et al. **J Toxicol Sci** 1988 Jul;13 Suppl 2:1–21 (Eng. Abstr.) **(Jpn)**

METABOLISM

An in vivo 1H and 31P NMR investigation of the effect of nitrate on hypoxic metabolism in maize roots. Fan TW, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):592–606

DNA adducts of cisplatin and carboplatin in tissues of cancer patients. Poirier MC, et al. **IARC Sci Publ** 1988;(89):313–20

PHARMACOKINETICS

Carboplatin and etoposide pharmacokinetics in patients with testicular teratoma. Newell DR, et al. **Cancer Chemother Pharmacol** 1989;23(6):367–72

Pharmacokinetics of (glycolate-0,0')-diammine platinum (II), a new platinum derivative, in comparison with cisplatin and carboplatin. Sasaki Y, et al. **Cancer Chemother Pharmacol** 1989;23(4):243–6

Human pharmacokinetics of carboplatin after oral administration [letter] van Hennik MB, et al. **Cancer Chemother Pharmacol** 1989;23(2):126–7

Rapid reduction of tetrachloro(D,L-trans)1,2-diaminocyclohexaneplatinum(IV) (tetraplatin) in RPMI 1640 tissue culture medium. Gibbons GR, et al. **Cancer Res** 1989 Mar 15;49(6):1402–7

Binding kinetics of tetrachloro-1,2-diaminocyclohexaneplatinum (IV) (tetraplatin) and cis-diamminedichloroplatinum (II) at 37 degrees C with human plasma proteins and with bovine serum albumin. Does aquation precede protein binding? LeRoy AF, et al. **J Natl Cancer Inst** 1989 Mar 15; 81(6):427–36

Pharmacokinetics of platinum cytostatics after cisplatin-related equitoxic dosing to rats. Amlacher R, et al. **Pharmazie** 1988 Nov;43(11):798–800

Disposition of cisplatin derivatives –3H-cis-1,2-diaminocyclohexanedichloroplatinum (II) and 3H-cis-1,2-diaminocyclohexanemalonatoplatinum (II) in BDF1 mice. Oswald CB, et al. **Res Commun Chem Pathol Pharmacol** 1989 Apr;64(1):41–58

[Pharmacokinetics of new cisplatin analogues in experimental animals] Fujita H, et al. **Gan To Kagaku Ryoho** 1989 Apr; 16(4 Pt 2-2):1366–72 (Eng. Abstr.) **(Jpn)**

[Studies on clinical pharmacology of cis-diamminedichloroplatinum (CDDP) in children with malignant neoplasm: pharmacokinetics of free and total CDDP] Murakami T, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Aug 20;23(8):1672–80 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Platinum complexes with a selective action on estrogen receptor-positive mammary tumors. von Angerer E, et al. **Anticancer Drug Des** 1989 Jun;4(1):21–35

Incorporation of cis-dichlorobiscyclopentylamineplatinum (II) into liposomes enhances its uptake by ADJ/PC6A tumour cells: comparative effects of the free and liposome-incorporated drug on the cyclic 3'-5' nucleotide phosphodiesterase activity. Deliconstantinos G. **Anticancer Res** 1988 Nov-Dec;8(6):1275–8

Comparison of the antitumor activity of cisplatin, carboplatin, and iproplatin against established human testicular cancer cell lines in vivo and in vitro. Harstrick A, et al. **Cancer** 1989 Mar 15;63(6):1079–83

Synthesis and antitumor activity of a series of (aminoethylpyrrolidine) platinum complexes. Khokhar AR, et al. **Cancer Chemother Pharmacol** 1989;23(1):15–8

Tumoricidal interactions of hyperthermia with carboplatin, cisplatin and etoposide. Cohen JD, et al. **Cancer Lett** 1989 Mar;44(3):205–10

Cytotoxicity of cisplatin and carboplatin used alone and in combination with the other anticancer drugs in the mouse embryo C3H10T1/2 cell line. Hussain SS, et al. **Chemotherapy** 1988;34(6):504–11

Carboplatin: a new cisplatin analog. Woloschuk DM, et al. **Drug Intell Clin Pharm** 1988 Nov;22(11):843–9 (68 ref.)

Differences in 23 S rRNA-protein neighbourhood in Escherichia coli 70 S ribosomes and 70 S initiation complex. Probing by bifunctional Pt(II)-containing reagent. Chistyakov PG, et al. **FEBS Lett** 1989 Mar 27; 246(1-2):197–201

Mixed-ligand complexes of platinum(II) as curing agents for pBR322 and pBR329 (ColE1) plasmids in Escherichia coli. Lakshmi VV, et al. **J Gen Microbiol** 1988 Jul;134 (Pt 7):1977–81

Prolongation of G1 phase in cultured glioma cells by cis-dichlorodiammineplatinum (II) (CDDP): analysis using bromodeoxyuridine (BrdU)-Hoechst technique. Morimura T. **J Neurooncol** 1989 May;7(1):71–9

Evaluation of cytotoxic and antitumor effects of a tetravalent analog of carboplatin. Jurášková V, et al. **Neoplasma** 1989; 36(3):297–303

Effect of oxoplatinum and CBDCA on renal functions in rats. Lázničková A, et al. **Neoplasma** 1989;36(2):161–9

Antitumor activity of cisplatin analogs against malignant ovarian tumor xenografts into nude mice. Hamaguchi K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Nov; 40(11):1755–9

Interaction of platinum(II) tetrachlorodianion (Fast Black)2 with superhelical DNA and with radiation in vitro and in vivo. Teicher BA, et al. **Radiat Res** 1989 Jul; 119(1):134–44

The pharmacology of carboplatin. Van Echo DA, et al. **Semin Oncol** 1989 Apr;16(2 Suppl 5):1–6 (51 ref.)

Circadian time dependence of murine tolerance for carboplatin. Boughattas NA, et al. **Toxicol Appl Pharmacol** 1988 Nov;96(2):233–47

Mutagenicity of cisplatin and carboplatin used alone and in combination with four other anticancer drugs. Hannan MA, et al. **Toxicology** 1989 Apr;55(1-2):183–91

[Preclinical and clinical evaluation of toxicity and antitumor activity of cisplatin analogues] Ariyoshi Y, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-2):1379–85 (Eng. Abstr.) **(Jpn)**

[The prospect for cisplatin analogs from the experimental standpoint] Tashiro T. **Gan To Kagaku Ryoho** 1989 Apr; 16(4 Pt 2-2):1358–65 (Eng. Abstr.) **(Jpn)**

[The lethal and kinetic effects of carboplatin studied using the human tumor clonogenic assay and flow cytometry] Fujikane T, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jul 20;23(7):1525–37 (Eng. Abstr.) **(Jpn)**

[The antitumor activity of platinum complexes of 2-aminoalkylpyridine as carrier ligand against colon 26 carcinoma and their reactivity with plasma protein] Morikawa K, et al. **Yakugaku Zasshi** 1988 Aug; 108(8):797–800 (Eng. Abstr.) **(Jpn)**

[Cleavage of DNA after modification with tetravalent platinum compounds] Astashkina TG, et al. **Dokl Akad Nauk SSSR** 1988 Jul-Aug;301(1):234–6 **(Rus)**

[2 types of interaction of metallointercalating agents with DNA] Salianov VI, et al. **Dokl Akad Nauk SSSR** 1988;

301(5):1241–4 (Rus)

POISONING

Ototoxicity of carboplatin in guinea pigs. Saito T, et al. **Auris Nasus Larynx** 1989;16(1):13–21

THERAPEUTIC USE

Phase II trial of iproplatin (CHIP) in previously untreated patients with colorectal cancer. Blitzer JB, et al. **Am J Clin Oncol** 1988 Dec;11(6):650–1

Phase II study of iproplatin (CHIP) in previously treated small-cell lung cancer. Granfortuna JM, et al. **Am J Clin Oncol** 1989 Aug;12(4):355–7

Randomized phase II evaluation of iproplatin (CHIP) and carboplatin (CBDCA) in lung cancer. A Southeastern Cancer Study Group trial. Kramer BS, et al. **Am J Clin Oncol** 1988 Dec;11(6):643–5

A phase II trial of iproplatin (CHIP) in previously treated advanced breast cancer. Meisner DJ, et al. **Am J Clin Oncol** 1989 Apr;12(2):129–31

Carboplatin. The better platinum in head and neck cancer? Volling P, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):695–8

Biological properties of ten human ovarian carcinoma cell lines: calibration in vitro against four platinum complexes. Hills CA, et al. **Br J Cancer** 1989 Apr;59(4):527–34

A phase II study of carboplatin in adenocarcinoma of the oesophagus. Steel A, et al. **Br J Cancer** 1988 Oct; 58(4):500–1

Phase II trial of carboplatin in patients with advanced germ-cell testicular tumors and transitional cell carcinomas of the urinary tract. Akaza H, et al. **Cancer Chemother Pharmacol** 1989;23(3):181–5

Preliminary evaluation of platinum transferrin (MPTC-63) as a potential nontoxic treatment for breast cancer. Elliott RL, et al. **Cancer Detect Prev** 1988;12(1–6):469–80

Carboplatin. **Cancer Invest** 1989;7(1):107

Phase II study of iproplatin (CHIP, JM-9) in advanced testicular cancers progressing after prior chemotherapy. Clavel M, et al. **Eur J Cancer Clin Oncol** 1988 Aug; 24(8):1345–8

Resistance to platinum compounds: mechanisms and beyond. Kelley SL, et al. **Eur J Cancer Clin Oncol** 1989 Aug; 25(8):1135–40 (33 ref.)

Carrier mediated action of platinum complexes on estrogen receptor positive tumors. Knebel N, et al. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):293–9

Carboplatin (CBDCA) and radiotherapy for stage IV carcinoma of the head and neck: a phase I–II study. Jacobs MC, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug; 17(2):361–3

Clinical trial of iproplatin (cis-dichloro-trans-dihydroxy-bis-isopropylamine platinum IV, CHIP) in patients with advanced breast cancer. Casper ES, et al. **Invest New Drugs** 1988 Jun; 6(2):87–91

Phase I study of weekly-administered iproplatin [cis-dichloro-trans-dihydroxy-bis-isopropylamine platin (chip, JM9)] Chawla SP, et al. **Invest New Drugs** 1988 Dec; 6(4):311–7

Phase I—preliminary phase II trial of iproplatin, a cisplatin analogue. Paolozzi FP, et al. **Invest New Drugs** 1988 Sep; 6(3):199–206

Simple nontoxic treatment of advanced metastatic seminoma with carboplatin. Horwich A, et al. **J Clin Oncol** 1989 Aug; 7(8):1150–6 (32 ref.)

High-dose platinum consisting of combined carboplatin and cisplatin in previously untreated ovarian cancer patients with residual disease. Lund B, et al. **J Clin Oncol** 1989 Oct;7(10):1469–73

A randomized comparative trial of carboplatin and iproplatin in advanced squamous carcinoma of the uterine cervix: a Gynecologic Oncology Group study. McGuire WP 3d, et al. **J Clin Oncol** 1989 Oct;7(10):1462–8

Carboplatin substitution for cisplatin in the treatment of ovarian carcinoma—a word of caution [editorial] McGuire WP, et al. **J Natl Cancer Inst** 1989 Oct 4;81(19):1438–9

Randomized trial in advanced ovarian cancer comparing cisplatin and carboplatin. Mangioni C, et al. **J Natl Cancer Inst** 1989 Oct 4;81(19):1464–71

Phase II study of carboplatin in non-small cell lung cancer. Tamura T, et al. **Jpn J Clin Oncol** 1989 Mar;19(1):51–5

Carboplatin or cisplatin? [letter] Mead GM. **Lancet** 1988 Oct 8;2(8615):851

Carboplatin or cisplatin? [letter; comment] Pinkerton CR, et al. **Lancet** 1989 Jul 15;2(8655):161. **Comment on:** Lancet 1988 Sep 3;2(8610):577–8

Carboplatin versus cisplatin [letter] Tighe M, et al. **Lancet** 1988 Dec 10;2(8624):1372–3

Carboplatin. **Med Lett Drugs Ther** 1989 Sep 8;31(800):83–4

Intraarterial infusion of carboplatin in the treatment of malignant gliomas: a phase II study. Follézou JY, et al. **Neoplasma** 1989;36(3):349–52

Platinum antitumour agents. Dabrowiak JC, et al. **Prog Med Chem** 1987;24:129–58 (161 ref.)

Carboplatin in the treatment of oesophageal cancer. Mannell A, et al. **S Afr Med J** 1989 Sep 2;76(5):213–4

Carboplatin (JM-8, CBDCA). A new platinum compound. **Semin Oncol** 1989 Apr;16(2 Suppl 5):1–48

Carboplatin in the treatment of ovarian cancer. Alberts DS, et al. **Semin Oncol** 1989 Apr;16(2 Suppl 5):19–26 (37 ref.)

Review of therapeutic trials of carboplatin in lung cancer. Bunn PA Jr. **Semin Oncol** 1989 Apr;16(2 Suppl 5):27–33 (37 ref.)

Biologic and clinical developments of cisplatin combined with radiation: concepts, utility, projections for new trials, and the emergence of carboplatin. Coughlin CT, et al. **Semin Oncol** 1989 Aug;16(4 Suppl 6):31–43 (99 ref.)

Carboplatin: the experience in head and neck cancer. Eisenberger M, et al. **Semin Oncol** 1989 Apr;16(2 Suppl 5):34–41 (26 ref.)

Carboplatin in refractory epithelial ovarian cancer. Kavanagh JJ, et al. **Semin Oncol** 1989 Apr;16(2 Suppl 5):45–8 (14 ref.)

Overview of carboplatin: replacing, complementing, and extending the therapeutic horizons of cisplatin. Muggia FM. **Semin Oncol** 1989 Apr;16(2 Suppl 5):7–13 (41 ref.)

Use of carboplatin in the treatment of testicular cancer. Williams SD, et al. **Semin Oncol** 1989 Apr;16(2 Suppl 5):42–4 (7 ref.)

Can neo-adjuvant chemotherapy prevent residual tumors? Bourut C, et al. **Suppl J Med Oncol Tumor Pharmacother** 1988;1:59–63

[Antiparasitic activity of Cis-Pt (II) pentamidine in experimental trypanosomiasis of sheep caused by Trypanosoma brucei brucei] Dreyfuss G, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3 Pt 2):626–31 (Eng. Abstr.) (Fre)

[Cytostatic drugs. 1: Platinum compounds, alkylating and intercalating cytostatic drugs] Bauch HJ. **Med Monatsschr Pharm** 1989 Jan;12(1):8–20 (17 ref.) (Ger)

[Antitumor activity of a new platinum complex (R)-(-)-2-aminomethylpyrrolidine (1,1-cyclobutane dicarboxylato) platinum (II) (DWA2114R) by its serial administration] Akamatsu K, et al. **Gan To Kagaku Ryoho** 1989 May;16(5):2039–43 (Eng. Abstr.) (Jpn)

[Experimental evaluation of cisplatin analogous in urogenital cancer] Machida T, et al. **Gan To Kagaku Ryoho** 1989 Apr; 16(4 Pt 2-2):1386–92 (Eng. Abstr.) (Jpn)

[Phase II study of carboplatin in cervical carcinoma] Noda K, et al. **Gan To Kagaku Ryoho** 1988 Nov;15(11):3067–72 (Eng. Abstr.) (Jpn)

[Current status of CDDP analogs in gynecologic malignancies] Yakushiji M, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-2):1393–8 (Eng. Abstr.) (Jpn)

[Synthesis of platinum complexes of 2-aminoalkylpyridine as carrier ligand and their antitumor activities] Morikawa K, et al. **Yakugaku Zasshi** 1988 Apr;108(4):317–24 (Eng. Abstr.) (Jpn)

[The biological activity of platinum and methionine complexes: the antitumor action and inhibition of root growth by complexes of differing compositions and structures] Ivanov VB, et al. **Izv Akad Nauk SSSR [Biol]** 1989 May-Jun;(3):469–73 (Eng. Abstr.) (Rus)

[Comparative study of platinum complexes in athymic mice with human tumors] Bukharov IK, et al. **Vopr Onkol** 1988; 34(9):1084–7 (Eng. Abstr.) (Rus)

[Cisplatin (platidiam) and the prospects for using complex platinum compounds in the clinical chemotherapy of malignant tumors] Gorbunova VA. **Vopr Onkol** 1989; 35(3):325–30 (Eng. Abstr.) (Rus)

TOXICITY

In vivo toxicity of cisplatin and carboplatin on the Leydig cell function and effect of the human choriogonadotropin. Azouri H, et al. **Biochem Pharmacol** 1989 Feb 15; 38(4):567–71

The effect of reduced osmolarity on platinum drug toxicity. Smith E, et al. **Br J Cancer** 1989 Jun;59(6):873–5

Toxicity and antitumor activity of cis-bis-carboxylato(trans-R,R-1,2-diaminocyclohexane) platinum(II) complexes entrapped in liposomes. Khokhar AR, et al. **Cancer Chemother Pharmacol** 1989;23(4):219–24

Preclinical toxicity and pharmacology of liposome-entrapped cis-bis-neodecanoato-trans-R,R-1,2-diaminocyclohexane platinum(II). Perez-Soler R, et al. **Cancer Chemother Pharmacol** 1989;24(1):1–8

Circadian rhythm in toxicities and tissue uptake of 1,2-diamminocyclohexane(trans-1)oxalatoplatinum(II) in mice. Boughattas NA, et al. **Cancer Res** 1989 Jun 15; 49(12):3362–8

Diethyldithiocarbamate inhibition of murine bone marrow toxicity caused by cis-diamminedichloroplatinum(II) or diammine-(1,1-cyclobutanedicarboxylato)platinum(II). Gringeri A, et al. **Cancer Res** 1988 Oct 15;48(20):5708–12

Teratogenic effects of carboplatin, an oncostatic drug, administered during the early organogenetic period in rats. Kai S, et al. **J Toxicol Sci** 1989 May;14(2):115–30

[Comparison of the effects of 1st and 3d generation platinum cytostatics on the chromosomes of lymphocytes in human peripheral blood in vitro] Srb V, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(4):475–83 (Eng. Abstr.) (Cze)

[Study on urinary beta-glucuronidase and alkaline phosphatase activities as indicators of CDDP renal toxicity] Takahashi T, et al. **Hinyokika Kiyo** 1989 Jan;35(1):1–6 (Eng. Abstr.) (Jpn)

[Reproduction studies of carboplatin (I)—Intravenous administration to rats prior to and in the early stages of pregnancy] Kai S, et al. **J Toxicol Sci** 1988 Jul;13 Suppl 2:23–34 (Eng. Abstr.) (Jpn)

[Reproduction studies of carboplatin (II)—Intravenous administration to rats during the period of fetal organogenesis] Kai S, et al. **J Toxicol Sci** 1988 Jul;13 Suppl 2:35–61 (Eng. Abstr.) (Jpn)

[Reproduction studies of carboplatin(III)—Intravenous administration to rats during the perinatal and lactation periods] Kai S, et al. **J Toxicol Sci** 1988 Jul;13 Suppl 2:63–81 (Eng. Abstr.) (Jpn)

[Studies of clinical pharmacology of cis-diamminedichloroplatinum (CDDP) in children with malignant neoplasm: clinical toxicities of CDDP] Murakami T, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Aug 20;23(8):1681–90 (Eng. Abstr.) (Jpn)

[Study on nephrotoxicity in rats receiving cis-diammine-1,1-cyclobutane dicarboxylate platinum II—special reference to morphological changes] Kimura S, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Apr; 80(4):517–25 (Eng. Abstr.) (Jpn)

URINE

Excretion kinetics of the DNA adducts of cis-diamminedichloroplatinum(II) formed in vitro in rat urine. Försti A, et al. **Carcinogenesis** 1988 Oct;9(10):1745–8

ORGANOTHIOPHOSPHORUS COMPOUNDS

see related
INSECTICIDES, ORGANOTHIOPHOSPHATE

Early behavioral toxicity produced by acute ionizing radiation. Bogo V. **Fundam Appl Toxicol** 1988 Nov; 11(4):578–9

ADVERSE EFFECTS

Effect of the radioprotector WR-2721 on operant behavior in the rat. Liu WF, et al. **Neurotoxicol Teratol** 1989 May-Jun;11(3):199–204

Pulmonary toxicity of phosphorothioate impurities found in organophosphate insecticides. Imamura T, et al. **Pharmacol Ther** 1988;38(3):419–27 (51 ref.)

[A case of bullous contact dermatitis caused by butifos] Karimov AM, et al. **Gig Tr Prof Zabol** 1988 Nov;(11):57 (Rus)

ANALYSIS

Removal of pyrazophos from treated fabric using household laundering. Braun HE, et al. **Bull Environ Contam Toxicol** 1989 May;42(5):687–90

Persistence of pirimiphos-methyl in stored potatoes. Hadjidemetriou DG. **Bull Environ Contam Toxicol** 1988 Aug;41(2):299–303

High-performance liquid and gas chromatography of dialkylphosphates, dialkylthiophosphates and dialkyldithiophosphates as their pentafluorobenzyl derivatives. Bardarov V, et al. **J Chromatogr** 1989 Jan 13; 462:233–41

Terbufos residues in wheat and barley. Westcott ND. **J Environ Sci Health [B]** 1988 Aug;23(4):317–30

[The residue behavior of pirimiphos-methyl of tomatoes, leaf- and soil surfaces in greenhouses] Goedicke HJ. **Nahrung** 1988;32(5):475–80 (Eng. Abstr.) (Ger)

[Determining the levels of phenols and various pesticides in fish by the colorimetric method] Gantverg AN. **Gig Sanit** 1988 Sep;(9):36–7 (Rus)

CHEMICAL SYNTHESIS

Stereoselective synthesis of P-homochiral oligo(thymidine methanephosphonates). Lesnikowski ZJ, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11675–89

Synthesis and application of a new phosphorylating agent: S-(N-monomethoxytritylaminoethyl)-O-(o-chlorophenyl)phosphorothi oate. Tanaka T, et al. **Nucleic Acids Symp Ser** 1988;(19):21–4

[Scientific substantiation of the maximum permissible level of O-ethyl-O-phenylchlorthiophosphate in reservoir water] Chura DA, et al. **Gig Sanit** 1988 Sep;(9):67–9 (Rus)

METABOLISM

Enzymatic hydrolysis of S-phosphocysteamine. Orzeszko G, et al. **Acta Pol Pharm** 1988;45(2):171–5

Chiral phosphorothioates: stereochemical analysis of enzymatic substitution at phosphorus. Frey PA. **Adv Enzymol** 1989;62:119–201 (201 ref.)

Studies on the metabolism of the pneumotoxin O,S,S-trimethyl phosphorodithioate—I. Lung and liver microsomes. Nemery B, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3709–15

Studies on the metabolism of the pneumotoxin O,S,S-trimethyl phosphorodithioate—II. Lung and liver slices. Nemery B, et al. **Biochem Pharmacol** 1988 Oct 1; 37(19):3717–22

Myo-inositol(1,4,5)trisphosphorothioate binds to specific [3H]inositol(1,4,5)trisphosphate sites in rat cerebellum and is resistant to 5-phosphatase. Willcocks AL, et al. **Eur J Pharmacol** 1988 Oct 11;155(1-2):181–3

myo-inositol 1,4,5-trisphosphorothioate is a potent competitive inhibitor of human erythrocyte 5-phosphatase

[published erratum appears in FEBS Lett 1989 Feb 27;244(2):510] Cooke AM, et al. **FEBS Lett** 1989 Jan 2; 242(2):373–7

In vitro metabolism of the phosphorothioate radioprotectors WR–2721 and WR–3689. Livesey JC, et al. **Pharmacol Ther** 1988;39(1–3):215–7

PHARMACOKINETICS

Disposition of the radioprotector ethiofos in the rhesus monkey. Influence of route of administration. Mangold DJ, et al. **Drug Metab Dispos** 1989 May–Jun;17(3):304–10

Competition for polyamine uptake into rat lung slices by WR2721 and analogues. Wyatt I, et al. **Int J Radiat Biol** 1989 Mar;55(3):463–72

Determination of phosacetim in rabbit tissues and blood by TLC. Ming S, et al. **J Anal Toxicol** 1988 Sep–Oct; 12(5):287–9

The toxicokinetics of methyl–ISP in rats. Shi N, et al. **J Tongji Med Univ** 1988;8(2):78–82

Pharmacokinetics of WR–2721. Shaw LM, et al. **Pharmacol Ther** 1988;39(1–3):195–201 (37 ref.)

The disposition of ethiofos (WR–2721) in the isolated perfused rat liver. Coleman MD, et al. **Radiat Res** 1989 Feb;117(2):334–41

PHARMACOLOGY

Comparative effects of synthetic insecticides—endosulfan, phosalone and permethrin—on Chlamydomonas reinhardtii algal cells. Gandhi SR, et al. **Acta Microbiol Hung** 1988; 35(2):93–9

Stereospecific mobilization of intracellular Ca2+ by inositol 1,4,5–triphosphate. Comparison with inositol 1,4,5–trisphosphorothioate and inositol 1,3,4–trisphosphate. Strupish J, et al. **Biochem J** 1988 Aug 1;253(3):901–5

Inositol 1,4,5–trisphosphorothioate, a stable analogue of inositol trisphosphate which mobilizes intracellular calcium. Taylor CW, et al. **Biochem J** 1989 May 1; 259(3):645–50

Influence of WR2721 on DNA cross–linking by nitrogen mustard in normal mouse bone marrow and leukemia cells in vivo. DeNeve WJ, et al. **Cancer Res** 1988 Nov 1; 48(21):6002–5

Promotion of cystine uptake, increase of glutathione biosynthesis, and modulation of glutathione status by S–2–(3–aminopropylamino)ethyl phosphorothioic acid (WR–2721) in Chinese hamster cells. Issels RD, et al. **Cancer Res** 1989 Apr 15;49(8):2082–6

Selenium pretreatment enhances the radioprotective effect and reduces the lethal toxicity of WR–2721. Weiss JF, et al. **Free Radic Res Commun** 1987;3(1–5):33–8

Potential immunomodulatory activity of phenylphosphonothioates. Pruett SB, et al. **Int J Immunopharmacol** 1989;11(4):385–93

Effect of WR–2721 on radiation–induced lipid peroxidation and enzyme release in erythrocytes and microsomes. Ayene SI, et al. **Int J Radiat Biol** 1989 Sep;56(3):265–75

Chiral reactions of acetylcholinesterase probed with enantiomeric methylphosphonothioates. Noncovalent determinants of enzyme chirality. Berman HA, et al. **J Biol Chem** 1989 Mar 5;264(7):3942–50

Effect of phosphorothioate homo–oligodeoxynucleotides on herpes simplex virus type 2–induced DNA polymerase. Gao WY, et al. **J Biol Chem** 1989 Jul 5;264(19):11521–6

Calcium oscillations [letter] Rink TJ. **Nature** 1989 Jul 27; 340(6231):271–2

Inhibition of deoxyribonucleases by phosphorothioate groups in oligodeoxyribonucleotides. Spitzer S, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11691–704

In vitro and in vivo protection against phototoxic side effects of photodynamic therapy by radioprotective agents WR–2721 and WR–77913. Dillon J, et al. **Photochem Photobiol** 1988 Aug;48(2):235–8

Radiation–induced changes in collagen isotypes I, III, and IV in the lung of LAF1 mouse: effects of time, dose, and WR–2721. Miller GG, et al. **Radiat Res** 1988 Sep; 115(3):515–32

Radioprotective effect of WR–2721 on haematopoiesis in mice. I. Quantitative changes in haematopoiesis. Brezáni P, et al. **Radiobiol Radiother (Berl)** 1988;29(5):587–93

Radioprotective effect of WR–2721 on haematopoiesis in mice. II. Morphological changes of bone marrow and spleen. Macková N, et al. **Radiobiol Radiother (Berl)** 1988; 29(5):595–601

Radioprotective effect of WR–2721 on haematopoiesis in mice. III. Changes in peripheral blood. Macková N, et al. **Radiobiol Radiother (Berl)** 1988;29(5):603–8

Effects of acute administration of O,S,S–trimethyl phosphorodithioate on the generation of cellular and humoral immune responses following in vitro stimulation. Rodgers KE, et al. **Toxicology** 1988 Oct;51(2–3):241–53

[The mechanism of selective action on warm–blooded animals and arthropods of S–ethinyl esters of thiophosphoric acid] Vikhreva LA, et al. **Dokl Akad Nauk SSSR** 1988;302(3):731–5 **(Rus)**

[The mechanism of reverse inhibition of cholinesterases by thionphosphonates] Kovalev NN, et al. **Izv Akad Nauk SSSR [Biol]** 1988 Nov–Dec;(6):926–9 (Eng. Abstr.) **(Rus)**

[Comparative study of the interaction of acetylcholinesterases of human erythrocytes and the heads of houseflies with phosphorylated alkylchloroformoximes] Shataeva GA, et al. **Zh Evol Biokhim Fiziol** 1988 Nov–Dec;24(6):791–6 (Eng. Abstr.) **(Rus)**

POISONING

A case of death from prothiophos poisoning. Miyazaki T, et al. **Forensic Sci Int** 1988 Jul–Aug;38(1–2):13–9

Late onset isofenphos neurotoxicity. Catz A, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1338–40

Case histories of wild birds killed intentionally with famphur in Georgia and West Virginia. White DH, et al. **J Wildl Dis** 1989 Apr;25(2):184–8

[Chemico–toxicologic findings in fatal suicidal poisoning by demeton–S–methyl] Schludecker D, et al. **Z Rechtsmed** 1988;101(1):55–60 (Eng. Abstr.) **(Ger)**

[Carbohydrate metabolism during poisoning with the cholinesterase inhibitor O–ethyl–S–hexylmethylthiophosphonate] Rozengart VI, et al. **Vopr Med Khim** 1971 Jul–Aug;17(4):403–7 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Purging of small cell lung cancer cells from human bone marrow using ethiofos (WR–2721) and light–activated merocyanine 540 phototreatment. Meagher RC, et al. **Cancer Res** 1989 Jul 1;49(13):3637–41

N–acyl dehydroalanines protect from radiation toxicity and inhibit radiation carcinogenesis in mice. Buc–Calderon P, et al. **Carcinogenesis** 1989 Sep;10(9):1641–4

Ultrastructural effects of phosphorothionates and other inhibitors of lung monooxygenases: protection against trialkylphosphorothiolate–induced lung injury. Dinsdale D, et al. **Exp Lung Res** 1989 May;15(3):459–71

Protection of bone marrow by WR–2721 after fractionated irradiation [letter] Coia LR, et al. **Int J Radiat Oncol Biol Phys** 1989 Oct;17(4):908–9

Clinical trials of WR–2721 and cis–platinum. Glover D, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1201–4

Protection of microvasculature in rat brain against late radiation injury by gammaphos. Plotnikova ED, et al. **Int J Radiat Oncol Biol Phys** 1988 Nov;15(5):1197–201

Propethampos, cyromazine and blowfly strike in sheep [letter] Hyman WB. **J S Afr Vet Assoc** 1988 Dec;59(4):180

Can WR–2721 be improved upon? Brown DQ, et al. **Pharmacol Ther** 1988;39(1–3):157–68 (57 ref.)

Clinical trials of WR–2721 prior to alkylating agent chemotherapy and radiotherapy. Glover D, et al. **Pharmacol Ther** 1988;39(1–3):3–7

Postirradiation glucan administration enhances the radioprotective effects of WR–2721. Patchen ML, et al. **Radiat Res** 1989 Jan;117(1):59–69

Protection of mice against mixed fission neutron–gamma (n: gamma = 1:1) irradiation by WR–2721, 16,16–dimethyl PGE2, and the combination of both agents. Steel LK, et al. **Radiat Res** 1988 Sep;115(3):605–8

Mechanism of unusual cell enlargement in the testis of irradiated mouse following treatment with a radioprotective thiophosphate. Jaimala, et al. **Radiobiol Radiother (Berl)** 1988;29(4):429–33

Inhibition of radiation induced changes in testicular RNA content by a thiophosphate. Jaimala. **Radiobiol Radiother (Berl)** 1989;30(2):163–6

TOXICITY

A pneumotoxin, O,O,S–trimethyl phosphorothioate, induces hemorheological alteration in rats. Bezençon ML, et al. **Arch Toxicol** 1989;63(4):325–30

Immature alveolar/blood barrier and low disaturated phosphatidylcholine in fetal lung after intrauterine exposure to O,O,S–trimethylphosphorothioate. Koizumi A, et al. **Arch Toxicol** 1989;63(4):331–5

Toxicity of the organophosphorous insecticide metamidophos (O,S–dimethyl phosphoramidothioate) to larvae of the freshwater prawn Macrobrachium rosenbergii (De Man) and the blue shrimp Penaeus stylirostris Stimpson. Juarez LM, et al. **Bull Environ Contam Toxicol** 1989 Aug; 43(2):302–9

Avian esterases as indicators of exposure to insecticides—the factor of diurnal variation. Thompson HM, et al. **Bull Environ Contam Toxicol** 1988 Jul;41(1):4–11

Testosterone as a factor modifying the toxicity of ekatin for the Pharaoh quail (Coturnix coturnix Pharaoh). I. Mature birds. Gromysz–Kałkowska K, et al. **Comp Biochem Physiol [C]** 1989;92(1):89–93

Ovarian damage to Channa punctatus after chronic exposure to low concentrations of Elsan, mercury, and ammonia. Dey S, et al. **Ecotoxicol Environ Safety** 1989 Apr; 17(2):247–57

Combined action of carbaryl and phenthoate on the sensitivity of the acetylcholinesterase system of the fish, Channa punctatus (Bloch). Rao KR, et al. **Ecotoxicol Environ Safety** 1989 Feb;17(1):12–5

Ultrastructural effects of phosphorothionates and other inhibitors of lung monooxygenases: protection against trialkylphosphorothiolate–induced lung injury. Dinsdale D, et al. **Exp Lung Res** 1989 May;15(3):459–71

Inhalation fertility and reproduction studies with O,O'–dimethylphosphorodithioate in Sprague–Dawley rats. Heydens WF, et al. **Fundam Appl Toxicol** 1989 Jan; 12(1):62–9

Hyperethanolaminuria in O, O, S–trimethyl phosphorothioate toxicity in rats. Hasegawa J, et al. **Ind Health** 1988; 26(4):215–23

Effects of isophenphos–I on the respiratory function of rat liver mitochondria. Liu RM, et al. **J Tongji Med Univ** 1988; 8(1):18–23

Toxicological studies on the organophosphorous insecticide methyl–ISP. Wu HQ, et al. **J Tongji Med Univ** 1989; 9(1):58–64

Studies on the genotoxicity of asataf (acephate), an organophosphate insecticide, in a mammalian in vivo system. Behera BC, et al. **Mutat Res** 1989 Jul;223(3):287–93

Chromosome aberrations in spermatogonia and sperm abnormalities in Curacron–treated mice. el Nahas SM, et al. **Mutat Res** 1989 Apr;222(4):409–14

Toxicological screening for organophosphorus–induced delayed neurotoxicity: complications in toxicity testing. Cherniack MG. **Neurotoxicology** 1988 Summer;9(2):249–71 (149 ref.)

Effects of ethiofos (WR–2721) and radiation on monkey visual discrimination performance. Bogo V, et al. **Pharmacol Ther** 1988;39(1–3):93–5

Morphogenesis of O,O,S–trimethyl phosphorothioate–induced pulmonary injury in mice. Durham SK, et al. **Toxicol Appl Pharmacol** 1988 Dec; 96(3):417–28

Long–term morphologic and biochemical changes induced by O,O,S–trimethyl phosphorothioate in the rat lung. Durham SK, et al. **Toxicol Appl Pharmacol** 1989 May; 98(3):465–74

Detection of kidney damage by malathion impurities using a microdissection technique. Keadtisuke S, et al. **Toxicol Lett** 1989 Apr;47(1):53–9

Atropine pretreatment does not abrogate O,O,S–trimethyl phosphorothioate–induced bronchiolar injury in mice. Durham SK, et al. **Toxicol Pathol** 1988;16(3):392–5

Biochemical and clinical tests of the delayed neuropathic potential of some O–alkyl O–dichlorophenyl phosphoramidate analogues of methamidophos (O,S–dimethyl phosphorothioamidate). Johnson MK, et al. **Toxicology** 1989 Jan;54(1):89–100

Effects of subacute administration of O,S,S–trimethyl phosphorodithioate on cellular and humoral immune response systems. Rodgers KE, et al. **Toxicology** 1989 Feb; 54(2):183–95

[The effect of noxious chemicals on the sperm quality of boars used for insemination. 1. The fly control agent "omexan"] Schulz O, et al. **Arch Exp Veterinarmed** 1988 May;42(3):435–43 (Eng. Abstr.) **(Ger)**

[Scientific substantiation of the maximum permissible level of O–ethyl–O–phenylchlorthiophosphate in reservoir water] Chura DA, et al. **Gig Sanit** 1988 Sep;(9):67–9 **(Rus)**

[Substantiation of hygienic standardization of ofunak in reservoir water] Kotelenets AI, et al. **Gig Sanit** 1988 Nov; (11):66–8 **(Rus)**

[Hygienic substantiation of the maximum permissible level of mono–methyldichlorothiophosphate in reservoir water] Tomkiv VM. **Gig Sanit** 1989 May;(5):74–6 **(Rus)**

[Circadian rhythm of blood acetylcholinesterase after administration of organophosphate compounds during hypokinesia] Dobriian BB, et al. **Kosm Biol Aviakosm Med** 1989 Jan–Feb;23(1):31–5 (Eng. Abstr.) **(Rus)**

ORGANOTIN COMPOUNDS

Environmental methylation of tin: an assessment. Ashby JR, et al. **Sci Total Environ** 1988 Jul 1;73(1–2):127–33

A comparison of the rates of methylation of mercury(II) species in aquatic media by various organotin and organosilicon moieties. Bellama JM, et al. **Sci Total Environ** 1988 Jul 1;73(1–2):39–51

ADMINISTRATION & DOSAGE

Encapsulation of triphenyltin hydroxide. Markus A, et al. **J Microencapsul** 1986 Jan–Mar;3(1):39–42

ANALYSIS

Determination of fentin residues in potatoes and celery. van den Broek HH, et al. **Analyst** 1988 Aug;113(8):1237–9

Determination of tri–n–butyltin and di–n–butyltin compounds in yellowtails. Sasaki K, et al. **Bull Environ Contam Toxicol** 1988 Dec;41(6):888–93

Inductively coupled plasma mass spectrometry and atomic emission spectrometry coupled to high–performance liquid chromatography for speciation and detection of organotin compounds. Suyani H, et al. **J Chromatogr Sci** 1989 Mar; 27(3):139–43

[Determination of dibutyltin compounds in polyvinyl chloride resin by capillary gas chromatography] Ohhira S, et al. **Nippon Eiseigaku Zasshi** 1989 Feb;43(6):1069–74 (Eng. Abstr.) **(Jpn)**

DIAGNOSTIC USE

Application of dibutyltin oxide method to regioselective acylation and alkylation of tylosin at C–4". Kiyoshima K, et al. **Chem Pharm Bull (Tokyo)** 1989 Apr;37(4):861–5

METABOLISM

The accumulation of organotins in adult and seed oysters from selected estuaries prior to the introduction of U.K. regulations governing the use of tributyltin–based

antifouling paints. Ebdon L, et al. **Sci Total Environ** 1989 Jul 1;83(1-2):63-84

PHARMACOLOGY

Actions of orally administered organotin compounds on heme metabolism and cytochrome P-450 content and function in intestinal epithelium. Rosenberg DW, et al. **Biochem Pharmacol** 1989 Apr 1;38(7):1155-61

Inhibition of oxidative phosphorylation by organotin thiocarbamates. Chandra S, et al. **Chem Biol Interact** 1989; 71(1):21-36

Inhibitory properties of tin(iv) diethyldithiocarbamates on tumoral cells growth. Carrara M, et al. **Pharmacol Res Commun** 1988 Jul;20(7):611-2

Inhibition by triphenyltin chloride of cytosolic free calcium mobilization in human neutrophils stimulated by a chemotactic factor. Miura Y, et al. **Res Commun Chem Pathol Pharmacol** 1989 May; 64(2):331-41

The effect of organotin compounds on chloride secretion by the in vitro perfused rectal gland of Squalus acanthias. Solomon R, et al. **Toxicol Appl Pharmacol** 1989 Sep 1; 100(2):307-14

THERAPEUTIC USE

Antitumor properties of organometallic metallocene complexes of tin and germanium. Köpf-Maier P, et al. **J Cancer Res Clin Oncol** 1988;114(5):502-6

TOXICITY

Metabolic disturbances induced by organotins through subchronic treatment in chickens. First communication: growth dynamics, carbohydrate and protein metabolism. Guta-Socaciu C, et al. **Arch Exp Veterinarmed** 1989 May; 43(3):415-20

Metabolic disturbances induced by organotins through subchronic treatment in chickens. Second communication: mineral metabolism. Guta-Socaciu C, et al. **Arch Exp Veterinarmed** 1989 May;43(3):421-5

An immunohistochemical study of dibutyltin-induced thymus atrophy. Pieters RH, et al. **Arch Toxicol Suppl** 1989; 13:175-8

Thymus atrophy and immunosuppression induced by organotin compounds. Snoeij NJ, et al. **Arch Toxicol Suppl** 1989;13:171-4

In vitro cytotoxicity of heavy metals, acrylamide, and organotin salts to neural cells and fibroblasts. Borenfreund E, et al. **Cell Biol Toxicol** 1987 Mar;3(1):63-73

Acute pancreatitis and bile duct lesions in rat induced by dibutyltin dichloride. Merkord J, et al. **Exp Pathol** 1989; 36(1):59-62

Dibutyltin and tributyltin compounds induce thymus atrophy in rats due to a selective action on thymic lymphoblasts. Snoeij NJ, et al. **Int J Immunopharmacol** 1988;10(7):891-9

Immunologic effects of perinatal exposure of rats to dioctyltin dichloride. Smialowicz RJ, et al. **J Toxicol Environ Health** 1988;25(4):403-22

Toxicity of dibutyltin, tributyltin and other organotin compounds to humans and to experimental animals. Boyer IJ. **Toxicology** 1989 May 15;55(3):253-98 (157 ref.)

[Experimental toxicity of indium formate and indium formate- dibutyltin oxide mixture (90-10) in the rat] Anger JP, et al. **J Toxicol Clin Exp** 1988 Jul-Aug;8(4):273-88 (Eng. Abstr.) **(Fre)**

[Thermal degradation of dibutyltin fluoride (DBTF) and pulmonary toxicity of combustion products in the rat and guinea pig. 2. Acute and subacute toxicity of effluent gases issuing from the thermolysis of DBTF] Anger JP, et al. **J Toxicol Clin Exp** 1985 May-Jun;5(3):171-83 (Eng. Abstr.) **(Fre)**

ORGASM

Bias and fairness in the diagnosis of primary orgasmic dysfunction in women. Fisher WA, et al. **Am Psychol** 1989 Jul;44(7):1080-1

Sex bias and POD. Morokoff PJ. **Am Psychol** 1989 Jan; 44(1):73-7

Treatment outcome of secondary orgasmic dysfunction: a two- to six-year follow-up. Milan RJ Jr, et al. **Arch Sex Behav** 1988 Dec;17(6):463-80

Self-perceived differences in the female orgasmic response. Davidson JK, et al. **Fam Pract Res J** 1989 Spring-Summer; 8(2):75-84

Orgasm: a new classification [editorial] Kothari P. **J Postgrad Med** 1988 Oct;34(4):199-200

The G spot and female ejaculation. A reply to Zaviačič [letter] Alzate H, et al. **J Sex Marital Ther** 1988 Winter; 14(4):299-301

The role of the Grafenberg Spot and female ejaculation in the female orgasmic response: an empirical analysis. Davidson JK Sr, et al. **J Sex Marital Ther** 1989 Summer; 15(2):102-20

The technique of coital alignment and its relation to female orgasmic response and simultaneous orgasm. Eichel EW, et al. **J Sex Marital Ther** 1988 Summer;14(2):129-41

Subtypes of anorgasmia via mathematical taxonomy. Derogatis LR, et al. **Psychosomatics** 1989 Spring; 30(2):166-73

[Retarded ejaculation and anejaculation without orgasm. Apropos of the results of studies and of treatment in 60 cases] Buvat J, et al. **Acta Urol Belg** 1989;57(1):195-206 (Eng. Abstr.) **(Fre)**

DRUG EFFECTS

Fluoxetine and anorgasmia [letter] Kline MD. **Am J Psychiatry** 1989 Jun;146(6):804-5

Repeated observations of yawning, clitoral engorgement, and orgasm associated with fluoxetine administration [letter] Modell JG. **J Clin Psychopharmacol** 1989 Feb;9(1):63-5

Antidepressants and inhibited female orgasm: a literature review. Jani NN, et al. **J Sex Marital Ther** 1988 Winter; 14(4):279-84 (24 ref.)

Psychiatric drugs and inhibited female orgasm. Segraves RT. **J Sex Marital Ther** 1988 Fall;14(3):202-7 (41 ref.)

Fluoxetine-related anorgasmy [letter] Lydiard RB, et al. **South Med J** 1989 Jul;82(7):933-4

PHYSIOLOGY

Sexual reflexes in male and female rats. Chung SK, et al. **Neurosci Lett** 1988 Dec 5;94(3):343-8

[The physiology of sexual reactions in women] Hovatta O. **Duodecim** 1988;104(15):1095-101 (37 ref.) **(Fin)**

[Changes in the psychophysical experience of orgasm in pregnancy] Pepe F, et al. **Minerva Ginecol** 1989 Jun; 41(6):295-7 (Eng. Abstr.) **(Ita)**

[Effect of total abdominal and vaginal hysterectomy on the sex life of women] Chojnacki A, et al. **Ginekol Pol** 1988 Aug;59(8):504-7 (Eng. Abstr.) **(Pol)**

ORIENTAL MEDICINE, TRADITIONAL see **MEDICINE, ORIENTAL TRADITIONAL**

ORIENTAL SORE see **LEISHMANIASIS**

ORIENTATION

Response amendments during manual aiming movements to double-step targets. Barrett NC, et al. **Acta Psychol (Amst)** 1989 May;70(3):205-17

Covert visual orienting: hemifield-activation can be mimicked by zoom lens and midlocation placement strategies. Klein R, et al. **Acta Psychol (Amst)** 1989 May; 70(3):235-50

Spatial S-R compatibility under head tilt. Schroeder-Heister P, et al. **Acta Psychol (Amst)** 1988 Oct;69(1):35-44

Experiential confinement as a condition of psychological change. Wilner W. **Am J Psychoanal** 1989 Mar;49(1):51-66

Spatial disorientation in Alzheimer's disease. Henderson VW, et al. **Arch Neurol** 1989 Apr;46(4):391-4

Disorientation to place [letter] Kirchmeier K, et al. **Arch Neurol** 1988 Dec;45(12):1299

The visually guided control of simulated altitude. Johnson WW, et al. **Aviat Space Environ Med** 1989 Feb;60(2):152-6

The giant hand phenomenon. Lyons TJ, et al. **Aviat Space Environ Med** 1989 Jan;60(1):64-6

Left hemisphere superiority for visuospatial functions in left-handers. Marzi CA, et al. **Behav Brain Res** 1988 Sep 15;30(2):183-92

Disturbances of spatial perception in children. Meerwaldt JD, et al. **Behav Brain Res** 1988 Dec 1;31(2):131-4

Development of visual and tactile rod orientation in children. Meerwaldt JD, et al. **Behav Brain Res** 1988 Sep 15; 30(2):145-9

Dynamic adaptation of the blind pointing characteristic to stepwise lateral tilts of body, head, and trunk. Ott D, et al. **Behav Brain Res** 1988 Sep 15;30(2):99-110

Perceptual spatial frequency--orientation surface: psychophysics and line element theory. Treutwein B, et al. **Biol Cybern** 1989;60(4):285-95

Dementia praecox revisited. Age disorientation, mental status, and ventricular enlargement. Goldberg TE, et al. **Br J Psychiatry** 1988 Aug;153:187-90

Upside-down faces: a review of the effect of inversion upon face recognition. Valentine T. **Br J Psychol** 1988 Nov;79 (Pt 4):471-91 (90 ref.)

Neck muscle vibration modifies the representation of visual motion and direction in man. Biguer B, et al. **Brain** 1988 Dec;111 (Pt 6):1405-24

Gradual specification of response amplitude in human tracking performance. Ghez C, et al. **Brain Behav Evol** 1989;33(2-3):69-74

Stereopsis impairment during smooth pursuit eye tracking. Vardi N, et al. **Brain Behav Evol** 1989;33(2-3):99-103

Face recognition: a general or specific right hemisphere capacity? Levine SC, et al. **Brain Cogn** 1988 Dec; 8(3):303-25

Positional dyslexia. Katz RB, et al. **Brain Lang** 1989 Aug; 37(2):266-89

Location errors in tachistoscopic recognition: guesses, probe errors, or spatial confusions? Butler BE, et al. **Can J Psychol** 1987 Sep;41(3):339-50

Spatial memory in pigeons on a four-arm radial maze. Dale RH. **Can J Psychol** 1988 Mar;42(1):78-83

Location confusions in visual information processing. Dixon P, et al. **Can J Psychol** 1988 Sep;42(3):378-94

The influence of visual target and limb information on manual aiming. Elliott D. **Can J Psychol** 1988 Mar;42(1):57-68

The perception of structure in vectorpatterns by 4-month-old infants. Humphrey GK, et al. **Can J Psychol** 1988 Mar;42(1):35-43

The time to identify disoriented letters: effects of practice and font. Jolicoeur P, et al. **Can J Psychol** 1987 Sep; 41(3):303-16

Naming and locating the tops of rotated pictures. Maki RH. **Can J Psychol** 1986 Dec;40(4):368-87

Constraints on human arm movement trajectories. Marteniuk RG, et al. **Can J Psychol** 1987 Sep;41(3):365-78

The effects of object orientation and object type on children's interpretation of the word big. Coley JD, et al. **Child Dev** 1989 Apr;60(2):372-80

The role of homecage environmental stimuli in the facilitation of shock-motivated spatial discrimination learning in rat pups. Misanin JR, et al. **Dev Psychobiol** 1989 Mar; 22(2):129-40

Operator orientation and compatibility in visual-motor task performance. Worringham CJ, et al. **Ergonomics** 1989 Apr; 32(4):387-99

Children's solution strategies and mental rotation: evidence for a developmental shift. Rosser RA, et al. **Genet Soc Gen Psychol Monogr** 1989 May;115(2):183-204

Differential color brightness as a body orientation cue. Barbour CG, et al. **Hum Factors** 1988 Dec;30(6):713-7

Significance and components of the orienting response: effects of signal value versus vigilance. Barry RJ. **Int J Psychophysiol** 1988 Nov;6(4):343-6

Human Pavlovian HR decelerative conditioning with negative tilt as US: a review of some S-R, stimulus-substitution evidence. Furedy JJ, et al. **Int J Psychophysiol** 1989 Mar;7(1):19-23 (27 ref.)

Observational learning of a left-right behavioral asymmetry in mice (Mus musculus). Collins RL. **J Comp Psychol** 1988 Sep;102(3):222-4

Multivariate analysis of putative measures of activity, exploration, emotionality, and spatial behavior in the hooded rat (Rattus norvegicus). Maier SE, et al. **J Comp Psychol** 1988 Dec;102(4):378-87

Rhesus monkeys (Macaca mulatta), video tasks, and implications for stimulus-response spatial contiguity. Rumbaugh DM, et al. **J Comp Psychol** 1989 Mar; 103(1):32-8

Early understanding of perception as a source of knowledge. Pillow BH. **J Exp Child Psychol** 1989 Feb;47(1):116-29

Sources of visual interference in delayed matching-to-sample with pigeons. Grant DS. **J Exp Psychol [Anim Behav]** 1988 Oct;14(4):368-75

On the representation of events: a study of orientation, recall, and recognition. Hanson C, et al. **J Exp Psychol [Gen]** 1989 Jun;118(2):136-47

Effect of background information on object identification. Boyce SJ, et al. **J Exp Psychol [Hum Percept]** 1989 Aug; 15(3):556-66

Aiming error under transformed spatial mappings suggests a structure for visual-motor maps. Cunningham HA. **J Exp Psychol [Hum Percept]** 1989 Aug;15(3):493-506

Does the identification of simple features require serial processing? Folk CL, et al. **J Exp Psychol [Hum Percept]** 1989 Feb;15(1):97-110

Understanding collision dynamics. Gilden DL, et al. **J Exp Psychol [Hum Percept]** 1989 May;15(2):372-83

Tests of a temporal theory of attentional binding. Keele SW, et al. **J Exp Psychol [Hum Percept]** 1988 Aug;14(3):444-52

Why is word recognition impaired by disorientation while the identification of single letters is not? Koriat A, et al. **J Exp Psychol [Hum Percept]** 1989 Feb;15(1):153-63

Components of the location probability effect in visual search tasks. Miller J. **J Exp Psychol [Hum Percept]** 1988 Aug; 14(3):453-71

Reflexive and voluntary orienting of visual attention: time course of activation and resistance to interruption. Müller HJ, et al. **J Exp Psychol [Hum Percept]** 1989 May; 15(2):315-30

Splitting visual space with attention. Nicoletti R, et al. **J Exp Psychol [Hum Percept]** 1989 Feb;15(1):164-9

Understanding natural dynamics. Proffitt DR, et al. **J Exp Psychol [Hum Percept]** 1989 May;15(2):384-93

Regression to egocentrically determined description of form under conditions of inattention. Rock I, et al. **J Exp Psychol [Hum Percept]** 1989 May;15(2):259-72

Haptically perceiving the distances reachable with hand-held objects. Solomon HY, et al. **J Exp Psychol [Hum Percept]** 1988 Aug;14(3):404-27

Interference in spatial memory. Elmes DG. **J Exp Psychol [Learn Mem Cogn]** 1988 Oct;14(4):668-75

Identification of disoriented objects: effects of context of prior presentation [published erratum appears in J Exp Psychol [Learn Mem Cogn] 1989 Jul;15(4):555] Jolicoeur P, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Mar; 15(2):200-10

Establishing global and local correspondence between successive stimuli: the holistic nature of backward alignment. Koriat A, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 May;15(3):480-94

Subjective hierarchies in spatial memory. McNamara TP, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Mar;15(2):211-27

Rules and exemplars in categorization, identification, and recognition. Nosofsky RM, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Mar;15(2):282-304

Orientation specificity in spatial memory: what makes a path different from a map of the path? Presson CC, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Sep;15(5):887-97

The effects of stereotyped behaviour on orienting and tonic cardiac activity. MacLean WE Jr, et al. **J Ment Defic Res** 1989 Feb;33 (Pt 1):31-9

Discrimination of opposite directions measured with stroboscopically illuminated random-dot patterns. De Bruyn B, et al. **J Opt Soc Am [A]** 1989 Feb;6(2):323–8

Binocular summation of hyperacuity tasks. Lindblom B, et al. **J Opt Soc Am [A]** 1989 Apr;6(4):585–9

Orientation of displaced homing pigeons with shifted circadian clocks: prediction vs observation. Neuss M, et al. **Naturwissenschaften** 1988 Jul;75(7):363–5

Pigeon homing: wind exposition determines the importance of olfactory input. Wiltschko R, et al. **Naturwissenschaften** 1989 May;76(5):229–31

Spatial disorientation in PD [letter] Taylor A, et al. **Neurology** 1989 Jun;39(6):879–80

A directional bias for studies of laterality. Alter I, et al. **Neuropsychologia** 1989;27(2):251–7

A cerebral origin for "directionality". Alter I. **Neuropsychologia** 1989;27(4):563–73

Exceptions to the male advantage on a spatial task: family handedness and college major as factors identifying women who excel. Casey MB, et al. **Neuropsychologia** 1989; 27(5):689–96

Compression and lateral shift of mental coordinate systems in a line bisection task. Werth R, et al. **Neuropsychologia** 1988;26(5):741–5

Peripheral apparent motion as a function of location, contrast, and direction of stimulus motion. Barfield W, et al. **Percept Mot Skills** 1989 Feb;68(1):33–4

Age and sex differences in representation of horizontality among children in India. De Lisi R, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):739–46

Intermodal enhancement of stimulus localisation in infants born prematurely. Foreman N, et al. **Percept Mot Skills** 1989 Aug;69(1):43–50

Effects of fatigue on ability to process visual information by experienced orienteers. Hancock S, et al. **Percept Mot Skills** 1986 Apr;62(2):491–8

Haptic identification of rotated letters using the left or right hand. Hunt LJ, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):899–906

Effect of starting position on reproduction of movement: further evidence of interference between location and distance information. Imanaka K. **Percept Mot Skills** 1989 Apr;68(2):423–34

Vision and kinesthesis in accuracy of hand movement. Lovelace EA. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):707–14

Autokinetic movement and inverted vision. Nakajima Y. **Percept Mot Skills** 1989 Aug;69(1):95–8

Effects of living in the up-down inverted visual world on apparent movement. Nakajima Y. **Percept Mot Skills** 1988 Aug;67(1):39–42

Displacement effects caused by converging lines and dots. Radenhausen RA, et al. **Percept Mot Skills** 1989 Feb; 68(1):103–6

Performance of the vertical position in synchronized swimming as a function of skill, proprioceptive and visual feedback. Starkes JL, et al. **Percept Mot Skills** 1989 Aug; 69(1):225–6

Development of orientation discrimination in infancy. Atkinson J, et al. **Perception** 1988;17(5):587–95

'Where' and 'what' in visual search. Atkinson J, et al. **Perception** 1989;18(2):181–9

Rotating trapezia which appear luminous and transparent during reversals. Cowie R. **Perception** 1989;18(2):173–80

On a changing perspective illusion within Vermeer's The Music Lesson. Deregowski JB, et al. **Perception** 1988; 17(1):13–21

Interactions in the discrimination and absolute judgement of orientation and length. Dick M, et al. **Perception** 1988; 17(2):177–89

Globally perceived directional flow in static images. Farell B, et al. **Perception** 1989;18(2):155–72

The perception of an optical flow projected on the ground surface. Flückiger M, et al. **Perception** 1988;17(5):633–45

Visual parsing and priority effects in temporal order judgements of line drawn patterns. Fraser IH, et al. **Perception** 1988;17(4):437–59

Angular induction as a function of contact and target orientation. Greene E, et al. **Perception** 1989;18(2):143–54

The corner Poggendorff. Greene E. **Perception** 1988; 17(1):65–70

Tactile recognition of mirror images by children: intermanual transfer and rotation of the palm. Heath B, et al. **Perception** 1988;17(4):535–47

Tactile memory in sighted and blind observers: the influence of orientation and rate of presentation. Heller MA. **Perception** 1989;18(1):121–33

The effect of feature displacement on the perception of well-known faces. Hosie JA, et al. **Perception** 1988; 17(4):461–74

Constant errors in judgements of collinearity due to the presence of neighbouring objects. Hotopf WH, et al. **Perception** 1988;17(4):523–34

Alleys on an extensive apparent frontoparallel plane: a second experiment. Indow T, et al. **Perception** 1988;17(5):647–66

Spatial and orientation specific integration in the tilt illusion. Johnstone S, et al. **Perception** 1989;18(1):5–23

Visual stimulation affects the perception of voluntary leg movements during walking. Lackner JR, et al. **Perception** 1988;17(1):71–80

Errors in estimating the orientation of dot patterns. Lánsky P, et al. **Perception** 1989;18(2):237–42

Spatial asymmetries in tactile discrimination of line orientation: a comparison of the sighted, visually impaired, and blind. Lechelt EC. **Perception** 1988;17(5):579–85

A simple optical method for producing two identical stimuli moving in opposite directions. Moulden B. **Perception** 1988; 17(1):135–6

Effects of phosphor persistence on perception and the control of eye movements. Neary C, et al. **Perception** 1989; 18(2):257–64

Reference frame effects on shape perception in two versus three dimensions. Palmer S, et al. **Perception** 1988; 17(2):147–63

Necessary considerations for a theory of form perception: a theoretical and empirical reply to Boselie and Leeuwenberg (1986). Peterson MA, et al. **Perception** 1989; 18(1):105–19

Privileged directions for subjective contours: horizontal and vertical versus tilted. Purghé F. **Perception** 1989; 18(2):201–13

Misaligned maps lead to predictable errors. Rossano MJ, et al. **Perception** 1989;18(2):215–29

Sources of error in the Piagetian water-level task. Sommerville D, et al. **Perception** 1988;17(2):249–54

Making Mayhew and Frisby effortlessly discriminable. Thompson P, et al. **Perception** 1989;18(2):231–5

The apparent size of three-dimensional objects and their silhouettes: a solid-superiority effect. Walker JT, et al. **Perception** 1988;17(1):23–30

Two-dimensional tilt illusions induced by orthogonal plaid patterns: effects of plaid motion, orientation, spatial separation, and spatial frequency. Wenderoth P, et al. **Perception** 1989;18(1):25–38

The differential effects of brief exposures and surrounding contours on direct and indirect tilt illusions. Wenderoth P, et al. **Perception** 1988;17(2):165–76

The two-process distinction in apparent motion. Petersik JT. **Psychol Bull** 1989 Jul;106(1):107–27 (105 ref.)

Learning in mice selectively bred for high and low aggressiveness. Kvist B. **Psychol Rep** 1989 Feb;64(1):127–30

Reduction and elimination of the Poggendorff misalignment effect by minor changes at intersections: implications for the perceptual-compromise explanation. Day RH. **Psychol Res** 1988;50(1):7–11

The effects of advance location cueing on latencies in a single-letter recognition task. van der Heijden AH, et al. **Psychol Res** 1988;50(2):94–102

Stimulus novelty and significance as determinants of electrodermal responsivity: the serial position effect. Ben-Shakhar G, et al. **Psychophysiology** 1989 Jan; 26(1):29–38

Orienting in schizophrenia: habituation to auditory stimuli of constant and varying intensity in patients high and low in skin conductance responsivity. Ohman A, et al. **Psychophysiology** 1989 Jan;26(1):48–61

Attention to color: an analysis of selection, controlled search, and motor activation, using event-related potentials. Wijers AA, et al. **Psychophysiology** 1989 Jan;26(1):89–109

The role of angles in inducing misalignment in the Poggendorff figure. Hotopf WH, et al. **Q J Exp Psychol [A]** 1989 May;41(2):355–83

Mental representations of spatial and nonspatial relations. McNamara TP, et al. **Q J Exp Psychol [A]** 1989 May; 41(2):215–33

Movement and working memory: patterns and positions in space. Smyth MM, et al. **Q J Exp Psychol [A]** 1988 Aug; 40(3):497–514

Working memory for movements. Smyth MM, et al. **Q J Exp Psychol [A]** 1989 May;41(2):235–50

[Knowledge of results and spatio-temporal control in an anticipation-coincidence task in children 6 to 10 years of age] Gagnon M, et al. **Can J Psychol** 1988 Sep;42(3):347–63 (Eng. Abstr.) **(Fre)**

[Spatial orientation of attention: results and theories] Possamaï CA. **Can J Psychol** 1986 Dec;40(4):388–413 (90 ref.) (Eng. Abstr.) **(Fre)**

[Navigation by means of an olfactory map and a sun compass: the homing ability of pigeons] Wallraff HG. **Naturwissenschaften** 1988 Aug;75(8):380–92 (82 ref.) (Eng. Abstr.) **(Ger)**

[The effect of temporal distribution in relation to constant frequency of stimuli on habituation of the orienting reaction] Baltissen R, et al. **Z Exp Angew Psychol** 1989; 36(2):181–98 (Eng. Abstr.) **(Ger)**

[Are marker identification and mental rotation independent transformations of the visual code?] Schroiff HW. **Z Exp Angew Psychol** 1988;35(3):451–62 (Eng. Abstr.) **(Ger)**

[The significance of partial visual feedback in discrete goal movements] Spijkers WA, et al. **Z Exp Angew Psychol** 1988; 35(3):463–75 (Eng. Abstr.) **(Ger)**

[Depersonalization experiences and the ability to take perspective] Habermas T. **Z Kinder Jugenpsychiatr** 1989 Mar;17(1):31–6 (25 ref.) **(Ger)**

[Not superior achievement—but a form of developmental delay] Weinschenk C. **Z Kinder Jugenpsychiatr** 1988 Sep; 16(3):163–5 **(Ger)**

[Effect of the probability of the appearance of stimulus on voluntary movements of attention] Castiello U, et al. **Boll Soc Ital Biol Sper** 1988 Nov;64(11):1037–43 (Eng. Abstr.) **(Ita)**

[Asymmetry in attention orientation in normal subjects] Dascola I, et al. **Boll Soc Ital Biol Sper** 1988 Nov; 64(11):1017–24 (Eng. Abstr.) **(Ita)**

[Differences in attention orientation with peripheral and central signals] Riggio L, et al. **Boll Soc Ital Biol Sper** 1988 Nov;64(11):1045–52 (Eng. Abstr.) **(Ita)**

[Effects of stimulus modality and task instruction upon the orienting response] Imai A. **Shinrigaku Kenkyu** 1988 Apr; 59(1):30–6 (Eng. Abstr.) **(Jpn)**

[An integral method of evaluating the open-field behavior of white rats] Buslovich SIu, et al. **Zh Vyssh Nerv Deiat** 1989 Jan-Feb;39(1):168–71 **(Rus)**

DRUG EFFECTS

The bite of Jesuits' bark. Balfour AJ. **Aviat Space Environ Med** 1989 Jul;60(7 Pt 2):A4–5

Effects of combined muscarinic and nicotinic blockade on choice accuracy in the radial-arm maze. Levin ED, et al. **Behav Neural Biol** 1989 Mar;51(2):270–7

Scopolamine interactions with D1 and D2 antagonists on radial-arm maze performance in rats. Levin ED. **Behav Neural Biol** 1988 Sep;50(2):240–5

Idazoxan, an alpha-2 antagonist, facilitates memory retrieval in the rat. Sara SJ, et al. **Behav Neural Biol** 1989 May; 51(3):401–11

Effect of cholinesterase inhibitors on Morris water task behavior following lesions of the nucleus basalis magnocellularis. Dokla CP, et al. **Behav Neurosci** 1988 Dec; 102(6):861–71

Effects of intrahippocampal administration of colchicine on incentive contrast and on radial maze performance. Flaherty CF, et al. **Behav Neurosci** 1989 Apr;103(2):319–28

Prefrontal cortex lesions differentially disrupt cocaine-reinforced conditioned place preference but not conditioned taste aversion. Isaac WL, et al. **Behav Neurosci** 1989 Apr;103(2):345–55

Improvement of memory by a vasopressin fragment: importance of individual differences in mnemonic function. Strupp BJ. **Behav Neurosci** 1989 Aug;103(4):743–54

Role of dentate gyrus cells in retention of a radial arm maze task and sensitivity of rats to cholinergic drugs. Tilson HA, et al. **Behav Neurosci** 1988 Dec;102(6):835–42

Sodium valproate and chlordiazepoxide in the elevated plus-maze test of anxiety in the rat. File SE, et al. **Neuropsychobiology** 1988;20(2):82–6

Psychopharmacological effects in the radial-arm maze. Levin ED. **Neurosci Biobehav Rev** 1988 Summer;12(2):169–75 (82 ref.)

Effects of scopolamine on performance of rats in a delayed-response radial maze task. Bolhuis JJ, et al. **Physiol Behav** 1988;43(4):403–9

Immediate and long-lasting effects of MK-801 on motor activity, spatial navigation in a swimming pool and EEG in the rat. Whishaw IQ, et al. **Psychopharmacology (Berlin)** 1989;98(4):500–7

[Neuropharmacologic effect of 2 newly synthesized compounds of the piperazine group. Report II. Effect on the behavior of experimental animals] Ianeva-Balabanska I, et al. **Eksp Med Morfol** 1988;27(3):22–6 (Eng. Abstr.) **(Bul)**

[Effect of tuftsin on the orientation-exploratory behavior of normal white rats and against a background of pharmacologically induced disorders of the brain biogenic amine system] Sarycheva NIu, et al. **Biol Nauki** 1989; (3):70–5 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Cue distinctiveness and response-to-change in scopolamine injected or hippocampal rats. Lukaszewska I, et al. **Acta Neurobiol Exp (Warsz)** 1988;48(4):137–44

Is the 45 degrees-oblique a third dominant direction? Yakimoff N, et al. **Acta Neurobiol Exp (Warsz)** 1989; 49(1):47–50

Orienting reactions to light tactile stimuli after single and repeated partial spinal cord lesions in the cat. Danielsson I, et al. **Acta Physiol Scand** 1989 May;136(1):121–30

Pre- and postflight (D-1) postural control in tilting environments. Bles W, et al. **Adv Otorhinolaryngol** 1988; 42:13–7

The relative effect of saccular and somatosensory information on spatial perception and control. Mittelstaedt H, et al. **Adv Otorhinolaryngol** 1988;42:24–30

Ocular torsion in upright and tilted positions during hypo- and hypergravity of parabolic flight. Diamond SG, et al. **Aviat Space Environ Med** 1988 Dec;59(12):1158–62

The effects of ibotenic acid lesions of the nucleus accumbens on spatial learning and extinction in the rat. Annett LE, et al. **Behav Brain Res** 1989 Jan 1;31(3):231–42

Impairment of memory in a delayed non-matching to place task following mamillary body lesions in mice. Beracochea DJ, et al. **Behav Brain Res** 1989 Aug 1;34(1-2):147–54

Responses of hippocampal formation neurons in the monkey related to delayed spatial response and object-place memory tasks. Cahusac PM, et al. **Behav Brain Res** 1989 Jul 1;33(3):229–40

Early-life undernutrition impairs the development of the learning and short-term memory processes mediating performance in a conditional-spatial discrimination task. Castro CA, et al. **Behav Brain Res** 1989 Apr 1;32(3):255–64

A comparison of the effects of fornix transection and sulcus principalis ablation upon spatial learning by monkeys. Gaffan D, et al. **Behav Brain Res** 1989 Jan 1;31(3):207–20

In vivo modulation of septo-hippocampal cholinergic

activity in mice: relationships with spatial reference and working memory performance. Galey D, et al. **Behav Brain Res** 1989 Mar 1;32(2):163–72

Long-term deficits in water maze spatial conditional alternation performance following retrohippocampal lesions in rats. Goodlett CR, et al. **Behav Brain Res** 1989 Feb 1;32(1):63–7

Spontaneous alternation and exploration in weaver mutant mice. Lalonde R, et al. **Behav Brain Res** 1988 Dec 1; 31(2):111–4

Enhanced detection of nucleus basalis magnocellularis lesion-induced spatial learning deficit in rats by modification of training regimen. Mandel RJ, et al. **Behav Brain Res** 1989 Jan 1;31(3):221–9

Early rearing environment and dorsal hippocampal ibotenic acid lesions: long-term influences on spatial learning and alternation in the rat. Pacteau C, et al. **Behav Brain Res** 1989 Aug 1;34(1–2):79–96

Intervention of the lateral and central amygdala on the association of visual stimuli with different magnitudes of reinforcement. Peinado-Manzano A. **Behav Brain Res** 1989 Apr 1;32(3):289–95

Circling behavior: ethological analysis and functional considerations. Piazza PV, et al. **Behav Brain Res** 1989 Jan 1;31(3):267–71

A correlation between regional acetylcholinesterase activity in rat brain and performance in a spatial task. Segal M, et al. **Behav Brain Res** 1988 Sep 15;30(2):215–9

The role of the fornix/fimbria and some related subcortical structures in place learning and memory. Sutherland RJ, et al. **Behav Brain Res** 1989 Apr 1;32(3):265–77

Differential hippocampal and cortical cholinergic activation during the acquisition, retention, reversal and extinction of a spatial discrimination in an 8-arm radial maze by mice. Toumane A, et al. **Behav Brain Res** 1988 Oct;30(3):225–34

Selective fimbria lesions impair acquisition of working and reference memory of rats in a complex spatial discrimination task. van der Staay FJ, et al. **Behav Brain Res** 1989 Mar 1;32(2):151–61

Studies into the mechanisms of strain differences in hippocampus-related behaviors. Pick CG, et al. **Behav Genet** 1989 Mar;19(2):315–25

Effects of anterior or dorsomedial thalamic ibotenic lesions on learning and memory in rats. Beracochea DJ, et al. **Behav Neural Biol** 1989 May;51(3):364–76

Improvement of learning by mesencephalic reticular stimulation during postlearning paradoxical sleep. Hennevin E, et al. **Behav Neural Biol** 1989 May; 51(3):291–306

The role of myelination in learning performance observed in two strains of myelin-deficient mutant mice (shiverer and mld). Inagawa K, et al. **Behav Neural Biol** 1988 Sep; 50(2):184–92

Frontal cortex grafts have opposite effects at different postoperative recovery times. Kolb B, et al. **Behav Neural Biol** 1988 Sep;50(2):193–206

Vestibular stimulation disrupts acquisition of place navigation in the Morris water tank task. Semenov LV, et al. **Behav Neural Biol** 1989 May;51(3):346–63

Acquisition of a complex place task in rats with selective ibotenate lesions of hippocampal formation: combined lesions of subiculum and entorhinal cortex versus hippocampus. Bouffard JP, et al. **Behav Neurosci** 1988 Dec; 102(6):828–34

Sampling behavior in the radial maze and operant chamber: role of the hippocampus and prefrontal area. Devenport LD, et al. **Behav Neurosci** 1988 Aug;102(4):489–98

Successful performance by monkeys with lesions of the hippocampal formation on AB and object retrieval, two tasks that mark developmental changes in human infants. Diamond A, et al. **Behav Neurosci** 1989 Jun;103(3):526–37

Spatial cognitive maps: differential role of parietal cortex and hippocampal formation. DiMattia BD, et al. **Behav Neurosci** 1988 Aug;102(4):471–80

Laterality for visual-spatial processing in two language-trained chimpanzees (Pan troglodytes). Hopkins WD, et al. **Behav Neurosci** 1989 Apr;103(2):227–34

Dissociation of item and order memory following parietal cortex lesions in the rat. Kesner RP, et al. **Behav Neurosci** 1989 Aug;103(4):907–10

Aging and atropine effects on spatial navigation in the Morris water task. Lindner MD, et al. **Behav Neurosci** 1988 Oct; 102(5):621–34

Disruption of the connections between the mediodorsal and sulcal prefrontal cortices alters the associability of rewarding medial cortical stimulation to place and taste stimuli in rats. Robertson A, et al. **Behav Neurosci** 1989 Aug;103(4):770–8

Influence of inherent directional biases on neurochemical consequences of conditioned circling. Szostak C, et al. **Behav Neurosci** 1989 Jun;103(3):678–87

Retention of maze performance inversely correlates with N-methyl-D-aspartate receptor number in hippocampus and frontal neocortex in the rat. Wenk GL, et al. **Behav Neurosci** 1989 Jun;103(3):688–90

On the visual orientation of random dot Moiré patterns. Lánský P, et al. **Biol Cybern** 1989;60(3):213–9

Stimulus omission and the orienting response: latency differences suggest different mechanisms. Barry RJ, et al. **Biol Psychol** 1987 Dec;25(3):261–76

Single-unit activity related to active localization of acoustic and visual stimuli in the frontal cortex of the rhesus monkey. Vaadia E. **Brain Behav Evol** 1989;33(2–3):127–31

Equivalent spatial location memory deficits in rats with medial septum or hippocampal formation lesions and patients with dementia of the Alzheimer's type. Kesner RP, et al. **Brain Cogn** 1989 Mar;9(2):289–300

Selective spatial attention and length representation in normal subjects and in patients with unilateral spatial neglect. Nichelli P, et al. **Brain Cogn** 1989 Jan;9(1):57–70

Mental rotation: an event-related potential study with a validated mental rotation task. Peronnet F, et al. **Brain Cogn** 1989 Mar;9(2):279–88

Orientation of the semicircular canals in rat. Blanks RH, et al. **Brain Res** 1989 May 22;487(2):278–87

Visual head extension: transitional head coordination in the pigeon squab (Columbia livia). Davies MN, et al. **Dev Psychobiol** 1989 Jul;22(5):477–88

The effects of gravity inversion on exercise-induced spinal loading. Boocock MG, et al. **Ergonomics** 1988 Nov; 31(11):1631–7

The organization of descending tectofugal pathways underlying orienting in the frog, Rana pipiens. I. Lateralization, parcellation, and an intermediate spatial representation. Masino T, et al. **Exp Brain Res** 1989; 75(2):227–44

The organization of descending tectofugal pathways underlying orienting in the frog, Rana pipiens. II. Evidence for the involvement of a tecto-tegmento-spinal pathway. Masino T, et al. **Exp Brain Res** 1989;75(2):245–64

Behavior evoked by electrical stimulation of the hamster superior colliculus. Northmore DP, et al. **Exp Brain Res** 1988;73(3):595–605

Evoked potential correlates of echolocation in the mustached bat, Pteronotus p. parnellii. Henson OW Jr, et al. **Hear Res** 1989 Apr;38(3):213–9

Directionality of sound pressure transformation at the pinna of echolocating bats. Jen PH, et al. **Hear Res** 1988 Jul 15; 34(2):101–17

Time is traded for intensity in the bat's auditory system. Pollak GD. **Hear Res** 1988 Nov;36(2–3):107–24

Human Pavlovian HR-decelerative conditioning with negative tilt as US: evidence of vagal and sympathetic influences on the UR in dogs. Furedy JJ, et al. **Int J Psychophysiol** 1989 Mar;7(1):25–33

An interpretation of cortical maps in echolocating bats. Altes RA. **J Acoust Soc Am** 1989 Feb;85(2):934–42

Range estimation by echolocation in the bat Eptesicus fuscus: trading of phase versus time cues. Menne D, et al. **J Acoust Soc Am** 1989 Jun;85(6):2642–50

Clutter interference along the target range axis in the echolocating bat, Eptesicus fuscus. Simmons JA, et al. **J Acoust Soc Am** 1988 Aug;84(2):551–9

Hemi-inattention in visual search for parallel lines after focal cerebral lesions. Vilkki J. **J Clin Exp Neuropsychol** 1989 Mar;11(2):319–31

Wheelchair obstacle course performance in right cerebral vascular accident victims. Webster JS, et al. **J Clin Exp Neuropsychol** 1989 Mar;11(2):295–310

Functional organization of mustached bat inferior colliculus: II. Connections of the FM2 region. Frisina RD, et al. **J Comp Neurol** 1989 Jun 1;284(1):85–107

Functional organization of mustached bat inferior colliculus: I. Representation of FM frequency bands important for target ranging revealed by 14C-2-deoxyglucose autoradiography and single unit mapping. O'Neill WE, et al. **J Comp Neurol** 1989 Jun 1;284(1):60–84

A comparison of signal detection between an echolocating dolphin and an optimal receiver. Au WW, et al. **J Comp Physiol [A]** 1989 Jan;164(4):451–8

Spatial contrast sensitivity in benign intracranial hypertension. Bulens C, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1323–9

The utility of testing tactile perception of direction of scratch as a sensitive clinical sign of posterior column dysfunction in spinal cord disorders. Hankey GJ, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):395–8

Complete visual inversion in vertebrobasilar ischaemic disease [letter] Mehler MF. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1236–7

Response of vestibular neurons to head rotations in vertical planes. I. Response to vestibular stimulation. Kasper J, et al. **J Neurophysiol** 1988 Nov;60(5):1753–64

Response of vestibular neurons to head rotations in vertical planes. II. Response to neck stimulation and vestibular-neck interaction. Kasper J, et al. **J Neurophysiol** 1988 Nov;60(5):1765–78

Physiological and performance comparisons of running flat and hill routes as applied to orienteering navigation. Knowlton RG, et al. **J Sports Med Phys Fitness** 1988 Jun; 28(2):189–93

Visuospatial learning in elementary school children with and without a family history of alcoholism. Schandler SL, et al. **J Stud Alcohol** 1988 Nov;49(6):538–45

Inhibition contributes to orientation selectivity in visual cortex of cat. Hata Y, et al. **Nature** 1988 Oct 27; 335(6193):815–7

Retention of orienting reaction habituation in multiple sclerosis. Rogozea R, et al. **Neurol Psychiatr (Bucur)** 1988 Oct-Dec;26(4):223–35

Pharmacological evidence that the sympathetic nervous system mediates the increase in renin secretion produced by immobilization and head-up tilt in rats. Golin RM, et al. **Neuropharmacology** 1988 Dec;27(12):1209–13

Spatial distribution of the inhibitory effect of peripheral non-informative cues on simple reaction time to non-fixated visual targets. Berlucchi G, et al. **Neuropsychologia** 1989;27(2):201–21

Catecholamines and the covert orientation of attention in humans. Clark CR, et al. **Neuropsychologia** 1989; 27(2):131–9

Mental rotation in a commissurotomized subject. Corballis MC, et al. **Neuropsychologia** 1989;27(5):585–97

Hemispheric control of the initial and corrective components of aiming movements. Haaland KY, et al. **Neuropsychologia** 1989;27(7):961–9

Synaptic plasticity and learning. II: Do different kinds of plasticity underlie different kinds of learning? Morris RG, et al. **Neuropsychologia** 1989;27(1):41–59

Visuospatial and other "right-hemispheric" functions after long recovery periods in left-hemispherectomized subjects. Ogden JA. **Neuropsychologia** 1989;27(6):765–76

Right hemisphere advantage for topographical orientation in the domestic chick. Rashid N, et al. **Neuropsychologia** 1989;27(7):937–48

Right hippocampal impairment in the recall of spatial location: encoding deficit or rapid forgetting? Smith ML, et al. **Neuropsychologia** 1989;27(1):71–81

Cortical slow potentials in verbal and spatial tasks—the effect of material, visual hemifield and performing hand. Uhl F, et al. **Neuropsychologia** 1988;26(5):769–75

Effects of unilateral dorsal and ventral striatal dopamine depletion on visual neglect in the rat: a neural and behavioural analysis. Carli M, et al. **Neuroscience** 1989; 29(2):309–27

Orientation discrimination and cortical function in the human newborn. Slater A, et al. **Perception** 1988;17(5):597–602

Striatal dopamine and the interface between orienting and ingestive functions. Hall S, et al. **Physiol Behav** 1988; 44(4–5):469–71

Maze-learning behavior in early adrenalectomized rats. Yehuda R, et al. **Physiol Behav** 1988;44(3):373–81

Sequential ideal-observer analysis of visual discriminations. Geisler WS. **Psychol Rev** 1989 Apr;96(2):267–314 (180 ref.)

Caudate-putamen lesions in the rat may impair or potentiate maze learning depending upon availability of stimulus cues and relevance of response cues. Mitchell JA, et al. **Q J Exp Psychol [B]** 1988 Aug;40(3):243–58

The capacity of human subjects to process directional information provided at two skin sites. Essick GK, et al. **Somatosens Mot Res** 1988;6(1):1–20

Discrimination and scaling of velocity of stimulus motion across the skin. Essick GK, et al. **Somatosens Mot Res** 1988; 6(1):21–40

Neuronal activity preceding directional and nondirectional cues in the premotor cortex of rhesus monkeys. Vaadia E, et al. **Somatosens Mot Res** 1988;6(2):207–30

Neural mechanisms of absolute tactile localization in monkeys. Vierck CJ Jr, et al. **Somatosens Mot Res** 1988; 6(1):41–61

Event or emergency? Two response systems in the mammalian superior colliculus. Dean P, et al. **Trends Neurosci** 1989 Apr;12(4):137–47 (66 ref.)

Visual course control in flies relies on neuronal computation of object and background motion. Egelhaaf M, et al. **Trends Neurosci** 1988 Aug;11(8):351–8 (47 ref.)

[Retinal distribution properties of preferred orientation of cortical cell responses to gratings in the cat] Zhou YF, et al. **Sheng Li Hsueh Pao** 1988 Apr;40(2):131–9 (Eng. Abstr.) **(Chi)**

[Quantifying the stimulus parameters in the neck torsion test] Holtmann S, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Sep; 67(9):460–4 (Eng. Abstr.) **(Ger)**

[Cervical afferent fibers and their relation to the regulation of equilibrium] Holtmann S, et al. **Laryngol Rhinol Otol (Stuttg)** 1989 Jan;68(1):72–7 (74 ref.) (Eng. Abstr.) **(Ger)**

[Directional diagram of hearing in the dolphin Tursiops truncatus L.] Popov VV, et al. **Dokl Akad Nauk SSSR** 1988;300(3):756–60 **(Rus)**

[Neuromuscular and psychic components of spatial orientation (on the 70th birthday of F.D. Gorbov)] Giurdzhian AA. **Kosm Biol Aviakosm Med** 1988 Nov-Dec; 22(6):86–95 **(Rus)**

[Development of spatial orientation during pilot training] Ivanov VV, et al. **Kosm Biol Aviakosm Med** 1988 Jul-Aug; 22(4):31–5 (Eng. Abstr.) **(Rus)**

[Functional characteristics of the orientation-selective neurons in the frontal visual field of the striate cortex in the baronduki] Polkoshnikov EV, et al. **Neirofiziologiia** 1988;20(3):365–74 (Eng. Abstr.) **(Rus)**

[Correlation of the visual and spatially oriented behaviors of white rats following the elaboration of a visual differentiation habit] Grigorian GE, et al. **Zh Vyssh Nerv Deiat** 1989 Jan-Feb;39(1):66–71 (Eng. Abstr.) **(Rus)**

[Orientation at an angle to the light in schools of Moenkhausia dichroura Kner: a model of a circannual clock] Belmonte P, et al. **Acta Cient Venez** 1987;38(4):484–9 (Eng. Abstr.) **(Spa)**

ORIENTATION PROGRAMS, EMPLOYEE see **INSERVICE TRAINING**

ORIGIN OF LIFE see **BIOGENESIS**

ORMOND'S DISEASE see **RETROPERITONEAL FIBROSIS**

ORNIDAZOLE see under **NITROIMIDAZOLES**

ORNIPRESSIN see under **VASOPRESSINS**

ORNITHINE

The reaction of pyridinecarboxylic acids with dicyclohexylcarbodiimide and p-nitrophenol. Ljungqvist A, et al. **Acta Chem Scand [B]** 1988 Jul;42(6):408-10

Inhibition of mammalian folylpolyglutamate synthetase and human dihydrofolate reductase by 5,8-dideaza analogues of folic acid and aminopterin bearing a terminal L-ornithine. Patil SA, et al. **J Med Chem** 1989 Jul; 32(7):1559-65

ADMINISTRATION & DOSAGE

[Amino acids prevent hepatic encephalopathy. Ornithine-aspartate in hyperammonemia--results of a study] Hartung HD. **Fortschr Med** 1989 Mar 15;107(8):56 **(Ger)**

ADVERSE EFFECTS

Ornithine-vasopressin gangrene and reconstruction of the upper lip. Case report. Bütow KW, et al. **J Craniomaxillofac Surg** 1989 Feb;17(2):88-91

ANALOGS & DERIVATIVES

N2-succinylornithine in ornithine catabolism of Pseudomonas aeruginosa. Vander Wauven C, et al. **Arch Microbiol** 1988;150(4):400-4

5-Fluoromethylornithine, an irreversible and specific inhibitor of L-ornithine:2-oxo-acid aminotransferase. Daune G, et al. **Biochem J** 1988 Jul 15;253(2):481-8

Structural specificity of inhibition of human folylpolyglutamate synthetase by ornithine-containing folate analogs. McGuire JJ, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3931-9

O-dephenylation and conjugation with benzoylornithine. New metabolic pathways for 3-phenoxybenzoic acid in chickens. Quistad GB, et al. **Drug Metab Dispos** 1988 Nov-Dec;16(6):818-22

N5-(L-1-carboxyethyl)-L-ornithine:NADP+ oxidoreductase from Streptococcus lactis. Purification and partial characterization. Thompson J. **J Biol Chem** 1989 Jun 5;264(16):9592-601

(6R,6S)-5,8,10-trideaza-5,6,7,8-tetrahydrofolate and 6(R,6S)-5,8,10-trideaza-5,6,7,8-tetrahydropteroyl-L-ornithine as potential antifolates and antitumor agents. Rosowsky A, et al. **J Med Chem** 1989 Mar;32(3):709-15

Glutamine and ornithine-alpha-ketoglutarate but not branched-chain amino acids reduce the loss of muscle glutamine after surgical trauma. Wernerman J, et al. **Metabolism** 1989 Aug;38(8 Suppl 1):63-6

BIOSYNTHESIS

Polyamines and regulation of ornithine biosynthesis in Escherichia coli. Cataldi AA, et al. **J Bacteriol** 1989 Apr; 171(4):1998-2002

BLOOD

Serum ornithine and myopia, a biochemical study. Wen LY, et al. **Acta Ophthalmol Suppl (Copenh)** 1988;185:143-4

Potential for the prenatal diagnosis of hyperornithinemia, hyperammonemia, and homocitrullinuria syndrome [letter] Chadefaux B, et al. **Am J Med Genet** 1989 Feb;32(2):264

METABOLISM

N2-succinylornithine in ornithine catabolism of Pseudomonas aeruginosa. Vander Wauven C, et al. **Arch Microbiol** 1988;150(4):400-4

Metabolite transport in rat kidney mitochondria: ornithine/phosphate translocator. Passarella S, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):870-9

Participation of ornithine aminotransferase in the synthesis and catabolism of ornithine in mice. Studies using gabaculine and arginine deprivation. Alonso E, et al. **Biochem J** 1989 Apr 1;259(1):131-8

Stimulus-secretion coupling of arginine-induced insulin release. Metabolism of L-arginine and L-ornithine in pancreatic islets. Malaisse WJ, et al. **Biochim Biophys Acta** 1989 Sep 19;1013(2):133-43

Evidence for functional immaturity of the ornithine-urea cycle in very-low-birth-weight infants. Boehm G, et al. **Biol Neonate** 1988;54(3):121-5

Ornithine aminotransferase activity, tissue ornithine concentrations and polyamine metabolism. Seiler N, et al. **Int J Biochem** 1989;21(4):425-32

Effect of caffeine on ornithine metabolism in rat brain, liver and kidney. Colombatto S, et al. **Ital J Biochem** 1989 Mar-Apr;38(2):75-82

Increase of ornithine amino lipid content in a sulfonolipid-deficient mutant of Cytophaga johnsonae. Pitta TP, et al. **J Bacteriol** 1989 Feb;171(2):952-7

Kinetic mechanism and specificity of the arginine-ornithine antiporter of Lactococcus lactis. Driessen AJ, et al. **J Biol Chem** 1989 Jun 25;264(18):10361-70

Comparison of ornithine metabolism in hyperornithinaemia-hyperammonaemia-homocitrullinuria syndrome, lysinuric protein intolerance and gyrate atrophy fibroblasts. Botschner J, et al. **J Inherited Metab Dis** 1989; 12(1):33-40

Familial lysinuric protein intolerance presenting as coma in two adult siblings. Shaw PJ, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):648-51

PHARMACOLOGY

Effect of dietary ornithine on renal and hepatic polyamine synthesis. Bedford MR, et al. **Ann Nutr Metab** 1988; 32(5-6):265-70

Stimulus-secretion coupling of arginine-induced insulin release. Functional response of islets to L-arginine and L-ornithine. Blachier F, et al. **Biochim Biophys Acta** 1989 Sep 19;1013(2):144-51

Reduction of difluoromethylornithine-induced thrombocytopenia in rats with ornithine while maintaining antitumor activity. Grossie VB Jr, et al. **Cancer Res** 1989 Aug 1;49(15):4159-62

Effects of arginine and ornithine on strength, lean body mass and urinary hydroxyproline in adult males. Elam RP, et al. **J Sports Med Phys Fitness** 1989 Mar;29(1):52-6

Effect of ornithine on transferrin secretion of rat and human hepatocyte cultures. Lescoat G, et al. **Liver** 1988 Dec; 8(6):360-5

PHYSIOLOGY

Histamine and serotonin inhibit induction of ornithine decarboxylase by ornithine in perifused Ehrlich ascites tumour cells. Matés JM, et al. **FEBS Lett** 1989 Jul 3; 250(2):257-61

ORNITHINE AMINOTRANSFERASE see under **AMINOTRANSFERASES**

ORNITHINE CARBAMOYLTRANSFERASE

X-ray diffraction analysis on single crystals of recombinant Escherichia coli ornithine transcarbamoylase. Kuo LC, et al. **J Biol Chem** 1989 Sep 25;264(27):16246-8

Reconstruction of an enzyme by domain substitution effectively switches substrate specificity. Houghton JE, et al. **Nature** 1989 Mar 9;338(6211):172-4

ANALYSIS

Carbamyl phosphate synthetase and ornithine transcarbamylase activities in enzyme-deficient human liver measured by radiochromatography and correlated with outcome. Tuchman M, et al. **Pediatr Res** 1989 Jul; 26(1):77-82

ANTAGONISTS & INHIBITORS

Inhibition of ornithine carbamoyltransferase from Pseudomonas syringae pv. syringae W50 by phaseolotoxin. Jahn O, et al. **J Basic Microbiol** 1989;29(5):315-8

Inhibitory effects of cadmium on rat ornithine carbamoyltransferase and urea synthesis in the rat liver parenchymal cells. Aoki Y, et al. **Res Commun Chem Pathol Pharmacol** 1989 Mar; 63(3):411-22

BIOSYNTHESIS

Schistosoma mansoni: suppression of carbamoyl phosphate synthetase (ammonia) and ornithine carbamoyltransferase activities in the liver of infected mice. Tanabe M, et al. **Exp Parasitol** 1989 May;68(4):432-42

DEFICIENCY

Attempts to investigate the molecular basis of urea cycle disorders. Matsuda I, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Aug;29(4):505-9

Differentiation of fatal neonatal enzyme deficiency and sudden infant death syndrome (SIDS). Brown GW, et al. **Alaska Med** 1988 Sep-Oct;30(5):159-60

Ornithine transcarbamylase deficiency resulting from a C-to-T substitution in exon 5 of the ornithine transcarbamylase gene. Hata A, et al. **Am J Hum Genet** 1989 Jul;45(1):123-7

Late onset ornithine carbamoyl transferase deficiency in males. Drogari E, et al. **Arch Dis Child** 1988 Nov; 63(11):1363-7

Late onset ornithine carbamoyl transferase deficiency in males [letter] Kennedy CR, et al. **Arch Dis Child** 1989 Apr; 64(4):638

Altered enzyme activities and citrulline synthesis in liver mitochondria from ornithine carbamoyltransferase-deficient sparse-furash mice. Cohen NS, et al. **Biochem J** 1989 Jan 1;257(1):251-7

Immunochemical analysis of nineteen ornithine transcarbamoylase deficiencies. Cavard C, et al. **Enzyme** 1988;40(1):51-6

Ornithine transcarbamylase deficiency in a male: strict correlation between metabolic control and plasma arginine concentration. Wendel U, et al. **Eur J Pediatr** 1989 Jan; 148(4):349-52

Characterization of point mutations in the same arginine codon in three unrelated patients with ornithine transcarbamylase deficiency. Maddalena A, et al. **J Clin Invest** 1988 Oct;82(4):1353-8

Liver transplantation for ornithine transcarbamylase deficiency in a girl. Largillière C, et al. **J Pediatr** 1989 Sep;115(3):415-7

Ornithine transcarbamylase deficiency in a boy with long survival [letter] Largilliere C, et al. **J Pediatr** 1988 Nov; 113(5):952

Prenatal diagnosis and heterozygote detection by DNA analysis in ornithine transcarbamylase deficiency. Spence JE, et al. **J Pediatr** 1989 Apr;114(4 Pt 1):582-8

Unusual biochemical and clinical features in a girl with ornithine transcarbamylase deficiency. Lacey DJ, et al. **Pediatr Neurol** 1986 Jan-Feb;2(1):51-3

[Prenatal diagnosis of ornithine transcarbamylase deficiency using a DNA marker analysis] Schwartz M, et al. **Ugeskr Laeger** 1988 Oct 31;150(44):2641-3 (Eng. Abstr.) **(Dan)**

[Prenatal diagnosis of enzymopathies of the urea cycle] Chadefaux B, et al. **Ann Biol Clin (Paris)** 1988;46(7):471-6 (36 ref.) (Eng. Abstr.) **(Fre)**

[Genetic counseling in ornithine carbamoyltransferase deficiency] Pelet A, et al. **Ann Biol Clin (Paris)** 1988; 46(7):455-9 (Eng. Abstr.) **(Fre)**

[An anesthetic experience with a patient with ornithine transcarbamylase deficiency] Hirota K, et al. **Masui** 1989 Jan;38(1):98-101 (Eng. Abstr.) **(Jpn)**

[A case of partial ornithine transcarbamylase deficiency] Ichiba N, et al. **No To Hattatsu** 1989 Jan;21(1):63-8 (Eng. Abstr.) **(Jpn)**

GENETICS

Molecular cloning and partial sequencing of the M. bovis-BCG ornithine-carbamoyltransferase gene. Timm J, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:254-5

Polyamines are sufficient to drive the transport of the precursor of ornithine carbamoyltransferase into rat liver mitochondria: possible effect on mitochondrial membranes. Marcote MJ, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):287-93

Site-directed mutagenesis of Escherichia coli ornithine transcarbamoylase: role of arginine-57 in substrate binding and catalysis [published erratum appears in Biochemistry 1989 May 16;28(10):4522] Kuo LC, et al. **Biochemistry** 1988 Nov 29;27(24):8823-32

Compared expression levels of ornithine transcarbamylase and carbamylphosphate synthetase in liver and small intestine of normal and mutant mice. Dubois N, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):321-8

Regulatory region of the Aspergillus nidulans argB gene. Goc A, et al. **Curr Genet** 1988 Nov;14(5):425-9

Import of a mutant mitochondrial precursor fails to respond to stimulation by a cytosolic factor. Randall SK, et al. **FEBS Lett** 1989 Jul 3;250(2):561-4

Identification of hydrophobic residues in the signal sequence of mitochondrial preornithine carbamyltransferase that enhance the rate of precursor import. Skerjanc IS, et al. **J Biol Chem** 1988 Nov 25;263(33):17233-6

Structural organization of the human ornithine transcarbamylase gene. Hata A, et al. **J Inherited Metab Dis** 1988;11(3):337-40

Mitochondrial import and processing of mutant human ornithine transcarbamylase precursors in cultured cells. Isaya G, et al. **Mol Cell Biol** 1988 Dec;8(12):5150-8

Scanning detection of mutations in human ornithine transcarbamoylase by chemical mismatch cleavage. Grompe M, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(15):5888-92

The spfash mouse: a missense mutation in the ornithine transcarbamylase gene also causes aberrant mRNA splicing. Hodges PE, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(11):4142-6

Different structures in the amino-terminal domain of the ornithine transcarbamylase leader peptide are involved in mitochondrial import and carboxyl-terminal cleavage. Kraus JP, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):8905-9

Triggering of allostery in an enzyme by a point mutation: ornithine transcarbamoylase. Kuo LC, et al. **Science** 1989 Aug 4;245(4917):522-4

ISOLATION & PURIFICATION

Purification and properties of ornithine carbamoyl transferase from liver of Squalus acanthias. Xiong XF, et al. **Arch Biochem Biophys** 1989 Apr;270(1):198-207

METABOLISM

Polyamines stimulate the "in vitro" transport of the precursor of ornithine carbamoyltransferase into rat liver mitochondria. Hernández-Yago J, et al. **Adv Exp Med Biol** 1988;250:497-508

Choice of substrate concentration in the search for abnormal enzyme activity in human tissues [letter] Kamoun P, et al. **Clin Chem** 1989 Jun;35(6):1267

Carbamoyl phosphate biosynthesis and partition in pyrimidine and arginine pathways of Escherichia coli. In situ properties of carbamoyl-phosphate synthase, ornithine transcarbamylase and aspartate transcarbamylase in permeabilized cells. Robin JP, et al. **Eur J Biochem** 1989 Aug 15;183(3):519-28

Detection of an insensitive ornithine-carbamoyltransferase

in strains of Pseudomonas syringae pv. phaseolicola with different phytotoxin-generating capacities. Jahn O, et al. **J Basic Microbiol** 1989;29(5):299-303

Reconstitution of mitochondrial protein transport with purified ornithine carbamoyltransferase precursor expressed in Escherichia coli. Murakami K, et al. **J Biol Chem** 1988 Dec 5;263(34):18437-42

Effect of vitamin A deficiency on nitrogen balance and hepatic urea cycle enzymes and intermediates in rats. John A, et al. **J Nutr** 1989 Jan;119(1):29-35

Mitochondrial import of rat pre-ornithine transcarbamylase: accurate processing of the precursor form is not required for uptake into mitochondria, nor assembly into catalytically active enzyme. Graf L, et al. **Protein Eng** 1988 Oct;2(4):297-300

ORNITHINE CARBOXY-LYASE see **ORNITHINE DECARBOXYLASE**

ORNITHINE DECARBOXYLASE

Biochemical and genetic characterization of the structure of yeast ornithine decarboxylase. Fonzi WA. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1409-16

Plasmodium falciparum: purification, properties, and immunochemical study of ornithine decarboxylase, the key enzyme in polyamine biosynthesis. Assaraf YG, et al. **Exp Parasitol** 1988 Oct;67(1):20-30

Crystallization and molecular symmetry of ornithine decarboxylase from Lactobacillus 30a. Momany C, et al. **J Biol Chem** 1989 Mar 15;264(8):4722-4

ANALYSIS

Cholecystokinin and gastrin peptides stimulate ODC activity in a rat pancreatic cell line. Scemama JL, et al. **Am J Physiol** 1989 May;256(5 Pt 1):G846-50

Facilitated micromethod for measurement of metabolically generated 14CO2, with application to measurement of ornithine decarboxylase. Gaines DW, et al. **Anal Biochem** 1989 Apr;178(1):52-6

Apparent ornithine decarboxylase activity, measured by 14CO2 trapping, after frozen storage of rat tissue and rat tissue supernatants. Gaines DW, et al. **Anal Biochem** 1988 Oct;174(1):88-96

Effect of estradiol on the activities of ornithine decarboxylase and S-adenosyl-methionine decarboxylase in tissues of ovariectomized rats. Wing LY. **Chin J Physiol** 1988; 31(2):95-103

Sandwich enzyme immunoassay for ornithine decarboxylase. Nishiyama M, et al. **J Immunoassay** 1989;10(1):19-35

Lack of detectable activity of ornithine decarboxylase in Pneumocystis carinii [letter] Pesanti EL, et al. **J Infect Dis** 1988 Nov;158(5):1137-8

Hepatic regenerative enzyme activity after diffuse injury with galactosamine: relationship to histologic alterations. Zieve L, et al. **J Lab Clin Med** 1988 Nov;112(5):575-82

Immunolocalization of ornithine decarboxylase in rat heart atria. Tipnis UR, et al. **J Mol Cell Cardiol** 1989 Aug; 21(8):743-50

Malignancy associated with ureterosigmoidostomy: detection by mucosa ornithine decarboxylase. Weber TR, et al. **J Pediatr Surg** 1988 Dec;23(12):1091-4

Ornithine decarboxylase as a marker for colorectal polyps and cancer. Luk GD, et al. **Prog Clin Biol Res** 1988; 279:227-39 (35 ref.)

[Ornithine decarboxylase activity and polyamine content in human adenocarcinomas of the stomach and large intestine] Berdinskikh NK, et al. **Eksp Onkol** 1988;10(6):39-41 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Inhibition of ornithine or arginine decarboxylase as an experimental approach to African or American trypanosomiasis. McCann PP, et al. **Adv Exp Med Biol** 1988;250:727-35 (23 ref.)

Changes in antizyme-ornithine decarboxylase complexes in tissues of hormone-treated rats. Peng T, et al. **Arch Biochem Biophys** 1989 Aug 15;273(1):99-105

Vitamins A and E do protect against oral carcinoma. Calhoun KH, et al. **Arch Otolaryngol Head Neck Surg** 1989 Apr; 115(4):484-8

Ornithine decarboxylase antizyme in kidneys of male and female mice. Murakami Y, et al. **Biochem J** 1988 Sep 1; 254(2):367-72

DL-alpha-difluoromethyl[3,4-3H]arginine metabolism in tobacco and mammalian cells. Inhibition of ornithine decarboxylase activity after arginase-mediated hydrolysis of DL-alpha-difluoromethylarginine to DL-alpha-difluoromethylornithine. Slocum RD, et al. **Biochem J** 1988 Oct 1;255(1):197-202

Feedback regulation of polyamine synthesis in Ehrlich ascites tumor cells. Analysis using nonmetabolizable derivatives of putrescine and spermine. Holm I, et al. **Biochim Biophys Acta** 1988 Dec 9;972(3):239-48

Purification and characterization of antizyme inhibitor of ornithine decarboxylase from rat liver. Kitani T, et al. **Biochim Biophys Acta** 1989 Apr 25;991(1):44-9

Comparative antitumor properties in rodents of irreversible inhibitors of L-ornithine decarboxylase, used as such or as prodrugs. Claverie N, et al. **Cancer Res** 1989 Aug 15; 49(16):4466-71

Sphingosine inhibits phorbol ester-induced inflammation, ornithine decarboxylase activity, and activation of protein kinase C in mouse skin. Gupta AK, et al. **J Invest Dermatol** 1988 Nov;91(5):486-91

Effect of hepatic failure toxins on regenerative enzymes in the liver after injury with galactosamine in the rat. Zieve L, et al. **J Lab Clin Med** 1989 Apr;113(4):463-8

2,2-Difluoro-5-hexyne-1,4-diamine: a potent enzyme-activated inhibitor of ornithine decarboxylase. Kendrick DA, et al. **J Med Chem** 1989 Jan;32(1):170-3

BIOSYNTHESIS

Mechanisms involved in ornithine decarboxylase induction by 12-O-tetradecanoylphorbol-13-acetate, a potent mouse skin tumor promoter and an activator of protein kinase C. Verma AK, et al. **Adv Exp Med Biol** 1988;250:273-90 (31 ref.)

Polyamine-dependent growth and calmodulin-regulated induction of ornithine decarboxylase. Ginty DD, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):G342-8

Induction of gastric and duodenal mucosal ornithine decarboxylase during stress. Wang JY, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):G259-65

Effect of epidermal growth factor on ornithine decarboxylase activity in A431 cells. Yazigi R, et al. **Anticancer Res** 1989 Jan-Feb;9(1):209-13

Insulin and phorbol myristic acetate induce ornithine decarboxylase in Reuber H35 rat hepatoma cells by different mechanisms. Goodman SA, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):343-50

Inhibition of phorbol ester-caused induction of ornithine decarboxylase and tumor promotion in mouse skin by staurosporine, a potent inhibitor of protein kinase C. Yamada S, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):9-15

Feedback control of ornithine decarboxylase expression by polyamines. Analysis of ornithine decarboxylase mRNA distribution in polysome profiles and of translation of this mRNA in vitro. Holm I, et al. **Biochem J** 1989 Mar 1; 258(2):343-50

Induction of histidine and ornithine decarboxylase activities in mouse tissues by recombinant interleukin-1 and tumor necrosis factor. Endo Y. **Biochem Pharmacol** 1989 Apr 15; 38(8):1287-92

Elevated polyphosphoinositide responsiveness and increased ornithine decarboxylase activity in the cerebral cortex induced by cholinergic denervation. Reed LJ, et al. **Biochem Soc Trans** 1988 Aug;16(4):467-8

Induction of ornithine decarboxylase in adult rat hippocampal slices. Baudry M, et al. **Brain Res** 1988 Dec;464(4):313-8

Inhibition of the induction of ornithine decarboxylase activity by 12-O-tetradecanoylphorbol-13-acetate in mouse skin by sphingosine sulfate. Enkvetchakul B, et al. **Carcinogenesis** 1989 Feb;10(2):379-81

sn-1,2-didecanoylglycerol effectively induces epidermal ornithine decarboxylase but only weak hyperplasia in mouse skin. Hirabayashi N, et al. **Carcinogenesis** 1988 Dec; 9(12):2215-20

Comparison of epidermal protein kinase C activity, ornithine decarboxylase induction and DNA synthesis stimulated by TPA or dioctanoylglycerol in mouse strains with differing susceptibility to TPA-induced tumor promotion. Mills KJ, et al. **Carcinogenesis** 1989 May;10(5):833-8

Differential inhibition by staurosporine, a potent protein kinase C inhibitor, of 12-O-tetradecanoylphorbol-13-acetate-caused skin tumor promotion, epidermal ornithine decarboxylase induction, hyperplasia and inflammation. Yamamoto S, et al. **Carcinogenesis** 1989 Jul;10(7):1315-22

Interleukin-2 regulates the activity of ornithine decarboxylase in a cloned murine T lymphocytic cell line: evidence for a protein kinase C-dependent pathway. Legraverend C, et al. **Exp Cell Res** 1989 Mar;181(1):282-8

Trypanosoma brucei brucei: regulation of ornithine decarboxylase in procyclic forms and trypomastigotes. Bacchi CJ, et al. **Exp Parasitol** 1989 May;68(4):392-402

Histamine and serotonin inhibit induction of ornithine decarboxylase by ornithine in perifused Ehrlich ascites tumour cells. Matés JM, et al. **FEBS Lett** 1989 Jul 3; 250(2):257-61

Allylisopropylacetamide induces rat hepatic ornithine decarboxylase. Kitchin KT, et al. **J Biochem Toxicol** 1987 Fall-Winter;2:215-23

Induction of ornithine decarboxylase in rat liver by phorbol ester is mediated by prostanoids from Kupffer cells. Kuiper J, et al. **J Biol Chem** 1989 Apr 25;264(12):6874-8

The lack of a role for protein kinase C in neurite extension and in the induction of ornithine decarboxylase by nerve growth factor in PC12 cells. Reinhold DS, et al. **J Biol Chem** 1989 Feb 25;264(6):3538-44

Glucose elevates ornithine decarboxylase expression in Vero cells. Lundgren DW, et al. **J Cell Physiol** 1988 Dec; 137(3):469-75

Cyclobutane-type pyrimidine photodimer formation and induction of ornithine decarboxylase in human skin fibroblasts after UV irradiation. Niggli HJ, et al. **J Invest Dermatol** 1988 Dec;91(6):579-84

Comparative studies on the inducing effects of cobalt chloride and co-protoporphyrin on hepatic ornithine decarboxylase and heme oxygenase in rats. Numazawa S, et al. **J Pharmacobiodyn** 1989 Jan;12(1):50-9

Effects of butylated hydroxytoluene upon PUVA-tumorigenesis and induction of ornithine decarboxylase activity in the mouse. Black HS, et al. **J Photochem Photobiol [B]** 1989 Feb;3(1):91-100

Inductions of ornithine decarboxylase and DNA synthesis in rat stomach mucosa by formaldehyde. Furihata C, et al. **Jpn J Cancer Res** 1988 Aug;79(8):917-20

Various sodium salts, potassium salts, a calcium salt and an ammonium salt induced ornithine decarboxylase and stimulated DNA synthesis in rat stomach mucosa. Furihata C, et al. **Jpn J Cancer Res** 1989 May;80(5):424-9

Hormonal control of ornithine decarboxylase and S-adenosyl-L-methionine decarboxylase during development of the rat epididymis. Majumder GC, et al. **Life Sci** 1974 Jul 1;15(1):45-55

Chloroform mediated refractory state against ornithine decarboxylase induction by serial chloroform treatment. Savage RE Jr, et al. **Res Commun Chem Pathol Pharmacol** 1988 Dec; 62(3):507-10

[Hepatic ornithine decarboxylase activity of rats induced by administration of 2-nitro-p-cresol and sodium deoxycholate] Nambaru S, et al. **Eisei Shikenjo Hokoku** 1988;(106):95-7 (Eng. Abstr.) **(Jpn)**

BLOOD

What is serum ornithine decarboxylase? [letter] Carakostas MC. **Clin Chem** 1988 Dec;34(12):2606-7

More on ornithine decarboxylase [letter] Evans GO. **Clin Chem** 1989 May;35(5):897

Degradation of ornithine decarboxylase in reticulocyte lysate is ATP-dependent but ubiquitin-independent. Bercovich Z, et al. **J Biol Chem** 1989 Sep 25;264(27):15949-52

GENETICS

Structure, amplification and methylation of ornithine decarboxylase genes in human malignant cells. Jänne J, et al. **Adv Exp Med Biol** 1988;250:253-60 (12 ref.)

Androgen regulation of ornithine decarboxylase and S-adenosylmethionine decarboxylase gene expression. Jänne OA, et al. **Adv Exp Med Biol** 1988;250:1-11 (37 ref.)

Growth-regulation of the cellular levels and expression of the mRNA molecules coding for ornithine decarboxylase and S-adenosylmethionine decarboxylase. Morris DR, et al. **Adv Exp Med Biol** 1988;250:241-52 (61 ref.)

Effects of cholecystokinin on pancreatic ornithine decarboxylase gene expression. Rosewicz S, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G818-21

Methylation of human ornithine decarboxylase gene before transfection abolishes its transient expression in Chinese hamster ovary cells. Halmekytö M, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):528-34

Mitogenic signaling pathways regulating expression of c-myc and ornithine decarboxylase genes in bovine T-lymphocytes. Morris DR, et al. **Biochemistry** 1988 Nov 15;27(23):8689-93

Hypomethylation of ornithine decarboxylase gene and erb-A1 oncogene in human chronic lymphatic leukemia. Lipsanen V, et al. **Blood** 1988 Dec;72(6):2042-4

Lack of a role of DNA methylation in tumor promoter 12-O-tetradecanoylphorbol-13-acetate-induced synthesis of ornithine decarboxylase messenger RNA in T24 cells. Hsieh JT, et al. **Cancer Res** 1989 Aug 1;49(15):4251-7

Regulation of ornithine decarboxylase gene expression in normal and transformed hamster embryo fibroblasts following stimulation by 12-O-tetradecanoylphorbol-13-acetate. Gilmour SK, et al. **Carcinogenesis** 1989 Jan;10(1):157-62

A functional mouse ornithine decarboxylase gene (Odc) maps to chromosome 12: further evidence of homoeology between mouse chromosome 12 and the short arm of human chromosome 2. Cox DR, et al. **Cytogenet Cell Genet** 1988; 48(2):92-4

Rearrangement between ornithine decarboxylase and the switch region of the gamma 1 immunoglobulin gene in alpha-difluoromethylornithine resistant mouse myeloma cells. Katz A, et al. **EMBO J** 1989 Apr;8(4):1163-7

Regulation of ornithine decarboxylase in murine erythroleukemic cells by N,N'-diacetyl-1,6-hexanediamine and N-acetyl-1,6-hexanediamine. Papazafiri P, et al. **Eur J Biochem** 1989 Jan 2;178(3):789-93

Interleukin-2 induces a rapid increase in ornithine decarboxylase mRNA in a cloned murine T lymphocytic cell line. Legraverend C, et al. **Exp Cell Res** 1989 Mar; 181(1):273-81

Rat ornithine decarboxylase gene. Nucleotide sequence, potential regulatory elements, and comparison to the mouse gene. Wen L, et al. **J Biol Chem** 1989 May 25; 264(15):9016-21

High level, cell-specific expression of ornithine decarboxylase transcripts in rat genitourinary tissues. Blackshear PJ, et al. **Mol Endocrinol** 1989 Jan;3(1):68-78

Evolution of androgen-regulated ornithine decarboxylase expression in mouse kidney. Rheaume C, et al. **Mol Endocrinol** 1989 Aug;3(8):1243-51

Strain polymorphism and tentative mapping of mouse ornithine decarboxylase. Colombo MP, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9075

Nucleotide sequence of the 5'-flanking region of the murine ornithine decarboxylase gene. Eisenberg LM, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2359

Nucleotide sequence of a pseudogene for rat ornithine

decarboxylase. Kanamoto R, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):463

Amplification of N-myc and ornithine decarboxylase genes in human neuroblastoma and hydroxyurea-resistant hamster cell lines. Tonin PN, et al. **Oncogene** 1989 Sep; 4(9):1117-21

ISOLATION & PURIFICATION

Purification and some properties of rat intestinal ornithine decarboxylase. Miyamoto K, et al. **J Biochem (Tokyo)** 1989 Jul;106(1):167-71

Trypanosoma brucei ornithine decarboxylase: enzyme purification, characterization, and expression in Escherichia coli. Phillips MA, et al. **J Biol Chem** 1988 Dec 5; 263(34):17933-41

METABOLISM

Receptors involved in the nervous system regulation of polyamine metabolism in rat salivary glands. Ekström J, et al. **Acta Physiol Scand** 1989 Mar;135(3):255-61

Enzyme regulation as an approach to interference with polyamine biosynthesis--an alternative to enzyme inhibition. Porter CW, et al. **Adv Enzyme Regul** 1988; 27:57-79

Polyamine pools and the control of ornithine decarboxylase activity. Davis RH, et al. **Adv Exp Med Biol** 1988; 250:627-32 (12 ref.)

Phosphorylation by casein kinase-2 and reversible alteration of thiol groups: mechanisms of control of ornithine decarboxylase? Flamigni F, et al. **Adv Exp Med Biol** 1988; 250:45-53

Ornithine decarboxylase and polyamine biosynthesis in pancreatic adaptation. Löser C, et al. **Adv Exp Med Biol** 1988;250:379-88

Modifications of ornithine decarboxylase induced by phosphatases. Mitchell JL, et al. **Adv Exp Med Biol** 1988; 250:55-70 (59 ref.)

Two phases of ornithine decarboxylase activation during lymphocyte mitogenesis. Mustelin T, et al. **Adv Exp Med Biol** 1988;250:301-13

Mucosal ornithine decarboxylase in the small intestine: localization and stimulation. Johnson LR, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G624-30

Stabilization of ornithine decarboxylase in erythroleukemia cells depleted of ATP. Flamigni F, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1217-22

Effect of hexadecane on piglet epidermal ornithine decarboxylase activity. Owusu S, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1291-8

Stable ornithine decarboxylase in promastigotes of Leishmania mexicana mexicana. Sánchez CP, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):754-61

Effect of acylated derivatives of ascorbate on ornithine decarboxylase induction in Ehrlich ascites tumor cells. Matsui-Yuasa I, et al. **Biochem Int** 1989 Mar;18(3):623-9

Effects of vanadyl sulphate on ornithine decarboxylase and progesterone levels in the ovary of rat. Reddy RL, et al. **Biochem Int** 1989 Feb;18(2):467-74

Involvement of thiol transferase- and thioredoxin-dependent systems in the protection of 'essential' thiol groups of ornithine decarboxylase. Flamigni F, et al. **Biochem J** 1989 Apr 1;259(1):111-5

Effect of inhibitors of S-adenosylmethionine decarboxylase on the contents of ornithine decarboxylase and S-adenosylmethionine decarboxylase in L1210 cells. Madhubala R, et al. **Biochem J** 1988 Aug 15;254(1):45-50

Hydrazine stress in the diabetic: ornithine decarboxylase activity. Rogers KS, et al. **Biochem Med Metab Biol** 1988 Aug;40(1):46-9

Stabilization of ornithine decarboxylase in mouse liver and lung by methylglyoxal bis(cyclohexylamidinohydrazone). Hibasami H, et al. **Biochem Pharmacol** 1988 Nov 1; 37(21):4117-20

Ornithine decarboxylase activity and the accumulation of its mRNA during early stages of liver regeneration. Hirvonen A. **Biochim Biophys Acta** 1989 Jan 23;1007(1):120-3

Interconversion of Tetrahymena pyriformis ornithine decarboxylase from inactive to active form by phosphorylation. Lougovoi CP, et al. **Biochim Biophys Acta** 1989 Jun 13;996(1-2):70-5

Myeloid growth factor(s) regulation of ornithine decarboxylase: effects of antiproliferative signals interferon-gamma and cAMP. Farrar WL, et al. **Blood** 1989 May 1;73(6):1468-75

Ornithine decarboxylase in the inner ear of the guinea pig. Müller M, et al. **Brain Res Bull** 1988 Jul;21(1):1-5

Induction of ornithine decarboxylase activity in isolated chicken osteoblasts by parathyroid hormone: the role of cAMP and calcium. Löwik CW, et al. **Calcif Tissue Int** 1988 Jul;43(1):7-18

An assessment of proliferative and enzyme activity in transitional mucosa adjacent to colonic cancer. Lawson MJ, et al. **Cancer** 1989 Sep 1;64(5):1061-6

Increased mucosal ornithine decarboxylase activity in large bowel with multiple tumors, adenocarcinoma, and adenoma. Narisawa T, et al. **Cancer** 1989 Apr 15; 63(8):1572-6

Role of ornithine decarboxylase in diallyl sulfide inhibition of colonic radiation injury in the mouse. Baer AR, et al. **Cancer Res** 1989 Sep 15;49(18):5073-6

Individual and combined effects of alpha-difluoromethylornithine and ovariectomy on the growth and polyamine milieu of experimental breast cancer in rats. Manni A, et al. **Cancer Res** 1989 Jul 1; 49(13):3529-34

Ornithine decarboxylase basal activity in liver, oesophagus and lung of vitamin A deficient rats, and the effect of retinoic acid. Daliam A, et al. **Carcinogenesis** 1988 Dec; 9(12):2161-4

Epidermal cell proliferation and modulation of the protective potency of dexamethasone against phorbol ester-induced ornithine decarboxylase activity. Nguyen-Ba G, et al. **Carcinogenesis** 1989 Apr;10(4):793-6

Presence of a functionally altered ornithine decarboxylase activity in chrysarobin-promoted mouse epidermal papillomas. O'Brien TG, et al. **Carcinogenesis** 1988 Nov; 9(11):2081-5

Independent and interrelated regulation of ornithine decarboxylase by calcium and cAMP in fetal rat osteoblasts. van Leeuwen JP, et al. **Cell Calcium** 1988 Aug; 9(4):181-91

Regional changes in ornithine decarboxylase activity and polyamine levels during thyroxine-induced cardiac hypertrophy. Tipnis UR, et al. **Cytobios** 1989;57(229):101-8

Increase in ornithine decarboxylase activity associated with development of dysplasia in Barrett's esophagus. Garewal HS, et al. **Dig Dis Sci** 1989 Feb;34(2):312-4

Involvement of antizyme in stabilization of ornithine decarboxylase caused by inhibitors of polyamine synthesis. Murakami Y, et al. **Eur J Biochem** 1989 Mar 1;180(1):181-4

Cell cycle distribution and ornithine decarboxylase activity in head and neck cancer in response to enteral nutrition. Edström S, et al. **Eur J Cancer Clin Oncol** 1989 Feb; 25(2):227-32

Destruction of specific hippocampal cell fields increases ornithine decarboxylase activity: modulation of the biochemical but not the histological changes by ganglioside GM1. Walsh TJ, et al. **Exp Neurol** 1989 Jul;105(1):54-61

Ornithine decarboxylase and diamine oxidase in human colon carcinoma cell line CaCo-2 in culture. D'Agostino L, et al. **Gastroenterology** 1989 Oct;97(4):888-94

Enhancement of ornithine decarboxylase activity in Ambystoma liver slices by ovine prolactin: an evaluation of possible mediators. Ibrahim RH, et al. **Gen Comp Endocrinol** 1988 Oct;72(1):90-6

Probable cloning artefacts previously interpreted as unusual leader sequences of rodent ornithine decarboxylase mRNAs--a cautionary tale. Coffino P. **Gene** 1988 Sep 30; 69(2):365-8

Immunohistochemical localization of L-ornithine decarboxylase in developing rat brain. Dorn A, et al. **Int J Dev Neurosci** 1987;5(2):145-50

Do catecholamines contribute to the effects of neonatal hypoxia on development of brain and heart? Influence of concurrent alpha-adrenergic blockade on ornithine decarboxylase activity. Slotkin TA, et al. **Int J Dev Neurosci** 1987;5(2):135-43

The changing profiles of L-ornithine decarboxylase and S-adenosyl-L-methionine decarboxylase activities in testicular cell types during sexual maturation of male rats. Shubhada S, et al. **J Androl** 1989 Mar-Apr;10(2):152-8

Compensatory route of spermidine acetylation and oxidation can supply sufficient putrescine for hepatic DNA synthesis at an early stage after partial hepatectomy in diaminopropane-treated rats. Sato Y, et al. **J Biochem (Tokyo)** 1988 Jul;104(1):98-101

Activity of ornithine decarboxylase and creatine kinase in soft and hard tissue of vitamin D-deficient chicks following parenteral application of 1,25-dihydroxyvitamin D3 or 24R,25-dihydroxyvitamin D3. Ittel TH, et al. **J Bone Miner Res** 1986 Feb;1(1):23-31

Modulatory function of protein kinase C in the activation of ornithine decarboxylase and in cAMP production in rat osteoblasts. van Leeuwen JP, et al. **J Cell Physiol** 1989 Mar;138(3):548-54

Stimulation of ornithine decarboxylase activity by arginine vasopressin in the rat medullary thick ascending limb of Henle's loop. Charlton JA, et al. **J Endocrinol** 1989 Feb; 120(2):195-9

Blood-brain barrier breakdown in cold-injured brain is linked to a biphasic stimulation of ornithine decarboxylase activity and polyamine synthesis: both are coordinately inhibited by verapamil, dexamethasone, and aspirin. Koenig H, et al. **J Neurochem** 1989 Jan;52(1):101-9

Polyamine biosynthetic decarboxylases in muscles of rats with different experimental myopathies. Lorenzini EC, et al. **J Neurol Sci** 1989 Jan;89(1):27-35

Dietary protein enhanced mammary ornithine decarboxylase activity and tumorigenesis in rats. Hawrylewicz EJ, et al. **J Nutr** 1989 Apr;119(4):547-52

Chloroform-induced multiple forms of ornithine decarboxylase: differential sensitivity of forms to enhancement by diethyl maleate and inhibition by ODC-antizyme. Savage RE Jr, et al. **J Toxicol Environ Health** 1989;27(1):57-64

Biosynthetic arginine decarboxylase in phytopathogenic fungi. Khan AJ, et al. **Life Sci** 1989;44(17):1215-22

Effect of exertion on the stimulation of ornithine decarboxylase activity by growth hormone in rats. Martin JV, et al. **Life Sci** 1989;44(24):1871-5

Polyamine metabolism in reversible cerebral ischemia of Mongolian gerbils. Paschen W, et al. **Metab Brain Dis** 1988 Dec;3(4):297-302

Ornithine decarboxylase and phosphatase activity can be stimulated by low concentrations of interferon in human breast cancer cell lines. Kortsaris A, et al. **Microbiologica** 1988 Oct;11(4):347-53

Polyamine inhibition preserves somatosensory evoked potential activity after transient cerebral ischaemia. Dempsey RJ, et al. **Neurol Res** 1988 Sep;10(3):141-4

Brain ornithine decarboxylase activity following transient cerebral ischaemia: relationship to cerebral oedema development. Dempsey RJ, et al. **Neurol Res** 1988 Sep; 10(3):175-8

Ontogenetic changes in laminar distribution of ornithine decarboxylase during development of cerebellar cortex: autoradiographic localization with [3H]alpha-difluoromethylornithine. Schweitzer L, et al. **Neuroscience** 1988 Nov;27(2):453-64

Effects of prenatal terbutaline exposure on cellular development in lung and liver of neonatal rat: ornithine decarboxylase activity and macromolecules. Kudlacz EM, et al. **Pediatr Res** 1989 Jun;25(6):617-22

Effects of prenatal dexamethasone on development of ornithine decarboxylase activity in brain and peripheral tissues of rats. Navarro HA, et al. **Pediatr Res** 1988 Oct; 24(4):465-9

Twenty-four-hour variations in ornithine decarboxylase and acid phosphatase in mice. Waldrop RD, et al. **Proc Soc Exp Biol Med** 1989 Sep;191(4):420-4

Stimulus-secretion coupling of arginine-induced insulin release. Effect of 2-aminoisobutyric acid upon ornithine decarboxylase activity and insulin secretion. Sener A, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jul; 65(1):65-80

Prevention of rapid intracellular degradation of ODC by a carboxyl-terminal truncation. Ghoda L, et al. **Science** 1989 Mar 17;243(4897):1493-5

Transplacental estrogen responses in the fetal rat: increased uterine weight and ornithine decarboxylase activity. Harmon JR, et al. **Teratology** 1989 Mar;39(3):253-60

Polyamine synthesis in rat lungs injured with alpha-naphthylthiourea. Olson JW, et al. **Toxicology** 1989 May 15;55(3):317-26

[The effect of 5-[2-(N,N-dimethylamino)ethoxy]-7-oxo-7H-benzo(c) fluorene hydrochloride (Benfluron, a cytostatic) on ornithine decarboxylase activity in the regenerating rat liver in vivo] Veselá J, et al. **Cesk Farm** 1988 Jul;37(6):251-4 (Eng. Abstr.) **(Cze)**

[Epigenetic mechanism of tumor promotion. Interrelationship between inflammation and ornithine decarboxylase activity induced in vitro by the carcinogenic 12-O-tetradecanoyl-phorbol-13-acetate] Giao NB, et al. **C R Acad Sci [III]** 1988;307(5):229-34 (Eng. Abstr.) **(Fre)**

[Polyamines in tumors of the oral cavity] Colombatto S, et al. **Minerva Stomatol** 1989 Jan;38(1):11-4 (Eng. Abstr.) **(Ita)**

[Increased mucosal ornithine decarboxylase activity in carcinoma-bearing large bowel and its inhibition by indomethacin] Narisawa T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Aug;85(8):1483-9 (Eng. Abstr.) **(Jpn)**

[The study of polyamine levels and enzyme activities in metabolic pathway of polyamine in spleen of mice inoculated tumor cells] Yokoyama I, et al. **Yakugaku Zasshi** 1989 Jan;109(1):52-8 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Polyamines mediate the reversible opening of the blood-brain barrier by the intracarotid infusion of hyperosmolal mannitol. Koenig H, et al. **Brain Res** 1989 Mar 27; 483(1):110-6

Downregulation of T cell growth factor production by ornithine decarboxylase and its product putrescine: D,L-alpha-difluoromethylornithine suppresses general protein synthesis but augments simultaneously the production of interleukin-2. Mihm S, et al. **Exp Cell Res** 1989 Feb;180(2):383-98

Role of ornithine decarboxylase in the regulation of cell growth by IL-1 and tumor necrosis factor. Endo Y, et al. **J Immunol** 1988 Oct 1;141(7):2342-8

ODC-polyamine system is involved in morphine analgesia. Genedani S, et al. **Life Sci** 1989;44(8):525-31

Regulation of ornithine decarboxylase in normal and neoplastic mouse and human epidermis. O'Brien TG, et al. **Prog Clin Biol Res** 1989;298:213-31

RADIATION EFFECTS

[Ornithine decarboxylase activity in rat tissues in the late periods after irradiation] Slozhenikina LV, et al. **Radiobiologiia** 1989 May-Jun;29(3):349-52 (Eng. Abstr.) **(Rus)**

URINE

Effects of urinary transferrin and ornithine decarboxylase-inducing fraction on rat bladder carcinogenesis. Noguchi S, et al. **Cancer Lett** 1989 Apr; 45(1):65-70

ORNITHOSIS

[A case of psittacosis meningitis complicated with uveitis] Adachi K, et al. **Rinsho Shinkeigaku** 1989 Jan;29(1):122–4 (Eng. Abstr.) **(Jpn)**

[A case report of psittacosis] Strugarević M, et al. **Srp Arh Celok Lek** 1988 Nov–Dec;116(11–12):1059–63 (Eng. Abstr.) **(Scc)**

COMPLICATIONS

Concomitant zoonotic infections with ovine Chlamydia and 'Q' fever in pregnancy: clinical features, diagnosis, management and public health implications. Case report [letter] **Br J Obstet Gynaecol** 1988 Sep;95(9):951–4

Sixth cranial nerve palsy complicating psittacosis [letter] Zumla A, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov; 51(11):1462

Haemolytic anaemia due to cold agglutinins caused by psittacosis. Timmerman R, et al. **Neth J Med** 1989 Jun; 34(5–6):306–9

Cerebellar disturbance in psittacosis. Shee CD. **Postgrad Med J** 1988 May;64(751):382–3

[Kawasaki syndrome associated with ornithosis] Pajerek J, et al. **Cas Lek Cesk** 1989 May 12;128(20):631–3 (Eng. Abstr.) **(Cze)**

DIAGNOSIS

Psittacosis pneumonia. Stubbs R, et al. **J Tenn Med Assoc** 1989 Apr;82(4):189–90 (9 ref.)

DRUG THERAPY

Atypical pneumonia [letter] Grant S, et al. **Med J Aust** 1989 Feb 6;150(3):168

[A case of psittacosis presenting as adult respiratory distress syndrome and successfully treated with steroid pulse therapy] Hirata M, et al. **Kokyu To Junkan** 1988 Aug; 36(8):893–7 (Eng. Abstr.) **(Jpn)**

EPIDEMIOLOGY

An outbreak of psittacosis in Minnesota turkey industry workers: implications for modes of transmission and control. Hedberg K, et al. **Am J Epidemiol** 1989 Sep; 130(3):569–77

Chlamydial antibodies in farmers in north-west England. Hobson D, et al. **Epidemiol Infect** 1988 Oct;101(2):397–404

Countrywide epidemics of Chlamydia pneumoniae, strain TWAR, in Scandinavia, 1981–1983. Grayston JT, et al. **J Infect Dis** 1989 Jun;159(6):1111–4

[Familial outbreak of ornithosis] Titov MB, et al. **Vrach Delo** 1988 Sep;(9):112–4 **(Rus)**

ETIOLOGY

Sheep-acquired severe Chlamydia psittaci infection in pregnancy. Helm CW, et al. **Int J Gynaecol Obstet** 1989 Apr;28(4):369–72

Chlamydia in ovine milk [letter] Wilsmore AJ. **Vet Rec** 1989 Jun 10;124(23):618–9

IMMUNOLOGY

[Ornithosis in domestic and imported bird species] Sixl W, et al. **Geogr Med** 1989;Suppl 2:101–4 (Eng. Abstr.) **(Ger)**

[Serology in lower respiratory tract infections. Virus, mycoplasma and ornithosis serology] Sundsfjord A, et al. **Tidsskr Nor Laegeforen** 1988 Oct 30;108(30):2719–20 (Eng. Abstr.) **(Nor)**

MICROBIOLOGY

Serological cross-reactivity among chlamydial strains in a family outbreak of psittacosis. Bourke SJ, et al. **J Infect** 1989 Jul;19(1):41–5

[Pleuropneumonia with abscess formation caused by TWAR] Kindmark CO, et al. **Lakartidningen** 1988 Dec 21; 85(51):4539–41 **(Swe)**

[TWAR—a newly discovered cause of pneumonia] Persson K. **Lakartidningen** 1988 Dec 21;85(51):4505–6 **(Swe)**

PATHOLOGY

[A case report of psittacosis and chlamydial isolation from bowel and faeces of a pet bird] Hayashi Y, et al. **Kansenshogaku Zasshi** 1988 Jul;62(7):669–74 (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

Immunomodulation and Chlamydia: immunosuppression and the protective immune response to C. psittaci in mice. Byrne GI, et al. **Adv Exp Med Biol** 1988;239:343–52 (34 ref.)

RADIOGRAPHY

Atypical pneumonia. Schriener RD, et al. **J Tenn Med Assoc** 1989 May;82(5):252–3

TRANSMISSION

Chlamydia psittaci excretion in ovine milk tested. Jones GE, et al. **Vet Rec** 1989 May 27;124(21):562

VETERINARY

Isolation and typing of a strain of Chlamydia psittaci from Angora goats. Brown AS, et al. **Aust Vet J** 1988 Sep; 65(9):288–9

Blood concentrations of chlortetracycline in macaws fed medicated pelleted feed. Flammer K, et al. **Avian Dis** 1989 Jan–Mar;33(1):199–203

Shedding and transmission of Chlamydia psittaci in experimentally infected chickens. Takahashi T, et al. **Avian Dis** 1988 Oct–Dec;32(4):650–8

Isolation and serological survey of Chlamydia psittaci in sheep in Hokkaido. Ishida T, et al. **Nippon Juigaku Zasshi** 1988 Aug;50(4):894–9

A chicken model of systemic infection with Chlamydia psittaci: comparison of the virulence among avian and mammalian strains. Takahashi T, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):622–31

Mouse models for evaluation of virulence of Chlamydia psittaci isolated from ruminants. Rodolakis A, et al. **Res Vet Sci** 1989 Jan;46(1):34–9

Relationship between virulence of Chlamydia psittaci strains and establishment of persistent infection of McCoy cells. Rodolakis A, et al. **Vet Microbiol** 1989 Jan;19(1):65–73

Comparison of DNA–spot hybridization, cell culture and direct immunofluorescence staining for the diagnosis of avian chlamydiae. Timms P, et al. **Vet Microbiol** 1988 Sep; 18(1):15–25

Isolation of Chlamydia psittaci from the genital tract of lambs: a possible link with enzootic abortion of ewes. Morgan KL, et al. **Vet Rec** 1988 Oct 8;123(15):399–400

[Diagnosis of chlamydial abortion] Rodolakis A. **Ann Rech Vet** 1988;19(4):213–20 (47 ref.) (Eng. Abstr.) **(Fre)**

[The occurrence and significance of Chlamydia psittaci and Coxiella burnetii in dogs and cats. A study of the literature] Werth D. **Berl Munch Tierarztl Wochenschr** 1989 May 1; 102(5):156–61 (113 ref.) (Eng. Abstr.) **(Ger)**

[The most frequent infectious causes of abortion in sheep in north Bavaria with special reference to Chlamydia and Salmonella infections] Plagemann O. **Tierarztl Prax** 1989; 17(2):145–8 (Eng. Abstr.) **(Ger)**

[Psittacosis of non-avian origin (letter)] García Lerín MC, et al. **Rev Clin Esp** 1988 Jul;183(3):153 **(Spa)**

ORNITHOSIS VIRUS see **CHLAMYDIA PSITTACI**

OROANTRAL FISTULA

EPIDEMIOLOGY

Parotid fistula in children in the tropics. Ijaduola TG, et al. **Ann Trop Paediatr** 1988 Dec;8(4):234–7

ETIOLOGY

Healing of experimental midline osteotomies in the rat palate. Kahnberg KE. **Swed Dent J** 1988;12(6):227–32

MICROBIOLOGY

[Comparative microbiological, macro- and microscopic and x-ray findings in iatrogenic perforation of the maxillary sinus depending on the time of its lancing] Schulz S, et al. **Zahn Mund Kieferheilkd** 1989;77(3):273–5 (Eng. Abstr.) **(Ger)**

SURGERY

Persistent oral antral fistulas. Del Junco R, et al. **Arch Otolaryngol Head Neck Surg** 1988 Nov; 114(11):1315–6

The "tadpole flap"—its role in closure of palatal fistulae. Watson JD, et al. **Br J Plast Surg** 1988 Sep;41(5):485–7

Tongue flap repair of oro-nasal fistulae in cleft palate patients. A review of 20 patients. Coghlan K, et al. **J Craniomaxillofac Surg** 1989 Aug;17(6):255–9

Management of an oroantral fistula in a patient with Wilson's disease: case report and review of the literature. Greene MW, et al. **Oral Surg Oral Med Oral Pathol** 1988 Sep; 66(3):293–6 (37 ref.)

OROFACIODIGITAL SYNDROMES see under **ABNORMALITIES, MULTIPLE**

OROPHARYNGEAL NEOPLASMS see under **PHARYNGEAL NEOPLASMS**

OROPHARYNX

A tidy adjunct to oropharyngeal airways [letter] Lee CM. **Anesth Analg** 1988 Dec;67(12):1193

Fish bones in the throat. Knight LC, et al. **Arch Emerg Med** 1989 Mar;6(1):13–6

Facial fuzz and funny findings. Facial hair causing otalgia and oropharyngeal pain. Papay FA, et al. **Cleve Clin J Med** 1989 May;56(3):273–6

Candidiasis of the oropharynx and esophagus. Guida RA. **Ear Nose Throat J** 1988 Nov;67(11):832, 834–6, 838–40 (27 ref.)

Randomized controlled trial of clotrimazole troche and ketoconazole for oropharyngeal candidiasis. Thamlikitkul V, et al. **J Med Assoc Thai** 1988 Dec;71(12):654–8

ABNORMALITIES

Syndrome of imperforate oropharynx with costovertebral and auricular anomalies. Flannery DB. **Am J Med Genet** 1989 Feb;32(2):189–91

ANATOMY & HISTOLOGY

Normal CT anatomy of the tongue, floor of mouth and oropharynx. Stutley J, et al. **Clin Radiol** 1989 May; 40(3):248–53

DRUG EFFECTS

Thorotrast-induced oro- and hypopharyngeal fibrosis with recurrent bleeding. Wustrow TP, et al. **J Craniomaxillofac Surg** 1988 Oct;16(7):315–9

INJURIES

The hazards of automatic-dishwasher detergent. Kynaston JA, et al. **Med J Aust** 1989 Jul 3;151(1):5–7

Oropharyngeal injury possibly due to free-base cocaine [letter] Bezmalinovic Z, et al. **N Engl J Med** 1988 Nov 24;319(21):1420–1

[Intubation lesions of the oropharynx, larynx and trachea] Kujundžić I, et al. **Lijec Vjesn** 1989 Jan–Feb;111(1–2):21–4 (Eng. Abstr.) **(Scr)**

[Caustic burns of the esophagus in childhood. Our 14 years' experience] García Merino F, et al. **An Esp Pediatr** 1988 Oct;29(4):293–7 (Eng. Abstr.) **(Spa)**

MICROBIOLOGY

Role of attachment for the virulence of Streptococcus pneumoniae. Andersson B, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:163–6

Oropharyngeal colonisation with fungi and gram-negative rods in patients treated with radiotherapy of the head and neck. Makkonen TA, et al. **Br J Oral Maxillofac Surg** 1989 Aug;27(4):334–40

Bacterial adherence as a mechanism of airway colonization. Niederman MS. **Eur J Clin Microbiol Infect Dis** 1989 Jan; 8(1):15–20 (23 ref.)

Phage types of Staphylococcus aureus isolates from the throats of school children. Chaudhary U, et al. **Indian J Med Res** 1988 Jul;88:18–9

Clinical impact of newer quinolones: influence on normal microflora. Nord CE, et al. **J Chemother** 1989 Feb; 1(1):18–23 (17 ref.)

Isolation and biochemical characterization of Haemophilus species isolated simultaneously from the oropharyngeal and anogenital areas. Martel AY, et al. **J Clin Microbiol** 1989 Jul;27(7):1486–9

Oropharyngeal and fecal carriage of Pseudomonas aeruginosa in hospital patients. Murthy SK, et al. **J Clin Microbiol** 1989 Jan;27(1):35–40

Asymptomatic neonatal contamination with herpes simplex virus. Carver JA, et al. **J Perinatol** 1988 Winter;8(1):14–6

Epstein-Barr virus/complement receptor and epithelial cells [letter] Niedobitek G, et al. **Lancet** 1989 Jul 8;2(8654):110

A sandwich adhesion on Streptococcus pneumoniae attaching to human oropharyngeal epithelial cells in vitro. Andersson B, et al. **Microb Pathog** 1988 Apr;4(4):267–78

Suppression of the oropharyngeal and gastrointestinal microflora by ciprofloxacin: microbiological and clinical consequences. Edlund C, et al. **Scand J Infect Dis Suppl** 1989;60:98–103 (21 ref.)

Manipulation of the oropharyngeal and intestinal microflora by norfloxacin: microbiological and clinical aspects. Edlund C, et al. **Scand J Infect Dis Suppl** 1988;56:14–21 (23 ref.)

Beta-lactamase producing anaerobic bacteria in the oropharynx and their clinical relevance. Nord CE, et al. **Scand J Infect Dis Suppl** 1988;57:50–4 (23 ref.)

In vitro adherence of Streptococcus pneumoniae to oropharyngeal cells: enhanced activity and colonization of the upper respiratory tract in patients with recurrent respiratory infections. Mbaki N, et al. **Tohoku J Exp Med** 1989 Apr;157(4):345–54

[Frequency of colonization and pneumonia and development of resistance in long-term ventilated intensive-care patients subjected to selective decontamination of the digestive tract] Konrad F, et al. **Anaesthesist** 1989 Mar;38(3):99–109 (Eng. Abstr.) **(Ger)**

PATHOLOGY

Naso- and oropharyngeal dimensions in children with obstructive sleep apnea. Brodsky L, et al. **Int J Pediatr Otorhinolaryngol** 1989 Feb;17(1):1–11

Oropharyngeal and upper respiratory tract mucosal-gland siderosis in neonatal hemochromatosis: an approach to biopsy diagnosis. Knisely AS, et al. **J Pediatr** 1988 Nov; 113(5):871–4

MRI of the floor of the mouth, tongue and orohypopharynx. Kassel EE, et al. **Radiol Clin North Am** 1989 Mar; 27(2):331–51 (46 ref.)

PHYSIOLOGY

External mechanical loading in conscious humans: role of upper airway mechanoreceptors. O'Donnell DE, et al. **J Appl Physiol** 1988 Aug;65(2):541–8

Questions about oropharyngeal motor development in young children [letter] Dworkin JP, et al.

J Speech Hear Disord 1988 Nov;53(4):483–6
Swallowing physiology and pathophysiology. Logemann JA. Otolaryngol Clin North Am 1988 Nov;21(4):613–23 (31 ref.)

PHYSIOPATHOLOGY

Water vapour and temperature dynamics in the upper airways of normal and CF subjects. Primiano FP Jr, et al. Eur Respir J 1988 May;1(5):407–14
Evaluation of swallowing pathophysiology. Sonies BC, et al. Otolaryngol Clin North Am 1988 Nov;21(4):637–48 (19 ref.)

RADIOGRAPHY

Interactive computer program for biomechanical analysis of videoradiographic studies of swallowing. Logemann JA, et al. AJR Am J Roentgenol 1989 Aug;153(2):277–80

SURGERY

Evaluation of reconstructive techniques of oropharyngeal defects. Stern JR, et al. Ann Plast Surg 1989 Apr; 22(4):332–6
Intraoral and oropharyngeal reconstruction using a de-epithelialized forearm flap. Kawashima T, et al. Head Neck 1989 Jul–Aug;11(4):358–63
Role of masseter crossover flap in oropharyngeal reconstruction. Tiwari RM, et al. J Laryngol Otol 1989 Mar;103(3):298–301
Reconstruction of intermediate sized mucosal defects with the pectoralis major myofascial flap. Moloy PJ. J Otolaryngol 1989 Feb;18(1):32–5

OROSOMUCOID

Modification of sialyl residues of glycoconjugates by reductive amination. Characterization of the modified sialic acids. Murray MC, et al. Carbohydr Res 1989 Mar 15; 186(2):255–65
Temperature-dependent osmotic permeability in glycoprotein containing liposomes. Neitchev VZ, et al. Mol Biol Rep 1988;13(2):85–9
Prof. Karl Schmid Ph.D.: achievement through engagement. Bürgi W. Prog Clin Biol Res 1989;300:1–5
Human plasma alpha 1-acid glycoprotein—biochemical properties, the amino acid sequence and the structure of the carbohydrate moiety, variants and polymorphism. Schmid K. Prog Clin Biol Res 1989;300:7–22 (37 ref.)

ADMINISTRATION & DOSAGE

Effects of alpha-1-acid glycoprotein administration on propranolol binding and beta blockade in rats. Keyler DE, et al. Biochem Pharmacol 1989 Apr 1;38(7):1163–8

ANALOGS & DERIVATIVES

Ethanol-induced impairments in receptor-mediated endocytosis of asialoorosomucoid in isolated rat hepatocytes: time course of impairments and recovery after ethanol withdrawal. Casey CA, et al. Alcoholism (NY) 1989 Apr;13(2):258–63
The pathways for fluid phase and receptor mediated endocytosis in rat hepatocytes are different but thermodynamically equivalent. Oka JA, et al. Biochem Biophys Res Commun 1989 Mar 15;159(2):488–94
Synthesis and characterization of N-hydroxysuccinimide ester chemical affinity derivatives of asialoorosomucoid that covalently cross-link to galactosyl receptors on isolated rat hepatocytes. Herzig MC, et al. Biochemistry 1989 Jan 24;28(2):600–10
The cyanogen bromide fragment I of asialoorosomucoid is transported more efficiently than asialoorosomucoid in rat hepatocytes. Chang TM, et al. Biochim Biophys Acta 1989 Feb 9;1010(2):166–76
Correlation between native and desialyzed forms of orosomucoid. Montiel MD, et al. Hum Hered 1988; 38(6):353–8
Receptor-mediated gene delivery and expression in vivo. Wu GY, et al. J Biol Chem 1988 Oct 15;263(29):14621–4
Effects of temperature on the degradation and biliary secretion of asialoorosomucoid by the perfused rat liver: evidence for two intracellular pathways. Kloppel TM. J Cell Physiol 1989 Mar;138(3):555–60
A radiopharmaceutical for the study of the liver: 99mTc-DTPA-asialo-orosomucoid. I: Radiochemical and animal distribution studies. Galli G, et al. J Nucl Med Allied Sci 1988 Apr–Jun;32(2):110–6
A radiopharmaceutical for the study of the liver: 99mTc-DTPA-asialo-orosomucoid. II: Human dynamic and imaging studies. Galli G, et al. J Nucl Med Allied Sci 1988 Apr–Jun;32(2):117–26

ANALYSIS

Microheterogeneity of alpha 1-acid glycoprotein in the sera of patients with cancer or inflammatory states of the ovaries. Kątnik I, et al. Arch Immunol Ther Exp (Warsz) 1988;36(1):1–6
Studies on the structure of the oligosaccharide chains of alpha 1-acid glycoprotein associated with rough membranes from rat liver. Silvanovich A, et al. Biochem Cell Biol 1989 Jan; 67(1):1–7
Efficient HPLC separation of N-p-nitrophenylglycosylamines derived from complex oligosaccharide mixtures. Human orosomucoid as a model. Kurth H, et al. Biomed Chromatogr 1986 Apr;1(2):58–63
Plasma protein fractions and alpha 1-acidglycoprotein as tumor markers in acute lymphoblastic leukemia. Abdalla A, et al. Chemioterapia 1987 Jun;6(2 Suppl):743–4
Immunoassay of alpha 1-acid glycoprotein in the Cobas Bio centrifugal analyzer. Verme CN, et al. Clin Chem 1988 Nov;34(11):2316–20
Glycan microheterogeneity of alpha 1-acid glycoprotein in sera and dialysates of patients on continuous ambulatory peritoneal dialysis. Fraeyman NH, et al. Clin Chim Acta 1989 Apr 28;181(1):47–54
Modifications of concanavalin A patterns of alpha 1-acid glycoprotein and alpha 2-HS glycoprotein in alcoholic liver disease. Jezequel M, et al. Clin Chim Acta 1988 Aug 15;176(1):49–57
Effects of age on the serum concentration of alpha 1-acid glycoprotein and the binding of lidocaine in pediatric patients. Lerman J, et al. Clin Pharmacol Ther 1989 Aug; 46(2):219–25
400-MHz 1H-NMR spectroscopy of fucosylated tetrasialyl oligosaccharides isolated from normal and cirrhotic alpha 1-acid glycoprotein. Wieruszeski JM, et al. FEBS Lett 1988 Oct 10;238(2):390–4
Adenosine deaminase, alpha 1 antitrypsin, alpha 1 acid glycoprotein, ceruloplasmin and protein in the diagnosis of tuberculous pleural effusion. Sulochana G, et al. Indian J Chest Dis Allied Sci 1988 Jan–Mar;30(1):15–8
Binding of amitriptyline to alpha 1-acid glycoprotein and its variants. Eap CB, et al. J Pharm Pharmacol 1988 Nov; 40(11):767–70
Alpha-1-acid glycoprotein concentrations and protein binding of propranolol in Sprague-Dawley and Dark Agouti rat strains treated by phenobarbital. Chauvelot-Moachon L, et al. J Pharmacol Exp Ther 1988 Mar;244(3):1103–8
Platelet number and size in relation to serum orosomucoid concentration in Crohn's disease. Shah A, et al. Med Lab Sci 1989 Jan;46(1):79–80
Serum prealbumin, transferrin and alpha-1-acid glycoprotein in patients with gynecological carcinomas. Tošner J, et al. Neoplasma 1988;35(4):403–11
Serum alpha 1-acid glycoprotein levels in cows. Iwata H, et al. Nippon Juigaku Zasshi 1988 Oct;50(5):1119–20
Plasma fibrinogen in unstable coronary artery disease. Swahn E, et al. Scand J Clin Lab Invest 1989 Feb;49(1):49–54
[Study of several proteins of the acute phase of surgical intervention] Pensabeni L, et al. Quad Sclavo Diagn 1987 Dec;23(4):395–401 (Eng. Abstr.) (Ita)
[A carbohydrate component of alpha1-acid glycoprotein from normal and abortive blood] Pavlenko AF, et al. Bioorg Khim 1989 Jun;15(6):816–20 (Eng. Abstr.) (Rus)

BIOSYNTHESIS

Effect of the alpha-glucosidase inhibitor N-hydroxyethyl-1-deoxynojirimycin (Bay m 1099) on the biosynthesis of liver secretory glycoproteins. Ludolph D, et al. Biochem Pharmacol 1989 Aug 1;38(15):2479–86
Parallel induction of plasma alpha 1-acid glycoprotein concentration and antipyrine clearance by various doses of phenobarbital in the dog. Abramson FP. Drug Metab Dispos 1988 Nov–Dec;16(6):890–1
Alpha 1-acid glycoprotein in bovine lymphocytes. Iwata H, et al. Nippon Juigaku Zasshi 1988 Oct;50(5):996–1002
In vivo, interleukin 1 and tumor necrosis factor alpha are essential cytokines involved in the induction of rat alpha 1-acid glycoprotein. Chauvelot-Moachon L, et al. Prog Clin Biol Res 1989;300:267–70
Expression of human alpha-1-acid glycoprotein in human cell lines. Dente L, et al. Prog Clin Biol Res 1989;300:131–4

BLOOD

Dose-response behavior of the induction of alpha 1-acid glycoprotein by phenobarbital in the dog. Abramson FP. Drug Metab Dispos 1988 Jul–Aug;16(4):546–50
Influence of continuous ambulatory peritoneal dialysis on serum alpha 1-acid glycoprotein concentration and drug binding. Belpaire FM, et al. Eur J Clin Pharmacol 1988; 35(4):339–43
Regulation of alpha 1-acid glycoprotein plasma concentration by sex steroids and adrenal-cortical hormones during experimental inflammation in the rat. Lebreton JP, et al. Inflammation 1988 Oct;12(5):413–24

DIAGNOSTIC USE

Alpha 1-acid glycoprotein high-performance liquid chromatography column (EnantioPAC) as a screening tool for protein binding. Jewell RC, et al. J Chromatogr 1989 Feb 24;487(2):257–64

DRUG EFFECTS

The effect of the plasticizers TBEP (tris-(2-butoxyethyl)-phosphate) and DEHP (di-(2-ethylhexyl)-phthalate) on beta-adrenergic ligand binding to alpha 1-acid glycoprotein and mononuclear leukocytes. Sager G, et al. Biochem Pharmacol 1989 Aug 1;38(15):2551–7

GENETICS

Cloning and developmental regulation of alpha 1 acid glycoprotein in swine. Stone RT, et al. Dev Genet 1987; 8(4):295–304
Molecular cloning of cDNAs corresponding to two genes of alpha 1-acid glycoprotein and characterization of two alleles of AGP-1 in the mouse. Lee SC, et al. DNA 1989 May;8(4):245–51
Comparison between isoelectric focusing methods for the detection of orosomucoid phenotypes. Montiel MD, et al. Electrophoresis 1988 Jun;9(6):268–72
Subtyping of orosomucoid 1 (ORM1) by isoelectric focusing in agarose and polyacrylamide gels. Thymann M, et al. Electrophoresis 1988 Aug;9(8):380–3
Orosomucoid 1 and orosomucoid 2 types in the Taiwanese and Japanese: evidence for five new orosomucoid variants. Umetsu K, et al. Electrophoresis 1988 May;9(5):224–6
Orosomucoid (alpha-1 acid glycoprotein) phenotyping by use of immobilized pH gradients with 8 M urea and immunoblotting. A new variant encountered in a population study. Eap CB, et al. Hum Genet 1988 Oct; 80(2):183–5
Regional assignment of the loci for adenylate kinase to 9q32 and for alpha 1-acid glycoprotein to 9q31-q32. A locus for Goltz syndrome in region 9q32-qter? Zuffardi O, et al. Hum Genet 1989 Apr;82(1):17–9
Correlation between native and desialyzed forms of orosomucoid. Montiel MD, et al. Hum Hered 1988; 38(6):353–8
Genetic polymorphisms of orosomucoid and alpha-2-HS-glycoprotein in a Philippine population. Umetsu K, et al. Hum Hered 1988;38(5):287–90
Deadenylation of alpha 1-acid glycoprotein mRNA in cultured hepatic cells during stimulation by dexamethasone. Carter KC, et al. J Biol Chem 1989 Mar 5;264(7):4112–9
Microtubule depolymerization inhibits the regulation of alpha 1-acid glycoprotein mRNA by hepatocyte stimulating factor. Carter KC, et al. J Biol Chem 1989 Jan 5; 264(1):515–9
The expression of alpha(1)-acid glycoprotein mRNA during rat development. High levels of expression in the decidua. Thomas T, et al. J Biol Chem 1989 Apr 5;264(10):5784–90
Detection of orosomucoid 1 phenotypes in semen and semen stains. Harada A, et al. J Forensic Sci 1989 May;34(3):665–9
Genetic polymorphisms of orosomucoid ORM1 and ORM2 in Libyans: occurrence of ORM1*2.1 and three new ORM2 alleles. Sebetan IM, et al. Jinrui Idengaku Zasshi 1988 Dec; 33(4):439–43
Sequences downstream of the glucocorticoid regulatory element mediate cycloheximide inhibition of steroid induced expression from the rat alpha 1-acid glycoprotein promoter: evidence for a labile transcription factor. Klein ES, et al. Mol Endocrinol 1988 Dec;2(12):1343–51
Genetic elements involved in regulated expression of rodent alpha 1-acid glycoprotein genes. Baumann H, et al. Prog Clin Biol Res 1989;300:99–110 (21 ref.)
The mRNA for alpha 1-acid glycoprotein is deadenylated during stimulation by dexamethasone. Carter KC, et al. Prog Clin Biol Res 1989;300:127–30
Human alpha-1-acid glycoprotein genes. Dente L. Prog Clin Biol Res 1989;300:85–98 (43 ref.)
The genetic polymorphism of human alpha 1-acid glycoprotein. Eap CB, et al. Prog Clin Biol Res 1989; 300:111–25 (36 ref.)
Multiple inflammation-inducible alpha 1-acid glycoprotein forms correlate with multiple genes in Mus caroli. Prowse KR, et al. Prog Clin Biol Res 1989;300:135–8
Genetic polymorphisms of orosomucoid ORM1 and ORM2 in a Japanese population: occurrence of new ORM1 alleles. Sebetan IM, et al. Z Rechtsmed 1989;102(1):5–9
Orosomucoid (ORM) typing by isoelectric focusing: description of two new alleles in a German population and thermostability in bloodstains. Umetsu K, et al. Z Rechtsmed 1989;102(2–3):171–7

IMMUNOLOGY

Monoclonal antibodies against human orosomucoid: tools for the exploration of structure, function and interactions. Halsall HB, et al. Prog Clin Biol Res 1989;300:67–84 (49 ref.)

ISOLATION & PURIFICATION

Isoelectric focusing of alpha-1 acid glycoprotein (orosomucoid) in immobilized pH-gradients with 8M urea: detection of its desialylated variants using an alkaline phosphatase-linked secondary antibody system. Eap CB, et al. Electrophoresis 1988 Oct;9(10):650–4
One-step purification of rat plasma alpha 1-acid glycoprotein by antibody affinity chromatography: application to normal and inflamed rat sera. Drechou A, et al. J Chromatogr 1989 Apr 14;489(2):273–81
Alpha 1-acid glycoprotein. Arnaud P, et al. Methods Enzymol 1988;163:418–30
One step purification of rat alpha 1-acid glycoprotein by antibody affinity chromatography. Application to normal and inflamed rat sera. Drechou A, et al. Prog Clin Biol Res 1989;300:271–4
[Quantification of alpha 1-acid glycoprotein glycoforms separated by immuno-affino-electrophoresis (letter)] Lefèvre C, et al. Ann Biol Clin (Paris) 1989;47(5):287–8 (Fre)

METABOLISM

Pharmacokinetics and protein binding of bupivacaine in postoperative epidural analgesia. Wulf H, et al. **Acta Anaesthesiol Scand** 1988 Oct;32(7):530–4

Serum IgA, acute phase proteins, and glycosylation of alpha 1-acid glycoprotein in ankylosing spondylitis. Mackiewicz A, et al. **Ann Rheum Dis** 1989 Feb;48(2):99–103

Human albumin and alpha 1-acid glycoprotein binding of propranolol in the presence of a perfluorochemical blood substitute. Parsons DL, et al. **Arch Int Pharmacodyn Ther** 1989 Jan-Feb;297:294–304

Microheterogeneity of alpha 1-acid glycoprotein in the detection of intercurrent infection in patients with rheumatoid arthritis. Pawlowski T, et al. **Arthritis Rheum** 1989 Mar;32(3):347–51

Inverse stereoselectivity in the binding of acenocoumarol to human serum albumin and to alpha 1-acid glycoprotein. Fitos I, et al. **Biochem Pharmacol** 1989 Jul 15; 38(14):2259–62

Different binding of propranolol enantiomers to human alpha 1-acid glycoprotein. Oravcová J, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2575–9

Lack of effect of treatment with human recombinant-tumour necrosis factor (HrTNF) on the binding of quinidine to alpha 1-acid glycoprotein (AGP). Barnett JA, et al. **Br J Clin Pharmacol** 1989 Feb;27(2):257–61

Alpha 1-acid glycoprotein concentration and molecular heterogeneity: relationship to oxprenolol binding in serum from healthy volunteers and patients with lung carcinoma or cirrhosis. Fraeyman NF, et al. **Br J Clin Pharmacol** 1988 Jun;25(6):733–40

Binding of prazosin and propranolol at variable alpha 1-acid glycoprotein and albumin concentrations. Sager G, et al. **Br J Clin Pharmacol** 1989 Feb;27(2):229–34

Alpha 1-acid glycoprotein and hepatic fibrosis. Ozeki T, et al. **Br J Exp Pathol** 1988 Aug;69(4):589–95

Study on the binding of dicumarol to alpha 1-acid glycoprotein using circular dichroism spectroscopy. Otagiri M, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec; 36(12):4958–62

Clinical pharmacokinetics of theophylline and levels of alpha 1-acid glycoprotein in smokeless tobacco users. Parish RC, et al. **Chest** 1989 Jun;95(6):1253–6

Meperidine binding to isolated alpha 1-acid glycoprotein and albumin. Julius HC, et al. **DICP** 1989 Jul-Aug; 23(7–8):568–72

Does alpha 1-acid glycoprotein reduce the unbound metabolic clearance of disopyramide in patients with renal impairment? Braun J, et al. **Eur J Clin Pharmacol** 1988; 35(3):313–7

Effects of monocytic products, recombinant interleukin-1, and recombinant interleukin-6 on glycosylation of alpha 1-acid glycoprotein: studies with primary human hepatocyte cultures and rats. Pos O, et al. **Inflammation** 1989 Aug;13(4):415–27

Buffer and pH effects on propranolol binding by human albumin and alpha 1-acid glycoprotein. Ravis WR, et al. **J Pharm Pharmacol** 1988 Jul;40(7):459–63

Protein binding and stability of norepinephrine in human blood plasma. Involvement of prealbumin, alpha 1-acid glycoprotein and albumin. de Vera N, et al. **Life Sci** 1988; 43(16):1277–86

Drug binding to alpha 1-acid glycoprotein studied by circular dichroism. Otagiri M, et al. **Pharm Res** 1989 Feb; 6(2):156–9

Drug binding to human alpha-1-acid glycoprotein in health and disease. Kremer JM, et al. **Pharmacol Rev** 1988 Mar; 40(1):1–47 (598 ref.)

Binding of prazosin to alpha 1-acid glycoprotein and albumin: effect of protein purity and concentrations. Sager G, et al. **Pharmacol Toxicol** 1989 Apr;64(4):365–8

Parallel induction of plasma alpha 1-acid glycoprotein concentration and antipyrine clearance by drugs. Abramson FP. **Prog Clin Biol Res** 1989;300:427–35

Glycan microheterogeneity forms of alpha 1-acid glycoprotein (AGP): their identification in biological fluids and variations in their relative proportions in disease states. Agneray J. **Prog Clin Biol Res** 1989;300:47–65 (41 ref.)

Contribution of the variants of alpha 1-acid glycoprotein to its binding of drugs. Baumann P, et al. **Prog Clin Biol Res** 1989;300:379–97 (64 ref.)

Blood binding and tissue transfer of drugs: the influence of alpha 1 acid glycoprotein binding. Belaiba R, et al. **Prog Clin Biol Res** 1989;300:287–305 (48 ref.)

Pharmacokinetic and pharmacodynamic consequences of altered binding of drugs to alpha 1-acid glycoprotein. Belpaire FM, et al. **Prog Clin Biol Res** 1989;300:337–50 (22 ref.)

Hyperfucosylation of alpha 1-acid glycoprotein during cirrhosis. Biou D, et al. **Prog Clin Biol Res** 1989;300:215–8

Binding to alpha 1-acid glycoprotein and relevant apparent volume of distribution. Bree F, et al. **Prog Clin Biol Res** 1989;300:321–36 (26 ref.)

Comparison of drug binding capacities of two AAG peptidic variants of human origin. Bree F, et al. **Prog Clin Biol Res** 1989;300:399–403

Comparison of drug binding capacities of three AAG glycan variants of human origin. Bree F, et al. **Prog Clin Biol Res** 1989;300:405–8

Physiopathological alterations of alpha 1 acid glycoprotein temporal variations: implications for chronopharmacology. Bruguerolle B, et al. **Prog Clin Biol Res** 1989;300:199–214 (19 ref.)

Enzyme-inducing drugs and rat alpha 1-acid glycoprotein—1—Response of SD and DA rats to the unique administration of phenobarbital. Chauvelot-Moachon L, et al. **Prog Clin Biol Res** 1989; 300:227–30

ANS-drug interactions to AAG and HSA fluorescence and equilibrium dialysis studies. Essassi D, et al. **Prog Clin Biol Res** 1989;300:423–6

Circulatory life time and organ distribution of differently glycosylated forms (unglycosylated, high-mannose type, hybrid type, complex type) of rat alpha-1-acid glycoprotein. Gross V, et al. **Prog Clin Biol Res** 1989; 300:231–4

Anomalies in the plasma proteins that bind propranolol in sheep. Hill MD, et al. **Prog Clin Biol Res** 1989;300:409–12

Enzyme-inducing drugs and rat alpha 1-acid glycoprotein—2—Phenobarbital effects on acute inflammation in DA rats. Levy F, et al. **Prog Clin Biol Res** 1989;300:275–8

Major microheterogeneity of alpha 1-acid glycoprotein in management of patients with rheumatic diseases. Mackiewicz A, et al. **Prog Clin Biol Res** 1989;300:219–22

Binding of drugs to alpha 1-acid glycoprotein and its desialylated form. Influence on hepatic disposition and implications for drug targeting to the liver. Meijer DK, et al. **Prog Clin Biol Res** 1989;300:143–67 (52 ref.)

Drug binding sites on human alpha-1-acid glycoprotein. Müller WE. **Prog Clin Biol Res** 1989;300:363–78 (36 ref.)

Alteration in the pharmacologic activity of alpha 1 adrenergic antagonists by alpha-1-acid glycoprotein. Oie S, et al. **Prog Clin Biol Res** 1989;300:235–8

Minor microheterogeneity of alpha 1-acid glycoprotein in rheumatoid arthritis. Pawlowski T, et al. **Prog Clin Biol Res** 1989;300:223–6

Changes in Con-A affinity of rat alpha 1-acid glycoprotein as detected by crossed affino immunoelectrophoresis do not correlate with biantennary glycan content. Pos O, et al. **Prog Clin Biol Res** 1989;300:279–82

Beta-adrenergic binding sites on alpha 1-acid glycoprotein and mononuclear leukocytes. Sager G. **Prog Clin Biol Res** 1989;300:413–6

Comparison of glycan microheterogeneities of alpha 1-acid glycoprotein between mothers and their newborns. Seta N, et al. **Prog Clin Biol Res** 1989;300:139–42

Experimental demonstration in the rat of the role played by human alpha 1 glycoprotein (HAAG) in the nonlinearity of RU 486 pharmacokinetics in women. Tremblay D, et al. **Prog Clin Biol Res** 1989;300:441–4

Indapamide binding to alpha 1-acid glycoprotein: consequences on its blood distribution and plasma binding in disease states. Urien S, et al. **Prog Clin Biol Res** 1989; 300:449–52

Tertatolol high affinity binding to alpha 1-acid glycoprotein: stereospecificity and consequences on plasma binding in disease states. Urien S, et al. **Prog Clin Biol Res** 1989; 300:453–6

Plasma concentrations of alpha-1-acid glycoprotein following operations and its effect on the plasma protein binding of bupivacaine. Wulf H, et al. **Prog Clin Biol Res** 1989;300:457–60

Alpha-1-acid glycoprotein and protein-binding of bupivacaine in the plasma of pregnant women at term. Wulf H, et al. **Prog Clin Biol Res** 1989;300:461–4

1-anilino-naphthalene 8-sulfonic acid (ANS) as a probe for the binding of artidepressant drugs to human alpha 1-acid glycoprotein (AAG). Zini R, et al. **Prog Clin Biol Res** 1989; 300:417–21

[Absence of changes in elderly patients of circadian variation of various so-called inflammation proteins] Bouvenot G, et al. **Ann Biol Clin (Paris)** 1989;47(2):76–8 (Eng. Abstr.) **(Fre)**

PHARMACOLOGY

Effect of alpha-1-acid glycoprotein, albumin and palmitic acid on the brain and salivary gland extraction of warfarin in rats. Urien S, et al. **J Pharmacol Exp Ther** 1989 Feb; 248(2):781–5

Alpha 1-acid glycoprotein effects on the permeability changes in reconstituted membranes. Neitchev VZ. **Prog Clin Biol Res** 1989;300:243–6

[Agglutination of intravenous lipid emulsions by acute phase proteins of inflammation] Gobert E, et al. **Pathol Biol (Paris)** 1988 Sep;36(7):877–81 (Eng. Abstr.) **(Fre)**

PHYSIOLOGY

Glycan variants of human alpha 1-acid glycoprotein modulate the biology of macrophages. Evidence that a concanavalin A-unreactive variant is involved in the production of an interleukin 1 inhibitor. Durand G. **Prog Clin Biol Res** 1989;300:247–65

Alpha 1-acid glycoprotein promotes nerve growth in vitro. Liu HM, et al. **Prog Clin Biol Res** 1989;300:239–42

The interaction of alpha-1-acid glycoprotein with endogenous autocoids, in particular, platelet activating factor (PAF). McNamara PJ, et al. **Prog Clin Biol Res** 1989; 300:307–19 (41 ref.)

Clinical relevance of alpha 1 acid glycoprotein in health and disease. Routledge PA. **Prog Clin Biol Res** 1989;300:185–98 (63 ref.)

Immune function studies of alpha-1-acid glycoprotein. Singh VK. **Prog Clin Biol Res** 1989;300:283–6

URINE

Urinary orosomucoid excretion rate in patients with non-insulin-dependent diabetes mellitus. Ito S, et al. **Acta Endocrinol (Copenh)** 1989 May;120(5):584–90

OROTATE PHOSPHORIBOSYLTRANSFERASE see under **PENTOSYLTRANSFERASES**

OROTIC ACID

Enzyme histochemical and ultrastructural approach in orotic acid-induced fatty liver and their recovery process in Wistar rats. Murakoshi M, et al. **Tokai J Exp Clin Med** 1988 Feb;13(1):37–43

ANALOGS & DERIVATIVES

Selective activity of 5-fluoroorotic acid against Plasmodium falciparum in vitro. Rathod PK, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):1090–4

Dihydroorotate induces Ca2+ release from rat liver mitochondria: a contribution to the mechanism of alloxan-induced Ca2+ release. Eichler W, et al. **Biol Chem Hoppe Seyler** 1988 Dec;369(12):1287–93

Methylglucamine orotate does not affect dopamine-stimulated fucosylation of rat hippocampal proteins. Pchalek V, et al. **Biomed Biochim Acta** 1988; 47(9):843–8

Orotate improves memory and enhances synaptic long-term potentiation in active avoidance behaviour in rats with perforant path stimulation as the conditioned stimulus. Bergado JA, et al. **Eur J Pharmacol** 1988 Nov 22; 157(2–3):155–63

New aspects in the pharmacology of kindling implications for mechanism of of action in kindling. Schmidt J. **Pol J Pharmacol Pharm** 1987 Sep-Oct;39(5):527–36

ANALYSIS

Orotic acid in guinea pig milk: changes in concentration during lactation. Wahab IM, et al. **J Dairy Sci** 1988 Sep; 71(9):2554–6

BIOSYNTHESIS

Orotic acid overproduction in experimental cirrhosis of rats. Shoemaker JD, et al. **Exp Mol Pathol** 1989 Jun;50(3):371–84

PHARMACOKINETICS

RNA labelling with 3H-orotic acid and 3H-fluorouracil of rat liver tumour following transient hepatic arterial ischaemia. Mack P, et al. **Eur J Surg Oncol** 1988 Dec; 14(6):669–75

PHARMACOLOGY

Increased catabolism of phosphatidylcholine to betaine regulates the liver phosphatidylcholine content in rats fed orotic acid. Tokmakjian SD, et al. **Biochem Int** 1989 Apr; 18(4):751–7

The impaired tolerance of the recently infarcted rat heart to cardioplegic arrest: the protective effect of orotic acid. Munsch C, et al. **J Mol Cell Cardiol** 1989 Aug;21(8):751–4

THERAPEUTIC USE

Sensitivity of the recently infarcted heart to cardioplegic arrest. Beneficial effect of pretreatment with orotic acid. Newman MA, et al. **J Thorac Cardiovasc Surg** 1989 Apr; 97(4):593–604

[Does Hepavis have value in the therapy of fatty liver caused by alcohol poisoning?] Odegaard S, et al. **Z Gastroenterol** 1989 Feb;27(2):91–3 (Eng. Abstr.) **(Ger)**

TOXICITY

Lysine-orotate potentiates the toxicity of an extract of the mushroom Amanita phalloides. Halacheva K, et al. **Toxicon** 1988;26(6):571–6

URINE

Orotic aciduria fibroblasts express a labile form of UMP synthase. Perry ME, et al. **J Biol Chem** 1989 Sep 15; 264(26):15522–8

Orotic aciduria due to arginine deprivation: changes in the levels of carbamoyl phosphate and of other urea cycle intermediates in mouse liver. Alonso E, et al. **J Nutr** 1989 Aug;119(8):1188–95

Uridine-responsive hypogammaglobulinemia and congenital heart disease in a patient with hereditary orotic aciduria. Alvarado CS, et al. **J Pediatr** 1988 Nov;113(5):867–71

Hypogammaglobulinemia in orotic aciduria [letter] Etzioni A. **J Pediatr** 1989 Aug;115(2):332–3

[Protein intolerance with lysinuria. Value of orotic aciduria in adjusting treatment with citrulline] de Parscau L, et al. **Arch Fr Pediatr** 1988 Dec;45(10):809–12 (Eng. Abstr.) **(Fre)**

OROTIDINE-5'-PHOSPHATE DECARBOXYLASE see under **CARBOXY-LYASES**

OROYA FEVER see **BARTONELLA INFECTIONS**

ORPHAN DRUG PRODUCTION see under **DRUG INDUSTRY**

ORPHENADRINE

ANALOGS & DERIVATIVES

Simple and rapid GLC method for the determination of orphenadrine in human plasma. Contin M, et al. **Biomed Chromatogr** 1987;2(5):193–4

[3H]-(+)-N-methyl-4-methyldiphenhydramine, a quaternary radioligand for the histamine H1-receptor. Treherne JM, et al. **Br J Pharmacol** 1988 Jul;94(3):797–810

BLOOD

Simple and rapid GLC method for the determination of orphenadrine in human plasma. Contin M, et al. **Biomed Chromatogr** 1987;2(5):193–4

PHARMACOLOGY

Mechanisms of orphenadrine-induced antinociception in mice: a role for serotonergic pathways. Hunskaar S, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):83–91

Interaction of nefopam and orphenadrine with the cytochrome P-450 and the glutathione system in rat liver. Leurs R, et al. **J Pharm Pharmacol** 1989 Jun;41(6):388–93

Inhibition of oxidative drug metabolism by orphenadrine: in vitro and in vivo evidence for isozyme-specific complexation of cytochrome P-450 and inhibition kinetics. Reidy GF, et al. **Mol Pharmacol** 1989 May;35(5):736–43

ORTHO-AMINOBENZOIC ACIDS see **ANTHRANILIC ACIDS**

ORTHO-DIHYDROXYBENZENES see **CATECHOLS**

ORTHO,PARA-DDD see **MITOTANE**

ORTHODONTIC APPLIANCES

see related
BONDING, DENTAL

Retentive strength of dental composite to metal surfaces. Wictorin L, et al. **Acta Odontol Scand** 1989 Jun; 47(3):185–91

A 3-year clinical and SEM study of surface changes of carious enamel lesions after inactivation. Artun J, et al. **Am J Orthod Dentofacial Orthop** 1989 Apr;95(4):327–33

Orthodontic fusion [letter] Behrents RG. **Am J Orthod Dentofacial Orthop** 1989 Sep;96(3):20A

The effect on the bonding strength of orthodontic brackets of fluoride application after etching. Bishara SE, et al. **Am J Orthod Dentofacial Orthop** 1989 Mar;95(3):259–60

The effect of temperature change of composites on the bonding strength of orthodontic brackets. Bishara SE, et al. **Am J Orthod Dentofacial Orthop** 1988 Nov;94(5):440–1

A paradigm of the marketplace. Bramble LM. **Am J Orthod Dentofacial Orthop** 1988 Oct;94(4):354–5

A three-cycle in vivo evaluation of reconditioned direct-bonding brackets. Buchwald A. **Am J Orthod Dentofacial Orthop** 1989 Apr;95(4):352–4

An in vitro investigation of lingual bonding. Chumak L, et al. **Am J Orthod Dentofacial Orthop** 1989 Jan;95(1):20–8

Lingual orthodontics—its renaissance. Creekmore T. **Am J Orthod Dentofacial Orthop** 1989 Aug;96(2):120–37

Comparative tensile strengths of brackets bonded to porcelain with orthodontic adhesive and porcelain repair systems. Eustaquio R, et al. **Am J Orthod Dentofacial Orthop** 1988 Nov;94(5):421–5

An American Board of Orthodontics case report. Fisher JC. **Am J Orthod Dentofacial Orthop** 1989 May;95(5):363–70

Cephalometric appraisal of patients treated with fixed lingual orthodontic appliances: historic review and analysis of cases. Fulmer DT, et al. **Am J Orthod Dentofacial Orthop** 1989 Jun;95(6):514–20 (19 ref.)

The use of magnets to move molars distally. Gianelly AA, et al. **Am J Orthod Dentofacial Orthop** 1989 Aug; 96(2):161–7

An American Board of Orthodontics case report. Surgical treatment of adult Class II, division 2 malocclusion. Hinkle FG. **Am J Orthod Dentofacial Orthop** 1989 Mar; 95(3):185–91

Indirect versus direct bonding: bond strength and failure location. Hocevar RA, et al. **Am J Orthod Dentofacial Orthop** 1988 Nov;94(5):367–71

Effects of a fixed magnetic appliance on the dentofacial complex. Kalra V, et al. **Am J Orthod Dentofacial Orthop** 1989 Jun;95(6):467–78

Direct bonding of orthodontic brackets to porcelain veneer laminates. Kao EC, et al. **Am J Orthod Dentofacial Orthop** 1988 Dec;94(6):458–68

Mechanical properties and clinical applications of orthodontic wires. Kapila S, et al. **Am J Orthod Dentofacial Orthop** 1989 Aug;96(2):100–9 (60 ref.)

Dynamics of the Tip-edge bracket. Kesling PC. **Am J Orthod Dentofacial Orthop** 1989 Jul;96(1):16–25

A clinical trial comparing the failure rates of directly bonded brackets using etch times of 15 or 60 seconds. Kinch AP, et al. **Am J Orthod Dentofacial Orthop** 1988 Dec; 94(6):476–83

Bond strength and durability of glass ionomer cements used as bonding agents in the placement of orthodontic brackets. Klockowski R, et al. **Am J Orthod Dentofacial Orthop** 1989 Jul;96(1):60–4

Pros and cons of the reuse of direct-bonded appliances. Matasa CG. **Am J Orthod Dentofacial Orthop** 1989 Jul; 96(1):72–6

Bond strength comparison: a simplified indirect technique versus direct placement of brackets. Milne JW, et al. **Am J Orthod Dentofacial Orthop** 1989 Jul;96(1):8–15

A visible light-activated direct-bonding material: an in vivo comparative study. O'Brien KD, et al. **Am J Orthod Dentofacial Orthop** 1989 Apr;95(4):348–51

Distortion of edgewise orthodontic brackets associated with different methods of debonding. Oliver RG, et al. **Am J Orthod Dentofacial Orthop** 1989 Jul;96(1):65–71

Retention—retainers may be forever. Parker WS. **Am J Orthod Dentofacial Orthop** 1989 Jun;95(6):505–13

An American Board of Orthodontics case report. A combined face mask-orthognathic surgical approach in the treatment of skeletal open bite and maxillary deficiency. Paz ME, et al. **Am J Orthod Dentofacial Orthop** 1989 Jan; 95(1):1–11

Increasing intrusion of anterior teeth. Ponitz PV. **Am J Orthod Dentofacial Orthop** 1988 Dec;94(6):514–5

An American Board of Orthodontics case report. Correction of a severe Class II malocclusion. Regan PD, et al. **Am J Orthod Dentofacial Orthop** 1989 Mar;95(3):192–9

More on obstructive sleep apnea [letter] Ross ND, et al. **Am J Orthod Dentofacial Orthop** 1989 Apr;95(4):41A–42A

Class II, Division 1 vertical pattern. Runge ME, et al. **Am J Orthod Dentofacial Orthop** 1988 Oct;94(4):271–7

Temperature-activated wires [letter] Schultz C. **Am J Orthod Dentofacial Orthop** 1988 Nov;94(5):444–5

An American Board of Orthodontics case report. Snyder DE. **Am J Orthod Dentofacial Orthop** 1988 Dec;94(6):453–7

An evaluation of a fluoride-releasing, visible light-activated bonding system for orthodontic bracket placement. Sonis AL, et al. **Am J Orthod Dentofacial Orthop** 1989 Apr; 95(4):306–11

Frictional forces in fixed appliances. Tidy DC. **Am J Orthod Dentofacial Orthop** 1989 Sep;96(3):249–54

Effects of appliance size, arch wire diameter, and alloy composition on the in vitro force delivery of the quad-helix appliance. Urbaniak JA, et al. **Am J Orthod Dentofacial Orthop** 1988 Oct;94(4):311–6

Aligning, leveling, and torque control—a pilot study. Andreasen GF, et al. **Angle Orthod** 1989 Spring;59(1):51–60

Force distribution comparisons of various retraction archwires. Chaconas SJ, et al. **Angle Orthod** 1989 Spring; 59(1):25–30

Force systems from an ideal arch—large deflection considerations. Koenig HA, et al. **Angle Orthod** 1989 Spring;59(1):11–6

Morphology of polycrystalline alumina brackets and its relationship to fracture toughness and strength. Kusy RP. **Angle Orthod** 1988 Jul;58(3):197–203

Space closure in adult patients using the segmented arch technique. Manhartsberger C, et al. **Angle Orthod** 1989 Fall; 59(3):205–10

Buccal separators for relief of TMJ pain and symptoms. Mintz AH. **Angle Orthod** 1988 Oct;58(4):351–6

Orthodontic bonding adhesives. Brown D. **Br J Orthod** 1988 Nov;15(4):277–8

Orthodontic band cements. Brown D. **Br J Orthod** 1989 May; 16(2):127–31

The behaviour of multiple loops in torsion. Cavina RA, et al. **Br J Orthod** 1988 Aug;15(3):149–56

An in vitro study of the bond strength of a glass ionomer cement in the direct bonding of orthodontic brackets. Cook PA, et al. **Br J Orthod** 1988 Nov;15(4):247–53

The orthodontic tooth positioner—an appraisal. Lew KK. **Br J Orthod** 1989 May;16(2):113–6 (17 ref.)

Scanning electron microscope appearance of the enamel/composite/bracket areas using different methods of surface enamel treatment, composite mix and bracket loading. Oliver RG, et al. **Br J Orthod** 1989 Feb;16(1):39–46

The direct bonding of teeth in the buccal segments: a problem eased. Pilley FA, et al. **Br J Orthod** 1989 Feb;16(1):47–8

Forces exerted by orthodontic aligning archwires. Rock WP, et al. **Br J Orthod** 1988 Nov;15(4):255–9

The effect of bracket type and ligation method upon forces exerted by orthodontic archwires. Rock WP, et al. **Br J Orthod** 1989 Aug;16(3):213–7

A jointed fan-type expander: a newly designed expansion appliance for the upper dental arch of patients with cleft lip and/or palate. Suzuki A, et al. **Cleft Palate J** 1989 Jul; 26(3):239–41; discussion 241

Esthetic orthodontic appliances for the adult. Goldstein MC, et al. **Dent Clin North Am** 1989 Apr;33(2):183–93

Orthodontics. Provisional restorations and appliances. Vanarsdall RL. **Dent Clin North Am** 1989 Jul;33(3):479–96

An experimental investigation into the effect of dimensional change on the stiffness of double vertical incisor alignment loops. Brown ID. **Eur J Orthod** 1988 Nov;10(4):319–28

Improving palatal attachments. Cook PA, et al. **Eur J Orthod** 1988 Nov;10(4):380–4

The quadhelix maxillary expansion appliance: Part I. Mechanics. Jones SP, et al. **Eur J Orthod** 1989 May; 11(2):169–78

A comparison of three appliance systems in the treatment of Class III malocclusion. Kerr WJ, et al. **Eur J Orthod** 1988 Aug;10(3):203–14

Japanese NiTi alloy wire: use of the direct electric resistance heat treatment method. Miura F, et al. **Eur J Orthod** 1988 Aug;10(3):187–91

Slow maxillary expansion: a comparison between banded and bonded appliances. Mossaz-Joëlson K, et al. **Eur J Orthod** 1989 Feb;11(1):67–76

Shear strength of orthodontic bonding agents. Pender N, et al. **Eur J Orthod** 1988 Nov;10(4):374–9

Bond strengths of two integral bracket-base combinations: an in vitro comparison with foil-mesh. Regan D, et al. **Eur J Orthod** 1989 May;11(2):144–53

Stability of magnetic versus mechanical palatal expansion. Vardimon AD, et al. **Eur J Orthod** 1989 May;11(2):107–15

A basic guide to some common orthopedic (functional) appliances. Johnson D. **Int J Orthod** 1989 Spring; 27(1-2):9–15

Retention and relapse. Watson DH. **Int J Orthod** 1988 Fall-Winter;26(3-4):4–9

Lingual orthodontic treatment [letter] Berke JB. **J Am Dent Assoc** 1989 Feb;118(2):150

The orthodontic appliance: esthetic considerations [published erratum appears in J Am Dent Assoc 1988 Nov;117(6):698] Hershey HG. **J Am Dent Assoc** 1988 Sep;117(4):29E–34E (7 ref.)

Esthetics correction [letter] Wolfsohn RS. **J Am Dent Assoc** 1988 Nov;117(6):698

A method for repositioning a mandibular fracture with delayed union and/or nonunion. Waikakul A. **J Oral Maxillofac Surg** 1989 Feb;47(2):206–8

An experimental orthopedic treatment of the rat mandible using a functional appliance alters the fibre and myosin types in masticatory muscles. Oudet C, et al. **Reprod Nutr Dev** 1988;28(3B):795–803

[Rebonding of orthodontic attachments] Wang T. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 May; 23(3):140–3, 190 (Eng. Abstr.) **(Chi)**

[Buccal microbiology, dental plaque and the incidence of caries in children with or without removable orthodontal appliances] Platiau R, et al. **Acta Stomatol Belg** 1988 Dec; 85(4):299–311 **(Fre)**

[The development of indirect bonding in combination with pre-bonded appliances] Altounian G. **Orthod Fr** 1987;58 Pt 2:775–90 (Eng. Abstr.) **(Fre)**

[1st order curves. Their development in the functional phases of treatment] Jegou I, et al. **Orthod Fr** 1987;58 Pt 2:479–87 **(Fre)**

[Appliance possibilities in the rehabilitation of restricted habitual mandibular movements] Jeckel N, et al. **Fortschr Kieferorthop** 1988 Aug;49(4):331–41 (Eng. Abstr.) **(Ger)**

[Corrosion behavior of different orthodontic wires] Kappert HF, et al. **Fortschr Kieferorthop** 1988 Aug;49(4):358–67 (Eng. Abstr.) **(Ger)**

[Clinical incidence of the fracture of bonded brackets] Krings A, et al. **Fortschr Kieferorthop** 1988 Dec;49(6):522–8 (Eng. Abstr.) **(Ger)**

[Comparative studies of fiberglass and metal brackets] Manhartsberger C, et al. **Fortschr Kieferorthop** 1989 Jun; 50(3):179–85 (Eng. Abstr.) **(Ger)**

[Adhesive strength and bonding behavior in graphite-marked bracket positioning] Muchitsch AP, et al. **Fortschr Kieferorthop** 1989 Feb;50(1):65–74 (Eng. Abstr.) **(Ger)**

[The importance of the choice of materials and their design for the efficacy of orthodontic appliances] Newesely H. **Fortschr Kieferorthop** 1989 Apr;50(2):99–108 (Eng. Abstr.) **(Ger)**

[The canine tooth retraction arch—a new version] Sevinc H. **Fortschr Kieferorthop** 1988 Dec;49(6):529–34 (Eng. Abstr.) **(Ger)**

[Evaluation of super-elasticity characteristics of orthodontic Ni-Ti alloy wire] Yoneyama T, et al. **Kokubyo Gakkai Zasshi** 1989 Mar;56(1):93–101 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Enamel wear caused by ceramic brackets. Douglass JB. **Am J Orthod Dentofacial Orthop** 1989 Feb;95(2):96–8

In re: Orthodontics/TMJ [letter] Nemeth RB. **Am J Orthod Dentofacial Orthop** 1989 Jun;95(6):25A

Perception of discomfort by patients undergoing orthodontic treatment. Ngan P, et al. **Am J Orthod Dentofacial Orthop** 1989 Jul;96(1):47–53

In re: An American Board of Orthodontics case report [letter] Zuccati G. **Am J Orthod Dentofacial Orthop** 1989 Apr; 95(4):42A

Traumatic ulcers and pain in adults during orthodontic treatment. Kvam E, et al. **Community Dent Oral Epidemiol** 1989 Jun;17(3):154–7

Allergic reaction to orthodontic wire: report of case. Dunlap CL, et al. **J Am Dent Assoc** 1989 Apr;118(4):449–50

The release of residual monomeric methyl methacrylate from acrylic appliances in the human mouth: an assay for monomer in saliva. Baker S, et al. **J Dent Res** 1988 Oct; 67(10):1295–9

Severe localised periodontitis in an adult: initiation by orthodontic rubber bands. Ewart NP. **N Z Dent J** 1989 Jul;85(381):92–4

ORTHODONTIC APPLIANCES, REMOVABLE

Functional appliances: a review. Bishara SE, et al. **Am J Orthod Dentofacial Orthop** 1989 Mar;95(3):250–8 (54 ref.)

The effect of a modified functional appliance on obstructive sleep apnea. Bonham PE, et al. **Am J Orthod Dentofacial Orthop** 1988 Nov;94(5):384–92

Cephalometric changes in Class II, Division 1 cases after orthopedic treatment with the bioactivator. Dahan J, et al. **Am J Orthod Dentofacial Orthop** 1989 Feb;95(2):127–37

Orthopedic and orthodontic effects resulting from the use of a functional appliance with different amounts of protrusive activation. DeVincenzo JP, et al. **Am J Orthod Dentofacial Orthop** 1989 Sep;96(3):181–90

The effect of the amount of protrusion built into the bionator on condylar growth and displacement: a clinical study. Op Heij DG, et al. **Am J Orthod Dentofacial Orthop** 1989 May; 95(5):401–9

An American Board of Orthodontics case report. A combined face mask–orthognathic surgical approach in the treatment of skeletal open bite and maxillary deficiency. Paz ME, et al. **Am J Orthod Dentofacial Orthop** 1989 Jan; 95(1):1–11

An American Board of Orthodontics case report. Correction of a severe Class II malocclusion. Regan PD, et al. **Am J Orthod Dentofacial Orthop** 1989 Mar;95(3):192–9

Osseointegrated titanium implants for maxillofacial protraction in monkeys. Smalley WM, et al. **Am J Orthod Dentofacial Orthop** 1988 Oct;94(4):285–95

Biomechanical effect of anteriorly directed extraoral forces on the craniofacial complex: a study using the finite element method. Tanne K, et al. **Am J Orthod Dentofacial Orthop** 1989 Mar;95(3):200–7

Treatment effects of the Herbst appliance. Valant JR, et al. **Am J Orthod Dentofacial Orthop** 1989 Feb;95(2):138–47

Functional orthopedic magnetic appliance (FOMA) II—modus operandi. Vardimon AD, et al. **Am J Orthod Dentofacial Orthop** 1989 May;95(5):371–87

Induced condylar growth in a patient with hemifacial microsomia. Kaplan RG. **Angle Orthod** 1989 Summer; 59(2):85–90

Frontal facial changes with the Fränkel appliance. Owen AH 3d. **Angle Orthod** 1988 Jul;58(3):257–87

Teeth in cross-bite: the role of removable appliances. Jacobs SG. **Aust Dent J** 1989 Feb;34(1):20–8

The closure of residual extraction spaces by means of traction screws: a report of two cases. Brown ID. **Br J Orthod** 1989 May;16(2):95–101

A functional appliance system for the correction of class II relationships. Trenouth MJ. **Br J Orthod** 1989 Aug; 16(3):169–76

Whither the removable appliance? [editorial] Usiskin LA. **Br J Orthod** 1988 Nov;15(4):287–8

An evaluation of the morphogenic and anatomic effects of the functional regulator utilizing the counterpart analysis. Enlow DH, et al. **Eur J Orthod** 1988 Aug;10(3):192–202

Dentofacial orthopaedics in relation to chronological age, growth period and skeletal development. An analysis of 72 male patients with Class II division 1 malocclusion treated with the Herbst appliance. Hägg U, et al. **Eur J Orthod** 1988 Aug;10(3):169–76

Five-year treatment results with a headgear–activator combination. Lehman R, et al. **Eur J Orthod** 1988 Nov; 10(4):309–18

Class II correction in Herbst and Bass therapy. Pancherz H, et al. **Eur J Orthod** 1989 Feb;11(1):17–30

Orthodontics [letter] **N Z Dent J** 1988 Jul;84(377):85–6

Protruding premaxilla in the bilateral cleft lip patient [letter] Georgiade NG, et al. **Plast Reconstr Surg** 1989 Aug; 84(2):372–3

[The hypoplastic condyle treated with an activator appliance (apropos of 2 cases)] Deplagne H, et al. **Orthod Fr** 1987; 58 Pt 2:641–8 (Eng. Abstr.) **(Fre)**

[Microbial colonization and various cleaning procedures for orthodontic appliances] Diedrich P. **Fortschr Kieferorthop** 1989 Jun;50(3):231–9 (Eng. Abstr.) **(Ger)**

[Relation of the activation force and deflection in various orthodontic springs (closing-loops)] Schillai G, et al. **Fortschr Kieferorthop** 1989 Jun;50(3):172–8 (Eng. Abstr.) **(Ger)**

[The design of removable appliances for tooth movement and tooth migration] Voss H. **Fortschr Kieferorthop** 1989 Jun;50(3):213–9 (Eng. Abstr.) **(Ger)**

[Mandibular repositioning. Design and fitting of an occlusal plate] Capurso U. **Minerva Stomatol** 1988 Sep;37(9):721–8 (Eng. Abstr.) **(Ita)**

[Bone inclusion and ectopia of a superior incisor. Clinical case] Cassarino G. **Minerva Stomatol** 1989 Feb;38(2):191–3 (Eng. Abstr.) **(Ita)**

[Use of distraction plates in the pathology of the temporo-mandibular articulation] Fraccari F, et al. **Minerva Stomatol** 1989 Mar;38(3):345–51 (Eng. Abstr.) **(Ita)**

[Evaluation of the use of polyethylene plates in the therapy of cranio-facial pain (the Drum plate)] Fraccari F, et al. **Minerva Stomatol** 1989 Mar;38(3):353–7 (Eng. Abstr.) **(Ita)**

[Comparative analysis immediately after treatment and 2 years and 10 months after treatment by posterior–anterior traction of the maxilla in patients with cleft lip and palate using a facial mask] Fernández De Cevallos–Urueta J, et al. **Bol Med Hosp Infant Mex** 1988 Dec;45(12):837–45 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Unexpected TMJ responses to functional jaw orthopedic therapy. Owen AH 3d. **Am J Orthod Dentofacial Orthop** 1988 Oct;94(4):338–49 (63 ref.)

[Morphologic changes in the mandibular condyle under the action of extraoral traction] Latiĭ AA. **Stomatologiia (Mosk)** 1989 Jan–Feb;68(1):16–9 (Eng. Abstr.) **(Rus)**

TRENDS

Present and future place in orthodontics for the basic removable appliance [letter] Dixon DA. **Br J Orthod** 1989 May;16(2):119

ORTHODONTIC WIRES see under **ORTHODONTIC APPLIANCES**

ORTHODONTICS

In re: "The specialty of orthodontics" [letter; comment] **Am J Orthod Dentofacial Orthop** 1989 Mar;95(3):25A, 27A–28A. **Comment on:** Am J Orthod Dentofacial Orthop 1988 Nov;94(5):443

Appointment frequency versus treatment time. Alger DW. **Am J Orthod Dentofacial Orthop** 1988 Nov;94(5):436–9

The crystallizing professionalism. Cote EF. **Am J Orthod Dentofacial Orthop** 1988 Dec;94(6):525–6

Infection control in orthodontic practice [letter] Fein S. **Am J Orthod Dentofacial Orthop** 1989 Jan;95(1):84

Legal aspects of orthodontic practice: risk management concepts. Short- and long-term risk management strategies. Machen DE. **Am J Orthod Dentofacial Orthop** 1989 Jun;95(6):524–5

Legal aspects of orthodontic practice: risk management concepts. Professional liability insurance. Machen DE. **Am J Orthod Dentofacial Orthop** 1989 Apr;95(4):357–9

The search continues for an orthodontic assistant profile [letter] Salvatoriello FW, et al. **Am J Orthod Dentofacial Orthop** 1989 May;95(5):28A

A review of clinical research in orthodontics. Tulloch JF, et al. **Am J Orthod Dentofacial Orthop** 1989 Jun; 95(6):499–504 (17 ref.)

Clinical evaluation of a fluoride-exchanging resin as an orthodontic adhesive. Underwood ML, et al. **Am J Orthod Dentofacial Orthop** 1989 Aug;96(2):93–9

Search for orthodontic assistant personality profile. Westbrook M, et al. **Am J Orthod Dentofacial Orthop** 1988 Oct;94(4):350–3

An analysis of orthodontically induced changes in craniofacial form. Lavelle CL. **Anat Anz** 1988; 166(1–5):165–73

The last word [editorial] Thurow RC. **Angle Orthod** 1988 Oct;58(4):290–2

The Jack R. Anderson Lecture. Sarver DM. **Arch Otolaryngol Head Neck Surg** 1989 May;115(5):566–7

'Community orthodontic services: a local review' [letter] **Br Dent J** 1989 Apr 22;166(8):282

The Consultant Orthodontic Service—1985 survey. Banks PA, et al. **Br Dent J** 1988 Dec 24;165(12):425–9

'Report of a survey conducted by the consultant orthodontists group' [letter] Halestrap DJ. **Br Dent J** 1989 Jul 22;167(2):50

Report of a survey conducted by the Consultant Orthodontists Group. The nature and distribution of clinical assistant posts in orthodontics in the United Kingdom in 1987. Postlethwaite KM, et al. **Br Dent J** 1989 Mar 11;166(5):166–70

Orthodontics. Williams DW. **Br Dent J** 1988 Aug 6; 165(3):103–4

Acceptance of recommended cross-infection procedures by orthodontists in the United Kingdom. Evans R. **Br J Orthod** 1989 Aug;16(3):189–94

Expanded function orthodontic auxiliaries; a proposal for their introduction in the UK. O'Brien KD, et al. **Br J Orthod** 1988 Nov;15(4):281–6

Orthodontics in West Germany. Sandler PJ. **Br J Orthod** 1989 May;16(2):133–5

Hand in glove with the orthodontist? Usiskin LA. **Br J Orthod** 1989 Feb;16(1):49–51

Changes in craniofacial size and shape with two modes of orthodontic treatment. Book D, et al. **J Craniofac Genet Dev Biol** 1988;8(3):207–23

Doctors and dentists: review of a symposium. Cole P. **J Otolaryngol** 1989 Jun;18(4):135–6

Tensile bond strength of orthodontic resins on the human tooth surface. Wang WN. **Proc Natl Sci Counc Repub China [B]** 1988 Oct;12(4):228–35

Panoramic screening for dental anomalies assessed by professionals with identical and different backgrounds. Hintze H, et al. **Scand J Dent Res** 1989 Feb;97(1):60–5

[The French Society of Orthodontics] Quintero J. **Orthod Fr** 1987;58 Pt 2:369–79 **(Fre)**

[Constraints of means, technics and results in orthodontics?] Dujarric F, et al. **Rev Stomatol Chir Maxillofac** 1989; 90(2):106–10 (Eng. Abstr.) **(Fre)**

[Hygiene questions in orthodontic practice] Gutowski-Hesedenz M, et al. **Fortschr Kieferorthop** 1988 Aug;49(4):368–76 (Eng. Abstr.) **(Ger)**

[Ethics in changing times] Lay R. **Fortschr Kieferorthop** 1988 Oct;49(5):484–8 **(Ger)**

[Success and failure in orthodontic treatment following temporomandibular condylar fractures] Sahm G. **Fortschr Kieferorthop** 1988 Dec;49(6):557–67 (Eng. Abstr.) **(Ger)**

[Consultation for patients with cheilognathopalatoschisis and their family members. Cooperation between orthodontists and human geneticists] Schwanitz G, et al. **Fortschr Kieferorthop** 1989 Apr;50(2):118–26 (Eng. Abstr.) **(Ger)**

[Principles for the design of the orthodontic work place] Sergl HG. **Fortschr Kieferorthop** 1988 Aug;49(4):377–87 (Eng. Abstr.) **(Ger)**

[Orthodontic failures following overlooked orofacial dyskinesias] Tränkmann J. **Fortschr Kieferorthop** 1988 Aug; 49(4):388–99 (Eng. Abstr.) **(Ger)**

[3-dimensional recording of changes in the infant jaw with unilateral cheilognathopalatoschisis with special reference to the results of preoperative orthodontic therapy] Schenk HJ, et al. **Zahn Mund Kieferheilkd** 1989;77(4):291–8 (Eng. Abstr.) **(Ger)**

[Comparative analysis of clinical indications and cephalometry in orthognathic surgery. II.] Cassarino G, et al. **Minerva Stomatol** 1988 Dec;37(12):997–1003 (Eng. Abstr.) **(Ita)**

[Organization of the admission of dental patients at an orthodontics department] Filippov GP, et al. **Stomatologiia (Mosk)** 1989 Jan–Feb;68(1):85 **(Rus)**

[Reasons for patients refraining from treatment by an orthodontist] Trezubov VN, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):51–3 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

[Root resorption, decalcification and orthodontic treatment] Arrigoni C, et al. **Ann Osp Maria Vittoria Torino** 1987–88; 30(1):72–6 (18 ref.) **(Ita)**

ECONOMICS

Attitudes to publicly funded orthodontics in the United Kingdom [letter] Stephens CD. **Am J Orthod Dentofacial Orthop** 1989 Jan;95(1):84–5

Swiss orthodontics—a difference? [letter] Horobin DG. **Br Dent J** 1989 Aug 5;167(3):94–5

EDUCATION

Quo vadis? [letter] **Am J Orthod Dentofacial Orthop** 1989 Sep;96(3):20A–21A

The future of orthodontic education: a personal perspective. Johnston LE Jr. **Am J Orthod Dentofacial Orthop** 1989 Sep;96(3):266–7

In re: "The Specialty of Orthodontics" (AJO/DO 1988;94:443) and replies (1989;95:25A) [letter] Payne GS. **Am J Orthod Dentofacial Orthop** 1989 Jun;95(6):27A

Mentors: a continuum in orthodontic education. Manasse RJ. **Angle Orthod** 1989 Summer;59(2):145–54

Postgraduate orthodontic training [letter] Mew J. **Aust Dent J** 1989 Aug;34(4):382

Postgraduate orthodontic training [letter] Mew J. **Aust Dent J** 1989 Apr;34(2):186–8

Oral surgery and orthodontic training [letter] Broadway RT. **Br Dent J** 1989 Feb 25;166(4):108–9

'Postgraduate education—who does what?' [letter] Cole-Morgan R. **Br Dent J** 1989 May 20;166(10):360

Oral surgery and orthodontic training [letter] Hall AM. **Br Dent J** 1989 May 6;166(9):319

Vocational training for GDPs—orthodontic module. Stratford NM. **Br Dent J** 1989 May 20;166(10):358–9

The Four Thames project: development of training in orthodontics for dental practice. Pender N. **Br J Orthod** 1988 Nov;15(4):269–75

An interest in orthodontics [editorial] Usiskin LA. **Br J Orthod** 1988 Aug;15(3):207–8

Membership in orthodontics [editorial] Usiskin LA. **Br J Orthod** 1989 Aug;16(3):221

Whither the removable appliance? [editorial] Usiskin LA. **Br J Orthod** 1988 Nov;15(4):287–8

HISTORY

"Orthodontistry" and dental occlusion in Etruscans. Corruccini RS, et al. **Angle Orthod** 1989 Spring;59(1):61–4

"It was a fantastic experience". Wahl N. **Angle Orthod** 1989 Fall;59(3):227–32 contd

LEGISLATION & JURISPRUDENCE

Orthognathic surgery [letter] Douglas BL. **Am J Orthod Dentofacial Orthop** 1989 Sep;96(3):22A–23A

Legal aspects of orthodontic practice: risk management concepts. Periodontal disease in orthodontic practice. Machen DE. **Am J Orthod Dentofacial Orthop** 1989 May; 95(5):445–7

Legal aspects of orthodontic practice: risk management concepts. Current concepts in orthodontic informed consent. Machen DE. **Am J Orthod Dentofacial Orthop** 1989 Jul;96(1):88–9

Michigan jury awards +850,000 in ortho case: a tempest in a teapot. Pollack B.

Am J Orthod Dentofacial Orthop 1988 Oct;94(4):358–60

METHODS

Lingual orthodontics—its renaissance. Creekmore T. Am J Orthod Dentofacial Orthop 1989 Aug;96(2):120–37

[Functional systems case analysis—a possibility of explaining and avoiding failure] Schrems HT, et al. Fortschr Kieferorthop 1988 Oct;49(5):454–62 (Eng. Abstr.) (Ger)

[The prognosis of autologous tooth transplants in orthodontic treatment planning] Schulz S. Fortschr Kieferorthop 1989 Jun;50(3):186–95 (Eng. Abstr.) (Ger)

[Third molars in relation to orthodontic treatment] Arrigoni C, et al. Ann Osp Maria Vittoria Torino 1987–88; 30(1):77–81 (25 ref.) (Ita)

[Prevention of complications during orthodontic interventions in the combined treatment of periodontitis] Abakarov SI, et al. Stomatologiia (Mosk) 1988 Sep–Oct; 67(5):49–52 (Eng. Abstr.) (Rus)

PSYCHOLOGY

[Interrelationships in the physician–patient and patient–physician systems in the orthodontic clinic] Dragobetskii MK. Stomatologiia (Mosk) 1989 Mar–Apr; 68(2):39–41 (Eng. Abstr.) (Rus)

[Patient assessment of the personality and professional qualities of the orthodontist] Trezubov VN. Stomatologiia (Mosk) 1989 May–Jun;68(3):52–4 (Eng. Abstr.) (Rus)

[An analysis of the causes for the occurrence of psychoemotional tension in patients in an orthodontic consultation] Trezubov VN. Stomatologiia (Mosk) 1989 Mar–Apr;68(2):36–9 (Eng. Abstr.) (Rus)

STATISTICS & NUMERICAL DATA

[Recent comparative statistical correlation studies on predicting the space requirement of the cuspid and bicuspid region using multiple regression comparisons] Gross A, et al. Fortschr Kieferorthop 1989 Apr;50(2):109–17 (Eng. Abstr.) (Ger)

TRENDS

The specialty of orthodontics [letter] Blair SP. Am J Orthod Dentofacial Orthop 1989 May;95(5):27A

Remarks of the AAO president at the opening ceremony of the 2nd International Congress of the Japan Orthodontic Society, Oct. 18, 1988. Lindquist JT. Am J Orthod Dentofacial Orthop 1989 Mar;95(3):261–3

The specialty of orthodontics [letter][see comments] Savage RA. Am J Orthod Dentofacial Orthop 1988 Nov;94(5):443 . Comment in: Am J Orthod Dentofacial Orthop 1989 Mar;95(3):25A, 27A–28A

ORTHODONTICS, CORRECTIVE

Changes in facial profile during orthodontic treatment with extraction of four first premolars. Drobocky OB, et al. Am J Orthod Dentofacial Orthop 1989 Mar;95(3):220–30

Veristic reporting [letter] Mamutil J. Am J Orthod Dentofacial Orthop 1989 Sep;96(3):21A–22A

The craniofacial morphology in persons with maxillonasal dysplasia (Binder syndrome). A longitudinal cephalometric study of orthodontically treated children. Olow-Nordenram M, et al. Am J Orthod Dentofacial Orthop 1989 Feb;95(2):148–58

Retention—retainers may be forever. Parker WS. Am J Orthod Dentofacial Orthop 1989 Jun;95(6):505–13

Effects of orthodontic force on methionine enkephalin and substance P concentrations in human pulpal tissue. Parris WG, et al. Am J Orthod Dentofacial Orthop 1989 Jun; 95(6):479–89

Long-term evaluation of root resorption occurring during orthodontic treatment. Remington DN, et al. Am J Orthod Dentofacial Orthop 1989 Jul;96(1):43–6

In re: Diagnosis/Root Resorption/Progress Monitoring (AJO/DO 1989;95:267–8) [letter; comment] Rubin RM. Am J Orthod Dentofacial Orthop 1989 Jul;96(1):15A–16A . Comment on: Am J Orthod Dentofacial Orthop 1989 Mar;95(3):267–8

An American Board of Orthodontics case report. Orthodontic treatment of a patient born with a severe right unilateral cleft lip and palate. Snyder EP, et al. Am J Orthod Dentofacial Orthop 1989 Apr;95(4):273–81

Oral hygiene program for orthodontic patients. Yeung SC, et al. Am J Orthod Dentofacial Orthop 1989 Sep; 96(3):208–13

Induced condylar growth in a patient with hemifacial microsomia. Kaplan RG. Angle Orthod 1989 Summer; 59(2):85–90

Orthodontic treatment, dental health, and oral health behavior in young Norwegian adults. Lervik T, et al. Angle Orthod 1988 Oct;58(4):381–6

Combined orthodontic-surgical treatment of alveolar clefts. Enemark H, et al. Ann Plast Surg 1988 Aug;21(2):127–33

Orthodontic radiographic usage by pediatric dentists. Atchison KA, et al. ASDC J Dent Child 1989 Jan–Feb; 56(1):26–9

What dentists should know about dento-facial deformity. Levant BA. Aust Dent J 1988 Aug;33(4):273–9

'Community orthodontic services: a local review' [letter] Br Dent J 1989 Feb 25;166(4):109

Community orthodontic services: a local review. Emery BJ. Br Dent J 1989 Jan 7;166(1):23–6

Benefits of orthodontic treatment [letter] Mew JR. Br Dent J 1989 Apr 22;166(8):283

'The great debate' [letter] Parker CD. Br Dent J 1989 Jun 24;166(12):436

Orthodontic demand [letter] Stephens CD. Br Dent J 1988 Aug 20;165(4):120

The effects of social class on the uptake of orthodontic treatment. Kenealy P, et al. Br J Orthod 1989 May; 16(2):107–11

Discontinuation of orthodontic treatment: a study of the contributing factors. Murray AM. Br J Orthod 1989 Feb; 16(1):1–7 (25 ref.)

A discussion of presurgical orthodontics in patients with clefts. Millard DR Jr, et al. Cleft Palate J 1988 Oct; 25(4):403–12

Orthodontics. Provisional restorations and appliances. Vanarsdall RL. Dent Clin North Am 1989 Jul;33(3):479–96

Dentofacial orthopaedics in relation to chronological age, growth period and skeletal development. An analysis of 72 male patients with Class II division 1 malocclusion treated with the Herbst appliance. Hägg U, et al. Eur J Orthod 1988 Aug;10(3):169–76

Marginal bone support and tooth lengths in 19-year-olds following orthodontic treatment. Ogaard B. Eur J Orthod 1988 Aug;10(3):180–6

Protraction of the cleft maxilla. Ranta R. Eur J Orthod 1988 Aug;10(3):215–22

Anesthesia for orthognathic surgery. Murphy A, et al. Int Anesthesiol Clin 1989 Summer;27(2):98–101 (19 ref.)

The philosophy of extraction in orthodontics. 1966 [classical article] Renfroe EW. Int J Orthod 1989 Spring;27(1–2):3–8

Retention and relapse. Watson DH. Int J Orthod 1988 Fall–Winter;26(3–4):4–9

Preventing adverse effects on the temporomandibular joint through orthodontic treatment. Wyatt WE. Int J Orthod 1988 Fall–Winter;26(3–4):10–2

Calcium hydroxide in the treatment of external root resorption. Saad AY. J Am Dent Assoc 1989 May; 118(5):579–81

Gnathologic assessment of centric slides in postretention orthodontic patients. Johnston LE Jr. J Prosthet Dent 1988 Dec;60(6):712–5

Orthodontic therapy for the restorative patient. Part II: The esthetic aspects. Miller TE. J Prosthet Dent 1989 Apr; 61(4):402–11

Circle method analysis—a roentgen-cephalometric aid to orthodontic diagnosis. Peltomäki T. Proc Finn Dent Soc 1988;84(5–6):297–303

[Clinical studies on the corrective orthodontics in periodontal diseases] Tao LM. Chung Hua Kou Chiang Hsueh Tsa Chih 1989 Jan;24(1):37–9 (Chi)

[Modern possibilities of orthodonto-surgical treatment of jaw anomalies in adolescents] Schütz P, et al. Cesk Pediatr 1989 Jun;44(6):337–40 (Eng. Abstr.) (Cze)

[Orthodontic and stomatologic implications in a child with Ehlers–Danlos syndrome] Courtois J, et al. Acta Stomatol Belg 1988 Dec;85(4):245–8 (Eng. Abstr.) (Fre)

[Trial of a personalized coherent chart] Bequain D, et al. Orthod Fr 1987;58 Pt 2:711–20 (Fre)

[The age of orthodontic treatment] Gaubert R, et al. Orthod Fr 1988;59 Pt 1:179–228 (203 ref.) (Fre)

[Esthetics and orthodontics] Ktistaki M. Orthod Fr 1987;58 Pt 2:747–58 (Eng. Abstr.) (Fre)

[Functional orthodontics. Prevention. Social dentistry] Simões WA. Orthod Fr 1987;58 Pt 2:693–708 (Eng. Abstr.) (Fre)

[Constraints of means, technics and results in orthodontics?] Dujarric F, et al. Rev Stomatol Chir Maxillofac 1989; 90(2):106–10 (Eng. Abstr.) (Fre)

[Comparative analysis of clinical indications and cephalometric data in orthognathic surgery. I] Cassarino G, et al. Minerva Stomatol 1988 Nov;37(11):827–30 (Eng. Abstr.) (Ita)

[Comparative characteristics of masticatory muscle tonus in children with orthognathic and prognathic deep bites before and after orthodontic treatment] Anikienko AA, et al. Stomatologiia (Mosk) 1989 Mar–Apr;68(2):53–6 (Eng. Abstr.) (Rus)

ADVERSE EFFECTS

Orthodontics, condylar position, and TMJ status. Gianelly AA. Am J Orthod Dentofacial Orthop 1989 Jun;95(6):521–3

Legal aspects of orthodontic practice: risk management concepts. Diagnosis, root resorption, and progress monitoring [see comments] Machen DE. Am J Orthod Dentofacial Orthop 1989 Mar;95(3):267–8. Comment in: Am J Orthod Dentofacial Orthop 1989 Jul;96(1):15A–16A

Post-orthodontic occlusal function. Smith A, et al. Aust Dent J 1989 Aug;34(4):301–9

Incidence of filled surfaces from 10–18 years of age in an orthodontically treated and untreated group in Norway. Ogaard B. Eur J Orthod 1989 May;11(2):116–9

[Apical root resorption during orthodontic treatment] Göz G, et al. Fortschr Kieferorthop 1989 Jun;50(3):196–206 (Eng. Abstr.) (Ger)

ECONOMICS

Regional variation in the provision and cost of General Dental Service orthodontic treatment in England and Wales. O'Brien KD, et al. Br J Orthod 1989 May; 16(2):67–74

INSTRUMENTATION

[Effect of removable sectional dentures on mandibular position] Kurochkin IuK. Stomatologiia (Mosk) 1989 Jan–Feb;68(1):64–6 (Eng. Abstr.) (Rus)

METHODS

An American Board of Orthodontics case report. Correction of Class I crowding in an achondroplastic patient. Dunbar JP, et al. Am J Orthod Dentofacial Orthop 1989 Sep; 96(3):255–63

Obstructive sleep apnea—an orthodontic concern. Cote EF. Angle Orthod 1988 Oct;58(4):293–307

A functional appliance system for the correction of class II relationships. Trenouth MJ. Br J Orthod 1989 Aug; 16(3):169–76

Overbite and overjet correction in a Class II, division 1 sample treated with Edgewise therapy. Hellekant M, et al. Eur J Orthod 1989 May;11(2):91–106

Obstructive sleep apnea syndrome in patients with class II malocclusion. Triplett WW, et al. Mayo Clin Proc 1989 Jun;64(6):644–52 (30 ref.)

Orthodontics and functional jaw orthopaedics [letter] Taylor MS. N Z Dent J 1988 Oct;84(378):120–1

[The importance of preoperative orthodontic therapy in the planning and performance of osteotomies of the middle face] Kahl B, et al. Fortschr Kieferorthop 1988 Dec; 49(6):543–56 (Eng. Abstr.) (Ger)

[Tertiary mandibular crowding depending on the start of treatment and the methods (letter)] Rohowsky HJ. Fortschr Kieferorthop 1988 Aug;49(4):400–1 (Ger)

[The effects of functional diagnostic measures on orthodontic planning and therapy] Weissenberg J, et al. Fortschr Kieferorthop 1989 Feb;50(1):12–20 (Eng. Abstr.) (Ger)

[Evaluation of the Schmuth index in orthodontic diagnosis] Balaton P, et al. Fogorv Sz 1989 Jan;82(1):23–5 (Eng. Abstr.) (Hun)

[Malposition of the second mandibular molars. Problems with their preservation and corrective orthodontic therapy] Bertelè GP, et al. Minerva Stomatol 1988 Aug;37(8):583–90 (Eng. Abstr.) (Ita)

PSYCHOLOGY

The prediction of patient co-operation in orthodontic treatment. Woolass KF, et al. Eur J Orthod 1988 Aug; 10(3):235–43

An evaluation of the psychological and social effects of malocclusion: some implications for dental policy making. Kenealy P, et al. Soc Sci Med 1989;28(6):583–91

STATISTICS & NUMERICAL DATA

[The abandonment of treatment in orthodontics] Fleury JE, et al. Rev Stomatol Chir Maxillofac 1989;90(1):30–8 (Eng. Abstr.) (Fre)

TRENDS

Prospect in retrospect. Foster TD. Br J Orthod 1988 Nov; 15(4):217–25

ORTHODONTICS, INTERCEPTIVE

The orthodontist in the team-treatment for children with rheumatoid arthritis. Grosfeld O. Eur J Orthod 1989 May; 11(2):120–4

[Functional orthodontics. Prevention. Social dentistry] Simões WA. Orthod Fr 1987;58 Pt 2:693–708 (Eng. Abstr.) (Fre)

[Cauhépé-Fieux syndrome. Interception in the deciduous dentition of mid-face hypoplasia] Brethaux J, et al. Rev Stomatol Chir Maxillofac 1989;90(4):236–40 (Eng. Abstr.) (Fre)

ORTHOMOLECULAR THERAPY

ADVERSE EFFECTS

Hypervitaminosis A causing benign intracranial hypertension. A case report. Bhettay EM, et al. S Afr Med J 1988 Dec 3;74(11):584–5

ORTHOMYXOVIRIDAE

Interferon production in rat type II pneumocytes and alveolar macrophages. Hahon N, et al. Exp Lung Res 1989 May; 15(3):429–45

[Mechanisms of virus-induced membrane and cell fusion reactions] Asano A, et al. Uirusu 1988 Jun;38(1):15–22 (55 ref.) (Jpn)

ANALYSIS

Digital fluorescence imaging of fusion of influenza virus with erythrocytes. Georgiou GN, et al. FEBS Lett 1989 Jul 3; 250(2):487–92

M protein (M1) of influenza virus: antigenic analysis and

intracellular localization with monoclonal antibodies. Bucher D, et al. **J Virol** 1989 Sep;63(9):3622–33

DRUG EFFECTS

Inhibitory effect of sulphur–containing purine nucleoside analogues on replication of RNA viruses: selective antiviral activity against influenza viruses. Yamamoto K, et al. **Acta Virol (Praha)** 1988 Sep;32(5):386–92

ENZYMOLOGY

Serine 71 of the glycoprotein HEF is located at the active site of the acetylesterase of influenza C virus. Herrler G, et al. **Arch Virol** 1988;102(3–4):269–74

Acetylated galactosamine is a receptor for the influenza C virus glycoprotein. Luther P, et al. **Arch Virol** 1988; 101(3–4):247–54

Isolation and characterization of sialate 9(4)–O–acetylesterase from influenza C virus. Schauer R, et al. **Biol Chem Hoppe Seyler** 1988 Oct;369(10):1121–30

Influenza neuraminidase is delivered directly to the apical surface of MDCK cell monolayers. Daniels PU, et al. **FEBS Lett** 1989 Feb 13;244(1):57–60

Effect of anti–haemagglutinin–esterase glycoprotein monoclonal antibodies on the receptor–destroying activity of influenza C virus. Hachinohe S, et al. **J Gen Virol** 1989 May;70 (Pt 5):1287–92

Influenza C virus esterase: analysis of catalytic site, inhibition, and possible function. Vlasak R, et al. **J Virol** 1989 May; 63(5):2056–62

Fluorometric assay for the measurement of viral neuraminidase in influenza vaccines. Lambré CR, et al. **Vaccine** 1989 Apr;7(2):104–5

Sialic acid is cleaved from glycoconjugates at the cell surface when influenza virus neuraminidases are expressed from recombinant vaccinia viruses. Els MC, et al. **Virology** 1989 May;170(1):346–51

Comparison of the three large polymerase proteins of influenza A, B, and C viruses. Yamashita M, et al. **Virology** 1989 Aug;171(2):458–66

GENETICS

Effects of polynucleotide inhibitors on transcriptional events of influenza virions. Jackson ML, et al. **Drug Des Deliv** 1986 Aug;1(1):39–45

Efficient synthesis of influenza virus hemagglutinin in mammalian cells with an extrachromosomal Epstein–Barr virus vector. Jalanko A, et al. **Gene** 1989 May 30; 78(2):287–96

Evolution of the hemagglutinin of equine H3 influenza viruses. Kawaoka Y, et al. **Virology** 1989 Apr;169(2):283–92

[Molecular biology aspects of the evolution of living systems] Blaškovič D. **Cas Lek Cesk** 1988 Sep 30;127(39–40):1213–6 (Eng. Abstr.) **(Slo)**

GROWTH & DEVELOPMENT

A human melanoma cell line highly susceptible to influenza C virus. Nishimura H, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1653–61

IMMUNOLOGY

The role of suppressive macrophages in influenza virus–induced immunosuppression. Ichikawa K, et al. **Acta Virol (Praha)** 1989 May;33(3):262–9

Immunoprophylaxis for influenza: comparison of a subunit and a whole virion vaccine. Carle F, et al. **Boll Ist Sieroter Milan** 1988;67(2):105–15

Specific antibody synthesis in vitro. IV. The correlation of in vitro and in vivo antibody response to influenza vaccine in rhesus monkeys. Ershler WB, et al. **Clin Exp Immunol** 1988 Sep;73(3):355–9

Determination of antibody response to influenza virus surface glycoproteins by kinetic enzyme–linked immunosorbent assay. Snyder MH, et al. **J Clin Microbiol** 1988 Oct; 26(10):2034–40

Murine cytotoxic T lymphocyte recognition of individual influenza virus proteins. High frequency of nonresponder MHC class I alleles. Bennink JR, et al. **J Exp Med** 1988 Nov 1;168(5):1935–9

Class II major histocompatibility complex–restricted T cells specific for a virion structural protein that do not recognize exogenous influenza virus. Evidence that presentation of labile T cell determinants is favored by endogenous antigen synthesis. Eisenlohr LC, et al. **J Exp Med** 1989 Mar 1; 169(3):921–31

Defective presentation to class I–restricted cytotoxic T lymphocytes in vaccinia–infected cells is overcome by enhanced degradation of antigen. Townsend A, et al. **J Exp Med** 1988 Oct 1;168(4):1211–24

Interleukin–1 inhibitor production by human mononuclear leukocytes and leukocyte subpopulations exposed to respiratory syncytial virus: analysis and comparison with the response to influenza virus. McCarthy DO, et al. **J Leukoc Biol** 1989 Sep;46(3):189–98

Limiting dilution cultures reveal latent influenza virus–specific helper T cells in virus–primed mice. Miller RA, et al. **J Mol Cell Immunol** 1984;1(6):357–68

Phenotypic hiding: the carryover of mutations in RNA viruses as shown by detection of mar mutants in influenza virus. Valcárcel J, et al. **J Virol** 1989 Sep;63(9):4107–9

A double–stranded RNA–inducible fish gene homologous to the murine influenza virus resistance gene Mx. Staeheli P, et al. **Mol Cell Biol** 1989 Jul;9(7):3117–21

Neuraminidases and hemagglutinins of influenza viruses augment cell–mediated cytotoxicity by activating NK cells [letter] Sinkovics JG. **Nat Immun Cell Growth Regul** 1989; 8(3):187–8

Studies of Streptococcus pneumoniae and influenza virus vaccines in the chinchilla otitis media model. Giebink GS. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S42–4 (11 ref.)

Recognition of influenza virus proteins by cytotoxic T lymphocytes. Townsend A, et al. **Philos Trans R Soc Lond [Biol]** 1989 Jun 12; 323(1217):527–33

Influenza viruses induce autoantibodies to a brain–specific 37–kDa protein in rabbit. Laing P, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1998–2002

The concept of immunofocusing illustrated by influenza virus infection. Roberts NJ Jr. **Rev Infect Dis** 1988 Nov–Dec; 10(6):1071–4 (32 ref.)

Characterization of variable–region genes and shared crossreactive idiotypes of antibodies specific for antigens of various influenza viruses. Moran TM, et al. **Viral Immunol** 1987 Spring;1(1):1–12

Antigenic and genetic characterization of three influenza C strains isolated in the Kinki district of Japan in 1982–1983. Adachi K, et al. **Virology** 1989 Sep;172(1):125–33

[Influenza season 1988–89; vaccine composition for the 1989–90 season] Masurel N, et al. **Ned Tijdschr Geneeskd** 1989 Mar 25;133(12):635–6 **(Dut)**

[Immunity and influenza virus] Melino C. **Clin Ter** 1988 Sep 15;126(5):353–62 (30 ref.) (Eng. Abstr.) **(Ita)**

ISOLATION & PURIFICATION

Characteristics of a persistent infection in Madin–Darby canine kidney cells with influenza C virus. Camilleri JJ, et al. **Intervirology** 1988;29(3):178–84

Detection of influenza C virus by using an in situ esterase assay. Wagaman PC, et al. **J Clin Microbiol** 1989 May; 27(5):832–6

Pacific basin may provide early flu warning [news] Marwick C. **JAMA** 1989 Mar 3;261(9):1255–6

Isolation of influenza virus in Thailand in the rainy seasons of 1986, 1987 and 1988. Takeuchi Y, et al. **Nippon Ika Daigaku Zasshi** 1989 Apr;56(2):201–3

[Detection of virions morphologically identical to the influenza virus in the small intestine of piglets] Kupchinskiĭ LG, et al. **Mikrobiol Zh** 1988 Jul–Aug;50(4):92–4 (Eng. Abstr.) **(Rus)**

METABOLISM

Mechanism of altered cytoskeleton organization in influenza virus infection. Križanová O, et al. **Acta Virol (Praha)** 1989 May;33(3):193–205

Transport of influenza virus envelope proteins from the Golgi complex to the apical plasma membrane in MDCK cells: pH–controlled interaction with a cycling receptor is not involved. Daniels–Holgate PU, et al. **FEBS Lett** 1989 Jun 5;249(2):407–10

PATHOGENICITY

Viral interference in the tick, Rhipicephalus appendiculatus. I. Interference to oral superinfection by Thogoto virus. Davies CR, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2461–8

Enhancement of virus transmission by tick salivary glands. Jones LD, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1895–8

Viral interference in the tick, Rhipicephalus appendiculatus. II. Absence of interference with Thogoto virus when the tick gut is by–passed by parenteral inoculation. Jones LD, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2469–73

Attachment of influenza C virus to human erythrocytes. Nishimura H, et al. **J Gen Virol** 1988 Oct;69 (Pt 10):2545–53

Role of hemagglutinin cleavage and expression of M1 protein in replication of A/WS/33, A/PR/8/34, and WSN influenza viruses in mouse brain. Schlesinger RW, et al. **J Virol** 1989 Apr;63(4):1695–703

[Comparative study of the hemolytic activity of ortho– and paramyxoviruses] Govorkova EA, et al. **Vopr Virusol** 1989 Mar–Apr;34(2):161–4 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Membrane fusion activity of influenza virus. Effects of gangliosides and negatively charged phospholipids in target liposomes. Stegmann T, et al. **Biochemistry** 1989 Feb 21; 28(4):1698–704

Studies on the structure of the influenza virus haemagglutinin at the pH of membrane fusion. Ruigrok RW, et al. **J Gen Virol** 1988 Nov;69 (Pt 11):2785–95

Impact of atmospheric dispersion and transport of viral aerosols on the epidemiology of influenza. Hammond GW, et al. **Rev Infect Dis** 1989 May–Jun;11(3):494–7 (29 ref.)

ULTRASTRUCTURE

Anatomical basis of Thogoto virus infection in BHK cell culture and in the ixodid tick vector, Rhipicephalus appendiculatus. Booth TF, et al. **J Gen Virol** 1989 May; 70 (Pt 5):1093–104

ORTHOMYXOVIRUS INFECTIONS

DRUG THERAPY

Antiviral activity of carboxyethylgermanium sesquioxide (Ge–132) in mice infected with influenza virus. Aso H, et al. **J Biol Response Mod** 1989 Apr;8(2):180–9

ETIOLOGY

Leads from the MMWR. Human infection with swine influenza virus––Wisconsin. **JAMA** 1988 Dec 2; 260(21):3116

Human infection with swine influenza virus––Wisconsin. **MMWR** 1988 Nov 4;37(43):661–3

GENETICS

Genetic mapping of the Mx influenza virus resistance gene within the region of mouse chromosome 16 that is homologous to human chromosome 21. Reeves RH, et al. **J Virol** 1988 Nov;62(11):4372–5

IMMUNOLOGY

Cytotoxic T cells in influenza infection. Askonas BA, et al. **Ann N Y Acad Sci** 1988;532:230–7 (26 ref.)

The susceptibility of breast–fed and cow's milk formula–fed infant guinea pigs to upper respiratory tract infection with influenza virus. Ali HM, et al. **Br J Exp Pathol** 1988 Aug; 69(4):563–75

Cytolytic T cells recognize a chimeric MHC class I antigen expressed in influenza A infected transgenic mice. Jefferies WA, et al. **EMBO J** 1988 Nov;7(11):3423–31

4–O–acetyl–N–acetylneuraminic acid in the N–linked carbohydrate structures of equine and guinea pig alpha 2–macroglobulins, potent inhibitors of influenza virus infection. Hanaoka K, et al. **J Biol Chem** 1989 Jun 15; 264(17):9842–9

Basis for the potent inhibition of influenza virus infection by equine and guinea pig alpha 2–macroglobulin. Pritchett TJ, et al. **J Biol Chem** 1989 Jun 15;264(17):9850–8

Regulation of lymphokine response during reinfection by influenza virus. Production of a factor that inhibits lymphokine activity. Beck MA, et al. **J Immunol** 1989 May 15;142(10):3560–7

Maternal–infant transfer of influenza–specific immunity not detectable by haemagglutination inhibition. Reuman PD, et al. **Microbios** 1988;54(220–221):135–47

Kinetics and specificity at the clonal level of the cytotoxic T lymphocyte response to influenza pneumonia. Jaffe PA, et al. **Viral Immunol** 1987–88;1(4):259–66

METABOLISM

Oxygen radicals in influenza–induced pathogenesis and treatment with pyran polymer–conjugated SOD. Oda T, et al. **Science** 1989 May 26;244(4907):974–6

[Lipid peroxidation in experimental viral infection and the effect on it of interferons and alpha–tocopherol] Ananenko AA, et al. **Vopr Med Khim** 1988 Nov–Dec;34(6):86–9 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

The effect of antecedent influenza A virus infection on the adherence of Hemophilus influenzae to chinchilla tracheal epithelium. Bakaletz LO, et al. **Am J Otolaryngol** 1988 May–Jun;9(3):127–34

Anatomical basis of Thogoto virus infection in BHK cell culture and in the ixodid tick vector, Rhipicephalus appendiculatus. Booth TF, et al. **J Gen Virol** 1989 May; 70 (Pt 5):1093–104

In vivo localization of Staphylococcus aureus in nasal tissues of healthy and influenza A virus–infected ferrets. Sanford BA, et al. **Proc Soc Exp Biol Med** 1989 Jun;191(2):163–9

PREVENTION & CONTROL

Prophylactic and therapeutic effects of murabutide in OF1 mice infected with influenza A/H3N2 (A/Texas/1/77) virus. Chomel JJ, et al. **J Biol Response Mod** 1988 Dec; 7(6):581–6

Protection against influenza virus infection by vaccine inoculated intranasally with cholera toxin B subunit. Tamura S, et al. **Vaccine** 1988 Oct;6(5):409–13

TRANSMISSION

Enhancement of virus transmission by tick salivary glands. Jones LD, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1895–8

VETERINARY

Relevance in epidemiology of infectious diseases of a rapid immunofluorescence technique for diagnosis: preliminary works about acute viral respiratory problems in fattening pigs. Onno M, et al. **Acta Vet Scand Suppl** 1988;84:256–8

Origin of the hemagglutinin on A/Equine/Johannesburg/86 (H3N8): the first known equine influenza outbreak in South Africa. Kawaoka Y, et al. **Arch Virol** 1989;106(1–2):159–64

Influenza in swine in Belgium (1969–1986): epizootiologic aspects. Haesebrouck F, et al. **Comp Immunol Microbiol Infect Dis** 1988;11(3–4):215–22

Isolation of A/Equi–2 virus during 1987 equine influenza epidemic in India. Uppal PK, et al. **Equine Vet J** 1989 Sep; 21(5):364–6

Antigenic variation of equine influenza: a stable virus [editorial] Wood JM. **Equine Vet J** 1988 Sep;20(5):316–8
Antibody isotype responses in the serum and respiratory tract to primary and secondary infections with equine influenza virus (H3N8). Hannant D, et al. **Vet Microbiol** 1989 Apr; 19(4):293–303
Survival of influenza virus in pig tissues after slaughter. Romijn PC, et al. **Vet Rec** 1989 Mar 4;124(9):224
Reactions to equine influenza vaccination [letter] Webbon P. **Vet Rec** 1988 Oct 1;123(14):379
Detection of antibodies against human influenza A virus (H1N1) in swine sera in the Federal Republic of Germany. Zhang XM, et al. **Zentralbl Veterinarmed [B]** 1988 Jul; 35(6):474–6
[Pathologic consequences of a severe influenza outbreak (swine virus A/H1N1) under natural conditions in the non-immune sow at the beginning of pregnancy] Madec F, et al. **Comp Immunol Microbiol Infect Dis** 1989; 12(1–2):17–27 (Eng. Abstr.) **(Fre)**

ORTHOMYXOVIRUS TYPE A, AVIAN

DRUG EFFECTS

Action of rimantadine on the structure of influenza A virus haemagglutinin. Mikheeva AV, et al. **Acta Virol (Praha)** 1989 Mar;33(2):131–6
Biologic potential of amantadine-resistant influenza A virus in an avian model. Bean WJ, et al. **J Infect Dis** 1989 Jun; 159(6):1050–6
[Change in the influenza virus upon multiplication in the presence of high concentrations of remantadine] Karako NI, et al. **Vopr Virusol** 1989 Jan–Feb;34(1):43–6 (Eng. Abstr.) **(Rus)**

GENETICS

Comparison of the nucleoprotein genes of a chicken and a mink influenza A H 10 virus. Reinhardt U, et al. **Arch Virol** 1988;103(1–2):139–45
Molecular cloning and analysis of the N5 neuraminidase subtype from an avian influenza virus. Harley VR, et al. **Virology** 1989 Mar;169(1):239–43
The B allele of the NS gene of avian influenza viruses, but not the A allele, attenuates a human influenza A virus for squirrel monkeys. Treanor JJ, et al. **Virology** 1989 Jul; 171(1):1–9
Localisation of the temperature-sensitive defect in the nucleoprotein of an influenza A/FPV/Rostock/34 virus. Mandler J, et al. **Virus Res** 1989 Feb;12(2):113–21
The role of RNA segment 1 in an in vitro host restriction occurring in an avian influenza virus mutant. Penn C. **Virus Res** 1989 Apr;12(4):349–59
[Primary structure of the avian influenza virus A/FVP/Weybridge hemagglutinin gene] Netesov SV, et al. **Mol Gen Mikrobiol Virusol** 1989 May;(5):26–34 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Inhibition of late influenza virus genome expression by diamidinophenylindole. Conti G, et al. **Ann Inst Pasteur Virol** 1988 Jan–Mar;139(1):69–78

IMMUNOLOGY

Rapid detection of group specific influenza A virus antigen. Ellis TM, et al. **Aust Vet J** 1988 Nov;65(11):356–8
Comparative serological evaluation of avian influenza vaccine in turkeys. Abraham A, et al. **Avian Dis** 1988 Oct–Dec;32(4):659–62
A broad-spectrum avian influenza subtype antigen for indirect enzyme-linked immunosorbent assay. Fatunmbi OO, et al. **Avian Dis** 1989 Apr–Jun;33(2):264–9
Comparison of the virologic and immunologic responses of volunteers to live avian-human influenza A H3N2 reassortant virus vaccines derived from two different avian influenza virus donors. Clements ML, et al. **J Clin Microbiol** 1989 Jan;27(1):219–22
Comparison of live, attenuated H1N1 and H3N2 cold-adapted and avian-human influenza A reassortant viruses and inactivated virus vaccine in adults. Sears SD, et al. **J Infect Dis** 1988 Dec;158(6):1209–19
Synthesis of biologically active influenza virus hemagglutinin in insect larvae. Kuroda K, et al. **J Virol** 1989 Apr; 63(4):1677–85
Neutralizing epitopes of the H5 hemagglutinin from a virulent avian influenza virus and their relationship to pathogenicity. Philpott M, et al. **J Virol** 1989 Aug; 63(8):3453–8
Antigenic and molecular characterization of subtype H13 hemagglutinin of influenza virus. Chambers TM, et al. **Virology** 1989 Sep;172(1):180–8
[Detection of antibodies using recombinant strains of influenza viruses in the sera of various species of birds circulating in the territories of the Ukrainian and Azerbaijan SSRs] Elkin VS, et al. **Vopr Virusol** 1988 Nov–Dec;33(6):674–6 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Influenza A isolations from exotic caged birds. Alexander DJ. **Vet Rec** 1988 Oct 22;123(17):442
Host range of avian influenza virus in free-living birds. Stallknecht DE, et al. **Vet Res Commun** 1988; 12(2–3):125–41 (111 ref.)

METABOLISM

Interplay between carbohydrate in the stalk and the length of the connecting peptide determines the cleavability of influenza virus hemagglutinin. Kawaoka Y, et al. **J Virol** 1989 Aug;63(8):3296–300
Inhibition of proteolytic activation of influenza virus hemagglutinin by specific peptidyl chloroalkyl ketones. Garten W, et al. **Virology** 1989 Sep;172(1):25–31

PATHOGENICITY

Human-avian influenza virus reassortants: effect of reassortment pattern on multi-cycle reproduction in MDCK cells. Kaverin NV, et al. **Arch Virol** 1988; 103(1–2):117–26
Highly pathogenic virus recovered from chickens infected with mildly pathogenic 1986 isolates of H5N2 avian influenza virus. Brugh M. **Avian Dis** 1988 Oct–Dec; 32(4):695–703
Destruction of lymphocytes by a virulent avian influenza A virus. Van Campen H, et al. **J Gen Virol** 1989 Feb;70 (Pt 2):467–72
Molecular mechanism of acquisition of virulence in influenza virus in nature. Kawaoka Y, et al. **Microb Pathog** 1988 Nov;5(5):311–8 (21 ref.)
Increased viral pathogenicity after insertion of a 28S ribosomal RNA sequence into the haemagglutinin gene of an influenza virus. Khatchikian D, et al. **Nature** 1989 Jul 13;340(6229):156–7
Intracerebral pathogenicity for chickens of avian influenza viruses isolated from free-living waterfowl in Japan. Otsuki K, et al. **Vet Microbiol** 1988 Dec;18(3–4):357–62
Mutations at the cleavage site of the hemagglutinin after the pathogenicity of influenza virus A/chick/Penn/83 (H5N2). Ohuchi M, et al. **Virology** 1989 Feb;168(2):274–80
What is the potential of avirulent influenza viruses to complement a cleavable hemagglutinin and generate virulent strains? Webster RG, et al. **Virology** 1989 Aug; 171(2):484–92

ORTHOMYXOVIRUS TYPE A, HUMAN

The carbohydrate chains of influenza virus hemagglutinin. Arbatsky NP, et al. **Carbohydr Res** 1988 Jul 15;178:165–81
[The twenty years after the outbreak of Hong Kong (H3N 2) influenza] Nakajima S. **Uirusu** 1988 Jun;38(1):1–14 (107 ref.) **(Jpn)**
[Effect of a new antiviral compound 1-morpholinomethyltetrahydro-2(1H)-pyrimidinone on the interaction of influenza virus proteins with flat lipid membranes] Tverdislov VA, et al. **Vopr Virusol** 1988 May–Jun;33(3):278–81 (Eng. Abstr.) **(Rus)**

ANALYSIS

Functional and structural analysis of the ribonucleoprotein complexes of different human influenza virus strains. Schreier E, et al. **Acta Virol (Praha)** 1988 Jul;32(4):289–95
[The structure of complex carbohydrate chains of hemagglutinin from influenza viruses A/Kiev/59/79 (H1N1), A/Chile/1/83/25(H1N1) and X/79(H3N2)] Arbatskiĭ NP, et al. **Bioorg Khim** 1989 Feb;15(2):181–6 (Eng. Abstr.) **(Rus)**
[The spatial interrelationships between influenza virus hemagglutinin and the lipid phase in the liposomal membrane] Guliako AA, et al. **Vopr Virusol** 1989 Mar–Apr; 34(2):145–9 (Eng. Abstr.) **(Rus)**
[Identification of the antigenic components of the host cell in isolated glycoproteins of the influenza virus] Rovnova ZI, et al. **Vopr Virusol** 1988 Jul–Aug;33(4):419–24 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Comparison of foscarnet and foscarnet esters as anti-influenza virus agents. Strid S, et al. **Chemotherapy** 1989;35(1):69–76
Resistance of influenza A virus to amantadine and rimantadine: results of one decade of surveillance. Belshe RB, et al. **J Infect Dis** 1989 Mar;159(3):430–5
[The combined action of glycosylation inhibitors on the influenza virus in Ehrlich ascites tumor cells] Pancheva S, et al. **Acta Microbiol Bulg** 1988;22:9–15 (Eng. Abstr.) **(Bul)**
[The antiviral action of a polyphenol complex isolated from the medicinal plant Geranium sanguineum L. VI. Reproduction of the influenza virus pretreated with the polyphenol complex] Serkedzhieva Iu, et al. **Acta Microbiol Bulg** 1988;22:16–21 (Eng. Abstr.) **(Bul)**
[Studies on antiviral agents. I. Antiviral activity of pyridobenzoazoles] Shigeta S, et al. **Yakugaku Zasshi** 1988 Sep;108(9):856–9 (Eng. Abstr.) **(Jpn)**

ENZYMOLOGY

Antibodies to polymerase proteins of influenza virus A/PR/8/34 (H1N1): comparison on the immunoreactivity with polymerase proteins of other influenza A and B virus strains. Schreier E, et al. **Acta Virol (Praha)** 1988 Jul; 32(4):296–302
Purification, thioredoxin renaturation, and reconstituted activity of the three subunits of the influenza A virus RNA polymerase. Szewczyk B, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):7907–11

GENETICS

Studies on the genetic basis of human influenza A virus adaptation to mice: degrees of virulence of reassortants with defined genetic content. Kaverin NV, et al. **Arch Virol** 1989;105(1–2):29–37
Mutations in the hemagglutinin gene associated with influenza virus resistance to norakin. Prösch S, et al. **Arch Virol** 1988;102(1–2):125–9
Novel method of detecting single base substitutions in RNA molecules by differential melting behavior in solution. Smith FI, et al. **Genomics** 1988 Oct;3(3):217–23
Biological and genetic evolution of the nucleoprotein gene of human influenza A viruses. Altmüller A, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2111–9
Pathways of evolution of influenza A (H1N1) viruses from 1977 to 1986 as determined by oligonucleotide mapping and sequencing studies. Cox NJ, et al. **J Gen Virol** 1989 Feb;70 (Pt 2):299–313
Class I MHC-restricted recognition of cells expressing a gene encoding a 41 amino acid product of the influenza hemagglutinin. Sweetser MT, et al. **J Immunol** 1988 Nov 15;141(10):3324–8
Comparative studies of wild-type and cold-mutant (temperature-sensitive) influenza virus: detection of mutations in all genes of the A/Ann Arbor/6/60 (H2N2) mutant vaccine donor strain. Cox NJ, et al. **Microb Pathog** 1986 Aug;1(4):387–97
Sequence of the nucleoprotein (NP) gene of the influenza A virus reassortant 81/HO, carrying the NP originally derived from A/Hong Kong/1/68 (H3N2). Reinhardt U, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6721
Sequence of a cDNA clone of the nucleoprotein gene of influenza B/Ann Arbor/1/86. Rota PA. **Nucleic Acids Res** 1989 May 11;17(9):3595
Nucleotide sequence of the NS gene of influenza virus A/Chile/1/83 (H1N1). Schreier E, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5381
Nucleotide sequences of influenza A virus RNA segment 7: a comparison of five isolates. Zebedee SL, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2870
Nucleotide changes in sequential variants of influenza virus hemagglutinin genes and molecular structures of corresponding monoclonal antibodies specific for each variant. Meek K, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4664–8
Complementation of recombinant baculoviruses by coinfection with wild-type virus facilitates production in insect larvae of antigenic proteins of hepatitis B virus and influenza virus. Price PM, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1453–6
Growth restriction of influenza A virus by M2 protein antibody is genetically linked to the M1 protein. Zebedee SL, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1061–5
Molecular hybridization with DNA probes as a laboratory diagnosis test for influenza viruses: further investigations on the possibilities of the method. Pljusnin AZ, et al. **Virologie** 1989 Jan–Mar;40(1):39–42
Identification of sequence changes in the cold-adapted, live attenuated influenza vaccine strain, A/Ann Arbor/6/60 (H2N2). Cox NJ, et al. **Virology** 1988 Dec;167(2):554–67
Inhibitory effects of vesicular stomatitis virus on cellular and influenza viral RNA metabolism and protein synthesis. Frielle DW, et al. **Virology** 1989 Sep;172(1):274–84
Translational regulation of influenza virus mRNAs. Yamanaka K, et al. **Virus Genes** 1988 Oct;2(1):19–30
[Structure of the hemagglutinin gene of the influenza virus during serial passages in chick embryos] Petrov NA, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):596–8 (Eng. Abstr.) **(Rus)**
[Primary structure of the genome of present-day Hong Kong-like strains of influenza viruses A/H3N2] Sandakhchiev LS, et al. **Dokl Akad Nauk SSSR** 1988; 302(6):1494–7 **(Rus)**
[Cloning and expression of the hemagglutinin gene of influenza virus subtype H1 in Escherichia coli] Petrenko VA, et al. **Mol Biol (Mosk)** 1989 May–Jun;23(3):889–98 (Eng. Abstr.) **(Rus)**
[Changes in the amino acid sequence of hemagglutinin during sequential adaptation of human influenza virus A to replication in mice] Grinev AA, et al. **Mol Gen Mikrobiol Virusol** 1988 Sep;(9):43–5 (Eng. Abstr.) **(Rus)**
[Genetic basis of influenza virus virulence: gene composition and virulence of reassortants between mouse-adapted and nonadapted strains from different subtypes] Rudneva IA, et al. **Mol Gen Mikrobiol Virusol** 1988 Sep;(9):32–6 (Eng. Abstr.) **(Rus)**
[Design of a recombinant strain of the vaccinia virus containing an expressible gene for influenza A virus hemagglutinin] Gibadulin RA, et al. **Vopr Virusol** 1988 May–Jun;33(3):275–8 (Eng. Abstr.) **(Rus)**
[The primary structure of the hemagglutinin of influenza A (H3N2) viruses isolated in the USSR in 1985] Zhdanov VM, et al. **Vopr Virusol** 1989 Mar–Apr;34(2):155–60 (Eng. Abstr.) **(Rus)**
[Genetic bases of the apathogenicity of live cold-adapted influenza vaccines] Klimov AI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Dec;(12):48–52 (16 ref.) **(Rus)**

[Molecular hybridization of nucleic acids as a method for the laboratory diagnosis of influenza in model experiments on cell cultures and in research on nasopharyngeal smears obtained from patients] Pliusnin AZ, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Aug;(8):19–23 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

The B allele of the NS gene of avian influenza viruses, but not the A allele, attenuates a human influenza A virus for squirrel monkeys. Treanor JJ, et al. **Virology** 1989 Jul; 171(1):1–9

[Specific and nonspecific indicators of activation of influenza viruses before an epidemic caused by influenza viruses subtype A/H3N2 and type B in Czechoslovakia in 1986] Heinz F, et al. **Cesk Epidemiol Mikrobiol Imunol** 1989 Jan; 38(1):1–9 (Eng. Abstr.) **(Cze)**

IMMUNOLOGY

Antigenic reactivity of matrix protein and nucleoprotein of influenza virus as detected by EIA after dissociation with different detergents. Khristova ML, et al. **Acta Virol (Praha)** 1989 Jan;33(1):1–7

Interaction between anti-influenza viral polymerase antibodies and RNP particles using the in vitro transcription process and an immunogold labelling technique. Schreier E, et al. **Acta Virol (Praha)** 1988 Sep; 32(5):403–8

Clinico-immunologic and allergologic studies with the inactivated influenza virus vaccine purified and concentrated by gradient centrifugation. Subbotina TI, et al. **Acta Virol (Praha)** 1988 Nov;32(6):494–502

Influenza A virus enhances Staphylococcus aureus-induced basophil histamine release in normal individuals and patients with intrinsic asthma. Clementsen P, et al. **Allergy** 1989 Jan;44(1):39–44

Antigenic analysis of influenza A and B viruses. **Can Dis Wkly Rep** 1988 Nov 26;14(47):215–6 **(Eng, Fre)**

Antigenic variation of recent influenza A(H3N2) viruses. **Can Dis Wkly Rep** 1988 Feb 5;14(5):17–9 **(Eng, Fre)**

Influenza serosurvey for 1988–1989 season. Weber JM, et al. **Can Dis Wkly Rep** 1989 Mar 11;15(10):55–7 **(Eng, Fre)**

Role of different lymphocyte subsets in human anti-viral T cell cultures. Gomez A, et al. **Cell Immunol** 1989 Feb; 118(2):312–27

The systemic and mucosal immune response of humans to influenza A virus. Murphy BR, et al. **Curr Top Microbiol Immunol** 1989;146:107–16 (45 ref.)

Nitrogen dioxide exposure in vivo and human alveolar macrophage inactivation of influenza virus in vitro. Frampton MW, et al. **Environ Res** 1989 Apr;48(2):179–92

Natural or vaccine-induced antibody as a predictor of immunity in the face of natural challenge with influenza viruses [published erratum appears in Epidemiol Infect 1989 Aug;103(1):217] Davies JR, et al. **Epidemiol Infect** 1989 Apr;102(2):325–33

Evaluation of cold-recombinant influenza A/Korea (CR-59) virus vaccine in infants. Anderson EL, et al. **J Clin Microbiol** 1989 May;27(5):909–14

Comparison of the virologic and immunologic responses of volunteers to live avian-human influenza A H3N2 reassortant virus vaccines derived from two different avian influenza virus donors. Clements ML, et al. **J Clin Microbiol** 1989 Jan;27(1):219–22

Diagnosis of influenza A virus infections by detection of specific immunoglobulins M, A, and G in serum. Vikerfors T, et al. **J Clin Microbiol** 1989 Mar;27(3):453–8

Human T cell clones present antigen [corrected and republished article originally printed in J Immunol 1989 Mar 1;142(5):1429–36] Hewitt CR, et al. **J Immunol** 1989 Jul 15;143(2):762–9

IL-4 (B cell-stimulatory factor 1) regulates multiple aspects of influenza virus-specific cell-mediated immunity. Horohov DW, et al **J Immunol** 1988 Dec 15; 141(12):4217–23

A virus-sensitive suppressor cell is involved in the regulation of human allospecific T cell-mediated cytotoxicity. Muluk SC, et al. **J Immunol** 1989 Oct 1;143(7):2209–15

A single amino acid substitution in HLA-A2 can alter the selection of the cytotoxic T lymphocyte repertoire that responds to influenza virus matrix peptide 55–73. Shimojo N, et al. **J Immunol** 1989 Jul 15;143(2):558–64

Comparison of live, attenuated H1N1 and H3N2 cold-adapted and avian-human influenza A reassortant viruses and inactivated virus vaccine in adults. Sears SD, et al. **J Infect Dis** 1988 Dec;158(6):1209–19

Phagocytosis and ingestion of influenza virus by human polymorphonuclear leucocytes in vitro: electronmicroscopy studies. Yamamoto K, et al. **J Med Microbiol** 1989 Mar;28(3):191–8

Enzyme-linked immunosorbent assay of core antigens for clinical diagnosis of influenza. Coonrod JD, et al. **J Med Virol** 1988 Aug;25(4):399–409

Immunoassay for serologic diagnosis of influenza type A using recombinant DNA produced nucleoprotein antigen and monoclonal antibody to human IgG. Harmon MW, et al. **J Med Virol** 1989 Jan;27(1):25–30

Differential effect of amantadine hydrochloride on the systemic and local immune response to influenza A. Reuman PD, et al. **J Med Virol** 1989 Feb;27(2):137–41

Purified influenza virus hemagglutinin and neuraminidase are equivalent in stimulation of antibody response but induce contrasting types of immunity to infection. Johansson BE, et al. **J Virol** 1989 Mar;63(3):1239–46

Single-amino-acid substitution in an antigenic site of influenza virus hemagglutinin can alter the specificity of binding to cell membrane-associated gangliosides. Suzuki Y, et al. **J Virol** 1989 Oct;63(10):4298–302

Purified glycoproteins of influenza virus stimulate cell-mediated cytotoxicity in vivo. Arora DJ, et al. **Nat Immun Cell Growth Regul** 1988;7(5–6):287–96

Binding of labelled influenza matrix peptide to HLA DR in living B lymphoid cells. Ceppellini R, et al. **Nature** 1989 Jun 1;339(6223):392–4

Class I major histocompatibility complex-restricted cytolytic T lymphocytes recognize a limited number of sites on the influenza hemagglutinin. Braciale TJ, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):277–81

Activated B cells can deliver help for the in vitro generation of antiviral cytotoxic T cells. Liu Y, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4629–33

Effect of mutations and variations of HLA-A2 on recognition of a virus peptide epitope by cytotoxic T lymphocytes. McMichael AJ, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9194–8

Human monoclonal antibodies to influenza virus: IgG subclass and light chain distribution. Frank AL, et al. **Viral Immunol** 1989;2(1):31–6

Identification of PR8 M1 protein in influenza virus high-yield reassortants by M1-specific monoclonal antibodies. Johansson BE, et al. **Virology** 1989 Aug;171(2):634–6

Extensive heterogeneity in the hemagglutinin of egg-grown influenza viruses from different patients. Wang ML, et al. **Virology** 1989 Jul;171(1):275–9

Influenza A (H1N1) vaccine efficacy in animal models is influenced by two amino acid substitutions in the hemagglutinin molecule. Wood JM, et al. **Virology** 1989 Jul;171(1):214–21

Detection of antibodies against human influenza A virus (H1N1) in swine sera in the Federal Republic of Germany. Zhang XM, et al. **Zentralbl Veterinarmed [B]** 1988 Jul; 35(6):474–6

[Surveillance of antibodies to human influenza A and B virus in swine population in different seasons in Chengdu] Mu SH, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Jun; 19(2):177–9 (Eng. Abstr.) **(Chi)**

[Immunomodulating properties of interferon inducers] Ershov FI, et al. **Antibiot Khimioter** 1989 Apr;34(4):270–6 (Eng. Abstr.) **(Rus)**

[Isolation of influenza virus hemagglutinin by solubilization with the nonionic detergent O-14] Krivorutchenko IuL, et al. **Mikrobiol Zh** 1987 May-Jun;49(3):72–5 (Eng. Abstr.) **(Rus)**

[Antigenic properties of synthetic fragments of the heavy chain of influenza virus A hemagglutinin] Samukov VV, et al. **Mol Gen Mikrobiol Virusol** 1988 Jul;(7):35–9 (Eng. Abstr.) **(Rus)**

[Indices of local antiviral immunity in patients with chronic bronchitis] Makhovenko LV, et al. **Ter Arkh** 1988; 60(11):95–7 (Eng. Abstr.) **(Rus)**

[Humoral immune response to the influenza virus: the fractionation of sera from immune animals] Ageeva ON, et al. **Vopr Virusol** 1988 May-Jun;33(3):281–6 (Eng. Abstr.) **(Rus)**

[Use of recombinants for preparing erythrocyte antibody diagnostic agents for influenza viruses] Belsembaeva RU, et al. **Vopr Virusol** 1988 Sep-Oct;33(5):612–4 **(Rus)**

[Isolation and characteristics of monoclonal antibodies to influenza virus types A and B] Busse TL, et al. **Vopr Virusol** 1988 Sep-Oct;33(5):543–7 (Eng. Abstr.) **(Rus)**

[The humoral immune response to the influenza virus: the characteristics of the enriched virus-neutralizing fraction of hyperimmune mouse serum] Golovleva IV. **Vopr Virusol** 1989 Mar-Apr;34(2):150–5 (Eng. Abstr.) **(Rus)**

[Antigenic and biological characteristics of strains of the influenza A (H3N2) virus, similar to virus A/Hong Kong/68, isolated from children in the USSR in 1986] Iakhno MA, et al. **Vopr Virusol** 1988 Nov-Dec;33(6):663–9 (Eng. Abstr.) **(Rus)**

[Antigenic drift of epidemic strains of influenza A virus (H3N2) in 1985] Iakhno MA, et al. **Vopr Virusol** 1989 Jan-Feb;34(1):38–42 (Eng. Abstr.) **(Rus)**

[Identification of the hemagglutinating antigens of the influenza virus by immunoenzyme analysis] Isaeva EI, et al. **Vopr Virusol** 1988 Sep-Oct;33(5):538–43 (Eng. Abstr.) **(Rus)**

[Enhanced immunogenicity of influenza virus hemagglutinin when incorporated into liposomes] Ishbaeva RI, et al. **Vopr Virusol** 1989 Mar-Apr;34(2):237–40 **(Rus)**

[Use of solid-phase fluorescent immunological analysis for demonstrating the influenza A virus] Ivanova VT, et al. **Vopr Virusol** 1988 May-Jun;33(3):362–5 **(Rus)**

[Immunogenic properties of synthetic fragments of influenza virus hemagglutinin, conjugated with a carrier protein] Mazurkova NA, et al. **Vopr Virusol** 1989 Jan-Feb; 34(1):34–8 (Eng. Abstr.) **(Rus)**

[Characteristics of the immune response in children multiply inoculated with an inactivated influenza vaccine] Rudenko LG, et al. **Vopr Virusol** 1988 Jul-Aug;33(4):407–11 (Eng. Abstr.) **(Rus)**

[Basic characteristics of a live influenza vaccine for children from type A influenza (H1N1 and H3N2) used separately and in combination] Rudenko LG, et al. **Vopr Virusol** 1989 Jan-Feb;34(1):29–34 (Eng. Abstr.) **(Rus)**

[Suppressive action of the influenza virus on the bone marrow stem cells of mice] Semenkov VF, et al. **Vopr Virusol** 1988 Jul-Aug;33(4):416–9 (Eng. Abstr.) **(Rus)**

[Adsorption study of the virions of the influenza virus and its individual proteins on polystyrene] Sokolova MV, et al. **Vopr Virusol** 1988 May-Jun;33(3):369–72 **(Rus)**

[Fragments of the matrix and nucleocapsid proteins of the influenza A virus containing antigenic determinants] Stefanovich LE, et al. **Vopr Virusol** 1989 Mar-Apr; 34(2):230–4 **(Rus)**

ISOLATION & PURIFICATION

Immunofluorescent staining of influenza virus antigen in fixed and paraffin-embedded tissue of experimentally infected hamsters. Lück PC, et al. **Acta Histochem (Jena)** 1989; 85(1):47–50

An outbreak of influenza A/Taiwan/1/86 (H1N1) infections at a naval base and its association with airplane travel. Klontz KC, et al. **Am J Epidemiol** 1989 Feb;129(2):341–8

Surveillance of influenza A and B viruses in Italy between 1984 and 1987. Mancini G, et al. **Eur J Epidemiol** 1988 Dec;4(4):445–50

Early detection of influenza virus by using a fluorometric assay of infected tissue culture. Pachucki CT, et al. **J Clin Microbiol** 1988 Dec;26(12):2664–6

One-incubation time-resolved fluoroimmunoassay based on monoclonal antibodies in detection of influenza A and B viruses directly in clinical specimens. Nikkari S, et al. **J Virol Methods** 1989 Jan;23(1):29–40

Rapid 24-well plate centrifugation assay for detection of influenza A virus in clinical specimens. Woods GL, et al. **J Virol Methods** 1989 Apr-May;24(1–2):35–42

[Isolation of influenza virus hemagglutinin and its separation into subunits by a stage-by-stage scheme for viral protein fractionation] Glushakova SE, et al. **Vopr Virusol** 1988 May-Jun;33(3):286–9 (Eng. Abstr.) **(Rus)**

[Purification of infectious influenza virus by microfiltration] Luk'ianova EG, et al. **Vopr Virusol** 1989 Mar-Apr; 34(2):240–3 **(Rus)**

METABOLISM

[Receptor properties of the hemagglutinin of influenza virus and its polypeptide fragments] Iurkina EA, et al. **Mol Gen Mikrobiol Virusol** 1988 Jun;(6):43–8 (Eng. Abstr.) **(Rus)**

PATHOGENICITY

Human-avian influenza virus reassortants: effect of reassortment pattern on multi-cycle reproduction in MDCK cells. Kaverin NV, et al. **Arch Virol** 1988; 103(1–2):117–26

Differential production of endogenous pyrogen by human peripheral blood leucocytes following interaction with H3N2 or H1N1 influenza viruses of differing virulence. Tinsley CM, et al. **Microb Pathog** 1987 Jul;3(1):63–70

[Etiology of influenza in Poland 1986] Jankowski M, et al. **Przegl Epidemiol** 1988;42(4):332–9 (Eng. Abstr.) **(Pol)**

[Induction by an inactivated influenza virus of congenital pathology and pregnancy pathology in mice] Morozova EL, et al. **Vopr Virusol** 1988 Sep-Oct;33(5):534–7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Influenza A virus enhances allergic histamine release. Effect of neuraminidase. Clementsen P, et al. **Allergy** 1989 Jan; 44(1):33–8

Fatty acid acylated antibodies against virus suppress its reproduction in cells. Kabanov AV, et al. **FEBS Lett** 1989 Jul 3;250(2):238–40

Depression of polymorphonuclear leukocyte functions by purified influenza virus hemagglutinin and sialic acid-binding lectins. Cassidy LF, et al. **J Immunol** 1989 Jun 15;142(12):4401–6

Regulation of lymphocyte proliferation after influenza virus infection of human mononuclear leukocytes. Roberts NJ Jr, et al. **J Med Virol** 1989 Mar;27(3):179–87

[Biological properties and the molecular structure of variants of the influenza virus isolated from the body of mice during persistent infection] Viktorova LM, et al. **Mikrobiol Zh** 1988 Mar-Apr;50(2):63–9 (Eng. Abstr.) **(Rus)**

[Secondary intensification of influenza virus reproduction and the development of tumors in mice] Orlovskii AA, et al. **Vopr Onkol** 1989;35(2):215–20 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Fluorescence anisotropy of UV-irradiated viruses. Hörer OL. **Virologie** 1989 Apr-Jun;40(2):115–8

ORTHOMYXOVIRUS TYPE A, PORCINE see under **ORTHOMYXOVIRUSES TYPE A**

ORTHOMYXOVIRUSES TYPE A

Sensitivity of Burkitt lymphoma Daudi cells to inactive influenza virus [published erratum appears in J Cancer Res Clin Oncol 1989;115(3):308] Shlomi Y, et al.

J Cancer Res Clin Oncol 1989;115(1):61–6
Differential extractability of influenza virus hemagglutinin during intracellular transport in polarized epithelial cells and nonpolar fibroblasts. Skibbens JE, et al. J Cell Biol 1989 Mar;108(3):821–32

ANALYSIS

Differential phosphorylation of the nucleoprotein of influenza A viruses. Kistner O, et al. J Gen Virol 1989 Sep;70 (Pt 9):2421–31
Separation of hemagglutinin and neuraminidase from influenza virus membrane by column displacement electrophoresis (isotachophoresis) with preservation of their activities. Johansson G, et al. Prep Biochem 1988; 18(4):405–12
Characterization of a unique protein produced by influenza A virus recovered from a long-term persistent infection. Lucas WT, et al. Virology 1988 Oct;166(2):620–3

CLASSIFICATION

Distinction of influenza viruses of different host cell origin. Sauter C. Experientia 1989 Jun 15;45(6):594–6
Two subtypes of nucleoproteins (NP) of influenza A viruses. Gammelin M, et al. Virology 1989 May;170(1):71–80

DRUG EFFECTS

Breaking and rejoining of disulfide bonds in external glycoproteins of influenza virus. Selimova LM, et al. Virology 1988 Oct;166(2):591–3
[Use of the zwitterion detergent Sulfobetain-12 for preparation of virosomes and investigation of their immunogenic and protective properties] Mazhul' LA, et al. Mol Gen Mikrobiol Virusol 1988 Dec;(12):42–7 (Eng. Abstr.) (Rus)

ENZYMOLOGY

Antibodies to polymerase proteins of influenza virus A/PR/8/34 (H1N1): comparison on the immunoreactivity with polymerase proteins of other influenza A and B virus strains. Schreier E, et al. Acta Virol (Praha) 1988 Jul; 32(4):296–302
Complex formation between influenza virus polymerase proteins expressed in Xenopus oocytes. Digard P, et al. Virology 1989 Jul;171(1):162–9
Comparison of the three large polymerase proteins of influenza A, B, and C viruses. Yamashita M, et al. Virology 1989 Aug;171(2):458–66
[Inhibitory effect of various 3'-amino- and 3'-azido-3'-deoxyribonucleotide-5'-triphosphates on RNA synthesis, catalyzed by RNA polymerase of influenza type A virus and cellular RNA-polymerase] Pravdina NF, et al. Mol Gen Mikrobiol Virusol 1989 Jan;(1):29–33 (Eng. Abstr.) (Rus)
[Inhibitory effect of 3'-azido-3'-azido-3'-deoxy-ribavirin-5'-triphosphate on RNA synthesis catalyzed by RNA polymerase from influenza A virus and by cellular DNA-dependent RNA polymerase II] Pravdina NF, et al. Vopr Med Khim 1989 Jan-Feb;35(1):104–6 (Eng. Abstr.) (Rus)

GENETICS

Comparison of the nucleoprotein genes of a chicken and a mink influenza A H 10 virus. Reinhardt U, et al. Arch Virol 1988;103(1–2):139–45
Evolution of influenza polymerase: nucleotide sequence of the PB2 gene of A/Chile/1/83 (H1 N1). Schreier E, et al. Arch Virol 1988;103(3–4):179–87
High-level transient expression of influenza virus proteins from a series of SV40 late and early replacement vectors. Huylebroeck D, et al. Gene 1988 Jun 30;66(2):163–81
Control of influenza virus gene expression: quantitative analysis of each viral RNA species in infected cells. Hatada E, et al. J Biochem (Tokyo) 1989 Apr;105(4):537–46
Murine cell lines stably expressing the influenza virus hemagglutinin gene introduced by a recombinant retrovirus vector are constitutive targets for MHC class I- and class II-restricted T lymphocytes. Eager KB, et al. J Immunol 1989 Oct 1;143(7):2328–35
Hemagglutinin polymorphism as the basis for low- and high-yield phenotypes of swine influenza virus. Kilbourne ED, et al. Proc Natl Acad Sci U S A 1988 Oct;85(20):7782–5
Evolution to predominance of swine influenza virus hemagglutinin mutants of predictable phenotype during single infections of the natural host. Kilbourne ED, et al. Proc Natl Acad Sci U S A 1988 Nov;85(21):8098–101
Distinct lineages of influenza virus H4 hemagglutinin genes in different regions of the world. Donis RO, et al. Virology 1989 Apr;169(2):408–17
Amino acid substitution at position 226 of the hemagglutinin molecule of influenza (H1N1) virus affects receptor binding activity but not fusion activity. Nobusawa E, et al. Virology 1988 Nov;167(1):8–14
Molecular cloning and sequencing of influenza virus A/Victoria/3/75 polymerase genes: sequence evolution and prediction of possible functional domains. de la Luna S, et al. Virus Res 1989 Jun;13(2):143–55
Complementation and analysis of an NP mutant of influenza virus. Li RA, et al. Virus Res 1989 Feb;12(2):97–111
Analysis of some swine influenza H1N1 viruses by oligonucleotide fingerprinting. Abusugra IA, et al. Zentralbl Veterinarmed [B] 1989 Feb;36(1):63–8
[Role of the NS gene in regulating the synthesis of RNA-segments of the influenza A virus] Gubareva LV, et al. Mol Gen Mikrobiol Virusol 1988 Dec;(12):38–42 (Eng. Abstr.) (Rus)
[Regulation of synthesis of virus-specific RNA in cells infected with influenza virus] Varich NL, et al. Mol Gen Mikrobiol Virusol 1988 Nov;(11):35–40 (Eng. Abstr.) (Rus)

GROWTH & DEVELOPMENT

Efficacy of inactivated influenza A virus (H3N2) vaccines grown in mammalian cells or embryonated eggs. Katz JM, et al. J Infect Dis 1989 Aug;160(2):191–8
Effects of cell differentiation on replication of A/WS/33, WSN, and A/PR/8/34 influenza viruses in mouse brain cell cultures: biological and immunological characterization of products. Bradshaw GL, et al. J Virol 1989 Apr; 63(4):1704–14
Survival of influenza virus in pig tissues after slaughter. Romijn PC, et al. Vet Rec 1989 Mar 4;124(9):224

IMMUNOLOGY

Staphylococcus aureus and influenza A virus stimulate human bronchoalveolar cells to release histamine and leukotrienes. Clementsen P, et al. Agents Actions 1989 Apr;27(1–2):107–9
Influenza A virus enhances IgE-mediated histamine release from human basophil leukocytes. Examination of the effect of viral neuraminidase and haemagglutinin. Clementsen P, et al. Agents Actions 1989 Apr;27(1–2):58–61
Laboratory evidence of influenza in Canada. Can Dis Wkly Rep 1988 Mar 12;14(10):43–4 (Eng, Fre)
Antigenic variation of equine influenza: a stable virus [editorial] Wood JM. Equine Vet J 1988 Sep;20(5):316–8
Cytotoxic T lymphocyte recognition sites on influenza virus hemagglutinin. Torres JV, et al. Immunol Lett 1988 Sep; 19(1):49–53
Influenza-specific cytotoxic T-cell recognition is inhibited by peptides unrelated in both sequence and MHC restriction. Bodmer HC, et al. Immunology 1989 Feb; 66(2):163–9
Absence of monocyte procoagulant activity during the immune response to influenza virus. Mathies M, et al. J Clin Microbiol 1989 Apr;27(4):615–21
Laboratory characterization of a swine influenza virus isolated from a fatal case of human influenza. Rota PA, et al. J Clin Microbiol 1989 Jun;27(6):1413–6
Diversity of the class II (I-Ak/I-Ek)-restricted T cell repertoire for influenza hemagglutinin and antigenic drift. Six nonoverlapping epitopes on the HA1 subunit are defined by synthetic peptides. Burt DS, et al. J Exp Med 1989 Aug 1;170(2):383–97
A 15 amino acid fragment of influenza nucleoprotein synthesized in the cytoplasm is presented to class I-restricted cytotoxic T lymphocytes. Gould K, et al. J Exp Med 1989 Sep 1;170(3):1051–6
Active immunization against virus infections due to antigenic drift by induction of crossreactive cytotoxic T lymphocytes. Kuwano K, et al. J Exp Med 1989 Apr 1; 169(4):1361–71
Primary stimulation by dendritic cells induces antiviral proliferative and cytotoxic T cell responses in vitro. Macatonia SE, et al. J Exp Med 1989 Apr 1;169(4):1255–64
The immunoglobulin G subclass responses of mice to influenza A virus: the effect of mouse strain, and the neutralizing abilities of individual protein A-purified subclass antibodies. Hocart MJ, et al. J Gen Virol 1989 Sep;70 (Pt 9):2439–48
The IgG subclass responses to influenza virus haemagglutinin in the mouse: effect of route of inoculation. Hocart MJ, et al. J Gen Virol 1989 Apr;70 (Pt 4):809–18
IgG-neutralized influenza virus undergoes primary, but not secondary uncoating in vivo. Rigg RJ, et al. J Gen Virol 1989 Aug;70 (Pt 8):2097–109
Acid-induced conformational modification of the hemagglutinin molecule alters interaction of influenza virus with antigen-presenting cells. Eisenlohr LC, et al. J Immunol 1988 Sep 15;141(6):1870–6
Induction and activity of class II-restricted, Lyt-2+ cytolytic T lymphocytes specific for the influenza H5 hemagglutinin. Hioe CE, et al. J Immunol 1989 Apr 1; 142(7):2482–8
Antiviral immunity induced by recombinant nucleoprotein of influenza A virus. I. Characteristics and cross-reactivity of T cell responses. Tite JP, et al. J Immunol 1988 Dec 1;141(11):3980–7
Recombinant vaccinia viruses and the development of immunization strategies using influenza virus. Doherty PC, et al. J Infect Dis 1989 Jun;159(6):1119–22
Induction of immune response to influenza virus with anti-idiotypic antibodies. Anders EM, et al. J Virol 1989 Jun;63(6):2758–67
Class II-restricted T-cell clones to a synthetic peptide of influenza virus hemagglutinin differ in their fine specificities and in the ability to respond to virus. Ffrench RA, et al. J Virol 1989 Jul;63(7):3087–94
Minimum requirements for immunogenic and antigenic activities of homologs of a synthetic peptide of influenza virus hemagglutinin. Tang XL, et al. J Virol 1988 Dec; 62(12):4745–51
Cell-mediated immune responses to influenza virus antigens expressed by vaccinia virus recombinants. Andrew ME, et al. Microb Pathog 1986 Oct;1(5):443–52
Effective production of mouse monoclonal antibodies against influenza virus by repeated intrasplenic immunization. Maéno M, et al. Microbiol Immunol 1988;32(12):1245–52
Cytolytic T-lymphocyte response to isolated class I H-2 proteins and influenza peptides. Kane KP, et al. Nature 1989 Jul 13;340(6229):157–9
The T cell receptor from an influenza-A specific murine CTL clone. Palmer MS, et al. Nucleic Acids Res 1989 Mar 25;17(6):2353
The Niels Jerne lecture. Influenza virus, a challenge to immunologists. Askonas BA. Res Immunol 1989 Jun-Aug; 140(5-6):627–34
Enhancement of protective antibody responses by cholera toxin B subunit inoculated intranasally with influenza vaccine. Tamura SI, et al. Vaccine 1989 Jun;7(3):257–62
Antibody isotype responses in the serum and respiratory tract to primary and secondary infections with equine influenza virus (H3N8). Hannant D, et al. Vet Microbiol 1989 Apr; 19(4):293–303
Effect of syngeneic anti-idiotypic antibody on influenza virus neuraminidase antibody response. Mayer R, et al. Viral Immunol 1987;1(2):121–34
Protection of chickens from lethal influenza infection by vaccinia-expressed hemagglutinin. Chambers TM, et al. Virology 1988 Dec;167(2):414–21
A region of the influenza A/NT/60/68 PB2 protein containing an antigenic determinant recognized by murine H-2Dd restricted cytotoxic T lymphocytes. Reay PA, et al. Virology 1988 Nov;167(1):261–8
Recognition of the PB1, neuraminidase, and matrix proteins of influenza virus A/NT/60/68 by cytotoxic T lymphocytes. Reay PA, et al. Virology 1989 Jun; 170(2):477–85
[Effect of gold on lymphocyte stimulation by influenza A in chronic polyarthritis] Wruck K, et al. Z Rheumatol 1988 May-Jun;47(3):139–42 (Eng. Abstr.) (Ger)
[Detection of viral antigens in the lungs and spleen of mice infected with influenza virus] Ivanova IA, et al. Mol Gen Mikrobiol Virusol 1989 May;(5):39–45 (Eng. Abstr.) (Rus)

ISOLATION & PURIFICATION

Isolation of swine-like influenza A(H1N1) viruses from man in Switzerland and The Netherlands. de Jong JC, et al. Ann Inst Pasteur Virol 1988 Oct-Dec;139(4):429–37
Isolation of A/Equi-2 virus during 1987 equine influenza epidemic in India. Uppal PK, et al. Equine Vet J 1989 Sep; 21(5):364–6
Rapid detection of influenza virus infections in human fetal lung diploid cell cultures. Phipps PH, et al. J Infect 1989 May;18(3):269–78

METABOLISM

Presence of insulin binding sites on viral particles. Samnotra V, et al. Antiviral Res 1988 Aug;9(5):285–93
RNA polymerase of influenza virus: role of NP in RNA chain elongation. Honda A, et al. J Biochem (Tokyo) 1988 Dec; 104(6):1021–6

PATHOGENICITY

Molecular and biological properties of a variant of avian influenza A/Seal/Massachusetts/1/80 (H7N7) virus that is pathogenic for mice. Podchernyaeva RJ, et al. Acta Virol (Praha) 1989 Jan;33(1):38–42
Molecular mechanism of complex infection by bacteria and virus analyzed by a model using serratial protease and influenza virus in mice. Akaike T, et al. J Virol 1989 May; 63(5):2252–9

PHYSIOLOGY

Ultrastructure and some biological properties of influenza A virus. II. Effect of physico-chemical factors on influenza A virus and its interferonogenic properties. Chomik M. Arch Immunol Ther Exp (Warsz) 1988;36(4):459–64
Fusogenic properties of reconstituted hybrid vesicles containing Sendai and influenza envelope glycoproteins: fluorescence dequenching and fluorescence microscopy studies. Lapidot M, et al. Biochim Biophys Acta 1989 Apr 28;980(3):281–90
Kinetics of pH-dependent fusion between 3T3 fibroblasts expressing influenza hemagglutinin and red blood cells. Measurement by dequenching of fluorescence. Morris SJ, et al. J Biol Chem 1989 Mar 5;264(7):3972–8
Effect of influenza A on phagocytic cell function. Ertürk M, et al. Med Microbiol Immunol (Berl) 1989; 178(4):199–209

RADIATION EFFECTS

Retention of immunogenicity after X-irradiation of mouse colon tumor cells expressing the transfected influenza virus hemagglutinin gene. Itaya T, et al. Cancer Immunol Immunother 1989;28(4):248–52
Gamma-irradiated influenza A virus can prime for a cross-reactive and cross-protective immune response against influenza A viruses. Müllbacher A, et al. Immunol Cell Biol 1988 Apr;66 (Pt 2):153–7

ULTRASTRUCTURE

Hydrophobic binding of the ectodomain of influenza hemagglutinin to membranes occurs through the "fusion peptide". Harter C, et al. **J Biol Chem** 1989 Apr 15; 264(11):6459–64

Studies on the structure of the influenza virus haemagglutinin at the pH of membrane fusion. Ruigrok RW, et al. **J Gen Virol** 1988 Nov;69 (Pt 11):2785–95

ORTHOMYXOVIRUSES TYPE B

ANALYSIS

Functional and structural analysis of the ribonucleoprotein complexes of different human influenza virus strains. Schreier E, et al. **Acta Virol (Praha)** 1988 Jul;32(4):289–95

Protein and nucleic acid analysis of influenza B viruses isolated in Italy in 1984. Donatelli I, et al. **J Med Virol** 1989 Mar;27(3):201–9

[Identification of the antigenic components of the host cell in isolated glycoproteins of the influenza virus] Rovnova ZI, et al. **Vopr Virusol** 1988 Jul–Aug;33(4):419–24 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

The effect of vitamin A on some biological properties of type B influenza virus. Ioniță E, et al. **Arch Roum Pathol Exp Microbiol** 1988 Apr–Jun; 47(2):115–9

[The combined action of glycosylation inhibitors on the influenza virus in Ehrlich ascites tumor cells] Pancheva S, et al. **Acta Microbiol Bulg** 1988;22:9–15 (Eng. Abstr.) **(Bul)**

[The antiviral action of a polyphenol complex isolated from the medicinal plant Geranium sanguineum L. VI. Reproduction of the influenza virus pretreated with the polyphenol complex] Serkedzhieva Iu, et al. **Acta Microbiol Bulg** 1988;22:16–21 (Eng. Abstr.) **(Bul)**

ENZYMOLOGY

Crystallization and preliminary X-ray analysis of type B influenza virus neuraminidase complexed with antibody Fab fragments. Laver WG, et al. **Virology** 1988 Dec; 167(2):621–4

Comparison of the three large polymerase proteins of influenza A, B, and C viruses. Yamashita M, et al. **Virology** 1989 Aug;171(2):458–66

GENETICS

Effect of mutations and deletions in a bicistronic mRNA on the synthesis of influenza B virus NB and NA glycoproteins. Williams MA, et al. **J Virol** 1989 Jan; 63(1):28–35

Genetics of cold-adapted B/Ann Arbor/1/66 influenza virus reassortants: the acidic polymerase (PA) protein gene confers temperature sensitivity and attenuated virulence. Donabedian AM, et al. **Microb Pathog** 1987 Aug; 3(2):97–108

Molecular hybridization with DNA probes as a laboratory diagnosis test for influenza viruses: further investigations on the possibilities of the method. Pljusnin AZ, et al. **Virologie** 1989 Jan–Mar;40(1):39–42

GROWTH & DEVELOPMENT

[Specific and nonspecific indicators of activation of influenza viruses before an epidemic caused by influenza viruses subtype A/H3N2 and type B in Czechoslovakia in 1986] Heinz F, et al. **Cesk Epidemiol Mikrobiol Imunol** 1989 Jan; 38(1):1–9 (Eng. Abstr.) **(Cze)**

IMMUNOLOGY

Upper respiratory tract infection and serum antibody responses in nursing home patients. Arroyo JC, et al. **Am J Infect Control** 1988 Aug;16(4):152–8

Analysis of the mechanism of influenza B virus inactivation by guinea pig serum. Yamamoto Goshima F, et al. **Arch Virol** 1988;103(3–4):275–82

Laboratory evidence of influenza in Canada. **Can Dis Wkly Rep** 1988 Mar 12;14(10):43–4 **(Eng, Fre)**

Antigenic analysis of influenza A and B viruses. **Can Dis Wkly Rep** 1988 Nov 26;14(47):215–6 **(Eng, Fre)**

Influenza serosurvey for 1988–1989 season. Weber JM, et al. **Can Dis Wkly Rep** 1989 Mar 11;15(10):55–7 **(Eng, Fre)**

Natural or vaccine-induced antibody as a predictor of immunity in the face of natural challenge with influenza viruses [published erratum appears in Epidemiol Infect 1989 Aug;103(1):217] Davies JR, et al. **Epidemiol Infect** 1989 Apr;102(2):325–33

Improved colorimetric assay for detecting influenza B virus neutralizing antibody responses to vaccination and infection. Tannock GA, et al. **J Clin Microbiol** 1989 Mar; 27(3):524–8

Cross-protection against microvariants of influenza virus type B by vaccinia viruses expressing haemagglutinins from egg- or MDCK cell-derived subpopulations of influenza virus type B/England/222/82. Rota PA, et al. **J Gen Virol** 1989 Jun;70 (Pt 6):1533–7

Class I major histocompatibility complex-restricted cytolytic T lymphocytes recognize a limited number of sites on the influenza hemagglutinin. Braciale TJ, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):277–81

The presence of both antivirus and antiself antibodies in sera from patients with adenovirus and influenza B. Portocala R, et al. **Virologie** 1988 Jul–Sep;39(3):207–16

[Surveillance of antibodies to human influenza A and B virus in swine population in different seasons in Chengdu] Mu SH, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Jun; 19(2):177–9 (Eng. Abstr.) **(Chi)**

[Use of recombinants for preparing erythrocyte antibody diagnostic agents for influenza viruses] Beisembaeva RU, et al. **Vopr Virusol** 1988 Sep–Oct;33(5):612–4 **(Rus)**

[Isolation and characteristics of monoclonal antibodies to influenza virus types A and B] **Busse TL**, et al. **Vopr Virusol** 1988 Sep–Oct;33(5):543–7 (Eng. Abstr.) **(Rus)**

[Identification of the hemagglutinating antigens of the influenza virus by immunoenzyme analysis] Isaeva EI, et al. **Vopr Virusol** 1988 Sep–Oct;33(5):538–43 (Eng. Abstr.) **(Rus)**

[Immunologic analysis of the antigenic properties of neuraminidase from drift-variants of influenza virus B] Rovnova ZI, et al. **Vopr Virusol** 1988 Nov–Dec; 33(6):669–74 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Surveillance of influenza A and B viruses in Italy between 1984 and 1987. Mancini G, et al. **Eur J Epidemiol** 1988 Dec;4(4):445–50

Rapid detection of influenza virus infections in human fetal lung diploid cell cultures. Phipps PH, et al. **J Infect** 1989 May;18(3):269–78

One-incubation time-resolved fluoroimmunoassay based on monoclonal antibodies in detection of influenza A and B viruses directly in clinical specimens. Nikkari S, et al. **J Virol Methods** 1989 Jan;23(1):29–40

Comparison of tube cultures of Madin Darby canine kidney cells with shell-vial cultures after low-speed centrifugation for influenza virus isolation. Ling AE, et al. **Pathology** 1988 Oct;20(4):346–8

PATHOGENICITY

Laboratory and epidemiologic assessment of a recent influenza B outbreak. King JC Jr, et al. **J Med Virol** 1988 Jul;25(3):361–8

PHYSIOLOGY

Biological functions of the NS1 protein of an influenza B virus mutant which has a long carboxyl terminal deletion. Tanaka T, et al. **Arch Virol** 1988;102(3–4):173–85

ORTHOMYXOVIRUSES TYPE C see under **ORTHOMYXOVIRIDAE**

ORTHOPANTOMOGRAPHY see **RADIOGRAPHY, PANORAMIC**

ORTHOPEDIC EQUIPMENT

Normal pinch strength. Brorson H, et al. **Acta Orthop Scand** 1989 Feb;60(1):66–8

A device for producing experimental fractures. Macdonald W, et al. **Acta Orthop Scand** 1988 Oct;59(5):542–4

Acetabular cup-siting device for total hip arthroplasty. Doyle J, et al. **Arch Orthop Trauma Surg** 1989; 108(5):317–21

Arthroscopically aided anterior cruciate ligament reconstruction using a new drill wire guide. Kariya Y, et al. **Arthroscopy** 1989;5(3):227–31

Caring for people at home. Aids to walking. **Aust Fam Physician** 1989 Jul;18(7):860

Thermal injury associated with infant walking-aids. Birchall MA, et al. **Burns Incl Therm Inj** 1988 Jun;14(3):244–7

The effects of body weight support on the locomotor pattern of spastic paretic patients. Visintin M, et al. **Can J Neurol Sci** 1989 Aug;16(3):315–25

Reliability of the Genucom Knee Analysis System. A pilot study. McQuade KJ, et al. **Clin Orthop** 1989 Aug; (245):216–9

Getting a handle on patient mobility. Heeschen SJ. **Geriatr Nurs (New York)** 1989 May–Jun;10(3):146–7

Above- and below-lesion EMG pattern mapping for controlling electrical stimulation of paraplegics to facilitate unbraced walker-assisted walking. Graupe D, et al. **J Biomed Eng** 1988 Jul;10(4):305–11

Instrumented implants in orthopaedics. Sell PJ. **J Biomed Eng** 1989 Mar;11(2):111–2

An axial rotation goniometer: brief report. Laupattarakasem W. **J Bone Joint Surg [Br]** 1989 Jan;71(1):137

Cordless drills [letter] Mellish RG. **J Med Eng Technol** 1988 Nov–Dec;12(6):289

A comparison of pulmonary complications in spinal cord-injured patients treated with two modes of spinal immobilization. Borkowski C. **J Neurosci Nurs** 1989 Apr; 21(2):79–85

Removal of a strangulating metal bearing from the penis. McLaughlin T, et al. **J Urol** 1989 Mar;141(3):617

Mobilisation after Achilles tendon rupture [letter] Roberts P, et al. **Lancet** 1989 Jul 22;2(8656):224

Knee prop for knee surgery. LeNoir JL. **Orthop Rev** 1988 Nov;17(11):1167–8

Hybrid paraplegic locomotion with the ParaWalker using intramuscular stimulation: a single subject study. Nene AV, et al. **Paraplegia** 1989 Apr;27(2):125–32

Energy cost of paraplegic locomotion with the ORLAU ParaWalker. Nene AV, et al. **Paraplegia** 1989 Feb; 27(1):5–18

A review of the fundamental design problems of providing ambulation for paraplegic patients. Stallard J, et al. **Paraplegia** 1989 Feb;27(1):70–5

Effect of altering handle position of a rolling walker on gait in children with cerebral palsy. Levangie PK, et al. **Phys Ther** 1989 Feb;69(2):130–4

Mobility methods selected for use in home and community environments. York J. **Phys Ther** 1989 Sep;69(9):736–47

Individually adapted lightweight walking aids with moulded handles for patients with severely deforming chronic arthritis. Löfkvist UB, et al. **Scand J Rheumatol** 1988; 17(3):167–73

Measurement of spinal sagittal configuration and mobility with Debrunner's kyphometer. Ohlén G, et al. **Spine** 1989 Jun;14(6):580–3

[Calcium phosphate ceramics in orthopedic surgery] Passuti N, et al. **Presse Med** 1989 Jan 7–14;18(1):28–31 (Eng. Abstr.) **(Fre)**

[Technical orthopedic management of osteopathies in adulthood] Gisbertz D, et al. **Orthopade** 1988 Sep; 17(5):447–9 (Eng. Abstr.) **(Ger)**

[A new version of a skull clamp of our design] Malawski S. **Chir Narzadow Ruchu Ortop Pol** 1988;53(5):412–5 (Eng. Abstr.) **(Pol)**

[Instruments for the emergency removal of a Küntscher nail] Matwin B. **Chir Narzadow Ruchu Ortop Pol** 1988; 53(4):325–7 (Eng. Abstr.) **(Pol)**

[A stand for measuring hand grip power and manipulation strength during simultaneous and symmetrical work of both hands] Nadolski Z. **Chir Narzadow Ruchu Ortop Pol** 1989; 54(1):69–72 (Eng. Abstr.) **(Pol)**

[A device used in early rehabilitation of invalids with amputation defects of 4 extremities] Berko VG, et al. **Ortop Travmatol Protez** 1989 Feb;(2):59–60 **(Rus)**

[Head holder for orthopedic support equipment] Gorlov SA, et al. **Ortop Travmatol Protez** 1988 Jun;(6):59 **(Rus)**

[Lengthening of the hip stump by an intramedullary distractor (preliminary report)] Kim OA, et al. **Ortop Travmatol Protez** 1989 Feb;(2):57–8 **(Rus)**

[Transportation devices in the system of rehabilitation of patients and invalids] Kostetskii MV. **Ortop Travmatol Protez** 1988 Aug;(8):54–7 **(Rus)**

[Use of damper hammocks in the treatment of spinal fractures] Shchëtkin VA. **Ortop Travmatol Protez** 1989 Jan; (1):60–1 **(Rus)**

[A device for reposition of the vertebrae] Voronovich IR, et al. **Ortop Travmatol Protez** 1989 Apr;(4):52–3 **(Rus)**

[A universal goniometer for measuring the mobility in the cervical segment of the spine] Savchenko VK, et al. **Revmatologiia (Moskva)** 1989 Jan–Mar;(1):71–3 **(Rus)**

[Diagnosis of rupture of the ligament system of the knee joint] Kotel'nikov GP. **Vestn Khir** 1988 Oct;141(10):116–7 **(Rus)**

ADVERSE EFFECTS

Meningoencephalitis and cerebral abscess as a complication of the halo device. Lammens J, et al. **Acta Orthop Belg** 1988;54(3):360–2

Radial nerve palsy: a complication of walker usage. Ball NA, et al. **Arch Phys Med Rehabil** 1989 Mar;70(3):236–8

Risk factors for median mononeuropathy of the wrist in postpoliomyelitis patients. Werner R, et al. **Arch Phys Med Rehabil** 1989 Jun;70(6):464–7

STANDARDS

Knot strength of cerclage bands and wires. Wilson JW. **Acta Orthop Scand** 1988 Oct;59(5):545–7

Force platform measures for evaluating postural control: reliability and validity. Goldie PA, et al. **Arch Phys Med Rehabil** 1989 Jul;70(7):510–7

Intertester reliability and concurrent validity of fluid-based and universal goniometers for active knee flexion. Rheault W, et al. **Phys Ther** 1988 Nov;68(11):1676–8

ORTHOPEDIC FIXATION DEVICES

Segmental spinal instrumentation in the early fixation of the fracture-dislocations of the dorsal and lumbar spine (S.S.I). De Luna ER, et al. **Acta Chir Hung** 1989;30(1):45–53

Fixateur interne—new method for segmental stabilization of the thoracolumbar spine. Pentelényi T, et al. **Acta Chir Hung** 1988;29(4):373–83

First Hungarian neurosurgical experiences with "Fixateur Interne" in the treatment of thoraco-lumbar spine injuries. Technical note. Pentelényi T, et al. **Acta Neurochir (Wien)** 1988;93(3–4):104–9

Anterior metal plate fixation in the treatment of unstable lower cervical spine injuries. Shoung HM, et al. **Acta Neurochir (Wien)** 1989;98(1–2):55–9

A new device for external fixation. Hammer R. **Acta Orthop Scand** 1988 Dec;59(6):708–11

Recurrence of deformity after removal of Harrington's fixation of spine fracture. Seventy-six cases followed for 2 years. Myllynen P, et al. **Acta Orthop Scand** 1988 Oct; 59(5):497–502

Regeneration after physeal distraction of the radius in sheep. Peltonen J, et al. **Acta Orthop Scand** 1988 Dec;59(6):675–80

Use of titanium wire in cervical spine fixation as a means to reduce MR artifacts. Mirvis SE, et al. **AJNR** 1988 Nov–Dec;9(6):1229–31

Postsurgical maxillary movement: a comparison study of bone plate and screw versus wire osseous fixation. Larsen AJ, et al. **Am J Orthod Dentofacial Orthop** 1989 Apr; 95(4):334–43

Simultaneous superior repositioning of the maxilla and mandibular advancement. A report on stability. Turvey TA, et al. **Am J Orthod Dentofacial Orthop** 1988 Nov; 94(5):372–83

Biomechanical evaluation of rotator cuff fixation methods. France EP, et al. **Am J Sports Med** 1989 Mar–Apr; 17(2):176–81

Evaluation of effectiveness of a facet wiring technique: an in vitro biomechanical investigation. Goel VK, et al. **Ann Biomed Eng** 1989;17(2):115–26

Kirschner wire migration through the jugular foramen. Sanders AD, et al. **Ann Otol Rhinol Laryngol** 1988 Sep–Oct; 97(5 Pt 1):559–60

Repair of fractured wire during sternal closure [letter] Malavé G. **Ann Thorac Surg** 1989 May;47(5):794

Spinal fixation. Using the Steffee pedicle screw and plate system. Allison RE, et al. **AORN J** 1989 Apr;49(4):1016–9, 1022–4, 1026–30

Ilizarov orthopedic methods. Innovations from a Siberian surgeon. Green SA. **AORN J** 1989 Jan;49(1):215–9, 222–30

Adolescent-type Tillaux fracture of the ankle: two case reports. Britton PD. **Arch Emerg Med** 1988 Sep;5(3):180–3

A strain-gauge study of the effect of external fixation on the canine tibia. Matushek KJ, et al. **Arch Orthop Trauma Surg** 1989;108(3):159–65

The difficult healing of segmental fractures of the tibial shaft. Rommens PM, et al. **Arch Orthop Trauma Surg** 1989; 108(4):238–42

Augmented fixation of mandibular fractures with a threaded Kirschner wire. Coniglio JU, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):699–704

A comparison of the use of external pin and transnasal Kirschner wire fixation for the unstable tripod malar fracture: a prospective trial. Stassen LF, et al. **Br J Oral Maxillofac Surg** 1989 Apr;27(2):99–106

Cyclic loading of segmental spinal instrumentation. Kummer FJ, et al. **Bull Hosp Jt Dis Orthop Inst** 1988 Fall;48(2):204–6

Unilateral external fixation. Methods to increase and reduce frame stiffness. Behrens F, et al. **Clin Orthop** 1989 Apr; (241):48–56

A primer of fixator devices and configurations. Behrens F. **Clin Orthop** 1989 Apr;(241):5–14

The halo skeletal fixator. Principles of application and maintenance. Botte MJ, et al. **Clin Orthop** 1989 Feb; (239):12–8

Use of skin incisions in the application of halo skeletal fixator pins. Botte MJ, et al. **Clin Orthop** 1989 Sep;(246):100–1

A mechanical assessment of applied compression and healing in knee arthrodesis. Cunningham JL, et al. **Clin Orthop** 1989 May;(242):256–64

Stabilization of sacroiliac joint disruption with threaded compression rods. Dabezies EJ, et al. **Clin Orthop** 1989 Sep;(246):165–71

A biomechanical analysis of the Ilizarov external fixator. Fleming B, et al. **Clin Orthop** 1989 Apr;(241):95–105

Correction of complicated extremity deformities by external fixation. Grill F. **Clin Orthop** 1989 Apr;(241):166–76

Cotrel–Dubousset instrumentation in neurofibromatosis spine curves. A preliminary report. Holt RT, et al. **Clin Orthop** 1989 Aug;(245):19–23

Proximal tibial osteotomy. A new fixation device. Miniaci A, et al. **Clin Orthop** 1989 Sep;(246):250–9

Surgical management of complex fractures of the distal femur. Mize RD. **Clin Orthop** 1989 Mar;(240):77–86

The halo. A spinal skeletal traction fixation device. By Vernon L. Nickel, Jacquelin Perry, Alice Garrett, and Malcolm Heppenstall, 1968 [classical article] Nickel VL, et al. **Clin Orthop** 1989 Feb;(239):4–11

Posterior transpedicular Zielke instrumentation of the lumbar spine. Simmons EH, et al. **Clin Orthop** 1988 Nov; (236):180–91

Segmental spinal instrumentation for neuromuscular spinal deformity. Stevens DB, et al. **Clin Orthop** 1989 May; (242):164–8

The effect of collar and distal stem fixation on micromotion of the femoral stem in uncemented total hip arthroplasty. Whiteside LA, et al. **Clin Orthop** 1989 Feb;(239):145–53

Rigid fixation and osteotomy design in frontal orbital advancement osteotomies. Del Campo AF. **Clin Plast Surg** 1989 Jan;16(1):205–11

Rigid fixation and facial asymmetry. Munro IR. **Clin Plast Surg** 1989 Jan;16(1):187–94

Stability in correction of hypertelorbitism and Treacher Collins syndromes. Tessier P, et al. **Clin Plast Surg** 1989 Jan;16(1):195–204 (12 ref.)

Cerclage wiring in the management of comminuted fractures of the femoral shaft. Fitzgerald JA, et al. **Injury** 1987 Mar; 18(2):111–6

Limb lengthening in achondroplasia by Ilizarov's method. Cattaneo R, et al. **Int Orthop** 1988;12(3):173–9

Spring alloplasty in the treatment of fractures of the thoracic and lumbar spines. A correlation of the results of treatment with the mechanism of injury. Kiwerski J. **Int Orthop** 1989; 13(1):33–7

"Ring fixator" for treatment of lower leg fractures. A review of 30 cases treated by a new external fixation system. Reith HB, et al. **Int Surg** 1988 Jul–Sep;73(3):170–2

Treatment of adolescent scoliosis by the Cotrel–Dubousset method. Gioia G, et al. **Ital J Orthop Traumatol** 1987 Dec; 13(4):509–16

J-wire technique for fixation of the Akin osteotomy. Murphy JS, et al. **J Am Podiatr Med Assoc** 1989 Jun;79(6):291–3

Management of neuromuscular spinal deformities with Luque segmental instrumentation. Boachie-Adjei O, et al. **J Bone Joint Surg [Am]** 1989 Apr;71(4):548–62

Spinal fusion augmented by luque-rod segmental instrumentation for neuromuscular scoliosis. Broom MJ, et al. **J Bone Joint Surg [Am]** 1989 Jan;71(1):32–44

Surgical treatment of adolescent idiopathic scoliosis. A comparative analysis. Mielke CH, et al. **J Bone Joint Surg [Am]** 1989 Sep;71(8):1170–7

Late fracture associated with retained internal fixation. Bransby-Zachary MA, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):539

Cerclage for torsional fractures of the tibia. Habernek H, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):311–3

Dwyer-Hartshill transpedicular fixation for spinal fusion. Mehdian H, et al. **J Bone Joint Surg [Br]** 1989 Aug; 71(4):689–91

Does sublaminar wiring produce spinal stenosis? Nixon JE. **J Bone Joint Surg [Br]** 1989 Jan;71(1):92–3

Closed treatment of hand fractures. Burkhalter WE. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 2):390–3 (6 ref.)

Comparison of eleven external fixators for treatment of unstable wrist fractures. Frykman GK, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):247–54

Composite wiring of metacarpal and phalangeal fractures. Greene TL, et al. **J Hand Surg [Am]** 1989 Jul;14(4):665–9

Combined intramedullary Kirschner wire and intra-osseous wire loop for fixation of finger fractures. Hung LK, et al. **J Hand Surg [Br]** 1989 May;14(2):171–6

The small AO external fixator in the treatment of unstable distal forearm fractures. Prince H, et al. **J Hand Surg [Br]** 1988 Aug;13(3):294–7

Posterior cervical interspinous compression wiring and fusion for mid to low cervical spinal injuries. Benzel EC, et al. **J Neurosurg** 1989 Jun;70(6):893–9

Invention of the infraorbital rim staple [letter] **J Oral Maxillofac Surg** 1988 Nov;46(11):918, 1025

Internal screw fixation: comparison of placement pattern and rigidity. Foley WL, et al. **J Oral Maxillofac Surg** 1989 Jul;47(7):720–3

A simplified method for fixation of mandibular fractures in children. Minkow B. **J Oral Maxillofac Surg** 1989 Jul; 47(7):764–5

A simplified technique for percutaneous rigid fixation of sagittal ramus osteotomies. Muller JT, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):93–5

Adaptation of the suprahyoid muscle complex to large mandibular advancements. Reynolds ST, et al. **J Oral Maxillofac Surg** 1988 Dec;46(12):1077–85

Stability of simultaneous maxillary intrusion and mandibular advancement: a comparison of rigid and nonrigid fixation techniques. Skoczylas LJ, et al. **J Oral Maxillofac Surg** 1988 Dec;46(12):1056–64

Limb lengthening by epiphyseal distraction in chondrodystrophic bone: an experimental study in the canine femur. Fjeld TO, et al. **J Orthop Res** 1989; 7(2):184–91

The effect of external fixation stiffness on early healing of transverse osteotomies. Gilbert JA, et al. **J Orthop Res** 1989;7(3):389–97

Efficacy of bone staples for fixation. Bargar WL, et al. **J Orthop Trauma** 1987;1(4):326–30

Comparative study of the Orthofix and Pittsburgh frames for external fixation of unstable pelvic ring fractures. Bell AL, et al. **J Orthop Trauma** 1988;2(2):130–8

External skeletal fixation: choosing a system based on biomechanical stability. Moroz TK, et al. **J Orthop Trauma** 1988;2(4):284–96

Patellar fixation protected with a load-sharing cable: a mechanical and clinical study. Perry CR, et al. **J Orthop Trauma** 1988;2(3):234–40

Femoral shaft fractures in children: technique of immediate treatment with supracondylar Kirschner wires and one-and-a-half spica cast. Celiker O, et al. **J Pediatr Orthop** 1988 Sep–Oct;8(5):580–4

Skin protection during external fixation frame pin insertion: an alternative method. Fitzsimmons MS, et al. **J Trauma** 1988 Dec;28(12):1676–7

Complex femur fractures: treatment with the Wagner external fixation device or the Grosse-Kempf interlocking nail. Murphy CP, et al. **J Trauma** 1988 Nov;28(11):1553–61

Intrinsic problems with the external fixation device of Hoffmann-Vidal-Adrey: a critical evaluation of 117 patients with complex tibial shaft fractures. Rommens P, et al. **J Trauma** 1989 May;29(5):630–8

Hypotensive anesthesia for spinal fusion and Lugue spinal segmental instrumentation. Ting MC, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Dec;26(4):427–30

Stability of the original Hoffman and AO tubular external fixation devices. Moroz TK, et al. **Med Biol Eng Comput** 1988 May;26(3):271–6

Posterior stabilization of cervical spine fractures and subluxations using plates and screws. Cooper PR, et al. **Neurosurgery** 1988 Sep;23(3):300–6

Methods of surgical stabilization for metastatic disease of the spine. Cybulski GR. **Neurosurgery** 1989 Aug;25(2):240–52 (95 ref.)

Aneurysmal bone cyst of the thoracic spine: treatment by excision and segmental stabilization with Luque rods. Cybulski GR, et al. **Neurosurgery** 1989 Feb;24(2):273–6

Anterior screw fixation of posteriorly displaced type II odontoid fractures. Geisler FH, et al. **Neurosurgery** 1989 Jul;25(1):30–7; discussion 37–8

Titanium wire internal fixation for stabilization of injury of the cervical spine: clinical results and postoperative magnetic resonance imaging of the spinal cord. Geisler FH, et al. **Neurosurgery** 1989 Sep;25(3):356–62

Halifax interlaminar clamps [letter] Holness RO, et al. **Neurosurgery** 1988 Jul;23(1):127–8

The spinal pedicle screw: techniques and systems. Esses SI, et al. **Orthop Rev** 1989 Jun;18(6):676–82 (18 ref.)

Tips of the trade #13. Tension band wiring of olecranon fractures. France MP. **Orthop Rev** 1989 Jun;18(6):713–5

Treatment of phalangeal fractures of the hand with intraosseous wire fixation. Gorosh J, et al. **Orthop Rev** 1989 Jul;18(7):800–6

The Ilizarov External Fixator, a physiologic method of orthopaedic reconstruction and skeletal correction. A conversation with Prof. G. A. Ilizarov and Victor H. Frankel [interview] Ilizarov GA, et al. **Orthop Rev** 1988 Nov;17(11):1142–54

The use of the Manuflex disposable mini external fixator. Cziffer E. **Orthopedics** 1989 Jan;12(1):163–6

The Ilizarov technique [editorial] D'Ambrosia R. **Orthopedics** 1989 Apr;12(4):495

Spinous process segmental spinal instrumentation. Drummond DS, et al. **Orthopedics** 1988 Oct;11(10):1403–10

The Wiltse pedicle screw fixation system. Guyer DW, et al. **Orthopedics** 1988 Oct;11(10):1455–60

Zielke instrumentation. Hammerberg KW, et al. **Orthopedics** 1988 Oct;11(10):1365–71

Development of the locking hook spinal rod system. Jacobs RR, et al. **Orthopedics** 1988 Oct;11(10):1415–21

Anterior Kostuik–Harrington distraction systems. Kostuik JP. **Orthopedics** 1988 Oct;11(10):1379–91

Distal radial osteotomy. McMurtry RY, et al. **Orthopedics** 1989 Jan;12(1):149–55

The treatment of displaced metaphyseal fractures with screws and wiring systems. Rüedi T. **Orthopedics** 1989 Jan; 12(1):55–9

Cotrel–Dubousset instrumentation. Shufflebarger HL, et al. **Orthopedics** 1988 Oct;11(10):1435–40

Is Cotrel–Dubousset Instrumentation the treatment of choice for idiopathic scoliosis in the adolescent who has an operative thoracic curve? Shufflebarger HL, et al. **Orthopedics** 1988 Nov;11(11):1579–88

Wiring techniques of the posterior cervical spine for the treatment of trauma. Stauffer ES. **Orthopedics** 1988 Nov; 11(11):1543–8

Internal spinal skeletal fixation system. Thalgott JS, et al. **Orthopedics** 1988 Oct;11(10):1465–8

Ninety-ninety intraosseous wiring for internal fixation of the digital skeleton. Zimmerman NB, et al. **Orthopedics** 1989 Jan;12(1):99–104

Displaced proximal humeral fractures treated by external fixation. Kristiansen B, et al. **Rev Chir Orthop** 1988;74 Suppl 2:290–1

Displaced distal radius fractures. A comparative study of treatment by external fixation, dorsal plaster immobilisation and functional bracing in supination. Solgaard S, et al. **Rev Chir Orthop** 1988;74 Suppl 2:339–40

Treatment of frontal sinus and supra-orbital fractures by Kirschner wire. van Deventer PV, et al. **S Afr J Surg** 1988 Sep;26(3):85–7

Idiopathic scoliosis—treatment by pre-operative Risser's localiser cast followed by Harrington rodding and posterior spinal fusion. Koh KT, et al. **Singapore Med J** 1988 Jun; 29(3):219–21

Olecranon fracture and tension band wiring. Low CK, et al. **Singapore Med J** 1988 Oct;29(5):480–4

Treatment of idiopathic scoliosis by preoperative localiser cast followed by Harrington rod fixation and posterior spinal fusion. Low YP. **Singapore Med J** 1988 Jun;29(3):197

Posterior segmental spinal instrumentation (PSSI) with posterolateral decompression and debulking for metastatic thoracic and lumbar spine disease. Limitations of the technique. Bridwell KH, et al. **Spine** 1988 Dec; 13(12):1383–94

Segmental spinal instrumentation. A study of the mechanical properties of materials used for sublaminar fixation. Crawford RJ, et al. **Spine** 1989 Jun;14(6):632–5

Biomechanics of cervical spine facetectomy and fixation techniques. Cusick JF, et al. **Spine** 1988 Jul;13(7):808–12

Segmental wiring for spinal deformity. A morbidity report. Dove J. **Spine** 1989 Feb;14(2):229–31

Computer tomography evaluation of Cotrel–Dubousset instrumentation in idiopathic scoliosis. Ecker ML, et al. **Spine** 1988 Oct;13(10):1141–4

Short-stepped Harrington rod distractor. Engler GL. **Spine** 1988 Aug;13(8):935–6

The role of external spinal skeletal fixation in the assessment of low-back disorders. Esses SI, et al. **Spine** 1989 Jun; 14(6):594–601

Back pain after Harrington rod instrumentation for idiopathic scoliosis. Fabry G, et al. **Spine** 1989 Jun;14(6):620–4

An analytical investigation of the mechanics of spinal instrumentation. Goel VK, et al. **Spine** 1988 Sep; 13(9):1003–11

Depth of intraspinal wire penetration during passage of sublaminar wires. Goll SR, et al. **Spine** 1988 May; 13(5):503–9

Cotrel–Dubousset instrumentation in adults. A preliminary report. Gurr KR, et al. **Spine** 1988 May;13(5):510–20

Tension band wiring–bone grafting for spondylolysis and spondylolisthesis. A clinical and biomechanical study. Hambly M, et al. **Spine** 1989 Apr;14(4):455–60

The Wiltse pedicle screw fixation system. Early clinical results. Horowitch A, et al. **Spine** 1989 Apr;14(4):461–7

Zielke instrumentation in idiopathic scoliosis: late effects and minimizing complications. Horton WC, et al. **Spine** 1988 Oct;13(10):1145–9

Long–term results of spinal instrumentation surgery for scoliosis five years or more after surgery, in patients over twenty–three years of age. Kitahara H, et al. **Spine** 1989 Jul;14(7):744–9

Anterior stabilization, instrumentation, and decompression for post–traumatic kyphosis. Kostuik JP, et al. **Spine** 1989 Apr;14(4):379–86

The comparative results of treatment in idiopathic thoracolumbar and lumbar scoliosis using the Harrington, Dwyer, and Zielke instrumentations. Luk KD, et al. **Spine** 1989 Mar;14(3):275–80

Luque fixation to the sacral ala using the Dunn–McCarthy modification. McCarthy RE, et al. **Spine** 1989 Mar; 14(3):281–3

Analysis of the primary and compensatory curvatures following Zielke instrumentation for idiopathic scoliosis. Puno RM, et al. **Spine** 1989 Jul;14(7):738–43

Frontal plane and sagittal plane balance following Cotrel–Dubousset instrumentation for idiopathic scoliosis. Richards BS, et al. **Spine** 1989 Jul;14(7):733–7

A biomechanical evaluation of cervical spinal stabilization methods in a bovine model. Static and cyclical loading. Sutterlin CE 3d, et al. **Spine** 1988 Jul;13(7):795–802

Multiple spinal fractures after scoliosis fusion with Harrington rods. Thomas R, et al. **Spine** 1989 May; 14(5):539–41

The effect of angled insertion on halo pin fixation. Triggs KJ, et al. **Spine** 1989 Aug;14(8):781–3

Orthognathic surgery without the use of postoperative intermaxillary fixation. A clinical and cephalometric evaluation of surgical correction of mandibular and maxillary deformities. Krekmanov L. **Swed Dent J Suppl** 1989;61:8–62

[A newly designed trapezoid compression plate and its clinical application] Xu XX. **Chung Hua Wai Ko Tsa Chih** 1988 Nov;26(11):667–72, 701 (Eng. Abstr.) **(Chi)**

[Use of a distraction apparatus in surgery of the hand] Sinkorová B. **Rozhl Chir** 1988 Nov;67(11):768–71 (Eng. Abstr.) **(Cze)**

[Prevention of neurologic involvement caused by an atlanto–axial dislocation in persons with Down syndrome (letter)] Mooij JJ, et al. **Ned Tijdschr Geneeskd** 1989 Feb 11;133(6):312 **(Dut)**

[Wagner's method of leg lengthening in young children] Besselaar PP, et al. **Tijdschr Kindergeneeskd** 1988 Dec; 56(6):288–92 (Eng. Abstr.) **(Dut)**

[The place of Ilizarov's method in the treatment of septic pseudarthrosis of the long bones] De Cloedt P, et al. **Acta Orthop Belg** 1988;54(3):353–9 (Eng. Abstr.) **(Fre)**

[Circular external fixation using Sequoia instrumentation. Theoretical, technical and clinical bases] Hardy JM, et al. **Acta Orthop Belg** 1988;54(3):326–34 (Eng. Abstr.) **(Fre)**

[4 years of application of Ilizarov's technic. Technical problems] Legaye J, et al. **Acta Orthop Belg** 1988; 54(3):335–47 (Eng. Abstr.) **(Fre)**

[Correction of angular deformities of the limbs in children using Ilizarov's technic] Prevot J. **Acta Orthop Belg** 1988; 54(3):348–52 (Eng. Abstr.) **(Fre)**

[Intertrochanteric osteotomy of the femur in children under 5 years of age. A new osteosynthesis plate] Jacquemier M, et al. **Chir Pediatr** 1989;30(2):121–4 (Eng. Abstr.) **(Fre)**

[Congenital pseudarthrosis of the legs and the Ilizarov method. Apropos of 4 cases] Plawecki S, et al. **Chir Pediatr** 1989;30(2):98–102 (Eng. Abstr.) **(Fre)**

[Segmental posterior spinal osteosynthesis using the Luque–Dove technic] Kerboul B, et al. **J Chir (Paris)** 1989 Mar;126(3):193–8 (Eng. Abstr.) **(Fre)**

[Cotrel–Dubousset instrumentation in the treatment of scoliosis] Lang G, et al. **J Chir (Paris)** 1988 Aug–Sep; 125(8–9):510–21 (5 ref.) (Eng. Abstr.) **(Fre)**

[The Ilizarov technic with a radiotransparent external fixator in children. Apropos of 21 initial clinical cases] Badelon O, et al. **Rev Chir Orthop** 1988;74 Suppl 2:286–90 **(Fre)**

[The Ilizarov method in the treatment of severe axial deviations of the limbs] Cattaneo R, et al. **Rev Chir Orthop** 1988;74 Suppl 2:237–40 **(Fre)**

[Results of early surgical treatment of fractures of the lateral humeral condyle in children] Morin B, et al. **Rev Chir Orthop** 1988;74 Suppl 2:129–31 **(Fre)**

[Osteosynthesis with an external fixator in 35 open and/or comminuted fractures of the ankle (tibial and bimalleolar supports)] Nordin JY, et al. **Rev Chir Orthop** 1988;74 Suppl 2:230–3 **(Fre)**

[Distraction of the limbs] Maquet P. **Rev Med Liege** 1988 Dec 1;43(23):757–60 **(Fre)**

[Indications for the external fixator in wrist fractures] Chamay A. **Z Unfallchir Versicherungsmed Berufskr** 1988; 81(4):254–61 (Eng. Abstr.) **(Fre)**

[Percutaneous Goetze cerclage in torsion fractures of the tibia. A computer–assisted follow–up of 186 cases] Habernek H, et al. **Aktuel Traumatol** 1989 Apr;19(2):73–6 (Eng. Abstr.) **(Ger)**

[The motion stable intraosseous wire suture—a prospective study] Brüser P, et al. **Handchir Mikrochir Plast Chir** 1989 Jan;21(1):10–7 (Eng. Abstr.) **(Ger)**

[Experimental studies of stabilization of refixation following median sternotomy] Schade K, et al. **Langenbecks Arch Chir** 1989;374(1):20–4 (Eng. Abstr.) **(Ger)**

[Treatment of severe fractures of the calcaneus by reposition and percutaneous bore wire fixation] Poigenfürst J, et al. **Unfallchirurg** 1988 Nov;91(11):493–501 (25 ref.) (Eng. Abstr.) **(Ger)**

[Treatment of fresh subcutaneous flexor tendon rupture of the distal joint of long fingers with temporary bone wire arthrodesis] Ittner G, et al. **Unfallchirurgie** 1989 Feb; 15(1):9–13 (Eng. Abstr.) **(Ger)**

[Correction of the pes equinus component in congenital clubfoot by freeing the triceps surae muscles and by tibiocalcaneal distraction] Peschterliev N, et al. **Z Orthop** 1988 Jul–Aug;126(4):413–5 (Eng. Abstr.) **(Ger)**

[The treatment of distal splinter fractures using an external fixator. Indications and technic] Jakob RP, et al. **Z Unfallchir Versicherungsmed Berufskr** 1989;82(1):5–13 (Eng. Abstr.) **(Ger)**

[Possibilities of wire osteosynthesis and experiences in our department] Nagy P. **Fogorv Sz** 1989 Jun;82(6):169–71 (Eng. Abstr.) **(Hun)**

[Early experience with the use of the Halo device in the treatment of damage to the cervical spine] Veres R, et al. **Magy Traumatol Orthop Helyreallito Sebesz** 1989; 32(1):15–23 (29 ref.) (Eng. Abstr.) **(Hun)**

[Use of axial external fixation in arthrodesis surgery] Cassini M, et al. **Chir Organi Mov** 1988 Jan–Mar;73(1):35–8 (Eng. Abstr.) **(Ita)**

[Biomechanical study of osteosynthesis of the vertebral column using the compressive Harrington apparatus] Todorov I. **Acta Chir Iugosl** 1987;34 Suppl 2:115–20 (Eng. Abstr.) **(Mac)**

[Treatment of diaphyseal fractures of the leg bones by metal polysynostosis] Dmitriev AE, et al. **Khirurgiia (Mosk)** 1988 Aug;(8):18–20 (Eng. Abstr.) **(Rus)**

[Treatment of occlusive diseases of the arteries of the lower extremities by Ilizarov's method] Fokin AA, et al. **Khirurgiia (Mosk)** 1988 Aug;(8):82–5 (Eng. Abstr.) **(Rus)**

[Treatment of adduction fractures of the femoral fracture with Seppo's fixation device] Mytus IaB. **Khirurgiia (Mosk)** 1988 Aug;(8):119–23 **(Rus)**

[Evaluation of the degree of infundibuliform abnormality of the thorax and technics of the fixation of the sternum] Abdrakhmanov AZh. **Ortop Travmatol Protez** 1989 Apr; (4):14–7 (Eng. Abstr.) **(Rus)**

[A device for the separate transverse repositioning of the forearm bones] Afaunov AI. **Ortop Travmatol Protez** 1988 Jul;(7):50–1 (Eng. Abstr.) **(Rus)**

[A hinged fracture reduction device—a stage in the technical development of the transosseous fixation method] Averkiev VA. **Ortop Travmatol Protez** 1989 Feb;(2):41–4 (Eng. Abstr.) **(Rus)**

[Use of rod apparatuses in treating fractures of the leg bones] Béts GV, et al. **Ortop Travmatol Protez** 1988 Jul;(7):7–11 (Eng. Abstr.) **(Rus)**

[Bilocal osteosynthesis by Ilizarov's method in defects of the long bones] Buachidze OSh, et al. **Ortop Travmatol Protez** 1988 May;(5):14–6 (Eng. Abstr.) **(Rus)**

[Complications of the surgical treatment using the Rodnianski–Gupalov endocorrector in patients with scoliosis] Gatiatulin RR, et al. **Ortop Travmatol Protez** 1989 Apr;(4):18–20 **(Rus)**

[A self–centering pin guide in the osteosynthesis of fragments of the femur neck] Golik PN. **Ortop Travmatol Protez** 1988 Sep;(9):67–8 **(Rus)**

[A system of extrafocal osteosynthesis using rod apparatuses] Korzh AA, et al. **Ortop Travmatol Protez** 1988 Jul;(7):1–7 (Eng. Abstr.) **(Rus)**

[Transosseous osteosynthesis by Ilizarov's method in open fractures of the bones of the legs] Kusturov VI, et al. **Ortop Travmatol Protez** 1988 May;(5):51–3 **(Rus)**

[Transosseous compression–distraction osteosynthesis in fresh diaphyseal fractures in a controlled biomechanical mode] Morgun VV, et al. **Ortop Travmatol Protez** 1988 May; (5):49–51 **(Rus)**

[A device for eliminating contracture of the ankle joint] Nagibin VI, et al. **Ortop Travmatol Protez** 1988 Jul;(7):51–2 (Eng. Abstr.) **(Rus)**

[Treatment of post–osteomyelitic circular defects in shin bones by the method of compression–distraction osteosynthesis with the use of allogenic bone matrix] Osepian IA, et al. **Ortop Travmatol Protez** 1989 Mar; (3):21–3 (Eng. Abstr.) **(Rus)**

[A device for reducing the dislocation and fixation of the acromial end of the clavicle] Poletanskiĭ VZ. **Ortop Travmatol Protez** 1988 May;(5):60–1 **(Rus)**

[A device for applying corsets and for reclination of compressed vertebrae] Shchekin OV. **Ortop Travmatol Protez** 1988 Jun;(6):56–8 **(Rus)**

[A method for the single–step repositioning of the fragments in Ilizarov's apparatus] Ust'iantsev VI, et al. **Ortop Travmatol Protez** 1988 Jul;(7):15–7 (Eng. Abstr.) **(Rus)**

[Use of wire fixators with a thermomechanical memory in the treatment of patients with fractures of the facial bones] Polenichkin VK, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug; 67(4):39–42 (Eng. Abstr.) **(Rus)**

[A method of joining tubular bone fragments] Mardanov TM. **Sud Med Ekspert** 1989 Apr–Jun;32(2):50 **(Rus)**

[Use of nail fixators with porolon padding in the treatment of transcondylar and epicondylar fractures of the humerus in children using skeletal traction] Shvetsov GP, et al. **Vestn Khir** 1989 Jan;142(1):73–4 **(Rus)**

[Extrafocal transosseous osteosynthesis of the mandible with a new repositioning–compression–distraction apparatus and headpiece for inserting pins into the bone fragments] Gynga GN, et al. **Voen Med Zh** 1988 Jun;(6):60–1 **(Rus)**

[Use of rod apparatuses for treating multiple unilateral diaphyseal fractures of the long bones] Kostiuk AN, et al. **Voen Med Zh** 1988 Aug;(8):58–9 **(Rus)**

ADVERSE EFFECTS

Internal fixation devices and infection. An electron microscopic study. Lind T, et al. **Acta Orthop Belg** 1988; 54(4):424–8

Instability of external fixators: evaluation of the problem and suggestions for a solution. Leali PT, et al. **Basic Life Sci** 1988;48:407–11

The effect of interdental continuous loop wire splinting and intermaxillary fixation on the marginal gingiva. Lello JL, et al. **Int J Oral Maxillofac Surg** 1988 Aug;17(4):249–52

Late neurological complications of Harrington–rod instrumentation. Hales DD, et al. **J Bone Joint Surg [Am]** 1989 Aug;71(7):1053–7

Factors influencing the penetration of wires into the neural canal during segmental wiring. Zindrick MR, et al. **J Bone Joint Surg [Am]** 1989 Jun;71(5):742–50

Migration of Kirschner wires used for rigid noncompressive fixation of the mandibular sagittal split osteotomy: report of four cases. Lansley CV, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):194–7

Neuropathology with spinal instrumentation. Coe JD, et al. **J Orthop Res** 1989;7(3):359–70

Vertebral compression fracture following segmental spinal instrumentation. Shimazaki K, et al. **Kobe J Med Sci** 1988 Apr;34(2):71–5

Severe notching of inferior border of mandible. Lee HY, et al. **Oral Surg Oral Med Oral Pathol** 1988 Aug; 66(2):268–9

Migration of fractured greater trochanteric osteotomy wire with resultant sciatica. A report of two cases. Glover MG, et al. **Orthopedics** 1989 May;12(5):743–4

Intraarticular trochanteric wire migration following bilateral total hip arthroplasty. A case report. Ritter MA, et al. **Orthopedics** 1988 Sep;11(9):1295–7

Acute intermittent arteriomesenteric occlusion of the duodenum after use of Harrington's spinal instrumentation: case report. Ohry A, et al. **Paraplegia** 1988 Oct;26(5):350–4

Comparison of halo complications in adults and children. Baum JA, et al. **Spine** 1989 Mar;14(3):251–2

Meningeal skin fistula. A complication following Harrington rod instrumentation and segmental wiring. Christodoulou AG, et al. **Spine** 1989 Feb;14(2):241–2

1989 Volvo Award in basic science. Device–related osteoporosis with spinal instrumentation. McAfee PC, et al. **Spine** 1989 Sep;14(9):919–26

The chronic local effects of sublaminar wires. An animal model. Schrader WC, et al. **Spine** 1988 May;13(5):499–502

[Complications of stable flexible wiring in the treatment of femoral fractures in children] Lascombes P, et al. **Rev Chir Orthop** 1988;74 Suppl 2:293–6 **(Fre)**

STANDARDS

Knot strength of cerclage bands and wires. Wilson JW. **Acta Orthop Scand** 1988 Oct;59(5):545–7

Biomechanical evaluation of spinal fixation devices: II. Stability provided by eight internal fixation devices. Panjabi MM, et al. **Spine** 1988 Oct;13(10):1135–40

Biomechanical evaluation of spinal fixation devices: I. A conceptual framework. Panjabi MM. **Spine** 1988 Oct; 13(10):1129–34

[Various aspects of developing polyfunctional pins for external fixation equipment and devices] Osypiv BA, et al. **Ortop Travmatol Protez** 1989 Feb;(2):44–8 (Eng. Abstr.) **(Rus)**

VETERINARY

Questions conclusions on spinal fixation technique [letter] Smith GK. **Am J Vet Res** 1989 Feb;50(2):302

Conservative management of fractures of the mandibular condyloid process in three cats and one dog. Salisbury SK, et al. **J Am Vet Med Assoc** 1989 Jan 1;194(1):85–7

Effect of cerclage wires on periosteal bone in growing dogs. Wilson JW. **Vet Surg** 1987 Jul–Aug;16(4):299–302

ORTHOPEDICS

Double–blind comparison between nalbuphine and pentazocine in the control of postoperative pain after

orthopedic surgery. Donadoni R, et al. **Acta Anaesthesiol Belg** 1988;39(4):251–6
Prophylactic methods against thromboembolism. Reilly DT. **Acta Chir Scand Suppl** 1989;550:115–8 (10 ref.)
Environmental bias in the practice of orthopedics [editorial] **Acta Orthop Scand** 1989 Feb;60(1):1–2
Scandinavian Orthopedic Association. Proceedings of the 44th assembly. Arhus, Denmark, June 8–11, 1988. Abstracts. **Acta Orthop Scand Suppl** 1988;227:1–132
Swedish Pediatric Orthopedic Society. Stockholm, October 13–14, 1988. Abstracts. **Acta Orthop Scand Suppl** 1989; 231:1–3
Norwegian Orthopedic Society. Oslo, October 28–29, 1988. Abstracts. **Acta Orthop Scand Suppl** 1989;231:15–21
Finnish Orthopedic Association. Helsinki, November 10–11, 1988. Abstracts. **Acta Orthop Scand Suppl** 1989;231:23–7
Swedish Orthopedic Society. Sundsvall, May 31–June 2, 1989. Abstracts. **Acta Orthop Scand Suppl** 1989;231:29–49
Danish Orthopedic Society. Copenhagen, October 28–29, 1988. Abstracts. **Acta Orthop Scand Suppl** 1989;231:5–13
Orthopaedic treatment of osteogenesis imperfecta. Cole WG. **Ann N Y Acad Sci** 1988;543:157–66 (9 ref.)
Do children need routine preoperative blood tests and blood cross matching in orthopaedic practice? Jones MW, et al. **Ann R Coll Surg Engl** 1989 Jan;71(1):1–3
Flucloxacillin compared with cefazolin in short-term prophylaxis for clean orthopedic surgery. Van Meirhaeghe J, et al. **Arch Orthop Trauma Surg** 1989;108(5):308–13
A modified soft tissue retractor for meniscal repair. Bach BR Jr. **Arthroscopy** 1988;4(4):295–6
Orthopedic aspects of achondroplasia in children. Kopits SE. **Basic Life Sci** 1988;48:189–97
Are orthopaedic surgeons gorillas? Barrett DS. **BMJ** 1988 Dec 24–31;297(6664):1638–9
Orthopaedic surgery: a health hazard. Dias JJ, et al. **BMJ** 1988 Dec 24–31;297(6664):1637–8
Perils of orthopedic surgery [letter] Day L. **Can Med Assoc J** 1988 Dec 1;139(11):1035–6
Advances in Greece. **Clin Orthop** 1989 Sep;(246):1–85
The role of the orthopedist in injury prevention. Heckman JD, et al. **Clin Orthop** 1989 Mar;(240):5–8
An orthopaedist's approach to cerebral palsy [editorial] Root L. **Dev Med Child Neurol** 1988 Oct;30(5):569–70
A controlled trial of sip-feed supplements in elderly orthopaedic patients. Williams CM, et al. **Eur J Clin Nutr** 1989 Apr;43(4):267–74
Fracture clinic referrals: the need for self audit. Morton RJ. **Injury** 1988 Mar;19(2):77–8
Digital nerve injuries in orthopaedic surgeons. Roberts AP, et al. **Injury** 1988 Jul;19(4):233–4
Multiple authorship of manuscripts [editorial] Cowell HR. **J Bone Joint Surg [Am]** 1989 Jun;71(5):639–40
Orthopaedic clinical research. Deficiencies in experimental design and determinations of outcome. Gartland JJ. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1357–64
Randomized trials in orthopaedics: why, how, and when? Laupacis A, et al. **J Bone Joint Surg [Am]** 1989 Apr; 71(4):535–43
A reappraisal of some professional attitudes in orthopaedic surgery [letter] Rubacky GE. **J Bone Joint Surg [Am]** 1989 Aug;71(7):1108
The choice of an experimental model. A guide for research workers. Roach HI, et al. **J Bone Joint Surg [Br]** 1989 Aug;71(4):549–53
Allocation of time in three academic specialties. Sanders AB, et al. **J Emerg Med** 1988 Sep–Oct;6(5):435–7
Postoperative wound infection: relation to different types of operation and wound contamination categories in orthopaedic surgery. Gästrin B, et al. **J Hosp Infect** 1989 May;13(4):387–93
Antibiotic resistance of coagulase-negative staphylococci in an orthopaedic department. Sanzén L, et al. **J Hosp Infect** 1988 Aug;12(2):103–8
Abstracts presented at th 1988 Orthopaedic Trauma Association. Dallas, Texas. **J Orthop Trauma** 1989; 3(2):156–84
A new shoulder retractor. Dias JJ. **J R Coll Surg Edinb** 1988 Aug;33(4):216
The role of orthopedic surgery in modern Canadian trauma: 1988 Fraser B. Gurd lecture. Meek RN. **J Trauma** 1989 Jun;29(6):716–8
Orthopedic surgery. Poss R, et al. **JAMA** 1989 May 19; 261(19):2869–70
Called to account. Surgery. Orthopedics. **Lancet** 1989 Apr 1;1(8640):714–6
99Tcm hexamethylpropyleneamineoxime-labelled leucocyte scanning for detection of infection in orthopaedic surgery—first results. Winker KH, et al. **Nucl Med Commun** 1988 Oct;9(10):771–4
Groundless fears [news] **Occup Health Saf** 1989 Apr; 58(4):11–2
Office practice. **Orthop Clin North Am** 1988 Oct; 19(4):675–889
Selected abstracts of the fourth annual meeting of the Southern Orthopaedic Association. Hamilton, Bermuda, May 20–24, 1987. **Orthop Rev** 1988 Jan;17(1):85–7, 94–9, 105–7, 112–4
Quality Recertification [letter] Airola VR. **Orthop Rev** 1988 Dec;17(12):1194
AIDS: an occupational hazard for orthopaedic surgeons? A conversation with Lorraine J. Day. [interview] Day LJ. **Orthop Rev** 1989 Apr;18(4):493–7
Orthopaedics overseas: the other side of the coin [editorial] Fowles JV. **Orthop Rev** 1989 Jan;18(1):13–4
Orthopaedics Overseas #15. Project Ethiopia. Harsha WN. **Orthop Rev** 1989 Jan;18(1):125–6, 128
Treating the victims of the Armenian earthquake. A conversation with Neil Kahanovitz, MD [interview by Jackie Syrop] Kahanovitz N. **Orthop Rev** 1989 Jul; 18(7):777–82
Pain clinic #12. The use of a self-administration system for oral analgesics on an orthopaedic service. Karpman RR, et al. **Orthop Rev** 1989 Jan;18(1):120–2
The use of nickel-titanium alloy in orthopedic surgery in China. Kuo PP, et al. **Orthopedics** 1989 Jan;12(1):111–6
Orthopedic surgeons' attitudes and practices concerning treatment of patients with HIV infection. Arnow PM, et al. **Public Health Rep** 1989 Mar–Apr;104(2):121–9
Patient involvement in decision-making in surgical and orthopaedic practice: the Project Perioperative Risk. Larsson US, et al. **Soc Sci Med** 1989;28(8):829–35
[Randomized clinical studies in orthopedic surgery] Surin VV. **Acta Chir Orthop Traumatol Cech** 1989 Jun; 56(3):245–52 (Eng. Abstr.) **(Cze)**
[Registration of orthopedic surgery complications (letter)] Noer HH, et al. **Ugeskr Laeger** 1989 May 15;151(20):1255–6 **(Dan)**
[Diagnosis of spinal cord tumor in pediatric orthopedics] Forin V. **Arch Fr Pediatr** 1989 May;46(5):369–71 (Eng. Abstr.) **(Fre)**
[Peridural anesthesia in pediatric orthopedics. Apropos of 71 cases] Chamoiseau P, et al. **Cah Anesthesiol** 1989 May; 37(3):161–4 **(Fre)**
[Ambulatory surgery in traumatic orthopedics] Schuhl JF, et al. **J Chir (Paris)** 1988 Jun–Jul;125(6–7):413–5 (Eng. Abstr.) **(Fre)**
[Thrombopenia induced by heparin in orthopedic surgery. Apropos of 12 cases] Coudane H, et al. **Rev Chir Orthop** 1988;74(6):488–92 (Eng. Abstr.) **(Fre)**
[Evaluation of therapeutic trials published apropos of antibiotic prophylaxis in orthopedic surgery] Doyon F, et al. **Rev Chir Orthop** 1989;75(2):72–6 (23 ref.) (Eng. Abstr.) **(Fre)**
[Autotransfusion and hemodilution in orthopedic surgery in children] Pouliquen-Evrard M, et al. **Rev Chir Orthop** 1989;75(1):11–8 (Eng. Abstr.) **(Fre)**
[Results after reparative surgery and rehabilitation for rupture of the rotator cuff of the shoulder] Heuleu JN, et al. **Rev Rhum Mal Osteoartic** 1989 Jan;56(1):105–9 **(Fre)**
[Orthopedic treatment of swan-neck deformities of the rheumatoid hand] Revel M, et al. **Rev Rhum Mal Osteoartic** 1989 Jan;56(1):93–6 **(Fre)**
[34th meeting of the East German Society of Orthopedics with international participation. 18–21 April 1988, Gera. Abstracts] **Beitr Orthop Traumatol** 1988 Nov;35(11):529–85 **(Ger)**
[Pathogen spectrum and resistance status of infections following orthopedic operations—an evaluation of 5 years] Carstens C, et al. **Z Orthop** 1989 May–Jun;127(3):367–70 (Eng. Abstr.) **(Ger)**
[Surgical infections in orthopedics: an updating note] Di Scioscio M, et al. **Chir Organi Mov** 1988 Jul–Sep; 73(3):187–93 (16 ref.) (Eng. Abstr.) **(Ita)**
[Short-term prophylaxis with sodium cefoperazone in orthopedic surgery. Preliminary data] Specchia L, et al. **Clin Ter** 1987 May 31;121(4):293–7 (Eng. Abstr.) **(Ita)**
[Hypotension controlled by labetalol in orthopedic surgery] Lari S, et al. **Minerva Anestesiol** 1988 May;54(5):195–8 (Eng. Abstr.) **(Ita)**
[Anesthesia with alfentanyl in minor surgery] Venuti FS, et al. **Minerva Anestesiol** 1988 Dec;54(12):509–14 (Eng. Abstr.) **(Ita)**
[Proceedings of the 62nd meeting of the Japanese Orthopedic Association. 11–13 April 1989, Tokyo. Abstracts] **Nippon Seikeigeka Gakkai Zasshi** 1989 Mar;63(3):S430–636 **(Jpn)**
[The 61st meeting of the Japanese Orthopaedic Association. Kyoto, April 1–3, 1988. Abstracts] **Nippon Seikeigeka Gakkai Zasshi** 1988 Sep;62(9):S849–1204 **(Jpn)**
[The third annual meeting for the Orthopaedic Research of the Japanese Orthopaedic Association. Tokyo, September 1 through 2, 1988. Abstracts] **Nippon Seikeigeka Gakkai Zasshi** 1988 Jul;62(7):1–42, S421–847 **(Jpn)**
[61st meeting of the Japanese Orthopaedic Association, Kyoto, 1–3 April 1988. Abstracts] **Nippon Seikeigeka Gakkai Zasshi** 1988 Oct;62(10):1–26, S1205–556 **(Jpn)**
[62d annual meeting of the Japanese Orthopedic Association. Urayasu, 14–16 April 1989. Abstracts] **Nippon Seikeigeka Gakkai Zasshi** 1989 Feb;63(2):S1–429 **(Jpn)**
[Medical studies on shoes] Ishizuka T. **Nippon Seikeigeka Gakkai Zasshi** 1988 Nov;62(11):1055–68 **(Jpn)**
[26th scientific meeting of the Polish Orthopedic and Traumatological Society. Abstracts] **Chir Narzadow Ruchu Ortop Pol** 1988;53(6):425–98 **(Pol)**
[The problem of improving the publication of scientific articles (a comment on articles in an American journal)] Korzh AA. **Ortop Travmatol Protez** 1989 Feb;(2):70–1 **(Rus)**
[Transfusion of autologous blood in orthopedics] Pashchuk AIu, et al. **Ortop Travmatol Protez** 1989 Apr;(4):45–8 **(Rus)**
[A surgical chisel] Ukhanov NIu. **Ortop Travmatol Protez** 1988 Sep;(9):68–9 **(Rus)**
[The "Patent" Automatic Information-Retrieval System in traumatology and orthopedics] Mattis ER. **Vestn Akad Med Nauk SSSR** 1988;(12):78–82 **(Rus)**
[The use of microsurgery in traumatology and orthopedics] Grishin IG, et al. **Voen Med Zh** 1989 Apr;(4):37–40 **(Rus)**
[The use of microsurgery in traumatology and orthopedics] Tkachenko SS, et al. **Voen Med Zh** 1989 Feb;(2):22–3 **(Rus)**
[Epidemiology in orthopedic surgery—registry data are often deficient] Zetterberg C. **Lakartidningen** 1989 May 10; 86(19):1813, 1816 **(Swe)**

ADVERSE EFFECTS

[Gas gangrene after aseptic orthopedic surgery] Moine P, et al. **Presse Med** 1989 Apr 1;18(13):675–8 (Eng. Abstr.) **(Fre)**

ECONOMICS

NHS review. Internal markets for surgical services: opportunity for trade in orthopaedics. Fordham RJ, et al. **BMJ** 1989 Apr 1;298(6677):882–4
Orthotic services: a need for change [editorial] Platts RG. **BMJ** 1988 Nov 5;297(6657):1145–6
Cost-effectiveness of orthopaedic research. Burstein AH. **J Bone Joint Surg [Am]** 1989 Aug;71(7):1094–7
Reflex sympathetic dystrophy of the knee. Treatment using continuous epidural anesthesia [letter] Kaplan SS. **J Bone Joint Surg [Am]** 1989 Aug;71(7):1110–1
DRGs, orthopedic surgery, and age at an academic medical center. Munoz E, et al. **Orthopedics** 1988 Dec; 11(12):1645–51

EDUCATION

Characteristics of successful and unsuccessful applicants to orthopedic residency training programs. Clark R, et al. **Clin Orthop** 1989 Apr;(241):257–64
Pain dysfunction syndromes. Teaching physicians how to recognize and treat them [letter] Kummel BM. **J Bone Joint Surg [Am]** 1989 Jan;71(1):151–2
Pediatric orthopedic surgery during the residency—too much, too little? Greene WB, et al. **J Pediatr Orthop** 1989 Jan–Feb;9(1):86–92 (2 ref.)
Orthopaedic medicine [letter] Harley S. **J R Coll Gen Pract** 1987 Dec;37(305):560
The SPOCC (Selective Procedures, Operative Cases, and Consults) program as an advance in orthopaedic resident record keeping. Bear JV, et al. **Orthop Rev** 1989 Feb; 18(2):193–8
The implications of orthopaedic recertification [editorial] Jacobs B. **Orthop Rev** 1988 Feb;17(2):143–4
Orthopaedic teaching [letter] Oreck SL. **Orthop Rev** 1988 Oct;17(10):1046–7
Orthopaedics overseas #12. An orthopaedic teaching program in Bangladesh. Staatz DS. **Orthop Rev** 1987 Oct; 16(10):770–3
[Appointment to orthopedic surgical courses in 1983–1986] Barfred T, et al. **Ugeskr Laeger** 1989 May 29;151(22):1376–8 (Eng. Abstr.) **(Dan)**
[Current problems of training students in orthopedics-traumatology and military and field surgery at the medical institutes of the country] Trubnikov VF, et al. **Ortop Travmatol Protez** 1988 Nov;(11):68–70 **(Rus)**

HISTORY

The emerging organizational years of orthopedic surgery. Coleman SS. **Clin Orthop** 1988 Dec;(237):105–14
Orthopaedic surgery—"Shaping it for Permanence or for Ending". 1962 [classical article] Luck JV Sr. **Clin Orthop** 1989 May;(242):4–11
Fifty years of orthopedics. Ponseti IV. **J Pediatr Orthop** 1989 Jan–Feb;9(1):79–85
Trauma and the orthopaedic surgeon [editorial] Garcia A. **Orthop Rev** 1988 Aug;17(8):751
Hippocratic principles in orthopaedics. Livingston MC. **Orthop Rev** 1988 Nov;17(11):1122, 1124, 1127
[The contribution of Hermann Gocht to the development of the orthopedic specialty—reflections on the 50th anniversary of his death] Paul UH, et al. **Beitr Orthop Traumatol** 1988 Dec;35(12):633–9 **(Ger)**
[An outstanding representative of our national orthopedics and traumatology (on the 90th birthday of N. P. Novachenko)] Korzh AA, et al. **Ortop Travmatol Protez** 1988 Nov;(11):71–5 **(Rus)**
[The centenary of the Department of Traumatology and Orthopedics of the S.M. Kirov Order of Lenin, Red Banner, Military Medical Academy] Tkachenko SS. **Ortop Travmatol Protez** 1988 Aug;(8):6–12 **(Rus)**
[The 50th anniversary of the Chair of Extrapulmonary Tuberculosis] Marakusha IG. **Probl Tuberk** 1989;(2):76–8 **(Rus)**
[On the centenary of the Department of Military Traumatology and Orthopedics of the S. M. Kirov Military Medical Academy] **Voen Med Zh** 1988 Oct;(10):74–6 **(Rus)**

METHODS

Arthroereisis of the subtalar joint. Peters PA, et al. **Foot Ankle** 1989 Aug;10(1):48–50 (19 ref.)
Clinical research database system for orthopaedic surgery. Aguilar EA, et al. **Instr Course Lect** 1989;38:429–36
Office evaluation and management of acute orthopedic trauma. Rosenthal RE. **Orthop Clin North Am** 1988 Oct; 19(4):675–88 (17 ref.)
Physeal growth arrest of the distal radius treated by the Ilizarov technique. Report of a case. Aston JW Jr, et al. **Orthop Rev** 1989 Jul;18(7):813–6
Tips of the Trade #14. A guide for the proper placement of a above a cannulated Asnis screw above a sliding DHS hip screw. Grenis MS, et al. **Orthop Rev** 1989 Jul; 18(7):818–21
Clinical applications of volumetric three-dimensional imaging. A report of three cases. Wolock BS, et al. **Orthop Rev** 1989 Jul;18(7):787–92
The use of the ISIS optical scanner in the management of the braced adolescent idiopathic scoliosis patient. Tredwell SJ, et al. **Spine** 1988 Oct;13(10):1104–5
[Orthopedic treatment of regular dorsal and dorsolumbar hyperkyphosis. New principles of active correction] David T, et al. **Rev Chir Orthop** 1989;75(4):259–66 (Eng. Abstr.) **(Fre)**
[Orthopedic technic in sports injuries of the hindfoot] Winkler W. **Schweiz Z Sportmed** 1988 Dec;36(4):179–85 (Eng. Abstr.) **(Ger)**
[Limb defects of the lower extremity and their surgical treatment in cooperation with orthopedic technics] Marquardt E. **Z Orthop** 1988 May–Jun;126(3):227–38 (32 ref.) (Eng. Abstr.) **(Ger)**
[Orthopedic surgery to prolong walking in Duchenne muscular dystrophy] Granata C, et al. **Chir Organi Mov** 1988 Jul–Sep;73(3):237–48 (Eng. Abstr.) **(Ita)**
[Diagnosis and therapy of infections in the field of orthopedics—with special reference to recent trends in osteomyelitis] Kawaji W. **Nippon Seikeigeka Gakkai Zasshi** 1988 Dec;62(12):1245–56 **(Jpn)**
[Results of conservative treatment of congenital dislocation of the hip—significance of arthrography] Kondo S. **Nippon Seikeigeka Gakkai Zasshi** 1988 Nov;62(11):977–90 (Eng. Abstr.) **(Jpn)**
[Prospects for using numerical methods in research in traumatology and orthopedics] Kalnberz VK, et al. **Vestn Akad Med Nauk SSSR** 1988;(8):74–9 (Eng. Abstr.) **(Rus)**

NURSING

Helping staff nurses become mini-specialists. Feller NG, et al. **Am J Nurs** 1989 Jul;89(7):991–2

ORGANIZATION & ADMINISTRATION

The computer. An orthopedic instrument. Hirsch PJ, et al. **Orthop Clin North Am** 1988 Oct;19(4):883–9
Orthopedic office management. The need for planning and goals. Powers GL. **Orthop Clin North Am** 1988 Oct; 19(4):877–81
Computer corner #19. The computer as an aid to the orthopaedic resident for record-keeping. Bear JV, et al. **Orthop Rev** 1988 Mar;17(3):325–8
[Organizational bases for the early detection and treatment of congenital hip dislocation in children] Shumada IV, et al. **Ortop Travmatol Protez** 1988 Oct;(10):63–7 **(Rus)**

PSYCHOLOGY

A reappraisal of some professional attitudes in orthopaedic surgery [editorial] Gartland JJ. **J Bone Joint Surg [Am]** 1989 Mar;71(3):319–20

STANDARDS

Achilles' heel. Kettelkamp DB. **J Bone Joint Surg [Am]** 1989 Aug;71(7):959–64
The value of standards to an embattled profession [editorial] Wilson FC. **J Bone Joint Surg [Am]** 1988 Dec; 70(10):1439–40
Emergency medicine—a house that Jack is building? [letter] Taylor TK. **Med J Aust** 1989 Aug 21;151(4):235
Certification, recertification and added qualifications [editorial] Stauffer ES. **Orthopedics** 1989 May;12(5):641–3
[Evolution in the management and the results of treatment of injuries of the cervical spine] Kiwerski J. **Chir Narzadow Ruchu Ortop Pol** 1988;53(4):267–73 (Eng. Abstr.) **(Pol)**
[What is necessary for raising the quality of prosthetic and orthopedic service to the community?] Korzh AA, et al. **Ortop Travmatol Protez** 1989 Apr;(4):53–7 **(Rus)**

TRENDS

Evolution and present status of orthopedic microsurgery in Greece. Soucacos PN, et al. **Clin Orthop** 1989 Sep; (246):65–9
The four-legged stool. Hoyt WAJr. **J Bone Joint Surg [Am]** 1989 Jun;71(5):782–3
Mission possible—seizing opportunity from challenge. McCollough NC3d. **J Bone Joint Surg [Am]** 1989 Jun; 71(5):778–81
Presidential address for the Orthopaedic Research Society, 1988. "Back to the future"—responsibilities of the Society. Goldberg VM. **J Orthop Res** 1989;7(4):612–5
The North American decision in historical perspective. Kane WJ. **Spine** 1988 Oct;13(10):1191
[Various remarks regarding the principles of the treatment of fractures] Korzh AA. **Ortop Travmatol Protez** 1989 Jan; (1):1–3 **(Rus)**
[Results and prospects of the development of traumatologic-orthopedic services in the republics of Central Asia and Kazakhstan] Shaposhnikov IuG. **Ortop Travmatol Protez** 1988 Nov;(11):1–5 **(Rus)**
[Progressive and nonprogressive trends in treating fractures (letter)] Shpigel'man PE. **Ortop Travmatol Protez** 1988 Oct; (10):76–7 **(Rus)**
[Status and objectives of the reorganization of orthopedic and traumatologic services for children in the Ukrainian SSR] Shumada IV, et al. **Ortop Travmatol Protez** 1988 Aug; (8):1–6 (Eng. Abstr.) **(Rus)**

UTILIZATION

The impact of alcohol ingestion on the orthopaedic and accident service. Redfern TR, et al. **Alcohol Alcohol** 1988; 23(5):415–9

ORTHOPSYCHIATRY

see related
MENTAL HEALTH

ORTHOPTERA

ANATOMY & HISTOLOGY

Organization of a sensory neuropile in the auditory pathway of two groups of Orthoptera. Römer H, et al. **J Comp Neurol** 1988 Sep 8;275(2):201–15
Morphological study of flight motor neurons in the cricket. Wang S, et al. **J Comp Neurol** 1989 Jan 8;279(2):272–80
[Effect of ovariectomy and allatectomy on movement of the ovipositor of virgin Acheta domesticus females] Renucci M, et al. **C R Acad Sci [III]** 1988;307(13):729–33 (Eng. Abstr.) **(Fre)**

EMBRYOLOGY

Developmental modulation of a glial cell-associated glycoprotein, 5B12, in an insect, Acheta domesticus. Meyer MR, et al. **Dev Biol** 1988 Nov;130(1):374–91

GENETICS

Different mitochondrial gene orders among insects: exchanged tRNA gene positions in the COII/COIII region between an orthopteran and a dipteran species. Haucke HR, et al. **Curr Genet** 1988 Nov;14(5):471–6
Molecular population genetics of mtDNA size variation in crickets. Rand DM, et al. **Genetics** 1989 Mar;121(3):551–69
Inversion polymorphisms in Trimerotropis pallidipennis (Orthoptera): clinical variation along an altitudinal gradient. Confalonieri VA, et al. **Heredity (Edinburgh)** 1989 Feb;62 (Pt 1):107–12
Packaging of DNA in cricket sperm. A compact mode of DNA packaging. Suzuki M, et al. **J Mol Biol** 1988 Dec 5;204(3):653–61

GROWTH & DEVELOPMENT

Rapid postembryonic development of a cricket flight muscle. Novicki A. **J Exp Zool** 1989 Jun;250(3):253–62
Control of growth and ultrastructural maturation of a cricket flight muscle. Novicki A. **J Exp Zool** 1989 Jun; 250(3):263–72
Central projections of a homoeotic regenerate, antennapedia, in a stick insect, Carausius morosus (Phasmida). Edwards JS, et al. **J Neurobiol** 1989 Apr;20(3):101–14

METABOLISM

De novo biosynthesis of arachidonic acid and 5,11,14-eicosatrienoic acid in the cricket Teleogryllus commodus. Jurenka RA, et al. **Biochim Biophys Acta** 1988 Nov 4;963(1):21–7

MICROBIOLOGY

Characterization of a non-occluded baculovirus (subgroup C) from the field cricket, Gryllus rubens. Boucias DG, et al. **Arch Virol** 1989;106(1–2):93–102

PARASITOLOGY

Pseudoparasitism with Gordius robustus. Herter CD, et al. **Am Fam Physician** 1989 Mar;39(3):139–42
Orthoptera as intermediate hosts of Staphylocystis furcata (Stieda, 1862) (Cestoda: Hymenolepididae). Ryšavý B. **Folia Parasitol (Praha)** 1989;36(1):43–7

PHYSIOLOGY

Kinematic and aerodynamic aspects of ultrasound-induced negative phonotaxis inflying Australian field crickets (Teleogryllus oceanicus). May ML, et al. **J Comp Physiol [A]** 1988 Dec;164(2):243–9
Audition in the praying mantis, Mantis religiosa L.: identification of an interneuron mediating ultrasonic hearing. Yager DD, et al. **J Comp Physiol [A]** 1989 Aug; 165(4):471–93
Spectral and polarized light sensitivity of photoreceptors in the compound eye of the cricket (Gryllus bimaculatus). Zufall F, et al. **J Comp Physiol [A]** 1989 Feb;164(5):597–608
Selective attention in an insect auditory neuron. Pollack GS. **J Neurosci** 1988 Jul;8(7):2635–9

ORTHOPTICS

The use of part-time occlusion for early onset unilateral exotropia. Freeman RS, et al. **J Pediatr Ophthalmol Strabismus** 1989 Mar–Apr;26(2):94–6
[New interdisciplinary approaches in ophthalmology] da Silva OA. **Agressologie** 1988 Oct;29(10):681–2 (Eng. Abstr.) **(Fre)**
[The law of the canals] Gagey PM. **Agressologie** 1988 Oct; 29(10):691–2 (Eng. Abstr.) **(Fre)**

METHODS

Role of occlusion in treatment of intermittent exotropia. Vishnoi SK, et al. **Indian J Ophthalmol** 1987 Jul–Aug; 35(4):207–10

ORTHOSES see **ORTHOTIC DEVICES**

ORTHOSIS see **ORTHOTIC DEVICES**

ORTHOTIC DEVICES

Modified Bobath sling with distal support. Sullivan BE, et al. **Am J Occup Ther** 1989 Jan;43(1):47–9
Rehabilitation technology for standing and walking after spinal cord injury. Jaeger RJ, et al. **Am J Phys Med Rehabil** 1989 Jun;68(3):128–33 (50 ref.)
Orthotic treatment of sesamoid pain. Axe MJ, et al. **Am J Sports Med** 1988 Jul–Aug;16(4):411–6
Comparing the short-board technique [letter] Dick T. **Ann Emerg Med** 1989 Jan;18(1):115–6
Cotrel-Dubousset (CD) instrumentation for the correction of spinal curvature. First results in special consideration of derotation. Bauer R, et al. **Arch Orthop Trauma Surg** 1988;107(6):364–8
Ground reaction forces, center of pressure, and duration of stance with and without an ankle-foot orthosis. Balmaseda MT Jr, et al. **Arch Phys Med Rehabil** 1988 Dec; 69(12):1009–12
Prosthetics, orthotics, and assistive devices. 4. Orthotic management of selected disorders. Hicks JE, et al. **Arch Phys Med Rehabil** 1989 May;70(5–S):S210–7 (50 ref.)
Orthotic technique for dystonia musculorum deformans. Hurvitz EA, et al. **Arch Phys Med Rehabil** 1988 Oct; 69(10):892–4
Prosthetics, orthotics, and assistive devices. 1. General concepts. Leonard JA Jr, et al. **Arch Phys Med Rehabil** 1989 May;70(5–S):S195–201 (54 ref.)
Influence of appropriate lower extremity orthotic management on ambulation, pain, and fatigue in a postpolio population. Waring WP, et al. **Arch Phys Med Rehabil** 1989 May;70(5):371–5
Pneumobelt for sleep in the ventilator user: clinical experience. Yang GF, et al. **Arch Phys Med Rehabil** 1989 Sep;70(9):707–11
Synergist erection system in the management of impotence secondary to spinal cord injury. Zasler ND, et al. **Arch Phys Med Rehabil** 1989 Sep;70(9):712–6
Orthotic correction of sitting abnormality in achondroplastic children. Siebens AA, et al. **Basic Life Sci** 1988;48:313–7
Objective evaluation of insert material for diabetic and athletic footwear. Brodsky JW, et al. **Foot Ankle** 1988 Dec; 9(3):111–6
Combined effect of foot arch structure and an orthotic device on stress fractures. Simkin A, et al. **Foot Ankle** 1989 Aug; 10(1):25–9
Orthotics and rehabilitation after extensive upper limb paralysis. Parry CB. **Hand Clin** 1989 Feb;5(1):97–105 (5 ref.)
Enhancing postural stability in hemiplegics using externally applied forces. Godall RM, et al. **Int J Rehabil Res** 1987; 10(4 Suppl 5):132–40
Mobility. Pratt D. **Int J Rehabil Res** 1987;10(4 Suppl 5):41–6
The shock-absorbing effect of soles and insoles. Rööser B, et al. **Int Orthop** 1988;12(4):335–8
In-shoe casting technique for specialized sports shoes. Palamarchuk HJ, et al. **J Am Podiatr Med Assoc** 1989 Sep; 79(9):462–5
Non-prescription custom insoles for ski boots. Petrov O, et al. **J Am Podiatr Med Assoc** 1988 Aug;78(8):422–8
Effect of the orthosis on performance in alpine skiing. A preliminary report. Santoro JP, et al. **J Am Podiatr Med Assoc** 1989 Feb;79(2):93–9
Issues and themes in computer aided design for external prosthetics and orthotics. Lord M, et al. **J Biomed Eng** 1988 Nov;10(6):491–8
Electrical muscle stimulation in combination with a reciprocating gait orthosis for ambulation by paraplegics. Phillips CA. **J Biomed Eng** 1989 Jul;11(4):338–44 (35 ref.)
Medium term comparison of shock attenuating insoles using a spectral analysis technique. Pratt DJ. **J Biomed Eng** 1988 Oct;10(5):426–9
The quality of magnetic resonance imaging, as affected by the composition of the halo orthosis. A brief note. Ballock RT, et al. **J Bone Joint Surg [Am]** 1989 Mar;71(3):431–4
Prevention of rapidly progressive scoliosis in Duchenne

muscular dystrophy by prolongation of walking with orthoses. Rodillo EB, et al. **J Child Neurol** 1988 Oct; 3(4):269–74

A comparison of the Minerva and halo jackets for stabilization of the cervical spine. Benzel EC, et al. **J Neurosurg** 1989 Mar;70(3):411–4

Stirrups as an aid in the treatment of congenital dysplasias of the hip in children. By Arnold Pavlik, 1950 [classical article] Pavlik A. **J Pediatr Orthop** 1989 Mar–Apr; 9(2):157–9

The Vancouver microstomia orthosis. Conine TA, et al. **J Prosthet Dent** 1989 Apr;61(4):476–83 (21 ref.)

Which orthosis? [editorial] **Lancet** 1989 Sep 23;2(8665):721

Type I odontoid fractures [letter] Francavilla TL, et al. **Neurosurgery** 1989 Sep;25(3):481

The effect of the thermoplastic Minerva body jacket on cervical spine motion. Maiman D, et al. **Neurosurgery** 1989 Sep;25(3):363–7; discussion 367–8

Halo–body jacket immobilization in rheumatoid arthritis patients with cervical myelopathy. Nazaroff KS, et al. **Nurs Clin North Am** 1989 Mar;24(1):209–23

Update on the use of orthotics in hemophilia. Heim M, et al. **Orthop Rev** 1988 Oct;17(10):975–8

The pediatric counter rotation system (CRS)—an improvement on the Denis Browne splint for post club foot release splinting: a report of two cases. Milgrom C, et al. **Orthop Rev** 1987 Oct;16(10):762–4

Early mobilisation of patients with cervical cord injury using the halo brace device. Parry H, et al. **Paraplegia** 1988 Aug; 26(4):226–32

Foot orthoses. Lockard MA. **Phys Ther** 1988 Dec; 68(12):1866–73 (59 ref.)

Comparison of three methods used to obtain a neutral plaster foot impression. McPoil TG, et al. **Phys Ther** 1989 Jun; 69(6):448–52

Effects of foot orthoses on center-of-pressure patterns in women. McPoil TG Jr, et al. **Phys Ther** 1989 Feb; 69(2):149–54

Remediation of toe–walking behavior with neutral–position, serial–inhibitory casts. A case report. Selby L. **Phys Ther** 1988 Dec;68(12):1921–3

Cervical orthoses. Beavis A. **Prosthet Orthot Int** 1989 Apr; 13(1):6–13

Biomechanics of orthoses for the subluxed shoulder. Cool JC. **Prosthet Orthot Int** 1989 Aug;13(2):90–6

Memory plastics for prosthetic and orthotic applications. Coombes AG, et al. **Prosthet Orthot Int** 1988 Dec; 12(3):143–51

Questionnaire assessment of patient satisfaction with lower limb orthoses from a district hospital. Fisher LR, et al. **Prosthet Orthot Int** 1989 Apr;13(1):29–35

The effectiveness of shock–absorbing insoles during normal walking. Johnson GR. **Prosthet Orthot Int** 1988 Aug; 12(2):91–5

The role of rigid and hinged polypropylene ankle–foot–orthoses in the management of cerebral palsy: a case study. Middleton EA, et al. **Prosthet Orthot Int** 1988 Dec;12(3):129–35

Multiaxial orthotic hip joint for squatting and cross–legged sitting with hip–knee–ankle–foot–orthosis. Singh U, et al. **Prosthet Orthot Int** 1988 Aug;12(2):101–2

The choice of prosthetic and orthotic technique for less developed countries: analysis and perspectives in Colombia. Vossberg A. **Prosthet Orthot Int** 1988 Aug;12(2):96–100

The role of orthotics in the rehabilitation of patients with fracture of the calcaneum. Winkler W. **Prosthet Orthot Int** 1989 Aug;13(2):70–5

Closed reduction of spondylolisthesis. An experience in 22 patients. Bradford DS. **Spine** 1988 May;13(5):580–7

Orthotic results in adolescent kyphosis. Gutowski WT, et al. **Spine** 1988 May;13(5):485–9

The use of the ISIS optical scanner in the management of the braced adolescent idiopathic scoliosis patient. Tredwell SJ, et al. **Spine** 1988 Oct;13(10):1104–5

Effect of ankle–foot orthosis (AFO) on body sway and walking capacity of hemiparetic stroke patients. Mojica JA, et al. **Tohoku J Exp Med** 1988 Dec;156(4):395–401

Fiberglass reinforced plastic orthotic appliances. Cho KJ. **Yonsei Med J** 1988;29(4):350–6

Orthotic compensation for non–functioning hip extensors. Ogilvie C, et al. **Z Kinderchir** 1988 Dec;43 Suppl 2:33–5

[Basics of conservative therapy of idiopathic scoliosis] Korbelář P. **Cesk Pediatr** 1989 May;44(5):296–8 **(Cze)**

[Pavlik's method of reduction treatment of congenital hip dislocation] Elbaz CM, et al. **Tijdschr Kindergeneeskd** 1988 Dec;56(6):236–40 (Eng. Abstr.) **(Dut)**

[Treatment of lumbar and dorso–lumbar scoliosis using the Boston orthosis and the 3–valve orthosis. Comparative study of the results in the frontal and horizontal planes] Fiore N, et al. **Rev Chir Orthop** 1988;74(6):569–75 (15 ref.) (Eng. Abstr.) **(Fre)**

[Frontal and sagittal reconstruction of idiopathic scoliotic curves treated by the Cotrel–Dubousset operation] Gioia G, et al. **Rev Chir Orthop** 1988;74(6):558–62 (Eng. Abstr.) **(Fre)**

[Orthosis for the upper extremity] Jungmichel D, et al. **Beitr Orthop Traumatol** 1988 Jun;35(6):284–6 (Eng. Abstr.) **(Ger)**

[Technical orthopedic management of osteopathies in adulthood] Gisbertz D, et al. **Orthopade** 1988 Sep; 17(5):447–9 (Eng. Abstr.) **(Ger)**

[Comment on the publication "Sonographic follow–up of hip dysplasia with expanding trouser therapy" (letter)] van Moppes FI, et al. **Z Orthop** 1988 Jul–Aug;126(4):461–4 (Eng. Abstr.) **(Ger)**

[Treatment of positional anomalies of the foot with a functional supportive inlay] Vitek M, et al. **Z Orthop** 1989 Jan–Feb;127(1):15–21 (Eng. Abstr.) **(Ger)**

[Effect of gamma ray sterilization on the expanding endo–orthosis for flatfoot] Girolami M, et al. **Chir Organi Mov** 1988 Jul–Sep;73(3):255–7 (Eng. Abstr.) **(Ita)**

[A semirigid corset in the treatment of lumbar disc arthrosis. Physiopathology, indications, limitations and counterindications. A clinical contribution] Lanciani P, et al. **Clin Ter** 1987 Nov 15;123(3):191–5 (Eng. Abstr.) **(Ita)**

[Treatment of fractures of the mandible: a new type of external fixator] Caldani P, et al. **Minerva Chir** 1989 Jun 30;44(12):1681–3 (Eng. Abstr.) **(Ita)**

[Upper extremity orthosis in various diseases] Watanabe H. **Nippon Seikeigeka Gakkai Zasshi** 1988 Dec;62(12):1233–44 **(Jpn)**

[Results of the treatment of congenital dysplasia of the hip joint by Pavlik's harness] Lénárt G, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(2):103–5 (Eng. Abstr.) **(Pol)**

[A functional load–relieving bandage for treating fractures of the leg bones (its biomechanical validation and methods of use)] Popsuíshapka AK. **Ortop Travmatol Protez** 1988 Jul;(7):58–64 (Eng. Abstr.) **(Rus)**

[Prevention of osteochondritis in folk medicine in the Ukraine] Pridatkevich AV, et al. **Ortop Travmatol Protez** 1988 Jun;(6):46–7 **(Rus)**

[A device for applying corsets and for reclination of compressed vertebrae] Shchekin OV. **Ortop Travmatol Protez** 1988 Jun;(6):56–8 **(Rus)**

[The value of the Pavlik harness and the modified Hillgenreiner apparatus in the treatment of congenital hip dislocation] Matasović T, et al. **Lijec Vjesn** 1988 Nov; 110(11):376–9 (Eng. Abstr.) **(Ser)**

ADVERSE EFFECTS

Subclavian vein thrombosis following fracture of the clavicle: a case report [letter] Kanbar MS. **Orthopedics** 1988 Oct; 11(10):1372, 1374

ECONOMICS

Orthotic services: a need for change [editorial] Platts RG. **BMJ** 1988 Nov 5;297(6657):1145–6

ORTHOVANADATE see **VANADATES**

ORTONAL see **METHAQUALONE**

ORYZA see **RICE**

ORYZIAS see under **CYPRINODONTIFORMES**

OS TRIGONUM see **TALUS**

OSCILLATORS, ENDOGENOUS see **BIOLOGICAL CLOCKS**

OSCILLOMETRY

OODG–Ulrich and OPG–Gee: a comparative study. Strik F. **Doc Ophthalmol** 1988 May;69(1):51–71

Oscillations in a collapsed–tube analog of the brachial artery under a sphygmomanometer cuff. Bertram CD, et al. **J Biomech Eng** 1989 Aug;111(3):185–91

A shunt–excited inductive power link. Sylvan K, et al. **J Med Eng Technol** 1989 Jul–Aug;13(4):215–9

[Proceedings of the 2d Symposium on Oscillatory Measurement of Airway Resistance. Munich, 4–5 December 1988] **Pneumologie** 1989 Jul;43(7):319–409 **(Ger)**

[Dynamic monitoring of neonatal blood pressure using the oscillometric method] Menghetti E, et al. **Pediatr Med Chir** 1988 Mar–Apr;10(2):169–75 (Eng. Abstr.) **(Ita)**

INSTRUMENTATION

[Oscillatory impedance measurement of the respiratory tract in children] Berdel D, et al. **Pneumologie** 1989 Jul; 43(7):392–9 (Eng. Abstr.) **(Ger)**

[Bronchial provocation in children: a comparison between the polyfrequent oscillation method and body plethysmography] Buhr W, et al. **Pneumologie** 1989 Jul; 43(7):400–2 (Eng. Abstr.) **(Ger)**

[Oscillatory measurement of airway resistance with the custo vit in comparison with Oscillaire and whole body plethysmography] Fichter J, et al. **Pneumologie** 1989 Jul; 43(7):382–6 (Eng. Abstr.) **(Ger)**

[Report of a trial of polyfrequent oscillo–resistometry with the custo vit equipment] Glaser T, et al. **Pneumologie** 1989 Jul;43(7):369–75 (Eng. Abstr.) **(Ger)**

[Oscillometric differentiation of lung fibrosis and lung emphysema] Issa I, et al. **Pneumologie** 1989 Jul;43(7):358–62 (Eng. Abstr.) **(Ger)**

[Principle of solid–frequent oscillo–resistometry] Korn V. **Pneumologie** 1989 Jul;43(7):348–52 (Eng. Abstr.) **(Ger)**

[Oscillo–resistometry in bicycle ergometry stress] Lindemann H. **Pneumologie** 1989 Jul;43(7):403–8 (Eng. Abstr.) **(Ger)**

[Theoretical and experimental studies of the diagnostic relevance and comparability of mechanical oscillation parameters] Müller E, et al. **Pneumologie** 1989 Jul; 43(7):339–47 (Eng. Abstr.) **(Ger)**

[The mechanics of forced oscillation—principles and use] Peslin R. **Pneumologie** 1989 Jul;43(7):320–3 (Eng. Abstr.) **(Ger)**

[Measurement of nasal oscillatory resistance] Petro W, et al. **Pneumologie** 1989 Jul;43(7):387–91 (Eng. Abstr.) **(Ger)**

[Expanded oscillo–resistometry—an independent method for studying lung function tests] Sebastiani O. **Pneumologie** 1989 Jul;43(7):363–8 (Eng. Abstr.) **(Ger)**

[Polyfrequent oscillometry measurement of airway resistance including the associated phase angle] Simm F. **Pneumologie** 1989 Jul;43(7):376–81 (Eng. Abstr.) **(Ger)**

[Optimizing monofrequent oscillometry] Smith HJ, et al. **Pneumologie** 1989 Jul;43(7):331–8 (Eng. Abstr.) **(Ger)**

[To what extent are oscillometric data of a simple resistor–volume model physically recordable?] Vogel J, et al. **Pneumologie** 1989 Jul;43(7):324–30 (Eng. Abstr.) **(Ger)**

METHODS

Exact measurements of nasal resistance with the oscillation method. Ullmer S, et al. **Rhinology** 1988 Dec;26(4):263–72

[Improvement in measuring airway resistance by lowering the oscillatory frequency] Wuthe H, et al. **Prax Klin Pneumol** 1988 Nov;42(11):790–2 (Eng. Abstr.) **(Ger)**

OSGOOD–SCHLATTER DISEASE see **OSTEOCHONDRITIS**

OSLER–RENDU DISEASE see **TELANGIECTASIA, HEREDITARY HEMORRHAGIC**

OSLER–VAQUEZ DISEASE see **POLYCYTHEMIA VERA**

OSMIUM

Application of Grimelius argyrophil staining to the study of tumour ultrastructure. III. Effects of osmium tetroxide. Soranzo L, et al. **Acta Histochem (Jena)** 1989;86(1):1–14

Osmium tetroxide probing of local DNA structure in linear and supercoiled plasmids containing curvature–inducing sequences. Paleček E, et al. **Gen Physiol Biophys** 1988 Aug; 7(4):379–93

Prolonged osmification of stomach epithelium. Pšeničnik M, et al. **Histochemistry** 1989;91(5):445–7

Organization of the internal membrane system in the principal cells of the mouse epididymis after osmium impregnation. Fain–Maurel MA, et al. **Reprod Nutr Dev** 1988; 28(5):1237–50

Increase in the calcium content of cardiac tissue after postfixation with osmium tetroxide. Blaineau S, et al. **Stain Technol** 1988 Nov;63(6):339–49

ADMINISTRATION & DOSAGE

[Treatment of chronic joint effusion by chemical or radioisotope synoviorthesis] Jonderko G. **Przegl Lek** 1988; 45(10):743–6 (44 ref.) **(Pol)**

CHEMICAL SYNTHESIS

Synthesis of a more stable osmium ammine electron–dense DNA stain. Olins AL, et al. **J Histochem Cytochem** 1989 Mar;37(3):395–8

DIAGNOSTIC USE

Vasopressin modifies osmium impregnation of the endoplasmic reticulum in cultured kidney collecting duct cells. Denis G, et al. **Biol Cell** 1988;63(3):335–41

ISOLATION & PURIFICATION

Osmium–191/iridium–191m generator based on silica gel impregnated with tridodecylmethylammonium chloride. Issachar D, et al. **J Nucl Med** 1989 Apr;30(4):538–41

METABOLISM

Electron transfer between cytochrome c and metal hexacyanide complexes. Effect of thermodynamic driving force on the electron transfer rate. Cho KC, et al. **Biochim Biophys Acta** 1989 Jan 26;973(1):53–8

PHARMACOLOGY

Characterization of damage in gamma–irradiated and OsO4–treated DNA using methoxyamine. Liuzzi M, et al. **Int J Radiat Biol** 1988 Nov;54(5):709–22

THERAPEUTIC USE

Knee arthroscopy after yttrium or osmic acid injection. Guaydier–Souquieres C, et al. **Arthroscopy** 1989;5(1):70–5

[The synoviorthesis] Kchir MM, et al. **Tunis Med** 1989 Mar; 67(3):145–9 (42 ref.) **(Fre)**

OSMIUM TETROXIDE see under **OSMIUM**

OSMOLAR CONCENTRATION

Serum osmolality in alcohol ingestions: differences in availability among laboratories of teaching hospital, nonteaching hospital, and commercial facilities. Eisen TF, et al. **Am J Emerg Med** 1989 May;7(3):256–9

Effect of bolus osmolality on human esophageal function. Bilder CR, et al. **Am J Gastroenterol** 1989 Jun;84(6):611–3

Electric charge distribution in proteins and ionic strength dependence of reaction rate. Egawa T, et al. **Biochim Biophys Acta** 1989 May 1;995(3):207–13

Relationship of hemolysis buffer structure, pH and ionic strength to spontaneous contour smoothing of isolated erythrocyte membranes. Raval PJ, et al. **Biochim Biophys Acta** 1989 Aug 7;983(2):230–40

A 2H-NMR study on the glycerol backbone of phospholipids extracted from Escherichia coli grown under high osmotic pressure: evidence for multiconformations of phosphatidylethanolamine. Yoshikawa W, et al. **Biochim Biophys Acta** 1988 Oct 20;944(3):321–8

The effect of reduced osmolarity on platinum drug toxicity. Smith E, et al. **Br J Cancer** 1989 Jun;59(6):873–5

Vasopressin reduces release from vasopressin-neurons and oxytocin-neurons by acting on V2-like receptors. Cheng SW, et al. **Brain Res** 1989 Feb 6;479(1):35–9

Responses from osmosensitive neurons of the rat subfornical organ in vitro. Sibbald JR, et al. **Brain Res** 1988 Oct 4; 461(2):205–14

Colloid osmotic pressure of cat brain homogenate separated from autogenous CSF by a copper ferrocyanide membrane. Tomita M, et al. **Brain Res** 1988 Nov 22;474(1):165–73

Clinical approach to the hyperosmolar patient. Geheb MA. **Crit Care Clin** 1987 Oct;3(4):797–815 (41 ref.)

Effects of osmotic stress on rabbit corneal endothelium. Armitage WJ, et al. **Cryobiology** 1988 Oct;25(5):425–39

Osmotic characteristics of sheep and cattle embryos. Széll A, et al. **Cryobiology** 1989 Jun;26(3):297–301

Osmolality—limits of physical tests. Newmark HL, et al. **Dev Pharmacol Ther** 1988;11(5):313–6 (21 ref.)

Thermal stability of nucleosomes studied in situ by flow cytometry: effect of ionic strength and n-butyrate. Darzynkiewicz Z, et al. **Exp Cell Res** 1989 Feb;180(2):551–6

Evidence for the physiological importance of the phosphotransfer between the two regulatory components, EnvZ and OmpR, in osmoregulation in Escherichia coli. Aiba H, et al. **J Biol Chem** 1989 Aug 25;264(24):14090–4

Hyperosmolarity inhibits galactosyl receptor-mediated but not fluid phase endocytosis in isolated rat hepatocytes. Oka JA, et al. **J Biol Chem** 1989 Jul 15;264(20):12016–24

Accumulation of cAMP and calcium in S49 mouse lymphoma cells following hyposmotic swelling. Watson PA. **J Biol Chem** 1989 Sep 5;264(25):14735–40

Potassium depletion and hypertonic medium reduce "non-coated" and clathrin-coated pit formation, as well as endocytosis through these two gates. Carpentier JL, et al. **J Cell Physiol** 1989 Mar;138(3):519–26

Determining the osmolality of seminal fluid aids in the rapid diagnosis of the fertilizing potential of spermatozoa. Gopalkrishman K, et al. **J In Vitro Fert Embryo Transf** 1989 Apr;6(2):119–21

Pineal response in the cichlid fish Oreochromis mossambicus to extreme osmolality, pH, and temperature. Relkin R. **J Pineal Res** 1989;7(1):37–43

The effect of hypoosmolarity on the electrical properties of Madin Darby canine kidney cells. Paulmichl M, et al. **Pflugers Arch** 1989 Mar;413(5):456–62

[Effect of ionic strength of a solution on the protonation of DNA molecule] Slonitskiĭ SV, et al. **Mol Biol (Mosk)** 1988 May–Jun;22(3):741–59 (Eng. Abstr.) **(Rus)**

OSMOLARITY see **OSMOLAR CONCENTRATION**

OSMOREGULATION see **WATER-ELECTROLYTE BALANCE**

OSMOSIS

Molecular mechanisms of osmosis. Kiil F. **Am J Physiol** 1989 Apr;256(4 Pt 2):R801–8

Regulation of organic osmolyte concentrations in tubules from rat renal inner medulla. Wirthensohn G, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):F128–35

Measurement of osmotic reflection coefficient for small molecules in cat hindlimbs. Wolf MB, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):H282–90

Alternative osmotic agents. Mistry CD, et al. **Blood Purif** 1989;7(2–3):109–14 (28 ref.)

The unstirred layer during osmotic flow into a tubule. Aldis GK. **Bull Math Biol** 1988;50(5):531–45

The osmotic permeability of a tubule wall. Aldis GK. **Bull Math Biol** 1988;50(5):547–58

Osmotic response of oocytes using a microscope diffusion chamber: a preliminary study comparing murine and human ova. Bernard A, et al. **Cryobiology** 1988 Dec;25(6):495–501

The hypoosmotic swelling test as a useful adjunct to the semen analysis to predict fertility potential. Check JH, et al. **Fertil Steril** 1989 Jul;52(1):159–61

Effect of hypo-osmotic incubation on membrane recycling. Novak JM, et al. **J Cell Physiol** 1988 Nov;137(2):235–42

Osmotic adjustment and the accumulation of organic solutes in whole cells and protoplasts of Saccharomyces cerevisiae. Meikle AJ, et al. **J Gen Microbiol** 1988 Nov;134 (Pt 11):3049–60

Hydrostatic pressures developed by osmotically swelling vesicles bound to planar membranes. Niles WD, et al. **J Gen Physiol** 1989 Feb;93(2):211–44

Effect of osmotic protection on nucleated cell killing by C5b-9: cell death is not affected by the prevention of cell swelling. Kim SH, et al. **Mol Immunol** 1989 Mar; 26(3):323–31

Comparison of transcellular and transepithelial water osmotic permeabilities (Pos) in the isolated proximal straight tubule (PST) of the rabbit kidney. Carpi-Medina P, et al. **Pflugers Arch** 1988 Jul;412(1–2):66–74

Osmotic work across inner medullary collecting duct accomplished by difference in reflection coefficients for urea and NaCl. Imai M, et al. **Pflugers Arch** 1988 Oct; 412(6):557–67

Osmotaxis in Escherichia coli. Li C, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9451–5

DRUG EFFECTS

[Effect of vasopressin on the osmotic permeability of the bladder wall in the frog and its content of cAMP, cGMP and inositol triphosphate] Natochin IuV, et al. **Fiziol Zh SSSR** 1989 May;75(5):702–8 (Eng. Abstr.) **(Rus)**

OSMOTIC DIURETICS see **DIURETICS, OSMOTIC**

OSMOTIC FRAGILITY

Influence of hypercholesterolemia on morphological and rheological characteristics of erythrocytes. Kanakaraj P, et al. **Atherosclerosis** 1989 Apr;76(2–3):209–18

Osmotic fragility model for red cell populations. Massaldi HA, et al. **Biophys J** 1988 Aug;54(2):301–8

Single locus (rol) control of extreme resistance to red cell osmotic lysis: intrinsic mode of gene action. Schaefer CA, et al. **Genetics** 1989 Feb;121(2):353–8

Comparison of intraerythrocyte and intraleucocyte sodium content and erythrocyte fragility in normotensive subjects. Paci A, et al. **J Nucl Med Allied Sci** 1988 Apr–Jun; 32(2):101–5

Normal erythrocyte osmotic fragility in hereditary spherocytosis. Korones D, et al. **J Pediatr** 1989 Feb; 114(2):264–6

Osmotic fragility of erythrocytes of two breeds of domestic fowl in the warm humid tropics. Oyewale JO, et al. **Lab Anim** 1988 Jul;22(3):250–4

Osmotic fragility, sialic acid content and survival of circulating erythrocytes in anemic tumor-bearing mice. Ray MR, et al. **Neoplasma** 1989;36(2):155–60

Abnormality of osmotic fragility and morphological disorder of bovine erythrocytes infected with Theileria sergenti. Yagi Y, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):389–95

DRUG EFFECTS

Danazol therapy renders red cells resistant to osmotic lysis. Ahn YS, et al. **FASEB J** 1989 Feb;3(2):157–62

Tris acetylacetonate aluminium(III) induces osmotic fragility and acanthocyte formation in suspended erythrocytes. Zatta P, et al. **Toxicol Lett** 1989 Jan;45(1):15–21

OSMOTIC PRESSURE

Subcutaneous interstitial fluid colloid osmotic pressure in dehydrated rats. Heir S, et al. **Acta Physiol Scand** 1988 Jul;133(3):365–71

Colloid osmotic pressure of interstitial fluid in rat subcutis and skeletal muscle: comparison of various wick sampling techniques. Wiig H, et al. **Acta Physiol Scand** 1988 Jun; 133(2):167–75

Measurement of colloid osmotic pressure in submicrolitre samples. Wiig H, et al. **Acta Physiol Scand** 1988 Apr; 132(4):445–52

An osmometer for aqueous biopolymer solutions. Schönert H, et al. **Anal Biochem** 1989 Feb 1;176(2):217–20

Osmotic opening of the blood–brain barrier. Rapoport SI. **Ann Neurol** 1988 Nov;24(5):677–84 (26 ref.)

Post-traumatic changes in, and effect of colloid osmotic pressure on the distribution of body water. Böck JC, et al. **Ann Surg** 1989 Sep;210(3):395–403; discussion 403–5

Ion channels activated by osmotic and mechanical stress in membranes of opossum kidney cells. Ubl J, et al. **J Membr Biol** 1988 Sep;104(3):223–32

Glucose metabolism during osmotic stress in isolated axons of Eriocheir sinensis. Gilles R. **Life Sci** 1974 Oct 1; 15(7):1363–9 (16 ref.)

A simple colloid osmometer and determination of some factors influencing the measurement of colloid osmotic pressure in rat serum. Chiba M, et al. **Microvasc Res** 1988 Sep;36(2):181–6

Separation of selected organic and inorganic solutes by low pressure reverse osmosis membranes. Bhattacharyya D, et al. **Prog Clin Biol Res** 1989;292:153–67

[Colloid osmotic pressure—physiologic, pathophysiologic and clinical significance] Dressler C, et al. **Anaesthesiol Reanim** 1988;13(4):195–203 (56 ref.) (Eng. Abstr.) **(Ger)**

OSSICULAR REPLACEMENT PROSTHESIS

Plaster of Paris and hair cell morphology. A scanning electron microscopic study of an alternative implant material for ear surgery. Högset O, et al. **Acta Otolaryngol (Stockh)** 1988 Nov–Dec;106(5–6):331–8

Temporal bone histopathology over 15 years post-stapedectomy. Himi T, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;447:126–34

Tympanoplasty and ossicular reconstruction: an update. Crabtree JA, et al. **Am J Otol** 1988 Jul;9(4):334–9 (106 ref.)

Biocompatible implants in tympanoplasty. Emmett JR. **Am J Otol** 1989 May;10(3):215–9

Long-term histologic study of a new carbon–carbon ossicular replacement prosthesis. Podoshin L, et al. **Am J Otol** 1988 Sep;9(5):366–75

Incus replacement prostheses of hydroxylapatite in middle ear reconstruction. Wehrs RE. **Am J Otol** 1989 May; 10(3):181–2

Audiometric results of TORP and PORP middle ear reconstruction. Mair IW, et al. **Ann Otol Rhinol Laryngol** 1989 Jun;98(6):429–33

Electromagnetic implantable middle ear hearing device of the ossicular-stimulating type: principles, designs, and experiments. Maniglia AJ, et al. **Ann Otol Rhinol Laryngol Suppl** 1988 Nov–Dec;136:3–16 (23 ref.)

Bone allografts in reconstructive middle ear surgery. Gersdorff M, et al. **Arch Otorhinolaryngol** 1989;246(2):94–6

Carbon–carbon middle ear prosthesis: a preliminary clinical human trial report. Podoshin L, et al. **Otolaryngol Head Neck Surg** 1988 Sep;99(3):278–81

[Silastic middle ear prosthesis] Novák V, et al. **Cesk Otolaryngol** 1988 Dec;37(6):327–31 (Eng. Abstr.) **(Cze)**

[Clinical experience with silastic middle-ear prostheses] Zelený M, et al. **Cesk Otolaryngol** 1989 Jan;38(1):11–6 (Eng. Abstr.) **(Cze)**

[Indications for and results of the technic of suspending the piston from the manubrium] Zelený M. **Cesk Otolaryngol** 1988 Dec;37(6):332–7 (Eng. Abstr.) **(Cze)**

[An experimental study of hydroxyapatite prosthesis in ossicular reconstructive surgery: long-term follow-up observation in the middle ear of cat] Yamanaka E. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jun;91(6):915–25 (Eng. Abstr.) **(Jpn)**

[A method of stabilizing auditory thresholds in patients with adhesive otitis media after stapedoplasty] Dmitriev NS, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):17–20 (Eng. Abstr.) **(Rus)**

OSSIFICATION, PATHOLOGIC

see related
SYNOSTOSIS

Heterotopic ossification within the small-bowel mesentery. Myers MA, et al. **Arch Surg** 1989 Aug;124(8):982–3

Periarticular heterotopic ossification after total hip arthroplasty for primary coxarthrosis. Sodemann B, et al. **Clin Orthop** 1988 Dec;(237):150–7

Ossification in the wall of a radicular cyst: report of a case. Karakasis DT, et al. **J Oral Maxillofac Surg** 1989 Aug; 47(8):853–5

Endometrial ossification, an unusual finding in an infertility clinic. A case report. Ombelet W. **J Reprod Med** 1989 Apr; 34(4):303–6

Limited dermal ossification: a case report. Bartosh RA, et al. **Orthop Rev** 1988 Feb;17(2):169–72

[Ossification of the ligamentum flavum] Dai LY. **Chung Hua Wai Ko Tsa Chih** 1989 Feb;27(2):99–101 (24 ref.) **(Chi)**

[OPLL—a rare disease picture] Glathe S, et al. **ROFO** 1988 Oct;149(4):440–1 **(Ger)**

[Ossification of the posterior longitudinal ligament] Terayama K. **Nippon Seikeigeka Gakkai Zasshi** 1988 Jun;62(6):679–95 (77 ref.) **(Jpn)**

[Ossified choroid plexus papilloma—case report] Kawamata T, et al. **No Shinkei Geka** !988 Jul;16(8):989–94 (Eng. Abstr.) **(Jpn)**

CHEMICALLY INDUCED

Inhibition by tumor necrosis factor of induction of ectopic bone formation by osteosarcoma-derived bone-inducing substance. Yoshikawa H, et al. **Bone** 1988;9(6):391–6

COMPLICATIONS

Cervical myelopathy due to ossification of the posterior longitudinal ligament. De Bleecker J, et al. **Acta Neurol Belg** 1988 May–Jul;88(3):133–9

Fracture of an ossification of the tendo calcaneus. Suso S, et al. **Acta Orthop Belg** 1988;54(4):391–3

Osteoma cutis associated with disordered ossification of the clavicle. A case report. Matsumoto K, et al. **Clin Orthop** 1989 Sep;(246):106–10

Heterotopic ossification: a case report and immunohistochemical observations. Randall JC, et al. **Hum Pathol** 1989 Jan;20(1):86–8

Rupture of the pectoralis major muscle: a complication.

Purnell R. **Injury** 1988 Jul;19(4):284

Severe cervical stenosis due to ossification of the posterior longitudinal ligament without neurological manifestations ("silent OPLL"). Merlini L, et al. **Ital J Neurol Sci** 1989 Feb;10(1):93–6

[Dorsal radiculo–myelopathy due to ossification of the yellow ligaments. Apropos of a case] Folinais D, et al. **Rev Rhum Mal Osteoartic** 1988 Jun;55(8):595–9 **(Fre)**

[Dorsal spinal cord disease caused by ossification of the ligamentum flavum and D10–D11 posterior arthrosis] Renier JC, et al. **Rev Rhum Mal Osteoartic** 1988 Jul–Sep; 55(9):665–7 **(Fre)**

[Craniostenosis and pregnancy] Deev AS. **Akush Ginekol (Mosk)** 1988 Oct;(10):56–7 **(Rus)**

DIAGNOSIS

MR imaging of ossification of the posterior longitudinal ligament [letter] Widder DJ. **AJR Am J Roentgenol** 1989 Jul;153(1):194–5

Falx ossification—MR visualization. Lee DH, et al. **Can Assoc Radiol J** 1988 Dec;39(4):260–2

Ossified epidural haematoma. Report of two cases. Mathuriya SN, et al. **Clin Neurol Neurosurg** 1989;91(3):269–72

Exuberant bony proliferation following foot surgery. Shollenberger BS, et al. **J Foot Surg** 1988 Sep–Oct; 27(5):433–9

Ossification of the ligamentum flavum. A case report and its MRI finding. Enomoto H, et al. **Neuroradiology** 1988; 30(6):571–3

Electrophysiologic diagnosis of cervical OPLL myelopathy using evoked spinal cord potentials. Shinomiya K, et al. **Spine** 1988 Nov;13(11):1225–33

[MRI of OPLL (ossification of the posterior longitudinal ligament)] Otake S, et al. **Rinsho Hoshasen** 1988 Sep; 33(9):989–93 (Eng. Abstr.) **(Jpn)**

[Primary osteosis cutis in 2 children] Chądzyńska M, et al. **Przegl Dermatol** 1988 Jul–Aug;75(4):293–300 (Eng. Abstr.) **(Pol)**

[Branching osteoplastic pneumopathy (description of 2 cases)] Il'kovich MM, et al. **Ter Arkh** 1988;60(7):124–5 **(Rus)**

[Post–traumatic ossifications simulating soft tissue neoplasms] Skotnikov VI, et al. **Vopr Onkol** 1989;35(7):790–5 (Eng. Abstr.) **(Rus)**

[Clinico–morphologic manifestations of ossifying cerebrospinal arachnoiditis] Neretin VIa, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):19–21 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

[The importance of magnesium in orthopedics. VI. The importance of magnesium in the treatment of ectopic calcification and ossification] Ditmar R, et al. **Acta Chir Orthop Traumatol Cech** 1989 Jun;56(3):190–200 (Eng. Abstr.) **(Cze)**

ETIOLOGY

Heterotopic ossification pseudophlebitis. Yarkony GM, et al. **Am J Med** 1989 Sep;87(3):342–4

Ectopic ossification after median sternotomy [letter] Vander Salm TJ, et al. **Ann Thorac Surg** 1989 Aug;48(2):315–6 (9 ref.)

Factors associated with heterotopic bone formation following total hip replacement. Pedersen NW, et al. **Arch Orthop Trauma Surg** 1989;108(2):92–5

Risk factors for heterotopic ossification in spinal cord injury. Lal S, et al. **Arch Phys Med Rehabil** 1989 May;70(5):387–90

Heterotopic ossification. Gennarelli TA. **Brain Inj** 1988 Apr–Jun;2(2):175–8 (0 ref.)

Spinal cord insults and heterotopic ossification in the pediatric population. Garland DE, et al. **Clin Orthop** 1989 Aug;(245):303–10

Bone metaplasia (bone lithiasis) in a papillary transitional carcinoma of renal pelvis. Miracco C, et al. **Eur Urol** 1988; 15(1–2):156–8

Ossification of the cricothyroid membrane following minitracheotomy. Pedersen J, et al. **Intensive Care Med** 1989;15(4):272–3 (6 ref.)

Functional significance of heterotopic bone formation after total hip arthroplasty. Ahrengart L, et al. **J Arthroplasty** 1989;4(2):125–31

Heterotopic ossification with total hip endoprostheses in various models of thrombosis prophylaxis [letter] Kjaersgaard–Andersen P. **J Arthroplasty** 1989;4(1):97–8

Heterotopic bone formation following total shoulder arthroplasty. Kjaersgaard–Andersen P, et al. **J Arthroplasty** 1989;4(2):99–104

I. Stylohyoid chain ossification: a discussion of etiology. Camarda AJ, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):508–14 (35 ref.)

II. Stylohyoid chain ossification: a discussion of etiology. Camarda AJ, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):515–20

Periarticular soft tissue calcification and ossification in the septic joint. Arnold S, et al. **Pediatr Radiol** 1989; 19(6–7):433–4

Peribronchial calcification and ossification—an unusual pattern of metastatic osteosarcoma. Widdowson DJ, et al. **Pediatr Radiol** 1988;18(6):490

[Ossification of a protruded lumbar vertebral disc. A report of 17 cases] Ji XM. **Chung Hua Wai Ko Tsa Chih** 1989 Feb;27(2):80–2, 124 (Eng. Abstr.) **(Chi)**

[Prevention and treatment of post–traumatic extraskeletal ossification] Nejman B, et al. **Pol Tyg Lek** 1988 Nov 28; 43(48):1540–2 **(Pol)**

PATHOLOGY

Multiple lesions of molluscum contagiosum with metaplastic ossification. Naert F, et al. **Am J Dermatopathol** 1989 Jun; 11(3):238–41

The ossified hyoid apparatus—morphology, interpretation, clinical and functional significance. Presentation of a rare case and highlights of the literature. Lykaki G, et al. **Anat Anz** 1988;166(1–5):187–93 (28 ref.)

Multichannel cochlear implants in partially ossified cochleas. Balkany T, et al. **Ann Otol Rhinol Laryngol Suppl** 1988 Sep–Oct;135:3–7

Cerebellopontine angle lipoma with abnormal bony structures—case report. Yoshii K, et al. **Neurol Med Chir (Tokyo)** 1989 Jan;29(1):48–51 (14 ref.)

Osteonecrosis and ossification disturbance of the femoral head in spontaneously hypertensive rats. Iwasaki K, et al. **Nippon Seikeigeka Gakkai Zasshi** 1988 Nov;62(11):1003–10

[The differential diagnosis of lung ossifications] Hackl H. **Pneumologie** 1989 Apr;43(4):210–2 (Eng. Abstr.) **(Ger)**

[Studies on induction mechanism of ossification of the posterior longitudinal ligament of the spine—especially on the cultured cells from the human spinal ligament] Ishida Y. **Nippon Seikeigeka Gakkai Zasshi** 1988 Nov; 62(11):1019–27 (Eng. Abstr.) **(Jpn)**

[Experimental study on ossification of spinal ligaments in the rabbit under influence of bone morphogenetic protein] Murakami H. **Nippon Seikeigeka Gakkai Zasshi** 1988 Dec; 62(12):1211–20 (Eng. Abstr.) **(Jpn)**

[Two cases of gastric cancer with generalized bone metastases revealing severe ossification] Usami K, et al. **Rinsho Hoshasen** 1988 Oct;33(10):1155–8 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Pathologic bone formation. Puzas JE, et al. **Clin Orthop** 1989 Aug;(245):269–81 (99 ref.)

[Physiopathology and therapy of ossification of posterior longitudinal ligaments] Yamaura I. **Nippon Seikeigeka Gakkai Zasshi** 1989 Apr;63(4):355–69 **(Jpn)**

PREVENTION & CONTROL

Indomethacin inhibits the recurrence of excised ectopic ossification after hip arthroplasty. A 3–4 year follow–up of 8 cases. Schmidt SA, et al. **Acta Orthop Scand** 1988 Oct;59(5):593

Prevention of periarticular heterotopic ossification following total hip arthroplasty. Clinical experience with indomethacin and ibuprofen. Sodemann B, et al. **Arch Orthop Trauma Surg** 1988;107(6):329–33

Prevention of heterotopic ossification by nonsteroid antiinflammatory drugs after total hip arthroplasty. Sodemann B, et al. **Clin Orthop** 1988 Dec;(237):158–63

The role of post–operative radiation in the prevention of heterotopic ossification in patients with post–traumatic acetabular fracture. Slawson RG, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):669–72

Indomethacin for the prevention of heterotopic ossification following total hip arthroplasty. Effectiveness, contraindications, and adverse effects. Cella JP, et al. **J Arthroplasty** 1988;3(3):229–34

Influence of indomethacin on experimental heterotopic bone formation in rats. Nilsson O, et al. **Rev Chir Orthop** 1988; 74 Suppl 2:330–2

Etiology and treatment of periarticular heterotopic ossification after total hip replacement. Sodemann B, et al. **Rev Chir Orthop** 1988;74 Suppl 2:329–30

RADIOGRAPHY

The enthesopathic changes of hypophosphatemic osteomalacia in adults: radiologic findings. Burnstein MI, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):785–90

CT demonstration of an ossifying bronchial carcinoid simulating broncholithiasis. Shin MS, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):51–2

Micromelic dwarfism with vertebral and metaphyseal abnormalities and advanced carpotarsal ossification: another observation. Meinecke P, et al. **Am J Med Genet** 1989 Mar;32(3):432–4

Ossification within a thoracic neurilemoma—a case report. Ou YC, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Aug; 42(2):143–6

Ossifying lipoma. Blanshard JD, et al. **J Laryngol Otol** 1989 Apr;103(4):429–31

Roentgen rounds #91. Calcaneonavicular coalition. Ehara S, et al. **Orthop Rev** 1987 Oct;16(10):777–9

Heterotopic ossification after direct lateral approach and transtrochanteric approach to the hip. Testa NN, et al. **Orthop Rev** 1988 Oct;17(10):965–71

Bony overgrowths and abnormal calcifications about the spine. Jones MD, et al. **Radiol Clin North Am** 1988 Nov; 26(6):1213–34 (61 ref.)

Localized ossifications in the supraspinous and interspinous ligaments of adult man. Scapinelli R. **Rays** 1988 Jan–Apr; 13(1):29–33

New bone formation in nasal polyps. de Vries N. **Rhinology** 1988 Sep;26(3):217–9

Hyperostotic lumbar spinal stenosis. A review of 12 surgically treated cases with roentgenographic survey of ossification of the yellow ligament at the lumbar spine. Kurihara A, et al. **Spine** 1988 Nov;13(11):1308–16

[Periarticular ossification following cement–free and cement fixed total endoprosthesis implantation in the hip joint] Hartwig CH, et al. **Z Orthop** 1989 May–Jun;127(3):296–301 (Eng. Abstr.) **(Ger)**

[A case of racemose osteoplastic pneumopathy] D'Andrea E, et al. **Radiol Med (Torino)** 1989 Jun;77(6):701–3 **(Ita)**

[Clinico–roentgenologic characteristics of calcinosis and ossification of postoperative scars of the white line of the abdominal wall] Skotnikov VI, et al. **Vestn Khir** 1988 Sep; 141(9):64–5 **(Rus)**

RADIONUCLIDE IMAGING

[A radionuclide method used in post–traumatic stiffness of the elbow joint] Ianovskaia EM, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):117–9 **(Rus)**

SURGERY

Ossification in linear morphoea with hemifacial atrophy—treatment by surgical excision. Handfield–Jones SE, et al. **Clin Exp Dermatol** 1988 Nov;13(6):385–8

Resection of heterotopic ossification in patients with spinal cord injuries. Garland DE, et al. **Clin Orthop** 1989 May; (242):169–76

Arthroscopic treatment of sports–related anterior osteophytes in the ankle. Hawkins RB. **Foot Ankle** 1988 Oct;9(2):87–90

Rapid ossification in a subungual osteochondroma. Pasternack WA, et al. **J Foot Surg** 1988 Jul–Aug; 27(4):334–8

Anterior cervical vertebrectomy and interbody fusion for multi–level spondylosis and ossification of the posterior longitudinal ligament. Kojima T, et al. **Neurosurgery** 1989 Jun;24(6):864–72

Comparison of the results of laminectomy and open–door laminoplasty for cervical spondylotic myeloradiculopathy and ossification of the posterior longitudinal ligament. Nakano N, et al. **Spine** 1988 Jul;13(7):792–4

THERAPY

Postburn heterotopic ossification: insights for management decision making. Peterson SL, et al. **J Trauma** 1989 Mar; 29(3):365–9

VETERINARY

Surgical treatment of laryngeal ossification in a tiger. Lloyd KC, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1205–6

OSSIFICATION, PHYSIOLOGIC see **OSTEOGENESIS**

OSTEITIS

Benign osteitis of the external auditory meatus. Youngs R, et al. **J Otolaryngol** 1988 Oct;17(6):302–7

Osteitis pubis in a 78 year old female. Catania J, et al. **Postgrad Med J** 1988 Feb;64(748):132–3

COMPLICATIONS

Palmoplantar pustulosis and sternocostoclavicular arthro–osteitis. Edlund E, et al. **Ann Rheum Dis** 1988 Oct; 47(10):809–15

[Ectropion of the eyelid due to maxillary osteitis and its treatment (report on 26 cases)] Kong FG, et al. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 Mar;1(1):28–30 (Eng. Abstr.) **(Chi)**

[Repeat fractures of the femoral diaphysis following healing of an infected pseudarthrosis] Evrard J. **Rev Chir Orthop** 1988;74 Suppl 2:282–4 **(Fre)**

[Osteitis pubis: a rare cause of prolonged fever syndrome] Lloveras JH, et al. **Medicina (B Aires)** 1985;45(1):54–6 (Eng. Abstr.) **(Spa)**

CONGENITAL

Bone and joint infection in the neonate. Morrissy RT. **Pediatr Ann** 1989 Jan;18(1):33–4, 36–8, 40–4 (34 ref.)

DIAGNOSIS

Diagnosis of acute bacterial osteomyelitis of the pubis by means of fine needle aspiration. Lupovitch A, et al. **Acta Cytol** 1989 Sep–Oct;33(5):649–51

DRUG THERAPY

Imipenem in the treatment of post–traumatic osteitis. Ketterl R, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):435–6

Antibiotic therapy in patients with post–traumatic osteitis. Ketterl R, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):436–7

[Treatment of osteo–articular infections with ofloxacin. Preliminary study] Brouqui P, et al. **Pathol Biol (Paris)** 1989 May;37(5):468–71 (Eng. Abstr.) **(Fre)**

[Local antibiotic therapy in postoperative and post–traumatic osteitis with the Septopal chain] Weise K, et al. **Unfallchirurg** 1988 Sep;91(9):416–21 (Eng. Abstr.) **(Ger)**

[Clinical evaluation of roxithromycin in odontogenic infection] Sasaki J, et al. **Jpn J Antibiot** 1989 May;

42(5):1233–55 (Eng. Abstr.) (Jpn)

ETIOLOGY

Internal fixation devices and infection. An electron microscopic study. Lind T, et al. **Acta Orthop Belg** 1988; 54(4):424–8

Asymmetrical humeral head activity after therapeutic irradiation. Dey HM, et al. **Clin Nucl Med** 1988 Sep; 13(9):681

A proliferative inflammation in the mandible caused by implantation of an infected dental root. A possible experimental model for chronic osteomyelitis. Wannfors K, et al. **Int J Oral Maxillofac Surg** 1989 Jun;18(3):179–83

Radiation osteitis in the foot. A case report. Wilson G, et al. **J Am Podiatr Med Assoc** 1989 Mar;79(3):146–51 (24 ref.)

Spina ventosa: the forgotten diagnosis. Report of one case, review of literature. Rigauts H, et al. **J Belge Radiol** 1989 Feb;72(1):13–6

Bacteremia and infection of a hip prosthesis caused by Bacillus alvei. Reboli AC, et al. **J Clin Microbiol** 1989 Jun; 27(6):1395–6

[Various aspects of tuberculosis of the hand: apropos of a series of 45 cases] Benkeddache Y, et al. **Ann Chir Main** 1988;7(2):166–75 (Eng. Abstr.) (Fre)

[Salvage of infected knee prosthesis] Pellaton M. **Rev Med Suisse Romande** 1988 Dec;108(12):1035–9 (Fre)

[BCG osteitis] Szabó L, et al. **Orv Hetil** 1988 Oct 9; 129(41):2203–4 (Eng. Abstr.) (Hun)

HISTORY

[Tertiary bone syphilis from the Middle Ages. A paleopathology study] Scheidegger S. **Pathologe** 1989 May; 10(3):177–81 (Ger)

MICROBIOLOGY

Hematogeneous osteitis due to Yersinia enterocolitica [letter] Fisch A, et al. **J Infect Dis** 1989 Sep;160(3):554

RADIOGRAPHY

Localized osseous cryptococcal infection. Report of 2 cases. Govender S, et al. **Acta Orthop Scand** 1988 Dec;59(6):720–2

A unified approach to symptomatic juxtasternal arthritis and enthesitis. Katz ME, et al. **AJR Am J Roentgenol** 1989 Aug; 153(2):327–33

RADIONUCLIDE IMAGING

[99mTc–HMPAO leukocyte scintigraphy in the diagnosis of inflammations of the skeletal system. Initial experiences] Winker H, et al. **Nuklearmedizin** 1988 Aug;27(4):121–6 (Eng. Abstr.) (Ger)

SURGERY

Wedge resection of the symphysis pubis for the treatment of osteitis pubis. Grace JN, et al. **J Bone Joint Surg [Am]** 1989 Mar;71(3):358–64

[Use of a distal pedicle medial hemisoleus flap in the treatment of residual osteitis of the lower quarter of the leg] Ginouves P, et al. **Ann Chir Plast Esthet** 1988; 33(4):350–4 (Eng. Abstr.) (Fre)

[Value of sural fascio–cutaneous flaps with distal pedicle for covering tissue loss of the lower third of the leg] Le Huec JC, et al. **Rev Chir Orthop** 1988;74 Suppl 2:324–7 (Fre)

[Infection of bones and joints] Burri C, et al. **Aktuel Probl Chir Orthop** 1989;34:1–110 (Ger)

[Observations on post–traumatic osteitis] Stuhldreier G, et al. **Aktuel Traumatol** 1989 Feb;19(1):28–34 (Eng. Abstr.) (Ger)

[Maduromycosis of the extremities] Bolko NT. **Vestn Khir** 1988 May;140(5):72–4 (Rus)

[Use of a continuous action carbon dioxide laser in the treatment of paronychia] Chernov EV, et al. **Vestn Khir** 1989 Mar;142(3):65–6 (Rus)

THERAPY

[The place of Ilizarov's method in the treatment of septic pseudarthrosis of the long bones] De Cloedt P, et al. **Acta Orthop Belg** 1988;54(3):353–9 (Eng. Abstr.) (Fre)

VETERINARY

The evaluation of isoxsuprine hydrochloride for the treatment of navicular disease: a double blind study. Turner AS, et al. **Equine Vet J** 1989 Sep;21(5):338–41

Radiographic measurement from the lateromedial projection of the equine foot with navicular disease. Verschooten F, et al. **Res Vet Sci** 1989 Jan;46(1):15–21

Pathophysiology of navicular syndrome. Pool RR, et al. **Vet Clin North Am Equine Pract** 1989 Apr;5(1):109–29 (24 ref.)

Diagnosis and treatment of the navicular syndrome in horses. Turner TA. **Vet Clin North Am Equine Pract** 1989 Apr; 5(1):131–44 (25 ref.)

OSTEITIS DEFORMANS

[Role of imaging in the study of painful Paget's bone (excluding axial sites)] Martin B, et al. **Ann Radiol (Paris)** 1988;31(5):315–21 (31 ref.) (Eng. Abstr.) (Fre)

[Paget's disease of bone—etiological, epidemiological and orthopedic aspects] Givon U, et al. **Harefuah** 1989 Apr 16;116(8):436–9 (33 ref.) (Heb)

BLOOD

Influence of pharmacological doses of calcitonin on serum osteocalcin concentration in patients with Paget's disease of the bone. Mulder H, et al. **Acta Endocrinol (Copenh)** 1989 Jun;120(6):721–3

COMPLICATIONS

CT findings in coexistent Paget's disease and multiple myeloma. Chua GT, et al. **Indiana Med** 1988 Jul; 81(7):616–7

Coexistence of Paget's disease and dermatomyositis. Leonard–Segal A, et al. **J Rheumatol** 1988 Oct; 15(10):1565–7

Spontaneous spinal epidural hematoma complicating Paget's disease of the spine. Case report. Hanna JW, et al. **Spine** 1989 Aug;14(8):900–2

[Giant cell tumors developing in Paget's disease. Presentation of 2 cases with an ultrastructural study] Carles D, et al. **Ann Pathol** 1989;9(1):47–53 (Eng. Abstr.) (Fre)

[Neurological complications of Paget's disease of bone] Foidart M, et al. **Rev Med Liege** 1989 Jun 1;44(11):396–401 (42 ref.) (Fre)

[Arterial calcification in Paget's disease. A study of etiologic factors] Schiano A, et al. **Rev Rhum Mal Osteoartic** 1988 May;55(7):541–4 (Fre)

[Giant cell tumor of the skull associated with Paget's disease of bone. Case report] Shimoda M, et al. **Neurol Med Chir (Tokyo)** 1988 Nov;28(11):1119–22 (17 ref.) (Eng. Abstr.) (Jpn)

DIAGNOSIS

The localization of the bone lesions of Paget's disease by radiographs, scintigraphy and thermography: pain may be related to bone blood flow [letter] Crisp AJ, et al. **Br J Rheumatol** 1989 Jun;28(3):266–8

Pseudosarcoma in Paget disease of bone. A case report. Monson DK, et al. **J Bone Joint Surg [Am]** 1989 Mar; 71(3):453–5

MR imaging of lytic changes in Paget disease of the calvarium. Kelly JK, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):27–9

Case report 530: Paget disease engrafted on congenitally fused cervical vertebrae (C3–C4). Geil GE, et al. **Skeletal Radiol** 1989;18(2):140–2

Case report 481: Benign intraosseous fibroma (desmoplastic fibroma) associated with Paget disease of the iliac bone. Hillmann JS, et al. **Skeletal Radiol** 1988;17(5):356–9

[Isolated Paget's disease of the hand. Apropos of a new case] Van Linthoudt D, et al. **Rev Rhum Mal Osteoartic** 1989 Mar 15;56(4):337–8 (Fre)

[Paget's disease of bone: MR characteristics at 1.5 T] Neuerburg J, et al. **ROFO** 1988 Dec;149(6):609–14 (Eng. Abstr.) (Ger)

DRUG THERAPY

Pamidronate sodium and calcitonin–resistant Paget's disease. Immediate response in a patient. Drake S, et al. **Arch Intern Med** 1989 Feb;149(2):401–3

Clinical and radiographic improvement of bone of the second lumbar vertebra in Paget's disease following therapy with etidronate disodium: a case report. Nicholas JJ, et al. **Arthritis Rheum** 1989 Jun;32(6):776–9

Biological and clinical assessment of a new bisphosphonate, (chloro–4 phenyl) thiomethylene bisphosphonate, in the treatment of Paget's disease of bone. Reginster JY, et al. **Bone** 1988;9(6):349–54

Relapse of osteoporosis circumscripta as a lytic ring after treatment of Paget's disease with intravenous 3–amino–1–hydroxypropylidene–1,1–bisphosphonate. Anderson DC, et al. **Br J Radiol** 1988 Nov; 61(731):996–1001

Pharmacologic management of Paget's disease. Stumpf JL. **Clin Pharm** 1989 Jul;8(7):485–95 (103 ref.)

Treatment of Paget's disease of bone with (4–chloro–phenyl) thiomethylene bisphosphonate. Audran M, et al. **Clin Rheumatol** 1989 Mar;8(1):71–9

Osteolytic Paget's disease of bone under unduly etidronate therapy [letter] Wendling D, et al. **Clin Rheumatol** 1988 Dec;7(4):543–5

Treatment of Paget's disease of bone with salmon calcitonin nasal spray. Gagel RF, et al. **J Am Geriatr Soc** 1988 Nov; 36(11):1010–4

One year's treatment of Paget's disease of bone by synthetic salmon calcitonin as a nasal spray. Reginster JY, et al. **J Bone Miner Res** 1988 Jun;3(3):249–52

Evaluation by using radionuclide uptake of bone in Paget's disease of bone: special reference to treatment with calcitonin. Dokoh S, et al. **Radioisotopes** 1988 Jun; 37(6):339–42

[Treatment of Paget's osteitis deformans] Brixen K, et al. **Ugeskr Laeger** 1989 Mar 13;151(11):677–80 (Eng. Abstr.) (Dan)

[A years' treatment of Paget's disease of bone using salmon calcitonin via nasal spray] Denis D, et al. **Rev Med Liege** 1989 Jan 1;44(1):23–7 (Fre)

[Biological and clinical effects of a new diphosphonate (chloro–4–phenyl) thiomethylene–diphosphonate in Paget's disease of bone] Lecart MP, et al. **Rev Med Liege** 1988 Dec 15;43(24):799–806 (Fre)

[Amino–hydroxy–propylidene biphosphonate in the treatment of Paget's disease resistant to calcitonin and/or etidronate] Miravet L, et al. **Rev Rhum Mal Osteoartic** 1989 Mar 15;56(4):287–92 (Eng. Abstr.) (Fre)

[Long–term follow–up of 88 patients with Paget's disease treated by discontinuous courses of low–dose disodium etidronate] Ravault A, et al. **Rev Rhum Mal Osteoartic** 1989 Mar 15;56(4):293–302 (Eng. Abstr.) (Fre)

[Hypocalcemia induced in patients with Paget's disease by nasal salmon calcitonin. Effects of anti–calcitonin salmine antibodies] Reginster JY, et al. **Rev Rhum Mal Osteoartic** 1989 Jun;56(7):563–7 (Fre)

[A single infusion of Pamidronate (APD) in Paget's disease of bone] Thiébaud D, et al. **Schweiz Med Wochenschr** 1989 Jan 21;119(3):71–4 (Eng. Abstr.) (Fre)

[Therapy of Paget's disease] Silveri F. **Clin Ter** 1987 Oct 31;123(2):85–94 (Eng. Abstr.) (Ita)

EPIDEMIOLOGY

[Paget's osteitis deformans. Epidemiology and clinical picture] Brixen K, et al. **Ugeskr Laeger** 1989 Mar 13; 151(11):673–7 (Eng. Abstr.) (Dan)

GENETICS

Paget bone disease and heredity: a case report. Agnusdei D, et al. **Henry Ford Hosp Med J** 1988;36(3):150–2

IMMUNOLOGY

[The immunoglobulin profile in Paget's disease of bone] Morales Piga A, et al. **Rev Clin Esp** 1988 Jun;183(2):71–3 (Eng. Abstr.) (Spa)

METABOLISM

Vitamin D in Paget's disease of bone. Foldes J, et al. **Clin Orthop** 1989 Jun;(243):275–9

Osteocalcin and bone remodelling in Paget's disease of bone, primary hyperparathyroidism, hypercalcaemia of malignancy and involutional osteoporosis. Torres R, et al. **Scand J Clin Lab Invest** 1989 May;49(3):279–85

MICROBIOLOGY

Osteoclasts in human osteopetrosis contain viral–nucleocapsid–like nuclear inclusions. Mills BG, et al. **J Bone Miner Res** 1988 Feb;3(1):101–6

PATHOLOGY

Paget's disease of bone with involvement of the dental pulp. Aldred MJ, et al. **J Oral Pathol Med** 1989 Mar;18(3):184–5

Paget's disease of bone. An update on the pathogenesis, pathophysiology, and treatment of osteitis deformans. Fallon MD, et al. **Pathol Annu** 1989;24 Pt 1:115–59 (26 ref.)

[Cervical mass and elevated alkaline phosphatase in a young man (clinical conference)] **Rev Clin Esp** 1989 Feb; 184(2):97–103 (Spa)

PHYSIOPATHOLOGY

Paget's disease of bone in older patients: UCLA grand rounds [clinical conference] Rosenthal MJ, et al. **J Am Geriatr Soc** 1989 Jul;37(7):639–50 (99 ref.)

Gait analysis of patients who have Paget disease. Gainey JC, et al. **J Bone Joint Surg [Am]** 1989 Apr;71(4):568–79

Parathyroid function in Paget's disease of bone. Siris ES, et al. **J Bone Miner Res** 1989 Feb;4(1):75–9

[Paget's disease 100 years after Sir Paget] Lecart MP, et al. **Rev Med Liege** 1988 Dec 1;43(23):765–83 (61 ref.) (Fre)

RADIOGRAPHY

Bone scintigraphy and radiology in Paget's disease of bone: a review. Vellenga CJ, et al. **Am J Physiol Imaging** 1988; 3(3):154–68 (73 ref.)

Radiology clinic. Female runner with shin pain. Decamp JR. **Indiana Med** 1988 Dec;81(12):1021–2

Extension of monostotic Paget disease from the femur to the tibia after arthrodesis of the knee. A case report. O'Driscoll SW, et al. **J Bone Joint Surg [Am]** 1989 Jan; 71(1):129–32

Radiologic case study. Monostotic Paget's disease in the sacrum. Baran GA, et al. **Orthopedics** 1989 May; 12(5):750–1, 754–6 (6 ref.)

[Paget's disease of the skeleton] Ziegler R. **Orthopade** 1988 Sep;17(5):407–10 (12 ref.) (Eng. Abstr.) (Ger)

[Morphology of Paget's osteodystrophia deformans in the computed tomogram] Oesterreich FU, et al. **ROFO** 1988 Dec;149(6):603–8 (Eng. Abstr.) (Ger)

RADIONUCLIDE IMAGING

Bone scintigraphy and radiology in Paget's disease of bone: a review. Vellenga CJ, et al. **Am J Physiol Imaging** 1988; 3(3):154–68 (73 ref.)

Total body and regional bone mineral analysis by dual–photon absorptiometry in Paget's disease of bone. Nuti R, et al. **Bone Miner** 1988 Mar;3(4):359–67

The use of nuclear medicine in the diagnosis of Paget's disease of the mandible. Report of a case. Camarda AJ, et al.

Can Dent Assoc J 1989 Jan;55(1):49–53 (18 ref.)
RE: The use of nuclear medicine in the diagnosis of Paget's disease of the mandible [letter] Lee L.
Can Dent Assoc J 1989 Jun;55(6):451–2
The case of the pathetic pagetic patella. D'Haem RJ, et al. Clin Nucl Med 1989 Apr;14(4):306–8
Paget's disease mimicing skeletal metastases in a patient with coexisting prostatic carcinoma. Shih WJ, et al. Eur J Nucl Med 1988;14(7–8):422–3

SURGERY

Total knee replacement in Paget's disease. Cameron HU. Orthop Rev 1989 Feb;18(2):206–8
[Hip endoprostheses in Paget's disease] Engelhardt P, et al. Orthopade 1988 Sep;17(5):404–6 (Eng. Abstr.) (Ger)
[Indications and possibilities of surgical therapy in osteodystrophia deformans Paget] Zollinger H, et al. Orthopade 1988 Sep;17(5):397–403 (Eng. Abstr.) (Ger)
[Progression of Paget's disease of the spine 10 years following posterolateral spondylodesis] Hopf C, et al. Z Orthop 1989 Jan–Feb;127(1):47–50 (Eng. Abstr.) (Ger)

OSTEITIS FIBROSA CYSTICA

COMPLICATIONS

Concomitant osteitis fibrosa cystica and ameloblastoma of the mandible. Zamurovic D, et al. J Rheumatol 1989 Mar; 16(3):397–401

DIAGNOSIS

[A comparative study of laboratory and x-ray data in the diagnosis of hyperparathyroid osteodystrophy] Spuziak MI. Lab Delo 1989;(5):62–4 (Eng. Abstr.) (Rus)

DRUG THERAPY

Intravenous calcitriol in the treatment of refractory osteitis fibrosa of chronic renal failure [see comments] Andress DL, et al. N Engl J Med 1989 Aug 3;321(5):274–9. Comment in: N Engl J Med 1989 Aug 3;321(5):317–9

ETIOLOGY

[The fibrocystic form of hyperparathyroidism of renal origin. Apropos of 2 cases (letter)] Prat F, et al. Ann Med Interne (Paris) 1989;140(4):325–6 (Fre)

RADIONUCLIDE IMAGING

Brown tumor of bone: a potential source of false-positive thallium-201 localization. Yang CJ, et al. J Nucl Med 1989 Jul;30(7):1264–7

OSTEITIS FIBROSA DISSEMINATA see FIBROUS DYSPLASIA OF BONE

OSTEO-ONYCHODYSPLASIA, HEREDITARY see NAIL-PATELLA SYNDROME

OSTEOARTHRITIS

The beneficial outcomes of the arthritis self-management course are not adequately explained by behavior change. Lorig K, et al. Arthritis Rheum 1989 Jan;32(1):91–5
A controlled evaluation of arthritis education. Lindroth Y, et al. Br J Rheumatol 1989 Feb;28(1):7–12
Adolescent tibia vara. Chmell M, et al. Orthopedics 1989 Feb; 12(2):295–7
Pain in osteoarthritis. Semin Arthritis Rheum 1989 May;18(4 Suppl 2):1–104
[Foot root arthrosis] Claustre J, et al. Rev Rhum Mal Osteoartic 1989 Jun;56(7):539–43 (Fre)
[Arthroses. Guidelines for diagnosis and treatment] Staff PH, et al. Tidsskr Nor Laegeforen 1988 Sep 20;108(26):2147–50 (Eng. Abstr.) (Nor)

BLOOD

Assay of serum hyaluronic acid in clinical application. Chichibu K, et al. Clin Chim Acta 1989 May 31; 181(3):317–23
Serum ribonucleotide binding activity in osteoarthritis. Tangnijkul Y, et al. Clin Exp Rheumatol 1988 Jul–Sep; 6(3):233–7
[Trans-synovial kinetics of tiaprofenic acid] Kurowski M. Z Rheumatol 1988 May–Jun;47(3):173–6 (Eng. Abstr.) (Ger)
[Indices of the blood fibrinolytic system in osteoarthrosis and rheumatoid arthritis] Palienko IA, et al. Vrach Delo 1989 Apr;(4):57–60 (Eng. Abstr.) (Rus)

CHEMICALLY INDUCED

[Monoiodoacetic acid-induced arthropathy of the rabbit knee—a contribution to the pathogenesis of arthrosis] Regling G, et al. Beitr Orthop Traumatol 1989 May; 36(5):193–203 (Eng. Abstr.) (Ger)

CLASSIFICATION

Osteoarthritis: definitions and criteria. McAlindon T, et al. Ann Rheum Dis 1989 Jul;48(7):531–2 (11 ref.)

COMPLICATIONS

Prevalence of upper gastrointestinal mucosal abnormalities at a rheumatology clinic [published erratum appears in Bol Asoc Med P R 1989 Feb;81(2):60] Senior J, et al. Bol Asoc Med P R 1988 Jul;80(7):241–4
Multiple ruptures of flexor tendons due to hypertrophic change at the distal radio-ulnar joint. A case report. Minami A, et al. J Bone Joint Surg [Am] 1989 Feb; 71(2):300–2
Hemarthrosis of the ankle secondary to false aneurysm caused by impingement from an osteophyte. A case report. Ris HB, et al. J Bone Joint Surg [Am] 1989 Jul;71(6):935–7
Degenerative arthritis of the carpus associated with congenital hypoplastic thumb. Bonatz E, et al. J Hand Surg [Am] 1989 Jul;14(4):734–6
Osteoarticular infection due to Coxiella burnetii [letter] Raoult D, et al. J Infect Dis 1989 Jun;159(6):1159–60
Synovial chondromatosis associated with experimental osteoarthritis in adult monkeys. Helmy ES, et al. J Oral Maxillofac Surg 1989 Aug;47(8):823–7
Osteoarthrosis as the cause of craniomandibular pain and dysfunction: a unifying concept. Stegenga B, et al. J Oral Maxillofac Surg 1989 Mar;47(3):249–56 (54 ref.)
Cervico-medullary compression secondary to ochronotic arthritis affecting cranio-vertebral joints syndesmo-dental ochronotic arthritis. Sharma RR, et al. J Postgrad Med 1988 Oct;34(4):253–7
The role of metabolic factors and blood pressure in the association of obesity with osteoarthritis of the knee. Davis MA, et al. J Rheumatol 1988 Dec;15(12):1827–32
Hereditary symphalangism. Association with osteoarthritis. Krohn KD, et al. J Rheumatol 1989 Jul;16(7):977–82
Pain, synovitis, and articular cartilage changes in osteoarthritis. Brandt KD. Semin Arthritis Rheum 1989 May;18(4 Suppl 2):77–80 (16 ref.)
[Cervical spondylotic myelopathies. Apropos of 121 cases. Prognostic value of sensitive symptoms] Bazin A, et al. Neurochirurgie 1988;34(5):328–37 (Eng. Abstr.) (Fre)
[Dorsal spinal cord disease caused by ossification of the ligamentum flavum and D10–D11 posterior arthrosis] Renier JC, et al. Rev Rhum Mal Osteoartic 1988 Jul–Sep; 55(9):665–7 (Fre)
[Mechanisms of pain syndrome in various vertebrogenic diseases] Popelianskiĭ AIa. Revmatologiia (Moskva) 1989 Jan–Mar;(1):53–5 (Rus)
[Pustular arthro-osteitis associated with gangrenous pyoderma. Apropos of 1 case and a review of the literature] Giménez García R, et al. Rev Clin Esp 1989 May; 184(9):477–9 (23 ref.) (Eng. Abstr.) (Spa)

DIAGNOSIS

General case of the day. Giant osteoarthritic subchondral cyst with a pathologic fracture. Conway WF, et al. Radiographics 1988 Jul;8(4):818–22
Temporomandibular joint: morphology and signal intensity characteristics of the disk at MR imaging. Helms CA, et al. Radiology 1989 Sep;172(3):817–20
A nursing perspective on the assessment of function in persons with arthritis. Goeppinger J, et al. Res Nurs Health 1988 Oct;11(5):321–31
Arthroscopic and synovial correlates of pain in osteoarthritis. Lindblad S. Semin Arthritis Rheum 1989 May;18(4 Suppl 2):91–3
[Costo-vertebral arthrosis disclosed by pseudo-visceral pains] Roux C, et al. Rev Rhum Mal Osteoartic 1989 Feb; 56(2):191–5 (Fre)
[Tuberculous monoarthritis] Huber HM, et al. Schweiz Rundsch Med Prax 1988 Aug 23;77(34):876–83 (Eng. Abstr.) (Ger)
[Significance of the changes in the level of expression of HLA antigens on the surface of T lymphocytes in differential diagnosis of joint diseases of different nature] Konenkov VI, et al. Revmatologiia (Moskva) 1989 Jan–Mar;(1):36–40 (Eng. Abstr.) (Rus)

DRUG THERAPY

Quantitative criteria for evaluating the early development of osteoarthritis and the effect of diclofenac sodium. Dunham J, et al. Agents Actions 1989 Aug;28(1–2):93–7
Intra-articular orgotein in osteoarthritis of the knee: a placebo-controlled efficacy, safety, and dosage comparison. McIlwain H, et al. Am J Med 1989 Sep; 87(3):295–300
Prophylactic treatment of canine osteoarthritis with glycosaminoglycan polysulfuric acid ester. Altman RD, et al. Arthritis Rheum 1989 Jun;32(6):759–66
Protective effects of corticosteroids on cartilage lesions and osteophyte formation in the Pond-Nuki dog model of osteoarthritis. Pelletier JP, et al. Arthritis Rheum 1989 Feb; 32(2):181–93
Flurbiprofen sustained-release in OA knee. Boston PF, et al. Br J Clin Pract 1988 Jan;42(1 Suppl):9–14
Mefenamic acid compared with diclofenac sodium in elderly patients with osteoarthritis. Stewart I, et al. Br J Clin Pract 1988 Aug;42(8):316–20
Intraarticular sodium hyaluronate injections in the Pond-Nuki experimental model of osteoarthritis in dogs. I. Biochemical results. Abatangelo G, et al. Clin Orthop 1989 Apr;(241):278–85
Intraarticular sodium hyaluronate injections in the Pond-Nuki experimental model of osteoarthritis in dogs. II. Morphological findings. Schiavinato A, et al. Clin Orthop 1989 Apr;(241):286–99
A method for comparing analgesics: glafenine and paracetamol. Multicenter cross-over approach. Amor B, et al. Clin Rheumatol 1988 Dec;7(4):492–7
A global safety evaluation of etodolac. Karbowski A. Clin Rheumatol 1989 Mar;8 Suppl 1:73–9 (18 ref.)
Recent clinical experience with etodolac in the treatment of osteoarthritis of the knee. Platt PN. Clin Rheumatol 1989 Mar;8 Suppl 1:54–62
A review of the antiarthritic efficacy and safety of etodolac. Zvaifler N. Clin Rheumatol 1989 Mar;8 Suppl 1:43–53 (28 ref.)
Diflunisal and ibuprofen: effects on gastric and duodenal mucosa in patients with osteoarthritis. Muncie HL Jr, et al. Clin Ther 1989 Jul–Aug;11(4):539–44
Efficacy and tolerability of etodolac in the treatment of osteoarthritis. Ciocci A. Curr Med Res Opin 1989; 11(7):471–5
Clinical trial of intra-articular injection of sodium hyaluronate in patients with osteoarthritis of the knee. Dixon AS, et al. Curr Med Res Opin 1988;11(4):205–13
A single-blind, placebo-controlled study of glycosaminoglycan-peptide complex ('Rumalon') in patients with osteoarthritis of the hip or knee. Gramajo RJ, et al. Curr Med Res Opin 1989;11(6):366–73
Etodolac therapy for osteoarthritis: a double-blind, placebo-controlled trial. Williams PI, et al. Curr Med Res Opin 1989;11(7):463–70
Drug prospects in osteoarthritis. Bird HA. Drug Des Deliv 1989 Jun;4(4):263–71 (31 ref.)
A double-blind trial of ademetionine vs naproxen in activated gonarthrosis. Domljan Z, et al. Int J Clin Pharmacol Ther Toxicol 1989 Jul;27(7):329–33
Efficacy and tolerability of nimesulide in elderly patients with osteoarthritis: double-blind trial versus naproxen. Fossaluzza V, et al. J Int Med Res 1989 May–Jun; 17(3):295–303
A randomized, double-blind study to compare tenoxicam with sustained release indomethacin in osteoarthritic patients treated in general practice. Hooper PA, et al. J Int Med Res 1989 Jan–Feb;17(1):17–23
Clinical efficacy of glycosaminoglycan polysulfate for the treatment of osteoarthritis of the knee joint: a double blind controlled study. Chamchan U, et al. J Med Assoc Thai 1989 Mar;72(3):123–8
Efficacy of misoprostol in upper gastro-intestinal lesions in arthritic patients on non-steroidal anti-inflammatory drugs (NSAIDS)—an Indian experience. Bhatt CB, et al. J Postgrad Med 1988 Oct;34(4):224–8
Validation study of WOMAC: a health status instrument for measuring clinically important patient relevant outcomes to antirheumatic drug therapy in patients with osteoarthritis of the hip or knee. Bellamy N, et al. J Rheumatol 1988 Dec;15(12):1833–40
The therapeutic effects of NSAID and corticosteroids in osteoarthritis: to be or not to be. Pelletier JP, et al. J Rheumatol 1989 Mar;16(3):266–9
Kidney invigorating medicine in the treatment of osteoarthritis: an experimental study. Zhao XH, et al. J Tradit Chin Med 1988 Dec;8(4):285–92
Prevention of NSAID-induced gastric ulcer with misoprostol: multicentre, double-blind, placebo-controlled trial. Graham DY, et al. Lancet 1988 Dec 3;2(8623):1277–80
Fish oil in osteoarthritis [letter] Stammers T, et al. Lancet 1989 Aug 26;2(8661):503
Clinical experience with ketoprofen in the management of osteoarthritis and rheumatoid arthritis. Fine IT. Md Med J 1989 Jun;38(6):485–8
Flurbiprofen. Med Lett Drugs Ther 1989 Apr 7;31(789):31–2
Toxic interactions between lithium and non-steroidal anti-inflammatory drugs. Stein G, et al. Psychol Med 1988 Aug;18(3):535–43 (55 ref.)
Local glycosaminoglycan polysulphate injection therapy in osteoarthritis of the hand. A placebo-controlled clinical study. Pastinen O, et al. Scand J Rheumatol 1988; 17(3):197–202
Chondroprotection. Semin Arthritis Rheum 1987 Nov;17(2 Suppl 1):1–53
New directions in therapy of osteoarthritis. Altman RD, et al. Semin Arthritis Rheum 1987 Nov;17(2 Suppl 1):1–2
Laboratory evaluation of antiarthritic drugs as potential chondroprotective agents. Burkhardt D, et al. Semin Arthritis Rheum 1987 Nov;17(2 Suppl 1):3–34 (274 ref.)
Long-term studies of antiosteoarthritic drugs: an assessment. Rejholec V. Semin Arthritis Rheum 1987 Nov;17(2 Suppl 1):35–53 (55 ref.)
[The present state of chondroprotective therapy in osteoarthrosis] Pelíšková Z, et al. Acta Chir Orthop Traumatol Cech 1989 Jun;56(3):185–9 (Eng. Abstr.) (Cze)
[Long-term therapy using non-steroidal antirheumatics. Workshop "Osteoarthritis: new hints" presented at the 5th symposium of the European League Against Rheumatism (EULAR). 9 November 1988, Paris. Abstracts] Fortschr Med 1989;107 Suppl 58:1–15 (Ger)
[Double-blind randomized multicenter study with tenoxicam, piroxicam and diclofenac sodium retard in the treatment of ambulatory patients with arthroses and soft tissue rheumatism] Moser U, et al. Schweiz Rundsch Med Prax 1989 Mar 7;78(10):263–9 (Eng.

Abstr.) (Ger)
[Can one increase the analgesic effect of Mobilisin ointment by iontophoresis? Placebo controlled triple cross-over double-blind study] Pavelka K Jr, et al. **Z Rheumatol** 1988 Jul-Aug;47(4):233-7 (Eng. Abstr.) (Ger)
[Drug therapy of arthrosis] Cervini C, et al. **Clin Ter** 1987 Dec 31;123(6):493-8 (27 ref.) (Ita)
[Proglumetacin in the treatment of rheumatoid arthritis and arthrosis] Cianfanelli M, et al. **Clin Ter** 1988 Aug 15; 126(3):181-5 (Eng. Abstr.) (Ita)
[Research on the therapeutic activity and tolerance of flunoxaprofen in arthrosis] Gallo M, et al. **Clin Ter** 1987 Sep 15;122(5):333-7 (Eng. Abstr.) (Ita)
[Ketoprofen lysine treatment of painful manifestations of spinal osteoarthrosis] Memeo A, et al. **Clin Ter** 1988 Jul 31;126(2):119-22 (Eng. Abstr.) (Ita)
[Telethermographic evaluation of pirprofen in rheumatic pathology] Pappalardo A, et al. **Clin Ter** 1987 Oct 15; 123(1):7-13 (Eng. Abstr.) (Ita)
[Treatment of patients with gonarthrosis by intra-articular administration of drugs] Popov VV, et al. **Klin Med (Mosk)** 1989 Apr;67(4):104-8 (Eng. Abstr.) (Rus)
[Efficacy of polyvinylpyrrolidone solutions of various concentrations in patients with rheumatic diseases of the joints] Matulis AA, et al. **Ter Arkh** 1989;61(5):108-12 (Eng. Abstr.) (Rus)

ECONOMICS

Substantial work disability and earnings losses in individuals less than age 65 with osteoarthritis: comparisons with rheumatoid arthritis. Pincus T, et al. **J Clin Epidemiol** 1989; 42(5):449-57

ENZYMOLOGY

Influence of non-steroidal anti-inflammatory drugs and disease activity on serum alkaline phosphatase concentrations in rheumatoid arthritis, osteoarthritis, and polymyalgia rheumatica. Doube A, et al. **Ann Rheum Dis** 1989 May;48(5):368-71
Activation of neutral metalloprotease in human osteoarthritic knee cartilage: evidence for degradation in the core protein of sulphated proteoglycan. Martel-Pelletier J, et al. **Ann Rheum Dis** 1988 Oct;47(10):801-8
Ultrastructural localisation of alkaline phosphatase activity in osteoarthritic human articular cartilage. Rees JA, et al. **Ann Rheum Dis** 1988 Sep;47(9):747-53
Changes in oxidative activities of chondrocytes during the early development of natural murine osteoarthritis. Dunham J, et al. **Br J Exp Pathol** 1988 Dec;69(6):845-53
Activities of dipeptidyl peptidase II and dipeptidyl peptidase IV in synovial fluid from patients with rheumatoid arthritis and osteoarthritis. Gotoh H, et al. **Clin Chem** 1989 Jun; 35(6):1016-8
Evidence for metalloproteinase and metalioproteinase inhibitor imbalance in human osteoarthritic cartilage. Dean DD, et al. **J Clin Invest** 1989 Aug;84(2):678-85
Uridine diphosphoglucose dehydrogenase activity in normal and osteoarthritic human chondrocytes. Zemel E, et al. **J Rheumatol** 1989 Jun;16(6):825-7
Effect of urinary trypsin inhibitor on osteoarthritis. Matsuo O, et al. **Thromb Res** 1988 Nov 1;52(3):237-45

EPIDEMIOLOGY

Low incidence of osteoarthrosis of the hips in contrast with osteoarthrosis of the knees among rural Saudis: why? [letter] Agunwa WC. **Ann Rheum Dis** 1989 Apr;48(4):351-2
Epidemiology of osteoarthritis: Zoetermeer survey. Comparison of radiological osteoarthritis in a Dutch population with that in 10 other populations. van Saase JL, et al. **Ann Rheum Dis** 1989 Apr;48(4):271-80
Does smoking protect against osteoarthritis? Felson DT, et al. **Arthritis Rheum** 1989 Feb;32(2):166-72
Degenerative joint disease in ballet dancers. Andersson S, et al. **Clin Orthop** 1989 Jan;(238):233-6
Epidemiology of hip and knee osteoarthritis. Felson DT. **Epidemiol Rev** 1988;10:1-28 (183 ref.)
Epidemiological aspects of osteoarthritis. Peyron JG. **Scand J Rheumatol Suppl** 1988;77:29-33
[Medico-social aspects of the identification of high risk groups for the development of osteoarthrosis deformans] Bobylev VIa, et al. **Ter Arkh** 1989;61(5):119-21 (Rus)

ETIOLOGY

Thigh muscle atrophy and postoperative osteoarthrosis after knee ligament tears. Kannus P, et al. **Acta Chir Hung** 1988; 29(2):151-61
The association of knee injury and obesity with unilateral and bilateral osteoarthritis of the knee. Davis MA, et al. **Am J Epidemiol** 1989 Aug;130(2):278-88
Is chronic renal failure a risk factor for the development of erosive osteoarthritis? Duncan IJ, et al. **Ann Rheum Dis** 1989 Mar;48(3):183-7
Generalised osteoarthritis: a hormonally mediated disease. Spector TD, et al. **Ann Rheum Dis** 1989 Jun;48(6):523-7 (54 ref.)
An experimental animal model of Kashin-Beck disease. Zhang GQ, et al. **Ann Rheum Dis** 1989 Feb;48(2):149-52
Occupation and osteoarthritis. Genti G. **Baillieres Clin Rheumatol** 1989 Apr;3(1):193-204 (84 ref.)
Increased rates of previous hysterectomy and gynaecological operations in women with osteoarthritis. Spector TD, et al. **BMJ** 1988 Oct 8;297(6653):899-900
Seamstress's finger: a cause of Heberden's nodes. Turner WH, et al. **BMJ** 1988 Dec 24-31;297(6664):1636
How often, when and how does joint hypermobility lead to osteoarthritis? Grahame R. **Br J Rheumatol** 1989 Aug; 28(4):320
Posttraumatic anterior cruciate ligament insufficiency as a cause of osteoarthritis in a knee joint. Kannus P, et al. **Clin Rheumatol** 1989 Jun;8(2):251-60
Osteoarthrosis of the knee due to chronic posttraumatic insufficiency of the lateral ligament compartment. Eight-year follow-up. Kannus P. **Clin Rheumatol** 1988 Dec;7(4):474-80
Arthropathy in von Willebrand's disease [published erratum appears in Clin Rheumatol 1989 Jun;8(2):296] Macfarlane JD, et al. **Clin Rheumatol** 1989 Mar;8(1):98-102
Early osteoarthritis in young sportsmen with severe anterolateral instability of the knee. Graham GP, et al. **Injury** 1988 Jul;19(4):247-8
Age, overweight, sex, and knee instability: their relationship to the post-traumatic osteoarthrosis of the knee joint. Kannus P, et al. **Injury** 1988 Mar;19(2):105-8
Osteoarthritis of the wrist secondary to non-union of the scaphoid. Allende BT. **Int Orthop** 1988;12(3):201-11 (20 ref.)
Alkaptonuria—a rare presentation [letter] Sharma JK, et al. **J Assoc Physicians India** 1988 May;36(5):353-4
Osteoarthrosis of the temporomandibular joint following experimental disc perforation in Macaca fascicularis. Helmy E, et al. **J Oral Maxillofac Surg** 1988 Nov;46(11):979-90
Rapidly progressive destructive arthropathy of the shoulder—a viewpoint on pathogenesis. Klimaitis A, et al. **J Rheumatol** 1988 Dec;15(12):1859-62
Osteoarthritis and obesity in the general population. A relationship calling for an explanation. van Saase JL, et al. **J Rheumatol** 1988 Jul;15(7):1152-8
Osteoarthritis after Colles' fracture. Overgaard S, et al. **Orthopedics** 1989 Mar;12(3):413-6
Late osteoarticular lesions following meningococcemia with disseminated intravascular coagulation. Santos E, et al. **Pediatr Radiol** 1989;19(3):199-202
Relationship between the utilisation profile of individual joints and their susceptibility to primary osteoarthritis. Alexander CJ. **Skeletal Radiol** 1989;18(3):199-205
[An infant with osteoarthritis and osteomyelitis of the humerus caused by Escherichia coli] Kreuning T, et al. **Ned Tijdschr Geneeskd** 1989 Apr 8;133(14):733-5 (Eng. Abstr.) (Dut)
[Various aspects of tuberculosis of the hand: apropos of a series of 45 cases] Benkeddache Y, et al. **Ann Chir Main** 1988;7(2):166-75 (Eng. Abstr.) (Fre)
[Osteoarthropathy of hemodialysis: development at 2 years after passage on high permeability membrane] Foissac-Gegoux P, et al. **Nephrologie** 1988;9(3):129-33 (Eng. Abstr.) (Fre)
[Multifocal osteoarthropathy associated with beta-2 microglobulin amylosis deposit in a patient with renal insufficiency treated exclusively with hemofiltration (letter)] Renaud H, et al. **Nephrologie** 1988;9(2):89-90 (Fre)
[Multifocal Candida albicans osteoarthritis in an infant] Lamireau T, et al. **Pediatrie** 1988;43(3):209-12 (Eng. Abstr.) (Fre)
[Fractures and pseudarthroses of the carpal scaphoid. A discussion of therapeutic attitudes and future perspectives in pseudarthroses with arthrosis or necrosis] Allieu Y, et al. **Rev Chir Orthop** 1988;74(8):738-40 (Fre)
[Pseudarthroses with a necrotic proximal fragment and global radiocarpal osteoarthritis. Introduction] Alnot JY. **Rev Chir Orthop** 1988;74(8):731 (Fre)
[Osteoarthritis of the wrist following pseudarthrosis of the scaphoid] Bonnevialle P, et al. **Rev Chir Orthop** 1988; 74(8):718-20 (Fre)
[The polyarticular and destructive form of amyloid arthropathy in dialysis patients. Apropos of a case] Jarde O, et al. **Rev Rhum Mal Osteoartic** 1989 Jun;56(7):555-7 (Fre)
[Risk factors in arthrosis. Hierarchy and modes of action] Peyron J. **Rev Rhum Mal Osteoartic** 1989 Feb;56(2):169-71 (22 ref.) (Fre)
[Coxarthrosis in dancers—an occupational disease?] Krause E, et al. **Beitr Orthop Traumatol** 1988 Oct;35(10):495-9 (21 ref.) (Eng. Abstr.) (Ger)
[Arguments against the recognition of arthroses of the knee joint following occupational stress as an occupational disease] Greinemann H. **Unfallchirurg** 1988 Aug; 91(8):374-80 (Eng. Abstr.) (Ger)
[Deformity of the fingers among women workers at a papermaking mill] Tsujita Y, et al. **Sangyo Igaku** 1989 Mar; 31(2):70-6 (Eng. Abstr.) (Jpn)
[Mechanism of development of so-called "curvature of the fingers" (Heberden's nodes)] Tsujita Y, et al. **Sangyo Igaku** 1988 Nov;30(6):486-7 (Jpn)
[Osteoarticular changes in vibration disease] Ablamunets KIa, et al. **Gig Sanit** 1988 Oct;(10):24-6 (Eng. Abstr.) (Rus)
[Hypermobility of the knee joint in osteoarthrosis] Chepoi VM, et al. **Revmatologiia (Moskva)** 1989 Jan-Mar;(1):22-6 (Eng. Abstr.) (Rus)

GENETICS

HLA-A, B antigens and alpha 1-antitrypsin phenotypes in nodal generalised osteoarthritis and erosive osteoarthritis. Pattrick M, et al. **Ann Rheum Dis** 1989 Jun;48(6):470-5
Genetics of osteoarthritis. Hutton C, et al. **Baillieres Clin Rheumatol** 1988 Dec;2(3):703-10 (55 ref.)
Genetics of osteoarthritis [letter] Pattrick M, et al. **Br J Rheumatol** 1989 Feb;28(1):88-9
Familial osteoarthrosis and type II collagen gene [letter; comment] Dieppe P. **Lancet** 1989 Jun 17;1(8651):1396. **Comment on:** Lancet 1989 Apr 29;1(8644):924-7
Osteoarthritis and cartilage collagen genes [letter] Hull R, et al. **Lancet** 1989 Jun 10;1(8650):1337-8
Predisposition to familial osteoarthrosis linked to type II collagen gene [see comments] Palotie A, et al. **Lancet** 1989 Apr 29;1(8644):924-7. **Comment in:** Lancet 1989 Jun 17;1(8651):1396
Thoracic disc herniation and paraplegia in Stickler's syndrome. Harkey HL, et al. **Neurosurgery** 1989 Jun; 24(6):909-12
[Hip joint sonography in skeletal dysplasias with metaphyseal involvement. Possibilities of erroneous assessments] Schumacher R, et al. **ROFO** 1988 Oct;149(4):414-6 (Eng. Abstr.) (Ger)

HISTORY

Spondylolysis and its relationship to degenerative joint disease in the prehistoric southeastern United States. Bridges PS. **Am J Phys Anthropol** 1989 Jul;79(3):321-9

IMMUNOLOGY

Humoral immunity to link protein in patients with inflammatory joint disease, osteoarthritis, and in non-arthritic controls. Austin AK, et al. **Ann Rheum Dis** 1988 Nov;47(11):886-92
Absence of antibodies to native type I and type II collagen in a rabbit model of osteoarthritis [letter] Hartmann DJ, et al. **Arthritis Rheum** 1989 Jun;32(6):814-5
Immunophotometric quantification of extravascular immunoglobulin deposits in the synovial membrane of patients with osteoarthritis and rheumatoid arthritis. Fritz P, et al. **Basic Appl Histochem** 1988;32(4):455-69
Increased serum levels of soluble interleukin-2 receptor in patients with systemic lupus erythematosus and rheumatoid arthritis. Semenzato G, et al. **J Clin Immunol** 1988 Nov; 8(6):447-52
Neuropeptides in synovium of patients with rheumatoid arthritis and osteoarthritis. Grönblad M, et al. **J Rheumatol** 1988 Dec;15(12):1807-10
Serum antibodies against chondrocyte cell surface proteins in osteoarthritis and rheumatoid arthritis. Mollenhauer J, et al. **J Rheumatol** 1988 Dec;15(12):1811-7
Immune mechanisms in osteoarthritis. Jasin HE. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):86-90 (48 ref.)
Drug-induced anticentromere antibody? Haberhauer G, et al. **Z Rheumatol** 1989 Mar-Apr;48(2):99-100
Modulation of the migration and chemotaxis of PMN cells by hyaluronic acid. Partsch G, et al. **Z Rheumatol** 1989 May-Jun;48(3):123-8
[Detection of interleukin 1 activity in synovial fluid in rheumatoid arthritis and osteoarthritis] Witt M, et al. **Beitr Orthop Traumatol** 1988 Dec;35(12):612-6 (Eng. Abstr.) (Ger)
[Induction of chemiluminescence of human granulocytes by monocyte factors from patients with chronic polyarthritis and arthrosis] Meske S, et al. **Z Rheumatol** 1988 May-Jun; 47(3):146-50 (Eng. Abstr.) (Ger)

METABOLISM

Chondronectin in human synovial fluid. Carsons S, et al. **Ann Rheum Dis** 1988 Oct;47(10):797-800
Increased expression of p150,95 and CR3 leukocyte adhesion molecules by mononuclear phagocytes in rheumatoid synovial membranes. Comparison with osteoarthritic and normal synovial membranes. Allen CA, et al. **Arthritis Rheum** 1989 Aug;32(8):947-54
Urate-mediated inflammation in nodal osteoarthritis: clinical and roentgenographic correlations. Lally EV, et al. **Arthritis Rheum** 1989 Jan;32(1):86-90
Experimental osteoarthritic articular cartilage is enriched in guanidine soluble type VI collagen. McDevitt CA, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):250-5
Naproxen kinetics in synovial fluid of patients with osteoarthritis. Bruno R, et al. **Br J Clin Pharmacol** 1988 Jul;26(1):41-4
Effect of intra-articular glucocorticoids on the disposition of sulphadimidine in chronic osteoarthritis patients. Reeves PT, et al. **Br J Clin Pharmacol** 1988 Nov;26(5):563-8
Rheumatoid factor has increased reactivity with IgG from synovial fluids of patients with rheumatoid arthritis and osteoarthritis. Carter SD, et al. **Br J Rheumatol** 1989 Jun; 28(3):233-8
1H nuclear magnetic resonance investigation of synovial fluid components in osteoarthritis, rheumatoid arthritis and traumatic effusions. Williamson MP, et al. **Br J Rheumatol** 1989 Feb;28(1):23-7
Insulin metabolism and action on amino acid uptake in human synoviocytes. Modifications induced by rheumatoid disease. Aussel C, et al. **Cell Mol Biol** 1988;34(5):539-51

Lectin-binding histochemistry of normal and osteoarthritic cartilage tissue. Hoedt-Schmidt S. **Clin Exp Rheumatol** 1989 May-Jun;7(3):257-64

Metabolic characteristics of in vitro cultured human chondrocytes in relation to the histopathologic grade of osteoarthritis. Bulstra SK, et al. **Clin Orthop** 1989 May;(242):294-302

The primary link in the chain of events in osteoarthrosis is a biochemical failure of the cartilage [letter] Hulth A. **Clin Orthop** 1989 Feb;(239):311-2

Profile of etodolac: pharmacokinetic evaluation in special populations. Brater DC, et al. **Clin Rheumatol** 1989 Mar; 8 Suppl 1:25-35 (24 ref.)

A pharmacokinetic study of the active metabolite of nabumetone in young healthy subjects and older arthritis patients. Kendall MJ, et al. **Eur J Clin Pharmacol** 1989; 36(3):299-305

Immunohistochemical detection and immunochemical analysis of type II collagen degradation in human normal, rheumatoid, and osteoarthritic articular cartilages and in explants of bovine articular cartilage cultured with interleukin 1. Dodge GR, et al. **J Clin Invest** 1989 Feb; 83(2):647-61

Quantitation of component proteoglycans during long-term organ explant culture of human osteoarthritic hip cartilage. Shuckett R, et al. **J Lab Clin Med** 1989 Jan;113(1):23-33

Production of catabolin by synovium from an experimental model of osteoarthritis. Sabiston CP, et al. **J Orthop Res** 1989;7(4):519-29

Modulation of cartilage proteoglycan synthesis by osteoarthritic synovium. Appel AM, et al. **J Rheumatol** 1988 Oct;15(10):1515-24

In vitro effect of select nonsteroidal antiinflammatory drugs on the synthesis and activity of anabolic regulatory factors produced by osteoarthritic and rheumatoid synovial tissue. Herman JH, et al. **J Rheumatol** 1989 Jan;16(1):75-81

In vitro effects of tiaprofenic acid, sodium salicylate and hydrocortisone on the proteoglycan metabolism of human osteoarthritic cartilage. Pelletier JP, et al. **J Rheumatol** 1989 May;16(5):646-55

The biology of osteoarthritis. Hamerman D. **N Engl J Med** 1989 May 18;320(20):1322-30 (97 ref.)

Proteoglycans synthesized by chondrocytes of human nonarthritic and osteoarthritic cartilage. Shuckett R, et al. **Proc Soc Exp Biol Med** 1989 Mar;190(3):275-81

Interleukin-6 (IL-6) in synovial fluid and serum of patients with rheumatic diseases. Swaak AJ, et al. **Scand J Rheumatol** 1988;17(6):469-74

Changes in proteoglycans of human osteoarthritic cartilage maintained in explant culture: implications for understanding repair in osteoarthritis. Malemud CJ, et al. **Scand J Rheumatol Suppl** 1988;77:7-12

Intraosseous pressure and partial pressures of oxygen and carbon dioxide in osteoarthritis. Kiaer T, et al. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):57-60

Molecular basis for the action of tiaprofenic acid on human osteoarthritic cartilage degradation. Martel-Pelletier J, et al. **Semin Arthritis Rheum** 1989 Feb;18(3 Suppl 1):19-26

Integrated plasma and synovial fluid pharmacokinetics of tenoxicam in patients with rheumatoid arthritis and osteoarthritis: factors determining the synovial fluid/plasma distribution ratio. Hinderling PH, et al. **Ther Drug Monit** 1988;10(3):250-60

[Change in lipid peroxidation in patients with primary osteoarthrosis deformans] Rubyk BI, et al. **Ter Arkh** 1988; 60(9):110-3 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Correlation of macroscopic osteoarthrotic changes and radiographic findings in the acromioclavicular joint. Stenlund B, et al. **Acta Radiol** 1988 Sep-Oct;29(5):571-6

Lack of association between serum keratan sulfate concentrations and cartilage changes of osteoarthritis after transection of the anterior cruciate ligament in the dog. Brandt KD, et al. **Arthritis Rheum** 1989 May;32(5):647-51

Effects of salicylate on chondrocytes from osteoarthritic and contralateral knees of dogs with unilateral anterior cruciate ligament transection. Slowman-Kovacs SD, et al. **Arthritis Rheum** 1989 Apr;32(4):486-90

Recurrent calcific periarthritis leading to erosive osteoarthritis. Baguley E, et al. **Br J Rheumatol** 1988 Dec; 27(6):490-2

Ultrastructural investigation of experimental osteoarthritis. A transmission electron microscopic study. Chai BF, et al. **Chin Med J [Engl]** 1988 Sep;101(9):643-8

Surgical implications of varus deformity of the knee with obliquity of joint surfaces. Cooke TD, et al. **J Bone Joint Surg [Br]** 1989 Aug;71(4):560-5

Morphometric comparison of synovium from patients with osteoarthritis and rheumatoid arthritis. Kennedy TD, et al. **J Clin Pathol** 1988 Aug;41(8):847-52

Degenerative changes in the temporomandibular joint in two Australian aboriginal populations. Richards LC. **J Dent Res** 1988 Dec;67(12):1529-33

Relationship between femoral anteversion and osteoarthritis of the hip. Kitaoka HB, et al. **J Pediatr Orthop** 1989 Jul-Aug;9(4):396-404

The temporomandibular joint: a comparison of clinical and arthroscopic findings. Holmlund A, et al. **J Prosthet Dent** 1989 Jul;62(1):61-5

Cartilage hypertrophy following canine anterior cruciate ligament transection differs among different areas of the joint. Adams ME. **J Rheumatol** 1989 Jun;16(6):818-24

Characterization of synovial macrophages by monoclonal antibodies in rheumatoid arthritis and osteoarthritis. Helbig B, et al. **Scand J Rheumatol Suppl** 1988;76:61-6

Periosteal and vascular innervation of the human patella in degenerative joint disease. Badalamente MA, et al. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):61-6

[Biochemistry and enzymology of experimental post-traumatic arthrosis] Blanckaert A, et al. **Rev Rhum Mal Osteoartic** 1989 Feb;56(2):205-6 **(Fre)**

[Destructive arthropathy probably associated with hydroxyapatite deposits] Crouzet J, et al. **Rev Rhum Mal Osteoartic** 1989 Feb;56(2):133-5 **(Fre)**

[Determination of the macromolecules in the extracellular matrix or of their antibodies in biological fluids in joint disease] Hartmann DJ, et al. **Rev Rhum Mal Osteoartic** 1989 Feb;56(2):187-9 **(Fre)**

[Biochemical changes in the cartilage in experimental arthrosis] Vignon E, et al. **Rev Rhum Mal Osteoartic** 1989 Feb;56(2):201-3 **(Fre)**

[Specific changes in the proteoglycans and link proteins in cartilage in human osteoarthritis] Vilamitjana J, et al. **Rev Rhum Mal Osteoartic** 1989 Feb;56(2):181-5 **(Fre)**

[Arthrotomy--a prearthrotic factor?] Lukoschek M, et al. **Aktuel Traumatol** 1988 Aug;18(4):163-7 (Eng. Abstr.) **(Ger)**

[Rhizarthrosis and thenar muscles. A clinico-anatomic study] Schöneberger M, et al. **Handchir Mikrochir Plast Chir** 1989 Jul;21(4):182-8 (Eng. Abstr.) **(Ger)**

[Clinical value of histomorphologic studies of joint capsules] Laschner W, et al. **Z Rheumatol** 1988 Jul-Aug; 47(4):195-200 (Eng. Abstr.) **(Ger)**

[Detritus synovitis in chronic polyarthritis: a clinical and operation histologic evaluation] Menninger H, et al. **Z Rheumatol** 1989 Mar-Apr;48(2):89-94 (Eng. Abstr.) **(Ger)**

[Reflection of local inflammatory activity in rheumatic diseases in synovial imprint cytology] Schwenke R, et al. **Z Rheumatol** 1988 Sep-Oct;47(5):329-32 (Eng. Abstr.) **(Ger)**

[Effect of riboflavin (vitamin B2) on spontaneous gonarthrosis in the mouse] Wilhelmi G, et al. **Z Rheumatol** 1988 May-Jun;47(3):166-72 (Eng. Abstr.) **(Ger)**

[Structural aspects of degenerative disease of the temporomandibular articulation] Cardesi E, et al. **Minerva Stomatol** 1989 Mar;38(3):299-306 (21 ref.) (Eng. Abstr.) **(Ita)**

[Comparative morphological study of various models of arthrosis deformans] Pankov Ela, et al. **Ortop Travmatol Protez** 1988 Jun;(6):6-10 **(Rus)**

[Synovitis in osteoarthrosis (clinico-morphologic research)] Kop'eva TN, et al. **Revmatologiia (Moskva)** 1988 Oct-Dec; (4):47-52 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Effect of naproxen on renal haemodynamics in elderly patients with arthritis. Wallis PJ, et al. **Age Ageing** 1989 Jan;18(1):26-30

Neovascularisation and its role in the osteoarthritic process. Brown RA, et al. **Ann Rheum Dis** 1988 Nov;47(11):881-5 (55 ref.)

Effect of high tibial osteotomy on upper tibial venous drainage: study by intraosseous phlebography in primary osteoarthritis of knee joint. Dev A, et al. **Ann Rheum Dis** 1989 Mar;48(3):188-93

Comment on the article by Summers et al [letter] Steiman I. **Arthritis Rheum** 1988 Nov;31(11):1452

Can the distribution of symptomatic and radiographic osteoarthritis within the human body be explained? Hutton CW. **Br J Rheumatol** 1989 Apr;28(2):143

Degenerative arthritis of the knee secondary to fracture malunion [letter] Kristensen. KD. **Clin Orthop** 1989 Aug; (245):311-2

Dietary habits, weight history, and vitamin supplement use in elderly osteoarthritis patients. White-O'Connor B, et al. **J Am Diet Assoc** 1989 Mar;89(3):378-82

Osteoarthritis in the hand: a comparison of handedness and hand use. Lane NE, et al. **J Rheumatol** 1989 May; 16(5):637-42

Intraosseous hypertension in osteoarthritis of the hip and ischemic necrosis of the femoral head. Ho WP, et al. **Orthop Rev** 1988 Feb;17(2):202-5

Para-articular connective tissue in osteoarthritis. Akeson WH, et al. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):41-50 (63 ref.)

Pain in osteoarthritis. Introduction and overview. Altman RD, et al. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):1-3

Pain assessment in osteoarthritis: experience with the WOMAC osteoarthritis index. Bellamy N. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):14-7

Factors associated with pain and osteoarthritis in the Tecumseh Community Health Study. Carman WJ. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):10-3

Future directions in therapy of pain in osteoarthritis. Ehrlich GE. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):100-4 (22 ref.)

Epidemiologic associations of pain in osteoarthritis of the knee: data from the National Health and Nutrition Examination Survey and the National Health and Nutrition Examination-I Epidemiologic Follow-up Survey. Hochberg MC, et al. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):4-9

Pain fibers in osteoarthritis: a review. Konttinen YT, et al. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):35-40 (26 ref.)

Soft tissue mechanisms of pain in osteoarthritis. Merritt JL. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):51-6 (43 ref.)

Sleep influences on regional and diffuse pain syndromes associated with osteoarthritis. Moldofsky H. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):18-21 (33 ref.)

Osteoarthritis and pain. Schaible HG, et al. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):30-4 (7 ref.)

The role of inflammation and crystals in the pain of osteoarthritis. Schumacher R Jr. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):81-5 (39 ref.)

Pain mechanisms and mediators in osteoarthritis. Zimmermann M. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):22-9 (34 ref.)

[40 years' development of a case of pseudo-achondroplasia. Role of mechanical and cellular factors in joint destructions] Nores JM, et al. **Presse Med** 1988 Dec 3; 17(43):2283-6 (Eng. Abstr.) **(Fre)**

[Gonarthrosis and obesity] Massé JP, et al. **Rev Rhum Mal Osteoartic** 1988 Dec;55(12):973-8 (Eng. Abstr.) **(Fre)**

[Physiopathology of arthrosis] Veys EM, et al. **Rev Rhum Mal Osteoartic** 1989 May;56(6):471-7 (30 ref.) **(Fre)**

[Modeling of dose-response relations in exposure-related changes of the locomotor system] Enderlein G, et al. **Z Gesamte Hyg** 1989 Apr;35(4):215-8 (Eng. Abstr.) **(Ger)**

[Analysis of variables of Melzack's semantic questionnaire in patients with osteoarthrosis] Nolli M, et al. **Minerva Anestesiol** 1988 May;54(5):215-22 (Eng. Abstr.) **(Ita)**

[Force plate analysis of ascending and descending stairs] Kikuchi T. **Nippon Seikeigeka Gakkai Zasshi** 1988 May; 62(5):485-94 (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

[A program of prevention of dysplastic arthrosis (general principles)] Simenach BI, et al. **Ortop Travmatol Protez** 1989 Feb;(2):1-6 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

Relation of perceived health with psychosocial variables in elderly osteoarthritis patients. De Forge BR, et al. **Psychol Rep** 1989 Feb;64(1):147-56

RADIOGRAPHY

Lesion of the anterior cruciate ligament and sagittal disalignment of the knee in weight-bearing. Egund N, et al. **Acta Radiol** 1988 Sep-Oct;29(5):559-63

Reproducibility of the pettersson scoring system. An interobserver study. Erlemann R, et al. **Acta Radiol** 1989 Mar-Apr;30(2):147-51

Examination of subchondral bone architecture in experimental osteoarthritis by microscopic computed axial tomography. Layton MW, et al. **Arthritis Rheum** 1988 Nov; 31(11):1400-5

Clinical applications of high-definition microfocal radiography. Buckland-Wright JC, et al. **Br J Radiol** 1989 Mar;62(735):209-17

Why is there such a poor correlation between radiographic joint damage and both symptoms and functional impairment in osteoarthritis? Dieppe PA. **Br J Rheumatol** 1989 Jun;28(3):242

Common arthritic manifestations. Wallace R, et al. **Del Med J** 1988 Nov;60(11):669-71

A radiological scoring scale for evaluation of post-traumatic osteoarthritis after knee ligament injuries. Kannus P, et al. **Int Orthop** 1988;12(4):291-7

The effects of temporomandibular joint internal derangement and degenerative joint disease on tomographic and arthrotomographic images. Brand JW, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):220-3

Unusual cause of knee pain in the older adult. Henry JH. **Orthop Rev** 1989 Feb;18(2):221-8 (12 ref.)

The other arthritides. Roentgenologic features of osteoarthritis, erosive osteoarthritis, ankylosing spondylitis, psoriatic arthritis, Reiter's disease, multicentric reticulohistiocytosis, and progressive systemic sclerosis. Gold RH, et al. **Radiol Clin North Am** 1988 Nov; 26(6):1195-212 (29 ref.)

Idiopathic destructive arthritis of the shoulder. Campion GV, et al. **Semin Arthritis Rheum** 1988 May;17(4):232-45 (46 ref.)

[Isolated arthritis of the sternal manubrium and palmo-plantar pustular psoriasis] Larbre JP, et al. **Rev Rhum Mal Osteoartic** 1988 Dec;55(12):999-1000 **(Fre)**

[Indications for computerized tomography of the wrist joint and carpal bones] Frahm R, et al. **Handchir Mikrochir Plast Chir** 1989 Jul;21(4):189-94 (Eng. Abstr.) **(Ger)**

[The significance of the center-edge angle in the prognosis of the dislocated hip 50 years after its initial description by Wiberg] Engelhardt P. **Orthopade** 1988 Nov;17(6):463-7

(Eng. Abstr.) (Ger)
[Long-term roentgenologic studies in peak performance javelin throwers] Neusel E, et al. **Sportverletz Sportschaden** 1987 Jun;1(2):76–80 (Eng. Abstr.) (Ger)
[The scaphoid–trapezium–trapezoid arthrosis. A clinical study 1982–1985] Wilhelm K, et al. **Unfallchirurg** 1989 Feb; 92(2):59–63 (Eng. Abstr.) (Ger)
[Unilateral finger polyarthrosis as a late sequel of frostbite] Rompe G. **Z Orthop** 1988 May–Jun;126(3):358–60 (24 ref.) (Eng. Abstr.) (Ger)
[Rheumatologic findings in patients with major and intermediate beta-thalassemia] Arman MI, et al. **Z Rheumatol** 1989 Mar–Apr;48(2):68–72 (Eng. Abstr.) (Ger)
[Clinical and x-ray manifestations and differential diagnosis of tuberculous diseases of the joints] Bellendir EN, et al. **Revmatologiia (Moskva)** 1988 Jul–Sep;(3):64–70 (31 ref.) (Rus)
[Roentgenography with direct manifold magnification in primary osteoarthrosis deformans] Tarasov AN, et al. **Sov Med** 1989;(1):96–8 (Rus)

RADIOTHERAPY

[The radiotherapeutic treatment of chronically relapsing, degenerative skeletal changes at the Oncology Clinic (Charité)] Gärtner C, et al. **Radiobiol Radiother (Berl)** 1988; 29(6):689–98 (Eng. Abstr.) (Ger)
[Clinical effectiveness of laser and magnetic-laser therapy of osteoarthrosis deformans] Illarionov VE, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 May–Jun; (3):43–6 (Eng. Abstr.) (Rus)

REHABILITATION

Biofeedback gait training system for temporal and distance factors. Hirokawa S, et al. **Med Biol Eng Comput** 1989 Jan; 27(1):8–13
[Comparison of the effectiveness of acupuncture and physical therapy in ambulatory patients with gonarthrosis] Ammer K, et al. **Wien Med Wochenschr** 1988 Nov 30;138(22):566–9 (Eng. Abstr.) (Ger)
[Evaluation of the effectiveness of the rehabilitation treatment of patients with pathology of the locomotor system] Nechushkin AI, et al. **Sov Med** 1988;(5):115–8 (Rus)

SURGERY

The PCA unicompartmental knee. A 1–4-year comparison of fixation with or without cement. Lindstrand A, et al. **Acta Orthop Scand** 1988 Dec;59(6):695–700
Proposed digital arthroplasty critical study of the preliminary results. Condamine JL, et al. **Ann Chir Main** 1988; 7(4):282–97 (Eng, Fre)
The Ring total knee replacement. Reissis N, et al. **Arch Orthop Trauma Surg** 1988;107(5):309–15
Arthroscopic lateral release for patellar pain or instability. Aglietti P, et al. **Arthroscopy** 1989;5(3):176–83
Outcome from multiple joint replacement surgery to the lower limbs. Walker DJ, et al. **Br J Rheumatol** 1989 Apr; 28(2):139–42
Should the patella be resurfaced in total knee arthroplasty? Efficacy of patellar resurfacing. Abraham W, et al. **Clin Orthop** 1988 Nov;(236):128–34
Further observations on metal-backed patellar component failure. Bayley JC, et al. **Clin Orthop** 1988 Nov;(236):82–7
Unicompartmental porous coated anatomic total knee arthroplasty. Bernasek TL, et al. **Clin Orthop** 1988 Nov; (236):52–9
The effect of postoperative collateral ligament laxity in total knee arthroplasty. Edwards E, et al. **Clin Orthop** 1988 Nov; (236):44–51
Total shoulder arthroplasty. Hawkins RJ, et al. **Clin Orthop** 1989 May;(242):188–94
The study of Maquet dome high tibial osteotomy. Arthroscopic-assisted analysis. Hsu RW. **Clin Orthop** 1989 Jun;(243):280–5
Evaluation of patients for high tibial osteotomy. Keene JS, et al. **Clin Orthop** 1989 Jun;(243):157–65
Total condylar knee arthroplasty in osteoarthritis. A four- to six-year follow-up evaluation of 103 cases. Kjaersgaard-Andersen P, et al. **Clin Orthop** 1989 Jan; (238):167–73
High tibial osteotomy compared with high tibial and Maquet procedures in medial and patellofemoral compartment osteoarthritis. Nguyen C, et al. **Clin Orthop** 1989 Aug; (245):179–87
The Sheehan total knee arthroplasty. A retrospective review. Porter M, et al. **Clin Orthop** 1988 Nov;(236):227–32
Long-term results of total hip arthroplasty for osteonecrosis of the femoral head. A comparison with osteoarthritis. Saito S, et al. **Clin Orthop** 1989 Jul;(244):198–207
Early changes in gait and maximum knee torque following knee arthroplasty. Steiner ME, et al. **Clin Orthop** 1989 Jan; (238):174–82
Surgical management of hallux limitus and rigidus in the young patient. DeLauro TM, et al. **Clin Podiatr Med Surg** 1989 Jan;6(1):83–92 (29 ref.)
Motor evoked responses recorded epidurally in a patient with Guillain–Barré syndrome. Zentner J, et al. **Eur Arch Psychiatry Neurol Sci** 1988;238(1):31–2
Ankle fusion: a new technique of internal fixation using a compression blade plate. Sowa DT, et al. **Foot Ankle** 1989 Apr;9(5):232–40
The cruciate ligaments in knee replacement. Hagena FW, et al. **Int Orthop** 1989;13(1):13–6
Total P.C.A. knee arthroprosthesis. Fontanesi G, et al. **Ital J Orthop Traumatol** 1988 Mar;14(1):41–8
High tibial osteotomy in the treatment of arthritic varus knee. A medium term (small) review of 61 cases. Rinonapoli E, et al. **Ital J Orthop Traumatol** 1988 Sep;14(3):283–92
Arthroplasty for the stiff or ankylosed knee. Aglietti P, et al. **J Arthroplasty** 1989;4(1):1–5
A 5–9-year follow-up study of the Sheehan total knee arthroplasty. Jakim I, et al. **J Arthroplasty** 1988;3 Suppl:S21–30
Proximal Tibial Osteotomy in Patients Who Are Fifty Years Old or Less. A Long-term Follow-Up Study [letter] **J Bone Joint Surg [Am]** 1989 Jul;71(6):951–2
Miyakawa patellectomy. Baker CL, et al. **J Bone Joint Surg [Am]** 1988 Dec;70(10):1489–94
Extension of monostotic Paget disease from the femur to the tibia after arthrodesis of the knee. A case report. O'Driscoll SW, et al. **J Bone Joint Surg [Am]** 1989 Jan; 71(1):129–32
Isolated talocalcaneal arthrodesis. A technique using moldable bone graft. Russotti GM, et al. **J Bone Joint Surg [Am]** 1988 Dec;70(10):1472–8
Tibiotalocalcaneal arthrodesis for arthritis and deformity of the hind part of the foot. Russotti GM, et al. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1304–7
Observations on patellar height after proximal tibial osteotomy. Scuderi GR, et al. **J Bone Joint Surg [Am]** 1989 Feb;71(2):245–8
The Oxford Knee for unicompartmental osteoarthritis. The first 103 cases. Goodfellow JW, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):692–701
Upper tibial osteotomy for secondary osteoarthritis of the knee. Morrey BF. **J Bone Joint Surg [Br]** 1989 Aug; 71(4):554–9
Total knee arthroplasty in the patient with Parkinson's disease. Vince KG, et al. **J Bone Joint Surg [Br]** 1989 Jan; 71(1):51–4
A follow-up study of an uncemented knee replacement. The results of 312 knees using the Kodama-Yamamoto prosthesis. Yamamoto S, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):505–8
Extensor carpi ulnaris and flexor carpi ulnaris tenodesis of the unstable distal ulna. Breen TF, et al. **J Hand Surg [Am]** 1989 Jul;14(4):612–7
Treatment of periscaphoid osteoarthritis by Silastic scaphoid implant. Clark DW, et al. **J R Soc Med** 1989 Aug; 82(8):464–5
Renal transplantation for dialysis arthropathy [letter] Campistol JM, et al. **Lancet** 1988 Oct 15;2(8616):900
High tibial osteotomy with fixation by a blade plate for medial compartment osteoarthritis of the knee. Koshino T, et al. **Orthop Clin North Am** 1989 Apr;20(2):227–43
Arthroscopic debridement of the knee joint. Schonholtz GJ. **Orthop Clin North Am** 1989 Apr;20(2):257–63 (18 ref.)
Total knee replacement in Paget's disease. Cameron HU. **Orthop Rev** 1989 Feb;18(2):206–8
A comparison of unicompartmental knee replacement with total knee replacement. Cameron HU, et al. **Orthop Rev** 1988 Oct;17(10):983–8
Proximal tibial osteotomy. Coventry MB. **Orthop Rev** 1988 May;17(5):456–8
Total elbow replacement. Leber C, et al. **Orthop Rev** 1988 Sep;17(9):857–63
Reliability and validity of the evaluation of pain in patients with total knee replacement. Boeckstyns ME, et al. **Pain** 1989 Jul;38(1):29–33
Correlation of patient's age, grade of arthrosis and degree of angle deformity correction to clinical results in high tibial osteotomy for gonarthrosis. Jokio PJ, et al. **Rev Chir Orthop** 1988;74 Suppl 2:327–8
Orthopedic surgery and degenerative arthritis. **Rheum Dis Clin North Am** 1988 Dec;14(3):497–618
Surgical treatment of osteoarthritis of the shoulder. Boyd AD Jr, et al. **Rheum Dis Clin North Am** 1988 Dec; 14(3):591–611 (78 ref.)
Long-term follow-up of cemented total hip replacement for osteoarthritis. Brick GW, et al. **Rheum Dis Clin North Am** 1988 Dec;14(3):565–77
Revision total knee arthroplasty in patients with osteoarthritis. Friedman RJ, et al. **Rheum Dis Clin North Am** 1988 Dec;14(3):537–44 (23 ref.)
Surgical treatment of unicompartmental degenerative arthritis of the knee. Kozinn SC, et al. **Rheum Dis Clin North Am** 1988 Dec;14(3):545–64 (66 ref.)
Knee surgery and the Indian knee. The importance of the preservation of flexion. Villar RN, et al. **Trop Doct** 1989 Jan;19(1):21–4
[Knee joint replacement with the Motorlet endoprosthesis in patients with rheumatoid arthritis and osteoarthritis] Rybka V, et al. **Sb Lek** 1989 May;91(5):137–45 (Eng. Abstr.) (Cze)
[Marmor's method of hemi-arthroplasty of the knee in arthritic genu varum or genu valgum] Idema WL, et al. **Ned Tijdschr Geneeskd** 1989 Apr 8;133(14):728–31 (Eng. Abstr.) (Dut)
[Results of cement-free knee prosthesis—Porous Coated Anatomic] Fernandez-Fairen M, et al. **Acta Orthop Belg** 1988;54(3):320–5 (Eng. Abstr.) (Fre)
[Total knee arthroplasty using the Insall–Burstein prosthesis. Study with a minimum of 2 years follow-up] Mullier J, et al. **Acta Orthop Belg** 1988;54(3):314–9 (Eng. Abstr.) (Fre)
[Study of a continuous series of knee arthroplasties using the Sheehan prosthesis] Velghe A, et al. **Acta Orthop Belg** 1988;54(3):302–8 (Eng. Abstr.) (Fre)
[Arthroplasty using a Swanson implant for traumatic arthropathy of the fingers] de Reynier JC, et al. **Helv Chir Acta** 1988 Jul;55(3):337–46 (Eng. Abstr.) (Fre)
[Unicompartmental "Lotus" knee prosthesis. Analysis of the results of a series of 142 cases (of which 56 had a follow-up of more than 5 years)] Aubriot JH, et al. **Rev Chir Orthop** 1988;74 Suppl 2:180–3 (Fre)
[Treatment of lax arthrotic genu valgum using Debeyre's unicondylar osteotomy. A radioclinical study of 55 knees operated on more than 5 years ago] Goutallier D, et al. **Rev Chir Orthop** 1988;74(8):753–63 (Eng. Abstr.) (Fre)
[Trapezectomy in the treatment of peritrapezial arthritis] Le Viet D, et al. **Rev Chir Orthop** 1988;74 Suppl 2:158–61 (Fre)
[Results between 5 and 10 years of Chiari pelvic osteotomy in advanced hip arthrosis] Sterkers Y, et al. **Rev Chir Orthop** 1989;75(1):26–33 (Eng. Abstr.) (Fre)
[Follow-up studies of surgically treated patients with patellar chondropathy and retropatellar arthrosis] Herrmann G, et al. **Beitr Orthop Traumatol** 1988 Sep;35(9):458–61 (Eng. Abstr.) (Ger)
[Arthroscopic therapy of chondropathy and gonarthrosis] Kopka F, et al. **Beitr Orthop Traumatol** 1989 Jan–Feb; 36(1–2):32–5 (Ger)
[Coxarthrosis caused by idiopathic femur head necrosis—diagnosis and surgical results] Linke R. **Beitr Orthop Traumatol** 1988 Aug;35(8):392–8 (Eng. Abstr.) (Ger)
[Results following high tibial head osteotomy in varus and valgus gonarthroses] Mayer G, et al. **Beitr Orthop Traumatol** 1988 Sep;35(9):443–9 (Eng. Abstr.) (Ger)
[Loeffler's capsulotomy in advanced varus gonarthrosis] Reichel F, et al. **Beitr Orthop Traumatol** 1988 Sep; 35(9):453–7 (Eng. Abstr.) (Ger)
[Loss of correction in valgus osteotomy of the tibial head] Witt M. **Beitr Orthop Traumatol** 1988 Sep;35(9):449–53 (Eng. Abstr.) (Ger)
[Long-term comparison of the "St. Georg" knee endoprosthesis system. 10-year survival rates of 2,236 gliding and hinge endoprosthesis] Heinert K, et al. **Chirurg** 1988 Nov;59(11):755–62 (Eng. Abstr.) (Ger)
[A rare cause of spontaneous rupture of the tendon of the extensor pollicis longus muscle] Ahmadi A. **Handchir Mikrochir Plast Chir** 1988 Jul;20(4):223–4 (Eng. Abstr.) (Ger)
[Long-term results of endoprosthetic replacement of the scaphoid bone of the wrist joint] Förster W, et al. **Handchir Mikrochir Plast Chir** 1988 Nov;20(6):306–13 (Eng. Abstr.) (Ger)
[Intermediate term results of treatment with the Francobal endoprosthesis in osteoarthritis] Helbig B, et al. **Handchir Mikrochir Plast Chir** 1988 Nov;20(6):301–5 (Eng. Abstr.) (Ger)
[Pisotriquetral osteoarthritis] Verhestraeten B, et al. **Handchir Mikrochir Plast Chir** 1988 Jul;20(4):208–10 (Eng. Abstr.) (Ger)
[Hip endoprostheses in Paget's disease] Engelhardt P, et al. **Orthopade** 1988 Sep;17(5):404–6 (Eng. Abstr.) (Ger)
[From the sports medicine practice: experiences with lateral clavicular resection] Jägemann V. **Sportverletz Sportschaden** 1989 Jun;3(2):92–4 (Eng. Abstr.) (Ger)
[Experiences with the self-supporting type SCL hip screw prosthesis] Bär G. **Unfallchirurgie** 1988 Dec;14(6):324–8 (Eng. Abstr.) (Ger)
[Structure and function of the "neosynovial membrane." Light and transmission electron microscopy studies of regenerated synovial membranes following surgical synovectomy] Rohe K, et al. **Unfallchirurgie** 1989 Feb; 15(1):1–8 (Eng. Abstr.) (Ger)
[Indications for hip joint replacement. Early and late results] Faensen M, et al. **Z Gesamte Inn Med** 1988 Jul 1; 43(13):344–7 (Eng. Abstr.) (Ger)
[Is the implantation of hinged knee joint prostheses still justifiable today? 15 years' experience using the Blauth knee joint prosthesis] Hassenpflug J, et al. **Z Orthop** 1988 Jul–Aug;126(4):398–407 (Eng. Abstr.) (Ger)
[Experimental results of cartilage abrasion with an excimer laser. Histologic and electron microscopy studies] Hohlbach G, et al. **Z Orthop** 1989 Mar–Apr;127(2):216–21 (Eng. Abstr.) (Ger)
[The femoropatellar pain syndrome. Conservative and surgical therapy in a long-term comparison (10–20 years) and their therapeutic consequences] Imhoff A, et al. **Z Orthop** 1989 Mar–Apr;127(2):139–51 (Eng. Abstr.) (Ger)
[Is high-density polyethylene suitable as an implant material in cement-free anchoring of hip endoprostheses? A histomorphologic study of an explanted polyethylene screw-in acetabula] Lintner F, et al. **Z Orthop** 1988 Dec; 126(6):688–92 (Eng. Abstr.) (Ger)
[Replacement of the hip joint in young patients under 40 years of age. Clinico-statistical report of experiences] Mittelmeier H, et al. **Z Orthop** 1988 May–Jun;126(3):304–13

(Eng. Abstr.) (Ger)
[Addition osteotomy of the head of the tibia with joint repair. Indications—technic—results] Müller RT, et al. **Z Orthop** 1989 May–Jun;127(3):308–14 (Eng. Abstr.) (Ger)
[Indications and results of knee endoprostheses without an axis] Puhl W, et al. **Z Orthop** 1988 May–Jun;126(3):361–8 (Eng. Abstr.) (Ger)
[The ochronosis disease picture and conservative and operative therapy. Presented in relation to a case report] Skuginna A, et al. **Z Orthop** 1988 Dec;126(6):643–6 (Eng. Abstr.) (Ger)
[5- to 10-year results of an acetabulum with ceramic pegs for cement-free bone implantation. Material and analysis of design] Wanivenhaus A, et al. **Z Orthop** 1988 Sep–Oct; 126(5):508–12 (Eng. Abstr.) (Ger)
[Clinical results using the PM type of hip endoprosthesis] Wolf T, et al. **Z Orthop** 1988 Dec;126(6):637–42 (Eng. Abstr.) (Ger)
[Evaluation of the results of surgical treatment of degenerative changes in the knee joint] Kubacki J, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(5):373–7 (Eng. Abstr.) (Pol)
[Surgical treatment of gonarthrosis deformans in middle-aged and elderly patients] Kuz'menko VV, et al. **Revmatologiia (Moskva)** 1989 Jan–Mar;(1):18–22 (Eng. Abstr.) (Rus)

THERAPY

Double-blind trial on the effectiveness of the Puspokladany thermal water on arthrosis of the knee-joints. Szucs L, et al. **J R Soc Health** 1989 Feb;109(1):7–9
Future therapeutic trends in osteoarthritis. Altman RD, et al. **Scand J Rheumatol Suppl** 1988;77:37–42 (32 ref.)
Pharmacologic and non-drug therapies for osteoarthritis. Huskisson EC. **Scand J Rheumatol Suppl** 1988;77:34–6
[Joint washing—a treatment possibility in active arthritis] Jungmichel D, et al. **Beitr Orthop Traumatol** 1988 Oct; 35(10):512–7 (Eng. Abstr.) (Ger)
[A semirigid corset in the treatment of lumbar disc arthrosis. Physiopathology, indications, limitations and counterindications. A clinical contribution] Lanciani P, et al. **Clin Ter** 1987 Nov 15;123(3):191–5 (Eng. Abstr.) (Ita)
[Experience with the use of reflexotherapy in arthrology] Osipova NN, et al. **Revmatologiia (Moskva)** 1988 Apr–Jun; (2):68–71 (Rus)
[Analgesic effect of physiotherapy in osteoarthritis] Shvartsova I, et al. **Revmatologiia (Moskva)** 1988 Jul–Sep; (3):76–7 (Rus)
[Effect of naphthalane baths on the cardiovascular system in patients with osteoarthrosis deformans associated with ischemic heart disease] Gulieva SA, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 May–Jun; (3):41–3 (Rus)
[Sulfide ooze mud and sodium chloride baths in treating osteoarthrosis patients] Novikova NV. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Mar–Apr; (2):35–7 (Eng. Abstr.) (Rus)
[Manual therapy and acupuncture in the treatment of neuro-dystrophic syndromes in cervical osteochondrosis] Goidenko VS, et al. **Zh Nevropatol Psikhiatr** 1989; 89(4):45–8 (Eng. Abstr.) (Rus)

URINE

Urinary hydroxy-pyridinium crosslinks provide indices of cartilage and bone involvement in arthritic diseases. Seibel MJ, et al. **J Rheumatol** 1989 Jul;16(7):964–70
[Hyaluronic acid and N-terminal procollagen-III-peptide in the urine in inflammatory and degenerative joint diseases] Respondek M, et al. **Z Rheumatol** 1989 May–Jun; 48(3):117–22 (Eng. Abstr.) (Ger)

VETERINARY

Evaluation of immune complexes and collagen type-specific antibodies in sera and synovial fluids of horses with secondary osteoarthritis. Niebauer GW, et al. **Am J Vet Res** 1988 Aug;49(8):1223–7
Micronema deletrix-induced granulomatous osteoarthritis in a lame horse. Simpson RM, et al. **J Comp Pathol** 1988 Oct; 99(3):347–51
Osteoarthrosis in guinea pigs: histopathologic and scanning electron microscopic features. Bendele AM, et al. **Lab Anim Sci** 1989 Mar;39(2):115–21
Rhesus macaques as an experimental model for degenerative arthritis. Pritzker KP, et al. **P R Health Sci J** 1989 Apr; 8(1):99–102
Idiopathic septic gonitis in five Holstein-Friesian heifers. Ndikuwera J, et al. **Vet Rec** 1989 Mar 11;124(10):245–7

OSTEOARTHRITIS, HIP

BLOOD

Canine serum keratan sulfate and hyaluronate concentrations. Relationship to age and osteoarthritis. Leipold HR, et al. **Arthritis Rheum** 1989 Mar;32(3):312–21

COMPLICATIONS

[Coxitis in ankylosing spondylo-arthritis. Results of treatment with total arthroplasty. Apropos of 162 cases] Mehdi M, et al. **Int Orthop** 1989;13(2):137–41 (Eng. Abstr.) (Fre)
[Conservative treatment of suppurative hematogenic arthritis of the hip joint] Boda A, et al. **Magy Traumatol Orthop Helyreallito Sebesz** 1989; 32(1):35–50 (Eng. Abstr.) (Hun)
[Various aspects of joint contractures in coxarthrosis] Himmelfarb AL. **Chir Narzadow Ruchu Ortop Pol** 1988; 53(4):274–80 (Eng. Abstr.) (Pol)

DIAGNOSIS

Degenerative cartilage lesions of the hip—magnetic resonance evaluation. Bongartz G, et al. **Magn Reson Imaging** 1989 Mar–Apr;7(2):179–86

DRUG THERAPY

Effect of non-steroidal anti-inflammatory drugs on the course of osteoarthritis. Rashad S, et al. **Lancet** 1989 Sep 2;2(8662):519–22

EPIDEMIOLOGY

Low incidence of osteoarthrosis of the hips in contrast with osteoarthrosis of the knees among rural Saudis: why? [letter] Agunwa WC. **Ann Rheum Dis** 1989 Apr;48(4):351–2
Epidemiology of hip and knee osteoarthritis. Felson DT. **Epidemiol Rev** 1988;10:1–28 (183 ref.)
[Professional dancing and coxarthrosis] Revel M, et al. **Rev Rhum Mal Osteoartic** 1989 Mar 15;56(4):321–3 (Fre)

ETIOLOGY

Is excessive running predictive of degenerative hip disease? Controlled study of former elite athletes. Marti B, et al. **BMJ** 1989 Jul 8;299(6691):91–3
Rapidly progressive hip osteoarthrosis—an unusual presentation of ochronosis. Cunningham TJ, et al. **Clin Exp Rheumatol** 1989 May–Jun;7(3):315–8 (10 ref.)
The aetiology of degenerative disease of the hip. A review of 400 cases. O'Brien TM, et al. **Ir J Med Sci** 1989 Mar; 158(3):63–6 (15 ref.)
Anteversion of the femur and idiopathic osteoarthrosis of the hip. Wedge JH, et al. **J Bone Joint Surg [Am]** 1989 Aug;71(7):1040–3
Medial femoral torsion and osteoarthritis. Hubbard DD, et al. **J Pediatr Orthop** 1988 Sep–Oct;8(5):540–2 (17 ref.)
[Etiologic factors of rapid destructive coxarthrosis] Lequesne M. **Presse Med** 1989 Jun 24;18(25):1231–3 (Fre)
[Rapid idiopathic destructive coxarthrosis. Prospective etiologic study of 27 cases] Lequesne M, et al. **Rev Rhum Mal Osteoartic** 1989 Feb;56(2):115–9 (Fre)

IMMUNOLOGY

[Study of antinuclear and anti-histone antibodies in chronic juvenile arthritis] Job-Deslandre C, et al. **Rev Rhum Mal Osteoartic** 1989 Jan;56(1):31–3 (Fre)

METABOLISM

Qualitative changes in human osteoarthritic hip cartilage proteoglycan synthesis during long-term explant culture. Shuckett R, et al. **Mech Ageing Dev** 1988 Dec;46(1–3):33–45
S-100 protein in normal, osteoarthrotic, and arthritic cartilage. Mohr W, et al. **Rheumatol Int** 1985;5(6):273–7
[Comparative studies on cadmium, chromium, nickel and lead accumulation in coxarthrosis and idiopathic femur head necrosis] Milachowski KA, et al. **Z Orthop** 1988 Jul–Aug; 126(4):408–12 (Eng. Abstr.) (Ger)

PATHOLOGY

Osteoarthritis of the hip and Heberden's nodes. McGoldrick F, et al. **Ann Rheum Dis** 1989 Jan;48(1):53–5
Heberden's nodes and osteoarthrosis of the hip [letter] Yazici H. **Ann Rheum Dis** 1989 Jul;48(7):614
Osteoarthritis and bone: osteologic types of osteoarthritis of the hip. Oettmeier R, et al. **Skeletal Radiol** 1989; 18(3):165–74

PHYSIOPATHOLOGY

Biomechanical characteristics of iliac crest bone in elderly women according to osteoarthritis grade at the hand joints. Gevers G, et al. **J Rheumatol** 1989 May;16(5):660–3
Statistical analysis of osteoarthritic gait. Khodadadeh S. **Med Biol Eng Comput** 1988 Jan;26(1):92–5

PSYCHOLOGY

Self-assessed disability in patients with arthrosis of the hip joint. Reliability of the Swedish version of the Nottingham Health Profile. Wiklund I, et al. **Int Disabil Stud** 1988; 10(4):159–63

RADIOGRAPHY

Primary osteoarthritis of the hip joint in Japan. Nakamura S, et al. **Clin Orthop** 1989 Apr;(241):190–6
A new method of estimation of interobserver variation and its application to the radiological assessment of osteoarthrosis in hip joints [letter] Silcocks P. **Stat Med** 1989 Jun;8(6):765–7
[2 case reports of atrophic polychondritis with destructive arthropathy] Le Goff P, et al. **Rev Rhum Mal Osteoartic** 1988 Dec;55(12):1011–3 (Fre)
[A retrospective analysis of x-ray changes of the hip joint] Luzsa G, et al. **Radiol Diagn (Berl)** 1989;30(1):47–52 (Eng. Abstr.) (Ger)

RADIONUCLIDE IMAGING

[Bone dynamic study—evaluation for factor analysis of hip joint] Nakajima K, et al. **Kaku Igaku** 1989 Feb;26(2):221–9 (Eng. Abstr.) (Jpn)
[Accumulation velocity of 99mTc-HMDP in hip joint diseases] Torizumi K, et al. **Radioisotopes** 1988 Jul; 37(7):398–401 (Eng. Abstr.) (Jpn)

SURGERY

Intertrochanteric osteotomy for the treatment of coxarthrosis. Hackenbroch MH. **Arch Orthop Trauma Surg** 1989; 108(3):125–31 (35 ref.)
Active metabolites of vitamin D in patients with coxarthrosis and with aseptic loosening of total hip endoprostheses. Tauber C, et al. **Arch Orthop Trauma Surg** 1989; 108(3):176–8
Electrical stimulation of human femoral intertrochanteric osteotomies. Double-blind study. Borsalino G, et al. **Clin Orthop** 1988 Dec;(237):256–63
Inhibition of complement activation by high-dose corticosteroids in total hip arthroplasty. Gammer W, et al. **Clin Orthop** 1988 Nov;(236):205–9
Endosteal bone loss after total hip arthroplasty. Hofmann AA, et al. **Clin Orthop** 1989 Aug;(245):138–44
Periarticular heterotopic ossification after total hip arthroplasty for primary coxarthrosis. Sodemann B, et al. **Clin Orthop** 1988 Dec;(237):150–7
Long term results of arthrodesis for severe osteoarthritis of the hip in young adults. Sofue M, et al. **Int Orthop** 1989; 13(2):129–33
Pneumococcal infection of a prosthetic hip joint. Wollner A, et al. **Int Orthop** 1989;13(2):135–6
Hip arthroplasty after biplanar femoral osteotomy. DeCoster TA, et al. **J Arthroplasty** 1989;4(1):79–86
The Hastings hip in osteoarthritis. A study of 47 cases with a 5-year follow-up period. Wetherell RG, et al. **J Arthroplasty** 1989;4(2):143–9
Total hip replacement after medial-displacement osteotomy of the proximal part of the femur. Søballe K, et al. **J Bone Joint Surg [Am]** 1989 Jun;71(5):692–7
Cementless hip replacement for arthritis. Problems with a smooth surface Moore stem. Phillips TW, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):750–5
Gait efficiency after total hip replacement. Broström LA, et al. **Rev Chir Orthop** 1988;74 Suppl 2:271–2
[Use of the cementless RM cup in total prosthesis arthroplasty of inflammatory coxitis] Longree P, et al. **Acta Orthop Belg** 1988;54(2):142–7 (Eng. Abstr.) (Fre)
[Rate of reoperation following total hip arthroplasty in arthrosis. Analysis of the survival of the prostheses] Johnsson R. **Rev Chir Orthop** 1988;74 Suppl 2:275–6 (Fre)
[Triple osteotomies of the pelvis in children] Monod A, et al. **Rev Chir Orthop** 1988;74 Suppl 2:111–2 (Fre)
[Spondyloepiphyseal dysplasia tarda: bilateral total arthroplasty of the hip] Soriano RM, et al. **Rev Chir Orthop** 1988;74(8):778–81 (Eng. Abstr.) (Fre)
[5-to-10-year results of Chiari's osteotomy in developing coxarthrosis] Sterkers Y, et al. **Rev Chir Orthop** 1988;74 Suppl 2:210–2 (Fre)
[Partial femur replacement: implanted without cement] Felmet G, et al. **Z Orthop** 1988 Jul–Aug;126(4):394–7 (Eng. Abstr.) (Ger)
[Valgus osteotomies preceding total endoprosthesis] Reichel F. **Zentralbl Chir** 1989;114(12):777–87 (Eng. Abstr.) (Ger)
[Results with intertrochanteric valgus osteotomy in the management of coxarthrosis] Forgon M, et al. **Magy Traumatol Orthop Helyreallito Sebesz** 1988; 31(3):161–71 (Eng. Abstr.) (Hun)
[Evaluation of the functional state of the hip joint after alloplasty] Wall A, et al. **Chir Narzadow Ruchu Ortop Pol** 1989;54(1):34–9 (Eng. Abstr.) (Pol)
[Reconstruction of the femur by the Ilizarov method in the treatment of arthrosis deformans of the hip joint] Ilizarov GA, et al. **Ortop Travmatol Protez** 1988 Jun;(6):10–3 (Eng. Abstr.) (Rus)
[Fenestration of fascia lata of the hip in coxarthrosis] Khelmut EA. **Ortop Travmatol Protez** 1988 Jun;(6):54–5 (Rus)
[Experimental substantiation of a transosseous approach in arthroplasty of the hip joint] Khvisiuk AN. **Ortop Travmatol Protez** 1989 May;(5):39–44 (Eng. Abstr.) (Rus)
[Variants in the surgical treatment of severe forms of coxarthrosis] Kulish NI, et al. **Ortop Travmatol Protez** 1988 Oct;(10):21–3 (Eng. Abstr.) (Rus)
[Our experience with the treatment of coxarthrosis] Us'tiantsev VI, et al. **Ortop Travmatol Protez** 1989 May; (5):51–2 (Rus)
[Rehabilitation and expert evaluation of work capacity of patients after total hip endoprosthesis using Shersher's construction] Shersher IaI, et al. **Sov Med** 1989;(5):13–5 (Eng. Abstr.) (Rus)
[Surgical treatment of children with degenerative-dystrophic processes in the dysplastic hip joint] Andrianov VL, et al. **Vestn Khir** 1989 Feb;142(2):71–5 (Eng. Abstr.) (Rus)

[Complex evaluation of the restoration of static and dynamic functions in patients after total endoprosthesis of the hip joint] Grinshtein EIa, et al. **Vestn Khir** 1989 Jan;142(1):83–6 (Eng. Abstr.) **(Rus)**

[Contraindications regarding total prosthesis of the hip joint] Kulish NI, et al. **Vestn Khir** 1988 Oct;141(10):95–6 (Eng. Abstr.) **(Rus)**

THERAPY

Effect of passive muscle stretching in osteoarthritis of the hip. Leivseth G, et al. **Clin Sci** 1989 Jan;76(1):113–7

VETERINARY

Internal fixation of femoral capital physeal injuries in dogs: 40 cases (1979–1987). DeCamp CE, et al. **J Am Vet Med Assoc** 1989 Jun 15;194(12):1750–4

[Practical experience with the triple pelvic osteotomy as treatment of hip instability in young dogs (published erratum appears in Tijdschr Diergeneeskd 1988 Dec 15;113(24):1388)] Crama K. **Tijdschr Diergeneeskd** 1988 Nov 1;113(21):1181–8 (Eng. Abstr.) **(Dut)**

OSTEOARTHROPATHY, PRIMARY HYPERTROPHIC

Pachydermoperiostosis (a case report and review of literature). Mishra GK, et al. **Australas Radiol** 1988 Aug; 32(3):398–400 (12 ref.)

[Pachydermoperiostosis (idiopathic hypertrophic osteoarthropathy)] Lin JT, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;42(3):223–8 (Eng. Abstr.) **(Chi)**

COMPLICATIONS

Pachydermoperiostosis with gastric hypertrophy, anemia, and increased serum bone Gla-protein levels. Venencie PY, et al. **Arch Dermatol** 1988 Dec;124(12):1831–4

Pachydermoperiostosis and acro-osteolysis. Matucci-Cerinic MI, et al. **Ital J Orthop Traumatol** 1988 Mar;14(1):107–11

[Two cases of pachydermoperiostosis with peptic ulcers] Ooi S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Feb; 86(2):253–6 **(Jpn)**

DIAGNOSIS

Primary hypertrophic osteoarthropathy. Martínez-Lavín M, et al. **Semin Arthritis Rheum** 1988 Feb;17(3):156–62 (95 ref.)

DRUG THERAPY

Colchicine treatment in a case of pachydermoperiostosis with acroosteolysis. Matucci-Cerinic M, et al. **Rheumatol Int** 1988;8(4):185–8

Pachydermoperiostosis: trial with isotretinoin. Park YK, et al. **Yonsei Med J** 1988;29(2):204–7

GENETICS

[Hereditary pachydermoperiostosis (letter)] Cattiau P, et al. **Ann Med Interne (Paris)** 1989;140(4):336–7 **(Fre)**

PATHOLOGY

Pachydermoperiostosis (primary hypertrophic osteoarthropathy): report of a case with evidence of endothelial and connective tissue involvement. Matucci-Cerinic M, et al. **Ann Rheum Dis** 1989 Mar; 48(3):240–6

[Pachydermoperiostosis—development of bone changes 25 years after disease onset] Míková D. **Vnitr Lek** 1989 Jan; 35(1):68–73 (Eng. Abstr.) **(Cze)**

[Complete pachydermoperiostosis. Ultrastructural and peripheral vascular system studies] Nini G, et al. **G Ital Dermatol Venereol** 1988 Oct;123(10):481–7 (Eng. Abstr.) **(Ita)**

RADIOGRAPHY

[Pachydermoperiostosis] Antolín J, et al. **Rev Clin Esp** 1989 Apr;184(7):383–4 **(Spa)**

OSTEOARTHROPATHY, SECONDARY HYPERTROPHIC

Finger clubbing, inflammatory bowel disease, and circulant vasodilators [letter] Olm M, et al. **Dis Colon Rectum** 1989 Feb;32(2):176

COMPLICATIONS

Arterial oxygen tension, haemoglobin F and red cell 2, 3 diphosphoglycerate in sickle cell anaemia patients with digital clubbing. Adekile AD. **Ann Trop Paediatr** 1989 Sep; 9(3):165–8

Pitting edema and hypertrophic pulmonary osteoarthropathy [letter] Armitage KB, et al. **Arch Intern Med** 1989 Jan; 149(1):223, 227

Unilateral clubbing of fingers associated with causalgia. Saunders PR, et al. **BMJ** 1988 Dec 24–31;297(6664):1635

Takayasu's arteritis and hypertrophic osteoarthropathy: a real association? [letter] Matucci-Cerinic M. **Clin Exp Rheumatol** 1988 Jul–Sep;6(3):329–30

Pulmonary hypertrophic osteoarthropathy as the initial manifestation of interstitial fibrosis. Kupfer Y, et al. **N Y State J Med** 1989 Apr;89(4):234–5

[Hypertrophic osteoarthropathy in children. Apropos of 2 cases] Goldenberg J, et al. **Rev Rhum Mal Osteoartic** 1988 Dec;55(12):1023–5 **(Fre)**

[Palmar-plantar keratoderma and digital clubbing in 2 brothers] Rafanelli A, et al. **G Ital Dermatol Venereol** 1989 Jan–Feb;124(1–2):51–3 (Eng. Abstr.) **(Ita)**

DIAGNOSIS

Digital clubbing: a numerical assessment of the deformity. Vázquez-Abad D, et al. **J Rheumatol** 1989 Apr; 16(4):518–20

[A case of hypertrophic osteoarthropathy secondary to lung cancer] Katsuyama N, et al. **Rinsho Hoshasen** 1988 Oct; 33(10):1117–8 **(Jpn)**

ETIOLOGY

Clubbing due to neonatal lung disease. Elder DE, et al. **Acta Paediatr Scand** 1989 Jul;78(4):631–2

Hypertrophic osteoarthropathy after liver transplantation. McCarthy GM, et al. **Am J Med** 1989 Apr;86(4):500–1

Hypertrophic pulmonary osteoarthropathy and nasopharyngeal carcinoma in a young Chinese patient. Wallington MM, et al. **Australas Radiol** 1988 Nov; 32(4):444–7

Pathogenesis of secondary hypertrophic osteoarthropathy: a hypothesis. Doyle L. **Eur Respir J** 1989 Feb;2(2):105–6

Hypertrophic pulmonary osteoarthropathy in cystic fibrosis. Crawford AM, et al. **Rheumatol Int** 1985;5(6):283–4

[Hypertrophic osteoarthropathy and congenital cyanotic heart defects] Berdah C, et al. **Arch Fr Pediatr** 1989 Jan; 46(1):31–3 (12 ref.) (Eng. Abstr.) **(Fre)**

[The special case. Thyrogenic acropachy] Gossmann HH, et al. **Z Rheumatol** 1989 May–Jun;48(3):152–7 (Eng. Abstr.) **(Ger)**

[Hypertrophic osteopathy in alcoholic males] Szántó D. **Orv Hetil** 1989 Mar 19;130(12):625–7 (Eng. Abstr.) **(Hun)**

PATHOLOGY

The pathology of clubbing: vascular changes in the nail bed. Currie AE, et al. **Br J Dis Chest** 1988 Oct;82(4):382–5

RADIOGRAPHY

Radiological cases of the month. Hypertrophic pulmonary osteoarthropathy. Bokulic RE, et al. **Am J Dis Child** 1989 Jun;143(6):747–8

Comment on the article by Weinblatt et al [letter; comment] Tiliakos NA. **Arthritis Rheum** 1989 Jan;32(1):115–6. **Comment on:** Arthritis Rheum 1988 Feb;31(2):167–75

RADIONUCLIDE IMAGING

Reversible pulmonary uptake and hypertrophic pulmonary osteoarthropathic distribution of technetium-99m methylene diphosphonate in a case of Pneumocystis carinii pneumonia. Vaquer RA, et al. **J Nucl Med** 1989 Sep; 30(9):1563–7

RADIOTHERAPY

Resolution of hypertrophic pulmonary osteoarthropathy after radiotherapy in the absence of lung tumor response. Campeau RJ, et al. **Clin Nucl Med** 1989 Jun;14(6):453–5

SURGERY

[Diabetic osteoarthropathy—not a primary indication for amputation] Brückner L. **Zentralbl Chir** 1989;114(4):241–52 (Eng. Abstr.) **(Ger)**

THERAPY

Improvement in hypertrophic hepatic osteoarthropathy after liver transplantation [letter] Vickers C, et al. **Lancet** 1988 Oct 22;2(8617):968

OSTEOARTHROSIS see **OSTEOARTHRITIS**

OSTEOARTHROSIS DEFORMANS see **OSTEOARTHRITIS**

OSTEOBLASTOMA see **OSTEOMA, OSTEOID**

OSTEOBLASTS

ANALYSIS

Mineralization in osteoblast cultures: a light and electron microscopic study. Ecarot-Charrier B, et al. **Bone** 1988; 9(3):147–54

Ultrastructural immunocytochemical localization of endogenous 1,25-dihydroxyvitamin D3 and its receptors in osteoblasts and osteocytes from neonatal mouse and rat calvaria. Boivin G, et al. **Bone Miner** 1987 Nov;3(2):125–36

Cytochemical properties of osteoblast cell membrane domains. Watson LP, et al. **J Histochem Cytochem** 1989 Aug;37(8):1235–46

Comparison of the calcium distribution pattern among several kinds of hard tissue forming cells of some living vertebrates. Kogaya Y, et al. **Scanning Microsc** 1988 Dec;2(4):2029–43

CYTOLOGY

Purification of murine hemopoietic stem cells and committed progenitors by fluorescence activated cell sorting using wheat germ agglutinin and monoclonal antibodies. Bauman JG, et al. **Acta Histochem Suppl (Jena)** 1988;36:241–53

Effects of prostaglandin E2 on phenotype of osteoblasts-like cells. Morita I, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:419–22

Lifetime of the osteoblast in mouse periodontium. McCulloch CA, et al. **Anat Rec** 1988 Oct;222(2):128–35

Transforming growth factor-beta-induced mitogenesis of human bone cancer cells. Datta HK, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):672–6

Downregulation of cell growth and cell cycle regulated genes during chick osteoblast differentiation with the reciprocal expression of histone gene variants. Shalhoub V, et al. **Biochemistry** 1989 Jun 27;28(13):5318–22

Dual elevation of cyclic AMP and inositol phosphates in response to mechanical deformation of murine osteoblasts. Sandy JR, et al. **Biochim Biophys Acta** 1989 Feb 9; 1010(2):265–9

Growth of osteoblasts on porous calcium phosphate ceramic: an in vitro model for biocompatibility study. Cheung HS, et al. **Biomaterials** 1989 Jan;10(1):63–7

Characterization of endosteal osteoblastic cells isolated from mouse caudal vertebrae. Lomri A, et al. **Bone** 1988; 9(3):165–75

Osteoblasts increase their rate of division and align in response to cyclic, mechanical tension in vitro. Buckley MJ, et al. **Bone Miner** 1988 Jul;4(3):225–36

Arachidonic acid stimulates cell growth in an osteoblastic cell line, MC3T3-E1, by noneicosanoid mechanism. Fujimori A, et al. **Calcif Tissue Int** 1989 Mar;44(3):186–91

Cell and molecular biology of vertebrate hard tissues. **Ciba Found Symp** 1988;136:1–307

Osteoblastic differentiation. Nijweide PJ, et al. **Ciba Found Symp** 1988;136:61–77 (28 ref.)

An adhesion variant of the MG-63 osteosarcoma cell line displays an osteoblast-like phenotype. Pierschbacher MD, et al. **Ciba Found Symp** 1988;136:131–41 (33 ref.)

Diversity of the osteoblastic phenotype. Rodan GA, et al. **Ciba Found Symp** 1988;136:78–91 (41 ref.)

Rat calvarial cell lines immortalized with SV-40 large T antigen: constitutive and retinoic acid-inducible expression of osteoblastic features. Heath JK, et al. **Endocrinology** 1989 Jun;124(6):3060–8

Androgens directly stimulate proliferation of bone cells in vitro. Kasperk CH, et al. **Endocrinology** 1989 Mar; 124(3):1576–8

Purification and characterisation of a growth factor from porcine bone. Mayer H, et al. **Eur J Biochem** 1989 May 1;181(2):409–15

Possible involvement of protein kinase C in proliferation and differentiation of osteoblast-like cells. Kozawa O, et al. **FEBS Lett** 1989 Jan 30;243(2):183–5

Establishment of human osteoblastic cells derived from periosteum in culture. Koshihara Y, et al. **In Vitro Cell Dev Biol** 1989 Jan;25(1):37–43

Culture and behavior of osteoblastic cells isolated from normal trabecular bone surfaces. Marie PJ, et al. **In Vitro Cell Dev Biol** 1989 Apr;25(4):373–80

Cell growth on metallic glasses: the interaction of amorphous metal alloys with cultured neuronal, osteoblast, endothelial, and fibroblast cells. McAuslan BR, et al. **J Biomed Mater Res** 1988 Oct;22(10):905–17

Growth of rat osteoblast-like cells in a lipid-enriched culture medium and regulation of function by parathyroid hormone and 1,25-dihydroxyvitamin D. Catherwood BD, et al. **J Bone Miner Res** 1988 Aug;3(4):431–8

Evidence for a toxic effect of aluminum on osteoblasts: a histomorphometric study in hemodialysis patients with aplastic bone disease. Parisien M, et al. **J Bone Miner Res** 1988 Jun;3(3):259–67

Periodontal ligament fibroblasts, preosteoblasts, and prechondrocytes express receptors for epidermal growth factor in vivo: a comparative radioautographic study. Cho MI, et al. **J Periodont Res** 1988 Sep;23(5):287–94

[Gene expression of osteoblasts during differentiation] Schön A, et al. **Verh Dtsch Ges Pathol** 1988;72:326–9 (Eng. Abstr.) **(Ger)**

DRUG EFFECTS

The effects of recombinant human granulocyte-macrophage colony-stimulating factor (rhGM-CSF) on human osteoblast-like cells. Evans DB, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):588–95

Recombinant human lymphotoxin effects on osteoblastic cells. Tatakis DN, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):435–40

Cadmium stimulates prostaglandin E2 synthesis in osteoblast-like cells, MC3T3-E1. Suzuki Y, et al. **Biochim Biophys Acta** 1989 Jul 11;1012(2):135–9

Biochemical effects of 17 beta-estradiol on UMR106 cells. Bankson DD, et al. **Bone Miner** 1989 Apr;6(1):55–63

The effects of 1,25-dihydroxyvitamin D3 on growth, alkaline phosphatase and adenylate cyclase of rat osteoblast-like cells. Pols HA, et al. **Bone Miner** 1986 Oct;1(5):397–405

Low serum osteocalcin in acute alcohol intoxication: a direct toxic effect of alcohol on osteoblasts. Rico H, et al. **Bone Miner** 1987 May;2(3):221–5

Stimulatory effect on bone resorption of interleukin-1-like cytokine produced by an osteoblast-rich population of mouse calvarial cells. Amano S, et al. **Calcif Tissue Int** 1988 Aug;43(2):88–91

Effect of interleukin 1 beta on osteoblastic clone MC3T3–E1 cells. Ikeda E, et al. **Calcif Tissue Int** 1988 Sep;43(3):162–6

Independent and interrelated regulation of ornithine decarboxylase by calcium and cAMP in fetal rat osteoblasts. van Leeuwen JP, et al. **Cell Calcium** 1988 Aug; 9(4):181–91

Phosphatidic acid–induced calcium mobilization in osteoblasts. Kawase T, et al. **J Biochem (Tokyo)** 1988 Apr; 103(4):581–2

The effect of 1,25–dihydroxyvitamin D3 on the cytoskeleton of rat calvaria and rat osteosarcoma (ROS 17/2.8) osteoblastic cells. Gronowicz G, et al. **J Bone Miner Res** 1986 Oct;1(5):441–55

Effects of transforming growth factors beta 1 and beta 2 on a mouse clonal, osteoblastlike cell line MC3T3–E1. Ibbotson KJ, et al. **J Bone Miner Res** 1989 Feb;4(1):37–45

Prostaglandins change cell shape and increase intercellular gap junctions in osteoblasts cultured from rat fetal calvaria. Shen V, et al. **J Bone Miner Res** 1986 Jun;1(3):243–9

Transforming growth factor beta modulates proliferation of osteoblastic cells: relation to its effect on receptor levels for epidermal growth factor. Uneno S, et al. **J Bone Miner Res** 1989 Apr;4(2):165–71

Parathyroid hormone and lipopolysaccharide induce murine osteoblast–like cells to secrete a cytokine indistinguishable from granulocyte–macrophage colony–stimulating factor. Horowitz MC, et al. **J Clin Invest** 1989 Jan;83(1):149–57

Fluoride and osteoblasts [letter] Dandona P, et al. **Lancet** 1989 Feb 25;1(8635):449–50

Estrogens and bone cell models. Gray TK. **Md Med J** 1988 Nov;37(11):863–5

[The effects of various cell growth factors and cyclosporin A, an immunosuppressive agent, on cloned osteoblastic cell line, MC3T3–E1 cells] Yajima M. **Nippon Naibunpi Gakkai Zasshi** 1988 Nov 20; 64(11):1187–98 (Eng. Abstr.) **(Jpn)**

[Effect of alpha–hydroxydimethyl–gamma–aminopropylidene bisphosphonate on the bone tissue of rats during hypokinesia] Shvets VN, et al. **Kosm Biol Aviakosm Med** 1989 Jan–Feb;23(1):27–31 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Molecular mechanism of cyclooxygenase regulation in cloned mouse osteoblastic cell (MC3T3–E1). Yamamoto S, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:444–9

Characterization of phospholipase C activity of the plasma membrane and cytosol of an osteoblast–like cell line. Suzuki Y, et al. **Am J Med Sci** 1989 Mar;297(3):135–44

Fatty acid cyclooxygenase activity stimulated by transforming growth factor–beta in mouse osteoblastic cells (MC3T3–E1). Sumitani K, et al. **Arch Biochem Biophys** 1989 May 1;270(2):588–95

Mineralization induced by beta–glycerophosphate in cultures leads to a marked increase in collagenase synthesis by mouse osteogenic MC3T3–E1 cells under subsequent stimulation with heparin. Sakamoto S, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):773–80

Possible induction of fatty acid cyclooxygenase in mouse osteoblastic cells (MC3T3–E1) by cAMP. Kusaka M, et al. **Biochim Biophys Acta** 1988 Dec 9;972(3):339–46

Characterization of a (Ca2+ + Mg2+)–ATPase system in the osteoblast plasma membrane. Shen V, et al. **Bone** 1988; 9(5):325–9

Stimulation of alkaline phosphatase activity by thyroid hormone in mouse osteoblast–like cells (MC3T3–E1): a possible mechanism of hyperalkaline phosphatasia in hyperthyroidism. Kasono K, et al. **Bone Miner** 1988 Sep; 4(4):355–63

Tartrate–resistant acid phosphatase activity in rat osteoblasts and osteocytes. Bianco P, et al. **Calcif Tissue Int** 1988 Sep; 43(3):167–71

Induction of ornithine decarboxylase activity in isolated chicken osteoblasts by parathyroid hormone: the role of cAMP and calcium. Löwik CW, et al. **Calcif Tissue Int** 1988 Jul;43(1):7–18

Localization of 1,25–(OH)2D3–responsive alkaline phosphatase in osteoblast–like cells (ROS 17/2.8, MG 63, and MC 3T3) and growth cartilage cells in culture. Boyan BD, et al. **J Biol Chem** 1989 Jul 15;264(20):11879–86

Certain vitamin D metabolites potentiate the expression of parathyroid hormone bioactivity. Bradbeer JN, et al. **J Bone Miner Res** 1988 Feb;3(1):47–52

Bone–resorbing agents promote and interferon–gamma inhibits bone cell collagenase production. Shen V, et al. **J Bone Miner Res** 1988 Dec;3(6):657–66

Epitopes of the human erythrocyte Ca2+–Mg2+ ATPase pump in human osteoblast–like cell plasma membranes. Borke JL, et al. **J Clin Endocrinol Metab** 1988 Dec; 67(6):1299–304

Human osteoblasts in vitro secrete tissue inhibitor of metalloproteinases and gelatinase but not interstitial collagenase as major cellular products. Rifas L, et al. **J Clin Invest** 1989 Aug;84(2):686–94

A proposed mechanism of the mitogenic action of fluoride on bone cells: inhibition of the activity of an osteoblastic acid phosphatase. Lau KH, et al. **Metabolism** 1989 Sep; 38(9):858–68

IMMUNOLOGY

Identification of osteoblast–specific monoclonal antibodies. Nakano T, et al. **Calcif Tissue Int** 1989 Mar;44(3):220–7

METABOLISM

PTH elevates inositol polyphosphates and diacylglycerol in a rat osteoblast–like cell line. Civitelli R, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):E660–7

Regulation of Na–dependent Pi transport by parathyroid hormone in osteoblast–like cells. Selz T, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E93–100

Heterogeneity of bone resorbing factors produced by unstimulated murine osteoblasts in vitro and in response to stimulation by parathyroid hormone and mononuclear cell factors. Meghji S, et al. **Arch Oral Biol** 1988; 33(11):773–8

Estradiol stimulates in vitro the secretion of insulin–like growth factors by the clonal osteoblastic cell line, UMR106. Gray TK, et al. **Biochem Biophys Res Commun** 1989 Jan 31;158(2):407–12

Parathyroid hormone alteration of free and tRNA–bound proline specific activities in cultured mouse osteoblast–like cells. Hall GE, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):994–1000

Parathyroid hormone (PTH) and PTH–like protein (PLP) stimulate interleukin–6 production by osteogenic cells: a possible role of interleukin–6 in osteoclastogenesis. Löwik CW, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1546–52

Release of insulin–like growth factor carrier proteins by osteoblasts: stimulation by estradiol and growth hormone. Schmid C, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):788–94

Murine osteoblasts release bone–resorbing factors of high and low molecular weights: stimulation by mechanical deformation. Sandy JR, et al. **Bone Miner** 1989 Jan; 5(2):155–68

Effect of parathyroid hormone and parathyroid hormone fragments on the intracellular ionized calcium concentration in an osteoblast cell line. van Leeuwen JP, et al. **Bone Miner** 1988 Jun;4(2):177–88

Effects of human PTH–related peptide and human PTH on cyclic AMP production and cytosolic free calcium in an osteoblastic cell clone. Yamada H, et al. **Bone Miner** 1989 Apr;6(1):45–54

Bone–resorbing cytokines enhance release of macrophage colony–stimulating activity by the osteoblastic cell MC3T3–E1. Felix R, et al. **Calcif Tissue Int** 1989 May; 44(5):356–60

Differential effects of parathyroid hormone on protein phosphorylation in two osteoblastlike cell populations isolated from neonatal mouse calvaria. Krieger NS, et al. **Calcif Tissue Int** 1989 Mar;44(3):192–9

The effects of prostaglandin E2 on DNA and collagen synthesis in osteoblasts in vitro. Nagai M. **Calcif Tissue Int** 1989 Jun;44(6):411–20

Microcarriers facilitate mineralization in MC3T3–E1 cells. Shima M, et al. **Calcif Tissue Int** 1988 Jul;43(1):19–25

The effect of lipopolysaccharide from bacteroides gingivalis and muramyl dipeptide on osteoblast collagenase release. Sismey–Durrant HJ, et al. **Calcif Tissue Int** 1989 May; 44(5):361–3

Platelet–derived growth factor enhances deoxyribonucleic acid and collagen synthesis in osteoblast–enriched cultures from fetal rat parietal bone. Centrella M, et al. **Endocrinology** 1989 Jul;125(1):13–9

Parathyroid hormone–related peptide transiently increases cytosolic calcium in osteoblast–like cells: comparison with parathyroid hormone. Civitelli R, et al. **Endocrinology** 1989 Sep;125(3):1204–10

Insulin increases the steady state level of alpha–1(I) procollagen mRNA in the osteoblast–rich segment of fetal rat calvaria. Craig RG, et al. **Endocrinology** 1989 Sep; 125(3):1430–7

Estradiol effects on proliferation, messenger ribonucleic acid for collagen and insulin–like growth factor–I, and parathyroid hormone–stimulated adenylate cyclase activity in osteoblastic cells from calvariae and long bones. Ernst M, et al. **Endocrinology** 1989 Aug;125(2):825–33

Direct modulation by estradiol of the response of human bone cells (SaOS–2) to human parathyroid hormone (PTH) and PTH–related protein. Fukayama S, et al. **Endocrinology** 1989 Jan;124(1):397–401

Parathyroid hormone enhances the transcript and polypeptide levels of insulin–like growth factor I in osteoblast–enriched cultures from fetal rat bone. McCarthy TL, et al. **Endocrinology** 1989 Mar;124(3):1247–53

Transcriptional regulation of osteocalcin production by transforming growth factor–beta in rat osteoblast–like cells. Noda M. **Endocrinology** 1989 Feb;124(2):612–7

Parathyroid hormone down–regulates the epidermal growth factor receptors in clonal osteoblastic mouse calvarial cells, MC3T3–E1: possible mediation by adenosine 3'5'–cyclic monophosphate. Ohta S, et al. **Endocrinology** 1989 May; 124(5):2419–26

Insulin–like growth factor I regulates type I procollagen messenger ribonucleic acid steady state levels in bone of rats. Schmid C, et al. **Endocrinology** 1989 Sep; 125(3):1575–80

Thrombospondin is synthesized and secreted by human osteoblasts and osteosarcoma cells. A model to study the different effects of thrombospondin in cell adhesion. Clezardin P, et al. **Eur J Biochem** 1989 May 15;181(3):721–6

Effects of ovariectomy and 17 beta–estradiol on bone GLA protein in growing rats: an indirect evidence for estrogen receptors in bone cells. Fiore CE, et al. **Exp Clin Endocrinol** 1988 Mar;92(3):335–40

Production of carrier proteins for insulin–like growth factors (IGFs) by rat osteoblastic cells. Regulation by IGF I and cortisol. Schmid C, et al. **FEBS Lett** 1989 Feb 27; 244(2):328–32

Aluminum enhances the stimulatory effect of NaF on prostaglandin E2 synthesis in a clonal osteoblast–like cell line, MOB 3–4, in vitro. Kawase T, et al. **J Biochem (Tokyo)** 1989 Jul;106(1):8–10

Cyclic AMP–mediated stabilization of osteocalcin mRNA in rat osteoblast–like cells treated with parathyroid hormone. Noda M, et al. **J Biol Chem** 1988 Dec 5; 263(34):18574–7

In situ localization of collagen production by chondrocytes and osteoblasts in fracture callus. Sandberg M, et al. **J Bone Joint Surg [Am]** 1989 Jan;71(1):69–77 (41 ref.)

A differentiation–inducing factor produced by the osteoblastic cell line MC3T3–E1 stimulates bone resorption by promoting osteoclast formation. Abe E, et al. **J Bone Miner Res** 1988 Dec;3(6):635–45

The effects of phenytoin on calcium uptake in osteoblastic cells. Dziak R, et al. **J Bone Miner Res** 1988 Aug; 3(4):415–20

Glucose transport in osteoblast–enriched bone explants: characterization and insulin regulation. Hahn TJ, et al. **J Bone Miner Res** 1988 Jun;3(3):359–65

Characterization of insulin binding in the UMR–106 rat osteoblastic osteosarcoma cell. Ituarte EA, et al. **J Bone Miner Res** 1989 Feb;4(1):69–73

Does interleukin–1 affect intracellular calcium in osteoblast–like cells (UMR–106)? Pacifici R, et al. **J Bone Miner Res** 1988 Feb;3(1):107–11

Parathyroid hormone regulation of proline uptake by cultured neonatal mouse osteoblastlike cells. Yee JA, et al. **J Bone Miner Res** 1989 Feb;4(1):23–7

Effect of parathyroid hormone on amino acid transport by cultured neonatal mouse calvarial bone cells. Yee JA. **J Bone Miner Res** 1988 Apr;3(2):211–8

Transcriptional regulation of osteopontin production in rat osteoblast–like cells by parathyroid hormone. Noda M, et al. **J Cell Biol** 1989 Feb;108(2):713–8

Thrombospondin is an osteoblast–derived component of mineralized extracellular matrix. Robey PG, et al. **J Cell Biol** 1989 Feb;108(2):719–27

Modulatory function of protein kinase C in the activation of ornithine decarboxylase and in cAMP production in rat osteoblasts. van Leeuwen JP, et al. **J Cell Physiol** 1989 Mar;138(3):548–54

Cytosolic pH regulation in osteoblasts. Interaction of Na+ and H+ with the extracellular and intracellular faces of the Na+/H+ exchanger. Green J, et al. **J Gen Physiol** 1988 Aug;92(2):239–61

NaF–induced Ca2+ mobilization is dependent upon the culture density in a parathyroid hormone–responsive osteoblast–like cell line [published erratum appears in Life Sci 1989;44(6):439] Kawase T, et al. **Life Sci** 1988; 43(26):2241–7

Diphosphonates inhibit human osteoblast secretion and proliferation. Khokher MA, et al. **Metabolism** 1989 Feb; 38(2):184–7

Inhibition of parathyroid hormone responsiveness in clonal osteoblastic cells expressing a mutant form of 3',5'–cyclic adenosine monophosphate–dependent protein kinase. Bringhurst FR, et al. **Mol Endocrinol** 1989 Jan;3(1):60–7

1,25–Dihydroxyvitamin D3 interaction with dexamethasone and retinoic acid: effects on procollagen messenger ribonucleic acid levels in rat osteoblast–like cells. Kim HT, et al. **Mol Endocrinol** 1989 Jan;3(1):97–104

Parathyroid hormone inhibits collagen synthesis at both ribonucleic acid and protein levels in rat osteogenic sarcoma cells. Partridge NC, et al. **Mol Endocrinol** 1989 Feb;3(2):232–9

Identification of androgen receptors in normal human osteoblast–like cells. Colvard DS, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):854–7

Structure of the rat osteocalcin gene and regulation of vitamin D–dependent expression. Lian J, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1143–7

Lead increases free Ca2+ concentration in cultured osteoblastic bone cells: simultaneous detection of intracellular free Pb2+ by 19F NMR. Schanne FA, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5133–5

Extracellular matrix production by osteoblasts on bioactive substrata in vitro. Davies JE, et al. **Scanning Microsc** 1988 Sep;2(3):1445–52

[Serum osteocalcin level as a marker of the functional state of osteoblasts after oral calcium tolerance test] Milkov V, et al. **Vutr Boles** 1988;27(3):101–6 (Eng. Abstr.) **(Bul)**

[Differentiation dependent lectin patterns in osteoblasts, bone tumors, and tumor–like lesions] Jundt G, et al. **Verh Dtsch Ges Pathol** 1988;72:304–6 (Eng. Abstr.) **(Ger)**

PATHOLOGY

Talc granulomatosis in the rat: the relationship between osteoblast insufficiency and adjacent bone marrow hyperplasia. Vukičević S, et al. **Exp Hematol** 1988 Oct; 16(9):735–40

Characterization of volume-sensitive, calcium-permeating pathways in the osteosarcoma cell line UMR-106-01. Yamaguchi DT, et al. **J Biol Chem** 1989 Mar 15; 264(8):4383–90

Histopathology of rare chondroosteoblastic metaplasia in benign lipomas. Katzer B. **Pathol Res Pract** 1989 Apr; 184(4):437–45 (10 ref.)

[Histomorphologic study of the bones of monkeys after 14-day anti-orthostatic hypokinesia] Durnova GN, et al. **Kosm Biol Aviakosm Med** 1989 Jan-Feb;23(1):22–6 (Eng. Abstr.) (Rus)

PHYSIOLOGY

The effect of lipopolysaccharide from the oral bacterium Bacteroides gingivalis on osteoclastic resorption of sperm-whale dentine slices in vitro. Sismey-Durrant HJ, et al. **Arch Oral Biol** 1987;32(12):911–3

Regulation of new osteoclast formation by a bone cell-derived macromolecular factor. Dickson IR, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1383–90

Natural human IL-1 beta exhibits regulatory actions on human bone-derived cells in vitro. Evans DB, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1242–8

Prostaglandin D2 stimulates calcification of human osteoblastic cells. Koshihara Y, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1206–12

Chemotactic response of mesenchymal cells, fibroblasts and osteoblast-like cells to bone Gla protein. Lucas PA, et al. **Bone** 1988;9(5):319–23

Membrane potential changes, cAMP stimulation and contraction in osteoblast-like UMR 106 cells in response to calcitonin and parathyroid hormone. Ferrier J, et al. **Bone Miner** 1988 Jun;4(2):133–45

Comparative studies of membrane potentials of rat osteoblasts in situ and in primary culture. Fritsch J, et al. **Bone Miner** 1987 Sep;2(6):463–78

Are osteoblastic cells required for the control of osteoclast activity by parathyroid hormone? Jilka RL. **Bone Miner** 1986 Sep;1(4):261–6 (24 ref.)

Cooperation of synthetic insulin-like growth factor I/somatomedin C and 1,25-dihydroxyvitamin D3 on regulation of function in clonal osteoblastic cells. Kurose H, et al. **Bone Miner** 1989 Mar;5(3):335–45

Bradykinin stimulates production of prostaglandin E2 and prostacyclin in murine osteoblasts. Lerner UH, et al. **Bone Miner** 1989 Jan;5(2):139–54

Corticosteroid-induced changes in the responsiveness of human osteoblast-like cells to parathyroid hormone. Silve C, et al. **Bone Miner** 1989 Apr;6(1):65–75

A dihydropyridine-sensitive calcium channel in rodent osteoblastic cells. Karpinski E, et al. **Calcif Tissue Int** 1989 Jul;45(1):54–7

Suggestion of a deficient osteoblastic function in diabetes mellitus: the possible cause of osteopenia in diabetics. Rico H, et al. **Calcif Tissue Int** 1989 Aug;45(2):71–3

Osteocalcin as an index of osteoblast function during and after ovine pregnancy. Farrugia W, et al. **Endocrinology** 1989 Sep;125(3):1705–10

Osteoblastic cells are involved in osteoclast formation. Takahashi N, et al. **Endocrinology** 1988 Nov;123(5):2600–2

Voltage-activated and stretch-activated Ba2+ conducting channels in an osteoblast-like cell line (UMR 106). Duncan R, et al. **FEBS Lett** 1989 Jul 17;251(1-2):17–21

Properties of the depolarization-activated calcium and barium entry in osteoblast-like cells. Yamaguchi DT, et al. **J Biol Chem** 1989 Jan 5;264(1):197–204

Does myeloma secrete an osteoblast inhibiting factor? Evans CE, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):288–90

Early effects of parathyroid hormone on membrane potential of rat osteoblasts in culture: role of cAMP and Ca2+. Fritsch J, et al. **J Bone Miner Res** 1988 Oct;3(5):547–54

Thyroid hormone 5'-deiodinase activity, nuclear binding, and effects on mitogenesis in UMR-106 osteoblastic osteosarcoma cells. LeBron BA, et al. **J Bone Miner Res** 1989 Apr;4(2):173–8

Bone marrow-derived stromal cell line expressing osteoblastic phenotype in vitro and osteogenic capacity in vivo. Benayahu D, et al. **J Cell Physiol** 1989 Jul;140(1):1–7

Electric fields stimulate DNA synthesis of mouse osteoblast-like cells (MC3T3-E1) by a mechanism involving calcium ions. Ozawa H, et al. **J Cell Physiol** 1989 Mar;138(3):477–83

Ionic regulation of intracellular pH in rat calvarial osteoblasts. Redhead CR. **J Physiol (Lond)** 1988 Jul; 401:455–68

Bone remodeling signaled by a dihydropyridine- and phenylalkylamine-sensitive calcium channel. Guggino SE, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2957–60

[The role of the bone cell in the regulation of phosphorus and calcium homeostasis] Marotti G. **G Clin Med** 1988 Apr; 69(4):243–61 (64 ref.) (Ita)

[Evaluation of the functional state of endosteal osteoblasts in chick embryos] Nitsevich TP. **Tsitol Genet** 1988 Jul-Aug;22(4):8–13 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Characteristics of phosphate transport in osteoblastlike cells. Caverzasio J, et al. **Calcif Tissue Int** 1988 Aug;43(2):83–7

SECRETION

Osteoblast-like cells secrete granulocyte-macrophage colony-stimulating factor in response to parathyroid hormone and lipopolysaccharide. Weir EC, et al. **Endocrinology** 1989 Feb;124(2):899–904

TRANSPLANTATION

Difference in shape of bone formed by isolated calvarial and scapular osteoblasts transplanted under various conditions. Moskalewski S, et al. **Folia Histochem Cytobiol** 1989; 27(1):25–33

ULTRASTRUCTURE

[Osteoblasts during various functional states] Rodionova NV. **Arkh Anat Gistol Embriol** 1988 Dec;95(12):54–9 (Eng. Abstr.) (Rus)

OSTEOCHONDRITIS

Kienböck's disease in an 8 year old boy. Hosking OR. **Aust N Z J Surg** 1989 Jan;59(1):92–3

Limping child—osteochondritis dissecans of the talus [letter] Green NE. **Orthop Rev** 1988 Dec;17(12):1194, 1196

[The natural history of osteochondritis dissecans of the knee in children] Cahuzac JP, et al. **Rev Chir Orthop** 1988;74 Suppl 2:121–4 (Fre)

CHEMICALLY INDUCED

Morphological investigation of osteochondrosis induced by ofloxacin in rats. Kato M, et al. **Fundam Appl Toxicol** 1988 Jul;11(1):120–31

CLASSIFICATION

Osteochondritis dissecans and other lesions of the femoral condyles. Bradley J, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):518–22

COMPLICATIONS

The sequelae of Osgood-Schlatter's disease in adults. Høgh J, et al. **Int Orthop** 1988;12(3):213–5

Osteochondrosis of the tibial tuberosity (Osgood-Schlatter's disease). Irowa GO. **J Manipulative Physiol Ther** 1989 Feb; 12(1):46–9

Bilateral fractures through "giant" patellar tendon ossicles: a late sequela of Osgood-Schlatter disease. Konsens RM, et al. **Orthop Rev** 1988 Aug;17(8):797–800

[Osteochondral fractures of the talus (osteochondritis)] Docquier J, et al. **Acta Orthop Belg** 1988;54(4):439–46 (Eng. Abstr.) (Fre)

[Changes in somatosensory evoked potentials in patients with vertebrogenic pain syndromes treated by electroacupuncture] Garkavenko VV, et al. **Fiziol Zh** 1989 May-Jun;35(3):12–6 (Eng. Abstr.) (Rus)

[Effect of the vertebral syndrome in cervical osteochondrosis on the course of I-IIA stage hypertension and cerebral electrical activity and hemodynamics] Semke GV, et al. **Klin Med (Mosk)** 1989 May;67(5):60–3 (Eng. Abstr.) (Rus)

[Clinical variants of the neurodystrophic syndrome of the muscles of the anterior abdominal wall in osteochondrosis of the spine] Veselovskiĭ VP, et al. **Klin Med (Mosk)** 1988 Jul;66(7):50–3 (Eng. Abstr.) (Rus)

[Deglutition disorders in cervical osteochondrosis] Nikol'skiĭ MA, et al. **Ortop Travmatol Protez** 1988 Nov;(11):58–9 (Rus)

[Unstable hypertension and cervical osteochondrosis] Semke GV. **Sov Med** 1988;(11):62–4 (Rus)

[Thermographic examination of patients with neurologic manifestations of lumbar osteochondrosis] Belova AN, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):31–5 (Eng. Abstr.) (Rus)

[Manual therapy and acupuncture in the treatment of neuro-dystrophic syndromes in cervical osteochondrosis] Goidenko VS, et al. **Zh Nevropatol Psikhiatr** 1989; 89(4):45–8 (Eng. Abstr.) (Rus)

[Treatment of complications of lumbar osteochondrosis by injecting autologous blood into the disks] Margolin GA. **Zh Vopr Neirokhir** 1989 Jan-Feb;(1):45–7 (Rus)

DIAGNOSIS

MR of osteochondritis dissecans and avascular necrosis of the mandibular condyle. Schellhas KP, et al. **AJR** 1989 Mar;152(3):551–60

Osteochondritis of the first metatarsal sesamoids. Velkes S, et al. **Arch Orthop Trauma Surg** 1988;107(6):369–71

Relapsing poly(peri)chondritis associated with fibrosing alveolar disease and antibodies to pneumocytes type II and Clara cells. Rauh G, et al. **Klin Wochenschr** 1989 Aug 1; 67(15):784–9

Ultrasonic diagnosis of Osgood-Schlatter and Sinding-Larsen-Johansson diseases of the knee. De Flaviis L, et al. **Skeletal Radiol** 1989;18(3):193–7

[Bilateral Freiberg's disease. Clinical and radiologic onset after age 44] Petersen KK, et al. **Ugeskr Laeger** 1989 Feb 20;151(8):506–7 (Eng. Abstr.) (Dan)

[Possibilities of biochemical differentiation of reactive effusions of the knee joint] Dingerkus MD, et al. **Sportverletz Sportschaden** 1987 Jun;1(2):86–90 (Eng. Abstr.) (Ger)

[Echography compared with conventional radiology in Osgood-Schlatter disease] Delle Monache C, et al. **Radiol Med (Torino)** 1989 Jun;77(6):631–4 (Eng. Abstr.) (Ita)

[Symptom of "brisk walk" in the differential diagnosis of vertebrogenic syndromes (preliminary report)] Korzh NA, et al. **Ortop Travmatol Protez** 1988 Jun;(6):40–3 (Eng. Abstr.) (Rus)

[An algorithm for the selection for manual therapy of patients with clinical manifestations of osteochondrosis] Kova l DE, et al. **Ortop Travmatol Protez** 1989 May;(5):65–9 (Rus)

[A method of using infrared thermography in the diagnosis of osteochondrosis of the cervical spine] Sidorenko LV. **Ortop Travmatol Protez** 1988 Jun;(6):48–50 (Rus)

[Clinico-electromyographic assessment of early neurologic manifestations of osteochondrosis of the vertebral column] Macheret EL, et al. **Vrach Delo** 1988 Nov;(11):83–6 (Eng. Abstr.) (Rus)

[Osteochondritis ischiopubica—van Neck-Odelberg disease in the differential diagnosis of coxalgia] Bakalár B, et al. **Acta Chir Orthop Traumatol Cech** 1989 Feb;56(1):24–9 (Eng. Abstr.) (Slo)

DRUG THERAPY

[A case of severe suppurative complication after hydrocortisone administration] Vereshchagin FF, et al. **Klin Khir** 1989;(1):54 (Rus)

ETIOLOGY

Osteochondritis dissecans of the shoulder in a tennis player. Ishikawa H, et al. **Am J Sports Med** 1988 Sep-Oct; 16(5):547–50 (18 ref.)

Osteochondritis in the female gymnast's elbow. Jackson DW, et al. **Arthroscopy** 1989;5(2):129–36

Tibia vara caused by focal fibrocartilaginous dysplasia. Husien AM, et al. **Clin Radiol** 1989 Jan;40(1):104–5

Kienböck's disease in a patient with Crohn's enteritis treated with corticosteroids. Culp RW, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):294–6

Osteochondrosis of the fourth metacarpal head after closed trauma. Smith RS, et al. **J Hand Surg [Am]** 1988 Nov; 13(6):920–2

Kienböck's disease: two unusual cases. Ribbans WJ. **J Hand Surg [Br]** 1988 Nov;13(4):463–5

[Osteochondrosis dissecans tali and sports] Bruns J, et al. **Sportverletz Sportschaden** 1988 Dec;2(4):153–7 (Eng. Abstr.) (Ger)

[Does excessive stress play a role in the development of osteochondrosis dissecans tali?] Smasal V, et al. **Sportverletz Sportschaden** 1988 Dec;2(4):158–9 (Eng. Abstr.) (Ger)

[Various complications related to the treatment of congenital hip dysplasia using a Koszla splint]-Maj S. **Chir Narzadow Ruchu Ortop Pol** 1988;53(3):229–33 (Eng. Abstr.) (Pol)

[Results of the surgical treatment of hip dysplasia with osteochondrosis as a complication of non-surgical treatment] Rogala P, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(3):224–8 (Eng. Abstr.) (Pol)

[Results of the surgical treatment of congenital dislocation of the hip joint by open reduction and transiliac and corrective osteotomies of the proximal end of the femur] Senger A, et al. **Chir Narzadow Ruchu Ortop Pol** 1988; 53(3):190–4 (Eng. Abstr.) (Pol)

[A case of osteochondropathy of the sesamoid bone of the 1st metatarsophalangeal joint] Greida BP. **Ortop Travmatol Protez** 1989 Feb;(2):49–50 (Rus)

GENETICS

Multiple epiphyseal dysplasia complicated by severe osteochondritis dissecans of the knee. Incidence in two families. Versteylen RJ, et al. **Skeletal Radiol** 1988; 17(6):407–12

PATHOLOGY

[Three case reports of relapsing polychondritis and their immunopathological analysis] Miyagi M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Feb; 27(2):188–93 (Eng. Abstr.) (Jpn)

[The mediopatellar synovial fold syndrome and osteochondropathy of the femoral condyle] Beloenko ED. **Ortop Travmatol Protez** 1988 Oct;(10):50–1 (Rus)

[Combined local forms of physeal dysplasias in a child] Khudalbergenov AA. **Ortop Travmatol Protez** 1988 Oct; (10):48–50 (Rus)

[Degeneration of the intervertebral disk] Tsiv'ian IaL, et al. **Ortop Travmatol Protez** 1988 Jun;(6):27–31 (Eng. Abstr.) (Rus)

PHYSIOPATHOLOGY

Pressures in the distal radioulnar joint: effect of surgical procedures used for Kienbock's disease. Werner FW, et al. **J Orthop Res** 1989;7(3):445–50

Limping child—osteochondritis dissecans of the talus. A case report. Madhok R. **Orthop Rev** 1987 Oct;16(10):757–9

[The femoropatellar pain syndrome in sports] Munzinger U, et al. **Chirurg** 1988 Nov;59(11):701–7 (11 ref.) **(Ger)**

[An analysis of quadriceps muscle force in boys with Osgood–Schlatter disease] Katoh K. **Nippon Seikeigeka Gakkai Zasshi** 1988 May;62(5):523–33 (Eng. Abstr.) **(Jpn)**

[Electrophysiological evaluation of neurologic manifestations of disorders in the topography of the spinal motor segment] Gongal'skii VV. **Ortop Travmatol Protez** 1988 Nov;(11):43–6 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

[Prevention of osteochondritis in folk medicine in the Ukraine] Pridatkevich AV, et al. **Ortop Travmatol Protez** 1988 Jun;(6):46–7 **(Rus)**

RADIOGRAPHY

Patellar angle in Osgood–Schlatter disease. Sen RK, et al. **Acta Orthop Scand** 1989 Feb;60(1):26–7

Panner's disease. Daniel WW. **Arthritis Rheum** 1989 Mar;32(3):341–2

Osteochondritis dissecans of the dome of the talus. Computed tomography scanning in the diagnosis and follow-up [letter; comment] Bueche MJ. **J Bone Joint Surg [Am]** 1989 Apr;71(4):632. **Comment on:** J Bone Joint Surg [Am] 1988 Aug;70(7):1017–9

Three-dimensional CT imaging for wrist disorders. Nakamura R, et al. **J Hand Surg [Br]** 1989 Feb;14(1):53–8

Osteochondral defects of the first metatarsal head in adolescence: a stage in the development of hallux rigidus. Thomas AP, et al. **J Pediatr Orthop** 1989 Mar–Apr;9(2):236–9

[Importance of the ossicle and therapy of Osgood–Schlatter disease] Engel A, et al. **Sportverletz Sportschaden** 1987 Jun;1(2):100–8 (Eng. Abstr.) **(Ger)**

[Echography compared with conventional radiology in Osgood–Schlatter disease] Delle Monache C, et al. **Radiol Med (Torino)** 1989 Jun;77(6):631–4 (Eng. Abstr.) **(Ita)**

[Ombrédanne's exostosis (multiple familial osteochondrosis) (its radiophotographic detection)] Ionescu N, et al. **Rev Ig [Pneumoftiziol]** 1988 Jul–Sep;37(3):269–73 (Eng. Abstr.) **(Rum)**

[Roentgenogrammetry in assessing the action of physiotherapy in patients with cervical osteochondrosis] Zharkov PL, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Jul–Aug;(4):62–4 (Eng. Abstr.) **(Rus)**

[Comparative clinico-roentgenological characteristics of degenerative-dystrophic changes in various segments of the spine] Kamalov II. **Zh Nevropatol Psikhiatr** 1989;89(4):28–31 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Dynamic bone scintigraphy in osteochondritis dissecans. McCullough RW, et al. **Int Orthop** 1988;12(4):317–22

Gallium detection of Salmonella costochondritis. Caruana V, et al. **J Nucl Med** 1988 Dec;29(12):2004–7

The development of Kienböck's disease as followed up by bone scintigraphy and radiography. Jacobsson H, et al. **ROFO** 1988 Nov;149(5):541–3

SURGERY

A compression pinning system for osteochondritis dissecans of the knee. Jakob RP, et al. **Acta Orthop Scand** 1989 Jun;60(3):319–21

The results of operative treatment of osteochondritis dissecans of the patella. Schwarz C, et al. **Am J Sports Med** 1988 Sep–Oct;16(5):522–9

Arthroscopic treatment of osteochondral lesions of the talar dome. Frank A, et al. **Arthroscopy** 1989;5(1):57–61

Arthroscopic treatment of osteochondritis dissecans of the scaphoid. Viegas SF. **Arthroscopy** 1988;4(4):278–81 (30 ref.)

Dorsiflexion osteotomy in Freiberg's disease. Kinnard P, et al. **Foot Ankle** 1989 Apr;9(5):226–31

Excision of posterolateral talar dome lesions through a medial transmalleolar approach. Ove PN, et al. **Foot Ankle** 1989 Feb;9(4):171–5

Results of drilling osteochondritis dissecans before skeletal maturity. Bradley J, et al. **J Bone Joint Surg [Br]** 1989 Aug;71(4):642–4

Arthroscopic drilling of osteochondral lesions of the knee. Rae PJ, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):534

Compressive fixation of osteochondritis dissecans fragments with Herbert screws. Wombwell JH, et al. **J Orthop Trauma** 1987;1(1):74–7

Double-elevating osteotomy of tibiae in the treatment of severe cases of Blount's disease. Gregosiewicz A, et al. **J Pediatr Orthop** 1989 Mar–Apr;9(2):178–81

Tibial tubercle apophysitis in cerebral palsy treated with proximal tibial epiphysiodesis: report of two cases with 3-year follow-up. Kasser JR, et al. **J Pediatr Orthop** 1988 Nov–Dec;8(6):704–6

Tibial sequestrectomy in the management of Osgood–Schlatter disease. Trail IA. **J Pediatr Orthop** 1988 Sep–Oct;8(5):554–7

[Synovial osteochondromatosis of the elbow in a 60-year-old woman] Meziane A, et al. **Ann Chir** 1989;43(3):252–4 (Eng. Abstr.) **(Fre)**

[Arthroscopic therapy of chondropathy and gonarthrosis] Kopka F, et al. **Beitr Orthop Traumatol** 1989 Jan–Feb;36(1–2):32–5 **(Ger)**

[Arthroscopic surgical treatment of circumscribed cartilage damage with spongiolization or Pridie drilling] Schmidt H, et al. **Beitr Orthop Traumatol** 1989 Jan–Feb;36(1–2):35–7 **(Ger)**

[Radius shortening in lunate bone osteomalacia]] Glas K, et al. **Fortschr Med** 1988 Oct 30;106(31):627–30 (0 ref.) (Eng. Abstr.) **(Ger)**

[The Graner capitate interposition arthroplasty in lunate malacia] Braun C, et al. **Handchir Mikrochir Plast Chir** 1988 Nov;20(6):314–7 (Eng. Abstr.) **(Ger)**

[Surgical therapy of malacia of the semilunar bone with a modified Graner method] Ehall R, et al. **Handchir Mikrochir Plast Chir** 1989 Jan;21(1):41–7 (Eng. Abstr.) **(Ger)**

[Partial intercarpal arthrodesis] Moser KD, et al. **Handchir Mikrochir Plast Chir** 1988 Jul;20(4):204–7 (Eng. Abstr.) **(Ger)**

[Pharyngeal complications following ventral fusion operations of the cervical spine] Bernemann D, et al. **Laryngorhinootologie** 1989 Feb;68(2):128–9 (Eng. Abstr.) **(Ger)**

[Aseptic necroses and osteochondrosis dissecans of the elbow joint] Eichenauer M, et al. **Orthopade** 1988 Aug;17(4):374–81 (Eng. Abstr.) **(Ger)**

[Pre- and postoperative magnetic resonance tomography of osteochondrosis dissecans] Lütten C, et al. **ROFO** 1989 Mar;150(3):290–3 (Eng. Abstr.) **(Ger)**

[Refixation in osteochondrosis dissecans with resorbable material using magnetic resonance tomography for follow-up monitoring] Lütten C, et al. **Sportverletz Sportschaden** 1988 Jun;2(2):61–8 (Eng. Abstr.) **(Ger)**

[Osteochondral lesions of the talus] Biedert R. **Unfallchirurg** 1989 Apr;92(4):199–205 (Eng. Abstr.) **(Ger)**

[The femoropatellar pain syndrome. Conservative and surgical therapy in a long-term comparison (10–20 years) and their therapeutic consequences] Imhoff A, et al. **Z Orthop** 1989 Mar–Apr;127(2):139–51 (Eng. Abstr.) **(Ger)**

[Discussion of the contribution "Patellafemoral pressure and measurements of the contact surface in Jägerhut patella—experimental studies of sagittal osteotomy of the patella" (letter)] Weh L. **Z Orthop** 1988 Sep–Oct;126(5):596–7 **(Ger)**

[Diagnosis and therapy of osteochondrosis dissecans] Lütten C, et al. **Z Unfallchir Versicherungsmed Berufskr** 1988;81(3):187–200 **(Ger)**

[Clinical and experimental study of shortening osteotomy of forearm bone(s) in Kienböck's disease] Shibata M. **Nippon Seikeigeka Gakkai Zasshi** 1989 Apr;63(4):245–61 (Eng. Abstr.) **(Jpn)**

[Hypothermia in spinal surgery] Khvisiuk NI, et al. **Ortop Travmatol Protez** 1989 May;(5):8–11 (Eng. Abstr.) **(Rus)**

THERAPY

Osgood–Schlatter disorder. Larkins PA. **Aust Fam Physician** 1988 Dec;17(12):1033–4

Osteochondrosis of the tibial tuberosity (Osgood–Schlatter's disease) [letter] Gümmell HA. **J Manipulative Physiol Ther** 1989 Aug;12(4):314

[Tactics in the management of pregnancy complicated by lumbar vertebrogenic pains] Burshinov AO, et al. **Akush Ginekol (Mosk)** 1988 Oct;(10):23–6 (Eng. Abstr.) **(Rus)**

[Our experience with organizing a department of manual therapy in an urban hospital] Lomakin PV. **Ortop Travmatol Protez** 1989 May;(5):55–8 **(Rus)**

[Treatment of reflex neurodystrophic syndromes of lumbar osteochondrosis using hydroxycobalamin injections] Pishel' IaV, et al. **Ortop Travmatol Protez** 1988 Jun;(6):44–5 **(Rus)**

[Results of the complex conservative ambulatory treatment of cervical osteochondrosis including acupuncture-reflexotherapy] Polienko EP, et al. **Ortop Travmatol Protez** 1989 Jan;(1):36–8 (Eng. Abstr.) **(Rus)**

[Exercise therapy of osteochondrosis of the lumbosacral portion of the spine] Epifanov VA. **Sov Med** 1988;(11):103–6 **(Rus)**

[Use of a low-frequency magnetic field in the combined treatment of middle-aged and elderly patients with ischemic heart disease and osteochondrosis of the cervico-thoracic spine] Sorokina EI, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Mar–Apr;(2):18–22 (Eng. Abstr.) **(Rus)**

[Complex treatment of lumbosacral radiculoischemia using manual therapy] Drobinskiĭ AD, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):24–6 (Eng. Abstr.) **(Rus)**

VETERINARY

Plasma amino acids in dogs with osteochondrosis or hip dysplasia. Hanssen I, et al. **Acta Vet Scand** 1989;30(1):111–2

Osteochondritis dissecans of the lateral ridge of the talus in a dog. van Ee RT, et al. **J Am Vet Med Assoc** 1988 Nov 15;193(10):1284–6

Degeneration of cartilage canal vessels associated with lesions of osteochondrosis in swine. Carlson CS, et al. **Vet Pathol** 1989 Jan;26(1):47–54

Arthroscopic surgery for the treatment of osteochondrosis in the equine shoulder joint. Bertone AL, et al. **Vet Surg** 1987 Jul–Aug;16(4):303–11

Diagnostic and surgical arthroscopy of the equine shoulder joint. Nixon AJ. **Vet Surg** 1987 Jan–Feb;16(1):44–52

Arthroscopic treatment of osteochondritis dissecans in the canine shoulder. Person MW. **Vet Surg** 1989 May–Jun;18(3):175–89

The effects of beveling the margins of articular cartilage defects in immature dogs. Rudd RG, et al. **Vet Surg** 1987 Sep–Oct;16(5):378–83

OSTEOCHONDRITIS DISSECANS see under **OSTEOCHONDRITIS**

OSTEOCHONDRODYSPLASIAS

Spondyloenchondrodysplasia. Menger H, et al. **J Med Genet** 1989 Feb;26(2):93–9

Stickler's syndrome. Temple IK. **J Med Genet** 1989 Feb;26(2):119–26

Achondrogenesis type II. Dilmen U, et al. **Pediatr Radiol** 1988;19(1):53

Pyknodysostosis: presentation of a new case. Arany L, et al. **ROFO** 1988 Oct;149(4):442–4

[A case of craniodiaphyseal dysplasia] Itagaki Y, et al. **No To Hattatsu** 1989 Jan;21(1):69–73 (Eng. Abstr.) **(Jpn)**

BLOOD

In vitro restoration by lithium of defective chemotaxis in Shwachman–Diamond syndrome. Azzarà A, et al. **Br J Haematol** 1988 Dec;70(4):502

CHEMICALLY INDUCED

Cortical hyperostosis and prostaglandins [letter] Svensson O. **Acta Orthop Scand** 1988 Dec;59(6):730

COMPLICATIONS

Cervical abnormalities in osteochondrodysplasia. Dubousset J. **Basic Life Sci** 1988;48:215–7

Rapid progression of tracheal stenosis associated with tracheopathia osteo-chondroplastica. Molloy AR, et al. **Intensive Care Med** 1988;15(1):60–2

Fatal cerebellar herniation secondary to Camurati–Englemann's disease. Simpson RK Jr, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1349–52

Intracranial chondroma in a patient with Ollier's disease. Case report. Traflet RF, et al. **J Neurosurg** 1989 Feb;70(2):274–6

High-dose intravenous methylprednisolone therapy for anemia associated with diaphyseal dysplasia [letter] Ozsoylu S. **J Pediatr** 1989 May;114(5):904

Case report 492: Chondrosarcoma of right ischium developing in a patient with Maffucci syndrome. Howie FM, et al. **Skeletal Radiol** 1988;17(5):368–74

[Familial osteochondrodysplatic dwarfism associated with deafness and tapeto-retinal heredo-degeneration] Khaldi F, et al. **Arch Fr Pediatr** 1989 Jun–Jul;46(6):429–32 (Eng. Abstr.) **(Fre)**

[Diagnostic problems in a case of Saldino–Mainzer syndrome] Barylak A, et al. **Pol Przegl Radiol (Warszawa)** 1988 Jan–Feb;52(1):46–7 (Eng. Abstr.) **(Pol)**

CONGENITAL

Omodysplasia. Maroteaux P, et al. **Am J Med Genet** 1989 Mar;32(3):371–5

DIAGNOSIS

Ultrasonographic prenatal diagnosis and fetal pathology of Langer mesomelic dwarfism. Evans MI, et al. **Am J Med Genet** 1988 Dec;31(4):915–20

Ultrasonic demonstration of thanatophoric dwarfism in utero. Kapoor R, et al. **Indian Pediatr** 1988 Oct;25(10):1009–11

Schwartz Jampel syndrome. Kumar H, et al. **Indian Pediatr** 1988 Oct;25(10):1005–6

Camurati–Engelmann's disease. A case report. Raffaelli P, et al. **Ital J Orthop Traumatol** 1988 Jun;14(2):267–71

Ollier's disease and Maffucci's syndrome: distinct entities or a continuum. Case report: enchondromatosis complicated by an intracranial glioma. Mellon CD, et al. **J Neurol** 1988 Jul;235(6):376–8

Progressive diaphyseal dysplasia presenting as neuromuscular disease. Stenzler S, et al. **J Pediatr Orthop** 1989 Jul–Aug;9(4):463–7

Achondrogenesis–hypochondrogenesis: the spectrum of chondrogenesis imperfecta. A radiological, ultrasonographic, and histopathologic study of 23 cases. van der Harten HJ, et al. **Pediatr Pathol** 1988;8(6):571–97

Prenatal diagnosis of Schwartz–Jampel syndrome with early manifestation. Hunziker UA, et al. **Prenat Diagn** 1989 Feb;9(2):127–31

Identification of avascular necrosis in the dysplastic proximal femoral epiphysis. Mandell GA, et al. **Skeletal Radiol** 1989;18(4):273–81

Case report 482: Chondrosarcoma (grade 1) arising from the right second toe in patient with multiple enchondromas. Nakajima H, et al. **Skeletal Radiol** 1988;17(4):289–92

[Thanatophoric dysplasia and possibilities of prenatal

diagnosis] Santavá A, et al. **Cesk Pediatr** 1989 Jan; 44(1):19–21 (Cze)
[Hip joint sonography in skeletal dysplasias with metaphyseal involvement. Possibilities of erroneous assessments] Schumacher R, et al. **ROFO** 1988 Oct;149(4):414–6 (Eng. Abstr.) (Ger)
[Comment on the article "Non-immunologic fetal ascites—case report"] Brühwiler H. **Zentralbl Gynakol** 1989;111(12):841–4 (Ger)
[Prenatal diagnostic approach to the fetus with short limbs] Barbieri GL, et al. **Pathologica** 1988 Sep–Oct; 80(1069):577–81 (Eng. Abstr.) (Ita)
[Morphological characteristics of lesions of the cartilaginous growth plate in several forms of osteochondrodysplasias] Barer FS, et al. **Ortop Travmatol Protez** 1989 Apr;(4):27–32 (Eng. Abstr.) (Rus)
[Differential diagnosis of diseases associated with joint hypermobility] Barashnev IuI, et al. **Pediatriia** 1988;(9):51–6 (Rus)
[Osteochondroplastic tracheopathy. Diagnostic confirmation. Experience with 8 cases] Núñez Cálix N, et al. **Rev Clin Esp** 1989 Jan;184(1):12–5 (23 ref.) (Eng. Abstr.) (Spa)

DRUG THERAPY

GH therapy in two patients with osteochondrodysplasia. Cacciari E, et al. **Basic Life Sci** 1988;48:129–33

EPIDEMIOLOGY

Bilateral femoral head dysplasia and osteochondritis. Multiple epiphyseal dysplasia tarda, spondylo–epiphyseal dysplasia tarda, and bilateral Legg–Perthes disease. Andersen PE Jr, et al. **Acta Radiol** 1988 Nov–Dec;29(6):705–9
Prevalence of lethal osteochondrodysplasias in Denmark. Andersen PE Jr. **Am J Med Genet** 1989 Apr;32(4):484–9
Birth prevalence rates of skeletal dysplasias. Stoll C, et al. **Clin Genet** 1989 Feb;35(2):88–92

ETIOLOGY

Natural history of human chondrodysplasias. Hall JG. **Pathol Immunopathol Res** 1988;7(1–2):81–4
New perspectives in the human chondrodysplasias. Horton WA, et al. **Pathol Immunopathol Res** 1988;7(1–2):146–8

GENETICS

Spondyloepiphyseal dysplasia tarda. Report of a family with autosomal dominant transmission. Schantz K, et al. **Acta Orthop Scand** 1988 Dec;59(6):716–9
Molecular heterogeneity in chondrodysplasias. Byers PH. **Am J Hum Genet** 1989 Jul;45(1):1–4 (32 ref.)
Type II collagen defects in the chondrodysplasias. I. Spondyloepiphyseal dysplasias. Murray LW, et al. **Am J Hum Genet** 1989 Jul;45(1):5–15
Thanatophoric dysplasia: an autosomal dominant condition? Martínez-Frías ML, et al. **Am J Med Genet** 1988 Dec; 31(4):815–20
Dominant craniometaphyseal dysplasia—a family study over five generations. Taylor DB, et al. **Australas Radiol** 1989 Feb;33(1):84–9
Kniest (Wagner–Stickler variant) and Goldmann–Favre disease in one sibship. Neetens A. **Bull Soc Belge Ophtalmol** 1987;223 Pt 2:27–32
Juvenile nephronophthisis associated with new skeletal abnormalities, tapetoretinal degeneration and liver fibrosis. Bianchi C, et al. **Helv Paediatr Acta** 1989 Jun; 43(5–6):449–55
A severe autosomal recessive acromesomelic dysplasia, the Hunter–Thompson type, and comparison with the Grebe type. Langer LO Jr, et al. **Hum Genet** 1989 Mar;81(4):323–8
Spondyloepiphyseal dysplasia tarda: linkage with genetic markers from the distal short arm of the X chromosome. Szpiro-Tapia S, et al. **Hum Genet** 1988 Dec;81(1):61–3
Thanatophoric dysplasia in identical twins. Young ID, et al. **J Med Genet** 1989 Apr;26(4):276–9
The comparative biology of chondrodysplasias in mice. Brown KS. **Pathol Immunopathol Res** 1988;7(1–2):55–61
Studies on the avian chondrodysplasia mutant, nanomelia. Goetinck PF. **Pathol Immunopathol Res** 1988;7(1–2):73–5
Peripheral dysplasia. Report of a new genetic syndrome. Bacha L, et al. **Pediatr Radiol** 1989;19(3):193–8
Identification of the molecular defect in a family with spondyloepiphyseal dysplasia. Lee B, et al. **Science** 1989 May 26;244(4907):978–80
[Spondyloepiphyseal dysplasia tarda: bilateral total arthroplasty of the hip] Soriano RM, et al. **Rev Chir Orthop** 1988;74(8):778–81 (Eng. Abstr.) (Fre)
[Stickler syndrome. Apropos of a case] Ziegler G, et al. **Rev Rhum Mal Osteoartic** 1988 Dec;55(12):1009–10 (Fre)
[Multiple epiphyseal dysplasia] Brunzlow H, et al. **Radiol Diagn (Berl)** 1988;29(4):571–80 (Eng. Abstr.) (Ger)
[A combination of multiple cartilaginous exostoses and enchondromatosis of bone in a family] Tschernikoff Z, et al. **Radiol Diagn (Berl)** 1989;30(1):53–6 (Eng. Abstr.) (Ger)

HISTORY

The history of Kashin–Beck disease [published erratum appears in N Y State J Med 1989 Aug;89(8):486] Sokoloff L. **N Y State J Med** 1989 Jun;89(6):343–51

METABOLISM

Type II achondrogenesis–hypochondrogenesis: identification of abnormal type II collagen. Godfrey M, et al. **Am J Hum Genet** 1988 Dec;43(6):904–13
Type X collagen in avian tibial dyschondroplasia. Bashey RI, et al. **Lab Invest** 1989 Jan;60(1):106–12
Type II collagen deficiency in achondrogenesis (Langer–Saldino). Eyre DR. **Pathol Immunopathol Res** 1988;7(1–2):90–4
Biochemical correlations in animal models of chondrodysplasias. Melvin T, et al. **Pathol Immunopathol Res** 1988;7(1–2):68–72 (15 ref.)
Abnormal type II collagen in the spondyloepiphyseal dysplasias. Murray LW, et al. **Pathol Immunopathol Res** 1988;7(1–2):99–103
Kniest dysplasia: a probable type II collagen defect. Poole AR, et al. **Pathol Immunopathol Res** 1988;7(1–2):95–8
[Molecular heterogeneity of proteoglycan aggregates of human hyalin cartilage in normal conditions and in systemic bone dysplasia] Feshchenko SP, et al. **Vopr Med Khim** 1989 Mar–Apr;35(2):24–33 (Eng. Abstr.) (Rus)

PATHOLOGY

Type II achondrogenesis–hypochondrogenesis: morphologic and immunohistopathologic studies. Godfrey M, et al. **Am J Hum Genet** 1988 Dec;43(6):894–903
Comparative histopathology of the growth cartilage in short-rib polydactyly syndromes type I and type III and in chondroectodermal dysplasia. Eržen M, et al. **Ann Genet (Paris)** 1988;31(3):144–50
Study of the formation of prechondral blastemas in the autopodium of normal and polydactyl rats. Gašpar S. **Folia Morphol (Praha)** 1989;37(1):95–105
A technique for necropsy evaluation of stenosis of the foramen magnum and rostral spinal canal in osteochondrodysplasia. Knisely AS, et al. **Hum Pathol** 1988 Dec;19(12):1372–5
Thanatophoric dwarfism in Libyan neonates—a report of 3 cases. Soni AL, et al. **Indian J Pediatr** 1988 Jul–Aug; 55(4):641–4
Approaches to investigating growth plate cartilage in the human chondrodysplasias. Horton WA. **Pathol Immunopathol Res** 1988;7(1–2):85–9 (40 ref.)
Stenosis of the foramen magnum and rostral spinal canal, with spinal cord deformity, in Jeune's asphyxiating thoracic dystrophy. Knisely AS, et al. **Pediatr Pathol** 1989; 9(3):299–305
[Severe malformations in atypical short-rib polydactyly syndrome (SRP-S)] Kuchelmeister K, et al. **Zentralbl Allg Pathol** 1988;134(6):561–6 (Eng. Abstr.) (Ger)

RADIOGRAPHY

Instability of the upper cervical spine. Skeletal Dysplasia Group. **Arch Dis Child** 1989 Feb;64(2):283–8
Metatropic dysplasia and its variants (analysis of 14 cases). Kozlowski K, et al. **Australas Radiol** 1988 Aug;32(3):325–37
Unclassified osteochondrodystrophies with extreme platyspondyly (report of two cases). Kozlowski K, et al. **Australas Radiol** 1988 May;32(2):263–8
Hypochondroplasia: radiological diagnosis and differential diagnosis. Fasanelli S. **Basic Life Sci** 1988;48:163–6
Dysplastic cortical hyperostosis: a new form of lethal neonatal dwarfism. Kozlowski K, et al. **Br J Radiol** 1989 Apr;62(736):376–8
Generalized enchondromatosis. A case report. Paterson DC, et al. **J Bone Joint Surg [Am]** 1989 Jan;71(1):133–40
A new type of lethal short-limbed dwarfism. Nairn ER, et al. **Pediatr Radiol** 1989;19(4):253–7
Chondrodystrophic dwarfism and multiple malformations in two sisters. Pazzaglia UE, et al. **Pediatr Radiol** 1988; 19(1):41–4
Dappled diaphyseal dysplasias. Carty H, et al. **ROFO** 1989 Feb;150(2):228–9
Micromelic bone dysplasia with cloverleaf skull. Andersen PE Jr, et al. **Skeletal Radiol** 1989;17(8):551–5
Case report 486: Spondyloepiphyseal dysplasia tarda (SDT) (presumptively proved). Brown DD, et al. **Skeletal Radiol** 1988;17(4):302–5
Case report 546: Endosteal hyperostosis (Worth type). Irie T, et al. **Skeletal Radiol** 1989;18(4):310–3
Case report 512: Spondyloenchondrodysplasia (SED) in two siblings. Ziv N, et al. **Skeletal Radiol** 1989;17(8):598–600
[X-ray diagnosis of multiple epiphyseal dysplasia (a report of 3 cases from the same family)] Zhou LQ. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Feb;23(1):35–7 (Eng. Abstr.) (Chi)
[Dysplasia epiphysealis hemimelica—a case report] Leonhardt K. **Beitr Orthop Traumatol** 1989 Jun;36(6):282–5 (Eng. Abstr.) (Ger)
[Hemihypertrophy as the main symptom of dysplasia epiphysealis hemimelica] Hinkel GK, et al. **Klin Padiatr** 1989 Jan–Feb;201(1):58–62 (20 ref.) (Eng. Abstr.) (Ger)
[Observations on the Camurati-Engelmann syndrome. Demonstration of changes of the petrous bone using high-resolution computed tomography] Dannenmaier B, et al. **ROFO** 1989 Aug;151(2):175–8 (Eng. Abstr.) (Ger)
[Camurati-Engelmann disease (progressive diaphyseal dysplasia). Differential diagnostic problems] Mastragelopulos N, et al. **Unfallchirurgie** 1989 Apr; 15(2):104–7 (Eng. Abstr.) (Ger)
[Osteomesopyknosis] D'Auria P, et al. **Radiol Med (Torino)** 1989 Mar;77(3):267–9 (Ita)
[A case of dysplasia epiphysialis hemimelica] Gambardella A, et al. **Radiol Med (Torino)** 1989 May;77(5):551–2 (Ita)
[Maffucci's syndrome. Apropos of a case and a review of the literature] Mandrioli R, et al. **Radiol Med (Torino)** 1988 Nov;76(5):490–2 (19 ref.) (Ita)

SURGERY

Techniques and results in extensive limb lengthening. Mastragostino S, et al. **Basic Life Sci** 1988;48:333–51
Auxological results of surgical correction of hypometries in congenital osteodysplasia. Morabito F, et al. **Basic Life Sci** 1988;48:389–93
A 37-year follow-up evaluation of multiple-stage femur and tibia lengthening in dyschondroplasia (enchondromatosis) with a net gain of 23.3 centimeters. Urist MR. **Clin Orthop** 1989 May;(242):137–57
Dysplasia epiphysealis hemimelica at the metacarpophalangeal joint. Maylack FH, et al. **J Hand Surg [Am]** 1988 Nov;13(6):916–20
Oblique tibial osteotomy for Blount's disease (tibia vara). Rab GT. **J Pediatr Orthop** 1988 Nov–Dec;8(6):715–20
Sellar chondroma in a case of Ollier's disease. Pospiech J, et al. **Neurochirurgia (Stuttg)** 1989 Jan;32(1):30–5
[Cartilaginous tumors in children] Dumontier C, et al. **Chir Pediatr** 1989;30(2):91–7 (Eng. Abstr.) (Fre)

THERAPY

[Progressive lengthening of the ulna in children using Wagner's technic. Apropos of 14 cases] Caton J, et al. **Rev Chir Orthop** 1988;74 Suppl 2:124–9 (Fre)

VETERINARY

Radiographic diagnosis of tibial dyschondroplasia in broilers: a field selection technique. Bartels JE, et al. **Avian Dis** 1989 Apr–Jun;33(2):254–7
Histomorphometry and vitamin D metabolism of valgus–varus deformity in broiler chickens. Newbrey JW, et al. **Avian Dis** 1988 Oct–Dec;32(4):704–12
Alaskan malamute chondrodysplasia—VIII. Incorporation of [14C]glucosamine and [3H]serine in hepatic metal–binding proteins of Canis familaris. McBride–Warren PA, et al. **Comp Biochem Physiol [B]** 1979;63(4):569–76
Clinical, radiographic, pathologic, and genetic features of osteochondrodysplasia in Scottish deerhounds. Breur GJ, et al. **J Am Vet Med Assoc** 1989 Sep 1;195(5):606–12
Radiographic diagnosis of hereditary chondrodysplasia in newborn lambs. Vanek JA, et al. **J Am Vet Med Assoc** 1989 Jan 15;194(2):244–8
The effect of dietary cholecalciferol, 25-hydroxycholecalciferol and 1,25-dihydroxycholecalciferol on the development of tibial dyschondroplasia in broiler chickens in the absence and presence of disulfiram. Edwards HM Jr. **J Nutr** 1989 Apr; 119(4):647–52
Animal models with chondrodysplasia/osteochondrodysplasia. Minor RR, et al. **Pathol Immunopathol Res** 1988;7(1–2):62–7
Effect of dietary calcium, phosphorus, chloride, and zeolite on the development of tibial dyschondroplasia. Edwards HM Jr. **Poult Sci** 1988 Oct;67(10):1436–46
Effect of dyschondroplasia on the rate of bone growth in the fowl. Thorp BH. **Res Vet Sci** 1988 Jul;45(1):78–82
Radiographic and histologic changes after thoracolumbar disc curettage. Wagner SD, et al. **Vet Surg** 1987 Jan–Feb; 16(1):65–9

OSTEOCHONDROSIS see **OSTEOCHONDRITIS**

OSTEOCLASTIC BONE LOSS see **BONE RESORPTION**

OSTEOCLASTS

Carbonic anhydrase II is induced in HL-60 cells by 1,25-dihydroxyvitamin D3: a model for osteoclast gene regulation. Hillstrom Shapiro L, et al. **FEBS Lett** 1989 Jun 5;249(2):307–10

ANALYSIS

[An attempt at identification of osteoclastic activation factors implicated in myeloma] Bataille R, et al. **Rev Rhum Mal Osteoartic** 1988 May;55(7):539–40 (Fre)

CLASSIFICATION

Osteoclast-like cells formed in long-term human bone marrow cultures express a similar surface phenotype as authentic osteoclasts. Kukita T, et al. **Lab Invest** 1989 Apr; 60(4):532–8

CYTOLOGY

A quantitative comparison of osteoclasts in the teeth of the anuran amphibian Xenopus laevis. Shaw JP. **Arch Oral Biol** 1988;33(6):451–3
Regulation of new osteoclast formation by a bone cell-derived macromolecular factor. Dickson IR, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1383–90

Immunocytochemical analysis of the human osteoclast: phenotypic relationship to other marrow-derived cells. Athanasou NA, et al. **Bone Miner** 1988 Mar;3(4):317–33

Corticosteroids inhibit the differentiation of U937 cells induced by the combination of lymphocyte-conditioned media and calcitriol. Dodd RC, et al. **Bone Miner** 1987 Jul;2(4):281–90

Impaired osteoclast differentiation in subcutaneous implants of bone particles in osteopetrotic mutants. Glowacki J, et al. **Bone Miner** 1989 Mar;5(3):271–8

Osteoclast formation from cloned pluripotent hemopoietic stem cells. Hagenaars CE, et al. **Bone Miner** 1989 May; 6(2):179–89

Osteopetrosis in the toothless rat: failure of osteoclast differentiation and function. Osier LK, et al. **Bone Miner** 1987 Oct;3(1):35–45

Pluripotent hemopoietic stem cells give rise to osteoclasts in vitro: effects of rGM-CSF. Schneider GB, et al. **Bone Miner** 1989 Jan;5(2):129–38

Characteristics of osteoclast precursor-like cells grown from mouse bone marrow. van de Wijngaert FP, et al. **Bone Miner** 1987 Nov;3(2):111–23

Cell and molecular biology of vertebrate hard tissues. **Ciba Found Symp** 1988;136:1–307

The regulation of osteoclastic development and function. Chambers TJ. **Ciba Found Symp** 1988;136:92–107 (49 ref.)

Osteoclast development: the cell surface and the bone environment. Osdoby P, et al. **Ciba Found Symp** 1988; 136:108–24 (22 ref.)

The origin of the osteoclast. Hanaoka H, et al. **Clin Orthop** 1989 Feb;(239):286–98

The cytogenesis of macrophages and osteoclast-like giant cells in bone tumors with special emphasis on the so-called fibrohistiocytic tumors. Roessner A, et al. **Curr Top Pathol** 1989;80:205–27

Parathyroid hormone (PTH)-related protein is a potent stimulator of osteoclast-like multinucleated cell formation to the same extent as PTH in mouse marrow cultures. Akatsu T, et al. **Endocrinology** 1989 Jul;125(1):20–7

Calcitonin receptors as markers for osteoclastic differentiation: correlation between generation of bone-resorptive cells and cells that express calcitonin receptors in mouse bone marrow cultures. Hattersley G, et al. **Endocrinology** 1989 Sep;125(3):1606–12

Osteoblastic cells are involved in osteoclast formation. Takahashi N, et al. **Endocrinology** 1988 Nov;123(5):2600–2

Glucocorticoids impair bone resorptive activity and viability of osteoclasts disaggregated from neonatal rat long bones. Tobias J, et al. **Endocrinology** 1989 Sep;125(3):1290–5

Comparison of multinucleated cells elicited in rats by particulate bone, polyethylene, or polymethylmethacrylate. Glowacki J, et al. **J Bone Miner Res** 1986 Aug;1(4):327–31

Multinucleated cells elicited in response to implants of devitalized bone particles possess receptors for calcitonin. Goldring SR, et al. **J Bone Miner Res** 1988 Feb;3(1):117–20

Osteoclast formation in vitro from progenitor cells present in the adult mouse circulation. Helfrich MH, et al. **J Bone Miner Res** 1989 Jun;4(3):325–34

Forskolin augments the effects of calcitonin on cytoplasmic spreading of isolated rat osteoclasts and plasma calcium levels in the rat. Nicholson GC, et al. **J Bone Miner Res** 1988 Apr;3(2):181–4

Effect of vitamin A on bone resorption: evidence for direct stimulation of isolated chicken osteoclasts by retinol and retinoic acid. Oreffo RO, et al. **J Bone Miner Res** 1988 Apr;3(2):203–10

Adhesion patterns and cytoskeleton of rabbit osteoclasts on bone slices and glass. Turksen K, et al. **J Bone Miner Res** 1988 Aug;3(4):389–400

Generation of osteoclasts from hemopoietic cells and a multipotential cell line in vitro. Hattersley G, et al. **J Cell Physiol** 1989 Sep;140(3):478–82

Osteoclast-like cells form in long-term human bone marrow but not in peripheral blood cultures. Takahashi N, et al. **J Clin Invest** 1989 Feb;83(2):543–50

Immunohistochemical characterization of osteoclasts and osteoclast-like cells with monoclonal antibody MB1 on paraffin-embedded tissues. Chilosi M, et al. **J Pathol** 1988 Nov;156(3):251–4

Histochemical properties of osteoclasts and reactive multinucleated giant cells. Kadoya Y, et al. **Osaka City Med J** 1988 Oct;34(2):169–77

Developmental and radiobiologic characteristics of canine multinucleated, osteoclast-like cells generated in vitro from canine bone marrow. Seed TM, et al. **Scanning Microsc** 1988 Sep;2(3):1599–611

DRUG EFFECTS

Time course of "escape" from calcitonin-induced inhibition of motility and resorption of disaggregated osteoclasts. Kanehisa J. **Bone** 1989;10(2):125–9

Two modes of action of bisphosphonates on osteoclastic resorption of mineralized matrix. Boonekamp PM, et al. **Bone Miner** 1986 Feb;1(1):27–39

Enhancement of the inhibitory action of APD on the transformation of osteoclast precursors into resorbing cells after dimethylation of the amino group. Boonekamp PM, et al. **Bone Miner** 1987 Feb;2(1):29–42

Dichloromethylenebisphosphonate (Cl2MBP) inhibits bone resorption through injury to osteoclasts that resorb Cl2MBP-coated bone. Flanagan AM, et al. **Bone Miner** 1989 Apr;6(1):33–43

Growth of osteoclast precursor-like cells from whole mouse bone marrow: inhibitory effect of CSF-1. van de Wijngaert FP, et al. **Bone Miner** 1987 Nov;3(2):97–110

Effects of the proteinase inhibitors leupeptin and E-64 on osteoclastic bone resorption. Everts V, et al. **Calcif Tissue Int** 1988 Sep;43(3):172–8

A differentiation-inducing factor produced by the osteoblastic cell line MC3T3-E1 stimulates bone resorption by promoting osteoclast formation. Abe E, et al. **J Bone Miner Res** 1988 Dec;3(6):635–45

Effects of human recombinant CSF-GM and highly purified CSF-1 on the formation of multinucleated cells with osteoclast characteristics in long-term bone marrow cultures. MacDonald BR, et al. **J Bone Miner Res** 1986 Apr;1(2):227–33

Bone resorption by isolated human osteoclasts in vitro: effects of calcitonin. Murrills RJ, et al. **J Bone Miner Res** 1989 Apr;4(2):259–68

Interleukin-1 and tumor necrosis factor stimulate the formation of human osteoclastlike cells in vitro. Pfeilschifter J, et al. **J Bone Miner Res** 1989 Feb;4(1):113–8

Calcitonin-like effects of forskolin and choleratoxin on surface area and motility of isolated rabbit osteoclasts. Ransjö M, et al. **J Bone Miner Res** 1988 Dec;3(6):611–9

Human macrophage colony-stimulating factor inhibits bone resorption by osteoclasts disaggregated from rat bone. Hattersley G, et al. **J Cell Physiol** 1988 Oct;137(1):199–203

Interleukin-2 stimulates osteoclastic activity: increased acid production and radioactive calcium release. Ries WL, et al. **J Periodont Res** 1989 Jul;24(4):242–6

[Effect of alpha-hydroxydimethyl-gamma-aminopropylidene bisphosphonate on the bone tissue of rats during hypokinesia] Shvets VN, et al. **Kosm Biol Aviakosm Med** 1989 Jan–Feb;23(1):27–31 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Inhibition of osteoclastic acid phosphatase abolishes bone resorption. Zaidi M, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):68–71

Osteoclastic acid ATPase: biochemical and histochemical studies of the osteopetrotic mutations in the rat. Ek-Rylander B, et al. **Bone Miner** 1989 Mar;5(3):309–21

Tartrate-resistant acid phosphatase activity in tibial osteoclasts and cells elicited by ectopic bone and suture implants in normal and osteopetrotic rats. Walters LM, et al. **Bone Miner** 1988 Apr;4(1):49–62

Different tartrate sensitivity and pH optimum for two isoenzymes of acid phosphatase in osteoclasts. An electron-microscopic enzyme-cytochemical study. Akisaka T, et al. **Cell Tissue Res** 1989 Jan;255(1):69–76

A quantitative cytochemical assay for osteoclast acid phosphatase activity in foetal rat calvaria. Webber DM, et al. **Histochem J** 1988 May;20(5):269–75

Ultrastructural localization of tartrate-resistant, purple acid phosphatase in rat osteoclasts by histochemistry and immunocytochemistry. Clark SA, et al. **J Bone Miner Res** 1989 Jun;4(3):399–405

Tartrate-resistant acid ATPase as a cytochemical marker for osteoclasts. Andersson GN, et al. **J Histochem Cytochem** 1989 Jan;37(1):115–7

IMMUNOLOGY

Pleomorphic carcinoma of the pancreas with osteoclast-like giant cells expressing an epithelial-associated antigen detected by monoclonal antibody 44-3A6. Combs SG, et al. **Diagn Cytopathol** 1988;4(4):316–22

Development of a monoclonal antibody to osteoclasts formed in vitro which recognizes mononuclear osteoclast precursors in the marrow. Kukita T, et al. **Endocrinology** 1989 Aug;125(2):630–7

METABOLISM

Dentin resorption mediated by odontoclasts in physiological root resorption of human deciduous teeth. Sasaki T, et al. **Am J Anat** 1988 Dec;183(4):303–15

Existence of parathyroid hormone binding sites on murine hemopoietic blast cells. Hakeda Y, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1481–6

'Calcium-activated' intracellular calcium elevation: a novel mechanism of osteoclast regulation. Zaidi M, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1461–5

Serum vitamin D metabolites and nuclear uptake of (3H)-1,25-dihydroxyvitamin D3 in monocytes from patients with autosomal dominant osteopetrosis: a study of two radiological types. Bollerslev J, et al. **Bone** 1988; 9(6):355–9

Rapid changes of light microscopic indices of osteoclast-bone relationships correlated with electron microscopy. McMillan PJ, et al. **Calcif Tissue Int** 1989 Jun;44(6):399–405

Hypocalcemia response following calcitonin administration: lack of correlation with osteoclast number determined after histoenzymologic identification in osteoporosis. Palle S, et al. **Clin Rheumatol** 1988 Sep;7(3):354–8

The cellular metabolism of lead and calcium: a kinetic analysis in cultured osteoclastic bone cells. Rosen JF, et al. **Contrib Nephrol** 1988;64:74–82

Distribution of lectin binding glycoprotein in osteoclasts. Illés T, et al. **Histochemistry** 1989;91(1):55–9

Characterization of isolated and cultured chick osteoclasts: the effects of acetazolamide, calcitonin, and parathyroid hormone on acid production. Hunter SJ, et al. **J Bone Miner Res** 1988 Jun;3(3):297–303

Calcitonin receptor binding as a marker of osteoclast heterogeneity in osteopetrotic rodents. Rouleau MF, et al. **J Bone Miner Res** 1986 Dec;1(6):543–53

Receptor-mediated uptake of a mannose-6-phosphate bearing glycoprotein by isolated chicken osteoclasts. Blair HC, et al. **J Cell Physiol** 1988 Dec;137(3):476–82

Cytoplasmic pH regulation and chloride/bicarbonate exchange in avian osteoclasts. Teti A, et al. **J Clin Invest** 1989 Jan;83(1):227–33

Influence of blood calcium on calcitonin receptors in isolated chick osteoclasts. Eliam MC, et al. **J Endocrinol** 1988 Nov; 119(2):243–8

Effects of peptides from the calcitonin genes on bone and bone cells. Zaidi M, et al. **Q J Exp Physiol** 1988 Jul; 73(4):471–85

Osteoclastic bone resorption by a polarized vacuolar proton pump. Blair HC, et al. **Science** 1989 Aug 25;245(4920):855–7

Quantitative interactions between Pb2+ and Ca2+ homeostasis in cultured osteoclastic bone cells. Rosen JF, et al. **Toxicol Appl Pharmacol** 1989 May;98(3):530–43

[Immunologic mechanisms of regulating calcium metabolism in human bone tissue (production of osteoclast-activating factor) during long-term anti-orthostatic hypokinesia] Konstantinova IV, et al. **Kosm Biol Aviakosm Med** 1989 May-Jun;23(3):38–42 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Osteoclasts in human osteopetrosis contain viral-nucleocapsid-like nuclear inclusions. Mills BG, et al. **J Bone Miner Res** 1988 Feb;3(1):101–6

PATHOLOGY

Osteoclasts in chronic otitis media, cholesteatoma, and otosclerosis. Chole RA. **Ann Otol Rhinol Laryngol** 1988 Nov-Dec;97(6 Pt 1):661–6

Reduced life span of the osteoclast in osteopetrotic (mi and midi) mice. Marshall MJ, et al. **Bone Miner** 1987 Apr; 2(2):115–24

Variable osteoclast appearance in human infantile osteopetrosis. Shapiro F, et al. **Calcif Tissue Int** 1988 Aug; 43(2):67–76

Immunocytochemical distribution of extracellular matrix receptors in human osteoclasts: a beta 3 integrin is colocalized with vinculin and talin in the podosomes of osteoclastoma giant cells. Zambonin-Zallone A, et al. **Exp Cell Res** 1989 Jun;182(2):645–52

Effects of a bisphosphonate (1-hydroxy ethylidene-1,1 bisphosphonic acid) on osteoclast number during prolonged bed rest in healthy humans. Chappard D, et al. **Metabolism** 1989 Sep;38(9):822–5

Osteoclasts and bone remodeling in chronic myeloproliferative disorders. A histochemical and morphometric study on trephine biopsies in 165 patients. Thiele J, et al. **Pathol Res Pract** 1989 Jun;184(6):591–9

[Osteoclastic type giant cell carcinoma of the breast] Trojani M, et al. **Ann Pathol** 1989;9(3):189–94 (Eng. Abstr.) **(Fre)**

[Changes in selected parameters of calcium-phosphorus metabolism, the metacarpal index and results of the calcitonic test in patients with diabetes mellitus type I] Gasińska T, et al. **Endokrynol Pol** 1988;39(3):155–63 (Eng. Abstr.) **(Pol)**

[Histomorphologic study of the bones of monkeys after 14-day anti-orthostatic hypokinesia] Durnova GN, et al. **Kosm Biol Aviakosm Med** 1989 Jan-Feb;23(1):22–6 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Inwardly rectifying K+ current in osteoclasts. Sims SM, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):C1277–82

Molecular mechanisms of bone resorption by the osteoclast. Baron R. **Anat Rec** 1989 Jun;224(2):317–24 (66 ref.)

Mechanism of osteoclast mediated bone resorption. Väänänen HK, et al. **Ann Chir Gynaecol** 1988;77(5–6):193–6 (44 ref.)

The effect of lipopolysaccharide from the oral bacterium Bacteroides gingivalis on osteoclastic resorption of sperm-whale dentine slices in vitro. Sismey-Durrant HJ, et al. **Arch Oral Biol** 1987;32(12):911–3

Activation of the bone-derived latent TGF beta complex by isolated osteoclasts. Oreffo RO, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):817–23

Bone resorption in vitro: macrophages and giant cells from failed total hip replacement versus osteoclasts. Pazzaglia UE, et al. **Biomaterials** 1989 May;10(4):286–8

Generation of osteoclasts from isolated hematopoietic progenitor cells. Kurihara N, et al. **Blood** 1989 Sep; 74(4):1295–302

A bone marrow fraction enriched for granulocyte-macrophage progenitors gives rise to osteoclasts in vitro. Schneider GB, et al. **Bone** 1988; 9(5):303–8

Conditioned medium of fetal mouse long bone rudiments stimulates the formation of osteoclast precursor-like cells from mouse bone marrow. van de Wijngaert FP, et al. **Bone** 1989;10(1):61–8

Monoclonal antibodies against osteoclasts inhibit bone resorption in vitro. Chambers TJ, et al. **Bone Miner** 1986 Apr;1(2):127–35

Are osteoblastic cells required for the control of osteoclast activity by parathyroid hormone? Jilka RL. **Bone Miner** 1986 Sep;1(4):261–6 (24 ref.)

The effect of substrate composition and condition on resorption by isolated osteoclasts. Shimizu H, et al. **Bone Miner** 1989 Jul;6(3):261–75

The origin and nature of stromal osteoclast-like multinucleated giant cells in breast carcinoma: implications for tumour osteolysis and macrophage biology. Athanasou NA, et al. **Br J Cancer** 1989 Apr;59(4):491–8

Expression of the vitronectin receptor during embryonic development; an immunohistological study of the ontogeny of the osteoclast in the rabbit. Simpson A, et al. **Br J Exp Pathol** 1989 Jun;70(3):257–65

Haemopoietic growth factors: their relevance in osteoclast formation and function. Testa NG, et al. **Ciba Found Symp** 1988;136:257–74 (32 ref.)

Generation of osteoclastic function in mouse bone marrow cultures: multinuclearity and tartrate-resistant acid phosphatase are unreliable markers for osteoclastic differentiation. Hattersley G, et al. **Endocrinology** 1989 Apr; 124(4):1689–96

Tumors producing human tumor necrosis factor induced hypercalcemia and osteoclastic bone resorption in nude mice. Johnson RA, et al. **Endocrinology** 1989 Mar; 124(3):1424–7

Control of cytosolic free calcium in rat and chicken osteoclasts. The role of extracellular calcium and calcitonin. Malgaroli A, et al. **J Biol Chem** 1989 Aug 25; 264(24):14342–7

Prostaglandins promote osteoclastlike cell formation by a mechanism involving cyclic adenosine 3',5'-monophosphate in mouse bone marrow cell cultures. Akatsu T, et al. **J Bone Miner Res** 1989 Feb;4(1):29–35

Bone resorption by isolated chick osteoclasts in culture is stimulated by murine spleen cell supernatant fluids (osteoclast-activating factor) and inhibited by calcitonin and prostaglandin E2. de Vernejoul MC, et al. **J Bone Miner Res** 1988 Feb;3(1):69–80

Effect of arachidonic acid metabolites on bone resorption by isolated rat osteoclasts. Fuller K, et al. **J Bone Miner Res** 1989 Apr;4(2):209–15

Bone matrix stimulates osteoclastic differentiation in cultures of rabbit bone marrow cells. Fuller K, et al. **J Bone Miner Res** 1989 Apr;4(2):179–83

Migration and phenotypic transformation of osteoclast precursors into mature osteoclasts: the effect of a bisphosphonate. Löwik CW, et al. **J Bone Miner Res** 1988 Apr;3(2):185–92

Inhibition of osteoclast-like cell formation by bisphosphonates in long-term cultures of human bone marrow. Hughes DE, et al. **J Clin Invest** 1989 Jun; 83(6):1930–5

Extracellular protons acidify osteoclasts, reduce cytosolic calcium, and promote expression of cell–matrix attachment structures. Teti A, et al. **J Clin Invest** 1989 Sep;84(3):773–80

Osteoclast activating factor is now interleukin-1 beta: historical perspective and biological implications. Jandinski JJ. **J Oral Pathol** 1988 Apr;17(4):145–52 (118 ref.)

Attachment to and phagocytosis of mineral by alveolar bone osteoclasts. Pierce AM. **J Submicrosc Cytol Pathol** 1989 Jan;21(1):63–71

Three voltage-activated K+ conductances and an ATP-activated conductance in freshly isolated embryonic chick osteoclasts. Ravesloot JH, et al. **Pflugers Arch** 1989; 414 Suppl 1:S166–7

Voltage-activated K+ conductances in freshly isolated embryonic chicken osteoclasts. Ravesloot JH, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6821–5

[Cytokines and osteoclastic action] Chenu C. **Pathol Biol (Paris)** 1989 Jun;37(6):768–75 (77 ref.) (Eng. Abstr.) **(Fre)**

[The role of the bone cell in the regulation of phosphorus and calcium homeostasis] Marotti G. **G Clin Med** 1988 Apr; 69(4):243–61 (64 ref.) **(Ita)**

RADIATION EFFECTS

Direct and indirect radiation effects on osteoclast formation in vitro. Scheven BA, et al. **Bone Miner** 1987 Jul; 2(4):291–300

ULTRASTRUCTURE

More on mononuclear osteoclasts [letter] Parker WS. **Am J Orthod Dentofacial Orthop** 1989 May;95(5):27A

Surface modifications at the periosseous region of chick osteoclast as revealed by freeze-substitution. Akisaka T, et al. **Anat Rec** 1988 Dec;222(4):323–32

A three-dimensional reconstruction of the ruffled border of osteoclasts. Domon T, et al. **Arch Histol Cytol** 1989 Mar; 52(1):1–13

Ultrastructure of the tibial epiphyseal growth plate in microphthalmic (mi/mi) mice. Paxinos-Maroudas D, et al. **Arch Oral Biol** 1989;34(2):77–84

The distribution of podosomes in osteoclasts cultured on bone laminae: effect of retinol. Zambonin-Zallone A, et al. **J Bone Miner Res** 1988 Oct;3(5):517–23

Characterization of the cytoskeleton of isolated chick osteoclasts: effect of calcitonin. Hunter SJ, et al. **J Histochem Cytochem** 1989 Oct;37(10):1529–37

OSTEOCYTES

ANALYSIS

Ultrastructural immunocytochemical localization of endogenous 1,25-dihydroxyvitamin D3 and its receptors in osteoblasts and osteocytes from neonatal mouse and rat calvaria. Boivin G, et al. **Bone Miner** 1987 Nov;3(2):125–36

Positivity to glial fibrillary acidic protein in bone, cartilage, and chordoma. Kasantikul V, et al. **J Surg Oncol** 1989 May; 41(1):22–6

CYTOLOGY

Neoplastic transformation of osteogenic cells: quantitative morphometric analysis of an in vitro model for osteosarcoma. Birek C, et al. **Carcinogenesis** 1988 Oct; 9(10):1785–91

ENZYMOLOGY

Tartrate-resistant acid phosphatase activity in rat osteoblasts and osteocytes. Bianco P, et al. **Calcif Tissue Int** 1988 Sep; 43(3):167–71

PATHOLOGY

Increased 3H-uridine levels in osteocytes following a single short period of dynamic bone loading in vivo. Pead MJ, et al. **Calcif Tissue Int** 1988 Aug;43(2):92–6

The femoral head in osteonecrosis. A quantitative study of osteocyte population. Humphreys S, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):205–8

Histopathology of femoral head osteonecrosis in rheumatoid arthritis: the relationship between steroid therapy and lipid degeneration in the osteocyte. Watanabe Y, et al. **Rheumatol Int** 1989;9(1):25–31

ULTRASTRUCTURE

An electron microscopic study of the changes observed in osteocytes under ischemic conditions. Usui Y, et al. **J Orthop Res** 1989;7(1):12–21

OSTEOGENESIS

Bone induction by fetal and adult human bone matrix in athymic rats. Aspenberg P, et al. **Acta Orthop Scand** 1989 Apr;60(2):195–9

Osteogenesis in cranial defects and diffusion chambers. Comparison in rabbits of bone matrix, marrow, and collagen implants. Strates BS, et al. **Acta Orthop Scand** 1989 Apr;60(2):200–3

Ultrastructure of the osteogenesis of acellular vertebral bone in the Japanese medaka, Oryzias latipes (Teleostei, Cyprinidontidae). Ekanayake S, et al. **Am J Anat** 1988 Jul; 182(3):241–9

Skeletal repair in the aged: a preliminary study in rabbits. Strates BS, et al. **Am J Med Sci** 1988 Oct;296(4):266–9

Sonographic appearance of the fetal heel ossification centers and foot length measurements provide independent markers for gestational age estimation. Goldstein I, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):923–6

Site-specific regulation of osteogenesis: maintenance of discrete levels of phenotypic expression in vitro. McCulloch CA, et al. **Anat Rec** 1989 Jan;223(1):27–34

Reduced bone formation in non-steroid treated patients with rheumatoid arthritis. Compston JE, et al. **Ann Rheum Dis** 1989 Jun;48(6):483–7

Development of osteogenic and chondrogenic potentials along the mediolateral axis of the embryonic chick mandible. Tyler MS. **Arch Oral Biol** 1988;33(6):443–9

Affinity of osteogenin, an extracellular bone matrix associated protein initiating bone differentiation, for concanavalin A. Paralkar VM, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):419–24

Increase of chondroitin 4-sulfate concentration in the endochondral ossification cartilage of normal dogs. Harab RC, et al. **Biochim Biophys Acta** 1989 Aug 18;992(2):237–40

Chondrogenesis and osteogenesis of bone marrow-derived cells by bone-inductive factor. Harada K, et al. **Bone** 1988; 9(3):177–83

Ultrastructural localization of matrix vesicles and alkaline phosphatase in the Swarm rat chondrosarcoma: their role in cartilage calcification. Miller GJ, et al. **Bone** 1988; 9(4):235–41

Skeletal tissue responses to thermal injury: an experimental study. Schaffler MB, et al. **Bone** 1988;9(6):397–406

Proteoglycans synthesized during the cartilage to bone transition in developing chick embryos. Weitzhandler M, et al. **Bone** 1988;9(4):225–33

The parathyroid glands in the skeletal development of the ovine foetus. Aaron JE, et al. **Bone Miner** 1989 Aug; 7(1):13–22

Osteogenesis in in vivo diffusion chamber cultures of human marrow cells. Bab I, et al. **Bone Miner** 1988 Sep;4(4):373–86

Expression of the chondrogenic phenotype by mineralizing cultures of embryonic chick calvarial bone cells. Berry L, et al. **Bone Miner** 1989 Aug;7(1):31–45

Cartilage resorption and endochondral bone formation during the development of long bones in chick embryos. Roach HI, et al. **Bone Miner** 1989 Jul;6(3):289–309

Plasma bone Gla-protein: assessment of its clinical value as an index of bone formation in hemodialyzed patients. Sebert JL, et al. **Bone Miner** 1987 Feb;2(1):21–7

Tumor cells stimulate in vivo periosteal bone formation. WLodarski KH, et al. **Bone Miner** 1987 May;2(3):185–92

Osteogenic capacity of vascularised periosteum: experimental study using rib periosteum in rabbits. Takato T, et al. **Br J Plast Surg** 1988 Sep;41(5):528–32

FT-IR microscopy of endochondral ossification at 20 mu spatial resolution [published erratum appears in Calcif Tissue Int 1989 Jul;45(1):62] Mendelsohn R, et al. **Calcif Tissue Int** 1989 Jan;44(1):20–4

A monoclonal antibody against dentin phosphophoryn recognizes a bone protein(s) appearing at the beginning of ossification. Nakama T, et al. **Calcif Tissue Int** 1988 Oct; 43(4):263–7

Osseous regeneration after therapy in patients with head and neck tumors. Estrin E, et al. **Cancer** 1989 Sep 15; 64(6):1222–5

Bone marrow fibroblast colony-forming cells are osteogenic stem cells [letter] Beranek JT. **Cell Tissue Kinet** 1988 Sep; 21(5):375–7

Bone formation in vitro by stromal cells obtained from bone marrow of young adult rats. Maniatopoulos C, et al. **Cell Tissue Res** 1988 Nov;254(2):317–30

Cell and molecular biology of vertebrate hard tissues. **Ciba Found Symp** 1988;136:1–307

Bone development. Caplan AI. **Ciba Found Symp** 1988; 136:3–21 (18 ref.)

Stromal stem cells: marrow-derived osteogenic precursors. Owen M, et al. **Ciba Found Symp** 1988;136:42–60 (63 ref.)

The histology of distraction osteogenesis using different external fixators. Aronson J, et al. **Clin Orthop** 1989 Apr; (241):106–16

Acetabular development in the infant's dislocated hips. Cherney DL, et al. **Clin Orthop** 1989 May;(242):98–103

The origin of the osteoclast. Hanaoka H, et al. **Clin Orthop** 1989 Feb;(239):286–98

The tension-stress effect on the genesis and growth of tissues. Part I. The influence of stability of fixation and soft-tissue preservation. Ilizarov GA. **Clin Orthop** 1989 Jan; (238):249–81

The tension-stress effect on the genesis and growth of tissues: Part II. The influence of the rate and frequency of distraction. Ilizarov GA. **Clin Orthop** 1989 Feb; (239):263–85

Normal and heterotopic periosteum. Włodarski KH. **Clin Orthop** 1989 Apr;(241):265–77 (111 ref.)

Dose-dependence of and threshold for optimal bone induction by collagenous bone matrix and osteogenin-enriched fraction. Muthukumaran N, et al. **Coll Relat Res** 1988 Sep;8(5):433–41

Isolation, partial purification and in vitro characterization of osteogenic inhibitory protein [published erratum appears in Connect Tissue Res 1988;18(1):following 65] Brownell AG, et al. **Connect Tissue Res** 1988;17(4):261–75

Tumor bone formation in different osteosarcomas: topological, biochemical, and histochemical analyses. Althoff J, et al. **Curr Top Pathol** 1989;80:55–89

Skeletogenesis in the sea urchin embryo. Decker GL, et al. **Development** 1988 Jun;103(2):231–47 (76 ref.)

Neoplastic and euplastic periosteal bone formation induced in rats by Mu-MSV inoculation. Włodarski KH. **Folia Morphol (Warsz)** 1987;46(1–2):1–8

A histochemical localization on Maclura pomifera lectin during osteogenesis. Nakamura M, et al. **Histochemistry** 1989;92(3):225–30

A review of matrix-induced osteogenesis with special reference to its potential use in cranio-facial surgery. Deatherage JR, et al. **Int J Oral Maxillofac Surg** 1988 Dec; 17(6):395–9 (31 ref.)

Human tissue response to porous hydroxyapatite implants. A case report. Frame JW, et al. **Int J Oral Maxillofac Surg** 1989 Jun;18(3):142–4

The role of mineralization in experimental models of osteogenetic induction with decalcified bone matrix. Pazzaglia UE, et al. **Ital J Orthop Traumatol** 1988 Sep; 14(3):369–75

Bone formation and static changes in the thoracic spine at uni- or bilateral experimental spondylodesis with demineralized bone matrix (DBM). Ragni PC, et al. **Ital J Orthop Traumatol** 1989 Jun;15(2):237–52

Treatment of a nonunion fracture of the tibia in a Chinese water dragon, including stimulation of osteogenesis with direct electric current. Mader DR, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1141–2

Role of cartilage canals in osteogenesis and growth of the vertebral centra. Chandraraj S, et al. **J Anat** 1988 Jun; 158:121–36

Osteogenesis in two marsupial species, the bandicoot Isoodon macrourus and the possum Trichosurus vulpecula. Gemmell RT, et al. **J Anat** 1988 Aug;159:155–64

Purification and partial amino acid sequence of osteogenin, a protein initiating bone differentiation. Luyten FP, et al. **J Biol Chem** 1989 Aug 15;264(23):13377–80

Development of an osteogenic bone-marrow preparation. Connolly J, et al. **J Bone Joint Surg [Am]** 1989 Jun; 71(5):684–91

Differences in the kinetics of the mineralization process in endochondral and intramembranous osteogenesis in human fetal development. Dziedzic-Goclawska A, et al. **J Bone Miner Res** 1988 Oct;3(5):533–9

Charged beads: generation of bone and giant cells. Krukowski M, et al. **J Bone Miner Res** 1988 Apr; 3(2):165–71

A calcium-binding, asparagine-linked oligosaccharide is involved in skeleton formation in the sea urchin embryo. Farach-Carson MC, et al. **J Cell Biol** 1989 Sep; 109(3):1289–99

Bone marrow-derived stromal cell line expressing osteoblastic phenotype in vitro and osteogenic capacity in vivo. Benayahu D, et al. **J Cell Physiol** 1989 Jul;140(1):1–7

Osteocalcin and deoxyribonucleic acid synthesis in vitro and histomorphometric indices of bone formation in postmenopausal osteoporosis. Marie PJ, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):272–9

Improved chondrocyte morphology and glycogen retention in the secondary center of ossification following osmium-potassium ferrocyanide fixation. Shepard N, et al. **J Electron Microsc Tech** 1989 Jan;11(1):83–9

Dysplasia epiphysealis hemimelica at the metacarpophalangeal joint. Maylack FH, et al. **J Hand Surg [Am]** 1988 Nov;13(6):916–20

Osteogenesis in composite grafts of allogenic demineralized bone powder and porous hydroxylapatite. el Deeb M, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):50–6

Cellular events associated with the induction of bone by demineralized bone. Bernick S, et al. **J Orthop Res** 1989; 7(1):1–11

Role of mechanical loading in the progressive ossification of a fracture callus. Blenman PR, et al. **J Orthop Res** 1989; 7(3):398–407

Extracellular matrix alterations during endochondral ossification in humans. Horton WA, et al. **J Orthop Res** 1988;6(6):793–803

Heterotopic osteogenesis in porous ceramics induced by marrow cells. Ohgushi H, et al. **J Orthop Res** 1989; 7(4):568–78

Different effects of mechanical vibration on bone ingrowth into porous hydroxyapatite and fracture healing in a rabbit model. Usui Y, et al. **J Orthop Res** 1989;7(4):559–67

Bone formation and remodeling after symmetric and asymmetric physeal distraction. Peltonen J. **J Pediatr Orthop** 1989 Mar–Apr;9(2):191–6

The clinical use of autologous marrow to improve osteogenic potential of bone grafts in pediatric orthopedics. Wientroub S, et al. **J Pediatr Orthop** 1989 Mar–Apr;9(2):186–90

Histologic evaluation of bone inductive proteins complexed with coralline hydroxylapatite in an extraskeletal site of the rat. Glass DA, et al. **J Periodontol** 1989 Mar;60(3):121–6

The osteogenic potential of two human demineralized bone preparations using a xenogeneic model. Marinak KW, et al. **J Periodontol** 1989 Jan;60(1):12–8

Mechanism of mineral formation in bone. Anderson HC. **Lab Invest** 1989 Mar;60(3):320–30 (138 ref.)

Diminished rates of bone formation in normal black adults. Weinstein RS, et al. **N Engl J Med** 1988 Dec 29; 319(26):1698–701

Banked bone grafting for bone defect repair—clinical evaluation of bone union and graft incorporation. Itoman M, et al. **Nippon Seikeigeka Gakkai Zasshi** 1988 May; 62(5):461–9

The structure and development of osteogenetic repair tissue according to Ilizarov Technique in man. Characterization of extracellular matrix. Tajana GF, et al. **Orthopedics** 1989 Apr;12(4):515–23

Scanning electron microscopy and gel electrophoresis of vascularized periosteal autografts. Burstein FD, et al. **Plast Reconstr Surg** 1989 Mar;83(3):500–10

Purification and characterization of other distinct bone-inducing factors. Wang EA, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9484–8

The cellular basis of Wolff's law. Transduction of physical stimuli to skeletal adaptation. Rubin CT, et al. **Rheum Dis Clin North Am** 1988 Dec;14(3):503–17 (110 ref.)

Induction of osteogenesis. Van Papendorp DH, et al. **S Afr Med J** 1989 Jun 17;75(12):581–2

Comparison of X-ray and ultrasound in detection of the fetal ossification centres. Jirouš J, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove** 1988;31(1):85–91

Osteocalcin and bone remodelling in Paget's disease of bone, primary hyperparathyroidism, hypercalcaemia of malignancy and involutional osteoporosis. Torres R, et al. **Scand J Clin Lab Invest** 1989 May;49(3):279–85

Differentiation of periosteal cells in muscle. An experimental study using the diffusion chamber method. Jaroma HJ, et al. **Scand J Plast Reconstr Surg Hand Surg** 1988;22(3):193–8

Novel regulators of bone formation: molecular clones and activities. Wozney JM, et al. **Science** 1988 Dec 16; 242(4885):1528–34

Inhibitory effects of cadmium on in vitro calcification of a clonal osteogenic cell, MC3T3-E1. Miyahara T, et al. **Toxicol Appl Pharmacol** 1988 Oct;96(1):52–9

[Incidence and clinical importance of chronic reactive periosteal new bone formation in the cervical region in patients with differing neurologic symptomatology] Trattnig S, et al. **Rontgenblatter** 1989 Feb;42(2):69–72 (Eng. Abstr.) **(Ger)**

[Relevant laboratory diagnostic methods for the evaluation of the osteoinductivity of bone matrix implants] Denner K, et al. **Z Med Lab Diagn** 1989;30(3):159–64 (Eng. Abstr.) **(Ger)**

[Ossification variations in the limb bones of the dog. I. Temporary ossification centers in growing dogs] Mayrhofer E. **Zentralbl Veterinarmed [A]** 1988 Aug; 35(7):544–60 (Eng. Abstr.) **(Ger)**

[Ossification variants of the limb bones of the dog. II. Persisting ossification zones] Mayrhofer E. **Zentralbl Veterinarmed [A]** 1988 Sep;35(8):604–9 (Eng. Abstr.) **(Ger)**

[Demineralized bovine bone matrix as bone inducer in the preparation of vertebral arthrodeses: short-term study in rats] Guizzardi S, et al. **Boll Soc Ital Biol Sper** 1988 Dec; 64(12):1071–6 (Eng. Abstr.) **(Ita)**

[On the possibility of bone and cementum formation and reattachment in filling bone defects with hydroxyapatite] Lo Bianco F, et al. **Minerva Stomatol** 1988 Oct; 37(10):733–40 (Eng. Abstr.) **(Ita)**

[Observation of the changes in the cartilage matrix in endochondral ossification of the rat mandibular condyle] Sugano H. **Kokubyo Gakkai Zasshi** 1988 Jun;55(2):283–330 (Eng. Abstr.) **(Jpn)**

[Glycosaminoglycans at the early stages of osteogenesis of the human long tubular bones] Asfandiiarov RI, et al. **Arkh Anat Gistol Embriol** 1989 Jan;96(1):82–6 (Eng. Abstr.) **(Rus)**

[Ossification of the cartilage skeleton of the extremities of human embryos] Kabak SL. **Arkh Anat Gistol Embriol** 1988 Jun;94(6):47–51 (Eng. Abstr.) **(Rus)**

[Dynamics of the mineralization of the ground substance in newly formed bony tissue in organ cultures of mouse bone marrow] Luriia EA, et al. **Biull Eksp Biol Med** 1988 Nov; 106(11):614–6 (Eng. Abstr.) **(Rus)**

[Bone tissue formation in organ cultures of human bone marrow] Luriia EA, et al. **Biull Eksp Biol Med** 1989 May; 107(5):593–5 (Eng. Abstr.) **(Rus)**

[Effect of hypokinesia on the osteogenetic and hematopoietic functions of the bone marrow in mice. The ectopic bone model] Burkovskaia TE, et al. **Kosm Biol Aviakosm Med** 1988 Jul–Aug;22(4):61–5 (Eng. Abstr.) **(Rus)**

[Changes in the osteoinductive activity of the bone matrix in ontogeny] Sumarokov DD, et al. **Ontogenez** 1988 Sep–Oct;19(5):468–73 (Eng. Abstr.) **(Rus)**

[Early prognosis of the state of osteogenesis in bone lengthening] Giul'nazarova SV, et al. **Ortop Travmatol Protez** 1989 Apr;(4):32–5 (Eng. Abstr.) **(Rus)**

[Study of bone formation and blood circulation using radionuclide methods in the treatment of fractures of the leg bones] Sveshnikov AA, et al. **Ortop Travmatol Protez** 1988 Sep;(9):23–6 (Eng. Abstr.) **(Rus)**

[Reparative osteogenesis after the treatment of multiple fractures of the crural bones using the Ilizarov method] Sveshnikov AA, et al. **Sov Med** 1989;(2):5–8 (Eng. Abstr.) **(Rus)**

[Evaluation of the functional state of endosteal osteoblasts in chick embryos] Nitsevich TP. **Tsitol Genet** 1988 Jul–Aug;22(4):8–13 (Eng. Abstr.) **(Rus)**

[Status of reparative osteogenesis in patients with femoral fractures treated using pin-rod equipment] Kornilov NV, et al. **Vestn Khir** 1989 Jan;142(1):66–8 **(Rus)**

[Effect of copper deficiency on growth and bone tissue formation] Smoliar VI, et al. **Vopr Pitan** 1988 Nov–Dec; (6):28–32 (Eng. Abstr.) **(Rus)**

[Hormonal regulation of bone remodeling] Eriksen EF, et al. **Nord Med** 1989;104(4):108–11 (Eng. Abstr.) **(Swe)**

DRUG EFFECTS

Hypermagnesemia: a cause of abnormal metaphyses in the neonate. Cumming WA, et al. **AJR Am J Roentgenol** 1989 May;152(5):1071–2

Influence of nicotine and caffeine on skeletal development in the rat. Nash JE, et al. **Anat Anz** 1989;168(2):109–26

Effects of B-aminopropionitrile on mineralization during endochondral ossification in chick tibia. Sandhu HS, et al. **Anat Embryol (Berl)** 1988;178(5):449–54

Flurbiprofen-induced stimulation of periosteal bone formation and inhibition of bone resorption in older rats. Jee WS, et al. **Bone** 1988;9(6):381–9

Bone repletion in vitro: evidence for a locally regulated bone repair response to PTH treatment. Linkhart TA, et al. **Bone** 1988;9(6):371–9

Inhibition by tumor necrosis factor of induction of ectopic bone formation by osteosarcoma-derived bone-inducing substance. Yoshikawa H, et al. **Bone** 1988;9(6):391–6

Bone-cell-stimulating substance. Clark I, et al. **Clin Orthop** 1988 Dec;(237):226–35

Autogeneic cancellous bone grafts in extensive segmental ulnar defects in dogs. Effects of xenogeneic bovine bone morphogenetic protein without and with interposition of soft tissues and interruption of blood supply. Johnson EE, et al. **Clin Orthop** 1989 Jun;(243):254–65

Augmentation of spinal fusion with bone morphogenetic protein in dogs. Lovell TP, et al. **Clin Orthop** 1989 Jun; (243):266–74

Experimental heterotopic bone formation induced by bone morphogenetic protein and recombinant human interleukin-1B. Mahy PR, et al. **Clin Orthop** 1988 Dec; (237):236–44

A preliminary study of the osteogenic potential of a biodegradable alloplastic-osteoinductive alloimplant. Schmitz JP, et al. **Clin Orthop** 1988 Dec;(237):245–55

The influence of fibrin sealant on demineralized bone matrix-dependent osteoinduction. A quantitative and qualitative study in rats. Schwarz N, et al. **Clin Orthop** 1989 Jan;(238):282–7

Examination of new bone growth on aluminium oxide implant contact surfaces after oral administration of ossein-hydroxyapatite compound to rats. Schmidt KH, et al. **Curr Med Res Opin** 1988;11(2):107–15

Human growth hormone enhances chondrogenesis and osteogenesis in a tissue culture system of chondroprogenitor cells. Maor G, et al. **Endocrinology** 1989 Sep;125(3):1239–45

Ectopic induction of cartilage and bone by water-soluble proteins from bovine bone using a collagenous delivery vehicle. Lucas PA, et al. **J Biomed Mater Res** 1989 Apr; 23(A1 Suppl):23–39

Aluminum-induced de novo bone formation in the beagle. A parathyroid hormone-dependent event. Quarles LD, et al. **J Clin Invest** 1989 May;83(5):1644–50

Local infusion of prostaglandin E1 stimulates mandibular bone formation in vivo. Marks SC Jr, et al. **J Oral Pathol** 1988 Nov;17(9–10):500–5

Fluoride and osteoblasts [letter] Dandona P, et al. **Lancet** 1989 Feb 25;1(8635):449–50

Caffeine, an exquisitely specific inhibitor of osteogenic differentiation. Runner MN. **Teratology** 1988 Dec; 38(6):599–606

[Purification of porcine bone morphogenetic protein and study of its osteo-inductive activity] Hu XB, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Jan;26(1):52–5, 63 (Eng. Abstr.) **(Chi)**

[Study of distraction osteogenesis in an animal body submitted to anticancer chemotherapy] Prevot J, et al. **Chir Pediatr** 1988;29(4):226–30 (Eng. Abstr.) **(Fre)**

[Osteogenesis in distraction in animals submitted to anti-cancer chemotherapy. Experimental study in rabbits] Prevot J, et al. **Rev Chir Orthop** 1988;74 Suppl 2:98–100 **(Fre)**

[Experiences with cement-free implantation of the Zweymüller/Endler and Zweymüller total hip joint endoprosthesis. Indications, results, complications and modification of periarticular ossification by diphosphonate (ethylidene-1-hydroxy-1,1-diphosphonate)] Dustmann HO, et al. **Z Orthop** 1988 May–Jun;126(3):314–25 (Eng. Abstr.) **(Ger)**

[Effect of anti-inflammatory preparations on the osteoinductive activity of bone tissue] Sumarokov DD, et al. **Farmakol Toksikol** 1988 Nov–Dec;51(6):73–6 (Eng. Abstr.) **(Rus)**

[Effect of somatotropic hormone and retabolil on the osteogenic activity of bone tissue] Sumarokov DD, et al. **Ortop Travmatol Protez** 1989 Feb;(2):66–9 **(Rus)**

[Effect of titanium on the osteogenic and proliferative potentials of bone marrow cells in vitro] Zaika AI, et al. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):42–4 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Stimulation of experimental endochondral ossification by low-energy pulsing electromagnetic fields. Aaron RK, et al. **J Bone Miner Res** 1989 Apr;4(2):227–33

OSTEOGENESIS IMPERFECTA

see related

DENTINOGENESIS IMPERFECTA

Osteogenesis imperfecta: comprehensive management. Marini JC. **Adv Pediatr** 1988;35:391–426 (115 ref.)

Phenotypical features of an unique Irish family with severe autosomal recessive osteogenesis imperfecta. Williams EM, et al. **Clin Genet** 1989 Mar;35(3):181–90

Osteogenesis imperfecta type II [letter] Banerjee KS, et al. **Indian Pediatr** 1988 Dec;25(12):1225–6

[Osteogenesis imperfecta. I. Clinico-genetic characteristics] Mařík I, et al. **Acta Chir Orthop Traumatol Cech** 1988 Jul; 55(4):318–26 (Eng. Abstr.) **(Cze)**

[Osteogenesis imperfecta. II. Differential diagnosis and therapy] Mařík I, et al. **Acta Chir Orthop Traumatol Cech** 1988 Jul;55(4):327–34 (Eng. Abstr.) **(Cze)**

[Osteogenesis imperfecta and dentinogenesis imperfecta. Apropos of 4 cases] Ajacques JC, et al. **Rev Stomatol Chir Maxillofac** 1989;90(4):259–67 (Eng. Abstr.) **(Fre)**

CLASSIFICATION

Osteogenesis imperfecta in Southern Africa. Diagnostic categorisation and biomolecular findings. Beighton P, et al. **Ann N Y Acad Sci** 1988;543:40–6

Clinical and genetical heterogeneity of osteogenesis imperfecta. Maroteaux P, et al. **Ann N Y Acad Sci** 1988; 543:16–29 (20 ref.)

Heterogeneity in osteogenesis imperfecta: clinical and morphological findings. Pontz BF, et al. **Ann N Y Acad Sci** 1988;543:30–9

Osteogenesis imperfecta nosology and genetics. Sillence DO. **Ann N Y Acad Sci** 1988;543:1–15 (41 ref.)

Perinatal lethal osteogenesis imperfecta: radiologic and pathologic evaluation of seven prenatally diagnosed cases. van der Harten HJ, et al. **Pediatr Pathol** 1988;8(3):233–52

COMPLICATIONS

Fatal intraoperative hemorrhage during spinal fusion surgery for osteogenesis imperfecta. Sperry K. **Am J Forensic Med Pathol** 1989 Mar;10(1):54–9

Osteogenesis imperfecta type I with unusual dental abnormalities. Levin LS, et al. **Am J Med Genet** 1988 Dec; 31(4):921–32

Osteogenesis imperfecta and hyperthermia. Ryan CA, et al. **Anesth Analg** 1989 Jun;68(6):811–4

Osteogenesis imperfecta of the temporal bone and its relation to otosclerosis. Nager GT. **Ann Otol Rhinol Laryngol** 1988 Nov–Dec;97(6 Pt 1):585–93

Osteogenesis imperfecta with congenital joint contractures (Bruck syndrome). Viljoen D, et al. **Clin Genet** 1989 Aug; 36(2):122–6

Osteogenesis imperfecta associated with basilar impression and cerebral atrophy: a case report. Brooks ML, et al. **Comput Med Imaging Graph** 1989 Jul–Aug;13(4):363–7

Treatment of open fracture of the forearm in osteogenesis imperfecta. Scott TR, et al. **J Hand Surg [Am]** 1989 Jan; 14(1):111–4

Hypertrophic callus formation leading to high-output cardiac failure in a patient with osteogenesis imperfecta. Burke TE, et al. **J Pediatr Orthop** 1988 Sep–Oct;8(5):605–8

[Aortic insufficiency with Valsalva's sinus aneurysm and Lobstein's disease (letter)] Guenot O, et al. **Ann Med Interne (Paris)** 1989;140(4):333–4 (9 ref.) **(Fre)**

[Arnold's neuralgia and facial neuralgia in osteogenesis imperfecta] Chartier JP, et al. **Rev Rhum Mal Osteoartic** 1988 Jul–Sep;55(9):713–7 (12 ref.) **(Fre)**

[Fracture of the mandible in osteogenesis imperfecta] Ehrenfeld M, et al. **Aktuel Traumatol** 1989 Jun;19(3):107–9 (Eng. Abstr.) **(Ger)**

[Bilateral laceration of patellar tendon in a case of osteogenesis imperfecta] Nigrisoli M, et al. **Chir Organi Mov** 1988 Jul–Sep;73(3):259–63 (Eng. Abstr.) **(Ita)**

[Anesthesia for surgery of long duration in a girl with osteogenesis imperfecta (letter)] González I, et al. **Rev Esp Anestesiol Reanim** 1988 May–Jun;35(3):170 **(Spa)**

CONGENITAL

Hydrocephalus of intrauterine onset in perinatally lethal osteogenesis imperfecta: clinical, sonographic, and pathologic correlations. Knisely AS, et al. **Pediatr Pathol** 1988;8(4):367–76

[Congenital fragilitas ossium (Lobstein–Vrolik disease)] Matveenko IuV. **Sud Med Ekspert** 1989 Jan–Mar;32(1):47–8 **(Rus)**

DIAGNOSIS

Osteogenesis imperfecta in twins: case report and review of literature. Sameshima K, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Oct;30(5):621–6 (22 ref.)

Prenatal diagnosis in osteogenesis imperfecta. Sykes B, et al. **Ann N Y Acad Sci** 1988;543:136–41 (0 ref.)

Brittle or battered? [letter] Blumenthal I. **Arch Dis Child** 1989 Jan;64(1):176–7

Basilar impression and osteogenesis imperfecta in a three-year-old girl: CT and MRI. Rush PJ, et al. **Pediatr Radiol** 1989;19(2):142–3

[Osteogenesis imperfecta type II. Prenatal diagnosis and management of a case] Romano F, et al. **Minerva Ginecol** 1988 Apr;40(4):273–5 (Eng. Abstr.) **(Ita)**

ENZYMOLOGY

[Alkaline phosphatase and its isoenzyme activity of the blood in osteogenesis imperfecta before and during treatment with calcitonin] Bodziony J, et al. **Padiatr Grenzgeb** 1988; 27(4):259–67 (Eng. Abstr.) **(Ger)**

ETIOLOGY

[Developmental bone abnormalities, their variants and the delay of osteogenesis in children with leukemia] Weisenbach J, et al. **Orv Hetil** 1989 Aug 20;130(34):1817–8, 1821–3 (Eng. Abstr.) **(Hun)**

[Magnesium metabolism in the familial form of osteogenesis imperfecta] Milewicz A, et al. **Pol Tyg Lek** 1988 Nov 14; 43(46):1479–81 (Eng. Abstr.) **(Pol)**

GENETICS

Biochemical heterogeneity of type I collagen mutations in osteogenesis imperfecta. Bateman JF, et al. **Ann N Y Acad Sci** 1988;543:95–105

Osteogenesis imperfecta: the molecular basis of clinical heterogeneity. Byers PH, et al. **Ann N Y Acad Sci** 1988; 543:117–28 (44 ref.)

General strategies for isolating the genes encoding type I collagen and for characterizing mutations which produce osteogenesis imperfecta. Cohn DH, et al. **Ann N Y Acad Sci** 1988;543:129–35 (41 ref.)

Collagen studies in an osteogenesis imperfecta type III family. Hollister DW, et al. **Ann N Y Acad Sci** 1988;543:62–72

Normal thermal stability of an overmodified type I collagen despite a structural mutation within the triple helical region in a case of osteogenesis imperfecta type IVB. Royce PM, et al. **Ann N Y Acad Sci** 1988;543:83–4

Imperfect collagenesis in osteogenesis imperfecta. The consequences of cysteine–glycine substitutions upon collagen structure and metabolism. Steinmann B, et al. **Ann N Y Acad Sci** 1988;543:47–61 (83 ref.)

Delayed triple-helix formation of abnormal type I collagen is corrected by reduced temperature. Studies of a family with variable expression of osteogenesis imperfecta. Superti-Furga A, et al. **Ann N Y Acad Sci** 1988;543:85–92

Genetic counselling in perinatally lethal and severe progressively deforming osteogenesis imperfecta. Thompson EM, et al. **Ann N Y Acad Sci** 1988;543:142–56

Defining structural defects in type I collagen by protein analysis? van der Rest M, et al. **Ann N Y Acad Sci** 1988; 543:93–4

Osteogenesis imperfecta—a model for the analysis of inborn errors of connective tissue. Ramirez F. **Basic Life Sci** 1988; 48:45–51 (25 ref.)

Increased expression of the gene for the pro alpha 1(IV) chain of basement-membrane procollagen in cultured skin fibroblasts from two variants of osteogenesis imperfecta. Pihlajaniemi T, et al. **Biochem J** 1989 Jan 15;257(2):439–45

A single base mutation that converts glycine 907 of the alpha 2(I) chain of type I procollagen to aspartate in a lethal variant of osteogenesis imperfecta. The single amino acid substitution near the carboxyl terminus destabilizes the whole triple helix. Baldwin CT, et al. **J Biol Chem** 1989 Feb 15;264(5):3002–6

A frameshift mutation results in a truncated nonfunctional carboxyl-terminal pro alpha 1(I) propeptide of type I collagen in osteogenesis imperfecta. Bateman JF, et al. **J Biol Chem** 1989 Jul 5;264(19):10960–4

Substitution of cysteine for glycine within the carboxyl-terminal telopeptide of the alpha 1 chain of type I collagen produces mild osteogenesis imperfecta. Cohn DH, et al. **J Biol Chem** 1988 Oct 15;263(29):14605–7

Detection of mutations in human type I collagen mRNA in osteogenesis imperfecta by indirect RNase protection. Genovese C, et al. **J Biol Chem** 1989 Jun 5;264(16):9632–7

Characterization of point mutations in the collagen COL1A1 and COL1A2 genes causing lethal perinatal osteogenesis imperfecta. Lamande SR, et al. **J Biol Chem** 1989 Sep 25; 264(27):15809–12

Osteogenesis imperfecta type IV. Detection of a point mutation in one alpha 1(I) collagen allele (COL1A1) by RNA/RNA hybrid analysis. Marini JC, et al. **J Biol Chem** 1989 Jul 15;264(20):11893–900

RNA sequence analysis of a perinatal lethal osteogenesis imperfecta mutation. Patterson E, et al. **J Biol Chem** 1989 Jun 15;264(17):10083–7

Decreased thermal denaturation temperature of osteogenesis imperfecta mutant collagen is independent of post-translational overmodifications of lysine and hydroxylysine. Rao VH, et al. **J Biol Chem** 1989 Jan 25; 264(3):1793–8

A lethal variant of osteogenesis imperfecta has a single base mutation that substitutes cysteine for glycine 904 of the alpha 1(I) chain of type I procollagen. The asymptomatic mother has an unidentified mutation producing an overmodified and unstable type I procollagen. Constantinou CD, et al. **J Clin Invest** 1989 Feb;83(2):574–84

Single base pair alterations as the predominant category of mutation in type I osteogenesis imperfecta [letter] Brookes AJ, et al. **J Med Genet** 1989 Jun;26(6):410

Lethal osteogenesis imperfecta [letter] Knisely AS, et al. **J Med Genet** 1989 Jun;26(6):410–1

Clinical variability of osteogenesis imperfecta linked to COL1A2 and associated with a structural defect in the type I collagen molecule. Superti-Furga A, et al. **J Med Genet** 1989 Jun;26(6):358–62

A cysteine for glycine substitution at position 1017 in an alpha 1(I) chain of type I collagen in a patient with mild dominantly inherited osteogenesis imperfecta. Labhard ME, et al. **Mol Biol Med** 1988 Dec;5(3):197–207

[Osteogenesis imperfecta and localized involvement of the spine: a peculiar form? Apropos of a familial case] Corsat JP, et al. **Rev Chir Orthop** 1989;75(2):120–4 (Eng. Abstr.) **(Fre)**

METABOLISM

Biochemical analysis of bone compacta in osteogenesis imperfecta. Brenner RE, et al. **Ann N Y Acad Sci** 1988; 543:106–8

Total body and regional analysis by dual-photon absorptiometry in osteogenesis imperfecta. Nuti R, et al. **Ann N Y Acad Sci** 1988;543:180–5

Severe nonlethal osteogenesis imperfecta: biochemical heterogeneity. Tenni R, et al. **Ann N Y Acad Sci** 1988; 543:73–82

Changes in collagen stability and folding in lethal perinatal osteogenesis imperfecta. The effect of alpha 1 (I)-chain glycine-to-arginine substitutions. Baker AT, et al. **Biochem J** 1989 Jul 1;261(1):253–7

Osteogenesis imperfecta: insufficient collagen synthesis in early childhood as evidenced by analysis of compact bone and fibroblast cultures. Brenner RE, et al. **Eur J Clin Invest** 1989 Apr;19(2):159–66

Lethal osteogenesis imperfecta: abnormal collagen metabolism and biochemical characteristics of hypophosphatasia. Royce PM, et al. **Eur J Pediatr** 1988 Aug;147(6):626–31

Biochemical analysis of callus tissue in osteogenesis imperfecta type IV. Evidence for transient overmodification in collagen types I and III. Brenner RE, et al. **J Clin Invest** 1989 Sep;84(3):915–21

Immunofluorescent localization of type III collagen and the N-terminal propeptide of type III procollagen in dentin matrix in osteogenesis imperfecta. Lukinmaa PL. **J Craniofac Genet Dev Biol** 1988;8(3):235–43

Osteogenesis imperfecta: fibronectin in dentin matrix. Lukinmaa PL, et al. **J Craniofac Genet Dev Biol** 1988; 8(1):75–82

PATHOLOGY

Isolation and characterization of bone cells from a patient with osteogenesis imperfecta type 1b. Puzas JE, et al. **Bone Miner** 1986 Oct;1(5):373–82

Plastic bowing of the ribs in children. Caro PA, et al. **Skeletal Radiol** 1988;17(4):255–8

RADIOGRAPHY

Case 8. Osteogenesis imperfecta tarda. **Radiographics** 1989 Jan;9(1):105–8

[Lethal syndromes with thin bones] Maroteaux P, et al. **Arch Fr Pediatr** 1988 Aug–Sep;45(7):477–81 (7 ref.) (Eng. Abstr.) **(Fre)**

SURGERY

Surgical treatment of the deformities of the long bones in severe osteogenesis imperfecta. Brunelli PC, et al. **Ann N Y Acad Sci** 1988;543:170–9

Orthopaedic treatment of osteogenesis imperfecta. Cole WG. **Ann N Y Acad Sci** 1988;543:157–66 (9 ref.)

Treatment of osteogenesis imperfecta in children. Finidori G. **Ann N Y Acad Sci** 1988;543:167–9 (0 ref.)

Failed tissue expansion in a patient with osteogenesis imperfecta. Stark GB, et al. **Ann Plast Surg** 1989 Feb; 22(2):156–9

The role of expanding intramedullary rods in osteogenesis imperfecta. Stockley I, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):422–7

Complications of intramedullary rods in osteogenesis imperfecta: Bailey–Dubow rods versus nonelongating rods. Gamble JG, et al. **J Pediatr Orthop** 1988 Nov–Dec; 8(6):645–9

[Osteogenesis imperfecta; treatment with internal splint for prevention of fractures (letter)] **Ned Tijdschr Geneeskd** 1989 Feb 18;133(7):370–1 **(Dut)**

[Osteogenesis imperfecta; treatment with internal rods for the prevention of fractures] Sijbrandij S, et al. **Ned Tijdschr Geneeskd** 1988 Dec 3;132(49):2251–3 (Eng. Abstr.) **(Dut)**

THERAPY

Osteogenesis imperfecta. Perspectives. Stoltz MR, et al. **Clin Orthop** 1989 May;(242):120–36 (57 ref.)

OSTEOLYSIS

Gorham's syndrome: a case report and review of the literature. Choma ND, et al. **Am J Med** 1987 Dec; 83(6):1151–6 (96 ref.)

The origin and nature of stromal osteoclast-like multinucleated giant cells in breast carcinoma: implications for tumour osteolysis and macrophage biology. Athanasou NA, et al. **Br J Cancer** 1989 Apr;59(4):491–8

[Ulcero-mutilating acro-osteopathy in hereditary neuropathies. Differential diagnosis and pathogenesis] Garbe C, et al. **Dtsch Med Wochenschr** 1989 Apr 21; 114(16):628–32 (Eng. Abstr.) **(Ger)**

[A case of prostatic carcinoma with osteolytic bone metastases] Fukuoka H, et al. **Hinyokika Kiyo** 1988 Oct; 34(10):1805–9 (Eng. Abstr.) **(Jpn)**

CHEMICALLY INDUCED

Osteolytic Paget's disease of bone under unduly etidronate therapy [letter] Wendling D, et al. **Clin Rheumatol** 1988 Dec;7(4):543–5

Acroosteolysis and Raynaud's phenomenon after vinyl chloride exposure. Freudiger H, et al. **Vasa** 1988; 17(3):216–8

COMPLICATIONS

Acne fulminans with bone lesions. Pauli SL, et al. **Acta Derm Venereol (Stockh)** 1988;68(4):351–5

Pachydermoperiostosis and acro-osteolysis. Matucci-Cerinic MI, et al. **Ital J Orthop Traumatol** 1988 Mar;14(1):107–11

Monocentric idiopathic osteolysis. Gupta A, et al. **J Assoc Physicians India** 1988 Nov;36(11):668–70

Acroosteolysis and polymyositis [letter] Lee EW, et al. **J Rheumatol** 1988 Oct;15(10):1592–4

[Pseudotumor of the shoulder after massive osteolysis (Gorham–Stout)] Hugo B, et al. **ROFO** 1989 Jan; 150(1):108–10 **(Ger)**

[The Giaccai syndrome as a cause of the development of trophic leg ulcers] Izmailov GA. **Klin Med (Mosk)** 1989 Jun;67(6):130–2 **(Rus)**

DIAGNOSIS

[Idiopathic massive osteolysis of skull bone: a case report] Hasegawa H, et al. **No Shinkei Geka** 1989 May;17(5):481–4 (8 ref.) (Eng. Abstr.) **(Jpn)**

DRUG THERAPY

Clodronate for osteolytic metastases due to breast cancer.

Elomaa I, et al. **Biomed Pharmacother** 1988;42(2):111–6
Giant hemangioma with thrombocytopenia and osteolysis successfully treated with prednisone. Sadan N, et al. **J Pediatr Orthop** 1989 Jul–Aug;9(4):472–5
Treatment of tumor-induced osteolysis by APD. Burckhardt P, et al. **Recent Results Cancer Res** 1989;116:54–66
Colchicine treatment in a case of pachydermoperiostosis with acroosteolysis. Matucci-Cerinic M, et al. **Rheumatol Int** 1988;8(4):185–8

ETIOLOGY

Mechanism of bone destruction due to middle ear cholesteatoma as revealed by laser-Raman spectrometry. Ohsaki K, et al. **Am J Otolaryngol** 1988 May–Jun; 9(3):117–26
Erosion of the patella secondary to gout. A case report. Cohn BT, et al. **Am J Sports Med** 1988 Jul–Aug;16(4):421–3
Common acute lymphoblastic leukaemia in an adult with hypercalcaemia and lytic bone lesions. Stein A, et al. **Br J Haematol** 1988 Dec;70(4):503
Femoral lysis after cemented hip arthroplasty. Huddleston HD. **J Arthroplasty** 1988;3(4):285–97 (65 ref.)
Extensive lytic bone lesions in a patient with chronic lymphocytic leukemia. Schreiber S, et al. **J Belge Radiol** 1988;71(4):497–500
Lack of biochemical progression or continuation of accelerated bone loss in mild asymptomatic primary hyperparathyroidism: evidence for biphasic disease course. Rao DS, et al. **J Clin Endocrinol Metab** 1988 Dec; 67(6):1294–8
Osteolysis of the clavicle [letter] Ahmad A. **JAMA** 1988 Dec 2;260(21):3129
Cat-scratch disease associated with a vertebral osteolytic lesion. Shanon AB, et al. **Pediatr Infect Dis J** 1989 Jan; 8(1):51–2
CT and conventional radiography in detecting lysis and fracture of the odontoid process in rheumatoid arthritis. Trippi D, et al. **Rays** 1988 May–Aug;13(2):39–44
Acro-osteolysis of the fingers in a spinal cord injury patient. A case report. Marmolya G, et al. **Spine** 1989 Jan; 14(1):137–9
[Osteolytic foci: cancer or not?] Brakenhoff JA, et al. **Ned Tijdschr Geneeskd** 1989 Feb 25;133(8):377–81 **(Dut)**
[Bone disorders due to congenital syphilis] den Boer JA, et al. **Tijdschr Kindergeneeskd** 1988 Dec;56(6):265–7 (Eng. Abstr.) **(Dut)**
[Osteoarticular lesions in sarcoidosis] Schuind F, et al. **Acta Orthop Belg** 1988;54(2):124–6 (Eng. Abstr.) **(Fre)**
[Invasive osteolytic trichilemnal cyst. Histopathologic aspect: non-proliferative trichilemnal cyst] Tennstedt D, et al. **Ann Dermatol Venereol** 1988;115(10):1047–50 **(Fre)**
[Osteolysis of the distal phalanges of the hand and systemic disease] Kchir MM, et al. **Tunis Med** 1987 Apr;65(4):251–4 (Eng. Abstr.) **(Fre)**
[Chronic lymphocytic leukemia presenting with osteolytic ankle lesions] Hekselman I, et al. **Harefuah** 1988 Dec 15; 115(12):369–70 (Eng. Abstr.) **(Heb)**
[Periapical osteolysis of endodontic origin. Immunologic features] Marini R, et al. **Minerva Stomatol** 1988 Dec; 37(12):1025–8 (19 ref.) (Eng. Abstr.) **(Ita)**

GENETICS

Idiopathic multicentric osteolysis: report of two new cases and a review of the literature [letter] Barr RJ, et al. **Am J Med Genet** 1989 Apr;32(4):556

PATHOLOGY

[Hypercalcemic crisis and multiple osteolyses in an elderly patient (clinical conference)] Pohl C, et al. **Med Klin** 1989 Feb 15;84(2):90–7 **(Ger)**
[Chylothorax and osteolytic lesion (clinical conference)] **Rev Clin Esp** 1989 Apr;184(7):376–82 **(Spa)**

PHYSIOPATHOLOGY

Pathophysiological aspects and therapeutic approaches of tumoral osteolysis and hypercalcemia. Bonjour JP, et al. **Recent Results Cancer Res** 1989;116:29–39 (33 ref.)

RADIOGRAPHY

Osteolytic lesions of the patella. Ehara S, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):103–6
Computed tomographic findings of brain and skull in myotonic dystrophy [letter] Cornacchia L, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1463–4
Circumscribed lytic lesions of the thalassaemic skull. Orzincolo C, et al. **Skeletal Radiol** 1988;17(5):344–7
[Radiological semeiology of the lacunar injuries of the mandible] Ciccarelli R, et al. **Minerva Stomatol** 1989 Jan; 38(1):97–106 (37 ref.) (Eng. Abstr.) **(Ita)**

SURGERY

Resection of the lateral end of the clavicle following osteolysis, with emphasis on non-traumatic osteolysis of the acromial end of the clavicle in athletes. Scavenius M, et al. **Injury** 1987 Jul;18(4):261–3
Massive osteolysis of the skull and its therapeutic implications: a case report. Bouwsma C, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):279–81
[Acro-osteolysis syndrome: is a synthesis in view?] Leu H, et al. **Z Orthop** 1988 Dec;126(6):675–82 (Eng. Abstr.) **(Ger)**

THERAPY

[Percutaneous injection of methyl-metacrylate in osteoporosis and severe vertebral osteolysis (Galibert's technic)] Lapras C, et al. **Ann Chir** 1989;43(5):371–6 (Eng. Abstr.) **(Fre)**

OSTEOLYSIS, ESSENTIAL see under **OSTEOLYSIS**

OSTEOMA

Ossifying fibroma of the maxillary sinus: a case report. Antonelli JR. **Ann Dent** 1989 Summer;48(1):33–6
Osteoma of the tongue. Nash M, et al. **Ear Nose Throat J** 1989 Jan;68(1):63–5
Intra orbital osteoma—a case report. Naidu MR, et al. **Indian J Ophthalmol** 1987 Jul–Aug;35(4):214–5
Osteoma of the incus. Milroy CM, et al. **J Otolaryngol** 1989 Aug;18(5):226–8
Choroidal osteoma. Shields CL, et al. **Surv Ophthalmol** 1988 Jul–Aug;33(1):17–27 (52 ref.)
[Bone choristoma of the bilateral choroid and asymmetric microphthalmia] Santoni G, et al. **J Fr Ophtalmol** 1988; 11(4):363–7 (Eng. Abstr.) **(Fre)**
[Osteoma of the choroid] Stamatinis C, et al. **Ophtalmologie** 1988 Nov-Dec;2(5):407–9 (Eng. Abstr.) **(Fre)**
[Osseous tumors of the jaw] Reychler H. **Rev Stomatol Chir Maxillofac** 1988;89(6):330–8 (54 ref.) (Eng. Abstr.) **(Fre)**
[Osteomas of the paranasal sinuses: review of the literature and personal cases] Sesenna E, et al. **Acta Biomed Ateneo Parmense** 1988;59(5–6):131–45 (Eng. Abstr.) **(Ita)**
[Osteomas of the facial massif] Pelo S, et al. **Minerva Stomatol** 1988 Nov;37(11):875–86 (41 ref.) (Eng. Abstr.) **(Ita)**

ANALYSIS

[Particle induced X-ray emission for trace element analysis of hairs from patients with cancer] Yao HY, et al. **Chung Hua Ch'ung Liu Tsa Chih** 1988 Mar;10(2):92–4 (Eng. Abstr.) **(Chi)**

COMPLICATIONS

Osteoma cutis associated with disordered ossification of the clavicle. A case report. Matsumoto K, et al. **Clin Orthop** 1989 Sep;(246):106–10
Osteoma of the ear canal presenting with headache. Shenoy P, et al. **J Laryngol Otol** 1989 Jul;103(7):683–4
Acquired Brown's syndrome caused by frontal sinus osteoma. Biedner B, et al. **J Pediatr Ophthalmol Strabismus** 1988 Sep–Oct;25(5):226–9
[Pneumocephalus as a complication of osteoma of the frontal sinus] Bein BN, et al. **Zh Vopr Neirokhir** 1988 Sep–Oct; (5):47–8 **(Rus)**

DIAGNOSIS

Aggressive paranasal sinus ossifying fibroma. Morris MR, et al. **Ear Nose Throat J** 1989 Mar;68(3):260–4 (22 ref.)
Case report 543. Osteofibrous dysplasia of tibia. Abdelwahab IF, et al. **Skeletal Radiol** 1989;18(3):249–51
[Primary osteosis cutis in 2 children] Chądzyńska M, et al. **Przegl Dermatol** 1988 Jul–Aug;75(4):293–300 (Eng. Abstr.) **(Pol)**

METABOLISM

Spontaneous decalcification of a choroidal osteoma. Trimble SN, et al. **Ophthalmology** 1988 May;95(5):631–4

PATHOLOGY

Ossifying fibroma of the maxilla. Case report. Sabharwal BD, et al. **Indian J Med Sci** 1989 Feb;43(2):36–8
Comparison between the peripheral ossifying fibroma and peripheral odontogenic fibroma. Kenney JN, et al. **J Oral Maxillofac Surg** 1989 Apr;47(4):378–82
The occurrence of a fibro-osseous lesion and multiple dental anomalies in a patient with the Greig cephalopolysyndactyly syndrome. Pliskin ME, et al. **Oral Surg Oral Med Oral Pathol** 1988 Oct;66(4):475–9
Osteofibrous dysplasia of the tibia and fibula. Blackwell JB, et al. **Pathology** 1988 Jul;20(3):227–33
[Choroidal osteoma: report of a case with distinct enlargement within 10 months] Chung YM, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Jun;87(6):662–4 (Eng. Abstr.) **(Chi)**
[Primary osteoma cutis] Schrallhammer K, et al. **Hautarzt** 1988 Aug;39(8):509–13 (35 ref.) (Eng. Abstr.) **(Ger)**
[Osteomatosis of the skin. Presentation of 2 cases] Frau G, et al. **Pathologica** 1989 Jan–Feb;81(1071):103–7 (Eng. Abstr.) **(Ita)**
[Eruptive and progressive cutaneous leiomyomatosis associated with cerebrovascular abnormalities and osteoma of the petrous bone] Sangüeza P, et al. **Med Cutan Ibero Lat Am** 1989;17(3):169–73 (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

Three-dimensional computed tomography in orbital osteoma. Ohtsuka K, et al. **Am J Ophthalmol** 1988 Oct 15; 106(4):502–4
Lingual osteoma. Bernard PJ, et al. **Arch Otolaryngol Head Neck Surg** 1989 Aug;115(8):989–90
Dental abnormalities and bone lesions associated with familial adenomatous polyposis: report of cases. Carl W, et al. **J Am Dent Assoc** 1989 Jul;119(1):137–9
Osteofibrous dysplasia. A report of two cases. Castellote A, et al. **Skeletal Radiol** 1988;17(7):483–6
Case report 497: Compact osteoma of iliac bone. Mirra JM, et al. **Skeletal Radiol** 1988;17(6):437–42
The potential aggressiveness of sinus osteomas. A report of two cases. Sadry F, et al. **Skeletal Radiol** 1988;17(6):427–30
[Differential diagnostic and therapeutic considerations in the treatment of giant osteomas of the skull bones] Arnhold-Schneider M. **HNO** 1988 Oct;36(10):409–11 (Eng. Abstr.) **(Ger)**
[Problem of radiologic diagnosis of osteoma of the facial bones and adjacent anatomical regions] Mlosek K, et al. **Pol Przegl Radiol (Warszawa)** 1988 Jan–Feb;52(1):19–22 (Eng. Abstr.) **(Pol)**

RADIONUCLIDE IMAGING

Radionuclide bone scan in frontal sinus osteoma. Noyek AM, et al. **Aust N Z J Surg** 1989 Feb;59(2):127–32

SURGERY

Craniofacial resection of ossifying fibromas and osteomas of the sinuses. Blitzer A, et al. **Arch Otolaryngol Head Neck Surg** 1989 Sep;115(9):1112–5

VETERINARY

Fracture-associated osteogenic sarcoma and a mandibular osteoma in two goats. Steinberg H, et al. **J Comp Pathol** 1989 May;100(4):453–57
Equine juvenile mandibular ossifying fibroma. Morse CC, et al. **Vet Pathol** 1988 Nov;25(6):415–21

OSTEOMA, OSTEOID

A double nidus osteoid osteoma in a finger. Allieu Y, et al. **J Hand Surg [Am]** 1989 May;14(3):538–41
Subperiosteal osteoid osteoma of the distal phalanx of the thumb. Crosby LA, et al. **J Hand Surg [Am]** 1988 Nov; 13(6):923–5
Osteoid osteoma and osteoblastoma. Gitelis S, et al. **Orthop Clin North Am** 1989 Jul;20(3):313–25 (92 ref.)
Benign osteoblastoma [clinical conference] Patnoe TG, et al. **Orthopedics** 1989 Feb;12(2):329–31
[Spinal osteoid osteomas. Apropos of 4 cases] Guy G, et al. **Neurochirurgie** 1989;35(1):41–6 (47 ref.) (Eng. Abstr.) **(Fre)**
[A rare localization of osteoid osteoma: the ischio-pubic ramus] Bertini G, et al. **Chir Organi Mov** 1988 Oct–Dec; 73(4):393–4 **(Ita)**
[Osteoid osteoma. Common and unusual cases] Moretti D, et al. **Chir Organi Mov** 1988 Apr–Jun;73(2):121–7 (Eng. Abstr.) **(Ita)**
[Osteoid osteoma in childhood: apropos of 6 cases] Fleta Zaragozano J, et al. **An Esp Pediatr** 1988 Nov;29(5):401–5 (Eng. Abstr.) **(Spa)**

COMPLICATIONS

Subluxation of the hip from osteoid osteoma. Report of two intraarticular cases. Ninomiya S, et al. **Acta Orthop Scand** 1989 Apr;60(2):220–2
Intracranial pneumocephalus (secondary to frontoethmoidal osteoma). Ferlito A, et al. **J Laryngol Otol** 1989 Jun; 103(6):634–7
[Chance coincidence of spondylolisthesis and osteoid osteoma of the spine—a case report] Molsberger A, et al. **Z Orthop** 1989 May–Jun;127(3):343–5 (Eng. Abstr.) **(Ger)**
[Osteoid osteoma as a cause of back pain of vertebral origin] Espino Aguilar R, et al. **An Esp Pediatr** 1989 Apr; 30(4):323–5 **(Spa)**

DIAGNOSIS

An unusual cause of metatarsal pain in a young kendo player. Sakamoto K, et al. **Am J Sports Med** 1989 Mar–Apr; 17(2):296–7
Importance of magnetic resonance imaging in osteoid osteoma: a case report. Bell RS, et al. **Can J Surg** 1989 Jul;32(4):276–8
Nondiaphyseal osteoid osteomas in the pediatric patient. Davidson RS, et al. **Clin Orthop** 1989 Jun;(243):230–4
Osteoblastoma of the patella. Case report and review of the literature. De Coster E, et al. **Clin Orthop** 1989 Jun; (243):216–9 (18 ref.)
Diagnostic difficulties in skeletal pathology. Schajowicz F, et al. **Clin Orthop** 1989 Mar;(240):281–310 (113 ref.)
Osteoid osteoma of the vertebral body. A case report. Savarese A, et al. **Ital J Orthop Traumatol** 1989 Jun; 15(2):253–7 (13 ref.)
Osteoid osteoma: two unusual case reports. Schilero J. **J Foot Surg** 1989 Jan–Feb;28(1):20–2
Benign osteoblastoma of the orbit [see comments] Leone CR Jr, et al. **Ophthalmology** 1988 Nov;95(11):1554–8. **Comment in:** Ophthalmology 1989 Apr;96(4):569–70
Diagnosis of fibro-osseous bone lesions [letter; comment] Margo CE, et al. **Ophthalmology** 1989 Apr;96(4):569–70.

Comment on: Ophthalmology 1988 Nov;95(11):1554–8
Answer please. Painless osteoid osteoma of the phalanx. Walker LG, et al. **Orthopedics** 1989 May;12(5):774, 776
Case report 538. Osteoblastoma of the second metatarsal. Ellis BI, et al. **Skeletal Radiol** 1989;18(3):228–32
Case report 531: Epiphyseal osteoblastoma distal end of femur. Raymond AK, et al. **Skeletal Radiol** 1989; 18(2):143–6
[Osteoid osteoma in the distal phalanx of the index finger] Nicolaisen T. **Ugeskr Laeger** 1988 Dec 19;150(51):3198–200 (Eng. Abstr.) (Dan)
[Osteoid osteoma of the hand. Apropos of 46 cases] Allieu Y, et al. **Ann Chir Main** 1988;7(4):298–304 (Eng. Abstr.) (Fre)
[Diagnosis and surgical strategy in 3 cases of benign and unusual tumors of the occipito-cervical skeleton] Chabannes J, et al. **Neurochirurgie** 1988;34(3):173–8 (Eng. Abstr.) (Fre)
[Frontal osteoid osteoma (letter)] Wendling D, et al. **Rev Rhum Mal Osteoartic** 1989 Jun;56(7):572–3 (Fre)
[Osteoid osteoma of the lower end of the femur—a diagnostic problem] van Linthoudt D, et al. **Schweiz Rundsch Med Prax** 1989 May 23;78(21):620–4 (57 ref.) (Eng. Abstr.) (Fre)
[Imaging of osteoid osteoma by MR tomography] Heuck A, et al. **Radiologe** 1988 Nov;28(11):522–7 (Eng. Abstr.) (Ger)
[Osteoid osteoma: an unfavorable localization causes difficulties in diagnosis] Abendschein T, et al. **ROFO** 1989 Aug;151(2):229–30 (Ger)
[Diagnosis of osteoid osteoma with special reference to angiography, scintigraphy, computerized tomography and magnetic resonance imaging] Flock K, et al. **Z Orthop** 1989 Mar–Apr;127(2):207–15 (Eng. Abstr.) (Ger)
[Osteoid osteoma of the hands and feet] Nechvolodova OL, et al. **Ortop Travmatol Protez** 1989 Jan;(1):13–5 (Eng. Abstr.) (Rus)
[Osteoclastoblastoma of the ethmoid labyrinth] Gariuk GI, et al. **Vestn Otorinolaringol** 1989 Mar–Apr;(2):80–1 (Rus)

METABOLISM

Prostaglandin synthesis by osteoid osteoma and osteoblastoma. Wold LE, et al. **Mod Pathol** 1988 Mar; 1(2):129–31

PATHOLOGY

Nerve fibres in osteoid osteoma. Greco F, et al. **Ital J Orthop Traumatol** 1988 Mar;14(1):91–4
Recurrent osteoblastoma of the mandible: report of a case. Colm SJ, et al. **J Oral Maxillofac Surg** 1988 Oct; 46(10):881–5
Benign osteoblastoma of the maxilla. el-Mofty S, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):60–4 (38 ref.)
"Aggressive" osteoblastoma of the maxilla. Ohkubo T, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jul;68(1):69–73
[Malignant osteoblastoma (a case of a tumor of the bones of the foot in a child)] Baeva AV, et al. **Ortop Travmatol Protez** 1988 Oct;(10):54–5 (Rus)
[The pairing and symmetry of jaw bone involvement in a central osteoblastoclastoma] Shestakov IuN, et al. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):80–1 (Rus)

PHYSIOPATHOLOGY

Atlanto-axial rotational limitation secondary to osteoid osteoma of the axis. Case report. Bucci MN, et al. **J Neurosurg** 1989 Jan;70(1):129–31

RADIOGRAPHY

Computed tomography in the diagnosis of osteoid osteoma in infancy [letter] Fleta J, et al. **Am J Dis Child** 1989 Sep; 143(9):1000
Osteoblastoma of the cervical spine. Case report. Grob D, et al. **Arch Orthop Trauma Surg** 1989;108(3):179–81
The use of computed tomography in diagnosis of osteoid osteoma. Broadfoot JE, et al. **Australas Radiol** 1988 Nov; 32(4):463–7
Phalangeal osteoid osteoma. Meng QF, et al. **Br J Radiol** 1989 Apr;62(736):321–5
Osteoid osteoma of the elbow. A study of twelve cases. Ruggieri P, et al. **Ital J Orthop Traumatol** 1989 Jun; 15(2):154–63 (23 ref.)
Osteoid osteoma of the spine. Savini R, et al. **Ital J Orthop Traumatol** 1988 Jun;14(2):233–8
Aggressive osteoblastoma. A case previously reported as a recurrent osteoid osteoma. Morton KS, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):428–31
Benign osteoblastoma of the parietal bone: case report. Martin-Ferrer S. **Neurosurgery** 1989 Jul;25(1):109–11; discussion 111–2
[Osteoid osteoma of the spine] Mespreuve M, et al. **J Belge Radiol** 1989 Apr;72(2):73–8 (Eng. Abstr.) (Dut)
[Benign osteoblastoma of the spine. Apropos of 4 cases with a case of spontaneous recovery] Collignon JC, et al. **Neurochirurgie** 1988;34(4):262–70 (Eng. Abstr.) (Fre)
[The value of various radiologic examination methods in studying benign osteoblastomas and osteoid osteomas of the spine. Apropos of 10 cases of osteoblastoma and 4 cases of osteoid osteoma] Roussouly P, et al. **Rev Chir Orthop** 1988;74 Suppl 2:316–9 (Fre)
[Lumbar spinous apophysis. An unusual location of osteoid osteoma] Carpentier E, et al. **Rev Rhum Mal Osteoartic** 1988 Dec;55(12):1001–3 (Fre)
[X-ray computed tomography of phalangeal osteoid osteoma (letter)] Malghem J, et al. **Rev Rhum Mal Osteoartic** 1988 Jul–Sep;55(9):719 (Fre)
[Osteoblastoma-like osteosarcoma] Hausegger KA, et al. **ROFO** 1989 Feb;150(2):223–4 (Ger)
[Presentation of a case of spinal osteoid osteoma causing dorsal scoliosis. Role of high resolution CT] Piazza P, et al. **Acta Biomed Ateneo Parmense** 1988;59(1–2):13–7 (Eng. Abstr.) (Ita)

RADIONUCLIDE IMAGING

Osteoid osteoma of the neck of the talus. Panni AS, et al. **Am J Sports Med** 1989 Jul–Aug;17(4):584–8
Radionuclide diagnosis of osteoid osteoma. Sostre S, et al. **Bol Asoc Med P R** 1988 Jul;80(7):245–7
Intraoperative radioective localization of an osteoid osteoma: a useful variation in technique. Todd BD, et al. **Br J Radiol** 1989 Feb;62(734):187–9
Scintigraphy in osteoid osteoma: problems related to differential diagnosis. Greco F, et al. **Ital J Orthop Traumatol** 1989 Mar;15(1):96–102
Scintigraphy in benign bone tumours. A report of 4 cases. Adams BK. **S Afr Med J** 1989 Aug 5;76(3):112–4
[The peroperative isotopic location of osteoid osteomas and other lesions exhibiting increased uptake on scintigraphy] Augereau B, et al. **Rev Chir Orthop** 1988;74(8):764–70 (Eng. Abstr.) (Fre)

SURGERY

Axillary compression syndrome with neurapraxia due to operative positioning. Nambisan RN, et al. **Surgery** 1989 Mar;105(3):449–54
[Giant cell tumors, aneurysmal bone cysts and osteoid osteomas of the spine] Hildebrandt G, et al. **Neurochirurgia (Stuttg)** 1988 Jul;31(4):107–13 (Eng. Abstr.) (Ger)

OSTEOMALACIA

[The current picture of osteomalacia] Hrba J, et al. **Cas Lek Cesk** 1988 Jul 22;127(30):954–7 (Eng. Abstr.) (Cze)

CHEMICALLY INDUCED

Osteomalacia from Al and Mg antacids. Report of a case of bilateral hip fracture. Neumann L, et al. **Acta Orthop Scand** 1989 Jun;60(3):361–2
Deferoxamine test and bone disease in dialysis patients with mild aluminum accumulation. de Vernejoul MC, et al. **Am J Kidney Dis** 1989 Aug;14(2):124–30
[Fluoride poisoning from the Saint-Yorre water with osteomalacia. Apropos of a case with bone histomorphometric analysis] Martin-May A, et al. **Rev Rhum Mal Osteoartic** 1988 Nov;55(11):959–60 (Fre)
[Osteopathia antiepileptica in adolescents and adults] Vahar-Matiar M, et al. **Fortschr Neurol Psychiatr** 1988 Jul; 56(7):216–30 (129 ref.) (Eng. Abstr.) (Ger)

COMPLICATIONS

Osteomalacia and rheumatoid arthritis [letter] Hordon LD. **Br J Rheumatol** 1989 Feb;28(1):84–5
Incidence of osteomalacia in fractures of the proximal end of femur. Tucker GS, et al. **Injury** 1988 Mar;19(2):89–92
[Occult hyperparathyroidism in a patient with osteomalacia] González D, et al. **Medicina (B Aires)** 1988;48(1):59–64 (25 ref.) (Eng. Abstr.) (Spa)

DIAGNOSIS

Osteomalacia and coeliac disease presenting as isolated dactylitis [letter] Sultan AH, et al. **Ann Rheum Dis** 1989 Jul;48(7):614–5
Osteomalacia in the elderly: biochemical screening in general practice. Stacey J, et al. **Ir Med J** 1989 Jun;82(2):72–3
[Diagnosis of osteopenia using roentgenological and histomorphometric methods] Abendrot K, et al. **Revmatologiia (Moskva)** 1989 Jan–Mar;(1):51–3 (Rus)

DRUG THERAPY

Persistence of dialysis osteomalacia despite treatment with 24R,25-dihydroxycholecalciferol. Phelps KR, et al. **Nephron** 1989;51(2):197–206
[Use of alkaline phosphatase isoenzymes in controlling the treatment of hepatic osteopathies] Kocián J, et al. **Vnitr Lek** 1988 Oct;34(10):994–1002 (Eng. Abstr.) (Cze)
[Comparative evaluation of the effectiveness of vitamin D3 preparations (1-alpha-hydroxy- and 1-alpha,25-dihydroxycholecalciferol in various forms of osteoporosis and osteomalacia] Zarubina NA, et al. **Probl Endokrinol (Mosk)** 1989 May–Jun;35(3):15–9 (Eng. Abstr.) (Rus)

ETIOLOGY

Tumor-induced osteomalacia and rickets. Nuovo MA, et al. **Am J Surg Pathol** 1989 Jul;13(7):588–99 (63 ref.)
Association between prolonged dietary vitamin D deficiency and autonomous hyperparathyroidism. Sultan AH, et al. **BMJ** 1989 Jul 22;299(6693):236–7
Oncogenous osteomalacia: a case study. Nitzan DW, et al. **Bone Miner** 1989 May;6(2):191–7
Primary Sjogren's syndrome presenting as osteomalacia secondary to renal tubular acidosis. Pal B, et al. **Br J Clin Pract** 1988 Oct;42(10):436–8
Oncogenic osteomalacia. A case report. McGuire MH, et al. **Clin Orthop** 1989 Jul;(244):305–8
Treatment and histological healing of aluminum-related osteomalacia. Boyce BF, et al. **Contrib Nephrol** 1988; 64:151–9
Osteomalacia secondary to osteosarcoma. A case report. Cheng CL, et al. **J Bone Joint Surg [Am]** 1989 Feb; 71(2):288–92
[Osteomalacia symptoms in primary hyperparathyroidism] Duquesnoy B, et al. **Rev Rhum Mal Osteoartic** 1988 May; 55(7):505–10 (Fre)
[Algodystrophy indicative of osteomalacia due to metabolic acidosis resulting from an intestinal neo-bladder. Apropos of 2 cases] Fortier-Beaulieu M, et al. **Rev Rhum Mal Osteoartic** 1989 Apr;56(5):409–12 (Fre)
[Osteomalacia revealing Gougerot-Sjögren syndrome] Hautefeuille P, et al. **Rev Rhum Mal Osteoartic** 1989 Jun; 56(7):551–3 (19 ref.) (Fre)
[Acute flaccid quadriplegia disclosing Gougerot-Sjögren syndrome with renal tubular acidosis, nephrocalcinosis and osteomalacia] Karras D, et al. **Rev Rhum Mal Osteoartic** 1989 May;56(6):491–4 (Fre)
[Hypophosphatemic osteomalacia in adults] Löhr-Schwaab S, et al. **Dtsch Med Wochenschr** 1989 Apr 7;114(14):538–42 (Eng. Abstr.) (Ger)
[Oncogenic hypophosphatemic osteomalacia] Schultze G, et al. **Dtsch Med Wochenschr** 1989 Jul 7;114(27):1073–8 (Eng. Abstr.) (Ger)
[Current theories on the role of vitamin D in physiology and pathology. Therapeutic implications] Bar A, et al. **Pol Tyg Lek** 1988 Nov 28;43(48):1531–6 (Pol)
[Changes in the jaws of rats after a 7-day flight on "Kosmos-1667"] Volozhin AI, et al. **Kosm Biol Aviakosm Med** 1989 Jan–Feb;23(1):83–6 (Rus)
[Oncogenic osteomalacia and Cushing's disease (letter)] García RV, et al. **Rev Clin Esp** 1989 Apr;184(6):333–4 (Spa)

METABOLISM

[Environmental exposure to cadmium and effects on human health. Part 2. Bone and mineral metabolism in inhabitants of the cadmium-polluted Jinzu River basin in Toyama Prefecture] Aoshima K, et al. **Nippon Eiseigaku Zasshi** 1988 Oct;43(4):864–71 (Eng. Abstr.) (Jpn)

PATHOLOGY

Hypophosphatemic oncogenic osteomalacia: report of three new cases. Papotti M, et al. **Tumori** 1988 Oct 31; 74(5):599–607

PHYSIOPATHOLOGY

[Biologico-mechanical behavior of bone in osteomalacia and in phosphate diabetes in adulthood] Enderle A. **Orthopade** 1988 Sep;17(5):432–9 (Eng. Abstr.) (Ger)

PREVENTION & CONTROL

Is reduced urinary calcium loss in long-term parenteral nutrition patients an adaptive mechanism to limit bone loss? **Nutr Rev** 1989 Jun;47(6):190–2 (13 ref.)

RADIOGRAPHY

The enthesopathic changes of hypophosphatemic osteomalacia in adults: radiologic findings. Burnstein MI, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):785–90
The petrous temporal bone and deafness in X-linked hypophosphataemic osteomalacia. O'Malley SP, et al. **Clin Radiol** 1988 Sep;39(5):528–30

RADIONUCLIDE IMAGING

The use of isotope bone scanning in suspected post-gastrectomy osteomalacia [letter] Wright GM, et al. **Practitioner** 1988 Apr 8;232(1446):365

SURGERY

Resolution of hypercalcemia and aluminum bone disease after renal transplantation. Piraino B, et al. **Am J Med** 1988 Nov; 85(5):728–30

VETERINARY

Diagnostic summary of 1986 turkey, broiler breeder, and layer necropsy cases at the University of Georgia. Morris MP, et al. **Avian Dis** 1988 Jul–Sep;32(3):391–403

OSTEOMYELITIS

A case of pelvic osteomyelitis. Matsukura H, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Apr;29(2):277–9
Haematogenous osteomyelitis of the first metatarsal sesamoid. A case report and review of the literature. Freund KG. **Arch Orthop Trauma Surg** 1989;108(1):53–4
Pyogenic sacroiliac joint infection. Hodgson BF. **Clin Orthop** 1989 Sep;(246):146–9

Atypical osteomyelitis of the skull base. Grobman LR, et al. **Laryngoscope** 1989 Jul;99(7 Pt 1):671–6

Nocardia asteroides cervical osteomyelitis in an immunocompetent host. Rosendale DE, et al. **Otolaryngol Head Neck Surg** 1988 Sep;99(3):334–7

[Critical considerations on various experimental staphylococcus infections] Farinelli S, et al. **Clin Ter** 1989 May 15;129(3):193–206 (41 ref.) (Eng. Abstr.) **(Ita)**

[Chronic recurrent multifocal osteomyelitis in children] Berezhnoĭ AP, et al. **Ortop Travmatol Protez** 1988 Nov; (11):23–7 (Eng. Abstr.) **(Rus)**

BLOOD

[Complications of capillary blood sample taking from newborn infants (letter)] Borris LC. **Ugeskr Laeger** 1988 Sep 19;150(38):2263–4 **(Dan)**

[Enzymatic status of circulating leukocytes in acute hematogenic osteomyelitis in children] Kushch NL, et al. **Vestn Khir** 1988 Oct;141(10):83–7 (Eng. Abstr.) **(Rus)**

[Status of the cell membranes of erythrocytes and renal parenchyma in patients with chronic osteomyelitis] Rak AV, et al. **Vestn Khir** 1988 Aug;141(8):62–4 **(Rus)**

COMPLICATIONS

Abdominal abscess following asymptomatic pelvic osteomyelitis. Case report. Høigaard AD, et al. **Acta Chir Scand** 1989 Mar;155(3):209–10

Septic acromioclavicular arthritis and osteomyelitis in a patient with acquired immunodeficiency syndrome. Zimmermann B 3d, et al. **Arthritis Rheum** 1989 Sep; 32(9):1175–8 (16 ref.)

Hypercalcemia and squamous cell carcinoma complicating chronic osteomyelitis. Fenton AJ, et al. **Aust N Z J Med** 1989 Aug;19(4):358–61

Osteomyelitis in pediatric patients with leukemia. Murphy RG, et al. **Cancer** 1988 Dec 15;62(12):2628–30

Mycobacterium terrae osteomyelitis and septic arthritis in a normal host. A case report. Rougraff BT, et al. **Clin Orthop** 1989 Jan;(238):308–10

Fusiform bacterial sepsis. Metastases with osteomyelitis and hepatic abscess occurring in a chaotic family. Van Dyke DC, et al. **Clin Pediatr (Phila)** 1989 Sep;28(9):423–5

Purulent osteomyelitis associated with empyema and toxic shock syndrome. Chen SM, et al. **J Emerg Med** 1988 Jul–Aug;6(4):285–7

Pyogenic upper cervical spinal infection as a cause of sudden-onset quadriplegia—case report. Itoyama Y, et al. **Neurol Med Chir (Tokyo)** 1988 Jun;28(6):594–7

Pseudo-osteomyelitis in Gaucher's disease. Paonessa KJ, et al. **Orthop Rev** 1989 Aug;18(8):880–8 (45 ref.)

Osteomyelitis associated with Crohn's disease. A case report and literature review. Chandler JT, et al. **Orthopedics** 1989 Feb;12(2):285–8 (8 ref.)

Toxic shock syndrome associated with osteomyelitis in premenarcheal girl. Jacobson RM, et al. **Pediatr Infect Dis J** 1989 Feb;8(2):125–6

Pulmonary association in a case of chronic recurrent multifocal osteomyelitis. Kerem E, et al. **Pediatr Pulmonol** 1989;7(1):55–8

Chronic recurrent multifocal osteomyelitis and psoriasis—a report of a new association and review of related disorders. Laxer RM, et al. **Semin Arthritis Rheum** 1988 May; 17(4):260–70 (54 ref.)

Soft tissue involvement, mediastinal pseudotumor, and venous thrombosis in pustulotic arthro-osteitis. A study of eight new cases. van Holsbeeck M, et al. **Skeletal Radiol** 1989;18(1):1–8

[Treatment of infected pseudarthroses in the long bones using external fixation] Karpaš K, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(5):655–67 (Eng. Abstr.) **(Cze)**

[Pyogenic spinal osteomyelitis with right-sided retroperitoneal abscess] Jacobsen IE. **Ugeskr Laeger** 1989 Jul 3;151(27):1760–1 (Eng. Abstr.) **(Dan)**

[Andrews bacterid (pustulosis palmaris et plantaris) in orthopedics. Description of 2 cases and literature review] Aebi B, et al. **Helv Chir Acta** 1988 Jul;55(3):347–52 (14 ref.) (Eng. Abstr.) **(Ger)**

[A case of malignant lymphoma, an anemone cell tumor of the leg, arising from osteomyelitis] Suzuki T, et al. **Gan No Rinsho** 1988 Sep;34(11):1595–602 (Eng. Abstr.) **(Jpn)**

[Respiratory and circulatory disorders in patients with hematogenous osteomyelitis of the spine] Tikhodeev SA, et al. **Khirurgiia (Mosk)** 1988 Aug;(8):35–8 (Eng. Abstr.) **(Rus)**

[Early orthopedic complications of acute hematogenous osteomyelitis of the hip in children] Burin MD. **Ortop Travmatol Protez** 1989 Apr;(4):24–6 (Eng. Abstr.) **(Rus)**

[Treatment of inveterate pathologic dislocation of the hip caused by meta-epiphyseal osteomyelitis] Novokreshchenov LB, et al. **Ortop Travmatol Protez** 1989 Mar;(3):39–41 (Eng. Abstr.) **(Rus)**

[Spinal cord disorders in tuberculosis and osteomyelitis of the spine and their surgical treatment] Tikhodeev SA. **Probl Tuberk** 1988;(12):39–42 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Diagnosis of acute bacterial osteomyelitis of the pubis by means of fine needle aspiration. Lupovitch A, et al. **Acta Cytol** 1989 Sep-Oct;33(5):649–51

Sellar abscess associated with tuberculous osteomyelitis of the skull: MR findings. Gupta RK, et al. **AJNR** 1989 Mar-Apr;10(2):448

Osteomyelitis of the foot in diabetic patients: evaluation with plain film, 99mTc-MDP bone scintigraphy, and MR imaging. Yuh WT, et al. **AJR** 1989 Apr;152(4):795–800

MR imaging characteristics of tuberculous spondylitis vs vertebral osteomyelitis. Smith AS, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):399–405

Vertebral osteomyelitis. Koenker RM, et al. **Am Fam Physician** 1989 Mar;39(3):169–74 (20 ref.)

The role of bone scan and radiography in the diagnostic evaluation of suspected pedal osteomyelitis. Segall GM, et al. **Clin Nucl Med** 1989 Apr;14(4):255–60

Chronic osteomyelitis: the relative roles of scintigrams, plain radiographs, and transmission computed tomography. Tumeh SS, et al. **Clin Nucl Med** 1988 Oct;13(10):710–5

Nondiaphyseal osteoid osteomas in the pediatric patient. Davidson RS, et al. **Clin Orthop** 1989 Jun;(243):230–4

Chronic, recurrent multifocal osteomyelitis. Case report and review of the literature. Van Howe RS, et al. **Clin Pediatr (Phila)** 1989 Feb;28(2):54–9 (28 ref.)

Osteomyelitis of the cervical spine presenting as a neurenteric cyst. Ein SH, et al. **J Pediatr Surg** 1988 Aug;23(8):779–81

High-resolution hip ultrasound in the limping child. Alexander JE, et al. **JCU** 1989 Jan;17(1):19–24

Radiographic evaluation of osteomyelitis using magnetic resonance imaging. Totty WG. **Orthop Rev** 1989 May; 18(5):587–92

Roentgen rounds #94. Osteomyelitis of the left ilium—left iliacus muscle abscess. Vest BT, et al. **Orthop Rev** 1988 May;17(5):511–5

Brucella osteomyelitis. Caudle RJ. **Orthopedics** 1988 Dec; 11(12):1731–4

Subacute osteomyelitis presenting as bone tumors. Juhn A, et al. **Orthopedics** 1989 Feb;12(2):245–8

Limb disuse in a newborn. Orebaugh S, et al. **Pediatr Emerg Care** 1988 Dec;4(4):256–8

Ultrasonography of the painful hip. Prospective studies in 204 patients. Dörr U, et al. **Pediatr Radiol** 1988;19(1):36–40

Osteomyelitis: detection with US. Work in progress. Abiri MM, et al. **Radiology** 1988 Dec;169(3):795–7

Osteomyelitis: detection with US. Abiri MM, et al. **Radiology** 1989 Aug;172(2):509–11

Case report 496: Intraosseous gas in Proteus mirabilis osteomyelitis complicating bone infarcts in sickle cell disease. Marx AC, et al. **Skeletal Radiol** 1988;17(7):510–3

Pyogenic vertebral osteomyelitis of a lumbar facet joint with associated epidural abscess. A case report with review of the literature. Roberts WA. **Spine** 1988 Aug;13(8):948–52 (35 ref.)

[Acute infantile osteomyelitis] Graswinckel JD, et al. **Tijdschr Kindergeneeskd** 1988 Dec;56(6):253–8 (Eng. Abstr.) **(Dut)**

[Contribution of echography in the course and treatment of acute osteomyelitis] Dargouth M, et al. **Rev Chir Orthop** 1989;75(4):252–8 (Eng. Abstr.) **(Fre)**

[Diagnostico-differential problems in acute osteomyelitis and Ewing's sarcoma] Mignani G, et al. **Chir Organi Mov** 1988 Oct-Dec;73(4):345–50 (Eng. Abstr.) **(Ita)**

[Serologic diagnosis of a staphylococcal etiology in osteomyelitis] Deriabin PN, et al. **Khirurgiia (Mosk)** 1988 Aug;(8):39–42 **(Rus)**

[Prognosis of the transition of acute hematogenous osteomyelitis to it chronic form in children] Novokreshchenov LB, et al. **Klin Khir** 1989;(6):30–2 (Eng. Abstr.) **(Rus)**

[Possibilities and perspectives of infrared thermography in the complex diagnosis of osteomyelitis of the extremities] Samokhin AV, et al. **Klin Khir** 1988;(12):36–7 (Eng. Abstr.) **(Rus)**

[Analysis of diagnostic errors in hematogenic osteomyelitis in children] Elovoĭ MM, et al. **Vestn Khir** 1988 Jul; 141(7):75–8 **(Rus)**

[Value of echography in the diagnosis of chronic osteomyelitis] Vesnin AG, et al. **Vestn Khir** 1988 Oct; 141(10):46–8 (Eng. Abstr.) **(Rus)**

[Chronic recurrent multifocal osteomyelitis] Muro Brussi M, et al. **An Esp Pediatr** 1988 Oct;29(4):339–40 **(Spa)**

DRUG THERAPY

Successful oral treatment of methicillin-resistant Staphylococcus aureus osteomyelitis using ciprofloxacin. Westblom TU, et al. **Am J Med** 1988 Dec;85(6):884

Use of ceftazidime for malignant external otitis. Kimmelman CP, et al. **Ann Otol Rhinol Laryngol** 1989 Sep;98(9):721–5

Comparative evaluation of daptomycin (LY146032) and vancomycin in the treatment of experimental methicillin-resistant Staphylococcus aureus osteomyelitis in rabbits. Mader JT, et al. **Antimicrob Agents Chemother** 1989 May;33(5):689–92

Ketoconazole in the treatment of osteomyelitis due to Candida albicans. Bannatyne RM, et al. **Can J Surg** 1989 May;32(3):201–2

The role of fluoroquinolones in the management of skin, soft tissue, and bone infections. Fong IW. **Clin Invest Med** 1989 Feb;12(1):44–9

Neonatal group B streptococcal osteomyelitis and suppurative arthritis. Outpatient therapy. Perkins MD, et al. **Clin Pediatr (Phila)** 1989 May;28(5):229–30

Review of tissue penetration and clinical efficacy of enoxacin in skin and skin structure infections and in osteomyelitis. Pankey GA. **Clin Pharmacokinet** 1989;16 Suppl 1:46–51 (16 ref.)

Use of an ambulatory infusion pump in a 12-year-old with Salmonella osteomyelitis. Vaida AJ, et al. **DICP** 1989 May; 23(5):379–81

Treatment of chronic experimental Staphylococcus aureus osteomyelitis with LY146032 and vancomycin. Luu QN, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jun;8(6):562–3

Newer regimens of antimicrobial therapy for acute suppurative osteoarticular infections. Syrogiannopoulos GA. **Indian J Pediatr** 1988 Sep-Oct;55(5):653–6

Adjuvant fosfomycin medication in chronic osteomyelitis. Meissner A, et al. **Infection** 1989 May-Jun;17(3):146–51

Therapy of acute and chronic gram-negative osteomyelitis with ciprofloxacin. Report from a Swedish Study Group. **J Antimicrob Chemother** 1988 Aug;22(2):221–8

Treatment of chronic osteomyelitis with ciprofloxacin. Hoogkamp-Korstanje JA, et al. **J Antimicrob Chemother** 1989 Mar;23(3):427–32

Use of ofloxacin in open fractures and in the treatment of post-traumatic osteomyelitis. Ketterl R, et al. **J Antimicrob Chemother** 1988 Sep;22 Suppl C:159–66

Treatment of nail puncture wounds [letter] **J Fam Pract** 1989 Apr;28(4):388, 396

Ciprofloxacin for the treatment of osteomyelitis: a review. Hessen MT, et al. **J Foot Surg** 1989 Mar-Apr;28(2):100–5 (32 ref.)

Vertebral osteomyelitis due to Haemophilus aphrophilus: treatment with ceftriaxone [letter] Nahass RG, et al. **J Infect Dis** 1989 Apr;159(4):811–2

The effect of local antibiotics in treating chronic osseous Staphylococcus aureus infection. Keogh BS, et al. **J Oral Maxillofac Surg** 1989 Sep;47(9):940–5

The use of tobramycin-impregnated polymethylmethacrylate beads in the therapy of deep bone and joint infections. Tsukayama DT, et al. **J Orthop Trauma** 1987;1(3):263–4

Therapy of skin, soft tissue, and bone infections with cefoxitin sodium. Perkins RL, et al. **Rev Infect Dis** 1979 Jan-Feb; 1(1):165–9

Clinical evaluation of cefoxitin in treatment of infections in 47 orthopedic patients. Schurman DJ, et al. **Rev Infect Dis** 1979 Jan-Feb;1(1):206–9

Use of quinolones for the treatment of osteomyelitis and septic arthritis. Waldvogel FA. **Rev Infect Dis** 1989 Jul-Aug;11 Suppl 5:S1259–63 (28 ref.)

Ciprofloxacin in the treatment of acute and chronic osteomyelitis: a review. Norrby SR. **Scand J Infect Dis Suppl** 1989;60:74–8 (14 ref.)

[Use of Septopal in the treatment of bone infections] Foldyna K, et al. **Acta Chir Orthop Traumatol Cech** 1989 Jun; 56(3):218–24 (Eng. Abstr.) **(Cze)**

[Choice of first-line antibiotic therapy in the treatment of bone and joint infections in children] Badelon O, et al. **Pathol Biol (Paris)** 1988 Jun;36(5 Pt 2):746–9 (Eng. Abstr.) **(Fre)**

[Gentamycin impregnated collagen fleece. A report of experiences] Tassler H, et al. **Fortschr Med** 1988 Sep 30; 106(28):571–3 (Eng. Abstr.) **(Ger)**

[Resistance of staphylococci to intracellular killing by macrophages—a new pathophysiologic concept of acute hematogenous osteomyelitis in childhood and its therapeutic consequences] Guggenbichler JP, et al. **Padiatr Padol** 1989;24(1):21–32 (Eng. Abstr.) **(Ger)**

[Conservative treatment of suppurative hematogenic arthritis of the hip joint] Boda A, et al. **Magy Traumatol Orthop Helyreallito Sebesz** 1989; 32(1):35–50 (Eng. Abstr.) **(Hun)**

[Use of ultrasonics in the prevention and treatment of suppurative surgical infection (review of the literature)] Gorfinkel' IV, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):151–6 (54 ref.) **(Rus)**

[Use of papain in combined treatment of patients with fistulous forms of suppurative inflammatory processes] Vetrile ST, et al. **Ortop Travmatol Protez** 1988 Nov; (11):18–22 (Eng. Abstr.) **(Rus)**

[Intraarterial antibiotic therapy in comprehensive therapeutic and preventive measures against inflammatory processes in the maxillofacial area] Shcherbatiuk DI, et al. **Stomatologiia (Mosk)** 1988 Jul-Aug;67(4):33–5 (Eng. Abstr.) **(Rus)**

[Endolymphatic antegrade infusion of drugs in the treatment of suppurative-inflammatory diseases] Sinenchenko GI. **Vestn Khir** 1988 Oct;141(10):143–5 (32 ref.) **(Rus)**

ECONOMICS

[Socioeconomic assessment of chronic traumatic osteomyelitis] Zhitnitskiĭ RE, et al. **Ortop Travmatol Protez** 1988 Jul;(7):53–6 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Bone and joint infections due to Pseudomonas aeruginosa: clinical aspects and treatment. Finkelstein R, et al. **Isr J Med Sci** 1989 Mar;25(3):123–6

Primary sternal osteomyelitis. Gill EA Jr, et al. **West J Med** 1989 Aug;151(2):199–203 (18 ref.)

ETIOLOGY

Internal fixation devices and infection. An electron microscopic study. Lind T, et al. **Acta Orthop Belg** 1988;

54(4):424–8
Mycobacterium avium infection of the knee in a child. Pedersen AK, et al. **Acta Orthop Scand** 1988 Oct; 59(5):585–6
Fusarium solani osteomyelitis with probable nosocomial spread. Nuovo MA, et al. **Am J Clin Pathol** 1988 Dec; 90(6):738–41
Candida osteomyelitis [letter] Collignon P. **Am J Med** 1987 Dec;83(6):1173
Malignant external otitis and osteomyelitis of the base of the skull. Chandler JR. **Am J Otol** 1989 Mar;10(2):108–10
'Punch' actinomycosis causing osteomyelitis of the hand. Blinkhorn RJ Jr, et al. **Arch Intern Med** 1988 Dec; 148(12):2668–70 (14 ref.)
Post-traumatic osteomyelitis. Pathophysiology and management. Roesgen M, et al.
Arch Orthop Trauma Surg 1989;108(1):1–9 (40 ref.)
Osteomyelitis of the mandible associated with osteopetrosis: report of a case. Lawoyin DO, et al.
Br J Oral Maxillofac Surg 1988 Aug;26(4):330–5
Actinomycotic osteomyelitis. Ruprecht A, et al.
Can Dent Assoc J 1988 Nov;54(11):837–9
Pneumococcal vertebral osteomyelitis presenting with an aseptic knee effusion in a child. Malleson PN, et al.
Clin Exp Rheumatol 1988 Jul–Sep;6(3):325–8
An unusual presentation of Yersinia enterocolitica. Bonilla RM. **Hosp Pract [Off]** 1988 Nov 15;23(11):23–4
Maxillary osteomyelitis in a neonate. Date UG, et al.
Indian Pediatr 1988 Mar;25(3):302–5
A case of Aspergillus osteomyelitis complicating an open fracture of the tibia. Richards RH, et al. **Injury** 1988 Mar; 19(2):129–30
Subacute Salmonella osteomyelitis following a greenstick fracture of the radius. Underhill TJ, et al. **Injury** 1988 Jul; 19(4):277–8
A proliferative inflammation in the mandible caused by implantation of an infected dental root. A possible experimental model for chronic osteomyelitis. Wannfors K, et al. **Int J Oral Maxillofac Surg** 1989 Jun;18(3):179–83
Bone lesions of acne fulminans. Case report and review of the literature. Jemec GB, et al. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 2):353–7 (19 ref.)
Unrecognized foreign body as a focus for delayed Serratia marcescens osteomyelitis and septic arthritis. Two case reports. Greene WB. **J Bone Joint Surg [Am]** 1989 Jun; 71(5):754–7
Skeletal infection by group B beta-haemolytic streptococci in neonates. A case report and review of the literature. Baxter MP, et al. **J Bone Joint Surg [Br]** 1988 Nov; 70(5):812–4 (19 ref.)
Serratia osteomyelitis causing neurological deterioration after spine fracture. A report of two cases. Lowe J, et al.
J Bone Joint Surg [Br] 1989 Mar;71(2):256–8
A complicated nail puncture wound. Chesebro MJ.
J Fam Pract 1988 Dec;27(6):640–1
Pseudomonas osteomyelitis secondary to puncture wound of the foot. Gallo JJ. **J Fam Pract** 1988 Nov;27(5):529–32 (35 ref.)
Acute hematogenous osteomyelitis: a model with trauma as an etiology. Morrissy RT, et al. **J Pediatr Orthop** 1989 Jul–Aug;9(4):447–56
Candidal osteomyelitis and septic arthritis in heroin abusers [letter] Podzamczer D, et al. **J Rheumatol** 1989 Feb; 16(2):256–7
Osteomyelitis of the clavicle secondary to infected Hickman catheter. Kravitz AB. **JPEN J Parenter Enteral Nutr** 1989 Jul–Aug;13(4):426–7
Pyogenic vertebral osteomyelitis after transcolonic gunshot wound. Miller BR, et al. **Milit Med** 1989 Feb;154(2):64–6
Polyarticular arthritis due to Sporothrix schenckii. Lesperance M, et al. **Mycoses** 1988 Dec;31(12):599–603
Neonatal cranial osteomyelitis: a complication of fetal monitoring. McGregor JA, et al. **Obstet Gynecol** 1989 Mar; 73(3 Pt 2):490–2
Osteomyelitis of the maxilla with associated vertical root fracture and Pseudomonas infection. Hoen MM, et al.
Oral Surg Oral Med Oral Pathol 1988 Oct;66(4):494–8
Scapular osteomyelitis. An unusual complication following subacromial corticosteroid injection. Buckley SL, et al.
Orthop Rev 1989 Mar;18(3):321–4
Osteomyelitis associated with varicella infection. Kain Z, et al. **Pediatr Infect Dis J** 1989 Jul;8(7):473–5 (19 ref.)
Pseudomonas osteomyelitis can occur in the foot after puncture wounds. Riley D. **Practitioner** 1988 Mar 22; 232(1445):296, 298
Case report 558: Multicentric Klebsiella pneumoniae (Friedländers bacillus) osteomyelitis in sickle cell anemia. Malpani AR, et al. **Skeletal Radiol** 1989;18(5):399–401
Haemophilus aphrophilus sternal osteomyelitis. Berenson CS, et al. **South Med J** 1988 Dec;81(12):1593–4
Intracranial complications of sinusitis. Parker GS, et al.
South Med J 1989 May;82(5):563–9
Yersinia enterocolitica causing spinal osteomyelitis and empyema in a nonimmunocompromised host. Sinnott JT 4th, et al. **South Med J** 1989 Mar;82(3):399–400
Pyogenic infection of the lumbar vertebral spine due to gas-forming organisms. A case report. Charles RW, et al. **Spine** 1989 May;14(5):541–3
[An infant with osteoarthritis and osteomyelitis of the humerus caused by Escherichia coli] Kreuning T, et al. **Ned Tijdschr Geneeskd** 1989 Apr 8;133(14):733–5 (Eng. Abstr.) **(Dut)**

[Acute hematogenous osteomyelitis of the patella. Apropos of 3 cases] Papavasiliou VA, et al. **Rev Chir Orthop** 1989; 75(2):130–2 (4 ref.) (Eng. Abstr.) **(Fre)**
[Chronic brucellar osteomyelitis of the humerus (letter)] Zarnitsky C, et al. **Rev Rhum Mal Osteoartic** 1989 Mar 15;56(4):342–3 **(Fre)**
[BCG osteitis] Szabó L, et al. **Orv Hetil** 1988 Oct 9; 129(41):2203–4 (Eng. Abstr.) **(Hun)**
[Staphylococcal osteomyelitis of the spine as a complication of gunshot abdominal wound] Ardashev IP, et al.
Ortop Travmatol Protez 1989 Jan;(1):57–9 **(Rus)**
[Mandibular fracture with an atypical complication] Ushin AG, et al. **Stomatologiia (Mosk)** 1988 Nov–Dec;67(6):74–5 **(Rus)**
[Osteomyelitis of the calcaneus in the neonate] Armesto Pérez V, et al. **An Esp Pediatr** 1988 Sep;29(3):263–4 **(Spa)**

IMMUNOLOGY

Antibody response to Staphylococcus aureus surface proteins in rabbits with persistent osteomyelitis after treatment with demineralized bone implants. Thomas VL, et al.
Infect Immun 1989 Feb;57(2):404–12
[Selected indicators of immunity in patients with chronic osteomyelitis] Pyzio A, et al.
Chir Narzadow Ruchu Ortop Pol 1988;53(4):313–7 (Eng. Abstr.) **(Pol)**
[The role of nonspecific protective factors in the prognosis of the course of acute hematogenous osteomyelitis] Rakhimov AU, et al. **Khirurgiia (Mosk)** 1988 Jul;(7):111–3 (Eng. Abstr.) **(Rus)**
[An immuno-test system for determining antibodies to Staphylococcus aureus in osteomyelitis in children] Stepanov EA, et al. **Khirurgiia (Mosk)** 1988 Jul;(7):98–101 (Eng. Abstr.) **(Rus)**
[Prognostic significance of the leukocyte interferon reaction in the treatment of acute surgical infection in children] Kutubidze RA, et al. **Klin Khir** 1988;(6):22–4 (Eng. Abstr.) **(Rus)**
[The state of immunity in patients with hematogenous osteomyelitis of the spine and femur (comparative characteristics)] Fishchenko VIa, et al.
Ortop Travmatol Protez 1988 Sep;(9):29–32 (Eng. Abstr.) **(Rus)**
[Results of immunological and microbiological examinations in acute hematogenous osteomyelitis in children] Savitskaia KI, et al. **Pediatriia** 1988;(5):46–52 (Eng. Abstr.) **(Rus)**

METABOLISM

Histochemical detection of osteocalcin in normal and pathological human bone. Vermeulen AH, et al.
J Histochem Cytochem 1989 Oct;37(10):1503–8
[Benzylpenicillin levels in the serum and bone tissue of the lower jaw in patients with chronic traumatic osteomyelitis after intraosseous and intramuscular administration] Borodin IuN. **Antibiot Khimioter** 1988 Sep;33(9):694–6 (Eng. Abstr.) **(Rus)**
[Biochemical criteria of the inflammatory process in spinal osteomyelitis] Titarenko OT, et al. **Vopr Med Khim** 1989 May–Jun;35(3):100–3 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Chronic osteomyelitislike disease with negative bacterial cultures. Pelkonen P, et al. **Am J Dis Child** 1988 Nov; 142(11):1167–73
Listeria monocytogenes osteomyelitis. Chirgwin K, et al.
Arch Intern Med 1989 Apr;149(4):931–2
Acute hematogenous Salmonella osteomyelitis in a nonsickle cell infant. Tomczak RL, et al.
J Am Podiatr Med Assoc 1988 Oct;78(10):535–8
Bone and joint infections caused by Kingella kingae: six cases and review of the literature. de Groot R, et al.
Rev Infect Dis 1988 Sep–Oct;10(5):998–1004 (36 ref.)
Septic arthritis and osteomyelitis from a cat bite. Chodakewitz J, et al. **Yale J Biol Med** 1988 Nov–Dec; 61(6):513–8
[Osteomyelitis caused by Pasteurella multocida following dog bite. Differential diagnostic considerations] Dietlein E, et al. **Med Klin** 1988 Jul 15;83(15):494–5 **(Ger)**
[Microflora in gunshot osteomyelitis in Ethiopia] Dzherelei AN. **Ortop Travmatol Protez** 1988 Jul;(7):45–6 (Eng. Abstr.) **(Rus)**
[Late recurrent osteomyelitis caused by Salmoneila typhi (letter)] Botet Pont C, et al. **Med Clin (Barc)** 1988 Oct 22;91(13):518 **(Spa)**

PATHOLOGY

Chronic pyogenic osteomyelitis. Case report. Shalhoub SY.
Aust Dent J 1988 Dec;33(6):478–80 (11 ref.)
Synovitis-acne-pustulosis hyperostosis-osteomyelitis syndrome (SAPHO). A new syndrome among the spondyloarthropathies? Benhamou CL, et al.
Clin Exp Rheumatol 1988 Apr–Jun;6(2):109–12
Spinal osteomyelitis: unusual findings on magnetic resonance imaging. Michael AS, et al.
Comput Med Imaging Graph 1988 Nov–Dec;12(6):329–31
A histological study of acute hematogenous osteomyelitis following physeal injuries in rabbits. Whalen JL, et al.
J Bone Joint Surg [Am] 1988 Oct;70(9):1383–92
A clinicoradiological study of maxillary osteomyelitis. Kaneda T, et al. **J Nihon Univ Sch Dent** 1989 Jun; 31(2):464–9
Diffuse sclerosing osteomyelitis of the mandible: clinical radiographic and histologic findings in twenty-seven patients. Van Merkesteyn JP, et al.
J Oral Maxillofac Surg 1988 Oct;46(10):825–9
Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 24–1989. A 77-year-old man with back pain and acute inability to walk.
N Engl J Med 1989 Jun 15;320(24):1610–8
Unusually aggressive osteomyelitis of the jaws. A report of two cases. Krutchkoff DJ, et al.
Oral Surg Oral Med Oral Pathol 1989 May;67(5):499–507
[Chronic osteomyelitis and cancer of the fistula] Wening JV, et al. **Langenbecks Arch Chir** 1989;374(1):55–9 (Eng. Abstr.) **(Ger)**
[Experimental polymicrobial osteomyelitis produced by both aerobic and anaerobic opportunistic pathogens] Sakaeda H. **Nippon Seikeigeka Gakkai Zasshi** 1988 Aug; 62(8):791–802 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

The pathogenesis of adult osteomyelitis. McGuire MH.
Orthop Rev 1989 May;18(5):564–70 (11 ref.)

PREVENTION & CONTROL

The prevention of infection in open fractures. An experimental study of the effect of antibiotic therapy. Worlock P, et al. **J Bone Joint Surg [Am]** 1988 Oct; 70(9):1341–7
[Prevention of suppurative complications after a trans-sternal approach to the organs of the anterior mediastinum] Chupryna VV, et al. **Vestn Khir** 1988 Sep;141(9):52–3 **(Rus)**

RADIOGRAPHY

Chronic recurrent multifocal osteomyelitis in children. A roentgenologic and scintigraphic investigation. Mortensson W, et al. **Acta Radiol** 1988 Sep–Oct;29(5):565–70
CT of hyoid osteomyelitis [letter] Schweitzer ME, et al.
AJR Am J Roentgenol 1989 Aug;153(2):432–3
Diagnosis of vertebral osteomyelitis in a community hospital by using computed tomography. Abbey DM, et al.
Arch Intern Med 1989 Sep;149(9):2029–35
The radiology of bone and joint infection. Barrington NA.
Br J Hosp Med 1988 Dec;40(6):464–72
Computed tomography as a diagnostic aid in diabetic and other problem feet. Williamson BR, et al. **Clin Imaging** 1989 Jun;13(2):159–63
Radiology clinic: ulcerated, swollen finger: rule out osteomyelitis. Lutz JD, et al. **Indiana Med** 1989 Apr; 82(4):264–5
Chronic recurrent multifocal osteomyelitis. Association with vertebra plana. Yu L, et al. **J Bone Joint Surg [Am]** 1989 Jan;71(1):105–12
Primary epiphyseal osteomyelitis in children. Report of three cases and review of the literature. Sorensen TS, et al.
J Bone Joint Surg [Br] 1988 Nov;70(5):818–20 (5 ref.)
Spinal brucellosis. A case with "cauliflower" appearance on CT. Demirci M, et al. **Neuroradiology** 1989;31(3):282–3
Periostitis ossificans versus Garrè's osteomyelitis. Part II: Radiologic analysis of 93 cases in the jaws. Nortjé CJ, et al. **Oral Surg Oral Med Oral Pathol** 1988 Aug;66(2):249–60
The role of computed tomography in chronic osteomyelitis. Lupi L, et al. **Rays** 1987 Sep–Dec;12(3):27–9
Inflammatory metachronous hyperostosis of the clavicle and femur in children. Report of two cases, one with long-term follow-up. Eftekhari F, et al. **Skeletal Radiol** 1989; 18(1):9–14
Pyogenic vertebral osteomyelitis of the posterior elements. Ehara S, et al. **Skeletal Radiol** 1989;18(3):175–8
Solitary lucent epiphyseal lesions in children. Gardner DJ, et al. **Skeletal Radiol** 1988;17(7):497–504
[Is bacterial osteomyelitis of the spine spondylitis or spondylodiscitis?] Elke M, et al. **Radiologe** 1989 Apr; 29(4):170–5 (Eng. Abstr.) **(Ger)**
[A rare case of primary osteomyelitis of the coronoid process] Gotte P, et al. **Minerva Stomatol** 1988 Oct; 37(10):763–70 (Eng. Abstr.) **(Ita)**
[The role of imaging diagnosis in chronic osteomyelitis. A case report] Cervi PM, et al. **Radiol Med (Torino)** 1988 Oct;76(4):356–8 **(Ita)**
[Differential x-ray diagnosis of tuberculosis and osteomyelitis of the spine in adults] Sovetova NA, et al.
Ortop Travmatol Protez 1988 Nov;(11):27–34 (Eng. Abstr.) **(Rus)**
[Computed tomography in the diagnosis of chronic osteomyelitis] Todua FI, et al. **Sov Med** 1988;(6):35–9 (Eng. Abstr.) **(Rus)**
[Differential x-ray diagnosis of osteomyelitis of the spine] Andreeva VF, et al. **Vestn Rentgenol Radiol** 1988 Nov–Dec;(6):68–74 (Eng. Abstr.) **(Rus)**
[Clinico-roentgenologic manifestations of chronic gunshot osteomyelitis of the long tubular bones of many years' duration] Ermachenko BA, et al.
Vestn Rentgenol Radiol 1988 Nov–Dec;(6):13–8 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

Detection of osteomyelitis at fracture nonunion sites: comparison of two scintigraphic methods. Seabold JE, et

al. **AJR Am J Roentgenol** 1989 May;152(5):1021–7
Noninflammatory entities and the differential diagnosis of positive three phase bone imaging. Delbeke D, et al. **Clin Nucl Med** 1988 Nov;13(11):844–51 (61 ref.)
Detection of acute osteomyelitis with indium–111 labeled white blood cells in a patient with sickle cell disease. Fernandez–Ulloa M, et al. **Clin Nucl Med** 1989 Feb; 14(2):97–100
Technetium–99m white blood cell imaging: false–negative result in salmonella osteomyelitis associated with sickle cell disease. Guze BH, et al. **Clin Nucl Med** 1989 Feb; 14(2):104–6
Differentiation of bone and bone marrow infarcts from osteomyelitis in sickle cell disorders. Kim HC, et al. **Clin Nucl Med** 1989 Apr;14(4):249–54
Three–phase bone scan reveals epididymo–orchitis. Schauwecker DS. **Clin Nucl Med** 1989 Jun;14(6):468–9
Combined leukocyte and bone imaging used to evaluate diabetic osteoarthropathy and osteomyelitis. Splittgerber GF, et al. **Clin Nucl Med** 1989 Mar;14(3):156–60
Significance of solitary spine abnormalities on technetium–99m bone imaging. Thivolle P, et al. **Clin Nucl Med** 1988 Jul;13(7):527–8
Radionuclide imaging in the evaluation of osteomyelitis and septic arthritis. Kim EE, et al. **Crit Rev Diagn Imaging** 1989;29(3):257–305 (83 ref.)
Indium–111–labeled leukocyte scintigraphy: diagnosis of subperiosteal abscesses complicating osteomyelitis in a child. Outwater E, et al. **J Nucl Med** 1988 Nov; 29(11):1871–4
Klebsiella pneumoniae osteomyelitis: demonstration by three–phase radionuclide bone imaging. Sanders JA. **J Nucl Med** 1989 Aug;30(8):1412–4
Combined bone scintigraphy and indium–111 leukocyte scans in neuropathic foot disease. Schauwecker DS, et al. **J Nucl Med** 1988 Oct;29(10):1651–5
Role of radionuclide imaging in the diagnosis of acute osteomyelitis. Demopulos GA, et al. **J Pediatr Orthop** 1988 Sep–Oct;8(5):558–65 (63 ref.)
Osteomyelitis. Roddie ME, et al. **Nucl Med Commun** 1988 Oct;9(10):713–7
Osteomyelitis: diagnosis with In–111–labeled leukocytes. Schauwecker DS. **Radiology** 1989 Apr;171(1):141–6
Radionuclide imaging in osteomyelitis. Gupta NC, et al. **Semin Nucl Med** 1988 Oct;18(4):287–99 (75 ref.)
Preoperative indium–labeled white blood cell scintigraphy in suspected osteomyelitis of the axial skeleton. Wukich DK, et al. **Spine** 1988 Oct;13(10):1168–70
[Diagnosis of infection in surgery of the locomotor system with Tc–99m–HMPAO leukocyte scintigraphy] Winker KH, et al. **Langenbecks Arch Chir** 1989;374(4):200–7 (Eng. Abstr.) **(Ger)**
[Clinical evaluation of indium–111–labeled leukocyte imaging in bone infection] Ishikawa N, et al. **Kaku Igaku** 1989 Mar; 26(3):375–84 (Eng. Abstr.) **(Jpn)**
[Radionuclide computed diagnosis of chronic hematogenous osteomyelitis in children] Sorokin SA, et al. **Khirurgiia (Mosk)** 1988 Jul;(7):107–10 (Eng. Abstr.) **(Rus)**

REHABILITATION

[Rehabilitation of World War II invalids with chronic gunshot osteomyelitis in the Poltava region] Mazurik MF, et al. **Klin Khir** 1989;(1):44–6 **(Rus)**

SURGERY

Subtransversalis passage of a rectus abdominis island flap for treatment of osteomyelitis of the posterior superior iliac spine. Lineaweaver WC, et al. **Ann Plast Surg** 1989 Jun; 22(6):539–42
Sternal osteomyelitis: treatment with rectus abdominis muscle. Iacobucci JJ, et al. **Br J Plast Surg** 1989 Jul; 42(4):452–9
Treatment of infected nonunion and delayed union of tibia fractures with locking intramedullary nails. Miller ME, et al. **Clin Orthop** 1989 Aug;(245):233–8
Local muscle flaps in the treatment of chronic osteomyelitis—the introduction of new vasculature. Ngoí SS, et al. **Injury** 1987 Sep;18(5):350–3
Radial reconstruction in segmental defects of both forearm bones. Kumar VP, et al. **J Bone Joint Surg [Br]** 1988 Nov; 70(5):815–7
Treatment of chronic osteomyelitis of the leg by peroneal myocutaneous island flap transfer. Yoshimura M, et al. **J Bone Joint Surg [Br]** 1989 Aug;71(4):593–6
Diabetic osteomyelitis: long–term attempts at salvage with eventual mortality. Fishman SA. **J Foot Surg** 1988 Jul–Aug; 27(4):310–5
Muscle transposition in the management of chronic osteomyelitis and ulceration of the heel. Graziano TA, et al. **J Foot Surg** 1989 Jan–Feb;28(1):68–71
Hematogenous osteomyelitis and septic arthritis in children: a ten year review. Geissler WB, et al. **J Miss State Med Assoc** 1989 Mar;30(3):71–4
Anterior cervical debridement and strut–grafting for osteomyelitis of the cervical spine. Stone JL, et al. **J Neurosurg** 1989 Jun;70(6):879–83
The role of external fixation in the treatment of posttraumatic osteomyelitis. Jupiter JB, et al. **J Orthop Trauma** 1988; 2(2):79–93
Adjunctive use of laser Doppler flowmetry for debridement of osteomyelitis. Swiontkowski MF, et al. **J Orthop Trauma** 1989;3(1):1–5
Vascularized tissue transfer. An adjunct to the treatment of osteomyelitis. Hanel DP. **Orthop Rev** 1989 May; 18(5):595–608
Pediatric update #8. Acute hematogenous osteomyelitis in children. Long–term results of surgical treatment. Meller I, et al. **Orthop Rev** 1989 Jul;18(7):824–31
Chronic osteomyelitis of the clavicle. Granick MS, et al. **Plast Reconstr Surg** 1989 Jul;84(1):80–4
Treatment of hematogenous pyogenic vertebral osteomyelitis with anterior debridement and primary bone grafting. Emery SE, et al. **Spine** 1989 Mar;14(3):284–91
[Treatment of atrophic ulcer and chronic osteomyelitis of foot induced by injury of cauda equina] Yao JX. **Chung Hua Wai Ko Tsa Chih** 1988 Aug;26(8):462–3, 509 (Eng. Abstr.) **(Chi)**
[Present possibilities of therapy in infected pseudoarthroses and chronic osteomyelitis—new concepts] Foldyna K, et al. **Acta Chir Orthop Traumatol Cech** 1988 Jul;55(4):372–81 (Eng. Abstr.) **(Cze)**
[The anterior tibial muscle as a distal pedicled osteomuscular transposition flap] Papp C, et al. **Chirurg** 1988 Sep; 59(9):610–3 **(Ger)**
[Rib span–plasty in sequestered osteomyelitis of the femoral diaphysis] Pip M, et al. **Unfallchirurg** 1989 Jun;92(6):305–8 (Eng. Abstr.) **(Ger)**
[Diagnosis and therapy of infections in the field of orthopedics—with special reference to recent trends in osteomyelitis] Kawaji W. **Nippon Seikeigeka Gakkai Zasshi** 1988 Dec;62(12):1245–56 **(Jpn)**
[Hypothermia and aspiration drainage in chronic osteomyelitis of tubular bones] Ermolov AS, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):110–2 **(Rus)**
[Use of a controlled abacterial medium in the complex surgical treatment of patients with post–traumatic osteomyelitis of the leg bones] Panchenko MK, et al. **Klin Khir** 1988;(12):3–5 (Eng. Abstr.) **(Rus)**
[Osteoplastic correction of defects of the forearm bones] Afaunov AI. **Ortop Travmatol Protez** 1989 Feb;(2):16–20 (Eng. Abstr.) **(Rus)**
[Treatment of post–osteomyelitic circular defects in shin bones by the method of compression–distraction osteosynthesis with the use of allogenic bone matrix] Osepian IA, et al. **Ortop Travmatol Protez** 1989 Mar; (3):21–3 (Eng. Abstr.) **(Rus)**
[Scintigraphy in the prognosis of the outcome of a free autoplasty in cases of suppurative infection] Vernigora IP, et al. **Ortop Travmatol Protez** 1988 Sep;(9):62 **(Rus)**
[Reconstructive surgical treatment of invalids with defects of part of the tibial diaphysis] Blinov BV, et al. **Vestn Khir** 1988 Jun;140(6):110–3 (Eng. Abstr.) **(Rus)**
[Direct blood transfusion in the complex treatment of children with suppurative surgical infection] Kushch NL, et al. **Vestn Khir** 1988 Aug;141(8):106–8 (Eng. Abstr.) **(Rus)**
[Use of demineralized allogeneic bone transplants for plastic surgery of osteomyelitic cavities] Limnik SA, et al. **Vestn Khir** 1988 Jun;140(6):113–6 (Eng. Abstr.) **(Rus)**
[Autologous transplantation of bone marrow fibroblasts in traumatology and orthopedics] Osepian IA, et al. **Vestn Khir** 1988 May;140(5):70–1 **(Rus)**
[Complex treatment of patients with chronic osteomyelitis using osteoplasty] Panchenko MK, et al. **Vestn Khir** 1988 Oct;141(10):42–6 (Eng. Abstr.) **(Rus)**
[Plastic surgery in post–osteomyelitic defect of the mandible] Sysoliatin PG. **Vestn Khir** 1988 Sep;141(9):92–4 (Eng. Abstr.) **(Rus)**
[Results of the surgical treatment of patients with hematogenic osteomyelitis of the spine] Tikhodeev SA. **Vestn Khir** 1988 May;140(5):42–6 (Eng. Abstr.) **(Rus)**
[Plasmapheresis in severe forms of suppurative–septic diseases in children] Tsuman VG, et al. **Vestn Khir** 1988 Jun;140(6):67–70 (Eng. Abstr.) **(Rus)**
[Surgical treatment of osteomyelitis of the frontal bone and the walls of the frontal sinus] Bondar' VP, et al. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):42–5 (Eng. Abstr.) **(Rus)**
[Treatment of osteomyelitis of the frontal bone with extensive skin defect] Bondar VP, et al. **Zh Vopr Neirokhir** 1988 Jul–Aug;(4):57–8 **(Rus)**

THERAPY

Home management of osteomyelitis. Gentry LO. **Bull N Y Acad Med** 1988 Jul–Aug;64(6):565–9
Treatment of osteoradionecrosis combined with pathologic fracture and osteomyelitis of the mandible with electromagnetic stimulation. Barak S, et al. **Int J Oral Maxillofac Surg** 1988 Aug;17(4):253–6
Management of chronic osteomyelitis using an irrigation suction technique. Bansal VP, et al. **Int Orthop** 1988; 12(4):265–8
Disseminated coccidioidomycosis of an ankle joint. A case study. Sprinkle RL 3d, et al. **J Am Podiatr Med Assoc** 1989 Jun;79(6):300–5
Treatment of chronic refractory osteomyelitis with adjunctive hyperbaric oxygen. Esterhai JL Jr, et al. **Orthop Rev** 1988 Aug;17(8):809–15
Bacterial osteomyelitis. Adjunctive hyperbaric oxygen therapy. Mader JT, et al. **Orthop Rev** 1989 May;18(5):581–5
Osteomyelitis of the skull base. Farrior J. **South Med J** 1989 Jun;82(6):719–22
[Modern therapy of bone infections] Foldyna K, et al. **Cas Lek Cesk** 1988 Nov 25;127(48):1489–91 (Eng. Abstr.) **(Cze)**
[Chronic osteomyelitis of the clavicle] Dietz HG, et al. **Klin Padiatr** 1989 May–Jun;201(3):199–201 (Eng. Abstr.) **(Ger)**
[Effect of Corynebacterium parvum preparation on selected immunologic indicators and clinical results in patients with chronic post–traumatic osteomyelitis] Perner T, et al. **Chir Narzadow Ruchu Ortop Pol** 1989;54(1):44–8 (Eng. Abstr.) **(Pol)**
[X–ray irradiation of donor blood in the complex treatment of suppurative diseases] Ermolov AS, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):46–51 (Eng. Abstr.) **(Rus)**
[Treatment of acute hematogenous osteomyelitis of the proximal end of the femur in children] Malyshev ES, et al. **Khirurgiia (Mosk)** 1988 Jul;(7):132–5 **(Rus)**
[Rationale for expediency in the surgical treatment of patients with chronic hematogenous osteomyelitis of the tibia at a specialized sanatorium] Gaĭko GV, et al. **Klin Khir** 1988; (12):1–3 (Eng. Abstr.) **(Rus)**
[Changes in the content of middle molecules of the blood in patients with chronic post–traumatic osteomyelitis as affected by hemosorption] Kosiakov AN, et al. **Klin Khir** 1988;(12):50–1 **(Rus)**
[Dynamics of several biochemical indicators of blood in osmoenzymo–reflexotherapy of chronic osteomyelitis] Tevosiants AV, et al. **Ortop Travmatol Protez** 1988 Nov; (11):34–6 (Eng. Abstr.) **(Rus)**
[Our experience in treating post–traumatic osteomyelitis of the leg bones] Tiliakov BT, et al. **Ortop Travmatol Protez** 1988 Jul;(7):44 (Eng. Abstr.) **(Rus)**
[Use of hyperbaric oxygenation for correction of parameters of the reactivity of the body in chronic inflammation] Volozhin AI, et al. **Patol Fiziol Eksp Ter** 1988 Jul–Aug; (4):61–5 (Eng. Abstr.) **(Rus)**
[Local hypothermia in the combined therapy of chronic osteomyelitis of the tubular bones] Ermolov AS, et al. **Sov Med** 1988;(6):39–42 (Eng. Abstr.) **(Rus)**
[Effect of a constant electric current and wound irrigation in the complex treatment of chronic osteomyelitis] Anisimov AI, et al. **Vestn Khir** 1988 Jun;140(6):138–9 **(Rus)**

VETERINARY

Polyarthritis and polyosteomyelitis in a juvenile giraffe. Jacobson ER, et al. **J Am Vet Med Assoc** 1986 Nov 1; 189(9):1182–3
What is your diagnosis? Unremoved penrose drain and osteomyelitis of spinous processes of T3 to T6. Jann HW, et al. **J Am Vet Med Assoc** 1989 Sep 1;195(5):651–2
Osteomyelitis of the calcaneus in horses: 28 cases (1972–1987). MacDonald MH, et al. **J Am Vet Med Assoc** 1989 May 1;194(9):1317–23
What is your diagnosis? Chronic osteomyelitis of the right scapula and right femur. Stampley A. **J Am Vet Med Assoc** 1989 Feb 15;194(4):567–8
Omphalophlebitis and osteomyelitis associated with Klebsiella septicemia in a premature foal. Vaala WE, et al. **J Am Vet Med Assoc** 1988 Nov 15;193(10):1273–7
Arthrodesis of metatarsophalangeal joints in a dog. van Ee RT, et al. **J Am Vet Med Assoc** 1989 Jan 1;194(1):82–4
Histoplasma capsulatum osteomyelitis in the cat. Wolf AM. **J Vet Intern Med** 1987 Oct–Dec;1(4):158–62
Vertebral osteomyelitis and suspected diskospondylitis in an Atlantic bottlenose dolphin (Tursiops truncatus). Alexander JW, et al. **J Wildl Dis** 1989 Jan;25(1):118–21
Clindamycin treatment of canine osteomyelitis [letter] Hutchison MF. **Vet Rec** 1988 Oct 1;123(14):378
[Abscess forming mandibular osteomyelitis following actinomycosis] Nuss K, et al. **Tierarztl Prax** 1989;17(1):15, 109–11 **(Ger)**

OSTEONECROSIS

Avascular necrosis of the mandibular condyle: fact or fantasy [letter] Abubaker O. **J Oral Maxillofac Surg** 1989 Sep; 47(9):1007–8
A metastatic adenocarcinoma of lung simulating humeral head osteonecrosis. Kawai K, et al. **Kobe J Med Sci** 1988 Apr;34(2):47–53

CHEMICALLY INDUCED

Arthroscopic treatment of steroid–induced osteonecrosis of the humeral head. Hayes JM. **Arthroscopy** 1989;5(3):218–21
Avascular necrosis and pulsed methylprednisolone in RA [letter] Jones JG. **Br J Rheumatol** 1988 Dec;27(6):497–8
Steroid–induced bilateral avascular necrosis of the lateral femoral condyles. A case report. Havel PE, et al. **Clin Orthop** 1989 Jun;(243):166–8
Multiple sites of ischemic necrosis of bone following long term corticosteroid treatment in a patient with auto–immune granulocytopenia. van Leeuwen HJ, et al. **Clin Rheumatol** 1989 Mar;8(1):103–7
Steroid–related osteonecrosis in inflammatory bowel disease. Vakil N, et al. **Gastroenterology** 1989 Jan;96(1):62–7
Aseptic necrosis and glucocorticosteroids in systemic lupus erythematosus: a reevaluation. Weiner ES, et al.

J Rheumatol 1989 May;16(5):604–8 (15 ref.)
Osteocartilaginous necrosis of the sinonasal tract following cocaine abuse. Kuriloff DB, et al. Laryngoscope 1989 Sep; 99(9):918–24
Case report 554: Osteonecrosis at multiple sites as noted. Archer AG, et al. Skeletal Radiol 1989;18(5):380–4
[Osteonecrosis in patients undergoing renal transplant. Decrease in frequency since the use of cyclosporin (letter)] Pere P, et al. Presse Med 1989 Apr 29;18(17):896 (Fre)
[Recurrent avascular bone necrosis in systemic lupus] Abu-Shakra M, et al. Harefuah 1989 Feb 15;116(4):197–9 (Eng. Abstr.) (Heb)

COMPLICATIONS

Ischaemic necrosis of the ilium complicating haemolytic anaemia due to an unstable haemoglobin. McGill NW, et al. Ann Rheum Dis 1988 Nov;47(11):957–60
Spinal cord compression related to vertebral osteonecrosis. Feldmann JL, et al. Clin Exp Rheumatol 1988 Jul–Sep; 6(3):297–300

DIAGNOSIS

MR of osteochondritis dissecans and avascular necrosis of the mandibular condyle. Schellhas KP, et al. AJR 1989 Mar;152(3):551–60
Diagnostic imaging of bone and joint abnormalities associated with sickle cell hemoglobinopathies. Sebes JI. AJR Am J Roentgenol 1989 Jun;152(6):1153–9 (71 ref.)
Spontaneous femoral osteonecrosis: correlation with MRI. Dey HM, et al. Clin Nucl Med 1988 Oct;13(10):756–8
Avascular necrosis of the vertebral body: MR imaging. Naul LG, et al. Radiology 1989 Jul;172(1):219–22

ETIOLOGY

Avascular necrosis of bone in systemic lupus erythematosus: possible role of haemostatic abnormalities. Nagasawa K, et al. Ann Rheum Dis 1989 Aug;48(8):672–6
Dysbaric disorders: aseptic bone necrosis in tunnel workers and divers. Davidson JK. Baillieres Clin Rheumatol 1989 Apr;3(1):1–23 (39 ref.)
Aseptic bone necrosis—clinical analysis of 117 divers. Chen SH, et al. Chung Hua I Hsueh Tsa Chih 1988 Oct; 42(4):323–8
Skin and bone necrosis following ecthyma gangrenosum in acute leukaemia—report of three cases. Koriech OM, et al. Clin Exp Dermatol 1988 Mar;13(2):78–81
Dysbaric osteonecrosis (caisson disease of bone): are active oxygen species and the endocrine system responsible, and can control of the production of free radicals and their reaction products confer protection? Jones GR. Free Radic Res Commun 1987;4(3):139–47 (91 ref.)
Avascular necrosis of the talus following apparently minor ankle injury: a case report. Feller JA, et al. Injury 1988 May;19(3):213–6
Calcaneal apophysitis (Sever's disease) associated with Tae Kwon Do injuries. Wirtz PD, et al. J Am Podiatr Med Assoc 1988 Sep;78(9):474–5
Idiopathic avascular necrosis of the scaphoid: Preiser's disease? Ferlic DC, et al. J Hand Surg [Am] 1989 Jan; 14(1):13–6 (14 ref.)
Long-term sequelae of diving. Elliott DH. J R Soc Med 1989 Feb;82(2):79–80
Too much pressure? Are deep-water divers risking their bones and brains? Wright K. Sci Am 1989 Sep;261(3):36, 38
Dysbaric osteonecrosis and its radiographic classification in China. Xue HL. Undersea Biomed Res 1988 Sep; 15(5):389–95
[Fractures and pseudarthroses of the carpal scaphoid. A discussion of therapeutic attitudes and future perspectives in pseudarthroses with arthrosis or necrosis] Allieu Y, et al. Rev Chir Orthop 1988;74(8):738–40 (Fre)
[Destructive arthropathies and osteonecroses during chronic hemodialysis. Study of 87 patients] Bouteiller G, et al. Rev Rhum Mal Osteoartic 1989 May;56(6):453–8 (46 ref.) (Fre)
[Talus necrosis and its treatment] Trauth J, et al. Aktuel Traumatol 1988 Aug;18(4):152–6 (Eng. Abstr.) (Ger)
[Ischemic necrosis of femoral condyles in systemic lupus erythematosus] Caldore M, et al. Minerva Pediatr 1989 Jan; 41(1):41–4 (Eng. Abstr.) (Ita)
[Effect of disorders of the afferent and sympathetic innervation on the structural organization of the osteoarticular system (experimental-morphologic study)] Stetsula VI, et al. Ortop Travmatol Protez 1988 Aug; (8):45–9 (Rus)
[Degeneration of the intervertebral disk] Tsiv'ian IaL, et al. Ortop Travmatol Protez 1988 Jun;(6):27–31 (Eng. Abstr.) (Rus)
[Aseptic necrosis of the head of long tubular bones in patients with lymphogranulomatosis] Kanaev SV, et al. Vopr Onkol 1988;34(12):1448–54 (Eng. Abstr.) (Rus)

PATHOLOGY

Case report 552: Post-traumatic remodelling of the distal tibial epiphysis: a form of aseptic osteonecrosis. Lagier R. Skeletal Radiol 1989;18(4):331–3
[Kümmell–Verneuille syndrome, a rare, but important differential diagnostic disease] Engelmann L, et al. Beitr Orthop Traumatol 1988 Dec;35(12):604–12 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

[Abnormalities, aseptic necroses, disorders of function of the spine—its relation to capacity in performance sports] Schaetz P. Z Arztl Fortbild (Jena) 1989;83(2):67–72 (Ger)

RADIOGRAPHY

Bilateral distal tibial osteonecrosis in systemic lupus erythematosus [letter] Outwater E, et al. AJR 1989 Apr; 152(4):895–6
Bilateral avascular necrosis of the first metatarsal head in adolescence. A case report. Fu FH, et al. Clin Orthop 1989 Sep;(246):282–4
Unusual cause of knee pain in the older adult. Henry JH. Orthop Rev 1989 Feb;18(2):221–8 (12 ref.)
Aseptic necrosis of the humeral head. Calderazzi A, et al. Rays 1988 Sep–Dec;13(3):13–7
Hydroxyapatite associated disease in an elderly female: differentiation from aseptic necrosis. Smith DF, et al. Scott Med J 1989 Apr;34(2):438–9
Idiopathic punctate necrosis of the phalanges of the feet. Keats TE, et al. Skeletal Radiol 1989;18(1):25–7
Intravertebral vacuum cleft in the fifth lumbar vertebra. Hashimoto K, et al. Spine 1989 Mar;14(3):351–4
[The intravertebral vacuum phenomenon or gaseous dissection of the vertebral body] Torsello G, et al. Radiol Med (Torino) 1989 Jun;77(6):635–7 (Eng. Abstr.) (Ita)
[Roentgenologic diagnosis of bone lesions in divers using densitometry] Khachkuruzov SG, et al. Gig Tr Prof Zabol 1988 Oct;(10):31–4 (Eng. Abstr.) (Rus)

RADIONUCLIDE IMAGING

[Diagnostic value of 3-stage bone scintigraphy. Comparison with classical bone scintigraphy] Moukhaiber H, et al. Rev Rhum Mal Osteoartic 1988 Oct;55(10):791–5 (31 ref.) (Fre)

SURGERY

Treatment of median sternotomy wound infection and sternal necrosis in an infant. Terranova W, et al. Ann Thorac Surg 1989 Jul;48(1):122–3
Revascularization of a partially necrotic talus with a vascularized bone graft from the iliac crest. Hussl H, et al. Arch Orthop Trauma Surg 1989;108(1):27–9
The study of Maquet dome high tibial osteotomy. Arthroscopic-assisted analysis. Hsu RW. Clin Orthop 1989 Jun;(243):280–5
Core decompression of the distal femur for avascular necrosis of the knee. Jacobs MA, et al. J Bone Joint Surg [Br] 1989 Aug;71(4):583–7
The scaphoid allograft: a new operation for treatment of the very proximal scaphoid nonunion or for the necrotic, fragmented scaphoid proximal pole. Carter PR, et al. J Hand Surg [Am] 1989 Jan;14(1):1–12
[*primary osteonecrosis of the medial femoral condyle. Unicompartmental or total replacement?] Cartier P, et al. Int Orthop 1988;12(3):229–35 (Eng. Abstr.) (Fre)
[Idiopathic osteonecrosis of the medial femoral condyle. Treatment with tibial osteotomy or unicompartmental arthroplasty] Hernigou P, et al. Rev Chir Orthop 1988; 74(3):232–7 (Eng. Abstr.) (Fre)
[Long-term results of treatment of rare aseptic necrosis of the scaphoid bone (Preiser disease) with the Swanson implant] Helbig B, et al. Handchir Mikrochir Plast Chir 1989 Jul;21(4):178–81 (Eng. Abstr.) (Ger)
[Aseptic necroses and osteochondrosis dissecans of the elbow joint] Eichenauer M, et al. Orthopade 1988 Aug; 17(4):374–81 (Eng. Abstr.) (Ger)
[Treatment of necrosis of the femur condyle with a medial gliding knee prosthesis] Hermichen HG, et al. Z Orthop 1988 May–Jun;126(3):300–3 (Eng. Abstr.) (Ger)
[Closed excochleation of an aseptic necrosis focus in the greater tubercle of the humerus] Shaposhnikov VI. Khirurgiia (Mosk) 1988 Aug;(8):61–3 (Eng. Abstr.) (Rus)

THERAPY

Hass' disease [letter] Mick TJ. J Manipulative Physiol Ther 1988 Aug;11(4):335–6
[Osteonecrosis of the semilunar bone. Current therapeutic approach] Schuind F, et al. Acta Orthop Belg 1988; 54(2):127–32 (36 ref.) (Eng. Abstr.) (Fre)

OSTEOPATHIC MANIPULATION see MANIPULATION, ORTHOPEDIC

OSTEOPATHIC MEDICINE

Unorthodox cancer medicine of early osteopathic medicine [letter] Schnier MS. CA 1989 Jan–Feb;39(1):63–4
Manipulation for postop pain [letter] Heath DM. Hosp Pract [Off] 1989 Sep 15;24(9):13
Osteopathic manipulation: purposes and protocols [letter] Kuchera WA. Hosp Pract [Off] 1989 Jul 15;24(7):17, 20
A call for equality in osteopathic medicine abroad [editorial] Allen TW. J Am Osteopath Assoc 1988 Sep;88(9):1082
Excise "allopathic" from osteopathic terminology [letter] Cummings CH. J Am Osteopath Assoc 1989 May;89(5):562, 566, 571
Preparing an AIDS policy for colleges of osteopathic medicine. Duerfeldt WF. J Am Osteopath Assoc 1989 Jan; 89(1):95–103
Broadening the focus of osteopathic medicine [letter] Patriquin DA. J Am Osteopath Assoc 1989 May;89(5):562
The progression of osteopathic medicine internationally: a survey of America-trained DOs practicing abroad. Shadday GJ, et al. J Am Osteopath Assoc 1988 Sep; 88(9):1095–8
[Application of high resolution scanning electron microscopy in osteopathic surgery] Tanaka K. Nippon Seikeigeka Gakkai Zasshi 1989 Apr;63(4):370–6 (Jpn)
[Our experience with organizing a department of manual therapy in an urban hospital] Lomakin PV. Ortop Travmatol Protez 1989 May;(5):55–8 (Rus)

EDUCATION

History of osteopathic medical education accreditation. AOA Editorial Department. J Am Osteopath Assoc 1988 Nov; 88(11):1371–2
AIDS and osteopathic medical education [editorial] Calabrese LH. J Am Osteopath Assoc 1989 Jan;89(1):34–5
A comparative curricular review project. Crow WT, et al. J Am Osteopath Assoc 1989 May;89(5):665–9
Teaching laboratory medicine with a problem-solving approach. Kumar K, et al. J Am Osteopath Assoc 1988 Jul;88(7):899–902
UNECOM's humanities program: an education in caring [letter] Perakis CR. J Am Osteopath Assoc 1989 Mar; 89(3):273, 276
Undergraduate osteopathic medical education. Reich M. J Am Osteopath Assoc 1988 Nov;88(11):1377–80
US osteopathic medical school finances. Reich M. J Am Osteopath Assoc 1988 Nov;88(11):1383–4, 1388
AOA continuing osteopathic medical education. Reuther GA. J Am Osteopath Assoc 1988 Nov;88(11):1399–402
Osteopathic postdoctoral education in transition. Ward D, et al. J Am Osteopath Assoc 1988 Nov;88(11):1389–97
Workshops and lectures [letter] Farnsworth WE. J Med Educ 1988 Oct;63(10):809

HISTORY

Hippocratic thought: its relationship to and between Andrew Taylor Still and Sir William Osler. Suter RE. J Am Osteopath Assoc 1988 Oct;88(10):1243–6, 1249–54

MANPOWER

Market responses to declines in the output of M.D.s [letter] Blackstone EA. Health Aff (Millwood) 1988 Summer; 7(3):237–8

METHODS

Incidence of spinal palpatory findings: a review. Beal MC. J Am Osteopath Assoc 1989 Aug;89(8):1027–30, 1033–5 (16 ref.)
Biomechanical and osteopathic approach to shoulder pain. Goldman S. J Am Osteopath Assoc 1989 Jan;89(1):53–7

TRENDS

The odyssey and outlook of graduate medical education. Freymann JG. J Am Osteopath Assoc 1989 Jun;89(6):761–4, 767 (8 ref.)
Mission accomplished? [editorial] Northup GW. J Am Osteopath Assoc 1988 Sep;88(9):1077, 1080

OSTEOPATHY see OSTEOPATHIC MEDICINE

OSTEOPENIA see BONE DISEASES, METABOLIC

OSTEOPETROSIS

Pycnodysostosis—report of a case. Yeo TC. Singapore Med J 1988 Dec;29(6):611–6

BLOOD

Thyroid hormone resistance in blood monocyte cells and elevated serum T3 in patients with autosomal dominant osteopetrosis. Bollerslev J, et al. Scand J Clin Lab Invest 1988 Dec;48(8):795–9

COMPLICATIONS

Fracture patterns in two types of autosomal-dominant osteopetrosis. Bollerslev J, et al. Acta Orthop Scand 1989 Feb;60(1):110–2
Osteomyelitis of the mandible associated with osteopetrosis: report of a case. Lawoyin DO, et al. Br J Oral Maxillofac Surg 1988 Aug;26(4):330–5
Optic nerve decompression for osteopetrosis in early childhood. Haines SJ, et al. Neurosurgery 1988 Oct; 23(4):470–5
[Osteopetrosis with intra-abdominal calcifications (letter)] Laroche M, et al. Rev Rhum Mal Osteoartic 1988 Nov; 55(11):961 (Fre)

DRUG THERAPY

Treatment of congenital osteopetrosis in the rabbit with high-dose 1,25-dihydroxyvitamin D. Popoff SN, et al. **J Bone Miner Res** 1989 Feb;4(1):57-67

Improvement of dental development in osteopetrotic mice by maternal vitamin D3 sulfate administration. Perkins T, et al. **J Craniofac Genet Dev Biol** 1988;8(1):83-93

ENZYMOLOGY

Osteoclastic acid ATPase: biochemical and histochemical studies of the osteopetrotic mutations in the rat. Ek-Rylander B, et al. **Bone Miner** 1989 Mar;5(3):309-21

Tartrate-resistant acid phosphatase activity in tibial osteoclasts and cells elicited by ectopic bone and suture implants in normal and osteopetrotic rats. Walters LM, et al. **Bone Miner** 1988 Apr;4(1):49-62

Elevated levels of creatine kinase BB isoenzyme in three patients with adult osteopetrosis [letter] Yoneyama T, et al. **N Engl J Med** 1989 May 11;320(19):1284-5

The role of carbonic anhydrase in autosomal dominant osteopetrosis. Bollerslev J, et al. **Scand J Clin Lab Invest** 1989 Feb;49(1):93-5

GENETICS

Serum vitamin D metabolites and nuclear uptake of (3H)-1,25-dihydroxyvitamin D3 in monocytes from patients with autosomal dominant osteopetrosis: a study of two radiological types. Bollerslev J, et al. **Bone** 1988; 9(6):355-9

Impaired osteoclast differentiation in subcutaneous implants of bone particles in osteopetrotic mutants. Glowacki J, et al. **Bone Miner** 1989 Mar;5(3):271-8

Elevated serum 1,25-dihydroxyvitamin D in osteopetrotic mutations in three species. Zerwekh JE, et al. **Bone Miner** 1987 May;2(3):193-9

Autosomal dominant osteopetrosis: bone metabolism and epidemiological, clinical, and hormonal aspects. Bollerslev J. **Endocr Rev** 1989 Feb;10(1):45-67 (91 ref.)

The syndrome of osteopetrosis, renal acidosis and cerebral calcification in two sisters. Al Rajeh S, et al. **Neuropediatrics** 1988 Aug;19(3):162-5

Creatine kinase brain isoenzyme in infantile osteopetrosis. Hiroyama Y, et al. **Pediatr Neurol** 1987 Jan-Feb;3(1):54-7

METABOLISM

Biochemical evidence of disturbed bone metabolism and calcium homeostasis in two types of autosomal dominant osteopetrosis. Bollerslev J, et al. **Acta Med Scand** 1988; 224(5):479-83

Calcitonin receptor binding as a marker of osteoclast heterogeneity in osteopetrotic rodents. Rouleau MF, et al. **J Bone Miner Res** 1986 Dec;1(6):543-53

MICROBIOLOGY

Osteoclasts in human osteopetrosis contain viral-nucleocapsid-like nuclear inclusions. Mills BG, et al. **J Bone Miner Res** 1988 Feb;3(1):101-6

Persistent viral DNA synthesis associated with an avian osteopetrosis-inducing virus. Aurigemma RE, et al. **Virology** 1989 Aug;171(2):626-9

PATHOLOGY

Skeletal biology in the toothless (osteopetrotic) rat. Seifert MF, et al. **Am J Anat** 1988 Oct;183(2):158-65

Sequential study of visceral lesions caused by isolates of an avian osteopetrosis virus (myeloblastosis-associated virus). Powers BE, et al. **Am J Vet Res** 1988 Sep;49(9):1589-97

Ultrastructure of the tibial epiphyseal growth plate in microphthalmic (mi/mi) mice. Paxinos-Maroudas D, et al. **Arch Oral Biol** 1989;34(2):77-84

Structural and histomorphometric studies of iliac crest trabecular and cortical bone in autosomal dominant osteopetrosis: a study of two radiological types. Bollerslev J, et al. **Bone** 1989;10(1):19-24

Bone particles from toothless (tl/tl) osteopetrotic rats not cured by bone marrow transplantation are resorbed in normal littermates. Anderson JM, et al. **Bone Miner** 1986 Jun;1(3):217-26

Reduced life span of the osteoclast in osteopetrotic (mi and midi) mice. Marshall MJ, et al. **Bone Miner** 1987 Apr; 2(2):115-24

Osteopetrosis in the toothless rat: failure of osteoclast differentiation and function. Osier LK, et al. **Bone Miner** 1987 Oct;3(1):35-45

Histopathology of the interactions between alveolar bone and impacted dental germs in osteopetrotic op/op rats. Phillippart C, et al. **J Oral Pathol Med** 1989 Mar; 18(3):157-62

Osteopetrosis: report of a case and discussion of the differential diagnosis. Ruprecht A, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec;66(6):674-9 (65 ref.)

PHYSIOPATHOLOGY

Disturbances of tooth form and eruption in the microphthalmic (mi) mouse: a light and electron microscopic study. Symons AL, et al. **Arch Oral Biol** 1989; 34(2):71-6

Stimulation of collagenolytic enzyme release from cultured bone cells of normal and osteopetrotic (mi/mi) mice by parathyroid hormone and lipopolysaccharide. Jilka RL. **Bone Miner** 1989 Jul;6(3):277-87

Impaired macrophage migration in incisors absent (ia) osteopetrotic rats. Seifert MF, et al. **Bone Miner** 1988 Jun; 4(2):167-76

The effects of transplantation of granulocyte-macrophage progenitors on bone resorption in osteopetrotic rats. Schneider GB, et al. **J Bone Miner Res** 1988 Apr; 3(2):225-32

Effects of bone marrow transplantation on impacted dental germs in osteopetrotic op/op rats. Philippart C, et al. **J Oral Pathol Med** 1989 Mar;18(3):163-6

RADIOGRAPHY

Cranial CT of autosomal recessive osteopetrosis. Bartynski WS, et al. **AJNR** 1989 May-Jun;10(3):543-50

Pycnodysostosis. Case report. Kumar A. **Int Orthop** 1988; 12(3):261-3

Osteopetrosis (marble bone disease)--agenesis of paranasal sinuses. Paulose KO, et al. **J Laryngol Otol** 1988 Nov; 102(11):1047-51

[Early osteopetrosis] Solís Sánchez G, et al. **An Esp Pediatr** 1988 May;28(5):468-70 (Spa)

RADIONUCLIDE IMAGING

Scintigraphy in a patient with complicated osteopetrosis. Adams BK. **Clin Nucl Med** 1989 May;14(5):323-6

Quantification of bone mineralization by dual photon absorptiometry in osteopetrosis. Fig LM, et al. **Clin Nucl Med** 1989 Jul;14(7):544-5

SURGERY

[Therapy of bone and joint changes in Albers-Schönberg osteopetrosis] Griss P, et al. **Orthopade** 1988 Sep; 17(5):411-9 (Eng. Abstr.) (Ger)

THERAPY

Transfusion of carbonic anhydrase-replete erythrocytes fails to correct the acidification defect in the syndrome of osteopetrosis, renal tubular acidosis, and cerebral calcification (carbonic anhydrase-II deficiency). Whyte MP, et al. **J Bone Miner Res** 1988 Aug;3(4):385-8

URINE

Triiodothyronine stimulates urinary excretion of calcium and hydroxyproline in autosomal dominant osteopetrosis. Bollerslev J, et al. **Bone** 1988;9(4):205-8

OSTEOPHYTOSIS, SPINAL see **SPINAL OSTEOPHYTOSIS**

OSTEOPOIKILOSIS see under **OSTEOSCLEROSIS**

OSTEOPOROSIS

Osteoporosis. Based on the Kuopio International Symposium. August 11-13, 1988. **Ann Chir Gynaecol** 1988; 77(5-6):167-250

Pathogenesis, prevention, and treatment of osteoporosis. Raisz LG, et al. **Annu Rev Med** 1989;40:251-67 (56 ref.)

Osteoporosis: a review. Grajales IT. **Bol Asoc Med P R** 1988 Oct;80(10):387-9 (10 ref.)

Osteoporosis: diagnosis and management. Hahn BH. **Bull Rheum Dis** 1988;38(2):1-9 (50 ref.)

The XXI European Symposium on Calcified Tissues. Jerusalem, Israel, 12-16 March 1989. Abstracts. **Calcif Tissue Int** 1989;44 Suppl:S1-118

Pathogenesis and treatment of steroid osteoporosis. Reid IR. **Clin Endocrinol (Oxf)** 1989 Jan;30(1):83-103 (163 ref.)

MAB Meridional Advisory Board, 2nd International Workshop on Osteoporosis. Paris, December 2-3, 1988. Proceedings. **Clin Rheumatol** 1989 Jun;8 Suppl 2:7-123

Osteoporosis: impact on the elderly societal concerns, and the role of radiology. Holland EA, et al. **Curr Probl Diagn Radiol** 1989 Mar-Apr;18(2):44-61

Osteoporosis: prevention and treatment. **Drug Ther Bull** 1989 Jan 9;27(1):1-4 (25 ref.)

The aged rat model of ovarian hormone deficiency bone loss. Kalu DN, et al. **Endocrinology** 1989 Jan;124(1):7-16

Algodystrophy and nerve lesions [letter] Temesvári P. **Isr J Med Sci** 1989 May;25(5):279

Osteoporosis: current review. Hedayati H, et al. **J Am Osteopath Assoc** 1988 Dec;88(12):1495-8, 1503-8 (45 ref.)

Transient osteoporosis of the hip of pregnancy. Two cases complicated by pathological fracture. Brodell JD, et al. **J Bone Joint Surg [Am]** 1989 Sep;71(8):1252-7

Osteoporosis. Overcoming a costly and debilitating disease. Rudy DR. **Postgrad Med** 1989 Aug;86(2):151-8 (21 ref.)

[Osteoporosis. Etiopathology and therapeutic inferences] Zakraoui L, et al. **Tunis Med** 1988 Nov;66(11):733-42 (57 ref.) (Fre)

[Osteoporosis: no reason for resignation. 5th International Study Group on Osteoporosis. Venedig, 21-23 April 1989] **Fortschr Med** 1989;107 Suppl 64:1-19 (Ger)

[Osteoporosis: a silent thief] Stazi C, et al. **Clin Ter** 1989 Jun 30;129(6):465-82 (59 ref.) (Eng. Abstr.) (Ita)

[Senile osteoporosis] **Fukuoka Igaku Zasshi** 1988 Jul; 79(7):489-92 (Jpn)

[Why the interest in osteoporosis? (editorial)] Zerbini CA. **Rev Paul Med** 1987 Nov-Dec;105(6):299-300 (Por)

[Diagnosis and prevention of osteoporosis (review of the foreign literature)] Sveshnikov AA. **Ortop Travmatol Protez** 1989 Apr;(4):65-8 (18 ref.) (Rus)

[Idiopathic juvenile osteoporosis] Zhdanova AV. **Ortop Travmatol Protez** 1988 Nov;(11):50-2 (Rus)

BLOOD

Bone disease in chronic alcoholism: the value of plasma osteocalcin measurement. Labib M, et al. **Alcohol Alcohol** 1989;24(2):141-4

PTH bioactivity in osteoporosis. Saphier PW, et al. **Bone Miner** 1987 Oct;3(1):75-83

Changes in serum levels of type I and III procollagen extension peptides during infusion of human parathyroid hormone fragment (1-34). Simon LS, et al. **J Bone Miner Res** 1988 Apr;3(2):241-6

Pulse amplitude and frequency modulation of parathyroid hormone in plasma. Harms HM, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):843-51

Plasma calcitonin levels are not lower than normal in osteoporotic women. Prince RL, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):684-7

Relationship between whole plasma calcitonin levels, calcitonin secretory capacity, and plasma levels of estrone in healthy women and postmenopausal osteoporotics. Reginster JY, et al. **J Clin Invest** 1989 Mar;83(3):1073-7

Ovarian steroid treatment blocks a postmenopausal increase in blood monocyte interleukin 1 release. Pacifici R, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2398-402

Relationship of bone density to estradiol and cortisol in anorexia nervosa and bulimia. Newman MM, et al. **Psychiatry Res** 1989 Jul;29(1):105-12

Some determinants of low bone mass and fracture among the elderly. Johnston CC Jr. **Trans Am Clin Climatol Assoc** 1987;99:17-22 (15 ref.)

[Study of the correlation between sex steroids and bone loss in climacteric women] Yang SZ, et al. **Hun Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Jun;19(2):193-5 (Eng. Abstr.) (Chi)

[Vitamin D3 level and age. Changes in the 1,25-dihydroxycholecalciferol level in various age groups in normal persons, in patients with osteoporosis, renal failure and liver cirrhosis] Weiss H, et al. **Med Klin** 1988 Oct 14;83(20):660-6 (Eng. Abstr.) (Ger)

[Involutional osteoporosis and basal levels of prolactin] Pedrazzoni M, et al. **Medicina (Firenze)** 1988 Jul-Sep; 8(3):320-1 (Eng. Abstr.) (Ita)

[The discrepancy on measurement of parathyroid hormone in blood under the condition of diseases in hemodialysis patients with renal insufficiency and elderly osteoporotic patients] Ueyoshi A, et al. **Ryumachi** 1988 Oct;28(5):324-33 (Eng. Abstr.) (Jpn)

CHEMICALLY INDUCED

Bone mass and dementia in hip fracture patients from areas with different aluminium concentrations in water supplies. Wood DJ, et al. **Age Ageing** 1988 Nov;17(6):415-9

Reversibility of steroid-induced osteoporosis. Lufkin EG, et al. **Am J Med** 1988 Dec;85(6):887-8

Effect of high-dose inhaled budesonide on calcium and phosphate metabolism and the risk of osteoporosis. Toogood JH, et al. **Am Rev Respir Dis** 1988 Jul; 138(1):57-61

Steroid osteoporosis. Reid IR. **Calcif Tissue Int** 1989 Aug; 45(2):63-7 (49 ref.)

Drug-induced osteoporosis. Mazanec DJ, et al. **Cleve Clin J Med** 1989 May;56(3):297-303 (64 ref.)

Glucocorticoid-induced osteoporosis. Ringe JD. **Clin Rheumatol** 1989 Jun;8 Suppl 2:109-15 (33 ref.)

Reversible bone loss in women treated with GnRH-agonists for endometriosis and uterine leiomyoma. Waibel-Treber S, et al. **Hum Reprod** 1989 May;4(4):384-8

Effect of exercise on the development of osteoporosis in adult rats. Myburgh KH, et al. **J Appl Physiol** 1989 Jan;66(1):14-9

Serum osteocalcin in the assessment of corticosteroid induced osteoporosis. Effect of long and short term corticosteroid treatment. Peretz A, et al. **J Rheumatol** 1989 Mar; 16(3):363-7

Corticosteroid-induced osteoporosis and hormone implants [letter] Reid DM. **Lancet** 1989 Mar 11;1(8637):563

Prednisone-induced bone loss in sarcoidosis: a risk especially frequent in postmenopausal women. Rizzato G, et al. **Sarcoidosis** 1988 Sep;5(2):93-8

[Inhibition of prednisolone osteopathy by diphosphonate (EHDP) in an animal experiment] Trzenschik K, et al. **Beitr Orthop Traumatol** 1989 Mar;36(3):81-91 (Eng. Abstr.) (Ger)

[Severe bone damage in a patient with primary hypoparathyroidism treated as an epileptic with anticonvulsants] Pató E, et al. **Orv Hetil** 1988 Dec 4; 129(49):2637-40 (29 ref.) (Eng. Abstr.) (Hun)

[Osteoporosis caused by chronic corticosteroid therapy--its pathogenesis, prevention and treatment] Gasińska T, et al. **Pol Tyg Lek** 1988 Nov 14;43(46):1486-8 (34 ref.) (Pol)

[Iatrogenic glucocorticoid osteoporosis] Dimov DM, et al. **Revmatologiia (Moskva)** 1988 Jul-Sep;(3):57-63 (69 ref.) (Rus)

[Aluminum might cause osteoporosis] Mjöberg B.

Lakartidningen 1988 Dec 21;85(51):4511 (Swe)

COMPLICATIONS

Is lactose malabsorption a risk factor in fractures of the elderly? Härmä M, et al. **Ann Chir Gynaecol** 1988; 77(5–6):180–3

Broken bones—a gynaecological problem. Purdie DW. **Br J Obstet Gynaecol** 1988 Aug;95(8):737–9

Epidemiology of fractures of the proximal femur associated with osteoporosis in Barcelona, Spain. Diez A, et al. **Calcif Tissue Int** 1989 Jun;44(6):382–6

Increasing age-adjusted risk of fragility fractures: a sign of increasing osteoporosis in successive generations? Obrant KJ, et al. **Calcif Tissue Int** 1989 Mar;44(3):157–67

The natural history of the osteoporotic vertebral fracture. Lyritis GP, et al. **Clin Rheumatol** 1989 Jun;8 Suppl 2:66–9

Analgesic effect of intranasal salmon calcitonin in the treatment of osteoporotic vertebral fractures. Pun KK, et al. **Clin Ther** 1989 Mar–Apr;11(2):205–9

Osteoporosis as a community health problem: lessons learned from studying hypertension. Kleerekoper M, et al. **Henry Ford Hosp Med J** 1988;36(2):113–6

Internal fixation of the oblique, osteoporotic fracture of the lateral malleolus. Fernandez GN. **Injury** 1988 Jul; 19(4):257–8

Quantification of osteopenia in hip fracture patients. Cornell CN, et al. **J Orthop Trauma** 1988;2(3):212–7

An examination of the association between vertebral deformities, physical disabilities and psychosocial problems. Ettinger B, et al. **Maturitas** 1988 Dec;10(4):283–96

Osteoporosis followed by primary hyperparathyroidism. **Nutr Rev** 1989 Mar;47(3):82–4

Spontaneous unstable burst fracture of the thoracolumbar spine in osteoporosis. A report of two cases. Arciero RA, et al. **Spine** 1989 Jan;14(1):114–7

Recurrent lead poisoning in a child with immobilization osteoporosis. Shannon M, et al. **Vet Hum Toxicol** 1988 Dec; 30(6):586–8

[The vacuum phenomenon in osteoporotic vertebral fractures] Küffer G, et al. **ROFO** 1989 Mar;150(3):361–3 (Ger)

[Osteoporotic crush fracture causing spinal cord compression] Fried V, et al. **Harefuah** 1988 Nov 15; 115(10):274–6 (Eng. Abstr.) (Heb)

[Cutis laxa syndrome. Clinical, histologic and ultrastructural study of a new variant] Pitzalis G, et al. **Minerva Pediatr** 1989 Apr;41(4):193–7 (Eng. Abstr.) (Ita)

[Contraindications regarding total prosthesis of the hip joint] Kulish NI, et al. **Vestn Khir** 1988 Oct;141(10):95–6 (Eng. Abstr.) (Rus)

[Evaluation of cortical bone atrophy: its usefulness in the diagnosis of osteoporosis associated with liver cirrhosis] Jorge Hernández JA, et al. **Rev Clin Esp** 1988 May; 182(8):412–8 (Eng. Abstr.) (Spa)

[Calcitonin in acute pain due to vertebral fracture in osteoporosis. Cooperative study] Arinoviche R, et al. **Rev Med Chil** 1987 Nov;115(11):1039–43 (Eng. Abstr.) (Spa)

DIAGNOSIS

Measurement of bone by dual-photon absorptiometry (DPA) and dual-energy X-ray absorptiometry (DEXA). Mazess RB, et al. **Ann Chir Gynaecol** 1988;77(5–6):197–203 (50 ref.)

Bone mineral densitometry. Health and Public Policy Committee, American College of Physicians [letter] **Ann Intern Med** 1988 Nov 15;109(10):846

Determination of galactosyl hydroxylysine in urine as a means for the identification of osteoporotic women. Moro L, et al. **Bone Miner** 1988 Jan;3(3):271–6

The clinical relevance of calcaneus bone mineral measurements: a review. Vogel JM, et al. **Bone Miner** 1988 Oct;5(1):35–58 (82 ref.)

Sensitivity of dual-photon absorptiometry in spinal osteoporosis. Pouilles JM, et al. **Calcif Tissue Int** 1988 Dec; 43(6):329–34

Hypocalcemia response following calcitonin administration: lack of correlation with osteoclast number determined after histoenzymologic identification in osteoporosis. Palle S, et al. **Clin Rheumatol** 1988 Sep;7(3):354–8

Diagnostic evaluation of osteoporosis. Eastell R, et al. **Endocrinol Metab Clin North Am** 1988 Sep;17(3):547–71 (103 ref.)

The measurement of osteoporosis in clinical practice. Comparison of histological and radiological methods. Charnley RM, et al. **J Bone Joint Surg [Br]** 1989 Aug; 71(4):661–3

Diagnostic sensitivity of bone densitometry [letter] Mazess RB. **J Bone Miner Res** 1988 Feb;3(1):121–3

Bone density measurement. Melton LJ 3d, et al. **J Bone Miner Res** 1988 Feb;3(1):ix–x

Limitations of forearm bone densitometry as an index of vertebral or femoral neck osteopenia. Pocock NA, et al. **J Bone Miner Res** 1986 Aug;1(4):369–75

Detection of prefracture spinal osteoporosis using bone mineral absorptiometry. Ross PD, et al. **J Bone Miner Res** 1988 Feb;3(1):1–11

Evaluation and clinical significance of appendicular skeletal assessment by radiographic photodensitometry. Bland JS, et al. **J Manipulative Physiol Ther** 1989 Apr;12(2):113–9 (21 ref.)

Osteoporosis screening and prevention in the chiropractic clinic. Jamison JR, et al. **J Manipulative Physiol Ther** 1988 Oct;11(5):390–5

Does densitometry have a predictive role in osteoporosis? Studies may give answer [news] Goldsmith MF. **JAMA** 1989 May 12;261(18):2598–9

Detection of the patient at risk for osteoporosis at the time of the menopause. Dequeker J. **Maturitas** 1989 Jun; 11(2):85–94

Approaches to senior care #5. Overview of geriatric osteopenic syndromes. Part II: Clinical presentation, diagnosis, and treatment. Lane JM, et al. **Orthop Rev** 1988 Dec;17(12):1231–6 (23 ref.)

Osteoporosis: a diagnosable disorder? Vigorita VJ. **Pathol Annu** 1988;23 Pt 2:185–212 (64 ref.)

Osteoporosis and estrogen deprivation. Risk prediction and diagnosis: an overview. Chesnut CH 3d. **Postgrad Med** 1989 Apr;Spec No:5–6; discussion 33–43

Selection of postmenopausal women for estrogen therapy. Christiansen C. **Postgrad Med** 1989 Apr;Spec No:10–2; discussion 33–43

Bone densitometry for diagnosis and monitoring osteoporosis. Mazess RB, et al. **Proc Soc Exp Biol Med** 1989 Jul; 191(3):261–71 (136 ref.)

Appropriate use of bone densitometry. Genant HK, et al. **Radiology** 1989 Mar;170(3 Pt 1):817–22

MR imaging of transient osteoporosis [letter] Leonidas JC. **Radiology** 1989 Jan;170(1 Pt 1):281

Pregnancy-associated osteoporosis. Chung HC, et al. **Yonsei Med J** 1988;29(3):286–94

[Serum osteocalcin level as a marker of the functional state of osteoblasts after oral calcium tolerance test] Milkov V, et al. **Vutr Boles** 1988;27(3):101–6 (Eng. Abstr.) (Bul)

[Current methods of measuring bone density] Duquesnoy B, et al. **Presse Med** 1988 Nov 5;17(39):2059–61 (Fre)

[Detection of female osteoporosis] Loyau G, et al. **Presse Med** 1988 Oct 29;17(38):2003–4 (Fre)

[What to expect from the measurement of bone mass?] Pouilles JM, et al. **Rev Rhum Mal Osteoartic** 1989 May; 56(6):479–85 (59 ref.) (Eng. Abstr.) (Fre)

[Computerized tomography determination of bone mineral content in quantitative diagnosis of osteoporosis] Banzer D, et al. **Orthopade** 1989 Feb;18(1):12–7 (Eng. Abstr.) (Ger)

[Transient osteoporosis or femur head necrosis? Early diagnosis using MRT] Higer HP, et al. **ROFO** 1989 Apr; 150(4):407–12 (Eng. Abstr.) (Ger)

[Bone density measurements in the diagnosis of osteoporosis] Heuck A, et al. **Rontgenpraxis** 1989 May;42(5):155–65 (100 ref.) (Ger)

[Transitory hip osteoporosis in magnetic resonance tomography] Glas K, et al. **Z Orthop** 1989 May–Jun; 127(3):302–7 (Eng. Abstr.) (Ger)

[Clinical problems of osteoporosis] Isaia GC, et al. **Minerva Endocrinol** 1989 Jan–Mar;14(1):35–40 (Eng. Abstr.) (Ita)

[Differential diagnosis of systemic osteoporosis and multiple myeloma] Zatsepin ST, et al. **Ortop Travmatol Protez** 1988 Nov;(11):46–50 (Eng. Abstr.) (Rus)

[Clinical criteria of the diagnosis of neurofibromatosis in children] Dats MS, et al. **Pediatriia** 1989;(5):93–4 (Rus)

[Differential diagnosis of Cushing's syndrome and juvenile osteoporosis in children] Zhukovskiĭ MA, et al. **Pediatriia** 1989;(3):91–2 (Rus)

[Involutional osteopathies: the clinical x-ray, biochemical and hormonal aspects of the diagnosis] Bukhman AI, et al. **Probl Endokrinol (Mosk)** 1988 Jul–Aug;34(4):7–12 (Eng. Abstr.) (Rus)

[Diagnosis of osteopenia using roentgenological and histomorphometric methods] Abendrot K, et al. **Revmatologiia (Moskva)** 1989 Jan–Mar;(1):51–3 (Rus)

DRUG THERAPY

The effect of ipriflavone treatment on osteoporosis induced by immobilization. Földes I, et al. **Acta Morphol Hung** 1988; 36(1–2):79–93

Effect of calcitonin replacement therapy in idiopathic juvenile osteoporosis. Jackson EC, et al. **Am J Dis Child** 1988 Nov;142(11):1237–9

Rationale for the use of calcitonin in postmenopausal osteoporosis. Avioli LV. **Ann Chir Gynaecol** 1988; 77(5–6):224–8 (37 ref.)

Fluoride and osteoporosis. Franke J. **Ann Chir Gynaecol** 1988; 77(5–6):235–45 (93 ref.)

Calcitriol for postmenopausal osteoporosis [letter] Gallagher JC, et al. **Ann Intern Med** 1989 Oct 1;111(7):621

Calcitriol treatment is not effective in postmenopausal osteoporosis. Ott SM, et al. **Ann Intern Med** 1989 Feb 15; 110(4):267–74

Effects of nandrolone decanoate and antiresorptive therapy on vertebral density in osteoporotic postmenopausal women. Need AG, et al. **Arch Intern Med** 1989 Jan; 149(1):57–60

Cross-over study of fat-corrected forearm mineral content during nandrolone decanoate therapy for osteoporosis. Need AG, et al. **Bone** 1989;10(1):3–6

Transdermal estradiol in the treatment of postmenopausal bone loss. Adami S, et al. **Bone Miner** 1989 Aug;7(1):79–86

Long-term effect of nandrolone decanoate, 1 alpha-hydroxyvitamin D3 or intermittent calcium infusion therapy on bone mineral content, bone remodeling and fracture rate in symptomatic osteoporosis: a double-blind controlled study. Geusens P, et al. **Bone Miner** 1986 Sep; 1(4):347–57

The relationship between fluoride effects on bone histology and on bone mass in patients with postmenopausal osteoporosis. Harrison JE, et al. **Bone Miner** 1986 Sep; 1(4):321–33

Effects of cyclical therapy for osteoporosis using an oral regimen of inorganic phosphate and sodium etidronate: a clinical and bone histomorphometric study. Hodsman AB. **Bone Miner** 1989 Jan;5(2):201–12

Treatment of postmenopausal osteoporosis: is the anabolic steroid nandrolone decanoate a candidate? Johansen JS, et al. **Bone Miner** 1989 Apr;6(1):77–86

Reduced occurrence of vertebral crush fractures in senile osteoporosis treated with 1 alpha (OH)-vitamin D3. Orimo H, et al. **Bone Miner** 1987 Oct;3(1):47–52

Iliac crest biopsy in longitudinal therapeutic trials of osteoporosis. Pødenphant J, et al. **Bone Miner** 1988 Oct; 5(1):77–87

Does calcium potentiate the effect of estrogen therapy on postmenopausal bone loss? Riis BJ, et al. **Bone Miner** 1987 Feb;2(1):1–9

Calcium and osteoporosis: some caveats and pleas. Blanchard J. **Calcif Tissue Int** 1989 Feb;44(2):67–8 (13 ref.)

Increase of vertebral density by combination therapy with pulsatile 1–38hPTH and sequential addition of calcitonin nasal spray in osteoporotic patients. Hesch RD, et al. **Calcif Tissue Int** 1989 Mar;44(3):176–80

Effect of calcitonin and vitamin D in osteoporosis. Palmieri GM, et al. **Calcif Tissue Int** 1989 Sep;45(3):137–41

Aggressive prevention is key to osteoporosis control. Licata AA. **Cleve Clin J Med** 1989 Jul–Aug;56(5):468–473

Use of calciferol and its metabolites and analogues in osteoporosis. Current status. Parfitt AM. **Drugs** 1988 Nov; 36(5):513–20 (69 ref.)

A rational approach to the prevention and treatment of postmenopausal osteoporosis. Spector TD, et al. **Drugs** 1989 Feb;37(2):205–11 (33 ref.)

Metabolic and clinical effects of ipriflavone in established post-menopausal osteoporosis. Agnusdei D, et al. **Drugs Exp Clin Res** 1989;15(2):97–104

Biochemical effects of calcium supplementation in postmenopausal osteoporosis. Horowitz M, et al. **Eur J Clin Nutr** 1988 Sep;42(9):775–8

Influence of food on relative bioavailability of fluoride in man from Na2FPO3-containing tablets for the treatment of osteoporosis. Trautner K. **Int J Clin Pharmacol Ther Toxicol** 1989 May;27(5):242–9

Treatment of bone weakness in patients with femoral neck fracture by fluoride, calcium and vitamin D. Mackie IG, et al. **J Bone Joint Surg [Br]** 1989 Jan;71(1):111–7

The effect of fluoride on bone histology in postmenopausal osteoporosis depends on adequate fluoride absorption and retention. Budden FH, et al. **J Bone Miner Res** 1988 Apr; 3(2):127–32

Increased incidence of hip fracture in osteoporotic women treated with sodium fluoride. Hedlund LR, et al. **J Bone Miner Res** 1989 Apr;4(2):223–5

Cyclic therapy of osteoporosis with neutral phosphate and brief, high-dose pulses of etidronate. Mallette LE, et al. **J Bone Miner Res** 1989 Apr;4(2):143–8

Histomorphometric effects of calcium or calcium plus 25-hydroxyvitamin D3 therapy in senile osteoporosis. Orwoll ES, et al. **J Bone Miner Res** 1989 Feb;4(1):81–8

Attainment of therapeutic fluoride levels in serum without major side effects using a slow-release preparation of sodium fluoride in postmenopausal osteoporosis. Pak CY, et al. **J Bone Miner Res** 1986 Dec;1(6):563–71

Restoration of spinal bone in osteoporotic men by treatment with human parathyroid hormone (1–34) and 1,25-dihydroxyvitamin D. Slovik DM, et al. **J Bone Miner Res** 1986 Aug;1(4):377–81

Effect of estrogen/gestagen and 24R,25-dihydroxyvitamin D3 therapy on bone formation in postmenopausal women. Thomsen K, et al. **J Bone Miner Res** 1986 Dec;1(6):503–7

Safe and effective treatment of osteoporosis with intermittent slow release sodium fluoride: augmentation of vertebral bone mass and inhibition of fractures. Pak CY, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):150–9

From the National Institutes of Health. Wyngaarden JB. **JAMA** 1989 Apr 7;261(13):1864

Results of a stimulatory therapy of low bone metabolism in osteoporosis with (1–38)hPTH and diphosphonate EHDP. Protocol of study I, osteoporosis trial Hannover. Hesch RD, et al. **Klin Wochenschr** 1988 Oct 3;66(19):976–84

Two-year follow-up of biphosphonate (APD) treatment in steroid osteoporosis [letter] Reid IR, et al. **Lancet** 1988 Nov 12;2(8620):1144

Correction of corticosteroid-induced osteoporosis by percutaneous hormone implants [letter] Studd JW, et al. **Lancet** 1989 Feb 11;1(8633):339

Estrogen replacement therapy: risk/benefit ratio for treatment. Glowacki GA. **Md Med J** 1989 Jul;38(7):551–5

Changes in soft tissue body composition and plasma lipid metabolism during nandrolone decanoate therapy in postmenopausal osteoporotic women. Hassager C, et al. **Metabolism** 1989 Mar;38(3):238–42

Antiresorptive strategies in osteoporosis treatment. Raisz LG. **Postgrad Med** 1989 Apr;Spec No:29–32; discussion 33–43

Newly discovered actions of 1.25-dihydroxyvitamin D3 and osteoporosis: basis and treatment. DeLuca HF. **Proc Soc Exp Biol Med** 1989 Jul;191(3):211–3

The effect of calcitriol on patients with postmenopausal osteoporosis with special reference to fracture frequency. Gallagher JC, et al. **Proc Soc Exp Biol Med** 1989 Jul; 191(3):287–92

Fluoride and osteoporosis. Pak CY. **Proc Soc Exp Biol Med** 1989 Jul;191(3):278–86 (80 ref.)

[Value of bone fluoride determination in osteoporotic patients treated with sodium fluoride] Laurent V, et al. **Presse Med** 1989 Apr 1;18(13):679–82 (Eng. Abstr.) (Fre)

[Bone complications during the treatment of osteoporosis with fluor] Marcelli C, et al. **Rev Med Interne** 1989 Mar–Apr;10(2):118–26 (Eng. Abstr.) (Fre)

[Treatment of postmenopausal with sodium fluoride. Effect on mineral bone content of the radius] de Guembecker W, et al. **Rev Rhum Mal Osteoartic** 1989 May;56(6):499–503 (Fre)

[Role of hyperthyroidism in bone complications of fluoride treatment of osteoporosis] Marcelli C, et al. **Rev Rhum Mal Osteoartic** 1988 Nov;55(11):915–8 (Fre)

[Contribution to the study of the treatment of osteoporosis using fluoride. Long–term sequelae following discontinuation of fluoride] van Linthoudt D, et al. **Schweiz Med Wochenschr** 1988 Aug 27;118(34):1199–201 (Eng. Abstr.) (Fre)

[Prophylaxis and treatment of osteoporosis] Kopera H. **Klin Wochenschr** 1989 May 15;67(10):557–8 (Ger)

[Drug therapy of osteoporosis] Dambacher MA. **Orthopade** 1988 Sep;17(5):425–31 (19 ref.) (Eng. Abstr.) (Ger)

[Skeletal fluorosis following uncontrolled use of sodium fluoride] Kästner P, et al. **Z Arztl Fortbild (Jena)** 1988; 82(10):455–9 (Ger)

[A new treatment possibility for osteoporosis with osteochin (ipriflavone) tablets] Bossányi A, et al. **Magy Traumatol Orthop Helyreallito Sebesz** 1989; 32(2):109–15 (Eng. Abstr.) (Hun)

[Efficacy of different doses of salmon calcitonin in the treatment of osteoporosis assessed by densitometry] Gnudi S, et al. **Boll Chim Farm** 1988 Jan;127(1):2S–5S (Eng. Abstr.) (Ita)

[Drug surveillance of salcatonin: preliminary results on efficacy and tolerance] Grazioli I, et al. **Clin Ter** 1988 Nov 30;127(4):289–95 (Eng. Abstr.) (Ita)

[Tolerability of nimesulide in the aged] Nante G, et al. **Clin Ter** 1988 Feb 29;124(4):295–302 (Eng. Abstr.) (Ita)

[Carbocalcitonin in the treatment of senile osteoporosis and hypercalcemic syndromes] Nardini F, et al. **Clin Ter** 1988 Oct 15;127(1):17–25 (Eng. Abstr.) (Ita)

[Action of calcitonin in peri– and post–menopausal osteoporosis and in osteoporosis induced by long–term treatment with cortisone] Notario A, et al. **Clin Ter** 1987 Oct 31;123(2):95–103 (Eng. Abstr.) (Ita)

[Treatment of postmenopausal and senile osteoporosis with synthetic salmon calcitonin. A clinical study] Salvini S, et al. **Clin Ter** 1987 Jun 30;121(6):471–7 (Eng. Abstr.) (Ita)

[Effects on the bones of nandrolone decanoate therapy in postmenopausal osteoporosis] Gennari C, et al. **Minerva Endocrinol** 1989 Jan–Mar;14(1):69–74 (Eng. Abstr.) (Ita)

[Sequential calcitriol–calcitonin in the therapy of osteoporosis] Passeri M, et al. **Minerva Endocrinol** 1989 Jan–Mar;14(1):57–62 (Eng. Abstr.) (Ita)

[Bone and joint diseases in elderly patients—treatment of osteoporosis] Yamamoto Y. **Nippon Ronen Igakkai Zasshi** 1988 May;25(3):249–52 (6 ref.) (Jpn)

[The efficacy of combined use of 1 alpha–hydroxyvitamin D3 with calcium supplements in the treatment of osteoporosis] Yoshikawa S, et al. **Nippon Seikeigeka Gakkai Zasshi** 1988 Aug;62(8):723–32 (Eng. Abstr.) (Jpn)

[Fluorosis in a postmenopausal woman] Helleskov Hansen NP, et al. **Tidsskr Nor Laegeforen** 1988 Nov 10; 108(31):2846–7 (Eng. Abstr.) (Nor)

[Effect of 1–alpha oxyvitamin D3 on bone tissue in systemic osteoporosis] Rodionova SS, et al. **Ortop Travmatol Protez** 1989 Feb;(2):37–40 (Eng. Abstr.) (Rus)

[Use of bisphosphonates in the treatment of systemic osteoporosis] Rodionova SS, et al. **Ortop Travmatol Protez** 1989 Mar;(3):51–6 (Rus)

[Treatment of severe postmenopausal osteoporosis] Reisner NA, et al. **Probl Endokrinol (Mosk)** 1988 Jul–Aug; 34(4):13–6 (Eng. Abstr.) (Rus)

[Comparative evaluation of the effectiveness of vitamin D3 preparations (1–alpha–hydroxy– and 1–alpha,25–dihydroxycholecalciferol in various forms of osteoporosis and osteomalacia] Zarubina NA, et al. **Probl Endokrinol (Mosk)** 1989 May–Jun;35(3):15–9 (Eng. Abstr.) (Rus)

ECONOMICS

Socio–economic costs of osteoporosis and changing patterns. Avioli LV. **Ann Chir Gynaecol** 1988;77(5–6):168–72 (41 ref.)

The direct medical costs of osteoporosis for American women aged 45 and older, 1986. Phillips S, et al. **Bone** 1988;9(5):271–9

Cost analysis of osteoporosis related to untreated menopause. Levy E. **Clin Rheumatol** 1989 Jun;8 Suppl 2:76–82

[Osteoporosis: a new social disease?] Molinatti GM, et al. **Minerva Endocrinol** 1989 Jan–Mar;14(1):31–4 (Eng. Abstr.) (Ita)

[Estimate of the costs of osteoporotic fractures of the femur in Spain] Díez Pérez A, et al. **Med Clin (Barc)** 1989 May 20;92(19):721–3 (Eng. Abstr.) (Spa)

ENZYMOLOGY

Activity of dipeptidyl peptidase IV and post–proline cleaving enzyme in sera from osteoporotic patients. Gotoh H, et al. **Clin Chem** 1988 Dec;34(12):2499–501

Bone turnover in postmenopausal women after withdrawal of estrogen/gestagen replacement therapy. Thomsen K, et al. **Gynecol Endocrinol** 1987 Jun;1(2):169–75

EPIDEMIOLOGY

Epidemiology and socio–economic aspects of osteoporosis in Finland. Simonen O. **Ann Chir Gynaecol** 1988; 77(5–6):173–5

Accelerated vertebral bone loss in relation to the menopause: a cross–sectional study on lumbar bone density in 286 women of 46 to 55 years of age. Elders PJ, et al. **Bone Miner** 1988 Oct;5(1):11–9

Bone mass, skin color and body size among black and white women. Nelson DA, et al. **Bone Miner** 1988 Jul;4(3):257–64

The epidemiology of osteoporosis. A selective overview. Allander E. **Clin Rheumatol** 1989 Jun;8 Suppl 2:9–12 (14 ref.)

[Bone changes in diabetes mellitus] Saito K. **Nippon Seikeigeka Gakkai Zasshi** 1988 Dec;62(12):1189–98 (Eng. Abstr.) (Jpn)

[Osteoporotic fracture of the femur in Spain] Navarro Quilis A. **Med Clin (Barc)** 1989 May 20;92(19):733–5 (14 ref.) (Spa)

ETIOLOGY

Ethanol reduces bone formation and may cause osteoporosis. Diamond T, et al. **Am J Med** 1989 Mar;86(3):282–8

Skeletal repair in the aged: a preliminary study in rabbits. Strates BS, et al. **Am J Med Sci** 1988 Oct;296(4):266–9

Nutritional factors in causation of osteoporosis. Heaney RP. **Ann Chir Gynaecol** 1988;77(5–6):176–9

Calcium and osteoporosis. Nordin BE, et al. **Ann Chir Gynaecol** 1988;77(5–6):212–8 (33 ref.)

Osteoporosis in hemochromatosis: iron excess, gonadal deficiency, or other factors? Diamond T, et al. **Ann Intern Med** 1989 Mar 15;110(6):430–6

Contributing diagnoses in osteoporosis. The value of a complete medical evaluation. Johnson BE, et al. **Arch Intern Med** 1989 May;149(5):1069–72

Risk factors for osteoporosis. Seeman E, et al. **Aust N Z J Med** 1989 Feb;19(1):69–75 (87 ref.)

The mechanostat: a proposed pathogenic mechanism of osteoporoses and the bone mass effects of mechanical and nonmechanical agents. Frost HM. **Bone Miner** 1987 Apr; 2(2):73–85 (13 ref.)

Gynaecological disorders and risk factors in premenopausal women predisposing to osteoporosis. A review. Lam SY, et al. **Br J Obstet Gynaecol** 1988 Oct;95(10):963–72 (90 ref.)

Aggressive posttraumatic osteoporosis of the humerus simulating a malignant neoplasm. Kattapuram SV, et al. **Cancer** 1988 Dec 15;62(12):2525–7

Osteoporosis in unstable adult scoliosis. Velis KP, et al. **Clin Orthop** 1988 Dec;(237):132–41

The osteoporosis of heparinotherapy and systemic mastocytosis. Bardin T, et al. **Clin Rheumatol** 1989 Jun;8 Suppl 2:119–23 (32 ref.)

The peak bone mass concept. Burckhardt P, et al. **Clin Rheumatol** 1989 Jun;8 Suppl 2:16–21 (42 ref.)

Pathogenetic aspects of involutional osteoporosis. Mazzuoli GF, et al. **Clin Rheumatol** 1989 Jun;8 Suppl 2:22–9 (19 ref.)

Immobilization osteoporosis: a review. Minaire P. **Clin Rheumatol** 1989 Jun;8 Suppl 2:95–103 (79 ref.)

Lead and osteoporosis: mobilization of lead from bone in postmenopausal women. Silbergeld EK, et al. **Environ Res** 1988 Oct;47(1):79–94

Hepatic osteodystrophy. Static and dynamic bone histomorphometry and serum bone Gla–protein in 80 patients with chronic liver disease. Diamond TH, et al. **Gastroenterology** 1989 Jan;96(1):213–21

Increased rate of spinal trabecular bone loss in patients with inflammatory bowel disease. Motley RJ, et al. **Gut** 1988 Oct;29(10):1332–6

Osteoporosis and amenorrhea in young women. Glazener CM, et al. **Gynecol Endocrinol** 1987 Sep;1(3):255–61

The influence of diet, body fat, menstrual cycling, and activity upon the bone density of females. Howat PM, et al. **J Am Diet Assoc** 1989 Sep;89(9):1305–7

Inflammatory cell changes in haversian canals. A possible cause of osteoporosis in rheumatoid arthritis. Takashima T, et al. **J Bone Joint Surg [Br]** 1989 Aug;71(4):671–6

Mechanisms of osteoporosis in adult and adolescent women with anorexia nervosa. Biller BM, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):548–54

Increases in bone density during treatment of men with idiopathic hypogonadotropic hypogonadism. Finkelstein JS, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):776–83

Quantitative histologic study of the influence of spinal instrumentation on lumbar fusions: a canine model. Farey ID, et al. **J Orthop Res** 1989;7(5):709–22

A reassessment of diet and osteoporosis—possible role for copper. Strain JJ. **Med Hypotheses** 1988 Dec;27(4):333–8 (54 ref.)

The calcium deficiency model for osteoporosis. Nordin BE, et al. **Nutr Rev** 1989 Mar;47(3):65–72 (39 ref.)

Proceedings from the second annual Symposium on the Long–term Effects of Estrogen Deprivation. **Postgrad Med** 1989 Apr;Spec No:1–91

Osteoporosis—extent and cause of the disease. Johnston CC Jr. **Proc Soc Exp Biol Med** 1989 Jul;191(3):258–60

Low bone mass may not be the only cause of skeletal fragility in osteoporosis. Recker RR. **Proc Soc Exp Biol Med** 1989 Jul;191(3):272–4

Osteoporosis in Scheuermann's disease. Lopez RA, et al. **Spine** 1988 Oct;13(10):1099–103

1989 Volvo Award in basic science. Device–related osteoporosis with spinal instrumentation. McAfee PC, et al. **Spine** 1989 Sep;14(9):919–26

Prolactinoma in a middle–aged man with an osteoporotic fracture. Taylor SD, et al. **West J Med** 1989 Jul;151(1):80–2

[Clinical analysis of bone diseases in patients under chronic hemopurification] Zhu LY. **Chung Hua I Hsueh Tsa Chih** 1989 Mar;69(3):128–30, 10 (Eng. Abstr.) (Chi)

[Acute osteoporosis in a breast–feeding vegetarian woman] Böstman L, et al. **Duodecim** 1988;104(12):937–40 (Fin)

[Risk factors for female osteoporosis] Kuntz D. **Presse Med** 1988 Oct 29;17(38):1998, 2001 (Fre)

[Osteogenesis imperfecta and localized involvement of the spine: a peculiar form? Apropos of a familial case] Corsat JP, et al. **Rev Chir Orthop** 1989;75(2):120–4 (Eng. Abstr.) (Fre)

[Osteoporosis in endocrine diseases] Bergmann P. **Rev Med Brux** 1988 Dec;9(10):462–6 (Eng. Abstr.) (Fre)

[Trabecular osteoporosis complicating unrecognized anorexia nervosa] Maugars Y, et al. **Rev Rhum Mal Osteoartic** 1989 Feb;56(2):159–61 (Fre)

[Cushing's syndrome due to primary micronodular adenomatosis of the adrenal cortex. An unusual cause of severe childhood or juvenile, reversible osteoporosis] Thévenon A, et al. **Rev Rhum Mal Osteoartic** 1988 Jun; 55(8):607–9 (Fre)

[Osteoporosis—a nutrition problem] Fleisch H. **Bibl Nutr Dieta** 1988;(42):67–9 (0 ref.) (Ger)

[Mineral content and bone density: a gold standard for osteoporosis?] Michel D. **Fortschr Med** 1989 May 20; 107(15):16–7 (Ger)

[Hypergonadotropic amenorrhea (WHO III) as a risk factor for osteoporosis] Metka M, et al. **Gynakol Rundsch** 1988; 28 Suppl 2:205–6 (Ger)

[The effect of inactivity–induced osteoporosis on the scintigraphic image of bone lesions of the wrist] Spitz J, et al. **Nuklearmedizin** 1989 Aug;28(4):124–8 (Eng. Abstr.) (Ger)

[The contribution of nutrition to the pathogenesis of osteoporosis] Hötzel D, et al. **Z Ernahrungswiss** 1989 Mar; 28(1):17–31 (52 ref.) (Eng. Abstr.) (Ger)

[Skeletal changes in thalassemia] Alaiyan H, et al. **Z Orthop** 1988 Jul–Aug;126(4):437–47 (Eng. Abstr.) (Ger)

[Calciotropic hormones in osteoporosis caused by anorexia nervosa] Saggese G, et al. **Minerva Pediatr** 1989 Feb; 41(2):61–5 (Eng. Abstr.) (Ita)

[The relationship between illness in the aged and in inherently scorbutic rats (ODS rats)] Kono K, et al. **Nippon Ronen Igakkai Zasshi** 1988 Sep;25(5):508–14 (Eng. Abstr.) (Jpn)

[A case of pregnancy complicated with Cushing syndrome] Hosoda S, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Feb;41(2):227–30 (Jpn)

[Studies of the effect of ischemia of the legs on the degree of osteoporosis of the femur and tibia using the cortex–shaft index] Skawina A, et al. **Przegl Lek** 1989;46(3):346–9 (Eng. Abstr.) (Pol)

[Osteoporosis in the postmenopause and following ovariectomy] Smetnik VP, et al. **Akush Ginekol (Mosk)** 1988 Aug;(8):5–9 (53 ref.) (Rus)

[Dynamics of immobilization–induced osteoporosis in rats] Shvets VN, et al. **Kosm Biol Aviakosm Med** 1988 Sep–Oct; 22(5):51–5 (Eng. Abstr.) (Rus)

[Low–gravitational changes in the bone system] Volozhin AI, et al. **Kosm Biol Aviakosm Med** 1988 Jul–Aug; 22(4):4–13 (73 ref.) (Eng. Abstr.) (Rus)

[Radiation injuries of the bones after the treatment of breast cancer] Gun'ko RI, et al. **Sov Med** 1988;(10):114–7 (Rus)

[Osteoporosis of the hand bones and regional blood flow in the post–traumatic shoulder–hand syndrome] Fastykovskaia ED, et al. **Vestn Rentgenol Radiol** 1988 Nov–Dec;(6):5–8 (Eng. Abstr.) (Rus)

[Renal retention of calcium in chronic obstructive pulmonary disease] Riancho A, et al. **Rev Clin Esp** 1988 Dec; 183(9):459–62 (Eng. Abstr.) (Spa)

[Risk of osteoporosis in Chilean adolescents caused by low calcium ingestion (letter)] Mahana D. **Rev Med Chil** 1988 May;116(5):482–3 (Spa)

GENETICS

Prader–Willi habitus, osteopenia, and camptodactyly (Urban–Rogers–Meyer syndrome): a probable second report. Pagnan NA, et al. **Am J Med Genet** 1988 Dec; 31(4):787–92

Bone mass is low in relatives of osteoporotic patients. Evans

RA, et al. **Ann Intern Med** 1988 Dec 1;109(11):870–3
Fracture of the upper end of the femur is not associated with familial fracture disposition. Gärdsell P, et al. **Arch Orthop Trauma Surg** 1989;108(5):265–7
Altered calcitonin gene in a young patient with osteoporosis [retracted by Alevizaki M, Legon S. In: BMJ 1989 Jul 22;299(6693):235] Alevizaki M, et al. **BMJ** 1989 May 6; 298(6682):1215–6
Osteoporosis and heredity. Gärdsell P, et al. **Clin Orthop** 1989 Mar;(240):164–7
Is geroderma osteodysplastica underdiagnosed? Hunter AG. **J Med Genet** 1988 Dec;25(12):854–7
Osteoporosis–pseudoglioma syndrome: clinical, morphological, and biochemical studies. Somer H, et al. **J Med Genet** 1988 Aug;25(8):543–9
Reduced bone mass in daughters of women with osteoporosis. Seeman E, et al. **N Engl J Med** 1989 Mar 2;320(9):554–8
The osteoporosis pseudoglioma syndrome. Update and report on two affected siblings. Swoboda W, et al. **Pediatr Radiol** 1988;18(5):399–404

HISTORY

Annals of internal medicine, Volume 27, 1947: Osteoporosis [classical article] Albright F. **Nutr Rev** 1989 Mar;47(3):85–6

IMMUNOLOGY

Malignant osteoporosis and defective immunoregulation. Rubin KR, et al. **J Bone Miner Res** 1988 Oct;3(5):509–16

METABOLISM

Cross-linking and new bone collagen synthesis in immobilized and recovering primate osteoporosis. Yamauchi M, et al. **Bone** 1988;9(6):415–8
Bone mineral density of the spine and proximal femur in normal and osteoporotic subjects in Japan. Norimatsu H, et al. **Bone Miner** 1989 Jan;5(2):213–22
Bone turnover determined by urinary excretion of [99mTc]diphosphonate in the prediction of postmenopausal bone loss. Thomsen K, et al. **Bone Miner** 1987 Apr; 2(2):125–31
A study on the phalanx bone mineral content in 273 normal pre- and post-menopausal females (transverse study of age-dependent bone loss). Trouerbach WT, et al. **Bone Miner** 1987 Oct;3(1):53–62
Maintained improvement in calcium balance and bone mineral content in patients with osteoporosis treated with the bisphosphonate APD. Valkema R, et al. **Bone Miner** 1989 Jan;5(2):183–92
Serum tartrate-resistant acid phosphatase and bone mineral content in postmenopausal osteoporosis. de la Piedra C, et al. **Calcif Tissue Int** 1989 Jul;45(1):58–60
Bone mineral content of mandibles: normal reference values—rate of age-related bone loss. von Wowern N. **Calcif Tissue Int** 1988 Oct;43(4):193–8
Biomarks in secondary osteoporosis. Aroso Dias A, et al. **Clin Rheumatol** 1989 Jun;8 Suppl 2:89–94
Isotope retention for assessment of bone turnover in involutional osteoporosis. Passeri M, et al. **Clin Rheumatol** 1989 Jun;8 Suppl 2:35–40
BGP (osteocalcin, bone-Gla-protein) in involutional osteoporosis. Rapado A, et al. **Clin Rheumatol** 1989 Jun; 8 Suppl 2:30–4
Rates of bone loss in normal women: evidence of accelerated trabecular bone loss after the menopause. Nilas L, et al. **Eur J Clin Invest** 1988 Oct;18(5):529–34
Fluoride content in human iliac bone: results in controls, patients with fluorosis, and osteoporotic patients treated with fluoride. Boivin G, et al. **J Bone Miner Res** 1988 Oct; 3(5):497–502
Early vertebral trabecular bone loss in normal premenopausal women. Buchanan JR, et al. **J Bone Miner Res** 1988 Oct; 3(5):583–7
Ultradistal and cortical forearm bone density in the assessment of postmenopausal bone loss and nonaxial fracture risk. Price RI, et al. **J Bone Miner Res** 1989 Apr; 4(2):149–55
Osteocalcin and deoxyribonucleic acid synthesis in vitro and histomorphometric indices of bone formation in postmenopausal osteoporosis. Marie PJ, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):272–9
Preliminary report of decreased serum magnesium in postmenopausal osteoporosis. Reginster JY, et al. **Magnesium** 1989;8(2):106–9
Persistence of increased bone resorption and possible role of dehydroepiandrosterone as a bone metabolism determinant in osteoporotic women in late post-menopause. Taelman P, et al. **Maturitas** 1989 Mar; 11(1):65–73
Abnormalities in parathyroid hormone secretion and 1,25-dihydroxyvitamin D3 formation in women with osteoporosis [letter] Franz KB. **N Engl J Med** 1989 Jun 22;320(25):1697–8
Abnormalities in parathyroid hormone secretion and 1,25-dihydroxyvitamin D3 formation in women with osteoporosis. Silverberg SJ, et al. **N Engl J Med** 1989 Feb 2;320(5):277–81
Estrogen receptors in bone. **Nutr Rev** 1989 Jan;47(1):15–7
Osteocalcin and bone remodelling in Paget's disease of bone, primary hyperparathyroidism, hypercalcaemia of malignancy and involutional osteoporosis. Torres R, et al. **Scand J Clin Lab Invest** 1989 May;49(3):279–85
[The significance of magnesium in orthopedics. V. Magnesium in osteoporosis] Ditmar R, et al. **Acta Chir Orthop Traumatol Cech** 1989 Apr;56(2):143–59 (Eng. Abstr.) **(Cze)**
[Noninvasive measuring of bone mass and osteoporosis (published erratum appears in Ned Tijdschr Geneeskd 1988 Dec 24;132(52):2392)] van Berkum FN, et al. **Ned Tijdschr Geneeskd** 1988 Dec 3;132(49):2233–7 (44 ref.) **(Dut)**

PATHOLOGY

Apparent age-related bone loss among adult female Gombe chimpanzees. Sumner DR, et al. **Am J Phys Anthropol** 1989 Jun;79(2):225–34
Osteoporotic bone microstructure by collagenase etching. Mackie IG, et al. **Ann Rheum Dis** 1989 Jun;48(6):464–9
Biophysical study of bone mineral in biopsies of osteoporotic patients before and after long-term treatment with fluoride. Raud CA, et al. **Bone** 1988;9(6):361–5
Distribution of resorption processes in the compacta and spongiosa of bones from lactating rats fed a low-calcium diet. Lozupone E, et al. **Bone** 1988;9(4):215–24
Structural mechanisms of trabecular bone loss in man. Compston JE, et al. **Bone Miner** 1989 Jul;6(3):339–50
Spinal osteoporosis in men. Francis RM, et al. **Bone Miner** 1989 Mar;5(3):347–57
Osteoporotic fracture space: an hypothesis. Heaney RP. **Bone Miner** 1989 Apr;6(1):1–13 (39 ref.)
Age-related bone loss in lumbar vertebrae of CW-1 female mice: a histomorphometric study. Bar-Shira-Maymon B, et al. **Calcif Tissue Int** 1989 Jan;44(1):36–45
Ultrasound attenuation of the os calcis in women with osteoporosis and hip fractures. Baran DT, et al. **Calcif Tissue Int** 1988 Sep;43(3):138–42
Measurement of anisotropic vertebral trabecular bone loss during aging by quantitative image analysis. Bergot C, et al. **Calcif Tissue Int** 1988 Sep;43(3):143–9
Change in vertebral shape in spinal osteoporosis. Hedlund LR, et al. **Calcif Tissue Int** 1989 Mar;44(3):168–72
Bone mineral density and fracture in postmenopausal women. Meltzer M, et al. **Calcif Tissue Int** 1989 Sep;45(3):142–5
A postmortem correlation of four techniques of assessment of osteoporosis with force of bone compression. Oyster N, et al. **Calcif Tissue Int** 1988 Aug;43(2):77–82
Variable osteoclast appearance in human infantile osteopetrosis. Shapiro F, et al. **Calcif Tissue Int** 1988 Aug; 43(2):67–76
Contrasting microanatomy of idiopathic and corticosteroid-induced osteoporosis. Aaron JE, et al. **Clin Orthop** 1989 Jun;(243):294–305
Secondary osteoporosis and the microanatomy of trabecular bone. Aaron JE, et al. **Clin Rheumatol** 1989 Jun;8 Suppl 2:84–8 (8 ref.)
Bone histomorphometry in glucocorticoid-induced osteoporosis. Dempster DW. **J Bone Miner Res** 1989 Apr; 4(2):137–41 (50 ref.)
A simple method for correlative light and scanning electron microscopy of human iliac crest bone biopsies: qualitative observations in normal and osteoporotic subjects. Dempster DW, et al. **J Bone Miner Res** 1986 Feb;1(1):15–21
Unequal decrease in bone density of lumbar spine and ultradistal radius in Colles' and vertebral fracture syndromes. Eastell R, et al. **J Clin Invest** 1989 Jan; 83(1):168–74
Bone histology in young adult osteoporosis. Hills E, et al. **J Clin Pathol** 1989 Apr;42(4):391–7
[Microradiographic study of iliac bone biopsies taken after treatment of postmenopausal osteoporosis with sodium fluoride. Histomorphometric correlations] Duriez R, et al. **Rev Rhum Mal Osteoartic** 1989 Apr;56(5):375–81 (Eng. Abstr.) **(Fre)**
[Para-articular osteoporosis in chronic polyarthritis] Bröll H, et al. **Acta Med Austriaca** 1988;15(5):135–6 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Osteoporosis. Watts NB. **Am Fam Physician** 1988 Nov; 38(5):193–207 (89 ref.)
Exercise and osteoporosis. Sinaki M. **Arch Phys Med Rehabil** 1989 Mar;70(3):220–9 (101 ref.)
Postmenopausal osteoporosis: response of immunoextracted calcitonin to a calcium clamp. Sjöberg HE, et al. **Bone** 1989;10(1):15–8
A newly developed spine deformity index (SDI) to quantitate vertebral crush fractures in patients with osteoporosis. Minne HW, et al. **Bone Miner** 1988 Mar;3(4):335–49
The pathophysiology of peri- and postmenopausal bone loss. Nilas L, et al. **Br J Obstet Gynaecol** 1989 May;96(5):580–7
Decreased bone formation in osteoporotic patients compared with age-matched controls. Garcia Carasco M, et al. **Calcif Tissue Int** 1989 Mar;44(3):173–5
Bone remodelling in osteoporosis. de Vernejoul MC. **Clin Rheumatol** 1989 Jun;8 Suppl 2:13–5
Osteoporosis—a review. Alden JC. **Clin Ther** 1989;11(1):3–14 (61 ref.)
Forearm bone loss in hemiplegia: a model for the study of immobilization osteoporosis. Prince RL, et al. **J Bone Miner Res** 1988 Jun;3(3):305–10
Bone turnover in postmenopausal osteoporosis. Effect of calcitonin treatment. Civitelli R, et al. **J Clin Invest** 1988 Oct;82(4):1268–74
Osteoporotic bone fragility. Detection by ultrasound transmission velocity. Heaney RP, et al. **JAMA** 1989 May 26;261(20):2986–90
'Senile' osteoporosis reconsidered [see comments] Resnick NM, et al. **JAMA** 1989 Feb 17;261(7):1025–9 (78 ref.). **Comment in:** JAMA 1989 Jul 21;262(3):352–3
Calcitonin and osteoporosis. New mechanisms of pathophysiology. Simmons JW, et al. **Orthop Rev** 1987 Oct; 16(10):718–25 (57 ref.)
[Estrogens and osteoporosis] Ziegler R. **Geburtshilfe Frauenheilkd** 1989 Feb;49 Suppl 1:82–4 (14 ref.) **(Ger)**
[The mechanical behavior of bone in severe osteoporosis with special reference to the hip endoprosthesis] Münzenberg KJ, et al. **Orthopade** 1988 Sep;17(5):420–4 (Eng. Abstr.) **(Ger)**
[Osteoporosis in menopause] Miranda R. **Gac Med Mex** 1988 Sep-Oct;124(9-10):381–3 (21 ref.) **(Spa)**

PREVENTION & CONTROL

Estrogen replacement therapy for the prevention of osteoporosis. Lufkin EG, et al. **Am Fam Physician** 1989 Sep;40(3):205–12 (38 ref.)
Estrogens in the prevention and treatment of postmenopausal osteoporosis: a review. Barzel US. **Am J Med** 1988 Dec; 85(6):847–50 (46 ref.)
The role of estrogen replacement therapy in the prevention of osteoporosis. Thorneycroft IH. **Am J Obstet Gynecol** 1989 May;160(5 Pt 2):1306–10 (22 ref.)
Intranasal calcitonin for prevention and treatment of osteoporosis. Christiansen C. **Ann Chir Gynaecol** 1988; 77(5–6):229–34 (33 ref.)
Prevention and treatment of osteoporosis with ovarian hormones. Lindsay R. **Ann Chir Gynaecol** 1988; 77(5–6):219–23 (32 ref.)
Physical activity and bone. Suominen H. **Ann Chir Gynaecol** 1988;77(5–6):184–8 (37 ref.)
Skeletal effects of oestrogen and testosterone in postmenopausal women [letter] **BMJ** 1988 Sep 10; 297(6649):687–8
Calcium and postmenopausal bone loss [letter] **BMJ** 1988 Aug 13;297(6646):481–3
Calcium supplementation of the diet--II. Kanis JA, et al. **BMJ** 1989 Jan 28;298(6668):205–8 (64 ref.)
Calcium supplementation of the diet [letter] [see comments] Selby PI, et al. **BMJ** 1989 Apr 1;298(6677):891–2. **Comment in:** BMJ 1989 Apr 15;298(6679):1034
Calcium supplementation of the diet [letter; comment] Stevenson JC. **BMJ** 1989 Apr 15;298(6679):1034. **Comment on:** BMJ 1989 Apr 1;298(6677):891–2
Brisk walking does not stop bone loss in postmenopausal women. Cavanaugh DJ, et al. **Bone** 1988;9(4):201–4
Effect of (Asu1,7)-eel calcitonin on the prevention of osteoporosis induced by combination of immobilization and ovariectomy in the rat. Hayashi T, et al. **Bone** 1989; 10(1):25–8
A model for estimating the potential costs and savings of osteoporosis prevention strategies. Ross PD, et al. **Bone** 1988;9(6):337–47
Commentary. Broken bones—a gynecological problem [letter] Kubba A. **Br J Obstet Gynaecol** 1989 Jan;96(1):123
A 47-year-old woman presenting with a 20-year history of SLE. Hughes GR. **Br J Rheumatol** 1989 Aug;28(4):349
Deterring bone loss by exercise intervention in premenopausal and postmenopausal women. Smith EL, et al. **Calcif Tissue Int** 1989 May;44(5):312–21
Preventing postmenopausal osteoporosis [letter] Adachi JD. **Can Med Assoc J** 1988 Nov 1;139(9):826–7
New methods for identifying "at risk" patients for osteoporosis. Christiansen C, et al. **Clin Rheumatol** 1989 Jun;8 Suppl 2:52–5
Salmon calcitonin (Miacalcic) nasal spray in prevention and treatment of osteoporosis. Gennari C. **Clin Rheumatol** 1989 Jun;8 Suppl 2:61–5 (16 ref.)
ADFR therapy in the prevention of bone loss after menopause. Pérez Cano R, et al. **Clin Rheumatol** 1989 Jun; 8 Suppl 2:56–60
A rational approach to the prevention and treatment of postmenopausal osteoporosis. Spector TD, et al. **Drugs** 1989 Feb;37(2):205–11 (33 ref.)
Calcium: taking mom's advice. Yen PK. **Geriatr Nurs (New York)** 1989 Mar-Apr;10(2):101–2
Is there any place for salmon calcitonin in prevention of postmenopausal bone loss? Reginster JY, et al. **Gynecol Endocrinol** 1988 Sep;2(3):195–204 (33 ref.)
Understanding and preventing osteoporosis. Marcus R. **Hosp Pract [Off]** 1989 Apr 15;24(4):189–204, 209–11, 215 passim (7 ref.)
Preventing postmenopausal osteoporosis with estrogen replacement therapy. Ettinger B. **Int J Fertil** 1986;31 Suppl:15–20 (14 ref.)
The relationship of dietary and supplemental calcium intake to bone loss and osteoporosis. Walden O. **J Am Diet Assoc** 1989 Mar;89(3):397–400 (46 ref.)
Prevention of osteoporosis by pulsed electromagnetic fields. Rubin CT, et al. **J Bone Joint Surg [Am]** 1989 Mar; 71(3):411–7
The effect of oral contraceptives on lumbar bone density in premenopausal women. Collins CL, et al. **J La State Med Soc** 1988 Sep;140(9):31–2, 35–9
About osteoporosis [letter] Kiveloff BI. **J R Soc Health** 1988 Aug;108(4):152

Corticosteroid induced osteoporosis and hormone implants [letter] Studd J, et al. **Lancet** 1989 Apr 15;1(8642):850–1

Differential effect of long–term oestrogen therapy on trabecular and cortical bone. Hosie CJ, et al. **Maturitas** 1989 Jun;11(2):137–45

Efficacy of nonloading exercises in prevention of vertebral bone loss in postmenopausal women: a controlled trial. Sinaki M, et al. **Mayo Clin Proc** 1989 Jul;64(7):762–9

Management of hypercholesterolaemia in postmenopausal women [letter] Colquhoun D. **Med J Aust** 1989 Sep 4; 151(5):299–300

Effects of a bisphosphonate (1–hydroxy ethylidene–1,1 bisphosphonic acid) on osteoclast number during prolonged bed rest in healthy humans. Chappard D, et al. **Metabolism** 1989 Sep;38(9):822–5

New steroid for the climacteric syndrome. Kicovic PM. **Minerva Endocrinol** 1989 Jan–Mar;14(1):63–7

The case for routine bone mass measurements [editorial] Fogelman I. **Nucl Med Commun** 1988 Aug;9(8):541–3

Osteoporosis: prevention during the adolescent and young adult years. Ausenhus MK. **Nurse Pract** 1988 Sep;13(9):42, 45, 48

Prevention of osteoporosis: treatment of estradiol deficiency. Ettinger B. **Obstet Gynecol** 1988 Nov;72(5 Suppl):12S–17S

So what? The patient's dilemma: medicine or milk? [letter] Gaffin J. **Paediatr Perinat Epidemiol** 1987 Sep;1(2):141–2

Experimental therapeutic strategies to increase bone mass. Kleerekoper M. **Postgrad Med** 1989 Apr;Spec No:26–8; discussion 33–43

Estrogen: prevention and treatment of osteoporosis. Lindsay R. **Postgrad Med** 1989 Apr;Spec No:7–9; discussion 33–43

A request for hormone replacement therapy. **Practitioner** 1988 Jul;232(1452):777–8, 781

Issues of aging in preventive medicine and the example of osteoporosis. Persky NW, et al. **Prim Care** 1989 Mar; 16(1):231–44 (53 ref.)

Estrogen/progestogen therapy: prevention and treatment of postmenopausal osteoporosis. Lindsay R. **Proc Soc Exp Biol Med** 1989 Jul;191(3):275–7

Bone protection with salmon calcitonin (sCT) in the long–term steroid therapy of chronic sarcoidosis. Rizzato G, et al. **Sarcoidosis** 1988 Sep;5(2):99–103

Preventing osteoporosis [letter] Bailie IE. **West J Med** 1989 Jun;150(6):697

A practical guide to preventing osteoporosis. Ettinger B. **West J Med** 1988 Dec;149(6):691–5 (35 ref.)

[Drug treatment of the postmenopause] Hamerlynck JV. **Ned Tijdschr Geneeskd** 1988 Aug 13;132(33):1518–23 (35 ref.) **(Dut)**

[How can osteoporosis be prevented?] Salmi J. **Duodecim** 1988;104(20):1644–9 (32 ref.) **(Fin)**

[Comparison of the osteoprotective effects of orally administered equine conjugated estrogens and percutaneous 17 beta–estradiol] Reginster JY, et al. **Rev Med Liege** 1989 Jan 15;44(2):55–60 **(Fre)**

[Prevention of postmenopausal bone loss with estrogens. Which molecule, which scheme, which dose?] Jamin C. **Rev Rhum Mal Osteoartic** 1989 May;56(6):429–32 (Eng. Abstr.) **(Fre)**

[Impact of hormonal prevention on fractures of the proximal femur in postmenopausal women: a simulation study] Van der Loos M, et al. **Soz Praventivmed** 1988;33(3):162–6 (Eng. Abstr.) **(Fre)**

[Comment on "consensus report": consensus development conference: prevention and treatment of osteoporosis] Ziegler R. **Klin Wochenschr** 1988 Oct 17;66(20):1044–6 (4 ref.) **(Ger)**

[Hormone substitution in menopause] Heinzl S. **Med Monatsschr Pharm** 1989 Mar;12(3):87–90 **(Ger)**

[Estrogen/progesterone substitution in and following menopause. Position of the German Society of Endocrinology] Ziegler R. **Med Monatsschr Pharm** 1989 Mar;12(3):91–3 **(Ger)**

[What is appropriate in postmenopausal osteoporosis?] Jesserer H. **Z Gesamte Inn Med** 1988 Aug 1;43(15):416–8 (11 ref.) (Eng. Abstr.) **(Ger)**

[Application of new therapeutic approaches in the prevention of osteoporosis in women] Bocci A, et al. **Minerva Endocrinol** 1989 Jan–Mar;14(1):75–80 (Eng. Abstr.) **(Ita)**

[Treatment of ovariectomized patients with intramuscular and nasal–spray synthetic calcitonin] Zara C, et al. **Minerva Endocrinol** 1989 Jan–Mar;14(1):53–6 (Eng. Abstr.) **(Ita)**

[Prevention of osteoporosis in rats by administration of xydiphone before and during hypokinesia] Shvets VN, et al. **Kosm Biol Aviakosm Med** 1988 Jul–Aug;22(4):65–70 (Eng. Abstr.) **(Rus)**

[Effect of alpha–hydroxydimethyl–gamma–aminopropylidene bisphosphonate on the bone tissue of rats during hypokinesia] Shvets VN, et al. **Kosm Biol Aviakosm Med** 1989 Jan–Feb;23(1):27–31 (Eng. Abstr.) **(Rus)**

[Prevention of osteoporosis of bone fragments in distraction osteosynthesis] Pustovoĭt MI, et al. **Ortop Travmatol Protez** 1988 Dec;(12):14–6 (Eng. Abstr.) **(Rus)**

[Recommendations from an expert meeting on the prevention and treatment of osteoporosis] **Lakartidningen** 1989 Mar 15;86(11):975–7 **(Swe)**

[Estrogen or calcitonin in prevention of osteoporosis?] Diamant B. **Lakartidningen** 1989 Feb 8;86(6):417–8 **(Swe)**

[Estrogen in the prevention of osteoporosis—protection of or threat against the cardiovascular system?] Silfverstolpe G, et al. **Lakartidningen** 1988 Nov 16;85(46):3924–5, 3927 **(Swe)**

PSYCHOLOGY

Treatment of osteoporosis. The psychological impact of a medical education program on older patients. Gold DT, et al. **J Am Geriatr Soc** 1989 May;37(5):417–22

Stress and adaptation patterns of older osteoporotic women. Roberto KA. **Women Health** 1988;14(3–4):105–19

RADIOGRAPHY

Quantitative computed tomography at peripheral measuring sites. Rüegsegger P. **Ann Chir Gynaecol** 1988;77(5–6):204–7

C.T. measurement of spinal mineral—initial Australian experience using the U.C.S.F. phantom. Alcock MK, et al. **Australas Radiol** 1988 May;32(2):276–9

Quantitative computed tomography of the rheumatic knee. Rüegsegger P, et al. **Clin Rheumatol** 1988 Dec;7(4):486–91

Osteoporosis and fracture patterns. A study of split–compression fractures of the lateral tibial condyle. Foltin E. **Int Orthop** 1988;12(4):299–303

Vertebral bone density in Scheuermann disease. Gilsanz V, et al. **J Bone Joint Surg [Am]** 1989 Jul;71(6):894–7

Models of spinal trabecular bone loss as determined by quantitative computed tomography. Block JE, et al. **J Bone Miner Res** 1989 Apr;4(2):249–57

Peripheral QCT: a low–risk procedure to identify women predisposed to osteoporosis. Müller A, et al. **Phys Med Biol** 1989 Jun;34(6):741–9

Accuracy of visually estimated bone mineralization in routine radiographs of the lower extremity. Finsen V, et al. **Skeletal Radiol** 1988;17(4):270–5

A cross–sectional study of age–related loss of mineral content of phalangeal bone in men and women. Trouerbach WT, et al. **Skeletal Radiol** 1988;17(5):338–43

[Idiopathic osteoporosis?] Montag M, et al. **Radiologe** 1989 Mar;29(3):151–2 **(Ger)**

[The endoprosthesis of the Kotz Modular Femur and Tibia Reconstruction System (KMFTR) and radiologic changes in the prosthesis anchorage] Höppel R. **Wien Klin Wochenschr** 1989 May 26;101(11):394 **(Ger)**

[Lumbar spine, coxofemoral and calcaneus osteoporosis: clinico–radiologic study] Knoplich J, et al. **Rev Paul Med** 1987 Nov–Dec;105(6):301–11 (Eng. Abstr.) **(Por)**

[Roentgenologic diagnosis of osteoporotic changes of the bone structure in persons occupationally exposed to vibration] Druzhinin VN, et al. **Gig Tr Prof Zabol** 1988 Dec;(12):12–5 (Eng. Abstr.) **(Rus)**

[Computerized axial tomography in the study of bone mass. Analysis of its reproducibility (letter)] Díez Pérez A, et al. **Med Clin (Barc)** 1989 Apr 8;92(13):518 **(Spa)**

[Computerized axial tomography in the study of bone mass. Analysis of reproducibility] Farrerons J, et al. **Med Clin (Barc)** 1988 Oct 1;91(10):361–4 (Eng. Abstr.) **(Spa)**

RADIONUCLIDE IMAGING

Determinants of bone density in normal women: risk factors for future osteoporosis? Stevenson JC, et al. **BMJ** 1989 Apr 8;298(6678):924–8

Age–related bone loss in women evaluated by the single and dual photon technique. Nilas L, et al. **Bone Miner** 1988 Apr;4(1):95–103

Long–term precision of dual photon absorptiometry in the lumbar spine in clinical settings. Nilas L, et al. **Bone Miner** 1988 Mar;3(4):305–15

The relationship of peripheral to axial bone density. Schneider P, et al. **Bone Miner** 1988 Jul;4(3):279–87

Relapse of osteoporosis circumscripta as a lytic ring after treatment of Paget's disease with intravenous 3–amino–1–hydroxypropylidene–1,1–bisphosphonate. Anderson DC, et al. **Br J Radiol** 1988 Nov; 61(731):996–1001

Scintigraphic evaluation of regional migratory osteoporosis. Kim SM, et al. **Clin Nucl Med** 1989 Jan;14(1):36–9

Significance of solitary spine abnormalities on technetium–99m bone imaging. Thivolle P, et al. **Clin Nucl Med** 1988 Jul;13(7):527–8

Bone turnover in postmenopausal osteoporosis. Determined by whole body retention and urinary excretion of 99m–technetium diphosphonate. Thomsen K. **Dan Med Bull** 1988 Oct;35(5):468–79 (140 ref.)

Nuclear medicine studies of aging—VI. Dual photon absorptiometry and bone scans in "at risk" women with back pain. Gupta SM, et al. **Int J Rad Appl Instrum [B]** 1988;15(6):629–30

Bone density of the radius, spine, and proximal femur in osteoporosis. Mazess RB, et al. **J Bone Miner Res** 1988 Feb;3(1):13–8

An evaluation of the contribution of bone mass measurements to clinical practice. Fogelman I. **Semin Nucl Med** 1989 Jan; 19(1):62–8 (55 ref.)

[Dual photon absorptiometry. Critical study] Marchandise X. **Rev Rhum Mal Osteoartic** 1989 Feb;56(2):137–40 **(Fre)**

THERAPY

The role of physical exercise in prevention and management of osteoporosis. Dilşen G, et al. **Clin Rheumatol** 1989 Jun; 8 Suppl 2:70–5

Osteoporosis: an updated approach to prevention and management. Lindsay R. **Geriatrics** 1989 Jan;44(1):45–6, 51–2, 54 (10 ref.)

Field distributions in vertebral bodies of the rat during electrical stimulation: a parametric study. Carter EL Jr, et al. **IEEE Trans Biomed Eng** 1989 Mar;36(3):333–45

Treatment of castration–induced osteoporosis by a capacitively coupled electrical signal in rat vertebrae. Brighton CT, et al. **J Bone Joint Surg [Am]** 1989 Feb; 71(2):228–36

Osteoporosis: exercise therapy, pre– and postdiagnosis. Stacey TA. **J Manipulative Physiol Ther** 1989 Jun; 12(3):211–9 (56 ref.)

Guidelines for treatment of osteoporosis in older women [letter; comment] Gilson SB. **JAMA** 1989 Jul 21; 262(3):352–3. **Comment on:** JAMA 1989 Feb 17;261(7):1025–9

Morphological analysis of iliac crest bone biopsies in patients with osteoporosis and treatment according to the ADFR concept with (1–38)hPTH and diphosphonate (EHDP)—Osteoporosis Study I, Hannover. Delling G, et al. **Klin Wochenschr** 1989 May 15;67(10):556

Osteoporosis. Barth RW, et al. **Orthop Clin North Am** 1988 Oct;19(4):845–58 (86 ref.)

Osteoporosis. A review. Mac Kinnon JL. **Phys Ther** 1988 Oct;68(10):1533–40 (98 ref.)

Osteoporosis and estrogen deprivation. Experimental approaches to therapy: an overview. Peck WA. **Postgrad Med** 1989 Apr;Spec No:23–5; discussion 33–43

Modern therapeutic approaches to osteoporosis. Sewell KL. **Rheum Dis Clin North Am** 1989 Aug;15(3):583–614 (255 ref.)

[Percutaneous injection of methyl–metacrylate in osteoporosis and severe vertebral osteolysis (Galibert's technic)] Lapras C, et al. **Ann Chir** 1989;43(5):371–6 (Eng. Abstr.) **(Fre)**

[Prevention and therapy of osteoporosis in the aged] Schmidt UJ. **Z Arztl Fortbild (Jena)** 1989;83(11):569–70 (14 ref.) **(Ger)**

[Disabling senile osteoporosis] Ringe JD, et al. **Z Gerontol** 1988 Nov–Dec;21(6):316–9 (Eng. Abstr.) **(Ger)**

[Interdisciplinary diagnosis and therapy concepts in climacteric osteoporosis] Löttge M, et al. **Zentralbl Gynakol** 1989;111(12):800–6 (Eng. Abstr.) **(Ger)**

URINE

[Urinary excretion of calcium after administration of 1 alpha–hydroxyvitamin D3 in idiopathic juvenile osteoporosis] Wieczorek E, et al. **Pol Tyg Lek** 1988 Nov 28;43(48):1537–9 **(Pol)**

VETERINARY

Validation of single photon absorptiometry in estimating bone mineral mass in rhesus monkey skeletons. Aguiló F Jr, et al. **P R Health Sci J** 1989 Apr;8(1):205–9

Bone mineral and osteoporosis in aging rhesus monkeys. Grynpas MD, et al. **P R Health Sci J** 1989 Apr;8(1):197–204

The effects of screw removal on bone strain in an idealized plated bone model. Korvick DL, et al. **Vet Surg** 1988 May–Jun;17(3):111–6

OSTEORADIONECROSIS see under **RADIATION INJURIES**

OSTEOSARCOMA

Primary osteogenic sarcoma of the kidney. Mortensen PH. **Br J Urol** 1989 Jan;63(1):101–2

Bovine colostric transforming growth factor–beta–like peptide that induces growth inhibition and changes in morphology of human osteogenic sarcoma cells (MG–63). Tokuyama H, et al. **Cell Biol Int Rep** 1989 Mar;13(3):251–8

Osteosarcoma [letter] Choudhary VK, et al. **Indian Pediatr** 1988 Jul;25(7):703–4

Osteosarcoma of the carpus. Bickerstaff DR, et al. **J Hand Surg [Br]** 1988 Aug;13(3):303–5 (22 ref.)

Osteosarcoma. Clinical and pathological considerations. Klein MJ, et al. **Orthop Clin North Am** 1989 Jul; 20(3):327–45 (66 ref.)

Osteogenic sarcoma: an update. **Semin Roentgenol** 1989 Jul; 24(3):143–202

Osteosarcoma—presumed lymph node metastases in two cases. English R, et al. **Skeletal Radiol** 1989;18(4):289–93

[Osteosarcoma of the fibula: study of 20 cases] Biagini R, et al. **Chir Organi Mov** 1988 Apr–Jun;73(2):99–105 (Eng. Abstr.) **(Ita)**

[Production of the strain transplantable to nude mice and rats from a HOS cell line of human osteogenic sarcoma] Rebazova ES, et al. **Biull Eksp Biol Med** 1988 Oct; 106(10):471–2 **(Rus)**

ANALYSIS

Inhibition by tumor necrosis factor of induction of ectopic bone formation by osteosarcoma–derived bone–inducing substance. Yoshikawa H, et al. **Bone** 1988;9(6):391–6

[A study of an immunosuppressive acidic protein (IAP) in patients with a bone tumor] Mori O, et al. **Gan No Rinsho** 1988 Oct;34(12):1690–2 (Eng. Abstr.) **(Jpn)**

[Steroid hormone receptors in osteogenic sarcomas] Bassalyk LS, et al. **Vopr Onkol** 1989;35(6):658–63 (Eng. Abstr.) **(Rus)**

BLOOD

Ectopic production of the beta-subunit of human chorionic gonadotropin in osteosarcoma. Ordóñez NG, et al. **Arch Pathol Lab Med** 1989 Apr;113(4):416–9

Methotrexate clearance and clinical toxicity in osteosarcoma following high-dose methotrexate therapy. Iqbal MP, et al. **JPMA** 1989 Feb;39(2):38–42

Daily profiles of plasma phenylalanine and tyrosine in patients with osteogenic sarcoma during treatment with high-dose methotrexate-citrovorum rescue. Hilton MA, et al. **Med Pediatr Oncol** 1989;17(4):265–70

COMPLICATIONS

Osteomalacia secondary to osteosarcoma. A case report. Cheng CL, et al. **J Bone Joint Surg [Am]** 1989 Feb; 71(2):288–92

Case report 529: Osteosarcoma of calcaneus with Rothmund–Thompson syndrome (RTS). Baró PR, et al. **Skeletal Radiol** 1989;18(2):136–9

DIAGNOSIS

Primary osteogenic sarcoma and osteogenic metaplastic carcinoma of the breast. Immunocytochemical identification in fine needle aspirates. Pettinato G, et al. **Acta Cytol** 1989 Sep–Oct;33(5):620–6

Diagnostic difficulties in skeletal pathology. Schajowicz F, et al. **Clin Orthop** 1989 Mar;(240):281–310 (113 ref.)

Mimickry in osteogenic sarcoma. Clinical considerations and report of 2 cases. Vigliani F, et al. **Ital J Orthop Traumatol** 1987 Dec;13(4):425–36

Osteosarcoma: use of MR imaging and MR spectroscopy in clinical decision making. Redmond OM, et al. **Radiology** 1989 Sep;172(3):811–5

Cross-sectional imaging in the evaluation of osteogenic sarcoma: MRI and CT. Seeger LL, et al. **Semin Roentgenol** 1989 Jul;24(3):174–84

Case report 560: Parosteal osteoma of tibia. Baum PA, et al. **Skeletal Radiol** 1989;18(5):406–9

Case report 532: Extraosseus intra-abdominal osteosarcoma. Grignon DJ, et al. **Skeletal Radiol** 1989;18(2):147–51

Case report 540. Grade III conventional sclerosing osteosarcoma of the calcaneus. López-Barea F, et al. **Skeletal Radiol** 1989;18(3):237–40

Case report 523: Osteoblastic osteosarcoma of the navicular. Moss CS, et al. **Skeletal Radiol** 1989;18(1):70–4

Primary extraosseous osteogenic sarcoma of the mediastinum: clinical, pathologic, and radiologic correlation. Tarr RW, et al. **South Med J** 1988 Oct;81(10):1317–9 (11 ref.)

[Unusually localized osteosarcoma] Triebel HJ, et al. **ROFO** 1989 May;150(5):615–6 **(Ger)**

[Osteosarcoma. A new diagnostic approach in presurgical loco-regional staging] Masciocchi C, et al. **Radiol Med (Torino)** 1988 Oct;76(4):249–54 (Eng. Abstr.) **(Ita)**

[Diagnosis of osteogenic sarcoma] Ono T. **Gan No Rinsho** 1989 Jan;Spec No:475–82 **(Jpn)**

DRUG THERAPY

Importance of age and methotrexate dosage: prognosis in children and young adults with high-grade osteosarcomas. Delepine N, et al. **Biomed Pharmacother** 1988;42(4):257–62

Chemotherapy for osteosarcoma. Souhami RL. **Br J Cancer** 1989 Feb;59(2):147–8 (15 ref.)

Effect of cumulative courses of intraarterial cis-diamminedichloroplatin-II on the primary tumor in osteosarcoma. Jaffe N, et al. **Cancer** 1989 Jan 1;63(1):63–7

Recovery of sperm production after chemotherapy for osteosarcoma. Meistrich ML, et al. **Cancer** 1989 Jun 1; 63(11):2115–23

Nodular form of bleomycin-related pulmonary injury in patients with osteogenic sarcoma. Santrach PJ, et al. **Cancer** 1989 Aug 15;64(4):806–11 (33 ref.)

Treatment of osteosarcoma. Waters KD. **Clin Exp Pharmacol Physiol Suppl** 1979;5:11–6

Overall results of adjuvant chemotherapy and a chemosensitivity test for osteosarcoma. Tomita K, et al. **Clin Ther** 1989;11(1):135–42

Enhancement of cytocidal and antitumor effect of cisplatin by caffeine in human osteosarcoma. Tomita K, et al. **Clin Ther** 1989;11(1):43–52

In vivo and in vitro investigations on biological effects of aromatic bis-(2-chloroethyl)amino-bisphosphonic acids, new agents proposed for chemotherapy of bone tumors: cytostatic activity in rat osteosarcoma; toxicity and genotoxicity in liver and bone marrow; mutagenicity in S. typhimurium. Pool BL, et al. **Invest New Drugs** 1988 Jun;6(2):67–78

Neoadjuvant chemotherapy in the treatment of osteosarcoma of the extremities: preliminary results in 131 cases treated preoperatively with methotrexate and cisdiamminoplatinum. Bacci G, et al. **Ital J Orthop Traumatol** 1988 Mar;14(1):23–39

The effects of methotrexate (MTX) on bone. A densitometric study conducted on 59 patients with MTX administered at different doses. Gnudi S, et al. **Ital J Orthop Traumatol** 1988 Jun;14(2):227–31

Marginal analysis applied to the dose–response curve. Silber JH, et al. **Med Pediatr Oncol** 1988;16(5):344–8

Regional chemotherapy for osteosarcoma. Benjamin RS. **Semin Oncol** 1989 Aug;16(4):323–7 (22 ref.)

Adjuvant chemotherapy for osteosarcoma. Eilber FR, et al. **Semin Oncol** 1989 Aug;16(4):312–22 (64 ref.)

Chemotherapy of advanced soft tissue and osteosarcomas. Kane MJ. **Semin Oncol** 1989 Aug;16(4):297–304 (123 ref.)

[Postoperative adjuvant chemotherapy of high dose MTX for osteogenic sarcoma] **Chung Hua Chung Liu Tsa Chih** 1988 May;10(3):233–5 (Eng. Abstr.) **(Chi)**

[Role of the pathologist in the treatment of osteosarcoma] Aymard B, et al. **Ann Pathol** 1988;8(4–5):336–9 (Eng. Abstr.) **(Fre)**

[Osteogenic osteosarcoma, a model of a disease that is curable using a multidisciplinary treatment approach] Desbois JC, et al. **C R Soc Biol (Paris)** 1988;182(6):523–37 **(Fre)**

[Neoadjuvant chemotherapy of osteosarcoma. Results of the cooperative studies COSS-80 and COSS-82 after 7 and 5 years] Bielack S, et al. **Klin Padiatr** 1989 Jul–Aug; 201(4):275–84 (Eng. Abstr.) **(Ger)**

[Nuclear medicine prediction of histologic tumor response of osteosarcoma] Knop J, et al. **Klin Padiatr** 1989 Jul–Aug; 201(4):285–92 (Eng. Abstr.) **(Ger)**

[Preoperative systemic chemotherapy of patients with osteosarcoma: a preliminary study of nine cases] Chuman H, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–3):1736–43 (Eng. Abstr.) **(Jpn)**

[Cis-dichlorodiammineplatinum in osteosarcoma. Osteosarcoma Cooperative Study Group report] Fukuma H, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 1):811–7 (Eng. Abstr.) **(Jpn)**

[Evaluation of adjuvant chemotherapy of osteosarcoma with special reference to adriamycin (final report)] Maeyama I, et al. **Gan To Kagaku Ryoho** 1988 Dec;15(12):3245–51 (Eng. Abstr.) **(Jpn)**

[Preoperative continuous intra-arterial infusion chemotherapy as part of a local regional treatment of osteosarcoma of the extremities] Sato M, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2712–7 (Eng. Abstr.) **(Jpn)**

[Clinico-morphologic characterization of lung metastases from osteogenic sarcoma during chemotherapy] Fedenko AN, et al. **Arkh Patol** 1989;51(3):22–8 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Purification of bone alkaline phosphatase from human osteosarcoma. Masuhara K, et al. **Bone Miner** 1987 Nov; 3(2):159–70

Alkaline phosphatase activity from human osteosarcoma cell line SaOS-2: an isoenzyme standard for quantifying skeletal alkaline phosphatase activity in serum. Farley JR, et al. **Clin Chem** 1989 Feb;35(2):223–9

Sugar-chain analysis of alkaline phosphatase by lectin affinity chromatography in serum from a patient with osteosarcoma. Kuwana T, et al. **Clin Chem** 1989 Jan; 35(1):179

Parathyroid hormone causes translocation of protein kinase-C from cytosol to membranes in rat osteosarcoma cells. Abou-Samra AB, et al. **Endocrinology** 1989 Mar; 124(3):1107–13

Second messenger signaling in the regulation of collagenase production by osteogenic sarcoma cells. Civitelli R, et al. **Endocrinology** 1989 Jun;124(6):2928–34

Human parathyroid hormone carboxyterminal peptide (53–84) stimulates alkaline phosphatase activity in dexamethasone-treated rat osteosarcoma cells in vitro. Murray TM, et al. **Endocrinology** 1989 Feb;124(2):1097–9

Signal transduction via the beta 1 integrins is a required intermediate in interleukin-1 beta induction of alkaline phosphatase activity in human osteosarcoma cells. Dedhar S. **Exp Cell Res** 1989 Jul;183(1):207–14

Establishment and characterization of a murine Gardner's osteosarcoma cell line (GOS/T): purification of bone-specific alkaline phosphatase (ALPase) and use of anti-ALPase as a diagnostic acid. Yumoto T, et al. **Exp Pathol** 1988;35(3):177–87

Alterations in hormone-sensitive adenylate cyclase of cloned rat osteosarcoma cells during long-term culture. Gutierrez GE, et al. **J Bone Miner Res** 1986 Aug;1(4):319–26

Presence and activity of alkaline phosphatase in two human osteosarcoma cell lines. Randall JC, et al. **J Histochem Cytochem** 1989 Jul;37(7):1069–74

ETIOLOGY

Potentiating and inhibiting effects of steroid hormones on the incidence of 90Sr induced osteosarcoma. Haraldsson I, et al. **Acta Oncol** 1988;27(4):393–8

Osteogenic sarcoma following acute lymphoblastic leukemia. Shaw PJ, et al. **Am J Pediatr Hematol Oncol** 1988 Spring; 10(1):81–2

Mediastinal osteosarcoma with extension to lungs in a patient treated for Hodgkin's disease. Catanese J, et al. **Cancer** 1988 Nov 15;62(10):2252–7 (28 ref.)

Induction of osteosarcomas in mouse lumbar vertebrae by repeated external beta-irradiation. Ootsuyama A, et al. **Cancer Res** 1989 Mar 15;49(6):1562–4

Postradiation sarcomas of bone. Huvos AG, et al. **Health Phys** 1988 Oct;55(4):631–6

Radiation-induced soft tissue osteogenic sarcoma of the scalp. Reyes CV. **Int J Dermatol** 1989 Jan–Feb;28(1):38–9

Osteosarcoma at the site of total hip replacement. A case report [published erratum appears in J Bone Joint Surg [Am] 1989 Aug;71(7):1112] Martin A, et al. **J Bone Joint Surg [Am]** 1988 Dec;70(10):1561–7 (30 ref.)

Fibrous dysplasia of the skull with acromegaly and sarcomatous transformation. Two cases with a review of the literature. Mortensen A, et al. **J Neurooncol** 1989 May; 7(1):25–9

Fission fragment RBE for bone sarcoma induction. Mays CW, et al. **Radiat Res** 1989 Sep;119(3):432–42

Seizures and hemiparesis in a young woman 24 years after treatment of astrocytoma [clinical conference] Mazziotta JC, et al. **West J Med** 1989 Feb;150(2):180–6

[Post-radiation osteosarcoma following Hodgkin's disease. Apropos of a case and review of the literature] Travers V, et al. **Rev Chir Orthop** 1989;75(1):40–4 (15 ref.) (Eng. Abstr.) **(Fre)**

[Mechanical injury as an alleged causative factor of osteosarcoma in a case of civil law suit] Zuk T, et al. **Wiad Lek** 1988 Apr 1;41(7):469–72 (Eng. Abstr.) **(Pol)**

GENETICS

DNA cytometry of osteosarcoma. Bauer HC. **Acta Orthop Scand Suppl** 1988;228:1–39 (94 ref.)

Retinoblastoma and osteosarcoma: the prototypic cancer family. Hansen MF, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Aug;29(4):526–33

Ploidy and morphology in osteosarcoma. Bauer HC, et al. **Anal Quant Cytol Histol** 1989 Apr;11(2):96–103

The gene responsible for the development of retinoblastoma and osteosarcoma. Benedict WF, et al. **Cancer** 1988 Oct 15;62(8 Suppl):1691–4

Complex karyotypes in a series of pediatric osteosarcomas. Biegel JA, et al. **Cancer Genet Cytogenet** 1989 Mar; 38(1):89–100

Amplification of the gli gene in childhood sarcomas. Roberts WM, et al. **Cancer Res** 1989 Oct 1;49(19):5407–13

Neoplastic transformation of osteogenic cells: quantitative morphometric analysis of an in vitro model for osteosarcoma. Birek C, et al. **Carcinogenesis** 1988 Oct; 9(10):1785–91

The molecular basis of retinoblastomas. Weinberg RA. **Ciba Found Symp** 1989;142:99–105; discussion 106–11

1,25-Dihydroxyvitamin D3 inhibits transcription of type I collagen genes in the rat osteosarcoma cell line ROS 17/2.8. Harrison JR, et al. **Endocrinology** 1989 Jul;125(1):327–33

Amplification of both c-myc and c-raf-1 oncogenes in a human osteosarcoma. Ikeda S, et al. **Jpn J Cancer Res** 1989 Jan;80(1):6–9

Preferential mutation of paternally derived RB gene as the initial event in sporadic osteosarcoma. Toguchida J, et al. **Nature** 1989 Mar 9;338(6211):156–8

Antibodies detecting abnormalities of the retinoblastoma susceptibility gene product (pp110RB) in osteosarcomas and synovial sarcomas. Shew JY, et al. **Oncogene Res** 1989; 4(3):205–14

Retinoblastoma and the progression of tumor genetics. Hansen MF, et al. **Trends Genet** 1988 May;4(5):125–8 (28 ref.)

[HLA phenotype in patients with osteosarcoma] Shimizu T. **Nippon Seikeigeka Gakkai Zasshi** 1989 Apr;63(4):269–73 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Radiostrontium-induced oncogenesis and the role of immunosuppression. I. Influence of 90Sr dose, adult thymectomy and antilymphocyteglobulin treatment on the development of neoplastic and preneoplastic lesions in the skeleton of CBA mice. Bierke P, et al. **Acta Oncol** 1989; 28(1):87–102

[Nonspecific resistance during preoperative chemoradiation treatment and UHF hyperthermia of osteogenic sarcoma] Lopatin VF, et al. **Med Radiol (Mosk)** 1989 Jan;34(1):46–9 (Eng. Abstr.) **(Rus)**

METABOLISM

Parathyroid hormone and noradrenaline-induced enhancement of cyclic AMP in a cloned osteogenic sarcoma cell line (UMR 106) is inhibited by neuropeptide Y. Bjurholm A, et al. **Acta Physiol Scand** 1988 Nov; 134(3):451–2

Ketoconazole inhibits self-induced metabolism of 1,25-dihydroxyvitamin D3 and amplifies 1,25-dihydroxyvitamin D3 receptor up-regulation in rat osteosarcoma cells. Reinhardt TA, et al. **Arch Biochem Biophys** 1989 Aug 1;272(2):459–65

The inhibitory guanine nucleotide regulatory protein modulates agonist-stimulated cAMP production in rat osteosarcoma cells. Pines M, et al. **Bone Miner** 1986 Feb; 1(1):15–26

Glucose transport system in UMR-106-01 osteoblastic osteosarcoma cells: regulation by insulin. Ituarte EA, et al. **Calcif Tissue Int** 1989 Jul;45(1):27–33

Establishment of a cell line producing bone morphogenetic protein from a human osteosarcoma. Takaoka K, et al.

Clin Orthop 1989 Jul;(244):258–64

Inhibitory effects of tumor necrosis factor–alpha and interferon–gamma on deoxyribonucleic acid and collagen synthesis by rat osteosarcoma cells (ROS 17/2.8). Nanes MS, et al. **Endocrinology** 1989 Jan;124(1):339–45

Thrombospondin is synthesized and secreted by human osteoblasts and osteosarcoma cells. A model to study the different effects of thrombospondin in cell adhesion. Clezardin P, et al. **Eur J Biochem** 1989 May 15;181(3):721–6

Regulation of type I collagen synthesis by 1,25–dihydroxyvitamin D3 in human osteosarcoma cells. Franceschi RT, et al. **J Biol Chem** 1988 Dec 15; 263(35):18938–45

Identification of a bone sialoprotein receptor in osteosarcoma cells. Oldberg A, et al. **J Biol Chem** 1988 Dec 25; 263(36):19433–6

Interaction of human parathyroid hormone–related peptide with parathyroid hormone receptors in clonal rat osteosarcoma cells. Shigeno C, et al. **J Biol Chem** 1988 Dec 5;263(34):18369–77

Kinetics of calcitonin receptor internalization in lung cancer (BEN) and osteogenic sarcoma (UMR 106–06) cells. Findlay DM, et al. **J Bone Miner Res** 1986 Jun;1(3):277–83

Characterization of insulin binding in the UMR–106 rat osteoblastic osteosarcoma cell. Ituarte EA, et al. **J Bone Miner Res** 1989 Feb;4(1):69–73

Clonal differences in prostaglandin synthesis among osteosarcoma cell lines. Rodan SB, et al. **J Bone Miner Res** 1986 Apr;1(2):213–20

Regulation of expression of the cell adhesion receptors, integrins, by recombinant human interleukin–1 beta in human osteosarcoma cells: inhibition of cell proliferation and stimulation of alkaline phosphatase activity. Dedhar S. **J Cell Physiol** 1989 Feb;138(2):291–9

Production of parathyroid hormone–like peptide in a human osteosarcoma cell line: stimulation by phorbol esters and epidermal growth factor. Rodan SB, et al. **J Endocrinol** 1989 Jul;122(1):219–27

Bone Gla protein messenger ribonucleic acid is regulated by both 1,25–dihydroxyvitamin D3 and 3',5'–cyclic adenosine monophosphate in rat osteosarcoma cells. Theofan G, et al. **Mol Endocrinol** 1989 Jan;3(1):36–43

Identification of a vitamin D–responsive protein on the surface of human osteosarcoma cells. Shull S, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5405–9

Immunocytochemical identification of osteogenic bone tumors by osteonectin antibodies. Jundt G, et al. **Virchows Arch [A]** 1989;414(4):345–53

MICROBIOLOGY

Dexamethasone effects on induction of neoplastic transformation by Fujinami sarcoma virus in an in vitro chick embryo periosteal model for osteosarcoma. Birek C, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7231–6

MORTALITY

Prognostication including DNA analysis in osteosarcoma. Bauer HC, et al. **Acta Orthop Scand** 1989 Jun;60(3):353–60

Prognostic variables in osteosarcoma: a multi–institutional study. Taylor WF, et al. **J Natl Cancer Inst** 1989 Jan 4; 81(1):21–30

PATHOLOGY

Extraskeletal osteogenic sarcoma of the mediastinum. Greenwood SM, et al. **Arch Pathol Lab Med** 1989 Apr; 113(4):430–3 (15 ref.)

Transforming growth factor–beta–induced mitogenesis of human bone cancer cells. Datta HK, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):672–6

Osteosarcoma of the uterine cervix associated with hyperplastic and atypical mesonephric rests. Bloch T, et al. **Cancer** 1988 Oct 15;62(8):1594–600

Dedifferentiated parosteal osteosarcoma of the femur with aneuploidy and lung metastases. van Oven MW, et al. **Cancer** 1989 Feb 15;63(4):807–11

An adhesion variant of the MG–63 osteosarcoma cell line displays an osteoblast–like phenotype. Pierschbacher MD, et al. **Ciba Found Symp** 1988;136:131–41 (33 ref.)

Tumor bone formation in different osteosarcomas: topological, biochemical, and histochemical analyses. Althoff J, et al. **Curr Top Pathol** 1989;80:55–89

Establishment and characterization of osteogenic cell lines from a spontaneous murine osteosarcoma. Schmidt J, et al. **Differentiation** 1988 Dec;39(3):151–60

Insulin promotes growth of the cultured rat osteosarcoma cell line UMR–106–01: an osteoblast–like cell. Hickman J, et al. **Endocrinology** 1989 Feb;124(2):701–6

Neoplastic and euplastic periosteal bone formation induced in rats by Mu–MSV inoculation. Włodarski KH. **Folia Morphol (Warsz)** 1987;46(1–2):1–8

Parosteal osteosarcoma of the skull. Hinton CE, et al. **Histopathology** 1989 Mar;14(3):322–3

Parosteal osteogenic sarcoma of bone with coexistent low– and high–grade sarcomatous components. Pintado SO, et al. **Hum Pathol** 1989 May;20(5):488–91

Vertebral osteosarcoma. Tigani D, et al. **Ital J Orthop Traumatol** 1988 Mar;14(1):5–13

Characterization of volume–sensitive, calcium–permeating pathways in the osteosarcoma cell line UMR–106–01. Yamaguchi DT, et al. **J Biol Chem** 1989 Mar 15; 264(8):4383–90

Interferon–inhibited human osteosarcoma xenografts induce host bone in nude mice. Forster S, et al. **J Bone Miner Res** 1988 Apr;3(2):199–202

Thyroid hormone 5'–deiodinase activity, nuclear binding, and effects on mitogenesis in UMR–106 osteoblastic osteosarcoma cells. LeBron BA, et al. **J Bone Miner Res** 1989 Apr;4(2):173–8

Osteogenic sarcoma of the ethmoid sinus. Bradley C, et al. **J Laryngol Otol** 1988 Dec;102(12):1176–8

Morphobiochemical analysis of calcified chondroblastic osteosarcoma of the mandible. Tokuoka T, et al. **J Oral Pathol** 1988 Apr;17(4):153–7

An analysis of spontaneous and chemotherapy–associated changes in skeletal osteosarcomas. Misdorp W, et al. **J Pathol** 1988 Oct;156(2):119–28

Drug resistance and cross–sensitivity in cultured human osteosarcoma cells. Tomita K, et al. **Nippon Seikeigeka Gakkai Zasshi** 1989 Apr;63(4):274–81

Primary osteosarcoma of the parotid gland. Stimson PG, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jul;68(1):80–6 (23 ref.)

Value of nude mice xenografts in the expression of cell heterogeneity of human sarcomas of bone and soft tissue. Llombart–Bosch A, et al. **Pathol Res Pract** 1988 Nov; 183(6):683–92

Test and teach. Number fifty–nine. Diagnosis: Periosteal osteogenic sarcoma. Chan MK, et al. **Pathology** 1989 Jan; 21(1):17–8, 65–6 (13 ref.)

Metachronous sarcomas in a patient with bilateral retinoblastomas. A case report. Cohen R. **S Afr Med J** 1989 Aug 5;76(3):117–8

Issues in the pathology of sarcomas of the soft tissue and bone. Leyvraz S, et al. **Semin Oncol** 1989 Aug;16(4):273–80 (73 ref.)

Osteosarcoma: pathology and classification. Unni KK, et al. **Semin Roentgenol** 1989 Jul;24(3):143–52

Histologic changes, proliferation kinetics, and growth patterns in squamous carcinomas and bone tumors transplanted to nude mice. Wagner W, et al. **Strahlenther Onkol** 1989 Jul;165(7):487–8

Metastatic patterns in osteosarcoma. Bacci G, et al. **Tumori** 1988 Aug 31;74(4):421–7 (30 ref.)

Establishment of highly metastatic clones without tumorigenicity derived from Dunn osteosarcoma. Chigira M, et al. **Tumour Biol** 1988;9(6):293–300

[Experimental observations on acrylic bone cement containing antitumor drugs] Li JM, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Mar;69(3):143–6, 12 (Eng. Abstr.) **(Chi)**

[Experimental animal model and cell model of osteosarcoma induced by radiation] Wang YM. **Chung Hua I Hsueh Tsa Chih** 1988 Apr;68(4):208–11, 16 (Eng. Abstr.) **(Chi)**

[Study on invasion of human amnion by malignant tumor cells] Liu ZJ. **Chung–hua Ping Li Hsueh Tsa Chih** 1988 Sep;17(3):219–21 (Eng. Abstr.) **(Chi)**

[Adenocarcinoma and primary osteosarcoma of the prostate. An unusual association] Dauge MC, et al. **Ann Pathol** 1989; 9(2):115–7 (Eng. Abstr.) **(Fre)**

[Mirror–image osteosarcoma of the radius. A case] Baranzelli MC, et al. **Presse Med** 1989 Jun 24;18(25):1245–8 (Eng. Abstr.) **(Fre)**

[The value of nuclear magnetic resonance tomography in staging of bone and soft tissue sarcomas] Härle A, et al. **Orthopade** 1989 Feb;18(1):34–40 (Eng. Abstr.) **(Ger)**

[Periosteal osteosarcoma] Wagner J, et al. **Unfallchirurg** 1988 Oct;91(10):479–83 (Eng. Abstr.) **(Ger)**

[Heterogeneity of clonal cell lines from a spontaneous osteosarcoma] Schmidt J, et al. **Verh Dtsch Ges Pathol** 1988; 72:330–2 (Eng. Abstr.) **(Ger)**

[Primary atrial heart tumors—a review of 21 cases] Heni HE, et al. **Z Kardiol** 1988 Jul;77(7):425–31 (Eng. Abstr.) **(Ger)**

[The suppression of osteogenic differentiation markers in human osteosarcoma cells transformed by Kirsten murine sarcoma virus] Katayama N. **Kokubyo Gakkai Zasshi** 1988 Dec;55(4):585–98 (Eng. Abstr.) **(Jpn)**

[Transplantable osteosarcomas in rats. I. The growth behavior of spontaneous and 4–HAQO induced osteosarcomas in rats] Miyauchi Y, et al. **Nippon Seikeigeka Gakkai Zasshi** 1989 Apr;63(4):282–95 (Eng. Abstr.) **(Jpn)**

[Anticancer drug screening test for human osteosarcoma transplanted into nude mice] Mochizuki K. **Nippon Seikeigeka Gakkai Zasshi** 1988 Nov; 62(11):991–1001 (Eng. Abstr.) **(Jpn)**

[Intraosseous highly differentiated osteogenic sarcoma] Petrovichev NN, et al. **Arkh Patol** 1988;50(8):71–4 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Auditory function in pediatric osteosarcoma patients treated with multiple doses of cis–diamminedichloroplatinum(II). Ruiz L, et al. **Cancer Res** 1989 Feb 1;49(3):742–4

Regulation of osteosarcoma EGF receptor affinity by phorbol ester and cyclic AMP. Borst SE, et al. **J Bone Miner Res** 1989 Apr;4(2):185–91

[Testosterone stimulation of the growth of a human osteogenic sarcoma strain transplanted into athymic rats] Bassalyk LS, et al. **Eksp Onkol** 1988;10(6):29–31 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Fatigue fractures of the proximal tibia simulating malignancy. Davies AM, et al. **Br J Radiol** 1988 Oct;61(730):903–8

A case of breast carcinoma with sarcomatous metaplasia. Thompson AJ, et al. **Clin Radiol** 1989 Jan;40(1):98–100

Cystic degeneration of fibrous dysplasia masquerading as sarcoma. Simpson AH, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):434–6

Primary osteosarcoma of the cervical spine: one case. Ben Miled K, et al. **J Neurorsdiol** 1988;15(3):294–300 **(Eng, Fre)**

Osteogenic sarcoma of the calvarium in children: CT manifestations. Kornreich L, et al. **Neuroradiology** 1988; 30(5):439–41

Osteosarcoma: angiographic assessment of response to preoperative chemotherapy. Carrasco CH, et al. **Radiology** 1989 Mar;170(3 Pt 1):839–42

Osteosarcoma: interventional radiology in diagnosis and management. Carrasco CH, et al. **Semin Roentgenol** 1989 Jul;24(3):193–200 (24 ref.)

Osteosarcoma. Edeiken–Monroe B, et al. **Semin Roentgenol** 1989 Jul;24(3):153–73 (55 ref.)

Case report 507: Osteosarcoma of the distal femoral epiphysis. Paltiel HJ, et al. **Skeletal Radiol** 1988;17(7):527–30

[Osteoblastoma–like osteosarcoma] Hausegger KA, et al. **ROFO** 1989 Feb;150(2):223–4 **(Ger)**

[The value of computed tomography in monitoring the preoperative chemotherapy of osteosarcoma] Rotte KH, et al. **ROFO** 1989 Jan;150(1):8–12 (Eng. Abstr.) **(Ger)**

[Parosteal osteosarcoma as a cause of chronic knee pain in an athlete] Wuisman P, et al. **Sportverletz Sportschaden** 1989 Mar;3(1):37–40 (Eng. Abstr.) **(Ger)**

[Determination of intramedullary extension of osteosarcomas using CT with special reference to the epiphyseal groove] Schurawitzki H, et al. **Z Orthop** 1989 May–Jun; 127(3):362–6 (Eng. Abstr.) **(Ger)**

RADIONUCLIDE IMAGING

Uptake of 99mTc–phytate in osteosarcoma cases. Rao PN, et al. **Eur J Nucl Med** 1989;15(3):162–4

The role of radionuclides in the patient with osteogenic sarcoma. Brown ML. **Semin Roentgenol** 1989 Jul; 24(3):185–92 (40 ref.)

[Scintigraphic follow–up of osteosarcoma during neoadjuvant chemotherapy. Results of the cooperative osteosarcoma study of the Society for Pediatric Oncology] Bielack S, et al. **Nuklearmedizin** 1988 Dec;27(6):237–41 (Eng. Abstr.) **(Ger)**

RADIOTHERAPY

Biological effectiveness of fast neutrons on a murine osteosarcoma. Ishii T, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):693–9

Small–cell osteosarcoma: correlation of in vitro and clinical radiation response. Stea B, et al. **Int J Radiat Oncol Biol Phys** 1988 Nov;15(5):1233–8

Radiosensitivity of osteosarcomas on nude mice. A comparative study of treatment with fast neutrons and cobalt 60. Wagner W, et al. **Strahlenther Onkol** 1989 Jul; 165(7):515–6

SECONDARY

Patterns of recurrence after resection of osteosarcoma of the extremity. Strategies for treatment of metastases. Huth JF, et al. **Arch Surg** 1989 Jan;124(1):122–6

Osteoblastic metastases from osteosarcoma (a case report). Kapoor R, et al. **Australas Radiol** 1988 Nov;32(4):460–2

Osteosarcoma metastatic to the kidney. Lockhart SK, et al. **Clin Imaging** 1989 Jun;13(2):154–6 (8 ref.)

The alteration in the pattern of pulmonary metastasis with adjuvant chemotherapy in osteosarcoma. Yamaguchi H, et al. **Int Orthop** 1988;12(4):305–8

Case report: calcified liver metastases from osteosarcoma. Shapiro RS, et al. **J Comput Tomogr** 1988 Jul;12(3):196–8

Uptake of 99Tcm–MDP in lung metastasis from osteosarcoma: clinical and animal studies. Tsuji T, et al. **Nucl Med Commun** 1988 Dec;9(12):947–54

Second malignant neoplasms in retinoblastoma. Fact and fiction. Mitchell C. **Ophthalmic Paediatr Genet** 1988 Nov; 9(3):161–5 (19 ref.)

Peribronchial calcification and ossification—an unusual pattern of metastatic osteosarcoma. Widdowson DJ, et al. **Pediatr Radiol** 1988;18(6):490

[Results of treatment in primary disseminated osteosarcoma. Analysis of the follow–up of patients in the cooperative osteosarcoma studies COSS–80 and COSS–82] Winkler K, et al. **Onkologie** 1989 Apr;12(2):92–6 (Eng. Abstr.) **(Ger)**

[Echocardiography in the diagnosis of the intracardiac mass] Alcini E, et al. **Ann Ital Chir** 1987;59(1–6):21–30 (Eng. Abstr.) **(Ita)**

[Intracavitary cardiac metastasis of osteosarcoma: echocardiographic aspects] Morace N, et al. **Cardiologia** 1989 May;34(5):459–64 (Eng. Abstr.) **(Ita)**

[Surgical treatment of pulmonary metastases from osteogenic sarcoma–significance of aggressive resection of bilateral multiple metastases and tumors invading adjacent organs] Maeda H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb;37(2):344–9 (Eng. Abstr.) **(Jpn)**

[Osteosarcoma with metastasis to soft tissues (letter)] Martínez Albaladejo M, et al. **Rev Clin Esp** 1988 Jun;

183(2):97–8 (Spa)
[Double primary osteosarcoma of bone metastasis] Caballero JL, et al. **Rev Med Panama** 1988 May;13(2):121–5 (Eng. Abstr.) (Spa)

SURGERY

Perioperative chemotherapy for primary sarcoma of bone. Chan KW, et al. **Can J Surg** 1989 Jan;32(1):43–6
Resection of pulmonary metastases in osteosarcoma. A retrospective analysis of 44 patients. Belli L, et al. **Cancer** 1989 Jun 15;63(12):2546–50
Total temporal bone resection for osteogenic sarcoma. Sataloff RT, et al. **Ear Nose Throat J** 1988 Sep;67(9):626–7, 630–2, 634 passim (22 ref.)
Malignant bone tumors of the hand. Dick HM, et al. **Hand Clin** 1989 Aug;5(3):373–81 (22 ref.)
Intermediate results and functional evaluation of limb-salvage surgery for osteosarcoma: an intergroup study in Japan. Tomita K, et al. **J Surg Oncol** 1989 Jun;41(2):71–6
Osteochondrosarcoma of the sternum: 29-year cure by radical surgery. Seley GP. **Mt Sinai J Med (NY)** 1988 Sep; 55(4):329–32
Combined treatment of osteosarcoma of the spine. Sundaresan N, et al. **Neurosurgery** 1988 Dec;23(6):714–9
Rotationplasty: an option for limb salvage in childhood osteosarcoma. Schwartz HS, et al. **Orthopedics** 1989 Feb; 12(2):257–63
[Reconstruction of the face after mandibular resection for sarcoma] Andrie J, et al. **Rozhl Chir** 1989 Mar;68(3):145–52 (Eng. Abstr.) (Cze)
[Cystic parosteal osteosarcoma. A case treated by resection] Wuisman P, et al. **Rev Chir Orthop** 1988;74(6):576–9 (Eng. Abstr.) (Fre)
[Accomplishments of tumor surgery in bone sarcoma in childhood] Joppich I, et al. **Langenbecks Arch Chir** 1988; Suppl 2:519–23 (16 ref.) (Eng. Abstr.) (Ger)
[Resection of pulmonary metastases: indications, surgical technic, results and prognostic factors] Eckersberger F, et al. **Wien Klin Wochenschr** 1989 Jan 20;101(2):69–75 (Eng. Abstr.) (Ger)
[Nonmetastatic osteosarcoma of the limb: effects of the biopsy (frozen section with immediate surgery vs traditional biopsy with deferred surgery) on survival. Study of 195 cases treated by amputation and adjuvant chemotherapy] Bacci G, et al. **Chir Organi Mov** 1988 Apr–Jun;73(2):93–7 (Eng. Abstr.) (Ita)
[Significance of intra-arterial CDDP as preoperative treatment of osteosarcoma] Masuda S, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-3):1755–63 (Eng. Abstr.) (Jpn)
[Osteogenic sarcoma of the breast] Shirin DF, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):134–5 (Rus)

THERAPY

Osteosarcoma and interferon. Studies of human xenografts in the nude mouse. Brosjö O. **Acta Orthop Scand Suppl** 1989;229:1–36
Systemic doxorubicin and intraarterial cisplatin preoperative chemotherapy plus postoperative adjuvant chemotherapy in patients with osteosarcoma. Stine KC, et al. **Cancer** 1989 Mar 1;63(5):848–53
Osteosarcoma in adults. One institution's experience. Siegel RD, et al. **Clin Orthop** 1989 Mar;(240):261–9
Effect of human interferon-alpha and interferon-gamma on growth, histology, and DNA content of human osteosarcomas in nude mice. Brosjö O, et al. **J Interferon Res** 1989 Aug;9(4):475–89
Therapy for osteosarcoma in dogs with intravenous injection of liposome-encapsulated muramyl tripeptide. MacEwen EG, et al. **J Natl Cancer Inst** 1989 Jun 21;81(12):935–8
Should inferences from observational study of treatment results be applied in osteosarcoma? [editorial] Shuster JJ. **J Natl Cancer Inst** 1989 Jan 4;81(1):2–3
[Comparative study of 3 successive treatment protocols of osteogenic osteosarcoma in children, adolescents and young adults. Apropos of 100 cases] Delepine N, et al. **Ann Med Interne (Paris)** 1989;140(1):32–5 (Eng. Abstr.) (Fre)
[Malignant primary bone tumors. Diagnosis, therapy and results of treatment] Böhm P, et al. **Fortschr Med** 1989 Mar 10;107(7):159–62 (Eng. Abstr.) (Ger)
[Malignant tumors of the bones (editorial)] Dahlin DC. **Chir Organi Mov** 1988 Jul–Sep;73(3):185–6 (Ita)
[Treatment of osteogenic sarcoma] Tateishi A. **Gan No Rinsho** 1989 Jan;Spec No:483–90 (Jpn)
[Historical improvement in the treatment of osteosarcoma] Kawano H, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-3):1771–5 (Eng. Abstr.) (Jpn)
[Analysis of the up-to-date methods of treating children with osteosarcoma] Woźniak W, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(4):318–21 (Eng. Abstr.) (Pol)

ULTRASTRUCTURE

Histopathological and ultrastructural observations of some human tumor xenografts passaged in athymic nude mice. I. Human osteosarcoma xenograft with features of viral (oncorna A and C type retrovirus) involvement. Kodousek R, et al. **Acta Univ Palacki Olomuc Fac Med** 1988; 119:199–214
The effect of 1,25-dihydroxyvitamin D3 on the cytoskeleton of rat calvaria and rat osteosarcoma (ROS 17/2.8) osteoblastic cells. Gronowicz G, et al. **J Bone Miner Res** 1986 Oct;1(5):441–55
Osteogenic sarcoma of the tongue: case report with light and electron microscopy studies and review of the literature. Beziat JL, et al. **J Oral Maxillofac Surg** 1989 May;47(5):524–8 (28 ref.)

VETERINARY

A primary extraskeletal osteogenic sarcoma arising in the spleen of a dog. Jabara AG, et al. **Aust Vet J** 1989 Jan; 66(1):27–9
Parosteal osteosarcoma of the mandible in a dog. Brogdon JD, et al. **J Am Vet Med Assoc** 1989 Apr 15;194(8):1079–81
Osteogenic sarcoma with subcutaneous involvement in a rabbit. Hoover JP, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1156–8
Extraskeletal osteosarcoma in two dogs. Schena CJ, et al. **J Am Vet Med Assoc** 1989 May 15;194(10):1452–6
What is your diagnosis? Lysis of the vertebral body of C7, with a pathologic compression fracture and compression of the spinal cord at the level of C7. van Ee RT, et al. **J Am Vet Med Assoc** 1989 Jan 15;194(2):285–6
Fracture-associated osteogenic sarcoma and a mandibular osteoma in two goats. Steinberg H, et al. **J Comp Pathol** 1989 May;100(4):453–57
Canine osteosarcoma. Treatment by amputation versus amputation and adjuvant chemotherapy using doxorubicin and cisplatin. Mauldin GN, et al. **J Vet Intern Med** 1988 Oct–Dec;2(4):177–80
Retroviral particles in radionuclide-induced murine osteosarcomas: mouse strain-related differences. Marquart KH. **Lab Anim Sci** 1989 Mar;39(2):127–31
Multilobular osteosarcoma of the mandible and orbit in a dog. McCalla TL, et al. **Vet Pathol** 1989 Jan;26(1):92–4
Osteosarcoma in the maxilla of a brown bear (Ursus arctos). Momotani E, et al. **Vet Pathol** 1988 Nov;25(6):527–9
Osteosarcoma at the site of a cortical bone allograft in a dog. Vasseur PB, et al. **Vet Surg** 1987 Jan–Feb;16(1):70–4
[Osteosarcoma of the distal femur, combined with multiple bone infarcts: the case of a 10-year-old poodle] Häni H, et al. **Tierarztl Prax** 1988;16(3):303–6 (Eng. Abstr.) (Ger)

OSTEOSCLEROSIS

Connective tissue nevus and osteopoikilosis in the hand: the Buschke-Ollendorff syndrome. Kobus RJ, et al. **J Hand Surg [Am]** 1989 May;14(3):535–8

CHEMICALLY INDUCED

Bone and joint pathology in fluoride-exposed workers. Czerwinski E, et al. **Arch Environ Health** 1988 Sep–Oct; 43(5):340–3
Hexachlorobenzene-induced hyperparathyroidism and osteosclerosis in rats. Andrews JE, et al. **Fundam Appl Toxicol** 1989 Feb;12(2):242–51
[Skeletal fluorosis following uncontrolled use of sodium fluoride] Kästner P, et al. **Z Arztl Fortbild (Jena)** 1988; 82(10):455–9 (Ger)
[Changed manifestation of fluorosis as an occupational disease within the past 15 years] Runge H. **Z Gesamte Hyg** 1988 Jul;34(7):396–8 (Eng. Abstr.) (Ger)
[Regression of skeletal fluorosis following termination of non-occupationally-induced exposure] Schmidt CW, et al. **Z Gesamte Inn Med** 1989 Apr 1;44(7):221–3 (Eng. Abstr.) (Ger)
[Fluorosis in a postmenopausal woman] Helleskov Hansen NP, et al. **Tidsskr Nor Laegeforen** 1988 Nov 10; 108(31):2846–7 (Eng. Abstr.) (Nor)

COMPLICATIONS

[Rhinoliquorrhea in a case of dysosteosclerosis with sclerosis of the aqueduct of Sylvius] Pascual-Castroviejo I, et al. **An Esp Pediatr** 1989 May;30(5):419–21 (10 ref.) (Spa)

DIAGNOSIS

[Iconography of Buschke Ollendorff syndrome: x ray computed tomography and nuclear magnetic resonance of osteopoikilosis] Dahan S, et al. **Ann Dermatol Venereol** 1989;116(3):225–30 (Eng. Abstr.) (Fre)
[Magnetic resonance tomographic results in bone changes associated with sclerosis] Holland BR, et al. **ROFO** 1988 Nov;149(5):513–21 (Eng. Abstr.) (Ger)
[Osteopoikilosis in magnetic resonance tomography (case report)] Wicke K, et al. **Wien Med Wochenschr** 1989 Mar 15;139(5):95–7 (Eng. Abstr.) (Ger)

ENZYMOLOGY

Evidence for an osteoblast-activating factor in a patient with peripheral T-cell lymphoma and osteosclerosis. Hüfner M, et al. **Klin Wochenschr** 1989 Apr 3;67(7):402–7

ETIOLOGY

Acute monoblastic leukemia with osteosclerosis and extensive myelofibrosis. Janin A, et al. **Am J Pediatr Hematol Oncol** 1988 Winter;10(4):319–22
Endemic fluorosis with spinal cord compression. A case report and review. Fisher RL, et al. **Arch Intern Med** 1989 Mar;149(3):697–700
Osteosclerosis of the phalanges in Werner syndrome. Goto M, et al. **Radiology** 1989 Sep;172(3):841–3
History of pain in the ankles, lower legs, arms, hands, head and face. Case report. Tien RD, et al. **Skeletal Radiol** 1988; 17(4):281–4

GENETICS

Osteomesopycnosis. A new case. Schmidt H, et al. **Pediatr Radiol** 1989;19(6-7):489–92
Osteomesopyknosis. Report of two new cases. Delcambre B, et al. **Skeletal Radiol** 1989;18(1):21–4

PATHOLOGY

Osteosclerotic myeloma with polyneuropathy and hypocalcemia. Ludescher C, et al. **Blut** 1989 Apr; 58(4):207–10 (22 ref.)
Intramedullary osteosclerosis. A report of the clinicopathologic features of five cases. Abdul-Karim FW, et al. **Orthopedics** 1988 Dec;11(12):1667–75

PHYSIOPATHOLOGY

Bone resorption in osteosclerotic mice is reduced in vitro. Reitter JN, et al. **Life Sci** 1989;45(3):263–6

RADIOGRAPHY

Skeletal manifestations of idiopathic bone sclerosis. Carter BC, et al. **Australas Radiol** 1988 May;32(2):242–6
Osteomesopyknosis: benign axial osteosclerosis. Griffith TM, et al. **Br J Radiol** 1988 Oct;61(730):951–3
Radiology clinic. Generalized osteosclerosis in an 83-year-old man with hip pain. Porter D, et al. **Indiana Med** 1988 Nov;81(11):953–4
Proximal tibial sclerotic reaction. Herring JA, et al. **J Pediatr Orthop** 1988 Nov–Dec;8(6):721–4
Localized cortical bone sclerosis and intramedullar linear sclerosis in neurofibromatosis. Kuur E, et al. **Rontgenblatter** 1988 Aug;41(8):329–31
Inflammatory metachronous hyperostosis of the clavicle and femur in children. Report of two cases, one with long-term follow-up. Eftekhari F, et al. **Skeletal Radiol** 1989; 18(1):9–14
["Cancellous nodules" of the skeleton. Osteopoikilosis: a radiological curiosity. Apropos of a familial case] Coillard C, et al. **Ann Radiol (Paris)** 1988;31(4):258–60 (Eng. Abstr.) (Fre)
[Punctate osteosclerosis of the tibial shaft. Campanacci's osteofibrous bone dysplasia of the left tibia] Adler CP, et al. **Radiologe** 1988 Dec;28(12):591–2 (Ger)
[Roentgen morphology of the eburnated vertebral body—diagnostic and differential diagnostic problems] Krug B, et al. **Rontgenblatter** 1988 Aug;41(8):348–54 (Eng. Abstr.) (Ger)
[Roentgenologic diagnosis of bone lesions in divers using densitometry] Khachkuruzov SG, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):31–4 (Eng. Abstr.) (Rus)

RADIONUCLIDE IMAGING

Bone imaging as an aid for the diagnosis of osteopoikilosis. Tong EC, et al. **Clin Nucl Med** 1988 Nov;13(11):816–9

VETERINARY

Osteosclerosis in a skunk with renal fibrous osteodystrophy. Heard DJ, et al. **J Am Vet Med Assoc** 1986 Nov 1; 189(9):1162–3

OSTEOSCLEROSIS FRAGILIS see **OSTEOPETROSIS**

OSTEOSYNTHESIS, FRACTURE see **FRACTURE FIXATION, INTERNAL**

OSTEOSYNTHESIS, FRACTURE, INTRAMEDULLARY see **FRACTURE FIXATION, INTRAMEDULLARY**

OSTEOTOMY

Indomethacin and bone remodeling. Effect on cortical bone after osteotomy in rabbits. Keller J, et al. **Acta Orthop Scand** 1989 Feb;60(1):119–21
Decreased abduction strength after Charnley hip replacement without trochanteric osteotomy. Obrant KJ, et al. **Acta Orthop Scand** 1989 Jun;60(3):305–7
An American Board of Orthodontics case report. Surgical treatment of adult Class II, division 2 malocclusion. Hinkle FG. **Am J Orthod Dentofacial Orthop** 1989 Mar; 95(3):185–91
Integumental profile changes after surgical orthodontic correction of bimaxillary dentoalveolar protrusion in black patients. O'Reilly MT. **Am J Orthod Dentofacial Orthop** 1989 Sep;96(3):242–8
Relationships of changes in craniofacial morphology, head posture, and nasopharyngeal airway size following mandibular osteotomy. Wenzel A, et al. **Am J Orthod Dentofacial Orthop** 1989 Aug;96(2):138–43
Isoflurane-induced hypotension in orthognathic surgery. Lessard MR, et al. **Anesth Analg** 1989 Sep;69(3):379–83
Effect of high tibial osteotomy on upper tibial venous drainage: study by intraosseous phlebography in primary osteoarthritis of knee joint. Dey A, et al. **Ann Rheum Dis** 1989 Mar;48(3):188–93

The study of Maquet dome high tibial osteotomy. Arthroscopic-assisted analysis. Hsu RW. **Clin Orthop** 1989 Jun;(243):280-5

Gait analysis in patients with gonarthrosis treated by high tibial osteotomy. Ivarsson I, et al. **Clin Orthop** 1989 Feb;(239):185-90

Evaluation of patients for high tibial osteotomy. Keene JS, et al. **Clin Orthop** 1989 Jun;(243):157-65

The effects of motion on the healing of cancellous bone. Schatzker J, et al. **Clin Orthop** 1989 Aug;(245):282-7

Maxillo-mandibular surgery for obstructive sleep apnoea. Guilleminault C, et al. **Eur Respir J** 1989 Jul;2(7):604-12

Metatarsal osteotomy for primary metatarsalgia: radiographic and pedobarographic study. Dreeben SM, et al. **Foot Ankle** 1989 Apr;9(5):214-8

Dorsiflexion osteotomy in Freiberg's disease. Kinnard P, et al. **Foot Ankle** 1989 Apr;9(5):226-31

Mathematical analysis of first metatarsal osteotomies. Kummer FJ. **Foot Ankle** 1989 Jun;9(6):281-9

Osteotomy of the first metatarsal base for metatarsus primus varus. Limbird TJ, et al. **Foot Ankle** 1989 Feb;9(4):158-62

Excision of posterolateral talar dome lesions through a medial transmalleolar approach. Ove PN, et al. **Foot Ankle** 1989 Feb;9(4):171-5

Distal oblique osteotomy for intractable plantar keratosis of the middle three metatarsals. Pedowitz WJ. **Foot Ankle** 1988 Aug;9(1):7-9

Treatment of metatarsalgia by sliding distal metatarsal osteotomy. Winson IG, et al. **Foot Ankle** 1988 Aug;9(1):2-6

Treatment of unstable trochanteric fractures with Dimon-Hughston osteotomy displacement fixation and acrylic cement. Chow SP, et al. **Injury** 1987 Mar;18(2):123-7

Treatment of unstable intertrochanteric fractures with Sarmiento valgus osteotomy and acrylic cement augmentation. Pun WK, et al. **Injury** 1987 Nov;18(6):384-9

Congenital hip dysplasia treated by the Salter osteotomy. Long-term review of 18 patients. Rinonapoli E, et al. **Ital J Orthop Traumatol** 1987 Dec;13(4):437-50

High tibial osteotomy in the treatment of arthritic varus knee. A medium term (small) review of 61 cases. Rinonapoli E, et al. **Ital J Orthop Traumatol** 1988 Sep;14(3):283-92

Domed high tibial osteotomy: the long-term results in tibiofemoral arthritis with and without malalignment of the extensor apparatus. Soccetti A, et al. **Ital J Orthop Traumatol** 1987 Dec;13(4):463-75

J-wire technique for fixation of the Akin osteotomy. Murphy JS, et al. **J Am Podiatr Med Assoc** 1989 Jun;79(6):291-3

Hip arthroplasty after biplanar femoral osteotomy. DeCoster TA, et al. **J Arthroplasty** 1989;4(1):79-86

Effect of the position of the greater trochanter on the rate of union after trochanteric osteotomy for total hip arthroplasty. Gottschalk FA, et al. **J Arthroplasty** 1988;3(3):235-40

Coefficient of static friction at pig femoral osteotomies: the role of anatomic reduction and compression on the value of the coefficient. Tillett ED, et al. **J Biomed Eng** 1989 Mar;11(2):107-10

Proximal Tibial Osteotomy in Patients Who Are Fifty Years Old or Less. A Long-term Follow-Up Study [letter] **J Bone Joint Surg [Am]** 1989 Jul;71(6):951-2

Observations on patellar height after proximal tibial osteotomy. Scuderi GR, et al. **J Bone Joint Surg [Am]** 1989 Feb;71(2):245-8

Upper tibial osteotomy for secondary osteoarthritis of the knee. Morrey BF. **J Bone Joint Surg [Br]** 1989 Aug;71(4):554-9

The surgical approach to orbital space-occupying lesions. Mohr C, et al. **J Craniomaxillofac Surg** 1989 May;17(4):149-54

Correction of deep overbite. A modified splint permitting rapid extrusion of posterior teeth. Tuinzing DB, et al. **J Craniomaxillofac Surg** 1989 May;17(4):172-4

Oblique osteotomy of the fifth metatarsal: a five year review. Catanzariti AR, et al. **J Foot Surg** 1988 Jul-Aug;27(4):316-20

Distal metatarsal osteotomy for bunionette deformity. Konradsen L, et al. **J Foot Surg** 1988 Nov-Dec;27(6):493-6

Orientation of the first metatarsal base wedge osteotomy: perpendicular to the metatarsal versus weight-bearing surface. Palladino SJ. **J Foot Surg** 1988 Jul-Aug;27(4):294-8

Trapezoidal osteotomy of the distal radius for unacceptable articular angulation after Colles' fracture. Watson HK, et al. **J Hand Surg [Am]** 1988 Nov;13(6):837-43

A lateral cephalometric analysis of nasal morphology following Le Fort I osteotomy applying photometric analysis techniques. Gassmann CJ, et al. **J Oral Maxillofac Surg** 1989 Sep;47(9):926-30

Correction of facial-skeletal deformities in two patients with facio-scapulo-humeral muscular dystrophy. Goldberg MH, et al. **J Oral Maxillofac Surg** 1989 Sep;47(9):996-9

Condylar displacement and temporomandibular joint dysfunction following bilateral sagittal split osteotomy and rigid fixation. Hackney FL, et al. **J Oral Maxillofac Surg** 1989 Mar;47(3):223-7

The effect of orthognathic surgery on occlusal force. Proffit WR, et al. **J Oral Maxillofac Surg** 1989 May;47(5):457-63

The effect of external fixation stiffness on early healing of transverse osteotomies. Gilbert JA, et al. **J Orthop Res** 1989;7(3):389-97

Effects of a scaphoid waist osteotomy on carpal kinematics. Smith DK, et al. **J Orthop Res** 1989;7(4):590-8

Mechanical effects of intramedullary acrylic cement on osteotomy healing in rats. Reikerås O, et al. **J Orthop Trauma** 1988;2(3):218-21

Mechanical effects of intramedullary reaming in pinned osteotomies in rats. Reikerås O, et al. **J Orthop Trauma** 1989;3(1):53-6

High tibial osteotomy with fixation by a blade plate for medial compartment osteoarthritis of the knee. Koshino T, et al. **Orthop Clin North Am** 1989 Apr;20(2):227-43

Migration of fractured greater trochanteric osteotomy wire with resultant sciatica. A report of two cases. Glover MG, et al. **Orthopedics** 1989 May;12(5):743-4

Correlation of patient's age, grade of arthrosis and degree of angle deformity correction to clinical results in high tibial osteotomy for gonarthrosis. Jokio PJ, et al. **Rev Chir Orthop** 1988;74 Suppl 2:327-8

Correction of kyphotic deformity in ankylosing spondylitis using multiple spinal osteotomy and Zielke's VDS instruments. Chen PQ. **Taiwan I Hsueh Hui Tsa Chih** 1988 Jul;87(7):692-9

[Treatment of lax arthrotic genu valgum using Debeyre's unicondylar osteotomy. A radioclinical study of 55 knees operated on more than 5 years ago] Goutallier D, et al. **Rev Chir Orthop** 1988;74(8):753-63 (Eng. Abstr.) **(Fre)**

[Results of treatment of hallux valgus by the modified McBride technic with or without complementary phalangeal or metatarsal osteotomy] Groulier P, et al. **Rev Chir Orthop** 1988;74(6):539-48 (Eng. Abstr.) **(Fre)**

[Triple osteotomies of the pelvis in children] Monod A, et al. **Rev Chir Orthop** 1988;74 Suppl 2:111-2 **(Fre)**

[5-to-10-year results of Chiari's osteotomy in developing coxarthrosis] Sterkers Y, et al. **Rev Chir Orthop** 1988;74 Suppl 2:210-2 **(Fre)**

[Osteotomy of the 2 bones of the forearm in children] Verneret C, et al. **Rev Chir Orthop** 1988;74 Suppl 2:336-9 **(Fre)**

[The Helal procedure in the treatment of static metatarsalgia due to flatfoot] Vichard P, et al. **Rev Chir Orthop** 1988;74 Suppl 2:227-9 **(Fre)**

[The healing of osteotomies of the lower jaw and the adaptation of the masticatory muscles after miniplate osteosynthesis in rabbits. I. Radiologic and histological evaluation of the lower jaw] Härtel J, et al. **Anat Anz** 1988;167(1):29-34 (Eng. Abstr.) **(Ger)**

[Therapy of bone and joint changes in renal osteodystrophy in adulthood] Zichner L. **Orthopade** 1988 Sep;17(5):440-6 (Eng. Abstr.) **(Ger)**

[Discussion of the contribution "Patellafemoral pressure and measurements of the contact surface in Jägerhut patella—experimental studies of sagittal osteotomy of the patella" (letter)] Weh L. **Z Orthop** 1988 Sep-Oct;126(5):596-7 **(Ger)**

[Torsion abnormalities of the tibia in the adult] Padovani G, et al. **Chir Organi Mov** 1988 Jan-Mar;73(1):21-6 (Eng. Abstr.) **(Ita)**

[Study of local capillary circulation using labeled albumin microspheres during osteotomy of the maxilla (experimental study)] Tairov UT, et al. **Med Radiol (Mosk)** 1989 Mar;34(3):65-9 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Maxillomandibular growth 2 years after mandibular advancement surgery with and without suprahyoid myotomy in juvenile Macaca mulatta. Carlson DS, et al. **Am J Orthod Dentofacial Orthop** 1988 Dec;94(6):491-502

Degenerative changes in dog articular cartilage induced by a unilateral tibial valgus osteotomy. Johnson RG, et al. **Exp Pathol** 1988;33(3):145-64

Pes planus after tibial osteotomy. McLaren CA, et al. **Foot Ankle** 1989 Jun;9(6):300-3

Osteotomy of the first metatarsal [letter] Mann RA. **Foot Ankle** 1989 Aug;10(1):51

Traumatic neuroma following sagittal mandibular osteotomy. Chau MN, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):95-8 (19 ref.)

The anti-inflammatory effect of organo-heparinoid cream after bilateral mandibular osteotomies. Sindet-Pedersen S, et al. **Int J Oral Maxillofac Surg** 1989 Feb;18(1):35-8

High-resolution ultrasound in the preoperative and postoperative assessment of distal metatarsal osteotomy. Preliminary report. Graf PM, et al. **Invest Radiol** 1988 Nov;23(11):827-31

Incidence of nasolacrimal injury and turbinectomy—associated atrophic rhinitis with Le Fort I osteotomies. Demas PN, et al. **J Craniomaxillofac Surg** 1989 Apr;17(3):116-8

Pulp sensibility and pulp necrosis after Le Fort I osteotomy. Vedtofte P, et al. **J Craniomaxillofac Surg** 1989 May;17(4):167-71

Serious circulatory disturbance after Le Fort I osteotomy. A case report. Yeo JF, et al. **J Craniomaxillofac Surg** 1989 Jul;17(5):222-5

Impairment of the inferior alveolar nerve after sagittal split osteotomy. Yoshida T, et al. **J Craniomaxillofac Surg** 1989 Aug;17(6):271-7 (23 ref.)

Ulnar impingement syndrome after Darrach procedure: treatment by advancement lengthening osteotomy of the ulna. Watson HK, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):302-6

Migration of Kirschner wires used for rigid noncompressive fixation of the mandibular sagittal split osteotomy: report of four cases. Lansley CV, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):194-7

Complications encountered during LeFort I osteotomy in a patient with mandibulofacial dysostosis. Reaume CE, et al. **J Oral Maxillofac Surg** 1988 Nov;46(11):1003-4

Potential complications of total knee replacement following tibial osteotomy. Cameron HU, et al. **Orthop Rev** 1988 Jan;17(1):39-43

Healing of experimental midline osteotomies in the rat palate. Kahnberg KE. **Swed Dent J** 1988;12(6):227-32

[Errors and complications in the surgical treatment of 761 dysplastic hip joints by the Salter method] Dugiello H, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(2):154-6 (Eng. Abstr.) **(Pol)**

[Evaluation of the results of the treatment of congenital hip dislocation by open reposition and torsion-valgus corrective osteotomy] Vizkelety T, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(2):157-9 (Eng. Abstr.) **(Pol)**

INSTRUMENTATION

The Broadgreen osteotomy splint. Bainton R, et al. **Br J Oral Maxillofac Surg** 1989 Feb;27(1):80-2

Difficult tracheal extubation. Lang S, et al. **Can J Anaesth** 1989 May;36(3 Pt 1):340-2

Proximal tibial osteotomy. A new fixation device. Miniaci A, et al. **Clin Orthop** 1989 Sep;(246):250-9

T-Screw. A new bone fixation device. Lichty TK, et al. **J Am Podiatr Med Assoc** 1989 Feb;79(2):65-73 (43 ref.)

Akin osteotomy using the 3M Shapiro Staplizer. Lerman BI. **J Foot Surg** 1989 Jan-Feb;28(1):64-7

Adaptation of the suprahyoid muscle complex to large mandibular advancements. Reynolds ST, et al. **J Oral Maxillofac Surg** 1988 Dec;46(12):1077-85

Inability to deploy the distal fixator fin of a Brooker-Wills nail. Webb LX. **J Orthop Trauma** 1988;2(3):262-3

Tips of the trade #15. Removal of hardware prior to total hip replacement. Cameron HU. **Orthop Rev** 1989 Aug;18(8):918-20

[Intertrochanteric osteotomy of the femur in children under 5 years of age. A new osteosynthesis plate] Jacquemier M, et al. **Chir Pediatr** 1989;30(2):121-4 (Eng. Abstr.) **(Fre)**

[Statistical evaluation of 4,141 osteosyntheses with autocompression plates] Schwarz B, et al. **Aktuel Traumatol** 1989 Feb;19(1):22-7 (Eng. Abstr.) **(Ger)**

[Significance of the micro-chisel osteotomy for esthetics in functional rhinoplasty] Fritzemeier U. **Fortschr Kiefer Gesichtschir** 1989;34:50-2 **(Ger)**

[Corrective osteotomy of the shaft of the femur and tibia with an interlocking nail] Friedebold G, et al. **Z Orthop** 1988 May-Jun;126(3):326-33 (Eng. Abstr.) **(Ger)**

METHODS

Osteotomy length and postoperative stability in vertical subcondylar ramus osteotomy. Tornes K. **Acta Odontol Scand** 1989 Apr;47(2):81-8

Interphalangeal asymmetrical V osteotomies. A biomechanical study. Capasso G, et al. **Acta Orthop Belg** 1988;54(4):447-51

Postsurgical maxillary movement: a comparison study of bone plate and screw versus wire osseous fixation. Larsen AJ, et al. **Am J Orthod Dentofacial Orthop** 1989 Apr;95(4):334-43

An American Board of Orthodontics case report. Snyder DE. **Am J Orthod Dentofacial Orthop** 1989 Feb;95(2):91-5

Simultaneous superior repositioning of the maxilla and mandibular advancement. A report on stability. Turvey TA, et al. **Am J Orthod Dentofacial Orthop** 1988 Nov;94(5):372-83

Re: A retrospective study of relapse in rigidly fixated sagittal split/osteotomies: contributing factors [letter] Woods MG. **Am J Orthod Dentofacial Orthop** 1988 Nov;94(5):446-7

Management of maxillary hypoplasia by Le Fort I osteotomy of the maxilla. Bromige MR. **Ann Acad Med Singapore** 1988 Jul;17(3):407-14

Osteotomy of the metacarpals and phalanges stabilized by AO plates and screws. Lucas GL, et al. **Ann Chir Main** 1989;8(1):30-8 **(Eng, Fre)**

Results of optic nerve sheath fenestration for pseudotumor cerebri. The lateral orbitotomy approach. Corbett JJ, et al. **Arch Ophthalmol** 1988 Oct;106(10):1391-7

Optic nerve sheath fenestration in pseudotumor cerebri. A lateral orbitotomy approach. Tse DT, et al. **Arch Ophthalmol** 1988 Oct;106(10):1458-62 (40 ref.)

Lateral orbitotomy without removal of the lateral orbital rim. Wirtschafter JD, et al. **Arch Ophthalmol** 1988 Oct;106(10):1463-8

Intertrochanteric osteotomy for the treatment of coxarthrosis. Hackenbroch MH. **Arch Orthop Trauma Surg** 1989;108(3):125-31 (35 ref.)

Biomechanical analysis of hip function after Chiari pelvic osteotomy. Kotžinek K, et al. **Arch Orthop Trauma Surg** 1989;108(2):112-5

Surgical repair of rabbit tibia osteotomy using isobutyl-2-cyanoacrylate. Papatheofanis FJ. **Arch Orthop Trauma Surg** 1989;108(4):236-7

Corrective osteotomy of the distal radius after fracture to

restore the function of wrist joint, forearm, and hand. Roesgen M, et al. **Arch Orthop Trauma Surg** 1988; 107(5):301–8

Acute-on-chronic bilateral reversed slipped capital femoral epiphysis managed by Imhauser-Weber osteotomy. Scher MA, et al. **Arch Orthop Trauma Surg** 1989;108(5):336–8

Open mandibular condylotomy (osteotomy) with precision scaphoid staple osteosynthesis and meniscopexy. A description of the operation. Norman JE, et al. **Aust Dent J** 1988 Jun;33(3):212–7

A retrospective study of the stability of midface osteotomies in cleft lip and palate patients. Adlam DM, et al. **Br J Oral Maxillofac Surg** 1989 Aug;27(4):265–76

The intramandibular sliding myo-osseous graft for delayed reconstruction of selected mandibular defects. A preliminary report. Browne GA, et al. **Br J Oral Maxillofac Surg** 1988 Dec;26(6):472–8

Osteotomy at the Le Fort I level. A versatile procedure. Wood GD, et al. **Br J Oral Maxillofac Surg** 1989 Feb; 27(1):33–8

The effects of Le Fort I osteotomy with maxillary movement on articulation, resonance, and velopharyngeal function. Kummer AW, et al. **Cleft Palate J** 1989 Jul;26(3):193–9; discussion 199–200

The callotasis method of limb lengthening. Aldegheri R, et al. **Clin Orthop** 1989 Apr;(241):137–45

Electrical stimulation of human femoral intertrochanteric osteotomies. Double-blind study. Borsalino G, et al. **Clin Orthop** 1988 Dec;(237):256–63

A new osteotomy for cubitus varus. DeRosa GP, et al. **Clin Orthop** 1988 Nov;(236):160–5 (16 ref.)

Wedge osteotomy of the lower end of the radius in the treatment of painful pseudarthrosis of the carpal scaphoid bone. Giannikas AC, et al. **Clin Orthop** 1989 Sep; (246):16–21

Correction of complicated extremity deformities by external fixation. Grill F. **Clin Orthop** 1989 Apr;(241):166–76

Correction of metatarsus primus varus with the Chevron metatarsal osteotomy. An analysis of corrective factors. Harper MC. **Clin Orthop** 1989 Jun;(243):180–3

Medial displacement osteotomy for unstable intertrochanteric fractures. Twenty years later. Hopkins CT, et al. **Clin Orthop** 1989 Aug;(245):165–8

Medial displacement metatarsal osteotomy for treatment of painful bunionette. Kitaoka HB, et al. **Clin Orthop** 1989 Jun;(243):172–9

High tibial osteotomy compared with high tibial and Maquet procedures in medial and patellofemoral compartment osteoarthritis. Nguyen C, et al. **Clin Orthop** 1989 Aug; (245):179–87

Principles and results of corrective lower limb osteotomies for patients with vitamin D-resistant hypophosphatemic rickets. Rubinovitch M, et al. **Clin Orthop** 1988 Dec; (237):264–70

Wilson's osteotomy for the treatment of hallux valgus. Schemitsch E, et al. **Clin Orthop** 1989 Mar;(240):221–5

Rigid fixation and osteotomy design in frontal orbital advancement osteotomies. Del Campo AF. **Clin Plast Surg** 1989 Jan;16(1):205–11

Rigid fixation: variations in osteotomy design and technique. Dufresne CR. **Clin Plast Surg** 1989 Jan;16(1):165–75 (43 ref.)

Rigid skeletal fixation in maxillary osteotomies. Intraoperative control of condylar position. Luhr HG, et al. **Clin Plast Surg** 1989 Jan;16(1):157–63

The use of the Wurtzberg system to facilitate fixation in facial osteotomies. Marsh JL. **Clin Plast Surg** 1989 Jan; 16(1):49–60

Fixation of metatarsal head osteotomies: when, why, and how? Cangiano SA. **Clin Podiatr Med Surg** 1989 Jan; 6(1):71–82 (25 ref.)

New concepts in metatarsal head osteotomies: reverse buckling techniques. Cavaliere RG. **Clin Podiatr Med Surg** 1989 Jan;6(1):161–78 (9 ref.)

Plantarflexory base wedge osteotomy in the treatment of functional and structural metatarsus primus elevatus. Davies GF. **Clin Podiatr Med Surg** 1989 Jan;6(1):93–102 (17 ref.)

The role of the akin osteotomy in the surgical management of hallux abducto valgus. Springer KR. **Clin Podiatr Med Surg** 1989 Jan;6(1):115–31 (29 ref.)

Shaft osteotomies in hallux valgus reduction. Vogler HW. **Clin Podiatr Med Surg** 1989 Jan;6(1):47–69 (31 ref.)

Proximal closing wedge osteotomy and adductor tenotomy for treatment of hallux valgus. Resch S, et al. **Foot Ankle** 1989 Jun;9(6):272–80

Treatment of hallux valgus in adolescents by the chevron osteotomy. Zimmer TJ, et al. **Foot Ankle** 1989 Feb; 9(4):190–3

The role of osteotomy in the treatment of slipped capital femoral epiphysis. Crawford AH. **Instr Course Lect** 1989; 38:273–9 (47 ref.)

Simultaneous correction of maxillary and mandibular dentofacial deformities without the use of postoperative intermaxillary fixation. A clinical and cephalometric study. Krekmanov L, et al. **Int J Oral Maxillofac Surg** 1988 Dec; 17(6):363–70

Articular eminectomy for long-standing luxation of the mandible. Report of 2 cases. Mizuno A, et al. **Int J Oral Maxillofac Surg** 1988 Oct;17(5):303–6

Radiographic changes of the temporomandibular joint after oblique sliding osteotomy of the mandibular rami. Petersson A, et al. **Int J Oral Maxillofac Surg** 1989 Feb;18(1):27–31

Skeletal stability following sagittal split osteotomy using monocortical miniplate internal fixation. Rubens BC, et al. **Int J Oral Maxillofac Surg** 1988 Dec;17(6):371–6

Stability after vertical subcondylar ramus osteotomy for correction of mandibular prognathism. Tornes K, et al. **Int J Oral Maxillofac Surg** 1988 Aug;17(4):242–8

Simultaneous rhinoplasty procedures in orthognathic surgery. Waite PD, et al. **Int J Oral Maxillofac Surg** 1988 Oct;17(5):298–302

Rotational acetabular osteotomy in congenital dysplasia of the hip. Azuma H, et al. **Int Orthop** 1989;13(1):21–8

Limb lengthening in achondroplasia by Ilizarov's method. Cattaneo R, et al. **Int Orthop** 1988;12(3):173–9

Clavicular osteotomy in shoulder arthroplasty. Redfern TR, et al. **Int Orthop** 1989;13(1):61–3

Bilateral transverse iliac osteotomy in the correction of neonatal bladder extrophies. Gökçora IH, et al. **Int Surg** 1989 Apr-Jun;74(2):123–5

Cervical osteotomy by the Simmons method in the treatment of cervical kyphosis due to ankylosing spondylitis. Case report. Savini R, et al. **Ital J Orthop Traumatol** 1988 Sep; 14(3):377–83

Two Reverdin-Laird osteotomy modifications for correction of hallux abducto valgus. Laird PO, et al. **J Am Podiatr Med Assoc** 1988 Aug;78(8):403–5

Triplanar closing base wedge osteotomy for tailor's bunion. Shrum DG, et al. **J Am Podiatr Med Assoc** 1989 Mar; 79(3):124–7

Subtrochanteric osteotomy with intramedullary fixation for arthroplasty of the dysplastic hip. A case report. Sponseller PD, et al. **J Arthroplasty** 1988;3(4):351–4

Radial osteotomy and Bowers arthroplasty for malunited fractures of the distal end of the radius. Fernandez DL. **J Bone Joint Surg [Am]** 1988 Dec;70(10):1538–51

Calcaneal osteotomy and tendon sling for the management of calcaneus deformity. Pandey AK, et al. **J Bone Joint Surg [Am]** 1989 Sep;71(8):1192–8

Anterior approach to the knee with osteotomy of the tibial tubercle for bicondylar tibial fractures [letter] Schatzker J. **J Bone Joint Surg [Am]** 1988 Dec;70(10):1575–6

Total hip replacement after medial-displacement osteotomy of the proximal part of the femur. Søballe K, et al. **J Bone Joint Surg [Am]** 1989 Jun;71(5):692–7

Hohmann-Thomasen metatarsal osteotomy for tailor's bunion (bunionette). Steinke MS, et al. **J Bone Joint Surg [Am]** 1989 Mar;71(3):423–6

Osteotomy of the tibial tubercle during total knee replacement. A report of twenty-six cases. Wolff AM, et al. **J Bone Joint Surg [Am]** 1989 Jul;71(6):848–52

Lower femoral osteotomy in cerebral palsy: brief report. Cooke PH, et al. **J Bone Joint Surg [Br]** 1989 Jan; 71(1):146–7

Sliding osteotomy for tailor's bunion: brief report. Hansson G. **J Bone Joint Surg [Br]** 1989 Mar;71(2):324

Acromioplasty for impingement with an intact rotator cuff. Hawkins RJ, et al. **J Bone Joint Surg [Br]** 1988 Nov; 70(5):795–7

Re-attachment of the un-united trochanter in Charnley low friction arthroplasty. Hodgkinson JP, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):523–5

Intertrochanteric osteotomy for avascular necrosis of the femoral head. Jacobs MA, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):200–4

Pentalateral osteotomy for cubitus varus. Clinical experiences of a new technique. Laupattarakasem W, et al. **J Bone Joint Surg [Br]** 1989 Aug;71(4):667–70

Osteonecrosis of the hip treated by intertrochanteric osteotomy. A four- to 15-year follow-up. Maistrelli G, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):761–6

On the feasibility of intraoral maxillo-malar osteotomy. Brusati R, et al. **J Craniomaxillofac Surg** 1989 Apr; 17(3):110–5

Reconstruction of the zygomatic area. A comparison between osteotomy and onlay techniques. Freihofer PM, et al. **J Craniomaxillofac Surg** 1989 Aug;17(6):243–8

Preserving the pterygoid plates in posterior repositioning of the LeFort I osteotomy. Hai HK, et al. **J Craniomaxillofac Surg** 1989 Jul;17(5):219–21

Paranasal incision as an access for maxillary osteotomy. Hollmann K, et al. **J Craniomaxillofac Surg** 1988 Nov; 16(8):359–61

Le Fort I maxillary osteotomies in cleft palate cases. Surgical changes and stability. Houston WJ, et al. **J Craniomaxillofac Surg** 1989 Jan;17(1):9–15 (10 ref.)

A modification of the sagittal splitting technique ensuring that the osteotomy split lies immediately medial to the lateral cortex. Kitajima T, et al. **J Craniomaxillofac Surg** 1989 Feb;17(2):53–7

Variations of a standard approach for correction of the bird-face deformity. Obwegeser HL. **J Craniomaxillofac Surg** 1988 Aug;16(6):247–65

Advantages of an additional subcranial approach in the correction of craniofacial deformities. Raveh J, et al. **J Craniomaxillofac Surg** 1988 Nov;16(8):350–8

Condylar displacement after oblique sliding osteotomy of the mandibular rami. A stereometric and plain radiographic study. Rosenquist B, et al. **J Craniomaxillofac Surg** 1988 Oct;16(7):301–7

Geometric austin osteotomy. Guerin G. **J Foot Surg** 1988 Nov-Dec;27(6):528–9

Modifications of the distal metaphyseal osteotomy to better facilitate use of the Herbert bone screw for fixation. Markus TA, et al. **J Foot Surg** 1988 Sep-Oct;27(5):447–52

Haglund's deformity and the Keck and Kelly osteotomy: a retrospective analysis. Miller AE, et al. **J Foot Surg** 1989 Jan-Feb;28(1):23–9 (13 ref.)

Dwyer osteotomy for treatment of calcaneal varus. Robinson DS, et al. **J Foot Surg** 1988 Nov-Dec;27(6):541–4

Metatarsal osteotomy using internal fixation with compression screws. Turan I, et al. **J Foot Surg** 1989 Mar-Apr;28(2):116–9

Ray transposition by intercarpal osteotomy after loss of the fourth digit. de Boer A, et al. **J Hand Surg [Am]** 1989 Mar; 14(2 Pt 2):379–81

Effect of Le Fort III osteotomy on mandibular growth in patients with Crouzon and Apert syndromes. Bu BH, et al. **J Oral Maxillofac Surg** 1989 Jul;47(7):666–71

The skeletal stability of Le Fort I downfracture osteotomies with rigid fixation. Carpenter CW, et al. **J Oral Maxillofac Surg** 1989 Sep;47(9):922–5

Uniaxial pullout evaluation of internal screw fixation. Foley WL, et al. **J Oral Maxillofac Surg** 1989 Mar;47(3):277–80

Internal screw fixation: comparison of placement pattern and rigidity. Foley WL, et al. **J Oral Maxillofac Surg** 1989 Jul;47(7):720–3

Factors contributing to relapse in rigidly fixed mandibular setbacks. Franco JE, et al. **J Oral Maxillofac Surg** 1989 May;47(5):451–6

Modification of the interocclusal splint for orthognathic surgery. Fridrich KL, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):96–7

Frontal soft tissue morphology with double V-Y closure following Le Fort I osteotomy. Hackney FL, et al. **J Oral Maxillofac Surg** 1988 Oct;46(10):850–6

Condylar positioning in orthognathic surgery. Hiatt WR, et al. **J Oral Maxillofac Surg** 1988 Dec;46(12):1110–2

Eminectomy and discoplasty for correction of the displaced temporomandibular joint disc. Kerstens HC, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):150–4

Stabilization of the intraoral vertical osteotomy using small bone plates. Kraut RA. **J Oral Maxillofac Surg** 1988 Oct; 46(10):908–10

Stability following combined maxillary and mandibular osteotomies treated with rigid internal fixation. Law JH, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):128–36

Reconstruction of the mandibular condyle using ramus osteotomies: a preliminary report. Markowitz NR, et al. **J Oral Maxillofac Surg** 1989 Apr;47(4):367–77 (82 ref.)

A simplified technique for percutaneous rigid fixation of sagittal ramus osteotomies. Muller JT, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):93–5

Modified sagittal split technique for patients with a high lingula. Nishioka GJ, et al. **J Oral Maxillofac Surg** 1989 Apr;47(4):426–7

Modified reduction genioplasty. Putnam JM, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):203–5

Inferior mandibular osteotomy and hyoid myotomy suspension for obstructive sleep apnea: a review of 55 patients. Riley RW, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):159–64

Stability of simultaneous maxillary intrusion and mandibular advancement: a comparison of rigid and nonrigid fixation techniques. Skoczylas LJ, et al. **J Oral Maxillofac Surg** 1988 Dec;46(12):1056–64

Predictability of upper lip soft tissue changes with maxillary advancement. Stella JP, et al. **J Oral Maxillofac Surg** 1989 Jul;47(7):697–703

Transoral placement of rigid fixation following sagittal ramus split osteotomy. Tulasne JF, et al. **J Oral Maxillofac Surg** 1989 Jun;47(6):651–2

Maxillary stability following downgraft and/or advancement procedures with stabilization using rigid fixation and porous block hydroxyapatite implants. Wardrop RW, et al. **J Oral Maxillofac Surg** 1989 Apr;47(4):336–42

Factors influencing the stability of the sagittal split osteotomy for mandibular advancement. Will LA, et al. **J Oral Maxillofac Surg** 1989 Aug;47(8):813–8

Severe facial trauma after orthognathic surgery with rigid fixation. Wilson GW, et al. **J Oral Maxillofac Surg** 1989 Jun;47(6):640–2

Surgical management of a large, complex mandibular odontoma by unilateral sagittal split osteotomy. Wong GB. **J Oral Maxillofac Surg** 1989 Feb;47(2):179–84

Supramalleolar osteotomy for the treatment of symptomatic tibial malunion. Graehl PM, et al. **J Orthop Trauma** 1987; 1(4):281–92

Le Fort I down-fracture of the maxilla: application to benign antral neoplasm. Armstrong JE, et al. **J Otolaryngol** 1988 Oct;17(6):288–92

Rhinoplastic implications of maxillary osteotomy. Donald PJ. **J Otolaryngol** 1988 Oct;17(6):265–73

Remodeling potential of long bones following angular osteotomies. Abraham E. **J Pediatr Orthop** 1989 Jan-Feb; 9(1):37–43

A comparative study of ambulation-abduction bracing and varus derotation osteotomy in the treatment of severe Legg-Calvé-Perthes disease in children over 6 years of age. Evans IK, et al. **J Pediatr Orthop** 1988 Nov-Dec; 8(6):676–82

Double-elevating osteotomy of tibiae in the treatment of severe cases of Blount's disease. Gregosiewicz A, et al. **J Pediatr Orthop** 1989 Mar-Apr;9(2):178–81

Long-term results of combined operative reduction of the

hip in older children. Klisić P, et al. **J Pediatr Orthop** 1988 Sep–Oct;8(5):532–4
Oblique tibial osteotomy in the correction of tibial deformity in children. Kruse RW, et al. **J Pediatr Orthop** 1989 Jul–Aug;9(4):476–82
The results of surgical treatment for Perthes' disease. Lack W, et al. **J Pediatr Orthop** 1989 Mar–Apr;9(2):197–204
Follow-up study of the subcapital wedge osteotomy for severe chronic slipped capital femoral epiphysis. Nishiyama K, et al. **J Pediatr Orthop** 1989 Jul–Aug;9(4):412–6
Leg lengthening by osteotomy and gradual distraction: an experimental study. Peltonen J, et al. **J Pediatr Orthop** 1988 Sep–Oct;8(5):509–12
Oblique tibial osteotomy for Blount's disease (tibia vara). Rab GT. **J Pediatr Orthop** 1988 Nov–Dec;8(6):715–20
One-stage combined operation of congenital dislocation of the hips in older children. Shih CH, et al. **J Pediatr Orthop** 1988 Sep–Oct;8(5):535–9
Salter innominate osteotomies in congenital dislocation of the hip. Waters P, et al. **J Pediatr Orthop** 1988 Nov–Dec;8(6):650–5
The mandibular swing stabilization of the midline mandibular osteotomy. Cohen JI, et al. **Laryngoscope** 1988 Oct;98(10):1139–42
The Caldwell-Luc procedure: institutional review of 670 cases: 1975–1985. DeFreitas J, et al. **Laryngoscope** 1988 Dec;98(12):1297–300
Effects of exposure time and pulse parameters on CO2 laser osteotomies. Clauser C, et al. **Lasers Surg Med** 1989;9(1):22–9
Mid-infrared erbium:YAG laser ablation of bone: the effect of laser osteotomy on bone healing. Nelson JS, et al. **Lasers Surg Med** 1989;9(4):362–74
Comparative evaluation of screw configuration on the stability of the sagittal split osteotomy. Ardary WC, et al. **Oral Surg Oral Med Oral Pathol** 1989 Aug;68(2):125–9
Osseous repair with Le Fort I osteotomy. Calhoun NR, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr;67(4):365–73
Postoperative changes after bilateral mandibular osteotomies: a computed tomography study. Lund E, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):588–93
Technical improvements in the sagittal split ramus osteotomy. Niederdellmann H, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jan;67(1):25–30
A retrospective study of advancement genioplasty. Park HS, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):481–9 (27 ref.)
Passive rigid fixation of sagittal split osteotomy. Shufford EL, et al. **Oral Surg Oral Med Oral Pathol** 1989 Aug;68(2):150–3
Surgical modification for the correction of chin deformities. Wolford LM, et al. **Oral Surg Oral Med Oral Pathol** 1988 Sep;66(3):279–86
Reapproximation of femoral anatomy in a young hip arthroplasty patient. A case report. Christensen CM, et al. **Orthop Rev** 1989 Feb;18(2):200–2
Proximal tibial osteotomy. Coventry MB. **Orthop Rev** 1988 May;17(5):456–8
Neuropathic ankle in CMT disease [letter] Siegel IM. **Orthop Rev** 1989 Feb;18(2):267
Distal radial osteotomy. McMurtry RY, et al. **Orthopedics** 1989 Jan;12(1):149–55
Management of developmental coxa vara in cleidocranial dysostosis. Richie MF, et al. **Orthopedics** 1989 Jul;12(7):1001–4
Mandibular reconstruction with vascularized iliac crest: a 10-year experience. David DJ, et al. **Plast Reconstr Surg** 1988 Nov;82(5):792–803
Mandibular reconstruction with the titanium hollow screw reconstruction plate (THORP) system: evaluation of 62 cases. Vuillemin T, et al. **Plast Reconstr Surg** 1988 Nov;82(5):804–14
Le Fort II osteotomy in the treatment of maxillonasal dysostosis (Binder's syndrome). Losken HW, et al. **S Afr J Surg** 1988 Sep;26(3):88–9
Evaluation of the role of concave rib osteotomies in the correction of thoracic scoliosis. Mann DC, et al. **Spine** 1989 May;14(5):491–5
Orthognathic surgery without the use of postoperative intermaxillary fixation. A clinical and cephalometric evaluation of surgical correction of mandibular and maxillary deformities. Krekmanov L. **Swed Dent J Suppl** 1989;61:8–62
Planning corrective osteotomy of the distal end of the radius. 1. Improved method. Bilić R, et al. **Unfallchirurg** 1988 Dec;91(12):571–4
Planning corrective osteotomy of the distal end of the radius. 2. Computer-aided planning and postoperative follow-up. Bilić R, et al. **Unfallchirurg** 1988 Dec;91(12):575–80
[Osteotomy in the area of the knee joint. I. Indications and surgical technic] Krbec M. **Acta Chir Orthop Traumatol Cech** 1988 Dec;55(6):481–90 (Eng. Abstr.) (Cze)
[Pauwel's abduction osteotomy for non-healing femoral neck fractures] Schüller NM, et al. **Ned Tijdschr Geneeskd** 1988 Aug 13;132(33):1532–6 (Eng. Abstr.) (Dut)
[Wagner's method of leg lengthening in young children] Besselaar PP, et al. **Tijdschr Kindergeneeskd** 1988 Dec;56(6):288–92 (Eng. Abstr.) (Dut)
[Surgical treatment of congenital hip dysplasia] Kooijman MA. **Tijdschr Kindergeneeskd** 1988 Dec;56(6):240–2 (Eng. Abstr.) (Dut)
[Osteotomy-synovectomy in rheumatoid arthritis of the knee] Blaimont P, et al. **Acta Orthop Belg** 1988;54(2):155–7 (Eng. Abstr.) (Fre)
[Oblique osteotomy of the fibula. Therapeutic aspect of consolidation problems of leg fractures] Elbaz C, et al. **Acta Orthop Belg** 1988;54(4):452–7 (Eng. Abstr.) (Fre)
[Mandibular condylar hyperplasia. Its various clinical aspects and its treatment] Gordeeff A, et al. **Acta Stomatol Belg** 1988 Dec;85(4):259–76 (Fre)
[The value of miniature compression screws in maxillofacial surgery] Boutault F, et al. **Ann Chir Plast Esthet** 1989;34(1):51–7 (Eng. Abstr.) (Fre)
[Advancement genioplasty with miniaturized Paulus plates] Labbe D, et al. **Ann Chir Plast Esthet** 1989;34(3):263–8 (Eng. Abstr.) (Fre)
[The pterygo-maxillary junction: its surgical implications] Leyder P, et al. **Ann Chir Plast Esthet** 1988;33(2):147–57 (Eng. Abstr.) (Fre)
[Plagiocephaly. Craniofacial asymmetry with variable curling-up] Czorny A, et al. **Neurochirurgie** 1988;34(6):375–82 (Eng. Abstr.) (Fre)
[The treatment of old dislocations of the radial head in children by osteotomy of the upper end of the ulna. Apropos of 15 cases] Bouyala JM, et al. **Rev Chir Orthop** 1988;74(2):173–82 (Eng. Abstr.) (Fre)
[The Ilizarov method in the treatment of severe axial deviations of the limbs] Cattaneo R, et al. **Rev Chir Orthop** 1988;74 Suppl 2:237–40 (Fre)
[Results of Salter's innominate osteotomy in residual hip dysplasia in children. Apropos of 60 cases] Fournet-Fayard J, et al. **Rev Chir Orthop** 1988;74(3):243–51 (Eng. Abstr.) (Fre)
[Translation-rotation osteotomy. 1975–1985 experiences with anterior impingement and incomplete lesions of the rotary cuff] Grammont PM, et al. **Rev Chir Orthop** 1988;74(4):337–40 (Fre)
[Idiopathic osteonecrosis of the medial femoral condyle. Treatment with tibial osteotomy or unicompartmental arthroplasty] Hernigou P, et al. **Rev Chir Orthop** 1988;74(3):232–7 (Eng. Abstr.) (Fre)
[Hemophiliac arthropathies of the knee with frontal plane deviation. Results of treatment with osteotomy for axial realignment] Le Balc'h T, et al. **Rev Chir Orthop** 1988;74 Suppl 2:183–7 (Fre)
[Posterior circumflex artery: anatomical study. Technical inferences for circular capsulotomy in Sugioka's femoral osteotomy] Rosset P, et al. **Rev Chir Orthop** 1988;74(3):203–8 (Eng. Abstr.) (Fre)
[Results between 5 and 10 years of Chiari pelvic osteotomy in advanced hip arthrosis] Sterkers Y, et al. **Rev Chir Orthop** 1989;75(1):26–33 (Eng. Abstr.) (Fre)
[Old post-traumatic dislocations of the radial head in children] Verneret C, et al. **Rev Chir Orthop** 1988;74 Suppl 2:134–6 (Fre)
[Debeyre's unicondylar osteotomy. Results in the treatment of lax arthritic genu valgum] Hernigou P, et al. **Rev Rhum Mal Osteoartic** 1988 Jun;55(8):569–75 (Eng. Abstr.) (Fre)
[Modifications of Lefort I osteotomy. Pterygomaxillary disjunction by an inferior rotation of the maxilla] Precious DS, et al. **Rev Stomatol Chir Maxillofac** 1988;89(5):288–92 (Eng. Abstr.) (Fre)
[Treatment of extra-articular malunited fractures of the distal radius using osteotomy with interposition of a graft] Chamay A, et al. **Z Unfallchir Versicherungsmed Berufskr** 1989;82(1):49–61 (Eng. Abstr.) (Fre)
[Displacement of the tibial tuberosity in retropatellar cartilage damage and recurrent patellar dislocation] Krause R, et al. **Aktuel Traumatol** 1989 Feb;19(1):35–42 (Eng. Abstr.) (Ger)
[Modified transpeduncular spongiosa-plasty with osteotomy of the transverse process] Thielemann FW, et al. **Aktuel Traumatol** 1989 Apr;19(2):63–4 (Eng. Abstr.) (Ger)
[Results following high tibial head osteotomy in varus and valgus gonarthroses] Mayer G, et al. **Beitr Orthop Traumatol** 1988 Sep;35(9):443–9 (Eng. Abstr.) (Ger)
[Loss of correction in valgus osteotomy of the tibial head] Witt M. **Beitr Orthop Traumatol** 1988 Sep;35(9):449–53 (Eng. Abstr.) (Ger)
[Malar bone reconstruction—onlay or osteotomy?] Freihofer HP, et al. **Fortschr Kiefer Gesichtschir** 1989;34:107–9 (Ger)
[Long-term studies of improved planning of genioplasty] Herbring M, et al. **Fortschr Kiefer Gesichtschir** 1989;34:27–31 (Ger)
[Significance of the chin for the esthetics of the face] Luhr HG. **Fortschr Kiefer Gesichtschir** 1989;34:23–7 (Ger)
[The importance of preoperative orthodontic therapy in the planning and performance of osteotomies of the middle face] Kahl B, et al. **Fortschr Kieferorthop** 1988 Dec;49(6):543–56 (Eng. Abstr.) (Ger)
[Radius shortening in lunate bone osteomalacia]] Glas K, et al. **Fortschr Med** 1988 Oct 30;106(31):627–30 (0 ref.) (Eng. Abstr.) (Ger)
[Correction of Bechterew kyphosis] Böhm H, et al. **Orthopade** 1989 Apr;18(2):142–54 (Eng. Abstr.) (Ger)
[Osteotomy to lengthen the femur neck with distal adjustment of the trochanter major in coxa vara after hip dislocation] Buess P, et al. **Orthopade** 1988 Nov;17(6):485–90 (Eng. Abstr.) (Ger)
[Long-term results of the Salter pelvic osteotomy] Moulin P, et al. **Orthopade** 1988 Nov;17(6):479–84 (Eng. Abstr.) (Ger)
[Long-term results following intertrochanteric varus osteotomy in aseptic femur head necrosis in the adult] Schneider E, et al. **ROFO** 1989 Apr;150(4):402–6 (Eng. Abstr.) (Ger)
[Shortening osteotomy with secure rotation] Dederich R, et al. **Unfallchirurg** 1988 Jul;91(7):307–13 (Eng. Abstr.) (Ger)
[Treatment of unreduced anterior shoulder dislocation] Noack W, et al. **Unfallchirurgie** 1988 Aug;14(4):184–90 (Eng. Abstr.) (Ger)
[Para-articular surgical interventions of the hip—a mechanical problem] Schmid F. **Unfallchirurgie** 1989 Feb;15(1):32–8 (Eng. Abstr.) (Ger)
[Idiopathic femur head necrosis in the adult—results of surgical therapy] Freiherr von Salis-Soglio G, et al. **Z Orthop** 1988 Sep–Oct;126(5):492–9 (Eng. Abstr.) (Ger)
[Addition osteotomy of the head of the tibia with joint repair. Indications—technic—results] Müller RT, et al. **Z Orthop** 1989 May–Jun;127(3):308–14 (Eng. Abstr.) (Ger)
[Treatment of splay foot with the Helal metatarsal osteotomy] Schmidt K, et al. **Z Orthop** 1989 May–Jun;127(3):322–5 (Eng. Abstr.) (Ger)
[Save the joint? Replace the joint? Long-term results and considerations in the treatment of femur head necroses in adults] Schneider E, et al. **Z Orthop** 1989 Mar–Apr;127(2):163–8 (Eng. Abstr.) (Ger)
[The Akin-New method for surgery of hallux valgus. 1-year results of a covered surgical method] Steinböck G, et al. **Z Orthop** 1988 Jul–Aug;126(4):420–4 (Eng. Abstr.) (Ger)
[Corrective interventions in malunited fractures of the distal radius] Fernandez DL, et al. **Z Unfallchir Versicherungsmed Berufskr** 1989;82(1):34–44 (Eng. Abstr.) (Ger)
[Corrective osteotomy of the distal forearm] Lehner M, et al. **Z Unfallchir Versicherungsmed Berufskr** 1989;82(1):45–8 (Eng. Abstr.) (Ger)
[Valgus osteotomies preceding total endoprosthesis] Reichel F. **Zentralbl Chir** 1989;114(12):777–87 (Eng. Abstr.) (Ger)
[Surgical method of sagittal splitting of the mandibular ramus. The Obweger-Dal Pont method] Bögi I. **Fogorv Sz** 1988 Nov;81(11):327–31 (Eng. Abstr.) (Hun)
[Transposition of the anterior tibial apophysis in the treatment of patellar instability without luxation] Costa P, et al. **Chir Organi Mov** 1988 Oct–Dec;73(4):339–44 (Eng. Abstr.) (Ita)
[Triple pelvic osteotomy in acetabular insufficiency] Vicenzi G, et al. **Chir Organi Mov** 1988 Oct–Dec;73(4):307–14 (Eng. Abstr.) (Ita)
[Osteotomy of the superior maxilla according to Koële. Review of long-term results] Benech A, et al. **Minerva Stomatol** 1988 Dec;37(12):991–6 (Eng. Abstr.) (Ita)
[Internal metallic cranio-facial suspensions (a modification)] Camurati R, et al. **Minerva Stomatol** 1989 Apr;38(4):413–4 (Eng. Abstr.) (Ita)
[An experimental analysis of three-dimensional hip joint force after pelvic osteotomies] Hamada T. **Nippon Seikeigeka Gakkai Zasshi** 1989 Apr;63(4):335–44 (Eng. Abstr.) (Jpn)
[Clinical and experimental study of shortening osteotomy of forearm bone(s) in Kienböck's disease] Shibata M. **Nippon Seikeigeka Gakkai Zasshi** 1989 Apr;63(4):245–61 (Eng. Abstr.) (Jpn)
[Limits of non-surgical treatment and the indications for the surgical treatment of congenital dislocation of the hip joint] Bernardczyk K. **Chir Narzadow Ruchu Ortop Pol** 1988;53(2):119–25 (Eng. Abstr.) (Pol)
[Torsion-valgus corrective osteotomy of the proximal end of the femur in the surgical treatment of congenital dysplasia of the hip joint] Kiepurska A. **Chir Narzadow Ruchu Ortop Pol** 1988;53(2):133–41 (Eng. Abstr.) (Pol)
[Results of the treatment of flexion deformities of the spine caused by ankylosing spondylitis using lumbar osteotomy] Malawski S, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(4):293–300 (Eng. Abstr.) (Pol)
[Late results of Chiari's osteotomy in the treatment of congenital hip dislocation] Mészáros T, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(3):212–4 (Eng. Abstr.) (Pol)
[Late results of the surgical treatment of congenital hip dysplasia by pelvic osteotomy using the Chiari method] Rejholec M, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(3):209–11 (Eng. Abstr.) (Pol)
[Remarks with regard to the use of selected methods of pelvic osteotomy] Rejholec M, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(3):240–5 (Eng. Abstr.) (Pol)
[Results of the surgical treatment of hip dysplasia with osteochondrosis as a complication of non-surgical treatment] Rogala P, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(3):224–8 (Eng. Abstr.) (Pol)
[Results of the surgical treatment of residual dysplasia of the hip joint with or without subluxation by transiliac

osteotomy and corrective osteotomy of the proximal end of the femur] Senger A, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(3):182–9 (Eng. Abstr.) (Pol)

[Results of the surgical treatment of congenital dislocation of the hip joint by open reduction and transiliac and corrective osteotomies of the proximal end of the femur] Senger A, et al. **Chir Narzadow Ruchu Ortop Pol** 1988; 53(3):190–4 (Eng. Abstr.) (Pol)

[Isolated transiliac osteotomy in the surgical treatment of congenital hip dysplasia] Senger A, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(3):175–81 (Eng. Abstr.) (Pol)

[Results of the surgical treatment of congenital dysplasia of the hip joint by Salter's pelvic osteotomy] Szczekot J, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(2):148–53 (Eng. Abstr.) (Pol)

[Triple osteotomy of pelvic bones in the surgical treatment of congenital hip dysplasia] Szczekot J. **Chir Narzadow Ruchu Ortop Pol** 1988;53(3):195–200 (Eng. Abstr.) (Pol)

[Development of the acetabulum after early open reposition of congenital hip dislocation] Szepesi K. **Chir Narzadow Ruchu Ortop Pol** 1988;53(2):130–2 (Eng. Abstr.) (Pol)

[Plastic surgery of the acetabulum in the treatment of congenital hip dysplasia] Szulc A, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(3):215–9 (Eng. Abstr.) (Pol)

[Repositio simplex in the surgical treatment of congenital dislocation of the hip joint] Szulc W, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(2):126–9 (Eng. Abstr.) (Pol)

[Pelvic osteotomy using the Chiari method in the surgical treatment of dysplasia of the hip joint] Szulc W, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(3):201–8 (Eng. Abstr.) (Pol)

[Detorsion–devalgization osteotomy of the proximal end of the femur in the surgical treatment of congenital hip dysplasia] Szulc W, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(3):169–74 (Eng. Abstr.) (Pol)

[Salter's pelvic osteotomy in the surgical treatment of congenital dysplasia of the hip joint] Wośko I, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(2):142–7 (Eng. Abstr.) (Pol)

[Late results of simultaneous reconstruction of the hip joint and pelvic osteotomy using the Salter method in the treatment of congenital hip dysplasia in children] Wośko I, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(3):234–9 (Eng. Abstr.) (Pol)

[Indications for a Chiari–type iliac osteotomy in the surgical trussing treatment of Perthes disease] Gotia DG, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Jul–Sep;92(3):519–21 (Eng. Abstr.) (Rum)

[Reconstruction of the femur by the Ilizarov method in the treatment of arthrosis deformans of the hip joint] Ilizarov GA, et al. **Ortop Travmatol Protez** 1988 Jun;(6):10–3 (Eng. Abstr.) (Rus)

[Elongating varisized osteotomy of the femur] Imamaliev AS, et al. **Ortop Travmatol Protez** 1988 May;(5):57–9 (Rus)

[Corrective intertrochanteric osteotomy in the treatment of aseptic necrosis of the femur head in adults] Ovchinnikov GI, et al. **Ortop Travmatol Protez** 1989 May;(5):35–9 (Eng. Abstr.) (Rus)

[Intertrochanteric corrective osteotomy in treating deformities of the proximal end of the femur] Rybachuk OI, et al. **Ortop Travmatol Protez** 1988 Oct;(10):19–20 (Eng. Abstr.) (Rus)

[Surgical treatment of children with degenerative–dystrophic processes in the dysplastic hip joint] Andrianov VL, et al. **Vestn Khir** 1989 Feb;142(2):71–5 (Eng. Abstr.) (Rus)

MORTALITY

Proximal tibial osteotomy. A survivorship analysis. Ritter MA, et al. **J Arthroplasty** 1988;3(4):309–11

REHABILITATION

[Growth of the extremity after surgical treatment of congenital dislocation of the hip joint] Gregosiewicz A, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(3):250–4 (Eng. Abstr.) (Pol)

VETERINARY

A preliminary investigation of the effect of selected electromagnetic field devices on healing of cannon bone osteotomies in horses. Sanders–Shamis M, et al. **Equine Vet J** 1989 May;21(3):201–5

Treatment of humeroulnar subluxation with a dynamic proximal ulnar osteotomy. A review of 13 cases. Gilson SD, et al. **Vet Surg** 1989 Mar–Apr;18(2):114–22

Total ear canal ablation combined with lateral bulla osteotomy for end–stage otitis in dogs. Results in thirty dogs. Mason LK, et al. **Vet Surg** 1988 Sep–Oct;17(5):263–8

A combined tension band and lag screw technique for fixation of olecranon osteotomies. Palmer RH, et al. **Vet Surg** 1988 Nov–Dec;17(6):328–32

Healing of mandibular body osteotomies after plate and intramedullary pin fixation. Roush JK, et al. **Vet Surg** 1989 May–Jun;18(3):190–6

[Practical experience with the triple pelvic osteotomy as treatment of hip instability in young dogs (published erratum appears in Tijdschr Diergeneeskd 1988 Dec 15;113(24):1388)] Crama K. **Tijdschr Diergeneeskd** 1988 Nov 1;113(21):1181–8 (Eng. Abstr.) (Dut)

[Osteotomy healing of the lower jaw and the adaptation of the masticatory muscles after miniplate osteosynthesis in rabbits. II. Response pattern of the masticatory muscles (M. masseter)] Herrmann V, et al. **Anat Anz** 1988; 167(2):87–104 (Eng. Abstr.) (Ger)

OSTERREICHER SYNDROME see **NAIL–PATELLA SYNDROME**

OSTERTAGIA

DRUG EFFECTS

Anthelmintic resistance in the field: changes in resistance status of parasitic populations in response to anthelmintic treatment. Waller PJ, et al. **Aust Vet J** 1988 Dec; 65(12):376–9

Anthelmintic resistance and the control of ovine ostertagiasis: a drug action model for genetic selection. Gettinby G, et al. **Int J Parasitol** 1989 Jul;19(4):369–76

Selection for thiabendazole resistance in Ostertagia spp. by low efficiency anthelmintic treatment. Martin PJ. **Int J Parasitol** 1989 May;19(3):317–25

Reliability and reproducibility of the larval paralysis test as an in vitro method for the detection of anthelmintic resistance of nematodes against levamisole and morantel tartrate. Geerts S, et al. **Vet Parasitol** 1989 Jan;30(3):223–32

Level of benzimidazole resistance in a strain of Ostertagia circumcincta studied over several infections in lambs. Scott EW, et al. **Vet Parasitol** 1989 Mar;30(4):305–14

Efficacy of oxfendazole against inhibited larvae of Ostertagia ostertagi in naturally infected calves in the southern USA. Couvillion CE, et al. **Vet Rec** 1989 Apr 29;124(17):462–4

GROWTH & DEVELOPMENT

Population biology of the parasitic phase of Ostertagia circumcincta. Smith G. **Int J Parasitol** 1989 Jul; 19(4):385–93

The capability of the predacious fungus Arthrobotrys oligospora (Hyphomycetales) to reduce numbers of infective larvae of Ostertagia ostertagi (Trichostrongylidae) in cow pats and herbage during the grazing season in Denmark. Grønvold J, et al. **J Helminthol** 1988 Dec; 62(4):271–80

Effect of temperature on development of the free–living stages of Ostertagia circumcincta. Pandey VS, et al. **Vet Parasitol** 1989 Jul 15;32(2–3):193–7

A comparison of two methods and two additives for faecal cultivation of bovine trichostrongyle larvae. Steffan P, et al. **Vet Parasitol** 1989 Jun;31(3–4):269–73

Interpretation of abomasal worm burdens in cattle. Hong C. **Vet Rec** 1989 Jan 28;124(4):87–8

IMMUNOLOGY

Soluble extracts from larval Ostertagia ostertagi modulating immune function. Cross DA, et al. **Int J Parasitol** 1989 Feb;19(1):57–61

Extraction and identification of a 31,000 mol.wt glycoprotein antigen of Ostertagia circumcincta by sera from resistant sheep. McGillivery DJ, et al. **Int J Parasitol** 1989 Aug; 19(5):473–8

PHYSIOLOGY

Induction of nematode–trapping organs in the predacious fungus Arthrobotrys oligospora (Hyphomycetales) by infective larvae of Ostertagia ostertagi (Trichostrongylidae). Grønvold J. **Acta Vet Scand** 1989; 30(1):77–87

Effects of trichostrongyle larval challenge on the reproductive performance of immune ewes. Jeffcoate IA, et al. **Res Vet Sci** 1988 Sep;45(2):234–9

Production of strains of the sheep parasite Ostertagia circumcincta by implantation of adult parasites into the abomasum of lambs. Scott EW, et al. **Res Vet Sci** 1988 Jul;45(1):120–1

Factors influencing rain splash dispersal of infective larvae of Ostertagia ostertagi (Trichostrongylidae) from cow pats to the surroundings. Grønvold J, et al. **Vet Parasitol** 1989 Apr;31(1):57–70

OSTERTAGIASIS see under **TRICHOSTRONGYLOIDIASIS**

OSTOMY

A stoma jig for surgical craft workshops. Jones RT, et al. **Ann R Coll Surg Engl** 1988 Sep;70(5):311–2

Enterostomal hydrocolloid materials [letter] Krugman ME, et al. **Ear Nose Throat J** 1988 Sep;67(9):696

Cricothyroidotomy, a useful alternative to tracheostomy in maxillofacial surgery. Ward Booth RP, et al. **Int J Oral Maxillofac Surg** 1989 Feb;18(1):24–6 (11 ref.)

Alternative to permanent ostomy formation. Crocker CH, et al. **J Arkansas Med Soc** 1989 Feb;85(9):379–80

ADVERSE EFFECTS

Ostomy closure for recurrent stomal hemorrhage: an indication for prophylactic sclerotherapy in biliary atresia. Minifee PK, et al. **J Pediatr Surg** 1988 Jul;23(7):630–1

METHODS

Percutaneous ostomy dilation: a technique for dilating the closed percutaneous endoscopic gastrostomy sites and reinserting gastrostomies. Tsang TK, et al. **Gastrointest Endosc** 1989 Jul–Aug;35(4):336–7

NURSING

The nursing preparation of stoma patients for self–care. Ewing G. **J Adv Nurs** 1989 May;14(5):411–20

OSTREOGRYCINS see **VIRGINIAMYCINS**

OTALGIA see **EARACHE**

OTC DRUGS see **DRUGS, NON–PRESCRIPTION**

OTITIS

COMPLICATIONS

[Causes and incidence of abscesses of the brain and cerebellum in adults] Bidziński J, et al. **Neurol Neurochir Pol** 1988 May–Jun;22(3):228–32 (Eng. Abstr.) (Pol)

[Neurologic complications in otitis and rhinosinusitis] Kozlova AA, et al. **Zh Nevropatol Psikhiatr** 1989;89(1):46–9 (Eng. Abstr.) (Rus)

[Intracranial complications of otitis: the present–day situation] Fernández Rodríguez R, et al. **An Otorrinolaringol Ibero Am** 1989;16(3):281–97 (Eng. Abstr.) (Spa)

DRUG THERAPY

Ciprofloxacin for the treatment of chronic ear disease. Piccirillo JF, et al. **Laryngoscope** 1989 May;99(5):510–3

[Multicenter study of auricularum in chronic otitis] Portmann M, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988; 109(5):489–91 (Eng. Abstr.) (Fre)

EPIDEMIOLOGY

Fungal infections of ear with special reference to chronic suppurative otitis media. Talwar P, et al. **Mycopathologia** 1988 Oct;104(1):47–50

ETIOLOGY

[Otitis caused by Vibrio alginolyticus] Puy H, et al. **Presse Med** 1989 May 13;18(19):985 (Fre)

PHYSIOPATHOLOGY

Deflation opening pressure of the eustachian tube. Cohen D. **Am J Otol** 1989 Mar;10(2):138–41

PREVENTION & CONTROL

Arabinogalactan– and dextran–induced ear inflammation in mice: differential inhibition by H1–antihistamines, 5–HT–serotonin antagonists and lipoxygenase blockers. van Wauwe JP, et al. **Agents Actions** 1989 Aug;28(1–2):78–82

SURGERY

[Torticollis—an unusual origin] Jensen JH, et al. **Ugeskr Laeger** 1989 Apr 10;151(15):950–1 (Eng. Abstr.) (Dan)

THERAPY

Managing diabetes–related infections in the elderly. Gleckman RA, et al. **Geriatrics** 1989 Aug;44(8):37–9, 43–4, 46 (18 ref.)

OTITIS EXTERNA

The draining ear. Otitis media and externa. Pelton SI, et al. **Infect Dis Clin North Am** 1988 Mar;2(1):117–29 (36 ref.)

CLASSIFICATION

Diseases of the external ear canal. Holt JJ. **Wis Med J** 1989 Mar;88(3):13–4

COMPLICATIONS

Malignant external otitis and osteomyelitis of the base of the skull. Chandler JR. **Am J Otol** 1989 Mar;10(2):108–10

Septic arthritis of the temporomandibular joint complicating otitis externa. Thomson HG. **J Laryngol Otol** 1989 Mar; 103(3):319–21

[Malignant otitis externa. Apropos of a case] Faubel Serra M, et al. **An Otorrinolaringol Ibero Am** 1988;15(6):653–60 (Eng. Abstr.) (Spa)

DRUG THERAPY

Malignant external otitis: treatment with fluoroquinolones. Joachims HZ, et al. **Am J Otolaryngol** 1988 May–Jun; 9(3):102–5

Use of ceftazidime for malignant external otitis. Kimmelman CP, et al. **Ann Otol Rhinol Laryngol** 1989 Sep;98(9):721–5

Efficacy of oral ciprofloxacin plus rifampin for treatment

of malignant external otitis. Rubin J, et al. **Arch Otolaryngol Head Neck Surg** 1989 Sep;115(9):1063–9

Treatment of Pseudomonas aeruginosa auricular perichondritis with oral ciprofloxacin. Noel SB, et al. **J Dermatol Surg Oncol** 1989 Jun;15(6):633–7

Successful treatment of malignant otitis externa with oral ciprofloxacin [letter] Osborne JE, et al. **J Infect** 1989 May; 18(3):298–9

Relapsing malignant otitis externa successfully treated with ciprofloxacin. Morrison GA, et al. **J Laryngol Otol** 1988 Oct;102(10):872–6

Ciprofloxacin for the treatment of chronic ear disease. Piccirillo JF, et al. **Laryngoscope** 1989 May;99(5):510–3

ETIOLOGY

Contact sensitivity in otitis externa. Lembo G, et al. **Contact Dermatitis** 1988 Jul;19(1):64–5

Malignant otitis externa due to Staphylococcus infection. Keay DG, et al. **J Laryngol Otol** 1988 Oct;102(10):926–7

[Fungal otitis in Libreville. Study of 83 cases] Kombila M, et al. **Bull Soc Pathol Exot Filiales** 1989;82(2):201–7 (Eng. Abstr.) **(Fre)**

[Human lagochilascariasis in Venezuela: description of a fatal case] Orihuela R, et al. **Rev Soc Bras Med Trop** 1987 Oct–Dec;20(4):217–21 (22 ref.) (Eng. Abstr.) **(Spa)**

MICROBIOLOGY

Malignant external otitis in children. Rubin J, et al. **J Pediatr** 1988 Dec;113(6):965–70 (36 ref.)

Etiological agents of otomycosis in Nigeria. Gugnani HC, et al. **Mycoses** 1989 May;32(5):224–9

[Personal studies on the current spectrum of pathogenic bacteria in otitis externa and chronic otitis media] Feidt H, et al. **Laryngorhinootologie** 1989 Jul;68(7):401–6 (20 ref.) (Eng. Abstr.) **(Ger)**

PATHOLOGY

Histopathology of the soft parts in 50 patients with malignant external otitis. Bernheim J, et al. **J Laryngol Otol** 1989 Apr; 103(4):366–8

PREVENTION & CONTROL

Recurrent otitis externa [letter] Shapiro DP. **Arch Otolaryngol Head Neck Surg** 1989 Mar;115(3):394

SURGERY

[General anesthesia with kalipsol during operations on the temporal bone in children] Tikhonova GV. **Anesteziol Reanimatol** 1988 Jul–Aug;(4):61–2 (Eng. Abstr.) **(Rus)**

THERAPY

Diagnosis, complications, and treatment of malignant otitis externa. Timon CI, et al. **Ir Med J** 1989 Feb;82(1):30–1

VETERINARY

Preliminary studies on the mechanism of infection and characterization of Malassezia pachydermatis in association with canine otitis externa. Gabal MA. **Mycopathologia** 1988 Nov;104(2):93–8

Diseases of the ear canal. **Vet Clin North Am [Small Anim Pract]** 1988 Jul; 18(4):729–969

Otitis externa. A disease of multifactorial etiology. August JR. **Vet Clin North Am [Small Anim Pract]** 1988 Jul; 18(4):731–42 (39 ref.)

Surgical management of otitis externa. Bradley RL. **Vet Clin North Am [Small Anim Pract]** 1988 Jul;18(4):813–9

Medical management of otitis externa. Chester DK. **Vet Clin North Am [Small Anim Pract]** 1988 Jul; 18(4):799–812

Cytologic evaluation of otic exudates. Chickering WR. **Vet Clin North Am [Small Anim Pract]** 1988 Jul; 18(4):773–82

The microbial environment of the ear canal in health and disease. Kowalski JJ. **Vet Clin North Am [Small Anim Pract]** 1988 Jul; 18(4):743–54 (27 ref.)

Evaluation of the patient with otitis externa. Rosser EJ Jr. **Vet Clin North Am [Small Anim Pract]** 1988 Jul; 18(4):765–72

Pathologic changes in otitis externa. Roth L. **Vet Clin North Am [Small Anim Pract]** 1988 Jul; 18(4):755–64

Otopharmacology. Wilcke JR. **Vet Clin North Am [Small Anim Pract]** 1988 Jul; 18(4):783–97

A case of canine otitis due to screwworm, Cochliomyia hominivorax, in France [letter] Chermette R. **Vet Rec** 1989 Jun 17;124(24):641

Total ear canal ablation combined with lateral bulla osteotomy for end-stage otitis in dogs. Results in thirty dogs. Mason LK, et al. **Vet Surg** 1988 Sep–Oct;17(5):263–8

OTITIS MEDIA

Recent advances in otitis media. Microbiology, immunology, biochemistry, and vaccination. Ogra PL, et al. **Ann Otol Rhinol Laryngol Suppl** 1989 Apr;139:23–32 (9 ref.)

Recent advances in otitis media. Animal models of otitis media. Ryan AF, et al. **Ann Otol Rhinol Laryngol Suppl** 1989 Apr;139:33–8 (46 ref.)

The draining ear. Otitis media and externa. Pelton SI, et al. **Infect Dis Clin North Am** 1988 Mar;2(1):117–29 (36 ref.)

Otitis media in the pediatric intensive care unit: a prospective study. Derkay CS, et al. **Otolaryngol Head Neck Surg** 1989 Apr;100(4):292–9

Otitis media. Update on a common, frustrating problem. Stool S. **Postgrad Med** 1989 Jan;85(1):40–7, 51, 53

[Diagnostic and therapeutic protocol in otitis media in the 1st year of life] Pestalozza G, et al. **Acta Otorhinolaryngol Ital** 1988;8 Suppl 19:11–8 (Eng. Abstr.) **(Ita)**

[Clinical observation of acute otitis media in children] Nakajima Y, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Mar;92(3):347–52 (Eng. Abstr.) **(Jpn)**

CHEMICALLY INDUCED

Ototoxicity of antimycotics. Marsh RR, et al. **Otolaryngol Head Neck Surg** 1989 Feb;100(2):134–6

CLASSIFICATION

Recent advances in otitis media. Definition and classification. Klein JO, et al. **Ann Otol Rhinol Laryngol Suppl** 1989 Apr; 139:10

COMPLICATIONS

Sensorineural hearing loss and acute otitis media in children. Rahko T, et al. **Acta Otolaryngol (Stockh)** 1989 Jul–Aug; 108(1–2):107–12

Sensorineural hearing loss in antigen-induced otitis media. Morizono T, et al. **Acta Otolaryngol Suppl (Stockh)** 1989; 457:67–72

Sensorineural hearing loss in acute and chronic middle ear diseases. Tos M. **Acta Otolaryngol Suppl (Stockh)** 1989; 457:87–93 (28 ref.)

Emergency presentation of coalescent mastoiditis. Rogers SM, et al. **Am J Emerg Med** 1989 Jul;7(4):413–6

Mechanism of bone destruction due to middle ear cholesteatoma as revealed by laser-Raman spectrometry. Ohsaki K, et al. **Am J Otolaryngol** 1988 May–Jun; 9(3):117–26

Otitic hydrocephalus: an uncommon complication of a common condition. Isaacman DJ. **Ann Emerg Med** 1989 Jun;18(6):684–7

Recent advances in otitis media. Complications and sequelae. Ruben RJ, et al. **Ann Otol Rhinol Laryngol Suppl** 1989 Apr; 139:46–55 (67 ref.)

Sensorineural loss in chronic otitis media. Is it clinically significant? Levine BA, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jul;115(7):814–6

Ear disease in Landau-Kleffner syndrome (LKS) and in adult psychiatry [letter] Gordon AG. **Can J Psychiatry** 1989 Feb; 34(1):77–8

Gradenigo's syndrome: a rare complication of otitis media. de Graaf J, et al. **Clin Neurol Neurosurg** 1988;90(3):237–9

Congenital cardiac outflow tract anomalies and otitis media. Todd JL, et al. **Int J Pediatr Otorhinolaryngol** 1988 Dec; 16(3):183–8

Speech perception in children with histories of recurrent otitis media. Clarkson RL, et al. **J Acoust Soc Am** 1989 Feb;85(2):926–33

Facial nerve palsy secondary to acute otitis media. Henderson PE, et al. **J Am Osteopath Assoc** 1989 Feb;89(2):207–10

Sensorineural hearing loss in chronic otitis media. Cusimano F, et al. **J Laryngol Otol** 1989 Feb;103(2):158–63

Urinary tract infections associated with otitis media in infants and children. Torrijos E, et al. **J Natl Med Assoc** 1989 Jun;81(6):677–9

Language screening for infants prone to otitis media. Black MM, et al. **J Pediatr Psychol** 1988 Sep;13(3):423–33

Neuropsychological sequelae of otitis media in children and adolescents with learning disabilities. Secord GJ, et al. **J Pediatr Psychol** 1988 Dec;13(4):531–42

The early signs and symptoms of neurotologic complications of chronic suppurative otitis media. Schwaber MK, et al. **Laryngoscope** 1989 Apr;99(4):373–5

Temporal bone pneumatization in cystic fibrosis patients. Todd NW, et al. **Laryngoscope** 1988 Oct;98(10):1046–9

Hazards of air travel for a child with otitis. **Pediatr Infect Dis J** 1989 Aug;8(8):542–3

Otitis media and congenital perilymphatic fistula as a cause of sensorineural hearing loss in children. Bluestone CD. **Pediatr Infect Dis J** 1988 Nov;7(11 Suppl):S141–5 (15 ref.)

Acute otitis media and respiratory virus infections. Ruuskanen O, et al. **Pediatr Infect Dis J** 1989 Feb;8(2):94–9

Otitis media and language performance in learning disabilities. Maritz NG, et al. **S Afr J Commun Disord** 1988; 35:17–23

[The importance of CT examination in the diagnosis and therapy of rhino-otogenic intracranial complications] Stárek I, et al. **Cesk Otolaryngol** 1989 May;38(3):143–8 (Eng. Abstr.) **(Cze)**

[Otitis media, petrositis and Gradenigo's syndrome] van Wieringen PM, et al. **Tijdschr Kindergeneeskd** 1989 Apr; 57(2):63–6 (Eng. Abstr.) **(Dut)**

[Otogenic brain abscess with rupture into the lateral ventricle] Bliouras K, et al. **HNO** 1989 Jul;37(7):303–5 (Eng. Abstr.) **(Ger)**

[Otogenic brain abscesses in a patient sample of the otolaryngology clinic of the Poznan Medical Academy 1953–1984] Szmeja Z, et al. **HNO** 1988 Dec;36(12):502–6 (Eng. Abstr.) **(Ger)**

[Microsurgical procedures in cases of labyrinthine fistula caused by cholesteatoma] Sanna M, et al. **Otolaryngol Pol** 1988;42(5):305–11 (Eng. Abstr.) **(Pol)**

[A case of complications of chronic cholesteatomatous otitis media] Nejthardt W. **Wiad Lek** 1988 Apr 15;41(8):522–4 (Eng. Abstr.) **(Pol)**

[Chronic suppurative mesoepitympanitis complicated by phlegmon of the neck and paralysis of the left side of the larynx] Enin IP, et al. **Vestn Otorinolaringol** 1988 May–Jun; (3):76–7 **(Rus)**

[Possibilities of the differential diagnosis of cerebral complications of chronic suppurative otitis media] Garshin MI, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):14–7 (Eng. Abstr.) **(Rus)**

[Improving the methods of diagnosing otogenic and rhinosinusogenic abscesses of the brain] Mirazizov KD, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):27–32 (Eng. Abstr.) **(Rus)**

[Chronic suppurative otitis media in combination with brain tumors] Romashov SS, et al. **Vestn Otorinolaringol** 1988 Nov–Dec;(6):16–20 (Eng. Abstr.) **(Rus)**

[Early detection of the neurosensory component of hearing loss in patients with adhesive otitis media] Sakalinskas VM. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):20–4 (Eng. Abstr.) **(Rus)**

[The phenomenon of hyperacusis in adhesive otitis media] Sharifbaev AS, et al. **Vestn Otorinolaringol** 1988 May–Jun; (3):20–2 (Eng. Abstr.) **(Rus)**

[2 cases of brain tumors simulating otogenic abscesses in patients with chronic suppurative epitympanitis] Smirnov NM, et al. **Vestn Otorinolaringol** 1988 Sep–Oct;(5):78–80 **(Rus)**

[Recurrence of otogenic brain abscess] Timirgaleev MKh, et al. **Vestn Otorinolaringol** 1988 Jul–Aug;(4):79–80 **(Rus)**

[Malignant otitis externa] Pérez Garrigues H, et al. **An Otorrinolaringol Ibero Am** 1989;16(1):5–11 (Eng. Abstr.) **(Spa)**

CONGENITAL

Congenital tuberculosis localised to the ear. Naranbhai RC, et al. **Arch Dis Child** 1989 May;64(5):738–40

DIAGNOSIS

Tubal function and surgery in chronic otitis media. A study on the predictive value of testing tubal function, Valsalva's manoeuvre and volume of ear spaces. Reimer A, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:127–30

Acoustic otoscopy in the diagnosis of otitis media. Jehle D, et al. **Ann Emerg Med** 1989 Apr;18(4):396–400

Recent advances in otitis media. Diagnosis and screening. Gates GA, et al. **Ann Otol Rhinol Laryngol Suppl** 1989 Apr;139:39–41 (14 ref.)

IgG subclass deficiency in children with recurrent respiratory infections. Berkel AI, et al. **J Okla State Med Assoc** 1989 Jan;82(1):11–3

Diagnostic value of acoustic reflectometry in children with acute otitis media. Lampe RM, et al. **Pediatr Infect Dis J** 1989 Jan;8(1):59–61

[Differential diagnosis in rhabdomyosarcoma and inflammation of the middle ear in children] Kabelka Z, et al. **Cesk Otolaryngol** 1988 Jul;37(4):234–8 (Eng. Abstr.) **(Cze)**

[Otogenic complications with a normal, intact tympanic membrane] von Scheel J. **Laryngol Rhinol Otol (Stuttg)** 1989 Jan;68(1):78–80 (Eng. Abstr.) **(Ger)**

[Otitis media in the neonatal period: tympanometric diagnosis in relation to otoscopy] Romagnoli M, et al. **Acta Otorhinolaryngol Ital** 1988;8 Suppl 19:79–86 (Eng. Abstr.) **(Ita)**

[Long-term evolution of chronic suppurative otomastoiditis] Ataman T, et al. **Rev Chir [Otorinolaringol]** 1988 Jul–Sep; 33(3):193–6 (Eng. Abstr.) **(Rum)**

[Clinico-morphologic aspects of chronic mesotympanitis] Dibirov DA, et al. **Vestn Otorinolaringol** 1989 Jan–Feb; (1):24–7 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Recurrent and penicillin V–resistant otitis media. A treatment study with amoxycillin/clavulanate and cefaclor. Jacobsson S, et al. **Acta Otolaryngol (Stockh)** 1988 Sep–Oct; 106(3–4):171–7

Early or late start of treatment in acute otitis media. A comparative study. Harder H, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:41–2

Clinical and bacteriological efficacy of amoxycillin/clavulanate (Spektramox) and cefaclor (Kefolor) in children with recurrent AOM or therapy failure. Jacobsson S, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:43–4

Clinical efficacy of amoxycillin/clavulanic acid and cefaclor in acute otitis media. Kaprio E, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:45–6

Controversies in the management of acute otitis media. Giebink GS, et al. **Adv Pediatr Infect Dis** 1988;3:47–63 (72 ref.)

Efficacy of a new macrolide (azithromycin). For acute otitis media in the chinchilla model. Chan KH, et al. **Arch Otolaryngol Head Neck Surg** 1988 Nov; 114(11):1266–9

Fatal anaphylaxis associated with ciprofloxacin in a patient with AIDS related complex. Peters B, et al. **BMJ** 1989 Mar 4;298(6673):605

Trimethoprim–sulfamethoxazole v. amoxicillin in the treatment of acute otitis media. Feldman W, et al. **Can Med Assoc J** 1988 Nov 15;139(10):961–4

Cefaclor: a decade of experience in acute otitis media. McLinn SE. **Clin Ther** 1988;11 Suppl A:35–47 (29 ref.)

Sobrerol in the treatment of secretory otitis media in childhood. Bellussi L, et al. **J Int Med Res** 1989 May–Jun; 17(3):277–86

Clinical evaluation of rectally administered ampicillin in acute otitis media. Bergström BK, et al. **J Int Med Res** 1988 Sep–Oct;16(5):376–85

Clinical efficacy and tolerance of bacampicillin and amoxycillin suspensions in children with acute otitis media. Puhakka HJ, et al. **J Int Med Res** 1989 Jan–Feb;17(1):41–7

Ototoxicity of ear drops in patients suffering from chronic otitis media. Podoshin L, et al. **J Laryngol Otol** 1989 Jan; 103(1):46–50

Antibiotics in acute otitis media [letter] Pitts J. **J R Coll Gen Pract** 1988 Jan;38(306):36

In vitro antibacterial activity of various antibiotics against isolates in chronic suppurative otitis media. Khan AS, et al. **JPMA** 1988 Oct;38(10):263–5

Preoperative therapeutic considerations in chronic suppurative otitis media. Papastavros T, et al. **Laryngoscope** 1989 Jun;99(6 Pt 1):655–9

Management of otitis media in infants and children: current role of old and new antimicrobial agents. Bluestone CD. **Pediatr Infect Dis J** 1988 Nov;7(11 Suppl):S129–36 (50 ref.)

Systemic antibiotics for treatment of the conjunctivitis–otitis media syndrome. Bodor FF. **Pediatr Infect Dis J** 1989 May; 8(5):287–90

Cost effectiveness of antibiotic therapy for otitis media in a military pediatric clinic. Callahan CW Jr. **Pediatr Infect Dis J** 1988 Sep;7(9):622–5

Comments on otitis media [letter] Coffey JD Jr, et al. **Pediatr Infect Dis J** 1989 Aug;8(8):540–1

Cost analysis of therapy of acute otitis media [letter] Stoddard J, et al. **Pediatr Infect Dis J** 1989 Mar;8(3):189–90

Value of fenspiride (Pneumorel 80 mg) in the preoperative treatment of chronic open tympanum otitis. Double-blind placebo-controlled study. Fraysse B, et al. **Rhinology** 1988; Suppl 4:31–41

Value of Pneumorel 80 mg in the treatment of chronic otitis in adults. Multicentre study of 696 cases. Sallebert L, et al. **Rhinology** 1988;Suppl 4:43–58

[The treatment of acute otitis media] van Buchem FL. **Ned Tijdschr Geneeskd** 1989 Feb 11;133(6):290–2 **(Dut)**

[Clinical efficacy of Auricularum compared with its bacteriologic efficacy in vitro] Frèche C, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(8):635–41 (Eng. Abstr.) **(Fre)**

[Treatment of acute otitis media in infants using an amoxicillin–clavulanic acid formulation (in the form of an oral suspension for pediatric use)] Cohen R, et al. **Ann Pediatr (Paris)** 1989 Jan;36(1):49–54 (Eng. Abstr.) **(Fre)**

[Antimicrobial effectiveness of azlocillin in cholesteatoma in parenteral administration] Mertens J, et al. **HNO** 1988 Oct; 36(10):423–5 (Eng. Abstr.) **(Ger)**

[Medical therapy of acute otitis media] Bolasco P, et al. **Medicina (Firenze)** 1988 Oct–Dec;8(4):419–22 (Eng. Abstr.) **(Ita)**

[Amoxicillin–clavulanic acid combination in bacterial infections of the upper respiratory tract in childhood. Controlled clinical study] Boccazzi A, et al. **Pediatr Med Chir** 1988 Jul–Aug;10(4):395–400 (Eng. Abstr.) **(Ita)**

[Evaluation of the efficacy of ceftriaxone in acute suppurative otitis media and acute exacerbation of chronic suppurative otitis media. A comparative study with cefotiam as the control] Baba S, et al. **Jpn J Antibiot** 1989 Jan;42(1):212–47 (Eng. Abstr.) **(Jpn)**

[Leucotrofina in the treatment of protracted suppurative otitis media in infants (preliminary note)] Rădulescu M. **Rev Chir [Otorinolaringol]** 1988 Oct–Dec;33(4):307–14 (Eng. Abstr.) **(Rum)**

[Dynamics of changes in the microflora of the tympanic cavity in patients with suppurative otitis media in relation to the use of medicinal drugs] Izvin AI. **Vestn Otorinolaringol** 1988 Nov–Dec;(6):72 **(Rus)**

[Exploration, diagnosis and treatment of eustachian tube diseases by means of positive pressure through a tympanic membrane perforation, or by paracentesis and transtympanic drainage] Doménec Llavallol O. **An Otorrinolaringol Ibero Am** 1989;16(2):215–28 (Eng. Abstr.) **(Spa)**

ECONOMICS

The impact of otitis media. Stool SE, et al. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S11–4

EPIDEMIOLOGY

Recurrent acute otitis media. A prospective study of children during the first three years of life. Harsten G, et al. **Acta Otolaryngol (Stockh)** 1989 Jan–Feb;107(1–2):111–9

Morbidity of very young infants with and without acute otitis media. Karma P, et al. **Acta Otolaryngol (Stockh)** 1989 May–Jun;107(5–6):460–6

Otitis media in the first year of life in two Eskimo communities. Stewart JL. **Ann Otol Rhinol Laryngol** 1989 Mar;98(3):200–1

Recent advances in otitis media. Epidemiology and natural history. Teele DW, et al. **Ann Otol Rhinol Laryngol Suppl** 1989 Apr;139:11–3

Epidemiology of otitis media and the role of the general practitioner in management. De Melker RA, et al. **Fam Pract** 1988 Dec;5(4):307–13 (48 ref.)

Incidence of acute otitis media in infants in a general practice. Ross AK, et al. **J R Coll Gen Pract** 1988 Feb;38(307):70–2

Fungal infections of ear with special reference to chronic suppurative otitis media. Talwar P, et al. **Mycopathologia** 1988 Oct;104(1):47–50

Epidemiology of pneumococcal capsular types causing pediatric infections. Austrian R. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S21–2 (19 ref.)

Epidemiology of otitis media. Klein JO. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S9

[Role of ambulatory care in the dynamics of the incidence of chronic suppurative otitis media in adolescents] Kuznetsov VS, et al. **Vestn Otorinolaringol** 1988 Jul–Aug; (4):3–5 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Current concepts of pathogenesis of otitis media: a review. Lim DJ, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 458:174–80 (45 ref.)

Otorrhea during transtympanal ventilation. Debruyne F, et al. **Am J Otol** 1988 Jul;9(4):316–7

Tuberculosis of the middle ear in an infant. Davidson S, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jul;115(7):876–7 (15 ref.)

Passive smoking and middle ear effusion in children [letter] **BMJ** 1989 Jul 22;299(6693):258–9

External otitis in divers: etiology and in vitro activity of ciprofloxacin and local agents. Dibb WL. **Chemioterapia** 1987 Jun;6(2 Suppl):138–40

Forcefeeding practices and otitis media in Ilorin, Nigeria. Adedoyin MA. **East Afr Med J** 1989 Jan;66(1):31–4

Acute otitis media in very young infants [letter] Panter-Brick M. **Lancet** 1989 Sep 30;2(8666):809

Animal models for nontypable Haemophilus influenzae otitis media. DeMaria TF. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S40–2 (12 ref.)

Haemophilus influenzae as a cause of acute otitis media. Wald ER. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S28–30 (20 ref.)

[Short-term complications of transtympanic aerators] François M, et al. **Ann Otolaryngol Chir Cervicofac** 1988; 105(5):349–53 (Eng. Abstr.) **(Fre)**

[Bacteriology of acute otitis, in current practice, in 1987. Therapeutic implications] Gehanno P, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(7):559–63 (Eng. Abstr.) **(Fre)**

[Suppuration of old open cavities. Radical treatment] Sterkers JM, et al. **Ann Otolaryngol Chir Cervicofac** 1989; 106(3):158–66 (Eng. Abstr.) **(Fre)**

[Allergic diseases of the nose, ears and throat] Loewe G. **Z Arztl Fortbild (Jena)** 1988;82(15):731–3 (7 ref.) **(Ger)**

HISTORY

The evolution of otitis media treatment in Illinois. Wiedeman JE, et al. **IMJ** 1988 Sep;174(3):145–7

IMMUNOLOGY

Humoral immune response in acute otitis media. Prellner K, et al. **Acta Otolaryngol Suppl (Stockh)** 1989;457:133–8 (31 ref.)

IgD in nasopharyngeal secretions and tonsils from otitis–prone children. Sørensen CH, et al. **Clin Exp Immunol** 1988 Jul;73(1):149–54

Pneumococcal serum antibody concentrations during the first three years of life: a study of otitis–prone and non–otitis–prone children. Prellner K, et al. **Int J Pediatr Otorhinolaryngol** 1989 Jul;17(3):267–79

Local production of IgG to pneumococcal C–polysaccharide in upper airway secretions from children with recurrent acute otitis media. Sørensen CH, et al. **Microb Pathog** 1989 Mar;6(3):183–91

Human adult immunogenicity of protein–coupled pneumococcal capsular antigens of serotypes prevalent in otitis media. Anderson P, et al. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S50–3

The role of antibodies to pneumococcal C polysaccharide in otitis media. Henrichsen J, et al. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S26–7

[The relation of antigen levels in the middle ear and round window membrane permeability in antigen–induced otitis media] Hamaguchi Y, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Nov;91(11):1864–70 (Eng. Abstr.) **(Jpn)**

[Status of humoral defense mechanisms of the middle ear in young children with acute suppurative otitis media] Merkulova EP, et al. **Vestn Otorinolaringol** 1989 Mar–Apr; (2):51–4 (Eng. Abstr.) **(Rus)**

METABOLISM

Relationship between antigen levels in middle ear and antigen passage through round window membrane in antigen–induced otitis media. Hamaguchi Y, et al. **Acta Otolaryngol Suppl (Stockh)** 1989;457:124–8

Prostaglandins in human cholesteatoma and granulation tissue. Jung TT, et al. **Am J Otol** 1988 May;9(3):197–200

Role of polymorphonuclear leukocytes in collagenase production in chronic otitis media. Moriyama H, et al. **Am J Otolaryngol** 1989 May–Jun;10(3):198–202

Hyaluronan in experimental serous and purulent otitis media. Laurent C, et al. **Ann Otol Rhinol Laryngol** 1989 Sep; 98(9):736–40

Tumor necrosis factor in middle ear effusions. Ophir D, et al. **Arch Otolaryngol Head Neck Surg** 1988 Nov; 114(11):1256–8

Ceftazidime in middle ear fluid. O'Donoghue MA, et al. **J Antimicrob Chemother** 1989 Apr;23(4):664–6

High–performance liquid chromatographic analysis of trimethoprim and sulfamethoxazole in microliter volumes of chinchilla middle ear effusion and serum. Erdmann GR, et al. **J Chromatogr** 1988 Dec 9;433:187–95

Experimental animal models for studying antimicrobial pharmacokinetics in otitis media. Canafax DM, et al. **Pharm Res** 1989 Apr;6(4):279–85

MICROBIOLOGY

The bacterial flora of the nasopharynx, with special reference to middle ear pathogens. A quantitative study in twenty children. Stenfors LE, et al. **Acta Otolaryngol (Stockh)** 1989 Jul–Aug;108(1–2):122–5

Quantitative bacterial cultures and beta–lactamase activity in chronic suppurative otitis media. Brook I, et al. **Ann Otol Rhinol Laryngol** 1989 Apr;98(4 Pt 1):293–7

Minimum inhibitory concentrations of some newly developed antimicrobials against common urinary and blood pathogens. el–Baz W, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):40–2

Bacteriology of chronic otitis media affecting children living in Rio de Janeiro. de Uzeda M, et al. **Ear Nose Throat J** 1989 Jun;68(6):448, 450, 452, passim

Alcaligenes piechaudii from chronic ear discharge. Peel MM, et al. **J Clin Microbiol** 1988 Aug;26(8):1580–1

Rhinovirus in acute otitis media. Arola M, et al. **J Pediatr** 1988 Oct;113(4):693–5

Animal models of otitis media: other pathogens. Doyle WJ. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S45–7 (18 ref.)

The microbiology of otitis media. Giebink GS. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S18–20 (32 ref.)

Anaerobic infections in the head and neck region. Tabaqchali S. **Scand J Infect Dis Suppl** 1988;57:24–34 (43 ref.)

[Bacteriologic study of acute otitis media in hospitals and private practice] François M, et al. **Arch Fr Pediatr** 1988 Aug–Sep;45(7):471–6 (Eng. Abstr.) **(Fre)**

[Personal studies on the current spectrum of pathogenic bacteria in otitis externa and chronic otitis media] Feidt H, et al. **Laryngorhinootologie** 1989 Jul;68(7):401–6 (20 ref.) (Eng. Abstr.) **(Ger)**

[Non–spore–forming anaerobes in suppurative–inflammatory diseases of the ORL organs] Mironov AIu, et al. **Vestn Otorinolaringol** 1989 Mar–Apr;(2):62–6 (Eng. Abstr.) **(Rus)**

PARASITOLOGY

Pneumocystis carinii otitis media. Smith MA, et al. **Am J Med** 1988 Nov;85(5):745–6

Aural myiasis caused by Wohlfahrtia magnifica. el Kadery AA, et al. **J Egypt Soc Parasitol** 1989 Dec;19(2):751–3

Aural schistosomiasis mansoni. Bhatia PL. **J Laryngol Otol** 1989 Jun;103(6):596–8

PATHOLOGY

Tympanic membrane structure during a Staphylococcus aureus–induced middle ear infection. A study in the rat middle ear. Grote JJ, et al. **Acta Otolaryngol (Stockh)** 1989 Mar–Apr;107(3–4):225–34

Eustachian tube lumen: comparison between normal and inflamed specimens. Sadé J, et al. **Ann Otol Rhinol Laryngol** 1989 Aug;98(8 Pt 1):630–4

Recent advances in otitis media. Anatomy, cell biology, and pathology. Paparella MM, et al. **Ann Otol Rhinol Laryngol Suppl** 1989 Apr;139:19–22 (44 ref.)

Extensive variations in nasal mucosa in infants with and without recurrent acute otitis media. A scanning electron–microscopic study. Jørgensen F, et al. **Arch Otolaryngol Head Neck Surg** 1989 May;115(5):571–80

Relation between the onset of chronic middle ear inflammation and the development of the middle ear air cell system. Ikarashi H, et al. **ORL J Otorhinolaryngol Relat Spec** 1988;50(5):306–12

Animal model for influenza A otitis media. Lim DJ, et al. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S38–40

[Fibro–adhesive otitis. Definition. Clinical and anatomopathologic data, value of surgical treatment] Martin C, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988; 109(3):213–22 (Eng. Abstr.) **(Fre)**

[Hearing impairment and earache as initial symptoms of Wegener's granulomatosis] Höing R, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Sep;67(9):480–4 (Eng.

Abstr.) (Ger)

PHYSIOPATHOLOGY

Are 'hot' ears really hot? [letter] Weir MR, et al. **Am J Dis Child** 1989 Jul;143(7):763–4

Protease inhibitors in middle ear effusions from experimental otitis media with effusion: kinetics of alpha 1–antitrypsin and alpha 2–macroglobulin levels. Hamaguchi Y, et al. **Ann Otol Rhinol Laryngol** 1989 Apr;98(4 Pt 1):287–92

Recent advances in otitis media. Eustachian tube and middle ear physiology and pathophysiology. Casselbrant ML, et al. **Ann Otol Rhinol Laryngol Suppl** 1989 Apr;139:14–8 (118 ref.)

[Sniff–induced negative pressure—a cause for the development of middle ear diseases?] Hauser R, et al. **HNO** 1989 Jun;37(6):242–7 (Eng. Abstr.) (Ger)

[Electronystagmography used in patients with chronic suppurative mesotympanitis] Dibirov DA, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):11–4 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

Screening for middle–ear disease in schools for hearing–impaired children. Meyer S, et al. **Int J Pediatr Otorhinolaryngol** 1989 May;17(2):163–70

Antimicrobial prophylaxis for recurrent otitis media. Leonetti JP, et al. **Otolaryngol Head Neck Surg** 1988 Jul;99(1):81–2 (5 ref.)

Proceedings of a workshop on vaccines for otitis media. Pittsburgh, PA, September 1–2, 1988. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S1–97

Studies of Streptococcus pneumoniae and influenza virus vaccines in the chinchilla otitis media model. Giebink GS. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S42–4 (11 ref.)

Viral vaccines in the control of otitis media. Gwaltney JM Jr. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S78–9 (10 ref.)

Evaluation of pilus vaccines for prevention of experimental otitis media caused by nontypable Haemophilus influenzae. Karasic RB, et al. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S62–5

A vaccine for otitis media: is there a need? What are the prospects? Klein JO. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S7–8

Pneumococcal otitis media vaccine trials. Klein JO. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S82–3

Evaluating vaccine candidates for the prevention of otitis media. Loeb MR, et al. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S48–50

Vaccines for Haemophilus influenzae type b as models for an otitis vaccine. Mäkelä PH, et al. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S73–5 (18 ref.)

Vaccination trials in otitis media: experiences in Finland since 1977. Mäkelä PH, et al. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S79–82 (10 ref.)

Antimicrobial drugs and surgical procedures in the prevention of otitis media. Paradise JL. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S35–7 (32 ref.)

Sample size considerations in vaccine trials. Rockette HE. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S91–3

RADIOGRAPHY

High–resolution computed tomography of cholesteatomatous otitis media: significance of preoperative information. Park KH, et al. **Yonsei Med J** 1988;29(4):367–72

[Evaluation of temporal bone pneumatization on high resolution CT (HRCT) measurements of the temporal bone in normal and otitis media group and their correlation to measurements of internal auditory meatus, vestibular or cochlear aqueduct] Nakamura M. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jul;91(7):1002–11 (Eng. Abstr.) (Jpn)

RADIOTHERAPY

[Effect of low–energy laser irradiation on the functional state of the acoustic analyzer (experimental study)] Bogomil'skiĭ MR, et al. **Vestn Otorinolaringol** 1989 Mar–Apr;(2):29–34 (Eng. Abstr.) (Rus)

SURGERY

Treatment of early recurrences of acute purulent otitis media; value of myringotomy. Lidén M, et al. **Acta Otolaryngol (Stockh)** 1988 Nov–Dec;106(5–6):441–7

Eustachian tube function in tympanoplasty. Farrior JB. **Am J Otol** 1989 May;10(3):234–6

Goode T–tubes: do the benefits of their use outweigh their complications? Brockbank MJ, et al. **Clin Otolaryngol** 1988 Oct;13(5):351–6

Analysis of secular trends in surgery for glue ear in the North Western Region (1975–1984). Friedman EH, et al. **Community Med** 1989 Feb;11(1):41–8

A prospective study of titanium ventilation tubes. Handler SD, et al. **Int J Pediatr Otorhinolaryngol** 1988 Oct; 16(1):55–60

Surgery related to histopathology in chronic inflammatory middle–ear disease. Palva T. **J Laryngol Otol** 1988 Oct; 102(10):851–6 (16 ref.)

Treatment of glue ear in relation to radiographic palatal airway size: a predictor for outcome following adenoidectomy? Parker AJ, et al. **J Laryngol Otol** 1989 Jan;103(1):66–70

Obliteration of the middle ear cleft. Violaris NS, et al. **J Laryngol Otol** 1989 Jan;103(1):43–5

The flexible/intact–bridge tympanomastoidectomy technique [published erratum appears in Otolaryngol Clin North Am 1989 Apr;22(2):ix] Alleva M, et al. **Otolaryngol Clin North Am** 1989 Feb;22(1):41–9

Stability of tympanoplasty in children. Tos M, et al. **Otolaryngol Clin North Am** 1989 Feb;22(1):15–28

Nocardia asteroides brain abscess following mastoidectomy. Cox F, et al. **Pediatr Neurol** 1986 May–Jun;2(3):183–4

[Myringoplasty in childhood] Dickopf B. **Kinderarztl Prax** 1988 Jun;56(6):289–93 (Eng. Abstr.) (Ger)

[Is measuring impedance following ear operations an aid in the analysis of postoperative sequelae?] Thoma J, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Dec;67(12):624–8 (Eng. Abstr.) (Ger)

[Surgery of chronic suppurative otitis media in childhood] Hildmann H. **Laryngorhinootologie** 1989 Apr;68(4):193–200 (66 ref.) (Eng. Abstr.) (Ger)

[Diagnostic criteria of the course of chronic otitis in the postoperative period] Tkach IuI, et al. **Lab Delo** 1988; (5):32–5 (Eng. Abstr.) (Rus)

[A method of stabilizing auditory thresholds in patients with adhesive otitis media after stapedoplasty] Dmitriev NS, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):17–20 (Eng. Abstr.) (Rus)

[Laser therapy in the early postoperative period following sanitizing surgery of the ear using a closed method (experimental study)] Mishen'kin NV, et al. **Vestn Otorinolaringol** 1988 Nov–Dec;(6):75–6 (Rus)

[Cerebellar abscess in the late period after an extensive cavitary operation on the ear] Nesterov DV, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):69–70 (Rus)

[Prevention of the recurrence of cholesteatoma in tympanoplasty, by tympanic reconstruction using tympano–ossicular homografts or temporal fascia. Apropos of 260 cases] Paiva A, et al. **An Otorrinolaringol Ibero Am** 1988;15(3):299–305 (Eng. Abstr.) (Spa)

THERAPY

Recent advances in otitis media. Management. Nelson JD, et al. **Ann Otol Rhinol Laryngol Suppl** 1989 Apr;139:42–5 (30 ref.)

Vertigo following aural suction: can it be prevented? Gray RF, et al. **Clin Otolaryngol** 1988 Aug;13(4):285–8

The use of tympanostomy tubes. Felder H. **Pediatr Ann** 1988 Oct;17(10):616, 618–9

Current management of chronic suppurative otitis media in infants and children. Bluestone CD. **Pediatr Infect Dis J** 1988 Nov;7(11 Suppl):S137–40

[The treatment of acute otitis media (letter)] Huizing EH. **Ned Tijdschr Geneeskd** 1989 Jun 3;133(22):1142–3 (Dut)

[A method of active opening of the auditory tube in the treatment of inflammatory diseases of the middle ear in children] Bubnova GG, et al. **Vestn Otorinolaringol** 1988 Sep–Oct;(5):50–2 (Eng. Abstr.) (Rus)

VETERINARY

Middle ear infection in suckling and weaned calves. Baba AI, et al. **Morphol Embryol (Bucur)** 1988 Oct–Dec; 34(4):271–5

Surgical management of otitis media and otitis interna. Boothe HW Jr. **Vet Clin North Am [Small Anim Pract]** 1988 Jul;18(4):901–11

Otitis media and otitis interna. Etiology, diagnosis, and medical management. Shell LG. **Vet Clin North Am [Small Anim Pract]** 1988 Jul; 18(4):885–99

An evaluation of tympanometry, otoscopy and palpation for assessment of the canine tympanic membrane. Little CJ, et al. **Vet Rec** 1989 Jan 7;124(1):5–8

Fly strike in a dog [letter] Penny DS. **Vet Rec** 1989 Jul 1; 125(1):24

Total ear canal ablation combined with lateral bulla osteotomy for end–stage otitis in dogs. Results in thirty dogs. Mason LK, et al. **Vet Surg** 1988 Sep–Oct;17(5):263–8

OTITIS MEDIA, SECRETORY see **OTITIS MEDIA WITH EFFUSION**

OTITIS MEDIA, SEROUS see **OTITIS MEDIA WITH EFFUSION**

OTITIS MEDIA, SUPPURATIVE see under **OTITIS MEDIA**

OTITIS MEDIA WITH EFFUSION

How long do middle ear pathogens survive in mucoid effusion material? Stenfors LE, et al. **Acta Otolaryngol (Stockh)** 1989 Mar–Apr;107(3–4):244–8

Non–suppurative otitis media. Ghosh LM. **J Indian Med Assoc** 1988 Sep;86(9):253–4

Diagnosis and treatment of secretory otitis media. Sadé J, et al. **Otolaryngol Clin North Am** 1989 Feb;22(1):1–14 (16 ref.)

COMPLICATIONS

Secretory otitis media and hearing loss. Sorri M, et al. **Acta Otolaryngol Suppl (Stockh)** 1989;457:94–9

The role of nasal allergy in otitis media with effusion. A clinical study. Tomonaga K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;458:41–7

Sequelae following secretory otitis and their progression. Tos M, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:37–8

Complications of chronic glue ears. Black B. **Aust Fam Physician** 1989 Jul;18(7):836–9, 842–3

The skull base and nasopharynx in Down's syndrome in relation to hearing impairment. Brown PM, et al. **Clin Otolaryngol** 1989 Jun;14(3):241–6

Conductive hearing loss assessment in children with otitis media with effusion. A comparison of pure tone and BERA results. Conijn EA, et al. **Clin Otolaryngol** 1989 Apr; 14(2):115–20

Nasopharyngeal neoplasms and their association with adult onset otitis media with effusion. Dempster JH, et al. **Clin Otolaryngol** 1988 Oct;13(5):363–5

Elevation of bone conduction threshold in children with middle ear effusion. Kobayashi K, et al. **Int J Pediatr Otorhinolaryngol** 1988 Nov;16(2):95–100

The influence of chronic persistent otitis media with effusion on language development of 2– to 4–year–olds. Rach GH, et al. **Int J Pediatr Otorhinolaryngol** 1988 Sep;15(3):253–61

The psychological, educational and auditory sequelae of early, persistent secretory otitis media. Webster A, et al. **J Child Psychol Psychiatry** 1989 Jul;30(4):529–46

Hearing and verbal–cognitive abilities in high–risk preterm infants prone to otitis media with effusion. Pearce PS, et al. **J Dev Behav Pediatr** 1988 Dec;9(6):346–51

Bilateral facial nerve palsy following secretory otitis media. Premachandra DJ, et al. **J Laryngol Otol** 1989 Jul; 103(7):685

The middle ear in cleft palate children pre and post palatal closure. Dhillon RS. **J R Soc Med** 1988 Dec;81(12):710–3

Presence of Chlamydia trachomatis in tympanocentesis fluid assessed by immunofluorescence microscopy and cell culture. Blackston ML, et al. **Otolaryngol Head Neck Surg** 1989 Apr;100(4):348–9

[Association of bilateral serous otitis, systemic vasculitis and temporal arteritis. Nosological problems (letter)] Vinceneux P, et al. **Presse Med** 1989 Jan 28;18(3):132 (Fre)

DIAGNOSIS

Prognosis of secretory otitis media in relation to viscoelasticity of effusions in children. Takeuchi K, et al. **Ann Otol Rhinol Laryngol** 1989 Jun;98(6):443–6

Sonotubometry: its role in childhood glue ear. Jonathan DA. **Clin Otolaryngol** 1989 Apr;14(2):151–4

Otoscopic diagnosis of middle ear effusion in acute and non–acute otitis media. I. The value of different otoscopic findings. Karma PH, et al. **Int J Pediatr Otorhinolaryngol** 1989 Feb;17(1):37–49

Persistent effusion following acute otitis media: tympanometry and pneumatic otoscopy in diagnosis. Wilmot JF, et al. **J R Coll Gen Pract** 1988 Apr; 38(309):149–52

Paediatric auditory brainstem response and pure–tone audiometry: threshold comparisons. A study of 142 difficult–to–test children. Fjermedal O, et al. **Scand Audiol** 1989;18(2):105–11

[Diagnosis and incidence of recurrence of chronic tubal secretory otitis media in childhood] Mertens H, et al. **HNO** 1988 Dec;36(12):507–10 (Eng. Abstr.) (Ger)

[Cases of serous otitis admitted to the ENT Department of the V. Babeş Hospital over the last 7 years] Tomescu P, et al. **Rev Chir [Otorinolaringol]** 1989 Jan–Mar;34(1):57–62 (Eng. Abstr.) (Rum)

DRUG THERAPY

Clinical evaluation of S–CMC syrup applied in the treatment of otitis media with effusion. Double blind comparative test with placebo. Kumazawa T, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;458:56–62

Long–term antibiotic treatment of children with secretory otitis media: a double–blind placebo–controlled study. Thomsen J, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 449:49–50

Antiinflammatory effects of a corticosteroid and protease inhibitor agents on antigen–induced otitis media in chinchillas. Hamaguchi Y, et al. **Am J Otolaryngol** 1988 May–Jun;9(3):142–8

Effect of naproxen, a prostaglandin inhibitor, on acute otitis media and persistence of middle ear effusion in children. Varsano IB, et al. **Ann Otol Rhinol Laryngol** 1989 May; 98(5 Pt 1):389–92

Antibiotic treatment of children with secretory otitis media. A randomized, double–blind, placebo–controlled study. Thomsen J, et al. **Arch Otolaryngol Head Neck Surg** 1989 Apr;115(4):447–51

Single intramuscular dose of ceftriaxone as compared to 7–day amoxicillin therapy for acute otitis media in children. A double–blind clinical trial. Varsano I, et al. **Chemotherapy** 1988;34 Suppl 1:39–46

Two interpretations of drug trial data [letter] Bluestone CD. **Lancet** 1989 Aug 26;2(8661):507–8

[Carbocysteine in the treatment of secretory tubotympanic catarrh in childhood] Kašpárek L, et al. **Cesk Otolaryngol** 1988 Dec;37(6):364–8 (Eng. Abstr.) (Cze)

[Treatment of secretory otitis media with ambroxol] Sartoris A. **Acta Otorhinolaryngol Ital** 1987;7 Suppl 16:51–60 (Eng.

Abstr.) (Ita)
[Use of Rokitamycin dry syrup in cases of upper deep cervical lymphadenitis and otitis media with exudatives] Mukai S, et al. **Kansenshogaku Zasshi** 1989 Feb; 63(2):98–102 (Eng. Abstr.) (Jpn)
[Effects of carbocysteine on the experimental otitis media with effusion] Hori F, et al.
Nippon Jibiinkoka Gakkai Kaiho 1988 Aug;91(8):1250–5 (Eng. Abstr.) (Jpn)
[The limits of transtympanic injections in treating serous otitis with a closed tympanum] Obreja S, et al.
Rev Chir [Otorinolaringol] 1988 Oct–Dec;33(4):253–8 (Eng. Abstr.) (Rum)

EPIDEMIOLOGY

Otitis media. Incidence, duration, and hearing status. Roland PS, et al. **Arch Otolaryngol Head Neck Surg** 1989 Sep; 115(9):1049–53
Epidemiology of otitis media and the role of the general practitioner in management. De Melker RA, et al.
Fam Pract 1988 Dec;5(4):307–13 (48 ref.)
Determination of the epidemiology and transmission of nontypable Haemophilus influenzae in children with otitis media by comparison of total genomic DNA restriction fingerprints. Loos BG, et al. **Infect Immun** 1989 Sep; 57(9):2751–7
Epidemiology of otitis media during the first seven years of life in children in greater Boston: a prospective, cohort study. Teele DW, et al. **J Infect Dis** 1989 Jul;160(1):83–94
Impedance screening for otitis media with effusion in Nigerian children. Ogisi FO. **J Laryngol Otol** 1988 Nov; 102(11):986–8
Screening for otitis media with effusion in preschool children. Zielhuis GA, et al. **Lancet** 1989 Feb 11;1(8633):311–4
Otitis media and hearing loss in the children of the Ruatoki valley: a continuing public health problem. Giles M, et al. **N Z Med J** 1989 Apr 12;102(865):160–1
Epidemiology of otitis media in infants and preschool children. Casselbrant ML. **Pediatr Infect Dis J** 1989 Jan; 8(1 Suppl):S10–1
Environmental risk factors for otitis media with effusion in preschool children. Zielhuis GA, et al.
Scand J Prim Health Care 1989 Mar;7(1):33–8
[Results of the Ewing screening test and the risk of otitis media with effusion in children of preschool age] Zielhuis GA, et al. **Ned Tijdschr Geneeskd** 1989 May 20; 133(20):1030–3 (Eng. Abstr.) (Dut)

ETIOLOGY

Experimental paralysis of tensor veli palatini muscle. Casselbrant ML, et al. **Acta Otolaryngol (Stockh)** 1988 Sep–Oct;106(3–4):178–85
Etiological role of adenoids upon otitis media with effusion. Fujita A, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 454:210–3
A rat model for bacterial otitis media. Hermansson A, et al. **Acta Otolaryngol Suppl (Stockh)** 1989;457:144–7
Secretory otitis media—infectious background and its implications for treatment. Karma P.
Acta Otolaryngol Suppl (Stockh) 1988;449:47–8
Eustachian tube dysfunction in children with ragweed hayfever during natural pollen exposure. Osur SL, et al. **Allergy Proc** 1989 Mar–Apr;10(2):133–9
Quantitative cytologic and histologic changes in the middle ear after the injection of nontypable Hemophilus influenzae endotoxin. DeMaria TF, et al. **Am J Otolaryngol** 1989 Jul–Aug;10(4):261–6
Ciliary activity on adenoids of patients with otitis media with effusion. Ohashi Y, et al. **Am J Otolaryngol** 1988 Nov–Dec; 9(6):323–6
Middle ear diseases in cleft palate patients in Singapore. Lau CC, et al. **Ann Acad Med Singapore** 1988 Jul;17(3):372–4
Mucociliary disease of the middle ear during experimental otitis media with effusion induced by bacterial endotoxin. Ohashi Y, et al. **Ann Otol Rhinol Laryngol** 1989 Jun; 98(6):479–84
Bilateral tympanic cavity infiltration with effusion in a patient with acute myeloblastic leukemia. Kurabayashi H, et al. **Blut** 1989 Jan;58(1):45–6
Passive smoking, salivary cotinine concentrations, and middle ear effusion in 7 year old children. Strachan DP, et al. **BMJ** 1989 Jun 10;298(6687):1549–52
Household smoking exposure—association with middle ear effusions. Reed BD, et al. **Fam Med** 1988 Nov–Dec; 20(6):426–30
Otitis media with effusion and habitual mouth breathing in Dutch preschool children. van Bon MJ, et al.
Int J Pediatr Otorhinolaryngol 1989 May;17(2):119–25
Parental smoking and middle ear effusions in children. Hinton AE, et al. **J Laryngol Otol** 1988 Nov;102(11):992–6
Bifid uvula: prevalence and association in otitis media with effusion in children admitted for routine otolaryngological operations. Rivron RP. **J Laryngol Otol** 1989 Mar; 103(3):249–52
Otitis media with effusion in the adult. Shimotakahara SG, et al. **J Otolaryngol** 1989 Apr;18(3):85–9
Restriction fragment mapping of nontypable haemophilus influenzae: a new tool to study this middle ear pathogen. Bernstein JM, et al. **Otolaryngol Head Neck Surg** 1989 Mar; 100(3):200–6
Otitis media and its relationship to allergy. Fireman P.
Pediatr Clin North Am 1988 Oct;35(5):1075–90 (40 ref.)
Pathogenesis of otitis media related to vaccine efficacy. Bluestone CD. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S14–7 (24 ref.)
[Secretory otitis as the initial sign of hypothyroidism] Pohjola–Sintonen S. **Duodecim** 1988;104(18):1478–80 (Fin)
[Middle ear effusion and allergy in childhood] Bachert C, et al. **Laryngorhinootologie** 1989 Apr;68(4):201–3 (Eng. Abstr.) (Ger)
[Role of surfactant in the pathogenesis of secretory otitis media] Van Cauwenberge PB, et al.
Acta Otorhinolaryngol Ital 1987;7 Suppl 16:45–9 (23 ref.) (Eng. Abstr.) (Ita)

IMMUNOLOGY

Serous otitis media and immunological reactions in the middle ear mucosa. van der Baan S, et al.
Acta Otolaryngol (Stockh) 1988 Nov–Dec;106(5–6):428–34
Role of the round window membrane in middle ear immune responses. Keithley EM, et al.
Acta Otolaryngol Suppl (Stockh) 1989;457:139–43
Recurrence of antigen–induced otitis media by thiol compound. Hamaguchi Y, et al. **Am J Otolaryngol** 1988 May–Jun;9(3):111–6
Effects of middle ear effusion on neutrophil function. Shimizu T, et al. **Am J Otolaryngol** 1989 Mar–Apr;10(2):132–7
Immune–mediated otitis media with effusion. Suzuki M, et al. **Am J Otolaryngol** 1988 Sep–Oct;9(5):199–209
Bactericidal activity of middle ear effusion on a single isolate of non–typable Haemophilus influenzae. Shimizu T, et al. **Int J Pediatr Otorhinolaryngol** 1988 Dec;16(3):211–7
Local production of IgG to pneumococcal C–polysaccharide in upper airway secretions from children with recurrent acute otitis media. Sørensen CH, et al. **Microb Pathog** 1989 Mar;6(3):183–91
[Immunologic studies of secretory otitis] Sprem N, et al. **HNO** 1989 Jun;37(6):248–9 (Eng. Abstr.) (Ger)
[Immunologic study of the nasal mucus and secretion in chronic otitis media with closed tympanum] Basterra J, et al. **An Otorrinolaringol Ibero Am** 1988;15(6):615–9 (Eng. Abstr.) (Spa)
[Rheumatoid factor and secretory otitis media] Basterra J, et al. **An Otorrinolaringol Ibero Am** 1988;15(4):451–5 (Eng. Abstr.) (Spa)

METABOLISM

Experimental otitis media in mice. Immunohistochemical observations. Ichimiya I, et al.
Acta Otolaryngol Suppl (Stockh) 1989;457:148–53
Influence of middle ear effusion on perilymph. Mogi G, et al. **Acta Otolaryngol Suppl (Stockh)** 1989;457:116–23
Proteases and protease inhibitors in immune complex otitis media in chinchillas. Hamaguchi Y, et al.
Ann Otol Rhinol Laryngol 1989 Jul;98(7 Pt 1):563–8
Hyaluronan in experimental serous and purulent otitis media. Laurent C, et al. **Ann Otol Rhinol Laryngol** 1989 Sep; 98(9):736–40
Beta 2–microglobulin in otitis media with effusion. DeMaria TF, et al. **Arch Otolaryngol Head Neck Surg** 1988 Nov; 114(11):1259–61
Rheologic studies on middle ear effusions and their mucus glycoproteins. FitzGerald JE, et al.
Arch Otolaryngol Head Neck Surg 1989 Apr;115(4):462–8
Plasmin and fibronectin degradation in chronic secretory otitis media. Salonen EM, et al.
Arch Otolaryngol Head Neck Surg 1989 Jan;115(1):48–53
Prostaglandin content in human middle ear effusions. Kawata R, et al. **Arch Otorhinolaryngol** 1989;246(3):133–6
Determination of lipid A in human middle ear effusions with the competitive ELISA technique. Tanimura F.
Arch Otorhinolaryngol 1989;246(2):79–82

MICROBIOLOGY

Quantification of bacteria in middle ear effusions. Stenfors LE, et al. **Acta Otolaryngol (Stockh)** 1988 Nov–Dec; 106(5–6):435–40
The bacterial flora of the nasopharynx, with special reference to middle ear pathogens. A quantitative study in twenty children. Stenfors LE, et al. **Acta Otolaryngol (Stockh)** 1989 Jul–Aug;108(1–2):122–5
Colonization of middle ear pathogens in the nasopharyngeal opening of the Eustachian tube during secretory otitis media. Stenfors LE, et al. **Acta Otolaryngol (Stockh)** 1989 Jan–Feb;107(1–2):104–10
Otitis media with effusion and the nasopharynx. A bacteriological and immunological study. Kurono Y, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:214–7
Interaction of bacteria with the immune system of Waldeyer's ring in otitis media with effusion. Sakakura Y, et al.
Acta Otolaryngol Suppl (Stockh) 1988;454:222–6
A rat model for pneumococcal otitis media. Hermansson A, et al. **Am J Otolaryngol** 1988 May–Jun;9(3):97–101
Adenoids and otitis media with effusion: nasopharyngeal flora. Tomonaga K, et al. **Am J Otolaryngol** 1989 May–Jun; 10(3):204–7
Nasopharyngeal culture with quantitative analysis of pathogenes in chronic otitis media with effusion. Effects on pathogen yield of different swabs and transport methods. Hemlin C, et al. **APMIS** 1989 Jul;97(7):606–10
Staphylococcus epidermidis and Staphylococcus aureus in otitis media with effusion. Kurono Y, et al.
Arch Otolaryngol Head Neck Surg 1988 Nov; 114(11):1262–5
Serous otitis media (S.O.M.). A bacteriological study of the ear canal and the middle ear. Cabenda SI, et al.
Int J Pediatr Otorhinolaryngol 1988 Nov;16(2):119–24
Bacteriology of chronic otitis media with effusion. Diamond C, et al. **J Laryngol Otol** 1989 Apr;103(4):369–71
Bacteriology of otitis media with effusion. Sriwardhana KB, et al. **J Laryngol Otol** 1989 Mar;103(3):253–6
Animal models of otitis media: other pathogens. Doyle WJ. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S45–7 (18 ref.)
Bacteriology of middle ear fluid specimens obtained by tympanocentesis from 111 Colombian children with acute otitis media. Trujillo H, et al. **Pediatr Infect Dis J** 1989 Jun;8(6):361–3

PATHOLOGY

Otitis media with effusion and tubal tonsil (video). Honda K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:218–21
Localized middle ear effusions: three unusual acute cases in adults. Parker DA, et al. **J Laryngol Otol** 1989 Jan; 103(1):83–5

PHYSIOPATHOLOGY

Hearing in chronic suppurative otitis media. Browning GG, et al. **Ann Otol Rhinol Laryngol** 1989 Apr;98(4 Pt 1):245–50
Protease inhibitors in middle ear effusions from experimental otitis media with effusion: kinetics of alpha 1–antitrypsin and alpha 2–macroglobulin levels. Hamaguchi Y, et al.
Ann Otol Rhinol Laryngol 1989 Apr;98(4 Pt 1):287–92
Auditory brain–stem responses in children with previous otitis media. Chambers RD, et al.
Arch Otolaryngol Head Neck Surg 1989 Apr;115(4):452–7
Primary deficits in eustachian tube function in patients with otitis media with effusion. Takahashi H, et al.
Arch Otolaryngol Head Neck Surg 1989 May;115(5):581–4
Mucolytic agents and otitis media with effusion. Fitzgerald JE, et al. **Biomed Pharmacother** 1988;42(8):505–11 (26 ref.)
Otitis media. Bierman CW, et al. **Clin Rev Allergy** 1988 Fall; 6(3):321–40 (32 ref.)
Speech sound discrimination pre– and posttympanostomy: a clinical case report. DeMarco S, et al. **Ear Hear** 1989 Feb;10(1):64–7
Otitis media and nasal disease: a role for allergy. Fireman P. **J Allergy Clin Immunol** 1988 Nov;82(5 Pt 2):917–26 (15 ref.)
Middle ear pressure changes after general anesthesia [letter] Finkelstein Y, et al. **Laryngoscope** 1989 Mar;99(3):349

PSYCHOLOGY

The effects of chronic otitis media on motor performance in 5– and 6–year–old children. Von T, et al.
Am J Occup Ther 1988 Jul;42(7):421–6
Infants' monaural localization of sounds: effects of unilateral ear infection. Morrongiello BA. **J Acoust Soc Am** 1989 Aug;86(2):597–602
Otitis media in early childhood and its relationship to later phonological development. Roberts JE, et al.
J Speech Hear Disord 1988 Nov;53(4):424–32
Otitis media in early childhood and cognitive, academic, and classroom performance of the school–aged child. Roberts JE, et al. **Pediatrics** 1989 Apr;83(4):477–85
[Is otitis media with effusion harmful for the language development of young children? (letter)] Mulder HJ.
Ned Tijdschr Geneeskd 1989 Jan 21;133(3):131–2 (Dut)
[Is otitis media with effusion harmful for language development in young children] van den Broek P, et al.
Ned Tijdschr Geneeskd 1988 Oct 8;132(41):1885–8 (Eng. Abstr.) (Dut)

SURGERY

Do we treat "the right" children with secretory otitis media at the ENT clinic? Augustsson I, et al.
Acta Otolaryngol Suppl (Stockh) 1988;449:39–40
Surgery of the tonsils and adenoids in relation to secretory otitis media in children. Maw AR, et al.
Acta Otolaryngol Suppl (Stockh) 1988;454:202–7
Effect of adenoidectomy on otitis media with effusion, tubal function, and sinusitis. Takahashi H, et al.
Am J Otolaryngol 1989 May–Jun;10(3):208–13
Chronic secretory otitis media: effects of surgical management. Gates GA, et al.
Ann Otol Rhinol Laryngol Suppl 1989 Jan;138:2–32
Adenoidectomy for secretory otitis media. Austin DF.
Arch Otolaryngol Head Neck Surg 1989 Aug;115(8):936–9
No peak–peak tympanometric conversion following surgery for otitis media with effusion in relation to airway size: a new treatment strategy? Parker AJ, et al.
Clin Otolaryngol 1989 Feb;14(1):27–32
Why do tympanostomy tubes block? Reid AP, et al.
Clin Otolaryngol 1988 Aug;13(4):279–83
A 15 year follow–up of a controlled trial of the use of grommets in glue ear. Skinner DW, et al.
Clin Otolaryngol 1988 Oct;13(5):341–6
A prospective study of titanium ventilation tubes. Handler SD, et al. **Int J Pediatr Otorhinolaryngol** 1988 Oct; 16(1):55–60
Surgery for otitis media with effusion in children and its relationship to parental smoking. Hinton AE.

J Laryngol Otol 1989 Jun;103(6):559–61

Prognostic factors in otitis media with effusion. Robinson PM. J Laryngol Otol 1988 Nov;102(11):989–91

Aspiration of middle ear effusions prior to grommet insertion an etiological factor in tympanosclerosis. McRae D, et al. J Otolaryngol 1989 Aug;18(5):229–31

Is aspiration of middle ear effusions prior to ventilation tube insertion really necessary? Youngs RP, et al. J Otolaryngol 1988 Aug;17(5):204–6

A prospective randomized study of four commonly used tympanostomy tubes. Weigel MT, et al. Laryngoscope 1989 Mar;99(3):252–6

Controversy over tubes and adenoidectomy. Bluestone CD, et al. Pediatr Infect Dis J 1988 Nov;7(11 Suppl):S146–9

[Mastoidectomy and seromucous otitis] Narcy P, et al. Ann Otolaryngol Chir Cervicofac 1989;106(4):263–7 (19 ref.) (Eng. Abstr.) (Fre)

[Serous otitis: long-term efficacy of transtympanic drainage] Cuchí A. An Otorrinolaringol Ibero Am 1989;16(2):179–86 (Eng. Abstr.) (Spa)

THERAPY

Treatment of secretory otitis media with Kampo medicine. Ikeda K, et al. Arch Otorhinolaryngol 1988;245(4):234–6

Thermal myringotomy versus grommets in the management of secretory otitis media. Kent SE. Int J Pediatr Otorhinolaryngol 1989 Feb;17(1):31–5

Bacteremia associated with tympanostomy tube insertion [letter] Lohr JA, et al. J Infect Dis 1989 Mar;159(3):594–5

Recovery from OME-related phonologic delay following tube placement. Paden EP, et al. J Speech Hear Disord 1989 Feb;54(1):94–100

Randomised study of myringotomy, amoxycillin/clavulanate, or both for acute otitis media in infants. Engelhard D, et al. Lancet 1989 Jul 15;2(8655):141–3

Lack of efficacy of middle-ear inflation: treatment of otitis media with effusion in children. Chan KH, et al. Otolaryngol Head Neck Surg 1989 Apr;100(4):317–23

[Our clinical management in treating seromucous otitis] Cotulbea S, et al. Rev Chir [Otorinolaringol] 1988 Oct–Dec; 33(4):259–64 (Eng. Abstr.) (Rum)

OTOLARYNGOLOGY

see related
OTORHINOLARYNGOLOGIC DISEASES

Cooperative clinical research in otology. Bailey BJ. Am J Otol 1989 May;10(3):248–51

The role of the otolaryngologist in managing suicidal adolescents. Derkay CS, et al. Ear Nose Throat J 1989 Jun;68(6):438, 440–3, 447

AIDS and the otolaryngologist. Jafek BW. Ear Nose Throat J 1988 Sep;67(9):624

AIDS and the otolaryngologist [letter] Lucente FE, et al. Ear Nose Throat J 1989 Jan;68(1):66–7

Doctors and dentists: review of a symposium. Cole P. J Otolaryngol 1989 Jun;18(4):135–6

Otolaryngology—head and neck surgery. Bailey BJ. JAMA 1989 May 19;261(19):2870–2

Directory of otolaryngologic societies. Laryngoscope 1989 Aug;99(8 Pt 1):872–4

Directory of otolaryngologic societies. Laryngoscope 1989 Sep;99(9):992–4

"Joining" the Triological Society. Ritter FN.

A book by its cover: sonnet on an otolaryngological text. Hayes CF. Lit Med 1987;6:92–3

Ten-year experience in otolaryngology medical malpractice claims in New Jersey. Yeager HP, et al. N J Med 1988 Oct;85(10):819–23

Pediatric infection with the human immunodeficiency virus: issues for the otorhinolaryngologist. Chanock SJ, et al. Otolaryngol Clin North Am 1989 Jun;22(3):637–60 (55 ref.)

Lasers in otology. McGee TM. Otolaryngol Clin North Am 1989 Feb;22(1):233–8

Steps and the future of the IFOS Standing Committee on Care of Hearing Impaired Children. Suzuki JI. Scand Audiol Suppl 1988;28:115–7

[The role of the medical society in the field of medical education] Hybášek I. Cesk Otolaryngol 1988 Dec; 37(6):321–6 (Eng. Abstr.) (Cze)

[The role of otorhinolaryngologists in treating severe craniocervicofacial injuries] Costaş V, et al. Rev Chir [Otorinolaringol] 1988 Oct–Dec;33(4):289–92 (Eng. Abstr.) (Rum)

ECONOMICS

Surgonomics. Health care financing policy for hospitalized otolaryngology patients. Muñoz E, et al. Arch Otolaryngol Head Neck Surg 1988 Nov; 114(11):1317–20

EDUCATION

Computer simulation of eye movements for teaching and training in ocular motor pathology. Huygen PL. Adv Otorhinolaryngol 1988;42:81–4

What you have to do to become an ENT senior registrar. Slack RW, et al. Clin Otolaryngol 1988 Dec;13(6):411–3

Annual meeting of the American Academy of Otolaryngology–Head and Neck Surgery Foundation, Inc. New Orleans, Louisiana, September 24–27, 1989. 1989 instruction course program. Otolaryngol Head Neck Surg 1989 May;100(5):367–500

Are we teaching medical students what they need to know? Ganzel TM, et al. Otolaryngol Head Neck Surg 1989 Apr; 100(4):339–44

Goals and mechanisms for training otolaryngologists in the area of geriatric medicine. Johns M, et al. Otolaryngol Head Neck Surg 1989 Apr;100(4):262–5

[Principles of the educational process at the department of otorhinolaryngology at the Charles University Medical School] Hahn A, et al. Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl 1988;31(4):565–7 (Eng. Abstr.) (Cze)

[Use of games during training in otorhinolaryngology at the Institute of Advanced Training of Physicians] Rodin VI, et al. Vestn Otorinolaringol 1989 Mar–Apr;(2):86–8 (Rus)

HISTORY

'Otology at the crossroads' (the second Morell MacKenzie address). Morrison AW. J Laryngol Otol 1988 Sep; 102(9):751–4

[Otolaryngology in ancient India] Kierzek A. Otolaryngol Pol 1988;42(4):296–9 (Eng. Abstr.) (Pol)

[Bronislaw Taczanowski (1840–1912)—an otologist, psychiatrist and the author of the first textbooks on otolaryngology] Kierzek A. Wiad Lek 1988 Jul 15; 41(14):966–71 (Eng. Abstr.) (Pol)

[History of the oldest Russian otorhinolaryngologic department at the Staro-Ekaterinskaia Hospital in Moscow (pre-revolutionary period)] Chumakov FI. Vestn Otorinolaringol 1989 May–Jun;(3):83–6 (Rus)

[Otorhinolaryngologic services in the Moscow province in the pre-Revolutionary period] Chumakov FI. Vestn Otorinolaringol 1989 Jan–Feb;(1):68–70 (Rus)

[Liudvig Iosifovich Sverzhevskiĭ and his school] Golosovskiĭ MM. Vestn Otorinolaringol 1988 May–Jun;(3):86–7 (Rus)

[The development and beginnings of otorhinolaryngology at the Comenius University Medical School in Bratislava] Tichý M, et al. Cesk Zdrav 1989 Mar;37(3):139–44 (Eng. Abstr.) (Slo)

[Results of the analytic and sociometric study of books and articles on otology. 16th–20th centuries (up to 1932). 2] Pisonero Ruiz MP. An Otorrinolaringol Ibero Am 1988; 15(3):307–42 (Eng. Abstr.) (Spa)

[Results of the analytic and sociometric study of books and articles on otology. 16th to 20th centuries (up to 1932). Part 3] Pisonero Ruiz MP. An Otorrinolaringol Ibero Am 1988;15(4):409–27 (Eng. Abstr.) (Spa)

INSTRUMENTATION

Transmission of infectious agents by inadequately sterilized ENT instruments [letter] Malt RA. N Engl J Med 1989 Mar 16;320(11):741–2

Modification of horizontal jaws of alligator forceps. Haberman RS 2d. Otolaryngol Head Neck Surg 1988 Sep; 99(3):346–7

New pneumatic adapter for a battery-powered otoscope. Zusho H. Otolaryngol Head Neck Surg 1988 Jul;99(1):79–80

[Fibrolaryngostroboscopy as a method of a functional study of the larynx] Deriagin NI, et al. Vestn Otorinolaringol 1989 May–Jun;(3):65–6 (Rus)

METHODS

Local anesthetics. Willis RA, et al. Am J Otol 1988 Sep; 9(5):434–7

Persistent effusion following acute otitis media: tympanometry and pneumatic otoscopy in diagnosis. Wilmot JF, et al. J R Coll Gen Pract 1988 Apr; 38(309):149–52

ORGANIZATION & ADMINISTRATION

Analysis of night-time and weekend otolaryngology service. McShane DP. Ir J Med Sci 1989 Jun;158(6):150–2

Audiology and Otology Pilot Centre for the countries of the Mediterranean area. Quaranta A. Scand Audiol Suppl 1988;28:95–7

STANDARDS

The ENT consultation: a prospective study of the doctor's and the patient's perceptions. Sim DW. J Laryngol Otol 1989 Apr;103(4):363–5

[Characteristics of ORL pathology in Burundi] Ryzhov NI. Vestn Otorinolaringol 1989 Jan–Feb;(1):71–3 (Rus)

TRENDS

Is research worthwhile? Booth CC. J Laryngol Otol 1989 Apr;103(4):351–6

[Address by the president of the German Society of Otorhinolaryngology, Head and Neck Surgery, Prof. Dr. M.E. Wiegand, Erlangen, on the opening of the 59th annual meeting on 15 May 1988 in Nürnberg] Wigand ME. Arch Otorhinolaryngol Suppl 1988;2:1–8 (Ger)

[Otorhinolaryngology: advances of the specialty] Acta Otorhinolaryngol Ital 1988 Sep–Oct;8(5):449–91 (Ita)

[Main trends in the development of Soviet otorhinolaryngology to the year 2000] Tarasov DI, et al. Vestn Otorinolaringol 1989 May–Jun;(3):3–9 (Rus)

OTOLITHIC MEMBRANE see under SACCULE AND UTRICLE

OTORHINOLARYNGOLOGIC DISEASES

Proceedings of the scientific session of the Collegium Oto-Rhino-Laryngologicum Amicitiae Sacrum. Hakone, October 23–26, 1988. Acta Otolaryngol (Stockh) 1989 May–Jun;107(5–6):327–495

Advances in Modern Otolaryngology. Commemoration of the 10th anniversary of Professor Masaru Ohyama taking his post with the Department of Otolaryngology, Kagoshima University School of Medicine. Acta Otolaryngol Suppl (Stockh) 1988;458:1–193

Oto-Rhino-Laryngological Research Society: abstracts. 3 October 1986. Clin Otolaryngol 1988 Aug;13(4):307–15

Oto-Rhino-Laryngological Research Society (ORS). Abstracts of the meeting. Bath, April 1988. Clin Otolaryngol 1989 Jun;14(3):263–70

Evaluation of a computer interview system for use with neuro-otology patients. O'Connor KP, et al. Clin Otolaryngol 1989 Feb;14(1):3–9

Otolaryngic allergy [letter] Ear Nose Throat J 1988 Dec; 67(12):920–1

Canadian Society of Otolaryngology–Head and Neck Surgery, 43rd annual meeting. April 30–May 3rd, 1989, Toronto. Abstracts. J Otolaryngol 1989 Mar;18(2):1–47 (Eng, Fre)

Mucosal leishmaniasis in Brazil. Zajtchuk JT, et al. Laryngoscope 1989 Sep;99(9):925–39

Pediatric otolaryngology. Otolaryngol Clin North Am 1989 Jun;22(3):473–676

Annual meeting of the American Academy of Otolaryngology–Head and Neck Surgery Foundation, Inc. New Orleans, Louisiana, September 24–28, 1989. Abstracts. Otolaryngol Head Neck Surg 1989 Aug;101(2):151–259

The fourteenth annual symposium: Ear, nose and throat diseases in children: 1987 update. Palm Beach, Florida, December 13–16, 1987. Proceedings. Pediatr Infect Dis J 1988 Nov;7(11 Suppl):S128–82

[1st European Congress of Oto-Rhino-Laryngology and Cervico-Facial Surgery. Paris, 26–29 September 1988. Abstracts] Rev Laryngol Otol Rhinol (Bord) 1988;109 Suppl:1–199 (Fre)

[1988 report of proceedings of the German Society for Otorhinolaryngology and Head and Neck Surgery. 2. Report of sessions] Arch Otorhinolaryngol Suppl 1988; 2:1–339 (Ger)

[Issue dedicated to Prof. H. H. Naumann on the occasion of his 70th birthday] Laryngol Rhinol Otol (Stuttg) 1989 Jan;68(1):1–80 (Ger)

[89th meeting of the Otorhinolaryngological Society of Japan. Kanazawa, 27–29 May 1988. Abstracts] Nippon Jibiinkoka Gakkai Kaiho 1988 Oct;91(10):1533–823 (Jpn)

[90th meeting of the Otorhinolaryngological Society of Japan. Osaka, 11–13 May 1989. Program] Nippon Jibiinkoka Gakkai Kaiho 1989 Mar;92(3 Suppl):489–533 (Jpn)

BLOOD

[Serum iron levels in various otorhinolaryngologic diseases] Horoch A, et al. Otolaryngol Pol 1988;42(1–2):92–6 (Eng. Abstr.) (Pol)

[The level of iron in the blood serum in patients with otorhinolaryngologic pathology] Khorokh A, et al. Lab Delo 1988;(11):76–7 (Rus)

COMPLICATIONS

Pediatric infection with the human immunodeficiency virus: issues for the otorhinolaryngologist. Chanock SJ, et al. Otolaryngol Clin North Am 1989 Jun;22(3):637–60 (55 ref.)

Otolaryngologic manifestations of sarcoidosis. Torsiglieri AJ Jr, et al. Trans Pa Acad Ophthalmol Otolaryngol 1988; 40:720–4 (17 ref.)

[Orthodontic anomalies and otorhinolaryngology] Coyas A. Orthod Fr 1987;58 Pt 2:411–4 (Fre)

[Indications for electronystagmography. When should the ENT physician indicate electronystagmography?] Reker U. HNO 1988 Nov;36(11):431–6 (18 ref.) (Eng. Abstr.) (Ger)

[Cerebral abscesses secondary to infectious otorhinolaryngologic diseases] Arseni C, et al. Rev Med Interna [Neurol Psihiatr] 1988 Jul–Sep; 33(3):171–88 (Eng. Abstr.) (Rum)

[The role of pathology of the ORL organs in the etiology of facial pain] Arzykulova GS, et al. Vestn Otorinolaringol 1989 Jan–Feb;(1):34–42 (94 ref.) (Eng. Abstr.) (Rus)

CONGENITAL

Arthrogryposis multiplex congenita: otolaryngologic diagnosis and management. Paugh DR, et al. Int J Pediatr Otorhinolaryngol 1988 Oct;16(1):45–53

DIAGNOSIS

Visualization techniques in the nasal airway: their role in the diagnosis of upper airway disease and measurement of therapeutic response. Selner JC.

J Allergy Clin Immunol 1988 Nov;82(5 Pt 2):909–16 (2 ref.)
Flexible oesophagogastroscopy in otolaryngology. Thomas HG, et al. J Laryngol Otol 1989 Apr;103(4):399–403
Modern imaging in ear, nose and throat problems. Curtin HD. Pediatr Infect Dis J 1988 Nov;7(11 Suppl):S174–82 (15 ref.)
[Ultrasonic diagnosis] Mann W.
Arch Otorhinolaryngol Suppl 1989;1:71–98 (Ger)
[Computerized tomography and nuclear magnetic tomography of the facial skull and neck] Mees K, et al. Arch Otorhinolaryngol Suppl 1989;1:1–40 (Ger)
[Manifestations of actinomycosis of the head and neck] Kainz J, et al. HNO 1988 Dec;36(12):493–7 (Eng. Abstr.) (Ger)
[Value of fibroendoscopy in diagnosis and therapy in otorhinolaryngology] Ukhitil B. Vestn Otorinolaringol 1988 Sep–Oct;(5):65–8 (Eng. Abstr.) (Rus)
[Thermography in clinical practice] Rozenfel'd LG. Vestn Rentgenol Radiol 1989 Jan–Feb;(1):62–8 (Rus)
[A portable ENT kit for the ship's physician] Revskoĭ IuK, et al. Voen Med Zh 1988 Dec;(12):49–50 (Rus)
[Bacteriologic and gas chromatographic diagnosis of nonclostridial anaerobic infection in suppurative-inflammatory diseases of the maxillofacial area and of the ENT organs] Mironov AIu, et al. Zh Mikrobiol Epidemiol Immunobiol 1988 Aug;(8):31–5 (Eng. Abstr.) (Rus)

DRUG THERAPY

Clinical and pharmacokinetic studies of sulbactam/penicillin combinations in the treatment of ear, nose and throat infections. Federspil P, et al. Drugs 1988;35 Suppl 7:80–3
Cefroxadine in the treatment of children affected by respiratory and ENT diseases. A multicentre study involving 1072 in-patients. Scaglione F, et al. Drugs Exp Clin Res 1989;15(2):71–6
Otorhinolaryngological evaluation of Phlogosam foam-spray. Zelen B. Ther Hung 1988;36(3):136–9
[Use of bacampicillin in the treatment of infections at diverse localizations] Giani M, et al. Clin Ter 1988 Sep 15;126(5):345–51 (Eng. Abstr.) (Ita)
[Clinical study of a new macrolide, miocamycin, in 150 patients with otorhinolaryngologic disorders] Ursino F, et al. Clin Ter 1987 Jul 15;122(1):13–6 (Eng. Abstr.) (Ita)
[Pediatric suspensions of amoxicillin and clavulanic acid in the treatment of bacterial infections of otorhinolaryngologic importance and the upper respiratory tract] Amendola F, et al. Minerva Pediatr 1989 Feb;41(2):97–103 (Eng. Abstr.) (Ita)
[Evaluation of the efficacy and tolerability of miocamycin in the treatment of otorhinololaryngologic infection by sensitive micro-organisms] Bellioni P, et al. Riv Eur Sci Med Farmacol 1987 Sep;9(3):293–8 (Eng. Abstr.) (Ita)
[Effect of antibiotics on the antiviral resistance of the body in chronic ENT diseases] Revskoĭ IuK, et al. Voen Med Zh 1989 Feb;(2):33–5 (Rus)

ECONOMICS

Hospital resource consumption and outcome. Route of admission and age for hospitalized otolaryngology patients. Muñoz E, et al. Arch Otolaryngol Head Neck Surg 1989 Jan;115(1):87–91

EPIDEMIOLOGY

Limited, intragroup epidemics of acute infectious diseases of the upper respiratory tracts and throat among workers of a Polish construction site in a tropical country. Jaremin B. Bull Inst Marit Trop Med Gdynia 1987;38(1–2):42–9
[Otorhinolaryngologic diseases in general practice] Bredahl C, et al. Ugeskr Laeger 1989 May 15;151(20):1237–40 (Eng. Abstr.) (Dan)
[Characteristics of ORL pathology in Burundi] Ryzhov NI. Vestn Otorinolaringol 1989 Jan–Feb;(1):71–3 (Rus)

ETIOLOGY

Otolaryngologic manifestations of the ectodermal dysplasias. Myer CM 3d. Birth Defects 1988;24(2):253–6
Otolaryngologic problems in cardiac transplant patients. Ganzel TM, et al. Laryngoscope 1989 Feb;99(2):158–61
AIDS and otolaryngology, its head and neck manifestations. Stofman GM, et al. Trans Pa Acad Ophthalmol Otolaryngol 1988;40:732–40 (34 ref.)
[Mycoses in otorhinolaryngology. Apropos of 167 cases] Ette A, et al. Rev Laryngol Otol Rhinol (Bord) 1989;110(2):173–7 (Eng. Abstr.) (Fre)
[Angioedema in ENT practice] Poniewierski M, et al. HNO 1989 Apr;37(4):169–73 (Eng. Abstr.) (Ger)
[State of the ORL organs in children and adolescents at a tuberculosis sanatorium] Sirenko IA, et al. Probl Tuberk 1989;(6):73–4 (Rus)
[ORL manifestations of tuberculous spondylitis in a colored immigrant] Roura i Moreno J. An Otorrinolaringol Ibero Am 1988;15(5):503–11 (Eng. Abstr.) (Spa)

HISTORY

[Otolaryngology in ancient India] Kierzek A. Otolaryngol Pol 1988;42(4):296–9 (Eng. Abstr.) (Pol)
[Otorhinolaryngologic services in the Moscow province in the pre-Revolutionary period] Chumakov FI. Vestn Otorinolaringol 1989 Jan–Feb;(1):68–70 (Rus)

IMMUNOLOGY

[Indications of immunologic evaluation in recurrent otorhinolaryngologic infections in children] Perrin P, et al. Rev Laryngol Otol Rhinol (Bord) 1989;110(2):137–40 (Eng. Abstr.) (Fre)

PATHOLOGY

Fine needle aspiration cytology in the management ENT of patients. Smallman LA, et al. J Laryngol Otol 1988 Oct;102(10):909–13

PREVENTION & CONTROL

[Occupational medicine otorhinolaryngologic analysis of employees of a district socialist agricultural facility within the scope of expanded public mass roentgen screening] Krellig B, et al. Z Gesamte Hyg 1989 Mar;35(3):149–51 (Eng. Abstr.) (Ger)
[Mass screening of families of frequently ill children] Gavalov SM, et al. Sov Zdravookhr 1988;(9):40–4 (Eng. Abstr.) (Rus)

PSYCHOLOGY

Psychiatric consultation on an otolaryngology liaison service. Bronheim H, et al. Gen Hosp Psychiatry 1989 Mar;11(2):95–102
[Otorhinolaryngologic manifestations of masked mono- or oligosymptomatic depressions] Minnigerode B, et al. HNO 1988 Sep;36(9):383–5 (Eng. Abstr.) (Ger)

SURGERY

Branhamella catarrhalis meningitis following otolaryngologic surgery. Naqvi SH, et al. APMIS Suppl 1988;3:74–5
Management of hemophilia in otolaryngologic surgery. A contemporary protocol. Scott TA, et al. Arch Otolaryngol Head Neck Surg 1988 Dec;114(12):1445–8
Input–output relationships in the NHS: inter district variations in ENT surgery within Wales. West RR, et al. Community Med 1988 Nov;10(4):319–26
Lasers in pediatric otolaryngology. Crockett DM, et al. Otolaryngol Clin North Am 1989 Jun;22(3):607–19 (40 ref.)
The use of acyclovir in ENT surgery. Holmes WF, et al. Trans Pa Acad Ophthalmol Otolaryngol 1988;40:776–7
[A solution for escaping controlled hypotension? Combination of enflurane and nitroglycerin in 51 cases of ORL surgery] Mechelany-Leroy L, et al. Agressologie 1988 Mar;29(3):171–7 (Eng. Abstr.) (Fre)
[Endoscopic surgery in ORL] Sacoun A. Rev Med Suisse Romande 1988 Nov;108(11):929–30 (Fre)
[Mechanomyography and electromyography—2 competing methods of relaxometry using vecuronium] Mellinghoff H, et al. Anasth Intensivther Notfallmed 1989 Feb;24(1):57–9 (Eng. Abstr.) (Ger)
[CAS (computer assisted surgery). A new procedure in head and neck surgery] Schlöndorff G, et al. HNO 1989 May;37(5):187–90 (Eng. Abstr.) (Ger)
[Plasma concentrations of lidocaine and prilocaine following infiltration anesthesia in otorhinolaryngologic surgery] Bachmann B, et al. Laryngol Rhinol Otol (Stuttg) 1988 Jul;67(7):335–9 (Eng. Abstr.) (Ger)
[CO2-laser surgery in otorhinolaryngology] Wolfensberger M. Schweiz Rundsch Med Prax 1989 Apr 18;78(16):471–3 (Eng. Abstr.) (Ger)
[Preliminary data on the preparation of a fibrin glue from the patient's own plasma and its use in ENT surgery] Cucuianu AM, et al. Rev Chir [Otorinolaringol] 1988 Apr–Jun;33(2):81–7 (Eng. Abstr.) (Rum)
[Use of closed-circuit anesthesia in otorhinolaryngologic surgery with a laser] Palanca Sanfrancisco JM, et al. An Otorrinolaringol Ibero Am 1988;15(5):513–20 (Eng. Abstr.) (Spa)

THERAPY

Management of common head and neck problems. Thomas GK, et al. Clin Obstet Gynecol 1988 Dec;31(4):915–26
[Ex vivo study of the effect of ribomunyl on the release of oxygen radicals by polynuclear neutrophils] Rahimy MC, et al. Allerg Immunol (Paris) 1989 May;21(5):201–3 (Eng. Abstr.) (Fre)
[Otorhinolaryngologic sulfurated crenotherapy. Biological and statistical arguments] Darrouzet JM, et al. Rev Laryngol Otol Rhinol (Bord) 1988;109(3):269–71 (Eng. Abstr.) (Fre)
[Difficulties in otolaryngologic practice in Central Africa] Pietruski J. Otolaryngol Pol 1988;42(4):291–5 (Eng. Abstr.) (Pol)
[Acupuncture analgesia in pathology and the treatment of ENT injuries] Popovici D. Rev Chir [Otorinolaringol] 1988 Oct–Dec;33(4):275–82 (Eng. Abstr.) (Rum)
[Deontological problems of otorhinolaryngology in the era of scientific and technological progress] Antoniv VF, et al. Vestn Otorinolaringol 1988 May–Jun;(3):3–5 (Eng. Abstr.) (Rus)

TRANSMISSION

[The asepsis problem at the office of the ENT physician] Knothe J, et al. Laryngorhinootologie 1989 Mar;68(3):160–2 (Eng. Abstr.) (Ger)

OTORHINOLARYNGOLOGIC NEOPLASMS

[Associated cancers of bronchi and upper airways. Apropos of 91 cases] Renella J, et al. Ann Chir 1988;42(8):591–6 (8 ref.) (Eng. Abstr.) (Fre)

COMPLICATIONS

Fetor from ulcerated head and neck tumors: causation and therapy. Brusis T, et al. Ann Otol Rhinol Laryngol 1989 Aug;98(8 Pt 1):615–7

DIAGNOSIS

[Ultrasonic diagnosis] Mann W.
Arch Otorhinolaryngol Suppl 1989;1:71–98 (Ger)
[Computerized tomography and nuclear magnetic tomography of the facial skull and neck] Mees K, et al. Arch Otorhinolaryngol Suppl 1989;1:1–40 (Ger)
[Differential diagnostic considerations in tumors in childhood in the ear-nose-throat specialty] Müller H, et al. Padiatr Grenzgeb 1989;28(3):175–80 (Eng. Abstr.) (Ger)
[Vascular lesions of the ENT organs. Considerations on cases hospitalized at the Colţea ENT Clinic in 1983–1987] Cincă D, et al. Rev Chir [Otorinolaringol] 1989 Jan–Mar;34(1):11–7 (Rum)

DRUG THERAPY

Preoperative chemotherapy in advanced resectable head and neck cancer: final report of the Southwest Oncology Group. Schuller DE, et al. Laryngoscope 1988 Nov;98(11):1205–11
[Continuous ambulatory chemotherapy in cancer of the upper respiratory and digestive tract] Bassot V, et al. Ann Otolaryngol Chir Cervicofac 1988;105(6):403–7 (Eng. Abstr.) (Fre)
[Complete tumor remission after chemotherapy. What should be done?] Bassot V, et al. Ann Otolaryngol Chir Cervicofac 1989;106(5):338–45 (14 ref.) (Eng. Abstr.) (Fre)
[Use of photosensitizing preparations in the treatment of cancer of the ORL organs] Zharkova NN, et al. Vestn Otorinolaringol 1988 Sep–Oct;(5):90–3 (23 ref.) (Rus)

EPIDEMIOLOGY

[Registry of cancers of the upper respiratory and digestive tract at the Northern and Pas-de-Calais departments from 1984 to 1986] Adenis L, et al. Bull Cancer (Paris) 1988;75(8):745–50 (Eng. Abstr.) (Fre)

MORTALITY

[Malignant neoplasms of the lip, mouth, pharynx, nose, ear and larynx. A descriptive-epidemiologic study] Neumann G. HNO 1988 Sep;36(9):345–54 (56 ref.) (Eng. Abstr.) (Ger)

PATHOLOGY

Primary extranodal and nodal non-Hodgkin's lymphoma. A survey of a population-based registry. Otter R, et al. Eur J Cancer Clin Oncol 1989 Aug;25(8):1203–10
Histologic changes, proliferation kinetics, and growth patterns in squamous carcinomas and bone tumors transplanted to nude mice. Wagner W, et al. Strahlenther Onkol 1989 Jul;165(7):487–8
[Cytodiagnosis using fine-needle aspiration in otorhinolaryngologic pathology] Acta Otorhinolaryngol Ital 1986;6 Suppl 12:1–57 (Ita)
[Fine needle aspiration in otorhinolaryngologic pathology. Sample taking and processing technics] Boccato P. Acta Otorhinolaryngol Ital 1986;6 Suppl 12:35–8 (5 ref.) (Ita)
[Cytodiagnosis using fine needle aspiration in otorhinolaryngologic pathology] Marzetti F. Acta Otorhinolaryngol Ital 1986;6 Suppl 12:4–8 (44 ref.) (Ita)

RADIOTHERAPY

Positive clinical experience with misonidazole in brachytherapy and external radiotherapy. Baillet F, et al. Int J Radiat Oncol Biol Phys 1989 Apr;16(4):1073–5
[Results of radiation therapy of malignant tumors of the ORL organs] Vorob'ev IuI, et al. Vestn Rentgenol Radiol 1988 Nov–Dec;(6):62–5 (Rus)

SURGERY

Rationale for elective modified neck dissection. Byers RM, et al. Head Neck Surg 1988 Jan–Feb;10(3):160–7
[Esophagectomy without thoracotomy using a stripping method: technic, results, indications in benign and malignant diseases of the esophagus] Apoil B, et al. Ann Chir 1989;43(1):10–4 (Eng. Abstr.) (Fre)
[Hemipharyngolaryngectomies. Functional and carcinologic results] Laccourreye H, et al.

Ann Otolaryngol Chir Cervicofac 1988;105(6):443–7 (Eng. Abstr.) (Fre)
[Peridural cervical anesthesia and oncologic ORL surgery. Our experience with 152 cases] Baylot D, et al. **Cah Anesthesiol** 1988 Nov;36(7):533–6 (Fre)
[Microvascular tissue transplantation of the ear, nose and throat] Bootz F, et al. **HNO** 1988 Nov;36(11):456–61 (Eng. Abstr.) (Ger)

THERAPY

[Percutaneous endoscopic gastrostomy. Indications and results in 31 patients] Seyrig JA, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(1):61–4 (Eng. Abstr.) (Fre)

OTORHINOLARYNGOLOGY see OTOLARYNGOLOGY

OTOSCLEROSIS

see related
FENESTRATION
STAPES MOBILIZATION

BLOOD

[Changes in selected biochemical indicators in long-term treatment of otosclerosis with sodium fluoride] Jaroszewicz-Heigelmann H, et al. **Otolaryngol Pol** 1988; 42(1-2):53–60 (Eng. Abstr.) (Pol)

COMPLICATIONS

How and when to prescribe sodium fluoride. Shambaugh GE Jr. **Am J Otol** 1989 Mar;10(2):146–7
Persistent stapedial artery associated with otosclerosis. Yamamoto E, et al. **ORL J Otorhinolaryngol Relat Spec** 1988;50(6):382–4
The fate of the non-operated ear in otosclerosis. Willis R. **Otolaryngol Head Neck Surg** 1989 Mar;100(3):224–6

DIAGNOSIS

[Is measuring impedance following ear operations an aid in the analysis of postoperative sequelae?] Thoma J, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Dec;67(12):624–8 (Eng. Abstr.) (Ger)
[Otogenic complications with a normal, intact tympanic membrane] von Scheel J. **Laryngol Rhinol Otol (Stuttg)** 1989 Jan;68(1):78–80 (Eng. Abstr.) (Ger)

DRUG THERAPY

Otospongiosis and sodium fluoride. A clinical double-blind, placebo-controlled study on sodium fluoride treatment in otospongiosis. Bretlau P, et al. **Am J Otol** 1989 Jan; 10(1):20–2
Fluoride therapy for otosclerosis. Kerr GS, et al. **Ear Nose Throat J** 1989 Jun;68(6):426, 428–9 (14 ref.)

ENZYMOLOGY

Altered adenylate cyclase activity in human otosclerotic bone cell cultures. Della Torre G, et al. **Mol Cell Endocrinol** 1989 Mar;62(1):119–23

EPIDEMIOLOGY

Incidence of otosclerosis. Levin G, et al. **Am J Otol** 1988 Jul;9(4):299–301

ETIOLOGY

Osteogenesis imperfecta of the temporal bone and its relation to otosclerosis. Nager GT. **Ann Otol Rhinol Laryngol** 1988 Nov-Dec;97(6 Pt 1):585–93
Hearing loss in tympanosclerosis caused by grommets. Tos M, et al. **Arch Otolaryngol Head Neck Surg** 1989 Aug; 115(8):931–5

IMMUNOLOGY

[Studies of histocompatibility antigens in otospongiosis] Buczyłko K, et al. **Otolaryngol Pol** 1988;42(5):333–7 (Eng. Abstr.) (Pol)

MICROBIOLOGY

Otosclerosis—an inflammatory disease of the otic capsule of viral aetiology? Arnold W, et al. **J Laryngol Otol** 1988 Oct;102(10):865–71

PATHOLOGY

Correlation of otosclerotic foci and degenerative changes in the organ of Corti and spiral ganglion. Kwok OT, et al. **Am J Otolaryngol** 1989 Jan-Feb;10(1):1–12
Cochlear hair cell stereocilia loss in LP/J mice with bone dysplasia of the middle ear. Chole RA, et al. **Ann Otol Rhinol Laryngol** 1989 Jun;98(6):461–5
Mastoid pneumatization in otosclerosis. Sadé J, et al. **Ann Otol Rhinol Laryngol** 1989 Jun;98(6):451–4
[Otosclerosis. A paramyxovirus-induced inflammatory reaction] Arnold W, et al. **HNO** 1989 Jun;37(6):236–41 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Etiology of otospongiotic sensorineural losses. Causse JR, et al. **Am J Otol** 1989 Mar;10(2):99–107 (70 ref.)
Validity of tympanometry in cases of confirmed otosclerosis. Muchnik C, et al. **J Laryngol Otol** 1989 Jan;103(1):36–8
[Evaluation of cochlear function in otospongiosis. Preliminary study] Bonfils P, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(5):318–21 (Eng. Abstr.) (Fre)
[Evaluation of hearing in patients with surgically treated otosclerosis] Kawiorska M, et al. **Otolaryngol Pol** 1988; 42(4):271–7 (Eng. Abstr.) (Pol)
[Changes in bone conduction hearing in patients with otosclerosis after stapedoplasty] Gol'dman II, et al. **Vestn Otorinolaringol** 1988 Sep-Oct;(5):56–8 (Rus)

RADIOGRAPHY

Radioanatomy of cochlear and stapedial otosclerosis. Wilbrand HF. **Scand Audiol Suppl** 1988;30:181–3
[Imaging of capsule otosclerosis using computerized tomography] von Glass W, et al. **HNO** 1988 Sep; 36(9):373–6 (Eng. Abstr.) (Ger)
[Computerized tomography in the diagnosis of otospongiosis] Buczyłko K, et al. **Otolaryngol Pol** 1988;42(4):236–45 (Eng. Abstr.) (Pol)

SURGERY

The twenty fine points of otosclerosis surgery. Causse JB. **Am J Otol** 1989 Jan;10(1):75–7 (0 ref.)
Vertigo in postoperative follow-up of otosclerosis. Causse JB, et al. **Am J Otol** 1988 May;9(3):246–55 (36 ref.)
Reconstructive techniques for tympanosclerosis. Austin DF. **Ann Otol Rhinol Laryngol** 1988 Nov-Dec;97(6 Pt 1):670–4
Lasers for otosclerosis. **Laryngoscope** 1989 Jun;99(6 Pt 2 Suppl 46):1–24
Lasers for otosclerosis: CO2 vs. Argon and KTP-532. Lesinski SG, et al. **Laryngoscope** 1989 Jun;99(6 Pt 2 Suppl 46):1–8
CO2 laser for otosclerosis: safe energy parameters. Lesinski SG, et al. **Laryngoscope** 1989 Jun;99(6 Pt 2 Suppl 46):9–12
Small fenestra stapedotomies with and without KTP laser: a comparison. Silverstein H, et al. **Laryngoscope** 1989 May; 99(5):485–8
[Surgical treatment of otosclerosis. Effects and risks] Bonding P. **Ugeskr Laeger** 1989 Feb 6;151(6):381–4 (Eng. Abstr.) (Dan)
[Sound injuries after surgery of otosclerosis] Causse JB, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(6):459–63 (19 ref.) (Eng. Abstr.) (Fre)
[The striking hammer] Lacher G, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(3):245–7 (Eng. Abstr.) (Fre)
[Effect of sodium fluoride on the activity of the otosclerotic process] Konarska A, et al. **Otolaryngol Pol** 1988; 42(1-2):46–52 (Eng. Abstr.) (Pol)

OTOSPONGIOSIS see OTOSCLEROSIS

OTTERS see under CARNIVORA

OUABAIN

Improved recovery of cardiac function after hypothermic ischemic storage with ouabain. Lagerstrom CF, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):782–8

ADMINISTRATION & DOSAGE

In-vivo quantification of myocardial Na-K pump rate during beta-adrenergic stimulation of intact pig hearts. Ellingsen O, et al. **Acta Physiol Scand** 1989 Apr;135(4):493–503

ANALOGS & DERIVATIVES

Inhibition of Na-K pump current in guinea pig ventricular myocytes by dihydroouabain occurs at high- and low-affinity sites. Mogul DJ, et al. **Circ Res** 1989 Jun; 64(6):1063–9
Na,K-ATPase isozymes in rat tissues: differential sensitivities to sodium, vanadate and dihydroouabain. Feige G, et al. **Prog Clin Biol Res** 1988;268B:377–84

ANTAGONISTS & INHIBITORS

The protective action of R56865 against ouabain-induced intoxication in rat heart isolated atria and ventricles. Finet M, et al. **Eur J Pharmacol** 1989 May 30;164(3):555–63

BLOOD

High plasma levels of a ouabain-like factor in normal pregnancy and in pre-eclampsia. Delva P, et al. **Eur J Clin Invest** 1989 Feb;19(1):95–100
Normalization of high plasma level of ouabain-like immunoreactivity in primary aldosteronism after removal of adenoma. Masugi F, et al. **J Hum Hypertens** 1988 Jun; 2(1):17–20
86Rb(K) influx and [3H]ouabain binding by human platelets: evidence for beta-adrenergic stimulation of Na-K ATPase activity. Turaihi K, et al. **Metabolism** 1989 Aug;38(8):773–6
The effect of external Na and Ca on the rate of ouabain binding to resealed human red blood cell ghosts. Bodemann HH, et al. **Prog Clin Biol Res** 1988;268B:365–70

ISOLATION & PURIFICATION

Difficulties in the isolation and identification of endogenous ouabain-like substances. Mir MA. **Prog Biochem Pharmacol** 1988;23:1–9 (44 ref.)

METABOLISM

Selective induction of high-ouabain-affinity isoform of Na+-K+-ATPase by thyroid hormone. Haber RS, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):E912–9
In vitro stimulation of Na+-K+-ATPase activity and ouabain binding by cortisol in coho salmon gill. McCormick SD, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):R707–15
Ouabain uptake by endocytosis in isolated guinea pig atria. Núñez-Durán H, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):C479–85
Ouabain binding in the human brain. Effects of Alzheimer's disease and aging. Harik SI, et al. **Arch Neurol** 1989 Sep; 46(9):951–4
Diffusion characteristics dissociate ouabain binding from inotropic effect in guinea-pig myocardium. Ebner F, et al. **Br J Pharmacol** 1988 Oct;95(2):399–404
Rapid decrease of high affinity ouabain binding sites in hippocampal CA1 region following short-term global cerebral ischemia in rat. Pylova SI, et al. **Brain Res** 1989 Jun 19;490(1):170–3
Forskolin infusion in vivo increases ouabain binding in brain. Swann AC, et al. **Brain Res** 1989 Jan 9;476(2):351–3
Digoxin-like immunoreactivity, displacement of ouabain and inhibition of Na+/K+ ATPase by four steroids known to be increased in essential hypertension. Seccombe DW, et al. **Clin Biochem** 1989 Feb;22(1):17–21
Reduced ouabain binding to erythrocytes in epilepsy—evidence for a membrane abnormality. Davidson DL, et al. **Epilepsy Res** 1988 Nov-Dec;2(6):387–90
Increased number of ouabain binding sites in lymphocytes from borderline hypertensives. Nielsen JR, et al. **Eur J Clin Invest** 1989 Feb;19(1):72–7
Different sensitivity of ATP + Mg + Na (I) and Pi + Mg (II) dependent types of ouabain binding to phospholipase A2. Svoboda P, et al. **J Membr Biol** 1988 Sep;104(3):211–21
Localization and characterization of binding sites with high affinity for [3H]ouabain in cerebral cortex of rabbit brain using quantitative autoradiography. Antonelli MC, et al. **J Neurochem** 1989 Jan;52(1):193–200
Subacute noradrenergic agonist infusions in vivo increase Na+, K+-ATPase and ouabain binding in rat cerebral cortex. Swann AC, et al. **J Neurochem** 1989 May; 52(5):1598–604
3H-ouabain binding sites in porcine skeletal muscle as influenced by environmental temperature and energy intake. Dauncey MJ, et al. **Pflugers Arch** 1989 Jul; 414(3):317–23
Voltage dependence of the Na-K ATPase: measurements of ouabain-dependent membrane current and ouabain binding in oocytes of Xenopus laevis. Schweigert B, et al. **Pflugers Arch** 1988 Oct;412(6):579–88
Regulation of cardiac glycoside receptors with different affinities for cardiac glycosides in cultured rat heart cells. Berger HJ, et al. **Prog Clin Biol Res** 1988;268B:345–52
Binding of ouabain to the Na-K-ATPase in oocytes of Xenopus laevis is voltage-independent. Lafaire AV, et al. **Prog Clin Biol Res** 1988;268B:409–16
The specific 3H-ouabain binding to Na+/K+-ATPase of the human placental tissue is inhibited by newborn plasma extracts. Paci A, et al. **Steroids** 1988 Oct;52(4):363–4
Cytotopographical specialization of enzymatically isolated rabbit retinal Müller (glial) cells: structure, ultrastructure, and 3H-ouabain binding sites. Reichenbach A, et al. **Z Mikrosk Anat Forsch** 1988;102(6):897–912

PHARMACOKINETICS

Nonlinear tissue distribution of ouabain in rabbits. Harashima H, et al. **Drug Metab Dispos** 1988 Jul-Aug;16(4):645–9
Kinetic analysis of the positive inotropic action (PIA) of ouabain in isolated perfused rabbit heart. Slow onset of PIA and slow binding to Na+, K+-adenosine triphosphatase. Harashima H, et al. **J Pharmacobiodyn** 1988 Aug;11(8):533–40

PHARMACOLOGY

Differential release of calcitonin gene-related peptide and neuropeptide Y from the isolated heart by capsaicin, ischaemia, nicotine, bradykinin and ouabain. Franco-Cereceda A, et al. **Acta Physiol Scand** 1989 Feb; 135(2):173–87
Studies on terminal differentiation of rat renal proximal tubular cells in culture: ouabain-sensitive K and Na transport. Larsson SH, et al. **Acta Physiol Scand** 1988 Feb; 132(2):129–34
Facilitatory effects of ouabain and digitalis-like substance on adrenergic transmission in hypertension. Tsuda K, et al. **Am J Hypertens** 1989 Jun;2(6 Pt 1):465–7
Deleterious effect of ouabain on myocardial function during hypoxia. Cunningham MJ, et al. **Am J Physiol** 1989 Mar; 256(3 Pt 2):H681–7
Effects of ouabain on neuronal thermosensitivity in hypothalamic tissue slices. Curras MC, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R21–8
Rates of synthesis and degradation of Na+-K+-ATPase

during chronic ouabain treatment. Rayson BM. **Am J Physiol** 1989 Jan;256(1 Pt 1):C75–80

Ouabain-sensitive H+–K+ exchange mechanism in the apical membrane of guinea pig colon. Suzuki Y, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):G979–88

Ouabain treatment of cardiac cells induces enhanced Na+–Ca2+ exchange activity. Vemuri R, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):C1273–6

Potassium secretion by the cortical collecting tubule: effect of Cl gradients and ouabain. Wingo CS. **Am J Physiol** 1989 Feb;256(2 Pt 2):F306–13

Effects of hypercalcemia and ouabain on plasma atrial natriuretic polypeptide in anesthetized dogs. Yamamoto A, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):E437–41

Effect of digitalis on central demyelinative conduction block in vivo. Kaji R, et al. **Ann Neurol** 1989 Feb;25(2):159–65

Effect of ouabain on hemodynamics in acute volume expanded hypertensive dogs. Otsuka A, et al. **Basic Res Cardiol** 1989 May–Jun;84(3):319–25

Ouabain sensitivity of a chimeric alpha subunit (Torpedo/rat) of the (Na,K)ATPase expressed in Xenopus oocyte. Noguchi S, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1237–43

Ouabain sensitivity of the alpha 3 isozyme of rat Na,K-ATPase. Urayama O, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):796–800

Interaction of iloprost and indomethacin with the cardiac effects of isoprenaline, ouabain and trapidil. Mentz P, et al. **Biomed Biochim Acta** 1988;47(10–11):S109–12

The effect of inhaled ouabain on bronchial reactivity to histamine in man. Knox AJ, et al. **Br J Clin Pharmacol** 1988 Jun;25(6):758–60

The effect of ouabain on metabolic rate in guinea-pigs: estimation of energy cost of sodium pump activity. Swaminathan R, et al. **Br J Nutr** 1989 May;61(3):467–73

Effects of magnesium, ouabain and bumetanide on 86rubidium uptake in a human atrial cell line. Borchgrevink PC, et al. **Br J Pharmacol** 1988 Oct;95(2):614–8

The influence of ouabain on twitch potentiation by anticholinesterases in the phrenic nerve-diaphragm muscles of mice. Nishimura M, et al. **Br J Pharmacol** 1989 Jan; 96(1):179–85

The effects of calcium antagonists on calcium overload contractures in embryonic chick myocytes induced by ouabain and veratrine. Patmore L, et al. **Br J Pharmacol** 1989 May;97(1):83–94

Ouabain distinguishes between nicotinic and muscarinic receptor-mediated catecholamine secretions in perfused adrenal glands of cat. Yamada Y, et al. **Br J Pharmacol** 1989 Feb;96(2):470–9

Calcium-dependent and ouabain-resistant oxygen consumption in the rat neurohypophysis. Shibuki K. **Brain Res** 1989 May 15;487(1):96–104

Central effect of agents which alter sodium transport on water drinking in the rat. Viva L, et al. **Brain Res Bull** 1989 Feb;22(2):201–6

Potassium, sodium, water, and Donnan potential changes in the myofibrils of intact muscle fibres after exposure to ouabain and K-free Ringer. Fong CN, et al. **Can J Physiol Pharmacol** 1988 Aug;66(8):1057–65

Ouabain prevents loss of autoregulation in rat pial arterioles caused by reoxygenation after a brief hypoxic episode. Kettler J, et al. **Can J Physiol Pharmacol** 1989 May; 67(5):423–7

Effects of palytoxin or ouabain on growth and squamous differentiation of human bronchial epithelial cells in vitro. Bonnard C, et al. **Carcinogenesis** 1988 Dec;9(12):2245–9

Pharmacological characterization of sodium channels in the primary culture of individual Drosophila embryos: neurons of a mutant deficient in a putative sodium channel gene. Sakai K, et al. **Cell Differ Dev** 1989 Mar;26(2):107–18

Inhibitory effect of ouabain and acetazolamide on secretin-stimulated pancreatic exocrine secretion in anaesthetized dog. Iwatsuki K, et al. **Clin Exp Pharmacol Physiol** 1989 Mar;16(3):139–45

Precocious retinal adhesion is affected by furosemide and ouabain. Frambach DA, et al. **Curr Eye Res** 1989 Jun; 8(6):553–6

Effects of phlorizin and ouabain on the polarity of mouse 4-cell/16-cell stage blastomere heterokaryons. Wiley LM, et al. **Dev Biol** 1989 Jun;133(2):375–84

Mechanisms of developmental increase in the sensitivity to ouabain. Khatter JC, et al. **Dev Pharmacol Ther** 1989; 12(3):128–36

Effects of medium amino acids on ouabain-sensitive 86Rb+ -uptake and membrane-potential dependent [3H]tetraphenylphosphonium accumulation in Friend erythroleukemia cells. Schaefer A, et al. **Eur J Cell Biol** 1988 Aug;46(3):453–7

Ouabain-induced contraction of vascular smooth muscle in spontaneously hypertensive rats and the effect of hydralazine. Morita S, et al. **Eur J Pharmacol** 1988 Jul 14; 151(3):409–18

Biphasic contraction induced by ouabain in human umbilical arteries. Sato K, et al. **Eur J Pharmacol** 1988 Dec 13; 158(3):299–302

Termination of ouabain-induced ventricular tachycardia by flunarizine in conscious dogs. Vos MA, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):139–45

Solubilization and characterization of a ouabain-sensitive protein from transverse tubule membrane-junctional sarcoplasmic reticulum complexes (TTM-JSR) in cat cardiac muscle. Fujino S, et al. **Experientia** 1989 May 15; 45(5):466–9

Rp-diastereomer of adenosine cyclic 3',5'-phosphorothioate as an antagonist of the stimulatory action of cyclic AMP on the ouabain-insensitive Na efflux in single barnacle muscle fibers. Nwoga J, et al. **Experientia** 1989 Feb 15; 45(2):142–3

Spontaneous and ouabain-induced efflux of catecholamines and dihydroxyphenylglycol in two canine blood vessels. Branco D, et al. **Fundam Clin Pharmacol** 1988;2(6):477–91

Contractile responses of the guinea-pig vas deferens to the combination of vanadium ions with ouabain. Garcia AG, et al. **Gen Pharmacol** 1989;20(4):457–62

The influence of ouabain on twitch contractions in the presence of veratridine. Nishimura M, et al. **Gen Pharmacol** 1989;20(1):23–30

Efficacy of glucose, ouabain and an aldose reductase inhibitor on 2-[3H] myo-inositol uptake by human, rat and rabbit erythrocytes. Hotta N, et al. **Horm Metab Res** 1988 Jul; 20(7):387–90

Effect of inhibition of lens membrane Na+–K+ ATPase by ouabain pre-treatment—an in vitro study. Albal MV, et al. **Indian J Ophthalmol** 1987;35(5–6):214–6

Ouabain-insensitive Na-ATPase activity in the basolateral membrane from rat jejunum. Orsenigo MN, et al. **Int J Biochem** 1988;20(12):1411–5

Ouabain sensitizes tumor cells but not normal cells to radiation. Lawrence TS. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):953–8

The enhancement of retinal adhesiveness by ouabain appears to involve cellular edema. Marmor MF, et al. **Invest Ophthalmol Vis Sci** 1989 Jul;30(7):1511–4

Effect of ouabain on lens equatorial currents. Wind BE, et al. **Invest Ophthalmol Vis Sci** 1988 Nov;29(11):1753–5

Neurobehavioral contributions to cardiac arrhythmias during aversive pavlovian conditioning in the rabbit receiving digitalis. Markgraf CG, et al. **J Auton Nerv Syst** 1988 Jun; 23(1):35–46

Effect of ouabain on cellular free calcium and cellular cyclic AMP production in response to arginine vasopressin in rat renal papillary collecting tubule cells in culture. Ishikawa S, et al. **J Endocrinol** 1989 Jun;121(3):467–77

Stimulation of sodium transport and fluid secretion by ouabain in an insect malpighian tubule. Maddrell SH, et al. **J Exp Biol** 1988 Jul;137:265–76

Do amiloride and ouabain affect ammonia fluxes in perfused Carcinus gill epithelia? Lucu C, et al. **J Exp Zool** 1989 Jan;249(1):1–5

Calcium and contractile responses to ouabain and potassium-free solution in aortae from spontaneously hypertensive rats. Lamb FS, et al. **J Hypertens** 1988 Oct; 6(10):821–8

The effect of ouabain on pressor responses to infused noradrenaline in patients with essential hypertension. Nishimura M, et al. **J Hypertens Suppl** 1988 Dec; 6(4):S354–6

Ouabain vasoconstricts human forearm arterioles through alpha-adrenergic stimulation. Taddei S, et al. **J Hypertens Suppl** 1988 Dec;6(4):S357–9

Effects of calcium and ouabain on the release of atrial natriuretic factor. Yamamoto A, et al. **J Hypertens Suppl** 1988 Dec;6(4):S317–9

Ouabain-induced cell swelling in rabbit cortical collecting tubule: NaCl transport by principal cells. Strange K. **J Membr Biol** 1989 Mar;107(3):249–61

Inter-species variations in myocardial responsiveness to cardiac glycosides: possible relations to the thyroid status. Felzen B, et al. **J Mol Cell Cardiol** 1989 Feb;21(2):165–74

Effect of ouabain applied by intrastriatal microdialysis on the in vivo release of dopamine, acetylcholine, and amino acids in the brain of conscious rats. Westerink BH, et al. **J Neurochem** 1989 Mar;52(3):705–12

Comparison of hypoxia and ouabain effects on the myocardial uptake kinetics of technetium-99m hexakis 2-methoxyisobutyl isonitrile and thallium-201. Meerdink DJ, et al. **J Nucl Med** 1989 Sep;30(9):1500–6

Comparative effects of ouabain on isolated papillary muscle from tree shrews, guinea-pigs and rats. Koga T, et al. **J Pharm Pharmacol** 1989 Mar;41(3):212–3

Effect of ouabain on the concentration of free cytosolic Ca++ and on contractility in cultured rat cardiac myocytes. Hallaq H, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):716–21

Norepinephrine and adenosine triphosphate release in different ratio from guinea pig vas deferens by high potassium chloride, ouabain and monensin. Katsuragi T, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):302–8

Aging: ouabain-sensitive 86Rb+ uptake rate and responsiveness to digoxin in rat left atrial muscle. Kennedy RH, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):104–10

Contrast effects of isoproterenol and ouabain on left ventricular diastolic relaxation dysfunction in isolated, blood-perfused rabbit hearts. Isoyama S, et al. **Jpn Circ J** 1989 Mar;53(3):261–9

The effect of ouabain, insulin, and cyclic AMP on the acidification of luminal fluid in the proximal tubule of bullfrog kidney. Kubota T, et al. **Jpn J Physiol** 1988; 38(4):549–56

Potentiation by Bay-K-8644 of the adrenal catecholamine secretory response to Ca re-introduction and ouabain: possible activation of Ca influx linked with Na efflux. Yano K, et al. **Jpn J Physiol** 1989;39(2):283–301

The effects of ouabain on the ERG c-wave. Kim HK. **Korean J Ophthalmol** 1987 Dec;1(2):84–9

Alternative reactions of ouabain with a Na+ and K+ ATPase. Knight VA. **Life Sci** 1974 Jul 1;15(1):95–102

Kinetic comparison of ouabain-resistant K:Cl fluxes (K:Cl [Co]-transport) stimulated in sheep erythrocytes by membrane thiol oxidation and alkylation. Lauf PK. **Mol Cell Biochem** 1988 Jul–Aug;82(1–2):97–106

Identification of a region within the Na,K-ATPase alpha subunit that contributes to differential ouabain sensitivity. Emanuel JR, et al. **Mol Cell Biol** 1989 Sep;9(9):3744–9

Sodium dependent 3H-noradrenaline release from rat neocortical slices in the absence of extracellular calcium: presynaptic modulation by mu-opioid receptor and adenylate cyclase activation. Schoffelmeer AN, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):548–52

Ouabain induces acetylcholine release from pure cholinergic synaptosomes independently of extracellular calcium concentration. Blasi JM, et al. **Neurochem Res** 1988 Nov; 13(11):1035–41

The response of digitalized canine ventricle to programmed stimulation: a study on triggered activity arrhythmias in the whole heart. Iinuma H, et al. **PACE** 1989 Aug; 12(8):1331–46 (24 ref.)

The dual effects of ouabain on 45Ca2+ transport and contractility in adult rat ventricular myocytes. Horackova M, et al. **Pflugers Arch** 1988 Aug;412(3):277–84

Involvement of Na and Cl in ouabain-induced cell swelling in thick ascending limb of rat kidney. Rajerison RM, et al. **Pflugers Arch** 1988 Oct;412(5):491–6

Effect of ouabain on electrolyte concentrations in principal and intercalated cells of the isolated perfused cortical collecting duct. Sauer M, et al. **Pflugers Arch** 1989 Apr; 413(6):651–5

Effect of ouabain on norepinephrine-induced contractions of isolated rabbit aorta. Oktay S, et al. **Pharmacology** 1988; 37(2):69–74

Altered sensitivity of system A amino acid transport to ouabain in normal and transformed C3H-10T1/2 cells during the cell cycle. Leister KJ, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):783–6

Species sensitivity of the sodium pump to a circulating ouabain-like inhibitor in acute hypervolemia and DOCA hypertension: comparison with ouabain. Hamlyn JM, et al. **Prog Biochem Pharmacol** 1988;23:22–34

Two molecular forms of Na+,K+-ATPase in the ferret heart and developmental changes in digitalis sensitivity. Ng YC, et al. **Prog Clin Biol Res** 1988;268B:423–8

Inotropic and toxic actions of several cardiac steroids in sheep cardiac tissues. Wasserstrom JA, et al. **Prog Clin Biol Res** 1988;268B:469–76

The effect of sodium pump blockade and denervation on the steady-state sodium permeability of mouse skeletal muscle fibres. Seabrooke SR, et al. **Q J Exp Physiol** 1988 Jul;73(4):561–72

K:Cl cotransport: emerging molecular aspects of a ouabain-resistant, volume-responsive transport system in red blood cells. Lauf PK. **Renal Physiol Biochem** 1988 May–Oct;11(3–5):248–59 (60 ref.)

Protective effect of ouabain on adriamycin-induced cardiovascular anomalies in chick embryos. Takagi Y, et al. **Teratology** 1989 Jun;39(6):573–80

Evidence of a blunted response to ouabain in canine transplanted heart with acute rejection. Dumont L, et al. **Transplant Proc** 1988 Dec;20(6):1228–30

[Comparison of the cytotoxic effect of sulmazole with ouabain on cultured myocardial cells] Liu JJ, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Mar;9(2):129–31 (Eng. Abstr.) **(Chi)**

[Changes induced by ouabain and colchicine in the transdentinal flow estimated in vivo by perfusion: the "push-pull" of the incisors of rats] Litovsky B, et al. **J Biol Buccale** 1988 Dec;16(4):209–14 (Eng. Abstr.) **(Fre)**

[Comparative study of the effects of antibodies to S-100 protein and ouabain on neurons of Helix pomatia] Pozdniakova AL. **Biull Eksp Biol Med** 1988 Oct; 106(10):393–5 (Eng. Abstr.) **(Rus)**

[Energy cooperation between animal cells during complete blockade of the Na+, K+-pumps in a part of the cells] Aslanidi KB, et al. **Dokl Akad Nauk SSSR** 1989; 305(4):990–3 **(Rus)**

[Characterization of changes in the activity of K+-n-nitrophenylphosphatase of erythrocyte ghosts under the influence of ouabain] Gulidova GP, et al. **Ukr Biokhim Zh** 1989 Jan–Feb;61(1):82–5 (Eng. Abstr.) **(Rus)**

TOXICITY

Pharmacological effects on oscillatory afterpotentials in partially depolarized ventricular myocardium. Albitz R, et al. **Biomed Biochim Acta** 1988;47(2):153–62

Modified method for the production of cardiac arrhythmias by ouabain in anesthetized cats. Rao TS, et al. **J Pharmacol Methods** 1988 Nov;20(3):255–63

The effect of an entrainment protocol on ouabain-induced ventricular tachycardia. Vos MA, et al. **PACE** 1989 Sep; 12(9):1485–93

Diminished toxicity of ouabain in the hypertrophied rat heart. Chevalier B, et al. **Pflugers Arch** 1989 Jul;414(3):311–6

OUTBREAKS see DISEASE OUTBREAKS

OUTCOME AND PROCESS ASSESSMENT (HEALTH CARE)

Can across-treatment changes in cumulative puff duration predict treatment outcome during nicotine fading. Burling TA, et al. **Addict Behav** 1989;14(1):75–82

The usefulness of diagnostic tests [letter] Franken EH Jr, et al. **AJR** 1988 Nov;151(5):1053–4

Criteria mapping: a method of quality assurance. Law M, et al. **Am J Occup Ther** 1989 Feb;43(2):104–9

Adverse outcome of hip fractures in older schizophrenic patients. Yarden PE, et al. **Am J Psychiatry** 1989 Mar; 146(3):377–9

Psychological consequences of blunt head trauma and relation to other indices of severity of injury. Gensemer IB, et al. **Ann Emerg Med** 1989 Jan;18(1):9–12

Measuring outcome after discharge from hospital for the elderly—a conceptual and empirical investigation. Victor CR, et al. **Arch Gerontol Geriatr** 1989 Jan;8(1):87–94

Focused stroke rehabilitation programs do not improve outcome. Dobkin BH. **Arch Neurol** 1989 Jun;46(6):701–3 (23 ref.)

Stroke rehabilitation. Hachinski V. **Arch Neurol** 1989 Jun; 46(6):703

Focused stroke rehabilitation programs improve outcome. Reding MJ, et al. **Arch Neurol** 1989 Jun;46(6):700–1 (14 ref.)

Adenotonsillectomy. A safe outpatient procedure. Maniglia AJ, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jan; 115(1):92–4

Rehabilitation outcome after anoxic brain damage. Groswasser Z, et al. **Arch Phys Med Rehabil** 1989 Mar; 70(3):186–8

The Functional Assessment Screening Questionnaire: application for evaluating pain-related disability. Millard RW. **Arch Phys Med Rehabil** 1989 Apr;70(4):303–7

Brain injury: functional outcome in children with tracheostomies and gastrostomies. Splaingard ML, et al. **Arch Phys Med Rehabil** 1989 Apr;70(4):318–21

Renal disease in diabetics—which patients have diabetic nephropathy and what is their outcome? Lynn KL, et al. **Aust N Z J Med** 1988 Oct;18(6):764–7

Evaluation of a proposed breast cancer screening regimen. Knox EG. **BMJ** 1988 Sep 10;297(6649):650–4

Audit of 26 years of obstetrics in general practice [see comments] Marsh GN, et al. **BMJ** 1989 Apr 22; 298(6680):1077–80. **Comment in:** BMJ 1989 May 13;298(6683):1313

Outcome in patients with recurrent restenosis after percutaneous transluminal balloon angioplasty. Glazier JJ, et al. **Br Heart J** 1989 Jun;61(6):485–8

Mass casualties [editorial] Edwards JD. **Br J Hosp Med** 1989 Aug;42(2):99

Quality assurance (QA). **Br J Plast Surg** 1989 May; 42(3):364–5

Acute ischaemia of the lower limb: the effect of centralizing vascular surgical services on morbidity and mortality. Clason AE, et al. **Br J Surg** 1989 Jun;76(6):592–3

Extending surgical audit: the assessment of postoperative outcome. Macintyre IM. **Br J Surg** 1989 Jun;76(6):531–2

Decanting a psychiatric hospital: development of a patient assessment methodology. Warner MM. **Bull Pan Am Health Organ** 1988;22(3):292–302

A method of uniform stratification of risk for evaluating the results of surgery in acquired adult heart disease. Parsonnet V, et al. **Circulation** 1989 Jun;79(6 Pt 2):I3–12

Quality indicators should emphasize outcomes. Bilodeau M. **Dimens Health Serv** 1989 Apr;66(3):9–10

Process and outcome of critical care provided by community and academic primary care physicians. Lawler FH, et al. **Fam Med** 1989 Jul–Aug;21(4):268–72

Audit of process and outcome in a mini-clinic for children with asthma. Usherwood TP, et al. **Fam Pract** 1988 Dec; 5(4):289–93

Outcomes of systemic/strategic team consultation: I. Overview and one-month results. Green RJ, et al. **Fam Process** 1989 Mar;28(1):37–58

Auditing outcome after gastro-intestinal operations—the evolution and work of a surgical review office. Macintyre IM. **Health Bull (Edinb)** 1988 Nov;46(6):307–10

JCAHO emphasizes patient outcomes. Robinson ML. **Hospitals** 1989 Jul 20;63(14):21

Panel allots only $20 million for outcomes research. Robinson ML. **Hospitals** 1989 Sep 20;63(18):29

HHS boosts funds for outcomes research. Robinson ML. **Hospitals** 1989 Apr 20;63(8):20–1

Stroke rehabilitation outcome studies: comparison of a Japanese facility with 17 U.S. facilities. Chino N, et al. **Int Disabil Stud** 1988;10(4):150–3

Predictive factors in stroke outcome and implications for intervention. Tupper A, et al. **Int J Rehabil Res** 1987;10(4 Suppl 5):119–22

Description of various types of intensive and intermediate care units in France. French Multicentric Group of ICU Research. **Intensive Care Med** 1989;15(4):260–5

Severity of illness and outcome of treatment in alcoholic patients in the intensive care unit. Jensen NH, et al. **Intensive Care Med** 1988;15(1):19–22

Oxygen consumption as an outcome predictor [letter] Shoemaker WC. **Intensive Care Med** 1988;15(1):64–6

An important alliance. **Iowa Med** 1989 Feb;79(2):94

Outcome of long-term hospitalization for asthma in children. Strunk RC, et al. **J Allergy Clin Immunol** 1989 Jan; 83(1):17–25

Health interventions and mortality change in developing countries. **J Biosoc Sci Suppl** 1989;10:1–136

Assessing the effect of primary health care on mortality in Ghana. Adjei S. **J Biosoc Sci Suppl** 1989;10:115–25

Reduction in neonatal mortality by simple interventions. Daga SR. **J Biosoc Sci Suppl** 1989;10:127–36

Oral rehydration therapy and its effect on child mortality in Egypt. Rashad H. **J Biosoc Sci Suppl** 1989;10:105–13

Effect of measles immunization on child mortality in rural Gambia. Williams PJ. **J Biosoc Sci Suppl** 1989;10:95–104

On the use of symbolic labels in psychotherapy outcome research: comment on Wills, Faitler, and Snyder. Collins FL Jr, et al. **J Consult Clin Psychol** 1988 Dec;56(6):932–3

Risk factors at intake predict nonremission among depressed patients. Krantz SE, et al. **J Consult Clin Psychol** 1988 Dec;56(6):863–9

Distinguishing specific from nonspecific interventions in comparative outcome studies: reply to Collins and Thompson. Snyder DK, et al. **J Consult Clin Psychol** 1988 Dec;56(6):934–5

Relationships among structure, process, and outcome scores derived from evaluations of 300 general dental practices. Crall JJ, et al. **J Dent Educ** 1988 Nov;52(11):643–6

What can medical sociologists say about clinical outcome measures? [editorial] Ferrante J. **J Health Soc Behav** 1988 Jun;29(2):V–VII

Insight and the clinical outcome of schizophrenic patients. McEvoy JP, et al. **J Nerv Ment Dis** 1989 Jan;177(1):48–51

The efficacy of ground versus helicopter transport in patient outcome. Campbell JP, et al. **J Okla State Med Assoc** 1989 Jul;82(7):311–4

Planning a pre-hospital cardiac resuscitation programme: an analysis of community and system factors in London. Walters G, et al. **J R Coll Physicians Lond** 1989 Apr; 23(2):107–10

Effectiveness of implementing a trauma triage system on outcome: a prospective evaluation. Kilberg L, et al. **J Trauma** 1988 Oct;28(10):1493–8

Functional outcome in pediatric trauma. Wesson DE, et al. **J Trauma** 1989 May;29(5):589–92

The quality of care: how can it be assessed? [letter] **JAMA** 1989 Feb 24;261(8):1151–2

Surgeon volume vs hospital volume: which matters more? [editorial] Garnick DW, et al. **JAMA** 1989 Jul 28; 262(4):547–8

The Medical Outcomes Study. Riesenberg D, et al. **JAMA** 1989 Aug 18;262(7):943

The functioning and well-being of depressed patients. Results from the Medical Outcomes Study. Wells KB, et al. **JAMA** 1989 Aug 18;262(7):914–9

Databases for health care outcomes. **Lancet** 1989 Jul 22; 2(8656):195–6 (18 ref.)

Outcome prediction in intensive care [letter] **Lancet** 1989 Aug 5;2(8658):330–1

Predictors of rehabilitation outcome among patients with SCI. Epstein RS, et al. **Md Med J** 1989 Jun;38(6):489–92

Hospital volume and patient outcomes. The case of hip fracture patients. Hughes RG, et al. **Med Care** 1988 Nov; 26(11):1057–67

Assessing the effects of physician-patient interactions on the outcomes of chronic disease [published erratum appears in Med Care 1989 Jul;27(7):679] Kaplan SH, et al. **Med Care** 1989 Mar;27(3 Suppl):S110–27

Case mix and outcomes of nursing home patients. The importance of prior nursing home care and admission from home versus hospital. Lewis MA, et al. **Med Care** 1989 Apr;27(4):376–85

Quality of care during a community-wide experiment in prospective payment to hospitals. Mushlin AI, et al. **Med Care** 1988 Nov;26(11):1081–91

Reforming nursing home quality regulation. Impact on cited deficiencies and nursing home outcomes. Spector WD, et al. **Med Care** 1989 Aug;27(8):789–801

Toward an applied technology for quality measurement in health care. Berwick DM. **Med Decis Making** 1988 Oct–Dec;8(4):253–8

Potential effectiveness of comparative casemix-corrected adverse outcome rates as quality monitors in a simulated hospital system. Pine MB, et al. **Med Decis Making** 1989 Apr–Jun;9(2):104–15

Prospective audit of aminoglycoside usage in a general hospital with assessments of clinical processes and adverse clinical outcomes. Li SC, et al. **Med J Aust** 1989 Aug 21; 151(4):224–32

The PRO. Another knife in the heart. Dinter RW. **Minn Med** 1988 Sep;71(9):528–30, 533

Quality of outcome and cost in an obstetric and neonatal service [see comments] Gunn TR, et al. **N Z Med J** 1989 Mar 22;102(864):136–40. **Comment in:** N Z Med J 1989 Jun 14;102(869):298

Mass vaccination against hepatitis B in preschool children: immunogenicity after three reduced doses. Milne A, et al. **N Z Med J** 1989 Aug 23;102(874):429–30

Comprehensive treatment of acute and chronic low back pain: a clinical outcome comparison. Tollison CD, et al. **Orthop Rev** 1989 Jan;18(1):59–64

The Last-Weiss Rorschach Ego-Strength Scale as a prognostic measure for psychiatric outpatients. Greenwald DF, et al. **Percept Mot Skills** 1988 Aug;67(1):199–207

The efficiency and effectiveness of geriatric day hospitals. Zeeli D, et al. **Postgrad Med J** 1988 Sep;64(755):683–6

A quasi-experimental design based on regional variations: discussion of a method for evaluating outcomes of medical practice. Loft A, et al. **Soc Sci Med** 1989;28(2):147–54

Using administrative data from Manitoba, Canada to study treatment outcomes: developing control groups and adjusting for case severity. Roos NP. **Soc Sci Med** 1989; 28(2):109–13

[The development of psychoses: results of a clinical survey concerning 383 cases followed during 10 years (1975–1985)] Robert P, et al. **Ann Med Psychol (Paris)** 1989 Jan; 147(1):15–33 (Eng. Abstr.) **(Fre)**

[A process audit of stillbirths in a rural family medical practice] Shamba E, et al. **Harefuah** 1989 Mar 1; 116(5):254–8 (Eng. Abstr.) **(Heb)**

ECONOMICS

Outcomes of five years of continuous intensive case management. Borland A, et al. **Hosp Community Psychiatry** 1989 Apr;40(4):369–76

Adverse outcomes and lack of health insurance among newborns in an eight-county area of California, 1982 to 1986 [see comments] Braveman P, et al. **N Engl J Med** 1989 Aug 24;321(8):508–13. **Comment in:** N Engl J Med 1989 Aug 24;321(8):541–2

METHODS

Adherence to pharmacotherapeutic regimen. Assessment and intervention. Fleece L, et al. **Ala J Med Sci** 1988 Oct; 25(4):389–93

Severity of illness measures: opportunities for clinicians. Couch JB, et al. **Ann Intern Med** 1988 Nov 15; 109(10):771–3

Quality assurance guidelines. Developing standards for a freestanding ambulatory surgery unit. King PL. **AORN J** 1989 Jul;50(1):98–102

Assessment of disease progress in psoriasis. Marks R, et al. **Arch Dermatol** 1989 Feb;125(2):235–40 (42 ref.)

Experience of a concurrent screening quality assurance programme on a vascular surgical unit. Lawrence-Brown M, et al. **Aust Clin Rev** 1989;9(1):17–26

Framework for the analysis of quality assurance in transition: the case of Mexico. Ruelas E, et al. **Aust Clin Rev** 1989; 9(1):9–16

Assessment of the survivors of major trauma accidents. Horne G, et al. **Aust N Z J Surg** 1989 Jun;59(6):465–70

Occurrence screening can improve QA programs. Carlow D. **Dimens Health Serv** 1988 Jun;65(5):20–2

Increasing the relevancy and usefulness of programme evaluation: a comprehensive evaluation. Favaro P, et al. **Hygie** 1988 Jun;7(2):28–32

A medical view of research methodology in rehabilitation. Aitken C. **Int J Rehabil Res** 1987;10(4 Suppl 5):34–9

Measuring the impact of health interventions on mortality in developing countries: why bother? Graham W. **J Biosoc Sci Suppl** 1989;10:69–78

Assessment of the outcome of low back surgery. Waddell G, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):723–7

Responsiveness and validity in health status measurement: a clarification. Guyatt GH, et al. **J Clin Epidemiol** 1989; 42(5):403–8

Flaws in mortality data. The hazards of ignoring comorbid disease. Greenfield S, et al. **JAMA** 1988 Oct 21; 260(15):2253–5

Functional status and well-being of patients with chronic conditions. Results from the Medical Outcomes Study. Stewart AL, et al. **JAMA** 1989 Aug 18;262(7):907–13

The Medical Outcomes Study. An application of methods for monitoring the results of medical care. Tarlov AR, et al. **JAMA** 1989 Aug 18;262(7):925–30

Quality of life, health status, and clinical research. Bergner M. **Med Care** 1989 Mar;27(3 Suppl):S148–56 (24 ref.)

The Risk-Adjusted Mortality Index. A new measure of hospital performance. DesHarnais SI, et al. **Med Care** 1988 Dec;26(12):1129–48

Barriers to the use of health status measures in clinical investigation, patient care, and policy research. Deyo RA, et al. **Med Care** 1989 Mar;27(3 Suppl):S254–68 (63 ref.)

Mortality rates, monitoring programs, and the quality of care [editorial] Fisher ES. **Med Decis Making** 1989 Apr–Jun; 9(2):75

Quality-adjusted life years, utility theory, and healthy-years equivalents. Mehrez A, et al. **Med Decis Making** 1989 Apr–Jun;9(2):142–9

Outcome data [letter] Snyder BD. **Minn Med** 1989 Mar; 72(3):139

Outcomes management: a technology of patient experience [letter] **N Engl J Med** 1989 Mar 2;320(9):600

The Mannheimer Peritonitis Index: a valuable method in predicting the outcome of severe peritonitis? van Laarhoven CJ, et al. **Neth J Surg** 1988 Dec;40(6):168

Measuring subjective clinical outcomes. Jette AM. **Phys Ther** 1989 Jul;69(7):580–4

Development of a surgical case review system. Edwards C. **QRB** 1988 Nov;14(11):332–5

A computerized log and integrated quality assessment program for the small emergency department. Kuypers ME. **QRB** 1989 May;15(5):144–50

An outcome monitoring system for psychiatric inpatient care.

Stevenson JF, et al. **QRB** 1988 Nov;14(11):326–31
A versatile approach to health system evaluation. Beghin D, et al. **World Health Forum** 1989;10(1):37–40
Score-aided decision making in patients with severe liver damage after hepatic transplantation. Gubernatis G, et al. **World J Surg** 1989 May–Jun;13(3):259–65
A new scoring system for disease intensity in a surgical intensive care unit. Lehmkuhl P, et al. **World J Surg** 1989 May–Jun;13(3):252–8
[Evaluation of the quality of medical care: analysis of methods] D'Hoore W. **Acta Clin Belg** 1988;43(4):291–305 (111 ref.) (Eng. Abstr.) **(Fre)**

STANDARDS

Orthopaedic clinical research. Deficiencies in experimental design and determinations of outcome. Gartland JJ. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1357–64

STATISTICS & NUMERICAL DATA

Survival compared to the general population and changes in health status among intensive care patients. Zarén B, et al. **Acta Anaesthesiol Scand** 1989 Jan;33(1):6–12
Black/white differences in non-treatment of bladder cancer patients and implications for survival. Mayer WJ, et al. **Am J Public Health** 1989 Jun;79(6):772–5
Prognosis with mechanical ventilation: the influence of disease, severity of disease, age, and chronic health status on survival from an acute illness. Knaus WA. **Am Rev Respir Dis** 1989 Aug;140(2 Pt 2):S8–13
Intensive care unit survival of patients with systemic illness. Raffin TA. **Am Rev Respir Dis** 1989 Aug;140(2 Pt 2):S28–35 (49 ref.)
Preventable deaths in a self-designated trauma system. Campbell S, et al. **Am Surg** 1989 Jul;55(7):478–80
Age, resource consumption, and outcome for medical patients at an academic medical center. Muñoz E, et al. **Arch Intern Med** 1989 Sep;149(9):1946–50
The outcome index. A method of quality assurance in the special care area. McFee AS, et al. **Arch Surg** 1989 Jul; 124(7):825–9
Results of cardiopulmonary resuscitation in adult patients managed in a teaching hospital: clinical outcome and implications. Twidale N, et al. **Aust Clin Rev** 1989 Mar; 8(32):223–8
Reduction in hospital readmission stay of elderly patients by a community based hospital discharge scheme: a randomised controlled trial. Townsend J, et al. **BMJ** 1988 Aug 20–27;297(6647):544–7
Factors related to outcome in intensive care: French multicenter study. The French Multicenter Group of ICU Research; The Inserm Unit 169 of Statistical and Epidemiological Studies. **Crit Care Med** 1989 Apr; 17(4):305–8
Outcome from intensive care. I. A 5-year study of 1308 patients: methodology and patient population. Dragsted L, et al. **Eur J Anaesthesiol** 1989 Jan;6(1):23–37
American Association of Critical-Care Nurses Demonstration Project: profile of excellence in critical care nursing. Mitchell PH, et al. **Heart Lung** 1989 May; 18(3):219–37
A comparison of two crisis housing alternatives to psychiatric hospitalization. Bond GR, et al. **Hosp Community Psychiatry** 1989 Feb;40(2):177–83
A follow-up of chronic patients committed to outpatient treatment. Hiday VA, et al. **Hosp Community Psychiatry** 1989 Jan;40(1):52–9
Predicting rehabilitation outcomes from clinical and statistical data: a probability model. Gay DA, et al. **Int J Rehabil Res** 1988;11(1):11–9
Neonatal surgery at Waikato Hospital 1978–87. Bourchier D, et al. **N Z Med J** 1989 May 10;102(867):217–8

TRENDS

In vitro fertilization: a history of quality assurance in Australia, 1980–89. Jansen R. **Aust Clin Rev** 1989;9(1):27–32

OUTER MEMBRANE PROTEINS, BACTERIAL see **BACTERIAL OUTER MEMBRANE PROTEINS**

OUTPATIENT CLINICS see **AMBULATORY CARE FACILITIES**

OUTPATIENT CLINICS, HOSPITAL

see related

AMBULATORY CARE

Patient use of treatment options at an ATU and ratings of their relative usefulness. Rees DW, et al. **Alcohol Alcohol** 1989;24(1):63–8
Does a residents' continuity clinic provide primary care? Wilson ME, et al. **Am J Dis Child** 1989 Jul;143(7):809–12
Liaison psychiatry in a child development clinic. Evered CJ, et al. **Arch Dis Child** 1989 May;64(5):754–8
What is the role of controls in an outpatient department on progression of renal disease? Bergström J, et al. **Blood Purif** 1988;6(6):336–42
Non-attendance or non-invitation? A case-control study of failed outpatient appointments. Frankel S, et al. **BMJ** 1989 May 20;298(6684):1343–5
Immunising children in hospital [news] Hull D. **BMJ** 1988 Sep 24;297(6651):755
Is routine urine testing in outpatient clinics useful? Morgan AG. **BMJ** 1988 Nov 5;297(6657):1173
A vitreoretinal service. Richardson J, et al. **BMJ** 1989 Jul 22;299(6693):241–5
Do geriatricians need a diabetic clinic? Mondal BK, et al. **Br J Clin Pract** 1988 Mar;42(3):124–6
Factors influencing non-attendance at child psychiatry out-patient appointments. Cottrell D, et al. **Br J Psychiatry** 1988 Feb;152:201–4
Ultrasound scanning by the urologist in outpatient clinics. Vesey SG, et al. **Br J Surg** 1988 Sep;75(9):921–2
Usefulness of computerized visual acuity testing in a pediatric ophthalmology clinic. Raymond JE, et al. **Can J Ophthalmol** 1988 Aug;23(5):213–5
Parent satisfaction in a child psychiatric service. Kotsopoulos S, et al. **Can J Psychiatry** 1989 Aug;34(6):530–3
Hidden psychiatric morbidity. Part I: A study of prevalence in an out-patient population at Bindura Provincial Hospital. Hall A, et al. **Cent Afr J Med** 1987 Oct;33(10):239–43
Objective evaluation of results of a pulmonary rehabilitation program in a community hospital. Mall RW, et al. **Chest** 1988 Dec;94(6):1156–60
Outpatient cardiac catheterization and the problem of delay in evaluation and management of acute myocardial infarction [editorial] Conti CR. **Clin Cardiol** 1989 Jul; 12(7):361
Outpatient cardiac catheterizations: analysis of patients requiring admission. Pink S, et al. **Clin Cardiol** 1989 Jul; 12(7):375–8
The care of AIDS patients in Delaware [editorial] Holloway WJ. **Del Med J** 1989 Jan;61(1):29–30
The Medical Center of Delaware infectious disease clinic. Winslow DL. **Del Med J** 1989 Jan;61(1):25–7
Ten years experience of a diabetes clinic in northern Tanzania. Corrigan CB, et al. **East Afr Med J** 1987 Nov; 64(11):772–81
Prevalence of psychiatric morbidity and utilisation of traditional healers in a general outpatient clinic in Nigeria. Ihezue UH, et al. **East Afr Med J** 1987 Nov;64(11):715–20
Aspects of compliance: taking drugs and keeping clinic appointments. Mattson RH, et al. **Epilepsy Res Suppl** 1988; 1:111–7
Group therapy in a public sector psychiatric clinic. Weiner MF. **Int J Group Psychother** 1988 Jul;38(3):355–65
Development of a productivity index to increase accountability of ambulatory nutrition services. Bell LS, et al. **J Am Diet Assoc** 1989 Apr;89(4):517–9
Looking at the patient in the mix: is case mix methodology unfair to the hospital outpatient department? Fein O, et al. **J Gen Intern Med** 1988 Sep–Oct;3(5):471–5
Computer-assisted shared care: the Aberdeen Blood Pressure Clinic. Petrie JC, et al. **J Hypertens Suppl** 1989 May; 7(3):S103–8
Disulfiram use at hospital-based and free-standing alcoholism treatment centers. Friedman TC, et al. **J Subst Abuse Treat** 1988;5(3):139–43
Risky business [letter] McCoy S. **MCN** 1989 Mar–Apr; 14(2):130
Missed appointments among patients new to a general medical clinic. Starkenburg RJ, et al. **N Y State J Med** 1988 Sep;88(9):473–5
Outpatient management of amyotrophic lateral sclerosis. Hudson AJ Jr. **Semin Neurol** 1987 Dec;7(4):344–51 (17 ref.)
[The ambulatory function of a department of neuromedicine at a central hospital] Jepsen IM, et al. **Ugeskr Laeger** 1988 Nov 21;150(47):2909–11 (Eng. Abstr.) **(Dan)**
[Sectorized psychiatry. Ambulatory psychiatry in a geographically defined region] Meidahl B, et al. **Ugeskr Laeger** 1989 Apr 24;151(17):1038–43 (Eng. Abstr.) **(Dan)**
[Organic disease among patients at an open psychiatric outpatient clinic] Solstad K, et al. **Ugeskr Laeger** 1989 Jan 30;151(5):298–300 (Eng. Abstr.) **(Dan)**
[The public assistance day care hospital in Paris] Roussel A. **Bull Acad Natl Med (Paris)** 1988 Apr;172(4):595–600 (Eng. Abstr.) **(Fre)**
[Methodologic problems in the after-care of patients with breast cancer, irradiated postoperatively using a high-voltage technic, from the point of view of a radiologic clinic] Bolck M, et al. **Radiobiol Radiother (Berl)** 1988; 29(6):685–8 (Eng. Abstr.) **(Ger)**
[Difficulties and errors in the ambulatory diagnosis of soft tissue sarcomas] Trishkin VA, et al. **Khirurgiia (Mosk)** 1988 Nov;(11):100–3 **(Rus)**
[Hospital ambulatory surgical services for children] Komarov NV, et al. **Klin Khir** 1988;(11):34–6 **(Rus)**
[The role of a 1-day hospital in providing staged treatment and ambulatory care of patients with phlebothrombosis of the retina] Palamarchuk GS, et al. **Oftalmol Zh** 1989; (1):16–7 (Eng. Abstr.) **(Rus)**
[Experience of a day clinic in the treatment of patients with diabetes mellitus] Verbovaia NI, et al. **Probl Endokrinol (Mosk)** 1989 Jan–Feb;35(1):48–9 **(Rus)**
[Role of outpatient therapeutic preparation of subinterns in training as future general practitioners] Galkin VA. **Ter Arkh** 1989;61(1):107–10 **(Rus)**
[The interdisciplinary management of child abuse with respect to the law and the current treatment] Mirabal B. **Bol Asoc Med P R** 1988 Jul;80(7):251–2 **(Spa)**

ECONOMICS

Financial barriers to medical care: a prospective study in a university-affiliated community clinic. Hubbell FA, et al. **Am J Med Sci** 1989 Mar;297(3):158–62
Outpatient myelography: an acceptable and cost-effective technique. Choudhri AH, et al. **Br J Radiol** 1989 Mar; 62(735):253–5
The cost-effectiveness of a clinical pharmacy service in an outpatient mental health clinic. Lobeck F, et al. **Hosp Community Psychiatry** 1989 Jun;40(6):643–5
HCFA monitors outpatient and home care growth. Koska MT. **Hospitals** 1988 Dec 20;62(24):62
Less money, more players in outpatient market. Larkin H. **Hospitals** 1989 Jan 20;63(2):26, 29–30
Governile: untangle the ambulatory payment knot. Larkin H. **Hospitals** 1989 Jun 5;63(11):20
The economic impact and multiplier effect of a family practice clinic on an academic medical center. Schneeweiss R, et al. **JAMA** 1989 Jul 21;262(3):370–5
The incremental cost of screening, diagnosis, and treatment of gonorrhea and chlamydia in a family planning clinic. Begley CE, et al. **Sex Transm Dis** 1989 Apr–Jun;16(2):63–7
[Experience using economic mechanisms in the activities of a cosmetology clinic] Miniaev VA, et al. **Sov Zdravookhr** 1989;(4):26–9 **(Rus)**
[Characteristics of population groups applying for the services of cost-accounting polyclinics as a factor in the planning of paid services (data of the cost-accounting polyclinics of Moscow)] Shvyrkov GIu, et al. **Sov Zdravookhr** 1989;(4):29–31 (Eng. Abstr.) **(Rus)**

HISTORY

[Ambulatory care and the polyclinic in Lausanne: 100 years of medicine and society] Saudan G. **Rev Med Suisse Romande** 1989 Apr;109(4):267–77 **(Fre)**

MANPOWER

Opening an outpatient facility. Conducting a mock run. Walz MJ. **AORN J** 1989 Sep;50(3):583–5
Well-informed employees are a valuable resource. Droste T. **Hospitals** 1989 Sep 5;63(17):54
[Rational work and recreation schedules of physicians and therapists during their work shift] Kutsenko GI. **Gig Sanit** 1988 Nov;(11):73–5 **(Rus)**
[Functions of a district phthisiologist in ambulatory practice] Shefer LB, et al. **Probl Tuberk** 1988;(6):12–7 (Eng. Abstr.) **(Rus)**
[Analysis and ways of improving the organization of activities of sector physicians] Kononov AG. **Sov Zdravookhr** 1989; (5):15–7 (Eng. Abstr.) **(Rus)**
[Effectiveness of postgraduate training of the heads of women's consultation clinics] Kozachenko MA, et al. **Sov Zdravookhr** 1989;(3):53–7 (Eng. Abstr.) **(Rus)**

ORGANIZATION & ADMINISTRATION

Providing clinical pharmacy services in an AIDS—oncology ambulatory-care clinic. Wong RJ, et al. **Am J Hosp Pharm** 1988 Nov;45(11):2351–4
Containing mental health treatment costs through program design: a Massachusetts study. Dickey B, et al. **Am J Public Health** 1989 Jul;79(7):863–7
Challenges in developing resident training in aesthetic surgery. Freiberg A. **Ann Plast Surg** 1989 Mar;22(3):184–7
Pain relief clinics under anaesthetic management in Scotland. Bisset WI. **Ann R Coll Surg Engl** 1988 Nov;70(6):392–4
Modular caseload management—an alternative to traditional waiting lists. Hill SD. **Aust Clin Rev** 1988 Jun;8(29):85–90
Outpatient clinics [editorial] Griffiths RW. **Br J Plast Surg** 1988 Sep;41(5):555–6
Initial experience in a special pain clinic in Nigeria. Umeh B. **Cent Afr J Med** 1989 Mar;35(3):351–5
Family-planning clinics and educational programmes—a rural experience. Brown SJ, et al. **Med J Aust** 1989 Feb 6;150(3):133–7
Waiting time in outpatient care: a study of divergent perspectives. Piper LE. **Milit Med** 1989 Aug;154(8):401–3
Emergency/outpatient services. Bennett MI. **New Dir Ment Health Serv** 1988 Fall;(39):65–72
Improving a university hospital obstetric clinic: better but not best. Dans PE, et al. **Obstet Gynecol** 1989 Aug; 74(2):262–6
Outpatient metabolic evaluation of patients with recurrent kidney stones. Leslie SW. **Ohio Med** 1989 Apr;85(4):292–4
A combined group and individual approach to outpatient lithium treatment. Seeger PA, et al. **Ohio Med** 1989 Apr; 85(4):300–2
Case management by nurses at a county facility. Winder PG. **QRB** 1988 Jul;14(7):215–9
The role of a hearing impaired clinic in pediatric otology. Myer CM 3d. **Scand Audiol Suppl** 1988;30:133–4
Computerization of clinic records: the resource utilization system for a sexually transmitted diseases clinic. Hart G. **Sex Transm Dis** 1989 Jan–Mar;16(1):1–6
[The structure and content of ambulatory family practice in a teaching hospital in Taiwan] Lin CS, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1988 Jul;4(7):401–8 (Eng. Abstr.) **(Chi)**
[Comprehensive care of patients with hypertension in a large-city regional outpatient clinic] Kopczyński J, et al. **Kardiol Pol** 1988;31 Suppl 1:77–84 (Eng. Abstr.) **(Pol)**
[Postgraduate training of administrators of women's referral centers based on a problem-related program] Aliab'eva LIa, et al. **Akush Ginekol (Mosk)** 1988 Sep;(9):76–7 **(Rus)**

[A primary prevention center at a pediatric polyclinic] Al'bitskiĭ VIu, et al. **Pediatriia** 1989;(4):91–3 **(Rus)**

[Scientific and technologic aspects of equipping the preventive services department during general mass screening of the population] Ananin VF, et al. **Sov Zdravookhr** 1989;(1):33–8 (Eng. Abstr.) **(Rus)**

[Organization of a medico-genetics center within a district clinical hospital] Iavorskiĭ VS, et al. **Sov Zdravookhr** 1988;(8):46–50 (Eng. Abstr.) **(Rus)**

[Effective forms of the work of a pediatric polyclinic] Ivannikova NV, et al. **Sov Zdravookhr** 1989;(5):43–5 (Eng. Abstr.) **(Rus)**

[The role of a day care hospital in increasing the quality of polyclinical services] Kalininskaia AA, et al. **Sov Zdravookhr** 1988;(12):15–7 (Eng. Abstr.) **(Rus)**

[Organization of the activities of outpatient clinics for referral and diagnostic services] Kozlitin VM, et al. **Sov Zdravookhr** 1988;(11):16–9 (Eng. Abstr.) **(Rus)**

[Improving the organization of rehabilitation treatment in urban polyclinics] Minakov VF, et al. **Sov Zdravookhr** 1988;(6):14–8 (Eng. Abstr.) **(Rus)**

[Health education in urban pediatric polyclinics] Nikiforova AG, et al. **Sov Zdravookhr** 1989;(3):47–9 (Eng. Abstr.) **(Rus)**

[Activities of a day hospital of the city polyclinic] Rozova IN, et al. **Sov Zdravookhr** 1989;(2):54–7 (Eng. Abstr.) **(Rus)**

[The hospital and semi-inpatient clinic in the structure of psychiatric care for adolescents] Gurovich IIa, et al. **Zh Nevropatol Psikhiatr** 1988;88(8):107–11 (Eng. Abstr.) **(Rus)**

STANDARDS

Outpatients view their psychiatric treatment. Conte HR, et al. **Hosp Community Psychiatry** 1989 Jun;40(6):641–3

Quality assurance: public hospital clinics [editorial] Benjamin GC. **J Natl Med Assoc** 1989 Apr;81(4):355–6

STATISTICS & NUMERICAL DATA

HIV infection in a primary-care outpatient clinic. Bender C, et al. **Hawaii Med J** 1988 Nov;47(11):519–22

TRENDS

Medicine and charity, then and now [letter] Snyderman RK. **Plast Reconstr Surg** 1989 Feb;83(2):391–2

[What should the chair of outpatient therapy be like?] Orlova GG, et al. **Ter Arkh** 1989;61(3):143–4 **(Rus)**

[Temporary disability in patients with acute pneumonia at an outpatient clinic] Terekhova TM, et al. **Ter Arkh** 1989;61(1):75–7 (Eng. Abstr.) **(Rus)**

UTILIZATION

General practitioners' referrals to specialist outpatient clinics. I. Why general practitioners refer patients to specialist outpatient clinics. Coulter A, et al. **BMJ** 1989 Jul 29;299(6694):304–6

General practitioners' referrals to specialist outpatient clinics. II. Locations of specialist outpatient clinics to which general practitioners refer patients. Coulter A, et al. **BMJ** 1989 Jul 29;299(6694):306–8

Referral patterns to an ophthalmic outpatient clinic by general practitioners and ophthalmic opticians and the role of these professionals in screening for ocular disease. Harrison RJ, et al. **BMJ** 1988 Nov 5;297(6657):1162–7

How much variation in referral rates among general practitioners is due to chance? Moore AT, et al. **BMJ** 1989 Feb 25;298(6672):500–2

Are referrals by general practitioners influenced by the availability of consultants? Roland M, et al. **BMJ** 1988 Sep 3;297(6648):599–600

A comparison of referrals to primary-care and hospital out-patient clinics. Brown RM, et al. **Br J Psychiatry** 1988 Aug;153:168–73

Surgical aspects of a district hospital combined gastroenterology clinic. Holmes KM, et al. **Br J Surg** 1988 Nov;75(11):1105–7

Ambulatory care continuity experience for medical housestaff at a large municipal hospital. Starkenburg RJ, et al. **Bull N Y Acad Med** 1988 May;64(4):347–51

Continuity of care for family practice patients in a university hospital-based residency program. Bertakis KD, et al. **Fam Pract Res J** 1989 Spring-Summer;8(2):100–6

An audit of wart treatment in a Scottish dermatology department. Keefe M, et al. **Health Bull (Edinb)** 1989 Jan;47(1):13–20

Medicaid policy and the substitution of hospital outpatient care for physician care. Cohen JW. **Health Serv Res** 1989 Apr;24(1):33–66

Epidemiological observations in the AIDS clinic at the Hadassah University Hospital in Jerusalem. Maayan S, et al. **Isr J Med Sci** 1989 Jun;25(6):309–13

The impact of guidelines in clinical outpatient practice. Hall R, et al. **J R Coll Physicians Lond** 1988 Oct;22(4):244–7

The cost-effectiveness of intensive postdischarge care. A randomized trial. Weinberger M, et al. **Med Care** 1988 Nov;26(11):1092–102

Family-planning clinics [letter] [published erratum appears in Med J Aust 1989 Jun 5;150(11):668] **Med J Aust** 1989 Apr 3;150(7):408

Who comes back to a paediatric outpatient clinic? Ford RP, et al. **N Z Med J** 1989 Mar 8;102(863):102–4

Attendance failure at Middlemore Hospital asthma clinic. McClellan VE, et al. **N Z Med J** 1989 May 10;102(867):211–3

[Clinical statistics on outpatients at the Urological Clinic of Sanjukai Hospital in 1987] Tanda H, et al. **Hinyokika Kiyo** 1988 Dec;34(12):2213–8 (Eng. Abstr.) **(Jpn)**

OUTPATIENT SURGERY see **AMBULATORY SURGERY**

OUTPATIENTS see under **PATIENTS**

OVAL WINDOW see under **VESTIBULAR APPARATUS**

OVALBUMIN

T cell activation by preformed, long-lived Ia-peptide complexes. Quantitative aspects. Watts TH. **J Immunol** 1988 Dec 1;141(11):3708–14

Interaction of vanadium(V) oxoanions with ovalbumin and transfusion gelatin. Ashraf SM, et al. **J Inorg Biochem** 1989 Jan;35(1):1–8

Circular dichroic study of conformational changes in ovalbumin. Batra PP, et al. **J Protein Chem** 1989 Apr;8(2):221–9

ADMINISTRATION & DOSAGE

The kinetics of oral hyposensitization to a protein antigen are determined by immune status and the timing, dose and frequency of antigen administration. Peng HJ, et al. **Immunology** 1989 Jul;67(3):425–30

Effect of antihistamines on antigen-induced increase of rat tracheal mucous gel layer thickness. Yanni JM, et al. **Int Arch Allergy Appl Immunol** 1988;87(4):430–4

The effect of immunization with protein-hapten conjugate on the intestinal uptake of p-aminobenzoic acid as a hapten. Yamamoto A, et al. **Life Sci** 1989;44(2):121–30

Characteristics of weekly pulmonary hypersensitivity responses elicited in the guinea pig by inhalation of ovalbumin aerosols. Karol MH, et al. **Toxicol Appl Pharmacol** 1989 Sep 1;100(2):234–46

Association of fever with late-onset pulmonary hypersensitivity responses in the guinea pig. Thorne PS, et al. **Toxicol Appl Pharmacol** 1989 Sep 1;100(2):247–58

ADVERSE EFFECTS

Recent data on the pharmacology of fenspiride. Lonchampt M, et al. **Rhinology** 1988;Suppl 4:59–66

ANALYSIS

Mass spectrometry of L-beta-aspartamido carbohydrates isolated from ovalbumin. Wang TH, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):335–8

Comparative chemical studies on the quail (Coturnix coturnix japonica) egg ovalbumin. Itoh T, et al. **Comp Biochem Physiol [B]** 1978;60(3):215–20

BIOSYNTHESIS

Flow of egg white ovalbumin into the yolk sac during embryogenesis. Sugimoto Y, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):400–3

BLOOD

[Permeability of the intestinal wall for protein in patients with food allergy] Beiul EA, et al. **Klin Med (Mosk)** 1988 Jul;66(7):96–101 (Eng. Abstr.) **(Rus)**

DIAGNOSTIC USE

[A new device for the gastric emptying test—a sulfamethizole capsule food method] Asada T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jan;86(1):11–8 (Eng. Abstr.) **(Jpn)**

[The possibility of using equine serum albumin in place of bovine serum albumin and ovalbumin in radioimmunological and immunoenzyme analyses and in virological practice] Kolmakova MV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 May;(5):47–50 (Eng. Abstr.) **(Rus)**

GENETICS

Positive and negative regulatory elements control the steroid-responsive ovalbumin promoter. Sanders MM, et al. **Biochemistry** 1988 Aug 23;27(17):6550–7

Cell-specific activity of a GGTCA half-palindromic oestrogen-responsive element in the chicken ovalbumin gene promoter. Tora L, et al. **EMBO J** 1988 Dec 1;7(12):3771–8

Cloning of Japanese quail ovalbumin cDNA in E. coli. Klaudiny J, et al. **Folia Biol (Praha)** 1989;35(2):65–77

A synthetic, partial pre-mRNA for ovalbumin primes its own complementary DNA with reverse transcriptase. Oyama F, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):403–8

Structure of the gene for human plasminogen activator inhibitor-2. The nearest mammalian homologue of chicken ovalbumin. Ye RD, et al. **J Biol Chem** 1989 Apr 5;264(10):5495–502

COUP transcription factor is a member of the steroid receptor superfamily. Wang LH, et al. **Nature** 1989 Jul 13;340(6229):163–6

Determination of secondary structure in the initiation region of ovalbumin mRNA. Liarakos CD, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11249–65

Multiple protein binding sites within the ovalbumin gene 5'-flanking region: isolation and characterization of sequence-specific binding proteins. Pastorcic M, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6693–711

The studies of COUP transcription factor from HeLa cells: purification and partial characterization. Wang LH, et al. **Prog Clin Biol Res** 1988;284:37–51

[Structural state of active and inactive genes during chromatin decondensation] Kukushkin AN, et al. **Mol Biol (Mosk)** 1988 Jul-Aug;22(4):955–67 (Eng. Abstr.) **(Rus)**

HISTORY

Early work on the glycoprotein of egg albumin [published erratum appears in Trends Biochem Sci 1988 Dec;13(12):469] Neuberger A. **Trends Biochem Sci** 1988 Oct;13(10):398–9

IMMUNOLOGY

Induction of a combined mucosal and systemic anti-ovalbumin response. Bianchi AT, et al. **Adv Exp Med Biol** 1988;237:675–80

Effect of an oral thromboxane synthetase inhibitor (OKY-046) on antigen-induced bronchoconstriction in guinea pigs. Nambu F, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989;19:528–30

Late airway responses to antigen challenge in sensitized inbred rats. Eidelman DH, et al. **Am Rev Respir Dis** 1988 May;137(5):1033–7

Structural characteristics of peptides required for their interaction with IAd. Grey HM, et al. **Ann N Y Acad Sci** 1988;546:72–9 (14 ref.)

Murine delayed type hypersensitivity is suppressed by Ascaris suum extract. Macedo MS, et al. **Braz J Med Biol Res** 1988;21(3):523–5

Tracheal responsiveness to histamine, PAF-acether and acetylcholine in normal and actively ovalbumin-sensitized guinea pigs. Medeiros YS, et al. **Braz J Med Biol Res** 1989;22(1):97–101

Suppression of IgE antibody production by Ascaris suum extract: characterization of suppressive component(s). Soares MF, et al. **Braz J Med Biol Res** 1988;21(3):527–9

A study of the adjuvant effect of nigrosin on antibody synthesis and phagocytic activity of peritoneal macrophages of inbred mice. Vericimo MA, et al. **Braz J Med Biol Res** 1988;21(2):301–4

The polyclonal and antigen-specific IgE and IgG subclass response of mice injected with ovalbumin in alum or complete Freund's adjuvant. Beck L, et al. **Cell Immunol** 1989 Oct 1;123(1):1–8

Immediate hypersensitivity to ovalbumin in children with hen's egg white allergy. Lau S, et al. **Eur J Pediatr** 1988 Aug;147(6):606–8

Active sensitization of guinea-pig airways in vivo enhances in vivo and in vitro responsiveness. Featherstone RL, et al. **Eur Respir J** 1988 Oct;1(9):839–45

Tolerance to aggregated human IgG but not ovalbumin can be induced by concurrent administration of depleting or non-depleting anti-L3T4 monoclonal antibodies. Charlton B, et al. **Immunol Cell Biol** 1989 Feb;67 (Pt 1):1–7

Priming of systemic and local delayed-type hypersensitivity responses by feeding low doses of ovalbumin to mice. Lamont AG, et al. **Immunology** 1989 Apr;66(4):595–9

The humoral immune response of mice to intra-mammary immunization with ovalbumin. Nashar TO, et al. **Immunology** 1988 Oct;65(2):319–21

Difference between bacterial and food antigens in mucosal immunogenicity. Wold AE, et al. **Infect Immun** 1989 Sep;57(9):2666–73

Effect of systemic and orally administered iota-carrageenan on ovalbumin-specific antibody response in the rat. Coste M, et al. **Int Arch Allergy Appl Immunol** 1989;88(4):474–6

Maternal determinants of neonatal immune response to ovalbumin: effect of breast feeding on development of anti-ovalbumin antibody in the neonate. Okamoto Y, et al. **Int Arch Allergy Appl Immunol** 1989;89(1):83–9

IgG and IgA antibody in tears of rabbits immunized by topical application of ovalbumin. Hall JM, et al. **Invest Ophthalmol Vis Sci** 1989 Jan;30(1):138–44

Effects of SO2 exposure on allergic sensitization in the guinea pig. Riedel F, et al. **J Allergy Clin Immunol** 1988 Oct;82(4):527–34

Induction of ovalbumin-specific cytotoxic T cells by in vivo peptide immunization. Carbone FR, et al. **J Exp Med** 1989 Mar 1;169(3):603–12

Class I-restricted presentation occurs without internalization or processing of exogenous antigenic peptides. Hosken NA, et al. **J Immunol** 1989 Feb 15;142(4):1079–83

Induction of class I MHC-restricted, peptide-specific cytolytic T lymphocytes by peptide priming in vivo. Ishioka GY, et al. **J Immunol** 1989 Aug 15;143(4):1094–100

Stable association of processed antigen with antigen-presenting cell membranes. Jensen PE. **J Immunol** 1989 Jul 15;143(2):420–5

Analysis of the interaction of peptide hen egg white lysozyme (34–45) with the I-Ak molecule. Lambert LE, et al.

J Immunol 1989 Aug 1;143(3):802–7
Two genetically identical antigen-presenting cell clones display heterogeneity in antigen processing. Michalek MT, et al. Proc Natl Acad Sci U S A 1989 May;86(9):3316–20
Origin of antibody-containing cells in the ovine mammary gland following intraperitoneal and intramammary immunisation. Sheldrake RF, et al. Res Vet Sci 1988 Sep; 45(2):156–9
Generation of high-rate ovalbumin-specific antibody-secreting cells in cultures of human peripheral blood B cells obtained from non-immunized blood donors. t Hart LA, et al. Scand J Immunol 1988 Nov;28(5):583–9
Detection of IgA antibodies and quantification of IgA antibody-producing cells specific for ovalbumin or Trichinella spiralis in the rat. Van Loveren H, et al. Scand J Immunol 1988 Sep;28(3):377–81
[Allergological study of breast feeding, ovalbumin and specific IgG, IgM and IgA antibodies to ovalbumin in human milk] Ogura H, et al. Arerugi 1989 Apr;38(4):342–51 (Eng. Abstr.) (Jpn)
[Late phase response in the guinea pig airway caliber following inhaled antigen exposure. I. Comparative study of passively and actively sensitized models] Terashi Y, et al. Arerugi 1988 Oct;37(10):980–91 (Eng. Abstr.) (Jpn)
[Usefulness of the analysis of IgE and food antibodies of the IgE class for the diagnosis and treatment of food allergy in children] Rujner J, et al. Wiad Lek 1988 Apr 15; 41(8):494–9 (Eng. Abstr.) (Pol)
[Tolerogenic effect of ovalbumin digestion products forming in the gastrointestinal tract of rats] Shirina LI, et al. Patol Fiziol Eksp Ter 1989 Mar–Apr;(2):54–6 (Eng. Abstr.) (Rus)

METABOLISM

Intestinal adaptation during lactation in the mouse. I. Enhanced intestinal uptake of dietary protein antigen. Harmatz PR, et al. Immunology 1989 May;67(1):92–5

PHARMACOLOGY

Studies of food allergy—lymphocyte blastogenesis to ovalbumin or bovine serum albumin for detection of allergens in hen's egg and cow's milk allergy. Kondo N, et al. Acta Paediatr Jpn Overseas Ed 1987 Oct;29(5):667–71
A polyfunctional molecule produced by the conjugation of a synthetic polyion–immunostimulant with specific antigen and an inhibitor of mast cell activation: effects on histamine release. Gushchin IS, et al. Agents Actions 1989 Apr; 27(1–2):75–8
Effect of Desmodium adscendens fractions on antigen- and arachidonic acid-induced contractions of guinea pig airways. Addy ME, et al. Can J Physiol Pharmacol 1988 Jun;66(6):820–5
Inhibition of antigen-induced contraction of guinea pig trachea by ICI 198,615. Redkar-Brown DG, et al. Eur J Pharmacol 1989 Jun 8;165(1):113–21
Ovalbumin-induced fusion of acidic phospholipid vesicles at low pH. Yun CH, et al. J Biochem (Tokyo) 1989 Mar; 105(3):406–11

ULTRASTRUCTURE

Absence of large-scale conformational change upon limited proteolysis of ovalbumin, the prototypic serpin. Gettins P. J Biol Chem 1989 Mar 5;264(7):3781–5

OVALOCYTOSIS, HEREDITARY see ELLIPTOCYTOSIS, HEREDITARY

OVARIAN CYCLE see MENSTRUAL CYCLE

OVARIAN CYSTS

[A giant cyst of ectopic ovarian tissue] Derevianko AIu, et al. Klin Khir 1988;(12):56 (Rus)

ANALYSIS

Oxidation products of ovarian cyst mucins. Characterisation by density-gradient analysis. Creeth JM. Carbohydr Res 1988 Jul 15;178:314–9

BLOOD

[Placental protein 5 and pregnancy zone protein in ovarian cysts and benign cystic ovarian tumors] Briese V, et al. Zentralbl Gynakol 1988;110(13):821–3 (Eng. Abstr.) (Ger)

CHEMICALLY INDUCED

Ovarian cysts and oral contraceptives [letter] Goldzieher JW, et al. Am J Obstet Gynecol 1989 Feb;160(2):523–4
Formation of ovarian follicular cysts and corpora lutea after treatment with antihistamine or indomethacin in prepubertal gilts. Hall JA, et al. Biol Reprod 1989 Mar; 40(3):565–9
Induction of ovarian cysts in progesterone-synchronized immature rats: evidence that suppression of follicular aromatase activity is not a prerequisite for the induction of cystic follicles. Bogovich K. Endocrinology 1989 Apr; 124(4):1646–53
Ovarian cyst formation: a complication of gonadotropin-releasing hormone agonist therapy. Feldberg D, et al. Fertil Steril 1989 Jan;51(1):42–5
Use of multiphasic oral contraceptives and hospitalizations of women with functional ovarian cysts in the United States. Grimes DA, et al. Obstet Gynecol 1989 Jun; 73(6):1037–9
[Follicular ovarian cysts appearing during progestin or estroprogestin oral contraception at low doses] Netter A, et al. Bull Acad Natl Med (Paris) 1988 May;172(5):711–5 (Eng. Abstr.) (Fre)
[Ovarian cysts in early pregnancy associated with the use of gonadotropins with abortive intention (2 cases) (letter)] Camargo Júnior HS. Rev Paul Med 1987 Nov–Dec; 105(6):347 (Por)

COMPLICATIONS

Ovarian cysts in women with inflammatory bowel disease. Rothe Nissen K, et al. Acta Obstet Gynecol Scand 1988; 67(3):237–40
Ovarian cyst and autonomic dysreflexia. Kumar VN, et al. Arch Phys Med Rehabil 1989 Jul;70(7):547–8
Ovarian cysts in precocious puberty. Arisaka O, et al. Clin Pediatr (Phila) 1989 Jan;28(1):44–7
Precocious pseudopuberty associated with multiple ovarian follicular cysts and low plasma oestradiol concentrations. Sinnecker G, et al. Eur J Pediatr 1989 Jun;148(7):600–2
The effects of baseline ovarian cysts on the clinical response to controlled ovarian hyperstimulation in an in vitro fertilization program. Hornstein MD, et al. Fertil Steril 1989 Sep;52(3):437–40
Autonomous ovarian cyst in isosexual precocious pseudopuberty. Baran GW, et al. JCU 1988 Jan;16(1):58–60
[Corpus luteum hemorrhage; beware of overtreatment] Brölmann HA, et al. Ned Tijdschr Geneeskd 1988 Sep 10; 132(37):1681–3 (Dut)
[Isolated metrorrhagia in a prepubertal child caused by functional ovarian cyst] Berlier P, et al. Pediatrie 1988; 43(9):749–51 (Eng. Abstr.) (Fre)
[Transitory precocious puberty caused by autonomous ovarian cysts. Clinical, endocrinologic and sonographic course] Partsch CJ, et al. Monatsschr Kinderheilkd 1989 Apr;137(4):235–8 (Eng. Abstr.) (Ger)
[Status of the breasts and endometrium in patients with benign tumors and tumor-like structures of the ovaries] Adamian LV, et al. Akush Ginekol (Mosk) 1989 Apr; (4):21–4 (Eng. Abstr.) (Rus)
[A combination of strangulated femoral hernia and torsion of an ovarian cyst] Akataev NA, et al. Klin Khir 1989; (2):57–8 (Rus)
[Acute phlegmonous cholecystitis associated with rupture of a twisted ovarian cyst] Gavrilenko BG, et al. Klin Khir 1988;(9):51 (Rus)
[Vaginometra mimicking torsion of an ovarian cyst] Petrakov VM, et al. Klin Khir 1989;(6):67 (Rus)

CONGENITAL

Ovarian cyst in a newborn. Kapoor R, et al. Indian Pediatr 1988 Sep;25(9):899–901
[Benign tumors of the ovaries and pyloric stenosis in a newborn infant] Doletskiĭ SIa, et al. Vestn Khir 1988 Jul; 141(7):78–9 (Rus)

DIAGNOSIS

Laparoscopy for screening and early diagnosis of ovarian cancer. Tolino A, et al. Acta Eur Fertil 1988 Sep–Oct; 19(5):277–8
The role of ultrasound in the management of ovarian masses in children. Thind CR, et al. Clin Radiol 1989 Mar; 40(2):180–2
Fetal Ovarian Cysts. A Report of Five Cases [letter] Weintraub Z. J Pediatr Surg 1988 Dec;23(12):1228
Three years' experience with large ovarian cysts diagnosed in utero. Zachariou Z, et al. J Pediatr Surg 1989 May; 24(5):478–82
Perinatal ultrasound casebook. In utero diagnosis of fetal ovarian cyst. Sarno AP Jr, et al. J Perinatol 1989 Mar; 9(1):98–9
Sonography of autonomous follicular ovarian cysts in precocious pseudopuberty. Fakhry J, et al. J Ultrasound Med 1988 Nov;7(11):597–603
The postmenopausal cystic adnexal mass: the potential role of ultrasound in conservative management. Goldstein SR, et al. Obstet Gynecol 1989 Jan;73(1):8–10
Prenatal diagnosis and management of fetal ovarian cysts. Rizzo N, et al. Prenat Diagn 1989 Feb;9(2):97–103
Pediatric case of the day. Infected ovarian cyst. Han BK, et al. Radiographics 1988 Jul;8(4):813–7
[Benign tumors of the ovary in young girls. Apropos of 3 cases in Africa] Ribault L, et al. Rev Fr Gynecol Obstet 1989 May;84(5):443–5 (Eng. Abstr.) (Fre)
[Determination of N-acetylneuraminic acid for the differential diagnosis of cystic ovarian tumors] Donat H, et al. Arch Geschwulstforsch 1989;59(2):113–20 (Eng. Abstr.) (Ger)
[Determination of carcinoembryonic antigen in puncture fluid of cystic ovarian tumors and ovarian cysts] Büttner HH, et al. Gynakol Rundsch 1988;28 Suppl 2:179–80 (Ger)
[Clinical contribution to the sonographic diagnosis and perinatal treatment of fetal ovarian cysts] Sander I, et al. Kinderarztl Prax 1988 Aug;56(8):395–9 (Eng. Abstr.) (Ger)
[CEA determination in aspired fluid of cystic ovarian tumors and ovarian cysts and in ascites and serum samples of patients with ovarian tumors] Kunze M, et al. Zentralbl Gynakol 1988;110(16):1006–12 (Eng. Abstr.) (Ger)
[Placental protein 12 (PP 12) in cyst and peritoneal fluids and serum samples of patients with ovarian cysts and cystic ovarian tumors] Strache RR, et al. Zentralbl Gynakol 1989; 111(11):749–54 (Eng. Abstr.) (Ger)
[Ultrasonic diagnosis of fetal ovarian cysts] Fiaschetti D, et al. Minerva Ginecol 1989 Jan;41(1):35–7 (Eng. Abstr.) (Ita)
[Prenatal echographic diagnosis in a case of fetal ovarian cystoma] Grio R, et al. Minerva Ginecol 1988 Aug; 40(8):481–3 (Eng. Abstr.) (Ita)
[Follicular cysts of the ovary in newborn infants. Apropos of 7 cases] Tomà P, et al. Minerva Pediatr 1988 Dec; 40(12):715–8 (Eng. Abstr.) (Ita)
[Transvaginal echography: initial experiences in oncologic gynecology] Squillaci E, et al. Radiol Med (Torino) 1989 Jun;77(6):658–62 (Eng. Abstr.) (Ita)

ENZYMOLOGY

Human ovarian tumor-associated trypsin. Its purification and characterization from mucinous cyst fluid and identification as an activator of pro-urokinase. Koivunen E, et al. J Biol Chem 1989 Aug 25;264(24):14095–9

EPIDEMIOLOGY

Risk factors for endometrioid, mucinous and serous benign ovarian cysts. Parazzini F, et al. Int J Epidemiol 1989 Mar; 18(1):108–12

ETIOLOGY

Smoking and cysts of the ovary. Wyshak G, et al. Int J Fertil 1988 Nov–Dec;33(6):398–404
Cystic ovarian enlargement resulting from autoimmune oophoritis. Biscotti CV, et al. Obstet Gynecol 1989 Sep;74(3 Pt 2):492–5

IMMUNOLOGY

Structural concepts of the human blood group A, B, H, Le(a), Le(b), I and i active glycoproteins purified from human ovarian cyst fluid. Wu AM. Adv Exp Med Biol 1988; 228:351–94 (45 ref.)
Monoclonal antibodies against ovarian carcinoma-associated antigens, raised by immunization with cyst fluids. Boerman O, et al. Anticancer Res 1989 May–Jun;9(3):551–8

PATHOLOGY

Hyperreactio luteinalis. Benign disorder masquerading as an ovarian neoplasm. Wajda KJ, et al. Arch Pathol Lab Med 1989 Aug;113(8):921–5 (50 ref.)
Needle aspiration of simple ovarian cysts in pregnancy. Case reports. Rodin A, et al. Br J Obstet Gynaecol 1989 Aug; 96(8):994–6
Multiple neuroectodermal tumors arising in a mature cystic teratoma of the ovary. Oláh KS, et al. Gynecol Oncol 1989 Aug;34(2):222–5
Liesegang rings in the female genital tract. A report of three cases. Clement PB, et al. Int J Gynecol Pathol 1989; 8(3):271–6
[Relation of genital tuberculosis and simple cysts of the ovary] Yildirim M, et al. Rev Fr Gynecol Obstet 1989 Mar 10;84(3):193–6 (Eng. Abstr.) (Fre)
[Case report of an enormous ovarian cyst] Sehović N, et al. Acta Chir Iugosl 1988;35(2):203–13 (Scr)
[Inclusions of ovarian germinative epithelium] Dimitrovska N. Jugosl Ginekol Perinatol 1988 Sep–Dec;28(5–6):135–7 (Eng. Abstr.) (Scr)

RADIOGRAPHY

A young woman with vague lower abdominal pain. Benign cystic teratoma (dermoid cyst). Dirlan ME, et al. West J Med 1989 Mar;150(3):349–50

SURGERY

[Current therapeutic approach to adnexal cysts] Erny R, et al. Rev Fr Gynecol Obstet 1988 Nov;83(11):673–7 (Eng. Abstr.) (Fre)
[Laparoscopic therapy of cystic ovarian tumors] Mursch-Edlmayr G, et al. Gynakol Rundsch 1988;28 Suppl 2:209–11 (Ger)
[Epidural anaesthesia for multiallergic pregnant patients] Shimai N, et al. Masui 1988 Jun;37(6):731–4 (Eng. Abstr.) (Jpn)
[Comparative evaluation of various methods of preventing infectious complications after planned gynecologic surgery] Evseev AA. Akush Ginekol (Mosk) 1989 Apr;(4):33–6 (Rus)
[Torsion of an ovarian cyst combined with phlegmonous appendicitis in a 5-month-old girl] Kalinets OS, et al. Klin Khir 1988;(6):75 (Rus)
[Simultaneous operations in multiple combined pathology of the abdominal cavity organs] Shevchuk MG, et al. Klin Khir 1988;(10):62 (Rus)

THERAPY

Recurrence of functional ovarian cysts after laparoscopic

fenestration [letter] De Wilde RL.
Am J Obstet Gynecol 1989 Sep;161(3):839
Ovarian cyst aspiration during in vitro fertilization/embryo transfer (IVF/ET) cycles. Feldberg D, et al.
J In Vitro Fert Embryo Transf 1988 Dec;5(6):372–5
Ultrasound-guided puncture of cystic tumors in the lower pelvis of young women. Granberg S, et al. **JCU** 1989 Feb; 17(2):107–11
Laparoscopic removal of dermoid cysts [letter] Hakim-Elahi E. **Obstet Gynecol** 1989 Jul;74(1):140
[Systematic non-surgical treatment of ovarian cysts in newborn infants. Apropos of 8 cases] Debeugny P, et al. **Chir Pediatr** 1989;30(1):30–6 (Eng. Abstr.) **(Fre)**

VETERINARY

The relationship between milk yield and cystic ovarian disease in cattle. Nanda AS, et al. **Br Vet J** 1989 Jan–Feb; 145(1):39–45
Effect of gonadotropin-releasing hormone on clinical response and fertility in cows with cystic ovaries, as related to milk progesterone concentration and days after parturition. Dinsmore RP, et al. **J Am Vet Med Assoc** 1989 Aug 1;195(3):327–30
The milk progesterone test as an aid to the diagnosis of cystic ovaries in dairy cows. Booth JM. **Vet Rec** 1988 Oct 22; 123(17):437–9

OVARIAN DISEASES

Bilateral torsion of the normal ovary and oviduct in a young girl. Wakamatsu M, et al. **J Fam Pract** 1989 Jan;28(1):101–2 (24 ref.)
Polyglandular autoimmune syndrome, type 2. Leor J, et al. **South Med J** 1989 Mar;82(3):374–6
[Primary tubo-ovarian echinococcosis. Description of a case and epidemiological, pathogenetic, diagnostic and therapeutic considerations] Lomeo AM, et al.
Minerva Ginecol 1988 Jul;40(7):443–6 (Eng. Abstr.) **(Ita)**

CHEMICALLY INDUCED

Ovarian hyperstimulation syndrome (OHS): a case of severe OHS. Rubessa S, et al. **Acta Eur Fertil** 1989 Jan–Feb; 20(1):15–7
Pulmonary oedema in the ovarian hyperstimulation syndrome [letter] Shulman DL, et al. **N Z Med J** 1988 Oct 12; 101(855):643–4
Ovarian hyperstimulation syndrome: an update review. Golan A, et al. **Obstet Gynecol Surv** 1989 Jun;44(6):430–40 (89 ref.)

COMPLICATIONS

Thyro-gonadic failure, a risk factor in cardiovascular pathology. Pitiş M, et al. **Endocrinologie** 1989 Jan–Mar; 27(1):43–7 (23 ref.)
Ovarian superstimulation in the treatment of infertility due to peritubal and periovarian adhesions. Aboulghar MA, et al. **Fertil Steril** 1989 May;51(5):834–7
Ovarian hyperstimulation complicating the clinical presentation of a pre-existing ectopic pregnancy. Paulson RJ, et al. **Fertil Steril** 1988 Oct;50(4):670–1
Acute actinomycotic peritonitis—a new presentation of chronic infection. Stanley D, et al. **J R Soc Med** 1988 Nov; 81(11):667–8
Ovarian torsion and amputation resulting in partially calcified, pedunculated cystic mass. Currarino G, et al.
Pediatr Radiol 1989;19(6–7):395–9
[A case of ovarian bleeding with combined congenital deficiency of factor V and von Willebrand's disease] Era I, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun; 41(6):761–4 **(Jpn)**
[Problems of pathogenesis of ovarian and idiopathic hirsutism] Tarasenko LV, et al.
Probl Endokrinol (Mosk) 1988 Sep–Oct;34(5):28–32 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Ovarian torsion: sonographic evaluation. Helvie MA, et al. **JCU** 1989 Jun;17(5):327–32
Pelvic abscesses in postmenopausal women. Vasilev SA, et al. **Surg Gynecol Obstet** 1989 Sep;169(3):243–6
Real-time ultrasonic diagnosis of ovarian tumors. Khan NS, et al. **Tokushima J Exp Med** 1987 Dec;34(3–4):53–60
[Possibilities of transvaginal echography in the examination of the uterus and ovaries] Griaznova IM, et al.
Akush Ginekol (Mosk) 1988 Nov;(11):17–21 (Eng. Abstr.) **(Rus)**
[Echographic transvaginal diagnosis of diseases of the internal genital organs] Strizhakov AN, et al.
Akush Ginekol (Mosk) 1988 Nov;(11):12–7 (Eng. Abstr.) **(Rus)**
[Significance of ultrasonic examination in the diagnosis of genital tuberculosis in women] Batashova MI, et al.
Probl Tuberk 1989;(5):51–3 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Twin pregnancy in premature ovarian failure after estrogen treatment: a case report. Tang L, et al.
Am J Obstet Gynecol 1989 Jul;161(1):172–3
Suppression of gonadotrophin secretion does not reverse premature ovarian failure. Ledger WL, et al.
Br J Obstet Gynaecol 1989 Feb;96(2):196–9
Transdermal estrogen replacement in ovarian failure for ovum donation. Droesch K, et al. **Fertil Steril** 1988 Dec; 50(6):931–4
Uterine receptivity in women receiving steroid replacement therapy for premature ovarian failure: ultrastructural and endocrinological parameters. Rogers P, et al.
Hum Reprod 1989 May;4(4):349–54

ETIOLOGY

Severe ovarian hyperstimulation syndrome. Case reports. Magnus O, et al. **Acta Eur Fertil** 1988 Mar–Apr;19(2):89–92
Secondary massive ovarian edema with Meig's syndrome. Lacson AG, et al. **Am J Clin Pathol** 1989 May; 91(5):597–603
Ovarian hyperstimulation presenting as acute hydrothorax after in vitro fertilization. Kingsland CR, et al.
Am J Obstet Gynecol 1989 Aug;161(2):381–2
Abdominopelvic actinomycosis associated with intrauterine devices. Two case reports. Mäenpää J, et al.
Arch Gynecol Obstet 1988;243(4):237–41
Oophorovesicular-colonic fistula: a rare complication of Crohn's disease. Goldberg SD, et al. **Can J Surg** 1988 Nov; 31(6):427–8
Ovarian abscess following cesarean section. A case report and review of literature. Bracha J, et al.
Clin Exp Obstet Gynecol 1988;15(4):134–6 (22 ref.)
Severe ovarian hyperstimulation syndrome: a reevaluated therapeutic approach. Borenstein R, et al. **Fertil Steril** 1989 May;51(5):791–5
Galactosemia and in vitro fertilization [letter] Fishel S.
Fertil Steril 1988 Dec;50(6):997–1000
Temporary ovarian failure in thyroid cancer patients after thyroid remnant ablation with radioactive iodine. Raymond JP, et al. **J Clin Endocrinol Metab** 1989 Jul;69(1):186–90
Transvaginal oocyte aspiration and pelvic infection [letter] Børlum KG, et al. **Lancet** 1989 Jul 1;2(8653):53
Two patients with hypergonadotropic ovarian failure due to pituitary hyperplasia. Okuda K, et al.
Obstet Gynecol 1989 Sep;74(3 Pt 2):498–501
Bilateral massive ovarian oedema—report of a case due to lymphangiitis carcinomatosa. Wong SY.
Virchows Arch [A] 1989;414(4):355–8
[Analysis of experimental autoimmune oophoritis as a model of premature ovarian failure] Miyake T, et al.
Nippon Naibunpi Gakkai Zasshi 1988 Aug 20;64(8):645–54 (Eng. Abstr.) **(Jpn)**
[Ovarian bleeding in patients with congenital bleeding tendency] Takamatsu J, et al. **Rinsho Ketsueki** 1988 Nov; 29(11):2037–41 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Hormonally related non-neoplastic conditions of the ovary. Stegner HE. **Curr Top Pathol** 1989;78:11–39 (95 ref.)
Morphometric assessment of ovarian stromal proliferation—a clinicopathological study. Snowden JA, et al.
Histopathology 1989 Apr;14(4):369–79
[A case of isolated tuberculosis of the ovary] Milchev N, et al. **Akush Ginekol (Sofiia)** 1988;27(4):79–80 **(Bul)**
[Abscess of the ovary. Apropos of 3 cases] Rekik S, et al.
Tunis Med 1987 Apr;65(4):285–9 (Eng. Abstr.) **(Fre)**
[A case of massive ovarian edema] Yamamoto K, et al.
Nippon Sanka Fujinka Gakkai Zasshi 1989 May; 41(5):617–20 **(Jpn)**

PHYSIOPATHOLOGY

Disorders of follicular ripening and ovulation in human. Jakobovits AA, et al. **Acta Med Hung** 1988;45(2):179–90 (55 ref.)
Effect of Japanese kampo medicine on hypothalamic-pituitary-ovarian function in women with ovarian insufficiency. Koyama T, et al.
Am J Chin Med 1988;16(1–2):47–55
Primary ovarian failure. Embryo donation after substitution therapy. Devroey P, et al. **Ann N Y Acad Sci** 1988; 541:755–60
Hyperinsulinemia and ovarian hyperandrogenism. Cause and effect. Barbieri RL, et al.
Endocrinol Metab Clin North Am 1988 Dec;17(4):685–703 (83 ref.)
Gamete intrafallopian transfer in premature ovarian failure [letter] Li TC. **Fertil Steril** 1988 Nov;50(5):831–2
Bone loss in young hypoestrogenic women due to primary ovarian failure: spinal quantitative computed tomography. Louis O, et al. **Fertil Steril** 1989 Aug;52(2):227–31
Transient liver function tests abnormalities in OHSS [letter] Sueldo CE. **Fertil Steril** 1988 Dec;50(6):995–6
Embryo donation in patients with primary ovarian failure. Devroey P, et al. **Hum Reprod** 1988 Oct;3 Suppl 2:85–7
Occult ovarian failure: a syndrome of infertility, regular menses, and elevated follicle-stimulating hormone concentrations. Cameron IT, et al.
J Clin Endocrinol Metab 1988 Dec;67(6):1190–4
[An unrecognized etiology of pleurisy: ovarian hyperstimulation syndrome (report of a case and physiopathologic discussion) (letter)] M'Raihi ML, et al.
Rev Pneumol Clin 1989;45(1):43–4 **(Fre)**

RADIONUCLIDE IMAGING

Scintigraphic localization of ovarian dysfunction. Mountz JM, et al. **J Nucl Med** 1988 Oct;29(10):1644–50

SURGERY

[Indications for the surgical intervention in endocrine disorders of the ovaries] Prader A. **Z Kinderchir** 1988 Aug; 43(4):284–8 (Eng. Abstr.) **(Ger)**
[Ovarian vein syndrome] Sanz Jaka JP, et al.
Arch Esp Urol 1988 Nov-Dec;41(9):827–30 (Eng. Abstr.) **(Spa)**

VETERINARY

Effect of high temperature and humidity in the periovulatory phase on swine ovarian function. Ogasa A, et al.
Nippon Juigaku Zasshi 1989 Jun;51(3):627–9

OVARIAN FUNCTION TESTS

[Ovarian physiology. VII. An hormonal test for predicting menopause] Porias Cuéllar HL, et al.
Arch Invest Med (Mex) 1988 Jul–Sep;19(3):193–8 (Eng. Abstr.) **(Spa)**

OVARIAN INTERSTITIAL CELLS see **THECA CELLS**

OVARIAN NEOPLASMS

Management of recurrent ovarian carcinoma [clinical conference] Ang PT, et al. **Am J Clin Oncol** 1989 Jun; 12(3):269–72
Endometrioid carcinoma of the ovary: a retrospective study. Tidy J, et al. **Br J Obstet Gynaecol** 1988 Nov;95(11):1165–9
Abdominal metastases of an ovarian cancer demonstrated on bone imaging. Ranner G, et al. **Clin Nucl Med** 1989 Feb; 14(2):124–6
Recurrent endometrial adenocarcinoma: presentation as a splenic mass mimicking malignant lymphoma. Gilks CB, et al. **Gynecol Oncol** 1989 May;33(2):209–11 (13 ref.)
Ovarian clear cell adenocarcinoma. Kennedy AW, et al.
Gynecol Oncol 1989 Mar;32(3):342–9
Primary invasive ovarian adenocarcinoma with brain and placental metastases: a case report. Patsner B, et al.
Gynecol Oncol 1989 Apr;33(1):112–5
A case report of three synchronous stage I malignant neoplasms. Ringler GE, et al. **Gynecol Oncol** 1989 Apr; 33(1):116–20
Carcinoma of the ovary presenting as obstructive jaundice. Rosenblatt M, et al. **Gynecol Oncol** 1989 Mar;32(3):385–9
Epithelial ovarian cancer. Schiffman MH, et al.
Gynecol Oncol 1989 Apr;33(1):129–32
Endodermal sinus tumor of the ovary [letter] Wawrzkiewicz M. **Gynecol Oncol** 1989 Apr;33(1):129
Capillary cloning of primary human tumor cells: assay miniaturization for drug efficacy testing. Peng XE, et al.
Int J Cell Cloning 1989 Sep;7(5):322–9
Sclerosing stromal tumor of the ovary. A light, electron microscopic and enzyme histochemical study. Lam RM, et al. **Int J Gynecol Pathol** 1988;7(3):280–90
Diagnosis and resection of an oral contraceptive-suppressible Sertoli-Leydig cell tumor with preservation of fertility and a 7-year follow-up. Haning RV Jr, et al.
Obstet Gynecol 1989 May;73(5 Pt 2):901–5 (27 ref.)
Ovarian carcinoma metastatic to the breast: a literature review and report of two cases. Matseoane SL.
Obstet Gynecol Surv 1988 Nov;43(11):645–54 (70 ref.)
Use of Cavitron surgical aspirator for debulking of diaphragmatic metastases in patients with advanced carcinoma of the ovaries. Deppe G, et al.
Surg Gynecol Obstet 1989 May;168(5):455–6
[Combined pharmacologic and surgical therapy of epithelial malignant neoplasms of the ovary in FIGO stages III–IV] Fioretti P, et al. **Ann Ostet Ginecol Med Perinat** 1988 Jul–Aug;109(4):191–8 (Eng. Abstr.) **(Ita)**
[Malignant epithelial tumors of the ovary. Current diagnostic and therapeutic aspects] Pescetto G. **G Clin Med** 1989 Jan; 70(1):3–18 (32 ref.) **(Ita)**
[Brain metastasis of ovarian cancer treated by chemotherapy including cis-platin: a case report] Aiba T, et al.
No Shinkei Geka 1989 Feb;17(2):159–61 (Eng. Abstr.) **(Jpn)**
[A combination of sarcoma of the breast and cancer of the female genital organs] Kachanov IP, et al. **Sov Med** 1988; (11):120–1 **(Rus)**
[Yolk sac tumor of the ovary] Kudaĭbergenov TK, et al.
Vopr Onkol 1989;35(7):877–8 **(Rus)**

ANALYSIS

Lectin binding sites of cultured ovarian Sertoli cell tumors and follicular granulosa cells. Stoica G, et al.
Anticancer Res 1989 May-Jun;9(3):687–94
Lectin binding sites in normal rat ovary and ENU-induced Sertoli cell tumors of the ovaries. Stoica G, et al.
Anticancer Res 1989 May-Jun;9(3):679–85
Detection of drug resistance in human ovarian carcinoma. Volm M, et al. **Arch Gynecol Obstet** 1989;244(2):123–8
Characterization of a human ovarian carcinoma cell line with estrogen and progesterone receptors. Geisinger KR, et al.
Cancer 1989 Jan 15;63(2):280–8
Clinical significance of abnormal nuclear DNA content in serous ovarian tumors. Klemi PJ, et al. **Cancer** 1988 Nov 1;62(9):2005–10
Use of monoclonal antibodies in immunocytochemical

localization of estrogen receptors in ovarian cancer. Masood S. **Cancer Detect Prev** 1988;12(1–6):283–90
Steroid receptors in epithelial ovarian carcinoma: relation to clinical parameters and survival. Bizzi A, et al. **Cancer Res** 1988 Nov 1;48(21):6222–6
P-glycoprotein expression in multidrug-resistant human ovarian carcinoma cell lines. Bradley G, et al. **Cancer Res** 1989 May 15;49(10):2790–6
Heterogeneity of glutathione content in human ovarian cancer. Lee FY, et al. **Cancer Res** 1989 Oct 1;49(19):5244–8
Tumor-associated mucin-type glycoprotein (CA54/61) defined by two monoclonal antibodies (MA54 and MA61) in ovarian cancers. Nozawa S, et al. **Cancer Res** 1989 Jan 15;49(2):493–8
Detection of the multidrug resistant phenotype in human tumours by monoclonal antibodies and the streptavidin–biotinylated phycoerythrin complex method. Volm M, et al. **Eur J Cancer Clin Oncol** 1989 Apr; 25(4):743–9
The cytokeratin profiles of ovarian common "epithelial" tumors. Duggan MA, et al. **Eur J Gynaecol Oncol** 1989; 10(2):73–9
DNA profile and steroid receptor content of human ovarian cancer. Jakobsen A, et al. **Eur J Gynaecol Oncol** 1988; 9(6):461–3
The relationship of steroid receptor expression to nuclear DNA distribution and clinicopathological characteristics in epithelial ovarian tumors. Friedlander ML, et al. **Gynecol Oncol** 1989 Feb;32(2):184–90
Clinical correlation of hormone receptor status in epithelial ovarian cancer. Masood S, et al. **Gynecol Oncol** 1989 Jul; 34(1):57–60
Importance of steroid receptors and aromatase activity in the prognosis of ovarian cancer: high tumor progesterone receptor levels correlate with longer survival. Slotman BJ, et al. **Gynecol Oncol** 1989 Apr;33(1):76–81
Immunohistochemical demonstration of pancreatic secretory trypsin inhibitor in gynecologic tumors. Ueda G, et al. **Gynecol Oncol** 1989 Jan;32(1):37–40
Epidermal growth factor receptors in spontaneous ovarian granulosa cell tumors of SWR-derived mice. Tennent BJ, et al. **Int J Cancer** 1989 Sep 15;44(3):477–82
DNA cytometry of pure dysgerminomas of the ovary. Oud PS, et al. **Int J Gynecol Pathol** 1988;7(3):258–67
Improved radiolabeled monoclonal antibody uptake by lavage of intraperitoneal carcinomatosis in mice. Wahl RL, et al. **J Nucl Med** 1989 Jan;30(1):60–5
Unstable expression of E-cadherin adhesion molecules in metastatic ovarian tumor cells. Hashimoto M, et al. **Jpn J Cancer Res** 1989 May;80(5):459–63
A sensitive method for immunocytochemical detection of P-glycoprotein in multidrug-resistant human ovarian carcinoma cell lines. Chan HS, et al. **Lab Invest** 1988 Dec; 59(6):870–5
Human ovarian carcinomas: correlation of malignancy and survival with the expression of epidermal growth factor receptors (EGF–R) and EGF–like factors (EGF–F). Bauknecht T, et al. **Med Oncol Tumor Pharmacother** 1989; 6(2):121–7
Cellular glutathione levels and sensitivity to radiation and antineoplastic agents in human ovarian cancer. Ozols RF, et al. **Prog Clin Biol Res** 1988;276:287–93
Bile constituents in ascitic fluid. Hedenborg G, et al. **Scand J Clin Lab Invest** 1988 Oct;48(6):543–52
Immunohistochemistry of ovarian granulosa cell tumours. The value of tissue specific proteins and tumour markers. Chadha S, et al. **Virchows Arch [A]** 1989;414(5):439–45
Immunohistochemical and ultrastructural localization of tissue polypeptide antigen in human ovarian tumours. Ghazizadeh M. **Virchows Arch [A]** 1989;414(5):453–7
Alpha smooth muscle actin (alpha-SM actin) in normal human ovaries, in ovarian stromal hyperplasia and in ovarian neoplasms. Czernobilsky B, et al. **Virchows Arch [B]** 1989;57(1):55–61
[Distribution of lectin–receptors in ovarian cystadenoma and cystadenocarcinoma] Hu NP. **Chung-hua Ping Li Hsueh Tsa Chih** 1989 Mar;18(1):40–2 (Eng. Abstr.) **(Chi)**
[Correlation between estrogen and progestin receptor protein and histopathology in ovarian tumor] Wang JH, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Sep;19(3):301–4 (Eng. Abstr.) **(Chi)**
[Comparative studies on the value of acute phase proteins and CA–125 for monitoring patients with ovarian cancer] Kölbl H, et al. **Strahlenther Onkol** 1988 Dec;164(12):724–8 (Eng. Abstr.) **(Ger)**
[Ganglioside content and profile in the ovarian tumor tissues and in the biological body fluids of patients] Novikov AM, et al. **Eksp Onkol** 1989;11(3):52–5 (Eng. Abstr.) **(Rus)**

BLOOD

Changes of serum proteins in patients with malignant gynaecological tumours. Pulay T, et al. **Acta Chir Hung** 1988;29(4):305–14
Response to human chorionic gonadotropin in patients with ovarian tumors. Scirpa P, et al. **Acta Obstet Gynecol Scand** 1988;67(7):589–94
Fucosylated forms of alpha-1-antitrypsin that predict unresponsiveness to chemotherapy in ovarian cancer. Thompson S, et al. **Br J Cancer** 1988 Nov;58(5):589–93
The use of serum TA–4 in monitoring patients with malignant transformation of ovarian mature cystic teratoma. Kimura T, et al. **Cancer** 1989 Jul 15;64(2):480–3
Ovarian Sertoli–Leydig cell tumor with elevated serum alpha–fetoprotein. Motoyama I, et al. **Cancer** 1989 May 15;63(10):2047–53 (28 ref.)
Amino-terminal propeptide of type III procollagen: a new prognosis indicator in human ovarian cancer. Kauppila A, et al. **Cancer Res** 1989 Apr 1;49(7):1885–9
Significance of initial plasma steroid concentrations in the prognosis of 'nonendocrine' malignant ovarian tumors. Mahlck CG, et al. **Gynecol Obstet Invest** 1989;28(1):41–6
Hemorheological parameters in patients with gynecologic malignancies. Miller B, et al. **Gynecol Oncol** 1989 May; 33(2):177–81
Elevated CA 125 serum levels in epithelial ovarian cancer metastatic to retroperitoneal lymph nodes [letter] Patsner B. **Gynecol Oncol** 1988 Oct;31(2):365–7
Carcinoembryonic antigen levels in germ cell tumours. Hitchins RN, et al. **Int J Biol Markers** 1989 Jan–Mar; 4(1):31–4
Circulating levels of CSF-1 (M–CSF) a lymphohematopoietic cytokine may be a useful marker of disease status in patients with malignant ovarian neoplasms. Kacinski BM, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):159–64
The serum concentrations of TAG–72 antigen measured with CA 72–4 IRMA in patients with ovarian carcinoma. Preliminary data. Gadducci A, et al. **J Nucl Med Allied Sci** 1989 Jan–Mar;33(1):32–6
Gonadotrophin response to releasing hormone in post–menopausal patients with ovarian tumours. Mango D, et al. **Maturitas** 1989 Jun;11(2):129–36
A comparative study of mucin–like carcinoma–associated antigen (MCA), CA 125, CA 19–9 and CEA in patients with ovarian cancer. Koelbl H, et al. **Neoplasma** 1989; 36(4):473–8
Prediction of clinical course and recurrence of human ovarian cancer by several serum tumor markers. Kikuchi Y, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jan;41(1):69–76
The diagnosis of immature teratoma by maternal serum alpha–fetoprotein screening. Montz FJ, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 2):522–5
Plasma lipid–associated sialic acid and serum CA 125 as indicators of disease status with advanced ovarian cancer. Vardi JR, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):379–83
Evaluation of the ovarian cancer antigen, Ca–125, as a tumor marker. Onetto M, et al. **Oncology** 1989;46(2):117–22
Temporary elevation of CA 125 after abdominal surgical treatment for benign disease and cancer. Talbot RW, et al. **Surg Gynecol Obstet** 1989 May;168(5):407–12
[Primary ovarian carcinoid with secretion of human pancreatic polypeptide and immunoreactivity to substance P] Proye C, et al. **Chirurgie** 1988;114(3):234–43 (38 ref.) (Eng. Abstr.) **(Fre)**
[Effect of sex steroids on the lipoprotein profile] Prömpeler HJ, et al. **Geburtshilfe Frauenheilkd** 1988 Nov;48(11):785–7 (Eng. Abstr.) **(Ger)**
[Placental protein 5 and pregnancy zone protein in ovarian cysts and benign cystic ovarian tumors] Briese V, et al. **Zentralbl Gynakol** 1988;110(13):821–3 (Eng. Abstr.) **(Ger)**
[Comparison of serum determinations of CA125, CA15–3 and CA50 in the preoperative evaluation of adnexal tumors] Gadducci A, et al. **Ann Ostet Ginecol Med Perinat** 1988 Jul–Aug;109(4):199–204 (Eng. Abstr.) **(Ita)**
[Plasma levels of von Willebrand factor in patients under integrated surgical–chemical therapy for ovarian cancer] Facchini V, et al. **Minerva Ginecol** 1988 Apr;40(4):231–4 (Eng. Abstr.) **(Ita)**
[Basic and clinical evaluation of an immunoradiometric competitive inhibition assay for sialyl TN antigen: (2). Evaluation of clinical significance. STN Study Group] Imura H, et al. **Gan To Kagaku Ryoho** 1989 Sep; 16(9):3221–30 (Eng. Abstr.) **(Jpn)**
[Studies on the clinical significance of type III procollagen peptide in sera as a tumor marker in patients with ovarian tumors] Mori T, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 May 20;24(5):974–89 (Eng. Abstr.) **(Jpn)**
[Serum CA 125 and ferritin in patients with ovarian carcinoma] Kanajet D, et al. **Jugosl Ginekol Perinatol** 1988 Sep–Dec;28(5–6):125–8 (Eng. Abstr.) **(Scr)**

BLOOD SUPPLY

Blood flow and oxygen consumption rates of human gynecological tumors xenografted into rnu/rnu-rats. Vaupel P, et al. **Strahlenther Onkol** 1989 Jul;165(7):502

CHEMICALLY INDUCED

Galactose and ovarian cancer [letter] Macdonald I. **Lancet** 1989 Aug 19;2(8660):452
Triazine herbicides and ovarian epithelial neoplasms. Donna A, et al. **Scand J Work Environ Health** 1989 Feb; 15(1):47–53

CLASSIFICATION

The concept of borderline malignancy in ovarian tumours: a reappraisal. Fox H. **Curr Top Pathol** 1989;78:111–34 (65 ref.)
Small cell carcinoma of the ovary that is commonly associated with hypercalcemia is a neuroendocrine tumor on the basis of presently available evidence [letter] Scully RE, et al. **Int J Gynecol Pathol** 1989;8(3):296–7

COMPLICATIONS

Ultrasound-guided percutaneous nephrostomy in the treatment of advanced gynecologic malignancy. Pedersen H, et al. **Acta Obstet Gynecol Scand** 1988;67(3):199–201
Mitomycin C adsorbed on activated carbon particles: is intraperitoneal chemotherapy effective for synchronous pleuritis carcinomatosa? [letter] Yokota T, et al. **Am J Gastroenterol** 1989 Sep;84(9):1124–5
Leiomyoma of the ovary with ascites and hydrothorax. Nicoll JJ, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):177–8
Virilizing pregnancy luteoma: a case report. Yasuda J, et al. **Asia Oceania J Obstet Gynaecol** 1988 Jun;14(2):155–60
Endometrioid carcinoma of the ovary: an unusual cause of postpartum collapse. Case report. King PA, et al. **Br J Obstet Gynaecol** 1989 Aug;96(8):1000–2
Benign cystic ovarian teratoma with colorectal involvement. Report of a case and review of the literature. Landmann DD, et al. **Dis Colon Rectum** 1988 Oct;31(10):808–13 (17 ref.)
Ovarian cystadenoma with stromal cell hyperplasia and postmenopausal virilization: a case report. Caron P, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Aug;28(4):341–5
Primary ovarian carcinoid tumor in combination with carcinoid heart disease; a case report. Oei SG, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 May;31(2):185–8
Membranous nephropathy associated with ovarian tumour in a young girl: recovery after removal. Beauvais P, et al. **Eur J Pediatr** 1989 Jun;148(7):624–5 (23 ref.)
Survival following intestinal obstruction in ovarian cancer. Redman CW, et al. **Eur J Surg Oncol** 1988 Oct;14(5):383–6
Ovarian carcinoma as a cause of Zollinger–Ellison syndrome. Natural history, secretory products, and response to provocative tests. Maton PN, et al. **Gastroenterology** 1989 Aug;97(2):468–71
Percutaneous epidural catheterization for intractable pain in terminal cancer patients. Ali NM, et al. **Gynecol Oncol** 1989 Jan;32(1):22–5
Palliative surgery for intestinal obstruction in advanced ovarian cancer. Rubin SC, et al. **Gynecol Oncol** 1989 Jul; 34(1):16–9
Virilization due to a rare ovarian tumor in a postmenopausal woman. Varma TR, et al. **Int J Gynaecol Obstet** 1988 Dec; 27(3):443–9
Virilizing granulosa cell tumor responsive to human chorionic gonadotropin and oral contraceptive with 8–year followup. Zaydon C, et al. **Int J Gynaecol Obstet** 1989 May;29(1):87–90
Metastatic malignant struma ovarii presenting as paraparesis from a spinal metastasis. McDougall IR, et al. **J Nucl Med** 1989 Mar;30(3):407–11
Malignancy presenting as peripheral venous gangrene. Adamson AS, et al. **J R Soc Med** 1988 Oct;81(10):609–10
Concurrence of ovarian cancer and dermatomyositis. A report of two cases and literature review. Mordel N, et al. **J Reprod Med** 1988 Jul;33(7):649–55 (42 ref.)
Cerebral and myocardial infarction induced by nonbacterial thrombotic endocarditis in a patient with ovarian cancer: report of a case. Mukai M, et al. **Jpn J Med** 1988 Aug; 27(3):321–4
Cushing's syndrome due to ACTH–production of an ovarian carcinoid. Schlaghecke R, et al. **Klin Wochenschr** 1989 Jun 15;67(12):640–4
Endodermal sinus tumor and benign cystic teratoma of the ovary occurring simultaneously. Elhosseiny A, et al. **N Y State J Med** 1989 Apr;89(4):233–4
Virilizing serous cystadenoma. Beauchamp PJ, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 2):513–7
Virilizing Brenner tumor of the ovary: case report. de Lima GR, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):895–8 (17 ref.)
Fatal recurrent reexpansion pulmonary edema. Fanning J, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):495–7
Adnexal torsion in postmenopausal women. Koonings PP, et al. **Obstet Gynecol** 1989 Jan;73(1):11–2
Ovarian carcinoma and paraneoplastic cerebellar degeneration. McLellan R, et al. **Obstet Gynecol** 1988 Dec; 72(6):922–5
Intestinal obstruction in patients with advanced carcinoma of the ovaries treated with combination chemotherapy. Lund B, et al. **Surg Gynecol Obstet** 1989 Sep;169(3):213–8
Gastrin–producing ovarian mucinous cystadenomas: a cause of the Zollinger–Ellison syndrome. Primrose JN, et al. **Surgery** 1988 Nov;104(5):830–3
CNS metastasis in ovarian cancer with microangiopathic hemolytic anemia associated with diffuse intravascular coagulation. Pogliani EM, et al. **Tumori** 1988 Dec 31; 74(6):731–6
[Right–sided cardiac failure as the primary symptom of carcinoid] Hansen PR, et al. **Ugeskr Laeger** 1989 May 8; 151(19):1191 (Eng. Abstr.) **(Dan)**
[Paraneoplastic hypercalcemia and ovarian seminoma. Review of the literature and etiological discussion apropos of a case] Louvet C, et al. **Bull Cancer (Paris)** 1989; 76(4):347–52 (30 ref.) (Eng. Abstr.) **(Fre)**
[Advanced cancer of the ovary and pregnancy. Apropos of 2 cases] Charles G, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(1):61–8 (Eng. Abstr.) **(Fre)**
[Zollinger–Ellison syndrome of ovarian origin. Apropos of a case with a review of the literature] de Broucker F, et al. **J Radiol** 1989 Feb;70(2):111–4 (28 ref.) (Eng. Abstr.) **(Fre)**

[Denny-Brown sensory neuropathy disclosing a bilateral ovarian adenocarcinoma] Humbert P, et al. **Rev Fr Gynecol Obstet** 1988 Nov;83(11):723–6 (Eng. Abstr.) **(Fre)**

[Case report on the differential diagnosis of hyperandrogenism: adrenal or ovarian origin?] Saeger W. **Pathologe** 1988 Nov;9(6):345–50 **(Ger)**

[A case of ovarian dysgerminoma in Down's syndrome] Gesmundo R, et al. **Minerva Ginecol** 1988 Apr;40(4):277–80 (Eng. Abstr.) **(Ita)**

[A case of hypercalcemia with ovarian carcinoma] Miura M, et al. **Gan No Rinsho** 1988 Dec;34(15):2119–24 (Eng. Abstr.) **(Jpn)**

[A case of Meigs' syndrome due to ovarian thecoma with increased CA125] Kawamura T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Dec; 26(12):1302–6 (Eng. Abstr.) **(Jpn)**

[Status of the breasts and endometrium in patients with benign tumors and tumor-like structures of the ovaries] Adamian LV, et al. **Akush Ginekol (Mosk)** 1989 Apr; (4):21–4 (Eng. Abstr.) **(Rus)**

[Isosexual precocious pseudopuberty caused by juvenile granulosa cell tumor] Durá Travé T, et al. **An Esp Pediatr** 1989 May;30(5):387–9 **(Spa)**

[A 39-year-old woman, with bilateral ovarian neoplasms, admitted for treatment of hyperglycemia (clinical conference)] Santabárbara P, et al. **Med Clin (Barc)** 1988 Jun 25;91(5):184–94 **(Spa)**

[Calcified pelvic mass with fistulization into the sigmoid colon] de Diego Rey P, et al. **Rev Clin Esp** 1989 Mar; 184(4):190–2 **(Spa)**

CONGENITAL

Endodermal sinus tumour in girls—improved survival in metastatic disease. Olsen L, et al. **Z Kinderchir** 1989 Apr; 44(2):83–5

DIAGNOSIS

The significance of neopterin determination as a tumour marker in ovarian cancer. Szarka G, et al. **Acta Chir Hung** 1988;29(4):359–64

The importance of polyamine determination in monitoring malignant gynaecological tumours. Szarka G, et al. **Acta Chir Hung** 1988;29(4):365–72

Laparoscopy for screening and early diagnosis of ovarian cancer. Tolino A, et al. **Acta Eur Fertil** 1988 Sep-Oct; 19(5):277–8

Unilateral microscopic gonadoblastoma in a prepubertal Turner mosaic with Y chromosome material identified by restriction fragment analysis [published erratum appears in Am J Clin Pathol 1989 Feb;91(2):240] Shah KD, et al. **Am J Clin Pathol** 1988 Nov;90(5):622–7

Diagnosis of a small ovarian tumor (androgen secreting) by magnetic resonance: a new noninvasive procedure. Ayalon D, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):903–5

Endodermal sinus (yolk sac) tumor in infants and children. A clinical and pathologic study: an 11 year review. Shebib S, et al. **Am J Pediatr Hematol Oncol** 1989 Spring; 11(1):36–9

Measurement of a monoclonal-antibody-defined antigen (90K) in the sera of patients with ovarian cancer. Scambia G, et al. **Anticancer Res** 1988 Jul-Aug;8(4):761–4

The value of second-look operation in patients with advanced epithelial ovarian carcinoma. Sevelda P, et al. **Arch Gynecol Obstet** 1989;244(2):79–86

Microheterogeneity of alpha 1-acid glycoprotein in the sera of patients with cancer or inflammatory states of the ovaries. Kątnik I, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(1):1–6

Radio-immunoscintigraphy and intraoperative tumour detection by means of anti-tumour antibodies in patients with ovarian cancer. Gitsch E, et al. **Baillieres Clin Obstet Gynaecol** 1989 Mar;3(1):31–6

Monoclonal antibodies and their usefulness in epithelial ovarian cancer. A review. Crowther ME, et al. **Br J Obstet Gynaecol** 1989 May;96(5):516–21 (42 ref.)

Quantitative nuclear morphology in the diagnosis of ovarian tumors of low malignant potential (borderline). Komitowski D, et al. **Cancer** 1989 Aug 15;64(4):905–10

Comparison of abdominopelvic computed tomography results and findings at second-look laparotomy in ovarian carcinoma patients. Reuter KL, et al. **Cancer** 1989 Mar 15;63(6):1123–8

Sonographic evaluation of ovarian volume in postmenopausal women: a screening test for ovarian cancer? Millo R, et al. **Clin Exp Obstet Gynecol** 1989;16(2-3):72–8

The role of ultrasound in the management of ovarian masses in children. Thind CR, et al. **Clin Radiol** 1989 Mar; 40(2):180–2

Cytopathology and fine-needle aspiration in ovarian tumours: its utility in diagnosis and management. Nuñez C. **Curr Top Pathol** 1989;78:69–83 (44 ref.)

Monoclonal antibodies in serological, immunoscintigraphic and immunocytochemical diagnosis of epithelial ovarian cancer. Branconi F, et al. **Eur J Gynaecol Oncol** 1989; 10(4):262–7

The association of ultrasonography and CA-125 test in the preoperative evaluation of ovarian carcinoma. Gadducci A, et al. **Eur J Gynaecol Oncol** 1988;9(5):373–6

Clinical applications of monoclonal antibodies against ovarian cancer-associated antigens. Kenemans P, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Nov;29(3):207–18 (89 ref.)

Endometrial cyst, dermoid cyst and mucinous cystadenoma sonographically evidenced in the same ovary. Hata K, et al. **Gynecol Obstet Invest** 1989;27(3):160–3

Serum lactic dehydrogenase and primary carcinoma of the ovary. Younis JS, et al. **Gynecol Obstet Invest** 1989; 28(1):47–50

A study of the monoclonal antibody OC 125 to diagnose malignant ovarian tumors. Li XG, et al. **Gynecol Oncol** 1989 Mar;32(3):327–30

Immune complexes in ovarian carcinoma. Runowicz CD, et al. **Gynecol Oncol** 1989 Mar;32(3):350–3

Primary squamous carcinoma of the ovary: a case report and review of the literature. Yetman TJ, et al. **Gynecol Oncol** 1989 Aug;34(2):240–3 (8 ref.)

HPV and cervical cancer [letter] v.d. Berg VD, et al. **Hum Pathol** 1989 Aug;20(8):817–8

CA 125 as a marker in epithelial ovarian cancer: Alone and in comparison with CEA. Bhatavdekar JM, et al. **Indian J Cancer** 1987 Dec;24(4):222–31

Never say 100 percent [letter] van Dalen A, et al. **Int J Biol Markers** 1988 Oct-Dec;3(4):275

Elevated serum CA 125 levels prior to diagnosis of ovarian neoplasia: relevance for early detection of ovarian cancer. Zurawski VR Jr, et al. **Int J Cancer** 1988 Nov 15; 42(5):677–80

Comparison between tissue and serum content of CA 125, CA 19-9, and carcinoembryonic antigen in ovarian tumors. Breitenecker G, et al. **Int J Gynecol Pathol** 1989;8(2):97–102

An immunohistochemical study of primary ovarian sarcoma. An evaluation of nine tumors. Sahin A, et al. **Int J Gynecol Pathol** 1988;7(3):268–79

The prognostic value of post chemotherapy serum CA 125 in epithelial ovarian cancer. Teeling M, et al. **Ir J Med Sci** 1989 Mar;158(3):59–62

An improved sensitive assay method for the heterogeneity of alpha-foetoprotein: possible application for early differential diagnosis. Ohkawa K, et al. **J Clin Chem Clin Biochem** 1989 May;27(5):337–41

Unusual anodic migrating isoamylase differentiates selected malignant from nonmalignant ascites. Kosches DS, et al. **J Clin Gastroenterol** 1989 Feb;11(1):43–6

Ultrasound examination in ovarian cancer patients. A comparison with second look laparotomy. Murolo C, et al. **J Ultrasound Med** 1989 Aug;8(8):441–3

Women at risk for ovarian cancer [letter] Taher MA. **J Ultrasound Med** 1988 Dec;7(12):696–7

Mucinous cystadenoma simulating renal transplant lymphocele. Kliewer MA, et al. **JCU** 1989 Feb; 17(2):119–22

Inhibin: from hypothesis to clinical application [editorial; comment] Bremner WJ. **N Engl J Med** 1989 Sep 21; 321(12):826–7. **Comment on:** N Engl J Med 1989 Sep 21;321(12):790–3

Inhibin as a marker for granulosa-cell tumors [see comments] Lappöhn RE, et al. **N Engl J Med** 1989 Sep 21; 321(12):790–3. **Comment in:** N Engl J Med 1989 Sep 21;321(12):826–7

Appreciation for malignancy on ovarian neoplasm by monoclonal antibody of BrdUrd. Izutsu T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep;40(9):1457–8

Clinical usefulness of sialyl SSEA-1 antigen as tumor marker for ovarian cancer as compared with CA125, CA19-9, TPA, IAP, CEA and ferritin. Yabushita H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Feb;41(2):217–24

CA 125 in peritoneal washings and fluid: correlation with plasma CA 125 and peritoneal cytology [letter] Fuith LC. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):432

Recurrence of ovarian and uterine neoplasms: diagnosis with transrectal US. Squillaci E, et al. **Radiology** 1988 Nov; 169(2):355–8

Lipid associated sialic acid in plasma in patients with advanced carcinoma of the ovaries. Vardi JR, et al. **Surg Gynecol Obstet** 1989 Apr;168(4):296–301

Real-time ultrasonic diagnosis of ovarian tumors. Khan NS, et al. **Tokushima J Exp Med** 1987 Dec;34(3-4):53–60

CA 125 reliability in predicting ovarian cancer recurrence. Zanaboni F, et al. **Tumori** 1989 Feb 28;75(1):69–71

Advances in the diagnosis and treatment of ovarian cancer. Davis TE. **West J Med** 1988 Dec;149(6):765–6

The use of monoclonal antibody B72.3 in the management of gynecologic malignancies. Simpson J, et al. **Yale J Biol Med** 1988 Jul-Aug;61(4):351–66 (57 ref.)

[Use of echography in the diagnosis of ovarian tumors] Mateeva E, et al. **Akush Ginekol (Sofiia)** 1988;27(3):61–6 (Eng. Abstr.) **(Bul)**

[Endodermal sinus tumor (yolk sac tumor)—report of 52 cases and review of the literature of 1224 cases] Dong HJ, et al. **Chung Hua Chung Liu Tsa Chih** 1988 May;10(3):213–6 (9 ref.) (Eng. Abstr.) **(Chi)**

[Diagnostic value of serum copper/zinc ratio in gynecologic tumors] Gao ZJ. **Chung Hua Chung Liu Tsa Chih** 1988 Nov;10(6):434–6 (Eng. Abstr.) **(Chi)**

[Application of monoclonal antibody OC 125 in gynecological oncology] Wu AR, et al. **Chung Hua Chung Liu Tsa Chih** 1988 Mar;10(2):132–6 (Eng. Abstr.) **(Chi)**

[Ascitic chromosomal assay in the diagnosis of ovarian carcinoma] Li LQ. **Chung Hua Fu Chan Ko Tsa Chih** 1988 May;23(3):162–3, 189–90 (Eng. Abstr.) **(Chi)**

[Rupture of a chocolate cyst of the ovary. A new gynecologic emergency] Zhou L. **Chung Hua Fu Chan Ko Tsa Chih** 1988 May;23(3):150–2, 189 (Eng. Abstr.) **(Chi)**

[Clinical application of magnetic resonance imaging in gynecology] Zou SS. **Chung Hua Fu Chan Ko Tsa Chih** 1989 Jan;24(1):19–21, 58 (Eng. Abstr.) **(Chi)**

[Immunohistological analysis of monoclonal antibody COC166-9 against primary ovarian epithelial cancer] Qian HN. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Sep; 17(3):207–9 (Eng. Abstr.) **(Chi)**

[Comparison of echography and x-ray computed tomography in cancer of the ovary] Normand F, et al. **Bull Cancer (Paris)** 1988;75(9):889–93 (Eng. Abstr.) **(Fre)**

[Validity of Gynaegnost in the follow-up of patients treated for ovarian cancer] Cerejeira L, et al. **Rev Fr Gynecol Obstet** 1989 Apr;84(4):347–9 (Eng. Abstr.) **(Fre)**

[Determination of N-acetylneuraminic acid for the differential diagnosis of cystic ovarian tumors] Donat H, et al. **Arch Geschwulstforsch** 1989;59(2):113–20 (Eng. Abstr.) **(Ger)**

[Magnetic resonance tomography in the differential diagnosis of ovarian tumor and mucocele of the appendix] Jaluvka V, et al. **Dtsch Med Wochenschr** 1989 Aug 18; 114(33):1245–7 (Eng. Abstr.) **(Ger)**

[Comparison of the results of preoperative studies with imaging procedures with the surgical status of ovarian cancer] Simon WE, et al. **Geburtshilfe Frauenheilkd** 1989 Jun;49(6):568–72 (Eng. Abstr.) **(Ger)**

[Determination of carcinoembryonic antigen in puncture fluid of cystic ovarian tumors and ovarian cysts] Büttner HH, et al. **Gynakol Rundsch** 1988;28 Suppl 2:179–80 **(Ger)**

[Bone and liver metastases in uterine, cervical and ovarian cancer] Karkavitsas N. **Rontgenblatter** 1988 Aug; 41(8):326–8 (Eng. Abstr.) **(Ger)**

[Recurrent thrombophlebitis, weakness (clinical conference)] Predel HG, et al. **Schweiz Rundsch Med Prax** 1989 May 2;78(18):532–4 (Eng. Abstr.) **(Ger)**

[Ultrasonography in the primary diagnosis and follow up of ovarian tumors] Grischke EM, et al. **Ultraschall Med** 1988 Oct;9(5):204–11 (Eng. Abstr.) **(Ger)**

[The value of CA 125 determination in the serum of patients with ovarian cancer] Bartel U, et al. **Zentralbl Gynakol** 1989;111(5):301–9 (Eng. Abstr.) **(Ger)**

[CEA determination in aspired fluid of cystic ovarian tumors and ovarian cysts and in ascites and serum samples of patients with ovarian tumors] Kunze M, et al. **Zentralbl Gynakol** 1988;110(16):1006–12 (Eng. Abstr.) **(Ger)**

[Placental protein 12 (PP 12) in cyst and peritoneal fluids and serum samples of patients with ovarian cysts and cystic ovarian tumors] Strache RR, et al. **Zentralbl Gynakol** 1989; 111(11):749–54 (Eng. Abstr.) **(Ger)**

[Magnetic resonance in the evaluation of pathology of the uterus and ovary] Gualdi GF, et al. **Clin Ter** 1989 Apr 15;129(1):55–61 **(Ita)**

[Monoclonal antibodies in gynecologic oncology. I. Diagnostic aspects] Sesti F, et al. **G Ital Oncol** 1987 Apr-Sep;7(2-3):83–9 (35 ref.) (Eng. Abstr.) **(Ita)**

[Prenatal echographic diagnosis in a case of fetal ovarian cystoma] Grio R, et al. **Minerva Ginecol** 1988 Aug; 40(8):481–3 (Eng. Abstr.) **(Ita)**

[Transvaginal echography: initial experiences in oncologic gynecology] Squillaci E, et al. **Radiol Med (Torino)** 1989 Jun;77(6):658–62 (Eng. Abstr.) **(Ita)**

[Ca 125 for the diagnosis of ovarian carcinoma] Purello D'Ambrosio F, et al. **Riv Eur Sci Med Farmacol** 1987 Dec; 9(4):401–3 (Eng. Abstr.) **(Ita)**

[Acute phase protein (alpha 1 AT) as a tumor marker in patients with ovarian cancer (OC)] Kawai M, et al. **Gan No Rinsho** 1989 Jun;35(7):799–803 (Eng. Abstr.) **(Jpn)**

[Diagnosis of ovarian cancer] Nakajima H, et al. **Gan No Rinsho** 1989 Jan;Spec No:382–91 **(Jpn)**

[New technology of diagnosis of ovarian cancer] Terashima Y. **Gan No Rinsho** 1988 Aug;34(10):1427–31 (Eng. Abstr.) **(Jpn)**

[The accuracy of CT and tumor markers in the detection of a recurrent ovarian carcinoma] Wakabayashi Y, et al. **Gan No Rinsho** 1989 Sep;35(10):1127–31 (Eng. Abstr.) **(Jpn)**

[The usefulness of MRI in the evaluation of hormonal therapy of ovarian chocolate cysts] Sugimura K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Sep 25; 48(9):1186–8 (Eng. Abstr.) **(Jpn)**

[Ovarian chocolate cysts—staging with relaxation time in MR imaging] Sugimura K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Oct 25; 48(10):1212–7 (Eng. Abstr.) **(Jpn)**

[Definition, diagnosis and treatment of ovarian cancers at an early stage] Terashima Y, et al. **Nippon Rinsho** 1989 May;47(5):1165–71 **(Jpn)**

[The clinical usefulness of serum CA72-4 analysis in patients with ovarian cancer] Kobayashi H. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 May;41(5):585–9 (Eng. Abstr.) **(Jpn)**

[Clinical usefulness of serum sialyl Le(x)-i measurement in patients with ovarian cancer] Kobayashi H. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jan;41(1):15–9 (Eng. Abstr.) **(Jpn)**

[Determining blood levels of free amino acids in patients with

malignant ovarian tumors: an auxiliary method of their diagnosis and a method of controlling their effective treatment] Iende Kh, et al. **Akush Ginekol (Mosk)** 1988 Nov;(11):42–4 (Eng. Abstr.) (Rus)

[Diagnostic value of the nuclear magnetic resonance relaxation method in the complex examination of patients with ovarian tumors] Makarov OV, et al. **Akush Ginekol (Mosk)** 1989 Apr;(4):58–9 (Rus)

[Torsion of a teratoma of the right ovary simulating an appendicular infiltrate] Ploshchanskii VV, et al. **Klin Khir** 1988;(6):63–4 (Rus)

[Intraoperative cytologic diagnosis of ovarian tumors] Petrova AS, et al. **Lab Delo** 1988;(12):33–7 (Rus)

[Comprehensive diagnosis of cancer of the ovaries] Korsunskii VN, et al. **Med Radiol (Mosk)** 1989 Aug; 34(8):51–6 (Eng. Abstr.) (Rus)

[Placental alkaline phosphatase as a marker of malignant neoplasms] Pashintseva LP, et al. **Vopr Med Khim** 1989 May–Jun;35(3):68–71 (Eng. Abstr.) (Rus)

[The importance of cytologic study methods in the preoperative morphologic diagnosis of ovarian tumors] Ali-Zade VA. **Vopr Onkol** 1988;34(12):1497–501 (Eng. Abstr.) (Rus)

[The role of laparoscopy in the diagnosis and treatment of gynecologic patients] Marinkin IO, et al. **Vopr Onkol** 1989; 35(4):480–1 (Rus)

[Diagnostic difficulties in metastatic ovarian tumors] Bolgova LS, et al. **Vrach Delo** 1988 Oct;(10):95–7 (Rus)

[Use of radioimmunoanalysis of tumor markers in the diagnosis of carcinoma of the breast, ovary and intestines] Kaušitz J. **Bratisl Lek Listy** 1988 Aug;89(8):563–76 (Eng. Abstr.) (Slo)

[Ovarian cancer and pregnancy] Vásquez R, et al. **Rev Chil Obstet Ginecol** 1986;51(2):143–8 (Eng. Abstr.) (Spa)

DRUG THERAPY

A comparison of the toxicity and efficacy of cisplatin and carboplatin in advanced ovarian cancer. The Swons Gynaecological Cancer Group. Adams M, et al. **Acta Oncol** 1989;28(1):57–60

Mechanisms for cisplatin–FUra synergism and cisplatin resistance in human ovarian carcinoma cells both in vitro and in vivo. Scanlon KJ, et al. **Adv Exp Med Biol** 1988; 244:127–35

The effect of surgical debulking on the response of patients with ovarian carcinoma to chemotherapy. McDermott DF, et al. **Am J Clin Oncol** 1988 Oct;11(5):520–3

CA-125 values predictive of clinical response during second-line chemotherapy for epithelial ovarian cancer. Ng LW, et al. **Am J Clin Oncol** 1989 Apr;12(2):106–9

Chemotherapy consisting of cisplatin, doxorubicin, and cyclophosphamide as an adjunct to surgery in stage Ic–II epithelial ovarian carcinoma. Gynecologic Oncology Group of the Comprehensive Cancer Center. Wils J, et al. **Am J Clin Oncol** 1989 Jun;12(3):251–4

First-line chemotherapy with intraperitoneal cisplatin and intravenous cyclophosphamide in ovarian carcinoma. A preliminary report. Zambetti M, et al. **Am J Clin Oncol** 1989 Apr;12(2):118–22

Jaundice after danazol therapy for endometriosis [letter] Xiol X, et al. **Am J Gastroenterol** 1989 Jul;84(7):834–5

A phase I/II study of intraperitoneally administered doxorubicin entrapped in cardiolipin liposomes in patients with ovarian cancer. Delgado G, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):812–7; discussion 817–9

Taxol: a unique antineoplastic agent with significant activity in advanced ovarian epithelial neoplasms. McGuire WP, et al. **Ann Intern Med** 1989 Aug 15;111(4):273–9

Cisplatin, vinblastine, and bleomycin in advanced and recurrent ovarian germ-cell tumors. A trial of the Gynecologic Oncology Group. Williams SD, et al. **Ann Intern Med** 1989 Jul 1;111(1):22–7

Effects of biological response modifiers on ovarian carcinoma cell lines. Marth C, et al. **Anticancer Res** 1989 Mar–Apr; 9(2):461–7

Effect of the tiapamil analog RO11–2933 on cellular sensitivity to antitumor drugs in sensitive and multidrug resistant human ovarian cancer cells. Mazzoni A, et al. **Anticancer Res** 1989 Mar–Apr;9(2):367–71

Combination chemotherapy with epirubicin and cisplatin in ovarian carcinoma. Fuith LC, et al. **Arch Gynecol Obstet** 1988;244(1):15–21

A study of drug efficacy in the treatment of ovarian cancer. Nishimura H, et al. **Asia Oceania J Obstet Gynaecol** 1989 Jun;15(2):135–9

Combination chemotherapy for malignant mixed germ cell tumours of the ovary: a prospective study. Singh P, et al. **Asia Oceania J Obstet Gynaecol** 1988 Jun;14(2):137–42

Cisplatin chemotherapy of ovarian cancer: is short-term in vitro chemosensitivity predictive of long-term patient survival? Khoo SK, et al. **Aust N Z J Obstet Gynaecol** 1988 Nov;28(4):313–7

The effect of chemotherapy on lymph node metastases in ovarian cancer. Burghardt E, et al. **Baillieres Clin Obstet Gynaecol** 1989 Mar;3(1):167–71 (5 ref.)

Anti-oestrogens in the treatment of breast and gynaecological cancers. Furr BJ. **Baillieres Clin Obstet Gynaecol** 1988 Sep;2(3):567–80 (76 ref.)

LHRH analogues in the management of uterine fibroids, premenstrual syndrome and breast malignancies. West CP. **Baillieres Clin Obstet Gynaecol** 1988 Sep;2(3):689–709 (88 ref.)

Therapy of advanced ovarian cancer with D-Trp-6-LH-RH (decapeptyl) microcapsules. Parmar H, et al. **Biomed Pharmacother** 1988;42(8):531–8 (20 ref.)

Response of patients in phase II studies of chemotherapy in ovarian cancer: implications for patient treatment and the design of phase II trials. Blackledge G, et al. **Br J Cancer** 1989 Apr;59(4):650–3

Treatment decisions in advanced ovarian cancer. Cody MM, et al. **Br J Cancer** 1989 Aug;60(2):155–6 (10 ref.)

A pilot study of carboplatin (JM8, CBDCA) and chlorambucil in combination for advanced ovarian cancer. Harding M, et al. **Br J Cancer** 1988 Nov;58(5):640–3

Biological properties of ten human ovarian carcinoma cell lines: calibration in vitro against four platinum complexes. Hills CA, et al. **Br J Cancer** 1989 Apr;59(4):527–34

The role of postoperative alkylating agent therapy in early-stage epithelial ovarian cancer. Mackintosh J, et al. **Br J Obstet Gynaecol** 1989 Mar;96(3):353–7

Intraperitoneal recombinant interferon-alpha 2b for recurrent malignant ascites due to ovarian cancer. Bezwoda WR, et al. **Cancer** 1989 Sep 1;64(5):1029–33

Intraperitoneal cisplatin chemotherapy versus abdominopelvic irradiation in ovarian carcinoma patients after second-look laparotomy. Menczer J, et al. **Cancer** 1989 Apr 15;63(8):1509–13

Tamoxifen in combination with cytotoxic chemotherapy in advanced epithelial ovarian cancer. A prospective randomized trial. Schwartz PE, et al. **Cancer** 1989 Mar 15;63(6):1074–8

Vinblastine, cisplatin, cyclophosphamide, bleomycin, doxorubicin, and etoposide in the treatment of small cell carcinoma of the ovary. Senekjian EK, et al. **Cancer** 1989 Sep 15;64(6):1183–7

A phase II study of mitozantrone in advanced carcinoma of the ovary. Coleman R, et al. **Cancer Chemother Pharmacol** 1989;24(3):200–2

Phase II study of carboplatin in recurrent ovarian cancer: severe hematologic toxicity in previously treated patients. Colombo N, et al. **Cancer Chemother Pharmacol** 1989; 23(5):323–8

A dose escalation study of carboplatin and ifosfamide in advanced ovarian cancer. Gallagher CJ, et al. **Cancer Chemother Pharmacol** 1989;24(1):54–7

Pharmacokinetics of thio-TEPA at two different doses. Hagen B, et al. **Cancer Chemother Pharmacol** 1988; 22(4):356–8

Randomised trial comparing prednimustine with combination chemotherapy in advanced ovarian carcinoma. Leonard RC, et al. **Cancer Chemother Pharmacol** 1989;23(2):105–10

300 mg/m2 carboplatin (Cb), adriamycin (A) cyclophosphamide (C) (CACb-300) combination in advanced ovarian carcinoma: a feasibility study. Martin P, et al. **Cancer Chemother Pharmacol** 1989;23(5):331–2

Phase II study of combination 4'-epidoxorubicin and mitomycin C in recurrent epithelial ovarian cancer. Redman C, et al. **Cancer Chemother Pharmacol** 1989; 23(1):51–3

Influence of infusion time on unchanged cisplatin disposition in patients with ovarian cancer. Reece PA, et al. **Cancer Chemother Pharmacol** 1989;24(4):256–60

Enhancement of antineoplastic effects of cisplatin by a calmodulin antagonist (W-7) in nude mice bearing human ovarian carcinoma. Oomori K, et al. **Cancer Detect Prev** 1988;12(1–6):481–6

Phase I clinical and pharmacokinetic study of mitoxantrone given to patients by intraperitoneal administration. Alberts DS, et al. **Cancer Res** 1988 Oct 15;48(20):5874–7

Intraperitoneal administration of human recombinant interferon-alpha in patients with ovarian cancer: effects on lymphocyte phenotype and cytotoxicity. Lichtenstein A, et al. **Cancer Res** 1988 Oct 15;48(20):5853–9

Intracavitary therapy of murine ovarian cancer with cis-diamminedichloroplatinum(II) and 10-ethyl-10-deazaaminopterin incorporating systemic leucovorin protection. Sirotnak FM, et al. **Cancer Res** 1989 Jun 1;49(11):2890–3

Recombinant interleukin-2 continuous infusion in ovarian cancer patients with minimal residual disease at second-look. Benedetti Panici P, et al. **Cancer Treat Rev** 1989 Jun;16 Suppl A:123–7

Supplementation with selenium, vitamin E and their combination in gynaecological cancer during cytotoxic chemotherapy. Sundström H, et al. **Carcinogenesis** 1989 Feb;10(2):273–8

A randomized study of high-dose versus low-dose cis-platinum combined with cyclophosphamide in the treatment of advanced ovarian cancer. Hong Kong Ovarian Carcinoma Study Group. Ngan HY, et al. **Chemotherapy** 1989;35(3):221–7

Comparative toxicity of cisplatin, carboplatin (CBDCA) and iproplatin (CHIP) in combination with cyclophosphamide in patients with advanced epithelial ovarian cancer. Anderson H, et al. **Eur J Cancer Clin Oncol** 1988 Sep; 24(9):1471–9

Characterization of cisplatin-resistant COLO 316 human ovarian carcinoma cells. Andrews PA, et al. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):619–25

Phase II studies of mitozolomide in melanoma, lung and ovarian cancer. Harding M, et al. **Eur J Cancer Clin Oncol** 1989 May;25(5):785–8

Adjuvant effects of prostaglandin D2 to cisplatin on human ovarian cancer cell growth in nude mice. Kikuchi Y, et al. **Eur J Cancer Clin Oncol** 1988 Dec;24(12):1829–33

Mechanisms of resistance to cis-diamminedichloroplatinum (II) in a rat ovarian carcinoma cell line. Sekiya S, et al. **Eur J Cancer Clin Oncol** 1989 Mar;25(3):429–37

The isolation and characterization of cisplatin-resistant rat ovarian cancer cells. Sekiya S, et al. **Eur J Cancer Clin Oncol** 1988 May;24(5):851–9

Phase II study of intravenous menogaril in advanced ovarian carcinoma. EORTC Early Clinical Trials Group. Sessa C, et al. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):751–2

Esorubicin in advanced ovarian epithelial cancer. A phase II study of the EORTC Gynecological Cancer Cooperative Group. van Oosterom AT, et al. **Eur J Cancer Clin Oncol** 1988 Aug;24(8):1379–80

Polychemotherapy and second-look laparotomy in the management of the ovarian cancer. Drača P. **Eur J Gynaecol Oncol** 1988;9(5):410–4

Treatment of metastatic lipid cell tumor of the ovary with BV-CAP and VAC chemotherapy, using serum testosterone and dihydrotestosterone as tumor markers. Patsner B, et al. **Eur J Gynaecol Oncol** 1988;9(6):441–4

Successful treatment of malignant carcinoid tumour with intravenous cis-platinum. Porter AT, et al. **Eur J Surg Oncol** 1988 Dec;14(6):703–4

Administration of nasal Buserelin as compared with subcutaneous Buserelin implant for endometriosis. Donnez J, et al. **Fertil Steril** 1989 Jul;52(1):27–30

Cis-platin-Mecy as salvage chemotherapy in recurrent advanced ovarian carcinoma. Belli M, et al. **G Ital Oncol** 1989 Jan–Mar;9(1):31–3

Placebo-controlled comparison of danazol and high-dose medroxyprogesterone acetate in the treatment of endometriosis. Telimaa S, et al. **Gynecol Endocrinol** 1987 Mar;1(1):13–23

Randomized phase III trial of chemoimmunotherapy in patients with previously untreated stage III, optimal disease ovarian cancer: a Southwest Oncology Group Study. Alberts DS, et al. **Gynecol Oncol** 1989 Jan;32(1):16–21

Randomized phase III trial of chemoimmunotherapy in patients with previously untreated stages III and IV suboptimal disease ovarian cancer: a Southwest Oncology Group Study. Alberts DS, et al. **Gynecol Oncol** 1989 Jan; 32(1):8–15

Platinum-based combination chemotherapy for malignant mixed mesodermal tumors of the ovary. Andersen WA, et al. **Gynecol Oncol** 1989 Mar;32(3):319–22

Ten years experience with a chemotherapy regime for ovarian cancer. Chan SY, et al. **Gynecol Oncol** 1988 Oct; 31(2):285–91

Evidence for the efficacy of adjuvant therapy in epithelial ovarian tumors of low malignant potential. Fort MG, et al. **Gynecol Oncol** 1989 Mar;32(3):269–72

Treatment of advanced epithelial ovarian cancer with cisplatin and cyclophosphamide. Gershenson DM, et al. **Gynecol Oncol** 1989 Mar;32(3):336–41

A study of cis-platinum and ifosfamide in alkylating agent-resistant ovarian cancer. Green JA, et al. **Gynecol Oncol** 1989 Feb;32(2):233–5

Cerebral metastases in patients with ovarian cancer treated with chemotherapy. Hardy JR, et al. **Gynecol Oncol** 1989 Jun;33(3):296–300

Advanced ovarian dysgerminoma with cure of tumor persistent in meninges. Jolles CJ, et al. **Gynecol Oncol** 1989 Jun;33(3):389–91

In vitro sensitivity of ovarian cancer as determined by a short-term biochemical assay: comparison between primary and metastatic sites in the same patient. Khoo SK, et al. **Gynecol Oncol** 1989 Feb;32(2):151–5

Evaluation of the hearing loss associated with cis-platinum treatment by high-frequency audiometry. Kujansuu E, et al. **Gynecol Oncol** 1989 Jun;33(3):321–2

Adjuvant chemotherapy in a pregnant patient with endodermal sinus tumor of the ovary. Metz SA, et al. **Gynecol Oncol** 1989 Mar;32(3):371–4

In vitro analysis of the anticancer potential of tumor necrosis factor in combination with cisplatin. Mutch DG, et al. **Gynecol Oncol** 1989 Sep;34(3):328–33

Long-term access to the peritoneal cavity in ovarian cancer patients. Rubin SC, et al. **Gynecol Oncol** 1989 Apr; 33(1):46–8

Phase II evaluation of peroral carmofur, cyclophosphamide, and hexamethylmelamine as a second-line therapy in advanced epithelial ovarian carcinoma. Sipilä P, et al. **Gynecol Oncol** 1989 Jul;34(1):27–9

Antiemetic treatment of chemotherapy-induced nausea in ovarian carcinoma patients. Sorbe B, et al. **Gynecol Oncol** 1989 Aug;34(2):141–4

Daunorubicin conjugated to a monoclonal anti-CA125 antibody selectively kills human ovarian cancer cells. Sweet F, et al. **Gynecol Oncol** 1989 Sep;34(3):305–11

Second-look procedures in ovarian cancer patients receiving six vs. nine courses of platinum, adriamycin, cytoxan (PAC) chemotherapy: the SCPMG experience 1982–1985. Watring W, et al. **Gynecol Oncol** 1989 Feb;32(2):245–7

Primary treatment with vincristine, dactinomycin, and cyclophosphamide in nondysgerminomatous germ cell tumor of the ovary. Wong LC, et al. **Gynecol Oncol** 1989 Aug;34(2):155–8

Chemotherapy in ovarian carcinoma: intravenous or intraperitoneal? Markman M. **Hematol Oncol Clin North Am** 1988 Sep;2(3):457–66 (15 ref.)

Tumour markers and POMB/ACE chemotherapy in the management of ovarian germ cell tumours (GCTs). Newlands ES, et al. **Int J Biol Markers** 1988 Jul–Sep; 3(3):185–92

Characterization of a novel mouse reticular cell sarcoma M5076 subline resistant to cisplatin. Ferrari A, et al. **Int J Cancer** 1989 Jun 15;43(6):1091–7

CA 125 in the monitoring of response to chemotherapy of ovarian carcinoma. Quaranta M, et al. **Int J Cancer Suppl** 1988;3:68–70

Randomised trial comparing combinations of cyclophosphamide and cisplatin without or with doxorubicin or 4'-epi-doxorubicin in the treatment of advanced ovarian cancer. Hernádi Z, et al. **Int J Gynaecol Obstet** 1988 Oct;27(2):199–204

A phase I trial of intraperitoneal recombinant interleukin 2 in patients with ovarian carcinoma. Chapman PB, et al. **Invest New Drugs** 1988 Sep;6(3):179–88

Intraperitoneal chemotherapy for ovarian carcinoma. Howell SB. **J Clin Oncol** 1988 Nov;6(11):1673–5 (22 ref.)

Leuprolide acetate in the treatment of refractory or persistent epithelial ovarian cancer. Kavanagh JJ, et al. **J Clin Oncol** 1989 Jan;7(1):115–8

High-dose platinum consisting of combined carboplatin and cisplatin in previously untreated ovarian cancer patients with residual disease. Lund B, et al. **J Clin Oncol** 1989 Oct;7(10):1469–73

Randomized trial of cyclophosphamide plus cisplatin with or without doxorubicin in ovarian carcinoma: a Gynecologic Oncology Group Study. Omura GA, et al. **J Clin Oncol** 1989 Apr;7(4):457–65

Surgically documented response to intraperitoneal cisplatin, cytarabine, and bleomycin after intravenous cisplatin-based chemotherapy in advanced ovarian adenocarcinoma. Piver MS, et al. **J Clin Oncol** 1988 Nov;6(11):1679–84

Intraperitoneal cisplatin and etoposide in the treatment of refractory/recurrent ovarian carcinoma. Reichman B, et al. **J Clin Oncol** 1989 Sep;7(9):1327–32

Intraperitoneal chemotherapy for ovarian carcinoma [letter] Shepard RC. **J Clin Oncol** 1989 May;7(5):685

Adverse effects of intraperitoneal fluorouracil in patients with optimal residual ovarian cancer after second-look laparotomy: a Gynecologic Oncology Group Study. Walton LA, et al. **J Clin Oncol** 1989 Apr;7(4):466–70

Cyclophosphamide-cisplatin versus cyclophosphamide-carboplatin in stage III–IV ovarian carcinoma: a comparison of equally myelosuppressive regimens. Edmonson JH, et al. **J Natl Cancer Inst** 1989 Oct 4;81(19):1500–4

Carboplatin substitution for cisplatin in the treatment of ovarian carcinoma—a word of caution [editorial] McGuire WP, et al. **J Natl Cancer Inst** 1989 Oct 4;81(19):1438–9

Randomized trial in advanced ovarian cancer comparing cisplatin and carboplatin. Mangioni C, et al. **J Natl Cancer Inst** 1989 Oct 4;81(19):1464–71

High-dose carboplatin with diethyldithiocarbamate chemoprotection in treatment of women with relapsed ovarian cancer. Rothenberg ML, et al. **J Natl Cancer Inst** 1988 Nov 16;80(18):1488–92

The trend of serum CA125 levels during the first three courses of chemotherapy as a predictor of second-look findings in patients with ovarian carcinoma. Gadducci A, et al. **J Nucl Med Allied Sci** 1989 Jul–Sep;33(3):243–6

Aggressive chemotherapy in endodermal sinus tumor. Athanikar N, et al. **J Surg Oncol** 1989 Jan;40(1):17–20

Clinical value of in vitro drug sensitivity testing based on short-term effects on DNA and RNA metabolism in ovarian cancer. Khoo SK, et al. **J Surg Oncol** 1989 Jul; 41(3):201–5

Cisplatin-based chemotherapy of epithelial ovarian cancer. Homesley HD. **J Surg Oncol Suppl** 1989;1:21–5 (13 ref.)

From the National Institutes of Health. Raub W. **JAMA** 1989 Oct 6;262(13):1748

Carboplatin versus cisplatin [letter] Tighe M, et al. **Lancet** 1988 Dec 10;2(8624):1372–3

Carboplatin. **Med Lett Drugs Ther** 1989 Sep 8;31(800):83–4

SPECT study of the fluid distribution in the intra-abdominal space during intraperitoneal treatment of ovarian cancer. Slosman D, et al. **Nucl Med Commun** 1985 Feb;6(2):91–6

Modulation and intensification of a cyclophosphamide, hexamethylmelamine, doxorubicin, and cisplatin ovarian cancer regimen. Bruckner HW, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):349–56

Re-treatment of patients with recurrent epithelial ovarian cancer with cisplatin-based chemotherapy. Gershenson DM, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):798–802

Neoadjuvant (cytoreductive) chemotherapy combined with intervention debulking surgery in advanced, unresected epithelial ovarian cancer. Lawton FG, et al. **Obstet Gynecol** 1989 Jan;73(1):61–5

Relapsing Clostridium difficile toxin-associated colitis in ovarian cancer patients treated with chemotherapy. Satin AJ, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):487–9

Four-year analysis of platinum and anthracycline combination for ovarian cancer. Martoni A, et al. **Oncology** 1989;46(2):109–16

Efficacy of adjuvant carboplatin-epirubicin chemotherapy in advanced ovarian cancer after radical surgery. Pickel H, et al. **Oncology** 1989;46(4):222–5

Carboplatin in the treatment of ovarian cancer. Alberts DS, et al. **Semin Oncol** 1989 Apr;16(2 Suppl 5):19–26 (37 ref.)

Navelbine in advanced ovarian epithelial cancer: a study of the French oncology centers. George MJ, et al. **Semin Oncol** 1989 Apr;16(2 Suppl 4):30–2

Carboplatin in refractory epithelial ovarian cancer. Kavanagh JJ, et al. **Semin Oncol** 1989 Apr;16(2 Suppl 5):45–8 (14 ref.)

Intraperitoneal cisplatin chemotherapy in the management of ovarian carcinoma. Markman M. **Semin Oncol** 1989 Aug; 16(4 Suppl 6):79–82 (14 ref.)

Optimal dosing with carboplatin. Ozols RF. **Semin Oncol** 1989 Apr;16(2 Suppl 5):14–8 (17 ref.)

Phase II experience with ifosfamide/mesna in gynecologic malignancies: preliminary report of Gynecologic Oncology Group studies. Sutton GP, et al. **Semin Oncol** 1989 Feb; 16(1 Suppl 3):68–72

Chemotherapy in ovarian carcinoma: present role and future prospects. Thigpen JT, et al. **Semin Oncol** 1989 Aug;16(4 Suppl 6):58–65 (34 ref.)

A nude mouse-phase II model for human ovarian cancer. Boven E, et al. **Strahlenther Onkol** 1989 Jul;165(7):534–5

Droloxifene—a novel antiestrogen in endocrine dependent human tumors xenotransplanted into nude mice. Stelzer P, et al. **Strahlenther Onkol** 1989 Jul;165(7):559–60

Timing of surgery and the role of cytoreductive chemotherapy in patients with advanced ovarian carcinoma. Negretti E, et al. **Tumori** 1988 Oct 31; 74(5):567–72

Cisplatin (P) versus cyclophosphamide, adriamycin and cisplatin (CAP) for stage III–IV epithelial ovarian carcinoma: a prospective randomized trial. Tomirotti M, et al. **Tumori** 1988 Oct 31;74(5):573–7

[Prediction of the clinical response of ovarian cancer to chemotherapy using an in vitro anticancer drug sensitivity test] Li ZX. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Sep; 23(5):287–9, 318 (Eng. Abstr.) (Chi)

[Intraperitoneal administration of high doses of cisplatin in advanced ovarian carcinoma] Ptáčková B, et al. **Cesk Gynekol** 1989 Mar;54(2):106–9 (Eng. Abstr.) (Cze)

[Observations on the course of advanced ovarian cancers following medicamentous reduction of hypophyseal gonadotropins] Jäger W, et al. **Geburtshilfe Frauenheilkd** 1989 Jul;49(7):611–7 (Eng. Abstr.) (Ger)

[Hormone dependence of malignant ovarian tumors—an in vitro model] Schieder K, et al. **Geburtshilfe Frauenheilkd** 1989 May;49(5):437–41 (Eng. Abstr.) (Ger)

[Tolerance of intraoperative, intraperitoneal chemotherapy in advanced gynecologic malignancies] Werner A, et al. **Geburtshilfe Frauenheilkd** 1988 Aug;48(8):574–8 (Eng. Abstr.) (Ger)

[The protective effect of medroxyprogesterone acetate in patients with ovarian cancer treated with chemotherapy] Enzelsberger H, et al. **Gynakol Rundsch** 1988;28 Suppl 2:195–7 (Ger)

[Carboplatin, VP-16 in epithelial ovarian cancer—initial experiences] Vavra N, et al. **Gynakol Rundsch** 1988;28 Suppl 2:197–9 (Ger)

[The medroxyprogesterone acetate serum level following various medroxyprogesterone acetate dose schedules in gynecologic oncology] Husslein P, et al. **Zentralbl Gynakol** 1988;110(20):1277–82 (Eng. Abstr.) (Ger)

[Chemotherapy of advanced ovarian carcinoma. II. Second-line treatment and new therapeutic modalities] Angelini F, et al. **Clin Ter** 1989 Apr 30;129(2):91–104 (136 ref.) (Eng. Abstr.) (Ita)

[Chemotherapy of advanced ovarian carcinoma. I. First-choice treatment] Angelini F, et al. **Clin Ter** 1988 Dec 31;127(6):453–62 (68 ref.) (Eng. Abstr.) (Ita)

[Thymopentin treatment of ovarian carcinoma: preliminary clinical results] Garozzo G, et al. **G Ital Oncol** 1988 Jan–Mar;8(1):11–3 (Eng. Abstr.) (Ita)

[Problems with hormone therapy in ovarian carcinoma] Sesti F, et al. **G Ital Oncol** 1988 Jul–Dec;8(3–4):107–12 (52 ref.) (Eng. Abstr.) (Ita)

[A case report of acute renal failure induced by melphalan in a patient with ovarian cancer] Kashimura M, et al. **Gan No Rinsho** 1988 Nov;34(14):2015–8 (Eng. Abstr.) (Jpn)

[Cisplatin, vinblastine, and bleomycin combination chemotherapy in a stage IV pure endodermal sinus tumor of the ovary—a case report of a long-term survival] Saito N, et al. **Gan No Rinsho** 1988 Dec;34(15):2114–8 (Eng. Abstr.) (Jpn)

[High-dose CDDP therapy using a balloon-occluded arterial infusion (BOAI) in recurrent ovarian cancer] Suzumori K, et al. **Gan No Rinsho** 1988 Aug;34(9):1107–14 (Eng. Abstr.) (Jpn)

[A case of ovarian germ cell tumor] Hayase R, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 1):2655–8 (Eng. Abstr.) (Jpn)

[Comparative studies of the antitumor activities of CDDP and the analogs—using gynecological carcinomas transplanted into nude mice] Suzumori K, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 1):387–91 (Eng. Abstr.) (Jpn)

[Combination chemotherapy of ovarian cancer with cisplatinum, aclarubicin and tegafur] Wada Y, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 1):2589–94 (Eng. Abstr.) (Jpn)

[Effect of medroxyprogesterone acetate on side effects of CAP therapy in gynecological malignant tumors] Yanagawa Y, et al. **Gan To Kagaku Ryoho** 1989 Jul; 16(7):2393–8 (Eng. Abstr.) (Jpn)

[Clinical study of combination chemotherapy with CDDP, ADM and CPM for ovarian cancer] Kobayashi H, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Apr 20;23(4):829–36 (Eng. Abstr.) (Jpn)

[Successful treatment of a patient with recurrent ovarian cancer by lentinan combined with intraarterial 5FU] Shimizu Y, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Mar 20;24(3):647–51 (Eng. Abstr.) (Jpn)

[The pharmacokinetics and clinical toxicities following intraperitoneal infusion of cis-diamminedichloroplatinum (II) with simultaneous sodium thiosulfate rescue in patients with ovarian cancer] Takizawa K, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jul 20;23(7):1483–90 (Eng. Abstr.) (Jpn)

[Effect of medical vagotomy on the CDDP induced nausea and vomiting evaluated by the chemotherapy-vomiting time (CV time)] Chen JT, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep; 40(9):1359–64 (Eng. Abstr.) (Jpn)

[Comparison of preoperative and postoperative chemotherapy in the treatment of advanced ovarian cancer] Hirabayashi K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun;41(6):647–52 (Eng. Abstr.) (Jpn)

[Taktivin in the combined treatment of patients with ovarian cancer] Griaznova IM, et al. **Akush Ginekol (Mosk)** 1988 Aug;(8):57–61 (Eng. Abstr.) (Rus)

[Clinico-morphological comparisons of the results of the combined treatment of tumors with platinum derivatives] Shalimov SA, et al. **Vrach Delo** 1988 Jul;(7):79–82 (Eng. Abstr.) (Rus)

EMBRYOLOGY

Embryology of the gonad with reference to special tumors of the ovary and testis. Barber HR. **J Pediatr Surg** 1988 Oct;23(10):967–72 (6 ref.)

[The antenatal period and the pathogenesis of ovarian tumors] Iurkova LE, et al. **Vopr Onkol** 1989;35(1):5–11 (56 ref.) (Rus)

ENZYMOLOGY

Amylase activity and fast-migrating amylase isoenzymes in serum and cyst fluid from patients with ovarian neoplasms. Henriksen R, et al. **Acta Obstet Gynecol Scand** 1988; 67(1):65–70

Immunochemical studies of human placental alkaline phosphatase in normal and neoplastic tissues. Vengerov YuYu, et al. **Adv Enzyme Regul** 1988;27:345–54

Oncodevelopmental expression and structure of alkaline phosphatase genes. Millán JL. **Anticancer Res** 1988 Sep–Oct;8(5A):995–1004 (90 ref.)

Lactic dehydrogenase isozyme patterns and alpha-hydroxybutyrate dehydrogenase activities in serum from newborns, patients with ovarian cancer or myocardial infarction. Kikuchi Y, et al. **Cancer Biochem Biophys** 1988 Nov;10(2):125–9

The glycosylation state of the precursors of the cathepsin B-like proteinase from human malignant ascitic fluid: possible implication in the secretory pathway of these proenzymes. Pagano M, et al. **Cancer Lett** 1989 Apr; 45(1):13–9

Neuron-specific enolase as a serum marker for immature teratoma and dysgerminoma. Kawata M, et al. **Gynecol Oncol** 1989 Feb;32(2):191–7

Immunohistochemical studies of steroidogenic enzymes (aromatase, 17 alpha-hydroxylase and cholesterol side-chain cleavage cytochromes P-450) in sex cord-stromal tumors of the ovary. Sasano H, et al. **Hum Pathol** 1989 May;20(5):452–7

Characterization of plasma alpha(1——3)-L-fucosyltransferase from an ovarian cancer patient with the aid of synthetic substrates. Madiyalakan R, et al. **Indian J Biochem Biophys** 1988 Feb–Apr; 25(1–2):32–5

Serum lactic dehydrogenase and its isoenzymes in patients with ovarian dysgerminoma. Yoshimura T, et al. **Int J Gynaecol Obstet** 1988 Dec;27(3):459–65 (26 ref.)

Human ovarian tumor-associated trypsin. Its purification and characterization from mucinous cyst fluid and identification as an activator of pro-urokinase. Koivunen E, et al. **J Biol Chem** 1989 Aug 25;264(24):14095–9

Serum placental-like alkaline phosphatase (PLAP): a novel combined enzyme linked immunoassay for monitoring ovarian cancer. Fisken J, et al. **J Clin Pathol** 1989 Jan; 42(1):40–5

Aromatase activity in human ovarian cancer. MacLusky NJ, et al. **Steroids** 1987 Oct–Dec;50(4–6):423–33

Glucose, lactate, and ketone body utilization by human gynecological tumors xenografted into rnu/rnu-rats. Kallinowski F, et al. **Strahlenther Onkol** 1989 Jul; 165(7):507–8

Expression of placental alkaline phosphatase in epithelial ovarian tumours. Stendahl U, et al. **Tumour Biol** 1989; 10(3):126–32

[Pleurisy with elevated amylase in ovarian cancer (letter)] Milleron B, et al. **Presse Med** 1988 Oct 15;17(35):1814–5

(Fre)

EPIDEMIOLOGY

Re: "Events of Reproductive Life and the Incidence of Epithelial Ovarian Cancer" [letter] Koch M. **Am J Epidemiol** 1989 Apr;129(4):861-3

Gynaecological cancer screening. Sivanesaratnam V. **Ann Acad Med Singapore** 1989 Jan;18(1):75-9

Sporadic non-African Burkitt's lymphoma. A case report. Childs WJ, et al. **Australas Radiol** 1988 May;32(2):269-71

Benign ovarian teratomas: a population-based case-control study. Westhoff C, et al. **Br J Cancer** 1988 Jul;58(1):93-8

The effects of oral contraceptives and parity on ovarian cancer trends in women under 55 years of age. Villard-Mackintosh L, et al. **Br J Obstet Gynaecol** 1989 Jul;96(7):783-8

Risk factors of ovarian cancer of epithelial origin: a case control study. Koch M, et al. **Cancer Detect Prev** 1988; 13(2):131-6

Case-control study of borderline ovarian tumors: reproductive history and exposure to exogenous female hormones. Harlow BL, et al. **Cancer Res** 1988 Oct 15; 48(20):5849-52

Population-based case-control study of ovarian cancer in Shanghai. Shu XO, et al. **Cancer Res** 1989 Jul 1; 49(13):3670-4

Ovarian carcinoma during pregnancy: a study of 23 cases in Israel between the years 1960 and 1984. Dgani R, et al. **Gynecol Oncol** 1989 Jun;33(3):326-31

Ovarian cancer incidence and mortality in Denmark, 1943-1982. Ewertz M, et al. **Int J Cancer** 1988 Nov 15; 42(5):690-6

Adipose tissue distribution and female carcinomas. A 12-year follow-up of participants in the population study of women in Gothenburg, Sweden. Lapidus L, et al. **Int J Obes** 1988; 12(4):361-8 (25 ref.)

Oral contraceptive use and malignancies of the genital tract. Results from the Royal College of General Practitioners' Oral Contraception Study. Beral V, et al. **Lancet** 1988 Dec 10;2(8624):1331-5

Tumourigenesis by partial body X-irradiation in mice. Sato F, et al. **Nippon Juigaku Zasshi** 1988 Dec;50(6):1161-8

The epidemiology of malignant neoplasms of the ovary, fallopian tube, and broad ligament in Canada: 1950-1984. Ayiomamitis A. **Obstet Gynecol** 1989 Jun;73(6):1017-21

[Epidemiologic aspects of ovarian carcinoma] Rendina GM, et al. **G Ital Oncol** 1987 Oct-Dec;7(4):149-62 (Eng. Abstr.) (Ita)

[Clinico-statistic study on 126 cases of benign ovarian neoplasms] Corrado F, et al. **Minerva Ginecol** 1988 Dec; 40(12):687-90 (Eng. Abstr.) (Ita)

[Ovarian carcinoma in the Clínica Ginecológica da Faculdade de Medicina da Universidade de São Paulo, Brazil] Souen JS. **Rev Paul Med** 1988 May-Jun; 106(3):140-4 (Eng. Abstr.) (Por)

[Dependence of the incidence of the occurrence of ovarian and uterine tumors in rats on the irradiation dosage from accelerated particles and gamma rays] Fedorenko BS, et al. **Eksp Onkol** 1989;11(1):24-7 (Eng. Abstr.) (Rus)

[Factorial analysis of ovarian neoplasms at Paula Jaraquemada hospital. 1975-1984 period] Suarez E, et al. **Rev Chil Obstet Ginecol** 1986;51(2):106-12 (Eng. Abstr.) (Spa)

ETIOLOGY

Association of obesity and ovarian cancer in a case-control study. Farrow DC, et al. **Am J Epidemiol** 1989 Jun; 129(6):1300-4

A case-control study of borderline ovarian tumors: the influence of perineal exposure to talc. Harlow BL, et al. **Am J Epidemiol** 1989 Aug;130(2):390-4

Nutrient intake and ovarian cancer. Slattery ML, et al. **Am J Epidemiol** 1989 Sep;130(3):497-502

Personal and environmental characteristics related to epithelial ovarian cancer. II. Exposures to talcum powder, tobacco, alcohol, and coffee. Whittemore AS, et al. **Am J Epidemiol** 1988 Dec;128(6):1228-40

Personal and environmental characteristics related to epithelial ovarian cancer. I. Reproductive and menstrual events and oral contraceptive use. Wu ML, et al. **Am J Epidemiol** 1988 Dec;128(6):1216-27

A case-control study of epithelial ovarian cancer. Hartge P, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):10-6

Dietary factors and epithelial ovarian cancer. Shu XO, et al. **Br J Cancer** 1989 Jan;59(1):92-6

Epithelial ovarian cancer and the ability to conceive. Whittemore AS, et al. **Cancer Res** 1989 Jul 15; 49(14):4047-52

Dysgerminoma in 45,X Turner syndrome: report of a case. Sinisi AA, et al. **Clin Endocrinol (Oxf)** 1988 Feb; 28(2):187-93 (33 ref.)

Myoma uterus as a marker of oncogynecological pathology in pre- and post-menopause. Bokhman Ya, et al. **Eur J Gynaecol Oncol** 1988;9(5):355-9

Malignant mixed germ cell tumor of the ovary in a young woman with Smith-Lemli-Opitz syndrome. Patsner B, et al. **Gynecol Oncol** 1989 Jun;33(3):386-8

Menstrual factors and the risk of epithelial ovarian cancer. Parazzini F, et al. **J Clin Epidemiol** 1989;42(5):443-8

Dietary and other risk factors of ovarian cancer among elderly women. Mori M, et al. **Jpn J Cancer Res** 1988 Sep; 79(9):997-1004

Galactose consumption and metabolism in relation to the risk of ovarian cancer. Cramer DW, et al. **Lancet** 1989 Jul 8; 2(8654):66-71

Galactose consumption and risk of ovarian cancer [letter] Reichlin S. **Lancet** 1989 Sep 2;2(8662):565

[A case-control study of high-risk factors in ovarian carcinoma] Qiao YL, et al. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1988 Oct; 9(5):269-73 (Eng. Abstr.) (Chi)

[The role of enzymes in the pathogenesis of genital tumors] Nagornaia VF. **Akush Ginekol (Mosk)** 1989 Apr;(4):11-5 (64 ref.) (Rus)

GENETICS

Enhanced DNA repair and resistance to cisplatin in human ovarian cancer. Lai GM, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4597-600

A unique pattern of proto-oncogene abnormalities in ovarian adenocarcinomas. Zhou DJ, et al. **Cancer** 1988 Oct 15; 62(8):1573-6

A genetic linkage study of familial breast-ovarian cancer. Ferrell RE, et al. **Cancer Genet Cytogenet** 1989 Apr; 38(2):241-8

Sequential cytogenetic studies in an ovarian cancer cell line. Smith A, et al. **Cancer Genet Cytogenet** 1989 Mar; 38(1):13-24

Drug-related chromosomal changes in chemoresistant human ovarian carcinoma cells. Teyssier JR, et al. **Cancer Genet Cytogenet** 1989 May;39(1):35-43

Cytogenetic analysis of ependymoma and teratoma of the ovary. Yang-Feng TL, et al. **Cancer Genet Cytogenet** 1988 Oct 1;35(1):83-9

Expression of a human multidrug resistance gene in ovarian carcinomas. Bourhis J, et al. **Cancer Res** 1989 Sep 15; 49(18):5062-5

Association of Ki-ras with amplified DNA sequences, detected in human ovarian carcinomas by a modified in-gel renaturation assay. Fukumoto M, et al. **Cancer Res** 1989 Apr 1;49(7):1693-7

Allele loss at the c-Ha-ras1 locus in human ovarian cancer. Lee JH, et al. **Cancer Res** 1989 Mar 1;49(5):1220-2

Ovarian teratocarcinomas in LT/Sv mice carrying t-mutations. Artzt K, et al. **Dev Genet** 1987;8(1):1-9

Familial ovarian cancer: a study of 11 families. Villani C, et al. **Eur J Gynaecol Oncol** 1989;10(4):281-3

Relationship of epithelial ovarian cancer to other malignancies within families. Schildkraut JM, et al. **Genet Epidemiol** 1988;5(5):355-67

45,XO/46,X,dic(Yq) mosaicism in Turner's phenotype with endodermal sinus tumor of the ovary. Ono T, et al. **Gynecol Obstet Invest** 1989;27(1):45-7

DNA flow cytometry, clinical and morphological parameters as prognostic factors for advanced malignant and borderline ovarian tumors. Kühn W, et al. **Gynecol Oncol** 1989 Jun;33(3):360-7

Over-expression of MDR1 gene with no DNA amplification in a multiple-drug-resistant human ovarian carcinoma cell line. Bénard J, et al. **Int J Cancer** 1989 Mar 15;43(3):471-7

Amplification of c-ras-Ki oncogene in human ovarian tumours. Boltz EM, et al. **Int J Cancer** 1989 Mar 15; 43(3):428-30

Trisomy 12 and translocation (7;9) in an ovarian immature teratoma. López Ginés C, et al. **Int J Gynecol Pathol** 1989; 8(3):277-85

C-myc oncogene product P62c-myc in ovarian mucinous neoplasms: immunohistochemical study correlated with malignancy. Polacarz SV, et al. **J Clin Pathol** 1989 Feb; 42(2):148-52

Effect of glutathione on DNA repair in cisplatin-resistant human ovarian cancer cell lines. Lai GM, et al. **J Natl Cancer Inst** 1989 Apr 5;81(7):535-9

Amplification and rearrangement of c-erb B proto-oncogenes in cancer of human female genital tract. Zhang X, et al. **Oncogene** 1989 Aug;4(8):985-9

High frequency of mas oncogene activation detected in the NIH3T3 tumorigenicity assay. van 't Veer LJ, et al. **Oncogene Res** 1988;3(3):247-54

Gene-centromere mapping and the study of non-disjunction in autosomal trisomies and ovarian teratomas. Chakravarti A, et al. **Prog Clin Biol Res** 1989;311:45-79

Gene signals relapse of breast, ovarian cancers [news] Marx JL. **Science** 1989 May 12;244(4905):654-5

Studies of the HER-2/neu proto-oncogene in human breast and ovarian cancer. Slamon DJ, et al. **Science** 1989 May 12;244(4905):707-12

[Dysgerminoma and gonadoblastoma in a phenotypic female with 45, X/47, XYY mosaicism] Tanaka S, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun;41(6):769-72 (Jpn)

[Variability and inheritability of the "level of endogenous SH groups" trait in cell and clone populations of transplantable rat tumors] Ismailov BI, et al. **Eksp Onkol** 1989;11(3):73-6 (Eng. Abstr.) (Rus)

IMMUNOLOGY

CA 125 in the follow-up of patients with ovarian cancer. Halila H, et al. **Acta Obstet Gynecol Scand** 1988;67(1):53-8

Characterization of the CA125 antigen secreted from a newly established human ovarian cancer cell line (SHIN-3). Imai S, et al. **Acta Pathol Jpn** 1989 Jan;39(1):43-9

Distribution and pharmacokinetics of radiolabeled monoclonal antibody OC 125 after intravenous and intraperitoneal administration in gynecologic tumors. Haisma HJ, et al. **Am J Obstet Gynecol** 1988 Oct; 159(4):843-8

Serum CA 125 levels and surgical findings in patients undergoing secondary operations for epithelial ovarian cancer. Rubin SC, et al. **Am J Obstet Gynecol** 1989 Mar; 160(3):667-71

Monoclonal antibodies against ovarian carcinoma-associated antigens, raised by immunization with cyst fluids. Boerman O, et al. **Anticancer Res** 1989 May-Jun;9(3):551-8

Density distribution and antigenic characterization of cell subpopulations isolated from cystic fluids of ovarian serous neoplasms. Harlozińska A, et al. **Anticancer Res** 1989 Jan-Feb;9(1):161-6

Increased ovarian tumor cell surface reacting antibodies in patients with ovarian adenocarcinoma after viral oncolysate treatment. Ioannides CG, et al. **Anticancer Res** 1989 Jan-Feb;9(1):81-6

Human neutrophil-mediated lysis of ovarian cancer cells. Lichtenstein A, et al. **Blood** 1989 Aug 1;74(2):805-9

Human ovarian carcinoma: evidence for patient-related differences in susceptibility to cytotoxic effectors that attack different cellular subpopulations within a tumour. Clark DA, et al. **Br J Cancer** 1988 Oct;58(4):415-8

CA125 in ovarian tumour tissue at second laparotomy. Maughan TS, et al. **Br J Cancer** 1989 Feb;59(2):259-60

Characterization of the antigen recognized by monoclonal antibody 1D3. Gangopadhyay A, et al. **Cancer Biochem Biophys** 1988 Nov;10(2):107-15

Preactivated T cells in cancer patients with poor prognosis. Fuchs DN, et al. **Cancer Detect Prev** 1988;12(1-6):97-103

Importance of MHC antigen expression on solid tumors in the in vitro interaction with autologous blood lymphocytes. Vánky F, et al. **Cancer Immunol Immunother** 1988; 27(3):213-22

Differential induction by interferons of major histocompatibility complex-encoded and non-major histocompatibility complex-encoded antigens in human breast and ovarian carcinoma cell lines. Boyer CM, et al. **Cancer Res** 1989 Jun 1;49(11):2928-34

Lymphokine-activated killer (LAK) and monocyte-mediated cytotoxicity on tumor cell lines resistant to antitumor agents. Allavena P, et al. **Cell Immunol** 1989 Apr 15; 120(1):250-8

Immunoassay of CA125 in ovarian cancer: a comparison of three assays for use in diagnosis and monitoring. Fisken J, et al. **Dis Markers** 1989 Jan-Mar;7(1):61-7

False positive results in an enzyme immunometric assay for the ovarian cancer associated antigen CA 125. Mogensen O, et al. **Eur J Cancer Clin Oncol** 1989 Jan;25(1):129-31

Measurement of the ovarian cancer-associated antigen CA 125 prior to second look operation. Mogensen O, et al. **Eur J Cancer Clin Oncol** 1988 Dec;24(12):1835-7

Cancer antigen CA125 in epithelial ovarian cancer: immunohistochemical expression before and after chemotherapy [letter] Redman C, et al. **Eur J Cancer Clin Oncol** 1988 Aug;24(8):1381-2

Inverted T helper/T suppressor lymphocyte ratio is not a reliable indicator of coexistent HIV infection in the presence of carcinoma: report of a patient with ovarian carcinoma and inverted TH/TS ratio. Fromowitz FB, et al. **Gynecol Oncol** 1989 Jul;34(1):119-121

Tissue expression of CA 125 in benign and malignant lesions of ovary and fallopian tube: a comparison with CA 19-9 and CEA. Neunteufel W, et al. **Gynecol Oncol** 1989 Mar; 32(3):297-302

Use of CA 125 to monitor patients with ovarian epithelial carcinomas. Podczaski E, et al. **Gynecol Oncol** 1989 May; 33(2):193-7

Value of serum 125Ca levels: does the result preclude second look? Potter ME, et al. **Gynecol Oncol** 1989 May; 33(2):201-3

A longitudinal study of antigen expression in epithelial ovarian cancer. Rubin SC, et al. **Gynecol Oncol** 1989 Sep; 34(3):389-94

Human monoclonal antibodies directed against ovarian carcinoma. Werner M, et al. **Gynecol Oncol** 1989 Aug; 34(2):148-54

An investigation of NCRC11 immunoreactivity in normal and neoplastic epithelia of the female genital tract and ovary. Hitchcock A, et al. **Histopathology** 1989 Aug; 15(2):187-94

Tumor antigen NB/70K and CA 125 levels in the blood of preoperative ovarian cancer patients and controls: a preliminary report of the use of the NB12123 and CA 125 radioimmunoassays alone and in combination. Knauf S, et al. **Int J Biol Markers** 1988 Apr-Jun;3(2):75-81

Heterogeneity of antigen expression in benign and malignant breast and ovarian epithelial cells. Boyer CM, et al. **Int J Cancer** 1989 Jan 15;43(1):55-60

Re-targeting of human lymphocytes expressing the T-cell receptor gamma/delta to ovarian carcinoma cells by the use of bispecific monoclonal antibodies. Ferrini S, et al. **Int J Cancer** 1989 Aug 15;44(2):245-50

Pre-operative discrimination between benign and malignant ovarian tumors using a combination of CA125 and CA15.3 serum assays. Yedema C, et al. **Int J Cancer Suppl** 1988; 3:61-7

Labelling of monoclonal antibodies 10B, 8C, and M2A with indium-111. Reilly R, et al.

Int J Rad Appl Instrum [A] 1989;40(4):279–83

CA 125 as a tumour marker in epithelial ovarian cancer. Sheehan JD, et al. **Ir J Med Sci** 1989 Jan;158(1):10–3

Characterization of a monoclonal antibody, OVB1, which binds to a unique determinant in human ovarian carcinomas and myeloid cells. Kurrasch RH, et al. **J Histochem Cytochem** 1989 Jan;37(1):57–67

Deletion of histo–blood group A and B antigens and expression of incompatible A antigen in ovarian cancer. Metoki R, et al. **J Natl Cancer Inst** 1989 Aug 2; 81(15):1151–7

Ovarian–tumor–infiltrating lymphocytes: phenotype and antitumor activity. Lotzová E. **Nat Immun Cell Growth Regul** 1988;7(4):226–9

Immunologic control of ovarian cancer. Zighelboim J, et al. **Nat Immun Cell Growth Regul** 1988;7(4):216–25

Lymphocyte activation by recombinant interleukin–2 in ovarian cancer patients. Boyer PJ, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):793–7

CA 125 in peritoneal washings and fluid: correlation with plasma CA 125 and peritoneal cytology. Schwartz PE, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):339–42

Antigens associated with epithelial ovarian carcinomas. Bast RC Jr. **Prog Clin Biol Res** 1989;288:73–83

Characterization of human ovarian cancer lines with a panel of monoclonal antibodies (MoAbs). Molthoff CF, et al. **Strahlenther Onkol** 1989 Jul;165(7):494–5

[The production and identification of OC859—a monoclonal antibody against tumor associated antigen in ovarian epithelial carcinoma] Hu XF. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Nov;23(6):367–9, 388 (Eng. Abstr.) **(Chi)**

[Clinical significance of the measurement of cellular immune status in patients with ovarian malignancies] Ma D, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Mar;23(2):99–101, 128 (Eng. Abstr.) **(Chi)**

[Preparation and characteristics of human monoclonal antibody HMD4 against ovarian epithelial carcinoma] Cui H. **Chung Hua I Hsueh Tsa Chih** 1989 Jan;69(1):46 **(Chi)**

[Reverse hemagglutination (RHA) test for detection of ovarian cancer antigen in serum] Liu WS. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Aug; 10(4):308–9 (Eng. Abstr.) **(Chi)**

[The usefulness and limitation of sugar antigen in ovarian cancers—with special reference to a new tumor marker, CA54/61] Nozawa S. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):1147–51 (Eng. Abstr.) **(Jpn)**

[Monoclonal antibodies raised against cultured cells and their application in cancer diagnosis] Nozawa S, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–3):1858–63 (Eng. Abstr.) **(Jpn)**

[Distribution of oncotrophoblast antigens defined by monoclonal antibodies] Inoue R. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Dec; 40(12):1837–43 (Eng. Abstr.) **(Jpn)**

[Changes in CA125 concentration in ovarian cancer patients during the remission state—mean attenuating curve and the effectiveness of surgery and chemotherapy] Kawai M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 May; 41(5):537–42 (Eng. Abstr.) **(Jpn)**

[Biochemical indicators of neoplasms of the female genital organs] Kamiński K. **Ginekol Pol** 1988 Jun;59(6):376–80 (19 ref.) (Eng. Abstr.) **(Pol)**

[The dosage of CA 125 in carcinoma of the ovary and other solid neoplasms] Scheinberg MA, et al. **Rev Paul Med** 1988 May–Jun;106(3):145–6 (Eng. Abstr.) **(Por)**

[Immunologic aspects of ovarian tumors] Makarov OV, et al. **Akush Ginekol (Mosk)** 1988 Nov;(11):3–6 (48 ref.) **(Rus)**

[The interferon–natural killer cell system of patients with ovarian tumors] Sorokin AM, et al. **Akush Ginekol (Mosk)** 1988 May;(5):23–7 (Eng. Abstr.) **(Rus)**

[Distribution of one of the ascitic fluid antigens of ovarian cancer patients in malignant tumors of the stomach and intestines] Sergeeva NS, et al. **Eksp Onkol** 1989;11(2):35–7 (Eng. Abstr.) **(Rus)**

[CA 125, a marker of ovarian epithelial tumors] Ruibal A. **Med Clin (Barc)** 1988 Jun 4;91(2):54–7 (44 ref.) **(Spa)**

METABOLISM

Immunohistochemical differentiation of clear–cell carcinoma of the female genital tract and endodermal sinus tumor with the use of alpha–fetoprotein and Leu–M1. Zirker TA, et al. **Am J Clin Pathol** 1989 May;91(5):511–4

Ectopic beta–human chorionic gonadotropin production by a dermoid cyst. Downey GP, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):449–51

Comparison of lipid content, surface membrane fluidity, and temperature dependence of cis–diamminedichloroplatinum(II) accumulation in sensitive and resistant human ovarian carcinoma cells. Mann SC, et al. **Anticancer Res** 1988 Nov–Dec;8(6):1211–5

Regulation and turnover of cellular retinol–binding protein in a xenografted human ovarian tumour. Wahlberg P, et al. **Anticancer Res** 1989 Jan–Feb;9(1):181–7

Disposition of cyclophosphamide on two consecutive cycles of treatment in patients with ovarian carcinoma. Erlichman C, et al. **Arzneimittelforschung** 1988 Jun;38(6):839–42

Photoaffinity labelling of gonadotropin releasing hormone binding sites in human epithelial ovarian carcinomata. Pahwa GS, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1086–92

Binding of anti–EMA, AGF 4:48 and the lectin UEA–1 to human ovarian carcinomas: histological and clinical correlations. Bradgate MG, et al. **Br J Obstet Gynaecol** 1989 Jul;96(7):854–60

Synthesis and release of glycoconjugates in vitro by human ovarian carcinoma cells isolated from effusions. Allen HJ, et al. **Cancer Biochem Biophys** 1989 May;10(3):219–26

Binding parameters of monoclonal antibodies reacting with ovarian carcinoma ascites cells. Mattes MJ, et al. **Cancer Immunol Immunother** 1989;28(3):199–207

Determination of intracellular reduced glutathione and glutathione related enzyme activities in cisplatin–sensitive and resistant experimental ovarian carcinoma cell lines. Chen G, et al. **Cancer Lett** 1989 Aug;46(3):207–11

Biodistribution of indium–111–labeled OC 125 monoclonal antibody intraperitoneally injected into patients operated on for ovarian carcinomas. Chatal JF, et al. **Cancer Res** 1989 Jun 1;49(11):3087–94

Resistance to etoposide induced by three glucose–regulated stresses in Chinese hamster ovary cells. Hughes CS, et al. **Cancer Res** 1989 Aug 15;49(16):4452–4

Transport and metabolism of 1–beta–D–arabinofuranosylcytosine in human ovarian adenocarcinoma cells. Jamieson GP, et al. **Cancer Res** 1989 Jan 15;49(2):309–13

Biodistribution of indium–111–labeled OC 125 monoclonal antibody after intraperitoneal injection in nude mice intraperitoneally grafted with ovarian carcinoma. Thédrez P, et al. **Cancer Res** 1989 Jun 1;49(11):3081–6

Aromatization of testosterone by epithelial tumor cells cultured from patients with ovarian carcinoma. Thompson MA, et al. **Cancer Res** 1988 Nov 15;48(22):6491–7

Advances in immunohistochemistry of ovarian tumours. Saksela E. **Curr Top Pathol** 1989;78:135–55 (111 ref.)

Gonadotropin releasing hormone binding sites in human epithelial ovarian carcinomata. Emons G, et al. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):215–21

Some observations on the effect of a GnRH analog in ovarian cancer. Jäger W, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Aug;32(2):137–48

Steroid receptors and ovarian tumors: variation within primary tumors and between primary tumors and metastases. Quinn MA, et al. **Gynecol Oncol** 1988 Nov; 31(3):424–9

Cytokeratin patterns in the epidermis of human ovarian mature cystic teratomas. Czernobilsky B, et al. **Hum Pathol** 1989 Feb;20(2):185–92

Leydig cell tumor of the ovary associated with endometrial carcinoma and containing 17 beta–hydroxysteroid dehydrogenase. Ichinohasama R, et al. **Int J Gynecol Pathol** 1989;8(1):64–71

An immunohistochemical study of the incidence and significance of sex steroid hormone binding sites in normal and neoplastic human ovarian tissue. al–Timimi A, et al. **Int J Gynecol Pathol** 1985;4(1):24–41

Differential cyclic AMP responses to calcitonin among human ovarian carcinoma cell lines: a calcitonin–responsive line derived from a rare tumor type. Upchurch KS, et al. **J Bone Miner Res** 1986 Jun;1(3):299–304

The occurrence of epidermal growth factor receptors and the characterization of EGF–like factors in human ovarian, endometrial, cervical and breast cancer. EGF receptors and factors in gynecological carcinomas. Bauknecht T, et al. **J Cancer Res Clin Oncol** 1989;115(2):193–9

Simultaneous stimulation of urokinase and tissue–type plasminogen activators by phorbol esters in human ovarian carcinoma cells. Band V, et al. **J Cell Physiol** 1989 Jan; 138(1):106–14

Constitutive production of macrophage colony–stimulating factor by human ovarian and breast cancer cell lines. Ramakrishnan S, et al. **J Clin Invest** 1989 Mar;83(3):921–6

The presence of a hitherto undefined high–capacity androgen binding macromolecule in human ovarian cancer tissue. Slotman BJ, et al. **J Steroid Biochem** 1989 Jul;33(1):105–9

Frequency of alpha–fetoprotein production by Sertoli–Leydig cell tumors of the ovary: an immunohistochemical study of eight cases. Gagnon S, et al. **Mod Pathol** 1989 Jan;2(1):63–7

Cancer cachexia. **Nutr Rev** 1988 Nov;46(11):385–8 (20 ref.)

Cancer antigens are expressed in a carcinogen–transformed Bloom syndrome B–lymphoblastoid cell line. Shiraishi Y, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8211–5

Synthesis and release of glycoconjugates bearing N–linked oligosaccharides by ovarian carcinoma cells isolated from effusions. Allen HJ, et al. **Tumour Biol** 1989;10(2):95–102

[Reduced cisplatin–uptake by cisplatin–resistant human ovarian cancer cells] Kikuchi Y, et al. **Gan To Kagaku Ryoho** 1988 Oct;15(10):2895–8 (Eng. Abstr.) **(Jpn)**

[Possibility of achieving the Pasteur effect by ascites carcinoma cells in vivo] Tagi–zade SB, et al. **Vopr Med Khim** 1971 Jul–Aug;17(4):407–11 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Human papillomavirus and epithelial ovarian neoplasia. Leake JF, et al. **Gynecol Oncol** 1989 Sep;34(3):268–73

MORTALITY

Cytofluorometric analysis of the DNA content in ovarian carcinoma and its relationship to patient survival. Murray K, et al. **Cancer** 1989 Jun 15;63(12):2456–60

Ovarian cancer 1976 and 1981. A tumor registry study. Lawrence R. **Conn Med** 1988 Aug;52(8):470–3

Survival after second–look laparotomy in advanced ovarian epithelial cancer. Study of 86 patients. de Gramont A, et al. **Eur J Cancer Clin Oncol** 1989 Mar;25(3):451–7

A meta–analysis of prognostic factors in advanced ovarian cancer with median survival and overall survival (measured with the log (relative risk] as main objectives. Voest EE, et al. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):711–20

Predictive factors for long–term survival in patients with advanced ovarian cancer. Krag KJ, et al. **Gynecol Oncol** 1989 Jul;34(1):88–93

Three–year prospect of patients with common epithelial carcinoma of the ovary. Mizuno K, et al. **Gynecol Oncol** 1989 Jul;34(1):70–4

Survival time, causes of death, and tumor/treatment–related morbidity in 100 women with ovarian cancer. Dvoretsky PM, et al. **Hum Pathol** 1988 Nov;19(11):1273–9

Endometrioid and clear cell carcinoma of the ovary. Factors affecting survival. Brescia RJ, et al. **Int J Gynecol Pathol** 1989;8(2):132–8

Predictability of the survival of patients with advanced ovarian cancer. van Houwelingen JC, et al. **J Clin Oncol** 1989 Jun;7(6):769–73

Influence of cellular DNA content on survival in ovarian carcinoma. Klemi PJ, et al. **Obstet Gynecol** 1989 Aug; 74(2):200–4

[Analysis of factors influencing prognosis in patients with advanced ovarian cancer] Kobayashi H. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 May; 41(5):564–70 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Lymphocyte subpopulations in malignant ascites of serous papillary ovarian adenocarcinoma. An immunocytochemical study. Guzman J, et al. **Acta Cytol** 1988 Nov–Dec;32(6):811–5

The influence of Romanowsky–Giemsa type of stains on the nuclear texture of desoxyribonuclease–treated cytological preparations. Wittekind D, et al. **Acta Histochem Suppl (Jena)** 1989;37:131–7

A case of ovarian leiomyoma. Sonobe H, et al. **Acta Med Okayama** 1989 Apr;43(2):131–4

Sex cord nests with annular tubules. The incidence of identifying them in normal ovaries. Delides GS, et al. **Acta Morphol Hung** 1988;36(1–2):3–6

The study of steroid hormones in epithelial ovarian tumours. Péter I, et al. **Acta Morphol Hung** 1988;36(1–2):133–40

Microglial and neural differentiation in human teratomas. Sangruchi T, et al. **Acta Neuropathol (Berl)** 1989; 78(3):258–63

Reimplantation of a benign ovarian tumor. Asmussen M, et al. **Acta Obstet Gynecol Scand** 1988;67(5):473–4

Cystic juvenile granulosa cell tumor of the ovary. Spaun E, et al. **Acta Obstet Gynecol Scand** 1988;67(2):177–80

Staging and treatment of ovarian carcinoma. De Palo G. **Acta Oncol** 1989;28(2):163–76 (139 ref.)

A case of ovarian granulosa cell tumor with invasive adenocarcinoma of the endometrium. A case report and review of the Japanese literature. Nakamura S, et al. **Acta Pathol Jpn** 1988 Jul;38(7):947–51 (13 ref.)

Interactions of invasive cells with native and modified extracellular matrix in vitro. Bracke M, et al. **Adv Exp Med Biol** 1988;233:171–8

Ovarian small cell carcinoma. Histogenetic considerations based on immunohistochemical and other findings. Aguirre P, et al. **Am J Clin Pathol** 1989 Aug;92(2):140–9

Hepatoblastoma in an adult with metastasis to the ovaries. Green LK, et al. **Am J Clin Pathol** 1989 Jul;92(1):110–5

Tumor markers for ovarian cancer. A comparative immunohistochemical and immunocytochemical study of two commercial monoclonal antibodies (OV632 and OC125). Koelma IA, et al. **Am J Clin Pathol** 1988 Oct; 90(4):391–6

Immature neural elements in immature teratomas. An immunohistochemical and ultrastructural study. Vance RP, et al. **Am J Clin Pathol** 1988 Oct;90(4):397–411

Ovarian relapse in a young woman with acute lymphoblastic leukaemia. Heaton DC, et al. **Am J Hematol** 1989 Jan; 30(1):42–3

Ovarian relapse in a young woman with acute lymphoblastic leukemia [letter] Stavem P, et al. **Am J Hematol** 1989 Oct; 32(2):155

Advanced primary ovarian carcinoma in pregnancy. Altaras M, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1210–1

Borderline ovarian tumors. Chambers JT, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1088–94

Synergistic cytotoxicity between dimethyl sulfoxide and antineoplastic agents against ovarian cancer in vitro. Pommier RF, et al. **Am J Obstet Gynecol** 1988 Oct; 159(4):848–52

Cytogenetic observations of a human ovarian carcinoma clinically resistant to therapy. Rotmensch J, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1099–103

Squamous cell carcinoma arising in mature cystic teratoma of the ovary. Clinicopathologic and topographic analysis. Hirakawa T, et al. **Am J Surg Pathol** 1989 May;

13(5):397–405
Serous surface papillary carcinoma. A clinicopathologic study of 10 cases and comparison with stage III–IV ovarian serous carcinoma. Mills SE, et al. **Am J Surg Pathol** 1988 Nov;12(11):827–34
Comparison of growth inhibition of a human ovarian adenocarcinoma cell line by free monoclonal antibodies and their corresponding antibody–recombinant ricin A chain immunotoxins. Ettenson D, et al. **Anticancer Res** 1988 Jul–Aug;8(4):833–8
Herpetiform cutaneous metastases following negative second look laparatomy for ovarian adenocarcinoma. Patsner B, et al. **Arch Gynecol Obstet** 1988;244(1):63–7
Juvenile granulosa cell tumors of the ovary. Biscotti CV, et al. **Arch Pathol Lab Med** 1989 Jan;113(1):40–6
Sclerosing stromal tumor of the ovary. Immunohistochemical and electron–microscopic demonstration of smooth–muscle differentiation. Saitoh A, et al. **Arch Pathol Lab Med** 1989 Apr;113(4):372–6
Hyperreactio luteinalis. Benign disorder masquerading as an ovarian neoplasm. Wajda KJ, et al.
Arch Pathol Lab Med 1989 Aug;113(8):921–5 (50 ref.)
An unusual malignancy arising in a benign cystic teratoma of the ovary. Escoffery CT, et al.
Aust N Z J Obstet Gynaecol 1989 Feb;29(1):85–7 (8 ref.)
A tumour–marker combination versus second–look surgery in ovarian cancer. I. Clinical experience. Lahousen M, et al. **Baillieres Clin Obstet Gynaecol** 1989 Mar;3(1):201–8 (5 ref.)
Prognostic implications of residual tumour volume in stage III ovarian cancer patients undergoing adjuvant cytotoxic chemotherapy. Petru E, et al.
Baillieres Clin Obstet Gynaecol 1989 Mar;3(1):109–17 (26 ref.)
The spread of ovarian cancer. Pickel H, et al.
Baillieres Clin Obstet Gynaecol 1989 Mar;3(1):3–12 (12 ref.)
Intraoperative staging in ovarian cancer. Sevin BU.
Baillieres Clin Obstet Gynaecol 1989 Mar;3(1):13–21 (15 ref.)
A tumour–marker combination versus second–look surgery in ovarian cancer. II. Mathematical model. Stettner H.
Baillieres Clin Obstet Gynaecol 1989 Mar;3(1):209–12
A carboranyl porphyrin for boron neutron capture therapy of brain tumors. Kahl SB, et al. **Basic Life Sci** 1989; 50:193–203
Risk factors in ovarian cancer of epithelial origin by pathological diagnosis. Koch M. **Br J Cancer** 1989 Feb; 59(2):257–8
Growth and radiation sensitivity of the MLS human ovarian carcinoma cell line grown as multicellular spheroids and xenografted tumours. Rofstad EK, et al. **Br J Cancer** 1989 Jan;59(1):28–35
Mesothelial cells stimulate the anchorage–independent growth of human ovarian tumour cells. Wilson AP.
Br J Cancer 1989 Jun;59(6):876–82
Ovarian fibromatosis with minor sex cord elements. Case report. Byrne P, et al. **Br J Obstet Gynaecol** 1989 Feb; 96(2):245–8
Peritoneal implants of ovarian serous borderline tumors. Histologic features and prognosis. Bell DA, et al.
Cancer 1988 Nov 15;62(10):2212–22
Cell kinetics in ovarian cancer. Relationship to clinicopathologic features, responsiveness to chemotherapy, and survival. Conte PF, et al. **Cancer** 1989 Sep 15;64(6):1188–91
Nuclear reactivity for estrogen. A possible diagnostic tool in differentiating colon cancer metastases in the ovary from primary mucinous ovarian tumors. Darwish SA, et al.
Cancer 1988 Nov 15;62(10):2203–6
Characterization of ovarian dysplasia by interactive morphometry. Deligdisch L, et al. **Cancer** 1989 Feb 15; 63(4):748–55
Tenckhoff catheter cytology in patients with ovarian cancer. Geisinger KR, et al. **Cancer** 1988 Oct 15;62(8):1582–5
Endodermal sinus tumor and mucinous cystadenofibroma of the ovary. Occurrence in an 82–year–old woman. Mazur MT, et al. **Cancer** 1988 Nov 1;62(9):2011–5
Cytotoxic and cytostatic effects of the streptococcal preparation OK–432 and its subcellular fractions on human ovarian tumor cells. Nio Y, et al. **Cancer** 1989 Jul 15; 64(2):434–41
Transitional cell carcinoma in high–grade high–stage ovarian carcinoma. An indicator of favorable response to chemotherapy. Robey SS, et al. **Cancer** 1989 Mar 1; 63(5):839–47
Metastatic patterns in histologic variants of ovarian cancer. An autopsy study. Rose PG, et al. **Cancer** 1989 Oct 1; 64(7):1508–13
Simultaneous soft agar cloning of ascites and solid tumor specimens from patients with ovarian cancer. Sridhar KS, et al. **Cancer** 1988 Oct 15;62(8):1577–81
Response to inhibition of androgen action of human ovarian cancer cells in vitro. Slotman BJ, et al. **Cancer Lett** 1989 Jun;45(3):213–20
Establishment and characterization of a human ovarian neoplastic cell line, DO–s. Briers TW, et al.
Cancer Res 1989 Sep 15;49(18):5153–61
Effect of sodium butyrate and other differentiation inducers on poorly differentiated human ovarian adenocarcinoma cell lines. Langdon SP, et al. **Cancer Res** 1988 Nov 1; 48(21):6161–5
Characterization and properties of nine human ovarian adenocarcinoma cell lines. Langdon SP, et al.
Cancer Res 1988 Nov 1;48(21):6166–72
Increased DNA repair as a mechanism of acquired resistance to cis–diamminedichloroplatinum (II) in human ovarian cancer cell lines. Masuda H, et al. **Cancer Res** 1988 Oct 15;48(20):5713–6
Borderline mucinous and serous tumors of ovary. Tang SE, et al. **Chin Med J [Engl]** 1988 May;101(5):334–8
Sclerosing stromal tumor of the ovary report of a case. Ho DM, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Aug; 40(2):271–4
A case of struma ovarii in a 92–year–old woman. D'Addato F, et al. **Clin Exp Obstet Gynecol** 1989;16(1):3–5
Pathology of endometriosis. Gerbie AB, et al.
Clin Obstet Gynecol 1988 Dec;31(4):779–86 (48 ref.)
Surgical staging of ovarian tumours: the individual and integrative roles of the oncologist and pathologist. Adcock LL, et al. **Curr Top Pathol** 1989;78:41–68 (137 ref.)
Ovarian tumours in laboratory and domestic animals. Damjanov I. **Curr Top Pathol** 1989;78:1–10 (43 ref.)
Prognostic significance of pathologic features of ovarian carcinoma. Silverberg SG. **Curr Top Pathol** 1989;78:85–109 (54 ref.)
Ciliated ovarian adenocarcinoma cells in ascitic fluid cytology: report of a case with immunocytochemical features. Kobayashi TK, et al. **Diagn Cytopathol** 1988; 4(3):234–8
Adenosquamous–cell carcinoma of the ovary: report of a case with positive peritoneal fluid cytology. Kornacki S, et al.
Diagn Cytopathol 1989;5(1):79–83
Fine–needle aspiration of spleen: diagnosis of a solitary ovarian metastasis. Nosanchuk JS, et al.
Diagn Cytopathol 1988;4(2):159–61
Uncommon histological variants of clear cell carcinoma of the ovary. Report of two cases with immunohistochemical and ploidy studies. Betta PG, et al.
Eur J Gynaecol Oncol 1988;9(5):431–4
Multifocal extraovarian serous carcinoma. A histochemical and immunohistochemical study. Resta L, et al.
Eur J Gynaecol Oncol 1988;9(6):474–8
Possibilities and progress of quantitative pathological examination of ovarian tumours. Baak JP.
Eur J Obstet Gynecol Reprod Biol 1988 Nov;29(3):183–9
Malignant transformation in benign cystic teratomas: dermoids of the ovary [corrected and republished article originally printed in Eur J Obstet Gynecol Reprod Biol 1988 Nov;29(3):197–206] Chadha S, et al.
Eur J Obstet Gynecol Reprod Biol 1988 Dec;29(4):329–38
Collagen type III in ovarian tumors. Histological, immunohistochemical and ultrastructural findings.
Stenbäck F. **Eur J Obstet Gynecol Reprod Biol** 1989 Jan; 30(1):73–88
Morphometric investigations in experimental ovarian endometriosis. Palatyński A. **Ginekol Pol** 1988 Dec; 59(12):713–8
Prognostic assessment in stage I ovarian cancer using a discriminant analysis with clinicopathological and DNA flow cytometric data. Punnonen R, et al.
Gynecol Obstet Invest 1989;27(4):213–6
Solid teratomas and mixed müllerian tumors of the ovary: a clinical, histological, and immunocytochemical comparative study. Calame JJ, et al. **Gynecol Oncol** 1989 May;33(2):212–21
Characterization of human ovarian and endometrial carcinoma cell lines established on extracellular matrix. Crickard K, et al. **Gynecol Oncol** 1989 Feb;32(2):163–73
Adenocarcinoma of the endometrium and endometrioid carcinoma of the ovary associated with pregnancy. Hoffman MS, et al. **Gynecol Oncol** 1989 Jan;32(1):82–5
Clear cell adenocarcinoma of the ovary: a clinical analysis and comparison with serous carcinoma. Jenison EL, et al.
Gynecol Oncol 1989 Jan;32(1):65–71 (43 ref.)
Clinicopathologic study of squamous cell carcinoma of the ovary. Kashimura M, et al. **Gynecol Oncol** 1989 Jul; 34(1):75–9
Inhibition of human ovarian cancer cell proliferation in vitro by neuroendocrine hormones. Kikuchi Y, et al.
Gynecol Oncol 1989 Jan;32(1):60–4
Intestinal variant of ovarian endodermal sinus tumor. Kim CR, et al. **Gynecol Oncol** 1989 Jun;33(3):379–81
Synergistic effects of cis–platinum and cytosine arabinoside on ovarian carcinoma cell lines, demonstrated by dual–parameter flow cytometry. Kingston RE, et al.
Gynecol Oncol 1989 Mar;32(3):282–7
Phenotypic and functional characteristics of mononuclear cells in ovarian carcinoma tumors. Lentz SS, et al.
Gynecol Oncol 1989 Aug;34(2):136–40
Multiple neuroectodermal tumors arising in a mature cystic teratoma of the ovary. Oláh KS, et al. **Gynecol Oncol** 1989 Aug;34(2):222–5
Synchronous carcinomas of endometrium and ovary. Piura B, et al. **Gynecol Oncol** 1989 May;33(2):261–4
Characterization of a hormone–producing ovarian carcinoma cell line. Poels LG, et al. **Gynecol Oncol** 1989 Feb; 32(2):203–14
Malignant struma ovarii. Rosenblum NG, et al.
Gynecol Oncol 1989 Feb;32(2):224–7
A clinical appraisal of stage I mucinous carcinoma of the ovary. Soeters R, et al. **Gynecol Oncol** 1989 May; 33(2):222–4
Establishment and characterization of a human ovarian endodermal sinus tumor cell line—producing specific type of alpha–fetoprotein subfraction [letter] Talerman A.
Gynecol Oncol 1988 Oct;31(2):367–8
Clinicopathologic features of ovarian mixed mesodermal tumors and carcinosarcomas. Terada KY, et al.
Gynecol Oncol 1989 Feb;32(2):228–32
Primary staging in ovarian tumors of low malignant potential. Yazigi R, et al. **Gynecol Oncol** 1988 Nov;31(3):402–8
Prognosis of ovarian carcinomas: prediction by histoquantitative methods. Haapasalo H, et al.
Histopathology 1989 Aug;15(2):167–78
Pneumatosis cystoides–like appearances in a mature cystic teratoma of the ovary. Maudsley G, et al.
Histopathology 1989 Apr;14(4):420–2
A case of ovarian fibromatosis with disseminated intra–abdominal fibromatosis. Roche WR, et al.
Histopathology 1989 Jan;14(1):101–7
Trophoblastic differentiation in a malignant mixed mesodermal tumor of the ovary. Barua R, et al.
Hum Pathol 1988 Oct;19(10):1235–6
Female splenic–gonadal fusion of the discontinuous type. Meneses MF, et al. **Hum Pathol** 1989 May;20(5):486–8
Ovarian gonadoblastoma with dysgerminoma in a woman with two normal children. Nakashima N, et al.
Hum Pathol 1989 Aug;20(8):814–6
Characteristics of "embryoid body" in human gonadal germ cell tumors. Nakashima N, et al. **Hum Pathol** 1988 Oct; 19(10):1144–54
Brenner tumor of the ovary: a correlative histologic, histochemical, immunohistochemical, and ultrastructural investigation. Santini D, et al. **Hum Pathol** 1989 Aug; 20(8):787–95
Development and characterization of a human cell line from an ovarian mixed Müllerian tumor (carcinosarcoma). van Haaften–Day C, et al. **In Vitro Cell Dev Biol** 1988 Oct; 24(10):965–71
Gliomatosis peritonei: a rare complication of malignant ovarian teratoma. Vijayaraghavan M, et al.
Indian J Pathol Microbiol 1987 Oct;30(4):383–6
Intraperitoneal and subcutaneous xenografts of human ovarian carcinoma in nude mice and their potential in experimental therapy. Massazza G, et al. **Int J Cancer** 1989 Sep 15;44(3):494–500
Marker profile of mesothelial cells versus ovarian carcinoma cells. van Niekerk CC, et al. **Int J Cancer** 1989 Jun 15; 43(6):1065–71
Brenner tumor as encountered in a southern Nigerian Hospital. Briggs ND, et al. **Int J Gynaecol Obstet** 1988 Dec;27(3):455–8
Torsion of ovarian tumors: a clinicopathological study. Lee CH, et al. **Int J Gynaecol Obstet** 1989 Jan;28(1):21–5
Malignant ovarian tumors associated with pregnancy: report of six cases. Matsuyama T, et al. **Int J Gynaecol Obstet** 1989 Jan;28(1):61–6
Small cell carcinoma of the ovary. A report of six cases. Abeler V, et al. **Int J Gynecol Pathol** 1988;7(4):315–29
A new histologic grading index in ovarian carcinoma. Bichel P, et al. **Int J Gynecol Pathol** 1989;8(2):147–55
Extrauterine pelvic malignant mixed mesodermal tumors. A study of 10 cases with immunohistochemistry. Deligdisch L, et al. **Int J Gynecol Pathol** 1988;7(4):361–72
Immunohistochemistry in the differential diagnosis in the second–look operation for ovarian carcinomas. Manivel JC, et al. **Int J Gynecol Pathol** 1989;8(2):103–13
Giant fibrosarcoma of the ovary. Miles PA, et al.
Int J Gynecol Pathol 1985;4(1):83–7
Ovarian clear cell carcinoma. A clinicopathologic analysis of 44 cases. Montag AG, et al. **Int J Gynecol Pathol** 1989; 8(2):85–96
Epithelial hyperplasia of the fallopian tube. Its association with serous borderline tumors of the ovary. Robey SS, et al. **Int J Gynecol Pathol** 1989;8(3):214–20
Cysts (cystadenomas) and tumors of the rete ovarii. Rutgers JL, et al. **Int J Gynecol Pathol** 1988;7(4):330–42
Demonstration of neuroendocrine cells in ovarian mucinous tumors. Sasaki E, et al. **Int J Gynecol Pathol** 1989; 8(3):189–200
Serous papillary carcinomas arising from the peritoneum and ovaries. A clinicopathologic and immunohistochemical comparison. Wick MR, et al. **Int J Gynecol Pathol** 1989; 8(3):179–88
Primary mucinous carcinoid tumor of the ovary. A case report. Wolpert HR, et al. **Int J Gynecol Pathol** 1989; 8(2):156–62
Calcified thecomas in young women. A report of four cases. Young RH, et al. **Int J Gynecol Pathol** 1988;7(4):343–50 (36 ref.)
Urothelial and ovarian carcinomas of identical cell types: problems in interpretation. A report of three cases and review of the literature. Young RH, et al.
Int J Gynecol Pathol 1988;7(3):197–211 (33 ref.)
Isolation by flow cytometry of a human ovarian tumor cell subpopulation exhibiting a high glutathione content phenotype and increased resistance to adriamycin. Lee FY, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1315–9
Sarcoma–like nodules in cystic ovarian tumours [letter] McCullough J, et al. **J Clin Pathol** 1988 Sep;41(9):1028–9
Correlation of hormone receptors with histologic differentiation in ovarian carcinoma. Nestok BR, et al.
J Fla Med Assoc 1988 Nov;75(11):731–3
Endometriosis during pregnancy: report of 3 cases. Sutthijumroon S, et al. **J Med Assoc Thai** 1989 May; 72(5):284–7

Adenocarcinoma in a mature cystic teratoma. A case report. Malviya VK, et al. **J Reprod Med** 1989 Feb;34(2):183–6
Ultrasound manifestation of metastatic perihepatic calcifications from ovarian carcinoma [letter] Pombo F, et al. **JCU** 1989 May;17(4):304–6
Andreblastoma in a five-year-old girl. Kawagoe K, et al. **Jpn J Clin Oncol** 1989 Jun;19(2):149–52
Ovarian involvement as an initial manifestation of malignant lymphoma. Yamane T, et al. **Jpn J Clin Oncol** 1989 Jun; 19(2):163–6
Immunohistochemistry of a spontaneous murine ovarian teratoma with neuroepithelial differentiation. Neuron-associated beta-tubulin as a marker for primitive neuroepithelium. Caccamo D, et al. **Lab Invest** 1989 Mar; 60(3):390–8
Evaluation of automated estimation of epithelial volume and its prognostic value in ovarian tumors. Schipper NW, et al. **Lab Invest** 1989 Aug;61(2):228–34
Tumour cell morphometry and response to chemotherapy in ovarian cancer [letter] Weger AR, et al. **Lancet** 1988 Oct 29;2(8618):1020–1
A histiocytoid (epithelioid) vascular tumor of the ovary: occurrence within a benign cystic teratoma. Madison JF, et al. **Mod Pathol** 1989 Jan;2(1):55–8
Surgical pathology of the ovary: a review of selected tumors. Tavassoli FA, et al. **Mod Pathol** 1988 Mar;1(2):140–67 (116 ref.)
Serous tumor of low malignant potential with early stromal invasion (serous LMP with microinvasion). Tavassoli FA. **Mod Pathol** 1988 Nov;1(6):407–14
Pure gonadal dysgenesis and gonadal tumors: report of three cases and review of literature. Delighdisch L, et al. **Mt Sinai J Med (NY)** 1988 Sep;55(4):313–7 (13 ref.)
Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 34–1989. A 74-year-old woman with vertigo and an adnexal mass. **N Engl J Med** 1989 Aug 24;321(8):524–35
Antitumor activity of cisplatin analogs against malignant ovarian tumor xenografts into nude mice. Hamaguchi K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Nov; 40(11):1755–9
Normal-sized ovary carcinoma syndrome. Feuer GA, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):786–92
Peritoneal cytology as an indicator of disease in patients with residual ovarian carcinoma [letter; comment] McGowan L. **Obstet Gynecol** 1989 Jan;73(1):136–7. **Comment on:** Obstet Gynecol 1988 Jun;71(6 Pt 1):851–3
Estrogen and anti-estrogen effects on the growth of human epithelial ovarian cancer in vitro. Nash JD, et al. **Obstet Gynecol** 1989 Jun;73(6):1009–16
Inhibition of ovarian cancer cell proliferation in vivo and incorporation of 3H-thymidine in vitro after follicle regulatory protein administration. Rodgers KE, et al. **Obstet Gynecol** 1989 Jan;73(1):66–74
The pathology and biologic behavior of ovarian cancer. An autopsy review. Dvoretsky PM, et al. **Pathol Annu** 1989; 24 Pt 1:1–24 (35 ref.)
Serous surface carcinoma of the ovary and peritoneum. A flow cytometric study. Rutledge ML, et al. **Pathol Annu** 1989;24 Pt 2:227–35
Ovarian tumorlike structures, biovular follicles, and binucleated oocytes in children: their frequency and possible pathologic significance. Manivel JC, et al. **Pediatr Pathol** 1988;8(3):283–92
Juvenile granulosa cell tumor. Scully RE. **Pediatr Pathol** 1988;8(4):423–7
Retroconversion of malignancy of ovarian immature teratoma. Lian LJ, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(2):79–83
Surgical staging of carcinoma of the ovaries. Buchsbaum HJ, et al. **Surg Gynecol Obstet** 1989 Sep;169(3):226–32
Ovarian epithelial tumors of low malignant potential. Chien RT, et al. **Surg Gynecol Obstet** 1989 Aug;169(2):143–6
Serous papillary adenocarcinoma of the ovary in a Nigerian child. Akinola O, et al. **Trop Geogr Med** 1988 Jul; 40(3):251–3
Isolated central nervous system metastasis from ovarian carcinoma: a case report. Bonardi G, et al. **Tumori** 1989 Apr 30;75(2):181–2
Primary melanoma of the ovary in a 25 year old primigravida—a case report. Shroff CP, et al. **Tumori** 1989 Feb 28;75(1):72–5
Benign cystic ovarian teratoma with lung differentiation. Pruszczyński M, et al. **Zentralbl Allg Pathol** 1988; 134(7):687–9
Cartilaginous teratoma of the ovary. Hrabowska M, et al. **Zentralbl Gynakol** 1989;111(11):761–5
[Pathologic study and prognostic factors in 28 patients with ovarian immature teratoma] Zhang CH, et al. **Chung Hua Chung Liu Tsa Chih** 1988 May;10(3):209–12 (Eng. Abstr.) **(Chi)**
[A suggestion for substaging of stage III ovarian cancer: an analysis of 132 cases] Sun AD. **Chung Hua Fu Chan Ko Tsa Chih** 1988 May;23(3):164–5, 190 (Eng. Abstr.) **(Chi)**
[Experimental heterotransplantation of human ovarian tumors in nude mice] Wei LH. **Chung Hua Fu Chan Ko Tsa Chih** 1989 Jan;24(1):32–4, 58–9 (Eng. Abstr.) **(Chi)**
[Endometrioid carcinoma of the ovary: clinicopathologic analysis in 87 cases] Zhu GZ. **Chung Hua Fu Chan Ko Tsa Chih** 1989 Mar;24(2):94–7, 124–5 (Eng. Abstr.) **(Chi)**
[Hilus cell tumors of the ovary] Motlík K, et al. **Cesk Patol** 1988 Aug;24(3):144–60 (Eng. Abstr.) **(Cze)**
[Malignant mesodermal mixed tumor of the ovary with neuro-ectodermic differentiation] Fetissof F, et al. **Ann Pathol** 1989;9(3):204–8 (21 ref.) (Eng. Abstr.) **(Fre)**
[Anatamo-pathological aspects of malignant ovarian tumors in children. Apropos of 16 cases] Makni MK, et al. **Arch Inst Pasteur Tunis** 1988 Jan-Apr;65(1-2):87–98 (Eng. Abstr.) **(Fre)**
[Clinical aspects and prognosis of granulosa cell tumors of the ovary] Scharl A, et al. **Geburtshilfe Frauenheilkd** 1988 Aug;48(8):567–73 (Eng. Abstr.) **(Ger)**
[Ovarian cancer cells and interferon: aspects of a biological network] Marth C, et al. **Gynakol Rundsch** 1988;28 Suppl 2:199–200 **(Ger)**
[Case report on the differential diagnosis of hyperandrogenism: adrenal or ovarian origin?] Saeger W. **Pathologe** 1988 Nov;9(6):345–50 **(Ger)**
[Involvement of pelvic lymph nodes in ovarian cancer] Seitzer D, et al. **Zentralbl Gynakol** 1988;110(18):1132–7 (Eng. Abstr.) **(Ger)**
[Lipid- (lipoid-) cell tumor of the ovary] Zahradka M, et al. **Zentralbl Gynakol** 1988;110(16):1043–5 (Eng. Abstr.) **(Ger)**
[Adenocarcinoma of the appendix. Presentation of a case] Arlandini A, et al. **Minerva Chir** 1988 Jun 30;43(12):1083–5 (Eng. Abstr.) **(Ita)**
[Embryonal carcinoma of the ovary. Anatomo-clinical aspects and presentation of a case] Maffeo A, et al. **Minerva Ginecol** 1989 May;41(5):241–5 (Eng. Abstr.) **(Ita)**
[The use of biological markers in the differential diagnosis in the staging of ovarian neoplasms] Nigro G, et al. **Minerva Ginecol** 1988 Apr;40(4):227–9 (Eng. Abstr.) **(Ita)**
[Laparoscopy and ovarian cancer] Tolino A, et al. **Minerva Ginecol** 1988 Jun;40(6):341–6 (Eng. Abstr.) **(Ita)**
[A clinicopathological study of advanced ovarian cancers without an enlargement of the ovaries] Kawagoe K, et al. **Gan No Rinsho** 1989 Jan;35(1):46–50 (Eng. Abstr.) **(Jpn)**
[Synchronous double cancers in the ovary and kidney—a case report] Myoga H, et al. **Gan No Rinsho** 1988 Nov; 34(14):2007–14 (Eng. Abstr.) **(Jpn)**
[An alpha-fetoprotein producing Sertoli-Leydig cell tumor—a case report] Taniyama K, et al. **Gan No Rinsho** 1989 Jan;35(1):107–13 (14 ref.) (Eng. Abstr.) **(Jpn)**
[An in vitro chemosensitivity test indicating regressive changes in the nucleus in cases of human ovarian cancer] Tokita H, et al. **Gan No Rinsho** 1988 Aug;34(9):1101–5 (Eng. Abstr.) **(Jpn)**
[Drug resistant mechanisms of platinum derivatives in a human cisplatin resistant ovarian cancer cell line] Nishiya I, et al. **Gan To Kagaku Ryoho** 1988 Oct;15(10):2871–81 (Eng. Abstr.) **(Jpn)**
[Establishment and characterization of human ovarian endometrioid carcinoma cell line] Fujii T. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Feb;41(2):161–6 (Eng. Abstr.) **(Jpn)**
[Retroperitoneal lymph node metastasis in patients with ovarian cancer] Kasamatsu T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Apr;41(4):473–8 (Eng. Abstr.) **(Jpn)**
[Clinicopathological study of malignant ovarian germ cell tumor] Kataoka A, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun; 41(6):695–701 (Eng. Abstr.) **(Jpn)**
[Isolation of cisplatin-resistant subline from human ovarian cancer cell line and analysis of its cell-biological characteristics] Yoshiya N, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jan;41(1):7–14 (Eng. Abstr.) **(Jpn)**
[Acute myelomonocytic leukemia with inv(16) (p13q22) developed in a case of ovarian cancer] Yaguchi M, et al. **Rinsho Ketsueki** 1988 Aug;29(8):1282–6 (Eng. Abstr.) **(Jpn)**
[Morphology of borderline mucinous ovarian tumors] Karseladze AI. **Arkh Patol** 1989;51(5):40–6 (Eng. Abstr.) **(Rus)**
[Morphology of serous borderline ovarian tumors] Karseladze AI. **Arkh Patol** 1989;51(3):28–34 (Eng. Abstr.) **(Rus)**
[Cytotoxicity of the pesticide romucide] Malysheva MV. **Gig Sanit** 1989 Jan;(1):73–4 **(Rus)**
[Potentialities of a cytomorphologic method in the evaluation of the efficacy of the treatment of cancer of the ovaries] Petrova S, et al. **Lab Delo** 1988;(10):31–5 (Eng. Abstr.) **(Rus)**
[Carcinoid tumors (apudomas) of the ovaries] Derizhanova IS. **Vopr Onkol** 1988;34(10):1155–9 (32 ref.) **(Rus)**
[Adolescent with hypogastric pain and an abdominal mass (clinical conference)] Cifuentes S, et al. **Rev Clin Esp** 1988 Dec;183(9):485–92 **(Spa)**

PHYSIOPATHOLOGY

Effect of ovarian endometriosis on ovulation in rabbits. Kaplan CR, et al. **Am J Obstet Gynecol** 1989 Jan; 160(1):40–4
Effects of massive ascites on measurement of cardiac ejection fraction via multi-gated acquisition (MUGA) scanning. Yetman TJ, et al. **Gynaecol Oncol** 1989 Jul;34(1):116–8
Radiation sensitivity of human ovarian carcinoma cell lines in vitro: effects of growth factors and hormones, basement membrane, and intercellular contact. Rofstad EK, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):921–9
31P NMR spectroscopy measurements of human ovarian carcinoma xenografts: relationship to tumour volume, growth rate, necrotic fraction and differentiation status. Rofstad EK, et al. **Radiother Oncol** 1988 Aug;12(4):315–26

PREVENTION & CONTROL

Screening for ovarian cancer. Jacobs I, et al. **Biomed Pharmacother** 1988;42(9):589–96 (51 ref.)
Prevention of ovarian cancer: a survey of the practice of prophylactic oophorectomy by fellows and members of the Royal College of Obstetricians and Gynaecologists. Jacobs I, et al. **Br J Obstet Gynaecol** 1989 May;96(5):510–5
Prophylactic oophorectomy. Studd J. **Br J Obstet Gynaecol** 1989 May;96(5):506–9 (16 ref.)
Tumoral markers (CA 125—CEA) in the screening of ovarian cancer. Alberico S, et al. **Eur J Gynaecol Oncol** 1988; 9(6):485–9
Transvaginal sonography as a screening method for ovarian cancer. Higgins RV, et al. **Gynecol Oncol** 1989 Sep; 34(3):402–6
Previous pelvic surgery in patients with ovarian cancer. Finazzo MS, et al. **South Med J** 1988 Dec;81(12):1518–20 (16 ref.)
[Inquiries to the editor. When is preventive removal of the adnexa indicated? (letter)] Winter R. **Zentralbl Gynakol** 1988;110(13):851 **(Ger)**

RADIOGRAPHY

Preoperative diagnosis of ovarian malignancies with intravenous digital subtraction angiography. Iwasaka T, et al. **Acta Obstet Gynecol Scand** 1988;67(1):59–63
Ovarian cancer. Cardenosa G, et al. **Am Fam Physician** 1987 Jun;35(6):129–30
Cystic teratoma of the ovary: CT detection. Buy JN, et al. **Radiology** 1989 Jun;171(3):697–701
Peritoneal implants from ovarian tumors: CT findings. Buy JN, et al. **Radiology** 1988 Dec;169(3):691–4
[Lymphangiography in ovarian cancer] Lang JH. **Chung Hua Fu Chan Ko Tsa Chih** 1989 Jan;24(1):29–31, 58 (Eng. Abstr.) **(Chi)**
[Hysterosalpingographic aspects of ovarian and peritoneal endometriosis. Case-control study] Querleu D, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(3):303–10 (Eng. Abstr.) **(Fre)**
[X-ray computed tomographic aspects of dermoid cysts of the ovary] Buy JN, et al. **J Radiol** 1989 Feb;70(2):103–9 (23 ref.) (Eng. Abstr.) **(Fre)**
[Prospective study of K-cell activity in patients with malignant gynecologic tumors. Effect of radiation therapy] Siklós P, et al. **Orv Hetil** 1989 May 7;130(19):979–84 (39 ref.) (Eng. Abstr.) **(Hun)**
[Computed tomographic evaluation of metastatic and primary ovarian tumors] Wakabayashi Y, et al. **Rinsho Hoshasen** 1988 Aug;33(8):885–8 (Eng. Abstr.) **(Jpn)**
[A case of remote metastasis of myxoid rhabdomyosarcoma of the ovary in the gastric wall] Reziapkin VV, et al. **Vestn Rentgenol Radiol** 1988 Sep-Oct;(5):87–8 **(Rus)**

RADIONUCLIDE IMAGING

Immunoscintigraphy using CA 125 antibodies in the management of ovarian cancer. Brökelmann J, et al. **Arch Gynecol Obstet** 1989;244(4):193–206
Immunoscintigraphy with indium-111 labeled monoclonal antibodies: the importance of a good display method. Liehn JC, et al. **Clin Nucl Med** 1989 Mar;14(3):187–91
Radioimmunoscintigraphy of ovarian cancer with 131-iodine labeled OC-125 antibody fragments. Barzen G, et al. **Eur J Nucl Med** 1989;15(1):42–8
Diagnostic and intraoperative immunoscintigraphy in ovarian cancer. Gitsch E, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Jul;32(1):33–7
Lipid cell tumor of the ovary: steroid hormone secretory pattern and localization using 75Se-selenomethylcholesterol. Younis JS, et al. **Gynecol Obstet Invest** 1989;27(2):110–2
Radioimmunoscintigraphy using monoclonal antibodies to CEA, CA 19-9 and CA 125. Baum RP, et al. **Int J Biol Markers** 1988 Jul-Sep;3(3):177–84
Immunoscintigraphy with 131I-labelled monoclonal antibodies HMFG2 and HMFG1 F(ab')2 versus abdominal CT scan in the detection of residual disease in ovarian cancer patients. Pectasides D, et al. **Int J Cancer Suppl** 1988;3:83–8
Diagnosis of ovarian cancer with radiolabelled monoclonal antibodies: our experience using 131I-B72.3. Mansi L, et al. **Int J Rad Appl Instrum [B]** 1989;16(2):127–35
Systemic perfusion: a method of enhancing relative tumor uptake of radiolabeled monoclonal antibodies. Wahl RL, et al. **Int J Rad Appl Instrum [B]** 1988;15(6):611–6
Pharmacokinetics of a radioiodinated monoclonal antibody F(ab')2 fragment in a xenograft model with circulating antigen. Zalutsky MR, et al. **Int J Rad Appl Instrum [B]** 1989;16(4):405–11
Intracavitary use of two radiolabeled tumor-associated monoclonal antibodies. Malamitsi J, et al. **J Nucl Med** 1988

Dec;29(12):1910-5
Scintigraphic localization of ovarian dysfunction. Mountz JM, et al. **J Nucl Med** 1988 Oct;29(10):1644-50
Immunoscintigraphy of human ovarian cancer xenografts using a radiolabelled monoclonal antibody to human pregnancy serum-derived immune complexes. Murray T, et al. **Nucl Med Commun** 1988 Jul;9(7):505-11
[Radio-immuno-lympho-scintigraphy in the radio-immuno-localization of epithelial ovarian cancer] Lian LJ. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Mar; 23(2):95-8, 128 (Eng. Abstr.) **(Chi)**
[Immunoscintigraphy with radionuclide-labeled monoclonal antibodies for tumor diagnosis and in benign diseases] Baum RP, et al. **Immun Infekt** 1989 Feb;17(1):22-4 (6 ref.) (Eng. Abstr.) **(Ger)**
[Immunoscintigraphy of cancer of the ovaries and colon using labeled monoclonal antibodies] Gabuniia RI, et al. **Med Radiol (Mosk)** 1989 Aug;34(8):56-61 (Eng. Abstr.) **(Rus)**

RADIOTHERAPY

Five and ten year estimated survival and disease-free rates after intraperitoneal chromic phosphate; stage I ovarian adenocarcinoma. Piver MS, et al. **Am J Clin Oncol** 1988 Oct;11(5):515-9
The development of alpha-emitting radionuclide lead 212 for the potential treatment of ovarian carcinoma. Rotmensch J, et al. **Am J Obstet Gynecol** 1989 Apr; 160(4):789-97
The treatment of intraperitoneal malignant disease with monoclonal antibody guided 131I radiotherapy. Ward B, et al. **Br J Cancer** 1988 Nov;58(5):658-62
Intraperitoneal radioimmunotherapy for ovarian cancer. Stewart JS, et al. **Br J Obstet Gynaecol** 1989 May; 96(5):529-36
Intraperitoneal cisplatin chemotherapy versus abdominopelvic irradiation in ovarian carcinoma patients after second-look laparotomy. Menczer J, et al. **Cancer** 1989 Apr 15;63(8):1509-13
Intraperitoneal P-32 after negative second-look laparotomy in ovarian carcinoma. Spencer TR Jr, et al. **Cancer** 1989 Jun 15;63(12):2434-7
Intraperitoneal radiolabeled OC 125 in patients with advanced ovarian cancer. Finkler NJ, et al. **Gynecol Oncol** 1989 Sep;34(3):339-44
Concurrent chemotherapy and single high-dose plus whole abdominopelvic radiation for persistent ovarian carcinoma. Homesley HD, et al. **Gynecol Oncol** 1989 Aug;34(2):170-4
Therapeutic effect of a radiolabeled monoclonal antibody on human ovarian cancer xenograft in nude mice. Manetta A, et al. **Gynecol Oncol** 1989 Mar;32(3):368-70
Intraperitoneal chromic phosphate in ovarian cancer: risks and benefits. Potter ME, et al. **Gynecol Oncol** 1989 Mar; 32(3):314-8
The effect of the alpha-emitting radionuclide lead-212 on human ovarian carcinoma: a potential new form of therapy. Rotmensch J, et al. **Gynecol Oncol** 1989 Feb;32(2):236-9
Ovarian carcinoma: abdominopelvic irradiation following reexploration. Solomon HJ, et al. **Gynecol Oncol** 1988 Nov; 31(3):396-401
Intraperitoneal 131I- and 90Y-labelled monoclonal antibodies for ovarian cancer: pharmacokinetics and normal tissue dosimetry. Stewart JS, et al. **Int J Cancer Suppl** 1988; 3:71-6
Optimal coverage of peritoneal surface in whole abdominal radiation for ovarian neoplasms. LaRouere J, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):607-13
Radiotherapy in the treatment of ovarian dysgerminoma [letter] Muggia FM. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):1050-1
Abdominopelvic irradiation for persistent advanced ovarian carcinoma. Stephenson JA, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug;17(2):385-8
Intraperitoneal radioimmunotherapy for ovarian cancer: pharmacokinetics, toxicity, and efficacy of I-131 labeled monoclonal antibodies. Stewart JS, et al. **Int J Radiat Oncol Biol Phys** 1989 Feb;16(2):405-13
Mouse ovarian tumor cells: an experimental model for progestin-mediated radiotherapy. Blumenthal RD, et al. **J Surg Oncol** 1988 Oct;39(2):96-100
Experimental model for radioimmunotherapy of human ovarian carcinoma with I-131-labeled monoclonal antibody OC 125. Senekowitsch R, et al. **Strahlenther Onkol** 1989 Jul;165(7):564-6
[Total abdominal radiotherapy in epithelial cancer of the ovary] Romestaing P, et al. **Ann Radiol (Paris)** 1989; 32(3):208-12 (Eng. Abstr.) **(Fre)**
[Irradiation in the treatment of adenocarcinoma of the ovary. Retrospective study of 44 cases] Chauvet B, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(4):526-32 (Eng. Abstr.) **(Fre)**
[Electrocardiographic evaluation of the reactions of the myocardium during irradiation of the thorax] Adler K, et al. **Med Radiol (Mosk)** 1989 Mar;34(3):27-31 **(Rus)**

SECONDARY

Metastases from carcinomas of the pancreas simulating primary mucinous tumors of the ovary. A report of seven cases. Young RH, et al. **Am J Surg Pathol** 1989 Sep; 13(9):748-56
Cystic metastases from colon carcinoma. Ptasznik R, et al. **Australas Radiol** 1988 Aug;32(3):356-9
Ovarian metastases of breast carcinoma. A clinicopathologic study of 59 cases. Gagnon Y, et al. **Cancer** 1989 Aug 15; 64(4):892-8
Alveolar rhabdomyosarcoma metastatic to the ovary. A report of two cases and a discussion of the differential diagnosis of small cell malignant tumors of the ovary. Young RH, et al. **Cancer** 1989 Aug 15;64(4):899-904
Characterization of a continuous cell line in culture established from a Krukenberg tumour of the ovary arising from a primary gastric adenocarcinoma. Whelan R, et al. **Eur J Cancer Clin Oncol** 1988 Sep;24(9):1397-408
Ovarian involvement in extragenital cancer. Yazigi R, et al. **Gynecol Oncol** 1989 Jul;34(1):84-7
Generalized melanosis in occult primary melanoma. Sexton M, et al. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 1):261-6
Krukenberg's tumor in the young population. Gupta P, et al. **J Am Osteopath Assoc** 1989 Apr;89(4):500-2, 505 (17 ref.)
[Ovarian metastasis of carcinoid tumor of the stomach (letter)] Imbaud P, et al. **J Chir (Paris)** 1988 Oct; 125(10):611-2 **(Fre)**
[Ovarian metastases of digestive cancers. Diagnostic and therapeutic management] Lorimier G, et al. **J Chir (Paris)** 1988 Dec;125(12):699-703 (Eng. Abstr.) **(Fre)**
[Two cases of advanced breast cancer with distant metastasis showing long-term survival with multidisciplinary treatment including intra-arterial infusion chemotherapy] Yokoyama N, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2920-3 (Eng. Abstr.) **(Jpn)**
[Indications for surgical treatment in stomach cancer with metastases to the ovaries] Vashakmadze LA, et al. **Sov Med** 1988;(12):95-8 **(Rus)**
[Peculiarities of colonic cancer metastasis to the ovaries and the role of prophylactic ovariectomy] Vorob'ev GI, et al. **Vopr Onkol** 1988;34(10):1245-9 (Eng. Abstr.) **(Rus)**

SECRETION

Effects of sodium butyrate on the secretion of beta-2-microglobulin and calcitonin in a human ovarian cancer cell line OC-3-VGH. Chang CC, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Aug;42(2):93-8
Gastrin-producing ovarian cystadenocarcinoma: sensitivity to secretin and SMS 201-995. Heyd J, et al. **Gastroenterology** 1989 Aug;97(2):464-7
Ovarian and peripheral steroid hormones in a case of Sertoli-Leydig cell tumor. Mango D, et al. **J Endocrinol Invest** 1988 Jul-Aug;11(7):521-5
Different mechanisms contribute to simultaneous inhibition of urokinase and tissue-type plasminogen activators by glucocorticoids in human ovarian carcinoma cells. Karlan BY, et al. **Mol Endocrinol** 1989 Jun;3(6):1006-13
Steroid secretion by a virilizing lipoid cell ovarian tumor: origins of dehydroepiandrosterone sulfate. Shenker Y, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):502-6
[Pro-cathepsin D can activate in vitro pro-cathepsin B secreted by ovarian cancers] Pagano M, et al. **C R Acad Sci [III]** 1989;309(1):7-12 (Eng. Abstr.) **(Fre)**

SURGERY

Second-assessment procedure for ovarian epithelial carcinoma [letter] Piura B. **Am J Obstet Gynecol** 1989 Jan; 160(1):275-6
Recurrence after negative second-look laparotomy for ovarian cancer: analysis of risk factors. Rubin SC, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1094-8
Radioimmunoguided surgery using monoclonal antibody. Martin EW Jr, et al. **Am J Surg** 1988 Nov;156(5):386-92
Place of second-look laparotomy after 18 courses of chemotherapy in epithelial ovarian cancer. Ngan HY, et al. **Aust N Z J Obstet Gynaecol** 1989 Feb;29(1):52-4
The role of second-look laparotomy in the management of patients with ovarian carcinoma. Rome RM, et al. **Aust N Z J Obstet Gynaecol** 1988 Nov;28(4):318-23
The role of surgical reexploration following chemotherapy in ovarian cancer. Solomon J. **Aust N Z J Obstet Gynaecol** 1988 May;28(2):121-6
Operative treatment of ovarian cancer. **Baillieres Clin Obstet Gynaecol** 1989 Mar;3(1):1-215
Spread and treatment of advanced ovarian cancer. Barber HR. **Baillieres Clin Obstet Gynaecol** 1989 Mar;3(1):23-9 (15 ref.)
The significance of pelvic and para-aortic lymphadenectomy in the operative treatment of ovarian cancer. Burghardt E, et al. **Baillieres Clin Obstet Gynaecol** 1989 Mar; 3(1):157-65 (10 ref.)
Prognostic factors in relation to second-look laparotomy in ovarian cancer. Creasman WT, et al. **Baillieres Clin Obstet Gynaecol** 1989 Mar;3(1):183-90 (10 ref.)
Pelvic and para-aortic lymphadenectomy in cancer of the ovary. Di Re F, et al. **Baillieres Clin Obstet Gynaecol** 1989 Mar;3(1):131-42 (13 ref.)
Controversial aspects of cytoreductive surgery in epithelial ovarian cancer. Hacker NF. **Baillieres Clin Obstet Gynaecol** 1989 Mar;3(1):49-57 (29 ref.)
The influence of cytoreductive surgery on progression-free interval and survival in epithelial ovarian cancer. Hoskins WJ. **Baillieres Clin Obstet Gynaecol** 1989 Mar;3(1):59-71 (49 ref.)
Diagnostic versus therapeutic second-look surgery in patients with ovarian cancer. Janisch H, et al. **Baillieres Clin Obstet Gynaecol** 1989 Mar;3(1):191-200 (17 ref.)
Surgical techniques used in achieving optimal resection of stage III cancer of the ovaries. Monaghan JM. **Baillieres Clin Obstet Gynaecol** 1989 Mar;3(1):39-48 (7 ref.)
Tumour reduction and chemotherapy in ovarian cancer. Pfleiderer A. **Baillieres Clin Obstet Gynaecol** 1989 Mar; 3(1):119-28 (6 ref.)
The second-look operation for ovarian cancer. Rutledge FN. **Baillieres Clin Obstet Gynaecol** 1989 Mar;3(1):175-82 (20 ref.)
Individualization of surgical treatment for ovarian cancer. Terashima Y, et al. **Baillieres Clin Obstet Gynaecol** 1989 Mar;3(1):73-82 (0 ref.)
Cytoreduction in ovarian cancer: achievability and results. Webb MJ. **Baillieres Clin Obstet Gynaecol** 1989 Mar; 3(1):83-94 (15 ref.)
Intestinal metastasis and operation in ovarian cancer: a report on 62 cases. Wu PC, et al. **Baillieres Clin Obstet Gynaecol** 1989 Mar;3(1):95-108 (10 ref.)
Lymph node metastasis and retroperitoneal lymphadenectomy in ovarian cancer. Wu PC, et al. **Baillieres Clin Obstet Gynaecol** 1989 Mar;3(1):143-55 (9 ref.)
The prognostic and therapeutic value of second-look laparotomy in advanced ovarian cancer. Bertelsen K, et al. **Br J Obstet Gynaecol** 1988 Dec;95(12):1231-6
Piperacillin in prophylaxis and therapy of gynecologic cancer patients. Scalambrino S, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):535-7
Cytoreduction in ovarian cancer: worth the risk? [editorial] Macfee MS. **Cleve Clin J Med** 1988 Nov-Dec;55(6):511-2
Outcome of primary cytoreduction surgery for advanced epithelial ovarian carcinoma. Seifer DB, et al. **Cleve Clin J Med** 1988 Nov-Dec;55(6):555-60
Dilemmas in the surgical treatment of ovarian cancer. Beckman EM, et al. **Contrib Gynecol Obstet** 1989;17:1-9 (22 ref.)
Advanced ovarian cancer: urinary tract resection as a part of cytoreductive surgery. Malviya VK, et al. **Eur J Gynaecol Oncol** 1989;10(2):69-72
Survival after negative second-look laparotomy. Luesley DM, et al. **Eur J Surg Oncol** 1989 Jun;15(3):205-10
Secondary cytoreductive surgery in ovarian cancer. Michel G, et al. **Eur J Surg Oncol** 1989 Jun;15(3):201-4
Neuropathies associated with radical pelvic surgery for gynecologic cancer. Hoffman MS, et al. **Gynecol Oncol** 1988 Nov;31(3):462-6
Influence of secondary cytoreduction at the time of second-look laparotomy on the survival of patients with epithelial ovarian carcinoma. Hoskins WJ, et al. **Gynecol Oncol** 1989 Sep;34(3):365-71
Secondary cytoreductive surgery in epithelial ovarian cancer: nonresponders to first-line therapy. Morris M, et al. **Gynecol Oncol** 1989 Apr;33(1):1-5
Secondary cytoreductive surgery for recurrent epithelial ovarian cancer. Morris M, et al. **Gynecol Oncol** 1989 Sep; 34(3):334-8
Cholecystectomy accompanying major abdominal surgery for gynecologic cancer. Patsner B, et al. **Gynecol Oncol** 1989 Jan;32(1):46-8
Is routine second-look laparotomy for ovarian cancer justified? Sonnendecker EW. **Gynecol Oncol** 1988 Oct; 31(2):249-55 (25 ref.)
Treatment of endometriosis with a Nd:YAG tissue-contact laser probe via laparoscopy. Corson SL, et al. **Int J Fertil** 1989 Jul-Aug;34(4):284-8
Ovarian tumors in pregnancy. Ashkenazy M, et al. **Int J Gynaecol Obstet** 1988 Aug;27(1):79-83
Rectosigmoid resection without colostomy during primary cytoreductive surgery for ovarian carcinoma. Sonnendecker EW, et al. **Int Surg** 1989 Jan-Mar;74(1):10-2
Stage III-IV epithelial carcinoma of the ovary: is the second-look operation of any value for the patient? Atad J, et al. **Isr J Med Sci** 1988 Nov;24(11):660-3
Emergence of imipenem-resistant Pseudomonas aeruginosa during treatment of intra-abdominal infection in a patient with ovarian carcinoma. Sze EH, et al. **J Natl Med Assoc** 1988 Oct;80(10):1133-5
Castration-sparing management of an adolescent with huge bilateral cystic teratomas of the ovaries. Jona JZ, et al. **J Pediatr Surg** 1988 Oct;23(10):973-4
Second-look laparotomy in endodermal sinus tumor: a report of two patients with normal levels of alpha-fetoprotein and residual tumor at reexploration. Curtin JP, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):893-5 (7 ref.)
The second-look operation and surgical reexploration in ovarian tumor of low malignant potential. Hopkins MP, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):375-8
Ovarian cystectomy for serous borderline tumors: a follow-up study of 35 cases. Lim-Tan SK, et al. **Obstet Gynecol** 1988 Nov;72(5):775-81
Laparoscopic removal of dermoid cysts. Nezhat C, et al. **Obstet Gynecol** 1989 Feb;73(2):278-81
[Ovarian seminoma and pregnancy. Apropos of a new case] Caubel P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989; 18(4):487-91 (Eng. Abstr.) **(Fre)**
[Pregnancy and ovarian tumors] Firket C. **Rev Med Liege**

1989 Apr 1;44(7):263–6 (27 ref.) (Fre)
[Organ-saving therapy of small ovarian cystomas and dermoids by surgical laparoscopy—a trial 1985–1987] Dressler F, et al. **Geburtshilfe Frauenheilkd** 1989 Apr; 49(4):390–3 (Eng. Abstr.) (Ger)
[Preserving fertility in malignant ovarian tumors] Pfleiderer A. **Gynakologe** 1988 Dec;21(4):308–14 (25 ref.) (Ger)
[Ovarian cancer. Recommendations for diagnosis, therapy and after care] **Onkologie** 1988;11 Suppl 1:1–32 (Ger)
[Indications for the surgical intervention in endocrine disorders of the ovaries] Prader A. **Z Kinderchir** 1988 Aug; 43(4):284–8 (Eng. Abstr.) (Ger)
[Surgery of the female gonads] Schwöbel MG, et al. **Z Kinderchir** 1988 Aug;43(4):289–94 (Eng. Abstr.) (Ger)
[The therapeutic value of second-look laparotomy in advanced ovarian carcinoma] Schneider J, et al. **Zentralbl Gynakol** 1988;110(22):1443–8 (Eng. Abstr.) (Ger)
[Therapy and course in 105 borderline tumors of the ovary] Wienold J, et al. **Zentralbl Gynakol** 1989;111(11):721–7 (Eng. Abstr.) (Ger)
[A case of giant serous cystadenoma of the ovary] Bruno G, et al. **Minerva Chir** 1988 Jun 30;43(12):1095–7 (Eng. Abstr.) (Ita)
[The second look at tumors of the ovary. Our experience] Sanlorenzo M, et al. **Minerva Chir** 1988 Sep 30; 43(18):1477–9 (Eng. Abstr.) (Ita)
[Follow-up of 53 patients with ovarian carcinoma] Garozzo G, et al. **Minerva Ginecol** 1988 Aug;40(8):471–3 (Eng. Abstr.) (Ita)
[Search for an operability score in patients with ovarian cancer in intestinal occlusion] Scarabelli C, et al. **Minerva Ginecol** 1988 Sep;40(9):517–30 (Eng. Abstr.) (Ita)
[Treatment of ovarian cancer] Kato T, et al. **Gan No Rinsho** 1989 Jan;Spec No:392–8 (Jpn)
[Reassessment of second-look operations (SLO) in the treatment of ovarian cancer] Ochiai K. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-2):1303–9 (Eng. Abstr.) (Jpn)
[A case of malignant ovarian tumor complicated by pregnancy, from the standpoint of tumor marker and quality of life] Okamoto M, et al. **Gan To Kagaku Ryoho** 1989 Sep;16(9):3287–90 (Eng. Abstr.) (Jpn)
[Primary cytoreductive surgery of advanced ovarian cancer with special reference to the significance of bowel resection] Sato K, et al. **Gan To Kagaku Ryoho** 1989 Apr; 16(4 Pt 2-1):1070–7 (Eng. Abstr.) (Jpn)
[Studies of second-look operations (SLO) in ovarian cancer] Yuzawa H. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-2):1310–6 (Eng. Abstr.) (Jpn)
[The role of surgical intervention in the combined treatment of advanced ovarian neoplasms] Popescu I. et al. **Rev Chir [Chir]** 1988 Nov-Dec;37(6):417–22 (Eng. Abstr.) (Rum)
[Observation of a patient with preserved reproductive function after surgical treatment of dysgerminoma] Egorova EV, et al. **Akush Ginekol (Mosk)** 1988 Nov; (11):65–6 (Rus)
[Comparative evaluation of various methods of preventing infectious complications after planned gynecologic surgery] Evseev AA. **Akush Ginekol (Mosk)** 1989 Apr;(4):33–6 (Rus)

THERAPY

Staging and treatment of ovarian carcinoma. De Palo G. **Acta Oncol** 1989;28(2):163–76 (139 ref.)
CA 125 levels in patients with ovarian carcinoma undergoing autologous bone marrow transplantation. Ciobanu N, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):354–5
Gynecologic malignancies: detection, prevention, and therapeutics. Part 1. Ovarian cancer. Perkins J. **Am Pharm** 1988 Nov;NS28(11):40–3
Sequential cisplatin/cyclophosphamide chemotherapy and abdominopelvic radiotherapy in the management of advanced ovarian cancer. Green JA, et al. **Br J Cancer** 1988 Nov;58(5):635–9
Subsequent primary cancers in relation to treatment of ovarian cancer. Prior P, et al. **Br J Cancer** 1989 Mar; 59(3):453–9
The role of postoperative alkylating agent therapy in early-stage epithelial ovarian cancer [letter] Finn CB, et al. **Br J Obstet Gynaecol** 1989 Aug;96(8):1007–8
Problems of peritoneal access in intraperitoneal treatment and monitoring of ovarian cancer. Redman CW, et al. **Br J Obstet Gynaecol** 1989 Jan;96(1):97–101
Adjuvant oral alkylating chemotherapy in patients with stage I epithelial ovarian cancer. Gallion HH, et al. **Cancer** 1989 Mar 15;63(6):1070–3
Sensitivity of fresh and cultured ovarian tumor cells to tumor necrosis factor, interferon-alpha 2, and OK-432. Nio Y, et al. **Cancer Immunol Immunother** 1988;27(3):246–54
High-dose chemotherapy with autologous bone marrow transplantation in patients with refractory ovarian cancer. Mulder PO, et al. **Eur J Cancer Clin Oncol** 1989 Apr; 25(4):645–9
The pediatric oncologist facing the gynaecological cancers in teenagers. Mann JR. **Eur J Gynaecol Oncol** 1989; 10(3):185–6
Simultaneous appearance of ovarian and endometrial carcinoma: a therapeutic challenge. Montoya F, et al. **Eur J Gynaecol Oncol** 1989;10(2):135–9
Second-look laparotomy in ovarian carcinoma patients after 8 and after 12 courses of cisplatin-based chemotherapy. Menczer J, et al. **Gynecol Obstet Invest** 1989;27(2):102–4
High-dose chemotherapy, total abdomen irradiation and autologous bone marrow infusion in ovarian cancer: an observation. Norès JM, et al. **Gynecol Obstet Invest** 1989; 27(1):55–6
Phase IB study of low-dose intraperitoneal recombinant interleukin-2 in patients with refractory advanced ovarian cancer: rationale and preliminary report. Beller U, et al. **Gynecol Oncol** 1989 Sep;34(3):407–12
High-dose melphalan and autologous bone marrow support for treatment of ovarian carcinoma with positive second-look operation. Dauplat J, et al. **Gynecol Oncol** 1989 Sep;34(3):294–8
Treatment of malignant ascites with allogeneic and autologous lymphokine-activated killer cells. Kamada M, et al. **Gynecol Oncol** 1989 Jul;34(1):34–7
Disseminated granulomatous disease (BCGosis) following chemoimmunotherapy for ovarian carcinoma. Kelleher MB, et al. **Gynecol Oncol** 1988 Oct;31(2):321–6
Immature teratoma of the ovary. Koulos JP, et al. **Gynecol Oncol** 1989 Jul;34(1):46–9
Therapeutic effect of recombinant human tumor necrosis factor in ovarian carcinoma xenograft in nude mice. Manetta A, et al. **Gynecol Oncol** 1989 Sep;34(3):360–4
Primary chemotherapy and the role of second-look laparotomy in non-dysgerminomatous germ cell malignancies of the ovary. Pippitt CH Jr, et al. **Gynecol Oncol** 1988 Oct;31(2):268–75
Synergistic activity of tumor necrosis factor and interferon in a nude mouse model of human ovarian cancer. Rubin SC, et al. **Gynecol Oncol** 1989 Sep;34(3):353–6
The feasibility of early administration of combination chemotherapy following cytoreductive surgery and second-look operation in patients with stage III ovarian carcinoma: a pilot study. Vardi JR, et al. **Gynecol Oncol** 1989 Jul;34(1):12–5
Mechanism of induction of endogenous tumor necrosis factor in ascites of ovarian cancer patients by OK-432, a streptococcal preparation. Mori H, et al. **Immunopharmacol Immunotoxicol** 1989;11(1):33–53
Whole abdominal irradiation following chemotherapy in patients with minimal residual disease after second look surgery in ovarian carcinoma. Haie C, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):15–9
Ovarian carcinoma. Carney DN. **Ir J Med Sci** 1989 Jan; 158(1):1–3
Ovarian cancer in a county hospital. Daly C, et al. **Ir Med J** 1989 Jun;82(2):60–1
Questioning current policies for the curative management of ovarian carcinoma. Fuks Z. **Isr J Med Sci** 1988 Sep-Oct; 24(9-10):572–9 (72 ref.)
Effects of lymphokine-activated killer cells and interleukin-2 on the ascites formation and the survival time of nude mice bearing human ovarian cancer cells. Oomori K, et al. **J Cancer Res Clin Oncol** 1989;115(3):217–20
Appearance of neuropeptides in ascitic fluid after peritoneal therapy with interleukin-2 and lymphokine-activated killer cells for intraabdominal malignancy. Schiogolev SA, et al. **J Clin Immunol** 1989 Mar;9(2):169–73
Ten-year follow-up of patients receiving cisplatin, doxorubicin, and cyclophosphamide chemotherapy for advanced epithelial ovarian carcinoma. Sutton GP, et al. **J Clin Oncol** 1989 Feb;7(2):223–9
Percutaneous catheter drainage of necrotic tumors: CT demonstration. Abbitt PL, et al. **J Comput Assist Tomogr** 1989 May-Jun;13(3):437–9
In vitro fertilization and embryo transfer (IVF/ET): an established and successful therapy for endometriosis. Oehninger S, et al. **J In Vitro Fert Embryo Transf** 1988 Oct;5(5):249–56
Management of early carcinoma of the ovary. Chapman GW Jr. **J Natl Med Assoc** 1988 Sep;80(9):1033–7 (4 ref.)
Cumulative pregnancy rates in infertile women with endometriosis. Badawy SZ, et al. **J Reprod Med** 1988 Sep; 33(9):757–60
Malignant Brenner tumor of the ovary. Chen KT, et al. **J Surg Oncol** 1988 Dec;39(4):260–3 (22 ref.)
Optimal debulking following chemotherapy of advanced-stage epithelial ovarian carcinoma. Piura B, et al. **J Surg Oncol** 1989 Apr;40(4):237–40
Development of anti-idiotypic antibodies against tumour antigens and autoantigens in ovarian cancer patients treated intraperitoneally with mouse monoclonal antibodies. Courtenay-Luck NS, et al. **Lancet** 1988 Oct 15; 2(8616):894–7
Lymphokine activity in malignant effusions after intracavitary viral oncolysate. Freedman RS, et al. **Lymphokine Res** 1989 Summer;8(2):115–22
Lymphocytes infiltrating ovarian carcinoma: modulation of functional activity by intraperitoneal treatment with biological response modifiers. Allavena P, et al. **Nat Immun Cell Growth Regul** 1988;7(4):230–8 (27 ref.)
Serotherapy of ovarian cancer. Lidor Y, et al. **Nat Immun Cell Growth Regul** 1988;7(4):193–215 (144 ref.)
Therapeutic considerations in the use of intraperitoneal radiolabelled monoclonal antibodies in ovarian carcinoma. Crowther ME, et al. **Nucl Med Commun** 1989 Mar; 10(3):149–59
Maternal and fetal survival following surgery and chemotherapy of endodermal sinus tumor of the ovary during pregnancy: a case report. Kim DS, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 2):503–7
Pregnancy following conservative surgery and adjunctive chemotherapy for stage III immature teratoma of the ovary. Lee RB, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):853–5
Peritoneal cytology of ovarian cancer patients receiving intraperitoneal therapy: quantitation of malignant cells and response. Sagae S, et al. **Obstet Gynecol** 1988 Nov; 72(5):782–8
Role of novel adjuvants in specific active immunotherapy. Cantrell JL, et al. **Prog Clin Biol Res** 1989;288:297–307
In vitro thermochemotherapy in ovarian cancer. Runge HM, et al. **Recent Results Cancer Res** 1988;109:214–23
Interferon in the treatment of ovarian cancer. Welander CE. **Semin Oncol** 1988 Oct;15(5 Suppl 5):26–9 (15 ref.)
Biologic response modifiers in gynecologic malignancies. Dutcher JP, et al. **Yale J Biol Med** 1988 Jul-Aug; 61(4):367–78 (78 ref.)
Epithelial ovarian carcinoma: analysis of prognostic factors. Kim SN, et al. **Yonsei Med J** 1988;29(3):244–51
[Granulosa cell tumor of the ovary; evaluation of therapeutic results] Ptáčková B, et al. **Cesk Gynekol** 1989 May; 54(4):263–7 (Eng. Abstr.) (Cze)
[Cancer of the ovary treated by intensive chemotherapy and irradiation of the abdomen with bone marrow autograft: a case (letter)] Nores JM, et al. **Ann Med Interne (Paris)** 1988;139(4):281–2 (Fre)
[Radiotherapy after chemotherapy and second-look laparotomy in the treatment of advanced ovarian cancers] Chauvet B, et al. **Ann Radiol (Paris)** 1989;32(2):131–5 (28 ref.) (Eng. Abstr.) (Fre)
[Therapeutic indications in the treatment of cancer of the ovary] Dubois JB. **Ann Radiol (Paris)** 1989;32(2):123–30 (47 ref.) (Eng. Abstr.) (Fre)
[Prognosis in ovarian cancer as a function of the results of the second-look laparatomy] Varette C, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(2):222–7 (Eng. Abstr.) (Fre)
[Value of sonographically controlled ascites puncture in patients with advanced ovarian cancers] Giers H, et al. **Z Arztl Fortbild (Jena)** 1989;83(9):459–61 (Ger)
[Monoclonal antibodies in gynecologic oncology. II. Prognostic and therapeutic aspects] Sesti F, et al. **G Ital Oncol** 1987 Apr-Sep;7(2-3):99–103 (15 ref.) (Eng. Abstr.) (Ita)
[An analysis of factors influential in improving the survival rate of patients with ovarian cancer] Ohta M, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-1):1008–15 (Eng. Abstr.) (Jpn)
[Clinical evaluation of intermittent administration of CDDP in advanced ovarian cancer] Umesaki N, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Feb;41(2):191–5 (Eng. Abstr.) (Jpn)
[Preliminary results of studies of the effect of immunostimulation combined with chemotherapy in patients with ovarian cancer] Pawlicki M, et al. **Ginekol Pol** 1988 Jun;59(6):358–62 (Eng. Abstr.) (Pol)
[CA 125 in the diagnosis and evaluation of the efficacy of the treatment of cancer of the ovaries] Sagan DL, et al. **Med Radiol (Mosk)** 1989 Jun;34(6):39–42 (Eng. Abstr.) (Rus)
[Combined treatment of malignant ovarian tumors] Pereslegin IA, et al. **Vopr Onkol** 1989;35(5):528–35 (48 ref.) (Rus)
[Treatment of patients with marginal tumors of the ovary] Vinokurov VL. **Vopr Onkol** 1989;35(7):870–4 (Eng. Abstr.) (Rus)
[Ovarian tumors: a problem with a difficult solution (editorial)] Ramírez Piña H. **Rev Chil Obstet Ginecol** 1986; 51(2):103 (Spa)

ULTRASTRUCTURE

Ultrastructural analysis of small cell carcinomas of the ovary. McMahon JT, et al. **Am J Clin Pathol** 1988 Nov;90(5):523–9
Primary insular argentaffin carcinoma of ovary. Case report and literature review. Hilton P, et al. **Br J Obstet Gynaecol** 1988 Dec;95(12):1324–31 (26 ref.)
Sclerosing stromal tumour of the ovary. Ultrastructural study. Tenti P, et al. **Eur J Gynaecol Oncol** 1988;9(6):464–9
Ultrastructural morphometric analysis of papillary neoplasms: biological and diagnostic relevance. Payne CM, et al. **Hum Pathol** 1989 Sep;20(9):864–70
Gonadoblastoma. Immunohistochemical and ultrastructural observations. Roth LM, et al. **Int J Gynecol Pathol** 1989; 8(1):72–81
Dental elements in mature teratomas of the ovary: scanning electron microscope ultrastructure. Fedele L, et al. **Tumori** 1989 Feb 28;75(1):76–8
[Krukenberg tumor of the ovary] Cong JW. **Chung Hua Chung Liu Tsa Chih** 1988 Nov;10(6):458–61 (Eng. Abstr.) (Chi)
[Light and electron microscopic observations on endodermal sinus tumor of the ovary] Li GR. **Chung Hua Fu Chan Ko Tsa Chih** 1989 Mar;24(2):98–9, 125 (Eng. Abstr.) (Chi)

VETERINARY

Teratocarcinoma of the ovary in a mare. Frazer GS, et al. **J Am Vet Med Assoc** 1988 Oct 15;193(8):953–5
Hemoperitoneum caused by rupture of a juvenile granulosa

cell tumor in an equine neonate. Green SL, et al. **J Am Vet Med Assoc** 1988 Dec 1;193(11):1417–9
Serous cystadenoma in a normally cyclic mare with high plasma testosterone values. Hinrichs K, et al. **J Am Vet Med Assoc** 1989 Feb 1;194(3):381–2
Primary ovarian adenocarcinoma associated with teratomatous elements in a mare. Van Camp SD, et al. **J Am Vet Med Assoc** 1989 Jun 15;194(12):1728–30
Premature lactation in a heifer with a sex cord–stromal tumor. Whitacre MD, et al. **J Am Vet Med Assoc** 1988 Oct 15;193(8):946–8
Small–colon rupture attributable to granulosa cell tumor in a mare. Wilson DA, et al. **J Am Vet Med Assoc** 1989 Mar 1;194(5):681–2
Diagonal paramedian approach for removal of ovarian tumors in the mare. Moll HD, et al. **Vet Surg** 1987 Nov–Dec;16(6):456–8
Malignant luteoma in a sow. Hashimoto N, et al. **Zentralbl Veterinarmed [A]** 1989 May;36(5):386–92

OVARIECTOMY

Variation of myometrial activities and steroid sexual hormones following bilateral ovariectomy in the rat at midpregnancy. Clabaut M, et al. **Acta Physiol Hung** 1988; 71(4):477–83
Ovariectomy, dietary zinc, and bone metabolism in retired breeder rats. Sherman SS, et al. **Am J Clin Nutr** 1989 Jun; 49(6):1184–91
Prolactin stimulates food intake in the absence of ovarian progesterone. Gerardo–Gettens T, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):R701–6
Hepatic sexual dimorphism: ontogeny and influence of adult gonadectomy. Studer RK, et al. **Am J Physiol** 1989 Mar; 256(3 Pt 1):E392–400
Chronically administered progesterone decreases halothane requirements in rabbits. Datta S, et al. **Anesth Analg** 1989 Jan;68(1):46–50
Anesthetic management for oophorectomy in a patient with lymphangiomyomatosis. Smith MB, et al. **Anesthesiology** 1989 Mar;70(3):548–50
Age–related alterations in pulsatile luteinizing hormone release: effects of long–term ovariectomy, repeated pregnancies and naloxone. Wise PM, et al. **Biol Reprod** 1988 Dec;39(5):1060–6
Opioidergic control of luteinizing hormone release in the female rabbit: influence of ovariectomy and steroid replacement on pulsatile secretion [published erratum appears in Biol Reprod 1988 Dec;39(5):1255] Younglai EV, et al. **Biol Reprod** 1988 Oct;39(3):630–7
The comparative effect of ovarian hormone administration on bone mineral status in oophorectomized rats. Barbagallo M, et al. **Bone** 1989;10(2):113–6
Effect of human parathyroid hormone (PTH(1–34)) on experimental osteopenia of rats induced by ovariectomy. Hori M, et al. **Bone Miner** 1988 Jan;3(3):193–9
Oophorectomy has no effect on experimental pancreatic carcinogenesis in the Syrian hamster. Chester JF, et al. **Br J Cancer** 1989 May;59(5):696–7
Prevention of ovarian cancer: a survey of the practice of prophylactic oophorectomy by fellows and members of the Royal College of Obstetricians and Gynaecologists. Jacobs I, et al. **Br J Obstet Gynaecol** 1989 May;96(5):510–5
Prophylactic oophorectomy. Studd J. **Br J Obstet Gynaecol** 1989 May;96(5):506–9 (16 ref.)
Central implants of diluted estradiol: independent effects on ingestive and reproductive behaviors of ovariectomized rats. Butera PC, et al. **Brain Res** 1989 Jul 10;491(2):266–73
Lack of effect of hyperprolactinemia on serotonin turnover in ovariectomized and ovariectomized estrogen–treated rats. Cohen IR, et al. **Brain Res** 1989 Jan 9;476(2):400–6
Limited responsiveness of LHRH neurons to norepinephrine may account for failure of locus coeruleus or medullary A1 electrical stimulation to increase plasma LH in estrogen–treated ovariectomized rats. Hartman RD, et al. **Brain Res** 1989 Jan 2;476(1):35–44
Suppression of spontaneous LH surges in estrogen–treated ovariectomized rats by microimplants of antiestrogens into the preoptic brain. Petersen SL, et al. **Brain Res** 1989 Apr 10;484(1–2):279–89
Effects of ovariectomy and of estrogen administration on some dopamine–related behaviors in the rat. Dorce VA, et al. **Braz J Med Biol Res** 1988;21(2):313–20
Complete remission after ovariectomy for advanced breast cancer correlated with estrogen receptor status and urinary androgen excretion. Oriana S, et al. **Breast Cancer Res Treat** 1988 Dec;12(3):303–5
The effects of chronic dietary calcium supplementation on bone mineral density in ovariectomized beagles. Shih MS, et al. **Calcif Tissue Int** 1988 Aug;43(2):122–4
Effect of etidronate disodium on bone turnover following surgical menopause. Smith ML, et al. **Calcif Tissue Int** 1989 Feb;44(2):74–9
Temporal relationship between bone loss and increased bone turnover in ovariectomized rats. Wronski TJ, et al. **Calcif Tissue Int** 1988 Sep;43(3):179–83
Hypothalamic cyclic AMP after the injection of ovarian steroids into ovariectomized rats. Zubin P, et al. **Can J Physiol Pharmacol** 1989 Apr;67(4):322–5
Therapeutic oophorectomy in metastatic breast cancer. Conte CC, et al. **Cancer** 1989 Jul 1;64(1):150–3
Effects of sex difference, gonadectomy and estradiol on N–ethyl–N–nitrosourea–induced trigeminal nerve tumors in rats. Aoyama H, et al. **Carcinogenesis** 1989 Aug; 10(8):1505–9
A premenstrual urticarial eruption treated with bilateral oophorectomy and hysterectomy. Mayou SC, et al. **Clin Exp Dermatol** 1988 Mar;13(2):114–6
Impaired estrogen–induced uterine insulin–like growth factor–I gene expression in the streptozotocin diabetic rat. Murphy LJ. **Diabetologia** 1988 Nov;31(11):842–7
Oophorectomy did not show any additional effect on bone density and mineral content in thyroxine treated mice. Broulik PD, et al. **Endocrinol Exp** 1989 Mar;23(1):49–53
Evidence that neurotensin participates in the central regulation of the preovulatory surge of luteinizing hormone in the rat. Alexander MJ, et al. **Endocrinology** 1989 Feb; 124(2):783–8
Loss of androgenic induction of alpha 2u–globulin gene family in the liver of NIH black rats. Chatterjee B, et al. **Endocrinology** 1989 Sep;125(3):1385–8
Unilateral ovariectomy increases inhibin messenger ribonucleic acid levels in newly recruited follicles. D'Agostino J, et al. **Endocrinology** 1989 Jan;124(1):310–7
Effects of gonadectomy on the in vitro and in vivo gonadotropin responses to gonadotropin–releasing hormone in male and female rats. Fallest PC, et al. **Endocrinology** 1989 Mar;124(3):1370–9
Serotonergic mediation of a negative feedback effect of estrogen on luteinizing hormone release in ovariectomized rats. Johnson JH, et al. **Endocrinology** 1988 Nov; 123(5):2270–5
Neuropeptide–Y suppresses pulsatile secretion of luteinizing hormone in ovariectomized rats: possible site of action. McDonald JK, et al. **Endocrinology** 1989 Jul;125(1):186–91
Control of gonadotropin secretion in the ovine fetus. II. A sex difference in pulsatile luteinizing hormone secretion after castration. Matwijiw I, et al. **Endocrinology** 1989 Mar; 124(3):1352–8
Suppression of mediobasal hypothalamic gonadotropin–releasing hormone and plasma luteinizing hormone pulsatile patterns by phentolamine in ovariectomized rhesus macaques. Pau KY, et al. **Endocrinology** 1989 Feb;124(2):891–8
Ovariectomy permits progesterone to increase the binding of [3H]spiperone to the anterior pituitary gland in estrogen–primed rats. Pilotte NS, et al. **Endocrinology** 1989 Feb;124(2):805–11
Effects of age and long term ovariectomy on prolactin secretion, as assessed by the reverse hemolytic plaque assay. Sortino MA, et al. **Endocrinology** 1989 Jan;124(1):90–6
Female–predominant rat hepatic P–450 forms j (IIE1) and 3 (IIA1) are under hormonal regulatory controls distinct from those of the sex–specific P–450 forms. Waxman DJ, et al. **Endocrinology** 1989 Jun;124(6):2954–66
Endocrine and pharmacological suppressors of bone turnover protect against osteopenia in ovariectomized rats. Wronski TJ, et al. **Endocrinology** 1989 Aug;125(2):810–6
Obstructive uropathy from endometriosis after hysterectomy and oophorectomy; two case reports. Manyonda IT, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 May;31(2):195–8
Clinical response and survival according to estrogen receptor levels after bilateral ovariectomy in advanced breast cancer. Oriana S, et al. **Eur J Surg Oncol** 1989 Feb; 15(1):39–42
Preprotachykinin gene expression in the mediobasal hypothalamus of estrogen–treated and ovariectomized control rats. Romano GJ, et al. **Exp Brain Res** 1989; 76(1):21–6
Effects of ovariectomy and 17 beta–estradiol on bone GLA protein in growing rats: an indirect evidence for estrogen receptors in bone cells. Fiore CE, et al. **Exp Clin Endocrinol** 1988 Mar;92(3):335–40
Morphometric investigations on endocrine glands. VI. Changes in rat pituitary glands after ovarectomy and a single injection of estradiol benzoate once per cycle period. Löw O, et al. **Exp Pathol** 1988;33(3):193–5
Progesterone and progestins modulate beta–endorphin concentrations in the hypothalamus and in the pituitary of castrated female rats. Genazzani AR, et al. **Gynecol Endocrinol** 1987 Mar;1(1):61–9
Different dopaminergic control of plasma luteinizing hormone, follicle–stimulating hormone and prolactin in ovulatory and postmenopausal women: effect of ovariectomy. De Leo V, et al. **Gynecol Obstet Invest** 1989; 27(2):94–8
Arylsulphatase activity in the oviduct of the frog Rana escuienta. II. Progesterone–induced changes following ovariectomy and hypophysectomy. Vitaioli L, et al. **Histochem J** 1988 May;20(5):301–7
Prostaglandin precursor fatty acids in serum and bile as influenced by oophorectomy, contraceptive steroids and pregnancy. An experimental study in the cat. Rådberg G, et al. **Horm Metab Res** 1989 May;21(5):240–4
Prolactin and gonadotrophin dynamics in response to antagonists of LHRH and dopamine in ovariectomized rhesus monkeys: a dissection of their common secretion. Geisthoevel F, et al. **Hum Reprod** 1988 Jul;3(5):591–5
Effect of third ventricle injection of GABA to feeding responses and blood sugar in intact and ovariectomized female rats. Rattan AK, et al. **Indian J Physiol Pharmacol** 1988 Apr–Jun;32(2):132–8
Cyclosporin A in the oophorectomized rat: unexpected severe bone resorption. Movsowitz C, et al. **J Bone Miner Res** 1989 Jun;4(3):393–8
The inter–relationships between ovarian–independent growth, tumorigenicity, invasiveness and antioestrogen resistance in the malignant progression of human breast cancer. Clarke R, et al. **J Endocrinol** 1989 Jul;122(1):331–40
Endometrial responses to a deciduogenic stimulus in ovariectomized rhesus monkeys treated with oestrogen and progesterone. Ghosh D, et al. **J Endocrinol** 1989 Jan; 120(1):51–8
A new way to induce oestrogen–deficiency osteopaenia in the rat: comparison of the effects of surgical ovariectomy and administration of the LHRH agonist buserelin on bone resorption and composition. Goulding A, et al. **J Endocrinol** 1989 May;121(2):293–8
Changes in the pulsatile secretion of LH after the removal of and subsequent resuckling by pups in ovariectomized lactating rats. Maeda KI, et al. **J Endocrinol** 1989 May; 121(2):277–83
Tissue–specific effects of castration and ovariectomy on murine epidermal growth factor and its mRNA. Pascall JC, et al. **J Endocrinol** 1989 Jun;121(3):501–6
Effect of the suckling stimulus on daily LH surges induced by chronic oestrogen treatment in ovariectomized lactating rats. Tsukamura H, et al. **J Endocrinol** 1988 Aug; 118(2):311–6
Effects of vitamin D3 metabolites in ovariectomized rats. Orimo H, et al. **J Int Med Res** 1989 May–Jun;17(3):243–8
Treatment of ovariectomized heifers with bovine follicular fluid specifically suppresses pituitary levels of FSH–beta mRNA. Beard AJ, et al. **J Mol Endocrinol** 1989 Sep; 3(2):85–91
Differences in the plasma concentrations of FSH and LH in ovariectomized Booroola FF and ++ ewes. McNatty KP, et al. **J Reprod Fertil** 1989 Mar;85(2):705–13
Blockade of the oestrogen–induced LH surge in the ovariectomized common marmoset (Callithrix jacchus) by an LHRH antagonist. O'Byrne KT, et al. **J Reprod Fertil** 1989 Mar;85(2):641–6
The response to analgesia testing is affected by gonadal steroids in the rat. Forman LJ, et al. **Life Sci** 1989; 45(5):447–54
Concomitant inhibition of pulsatile luteinizing hormone (LH) and stimulation of prolactin release by prostacyclin (PGI2) in ovariectomized (OVX) conscious rats. Ottlecz A, et al. **Life Sci** 1988;43(25):2077–85
Lithium suppresses ovariectomy–induced surges in plasma gonadotropins in rats. Sheikha SH, et al. **Life Sci** 1989; 44(19):1363–9
Ovarian steroids and hypothalamic norepinephrine release: studies using in vivo brain microdialysis. Vathy I, et al. **Life Sci** 1988;43(19):1493–9
Blood coagulation profile in long–term hormone replacement therapy with mestranol. Al–Azzawi F, et al. **Maturitas** 1989 Jun;11(2):95–101
Differential effect of long–term oestrogen therapy on trabecular and cortical bone. Hosie CJ, et al. **Maturitas** 1989 Jun;11(2):137–45
Ovariectomy abolishes the normalization of femoral mineral content in 40–week–old female X–linked hypophosphatemic mice. Soener RA, et al. **Miner Electrolyte Metab** 1988;14(6):321–31
Radioimmunoassay of rat serum inhibin: changes after PMSG stimulation and gonadectomy. Robertson DM, et al. **Mol Cell Endocrinol** 1988 Jul;58(1):1–8
Pregnancy after oocyte collection and total ovariectomy [letter] Sèle B, et al. **N Engl J Med** 1989 Jun 29;320(26):1756
Third ventricular injection of alpha–bungarotoxin decreases pulsatile luteinizing hormone secretion in the ovariectomized rat. Kalash J, et al. **Neuroendocrinology** 1989 May;49(5):462–70
Effects of ovariectomy on GnRH mRNA, proGnRH and GnRH levels in the preoptic hypothalamus of the female rat. Kelly MJ, et al. **Neuroendocrinology** 1989 Jan; 49(1):88–97
Effects of ovariectomy and estradiol replacement on the binding of 125I–neurotensin in rat suprachiasmatic nucleus. Moyse E, et al. **Neuroendocrinology** 1988 Jul;48(1):53–60
Inhibitory effect of central LHRH on LH secretion in the ovariectomized ewe. Naylor AM, et al. **Neuroendocrinology** 1989 May;49(5):531–6
Neoadjuvant (cytoreductive) chemotherapy combined with intervention debulking surgery in advanced, unresected epithelial ovarian cancer. Lawton FG, et al. **Obstet Gynecol** 1989 Jan;73(1):61–5
Interactions between transplanted pituitary tumor and gonads in nude mice. Mori H, et al. **Pathol Res Pract** 1988 Sep; 183(5):642–4
A permanent dopamine receptor up–regulation in the ovariectomized rat. Gordon JH, et al. **Pharmacol Biochem Behav** 1989 May;33(1):123–5
Influence of ovariectomy, estradiol and progesterone on the behavior of mice in an experimental model of depression. Bernardi M, et al. **Physiol Behav** 1989 May;45(5):1067–8
Gender–specific and gonadectomy–specific effects upon swim analgesia: role of steroid replacement therapy. Romero MT, et al. **Physiol Behav** 1988;44(2):257–65
Characteristics of noncontraceptive hormone users. Egeland GM, et al. **Prev Med** 1988 Jul;17(4):403–11
Cadmium accelerates bone loss in ovariectomized mice and fetal rat limb bones in culture. Bhattacharyya MH, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8761–5
TAH and BSO with adjuvant pelvic EXRT and vaginal

Cs-137 boost in the management of carcinoma of the endometrium. Kumar PP, et al. **Radiat Med** 1988 Sep-Oct; 6(5):240-7

Previous pelvic surgery in patients with ovarian cancer. Finazzo MS, et al. **South Med J** 1988 Dec;81(12):1518-20 (16 ref.)

Hysterectomy and ovarian removal--a major health issue in the perimenopausal years. Greenwood S. **West J Med** 1988 Dec;149(6):771-2

Hormonal modulation of the rat mammary gland gamma-glutamyltranspeptidase. Rios M, et al. **Z Naturforsch [C]** 1989 Jul-Aug;44(7-8):651-4

[Effect of ovariectomy and allatectomy on movement of the ovipositor of virgin Acheta domesticus females] Renucci M, et al. **C R Acad Sci [III]** 1988;307(13):729-33 (Eng. Abstr.) **(Fre)**

[The course and treatment of an ovarian pregnancy in the 3d trimester] Schander K, et al. **Geburtshilfe Frauenheilkd** 1989 Feb;49(2):198-200 (Eng. Abstr.) **(Ger)**

[Preserving fertility in malignant ovarian tumors] Pfleiderer A. **Gynakologe** 1988 Dec;21(4):308-14 (25 ref.) **(Ger)**

[Inquiries to the editor. When is preventive removal of the adnexa indicated? (letter)] Winter R. **Zentralbl Gynakol** 1988;110(13):851 **(Ger)**

[Thyroid and adrenal response to acute stimulation with HCG: effects of bilateral ovariectomy] Banchini A, et al. **Minerva Endocrinol** 1988 Apr-Jun;13(2):103-6 (Eng. Abstr.) **(Ita)**

[Treatment of ovariectomized patients with intramuscular and nasal-spray synthetic calcitonin] Zara C, et al. **Minerva Endocrinol** 1989 Jan-Mar;14(1):53-6 (Eng. Abstr.) **(Ita)**

[Endocrine therapy of lung cancer] Sagara N, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 1):859-61 **(Jpn)**

[Effect of gonadectomy on the onset of diabetic syndrome in the female WBN/Kob rats] Kon H, et al. **Jikken Dobutsu** 1988 Oct;37(4):429-35 (Eng. Abstr.) **(Jpn)**

[Qualitative and quantitative changes of luteinizing hormone (LH) in the pituitary glands in female Japanese monkeys (Macaca fuscata) during the menstrual cycle and after castration] Hamada K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Mar;41(3):241-8 (Eng. Abstr.) **(Jpn)**

[Effects of alfacalcidol (1 alpha-OH-D3) on post oophorectomy osteopenia as measured by microdensitometry] Ohta H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 May; 41(5):505-12 (Eng. Abstr.) **(Jpn)**

[Observation of a patient with preserved reproductive function after surgical treatment of dysgerminoma] Egorova EV, et al. **Akush Ginekol (Mosk)** 1988 Nov; (11):65-6 **(Rus)**

[Comparative evaluation of various methods of preventing infectious complications after planned gynecologic surgery] Evseev AA. **Akush Ginekol (Mosk)** 1989 Apr;(4):33-6 **(Rus)**

[Peculiarities of colonic cancer metastasis to the ovaries and the role of prophylactic ovariectomy] Vorob'ev GI, et al. **Vopr Onkol** 1988;34(10):1245-9 (Eng. Abstr.) **(Rus)**

[Effect of ovariectomy on plasma levels of progesterone, free and conjugated estrone in pregnant sheep] Esteva M, et al. **Rev Esp Fisiol** 1988 Jun;44(2):197-203 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Excretion of pyridinium cross-links of collagen in ovariectomized rats as urinary markers for increased bone resorption. Black D, et al. **Calcif Tissue Int** 1989 May; 44(5):343-7

[Mechanism of the decrease in metacarpal bone mineral content due to oophorectomy] Ohta H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Mar; 41(3):333-40 (Eng. Abstr.) **(Jpn)**

[Evaluation of the effect of premenopausal oophorectomy on bone mineral content] Ueno N, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Mar; 41(3):308-12 (Eng. Abstr.) **(Jpn)**

HISTORY

Ephraim McDowell (1771-1830). Warren JV. **J Lab Clin Med** 1989 Jan;113(1):133-4

INSTRUMENTATION

[Ovariectomy by laparoscopy] Kolmorgen K. **Zentralbl Gynakol** 1989;111(9):613-7 (Eng. Abstr.) **(Ger)**

METHODS

Quantitative determination of follicle size distribution in the guinea pig ovary after hemicastration and PMSG treatment. Fujimori K, et al. **Endocrinol Jpn** 1989 Apr; 36(2):175-85

Endosurgical electrocoagulation of the mesovarium as an alternative method of inducing surgical menopause in monkeys. Vancaillie TG, et al. **Fertil Steril** 1989 Apr; 51(4):733-5

Pregnancy following conservative surgery and adjunctive chemotherapy for stage III immature teratoma of the ovary. Lee RB, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):853-5

[The clinical and hormonal effects of laparoscopic multiple punch resection (MPR) of the ovary in polycystic ovary syndrome] Utsunomiya T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Dec; 40(12):1800-4 (Eng. Abstr.) **(Jpn)**

PSYCHOLOGY

Ovariectomy attenuates aggression by female rats cohabiting with sexually active sterile males. Albert DJ, et al. **Physiol Behav** 1989 Feb;45(2):225-8

VETERINARY

Evaluation of Haemonchus contortus infections in sexually intact and ovariectomized ewes. Fleming MW, et al. **Am J Vet Res** 1988 Oct;49(10):1733-5

Concentrations of luteinizing hormone, follicle stimulating hormone and prolactin following transection of the pituitary stalk in ovariectomized ewes. Gust CM, et al. **Domest Anim Endocrinol** 1987 Apr;4(2):103-10

Ovarian inhibition of peripheral plasma concentration of follicle stimulating hormone in prepuberal Holstein heifers. Zollers WG Jr, et al. **Domest Anim Endocrinol** 1989 Jan; 6(1):35-40

Effects of gender, time of castration, genotype and feeding regimen on lamb growth and carcass fatness. Arnold AM, et al. **J Anim Sci** 1988 Oct;66(10):2468-75

Influences of gender, time of castration, genotype, birthtype and feeding regimen on lamb longissimus fiber type proportions. Arnold AM, et al. **J Anim Sci** 1988 Oct; 66(10):2476-83

Complications of castration and ovariectomy. Nickels FA. **Vet Clin North Am [Equine Pract]** 1988 Dec;4(3):515-23 (35 ref.)

Ovariectomy, ovariohysterectomy, and cesarean section in mares. Slone DE Jr. **Vet Clin North Am [Equine Pract]** 1988 Dec;4(3):451-9 (10 ref.)

Diagonal paramedian approach for removal of ovarian tumors in the mare. Moll HD, et al. **Vet Surg** 1987 Nov-Dec;16(6):456-8

[Urinary incontinence in spayed female dogs: frequency and breed disposition] Arnold S, et al. **Schweiz Arch Tierheilkd** 1989;131(5):259-63 (Eng. Abstr.) **(Ger)**

OVARY

see related

OVARIECTOMY

Ovarian pregnancy--ultrasonographic diagnosis. Malinger G, et al. **Acta Obstet Gynecol Scand** 1988;67(6):561-3

Ovarian and intra-uterine pregnancy combined. Nilsson BG, et al. **Acta Obstet Gynecol Scand** 1988;67(6):569-70

Preferential uptake of cytotoxic porphyrins from hematoporphyrin derivative in murine L929 fibroblasts and Chinese hamster ovary K1 epithelial cells. Boegheim JP, et al. **Biochim Biophys Acta** 1989 Aug 15;1012(3):237-42

The ovary--then and now. Barber HR. **Int J Fertil** 1989 May-Jun;34(3):173-4, 177-82 (18 ref.)

Quantification of aminofluorene adduct formation and repair in defined DNA sequences in mammalian cells using the UVRABC nuclease. Tang MS, et al. **J Biol Chem** 1989 Aug 25;264(24):14455-62

Radiation dosimetry in radionuclide hysterosalpingography with technetium-99m [letter] Stabin M. **J Nucl Med** 1989 Mar;30(3):415-6

Bilateral retroperitoneal ovaries. A case report. Campbell BF, et al. **J Reprod Med** 1988 Oct;33(10):839-42

Follistatin gene expression in the ovary and extragonadal tissues. Shimasaki S, et al. **Mol Endocrinol** 1989 Apr; 3(4):651-9

[Gonadal differentiation] Pelliniemi LJ. **Duodecim** 1988; 104(17):1310-9 (50 ref.) **(Fin)**

[Cystadenoma of the liver and bile ducts with ovarian stroma] Jakschik J, et al. **Zentralbl Chir** 1989;114(1):45-8 **(Ger)**

[A giant cyst of ectopic ovarian tissue] Derevianko AIu, et al. **Klin Khir** 1988;(12):56 **(Rus)**

[Ovarian pregnancy with contralateral corpus luteum and an intrauterine device] Srketić M, et al. **Jugosl Ginekol Perinatol** 1988 Sep-Dec;28(5-6):148-9 (Eng. Abstr.) **(Scr)**

ABNORMALITIES

The Perrault syndrome: clinical report and review. Nishi Y, et al. **Am J Med Genet** 1988 Nov;31(3):623-9 (11 ref.)

Hernia uterus inguinale associated with unicornuate uterus. Elliott DC, et al. **Arch Surg** 1989 Jul;124(7):872-3

Chromosome studies and fertility treatment in women with ovarian failure. Hens L, et al. **Clin Genet** 1989 Aug; 36(2):81-91

Progesterone administration in patients with absent ovaries. Devroey P, et al. **Int J Fertil** 1989 May-Jun;34(3):188-93

[A case of supernumerary ovaries diagnosed during cesarean section] Grio R, et al. **Minerva Ginecol** 1988 Nov; 40(11):671-3 (11 ref.) (Eng. Abstr.) **(Ita)**

ANALYSIS

Immunohistochemical localization of renin and angiotensin II in human ovaries. Palumbo A, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):8-14

Lectin binding sites in normal rat ovary and ENU-induced Sertoli cell tumors of the ovaries. Stoica G, et al. **Anticancer Res** 1989 May-Jun;9(3):679-85

Transforming growth factor-alpha in the adult bovine ovary: identification in growing ovarian follicles. Lobb DK, et al. **Biol Reprod** 1989 May;40(5):1087-93

Sex-specific proteins in normal chick embryo gonads and testis feminized by oestrogen treatment: a two-dimensional gel electrophoresis investigation. Samsel J, et al. **Cell Differ Dev** 1988 Dec;25(3):223-8

Immunocytochemical localization of estradiol and progesterone receptors in the monkey ovary throughout the menstrual cycle. Hild-Petito S, et al. **Endocrinology** 1988 Dec;123(6):2896-905

Sigma-receptors in endocrine organs: identification, characterization, and autoradiographic localization in rat pituitary, adrenal, testis, and ovary. Wolfe SA Jr, et al. **Endocrinology** 1989 Mar;124(3):1160-72

Radioimmunoassay investigations of 20 beta-hydroxylated steroids in maturing/ovulating female rainbow trout (Salmo gairdneri). Canario AV, et al. **Gen Comp Endocrinol** 1989 Apr;74(1):77-84

Detection of unconjugated and conjugated steroids in the ovary, eggs, and haemolymph of the decapod crustacean Nephrops norvegicus. Fairs NJ, et al. **Gen Comp Endocrinol** 1989 May;74(2):199-208

Immunohistochemical localization of desmin in the quail ovary. Demonstration of a suspensory apparatus. Van Nassauw L, et al. **Histochemistry** 1989;90(5):371-7

Histomorphological alterations in gonads of normal and pinealectomized domestic pigeon, Columba livia, during breeding and post-breeding phases. Ramachandran AV, et al. **Indian J Exp Biol** 1988 Nov;26(11):835-8

A gonadotropin-releasing hormone-binding inhibitor from bovine ovaries. Purification and identification as histone H2A. Aten RF, et al. **J Biol Chem** 1989 Jul 5; 264(19):11065-71

Antigonadotropic effects of the bovine ovarian gonadotropin-releasing hormone-binding inhibitor/histone H2A in rat luteal and granulosal cells. Aten RF, et al. **J Biol Chem** 1989 Jul 5;264(19):11072-5

Chinese hamster ovary cell mutants deficient in an anion exchanger functionally similar to the erythroid band 3. Elgavish A, et al. **J Biol Chem** 1988 Dec 15; 263(35):18607-13

Purification, characterization, and amino-terminal sequence of rat ovarian receptor for luteinizing hormone/human choriogonadotropin. Roche PC, et al. **J Biol Chem** 1989 Mar 15;264(8):4636-41

Carbohydrate structures of human tissue plasminogen activator expressed in Chinese hamster ovary cells. Spellman MW, et al. **J Biol Chem** 1989 Aug 25; 264(24):14100-11

Oestrogen receptor mRNA and a related RNA transcript in mouse ovaries. Hillier SG, et al. **J Mol Endocrinol** 1989 Jan;2(1):39-45

Cellular localization of inhibin mRNA in the bovine ovary by in-situ hybridization. Torney AH, et al. **J Reprod Fertil** 1989 May;86(1):391-9

Inhibin mRNAs in ovine and bovine ovarian follicles and corpora lutea throughout the estrous cycle and gestation. Rodgers RJ, et al. **Mol Cell Endocrinol** 1989 Mar; 62(1):95-101

Identification of neurohypophysial peptides in the ovaries of several mammalian and nonmammalian species. Watkins WB, et al. **Peptides** 1988 Sep-Oct;9(5):927-32

Rat ovarian prostaglandin levels and ovulation as indicators of the strength of non-steroidal anti-inflammatory drugs. Espey LL, et al. **Prostaglandins** 1988 Dec;36(6):875-9

Alpha smooth muscle actin (alpha-SM actin) in normal human ovaries, in ovarian stromal hyperplasia and in ovarian neoplasms. Czernobilsky B, et al. **Virchows Arch [B]** 1989;57(1):55-61

ANATOMY & HISTOLOGY

Cellular enzymology--a quantitative cytochemical approach based on continuous microdensitometric monitoring of enzyme activity in unfixed tissue sections. Robertson WR, et al. **Acta Histochem Suppl (Jena)** 1989;37:37-44

The use of transvaginal sonography for evaluation of postmenopausal ovarian size and morphology. Rodriguez MH, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):810-4

A contribution to knowledge of lymphatic vessels morphology in the ovary of the cat. Ricciardi MP, et al. **Boll Soc Ital Biol Sper** 1989 May;65(5):381-4

Ovarian size in postmenopausal women. Goswamy RK, et al. **Br J Obstet Gynaecol** 1988 Aug;95(8):795-801

Effect of a pineal indolamine, 5-methoxyindole-3-acetic acid, on the estrous cycle and reproductive organs of female Wistar albino rats. Ocal-Irez T, et al. **Brain Res** 1989 Jul 24;493(1):1-7

Sonographic evaluation of ovarian volume in postmenopausal women: a screening test for ovarian cancer? Millo R, et al. **Clin Exp Obstet Gynecol** 1989;16(2-3):72-8

Ultrasonographic identification and measurement of the normal ovary in postmenopausal Japanese women. Hata K, et al. **Gynecol Obstet Invest** 1989;27(2):99-101

Ovarian development of the female child and adolescent: I. Morphology. Giorlandino C, et al. **Int J Gynaecol Obstet** 1989 May;29(1):57-63

Circulating progesterone concentrations and ovarian

functional anatomy in the African elephant (Loxodonta africana). de Villiers DJ, et al. **J Reprod Fertil** 1989 May; 86(1):195–201

Histological evidence for heterogeneity in the development of preovulatory pig follicles. Hunter MG, et al. **J Reprod Fertil** 1989 May;86(1):165–70

Ovarian tumorlike structures, biovular follicles, and binucleated oocytes in children: their frequency and possible pathologic significance. Manivel JC, et al. **Pediatr Pathol** 1988;8(3):283–92

Ultrasonographic measurement of ovarian volume in women of child-bearing age. Fischetti SG, et al. **Rays** 1988 May–Aug;13(2):65–8

[Ovarian morphology and function during the climacteric] Rachev E. **Akush Ginekol (Sofiia)** 1989;28(1):83–8 (25 ref.) (Bul)

[Comparative morphological study of the peritoneal mesothelium and the germinal epithelium of the ovary. Histogenetic evidence for endometriosis] Hoang NM, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(4):479–84 (Eng. Abstr.) (Fre)

[Normal cyclical morphology of the endometrium and ovary of swine] Leiser R, et al. **Tierarztl Prax** 1988;16(3):261–80 (Eng. Abstr.) (Ger)

[Pelvic echography in the differential diagnosis of isolated precocious thelarche and true precocious puberty] Arrigo T, et al. **Minerva Pediatr** 1988 May;40(5):269–72 (Eng. Abstr.) (Ita)

BLOOD SUPPLY

Hormonal influence on utero-ovarian blood flow distribution in the mid-luteal pseudopregnant rat. Gåfvels M, et al. **Acta Physiol Scand** 1988 Mar;132(3):329–34

Computed tomographic features of puerperal ovarian vein thrombosis. Khurana BK, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):905–8

Gradients of prorenin and active renin in ovarian venous and peripheral venous blood samples obtained simultaneously. Paulson RJ, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1575–9

Effects of prostacyclin on ovulation and microvasculature of the in vitro perfused rabbit ovary. Yoshimura Y, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):977–82

Increase in ovarian blood volume during ovulation in the gonadotropin-primed immature rat. Tanaka N, et al. **Biol Reprod** 1989 Apr;40(4):762–8

Transvaginal pulsed Doppler measurement of blood flow velocity in the ovarian arteries during cycle stimulation and after follicle puncture. Deutinger J, et al. **Fertil Steril** 1989 Mar;51(3):466–70

CT appearance of right gonadal vein. Rebner M, et al. **J Comput Assist Tomogr** 1989 May–Jun;13(3):460–2

Episodic secretion of inhibin into the ovarian vein during the follicular phase of the oestrous cycle in the ewe. McNeilly AS, et al. **J Endocrinol** 1989 Jul;122(1):287–92

Ovarian capillary blood flow in seasonally anoestrous ewes induced to ovulate by treatment with GnRH. Brown BW, et al. **J Reprod Fertil** 1988 Nov;84(2):653–8

Blood flow in the ovaries and ovarian follicles of Romanov and Préalpes-du-Sud ewes. Brown BW, et al. **J Reprod Fertil** 1989 Jan;85(1):317–23

Doppler ultrasound in the nonpregnant pelvis. Farquhar CM, et al. **J Ultrasound Med** 1989 Aug;8(8):451–7

Ovarian vein thrombosis with atypical presentation: role of sonography and duplex Doppler. Baka JJ, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):887–9

[MRI and post-partum thrombosis of the utero-ovarian vein. Apropos of a case] Martin B, et al. **Ann Radiol (Paris)** 1988; 31(4):251–4 (Eng. Abstr.) (Fre)

[The arteries of the mesovarium in the ontogenic development of women] Wydrzynski M. **Bull Assoc Anat (Nancy)** 1988 Mar;72(216):37–9 (Eng. Abstr.) (Fre)

[Ovarian vein syndrome] Montagnac R, et al. **Rev Fr Gynecol Obstet** 1989 Jan;84(1):11–4 (14 ref.) (Eng. Abstr.) (Fre)

[Transvaginal pulsed Doppler measurement of flow velocities in pelvic vessels following cycle stimulation] Deutinger J, et al. **Geburtshilfe Frauenheilkd** 1989 Jan;49(1):33–6 (Eng. Abstr.) (Ger)

[Puerperal ovarian vein thrombophlebitis—a rare puerperal complication] Loos W, et al. **Geburtshilfe Frauenheilkd** 1988 Jul;48(7):483–8 (Eng. Abstr.) (Ger)

[Puerperal ovarian vein thrombophlebitis following pregnancy with quadruplets] Spitzer D, et al. **Geburtshilfe Frauenheilkd** 1989 May;49(5):502–3 (Eng. Abstr.) (Ger)

[The left ovarian vein as a functional renal vein] Sigmund G, et al. **ROFO** 1989 Aug;151(2):243–4 (Ger)

[Roentgen phlebography diagnosis of varicose changes of the ovarian veins] Botschorischwili GG, et al. **Z Urol Nephrol** 1989 Mar;82(3):135–8 (Eng. Abstr.) (Ger)

[The role of the cholinergic system in the regulation of blood flow through the reproductive organs of swine during the estrous cycle] Dynarowicz I, et al. **Pol Arch Weter** 1987; 27(4):69–83 (Eng. Abstr.) (Pol)

[Spontaneous rupture of veins of the utero-ovarian plexus in pregnancy] Starzewski J, et al. **Wiad Lek** 1988 Sep 1; 41(17):1175–7 (Eng. Abstr.) (Pol)

[The content of sex steroids in the blood flowing from the ovaries of patients suffering from a neuroendocrine syndrome and polycystic ovaries] Rubchenko TI, et al. **Akush Ginekol (Mosk)** 1988 Aug;(8):54–7 (Eng. Abstr.) (Rus)

[Puerperal thrombosis of the ovarian vein associated with an intracaval "floating" thrombus] Vaquero F, et al. **Angiologia** 1988 Nov–Dec;40(6):219–24 (Eng. Abstr.) (Spa)

[Syndrome of the right ovarian vein. Presentation of a new case] Llarena Ibarguren R, et al. **Arch Esp Urol** 1988 Sep; 41(7):543–5 (Eng. Abstr.) (Spa)

[Ovarian vein syndrome] Sanz Jaka JP, et al. **Arch Esp Urol** 1988 Nov–Dec;41(9):827–30 (Eng. Abstr.) (Spa)

CYTOLOGY

In vivo and in vitro effects of androgens on rat ovarian granulosa cells. Anderson E. **Am J Obstet Gynecol** 1989 Apr;160(4):782–8

Differential role of protein kinase C in the action of luteinizing hormone-releasing hormone on hormone production in rat ovarian cells. Wang J, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):984–9

Properties and physiological function of the polyamine transport system. Byers TL, et al. **Am J Physiol** 1989 Sep; 257(3 Pt 1):C545–53

A technique for monitoring mammalian cell growth and inhibition in situ via Fourier transform infrared spectroscopy. Hutson TB, et al. **Anal Biochem** 1988 Nov 1;174(2):415–22

S-100 protein-immunoreactive cells in the bovine ovary. Kamiya S, et al. **Anat Rec** 1989 Apr;223(4):384–6

Acrylamide sensitization of the heat response of the cytoskeleton and cytotoxicity in attaching and well-spread synchronous Chinese hamster ovary cells. Wachsberger PR, et al. **Cell Motil Cytoskeleton** 1989;13(2):67–82

Method for probing cells in radiation-induced G2 arrest: demonstration of potentially lethal damage repair. Rowley R, et al. **Cell Tissue Kinet** 1988 Nov;21(6):395–403

Characterization by flow cytometry of fluorescein-methotrexate transport in Chinese hamster ovary cells. Assaraf YG, et al. **Cytometry** 1989 Jan; 10(1):50–5

Microanalysis of hormone responsive ovarian interstitial gland cells in miniature culture. Bitzur S, et al. **Endocrinology** 1989 Mar;124(3):1471–84

Ovarian germinal epithelial cells respond to basic fibroblast growth factor and express its gene: implications for early folliculogenesis. Gospodarowicz D, et al. **Endocrinology** 1989 Sep;125(3):1266–76

Regulation of ovarian cell growth through the local production of transforming growth factor-alpha by theca cells. Skinner MK, et al. **Endocrinology** 1988 Dec; 123(6):2632–8

Elevation of glutathione levels and glutathione S-transferase activity in arsenic-resistant Chinese hamster ovary cells. Lee TC, et al. **In Vitro Cell Dev Biol** 1989 May;25(5):442–8

Distribution and characteristics of mast cells in immature rat ovary. Parshad RK, et al. **Indian J Exp Biol** 1988 Dec; 26(12):937–40

Growth characteristics of rabbit ovarian mesothelial (surface epithelial) cells. Nicosia SV, et al. **Int J Gynecol Pathol** 1985;4(1):58–74

Inositol metabolism and cell growth in a Chinese hamster ovary cell myo-inositol auxotroph. Jackowski S, et al. **J Biol Chem** 1988 Nov 15;263(32):16830–6

Cortical granule-specific components are present within oocytes and accessory cells during sea urchin oogenesis. Wessel GM. **J Histochem Cytochem** 1989 Sep;37(9):1409–20

Drug resistance in Chinese hamster ovary cells during recovery from severe hypoxia. Wilson RE, et al. **J Natl Cancer Inst** 1989 Aug 16;81(16):1235–40

Rapid changes in the expression of inhibin alpha-, beta A-, and beta B-subunits in ovarian cell types during the rat estrous cycle. Meunier H, et al. **Mol Endocrinol** 1988 Dec; 2(12):1352–63

The developmental history of female germ cells in mammals. McLaren A. **Oxf Rev Reprod Biol** 1988;10:162–79 (88 ref.)

Cell-to-cell channel conductance during loss of gap junctional coupling in pairs of pancreatic acinar and Chinese hamster ovary cells. Somogyi R, et al. **Pflugers Arch** 1988 Jul;412(1–2):54–65

Increased sister chromatid exchanges in Chinese hamster ovary cells exposed to high intensity pulsed ultrasound. Barnett SB, et al. **Ultrasound Med Biol** 1988;14(5):397–403

Sister chromatid exchanges in Chinese hamster ovary cells exposed to high intensity pulsed ultrasound: inability to confirm previous positive results. Miller MW, et al. **Ultrasound Med Biol** 1989;15(3):255–62

[Gonadal differentiation] Pelliniemi LJ. **Duodecim** 1988; 104(17):1310–9 (50 ref.) (Fin)

[Reduction of germ cell number induced in vitro by the testis in fetal rat ovary may be caused by factors other than anti-Müllerian hormone] Charpentier G, et al. **C R Acad Sci [III]** 1989;309(1):35–42 (Eng. Abstr.) (Fre)

[Limitation on the number of germ cells in the fetal ovary of the rat by older ovaries, in vitro] Prepin J, et al. **C R Acad Sci [III]** 1989;308(2):61–4 (Eng. Abstr.) (Fre)

DRUG EFFECTS

Gonadotropin-releasing hormone agonist inhibits physiologic ovarian follicular loss in rats. Ataya K, et al. **Acta Endocrinol (Copenh)** 1989 Jul;121(1):55–60

Ovarian hyperstimulation syndrome (OHS): a case of severe OHS. Rubessa S, et al. **Acta Eur Fertil** 1989 Jan–Feb; 20(1):15–7

Ovarian hyperstimulation syndrome. A case history and review. Varma TR, et al. **Acta Obstet Gynecol Scand** 1988; 67(7):579–84

Acute stimulatory effects of an LH-RH agonist on the ovary in pseudopregnant rats. Varga B, et al. **Acta Physiol Hung** 1989;73(1):89–95

Is serotonin involved in the ovulatory process of the rat ovary perfused in vitro? Schmidt G, et al. **Acta Physiol Scand** 1988 Feb;132(2):251–6

Pituitary-ovarian activity when switching from various monophasic pills to a triphasic pill. Eyong E, et al. **Adv Contracept** 1989 Mar;5(1):1–11

Effect of Japanese kampo medicine on hypothalamic-pituitary-ovarian function in women with ovarian insufficiency. Koyama T, et al. **Am J Chin Med** 1988;16(1–2):47–55

The effect of medroxyprogesterone acetate (Provera) on ovarian radiosensitivity. Jarrell J, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):990–4

Effects of long-term testosterone exposure on ovarian function and morphology in the rhesus monkey. Faiman C, et al. **Anat Rec** 1988 Nov;222(3):245–51

Gossypol as anti-fertility agent in female rats. Ahmed AA, et al. **Arch Exp Veterinarmed** 1988 Nov;42(6):944–7

Insulin-like growth factor 1 as an intra-ovarian hormone—an integrated hypothesis and review. Eden JA, et al. **Aust N Z J Obstet Gynaecol** 1989 Feb;29(1):30–7 (24 ref.)

Effects of vanadyl sulphate on ornithine decarboxylase and progesterone levels in the ovary of rat. Reddy RL, et al. **Biochem Int** 1989 Feb;18(2):467–74

The plant metabolite 6-methoxybenzoxazolinone interacts with follicle-stimulating hormone to enhance ovarian growth. Butterstein GM, et al. **Biol Reprod** 1988 Sep; 39(2):465–71

Gonadotropin regulation of rat ovarian lysosomes: existence of a hormone specific dual control mechanism. Dhanasekaran N, et al. **Biosci Rep** 1988 Jun;8(3):279–85

Toxic effects of mercuric chloride, methylmercuric chloride, and emisan 6 (an organic mercurial fungicide) on ovarian recrudescence in the catfish Clarias batrachus (L.). Kirubagaran R, et al. **Bull Environ Contam Toxicol** 1988 Dec;41(6):902–9

Comparative sublethal ovarian pathology of some pesticides in the teleost, Puntius conchonius Hamilton. Kumar S, et al. **Bull Environ Contam Toxicol** 1988 Aug;41(2):227–32

Effect of cyclophosphamide on the immature rat ovary. Ataya KM, et al. **Cancer Res** 1989 Apr 1;49(7):1660–4

The effect of levonorgestrel administered in large doses at different stages of the cycle on ovarian function and endometrial morphology. Landgren BM, et al. **Contraception** 1989 Mar;39(3):275–89

Plasma levonorgestrel levels and ovarian function during the use of a levonorgestrel-releasing intracervical contraceptive device. Ratsula K, et al. **Contraception** 1989 Feb;39(2):195–204

The influence of growth hormone injections on the endocrine and metabolic status of gilts. Kirkwood RN, et al. **Domest Anim Endocrinol** 1989 Apr;6(2):167–76

Ovarian damage to Channa punctatus after chronic exposure to low concentrations of Elsan, mercury, and ammonia. Dey S, et al. **Ecotoxicol Environ Safety** 1989 Apr; 17(2):247–57

Steroid hormone receptors in the uterus and ovary of immature rats treated with gonadotropins. Arakawa S, et al. **Endocrinol Jpn** 1989 Apr;36(2):219–28

Ultrastructural alterations in ovaries from nifurtimox or benznidazole-treated rats: their relation to ovarian nitroreductive biotransformation of both drugs. de Castro CR, et al. **Exp Mol Pathol** 1989 Jun;50(3):385–97

An increased initial follicle-stimulating hormone/luteinizing hormone ratio does not affect ovarian responses and the outcomes of in vitro fertilization. Benadiva CA, et al. **Fertil Steril** 1988 Nov;50(5):777–81

Pituitary and ovarian suppression rate after high dosage of gonadotropin-releasing hormone agonist. Bider D, et al. **Fertil Steril** 1989 Apr;51(4):578–81

Ovarian suppression induced with Buserelin or danazol in the management of endometriosis: a randomized, comparative study. Dmowski WP, et al. **Fertil Steril** 1989 Mar;51(3):395–400

Enzyme immune assay determination of CA-125 in serum, peritoneal fluid, and follicular fluid from women with minimal endometriosis after ovarian hyperstimulation. Eisermann J, et al. **Fertil Steril** 1989 Feb;51(2):344–7

Effects of 180 micrograms and 250 micrograms norgestimate on pituitary-ovarian function and cervical mucus. Eyong E, et al. **Fertil Steril** 1988 Nov;50(5):756–60

Ovarian hyperstimulation syndrome following D-Trp-6 luteinizing hormone-releasing hormone microcapsules and menotropin for in vitro fertilization. Golan A, et al. **Fertil Steril** 1988 Dec;50(6):912–6

Sonatox-induced impairment of ovarian activity in an exotic cichlid, Oreochromis mossambicus. Bhattacharya L, et al. **Folia Morphol (Praha)** 1989;37(1):33–7

Effect of Des-Gly10-(im-Bzl-D-His6)LHRH-ethylamide on hypophysial gonadotrophs and ovary of the juvenile frog Rana cyanophlyctis (Schn.). Saidapur SK, et al.

Gen Comp Endocrinol 1989 Feb;73(2):233–41

Regulation of gonadal steroidogenesis in Fundulus heteroclitus by recombinant salmon growth hormone and purified salmon prolactin. Singh H, et al. **Gen Comp Endocrinol** 1988 Oct;72(1):144–53

The effect of different LH-RH agonists on the levels of immunoreactive gonadotropins. Insler V, et al. **Gynecol Endocrinol** 1988 Dec;2(4):305–12

Further evidence that prolactin controls the prepubertal sexual development in the female rat. Kawagoe S, et al. **Gynecol Obstet Invest** 1989;27(4):197–200

Suppression with gonadotropin-releasing hormone analogues prior to stimulation with gonadotropins: comparison of three protocols. Lipitz S, et al. **Gynecol Obstet Invest** 1989; 28(1):31–4

Early progesterone rise during ovarian stimulation in humans: difference with the primate model. Remorgida V, et al. **Horm Metab Res** 1989 Feb;21(2):108

Utilization of GnRH agonists for poor responders in an IVF programme. Belaisch-Allart J, et al. **Hum Reprod** 1989 Jan; 4(1):33–4

Salivary oestradiol in spontaneous and stimulated menstrual cycles. Berthonneau J, et al. **Hum Reprod** 1989 Aug; 4(6):625–8

The value and role of plasma 17 beta-oestradiol measurements during ovarian hyperstimulation for in-vitro fertilization. Leerentveld RA, et al. **Hum Reprod** 1988 Aug; 3(6):735–9

Delayed occurrence of an LH surge after HCG administration during ovarian stimulation with gonadotrophins: effect of LHRH treatment. Rojas FJ, et al. **Hum Reprod** 1989 Aug;4(6):643–6

Ovarian stimulation during gonadotropin treatment after hCG administration monitored by ultrasound and serum estradiol and progesterone. Ylöstalo P, et al. **Int J Fertil** 1988 Jul-Aug;33(4):259–64

Effects of the posterior hypophysis and ovary on pheromonal production in normal females and in the reproductive behavior of male rats treated with D,L-propranolol. Zipper J, et al. **Int J Fertil** 1988 Nov-Dec;33(6):426–31

Reproductive and growth responses of gilts to exogenous porcine pituitary growth hormone. Bryan KA, et al. **J Anim Sci** 1989 Jan;67(1):196–205

'Corkscrewing', as evidence for force generation within a detergent-extracted microtubule translocation system from insect ovaries. Stebbings H, et al. **J Cell Sci** 1989 Jan;92 (Pt 1):21–7

The effects of long term testosterone administration on pulsatile luteinizing hormone secretion and on ovarian histology in eugonadal female to male transsexual subjects. Spinder T, et al. **J Clin Endocrinol Metab** 1989 Jul; 69(1):151–7

Purified FSH stimulates production of inhibin by the human ovary. Buckler HM, et al. **J Endocrinol** 1989 Jul; 122(1):279–85

Biochemical and histological studies of reproductive organs in cyclic and ovariectomized rats supporting a non-hormonal action for neem oil. Tewari RK, et al. **J Ethnopharmacol** 1989 May;25(3):281–93

Ovarian hyperstimulation inhibits embryo implantation in the mouse. Fossum GT, et al. **J In Vitro Fert Embryo Transf** 1989 Feb;6(1):7–10

The duration of pituitary suppression by means of intranasal gonadotropin hormone-releasing hormone analogue administration does not influence the ovarian response to gonadotropin stimulation and success rate in a gamete intrafallopian transfer (GIFT) program. Remorgida V, et al. **J In Vitro Fert Embryo Transf** 1989 Apr;6(2):76–80

Inhibition of pituitary-gonadal axis in mice by long-term administration of D-Trp-6-LHRH microcapsules. Bokser L, et al. **J Reprod Fertil** 1989 Mar;85(2):569–74

Effects of inhibitors of protein synthesis on the ovulatory process of the perfused rat ovary. Brännström M, et al. **J Reprod Fertil** 1989 Mar;85(2):451–9

Prevention of ovarian damage induced by cyclophosphamide in adult female mice by hormonal manipulations. Budel V, et al. **J Reprod Fertil** 1988 Nov;84(2):625–33

Effects of dibutyryl cyclic AMP on oocyte maturation and ovulation in the perfused rabbit ovary. Hosoi Y, et al. **J Reprod Fertil** 1989 Mar;85(2):405–11

Effects of clomiphene citrate on ovarian function in hypophysectomized rats. Moon YS, et al. **J Reprod Fertil** 1989 Jul;86(2):753–7

Ovarian response to hCG treatment during the oestrous cycle in heifers. Price CA, et al. **J Reprod Fertil** 1989 May; 86(1):303–8

Effects of epidermal growth factor and insulin-like growth factor I on the levels of mRNA encoding aromatase cytochrome P-450 of human ovarian granulosa cells. Steinkampf MP, et al. **Mol Cell Endocrinol** 1988 Sep; 59(1-2):93–9

Reducing the cost of the cure in childhood leukemia [editorial; comment] Civin CI. **N Engl J Med** 1989 Jul 20; 321(3):185–7. **Comment on:**. **Comment on:** N Engl J Med 1989 Jul 20;321(3):136–42 N Engl J Med 1989 Jul 20;321(3):143–51

Chronic inhibition of hypothalamic-pituitary-ovarian axis and body weight gain by brain-directed delivery of estradiol-17 beta in female rats. Sarkar DK, et al. **Neuroendocrinology** 1989 Aug;50(2):204–10

Effects of LH-RH analogue on LH release and ovarian function in ovarian quiescent heifers. Kamomae H, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):613–21

The effect of PMSG on ovarian function in ovarian quiescent heifers. Kamomae H, et al. **Nippon Juigaku Zasshi** 1988 Dec;50(6):1222–31

Direct inhibitory ovarian effects of prolactin in the process of ovulation. Yoshimura Y, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jan;41(1):83–9

Gold sodium thiomalate toxicity in cadmium-sensitive and cadmium-resistant Chinese hamster ovary cells. Nedelman MA, et al. **Proc Soc Exp Biol Med** 1989 Jun;191(2):179–86

Ovulation in the perfused ovary in vitro: further evidence that estrogen is not required. Morioka N, et al. **Steroids** 1988 Jan-Feb;51(1-2):173–83

Comparison of the effects of two lathyrogens on the reproductive system of the laying hen. Chowdhury SD, et al. **Vet Rec** 1989 Mar 11;124(10):240–2

[Increased incidence of ovarian hyperstimulation syndrome following combined GnRH agonist/hMG therapy] Lindner C, et al. **Geburtshilfe Frauenheilkd** 1989 Apr;49(4):337–44 (Eng. Abstr.) **(Ger)**

[Effects of o,p'-DDD on pituitary-gonadal function in patients with Cushing's disease] Ojima M, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Jun 20;64(6):451–62 (Eng. Abstr.) **(Jpn)**

[Effects of prostaglandin F2 alpha on steroidogenesis of the PMSG-hCG primed rat ovary in luteolysis] Takagi K. **Nippon Naibunpi Gakkai Zasshi** 1988 Oct 20;64(10):1024–37 (Eng. Abstr.) **(Jpn)**

[Effect of shakuyaku-kanzo-to, shakuyaku, kanzo, paeoniflorin, glycyrrhetinic acid and glycyrrhizin on ovarian function in rats] Takeuchi T. **Nippon Naibunpi Gakkai Zasshi** 1988 Nov 20; 64(11):1124–39 (Eng. Abstr.) **(Jpn)**

[Continuous subcutaneous infusion of GnRH agonist: effective dosage in the treatment of endometriosis and its influence on the ovarian response to human menopausal gonadotropin] Masaoka K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun;41(6):729–36 (Eng. Abstr.) **(Jpn)**

[Psychotropic substances and endocrine mechanisms: the effect on gonadal function] Arushanian EB, et al. **Farmakol Toksikol** 1988 Nov-Dec;51(6):104–12 (115 ref.) (Eng. Abstr.) **(Rus)**

[Luliberin alters the effects of gonadotropins and arginine vasotocin on steroid hormone production by mouse ovaries in vitro] Sirotkin AV, et al. **Fiziol Zh SSSR** 1988 Sep; 74(9):1333–6 **(Rus)**

[Effect of thymosin (fraction 5) on the development of functional activity of the adrenals and gonads in genetically athymic mice] Ignat'eva EV, et al. **Probl Endokrinol (Mosk)** 1988 Nov-Dec;34(6):83–6 (Eng. Abstr.) **(Rus)**

[Effect of the nonhormonal bisanionic aromatic compound IEM 967 on the pituitary-ovarian system of rats] Bekhtereva EP. **Vopr Med Khim** 1988 Jul-Aug;34(4):78–81 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Studies on the ovarian development in zebu cattle (Bos indicus). Mbassa GK. **Anat Histol Embryol** 1989 Jun; 18(2):143–9

Mouse gonadal differentiation in vitro in the presence of fetal calf serum. Mackay S, et al. **Cell Differ Dev** 1989 Jun; 27(1):19–28

Hormone ontogeny in the ovine fetus. XXIII. Pulsatile administration of follicle-stimulating hormone stimulates inhibin production and decreases testosterone synthesis in the ovine fetal gonad. Albers N, et al. **Endocrinology** 1989 Jun;124(6):3089–94

Control of gonadotropin secretion in the ovine fetus. II. A sex difference in pulsatile luteinizing hormone secretion after castration. Matwijiw I, et al. **Endocrinology** 1989 Mar; 124(3):1352–8

Embryology of the gonad with reference to special tumors of the ovary and testis. Barber HR. **J Pediatr Surg** 1988 Oct;23(10):967–72 (6 ref.)

Genotypic effects on gonadal size in fetal mice. Argyropoulos G, et al. **J Reprod Fertil** 1989 Jul;86(2):473–8

Production of C21 steroids in rat fetal ovaries. Rouiller V, et al. **J Steroid Biochem** 1988 Oct;31(4A):447–52

Formation of male and female sex cords in gonadal development of C57BL/6 mouse. Kanai Y, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):7–16

Role of mammalian Y chromosome in sex determination. Burgoyne PS. **Philos Trans R Soc Lond [Biol]** 1988 Dec 1;322(1208):63–72 (48 ref.)

Anti-Müllerian hormone produces endocrine sex reversal of fetal ovaries. Vigier B, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3684–8

Ultrastructure of human germ cells in sex-indifferent gonad, in early fetal testis or ovary and in testicular cancers. Francavilla S, et al. **Prog Clin Biol Res** 1989;296:31–40

Electron microscopic study of the gonadal development in early human embryos. Fukuda O, et al. **Prog Clin Biol Res** 1989;296:23–9

Migration of human germ cells and their relationship with the developing ovary: ultrastructural aspects. Makabe S, et al. **Prog Clin Biol Res** 1989;296:41–54

Anti-müllerian hormone and freemartinism: inhibition of germ cell development and induction of seminiferous cord-like structures in rat fetal ovaries exposed in vitro to purified bovine AMH [published erratum appears in Reprod Nutr Dev 1988;28 Suppl 1:199] Vigier B, et al. **Reprod Nutr Dev** 1988;28(4B):1113–28

[Action of LH on the secretion of estradiol by the chick embryonic ovary in in vitro culture] Weniger JP, et al. **Reprod Nutr Dev** 1988;28(6A):1473–7 (Eng. Abstr.) **(Fre)**

[Recognition of germinal plasma in oocytes of Bufo arenarum] Rengel D, et al. **Rev Bras Biol** 1988 Aug; 48(3):497–505 (62 ref.) (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Gonadal function and ovarian galactose metabolism in classic galactosemia. Kaufman FR, et al. **Acta Endocrinol (Copenh)** 1989 Feb;120(2):129–33

Methylation of human ornithine decarboxylase gene before transfection abolishes its transient expression in Chinese hamster ovary cells. Halmekytö M, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):528–34

Changes in the levels of superoxide anion radical and superoxide dismutase during the estrous cycle of Rattus norvegicus and induction of superoxide dismutase in rat ovary by lutropin. Laloraya M, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):146–53

A DNA helicase from Xenopus laevis ovaries [published erratum appears in Biochemistry 1989 Feb 21;28(4):1930] Poll EH, et al. **Biochemistry** 1988 Nov 29;27(24):8701–6

A major single-stranded DNA binding protein from ovaries of the frog, Xenopus laevis, is lactate dehydrogenase. Kaiserman HB, et al. **Biochim Biophys Acta** 1989 Jun 1; 1008(1):23–30

Modulation of soluble ovarian adenosine 3',5'-monophosphate-dependent protein kinase activity during prepubertal development in the rat. II. Evaluation of the catalytic subunit inhibitor activity. Hunzicker-Dunn M, et al. **Biol Reprod** 1989 Mar;40(3):486–94

Effect of hyperthermia on activity of three glycosyltransferases in Chinese hamster ovary cells. Henle KJ, et al. **Cancer Res** 1988 Oct 15;48(20):5717–21

Immunohistochemical localization of glutamate decarboxylase in the rat oviduct and ovary: further evidence for non-neural GABA systems. Erdö SL, et al. **Cell Tissue Res** 1989 Feb;255(2):431–4

Enzymes of steroid hormone metabolism in ovarian tissue of teleosts. Eckstein B, et al. **Comp Biochem Physiol [B]** 1979;64(3):309–12

Characteristics of a proteinase from ovarian fluid of the lumpsucker (Cyclopterus lumpus L.). Raae AJ, et al. **Comp Biochem Physiol [B]** 1988;91(4):647–50

Effect of malathion and endosulfan on brain acetylcholinesterase and ovarian steroidogenesis of Channa punctatus (Bloch). Inbaraj RM, et al. **Ecotoxicol Environ Safety** 1988 Oct;16(2):123–8

Protein carboxyl methyltransferase activity specific for age-modified aspartyl residues in mouse testes and ovaries: evidence for translation during spermiogenesis. O'Connor CM, et al. **Gamete Res** 1989 Mar;22(3):307–19

Developmental changes of steroidogenic enzyme activities in the embryonic gonads of the chicken: the sexual difference. Imataka H, et al. **Gen Comp Endocrinol** 1988 Sep;71(3):413–8

Further immunocytochemical study on the localization of aromatase in the ovary of rats and mice. Ishimura K, et al. **Histochemistry** 1989;90(6):413–6

The purification and properties of NADPH-dependent carbonyl reductases from rat ovary. Iwata N, et al. **J Biochem (Tokyo)** 1989 Apr;105(4):556–64

Hepatic lipase in the rat ovary. Ovaries cannot synthesize hepatic lipase but accumulate it from the circulation. Hixenbaugh EA, et al. **J Biol Chem** 1989 Mar 5; 264(7):4222–30

Hormonal regulation of nuclear cyclic AMP-dependent protein kinase subunit levels in rat ovaries. Kwast-Welfeld J, et al. **J Biol Chem** 1988 Oct 5;263(28):14343–50

Pleiotropic resistance to glycoprotein processing inhibitors in Chinese hamster ovary cells. The role of a novel mutation in the asparagine-linked glycosylation pathway. Lehrman MA, et al. **J Biol Chem** 1989 Jan 25; 264(3):1584–93

The expression of a functional cDNA encoding the chicken cytochrome P-450arom (aromatase) that catalyzes the formation of estrogen from androgen. McPhaul MJ, et al. **J Biol Chem** 1988 Nov 5;263(31):16358–63

A high molecular weight topoisomerase I from Xenopus laevis ovaries. Richard RE, et al. **J Biol Chem** 1989 Mar 15;264(8):4704–9

Proteasomes (multi-protease complexes) as 20 S ring-shaped particles in a variety of eukaryotic cells. Tanaka K, et al. **J Biol Chem** 1988 Nov 5;263(31):16209–17

Rapidly reversible enzyme inhibition in a temperature-sensitive mammalian cell mutant lacks thermotolerance. Vidair CA, et al. **J Cell Physiol** 1989 Aug; 140(2):227–32

Correlation of plasma progesterone concentrations to ovarian H-type lipase activity during pseudopregnancy in the rat. Gåfvels M, et al. **J Reprod Fertil** 1989 Jul;86(2):589–98

Histochemical study of superoxide dismutase in the ovary of the rat during the oestrous cycle. Laloraya M, et al. **J Reprod Fertil** 1989 Jul;86(2):583–7

Immunolocalization of aromatase, 17 alpha-hydroxylase and side-chain-cleavage cytochromes P-450 in the human ovary. Sasano H, et al. **J Reprod Fertil** 1989 Jan;85(1):163–9

Kinetic analysis of human placental, ovarian, and adrenal

3 beta-hydroxysteroid dehydrogenase inhibition by epostane in vitro. López Bernal A. **J Steroid Biochem** 1989 Sep;33(3):483–5
Activity of 3 beta-hydroxysteroid dehydrogenase/isomerase in the fetal rat ovary. Picon R, et al. **J Steroid Biochem** 1988 Nov;31(5):839–43
Changes in 3 beta-hydroxysteroid dehydrogenase activity in the developing rabbit ovary. YoungLai EV, et al. **J Steroid Biochem** 1988 Dec;31(6):983–6
Immunohistochemical analysis of cytochrome P-450 17 alpha-hydroxylase in pig adrenal cortex, testis and ovary. Sasano H, et al. **Mol Cell Endocrinol** 1989 Apr; 62(2):197–202
Purification of three forms of chromatographically distinct protein kinase C from the swine ovary. Wheeler MB, et al. **Mol Cell Endocrinol** 1989 Jan;61(1):117–22
Separation of the complexes formed between the regulatory and catalytic subunits of cyclic adenosine monophosphate-dependent protein kinase and topoisomerase I activity in preovulatory follicle-enriched immature rat ovaries. Hunzicker-Dunn M, et al. **Mol Endocrinol** 1989 May;3(5):780–9
The estrogen 2-hydroxylase activity of the gonadotropin-stimulated hypophysectomized immature rat ovary. Chakraborty C, et al. **Proc Soc Exp Biol Med** 1988 Nov;189(2):189–95
Localization and regulation of ovarian carbonyl reductase in rats. Inazu N, et al. **Prog Clin Biol Res** 1989;290:323–34
The purification and characterization of NADPH-dependent carbonyl reductase from rat ovary. Iwata N, et al. **Prog Clin Biol Res** 1989;290:307–21
The involvement of oxytocin in ovulation and in the outputs of cyclo-oxygenase and 5-lipoxygenase products from isolated rat ovaries. Viggiano M, et al. **Prostaglandins** 1989 Mar;37(3):367–78
Physiological role of ovarian carbonyl reductase and effect of antiestrogen on its activity in rats. Inazu N, et al. **Res Commun Chem Pathol Pharmacol** 1989 Mar; 63(3):341–59
[The role of enzymes in the pathogenesis of genital tumors] Nagornaia VF. **Akush Ginekol (Mosk)** 1989 Apr;(4):11–5 (64 ref.) **(Rus)**

GROWTH & DEVELOPMENT

The ontogeny of immunoreactive beta-endorphin and beta-lipotropin in the rat ovary. Adams ML, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1171–6
Influences of prenatal and postnatal fraternity size on ovarian development in the mouse. Kirkpatrick BW, et al. **Biol Reprod** 1988 Dec;39(5):1027–31
The kinetics of pre-antral follicle development in ovaries of CBA/Ca mice during the first 14 weeks of life. Faddy MJ, et al. **Cell Tissue Kinet** 1987 Nov;20(6):551–60
Cellular localization of müllerian inhibiting substance in the developing rat ovary. Ueno S, et al. **Endocrinology** 1989 Feb;124(2):1000–6
Ovarian early postovulatory development and oestrogen production in rainbow trout (Salmo gairdneri R.) from a spring-spawning strain. de Mones A, et al. **Gen Comp Endocrinol** 1989 Jun;74(3):431–41
Effects of creep feeding, zeranol implants and breed type on beef production: II. Reproductive development and fat deposition in heifers. Prichard DL, et al. **J Anim Sci** 1989 Mar;67(3):617–23
Fibroblast growth factor and the control of pituitary and gonad development and function. Gospodarowicz D, et al. **J Steroid Biochem** 1989 Jan;32(1B):183–91 (103 ref.)
The ontogeny of immunoreactive, endogenous FSH and LH in the rat ovary during early folliculogenesis. Mulheron GW, et al. **Proc Soc Exp Biol Med** 1989 Jan;190(1):91–7
The ontogeny of primordial follicles in the mouse ovary. Merchant-Larios H, et al. **Prog Clin Biol Res** 1989; 296:55–63
Regulation and temporal sequence of surface epithelium morphogenesis in the postovulatory rabbit ovary. Nicosia SV, et al. **Prog Clin Biol Res** 1989;296:111–9
[Steroid hormone transformation in the gonads and liver of aged rats] Schriefers H, et al. **Biol Chem Hoppe Seyler** 1988 May;369(5):371–80 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Organ-specific antibodies against ovary in patients with systemic lupus erythematosus. Moncayo-Naveda H, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1227–9
Ovarian histopathology of bitches immunized with porcine zonae pellucidae. Mahi-Brown CA, et al. **Am J Reprod Immunol Microbiol** 1988 Nov;18(3):94–103
Premature ovarian failure. I: The association with autoimmunity. Mignot MH, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Jan;30(1):59–66
Premature menopause: monoclonal antibody defined T lymphocyte abnormalities and antiovarian antibodies. Rabinowe SL, et al. **Fertil Steril** 1989 Mar;51(3):450–4
An investigation of NCRC11 immunoreactivity in normal and neoplastic epithelia of the female genital tract and ovary. Hitchcock A, et al. **Histopathology** 1989 Aug; 15(2):187–94
Chinese hamster ovary cells deficient in N-acetylglucosaminyltransferase I activity are resistant to Entamoeba histolytica-mediated cytotoxicity. Li E, et al. **Infect Immun** 1989 Jan;57(1):8–12
[Antibodies against the ovary in patients with sterility] Moncayo-Naveda H, et al. **Gynakol Rundsch** 1988;28 Suppl 2:54–6 **(Ger)**

INNERVATION

Changes of noradrenaline content in the adrenergic nerves of the pig ovaries different periods of the oestrous cycle. Lakomy M, et al. **Anat Anz** 1988;166(1–5):149–55
Neuropeptide Y-containing nerves in rat gonads: sex difference and development. Allen LG, et al. **Biol Reprod** 1989 Feb;40(2):371–8
The innervation of the immature rat ovary by calcitonin gene-related peptide. Calka J, et al. **Biol Reprod** 1988 Dec; 39(5):1215–23
Direct electrical stimulation of the superior ovarian nerve in rats causes an increase in neuronal activity in the ipsilateral ovarian plexus nerve. Klein CM, et al. **Brain Res** 1989 Feb 6;479(1):194–200
Catecholaminergic nerves in the embryonic chick ovary: co-localization with beta 2-adrenoceptor-bearing steroidogenic cells. Müller-Marschhausen U, et al. **Cell Tissue Res** 1988 Oct;254(1):1–9

METABOLISM

Binding overlap and internalization of gonadotropin and thyrotropin in neonatal rat testicle and ovary cell cultures and the Chinese hamster ovary (CHO) cell line. Gruszczynska M, et al. **Acta Biol Hung** 1988;39(1):39–47
Counter current transfer of polypeptide hormones from uterus to ovary in gilts using insulin as a model. Koziorowski M, et al. **Acta Physiol Pol** 1988 Mar-Apr; 39(2):121–8
Ovarian renin-angiotensin system [letter] Rennie D, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1601–2
Platelet activating factor-induced early pregnancy factor activity from the perfused rabbit ovary and oviduct. Sueoka K, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1580–4
Increase in ovarian leukotrienes during hormonally induced ovulation in the rat. Espey LL, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):E753–9
Factors influencing the free androgen index in a group of subfertile women with normal ovaries. Eden JA, et al. **Ann Clin Biochem** 1988 Jul;25 (Pt 4):350–3
Ovarian steroid action on gene expression: mechanisms and models. Rories C, et al. **Annu Rev Physiol** 1989;51:653–81 (197 ref.)
Gonadotropin-dependent metabolism of 7,12-dimethylbenz(a)anthracene in the ovary of rhesus monkey. Bengtsson M, et al. **Biochem Pharmacol** 1989 Jun 1;38(11):1869–72
The role of inositol lipid metabolism in the ovary. Leung PC, et al. **Biol Reprod** 1989 Apr;40(4):703–8 (48 ref.)
Suppression of luteal estradiol receptors and progesterone synthesis by a gonadotropin-releasing hormone agonist (WY-40972) during midgestation. Sridaran R, et al. **Biol Reprod** 1989 Feb;40(2):276–82
Metal-binding proteins of the Syrian hamster ovaries: apparent deficiency of metallothionein. Waalkes MP, et al. **Biol Reprod** 1988 Nov;39(4):953–61
Changes in serum and ovarian steroids during reproductive development in the female guinea pig. Westfahl PK, et al. **Biol Reprod** 1988 Dec;39(5):1086–92
Effects of treadmill exercise on the transfer of plasma triglyceride into the ovary of the laying fowl. Vincent R, et al. **Br Poult Sci** 1988 Dec;29(4):801–14
Direct hypothalamic control of vasoactive intestinal peptide (VIP) levels in the developing rat ovary. Advis JP, et al. **Brain Res Bull** 1989 Apr;22(4):605–10
Binding of 125I-labelled human chorionic gonadotropin to cell membrane receptors in rabbit ovarian slices. YoungLai EV, et al. **Can J Physiol Pharmacol** 1988 Apr;66(4):337–41
Steroidogenesis in fetal bovine gonads. Dominguez MM, et al. **Can J Vet Res** 1988 Oct;52(4):401–6
Inhibition of rat ovarian [3H]thymidine uptake by luteinizing hormone-releasing hormone agonists: a possible mechanism for preventing damage by cytotoxic agents. Ataya KM, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7252–6
Immunohistochemical localization of tissue-type plasminogen activator in ovaries before and after induced and spontaneous ovulation in the rat. Cajander SB, et al. **Cell Tissue Res** 1989 Jul;257(1):1–8
Post-tubal sterilization problems correlated with ovarian steroidogenesis. Cattanach JF, et al. **Contraception** 1988 Nov;38(5):541–50
Steroidogenesis in human polycystic ovary. Mahajan DK. **Endocrinol Metab Clin North Am** 1988 Dec;17(4):751–69 (91 ref.)
Pregnant mare's serum gonadotropin stimulates inhibin subunit gene expression in the immature rat ovary: dose response characteristics and relationships to serum gonadotropins, inhibin, and ovarian steroid content. Davis SR, et al. **Endocrinology** 1988 Nov;123(5):2399–407
Rat ovarian renin: characterization and changes during the estrous cycle. Howard RB, et al. **Endocrinology** 1988 Nov; 123(5):2331–40
Mullerian inhibiting substance in the adult rat ovary during various stages of the estrous cycle. Ueno S, et al. **Endocrinology** 1989 Aug;125(2):1060–6
Arachidonic acid as a stimulatory mediator of luteinizing hormone-releasing hormone action in the rat ovary. Wang J, et al. **Endocrinology** 1989 Apr;124(4):1973–9
Functional reconstitution of rat ovarian LH/hCG receptor into proteoliposomes. Kolena J. **FEBS Lett** 1989 Jul 3; 250(2):425–8
Ovarian renin production in vitro and in vivo: characterization and clinical correlation. Paulson RJ, et al. **Fertil Steril** 1989 Apr;51(4):634–8
Biosynthetic pathways of testosterone and estradiol-17 beta in slices of the embryonic ovary and testis of the chicken (Gallus domesticus). Imataka H, et al. **Gen Comp Endocrinol** 1989 Jan;73(1):69–79
Progesterone down-regulation of nuclear estrogen receptor: a fundamental mechanism in birds and mammals. Selcer KW, et al. **Gen Comp Endocrinol** 1988 Dec;72(3):443–52
Vitellogenin synthesis by fat body and ovary in the terrestrial isopod, Armadillidium vulgare. Suzuki S, et al. **Gen Comp Endocrinol** 1989 Apr;74(1):120–6
Plasma LH and gonadal LH-binding cells in normal and surgically decapitated chick embryos. Woods JE, et al. **Gen Comp Endocrinol** 1989 Apr;74(1):1–13
The effect of hypophysectomy on inhibin production by adult rat ovaries: changes in ovarian inhibin gene expression and serum inhibin. Davis SR, et al. **Gynecol Endocrinol** 1988 Sep;2(3):223–32
Influence of age at exposure on concentrations of 239Pu in beagle gonads. Miller SC, et al. **Health Phys** 1989 Apr; 56(4):485–91
Changes in lectin binding pattern of gonads of developing mice. Kanai Y, et al. **Histochemistry** 1989;92(1):37–42
An improved method for primary culture of ovarian androgen-producing cells in serum-free medium: effect of lipoproteins, insulin, and insulinlike growth factor-I. Magoffin DA, et al. **In Vitro Cell Dev Biol** 1988 Sep; 24(9):862–70
Mechanism involved in gonadotropin stimulation of ovarian steroidogenesis. Deb S, et al. **Indian J Biochem Biophys** 1988 Aug;25(4):344–9
Thyroid hormone stimulation of the perch (Anabas testudineus Bloch) ovarian mitochondrial steroidogenesis. Kaul K, et al. **Indian J Exp Biol** 1988 Jun;26(6):413–7
Effect of dietary Zn-deficiency on the distribution of lipids in the ovary of mature mouse. Taneja SK, et al. **Indian J Exp Biol** 1988 Apr;26(4):271–3
An immunohistochemical study of the incidence and significance of sex steroid hormone binding sites in normal and neoplastic human ovarian tissue. al-Timimi A, et al. **Int J Gynecol Pathol** 1985;4(1):24–41
A review of lipoprotein cholesterol metabolism: importance to ovarian function. Grummer RR, et al. **J Anim Sci** 1988 Dec;66(12):3160–73 (106 ref.)
Fleroxacin concentrations in myometrium, ovary and fallopian tube. Portmann R, et al. **J Antimicrob Chemother** 1989 Apr;23(4):662–4
Expression of biologically active human follitropin in Chinese hamster ovary cells. Keene JL, et al. **J Biol Chem** 1989 Mar 25;264(9):4769–75
Characterization of rat ovarian lutropin receptor. Role of thiol groups in receptor association. Sojar HT, et al. **J Biol Chem** 1989 Feb 15;264(5):2552–9
Ovarian inhibin content in immature female rats following hypophysectomy: control by exogenous gonadotrophins. Carson RS, et al. **J Endocrinol** 1988 Nov;119(2):185–9
Cell-specific variations and hormonal regulation of immunoreactive cytochrome P-450scc in the rat ovary. Le Goascogne C, et al. **J Reprod Fertil** 1989 Jan;85(1):61–72
Role of the peripubertal pattern of FSH, LH and prolactin secretion in regulating in-vitro steroidogenesis and follicular growth within juvenile rat ovaries. Peluso JJ. **J Reprod Fertil** 1989 Jul;86(2):705–11
Detection of early pregnancy factor (EPF) using the rabbit ovary and oviduct perfused in vitro. Sueoka K, et al. **J Reprod Fertil** 1988 Sep;84(1):325–31
Plasma testosterone levels and ovarian testosterone content in adult mice treated with diethylstilbestrol neonatally. Halling A, et al. **J Steroid Biochem** 1989 Mar;32(3):439–43
An in vitro method to determine the selective inhibition of estrogen biosynthesis by aromatase inhibitors. Häusler A, et al. **J Steroid Biochem** 1989 Jul;33(1):125–31
Hormonally active long-term culture of human ovarian cells: initial characterization. Bhargava G, et al. **Metabolism** 1989 Mar;38(3):195–6
Human chorionic gonadotrophin-induced suppression of serum inhibin involves reduction in ovarian inhibin alpha-subunit messenger RNA levels in the pregnant mare serum gonadotrophin-primed female rat. Davis SR, et al. **Mol Cell Endocrinol** 1989 Jan;61(1):123–8
A role for the insulin-like growth factor II/mannose-6-phosphate receptor in the insulin-induced inhibition of protein catabolism. Kovacina KS, et al. **Mol Endocrinol** 1989 Jun;3(6):901–6
Opposite changes of pituitary and ovarian receptors for LHRH in ageing rats: further evidence for a direct neural control of ovarian LHRH receptor activity. Marchetti B, et al. **Neuroendocrinology** 1988 Sep;48(3):242–51
Binding sites for gonadotropins in human postmenopausal ovaries. Nakano R, et al. **Obstet Gynecol** 1989 Feb; 73(2):196–200
Galactose metabolism in human ovarian tissue. Xu YK, et al. **Pediatr Res** 1989 Feb;25(2):151–5
Effect of ovarian steroids on the concentration of mu opiate receptors in different regions of the brain of the female rat. Maggi R, et al. **Pharmacol Res** 1989 Jan-Feb;21(1):91–2
Estrogen suppression of preincubated tadpole ovaries in vitro

by cyanoketone. Hsu CY, et al.
Proc Natl Sci Counc Repub China [B] 1988 Apr;12(2):84–7
Reproductive tract and pancreatic norepinephrine levels in pre- and overt-diabetic C57BL/KsJ mice: relationship to body weight, blood glucose, serum insulin, and reproductive dysfunction. Garris DR.
Proc Soc Exp Biol Med 1988 Oct;189(1):79–83
Prostaglandin (PG) accumulation in vitro by mouse ovaries, oviducts, and uteri. Saffaripour S, et al. **Prostaglandins** 1988 Aug;36(2):229–39
A comparative study of the effects of ketoconazole and fluconazole on 17-beta estradiol production by rat ovaries in vitro. Latrille F, et al.
Res Commun Chem Pathol Pharmacol 1989 Apr;64(1):173–6
New type of plasminogen activator produced by an established cell line from human ovary. Matsuo O, et al.
Thromb Res Suppl 1988;8:45–55
Metabolism of 7,12-dimethylbenz(a)anthracene by different types of cells in the human ovary. Bengtsson M, et al.
Xenobiotica 1988 Nov;18(11):1255–70
[Ovarian inhibin activity in rats with persistent estrus] Nakamura S, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Oct 20;64(10):1102–14 (Eng. Abstr.) **(Jpn)**
[Effects of stress, ACTH and dexamethasone on the activity of steroidogenesis-related enzymes in pregnant rats. I. Steroid hormone levels in the serum, ovary and placenta and their synthesis in the placenta in vitro] Rembiesa R, et al. **Endokrynol Pol** 1988;39(1):1–9 (Eng. Abstr.) **(Pol)**
[Cyclic AMP metabolism in target tissues in uterine myoma] Dobrotina AF, et al. **Sov Med** 1988;(5):16–8 (Eng. Abstr.) **(Rus)**
[Early and late changes in potassium transport during the start of proliferation in CHO cell cultures. The action of serum, isoproterenol, propranolol and theophylline] Marakhova II, et al. **Tsitologiia** 1988 Oct;30(10):1208–17 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Transmission of Salmonella enteritidis in poultry [letter] Bygrave AC, et al. **Vet Rec** 1989 May 27;124(21):571

PATHOLOGY

Severe ovarian hyperstimulation syndrome. Case reports. Magnus O, et al. **Acta Eur Fertil** 1988 Mar-Apr;19(2):89–92
Sex cord nests with annular tubules. The incidence of identifying them in normal ovaries. Delides GS, et al.
Acta Morphol Hung 1988;36(1-2):3–6
Ovulation induction and pregnancy with an estrogen-gonadotropin stimulation technique in a menopausal woman with marked hypoplastic ovaries. Check JH, et al. **Am J Obstet Gynecol** 1989 Feb; 160(2):405–6
Effect of ovarian endometriosis on ovulation in rabbits. Kaplan CR, et al. **Am J Obstet Gynecol** 1989 Jan; 160(1):40–4
Clinical presentation, hormonal profiles and ultrasonic ovarian morphology in women with suspected polycystic ovarian disease. Rojanasakul A, et al.
Asia Oceania J Obstet Gynaecol 1989 Mar;15(1):59–65
Premature ovarian failure: a clinical, histological and cytogenetic study. Tanaka S, et al.
Asia Oceania J Obstet Gynaecol 1988 Sep;14(3):293–300
Ultrasonographic study of ovaries of 19 women with weight loss-related hypothalamic oligo-amenorrhea. Futterweit W, et al. **Biomed Pharmacother** 1988;42(4):279–83
Isolation of two Chinese hamster ovary cell mutants hypersensitive to topoisomerase II inhibitors and cross-resistant to peroxides. Davies SM, et al.
Cancer Res 1989 Aug 15;49(16):4526–30
Reduced frequency of luteinizing hormone pulses in women with weight loss-related amenorrhoea and multifollicular ovaries. Mason HD, et al. **Clin Endocrinol (Oxf)** 1988 Jun; 28(6):611–8
Weight gain and reproductive function: ultrasonographic and endocrine features in anorexia nervosa. Treasure JL, et al.
Clin Endocrinol (Oxf) 1988 Dec;29(6):607–16
Morphological changes of the ovarian surface epithelium in women with ovarian polycystic disease or endometrial carcinoma and a control group. Resta L, et al.
Eur J Gynaecol Oncol 1989;10(1):39–41
An association among blepharophimosis, resistant ovary syndrome, and true premature menopause. Fraser IS, et al. **Fertil Steril** 1988 Nov;50(5):747–51
Morphometric investigations in experimental ovarian endometriosis. Palatyński A. **Ginekol Pol** 1988 Dec; 59(12):713–8
Virilization due to ovarian hyperthecosis in a postmenopausal woman. van Heyningen C, et al. **Gynecol Endocrinol** 1988 Dec;2(4):331–8
Assessment of ovaries by magnetic resonance imaging in patients presenting with polycystic ovarian syndrome. Faure N, et al. **Hum Reprod** 1989 May;4(4):468–72
Marker profile of mesothelial cells versus ovarian carcinoma cells. van Niekerk CC, et al. **Int J Cancer** 1989 Jun 15; 43(6):1065–71
A histological study of the gonads of T16H/XSxr hermaphrodite mice. Ward HB, et al. **J Anat** 1988 Jun; 158:65–75
Nutritional folate deficiency in Chinese hamster ovary cells. I. Characterization of the pleiotropic response and its modulation by nucleic acid precursors. Borman LS, et al.
J Cell Physiol 1989 Aug;140(2):335–43
Ovarian ultrasound appearances in Turner syndrome. Massarano AA, et al. **J Pediatr** 1989 Apr;114(4 Pt 1):568–73
The ultrasonographic features in anorexia nervosa and bulimia nervosa: a simplified method of monitoring hormonal states during weight gain. Treasure JL.
J Psychosom Res 1988;32(6):623–34
Ultrasound and infertility. Shapiro BS, et al.
J Reprod Med 1989 Feb;34(2):151–5 (38 ref.)
Effects of parenteral di-(2-ethylhexyl)phthalate (DEHP) on gonadal biochemistry, pathology, and reproductive performance of mice. Agarwal DK, et al.
J Toxicol Environ Health 1989;26(1):39–59
Surgical pathology of the ovary: a review of selected tumors. Tavassoli FA, et al. **Mod Pathol** 1988 Mar;1(2):140–67 (116 ref.)
Cystic ovarian enlargement resulting from autoimmune oophoritis. Biscotti CV, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):492–5
Normal-sized ovary carcinoma syndrome. Feuer GA, et al.
Obstet Gynecol 1989 May;73(5 Pt 1):786–92
Cellularity of the ovarian stroma in patients with endometrial carcinoma. Aalto ML. **Tumori** 1989 Jun 30;75(3):289–91
Morphology of rabbit ovaries after sterilization by uterus horn coagulation or section. Riedel HH, et al.
Zentralbl Gynakol 1989;111(9):581–6
[Histopathology of gonads in syndromes of abnormal sexual differentiation] Mazanec K, et al. **Cesk Patol** 1989 Mar; 25(1):54–60 (Eng. Abstr.) **(Cze)**
[Findings on changes in the gonads in autopsy cases of AIDS] Badini A, et al. **Pathologica** 1988 Sep-Oct;80(1069):633–7 (Eng. Abstr.) **(Ita)**
[A clinicopathological study of advanced ovarian cancers without an enlargement of the ovaries] Kawagoe K, et al.
Gan No Rinsho 1989 Jan;35(1):46–50 (Eng. Abstr.) **(Jpn)**
[Ultrasonographic examination of the female genital organs in hirsutism] Baron J, et al. **Ginekol Pol** 1988 Sep; 59(9):548–51 (Eng. Abstr.) **(Pol)**
[Diagnostic value of the nuclear magnetic resonance relaxation method in the complex examination of patients with ovarian tumors] Makarov OV, et al.
Akush Ginekol (Mosk) 1989 Apr;(4):58–9 **(Rus)**
[Status of the ovaries in tubal and peritoneal infertility] Shtyrov SV. **Akush Ginekol (Mosk)** 1988 Nov;(11):59–63 (Eng. Abstr.) **(Rus)**
[Morphofunctional characteristics of the ovaries in generalized lipodystrophy syndrome] Bronshtein ME, et al. **Sov Med** 1988;(5):102–6 **(Rus)**

PHYSIOLOGY

Effect of gonadal activity on the cranial dimorphism of the rat. Dahinten SL, et al. **Acta Anat (Basel)** 1988;132(4):324–6
Light microscopic, enzyme biochemical and steroid analytical investigations of follicular atresia in the ovary of domestic goose. Forgó V, et al. **Acta Biol Hung** 1988; 39(4):377–401
Structural and hormonal changes during follicular maturation in the ovary of the domestic goose. Forgó V, et al.
Acta Biol Hung 1988;39(4):403–17
Lactogen and LH receptors. Rat P-450 17 alpha, structural analysis and hormonal regulation of mRNA levels in the Leydig cell. Dufau ML, et al. **Ann N Y Acad Sci** 1989; 564:57–76
Improvements in ovarian stimulation for in vitro fertilization. Frydman R, et al. **Ann N Y Acad Sci** 1988;541:30–6
The ovarian prorenin-angiotensin system. Lessons from IVF. Itskovitz J, et al. **Ann N Y Acad Sci** 1988;541:179–89
Studies on the mechanism of ovulation using the model of the isolated ovary. Janson PO, et al.
Ann N Y Acad Sci 1988;541:22–9
Insulin-like growth factor 1 as an intra-ovarian hormone—an integrated hypothesis and review. Eden JA, et al.
Aust N Z J Obstet Gynaecol 1989 Feb;29(1):30–7 (24 ref.)
Biological correlates of behavioral development in the ant, Novomessor albisetosus (Mayr). McDonald P, et al.
Behav Neurosci 1988 Dec;102(6):986–91
Angiotensin II stimulates an endogenous response in Xenopus laevis ovarian follicles. Lacy MP, et al.
Biochem Biophys Res Commun 1989 Mar 15;159(2):658–63
E-series prostaglandins activate cAMP-mediated potassium currents in follicle-enclosed Xenopus oocyte. Mori K, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1535–40
Pineal and ovarian response to 22- and 24-h days in the ewe. English J, et al. **Biol Reprod** 1988 Aug;39(1):9–18
The development of porcine zona pellucida using monoclonal antibodies: II. Electron microscopy. Takagi J, et al.
Biol Reprod 1989 May;40(5):1103–8
Control of the development of the ovarian follicular hierarchy in broiler breeder pullets by food restriction during rearing. Hocking PM, et al. **Br Poult Sci** 1989 Mar; 30(1):161–73
Evidence that short photoperiod-induced gonadal regression in the Mongolian gerbil is mediated by the action of melatonin in the medial hypothalamus. Devries MJ, et al.
Brain Res 1989 Aug 14;494(2):241–6
A study on the feasibility of suppressing ovarian activity following the end of postpartum amenorrhoea by increasing the frequency of suckling. Díaz S, et al.
Clin Endocrinol (Oxf) 1988 May;28(5):525–35
Pharmacodynamics of a contraceptive vaginal ring releasing 3-keto-desogestrel. Jackson R, et al. **Contraception** 1989 Jun;39(6):653–64
Changes in interstitial gland in the ovary of the bat Rinolaphus eurale Blas: arousal from hibernation. Tsvetkov T, et al. **Cryobiology** 1988 Dec;25(6):502–7
Regulation of tropomyosin expression in the maturing ovary and in primary granulosa cell cultures. Ben-Ze'ev A, et al. **Dev Biol** 1989 Sep;135(1):191–201
Some observations on the role of LH receptor binding inhibitor of ovine corpora lutea in ovarian processes. Dhir RN, et al. **Endocr Res** 1988-89;14(4):345–64
Intragonadal regulation of follicular maturation. Tonetta SA, et al. **Endocr Rev** 1989 May;10(2):205–29 (378 ref.)
Cytokine-mediated regulation of ovarian function: encounters of a third kind. Adashi EY. **Endocrinology** 1989 May;124(5):2043–5
Luteolytic actions of peroxide in rat ovarian cells. Behrman HR, et al. **Endocrinology** 1989 Jun;124(6):2895–900
Escape from chronic estrogenic suppression of ovarian function in the adult rhesus monkey: evidence for changing sensitivity of gonadotropin secretion to estrogen inhibition. Billiar RB, et al. **Endocrinology** 1989 May;124(5):2373–82
Further studies on the role of the gonads in determining the ontogeny of gonadotropin secretion in the guinea pig (Cavia porcelus). Fraser MO, et al. **Endocrinology** 1989 Aug;125(2):906–11
Insulin-like growth factor I gene expression in the rat ovary is confined to the granulosa cells of developing follicles. Oliver JE, et al. **Endocrinology** 1989 Jun;124(6):2671–9
Immunoreactive inhibin secretion by the hypophysectomized female rat: demonstration of the modulating effect of gonadotropin-releasing hormone and estrogen through a direct ovarian site of action. Rivier C, et al.
Endocrinology 1989 Jan;124(1):195–8
Increase in ovarian 15-hydroxyeicosatetraenoic acid during ovulation in the gonadotropin-primed immature rat. Tanaka N, et al. **Endocrinology** 1989 Sep;125(3):1373–7
Evaluation of the hormonal function of transposed ovaries in cervical cancer patients after surgery and pelvic irradiation. Preliminary report. Ploch E, et al.
Eur J Gynaecol Oncol 1988;9(6):479–84
Ovarian function in the non-mosaic Turner syndrome; a case report. Jacquemyn Y, et al.
Eur J Obstet Gynecol Reprod Biol 1989 Feb;30(2):187–91
Testis-specific histone H1t is truly a testis-specific variant and not a meiotic-specific variant. Markose ER, et al.
Exp Cell Res 1989 May;182(1):279–83
Prospective study of the pituitary-ovarian function after tubal sterilization by the Pomeroy or Uchida techniques. Alvarez F, et al. **Fertil Steril** 1989 Apr;51(4):604–8
A nonseparation, time-resolved fluoroimmunoassay to monitor ovarian function and predict potential fertility in women. Barnard G, et al. **Fertil Steril** 1989 Jul;52(1):60–5
Ovarian activity in outdoor and laboratory bred bank vole (Clethrionomys glareolus) females. Kruczek M.
Folia Biol (Krakow) 1988;36(3-4):269–73
Estradiol secretion by the ovarian tissue, in response to hypophyseal stimulation, during ontogenesis of the bullfrog. Hsu CY, et al. **Gen Comp Endocrinol** 1989 Apr; 74(1):161–4
Effects of photoperiod and temperature on gonadal maturation, and plasma steroid and gonadotropin levels in a cyprinid fish, the honmoroko Gnathopogon caerulescens. Okuzawa K, et al. **Gen Comp Endocrinol** 1989 Jul; 75(1):139–47
The effect of corticosterone on the response of the ovary to pregnant mare's serum gonadotrophin in sexually immature pullets. Petitte JN, et al.
Gen Comp Endocrinol 1989 Jun;74(3):377–84
Effects of ovariectomy on long-day-induced premigratory fat deposition, plasma levels of luteinizing hormone and prolactin, and molt in white-crowned sparrows, Zonotrichia leucophrys gambelii. Schwabl H, et al.
Gen Comp Endocrinol 1988 Sep;71(3):398–405
Long-term ovariectomy and hormone-induced sexual behavior, progestin receptors, and hypothalamic morphology in female rats. Delville Y, et al.
Horm Behav 1989 Jun;23(2):269–78
Effects of ovarian hormones on eating behaviors, body weight, and glucoregulation in rhesus monkeys. Kemnitz JW, et al. **Horm Behav** 1989 Jun;23(2):235–50
Ovarian hormone-induced short-latency maternal behavior in ovariectomized virgin Long-Evans rats. Stern JM, et al. **Horm Behav** 1989 Jun;23(2):157–72
Ovarian stimulation using pure FSH in an in-vitro fertilization programme. Diedrich K, et al. **Hum Reprod** 1988 Oct;3 Suppl 2:23–8
Doppler ultrasound studies of the uterine artery in spontaneous ovarian cycles. Goswamy RK, et al.
Hum Reprod 1988 Aug;3(6):721–6
Ovarian stimulation for in-vitro fertilization: clomiphene and HMG. Lehmann F, et al. **Hum Reprod** 1988 Oct;3 Suppl 2:11–21
Suppression of prolactin secretion during ovarian hyperstimulation is followed by elevated serum levels of endometrial protein PP14 in the late luteal phase. Seppälä M, et al. **Hum Reprod** 1989 May;4(4):389–91
Progesterone in saliva as an index of ovarian function. Adekunle AO, et al. **Int J Gynaecol Obstet** 1989 Jan; 28(1):45–51
Ovarian function and hormone secretion of gilts actively immunized against androstenedione. McKinnie MR, et al.
J Anim Sci 1988 Dec;66(12):3131–43

Influence of the ovary and suckling on luteinizing hormone response to naloxone in postpartum beef cows. Rund LA, et al. **J Anim Sci** 1989 Jun;67(6):1527–31

Ovarian influence on uterine growth in prepubertal gilts. Wu MC, et al. **J Anim Sci** 1988 Nov;66(11):2893–8

Identification of rat ovarian nuclear factors that interact with the cAMP-inducible lactate dehydrogenase A subunit promoter. Kwast-Welfeld J, et al. **J Biol Chem** 1989 Apr 25;264(12):6941–7

The translocation of mitochondria along insect ovarian microtubules from isolated nutritive tubes: a simple reactivated model. Stebbings H, et al. **J Cell Sci** 1987 Dec; 88 (Pt 5):641–8

Recovery of hormone secretion after chronic gonadotropin–releasing hormone agonist administration in women with polycystic ovarian disease. de Ziegler D, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1111–7

Heterogeneity of serum prolactin throughout the menstrual cycle and pregnancy in hyperprolactinemic women with normal ovarian function. Larrea F, et al. **J Clin Endocrinol Metab** 1989 May;68(5):982–7

Alterations in the hypothalamic–pituitary–ovarian and the hypothalamic–pituitary–adrenal axes in athletic women. Loucks AB, et al. **J Clin Endocrinol Metab** 1989 Feb; 68(2):402–11

Dynamics of gonadotropin release following ovariectomy and injection of gonadotropin–releasing hormone in early postpartum dairy cows. Dissen GA, et al. **J Dairy Sci** 1988 Dec;71(12):3489–96

The self–priming action of LHRH increases the low pituitary LH and FSH response caused by ovarian factors: observations in vitro. de Koning J, et al. **J Endocrinol** 1989 Mar;120(3):439–47

Histamine, mast cells and ovarian function. Krishna A, et al. **J Endocrinol** 1989 Mar;120(3):363–71 (48 ref.)

A function for ovarian oxytocin. Luck MR. **J Endocrinol** 1989 May;121(2):203–4

Inhibition of gonadotropic and ovarian function by intranasal administration of D–Ser (TBU)6–EA10–LHRH in normo–ovulatory women and patients with polycystic ovary disease. Smitz J, et al. **J Endocrinol Invest** 1988 Oct; 11(9):647–52

Involvement of a circadian rhythm in the photoperiodic ovarian response of the yellow–throated sparrow, Gymnorhis xanthocollis. Dixit AS, et al. **J Exp Biol** 1989 May;143:411–8

Alterations in the cell cycle characteristics of granulosa cells during the periovulatory period: evidence of ovarian and oviductal influences. Schuetz AW, et al. **J Exp Zool** 1989 Jan;249(1):105–10

The decidual cell response in aging C57BL/6J mice is potentiated by long–term ovariectomy and chronic food restriction. Goodrick GJ, et al. **J Gerontol** 1989 May; 44(3):B67–71

Ovarian cyclicity, hormones, and behavior as markers of aging in female pigtailed macaques (Macaca nemestrina). Short R, et al. **J Gerontol** 1989 Sep;44(5):B131–8

Effect of pinealectomy, eye enucleation, and melatonin treatment on ovarian activity and vitellogenin levels in the catfish exposed to short photoperiod or long photoperiod. Garg SK. **J Pineal Res** 1989;7(2):91–104

Growth factors in ovarian function. Carson RS, et al. **J Reprod Fertil** 1989 Mar;85(2):735–46 (67 ref.)

Effect of day of the oestrous cycle, side of the reproductive tract and heat shock on in–vitro protein secretion by bovine endometrium. Malayer JR, et al. **J Reprod Fertil** 1988 Nov; 84(2):567–78

Monitoring ovarian function and pregnancy in the giant panda (Ailuropoda melanoleuca) by evaluating urinary bioactive FSH and steroid metabolites. Monfort SL, et al. **J Reprod Fertil** 1989 Jan;85(1):203–12

Importance of non–olfactory ram stimuli in mediating ram–induced ovulation in the ewe. Pearce GP, et al. **J Reprod Fertil** 1988 Sep;84(1):333–9

Distribution of follicular growth, atresia and ovulation in the ovary of the domestic hen (Gallus domesticus) at different ages. Waddington D, et al. **J Reprod Fertil** 1988 Sep; 84(1):223–30

Oxytocin and ovarian function. Fuchs AR. **J Reprod Fertil Suppl** 1988;36:39–47 (53 ref.)

Effects of shock waves on the rat ovary. McCullough DL, et al. **J Urol** 1989 Mar;141(3):666–9

Role of ovarian steroids on the catecholamine synthesis and release in female rat adrenal: in vivo and in vitro studies. de Miguel R, et al. **Life Sci** 1989;44(25):1979–86

Ovarian effect of periodic episodes of elevated serum follicle stimulating hormone (FSH). Johnson DC, et al. **Life Sci** 1974 Aug 15;15(4):793–802

Hypertrophy of the thymus and restoration of immune functions in mice and rats by gonadectomy. Utsuyama M, et al. **Mech Ageing Dev** 1989 Mar;47(3):175–85

Ovarian transforming growth factor–beta (TGF beta): cellular site(s), and mechanism(s) of action. Adashi EY, et al. **Mol Cell Endocrinol** 1989 Feb;61(2):247–56

Gonadal steroids regulate proenkephalin gene expression in a tissue–specific manner within the female reproductive system. Muffly KE, et al. **Mol Endocrinol** 1988 Oct; 2(10):979–85

Ovarian nerve extracts influence androgen production by cultured ovarian thecal cells. Morley P, et al. **Neuroendocrinology** 1989 Jul;50(1):93–9

Psychotropic properties of ovarian estrogens (review). Arushanyan EB, et al. **Neurosci Behav Physiol** 1989 Jan–Feb;19(1):57–66 (109 ref.)

Contribution of DNA polymerase delta to DNA replication in permeable CHO cells synchronized in S phase. Basnakian A, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4757–67

Countercurrent transfer in the ovarian pedicle and its physiological implications. Einer–Jensen N. **Oxf Rev Reprod Biol** 1988;10:348–81 (213 ref.)

Effects of photoperiod, the pineal gland and the gonads on agonistic behavior in female golden hamsters (Mesocricetus auratus). Fleming AS, et al. **Physiol Behav** 1988; 44(2):227–34

Regulation of neuronal oxytocin mRNA by ovarian steroids in the mature and developing hypothalamus. Miller FD, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2468–72

Periovulatory changes in the ovary. Morphology and expression of tissue–type plasminogen activator. Cajander SB. **Prog Clin Biol Res** 1989;296:91–101 (38 ref.)

Mullerian inhibiting substance in the ovary. Donahoe PK, et al. **Prog Clin Biol Res** 1988;267:153–75 (62 ref.)

Morphological observations on ovulation. Okamura H. **Prog Clin Biol Res** 1989;296:79–90

Role of germ cells and splenocytes in the steroidogenesis of ovarian endocrine cells. Takahashi M, et al. **Prog Clin Biol Res** 1989;294:101–15

Some metabolic characteristics of dairy cows with different post partum ovarian function. Huszenicza G, et al. **Zentralbl Veterinarmed [A]** 1988 Aug;35(7):506–15

[Restoration of pituitary–ovarian function after long–term application of combined norethindrone oenanthate] Shen KY. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Sep; 23(5):293–5, 318 (Eng. Abstr.) **(Chi)**

[Studies on ovarian plasminogen activators and their inhibitor] Liu YX. **Sheng Li Hsueh Pao** 1988 Oct; 40(5):421–9 (20 ref.) (Eng. Abstr.) **(Chi)**

[Residual function in the ovary during low–dose oral contraceptive treatment] Pearson S, et al. **Ugeskr Laeger** 1989 Jun 5;151(23):1465–8 (Eng. Abstr.) **(Dan)**

[Peripheral effects of prolactin in reproductive function. II. Female reproductive function] Leroy–Martin B, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(3):288–94 (73 ref.) (Eng. Abstr.) **(Fre)**

[Post–partum ovarian activity in Sardinian ewes] Cappai P, et al. **Boll Soc Ital Biol Sper** 1989 May;65(5):445–52 (Eng. Abstr.) **(Ita)**

[Study on climacteric symptoms in relation to ovarian function ageing and psychologic factors] Yashiro Y. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Feb;41(2):154–60 (Eng. Abstr.) **(Jpn)**

[The role of melatonin in the regulation of functions of the genital system] Kniażewski B. **Pol Tyg Lek** 1988 Apr 25; 43(17):561–4 (40 ref.) (Eng. Abstr.) **(Pol)**

[Metabolic and cardiovascular changes in ovariectomized animals with alloxan diabetes and under stress] Sneer A, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Apr–Jun; 92(2):335–40 (Eng. Abstr.) **(Rum)**

[Osteoporosis in the postmenopause and following ovariectomy] Smetnik VP, et al. **Akush Ginekol (Mosk)** 1988 Aug;(8):5–9 (53 ref.) **(Rus)**

[Effect of estrogens on the lipid composition of the plasma membranes of the uterine cells in ovariectomized rats] Mineeva EN. **Farmakol Toksikol** 1988 Nov–Dec;51(6):51–2 (Eng. Abstr.) **(Rus)**

[Morphofunctional changes in the ovarioles of blood–sucking mosquitoes (Diptera, Culicidae) during oogenesis. I. Normal oogenesis] Lange AB, et al. **Med Parazitol (Mosk)** 1989 Jan–Feb;(1):22–6 (Eng. Abstr.) **(Rus)**

[Morphofunctional changes of the ovarioles of blood–sucking mosquitoes (Diptera, Culicidae) during oogenesis. 2. Abortive oogenesis] Sokolova MI, et al. **Med Parazitol (Mosk)** 1989 May–Jun;(3):55–60 (25 ref.) (Eng. Abstr.) **(Rus)**

[Psychotropic properties of ovarian estrogens] Arushanian EB, et al. **Probl Endokrinol (Mosk)** 1988 Jul–Aug; 34(4):81–8 (109 ref.) **(Rus)**

[Seasonal characteristics of the functioning of the hypophysis–gonad system in the suslik Citellus parryi] Shvareva NV, et al. **Zh Evol Biokhim Fiziol** 1989 Jan–Feb; 25(1):52–9 (Eng. Abstr.) **(Rus)**

[Gonadal endocrine function in female silver foxes selected for domesticated behavior] Osadchuk LV, et al. **Zh Obshch Biol** 1989 Mar–Apr;50(2):189–98 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Allogenic bone marrow transplantation in adults: endocrine sequelae after 1–6 years. Benker G, et al. **Acta Endocrinol (Copenh)** 1989 Jan;120(1):37–42

Primordial birdheaded nanism associated with progressive ataxia, early onset insulin resistant diabetes, goiter and primary gonadal insufficiency. A new syndrome. Bangstad HJ, et al. **Acta Paediatr Scand** 1989 May;78(3):488–93

Trypanosome–induced ovarian dysfunction. Evidence of higher residual fertility in trypanotolerant small East African goats. Mutayoba BM, et al. **Acta Trop (Basel)** 1988 Sep;45(3):225–37

Stress and reproduction: physiologic and pathophysiologic interactions between the stress and reproductive axes. Rabin D, et al. **Adv Exp Med Biol** 1988;245:377–87 (98 ref.)

Studies on pituitary–gonadal function in patients with Cushing's syndrome. Odagiri E, et al. **Endocrinol Jpn** 1988 Jun;35(3):421–7

The aged rat model of ovarian hormone deficiency bone loss. Kalu DN, et al. **Endocrinology** 1989 Jan;124(1):7–16

Ovarian superstimulation in the treatment of infertility due to peritubal and periovarian adhesions. Aboulghar MA, et al. **Fertil Steril** 1989 May;51(5):834–7

Use of a gonadotropin–releasing hormone agonist during ovarian stimulation leads to significant concentrations of peptide in follicular fluids. Loumaye E, et al. **Fertil Steril** 1989 Aug;52(2):256–63

Short–term luteinizing hormone–releasing hormone agonist treatment: prospective trial of a novel ovarian stimulation regimen for in vitro fertilization. Macnamee MC, et al. **Fertil Steril** 1989 Aug;52(2):264–9

A physiopathological study on ovarian dysfunction in female patients with alcoholism. Seki M. **Fukuoka Igaku Zasshi** 1988 Oct;79(10):738–48

Inhibin and renin in follicular fluids of patients with one or two ovaries stimulated with a GnRH agonist and gonadotrophins. Pampfer S, et al. **Hum Reprod** 1989 May; 4(4):396–402

Postpartum reproduction in protein restricted beef cows: effect on the hypothalamic–pituitary–ovarian axis. Nolan CJ, et al. **J Anim Sci** 1988 Dec;66(12):3208–17

Detailed assessment of big big prolactin in women with hyperprolactinemia and normal ovarian function. Fraser IS, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):585–92

Ovarian function following chemotherapy for childhood brain tumours. Clayton PE, et al. **Med Pediatr Oncol** 1989; 17(2):92–6

Pituitary–ovarian responses to nafarelin testing in the polycystic ovary syndrome. Barnes RB, et al. **N Engl J Med** 1989 Mar 2;320(9):559–65

Normal or early development of puberty despite gonadal damage in children treated for acute lymphoblastic leukemia [see comments] Quigley C, et al. **N Engl J Med** 1989 Jul 20;321(3):143–51. **Comment in:** N Engl J Med 1989 Jul 20;321(3):185–7

Psychoendocrinology of anorexia nervosa. Weiner H. **Psychiatr Clin North Am** 1989 Mar;12(1):187–206 (139 ref.)

Hypothalamic–pituitary–gonadal function in anorexia nervosa and bulimia. Devlin MJ, et al. **Psychiatry Res** 1989 Apr;28(1):11–24

[Receptor status and ovarian function in carcinoma of the breast] Giuffrida D, et al. **G Ital Oncol** 1989 Apr–Sep; 9(2–3):73–6 (Eng. Abstr.) **(Ita)**

[Gonadal dysfunctions in female obesity] Takasaki K, et al. **Nippon Rinsho** 1988 Nov;46(11):2405–11 **(Jpn)**

[Endocrinological environment in polycystic ovarian disease (PCOD)] Fujimoto S, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep; 40(9):1465–70 **(Jpn)**

[Current theories on female fertility in Cushing's syndrome] Gustowski A, et al. **Ginekol Pol** 1988 Jun;59(6):371–5 (55 ref.) (Eng. Abstr.) **(Pol)**

[The role of environmental and genetic factors in the development of pathology of the reproductive system in girls] Kuznetsova MN, et al. **Akush Ginekol (Mosk)** 1989 Feb;(2):38–41 (Eng. Abstr.) **(Rus)**

[Gonadotropic and ovarian hormone levels in the course of the menstrual cycle of patients with chronic pyelonephritis] Tanchev S, et al. **Akush Ginekol (Mosk)** 1988 Aug;(8):15–7 (Eng. Abstr.) **(Rus)**

[Functional status of the hypothalamo–hypophyseal–gonadal system in girls of pubertal age in diffuse toxic goiter and hypothyroidism] Varlamova TM, et al. **Pediatriia** 1988; (4):27–30 (Eng. Abstr.) **(Rus)**

[The effect of metoclopramide on the hypophyseo–ovarian relations in patients with amenorrhea resulting from body mass loss] Potin VV, et al. **Probl Endokrinol (Mosk)** 1989 Mar–Apr;35(2):44–8 (Eng. Abstr.) **(Rus)**

[Specific binding of androgens by the skin in hirsutism of ovarian genesis] Tarasenko LV, et al. **Probl Endokrinol (Mosk)** 1989 May–Jun;35(3):19–21 (Eng. Abstr.) **(Rus)**

[Disorders of hypothalamico–pituitary regulation of adrenal and ovarian function in women suffering from Itsenko–Cushing disease] Manusharova RA. **Vrach Delo** 1989 Feb;(2):24–7 (Eng. Abstr.) **(Rus)**

[Diabetes mellitus and the reproductive function in women] Spremović S, et al. **Med Pregl** 1988;41(3–4):144–8 **(Scr)**

RADIATION EFFECTS

Prednisolone improves the response to primary endocrine treatment for advanced breast cancer. Rubens RD, et al. **Br J Cancer** 1988 Nov;58(5):626–30

Radiation exposure of the ovaries during hysterosalpingography. Is radionuclide hysterosalpingography justified? van der Weiden RM, et al. **Br J Obstet Gynaecol** 1989 Apr;96(4):471–2

Ovarian and body weight responses of female redheaded bunting to ultra–short photoperiods: demonstration of circadian involvement. Tripathi BK. **Exp Biol** 1989; 48(3):173–6

Gamma irradiation effect on oogenesis in Culex quinquefasciatus Say exposed as pupa. Dey B, et al. **J Commun Dis** 1987 Dec;19(4):304–9

Effects of neonatal ovarian X–irradiation in the Chinese hamster. I. Correlation between the age of irradiation and the fertility span. Tateno H, et al.

J Radiat Res (Tokyo) 1989 Jun;30(2):185–90

Steroid hormone production in testis, ovary, and adrenal gland of immature rats irradiated in utero with 60Co. Inano H, et al. Radiat Res 1989 Feb;117(2):293–303

[Radiation dosage to the gonads in cranial computerized tomography in young children] Berndt L, et al. Kinderarztl Prax 1988 Dec;56(12):599–602 (Eng. Abstr.) (Ger)

[Scintigraphic studies of gonadal burden in radiosynoviortheses of the knee joint with yttrium 90] Wagener P, et al. Z Rheumatol 1988 Jul–Aug;47(4):201–4 (Eng. Abstr.) (Ger)

[Late sequelae of gamma irradiation of rat ovaries during embryonic development] Shakhdinarova LV, et al. Radiobiologiia 1989 Mar–Apr;29(2):175–8 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Ovarian conservation at hysterectomy: a potential diagnostic pitfall. Reed DH, et al. Clin Radiol 1989 May;40(3):274–6

SECRETION

Pattern of ovarian progesterone secretion during the luteal phase of the ovine estrous cycle. Alecozay AA, et al. Biol Reprod 1988 Sep;39(2):287–94

Prostaglandin F2 alpha–stimulated release of ovarian oxytocin in the sheep in vivo: threshold and dose dependency. Lamsa JC, et al. Biol Reprod 1989 Jun; 40(6):1215–23

Prostaglandins and progesterone secretion in the in vitro perfused pseudopregnant rabbit ovary. Dharmarajan AM, et al. Endocrinology 1989 Mar;124(3):1198–203

Steroid secretion by ovarian cells of the Japanese quail (Coturnix coturnix japonica). Onagbesan OM, et al. Gen Comp Endocrinol 1988 Nov;72(2):272–81

Neurotransmitters and lymphatic–vascular transfer of prostaglandin F2 alpha stimulate ovarian oxytocin output in sheep. Heap RB, et al. J Endocrinol 1989 Jul; 122(1):147–59

Secretion of bioactive inhibin by the ovary of the Booroola Merino ewe with or without a copy of the fecundity (F) gene. Tsonis CG, et al. J Endocrinol 1988 Oct;119(1):R5–8

Ovarian and peripheral steroid hormones in a case of Sertoli–Leydig cell tumor. Mango D, et al. J Endocrinol Invest 1988 Jul–Aug;11(7):521–5

Evidence that the bovine ovary secretes large amounts of monomeric inhibin alpha subunit and its isolation from bovine follicular fluid. Knight PG, et al. J Mol Endocrinol 1989 May;2(3):189–200

Adrenal and ovarian sources of progesterone secretion in young female fallow deer, Dama dama. Asher GW, et al. J Reprod Fertil 1989 Mar;85(2):667–75

Interovarian relationship in the secretion of progesterone during the luteal phase of the capuchin monkey (Cebus apella). Nagle CA, et al. J Reprod Fertil 1989 Mar; 85(2):389–96

Effect of the peripubertal pattern of LH and FSH secretion on in–vitro oestradiol–17 beta secretion and follicular growth within juvenile rat ovaries. Peluso JJ. J Reprod Fertil 1988 Sep;84(1):239–45

The role of growth factors on the expression of differentiated functions of the ovary and placenta. Maruo T. Nippon Naibunpi Gakkai Zasshi 1988 Dec 20; 64(12):1214–22

Ultrastructural maturation of the luteal cell in the pregnant rat: quantitative changes in cell organelles and their relation to progesterone secretion. Meyer GT, et al. Prog Clin Biol Res 1989;296:131–7

[Hypophysis and estradiol secretion in the chick embryo] Weniger JP, et al. C R Acad Sci [III] 1989;308(20):531–6 (Eng. Abstr.) (Fre)

[Pathophysiology of the polycystic ovary syndrome] Alieva EA, et al. Akush Ginekol (Mosk) 1989 Apr;(4):3–6 (69 ref.) (Rus)

[Circadian organization of hormonal function of the hypophyseo–ovarian system (experimental study of Papio hamadryas monkeys)] Goncharov NP, et al. Akush Ginekol (Mosk) 1988 Nov;(11):56–9 (Eng. Abstr.) (Rus)

[Gonadal and adrenal endocrine functions in female minks of 2 genotypes in postnatal ontogeny] Gulevich RG, et al. Zh Evol Biokhim Fiziol 1988 May–Jun;24(3):445–50 (Eng. Abstr.) (Rus)

SURGERY

The relation of fertility and ovarian histology after bilateral ovarian wedge resection. Lappöhn RE, et al. Fertil Steril 1989 Aug;52(2):221–6

The effect of laparoscopic multiple punch resection of the ovary on hypothalamo–pituitary axis in polycystic ovary syndrome. Sumioki H, et al. Fertil Steril 1988 Oct; 50(4):567–72

Second–look operative laparoscopy 1 year following reproductive surgery. Tulandi T, et al. Fertil Steril 1989 Sep;52(3):421–4

Inguinal ovary and fallopian tube—an unusual hernia. Amarin ZO, et al. Int J Gynaecol Obstet 1988 Aug;27(1):141–3

Effects of cyproterone acetate, LHRH agonist and ovarian surgery in McCune–Albright syndrome with precocious puberty and galactorrhea. Carani C, et al. J Endocrinol Invest 1988 Jun;11(6):419–23

Castration–sparing management of an adolescent with huge bilateral cystic teratomas of the ovaries. Jona JZ, et al. J Pediatr Surg 1988 Oct;23(10):973–4

Adnexal recurrence of stage IB squamous cell cervical carcinoma after radical surgery and oophoropexy. A case report. Atamdede F, et al. J Reprod Med 1989 Mar; 34(3):244–6

Effects of previous ovarian surgery on the follicular response to ovulation induction in an in vitro fertilization program. Hornstein MD, et al. J Reprod Med 1989 Apr;34(4):277–81

Ovarian wedge resection with contact Nd:YAG laser irradiation used laparoscopically. Kojima E, et al. J Reprod Med 1989 Jul;34(7):444–6

Laparoscopic management of ovarian pregnancy. A case report. Van Coevering RJ 2d, et al. J Reprod Med 1988 Sep;33(9):774–6

Ovarian cystectomy for serous borderline tumors: a follow–up study of 35 cases. Lim–Tan SK, et al. Obstet Gynecol 1988 Nov;72(5):775–81

TRANSPLANTATION

Ovulatory response to the sequential administration of follicle stimulating hormone and human chorionic gonadotropin by autografted ovary in unilaterally ovariectomized adult rat with peripheral denervation induced by guanethidine treatment. Ayala ME, et al. Rev Invest Clin 1988 Apr–Jun; 40(2):149–55

[Cancer of the transposed ovary following Wertheimer operation] Leitsmann H, et al. Z Arztl Fortbild (Jena) 1988; 82(11):501–3 (Ger)

[Extended hysterectomy with sparing of the ovaries and their transposition to a non–pelvic site (beyond the field of irradiation)] Stelmachów J, et al. Ginekol Pol 1988 Nov; 59(11):676–80 (Eng. Abstr.) (Pol)

ULTRASTRUCTURE

Schistosoma japonicum and S. mansoni: ultrastructural damage in the tegument and reproductive organs after treatment with levo– and dextro–praziquantel. Irie Y, et al. Am J Trop Med Hyg 1989 Aug;41(2):204–11

Ultrastructure of the ovarian medulla in the newly hatched chick treated with human chorionic gonadotropin. González del Pliego M, et al. Cell Tissue Res 1988 Sep; 253(3):665–70

Polytene chromosomes from ovarian pseudonurse cells of the Drosophila melanogaster otu mutant. I. Photographic map of chromosome 3. Heino TI. Chromosoma 1989 Mar; 97(5):363–73

The ovarium of the hibernator (Citellus citellus L.) after spring arousal. Tsvetkov T, et al. Cryobiology 1989 Apr; 26(2):180–5

Phosphorylation of proteins in rat ovarian plasma membranes by [gamma–32P]GTP: evidence for the formation of a high energy phosphoprotein. Amir–Zaltsman Y, et al. Mol Cell Endocrinol 1989 May;63(1–2):175–87

An immunocytochemical study of the progesterone receptor in rabbit ovary. Korte JM, et al. Mol Cell Endocrinol 1988 Jul;58(1):93–101

The role of the cumulus–corona cells surrounding in vitro human oocytes and polypronuclear ova: an ultrastructural study. Nottola SA, et al. Prog Clin Biol Res 1989; 296:345–54

Oogenesis and ovulation in normal conditions or induced by homologous hypophysis in Hoplias m. malabaricus (Pisces, Erythrynidae). Matkovic M, et al. Rev Bras Biol 1989 Feb;49(1):203–12

The development of microtubular arrays in the germ tissue of an insect telotrophic ovary. Valdimarsson G, et al. Tissue Cell 1989;21(1):123–38

[Ultrastructure of the steroidogenic cells in the ovary of the Russian sturgeon before and after maturation under exposure to luliberin] Vasil'eva EV. Tsitologiia 1988 Sep; 30(9):1063–6 (Eng. Abstr.) (Rus)

OVER-THE-COUNTER DRUGS see **DRUGS, NON-PRESCRIPTION**

OVERALL AND GORHAM BRIEF PSYCHIATRIC RATING SCALE see under **PSYCHIATRIC STATUS RATING SCALES**

OVERDOSE see **POISONING**

OVEREATING see **HYPERPHAGIA**

OVERINCLUSION see under **COGNITION DISORDERS**

OVIDUCTS

Oviductal, not oviducal. Smith HM, et al. Anat Rec 1989 Apr;223(4):446–7

Concentration of steroid sex hormones in the plasma of hens in relation to oviduct tumours. Anjum AD, et al. Br Poult Sci 1988 Dec;29(4):729–34

Oestrogen and progesterone receptors and their relationship to histological grades of epithelial tumours of the magnum region of the oviduct of the domestic fowl. Anjum AD, et al. J Comp Pathol 1989 Apr;100(3):275–86

Co–culture of early cattle embryos to the blastocyst stage with oviducal tissue or in conditioned medium. Eyestone WH, et al. J Reprod Fertil 1989 Mar;85(2):715–20

Spontaneous occurrence and experimental induction of leiomyoma of the ventral ligament of the oviduct of the hen. Anjum AD, et al. Res Vet Sci 1988 Nov;45(3):341–8

Oviduct magnum tumours in the domestic fowl and their association with laying. Anjum AD, et al. Vet Rec 1989 Jul 8;125(2):42–3

ANALYSIS

Alteration of the spermatozoal glycocalyx and its effect on duration of fertility in the fowl (Gallus domesticus). Froman DP, et al. Biol Reprod 1989 Mar;40(3):615–21

A glycoprotein of oviductal origin alters biochemical properties of the zona pellucida of hamster egg. Oikawa T, et al. Gamete Res 1988 Feb;19(2):113–22

New freeze–dry and vapor fixation method for immunohistochemistry of soluble proteins: subcellular location of the progesterone receptor. Pekki A, et al. J Histochem Cytochem 1989 Aug;37(8):1207–13

Two progesterone receptors in the oviduct of the freshwater turtle Chrysemys picta: possible homology to mammalian and avian progesterone receptor systems. Reese JC, et al. J Steroid Biochem 1989 Aug;33(2):297–310

Autoradiographic localization of beta–adrenergic receptors in rat oviduct. Tolszczuk M, et al. Mol Cell Endocrinol 1988 Nov;60(1):95–9

[Dynamics of amino acid and protein metabolism in laying hens after the administration of 15N–labeled wheat protein. 10. 15N–labeling of crude protein and amino acids of the oviducts] Gruhn K, et al. Arch Tierernahr 1989 Mar; 39(3):311–20 (Eng. Abstr.) (Ger)

ANATOMY & HISTOLOGY

Anatomical basis of a passive mechanism for ovum retention at the ampulloisthmic junction. Halbert SA, et al. Anat Rec 1988 Aug;221(4):841–5

CYTOLOGY

Immunolocalization of laminin during estrogen–induced differentiation of quail oviduct epithelial cells. Perche O, et al. Biol Cell 1988;64(3):353–62

DRUG EFFECTS

Effects of brefeldin A on the synthesis and secretion of egg white proteins in primary cultured oviduct cells of laying Japanese quail (Coturnix coturnix japonica). Kato S, et al. Biochim Biophys Acta 1989 Apr 25;991(1):36–43

Steroid–induced cell proliferation in vivo is associated with increased c–myc proto–oncogene transcript abundance. Rempel SA, et al. Development 1988 Sep;104(1):87–95

In vitro effects of taxol on ciliogenesis in quail oviduct. Boisvieux–Ulrich E, et al. J Cell Sci 1989 Jan;92 (Pt 1):9–20

Rapid inhibition of c–myc gene expression by a glucocorticoid in the avian oviduct. Rories C, et al. Mol Endocrinol 1989 Jun;3(6):991–1001

Comparison of the effects of two lathyrogens on the reproductive system of the laying hen. Chowdhury SD, et al. Vet Rec 1989 Mar 11;124(10):240–2

The influence of substance P on oviductal, duodenal and blood pressure in the anaesthetized domestic hen. De Saedeleer V, et al. Vet Res Commun 1989;13(3):183–91

ENZYMOLOGY

Immunohistochemical localization of glutamate decarboxylase in the rat oviduct and ovary: further evidence for non–neural GABA systems. Erdö SL, et al. Cell Tissue Res 1989 Feb;255(2):431–4

N–acetylglucosaminyltransferase III, IV and V activities in Novikoff ascites tumour cells, mouse lymphoma cells and hen oviduct. Application of a sensitive and specific assay by use of high–performance liquid chromatography. Koenderman AH, et al. Eur J Biochem 1989 May 15; 181(3):651–5

Arylsulphatase activity in the oviduct of the frog Rana esculenta. II. Progesterone–induced changes following ovariectomy and hypophysectomy. Vitaioli L, et al. Histochem J 1988 May;20(5):301–7

Control of glycoprotein synthesis. Detection and characterization of a novel branching enzyme from hen oviduct, UDP–N–acetylglucosamine:GlcNAc beta 1–6 (GlcNAc beta 1–2)Man alpha–R (GlcNAc to Man) beta–4–N–acetylglucosaminyltransferase VI. Brockhausen I, et al. J Biol Chem 1989 Jul 5;264(19):11211–21

Purification and characterization of hen oviduct N alpha–acetyltransferase. Kamitani K, et al. J Biol Chem 1989 Aug 5;264(22):13188–93

Hen oviduct N alpha–acetyltransferase is a ribonucleoprotein having 7 S RNA. Kamitani K, et al. J Biol Chem 1989 Aug 5;264(22):13194–8

The effect of the protein matrix on glycoprotein processing by oviduct Golgi enzymes. Shao MC, et al. J Biol Chem 1989 Apr 15;264(11):6245–51

IMMUNOLOGY

Monoclonal antibodies specific for an oviductal component associated with the hamster zona pellucida. St–Jacques S, et al. J Reprod Immunol 1988 Mar;12(4):247–61

METABOLISM

Platelet activating factor–induced early pregnancy factor

activity from the perfused rabbit ovary and oviduct. Sueoka K, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1580–4
Control of glycoprotein synthesis. The use of oligosaccharide substrates and HPLC to study the sequential pathway for N-acetylglucosaminyltransferases I, II, III, IV, V, and VI in the biosynthesis of highly branched N-glycans by hen oviduct membranes. Brockhausen I, et al.
Biochem Cell Biol 1988 Oct;66(10):1134–51
Positive and negative regulatory elements control the steroid-responsive ovalbumin promoter. Sanders MM, et al. **Biochemistry** 1988 Aug 23;27(17):6550–7
Sulphatides in the frog oviduct: response to estradiol stimulation. Vitaioli L, et al. **Cell Mol Biol** 1988; 34(4):373–82
Effects of tamoxifen, tamoxifen metabolites, and nafoxidine on adenosine 3',5'-monophosphate phosphodiesterase: correlations with growth inhibitory activities but not estrogen receptor affinities. Fanidi A, et al.
Endocrinology 1989 Sep;125(3):1187–93
Progesterone down-regulation of nuclear estrogen receptor: a fundamental mechanism in birds and mammals. Selcer KW, et al. **Gen Comp Endocrinol** 1988 Dec;72(3):443–52
Biochemical characterization and subunit structure of quail oviduct progesterone receptor. Dufrene L, et al.
J Steroid Biochem 1989 May;32(5):703–13
Two progesterone receptors in the oviduct of the freshwater turtle Chrysemys picta: possible homology to mammalian and avian progesterone receptor systems. Reese JC, et al.
J Steroid Biochem 1989 Aug;33(2):297–310
FOSP-1 (frog oviduct-specific protein-1) gene: cloning of cDNA and induction by estrogen in primary cultures of Xenopus oviduct cells. Lerivray H, et al.
Mol Cell Endocrinol 1988 Oct;59(3):241–8
Multiple protein binding sites within the ovalbumin gene 5'-flanking region: isolation and characterization of sequence-specific binding proteins. Pastorcic M, et al.
Nucleic Acids Res 1989 Aug 25;17(16):6693–711

PHYSIOLOGY

Time-dependent loss of developmental potential when two-celled mouse embryos were retained in culture in excised oviducts. Pike IL, et al. **Ann N Y Acad Sci** 1988; 541:419–23
Oviducal storage of spermatozoa in the turkey: its relevance to artificial insemination technology. Bakst MR.
Br Poult Sci 1989 Jun;30(2):423–9 (30 ref.)
Cumulus cell dispersion induced by estradiol in mouse oviduct in vitro. Roblero LS, et al. **Gamete Res** 1989 Aug; 23(4):467–73
Fibre-optic laser instrument for measuring ciliary activity of oviducts in vitro. Holloway GA Jr, et al.
Med Biol Eng Comput 1988 Nov;26(6):655–8
Function of bilateral oviducts in double oviduct hens following surgery. Wentworth BC, et al. **Poult Sci** 1988 Oct;67(10):1465–8

SECRETION

Secretion of proteins by cultured bovine oviducts collected from estrus through early diestrus. Malayer JR, et al.
J Exp Zool 1988 Dec;248(3):345–53

ULTRASTRUCTURE

Histology and functional morphology of the female reproductive tract of the tortoise Gopherus polyphemus. Palmer BD, et al. **Am J Anat** 1988 Nov;183(3):200–11
Ultrastructural evidence that specialized regions of the murine oviduct contribute a glycoprotein to the extracellular matrix of mouse oocytes. Kapur RP, et al.
Anat Rec 1988 Jul;221(3):720–9

OVIDUCTS, MAMMALIAN see **FALLOPIAN TUBES**

OVIPOSITION

Self-regulation in Bulinus tropicus (Krauss), a snail of helminthological importance. Chaudhry MA.
Acta Physiol Pharmacol Latinoam 1987;37(3):343–56
Chemical ecology and behavioral aspects of mosquito oviposition. Bentley MD, et al. **Annu Rev Entomol** 1989; 34:401–21 (123 ref.)
Relationship between delayed onset of egg production and involution of the bursa of Fabricius in White Leghorn chickens. Butcher GD, et al. **Avian Dis** 1989 Apr–Jun; 33(2):361–4
Genetics of factors affecting the life history of Drosophila melanogaster. III. Egg insertion behavior. Gonzalez D.
Behav Genet 1989 Mar;19(2):301–13
Induction of copulatory behavior in Aplysia: atrial gland factors mimic the excitatory effects of freshly deposited egg cordons. Painter SD, et al. **Behav Neural Biol** 1989 Mar;51(2):222–36
Analysis of the egg production pattern in a tropical wet climate: influences of the phase of production and the estimated period of oviposition. Essien AI.
Beitr Trop Landwirtsch Veterinarmed 1989;27(1):101–7
Photoperiod and thermal effects on the productive and reproductive performance of Ross Tented egg-type and Hubbard broiler chicks living under subtropical conditions. el-Sayiad GA, et al.
Beitr Trop Landwirtsch Veterinarmed 1989;27(1):109–17
The use of two populations of hepatocytes with different triacylglycerol contents as a model to study the accumulation of liver lipid in the laying hen. Cross KE, et al. **Biochem J** 1988 Oct 1;255(1):259–65
Effect of temperature during induced moulting on plumage renewal and subsequent production. Herremans M, et al.
Br Poult Sci 1988 Dec;29(4):853–61
Selection experiment for increased egg production under 23 H and 24 H light–dark cycles in the domestic fowl. Naito M, et al. **Br Poult Sci** 1989 Mar;30(1):49–60
Genetic basis of the increase in egg weight with pullet age in a White Leghorn flock. Poggenpoel DG, et al.
Br Poult Sci 1988 Dec;29(4):863–7
Characteristics of oviposition patterns of turkey hens and the influence of different wavelengths of light. Pyrzak R, et al. **Br Poult Sci** 1989 Mar;30(1):151–60
Effects of cholecalciferol or calcium deficiency on oestrogen metabolism in the laying hen. Tsang CP, et al.
Br Poult Sci 1988 Dec;29(4):753–9
Effects of treadmill exercise on the transfer of plasma triglyceride into the ovary of the laying fowl. Vincent R, et al. **Br Poult Sci** 1988 Dec;29(4):801–14
Regulation of net intestinal calcium uptake in hens laying obligatory soft-shelled eggs. Waddington D, et al.
Br Poult Sci 1989 Jun;30(2):341–51
Novel fraction collector for studying the oviposition rhythm in the turnip moth. Byers JA. **Chronobiol Int** 1987; 4(2):189–94
Effect of temperature on the ovipositional biology and egg viability of the cattle tick Boophilus annulatus (Acari: Ixodidae). Davey RB. **Exp Appl Acarol** 1988 Sep; 5(1–2):1–14
A note on methodology applied in the laboratory breeding of mosquitoes of the genus Aedes. Olejníček J.
Folia Parasitol (Praha) 1988;35(4):352
Dynamics of egg production of the cestode Diphyllobothrium dendriticum (Nitzsch, 1824) (Cestoda: Pseudophyllidea) and the concept of fecundity in helminths. Pronin NM, et al. **Folia Parasitol (Praha)** 1989; 36(1):49–57
Changes in progesterone metabolism in the chicken hypothalamus during induced egg laying stop and molting. Balthazart J, et al. **Gen Comp Endocrinol** 1988 Nov; 72(2):282–95
Developmental and comparative aspects of nonsynaptic release by the egg-laying controlling caudodorsal cells of basommatophoran snails. Schmidt ED, et al.
Gen Comp Endocrinol 1989 Jul;75(1):17–28
Caenorhabditis elegans mutants defective in the functioning of the motor neurons responsible for egg laying. Desai C, et al. **Genetics** 1989 Apr;121(4):703–21
Chromosomal analysis of initial retention capacity in virgin Drosophila melanogaster females. Boulétreau-Merle J, et al. **Heredity (Edinburgh)** 1989 Apr;62 (Pt 2):145–51
Observations on egg production by Toxocara pteropodis. Prociv P. **Int J Parasitol** 1989 Jul;19(4):441–3
Diurnal pattern and behavior of oviposition of Toxorhynchites theobaldi in the field. Arredondo-Bernal HC, et al. **J Am Mosq Control Assoc** 1989 Mar;5(1):25–8
Factors affecting oviposition site preference by Toxorhynchites splendens in the laboratory. Benzon GL, et al. **J Am Mosq Control Assoc** 1988 Mar;4(1):20–2
The effect of different methods of oviposition inducement on egg fertility rates in a Simulium damnosum Theobald complex species (Diptera: Simuliidae). Boakye DA, et al.
J Am Mosq Control Assoc 1985 Dec;1(4):535–7
Oviposition behavior of Aedes triseriatus and Aedes hendersoni on the Delmarva Peninsula. Clark GG, et al.
J Am Mosq Control Assoc 1985 Dec;1(4):526–8
Habitat selection strategies of mosquitoes inhabiting citrus irrigation furrows. Curtis GA.
J Am Mosq Control Assoc 1985 Jun;1(2):169–73
Use of an artificial bromeliad to show the importance of color value in restricting colonization of bromeliads by Aedes aegypti and Culex quinquefasciatus. Frank JH.
J Am Mosq Control Assoc 1985 Mar;1(1):28–32
Effect of axenic larvae on the oviposition site selection by Aedes atropalpus. Maire A. **J Am Mosq Control Assoc** 1985 Sep;1(3):320–3
Laboratory oviposition, fecundity and egg hatching ability of colonized Anopheles albimanus from southwestern Mexico. Ramsey JM, et al. **J Am Mosq Control Assoc** 1988 Dec;4(4):509–15
Studies on autogeny in Culex tarsalis: 3. Life table attributes of autogenous and anautogenous strains under laboratory conditions. Reisen WK, et al.
J Am Mosq Control Assoc 1987 Dec;3(4):619–25
Oviposition of Toxorhynchites theobaldi in different types of artificial containers in Mexico. Reyes-Villaneuva F, et al. **J Am Mosq Control Assoc** 1987 Dec;3(4):651–4
Rate of oviposition by Culex quinquefasciatus in San Antonio, Texas, during three years. Strickman D.
J Am Mosq Control Assoc 1988 Sep;4(3):339–44
Seasonal appearance and size of egg rafts of Culex halifaxii and Culex fuscanus in Okinawajima, the Ryukyu Archipelago, Japan. Tokuyama Y, et al.
J Am Mosq Control Assoc 1987 Sep;3(3):403–6
Depth of oviposition by Romanomermis culicivorax (Nematoda: Mermithidae) in Louisiana riceland soils. Walker TW, et al. **J Am Mosq Control Assoc** 1985 Dec; 1(4):528–30
Use of aerial color infrared photography as a survey technique for Psorophora columbiae oviposition habitats in Texas ricelands. Welch JB, et al.
J Am Mosq Control Assoc 1989 Jun;5(2):147–60
Oviposition habitats of Psorophora columbiae in soybean fields of a Texas riceland agroecosystem. Welch JB, et al.
J Am Mosq Control Assoc 1987 Jun;3(2):251–8
Isolation, characterization, and evolutionary aspects of a cDNA clone encoding multiple neuropeptides involved in the stereotyped egg-laying behavior of the freshwater snail Lymnaea stagnalis. Vreugdenhil E, et al. **J Neurosci** 1988 Nov;8(11):4184–91
John Hull Grundy lecture. Eggs—the neglected insects. Beament J. **J R Army Med Corps** 1989 Jun;135(2):49–56 (23 ref.)
Breeding places of Phlebotomus ariasi in the cevennes focus of leishmaniasis in the south of France. Killick-Kendrick R. **Parassitologia** 1987 May–Dec;29(2–3):181–91
Response of White Leghorn hens to various dietary levels of Cassia obtusifolia and nutrient fortification as a means of alleviating depressed performance. Flunker LK, et al.
Poult Sci 1989 Jul;68(7):909–13
Severe feed restriction in pullets during the early growing period: performance and relationships among age, body weight, and egg weight at the onset of production. Hurwitz S, et al. **Poult Sci** 1989 Jul;68(7):914–24
Associations of major histocompatibility complex haplotypes with body weight and egg production traits in S1 White Leghorn chickens. Kim CD, et al. **Poult Sci** 1989 Apr; 68(4):464–9
Effects of thyroidectomy on egg production, molt, and plasma thyroid hormone concentrations of turkey hens. Lien RJ, et al. **Poult Sci** 1989 Aug;68(8):1126–32
Analysis of factors affecting year-round performance of Single Comb White Leghorn laying hens reared under an open-sided housing system. Okumura J, et al. **Poult Sci** 1988 Aug;67(8):1130–8
Effects of ad libitum versus restricted feeding on body composition and egg production of broiler breeders. Robbins KR, et al. **Poult Sci** 1988 Jul;67(7):1001–7
Myoelectrical activity changes in the uterus and vagina during oviposition in the conscious domestic hen. Wechsung E, et al. **Poult Sci** 1988 Nov;67(11):1615–8
Oviduct magnum tumours in the domestic fowl and their association with laying. Anjum AD, et al. **Vet Rec** 1989 Jul 8;125(2):42–3
[Effect of the laying nest on cortisone levels in the plasma of laying hens prior to oviposition] Beuving G.
Tijdschr Diergeneeskd 1989 Jan 1;114(1):3–9 (Eng. Abstr.) **(Dut)**
[Effect of ovariectomy and allatectomy on movement of the ovipositor of virgin Acheta domesticus females] Renucci M, et al. **C R Acad Sci [III]** 1988;307(13):729–33 (Eng. Abstr.) **(Fre)**
[Significance of the adhesion site of Pediculus capitis eggs in hair samples collected from barber shop floors] Linardi PM, et al. **Rev Soc Bras Med Trop** 1987 Oct–Dec; 20(4):209–12 (Eng. Abstr.) **(Por)**

DRUG EFFECTS

Synthetic egg-laying hormone of Aplysia: quantitative studies of induction of egg laying in Stylocheilus and of the activation of Aplysia buccal neuron B16. Ram JL, et al. **Comp Biochem Physiol [C]** 1989;92(1):131–4
Oviposition pattern of Japanese quail following hypothalamic lesioning with super-absorbent polymer. Ohta M, et al.
Gen Comp Endocrinol 1988 Dec;72(3):424–30
Influence of 1,25-dihydroxyvitamin D3 on the performance of commercial laying hens. Harms RH, et al. **Poult Sci** 1988 Aug;67(8):1233–5
[Effects of a sublethal concentration of molluscacide (CuCl2) on the reproductive activity and movements of the molluscan host Lymnaea truncatula Müller] Rondelaud D.
Ann Rech Vet 1988;19(4):273–8 (Eng. Abstr.) **(Fre)**

OVOCYTES see **OOCYTES**

OVOMUCIN see under **EGG PROTEINS**

OVULATION

Prediction and detection of ovulation relationship between woman's observations of cervical mucus changes, thermic and echographic parameters of ovulation. Pagano G, et al. **Acta Eur Fertil** 1988 Sep–Oct;19(5):269–71
Disorders of follicular ripening and ovulation in human. Jakobovits AA, et al. **Acta Med Hung** 1988;45(2):179–90 (55 ref.)
Effect of transportation and relocation in post-weaning anoestrous priminarous sows. Rojanasthien S.
Acta Vet Scand 1989;30(1):1–8
Reduction of food intake in the ovulatory phase of the menstrual cycle. Lyons PM, et al. **Am J Clin Nutr** 1989 Jun;49(6):1164–8
Amenorrhea in an ovulatory woman despite a normal uterine cavity: case report. Check JH, et al.
Am J Obstet Gynecol 1989 Mar;160(3):598–9
Effect of ovarian endometriosis on ovulation in rabbits. Kaplan CR, et al. **Am J Obstet Gynecol** 1989 Jan; 160(1):40–4
The accuracy of urinary luteinizing hormone testing in predicting ovulation. Lloyd R, et al.
Am J Obstet Gynecol 1989 Jun;160(6):1370–2; discussion 1373–5

Influence of preovulatory estradiol concentration on diurnal and pulsatile prolactin secretion patterns. Marshall LA, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1558–63

Effect of preovulatory estradiol concentrations on luteinizing hormone diurnal secretory patterns: a hypothesis for the timing of the luteinizing hormone surge. Marshall LA, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1123–7

Ovulation in relation to cervical canal diameter [letter] Shettles LB. **Am J Obstet Gynecol** 1988 Dec;159(6):1600–1

Ecology and ovarian function among Lese women of the Ituri Forest, Zaire. Ellison PT, et al. **Am J Phys Anthropol** 1989 Apr;78(4):519–26

Inhibin: circulating levels in women during ovulation induction and detection in human placenta by specific radioimmunoassay. Healy DL, et al. **Ann N Y Acad Sci** 1988;541:162–78

Studies on the mechanism of ovulation using the model of the isolated ovary. Janson PO, et al. **Ann N Y Acad Sci** 1988;541:22–9

The blood vascular wreath of rat ovarian follicle, with special reference to its changes in ovulation and luteinization: a scanning electron microscopic study of corrosion casts. Murakami T, et al. **Arch Histol Cytol** 1988 Oct; 51(4):299–313

An egg drop associated with splenomegaly in broiler breeders. Handlinger JH, et al. **Avian Dis** 1988 Oct–Dec; 32(4):773–8

Localization of relaxin during formation of the porcine corpus luteum. Bagnell CA, et al. **Biol Reprod** 1989 Apr; 40(4):835–41

Progesterone is a mediator in the ovulatory process of the in vitro–perfused rat ovary. Brännström M, et al. **Biol Reprod** 1989 Jun;40(6):1170–8

Morphological studies of the microcirculatory system of periovulatory ovine follicles. Cavender JL, et al. **Biol Reprod** 1988 Nov;39(4):989–97

Luteinizing hormone–independent luteinization and ovulation in the hypophysectomized rat: a possible role for the oocyte? Hubbard GM, et al. **Biol Reprod** 1988 Aug; 39(1):183–94

Immunocytochemical evidence for the transfer of an oviductal antigen to the zona pellucida of hamster ova after ovulation. Kan FW, et al. **Biol Reprod** 1989 Mar; 40(3):585–98

Effect of electrocautery of nonovulated day 1 follicles on subsequent morphological variation among day 11 porcine embryos. Pope WF, et al. **Biol Reprod** 1988 Nov; 39(4):882–7

Increase in ovarian blood volume during ovulation in the gonadotropin–primed immature rat. Tanaka N, et al. **Biol Reprod** 1989 Apr;40(4):762–8

Programmed gamete intrafallopian transfer (GIFT). Bates RG, et al. **Br J Obstet Gynaecol** 1988 Dec;95(12):1220–5

A unique case of catamenial pneumothorax [letter] Brown RC. **Chest** 1989 Jun;95(6):1368

Rhythms in the ovulatory cycle. 1st: Prolactin. Chronobiological Research Group on Synthetic Peptides in Medicine. Carandente F, et al. **Chronobiologia** 1989 Jan–Mar;16(1):35–44

New tests for the prediction of ovulation. Kenigsberg D. **Clin Obstet Gynecol** 1989 Sep;32(3):533–40

Influence of egg production on zinc, copper and iron metabolism in the turkey hen (Meleagris gallopavo). Richards MP. **Comp Biochem Physiol [A]** 1989;93(4):811–7

Lactational amenorrhea and the recovery of ovulation and fertility in fully nursing Chilean women. Díaz S, et al. **Contraception** 1988 Jul;38(1):53–67

Use–effectiveness of the ovulation method initiated during postpartum breastfeeding. Perez A, et al. **Contraception** 1988 Nov;38(5):499–508

Month–of–birth distribution of diabetics and ovopathy: a new aetiological view. Jongbloet PH, et al. **Diabetes Res** 1988 Oct;9(2):51–8

Influence of follicular ablation during lactation on postweaning interval to estrus, ovulation rate, and endocrine function in sows. Cox NM, et al. **Domest Anim Endocrinol** 1987 Apr;4(2):87–93

Ovarian follicular dynamics in heifers: test of two–wave hypothesis by ultrasonically monitoring individual follicles. Knopf L, et al. **Domest Anim Endocrinol** 1989 Apr; 6(2):111–9

Evidence that neurotensin participates in the central regulation of the preovulatory surge of luteinizing hormone in the rat. Alexander MJ, et al. **Endocrinology** 1989 Feb; 124(2):783–8

The preovulatory prolactin surge: an evaluation of the role of dopamine. Arbogast LA, et al. **Endocrinology** 1988 Dec; 123(6):2690–5

Tissue–type plasminogen activator in rat oocytes: expression during the periovulatory period, after fertilization, and during follicular atresia. Bicsak TA, et al. **Endocrinology** 1989 Jan;124(1):187–94

Periovulatory expression of cholesterol side–chain cleavage cytochrome P–450 in cumulus cells. Goldschmit D, et al. **Endocrinology** 1989 Jan;124(1):369–78

Immunoneutralization of endogenous inhibin modifies hormone secretion and ovulation rate in the rat. Rivier C, et al. **Endocrinology** 1989 Jul;125(1):152–7

Increase in ovarian 15–hydroxyeicosatetraenoic acid during ovulation in the gonadotropin–primed immature rat. Tanaka N, et al. **Endocrinology** 1989 Sep;125(3):1373–7

Suppression of ovulation rate by antibodies to tissue–type plasminogen activator and alpha 2–antiplasmin. Tsafriri A, et al. **Endocrinology** 1989 Jan;124(1):415–21

Decreased inhibin gene expression in preovulatory follicles requires primary gonadotropin surges. Woodruff TK, et al. **Endocrinology** 1989 May;124(5):2193–9

Twin embryos in mares. I: From ovulation to fixation. Ginther OJ. **Equine Vet J** 1989 May;21(3):166–70 (17 ref.)

Prediction and self–prediction of ovulation in clomiphene citrate–treated patients. Fedele L, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Aug;28(4):297–303

An experimental study of tubo–ovarian function following restoration of patency in hydrosalpinges. Karbowski B, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Aug; 28(4):305–15

Selective oocyte retrieval: a new approach to ovarian hyperstimulation. Belaisch–Allart J, et al. **Fertil Steril** 1988 Oct;50(4):654–6

Effect of oral contraceptives or dexamethasone on plasma beta–endorphin during the menstrual cycle. Comitini G, et al. **Fertil Steril** 1989 Jan;51(1):46–50

Risk of ovulatory infertility in relation to body weight. Green BB, et al. **Fertil Steril** 1988 Nov;50(5):721–6

Prediction of ovulation. Grinsted J, et al. **Fertil Steril** 1989 Sep;52(3):388–93

The relationship of sperm parameters to cycle fecundity in superovulated women undergoing intrauterine insemination. Horvath PM, et al. **Fertil Steril** 1989 Aug; 52(2):288–94

Interobserver variation in estimation of day of conception intercourse using selected natural family planning charts. Kambic R, et al. **Fertil Steril** 1989 Mar;51(3):430–4

The luteinized unruptured follicle and other ovulatory dysfunctions. Katz E. **Fertil Steril** 1988 Dec;50(6):839–50 (72 ref.)

Effects of progesterone on luteinizing hormone release and estradiol/progesterone ratio in the luteal phase of women superovulated for in vitro fertilization and embryo transfer. Mahadevan MM, et al. **Fertil Steril** 1988 Dec;50(6):935–7

A trial of superovulation in ovum donors undergoing uterine lavage. Sauer MV, et al. **Fertil Steril** 1989 Jan;51(1):131–4

Occult ovulatory dysfunction in women with minimal endometriosis or unexplained infertility. Tummon IS, et al. **Fertil Steril** 1988 Nov;50(5):716–20

Effects of ultrasound on ovulation in the mouse. Heyner S, et al. **Gamete Res** 1989 Mar;22(3):333–8

Formation of the rupture site in preovulatory hamster follicles: morphological and morphometric analysis of thinning of the granulosa and thecal layers. Martin GG, et al. **Gamete Res** 1987 Aug;17(4):303–20

Ovulation and fertilization of primary and secondary oocytes in LT/Sv strain mice. O'Neill GT, et al. **Gamete Res** 1987 Sep;18(1):27–36

Effects of delayed mating on preimplantation embryos in spontaneously ovulated mice. Sakai N, et al. **Gamete Res** 1988 Apr;19(4):381–5

Formation of the rupture site in preovulatory hamster and mouse follicles: loss of the surface epithelium. Talbot P, et al. **Gamete Res** 1987 Aug;17(4):287–302

Effects of a superovulatory dose of pregnant mare serum gonadotropin on follicular steroid contents and oocyte maturation in rats. Yun YW, et al. **Gamete Res** 1989 Jul; 23(3):289–98

Ovarian early postovulatory development and oestrogen production in rainbow trout (Salmo gairdneri R.) from a spring–spawning strain. de Mones A, et al. **Gen Comp Endocrinol** 1989 Jun;74(3):431–41

Induction of gonadotropin surge by steroid hormone implantation in ovariectomized and sexually regressed female goldfish. Kobayashi M, et al. **Gen Comp Endocrinol** 1989 Mar;73(3):469–76

Direct evidence that 17 alpha,20 beta–dihydroxy–4–pregnen–3–one functions as a goldfish primer pheromone: preovulatory release is closely associated with male endocrine responses. Stacey NE, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):62–70

Periovulatory female goldfish release three potential pheromones: 17 alpha,20 beta–dihydroxyprogesterone, 17 alpha,20 beta–dihydroxyprogesterone glucuronide, and 17 alpha–hydroxyprogesterone. Van der Kraak G, et al. **Gen Comp Endocrinol** 1989 Mar;73(3):452–7

Different dopaminergic control of plasma luteinizing hormone, follicle–stimulating hormone and prolactin in ovulatory and postmenopausal women: effect of ovariectomy. De Leo V, et al. **Gynecol Obstet Invest** 1989; 27(2):94–8

Timing of ovulation for artificial insemination. Cant S, et al. **Health Bull (Edinb)** 1989 Jan;47(1):9–12

Behavioral stimulation of ovarian growth. Cheng MF, et al. **Horm Behav** 1988 Sep;22(3):388–401

Expression of a secretory product by microvillous and ciliated cells of the human endometrial epithelium in vivo and in vitro. Campbell S, et al. **Hum Reprod** 1988 Nov; 3(8):927–34

A new crystallographic approach to fern–like microstructures in human ovulatory cervical mucus. Chrétien FC, et al. **Hum Reprod** 1989 May;4(4):359–68

Synchronization of donor's and recipient's cycles with GnRH analogues in an oocyte donation programme. Devroey P, et al. **Hum Reprod** 1989 Apr;4(3):270–4

Blunted LH surge after HCG administration in cycles superovulated for in–vitro fertilization. Hamori M, et al. **Hum Reprod** 1989 May;4(4):392–5

Serum follicle–stimulating hormone inhibition is a marker for preovulatory oocytes in in–vitro fertilization and embryo transfer. Kreiner D, et al. **Hum Reprod** 1989 May; 4(4):381–3

In vivo characteristics of polyclonal and monoclonal anti–LHRH antibodies in ovulation inhibition and estrus suppression. Singh V, et al. **Indian J Exp Biol** 1988 Nov; 26(11):819–23

Ovarian function after the menarche and hormonal contraception. Borsos A, et al. **Int J Gynaecol Obstet** 1988 Oct;27(2):249–53

Ultrasonic assessment of ovulation in cyclofenil induced ovulatory cycles. Varma TR, et al. **Int J Gynaecol Obstet** 1988 Oct;27(2):231–8

Endocrine changes associated with a dietary–induced increase in ovulation rate (flushing) in gilts. Flowers B, et al. **J Anim Sci** 1989 Mar;67(3):771–8

Influence of prenatal and postnatal fraternity size on reproduction in swine. Kirkpatrick BW, et al. **J Anim Sci** 1988 Oct;66(10):2530–7

The abnormal response of polycystic ovarian disease patients to exogenous pulsatile gonadotropin–releasing hormone: characterization and management. Filicori M, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):825–31

Egg laying in Aplysia. I. Behavioral patterns and muscle activity of freely behaving animals after selectively elicited bag cell discharges. Ferguson GP, et al. **J Comp Physiol [A]** 1989 Feb;164(6):835–47

The functional activity of hypothalamic dopamine in broody bantam hens. Macnamee MC, et al. **J Endocrinol** 1989 Apr; 121(1):67–74

Changes in pituitary responsiveness during the ovulatory cycle of the Japanese quail, in vitro. Connolly PB, et al. **J Exp Zool** 1988 Aug;247(2):172–6

Failure of fertilization following abbreviated copulation in the ferret (Mustela putorius furo). Miller BJ, et al. **J Exp Zool** 1989 Jan;249(1):85–9

Alterations in the cell cycle characteristics of granulosa cells during the periovulatory period: evidence of ovarian and oviductal influences. Schuetz AW, et al. **J Exp Zool** 1989 Jan;249(1):105–10

Evidence for prostaglandin involvement in early luteal regression of the superovulated nanny goat (Capra hircus). Battye KM, et al. **J Reprod Fertil** 1988 Nov;84(2):425–30

Ovarian capillary blood flow in seasonally anoestrous ewes induced to ovulate by treatment with GnRH. Brown BW, et al. **J Reprod Fertil** 1988 Nov;84(2):653–8

The number of spermatozoa, the number of ovulations per ewe, and immunization against androstenedione affect fertility and prolificacy of sheep. Cameron AW, et al. **J Reprod Fertil** 1988 Sep;84(1):43–50

Binding characteristics of 125I–labelled human FSH to granulosa cells from Booroola ewes which were homozygous, heterozygous or non–carriers of a major gene(s) influencing their ovulation rate. McNatty KP, et al. **J Reprod Fertil** 1989 May;86(1):27–38

Increases in ovulation rate in lupin–fed ewes are initiated by increases in protein digested post–ruminally. Nottle MB, et al. **J Reprod Fertil** 1988 Nov;84(2):563–6

LH receptor induction and ovulation rate in mice selected for litter size and body weight. Pomp D, et al. **J Reprod Fertil** 1988 Nov;84(2):601–9

Season determines timing of first ovulation in rhesus monkeys (Macaca mulatta) housed outdoors. Wilson ME, et al. **J Reprod Fertil** 1989 Mar;85(2):583–91

Changes in the estrous cycle and number of ovulated and fertilized ova in aging female IVCS mice. Tappa B, et al. **Jikken Dobutsu** 1989 Apr;38(2):115–9

Embryo production in B6D2–F1 mice using two superovulating regimens. Cosby NC, et al. **Lab Anim Sci** 1989 May;39(3):249–50

Spontaneous profuse superovulation in association with ectopic fetuses in a rabbit. Smith CA, et al. **Lab Anim Sci** 1989 Jan;39(1):74–7

Differential alterations in dopamine turnover rates in the stalk–median eminence and posterior pituitary during the preovulatory prolactin surge. Arbogast LA, et al. **Neuroendocrinology** 1989 May;49(5):525–30

Inhibition of proestrous LH surge and ovulation in rats evoked by stimulation of the medial raphe nucleus involves a GABA–mediated mechanism. Morello H, et al. **Neuroendocrinology** 1989 Jul;50(1):81–7

The development of over–the–counter (OTC) assays for pregnanediol–3–glucuronide and estrone–B,D–glucuronide. Bahar I. **Prog Clin Biol Res** 1988;285:139–51

Periovulatory changes in the ovary. Morphology and expression of tissue–type plasminogen activator. Cajander SB. **Prog Clin Biol Res** 1989;296:91–101 (38 ref.)

Ultrastructure of the in vitro ovulated ova. Kitai H, et al. **Prog Clin Biol Res** 1989;296:281–6

Regulation of steroidogenic function during luteinization. Mori T, et al. **Prog Clin Biol Res** 1989;294:117–28 (15 ref.)

Mechanism of mammalian ovulation. Morioka N, et al. **Prog Clin Biol Res** 1989;294:65–85 (76 ref.)

Morphological observations on ovulation. Okamura H. **Prog Clin Biol Res** 1989;296:79–90

Immunochemical criteria for successful matching of monoclonal antibodies to immunoassays of peptide hormones for assessment of pregnancy and ovulation. Porter P, et al. **Prog Clin Biol Res** 1988;285:181–200

The periovulatory interval: physiologic and endocrinologic

implications. Wallach EE, et al. **Prog Clin Biol Res** 1989; 294:87-100 (63 ref.)

The involvement of oxytocin in ovulation and in the outputs of cyclo-oxygenase and 5-lipoxygenase products from isolated rat ovaries. Viggiano M, et al. **Prostaglandins** 1989 Mar;37(3):367-78

Oogenesis and ovulation in normal conditions or induced by homologous hypophysis in Hoplias m. malabaricus (Pisces, Erythrynidae). Matkovic M, et al. **Rev Bras Biol** 1989 Feb;49(1):203-12

Final maturation and ovulation provoked by supply of homologous hypophysis in Hoplias m. malabaricus (Pisces, Erythrinidae). Matkovic M, et al. **Rev Bras Biol** 1989 Feb; 49(1):213-20

The involvement of platelet activating factor in ovulation. Abisogun AO, et al. **Science** 1989 Jan 20;243(4889):381-3

Angiotensin II: does it have a direct obligate role in ovulation? Naftolin F, et al. **Science** 1989 Aug 25; 245(4920):870-1

Murine ovulatory response to ultrasound exposure and its gynecological relevance. Gates AH, et al. **Ultrasound Med Biol** 1988;14(6):485-91

Low incidence of fertilisation in superovulated cows: a physiological explanation. Hunter RH. **Vet Rec** 1988 Oct 22;123(17):443

Superovulatory response in pashmina goats [letter] Mahmood S, et al. **Vet Rec** 1989 Jul 29;125(5):117

Predicting ovulation in the mare on the basis of follicular growth and serum oestrone sulphate and progesterone levels. Koskinen E, et al. **Zentralbl Veterinarmed [A]** 1989 Apr;36(4):299-304

Ovarian serotonin during oocyte development and ovulation in the domestic hen (Gallus domesticus). Paczoska-Eliasiewicz H, et al. **Zentralbl Veterinarmed [A]** 1988 Sep;35(8):617-21

[Changes in serum FSH, LH and ovarian follicular growth during electroacupuncture for induction of ovulation] Yu J, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Apr; 9(4):199-202, 195 (Eng. Abstr.) **(Chi)**

[Survey of menstrual cycle length and ovulation in healthy women in Beijing] Xiao BL. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Sep;23(5):279-82, 317 (Eng. Abstr.) **(Chi)**

[Plasminogen activator activity in mouse ovaries during periovulatory period] Liu YX, et al. **Sheng Li Hsueh Pao** 1989 Jun;41(3):284-90 (Eng. Abstr.) **(Chi)**

[Selection of the dominant follicle. I] Presl J, et al. **Cesk Gynekol** 1989 Apr;54(3):200-14 **(Cze)**

[Comparative study of the lipid composition of seminal fluid and ovulatory peritoneal fluid in humans] Vignon F, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(4):459-62 (Eng. Abstr.) **(Fre)**

[Presence of an oncofetal antigen, beta 2-microglobulin in the preovulation follicular fluid [letter]] Moncharmont P, et al. **Presse Med** 1989 Mar 4;18(9):492-3 **(Fre)**

[Sonographic studies of the preovulatory follicle development in the mare (published erratum appears in DTW 1989 Jan;96(1):31)] Will K, et al. **DTW** 1988 Oct; 95(9):362-5 (Eng. Abstr.) **(Ger)**

[Possible involvement of the renin-angiotensin system in reproduction. II. Occurrence and role in the female reproductive tract] Jentzsch KD, et al. **Zentralbl Gynakol** 1989;111(8):485-93 (46 ref.) (Eng. Abstr.) **(Ger)**

[Prediction of ovulation based on the serum estradiol level and the diameter of the follicle] Zalányi S, et al. **Orv Hetil** 1989 Jan 22;130(4):173-5 (18 ref.) (Eng. Abstr.) **(Hun)**

[A longitudinal study on the prognosis of ovulatory disturbance in teenage patients with high LH and normal FSH serum levels] Kimura K, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Oct 20; 64(10):1088-101 (Eng. Abstr.) **(Jpn)**

[The ovarian cycle and its regulation] Henriksen T, et al. **Tidsskr Nor Laegeforen** 1988 Aug 30;108(24):1919-24 (Eng. Abstr.) **(Nor)**

[Current theories on female fertility in Cushing's syndrome] Gustowski A, et al. **Ginekol Pol** 1988 Jun;59(6):371-5 (55 ref.) (Eng. Abstr.) **(Pol)**

[An impulse device for measuring electric conductivity with thermostatic skin electrodes for determining ovulation time] Stupnitskiĭ IF. **Med Tekh** 1989 Jan-Feb;(1):50-2 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Periovulatory serum prolactin and progesteron secretion in gonadotropin stimulated cycles. Meden-Vrtovec H, et al. **Acta Eur Fertil** 1988 Jul-Aug;19(4):213-6

Ovulation monitored by serum 17 beta-estradiol and ultrasound: differential ovarian response to human gonadotropins in various anovulatory states. Padova G, et al. **Acta Eur Fertil** 1988 Sep-Oct;19(5):283-6

Induced anovulation as treatment of premenstrual tension syndrome. A double-blind cross-over study with GnRH-agonist versus placebo. Hammarbäck S, et al. **Acta Obstet Gynecol Scand** 1988;67(2):159-66

Increased calcium response to ADP in blood platelets from women during ovulation compared with menstruation: cytoplasmic calcium measured with the fura-2 technique. Pedersen OS, et al. **Acta Physiol Scand** 1988 Mar; 132(3):335-9

Is serotonin involved in the ovulatory process of the rat ovary perfused in vitro? Schmidt G, et al. **Acta Physiol Scand** 1988 Feb;132(2):251-6

Ovarian hyperstimulation presenting as acute hydrothorax after in vitro fertilization. Kingsland CR, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):381-2

Effects of prostacyclin on ovulation and microvasculature of the in vitro perfused rabbit ovary. Yoshimura Y, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):977-82

Increase in ovarian leukotrienes during hormonally induced ovulation in the rat. Espey LL, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):E753-9

Superovulation of immature rats by continuous infusion of follicle-stimulating hormone. Armstrong DT, et al. **Biol Reprod** 1988 Oct;39(3):511-8

Estradiol-induced blockade of ovulation in the cow: effects on luteinizing hormone release and follicular fluid steroids. Engelhardt H, et al. **Biol Reprod** 1989 Jun;40(6):1287-97

Effects of an antiandrogen, flutamide, on oocyte quality and embryo development in rats superovulated with pregnant mare's serum gonadotropin. Yun YW, et al. **Biol Reprod** 1988 Sep;39(2):279-86

Influence of serum luteinising hormone concentrations on ovulation, conception, and early pregnancy loss in polycystic ovary syndrome. Homburg R, et al. **BMJ** 1988 Oct 22;297(6655):1024-6

One hundred pregnancies after treatment with pulsatile luteinising hormone releasing hormone to induce ovulation. Homburg R, et al. **BMJ** 1989 Mar 25;298(6676):809-12

Suppression of ovulation by transdermal oestradiol patches. Watson NR, et al. **BMJ** 1988 Oct 8;297(6653):900-1

Human chorionic gonadotropin and luteinizing hormone-releasing hormone reverse the blockade of ovulation in pregnant mare's serum gonadotropin-primed immature rats by the anti-androgenic drug, hydroxyflutamide. Chandrasekhar Y, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):783-7

Immunohistochemical localization of tissue-type plasminogen activator in ovaries before and after induced and spontaneous ovulation in the rat. Cajander SB, et al. **Cell Tissue Res** 1989 Jul;257(1):1-8

Isolation of ovulatory-active substances from crops of Job's tears (Coix lacryma-jobi L. var. ma-yuen STAPF.). Kondo Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug;36(8):3147-52

"Sunday start" multiphasic oral contraception: ovulation prevention and delayed follicular atresia in primates. Danforth DR, et al. **Contraception** 1989 Mar;39(3):321-30

Contraceptive potential of RU 486 by ovulation inhibition: III. Preliminary observations on once weekly oral administration. Danforth DR, et al. **Contraception** 1989 Aug;40(2):195-200

Luteal deficiency caused by human ovarian follicular fluid peptide in post-partum marmosets, Callithrix jacchus. Nandedkar TD, et al. **Contraception** 1989 Jul;40(1):101-9

The influence of exogenous pituitary growth hormone on the ovulatory response to PMSG and hCG and the LH response to estradiol benzoate in prepubertal gilts. Kirkwood RN, et al. **Domest Anim Endocrinol** 1988 Oct; 5(4):317-22

Gonadotropin-induced murine oocyte maturation in vivo is not associated with decreased cyclic adenosine monophosphate in the oocyte-cumulus cell complex. Eppig JJ, et al. **Gamete Res** 1988 Jun;20(2):125-31

Superovulation in immature and mature Chinese hamsters. Roldan ER, et al. **Gamete Res** 1987 Apr;16(4):281-90

Effect of exogenous hormones on the ovulation of primary and secondary oocytes in LT/Sv strain mice. Speirs S, et al. **Gamete Res** 1988 Oct;21(2):179-84

Gonadotropin-induced ovulation in a reptile (Anolis carolinensis): histological observations. Jones RE, et al. **Gen Comp Endocrinol** 1988 Nov;72(2):312-22

Effects of varying doses of HCG on the evolution of preovulatory rabbit follicles and oocytes. Bomsel-Helmreich O, et al. **Hum Reprod** 1989 Aug; 4(6):636-42

The luteal phase and early pregnancy after combined GnRH-agonist/HMG treatment for superovulation in IVF or GIFT. Smitz J, et al. **Hum Reprod** 1988 Jul;3(5):585-90

Neonatally androgenized rats with polycystic ovaries induced to ovulate by hCG mate but fail to conceive. Shanbhag AB, et al. **Indian J Exp Biol** 1988 Jun; 26(6):418-25

Daily or alternate-day FSH therapy in patients with polycystic ovarian disease resistant to clomiphene citrate treatment. McFaul PB, et al. **Int J Fertil** 1989 May-Jun; 34(3):194-8

Effect of the mode of clomiphene citrate administration on ovarian response in an in vitro fertilization program. Rönnberg L, et al. **Int J Fertil** 1988 Sep-Oct;33(5):334-7

Enhanced pre-ovulatory progesterone levels in fertile cycles during clomiphene citrate treatment. Fedele L, et al. **Int J Gynaecol Obstet** 1989 Jul;29(3):239-42

Sonographic study of the endometrial responses to ovarian hormones in patients receiving ovarian stimulation. Sakamoto C, et al. **Int J Gynaecol Obstet** 1988 Dec; 27(3):407-14

Effect of age and norgestomet on endocrine parameters and production of embryos in superovulated beef cows. Garcia-Winder M, et al. **J Anim Sci** 1988 Aug; 66(8):1974-81

Reproductive response of ewes to immunization with Fecundin (ovandrotone). Meyer HH, et al. **J Anim Sci** 1988 Nov;66(11):2742-9

Enhanced preovulatory progesterone levels in clomiphene citrate-induced cycles. Fedele L, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):681-3

Heterogeneity in the luteal population following superovulation with pregnant mare serum gonadotrophin and human chorionic gonadotrophin in the sheep. Hunter MG, et al. **J Endocrinol** 1989 Jun;121(3):459-65

LH, FSH and ovulation rate in ewes treated with exogenous oestradiol. Atkinson S, et al. **J Reprod Fertil** 1989 May; 86(1):383-90

Effects of inhibitors of protein synthesis on the ovulatory process of the perfused rat ovary. Brännström M, et al. **J Reprod Fertil** 1989 Mar;85(2):451-9

Ability of progesterone to reverse anti-androgen (hydroxyflutamide)-induced interference with the preovulatory LH surge and ovulation in PMSG-primed immature rats. Chandrasekhar Y, et al. **J Reprod Fertil** 1989 Jan;85(1):309-16

Consequences of increasing or decreasing plasma FSH concentrations during the preovulatory period in Romney ewes. Henderson KM, et al. **J Reprod Fertil** 1988 Sep; 84(1):187-96

Effects of dibutyryl cyclic AMP on oocyte maturation and ovulation in the perfused rabbit ovary. Hosoi Y, et al. **J Reprod Fertil** 1989 Mar;85(2):405-11

Effects of clomiphene citrate on ovarian function in hypophysectomized rats. Moon YS, et al. **J Reprod Fertil** 1989 Jul;86(2):753-7

Initiation of follicular maturation during mid-pregnancy by the administration of LH in the rat. Taya K, et al. **J Reprod Fertil** 1989 Jan;85(1):51-60

Superovulation and early embryo development in the adult mouse after prenatal exposure to diethylstilboestrol. Wordinger RJ, et al. **J Reprod Fertil** 1989 Mar;85(2):383-8

Effect of pregnant mare's serum gonadotropin on increased ovulation in guinea pigs with synchronized estrous cycle. Kosaka T, et al. **Jikken Dobutsu** 1989 Jan;38(1):81-3

The mode of action of indomethacin, aspirin and melatonin on the blockage of the first ovulation in immature rat pretreated with PMSG. Tamura K, et al. **Jpn J Pharmacol** 1989 Aug;50(4):491-4

Direct inhibitory ovarian effects of prolactin in the process of ovulation. Yoshimura Y, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jan;41(1):83-9

Rat ovarian prostaglandin levels and ovulation as indicators of the strength of non-steroidal anti-inflammatory drugs. Espey LL, et al. **Prostaglandins** 1988 Dec;36(6):875-9

Effect of a steroidal (prednisolone) and nonsteroidal (indomethacin) antiinflammatory agent on ovulation and follicular accumulation of prostagiandin F2 alpha in sheep. Murdoch WJ. **Prostaglandins** 1989 Mar;37(3):331-4

The effects of reserpine and LHRH or salmon GnRH analogues on gonadotropin release, ovulation and spermiation in common carp (Cyprinus carpio L.). Sokołowska M, et al. **Reprod Nutr Dev** 1988;28(4A):889-97

Different ovulatory response to copulatory stimulus in rats treated with reserpine or atropine on diestrus day one. Villavicencio J, et al. **Rev Invest Clin** 1988 Jul-Sep; 40(3):231-5

Ovulation in the perfused ovary in vitro: further evidence that estrogen is not required. Morioka N, et al. **Steroids** 1988 Jan-Feb;51(1-2):173-83

Ovulatory response of chlordecone (Kepone)-exposed mice to exogenous gonadotropins. Swartz WJ, et al. **Toxicology** 1988 Oct;51(2-3):147-53

Control of oestrus and ovulation in peri-pubertal gilts with allyltrenbolone or a combination of natural gonadotrophins. Varley MA, et al. **Vet Rec** 1989 Feb 25;124(8):186-9

[Induction of ovulation with pulsatile administration of luteinizing hormone releasing hormone] Zhang YW. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Nov;23(6):330-3, 386 (Eng. Abstr.) **(Chi)**

[Follicular development in stimulated cycles] Zhao WX, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Nov;23(6):326-9, 386 (Eng. Abstr.) **(Chi)**

[Pulsatile administration of GnRH: from the future to the present] Thalabard JC, et al. **Ann Endocrinol (Paris)** 1988; 49(4-5):398-402 (Eng. Abstr.) **(Fre)**

[Fertilization in vitro with frozen donor sperm after ovocyte stimulation with an LH-RH analog, HMG, and HCG using a short-term protocol] Sagot P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(5):677-85 (Eng. Abstr.) **(Fre)**

[The course of ovulation in gilts after the partial replacement of HCG by GnRH for ovulation stimulation] Schlegel W, et al. **Arch Exp Veterinarmed** 1989 Jan;43(1):97-100 (Eng. Abstr.) **(Ger)**

[The course of ovulation in gilts after the use of two GnRH injections for ovulation stimulation] Schlegel W, et al. **Arch Exp Veterinarmed** 1989 Jan;43(1):101-5 (Eng. Abstr.) **(Ger)**

[Use of gonadotropin releasing hormone analogs in Marcumar-treated patients for contraception and prevention of life-threatening ovulation hemorrhages] Prömpeler H, et al. **Geburtshilfe Frauenheilkd** 1988 Aug; 48(8):588-9 (Eng. Abstr.) **(Ger)**

[Stimulation of superovulation with clostilbegit for extracorporeal fertilization of human oocytes] Kalinina EA. **Akush Ginekol (Mosk)** 1988 Sep;(9):58-60 **(Rus)**

[Structural and functional indices of disturbances of oocyte maturation in androgenized rats after induction of ovulation

with pregnant mare's serum and luliberin] Kitaev EM, et al. **Tsitologiia** 1988 Nov;30(11):1379–83 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

[Relation of postradiation superovulation to the development of embryos and progeny of Wistar rats] Shakhdinaroba LV, et al. **Radiobiologiia** 1988 Sep–Oct;28(5):677–80 (Eng. Abstr.) **(Rus)**

OVULATION DETECTION

The development of fertility assay kits: an overview. France JT. **Int J Fertil** 1988;33 Suppl:5–9 (21 ref.)

Importance of echographic and endocrine monitoring for the assessment of ovulation by follicle stimulating hormone in polycystic ovarian disease. Caruso A, et al. **Int J Gynaecol Obstet** 1989 Feb;28(2):163–9

Experience with ultrasound. March CM. **J Reprod Med** 1989 Jan;34(1 Suppl):100–3

INSTRUMENTATION

Inability of sonography to detect imminent ovulation. Zandt–Stastny D, et al. **AJR** 1989 Jan;152(1):91–5

METHODS

Prediction of ovulation with the assessment of LH and the E1G/P2G ratio in urinary samples. Baviera G, et al. **Acta Eur Fertil** 1988 May–Jun;19(3):139–42

Luteinizing hormone and ovulation timing in a therapeutic donor insemination program using frozen semen. Kossoy LR, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1169–72

A novel approach for monitoring the endometrial cycle and detecting ovulation. Seif MW, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):357–62

The Billings Ovulation Method. An update [published erratum appears in Aust Fam Physician 1988 Dec;17(12):following 1028] Billings JJ, et al. **Aust Fam Physician** 1988 Oct;17(10):843–6

What are the ultrasound and biochemical features of impending ovulation? Eden JA, et al. **Aust N Z J Obstet Gynaecol** 1988 Aug;28(3):225–7

Temporal relation of ovulation to salivary and vaginal electrical resistance patterns: implications for natural family planning. Moreno JE, et al. **Contraception** 1988 Oct; 38(4):407–18

An assessment of the dual-analyte enzyme immunoassay for ovulation timing. Lenton EA, et al. **Hum Reprod** 1989 May; 4(4):378–80

Natural methods for fertility control: a prospective study—First Part. Barbato M, et al. **Int J Fertil** 1988;33 Suppl:48–51

Detection of the fertile phase from changes in cervico-vaginal fluid volume. Flynn AM, et al. **Int J Fertil** 1988;33 Suppl:17–23

The natural family planning programme in Bangladesh. Gomes I, et al. **Int J Fertil** 1988;33 Suppl:52–3

Simplified LH-rise method to time oocyte recovery for in vitro fertilization. Mahadevan MM, et al. **Int J Fertil** 1989 Jul–Aug;34(4):276–80

Self-palpation to assess cervical changes in relation to mucus and temperature. Parenteau-Carreau S, et al. **Int J Fertil** 1988;33 Suppl:10–6

Recognition of ovulatory/anovulatory cycle pattern in adolescents by mucus self-detection. Klaus H, et al. **J Adolesc Health Care** 1989 Mar;10(2):93–6

Ovulation prediction by monitoring salivary and vaginal electrical resistance with the PEAK Ovulation Predictor. Jacobs MH, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):817–22

Correlation of endometrial maturation with four methods of estimating day of ovulation [letter] Olive DL. **Obstet Gynecol** 1989 Jun;73(6):1053

Correlation of endometrial maturation with four methods of estimating day of ovulation. Shoupe D, et al. **Obstet Gynecol** 1989 Jan;73(1):88–92

[Urinary LH as determined by enzyme-immunoassay combined with real-time ultrasound in the prediction of ovulation and its clinical application] Liu P. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Mar;23(2):65–8, 126 (Eng. Abstr.) **(Chi)**

[Ultrasound monitoring of follicle development, ovulation and corpus luteum formation in infertile women] Zhu Q. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Mar;23(2):69–71, 126 (Eng. Abstr.) **(Chi)**

[Ovulation detection using the urine LH test] Tseng CJ, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Jul;87(7):751–4 (Eng. Abstr.) **(Chi)**

[The prediction of the day of ovulation with a do-it-yourself test (letter)] Kant PC. **Ned Tijdschr Geneeskd** 1988 Nov 5;132(45):2075–6 **(Dut)**

[Predicting the day of ovulation with a do-it-yourself test] Kremer J, et al. **Ned Tijdschr Geneeskd** 1988 Aug 20; 132(34):1566–9 **(Dut)**

[The Discretest] van Gulick FJ, et al. **Ned Tijdschr Geneeskd** 1988 Aug 20;132(34):1578–80 (Eng. Abstr.) **(Dut)**

[Possibilities for using the LH color test in determining ovulation time] Riedel HH, et al. **Geburtshilfe Frauenheilkd** 1989 Jan;49(1):41–4 (Eng. Abstr.) **(Ger)**

[Peri-ovulatory hormone determination in females with sterility of unknown origin] Vytiska-Binstorfer E. **Zentralbl Gynakol** 1989;111(5):281–6 (Eng. Abstr.) **(Ger)**

[Prediction of ovulation: possibilities and limitations in current methods] Cabibbe G, et al. **Ann Ostet Ginecol Med Perinat** 1988 Sep–Oct; 109(5):257–64 (Eng. Abstr.) **(Ita)**

[A single measurement of progesterone as an index of ovulation in unexplained sterility] Morán C, et al. **Arch Invest Med (Mex)** 1988 Apr–Jun;19(2):107–11 (Eng. Abstr.) **(Spa)**

[Simple testing of luteinizing hormone in the urine indicates ovulation] Pousette A, et al. **Lakartidningen** 1989 Apr 26; 86(17):1584–5 **(Swe)**

PSYCHOLOGY

Acceptability of the modified mucus method: study of the psychosocial factors affecting acceptance. Dorairaj K. **Int J Fertil** 1988;33 Suppl:78–86

OVULATION INDUCTION

Induction of ovulation for gamete intrafallopian transfer (GIFT) using a gonadotropin-releasing hormone agonist and "pure" FSH: results obtained in 30 normally menstruating women. La Sala GB, et al. **Acta Eur Fertil** 1988 May–Jun;19(3):159–65

Severe ovarian hyperstimulation syndrome. Case reports. Magnus O, et al. **Acta Eur Fertil** 1988 Mar–Apr;19(2):89–92

Ovarian hyperstimulation syndrome (OHS): a case of severe OHS. Rubessa S, et al. **Acta Eur Fertil** 1989 Jan–Feb; 20(1):15–7

Ovarian hyperstimulation syndrome. A case history and review. Varma TR, et al. **Acta Obstet Gynecol Scand** 1988; 67(7):579–84

Ovulation induction and pregnancy with an estrogen-gonadotropin stimulation technique in a menopausal woman with marked hypoplastic ovaries. Check JH, et al. **Am J Obstet Gynecol** 1989 Feb; 160(2):405–6

Factors affecting fetal loss in induction of ovulation with gonadotropins: increased abortion rates related to hormonal profiles in conceptual cycles. Lam SY, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):621–8

The use of a GnRH analogue for ovulation induction for tubal gamete transfer. Ah-Moye M, et al. **Ann N Y Acad Sci** 1988;541:75–81

Improvements in ovarian stimulation for in vitro fertilization. Frydman R, et al. **Ann N Y Acad Sci** 1988;541:30–6

Short-term utilization of a gonadotropin-releasing hormone agonist (buserelin) for induction of ovulation in an in vitro fertilization program. Loumaye E, et al. **Ann N Y Acad Sci** 1988;541:96–102

Protocols for induction of ovulation. The concept of programmed cycles. Mashiach S, et al. **Ann N Y Acad Sci** 1988;541:37–45

Stimulation protocols for patients with "atypical response". Muasher SJ. **Ann N Y Acad Sci** 1988;541:82–95

Follicular stimulation for high tech pregnancies: are we playing it safe? Fishel S, et al. **BMJ** 1989 Jul 29; 299(6694):309–11

Suppression of gonadotrophin secretion does not reverse premature ovarian failure [letter] van der Weiden RM, et al. **Br J Obstet Gynaecol** 1989 Jul;96(7):881

Induction of ovulation in the patient with polycystic ovarian disease. Blankstein J, et al. **Endocrinol Metab Clin North Am** 1988 Dec;17(4):733–49 (40 ref.)

Prostaglandin F2 alpha, progesterone and estradiol concentrations in human follicular fluid and their relation to success of in vitro fertilization. Suchanek E, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Aug;28(4):331–9

Ovulation induction for in-vitro-fertilization and embryo transfer applying decapeptyl (DTRP-6 LH/RH) in combination with HMG or FSH. Mettler L, et al. **Exp Clin Endocrinol** 1988 Mar;92(3):245–51

Transvaginal pulsed Doppler measurement of blood flow velocity in the ovarian arteries during cycle stimulation and after follicle puncture. Deutinger J, et al. **Fertil Steril** 1989 Mar;51(3):466–70

Endometrial thickness and growth during ovarian stimulation: a possible predictor of implantation in in vitro fertilization. Gonen Y, et al. **Fertil Steril** 1989 Sep; 52(3):446–50

Does transient hyperprolactinemia during ovarian hyperstimulation interfere with conception or pregnancy outcome? Gonen Y, et al. **Fertil Steril** 1989 Jun; 51(6):1007–10

The effects of baseline ovarian cysts on the clinical response to controlled ovarian hyperstimulation in an in vitro fertilization program. Hornstein MD, et al. **Fertil Steril** 1989 Sep;52(3):437–40

Diagnosis and management of out-of-phase endometrial biopsies among patients receiving clomiphene citrate for ovulation induction. Keenan JA, et al. **Fertil Steril** 1989 Jun;51(6):964–7

Adjuvant leuprolide in normal, abnormal, and poor responders to controlled ovarian hyperstimulation for in vitro fertilization/gamete intrafallopian transfer. Sathanandan M, et al. **Fertil Steril** 1989 Jun;51(6):998–1006

Preimplantation embryo development and serum steroid levels in immature rats induced to ovulate or superovulate with pregnant mares' serum gonadotropin injection or follicle-stimulating hormone infusions. Leveille MC, et al. **Gamete Res** 1989 May;23(1):127–38

Effects of induced ovulation by pregnant mare's serum and human chorionic gonadotropin on the sex ratio of mouse fetuses. Sakai N, et al. **Gamete Res** 1987 Apr;16(4):319–22

Pregnancy outcome in luteinizing hormone-releasing hormone induced cycles: a multicentre study. Braat DD, et al. **Gynecol Endocrinol** 1989;3(1):35–44

Pituitary response during pulsatile luteinizing hormone-releasing hormone ovulation—induction in patients with clomiphene citrate-resistant polycystic ovary-like disease. Burger CW, et al. **Gynecol Endocrinol** 1988 Mar;2(1):19–33

Induction of multiple follicular development as a therapy for unexplained or male-related infertility. Fioretti P, et al. **Gynecol Endocrinol** 1989;3(1):45–53

Endocrine dynamics during pulsatile GnRH administration in patients with hypothalamic amenorrhea and polycystic ovarian disease. Rossmanith WG, et al. **Gynecol Endocrinol** 1989;3(1):21–34

Use of combined exogenous gonadotropins and pulsatile gonadotropin-releasing hormone in patients with polycystic ovarian disease: a new approach to induction of ovulation. Venturini PL, et al. **Gynecol Endocrinol** 1988 Sep;2(3):205–13

Impairment of dopaminergic and opioidergic activity in patients with polycystic ovarian disease is restored by treatment for the induction of ovulation. Nappi C, et al. **Gynecol Obstet Invest** 1989;27(1):38–41

The value of GnRH analogue therapy in IVF in women with unexplained infertility. Ashkenazi J, et al. **Hum Reprod** 1989 Aug;4(6):667–9

Ovarian stimulation of IVF patients: effects of the reversible hypogonadotrophic state induced by GnRH agonist. Crosignani PG, et al. **Hum Reprod** 1988 Oct;3 Suppl 2:39–41

Ovulation induction in polycystic ovarian disease by pure FSH (Metrodin). A comparison between chronic low-dose pulsatile administration and i.m. injections. Quartero HW, et al. **Hum Reprod** 1989 Apr;4(3):247–9

Embryo quality and uterine receptivity in in-vitro fertilization cycles with or without agonists of gonadotrophin-releasing hormone. Testart J, et al. **Hum Reprod** 1989 Feb;4(2):198–201

Influence of different stimulation treatments on oocyte characteristics and in-vitro fertilizing ability. Testart J, et al. **Hum Reprod** 1989 Feb;4(2):192–7

Correlation between plasma estradiol and estrone-3-glucuronide in urine during the monitoring of ovarian induction therapy. Catalan R, et al. **Int J Fertil** 1989 Jul–Aug;34(4):271–5

Evaluation of stimulated cycles with multiple follicular development but low oocyte retrieval. Pellicer A, et al. **Int J Fertil** 1989 Jan–Feb;34(1):37–41

Importance of echographic and endocrine monitoring for the assessment of ovulation by follicle stimulating hormone in polycystic ovarian disease. Caruso A, et al. **Int J Gynaecol Obstet** 1989 Feb;28(2):163–9

Ultrasonic assessment of ovulation in cyclofenil induced ovulatory cycles. Varma TR, et al. **Int J Gynaecol Obstet** 1988 Oct;27(2):231–8

Return to the natural cycle for in vitro fertilization (alleluia! alleluia!) [editorial] Garcia J. **J In Vitro Fert Embryo Transf** 1989 Apr;6(2):67–8

Recovery of a preovulatory binucleate oocyte in a patient following induction of ovulation for in vitro fertilization. Mahadevan MM, et al. **J In Vitro Fert Embryo Transf** 1988 Oct;5(5):299–300

Programmed ovulation induction and oocyte retrieval for in vitro fertilization. Salat-Baroux J, et al. **J In Vitro Fert Embryo Transf** 1988 Jun;5(3):153–7

The effect of clomiphene citrate on human preovulatory oocyte maturation in vivo. Seibel MM, et al. **J In Vitro Fert Embryo Transf** 1989 Feb;6(1):3–6

Massive ascites following induction of ovulation with clomiphene citrate: a case report. Rojanasakul A. **J Med Assoc Thai** 1988 Jul;71 Suppl 2:86–8

Function of abnormal corpora lutea in vitro after GnRH-induced ovulation in the anoestrous ewe. Hunter MG, et al. **J Reprod Fertil** 1988 Sep;84(1):139–48

Importance of non-olfactory ram stimuli in mediating ram-induced ovulation in the ewe. Pearce GP, et al. **J Reprod Fertil** 1988 Sep;84(1):333–9

Ovarian response to hCG treatment during the oestrous cycle in heifers. Price CA, et al. **J Reprod Fertil** 1989 May; 86(1):303–8

Effect of hysterectomy on the short life-cycle corpus luteum produced after GnRH-induced ovulation in the anoestrous ewe. Southee JA, et al. **J Reprod Fertil** 1988 Sep; 84(1):149–55

Function of abnormal corpora lutea in vivo after GnRH-induced ovulation in the anoestrous ewe. Southee JA, et al. **J Reprod Fertil** 1988 Sep;84(1):131–7

Practice management for ovulation induction. Bonaventura LM. **J Reprod Med** 1989 Jan;34(1 Suppl):86–9

Monitoring gonadotropin therapy. Caldwell BV. **J Reprod Med** 1989 Jan;34(1 Suppl):95–9

Ovulation induction. State of the art. Goldfarb AF. **J Reprod Med** 1989 Jan;34(1 Suppl):65–7

The polycystic ovary syndrome. Marut EL.

J Reprod Med 1989 Jan;34(1 Suppl):104–7
IVF: induction of ovulation in poor responders. Crosignani PG, et al. J Steroid Biochem 1989 Jan;32(1B):171–3
Abdominal ultrasonography versus transvaginal scanning: accuracy in follicular development evaluation and prediction for oocyte retrieval in stimulated cycles. Bonilla-Musoles F, et al. JCU 1989 Sep;17(7):469–73
Ovulation induction and neural tube defects [letter] Cornel MC, et al. Lancet 1989 Jun 17;1(8651):1386
Ovulation induction and neural tube defects [letter] Czeizel A. Lancet 1989 Jul 15;2(8655):167
Induction of ovulation with gonadotrophin-releasing hormone--life-table analysis of 50 courses of treatment. Kovacs GT, et al. Med J Aust 1989 Jul 3;151(1):21, 24–6
Gonadotropin and estradiol levels during ovarian stimulation in women treated with leuprolide acetate. Stone BA, et al. Obstet Gynecol 1989 Jun;73(6):990–5
Luteal phase hyperprolactinemia during ovulation induction with human menopausal gonadotropins: incidence, recurrence, and effect on pregnancy rates. Tippet PD, et al. Obstet Gynecol 1989 Apr;73(4):613–6
Ovulatory response to the sequential administration of follicle stimulating hormone and human chorionic gonadotropin by autografted ovary in unilaterally ovariectomized adult rat with peripheral denervation induced by guanethidine treatment. Ayala ME, et al. Rev Invest Clin 1988 Apr-Jun; 40(2):149–55
[In vitro fertilization and embryo transfer after induction of ovulation by menotropin] Xu LL.
Chung Hua I Hsueh Tsa Chih 1988 Sep;68(9):500–2, 36 (Eng. Abstr.) (Chi)
[Rapid determination of plasma progesterone. Its value in ovarian stimulation for in vitro fertilization] Emperaire JC, et al. J Gynecol Obstet Biol Reprod (Paris) 1989;18(1):103–8 (Eng. Abstr.) (Fre)
[Pre-decision algorithms for the induction of ovulation in fertilization in vitro] Moreau L, et al.
Rev Fr Gynecol Obstet 1989 Apr;84(4):313–5 (Eng. Abstr.) (Fre)
[Increased incidence of ovarian hyperstimulation syndrome following combined GnRH agonist/hMG therapy] Lindner C, et al. Geburtshilfe Frauenheilkd 1989 Apr;49(4):337–44 (Eng. Abstr.) (Ger)
[Morphological aspects of ovum maturation in an in vitro fertilization and gamete transfer program of the IMSS (Mexican Institute of Social Security)] González Diddi M, et al. Arch Invest Med (Mex) 1988 Jul-Sep;19(3):213–23 (Eng. Abstr.) (Spa)

ADVERSE EFFECTS

Induction of ovulation causing recurrent bloody ascites in a woman with endometriosis. Feigin RD, et al.
Am J Obstet Gynecol 1988 Nov;159(5):1161–2
Severe ovarian hyperstimulation syndrome: a reevaluated therapeutic approach. Borenstein R, et al. Fertil Steril 1989 May;51(5):791–5

METHODS

Effect of toki-shakuyaku-san on ovulation induced by human menopausal gonadotropin in rats. Koyama T, et al.
Am J Chin Med 1988;16(3–4):169–72
Administration of pure follicle-stimulating hormone during gonadotropin-releasing hormone agonist therapy in patients with clomiphene-resistant polycystic ovarian disease: hormonal evaluations and clinical perspectives. Remorgida V, et al. Am J Obstet Gynecol 1989 Jan; 160(1):108–13
Improved oocyte quality through improved ovulation induction regimen. Pellicer A, et al. Ann N Y Acad Sci 1988;541:46–59
Maturity and in vitro fertilization of superovulated human oocytes in relation to various hormone levels in follicular fluids. Chang YS, et al.
Asia Oceania J Obstet Gynaecol 1988 Jun;14(2):259–65
FSH, LH, PRL and E2 levels in follicular fluid and serum of patients undergoing follicle stimulation with different protocols for IVF. Shin MT, et al.
Asia Oceania J Obstet Gynaecol 1988 Jun;14(2):227–32
Further evaluation of first morning urinary oestrogen in monitoring gonadotrophin therapy. Tang GW, et al.
Aust N Z J Obstet Gynaecol 1988 May;28(2):141–3
LHRH analogues for ovulation induction, with particular reference to polycystic ovary syndrome. Fleming R, et al.
Baillieres Clin Obstet Gynaecol 1988 Sep;2(3):677–87
Growth hormone facilitates ovulation induction by gonadotrophins. Homburg R, et al.
Clin Endocrinol (Oxf) 1988 Jul;29(1):113–7
Treatment of polycystic ovarian disease by inducing ovulation with pulsatile subcutaneous administration of human menopausal gonadotrophin associated with luteinizing hormone-releasing hormone analogue. Nakamura Y, et al. Clin Endocrinol (Oxf) 1988 Oct; 29(4):395–402
Practical guidelines for the treatment of infertility in hirsute women. Dolian GG, et al.
Eur J Obstet Gynecol Reprod Biol 1988 Oct;29(2):143–52
Ovulation induction with pulsatile luteinizing hormone-releasing hormone in women with clomiphene citrate-resistant polycystic ovary-like disease: endocrine results. Burger CW, et al. Fertil Steril 1989 Jan;51(1):20–9
Luteal hCG in ovulation induction [letter] Corsan GH, et al. Fertil Steril 1989 Mar;51(3):549–50
Routine pituitary suppression with leuprolide before ovarian stimulation for oocyte retrieval. Meldrum DR, et al.
Fertil Steril 1989 Mar;51(3):455–9
Oral clomiphene citrate and vaginal progesterone suppositories in the treatment of luteal phase dysfunction: a comparative study. Murray DL, et al. Fertil Steril 1989 Jan;51(1):35–41
Clinical experience in the induction of ovulation and pregnancy with pulsatile subcutaneous administration of human menopausal gonadotropin: a low incidence of multiple pregnancy. Nakamura Y, et al. Fertil Steril 1989 Mar;51(3):423–9
Induction of ovulation with clomiphene citrate in women with polycystic ovary syndrome: the difference between responders and nonresponders. Polson DW, et al.
Fertil Steril 1989 Jan;51(1):30–4
Efficacy of human menopausal gonadotropins as therapy for abnormal cervical mucus. Soto-Albors C, et al.
Fertil Steril 1989 Jan;51(1):58–62
The effect of gonadotropin suppression on the induction of ovulation in premature ovarian failure patients. Surrey ES, et al. Fertil Steril 1989 Jul;52(1):36–41
Induction of ovulation with subcutaneous pulsatile gonadotropin-releasing hormone: correlation with body weight and other parameters. Thomas AK, et al.
Fertil Steril 1989 May;51(5):786–90
Induction of ovulation with D-Trp6-LHRH combined with purified FSH in patients with polycystic ovarian disease. Ayalon D, et al. Gynecol Endocrinol 1988 Dec;2(4):319–30
Induction of ovulation--past, present and future. Jewelewicz R, et al. Gynecol Obstet Invest 1988;26(2):89–103 (46 ref.)
Suppression with gonadotropin-releasing hormone analogues prior to stimulation with gonadotropins: comparison of three protocols. Lipitz S, et al. Gynecol Obstet Invest 1989; 28(1):31–4
Failure of hysteroscopic insemination of the fallopian tube in synchronized cycles. Brooks JH, et al. Int J Fertil 1988 Sep-Oct;33(5):353–61
Simplified LH-rise method to time oocyte recovery for in vitro fertilization. Mahadevan MM, et al. Int J Fertil 1989 Jul-Aug;34(4):276–80
Comparison of different regimens of human gonadotropins for superovulation of rhesus monkeys: ovulatory response and subsequent luteal function. Vandevoort CA, et al.
J In Vitro Fert Embryo Transf 1989 Apr;6(2):85–91
FSH-induced ovulation in intact and hypophysectomized mice. Montgomery V, et al. J Reprod Fertil 1988 Sep; 84(1):1–6
Ovulation induction. State of the art. Proceedings of a symposium. J Reprod Med 1989 Jan;34(1 Suppl):65–116
Role of gonadotropin releasing hormone agonists in ovulation induction. Dodson WC. J Reprod Med 1989 Jan;34(1 Suppl):76–80 (25 ref.)
Effects of previous ovarian surgery on the follicular response to ovulation induction in an in vitro fertilization program. Hornstein MD, et al. J Reprod Med 1989 Apr;34(4):277–81
Ovulation induction for assisted reproduction. Scott RT Jr, et al. J Reprod Med 1989 Jan;34(1 Suppl):108–14
Closed intravenous administration of gonadotropin-releasing hormone: safety of extended peripheral intravenous catheterization. Hopkins CC, et al. Obstet Gynecol 1989 Aug;74(2):267–70
Kallmann syndrome: a case of twin pregnancy and review of the literature. Aharoni A, et al. Obstet Gynecol Surv 1989 Jul;44(7):491–4 (33 ref.)
Induction of ovulation with pulsatile administration of LHRH. Zhang YW, et al.
Proc Chin Acad Med Sci Peking Union Med Coll 1988; 3(2):98–103
[Ultrasonic monitoring of ovulatory induction by clomiphene and Chinese traditional medicine] Luo LL.
Chung Hua Fu Chan Ko Tsa Chih 1988 Mar;23(2):72–4, 126 (Eng. Abstr.) (Chi)
[Induction of ovulation with pulsatile administration of luteinizing hormone releasing hormone] Zhang YW.
Chung Hua Fu Chan Ko Tsa Chih 1988 Nov;23(6):330–3, 386 (Eng. Abstr.) (Chi)
[Follicular development in stimulated cycles] Zhao WX, et al. Chung Hua Fu Chan Ko Tsa Chih 1988 Nov;23(6):326–9, 386 (Eng. Abstr.) (Chi)
[Initial experiences in the use of pulsatile Gn-RH administration for ovulation induction] Nehmzow M, et al. Zentralbl Gynakol 1988;110(12):778–83 (Eng. Abstr.) (Ger)
[Hormone profile and follicle development in ovarian stimulation treatment for in vitro fertilization. II. Prolactin, estradiol and progesterone profile] Sudik R, et al.
Zentralbl Gynakol 1989;111(9):567–80 (Eng. Abstr.) (Ger)
[The hormonal micromilieu and oocyte status in the stimulated in vitro fertilization cycle] Sudik R, et al.
Zentralbl Gynakol 1989;111(9):587–603 (Eng. Abstr.) (Ger)
[The use of pulsatile gonadotropins and gonadotropin releasing hormone analogues for ovulation induction in chronic anovulatory patients] Bacchi Modena A, et al.
Minerva Ginecol 1988 Aug;40(8):457–60 (Eng. Abstr.) (Ita)
[Intended super-ovulation with HMG in the treatment of so-called functional sterility] Aisaka K, et al.
Nippon Sanka Fujinka Gakkai Zasshi 1989 Feb; 41(2):196–202 (Eng. Abstr.) (Jpn)
[Ovulation induction using clomiphene and human gonadotropins in combined therapy] Stilinović K, et al. Jugosl Ginekol Perinatol 1989 Jan-Apr;29(1–2):41–3 (Eng. Abstr.) (Scr)
[Effects of different methods of ovarian stimulation in adult rats] Carreras A, et al. Rev Esp Fisiol 1988 Mar;44(1):17–20 (Eng. Abstr.) (Spa)

VETERINARY

Controlling seasonal anoestrus in mares. Hyland JH.
Br Vet J 1988 Sep-Oct;144(5):417–8
Superovulation response of upgraded indigenous Philippine goat (Capra hircus). Ocampo MB, et al. Jpn J Vet Res 1988 Oct;36(3–4):249–55
The effect of PMSG on ovarian function in ovarian quiescent heifers. Kamomae H, et al. Nippon Juigaku Zasshi 1988 Dec;50(6):1222–31
Blood LH level and induced ovulation after hCG and PMSG treatment in ovarian quiescent cattle. Kamomae H, et al. Nippon Juigaku Zasshi 1989 Jun;51(3):467–73
Fertility of ewes given either melatonin or progestogen sponges. Rajkumar RR, et al. Vet Rec 1989 Mar 4; 124(9):215–7
Dinoprost 14-day oestrus synchronisation schedule for dairy cows. Young IM. Vet Rec 1989 Jun 3;124(22):587–8
[Experimental endocrinological studies in gilts near the time of ovulation using Gn-RH vet. "Berlin Chemistry"] George G, et al. Arch Exp Veterinarmed 1989 Jan; 43(1):23–37 (Eng. Abstr.) (Ger)
[The course of ovulation in gilts after the use of two GnRH injections for ovulation stimulation] Schlegel W, et al.
Arch Exp Veterinarmed 1989 Jan;43(1):101–5 (Eng. Abstr.) (Ger)
[The course of ovulation in gilts after the partial replacement of HCG by GnRH for ovulation stimulation] Schlegel W, et al. Arch Exp Veterinarmed 1989 Jan;43(1):97–100 (Eng. Abstr.) (Ger)

OVUM

see related

GRAAFIAN FOLLICLE

Exocytosis reconstituted from the sea urchin egg is unaffected by calcium pretreatment of granules and plasma membrane. Whalley T, et al. Biosci Rep 1988 Aug; 8(4):335–43
Ontogenic expression of a CyI actin fusion gene injected into sea urchin eggs. Katula KS, et al. Development 1987 Nov; 101(3):437–47
Recovery of two human oocytes surrounded by a single zona pellucida. Fishel S, et al. Fertil Steril 1989 Aug;52(2):325–7
Partial zona dissection of the human oocyte: a nontraumatic method using micromanipulation to assist zona pellucida penetration. Malter HE, et al. Fertil Steril 1989 Jan; 51(1):139–48
A zona opening procedure for improving in vitro fertilization at low sperm concentrations: a mouse model. Odawara Y, et al. Fertil Steril 1989 Apr;51(4):699–704
Ethical and legal issues in human egg donation. Robertson JA. Fertil Steril 1989 Sep;52(3):353–63 (37 ref.)
A trial of superovulation in ovum donors undergoing uterine lavage. Sauer MV, et al. Fertil Steril 1989 Jan;51(1):131–4
Fertilizing potential of acrosome-defective sperm following microsurgical injection into eggs. Lanzendorf S, et al.
Gamete Res 1988 Apr;19(4):329–37
Pediculosis capitis and the stubborn nit. Parish LC, et al.
Int J Dermatol 1989 Sep;28(7):436–7
Epileptiform patterns of children. Drury I.
J Clin Neurophysiol 1989 Jan;6(1):1–39 (90 ref.)
Choice of needle for ovum pickup. Haines CJ, et al.
J In Vitro Fert Embryo Transf 1989 Apr;6(2):111–2
Comparison of zona cutting and zona drilling as techniques for assisted fertilization in the mouse. Depypere HT, et al. J Reprod Fertil 1988 Sep;84(1):205–11
Genetic parameters of egg characteristics in Japanese quail. Sato K, et al. Jikken Dobutsu 1989 Jan;38(1):55–9
Dynamic EEG changes during cigarette smoking. Knott VJ. Neuropsychobiology 1988;19(1):54–60
Variations in egg size of Trichuris trichiura. Yoshikawa H, et al. Parasitol Res 1989;75(8):649–54
[Limitation on the number of germ cells in the fetal ovary of the rat by older ovaries, in vitro] Prepin J, et al.
C R Acad Sci [III] 1989;308(2):61–4 (Eng. Abstr.) (Fre)
[Ovicidal effects of heat and disinfectants on Syphacia muris estimated by in vitro hatching] Miyaji S, et al.
Jikken Dobutsu 1988 Oct;37(4):399–404 (Eng. Abstr.) (Jpn)

ABNORMALITIES

Month-of-birth distribution of diabetics and ovopathy: a new aetiological view. Jongbloet PH, et al. Diabetes Res 1988 Oct;9(2):51–8

ANALYSIS

Molecular changes in the human zona pellucida associated with fertilization and human sperm-zona interactions. Shabanowitz RB, et al. Ann N Y Acad Sci 1988;541:621–32
Zona pellucida glycoproteins. Wassarman PM.
Annu Rev Biochem 1988;57:415–42 (97 ref.)
The effect of chronic lead intoxication in mature chickens.

Mazliah J, et al. **Avian Dis** 1989 Jul–Sep;33(3):566–70

A tumor growth inhibitory factor and a tumor growth promoting factor isolated from unfertilized ova of shad (Alosa sapidissima). Sheid B, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):713–9

Modification of porcine zona pellucida with fluorescein isothiocyanate: evidence for the presence of a structural unit consisting of glycoproteins in the mammalian egg coat. Hatanaka Y, et al. **Biochem Int** 1988 Nov;17(5):935–44

The amino acid sequence, immunofluorescence and microinjection studies on the 15 kDa calcium–binding protein from sea urchin egg. Hosoya H, et al. **Cell Struct Funct** 1988 Dec;13(6):525–32

Isolation and characterization of a novel type of sialoglycoproteins (hyosophorin) from the eggs of medaka, Oryzias latipes: nonapeptide with a large N–linked glycan chain as a tandem repeat unit. Kitajima K, et al. **Dev Biol** 1989 Apr;132(2):544–53

Fractionation of cytostatic factors from cytosols of amphibian eggs. Shibuya EK, et al. **Dev Biol** 1989 Sep;135(1):212–9

Vimentin expression in oocytes, eggs and early embryos of Xenopus laevis. Tang P, et al. **Development** 1988 Jun; 103(2):279–87

Tropomyosin in the sea urchin egg cortex. Maekawa S, et al. **Eur J Biochem** 1989 Jan 2;178(3):657–62

Localization and possible function of 20 kDa actin–modulating protein (actolinkin) in the sea urchin egg. Ishidate S, et al. **Eur J Cell Biol** 1988 Jun;46(2):275–81

Distribution of ion channels in ascidian eggs and zygotes. Dale B, et al. **Exp Cell Res** 1989 Mar;181(1):238–44

A glycoprotein of oviductal origin alters biochemical properties of the zona pellucida of hamster egg. Oikawa T, et al. **Gamete Res** 1988 Feb;19(2):113–22

Ovostatin, an endogenous trypsin inhibitor of sea urchin eggs: purification and characterization of ovostatin from eggs of the sea urchin, Strongylocentrotus intermedius. Yamada Y, et al. **Gamete Res** 1988 Mar;19(3):265–75

Purification of the sperm–binding factor and identification of a sperm attack molecule from the egg of the sea urchin, Hemicentrotus pulcherrimus. Yoshida M, et al. **Gamete Res** 1987 Sep;18(1):1–16

Studies on furan fatty acids of salmon roe phospholipids. Ishii K, et al. **J Biochem (Tokyo)** 1988 May;103(5):836–9

Use of a bacteriophage–derived endo–N–acetylneuraminidase and an equine antipolysialyl antibody to characterize the polysialyl residues in salmonid fish egg polysialoglycoproteins. Substrate and immunospecificity studies. Kitajima K, et al. **J Biol Chem** 1988 Dec 5; 263(34):18269–76

Applicability of capillary gas chromatography to study caffeine distribution in the developing chicken egg. Kapil RP, et al. **J Chromatogr** 1989 Aug 25;493(1):182–7

Bacterial action of fertilization envelope extract from eggs of the fish Cyprinus carpio and Plecoglossus altivelis. Kudo S, et al. **J Exp Zool** 1989 May;250(2):219–28

Nucleotide sequence of the gene encoding zona pellucida glycoprotein ZP3—the mouse sperm receptor. Kinloch RA, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2861–3

ANATOMY & HISTOLOGY

Structure of the zona pellucida and cumulus oophorus in three species of native Australian rodents. McGregor L, et al. **Gamete Res** 1989 Jul;23(3):279–87

CYTOLOGY

Ovum donation. The state of the art. Schenker JG. **Ann N Y Acad Sci** 1988;541:742–54

M–phase–specific protein kinase from mitotic sea urchin eggs: cyclic activation depends on protein synthesis and phosphorylation but does not require DNA or RNA synthesis. Arion D, et al. **Exp Cell Res** 1989 Aug; 183(2):361–75

Quantitation and subcellular localization of proliferating cell nuclear antigen (PCNA/cyclin) in oocytes and eggs of Xenopus laevis. Zuber M, et al. **Exp Cell Res** 1989 Jun; 182(2):384–93

Analysis of the first cell cycle in the cross between hamster eggs and human sperm. Brandriff BF, et al. **Gamete Res** 1989 Jul;23(3):299–308

Fertilizability of unovulated mature eggs following indomethacin administration in mice. Hayashi S, et al. **Gamete Res** 1987 Dec;18(4):291–9

The Florey lecture, 1988. From egg to embryo: the initiation of cell differentiation in Amphibia. Gurdon JB. **Proc R Soc Lond [Biol]** 1989 Jun 22;237(1286):11–25 (35 ref.)

Morpho–functional characteristics of the pre–embryo. Suzuki S, et al. **Prog Clin Biol Res** 1989;296:311–20

DRUG EFFECTS

Significance of D–mannose as a sperm receptor site on the zona pellucida in human fertilization. Mori K, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):207–11

Persistence of hepatic fibrosis and tissue eggs following treatment of Schistosoma japonicum infected mice. Cheever AW, et al. **Am J Trop Med Hyg** 1989 Jun; 40(6):620–8

Sodium hypochlorite as an ovicide for Echinococcus. Craig PS, et al. **Ann Trop Med Parasitol** 1988 Apr;82(2):211–3

Mediating effect of calcium in HgCl2 cytotoxicity in sea urchin egg: role of mitochondria in Ca2+–mediated death. Walter P, et al. **Biochim Biophys Acta** 1989 Aug 15; 1012(3):219–26

Organochlorines and heavy metals in herring gull (Larus argentatus) eggs and chicks from the same clutch. Becker PH, et al. **Bull Environ Contam Toxicol** 1989 May; 42(5):721–7

The isotopic effects of D2O in developing sea urchin eggs. Sumitro SB, et al. **Cell Struct Funct** 1989 Feb;14(1):95–111

Comparative studies of the effect of thiourea and BHC on behaviour and mortality in adult snails of the species Lymnaea stagnalis and on their egg masses. Bhide M. **Folia Morphol (Praha)** 1989;37(1):13–8

Sulfhydryl groups are involved in the activation of sea urchin eggs. Dale B, et al. **Gamete Res** 1988 Feb;19(2):161–8

Effects of aipha–latrotoxin on the early developmental events of the sea urchin Paracentrotus lividus: a histochemical study. Falugi C, et al. **Gegenbaurs Morphol Jahrb** 1989; 135(2):229–39

Clinical evaluation of an after–pediculicide nit removal system. DeFelice J, et al. **Int J Dermatol** 1989 Sep; 28(7):468–70

Effects of sodium azide on sea urchin embryos and gametes. Pagano G, et al. **Teratogenesis Carcinog Mutagen** 1988; 8(6):363–76

[Effect of chemotherapy on the Schistosoma mansoni eggs] dos Reis MG, et al. **Mem Inst Oswaldo Cruz** 1987 Apr–Jun; 82(2):161–5 (Eng. Abstr.) **(Por)**

[Total proteins levels and embryonic development of eggs of sea urchins (Lytechinus variegatus) treated with YbCl3] de Oliveira AM, et al. **Rev Bras Biol** 1989 Feb;49(1):231–5 (Eng. Abstr.) **(Por)**

[In vitro effect of ivermectin on the eggs of Lagochilascaris minor Leiper, 1909] Campos DM, et al. **Rev Inst Med Trop Sao Paulo** 1988 Jul–Aug;30(4):305–9 (Eng. Abstr.) **(Por)**

[The effect of phorbol ester on the polar properties of eggs] Bozhkova VP, et al. **Dokl Akad Nauk SSSR** 1989 Mar–Apr; 305(1):212–4 **(Rus)**

ENZYMOLOGY

Quantitation of the dynein pool in unfertilized sea urchin eggs. Rose PM, et al. **Biochim Biophys Acta** 1989 Jan 27; 990(1):31–9

Contrast in levels of metabolic enzymes in human and mouse ova. Chi MM, et al. **Biol Reprod** 1988 Sep;39(2):295–307

Sea urchin DNA methyltransferases. Tosi L, et al. **Cell Biophys** 1989 Aug–Oct;15(1–2):127–43

Protein kinase C from sea urchin eggs. Shen SS, et al. **Comp Biochem Physiol [B]** 1989;92(2):251–4

Some characteristics of mitochondrial monoamine oxidase activity in eggs of carp (Cyprinus carpio) and rainbow trout (Salmo gairdneri). Nicotra A, et al. **Comp Biochem Physiol [C]** 1989;92(2):401–4

Proteases released from Xenopus laevis eggs at activation and their role in envelope conversion. Lindsay LL, et al. **Dev Biol** 1989 Sep;135(1):202–11

The localization of PI and PIP kinase activities in the sea urchin egg and their modulation following fertilization. Oberdorf J, et al. **Dev Biol** 1989 Jan;131(1):236–42

cDNA cloning, nucleotide sequence and expression of the gene for arylsulfatase in the sea urchin (Hemicentrotus pulcherrimus) embryo. Sasaki H, et al. **Eur J Biochem** 1988 Oct 15;177(1):9–13

A cortical granule–specific enzyme, B–1,3–glucanase, in sea urchin eggs. Wessel GM, et al. **Gamete Res** 1987 Dec; 18(4):339–48

Glucose phosphate isomerase activity in mouse and human eggs and pre–embryos. West JD, et al. **Hum Reprod** 1989 Jan;4(1):82–5

Acrosin inhibitor in extract of the zonae pellucidae of porcine oocytes. Veselský L, et al. **Int J Fertil** 1989 May–Jun; 34(3):231–4

Purification and characterization of multicatalytic proteinase from eggs of the ascidian Halocynthia roretzi. Saitoh Y, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):254–60

Widespread occurrence in animal tissues of an enzyme catalyzing the conversion of NAD+ into a cyclic metabolite with intracellular Ca2+–mobilizing activity. Rusinko N, et al. **J Biol Chem** 1989 Jul 15;264(20):11725–31

Expression of the germ cell alkaline phosphatase gene in human choriocarcinoma cells. Watanabe S, et al. **J Biol Chem** 1989 Jul 25;264(21):12611–9

Respiratory burst oxidase of fertilization. Heinecke JW, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1259–63

GROWTH & DEVELOPMENT

Progressively restricted expression of a homeo box gene within the aboral ectoderm of developing sea urchin embryos. Angerer LM, et al. **Genes Dev** 1989 Mar; 3(3):370–83

Pregnancies from fallopian replacement of immature eggs with delayed intrauterine insemination. Leung CK, et al. **Hum Reprod** 1989 Jan;4(1):80–1

Comments on a model of egg development and diapause: a reply to Susan Scott. Hilbert DW, et al. **J Theor Biol** 1989 Jan 9;136(1):121–3

Comments on a model of egg development and diapause. Scott SM. **J Theor Biol** 1989 Jan 9;136(1):117–20

IMMUNOLOGY

Monoclonal antibodies to porcine zona pellucida that block the initial stages of fertilization. Kyurkchiev SD, et al. **Am J Reprod Immunol Microbiol** 1988 Sep;18(1):11–6

Ovarian histopathology of bitches immunized with porcine zonae pellucidae. Mahi–Brown CA, et al. **Am J Reprod Immunol Microbiol** 1988 Nov;18(3):94–103

Neutralizing antibodies for infectious hematopoietic necrosis virus in eggs of steelhead trout (Salmo gairdneri). Shors ST, et al. **Am J Vet Res** 1989 Feb;50(2):232–4

High affinity antibody from hen's eggs directed against the human insulin receptor and the human IGF–I receptor. Stuart CA, et al. **Anal Biochem** 1988 Aug 15;173(1):142–50

Incorporation and dispersal of sperm surface antigens in plasma membranes of inseminated sea urchin (Arbacia punctulata) eggs and oocytes. Longo FJ. **Dev Biol** 1989 Jan;131(1):37–43

Necessity of adjuvants for inducing effective antibody response to zona pellucida antigens. Bhatnagar P, et al. **Experientia** 1989 Aug 15;45(8):759–62

Analysis of the biological properties of antibodies raised against intact and deglycosylated porcine zonae pellucidae. Henderson CJ, et al. **Gamete Res** 1987 Apr;16(4):323–41

Immunoelectron microscopic localization of an oviductal antigen in hamster zona pellucida by use of a monoclonal antibody. Kan FW, et al. **J Histochem Cytochem** 1988 Nov; 36(11):1441–7

Blocking effect of sperm immobilizing antibodies on sperm penetration of human zonae pellucidae. Tsukui S, et al. **J In Vitro Fert Embryo Transf** 1988 Jun;5(3):123–8

Contraception in mares heteroimmunized with pig zonae pellucidae. Liu IK, et al. **J Reprod Fertil** 1989 Jan; 85(1):19–29

Immunogenicity of a 92kDa component of porcine zona pellucida isolated using a monoclonal antibody (3A4–2G1) exclusively cross–reactive with porcine and human zonae pellucidae. Hasegawa A, et al. **J Reprod Immunol** 1988 Oct;14(1):73–82

Monoclonal antibodies specific for an oviductal component associated with the hamster zona pellucida. St–Jacques S, et al. **J Reprod Immunol** 1988 Mar;12(4):247–61

Inhibition of in vitro fertilization by a monoclonal antibody reacting with the zona pellucida of the oviductal egg but not with that of the ovarian egg of the golden hamster. Sakai Y, et al. **J Reprod Immunol** 1988 Nov;14(2):177–89

An egg surface antigen of Setaria digitata (filariae) shed on development to microfilariae. Dissanayake S, et al. **Trans R Soc Trop Med Hyg** 1988;82(4):616–20

[2 forms of antigamete immunity in infertility of inflammatory origin and the level of regulatory T–lymphocytes] Chernyshov VP, et al. **Akush Ginekol (Mosk)** 1988 Aug; (8):34–7 (Eng. Abstr.) **(Rus)**

METABOLISM

Localization of eosinophil major basic protein onto eggs of Schistosoma mansoni in human pathologic tissue. Kephart GM, et al. **Am J Pathol** 1988 Nov;133(2):389–96

Na+–H+ antiport during fertilization of the sea urchin egg is blocked by W–7 but is insensitive to K252a and H–7. Shen SS. **Biochem Biophys Res Commun** 1989 Jun 30; 161(3):1100–8

Roles for Ca2+, Mg2+ and NaCl in modulating the self–association reaction of hyalin, a major protein component of the sea–urchin extraembryonic hyaline layer. Robinson JJ. **Biochem J** 1988 Nov 15;256(1):225–8

Relationship between two types of mouse sperm surface sites that mediate binding of sperm to the zona pellucida. Benau DA, et al. **Biol Reprod** 1988 Sep;39(2):235–44

Immunocytochemical evidence for the transfer of an oviductal antigen to the zona pellucida of hamster ova after ovulation. Kan FW, et al. **Biol Reprod** 1989 Mar; 40(3):585–98

95 kd sperm proteins bind ZP3 and serve as tyrosine kinase substrates in response to zona binding. Leyton L, et al. **Cell** 1989 Jun 30;57(7):1123–30

Studies of the mechanisms of nuclear control over the synthesis of mitochondrial DNA in sea urchin eggs. Rinaldi AM, et al. **Cell Biol Int Rep** 1989 Feb;13(2):181–7

Transfer of information from mRNA to chromosomes by reverse transcription in early development of goldfish eggs. Niu MC, et al. **Cell Mol Biol** 1989;35(3):333–45

225–Kilodalton phosphoprotein associated with mitotic centrosomes in sea urchin eggs. Kuriyama R. **Cell Motil Cytoskeleton** 1989;12(2):90–103

Arachidonic acid metabolism in Ascidia ceratodes eggs: role of lipid peroxidation. Perry G, et al. **Comp Biochem Physiol [B]** 1988;90(4):785–9

The amino terminal sequence of sea urchin sperm histone H1 and its phosphorylation by egg cytosol. Porter DC, et al. **Comp Biochem Physiol [B]** 1989;92(2):381–4

A glycoprotein from the liver constitutes the inner layer of the egg envelope (zona pellucida interna) of the fish, Oryzias latipes. Hamazaki TS, et al. **Dev Biol** 1989 May; 133(1):101–10

Characterization of a proteinase that cleaves zona pellucida glycoprotein ZP2 following activation of mouse eggs. Moller CC, et al. **Dev Biol** 1989 Mar;132(1):103–12

Acrosome intact and acrosome–reacted human sperm can initiate binding to the zona pellucida. Morales P, et al. **Dev Biol** 1989 Jun;133(2):385–92

Paternal allocation of sequestered plant pyrrolizidine alkaloid to eggs in the danaine butterfly, Danaus gilippus. Dussourd DE, et al. **Experientia** 1989 Sep 15;45(9):896–8

Mechanism of biosynthesis of 11R–and

12R-hydroxyeicosatetraenoic acids by eggs of the sea urchin Strongylocentrotus purpuratus. Hawkins DJ, et al. **FEBS Lett** 1989 Apr 10;247(1):9-12

Generation of O2- and tyrosine cation-mediated chemiluminescence during the fertilization of sea urchin eggs. Takahashi A, et al. **FEBS Lett** 1989 Mar 27; 246(1-2):117-9

Characterization of cell surface polypeptides of unfertilized, fertilized, and protease-treated zona-free mouse eggs. Boldt J, et al. **Gamete Res** 1989 May;23(1):91-101

Equine zona pellucida and capsule: some physicochemical and antigenic properties. Bousquet D, et al. **Gamete Res** 1987 Feb;16(2):121-32

Actin synthesis is not regulated by granulosa cells in mouse growing and preovulatory oocytes. Canipari R, et al. **Gamete Res** 1988 Jun;20(2):115-24

Identification, isolation, and properties of a plasma membrane protein involved in the adhesion of boar sperm to the porcine zona pellucida. Peterson RN, et al. **Gamete Res** 1989 May;23(1):103-18

Polarized distribution of binding sites for concanavalin A and wheat-germ agglutinin in the zona pellucida of goodeid oocytes (teleostei). Schindler JF, et al. **Histochemistry** 1989; 91(5):413-7

The induction of permeability in egg-shells of Ascaris suum prior to hatching. Clarke AJ, et al. **Int J Parasitol** 1988 Nov;18(7):987-90

Effects of the oviduct and wheat germ agglutinin on enzymatic digestion of porcine zona pellucidae. Broermann DM, et al. **J Anim Sci** 1989 May;67(5):1324-9

Boar acrosin digestion of the porcine egg coat, zona pellucida, and rearrangement of the zona proteins. Nakano M, et al. **J Biochem (Tokyo)** 1989 Jan;105(1):138-42

Molecular cloning and characterization of cDNAs coding for apo-polysialoglycoprotein of rainbow trout eggs. Multiple mRNA species transcribed from multiple genes contain diverged numbers of exact 39-base (13-amino acid) repeats. Sorimachi H, et al. **J Biol Chem** 1988 Nov 25; 263(33):17678-84

Evidence that aggregation of mouse sperm receptors by ZP3 triggers the acrosome reaction. Leyton L, et al. **J Cell Biol** 1989 Jun;108(6):2163-8

Effects of in vitro incubation on a zona binding site found on murine spermatozoa. Boettger H, et al. **J Exp Zool** 1989 Jan;249(1):90-8

The hemizona assay (HZA): a predictor of human sperm fertilizing potential in in vitro fertilization (IVF) treatment. Franken DR, et al. **J In Vitro Fert Embryo Transf** 1989 Feb;6(1):44-50

Genetic differences in periovum sensitivity to hyaluronidase and protease between C57BL/6, BALB and CXB recombinant mice. Bander SA, et al. **J Reprod Fertil** 1988 Nov;84(2):709-14

Developmental expression of ZP3, a mouse zona pellucida gene. Dean J, et al. **Prog Clin Biol Res** 1989;294:21-32 (13 ref.)

Egg-induced modifications of the mouse zona pellucida. Schultz RM, et al. **Prog Clin Biol Res** 1988;284:77-92 (30 ref.)

Ovothiol replaces glutathione peroxidase as a hydrogen peroxide scavenger in sea urchin eggs. Turner E, et al. **Science** 1988 Nov 11;242(4880):939-41

MICROBIOLOGY

Trypsin treatment of bovine ova after in vitro exposure to vesicular stomatitis virus. Stringfellow DA, et al. **Am J Vet Res** 1989 Jun;50(6):990-2

The importance of the zona pellucida for disease control in livestock by embryo transfer. Chen SS, et al. **Br Vet J** 1989 Mar-Apr;145(2):129-40 (56 ref.)

Protein A gold identification of ureaplasmas on the bovine zona pellucida. Britton AP, et al. **Can J Vet Res** 1989 Apr; 53(2):172-5

Transovarial transmission of Rickettsia tsutsugamushi in Leptotrombidium pallidum successively reared in the laboratory. Takahashi M, et al. **Jpn J Exp Med** 1988 Oct; 58(5):213-8

Pathogens associated with mammalian embryo (a review). Apelo CL, et al. **Jpn J Vet Res** 1989 Apr;37(2):49-69 (55 ref.)

PATHOLOGY

Karyotype analysis of blighted ova in pregnancies achieved by in vitro fertilization. Roesler M, et al. **Fertil Steril** 1989 Jun;51(6):1065-6

PHYSIOLOGY

The effects of lymphokines and monokines on human sperm fertilizing ability in the zona-free hamster egg penetration test. Hill JA, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1154-9

Physiological role of HMG-CoA reductase in regulating egg production by Schistosoma mansoni. Vandewaa EA, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):R618-25

Anatomical basis of a passive mechanism for ovum retention at the ampulloisthmic junction. Halbert SA, et al. **Anat Rec** 1988 Aug;221(4):841-5

Developmental expression of the sperm receptor of the mouse zona pellucida. Dean J, et al. **Ann N Y Acad Sci** 1989; 564:281-8

Mechanisms of signal transduction in mouse spermatozoa. Kopf GS. **Ann N Y Acad Sci** 1989;564:289-302

The biology of human sperm-zona pellucida interaction. Overstreet JW, et al. **Ann N Y Acad Sci** 1988;541:337-45

Zona-free hamster egg penetration assay: prognostic indicator in an IVF program. Nahhas F, et al. **Arch Androl** 1989;23(1):33-7

Xenopus egg extracts: a model system for chromatin replication. Almouzni G, et al. **Biochim Biophys Acta** 1988 Dec 20;951(2-3):443-50

Egg jelly triggers a calcium influx which inactivates and is inhibited by calmodulin antagonists in the sea urchin sperm. Guerrero A, et al. **Biochim Biophys Acta** 1989 Mar 27; 980(1):109-16

Zona pellucida-induced acrosome reaction in boar sperm. Berger T, et al. **Biol Reprod** 1989 Mar;40(3):525-30

The development of porcine zona pellucida using monoclonal antibodies: II. Electron microscopy. Takagi J, et al. **Biol Reprod** 1989 May;40(5):1103-8

The development of porcine zona pellucida using monoclonal antibodies: I. Immunochemistry and light microscopy. Takagi J, et al. **Biol Reprod** 1989 May;40(5):1095-102

Zona drilling increases the penetrability of rat oocytes matured in vitro. Vanderhyden BC, et al. **Biol Reprod** 1989 May;40(5):953-60

Mechanics of sperm-egg interaction at the zona pellucida. Baltz JM, et al. **Biophys J** 1988 Oct;54(4):643-54

Characteristics of unturned eggs: critical period, retarded embryonic growth and poor albumen utilisation. Deeming DC. **Br Poult Sci** 1989 Jun;30(2):239-49

Sperm cells as vectors for introducing foreign DNA into eggs: genetic transformation of mice. Lavitrano M, et al. **Cell** 1989 Jun 2;57(5):717-23

Induction of the cortical reaction in isolated sea urchin egg cortices: effects of Ca2+ and ionophore A23187. Semancik GJ, et al. **Cell Biol Int Rep** 1988 Oct;12(10):857-66

G-proteins and egg activation. Jaffe LA, et al. **Cell Differ Dev** 1988 Nov;25 Suppl:15-8 (20 ref.)

Microtubules are required for centrosome expansion and positioning while microfilaments are required for centrosome separation in sea urchin eggs during fertilization and mitosis. Schatten H, et al. **Cell Motil Cytoskeleton** 1988;11(4):248-59

The cortical reaction in the egg of Discoglossus pictus: a study of the changes in the endoplasmic reticulum at activation. Campanella C, et al. **Dev Biol** 1988 Nov; 130(1):108-19

Genomic organization of a sex specific gene: the primary sperm receptor of the mouse zona pellucida. Chamberlin ME, et al. **Dev Biol** 1989 Jan;131(1):207-14

Replication of Xenopus erythrocyte nuclei in a homologous egg extract requires prior proteolytic treatment. Coppock DL, et al. **Dev Biol** 1989 Jan;131(1):102-10

Hamster sperm penetration of the zona pellucida: kinematic analysis and mechanical implications. Drobnis EZ, et al. **Dev Biol** 1988 Nov;130(1):311-23

An adhesion-associated agonist from the zona pellucida activates G protein-promoted elevations of internal Ca2+ and pH that mediate mammalian sperm acrosomal exocytosis. Florman HM, et al. **Dev Biol** 1989 Sep; 135(1):133-46

A long-lasting electrically mediated block, due to the egg membrane hyperpolarization at fertilization, ensures physiological monospermy in eggs of the crab Maia squinado. Goudeau H, et al. **Dev Biol** 1989 Jun; 133(2):348-60

An electrically mediated block to polyspermy in the primitive urodele Hynobius nebulosus and phylogenetic comparison with other amphibians. Iwao Y. **Dev Biol** 1989 Aug; 134(2):438-45

Egg-induced modifications of the zona pellucida of mouse eggs: effects of microinjected inositol 1,4,5-trisphosphate. Kurasawa S, et al. **Dev Biol** 1989 May;133(1):295-304

Egg envelope conversion following fertilization in Bufo japonicus. Lindsay LL, et al. **Dev Biol** 1988 Nov; 130(1):37-44

Characterization of a proteinase that cleaves zona pellucida glycoprotein ZP2 following activation of mouse eggs. Moller CC, et al. **Dev Biol** 1989 Mar;132(1):103-12

A developmental switch in sea urchin U1 RNA. Nash MA, et al. **Dev Biol** 1989 Aug;134(2):289-96

A highly localized activation current yet widespread intracellular calcium increase in the egg of the frog, Discoglossus pictus. Nuccitelli R, et al. **Dev Biol** 1988 Nov; 130(1):120-32

Localization and developmental fate of ovoperoxidase and proteoliaisin, two proteins involved in fertilization envelope assembly. Somers CE, et al. **Dev Biol** 1989 Jan; 131(1):226-35

Analysis of follicle-cell functions in Drosophila: the Fs(3)Apc mutation and the development of chorionic appendages. Szabad J, et al. **Dev Biol** 1989 Jan;131(1):1-10

Fertilization in Discoglossus pictus (Anura). I. Sperm-egg interactions in distinct regions of the dimple and occurrence of a late stage of sperm penetration. Talevi R, et al. **Dev Biol** 1988 Dec;130(2):524-35

Egg jelly induces the phosphorylation of histone H3 in spermatozoa of the sea urchin Arbacia punctulata. Vacquier VD, et al. **Dev Biol** 1989 May;133(1):111-8

K+ activity and regulation of intracellular pH in the sea urchin egg during fertilization. Shen SS, et al. **Exp Cell Res** 1989 Aug;183(2):343-52

A sperm-zona pellucida binding test and in vitro fertilization. Liu DY, et al. **Fertil Steril** 1988 Nov;50(5):782-8

A human sperm-zona pellucida binding test using oocytes that failed to fertilize in vitro. Liu DY, et al. **Fertil Steril** 1988 Nov;50(5):782-8

Hemizona assay: assessment of sperm dysfunction and prediction of in vitro fertilization outcome. Oehninger S, et al. **Fertil Steril** 1989 Apr;51(4):665-70

Effects of agents used for zona pellucida removal on hamster oocyte penetration by human spermatozoa. Hoshi K, et al. **Fukushima J Med Sci** 1988 Jun;34(1):1-9

Failure of spermatozoa from T/t mice to fertilize in vitro is overcome by zona drilling. Ahmad T, et al. **Gamete Res** 1989 Apr;22(4):369-73

Synthetic organic pH buffers can support fertilization of guinea pig eggs, but not as efficiently as bicarbonate buffer. Bhattacharyya A, et al. **Gamete Res** 1988 Feb;19(2):123-9

Impaired ability of human spermatozoa to penetrate zona-free hamster oocytes: is a postacrosomal sheath anomaly involved? Courtot AM, et al. **Gamete Res** 1987 Jun;17(2):145-56

Sperm entry into zona-free oocytes in the hamster oviduct: implications for the mechanisms of acrosome reaction induction. Cuasnicu PS, et al. **Gamete Res** 1988 Sep; 21(1):85-91

Use of salt-stored zonae pellucidae for assessing rabbit sperm capacitation for in vitro fertilization. Fayrer-Hosken RA, et al. **Gamete Res** 1987 Jul;17(3):191-201

Hemizona assay using salt-stored human oocytes: evaluation of zona pellucida capacity for binding human spermatozoa. Franken DR, et al. **Gamete Res** 1989 Jan;22(1):15-26

Polyclonal antibodies to a 32-kDa deglycosylated polypeptide from porcine zonae pellucidae will prevent human gamete interaction in vitro. Henderson CJ, et al. **Gamete Res** 1987 Nov;18(3):251-65

Fate of sperm tail components after incorporation into the hamster egg. Hiraoka J, et al. **Gamete Res** 1988 Apr; 19(4):369-80

Binding of morphologically abnormal sperm to mouse egg zonae pellucidae in vitro. Kot MC, et al. **Gamete Res** 1987 Sep;18(1):57-66

Induction of cross-fertilization between sea urchin eggs and starfish sperm by polyethylene glycol treatment. Kyozuka K, et al. **Gamete Res** 1989 Feb;22(2):123-9

Fertilization and development of mouse eggs injected under the zona pellucida with single spermatozoa treated to induce the acrosome reaction. Lacham O, et al. **Gamete Res** 1989 Jun;23(2):233-43

Monospermy and polyspermy after partial zona dissection of reinseminated human oocytes. Malter H, et al. **Gamete Res** 1989 Aug;23(4):377-86

Human sperm nuclei can transform into condensed chromosomes in Xenopus egg extracts. Ohsumi K, et al. **Gamete Res** 1988 May;20(1):1-9

Features of a seminal proteinase inhibitor- zona pellucida-binding component on murine spermatozoa. Robinson R, et al. **Gamete Res** 1987 Mar;16(3):217-28

Status of the rat acrosome during sperm-zona pellucida interactions. Shalgi R, et al. **Gamete Res** 1989 Jan; 22(1):1-13

Interactions of aged gametes: in vitro fertilization using in vitro-aged sperm and in vivo-aged ova in the mouse. Smith AL, et al. **Gamete Res** 1987 Jan;16(1):47-56

Cleavage characteristics of mouse embryos inseminated and cultured after zona pellucida drilling. Talansky BE, et al. **Gamete Res** 1988 Nov;21(3):277-87

Zona pellucida penetration assay for capacitation of bovine sperm. Wheeler MB, et al. **Gamete Res** 1987 Nov; 18(3):237-50

Zonae pellucidae of salt-stored hamster and human eggs: their penetrability by homologous and heterologous spermatozoa. Yoshimatsu N, et al. **Gamete Res** 1988 Oct; 21(2):115-26

Human sperm-zona pellucida binding, sperm characteristics and in-vitro fertilization. Liu DY, et al. **Hum Reprod** 1989 Aug;4(6):696-701

Factors associated with accidental fractures of the zona pellucida and multipronuclear human oocytes following in-vitro fertilization. Lowe B, et al. **Hum Reprod** 1988 Oct; 3(7):901-4

Effect of damage to the zona pellucida on development of preimplantation embryos in the mouse. Nichols J, et al. **Hum Reprod** 1989 Feb;4(2):180-7

The presence of zonae pellucidae influences fusion rates between spermatozoa and zona free hamster oocytes. van Kooij RJ, et al. **Hum Reprod** 1988 Aug;3(6):773-5

Reorganization of the egg surface at fertilization. Longo FJ. **Int Rev Cytol** 1988;113:233-69 (268 ref.)

Mortality of chicks and decreased fertility and hatchability of eggs from a captive breeding pair of ostriches. Ley DH, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1124-6

Structural studies of fertilization-associated carbohydrate-rich glycoproteins (hyosophorin) isolated from the fertilized and unfertilized eggs of flounder, Paralichthys olivaceus. Presence of a novel penta-antennary N-linked glycan chain in the tandem repeating glycopeptide unit of hyosophorin. Seko A, et al. **J Biol Chem** 1989 Sep 25;264(27):15922-9

Activators of protein kinase C trigger cortical granule exocytosis, cortical contraction, and cleavage furrow formation in Xenopus laevis oocytes and eggs. Bement WM, et al. **J Cell Biol** 1989 Mar;108(3):885-92

Egg laying in Aplysia. II. Organization of central and

peripheral pathways for initiating neurosecretory activity and behavioral patterns. Ferguson GP, et al. **J Comp Physiol [A]** 1989 Feb;164(6):849–57

Cross-fertilization between Syrian and Chinese hamsters. Roldan ER, et al. **J Exp Zool** 1989 Jun;250(3):321–8

Zona-induced acrosome reaction of hamster spermatozoa. Uto N, et al. **J Exp Zool** 1988 Oct;248(1):113–20

Sites of zona pellucida shedding by mouse embryo other than muran trophectoderm. Yamazaki K, et al. **J Exp Zool** 1989 Mar;249(3):347–9

Spontaneous zona reaction in the mouse as a limiting factor for the time in which an oocyte may be fertilized. Dodson MG, et al. **J In Vitro Fert Embryo Transf** 1989 Apr; 6(2):101–6

Is the sperm-binding capability of the zona pellucida linked to its surface structure? A scanning electron microscopic study of human in vitro fertilization. Familiari G, et al. **J In Vitro Fert Embryo Transf** 1988 Jun;5(3):134–43

Effects of the zona pellucida, agar embedding, and culture on the survival of micromanipulated bovine embryos after freezing and thawing. Picard L, et al. **J In Vitro Fert Embryo Transf** 1988 Oct;5(5):268–74

Significance of the recovery of fractured-zona oocytes in an in vitro fertilization program. Romeu A, et al. **J In Vitro Fert Embryo Transf** 1988 Aug;5(4):216–24

Human follicular fluid: prolactin is biologically active and ovum fertilization correlates with estradiol concentration. Subramanian MG, et al. **J In Vitro Fert Embryo Transf** 1988 Jun;5(3):129–33

Some properties of the membrane currents underlying the fertilization potential in sea urchin eggs. David C, et al. **J Physiol (Lond)** 1988 Aug;402:139–54

On the mechanism of a pH-induced rise in membrane potassium conductance in hamster eggs. Georgiou P, et al. **J Physiol (Lond)** 1988 Aug;402:121–38

John Hull Grundy lecture. Eggs—the neglected insects. Beament J. **J R Army Med Corps** 1989 Jun;135(2):49–56 (23 ref.)

Sperm binding to the pig zona pellucida and inhibition of binding by solubilized components of the zona pellucida. Berger T, et al. **J Reprod Fertil** 1989 Jul;86(2):559–65

Incubation of eggs from tropical killifishes on agar plates. Das J. **Lab Anim Sci** 1989 May;39(3):264–5

High-molecular-weight eosinophil chemotactic factor from Schistosoma japonicum eggs. Owhashi M, et al. **Methods Enzymol** 1988;162:174–80

A delayed all-or-none hyperpolarisation induced by a single Ca action potential in hamster eggs. McNiven AI, et al. **Pflugers Arch** 1988 Sep;412(4):451–3

Migration of human germ cells and their relationship with the developing ovary: ultrastructural aspects. Makabe S, et al. **Prog Clin Biol Res** 1989;296:41–54

Role of germ cells and splenocytes in the steroidogenesis of ovarian endocrine cells. Takahashi M, et al. **Prog Clin Biol Res** 1989;294:101–15

Inhibitory effect of homologous solubilized zona pellucida on rabbit in vitro fertilization. Dumont M, et al. **Reprod Nutr Dev** 1988;28(6A):1531–40

Ageing of the unfertilized cow egg in vivo: how soon is fertility compromised? Hunter RH. **Vet Rec** 1989 May 6; 124(18):489–90

Effect in vitro of bovine viral diarrhea virus on bovine embryos with the zona pellucida intact, damaged and removed. Bielanski A, et al. **Vet Res Commun** 1988; 12(1):19–24

[The hamster test. Practical consequences.] Koulischer L, et al. **Acta Urol Belg** 1989;57(1):77–81 (Eng. Abstr.) **(Fre)**

RADIATION EFFECTS

Changes in X-ray sensitivity of mouse eggs from fertilization to the early pronuclear stage, and their repair capacity. Matsuda Y, et al. **Int J Radiat Biol** 1989 Feb;55(2):233–56

TRANSPLANTATION

Pregnancy resulting from peritoneal ovum sperm transfer procedure. Gentry W, et al. **Fertil Steril** 1989 Jan; 51(1):179–81

Retained pregnancy complicating donor ovum transfer. Sauer MV. **Int J Gynaecol Obstet** 1989 May;29(1):83–5

Availability of donated oocytes from an ambulatory sterilization program. Feinman M, et al. **J Reprod Med** 1989 Jul;34(7):441–3

[Preservation by deep freezing of oocytes and embryos] Bürkle K, et al. **DTW** 1989 Feb;96(2):57–9 (Eng. Abstr.) **(Ger)**

ULTRASTRUCTURE

A comparative ultrastructural study of in vivo versus in vitro fertilization of bovine oocytes. Hyttel P, et al. **Anat Embryol (Berl)** 1989;179(5):435–42

From egg to epithelium. Fleming TP, et al. **Annu Rev Cell Biol** 1988;4:459–85 (138 ref.)

The three-dimensional structure of the zona pellucida in growing and atretic ovarian follicles of the mouse. Scanning and transmission electron-microscopic observations using ruthenium red and detergents. Familiari G, et al. **Cell Tissue Res** 1989 Aug;257(2):247–53

Polarization of ooplasmic segregation and dorsal-ventral axis determination in ascidian embryos. Bates WR, et al. **Dev Biol** 1988 Nov;130(1):98–107

The cortical actin-membrane cytoskeleton of unfertilized sea urchin eggs: analysis of the spatial organization and relationship of filamentous actin, nonfilamentous actin, and egg spectrin. Bonder EM, et al. **Dev Biol** 1989 Aug; 134(2):327–41

Spindle-pole organization during early mouse development. Hiraoka L, et al. **Dev Biol** 1989 May;133(1):24–36

In vitro formation of the "S" layer, a unique component of the fertilization envelope in Xenopus laevis eggs. Larabell CA, et al. **Dev Biol** 1988 Nov;130(1):356–64

Polarity of sperm entry in the ascidian egg. Speksnijder JE, et al. **Dev Biol** 1989 May;133(1):180–4

Purification and characterization of a cortical secretory vesicle membrane fraction. Vater CA, et al. **Dev Biol** 1989 Sep;135(1):111–23

Analysis of supra-nucleosome particles from unfertilized eggs of sea urchins. Imschenetzky M, et al. **Exp Cell Res** 1989 Jun;182(2):436–44

Rhesus monkey sperm penetration into zona-free hamster ova: comparison of preparation and culture conditions. Binor Z, et al. **Gamete Res** 1988 Jan;19(1):91–9

Isolation of 125I-concanavalin A-labeled plasma membrane from unfertilized mouse eggs. Boldt J, et al. **Gamete Res** 1987 Apr;16(4):303–10

Ultrastructural study of the mature egg of Tethya citrina Sarà and Melone (Porifera, Demospongiae). Gaino E, et al. **Gamete Res** 1987 Mar;16(3):259–65

Effects of induction current and other factors on large-scale electrofusion for pronuclear transplantation of mouse eggs. Kono T, et al. **Gamete Res** 1988 Apr;19(4):349–57

A female sterile screen of the Drosophila melanogaster X chromosome using hybrid dysgenesis: identification and characterization of egg morphology mutants. Orr WC, et al. **Genetics** 1989 Aug;122(4):847–58

Partial zona dissection of human oocytes when failure of zona pellucida penetration is anticipated. Cohen J, et al. **Hum Reprod** 1989 May;4(4):435–42

Quantitative analysis of sea urchin egg kinesin-driven microtubule motility. Cohn SA, et al. **J Biol Chem** 1989 Mar 15;264(8):4290–7

High molecular weight polymers block cortical granule exocytosis in sea urchin eggs at the level of granule matrix disassembly. Chandler DE, et al. **J Cell Biol** 1989 Sep; 109(3):1269–78

Fertilization of zona-drilled mouse oocytes treated with a monoclonal antibody to the zona glycoprotein, ZP3. Conover JC, et al. **J Exp Zool** 1988 Jul;247(1):113–8

Selective identification of the paternal mitochondrion in living sea urchin eggs and embryos by chlorotetracycline. Hinkley RE Jr, et al. **J Exp Zool** 1989 Jan;249(1):111–4

Effects of aging on the zona pellucida surface of mouse oocytes. Nogués C, et al. **J In Vitro Fert Embryo Transf** 1988 Aug;5(4):225–9

Egg of Aedes (Gymnometopa) mediovittatus (Diptera: Culicidae). Linley JR, et al. **J Med Entomol** 1989 Jul; 26(4):252–5

Heterochrony and the introduction of novel modes of morphogenesis during the evolution of moth choriogenesis. Regier JC, et al. **J Mol Evol** 1988 Dec-1989 Feb; 28(1–2):19–31

Human in vitro fertilization: the fine three-dimensional architecture of the zona pellucida. Familiari G, et al. **Prog Clin Biol Res** 1989;296:335–44

Ultrastructure of human germ cells in sex-indifferent gonad, in early fetal testis or ovary and in testicular cancers. Francavilla S, et al. **Prog Clin Biol Res** 1989;296:31–40

Ultrastructure of the in vitro ovulated ova. Kitai H, et al. **Prog Clin Biol Res** 1989;296:281–6

Ultrastructural observation on early human eggs. Analysis of four concepti. Pereda J. **Prog Clin Biol Res** 1989; 296:367–79

[Ultrastructure of the germ cells in the prefollicular stages of oogenesis in mammals] Kurilo LF, et al. **Arkh Anat Gistol Embriol** 1988 Aug;95(8):90–3 (41 ref.) **(Rus)**

[Morphological aspects of ovum maturation in an in vitro fertilization and gamete transfer program of the IMSS (Mexican Institute of Social Security)] González Diddi M, et al. **Arch Invest Med (Mex)** 1988 Jul-Sep;19(3):213–23 (Eng. Abstr.) **(Spa)**

OVUM IMPLANTATION

Pregnancies in septate uteri: outcome in relation to site of uterine implantation as determined by sonography. Fedele L, et al. **AJR** 1989 Apr;152(4):781–4

Trophoblast differentiation during the transition from trophoblastic plate to lacunar stage of implantation in the rhesus monkey and human. Enders AC. **Am J Anat** 1989 Sep;186(1):85–98

The nature of embryo reduction in mares with twin conceptuses: deprivation hypothesis. Ginther OJ. **Am J Vet Res** 1989 Jan;50(1):45–53

Human uterine endocrinology and the implantation window. Edwards RG. **Ann N Y Acad Sci** 1988;541:445–54

Uterine receptivity for blastocyst implantation. Yoshinaga K. **Ann N Y Acad Sci** 1988;541:424–31 (49 ref.)

Localization and significance of fibronectin in peri-implantation mouse embryos. Takeuchi K, et al. **Asia Oceania J Obstet Gynaecol** 1989 Jun;15(2):191–7

A possible role of superoxide anion radical in the process of blastocyst implantation in Mus musculus. Laloraya M, et al. **Biochem Biophys Res Commun** 1989 Jun 15; 161(2):762–70

Role of prolactin and luteinizing hormone in regulating timing of implantation in the spotted skunk. Berria M, et al. **Biol Reprod** 1989 Feb;40(2):232–8

Morphological evidence for increased uterine vascular permeability at the time of embryonic attachment in the pig. Keys JL, et al. **Biol Reprod** 1988 Sep;39(2):473–87

Changes in the 17 beta-hydroxysteroid dehydrogenase activity of mouse blastocysts during delayed implantation. Wu JT. **Biol Reprod** 1988 Dec;39(5):1021–6

Vascular response in a non-uterine site to implantation-stage embryos in the rat and guinea-pig: in vivo and ultrastructural studies. Rogers PA, et al. **Cell Tissue Res** 1988 Oct;254(1):217–24

Inhibition of pregnancy before and after implantation in rats with monoclonal antibody against progesterone. Phillips A, et al. **Contraception** 1988 Jul;38(1):109–16

Oestrogen and progestogen receptors in endometrium and myometrium at the time of blastocyst implantation in pregnant diabetic rats. De Hertogh R, et al. **Diabetologia** 1989 Aug;32(8):568–72

Increased binding of epidermal growth factor at preimplantation sites in mouse uteri. Brown MJ, et al. **Endocrinology** 1989 Jun;124(6):2882–8

Evidence for prostaglandins and leukotrienes as mediators of phase I of estrogen action in implantation in the mouse. Gupta A, et al. **Endocrinology** 1989 Jan;124(1):546–8

The male-induced implantation failure (the Bruce effect) in laboratory mice: investigations on luteal failure in pregnancy-blocked females. Rajendren G, et al. **Exp Clin Endocrinol** 1988 Sep;92(1):13–9

Endometrial thickness and growth during ovarian stimulation: a possible predictor of implantation in in vitro fertilization. Gonen Y, et al. **Fertil Steril** 1989 Sep; 52(3):446–50

Decreased uterine perfusion—a cause of infertility. Goswamy RK, et al. **Hum Reprod** 1988 Nov;3(8):955–9

Early pregnancy wastage following late implantation of embryos after in-vitro fertilization and embryo transfer. Hamori M, et al. **Hum Reprod** 1989 Aug;4(6):714–7

A comparative study of attachment of human, bovine and mouse blastocysts to uterine epithelial monolayer. Lindenberg S, et al. **Hum Reprod** 1989 May;4(4):446–56

Evaluation of variations in pregnancy rates, implantation rates and early abortion rates within an in-vitro fertilization programme. Sundström P, et al. **Hum Reprod** 1989 May; 4(4):443–5

Reversal of the anti-implantation effect of inhibin with progesterone in the hamster. Bapat BV, et al. **Int J Fertil** 1986 Mar-Apr;31(1):71–6

Immunogold localization of placental lactogen and the SBU-3 antigen by cryoultramicrotomy at implantation in the sheep. Morgan G, et al. **J Cell Sci** 1987 Nov;88 (Pt 4):503–12

DNA synthesis in the mouse blastocyst during the beginning of delayed implantation. Given RL. **J Exp Zool** 1988 Dec; 248(3):365–70

Delayed development in Fischer's pygmy fruit bat, Haplonycteris fischeri, in the Philippines. Heideman PD. **J Reprod Fertil** 1989 Mar;85(2):363–82

Effect of food restriction on reproduction and lactation in house mice mated post partum. Krackow S. **J Reprod Fertil** 1989 May;86(1):341–7

Ontogeny and implication of pregnancy-associated agglutinin of the rat uterus. Mukhopadhyay PK, et al. **J Reprod Fertil** 1989 May;86(1):59–63

Effect of cyproterone acetate on the pregnancy-blocking ability of male mice and the possible chemical nature of the pheromone [published erratum appears in J Reprod Fertil 1989 Jul;86(2):inside front cover] Rajendren G, et al. **J Reprod Fertil** 1988 Sep;84(1):387–92

Changes in secreted uterine proteins associated with embryo implantation in the mouse. Weitlauf HM, et al. **J Reprod Fertil** 1988 Nov;84(2):539–49

The endocrine requirements for implantation and early embryogenesis in women. Cameron IT, et al. **J Reprod Fertil Suppl** 1988;36:17–25 (41 ref.)

Failure of implantation and its relevance to subfertility. Cooke ID. **J Reprod Fertil Suppl** 1988;36:155–9 (17 ref.)

Maternal reactions affecting early embryogenesis and implantation. Heap RB, et al. **J Reprod Fertil Suppl** 1988; 36:83–97 (73 ref.)

Embryonic signals during the peri-implantation period in primates. Hearn JP, et al. **J Reprod Fertil Suppl** 1988; 36:49–58 (30 ref.)

The endocrinology of conception cycles and implantation in women. Lenton EA, et al. **J Reprod Fertil Suppl** 1988; 36:1–15 (31 ref.)

An assessment of the factors causing embryonic loss after fertilization in vitro. Osborn JC, et al. **J Reprod Fertil Suppl** 1988;36:59–72 (49 ref.)

Dispersal of rat uterine mast cells and their functional response to an embryo-derived histamine releasing factor: a possible model for embryo implantation. Cocchiara R, et al. **J Reprod Immunol** 1988 Nov;14(2):191–201

Distribution of some Gal beta 1-3(4)GlcNAc related carbohydrate antigens on the mouse uterine epithelium in relation to the peri-implantational period. Kimber SJ, et al. **J Reprod Immunol** 1988 Mar;12(4):297–313

Plasminogen activator inhibitor types 1 and 2 in human trophoblasts. PAI-1 is an immunocytochemical marker of invading trophoblasts. Feinberg RF, et al. **Lab Invest** 1989

Jul;61(1):20–6
Oocyte donation in 61 patients. Serhal PF, et al. **Lancet** 1989 May 27;1(8648):1185–7
Relationship between the number of sperms and the rate of implantation in bitches inseminated into unilateral uterine horn. Tsutsui T, et al. **Nippon Juigaku Zasshi** 1989 Apr; 51(2):257–63
Progesterone levels and socially-induced implantation failure and fetal resorption in golden hamsters (Mesocricetus auratus). Huck UW, et al. **Physiol Behav** 1988;44(3):321–6
Localization of mRNA for the oncotrophoblastic protein oncomodulin during implantation and early placentation in the rat. Brewer LM, et al. **Placenta** 1989 Jul–Aug; 10(4):359–75
Effect of delayed implantation on differentiation of the extra-embryonic endoderm in the mouse blastocyst. Gardner RL, et al. **Placenta** 1988 Jul–Aug;9(4):343–59
Uterine receptivity in the primate. Anderson TL, et al. **Prog Clin Biol Res** 1989;294:389–99
Anti-implantation effects of monoclonal anti-progesterone antibody. Hahn DW, et al. **Prog Clin Biol Res** 1989; 294:295–304
Platelet-activating factor (PAF) and blastocyst-endometrial interactions. Harper MJ, et al. **Prog Clin Biol Res** 1989; 294:305–15
Embryonic signaling at implantation in the mouse. Weitlauf HM. **Prog Clin Biol Res** 1989;294:359–76
Receptor concept in implantation research. Yoshinaga K. **Prog Clin Biol Res** 1989;294:379–87
Hormonal control of implantation in guinea pigs. Thapar M, et al. **Steroids** 1988 Jul–Aug;52(1–2):85–108
[Lipid domains in the plasma membrane of rabbit uterine epithelium from the time of ovum implantation. A freeze fracture-cytochemical study] Winterhager E, et al. **Acta Histochem Suppl (Jena)** 1988;36:395–8 **(Ger)**
[A study of progestin, glucocorticoid binding and glycogen content in rat endometrium before and after implantation: effect of antiprogesterone RU-38486] Takahashi T, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Oct 20;64(10):1081–7 (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

Why does RU486 fail to prevent implantation despite success in inducing menstruation? Li TC, et al. **Contraception** 1988 Oct;38(4):401–6
Interfering with implantation by postcoital estrogen administration. II. Endometrium epithelial cell ultrastructure. van Santen MR, et al. **Contraception** 1988 Dec;38(6):711–24
Effect of diclofenac on implantation and embryonic development in the rat. Carp HJ, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Jul;28(3):273–7
Effect of haloperidol on male-induced implantation failure (Bruce effect) in mice. Rajendren G, et al. **Indian J Exp Biol** 1988 Nov;26(11):909–10
Ovarian hyperstimulation inhibits embryo implantation in the mouse. Fossum GT, et al. **J In Vitro Fert Embryo Transf** 1989 Feb;6(1):7–10
Antagonists of embryo-derived platelet-activating factor prevent implantation of mouse embryos. Spinks NR, et al. **J Reprod Fertil** 1988 Sep;84(1):89–98
Effects of suprachiasmatic nuclear ablation and melatonin on delayed implantation in the spotted skunk. Berria M, et al. **Neuroendocrinology** 1988 Oct;48(4):371–5
Effects of prostaglandin F2 alpha-analogue administration on luteal function, implantation of embryos and maintenance of pregnancy in bitches. Tsutsui T, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):496–504
A paradoxical effect of an antiestrogen, CI-628, on implantation in the mouse. Huet YM, et al. **Proc Soc Exp Biol Med** 1988 Oct;189(1):61–5
Requirement for estrogen in implantation and post implantation survival of blastocyst in the bonnet monkey. Moudgal NR, et al. **Prog Clin Biol Res** 1989;294:277–88
Antiprogestins and egg-implantation. Psychoyos A. **Prog Clin Biol Res** 1989;294:289–94
Addition of steroids to embryo-uterine monolayer co-culture enhances embryo survival and implantation in vitro. Lavranos TC, et al. **Reprod Fertil Dev** 1989;1(1):41–6
Factors associated with reduced fertility and implantation rates in females mated to acrylamide-treated rats. Sublet VH, et al. **Toxicology** 1989 Apr;55(1–2):53–67
[Effect of glycoconjugates in blastocyst implantation: anti-implantation activity of concanavalin A in mice] Chen HL, et al. **Sheng Li Hsueh Pao** 1988 Apr;40(2):202–7 (Eng. Abstr.) **(Chi)**
[A comparative study on the antifertility action of levonorgestrel oxime and levonorgestrel] Liu CQ, et al. **Yao Hsueh Hsueh Pao** 1988 Apr;23(4):252–7 (Eng. Abstr.) **(Chi)**
[A study of progestin, glucocorticoid binding and glycogen content in rat endometrium before and after implantation: effect of antiprogesterone RU-38486] Takahashi T, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Oct 20;64(10):1081–7 (Eng. Abstr.) **(Jpn)**
[Induction of oxygen consumption at the site of implantation in the rat by prostaglandins] Vilar Rojas C, et al. **Arch Invest Med (Mex)** 1988 Jul–Sep;19(3):283–9 (Eng. Abstr.) **(Spa)**

RADIATION EFFECTS

Effects of pre-ovulatory X-irradiation on fertilization, initial cleavage and post-nidation development in the Chinese hamster. Imaizumi K. **Asia Oceania J Obstet Gynaecol** 1989 Mar;15(1):93–100

OVUM IMPLANTATION, DELAYED see under **OVUM IMPLANTATION**

OVUM PROTEINS see **EGG PROTEINS**

OVUM-SPERM INTERACTIONS see **SPERM-OVUM INTERACTIONS**

OVUM TRANSPORT

Transperitoneal ovum migration in women with unilateral congenital ovarian absence. Ben-Nun I, et al. **Acta Obstet Gynecol Scand** 1988;67(7):665–7
Estrogen and progesterone receptors in the oviduct during egg transport in cyclic and pregnant rats. Fuentealba B, et al. **Biol Reprod** 1988 Nov;39(4):751–7
Ovum transport in the rat oviductal ampulla in the absence of muscle contractility. Halbert SA, et al. **Biol Reprod** 1989 Jun;40(6):1131–6
Effect of clomiphene on nuclear estrogen receptor of the fallopian tube during ovum transport in rabbits. Gupta JS, et al. **Endocr Res** 1989;15(3):339–53
An ovum capture inhibitor (OCI) in endometriosis peritoneal fluid: an OCI-related membrane responsible for fimbrial failure of ovum capture. Suginami H, et al. **Fertil Steril** 1988 Oct;50(4):648–53
Intrinsic spontaneous activity and beta-adrenoceptor-mediated tubal dilatation affect ovum transport in the oviduct of the cow. Isla M, et al. **J Reprod Fertil** 1989 Jan;85(1):79–87

DRUG EFFECTS

Effect of oestradiol delivered from a perioviducal device on ovum transport in mice. Zenteno J, et al. **J Reprod Fertil** 1989 Jul;86(2):545–8

OWNERSHIP

Ethical concerns about new socioeconomic trends in mental health care [letter] Nol EA. **Am J Psychiatry** 1989 Feb; 146(2):286–7
NHS review. The white paper and the independent sector: scope for growth and restructuring. Laing W. **BMJ** 1989 Mar 25;298(6676):821–3
Canadian immunization: public programs or private enterprise? McIntyre L, et al. **Bull Pan Am Health Organ** 1988;22(4):355–63 (22 ref.)
Privatization: will we gain from it? Lalonde MP. **Dimens Health Serv** 1988 Nov;65(8):10–1
Will there always be a National Health Service? Finn J. **Hospitals** 1988 Oct 20;62(20):86, 88–9
The value of cat ownership to elderly women living alone. Mahalski PA, et al. **Int J Aging Hum Dev** 1988;27(4):249–60
The politics of welfare privatization: the British experience. Taylor-Gooby P. **Int J Health Serv** 1989;19(2):209–20
Who owns research data? Schreiber MH, et al. **Invest Radiol** 1989 May;24(5):410–1
Privatisation [letter] Rich G. **J Hosp Infect** 1989 Feb; 13(2):200–1
The ownership of health facilities and clinical decisionmaking. The case of the ESRD industry. Schlesinger M, et al. **Med Care** 1989 Mar;27(3):244–58
Workers under stress. Self-reported health and well-being of Weirton steel workers before and after becoming an ESOP company. Levine A, et al. **W V Med J** 1988 Dec; 84(12):561–7
[To whom do roentgen photos belong?] **Tijdschr Diergeneeskd** 1989 Mar 1;114(5):293 **(Dut)**

ECONOMICS

Private and public sectors form partnership to solve indigent maternity care crisis. Deju J. **J Fla Med Assoc** 1988 Nov; 75(11):725–6

LEGISLATION & JURISPRUDENCE

Physician self referral arrangements: legitimate business or unethical "entrepreneurialism". McDowell TN Jr. **Am J Law Med** 1989;15(1):61–109
The debate over physician ownership of health care facilities. Iglehart JK. **N Engl J Med** 1989 Jul 20;321(3):198–204

TRENDS

Public and private responsibility for mental health services. A report on the Tennessee Task Force. Perkey B. **Am Psychol** 1989 Aug;44(8):1148–50
Private-sector care for chronically mentally ill individuals. The more things change, the more they stay the same. Shadish WR Jr. **Am Psychol** 1989 Aug;44(8):1142–7 (50 ref.)
Privatization and the mental health system. A private sector view. Simons LS. **Am Psychol** 1989 Aug;44(8):1138–41 (14 ref.)
The impact of privatization of psychiatric care on children and adolescents [editorial] Pothier PC. **Arch Psychiatr Nurs** 1989 Jun;3(3):123–4
The rise in private hospital care [editorial] Goldacre M. **BMJ** 1989 Jan 28;298(6668):202–3
The growth of home ownership: 1940–1980. Chevan A. **Demography** 1989 May;26(2):249–66
The home care crisis of the nineties. Kane NM. **Gerontologist** 1989 Feb;29(1):24–31 (19 ref.)
Law and money spur HMO profit status changes. Larkin H. **Hospitals** 1989 Jan 5;63(1):68–9
Clinical freedom: two lessons for the UK from US experience with privatisation of health care. Lee PR, et al. **Lancet** 1989 Feb 4;1(8632):263–5 (31 ref.)
Patients' rights in a Third World southern African country, with special reference to Bophuthatswana: is there any potential for privatisation? Nathan C. **Med Law** 1989; 7(6):585–93
Private medicine and the privatisation of health care in South Africa. Naylor CD. **Soc Sci Med** 1988;27(11):1153–70 (105 ref.)
The consequences of health service privatisation for equality and equity in health care in South Africa. Price M. **Soc Sci Med** 1988;27(7):703–16 (58 ref.)

1-OXACEPHALOSPORIN see **MOXALACTAM**

OXACILLIN

Low temperature solubility of antibiotics: oxacillin sodium. Mishra DS, et al. **J Parenter Sci Technol** 1988 Nov–Dec; 42(6):177–80

ADVERSE EFFECTS

Oxacillin-associated hypokalemia. Schlaeffer F. **Drug Intell Clin Pharm** 1988 Sep;22(9):695–6

PHARMACOLOGY

Role of beta-lactamase and different testing conditions in oxacillin-borderline-susceptible staphylococci. Sierra-Madero JG, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1754–7
Bactericidal activity of oxacillin against beta-lactamase-hyperproducing Staphylococcus aureus. Woods GL, et al. **Antimicrob Agents Chemother** 1988 Nov; 32(11):1614–8
Resistance to dicloxacillin, methicillin and oxacillin in methicillin-susceptible and methicillin-resistant Staphylococcus aureus detected by dilution and diffusion methods. Rosdahl VT, et al. **APMIS** 1989 Aug; 97(8):715–22
Survey on methicillin/oxacillin-resistant staphylococci (MORS) in Hungary. Thege MK, et al. **Br J Clin Pract Symp Suppl** 1988 Feb;57:66–71
Immunoblots, antimicrobial resistance, and bacteriophage typing of oxacillin-resistant Staphylococcus aureus. Mulligan ME, et al. **J Clin Microbiol** 1988 Nov; 26(11):2395–401
Implications of acquired oxacillin resistance in the management and control of Staphylococcus aureus infections. Massanari RM, et al. **J Infect Dis** 1988 Oct; 158(4):702–9
[Sensitivity of Staphylococci to netilmicin and other antibiotics with reference to oxacillin-resistant strains] Ruczkowska J, et al. **Wiad Lek** 1988 Aug 15;41(16):1086–90 (Eng. Abstr.) **(Pol)**

THERAPEUTIC USE

Critical evaluation of common clinical parameters of postoperative pneumonia after thoracic surgery with perioperative prophylaxis. Bardua R, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):580–2
Systemic chemoprophylaxis in pacemaker surgery: a prospective randomized study. Bonini W, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):584–5
Short-term antibiotic prophylaxis in elective oral and maxillofacial surgery with mezlocillin and oxacillin. Dumbach J, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):570–2
Results of antibiotic prophylaxis in head and neck surgery. Elies W. **Chemioterapia** 1987 Jun;6(2 Suppl):575–6
Perioperative antibiotic prophylaxis in mandibular fracture treatment. Gerlach K, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):568
Perioperative prophylaxis and postoperative treatment of pneumonia with oxacillin and acylureidopenicillin in thoracic surgery. Koch A, et al. **Chemioterapia** 1987 Jun; 6(2 Suppl):583
The results of perioperative prophylaxis in thoracic surgery. Lenz J, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):578
Oxacillin-resistant S aureus [letter] Silver HJ. **Infect Control Hosp Epidemiol** 1989 Mar;10(3):98
The activity of isoxazolyl penicillins in experimental staphylococcal infection. Renneberg J, et al. **J Infect Dis** 1989 Jun;159(6):1128–32

OXADIAZOLES

HPLC electrochemical fluorometric detection of amino acids including tryptophan using 4-fluoro-7-nitrobenzo-2-oxa-1,3-diazole. Watanabe N, et al. **Biomed Chromatogr** 1987;2(3):99–103
Crystallographic studies and semi-empirical MNDO calculations on quisqualic acid and its analogues: systems

containing unusual pyramidal heterocyclic ring nitrogens. Jackson DE, et al. **J Comput Aided Mol Des** 1989 Jan; 2(4):321–8

Receptor binding of NBD–labeled fluorescent estrogens and progestins in whole cells and cell–free preparations. Carlson KE, et al. **J Steroid Biochem** 1989 Mar;32(3):345–55

Comparative effects of quisqualic and ibotenic acid–induced lesions of the substantia innominata and globus pallidus on the acquisition of a conditional visual discrimination: differential effects on cholinergic mechanisms. Robbins TW, et al. **Neuroscience** 1989;28(2):337–52

ADVERSE EFFECTS

Hallucinations in children caused by oxolamine citrate. McEwen J, et al. **Med J Aust** 1989 Apr 17;150(8):449–50, 452

ANALYSIS

Contamination of commercially available quisqualic acid by glutamate–like and aspartate–like substances. Cha JH, et al. **J Neurosci Methods** 1989 Mar;27(2):143–8

ANTAGONISTS & INHIBITORS

Quinoxalinediones selectively block quisqualate and kainate receptors and synaptic events in rat neocortex and hippocampus and frog spinal cord in vitro. Fletcher EJ, et al. **Br J Pharmacol** 1988 Oct;95(2):585–97

L–alpha–aminodipate antagonizes the priming effect of quisqualate in hippocampal slices. Harris EW. **Eur J Pharmacol** 1989 Feb 14;161(1):107–9

DIAGNOSTIC USE

A fluorescent derivative of ceramide: physical properties and use in studying the Golgi apparatus of animal cells. Pagano RE. **Methods Cell Biol** 1989;29:75–85

METABOLISM

Synthesis and characterization of CGP–12177–NBD: a fluorescent beta–adrenergic receptor probe. Heithier H, et al. **Biochimie** 1988 May;70(5):687–94

(+)–[3H]–PN 200–110 binding to cell membranes and intact strips of portal vein smooth muscle: characterization and modulation by membrane potential and divalent cations. Dacquet C, et al. **Br J Pharmacol** 1989 May;97(1):256–62

Calcium channel antagonist receptors in cerebral cortex from alcoholic patients. Marks SS, et al. **Brain Res** 1989 Jan 23;478(1):196–8

Binding Ca2+ to intracellular or to extracellular sites of dihydropyridine receptor of rabbit skeletal muscle discriminates between in vitro binding of Ca2+–channel agonist and antagonist. Kanngiesser U, et al. **Eur J Biochem** 1989 May 1;181(2):467–73

Characteristics of specific bindings of nitrendipine and PN200–110 to various crude membranes: induction of irreversible bindings by UV irradiation. Ichida S, et al. **J Biochem (Tokyo)** 1989 May;105(5):760–6

Calcium channel agonist and antagonist binding in a highly enriched sarcolemma preparation obtained from canine ventricle. Rampe D, et al. **J Cardiovasc Pharmacol** 1989 Apr;13(4):547–56

Separation of quisqualate– and kainate–selective glutamate receptors in cultured neurons from the rat superior colliculus. Perouansky M, et al. **J Neurosci** 1989 Jan; 9(1):70–80

Voltage–dependent binding of dihydropyridine calcium channel blockers to guinea pig ventricular myocytes. Kamp TJ, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1240–7

Concanavalin A selectively reduces desensitization of mammalian neuronal quisqualate receptors. Mayer ML, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1411–5

PHARMACOLOGY

ATP–dependent H+ transport by the turtle bladder: NBD–Cl preferentially inhibits the vanadate–insensitive component in isolated membranes. Youmans SJ, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):312–9

Cytochrome P–450 inactivation by 3–alkylsydnones. Mechanistic implications of N–alkyl and N–alkenyl heme adduct formation. Grab LA, et al. **Biochemistry** 1988 Jun 28;27(13):4805–14

Modification of the (Ca2+ + Mg2+)–ATPase protein of sarcoplasmic reticulum with 7–chloro–4–nitrobenzo–2–oxa–1,3–diazole. Bailin G, et al. **Biochim Biophys Acta** 1989 Apr 6;995(2):122–32

Inhibition of field stimulation–evoked relaxations in rat oesophageal smooth muscle by the calcium antagonist PN 200–110. Akbarali HI, et al. **Br J Pharmacol** 1988 Oct; 95(2):512–8

Sodium–dependent inhibition by PN200–110 enantiomers of nicotinic adrenal catecholamine release. Cárdenas AM, et al. **Br J Pharmacol** 1988 Sep;95(1):9–14

Selective effects of serotonin upon excitatory amino acid–induced depolarizations of Purkinje cells in cerebellar slices from young rats. Hicks TP, et al. **Brain Res** 1989 Jul 17;492(1–2):371–6

Excitatory amino acid receptors in piriform cortex do not show receptor desensitization. Hori N, et al. **Brain Res** 1988 Aug 9;457(2):350–4

Quisqualate, kainate and NMDA can initiate spreading depression in the turtle cerebellum. Lauritzen M, et al. **Brain Res** 1988 Dec 20;475(2):317–27

Actions of excitatory amino acid acid agonists and antagonists on the primary afferents of the vestibular system of the axolotl (Ambystoma mexicanum). Soto E, et al. **Brain Res** 1988 Oct 11;462(1):104–11

Two distinct quisqualate receptor systems are present on striatal neurons. Weiss S. **Brain Res** 1989 Jul 3; 491(1):189–93

Novel recognition site for L–quisqualate sensitizes neurons to depolarization by L–2–amino–4–phosphonobutanoate (L–AP4). Whittemore ER, et al. **Brain Res** 1989 Jun 5; 489(1):146–56

Characterization of deep dorsal horn neurones in the rat spinal cord in vitro: synaptic and excitatory amino acid induced excitations. King AE, et al. **Comp Biochem Physiol [A]** 1989;93(1):171–5

Quisqualate, high calcium concentration and zero–chloride prevent kainate–induced toxicity of cerebellar granule cells. McCaslin PP, et al. **Eur J Pharmacol** 1988 Aug 2; 152(3):341–6

Differences in magnesium and calcium effects on N–methyl–D–aspartate– and quisqualate–induced decreases in extracellular sodium concentration in rat hippocampal slices. Köhr G, et al. **Exp Brain Res** 1988;71(2):425–30

Protoporphyrinogen oxidase inhibition by three peroxidizing herbicides: oxadiazon, LS 82–556 and M&B 39279. Matringe M, et al. **FEBS Lett** 1989 Mar 13;245(1–2):35–8

Developmental changes in the chemosensitivity of rat brain synaptoneurosomes to excitatory amino acids, estimated by inositol phosphate formation. Guiramand J, et al. **Int J Dev Neurosci** 1989;7(3):257–66

Electrophysiological properties of isradipine (PN200–110) in humans. van Wijk LM, et al. **J Cardiovasc Pharmacol** 1989 Sep;14(3):492–5

Enhancement of desensitization of quisqualate–type glutamate receptor by the dissociative anaesthetic ketamine. Ashford ML, et al. **J Exp Biol** 1989 Jan;141:73–86

Quisqualic acid modulates kainate responses in cultured cerebellar granule cells. Gallo V, et al. **J Neurochem** 1989 Jan;52(1):10–6

Solubilization of quisqualate–sensitive [3H]glutamate binding activity from rat retina. Yoneda Y, et al. **J Neurochem** 1989 May;52(5):1501–7

AMPA, kainate, and quisqualate activate a common receptor–channel complex on embryonic chick motoneurons. Zorumski CF, et al. **J Neurosci** 1988 Nov; 8(11):4277–86

Pharmacological characterization of the glutamate receptor in cultured astrocytes. Backus KH, et al. **J Neurosci Res** 1989 Mar;22(3):274–82

Muscimol, gamma–aminobutyric acidA receptors and excitatory amino acids in the mouse spinal cord. Aanonsen LM, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1034–8

Attenuation of the behavioral response to quisqualic acid and glutamic acid diethyl ester by chronic haloperidol administration. Freed WJ, et al. **Life Sci** 1989;44(18):1303–8

Multiple conductance channels in type–2 cerebellar astrocytes activated by excitatory amino acids. Usowicz MM, et al. **Nature** 1989 Jun 1;339(6223):380–3

Endothelium– and sydnonimine–induced responses of native and cultured aortic smooth muscle cells are not impaired by nitroglycerin tolerance. Mülsch A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):568–74

Preventive action of quisqualic acid against grayanotoxin–induced suppression of locomotor activity in mice. Ohgaki T, et al. **Neuropharmacology** 1988 Oct; 27(10):1045–53

Solubilization of stereospecific and quisqualate–sensitive activity of [3H]glutamate binding in the pituitary of the rat. Yoneda Y, et al. **Neuropharmacology** 1989 Jun; 28(6):611–6

Extracellular taurine increase in rat hippocampus evoked by specific glutamate receptor activation is related to the excitatory potency of glutamate agonists. Menéndez N, et al. **Neurosci Lett** 1989 Jul 17;102(1):64–9

A specific quisqualate agonist inhibits kainate responses induced in Xenopus oocytes injected with rat brain RNA. Rassendren FA, et al. **Neurosci Lett** 1989 May 8;99(3):333–9

The effects of N–acetylated alpha–linked acidic dipeptidase (NAALADase) inhibitors on [3H]NAAG catabolism in vivo. Stauch BL, et al. **Neurosci Lett** 1989 May 22; 100(1–3):295–300

N–methyl–D–aspartate activates different channels than do kainate and quisqualate. Lerma J, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2083–7

Quisqualate activates a rapidly inactivating high conductance ionic channel in hippocampal neurons. Tang CM, et al. **Science** 1989 Mar 17;243(4897):1474–7

[Immunocorrection of the physiologic status of white rats by sidnofen conjugates with bovine serum albumin] Danilova RA, et al. **Biol Nauki** 1989;(3):63–9 (Eng. Abstr.) **(Rus)**

[Peripheral cholinolytic action—one of the effects of sidnofen] Samonina GE, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):449–51 (Eng. Abstr.) **(Rus)**

[Long–term change in emotional status and lea.ning in white rats after immunization with a conjugate of sydnophen and bovine serum albumin] Danilova RA, et al. **Dokl Akad Nauk SSSR** 1988;303(6):1512–4 **(Rus)**

[Analysis of the effect of quisqualate, N–methyl–D– aspartate and several blockers of amino acid receptors on synaptic transmission in the ampullae of Lorenzini] Akoev GN, et al. **Neirofiziologiia** 1989;21(2):160–7 (Eng. Abstr.) **(Rus)**

[Blocking action of Nephila clavata spider toxin on ionic currents activated by glutamate and its agonists in isolated hippocampal neurons] Kiskin NI, et al. **Neirofiziologiia** 1989;21(2):152–60 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

EEG changes after mesocarb in respondent and nonrespondent hyperkinetic children. Drtílková I, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):50

[Studies on pyrazine derivatives. XXII. Synthesis and tuberculostatic activity of the products of reactions of pyrazinyl–1,3,4–oxadiazol–2–thione with amines] Pancechowska–Ksepko D, et al. **Acta Pol Pharm** 1988; 45(3):193–200 (Eng. Abstr.) **(Pol)**

[Evaluation of the effectiveness of drugs for prevention of motion sickness] Galle RR, et al. **Kosm Biol Aviakosm Med** 1988 Jul–Aug;22(4):90–4 **(Rus)**

[Sidnocarb treatment of young schoolchildren with the hyperdynamic syndrome] Krasov VA. **Zh Nevropatol Psikhiatr** 1988;88(8):97–101 (Eng. Abstr.) **(Rus)**

TOXICITY

Neurotoxicity of excitatory amino acid receptor agonists in young rat hippocampal slices. Garthwaite G, et al. **J Neurosci Methods** 1989 Jul;29(1):33–42

Differential dependence on Ca2+ of N–methyl–D–aspartate and quisqualate neurotoxicity in young rat hippocampal slices. Garthwaite G, et al. **Neurosci Lett** 1989 Feb 27; 97(3):316–22

Quisqualate neurotoxicity: a delayed, CNQX–sensitive process triggered by a CNQX–insensitive mechanism in young rat hippocampal slices. Garthwaite G, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):113–8

Comparative effects of kainic, quisqualic, and ibotenic acids on phenylethanolamine–N–methyltransferase–containing cells of rat retina. Cohen J. **Toxicology** 1989 Feb; 54(2):177–82

OXALATES

The effect of oxalate and malonate on red cell metabolism [letter] Tomson CR, et al. **Blood** 1988 Oct;72(4):1435

Determination of absolute chemiluminescence quantum yields for reactions of bis–(pentachlorophenyl) oxalate, hydrogen peroxide and fluorescent compounds. Catherall CL, et al. **J Biolumin Chemilumin** 1989 Jul–Sep;3(3):147–54

Detection of pathogenic Yersinia enterocolitica by using congo red–magnesium oxalate agar medium. Riley G, et al. **J Clin Microbiol** 1989 Jan;27(1):213–4

ADMINISTRATION & DOSAGE

Bioavailability of oxalic acid from spinach, sugar beet fibre and a solution of sodium oxalate consumed by female volunteers. Hanson CF, et al. **Food Chem Toxicol** 1989 Mar; 27(3):181–4

Mineral balances of men fed a diet containing fiber in fruits and vegetables and oxalic acid in spinach for six weeks. Kelsay JL, et al. **J Nutr** 1988 Oct;118(10):1197–204

ADVERSE EFFECTS

[Oxalate–induced arthropathy in hemodialysis] Ferreiro JL. **Med Clin (Barc)** 1988 Jun 4;91(2):58–60 (28 ref.) **(Spa)**

ANALYSIS

Resolution of neuroexcitatory non–protein amino acid enantiomers by high–performance liquid chromatography utilising pre–column derivatisation with o–phthaldialdehyde chiral thiols. Application to omega–N–oxalyl diamino acids. Euerby MR, et al. **J Chromatogr** 1989 Apr 19;466:407–14

Kochia scoparia oxalate content. Dickie CW, et al. **Vet Hum Toxicol** 1989 Jun;31(3):240–2

BLOOD

The determination of plasma oxalate concentrations using an enzyme/bioluminescent assay. 2. Co–immobilisation of bioluminescent enzymes and studies of in vitro oxalogenesis. Parkinson IS, et al. **Clin Chim Acta** 1989 Jan 13;179(1):97–108

A simple, rapid assay for plasma oxalate in uraemic patients using oxalate oxidase, which is free from vitamin C interference. Rolton HA, et al. **Clin Chim Acta** 1989 Jul 14;182(3):247–54

Correction of subclinical ascorbate deficiency in patients receiving dialysis: effects on plasma oxalate, serum cholesterol, and capillary fragility. Tomson CR, et al. **Clin Chim Acta** 1989 Apr 14;180(3):255–64

Oxalate retention in chronic renal failure: tubular vs glomerular diseases. Tomson CR, et al. **Clin Nephrol** 1989 Aug;32(2):87–95

Determination of oxalate in human serum by multicolumn isotachophoresis. Dolník V, et al. **Electrophoresis** 1988 Dec; 9(12):839–41

Effect of pyridoxine supplementation on plasma oxalate concentrations in patients receiving dialysis. Tomson CR, et al. **Eur J Clin Invest** 1989 Apr;19(2):201–5

The clinical significance of hyperoxalaemia. Tomson CR. **Int J Artif Organs** 1988 Sep;11(5):329–34 (51 ref.)
Measurement of plasma oxalate by capillary gas chromatography and its validation by isotope dilution mass spectrometry. France NC, et al. **J Chromatogr** 1988 Dec 9;433:1–7
Plasma oxalate concentration and secondary oxalosis in patients with chronic renal failure. Tomson CR, et al. **J Clin Pathol** 1988 Oct;41(10):1107–13
Plasma oxalate in patients receiving continuous ambulatory peritoneal dialysis. Tomson CR, et al. **Nephrol Dial Transplant** 1988;3(3):295–9
[Plasma and urinary levels of oxalate in lambs fed exclusively on Oxalis cernua] Marongiu A, et al. **Boll Soc Ital Biol Sper** 1988 Jan;64(1):77–84 (Eng. Abstr.) **(Ita)**
[A highly sensitive assay method of oxalic acid in human plasma using high performance liquid chromatography with fluorescent labeling reagent] Shimizu K, et al. **Yakugaku Zasshi** 1989 Mar;109(3):163–7 (Eng. Abstr.) **(Jpn)**

CHEMICAL SYNTHESIS

[Antitubercular agents. 43. A new group of potential antitubercular agents—oxalanilides and malonanilides] Waisser K, et al. **Pharmazie** 1989 Feb;44(2):162–3 **(Ger)**

ISOLATION & PURIFICATION

[Value of ether extraction in realizing a limit test of oxalic acid in ascorbic acid–based drugs] Willemot J. **Ann Pharm Fr** 1988;46(4):233–40 (Eng. Abstr.) **(Fre)**

METABOLISM

Oxalate deposits in the kidney of 5/6 nephrectomised rats supplemented by large doses of vitamin C. Ono K, et al. **Adv Exp Med Biol** 1989;252:365–70
Coordination of manganous ion at the active site of pyruvate, phosphate dikinase: the complex of oxalate with the phosphorylated enzyme. Kofron JL, et al. **Biochemistry** 1988 Jun 28;27(13):4781–7
Recurrence of oxalate deposition in a renal transplant during ciclosporin A therapy. Drachman R, et al. **Child Nephrol Urol** 1988–89;9(1–2):90–2
Inhibition of endogenous oxalate production: biochemical considerations of the roles of glycollate oxidase and lactate dehydrogenase. Bais R, et al. **Clin Sci** 1989 Mar;76(3):303–9
Vitamin A deficiency in rats enhances intestinal transport of calcium and oxalate in vitro. Kancha R, et al. **Int J Vitam Nutr Res** 1989;59(2):236–7
Purification and characterization of oxalyl-coenzyme A decarboxylase from Oxalobacter formigenes. Baetz AL, et al. **J Bacteriol** 1989 May;171(5):2605–8
Oxalate:formate exchange. The basis for energy coupling in Oxalobacter. Anantharam V, et al. **J Biol Chem** 1989 May 5;264(13):7244–50
Oxalate measurement in the picomol range by ion chromatography: values in fasting plasma and urine of controls and patients with idiopathic calcium urolithiasis. Schwille PO, et al. **J Clin Chem Clin Biochem** 1989 Feb; 27(2):87–96
The subcellular metabolism of glyoxylate in primary hyperoxaluria type 1: the relationship between glycine production and oxalate overproduction. Thompson GN, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:212–4
Oxalate synthesis, transport and the hyperoxaluric syndromes. Williams HE, et al. **J Urol** 1989 Mar;141(3 Pt 2):742–9 (64 ref.)
Treatment of enteric hyperoxaluria with calcium–containing organic marine hydrocolloid. Lindsjö M, et al. **Lancet** 1989 Sep 23;2(8665):701–4
Acquired renal cysts in five–sixths nephrectomized rats: the roles of oxalate deposits in renal tubules and a renotropic factor. Ono K, et al. **Nephron** 1989;51(3):393–8
Effect of vitamin C supplementation on renal oxalate deposits in five–sixths nephrectomized rats. Ono K, et al. **Nephron** 1989;51(4):536–9
Intestinal oxalate and calcium absorption in recurrent renal stone formers and healthy subjects. Lindsjö M, et al. **Scand J Urol Nephrol** 1989;23(1):55–9
Oxalate metabolism in renal stone disease with special reference to calcium metabolism and intestinal absorption. Lindsjö M. **Scand J Urol Nephrol Suppl** 1989;119:1–53 (224 ref.)
[Pancreatico–biliary secretion in enteral hyperoxaluria] Möller T, et al. **Dtsch Z Verdau Stoffwechselkr** 1988; 48(6):315–20 (Eng. Abstr.) **(Ger)**
[Acid–base balance of the blood and possible renal mechanisms of its imbalance in children with oxalate–phosphate stones of the urinary tract] Gontmakher VM, et al. **Urol Nefrol (Mosk)** 1989 May–Jun;(3):33–6 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Bioavailability of oxalic acid from spinach, sugar beet fibre and a solution of sodium oxalate consumed by female volunteers. Hanson CF, et al. **Food Chem Toxicol** 1989 Mar; 27(3):181–4
Intestinal absorption of oxalate by xylitol–treated rats and mice. Salminen S, et al. **Toxicol Lett** 1988 Nov; 44(1–2):113–20
[Pharmacokinetic study on oxalate in rats] Sugimoto T, et al. **Hinyokika Kiyo** 1988 Jul;34(7):1135–40 (Eng. Abstr.) **(Jpn)**
[Studies of oxalate efflux and oxalate transport via anion exchange in rat renal brush border membrane vesicles] Nishibuchi S, et al. **Nippon Jinzo Gakkai Shi** 1989 Jan; 31(1):57–65 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Sodium oxalate corrects calcium interference in Lowry protein assay. Morrissey TB, et al. **J Surg Res** 1989 Sep; 47(3):273–5
Effect of oxalate on function of kidney mitochondria. Strzelecki T, et al. **J Urol** 1989 Feb;141(2):423–7

POISONING

Acute oxalate toxicity of sheep associated with slender iceplant (Mesembryanthemum nodiflorum). Jacob RH, et al. **Aust Vet J** 1989 Mar;66(3):91–2

THERAPEUTIC USE

Radiopharmaceuticals for radiation synovectomy: evaluation of two yttrium–90 particulate agents. Davis MA, et al. **J Nucl Med** 1989 Jun;30(6):1047–55
Effects of potassium oxalate on dentin hypersensitivity in vivo. Muzzin KB, et al. **J Periodontol** 1989 Mar;60(3):151–8

URINE

Effect of animal and vegetable protein intake on oxalate excretion in idiopathic calcium stone disease. Marangella M, et al. **Br J Urol** 1989 Apr;63(4):348–51
Effect of citrate on the urinary excretion of calcium and oxalate: relevance to calcium oxalate nephrolithiasis. Cowley DM, et al. **Clin Chem** 1989 Jan;35(1):23–8
Improved urinary oxalate method for a centrifugal analyzer [letter] Coyle P, et al. **Clin Chem** 1989 Aug;35(8):1806
Extent of removal of sulfate and phosphate during the extraction step in the sigma enzymatic method for oxalate assay, as determined by ion chromatography [letter] Singh RP. **Clin Chem** 1988 Nov;34(11):2390
Urinary calcium and oxalate excretion during oral fructose or glucose load in man. Nguyen NU, et al. **Horm Metab Res** 1989 Feb;21(2):96–9
Determination of phosphate, sulfate and oxalate in urine by ion chromatography. Singh RP, et al. **J Chromatogr** 1988 Dec 9;433:373–6
[Risk indicators of urinary calculus formation: value of oxalate and citrate excretion in comparison with the oxalate tolerance value] Hannak D, et al. **Urologe [A]** 1989 Jan; 28(1):20–4 (Eng. Abstr.) **(Ger)**
[The urinary oxalate determination using high performance liquid chromatography] Ikuma S, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 May;79(5):903–9 (Eng. Abstr.) **(Jpn)**
[Urinary excretion of calcium, magnesium, uric acid and oxalic acid in normal children] Hernández Marco R, et al. **An Esp Pediatr** 1988 Aug;29(2):99–104 (Eng. Abstr.) **(Spa)**

OXALOACETATES

Mutation of amino acids thought to polarize the oxaloacetate carbonyl in citrate synthase severely reduces but does not abolish activity of the enzyme. Anderson DH, et al. **Biochem Cell Biol** 1989 Feb–Mar;67(2–3):98–102

METABOLISM

Steady–state kinetic studies of the metal ion–dependent decarboxylation of oxalacetate catalyzed by pyruvate kinase. Kiick DM, et al. **Arch Biochem Biophys** 1989 May 1;270(2):647–54

PHARMACOLOGY

Interactions of oxaloacetate with Escherichia coli fumarate reductase. Ackrell BA, et al. **Arch Biochem Biophys** 1989 Jan;268(1):26–34

OXALURIA see **HYPEROXALURIA**

OXAMIC ACID see under **AMINO ACIDS**

OXAMNIQUINE see under **NITROQUINOLINES**

OXANDROLONE

PHARMACOLOGY

Growth hormone secretion in Turner's syndrome and influence of oxandrolone and ethinyl oestradiol. Massarano AA, et al. **Arch Dis Child** 1989 Apr;64(4):587–92

THERAPEUTIC USE

Anabolic steroids in girls with Turner's syndrome. Joss EE. **Acta Paediatr Scand Suppl** 1988;343:38–42 (12 ref.)
Treatment of Turner's syndrome with recombinant human growth hormone (somatrem). Lippe B, et al. **Acta Paediatr Scand Suppl** 1988;343:47–52
Growth and growth hormone responses to oxandrolone in boys with constitutional delay of growth and puberty (CDGP). Clayton PE, et al. **Clin Endocrinol (Oxf)** 1988 Aug;29(2):123–30
Oxandrolone therapy in six boys with the Prader–Willi syndrome. Holm VA, et al. **J Pediatr** 1989 Feb;114(2):325–7
[Considerations on forecasting [corrected] growth after cessation of oxandrolone therapy (published erratum appears in Minerva Pediatr 1989 Jan;41(1):X)] Rusconi R. **Minerva Pediatr** 1988 Oct;40(10):585–8 (Eng. Abstr.) **(Ita)**

URINE

Studies on anabolic steroids. II—Gas chromatographic/mass spectrometric characterization of oxandrolone urinary metabolites in man. Massé R, et al. **Biomed Environ Mass Spectrom** 1989 Jun;18(6):429–38

OXATHIINS see under **HETEROCYCLIC COMPOUNDS**

OXAZEPAM

ADMINISTRATION & DOSAGE

The use of benzodiazepine hypnotics in the elderly. Baker MI, et al. **Pharmacotherapy** 1988;8(4):241–7

ANALOGS & DERIVATIVES

Bioavailability and pharmacokinetics of oxazepam. Sonne J, et al. **Eur J Clin Pharmacol** 1988;35(4):385–9
[Oxazepam glucuronide] Franzelius C, et al. **Beitr Gerichtl Med** 1988;46:427–31 (Eng. Abstr.) **(Ger)**

ANALYSIS

Determination of diazepam and oxazepam using high–performance liquid chromatography and fourth–derivative spectrophotometric techniques. Abdel–Hamid ME, et al. **Analyst** 1988 Sep;113(9):1443–6
The kinetics of the racemization of oxazepam in aqueous solution. Aso Y, et al. **Chem Pharm Bull (Tokyo)** 1988 May; 36(5):1834–40

PHARMACOKINETICS

Pharmacokinetics and distribution of diazepam and oxazepam in early pregnancy. Jørgensen NP, et al. **Acta Obstet Gynecol Scand** 1988;67(6):493–7
Influence of a very low calorie diet on the clearance of oxazepam and antipyrine in man. Sonne J, et al. **Eur J Clin Pharmacol** 1989;36(4):407–9
Bioavailability and pharmacokinetics of oxazepam. Sonne J, et al. **Eur J Clin Pharmacol** 1988;35(4):385–9

PHARMACOLOGY

Age–related differences in the coordination disturbance and anticonvulsant effect of oxazepam in mice. Kitani K, et al. **Arch Gerontol Geriatr** 1989 Jul;9(1):31–43 (26 ref.)
Human liver morphine UDP–glucuronyl transferase enantioselectivity and inhibition by opioid congeners and oxazepam. Wahlström A, et al. **Br J Pharmacol** 1988 Jul; 94(3):864–70
Kinetics of drug action in disease states. XXIV. Pharmacodynamics of diazepam and its active metabolites in rats. Klockowski PM, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):912–8
Kinetics of drug action in disease states. XXXI. Effect of experimental hyperthyroidism on the hypnotic activity of a benzodiazepine (oxazepam) in rats. Walker JS, et al. **Pharm Res** 1989 May;6(5):404–7
Development of the interaction of GABA and oxazepam on spontaneous motility in chick embryos. Sedláček J. **Physiol Bohemoslov** 1989;38(1):93–6

POISONING

[Laboratory diagnosis of acute poisoning of children by elenium, seduxen and tazepam] Kuznetsova NI. **Lab Delo** 1988;(5):38–40 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Oxazepam to stomatologic patients who do not cooperate. Kukletová M, et al. **Act Nerv Super (Praha)** 1989 Apr; 31(1):57–8
Double–blind controlled trial comparing carbamazepine to oxazepam treatment of alcohol withdrawal. Malcolm R, et al. **Am J Psychiatry** 1989 May;146(5):617–21
[Anxiety in the perioperative phase—a double–blind study using oxazepam] Wisiak UV, et al. **Anaesthesiol Reanim** 1989;14(2):113–8 (Eng. Abstr.) **(Ger)**
[Preoperative subjective anxiety. Double blind study using oxazepam] Kröll W, et al. **Anaesthesist** 1988 Dec; 37(12):752–7 (Eng. Abstr.) **(Ger)**

URINE

Rapid extraction of oxazepam from greyhound urine for high performance liquid chromatography analysis. Moore CM, et al. **Forensic Sci Int** 1988 Sep;38(3–4):237–41

OXAZEPINES see under **AZEPINES**

OXAZINES

Investigation of a modified gallocyanin chrome alum staining

technique in cytology compared to thionine and haematoxylin as nuclear stains. Schulte E. **Acta Histochem Suppl (Jena)** 1988;36:341–52

Nile red simultaneous staining of intracellular lipids and membrane network in human muscle cultures. Santilli I, et al. **Basic Appl Histochem** 1989;33(1):49–52

Liver cell carcinoma with orcein-positive granules and no identifiable copper. Shousha S, et al. **Histopathology** 1988 Oct;13(4):455–8

Benadrostin, new inhibitor of poly(ADP-ribose) synthetase, produced by actinomycetes. II. Structure determination. Yoshida S, et al. **J Antibiot (Tokyo)** 1988 Aug;41(8):1015–8

Orcein-alcian blue staining: a new technique for demonstrating acid mucins in gastrointestinal epithelium. Singh R, et al. **J Clin Pathol** 1989 Aug;42(8):881–4

A new technique for orcein banding with acid treatment. Chattopadhyay D, et al. **Stain Technol** 1988 Sep;63(5):283–7

ADMINISTRATION & DOSAGE

Therapeutic efficacy of a novel transdermal delivery system for (+)-PHNO in parkinsonian squirrel monkeys [letter] Rupniak NM, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):289–90

The antiparkinsonian actions and pharmacokinetics of transdermal (+)-4-propyl-9-hydroxynaphthoxazine (+PHNO): preliminary results. Coleman RJ, et al. **Mov Disord** 1989;4(2):129–38

The effect of intracerebroventricular infusion of (+)-4-propyl-9-hydroxynapthoxacine (PHNO) through a totally implanted drug delivery system in rats with dopamine deficiency. de Yebenes JG, et al. **Mov Disord** 1987;2(4):291–9

Antiparkinsonian efficacy of a novel transdermal delivery system for (+)-PHNO in MPTP-treated squirrel monkeys. Rupniak NM, et al. **Neurology** 1989 Mar;39(3):329–35

BLOOD

A sensitive gas chromatographic mass spectrometric assay for a novel dopamine agonist (+)-trans-3,4,4A,5,6,10B-hexahydro-4-propyl-2H-naphth(1,2-B)(1,4) oxazin-9-ol in human plasma. Musson DG, et al. **Biomed Environ Mass Spectrom** 1988 Oct; 17(4):293–8

CHEMICAL SYNTHESIS

Synthesis and pharmacology of trans-4-n-propyl-3,4,4a,10b-tetrahydro-2H,5H-1-benzopyrano[4,3-b]-1,4-oxazin-7- and -9-ols: the significance of nitrogen pKa values for central dopamine receptor activation. Dijkstra D, et al. **J Med Chem** 1988 Nov;31(11):2178–82

Hypolipidemic 2-[4-(1,1-dimethylethyl)phenyl]-4H-3,1-benzoxazin-4-ones. Structure-activity relationships of a novel series of high-density lipoprotein elevators. Fenton G, et al. **J Med Chem** 1989 Jan;32(1):265–72

Synthesis and reactions of some biologically active 2-(2'-thienyl)benzoxazinone and quinazolinone derivatives. el-Khamry AM, et al. **Pharmazie** 1989 May;44(5):312–5

[Synthesis of new potential analgesics and antibiotically active pyridazino[4,3-e]oxazinones and pyrimido[4,5-c]pyridazinones] Ried W, et al. **Arch Pharm (Weinheim)** 1988 Sep;321(9):527–32 (Eng. Abstr.) **(Ger)**

DIAGNOSTIC USE

Orcein staining for hepatitis B surface antigen (HBsAg) in liver diseases in Papua New Guinea. Murthy DP, et al. **P N G Med J** 1988 Sep;31(3):179–83

Cresyl violet: a rapid, simple, easily interpretable stain for detecting Pneumocystis carinii in sputum. Moas CM, et al. **South Med J** 1989 Aug;82(8):957–9

[The effect of dietary proteins on the fluorescence of Nile red in the aortic arch in guinea pigs] Habán P, et al. **Bratisl Lek Listy** 1989 Feb;90(2):120–4 (Eng. Abstr.) **(Slo)**

ISOLATION & PURIFICATION

Benadrostin, new inhibitor of poly(ADP-ribose) synthetase, produced by actinomycetes. I. Taxonomy, production, isolation, physico-chemical properties and biological activities. Aoyagi T, et al. **J Antibiot (Tokyo)** 1988 Aug; 41(8):1009–14

Antitumor principles in mosses: the first isolation and identification of maytansinoids, including a novel 15-methoxyansamitocin P-3. Sakai K, et al. **J Nat Prod** 1988 Sep-Oct;51(5):845–50

METABOLISM

Redox cycling of resorufin catalyzed by rat liver microsomal NADPH-cytochrome P450 reductase. Dutton DR, et al. **Arch Biochem Biophys** 1989 Feb 1;268(2):605–16

Reduction of 7-alkoxyresorufins by NADPH-cytochrome P450 reductase and its differential effects on their O-dealkylation by rat liver microsomal cytochrome P450. Dutton DR, et al. **Arch Biochem Biophys** 1989 Feb 1; 268(2):617–29

Orcein-positive granules in liver cell carcinoma [letter] **Histopathology** 1989 Aug;15(2):204–8

PHARMACOLOGY

Effects of ageing on the behavioural responses to dopamine agonists: decreased yawning and locomotion, but increased stereotypy. Stoessl AJ, et al. **Brain Res** 1989 Aug 21; 495(1):20–30

Lipid lowering actions of 7-(2-methylene butyryl)-(2H)-1,4-benzoxazin-3-(4H)-one derivatives in mice, rats and Syrian hamsters. Moussavi Z, et al. **Clin Chim Acta** 1989 Mar 15;180(1):35–44

A strategy for measuring the therapeutic properties of new antiparkinsonian drugs, such as +PHNO, in patients with on-off fluctuations. Coleman RJ, et al. **Clin Neuropharmacol** 1989 Feb;12(1):37–45

In-vitro toxoplasmacidal activity of cationic electron carriers. Chang HR, et al. **J Antimicrob Chemother** 1989 Feb;23(2):229–35

Endocrine and neurochemical effects of (+)-PHNO, a dopamine D2 agonist. Gust CM, et al. **J Neural Transm** 1989;75(1):11–20

Effect of FK973, a new antitumor antibiotic, on the cell cycle of L1210 cells in vitro. Nakamura T, et al. **Jpn J Pharmacol** 1989 Mar;49(3):317–24

Behavioural effects of (+)-4-propyl-9-hydroxynaphthoxazine in primates rendered parkinsonian with 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine. Clarke CE, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jul; 338(1):35–8

The dopamine agonist, PHNO ((+)-4-propyl-9-hydroxynaphthoxazine), inhibits cyclic adenosine 3',5'-monophosphate formation and prolactin release from anterior pituitary cells. Login IS, et al. **Neuropharmacology** 1989 Jun;28(6):647–50

THERAPEUTIC USE

The efficacy of (+)-4-propyl-9-hydroxynaphthoxazine as adjunctive therapy in Parkinson's disease. Weiner WJ, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):732–5

Antiparkinsonian activity of a single oral dose of PHNO. Grandas F, et al. **Mov Disord** 1987;2(1):47–51

PHNO, a novel dopamine agonist, in animal models of parkinsonism. Koller W, et al. **Mov Disord** 1987;2(3):193–9

Antiparkinsonian activity of (+)-PHNO in the MPTP-treated common marmoset. Nomoto M, et al. **Mov Disord** 1987;2(1):37–45

[Antitumor activity of trewiasine in vitro and in vivo] Yang JL, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Nov; 9(6):508–11 (Eng. Abstr.) **(Chi)**

[Antitumor efficacy of FK 973 on malignant glioma cells] Shimizu K, et al. **Gan To Kagaku Ryoho** 1989 Jul; 16(7):2367–72 (Eng. Abstr.) **(Jpn)**

OXAZOCILLINE see **OXACILLIN**

OXAZOCINES

ANALYSIS

Stereoisomer differentiation for the analgesic drug nefopam hydrochloride using modeling studies of serotonin uptake area. Glaser R, et al. **J Pharm Sci** 1989 Feb;78(2):87–90

PHARMACOLOGY

Interaction of nefopam and orphenadrine with the cytochrome P-450 and the glutathione system in rat liver. Leurs R, et al. **J Pharm Pharmacol** 1989 Jun;41(6):388–93

[Synthesis and the effect of new derivatives of perhydro-1,4,6-oxadiazocine on the central nervous system] Brzezińska E, et al. **Acta Pol Pharm** 1988; 45(5):400–5 (Eng. Abstr.) **(Pol)**

THERAPEUTIC USE

Assessment of the analgesic efficacy of nefopam hydrochloride after upper abdominal surgery: a study using patient controlled analgesia. McLintock TT, et al. **Br J Surg** 1988 Aug;75(8):779–81

Nefopam in rheumatoid arthritis. Results of a double-blind placebo controlled study [letter] Swinson DR, et al. **Clin Rheumatol** 1988 Sep;7(3):411–2

[Evaluation of the analgesic efficacy of nefopam in postoperative pain] Giudice G, et al. **Minerva Anestesiol** 1988 Jan-Feb;54(1-2):19–23 (Eng. Abstr.) **(Ita)**

[Nefopam in postoperative analgesia. Comparison with meperidine and morphine] Novelli GP, et al. **Minerva Anestesiol** 1988 Jun;54(6):259–67 (Eng. Abstr.) **(Ita)**

OXAZOLES

Fluorogenic reagent for thiols: 4-(N,N-dimethylaminosulphonyl)-7-fluoro-2,1,3-benzoxadiazole. Toyo'oka T, et al. **Analyst** 1989 Apr; 114(4):413–9

Measurements of fluorescence lifetimes by use of a hybrid time-correlated and multifrequency phase fluorometer. Hedstrom J, et al. **Biochemistry** 1988 Aug 23;27(17):6203–8

Influence of side-chain-terminating moieties on the conformation of branched polypeptides and their conjugates with 4-ethoxymethylene-2-phenyl-5(4H)-oxazolone. Hudecz F, et al. **Biophys Chem** 1988 Aug;31(1-2):53–61

Modulation of GFAP mRNA levels following toxic lesions in the basal ganglia of the rat. Rataboul P, et al. **Brain Res Bull** 1989 Jan;22(1):155–61

Optical recording of electrical activity from axons and glia of frog optic nerve: potentiometric dye responses and morphometrics. Konnerth A, et al. **GLIA** 1988;1(3):225–32

Methods for pH determination in human erythrocytes. Büttner D, et al. **J Clin Chem Clin Biochem** 1989 Feb; 27(2):75–9

Combined in-beam electron impact-B/E-linked scan mass spectrometry of oxazoline derivatives for the structure determination of long-chain unsaturated fatty acids. Yang YM, et al. **J Lipid Res** 1989 Jan;30(1):127–33

Location of double bonds in fatty acids of fish oil and rat testis lipids. Gas chromatography-mass spectrometry of the oxazoline derivatives. Yu QT, et al. **Lipids** 1989 Jan; 24(1):79–83

Imidazole, oxazole, and peptide alkaloids and other miscellaneous alkaloids. Lewis JR. **Nat Prod Rep** 1988 Aug; 5(4):351–61 (66 ref.)

Comparative effects of quisqualic and ibotenic acid-induced lesions of the substantia innominata and globus pallidus on the acquisition of a conditional visual discrimination: differential effects on cholinergic mechanisms. Robbins TW, et al. **Neuroscience** 1989;28(2):337–52

ADVERSE EFFECTS

Rilmenidine and vigilance. Review of clinical studies. Mahieux F. **Am J Med** 1989 Sep 18;87(3C):67S-72S (38 ref.)

Zonisamide usage [letter] Sander JW, et al. **Neurology** 1989 May;39(5):749

ANALOGS & DERIVATIVES

4-alkylidene oxazolones as substrates and inhibitors for sensitive assays of the normality of active sites and the catalytic properties of hydrolases. Baese HJ, et al. **Biochim Biophys Acta** 1989 Feb 24;990(2):113–21

ANALYSIS

Conversion of Woodward's Reagent K in an aqueous medium: mathematical analysis applied to enzyme modification. Kuimov AN, et al. **Anal Biochem** 1988 Jul; 172(1):56–60

Kinetics and mechanism of reversible hydrolysis of 11b-methylbenzodiazepinooxazoles. Kurono Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2582–6

Mycobactins and exochelins of Mycobacterium tuberculosis, M. bovis, M. africanum and other related species. Barclay R, et al. **J Gen Microbiol** 1988 Mar;134 (Pt 3):771–6

Isoxazoles V: chemical stability of diisoxazolylnaphthoquinone in aqueous solution. Longhi MR, et al. **J Pharm Sci** 1989 May;78(5):408–12

Location of methyl branchings in fatty acids: fatty acids in uropygial secretion of Shanghai duck by GC-MS of 4,4-dimethyloxazoline derivatives [published erratum appears in Lipids 1989 Feb;24(2):160] Yu QT, et al. **Lipids** 1988 Aug;23(8):804–10

BIOSYNTHESIS

Co-ordinated expression of the components of iron transport (mycobactin, exochelin and envelope proteins) in Mycobacterium neoaurum. Sritharan M, et al. **FEMS Microbiol Lett** 1989 Jul 15;51(1):183–5

BLOOD

Rapid and simple HPLC determination of 5,5-dimethyl-2,4-oxazolidynedione in rabbit serum. Gaździk WR, et al. **Biomed Chromatogr** 1987;2(3):137–8

CHEMICAL SYNTHESIS

A fluorescent indicator for measuring cytosolic free magnesium. Raju B, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C540–8

Synthesis and antifungal activity of novel isoxazolidine compounds. Mullen GB, et al. **Ann N Y Acad Sci** 1988; 544:32–45

Synthesis of 5-alkyl-4-oxazoleacetic acid derivatives with hypolipidemic activities. Seki M, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4435–40

Synthesis and biological activity of the metabolites of [3,4-bis(4-methoxyphenyl)-5-isoxazolyl]acetic acid. Yamawaki I, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug; 36(8):3142–6

Studies on antifungal agents. 19. Effect of the C-5-aromatic substitution on the in vitro activity of novel 3,5-substituted isoxazolidines. Mullen GB, et al. **Chemotherapy** 1989; 35(1):39–42

Synthesis and biological activity of a GABAA agonist which has no effect on benzodiazepine binding and of structurally related glycine antagonists. Byberg JR, et al. **Drug Des Deliv** 1987 May;1(4):261–74

Anticonvulsant activities of phenyl-substituted bicyclic 2,4-oxazolidinediones and monocyclic models. Comparison with binding to the neuronal voltage-dependent sodium channel. Brouillette WJ, et al. **J Med Chem** 1988 Nov; 31(11):2218–21

Synthesis and structure-activity studies of some disubstituted phenylisoxazoles against human picornavirus. Diana GD, et al. **J Med Chem** 1989 Feb;32(2):450–5

Evaluation and synthesis of aminohydroxyisoxazoles and pyrazoles as potential glycine agonists. Drummond J, et al. **J Med Chem** 1989 Sep;32(9):2116–28

Antibacterials. Synthesis and structure–activity studies of 3–aryl–2–oxooxazolidines. 1. The "B" group. Gregory WA, et al. **J Med Chem** 1989 Aug;32(8):1673–81

Studies on antifungal agents. 23. Novel substituted 3,5–diphenyl–3–(1H–imidazol–1–ylmethyl)–2–alkylisoxazolidine derivatives. Mullen GB, et al. **J Med Chem** 1988 Oct;31(10):2008–14

5–([aryl or aryloxy (or thio)]methyl)–3–(1H–imidazol–1–ylmethyl)–3–(2–thienyl)–2–methylisoxazolidine derivatives as novel antifungal agents. Mullen GB, et al. **J Pharm Sci** 1988 Dec; 77(12):1050–4

Nuclear magnetic resonance spectra and mosquito repellent properties of some oxazolidine derivatives of 3–methyl–4–hexenal. Taylor WG, et al. **J Pharm Sci** 1989 Feb;78(2):109–13

Synthesis and pharmacological properties of derivatives of isoxazolo [5,4–d]–6,7–dihydropyrimidines. Machoń Z, et al. **Pol J Pharmacol Pharm** 1988 Mar–Apr;40(2):209–16

[Thiophene as a structural element in physiologically active substances. 17. Thienoisoxazoles through nucleophile substitution] Binder D, et al. **Arch Pharm (Weinheim)** 1988 Jul;321(7):391–5 (Eng. Abstr.) (Ger)

DIAGNOSTIC USE

Impermeant potential–sensitive oxonol dyes: I. Evidence for an "on–off" mechanism. George EB, et al. **J Membr Biol** 1988 Aug;103(3):245–53

Monitoring cytosolic free magnesium in cultured chicken heart cells by use of the fluorescent indicator Furaptra. Murphy E, et al. **Proc Natl Acad Sci U S A** 1989 Apr; 86(8):2981–4

IMMUNOLOGY

Cell–mediated immunity is enhanced by cytostatic drugs continuously released at the site of antigenic stimulation. Claessen AM, et al. **Cancer Immunol Immunother** 1989; 28(2):131–5

Regulation of lymphocyte proliferation in contact sensitivity: homeostatic mechanisms and a possible explanation of antigenic competition. Kimber I, et al. **Immunology** 1989 Apr;66(4):577–82

Variable region primary structures of a high affinity anti–fluorescein immunoglobulin M cryoglobulin exhibiting oxazolone cross–reactivity. Dombrink–Kurtzman MA, et al. **J Biol Chem** 1989 Mar 15;264(8):4513–22

ISOLATION & PURIFICATION

Presence of mycobactin–like substance in Mycobacterium leprae. Dhople AM, et al. **Indian J Lepr** 1988 Jul; 60(3):348–59

METABOLISM

Decreasing pH of rat embryos and fluids estimated by transplacental distribution of DMO. Collins MD, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):R542–9

On the metabolism of ditazole in man. Maurer H, et al. **Arzneimittelforschung** 1988 Dec;38(12):1843–5

Reaction of Woodward's reagent K with D–xylose isomerases. Modification of an active site carboxylate residue. Vangrysperre W, et al. **Biochem J** 1989 May 15; 260(1):163–9

Comparison of trimethadione and antipyrine as indicators of oxidative drug metabolizing capacity in man. Tanaka E, et al. **Eur J Clin Pharmacol** 1989;36(6):629–32

Thiocyanate stabilizes AMPA binding to the quisqualate receptor. Nielsen EO, et al. **Eur J Pharmacol** 1988 Nov 22;157(2–3):197–203

Interaction of clonidine and rilmenidine with imidazoline–preferring receptors. Lachaud V, et al. **J Hypertens Suppl** 1988 Dec;6(4):S511–3

Kinetics of the potential–sensitive extrinsic probe oxonol VI in beef heart submitochondrial particles. Smith JC, et al. **J Membr Biol** 1979;46(3):255–82

[3H]zonisamide binding in rat brain. Mimaki T, et al. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):640–2

PHARMACOKINETICS

Pharmacokinetics of rilmenidine. Genissel P, et al. **Am J Med** 1989 Sep 18;87(3C):18S–23S

Simple high–performance liquid chromatographic method for the measurement of toloxatone in rabbit cerebrospinal fluid and plasma. Vistelle R, et al. **J Chromatogr** 1989 May 30; 490(2):387–94

Impermeant potential–sensitive oxonol dyes: III. The dependence of the absorption signal on membrane potential. George EB, et al. **J Membr Biol** 1988 Oct;105(1):55–64

Impermeant potential–sensitive oxonol dyes: II. The dependence of the absorption signal on the length of alkyl substituents attached to the dye. Nyirjesy P, et al. **J Membr Biol** 1988 Oct;105(1):45–53

Sex–related differences in hepatic drug–oxidizing capacity of streptozotocin–induced diabetic rats. Tanaka E, et al. **J Pharmacobiodyn** 1988 Jun;11(6):416–23

The metabolism and excretion of trimethadione in patients with percutaneous transhepatic biliary drainage and renal dysfunction. Tanaka E, et al. **J Pharmacobiodyn** 1989 Mar; 12(3):145–8

Biochemical profile of risperidone, a new antipsychotic. Leysen JE, et al. **J Pharmacol Exp Ther** 1988 Nov; 247(2):661–70

PHARMACOLOGY

Effort blood pressure control in the course of antihypertensive treatment. de Divitiis O, et al. **Am J Med** 1989 Sep 18;87(3C):46S–56S

Antihypertensive drugs and baroreflex sensitivity. Effects of rilmenidine. Harron DW. **Am J Med** 1989 Sep 18; 87(3C):57S–62S

Renal excretory actions of antihypertensive agents. Effects of rilmenidine. Leary WP. **Am J Med** 1989 Sep 18; 87(3C):63S–66S

Recent advances in the pharmacology of rilmenidine. Montastruc JL, et al. **Am J Med** 1989 Sep 18; 87(3C):14S–17S (23 ref.)

Rilmenidine: a novel antihypertensive agent. Safar ME. **Am J Med** 1989 Sep 18;87(3C):24S–29S (43 ref.)

In vitro antifungal activity of novel substituted 3,5–diphenyl–3–(1H–1,2,4–triazol–1–ylmethyl)–2–methylisoxazolidine derivatives. Bennett GA, et al. **Ann N Y Acad Sci** 1988;544:375–7

3–(substituted phenyl)–3–(1H–1,2,4–triazol–1–ylmethyl)–2–methyl–5–[(substituted phenoxy)methyl]–isoxazolidine derivatives. Structure–activity relationships. Bennett GA, et al. **Ann N Y Acad Sci** 1988;544:369–72

In vitro activity of novel 5–carbonyl derivatives of 3–phenyl–3–(1H–imidazol–1–ylmethyl)–2–methyl–isoxazolidines. Bennett GA, et al. **Ann N Y Acad Sci** 1988;544:396–9

In vitro activity of novel cis–5–substituted–3–(2–naphthalenyl)–3–(1H–imidazol–1–ylmethyl)– 2–methylisoxazolidine derivatives. Bennett GA, et al. **Ann N Y Acad Sci** 1988;544:400–2

Novel 5–phenyl(or phenoxyalkyl)–3–(2–furanyl)–3–(1H–imidazol–1–ylmethyl)–2– methylisoxazolidines. In vitro antifungal activity. Bennett GA, et al. **Ann N Y Acad Sci** 1988; 544:384–6

cis–3–(substituted phenyl)–3–(1H–imidazol–1–ylmethyl)–2–methyl–5–([=(substituted phenyl)thio(or amino)]methyl)isoxazolidines. In vitro antifungal activity and structure–activity relationships. DeCory TR, et al. **Ann N Y Acad Sci** 1988; 544:366–8

In vitro antifungal activity of novel substituted 3,5–diphenyl–3–(1H–imidazol–1–ylmethyl)–2–methylisoxazolidine derivatives. DeCory TR, et al. **Ann N Y Acad Sci** 1988;544:363–5

cis–5–alkoxyalkyl–3–phenyl–3–(1H–imidazol–1–ylmethyl)–2– methylisoxazolidine derivatives. Maryniak DM, et al. **Ann N Y Acad Sci** 1988;544:373–4

In vitro antifungal activity and structure–activity relationship studies of novel cis–5–acyloxyalkyl–3–phenyl–3–(1H–imidazol–1–ylmethyl)–2– methylisoxazolidine derivatives. Maryniak DM, et al. **Ann N Y Acad Sci** 1988;544:378–80

In vitro activity of novel 5–(phenyl or phenoxyalkyl)–3–(2–thienyl)–3–(1H–imidazol–1–ylmethyl)–2– methylisoxazolidines. Mullen GB, et al. **Ann N Y Acad Sci** 1988;544:392–5

Substituted 5–phenoxyalkyl–3–phenyl–3–(1H–imidazol–1–ylmethyl)–2– methylisoxazolidines. Antifungal activity and structure–activity relationship studies. Mullen GB, et al. **Ann N Y Acad Sci** 1988;544:359–62

cis–5–alkyl(or alkenyl)–3–phenyl–3–(1H–imidazole–1–ylmethyl)–2–methylisoxazolidine derivatives. In vitro antifungal activity and structure–activity relationships. Swift PA, et al. **Ann N Y Acad Sci** 1988;544:381–3

Insulin and acivicin improve host nutrition and prevent tumor growth during total parenteral nutrition. Chance WT, et al. **Ann Surg** 1988 Oct;208(4):524–31

Mechanism of action and in vitro and in vivo activities of S–6123, a new oxazolidinone compound. Daly JS, et al. **Antimicrob Agents Chemother** 1988 Sep;32(9):1341–6

Mechanism of action of DuP 721: inhibition of an early event during initiation of protein synthesis. Eustice DC, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1218–22

Selection of orally active antifungal agents from 3,5–substituted isoxazolidine derivatives based on acute efficacy–safety profiles. Palmer GC, et al. **Antimicrob Agents Chemother** 1989 Jun;33(6):895–905

Inactivation of Giardia lamblia and Giardia canis cysts by combined and free chlorine. Kong LI, et al. **Appl Environ Microbiol** 1988 Oct;54(10):2580–2

Is free halogen necessary for disinfection? Williams DE, et al. **Appl Environ Microbiol** 1988 Oct;54(10):2583–5

In vitro effects of S.3341 on the spontaneous contractile activity of the rat portal vein: interference with the alpha–adrenergic stimulation. Bourreau JP, et al. **Arch Int Pharmacodyn Ther** 1988 Nov–Dec;296:29–44

New isoxazole derivatives provided with antihypertensive activity. Carenzi A, et al. **Arzneimittelforschung** 1989 Jun; 39(6):642–6

Effects of the combination of acivicin and cis–diamminedichloroplatinum(II) on thymidylate synthesis of A549 lung cancer cells. Futami H, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):31–7

Calyculin A and okadaic acid: inhibitors of protein phosphatase activity. Ishihara H, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):871–7

Inhibition of the mitochondrial phosphate carrier by a reaction with a carboxyl group reagent. Wolf G, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):212–6

Comparative effects of rilmenidine and clonidine on bronchial responses to histamine in asthmatic subjects. Dinh Xuan AT, et al. **Br J Clin Pharmacol** 1988 Dec;26(6):703–8

A local circuit neocortical synapse that operates via both NMDA and non–NMDA receptors. Thomson AM, et al. **Br J Pharmacol** 1989 Feb;96(2):406–8

Two distinct quisqualate receptor systems are present on striatal neurons. Weiss S. **Brain Res** 1989 Jul 3; 491(1):189–93

Hippocampal kindling enhances excitatory amino acid receptor–mediated polyphosphoinositide hydrolysis in the hippocampus and amygdala/pyriform cortex. Yamada N, et al. **Brain Res** 1989 Jun 19;490(1):126–32

Complex responses activated by ibotenate in postnatal rat hippocampal neurons. Zorumski CF, et al. **Brain Res** 1989 Aug 7;494(1):193–7

Effects of GABA, THIP, and potassium on excitability of myelinated axons of isolated amphibian spinal roots. Liske S, et al. **Can J Physiol Pharmacol** 1989 Jun;67(6):682–5

5,5'–Dimethyloxazolidine–2,4–dione is a strong inducer of differentiation of human promyelocytic leukemia (HL–60) cells. Calderon TM, et al. **Cell Differ Dev** 1989 May; 26(3):181–90

Studies on antifungal agents. 17. Effects of the C–5–substitution on the in vitro activity of novel 3,5–substituted isoxazolidines. Dormer PA, et al. **Chemotherapy** 1988;34(5):411–4

Studies on antifungal agents. 20. Effect of the nitrogen substitution on the in vitro activity of novel 3,5–substituted isoxazolidines. Swift PA, et al. **Chemotherapy** 1989; 35(2):130–2

Acivicin inhibits Crithidia fasciculata growth in a serum–free medium and inactivates carbamoyl–phosphate synthetase II in vivo. Aoki T, et al. **Comp Biochem Physiol [C]** 1988; 90(2):391–6

The effects of acivicin on glutamine transport by renal basolateral membrane vesicles. Sastrasinh M, et al. **Contrib Nephrol** 1988;63:43–8

Calyculins, potent antitumour metabolites from the marine sponge Discodermia calyx: biological activities. Kato Y, et al. **Drugs Exp Clin Res** 1988;14(12):723–8

Blockade of sustained repetitive action potentials in cultured spinal cord neurons by zonisamide (AD 810, CI 912), a novel anticonvulsant. Rock DM, et al. **Epilepsy Res** 1989 Mar–Apr;3(2):138–43

Comparative in vitro activity of the new oxazolidinones DuP 721 and DuP 105 against staphylococci and streptococci. Mini E, et al. **Eur J Clin Microbiol Infect Dis** 1989 Mar; 8(3):256–60

Rilmenidine selectivity for imidazoline receptors in human brain. Bricca G, et al. **Eur J Pharmacol** 1989 Apr 25; 163(2–3):373–7

Inhibitory effects of a new, potent, centrally acting muscle relaxant, (4S,5R)–4–(2–methylpropyl)–3–[3–(perhydroazepin–1–yl)propyl]–5– phenyl–1,3–oxazolidin–2–one (NC–1200) on micturition contractions of the bladder in rats. Kimura A, et al. **Eur J Pharmacol** 1988 Jul 26;152(1–2):55–62

The effects of intra–subicular ibotenate on resistance to extinction after continuous or partial reinforcement. Sinden JD, et al. **Exp Brain Res** 1988;73(2):315–9

Effects of unilateral microinjections of GABAergic drugs into the inferior colliculus on auditory evoked potentials and on audiogenic seizure susceptibility. Bagri A, et al. **Exp Neurol** 1989 Apr;104(1):82–7

GABA agonist promoted formation of low affinity GABA receptors on cerebellar granule cells is restricted to early development. Belhage B, et al. **Int J Dev Neurosci** 1988; 6(2):125–8

Temporal development of GABA agonist induced alterations in ultrastructure and GABA receptor expression in cultured cerebellar granule cells. Hansen GH, et al. **Int J Dev Neurosci** 1987;5(3):263–9

Rilmenidine (S 3341) and the sympathoadrenal system: adrenoreceptors, plasma and adrenal catecholamines in dogs. Valet P, et al. **J Auton Pharmacol** 1988 Dec; 8(4):319–26

Pharmacologic effects of A–56234, a new high–ceiling diuretic. Luther RR, et al. **J Clin Pharmacol** 1988 Sep; 28(9):795–803

Inhibition of dopamine beta–hydroxylase by goitrin, a natural antithyroid compound. Zenker N, et al. **J Nat Prod** 1988 Sep–Oct;51(5):862–5

Monoamine oxidase–B inhibition: a comparison of in vivo and ex vivo measures of reversible effects. Turkish S, et al. **J Neural Transm** 1988;74(3):141–8

AMPA, kainate, and quisqualate activate a common receptor–channel complex on embryonic chick motoneurons. Zorumski CF, et al. **J Neurosci** 1988 Nov; 8(11):4277–86

Rilmenidine differs from clonidine in that it lacks histamine–like activity. Li CG, et al. **J Pharm Pharmacol** 1989 Jul;41(7):464–8

Calcium–independent activation of contractile apparatus in smooth muscle by calyculin–A. Ishihara H, et al.

J Pharmacol Exp Ther 1989 Jul;250(1):388–96

Genetic and molecular analyses of spontaneous mutants of human rhinovirus 14 that are resistant to an antiviral compound. Heinz BA, et al. **J Virol** 1989 Jun;63(6):2476–85

Ibotenic acid–induced hippocampal lesions and amygdaloid kindling in rats. Kondo S, et al.
Jpn J Psychiatry Neurol 1988 Sep;42(3):623–4

Release of acetylcholine and its dopaminergic control in slices from striatal grafts in the ibotenic acid–lesioned rat striatum. Wichmann T, et al.
Naunyn Schmiedebergs Arch Pharmacol 1988 Dec; 338(6):623–31

Amplification by glycine of the effect of the GABA transport inhibitor THPO on synaptosomal GABA level. Wood JD, et al. **Neurochem Res** 1988 Oct;13(10):917–21

Specific petit mal anticonvulsants reduce calcium currents in thalamic neurons. Coulter DA, et al. **Neurosci Lett** 1989 Mar 13;98(1):74–8

Ibotenic acid stimulates D-[3H]aspartate release from cultured cerebellar granule cells. Hubert JP, et al.
Neurosci Lett 1989 Jan 30;96(3):345–50

Role of quisqualic acid receptors in the hypermotility response produced by the injection of AMPA into the nucleus accumbens. Shreve PE, et al.
Pharmacol Biochem Behav 1988 Jun;30(2):379–84

Risperidone (R 64 766), a potent and complete LSD antagonist in drug discrimination by rats. Meert TF, et al. **Psychopharmacology (Berlin)** 1989;97(2):206–12

Differential effects of the new antipsychotic risperidone on large and small motor movements in rats: a comparison with haloperidol. Megens AA, et al.
Psychopharmacology (Berlin) 1988;95(4):493–6

Animal behavioral and neurochemical effects of the CNS toxic amino acid antitumor agent, acivicin. McGovren JP, et al. **Res Commun Chem Pathol Pharmacol** 1989 Feb; 63(2):215–29

[Search for new beta-adrenoblockaders among derivatives of (3-amino-2-hydroxypropoxy) phenoxymethyl isoxazole] Iuzhakov SD, et al. **Farmakol Toksikol** 1988 Jul–Aug; 51(4):47–52 (Eng. Abstr.) **(Rus)**

POISONING

Neuronal depletion of the amygdala resembles the learning deficits induced by low level lead exposure in rats. Munoz C, et al. **Neurotoxicol Teratol** 1989 May–Jun;11(3):257–64

THERAPEUTIC USE

Risperidone (R64 766) in psychotic patients. A first clinical therapeutic exploration. Roose K, et al.
Acta Psychiatr Belg 1988 May–Jun;88(3):233–41

Second International Symposium on Rilmenidine. Paris, March 11, 1988. Proceedings. **Am J Med** 1989 Sep 18; 87(3C):1S–74S

Treatment of hypertension in diabetic patients. Lambert AE, et al. **Am J Med** 1989 Sep 18;87(3C):30S–33S

Acceptability of rilmenidine and long-term surveillance of plasma concentrations in hypertensive patients with renal insufficiency. Lins RL, et al. **Am J Med** 1989 Sep 18; 87(3C):41S–45S

Comparisons of ketoconazole, PR 969–566, PR 967–234, and PR 967–248 as antifungals in vitro and in the rat model of candidal vaginitis based on efficacy/safety profiles. Palmer GC, et al. **Ann N Y Acad Sci** 1988;544:387–91

Anticonvulsant activity of intracerebroventricularly administered glial GABA uptake inhibitors and other GABAmimetics in chemical seizure models. Gonsalves SF, et al. **Epilepsy Res** 1989 Jul–Aug;4(1):34–41

GABA uptake inhibitors: relevance to antiepileptic drug research. Krogsgaard-Larsen P, et al. **Epilepsy Res** 1987 Mar;1(2):77–93 (131 ref.)

Phase II trials of 5-day vinblastine infusion (NSC 49842), L-alanosine (NSC 153353), acivicin (NSC 163501), and aminothiadiazole (NSC 4728) in patients with recurrent or metastatic renal cell carcinoma. Elson PJ, et al.
Invest New Drugs 1988 Jun;6(2):97–103

Clearance of a persistent human enterovirus infection of the mouse central nervous system by the antiviral agent disoxaril. Jubelt B, et al. **J Infect Dis** 1989 May; 159(5):866–71

The antiepileptic effect of zonisamide on patients with refractory seizures and its side effect. Shimizu A, et al. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):583

Early bronchodilating effect of a new oral beta-2-receptor agonist (broxaterol) in bronchial asthma. Chetta A, et al. **Respiration** 1988;53(4):220–4

[Monoamine oxidase inhibitor in the treatment of attention deficit disorder of residual type. Apropos of a case] Parquet PJ, et al. **Encephale** 1988 Nov–Dec;14(6):439–41 (22 ref.) (Eng. Abstr.) **(Fre)**

[Evaluation of the effectiveness and tolerance of broxaterol in 10 patients with reversible bronchospasm] Scoditti S, et al. **Arch Monaldi Mal Torace** 1987 Jul–Aug;42(4):383–8 (Eng. Abstr.) **(Ita)**

[Effectiveness of a new beta 2-agonist (broxaterol) on bronchospasm induced by methacholine (blind study versus salbutamol)] Corrias A, et al. **Pediatr Med Chir** 1989 Jan–Feb;11(1):61–3 (Eng. Abstr.) **(Ita)**

[Efficacy of broxaterol (vs salbutamol) in asthma induced by physical exercise in children] Corrias A, et al.
Pediatr Med Chir 1989 Mar–Apr;11(2):161–3 (Eng. Abstr.) **(Ita)**

TOXICITY

Chronic toxicity of the anticonvulsant zonisamide in beagle dogs. Walker RM, et al. **Fundam Appl Toxicol** 1988 Aug; 11(2):333–42

GM1 ganglioside protects nucleus basalis from excitotoxin damage: reduced cortical cholinergic losses and animal mortality. Mahadik SP, et al. **J Neurosci Res** 1988 Aug; 20(4):479–83

Caudato-nigral transmission in the substantia nigra pars reticulata neurons changes with recovery from circling movements induced by microinfusion of ibotenic acid. I. Behavioral study. Udo M, et al. **Neurosci Res** 1989 Jun; 6(5):475–80

Caudato-nigral transmission in the substantia nigra pars reticulata neurons changes with recovery from circling movements induced by microinfusion of ibotenic acid. II. Electrophysiological study on synaptic transmission. Udo M, et al. **Neurosci Res** 1989 Jun;6(5):481–6

Comparative effects of kainic, quisqualic, and ibotenic acids on phenylethanolamine-N-methyltransferase-containing cells of rat retina. Cohen J. **Toxicology** 1989 Feb; 54(2):177–82

Comparative acute renal effects of three
N-(3,5-dichlorophenyl)carboximide fungicides:
N-(3,5-dichlorophenyl)succinimide, vinclozolin and iprodione. Rankin GO, et al. **Toxicology** 1989 Jun 16; 56(3):263–72

[Effect of bucid on oxidation-reduction processes in the microsomes and mitochondria of the animal liver] Sinitskaia TA, et al. **Gig Sanit** 1989 May;(5):87–8 **(Rus)**

OXAZOLONE see under **OXAZOLES**

OXEDRINE see **SYNEPHRINE**

OXEPINS

ISOLATION & PURIFICATION

Zoapatle XIII. Isolation of water soluble fractions from Montanoa frutescens and some biological activities. Guzmán-Durán A, et al. **Arch Invest Med (Mex)** 1988 Apr–Jun;19(2):157–63

PHARMACOLOGY

The zoapatle XIV—the effect of oral administration of zoapatle upon progesterone plasma levels in pregnant rabbits. Pedrón N, et al. **Contraception** 1988 Sep;38(3):373–9

The zoapatle. XV. Activity of 16
alpha-hydroxy-ent-kauran-19-oic acid isolated from Montanoa hibiscifolia, and its methyl ester on rat and guinea pig uterus. Ponce-Monter H, et al.
J Ethnopharmacol 1988 Dec;24(2–3):127–34

OXIDANTS, PHOTOCHEMICAL

ADVERSE EFFECTS

Environmental cancer, phagocytic oxidant stress and nutritional interactions. Evans PH, et al.
Bibl Nutr Dieta 1989;(43):313–26 (86 ref.)

PHARMACOLOGY

Changes in the viscosity of hyaluronic acid after exposure to a myeloperoxidase-derived oxidant. Baker MS, et al. **Arthritis Rheum** 1989 Apr;32(4):461–7

OXIDASES see **OXIDOREDUCTASES**

OXIDATION-REDUCTION

Problems associated with distinguishing between singlet oxygen and electron transfer photooxygenation reactions. Davidson RS, et al. **Free Radic Res Commun** 1987; 2(4–6):313–20 (40 ref.)

On the role of oxygen in dehydrogenase reactions using tetrazolium salts. Van Noorden CJ. **Histochem J** 1988 Oct; 20(10):587–93

Biological oxidation and the mobilization of mitochondrial calcium during the differentiation of Physarum polycephalum. Nations C, et al. **J Cell Physiol** 1989 Aug; 140(2):311–6

Inhibition of glycolysis alters potassium ion transport and mitochondrial redox activity in rat brain. Raffin CN, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):857–65

Phosphorylation of tyrosine enhances its electron transfer capability: a model of redox modulation as oncogene expression? Peterson DA, et al. **Med Hypotheses** 1988 Aug; 26(4):271–3

Pharmacogenetics and its clinical implications. Part II. Oxidation polymorphism. Horai Y, et al.
Ration Drug Ther 1988 Jun;22(6):1–8 (20 ref.)

Changes in the levels of endogenous antioxidants in the liver of mice with experimental endotoxemia and the protective effects of the antioxidants. Sugino K, et al. **Surgery** 1989 Feb;105(2 Pt 1):200–6

[Evaluation of the antioxidative activity of blood plasma using yolk lipoproteins] Klebanov GI, et al. **Lab Delo** 1988; (5):59–62 (Eng. Abstr.) **(Rus)**

[Several indicators of oxidative processes in fractures of the long bones] Landa VA, et al. **Ortop Travmatol Protez** 1989 Mar;(3):17–20 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Antioxidant and pro-oxidant actions of the plant phenolics quercetin, gossypol and myricetin. Effects on lipid peroxidation, hydroxyl radical generation and bleomycin-dependent damage to DNA. Laughton MJ, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2859–65

A study on the mechanism of the vanadate-dependent NADH oxidation. Liochev SI, et al.
Free Radic Biol Med 1988;5(5–6):349–54

Prevalence of debrisoquine oxidation phenotypes in glaucoma patients. Salminen L, et al. **Int Ophthalmol** 1989 Jan;13(1–2):91–3

Mechanism of endothelial cell shape change in oxidant injury. Hinshaw DB, et al. **J Surg Res** 1989 Apr;46(4):339–49

Deuterium isotope effects as a tool in the study of ethanol oxidation in rat liver microsomes. Lundquist F, et al.
Pharmacol Toxicol 1989 Jul;65(1):45–54

Deuterium isotope effects on ethanol oxidation in perfused rat liver and in rats and rabbits in vivo: application to determine the contribution of various pathways. Lundquist F, et al. **Pharmacol Toxicol** 1989 Jul;65(1):55–62

Effects of propylene glycol on redox state of the perfused rat liver—a note of caution. Schölmerich J, et al.
Res Exp Med (Berl) 1989;189(1):39–42

Differential lymphocyte growth-modifying effects of oxidants: changes in cytosolic Ca+2. Duncan DD, et al. **Toxicol Appl Pharmacol** 1989 Sep 15;100(3):485–97

[Resistance of erythrocytes of different ages to oxidants in persons with hereditary glucosephosphate dehydrogenase deficiency] Ermakova TA, et al. **Gematol Transfuziol** 1989 Mar;34(3):45–8 **(Rus)**

OXIDATIVE PHOSPHORYLATION

see related
UNCOUPLING AGENTS

Effect of cellular inhibitors on the infection of various susceptible cells with vesicular stomatitis virus. Superti F, et al. **Acta Virol (Praha)** 1988 Nov;32(6):487–93

Molecular events in coupling and uncoupling of oxidative phosphorylation. Azzone GF, et al. **Ann N Y Acad Sci** 1988;550:277–88

Heart mitochondrial creatine kinase revisited: the outer mitochondrial membrane is not important for coupling of phosphocreatine production to oxidative phosphorylation. Kuznetsov AV, et al. **Arch Biochem Biophys** 1989 Jan; 268(1):176–90

Energy-induced modulation of the kinetics of oxidative phosphorylation and reverse electron transfer. Hekman C, et al. **Biochemistry** 1988 Sep 20;27(19):7559–65

Study on ATP-generating system and related hexokinase activity in mitochondria isolated from undifferentiated or differentiated HT29 adenocarcinoma cells. Gauthier T, et al. **Biochim Biophys Acta** 1989 Jul 13;975(2):231–8

Differential effects of osmotic pressure on mitochondrial respiratory chain and indices of oxidative phosphorylation. Sitaramam V, et al. **Biochim Biophys Acta** 1989 Jul 13; 975(2):252–66

Relationship between oxidative phosphorylation and adenine nucleotide translocase activity of two populations of cardiac mitochondria and mechanical recovery of ischemic hearts following reperfusion. Duan J, et al.
Can J Physiol Pharmacol 1989 Jul;67(7):704–9

Ca, Mg-ATPase activity of permeabilised rat heart cells and its functional coupling to oxidative phosphorylation of the cells. Kümmel L. **Cardiovasc Res** 1988 May;22(5):359–67

A study on Na+ -coupled oxidative phosphorylation: ATP formation supported by artificially imposed delta pNa and delta pK in Vibrio alginolyticus cells. Dibrov PA, et al. **J Bioenerg Biomembr** 1989 Jun;21(3):347–57

Role of energy in oxidative phosphorylation. Matsuno-Yagi A, et al. **J Bioenerg Biomembr** 1988 Aug;20(4):481–502 (66 ref.)

A possible role of inorganic phosphate as a regulator of oxidative phosphorylation in combined urea synthesis and gluconeogenesis in perfused rat liver. A phosphorus magnetic resonance spectroscopy study. Tanaka A, et al. **J Biol Chem** 1989 Jun 15;264(17):10034–40

Serum CK, calcium, magnesium, and oxidative phosphorylation in mdx mouse muscular dystrophy. Glesby MJ, et al. **Muscle Nerve** 1988 Aug;11(8):852–6

Room for theory? [letter] Fair CM. **Nature** 1989 Jul 27; 340(6231):260

Oxidative phosphorylation and activity of some chosen oxidoreductases of mitochondria of rat brain subjected to severe environmental hyperthermia. Skonieczna M, et al. **Neuropatol Pol** 1988;26(2):245–57

Prognosis of newborn infants with hypoxic-ischemic brain injury assessed by phosphorus magnetic resonance spectroscopy. Azzopardi D, et al. **Pediatr Res** 1989 May; 25(5):445–51

Carnitine deficiency, mitochondrial dysfunction and the heart. Identical defect of oxidative phosphorylation in muscle mitochondria in cardiomyopathy due to carnitine loss and in Duchenne muscular dystrophy. Scholte HR, et al. **Wien Klin Wochenschr** 1989 Jan 6;101(1):12–7

[The kinase C system in the regulation of intracellular metabolism] Ratajczak MZ, et al. **Pol Tyg Lek** 1988 Jul 25;43(30):963–7 **(Pol)**

[Mechanism and significance of ribosomal protein S6 in

eukaryotes] Jakubowicz T. **Postepy Biochem** 1988; 34(3):131–45 (108 ref.) **(Pol)**

[The role of adenine nucleotide translocator in the regulation of oxidative phosphorylation in heart mitochondria] Kholodenko BN, et al. **Biokhimiia** 1988 Jun;53(6):1009–12 (Eng. Abstr.) **(Rus)**

[Oxidative phosphorylation and lipid peroxidation of the liver mitochondria in rats after acute benzene poisoning] Trifonov IuA, et al. **Gig Sanit** 1989 Mar;(3):32–4 (Eng. Abstr.) **(Rus)**

[The effect of smoking and alcohol on oxidative phosphorylation in mitochondria in the myocardium] Gvozdjáková A, et al. **Bratisl Lek Listy** 1989 Mar; 90(3):175–9 (Eng. Abstr.) **(Slo)**

DRUG EFFECTS

Effect of oleic acid on mitochondrial oxidative phosphorylation in rat brain slices. Ogawa M, et al. **Biochem Int** 1988 Oct;17(4):773–82

Local protons and uncoupling of aerobic and artificial delta muH-driven ATP synthesis. Luvisetto S, et al. **Biochemistry** 1989 Feb 7;28(3):1109–16

Nature of proton cycling during gramicidin uncoupling of oxidative phosphorylation. Luvisetto S, et al. **Biochemistry** 1989 Feb 7;28(3):1100–8

Uncoupling of oxidative phosphorylation: different effects of lipophilic weak acids and electrogenic ionophores on the kinetics of ATP synthesis. Matsuno-Yagi A, et al. **Biochemistry** 1989 May 16;28(10):4367–74

Mechanism of uncoupling of oxidative phosphorylation by gramicidin. Rottenberg H, et al. **Biochemistry** 1989 May 16;28(10):4355–60

Quantitative analyses of the uncoupling activity of substituted phenols with mitochondria from flight muscles of house flies. Miyoshi H, et al. **Biochim Biophys Acta** 1988 Oct 5;935(3):312–21

Structural requirements of salicylanilides for uncoupling activity in mitochondria: quantitative analysis of structure-uncoupling relationships. Terada H, et al. **Biochim Biophys Acta** 1988 Dec 7;936(3):504–12

Metabolism of round spermatids: gossypol induces uncoupling of respiratory chain and oxidative phosphorylation. Nakamura M, et al. **Biol Reprod** 1988 Nov;39(4):771–8

Enhanced oxidative phosphorylation in rat liver mitochondria following prolonged in vivo treatment with imipramine. Katyare SS, et al. **Br J Pharmacol** 1988 Nov; 95(3):914–22

Effects of 6-hydroxydopamine on oxidative phosphorylation of mitochondria from rat striatum, cortex, and liver. Thakar JH, et al. **Can J Physiol Pharmacol** 1988 Apr;66(4):376–9

Inhibition of oxidative phosphorylation by organotin thiocarbamates. Chandra S, et al. **Chem Biol Interact** 1989; 71(1):21–36

QSAR studies of hydrazone uncouplers of oxidative phosphorylation. Winkler DA, et al. **Drug Des Deliv** 1988 Jul;3(2):191–207

Uncoupling effect of protonophoric and nonprotonophoric analogs of carbonyl cyanide phenylhydrazone on mitochondrial oxidative phosphorylation. Antalik M, et al. **Gen Physiol Biophys** 1988 Oct;7(5):517–28

Functional state of rat liver and kidney mitochondria during sterigmatocystin toxicosis. Banu S, et al. **Indian J Exp Biol** 1988 Nov;26(11):858–9

Organic hydroperoxides at high concentrations cause energization and activation of ATP synthesis in mitochondria. Marshansky V. **J Biol Chem** 1989 Mar 5; 264(7):3670–3

Chloride-dependent uncoupling of oxidative phosphorylation by triethyllead and triethyltin increases cytosolic free calcium in guinea pig cerebral cortical synaptosomes [published erratum appears in J Neurochem 1989 Feb;52(2):661] Kauppinen RA, et al. **J Neurochem** 1988 Nov;51(5):1617–25

Effect of the plasticizer di-(2-ethylhexyl)phthalate on oxidative phosphorylation in rat liver mitochondria: modification of the function of the adenine nucleotide translocator. Kora S, et al. **J Pharmacobiodyn** 1988 Dec; 11(12):773–8

Pentachlorobutadienyl-L-cysteine uncouples oxidative phosphorylation by dissipating the proton gradient. Schnellmann RG, et al. **Toxicol Appl Pharmacol** 1989 Sep 15;100(3):498–505

Effects of cyclosporine on oxidative phosphorylation and adenylate energy charge of regenerating rat liver. Uemoto S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):924–5

[A compensatory low-energy shift in the respiration of liver mitochondria exposed to a detergent] Zhivotnikova NV, et al. **Gig Sanit** 1988 Dec;(12):80–1 **(Rus)**

OXIDES

see related
CYCLIC N-OXIDES
CYCLIC S-OXIDES

Structure of superconducting thin films of YBa2Cu3O7-x grown on SrTiO3 and cubic zirconia. Tietz LA, et al. **J Electron Microsc Tech** 1988 Mar;8(3):263–72

Re: Effect of silver oxide/trichloroisocyanuric acid antimicrobial urinary drainage system on catheter-associated bacteriuria [letter] Burke HB. **J Urol** 1989 May;141(5):1213

Chlorine dioxide sterilization of implanted right atrial catheters in rabbits. Dennis MB Jr, et al. **Lab Anim Sci** 1989 Jan;39(1):51–5

Lithium/silver vanadium oxide batteries for implantable defibrillators. Takeuchi ES, et al. **PACE** 1988 Nov;11(11 Pt 2):2035–9

[Heme activated oxidations using the chlorite-oxygen complex "TCDO" (Oxoferin)—an overview] Elstner EF. **Z Naturforsch [C]** 1988 Nov-Dec;43(11-12):893–902 (Eng. Abstr.) **(Ger)**

ADMINISTRATION & DOSAGE

Effect of oral adsorbent on blood metabolites in hepatic failure dogs. Hiraishi M, et al. **Int J Artif Organs** 1989 Feb;12(2):114–20

[Clinical experiences with tetrachlorodecaoxide in the local treatment of difficult-to-heal wounds] Weise K, et al. **Aktuel Traumatol** 1988 Oct;18(5):219–25 (Eng. Abstr.) **(Ger)**

[Prevention of extravasation necroses as a complication following intravenous cytostatic drug therapy. Results of an open pilot study] Kolarić K, et al. **Onkologie** 1988 Oct; 11(5):238–40 (Eng. Abstr.) **(Ger)**

[Increase of oxygen partial pressure and acceleration of wound healing by tetrachlorodecaoxide] Weiler-Mithoff EM, et al. **Z Hautkr** 1989 Mar 15;64(3):208–11 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

[Damage to blood cells caused by oxoferin?] Elstner E. **Klin Wochenschr** 1989 Jul 17;67(14):741–2 **(Ger)**

ANALYSIS

Determination of chlorine and chlorine dioxide in workplace air by impinger collection and ion-chromatographic analysis. Björkholm E, et al. **J Chromatogr** 1988 Dec 21; 457:409–14

Oxygen ordering and twinning in YBa2Cu3O7-x. Barry JC. **J Electron Microsc Tech** 1988 Mar;8(3):325–37

Examples of high-resolution electron microscopy (HREM) investigation of complex oxides related to perovskite. Hervieu M. **J Electron Microsc Tech** 1989 Mar;11(3):202–21

Evaluation of high-resolution electron microscopy as a method for studying Y-Ba-Cu-O superconductors. Krakow W, et al. **J Electron Microsc Tech** 1988 Mar; 8(3):273–84

Electron microscopy study of twin behavior in GdBa2Cu3Ox and YBa2Cu3Ox. Mitchell TE, et al. **J Electron Microsc Tech** 1988 Mar;8(3):317–23

Analytical electron microscopy study of high Tc superconductor YBa2Cu3O7. Sabatini RL, et al. **J Electron Microsc Tech** 1988 Mar;8(3):307–9

Application of convergent beam electron diffraction in the structural study of high-temperature superconducting oxides. Zou XD, et al. **J Electron Microsc Tech** 1987 Dec; 7(4):269–75

PHARMACOLOGY

Time kinetics of hemoglobin and myoglobin activation by tetrachlorodecaoxide (TCDO). Youngman RJ, et al. **Free Radic Res Commun** 1986;1(5):311–9

Inactivation of bacteria by Purogene. Harakeh S, et al. **J Appl Bacteriol** 1988 May;64(5):459–63

Effects of dopamine beta-monooxygenase substrate analogs on ascorbate levels and norepinephrine synthesis in adrenal chromaffin granule ghosts. Wimalasena K, et al. **J Biol Chem** 1989 Jan 5;264(1):124–30

The effectiveness of two disinfectants on denture base acrylic resin with an organic load. Bell JA, et al. **J Prosthet Dent** 1989 May;61(5):580–3

[Oxoferin and sodium chlorite—a comparison] Habermann E, et al. **Klin Wochenschr** 1989 Jan 4;67(1):20–5 (Eng. Abstr.) **(Ger)**

[Use of hydrogen peroxide and lead oxide for purification of urea-contaminated water] Vasilenko II, et al. **Kosm Biol Aviakosm Med** 1989 May-Jun;23(3):73–5 **(Rus)**

THERAPEUTIC USE

Tetrachlorodecaoxygen anion complex treatment after localized X irradiation of the rat colon. Breiter N, et al. **Br J Radiol** 1989 Apr;62(736):381–3

Treatment of herpes genitalis with new topical agent, Allay gel [letter] Lawrence AG. **Genitourin Med** 1988 Dec; 64(6):395

[Value of the Practitioner's Ambulatory Treatment in treating leg ulcers] Kalis B, et al. **Phlebologie** 1989 Jan-Mar; 42(1):169–73 **(Fre)**

[Calcium oxide therapy of periapical lesions. A clinical contribution] Iacobelli L, et al. **Minerva Stomatol** 1989 Jun; 38(6):623–7 (Eng. Abstr.) **(Ita)**

[Periapical lesions treated with CaO. Histological controls] Iacobelli L, et al. **Minerva Stomatol** 1989 Jun;38(6):639–44 (Eng. Abstr.) **(Ita)**

[Effect of oral-adsorbent (AST-120) in chronic renal failure (CRF) in rats] Sakai T, et al. **Nippon Jinzo Gakkai Shi** 1989 Apr;31(4):359–65 (Eng. Abstr.) **(Jpn)**

TOXICITY

Effects of ingestion of lead monoxide alloy on male mouse reproduction. al-Hakkak ZS, et al. **Arch Toxicol** 1988 Aug; 62(1):97–100

Toxicity of chlorine dioxide to early life stages of marine organisms. Hose JE, et al. **Bull Environ Contam Toxicol** 1989 Mar;42(3):315–9

Toxicity of metallic ions and oxides to rabbit alveolar macrophages. Labedzka M, et al. **Environ Res** 1989 Apr; 48(2):255–74

Teratogenic evaluation of a polybromodiphenyl oxide mixture in New Zealand white rabbits following oral exposure. Breslin WJ, et al. **Fundam Appl Toxicol** 1989 Jan; 12(1):151–7

OXIDOREDUCTASES

The magnetic properties of the nickel cofactor F430 in the enzyme methyl-coenzyme M reductase of Methanobacterium thermoautotrophicum. Cheesman MR, et al. **Biochem J** 1989 Jun 1;260(2):613–6

Type 2-depleted fungal laccase. Hanna PM, et al. **Biochem J** 1988 Jul 15;253(2):561–8

Two structural types of mercury reductases and possible ways of their evolution. Bogdanova ES, et al. **FEBS Lett** 1989 Apr 24;247(2):333–6

The magnetic and electronic properties of Methanobacterium thermoautotrophicum (strain delta H) methyl coenzyme M reductase and its nickel tetrapyrrole cofactor F430. A low temperature magnetic circular dichroism study. Hamilton CL, et al. **J Biol Chem** 1989 Jul 15; 264(20):11605–13

X-ray crystal structure of the blue oxidase ascorbate oxidase from zucchini. Analysis of the polypeptide fold and a model of the copper sites and ligands. Messerschmidt A, et al. **J Mol Biol** 1989 Apr 5;206(3):513–29

ADMINISTRATION & DOSAGE

Synergistic antiandrogenic effects of topical combinations of 5 alpha-reductase and androgen receptor inhibitors in the hamster sebaceous glands. Matias JR, et al. **J Invest Dermatol** 1988 Nov;91(5):429–33

ANALYSIS

Methylenetetrahydrofolate dehydrogenases in normal and transformed mammalian cells. MacKenzie RE, et al. **Adv Enzyme Regul** 1988;27:31–9

A luminometric assay for peroxisomal beta-oxidation. Effects of fasting and streptozotocin-diabetes on peroxisomal beta-oxidation. Osmundsen H, et al. **Biochem J** 1989 May 15;260(1):215–20

Structure of the active site of sulfite oxidase. X-ray absorption spectroscopy of the Mo(IV), Mo(V), and Mo(VI) oxidation states. George GN, et al. **Biochemistry** 1989 Jun 13;28(12):5075–80

A form of cytochrome P450 in man, orthologous to form d in the rat, catalyses the O-deethylation of phenacetin and is inducible by cigarette smoking. Sesardic D, et al. **Br J Clin Pharmacol** 1988 Oct;26(4):363–72

Using the scoparone O-demethylase assay for categorizing types of hepatic microsomal monooxygenase inducers. Kato S, et al. **Bull Environ Contam Toxicol** 1989 Apr; 42(4):489–94

Occurrence and possible adaptive significance of some histochemically demonstrable dehydrogenases in two entosymbiotic rhabdocoels (Platyhelminthes: Turbellaria). Jennings JB, et al. **Comp Biochem Physiol [B]** 1979; 62(4):301–4

Enzymatic characterization of three aeromonas species using API Peptidase, API "Osidase," and API Esterase test kits. Carnahan AM, et al. **Diagn Microbiol Infect Dis** 1988 Aug; 10(4):195–203

Molecular differences between rat-liver and rat-kidney biliverdin reductase. Implications for their in vivo regulation. Cascone O, et al. **Eur J Biochem** 1989 Jan 15; 179(1):123–30

The nature of the cupric site in nitrous oxide reductase and of CuA in cytochrome c oxidase. Kroneck PM, et al. **FEBS Lett** 1989 May 8;248(1-2):212–3

Dehydrogenase enzyme histochemistry on freeze-dried or fixed resin-embedded tissue. Murray GI, et al. **Histochem J** 1988 Sep;20(9):491–8

Coordination chemistry of F430. Axial ligation equilibrium between square-planar and bis-aquo species in aqueous solution. Shiemke AK, et al. **J Biol Chem** 1989 Jul 5; 264(19):11236–45

A new approach to enzyme histochemical analysis of biopsy specimens. Murray GI, et al. **J Clin Pathol** 1989 Jul; 42(7):767–71

p-Nitrophenetole deethylase activity of rat liver microsomes entrapped in polyelectrolyte capsules. Jung C, et al. **J Microencapsul** 1987 Jan-Mar;4(1):1–9

Vanillate O-demethylase from Pseudomonas species. Buswell JA, et al. **Methods Enzymol** 1988;161:294–301

Design and applications of sensitive enzyme immunoassays specific for clostridial enoate reductases. Krause G, et al. **Z Naturforsch [C]** 1989 May-Jun;44(5–6):345–52

[The prediction of relapses of herpetic keratitis by determining dehydrogenase activity in the lacrimal fluid] Terekhina NA, et al. **Vestn Oftalmol** 1988 Nov-Dec; 104(6):42–5 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Protoporphyrinogen oxidase as a molecular target for diphenyl ether herbicides. Matringe M, et al. **Biochem J** 1989 May 15;260(1):231–5

Structure–activity relationships of pyrimidines as dihydroorotate dehydrogenase inhibitors. DeFrees SA, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3807–16

Inhibition and covalent modification of rape seed (Brassica napus) enoyl ACP reductase by phenylglyoxal. Cottingham IR, et al. **Biochim Biophys Acta** 1989 May 1;995(3):273–8

The relation between inhibition of cell growth and of dihydroorotic acid dehydrogenase by brequinar sodium. de Kant E, et al. **Cancer Lett** 1989 Jul 15;46(2):123–7

Protoporphyrinogen oxidase inhibition by three peroxidizing herbicides: oxadiazon, LS 82-556 and M&B 39279. Matringe M, et al. **FEBS Lett** 1989 Mar 13;245(1–2):35–8

Isoprenoid (phosphinylmethyl)phosphonates as inhibitors of squalene synthetase. Biller SA, et al. **J Med Chem** 1988 Oct;31(10):1869–71

Antihormonal activities of 5 alpha-reductase and aromatase inhibitors. Zoppi S, et al. **J Steroid Biochem** 1988 Oct; 31(4B):677–83

Effects of the fungicide prochloraz on xenobiotic metabolism in rainbow trout: inhibition in vitro and time course of induction in vivo. Snegaroff J, et al. **Xenobiotica** 1989 Mar; 19(3):255–67

BIOSYNTHESIS

Expression of denitrification enzymes in response to the dissolved oxygen level and respiratory substrate in continuous culture of Pseudomonas stutzeri. Körner H, et al. **Appl Environ Microbiol** 1989 Jul;55(7):1670–6

Phytoalexin synthesis in soybean cells: elicitor induction of reductase involved in biosynthesis of 6'-deoxychalcone. Welle R, et al. **Arch Biochem Biophys** 1989 Jul; 272(1):97–102

Pharmacokinetics and biological activity of 2,3,7,8-tetrachlorodibenzo-p-dioxin. 1. Dose-dependent tissue distribution and induction of hepatic ethoxyresorufin O-deethylase in rats following a single injection. Abraham K, et al. **Arch Toxicol** 1988;62(5):359–68

Toxicity and 7-ethoxyresorufin O-deethylase-inducing potency of coplanar polychlorinated biphenyls (PCBs) in chick embryos. Brunström B, et al. **Arch Toxicol** 1988; 62(4):263–6

Assembly of Escherichia coli fumarate reductase holoenzyme. Latour DJ, et al. **Biochem Cell Biol** 1989 Jun; 67(6):251–9

Structure-dependent induction of aryl hydrocarbon hydroxylase in human breast cancer cell lines and characterization of the Ah receptor. Harris M, et al. **Cancer Res** 1989 Aug 15;49(16):4531–5

High affinity diethylnitrosamine-deethylase in liver microsomes from acetone-induced rats. Puccini P, et al. **Carcinogenesis** 1989 Sep;10(9):1629–34

Induction of monooxygenase activity in the intestine of spot (Leiostomus xanthurus), a marine teleost, by dietary polycyclic aromatic hydrocarbons. van Veld PA, et al. **Drug Metab Dispos** 1988 Sep–Oct;16(5):659–65

A sensitive method for the detection of mutagenic nitroarenes: construction of nitroreductase-overproducing derivatives of Salmonella typhimurium strains TA98 and TA100. Watanabe M, et al. **Mutat Res** 1989 Aug; 216(4):211–20

Effects of ortho- and non-ortho-substituted polychlorinated biphenyl congeners on the hepatic monooxygenase system in scup (Stenotomus chrysops). Gooch JW, et al. **Toxicol Appl Pharmacol** 1989 May;98(3):422–33

Chlorinated drinking water is mutagenic and causes 3-methylcholanthrene type induction of hepatic monooxygenase. Liimatainen A, et al. **Toxicology** 1988 Oct; 51(2–3):281–9

BLOOD

The electron transport chain of the microbicidal oxidase of phagocytic cells and its involvement in the molecular pathology of chronic granulomatous disease. Segal AW. **Biochem Soc Trans** 1989 Jun;17(3):427–34

Analytical studies on beta-lactam antibiotics. II. Displacement effect of beta-lactam antibiotics on bilirubin bound to human serum albumin. Matsuura A, et al. **Chemotherapy** 1988;34(4):345–53

Accurate and specific HPLC assay of coproporphyrinogen III oxidase activity in human peripheral leucocytes. Guo R, et al. **Clin Chim Acta** 1988 Oct 31;177(3):245–52

Lymphocytes are the preferred cells for the measurement of blood coproporphyrinogen oxidase activity. Rossi E, et al. **Clin Chim Acta** 1989 Apr 28;181(1):115–7

Dihydropyrimidine dehydrogenase activity in human blood mononuclear cells. Tuchman M, et al. **Enzyme** 1989; 42(1):15–24

The superoxide-generating respiratory burst oxidase of human neutrophil plasma membrane. Phosphatidylserine as an effector of the activated enzyme. Tamura M, et al. **J Biol Chem** 1988 Nov 25;263(33):17621–6

Serum and cerebrospinal fluid enzymes in subarachnoid haemorrhage. Maiuri F, et al. **Neurol Res** 1989 Mar; 11(1):6–8

[The importance of antioxidative enzymes in regulating lipid peroxidation in human erythrocyte membranes] Verbolovich VP, et al. **Biol Nauki** 1989;(1):27–33 **(Rus)**

[Enzymatic status of lymphocytes and various aspects of prognosis of the course of chronic lymphocytic leukemia] Tsyba NN, et al. **Gematol Transfuziol** 1989 May;34(5):22–6 (Eng. Abstr.) **(Rus)**

[The interleukin system and the energy enzyme activity in lymphocytes of patients with newly detected pulmonary tuberculosis] Mishin VIu, et al. **Probl Tuberk** 1988;(6):55–9 (Eng. Abstr.) **(Rus)**

CHEMICAL SYNTHESIS

The rational construction of new enzymes: design and synthesis of a dehydrogenase which accepts an unnatural substrate. Clarke AR, et al. **Sci Prog** 1989;73(289 Pt 1):117–31 (15 ref.)

DEFICIENCY

Neuropathology in glutaric acidaemia type 1. Chow CW, et al. **Acta Neuropathol (Berl)** 1988;76(6):590–4

Acute and chronic-intermittent isovaleric acidemia: diagnosis and glycine therapy. Elsas LJ 2d, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Aug;30(4):442–51

Multiple defects of the respiratory chain including complex II in a family with myopathy and encephalopathy. Desnuelle C, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):695–700

Molybdenum cofactor deficiency in a patient previously characterized as deficient in sulfite oxidase. Johnson JL, et al. **Biochem Med Metab Biol** 1988 Aug;40(1):86–93

Lipid storage myopathy due to glutaric aciduria type II: treatment of a potentially fatal myopathy. Turnbull DM, et al. **Dev Med Child Neurol** 1988 Oct;30(5):667–72

CT-scan findings in an infant with glutaric aciduria type I. Yager JY, et al. **Dev Med Child Neurol** 1988 Dec; 30(6):808–11 (12 ref.)

Report on a new patient with combined deficiencies of sulphite oxidase and xanthine dehydrogenase due to molybdenum cofactor deficiency. Endres W, et al. **Eur J Pediatr** 1988 Dec;148(3):246–9

Delta 4-3-oxosteroid 5 beta-reductase deficiency described in identical twins with neonatal hepatitis. A new inborn error in bile acid synthesis. Setchell KD, et al. **J Clin Invest** 1988 Dec;82(6):2148–57

A Scandinavian case of isovaleric acidaemia. Gerdes AM, et al. **J Inherited Metab Dis** 1988;11(2):219–20

Isovaleric acidaemia in a premature infant: diagnosis and treatment. Heimler R, et al. **J Inherited Metab Dis** 1988; 11(3):313–4

Attempt at therapy in sulphite oxidase deficiency. Tardy P, et al. **J Inherited Metab Dis** 1989;12(1):94–5

A new case of isolated sulphite oxidase deficiency with rapid fatal outcome. Vianey-Liaud C, et al. **J Inherited Metab Dis** 1988;11(4):425–6

Glutaric aciduria type I: enzymatic and neuroradiologic investigations of two kindreds. Amir N, et al. **J Pediatr** 1989 Jun;114(6):983–9

Sulfite oxidase deficiency: clinical, neuroradiologic, and biochemical features in two new patients. Brown GK, et al. **Neurology** 1989 Feb;39(2 Pt 1):252–7

Kearns-Sayre syndrome and complex II deficiency. Rivner MH, et al. **Neurology** 1989 May;39(5):693–6

Central and peripheral nervous system pathology of homocystinuria due to 5,10-methylenetetrahydrofolate reductase deficiency. Nishimura M, et al. **Pediatr Neurol** 1985 Nov–Dec;1(6):375–8

Acute profound dystonia in infants with glutaric acidemia. Bergman I, et al. **Pediatrics** 1989 Feb;83(2):228–34 (24 ref.)

GENETICS

Chromosomal localization of the gene for the human trifunctional enzyme, methylenetetrahydrofolate dehydrogenase-methenyltetrahydrofolate cyclohydrolase-formyltetrahydrofolate synthetase. Rozen R, et al. **Am J Hum Genet** 1989 Jun;44(6):781–6

Genetics and development of ocular oxidases in the mouse: evidence for a new locus (Eox-1) closely linked with the aldehyde oxidase loci on chromosome 1. Hintz M, et al. **Anim Genet** 1988;19(3):227–36

The aldox-2 locus of Drosophila melanogaster also affects sulfite oxidase and molybdenum metabolism. Bentley MM, et al. **Biochem Genet** 1989 Feb;27(1–2):99–118

Mutagenesis of the N- and C-terminal cysteine pairs of Tn501 mercuric ion reductase: consequences for bacterial detoxification of mercurials. Moore MJ, et al. **Biochemistry** 1989 Feb 7;28(3):1183–94

Gene cloning and sequence determination of leucine dehydrogenase from Bacillus stearothermophilus and structural comparison with other NAD(P)+-dependent dehydrogenases. Nagata S, et al. **Biochemistry** 1988 Dec 13;27(25):9056–62

A comparison of the methyl reductase genes and gene products. Weil CF, et al. **Can J Microbiol** 1989 Jan; 35(1):101–8

Assignment of the rat genes coding for medium-chain acyl-CoA dehydrogenase, isovaleryl-CoA dehydrogenase, and the beta subunit of propionyl-CoA carboxylase to chromosomes 2, 3, and 8, respectively. Szpirer C, et al. **Cytogenet Cell Genet** 1989;50(1):23–6

The relationship between imipramine metabolism and the sparteine oxidation polymorphism. Brøsen K. **Dan Med Bull** 1988 Oct;35(5):460–8 (66 ref.)

Primary structure of the cytochrome P450 lanosterol 14 alpha-demethylase gene from Candida tropicalis. Chen C, et al. **DNA** 1988 Nov;7(9):617–26

Overproduction of peroxide-scavenging enzymes in Escherichia coli suppresses spontaneous mutagenesis and sensitivity to redox-cycling agents in oxyR-mutants. Greenberg JT, et al. **EMBO J** 1988 Aug;7(8):2611–7

Comparison of the NH2-terminal amino acid sequences of the four non-identical subunits of the NAD-linked hydrogenases from Nocardia opaca 1b and Alcaligenes eutrophus H16. Zaborosch C, et al. **Eur J Biochem** 1989 Apr 15;181(1):175–80

Isolation of the gene for cytochrome P450L1A1 (lanosterol 14 alpha-demethylase) from Candida albicans. Kirsch DR, et al. **Gene** 1988 Sep 7;68(2):229–37

Transient expression in mammalian cells of the bacterial reporter gene encoding mercuric reductase: effects of various regulatory elements. Veldhuisen G, et al. **Gene** 1988 Nov 30;71(2):381–90

Isolation of a phytoalexin-detoxification gene from the plant pathogenic fungus Nectria haematococca by detecting its expression in Aspergillus nidulans. Weltring KM, et al. **Gene** 1988 Sep 7;68(2):335–44

Cloning and sequencing of Pseudomonas genes encoding vanillate demethylase. Brunel F, et al. **J Bacteriol** 1988 Oct; 170(10):4924–30

Recruitment of a chromosomally encoded maleylacetate reductase for degradation of 2,4-dichlorophenoxyacetic acid by plasmid pJP4. Kukor JJ, et al. **J Bacteriol** 1989 Jun;171(6):3385–90

An alkyl hydroperoxide reductase induced by oxidative stress in Salmonella typhimurium and Escherichia coli: genetic characterization and cloning of ahp. Storz G, et al. **J Bacteriol** 1989 Apr;171(4):2049–55

Molecular cloning, heterologous expression, and primary structure of the structural gene for the copper enzyme nitrous oxide reductase from denitrifying Pseudomonas stutzeri. Viebrock A, et al. **J Bacteriol** 1988 Oct; 170(10):4658–68

Nucleotide sequence of a chromosomal mercury resistance determinant from a Bacillus sp. with broad-spectrum mercury resistance. Wang Y, et al. **J Bacteriol** 1989 Jan; 171(1):83–92

Structure and comparative analysis of the genes encoding component C of methyl coenzyme M reductase in the extremely thermophilic archaebacterium Methanothermus fervidus. Weil CF, et al. **J Bacteriol** 1988 Oct; 170(10):4718–26

Isolation and characterization of cDNA clones encoding the murine NAD-dependent methylenetetrahydrofolate dehydrogenase-methenyltetrahydrofolate cyclohydrolase. Bélanger C, et al. **J Biol Chem** 1989 Mar 25;264(9):4837–43

Primary structure of a human trifunctional enzyme. Isolation of a cDNA encoding methylenetetrahydrofolate dehydrogenase-methenyltetrahydrofolate cyclohydrolase-formyltetrahydrofolate synthetase. Hum DW, et al. **J Biol Chem** 1988 Nov 5;263(31):15946–50

Conservation of central nervous system glutaryl-coenzyme A dehydrogenase in fruit-eating bats with glutaric aciduria and deficient hepatic glutaryl-coenzyme A dehydrogenase. McMillan TA, et al. **J Biol Chem** 1988 Nov 25; 263(33):17258–61

Molecular cloning and nucleotide sequence of cDNAs encoding the precursors of rat long chain acyl-coenzyme A, short chain acyl-coenzyme A, and isovaleryl-coenzyme A dehydrogenases. Sequence homology of four enzymes of the acyl-CoA dehydrogenase family. Matsubara Y, et al. **J Biol Chem** 1989 Sep 25;264(27):16321–31

Characterization of the cysJIH regions of Salmonella typhimurium and Escherichia coli B. DNA sequences of cysI and cysH and a model for the siroheme-Fe4S4 active center of sulfite reductase hemoprotein based on amino acid homology with spinach nitrite reductase. Ostrowski J, et al. **J Biol Chem** 1989 Sep 15;264(26):15726–37

Cloning and sequence analysis of a cDNA for 3-hydroxyisobutyrate dehydrogenase. Evidence for its evolutionary relationship to other pyridine nucleotide-dependent dehydrogenases. Rougraff PM, et al. **J Biol Chem** 1989 Apr 5;264(10):5899–903

The developmentally regulated P100/11E gene of Leishmania major shows homology to a superfamily of reductase genes. Samaras N, et al. **J Biol Chem** 1989 Mar 5;264(7):4251–4

Polymorphic O-demethylation of codeine [letter] Chen ZR, et al. **Lancet** 1988 Oct 15;2(8616):914–5

Peroxisome targeting signal of rat liver acyl-coenzyme A oxidase resides at the carboxy terminus. Miyazawa S, et al. **Mol Cell Biol** 1989 Jan;9(1):83–91

Comparative analysis of genes encoding methyl coenzyme M reductase in methanogenic bacteria. Klein A, et al. **Mol Gen Genet** 1988 Aug;213(2–3):409–20

Nucleotide sequence of a cDNA coding for the NADPH-protochlorophyllide oxidoreductase (PCR) of barley (Hordeum vulgare L.) and its expression in Escherichia coli. Schulz R, et al. **Mol Gen Genet** 1989 Jun; 217(2–3):355–61

Nucleotide sequence of the dmsABC operon encoding the anaerobic dimethylsulphoxide reductase of Escherichia coli. Bilous PT, et al. **Mol Microbiol** 1988 Nov;2(6):785–95

Nucleotide sequence of cytochrome P450 L1A1 (lanosterol 14 alpha-demethylase) from Candida albicans. Lai MH, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):804

Lux C, D and E genes of the Vibrio fischeri luminescence

operon code for the reductase, transferase, and synthetase enzymes involved in aldehyde biosynthesis. Boylan M, et al. **Photochem Photobiol** 1989 May;49(5):681–8

Primary structure of cucumber (Cucumis sativus) ascorbate oxidase deduced from cDNA sequence: homology with blue copper proteins and tissue-specific expression. Ohkawa J, et al. **Proc Natl Acad Sci U S A** 1989 Feb; 86(4):1239–43

Isolation, sequence, and bacterial expression of a cDNA for (S)-tetrahydroberberine oxidase from cultured berberine-producing Coptis japonica cells. Okada N, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):534–8

HISTORY

Commentary on 'Intracellular Localization of Catalase and of Some Oxidases in Rat Liver'. de Duve C. **Biochim Biophys Acta** 1989;1000:317–20

Intracellular localization of catalase and of some oxidases in rat liver. 1960 [classical article] de Duve C, et al. **Biochim Biophys Acta** 1989;1000:321–2

IMMUNOLOGY

Interaction of cellular hydrogenase, cytochrome c3, and desulfoviridin in Desulfovibrio vulgaris Miyazaki with their antibodies. Tamura A, et al. **J Biochem (Tokyo)** 1988 Nov; 104(5):722–6

Immunological identification of the alternative oxidase of Neurospora crassa mitochondria. Lambowitz AM, et al. **Mol Cell Biol** 1989 Mar;9(3):1362–4

ISOLATION & PURIFICATION

Native gel activity stain and preparative electrophoretic method for the detection and purification of pyridine nucleotide-linked dehydrogenases. Seymour JL, et al. **Anal Biochem** 1989 May 1;178(2):243–7

Purification and characterization of an anabolic fumarate reductase from Methanobacterium thermoautotrophicum. Khandekar SS, et al. **Appl Environ Microbiol** 1989 Apr; 55(4):856–61

Purification, immunoassay, and tissue distribution of rat C1-tetrahydrofolate synthase. Cheek WD, et al. **Arch Biochem Biophys** 1989 May 1;270(2):504–12

Multiple forms of biliverdin reductase: modification of the pattern of expression in rat liver by bromobenzene. Huang TJ, et al. **Arch Biochem Biophys** 1989 May 1;270(2):513–20

Purification of prosthetically intact sulfite oxidase from chicken liver using a modified procedure. Kipke CA, et al. **Arch Biochem Biophys** 1989 Apr;270(1):383–90

Characteristics of purified protoporphyrinogen oxidase from barley. Jacobs NJ, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):790–6

Ligninolytic enzymes of the white-rot fungus Phlebia radiata. Niku-Paavola ML, et al. **Biochem J** 1988 Sep 15; 254(3):877–84

The cytochromes of anaerobically grown Escherichia coli. An electron-paramagnetic-resonance study of the cytochrome bd complex in situ. Rothery RA, et al. **Biochem J** 1989 Jul 15;261(2):437–43

Purification and properties of mouse liver coproporphyrinogen oxidase. Bogard M, et al. **Eur J Biochem** 1989 May 1;181(2):417–21

Methyl-coenzyme-M reductase from Methanobacterium thermoautotrophicum (strain Marburg). Purity, activity and novel inhibitors. Ellermann J, et al. **Eur J Biochem** 1989 Sep 1;184(1):63–8

Purification of the F420-reducing hydrogenase from Methanosarcina barkeri (strain Fusaro). Fiebig K, et al. **Eur J Biochem** 1989 Sep 1;184(1):79–88

Identification of the ferroxidase centre in ferritin. Lawson DM, et al. **FEBS Lett** 1989 Aug 28;254(1–2):207–10

Purification and properties of the membrane-associated coenzyme F420-reducing hydrogenase from Methanobacterium formicicum. Baron SF, et al. **J Bacteriol** 1989 Jul;171(7):3846–53

Isolation, characterization, and biological activity of ferredoxin-NAD+ reductase from the methane oxidizer Methylosinus trichosporium OB3b. Chen YP, et al. **J Bacteriol** 1989 Sep;171(9):5012–6

Characterization of anaerobic sulfite reduction by Salmonella typhimurium and purification of the anacrobically induced sulfite reductase. Hallenbeck PC, et al. **J Bacteriol** 1989 Jun;171(6):3008–15

Coupled enzymatic production of sulfite, thiosulfate, and hydrogen sulfide from sulfur: purification and properties of a sulfur oxygenase reductase from the facultatively anaerobic archaebacterium Desulfurolobus ambivalens. Kletzin A. **J Bacteriol** 1989 Mar;171(3):1638–43

Component A3 of the methylcoenzyme M methylreductase system of Methanobacterium thermoautotrophicum delta H: resolution into two components. Rouvière PE, et al. **J Bacteriol** 1989 Sep;171(9):4556–62

Purification and characterization of N-ethylmaleimide reducing enzyme from Candida lipolytica. Mizugaki M, et al. **J Biochem (Tokyo)** 1989 May;105(5):782–4

Purification of a protein doublet that binds to six TGG-containing sequences in the promoter for hamster 3-hydroxy-3-methylglutaryl-coenzyme A reductase. Gil G, et al. **J Biol Chem** 1988 Dec 15;263(35):19009–19

Purification and properties of phloroglucinol reductase from Eubacterium oxidoreducens G-41. Haddock JD, et al. **J Biol Chem** 1989 Mar 15;264(8):4423–7

Purification and some characteristics of nitric oxide reductase-containing vesicles from Paracoccus denitrificans. Hoglen J, et al. **J Biol Chem** 1989 May 5; 264(13):7556–63

Detection of 10 variants of biliverdin reductase in rat liver by two-dimensional gel electrophoresis. Huang TJ, et al. **J Biol Chem** 1989 May 15;264(14):7844–9

An alkyl hydroperoxide reductase from Salmonella typhimurium involved in the defense of DNA against oxidative damage. Purification and properties. Jacobson FS, et al. **J Biol Chem** 1989 Jan 25;264(3):1488–96

One-step purification from Escherichia coli of complex II (succinate: ubiquinone oxidoreductase) associated with succinate-reducible cytochrome b556. Kita K, et al. **J Biol Chem** 1989 Feb 15;264(5):2672–7

Purification, crystallization, and preliminary x-ray diffraction studies of the flavoenzyme mercuric ion reductase from Bacillus sp. strain RC607. Moore MJ, et al. **J Biol Chem** 1989 Aug 25;264(24):14386–8

Purification and some characteristics of a cytochrome c-containing nitrous oxide reductase from Wolinella succinogenes. Teraguchi S, et al. **J Biol Chem** 1989 Feb 5;264(4):1972–9

4-Methoxybenzoate monooxygenase from Pseudomonas putida: isolation, biochemical properties, substrate specificity, and reaction mechanisms of the enzyme components. Bernhardt FH, et al. **Methods Enzymol** 1988; 161:281–94

2-methyl branched-chain acyl-CoA dehydrogenase from rat liver. Ikeda Y, et al. **Methods Enzymol** 1988;166:360–73

Isovaleryl-CoA dehydrogenase from rat liver. Ikeda Y, et al. **Methods Enzymol** 1988;166:374–89

[Simple method for preparative slab gel electrophoresis—application for the purification of dehydrogenases] Ohshima T, et al. **Seikagaku** 1988 May; 60(5):374–7 **(Jpn)**

[Protein disulfide isomerase and thioltransferase] Yamada T, et al. **Tanpakushitsu Kakusan Koso** 1988 Jul;33(9):1551–8 (52 ref.) **(Jpn)**

[Glutathione oxidase] Yoshihama Y, et al. **Tanpakushitsu Kakusan Koso** 1988 Jul;33(9):1559–63 (23 ref.) **(Jpn)**

METABOLISM

Histological and enzyme histochemical study on the injured knee meniscus in human. Järvinen M, et al. **Acta Histochem (Jena)** 1989;85(1):9–14

Hormonal regulation of intramitochondrial Ca2+ and oxidative metabolism in mammalian tissues. McCormack JG, et al. **Adv Exp Med Biol** 1988;232:249–56

The formation of lipoxins and 6,7-dihydrolipoxins by 5-lipoxygenase and reductase partially purified from potato tubers. Ho HY, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:137–40

Reciprocal changes of muscle oxidases and liver enzymes with recovery from iron deficiency. Azevedo JL Jr, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):E401–5

Laccase-mediated detoxification of phenolic compounds. Bollag JM, et al. **Appl Environ Microbiol** 1988 Dec; 54(12):3086–91

Cell-free mercury volatilization activity from three marine caulobacter strains. Ji GY, et al. **Appl Environ Microbiol** 1989 Feb;55(2):523–5

Yeast PAPS reductase: properties and requirements of the purified enzyme. Schwenn JD, et al. **Arch Microbiol** 1988; 150(4):313–9

The in vitro effects of alkanes, alcohols, and ketones on rat lung cytochrome P450-dependent alkoxyphenoxazone dealkylase activities. Rabovsky J, et al. **Arch Toxicol** 1989; 63(1):13–7

Characterization of microsomal and cytoplasmic metyrapone reducing enzymes from mouse liver. Maser E. **Arch Toxicol Suppl** 1989;13:271–4

Stability and immunologic activity of immobilized heparinase and bilirubin oxidase. Comfort AR, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):538–42

Mechanisms for the generation of oxygen radicals by drugs. Ziegler DM. **Basic Life Sci** 1988;49:729–38 (38 ref.)

Nitrous oxide exposure reduces hepatic C1-tetrahydrofolate synthase expression in rats. Barlowe CK, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):245–9

Mitochondria and microsomal membranes have a free radical reductase activity that prevents chromanoxyl radical accumulation. Packer L, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):229–35

Light-independent NADPH-protochlorophyllide oxidoreductase activity in purified plasma membrane from the cyanobacterium Anacystis nidulans. Peschek GA, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):71–8

In vitro carotenogenesis and characterization of the phytoene desaturase reaction in Anacystis. Sandmann G, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):916–21

Stimulation of rat-kidney hexose monophosphate shunt dehydrogenase activity by chronic metabolic acidosis. Peragón J, et al. **Biochem Int** 1989 May;18(5):1041–50

Binding of FAD to 6-hydroxy-D-nicotine oxidase apoenzyme prevents degradation of the holoenzyme. Brandsch R, et al. **Biochem J** 1989 Feb 15;258(1):187–92

Involvement of thiol transferase- and thioredoxin-dependent systems in the protection of 'essential' thiol groups of ornithine decarboxylase. Flamigni F, et al. **Biochem J** 1989 Apr 1;259(1):111–5

The nature of the phosphate complex of sulphite oxidase from electron-paramagnetic-resonance studies. George GN, et al. **Biochem J** 1988 Nov 15;256(1):307–9

Cytochrome P-450-dependent 14 alpha-demethylation of lanosterol in Candida albicans. Hitchcock CA, et al. **Biochem J** 1989 Jun 1;260(2):549–56

The kinetics of ox kidney biliverdin reductase in the pre-steady state. Evidence that the dissociation of bilirubin is the rate-determining step. Rigney E, et al. **Biochem J** 1989 May 1;259(3):709–13

Some physical and immunological properties of ox kidney biliverdin reductase. Rigney EM, et al. **Biochem J** 1988 Oct 15;255(2):431–5

Nitroreductase activity of NADH dehydrogenase of the respiratory redox chain. Smyth GE, et al. **Biochem J** 1989 Feb 1;257(3):859–63

Thiols as myeloperoxidase-oxidase substrates. Svensson BE. **Biochem J** 1988 Jul 15;253(2):441–9

Rat liver microsomal NADPH-supported oxidase activity and lipid peroxidation dependent on ethanol-inducible cytochrome P-450 (P-450IIE1). Ekström G, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1313–9

Circadian rhythm of rat liver dihydropyrimidine dehydrogenase. Possible relevance to fluoropyrimidine chemotherapy. Harris BE, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4759–62

A new cytotoxic, DNA interstrand crosslinking agent, 5-(aziridin-1-yl)-4-hydroxylamino-2-nitrobenzamide, is formed from 5-(aziridin-1-yl)-2,4-dinitrobenzamide (CB 1954) by a nitroreductase enzyme in Walker carcinoma cells. Knox RJ, et al. **Biochem Pharmacol** 1988 Dec 15; 37(24):4661–9

The nitroreductase enzyme in Walker cells that activates 5-(aziridin-1-yl)-2,4-dinitrobenzamide (CB 1954) to 5-(aziridin-1-yl)-4-hydroxylamino-2-nitrobenzamide is a form of NAD(P)H dehydrogenase (quinone) (EC 1.6.99.2). Knox RJ, et al. **Biochem Pharmacol** 1988 Dec 15; 37(24):4671–7

Structure-activity relationship of ligands of dihydrouracil dehydrogenase from mouse liver. Naguib FN, et al. **Biochem Pharmacol** 1989 May 1;38(9):1471–80

Site-directed mutagenesis of yeast C1-tetrahydrofolate synthase: analysis of an overlapping active site in a multifunctional enzyme. Barlowe CK, et al. **Biochemistry** 1989 Mar 7;28(5):2099–106

Mutagenesis of the redox-active disulfide in mercuric ion reductase: catalysis by mutant enzymes restricted to flavin redox chemistry. Distefano MD, et al. **Biochemistry** 1989 Feb 7;28(3):1168–83

Substrate flux through methylenetetrahydrofolate dehydrogenase: predicted effects of the concentration of methylenetetrahydrofolate on its partitioning into pathways leading to nucleotide biosynthesis or methionine regeneration. Green JM, et al. **Biochemistry** 1988 Oct 18; 27(21):8014–22

Resonance Raman studies of Escherichia coli sulfite reductase hemoprotein. 3. Bound ligand vibrational modes. Han SH, et al. **Biochemistry** 1989 Jun 27;28(13):5477–85

Resonance Raman studies of Escherichia coli sulfite reductase hemoprotein. 1. Siroheme vibrational modes. Han SH, et al. **Biochemistry** 1989 Jun 27;28(13):5461–71

Analysis of the kinetic mechanism of the bovine liver mitochondrial dihydroorotate dehydrogenase. Hines V, et al. **Biochemistry** 1989 Feb 7;28(3):1222–6

Mechanistic studies on the bovine liver mitochondrial dihydroorotate dehydrogenase using kinetic deuterium isotope effects. Hines V, et al. **Biochemistry** 1989 Feb 7; 28(3):1227–34

Conformational changes of cytochromes P-450cam and P-450lin induced by high pressure. Hui Bon Hoa G, et al. **Biochemistry** 1989 Jan 24;28(2):651–6

Resonance Raman studies of Escherichia coli sulfite reductase hemoprotein. 2. Fe4S4 cluster vibrational modes. Madden JF, et al. **Biochemistry** 1989 Jun 27;28(13):5471–7

Evidence for the participation of Cys558 and Cys559 at the active site of mercuric reductase. Miller SM, et al. **Biochemistry** 1989 Feb 7;28(3):1194–205

Myeloperoxidase-mediated inhibition of microbial respiration: damage to Escherichia coli ubiquinol oxidase. Rakita RM, et al. **Biochemistry** 1989 Apr 4;28(7):3031–6

Activated conformers of Escherichia coli sulfite reductase heme protein subunit [published erratum appears in Biochemistry 1988 Dec 27;27(26):9226] Young LJ, et al. **Biochemistry** 1988 Jul 12;27(14):4991–9

Superoxidized states of Escherichia coli sulfite reductase heme protein subunit. Young LJ, et al. **Biochemistry** 1988 Aug 9;27(16):5984–90

Role of the 8-double bond of lanosterol in the enzyme-substrate interaction of cytochrome P-450(14DM) (lanosterol 14 alpha-demethylase). Aoyama Y, et al. **Biochim Biophys Acta** 1989 Feb 6;1001(2):196–200

Oxidation of malate by the mitochondrial succinate-ubiquinone reductase. Belikova YO, et al. **Biochim Biophys Acta** 1988 Oct 26;936(1):1–9

Regulation of squalene synthetase in human hepatoma cell line Hep G2 by sterols, and not by mevalonate-derived non-sterols. Cohen LH, et al. **Biochim Biophys Acta** 1989 Mar 14;1002(1):69–73

Enhanced oxidation of bilirubin by an immobilized tri-enzyme system of glucose oxidase, bilirubin oxidase and horseradish peroxidase. Daka NJ, et al.

Biochim Biophys Acta 1989 Jun 27;991(3):487–9
Conversion of 5 alpha–pregnane–3,20–dione, 3 alpha–hydroxy–5 alpha–pregnan–20–one and 3 beta–hydroxy–5 alpha–pregnan–20–one to delta 16–C19 steroids by the reconstituted delta 16–C19–steroid synthetase system. Kohara H, et al.
Biochim Biophys Acta 1989 Apr 25;991(1):141–4
The reaction mechanism of bovine kidney biliverdin reductase. Rigney E, et al. **Biochim Biophys Acta** 1988 Nov 23;957(2):237–42
Accumulation of 14 alpha–methylergosta–8,24(28)–dien–3 beta,6 alpha–diol in 14 alpha–demethylation mutants of Candida albicans: genetic evidence for the involvement of 5–desaturase. Shimokawa O, et al.
Biochim Biophys Acta 1989 May 15;1003(1):15–9
Pyrroloquinoline quinone: a new redox cofactor in eukaryotic enzymes. Hartmann C, et al. **Biofactors** 1988 Jan;1(1):41–9 (82 ref.)
Reductions of 2–enals, dehydrogenation of saturated aldehydes and their racemisation. Thanos I, et al.
Biol Chem Hoppe Seyler 1988 Jun;369(6):451–60
Antioxidant enzymatic systems and oxidative stress in erythrocytes from newborn infants and adults. Pinturo R, et al. **Boll Soc Ital Biol Sper** 1988 Dec;64(12):1113–20
Effect of quinidine on the dextromethorphan O–demethylase activity of microsomal fractions from human liver. Broly F, et al. **Br J Clin Pharmacol** 1989 Jul;28(1):29–36
Effects of copper deficiency on hepatic and cardiac antioxidant enzyme activities in lactose– and sucrose–fed rats. Lynch SM, et al. **Br J Nutr** 1989 Mar;61(2):345–54
Changes in the activity of testosterone–metabolizing enzymes in the brain of male and female zebra finches during the post–hatching period. Vockel A, et al. **Brain Res** 1988 Nov 1;463(2):330–40
Effect of heavy metals ions on enzyme activity in the Mediterranean mussel, Donax trunculus. Mizrahi L, et al.
Bull Environ Contam Toxicol 1989 Jun;42(6):854–9
Toxicity of sodium dichloro S–triazinetrione to Drosophila melanogaster. Shayela S, et al.
Bull Environ Contam Toxicol 1988 Jul;41(1):108–13
Interaction between hydrogenase, nitrogenase, and respiratory activities in a Frankia isolate from Alnus rubra. Murry MA, et al. **Can J Microbiol** 1989 Jun;35(6):636–41
Cytochrome P450–dependent alkoxyphenoxazone dealkylase activity in rat alveolar type II cells: effect of pretreatment with beta–naphthoflavone. Rabovsky J, et al.
Cell Biochem Funct 1989 Apr;7(2):79–89
Involvement of cysteine, serotonin and their analogues in peroxidase–oxidase reactions. Svensson BE.
Chem Biol Interact 1989;70(3–4):305–21
Synergism between substrate and non–substrate thiols in peroxidase–oxidase reactions. Svensson BE.
Chem Biol Interact 1989;70(3–4):323–37
A simple, rapid assay for plasma oxalate in uraemic patients using oxalate oxidase, which is free from vitamin C interference. Rolton HA, et al. **Clin Chim Acta** 1989 Jul 14;182(3):247–54
Isoelectric focusing studies of aldehyde dehydrogenases, alcohol dehydrogenases and oxidases from mammalian anterior eye tissues. Holmes RS, et al.
Comp Biochem Physiol [B] 1989;93(2):271–7
Activity of some dehydrogenase enzymes in mitochondria from Physarum polycephalum. McCarthy JL, et al.
Comp Biochem Physiol [B] 1979;63(4):495–9
Intestinal peroxisomes of goldfish (Carassius auratus)—examination for hydrolase, dehydrogenase and carnitine acetyltransferase activities. Temple NJ, et al.
Comp Biochem Physiol [B] 1979;64(1):57–63
The occurrence of glutathione–insulin transhydrogenase (protein–disulfide interchange enzyme) in the lens. Darrow RM, et al. **Curr Eye Res** 1988 Sep;7(9):861–9
Metabolism of drugs in the eye. Drug–reducing activity of preparations from bovine ciliary body. Shimada S, et al.
Curr Eye Res 1988 Nov;7(11):1069–75
Haloperidol reductase in human and guinea pig livers. Inaba T, et al. **Drug Metab Dispos** 1989 May–Jun;17(3):330–3
Activities of cytosolic and microsomal drug oxidases of rat hepatocytes in primary culture. Sherratt AJ, et al.
Drug Metab Dispos 1989 Jan–Feb;17(1):20–5
Insulin degradation: mechanisms, products, and significance. Duckworth WC. **Endocr Rev** 1988 Aug;9(3):319–45 (345 ref.)
Role of nitroreduction in the synergistic mutational response induced by mixtures of 1– and 3–nitrobenzo[a]pyrene in Salmonella typhimurium. Thornton–Manning JR, et al.
Environ Mol Mutagen 1989;13(3):203–10
The energy–conserving nitric–oxide–reductase system in Paracoccus denitrificans. Distinction from the nitrite reductase that catalyses synthesis of nitric oxide and evidence from trapping experiments for nitric oxide as a free intermediate during denitrification. Carr GJ, et al.
Eur J Biochem 1989 Feb 15;179(3):683–92
Mechanisms of flavoprotein–catalyzed reactions. Ghisla S, et al. **Eur J Biochem** 1989 Apr 15;181(1):1–17 (153 ref.)
Dehydrogenases for the synthesis of chiral compounds. Hummel W, et al. **Eur J Biochem** 1989 Sep 1;184(1):1–13 (114 ref.)
Phosphoenolpyruvate–dependent flavinylation of 6–hydroxy–D–nicotine oxidase. Nagursky H, et al.
Eur J Biochem 1988 Nov 1;177(2):319–25
Kinetics of bilirubin oxidation catalysed by bilirubin oxidase in a water–in–oil microemulsion system. Oldfield C, et al.
Eur J Biochem 1989 Aug 1;183(2):347–55
Nitrous oxide reductase from Pseudomonas stutzeri. Redox properties and spectroscopic characterization of different forms of the multicopper enzyme. Riester J, et al.
Eur J Biochem 1989 Jan 2;178(3):751–62
On the role of phospholipids in the reconstituted cytochrome P–450 system. A model study using dilauroyl and distearoyl glycerophosphocholine. Rietjens IM, et al.
Eur J Biochem 1989 May 1;181(2):309–16
The Na+–motive terminal oxidase activity in an alkalo– and halo–tolerant Bacillus. Semeykina AL, et al.
Eur J Biochem 1989 Aug 15;183(3):671–8
Selective induction of peroxisomal enzymes by the hypolipidemic drug bezafibrate. Detection of modulations by automatic image analysis in conjunction with immunoelectron microscopy and immunoblotting. Beier K, et al. **Eur J Cell Biol** 1988 Aug;46(3):383–93
Immunocytochemical analysis of soluble epoxide hydrolase and catalase in mouse and rat hepatocytes demonstrates a peroxisomal localization before and after clofibrate treatment. Hollinshead M, et al. **Eur J Cell Biol** 1988 Aug; 46(3):394–402
Dihydroorotic acid dehydrogenase activity in actinomycin–D–treated and normal chick embryos. Katdare SM, et al. **Exp Cell Biol** 1988;56(6):285–8
Ultrastructural alterations in ovaries from nifurtimox or benznidazole–treated rats: their relation to ovarian nitroreductive biotransformation of both drugs. de Castro CR, et al. **Exp Mol Pathol** 1989 Jun;50(3):385–97
A methyl–CoM methylreductase system from methanogenic bacterium strain Gö 1 not requiring ATP for activity. Deppenmeier U, et al. **FEBS Lett** 1988 Dec 5;241(1–2):60–4
Reductive dehydroxylation of 4–hydroxybenzoyl–CoA to benzoyl–CoA in a denitrifying, phenol–degrading Pseudomonas species. Glöckler R, et al. **FEBS Lett** 1989 Jul 17;251(1–2):237–40
ESR studies on iron–sulfur clusters of complex II in Ascaris suum mitochondria which exhibits strong fumarate reductase activity. Hata–Tanaka A, et al. **FEBS Lett** 1988 Dec 19;242(1):183–6
The cupric site in nitrous oxide reductase contains a mixed–valence [Cu(II),Cu(I)] binuclear center: a multifrequency electron paramagnetic resonance investigation. Kroneck PM, et al. **FEBS Lett** 1988 Dec 19;242(1):70–4
Detection and localization of a new enzyme catalyzing the beta–aryl ether cleavage in the soil bacterium (Pseudomonas paucimobilis SYK–6). Masai E, et al.
FEBS Lett 1989 Jun 5;249(2):348–52
Potentiometric titration of cytochrome–bo type quinol oxidase of Escherichia coli: evidence for heme–heme and copper–heme interaction. Salerno JC, et al. **FEBS Lett** 1989 Apr 10;247(1):101–5
Characterization of a new enzyme system that desaturates the side chain of N–acetyldopamine. Saul SJ, et al.
FEBS Lett 1989 Jul 17;251(1–2):69–73
Ferroxidase II activity and serum cholesterol. Macfarlane SK, et al. **Free Radic Res Commun** 1987;3(1–5):79–83
Lipoprotein oxidation and induction of ferroxidase activity in stored human extracellular fluids. Winyard PG, et al.
Free Radic Res Commun 1989;5(4–5):227–35
Brain enzyme histochemistry following stabilization by microwave irradiation. Marani E, et al. **Histochem J** 1988 Jun–Jul;20(6–7):397–404
Developmental changes of TCA cycle enzymes in human fetal brain. Sengupta T, et al.
Indian J Biochem Biophys 1988 Oct;25(5):404–7
Histochemical studies on the distribution of certain dehydrogenases in squamous cell carcinoma of cheek. Banerjee S, et al. **Indian J Cancer** 1989 Mar;26(1):21–30
Biliverdin reductase activity in cattle, sheep, rabbits and rats. George JW, et al. **Int J Biochem** 1989;21(5):477–81
Androgen receptors, androgen–dependent proliferation, and 5 alpha–reductase activity of small–cell lung cancer cell lines. Maasberg M, et al. **Int J Cancer** 1989 Apr 15; 43(4):685–91
Correlations of dihydropyrimidine dehydrogenase, thymidine phosphorylase and thymidine kinase activities in strongly and weakly malignant cultured murine neuroblastoma cells. Williams CS, et al. **Int J Cancer** 1989 May 15;43(5):901–4
Possible roles for pyruvate:ferredoxin oxidoreductase and thiol–dependent peroxidase and reductase activities in resistance to nitroheterocyclic drugs in Giardia intestinalis. Smith NC, et al. **Int J Parasitol** 1988 Nov;18(7):991–7
Oxidases involved in biosynthesis of macrolide antibiotic patulolides from Penicillium urticae S11R59. Rodphaya D, et al. **J Antibiot (Tokyo)** 1989 May;42(5):752–60
Ferric reductase activity in Azotobacter vinelandii and its inhibition by Zn2+. Huyer M, et al. **J Bacteriol** 1989 Jul; 171(7):4031–7
Characterization of a CO–dependent O–demethylating enzyme system from the acetogen Clostridium thermoaceticum. Wu ZR, et al. **J Bacteriol** 1988 Dec; 170(12):5747–50
Use of bilirubin oxidase for probing chromophore topography in tetrapyrrole proteins. Singh BR, et al.
J Biochem Biophys Methods 1989 Mar;18(2):135–47
Enzymatic in situ determination of stereospecificity of NAD–dependent dehydrogenases. Esaki N, et al.
J Biol Chem 1989 Jun 15;264(17):9750–2
Location of heme axial ligands in the cytochrome d terminal oxidase complex of Escherichia coli determined by site–directed mutagenesis. Fang H, et al. **J Biol Chem** 1989 May 15;264(14):8026–32
Mechanism of ferritin iron uptake: activity of the H–chain and deletion mapping of the ferro–oxidase site. A study of iron uptake and ferro–oxidase activity of human liver, recombinant H–chain ferritins, and of two H–chain deletion mutants. Levi S, et al. **J Biol Chem** 1988 Dec 5; 263(34):18086–92
Dehydrogenase–dependent ethanol metabolism in deer mice (Peromyscus maniculatus) lacking cytosolic alcohol dehydrogenase. Reversibility and isotope effects in vivo and in subcellular fractions. Norsten C, et al.
J Biol Chem 1989 Apr 5;264(10):5593–7
Correlation of kinetic parameters of nitroreductase enzymes with redox properties of nitroaromatic compounds. Orna MV, et al. **J Biol Chem** 1989 Jul 25;264(21):12379–84
Characterization of the flavoprotein moieties of NADPH–sulfite reductase from Salmonella typhimurium and Escherichia coli. Physicochemical and catalytic properties, amino acid sequence deduced from DNA sequence of cysJ, and comparison with NADPH–cytochrome P–450 reductase. Ostrowski J, et al.
J Biol Chem 1989 Sep 25;264(27):15796–808
Structural analysis of the FMN binding domain of NADPH–cytochrome P–450 oxidoreductase by site–directed mutagenesis. Shen AL, et al. **J Biol Chem** 1989 May 5;264(13):7584–9
Structural and spectroscopic characterization of exogenous ligand binding to isolated factor F430 and its configurational isomers. Shiemke AK, et al.
J Biol Chem 1989 May 5;264(13):7276–84
Effects of Ca2+ on the activities of the calcium–sensitive dehydrogenases within the mitochondria of mammalian tissues. Denton RM, et al. **J Cardiovasc Pharmacol** 1988; 12 Suppl 5:S69–72 (30 ref.)
Coproporphyrinogen oxidase, protoporphyrinogen oxidase and ferrochelatase activities in human liver biopsies with special reference to alcoholic liver disease. Li F, et al.
J Hepatol 1989 Jan;8(1):86–93
Inactivation and activation of various membranal enzymes of the cholesterol biosynthetic pathway by digitonin. Eilenberg H, et al. **J Lipid Res** 1989 Aug;30(8):1127–35
Effect of oxygen tension on the anti–oxidant enzyme activities of tetralogy of Fallot ventricular myocytes. Li RK, et al. **J Mol Cell Cardiol** 1989 Jun;21(6):567–75
UDP galactose:ceramide galactosyltransferase, CDP choline:1,2–diacyl–sn–glycerol phosphocholine transferase, and microsomal reductases in major regions of the developing rat brain in nutritional stress. Padmini S, et al.
J Neurosci Res 1989 Jul;23(3):310–5
Peroxisomal palmityl CoA oxidase activity in ocular tissues and cultured ciliary epithelial cells. Ng MC, et al.
J Ocul Pharmacol 1989 Spring;5(1):65–70
Progesterone metabolism in the gastric mucosa microsomes of guinea pig. Ichihara K, et al. **J Steroid Biochem** 1989 Jun;32(6):835–40
The mechanism of the synthesis of 16–androstenes in human testicular homogenates. Weusten JJ, et al.
J Steroid Biochem 1989 May;32(5):689–94
Effects of various inducers on the activities of cytochrome P–450–mixed function oxidases and aflatoxin B1 activation in microsomes of hamster livers. Sunouchi M, et al.
J Toxicol Sci 1988 Nov;13(4):193–204
Identity of acyl–CoA oxidase with glutaryl–CoA oxidase. Horie S, et al. **Life Sci** 1989;44(16):1141–8
Evidence for the involvement of cytochrome P–450 in tiaramide N–oxide reduction. Sugiura M, et al. **Life Sci** 1974 Oct 15;15(8):1433–42
Mutant isovaleryl–CoA dehydrogenase in isovaleric acidemia cells: assay of activity and molecular characterization. Ikeda Y, et al. **Methods Enzymol** 1988;166:155–66
On the compartmentalization of catalase, fatty acyl–CoA oxidase and urate oxidase in mammalian livers, and the influence of clofibrate treatment on this microlocalization. Hemsley A, et al. **Mol Cell Biochem** 1988 Oct;83(2):187–94
Oxidative phosphorylation and activity of some chosen oxidoreductases of mitochondria of rat brain subjected to severe environmental hyperthermia. Skonieczna M, et al.
Neuropatol Pol 1988;26(2):245–57
Elevated activity of several antioxidant enzymes in neuromuscular diseases. A histochemical and biochemical study. Meijer AE. **Pathol Res Pract** 1989 May; 184(5):535–40
Iron–sulfur clusters of hydrogenase I and hydrogenase II of Clostridium pasteurianum. Adams MW, et al.
Proc Natl Acad Sci U S A 1989 Jul;86(13):4932–6
Mechanism of mercury(II) reductase and influence of ligation on the reduction of mercury(II) by a water soluble 1,5–dihydroflavin. Gopinath E, et al.
Proc Natl Acad Sci U S A 1989 May;86(9):3041–4
Pseudomonas stutzeri N2O reductase contains CuA–type sites. Scott RA, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4082–6
Radiometric quantitation of delta 4–3–ketosteroid–5 alpha–oxidoreductase utilizing high performance liquid chromatography. Kelce WR, et al. **Steroids** 1988 Sep; 52(3):217–35
Studies on the etiology of trace metal–induced porphyria: effects of porphyrinogenic metals on coproporphyrinogen oxidase in rat liver and kidney. Woods JS, et al.
Toxicol Appl Pharmacol 1989 Jan;97(1):183–90
Effect of allyl isothiocyanate on hepatic monooxygenases and

serum transferases in rats. Lewerenz HJ, et al. **Toxicol Lett** 1988 Nov;44(1–2):65–70

Photosystem II, the water–splitting enzyme. Rutherford AW. **Trends Biochem Sci** 1989 Jun;14(6):227–32 (35 ref.)

N–oxygenation of stobadine, a gamma–carboline antiarrhythmic and cardioprotective agent: the role of flavin–containing monooxygenase. Stefek M, et al. **Xenobiotica** 1989 Feb;19(2):143–50

[O6–mdGuo demethylation in cells and tissues] Wang JJ. **Shih Yen Sheng Wu Hsueh Pao** 1988 Jun;21(2):223–9 (Eng. Abstr.) (Chi)

[Activity of selected dehydrogenases and monoamine oxidases in the small intestine of gnotobiotic piglets infected with the coccidium Isospora suis] Kudweis M, et al. **Vet Med (Praha)** 1989 May;34(5):287–96 (Eng. Abstr.) (Cze)

[Intracellular enzymes of glucose metabolism in obesity and diabetes] Bonora E, et al. **Minerva Endocrinol** 1988 Oct–Dec;13(4):275–8 (Eng. Abstr.) (Ita)

[Evaluation of toxic effects on Yusho causal substances by chick embryo hepatic microsomal enzymes activities] Kashimoto T, et al. **Fukuoka Igaku Zasshi** 1989 May; 80(5):210–20 (Eng. Abstr.) (Jpn)

[A case of late–onset and slowly progressive mitochondrial myopathy with abnormalities of complexes in electron–transfer system] Shibuya S, et al. **Rinsho Shinkeigaku** 1988 Oct;28(10):1147–51 (Eng. Abstr.) (Jpn)

[Effect of benzodiazepines on drug–metabolizing enzymes. I. In vivo effect of clonazepam on microsomal monooxygenases of the rat liver in increased environmental temperature] Pachecka J, et al. **Acta Pol Pharm** 1988; 45(2):176–80 (Eng. Abstr.) (Pol)

[Dynamics of the morphologic and cytoenzymatic changes in the lungs of rats of both sexes in acute cadmium chloride poisoning] Siegel A. **Med Pr** 1988;39(4):229–35 (Eng. Abstr.) (Pol)

[Relation between the 7–ethoxyresorufin–O–deethylase activity of the liver microsomal monooxygenase system and the level of methylcholanthrene–induced form of cytochrome P–450] Grishanova AIu, et al. **Biokhimiia** 1988 Jun;53(6):956–9 (Eng. Abstr.) (Rus)

[Oxidoreductase activity of an unusual liver estrogen–binding protein in rats] Smirnov AN, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):337–9 (Eng. Abstr.) (Rus)

[Changes in the activity of a number of enzymes of skeletal muscle fibers in rats after a single physical load] Kuznetsov SL, et al. **Gig Sanit** 1988 Jul;(7):78–9 (Rus)

[Effect of thiuram D on the activity of oxidative liver enzymes in experimental studies] Makarova LF, et al. **Gig Sanit** 1988 Oct;(10):81–2 (Rus)

[Determination of enzyme activity in the reaction with pyridine nucleotide–dependent dehydrogenases] Cherniad'eva IF, et al. **Lab Delo** 1988;(7):64–7 (Eng. Abstr.) (Rus)

[Cytochemical research on cysts of the sarcosporidian Sarcocystis bovicanis. II. Oxidation–reduction enzymes] Metsis AL. **Tsitologiia** 1988 Jul;30(7):882–7 (Eng. Abstr.) (Rus)

[The effect of temperature acclimation on NADP–dependent dehydrogenase activity in the carp liver and various mechanisms of its regulation] Sautin IuIu, et al. **Ukr Biokhim Zh** 1988 Nov–Dec;60(6):29–34 (Eng. Abstr.) (Rus)

[Activation of succinate oxidase in the inner membrane of rat liver mitochondria] Zinich VN, et al. **Ukr Biokhim Zh** 1989 May–Jun;61(3):67–72 (Eng. Abstr.) (Rus)

[Activity of 5–alpha– and 5–beta–steroid reductases in subcellular liver structures from rats bearing Walker carcinosarcoma] Ulinskaite AP, et al. **Vopr Med Khim** 1989 Jan–Feb;35(1):77–81 (Eng. Abstr.) (Rus)

PHARMACOLOGY

Oxygen radicals and antioxidant enzymes alter pulmonary vascular reactivity in the rat lung. Archer SL, et al. **J Appl Physiol** 1989 Jan;66(1):102–11

PHYSIOLOGY

Properties of a Pseudomonas stutzeri outer membrane channel–forming protein (NosA) required for production of copper–containing N2O reductase. Lee HS, et al. **J Bacteriol** 1989 Apr;171(4):2096–100

RADIATION EFFECTS

[The dynamics of the histochemical activity of the oxidoreductases in the myocardium of mature and old rats undergoing whole–body gamma irradiation at a dose of 1 Gy] Amvros'ev AP, et al. **Radiobiologiia** 1989 Jul–Aug; 29(4):469–72 (Eng. Abstr.) (Rus)

OXIDOREDUCTASES, N–DEMETHYLATING

A new commercial method for the enzymatic determination of creatinine in serum and urine evaluated: comparison with a kinetic Jaffé method and isotope dilution–mass spectrometry. Lindbäck B, et al. **Clin Chem** 1989 May; 35(5):835–7

ANTAGONISTS & INHIBITORS

Bacterial sarcosine oxidase: identification of novel substrates and a biradical reaction intermediate. Zeller HD, et al. **Biochemistry** 1989 Jun 13;28(12):5145–54

Effect of diallyl sulfide on rat liver microsomal nitrosamine metabolism and other monooxygenase activities. Brady JF, et al. **Cancer Res** 1988 Nov 1;48(21):5937–40

BIOSYNTHESIS

Induction of rat hepatic N–nitrosodimethylamine demethylase by acetone is due to protein stabilization. Song BJ, et al. **J Biol Chem** 1989 Feb 25;264(6):3568–72

Effect of 1,3–butanediol on rat liver microsomal NDMA demethylation and other monooxygenase activities. Li D, et al. **Toxicol Lett** 1989 Feb;45(2–3):141–7

METABOLISM

Presence of AMP binding sequence in subunit B of Corynebacterium sarcosine oxidase. Suzuki H, et al. **Biochem Int** 1988 Sep;17(3):577–83

Microcoulometric analysis of trimethylamine dehydrogenase. Barber MJ, et al. **Biochem J** 1988 Dec 1;256(2):657–9

Interaction of tetrahydropteroylpolyglutamates with two enzymes from mitochondria. Strong WB, et al. **Biochemistry** 1989 Jan 10;28(1):106–14

Growth hormone depresses ethylmorphine demethylase activity: correlation with decreased levels of fast–turnover cytochrome P–450 in hypophysectomized female rats. Vockentanz BM, et al. **Can J Physiol Pharmacol** 1988 Jul; 66(7):868–72

Regulation of renal N–nitrosodimethylamine demethylase activity by androgens, progestin, glucocorticoid, and estrogen in BALB/c mice. Ahir S, et al. **Cancer Res** 1989 Jul 15;49(14):3737–41

Molecular basis for the sex–related difference in renal N–nitrosodimethylamine demethylase in C3H/HeJ mice. Hong JY, et al. **Cancer Res** 1989 Jun 1;49(11):2973–9

Definitive liquid–chromatographic demonstration that N–ethylglycine is the metabolite of lidocaine that interferes in the Kodak sarcosine oxidase–coupled method for creatinine. Roberts RT, et al. **Clin Chem** 1988 Dec; 34(12):2569–72

Effects of 2–arylbenzimidazoles on rat hepatic microsomal monooxygenase system. Iscan MY, et al. **Comp Biochem Physiol [C]** 1989;92(1):109–15

Changes in the activity of some liver drug–metabolizing enzymes during and after prolonged application of diphenylhydantoin. Kantarev N, et al. **Folia Med (Plovdiv)** 1987;29(4):24–9

Studies of crystalline trimethylamine dehydrogenase in three oxidation states and in the presence of substrate and inhibitor. Bellamy HD, et al. **J Biol Chem** 1989 Jul 15; 264(20):11887–92

[Functional status of the monooxygenase system of the liver microsomes in potassium bichromate poisoning] Nurmagambetov TZh, et al. **Gig Sanit** 1988 Oct;(10):85–6 (Rus)

OXIDOREDUCTASES, O–DEMETHYLATING see under **OXIDOREDUCTASES**

OXIDOREDUCTASES, NADH, NADPH see **NADH, NADPH OXIDOREDUCTASES**

OXIMES

Evaluation of a new leukocyte labeling procedure with 99mTc–HMPAO. Kelbaek H, et al. **Eur J Nucl Med** 1988; 14(12):621–3

Single photon emission computed tomography with 99mTc HM–PAO in the study of focal epilepsy. Grasso E, et al. **Ital J Neurol Sci** 1989 Apr;10(2):175–9

Technetium–99m HM–PAO stereoisomers: differences in interaction with glutathione. Ballinger JR, et al. **J Nucl Med** 1988 Dec;29(12):1998–2000

Use of sodium iodide to overcome the eluate age restriction for Ceretec reconstitution. Bayne VJ, et al. **Nucl Med Commun** 1989 Jan;10(1):29–33

Sweet–taste receptor recognition of the conformationally flexible aldoxime molecule. Venanzi TJ, et al. **Prog Clin Biol Res** 1989;291:321–4

ADVERSE EFFECTS

Fluvoxamine and weight loss [letter] Fernstrom MH, et al. **Biol Psychiatry** 1988 Dec;24(8):948–9

Fluvoxamine and hepatic function [letter] Green BH. **Br J Psychiatry** 1988 Jul;153:130–1

Chronic treatment with fluvoxamine, clovoxamine, and placebo: interaction with digoxin and effects on sleep and alertness. Ochs HR, et al. **J Clin Pharmacol** 1989 Jan; 29(1):91–5

ANALYSIS

Assessment of the arterial input curve for [99mTc]–d,l–HM–PAO by rapid octanol extraction. Andersen AR, et al. **J Cereb Blood Flow Metab** 1988 Dec; 8(6):S23–30

Assessment of the purity of d,l HM–PAO from diastereomeric mixtures using NMR techniques. Feinstein–Jaffe I, et al. **J Nucl Med** 1989 Jan;30(1):106–9

DIAGNOSTIC USE

99Tcm–HMPAO single photon emission tomography in the diagnosis of cerebral barotrauma. Macleod MA, et al. **Br J Radiol** 1988 Dec;61(732):1106–9

Technetium–99m HMPAO imaging in patients with basal ganglia disease. Smith FW, et al. **Br J Radiol** 1988 Oct; 61(730):914–20

Cerebral hypoxic injury detected by Tc–HMPAO SPECT. Lee A, et al. **Clin Nucl Med** 1989 Jul;14(7):482–3

Clinical usefulness of technetium–99m HM–PAO labeled white blood cell imaging in abscesses. Mortelmans L, et al. **Clin Nucl Med** 1989 Feb;14(2):127–9

Initial experience with 99m Tc–hexamethyl–propylene amine oxime (HM–PAO) single photon emission computed tomography (SPECT) in patients with focal epilepsy. Stefan H, et al. **Epilepsy Res** 1987 Mar;1(2):134–8

Radiolabelling of human platelets with 99mTc–HMPAO. Vorne M, et al. **Eur J Haematol** 1989 May;42(5):487–91

Tc–99m–HMPAO labelled human platelets: in vitro and in vivo results. Becker W, et al. **Eur J Nucl Med** 1989; 15(6):296–301

Clinical experience with Tc–99m HM–PAO high resolution SPECT of the brain in patients with cerebrovascular accidents. De Roo M, et al. **Eur J Nucl Med** 1989; 15(1):9–15

99mTc–HM–PAO and 123I–amphetamine cerebral scintigraphy: a new, non invasive method in determination of brain death in children. Galaske RG, et al. **Eur J Nucl Med** 1988;14(9–10):446–52

A comparison of Tc–99m HM–PAO and I–123 IMP cerebral SPECT images in Alzheimer's disease and multi–infarct dementia. Gemmell HG, et al. **Eur J Nucl Med** 1988; 14(9–10):463–6

The behavior of 99mTc–hexamethylpropyleneamineoxime (99mTc–HMPAO) in blood and brain. Nakamura K, et al. **Eur J Nucl Med** 1989;15(2):100–7

RCBF–quantification with 99mTc–HMPAO–SPECT: theory and first results. Nickel O, et al. **Eur J Nucl Med** 1989;15(1):1–8

Semiquantitative assessment of regional cerebral perfusion using 99mTc HM–PAO and emission tomography. Spreafico G, et al. **Eur J Nucl Med** 1988;14(11):565–8

Scintigraphic assessment of bowel involvement and disease activity in Crohn's disease using technetium 99m–hexamethyl propylene amine oxine as leukocyte label. Schölmerich J, et al. **Gastroenterology** 1988 Nov; 95(5):1287–93

Hexamethyl–propylene amine oxime (MM–PAO). Papers presented at a symposium. September 1987, Copenhagen, Denmark. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S1–126

Quantitative measurements of cerebral blood flow using SPECT and [99mTc]–d,l–HM–PAO compared to xenon–133. Andersen AR, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S69–81

CBF tomograms with [99mTc–HM–PAO in patients with dementia (Alzheimer type and HIV) and Parkinson's disease—initial results. Costa DC, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S109–15

Linearization correction of 99mTc–labeled hexamethyl–propylene amine oxime (HM–PAO) image in terms of regional CBF distribution: comparison to C15O2 inhalation steady–state method measured by positron emission tomography. Inugami A, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S52–60

Tomographic studies of rCBF with [99mTc]–HM–PAO SPECT in patients with brain tumors: comparison with C15O2 continuous inhalation technique and PET. Langen KJ, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S90–4

Technetium–99m–d,l–HM–PAO, the development of a new class of 99mTc–labeled tracers: an overview. Lassen NA, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S1–3

[99mTc]–HM–PAO SPECT in Parkinson's disease. Pizzolato G, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S101–8

SPECT measurements with 99mTc–HM–PAO in focal epilepsy. Ryding E, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S95–100

The use of technetium–99m–HM–PAO in the assessment of patients with dementia and other neuropsychiatric conditions. Smith FW, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S116–22

The use of [99mTc]–HM–PAO in the diagnosis of primary degenerative dementia. Testa HJ, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S123–6

SPECT with [99mTc]–d,l–hexamethyl–propylene amine oxime (HM–PAO) compared with regional cerebral blood flow measured by PET: effects of linearization. Yonekura Y, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S82–9

SPECT imaging of moyamoya disease using 99mTc–HM–PAO. Comparison with computed tomography findings. Mountz JM, et al. **J Comput Tomogr** 1988 Oct;12(4):247–50

The development of an epileptogenic focus. A case study with 99mTc–HMPAO SPECT. Dressler D, et al. **J Neurol** 1989 Jul;236(5):300–2

Filling out phenomenon with technetium–99m HM–PAO brain SPECT at the site of mild cerebral ischemia. Hayashida K, et al. **J Nucl Med** 1989 May;30(5):591–8

Evaluation of cerebral collateral circulation by technetium–99m HM–PAO brain SPECT during Matas test: report of three cases. Matsuda H, et al. **J Nucl Med** 1988 Oct;29(10):1724–9

Comparative study of regional cerebral blood flow images

by SPECT using xenon-133, iodine-123 IMP, and technetium-99m HM-PAO. Nakano S, et al. **J Nucl Med** 1989 Feb;30(2):157–64

Dynamic SPECT with technetium-99m HM-PAO in meningiomas—a comparison with iodine-123 IMP. Nakano S, et al. **J Nucl Med** 1989 Jun;30(6):1101–5

Myocardial perfusion imaging with technetium-99m SQ30217: comparison with thallium-201 and coronary anatomy. Seldin DW, et al. **J Nucl Med** 1989 Mar; 30(3):312–9

Technetium-99m HM-PAO-labeled leukocytes in detection of inflammatory lesions: comparison with gallium-67 citrate. Vorne M, et al. **J Nucl Med** 1989 Aug;30(8):1332–6

Cerebral perfusion deficits in dysbaric illness. Adkisson GH, et al. **Lancet** 1989 Jul 15;2(8655):119–22

99mTc-HMPAO washout in prognosis of stroke [letter] [published erratum appears in Lancet 1989 Feb 4;1(8632):288] [see comments] Costa DC, et al. **Lancet** 1989 Jan 28;1(8631):213–4. **Comment in:** Lancet 1989 Feb 18;1(8634):380–1

Role of routine functional brain imaging in temporal lobe epilepsy [letter] Ell PJ, et al. **Lancet** 1989 Apr 29; 1(8644):959

Postictal SPET in epilepsy [letter] Rowe CC, et al. **Lancet** 1989 Feb 18;1(8634):389–90

Interpretation of 99mTc-HMPAO washout after stroke [letter; comment] Smith FW. **Lancet** 1989 Feb 18; 1(8634):380–1. **Comment on:** Lancet 1989 Jan 28;1(8631):213–4

99Tcm hexamethylpropyleneamineoxime (HMPAO) as a platelet label: evaluation of labelling parameters and first in vivo results. Becker W, et al. **Nucl Med Commun** 1988 Oct;9(10):831–42

Investigations of brain tumours with 99Tcm-HMPAO SPECT. Langen KJ, et al. **Nucl Med Commun** 1989 May; 10(5):325–34

Direct autoradiographic comparison of 99Tcm-HMPAO with 125I-IMP in experimental brain ischaemia. Matsuda H, et al. **Nucl Med Commun** 1988 Nov;9(11):891–7

A rapid method for the preparation of 99Tcm hexametazime-labelled leucocytes. Solanki KK, et al. **Nucl Med Commun** 1988 Oct;9(10):753–61

Comparison of 123I monoclonal granulocyte antibody and 99Tcm-HMPAO-labelled leucocytes in the detection of inflammation. Vorne M, et al. **Nucl Med Commun** 1988 Sep;9(9):623–9

99Tcm hexamethylpropyleneamineoxime-labelled leucocyte scanning for detection of infection in orthopaedic surgery—first results. Winker KH, et al. **Nucl Med Commun** 1988 Oct;9(10):771–4

Fluvoxamine-melatonin-stimulation-test (FMST) in patients with depressive disorders. Demisch L, et al. **Pharmacopsychiatry** 1988 Nov;21(6):420–1

Serial radionuclide determinations of graft perfusion in pancreas transplantation. Teule GJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2795–6

[Isolated fever disclosing Crohn disease. Diagnostic contribution of scintigraphy with Tc 99m HMPAO labelled leukocytes (letter)] Raoul JL, et al. **Gastroenterol Clin Biol** 1989 Mar;13(3):315–6 **(Fre)**

[Tomographical use of Tc hexamethylpropylene amine-oxime. First experience (78 studies)] Steinling M, et al. **Presse Med** 1988 Sep 17;17(31):1565–9 (Eng. Abstr.) **(Fre)**

[HMPAO-SPECT in cerebral seizures] Grünwald F, et al. **Nuklearmedizin** 1988 Dec;27(6):248–51 (Eng. Abstr.) **(Ger)**

[SPECT findings in the hemiparkinson syndrome using 99mTc-HMPAO] Neumann C, et al. **Nuklearmedizin** 1989 Jun;28(3):92–4 (Eng. Abstr.) **(Ger)**

[Preliminary results of 99mTc-HMPAO-SPECT studies in endogenous psychoses] Wilhelm KR, et al. **Nuklearmedizin** 1989 Jun;28(3):88–91 (Eng. Abstr.) **(Ger)**

[99mTc-HMPAO leukocyte scintigraphy in the diagnosis of inflammations of the skeletal system. Initial experiences] Winker H, et al. **Nuklearmedizin** 1988 Aug;27(4):121–6 (Eng. Abstr.) **(Ger)**

[Unusual accumulation of I-123 IMP and Tc-99m HMPAO in glioblastoma multiforme] Maeda H, et al. **Kaku Igaku** 1988 Jul;25(7):655–8 (Eng. Abstr.) **(Jpn)**

[Tc-99m-HMPAO brain scintigraphy: a comparative study with I-123-IMP] Nishimoto H, et al. **Kaku Igaku** 1989 Apr; 26(4):545–50 **(Jpn)**

[A case of Creutzfeldt-Jakob disease followed up by N-isopropyl-[123I]-p-iodoamphetamine and 99mTc-hexamethylpropyleneamine oxime SPECT] Ono S, et al. **Kaku Igaku** 1989 Jan;26(1):77–88 (Eng. Abstr.) **(Jpn)**

[Single photon emission computed tomography by using N-isopropyl-p-[123I]-iodoamphetamine and 99mTc-hexamethyl propyleneamine oxime in a patient with herpes simplex encephalitis] Ono S, et al. **Kaku Igaku** 1989 Feb;26(2):239–51 (Eng. Abstr.) **(Jpn)**

[Single photon emission computed tomography (SPECT) using 99mTc-hexamethylpropyleneamine oxime in brain tumor: comparison of N-isopropyl-[123I]-p-iodoamphetamine and 99mTc-DTPA SPECT] Ono S, et al. **Kaku Igaku** 1988 Dec;25(12):1371–9 (Eng. Abstr.) **(Jpn)**

[Basic and clinical evaluation of regional cerebral perfusion scintigraphy of 99mTc-HM-PAO] Tsukatani Y, et al. **Rinsho Hoshasen** 1988 Jul;33(7):741–9 (Eng. Abstr.) **(Jpn)**

[Regional cerebrocerebellar perfusion imaging in spinocerebellar degeneration using technetium-99m-HM-PAO] Tanaka M, et al. **Rinsho Shinkeigaku** 1988 Jul;28(7):769–74 (Eng. Abstr.) **(Jpn)**

METABOLISM

Sulfation of mono- and diaryl oximes by aryl sulfotransferase isozymes. Mangold JB, et al. **Biochim Biophys Acta** 1989 Jun 27;991(3):453–8

Extraction of [99mTc]-d,l-HM-PAO across the blood-brain barrier. Andersen AR, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S44–51

99mTc-HMPAO washout from brain [letter] Ell PJ, et al. **Lancet** 1989 Mar 25;1(8639):665–6

99mTc-HMPAO washout in prognosis of stroke [letter] Limburg M, et al. **Lancet** 1989 Apr 15;1(8642):839–40

Beta-adrenoceptor binding potencies of new aliphatic and alicyclic oxime ethers and their relevance to intraocular pressure control. Himber J, et al. **Methods Find Exp Clin Pharmacol** 1989 May;11(5):315–21

PHARMACOKINETICS

Uptake and release of two new Tc-99m labeled myocardial blood flow imaging agents in cultured cardiac cells. Maublant JC, et al. **Eur J Nucl Med** 1989;15(4):180–2

Retention of [99mTc]-d,l-HM-PAO in rat brain: an autoradiographic study. Hoffman TJ, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S38–43

The retention of [99mTc]-d,l-HM-PAO in the human brain after intracarotid bolus injection: a kinetic analysis. Lassen NA, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S13–22

Initial cerebral HM-PAO distribution compared to LCBF: use of a model which considers cerebral HM-PAO trapping kinetics. Lear JL. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S31–7

Determination of flow and rate constants in a kinetic model of [99mTc]-hexamethyl-propylene amine oxime in the human brain. Matsuda H, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S61–8

The retention mechanism of technetium-99m-HM-PAO: intracellular reaction with glutathione. Neirinckx RD, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S4–12

99mTc-HMPAO uptake and washout in stroke [letter] Bowler JV, et al. **Lancet** 1989 May 20;1(8647):1140–1

99mTc-HMPAO washout in prognosis of stroke [letter] Steinling M, et al. **Lancet** 1989 Mar 18;1(8638):619–20

PHARMACOLOGY

Kinetics of Mg2+-ATPase inhibition by benthiocarb and its recovery by oximes and L-cysteine in brain of albino rat (Wistar strain). Veera Babu GR, et al. **Arch Int Physiol Biochim** 1989 Apr;97(2):205–9

Spontaneous and oxime-induced reactivation of acetylcholinesterase inhibited by phosphoramidates. Langenberg JP, et al. **Arch Toxicol** 1988;62(4):305–10

Comparison of the cardiovascular effects of trans-diclofurime with different types of calcium antagonists in conscious spontaneously hypertensive rats. Petty MA, et al. **Br J Pharmacol** 1988 Aug;94(4):1218–24

Inhibition of copper-containing amine oxidase by oximes. Hiraoka A, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug; 36(8):3027–31

Charge transfer-oxy radical mechanism for anticancer agents: mAMSA derivatives, rhodamine 123, and nickel salicylaldoximate. Crawford PW, et al. **Free Radic Res Commun** 1987;3(6):347–56

Evaluation of two new insect growth regulators against mosquitoes in the laboratory. Estrada JG, et al. **J Am Mosq Control Assoc** 1986 Mar;2(1):57–60

Ab initio molecular electrostatic potentials of perillartine analogues: implications for sweet-taste receptor recognition. Venanzi TJ, et al. **J Med Chem** 1988 Oct; 31(10):1879–85

Progress in medical defense against nerve agents. Dunn MA, et al. **JAMA** 1989 Aug 4;262(5):649–52 (21 ref.)

[Reactivating and cholinolytic action of dipyroxime in the myoneural synapse of warm-blooded animals] Giniatullin RA, et al. **Neirofiziologiia** 1988;20(3):351–7 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Treatment strategy in depression. I. Non-tricyclic and selective reuptake inhibitors in resistant depression: a double-blind partial crossover study on the effects of oxaprotiline and fluvoxamine. Nolen WA, et al. **Acta Psychiatr Scand** 1988 Dec;78(6):668–75

Treatment of alcoholic organic brain syndrome with the serotonin reuptake inhibitor fluvoxamine: a preliminary study. Stapleton JM, et al. **Adv Alcohol Subst Abuse** 1988; 7(3–4):47–51

Efficacy of fluvoxamine in obsessive-compulsive disorder. A double-blind comparison with placebo. Goodman WK, et al. **Arch Gen Psychiatry** 1989 Jan;46(1):36–44

Effective pharmacotherapy of alcoholic amnestic disorder with fluvoxamine. Preliminary findings. Martin PR, et al. **Arch Gen Psychiatry** 1989 Jul;46(7):617–21

Effects of desipramine and fluvoxamine treatment on the prolactin response to tryptophan. Serotonergic function and the mechanism of antidepressant action. Price LH, et al. **Arch Gen Psychiatry** 1989 Jul;46(7):625–31

A double-blind comparison of fluvoxamine and dothiepin in the treatment of major affective disorder. Mullin JM, et al. **Br J Clin Pract** 1988 Feb;42(2):51–5

Flupenthixol and fluvoxamine in mild to moderate depression: a comparison in general practice. Hamilton BA, et al. **Pharmatherapeutica** 1989;5(5):292–7

Serotonin-influencing drugs in the treatment of panic disorder. Westenberg HG, et al. **Psychopathology** 1989;22 Suppl 1:68–77

Fluvoxamine as an antiobsessional agent. Goodman WK, et al. **Psychopharmacol Bull** 1989;25(1):31–5 (23 ref.)

Fluvoxamine, imipramine, and placebo in the treatment of depressed outpatients: effects on depression. Lydiard RB, et al. **Psychopharmacol Bull** 1989;25(1):68–70

TOXICITY

Effect of toxogonin on the rat liver drug metabolizing enzyme systems. Dishovski C, et al. **Arch Toxicol Suppl** 1989;13:294–6

OXIMETRY

Pulse oximetry in methemoglobinemia. Watcha MF, et al. **Am J Dis Child** 1989 Jul;143(7):845–7

Pulse oximetry in the emergency department. Galdun JP, et al. **Am J Emerg Med** 1989 Jul;7(4):422–5

Pulse oximetry in malignant hyperthermia. Bacon AK. **Anaesth Intensive Care** 1989 May;17(2):208–10

Monitoring perfusion in pulse oximetry [letter] Grigg KN. **Anaesth Intensive Care** 1988 Aug;16(3):377–8

Detection of unsuspected endobronchial intubation by pulse oximetry [letter] Riley R. **Anaesth Intensive Care** 1989 Aug; 17(3):381–2

Identification of autonomic dysfunction with a pulse oximeter. Broome IJ, et al. **Anaesthesia** 1988 Oct; 43(10):833–6

Another use of the pulse oximeter [letter] Pillai EV, et al. **Anaesthesia** 1989 Aug;44(8):705–6

Pulse oximetry in methaemoglobinaemia. Failure to detect low oxygen saturation. Rieder HU, et al. **Anaesthesia** 1989 Apr;44(4):326–7

Pulse oximetry in the recovery room. Smith DC, et al. **Anaesthesia** 1989 Apr;44(4):345–8

Principles of pulse oximetry: theoretical and practical considerations. Alexander CM, et al. **Anesth Analg** 1989 Mar;68(3):368–76 (19 ref.)

Benzocaine-induced methemoglobinemia in an adult: accuracy of pulse oximetry with methemoglobinemia. Anderson ST, et al. **Anesth Analg** 1988 Nov; 67(11):1099–101

The effect of fingerprinting ink on pulse oximetry [letter] Battito MF. **Anesth Analg** 1989 Aug;69(2):265

Hazards of henna [letter] Goucke R. **Anesth Analg** 1989 Sep; 69(3):416–7

Effect of transparent adhesive tape on pulse oximetry [letter] Read MS. **Anesth Analg** 1989 May;68(5):701–2

Effects of methemoglobinemia on pulse oximetry and mixed venous oximetry. Barker SJ, et al. **Anesthesiology** 1989 Jan; 70(1):112–7

Pulse oximetry is presently not on American Society of Anesthesiologists standard [letter] Epstein BS. **Anesthesiology** 1989 May;70(5):884

Pulse oximetry and patient positioning: a report of eight cases. Hovagim AR, et al. **Anesthesiology** 1989 Sep;71(3):454–6

Systolic venous waves cause spurious signs of arterial hemoglobin desaturation. Mark JB. **Anesthesiology** 1989 Jul;71(1):158–60

Cool fingers and pulse oximetry [letter] Paulus DA, et al. **Anesthesiology** 1989 Jul;71(1):168–9

Respiratory artifact during pulse oximetry in critically ill patients. Scheller J, et al. **Anesthesiology** 1988 Oct; 69(4):602–3

Axillary block utilizing the pulse oximeter [letter] Sullivan MJ, et al. **Anesthesiology** 1989 Jul;71(1):166–7

Hyperbilirubinemia does not interfere with hemoglobin saturation measured by pulse oximetry. Veyckemans F, et al. **Anesthesiology** 1989 Jan;70(1):118–22

Whiz-Bang or pure O2? [editorial] Haynes BE. **Ann Emerg Med** 1988 Oct;17(10):1105

Pulse oximetry at the roadside: a study of pulse oximetry in immediate care. Silverston P. **BMJ** 1989 Mar 18; 298(6675):711–3

The use of pulse oximetry in the immediate recovery phase following dental extractions under general anesthesia in children. Young ER, et al. **Can Dent Assoc J** 1989 Apr; 55(4):305–8

Blood pressure monitoring during mediastinoscopy [letter] Garry BP, et al. **Can J Anaesth** 1989 May;36(3 Pt 1):365

PORCH test [letter] Wong W. **Can J Anaesth** 1989 Jul; 36(4):483–5

Arterial oxygen saturation during Nd:YAG laser photoresection of endobronchial tumors under local anesthesia. Use of intermittent supplemental oxygen with pulse oximetry guidance. Schiffman PL, et al. **Chest** 1988 Dec;94(6):1300–1

Pulse oximetry [editorial] Tremper KK. **Chest** 1989 Apr; 95(4):713–5

Pulse oximetry in neonatal intensive care. Dziedzic K, et al. **Clin Perinatol** 1989 Mar;16(1):177–97 (70 ref.)

Pulse oximetry during low cardiac output and hypothermia states immediately after open heart surgery. Palve H, et

al. **Crit Care Med** 1989 Jan;17(1):66–9
Pulse oximetry in infants [letter] Solimano AJ, et al. **Crit Care Med** 1989 Jul;17(7):712–3
Monitoring the patient receiving conscious sedation for gastrointestinal endoscopy: issues and guidelines. Fleischer D. **Gastrointest Endosc** 1989 May–Jun;35(3):262–6 (17 ref.)
Use of pulse oximetry in critically ill adults. Szaflarski NL, et al. **Heart Lung** 1989 Sep;18(5):444–53
An in vitro tissue model for evaluating the effect of carboxyhemoglobin concentration on pulse oximetry. Mendelson Y, et al. **IEEE Trans Biomed Eng** 1989 Jun; 36(6):625–7
Variations in optical absorption spectra of adult and fetal hemoglobins and its effect on pulse oximetry. Mendelson Y, et al. **IEEE Trans Biomed Eng** 1989 Aug;36(8):844–8
The use of pulse oximetry in post-operative hypoxaemia in patients after propofol induction of anaesthesia. Thomson KD, et al. **Int J Clin Monit Comput** 1989 Jan;6(1):7–10
Accuracy of pulse oximetry to estimate HbO2 fraction of total Hb during exercise. Powers SK, et al. **J Appl Physiol** 1989 Jul;67(1):300–4
Fluorescent light interferes with pulse oximetry. Amar D, et al. **J Clin Monit** 1989 Apr;5(2):135–6 (6 ref.)
Diffusion hypoxia: a reappraisal using pulse oximetry. Brodsky JB, et al. **J Clin Monit** 1988 Oct;4(4):244–6
Evaluation of the palmar circulation by pulse oximetry. Cheng EY, et al. **J Clin Monit** 1989 Jan;5(1):1–3
Pulse oximetry for monitoring during ward analgesia: epidural morphine versus parenteral narcotics. Choi HJ, et al. **J Clin Monit** 1989 Apr;5(2):87–9
Simple and noninvasive indicator of pulmonary gas exchange impairment using pulse oximetry. Katsuya H, et al. **J Clin Monit** 1989 Apr;5(2):82–6
Pulse oximetry. Kelleher JF. **J Clin Monit** 1989 Jan; 5(1):37–62 (220 ref.)
Intraoperative pulse oximetry in peripheral revascularization in an infant. Skeen JT, et al. **J Clin Monit** 1988 Oct; 4(4):272–3
Pulse oximetry: analysis of theory, technology, and practice. Wukitsch MW, et al. **J Clin Monit** 1988 Oct;4(4):290–301 (25 ref.)
Postoperative pulse oximetry of patients in maxillomandibular fixation. Smith RA, et al. **J Oral Maxillofac Surg** 1989 Jul; 47(7):684–8
Proceedings of the Broadmoor Symposium: The uses, benefits, and limitations of pulse oximetry in neonatal medicine. November 12–14, 1986, Colorado Springs, Colorado. **J Perinatol** 1987 Fall;7(4):305–49
Clinical experience with pulse oximetry in managing oxygen therapy in neonatal intensive care. Cunningham MD, et al. **J Perinatol** 1987 Fall;7(4):333–5
The clinical use of pulse oximetry with bronchopulmonary dysplasia. Eggert LD. **J Perinatol** 1987 Fall;7(4):336
The use of pulse oximetry during infant transport from outside facilities. Hankins CT. **J Perinatol** 1987 Fall; 7(4):346
The uses, benefits, and limitations of pulse oximetry in neonatal medicine: consensus on key issues. Hay WW Jr. **J Perinatol** 1987 Fall;7(4):347–9
Physiology of oxygenation and its relation to pulse oximetry in neonates. Hay WW Jr. **J Perinatol** 1987 Fall;7(4):309–19 (25 ref.)
The theory and principles of pulse oximetry. Pologe JA. **J Perinatol** 1987 Fall;7(4):320–2
The pulse oximeter in free muscle flap surgery. "A microvascular surgeon's sleep aid". Menick FJ. **J Reconstr Microsurg** 1988 Jul;4(4):331–4
Exercise oximetry for early diagnosis of Pneumocystis carinii pneumonia [letter] Faetkenheuer G, et al. **Lancet** 1989 Jan 28;1(8631):222
Continuous intrapartum monitoring of fetal oxygen saturation [letter] Gardosi J, et al. **Lancet** 1989 Sep 16;2(8664):692–3
Early diagnosis of Pneumocystis carinii infection [letter] Thomas SH, et al. **Lancet** 1989 Jan 7;1(8628):43
Pulse oximetry: a review of the theory, accuracy, and clinical applications. Bowes WA 3d, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):541–6 (32 ref.)
Use of pulse oximetry for monitoring tracheostomy tube obstruction. Rao AJ, et al. **ORL J Otorhinolaryngol Relat Spec** 1988;50(5):345–8
Neonatal pulse oximetry: accuracy and reliability. Hay WW Jr, et al. **Pediatrics** 1989 May;83(5):717–22
Pulse oximetry during shunt surgery in pediatric patients with tetralogy of fallot. Oh HK, et al. **Yonsei Med J** 1989; 30(1):12–5
[The use of pulse oximetry in the perioperative monitoring of pediatric patients at risk using the surgical correction of a laparoschisis as an example] Mertzlufft F, et al. **Anaesthesist** 1989 Jan;38(1):36–9 (Eng. Abstr.) **(Ger)**
[Intraoperative detection of air embolism and corpuscular embolism using pulse oximetry and capnometry. Comparative studies with transesophageal echocardiography] Bednarz F, et al. **Anasth Intensivther Notfallmed** 1989 Feb;24(1):20–6 (Eng. Abstr.) **(Ger)**
[Monitoring of bronchoscopy in artificially ventilated patients using peripheral pulse oximetry—a useful monitoring method?] Konrad F, et al. **Anasth Intensivther Notfallmed** 1988 Aug;23(4):205–8 (Eng. Abstr.) **(Ger)**
[The use of pulse oximetry in detecting disorders of the arterial oxygen status in the immediate postoperative phase exemplified by combination anesthesia with isoflurane] Mertzlufft FO, et al. **Anasth Intensivther Notfallmed** 1989 Feb;24(1):27–36 (Eng. Abstr.) **(Ger)**
[The reliability of pulse oximetry monitoring of arterial oxygen saturation in centrally intubated and hypothermic patients] Striebel HW, et al. **Anasth Intensivther Notfallmed** 1988 Aug;23(4):200–4 (Eng. Abstr.) **(Ger)**
[Evaluation of monitoring during lung lavage] Okada K, et al. **Masui** 1988 Jun;37(6):727–30 (Eng. Abstr.) **(Jpn)**
[Use of pulse oximetry during the performance of fibro–bronchoscopy (letter)] Ricós M, et al. **Rev Esp Anestesiol Reanim** 1988 May–Jun;35(3):169–70 **(Spa)**
[Pulse oximetry: a revolution in anesthesiology (editorial)] Severinghaus JW. **Rev Esp Anestesiol Reanim** 1988 May–Jun;35(3):119–20 **(Spa)**
[Pulse oximeter gives a new dimension to the monitoring of children during anesthesia] Werner O, et al. **Lakartidningen** 1988 Oct 19;85(42):3474–5 **(Swe)**

ECONOMICS

Analysis of the effects of continuous on–line monitoring of mixed venous oxygen saturation on patient outcome and cost–effectiveness. Jastremski MS, et al. **Crit Care Med** 1989 Feb;17(2):148–53

HISTORY

Historical perspective of noninvasive monitoring. Peabody JL. **J Perinatol** 1987 Fall;7(4):306–8

INSTRUMENTATION

Technique for RF isolation of a pulse oximeter in a 1.5–T MR unit [letter] Wagle WA. **AJNR** 1989 Jan–Feb;10(1):208
Pulse oximeters and poor perfusion [letter] Hanning CD. **Anaesth Intensive Care** 1989 May;17(2):238
A comparison of fifteen pulse oximeters. Part I: A clinical comparison; Part II: A test of performance under conditions of poor perfusion. Morris RW, et al. **Anaesth Intensive Care** 1989 Feb;17(1):62–73
Comparison of pulse oximeters—comment [letter] Webb RK, et al. **Anaesth Intensive Care** 1989 May;17(2):238–9
Pulse oximeters and finger nails [letter] Tweedie IE. **Anaesthesia** 1989 Mar;44(3):268
Pulse oximetry probe disconnection [letter] Landers DF, et al. **Anesth Analg** 1989 Aug;69(2):265–6
Blood flow limits and signal detection comparing five different models of pulse oximeters [letter] Greenblott GB, et al. **Anesthesiology** 1989 Feb;70(2):367–8
Effects of radial artery cannulation on the function of finger blood pressure and pulse oximeter monitors. Kurki TS, et al. **Anesthesiology** 1988 Nov;69(5):778–82
Pulse oximeter cost per use—securing savings [letter] Maruschak GF, et al. **Anesthesiology** 1989 Jul;71(1):167–8
Accuracy of two mixed venous saturation catheters during long–term use in critically ill patients. Reinhart K, et al. **Anesthesiology** 1988 Nov;69(5):769–73
Pulse oximetry. Tremper KK, et al. **Anesthesiology** 1989 Jan; 70(1):98–108 (53 ref.)
Evaluation of a pulse oximeter in the prehospital setting. McGuire TJ, et al. **Ann Emerg Med** 1988 Oct; 17(10):1058–62
Optical sensor for hemoglobin content and oxygen saturation. Application to artificial heart research. Takatani S, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):808–12
Guidelines for the use of pulse oximetry in the non–invasive estimation of oxygen saturation in oxygen–dependent newborn infants. Reynolds GJ, et al. **Aust Paediatr J** 1988 Dec;24(6):346–50
The technology of pulse oximetry. Blackwell GR. **Biomed Instrum Technol** 1989 May–Jun;23(3):188–93 (44 ref.)
Quantitative evaluation of a combined pulse oximetry and end–tidal CO2 monitor. Cheng EY, et al. **Biomed Instrum Technol** 1989 May–Jun;23(3):216–21
High altitude testing of pulse oximeter. Glanfield M. **BMJ** 1988 Dec 10;297(6662):1516
Pulse oximeters: essential monitors with limitations. Kidd JF, et al. **Br J Anaesth** 1989 Apr;62(4):355–7 (18 ref.)
Comparison of pulse oximeters: effects of vasoconstriction and venous engorgement. Wilkins CJ, et al. **Br J Anaesth** 1989 Apr;62(4):439–44
Ambulatory monitoring of arterial oxygen saturation. Decker MJ, et al. **Chest** 1989 Apr;95(4):717–22
Oximeters [letter] Golish JA, et al. **Chest** 1988 Nov; 94(5):1110–2
Evaluation of pulse oximetry as a continuous monitoring technique in the neonatal intensive care unit. Barrington KJ, et al. **Crit Care Med** 1988 Nov;16(11):1147–53
Comparison of recorded values from six pulse oximeters. Choe H, et al. **Crit Care Med** 1989 Jul;17(7):678–81
Noninvasive pulse oximetry utilizing skin reflectance photoplethysmography. Mendelson Y, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):798–805
Evaluation of the Datascope ACCUSAT pulse oximeter in healthy adults [letter] **J Clin Monit** 1989 Jan;5(1):64–6
Absorption characteristics of human fetal hemoglobin at wavelengths used in pulse oximetry. Harris AP, et al. **J Clin Monit** 1988 Jul;4(3):175–7
The use of a personal computer for trend data analysis with the Ohmeda 3700 pulse oximeter. Pasterkamp H, et al. **J Clin Monit** 1988 Jul;4(3):215–22
Errors in 14 pulse oximeters during profound hypoxia. Severinghaus JW, et al. **J Clin Monit** 1989 Apr;5(2):72–81
Effect of heparinization of catheters on pulmonary artery oximetry. Stritter GM, et al. **J Clin Monit** 1988 Jul; 4(3):204–9
Pulse oximetry: a "which" hunt? Sykes MK. **J Clin Monit** 1989 Apr;5(2):69–71
Display variability, false alarms, probe cautions, and recorder use in neonatal pulse oximetry. Kopotic RJ, et al. **J Perinatol** 1987 Fall;7(4):340–2
Use of pulse oximetry in neonatal anesthesia. Miyasaka K, et al. **J Perinatol** 1987 Fall;7(4):343–5
Measurement of fetal peripheral perfusion with a pulse oximeter [letter] Johnson N, et al. **Lancet** 1989 Apr 22; 1(8643):898
A test object for assessing pulse oximeters. Munley AJ, et al. **Lancet** 1989 May 13;1(8646):1048–9
Design and evaluation of a new reflectance pulse oximeter sensor. Mendelson Y, et al. **Med Instrum** 1988 Aug; 22(4):167–73
[Accuracy of the Biox 3700 Pulse Oximeter and its clinical applications] Lu CC, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Nov;40(5):431–6 (Eng. Abstr.) **(Chi)**
[Reliability and limitations of pulse oximetry in corrective cyanotic heart surgery] Meier–Stauss P, et al. **Anaesthesist** 1989 Jun;38(6):302–8 (Eng. Abstr.) **(Ger)**
[Postoperative arterial oxygen saturation in children] Bach A, et al. **Anasth Intensivther Notfallmed** 1989 Feb; 24(1):37–42 (Eng. Abstr.) **(Ger)**
[Use of a CCD array camera for reflectance spectrometry of blood. 1. Determination of hematocrit–independent oxygen saturation using a new evaluation procedure] Pahl R, et al. **Biomed Tech (Berlin)** 1988 Oct;33(10):240–6 (Eng. Abstr.) **(Ger)**
[Pulse oximetry in surgery of the bronchial system] Kessler G, et al. **HNO** 1989 May;37(5):216–9 (Eng. Abstr.) **(Ger)**

METHODS

Toward absolute reflectance oximetry: I. Theoretical consideration for noninvasive tissue reflectance oximetry. Takatani S. **Adv Exp Med Biol** 1989;248:91–102
Oximetric quantitation of intracardiac left–to–right shunting: limitations of the Qp/Qs ratio. Cigarroa RG, et al. **Am J Cardiol** 1989 Jul 15;64(3):246–7
Pulse oximetry for localisation of the dorsalis pedis artery [letter] Katz Y, et al. **Anaesth Intensive Care** 1989 Feb; 17(1):114–5
Jaundice, oximetry, and spurious hemoglobin desaturation. Beall SN, et al. **Anesth Analg** 1989 Jun;68(6):806–7
A buccal sensor for measuring arterial oxygen saturation [letter] Gunter JB. **Anesth Analg** 1989 Sep;69(3):417–8
Glossal pulse oximetry [letter] Hickerson W, et al. **Anesth Analg** 1989 Jan;68(1):73–4
The use of a vinyl glove does not affect pulse oximeter monitoring [letter] Ackerman WE, et al. **Anesthesiology** 1989 Mar;70(3):558–9
Changing perspectives in monitoring oxygenation [editorial] Fairley HB. **Anesthesiology** 1989 Jan;70(1):2–4
Use of pulse oximeter with nail polish [letter] White L. **AORN J** 1989 Sep;50(3):520
Conjunctival oxygen monitoring during cardiopulmonary resuscitation. Heyworth J. **Arch Emerg Med** 1989 Jun; 6(2):128–36 (20 ref.)
Multiple technical difficulties in maintaining reliable oximeter readings [letters] Fitzgibbons TC. **Arthroscopy** 1989;5(1):85
Noninvasive monitoring of oxygen and carbon dioxide. Wiedemann HP, et al. **Clin Chest Med** 1989 Jun; 10(2):239–54 (105 ref.)
Mixed venous oximetry. Kupeli IA, et al. **Int Anesthesiol Clin** 1989 Fall;27(3):176–83 (34 ref.)
Hyperoxemia in newborn infants: detection by pulse oximetry. Bucher HU, et al. **Pediatrics** 1989 Aug; 84(2):226–30
[Reliability of transcutaneous PO2 measurements and ear oximetry at different levels of exercise] Chailleux E, et al. **Rev Mal Respir** 1989;6(3):229–35 (Eng. Abstr.) **(Fre)**
[Invasive monitoring of arterial gases in intensive care. Indications, misuse and hazards] Chevrolet JC. **Schweiz Med Wochenschr** 1989 Mar 18;119(11):335–40 (Eng. Abstr.) **(Fre)**
[Evaluation of the effectiveness of sympathectomy using the skin oximetry method] Prokhorov GG, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):44–7 (Eng. Abstr.) **(Rus)**

STANDARDS

Pulse oximetry is accurate in patients with dysrhythmias and a pulse deficit [letter] Wong DH, et al. **Anesthesiology** 1989 Jun;70(6):1024–5
The accuracy of pulse oximetry in neonates: effects of fetal hemoglobin and bilirubin. Anderson JV. **J Perinatol** 1987 Fall;7(4):323
Skin pigmentation as an influence on the accuracy of pulse oximetry. Emery JR. **J Perinatol** 1987 Fall;7(4):329–30
Is co–oximetry a reliable standard for pulse oximetry in the neonate? Hodgson AJ. **J Perinatol** 1987 Fall;7(4):327–8
Effects of fetal hemoglobin on pulse oximetry. Pologe JA, et al. **J Perinatol** 1987 Fall;7(4):324–6
Pulse oximetry versus transcutaneous oxygen monitoring in

perinatology applications. Wiswell TE. **J Perinatol** 1987 Fall;7(4):331–2

VETERINARY

Noninvasive oximetry in the rat. Decker MJ, et al. **Biomed Instrum Technol** 1989 May–Jun;23(3):222–8

OXIMETRY, TRANSCUTANEOUS see **BLOOD GAS MONITORING, TRANSCUTANEOUS**

3-OXOACYL (ACYL CARRIER PROTEIN) SYNTHASE see under **ACYLTRANSFERASES**

OXOGLUTARATES see **KETOGLUTARIC ACIDS**

OXOLINIC ACID

PHARMACOKINETICS

Bioavailability of commercial preparations of oxolinic acid administered to chickens under fasting and non-fasting conditions and its relation to their in vitro dissolution rates. Hamamoto K, et al. **Nippon Juigaku Zasshi** 1988 Dec; 50(6):1143–9

PHARMACOLOGY

Nalidixic acid and oxolinic acid reversibly suppress 3-methylcholanthrene-induced cell transformation of BALB/3T3 mouse cells. Kaneko M, et al. **Int J Cancer** 1988 Dec 15;42(6):913–6

[Comparison of the antibacterial effects of ofloxacin, oxolinic acid and nalidixic acid] Langšádl L, et al. **Cesk Epidemiol Mikrobiol Imunol** 1988 Sep;37(5):297–308 (Eng. Abstr.) **(Cze)**

THERAPEUTIC USE

[Modifying effect of oxolinic acid on the radiation-induced hemorrhagic syndrome] Tartakovskiĭ VN, et al. **Radiobiologiia** 1989 Mar–Apr;29(2):276–8 (Eng. Abstr.) **(Rus)**

TOXICITY

Evaluation of the DNA-damaging and mutagenic activity of oxolinic and pipemidic acids by the granuloma pouch assay. Maura A, et al. **Mutagenesis** 1988 Sep;3(5):397–401

OXONIC ACID see under **TRIAZINES**

6-OXO-PGF1 ALPHA see **6-KETOPROSTAGLANDIN F1 ALPHA**

6-OXOPROSTAGLANDIN F1 ALPHA see **6-KETOPROSTAGLANDIN F1 ALPHA**

OXOQUINOLINES see **QUINOLINONES**

17-OXOSTEROIDS see **17-KETOSTEROIDS**

OXOSUCCINATES see **OXALOACETATES**

OXOTREMORINE

ANALOGS & DERIVATIVES

Displacement of [3H]oxotremorine-M binding by muscarinic antagonists in guinea-pig atrial and ileal membrane homogenates. Choo LK, et al. **Eur J Pharmacol** 1988 Jul 7;151(2):197–204

Muscarinic actions and receptor binding of the enantiomers of BM 130, an alkylating analog of oxotremorine. Ringdahl B, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):210–5

Antimuscarinic oxotremorine analogs distinguish high and low affinity agonist states of muscarinic receptors. Ringdahl B, et al. **Proc West Pharmacol Soc** 1988;31:57–60

ANTAGONISTS & INHIBITORS

Device for quantitating tremor activity in mice: antitremor activity of atropine versus soman- and oxotremorine-induced tremors. Clement JG, et al. **J Pharmacol Methods** 1989 Aug;22(1):25–36

DIAGNOSTIC USE

Bretylium tosylate binds preferentially to muscarinic receptors labelled with [3H]oxotremorine M (SH or 'high affinity' receptors) in rat heart and brain cortex. Gillard M, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):117–24

METABOLISM

Bilateral changes in neocortical [3H]pirenzepine and [3H]oxotremorine-M binding following unilateral lesions of the rat nucleus basalis magnocellularis: an autoradiographic study. Atack JR, et al. **Brain Res** 1989 Apr 3;483(2):367–72

PHARMACOLOGY

Parallel modifications of spatial memory performances, exploration patterns, and hippocampal theta rhythms in fornix-damaged rats: reversal by oxotremorine. Maho C, et al. **Behav Neurosci** 1988 Aug;102(4):601–4

Prolonged exposure of human neuroblastoma SH-SY5Y cell line to morphine and oxotremorine modulates signal transduction in adenylate cyclase system. Olasmaa M, et al. **Brain Res** 1988 Dec 20;475(2):291–6

Differential effects of M1- and M2-muscarinic drugs on striatal dopamine release and metabolism in freely moving rats. Xu M, et al. **Brain Res** 1989 Aug 28;495(2):232–42

Effects of oxotremorine on neuronal RNA and chromatin in thalamic cholinoceptive sites. Martin LJ, et al. **J Neurol Sci** 1988 Sep;86(2–3):159–69

Effect of vasopressin antagonist on antidiuresis by oxotremorine microinjected into the hypothalamic supraoptic and paraventricular nuclei in a water-loaded and ethanol-anesthetized rat. Mori M, et al. **Jpn J Pharmacol** 1989 Mar;49(3):357–64

Effects of oxotremorine and RMI 12330 A on [3H]acetylcholine release and adenylate cyclase activity in guinea pig superior cervical ganglion. Capuzzo A, et al. **Neurochem Res** 1988 Nov;13(11):1049–53

Heterogeneity of presynaptic muscarinic receptors involved in modulation of transmitter release. Vizi ES, et al. **Neuroscience** 1989;31(1):259–67

Amnesia induced by short-term treatment with ethanol: attenuation by pretest oxotremorine. Brioni JD, et al. **Pharmacol Biochem Behav** 1989 May;33(1):27–9

The effects of chronic oxotremorine treatment on spatial learning and tolerance development in mice. Wehner JM, et al. **Pharmacol Biochem Behav** 1989 Feb;32(2):543–51

Muscarinic agonists and phorbol esters increase tyrosine phosphorylation of a 40-kilodalton protein in hippocampal slices. Stratton KR, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2498–501

Antimuscarinic oxotremorine analogs distinguish high and low affinity agonist states of muscarinic receptors. Ringdahl B, et al. **Proc West Pharmacol Soc** 1988;31:57–60

Potentiation of oxotremorine-induced hypothermia by alaproclate in PCA lesioned and non-lesioned rats. Dilsaver SC, et al. **Psychopharmacology (Berlin)** 1989;97(1):51–3

Central and peripheral muscarinic actions of physostigmine and oxotremorine on avoidance responding of squirrel monkeys. Witkin JM. **Psychopharmacology (Berlin)** 1989; 97(3):376–82

[Action of PMA (phorbol myristate acetate), scopolamine, propranolol, and oxotremorine on memorization of an active or passive avoidance test] Laborit H, et al. **Encephale** 1989 Jan–Feb;15(1):29–35 (Eng. Abstr.) **(Fre)**

OXPRENOLOL

ADMINISTRATION & DOSAGE

Zero-order release formulation of oxprenolol hydrochloride with swelling and erosion control. Devi KP, et al. **Pharm Res** 1989 Apr;6(4):313–7

BLOOD

Alpha 1-acid glycoprotein concentration and molecular heterogeneity: relationship to oxprenolol binding in serum from healthy volunteers and patients with lung carcinoma or cirrhosis. Fraeyman NF, et al. **Br J Clin Pharmacol** 1988 Jun;25(6):733–40

PHARMACOKINETICS

Relationship between the rate of appearance of oxprenolol in the systemic circulation and the location of an oxprenolol Oros 16/260 drug delivery system within the gastrointestinal tract as determined by scintigraphy. Davis SS, et al. **Br J Clin Pharmacol** 1988 Oct;26(4):435–43

PHARMACOLOGY

[Comparison of the effects of oxprenolol and nifedipine on blood pressure at rest and during physical exercise in essential hypertension] Gambini G, et al. **Clin Ter** 1988 Feb 15;124(3):203–10 (Eng. Abstr.) **(Ita)**

THERAPEUTIC USE

Efficacy of four antihypertensive drugs (clonidine, enalapril, nitrendipine, oxprenolol) on stress blood pressure. Schmieder RE, et al. **Am J Cardiol** 1989 Jun 1; 63(18):1333–8

Evaluation of two oxprenolol oral osmotic (OROS) delivery systems in patients with essential hypertension. McInnes GT, et al. **Eur J Clin Pharmacol** 1988;34(6):605–11

Comparative study of oxprenolol and atenolol in the treatment of hypertension. Kamili MA, et al. **Indian Heart J** 1988 Nov–Dec;40(6):471–4

Effects of chlorthalidone, oxprenolol, and their combination in hypertensive blacks: a randomized double-blind crossover study. Obel AO. **J Cardiovasc Pharmacol** 1989 Mar;13(3):465–70

OXYCEPHALY see **CRANIOSYNOSTOSES**

OXYCHLOROCHIN see **HYDROXYCHLOROQUINE**

OXYCHLOROQUINE see **HYDROXYCHLOROQUINE**

OXYCLOZANIDE see under **SALICYLAMIDES**

OXYCODONE see under **CODEINE**

OXYFEDRINE see under **PROPIOPHENONES**

OXYGEN

Gaseous homeostasis during low-flow anaesthesia. Bengtson JP, et al. **Acta Anaesthesiol Scand** 1988 Oct;32(7):516–21

Sedation by the use of inhalation agents in dental care. Hallonsten AL. **Acta Anaesthesiol Scand Suppl** 1988;88:31–5 (29 ref.)

Oxygen-inhibited surface layers on Microfill Pontic. Peutzfeldt A, et al. **Acta Odontol Scand** 1989 Feb;47(1):31–3

Effects of blood pressure change upon brain-stem pO2 in rabbits with surgically removed baroreceptor nerve. Possible mechanisms for vertigo due to autonomic nerve dysfunction. Yamamoto K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;447:46–54

Effects of reduced oxygen tension on endothelium-dependent relaxation induced by acetylcholine differ in rabbit femoral artery and jugular vein. Vedernikov YP, et al. **Acta Physiol Scand** 1989 Mar;135(3):343–8

Electrochemical study of oxygen behaviour with lung surfactant. Ladanyi E. **Adv Exp Med Biol** 1989;248:787–94

Effects of anoxia on catecholamine levels in brain and kidney of the crucian carp. Nilsson GE. **Am J Physiol** 1989 Jul; 257(1 Pt 2):R10–4

Disadvantages of air-oxygen mixtures replacing nitrous oxide [letter] Gillman MA. **Anaesthesia** 1988 Oct;43(10):898–9

Sufentanil to supplement nitrous oxide in oxygen during balanced anaesthesia. O'Connor M, et al. **Anaesthesia** 1988 Sep;43(9):749–52

Flammability of esophageal stethoscopes, nasogastric tubes, feeding tubes, and nasopharyngeal airways in oxygen- and nitrous oxide-enriched atmospheres. Simpson JI, et al. **Anesth Analg** 1988 Nov;67(11):1093–5

An in vivo 1H and 31P NMR investigation of the effect of nitrate on hypoxic metabolism in maize roots. Fan TW, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):592–606

Reaction between ortho-semiquinones and oxygen: pulse radiolysis, electron spin resonance, and oxygen uptake studies. Kalyanaraman B, et al. **Arch Biochem Biophys** 1988 Oct;266(1):277–84

Transient hyperoxia and cerebral blood flow velocity in infants born prematurely and at full term. Niijima S, et al. **Arch Dis Child** 1988 Oct;63(10 Spec No):1126–30

High altitude can accurately be simulated by using altered oxygen concentrations [letter] Allerheiligen D. **Aviat Space Environ Med** 1989 Jul;60(7):716

Evoked potential and other CNS reactions during a heliox dive to 360 msw. Vaernes RJ, et al. **Aviat Space Environ Med** 1989 Jun;60(6):550–7

Oxygen radicals in biology and medicine. Papers presented at the Fourth International Congress on Oxygen Radicals. June 27-July 3, 1987, La Jolla, California. **Basic Life Sci** 1988;49:1–1095

Roles of oxygen and oxygen substitutes in DNA sugar damage by antitumor antibiotics. Goldberg IH, et al. **Basic Life Sci** 1988;49:745–57 (35 ref.)

Singlet oxygen: current mechanistic aspects of photo-oxidation. Gorman AA. **Basic Life Sci** 1988;49:101–4

Lipid peroxidation dependent on oxygen and catalytic free iron ions in situ storage muscle foods. Harel S, et al. **Basic Life Sci** 1988;49:301–6

Peroxy radicals and singlet oxygen (1O2) from the addition of superoxide ion ($O_2^{-\cdot}$) to CCl_4, CF_3CCl_3, $PhCCl_3$, N-BuBr and N-BuCl in acetonitrile. Matsumoto S, et al. **Basic Life Sci** 1988;49:39–42

The redox thermodynamics for dioxygen species (O_2, $O_2^{-\cdot}$, $HOO_\cdot$, HOOH, and HOO^-) and monooxygen species (O, $O^{-\cdot}$, $\cdot OH$, and ^-OH) in water and aprotic solvents. Sawyer DT. **Basic Life Sci** 1988;49:11–20

Mechanisms for the generation of oxygen radicals by drugs. Ziegler DM. **Basic Life Sci** 1988;49:729–38 (38 ref.)

ESR evidence for superoxide, hydroxyl radicals and singlet oxygen produced from hydrogen peroxide and nickel(II) complex of glycylglycyl-L-histidine. Inoue S, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):445–51

Bromodeoxyuridine amplifies free-radical-mediated DNA damage. Poot M, et al. **Biochem J** 1989 Jul 1;261(1):269–71

Synergistic interactions between NADPH-cytochrome P-450 reductase, paraquat, and iron in the generation of active oxygen radicals. Clejan L, et al. **Biochem Pharmacol** 1989 Jun 1;38(11):1779–86

Determination of the dioxygen quenching constant for protein and model indole triplets. Ghiron C, et al. **Biochim Biophys Acta** 1988 Nov 23;957(2):207–16

FTIR-ATR spectra of protein A immobilized on to functionalized polypropylene membranes by gaseous plasma of oxygen and of anhydrous ammonia. Sipehia R. **Biomater Artif Cells Artif Organs** 1988–89;16(5):955–66

Preservation of guinea pig hearts by hypothermic gas perfusion. Bailey LE. **Can J Physiol Pharmacol** 1989 Jul; 67(7):692–6

Selective fractionation of hypoxic B16 melanoma cells by density gradient centrifugation. Fornabaio M, et al. **Cancer Lett** 1989 Mar;44(3):185–90

Cytotoxic effect of RA233 on hypoxic B16 melanoma cells in vitro. Stackpole CW, et al. **Cancer Lett** 1988 Sep–Oct; 42(1–2):127–31

Roles of oxygen in photochemical reaction of naphthols in aqueous nitrite solution and mutagen formation. Suzuki J, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4567–75

Rate-dependent effects of hypoxia on internal longitudinal

resistance in guinea pig papillary muscles. Hiramatsu Y, et al. **Circ Res** 1988 Nov;63(5):923–9

Prostaglandin E1 infusion fails to prevent hyperoxic lung injury in adult rabbits. Hageman JR, et al. **Crit Care Med** 1989 Apr;17(4):339–44

Role of oxygen free radicals in the induction of sister chromatid exchanges by cigarette smoke. Lee CK, et al. **Environ Mol Mutagen** 1989;13(1):54–9

Multiplicity of interactions between dromedary hemoglobin and solvent components. A structural and functional study. Bertollini A, et al. **Eur J Biochem** 1988 Oct 1;176(3):669–73

Fe(II)–substituted horse liver alcohol dehydrogenase, a model for non–heme iron enzymes. Various states of iron–dioxygen interaction investigated by Mössbauer and EPR spectroscopy. Bill E, et al. **Eur J Biochem** 1989 Mar 1;180(1):111–21

Viscosity–dependent energy barriers and equilibrium conformational fluctuations in oxygen recombination with hemerythrin. Lavalette D, et al. **Eur J Biochem** 1988 Oct 15;177(1):97–108

Therapy with red blood cells decreases hyperoxic pulmonary injury. Hoidal JR, et al. **Exp Lung Res** 1988;14 Suppl:977–85 (24 ref.)

The effect of oxygen, antioxidants, and superoxide radical on tyrosine phenoxyl radical dimerization. Hunter EP, et al. **Free Radic Biol Med** 1989;6(6):581–5

On the interaction of anisyl–3,4–semiquinone with oxygen. Cooksey CJ, et al. **Free Radic Res Commun** 1987;4(3):131–8

Oxygen activation and deactivation in the presence of simple metal–chelates. Duchstein HJ. **Free Radic Res Commun** 1987;4(1):61–7

Effects of hyperthermic conditions on the reactivity of oxygen radicals. Issels RD, et al. **Free Radic Res Commun** 1986;2(1–2):7–18

Inability of chemically generated singlet oxygen to break the DNA backbone. Nieuwint AW, et al. **Free Radic Res Commun** 1985;1(1):1–9

The ene reaction of singlet oxygen with olefins. Orfanopoulos M, et al. **Free Radic Res Commun** 1987;2(4–6):321–6

New singlet oxygen source and trapping reagent for peroxide intermediates. Saito I, et al. **Free Radic Res Commun** 1987; 2(4–6):327–36

Response of human hepatocyte lysosomes to postmortem anoxia. Yu QC, et al. **Hum Pathol** 1988 Oct;19(10):1174–80

Production of oxygen radicals by the reduction of oxygen arising from the surface activity of mineral fibres. Pezerat H, et al. **IARC Sci Publ** 1989;(90):100–11

A fast differential paramagnetic O2–sensor. Meriläinen PT. **Int J Clin Monit Comput** 1988;5(3):187–95

Investigations into cultivation of M. leprae under low oxygen tension [letter] Ishaque M. **Int J Lepr Other Mycobact Dis** 1989 Mar;57(1):115–6

Molecular mechanisms of oxygen and "electron–affinic" radiosensitizers [letter] Wardman P. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):286–8

Rat lung glucose metabolism after 24 h of exposure to 100% oxygen. Bassett DJ, et al. **J Appl Physiol** 1989 Feb; 66(2):989–96

Type II pneumocyte changes during hyperoxic lung injury and recovery. Holm BA, et al. **J Appl Physiol** 1988 Dec; 65(6):2672–8

Effect of 100% O2 on hypoxic eucapnic ventilation. Holtby SG, et al. **J Appl Physiol** 1988 Sep;65(3):1157–62

BCNU–induced protection from hyperbaric hyperoxia: role of glutathione metabolism. Jenkinson SG, et al. **J Appl Physiol** 1988 Dec;65(6):2531–6

Lung aeration and lung water dynamics in artificially ventilated newborn lambs. Maloney JE, et al. **J Appl Physiol** 1989 Jan;66(1):1–7

Increase in pulmonary capillary permeability in dogs exposed to 100% O2. Royer F, et al. **J Appl Physiol** 1988 Sep; 65(3):1140–6

Cytokines increase rat lung antioxidant enzymes during exposure to hyperoxia. White CW, et al. **J Appl Physiol** 1989 Feb;66(2):1003–7

Polyethylene glycol–attached antioxidant enzymes decrease pulmonary oxygen toxicity in rats. White CW, et al. **J Appl Physiol** 1989 Feb;66(2):584–90

Signal transduction in chemotaxis to oxygen in Escherichia coli and Salmonella typhimurium. Shioi J, et al. **J Bacteriol** 1988 Dec;170(12):5507–11

Direct observation of singlet oxygen production by merocyanine 540 associated with phosphatidylcholine liposomes. Feix JB, et al. **J Biol Chem** 1988 Nov 25; 263(33):17247–50

Singlet oxygen production from the peroxidase–catalyzed oxidation of indole–3–acetic acid. Kanofsky JR. **J Biol Chem** 1988 Oct 5;263(28):14171–5

Intracellular pH during "chemical hypoxia" in cultured rat hepatocytes. Protection by intracellular acidosis against the onset of cell death. Gores GJ, et al. **J Clin Invest** 1989 Feb;83(2):38 ,–96

A theoretical study of the Si–O bond in disiloxane and related molecules. Abraham RJ, et al. **J Comput Aided Mol Des** 1989 Jan;2(4):267–80

The effect of dissolved oxygen concentration on the growth physiology of Saccharomyces cerevisiae whi2 mutants. Rahman DR, et al. **J Gen Microbiol** 1988 Aug;134 (Pt 8):2241–8

Low pO2 selectively inhibits K channel activity in chemoreceptor cells of the mammalian carotid body. López–López J, et al. **J Gen Physiol** 1989 May; 93(5):1001–15

Relationship between cell adenosine triphosphate and glutathione content and protection by glycine against hypoxic proximal tubule cell injury. Weinberg JM, et al. **J Lab Clin Med** 1989 May;113(5):612–22

Hypoxic contraction of isolated rat pulmonary artery. Rodman DM, et al. **J Pharmacol Exp Ther** 1989 Mar; 248(3):952–9

Beneficial effects of lidocaine and disopyramide on oxygen–deficiency–induced contractile failure and metabolic disturbance in isolated rabbit hearts. Takeo S, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):306–14

Facing hypoxia: a must for photodynamic therapy. Freitas I. **J Photochem Photobiol [B]** 1988 Sep;2(2):281–2

Singlet oxygen production and photoisomerization: two competitive processes for merocyanine 540 irradiated with visible light. Hoebeke M, et al. **J Photochem Photobiol –B–** 1988 May;1(4):437–46

Triplet state properties and triplet–state–oxygen interactions of some linear and angular furocoumarins. Knox CN, et al. **J Photochem Photobiol –B–** 1988 Mar;1(3):315–21

On the problems involved in detecting luminescence from singlet oxygen in biological specimens [news] Rodgers MA. **J Photochem Photobiol –B–** 1988 Mar;1(3):371–3

A dynamic analysis of the ventilatory response to hypoxia in man. Bertholon JF, et al. **J Physiol (Lond)** 1989; 408:473–92

Stimulation of breathing movements by L–5–hydroxytryptophan in fetal sheep during normoxia and hypoxia. Fletcher DJ, et al. **J Physiol (Lond)** 1988 Oct; 404:575–89

Determination of ethane and pentane in free oxygen radical–induced lipid peroxidation. Pitkänen OM, et al. **Lipids** 1989 Feb;24(2):157–9

Cancellation of the boundary and edge effects by choice of lens thickness during oxygen permeability measurement of contact lenses. Weissman BA, et al. **Optom Vis Sci** 1989 May;66(5):264–8

Kinetics and mechanism of captopril oxidation in aqueous solution under controlled oxygen partial pressure. Lee TY, et al. **Pharm Res** 1987 Apr;4(2):98–103

Oxygen diffusion coefficients in commonly used topical semisolid creams. Wang JC, et al. **Pharm Res** 1988 Feb; 5(2):92–8

Singlet oxygen induces frank strand breaks as well as alkali– and piperidine–labile sites in supercoiled plasmid DNA. Blazek ER, et al. **Photochem Photobiol** 1989 May; 49(5):607–13

Anthralin–derived transients—I. The triplet state and the products of its reaction with oxygen in benzene. Bruce JM, et al. **Photochem Photobiol** 1989 Apr;49(4):439–45

Photosensitizers in organized media: singlet oxygen production and spectral properties. Gottfried V, et al. **Photochem Photobiol** 1988 Aug;48(2):157–63

Products and relative reaction rates of the oxidation of tocopherols with singlet molecular oxygen. Neely WC, et al. **Photochem Photobiol** 1988 Oct;48(4):423–8

The production of singlet molecular oxygen by zinc(II) phthalocyanine in ethanol and in unilamellar vesicles. Chemical quenching and phosphorescence studies. Valduga G, et al. **Photochem Photobiol** 1988 Jul;48(1):1–5

Singlet molecular oxygen quenching by saturated and unsaturated fatty–acids and by cholesterol. Vever–Bizet C, et al. **Photochem Photobiol** 1989 Sep;50(3):321–5

Oxygen permeability of phosphatidylcholine—cholesterol membranes. Subczynski WK, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4474–8

Hypoxia induces DNA overreplication and enhances metastatic potential of murine tumor cells. Young SD, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9533–7

Relationship between energy status, hypoxic cell fraction, and hyperthermic sensitivity in a murine fibrosarcoma. Gerweck LE, et al. **Radiat Res** 1989 Mar;117(3):448–58

Radiosensitivity of mouse lip mucosa: influence of anesthesia, carbogen, and a new high O2 carrying perfluorochemical emulsion. Thomas C, et al. **Radiat Res** 1989 Jun; 118(3):476–87

Evidence for the generation of singlet molecular oxygen during dopa and dopamine peroxidation. Kruk I, et al. **Z Naturforsch [C]** 1989 Jan–Feb;44(1–2):39–44

[The basic operation manual of using gas cylinders—a report of an oxygen accident] Jang RY, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun;26(2):253–6 (Eng. Abstr.) **(Chi)**

[Industrial aspects of the production and consumption of medical oxygen at home] Grasset JM. **Agressologie** 1988 Sep;29(8):569–72 (Eng. Abstr.) **(Fre)**

[Inhibitory action of tiopronin on free radicals] Rommain M, et al. **Rev Rhum Mal Osteoartic** 1989 Apr 30;56(5 Pt 2):34–7 (Eng. Abstr.) **(Fre)**

[Sufentanil–N2O2/O2 or halothane–N2O/O2 anesthesia in surgery of infants and children with congenital heart defects. Hemodynamics and plasma catecholamines] Barankay A, et al. **Anaesthesist** 1989 Aug;38(8):391–6 (Eng. Abstr.) **(Ger)**

[Changes in regional cerebral blood flow and tissue PO2 due to complete cerebral ischemia] Kajiyama K. **Masui** 1988 Aug;37(8):923–32 (Eng. Abstr.) **(Jpn)**

[A case report of a patient who developed cyanosis and significant decrease in PtcO2 caused by a contraction of the ductus arteriosus] Tanaka K, et al. **Masui** 1989 Jan; 38(1):107–9 (Eng. Abstr.) **(Jpn)**

[Negative chronotropic effect of hypoxia on the rabbit sinus node] Kushikata Y. **Nippon Ika Daigaku Zasshi** 1988 Aug; 55(4):371–9 (Eng. Abstr.) **(Jpn)**

[A schedule of 40 m nitrogen–oxygen saturation diving] Ikeda T, et al. **Sangyo Igaku** 1988 Jul;30(4):284–5 **(Jpn)**

[Electronic structure of the binding of O2, CO and NO with heme iron] Kobayashi H, et al. **Tanpakushitsu Kakusan Koso** 1987 May;32(6):704–10 (38 ref.) **(Jpn)**

[Life time of active oxygens and their physiological significance] Kobayashi K. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2678–83 **(Jpn)**

[Chemistry of active oxygen species] Saito I, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2665–77 **(Jpn)**

[Sensibilized dimer luminescence of singlet molecular oxygen in solutions] Krasnovskiĭ AA Jr, et al. **Biofizika** 1988 Sep–Oct;33(5):884–6 (Eng. Abstr.) **(Rus)**

[Oxygen dependence of the kinetics of nonenzymatic lipid peroxidation] Sitnitskiĭ AE, et al. **Biofizika** 1989 Mar–Apr; 34(2):230–4 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Pulmonary effects of blood replacement with a perfluorochemical emulsion followed by exposure to 85% oxygen or air. Barry BE, et al. **Am Rev Respir Dis** 1988 Aug;138(2):435–44

Transtracheal oxygen decreases inspired minute ventilation. Couser JI Jr, et al. **Am Rev Respir Dis** 1989 Mar; 139(3):627–31

Polyamines, DNA synthesis, and tolerance to hyperoxia of mice and rats. Tierney DF, et al. **Am Rev Respir Dis** 1989 Feb;139(2):387–92

Transtracheal oxygen decreases inspired minute ventilation [letter] Williams MH Jr. **Am Rev Respir Dis** 1989 Aug; 140(2):562

Inspired oxygen and nitrous oxide concentrations in volunteers during nitrous oxide sedation with a Hudson mask [published erratum appears in Anaesth Intensive Care 1989 Feb;17(1):8] Anderson BJ, et al. **Anaesth Intensive Care** 1988 Nov;16(4):423–6

Maintenance of oxygenation during one–lung ventilation. Effect of intermittent reinflation of the collapsed lung with oxygen. Malmkvist G. **Anesth Analg** 1989 Jun;68(6):763–6

A humidification device for nasal oxygen [letter] Elstein ID, et al. **Anesthesiology** 1989 May;70(5):879

Pharyngeal insufflation of oxygen prevents arterial desaturation during apnea. Teller LE, et al. **Anesthesiology** 1988 Dec;69(6):980–2

Oxygen as an isolated variable influences resistance to infection. Jönsson K, et al. **Ann Surg** 1988 Dec;208(6):783–7

Human tolerance to 100% oxygen at 9.5 psia during five daily simulated 8–hour EVA exposures. Webb JT, et al. **Aviat Space Environ Med** 1989 May;60(5):415–21

Effect of various oxygenation conditions and fluosol–DA on cancer chemotherapeutic agents. Teicher BA, et al. **Biomater Artif Cells Artif Organs** 1988;16(1–3):533–46

Maximum FIO2 during caesarean section. Bogod DG, et al. **Br J Anaesth** 1988 Sep;61(3):255–62

Preoxygenation [editorial] Gold MI. **Br J Anaesth** 1989 Mar; 62(3):241–2

Maternal inspired oxygen concentration and neonatal status for caesarean section under general anaesthesia. Comparison of effects of 33% or 50% oxygen in nitrous oxide. Lawes EG, et al. **Br J Anaesth** 1988 Sep;61(3):250–4

Predicted and measured oxygen concentrations in the circle system using low fresh gas flows with oxygen supplied by an oxygen concentrator. Parker CJ, et al. **Br J Anaesth** 1988 Oct;61(4):397–402

Oxygen supplementation during electroconvulsive therapy. Räsänen J, et al. **Br J Anaesth** 1988 Nov;61(5):593–7

Comparison of 1.5% enflurane with 1.25% isoflurane in oxygen for caesarean section: avoidance of awareness without nitrous oxide. Tunstall ME, et al. **Br J Anaesth** 1989 Feb;62(2):138–43

Effect of oxygen withdrawal on active and passive electrical properties of arterially perfused rabbit ventricular muscle. Riegger CB, et al. **Circ Res** 1989 Mar;64(3):532–41

Blood biochemical and cellular changes during a decompression procedure involving eight hours of oxygen prebreathing. Jauchem JR. **Clin Physiol Biochem** 1989; 7(1):47–52

Continuous monitoring of tissue oxygen tension during hyperoxia and hypoxia: relation of subcutaneous, transcutaneous, and conjunctival oxygen tension to hemodynamic variables. Gottrup F, et al. **Crit Care Med** 1988 Dec;16(12):1229–34

Airway pressure release ventilation by mask. Jousela IT, et al. **Crit Care Med** 1988 Dec;16(12):1250–1

Inspired oxygen concentration during general anaesthesia for caesarean section. Matthews P, et al. **Eur J Anaesthesiol** 1989 Jul;6(4):295–301

Portable oxygen therapy: use and benefit in hypoxaemic COPD patients on long–term oxygen therapy [published erratum appears in Eur Respir J 1989 Mar;2(3):292] Vergeret J, et al. **Eur Respir J** 1989 Jan;2(1):20–5

A high flow turbine CPAP system. Moran JL, et al. **Intensive Care Med** 1988;14(6):658–60

The combined effect of nitrous oxide and oxygen and electrical stimulation during restorative dental treatment. Donaldson D, et al. **J Am Dent Assoc** 1989 Jun;118(6):733–6

Oxygen–mediated impairment of human pulmonary

endothelial cell growth: evidence for a specific threshold of toxicity. Martin WJ 2d, et al. **J Lab Clin Med** 1989 Apr; 113(4):413–21

Use of an HeO2 mixture in the management of upper airway obstruction during labor and delivery. A case report. Mallett VT, et al. **J Reprod Med** 1989 Jun;34(6):429–30

The effects of oxygen toxicity on the pregnant rat using an apparatus designed to measure oxygen consumption method. Yoshimura Y, et al. **J Toxicol Sci** 1988 Aug; 13(3):141–9

Oxygen and athletes [editorial] Cooper KH, et al. **JAMA** 1989 Jul 14;262(2):264

Effects of 100% oxygen on performance of professional soccer players. Winter FD Jr, et al. **JAMA** 1989 Jul 14; 262(2):227–9

Nasopharyngeal oxygen in children [letter] [see comments] Klein M, et al. **Lancet** 1989 Mar 4;1(8636):493–4. **Comment in:** Lancet 1989 May 13;1(8646):1077–8

Nasopharyngeal oxygen in children [letter; comment] Shann F. **Lancet** 1989 May 13;1(8646):1077–8. **Comment on:** Lancet 1989 Mar 4;1(8636):493–4

Reducing fire hazard during ophthalmic surgery by using compressed air. Neatrour GP, et al. **Ophthalmic Surg** 1989 Jun;20(6):430–2

Hypoxia–induced increases in hypoxic tolerance augmented by beta–hydroxybutyrate in mice. Rising CL, et al. **Stroke** 1989 Sep;20(9):1219–25

The effects of hyperoxia during fulminant sepsis. Garner WL, et al. **Surgery** 1989 Jun;105(6):747–51

Oxygen tolerance in mice following exposure to butylated hydroxytoluene. Margaretten N, et al. **Toxicol Appl Pharmacol** 1988 Oct;96(1):147–58

Exacerbation of tallysomycin toxicity in rats by concurrent exposure to sublethal hyperoxia. Coursin DB, et al. **Toxicology** 1989 Apr;55(1–2):225–37

The mechanism of action of retrograde oxygen persufflation in renal preservation. Pegg DE, et al. **Transplantation** 1989 Aug;48(2):210–7

A pilot clinical study of retrograde oxygen persufflation in renal preservation. Rolles K, et al. **Transplantation** 1989 Aug;48(2):339–42

[Hyperoxia test during attempts to withdraw artificial ventilation] Pourriat JL, et al. **Agressologie** 1989 Apr; 30(4):217–21 (Eng. Abstr.) **(Fre)**

[EEG recorded after effort in triathletes. Influence of prior inhalation of hyperbaric oxygen] Dolisi C, et al. **Neurophysiol Clin** 1989 May;19(2):123–30 (Eng. Abstr.) **(Fre)**

[Oxygen partial pressure after rectal oxygen insufflation—experimental animal studies] Klug W, et al. **Z Exp Chir Transplant Kunstliche Organe** 1988;21(4):222–6 (Eng. Abstr.) **(Ger)**

[Changes in the functional status of lymphocytes in patients with chronic salpingo–oophoritis treated by normobaric hypoxia] Burlev VA, et al. **Akush Ginekol (Mosk)** 1989 Feb;(2):27–9 (Eng. Abstr.) **(Rus)**

[Kinetics of oxygen metabolism in pregnant women with high risk of developing late toxemia during intermittent normobaric hypoxia] Chizhov AIa, et al. **Akush Ginekol (Mosk)** 1989 May;(5):17–20 (Eng. Abstr.) **(Rus)**

[Effect of hyperoxygenation on oxygen metabolism kinetics in women in the third trimester of pregnancy] Karash IuM, et al. **Akush Ginekol (Mosk)** 1989 May;(5):62–4 **(Rus)**

[Gas microembolism caused by equipment for artificial circulation. Its significance, causes and prevention] Maksimenko VB, et al. **Anesteziol Reanimatol** 1988 Jul–Aug;(4):9–11 (Eng. Abstr.) **(Rus)**

[Criteria of individual variations in the reactivity of the respiratory system] Berezovskiĭ VA, et al. **Fiziol Zh** 1989 May–Jun;35(3):62–7 (Eng. Abstr.) **(Rus)**

[Physical work capacity of Alpinists under conditions of extremely low pO2 in inspired air] Kolchinskaia AZ, et al. **Fiziol Zh** 1989 May–Jun;35(3):68–74 (Eng. Abstr.) **(Rus)**

[Brain oxygenation in newborn rats in hyperoxic and oxygen–free gaseous environments] Raguzin AV. **Fiziol Zh** 1988 Jul–Aug;34(4):41–6 (Eng. Abstr.) **(Rus)**

[Dynamics of oxygen tension in the brain and subcutaneous adipose tissue of newborn rats during anoxia and reoxygenation] Raguzin AV. **Fiziol Zh** 1989 May–Jun; 35(3):74–80 (Eng. Abstr.) **(Rus)**

[A puncture needle for simultaneous administration of drugs and oxygen] Glivenko IuA. **Klin Khir** 1989;(1):69 **(Rus)**

[Heliox correction of the changes in hemodynamics and gas exchange in the early period after lung resection] Kogosov IuA, et al. **Klin Khir** 1988;(10):3–4 (Eng. Abstr.) **(Rus)**

[Use of helium–oxygen mixtures in respiratory hypoxia] Zhukovskiĭ LI, et al. **Klin Med (Mosk)** 1989 Feb; 67(2):114–8 (Eng. Abstr.) **(Rus)**

[Species–specific reactions of succinate dehydrogenase of lymphocytes in animals to acute hypoxic hypoxia and its relation to the radiation resistance of the body] Antipov VV, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr; 23(2):63–6 (Eng. Abstr.) **(Rus)**

[Changes in the maximum permissible supersaturation coefficient in altitude decompression] Chadov VI, et al. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):58–62 (Eng. Abstr.) **(Rus)**

[Optimal methods of oxygen therapy] Zhukovskiĭ LI, et al. **Probl Tuberk** 1988;(9):40–3 (Eng. Abstr.) **(Rus)**

[Use of normobaric oxygenation for preventive and therapeutic purposes] Marachev AG, et al. **Ter Arkh** 1989; 61(2):88–92 (Eng. Abstr.) **(Rus)**

[Substantiation and use of a new method of transorganic oxygen preservation of the kidneys] Petrovskiĭ BV, et al. **Vestn Akad Med Nauk SSSR** 1989;(2):69–82 (Eng. Abstr.) **(Rus)**

[Validation and experience in the use of local oxygen therapy in the system of the combined treatment of psoriasis patients] Bukharovich MN, et al. **Vestn Dermatol Venerol** 1989;(4):38–42 (Eng. Abstr.) **(Rus)**

[A device for conducting artificial ventilation of the lungs using an injection method during bronchoscopy] Larionov AI, et al. **Vestn Khir** 1988 Dec;141(12):87 **(Rus)**

[Arterial oxygen saturation during anesthetic induction and orotracheal intubation] Canet Capeta J, et al. **Rev Esp Anestesiol Reanim** 1988 May–Jun;35(3):123–6 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

The oxygen hypothesis: fruitful predictor or narrow dogma? Silverman WA. **Birth Defects** 1988;24(1):203–7

Several animal models of oxidative stress to the skin. Miyachi Y, et al. **Dermatologica** 1989;179 Suppl 1:141

Patterns of progression and markers of lung injury in rodents and subhuman primates exposed to hyperoxia. Fracica PJ, et al. **Exp Lung Res** 1988;14 Suppl:869–85

Pulmonary O2 toxicity: validation of the "60%" rule in cultured human lung endothelium [editorial] Kennedy TP. **J Lab Clin Med** 1989 Apr;113(4):399–400

Evidence for the role of active oxygen in guanidine synthesis in haemodialysis patients and in vitro. Nagase S, et al. **Nephrol Dial Transplant** 1988;3(6):790–4

Pulmonary insults due to transfusions, radiation, and hyperoxia. Duane P. **Semin Respir Infect** 1988 Sep; 3(3):240–6 (84 ref.)

Early bronchopulmonary lesions in rat lung after normobaric 100% oxygen exposure and their evolution. A light and electron microscopic study. Porte A, et al. **Virchows Arch [A]** 1989;414(2):135–45

[DNA damage by oxygen radicals and carcinogenesis] Kasai H. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 2):459–65 (24 ref.) (Eng. Abstr.) **(Jpn)**

[Effect of electrolysis oxygen on the human body] Koziarin IP. **Vrach Delo** 1989 Jan;(1):107–9 (Eng. Abstr.) **(Rus)**

ANALYSIS

The use of conductive thermoplastic wires as oxygen sensors in microwave fields. Bicher HI, et al. **Adv Exp Med Biol** 1989;248:119–24

Tissue oxygen tension in the cerebral cortex of the rabbit. Fennema M, et al. **Adv Exp Med Biol** 1989;248:451–60

The oxygen dependence of the energy state of cardiac tissue: 31P–NMR and optical measurement of myoglobin in perfused rat heart. Fukuda H, et al. **Adv Exp Med Biol** 1989;248:567–73

Influence of prostaglandin E1 on muscular tissue–PO2 in patients with diabetic gangrene. Heinrich R, et al. **Adv Exp Med Biol** 1989;248:699–704

Potentiometric polarographic PO2 electrode (PO2–PPE). Kessler M, et al. **Adv Exp Med Biol** 1989;248:137–40

Development of muscular tissue PO2 after vascular reconstructive surgery. Krawzak HW, et al. **Adv Exp Med Biol** 1989;248:713–8

Chinese herbal medicine increases tissue oxygen tension. Linsenmeier RA, et al. **Adv Exp Med Biol** 1989;248:795–801

Conjunctival oxygen tension monitoring in emergency department patients. Abraham E, et al. **Am J Emerg Med** 1988 Nov;6(6):549–54

Low oxygen selectively inhibits aldosterone secretion from bovine adrenocortical cells in vitro. Raff H, et al. **Am J Physiol** 1989 May;256(5 Pt 1):E640–4

Intraocular oxygen tension measured with a fiber–optic sensor in normal and diabetic dogs. Stefansson E, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1127–33

Atmospheric concentrations of nitrous oxide in ambulances during Entonox administration. Ilsley AH, et al. **Anaesth Intensive Care** 1989 Feb;17(1):83–5

Phosphorimeters for analysis of decay profiles and real time monitoring of exponential decay and oxygen concentrations. Green TJ, et al. **Anal Biochem** 1988 Oct; 174(1):73–9

Enzymatic method for measuring the absolute value of oxygen concentration. Yomo T, et al. **Anal Biochem** 1989 May 15;179(1):124–6

Standards for oxygen analyzers [letter] Hedley–White J. **Anesthesiology** 1989 Aug;71(2):317

The measurement of expiratory oxygen as disconnection alarm. Knaack–Steinegger R, et al. **Anesthesiology** 1989 Feb;70(2):343–4

Phenylephrine–induced anterior chamber hypoxia. Pakalnis VA, et al. **Ann Ophthalmol** 1988 Jul;20(7):267–70

Simple test to distinguish between surgical and non–surgical pneumoperitoneum in ventilated neonates. Vanhaesebrouck P, et al. **Arch Dis Child** 1989 Jan;64(1 Spec No):48–9

Active oxygen species and structure specificity of antipsoriatic anthrones. Müller K. **Arch Pharm (Weinheim)** 1988 Jul;321(7):385–9

The detection of singlet oxygen in biochemical systems using 1268 nm chemiluminescence. Kanofsky JR. **Basic Life Sci** 1988;49:211–8

Electron spin resonance investigations of oxygen–centered free radicals in biological systems. Mason RP, et al. **Basic Life Sci** 1988;49:21–7

Design and evaluation of a reversible fiber optic sensor for determination of oxygen. Surgi MR. **Biotechnology** 1989; 11:249–90 (67 ref.)

New approach to the seven–day Ceriodaphnia dubia test with additional comments pertaining to the same test for Daphnia magna. Cowgill UM, et al. **Bull Environ Contam Toxicol** 1989 May;42(5):749–53

Synovial oxygen partial pressure after experimental microtraumatic joint affection. Fengler H, et al. **Clin Rheumatol** 1988 Dec;7(4):459–64

Automatic measurement of the oxygen affinity of Cancer magister hemocyanin. Wajcman H, et al. **Comp Biochem Physiol [B]** 1977;57(2):139–41

Continuous monitoring of tissue oxygen tension during hyperoxia and hypoxia: relation of subcutaneous, transcutaneous, and conjunctival oxygen tension to hemodynamic variables. Gottrup F, et al. **Crit Care Med** 1988 Dec;16(12):1229–34

Comparison of two formulas to calculate alveolar oxygen tension in canine oleic acid pulmonary edema. Johnston WE, et al. **Crit Care Med** 1989 Feb;17(2):176–8

Inspiratory end–tidal oxygen content difference: a sensitive indicator of hypoventilation. Linko K, et al. **Crit Care Med** 1989 Apr;17(4):345–8

Insufficient oxygen concentration obtained at domiciliary controls of eighteen concentrators. Bongard JP, et al. **Eur Respir J** 1989 Mar;2(3):280–2

Oxygen radical chemistry of polyunsaturated fatty acids. Gardner HW. **Free Radic Biol Med** 1989;7(1):65–86 (109 ref.)

Metastable oxygen molecules in the troposphere. Schurath U. **Free Radic Res Commun** 1987;3(1–5):173–84

Relations between pH, oxygen partial pressure and growth in cultured cell spheroids. Carlsson J, et al. **Int J Cancer** 1988 Nov 15;42(5):715–20

Gas exchange in healthy rabbits during high–frequency oscillatory ventilation. Boynton BR, et al. **J Appl Physiol** 1989 Mar;66(3):1343–51

Improved fabrication of double–barreled recessed cathode O2 microelectrodes [letter] Nair PK, et al. **J Appl Physiol** 1989 May;66(5):2479

Halothane interference at an amperometric oxygen electrode: the development of an oxygen/halothane sensor. Hall EA, et al. **J Biomed Eng** 1988 Jul;10(4):319–25

High–performance liquid chromatographic method for the direct quantitation of oxy radicals in myocardium and blood by means of 1,3–dimethylthiourea and dimethyl sulfoxide. Rao PS, et al. **J Chromatogr** 1988 Dec 28; 459:269–73

Oxygen concentration in milk of healthy and mastitic cows and implications of low oxygen tension for the killing of Staphylococcus aureus by bovine neutrophils. Mayer SJ, et al. **J Dairy Res** 1988 Nov;55(4):513–9

Oxygen ordering and twinning in YBa2Cu3O7–x. Barry JC. **J Electron Microsc Tech** 1988 Mar;8(3):325–37

Detection of singlet oxygen luminescence with germanium avalanche photodiodes. Andreoni A, et al. **J Photochem Photobiol [B]** 1987 Sep;1(1):129–30

A statistical assessment of the dependability of transcutaneous tissue oxygen tension measurements. Stein M, et al. **J Surg Res** 1989 Jan;46(1):70–5

Mathematical simulation of an amperometric enzyme–substrate electrode with a pO2 basic sensor. Part 2. Mathematical simulation of the glucose oxidase glucose electrode. Lemke K. **Med Biol Eng Comput** 1988 Sep; 26(5):533–40

Mathematical stimulation of an amperometric enzyme–substrate electrode with a pO2 basic sensor. Part 1. Mathematical model and simulation of the pO2 basic sensor. Lemke K. **Med Biol Eng Comput** 1988 Sep; 26(5):523–32

Accuracy in measurement of gas partial pressure in biological media by gas–consuming probes. Pedersen JB, et al. **Med Biol Eng Comput** 1988 Mar;26(2):203–6

Electron spin resonance oximetry. Belkin S, et al. **Methods Enzymol** 1988;167:670–7

Stacking samples while measuring oxygen transmissibility of hydrogel contact lenses. Weissman BA, et al. **Optom Vis Sci** 1989 Apr;66(4):235–8

Singlet oxygen generation of porphyrins, chlorins, and phthalocyanines. Kimel S, et al. **Photochem Photobiol** 1989 Aug;50(2):175–83

Non–invasive conjunctival PCO2 and PO2 monitoring during hyper– and hypoventilation. Kram HB, et al. **Resuscitation** 1988 Oct;16(4):263–9

[Escape of hydrogen peroxide and oxygen from the root canal] Glockmann E, et al. **Zahn Mund Kieferheilkd** 1989; 77(1):8–11 (Eng. Abstr.) **(Ger)**

[Measurements of active oxygen by cytochemical demonstration procedures] Hirai K, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2708–16 **(Jpn)**

[Measurements of active oxygen by chemiluminescence] Nakano M. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):2699–707 **(Jpn)**

[Measurements of active oxygen by chemical and biochemical procedures] Nakano M. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2684–92 **(Jpn)**

[Measurements of active oxygen by electron spin resonance]

Tero-Kubota S. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):2693–8 **(Jpn)**
[A method of measuring pO2 and the concentration of oxidizing agents in tissues] Prokhorov GG.
Patol Fiziol Eksp Ter 1988 Jul–Aug;(4):72–5 **(Rus)**

ANTAGONISTS & INHIBITORS

Protective effect of glutathione against oxygen–induced growth inhibition of human diploid fibroblasts. Honda S, et al. **Biochem Int** 1989 Feb;18(2):439–46
Higher antioxidative capacity during a chronic stable heart hypertrophy. Gupta M, et al. **Circ Res** 1989 Feb; 64(2):398–406
[Correlation of the rates of singlet oxygen inactivation by phenols and their efficacy in the inhibition of neoplasms induced by benzo(a)pyrene] Bensasson RV, et al.
C R Acad Sci [III] 1988;307(18):807–10 (Eng. Abstr.) **(Fre)**

BIOSYNTHESIS

Significance of reactive oxygen species and antioxidants in defining the efficacy of sperm preparation techniques. Aitken RJ, et al. **J Androl** 1988 Nov–Dec;9(6):367–76
Botulinum C2 toxin ADP–ribosylates actin and enhances O2–production and secretion but inhibits migration of activated human neutrophils. Norgauer J, et al. **J Clin Invest** 1988 Oct;82(4):1376–82
Maturational difference in functional/metabolic sequelae of free radical formation on reperfusion. del Nido PJ, et al. **J Surg Res** 1989 Jun;46(6):532–6

BLOOD

Early detection of inadvertent oesophageal intubation: pulse oximetry vs. capnography. Guggenberger H, et al.
Acta Anaesthesiol Scand 1989 Feb;33(2):112–5
Assessment of the efficiency of pulmonary oxygenation. The choice of oxygenation index. Zetterström H.
Acta Anaesthesiol Scand 1988 Oct;32(7):579–84
Extravascular arteriovenous oxygen shunting in the cat stomach. Ivarsson L, et al. **Acta Physiol Scand** 1989 Mar; 135(3):293–7
Oxygen transport to tissue XI. Proceedings of the 16th annual meeting of the International Society on Oxygen Transport to Tissue. August 7–11, 1988, Ottawa, Ontario, Canada.
Adv Exp Med Biol 1989;248:1–868
Myocardial oxygen transport during leftward shifts of the oxygen dissociation curve by carbamylation or hypothermia. Baer RW. **Adv Exp Med Biol** 1989;248:325–33
Oxygen delivery and performance in the isolated, perfused rat heart: comparison of perfusion with aqueous and perfluorocarbon–containing media. Biro GP, et al.
Adv Exp Med Biol 1989;248:509–16
Central reflex effects of hypoxia on muscle oxygenation. Bredle DL, et al. **Adv Exp Med Biol** 1989;248:681–5
Microelectrode studies of facilitated O2 transport across hemoglobin and myoglobin layers. Buerk DG, et al.
Adv Exp Med Biol 1989;248:125–35
The nature of fluorocarbon enhanced cerebral oxygen transport. Clark LC Jr, et al. **Adv Exp Med Biol** 1989; 248:341–55
Determination of cerebral venous hemoglobin saturation by derivative near infrared spectroscopy. Ferrari M, et al.
Adv Exp Med Biol 1989;248:47–53
Effects of red cell spacing and red cell movement upon oxygen release under conditions of maximally working skeletal muscle. Groebe K, et al. **Adv Exp Med Biol** 1989; 248:175–85
The interaction between oxygen and vascular wall. Grote J, et al. **Adv Exp Med Biol** 1989;248:575–81
Precapillary O2 loss and arteriovenous O2 diffusion shunt are below limit of detection in myocardium. Honig CR, et al. **Adv Exp Med Biol** 1989;248:591–9
Calculation of oxygen pressures and fluxes in a flat plane perpendicular to any capillary distribution. Hoofd L, et al. **Adv Exp Med Biol** 1989;248:187–96
Effects of different inspiratory/expiratory (I/E) ratios and PEEP–ventilation on blood gases and hemodynamics in dogs with severe respiratory distress syndrome (RDS). Lachmann B, et al. **Adv Exp Med Biol** 1989;248:769–77
Improved arterial oxygenation and CO2 elimination following changes from volume–generated PEEP ventilation with inspiratory/expiratory (I/E) ratio of 1:2 to pressure–generated ventilation with I/E ratio of 4:1 in patients with severe adult respiratory distress syndrome (ARDS). Lachmann B, et al. **Adv Exp Med Biol** 1989; 248:779–86
Intrauterine growth retardation related to maternal erythrocyte oxygen transport. Mendoza GJ, et al.
Adv Exp Med Biol 1989;248:377–86
Relationship between the transfer rate and the difference in partial pressure of gas molecules at a heterogeneous interface. Mochizuki M. **Adv Exp Med Biol** 1989; 248:207–14
Fractionation of oxygen isotopes due to equilibration of oxygen with hemoglobin. Pflug KP, et al.
Adv Exp Med Biol 1989;248:407–11
Measurements of oxygen flux from arterioles imply high permeability of perfused tissue to oxygen. Popel AS, et al. **Adv Exp Med Biol** 1989;248:215–25
The effect of hyperchylomicronaemia on oxygen affinity in human blood. Poss MJ, et al. **Adv Exp Med Biol** 1989; 248:413–8
The overall fractionation effect of isotopic oxygen molecules during oxygen transport and utilization in humans. Schuster KD, et al. **Adv Exp Med Biol** 1989;248:151–6
Toward absolute reflectance oximetry: I. Theoretical consideration for noninvasive tissue reflectance oximetry. Takatani S. **Adv Exp Med Biol** 1989;248:91–102
Evaluation of a heparin–coated PO2 electrode for continuous intravasal PO2 monitoring. Tenbrinck R, et al.
Adv Exp Med Biol 1989;248:157–62
PO2 histograms in various models of tissue oxygenation in skeletal muscle. Turek Z, et al. **Adv Exp Med Biol** 1989; 248:227–37
Effect of emopamil on cerebrocortical microcirculation during hypoxia and reactive hyperemia and on [K+]e, pH, pO2 changes during and after N2 anoxia. Urbanics R, et al. **Adv Exp Med Biol** 1989;248:479–87
Hypoxia in saline–perfused heart may be due to mismatch of regional metabolism and perfusion. van Beek JH.
Adv Exp Med Biol 1989;248:499–507
The influence of different anesthetics on the oxygen delivery to and consumption of the heart. van Daal GJ, et al.
Adv Exp Med Biol 1989;248:527–32
Influences of different routinely used muscle relaxants on oxygen delivery to and oxygen consumption by the heart during xenon–anesthesia. van Woerkens LJ, et al.
Adv Exp Med Biol 1989;248:673–8
Hemodilution and myocardial oxygen supply. The influence of fluosol–DA. Vogel H, et al. **Adv Exp Med Biol** 1989; 248:653–61
Relation of exercise capacity to resting arterial oxygen transport in left ventricular dysfunction. Miyagi Y, et al.
Am J Cardiol 1989 Feb 15;63(7):457–60
Effects of nisoldipine on systemic and leg blood flow, oxygen transport and metabolism, and hemodynamics during exercise in effort angina pectoris. Ram J, et al.
Am J Cardiol 1989 Apr 1;63(12):802–6
Hb Warsaw (beta 42 Phe——Val): an unstable hemoglobin with decreased oxygen affinity. I. Hematologic and clinical expression. Honig GR, et al. **Am J Hematol** 1989 Sep; 32(1):36–41
Blood glucose and oxygen tension levels in small–for–gestational–age fetuses. Economides DL, et al.
Am J Obstet Gynecol 1989 Feb;160(2):385–9
Heart rate patterns in normoxemic, hypoxemic, and anemic second–trimester fetuses. Nicolaides KH, et al.
Am J Obstet Gynecol 1989 May;160(5 Pt 1):1034–7
The effect of continuous or pulsatile administration of oxytocin to ewes at 126 to 136 days' gestation on myometrial activity and fetal oxygenation. Pimentel G, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):242–7
Fetal blood gas analysis from cordocentesis for abnormal fetal heart rate patterns. Shah DM, et al.
Am J Obstet Gynecol 1989 Aug;161(2):374–6
Blood oxygen content estimated from PO2, PCO2, and pH. Belanger SF, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1545–8
Noninvasive determination of hemoglobin saturation in dogs by derivative near–infrared spectroscopy. Ferrari M, et al.
Am J Physiol 1989 May;256(5 Pt 2):H1493–9
Effect of hemoglobin concentration on critical cardiac output and oxygen transport. Heusser F, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H527–32
Anatomical determinants of O2 flux density at coronary capillaries. Honig CR, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H375–82
Responses to acute hypoxemia in fetal sheep at 0.6–0.7 gestation. Iwamoto HS, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H613–20
Optimal hematocrit for canine gastric oxygenation. Kiel JW, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H472–7
Cerebral oxygenation and blood flow in infant and young adult rats. Kreisman NR, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R78–85
Relation of blood flow to VO2, PO2, and PCO2 in dog gastrocnemius muscle. Mohrman DE, et al.
Am J Physiol 1988 Nov;255(5 Pt 2):H1004–10
Rate of oxygen loss from arterioles is an order of magnitude higher than expected. Popel AS, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H921–4
Evaluation of a blood sample–transfusion protocol in rats: blood gases, renin, and ACTH. Raff H. **Am J Physiol** 1988 Nov;255(5 Pt 2):R851–4
Oxygen exchange in the microcirculation of hamster retractor muscle. Swain DP, et al. **Am J Physiol** 1989 Jan; 256(1 Pt 2):H247–55
Effect of umbilical blood flow on transplacental diffusion of ethanol and oxygen. Wilkening RB, et al.
Am J Physiol 1989 Mar;256(3 Pt 2):H813–20
Comparison of PO2, PCO2, and pH in blood collected from the femoral artery and a cut claw of cats. Solter PF, et al. **Am J Vet Res** 1988 Nov;49(11):1882–3
Do sleep studies contribute to the management of patients with severe chronic obstructive pulmonary disease? Connaughton JJ, et al. **Am Rev Respir Dis** 1988 Aug; 138(2):341–4
Effects of hyperoxia and vitamin E on the fatty acid composition of rat lung microsomes and mitochondria. Dilley ED, et al. **Am Rev Respir Dis** 1989 Aug;140(2):423–9
Identification and quantification of apneas by computer–based analysis of oxygen saturation. George CF, et al. **Am Rev Respir Dis** 1988 May;137(5):1238–40
Worsening oxygenation in the mechanically ventilated patient. Causes, mechanisms, and early detection [see comments] Glauser FL, et al. **Am Rev Respir Dis** 1988 Aug;138(2):458–65 (121 ref.). **Comment in:** Am Rev Respir Dis 1989 Jan;139(1):286
Weekly cuirass ventilation improves blood gases and inspiratory muscle strength in patients with chronic air–flow limitation and hypercarbia. Gutiérrez M, et al.
Am Rev Respir Dis 1988 Sep;138(3):617–23
Abnormal breathing during sleep and chemical control of breathing during wakefulness in patients with sleep apnea syndrome. Kunitomo F, et al. **Am Rev Respir Dis** 1989 Jan;139(1):164–9
Worsening oxygenation in the mechanically ventilated patient [letter; comment] Stangel P. **Am Rev Respir Dis** 1989 Jan;139(1):286. **Comment on:** Am Rev Respir Dis 1988 Aug;138(2):458–65
The use of a simple exercise test for the diagnosis of Pneumocystis carinii pneumonia in patients with AIDS. Stover DE, et al. **Am Rev Respir Dis** 1989 Jun; 139(6):1343–6
Changes in oxygenation and pulse rate during endoscopy. Hayward SR, et al. **Am Surg** 1989 Mar;55(3):198–202
Pulse oximetry in malignant hyperthermia. Bacon AK.
Anaesth Intensive Care 1989 May;17(2):208–10
Pulse oximetry in methaemoglobinaemia. Failure to detect low oxygen saturation. Rieder HU, et al. **Anaesthesia** 1989 Apr;44(4):326–7
Early postoperative arterial oxygen desaturation. Determining factors and response to oxygen therapy. Canet J, et al. **Anesth Analg** 1989 Aug;69(2):207–12
Preoxygenation: a study of denitrogenation. Carmichael FJ, et al. **Anesth Analg** 1989 Mar;68(3):406–9
Preoxygenation in the morbidly obese: a comparison of two techniques. Goldberg ME, et al. **Anesth Analg** 1989 Apr; 68(4):520–2
Left ventricular oxygen tensions in dogs during coronary vasodilation by enflurane, isoflurane and dipyridamole. Habazettl H, et al. **Anesth Analg** 1989 Mar;68(3):286–94
Effects of methemoglobinemia on pulse oximetry and mixed venous oximetry. Barker SJ, et al. **Anesthesiology** 1989 Jan; 70(1):112–7
Changes in venous blood lactate, venous blood gases, and somatosensory evoked potentials after tourniquet application. Benzon HT, et al. **Anesthesiology** 1988 Nov; 69(5):677–82
Splanchnic oxygen consumption and hepatic surface oxygen tensions during isoflurane anesthesia. Conzen PF, et al.
Anesthesiology 1988 Nov;69(5):643–51
Isoflurane and hepatic oxygenation [editorial] Gelman S, et al. **Anesthesiology** 1988 Nov;69(5):639–40
Systolic venous waves cause spurious signs of arterial hemoglobin desaturation. Mark JB. **Anesthesiology** 1989 Jul;71(1):158–60
Mixed venous oxygen saturation during thoracic anesthesia. Thys DM, et al. **Anesthesiology** 1988 Dec;69(6):1005–9
Hyperbilirubinemia does not interfere with hemoglobin saturation measured by pulse oximetry. Veyckemans F, et al. **Anesthesiology** 1989 Jan;70(1):118–22
Pulse oximetry is accurate in patients with dysrhythmias and a pulse deficit [letter] Wong DH, et al. **Anesthesiology** 1989 Jun;70(6):1024–5
A simple method for rapid estimate of pulmonary venous admixture. Chiarla C, et al. **Angiology** 1988 Dec; 39(12):1030–5
Experimental atherosclerosis and oxygen free radicals. Prasad K, et al. **Angiology** 1989 Sep;40(9):835–43
Proliferation of alveolar macrophages in hyperoxia. Nerurkar LS, et al. **Ann Allergy** 1988 Nov;61(5):344–7
A compartmental model for oxygen transport in brain microcirculation. Sharan M, et al. **Ann Biomed Eng** 1989; 17(1):13–38
Relationship between arterial blood gases and spirometry in acute exacerbations of chronic obstructive pulmonary disease. Emerman CL, et al. **Ann Emerg Med** 1989 May; 18(5):523–7
Arterial oxygen tension, haemoglobin F and red cell 2, 3 diphosphoglycerate in sickle cell anaemia patients with digital clubbing. Adekile AD. **Ann Trop Paediatr** 1989 Sep; 9(3):165–8
PO2 chemoreception in arterial chemoreceptors. Acker H.
Annu Rev Physiol 1989;51:835–44 (49 ref.)
Alterations in oxygen saturation and ventilation after intravenous sedation for peritoneoscopy. Brady CE 3d, et al. **Arch Intern Med** 1989 May;149(5):1029–32
Effect of triazolam on sleep and arterial oxygen saturation in patients with chronic obstructive pulmonary disease. Timms RM, et al. **Arch Intern Med** 1988 Oct; 148(10):2159–63
Effects of optic atrophy on retinal blood flow and oxygen saturation in humans. Sebag J, et al. **Arch Ophthalmol** 1989 Feb;107(2):222–6
Regulation of the oxygen affinity of haemoglobin from the reindeer (Rangifer tarandus tarandus L.). Condó SG, et al. **Arctic Med Res** 1988 Apr;47(2):83–8
Peritoneal oxygenation of normoxic and hypoxic dogs. Schmidt JA, et al. **ASAIO Trans** 1989 Jan–Mar;35(1):35–9
Optical sensor for hemoglobin content and oxygen saturation. Application to artificial heart research. Takatani S, et al.
ASAIO Trans 1988 Jul–Sep;34(3):808–12
Monitoring of sedated pediatric dental patients. Whitehead BG, et al. **ASDC J Dent Child** 1988 Sep–Oct;55(5):329–33

Persistent pulmonary hypertension of the newborn treated with hyperventilation: clinical features and outcome. John E, et al. **Aust Paediatr J** 1988 Dec;24(6):357–61

Phagocyte dioxygenation reactions yielding chemiluminescence: the maximum multiplicity and spin conservation rules relative to oxygen reactivity. Allen RC. **Basic Life Sci** 1988;49:219–22

An analysis of the stopped-flow kinetics of gaseous ligand uptake and release by adult mouse erythrocytes. Brittain T, et al. **Biochem J** 1989 May 15;260(1):171–6

Temperature- and pH-dependence of the oxygen-binding reaction of human fetal haemoglobin. Doyle ML, et al. **Biochem J** 1989 Jun 1;260(2):617–9

31P NMR probes of sipunculan erythrocytes containing the O2-carrying protein hemerythrin. Robitaille PM, et al. **Biochemistry** 1988 Jun 14;27(12):4458–65

Hb natal or alpha 2(minus Tyr-Arg) beta 2: a high oxygen affinity alpha chain variant with a deleted carboxy-terminus resulting from a TAC——TAA (Tyr——terminating codon) mutation in codon alpha 140. Jogessar VB, et al. **Biochim Biophys Acta** 1988 Nov 10; 951(1):36–41

Intracellular spin-trapping of oxygen-centered radicals generated by human neutrophils. Pou S, et al. **Biochim Biophys Acta** 1989 Jun 27;991(3):459–64

A note on the drug-induced arterialization of venous blood in schizophrenics: possible microcirculation disturbances. Takei M. **Biol Psychiatry** 1989 Jan;25(1):110–4

Effects of inositol hexaphosphate induced high P50 on an isolated rabbit heart with free and limited coronary blood flow. Baron JF, et al. **Biomater Artif Cells Artif Organs** 1988;16(1–3):359–61

Cardiac effects of phytic acid induced high P50 with free and limited coronary blood flow. Baron JF, et al. **Biomater Artif Cells Artif Organs** 1988–89;16(5):871–85

Liposome-encapsulated hemoglobin: oxygen binding properties and respiratory function. Farmer MC, et al. **Biomater Artif Cells Artif Organs** 1988;16(1–3):289–99

Perfluorochemicals as oxygen transport vehicles. Geyer RP. **Biomater Artif Cells Artif Organs** 1988;16(1–3):31–49 (62 ref.)

Pyridoxylated-polyhemoglobin solution: a low viscosity oxygen-delivering blood replacement fluid with normal oncotic pressure and long-term storage feasibility. Keipert PE, et al. **Biomater Artif Cells Artif Organs** 1988; 16(1–3):185–96

An overview of perfluorooctylbromide—application as a synthetic oxygen carrier and imaging agent for X-ray, ultrasound and nuclear magnetic resonance. Long DM, et al. **Biomater Artif Cells Artif Organs** 1988;16(1–3):411–20 (20 ref.)

Recent studies on perfluorochemical (PFC) emulsion as an oxygen carrier in Japan. Mitsuno T, et al. **Biomater Artif Cells Artif Organs** 1988;16(1–3):365–73 (10 ref.)

Physical properties of a new synthetic oxygen carrier. Moore RE. **Biomater Artif Cells Artif Organs** 1988;16(1–3):443–5

Liposome/heme as a totally synthetic oxygen carrier. Tsuchida E, et al. **Biomater Artif Cells Artif Organs** 1988; 16(1–3):313–9

Optimal hematologic variables for oxygen transport, including P50, hemoglobin cooperativity, hematocrit, acid-base status, and cardiac function. Winslow RM. **Biomater Artif Cells Artif Organs** 1988;16(1–3):149–71

Circulatory effects of oxygen radicals. Saugstad OD, et al. **Biomed Biochim Acta** 1989;48(2–3):S20–4

Noninvasive oximetry in the rat. Decker MJ, et al. **Biomed Instrum Technol** 1989 May–Jun;23(3):222–8

An extended Monod-Wyman-Changeaux-model expressed in terms of the Herzfeld-Stanley formalism applied to oxygen and carbonmonoxide binding curves of hemoglobin trout IV. Schweitzer-Stenner R, et al. **Biophys J** 1989 Apr; 55(4):691–701

A mathematical model for the computation of the oxygen dissociation curve in human blood. Sharan M, et al. **Biosystems** 1989;22(3):249–60 (40 ref.)

Modification of partial pressure of oxygen (P50) in mammalian red blood cells by incorporation of an allosteric effector of hemoglobin. Bailleul C, et al. **Biotechnol Appl Biochem** 1989 Feb;11(1):31–40

Cardiovascular function and arterial blood gases during isolated ultrafiltration in healthy man. Freyschuss U, et al. **Blood Purif** 1988;6(4):213–26

Arterial oxygen tension and saturation in hospital patients: effect of age and activity. Blom H, et al. **BMJ** 1988 Sep 17;297(6650):720–1

Comparative remarks on the oxygen dissociation curves from normal adults, newborns and hemoglobinopathic subjects. Amprimo MC, et al. **Boll Soc Ital Biol Sper** 1988 Sep; 64(9):853–60

Relationship between alveolar deadspace and arterial oxygenation in children with congenital cardiac disease. Fletcher R. **Br J Anaesth** 1989 Feb;62(2):168–76

Effects of propofol on pulmonary and systemic arterial pressure-flow relationships in hyperoxic and hypoxic dogs. Naeije R, et al. **Br J Anaesth** 1989 May;62(5):532–9

Changes in oxygen saturation during inhalation induction of anaesthesia in children. Sampaio MM, et al. **Br J Anaesth** 1989 Feb;62(2):199–201

Oxygen desaturation following sedation for regional analgesia. Smith DC, et al. **Br J Anaesth** 1989 Feb; 62(2):206–9

Pulse oximetry during extradural analgesia for extracorporeal shock wave lithotripsy. Vegfors M, et al. **Br J Anaesth** 1988 Dec;61(6):771–2

Effects of hyperbaric oxygen on the rat neurogenic pulmonary edema. Iazzetti PE, et al. **Braz J Med Biol Res** 1988;21(1):153–6

Decreases in arterial oxygen saturation in paediatric outpatients during transfer to the postanaesthetic recovery room. Chripko D, et al. **Can J Anaesth** 1989 Mar; 36(2):128–32

Improved use of arterial blood gas analysis in suspected pulmonary embolism. Cvitanic O, et al. **Chest** 1989 Jan; 95(1):48–51

Correlates of arterial oxygenation during exercise in severe chronic obstructive pulmonary disease. D'Urzo AD, et al. **Chest** 1989 Jan;95(1):13–7

Continuous monitoring of mixed venous oxygen saturation as an indicator of pharmacologic intervention. Hassan E, et al. **Chest** 1989 Feb;95(2):406–9

Continuous monitoring of mixed venous oxygen saturation in patients with acute myocardial infarction. Kyff JV, et al. **Chest** 1989 Mar;95(3):607–11

The effects of nitrazepam and flunitrazepam on oxygen desaturation during sleep in patients with stable hypoxemic nonhypercapnic COPD. Midgren B, et al. **Chest** 1989 Apr; 95(4):765–8

Comparison of central-venous to mixed-venous oxygen saturation during changes in oxygen supply/demand. Reinhart K, et al. **Chest** 1989 Jun;95(6):1216–21

Relationship between mixed venous oxygen saturation and cardiac index in patients with chronic congestive heart failure. Richard C, et al. **Chest** 1989 Jun;95(6):1289–94

Arterial oxygen saturation during Nd:YAG laser photoresection of endobronchial tumors under local anesthesia. Use of intermittent supplemental oxygen with pulse oximetry guidance. Schiffman PL, et al. **Chest** 1988 Dec;94(6):1300–1

Comparison of hemodynamic and oxygen transport effects of dopamine and dobutamine in critically ill surgical patients. Shoemaker WC, et al. **Chest** 1989 Jul;96(1):120–6

Effect of bronchial challenge on breathing patterns and arterial oxygenation in stable asthma. Stewart IC, et al. **Chest** 1989 Jan;95(1):65–70

Arterial oxygen desaturation during sleep in interstitial pulmonary disease. Correlation with chemical control of breathing during wakefulness. Tatsumi K, et al. **Chest** 1989 May;95(5):962–7

Real-time analysis of arterial oxygen saturation with pulse oximeter and arrhythmia during fiberoptic bronchoscopy. Su YM, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Dec; 42(6):443–8

An interlaboratory study of blood-gas analysis: dependence of pO2 and pCO2 results on atmospheric pressure. Burnett RW, et al. **Clin Chem** 1989 Aug;35(8):1779–81

Influence of blood oxygen tension on dipstick glucose determinations [letter] Halloran SP. **Clin Chem** 1989 Jun; 35(6):1268–9

Reliability of the determination of whole-blood oxygen affinity by means of blood-gas analyzers and multi-wavelength oximeters. Kwant G, et al. **Clin Chem** 1989 May;35(5):773–7

Increase in Hb-O2-affinity at moderate altitude (2000 m) in patients on maintenance hemodialysis [published erratum appears in Clin Nephrol 1989 Jul;32(1):50] Mairbäurl H, et al. **Clin Nephrol** 1989 Apr;31(4):198–203

Closed-loop control of the partial pressure of arterial oxygen in neonates. Dugdale RE, et al. **Clin Phys Physiol Meas** 1988 Nov;9(4):291–305

Noninvasive oxygen monitoring. Brown M, et al. **Crit Care Clin** 1988 Jul;4(3):493–509 (63 ref.)

Hydrochloric acid infusion for treatment of metabolic alkalosis associated with respiratory acidosis. Brimioulle S, et al. **Crit Care Med** 1989 Mar;17(3):232–6

Unreliability of oxygen tension-based indices in reflecting intrapulmonary shunting in critically ill patients. Cane RD, et al. **Crit Care Med** 1988 Dec;16(12):1243–5

Low dose norepinephrine in patients with septic shock and oliguria: effects on afterload, urine flow, and oxygen transport. Hesselvik JF, et al. **Crit Care Med** 1989 Feb; 17(2):179–80

Cardiopulmonary effects of Intralipid infusion in critically ill patients [letter] Isenstein DA. **Crit Care Med** 1989 Jul; 17(7):710

Analysis of the effects of continuous on-line monitoring of mixed venous oxygen saturation on patient outcome and cost-effectiveness. Jastremski MS, et al. **Crit Care Med** 1989 Feb;17(2):148–53

Do periodic hyperinflations improve gas exchange in patients with hypoxemic respiratory failure? [letter] MacKenzie CF. **Crit Care Med** 1989 Jun;17(6):595–7

Optimization of oxygen transport in mechanically ventilated newborns using oximetry and pulsed Doppler-derived cardiac output. Trang TT, et al. **Crit Care Med** 1988 Nov; 16(11):1094–7

Leukocytic oxygen activation and microbicidal oxidative toxins. Hurst JK, et al. **Crit Rev Biochem Mol Biol** 1989; 24(4):271–328 (375 ref.)

Blood flow rate, temperature, oxygen tension and consumption in the skin of adults measured by a heated microcathode oxygen electrode. Jaszczak P. **Dan Med Bull** 1988 Aug;35(4):322–34 (50 ref.)

Reduction in index of oxygen saturation at margin of active duodenal ulcers may lead to slow healing. Leung FW, et al. **Dig Dis Sci** 1989 Mar;34(3):417–23

Flow velocity waveforms in the fetal internal carotid artery relative to fetal blood gas and acid-base measurements in normal pregnancy. Simonazzi E, et al. **Early Hum Dev** 1989 May;19(2):111–5

A comparison between methods of measuring anaerobic work capacity. Nebelsick-Gullett LJ, et al. **Ergonomics** 1988 Oct; 31(10):1413–9

Breathing-valve encumbrance and arterial blood gas and acid-base status in exercise in man. Ward SA, et al. **Eur J Appl Physiol** 1989;58(4):382–8

Effect of hypoxia on arterial and venous blood levels of oxygen, carbon dioxide, hydrogen ions and lactate during incremental forearm exercise. Yoshida T, et al. **Eur J Appl Physiol** 1989;58(7):772–7

Increased oxygen affinity with normal heterotropic effects in hemoglobin Loire [alpha 88(F9)Ala——Ser]. Baklouti F, et al. **Eur J Biochem** 1988 Nov 1;177(2):307–12

Endobronchial versus intravenous application of the vasopressin derivative glypressin during diagnostic bronchoscopy. Breuer HW, et al. **Eur Respir J** 1989 Mar; 2(3):225–8

Pulmonary artery pressure--flow plots in hyperoxic and in hypoxic dogs: effects of prostaglandin E1. Leeman M, et al. **Eur Respir J** 1988 Aug;1(8):711–5

Effect of different volumes of BAL fluid on arterial oxygen saturation. Pirożyński M, et al. **Eur Respir J** 1988 Dec; 1(10):943–7

Determinants of respiratory disturbance and oxygen saturation drop indices in obstructive sleep apnoea syndrome. Quera-Salva MA, et al. **Eur Respir J** 1988 Jul; 1(7):626–31

Age related characteristics of blood gases in healthy subjects. Ilouchev D. **Folia Med (Plovdiv)** 1987;29(2):19–24

A study of the blood-gases and acid-base status in patients with acute myocardial infarction according to its location. Ovanessian M, et al. **Folia Med (Plovdiv)** 1987;29(3):42–51

Some roles of free radicals in malaria. Clark IA, et al. **Free Radic Biol Med** 1989;6(3):315–21 (87 ref.)

Chemiluminescence response of human B-cell lines. Kapp A, et al. **Free Radic Res Commun** 1987;2(4–6):337–41

Cell-dependent chemiluminescence. Modulation of the N-formyl chemotactic peptide (FNLPNTL) mediated oxidative burst in human polymorphonuclear leukocytes (PMNL) by murine monoclonal antibody NMS-1. Schmitt M, et al. **Free Radic Res Commun** 1987;2(4–6):359–68

Damage of erythrocytes by activated oxygen generated in hypoxic rat liver. Siems W, et al. **Free Radic Res Commun** 1987;4(1):31–9

Effect of cigarette smoking on the gastric mucosal blood volume index and hemoglobin oxygenation in man. Kawano S, et al. **Gastroenterol Jpn** 1989 Feb;24(1):1–7

Effectiveness of oxygen concentrations of less than 100% before and after endotracheal suction in patients with chronic obstructive pulmonary disease. Rogge JA, et al. **Heart Lung** 1989 Jan;18(1):64–71

Structure-function of Hb Marseille-Long Island [alpha 2 beta 2 N-methionyl-2(NA2) His——Pro] Bohn B, et al. **Hemoglobin** 1989;13(4):355–65

Extremely elevated WBC and a PO2 of zero. Neerukonda SK. **Hosp Pract [Off]** 1989 Apr 15;24(4):186

Development of a closed-loop pacemaker controller regulating mixed venous oxygen saturation level. Inbar GF, et al. **IEEE Trans Biomed Eng** 1988 Sep;35(9):679–90

A telemetry-instrumentation system for chronically implanted glucose and oxygen sensors. McKean BD, et al. **IEEE Trans Biomed Eng** 1988 Jul;35(7):526–32

An in vitro tissue model for evaluating the effect of carboxyhemoglobin concentration on pulse oximetry. Mendelson Y, et al. **IEEE Trans Biomed Eng** 1989 Jun; 36(6):625–7

Definition and notation of hemoglobin oxygen saturation. Zijlstra WG, et al. **IEEE Trans Biomed Eng** 1989 Aug; 36(8):872

The process of gas exchange in systemic circulation in a hyperbaric environment: an analytical approach. Singh MP, et al. **IMA J Math Appl Med Biol** 1988;5(4):281–301

Serotonin as a modulator of skeletal muscle oxygenation: effects of ketanserin and ritanserin on oxygen pressure distributions. Thorborg P, et al. **Int J Microcirc Clin Exp** 1989 Apr;8(2):191–203

The effect of arterial oxygen content on the results of radiation therapy for epidermoid bronchogenic carcinoma. Sasai K, et al. **Int J Radiat Oncol Biol Phys** 1989 Jun; 16(6):1477–81

Manipulations in the oxygen transport capacity of blood as a means of sensitizing tumors to radiation therapy. Siemann DW, et al. **Int J Radiat Oncol Biol Phys** 1989 May; 16(5):1169–72

Clinical parameters and transcutaneous oxygen measurements for the prognosis of venous ulcers. Nemeth AJ, et al. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 1):186–90

Ulcerated edematous limbs: effect of edema removal on transcutaneous oxygen measurements. Nemeth AJ, et al. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 1):191–7

Effects of oxygen supplementation on blood gas values in chemically restrained juvenile African elephants. Heard DJ, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1071–4

O2 metabolism of the sheep diaphragm during flow resistive loaded breathing. Bazzy AR, et al. **J Appl Physiol** 1989 May;66(5):2305–11

Oxygen transport to exercising leg in chronic hypoxia. Bender PR, et al. **J Appl Physiol** 1988 Dec;65(6):2592–7
Increased exercise SaO2 independent of ventilatory acclimatization at 4,300 m. Bender PR, et al. **J Appl Physiol** 1989 Jun;66(6):2733–8
Muscle perfusion and oxygenation during local hyperoxia. Bredle DL, et al. **J Appl Physiol** 1988 Nov;65(5):2057–62
Operation Everest II: maximal oxygen uptake at extreme altitude. Cymerman A, et al. **J Appl Physiol** 1989 May; 66(5):2446–53
Central venous O2 saturation and rate of arterial desaturation during obstructive apnea. Fletcher EC, et al. **J Appl Physiol** 1989 Mar;66(3):1477–85
Effect of flow on O2 consumption during progressive hypoxemia. Gutierrez G, et al. **J Appl Physiol** 1988 Aug; 65(2):601–7
Effect of pentoxiphylline on oxygen transport during hypothermia. Hershenson MB, et al. **J Appl Physiol** 1989 Jan;66(1):96–101
Dissociation of maximal O2 uptake from O2 delivery in canine gastrocnemius in situ. Hogan MC, et al. **J Appl Physiol** 1989 Mar;66(3):1219–26
The carotenoid crocetin enhances pulmonary oxygenation. Holloway GM, et al. **J Appl Physiol** 1988 Aug;65(2):683–6
ACTH secretion and ventilation increase at similar arterial PO2 in conscious rats. Jacobson L, et al. **J Appl Physiol** 1989 May;66(5):2245–50
Model implications of gas exchange dynamics on blood gases in incremental exercise. Lamarra N, et al. **J Appl Physiol** 1989 Apr;66(4):1539–46
Pulmonary gas exchange in panting dogs. Meyer M, et al. **J Appl Physiol** 1989 Mar;66(3):1258–63
O2 content of blood sampled from different venous compartments of the rat. Musch TI, et al. **J Appl Physiol** 1988 Aug;65(2):988–91
Roles of CO2, O2, and acid in arteriovenous [H+] difference during muscle contractions. Stainsby WN, et al. **J Appl Physiol** 1988 Oct;65(4):1803–10
Developments in oxygen monitoring. Delpy DT. **J Biomed Eng** 1988 Nov;10(6):533–40 (52 ref.)
Algorithm for computing oxygen dissociation curve with pH, PCO2, and CO in sheep blood. Sharan M, et al. **J Biomed Eng** 1989 Jan;11(1):48–52
Transcutaneous oxygen tension as a predictor of success after an amputation [letter] Mars M. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1429–30
The effect of intracapsular pressure and extension of the hip on oxygenation of the juvenile femoral epiphysis. A study in the goat. Svalastoga E, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):222–6
Retrograde catheterization of the right internal jugular vein for serial measurements of cerebral venous oxygen content. Jakobsen M, et al. **J Cereb Blood Flow Metab** 1989 Oct; 9(5):717–20
International Federation of Clinical Chemistry (IFCC), Scientific Division. Committee on pH. Blood Gases and Electrolytes. IFCC method (1988) for tonometry of blood: reference materials for pCO2 and pO2. Burnett RW, et al. **J Clin Chem Clin Biochem** 1989 Jun;27(6):403–8
Effect of sevoflurane on P50 and on measurement of oxygen tension. Kambam JR, et al. **J Clin Monit** 1988 Oct; 4(4):261–3
Monitoring of the inspired and end-tidal oxygen, carbon dioxide, and nitrous oxide concentrations: clinical applications during anesthesia and recovery. Linko K, et al. **J Clin Monit** 1989 Jul;5(3):149–56
Understanding the meaning of the shunt fraction calculation [letter] Sarnat AJ. **J Clin Monit** 1988 Jul;4(3):231–2
Net metabolism of volatile fatty acids, D-beta-hydroxybutyrate, nonesterifield fatty acids, and blood gasses by portal-drained viscera and liver of lactating Holstein cows. Reynolds CK, et al. **J Dairy Sci** 1988 Sep; 71(9):2395–405
Arteriolization of venous blood gases: a clue to the diagnosis of cyanide poisoning. Johnson RP, et al. **J Emerg Med** 1988 Sep–Oct;6(5):401–4
Effect of adrenaline and blood gas conditions on red cell volume and intra-erythrocytic electrolytes in the carp, Cyprinus carpio. Fuchs DA, et al. **J Exp Biol** 1988 Jul; 137:457–76
Idiosyncratic reaction to nebulised ribavirin in an artificially ventilated neonate [letter] Cosgrove M, et al. **J Infect** 1989 Jul;19(1):85–7
Resonance Raman spectroscopy of hemoglobin in intact cells: a probe of oxygen uptake by erythrocytes in rheumatoid arthritis. Hoey S, et al. **J Inorg Biochem** 1988 Nov; 34(3):189–99
Modification of the oxygen affinity and intracellular hemoglobin concentration of normal and sickle cells by means of an osmotic pulse. Franco RS, et al. **J Lab Clin Med** 1989 Jan;113(1):58–66
Filtration of sickle cells: recruitment into a rigid fraction as a function of density and oxygen tension. Schmalzer EA, et al. **J Lab Clin Med** 1989 Jun;113(6):727–34
The calcium ionophore ionomycin can prime, but not activate, the reactive oxygen generating system in differentiated HL-60 cells. Dahlgren C. **J Leukoc Biol** 1989 Jul;46(1):15–24
The effects of protamine on hemodynamics and oxygenation during cardiac surgery. Suwanchinda V, et al. **J Med Assoc Thai** 1989 May;72(5):275–9
Cerebral arteriovenous oxygen difference as an estimate of cerebral blood flow in comatose patients. Robertson CS, et al. **J Neurosurg** 1989 Feb;70(2):222–30
Incidence of oxygen desaturation during oral surgery outpatient procedures. White CS, et al. **J Oral Maxillofac Surg** 1989 Feb;47(2):147–9
Use of the postductal PaO2 as a predictor of pulmonary vascular hypoplasia in infants with congenital diaphragmatic hernia. O'Rourke PP, et al. **J Pediatr Surg** 1988 Oct;23(10):904–7
The relationship between arterial and tissue PO2 in the fetal lamb. Towell ME. **J Perinat Med** 1988;16 Suppl 1:139–49
Term human fetal umbilical vein oxygen content, placental weight, and maternal blood pressure. Bonds DR, et al. **J Perinatol** 1987 Spring;7(2):114–7
Effects of hyperoxia on entry of bilirubin and albumin into rat brain. Hansen TW, et al. **J Perinatol** 1987 Summer; 7(3):217–20
Physiology of oxygenation and its relation to pulse oximetry in neonates. Hay WW Jr. **J Perinatol** 1987 Fall;7(4):309–19 (25 ref.)
Evaluation of arterial oxygen saturation of the newborn in the labor and delivery suite. Porter KB. **J Perinatol** 1987 Fall;7(4):337–9
Blood oxygen tension-related change of theophylline clearance in experimental hypoxemia. Kishimoto I, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1237–42
Multisensor transcutaneous oximetric mapping to predict below-knee amputation wound healing: use of a critical Po2. Kram HB, et al. **J Vasc Surg** 1989 Jun;9(6):796–800
Effects of diagnostic procedures during fiberoptic bronchoscopy on heart rate, blood pressure, and blood gases. Breuer HW, et al. **Klin Wochenschr** 1989 May 15; 67(10):524–9
Oxygen transport and delivery in rabbits treated with cyanate. Aono M, et al. **Life Sci** 1974 Sep 15;15(6):1083–90
Vasopressin and angiotensin II stimulate oxygen uptake in the perfused rat hindlimb. Colquhoun EQ, et al. **Life Sci** 1988;43(21):1747–54
Oxygen affinity of blood in rats during cobalt-induced erythrocytic polycythemia and after its correction. Rakušan K, et al. **Life Sci** 1974 Jul 1;15(1):23–8
Unsteady oxygen transport in flat plate and tubular membrane oxygenators. Eason G, et al. **Life Support Syst** 1983;1 Suppl 1:345–9
Facilitated CO2 and O2 transfer during hemodialysis. Zborowski M, et al. **Life Support Syst** 1983;1 Suppl 1:350–3
PaO2 increases with coughing in patients with chronic lung disease. Martinez W, et al. **Lung** 1988;166(5):287–91
Arterial blood gas changes associated with different methods of extubation. Cheung HK, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun;26(2):191–4
Red cell oxygen transport in man in relation to gender and age. Humpeler E, et al. **Mech Ageing Dev** 1989 Mar; 47(3):229–39
System for long-term measurement of cerebral blood and tissue oxygenation on newborn infants by near infra-red transillumination. Cope M, et al. **Med Biol Eng Comput** 1988 May;26(3):289–94
Local tissue oxygenation during constant red blood cell flux: a discrete source analysis of velocity and hematocrit changes. Tsai AG, et al. **Microvasc Res** 1989 May; 37(3):308–22
Retinal phototoxicity from the operating microscope. The role of inspired oxygen [see comments] Jaffe GJ, et al. **Ophthalmology** 1988 Aug;95(8):1130–41. **Comment in:** Ophthalmology 1989 Jun;96(6):925–6
First clinical experience with an oxygen saturation controlled pacemaker in man. Stangl K, et al. **PACE** 1988 Nov;11(11 Pt 2):1882–7
Experimental study of reflectance spectrophotometric analysis of the dog's dural sac—in the open decompressed state and after the application of external dural pressure. Tajima N, et al. **Paraplegia** 1989 Jun;27(3):198–203
Effect of chloral hydrate on arterial oxygen saturation in wheezy infants. Mallol J, et al. **Pediatr Pulmonol** 1988; 5(2):96–9
Home measurement of oxygen saturation during sleep in patients with cystic fibrosis. Montgomery M, et al. **Pediatr Pulmonol** 1989;7(1):29–34
Accuracy of two wavelength pulse oximetry in neonates and infants. Praud JP, et al. **Pediatr Pulmonol** 1989;6(3):180–2
Hyperoxemia in newborn infants: detection by pulse oximetry. Bucher HU, et al. **Pediatrics** 1989 Aug; 84(2):226–30
Neonatal pulse oximetry: accuracy and reliability. Hay WW Jr, et al. **Pediatrics** 1989 May;83(5):717–22
Effect of blood gases and pH on thromboembolic reactions in rabbit mesenteric microvessels. oude Egbrink MG, et al. **Pflugers Arch** 1989 Jul;414(3):324–30
Oxygen uptake in saline-perfused rabbit heart is decreased to a similar extent during reductions in flow and in arterial oxygen concentration. van Beek JH, et al. **Pflugers Arch** 1989 May;414(1):82–8
Regional respiratory quotients in sepsis and shock. Giovannini I, et al. **Prog Clin Biol Res** 1989;308:607–11
Arterial blood gas changes in panic disorder and lactate-induced panic. Papp LA, et al. **Psychiatry Res** 1989 May;28(2):171–80
Tumor radiosensitization by nicotinamide: a result of improved perfusion and oxygenation. Horsman MR, et al. **Radiat Res** 1989 Apr;118(1):139–50
Adaptive respiratory responses of trout to acute hypoxia. II. Blood oxygen carrying properties during hypoxia. Claireaux G, et al. **Respir Physiol** 1988 Oct;74(1):91–8
Central-peripheral chemoreceptor ventilatory interaction in awake goats. Daristotle L, et al. **Respir Physiol** 1989 Jun; 76(3):383–91
Arterial blood gas status in rats exposed to chronic CO at low and high altitude. Davies DG, et al. **Respir Physiol** 1989 Feb;75(2):193–8
Oxygen carriage and carbonic anhydrase activity in the blood of a marsupial, the Tammar wallaby (Macropus eugenii), during early development. Holland RA, et al. **Respir Physiol** 1988 Jul;73(1):69–86
Analysis of oxygen binding by Xenopus laevis hemoglobin: implications for the Root effect. Kister J, et al. **Respir Physiol** 1989 May;76(2):191–203
Significance of the Bohr effect for tissue oxygenation in a model with counter-current blood flow. Kobayashi H, et al. **Respir Physiol** 1989 Jun;76(3):277–88
Blood oxygen binding properties for the burrowing owl, Athene cunicularia. Maginniss LA, et al. **Respir Physiol** 1989 May;76(2):205–14
The role of catecholamines in regulating arterial oxygen content during acute hypercapnic acidosis in rainbow trout (Salmo gairdneri). Perry SF, et al. **Respir Physiol** 1989 Sep; 77(3):365–77
Respiratory adaptation in the highest inhabitants and highest Sherpa mountaineers. Santolaya RB, et al. **Respir Physiol** 1989 Aug;77(2):253–62
Oxygen saturation after bronchography under general anaesthesia. Macgillivray RG, et al. **S Afr Med J** 1989 Aug 19;76(4):151–2
Sleep-disordered breathing in healthy aged persons: one-year follow-up of daytime sequelae. Berry DT, et al. **Sleep** 1989 Jun;12(3):211–5
Oxygen consumption during sleep: influence of sleep stage and time of night. Ryan T, et al. **Sleep** 1989 Jun; 12(3):201–10
Combined evaluation of postphlebitic limbs by laser doppler flowmetry and transcutaneous PO2/PCO2 measurements. Belcaro G, et al. **Vasa** 1988;17(4):259–61
A comparison of pO2, pCO2, pH and bicarbonate in blood from the carotid and coccygeal arteries of calves. Gustin P, et al. **Vet Res Commun** 1988;12(4–5):343–6
The effect of resuscitation technique and pre-arrest state of oxygenation on blood-gas values during cardiopulmonary resuscitation in dogs. Lippert AC, et al. **Vet Surg** 1988 Sep–Oct;17(5):283–90
The 24-hour posttransfusion survival and lifespan of autologous baboon red cells treated with inositol hexaphosphate-polyethylene glycol or inositol hexaphosphate-adenosine triphosphate-polyethylene glycol to decrease oxygen affinity. Franco RS, et al. **Vox Sang** 1988;55(2):90–6
Distribution of blood gases, glucose and lactate within stored blood units. Sandhagen B, et al. **Vox Sang** 1988;55(3):139–42
[Analytical reliability of the results of determining pH, pCO2 and pO2 with the ABL 300 (Radiometer) automatic pH and blood gas analyzer] Tsachev K, et al. **Vutr Boles** 1988; 27(4):77–81 (Eng. Abstr.) **(Bul)**
[Selective high-frequency jet ventilation of the operative lung improves oxygenation during thoracic surgery] Chen CY, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun;26(2):185–6 (Eng. Abstr.) **(Chi)**
[Arterial blood gas changes in patients with malignant airway obstruction treated with Nd-YAG laser under local anesthesia] Lee CM, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Jan;88(1):74–7 (Eng. Abstr.) **(Chi)**
[The effect of hemoperfusion using synthetic resin on blood gases and acid-base equilibrium] Horák J, et al. **Vnitr Lek** 1988 Oct;34(10):971–3 (Eng. Abstr.) **(Cze)**
[Oxygen status of arterial blood including uncompensated mixed venous oxygen tension and cardial oxygen compensation factor. Reevaluation on the basis of 250 arterial punctures] Jensen E, et al. **Ugeskr Laeger** 1989 May 22;151(21):1316–20 (Eng. Abstr.) **(Dan)**
[The effect of age and activity on arterial oxygen pressure and arterial oxygen saturation in hospitalized patients] Blom HJ, et al. **Ned Tijdschr Geneeskd** 1989 May 27; 133(21):1080–3 (Eng. Abstr.) **(Dut)**
[The course of arterial oxygen saturation in 2 anesthesia technics—anesthesia technics for adenotomy and (adeno)tonsillectomy in children under 15 in The Netherlands (letter)] Helmers JH. **Ned Tijdschr Geneeskd** 1988 Aug 27;132(35):1630–2 **(Dut)**
[Relation of the fall in PO2 in ventilation of the lower lung in pulmonary surgery and the preoperative distribution of respiratory function] Fischler M, et al. **Ann Fr Anesth Reanim** 1988;7(5):365–9 (Eng. Abstr.) **(Fre)**
[Comparative study of transcutaneous oxygen pressure and laser- Doppler flow in the feet of 15 healthy subjects] Nove-Josserand R, et al. **J Mal Vasc** 1988;13(4):328–34 (Eng. Abstr.) **(Fre)**
[Estimation of PaO2 using pulsatile oximetry and the HbO2 dissociation curve in the premature infant] Major D, et al. **Union Med Can** 1989 Jan–Feb;118(1):18, 21–2 (Eng. Abstr.) **(Fre)**
[The status of arterial and mixed venous blood gases in the initial phase of intubation apnea. Studies on the Christiansen-Douglas-Haldane effect] Brandt L, et al.

Anaesthesist 1989 Apr;38(4):167–73 (Eng. Abstr.) **(Ger)**

[Decrease in paO2 following intratracheal application of a local anesthetic and a 0.9% sodium chloride solution. A prospective study on the use of fiberoptic bronchoscopy in ventilated patients during local anesthesia] Konrad F, et al. **Anaesthesist** 1989 Apr;38(4):174–9 (Eng. Abstr.) **(Ger)**

[Reliability and limitations of pulse oximetry in corrective cyanotic heart surgery] Meier-Stauss P, et al. **Anaesthesist** 1989 Jun;38(6):302–8 (Eng. Abstr.) **(Ger)**

[The washout behavior of isoflurane following balanced anesthesia and its effect on postoperative oxygen supply] Mertzlufft F, et al. **Anaesthesist** 1989 Aug;38(8):401–7 (Eng. Abstr.) **(Ger)**

[Oxygen transport function, biochemical changes and 24-hour post- transfusion survival rate of erythrocytes stored in PAGGS-sorbit solution in relation to various storage conditions] Hammerl M, et al. **Beitr Infusionther** 1988;21:53–9 **(Ger)**

[Oxygen transport function of erythrocyte concentrates: a comparison of erythrocytes stored in CPDA-1 and PAGGS-sorbit] Hasibeder W, et al. **Beitr Infusionther** 1988;21:49–52 **(Ger)**

[Air transport of patients (letter)] Neumann H. **Dtsch Med Wochenschr** 1989 Aug 4;114(31–32):1225 **(Ger)**

[Various effects of secretin and pentagastrin on peripheral venous blood gas analysis] von Kleist D, et al. **Dtsch Z Verdau Stoffwechselkr** 1988;48(3–4):194–7 (Eng. Abstr.) **(Ger)**

[Oxygen partial pressure measurements in the perilymph and scala tympani in normo- and hyperbaric conditions. An animal experiment study] Lamm C, et al. **HNO** 1988 Sep; 36(9):363–6 (Eng. Abstr.) **(Ger)**

[Simultaneous determinations of oxygen partial pressure in the scala tympani, electrocochleography and blood pressure measurements in noise stress in guinea pigs] Lamm K, et al. **HNO** 1988 Sep;36(9):367–72 (Eng. Abstr.) **(Ger)**

[Intra- and postoperative effect of various plasma substitutes on blood rheology and conjunctival oxygen partial pressure in microsurgical intervertebral disk operations] Simon J, et al. **Infusionstherapie** 1989 Feb;16(1):30–8 (Eng. Abstr.) **(Ger)**

[Effect of hemodilution with 10% hydroxyethyl starch solution (MW 200,000/9.5) on the flow properties of blood, arterial blood gases and conjunctival oxygen partial pressure in patients with cerebral infarct] Staedt U, et al. **Infusionstherapie** 1989 Jun;16(3):107–12 (Eng. Abstr.) **(Ger)**

[Behavior of the oxygen half-saturation value and HbF content of blood of newborn infants during blood exchange transfusion] Menzel K, et al. **Kinderarztl Prax** 1989 May; 57(5):223–7 (Eng. Abstr.) **(Ger)**

[Oxygen—concentration and acid-base status of arterial blood as limiting factors in hemodilution] Zander R. **Klin Wochenschr** 1988;66 Suppl 15:3–7 (Eng. Abstr.) **(Ger)**

[The oxygen affinity of hemoglobin in children with congenital cyanotic heart disease] Wolff HJ, et al. **Padiatr Grenzgeb** 1988;27(5):381–4 (Eng. Abstr.) **(Ger)**

[Lung function and blood gas analysis studies in patients with COPD and respiratory insufficiency receiving almitrine medication with special reference to its clinical aspects] Hillebrand M, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:391–3 (Eng. Abstr.) **(Ger)**

[Effect of almitrine, a chemoreceptor stimulator, on nocturnal hypercapnia and pulmonary artery pressure during O2 respiration in chronic obstructive lung disease] Rühle KH, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:411–4 (Eng. Abstr.) **(Ger)**

[Increase of arterial oxygen pressure in therapy with theophylline in patients with obstructive ventilation disorder and partial respiratory insufficiency] Schmidt EW, et al. **Prax Klin Pneumol** 1988 Jul;42(7):600–2 (Eng. Abstr.) **(Ger)**

[Oxygen saturation during sleep in chronic obstructive lung diseases before and after bronchodilator therapy. A controlled, prospective study in 36 patients] Schmid T, et al. **Schweiz Med Wochenschr** 1988 Nov 12;118(45):1645–50 (Eng. Abstr.) **(Ger)**

[Snoring and sleep apnea syndrome] Peter JH, et al. **Wien Med Wochenschr** 1989 Jun 15;139(11):264–73 (48 ref.) (Eng. Abstr.) **(Ger)**

[The effect of ascorbic acid in preservation solutions on the antioxidative potential of blood plasma during liver transplantation in miniature swine] Popov I, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(1):22–6 (Eng. Abstr.) **(Ger)**

[Changes in anti-oxidative homeostasis in hemodialysis patients] Schmidtmann S, et al. **Z Urol Nephrol** 1989 Feb; 82(2):77–80 (Eng. Abstr.) **(Ger)**

[Recent physiologic and pathophysiologic findings on fetal circulation] Schwartze H. **Zentralbl Gynakol** 1988; 110(20):1257–62 (13 ref.) (Eng. Abstr.) **(Ger)**

[The oxygen transport function and energy metabolism of erythrocytes in human aging] Korkuško OV, et al. **ZFA** 1989 Mar–Apr;44(2):73–9 (Eng. Abstr.) **(Ger)**

[Continuous monitoring of mixed venous oxygen saturation (SvO2) in anesthesia and intensive care. Physiopathological presuppositions and clinical applications] Bertolissi M, et al. **Minerva Anestesiol** 1988 Mar;54(3):89–94 (Eng. Abstr.) **(Ita)**

[Clinical applications of continuous monitoring of mixed venous oxygen saturation in anesthesia and intensive care] De Monte A, et al. **Minerva Anestesiol** 1988 Mar; 54(3):95–101 (Eng. Abstr.) **(Ita)**

[Effects of differences in oxygen affinity on circulatory response to hypoxia] Kamada A. **Hokkaido Igaku Zasshi** 1988 Jul;63(4):607–15 (Eng. Abstr.) **(Jpn)**

[A study of level of serum angiotensin I converting enzyme in patients with old and inactive pulmonary tuberculosis—in relation to pulmonary function (PO2,%VC,FEV1.0,%FEV1.0)] Morotomi Y, et al. **Kekkaku** 1988 Nov;63(11):701–6 (Eng. Abstr.) **(Jpn)**

[Changes in arterial blood gas tensions during the recovery period of constant-load exercise] Hirose Y, et al. **Kokyu To Junkan** 1988 Aug;36(8):865–8 **(Jpn)**

[Hemoglobin affinity for oxygen in coronary sinus blood during rapid atrial pacing and supine bicycle ergometer exercise testings in patients with coronary artery disease] Miyahara T, et al. **Kokyu To Junkan** 1988 Jun;36(6):681–5 (Eng. Abstr.) **(Jpn)**

[Conjunctival PO2 may demonstrate low peripheral perfusion in the hypovolemic dog] Okazaki K, et al. **Masui** 1988 Dec; 37(12):1456–9 (Eng. Abstr.) **(Jpn)**

[A study of cerebral metabolism under selective cerebral perfusion for aortic arch surgery—cerebral circulation management under continuous monitoring of blood oxygen saturation of internal jugular vein] Kuwabara M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug;36(8):1319–25 **(Jpn)**

[Nocturnal oxygen desaturation in patients with diffuse panbronchiolitis] Chonabayashi N. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Apr; 26(4):394–404 (Eng. Abstr.) **(Jpn)**

[The effect of nebulized beta-stimulant on the regional ventilation-perfusion ratio and blood gas analysis] Suzuki T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Apr; 26(4):367–72 (Eng. Abstr.) **(Jpn)**

[Pathogenetic roles of red cell 2,3-DPG and P50 in dementia due to vascular leukoencephalopathy] Sasaki K. **Nippon Ronen Igakkai Zasshi** 1988 May;25(3):301–8 (Eng. Abstr.) **(Jpn)**

[Effects of maternal hyperventilation and oxygen inhalation during labor on fetal blood-gas status] Haruta M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep; 40(9):1377–84 (Eng. Abstr.) **(Jpn)**

[From the blood gas analytic aspect-pathogenesis of pulmonary hypertension] Makino M, et al. **Rinsho Byori** 1988 May;36(5):583–7 **(Jpn)**

[Mechanism of the Bohr effect] Ohe M. **Tanpakushitsu Kakusan Koso** 1987 May;32(6):549–56 (23 ref.) **(Jpn)**

[Changes in oxygen saturation of arterial blood during controlled oxygen therapy using oxygen masks produced in Poland] Sliwiński P, et al. **Pneumonol Pol** 1988 Dec; 56(12):564–8 (Eng. Abstr.) **(Pol)**

[Partial oxygen pressure in arterialized capillary blood of the skin in allergic bronchial spasm] Kowalski J, et al. **Pol Tyg Lek** 1988 May 23;43(21):659–63 (Eng. Abstr.) **(Pol)**

[Effect of flow-type ultraviolet irradiation of the blood on its gas level in patients with chronic renal failure complicated by suppurative infections] Cherniakov VL, et al. **Anesteziol Reanimatol** 1988 May-Jun;(3):57–60 (Eng. Abstr.) **(Rus)**

[Diagnostic value of laboratory indicators in various states of oxygen transport function of the blood in patients, operated on under conditions of cardiopulmonary bypass] Dement'eva II, et al. **Anesteziol Reanimatol** 1989 Jan–Feb; (1):6–10 (Eng. Abstr.) **(Rus)**

[Blood gas composition, arterial blood pressure and cerebral blood flow during sanitization of the tracheobronchial tree in newborn infants] Gavriushov VV, et al. **Anesteziol Reanimatol** 1988 Jul-Aug;(4):6–9 (Eng. Abstr.) **(Rus)**

[Percutaneous control of gas exchange levels during surgery with hyperbaric oxygenation] Iushkov MA, et al. **Anesteziol Reanimatol** 1988 May-Jun;(3):23–5 (Eng. Abstr.) **(Rus)**

[Respiratory function of the blood in patients in critical conditions: saturation of arterial blood with O2 as a function of P50] Riabov GA, et al. **Anesteziol Reanimatol** 1988 May-Jun;(3):28–31 (Eng. Abstr.) **(Rus)**

[Calibration of oxygen meters and determination of the curve for hemoglobin dissociation by kinetics of oxygenation and deoxygenation of the blood] Fok MV, et al. **Biofizika** 1989 May-Jun;34(3):508–11 (Eng. Abstr.) **(Rus)**

[Dynamics of erythrocyte oxygenation in vitro] Fok MV, et al. **Biofizika** 1988 Jul-Aug;33(4):622–5 (Eng. Abstr.) **(Rus)**

[Oxygen affinity of human and rat hemoglobins after heating the blood outside the body] Irzhak LI, et al. **Biol Nauki** 1988;(6):55–8 (Eng. Abstr.) **(Rus)**

[Dependence of hypoxic changes in macro- and micro-hemodynamics on the activity of adrenoreceptors in the skeletal muscle in hypothermia] Nurmatov AA, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):16–9 (Eng. Abstr.) **(Rus)**

[Release of active forms of oxygen by blood neutrophils of Syrian hamsters with primary and transplanted tumors] Kashkina LM, et al. **Eksp Onkol** 1988;10(5):73–5 (Eng. Abstr.) **(Rus)**

[Effect of helium and argon on the oxygen uptake by lymphocytes] Govorukha TN, et al. **Fiziol Zh** 1989 Mar-Apr;35(2):93–5 (Eng. Abstr.) **(Rus)**

[Blood oxygenation in the lungs and characteristics of the development of a hypoxic state during hyperthermia] Seredenko MM, et al. **Fiziol Zh SSSR** 1988 Jul;74(7):987–94 (Eng. Abstr.) **(Rus)**

[Compensatory mechanisms regulating oxygen transport and erythropoiesis during an alteration in the erythrocyte composition of the blood in rats] Volzhskaia AM, et al. **Fiziol Zh SSSR** 1989 Feb;75(2):227–31 (Eng. Abstr.) **(Rus)**

[Signs of hypoxia in patients with post-transfusion complications] Vinogradova IL, et al. **Gematol Transfuziol** 1989 Mar;34(3):23–6 (Eng. Abstr.) **(Rus)**

[Hemoglobin affinity to oxygen and its correction with captopril in chronic cardiac insufficiency] Kukes VG, et al. **Kardiologiia** 1989 Apr;29(4):34–6 (Eng. Abstr.) **(Rus)**

[Effect of peripheral vasodilators on the oxygen system of the body and central hemodynamics in patients with acute myocardial infarction] Nazarov AM, et al. **Kardiologiia** 1988 Nov;28(11):61–3 (Eng. Abstr.) **(Rus)**

[External respiration, gas exchange and hemodynamics in the early postoperative period in patients after extensive resection of the liver] Vishnevskii VA, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):116–9 **(Rus)**

[Plasmapheresis with extracorporeal membrane oxygenation of the blood in the treatment of peritonitis] Abdullaev EG, et al. **Klin Khir** 1989;(4):47–8 (Eng. Abstr.) **(Rus)**

[Use of a polarographic method for assessing the state of the peripheral circulation in patients with obliterating diseases of the arteries of the lower extremities] Kushnir RIa, et al. **Klin Khir** 1988;(7):52–4 (Eng. Abstr.) **(Rus)**

[Acid-base equilibrium and blood gases in patients with aseptic necrosis of the femur head during treatment with curantyl (dipyridamole)] Golopatiuk AS. **Klin Med (Mosk)** 1988 Oct;66(10):138–40 (Eng. Abstr.) **(Rus)**

[Various characteristics of hemodynamics and gas exchange in patients with chronic obstructive lung diseases] Matkovskii SK, et al. **Klin Med (Mosk)** 1988 Dec; 66(12):50–3 **(Rus)**

[Characteristics of changes in cardiac output and blood gas composition in humans in modeling the effects of weightlessness] Vorob'ev VE, et al. **Kosm Biol Aviakosm Med** 1988 Jul-Aug;22(4):94–6 **(Rus)**

[Spectrophotometric determination of oxygen-dissociating properties of hemoglobin] Strubitskii IV, et al. **Lab Delo** 1988;(12):11–3 (Eng. Abstr.) **(Rus)**

[Synthesis of oxygen free radicals by neutrophils in acute pneumonia] Aleksandrova IV, et al. **Sov Med** 1988;(5):8–10 (Eng. Abstr.) **(Rus)**

[Gas exchange and acid-base equilibrium of the blood in chronic obstructive lung diseases] Solomatin AS. **Sov Med** 1989;(2):25–9 (62 ref.) **(Rus)**

[Effect of hydralazine on the respiratory function of the lungs and blood gas composition in patients with chronic obstructive bronchitis] Gavrisiuk VK, et al. **Ter Arkh** 1988; 60(8):71–4 (Eng. Abstr.) **(Rus)**

[Oxygen-transport function and carbohydrate metabolism in rat erythrocytes during hypoxic hypoxia and treatment with insulin] Sukhomlinov BF, et al. **Ukr Biokhim Zh** 1988 Nov-Dec;60(6):82–5 (Eng. Abstr.) **(Rus)**

[Disorders of oxygenation and skin capillary blood flow rate in psoriasis and correction of them with ethacizine] Kurdina MI, et al. **Vestn Dermatol Venerol** 1989;(2):38–41 (Eng. Abstr.) **(Rus)**

[Effect of chemical modification of hemoglobin on its biological activity] Gudkin LR, et al. **Vopr Med Khim** 1988 Jul-Aug;34(4):90–3 (Eng. Abstr.) **(Rus)**

DEFICIENCY

Adenosine, 'pertussis-sensitive' G-proteins, and K+ conductance in central mammalian neurones under energy deprivation. Spuler A, et al. **Neurosci Lett** 1989 Apr 10; 98(3):280–4

DIAGNOSTIC USE

Fetal haemodynamic response to acute maternal hyperoxygenation as predictor of fetal distress in intrauterine growth retardation. Arduini D, et al. **BMJ** 1989 Jun 10;298(6687):1561–2

METABOLISM

Effects of Gramoxone-induced reactive oxygen radicals on eicosanoid synthesis of mouse lung. Matkovics B, et al. **Acta Biol Hung** 1988;39(4):351–9

Effects of various oxygen concentrations on antioxidant enzymes and the quantity of tissue phospholipid fatty acids in the carp. Radi AA, et al. **Acta Biol Hung** 1988; 39(1):109–19

Antibody-induced generation of reactive oxygen radicals by brain macrophages in canine distemper encephalitis: a mechanism for bystander demyelination. Griot C, et al. **Acta Neuropathol (Berl)** 1989;78(4):396–403

Intraosseous pO2 in femoral neck fracture. Restoration of blood flow after aspiration of hemarthrosis in undisplaced

fractures. Kristensen KD, et al. **Acta Orthop Scand** 1989 Jun;60(3):303–4

Formation of reactive oxygen species by phagocytic cells: functions and dysfunctions. Roos D, et al.
Acta Paediatr Hung 1988–89;29(1–2):83–91 (22 ref.)

Buffering of muscle tissue PO2 levels by the superposition of the oxygen field from many capillaries. Clark PA, et al. **Adv Exp Med Biol** 1989;248:165–74

A CCD spectrophotometer to quantitate the concentration of chromophores in living tissue utilising the absorption peak of water at 975 nm. Cope M, et al.
Adv Exp Med Biol 1989;248:33–40

Oxygen diffusion through mitochondrial membranes. Koyama T, et al. **Adv Exp Med Biol** 1989;248:763–7

Predicting maximum oxygen uptake in adolescents. Hergenroeder AC, et al. **Am J Dis Child** 1989 Jun; 143(6):673–7

Effects of reductions in hemoglobin–oxygen affinity and hematocrit level on oxygen consumption and acid–base state in fetal lambs. Edelstone DI, et al.
Am J Obstet Gynecol 1989 Apr;160(4):820–6; discussion 826–8

Effects of maternal hyperoxia on the biophysical assessment of fetuses with suspected intrauterine growth retardation. Ruedrich DA, et al. **Am J Obstet Gynecol** 1989 Jul; 161(1):188–92

Walker carcinosarcoma cells damage endothelial cells by the generation of reactive oxygen species. Shaughnessy SG, et al. **Am J Pathol** 1989 Apr;134(4):787–96

Role of oxygen free radical species in in vitro models of proximal tubular ischemia. Borkan SC, et al.
Am J Physiol 1989 Jul;257(1 Pt 2):F114–25

Oxygen metabolites modulate prostaglandin E2 production by isolated gastric mucosal cells. Olson CE, et al.
Am J Physiol 1989 May;256(5 Pt 1):G925–30

Oxygen diffusion and mitochondrial respiration in neuroblastoma cells. Robiolio M, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):C1207–13

Rocking promotes differentiated properties in LLC-PK cells by improved oxygenation. Sahai A, et al. **Am J Physiol** 1989 May;256(5 Pt 1):C1064–9

Glomerular dysfunction induced by polymorphonuclear leukocyte-derived reactive oxygen species. Yoshioka T, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):F53–9

Role of phospholipase A2 and oxygenated free radicals in mucosal damage after small intestinal ischemia and reperfusion. Otamiri T, et al. **Am J Surg** 1989 Jun; 157(6):562–5; discussion 566

Problems associated with spin trapping oxygen-centered free radicals in biological systems. Pou S, et al.
Anal Biochem 1989 Feb 15;177(1):1–6 (42 ref.)

The paraganglia within the carotid bifurcation regions of young and old spontaneously hypertensive rats (SHR) after exposure to chronic hypobaric hypoxia. II. The carotid body-like organs. Habeck JO, et al. **Anat Anz** 1988; 167(1):47–55

Increased production of oxygen free radicals by polymorphonuclear leukocytes in heart failure due to aortic stenosis. Prasad K, et al. **Angiology** 1989 May;40(5):472–8

The effects of oxidizing species derived from molecular oxygen on the proliferation in vitro of human granulocyte–macrophage progenitor cells. Broxmeyer HE, et al. **Ann N Y Acad Sci** 1989;554:177–84

Physiological and pathologic effects of oxidants in mouse epidermal cells. Cerutti P, et al. **Ann N Y Acad Sci** 1988; 551:75–81; discussion 81–2

Optical and nuclear magnetic resonance studies of hypoxia in human tissue and tumors. Chance B, et al.
Ann N Y Acad Sci 1988;551:1–16

Electron transfer from cytochrome c to O2. Hill BC.
Ann N Y Acad Sci 1988;550:98–104

Intermediates in the reaction of reduced cytochrome oxidase with dioxygen. Orii Y. **Ann N Y Acad Sci** 1988;550:105–17

Effect of vitamin A on rat hepatic mixed-function oxidases, glutathione transferase activity and generations of oxygen radicals. Ayalogu EO, et al. **Ann Nutr Metab** 1988; 32(2):75–82

Oxygen sensing in the kidney and its relation to erythropoietin production. Bauer C, et al.
Annu Rev Physiol 1989;51:845–56 (65 ref.)

Transport of oxygen in muscle. Wittenberg BA, et al.
Annu Rev Physiol 1989;51:857–78 (136 ref.)

Use of a novel air separation system in a fed-batch fermentative culture of Escherichia coli. Fass R, et al.
Appl Environ Microbiol 1989 May;55(5):1305–7

Expression of denitrification enzymes in response to the dissolved oxygen level and respiratory substrate in continuous culture of Pseudomonas stutzeri. Körner H, et al. **Appl Environ Microbiol** 1989 Jul;55(7):1670–6

Hyperoxia and xanthine dehydrogenase/oxidase activities in rat lung and heart. Elsayed NM, et al.
Arch Biochem Biophys 1989 Sep;273(2):281–6

Oxygen reduction and lipid peroxidation by iron chelates with special reference to ferric nitrilotriacetate. Hamazaki S, et al. **Arch Biochem Biophys** 1989 Jul;272(1):10–7

Bromine derivatives of amino acids as intermediates in the peroxidase-catalyzed formation of singlet oxygen. Kanofsky JR. **Arch Biochem Biophys** 1989 Oct; 274(1):229–34

Interaction of ferric complexes with rat liver nuclei to catalyze NADH-and NADPH-Dependent production of oxygen radicals. Kukielka E, et al.
Arch Biochem Biophys 1989 Sep;273(2):319–30

An electron spin resonance study of oxyradical generation in superoxide dismutase- and catalase-deficient mutants of Escherichia coli K-12. Schellhorn HE, et al.
Arch Biochem Biophys 1989 Jun;271(2):323–31

Biosynthesis of 9-beta-D-arabinofuranosyladenine: hydrogen exchange at C-2' and oxygen exchange at C-3' of adenosine. Suhadolnik RJ, et al.
Arch Biochem Biophys 1989 Apr;270(1):363–73

The comparative study of reactive oxygen species generated by polymorphonuclear leukocytes as alpha 1-proteinase inhibitor inactivators–possible application for antioxidant prevention of emphysema. Nowak D.
Arch Immunol Ther Exp (Warsz) 1988;36(6):723–31

Oxygen activation and defence against oxygen toxicity in a psychrophilic Bacteroidaceae. Bentzen G, et al.
Arch Microbiol 1989;151(2):95–100

Adaptation to arterial wall hypoxia demonstrated in vivo with oxygen microcathodes. Zemplenyi T, et al.
Atherosclerosis 1989 Apr;76(2–3):173–9

Iron toxicity and oxygen radicals. Gutteridge JM, et al.
Baillieres Clin Haematol 1989 Apr;2(2):195–256 (364 ref.)

Modification of disease by preventing free radical formation: a new concept in pharmacological intervention. Ward PA, et al. **Baillieres Clin Haematol** 1989 Apr;2(2):391–402 (22 ref.)

Interactions of oxygen and sulfhydryls with free radicals in irradiated mammalian cells. Held KD. **Basic Life Sci** 1988; 49:441–8

Oxygen radicals, lipid peroxidation and DNA damage in mitochondria. Hruszkewycz AM, et al. **Basic Life Sci** 1988; 49:449–56 (70 ref.)

Metal ions, oxygen radicals and tissue damage. Aust SD.
Bibl Nutr Dieta 1989;(43):266–77

Hypoxia as a risk factor for doxorubicin-induced cardiotoxicity: a NMR evaluation. Bradamante S, et al.
Biochem Biophys Res Commun 1989 Sep 15;163(2):682–8

Mitochondria and xanthine oxidase both generate reactive oxygen species in isolated perfused rat liver after hypoxic injury. Jaeschke H, et al.
Biochem Biophys Res Commun 1989 Apr 14;160(1):140–7

Singlet oxygen production from the peroxidase catalyzed formation of styrene glutathione adducts. Kanofsky JR.
Biochem Biophys Res Commun 1989 Mar 31;159(3):1051–4

Two pathways for phosphate/water oxygen exchange by yeast inorganic pyrophosphatase. Kasho VN, et al.
Biochem Biophys Res Commun 1989 Jun 15;161(2):475–80

Perturbations in cerebral oxygen radical formation and membrane order following vitamin E deficiency. LeBel CP, et al. **Biochem Biophys Res Commun** 1989 Sep 15; 163(2):860–6

Role of oxygen during horseradish peroxidase turnover and inactivation. Ma XY, et al.
Biochem Biophys Res Commun 1988 Nov 30;157(1):160–5

Magnesium monoperoxophtalate: an efficient single oxygen atom donor in DNA cleavage catalyzed by metalloporphyrin. Pratviel G, et al.
Biochem Biophys Res Commun 1989 May 15;160(3):1212–8

Kinetic analysis of the cerebral creatine kinase reaction under hypoxic and hypoglycaemic conditions in vitro. A 31P-n.m.r. study. Cox DW, et al. **Biochem J** 1988 Oct 15; 255(2):523–7

The role of the gulose-mannose part of bleomycin in activation of iron–molecular oxygen complexes. Kénani A, et al. **Biochem J** 1988 Jul 15;253(2):497–504

Bilirubin photoconversion induced by monochromatic laser radiation. Comparison between aerobic and anaerobic experiments in vitro. Migliorini MG, et al. **Biochem J** 1988 Dec 15;256(3):841–6

The effects of fasting or hypoxia on rates of protein synthesis in vivo in subcellular fractions of rat heart and gastrocnemius muscle. Preedy VR, et al. **Biochem J** 1989 Jan 15;257(2):519–27

Oxidation of nitrogenase iron protein by dioxygen without inactivation could contribute to high respiration rates of Azotobacter species and facilitate nitrogen fixation in other aerobic environments. Thorneley RN, et al. **Biochem J** 1989 Jul 1;261(1):181–7

Incorporation of atmospheric oxygen into the carbonyl functionality of the protochlorophyllide isocyclic ring. Walker CJ, et al. **Biochem J** 1989 Jan 15;257(2):599–602

The effect of hypoxia and of energy depletion on 1,4-dihydropyridine binding sites in rat cardiac membrane fragments. Gu XH, et al. **Biochem Pharmacol** 1989 Jun 15; 38(12):1897–907

Interactions between paraquat and ferric complexes in the microsomal generation of oxygen radicals. Puntarulo S, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2911–8

Modulation of oxidative stress in the gastrointestinal tract and effect on rat intestinal motility. van der Vliet A, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2807–18

Experimental charge measurement at leaving oxygen in the bovine ribonuclease A catalyzed cyclization of uridine 3'-phosphate aryl esters. Davis AM, et al. **Biochemistry** 1988 Dec 13;27(25):9042–7

Carbon monoxide and oxygen binding to human hemoglobin F0. Di Cera E, et al. **Biochemistry** 1989 Mar 21;28(6):2631–8

Structure and function of the carboxyl-terminal oxygen-binding domain from the subunit of Octopus dofleini hemocyanin. Miller KI, et al. **Biochemistry** 1988 Sep 20;27(19):7282–8

Mechanistic studies on phenylalanine hydroxylase from Chromobacterium violaceum. Evidence for the formation of an enzyme–oxygen complex. Pember SO, et al.
Biochemistry 1989 Mar 7;28(5):2124–30

Linkage of organic phosphates to oxygen binding in human hemoglobin at high concentrations. Robert CH, et al.
Biochemistry 1988 Sep 6;27(18):6835–43

Cytochrome P-450 and oxygen toxicity. Oxygen-dependent induction of ethanol-inducible cytochrome P-450 (IIE1) in rat liver and lung. Tindberg N, et al. **Biochemistry** 1989 May 16;28(10):4499–504

The anion-transport inhibitor H2DIDS cross-links hemoglobin interdimerically and enhances oxygen unloading. Fuhrmann GF, et al. **Biochim Biophys Acta** 1988 Dec 8;946(1):25–32

Photoprotective effect of vitamins A and E on polyamine and oxygenated free radical metabolism in hairless mouse epidermis. Khettab N, et al. **Biochimie** 1988 Dec; 70(12):1709–13

Allosteric oxygen-binding properties of reassembled tarantula (Eurypelma californicum) hemocyanin with incorporated apo- or met-subunits. Decker H, et al.
Biol Chem Hoppe Seyler 1989 Jun;370(6):511–23

Bovine hemoglobin as a basis for artificial oxygen carriers. Bucci E, et al. **Biomater Artif Cells Artif Organs** 1988; 16(1–3):197–204

Polarographic cerebral oxygen availability, fluorocarbon blood levels and efficacy of oxygen transport by emulsions. Clark LC Jr, et al. **Biomater Artif Cells Artif Organs** 1988; 16(1–3):375–93

Oxygenation effect of fluosol-DA on hypoxic tumor tissue and retention of PFCs in the tumor–bearing rats. Watanabe M, et al. **Biomater Artif Cells Artif Organs** 1988; 16(1–3):547–56

Reactive oxygen metabolites and the human myocardium. Burrell CJ, et al. **Br Heart J** 1989 Jan;61(1):4–8 (40 ref.)

The effect of hypobaric hypoxia on misonidazole binding in normal and tumour-bearing mice. MacManus MP, et al. **Br J Cancer** 1989 Mar;59(3):349–52

Deficient activation by a human cell strain leads to mitomycin resistance under aerobic but not hypoxic conditions. Marshall RS, et al. **Br J Cancer** 1989 Mar;59(3):341–6

Reactive oxygen products in heterologous anti-glomerular basement membrane nephritis in rats. Birtwistle RJ, et al.
Br J Exp Pathol 1989 Apr;70(2):207–13

Partition of portal-drained visceral net flux in beef steers. 1. Blood flow and net flux of oxygen, glucose and nitrogenous compounds across stomach and post-stomach tissues. Reynolds CK, et al. **Br J Nutr** 1988 Nov; 60(3):539–51

Is the proportion of hypoxic cells in a solid tumour dependent on the host (mouse or rat)? Guichard M, et al.
Bull Cancer (Paris) 1989;76(4):367–71

Effects of organic and inorganic lead on the oxygen equilibrium curves of the fresh water field crab, Barytelphusa guerini. Tulasi SJ, et al.
Bull Environ Contam Toxicol 1989 Feb;42(2):247–53

Role of reactive oxygen derived radicals in ischemic heart disease. Godin DV. **Can J Cardiol** 1989 Jun–Aug;5(5):235–8

Beta-adrenergic receptor function and oxygen radical production in bovine pulmonary alveolar macrophages. Conlon PD, et al. **Can J Physiol Pharmacol** 1988 Dec; 66(12):1538–41

Metabolism of SR 4233 by Chinese hamster ovary cells: basis of selective hypoxic cytotoxicity. Baker MA, et al.
Cancer Res 1988 Nov 1;48(21):5947–52

Analysis of antioxidant defense systems during rat hepatocarcinogenesis. Vo TK, et al. **Carcinogenesis** 1988 Nov;9(11):2009–13

ESR studies on active oxygen radicals produced in the respiratory burst of human polymorphonuclear leukocytes. Zhao BL, et al. **Cell Biol Int Rep** 1989 Jun;13(6):529–36

Scavenging effect of extracts of green tea and natural antioxidants on active oxygen radicals. Zhao BL, et al.
Cell Biophys 1989 Apr;14(2):175–85

Singlet oxygen production by biological systems. Kanofsky JR. **Chem Biol Interact** 1989;70(1–2):1–28 (197 ref.)

Reactive oxygen metabolites relax the lamb ductus arteriosus by stimulating prostaglandin production. Clyman RI, et al. **Circ Res** 1989 Jan;64(1):1–8

"Reperfusion injury" by oxygen-derived free radicals? Effect of superoxide dismutase plus catalase, given at the time of reperfusion, on myocardial infarct size, contractile function, coronary microvasculature, and regional myocardial blood flow. Przyklenk K, et al. **Circ Res** 1989 Jan;64(1):86–96

Reactive oxygen intermediates reduce inactivation of serotonin in isolated, perfused rat lungs. Kjaeve J, et al.
Circ Shock 1989 Jun;28(2):79–87

Oxygen free radical activity during live E. coli septic shock in the dog. Morgan RA, et al. **Circ Shock** 1988 Aug; 25(4):319–23

Studies on the possible role of oxygen-derived free radicals for impairment of protein and energy metabolism in liver ischemia. Nordström G, et al. **Circ Shock** 1988 Oct; 26(2):115–26

Evaluation of variation in oxygen transmission in rigid contact lens extended wear. Nelson JM, et al. **CLAO J** 1989 Apr–Jun;15(2):125–33

Pharmacological modification of oxygen affinity improves deformability of deoxygenated sickle erythrocytes: a possible therapeutic approach to sickle cell disease. Keidan AJ, et al. **Clin Sci** 1989 Apr;76(4):357–62

Oxygen uptake and lactate production by Schistosoma mansoni cercaria, cercarial body and tail, and schistosomule. Von Kruger WM, et al. **Comp Biochem Physiol [B]** 1978;60(1):41–6

Oxyradical species and their relationship to pathophysiology in pediatric critical care illness. Zimmerman JJ. **Crit Care Clin** 1988 Oct;4(4):645–60

Effects of hyperventilation, hypothermia, and altered blood viscosity on cerebral blood flow, cross-brain oxygen extraction, and cerebral metabolic rate for oxygen in cats. Frewen TC, et al. **Crit Care Med** 1989 Sep;17(9):912–6

Transcutaneous and liver surface PO2 during hemorrhagic hypotension and treatment with phenylephrine. Tremper KK, et al. **Crit Care Med** 1989 Jun;17(6):537–40

Theory of oxygen transport to tissue. Popel AS. **Crit Rev Biomed Eng** 1989;17(3):257–321 (196 ref.)

Free radical damage and organ preservation: fact or fiction? A review of the interrelationship between oxidative stress and physiological ion disbalance. Fuller BJ, et al. **Cryobiology** 1988 Oct;25(5):377–93 (72 ref.)

The production of toxic oxygen metabolites by hemocytes of different snail species. Dikkeboom R, et al. **Dev Comp Immunol** 1988 Summer;12(3):509–20

Impaired oxygenation of gastric mucosa in portal hypertension. The basis for increased susceptibility to injury. Sarfeh IJ, et al. **Dig Dis Sci** 1989 Feb;34(2):225–8

Electroencephalographic correlates of blood flow and oxygen metabolism provided by positron emission tomography in patients with cerebral infarction. Nagata K, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jan; 72(1):16–30

The role of free radicals in tumor promotion. Goldstein BD, et al. **Environ Health Perspect** 1989 May;81:55–7 (13 ref.)

Evidence supporting a role for active oxygen species in asbestos-induced toxicity and lung disease. Mossman BT, et al. **Environ Health Perspect** 1989 May;81:91–4 (27 ref.)

Substrate-modulated reactions of putidamonooxin. The nature of the active oxygen species formed and its reaction mechanism. Wende P, et al. **Eur J Biochem** 1989 Apr 15; 181(1):189–97

Stimulus-specific defect in oxidative metabolism of polymorphonuclear granulocytes in polycythemia vera. Samuelsson J, et al. **Eur J Haematol** 1988 Nov;41(5):454–8

Cardiovascular responses to hypoxia in the Atlantic cod, Gadus morhua. Fritsche R, et al. **Exp Biol** 1989; 48(3):153–60

Pulmonary metabolism of reactive oxygen species. Panus PC, et al. **Exp Lung Res** 1988;14 Suppl:959–76 (48 ref.)

The oxygen environment of the arterial media in early rabbit hypertension. Crawford DW, et al. **Exp Mol Pathol** 1988 Oct;49(2):215–33

Enzymatic and nonenzymatic lipid peroxidation capacities and antioxidants in hypoxic and reoxygenated rat myocardium. Kihlström M, et al. **Exp Mol Pathol** 1989 Apr;50(2):230–8

Increased oxygen radical-dependent inactivation of metabolic enzymes by liver microsomes after chronic ethanol consumption. Dicker E, et al. **FASEB J** 1988 Oct; 2(13):2901–6

Oxidants, inflammation, and anti-inflammatory drugs. Halliwell B, et al. **FASEB J** 1988 Oct;2(13):2867–73 (41 ref.)

Evidence for a PO2-sensitive K+ channel in the type-I cell of the rabbit carotid body. Delpiano MA, et al. **FEBS Lett** 1989 Jun 5;249(2):195–8

Induction of tumour hypoxia by a vasoactive agent. A combined NMR and radiobiological study. Dunn JF, et al. **FEBS Lett** 1989 Jun 5;249(2):343–7

Central nervous system trauma and stroke. I. Biochemical considerations for oxygen radical formation and lipid peroxidation. Braughler JM, et al. **Free Radic Biol Med** 1989;6(3):289–301 (108 ref.)

Degradation of oxidatively denatured proteins in Escherichia coli. Davies KJ, et al. **Free Radic Biol Med** 1988;5(4):215–23

Oxidatively denatured proteins are degraded by an ATP-independent proteolytic pathway in Escherichia coli. Davies KJ, et al. **Free Radic Biol Med** 1988;5(4):225–36

Central nervous system trauma and stroke. II. Physiological and pharmacological evidence for involvement of oxygen radicals and lipid peroxidation. Hall ED, et al. **Free Radic Biol Med** 1989;6(3):303–13 (98 ref.)

Is the autoxidation of catecholamines involved in ischemia-reperfusion injury? Jewett SL, et al. **Free Radic Biol Med** 1989;6(2):185–8

Oxygen radicals, inflammation, and tissue injury. Ward PA, et al. **Free Radic Biol Med** 1988;5(5–6):403–8 (45 ref.)

Hyperoxia during reperfusion is a factor in reperfusion injury. Wolbarsht ML, et al. **Free Radic Biol Med** 1989;6(1):61–2

The stoichiometry of tyrosinase-catalyzed oxidation of 4-hydroxyanisole. Dobrucki JW, et al. **Free Radic Res Commun** 1988;4(5):325–9

Enhancement of enzyme-catalyzed production of reactive oxygen species by suspensions of "crocidolite" asbestos fibres. Elstner EF, et al. **Free Radic Res Commun** 1986; 1(6):355–9

Dysbaric osteonecrosis (caisson disease of bone): are active oxygen species and the endocrine system responsible, and can control of the production of free radicals and their reaction products confer protection? Jones GR. **Free Radic Res Commun** 1987;4(3):139–47 (91 ref.)

Liver nuclear NADPH-cytochrome P-450 reductase may be involved in redox cycling of bleomycin-Fe(III), oxy radical formation and DNA damage. Kappus H, et al. **Free Radic Res Commun** 1987;2(4–6):271–7

The decisive pO2-levels in haloalkane-mediated liver cell injury. Noll T, et al. **Free Radic Res Commun** 1987; 3(1–5):293–8

Virus-induced formation of reactive oxygen intermediates in phagocytic cells. Peterhans E, et al. **Free Radic Res Commun** 1987;3(1–5):39–46

Reduction of oxygen by NADH/NADH dehydrogenase in the presence of adriamycin. Thornalley PJ, et al. **Free Radic Res Commun** 1986;2(3):163–71

Time kinetics of hemoglobin and myoglobin activation by tetrachlorodecaoxide (TCDO). Youngman RJ, et al. **Free Radic Res Commun** 1986;1(5):311–9

Experimental support for the implication of oxidative stress in the genesis of parkinsonian syndromes. Fariello RG. **Funct Neurol** 1988 Oct–Dec;3(4):407–12 (10 ref.)

Generation of reactive oxygen species by Kupffer cells and blood monocytes during intestinal amebiasis in guinea pigs. Virk KJ, et al. **Gastroenterol Jpn** 1988 Dec;23(6):688–94

Role of oxygen derived free radicals in platelet activating factor induced bowel necrosis. Cueva JP, et al. **Gut** 1988 Sep;29(9):1207–12

Oxygen radicals: mediators of gastrointestinal pathophysiology. Parks DA. **Gut** 1989 Mar;30(3):293–8 (35 ref.)

Physiologic effects of tissue oxygenation on wound healing. Whitney JD. **Heart Lung** 1989 Sep;18(5):466–74 (48 ref.)

Involvement of O2 radicals in 'autoimmune' diabetes. Nomikos IN, et al. **Immunol Cell Biol** 1989 Feb;67 (Pt 1):85–7

Culture medium oxygen tension affects fibronectin production in human adult and cord blood macrophages. Yoder MC, et al. **Immunol Lett** 1988 Sep;19(1):1–6

Effect of scavengers of active oxygen species and pretreatment with acetyl-salicylic acid on the injury to cultured endothelial cells by thrombin-stimulated platelets. Larsen T, et al. **In Vitro Cell Dev Biol** 1989 Mar;25(3 Pt 1):276–82

A model for changes in the conformation of oxygen evolving complex of chloroplasts during oxidation of water. Raval MK, et al. **Indian J Biochem Biophys** 1988 Aug;25(4):341–3

Catechol stimulation of ferricyanide Hill reaction by spheroplasts of cyanobacterium, Synechococcus cedrorum: effect of temperature on catechol-stimulated oxygen evolution. Wavare RA, et al. **Indian J Biochem Biophys** 1989 Feb;26(1):19–23

Pulmonary diffusion capacity for Co at varying alveolar oxygen tensions and different alveolar volumes. Mahajan KK, et al. **Indian J Physiol Pharmacol** 1988 Jan–Mar; 32(1):21–8

Relationship between intracellularly and extracellularly generated oxygen metabolites from primed polymorphonuclear leukocytes differs from that obtained from nonprimed cells. Briheim G, et al. **Inflammation** 1989 Aug;13(4):455–64

Reactive oxygen intermediates inactivate Mycobacterium leprae in the phagocytes from human peripheral blood. Marolia J, et al. **Int J Lepr Other Mycobact Dis** 1989 Jun; 57(2):483–91

Respiration in the filarial nematode Brugia pahangi. Paget TA, et al. **Int J Parasitol** 1989 May;19(3):337–43

31P NMR spectroscopy in vivo of two murine tumor lines with widely different fractions of radiobiologically hypoxic cells. Rofstad EK, et al. **Int J Radiat Biol** 1988 Oct; 54(4):635–49

Induction of severe tumor hypoxia by modifiers of the oxygen affinity of hemoglobin. Adams GE, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1179–82

Keynote address: hypoxic cell radiosensitizers: where next? Brown JM. **Int J Radiat Oncol Biol Phys** 1989 Apr; 16(4):987–93 (43 ref.)

Keynote address: cellular reduction of nitroimidazole drugs: potential for selective chemotherapy and diagnosis of hypoxic cells. Chapman JD, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):911–7 (45 ref.)

Autoradiographic study of tritium-labeled misonidazole in the mouse. Cobb LM, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):953–6

Keynote address: hypoxic cell sensitizers: clinical developments. Dische S. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1057–60 (29 ref.)

Comparison of 3H-misonidazole binding between CHO and 9L cells using the sandwich system. Hlatky L, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):943–7

The relationship between radiation response of human squamous carcinoma cells and specific metabolic changes induced by chronic hypoxia. Kwok TT, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1301–5

Quantitation of hypoxia in multicellular spheroids by video image analysis. Miller GG, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):949–52

NLP-1: a DNA intercalating hypoxic cell radiosensitizer and cytotoxin. Panicucci R, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1039–43

31P NMR spectroscopy and HbO2 cryospectrophotometry in prediction of tumor radioresistance caused by hypoxia. Rofstad EK, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr; 16(4):919–23

Characteristics of fluorinated nitroazoles as hypoxic cell radiosensitizers. Shibamoto Y, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1045–8

The differential hypoxic cytotoxicity of bioreductive agents determined in vitro by the MTT assay. Stratford IJ, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):973–6

Modification of the radiation response of pig skin by manipulation of tissue oxygen tension using anesthetics and administration of BW12C. van den Aardweg GJ, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1191–4

A comparison of colorimetric and clonogenic assays for hypoxic-specific toxins with hamster and human cells. Watts ME, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr; 16(4):939–42

The reaction between nitracrine and glutathione: implications for hypoxic cell radiosensitization and cytotoxicity. Wilson WR, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr; 16(4):1001–5

Micropharmacokinetics of chemical modifiers. Workman P. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):897–906 (52 ref.)

The effects of oxygen free radicals on wound healing. Foschi D, et al. **Int J Tissue React** 1988;10(6):373–9

Device for intracellular increase of oxygen free radicals and inhibition of MethA tumour cell proliferation: in vitro and in vivo studies. Mashiba H, et al. **Int J Tissue React** 1988; 10(5):273–80

Oxygen free radicals and lungs. Junod AF. **Intensive Care Med** 1989;15 Suppl 1:S21–23

Effects of hyperoxia on the oxygen distribution in the intact cat retina. Linsenmeier RA, et al. **Invest Ophthalmol Vis Sci** 1989 Apr;30(4):612–8

Comparative study of vitreous oxygen tension in human and rabbit eyes. Sakaue H, et al. **Invest Ophthalmol Vis Sci** 1989 Sep;30(9):1933–7

Retinal aerobic glycolysis revisited [editorial] Winkler BS. **Invest Ophthalmol Vis Sci** 1989 Jun;30(6):1023

Oxygen distribution and consumption in the cat retina at increased intraocular pressure. Yancey CM, et al. **Invest Ophthalmol Vis Sci** 1989 Apr;30(4):600–11

Analysis of the relationship between defective sperm function and the generation of reactive oxygen species in cases of oligozoospermia. Aitken RJ, et al. **J Androl** 1989 May–Jun; 10(3):214–20

Inhibitory effect of antibiotic cerulenin on the respiratory burst in phagocytes. I. Effects of cerulenin on active oxygen-generation and lipid metabolism in phagocytes. Nakata M, et al. **J Antibiot (Tokyo)** 1989 Jul;42(7):1171–7

Critical O2 delivery to skeletal muscle at high and low PO2 in endotoxemic dogs. Bredle DL, et al. **J Appl Physiol** 1989 Jun;66(6):2553–8

Rat lung antioxidant enzyme activities and their specific proteins during hyperoxia. Crouch LS, et al. **J Appl Physiol** 1988 Aug;65(2):797–804

Effect of O2 partial pressure on the myeloperoxidase pathway of neutrophils. Davis WB, et al. **J Appl Physiol** 1988 Nov; 65(5):1995–2003

Effects of reactive oxygen species on prostacyclin production in perinatal rat lung cells. Lee DS, et al. **J Appl Physiol** 1989 Mar;66(3):1321–7

Hyperoxia and self- or neutrophil-generated O2 metabolites inactivate xanthine oxidase. Terada LS, et al. **J Appl Physiol** 1988 Nov;65(5):2349–53

Oxygen diffusion-concentration in erythrocyte plasma membranes studied by the fluorescence quenching of anionic and cationic pyrene derivatives. Lissi EA, et al. **J Bioenerg Biomembr** 1989 Jun;21(3):375–85

Chloroplast intragenic suppression enhances the low CO2/O2 specificity of mutant ribulose-bisphosphate carboxylase/oxygenase. Chen ZX, et al. **J Biol Chem** 1989 Feb 25;264(6):3051–3

Detection of singlet (1O2) oxygen phosphorescence during chloroperoxidase-catalyzed decomposition of ethyl hydroperoxide. Hall RD, et al. **J Biol Chem** 1989 May 15; 264(14):7900–6

Structure-function relationships in hemoglobin Kariya, Lys-40(C5) alpha——Glu, with high oxygen affinity. Functional role of the salt bridge between Lys-40 alpha and the beta chain COOH terminus. Imai K, et al. **J Biol Chem** 1989 Jul 5;264(19):11174–80

Oxygen isotope effects on the ribulosebisphosphate oxygenase reaction. Krecki W, et al. **J Biol Chem** 1989 Jul 5;264(19):10982–6

The reactivity of chicken liver xanthine dehydrogenase with molecular oxygen. Nishino T, et al. **J Biol Chem** 1989 Feb 15;264(5):2518–27

Differences in redox and kinetic properties between NAD-dependent and O2-dependent types of rat liver xanthine dehydrogenase. Saito T, et al. **J Biol Chem** 1989 Jun 15;264(17):10015–22

Discrimination between oxygen and carbon monoxide and inhibition of autooxidation by myoglobin. Site-directed mutagenesis of the distal histidine. Springer BA, et al. **J Biol Chem** 1989 Feb 25;264(6):3057–60

Reoxygenation and calcium-induced cerebroarterial contractions as affected by vasodilator agents. Bian K, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):808–15

Mechanisms of cerebrovascular O2 sensitivity from hyperoxia to moderate hypoxia in the rat. Shinozuka T, et al. **J Cereb Blood Flow Metab** 1989 Apr;9(2):187–95

Evidence for improved myocardial oxygen delivery and function during hypoxia in the mole rat. Edoute Y, et al. **J Comp Physiol [B]** 1988;158(5):575–82

Oxygen binding properties, capillary densities and heart

weights in high altitude camelids. Jürgens KD, et al. **J Comp Physiol [B]** 1988;158(4):469–77

An investigation of the nature of Bohr, Root, and Haldane effects in Octopus dofleini hemocyanin. Miller KI, et al. **J Comp Physiol [B]** 1988;158(5):547–52

Comparative oxygen affinity of fish and mammalian myoglobins. Nichols JW, et al. **J Comp Physiol [B]** 1989; 159(2):205–9

Oxygen-dependent killing of Staphylococcus aureus by human neutrophils. Edwards SW, et al. **J Gen Microbiol** 1987 Dec;133 (Pt 12):3591–7

Influence of oxygen tension on the respiratory activity of Mycobacterium phlei. Gillespie J, et al. **J Gen Microbiol** 1988 Jan;134 (Pt 1):247–52

PSK, a polysaccharide from Coriolus vesicolor, enhances oxygen metabolism of murine peritoneal macrophages and the host resistance to listerial infection. Saito H, et al. **J Gen Microbiol** 1988 Apr;134 (Pt 4):1029–35

A haemoprotein is not involved in the control by oxygen of enteric nitrogenase synthesis. Smith A, et al. **J Gen Microbiol** 1988 Jun;134 (Pt 6):1499–507

Effects of in vivo administration of recombinant human granulocyte-macrophage colony-stimulating factor on human neutrophil chemotaxis and oxygen metabolism [letter] Buescher ES, et al. **J Infect Dis** 1988 Nov; 158(5):1140–2

Oxygen activation and ligand binding by pure heme-octapeptide microperoxidase-8 (MP-8). Adams PA, et al. **J Inorg Biochem** 1988 Nov;34(3):167–75

Ferriprotoporphyrin IX mediated oxygen activation/insertion reactions: the anerobic reduction of the aniline-Fe3+-microperoxidase-8 complex by NADH. Adams PA, et al. **J Inorg Biochem** 1988 Nov;34(3):177–87

Interferons affect oxygen metabolism in human neutrophil granulocytes. Lappegård KT, et al. **J Interferon Res** 1988 Oct;8(5):665–77

Effects of anoxia, hyperoxia, and salinity on neurons in the leech Nephelopsis obscura (Erpobdellidae): RNA redistribution by fluorescence histochemistry. Singhal RN, et al. **J Invertebr Pathol** 1989 Jan;53(1):93–101

Lung and muscle water after crystalloid and colloid infusion in septic rats: effect on oxygen delivery and metabolism. Rackow EC, et al. **J Lab Clin Med** 1989 Feb;113(2):184–9

Binding of oxygen and carbon monoxide to the hemocyanin from the spiny lobster. Connelly PR, et al. **J Mol Biol** 1989 Jun 20;207(4):829–32

Modulation of oxygen affinity in hemoglobin by solvent components. Interaction of bovine hemoglobin with 2,3-diphosphoglycerate and monatomic anions. Fronticelli C, et al. **J Mol Biol** 1988 Jul 20;202(2):343–48

Transient kinetics of oxygen dissociation from ferrous subunits of iron-cobalt hybrid hemoglobins. The principal reaction controlling the co-operativity. Kitagishi K, et al. **J Mol Biol** 1988 Oct 20;203(4):1119–26

Analysis of hemoglobin oxygen equilibrium curves. Are unique solutions possible? Marden MC, et al. **J Mol Biol** 1989 Jul 20;208(2):341–5

Oxygen diffusion distance in thyroxine-induced hypertrophic rabbit myocardium. Seiden D, et al. **J Mol Cell Cardiol** 1988 Oct;20(10):917–30

A new method to study activated oxygen species induced damage in cardiomyocytes and protection by Ca2+-antagonists. Ver Donck L, et al. **J Mol Cell Cardiol** 1988 Sep;20(9):811–23

Drug resistance in Chinese hamster ovary cells during recovery from severe hypoxia. Wilson RE, et al. **J Natl Cancer Inst** 1989 Aug 16;81(16):1235–40

Antioxidant enzymes and related trace elements in aging brain capillaries and choroid plexus. Tayarani I, et al. **J Neurochem** 1989 Sep;53(3):817–24

Effect of booster blood transfusions on oxygen utilization in infants with bronchopulmonary dysplasia. Alverson DC, et al. **J Pediatr** 1988 Oct;113(4):722–6

The effect of aminophylline on gastrointestinal blood flow and oxygen metabolism in the conscious newborn lamb. Cronin CM, et al. **J Pediatr Gastroenterol Nutr** 1989 Apr; 8(3):371–5

Effect of diltiazem on regional oxygenation of reperfused myocardium. Acad BA, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):91–6

Calmodulin and free oxygen radicals interaction with steady-state calcium accumulation and passive calcium permeability of cardiac sarcoplasmic reticulum. Okabe E, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):286–92

Singlet oxygen formation in monomeric and aggregated porphyrin c. Bennett LE, et al. **J Photochem Photobiol [B]** 1989 Feb;3(1):81–9

Hydrogen production by rumen holotrich protozoa: effects of oxygen and implications for metabolic control by in situ conditions. Lloyd D, et al. **J Protozool** 1989 Mar–Apr; 36(2):205–13 (52 ref.)

Reperfusion injury and oxygen free radicals: a review. Russell RC, et al. **J Reconstr Microsurg** 1989 Jan;5(1):79–84 (54 ref.)

Xanthine oxidase-derived oxygen radicals induce pulmonary edema via direct endothelial cell injury. Grosso MA, et al. **J Surg Res** 1989 Apr;46(4):355–60

Antiviral antibodies stimulate production of reactive oxygen species in cultured canine brain cells infected with canine distemper virus. Bürge T, et al. **J Virol** 1989 Jun; 63(6):2790–7

Combined effects of hypoxia and elimination of glucose on resting and postextrasystolic potentiated contractions of papillary muscle of guinea pigs. Asayama J, et al. **Jpn Circ J** 1989 Apr;53(4):319–28

The link between free radicals and myocardial injury. Nakazawa H, et al. **Jpn Circ J** 1988 Jul;52(7):646–54

Measurement of vitreous oxygen tension in human eyes. Sakaue H, et al. **Jpn J Ophthalmol** 1989;33(2):199–203

Role of reactive oxygen metabolites in experimental glomerular disease. Shah SV. **Kidney Int** 1989 May; 35(5):1093–106 (157 ref.)

Stimulation of active oxygen formation by serum of patients with Graves' disease. Taniguchi H, et al. **Kobe J Med Sci** 1988 Oct;34(5):197–200

Reactive oxygen in the tumor promotion stage of skin carcinogenesis. Fischer SM, et al. **Lipids** 1988 Jun; 23(6):592–7

In vivo localized ESR spectroscopy reflecting metabolism. Bacic G, et al. **Magn Reson Med** 1989 May;10(2):266–72

Oxygen free radical production by mouse peritoneal macrophages as a function of age. Lavie L, et al. **Mech Ageing Dev** 1988 Nov 14;45(2):177–89

Does oxygen free radical increased formation explain long term complications of diabetes mellitus? Gillery P, et al. **Med Hypotheses** 1989 May;29(1):47–50 (23 ref.)

The role of oxygen in toxic shock syndrome. Mahoney JR Jr. **Med Hypotheses** 1988 Nov;27(3):215–6

The effect of body cooling on oxygen transport during exercise. Pendergast DR. **Med Sci Sports Exerc** 1988 Oct; 20(5 Suppl):S171–6 (36 ref.)

The effects of oxygen radical—mediated pulmonary endothelial damage on cancer metastasis [published erratum appears in Mol Cell Biochem 1989 Mar 16;86(1):97] Orr FW, et al. **Mol Cell Biochem** 1988 Dec;84(2):189–98

The Azorhizobium caulinodans nitrogen-fixation regulatory gene, nifA, is controlled by the cellular nitrogen and oxygen status. Ratet P, et al. **Mol Microbiol** 1989 Jun; 3(6):825–38

Oxidative stress injury studied in isolated intact cells. Bellomo G, et al. **Mol Toxicol** 1987–88 Fall;1(4):281–93 (39 ref.)

Effects of active oxygen species on the genetic apparatus. **Mutat Res** 1989 Sep;214(1):1–164

Methylreductic acid and hydroxymethylreductic acid: oxygen radical-forming agents in heated starch. Kasai H, et al. **Mutat Res** 1989 Sep;214(1):159–64

Generation of oxy radicals in biosystems. Simic MG, et al. **Mutat Res** 1989 Sep;214(1):3–12 (60 ref.)

The involvement of reactive oxygen species in oral cancers of betel quid/tobacco chewers. Stich HF, et al. **Mutat Res** 1989 Sep;214(1):47–61 (99 ref.)

Effect of combinations of antioxidants on phagocyte-induced sister-chromatid exchanges. Weitberg AB. **Mutat Res** 1989 Sep;224(1):1–4

Neutrophil oxygen radical production by dialysis membranes. Kuwahara T, et al. **Nephrol Dial Transplant** 1988;3(5):661–5

Age-related effect induced by oxidative stress on the cerebral glutathione system. Benzi G, et al. **Neurochem Res** 1989 May;14(5):473–81

Generation of oxygen radicals and formation of fibrin thrombi in glomerular capillaries of rats with nephrotoxic nephritis. Ito S, et al. **Nippon Jinzo Gakkai Shi** 1989 Feb; 31(2):171–7

The role of free oxygen radicals in the expulsion of primary infections of Nippostrongylus brasiliensis. Smith NC. **Parasitol Res** 1989;75(6):423–38 (218 ref.)

Developmental biology of oxidant-producing enzymes and antioxidants in the piglet intestine. Crissinger KD, et al. **Pediatr Res** 1989 Jun;25(6):612–6

Comparative study of demethoxydaunorubicin with other anthracyclines on generation of oxygen radicals and clonogenic survival of fibroblasts. Grankvist K, et al. **Pharmacol Toxicol** 1989 Jul;65(1):40–4

The effects of near-UV radiation on human lens beta-crystallins: protein structural changes and the production of O2- and H2O2. Andley UP, et al. **Photochem Photobiol** 1989 Jul;50(1):97–105

Singlet oxygen involvement in the inactivation of cultured human fibroblasts by UVA (334 nm, 365 nm) and near-visible (405 nm) radiations. Tyrrell RM, et al. **Photochem Photobiol** 1989 Apr;49(4):407–12

Is skeletal muscle PO2 related to the severity of multiple organ failure and survival in critically ill patients? A preliminary study. Beerthuizen GI, et al. **Prog Clin Biol Res** 1989;308:137–42

Susceptibility of mitochondrial membranes to calcium and reactive oxygen species: implications for ischemic and toxic tissue damage. Malis CD, et al. **Prog Clin Biol Res** 1988; 282:235–59 (128 ref.)

Free radical scavengers in the cardiopulmonary response to endotoxin. Traber DL, et al. **Prog Clin Biol Res** 1989; 308:885–90 (26 ref.)

Active oxygen free radicals are scavenged by condensed tannins. Uchida S, et al. **Prog Clin Biol Res** 1988;280:135–8

Comparison of the effects of oxygen, 5-hydroxytryptamine, bradykinin and adrenaline in isolated human umbilical artery smooth muscle. McGrath JC, et al. **Q J Exp Physiol** 1988 Jul;73(4):547–59

Induction of marrow hypoxia by radioprotective agents. Allalunis-Turner MJ, et al. **Radiat Res** 1989 Jun; 118(3):581–6

Role of oxygen-dependent mechanisms in monoclonal-antibody-induced lysis of normal T cells by phagocytes. II. Murine phagocytes. Descamps-Latscha B, et al. **Res Immunol** 1989 Jan;140(1):33–54

Adaptive respiratory responses of trout to acute hypoxia. III. Ion movements and pH changes in the red blood cell. Fievet B, et al. **Respir Physiol** 1988 Oct;74(1):99–113

Evidence that hypoxemia promotes catecholamine release during hypercapnic acidosis in rainbow trout (Salmo gairdneri). Perry SF, et al. **Respir Physiol** 1989 Sep; 77(3):351–63

Adaptive respiratory responses of trout to acute hypoxia. I. Effects of water ionic composition on blood acid–base status response and gill morphology. Thomas S, et al. **Respir Physiol** 1988 Oct;74(1):77–89

Phagocytes, O2 reduction, and hydroxyl radical. Cohen MS, et al. **Rev Infect Dis** 1988 Nov–Dec;10(6):1088–96 (105 ref.)

X-ray and xenobiotic effect on rat liver oxygen tension. Zima M, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove** 1988;31(5):443–53

Oxygen free radicals decrease survival time of isolated rat hearts. Semb AG, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):135–8

Oxygen radicals in influenza-induced pathogenesis and treatment with pyran polymer-conjugated SOD. Oda T, et al. **Science** 1989 May 26;244(4907):974–6

Intraosseous pressure and partial pressures of oxygen and carbon dioxide in osteoarthritis. Kiaer T, et al. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):57–60

Oxygen radicals, lipid peroxidation, and neutrophil infiltration after small-intestinal ischemia and reperfusion. Otamiri T. **Surgery** 1989 May;105(5):593–7

Non-apnoeic REM sleep induced nocturnal oxygen desaturation treated by nasal continuous positive airway pressure. Sériès F, et al. **Thorax** 1989 Jun;44(6):521–2

Characterization of the oxidant generation by inflammatory cells lavaged from rat lungs following acute exposure to ozone. Esterline RL, et al. **Toxicol Appl Pharmacol** 1989 Jun 15;99(2):229–39

Incorporation and disappearance of oxygen-18 in lung from mice exposed to 1 ppm 18O3. Santrock J, et al. **Toxicol Appl Pharmacol** 1989 Mar 15;98(1):75–80

Lipid peroxidation activation and cytochrome P-450 decrease in rat liver endoplasmic reticulum under oxidative stress. Serbinova EA, et al. **Toxicol Lett** 1989 May; 47(2):119–23

Synergistic interaction of ozone and respirable aerosols on rat lungs. IV. Protection by quenchers of reactive oxygen species. Warren DL, et al. **Toxicology** 1988 Dec 16; 53(1):113–33

No effect of modulators of reactive oxygen-induced pathology on microcystin-LR intoxication. Franz DR, et al. **Toxicon** 1988;26(11):1098–101

Low-frequency resonance and cooperativity of hemoglobin [letter] Chou KC. **Trends Biochem Sci** 1989 Jun;14(6):212–3

Ultrasound-enhanced diffusion through isolated frog skin. Mortimer AJ, et al. **Ultrasonics** 1988 Nov;26(6):348–51

Hemoperfusion effect on oxygen-carrying function of preserved donor blood and erythrocytic mass. Khodas MYa, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989; 22(2):92–6

[The effect of oxygen free radicals in the pathologic course following experimental brain injury] Gao GD. **Chung Hua I Hsueh Tsa Chih** 1988 Nov;68(11):629–31, 44 (Eng. Abstr.) **(Chi)**

[Changes in the ability to produce reactive oxygen by phagocytes from mice infected or immunized with Plasmodium berghei] Li M, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(3):208–11 (Eng. Abstr.) **(Chi)**

[Reoxygenation of tumors of the uterine cervix during combined radiotherapy using low dose gamma-neutron irradiation with californium-252] Tačev T, et al. **Cesk Radiol** 1989 Mar;43(2):125–35 (Eng. Abstr.) **(Cze)**

[Evaluation by chemiluminescence of the in vitro production of oxygen radicals by phagocytic cells in leprosy] Sarthou JL, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:181–3 **(Fre)**

[Free radicals derived from oxygen: production and effects on the functions of glomerular cells] Baud L, et al. **Arch Int Physiol Biochim** 1988 Aug;96(3):A47–56 (45 ref.) **(Fre)**

[Toxicity of oxygen free radicals in reperfusion. Myth or reality?] de Leiris J, et al. **Arch Mal Coeur** 1988 Oct;81 Spec No:35–40 (Eng. Abstr.) **(Fre)**

[Oxygen free radicals and inflammatory diseases of intestines] Emerit J, et al. **J Chir (Paris)** 1989 May;126(5):287–93 (49 ref.) (Eng. Abstr.) **(Fre)**

[Laboratory parameters for the estimation of the oxygen supply of the organism] Wolff J. **Z Med Lab Diagn** 1989; 30(2):118–23 (Eng. Abstr.) **(Ger)**

[Oxygen regulation of nitrogen metabolism in microorganisms] Schauer F. **Zentralbl Mikrobiol** 1988; 143(3):195–206 (46 ref.) (Eng. Abstr.) **(Ger)**

[Role of oxygen free-radicals in myocardial ischemia reperfusion injury—practical implications] Leor J, et al. **Harefuah** 1988 Apr 15;114(8):400–3 (55 ref.) **(Heb)**

[Free oxygen radicals. Their role in the physiopathology of rheumatic diseases and therapeutic implications] Allegrezza Giulietti A, et al. **Clin Ter** 1987 Sep 30;122(6):445–57 (84 ref.) (Eng. Abstr.) **(Ita)**

[Study of the activity of neutrophils to produce active oxygen species in asthmatic children—using whole blood luminol-dependent chemiluminescence] Kato M, et al.

Arerugi 1988 Oct;37(10):992–8 (Eng. Abstr.) (Jpn)
[The relationship between thermotolerance and the tissue oxygen tension in human gastric cancer tissue] Kokubun M, et al. Gan No Rinsho 1988 Dec;34(15):2075–8 (Eng. Abstr.) (Jpn)
[Radiosensitizer: hypoxic cell radiosensitizer] Mori T. Gan To Kagaku Ryoho 1989 Apr;16(4 Pt 2-2):1399–404 (15 ref.) (Eng. Abstr.) (Jpn)
[Present status of radiation sensitizers—hypoxic cell radiosensitizer] Murayama C, et al. Gan To Kagaku Ryoho 1989 Jun;16(6):2135–41 (33 ref.) (Eng. Abstr.) (Jpn)
[The effects of dopamine and amrinone on myocardial oxygen demand-supply relationship in dogs with coronary artery stenosis] Fujigaki T. Masui 1989 Jan;38(1):41–52 (Eng. Abstr.) (Jpn)
[Partial oxygen tension of middle ear cavity in a normobaric environment] Koyama S. Nippon Jibiinkoka Gakkai Kaiho 1989 Jan;92(1):68–77 (Eng. Abstr.) (Jpn)
[Evaluation of bronchial circulation and wound healing after sleeve lobectomy—a study on tissue oxygen tension and hydroxyproline concentration of the anastomotic site] Kato R. Nippon Kyobu Geka Gakkai Zasshi 1988 Jun;36(6):923–30 (Eng. Abstr.) (Jpn)
[Mechanisms of the biosynthesis of free radicals of reactive oxygen] Niki E. Nippon Rinsho 1988 Oct;46(10):2125–9 (Jpn)
[Mononuclear phagocytes and reactive oxygen species] Yamazaki M. Nippon Rinsho 1989 Mar;47(3):550–3 (Jpn)
[Generation of active oxygen by environmental factors; pheophorbide] Kimura S. Tanpakushitsu Kakusan Koso 1988 Dec;33(16):2803–10 (Jpn)
[Generation of oxygen-derived radicals in mitochondria and their damages] Nishida T, et al. Tanpakushitsu Kakusan Koso 1988 Dec;33(16):2717–22 (Jpn)
[Reduction of molecular oxygen and proton translocation catalyzed by cytochrome oxidase] Orii Y. Tanpakushitsu Kakusan Koso 1987 May;32(6):757–63 (28 ref.) (Jpn)
[Inderal as a means of preventing damage to vitally important organs in the case of mechanical asphyxiation, accompanied by clinical death] Dolgikh VT, et al. Anesteziol Reanimatol 1989 Jan–Feb;(1):10–4 (Eng. Abstr.) (Rus)
[Changes in the oxygen transport function in patients with chronic kidney failure during hemodialysis] Neĭmark MI. Anesteziol Reanimatol 1989 Jan–Feb;(1):14–7 (Eng. Abstr.) (Rus)
[Influence of the intensity of oxygen mass transfer on the biosynthesis of amphotericin B] Vekshin GA, et al. Antibiot Khimioter 1989 Feb;34(2):102–4 (Eng. Abstr.) (Rus)
[Potassium transport in ischemia and anoxia of the perfused liver] Kabakov AIu, et al. Biofizika 1989 Mar–Apr;34(2):295–6 (Eng. Abstr.) (Rus)
[Modification of proteins by active oxygen and their degradation] Archakov AI, et al. Biokhimiia 1989 Feb;54(2):179–86 (57 ref.) (Eng. Abstr.) (Rus)
[Antioxidative properties and degradation of serum proteins by active oxygen forms (O2–., OCl–) generated by stimulated neutrophils] Sharonov BP, et al. Biokhimiia 1988 May;53(5):816–25 (Eng. Abstr.) (Rus)
[Modulation of the formation of active forms of oxygen in cellular interactions in syngenic and allogenic systems] Pukhov KI, et al. Dokl Akad Nauk SSSR 1989;305(5):1249–52 (Rus)
[Changes in oxygen tension in tumor during induced hyperglycemia] Teplitskiĭ MG, et al. Eksp Onkol 1988;10(5):66–8 (Eng. Abstr.) (Rus)
[Use of coefficients of the efficiency of the oxygen transport system in evaluating the functional potentials of the oxygen regimen of the body] Rapoport ZhZh, et al. Fiziol Cheloveka 1988 Nov–Dec;14(6):938–42 (Rus)
[Modeling of the process of oxygen transport to tissues in acute hemic hypoxia] Voloshchenko VO. Fiziol Zh 1988 Nov–Dec;34(6):108–11 (Eng. Abstr.) (Rus)
[Physiologic bases of the clinical use of oxygen-transporting blood substitutes] Ivanov KP. Gematol Transfuziol 1989 Jan;34(1):42–7 (22 ref.) (Rus)
[Experimental study of hemodynamics and oxygen regimen in the body during replacement of massive blood loss with a suspension of erythrocytes in a solution of modified deionized gelatin] Selivanov EA, et al. Gematol Transfuziol 1989 Jan;34(1):29–33 (Eng. Abstr.) (Rus)
[Theoretical evaluation of the ratio of endo- and exogenous respiration in yeasts using the balance of macroergic compounds] Ivanov VN. Mikrobiol Zh 1987 Nov–Dec;49(6):12–6 (Eng. Abstr.) (Rus)
[Electron factors in peroxidase properties and the mechanism of activation of oxygen with heme-containing proteins] Stavrov SS, et al. Mol Biol (Mosk) 1988 May–Jun;22(3):837–43 (Eng. Abstr.) (Rus)
[Skin oxygen tension and pulmonary artery systolic pressure in patients with pulmonary tuberculosis during oxygen therapy] Zuev VS, et al. Probl Tuberk 1989;(3):46–9 (Rus)
[Desynchronization of circadian rhythms of the oxygen balance in the tissues and rheological properties of the blood in type I diabetes mellitus] Galenok VA, et al. Ter Arkh 1988;60(9):27–31 (Eng. Abstr.) (Rus)
[Oxygen supply and physical working capacity in patients with diabetes mellitus] Zubkova ST, et al. Ter Arkh 1988;60(9):24–7 (Eng. Abstr.) (Rus)
[Oxygen-dependent indicators of phagocytosis in an infection caused by Trychophyton rubrum] Svirid SG. Vrach Delo 1989 Feb;(2):109–10 (Eng. Abstr.) (Rus)
[Free oxygen radicals in health and disease] Simović M, et al. Vojnosanit Pregl 1988 Jul–Aug;45(4):279–87 (106 ref.) (Scr)
[Free radicals of oxygen and antioxidants in medicine] Romero Alvira D, et al. Rev Clin Esp 1989 Apr;184(7):345–6 (18 ref.) (Spa)

PHARMACOKINETICS

Effects of free radicals on permeability and vasomotor response of cerebral vessels. Unterberg A, et al. Acta Neuropathol (Berl) 1988;76(3):238–44
Oxygen distribution and utilization after phorbol myristate acetate-induced lung injury. Dorinsky PM, et al. Am Rev Respir Dis 1988 Dec;138(6):1454–63
Relationship between oxygen uptake and oxygen delivery in patients with pulmonary hypertension. Mohsenifar Z, et al. Am Rev Respir Dis 1988 Jul;138(1):69–73
Oxygen and exposure kinetics as factors influencing the cytotoxicity of porfiromycin, a mitomycin C analogue, in Chinese hamster ovary cells. Marshall RS, et al. Cancer Res 1988 Oct 15;48(20):5655–9
Oxygen delivery and utilization in sepsis. Dantzker D. Crit Care Clin 1989 Jan;5(1):81–98 (73 ref.)
Erythrocyte O2 transport and metabolism and effects of vitamin B6 therapy in type II diabetes mellitus. Solomon LR, et al. Diabetes 1989 Jul;38(7):881–6
Human lung deposition of particles suspended in air or in helium/oxygen mixture. Svartengren M, et al. Exp Lung Res 1989 Jul;15(4):575–85
Is resting muscle oxygen uptake controlled by oxygen availability to cells? Chinet AE, et al. J Appl Physiol 1989 Jan;66(1):253–60
Oxygen delivery rate and sufficiency of oxygenation during ECMO in newborn baboons. Cornish JD, et al. J Appl Physiol 1989 Jan;66(1):210–6
Independent measurement of oxygen consumption and oxygen delivery. Cilley RE, et al. J Surg Res 1989 Sep;47(3):242–7
Gas permeability of round window membrane. Sasa H, et al. ORL J Otorhinolaryngol Relat Spec 1989;51(2):88–93
Oxygen supply of the blood-free perfused guinea-pig brain in normo- and hypothermia measured by the local distribution of oxygen pressure. Baumgärtl H, et al. Pflugers Arch 1989 Jun;414(2):228–34
Oxygen transfer kinetics of red blood cells of the turtle Pseudemys scripta elegans. Yamaguchi K, et al. Respir Physiol 1989 Mar;75(3):371–84
Evaluation of a new, more oxygen-permeable, polyvinylchloride container. Holme S, et al. Transfusion 1989 Feb;29(2):159–64
[Hemoglobinopathies and oxygen transport] Espinós Pérez D. Bull Acad Natl Med 1989 Mar;173(3):283–90 (Fre)

PHARMACOLOGY

Effect of fentanyl-oxygen anesthesia during cardiac surgery on serum thyroid hormones. Imberti R, et al. Acta Anaesthesiol Belg 1988;39(4):217–22
Reversal of carbon monoxide-cytochrome c oxidase binding by hyperbaric oxygen in vivo. Brown SD, et al. Adv Exp Med Biol 1989;248:747–54
Postnatal growth of pulmonary acini and alveoli in normal and oxygen-exposed rats studied by serial section reconstructions. Randell SH, et al. Am J Anat 1989 Sep;186(1):55–68
Daily exposure to forty percent oxygen causes a decrease in platelet count. Meintjes AF, et al. Am J Hematol 1988 Dec;29(4):201–3
Fanconi anemia mutation causes cellular susceptibility to ambient oxygen. Schindler D, et al. Am J Hum Genet 1988 Oct;43(4):429–35
Injury and remodeling of pulmonary veins by high oxygen. A morphometric study. Hu LM, et al. Am J Pathol 1989 Feb;134(2):253–62
Whole body autoregulation in conscious areflexic rats during hypoxia and hyperoxia. Hinojosa-Laborde C, et al. Am J Physiol 1989 Apr;256(4 Pt 2):H1023–9
Endotoxin increases lung Cu,Zn superoxide dismutase mRNA: O2 raises enzyme synthesis. Iqbal J, et al. Am J Physiol 1989 Aug;257(2 Pt 1):L61–4
Lipoxygenase inhibitors block O2 responses of hamster cheek pouch arterioles. Jackson WF. Am J Physiol 1988 Oct;255(4 Pt 2):H711–6
Mechanism for depression of heart sarcolemmal Ca2+ pump by oxygen free radicals. Kaneko M, et al. Am J Physiol 1989 Sep;257(3 Pt 2):H804–11
Mechanisms of hypoxia-induced atrial natriuretic factor release from rat hearts. Lew RA, et al. Am J Physiol 1989 Jul;257(1 Pt 2):H147–56
Effects of oxygen concentration on embryonic development in rats: a light and electron microscopic study using whole-embryo culture techniques. Miki A, et al. Anat Embryol (Berl) 1988;178(4):337–43
Effect of aerobic growth conditions on the soluble cytochrome content of the purple phototrophic bacterium Rhodobacter sphaeroides: induction of cytochrome c554. Bartsch RG, et al. Arch Biochem Biophys 1989 Jun;271(2):433–40
Microsomal reduction of low-molecular-weight Fe3+ chelates and ferritin: enhancement by adriamycin, paraquat, menadione, and anthraquinone 2-sulfonate and inhibition by oxygen. Vile GF, et al. Arch Biochem Biophys 1988 Dec;267(2):606–13
Reversible conversion of coenzyme F420 to the 8-OH-AMP and 8-OH-GMP esters, F390-A and F390-G, on oxygen exposure and reestablishment of anaerobiosis in Methanobacterium thermoautotrophicum. Kiener A, et al. Arch Microbiol 1988;150(3):249–53
Alterations in cultured rat pulmonary artery endothelial cells with hyperoxia; effect of age. Chuknyiska RS, et al. Basic Life Sci 1988;49:975–8
The effect of oxygen on the OH radical-induced strand break formation of DNA in vitro and in vivo. Schulte-Frohlinde D. Basic Life Sci 1988;49:403–17
Effects of singlet oxygen on the biological activity of DNA and its involvement in single strand-break formation. Wefers H, et al. Basic Life Sci 1988;49:473–7
Protein kinase C involvement in lipid peroxidation and cell membrane damage induced by oxygen-based radicals in hepatocytes. von Ruecker AA, et al. Biochem Biophys Res Commun 1989 Sep 15;163(2):836–42
V79 Chinese-hamster cells rendered resistant to high cadmium concentration also become resistant to oxidative stress. Mello-Filho AC, et al. Biochem J 1988 Dec 1;256(2):475–9
The O2-dependence of respiration and H2O2 production in the parasitic nematode Ascaridia galli. Paget TA, et al. Biochem J 1988 Dec 1;256(2):633–9
Oxygen dependence of salbutamol elimination by the isolated perfused rat liver. Angus PW, et al. Biochem Pharmacol 1989 May 1;38(9):1443–9
Subcellular distribution of malate-aspartate cycle intermediates during normoxia and anoxia in the heart. Wiesner RJ, et al. Biochim Biophys Acta 1988 Oct 26;936(1):114–23
Possible involvement of queuine in oxidative metabolism. Szabo L, et al. Biofactors 1988 Oct;1(3):241–4
Isolated heart preservation for 24 hours: is O2 important? de Varennes B, et al. Biomater Artif Cells Artif Organs 1988;16(1-3):357–8
The feeding with unsaturated fatty acids modifies the course of the isometric contraction of rabbit papillary muscle in hypoxia. Guenther J, et al. Biomed Biochim Acta 1989;48(5–6):S569–72
The influence of hypoxia and hyperoxia during metabolic acidosis and alkalosis on pulmonary haemodynamics. Oddoy A, et al. Biomed Biochim Acta 1989;48(2–3):S260–3
Selective impairment of endothelium-dependent relaxation by oxygen-derived free radicals: distinction between receptor versus nonreceptor mediators. Pieper GM, et al. Blood Vessels 1989;26(1):44–7
Influence of acute isocapnic hypoxia on bronchial calibre and "expiratory reserve" volume in dogs. Watney GC, et al. Br J Anaesth 1988 Oct;61(4):407–12
Erythrocyte heterogeneity in sickle cell disease: effect of deoxygenation on intracellular polymer formation and rheology of sub-populations. Keidan AJ, et al. Br J Haematol 1989 Jun;72(2):254–9
Alteration of the mechanical properties of sickle cells by repetitive deoxygenation: role of calcium and the effects of calcium blockers. Nash GB, et al. Br J Haematol 1989 Jun;72(2):260–4
Flunarizine inhibits endothelium-dependent hypoxic facilitation in canine coronary arteries through an action on vascular smooth muscle. Iqbal A, et al. Br J Pharmacol 1988 Nov;95(3):789–94
Effect of prolonged normobaric hyperoxia on regional cerebral metabolic rate for glucose in conscious rats. Torbati D, et al. Brain Res 1988 Aug 30;459(1):187–91
The abnormal mechanical strength-interval curve of hypoxic rabbit papillary muscle. Goodyer AV. Can J Physiol Pharmacol 1988 Jul;66(7):907–16
Ouabain prevents loss of autoregulation in rat pial arterioles caused by reoxygenation after a brief hypoxic episode. Kettler J, et al. Can J Physiol Pharmacol 1989 May;67(5):423–7
Cardiopulmonary effects of a halothane/oxygen combination in hypovolemic cats. Ingwersen W, et al. Can J Vet Res 1988 Oct;52(4):428–33
Effects of hyperoxia on B16-F10 cells in vivo. Margaretten NC, et al. Cancer Lett 1988 Sep–Oct;42(1–2):119–25
Superoxide production by human umbilical vein endothelial cells in an anoxia-reoxygenation model. Schinetti ML, et al. Cardiovasc Res 1989 Jan;23(1):76–80
Indomethacin, but not oxygen tension, affects the sensitivity of isolated neonatal rabbit ductus arteriosus, but not aorta, to noradrenaline. Smith GC, et al. Cardiovasc Res 1988 Dec;22(12):910–5
DNA damage by oxygen radicals and excited state species: a comparative study using enzymatic probes in vitro. Epe B, et al. Chem Biol Interact 1988;67(1–2):149–65
Effects of infusion of prostacyclin on anatomical intrapulmonary right to left shunt: a useful model of human hypoxic vasoconstriction? Bush A, et al. Clin Sci 1989 Feb;76(2):143–9
Hyperoxia decreases lung size of amphibian tadpoles without changing GSH-peroxidases or tissue peroxidation. Barja

de Quiroga G, et al. **Comp Biochem Physiol [A]** 1989; 92(4):581–8
Metabolic responses to gradual cooling in chicken eggs treated with thiourea and oxygen. Tazawa H, et al. **Comp Biochem Physiol [A]** 1989;92(4):619–22
Effect of increasing inspired oxygen concentration on hemodynamics and regional blood flows. Asher AS, et al. **Crit Care Med** 1988 Dec;16(12):1235–7
Adenosine 5'-triphosphate, adenosine and endothelium-derived relaxing factor in hypoxic vasodilatation of the heart. Hopwood AM, et al. **Eur J Pharmacol** 1989 Jun 20;165(2–3):323–6
Protective action of YM-12617, an alpha 1-adrenoceptor antagonist, on the hypoxic and reoxygenated myocardium. Tanonaka K, et al. **Eur J Pharmacol** 1989 Jun 8; 165(1):97–106
Breathing 30 per cent oxygen attenuates bronchial responsiveness to methacholine in asthmatic patients. Inoue H, et al. **Eur Respir J** 1989 Jun;2(6):506–12
The biosynthetic pathway of pyrimidine (deoxy)nucleotides: a sensor of oxygen tension necessary for maintaining cell proliferation? Löffler M. **Exp Cell Res** 1989 Jun; 182(2):673–80
Interaction between oxygen and cell membranes: modification of membrane lipids to enhance pulmonary artery endothelial cell tolerance to hypoxia. Block ER. **Exp Lung Res** 1988;14 Suppl:937–58
Pulmonary limits of oxygen tolerance in man. Clark JM. **Exp Lung Res** 1988;14 Suppl:897–910
Hypoxia-induced oxygen tolerance: maintenance of endothelial metabolic function. Jackson RM, et al. **Exp Lung Res** 1988;14 Suppl:887–96
Extension of oxygen tolerance in man: philosophy and significance. Lambertsen CJ. **Exp Lung Res** 1988;14 Suppl:1035–58 (56 ref.)
Ultrastructural localisation of substance P and choline acetyltransferase in endothelial cells of rat coronary artery and release of substance P and acetylcholine during hypoxia. Milner P, et al. **Experientia** 1989 Feb 15; 45(2):121–5
Reactive oxygen species induce antigenic changes in DNA. Blount S, et al. **FEBS Lett** 1989 Mar 13;245(1–2):100–4
The effects of oxygen free radicals on the carbohydrate moiety of IgG. Griffiths HR, et al. **FEBS Lett** 1989 Mar 13;245(1–2):95–9
The toxic effect of short exposures to the atmospheric oxygen concentration on early mouse embryonic development. Pabon JE Jr, et al. **Fertil Steril** 1989 May;51(5):896–900
Formation of endonuclease III-sensitive sites as a consequence of oxygen radical attack on DNA. Denq RY, et al. **Free Radic Biol Med** 1989;6(2):123–9
Oxygen-concentration dependence of microsomal chemiluminescence. Puntarulo S, et al. **Free Radic Biol Med** 1989;7(3):269–73
Effect of ambient oxygen concentration on lipofuscin accumulation in cultured rat heart myocytes—a novel in vitro model of lipofuscinogenesis. Sohal RS, et al. **Free Radic Biol Med** 1989;6(1):23–30
Modulation of iron-mediated oxidant damage in erythrocytes by cellular energy levels. Baysal E, et al. **Free Radic Res Commun** 1987;3(1–5):227–32
The role of glycolysis and hexose monophosphate pathway in the hypoxic toxicity of misonidazole. De Groot H, et al. **Free Radic Res Commun** 1987;3(1–5):93–8
Oxygen-induced free radical in wheat roots. Goodman BA, et al. **Free Radic Res Commun** 1986;2(3):173–8
DNA damage by chemically generated singlet oxygen. Lafleur MV, et al. **Free Radic Res Commun** 1987; 2(4–6):343–50
Oxygen enhancement of free radical damage to DNA. A comparison of radiation-induced degradation with copper-catalyzed degradation by H2O2. Prütz WA. **Free Radic Res Commun** 1989;6(2–3):163–5
Oxidative stress as a defense mechanism against parasitic infections [published erratum appears in Free Radic Res Commun 1987;4(1):following 67] Schirmer RH, et al. **Free Radic Res Commun** 1987;3(1–5):3–12
The effect of oxygen and thiols on the radiation damage of DNA. Schulte-Frohlinde D. **Free Radic Res Commun** 1989; 6(2–3):181–3 (24 ref.)
Enzyme release and mitochondrial activity in reoxygenated cardiac muscle: relationship with oxygen-induced lipid peroxidation. Gauduel Y, et al. **Gen Physiol Biophys** 1989 Aug;8(4):327–40
Contractions to oxygen-derived free radicals are augmented in aorta of the spontaneously hypertensive rat. Auch-Schwelk W, et al. **Hypertension** 1989 Jun;13(6 Pt 2):859–64
Effects of oxygen on ferrous sulphate induced lipid peroxidation in liposomal membrane. Agarwal S, et al. **Indian J Biochem Biophys** 1985 Dec;22(6):331–4
Prostaglandin H synthetase activates xenobiotics into free radicals: histamine release and biochemical characteristics. Masini E, et al. **Int Arch Allergy Appl Immunol** 1989; 88(1–2):134–5
Effects of oxygen rearing on the electroretinogram and GFA-protein in the rat. Penn JS, et al. **Invest Ophthalmol Vis Sci** 1988 Nov;29(11):1623–30
Oxygen radicals and antioxidant enzymes alter pulmonary vascular reactivity in the rat lung. Archer SL, et al. **J Appl Physiol** 1989 Jan;66(1):102–11
Effect of endotoxin pretreatment on the pulmonary vascular response to hypoxia in O2-exposed lambs. Hazinski TA, et al. **J Appl Physiol** 1988 Oct;65(4):1586–91
Dynamic response of local pulmonary blood flow to alveolar gas tensions: experiment. Paradowski LJ, et al. **J Appl Physiol** 1989 Jun;66(6):2559–64
Tachykinins mediate bronchoconstriction elicited by isocapnic hyperpnea in guinea pigs. Ray DW, et al. **J Appl Physiol** 1989 Mar;66(3):1108–12
Regulation of carbon monoxide dehydrogenase and hydrogenase in Rhodospirillum rubrum: effects of CO and oxygen on synthesis and activity. Bonam D, et al. **J Bacteriol** 1989 Jun;171(6):3102–7
Oxygen-dependent inactivation of ribulose 1,5-bisphosphate carboxylase/oxygenase in crude extracts of Rhodospirillum rubrum and establishment of a model inactivation system with purified enzyme. Cook LS, et al. **J Bacteriol** 1988 Dec;170(12):5473–8
Changes in diadenosine tetraphosphate levels in Physarum polycephalum with different oxygen concentrations. Garrison PN, et al. **J Bacteriol** 1989 Mar;171(3):1506–12
Dependence of nitrogenase switch-off upon oxygen stress on the nitrogenase activity in Azotobacter vinelandii. Kuhla J, et al. **J Bacteriol** 1988 Nov;170(11):5325–9
Intracellular Mn (II)-associated superoxide scavenging activity protects Cu,Zn superoxide dismutase-deficient Saccharomyces cerevisiae against dioxygen stress. Chang EC, et al. **J Biol Chem** 1989 Jul 25;264(21):12172–8
Hyperoxic exposure alters gene expression in the lung. Induction of the tissue inhibitor of metalloproteinases mRNA and other mRNAs. Horowitz S, et al. **J Biol Chem** 1989 May 5;264(13):7092–5
Oxygen influences the subunit structure of cytochrome c oxidase in the slime mold Dictyostelium discoideum. Schiavo G, et al. **J Biol Chem** 1989 May 5;264(13):7129–34
Differential effects of hyperoxia and hydrogen peroxide on DNA damage, polyadenosine diphosphate-ribose polymerase activity, and nicotinamide adenine dinucleotide and adenosine triphosphate contents in cultured endothelial cells and fibroblasts. Junod AF, et al. **J Cell Physiol** 1989 Jul;140(1):177–85
Effect of different oxygen concentrations in the gas phase on biochemical activities of goat mammary tissue in organ culture. Skarda J, et al. **J Dairy Res** 1989 Feb;56(1):1–5
Hypoxic injury to medullary thick ascending limbs in perfused rat kidneys: reversible and irreversible phases. Brezis M, et al. **J Electron Microsc Tech** 1988 Jul;9(3):293–8
Effect of hyperoxia acclimation on catalase and glutathione peroxidase activities and in vivo peroxidation products in various tissues of the frog Rana ridibunda perezi. López-Torres M, et al. **J Exp Zool** 1988 Oct;248(1):7–18
Susceptibility of Eimeria bovis and Toxoplasma gondii to oxygen intermediates and a new mathematical model for parasite killing. Hughes HP, et al. **J Parasitol** 1989 Aug; 75(4):489–97
Hepatotoxicity of menadione predominates in oxygen-rich zones of the liver lobule. Badr MZ, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1317–22
Effects of oxygen concentration on functions of the rat visceral yolk sac endoderm in vitro. A histochemical study using whole-embryo culture technique. Miki A, et al. **Kobe J Med Sci** 1988 Apr;34(2):55–70
Effect of environmental particulates on cultured human and bovine endothelium. Cellular injury via an oxidant-dependent pathway. Garcia JG, et al. **Lab Invest** 1989 Jul;61(1):53–61
Lung MK 351A uptake after hypoxia adaptation and subsequent hyperoxia exposure. Jackson RM, et al. **Lung** 1988;166(4):209–19
Slowing down aging of cultured embryonal chick chondrocytes by maintenance under lowered oxygen tension. Nevo Z, et al. **Mech Ageing Dev** 1988 Nov 14; 45(2):157–65
Oxygen sensitivity of recessed and unrecessed antimony pH microelectrodes. Kiani MF, et al. **Med Biol Eng Comput** 1988 Sep;26(5):541–6
Active tone and arteriolar responses to increased oxygen availability in the mesoappendix of spontaneously hypertensive rats. Lombard JH, et al. **Microcirc Endothelium Lymphatics** 1988 Oct;4(5):339–53
Oxygen free radicals induced release of lysosomal enzymes in vitro. Kalra J, et al. **Mol Cell Biochem** 1988 Dec; 84(2):233–8
Oxygen-dependent hepatotoxicity due to doxorubicin: role of reducing equivalent supply in perfused rat liver. Ganey PE, et al. **Mol Pharmacol** 1988 Nov;34(5):695–701
Cytotoxic and genotoxic effects of extracellular generated singlet oxygen in human lymphocytes in vitro. Decuyper-Debergh D, et al. **Mutat Res** 1989 Jan–Feb; 225(1–2):11–4
Chromosomal instability in an oxygen-tolerant variant of Chinese hamster ovary cells. Gille JJ, et al. **Mutat Res** 1989 Jan;219(1):17–28
Chromosomal instability and progressive loss of chromosomes in HeLa cells during adaptation to hyperoxic growth conditions. Gille JJ, et al. **Mutat Res** 1989 Jul; 219(4):225–30
Effects of hypoxia on noradrenaline release and neuronal reuptake in isolated rabbit thoracic aortic strips. Lee K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):503–8
Oxygen radicals in cell injury and cell death. Warren JS, et al. **Pathol Immunopathol Res** 1987;6(5–6):301–15 (83 ref.)
Effects of pulmonary oxygen injury on airway content of surfactant-associated protein A. Nogee LM, et al. **Pediatr Res** 1988 Nov;24(5):568–73
Stereological re-examination of the effects of varying oxygen tensions on human placental villi maintained in organ culture for up to 12 h. Burton GJ, et al. **Placenta** 1989 May–Jun;10(3):263–73
Induction of an antioxidant protein of Saccharomyces cerevisiae by O2, Fe3+, or 2-mercaptoethanol. Kim IH, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6018–22
Role of endothelial relaxing and contracting factors in rabbit cranial artery responses to hypoxia. Pearce WJ. **Proc West Pharmacol Soc** 1989;32:239–45
Role of eicosanoids in relative oxygen tolerance of newborn rabbits. Holtzman RB, et al. **Prostaglandins** 1989 Apr; 37(4):481–91
Inhibition of the oxygen-induced contraction of the isolated human umbilical artery by indomethacin, flurbiprofen, aspirin and drugs modifying Ca2+ disposition. MacLennan SJ, et al. **Prostaglandins** 1988 Nov;36(5):711–29
Thermal enhancement of the cell killing effect of X-irradiation in mammalian cells in vitro and in a transplantable mouse tumor: influence of pH, thermotolerance, hypoxia, or misonidazole. Haveman J, et al. **Recent Results Cancer Res** 1988;109:149–60 (44 ref.)
Alveolar hypoxia, inhibition of hypoxic pulmonary vasoconstriction, and permeability edema. Cheney FW, et al. **Respir Physiol** 1989 Jan;75(1):11–8
Effects of hyperoxia and dimethylthiourea on neonatal pulmonary hemodynamics in piglets. Hoffmeister AC, et al. **Respir Physiol** 1989 May;76(2):139–48
Effects of environmental O2 on blood flow and diffusing capacity in amphibian skin. Malvin GM, et al. **Respir Physiol** 1989 May;76(2):229–41
The effect of almitrine bismesylate on the steady-state responses of arterial chemoreceptors to CO2 and O2 in the cat. Maxwell DL, et al. **Respir Physiol** 1988 Dec; 74(3):275–84
Cyclooxygenase inhibition and effects of hypoxia on pulmonary circulation and gas exchange in anesthetized dogs. Shams H, et al. **Respir Physiol** 1989 Jan;75(1):39–49
Effects of 90% oxygen exposure on the ultrastructure of the tracheal epithelium in rabbits. Konrádová V, et al. **Respiration** 1988;54(1):24–32
Acute hyperoxic lung edema is not reduced by granulocyte depletion in rats. Lurie A. **Respiration** 1988;53(4):232–8
The influence of carbogen on susceptibility to TTS. Lindgren F, et al. **Scand Audiol** 1989;18(1):47–52
Covalent cross-links in oxygen free radical altered human immunoglobulin G. Kleinveld HA, et al. **Scand J Rheumatol Suppl** 1988;75:157–63
Oxygen free radicals denature human IgG and increase its reactivity with rheumatoid factor antibody. Lunec J, et al. **Scand J Rheumatol Suppl** 1988;75:140–7
Direct cytotoxic effect of oxygen radicals on the gastric mucosa. Stein HJ, et al. **Surgery** 1989 Aug;106(2):318–23: discussion 323–4
Almitrine bismesylate reduces hypoxic pulmonary vasoconstriction in isolated rat lungs. Kato S, et al. **Tohoku J Exp Med** 1989 Feb;157(2):119–29
Effects of a H2-He-O2 mixture on the HPNS up to 450 msw. Rostain JC, et al. **Undersea Biomed Res** 1988 Jul; 15(4):257–70
Polyethylene glycol effect on the oxygenated and hypoxic isolated perfused rat kidney. Kopolovic J, et al. **Virchows Arch [A]** 1989;414(5):429–37
[Influence of hyperoxia and hypoxia on bronchial mucociliary clearance] Tashiro N. **Hokkaido Igaku Zasshi** 1988 Jul;63(4):597–606 (Eng. Abstr.) **(Jpn)**
[Effects of oxygen administration on mixed venous oxygenation and pulmonary hemodynamics in chronic pulmonary disease] Murata Y, et al. **Kokyu To Junkan** 1988 Jul;36(7):761–5 (Eng. Abstr.) **(Jpn)**
[Myocardial protection—a comparison of non-oxygenated and oxygenated cardioplegia] Tabayashi K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul;36(7):1121–7 (Eng. Abstr.) **(Jpn)**
[Aggregation of membrane proteins of E. coli cells after treatment with singlet oxygen] Igumenov VL, et al. **Biokhimiia** 1988 Jun;53(6):925–30 (Eng. Abstr.) **(Rus)**
[DNA damage and repair in human lymphocytes under the activation of molecular oxygen] Binková B, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):676–8 (Eng. Abstr.) **(Rus)**
[Contribution of the kidney and liver into erythropoietin production] Nefedov VP, et al. **Dokl Akad Nauk SSSR** 1988;301(5):1261–4 **(Rus)**
[Suppression of a viral infection with the use of a photoimmunotoxin] Savitskiĭ AL, et al. **Dokl Akad Nauk SSSR** 1989;304(5):1258–61 **(Rus)**
[Effect of hyperoxia on systemic hemodynamics, microcirculation, and oxygen regimen in rats in replacement of massive blood loss by albumin] Kochetygov NI, et al. **Patol Fiziol Eksp Ter** 1989 Mar–Apr;(2):35–9 (Eng. Abstr.) **(Rus)**
[Effect of hypoxia and streptase on the blood and abdominal aorta in rats] Nikulin AA, et al. **Patol Fiziol Eksp Ter** 1988 Nov–Dec;(6):66–8 (Eng. Abstr.) **(Rus)**
[The interphase death of dividing cells. The effect of oxygen and the pH of the medium on the interphase death of Ehrlich ascites carcinoma cells under the action of ionizing

radiation] Korystov IuN, et al. **Radiobiologiia** 1989 Jul-Aug;29(4):457-62 (Eng. Abstr.) **(Rus)**

[Effect of exogenous ribose-5-phosphate on the ATP level in a cardiomyocyte culture during "metabolic ischemia" and anoxia] Golubev MA, et al. **Vopr Med Khim** 1988 Jul-Aug;34(4):94-7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Pharmacokinetics of coenzyme Q10 in recovery of acute sensorineural hearing loss due to hypoxia. Sato K. **Acta Otolaryngol Suppl (Stockh)** 1988;458:95-102

Molecular biology of oxygen free radicals. Nagy I. **Acta Paediatr Hung** 1988-89;29(1-2):77-82 (42 ref.)

Effect of oxygen free radicals on cardiovascular function at organ and cellular levels. Prasad K, et al. **Am Heart J** 1989 Jun;117(6):1196-202

Iron, plasma antioxidants, and the 'oxygen radical disease of prematurity'. Sullivan JL. **Am J Dis Child** 1988 Dec; 142(12):1341-4 (34 ref.)

Single cause for initiation of labor and toxemia: a hypothesis. Adamsons K, et al. **Am J Perinatol** 1989 Apr;6(2):133-7

Hypoxic liver cell death: critical Po2 and dependence of viability on glycolysis. Anundi I, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):G58-64

Organ-specific control of glycolysis in anoxic turtles. Kelly DA, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R774-9

Beta-receptor-adenylate cyclase coupling in hypoxic neonatal rat ventricular myocytes. Thandroyen FT, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1209-17

Effects of substrate and hypoxia on smooth muscle metabolism and contraction. Wendt IR. **Am J Physiol** 1989 Apr;256(4 Pt 1):C719-27

Asbestos-induced endothelial cell activation and injury. Demonstration of fiber phagocytosis and oxidant-dependent toxicity. Garcia JG, et al. **Am Rev Respir Dis** 1988 Oct;138(4):958-64

Alteration in obstructive apnea pattern induced by changes in oxygen- and carbon-dioxide-inspired concentrations. Hudgel DW, et al. **Am Rev Respir Dis** 1988 Jul;138(1):16-9

The influence of the transmembrane sodium gradient on the responses of pulmonary arteries to decreases in oxygen tension. Salvaterra CG, et al. **Am Rev Respir Dis** 1989 Apr; 139(4):933-9

Effect of endothelial injury on the responses of isolated guinea pig pulmonary venules to reduced oxygen tension. Tracey WR, et al. **Am Rev Respir Dis** 1989 Jul;140(1):68-74

Gaseous pathways in atelectatic ears. Sadé J, et al. **Ann Otol Rhinol Laryngol** 1989 May;98(5 Pt 1):355-8

Oxygen dependent regulation of mammalian ribonucleotide reductase in vivo and possible significance for replicon initiation. Probst H, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):334-40

5'-Nucleotidase activity and adenosine formation in stimulated, hypoxic and underperfused rat heart. Headrick JP, et al. **Biochem J** 1989 Jul 15;261(2):541-50

Percutaneous respiration in the new-born infant. Effect of ambient oxygen concentration on pulmonary oxygen uptake. Cartlidge PH, et al. **Biol Neonate** 1988;54(2):68-72

The adaptation of Plasmodium falciparum to oxidative stress in G6PD deficient human erythrocytes. Roth E Jr, et al. **Br J Haematol** 1988 Nov;70(3):363-7

Involvement of adenosine in synaptic depression induced by a brief period of hypoxia in isolated spinal cord of neonatal rat. Lloyd HG, et al. **Brain Res** 1988 Oct 18;462(2):391-5

Effects of hypoxia on calcium fluxes and force development in the neonatal rat atrium. Lodge NJ, et al. **Cardiovasc Res** 1988 Jul;22(7):520-6

Modulation of the Purkinje-ventricular muscle junctional conduction by elevated potassium and hypoxia. Tan RC, et al. **Circulation** 1989 May;79(5):1100-5

Acute effect of smoking on rebreathing carbon monoxide, breath-hold carbon monoxide and alveolar oxygen. Kirkham AJ, et al. **Clin Sci** 1988 Oct;75(4):371-3

Correlation between oxygen tension and spin-lattice relaxation rate in tumors. Akber SF. **Eur J Radiol** 1989 Feb;9(1):56-9

Studying the control of breathing in man. Folgering H. **Eur Respir J** 1988 Jul;1(7):651-60 (73 ref.)

Ventilatory and circulatory adjustments in the European eel (Anguilla anguilla L.) exposed to short term hypoxia. Peyraud-Waitzenegger M, et al. **Exp Biol** 1989; 48(2):107-22

Hypoxia, reactive oxygen, and cell injury. de Groot H, et al. **Free Radic Biol Med** 1989;6(5):541-51 (72 ref.)

On the role of oxygen in dehydrogenase reactions using tetrazolium salts. Van Noorden CJ. **Histochem J** 1988 Oct; 20(10):587-93

Conjunctival oxygen tension monitoring in experimental septic shock. van der Linden J, et al. **Int J Clin Monit Comput** 1989 Jan;6(1):37-43

No-carrier-added synthesis of 3-[18F]fluoro-1-(2-nitro-1-imidazolyl)-2-propanol. A potential PET agent for detecting hypoxic but viable tissues. Hwang DR, et al. **Int J Rad Appl Instrum [A]** 1989; 40(2):117-26

Cellular glutathione content and K values. II. Sölen G, et al. **Int J Radiat Biol** 1989 Feb;55(2):201-10

Induction of tumour hypoxia post-irradiation: a method for increasing the sensitizing efficiency of misonidazole and RSU 1069 in vivo. Stratford IJ, et al. **Int J Radiat Biol** 1989 Mar;55(3):411-22

Hypoxic toxicity of misonidazole in a glucose-6-phosphate dehydrogenase deficient mutant Chinese hamster ovary cell line. de Groot H, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):1017-20

Chemical manipulations of tissue oxygenation for therapeutic benefit. Guichard M. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1125-30 (55 ref.)

3H-misonidazole labeling and viability of hypoxic cells in the sandwich system, an in vitro tumor analogue. Hlatky L, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):143-53

Repair of radiation induced damage--dependence on oxygen and energy status. Ling CC, et al. **Int J Radiat Oncol Biol Phys** 1988 Nov;15(5):1179-86

Tumor bed effect-induced reduction of tumor radiocurability through the increase in hypoxic cell fraction. Milas L, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):139-42

Temperature dependence of binding of a fluorescent hypoxia probe. Olive PL. **Int J Radiat Oncol Biol Phys** 1989 Jun; 16(6):1565-70

Radioprotection of normal tissues of the mouse by hypoxic breathing. Stevens GN, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1165-8

Enhanced synthesis of specific proteins, RNA, and DNA caused by hypoxia and reoxygenation. Wilson RE, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):957-61

Oxygen-dependent differences in exopolysaccharide production and aminoglycoside inhibitory-bactericidal interactions with Pseudomonas aeruginosa--implications for endocarditis. Bayer AS, et al. **J Antimicrob Chemother** 1989 Jan;23(1):21-35

H2O2 and cGMP may function as an O2 sensor in the pulmonary artery. Burke-Wolin T, et al. **J Appl Physiol** 1989 Jan;66(1):167-70

Ventilatory response to CO2 and O2 near eupnea in awake dogs. Hwang WW, et al. **J Appl Physiol** 1988 Aug; 65(2):788-96

Energy dependence of enzyme release from hypoxic isolated perfused rat heart tissue. Kehrer JP, et al. **J Appl Physiol** 1988 Oct;65(4):1855-60

Oxygen, nitrate, and molybdenum regulation of dmsABC gene expression in Escherichia coli. Cotter PA, et al. **J Bacteriol** 1989 Jul;171(7):3817-23

Oxygen gradients in CHO cells: measurement and characterization by electron spin resonance. Glockner JF, et al. **J Cell Physiol** 1989 Sep;140(3):505-11

Inhibition of tumor cell growth by interferon-gamma is mediated by two distinct mechanisms dependent upon oxygen tension: induction of tryptophan degradation and depletion of intracellular nicotinamide adenine dinucleotide. Aune TM, et al. **J Clin Invest** 1989 Sep; 84(3):863-75

Cardiovascular and metabolic responses during anoxic submergence in the bullfrog with and without maintained extracellular pH. Warburton SJ, et al. **J Exp Zool** 1989 Jul;251(1):13-9

Hypoxia-selective antitumor agents. 2. Electronic effects of 4-substituents on the mechanisms of cytotoxicity and metabolic stability of nitracrine derivatives. Wilson WR, et al. **J Med Chem** 1989 Jan;32(1):31-8

Hypoxia-selective antitumor agents. 1. Relationships between structure, redox properties and hypoxia-selective cytotoxicity for 4-substituted derivatives of nitracrine. Wilson WR, et al. **J Med Chem** 1989 Jan;32(1):23-30

Retrotransposon-like VL30 elements are efficiently induced in anoxic rat fibroblasts. Anderson GR, et al. **J Mol Biol** 1989 Feb 20;205(4):765-9

Myocardial performance and free energy of ATP-hydrolysis in isolated rat hearts during graded hypoxia, reoxygenation and high Ke+-perfusion. Griese M, et al. **J Mol Cell Cardiol** 1988 Dec;20(12):1189-201

Effect of oxygen tension on the anti-oxidant enzyme activities of tetralogy of Fallot ventricular myocytes. Li RK, et al. **J Mol Cell Cardiol** 1989 Jun;21(6):567-75

Modification of cardiac action potential by photosensitizer-generated reactive oxygen. Tarr MT, et al. **J Mol Cell Cardiol** 1989 Jun;21(6):539-43

Effects of hypoglycaemia and hypoxia on the intracellular pH of cerebral tissue as measured by 31P nuclear magnetic resonance. Brooks KJ, et al. **J Neurochem** 1989 Feb; 52(2):604-10

Effects of potassium, oxygen and carbon dioxide on the steady-state discharge of cat carotid body chemoreceptors. Burger RE, et al. **J Physiol (Lond)** 1988 Jul;401:519-31

Effect of training on maximal oxygen uptake and aerobic capacity of locomotory muscles in tufted ducks, Aythya fuligula. Butler PJ, et al. **J Physiol (Lond)** 1988 Jul; 401:347-59

Analysis of the cardiovascular changes induced in the rat by graded levels of systemic hypoxia. Marshall JM, et al. **J Physiol (Lond)** 1988 Dec;407:385-403

Brain transections demonstrate the central origin of hypoxic ventilatory depression in carotid body-denervated rats. Martin-Body RL. **J Physiol (Lond)** 1988 Dec;407:41-52

Oxygen-derived free radical damage in canine heart transplantation. Bando K, et al. **J Surg Res** 1989 Feb; 46(2):152-6

Tissue oxygen tension in random pattern skin flaps during normovolemic hemodilution. Hansen ES, et al. **J Surg Res** 1989 Jul;47(1):24-9

Superoxide radical generation by inflamed human synovium after hypoxia [letter] Allen RE, et al. **Lancet** 1989 Jul 29; 2(8657):282-3

Effects of oxygen deprivation on incubated rat soleus muscle. Fagan JM, et al. **Life Sci** 1989;44(10):677-81

Active oxygen in neuromuscular disorders. Davison A, et al. **Mol Cell Biochem** 1988 Dec;84(2):199-216 (89 ref.)

Effects of hypoxia on lipolysis in isolated rat myocardial cells. Larsen TS, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24; 88(1-2):139-44

The nirB promoter of Escherichia coli: location of nucleotide sequences essential for regulation by oxygen, the FNR protein and nitrite. Jayaraman PS, et al. **Mol Microbiol** 1988 Jul;2(4):527-30

Effect of magnesium on depression of the monosynaptic reflex induced by 2-chloroadenosine or hypoxia in the isolated spinal cord of neonatal rats. Lloyd HG, et al. **Neurosci Lett** 1989 Jun 19;101(2):175-81

Redox competition and radiosensitivity: implications for testing radioprotective compounds. Denekamp J, et al. **Pharmacol Ther** 1988;39(1-3):59-66 (17 ref.)

The relationship between oxygen supply and oxygen uptake in septic shock: the possible role of endotoxin. De Backer D, et al. **Prog Clin Biol Res** 1989;308:181-4 (16 ref.)

Role of flavonoids in the oxygen-free radical modulation of the immune response. Pignol B, et al. **Prog Clin Biol Res** 1988;280:173-82

Radiosensitivity of parenchymal hepatocytes as a function of oxygen concentration. Alati T, et al. **Radiat Res** 1989 Jun;118(3):488-501

Protection against radiation-induced mutagenesis in V79 cells by 2-[(aminopropyl)amino] ethanethiol under conditions of acute hypoxia. Grdina DJ, et al. **Radiat Res** 1989 Feb; 117(2):251-8

Enhancement of radiation sensitivity by postirradiation hypoxia: time course and oxygen concentration dependency. Gupta V, et al. **Radiat Res** 1988 Oct; 116(1):124-34

Selective killing of glucose-deprived hypoxic cells by hyperthermia. I. Protection by purine ribonucleosides. Kim JH, et al. **Radiat Res** 1988 Nov;116(2):337-42

The radiation response of cells recovering after chronic hypoxia. Kwok TT, et al. **Radiat Res** 1989 Aug; 119(2):261-7

Oxygen enhancement ratio of fractionated regimens in vitro. Palcic B, et al. **Radiat Res** 1989 Mar;117(3):409-18

Repair of chromatin damage in glutathione-depleted V-79 cells: comparison of oxic and hypoxic conditions. Xue LY, et al. **Radiat Res** 1988 Oct;116(1):89-99

Experimental bases of hypoxyradiotherapy. Neumeister K, et al. **Radiobiol Radiother (Berl)** 1988;29(4):387-98 (52 ref.)

Results of clinical pilot studies of hypoxyradiotherapy. Neumeister K, et al. **Radiobiol Radiother (Berl)** 1988; 29(4):399-408 (32 ref.)

Contribution to some radiobiological aspects of the investigation of radiosensitizers of hypoxic cells. Part IV: Radiosensitizing effect of metronidazole evaluated on the level of postirradiation changes of bone marrow cellularity in rats protected by induced hypoxia of lower body half. Vodička I, et al. **Radiobiol Radiother (Berl)** 1989;30(1):55-9

Contribution to some radiobiological aspects of the investigation of chemical radiosensitizers of hypoxic cells. Part V: Metronidazole--dependence of its radiosensitizing effect on the dose, time interval of administration and hypoxia degree of the bone marrow evaluated according to the changes of its cellularity in rats. Vodička I, et al. **Radiobiol Radiother (Berl)** 1989;30(1):61-8

Protective effect of hypoxia in the ram testis during single and split-dose X-irradiation. van Vliet J, et al. **Radiother Oncol** 1988 Sep;13(1):9-16

Peripheral chemoreceptor CO2 response during hyperoxia in the 14-day-old awake lamb. Carroll JL, et al. **Respir Physiol** 1988 Sep;73(3):339-49

Cardiopulmonary function in exercising bar-headed geese during normoxia and hypoxia. Fedde MR, et al. **Respir Physiol** 1989 Aug;77(2):239-52

Hemolymph oxygen transport during environmental hypoxia in the shore crab, Carcinus maenas. Lallier F, et al. **Respir Physiol** 1989 Sep;77(3):323-36

Gas exchange and development of chicken embryos with widely altered shell conductance from the beginning of incubation. Okuda A, et al. **Respir Physiol** 1988 Nov; 74(2):187-97

Efficiency of parabronchial gas exchange in deep hypoxia: measurements in the resting duck. Shams H, et al. **Respir Physiol** 1989 Aug;77(2):135-46

Short-term effects of altered shell conductance on oxygen uptake and hematological variables of late chicken embryos. Tazawa H, et al. **Respir Physiol** 1988 Nov; 74(2):199-209

Factors terminating nonventilatory periods in the turtle, Chelydra serpentina. West NH, et al. **Respir Physiol** 1989 Sep;77(3):337-49

Development of the chick embryo: effects of egg mass. Xu L, et al. **Respir Physiol** 1988 Nov;74(2):177-85

Aerobic power during maximal exercise in untrained and well-trained persons with quadriplegia and paraplegia. Eriksson P, et al. **Scand J Rehabil Med** 1988;20(4):141-7

Effect of polymorph derived oxidants on IgG in relation to rheumatoid factor binding. Griffiths HR, et al. **Scand J Rheumatol Suppl** 1988;75:148-56

[Effects of ginseng root saponins on serum corticosterone and brain neurotransmitters of mice under hypobaric and hypoxic environment] Lu G, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Nov;9(6):489-92 (Eng. Abstr.) **(Chi)**

[Oxygen-derived free radicals: their biochemistry, protective mechanisms and physiopathological aspects] Hansen PR. **Ugeskr Laeger** 1988 Oct 24;150(43):2564–8 (Eng. Abstr.) **(Dan)**

[Oxygen, phagocytic cells and atheroma] Hakim J. **J Mal Vasc** 1989;14 Suppl A:17–24 (48 ref.) (Eng. Abstr.) **(Fre)**

[Oxygen radicals in septic shock] Schoenberg MH, et al. **Chirurg** 1988 Dec;59(12):836–41 (24 ref.) (Eng. Abstr.) **(Ger)**

[Pathophysiology and clinical aspects of nocturnal hypoxemia] Rühle KH. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:383–6 (Eng. Abstr.) **(Ger)**

[Polarographic analysis of tumor tissue oxygen tension after hyperthermia combined with misonidazole] Kokubun M, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 1):371–7 (Eng. Abstr.) **(Jpn)**

[Shock and oxygen free radicals] Ogawa R. **Masui** 1988 Dec; 37(12):1447–55 (15 ref.) **(Jpn)**

[Role of oxygen-derived free radicals in gastric mucosal lesions induced by burn injury in rats] Yoshida N, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Nov;85(11):2372–9 (Eng. Abstr.) **(Jpn)**

[Role of lipid peroxidation and polymorphonuclear leukocytes-derived oxygen radicals in acute gastric lesions induced by hyperthermic treatment] Yoshikawa T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Feb;86(2):159–64 (Eng. Abstr.) **(Jpn)**

[Hypoxic radiotherapy of malignant tumors (review)] Barkanov AI, et al. **Med Radiol (Mosk)** 1988 Nov; 33(11):60–4 (28 ref.) **(Rus)**

[The effect of normobaric hypoxic stimulation on the aggregation properties of blood cells in an irradiated host] Sobolev AA, et al. **Radiobiologiia** 1989 Jan–Feb;29(1):79–82 (Eng. Abstr.) **(Rus)**

POISONING

Pulmonary angiotensin-converting enzyme activity in the oxygen-toxic sheep. Howell RE, et al. **Am Rev Respir Dis** 1988 Jul;138(1):160–6

Retrosternal pain is an early indicator of oxygen toxicity. Montgomery AB, et al. **Am Rev Respir Dis** 1989 Jun; 139(6):1548–50

Protein deficiency potentiates oxygen toxicity. Fanburg BL, et al. **Exp Lung Res** 1988;14 Suppl:911–9

Extension of oxygen tolerance by treatment with endotoxin: means to improve its potential therapeutic safety in man. Frank L. **Exp Lung Res** 1988;14 Suppl:987–1003

Sublethal hyperoxic injury to the alveolar epithelium and the pulmonary surfactant system. Matalon S, et al. **Exp Lung Res** 1988;14 Suppl:1021–33

[Experimental study on the effect of sodium ferulate in protecting acute oxygen intoxication and lipid peroxidation] Fu ZK. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Sep;8(9):546–7, 518 (Eng. Abstr.) **(Chi)**

[Pathogenesis of oxygen toxicity] Dluholucký S, et al. **Cesk Pediatr** 1989 Feb;44(2):93–8 (28 ref.) **(Slo)**

THERAPEUTIC USE

Short-term effects of maternal oxygen administration on blood flow velocity waveforms in healthy and growth-retarded fetuses. Arduini D, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1077–80

The effect of nasal flow on breathlessness in patients with chronic obstructive pulmonary disease. Liss HP, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1285–8

The effects of controlled oxygen therapy on ventricular function in patients with stable and decompensated cor pulmonale [see comments] MacNee W, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1289–95. **Comment in:** Am Rev Respir Dis 1989 Jan;139(1):285–6

An assessment of postoperative oxygen therapy in patients with fractured neck of femur. Dyson A, et al. **Anaesth Intensive Care** 1988 Nov;16(4):405–10

Oxygen administration prevents hypoxemia during post-anesthetic transport in children. Patel R, et al. **Anesthesiology** 1988 Oct;69(4):616–8

Prognosis and therapy of early acute idiopathic auditory failure. Russolo M, et al. **Audiology** 1988;27(4):215–26

Fluosol DA and oxygen as an adjuvant to the radiotherapeutic management of advanced head/neck carcinoma. Lustig RA, et al. **Biomater Artif Cells Artif Organs** 1988;16(1–3):511–8

Perfluorochemical emulsions as adjuncts to radiotherapy. Rockwell S. **Biomater Artif Cells Artif Organs** 1988; 16(1–3):519–31 (33 ref.)

Respiratory physiology, oxygen therapy, and monitoring: report of a clinical trial of constant monitoring. Bancalari E, et al. **Birth Defects** 1988;24(1):41–52

Helium-oxygen gas mixtures in the management of patients with airway obstruction. Orr JB. **Ear Nose Throat J** 1988 Dec;67(12):866, 868–9 (15 ref.)

Therapeutic regimens in acute experimental hemorrhagic pancreatitis. Effects of hydration, oxygenation, peritoneal lavage, and a potent protease inhibitor. Niederau C, et al. **Gastroenterology** 1988 Dec;95(6):1648–57

Prophylactic action of carbogen against noise induced hearing loss. Chaturvedi RC, et al. **Indian J Med Res** 1988 Jul;88:60–3

Normobaric oxygen as a sensitizer of hypoxic tumor cells. Hong A, et al. **Int J Radiat Oncol Biol Phys** 19s9 Apr; 16(4):1097–9

Intermittent use of a perfluorochemical emulsion (Fluosol-DA 20%) and carbogen breathing with fractionated irradiation. Moulder JE, et al. **Int J Radiat Oncol Biol Phys** 1988 Nov;15(5):1193–6

Preclinical studies of a perfluorochemical emulsion as an adjunct to radiotherapy. Rockwell S, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):913–20

New high O2 carrying perfluorochemical emulsions and/or carbogen: reactions of a human tumor xenograft to irradiation. Thomas C, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1157–60

Neurodevelopmental status of low birth weight infants with bronchopulmonary dysplasia requiring prolonged oxygen supplementation. Lifschitz MH, et al. **J Perinatol** 1987 Spring;7(2):127–32

Gas reduction of intussusception. de Campo JF, et al. **Pediatr Radiol** 1989;19(5):297–8

Abnormal pulmonary outcomes in premature infants: prediction from oxygen requirement in the neonatal period. Shennan AT, et al. **Pediatrics** 1988 Oct;82(4):527–32

Ventilation-perfusion mismatching in acute severe asthma: effects of salbutamol and 100% oxygen. Ballester E, et al. **Thorax** 1989 Apr;44(4):258–67

Influence of heliox, oxygen, and N2O–O2 breathing on N2 bubbles in adipose tissue. Hyldegaard O, et al. **Undersea Biomed Res** 1989 May;16(3):185–93

[The experimental study of oxygenated crystalloid cardioplegia assessed by intramyocardial PCO2 monitoring] Watanabe T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug;36(8):1238–44 (Eng. Abstr.) **(Jpn)**

[First experience of using autotransfusions of UV-irradiated oxygenated blood in patients with various allergic dermatoses] Udzhukhu VIu, et al. **Vestn Dermatol Venerol** 1989;(2):47–50 (Eng. Abstr.) **(Rus)**

[Changes in the bioelectric activity of the brain in patients treated in the restorative period after operations on the intracranial blood vessels by oxygen baths and exercises in pools and indoors] Andreeva VM, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 May–Jun; (3):35–41 (Eng. Abstr.) **(Rus)**

[Treatment of hypertensive patients with oxygen baths and decimeter waves] Lavrinets VI, et al. **Vrach Delo** 1988 Dec; (12):26–7 (Eng. Abstr.) **(Rus)**

TOXICITY

Inactivation of exogenous surfactant in experimental respiratory failure induced by hyperoxia. Ennema JJ, et al. **Acta Anaesthesiol Scand** 1988 Nov;32(8):665–71

Endotoxin protection against pulmonary oxygen toxicity and its reversal by acetyl salicylic acid: role of eicosanoid production by broncho-alveolar lavage cells. Klein J, et al. **Agents Actions** 1989 Jan;26(1–2):246–8

Copper complexes with superoxide dismutase activity enhance oxygen-mediated toxicity in human erythroleukemia cells. Steinkühler C, et al. **Ann N Y Acad Sci** 1988;551:133–6

Biochemistry of oxygen toxicity. Cadenas E. **Annu Rev Biochem** 1989;58:79–110 (159 ref.)

Low temperature worsens mammalian oxygen toxicity. Jamieson D, et al. **Aviat Space Environ Med** 1989 Jul; 60(7):639–43

Human fibroblast antioxidant defense response to alteration in oxygen tension. Balin AK, et al. **Basic Life Sci** 1988; 49:707–11

Lung energy metabolism following twenty-four hours exposure to one hundred percent oxygen. Bassett DJ, et al. **Basic Life Sci** 1988;49:979–82

Prostaglandins and leukotrienes in pulmonary O2 toxicity. Faiman MD, et al. **Basic Life Sci** 1988;49:983–6

Reactive oxygen metabolites and hyperoxic toxicity. Jamieson D. **Basic Life Sci** 1988;49:553–60 (37 ref.)

Microinjection of antioxidant enzymes to protect cells from oxygen derived free radicals. Michiels C, et al. **Basic Life Sci** 1988;49:703–6

Tocopherol behavior and membrane constituents in erythrocytes with oxidant stress. Miki M, et al. **Basic Life Sci** 1988;49:595–604

Oxygen-induced retinopathy in the rat. Penn JS, et al. **Basic Life Sci** 1988;49:1025–8

Implication of protein oxidation in protein turnover, aging, and oxygen toxicity. Stadtman ER, et al. **Basic Life Sci** 1988;49:331–9 (23 ref.)

Oxidative modification of enzymes during aging and acute oxidative stress. Starke-Reed PE, et al. **Basic Life Sci** 1988; 49:537–40

From nitric oxide to desferal: nitrogen free radicals and iron in oxidative injury. Willson RL. **Basic Life Sci** 1988; 49:87–99 (70 ref.)

Attenuation of antioxidant enzymes in response to oxidative stresses. Hassan HM. **Bibl Nutr Dieta** 1989;(43):278–87 (59 ref.)

Singlet molecular oxygen causes loss of biological activity in plasmid and bacteriophage DNA and induces single-strand breaks. Di Mascio P, et al. **Biochim Biophys Acta** 1989 Mar 1;1007(2):151–7

Impairment of superoxide release by alveolar macrophage in rats exposed to oxygen and vitamin E. Nakamura H, et al. **Biol Neonate** 1988;54(1):29–34

Effect of light and hyperoxia on ocular blood flow in the newborn piglet. Stiris T, et al. **Biol Neonate** 1989; 55(3):191–6

Role of polymorphonuclear leukocytes in hyperoxic lung injury. Prevention of neutrophil influx into the lung endothelium during oxygen exposure by ibuprofen. Das DK, et al. **Biomed Biochim Acta** 1988;47(12):1023–36

Acrylonitrile potentiation of oxygen toxicity in rats. Vilim V, et al. **Biomed Biochim Acta** 1988;47(2):205–9

Absence of an additional fibrotic response caused by oxygen in the lungs of rats after the intratracheal administration of bleomycin. Veninga TS, et al. **Br J Anaesth** 1988 Oct; 61(4):413–8

Effects of hypoxia or hyperoxia on the lung of the chick embryo. Xu LJ, et al. **Can J Physiol Pharmacol** 1989 May; 67(5):515–9

Role of respiratory-burst products from polymorphonuclear leukocytes in the antitumor activity of Propionibacterium acnes vaccine. Murano EA, et al. **Cancer Immunol Immunother** 1989;29(1):7–16

Oxygen toxicity is not related to mammalian body size. Arieli R. **Comp Biochem Physiol [A]** 1988;91(2):221–3 (16 ref.)

Biochemistry of reoxygenation injury. Ernster L. **Crit Care Med** 1988 Oct;16(10):947–53 (60 ref.)

Cellular and eicosanoid composition of bronchoalveolar lavage fluid in endotoxin protection against pulmonary oxygen toxicity. Klein J, et al. **Crit Care Med** 1989 Mar; 17(3):247–50

Endothelium-dependent relaxation in isolated pulmonary arteries from rabbits exposed to hyperoxia. Obara H, et al. **Crit Care Med** 1989 Aug;17(8):780–5

Superoxide dismutase activity and growth of retinal pigment epithelial cells are suppressed by 20% oxygen in vitro. Akeo K, et al. **Curr Eye Res** 1988 Oct;7(10):961–7

Pulmonary oxygen toxicity in the guinea pig. Effect of indomethacin. Roberts JD Jr, et al. **Dev Pharmacol Ther** 1989;12(2):106–12

Protection against pulmonary O2 toxicity by N-acetylcysteine. Wagner PD, et al. **Eur Respir J** 1989 Feb;2(2):116–26

Extension of oxygen tolerance. Symposium in honor of Christian J. Lambertsen, MD. Philadelphia, Pennsylvania, May 26, 1987. Proceedings. **Exp Lung Res** 1988;14 Suppl:863–1058

Granulocyte independence of pulmonary oxygen toxicity in the rat. Boyce NW, et al. **Exp Lung Res** 1989 May; 15(3):491–8

Electron paramagnetic resonance evidence that cellular oxygen toxicity is caused by the generation of superoxide and hydroxyl free radicals. Zweier JL, et al. **FEBS Lett** 1989 Jul 31;252(1–2):12–6

Oxygen toxicity and reactive oxygen metabolites in mammals. Jamieson D. **Free Radic Biol Med** 1989;7(1):87–108 (221 ref.)

Oxygen radicals and plasma membrane potential. Scott JA, et al. **Free Radic Biol Med** 1988;5(4):237–46 (58 ref.)

Transition metal complexes as sensitizers or protectors against O2- toxicity. Czapski G, et al. **Free Radic Res Commun** 1989;6(2–3):167–9

Effects of oxidative stress caused by hyperoxia and diquat. A study in isolated hepatocytes. Eklöw-Låstbom L, et al. **Free Radic Res Commun** 1986;2(1–2):57–68

Are toxic oxygen radicals involved in the pathogenesis of reflex sympathetic dystrophy? Goris RJ, et al. **Free Radic Res Commun** 1987;3(1–5):13–8

The effects of iron and desferrioxamine on the lung injury induced by intravenous bleomycin and hyperoxia. Hay JG, et al. **Free Radic Res Commun** 1987;4(2):109–14

Concepts related to the study of reactive oxygen and cardiac reperfusion injury. Kehrer JP. **Free Radic Res Commun** 1989;5(6):305–14 (59 ref.)

Xanthine oxidase is not responsible for reoxygenation injury in isolated-perfused rat heart. Kehrer JP, et al. **Free Radic Res Commun** 1987;3(1–5):69–78

Active oxygen contributes to the major part of chromosomal aberrations in V79 Chinese hamster cells exposed to N-hydroxy-2-naphthylamine. Ochi T, et al. **Free Radic Res Commun** 1989;5(6):351–8

Oxygen toxicity. The influence of adenine-nucleotides and phosphate on Fe2+ autoxidation. Tadolini B. **Free Radic Res Commun** 1989;5(4–5):237–43

Alcohol-induced hepatotoxicity: a role for oxygen free radicals. Younes M, et al. **Free Radic Res Commun** 1987; 3(1–5):19–26

Susceptibility of Plasmodium falciparum to a peroxidase-mediated oxygen-dependent microbicidal system. Malhotra K, et al. **Infect Immun** 1988 Dec; 56(12):3305–9

Relationship between neutrophil-mediated oxidative injury during acute experimental pyelonephritis and chronic renal scarring. Meyland PR, et al. **Infect Immun** 1989 Jul; 57(7):2196–202

Free radicals induce ischemia-reperfusion injury and histamine release in the isolated guinea pig heart. Masini E, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):132–3

Development of O2 tolerance in rabbits with no increase in antioxidant enzymes. Baker RR, et al. **J Appl Physiol** 1989 Apr;66(4):1679–84

Source of ethane in expirate of rats ventilated with 100% oxygen. Habib MP, et al. **J Appl Physiol** 1989 Mar; 66(3):1268–72

Pulmonary O2 toxicity in lambs: physiological and biochemical effects of endotoxin infusion. Hazinski TA,

et al. **J Appl Physiol** 1988 Oct;65(4):1579–85
Alveolar hyperoxic injury in rabbits receiving exogenous surfactant. Loewen GM, et al. **J Appl Physiol** 1989 Mar; 66(3):1087–92
Role of activated oxygen species on the mutagenicity of benzo[a]pyrene. Wei CE, et al. **J Appl Toxicol** 1989 Jun; 9(3):169–73
Comparison of killing of gram-negative and gram-positive bacteria by pure singlet oxygen. Dahl TA, et al. **J Bacteriol** 1989 Apr;171(4):2188–94
Effects of oxygen and methyl viologen on Thermus aquaticus. MacMichael GJ. **J Bacteriol** 1988 Oct; 170(10):4995–8
Physiological significance of catalase and glutathione peroxidases, and in vivo peroxidation, in selected tissues of the toad Discoglossus pictus (Amphibia) during acclimation to normobaric hyperoxia. Barja de Quiroga G, et al. **J Comp Physiol [B]** 1988;158(5):583–90
Effects of sodium valproate and oxygen on the CD-1 mouse fetus. Paulson RB, et al. **J Craniofac Genet Dev Biol** 1988; 8(1):35–45
Reactive oxygen species facilitate the in vitro and in vivo lipopolysaccharide-induced release of tumor necrosis factor. Chaudhri G, et al. **J Immunol** 1989 Aug 15; 143(4):1290–4
The role of oxidant injury in tumor cell sensitivity to recombinant human tumor necrosis factor in vivo. Implications for mechanisms of action. Zimmerman RJ, et al. **J Immunol** 1989 Feb 15;142(4):1405–9
Pulmonary extraction of propranolol in normal and oxygen-toxic sheep. Howell RE, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):93–9
Acute and repair stage characteristics of magnetic resonance relaxation times in oxygen-induced pulmonary edema. Shioya S, et al. **Magn Reson Med** 1988 Dec;8(4):450–9
Mutagenicity spectra in Salmonella typhimurium strains of glutathione, L-cysteine and active oxygen species. Glatt H. **Mutagenesis** 1989 May;4(3):221–7
Pathophysiological mechanisms of active oxygen. Cerutti P, et al. **Mutat Res** 1989 Sep;214(1):81–8 (44 ref.)
Mutagenicity of active oxygen species in bacteria and its enzymatic or chemical inhibition. De Flora S, et al. **Mutat Res** 1989 Sep;214(1):153–8
Effects of lethal exposure to hyperoxia and to hydrogen peroxide on NAD(H) and ATP pools in Chinese hamster ovary cells. Gille JJ, et al. **Mutat Res** 1989 Sep;214(1):89–96
Genetic toxicology of oxygen. Joenje H. **Mutat Res** 1989 Jul;219(4):193–208 (151 ref.)
Aroclor-1254-induced rat-liver S9 causes chromosomal aberrations in CHO cells but not human lymphocytes: a role for active oxygen? Kirkland DJ, et al. **Mutat Res** 1989 Sep;214(1):115–22
Effect of nicotinic acid supplementation in vivo on oxygen radical-induced genetic damage in human lymphocytes. Weitberg AB. **Mutat Res** 1989 Aug;216(4):197–201
Into deepest lung with drug and camera. Akers TK, et al. **Neurosci Biobehav Rev** 1988 Fall-Winter;12(3–4):315–20
Menhaden fish oil, n-3 polyunsaturated fatty acids, and protection of newborn rats from oxygen toxicity. Sosenko IR, et al. **Pediatr Res** 1989 Apr;25(4):399–404
The preterm rat: a model for studies of acute and chronic neonatal lung disease. Tanswell AK, et al. **Pediatr Res** 1989 May;25(5):525–9
Free radicals and oxygen toxicity. Buechter DD. **Pharm Res** 1988 May;5(5):253–60 (121 ref.)
Oxidative stress leads to inhibition of calcium transport by sarcoplasmic reticulum in skeletal muscle. Kagan VE, et al. **Proc Soc Exp Biol Med** 1989 Apr;190(4):365–8
The effects of a prostacyclin analog OP-41483 on pulmonary oxygen toxicity in an isolated heart-lung autoperfusion model. Arima T, et al. **Prostaglandins** 1989 Jan;37(1):33–51
Radiation factors and their influence on induction of oxygen resistance. Lee YJ, et al. **Radiat Res** 1989 Jan;117(1):158–62
Pulmonary oxygen toxicity in rats: prevention by pyrogenic diphosphoryl lipid A and potentiation by nontoxic monophosphoryl lipid A and lipid X. Smith RM. **Res Commun Chem Pathol Pharmacol** 1988 Nov; 62(2):221–34
DNA damage induced in mammalian cells by active oxygen species. Zheng RL, et al. **Sci Sin [B]** 1988 Jun;31(6):676–86
Non-lethal hyperoxic potentiation of lung disease in the rat following subcutaneous administration of bleomycin. Coursin DB, et al. **Toxicology** 1988 Dec 16;53(1):45–55
Lack of effect of oxygen-radical scavenging systems in the preserved reperfused rabbit kidney. Winchell RJ, et al. **Transplantation** 1989 Sep;48(3):393–6
Cytotoxic effect of oxygen on the skeletal muscle of mouse diaphragm. Shamsadeen N, et al. **Virchows Arch [B]** 1989; 57(2):123–9
[The role of free radical reactions in various physiological processes in human diseases] Fehér J. **Orv Hetil** 1988 Dec 11;129(50):2667–72 (50 ref.) (Eng. Abstr.) **(Hun)**
[A comparison of intermittent versus continuous aortic cross-clamping during multidose cardioplegic arrest and the possible participation of oxygen toxicity in the cellular injury induced by reperfusion of ischemic myocardium] Tamura M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jun;36(6):874–82 (Eng. Abstr.) **(Jpn)**
[Generation of active oxygen by environmental factors; mutagenicity and active oxygen species] Sofuni T, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2830–7 **(Jpn)**
[Generation of active oxygen by environmental factors; high concentration oxygen] Takahashi H. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2818–23 **(Jpn)**
[Kinetics of the oxidative deamination reaction in the preconvulsive period of oxygen-induced epilepsy] Gol'dina OA, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):417–20 (Eng. Abstr.) **(Rus)**
[Changes in the balance of biogenic monoamines and their metabolites in the organs of rats with oxygen-induced epilepsy] Maĭsov NI, et al. **Biull Eksp Biol Med** 1989 Apr; 107(4):399–402 (Eng. Abstr.) **(Rus)**
[Functional state of animals after inhalation of electrolysis oxygen obtained from distilled water] Koziarin IP. **Gig Sanit** 1989 Jan;(1):74–5 **(Rus)**

OXYGEN CONSUMPTION

Cerebral blood flow and metabolism during adenosine-induced hypotension in patients undergoing cerebral aneurysm surgery. Lagerkranser M, et al. **Acta Anaesthesiol Scand** 1989 Jan;33(1):15–20
Effect of nimodipine on mitochondrial respiration in different rat brain areas after subarachnoid haemorrhage. Rodriguez y Baena R, et al. **Acta Neurochir Suppl (Wien)** 1988; 43:177–81
Alterations in oxygenation of cochlear endolymph during loud sound exposure. Thorne PR, et al. **Acta Otolaryngol (Stockh)** 1989 Jan-Feb;107(1–2):71–9
Tissue oxygen tension in the stria vascularis. Nagahara K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;456:137–42
The role of cationic transport in the respiratory burst activation in granulocytes. Szabó I, et al. **Acta Paediatr Hung** 1988–89;29(1–2):93–6
Myocardial oxygen consumption during atrial pacing at various inotropic levels. Andersen FR, et al. **Acta Physiol Scand** 1988 Jul;133(3):315–24
Parabronchial oxygen extraction in ducks during selective cooling of the spinal cord. Johannesen H, et al. **Acta Physiol Scand** 1988 Apr;132(4):563–7
Oxygen deficit is not affected by the rate of transition from rest to submaximal exercise. Ren JM, et al. **Acta Physiol Scand** 1989 Apr;135(4):545–8
Oxygen deficit at the onset of submaximal exercise is not due to a delayed oxygen transport. Sahlin K, et al. **Acta Physiol Scand** 1988 Oct;134(2):175–80
Metabolism of the black bear under simulated denning conditions. Watts P, et al. **Acta Physiol Scand** 1988 Sep; 134(1):149–52
Oxygen transport to tissue XI. Proceedings of the 16th annual meeting of the International Society on Oxygen Transport to Tissue. August 7–11, 1988, Ottawa, Ontario, Canada. **Adv Exp Med Biol** 1989;248:1–868
Myocardial oxygen transport during leftward shifts of the oxygen dissociation curve by carbamylation or hypothermia. Baer RW. **Adv Exp Med Biol** 1989;248:325–33
Oxygen delivery and performance in the isolated, perfused rat heart: comparison of perfusion with aqueous and perfluorocarbon-containing media. Biro GP, et al. **Adv Exp Med Biol** 1989;248:509–16
Central reflex effects of hypoxia on muscle oxygenation. Bredle DL, et al. **Adv Exp Med Biol** 1989;248:681–5
Time resolved spectroscopic (TRS) and continuous wave spectroscopic (CWS) studies of photon migration in human arms and limbs. Chance B. **Adv Exp Med Biol** 1989; 248:21–31
The nature of fluorocarbon enhanced cerebral oxygen transport. Clark LC Jr, et al. **Adv Exp Med Biol** 1989; 248:341–55
Tissue oxygen tension in the cerebral cortex of the rabbit. Fennema M, et al. **Adv Exp Med Biol** 1989;248:451–60
The oxygen dependence of the energy state of cardiac tissue: 31P-NMR and optical measurement of myoglobin in perfused rat heart. Fukuda H, et al. **Adv Exp Med Biol** 1989;248:567–73
Calculation of oxygen pressures and fluxes in a flat plane perpendicular to any capillary distribution. Hoofd L, et al. **Adv Exp Med Biol** 1989;248:187–96
The oxygen dependency of the redox state of heme and copper in cytochrome oxidase in vitro. Hoshi Y, et al. **Adv Exp Med Biol** 1989;248:71–6
The respiratory burst in activated macrophages: studies of its molecular basis and evidence for downregulation in chronic infection. Johnston RB Jr, et al. **Adv Exp Med Biol** 1988;239:63–72 (22 ref.)
Structured modeling and simulation of oxygen transport to hybridoma cell in a suspension culture: theoretical analysis. Kang KA, et al. **Adv Exp Med Biol** 1989;248:197–206
Maximal O2 uptake limitation in contracting skeletal muscle during carbon monoxide hypoxia. King CE. **Adv Exp Med Biol** 1989;248:705–12
The effects of temperature and buffer concentration on the metabolism of human atrial appendages measured by 31P and 1H NMR. Mainwood GW, et al. **Adv Exp Med Biol** 1989;248:611–9
Measurements of oxygen flux from arterioles imply high permeability of perfused tissue to oxygen. Popel AS, et al. **Adv Exp Med Biol** 1989;248:215–25
Muscle O2 uptake while perfused at constant pressure with normoxic blood during global hypoxia. Reinhart K, et al. **Adv Exp Med Biol** 1989;248:729–34
Contribution of diffusion to the oxygen dependence of energy metabolism in human neuroblastoma cells. Rumsey WL, et al. **Adv Exp Med Biol** 1989;248:829–33
The overall fractionation effect of isotopic oxygen molecules during oxygen transport and utilization in humans. Schuster KD, et al. **Adv Exp Med Biol** 1989;248:151–6
Oxygen gradients in two regions of the epiphyseal growth plate. Silverton SF, et al. **Adv Exp Med Biol** 1989; 248:809–15
Alterations in oxyhemoglobin dissociation curve during normoxic acute normovolemic hemodilution. Trouwborst A, et al. **Adv Exp Med Biol** 1989;248:419–25
PO2 histograms in various models of tissue oxygenation in skeletal muscle. Turek Z, et al. **Adv Exp Med Biol** 1989; 248:227–37
Hypoxia in saline-perfused heart may be due to mismatch of regional metabolism and perfusion. van Beek JH. **Adv Exp Med Biol** 1989;248:499–507
Blood flow, tissue oxygenation, pH distribution, and energy metabolism of murine mammary adenocarcinomas during growth. Vaupel P, et al. **Adv Exp Med Biol** 1989;248:835–45
Interrelationship among morphology, metabolism, and proliferation of tumor cells in monolayer and spheroid culture. Walenta S, et al. **Adv Exp Med Biol** 1989; 248:847–53
Oxygen distribution in isolated perfused liver observed by phosphorescence imaging. Wilson DF, et al. **Adv Exp Med Biol** 1989;248:109–15
Cardiovascular responses to maximal treadmill exercise in healthy adult Nigerians. Balogun MO, et al. **Afr J Med Med Sci** 1989 Jun;18(2):109–16
Oxygen uptake and heart rate during cross-country skiing and track walking after myocardial infarction. Oldridge NB, et al. **Am Heart J** 1989 Feb;117(2):495–7
Response in oxygen uptake and ventilation during stair climbing in patients with chronic heart failure. Reddy HK, et al. **Am J Cardiol** 1989 Jan 15;63(3):222–5
Decreased oxygen utilization in epidemic typhus infection: case report with sequential hemodynamic studies. Flugelman MY, et al. **Am J Med** 1988 Oct;85(4):581–2
Effects of reductions in hemoglobin-oxygen affinity and hematocrit level on oxygen consumption and acid-base state in fetal lambs. Edelstone DI, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):820–6; discussion 826–8
Intraretinal and preretinal PO2 response to acutely raised intraocular pressure in cats. Alder VA, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):H1627–34
Measurement of forearm oxygen consumption: role of heating the contralateral hand. Astrup A, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):E572–8
Regulation of VO2 in red muscle: do current biochemical hypotheses fit in vivo data? Connett RJ, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):R898–906
Glycolytic and oxidative metabolism in primary renal proximal tubule cultures. Dickman KG, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C333–40
Cerebral blood flow, oxygenation, and carbohydrate metabolism in immature fetal sheep in utero. Gleason CA, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1264–8
Energy expenditure during stress ulcer formation in vulnerable rats. Greenberg D, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R403–7
Influence of age, fat cell weight, and obesity on O2 consumption of human adipose tissue. Hallgren P, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):E467–74
Measurement of hepatocellular function, cardiac output, effective blood volume, and oxygen saturation in rats. Hauptman JG, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R439–44
Effects of glucose and insulin on fetal glucose oxidation and oxygen consumption. Hay WW Jr, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):E704–13
Relation between phosphate metabolites and oxygen consumption of heart in vivo. Katz LA, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):H265–74
Optimal hematocrit for canine gastric oxygenation. Kiel JW, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H472–7
Effects of hemodilution on gastric and intestinal oxygenation. Kiel JW, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):H171–8
Oxygen consumption after massive sympathetic nervous system discharge. Lang SA, et al. **Am J Physiol** 1989 Mar; 256(3 Pt 1):E345–51
Postprandial gastrointestinal blood flow and oxygen consumption during environmental cold stress. Mayfield SR, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):G364–8
Relation of blood flow to VO2, PO2, and PCO2 in dog gastrocnemius muscle. Mohrman DE, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1004–10
O2 uptake in bled dogs after resuscitation with hypertonic saline or hydroxyethylstarch. Reinhart K, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H238–43
Oxygen diffusion and mitochondrial respiration in neuroblastoma cells. Robiolio M, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):C1207–13
Phosphocreatine and oxidative metabolism-contraction coupling in rabbit aorta. Scott DP, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H597–602
Fetal neuromuscular blockade: effect on oxygen demand and placental transport. Wilkening RB, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H734–8
Minor preload dependence of O2 consumption of unloaded contraction in dog heart. Yasumura Y, et al.

Am J Physiol 1989 May;256(5 Pt 2):H1289–94
Effect of hypoxia on diaphragm blood flow, oxygen uptake, and contractility. Bark H, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1535–41
Prediction of maximal oxygen uptake and power during cycle ergometry in subjects older than 55 years of age. Blackie SP, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1424–9
The effect of acute inflammatory lung injury on the respiratory burst and protein kinase C activity of rat pulmonary alveolar macrophages. Brieland JK, et al. **Am Rev Respir Dis** 1989 Feb;139(2):378–81
Oxygen consumption of the respiratory muscles in normal and in malnourished patients with chronic obstructive pulmonary disease. Donahoe M, et al. **Am Rev Respir Dis** 1989 Aug;140(2):385–91
Oxygen distribution and utilization after phorbol myristate acetate-induced lung injury. Dorinsky PM, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1454–63
Relationship between oxygen uptake and oxygen delivery in patients with pulmonary hypertension. Mohsenifar Z, et al. **Am Rev Respir Dis** 1988 Jul;138(1):69–73
5-Hydroxytryptamine uptake in oxygen radical-mediated acute lung injury. Vigneswaran WT, et al. **Am Rev Respir Dis** 1989 Feb;139(2):382–6
Oxygen-derived free radical scavengers and skeletal muscle ischemic/reperfusion injury. Faust KB, et al. **Am Surg** 1988 Dec;54(12):709–19
Metabolic responses—(VO2, VCO2 and energy expenditure)—associated with nasal intubation of the trachea. Fassoulaki A, et al. **Anesth Analg** 1989 Feb; 68(2):112–5
Effects of thoracic epidural anesthesia on systemic hemodynamic function and systemic oxygen supply-demand relationship. Reinhart K, et al. **Anesth Analg** 1989 Sep;69(3):360–9
Changes in ventilation, oxygen uptake, and carbon dioxide output during recovery from isoflurane anesthesia. Ciofolo MJ, et al. **Anesthesiology** 1989 May;70(5):737–41
Cerebral blood flow and cerebral oxygen consumption during nitroprusside-induced hypotension to less than 50 mmHg. Pinaud M, et al. **Anesthesiology** 1989 Feb;70(2):255–60
Combining transmural left ventricular mechanics and energetics to predict oxygen demand. Carasso S, et al. **Ann Biomed Eng** 1988;16(5):495–513
Mathematical evidence for flow-induced changes in myocardial oxygen consumption. Napper SA, et al. **Ann Biomed Eng** 1988;16(4):349–65
Effect of cold rearing on metabolic rate and growth rate of obese (ob/ob) mice. Houlden M, et al. **Ann Nutr Metab** 1988;32(4):200–5
Oxygen as an isolated variable influences resistance to infection. Jönsson K, et al. **Ann Surg** 1988 Dec;208(6):783–7
Assessment of exercise oxygen consumption [letter] Olsen GN, et al. **Ann Thorac Surg** 1988 Oct;46(4):483–4
Assessment of exercise oxygen consumption: reply [letter] Wetstein L, et al. **Ann Thorac Surg** 1989 Apr;47(4):639
In vivo study of tissue oxygen metabolism using optical and nuclear magnetic resonance spectroscopies. Tamura M, et al. **Annu Rev Physiol** 1989;51:813–34 (169 ref.)
In vitro effects of acetaminophen metabolites and analogs on the respiration of mouse liver mitochondria. Ramsay RR, et al. **Arch Biochem Biophys** 1989 Sep;273(2):449–57
Use of conjunctival oxygen monitoring in cardiac patients in the emergency unit. Harding S, et al. **Arch Emerg Med** 1988 Dec;5(4):233–8
Energy requirements of gamefield exercises designed for wheelchair-bound persons. Cardús D, et al. **Arch Phys Med Rehabil** 1989 Feb;70(2):124–7
Early detection of shock in critically ill patients by skeletal muscle PO2 assessment. Beerthuizen GI, et al. **Arch Surg** 1989 Jul;124(7):853–5
Oxidative activity of polymorphonuclear leukocytes after thermal injury. Dobke MK, et al. **Arch Surg** 1989 Jul; 124(7):856–9
Supplemental oxygen and dependent positioning as adjunctive measures to improve forefoot tissue oxygenation. Johnson WC, et al. **Arch Surg** 1988 Oct; 123(10):1227–30
Left ventricular oxygen consumption and organ blood flow distribution during pulsatile ventricular assist. Pantalos GM, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):356–60
Myocardial O2 supply and consumption in early cardiac hypertrophy of renal hypertensive rabbits. Cimini CM, et al. **Basic Res Cardiol** 1989 Jan–Feb;84(1):13–21
Multiple defects of the respiratory chain including complex II in a family with myopathy and encephalopathy. Desnuelle C, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):695–700
Lucigenin chemiluminescence and its relationship to mitochondrial respiration in phagocytic cells. Esterline RL, et al. **Biochem Biophys Res Commun** 1989 Mar 15; 159(2):584–91
Lack of effect of pertussis toxin on TNF-alpha-induced formation of reactive oxygen intermediates by human neutrophils. Meurer R, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):763–9
Synergistic deleterious effect of micromolar Ca ions and free radicals on respiratory function of heart mitochondria at cytochrome C and its salvage trial. Toyo-oka T, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1397–403
Control of respiration in non-phosphorylating mitochondria is shared between the proton leak and the respiratory chain. Brand MD, et al. **Biochem J** 1988 Oct 15;255(2):535–9
Oxidation of nitrogenase iron protein by dioxygen without inactivation could contribute to high respiration rates of Azotobacter species and facilitate nitrogen fixation in other aerobic environments. Thorneley RN, et al. **Biochem J** 1989 Jul 1;261(1):181–7
Effects of oxygen on the metabolism of nitroxide spin labels in cells. Chen K, et al. **Biochemistry** 1989 Mar 21; 28(6):2496–501
Commentary on 'New Methods for the Study of the Carbon Monoxide Compounds of Respiratory Enzymes'. Chance B. **Biochim Biophys Acta** 1989;1000:345–7
The mitochondrial respiratory chain of yeast. Structure and biosynthesis and the role in cellular metabolism. de Vries S, et al. **Biochim Biophys Acta** 1987;895(3):205–39 (252 ref.)
The bactericidal effects of the respiratory burst and the myeloperoxidase system isolated in neutrophil cytoplasts. Odell EW, et al. **Biochim Biophys Acta** 1988 Oct 7; 971(3):266–74
A respiratory-driven and an artificially driven ATP synthesis in mutants of Vibrio parahaemolyticus lacking H+-translocating ATPase. Sakai Y, et al. **Biochim Biophys Acta** 1989 Mar 23;973(3):450–6
Differential effects of osmotic pressure on mitochondrial respiratory chain and indices of oxidative phosphorylation. Sitaramam V, et al. **Biochim Biophys Acta** 1989 Jul 13; 975(2):252–66
Different susceptibility of cortical and medullary rat kidney mitochondria to ischemic injury. Jung K, et al. **Biomed Biochim Acta** 1988;47(6):455–60
Autoxidative damage to the retina: potential role in retinopathy of prematurity. Katz ML, et al. **Birth Defects** 1988;24(1):237–48 (41 ref.)
Optimisation of positive and expiratory pressure for maximal delivery of oxygen to tissues using oesophageal Doppler ultrasonography. Singer M, et al. **BMJ** 1989 May 20; 298(6684):1350–3
The "metabolic burst" in polymorphonuclear leukocytes: in vitro reduction by scale extract of psoriasis. Muti S, et al. **Boll Soc Ital Biol Sper** 1988 Feb;64(2):123–30
A new exercise test for the assessment of heart failure: use of a self powered treadmill. Parameshwar J, et al. **Br Heart J** 1989 May;61(5):421–5
Oxygen consumption and carbon dioxide elimination in infants and children during anaesthesia and surgery. Lindahl SG. **Br J Anaesth** 1989 Jan;62(1):70–6
Reducing the hypoxic fraction of a tumour model by growth in low glucose. Hlatky L, et al. **Br J Cancer** 1989 Mar; 59(3):375–80
Characterization of radiation resistant hypoxic cell subpopulations in KHT sarcomas. (II). Cell sorting. Siemann DW, et al. **Br J Cancer** 1988 Sep;58(3):296–300
Lactate and gas exchange responses to incremental and steady state running. Haverty M, et al. **Br J Sports Med** 1988 Jun;22(2):51–4
A progressive shuttle run test to estimate maximal oxygen uptake. Ramsbottom R, et al. **Br J Sports Med** 1988 Dec; 22(4):141–4
The cerebral metabolism of glucose and oxygen measured with positron tomography in patients with mitochondrial diseases. Frackowiak RS, et al. **Brain** 1988 Oct;111 (Pt 5):1009–24
Local brain haemodynamics and oxygen metabolism in cerebrovascular disease. Positron emission tomography. Sette G, et al. **Brain** 1989 Aug;112 (Pt 4):931–51
Survival and growth of hippocampal neurons in defined medium at low density: advantages of a sandwich culture technique or low oxygen. Brewer GJ, et al. **Brain Res** 1989 Aug 7;494(1):65–74
Hypoxic and hypercapnic responses of [Ca2+]o and [K+]o in the cat carotid body in vitro. Delpiano MA, et al. **Brain Res** 1989 Mar 20;482(2):235–46
Adenosine antagonists delay hypoxia-induced depression of neuronal activity in hippocampal brain slice. Fowler JC. **Brain Res** 1989 Jun 26;490(2):378–84
Ionic currents on type-I cells of the rabbit carotid body measured by voltage-clamp experiments and the effect of hypoxia. Hescheler J, et al. **Brain Res** 1989 May 1; 486(1):79–88
Antidiabetic sulfonylureas: localization of binding sites in the brain and effects on the hyperpolarization induced by anoxia in hippocampal slices. Mourre C, et al. **Brain Res** 1989 May 1;486(1):159–64
Cerebral mitochondrial respiration in diabetic and chronically hypoglycemic rats. Pelligrino DA, et al. **Brain Res** 1989 Feb 13;479(2):241–6
Substance P and neurokinin A in the cat carotid body: localization, exogenous effects and changes in content in response to arterial pO2. Prabhakar NR, et al. **Brain Res** 1989 Mar 6;481(2):205–14
Unlike hypoxia, hypoglycemia does not preferentially destroy GABAergic neurons in developing rat neocortex explants in culture. Romijn HJ, et al. **Brain Res** 1989 Feb 20; 480(1-2):58–64
Calcium-dependent and ouabain-resistant oxygen consumption in the rat neurohypophysis. Shibuki K. **Brain Res** 1989 May 15;487(1):96–104
Effects of norepinephrine infused in the paraventricular hypothalamus on energy expenditure in the rat. Siviy SM, et al. **Brain Res** 1989 May 15;487(1):79–88
Activity of hypothalamic neurons in conscious rats decreased by hyperbaric environment. Osaka T, et al. **Brain Res Bull** 1989 Mar;22(3):549–55
Effects of deprivation of oxygen and glucose on the neural activity and the level of high energy phosphates in the hippocampal slices of immature and adult rat. Kawai S, et al. **Brain Res Dev Brain Res** 1989 Jul 1;48(1):11–8
Lipid peroxidation in developing fetal guinea pig brain during normoxia and hypoxia. Mishra OP, et al. **Brain Res Dev Brain Res** 1989 Jan 1;45(1):129–35
Changes in myocardial and coronary sinus blood oxygen tension induced by asphyxia and reoxygenation. Cicogna AC, et al. **Braz J Med Biol Res** 1988;21(3):585–90
Comparison of chemical biodegradation rates in BOD dilution and natural waters. Vaishnav DD, et al. **Bull Environ Contam Toxicol** 1988 Aug;41(2):291–8
Oxidant injury to isolated heart cells. Kaminishi K, et al. **Can J Cardiol** 1989 Apr;5(3):168–74
Response of hydroperoxidase and superoxide dismutase deficient mutants of Escherichia coli K-12 to oxidative stress. Schellhorn HE, et al. **Can J Microbiol** 1988 Oct; 34(10):1171–6
Absence of increased oxygen consumption in brown adipose tissue of rats exhibiting "cafeteria" diet-induced thermogenesis. Ma SW, et al. **Can J Physiol Pharmacol** 1988 Nov;66(11):1347–54
The effect of exercise duration on the exercise and post-exercise oxygen consumption. Chad KE, et al. **Can J Sport Sci** 1988 Dec;13(4):204–7
Measure the breath-by-breath oxygen uptake (VO2) during a Wingate anaerobic power test [letter] Hughson RL. **Can J Sport Sci** 1988 Dec;13(4):266–7
Validity of the 20 m shuttle run test with 1 min stages to predict VO2max in adults. Léger L, et al. **Can J Sport Sci** 1989 Mar;14(1):21–6
The validity generalization of distance run tests. Safrit MJ, et al. **Can J Sport Sci** 1988 Dec;13(4):188–96 (63 ref.)
Diastolic characteristics and cardiac energetics of isolated hearts exposed to volume and pressure overload. Friberg P. **Cardiovasc Res** 1988 May;22(5):329–39
The relation between inhibition of glycolysis and stimulation of oxygen uptake due to glucagon in livers from rats in different metabolic conditions. Bazotte RB, et al. **Cell Biochem Funct** 1988 Oct;6(4):225–30
ESR studies on oxygen consumption during the respiratory burst of human polymorphonuclear leukocytes. Zhao BL, et al. **Cell Biol Int Rep** 1989 Apr;13(4):317–23
Effect of altering heart rate on oxygen uptake at exercise onset. Casaburi R, et al. **Chest** 1989 Jan;95(1):6–12
Oxygen uptake during weaning from mechanical ventilation. Hubmayr RD, et al. **Chest** 1988 Dec;94(6):1148–55
Pressure control inverse ratio ventilation as a method to reduce peak inspiratory pressure and provide adequate ventilation and oxygenation. Lain DC, et al. **Chest** 1989 May;95(5):1081–8
Comparison of central-venous to mixed-venous oxygen saturation during changes in oxygen supply/demand. Reinhart K, et al. **Chest** 1989 Jun;95(6):1216–21
Effects of interleukin-2 on oxygen delivery and consumption in patients with advanced malignancy. Silverman HJ, et al. **Chest** 1988 Oct;94(4):816–21
Cerebral circulation and oxygen metabolism in moyamoya disease of ischemic type in children. Taki W, et al. **Childs Nerv Syst** 1988 Oct;4(5):259–62
Role of thromboxane A2 in the control of myocardial O2 supply/consumption balance and severity of ischemia during pacing-induced ischemia. Grover GJ, et al. **Circ Res** 1989 Mar;64(3):575–82
Oxygen consumption and coronary reactivity in postischemic myocardium. Laxson DD, et al. **Circ Res** 1989 Jan; 64(1):9–20
Progressive hypoxemia limits left ventricular oxygen consumption and contractility. Walley KR, et al. **Circ Res** 1988 Nov;63(5):849–59
Time-invariant oxygen cost of mechanical energy in dog left ventricle: consistency and inconsistency of time-varying elastance model with myocardial energetics. Yasumura Y, et al. **Circ Res** 1989 Apr;64(4):764–78
Early impairment of oxidative metabolism and energy production in severe sepsis. Astiz M, et al. **Circ Shock** 1988 Nov;26(3):311–20
Splanchnic blood flows in a rat model of antibiotic-controlled intra-abdominal abscess during normoxia and hyperoxia. Muhvich KH, et al. **Circ Shock** 1989 Mar;27(3):253–62
The effects of chronic bacteremia on the metabolic response to exercise in the conscious rat. Musch TI, et al. **Circ Shock** 1988 Aug;25(4):245–58
Noninvasive quantitation of regional myocardial oxygen consumption in vivo with [1-11C]acetate and dynamic positron emission tomography. Buxton DB, et al. **Circulation** 1989 Jan;79(1):134–42
Exercise training in patients with chronic heart failure delays ventilatory anaerobic threshold and improves submaximal exercise performance. Sullivan MJ, et al. **Circulation** 1989 Feb;79(2):324–9
Time course of corneal oxygen uptake during contact lens wear. Carney LG, et al. **CLAO J** 1988 Jul–Sep;14(3):151–4
Effects of transient increase in intrathoracic pressure on hemodynamic determinants of myocardial oxygen supply and demand. Pepine CJ, et al. **Clin Cardiol** 1988 Dec; 11(12):831–7
Metabolic sources of reactive oxygen metabolites during oxidant stress and ischemia with reperfusion. Grisham MB,

et al. **Clin Chest Med** 1989 Mar;10(1):71–81 (44 ref.)
Determination of the oxygen cost of level walking. Linnarsson D, et al. **Clin Physiol** 1989 Feb;9(1):1–10
Erythrocytes alter the pattern of renal hypoxic injury: predominance of proximal tubular injury with moderate hypoxia. Endre ZH, et al. **Clin Sci** 1989 Jan;76(1):19–29
Development of temperature regulation in the common white-toothed shrew, Crocidura russula. Nagel A. **Comp Biochem Physiol [A]** 1989;92(3):409–13
The maintenance of respiratory control at 25 degrees C by mitochondria from various animal and plant sources. Goldblatt M, et al. **Comp Biochem Physiol [B]** 1978; 61(1):189–90
Oxidative metabolism of rabbit and rat intestine with short chain fatty acids and glucose: an evaluation of data analysis. Hatch M, et al. **Comp Biochem Physiol [B]** 1989; 92(4):779–86
Hydrogen shuttles in air versus water breathing fishes. Hochachka PW, et al. **Comp Biochem Physiol [B]** 1979; 63(1):45–56
Hydrogen shuttles in gills of water versus air breathing osteoglossids. Hochachka PW, et al. **Comp Biochem Physiol [B]** 1979;63(1):57–61
The temperature dependence of State IV respiration, the calcium uptake system, and the activity of the calcium ionophore A23187 in mitochondria from endo- and ectothermic animals. Smith CL. **Comp Biochem Physiol [B]** 1978;59(3):231–7
Oxygen delivery and utilization in sepsis. Dantzker D. **Crit Care Clin** 1989 Jan;5(1):81–98 (73 ref.)
Cellular oxygen utilization during multiple organ failure. Gutierrez G, et al. **Crit Care Clin** 1989 Apr;5(2):271–87 (101 ref.)
Oxygen delivery and uptake by peripheral tissues: physiology and pathophysiology. Schumacker PT, et al. **Crit Care Clin** 1989 Apr;5(2):255–69 (63 ref.)
Hemodynamic and metabolic changes during and following operation. Waxman K. **Crit Care Clin** 1987 Apr;3(2):241–50 (38 ref.)
Oxygen delivery and lactic acidosis [letter] Benjamin E, et al. **Crit Care Med** 1989 Mar;17(3):299
Metabolic and nutritional aspects of weaning from mechanical ventilation. Benotti PN, et al. **Crit Care Med** 1989 Feb;17(2):181–5 (45 ref.)
Renal oxygenation in endotoxin shock in dogs. Gullichsen E, et al. **Crit Care Med** 1989 Jun;17(6):547–50
Myocardial blood flow and oxygen consumption during positive end-expiratory pressure ventilation at different levels of cardiac inotropy and frequency. Hevrøy O, et al. **Crit Care Med** 1989 Jan;17(1):48–52
Relationship of oxygen delivery and mixed venous oxygenation to lactic acidosis in patients with sepsis and myocardial infarction [letter] McConachie IW, et al. **Crit Care Med** 1989 Aug;17(8):844–5
Oxygen consumption and central hemodynamics in septic shock treated with antibiotics, fluid infusions, and corticosteroids. Ottosson J, et al. **Crit Care Med** 1989 Aug; 17(8):772–9
Comparison of cardiac output estimation by thoracic electrical bioimpedance, thermodilution, and Fick methods. Salandin V, et al. **Crit Care Med** 1988 Nov;16(11):1157–8
Tissue oxygen debt as a determinant of lethal and nonlethal postoperative organ failure. Shoemaker WC, et al. **Crit Care Med** 1988 Nov;16(11):1117–20
Evaluation of a replenishment type oxygen consumption monitor. Westenskow DR, et al. **Crit Care Med** 1989 Aug; 17(8):798–802
Theory of oxygen transport to tissue. Popel AS. **Crit Rev Biomed Eng** 1989;17(3):257–321 (196 ref.)
Effect of cannulation site on the primary determinants of myocardial oxygen consumption during left heart bypass. Kress DC, et al. **Curr Surg** 1988 Jul–Aug;45(4):303–7
The response of the immature brain to changes in the internal and external environment. Trojan S, et al. **Czech Med** 1989; 12(1):53–64
Erythrocyte O2 transport and metabolism and effects of vitamin B6 therapy in type II diabetes mellitus. Solomon LR, et al. **Diabetes** 1989 Jul;38(7):881–6
Usefulness of anaerobic threshold in estimating intensity of exercise for diabetics. Kawaji K, et al. **Diabetes Res Clin Pract** 1989 May 15;6(4):303–9
The validity of the use of heart rate in estimating oxygen consumption in static and in combined static/dynamic exercise. Maas S, et al. **Ergonomics** 1989 Feb;32(2):141–8
Sex differences of physical working capacity in normoxia and hypoxia. Shephard RJ, et al. **Ergonomics** 1988 Aug; 31(8):1177–92
Slow upward drift of VO2 during constant-load cycling in untrained subjects. Camus G, et al. **Eur J Appl Physiol** 1988;58(1–2):197–202
Cardiovascular changes associated with decreased aerobic capacity and aging in long-distance runners. Fuchi T, et al. **Eur J Appl Physiol** 1989;58(8):884–9
Predictors of sweat loss in man during prolonged exercise. Greenhaff PL, et al. **Eur J Appl Physiol** 1989;58(4):348–52
A new approach to assessing maximal aerobic power in children: the Odense School Child Study. Hansen HS, et al. **Eur J Appl Physiol** 1989;58(6):618–24
Forearm oxygen uptake during maximal forearm dynamic exercise. Hartling OJ, et al. **Eur J Appl Physiol** 1989; 58(5):466–70
The increased oxygen uptake upon immersion. The raised external pressure could be a causative factor. Mekjavic IB, et al. **Eur J Appl Physiol** 1989;58(5):556–62
The energy cost of level cross-country skiing and the effect of the friction of the ski. Saibene F, et al. **Eur J Appl Physiol** 1989;58(7):791–5
The aerobic demand of backstroke swimming, and its relation to body size, stroke technique, and performance. Smith HK, et al. **Eur J Appl Physiol** 1988;58(1–2):182–8
Optimum cycle frequencies in hand-rim wheelchair propulsion. Wheelchair propulsion technique. van der Woude LH, et al. **Eur J Appl Physiol** 1989;58(6):625–32
O2 tension, swimming-velocity, and thermal effects on the metabolic rate of the Pacific albacore Thunnus alalunga. Graham JB, et al. **Exp Biol** 1989;48(2):89–94
Metabolic rate, heart rate, and tailbeat frequency during sustained swimming in the leopard shark Triakis semifasciata. Scharold J, et al. **Exp Biol** 1989;48(4):223–30
Tumor radiation responses and tumor oxygenation in aging mice. Rockwell S. **Exp Gerontol** 1989;24(1):37–48
Effects of hyperoxia on surfactant morphology and cell viability in organotypic cultures of fetal rat lung. Loo CK, et al. **Exp Lung Res** 1989 Jul;15(4):597–617
Improvement of energy state and basic modifications of neuropathological damage in rabbits as a result of graded postischemic spinal cord reoxygenation. Maršala M, et al. **Exp Neurol** 1989 Jul;105(1):93–103
Cycles of juvenile hormone esterase activity during the juvenile hormone-driven cycles of oxygen consumption in pupal diapause of flesh flies. Denlinger DL, et al. **Experientia** 1989 May 15;45(5):474–6
1,2-Diacylglycerol accumulation in human neutrophils does not correlate with respiratory burst activation. Koenderman L, et al. **FEBS Lett** 1989 Jan 30; 243(2):399–403
The mechanism of proton translocation in respiration and photosynthesis. Malmström BG. **FEBS Lett** 1989 Jun 19; 250(1):9–21 (48 ref.)
Influence of non-esterified fatty acids on respiratory control of reconstituted cytochrome-c oxidase. Thiel C, et al. **FEBS Lett** 1989 Jul 17;251(1–2):270–4
Xenopus spermatozoon: is there any correlation between motility and oxygen consumption? Bernardini G, et al. **Gamete Res** 1988 Dec;21(4):403–8
Paired pulse pacing increases cardiac O2 consumption for activation without changing efficiency of contractile machinery in canine left ventricle. Suga H, et al. **Heart Vessels** 1988;4(2):79–87
Incomplete compensation of enhanced hepatic oxygen consumption in rats with alcoholic centrilobular liver necrosis. Tsukamoto H, et al. **Hepatology** 1989 Feb; 9(2):302–6
Method of quenching of muscle fibres affects apparent succinate dehydrogenase activity. Van der Laarse WJ, et al. **Histochem J** 1988 Nov;20(11):642–4
Fibronectin enhances respiratory burst of phagocytes stimulated by zymosan and immune complexes. Kuroiwa A, et al. **Immunology** 1988 Oct;65(2):177–80
Aerobic-anaerobic transition level of Indian middle & long distance runners. Ghosh AK, et al. **Indian J Med Res** 1988 Oct;88:371–5
Tumor necrosis factor alpha potentiates neutrophil antimicrobial activity: increased fungicidal activity against Torulopsis glabrata and Candida albicans and associated increases in oxygen radical production and lysosomal enzyme release. Ferrante A. **Infect Immun** 1989 Jul; 57(7):2115–22
Oxidant stress in Neisseria gonorrhoeae: adaptation and effects on L-(+)-lactate dehydrogenase activity. Fu HS, et al. **Infect Immun** 1989 Jul;57(7):2173–8
Roles of the Fc receptor and respiratory burst in killing of Rickettsia prowazekii by macrophagelike cell lines. Keysary A, et al. **Infect Immun** 1989 Aug;57(8):2390–6
Effects of Histoplasma capsulatum on murine macrophage functions: inhibition of macrophage priming, oxidative burst, and antifungal activities. Wolf JE, et al. **Infect Immun** 1989 Feb;57(2):513–9
Indirect calorimetry in cardiac patients. Koning HM, et al. **Int J Clin Monit Comput** 1988;5(4):229–34
Antioxidant enzymatic activities and resistance to oxidative stress in primary and subcultured rat astroglial cells. Vanella A, et al. **Int J Dev Neurosci** 1989;7(3):233–41
The pancreas and oxygen consumption. 1. Pancreatic oxygen consumption in normo- and hypovolemic dogs. Robert JH, et al. **Int J Pancreatol** 1989 Feb;4(1):51–63
Respiration in the filarial nematode Brugia pahangi. Paget TA, et al. **Int J Parasitol** 1989 May;19(3):337–43
Hypoxia and reoxygenation in human melanoma xenografts. Rofstad EK. **Int J Radiat Oncol Biol Phys** 1989 Jul; 17(1):81–9
Effect of active warming-up on thermoregulatory, circulatory, and metabolic responses to incremental exercise in endurance-trained athletes. Chwalbińska-Moneta J, et al. **Int J Sports Med** 1989 Feb; 10(1):25–9
Aerobic threshold, anaerobic threshold, and maximal oxygen uptake of Japanese speed-skaters. Nemoto I, et al. **Int J Sports Med** 1988 Dec;9(6):433–7
Peak oxygen intake and hypoxia: influence of physical fitness. Shephard RJ, et al. **Int J Sports Med** 1988 Aug;9(4):279–83
Automated systems for measurement of oxygen uptake during exercise testing. Versteeg PG, et al. **Int J Sports Med** 1989 Apr;10(2):107–12
Percentages of maximal heart rate, heart rate reserve, and VO2peak for determining endurance training intensity in sedentary women. Weltman A, et al. **Int J Sports Med** 1989 Jun;10(3):212–6 (23 ref.)
Comments on outcome prediction in critically ill patients [letter] Gilston A. **Intensive Care Med** 1988;14(6):676–7
Validation of a new closed circuit indirect calorimetry method compared with the open Douglas bag method. Raurich JM, et al. **Intensive Care Med** 1989;15(4):274–8
Oxygen consumption as an outcome predictor [letter] Shoemaker WC. **Intensive Care Med** 1988;15(1):64–6
Oxygen distribution and consumption in the cat retina at increased intraocular pressure. Yancey CM, et al. **Invest Ophthalmol Vis Sci** 1989 Apr;30(4):600–11
In vivo measurements of vascular oxygen tension in tumors using MRI of a fluorinated blood substitute. Fishman JE, et al. **Invest Radiol** 1989 Jan;24(1):65–71
Effect of different degrees of hypoxia and reoxygenation on myocardial energetics. Edoute Y, et al. **Isr J Med Sci** 1989 Jul;25(7):382–8
Effects of active muscle mass size on cardiopulmonary responses to exercise in congestive heart failure. Martin WH 3d, et al. **J Am Coll Cardiol** 1989 Sep;14(3):683–94
Comparison of three methods of determining oxygen consumption and resting energy expenditure. Walsh BJ, et al. **J Am Osteopath Assoc** 1989 Jan;89(1):43–6
O2 metabolism of the sheep diaphragm during flow resistive loaded breathing. Bazzy AR, et al. **J Appl Physiol** 1989 May;66(5):2305–11
Muscle perfusion and oxygenation during local hyperoxia. Bredle DL, et al. **J Appl Physiol** 1988 Nov;65(5):2057–62
Metabolic and circulatory responses of normoxic skeletal muscle to whole-body hypoxia. Bredle DL, et al. **J Appl Physiol** 1988 Nov;65(5):2063–8
Two-cytochrome metabolic model for carotid body PtiO2 and chemosensitivity changes after hemorrhage. Buerk DG, et al. **J Appl Physiol** 1989 Jul;67(1):60–8
Continuous increase in blood lactate concentration during different ramp exercise protocols. Campbell ME, et al. **J Appl Physiol** 1989 Mar;66(3):1104–7
Is resting muscle oxygen uptake controlled by oxygen availability to cells? Chinet AE, et al. **J Appl Physiol** 1989 Jan;66(1):253–60
Aerobic power and cardiovascular response to stress. Claytor RP, et al. **J Appl Physiol** 1988 Sep;65(3):1416–23
Oxygen delivery rate and sufficiency of oxygenation during ECMO in newborn baboons. Cornish JD, et al. **J Appl Physiol** 1989 Jan;66(1):210–6
Operation Everest II: maximal oxygen uptake at extreme altitude. Cymerman A, et al. **J Appl Physiol** 1989 May; 66(5):2446–53
Measurement of O2 consumption in isolated organs without venous cannulation. DeGrado TR, et al. **J Appl Physiol** 1989 Mar;66(3):1316–20
Effects of priming exercise on VO2 kinetics and O2 deficit at the onset of stepping and cycling. di Prampero PE, et al. **J Appl Physiol** 1989 May;66(5):2023–31
Influence of inspiratory flow rate and frequency on O2 cost of resistive breathing in humans. Dodd DS, et al. **J Appl Physiol** 1988 Aug;65(2):760–6
O2 cost of inspiratory and expiratory resistive breathing in humans. Dodd DS, et al. **J Appl Physiol** 1988 Dec; 65(6):2518–23
Role of muscle loss in the age-associated reduction in VO2 max. Fleg JL, et al. **J Appl Physiol** 1988 Sep;65(3):1147–51
Effects of hypoxia on metabolic rate of conscious adult cats during cold exposure. Gautier H, et al. **J Appl Physiol** 1989 Jul;67(1):32–8
Increased hemoglobin O2 affinity does not improve O2 consumption in hypoxemia. Gutierrez G, et al. **J Appl Physiol** 1989 Feb;66(2):837–43
Skeletal muscle O2 consumption and energy metabolism during hypoxemia. Gutierrez G, et al. **J Appl Physiol** 1989 May;66(5):2117–23
Effect of flow on O2 consumption during progressive hypoxemia. Gutierrez G, et al. **J Appl Physiol** 1988 Aug; 65(2):601–7
Cardiovascular responses of 70- to 79-yr-old men and women to exercise training. Hagberg JM, et al. **J Appl Physiol** 1989 Jun;66(6):2589–94
Determinants of VO2max in rats after high-intensity sprint training. Hilty MR, et al. **J Appl Physiol** 1989 Jan; 66(1):195–201
Dissociation of maximal O2 uptake from O2 delivery in canine gastrocnemius in situ. Hogan MC, et al. **J Appl Physiol** 1989 Mar;66(3):1219–26
Limitation of maximal O2 uptake and performance by acute hypoxia in dog muscle in situ. Hogan MC, et al. **J Appl Physiol** 1988 Aug;65(2):815–21
Regulation of lactic acid production during exercise. Katz A, et al. **J Appl Physiol** 1988 Aug;65(2):509–18 (94 ref.)
Oxygen uptake kinetics during exercise in diabetic neuropathy. Kremser CB, et al. **J Appl Physiol** 1988 Dec; 65(6):2665–71
Variability of responses across training levels to maximal treadmill exercise. Kyle SB, et al. **J Appl Physiol** 1989 Jul; 67(1):160–5
Dissociation of changes in VO2 max, muscle QO2, and performance with training in rats. Lambert MI, et al. **J Appl Physiol** 1989 Apr;66(4):1620–5
Costal diaphragmatic O2 and lactate extraction in laryngeal hemiplegic ponies during exercise. Manohar M, et al.

J Appl Physiol 1988 Oct;65(4):1723–8
Peripheral effects of endurance training in young and old subjects. Meredith CN, et al. **J Appl Physiol** 1989 Jun; 66(6):2844–9
Measurements of metabolic rate in rats: a comparison of techniques. Musch TI, et al. **J Appl Physiol** 1988 Aug; 65(2):964–70
Long-term mild jogging increases insulin action despite no influence on body mass index or VO2 max. Oshida Y, et al. **J Appl Physiol** 1989 May;66(5):2206–10
Effect of hindlimb suspension on VO2 max and regional blood flow responses to exercise. Overton JM, et al. **J Appl Physiol** 1989 Feb;66(2):653–9
Effects of incomplete pulmonary gas exchange on VO2 max. Powers SK, et al. **J Appl Physiol** 1989 Jun;66(6):2491–5
Combined effects of female hormones and metabolic rate on ventilatory drives in women. Regensteiner JG, et al. **J Appl Physiol** 1989 Feb;66(2):808–13
Physiological factors associated with the lower maximal oxygen consumption of master runners. Rivera AM, et al. **J Appl Physiol** 1989 Feb;66(2):949–54
Evidence for tissue diffusion limitation of VO2max in normal humans. Roca J, et al. **J Appl Physiol** 1989 Jul;67(1):291–9
Induced lactacidemia does not affect postexercise O2 consumption. Roth DA, et al. **J Appl Physiol** 1988 Sep; 65(3):1045–9
Prediction of VO2max during cycle exercise in pregnant women. Sady SP, et al. **J Appl Physiol** 1988 Aug; 65(2):657–61
Model analyses of capillary growth and tissue oxygenation during hypoxia. Snyder GK. **J Appl Physiol** 1988 Nov; 65(5):2332–6
Regional hemodynamic responses to hypoxia and hypermetabolism in polycythemic dogs. Stork RL, et al. **J Appl Physiol** 1989 Jul;67(1):96–102
On the modeling and interpretation of oxygen uptake kinetics from ramp work rate tests. Swanson GD, et al. **J Appl Physiol** 1988 Dec;65(6):2453–8
Construction of TnphoA gene fusions in Rhodobacter sphaeroides: isolation and characterization of a respiratory mutant unable to utilize dimethyl sulfoxide as a terminal electron acceptor during anaerobic growth in the dark on glucose. Moore MD, et al. **J Bacteriol** 1989 Aug; 171(8):4385–94
Isolation of a Rhizobium phaseoli cytochrome mutant with enhanced respiration and symbiotic nitrogen fixation. Soberón M, et al. **J Bacteriol** 1989 Jan;171(1):465–72
Trimethylamine N-oxide respiration by aerobic photosynthetic bacterium, Erythrobacter sp. OCh 114. Arata H, et al. **J Biochem (Tokyo)** 1988 Jun;103(6):1011–5
Proton release associated with respiratory burst of polymorphonuclear leukocytes. Takanaka K, et al. **J Biochem (Tokyo)** 1988 Apr;103(4):656–60
Reevaluation of the spin-trapped adduct formed from 5,5-dimethyl-1-pyrroline-1-oxide during the respiratory burst in neutrophils. Ueno I, et al. **J Biochem (Tokyo)** 1989 Jun;105(6):905–10
Oxygen exchange reaction during ATP hydrolysis by glycerinated muscle fibers, myofibrils, and synthetic actomyosin filaments. Yasui M, et al. **J Biochem (Tokyo)** 1989 Apr;105(4):644–7
Interaction of nuclear factors with multiple sites in the somatic cytochrome c promoter. Characterization of upstream NRF-1, ATF, and intron Sp1 recognition sequences. Evans MJ, et al. **J Biol Chem** 1989 Aug 25; 264(24):14361–8
Studies of signal transduction in the respiratory burst-associated stimulation of fMet-Leu-Phe-induced tubulin tyrosinolation and phorbol 12-myristate 13-acetate-induced posttranslational incorporation of tyrosine into multiple proteins in activated neutrophils and HL-60 cells. Nath J, et al. **J Biol Chem** 1989 Jan 15; 264(2):848–55
Alterations in oxidative function and respiratory regulation in the post-ischemic myocardium. Zimmer SD, et al. **J Biol Chem** 1989 Jul 25;264(21):12402–11
A model of oxygen exchange between an arteriole or venule and the surrounding tissue. Weerappuli DP, et al. **J Biomech Eng** 1989 Feb;111(1):24–31
Effect of intracapillary resistance to oxygen transport on the diffusional shunting between capillaries. Varela FE, et al. **J Biomed Eng** 1988 Oct;10(5):400–5
Relationship of body composition, muscle strength, and aerobic capacity to bone mineral density in older men and women. Bevier WC, et al. **J Bone Miner Res** 1989 Jun; 4(3):421–32
Respiration supported nitrogenase activity of isolated Rhizobium meliloti bacteroids. Miller RW, et al. **J Cell Biochem** 1988 Sep;38(1):35–49
Growth-related changes of oxygen consumption rates of tumor cells grown in vitro and in vivo. Kallinowski F, et al. **J Cell Physiol** 1989 Jan;138(1):183–91
Studies on the molecular mechanisms of human Fc receptor-mediated phagocytosis. Amplification of ingestion is dependent on the generation of reactive oxygen metabolites and is deficient in polymorphonuclear leukocytes from patients with chronic granulomatous disease. Gresham HD, et al. **J Clin Invest** 1988 Oct; 82(4):1192–201
Modulation of polymorphonuclear leukocyte microbicidal activity and oxidative metabolism by fibrinogen degradation products D and E. Kazura JW, et al. **J Clin Invest** 1989 Jun;83(6):1916–24
Developmental changes in the relation between phosphate metabolites and oxygen consumption in the sheep heart in vivo. Portman MA, et al. **J Clin Invest** 1989 Feb; 83(2):456–64
Swimming by sea otters: adaptations for low energetic cost locomotion. Williams TM. **J Comp Physiol [A]** 1989 Feb; 164(6):815–24
Paradoxical social effects on response to cold during ontogeny of the common white-toothed shrew, Crocidura russula. Nagel A. **J Comp Physiol [B]** 1989;159(3):301–4
Fetal oxygen uptake during uterine contractures. Llanos AJ, et al. **J Dev Physiol** 1988 Dec;10(6):525–9
The similarity of mitochondrial distribution in equine skeletal muscles of differing oxidative capacity. Kayar SR, et al. **J Exp Biol** 1988 Jul;137:253–63
Oxidative properties of carp red and white muscle. Moyes CD, et al. **J Exp Biol** 1989 May;143:321–31
Respiration in the cysts and trophozoites of Giardia muris. Paget TA, et al. **J Gen Microbiol** 1989 Jan;135 (Pt 1):145–54
Herpes simplex virus type 2 primes mouse macrophages for an early and genetically determined respiratory burst mediated by interferon-alpha/beta. Mogensen SC, et al. **J Gen Virol** 1989 Jun;70 (Pt 6):1371–9
Calculated splanchnic oxygen uptake and hepatic vascular resistance: what do these terms mean? Hadengue A, et al. **J Hepatol** 1989 May;8(3):387–90
Abnormal tissue oxygenation in patients with cirrhosis and liver failure. Moreau R, et al. **J Hepatol** 1988 Aug; 7(1):98–105
Adenosine regulates the respiratory burst of cytokine-triggered human neutrophils adherent to biologic surfaces. de la Harpe J, et al. **J Immunol** 1989 Jul 15; 143(2):596–602
The 40-kDa Fc gamma receptor (FcRII) on human neutrophils is essential for the IgG-induced respiratory burst and IgG-induced phagocytosis. Huizinga TW, et al. **J Immunol** 1989 Apr 1;142(7):2365–9
Chemoattractant-induced cytoplasmic pH changes and cytoskeletal reorganization in human neutrophils. Relationship to the stimulated calcium transients and oxidative burst. Naccache PH, et al. **J Immunol** 1989 Apr 1;142(7):2438–44
Studies on molecular regulation of phagocytosis in neutrophils. Con A-mediated ingestion and associated respiratory burst independent of phosphoinositide turnover, rise in [Ca2+]i, and arachidonic acid release. Rossi F, et al. **J Immunol** 1989 Mar 1;142(5):1652–60
Antibody-coated target cell membrane-induced chemiluminescence by human polymorphonuclear leukocytes. Van Kessel KP, et al. **J Immunol Methods** 1989 Mar 31;118(2):279–85
The mechanism of respiratory control in the in vivo heart. Koretsky AP, et al. **J Mol Cell Cardiol** 1989 Feb;21 Suppl 1:59–66
Reduced aerobic metabolic efficiency in globally "stunned" myocardium. Laster SB, et al. **J Mol Cell Cardiol** 1989 Apr;21(4):419–26
Maximum rate of oxygen consumption and quantitative histochemistry of succinate dehydrogenase in single muscle fibres of Xenopus laevis. van der Laarse WJ, et al. **J Muscle Res Cell Motil** 1989 Jun;10(3):221–8
Enhanced oxygen metabolism of peritoneal macrophages in the presence of murine neuroblastoma cells is partly caused by enkephalins. Willems J, et al. **J Neuroimmunol** 1988 Oct; 19(4):269–78
Electrophysiology of energy metabolism and neuronal function in the hippocampal slice preparation. Schurr A, et al. **J Neurosci Methods** 1989 May;28(1–2):7–13
Validity of estimates of myocardial oxidative metabolism with carbon-11 acetate and positron emission tomography despite altered patterns of substrate utilization. Brown MA, et al. **J Nucl Med** 1989 Feb;30(2):187–93
Assessment of myocardial oxidative metabolic reserve with positron emission tomography and carbon-11 acetate. Henes CG, et al. **J Nucl Med** 1989 Sep;30(9):1489–99
Transcutaneous measurement of PO2 and PCO2 in the dermis at the site of the tuberculin reaction in healthy human subjects. Spence VA, et al. **J Pathol** 1988 Aug; 155(4):289–93
Left ventricular oxygen extraction during submaximal and maximal exertion in ponies. Manohar M. **J Physiol (Lond)** 1988 Oct;404:547–56
Modulating the oxygen tension in tumours by hypothermia and hyperbaric oxygen. Nias AH, et al. **J R Soc Med** 1988 Nov;81(11):633–6
Oxygen consumption and ventilation during constant-load exercise in runners and cyclists. Costa MM, et al. **J Sports Med Phys Fitness** 1989 Mar;29(1):36–44
Prediction of maximal oxygen intake using submaximal arm ergometry. Egger KC, et al. **J Sports Med Phys Fitness** 1988 Dec;28(4):354–9
Relationships among pulmonary diffusing capacity, lung volumes and maximal oxygen consumption. Farrell PA, et al. **J Sports Med Phys Fitness** 1988 Dec;28(4):387–93
Effect of the circadian rhythm in body temperature on oxygen uptake. Hill DW, et al. **J Sports Med Phys Fitness** 1988 Sep;28(3):310–2
Comparison of two intense interval training programs on maximum oxygen uptake and running performance. Olsen R, et al. **J Sports Med Phys Fitness** 1988 Jun;28(2):158–64
Recovery metabolism and thermoregulation of endurance trained and heat acclimatized men. Pivarnik JM, et al. **J Sports Med Phys Fitness** 1988 Dec;28(4):375–80
Relationship of estrogen to strength, percent body fat and oxygen uptake in women. Rice PL. **J Sports Med Phys Fitness** 1988 Jun;28(2):145–50
The effects of aerobic dance training on serum lipids, lipoproteins and cardiopulmonary function. Williford HN, et al. **J Sports Med Phys Fitness** 1988 Jun;28(2):151–7
Independent measurement of oxygen consumption and oxygen delivery. Cilley RE, et al. **J Surg Res** 1989 Sep; 47(3):242–7
Effect of cannulation site on the primary determinants of myocardial oxygen consumption during left heart bypass. Cohen DJ, et al. **J Surg Res** 1989 Aug;47(2):159–65
Upgrading acellular to sanguineous cardioplegic efficacy. Illes RW, et al. **J Surg Res** 1989 Jun;46(6):543–8
Myocardial blood flow and oxygen consumption after aortic cross-clamping. van der Veen FH, et al. **J Surg Res** 1989 Oct;47(4):319–24
New technique for analysis of cardiac energetics using a modified Fenn equation. Ando H, et al. **J Thorac Cardiovasc Surg** 1989 Apr;97(4):565–74
Effects of hypothermia and hemodilution on oxygen metabolism and hemodynamics in patients recovering from coronary artery bypass operations. Kim YD, et al. **J Thorac Cardiovasc Surg** 1989 Jan;97(1):36–42
Effects of isophenphos-I on the respiratory function of rat liver mitochondria. Liu RM, et al. **J Tongji Med Univ** 1988; 8(1):18–23
The effects of oxygen toxicity on the pregnant rat using an apparatus designed to measure oxygen consumption method. Yoshimura Y, et al. **J Toxicol Sci** 1988 Aug; 13(3):141–9
Severity and pathophysiology of heart failure on the basis of anaerobic threshold (AT) and related parameters. Itoh H, et al. **Jpn Circ J** 1989 Feb;53(2):146–54
Analysis of acute and chronic heart failure in view of hepatic oxygen supply-demand relationship using hepatic venous oxygen saturation. Matsuda H, et al. **Jpn Circ J** 1989 Feb; 53(2):175–9
The hemodynamic and metabolic basis for decreased aerobic capacity in the supine exercise compared with the upright exercise in coronary artery disease. Takata T, et al. **Jpn Circ J** 1988 Jun;52(6):495–502
Crossbridge model compatible with the linear relation between left ventricular oxygen consumption and pressure-volume area. Yasumura Y, et al. **Jpn Heart J** 1988 May;29(3):335–47
Efficiencies from consumed O2 and pressure-volume area to work of in situ dog heart. Nozawa T, et al. **Jpn J Physiol** 1988;38(5):713–28
Energy deficiency, calcium overload or oxidative stress: possible causes of irreversible ischemic myocardial injury. Piper HM. **Klin Wochenschr** 1989 May 2;67(9):465–76 (87 ref.)
Involvement of oxygen radicals and phospholipase A2 in acute pancreatitis of the rat. Schoenberg MH, et al. **Klin Wochenschr** 1989 Feb 1;67(3):166–70
Mitochondrial function in Parkinson's disease [letter; comment] Bindoff LA, et al. **Lancet** 1989 Jul 1;2(8653):49 . **Comment on:** Lancet 1989 Jun 3;1(8649):1269
Decline in skeletal muscle mitochondrial respiration chain function with ageing [letter; comment] Cardellach F, et al. **Lancet** 1989 Jul 1;2(8653):44–5. **Comment on:** Lancet 1989 Mar 25;1(8639):637–9
Decline in skeletal muscle mitochondrial respiratory chain function: possible factor in ageing [see comments] Trounce I, et al. **Lancet** 1989 Mar 25;1(8639):637–9. **Comment in:** Lancet 1989 Jul 1;2(8653):44–5
Bacterial infection (Legionella pneumophila) stimulates fever, metabolic rate and brown adipose tissue activity in the guinea pig. Cooper AL, et al. **Life Sci** 1989;45(9):843–7
Normal cardiac output in the conscious young spontaneously hypertensive rat: evidence for higher oxygen utilization. Tadepalli AS, et al. **Life Sci** 1974 Sep 15;15(6):1103–14
System for long-term measurement of cerebral blood and tissue oxygenation on newborn infants by near infra-red transillumination. Cope M, et al. **Med Biol Eng Comput** 1988 May;26(3):289–94
Physiological parameters related to distance running performance in female athletes. Fay L, et al. **Med Sci Sports Exerc** 1989 Jun;21(3):319–24
Effects of shoe type on cardiorespiratory responses and rearfoot motion during treadmill running. Hamill J, et al. **Med Sci Sports Exerc** 1988 Oct;20(5):515–21
Enkephalin metabolism: effect of acute exercise stress and cardiovascular fitness. Jaskowski MA, et al. **Med Sci Sports Exerc** 1989 Apr;21(2):154–60
Nutritional, physiological, and menstrual status of distance runners. Kaiserauer S, et al. **Med Sci Sports Exerc** 1989 Apr;21(2):120–5
Cardiovascular and thermal responses of triathlon performance. Kreider RB, et al. **Med Sci Sports Exerc** 1988 Aug;20(4):385–90
Metabolic and cardiorespiratory responses relative to the anaerobic threshold. McLellan TM, et al. **Med Sci Sports Exerc** 1989 Apr;21(2):191–8
The role of calcium in the control of respiration by muscle mitochondria. McMillin JB, et al. **Med Sci Sports Exerc** 1989 Aug;21(4):406–10 (32 ref.)
Prediction of peak oxygen consumption in obstructive airway

disease. Mahler DA, et al. **Med Sci Sports Exerc** 1988 Dec; 20(6):574–8

Ventilatory threshold and VO2max changes in children following endurance training. Mahon AD, et al. **Med Sci Sports Exerc** 1989 Aug;21(4):425–31 (29 ref.)

A comparison of methods used to determine VO2 of exercising humans and animals. Norton KI, et al. **Med Sci Sports Exerc** 1989 Aug;21(4):480–6

Haldane transformation [letter] Poole DC, et al. **Med Sci Sports Exerc** 1988 Aug;20(4):420–1

Brain cellular and mitochondrial respiration in media of altered pH. Holtzman D, et al. **Metab Brain Dis** 1987 Jun; 2(2):127–37

Hormonal and metabolic responses of untrained, moderately trained, and highly trained men to three exercise intensities. Deuster PA, et al. **Metabolism** 1989 Feb;38(2):141–8

Oxygen consumption and guanosine diphosphate binding by fetal brown adipose tissue in diabetic pregnancy. Neufeld ND, et al. **Metabolism** 1989 Sep;38(9):831–6

Contribution of capillary recruitment to regulation of tissue oxygenation in rat cremaster muscle. Morff RJ. **Microvasc Res** 1988 Sep;36(2):150–61

Effect of lipid peroxidation on heart mitochondria oxygen consuming and calcium transporting capacities. Ceconi C, et al. **Mol Cell Biochem** 1988 Jun;81(2):131–5

Control of mitochondrial respiration in muscle. McMillin JB, et al. **Mol Cell Biochem** 1988 Jun;81(2):121–9 (50 ref.)

Changes of the respiratory coefficient in cultures of rat liver cells. Crăciun O, et al. **Morphol Embryol (Bucur)** 1989 Jan–Mar;35(1):53–8

Imaging techniques in Parkinson's disease. Martin WR. **Mov Disord** 1989;4 Suppl 1:S63–9 (39 ref.)

Dihydrorhodamine 123: a new flow cytometric indicator for respiratory burst activity in neutrophil granulocytes. Rothe G, et al. **Naturwissenschaften** 1988 Jul;75(7):354–5

Cytosolic-free calcium and neurotransmitter release with decreased availability of glucose or oxygen. Gibson GE, et al. **Neurochem Res** 1989 May;14(5):437–43

Simultaneous recording of local electrical activity, partial oxygen tension and temperature in the rat hippocampus with a chamber-type microelectrode. Effects of anaesthesia, ischemia and epilepsy. Freund TF, et al. **Neuroscience** 1989;28(3):539–49

Ca2+-dependent and Ca2+-independent glutamate release, energy status and cytosolic free Ca2+ concentration in isolated nerve terminals following metabolic inhibition: possible relevance to hypoglycaemia and anoxia. Kauppinen RA, et al. **Neuroscience** 1988 Oct;27(1):175–82

Reliability of corneal oxygen flux measurements. Paugh JR, et al. **Optom Vis Sci** 1989 Feb;66(2):113–6

Resting oxygen consumption and ventilation in cystic fibrosis. Hirsch JA, et al. **Pediatr Pulmonol** 1989;6(1):19–26

Intestinal blood flow and oxygen consumption: responses to hemorrhage in the developing piglet. Crissinger KD, et al. **Pediatr Res** 1989 Aug;26(2):102–5

Effect of oxygen exposure on ATP content of rat bronchoalveolar lavage. Rice WR, et al. **Pediatr Res** 1989 Apr;25(4):396–8

Changes in ovine hepatic circulation and oxygen consumption at birth. Townsend SF, et al. **Pediatr Res** 1989 Mar;25(3):300–4

Feline left ventricular oxygen consumption is not affected by volume expansion, ejection or redevelopment of pressure during relaxation. Duwel CM, et al. **Pflugers Arch** 1988 Sep;412(4):409–16

Total muscle mitochondrial volume in relation to aerobic capacity of horses and steers. Kayar SR, et al. **Pflugers Arch** 1989 Feb;413(4):343–7

Oxygen uptake in saline-perfused rabbit heart is decreased to a similar extent during reductions in flow and in arterial oxygen concentration. van Beek JH, et al. **Pflugers Arch** 1989 May;414(1):82–8

Rate of decrease of myocardial O2 consumption due to cardiac arrest in anesthetized goats. Vergroesen I, et al. **Pflugers Arch** 1988 Dec;413(2):160–6

A portable scanning reflectance spectrophotometer using visible wavelengths for the rapid measurement of skin pigments. Feather JW, et al. **Phys Med Biol** 1989 Jul; 34(7):807–20

Model calculations of oxygen supply to tissue slice preparations. Lipinski HG. **Phys Med Biol** 1989 Aug; 34(8):1103–11

Oxygen consumption during calisthenic exercise in women with coronary artery disease. Gleeson PB, et al. **Phys Ther** 1989 Apr;69(4):260–3

Effects of a developmental physical therapy program on oxygen saturation and heart rate in preterm infants. Kelly MK, et al. **Phys Ther** 1989 Jun;69(6):467–74

Effects of simulated weightlessness and sympathectomy on maximum VO2 of male rats. Woodman CR, et al. **Physiologist** 1989 Feb;32(1 Suppl):S35–6

Oxidative capacity of muscle and mitochondria: correlation of physiological, biochemical, and morphometric characteristics. Schwerzmann K, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1583–7

Oxygen consumption by portal vein-drained organs and by whole animal in conscious growing swine. Yen JT, et al. **Proc Soc Exp Biol Med** 1989 Apr;190(4):393–8

Nucleotides, oxygen free radical scavengers, and brain protection: mouse model. Abadir AR, et al. **Proc West Pharmacol Soc** 1989;32:91–3

The relationship between oxygen supply and oxygen uptake in septic shock: the possible role of endotoxin. De Backer D, et al. **Prog Clin Biol Res** 1989;308:181–4 (16 ref.)

Analysis of the determinants of CO2 and O2 exchange ratios in shock. Giovannini I, et al. **Prog Clin Biol Res** 1989; 308:613–7

Pulmonary pressure-flow relationship and peripheral oxygen supply in ARDS due to bacterial sepsis. Kloess T, et al. **Prog Clin Biol Res** 1989;308:175–80

Tissue oxygen debt as a determinant of postoperative organ failure. Shoemaker WC, et al. **Prog Clin Biol Res** 1989; 308:133–6

Design of microvasculature and gas exchange. Weibel ER. **Prog Clin Biol Res** 1989;295:147–55

Energy cost of walking with flat feet. Otman S, et al. **Prosthet Orthot Int** 1988 Aug;12(2):73–6

Effect of reperfusion on O2 supply/consumption balance in ischemic canine left ventricle. Upsher ME, et al. **Res Exp Med (Berl)** 1988;188(5):377–90

Gas exchange and metabolic transients in heart transplant recipients. Cerretelli P, et al. **Respir Physiol** 1988 Dec; 74(3):355–71

Significance of the Bohr effect for tissue oxygenation in a model with counter-current blood flow. Kobayashi H, et al. **Respir Physiol** 1989 Jun;76(3):277–88

High rate of O2 consumption in exercising foxes: large PO2 difference drives diffusion across the lung. Longworth KE, et al. **Respir Physiol** 1989 Sep;77(3):263–76

Metabolic and ventilatory rates in newborn kittens during acute hypoxia. Mortola JP, et al. **Respir Physiol** 1988 Jul; 73(1):55–67

Diaphragm VO2, diaphragm EMG, pressure-time product and calculated ventilation in newborn lambs during hypercapnic hyperpnoea. Soust M, et al. **Respir Physiol** 1989 Apr;76(1):107–17

Oxygen regulation capacity in Discoglossus pictus tadpoles between moderate hyperoxia and acute hypoxia in water. Barja de Quiroga G, et al. **Rev Esp Fisiol** 1988 Sep; 44(3):323–9

Colloid versus crystalloid cardioplegia. A prospective, randomized clinical study. Lindberg H, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):127–33

Effects of physiological oxygen environment on drug-induced cell lethality of multicellular tumor spheroids from human lung cancer. Inoue S, et al. **Sel Cancer Ther** 1989;5(1):13–22

Height-adjusted, rate-specific, single-stage step test for predicting maximal oxygen consumption. Francis K, et al. **South Med J** 1989 May;82(5):602–6

Elevation of metabolic rate following exercise. Implications for weight loss. Brehm BA. **Sports Med** 1988 Aug;6(2):72–8 (42 ref.)

Exercise and liver disease. Ritland S. **Sports Med** 1988 Aug; 6(2):121–6 (16 ref.)

Blood flow and oxygen consumption rates of human gynecological tumors xenografted into rnu/rnu-rats. Vaupel P, et al. **Strahlenther Onkol** 1989 Jul;165(7):502

Effect of partial burn excision and closure on postburn oxygen consumption. Demling RH, et al. **Surgery** 1988 Nov;104(5):846–52

Whole body gas exchange: amino acid and lactate clearance as indicators of initial and early allograft viability in liver transplantation. Svensson KL, et al. **Surgery** 1989 Apr; 105(4):472–80

Exercise responses in patients treated for pulmonary tuberculosis by thoracoplasty. Phillips MS, et al. **Thorax** 1989 Apr;44(4):268–74

Effects of verapamil and BAY K 8644 on the hypoxic contraction of the isolated human pulmonary artery. Ohe M, et al. **Tohoku J Exp Med** 1989 Jan;157(1):81–2

Donor rating in human liver transplantation: correlation of oxygen consumption after revascularization with MEGX formation in donors. Burdelski M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2392–3

Liver transplantation—energy expenditure, nitrogen loss, and substrate oxidation rate in the first two postoperative days. Delafosse B, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2453–4

Total oxygen consumption, ketone body ratio and a special score as early indicators of irreversible liver allograft dysfunction. Gubernatis G, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 2):2279–81

Mitochondrial respiratory function, adenine nucleotides and antioxygenic enzymes in pig liver transplantation. Sakurada M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1321–2

[Formalization of the knowledge on tissue perfusion and oxygenation--a stage in developing an expert system for assessing basic states in resuscitation and intensive treatment] Khinkov O, et al. **Khirurgiia (Sofiia)** 1988; 41(5):78–83 (Eng. Abstr.) **(Bul)**

[A survey on oxygen consumption during submaximal exercise and the classification of cardiac function] Zhang YL. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1989 Feb; 17(1):29–31 **(Chi)**

[The relationship between coronary artery stenosis and myocardial metabolism of oxygen demand in dogs] Chen SL, et al. **Sheng Li Hsueh Pao** 1989 Jun;41(3):272–7 (Eng. Abstr.) **(Chi)**

[Methodical aspects of determining the anaerobic threshold in progressive stress tests] Feitová S, et al. **Vnitr Lek** 1988 Sep;34(9):874–81 (Eng. Abstr.) **(Cze)**

[Measurement of oxygen consumption during exertion in patients with cardiac failure] Cohen-Solal A, et al. **Ann Cardiol Angeiol (Paris)** 1988 Dec;37(10):601–8 (57 ref.) (Eng. Abstr.) **(Fre)**

[Anaerobic metabolism in children. Comparison of high and low altitude] Coudert J, et al. **Ann Pediatr (Paris)** 1988 Dec;35(10):753–6 (Eng. Abstr.) **(Fre)**

[Multiparameter correlative study of respiratory gas exchange during exercise] Kayanakis JG, et al. **Arch Mal Coeur** 1988 Dec;81(12):1507–13 (Eng. Abstr.) **(Fre)**

[Hemodynamic and gasometric modifications during the anesthesia recovery period in patients undergoing ventilation after surgery of the abdominal aorta] Janvier G, et al. **Cah Anesthesiol** 1989 Jan–Feb;37(1):3–9 (Eng. Abstr.) **(Fre)**

[Relation between endurance time and maximal oxygen consumption during supramaximal running] Camus G, et al. **J Physiol (Paris)** 1988;83(1):26–31 (Eng. Abstr.) **(Fre)**

[Functional rehabilitation of arteriopathies] Féry D. **Phlebologie** 1989 Apr–Jun;42(2):327–38 (Eng. Abstr.) **(Fre)**

[Does Swan-ganz catheter help in weaning from controlled ventilation after mitral valve replacement?] Lehot JJ, et al. **Presse Med** 1988 Nov 12;17(40):2121–4 (Eng. Abstr.) **(Fre)**

[Fluorescent formazans in flow cytometry. Studies of their oxygen sensitivity] Kuhlmann U, et al. **Acta Histochem Suppl (Jena)** 1989;37:221–30 (Eng. Abstr.) **(Ger)**

[Optimization of ventilation in anesthesia. 5. Studies on the effect of different forms of ventilation on pulmonary hemodynamics, O2 transport and O2 utilization in tissue] Hakenbeck H, et al. **Anaesthesiol Reanim** 1988;13(6):351–62 (Eng. Abstr.) **(Ger)**

[Errors in the determination of oxygen consumption using the analysis of respiratory gases] Hieronymi U, et al. **Anaesthesiol Reanim** 1989;14(3):167–74 (Eng. Abstr.) **(Ger)**

[Initial clinical experiences with the S & W Kaloximet, a device for measuring oxygen consumption in anesthesia and intensive medicine] Lübbe N, et al. **Anaesthesist** 1989 Mar; 38(3):147–51 (Eng. Abstr.) **(Ger)**

[The effect of pre-oxygenation on hemodynamics and oxygen consumption] Reinhart K, et al. **Anaesthesist** 1989 May; 38(5):233–7 (Eng. Abstr.) **(Ger)**

[The oxygen uptake capacity of swine] Steinhardt M, et al. **Arch Exp Veterinarmed** 1989 Mar;43(2):309–14 (Eng. Abstr.) **(Ger)**

[Gas metabolism and body temperature during submaximal, maximal and supramaximal physical activity of swine] Steinhardt M, et al. **Arch Exp Veterinarmed** 1989 Mar; 43(2):301–8 (Eng. Abstr.) **(Ger)**

[Oxygen consumption in rats in changes of a fixed circadian rhythm] Ankermann H, et al. **Biomed Biochim Acta** 1988; 47(12):1081–4 **(Ger)**

[Continuous measurement of oxygen partial pressure in the conjunctiva palpebrae] Bastian GO, et al. **Fortschr Ophthalmol** 1988;85(6):654–8 (Eng. Abstr.) **(Ger)**

[New biochemical models for cataract research] Kröner R, et al. **Fortschr Ophthalmol** 1989;86(1):26–31 (Eng. Abstr.) **(Ger)**

[Simultaneous determination of oxygen partial pressure in the scala tympani, electrocochleography and blood pressure values in the guinea pig] Lamm K, et al. **HNO** 1989 Feb;37(2):48–55 (Eng. Abstr.) **(Ger)**

[Conjunctival oxygen partial pressure in cerebral infarct before and following infusion of 500 ml of 10 percent hydroxyethyl starch 200/0.5] Staedt U, et al. **Klin Wochenschr** 1988 Nov 15;66(22):1146 **(Ger)**

[Conjunctival oxygen pressure in patients with acute cerebral infarct] Staedt U, et al. **Klin Wochenschr** 1988 Jul 15; 66(14):628–32 (Eng. Abstr.) **(Ger)**

[Oxygen radical production of alveolar inflammatory cells in sarcoidosis and idiopathic lung fibrosis] Strausz J, et al. **Pneumologie** 1989 Aug;43(8):440–5 (Eng. Abstr.) **(Ger)**

[Ability to transport oxygen of temporary full and split-skin transplants] Bäumer F, et al. **Unfallchirurg** 1989 Apr; 92(4):206–8 (Eng. Abstr.) **(Ger)**

[Clinical studies of the effect of physical training therapy on oxygen absorption and pulmonary artery pressure in persons with chronic obstructive lung diseases] Rabe U, et al. **Z Erkr Atmungsorgane** 1989;172(2):118–22 (Eng. Abstr.) **(Ger)**

[Validation of indirect myocardial parameters of oxygen consumption in patients with normal and pathologically changed ventricular function] Kahles H, et al. **Z Kardiol** 1989 May;78(5):285–93 (Eng. Abstr.) **(Ger)**

[Functional properties of isolated kidney mitochondria of rats in food deprivation] Jung K. **Z Urol Nephrol** 1989 May; 82(5):273–6 (Eng. Abstr.) **(Ger)**

[Clinical and instrumental study of patients with syndrome X associated or unassociated with excessive myocard'al oxygen consumption low work loads] Mammi G. **Clin Ter** 1988 Jun 30;125(6):435–41 (Eng. Abstr.) **(Ita)**

[High energy phosphates and mitochondrial respiratory function after 24 hours cardiac preservation—comparison between simple hypothermic immersion and continuous hypothermic perfusion] Tago M, et al. **Kokyu To Junkan** 1989 Jan;37(1):61–3 (Eng. Abstr.) **(Jpn)**

[The effect of induced hyperthermia on hemodynamics, coronary circulation and metabolic rate in the dog]

Noguchi T. **Masui** 1988 Dec;37(12):1510–7 (Eng. Abstr.) **(Jpn)**

[Experimental study of hepatic hemodynamics and hepatic oxygen consumption after hepatectomy] Asahi K, et al. **Nippon Geka Gakkai Zasshi** 1989 Feb;90(2):228–42 (Eng. Abstr.) **(Jpn)**

[Cerebral blood flow and oxygen metabolism in patients with Parkinson's disease] Kitamura S, et al. **No To Shinkei** 1988 Oct;40(10):979–85 (Eng. Abstr.) **(Jpn)**

[Intracellular oxygen concentration—oxygen gradient] Tamura M, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):2855–61 **(Jpn)**

[Improved aerobic exercise performance after short–term training of patients with coronary disease] Nordrehaug JE, et al. **Tidsskr Nor Laegeforen** 1989 Feb 28;109(6):687–9 (Eng. Abstr.) **(Nor)**

[Studies of the correlation of physiologic energy out put and efficiency and physical work capacity (VO2max) of turners] Jopkiewicz A. **Med Pr** 1988;39(4):271–5 (Eng. Abstr.) **(Pol)**

[Silent myocardial anoxia. A change in the philosophy of diagnosing and treating ischemic heart disease?] Dubiel JP, et al. **Przegl Lek** 1989;46(2):301–5 (33 ref.) **(Pol)**

[Kinetics of oxygen metabolism in pregnant women with high risk of developing late toxemia during intermittent normobaric hypoxia] Chizhov AIa, et al. **Akush Ginekol (Mosk)** 1989 May;(5):17–20 (Eng. Abstr.) **(Rus)**

[Effect of hyperoxygenation on oxygen metabolism kinetics in women in the third trimester of pregnancy] Karash IuM, et al. **Akush Ginekol (Mosk)** 1989 May;(5):62–4 **(Rus)**

[Acid–base and gas composition of the amniotic fluid during delivery of low birth weight fetuses] Komissarova LM, et al. **Akush Ginekol (Mosk)** 1988 Dec;(12):42–5 (Eng. Abstr.) **(Rus)**

[Characteristics of the functioning of the oxygen supply system on the 1st day following trauma in patients with various courses of the post–traumatic period] Edeleva NV, et al. **Anesteziol Reanimatol** 1989 Mar–Apr;(2):47–51 (Eng. Abstr.) **(Rus)**

[Assessment of the degree of severity of the status of resuscitated patients by parameters of the oxygen transport system] Riabov GA, et al. **Anesteziol Reanimatol** 1988 Sep–Oct;(5):7–10 (Eng. Abstr.) **(Rus)**

[Various characteristics of central hemodynamics and oxygen balance in patients with severe mechanical trauma in relation to the course of the post–traumatic period] Vasilenko NI, et al. **Anesteziol Reanimatol** 1988 Jul–Aug; (4):27–32 (Eng. Abstr.) **(Rus)**

[Recording of the respiration of skinned cardiac fibers—a method that permits an evaluation of the functional parameters of mitochondria without their isolation from the tissue] Kuznetsov AV, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):166–9 (Eng. Abstr.) **(Rus)**

[Cellular mechanisms of transitory smooth muscle contraction of the coronary arteries during hypoxia: role of intracellular Ca2+] Solov'ev AI, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):5–7 (Eng. Abstr.) **(Rus)**

[Criteria of individual variations in the reactivity of the respiratory system] Berezovskiĭ VA, et al. **Fiziol Zh** 1989 May–Jun;35(3):62–7 (Eng. Abstr.) **(Rus)**

[Physical work capacity of Alpinists under conditions of extremely low pO2 in inspired air] Kolchinskaia AZ, et al. **Fiziol Zh** 1989 May–Jun;35(3):68–74 (Eng. Abstr.) **(Rus)**

[Effect of neurotensin on circulation and oxygen consumption of the intestines] Pavliĭk VV, et al. **Fiziol Zh** 1988 Nov–Dec;34(6):59–65 (Eng. Abstr.) **(Rus)**

[Brain oxygenation in newborn rats in hyperoxic and oxygen–free gaseous environments] Raguzin AV. **Fiziol Zh** 1988 Jul–Aug;34(4):41–6 (Eng. Abstr.) **(Rus)**

[Dynamics of oxygen tension in the brain and subcutaneous adipose tissue of newborn rats during anoxia and reoxygenation] Raguzin AV. **Fiziol Zh** 1989 May–Jun; 35(3):74–80 (Eng. Abstr.) **(Rus)**

[The blood supply and oxygen balance of the different tissues of the extremities following experimental sympathectomy] Prokhorov GG. **Fiziol Zh SSSR** 1988 Oct;74(10):1447–53 (Eng. Abstr.) **(Rus)**

[Effect of an increase in the blood flow through the vessels of skeletal muscle on its functional indices and oxygen demand] Shustova NIa, et al. **Fiziol Zh SSSR** 1988 Dec; 74(12):1776–85 **(Rus)**

[Oxygen supply and the function of the isolated heart under various degrees of anemic hypoxia] Iarochkin VS, et al. **Gematol Transfuziol** 1988 Jul;33(7):21–5 (Eng. Abstr.) **(Rus)**

[The role of the parasympathetic nervous system in regulating the oxygen tension and regional blood flow in the digestive organs of rats] Tsibulevvskiĭ AIu, et al. **Izv Akad Nauk SSSR [Biol]** 1989 May–Jun;(3):461–5 (Eng. Abstr.) **(Rus)**

[Normal indicators of spiroergometry in young persons] Alishin II. **Kardiologiia** 1989 May;29(5):52–6 (Eng. Abstr.) **(Rus)**

[Clinical observation of a patient who participated in a marathon race after myocardial infarction] Aronov DM, et al. **Kardiologiia** 1988 Sep;28(9):99–100 **(Rus)**

[Adaptation of myocardial function to conditions of myocardial insufficiency in patients with marked coronary arteriosclerosis] Furkalo NK, et al. **Kardiologiia** 1989 Mar; 29(3):30–4 (Eng. Abstr.) **(Rus)**

[Central hemodynamics and oxygen supply in patients with ischemic heart disease associated with chronic bronchitis] Kozhinskiĭ VM, et al. **Kardiologiia** 1989 Apr;29(4):52–4 (Eng. Abstr.) **(Rus)**

[Current possibilities of bloodless quantitative evaluation of the pumping function reserve of the heart based on the study of oxygen consumption during the treadmill test] Kudriashev VE, et al. **Kardiologiia** 1989 May;29(5):48–52 (Eng. Abstr.) **(Rus)**

[Interrelations of tissue and intravascular characteristics of microcirculation in patients with acute disorders of coronary circulation] Tsapaev VG, et al. **Kardiologiia** 1989 Feb;29(2):102–4 **(Rus)**

[Evaluation of the effectiveness of sympathectomy using the skin oximetry method] Prokhorov GG, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):44–7 (Eng. Abstr.) **(Rus)**

[Early signs of decompression of the body in acute suppurative peritonitis and ways of increasing the effectiveness of intensive therapy] Shifrin GA, et al. **Klin Khir** 1989;(1):29–31 (Eng. Abstr.) **(Rus)**

[Effect of a 30–day period of hypokinesia on various physiologic and biochemical indicators during maximal physical load] Buzulina VP, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):40–4 (Eng. Abstr.) **(Rus)**

[Rate of endogenous respiration of Pseudomonas cells] Arzamastsev AA. **Mikrobiologiia** 1988 Nov–Dec; 57(6):977–82 (Eng. Abstr.) **(Rus)**

[A method for determining optimal development conditions by summary oxygen consumption] Zotin AI, et al. **Ontogenez** 1989 Jan–Feb;20(1):103–7 (Eng. Abstr.) **(Rus)**

[Prediction of the course of the wound process by the inhibition of mitochondrial respiration by blood serum in an experiment] Eliseeva Sv, et al. **Patol Fiziol Eksp Ter** 1988 May–Jun;(3):45–8 (Eng. Abstr.) **(Rus)**

[An oxygen regimen in acute pneumonia and bronchitis in children] Itskovich AI, et al. **Pediatriia** 1988;(6):107 **(Rus)**

[Transformation of 2,4,6–trinitrotoluene during oxygen and nitrate respiration in Pseudomonas fluorescens] Naumova RP, et al. **Prikl Biokhim Mikrobiol** 1988 Jul–Aug; 24(4):493–8 (Eng. Abstr.) **(Rus)**

[Indices of the local volumetric blood flow and oxygenation in hemangiomas of the face and neck] Agapov VS, et al. **Stomatologiia (Mosk)** 1988 Nov–Dec;67(6):32–4 (Eng. Abstr.) **(Rus)**

[Respiration of mitochondria from brown fat and the mechanism of thermogenesis] Akhmerov RN, et al. **Ukr Biokhim Zh** 1988 Sep–Oct;60(5):53–8 (Eng. Abstr.) **(Rus)**

[Acid–base equilibrium, tissue oxygenation and hemodynamics in arteriosclerosis obliterans after sympathectomy] Peregudov IG, et al. **Vestn Khir** 1989 Feb; 142(2):45–9 (Eng. Abstr.) **(Rus)**

[The importance of the polarographic study of oxygen tension in the tissues in assessing body functional state in sailors] Tiunov LA, et al. **Voen Med Zh** 1989 Mar;(3):47–9 **(Rus)**

[Possibility of achieving the Pasteur effect by ascites carcinoma cells in vivo] Tagi–zade SB, et al. **Vopr Med Khim** 1971 Jul–Aug;17(4):407–11 (Eng. Abstr.) **(Rus)**

[Characteristics of the oxygen allowance in physical loads on patients with ischemic heart disease] Belyĭ DA. **Vrach Delo** 1988 Oct;(10):7–9 (Eng. Abstr.) **(Rus)**

[Characteristics of changes in the oxygen regimen of patients with chronic hepatitis and liver cirrhosis] Volianskaia OE, et al. **Vrach Delo** 1988 Nov;(11):23–5 (Eng. Abstr.) **(Rus)**

[Mitochondrial respiratory activity of the trematode Fasciola hepatica] Savchenko AV, et al. **Zh Evol Biokhim Fiziol** 1988 Nov–Dec;24(6):785–90 (Eng. Abstr.) **(Rus)**

[Oxygen balance of the brain in exogenous neurotoxicoses (review of the literature)] Kvitnitskiĭ–Ryzhov IuN, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):132–42 (160 ref.) **(Rus)**

[Characteristics of psychophysiologic stress in the rowing of cutters] Životić–Vanović M, et al. **Vojnosanit Pregl** 1988 Jul–Aug;45(4):259–65 (Eng. Abstr.) **(Scr)**

[Direct and indirect maximum oxygen consumption in sedentary subjects living at a moderate altitude] González Camarena R, et al. **Arch Inst Cardiol Mex** 1989 May–Jun; 59(3):273–8 (Eng. Abstr.) **(Spa)**

[Oxygen: from the atmosphere to mitochondria] Roca J, et al. **Med Clin (Barc)** 1989 Jun 3;93(1):17–9 (16 ref.) **(Spa)**

[Effects of positive end expiratory pressure on oxygen transport] Silla I, et al. **Rev Esp Anestesiol Reanim** 1989 Mar–Apr;36(2):77–9 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

The effects of prolonged isoflurane anaesthesia on cerebral blood flow and metabolism in the dog. Roald OK, et al. **Acta Anaesthesiol Scand** 1989 Apr;33(3):210–3

Effects of adenosine–induced hypotension on cerebral blood flow and metabolism in the pig. Ståhge K, et al. **Acta Anaesthesiol Scand** 1989 Apr;33(3):199–203

Effects of prostaglandins on perilymphatic oxygenation. Enhancement of cochlear autoregulation by prostacyclin. Nagahara K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 456:143–50

Mechanism of the mitochondrial respiratory toxicity of cephalosporin antibiotics. Tune BM. **Adv Exp Med Biol** 1989;252:313–8

The influence of different anesthetics on the oxygen delivery to and consumption of the heart. van Daal GJ, et al. **Adv Exp Med Biol** 1989;248:527–32

Influences of different routinely used muscle relaxants on oxygen delivery to and oxygen consumption by the heart during xenon–anesthesia. van Woerkens LJ, et al. **Adv Exp Med Biol** 1989;248:673–8

The effect of acetylcholine on regional myocardial O2 consumption and coronary blood flow in the rabbit heart. Weiss HR, et al. **Adv Exp Med Biol** 1989;248:663–71

Role of myocardial oxygen consumption in dipyridamole–induced ischemia. Picano E, et al. **Am Heart J** 1989 Aug;118(2):314–9

Effect of phosphodiesterase inhibition on myocardial oxygen consumption and coronary blood flow. Baim DS. **Am J Cardiol** 1989 Jan 3;63(2):23A–26A

Metabolic and hemodynamic consequences of sodium bicarbonate administration in patients with heart disease. Bersin RM, et al. **Am J Med** 1989 Jul;87(1):7–14

Succinate alters respiration, membrane potential, and intracellular K+ in proximal tubule. Gullans SR, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):F1170–7

Stimulation of oxygen uptake by glucagon is oxygen dependent in perfused rat liver. Kizaki Z, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):G369–76

Vasopressin reduces oxygen uptake in intact dogs but not in sinoaortic–denervated dogs. Liard JF. **Am J Physiol** 1989 Jul;257(1 Pt 2):R1–9

No significant increase in O2 consumption of KCl–arrested dog heart with filling and dobutamine. Nozawa T, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H807–12

Effects of butorphanol tartrate on arterial pressure, jejunal blood flow, vascular resistance, O2 extraction, and O2 uptake in halothane–anesthetized ponies. Stick JA, et al. **Am J Vet Res** 1989 Aug;50(8):1202–6

Hemodynamic changes and oxygen consumption in burned patients during enflurane or isoflurane anesthesia. Gregoretti S, et al. **Anesth Analg** 1989 Oct;69(4):431–6

The interaction of nitrous oxide and isoflurane with incomplete cerebral ischemia in the rat. Baughman VL, et al. **Anesthesiology** 1989 May;70(5):767–74

Regional blood flow and tissue oxygen pressures of the collateral–dependent myocardium during isoflurane anesthesia in dogs. Conzen PF, et al. **Anesthesiology** 1989 Mar;70(3):442–52

The response of individual polypeptides of the mammalian respiratory chain to thyroid hormone. Mutvei A, et al. **Arch Biochem Biophys** 1989 Jan;268(1):215–20

Effects of idebenone and related compounds on respiratory activities of brain mitochondria, and on lipid peroxidation of their membranes. Imada I, et al. **Arch Gerontol Geriatr** 1989 May;8(3):323–41

Effect of thyroxine (T4) and thiourea on the hepatic oxygen consumption of male garden lizards of three different age groups. Sahu N, et al. **Arch Gerontol Geriatr** 1989 Jan; 8(1):55–62

Effect of venoruton on hypoxic stress–induced neurotoxicity in mice and oxygen free radical generation by human neutrophils. Shukla VK, et al. **Arch Int Pharmacodyn Ther** 1989 May–Jun;299:127–33

Regional myocardial O2 consumption and coronary blood flow responses to acetylcholine in rabbit heart. Acad BA, et al. **Arch Int Physiol Biochim** 1989 Apr;97(2):197–204

The effect of magnesium and manganese uptake and accumulation on oxygen consumption and ammonia excretion in Porcellio spinicornis Say (Porcellionidae, Isopoda). Alikhan MA, et al. **Arch Int Physiol Biochim** 1988 Dec;96(5):147–54

Cooperative stimulation by sulfite and crocidolite asbestos fibres of enzyme catalyzed production of reactive oxygen species. Elstner EF, et al. **Arch Toxicol** 1988;62(6):424–7

Acetate–induced changes in cardiac energy metabolism and hemodynamics in the rat. Kiviluoma KT, et al. **Basic Res Cardiol** 1988 Jul–Aug;83(4):431–44

Diacylglycerol kinase inhibitors R59022 and dioctanoylethylene glycol potentiate the respiratory burst of neutrophils by raising cytosolic Ca2+. Nasmith P, et al. **Biochem Biophys Res Commun** 1989 May 30; 161(1):95–100

Lead inhibits oxidative metabolism of macrophages exposed to macrophage–activating factor. Buchmüller–Rouiller Y, et al. **Biochem J** 1989 Jun 1;260(2):325–32

Stimulation of respiration by mitogens in rat thymocytes is independent of mitochondrial calcium. Lakin–Thomas PL, et al. **Biochem J** 1988 Nov 15;256(1):167–73

The O2–dependence of respiration and H2O2 production in the parasitic nematode Ascaridia galli. Paget TA, et al. **Biochem J** 1988 Dec 1;256(2):633–9

Nature of proton cycling during gramicidin uncoupling of oxidative phosphorylation. Luvisetto S, et al. **Biochemistry** 1989 Feb 7;28(3):1100–8

Myeloperoxidase–mediated inhibition of microbial respiration: damage to Escherichia coli ubiquinol oxidase. Rakita RM, et al. **Biochemistry** 1989 Apr 4;28(7):3031–6

Metabolism of round spermatids: gossypol induces uncoupling of respiratory chain and oxidative phosphorylation. Nakamura M, et al. **Biol Reprod** 1988 Nov;39(4):771–8

Impairment of the respiratory chain in the b–c1 region as

early functional event during Fe2+/ascorbate induced peroxidation in rat liver mitochondria. Trümper L, et al. **Biomed Biochim Acta** 1988;47(12):933–9

Thermogenic responses to graded doses of noradrenaline in undernourished Indian male subjects. Kurpad AV, et al. **Br J Nutr** 1989 Mar;61(2):201–8

Potassium-induced increases in oxygen consumption are diminished by age in rat hippocampal slices. Martin FR, et al. **Brain Res** 1989 Jul 17;492(1–2):392–6

Toxicity to and oxygen consumption of the freshwater snail Thiara (Stenomelania) torulosa (Bruguiere) in relation to organophosphorus insecticide exposure. Bharathi C, et al. **Bull Environ Contam Toxicol** 1989 May;42(5):773–7

Heavy metal toxicity to fiddler crabs, Uca annulipes latreille and Uca triangularis (Milne Edwards): respiration on exposure to copper, mercury, cadmium, and zinc. Devi VU, et al. **Bull Environ Contam Toxicol** 1989 Jul; 43(1):165–72

Uptake and distribution of copper sulphate and its effect on the respiration rate of the hemocyanin-producing freshwater snail Lymnaea natalensis. Wolmarans CT, et al. **Bull Environ Contam Toxicol** 1988 Aug;41(2):214–21

Effect of ascorbate on oxygen uptake and growth of Escherichia coli B. Richter HE, et al. **Can J Microbiol** 1988 Jun;34(6):822–5

Depressing effects of calcium antagonists on oxygen consumption in isolated skeletal muscle during potassium depolarization. Barnes WS. **Can J Physiol Pharmacol** 1988 Jun;66(6):836–40

The effects of fluorocitrate on renal glutamine, lactate, alanine, and oxygen metabolism in the dog. Fine A. **Can J Physiol Pharmacol** 1989 Jun;67(6):641–4

Effect of albuterol on oxygen uptake and Na+–K+ ATPase activity of jejunal epithelia and liver in chickens. Rompala RE, et al. **Can J Physiol Pharmacol** 1989 May;67(5):431–4

The respiratory behavior of Lewis carcinoma cells—existence of a cyanide-resistant respiration. Miralpeix M, et al. **Cancer Biochem Biophys** 1989 May; 10(3):227–33

New pluronic-free perfluorocarbon cardioplegia improves myocardial oxygenation. Johnson DL, et al. **Circulation** 1988 Nov;78(5 Pt 2):III153–7

Myocardial oxygen use during epinephrine administration to ischemically injured canine hearts. Lekven J, et al. **Circulation** 1988 Nov;78(5 Pt 2):III125–36

The effects of magnesium on state 3 respiration of liver mitochondria from control and cold-acclimated rats and hamsters. Rochelle RH, et al. **Comp Biochem Physiol [B]** 1978;60(3):267–9

Changes induced by caffeine, theophylline and theobromine on calcium uptake, respiration and ATP levels in rat-liver mitochondria. de la Cruz MJ, et al. **Comp Biochem Physiol [C]** 1988;91(2):443–7

The effect of benzodiazepine on the increase of oxygen consumption in cold exposed rats. Luz J, et al. **Comp Biochem Physiol [C]** 1988;90(1):151–3

Comparison of hydroxyethyl starch and lactated Ringer's solution on hemodynamics and oxygen transport of critically ill patients in prospective crossover studies. Hankeln K, et al. **Crit Care Med** 1989 Feb;17(2):133–5

Inhibition of polymorphonuclear leukocyte respiratory burst by elevated glucose concentrations in vitro. Nielson CP, et al. **Diabetes** 1989 Aug;38(8):1031–5

Flow cytometric analysis of oxidative product formation in phytohemagglutinin-stimulated ethanol-treated immune mononuclear cells. Rouahi N, et al. **Drug Alcohol Depend** 1989 Jan;23(1):55–62

Thermogenic effects of the antiglucocorticoid RU-486 in the rat: involvement of corticotropin-releasing factor and sympathetic activation of brown adipose tissue. Hardwick AJ, et al. **Endocrinology** 1989 Apr;124(4):1684–8

The effects of dietary manipulation upon the respiratory exchange ratio as a predictor of maximum oxygen uptake during fixed term maximal incremental exercise in man. Aitken JC, et al. **Eur J Appl Physiol** 1989;58(7):722–7

Ramp work tests with three different beta-blockers in normal human subjects. Hughson RL. **Eur J Appl Physiol** 1989; 58(7):710–6

Altered relationship between protonmotive force and respiration rate in non-phosphorylating liver mitochondria isolated from rats of different thyroid hormone status. Hafner RP, et al. **Eur J Biochem** 1988 Dec 15;178(2):511–8

Effects of peripheral benzodiazepines upon the O2 consumption of neuroblastoma cells. Larcher JC, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):197–202

Mitochondrial porin regulates the sensitivity of anion carriers to inhibitors. Pronevich LA, et al. **FEBS Lett** 1989 Apr 24;247(2):330–2

2,3,7,8, tetrachlorodibenzo-p-dioxin induces oxygen activation associated with cell respiration. Nohl H, et al. **Free Radic Biol Med** 1989;6(4):369–74

Chemiluminescent and respiratory responses related to thyroid hormone-induced liver oxidative stress. Fernandez V, et al. **Free Radic Res Commun** 1988;5(2):77–84

A new cardiotonic agent, OPC-8212, elevates the myocardial oxygen consumption versus pressure-volume area (PVA) relation in a similar manner to catecholamines and calcium in canine hearts. Futaki S, et al. **Heart Vessels** 1988; 4(3):153–61

Relationship between oxygen transport and oxygen uptake in patients with cirrhosis: effects of vasoactive drugs. Moreau R, et al. **Hepatology** 1989 Mar;9(3):427–32

Effect of Bacillus sphaericus 1593 toxin on choline acetyl transferase and mitochondrial oxidative activities of the mosquito larvae. Narasu ML, et al. **Indian J Biochem Biophys** 1988 Jun;25(3):253–6

Effects of pyocyanine, a phenazine dye from Pseudomonas aeruginosa, on oxidative burst and bacterial killing in human neutrophils. Müller PK, et al. **Infect Immun** 1989 Sep;57(9):2591–6

Serotonin as a modulator of skeletal muscle oxygenation: effects of ketanserin and ritanserin on oxygen pressure distributions. Thorborg P, et al. **Int J Microcirc Clin Exp** 1989 Apr;8(2):191–203

The pancreas and oxygen consumption (Part 2). Steroids do not modify resting pancreatic oxygen consumption in dogs: a preliminary report. Robert JH, et al. **Int J Pancreatol** 1989 Apr;4(3):353–9

Effect of beta-adrenergic blockade on response to exercise in sedentary and active subjects. Brusasco V, et al. **J Appl Physiol** 1989 Jul;67(1):103–9

Maximal aerobic capacity at several ambient concentrations of CO at several altitudes. Horvath SM, et al. **J Appl Physiol** 1988 Dec;65(6):2696–708

Effect of endotoxin on systemic and skeletal muscle O2 extraction. Samsel RW, et al. **J Appl Physiol** 1988 Sep; 65(3):1377–82

Role of menaquinone in inactivation and activation of the Bacillus cereus forespore respiratory system. Escamilla JE, et al. **J Bacteriol** 1988 Dec;170(12):5908–12

Selective priming of rate and duration of the respiratory burst of neutrophils by 1,2-diacyl and 1-O-alkyl-2-acyl diglycerides. Possible relation to effects on protein kinase C. Bass DA, et al. **J Biol Chem** 1988 Dec 25; 263(36):19610–7

1-O-hexadecyl-2-Q-methylglycerol, a novel inhibitor of protein kinase C, inhibits the respiratory burst in human neutrophils. Kramer IM, et al. **J Biol Chem** 1989 Apr 5; 264(10):5876–84

Vasoactive intestinal peptide stimulates long-chain fatty acid oxidation and inhibits acetyl-coenzyme A carboxylase activity in isolated rat enterocytes. Vidal H, et al. **J Biol Chem** 1989 Mar 25;264(9):4901–6

Respiratory burst oscillations in human neutrophils and their correlation with fluctuations in apparent cell shape. Wymann MP, et al. **J Biol Chem** 1989 Sep 25; 264(27):15829–34

Comparison of the effects of nifedipine and nitroglycerin on hemodynamic determinants of myocardial oxygen consumption and supply during exertional angina. Choong CY, et al. **J Cardiovasc Pharmacol** 1989 Mar;13(3):361–9

Lipopolysaccharide priming of human neutrophils for an enhanced respiratory burst. Role of intracellular free calcium. Forehand JR, et al. **J Clin Invest** 1989 Jan; 83(1):74–83

Impaired oxygen utilization. A new mechanism for the hepatotoxicity of ethanol in sub-human primates. Lieber CS, et al. **J Clin Invest** 1989 May;83(5):1682–90

Energy metabolism in trout red cells: consequences of adrenergic stimulation in vivo and in vitro. Ferguson RA, et al. **J Exp Biol** 1989 May;143:133–47

Arachidonate-dependent oxygen consumption in Dictyostelium discoideum. Krill DC, et al. **J Gen Microbiol** 1988 Aug;134 (Pt 8):2123–9

Differential sensitivity of macrophages from herpes simplex virus-resistant and -susceptible mice to respiratory burst priming by interferon-alpha/beta. Ellermann-Eriksen S, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2139–47

Temporal adaptation of neutrophil oxidative responsiveness to n-formyl-methionyl-leucyl-phenylalanine. Acceleration by granulocyte-macrophage colony stimulating factor. English D, et al. **J Immunol** 1988 Oct 1;141(7):2400–6

Dual mechanisms in priming of the chemoattractant-induced respiratory burst in human granulocytes. A Ca2+-dependent and a Ca2+-independent route. Koenderman L, et al. **J Immunol** 1989 Jan 15;142(2):623–8

Laminin promotes the oxidative burst in human neutrophils via increased chemoattractant receptor expression. Pike MC, et al. **J Immunol** 1989 Mar 15;142(6):2004–11

Activation of human neutrophils by substance P. Effect on oxidative metabolism, exocytosis, cytosolic Ca2+ concentration and inositol phosphate formation. Serra MC, et al. **J Immunol** 1988 Sep 15;141(6):2118–24

Suppression of monocyte oxidative response by phenolic glycolipid I of Mycobacterium leprae. Vachula M, et al. **J Immunol** 1989 Mar 1;142(5):1696–701

Respiration of medically important Candida species and Saccharomyces cerevisiae in relation to glucose effect. Niimi M, et al. **J Med Vet Mycol** 1988 Jun;26(3):195–8

Effects of intravenous glucose loading on oxygen consumption, carbon dioxide production, and resting energy expenditure in infants with bronchopulmonary dysplasia. Yunis KA, et al. **J Pediatr** 1989 Jul;115(1):127–32

Improved myocardial oxygen utilization following propranolol infusion in adolescents with postburn hypermetabolism. Minifee PK, et al. **J Pediatr Surg** 1989 Aug;24(8):806–10; discussion 810–1

Regional O2 consumption and coronary flow during beta adrenoceptor stimulation in reperfused canine myocardium. Acad BA, et al. **J Pharmacol Exp Ther** 1989 Aug; 250(2):611–6

Alpha adrenoceptor agonist stimulation of oxygen consumption in rat proximal and distal nephrons. Gesek FA, et al. **J Pharmacol Exp Ther** 1989 May;249(2):529–34

Effect of nisoldipine on coronary resistance, contractility and oxygen consumption of the isolated blood-perfused canine left ventricle. Schipke JD, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):1000–4

Decreased oxygen consumption as a toxic manifestation of protamine sulfate reversal of heparin anticoagulation. Wakefield TW, et al. **J Vasc Surg** 1989 Jun;9(6):772–7

Nifedipine and impaired oxygenation in patients with chronic bronchitis and cor pulmonale [letter] Kalra L, et al. **Lancet** 1989 May 20;1(8647):1135–6

Oxygen transport and delivery in rabbits treated with cyanate. Aono M, et al. **Life Sci** 1974 Sep 15;15(6):1083–90

Vasopressin and angiotensin II stimulate oxygen uptake in the perfused rat hindlimb. Colquhoun EQ, et al. **Life Sci** 1988;43(21):1747–54

Acquisition of tolerance to delta-9-THC as measured by the response of a cellular function. Nazar BL, et al. **Life Sci** 1974 Jun 16;14(12):2513–20

Maximal exercise responses to acute and chronic beta-adrenergic blockade in healthy male subjects. Jilka SM, et al. **Med Sci Sports Exerc** 1988 Dec;20(6):570–3

Prediction of steady-state oxygen consumption during norepinephrine infusions in humans. Sheela ML, et al. **Metabolism** 1988 Oct;37(10):907–9

The effect of thyroid state on respiratory activities of three rat liver mitochondrial fractions. Goglia F, et al. **Mol Cell Endocrinol** 1989 Mar;62(1):41–6

Mitochondrial benzodiazepine receptors mediate inhibition of mitochondrial respiratory control. Hirsch JD, et al. **Mol Pharmacol** 1989 Jan;35(1):157–63

The pancreas and oxygen consumption: 3. Do steroids improve pancreatic O2 consumption response to hypovolemia? Final Report. Robert JH, et al. **Mt Sinai J Med (NY)** 1988 Oct;55(5):365–8

Reduced metabolic rate in acute uremic rats: interrelations between bilateral nephrectomy and anesthesia. Raneburger J, et al. **Nephron** 1989;51(4):569–70

Respiratory chain inhibitors slow gluconeogenesis. **Nutr Rev** 1988 Sep;46(9):329–32 (9 ref.)

Cyanide-induced chronic partial asphyxia in vitro: neurochemical abnormalities and reversal by magnesium. Sher PK. **Pediatr Neurol** 1987 Jul–Aug;3(4):197–202

Beta-adrenergic influence on increased myocardial oxygen consumption during hypoxemia in awake newborn lambs. Fisher DJ. **Pediatr Res** 1989 Jun;25(6):585–90

Endogenous adenosine improves work rate to oxygen consumption ratio in catecholamine stimulated isovolumic rat heart. Headrick J, et al. **Pflugers Arch** 1989 Feb; 413(4):354–8

Effects of fructose-1,6-diphosphate on heart rate, ventilation, oxygen consumption and endurance performance. Ripari P, et al. **Pharmatherapeutica** 1988;5(4):249–55

Effects of midazolam (a benzodiazepine) on cerebral perfusion and oxygenation in dogs. Yeh FC, et al. **Proc Natl Sci Counc Repub China [B]** 1988 Jul;12(3):174–9

Vasoactive intestinal peptide inhibits the respiratory burst in human monocytes by a cyclic AMP-mediated mechanism. Wiik P. **Regul Pept** 1989 May;25(2):187–97

Asbestos-induced activation of the respiratory burst in rabbit neutrophils. Elferink JG, et al. **Res Commun Chem Pathol Pharmacol** 1988 Aug; 61(2):201–11

Anti oxy-radical properties of trimetazidine. Guarnieri C, et al. **Res Commun Chem Pathol Pharmacol** 1989 May; 64(2):215–25

Studies of embryotoxic mechanisms of niridazole: evidence that oxygen depletion plays a role in dysmorphogenicity. Fantel AG, et al. **Teratology** 1989 Mar;39(3):243–51

Changes in day and night time oxygenation with protriptyline in patients with chronic obstructive lung disease. Sériès F, et al. **Thorax** 1989 Apr;44(4):275–9

Inhibition of mitochondrial respiration by cationic rhodamines as a possible teratogenicity mechanism. Ranganathan S, et al. **Toxicol Appl Pharmacol** 1989 Jun 1;99(1):81–9

New 4-hydroxypyridine and 4-hydroxyquinoline derivatives as inhibitors of NADH-ubiquinone reductase in the respiratory chain. Chung KH, et al. **Z Naturforsch [C]** 1989 Jul-Aug;44(7–8):609–16

[Effects of nitrendipine on coronary flow and myocardial oxygen and carbon dioxide metabolism in dogs] Rao MR, et al. **Yao Hsueh Hsueh Pao** 1988 Feb;23(2):100–3 (Eng. Abstr.) **(Chi)**

[Inhibition of mitochondrial respiration by mepivacaine] di Jeso F, et al. **C R Soc Biol (Paris)** 1988;182(3):266–9 (Eng. Abstr.) **(Fre)**

[The effect of adrenaline and noradrenaline on the oxygen supply of the myocardium during cardiopulmonary resuscitation] Lindner KH, et al. **Anaesthesist** 1989 May; 38(5):245–50 (Eng. Abstr.) **(Ger)**

[The effect of pancuronium and norcuron on hemodynamics, coronary circulation and myocardial oxygen consumption in coronary surgery patients] Günnicker M, et al. **Anasth Intensivther Notfallmed** 1989 Apr;24(2):88–93 (Eng. Abstr.) **(Ger)**

[Oxygen consumption and RQ-values in rats anesthesized with urethane and pentobarbital during continuous infusion of noradrenaline with and without glucose load] Ankermann H. **Biomed Biochim Acta** 1988;47(7):647–53 (Eng. Abstr.) **(Ger)**

[Effect of a 10% and 6% hydroxyethyl starch solution (molecular weight 200,000/0.62) in comparison with a 10%

dextran solution (molecular weight 40,000) on flow properties of blood and tissue oxygen pressure in patients with intermittent claudication] Ehrly AM, et al. **Infusionstherapie** 1988 Oct;15(5):181–7 (Eng. Abstr.) (Ger)

[Sense and nonsense in barbiturate-induced functional paralysis for the protective and therapeutic decrease in cerebral oxygen requirements] Schneider D, et al. **Psychiatr Neurol Med Psychol Beih** 1988;40:36–43 (Ger)

[Effects of naftidrofuryl on macro-, microcirculation, tissue oxygen consumption and blood flow] Kiesewetter H, et al. **Vasa Suppl** 1988;24:21–6 (Eng. Abstr.) (Ger)

[Modification of vascular resistance and O2 utilization by prostaglandin E1] Stark G, et al. **Vasa Suppl** 1988;26:116–9 (Eng. Abstr.) (Ger)

[Drug effects on myocardial oxygen consumption, systolic arterial pressure, diastolic arterial pressure and heart rate at rest and during exercise: comparison of enalapril and captopril] Striano U, et al. **Cardiologia** 1988 Sep;33(9):841–6 (Eng. Abstr.) (Ita)

[Assessment of myocardial oxygen consumption during hypothermic perfusion on arrested heart with perfluorochemical and blood cardioplegia] Tamura K. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Apr;37(4):612–21 (Eng. Abstr.) (Jpn)

[Studies on the beneficial effect of levocarnitine chloride (LC–80) on organic acidemias, especially propionic acidemia and methylmalonic acidemia] Fujisawa S, et al. **Nippon Yakurigaku Zasshi** 1989 May;93(5):305–14 (Eng. Abstr.) (Jpn)

[Circulatory and metabolic effects of neuropeptides on the stomach] Gustaw P. **Folia Med Cracov** 1988;29(1–2):3–19 (Eng. Abstr.) (Pol)

[Effect of nicotine on mesenteric circulation and tissue oxygen uptake] Pawlik WW, et al. **Folia Med Cracov** 1988; 29(1–2):73–85 (Eng. Abstr.) (Pol)

[Isothiobarbamine prevention of disorders of carbohydrate and oxygen metabolism and of the development of brain edema in the early period after an intracerebral hemorrhage] Plotnikov MB, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):688–90 (Eng. Abstr.) (Rus)

[Effect of carminomycin on the enzyme systems of the metabolism of active forms of oxygen and on free-radical lipid oxidation in August rats with Walker carcinosarcoma 256] Tazhibaev ShS, et al. **Eksp Onkol** 1989;11(4):66–70 (Eng. Abstr.) (Rus)

[Effect of dimephosphon on the blood circulation and oxygen tension in the brain of normal waking rabbits and in motion sickness] Beketov AI, et al. **Farmakol Toksikol** 1988 Sep–Oct;51(5):35–8 (Eng. Abstr.) (Rus)

[Effect of dopamine on the blood supply and oxygen balance of the ischemic myocardium] Katkov EV, et al. **Farmakol Toksikol** 1988 Jul–Aug;51(4):41–4 (Eng. Abstr.) (Rus)

[Effect of helium and argon on the oxygen uptake by lymphocytes] Govorukha TN, et al. **Fiziol Zh** 1989 Mar–Apr;35(2):93–5 (Eng. Abstr.) (Rus)

[A compensatory low-energy shift in the respiration of liver mitochondria exposed to a detergent] Zhivotnikova NV, et al. **Gig Sanit** 1988 Dec;(12):80–1 (Rus)

[Effect of hyperbaric oxygenation on tissue respiratory function and lipid peroxidation in experimental chronic phosphorus poisoning] Orynbaev TO, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):57–9 (Rus)

[Changes in central hemodynamics and gas exchange after a single and scheduled administration of obsidan in patients with exertion-induced stenocardia and various types of blood circulation] Kozhinskiĭ VM, et al. **Kardiologiia** 1989 May;29(5):20–3 (Eng. Abstr.) (Rus)

[Evaluation of the adequacy of hypotensive therapy based on the status of the tissue oxygen system and serum lactate dehydrogenase and cytochrome oxidase activities in patients with hypertension] Kulichenko LL, et al. **Kardiologiia** 1988 Oct;28(10):31–6 (Eng. Abstr.) (Rus)

[Oxygen supply of the body during the administration organofluorine emulsions (a pathophysiological analysis)] Iarochkin VS, et al. **Patol Fiziol Eksp Ter** 1988 May–Jun; (3):81–6 (49 ref.) (Rus)

[Effect of ethacizine on indices of the oxygen regimen and blood perfusion of the skin in psoriasis patients] Kurdina MI, et al. **Ter Arkh** 1988;60(10):75–8 (Eng. Abstr.) (Rus)

[Effect of cadmium ions on the respiration, cation transport and morphology of the liver mitochondria in the rat and the lamprey] Skul'skiĭ IA, et al. **Tsitologiia** 1988 Aug; 30(8):956–62 (Eng. Abstr.) (Rus)

[Effect of bacterial endotoxin on the respiratory function of liver mitochondria] Natanzon LV. **Ukr Biokhim Zh** 1988 Jul–Aug;60(4):91–5 (Eng. Abstr.) (Rus)

RADIATION EFFECTS

Effects of ultraviolet radiation on the oxygen uptake rate of the rabbit cornea. Lattimore MR Jr. **Optom Vis Sci** 1989 Feb;66(2):117–22

Photosensitization by antitumor agents—7. Correlation between anthracenedione-photosensitized DNA damage, NADH oxidation and oxygen consumption following visible light illumination. Hartley JA, et al. **Photochem Photobiol** 1988 Jul;48(1):19–25

[Rhodopsin photo-oxidation: oxygen consumption and spectrum of activity] Starostin AV, et al. **Biofizika** 1988 May–Jun;33(3):452–5 (Eng. Abstr.) (Rus)

[Hypooxygenation in populations of radionuclide-carrying mammals] Il'enko AI, et al. **Dokl Akad Nauk SSSR** 1988; 300(6):1510–1 (Rus)

[Change in the replicative synthesis of DNA and in respiration during gamma-irradiation of cultured human lymphocytes] Seĭlanov AS, et al. **Radiobiologiia** 1988 Sep–Oct;28(5):607–10 (Eng. Abstr.) (Rus)

OXYGEN DEFICIENCY see **ANOXIA**

OXYGEN INHALATION THERAPY

The effect of placebo in the alcohol withdrawal state. Lichtigfeld FJ, et al. **Alcohol Alcohol** 1989;24(2):109–12

Home oxygen therapy for chronic lung disease in extremely low-birth-weight infants. Hudak BB, et al. **Am J Dis Child** 1989 Mar;143(3):357–60

The effect of six months of daily treatment with the beta-2 agonist oral pirbuterol on pulmonary hemodynamics in patients with chronic hypoxic cor pulmonale receiving long-term oxygen therapy. Biernacki W, et al. **Am Rev Respir Dis** 1989 Feb;139(2):492–7

The effects of controlled oxygen therapy on ventricular function in patients with stable and decompensated cor pulmonale [letter; comment] Weitzenblum E. **Am Rev Respir Dis** 1989 Jan;139(1):285–6. **Comment on:** Am Rev Respir Dis 1988 Jun;137(6):1289–95

Early postoperative arterial oxygen desaturation. Determining factors and response to oxygen therapy. Canet J, et al. **Anesth Analg** 1989 Aug;69(2):207–12

Supplemental oxygen and dependent positioning as adjunctive measures to improve forefoot tissue oxygenation. Johnson WC, et al. **Arch Surg** 1988 Oct; 123(10):1227–30

Amniotic fluid embolism [letter] Fay R. **Aust N Z J Obstet Gynaecol** 1988 Aug;28(3):241

Guidelines for the use of pulse oximetry in the non-invasive estimation of oxygen saturation in oxygen-dependent newborn infants. Reynolds GJ, et al. **Aust Paediatr J** 1988 Dec;24(6):346–50

Prescription of oxygen concentrators for long term oxygen treatment [letter] **BMJ** 1988 Dec 3;297(6661):1468–9

Long term oxygen therapy (LTOT) for chronic respiratory insufficiency. Sadoul P. **Bull Int Union Tuberc Lung Dis** 1988 Dec;63(4):42–8 (27 ref.)

Nocturnal oxygen therapy does not improve snorers' intelligence. Block AJ, et al. **Chest** 1989 Feb;95(2):274–8

Relationship between improvement in exercise performance with supplemental oxygen and hypoxic ventilatory drive in patients with chronic airflow obstruction. Light RW, et al. **Chest** 1989 Apr;95(4):751–6

Septal rupture: effect of oxygen administration. Hollander G, et al. **Clin Cardiol** 1988 Dec;11(12):848–50

Home oxygen therapy. Outcome of infants discharged from NICU on continuous treatment. Sauve RS, et al. **Clin Pediatr (Phila)** 1989 Mar;28(3):113–8

Pulmonary artery pressure changes in primary pulmonary hypertension after verapamil and oxygen. Dubiel JP, et al. **Cor Vasa** 1988;30(3):200–10

Oxygen delivery and lactic acidosis [letter] Benjamin E, et al. **Crit Care Med** 1989 Mar;17(3):299

Recommendations for long term oxygen therapy (LTOT). European Society of Pneumology Task Group. **Eur Respir J** 1989 Feb;2(2):160–4

Recommendations for long term oxygen therapy (LTOT). Report on an SEP (European Society of Pneumology) Task Group [letter] Ström K. **Eur Respir J** 1989 May;2(5):481

A national register for long-term oxygen therapy in chronic hypoxia: preliminary results. Ström K, et al. **Eur Respir J** 1988 Dec;1(10):952–8

Arterial blood gas changes with a hyperinflation and hyperoxygenation suctioning intervention in critically ill patients. Chulay M. **Heart Lung** 1988 Nov;17(6 Pt 1):654–61

Phase I/II study of Fluosol-DA and 100% oxygen as an adjuvant to radiation in the treatment of advanced squamous cell tumors of the head and neck. Lustig R, et al. **Int J Radiat Oncol Biol Phys** 1989 Jun;16(6):1587–93

Supplemental oxygen reduces right ventricular hypertrophy in monocrotaline-injected rats. Hill NS, et al. **J Appl Physiol** 1989 Apr;66(4):1642–8

Accurate determination of end-tidal carbon dioxide during administration of oxygen by nasal cannulae. Bowe EA, et al. **J Clin Monit** 1989 Apr;5(2):105–10

Nocturnal home oxygen in the treatment of hypoxemic cystic fibrosis patients. Zinman R, et al. **J Pediatr** 1989 Mar; 114(3):368–77

Transient pulmonary vascular lability: a form of mild pulmonary hypertension of the newborn not requiring mechanical ventilation. Bonta BW. **J Perinatol** 1988 Winter;8(1):19–23

Hemodynamic changes in growth retarded fetuses during maternal oxygen administration as predictors of fetal outcome. Arduini D, et al. **J Ultrasound Med** 1989 Apr; 8(4):193–6

Reappraisal of OP-1206, a prostaglandin E1 derivative in combination with low-flow oxygen inhalation therapy in chronic lung disease. Ishizaki T, et al. **Jpn J Med** 1989 Jan–Feb;28(1):34–40

Hyperbaric and normobaric oxygen in acute carbon monoxide poisoning [letter] James PB. **Lancet** 1989 Sep 30;2(8666):799–80

Trial of normobaric and hyperbaric oxygen for acute carbon monoxide intoxication. Raphael JC, et al. **Lancet** 1989 Aug 19;2(8660):414–9

Acute effects of oxygen, nifedipine, and diltiazem in patients with cystic fibrosis and mild pulmonary hypertension. Davidson A, et al. **Pediatr Pulmonol** 1989;6(1):53–9

Supplemental oxygen and exercise ability in chronic obstructive airways disease. Davidson AC, et al. **Thorax** 1988 Dec;43(12):965–71

Supplemental oxygen and quality of sleep in patients with chronic obstructive lung disease. McKeon JL, et al. **Thorax** 1989 Mar;44(3):184–8

Heliox treatment for spinal decompression sickness following air dives. Douglas JD, et al. **Undersea Biomed Res** 1988 Jul;15(4):315–9

Helium and oxygen mixtures in the treatment of compressed-air illness [letter] James PB. **Undersea Biomed Res** 1988 Jul;15(4):321–2

Air vs. He-O2 recompression treatment of decompression sickness in guinea pigs. Lillo RS, et al. **Undersea Biomed Res** 1988 Jul;15(4):283–300

[The rule of changes in arterial blood gas in COPD patients with respiratory failure and efficacy of oxygen therapy] Rong ZS. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Aug;11(4):199–201, 253 (Eng. Abstr.) (Chi)

[Oxygen treatment and cigarette smoking. A potentially fatal combination] Hansen NC, et al. **Ugeskr Laeger** 1989 May 1;151(18):1125 (Eng. Abstr.) (Dan)

[Current concept of the indications and long-term results of long-term oxygen therapy in adults] Dautzenberg B, et al. **Agressologie** 1988 Jun;29(7):519–24 (26 ref.) (Eng. Abstr.) (Fre)

[Prescription of oxygen therapy in France (the administrative way of prescribing] Ludot A, et al. **Agressologie** 1988 Sep; 29(8):607–12 (Eng. Abstr.) (Fre)

[Preliminary evaluation, setting up and surveillance of long-term oxygen therapy at home] Muir JF. **Agressologie** 1988 Jun;29(7):511–7 (29 ref.) (Eng. Abstr.) (Fre)

[Limitations of oxygen therapy] Muir JF, et al. **Agressologie** 1988 Jun;29(7):537–9 (11 ref.) (Eng. Abstr.) (Fre)

[Long-term oxygen therapy at home and neuropsychologic phenomena] Pedinielli JL. **Agressologie** 1988 Jun; 29(7):533–6 (38 ref.) (Eng. Abstr.) (Fre)

[Education of the patient on long-term oxygen therapy] Poirson-Chevalier C, et al. **Agressologie** 1988 Sep; 29(8):565–8 (Eng. Abstr.) (Fre)

[Use of long-term oxygen therapy excluding obstructive bronchopneumopathies] Robert D, et al. **Agressologie** 1988 Jun;29(7):525–8 (17 ref.) (Eng. Abstr.) (Fre)

[Oxygen therapy at home in children] Sardet A, et al. **Agressologie** 1988 Jun;29(7):529–31 (24 ref.) (Eng. Abstr.) (Fre)

[Physiopathologic justification of long-term oxygen therapy in chronic respiratory insufficiency] Weitzenblum E. **Agressologie** 1988 Jun;29(7):499–505 (38 ref.) (Eng. Abstr.) (Fre)

[Prescribing of long-term oxygen therapy and observation of its results] Desrues B, et al. **Rev Mal Respir** 1989; 6(3):237–41 (Eng. Abstr.) (Fre)

[Practice of long-term oxygen therapy (editorial)] Levi-Valensi P. **Rev Mal Respir** 1989;6(3):187–8 (Fre)

[Critical study of the indications for long-term oxygen therapy. Chronic obstructive bronchopneumopathies] Sadoul P, et al. **Rev Mal Respir** 1988;5(4):363–72 (45 ref.) (Eng. Abstr.) (Fre)

[Long-term oxygen therapy in Switzerland] Bongard JP, et al. **Schweiz Med Wochenschr** 1989 Jan 28;119(4):110–5 (Eng. Abstr.) (Fre)

[Long-term oxygen therapy in chronic respiratory insufficiency] Kamel A, et al. **Tunis Med** 1988 Aug–Sep; 66(8–9):571–7 (27 ref.) (Fre)

[The effect of pre-oxygenation on hemodynamics and oxygen consumption] Reinhart K, et al. **Anaesthesist** 1989 May; 38(5):233–7 (Eng. Abstr.) (Ger)

[Methohexital/alfentanil-thiopental/alfentanil for total intravenous anesthesia for direct laryngoscopy with 100% O2 jet ventilation] Tolksdorf W, et al. **Anasth Intensivther Notfallmed** 1988 Aug;23(4):191–4 (Eng. Abstr.) (Ger)

[Fetal systolic time intervals in threatened premature labor and their relation to therapeutic efforts] Ruckhäberle KE, et al. **Z Geburtshilfe Perinatol** 1989 May–Jun;193(3):129–33 (Eng. Abstr.) (Ger)

[Chronic respiratory insufficiency and pulmonary heart disease—therapeutic aspects] Schilling W. **Z Gesamte Inn Med** 1988 Jun 15;43(12):331–5 (18 ref.) (Eng. Abstr.) (Ger)

[Intrauterine growth retardation—CTG findings in pre-partum oxygen respiration and transcutaneous nerve stimulation] Kyank HR, et al. **Zentralbl Gynakol** 1988; 110(22):1407–15 (Eng. Abstr.) (Ger)

[Helium for reducing the work of breathing in upper airway obstruction] Segal E, et al. **Harefuah** 1988 Oct; 115(7–8):175–7 (Eng. Abstr.) (Heb)

[Mechanical ventilation and oxygen therapy of sleep related breathing disorders] Narui K, et al. **Kokyu To Junkan** 1989 Jan;37(1):49–52 (Jpn)

[Effects of nifedipine on pulmonary hypertension in patients with chronic respiratory failure—a comparison with oxygen administration at rest and during exercise] Araki

Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Aug; 26(8):805–11 (Eng. Abstr.) **(Jpn)**

[Exercise induced hypoxemia and exercise tolerance in patients with COPD and the benefits of oxygen supplementation] Kurihara N, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Feb; 27(2):155–62 (Eng. Abstr.) **(Jpn)**

[Effect of low flow oxygen and nifedipine on ventilation and hemodynamics in chronic lung diseases] Mutoh T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 May; 26(5):524–30 (Eng. Abstr.) **(Jpn)**

[Changes in the functional status of lymphocytes in patients with chronic salpingo–oophoritis treated by normobaric hypoxia] Burlev VA, et al. **Akush Ginekol (Mosk)** 1989 Feb;(2):27–9 (Eng. Abstr.) **(Rus)**

[Skin oxygen tension and pulmonary artery systolic pressure in patients with pulmonary tuberculosis during oxygen therapy] Zuev VS, et al. **Probl Tuberk** 1989;(3):46–9 **(Rus)**

[Myocardial reaction and lung ventilation response to inhalation of the gaseous hypoxic mixture GGS–10 in patients with rheumatoid arthritis] Amosov IS, et al. **Ter Arkh** 1989;61(5):62–4 (Eng. Abstr.) **(Rus)**

[Use of normobaric oxygenation for preventive and therapeutic purposes] Marachev AG, et al. **Ter Arkh** 1989; 61(2):88–92 (Eng. Abstr.) **(Rus)**

[Long–term home oxygen therapy] Stangl B, et al. **Piucne Bolesti** 1988 Jul–Dec;40(3–4):171–8 (Eng. Abstr.) **(Scr)**

[Oxygen therapy in sudden perceptual hearing disorders] Koval J, et al. **Cesk Otolaryngol** 1989 Mar;38(2):89–97 (Eng. Abstr.) **(Slo)**

[The oxygen study. Prolonged oxygen therapy at home is of great value for patients with chronic lung failure] Ström K, et al. **Lakartidningen** 1989 Jun 28;86(26–27):2452–5 **(Swe)**

ADVERSE EFFECTS

Hazards of nasopharyngeal oxygen therapy: a case of iatrogenic stomach rupture. Van Daele G, et al. **Acta Chir Belg** 1987 Sep–Oct;87(5):291–3

Nasal oxygen in exacerbations of ventilatory failure: an underappreciated risk. Davies RJ, et al. **BMJ** 1989 Jul 1; 299(6690):43–4

Is 50% oxygen harmful? [letter] Morris AH. **Crit Care Med** 1988 Nov;16(11):1165

Hazards of oxygen treatment in the ambulance [letter] Moore–Gillon J, et al. **Lancet** 1989 Apr 22;1(8643):904

Oxygen toxicity in the infant rhesus monkey: effects on regulatory peptides in lung and blood. Keith IM, et al. **Pediatr Pulmonol** 1988;5(1):31–5

Dietary antioxidants in the prevention of oxygen–induced injury. Kennedy KA. **Semin Perinatol** 1989 Apr; 13(2):97–103 (40 ref.)

[Long–term oxygen therapy: does a toxic risk exist?] Housset B. **Agressologie** 1988 Jun;29(7):507–10 (29 ref.) (Eng. Abstr.) **(Fre)**

[Comparison of O2–exposed premature infants with and without vitamin E substitution from the ophthalmologic viewpoint] Burgold R, et al. **Kinderarztl Prax** 1989 Feb; 57(2):71–6 (Eng. Abstr.) **(Ger)**

HISTORY

Studies of domiciliary oxygen in a common cause. Petty TL. **Thorax** 1989 Jul;44(7):588–90

INSTRUMENTATION

Minireg failure [letter] Allberry RA. **Anaesth Intensive Care** 1989 May;17(2):234–5

The Malawi anaesthetic machine. Experience with a new type of anaesthetic apparatus for developing countries. Fenton PM. **Anaesthesia** 1989 Jun;44(6):498–503

Allergic contact dermatitis to a nasal cannula [letter] Toome BK. **Arch Dermatol** 1989 Apr;125(4):571

Recovery room oxygenation: a comparison of nasal catheters and 40 per cent oxygen masks. Hudes ET, et al. **Can J Anaesth** 1989 Jan;36(1):20–4

The micro–trach. A seven–year experience with transtracheal oxygen therapy. Heimlich HJ, et al. **Chest** 1989 May; 95(5):1008–12

Efficacy of a pulsed oxygen delivery device during exercise in patients with chronic respiratory disease. Senn S, et al. **Chest** 1989 Sep;96(3):467–72

Effectiveness of open–circuit and oxyhood delivery of helium–oxygen. Stillwell PC, et al. **Chest** 1989 Jun; 95(6):1222–4

A new pendant oxygen–conserving cannula which allows pursed lips breathing. Tiep BL, et al. **Chest** 1989 Apr; 95(4):857–60

A conservation device for oxygen therapy in COPD. Evans TW, et al. **Eur Respir J** 1988 Dec;1(10):959–61

The Hudson Multi–Vent oxygen mask [letter] Johns DP, et al. **Med J Aust** 1988 Oct 3;149(7):392

Prescription of oxygen concentrators: adherence to published guidelines. Dilworth JP, et al. **Thorax** 1989 Jul;44(7):576–8

[Long term oxygen therapy in the home] Lahdensuo A, et al. **Duodecim** 1988;104(6):467–72 (16 ref.) **(Fin)**

[Oxygen extractors] Bedicam JM, et al. **Agressologie** 1988 Sep;29(8):575–83 (Eng. Abstr.) **(Fre)**

[Oxygen–conserving devices for delivery of long–term oxygen therapy] Leger P, et al. **Agressologie** 1988 Sep; 29(8):603–6 (Eng. Abstr.) **(Fre)**

[Portable liquid oxygen and the choice of a source] Levi–Valensi P, et al. **Agressologie** 1988 Sep;29(8):585–94 (Eng. Abstr.) **(Fre)**

[The Oxytron: a new device for administering oxygen in the spontaneously breathing patient] Mertzlufft F, et al. **Anaesthesist** 1989 Jun;38(6):320–2 (Eng. Abstr.) **(Ger)**

[Iatrogenic foreign body of the nose] Ritter J, et al. **Laryngorhinootologie** 1989 May;68(5):299–300 (Eng. Abstr.) **(Ger)**

[Transtracheal oxygen therapy with oxycath: introduction technic, complications, results in 12 treated patients] Migliorini V, et al. **Acta Otorhinolaryngol Ital** 1989 Mar–Apr;9(2):131–8 (Eng. Abstr.) **(Ita)**

[Changes in oxygen saturation of arterial blood during controlled oxygen therapy using oxygen masks produced in Poland] Sliwiński P, et al. **Pneumonol Pol** 1988 Dec; 56(12):564–8 (Eng. Abstr.) **(Pol)**

METHODS

Home oxygen therapy. Herrick TW, et al. **Am Fam Physician** 1989 Feb;39(2):157–62 (14 ref.)

Constant oxygen insufflation (COI) in a ventilatory failure model. Long SE, et al. **Am Rev Respir Dis** 1988 Sep; 138(3):630–5

The oxygen delivery characteristics of the Hudson Oxy–one face mask. Milross J, et al. **Anaesth Intensive Care** 1989 May;17(2):180–4

Using helium–oxygen mixtures in the emergency management of acute upper airway obstruction. Boorstein JM, et al. **Ann Emerg Med** 1989 Jun;18(6):688–90

Persistent pulmonary hypertension of the newborn treated with hyperventilation: clinical features and outcome. John E, et al. **Aust Paediatr J** 1988 Dec;24(6):357–61

Arterial oxygen saturation during Nd:YAG laser photoresection of endobronchial tumors under local anesthesia. Use of intermittent supplemental oxygen with pulse oximetry guidance. Schiffman PL, et al. **Chest** 1988 Dec;94(6):1300–1

Nasopharyngeal oxygen in children. Shann F, et al. **Lancet** 1988 Nov 26;2(8622):1238–40

Oxygen delivery for ambulatory patients. How the Micro–Trach increases mobility. Heimlich HJ. **Postgrad Med** 1988 Nov 1;84(6):68–73, 77–9 (14 ref.)

Practical tips on prescribing home oxygen therapy. Petty TL. **Postgrad Med** 1988 Nov 1;84(6):83–5, 88–90

[Long–term oxygen therapy by transtracheal catheter] Leger P, et al. **Agressologie** 1988 Sep;29(8):595–602 (Eng. Abstr.) **(Fre)**

[Long–term oxygen therapy: current problems (patient selection)] Levi–Valensi P, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:403–8 (Eng. Abstr.) **(Fre)**

[Treatment of nocturnal hypoxia in chronic obstructive bronchopneumopathies] Weitzenblum E, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:387–90 (Eng. Abstr.) **(Fre)**

[The German Society of Pneumology and Tuberculosis. Recommendations fo long–term oxygen therapy in severe chronic hypoxemia] **Pneumologie** 1989 May;43(5):233–5 **(Ger)**

[Transtracheal O2 administration in long–term oxygen therapy] Häggi J, et al. **Schweiz Med Wochenschr** 1988 Sep 17;118(37):1321–4 (Eng. Abstr.) **(Ger)**

[Increasing mental performance by multistep oxygen therapy. Computer–assisted measurements of information processing capacity, intelligence, short–term memory and further parameters of cerebral performance] von Ardenne M, et al. **ZFA** 1989 Jan–Feb;44(1):37–48 (Eng. Abstr.) **(Ger)**

[The fate of energy metabolism of the human and its favorable modification by multistep oxygen therapy. A contribution by the Manfred von Ardenne Research Institute] von Ardenne M. **ZFA** 1989 Jan–Feb;44(1):7–36 **(Ger)**

[Use of helium–oxygen mixtures in respiratory hypoxia] Zhukovskiĭ LI, et al. **Klin Med (Mosk)** 1989 Feb; 67(2):114–8 (Eng. Abstr.) **(Rus)**

[Optimal methods of oxygen therapy] Zhukovskiĭ LI, et al. **Probl Tuberk** 1988;(9):40–3 (Eng. Abstr.) **(Rus)**

STANDARDS

Prescription of oxygen concentrators for long term oxygen treatment: reassessment in one district. Walshaw MJ, et al. **BMJ** 1988 Oct 22;297(6655):1030–2

Insufficient oxygen concentration obtained at domiciliary controls of eighteen concentrators. Bongard JP, et al. **Eur Respir J** 1989 Mar;2(3):280–2

Clinical experience with pulse oximetry in managing oxygen therapy in neonatal intensive care. Cunningham MD, et al. **J Perinatol** 1987 Fall;7(4):333–5

TRENDS

[Home oxygen therapy in Poland] Zielinski J. **Pneumonol Pol** 1988 Dec;56(12):537–40 **(Pol)**

VETERINARY

Oxygen and ventilatory support for the critical patient. Pascoe PJ. **Semin Vet Med Surg (Small Anim)** 1988 Aug; 3(3):202–9

OXYGEN ISOTOPES

Method for tracing oxygen–18 in vivo: application to ozone dosimetry in animals. Aissa M, et al. **Basic Life Sci** 1988; 49:195–7

Oxygen–17 contrast agents. Fast imaging techniques. Hopkins AL, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S240–2

DIAGNOSTIC USE

Measurement of energy expenditure in free–living humans by using doubly labeled water. Schoeller DA. **J Nutr** 1988 Nov;118(11):1278–89 (68 ref.)

[Double labeling of water with stable isotopes for measuring energy expenditure in man] Montagnon B, et al. **Gastroenterol Clin Biol** 1989;13(2):208–16 (43 ref.) **(Fre)**

OXYGEN PARTIAL PRESSURE DETERMINATION, TRANSCUTANEOUS see **BLOOD GAS MONITORING, TRANSCUTANEOUS**

OXYGEN RADIOISOTOPES

[An improved method to produce [15O]H2O with less ammonia by catalytic reaction] Miyake Y, et al. **Kaku Igaku** 1988 Jul;25(7):659–63 **(Jpn)**

DIAGNOSTIC USE

Noninvasive quantitation of myocardial blood flow in human subjects with oxygen–15–labeled water and positron emission tomography. Bergmann SR, et al. **J Am Coll Cardiol** 1989 Sep;14(3):639–52

Linearization correction of 99mTc–labeled hexamethyl–propylene amine oxime (HM–PAO) image in terms of regional CBF distribution: comparison to C15O2 inhalation steady–state method measured by positron emission tomography. Inugami A, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S52–60

Tomographic studies of rCBF with [99mTc]–HM–PAO SPECT in patients with brain tumors: comparison with C15O2 continuous inhalation technique and PET. Langen KJ, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S90–4

Quantitation of myocardial blood flow with H2 15O and positron emission tomography: assessment and error analysis of a mathematical approach. Herrero P, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):862–73

Simultaneous correction for tracer arrival delay and dispersion in CBF measurements by the H215O autoradiographic method and dynamic PET. Meyer E. **J Nucl Med** 1989 Jun;30(6):1069–78

Radiation absorbed dose estimates for oxygen–15 radiopharmaceuticals (H2(15)O, C15O, O15O) in newborn infants. Powers WJ, et al. **J Nucl Med** 1988 Dec; 29(12):1961–70

Regional cerebral blood flow measurement with intravenous [15O]water bolus and [18F]fluoromethane inhalation. Herholz K, et al. **Stroke** 1989 Sep;20(9):1174–81

[Regional myocardial blood flow quantitatively measured using O–15 water and dynamic positron emission tomography] Takahashi A, et al. **J Cardiol** 1987 Dec; 17(4):741–8 (Eng. Abstr.) **(Jpn)**

[Radiation dose distribution of gamma and beta+–rays during O–15–labeled gas steady state measurement] Hachiya T, et al. **Kaku Igaku** 1989 Jan;26(1):107–11 **(Jpn)**

[Measurement of cerebral circulation and metabolism in patients with spinocerebellar degeneration using positron emission tomography and O–15 steady–state method] Shishido F, et al. **Kaku Igaku** 1988 Jul;25(7):633–8 (Eng. Abstr.) **(Jpn)**

OXYGENASES

Structure and assembly of protocatechuate 3,4–dioxygenase. Ohlendorf DH, et al. **Nature** 1988 Nov 24;336(6197):403–5

[Biochemical reactions of superoxygenase with activated oxygen species] Yoshida R. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):3048–53 **(Jpn)**

ANALYSIS

A reverse–phase liquid chromatographic assay for flavin–containing monooxygenase activity. Cashman JR, et al. **Anal Biochem** 1988 Nov 15;175(1):274–80

Characterization of cerebral 7–ethoxycoumarin–O–deethylase: evidence for multiplicity of cytochrome P450 in brain. Dhawan A, et al. **Biochem Med Metab Biol** 1989 Jun;41(3):184–92

Fluorometric assay of hepatic microsomal monooxygenases by use of 7–methoxyquinoline. Mayer RT, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1364–8

Electron–nuclear double resonance spectroscopy of 15N–enriched phthalate dioxygenase from Pseudomonas cepacia proves that two histidines are coordinated to the [2Fe–2S] Rieske–type clusters. Gurbiel RJ, et al. **Biochemistry** 1989 May 30;28(11):4861–71

Distinct pulmonary and hepatic forms of flavin–containing monooxygenase in sheep. Williams DE, et al. **Comp Biochem Physiol [B]** 1989;93(2):465–70

Localization of quinolinic acid metabolizing enzymes in the rat brain. Immunohistochemical studies using antibodies to 3–hydroxyanthranilic acid oxygenase and quinolinic acid phosphoribosyltransferase. Köhler C, et al. **Neuroscience** 1988 Oct;27(1):49–76

ANTAGONISTS & INHIBITORS

Mechanism of action and biochemical selectivity of allylamine antimycotic agents. Ryder NS. **Ann N Y Acad Sci** 1988;544:208–20

Inactivation and activation of various membranal enzymes of the cholesterol biosynthetic pathway by digitonin. Eilenberg H, et al. **J Lipid Res** 1989 Aug;30(8):1127–35

Squalene analogues containing isopropylidene mimics as potential inhibitors of pig liver squalene epoxidase and oxidosqualene cyclase. Sen SE, et al. **J Med Chem** 1989 Sep;32(9):2152–8

Terbinafine inhibits the mitogenic response to platelet-derived growth factor in vitro and neointimal proliferation in vivo. Nemecek GM, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1167–74

Inhibition of the mono-oxygenase system by butylated hydroxyanisole and butylated hydroxytoluene. Yang CS, et al. **Life Sci** 1974 Oct 15;15(8):1497–505

Depression of the hepatic cytochrome P-450 monooxygenase system by the neurotoxin 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP). Shahi GS, et al. **Pharmacol Toxicol** 1989 Jan;64(1):107–10

Interaction of carbaryl and N-nitrosocarbaryl with microsomal monooxygenase activities. Beraud M, et al. **Toxicol Lett** 1989 Feb;45(2–3):251–60

BIOSYNTHESIS

Influence of interferon-gamma and extracellular tryptophan on indoleamine 2,3-dioxygenase activity in T24 cells as determined by a non-radiometric assay. Werner ER, et al. **Biochem J** 1988 Dec 1;256(2):537–41

Hepatic monooxygenase induction and promutagen activation in channel catfish from a contaminated river basin. Winston GW, et al. **Ecotoxicol Environ Safety** 1988 Dec;16(3):258–71

Regulation of isofunctional enzymes in Pseudomonas alcaligenes mutants defective in the gentisate pathway. Poh CL, et al. **J Appl Bacteriol** 1988 May;64(5):451–8

Genetically engineered V79 Chinese hamster cell expression of purified cytochrome P-450IIB1 monooxygenase activity. Platt KL, et al. **J Biochem Toxicol** 1989 Spring; 4(1):1–6

The biosynthesis and assembly of protein A of soluble methane monooxygenase of Methylococcus capsulatus (Bath). Green J, et al. **J Biol Chem** 1988 Nov 25; 263(33):17561–5

The development of antibody to the interferon-induced indoleamine 2,3-dioxygenase and the study of the regulation of its synthesis. Rubin BY, et al. **J Interferon Res** 1988 Oct;8(5):691–702

Interferon-induced indoleamine 2,3-dioxygenase activity in human mononuclear phagocytes. Carlin JM, et al. **J Leukoc Biol** 1989 Jan;45(1):29–34

Comparison of the effects of various inducers on 7-alkoxycoumarin O-dealkylase activities in liver microsomes. Okuno H, et al. **Jpn J Pharmacol** 1989 May; 50(1):1–9

Interferon gamma-resistant mutants are defective in the induction of indoleamine 2,3-dioxygenase. Feng GS, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7144–8

[Effect of fepromaron on the enzyme activity of the liver monooxygenase system] Imambaev SE, et al. **Farmakol Toksikol** 1989 Mar-Apr;52(2):50–2 (Eng. Abstr.) **(Rus)**

GENETICS

Molecular cloning of 3-phenylcatechol dioxygenase involved in the catabolic pathway of chlorinated biphenyl from Pseudomonas putida and its expression in Escherichia coli. Khan A, et al. **Appl Environ Microbiol** 1988 Nov; 54(11):2664–71

Differential regulation of lambda pL and pR promoters by a cI repressor in a broad-host-range thermoregulated plasmid marker system. Winstanley C, et al. **Appl Environ Microbiol** 1989 Apr;55(4):771–7

Molecular analysis of methane monooxygenase from Methylococcus capsulatus (Bath). Stainthorpe AC, et al. **Arch Microbiol** 1989;152(2):154–9

Cloning and expression in Escherichia coli of the toluene dioxygenase gene from Pseudomonas putida NCIB11767. Stephens GM, et al. **FEMS Microbiol Lett** 1989 Feb; 48(3):295–300

Multiple ligninase-related genes from Phanerochaete chrysosporium. Brown A, et al. **Gene** 1988 Dec 15; 73(1):77–85

Cloning, nucleotide sequence and characterization of genes encoding naphthalene dioxygenase of Pseudomonas putida strain NCIB9816. Kurkela S, et al. **Gene** 1988 Dec 20; 73(2):355–62

Molecular analysis of a Phanerochaete chrysosporium lignin peroxidase gene. Walther I, et al. **Gene** 1988 Oct 15; 70(1):127–37

Cloning and heterologous expression in Streptomyces lividans of Streptomyces rimosus genes involved in oxytetracycline biosynthesis. Binnie C, et al. **J Bacteriol** 1989 Feb;171(2):887–95

Cloning and expression of the catA and catBC gene clusters from Pseudomonas aeruginosa PAO. Kukor JJ, et al. **J Bacteriol** 1988 Oct;170(10):4458–65

DNA sequence of the Acinetobacter calcoaceticus catechol 1,2-dioxygenase I structural gene catA: evidence for evolutionary divergence of intradiol dioxygenases by acquisition of DNA sequence repetitions. Neidle EL, et al. **J Bacteriol** 1988 Oct;170(10):4874–80

Duplication of a 2,4-dichlorophenoxyacetic acid monooxygenase gene in Alcaligenes eutrophus JMP134(pJP4). Perkins EJ, et al. **J Bacteriol** 1988 Dec; 170(12):5669–72

Bacterial aromatic ring-cleavage enzymes are classified into two different gene families. Harayama S, et al. **J Biol Chem** 1989 Sep 15;264(26):15328–33

Use of synthetic oligonucleotide probes for identifying ligninase cDNA clones. Zhang YZ, et al. **Methods Enzymol** 1988;161:228–37

[Cloning and expression of Pseudomonas putida gene controlling the catechol-2,3-oxygenase activity in Escherichia coli cells] Tsoĭ TV, et al. **Genetika** 1988 Sep; 24(9):1550–61 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Occurrence of two different forms of protocatechuate 3,4-dioxygenase in a Moraxella sp. Sterjiades R, et al. **Appl Environ Microbiol** 1989 Feb;55(2):340–7

Purification and properties of catechol 1,2-dioxygenase (pyrocatechase) from Pseudomonas putida mt-2 in comparison with that from Pseudomonas arvilla C-1. Nakai C, et al. **Arch Biochem Biophys** 1988 Dec;267(2):701–13

Distribution of microsomal monooxygenases in the rabbit respiratory tract. Sabourin PJ, et al. **Drug Metab Dispos** 1988 Jul-Aug;16(4):557–62

Solubilisation of methane monooxygenase from Methylococcus capsulatus (Bath). Smith DD, et al. **Eur J Biochem** 1989 Jul 1;182(3):667–71

Methane monooxygenase from Methylosinus trichosporium OB3b. Purification and properties of a three-component system with high specific activity from a type II methanotroph. Fox BG, et al. **J Biol Chem** 1989 Jun 15; 264(17):10023–33

Purification and assay of alpha-ketoisocaproate dioxygenase from rat liver. Sabourin PJ, et al. **Methods Enzymol** 1988; 166:288–97

[Purification and properties of two enzymes of meta-cleaving the aromatic ring controlled by the biphenyl biodegradation plasmid pBS 241 from Pseudomonas putida] Selifonov SA, et al. **Biokhimiia** 1988 Jun;53(6):1040–7 (Eng. Abstr.) **(Rus)**

METABOLISM

Characterization of human liver and kidney cytochrome P-450-dependent arachidonic acid epoxygenase. Abraham NG, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:347–50

The effect of age upon the affinity of microsomal mono-oxygenase enzymes for substrate in human liver. Wynne HA, et al. **Age Ageing** 1988 Nov;17(6):401–5

A stopped-flow kinetic study of soluble methane mono-oxygenase from Methylococcus capsulatus (Bath). Green J, et al. **Biochem J** 1989 Apr 1;259(1):167–72

The magnesium-protoporphyrin IX (oxidative) cyclase system. Studies on the mechanism and specificity of the reaction sequence. Walker CJ, et al. **Biochem J** 1988 Oct 15;255(2):685–92

Monoclonal antibody directed detection of cytochrome P-450 (PCN) in human fetal liver. Ladona MG, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4735–41

In vitro drug metabolism and pharmacokinetics of diazepam in cynomolgus monkey hepatocytes during culture for six days. Seddon T, et al. **Biochem Pharmacol** 1989 Aug 15; 38(16):2621–30

Enzyme kinetic and spectroscopic studies of inhibitor and effector interactions with indoleamine 2,3-dioxygenase. 1. Norharman and 4-phenylimidazole binding to the enzyme as inhibitors and heme ligands. Sono M, et al. **Biochemistry** 1989 Jun 27;28(13):5392–9

Enzyme kinetic and spectroscopic studies of inhibitor and effector interactions with indoleamine 2,3-dioxygenase. 2. Evidence for the existence of another binding site in the enzyme for indole derivative effectors. Sono M. **Biochemistry** 1989 Jun 27;28(13):5400–7

Pre-steady-state kinetic study on the formation of compound I and II of ligninase. Harvey PJ, et al. **Biochim Biophys Acta** 1989 Jan 19;994(1):59–63

Effect of starvation and refeeding on cysteamine dioxygenase activity in rat liver and heart. Rosei MA. **Cell Mol Biol** 1988;34(3):287–93

Stereoselective N-oxygenation of zimeldine and homozimeldine by the flavin-containing monooxygenase. Cashman JR, et al. **Drug Metab Dispos** 1988 Jul-Aug; 16(4):616–22

Preferential induction of the rat hepatic P450 I proteins by the food carcinogen 2-amino-3-methyl-imidazo[4,5-f]quinoline. Rodrigues AD, et al. **Eur J Biochem** 1989 May 15;181(3):627–31

Characterization of an FMN-containing cyclohexanone monooxygenase from a cyclohexane-grown Xanthobacter sp. Trower MK, et al. **Eur J Biochem** 1989 Apr 15; 181(1):199–206

Substrate-modulated reactions of putidamonooxin. The nature of the active oxygen species formed and its reaction mechanism. Wende P, et al. **Eur J Biochem** 1989 Apr 15; 181(1):189–97

Trametes versicolor ligninase: isozyme sequence homology and substrate specificity. Jönson L, et al. **FEBS Lett** 1989 Apr 10;247(1):143–6

Squalene epoxide cyclase and microemulsion. Lee KM, et al. **FEBS Lett** 1989 Feb 27;244(2):347–50

Cysteamine oxygenase: possible involvement of superoxide ion in the catalytic mechanism. Ricci G, et al. **Free Radic Res Commun** 1987;3(6):365–71

A novel anthraquinone ring cleavage enzyme from Aspergillus terreus. Fujii I, et al. **J Biochem (Tokyo)** 1988 May;103(5):878–83

A sex-specific form of cytochrome P-450 catalyzing propoxycoumarin O-depropylation and its identity with testosterone 6 beta-hydroxylase in untreated rat livers: reconstitution of the activity with microsomal lipids. Yamazoe Y, et al. **J Biochem (Tokyo)** 1988 Nov; 104(5):785–90

Persulfide generated from L-cysteine inactivates tyrosine aminotransferase. Requirement for a protein with cysteine oxidase activity and gamma-cystathionase. Hargrove JL. **J Biol Chem** 1988 Nov 25;263(33):17262–9

Effects of tryptophan and pH on the kinetics of superoxide radical binding to indoleamine 2,3-dioxygenase studied by pulse radiolysis. Kobayashi K, et al. **J Biol Chem** 1989 Sep 15;264(26):15280–3

Binding of isotopically labeled substrates, inhibitors, and cyanide by protocatechuate 3,4-dioxygenase. Orville AM, et al. **J Biol Chem** 1989 May 25;264(15):8791–801

The roles of superoxide anion and methylene blue in the reductive activation of indoleamine 2,3-dioxygenase by ascorbic acid or by xanthine oxidase-hypoxanthine. Sono M. **J Biol Chem** 1989 Jan 25;264(3):1616–22

Enhancement of indoleamine 2,3-dioxygenase activity in cancer patients receiving interferon-beta Ser. Carlin JM, et al. **J Interferon Res** 1989 Apr;9(2):167–73

Interferon-induced indoleamine 2,3-dioxygenase activity inhibits Chlamydia psittaci replication in human macrophages. Carlin JM, et al. **J Interferon Res** 1989 Jun; 9(3):329–37

Epidermal cytochrome P-450: immunochemical characterization of isoform induced by topical application of 3-methylcholanthrene to neonatal rat. Khan WA, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):921–7

Cytochrome P-450 mediated metabolism in active murine systemic lupus erythematosus. Baer AN, et al. **J Rheumatol** 1989 Mar;16(3):335–8

Effects of aging and caloric restriction on hepatic drug metabolizing enzymes in the Fischer 344 rat. I: The cytochrome P-450 dependent monooxygenase system. Leakey JE, et al. **Mech Ageing Dev** 1989 May;48(2):145–55 (53 ref.)

Lignin-depolymerizing activity of Streptomyces. Crawford DL, et al. **Methods Enzymol** 1988;161:249–58

A possible role for lipoxygenase and epoxygenase arachidonate metabolites in prolactin release from pituitary cells. Judd AM, et al. **Neuroendocrinology** 1988 Oct; 48(4):407–16

Immunohistochemical detection of human placental cytochrome P-450-associated mono-oxygenase system inducible by maternal cigarette smoking. Pasanen M, et al. **Placenta** 1988 May-Jun;9(3):267–75

Dietary restriction postpones the age-dependent compromise of male rat liver microsomal monooxygenases. Schmucker DL, et al. **Prog Clin Biol Res** 1989;287:283–8

In-vivo and in-vitro studies of the effects of mercaptoundecahydrododecaborate (BSH) on hepatic cytochrome P-450 mono-oxygenase enzyme activity and on hexobarbital (HXB) induced sleep in mice. Fontenelle L, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2–3):172–3

Pulmonary indoleamine 2,3-dioxygenase activity and its significance in the response of rats, mice, and rabbits to oxidative stress. Daley-Yates PT, et al. **Toxicol Appl Pharmacol** 1988 Nov;96(2):222–32

The metabolism of N,N-dimethylaniline by isolated rat hepatocytes: identification of a novel N-conjugate. Sherratt AJ, et al. **Xenobiotica** 1989 Apr;19(4):379–88

Influence of medium composition on 7-alkoxycoumarin O-dealkylase activities of rat hepatocytes in primary maintenance culture. Warren M, et al. **Xenobiotica** 1988 Aug;18(8):973–81

[Effect of fenilin on the enzyme activity of the monooxygenase system in the rat liver during a change in the feeding] Imambaev SE. **Farmakol Toksikol** 1989 Jan-Feb;52(1):59–61 (Eng. Abstr.) **(Rus)**

[Interrelation of monooxygenase activity and the function of the immune system in psoriasis patients] Khakimov ZZ, et al. **Vestn Dermatol Venerol** 1988;(8):11–3 (Eng. Abstr.) **(Rus)**

[Oxygenase reactions in rat liver microsomes during antioxidant deficiency] Gubskiĭ IuI, et al. **Vopr Med Khim** 1988 Jul-Aug;34(4):81–5 (Eng. Abstr.) **(Rus)**

[The liver monooxygenase system in nutritional deficiency in rats in early ontogeny] Khakimov ZZ, et al. **Vopr Pitan** 1988 Nov-Dec;(6):62–5 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Ligninase-mediated phenoxy radical formation and polymerization unaffected by cellobiose:quinone oxidoreductase [published erratum appears in Biochimie 1988 Aug;70(8):1126] Odier E, et al. **Biochimie** 1988 Jun; 70(6):847–52

PHYSIOLOGY

Interferons and indoleamine 2,3-dioxygenase: role in antimicrobial and antitumor effects. Carlin JM, et al. **Experientia** 1989 Jun 15;45(6):535-41 (71 ref.)

7-ethoxycoumarin deethylase activity as indicator of oxidative metabolism in rabbit eyes. Aimoto T, et al. **J Ocul Pharmacol** 1985 Fall;1(3):279-86

OXYGENATION, EXTRACORPOREAL MEMBRANE see **EXTRACORPOREAL MEMBRANE OXYGENATION**

OXYGENATION, HYPERBARIC see **HYPERBARIC OXYGENATION**

OXYGENATORS

The need for a second-generation pump oxygenator [editorial] Nosé Y. **Artif Organs** 1989 Apr;13(2):89-90

Oxygen concentrators in the home [editorial] Bardsley P, et al. **BMJ** 1988 Dec 10;297(6662):1486-7

Different oxygenators for cardiopulmonary bypass lead to varying degrees of human complement activation in vitro. Videm V, et al. **J Thorac Cardiovasc Surg** 1989 May; 97(5):764-70

ADVERSE EFFECTS

Complement activation caused by different oxygenators [letter] Volanakis JE. **J Thorac Cardiovasc Surg** 1989 Aug; 98(2):292-5

STANDARDS

Adverse effects of anesthetic agents on polycarbonate plastic oxygenators [letter] Walls JT, et al. **J Thorac Cardiovasc Surg** 1988 Oct;96(4):667-8

SUPPLY & DISTRIBUTION

Prescription of oxygen concentrators for long term oxygen treatment [letter] **BMJ** 1988 Dec 3;297(6661):1468-9

OXYGENATORS, MEMBRANE

Complex multiple percutaneous transluminal coronary angioplasties with vortex oxygenator cardiopulmonary support in the community hospital setting. Freedman RJ Jr, et al. **Cathet Cardiovasc Diagn** 1989 Aug;17(4):237-42

Conceptual and design features of a practical, clinically effective intravenous mechanical blood oxygen/carbon dioxide exchange device (IVOX). Mortensen JD, et al. **Int J Artif Organs** 1989 Jun;12(6):384-9

Postoperative cardiopulmonary failure in tetralogy of Fallot with absent pulmonary valve syndrome treated by extracorporeal membrane oxygenation. Pahl E, et al. **Int J Cardiol** 1988 Aug;20(2):276-8

Membrane oxygenators: current developments in design and application. Gaylor JD. **J Biomed Eng** 1988 Nov; 10(6):541-7 (29 ref.)

Hyperthermic regional perfusion using membrane- instead of bubble-oxygenators. An experimental and clinical study. van Os J, et al. **J Cardiovasc Surg (Torino)** 1989 Jul-Aug; 30(4):523-32

A simplified method for autoregulation of blood flow in the extracorporeal membrane oxygenation circuit. Atkinson JB, et al. **J Pediatr Surg** 1989 Mar;24(3):251-2

Unsteady oxygen transport in flat plate and tubular membrane oxygenators. Eason G, et al. **Life Support Syst** 1983;1 Suppl 1:345-9

Complement activation by extracorporeal circulation: effects of precoating a membrane oxygenator circuit with human whole blood. Videm V, et al. **Scand J Thorac Cardiovasc Surg** 1988;22(3):251-6

[Mechanical circulatory assistance by combined use of a partial veno-arterial bypass and intra-aortic balloon pumping] Ruschewski W. **Helv Chir Acta** 1988 Nov; 55(4):489-93 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Life-threatening intrathoracic complications during treatment with extracorporeal membrane oxygenation. Zwischenberger JB, et al. **J Pediatr Surg** 1988 Jul; 23(7):599-604

STANDARDS

[Clinical experiences with a new membrane oxygenator with low priming volume (D702 MASTER FLO 51), studies during pulsatile and constant flow perfusion] Kobayashi S, et al. **Kyobu Geka** 1989 Jun;42(6):453-6 (Eng. Abstr.) **(Jpn)**

[Study of the functioning of a membrane oxygenator MOST-122 during artificial circulation with pulsed blood flow] Vlasov VM, et al. **Med Tekh** 1989 Jan-Feb;(1):21-6 (Eng. Abstr.) **(Rus)**

OXYHEMOGLOBINS

The influence of structural variations in the F- and FG-helix of the beta-subunit modified oxyHb-NES on the heme structure detected by resonance Raman spectroscopy. Schweitzer-Stenner R, et al. **Eur Biophys J** 1989; 17(2):87-100

[Experimental cerebral vasospasm induced by oxyhemoglobin and the sympathetic nervous system (Part 1): Effect of alpha-adrenergic receptor blockers] Iwai R, et al. **No To Shinkei** 1988 Jun;40(6):547-52 (Eng. Abstr.) **(Jpn)**

[Experimental cerebral vasospasm induced by oxyhemoglobin and the sympathetic nervous system (Part 2): An investigation into denervation supersensitivity] Iwai R, et al. **No To Shinkei** 1988 Jul;40(7):603-8 (Eng. Abstr.) **(Jpn)**

ANALYSIS

New instrument for monitoring hemoglobin oxygenation. Tamura T, et al. **Adv Exp Med Biol** 1989;248:103-7

Characterization of protein spin labeling by maleimide: evidence for nitroxide reduction. Perussi JR, et al. **Anal Biochem** 1988 Sep;173(2):289-95

A proton nuclear magnetic resonance investigation of the anion Bohr effect of human normal adult hemoglobin. Russu IM, et al. **Biochemistry** 1989 Jun 13;28(12):5298-306

Maternal oxygenation during normal labour. Reed PN, et al. **Br J Anaesth** 1989 Mar;62(3):316-8

31P NMR spectroscopy and HbO2 cryospectrophotometry in prediction of tumor radioresistance caused by hypoxia. Rofstad EK, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr; 16(4):919-23

Accuracy of pulse oximetry to estimate HbO2 fraction of total Hb during exercise. Powers SK, et al. **J Appl Physiol** 1989 Jul;67(1):300-4

Protective effect of sucrose on spray drying of oxyhemoglobin. Labrude P, et al. **J Pharm Sci** 1989 Mar; 78(3):223-9

Determinants of blood pressure in snorers. Hoffstein V, et al. **Lancet** 1988 Oct 29;2(8618):992-4

[Testing of human oxyhemoglobin function during its storage as solutions] Myshkin AE, et al. **Gematol Transfuziol** 1988 Jun;33(6):60-1 **(Rus)**

[Arterial oxygen saturation during anesthetic induction and orotracheal intubation] Canet Capeta J, et al. **Rev Esp Anestesiol Reanim** 1988 May-Jun;35(3):123-6 (Eng. Abstr.) **(Spa)**

BLOOD

Multicomponent analysis of near-infrared spectra of anesthetized rat head: (I). Estimation of component spectra by principal component analysis. Araki R, et al. **Adv Exp Med Biol** 1989;248:3-10

CEREBROSPINAL FLUID

[Method and clinical significance of cerebrospinal fluid spectrophotometry] Müller FA, et al. **Nervenarzt** 1989 May;60(5):255-61 (Eng. Abstr.) **(Ger)**

METABOLISM

Haem derivatives in subdural haematomas. Wahlgren NG, et al. **Acta Neurochir (Wien)** 1988;95(3-4):109-13

Low viscosity of densely and highly polymerized human hemoglobin in aqueous solution—the problem of stability. Barnikol WK, et al. **Adv Exp Med Biol** 1989;248:335-40

Microelectrode studies of facilitated O2 transport across hemoglobin and myoglobin layers. Buerk DG, et al. **Adv Exp Med Biol** 1989;248:125-35

Near infrared determined cerebral transit time and oxy- and deoxyhemoglobin relationships during hemorrhagic hypotension in the dog. Ferrari M, et al. **Adv Exp Med Biol** 1989;248:55-62

Determination of cerebral venous hemoglobin saturation by derivative near infrared spectroscopy. Ferrari M, et al. **Adv Exp Med Biol** 1989;248:47-53

Oxygen supply of the myocardium. Frank KH, et al. **Adv Exp Med Biol** 1989;248:561-6

Near infrared quadruple wavelength spectrophotometry of the rat head. Hazeki O, et al. **Adv Exp Med Biol** 1989; 248:63-9

Precapillary O2 loss and arteriovenous O2 diffusion shunt are below limit of detection in myocardium. Honig CR, et al. **Adv Exp Med Biol** 1989;248:591-9

Oxygen binding of modified hemoglobins in solution. Mauldin D, et al. **Adv Exp Med Biol** 1989;248:371-6

Fractionation of oxygen isotopes due to equilibration of oxygen with hemoglobin. Pflug KP, et al. **Adv Exp Med Biol** 1989;248:407-11

Measurements of oxygen flux from arterioles imply high permeability of perfused tissue to oxygen. Popel AS, et al. **Adv Exp Med Biol** 1989;248:215-25

Alterations in oxyhemoglobin dissociation curve during normoxic acute normovolemic hemodilution. Trouwborst A, et al. **Adv Exp Med Biol** 1989;248:419-25

Arterial and mixed venous blood gas status during apnoea of intubation—proof of the Christiansen-Douglas-Haldane effect in vivo. Mertzlufft FO, et al. **Anaesth Intensive Care** 1989 Aug;17(3):325-31

Oxyhemoglobin saturation following cesarean section in patients receiving epidural morphine, PCA, or im meperidine analgesia. Brose WG, et al. **Anesthesiology** 1989 Jun;70(6):948-53

Carboxyhemoglobin and P50 in pregnancy [letter] Hasibeder W, et al. **Anesthesiology** 1988 Nov;69(5):800-1

DNA alterations induced by the carbon-centered radical derived from the oxidation of 2-phenylethylhydrazine. Leite LC, et al. **Arch Biochem Biophys** 1989 May 1; 270(2):560-72

Production and metabolism of cytotoxic phospholipids generated during incubation of liposomes with oxyhemoglobin. Inoue K, et al. **Basic Life Sci** 1988; 49:291-300

An investigation of human oxyhemoglobin beta tetramer dissociation using haptoglobin binding. Michalski LA, et al. **Biochem Biophys Res Commun** 1988 Oct 14; 156(1):438-44

Detection of free radicals as intermediates in the methemoglobin formation from oxyhemoglobin induced by hydroxylamine. Stolze K, et al. **Biochem Pharmacol** 1989 Sep 15;38(18):3055-9

Interaction of zinc protoporphyrin with intact oxyhemoglobin. Hirsch RE, et al. **Biochemistry** 1989 Feb 21;28(4):1851-5

Preferential hydrolysis of oxidized phospholipids by peritoneal fluid of rats treated with casein. Itabe H, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):192-200

Cardiac effects of phytic acid induced high P50 with free and limited coronary blood flow. Baron JF, et al. **Biomater Artif Cells Artif Organs** 1988-89;16(5):871-85

A new method for the determination of equilibrium constants through binding capacity measurements. Di Cera E, et al. **Biophys Chem** 1988 Dec;32(2-3):149-52

An extended Monod-Wyman-Changeaux-model expressed in terms of the Herzfeld-Stanley formalism applied to oxygen and carbonmonoxide binding curves of hemoglobin trout IV. Schweitzer-Stenner R, et al. **Biophys J** 1989 Apr; 55(4):691-701

Detection of the heme perturbations caused by the quaternary R——T transition in oxyhemoglobin trout IV by resonance Raman scattering. Schweitzer-Stenner R, et al. **Biophys J** 1989 Apr;55(4):703-12

Resolvability of free energy changes for oxygen binding and subunit association by human hemoglobin. Straume M, et al. **Biophys J** 1989 Jul;56(1):15-25

Pulmonary vascular hemodynamics in chronic lung disease patients with and without oxyhemoglobin desaturation during sleep. Fletcher EC, et al. **Chest** 1989 Apr; 95(4):757-64

Sleep and oxyhemoglobin desaturation patterns in chronic obstructive pulmonary diseases. Manni R, et al. **Eur Neurol** 1988;28(5):275-8

Oxidation of dimethylsulphoxide to formaldehyde by oxyhaemoglobin and oxyleghaemoglobin in the presence of hydrogen peroxide is not mediated by "free" hydroxyl radicals. Puppo A, et al. **Free Radic Res Commun** 1989; 5(4-5):277-81

Prevention of cerebral vasospasm: experimental studies on the degradation of oxyhemoglobin by ascorbic acid. Sato M. **Fukushima J Med Sci** 1987 Dec;33(2):55-70

Induction of severe tumor hypoxia by modifiers of the oxygen affinity of hemoglobin. Adams GE, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1179-82

Chlorophenoxy acetic acid derivatives as hemoglobin modifiers and tumor radiosensitizers. Hirst DG, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1183-6

Effect of the manipulation of oxyhemoglobin status by BW12C on tumor thermosensitivity and on blood flow in tumor and normal tissues in mice. Honess DJ, et al. **Int J Radiat Oncol Biol Phys** 1989 May;16(5):1187-90

Manipulations in the oxygen transport capacity of blood as a means of sensitizing tumors to radiation therapy. Siemann DW, et al. **Int J Radiat Oncol Biol Phys** 1989 May; 16(5):1169-72

Central venous O2 saturation and rate of arterial desaturation during obstructive apnea. Fletcher EC, et al. **J Appl Physiol** 1989 Mar;66(3):1477-85

The effect of intentional hemodilution on P50. Parris WC, et al. **J Cardiovasc Surg (Torino)** 1988 Sep-Oct;29(5):560-2

Binding of inositol hexakisphosphate to the oxygenated derivative of dromedary (Camelus dromedarius) and human hemoglobin: 31P-NMR study. Ascenzi P, et al. **J Inorg Biochem** 1989 Apr;35(4):247-53

Salt, phosphate and the Bohr effect at the hemoglobin beta chain C terminus studied by hydrogen exchange. Louie G, et al. **J Mol Biol** 1988 Jun 20;201(4):765-72

Cryospectrophotometric determination of tumor intravascular oxyhemoglobin saturations: dependence on vascular geometry and tumor growth. Fenton BM, et al. **J Natl Cancer Inst** 1988 Dec 21;80(20):1612-9

Carboxy- and oxyhemoglobin in pregnant ewe and fetus after inhalation of marijuana, marijuana placebo and tobacco cigarette smoke. McTiernan MJ, et al. **Life Sci** 1988; 43(24):2043-7

Functional properties of hemoglobin in human red cells: II. Determination of the Bohr effect. Kister J, et al. **Respir Physiol** 1988 Sep;73(3):363-78

Significance of the Bohr effect for tissue oxygenation in a model with counter-current blood flow. Kobayashi H, et al. **Respir Physiol** 1989 Jun;76(3):277-88

Inhibition of heme-promoted enzymatic lipid peroxidation by desferrioxamine and EDTA. Carlin G, et al. **Ups J Med Sci** 1988;93(3):215-23

Residual motion of hemoglobin-bound spin labels as a probe for protein dynamics. Steinhoff H, et al. **Z Naturforsch [C]** 1989 Mar-Apr;44(3-4):280-8

[Estimation of PaO2 using pulsatile oximetry and the HbO2 dissociation curve in the premature infant] Major D, et al. **Union Med Can** 1989 Jan-Feb;118(1):18, 21-2 (Eng. Abstr.) **(Fre)**

[In vivo detection of the Christiansen–Douglas–Haldane effect in clinical conditions] Brandt L, et al. **Anaesthesist** 1988 Aug;37(8):529–34 (Eng. Abstr.) **(Ger)**

[The status of arterial and mixed venous blood gases in the initial phase of intubation apnea. Studies on the Christiansen–Douglas–Haldane effect] Brandt L, et al. **Anaesthesist** 1989 Apr;38(4):167–73 (Eng. Abstr.) **(Ger)**

[An algorithm for calculating and analyzing the dissociation curves of human blood oxyhemoglobin standardized by 2 and 3 allosteric ligands] Dmitrieva MG, et al. **Anesteziol Reanimatol** 1989 Mar–Apr;(2):15–8 (Eng. Abstr.) **(Rus)**

[Respiratory function of the blood in patients in critical conditions: saturation of arterial blood with O2 as a function of P50] Riabov GA, et al. **Anesteziol Reanimatol** 1988 May–Jun;(3):28–31 (Eng. Abstr.) **(Rus)**

[Hemoglobin affinity to oxygen and its correction with captopril in chronic cardiac insufficiency] Kukes VG, et al. **Kardiologiia** 1989 Apr;29(4):34–6 (Eng. Abstr.) **(Rus)**

[Metronidazole activity and human erythrocytes] Birzhanova NKh, et al. **Med Radiol (Mosk)** 1989 Jun;34(6):43–5 **(Rus)**

[Effect of chemical modification of hemoglobin on its biological activity] Gudkin LR, et al. **Vopr Med Khim** 1988 Jul–Aug;34(4):90–3 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Free radical generation during delta-aminolevulinic acid autoxidation: induction by hemoglobin and connections with porphyrinpathies. Monteiro HP, et al. **Arch Biochem Biophys** 1989 May 15;271(1):206–16

Relation of supersensitivity to cerebral vasospasm induced by oxyhaemoglobin. Iwai R, et al. **Neurol Res** 1988 Sep; 10(3):169–74

Relationship between extraluminal oxyhemoglobin and endothelium-dependent vasodilatation in isolated perfused canine internal carotid arteries. Tanaka Y, et al. **Neurosurgery** 1988 Aug;23(2):158–61

Time-dependent effects of extraluminally-applied oxyhemoglobin and endothelial removal on vasodilator responses in isolated, perfused canine basilar arteries. Tsuji T, et al. **Pharmacology** 1989;38(2):101–12

The tracheal nonadrenergic noncholinergic inhibitory system during antigen challenge. Ko WC, et al. **Respir Physiol** 1988 Nov;74(2):129–38

Prolonged exposure to oxyhemoglobin modifies the response of isolated dog middle cerebral arteries to vasoactive substances. Onoue H, et al. **Stroke** 1989 May;20(5):657–63

[Selective augmenting effect of oxy-Hb on the contractions of cerebral arteries elicited by various vasoactive substances] Tsuiki K. **No Shinkei Geka** 1988 Sep; 16(10):1155–62 (Eng. Abstr.) **(Jpn)**

OXYMETAZOLINE see under **IMIDAZOLES**

OXYMETHOLONE

THERAPEUTIC USE

Oxymetholone therapy in patients with familial antithrombin III deficiency. Shibuya A, et al. **Thromb Haemost** 1988 Dec 22;60(3):495–7

OXYMORPHONE see under **DIHYDROMORPHINONE**

OXYNEURINE see **BETAINE**

OXYNTIC CELLS see **PARIETAL CELLS, GASTRIC**

OXYPERTINE see under **INDOLES**

OXYPHENBUTAZONE

ADMINISTRATION & DOSAGE

A new approach to encapsulating nonsteroidal anti-inflammatory drugs. IV. Effect of cellulose derivatives with different functional groups on the bioavailability and gastric ulcerogenic activity of acidic as well as basic nonsteroidal anti-inflammatory drugs. Meshali MM, et al. **J Microencapsul** 1989 Jul–Sep;6(3):355–60

ANALYSIS

Physical characterization of two oxyphenbutazone pseudopolymorphs. Stoltz M, et al. **J Pharm Sci** 1988 Dec; 77(12):1047–9

PHARMACOKINETICS

Pharmacokinetics of oxyphenbutazone in horses. Gerken DF, et al. **J Vet Pharmacol Ther** 1988 Sep;11(3):283–7

THERAPEUTIC USE

A comparative study of ibuprofen with paracetamol versus oxyphenbutazone with analgin combination in ophthalmic practice. Roy IS, et al. **Indian J Ophthalmol** 1988 Jan–Mar; 36(1):37–40

OXYPHENISATIN ACETATE see under **INDOLES**

OXYPHENONIUM BROMIDE see under **AMMONIUM COMPOUNDS**

OXYPROLINE see **HYDROXYPROLINE**

OXYPROTHEPINE see under **DIBENZOTHIEPINS**

OXYPURINOL see under **PYRIMIDINES**

OXYTETRACID see **OXYTETRACYCLINE**

OXYTETRACYCLINE

Antibiotic–metal interactions in saline medium. von Fraunhofer JA, et al. **Biomaterials** 1989 Mar;10(2):136–8

ADMINISTRATION & DOSAGE

Intra-amniotic injection of oxytetracycline hydrochloride for termination of mid-trimester pregnancy. Faktor JH, et al. **Gynecol Obstet Invest** 1988;26(3):177–80

[Immunomorphologic changes in the liver under the influence of low tetracycline doses] Zhil'skaia ZhIa, et al. **Vrach Delo** 1988 Oct;(10):70–2 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

[Prevention of development of tetracycline-induced changes in the teeth of children with the use of sodium fluoride] Antalovská Z, et al. **Cas Lek Cesk** 1986 Oct 24; 125(43):1317–20 (Eng. Abstr.) **(Cze)**

ANALYSIS

Bioassay techniques and high-performance liquid chromatography for detection of oxytetracycline residues in tissues from calves. MacNeil JD, et al. **Am J Vet Res** 1989 Jan;50(1):72–4

Flow injection amperometric detection based on ion transfer across a water–solidified nitrobenzene interface for the determination of tetracycline and terramycin. Ji HM, et al. **Analyst** 1988 Oct;113(10):1541–3

Determination of oxytetracycline in fish by high-performance liquid chromatography. Björklund H. **J Chromatogr** 1988 Nov 18;432:381–7

A rapid fluorimetric screening method for chlortetracycline, oxytetracycline and tetracycline in pig meat and kidney tissues. Haagsma N, et al. **Z Lebensm Unters Forsch** 1989 Mar;188(3):227–31

BIOSYNTHESIS

Cloning and heterologous expression in Streptomyces lividans of Streptomyces rimosus genes involved in oxytetracycline biosynthesis. Binnie C, et al. **J Bacteriol** 1989 Feb;171(2):887–95

BLOOD

Determination of oxytetracycline in plasma from rainbow trout using high-performance liquid chromatography with ultraviolet detection. Iversen B, et al. **J Chromatogr** 1989 Aug 25;493(1):217–21

METABOLISM

Molecular cloning of resistance genes and architecture of a linked gene cluster involved in biosynthesis of oxytetracycline by Streptomyces rimosus. Butler MJ, et al. **Mol Gen Genet** 1989 Jan;215(2):231–8

PHARMACOKINETICS

Pharmacokinetics of oxytetracycline in the turkey: evaluation of biliary and urinary excretion. Dyer DC. **Am J Vet Res** 1989 Apr;50(4):522–4

Effect of experimental synovitis on disposition of penicillin and oxytetracycline in neonatal calves. Guard CL, et al. **Cornell Vet** 1989 Apr;79(2):161–71

Plasma concentrations of oxytetracycline in swine after administration of the drug intramuscularly and orally in feed. Hall WF, et al. **J Am Vet Med Assoc** 1989 May 1; 194(9):1265–8

Oxytetracycline pharmacokinetics, tissue depletion, and toxicity after administration of a long-acting preparation at double the label dosage. TerHune TN, et al. **J Am Vet Med Assoc** 1989 Apr 1;194(7):911–7

Poly(lactic acid) microencapsulated oxytetracycline: in vitro and in vivo evaluation. Vidmar V, et al. **J Microencapsul** 1984 Apr–Jun;1(2):131–6

Concentrations of sulphadimidine, oxytetracycline and penicillin G in serum, synovial fluid and tissue cage fluid after parenteral administration to calves. Bengtsson B, et al. **J Vet Pharmacol Ther** 1989 Mar;12(1):37–45

Comparative pharmacokinetics of oxytetracycline in rainbow trout (Salmo gairdneri) and African catfish (Clarias gariepinus). Grondel JL, et al. **J Vet Pharmacol Ther** 1989 Jun;12(2):157–62

Pharmacokinetics of long acting oxytetracycline in the laboratory rat. Curl JL, et al. **Lab Anim Sci** 1988 Aug; 38(4):430–4

PHARMACOLOGY

The effect of oxytetracycline on leukocyte migration into inflammatory exudate. Luthman J, et al. **Acta Vet Scand** 1988;29(3–4):505–7

Low propensity for poultry isolates of Pasteurella multocida to acquire adaptive resistance to oxytetracycline. Champlin FR, et al. **Avian Dis** 1988 Jul–Sep;32(3):478–82

Studies on the response of guinea fowls (Numida meleagris) to antibiotics. Oguntona T. **Br Poult Sci** 1988 Sep; 29(3):683–7

Lack of lysosomal fusion with phagosomes containing Ehrlichia risticii in P388D1 cells: abrogation of inhibition with oxytetracycline. Wells MY, et al. **Infect Immun** 1988 Dec;56(12):3209–15

Effects of feed or water restriction, antibiotic injection and receiving diet management on commingled feeder pig performance. Brumm MC, et al. **J Anim Sci** 1989 May; 67(5):1183–8

THERAPEUTIC USE

Survival analysis for evaluation of corneal ulcer healing times in calves with naturally acquired infectious bovine keratoconjunctivitis. Edmondson AJ, et al. **Am J Vet Res** 1989 Jun;50(6):838–44

Efficacy of long-acting oxytetracycline alone or in combination with streptomycin for treatment of Brucella ovis infection of rams. Marín CM, et al. **Am J Vet Res** 1989 Apr;50(4):560–3

Measuring treatment compliance of men with non-gonococcal urethritis receiving oxytetracycline combined with low dose phenobarbitone. Bignell CJ, et al. **Genitourin Med** 1988 Oct;64(5):312–5

Randomized efficacy trials of long-acting oxytetracycline in neonatal pigs. Gardner IA, et al. **J Am Vet Med Assoc** 1989 Mar 1;194(5):659–63

Development of periodontal disease in a single flock of sheep: clinical signs, morphology of subgingival plaque and influence of antimicrobial agents. Spence JA, et al. **Res Vet Sci** 1988 Nov;45(3):324–31

Development of a prophylactic regime using long-acting tetracycline for the control of redwater and heartwater in susceptible cattle moved into an endemic area. Purnell RE, et al. **Trop Anim Health Prod** 1989 Feb;21(1):11–9

Long-acting oxytetracycline prophylaxis to protect susceptible cattle introduced into an area of Kenya with endemic East Coast fever. Chumo RS, et al. **Vet Rec** 1989 Mar 4;124(9):219–22

Metaphylactic use of long-acting oxytetracycline in pasteurellosis in lambs. Gilmour NJ, et al. **Vet Rec** 1988 Oct 22;123(17):443–4

Effect of chemotherapy on semen characteristics of Balami rams infected with Anaplasma ovis. Kumi-Diaka J, et al. **Vet Res Commun** 1988;12(2–3):119–24

[Clinical efficacy of Auricularum compared with its bacteriologic efficacy in vitro] Frèche C, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(8):635–41 (Eng. Abstr.) **(Fre)**

[Multicenter study of auricularum in chronic otitis] Portmann M, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988; 109(5):489–91 (Eng. Abstr.) **(Fre)**

[Tetracycline and oxytetracycline in the treatment of non-gonococcal urethritis in men] Dajek Z, et al. **Przegl Dermatol** 1988 May–Jun;75(3):210–4 (Eng. Abstr.) **(Pol)**

[The effectiveness of tetracycline in the treatment of rosacea associated with epithelioid granulomas] Dobrić I, et al. **Acta Med Iugosl** 1989;43(2):127–36 (Eng. Abstr.) **(Scr)**

TOXICITY

[Acute toxicity of penicillin G and OTC (oxytetracycline) and the products of their thermal degradation] Kiszczak L, et al. **Rocz Panstw Zakl Hig** 1988;39(4):314–8 (Eng. Abstr.) **(Pol)**

[Subchronic toxicity of oxytetracycline (OTC) and the products of its thermal degradation after oral administration] Tropiło J, et al. **Rocz Panstw Zakl Hig** 1988; 39(6):497–503 (Eng. Abstr.) **(Pol)**

URINE

Factors affecting the accuracy of the live animal swab test for detecting urine oxytetracycline and predicting oxytetracycline residues in calves. TerHune TN, et al. **J Am Vet Med Assoc** 1989 Apr 1;194(7):918–21

OXYTHIAMINE see under **THIAZOLES**

OXYTOCICS

[Tocographic pattern induced by misoprostol] Mariani Neto C, et al. **Rev Paul Med** 1988 Jul–Aug;106(4):205–8 (Eng. Abstr.) **(Por)**

ADMINISTRATION & DOSAGE

Active versus physiological management of third stage of labour [letter] Guidotti RJ. **BMJ** 1989 Jan 7;298(6665):50

POISONING

Hazard of piggy-backing intravenous infusions [letter] Ewen A. **Anaesthesia** 1988 Oct;43(10):902

THERAPEUTIC USE

Changes in plasma cyclic AMP and cyclic GMP during spontaneous labor and labor induced by oxytocin, prostaglandin F2 alpha and prostaglandin E2. Nagata I, et al. **Gynecol Obstet Invest** 1988;26(1):21–8

OXYTOCIN

Evolving concepts of oxytocin for induction of labor. Dawood MY. **Am J Perinatol** 1989 Apr;6(2):167–72 (59 ref.)

Premature rupture of membranes near term: induction of labor with endocervical prostaglandin E2 gel or intravenous oxytocin. Goeschen K. **Am J Perinatol** 1989 Apr;6(2):181–4

Pulsatile administration enhances the effect and reduces the dose of oxytocin required for induction of labor. Randolph GW, et al. **Am J Perinatol** 1989 Apr;6(2):159–66

Oxytocin augmentation in dysfunctional labour after previous caesarean section. Arulkumaran S, et al. **Br J Obstet Gynaecol** 1989 Aug;96(8):939–41

Mid–trimester therapeutic abortion by intra–amniotic prostaglandin F2 alpha and concomitant oxytocin. Hørding U. **Clin Exp Obstet Gynecol** 1988;15(4):124–8

Plasma prolactin concentrations in mares and their neonates after oxytocin induction of parturition. Roser JF, et al. **Domest Anim Endocrinol** 1989 Apr;6(2):101–10

Oxytocin and the induction of labor: use in a network of community hospitals. Crump WJ. **Fam Med** 1989 Mar–Apr; 21(2):110–3

ADMINISTRATION & DOSAGE

The effect of oxytocin administration upon the pulsatile secretion of luteinizing hormone in humans. Amico JA, et al. **Acta Endocrinol (Copenh)** 1989 Jul;121(1):41–5

Oxytocin reduces exercise–induced ACTH and cortisol rise in man. Coiro V, et al. **Acta Endocrinol (Copenh)** 1988 Nov; 119(3):405–12

A comparison of oral prostaglandin E2 tablets with intravenous oxytocin for stimulation of labor after premature rupture of membranes at term. Massil HY, et al. **Acta Obstet Gynecol Scand** 1988;67(8):703–9

Gastrointestinal regulatory peptides during oxytocin infusion in post–term pregnancies. Holst N, et al. **Acta Physiol Scand** 1988 Jan;132(1):23–7

Interaction between gastrin–17 and oxytocin on plasma levels of insulin, glucagon and glucose in conscious dogs. Stock S, et al. **Acta Physiol Scand** 1989 Apr;135(4):559–64

Intraumbilical oxytocin for the retained placenta [letter] Golan A. **Am J Obstet Gynecol** 1988 Nov;159(5):1309–10

Oxytocin administration and uterine exploration in the management of vaginal birth after cesarean—not routine procedures [letter] Jakobi P, et al. **Am J Obstet Gynecol** 1989 Jun;160(6):1538–40

Changes in neonatal transcutaneous bilirubinometer index following intravenous fluid and oxytocin infusion during labour. Loong EP, et al. **Asia Oceania J Obstet Gynaecol** 1988 Dec;14(4):411–4

Intrauterine pressure studies in multigravid patients in spontaneous labour: effect of oxytocin augmentation in delayed first stage. Reddi K, et al. **Br J Obstet Gynaecol** 1988 Aug;95(8):771–7

Trial of scar with induction/oxytocin in delivery following prior section. Meehan FP. **Clin Exp Obstet Gynecol** 1988; 15(4):117–23

Psychological stress and administered oxytocin during pregnancy: effect corticosterone and prolactin response in lactating rats. Pfister HP, et al. **Int J Neurosci** 1989 Mar; 45(1–2):91–9

Oxytocin–induced labor characteristics and uterine activity after preinduction cervical priming with prostaglandin E2 intracervical gel. Ferguson JE 2d, et al. **Obstet Gynecol** 1988 Nov;72(5):739–45

Oxytocin for the induction of labor. Blakemore KJ, et al. **Obstet Gynecol Clin North Am** 1988 Jun;15(2):339–53

Management of term pregnancy with premature rupture of the membranes and unfavourable cervix. van der Walt D, et al. **S Afr Med J** 1989 Jan 21;75(2):54–6

Comparative study between prostaglandin E2 vaginal tablet and intravenous oxytocin in induction of labour. Chua SM, et al. **Singapore Med J** 1988 Aug;29(4):379–82

[Biochemistry of neonatal cord blood following intrapartum glucose and oxytocin infusion] Liu YX, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1989 Mar;24(2):85–6, 124 (Eng. Abstr.) **(Chi)**

ADVERSE EFFECTS

Oxytocin may explain neonatal seizures [letter] Goodlin RC. **Am J Obstet Gynecol** 1989 Jul;161(1):259

A prospective study of the active management of labor in women of high parity. Laor D, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Feb;30(2):111–5

Good medicine—lethal side effects. Avery JK. **J Tenn Med Assoc** 1989 Feb;82(2):91

[Effect of glucocorticoids, tocolytics and oxytocin on the status and fate of premature infants] Szczurowicz A, et al. **Wiad Lek** 1988 Sep 15;41(18):1197–203 (Eng. Abstr.) **(Pol)**

ANALOGS & DERIVATIVES

Processing of the oxytocin precursor: isolation of an exopeptidase from neurosecretory granules of bovine pituitaries. Nörenberg U, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):898–904

Uterine blood flow and myometrial activity at menstruation, and the action of vasopressin and a synthetic antagonist. Hauksson A, et al. **Br J Obstet Gynaecol** 1988 Sep; 95(9):898–904

Physiological effects of arginine vasotocin and mesotocin in cockerels. Robinzon B, et al. **Br Poult Sci** 1988 Sep; 29(3):639–52

Relationships between renal hemodynamics and plasma levels of arginine vasotocin and mesotocin during hemorrhage in the domestic fowl (Gallus domesticus). Bottje WG, et al. **Comp Biochem Physiol [A]** 1989;92(3):423–7

Effect of heat stress on plasma levels of arginine vasotocin and mesotocin in domestic fowl (Gallus domesticus). Wang S, et al. **Comp Biochem Physiol [A]** 1989;93(4):721–4

Distribution of immunoreactive vasotocin and mesotocin in the chicken gastrointestinal tract. Robinzon B, et al. **Domest Anim Endocrinol** 1988 Jul;5(3):241–6

The localization of oxytocin and mesotocin in the reproductive tract of the male marsupial bandicoot Isoodon macrourus. Gemmell RT, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):103–9

Immunocytochemical location of oxytocin and mesotocin within the hypothalamus of two Australian marsupials, the bandicoot Isoodon macrourus and the brushtail possum Trichosurus vulpecula. Gemmell RT, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):96–102

Analogs of oxytocin containing a pseudopeptide Leu–Gly bond of cis and trans configuration. Lebl M, et al. **Int J Pept Protein Res** 1989 Jan;33(1):16–21

Molecular mechanics calculations on deaminooxytocin and on deamino–arginine–vasopressin and its analogues. Liwo A, et al. **J Comput Aided Mol Des** 1989 Jan;2(4):281–309

Correlation between myometrial receptor affinity, lipophilicity and antagonistic potency of oxytocin analogues in the rat. Atke A, et al. **J Endocrinol** 1988 Aug; 118(2):187–92

Post–translational processing of oxytocin–neurophysin prohormone in the ovine corpus luteum: activity of peptidyl glycine alpha–amidating mono–oxygenase and concentrations of its cofactor, ascorbic acid. Sheldrick EL, et al. **J Endocrinol** 1989 Jul;122(1):313–22

Co–existence of TRH with mesotocin in the same axon terminals of the bullfrog pars nervosa as revealed by double labeling immunocytochemistry. Shioda S, et al. **Neurosci Lett** 1989 Mar 13;98(1):25–8

Penile erection and yawning induced by oxytocin and related peptides: structure–activity relationship. Argiolas A, et al. **Peptides** 1989 May–Jun;10(3):559–63

Fluorescent, photoaffinity, and biotinyl analogs of oxytocin. Buku A, et al. **Peptides** 1988 Jul–Aug;9(4):783–6

Distribution of immunoreactive mesotocin and vasotocin in the brain and pituitary of chickens. Robinzon B, et al. **Peptides** 1988 Jul–Aug;9(4):829–33

Apomorphine stimulation of male copulatory behavior is prevented by the oxytocin antagonist d(CH2)5 Tyr(Me)–Orn8–vasotocin in rats. Argiolas A, et al. **Pharmacol Biochem Behav** 1989 May;33(1):81–3

[4–(0–methyl)–L–threonine] –oxytocin. Synthesis and uterotonic activity. Bańkowski K. **Pol J Pharmacol Pharm** 1988 May–Jun;40(3):331–5

Vasotocin and isotocin precursors from the white sucker, Catostomus commersoni: cloning and sequence analysis of the cDNAs. Heierhorst J, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5242–6

ANALYSIS

Chronic treatment with desmethylimipramine increases the oxytocin content in the hypothalamus and neurohypophysis of normal and pinealectomized male rats. Juszczak M. **Acta Physiol Pol** 1988 Jul–Aug;39(4):261–8

Oxytocin and vasopressin are present in human and rat pancreas. Amico JA, et al. **Am J Med Sci** 1988 Nov; 296(5):303–7

Evidence for the presence of oxytocin in the ovine epididymis. Knickerbocker JJ, et al. **Biol Reprod** 1988 Sep; 39(2):391–7

Serial oxytocin levels in amniotic fluid and maternal plasma during normal and induced labour [letter] Thornton S, et al. **Br J Obstet Gynaecol** 1989 Mar;96(3):370–1

Central and peripheral release of vasopressin and oxytocin in the conscious rat after osmotic stimulation. Landgraf R, et al. **Brain Res** 1988 Aug 9;457(2):219–25

Phylogenetic study of the oxytocin–like immunoreactive system in invertebrates. Mizuno J, et al. **Comp Biochem Physiol [A]** 1988;91(4):733–8

Vasopressin and oxytocin systems in the brain and upper spinal cord of Macaca fascicularis. Caffé AR, et al. **J Comp Neurol** 1989 Sep 15;287(3):302–25

Neurohypophyseal aging: differential changes in oxytocin and vasopressin release, studied in Fischer 344 and Sprague–Dawley rats. Zbuzek V, et al. **Neuroendocrinology** 1988 Dec;48(6):619–26

[Immunohistochemical identification of VP– and OT–containing neurons in the hypothalamus and its adjacent areas of the rat] Yang M, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec;19(4):367–70 (Eng. Abstr.) **(Chi)**

[Labor–determining factors. Study of myometrial receptors and our hypothesis of clinical approacn] Cappa F, et al. **Minerva Ginecol** 1988 Jul;40(7):407–10 (Eng. Abstr.) **(Ita)**

[Human placental oxytocin and its increase by prostaglandin E2 and F2 alpha] Sugahara M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Mar; 41(3):287–92 (Eng. Abstr.) **(Jpn)**

ANTAGONISTS & INHIBITORS

Oxytocin receptor blockade: a new principle in the treatment of preterm labor? Andersen LF, et al. **Am J Perinatol** 1989 Apr;6(2):196–9

Profile of an oxytocin antagonist, RWJ 22164 for treatment of preterm labor in laboratory models of uterine contractility. Demarest KT, et al. **Am J Perinatol** 1989 Apr; 6(2):200–4

Oxytocin antagonist (dTVT) and oxytocin receptors in myometrium and decidua. Fuchs AR, et al. **Am J Perinatol** 1989 Apr;6(2):205–8

Calcitonin is a competitive inhibitor of the hydrosmotic effect of oxytocin in toad bladder. Parisi M, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):E613–6

A structurally unique, potent, and selective oxytocin antagonist derived from Streptomyces silvensis. Pettibone DJ, et al. **Endocrinology** 1989 Jul;125(1):217–22

Interruption of parturition in rats by morphine: a result of inhibition of oxytocin secretion. Russell JA, et al. **J Endocrinol** 1989 Jun;121(3):521–36

Solid–phase synthesis of 16 potent (selective and nonselective) in vivo antagonists of oxytocin. Manning M, et al. **J Med Chem** 1989 Feb;32(2):382–91

Apomorphine stimulation of male copulatory behavior is prevented by the oxytocin antagonist d(CH2)5 Tyr(Me)–Orn8–vasotocin in rats. Argiolas A, et al. **Pharmacol Biochem Behav** 1989 May;33(1):81–3

BIOSYNTHESIS

Total translation of vasopressin and oxytocin in neurohypophysis of rats. Robinson AG, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R109–17

BLOOD

Effect of acute ether or restraint stress on plasma corticotropin–releasing hormone, vasopressin and oxytocin levels in the rat. Hashimoto K, et al. **Acta Med Okayama** 1989 Jun;43(3):161–7

Increased plasma levels of oxytocin in response to afferent electrical stimulation of the sciatic and vagal nerves and in response to touch and pinch in anaesthetized rats. Stock S, et al. **Acta Physiol Scand** 1988 Jan;132(1):29–34

Regulation of vasopressin and oxytocin release in vitro. Sladek CD, et al. **Adv Exp Med Biol** 1988;245:157–65 (46 ref.)

Influence of premature rupture of membranes on induction of labor and plasma 13,14–dihydro–15–keto–prostaglandin F2 alpha and oxytocin levels in patients with unripe cervix. Fuchs AR, et al. **Am J Perinatol** 1989 Apr;6(2):176–80

Afferent renal nerve effects on plasma vasopressin and oxytocin in conscious rats. Simon JK, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1240–4

Plasma oxytocin during third stage of labour [letter] **BMJ** 1988 Sep 3;297(6648):620

Amniotomy–induced labour is not mediated by endogenous oxytocin. Thornton S, et al. **Br J Obstet Gynaecol** 1989 Aug;96(8):945–8

Responses of plasma oxytocin and arginine vasopressin to nausea induced by apomorphine and ipecacuanha. Nussey SS, et al. **Clin Endocrinol (Oxf)** 1988 Mar;28(3):297–304

The response of plasma oxytocin to surgical stress. Nussey SS, et al. **Clin Endocrinol (Oxf)** 1988 Mar;28(3):277–82

Endogenous opioids inhibit oxytocin release during nicotine–stimulated secretion of vasopressin in man. Seckl JR, et al. **Clin Endocrinol (Oxf)** 1988 May;28(5):509–14

Effects of subacute opioid administration during late pregnancy in the rat on the initiation, duration and outcome of parturition and maternal levels of oxytocin and arginine vasopressin. Evans RG, et al. **Clin Exp Pharmacol Physiol** 1989 Mar;16(3):169–78

Fetal and maternal plasma levels of gastrin, somatostatin and oxytocin after vaginal delivery and elective cesarean section. Marchini G, et al. **Early Hum Dev** 1988 Nov; 18(1):73–9

Release of oxytocin and vasopressin by intracerebroventricular vasoactive intestinal polypeptide. Bardrum B, et al. **Endocrinology** 1988 Nov;123(5):2249–54

Hormonal changes during lactation in sows: influence of spontaneous suckling on prolactin, oxytocin and corticoids concentrations. Okrasa S, et al. **Exp Clin Endocrinol** 1989 Apr;93(1):95–103

Plasma oxytocin concentrations in pigs after water deprivation and during rehydration. Thornton SN, et al. **Horm Metab Res** 1989 Jun;21(6):345

Elevated plasma levels of oxytocin in obese subjects before and after gastric banding. Stock S, et al. **Int J Obes** 1989 Apr;13(2):213–22

Effects of adrenalectomy and glucocorticoids on the peptides CRF–41, AVP and oxytocin in rat hypophysial portal blood [published erratum appears in J Physiol (Lond) 1988 Nov;405:785] Fink G, et al. **J Physiol (Lond)** 1988 Jul; 401:329–45

Hormonal changes during luteal regression in farmed fallow deer, Dama dama. Asher GW, et al. **J Reprod Fertil** 1988 Sep;84(1):379–86

Variation in plasma concentrations of oestradiol–17 beta and their relationship to those of progesterone, 13,14–dihydro–15–keto–prostaglandin F–2 alpha and oxytocin across pregnancy and at parturition in pony mares. Haluska GJ, et al. **J Reprod Fertil** 1988 Nov;84(2):635–46

Motor action potential (M.A.P.) in the evaluation of uremic

peripheral neurone damage: influence of middle molecules (M.M.). Coratelli P, et al. **Life Support Syst** 1983;1 Suppl 1:129–32

Comparison of adrenocorticotropin control in Brattleboro, Long–Evans, and Wistar rats. Measurement of corticotropin–releasing factor, arginine vasopressin, and oxytocin in hypophysial portal blood. Tannahill LA, et al. **Neuroendocrinology** 1988 Dec;48(6):650–7

Apomorphine increases plasma oxytocin concentration in male rats. Melis MR, et al. **Neurosci Lett** 1989 Apr 10; 98(3):351–5

Oxytocin release evoked by electrical stimulation of the medial forebrain in the rat: analysis of stimulus parameters and supraoptic neuronal activity. Ingram CD, et al. **Neuroscience** 1988 Nov;27(2):597–605

The influence of morphine and naloxone on plasma oxytocin concentration in the rat. Grell S, et al. **Pharmacol Toxicol** 1988 Oct;63(4):274–6

Effects of a gastric implant on body weight and gastrointestinal hormones in cafeteria diet obese rats. Northway MG, et al. **Physiol Behav** 1989 Feb;45(2):331–5

Dopaminergic, but not cholinergic, involvement in regulation of hypoglycemia–induced oxytocin release in man. Chiodera P, et al. **Psychoneuroendocrinology** 1989; 14(3):203–8

Angiotensin acts at the subfornical organ to increase plasma oxytocin concentrations in the rat. Ferguson AV, et al. **Regul Pept** 1988 Dec;23(3):343–52

Effect of central hypertonic stimulation on plasma atrial natriuretic peptide and oxytocin in conscious rats. Hattori T, et al. **Regul Pept** 1988 Dec;23(3):271–8

Oxytocin, vasopressin, and prolactin responses associated with nipple stimulation. Hatjis CG, et al. **South Med J** 1989 Feb;82(2):193–6

[Oxytocin stress test by breast stimulation] Schröcksnadel H, et al. **Gynakol Rundsch** 1988;28 Suppl 2:157–8 **(Ger)**

[Changes in the 13,14–dihydro–15–ketoprostaglandin F2alpha and oxytocin level in the 1st trimester following beta–sympathomimetic and intracervical prostaglandin E2 gel administration] Osmers R, et al. **Zentralbl Gynakol** 1988; 110(21):1366–76 (Eng. Abstr.) **(Ger)**

[Fundamental studies on the measurement of plasma concentration of oxytocin during perinatal period] Furuya K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Nov; 40(11):1685–92 (Eng. Abstr.) **(Jpn)**

CEREBROSPINAL FLUID

Diurnal changes in vasopressin and oxytocin levels in cerebrospinal fluid of post–operative patients with intracranial aneurysms. Kuboyama T, et al. **Endocrinol Jpn** 1988 Apr;35(2):249–54

CHEMICAL SYNTHESIS

Fluorescent, photoaffinity, and biotinyl analogs of oxytocin. Buku A, et al. **Peptides** 1988 Jul–Aug;9(4):783–6

DIAGNOSTIC USE

[Autostimulation of the nipples as an endogenous oxytocin test] Ninkova E, et al. **Akush Ginekol (Sofiia)** 1988; 27(5):26–30 (Eng. Abstr.) **(Bul)**

[Nipple stimulation contraction stress test and oxytocin challenge test in evaluating fetal well being in high risk pregnancy] Ihara Y, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jan;41(1):101–4 **(Jpn)**

GENETICS

Regulation of vasopressin and oxytocin synthesis in anterior pituitary and peripheral tissues. Dave JR, et al. **Adv Alcohol Subst Abuse** 1988;7(3–4):231–4

A single rat genomic DNA fragment encodes both the oxytocin and vasopressin genes separated by 11 kilobases and oriented in opposite transcriptional directions. Mohr E, et al. **Biochimie** 1988 May;70(5):649–54

Diurnal variation in vasopressin and oxytocin messenger RNAs in hypothalamic nuclei of the rat. Burbach JP, et al. **Brain Res** 1988 Sep;464(2):157–60

Vasopressin and oxytocin gene expression in the supraoptic and paraventricular nucleus of the spontaneously hypertensive rat (SHR) during development of hypertension. van Tol HH, et al. **Brain Res** 1988 Dec; 464(4):303–11

Oxytocin and vasopressin gene expression during gestation and lactation. Zingg HH, et al. **Brain Res** 1988 Aug; 464(1):1–6

Ontogeny of hypothalamic vasopressin, oxytocin and somatostatin gene expression. Almazan G, et al. **Brain Res Dev Brain Res** 1989 Jan 1;45(1):69–75

Expression of the oxytocin and vasopressin genes in the rat hypothalamus during development: an in situ hybridization study. Laurent FM, et al. **Brain Res Dev Brain Res** 1989 Mar 1;46(1):145–54

Expression of the vasopressin and oxytocin genes in rats occurs in mutually exclusive sets of hypothalamic neurons. Mohr E, et al. **FEBS Lett** 1988 Dec 19;242(1):144–8

Independent regulation of neuropeptide mRNA level and poly(A) tail length. Carter DA, et al. **J Biol Chem** 1989 Apr 25;264(12):6601–3

Quantitation of vasopressin and oxytocin mRNA levels in the brain. Van Tol HH, et al. **Methods Enzymol** 1989; 168:398–413

Oxytocin mRNA: increase of polyadenylate tail size during pregnancy and lactation. Zingg HH, et al. **Mol Cell Endocrinol** 1989 Aug;65(1–2):59–62

Differential responses in vasopressin and oxytocin gene expression in distinct hypothalamic nuclei after hypothalamoneurohypophyseal disconnection and vasopressin substitution. Van Tol HH, et al. **Neuroendocrinology** 1989 Apr;49(4):337–43

Simultaneous use of digoxigenin– and radiolabeled oligodeoxyribonucleotide probes for hybridization histochemistry. Young WS 3d. **Neuropeptides** 1989 May–Jun;13(4):271–5

Regulation of neuronal oxytocin mRNA by ovarian steroids in the mature and developing hypothalamus. Miller FD, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2468–72

[Structures of the precursors and genes of arginine vasopressin and oxytocin and enzymologic modification of these two precursors] Ding Y. **Sheng Li Ko Hsueh Chin Chan** 1988 Jul;19(3):241–5 (36 ref.) **(Chi)**

[Ultrastructural localization of mRNA coding for oxytocin by in situ hybridization. Study by high resolution autoradiography using a tritiated oligonucleotide probe] Trembleau A, et al. **C R Acad Sci [III]** 1988;307(20):869–74 (Eng. Abstr.) **(Fre)**

IMMUNOLOGY

Distributional pattern of oxytocin– and vasopressin–immunoreactivity in the neurohypophysis of the Djungarian hamster (Phodopus sungorus). Redecker P, et al. **Cell Tissue Res** 1988 Sep;253(3):677–81

Effect of active immunization against oxytocin on gonadotrophin secretion and the establishment of pregnancy in the ewe. Wathes DC, et al. **J Reprod Fertil** 1989 Jul;86(2):653–64

ISOLATION & PURIFICATION

Preparation of serum oxytocin and arginine vasopressin prior to radioimmunoassay: simultaneous extraction and separation on C18 Sep–Pak cartridges. Carman FS 3d, et al. **Clin Biochem** 1988 Oct;21(5):265–9

Preparative high–performance liquid chromatography of peptides on a new reversed–phase packing material, Kromasil C18. Larsson K, et al. **J Chromatogr** 1988 Oct 19;450(1):71–80

METABOLISM

Immunoreactive oxytocin and vasopressin in the non–pregnant human uterus and oviductal isthmus. Lundin S, et al. **Acta Endocrinol (Copenh)** 1989 Feb;120(2):239–44

Cultured hypothalamic explants from spontaneously hypertensive rats have decreased vasopressin and oxytocin content and release. Bennett BA, et al. **Am J Hypertens** 1989 Jan;2(1):46–51

Autoradiographic demonstration of oxytocin–binding sites in the macula densa. Stoeckel ME, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):F310–4

Essential role of magnesium in oxytocin–receptor affinity and ligand specificity. Antoni FA, et al. **Biochem J** 1989 Jan 15;257(2):611–4

Serial oxytocin levels in amniotic fluid and maternal plasma during normal and induced labour. Padayachi T, et al. **Br J Obstet Gynaecol** 1988 Sep;95(9):888–93

Vasopressin reduces release from vasopressin–neurons and oxytocin–neurons by acting on V2–like receptors. Cheng SW, et al. **Brain Res** 1989 Feb 6;479(1):35–9

Immobilization stress affects oxytocin and vasopressin levels in hypothalamic and extrahypothalamic sites. Miaskowski C, et al. **Brain Res** 1988 Aug 16;458(1):137–41

Measurement of septal release of vasopressin and oxytocin by the push–pull technique following electrical stimulation of the paraventricular nucleus of rats. Neumann I, et al. **Brain Res** 1988 Oct 11;462(1):181–4

Does acute, intense stimulation of oxytocin neurones in the supraoptic nucleus increase their content of oxytocin mRNA? Sumner BE, et al. **Brain Res** 1989 Jun 12; 489(2):283–90

Functional kappa–opioid receptors on oxytocin and vasopressin nerve terminals isolated from the rat neurohypophysis. Zhao BG, et al. **Brain Res** 1988 Oct 11; 462(1):62–6

Evidence for substance P, serotonin and oxytocin input to medullary catecholamine neurons with diencephalic projections. Nicholas AP, et al. **Brain Res Bull** 1989 Feb; 22(2):213–23

Changes in immunostaining for oxytocin in the forebrain of the female rat during late pregnancy, parturition and early lactation. Jirikowski GF, et al. **Cell Tissue Res** 1989; 256(2):411–7

Time course of the estradiol–dependent induction of oxytocin receptor binding in the ventromedial hypothalamic nucleus of the rat. Johnson AE, et al. **Endocrinology** 1989 Sep; 125(3):1414–9

Evidence that apomorphine induces penile erection and yawning by releasing oxytocin in the central nervous system. Melis MR, et al. **Eur J Pharmacol** 1989 May 30; 164(3):565–70

Insulin and release of neurohypophysial hormones: in vivo and in vitro studies. Guzek JW, et al. **Exp Clin Endocrinol** 1988 Sep;92(1):43–50

The effect of atrial natriuretic factor on arginine–8–vasopressin and oxytocin levels in various brain regions and plasma. Laczi F, et al. **Exp Clin Endocrinol** 1988 Mar;92(3):328–34

The effects of beta–endorphin on arginine–8–vasopressin and oxytocin levels in rat brain areas. Vecsernyés M, et al. **Experientia** 1989 May 15;45(5):472–4

Photoaffinity labelling of the oxytocin receptor in plasma membranes from rat mammary gland. Müller M, et al. **FEBS Lett** 1989 Jan 2;242(2):333–6

Immunocytochemical location of oxytocin and mesotocin within the hypothalamus of two Australian marsupials, the bandicoot Isoodon macrourus and the brushtail possum Trichosurus vulpecula. Gemmell RT, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):96–102

The localization of oxytocin and mesotocin in the reproductive tract of the male marsupial bandicoot Isoodon macrourus. Gemmell RT, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):103–9

Immunocytochemistry of 5–bromo–2'–deoxyuridine labelled oligonucleotide probes. A novel technique for in situ hybridization. Jirikowski GF, et al. **Histochemistry** 1989; 91(1):51–3

Distribution and morphometric characteristics of oxytocin– and vasopressin–immunoreactive neurons in the rabbit hypothalamus. Schimchowitsch S, et al. **J Comp Neurol** 1989 Jul 15;285(3):304–24

Characteristics of milk ejection, associated intramammary pressure changes and oxytocin release in the mare. Ellendorff F, et al. **J Endocrinol** 1988 Nov;119(2):219–27

The interaction of arginine vasopressin and oxytocin with bovine adrenal medulla cells. Taylor AH, et al. **J Endocrinol** 1989 Apr;121(1):133–9

Differential biosynthesis and posttranslational processing of vasopressin and oxytocin in rat brain during embryonic and postnatal development. Altstein M, et al. **J Neurosci** 1988 Nov;8(11):3967–77

Frequency–dependent effects of activation and inhibition of protein kinase C on neurohypophysial release of oxytocin and vasopressin. Racké K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jun; 339(6):617–24

Estradiol modulation of oxytocin binding in the ventromedial hypothalamic nucleus of male and female rats. Coirini H, et al. **Neuroendocrinology** 1989 Aug;50(2):193–8

Differential effects of pituitary stalk–section on posterior pituitary and hypothalamic contents of prolactin–releasing factor, oxytocin, dopamine and beta–endorphin. Hyde JF, et al. **Neuroendocrinology** 1988 Sep;48(3):314–9

Testosterone modulates oxytocin binding in the hypothalamus of castrated male rats. Johnson AE, et al. **Neuroendocrinology** 1989 Aug;50(2):199–203

Endogenous opioid inhibition of the release of oxytocin from the isolated rat neurohypophysis during high–frequency stimulation of the pituitary stalk. Wammack R, et al. **Neurosci Lett** 1988 Sep 23;92(1):114–8

Differential distribution of acetylcholinesterase activity among vasopressin– and oxytocin–containing supraoptic magnocellular neurons. Pow DV, et al. **Neuroscience** 1989; 28(1):109–19

Prostaglandin F2 alpha, oxytocin and progesterone secretion by bovine luteal cells at several stages of luteal development: effects of oxytocin, luteinizing hormone, prostaglandin F2 alpha and estradiol–17 beta. Grazul AT, et al. **Prostaglandins** 1989 Sep;38(3):307–18

Effects of prostaglandin E2 and D2 on the release of vasopressin and oxytocin. Hashimoto H, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Apr; 36(1):9–14

PHARMACOKINETICS

[Metabolic clearance rate of oxytocin in human subjects] Takeda S, et al. **Nippon Naibunpi Gakkai Zasshi** 1989 Mar 20;65(3):182–9 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Intraventricular administration of neurohypophyseal hormones interferes with the development of tolerance to ethanol. Szabó G, et al. **Acta Physiol Hung** 1989; 73(1):97–103

Influence of oxytocin and prostaglandin on semen characteristics and process of ejaculation in buffalo bulls. Ibrahim MA. **Acta Vet Hung** 1988;36(1–2):3–10

The effect of continuous or pulsatile administration of oxytocin to ewes at 126 to 136 days' gestation on myometrial activity and fetal oxygenation. Pimentel G, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):242–7

Effect of umbilical vein oxytocin on puerperal blood loss and length of the third stage of labor. Reddy VV, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):206–8

Desensitization of rabbit myometrium to oxytocin and prostaglandin F2 alpha. Eiler H, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):E20–6

Medial preoptic area oxytocin and female sexual receptivity. Caldwell JD, et al. **Behav Neurosci** 1989 Jun;103(3):655–62

TPA– and agonist–induced force development in myometrium from pregnant and non–pregnant rats. Missiaen L, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):302–6

Vasopressin and oxytocin receptors on plasma membranes from rat mammary gland. Demonstration of vasopressin

receptors by stimulation of inositol phosphate formation, and oxytocin receptors by binding of a specific 125I-labeled oxytocin antagonist, d(CH2)5(1)[Tyr(Me)2, Thr4,Tyr-NH2(9)]OVT. Soloff MS, et al. **Biochem Cell Biol** 1989 Feb-Mar;67(2-3):152-62

Oxytocin regulates the plasma membrane Ca2+ transport in rat myometrium. Enyedi A, et al. **Biochem J** 1989 Jul 1;261(1):23-8

Studies on the effects of nitrendipine on oxytocin-, angiotensin II- and ergometrine-induced contraction of pregnant human myometrium in vitro. Odum CU, et al. **Br J Obstet Gynaecol** 1988 Aug;95(8):765-70

Vasopressin and oxytocin express excitatory effects on respiratory and respiration-related neurones in the nuclei of the tractus solitarius in the cat. Henry JL, et al. **Brain Res** 1989 Jul 3;491(1):150-5

The effect of oxytocin infusion on adenohypophysial and adrenal cortical responses to insulin-induced hypoglycaemia. Nussey SS, et al. **Clin Endocrinol (Oxf)** 1988 Sep;29(3):257-64

Variation in myometrial response to intravenous oxytocin administration at different times of the day in the pregnant rhesus monkey. Honnebier MB, et al. **Endocrinology** 1989 Sep;125(3):1498-503

Oxytocin mediates the hypothalamic action of vasoactive intestinal peptide to stimulate prolactin secretion. Samson WK, et al. **Endocrinology** 1989 Feb;124(2):812-9

Glucocorticoids but not vasopressin or oxytocin inhibit luteinizing hormone secretion in patients with psychogenic amenorrhea. Monzani A, et al. **Gynecol Endocrinol** 1989; 3(1):55-62

Pharmacological doses of oxytocin affect plasma hormone levels modulating glucose homeostasis in normal man. Paolisso G, et al. **Horm Res** 1988;30(1):10-6

Influence of exogenously administered oxytocin on central noradrenaline, dopamine and serotonin levels following psychological stress in nulliparous female rats (Rattus norvegicus). Pfister HP, et al. **Int J Neurosci** 1989 Apr; 45(3-4):221-9

Effect of phenylephrine, ergonovine, oxytocin and norepinephrine as an extender ingredient on viability of bovine spermatozoa. Gallagher GR, et al. **J Anim Sci** 1989 Jun;67(6):1573-6

Effect of calcium on oxytocin-induced contraction of mammary gland myoepithelium as visualized by NBD-phallacidin. Moore DM, et al. **J Cell Sci** 1987 Dec; 88 (Pt 5):563-9

Gonadotrophin-releasing activity of neurohypophysial hormones: I. Potential for modulation of pituitary hormone secretion in rats. Evans JJ, et al. **J Endocrinol** 1989 Jul; 122(1):99-106

The effect of Ca deprivation and of Ca-blocking drugs on oxytocin-induced contractions of the male mouse anococcygeus. Gibson A, et al. **J Pharm Pharmacol** 1989 Jun;41(6):412-5

Paraventricular and supraoptic bursting oxytocin cells in rat are locally regulated by oxytocin and functionally related. Moos F, et al. **J Physiol (Lond)** 1989;408:1-18

Oxytocin infusion from day 10 after oestrus extends the luteal phase in non-pregnant cattle. Gilbert CL, et al. **J Reprod Fertil** 1989 May;86(1):203-10

Oxytocin-induced release of prostaglandin-like substance in isolated rat uterus. Chan WY. **Life Sci** 1974 Jun 16; 14(12):2385-92

Inhibitory action of exogenous oxytocin on plasma cortisol in normal human subjects: evidence of action at the adrenal level. Legros JJ, et al. **Neuroendocrinology** 1988 Aug; 48(2):204-6

Effect of arginine vasopressin and oxytocin on acetylcholine-stimulation of corticosteroid and catecholamine secretion from the rat adrenal gland perfused in situ. Porter ID, et al. **Neuropeptides** 1988 Nov-Dec; 12(4):265-71

Penile erection and yawning induced by oxytocin and related peptides: structure-activity relationship. Argiolas A, et al. **Peptides** 1989 May-Jun;10(3):559-63

Influence of oxytocin on feeding behavior in the rat. Arletti R, et al. **Peptides** 1989 Jan-Feb;10(1):89-93

Oxytocin-induced penile erection and yawning: structure-activity relationship studies. Melis MR, et al. **Pharmacol Res Commun** 1988 Dec;20(12):1117-8

Prostaglandin E2 gel compared to oxytocin for medically-indicated labour induction at term: a controlled clinical trial. Silva-Cruz A, et al. **Pharmatherapeutica** 1988; 5(4):228-32

Correlation between oxytocin neuronal sensitivity and oxytocin receptor binding: an electrophysiological and autoradiographical study comparing rat and guinea pig hippocampus. Raggenbass M, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):750-4

Localized actions of progesterone in hypothalamus involve oxytocin. Schumacher M, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6798-801

Role of phospholipase C in mediating oxytocin-induced release of prostaglandin F2 alpha from ovine endometrial tissue. Silvia WJ, et al. **Prostaglandins** 1988 Apr; 35(4):535-48

Effects of pregnancy, oxytocin, ovine trophoblast protein-1 and their interactions on endometrial production of prostaglandin F2 alpha in vitro in perifusion chambers. Vallet JL, et al. **Prostaglandins** 1989 Jul;38(1):113-24

Inhibitory influence of oxytocin infusion on contingent negative variation and some memory tasks in normal men. Geenen V, et al. **Psychoneuroendocrinology** 1988; 13(5):367-75

Oxytocin-induced penile erection and yawning in male rats: effect of neonatal monosodium glutamate and hypophysectomy. Argiolas A, et al. **Psychopharmacology (Berlin)** 1989;97(3):383-7

[Antagonistic effect of oxytocin on the ototoxicity of kanamycin] Dong WJ. **Chung Hua I Hsueh Tsa Chih** 1988 Aug;68(8):460-2 **(Chi)**

[The effect of oxytocin, prostaglandin F2 alpha and their combined administration on labor activity] Hanzelka J, et al. **Cesk Gynekol** 1988 Nov;53(9):660-3 **(Cze)**

[Modifications of contingent negative variation (CNV) induced by oxytocin infusion] Timsit-Berthier M, et al. **Neurophysiol Clin** 1988 Dec;18(6):501-11 (Eng. Abstr.) **(Fre)**

[Effect of oxytocin on steroidogenesis in the rat ovary and placenta during the placental phase of pregnancy] Warszyńska A, et al. **Endokrynol Pol** 1988;39(1):19-25 (Eng. Abstr.) **(Pol)**

[The effect of neurohypophyseal peptides on the formation of conditioned active avoidance behavior] Ibragimov RSh. **Fiziol Zh SSSR** 1989 Jan;75(1):8-12 (Eng. Abstr.) **(Rus)**

[The effect of oxytocin and vasopressin on individual behavior and EEG-correlates of narcotic dependent rats in the "open field" test] Ibragimov RSh, et al. **Fiziol Zh SSSR** 1989 Apr;75(4):441-6 (Eng. Abstr.) **(Rus)**

[Ionic dependence of hyperpolarized changes of the membrane potential of breast secretory cells] Tolkunov IuA. **Fiziol Zh SSSR** 1989 Apr;75(4):567-74 (Eng. Abstr.) **(Rus)**

[Effect of application of oxytocin on neurons of Helix pomatia: depolarization effects] Kononenko NI, et al. **Neirofiziologiia** 1988;20(5):652-9 (Eng. Abstr.) **(Rus)**

[Effect of application of oxytocin on neurons of Helix pomatia: hyperpolarization effects] Kononenko NI, et al. **Neirofiziologiia** 1988;20(5):659-66 (Eng. Abstr.) **(Rus)**

[Effect of oxytocin on rat dorsal root ganglia in vitro] Molokanova EA, et al. **Neirofiziologiia** 1989;21(3):420-2 (Eng. Abstr.) **(Rus)**

[Effect of vasopressin and oxytocin on the dorsal root potentials of the isolated perfused spinal cord in rat pups] Tamarova ZA. **Neirofiziologiia** 1988;20(6):757-63 (Eng. Abstr.) **(Rus)**

[Effect of oxytocin on fibrinolysis and the status of the kallikrein-kinin system] Kirichuk VF, et al. **Probl Endokrinol (Mosk)** 1989 Mar-Apr;35(2):81-4 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Fetal and maternal oxytocin in human parturition. Chard T. **Am J Perinatol** 1989 Apr;6(2):145-52 (75 ref.)

Central oxytocin systems may mediate a cardiovascular response to acute stress in rats. Callahan MF, et al. **Am J Physiol** 1989 May;256(5 Pt 2):H1369-77

Central dopamine-oxytocin-adrenocorticotropin link in the expression of yawning and penile erection. Argiolas A, et al. **Ann Ist Super Sanita** 1988;24(3):377-82

Oxytocin in the testis: what, where, and why? Pickering BT, et al. **Ann N Y Acad Sci** 1989;564:198-209

Topography of oxytocin and vasopressin neurons in the forebrain of Equus caballus: further support of proposed evolutionary relationships for proopiomelanocortin, oxytocin and vasopressin neurons. Melrose PA, et al. **Brain Behav Evol** 1989;33(4):193-204

Sensitivity of magnocellular oxytocin neurones to opioid antagonists in rats treated chronically with intracerebroventricular (i.c.v.) morphine. Leng G, et al. **Brain Res** 1989 Apr 10;484(1-2):290-6

Endogenous oxytocin inhibits morphine tolerance through limbic forebrain oxytocin receptors. Sarnyai Z, et al. **Brain Res** 1988 Nov 1;463(2):284-8

Neuronal-glial and synaptic plasticity in the adult rat paraventricular nucleus. Theodosis DT, et al. **Brain Res** 1989 Apr 10;484(1-2):361-6

Circulating immunoreactive oxytocin during the human menstrual cycle comes from the pituitary and is estradiol dependent. Shukovski L, et al. **J Clin Endocrinol Metab** 1989 Feb;68(2):455-60

Is oxytocin of conceptus origin involved in inhibition of luteal regression in early pregnancy in ewes? Lacroix MC, et al. **J Endocrinol** 1988 Sep;118(3):R17-20

A function for ovarian oxytocin. Luck MR. **J Endocrinol** 1989 May;121(2):203-4

Role of prostaglandin F-2 alpha and oxytocin in the regression of GnRH-induced abnormal corpora lutea in anoestrous ewes. Hunter MG, et al. **J Reprod Fertil** 1989 Mar;85(2):551-61

Oxytocin and ovarian function. Fuchs AR. **J Reprod Fertil Suppl** 1988;36:39-47 (53 ref.)

Immunoneutralization of oxytocin attenuates preovulatory prolactin secretion during proestrus in the rat. Sarkar DK. **Neuroendocrinology** 1988 Aug;48(2):214-6

Water intake in rats subjected to hypothalamic immunoneutralization of angiotensin II, atrial natriuretic peptide, vasopressin, or oxytocin. Franci CR, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2952-6

Oxytocin: neurobiologic considerations and their implications for affective illness. Demitrack MA, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988;12 Suppl:S23-51 (137 ref.)

The involvement of oxytocin in ovulation and in the outputs of cyclo-oxygenase and 5-lipoxygenase products from isolated rat ovaries. Viggiano M, et al. **Prostaglandins** 1989 Mar;37(3):367-78

[The role of oxytocin in realizing hypothalamic effects on the motor function of the digestive tract] Dobrovol'skaia ZA, et al. **Fiziol Zh SSSR** 1989 May;75(5):734-7 (Eng. Abstr.) **(Rus)**

[Role of vasopressin- and oxytocinergic cells of macrocellular rat hypothalamic nuclei in regulating the thyroid during the administration of thyroliberin] Krasnovskaia IA, et al. **Probl Endokrinol (Mosk)** 1989 Mar-Apr;35(2):67-70 (Eng. Abstr.) **(Rus)**

POISONING

Hazard of piggy-backing intravenous infusions [letter] Ewen A. **Anaesthesia** 1988 Oct;43(10):902

SECRETION

Naloxone affects the release of cortisol, but not of vasopressin or oxytocin, in dehydrated sheep. Thornton SN, et al. **Acta Endocrinol (Copenh)** 1989 Jan;120(1):50-4

LiCl and CCK inhibit gastric emptying and feeding and stimulate OT secretion in rats. McCann MJ, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R463-8

Prostaglandin F2 alpha-stimulated release of ovarian oxytocin in the sheep in vivo: threshold and dose dependency. Lamsa JC, et al. **Biol Reprod** 1989 Jun; 40(6):1215-23

Evidence for involvement of an adrenal catecholamine in the beta-adrenergic inhibition of oxytocin release in lactating rats. Song SL, et al. **Brain Res** 1988 Aug 9; 457(2):303-9

Oxytocin and progesterone release from bovine corpus luteal cells in culture: effects of insulin-like growth factor I, insulin, and prostaglandins. McArdle CA, et al. **Endocrinology** 1989 Mar;124(3):1278-86

Baroreceptor influences on oxytocin and vasopressin secretion. Morris M, et al. **Hypertension** 1989 Feb; 13(2):110-4

Arginine vasopressin and oxytocin responses to insulin-induced hypoglycemia in type 1 (insulin-dependent) diabetes. Fisher BM, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):688-92

Human corpus luteum secretion of relaxin, oxytocin, and progesterone. Khan-Dawood FS, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):627-31

Catecholamines, oxytocin and milk removal in dairy cows. Blum JW, et al. **J Dairy Res** 1989 May;56(2):167-77

Neurotransmitters and lymphatic-vascular transfer of prostaglandin F2 alpha stimulate ovarian oxytocin output in sheep. Heap RB, et al. **J Endocrinol** 1989 Jul; 122(1):147-59

Gamma-aminobutyric acid regulation of neurohypophysial hormone secretion in male and female rats. Saridaki E, et al. **J Endocrinol** 1989 May;121(2):343-9

Optimizing release from peptide hormone secretory nerve terminals. Bicknell RJ. **J Exp Biol** 1988 Sep;139:51-65 (55 ref.)

Greatly elevated and sustained secretion of oxytocin by bovine granulosa cells in serum-free culture. Luck MR. **J Exp Zool** 1989 Sep;251(3):361-6

Endogenous opioid actions and effects of environmental disturbance on parturition and oxytocin secretion in rats. Leng G, et al. **J Reprod Fertil** 1988 Sep;84(1):345-56

Naloxone abolishes the inhibiting effect of somatostatin on the release of oxytocin evoked by insulin-induced hypoglycemia in humans. Chiodera P, et al. **Metabolism** 1989 Aug;38(8):709-11

Differential effects of potassium channel blockers on neurohypophysial release of oxytocin and vasopressin. Evidence for frequency-dependent interaction with the endogenous opioid inhibition of oxytocin release. Racké K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):560-6

Naloxone potentiation of effects of cholecystokinin and lithium chloride on oxytocin secretion, gastric motility and feeding. Flanagan LM, et al. **Neuroendocrinology** 1988 Dec; 48(6):668-73

Evidence for prolactin feedback actions on hypothalamic oxytocin, vasoactive intestinal peptide and dopamine secretion. Sarkar DK. **Neuroendocrinology** 1989 May; 49(5):520-4

Opioid-noradrenergic interactions in the neurohypophysis. I. Differential opioid receptor regulation of oxytocin, vasopressin, and noradrenaline release. Zhao BG, et al. **Neuroendocrinology** 1988 Jul;48(1):16-24

Opioid-noradrenergic interactions in the neurohypophysis. II. Does noradrenaline mediate the actions of endogenous opioids on oxytocin and vasopressin release? Zhao BG, et al. **Neuroendocrinology** 1988 Jul;48(1):25-31

A study on the release mechanism of vasopressin and oxytocin. Hashimoto H, et al. **Neuropeptides** 1988 Nov-Dec;12(4):199-206

Opioid inhibition of secretion from oxytocin and vasopressin nerve terminals following selective depletion of neurohypophysial catecholamines. Bicknell RJ, et al. **Neurosci Lett** 1988 Nov 11;93(2-3):281-6

Comparison of the oxytocin response to water-deprivation, hyperosmolarity and administration of morphine or

naltrexone in lactating and virgin female rats. Evans RG, et al. **Neurosci Lett** 1988 Nov 22;94(1-2):177-81
Species-specific effects of bombesin on gastric emptying and neurohypophyseal secretion. Verbalis JG, et al. **Peptides** 1988 Nov-Dec;9(6):1289-93
Cholecystokinin evokes secretion of oxytocin and vasopressin from rat neural lobe independent of external calcium. Bondy CA, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(13):5198-201
Relaxin regulates oxytocin secretion in late-pregnant beef heifers. Musah AI, et al. **Proc Soc Exp Biol Med** 1989 Jun; 191(2):124-9
[Study on oxytocin secretion from the guinea pig hypothalamo-neurohypophyseal complex (HNC) in organ culture] Haginiwa I, et al.
Nippon Sanka Fujinka Gakkai Zasshi 1989 Mar;41(3):273-9 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Amniotomy or oxytocin for induction of labor. Re-analysis of a randomized controlled trial. Keirse MJ.
Acta Obstet Gynecol Scand 1988;67(8):731-5
Foetal adrenal steroids--initiation of human parturition. Marton IS. **Acta Physiol Hung** 1988;71(4):557-9
Increased myometrial responsiveness to oxytocin during term and preterm labor. Garfield RE, et al.
Am J Obstet Gynecol 1989 Aug;161(2):454-61
Removing a retained placenta by oxytocin--a controlled study. Wilken-Jensen C, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):155-6
Progesterone antagonist (RU 486) for cervical dilation, labor induction, and delivery in monkeys: effectiveness in combination with oxytocin. Wolf JP, et al.
Am J Obstet Gynecol 1989 Jan;160(1):45-7

URINE

Vasopressin and oxytocin excretion in the Brown-Norway rat in relation to aging, water metabolism and testosterone. Goudsmit E, et al. **Mech Ageing Dev** 1988 Sep;44(3):241-52

OXYTOCINASE see under **AMINOPEPTIDASES**

OXYURIASIS

Pinworm infestation of the genital tract. Knuth KR, et al. **Am Fam Physician** 1988 Nov;38(5):127-30
[Pruritus ani, an irritating problem (letter)]
Ned Tijdschr Geneeskd 1988 Aug 13;132(33):1548 **(Dut)**

COMPLICATIONS

Enterobius vermicularis infection causing endometritis and persistent vaginal discharge in three siblings [letter] McKay T. **N Z Med J** 1989 Feb 8;102(861):56
[Mesenteric adenitis, associated with the presence of nematode larvae?] Pampiglione S, et al. **Pathologica** 1988 May-Jun;80(1067):303-8 (Eng. Abstr.) **(Ita)**

DRUG THERAPY

Ivermectin for human strongyloidiasis and other intestinal helminths. Naquira C, et al. **Am J Trop Med Hyg** 1989 Mar;40(3):304-9
A randomized controlled trial of pyrantel and mebendazole in children with enterobiasis and concomitant ascariasis. Sarmah HC. **Indian Pediatr** 1988 Jun;25(6):544-7
Artemisia herba-alba extract for treating Enterobius vermicularis infection. al-Waili NS.
Trans R Soc Trop Med Hyg 1988;82(4):626
[Treatment of pinworm (letter)] **Ugeskr Laeger** 1989 Jul 17; 151(29):1886-7 **(Dan)**
[Treatment of pinworms (letter)] Lomholt G.
Ugeskr Laeger 1989 Aug 28;151(35):2216 **(Dan)**
[Efficacy and tolerance of a nematocide used in treating enterobiasis] Ziganshina NKh, et al.
Med Parazitol (Mosk) 1989 Mar-Apr;(2):47-9 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

The intestinal parasitic infections among children in Riyadh, Saudi Arabia. Ahmed MM, et al. **J Egypt Soc Parasitol** 1989 Dec;19(2):583-8
Enterobius vermicularis infection in a children's ward. Ashford RW, et al. **J Hosp Infect** 1988 Oct;12(3):221-4
A study on enterobiasis among aboriginal children in Nanao and Tatung districts, Ilan county, northeast Taiwan. Fan PC, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Mar;5(3):156-61
[Dynamics of the enterobiasis situation in the Viniitsa region in 1976-1985] Martsinkovskiĭ LT, et al.
Med Parazitol (Mosk) 1988 Nov-Dec;(6):89-91 (Eng. Abstr.) **(Rus)**

PARASITOLOGY

Sex, Enterobius vermicularis and the appendix. Williams DJ, et al. **Br J Surg** 1988 Dec;75(12):1225-6

PATHOLOGY

Hepatic granuloma resulting from Enterobius vermicularis. Mondou EN, et al. **Am J Clin Pathol** 1989 Jan;91(1):97-100

TRANSMISSION

Family infection in enterobiasis. Saxena KK, et al.
Indian J Pediatr 1988 Jul-Aug;55(4):627-30

VETERINARY

The effect of infection with the pinworm (Syphacia muris) on rat growth. Wagner M. **Lab Anim Sci** 1988 Aug; 38(4):476-8

OXYURIS VERMICULARIS see **ENTEROBIUS**

OXYUROIDEA

[Ovicidal effects of heat and disinfectants on Syphacia muris estimated by in vitro hatching] Miyaji S, et al.
Jikken Dobutsu 1988 Oct;37(4):399-404 (Eng. Abstr.) **(Jpn)**

ISOLATION & PURIFICATION

Appendicitis and enterobiasis in children. Bredesen J, et al. **Acta Chir Scand** 1988 Oct;154(10):585-7

OXYVANADIUM see **VANADATES**

OYSTERS

Vibrio vulnificus sepsis after eating raw oysters. Stahr B, et al. **J Ky Med Assoc** 1989 May;87(5):219-22
An outbreak of shigellosis associated with the consumption of raw oysters. Reeve G, et al. **N Engl J Med** 1989 Jul 27;321(4):224-7
[An investigation of medicinal concha ostreae of Xinghua City, Jiangsu Province] Zhang HB, et al.
Chung Kuo Chung Yao Tsa Chih 1989 Jan;14(1):6-7, 61 (Eng. Abstr.) **(Chi)**

ANALYSIS

Intestinal absorption of oyster shell electrolysate. Fujita T, et al. **Bone Miner** 1988 Sep;4(4):321-7
Analysis of tributyltin compounds in shellfish by using gas chromatography-mass spectrometry. Hannah DJ, et al.
Bull Environ Contam Toxicol 1989 Jul;43(1):22-7
Metal concentrations in pearl oyster, Pinctada radiata, collected from Saudi Arabian coast of the Arabian Gulf. Sadig M, et al. **Bull Environ Contam Toxicol** 1989 Jan; 42(1):111-8
The rapid decomposition of biological materials by using a microwave acid digestion bomb. Stripp RA, et al.
J Anal Toxicol 1989 Jan-Feb;13(1):57-9
Zinc from oyster tissue as causative factor in mouse deaths in official bioassay for paralytic shellfish poison. McCulloch AW, et al. **J Assoc Off Anal Chem** 1989 Mar-Apr; 72(2):384-6

CYTOLOGY

Separation of Crassostrea gigas hemocytes by density gradient centrifugation and counterflow centrifugal elutriation. Bachère E, et al. **Dev Comp Immunol** 1988 Summer;12(3):549-59

IMMUNOLOGY

A galactose-specific lectin from the hemolymph of the pearl oyster, Pinctada fucata martensii. Suzuki T, et al.
Comp Biochem Physiol [B] 1989;92(3):455-62

METABOLISM

Purification and properties of novel molluscan metallothioneins. Roesijadi G, et al.
Arch Biochem Biophys 1989 Sep;273(2):403-13
Distribution of cadmium in the pearl oyster, Pinctada albina albina (Lamarck), following exposure to cadmium in seawater. Francesconi KA.
Bull Environ Contam Toxicol 1989 Aug;43(2):321-8
Fatty acid components of larval Ostrea edulis (L.): importance of triacylglycerols as a fatty acid reserve. Napolitano GE, et al. **Comp Biochem Physiol [B]** 1988; 90(4):875-83
The accumulation of organotins in adult and seed oysters from selected estuaries prior to the introduction of U.K. regulations governing the use of tributyltin-based antifouling paints. Ebdon L, et al. **Sci Total Environ** 1989 Jul 1;83(1-2):63-84

MICROBIOLOGY

Evidence for colonization and destruction of hinge ligaments in cultured juvenile Pacific oysters (Crassostrea gigas) by cytophaga-like bacteria. Dungan CF, et al.
Appl Environ Microbiol 1989 May;55(5):1128-35
Enzyme-capture assay for rapid detection of Escherichia coli in oysters. Holt SM, et al. **Appl Environ Microbiol** 1989 Jan;55(1):229-32
Polyethylene glycol precipitation for recovery of pathogenic viruses, including hepatitis A virus and human rotavirus, from oyster, water, and sediment samples. Lewis GD, et al. **Appl Environ Microbiol** 1988 Aug;54(8):1983-8
Toxigenic Vibrio cholerae O1 infection acquired in Colorado. **MMWR** 1989 Jan 20;38(2):19-20
Vibrio vulnificus meningitis in a boy with thalassemia after eating raw oysters. Katz BZ. **Pediatrics** 1988 Nov; 82(5):784-6

OZENA see **RHINITIS, ATROPHIC**

OZONE

Contrast agents and the ozone layer [letter] Hall FM.
AJR Am J Roentgenol 1989 Sep;153(3):654-5
Ozone-induced bronchial hyperresponsiveness in the rat is not accompanied by neutrophil influx or increased vascular permeability in the trachea. Evans TW, et al.
Am Rev Respir Dis 1988 Jul;138(1):140-4
The case of the missing ozone: are physiatrists to blame? Vallentyne SW, et al. **Arch Phys Med Rehabil** 1988 Nov; 69(11):992-3
Destruction of ethidium bromide in solution by ozonolysis. Zocher R, et al. **Biol Chem Hoppe Seyler** 1988 Oct; 369(10):1191-4
Health and the ozone layer [letter] Elwood JM. **BMJ** 1988 Oct 8;297(6653):918
Health and the ozone layer [letter] Elwood JM. **BMJ** 1988 Dec 17;297(6663):1612-3
Health and the ozone layer [letter] Mackie RA, et al.
BMJ 1988 Nov 12;297(6658):1271-2
Ozone and the health of the earth. Prazmowski A.
Can J Public Health 1988 Sep-Oct;79(5):383-4
Saving our ozone layer: the DuPont Company's decision [editorial] Paulshock BZ. **Del Med J** 1988 Sep;60(9):533-4
Ozone depletion and skin cancer. van der Leun JC.
J Photochem Photobiol -B- 1988 May;1(4):493-4
Increased outdoor recreation, diminished ozone layer pose ultraviolet radiation threat to eye [news] Olson CM.
JAMA 1989 Feb 24;261(8):1102-3
Anaesthetic agents and the ozone layer [letter] **Lancet** 1989 May 27;1(8648):1209-10
Anaesthetic agents and the ozone layer [letter] **Lancet** 1989 May 6;1(8645):1011-2
Skin cancer and the ozone layer [letter] Gray N. **Lancet** 1989 Jun 10;1(8650):1337
Halothane anaesthetic and the ozone layer [letter] Nørreslet J, et al. **Lancet** 1989 Apr 1;1(8640):719
Mutagenicity on chlorination of products formed by ozonation of naphthoresorcinol in water. Sayato Y, et al.
Mutat Res 1989 Jul;226(3):151-5
Ozone limitations [news] Coles P. **Nature** 1989 Feb 16; 337(6208):587
British government promotes atmosphere of concern [news] McGourty C. **Nature** 1988 Dec 1;336(6198):415
Biological UV-doses and the effect of an ozone layer depletion. Dahlback A, et al. **Photochem Photobiol** 1989 May;49(5):621-5
[Use of ozone in the preparation of swimming and bathing water in West Germany] Eichelsdörfer D, et al.
Off Gesundheitswes 1988 Jul;50(7):363-6 (Eng. Abstr.) **(Ger)**
[Ozone depletion, ultraviolet rays and skin cancer] Moan J, et al. **Tidsskr Nor Laegeforen** 1988 Nov 10;108(31):2838-40 (Eng. Abstr.) **(Nor)**

ADVERSE EFFECTS

Experimental rhinovirus infection in human volunteers exposed to ozone. Henderson FW, et al.
Am Rev Respir Dis 1988 May;137(5):1124-8
Short-term pulmonary function change in association with ozone levels. Kinney PL, et al. **Am Rev Respir Dis** 1989 Jan;139(1):56-61
Ozone-induced inflammation in the lower airways of human subjects. Koren HS, et al. **Am Rev Respir Dis** 1989 Feb; 139(2):407-15
Acute ozone exposure increases plasma prostaglandin F2 alpha in ozone-sensitive human subjects. Schelegle ES, et al. **Am Rev Respir Dis** 1989 Jul;140(1):211-6
Exposure assessment of oxidant gases and acidic aerosols. Lioy PJ. **Annu Rev Public Health** 1989;10:69-84 (63 ref.)
Effects of ozone on respiratory function and structure. Lippmann M. **Annu Rev Public Health** 1989;10:49-67 (69 ref.)
Latex condom deterioration accelerated by environmental factors: I. Ozone. Clark LJ, et al. **Contraception** 1989 Mar; 39(3):245-51
Effect of dietary vitamin E level on the biochemical response of rat lung to ozone inhalation. Elsayed NM, et al.
Drug Nutr Interact 1988;5(4):373-86
Human health effects of exposure to airborne acid. Folinsbee LJ. **Environ Health Perspect** 1989 Feb;79:195-9
Respiratory health effects associated with ambient sulfates and ozone in two rural Canadian communities. Stern B, et al. **Environ Res** 1989 Jun;49(1):20-39
Reproducibility of the pulmonary function response of older men and women to a 2-hour ozone exposure. Bedi JF, et al. **JAPCA** 1988 Aug;38(8):1016-9
A reversible model of acute lung injury based on ozone exposure. Bassett DJ, et al. **Lung** 1988;166(6):355-69
The pulmonary effects of ozone and nitrogen dioxide alone and combined in healthy and asthmatic adolescent subjects. Koenig JQ, et al. **Toxicol Ind Health** 1988 Dec;4(4):521-32
Repeated laboratory ozone exposures of volunteer Los Angeles residents: an apparent seasonal variation in response. Linn WS, et al. **Toxicol Ind Health** 1988 Dec; 4(4):505-20
Tropospheric ozone: the dynamics of human exposure. Lioy PJ, et al. **Toxicol Ind Health** 1989 May;5(3):493-504

[Hematologic effects of exposure to ozone] Lisiewicz J, et al. **Przegl Lek** 1989;46(3):363–8 (61 ref.) **(Pol)**

ANALYSIS

Quantitative determination of aqueous-phase ozone by chemiluminescence using indigo-5,5'-disulfonate. Takeuchi K, et al. **Anal Chem** 1989 Mar 15;61(6):619–23

Ozone depletion and its consequences for the fluence of carcinogenic sunlight. Moan J, et al. **Cancer Res** 1989 Aug 1;49(15):4247–50

Measurements of ozone, oxides of N and nitric acid produced in the tunnel of a high-energy electron storage ring. Kanda Y, et al. **Health Phys** 1989 Jun;56(6):953–6

Ozone trends in Atlanta, Georgia: have emission controls been effective? Lindsay RW, et al. **JAPCA** 1989 Jan; 39(1):40–3

Global stratospheric ozone and UVB radiation [letter] Grant WB. **Science** 1988 Nov 25;242(4882):1111–2

ANTAGONISTS & INHIBITORS

Pretreatment with EDU decreases rat lung cellular responses to ozone. Bassett DJ, et al. **Toxicol Appl Pharmacol** 1989 Aug;100(1):32–40

METABOLISM

Methyl linoleate ozonide as a substrate for rat glutathione S-transferases: reaction pathway and isoenzyme selectivity. Vos RM, et al. **Chem Biol Interact** 1989;69(2–3):269–78

The role of hydroxyl radicals in the degradation of DNA by ozone. Van der Zee J, et al. **Free Radic Res Commun** 1987;2(4–6):279–84

Incorporation and disappearance of oxygen-18 in lung from mice exposed to 1 ppm 18O3. Santrock J, et al. **Toxicol Appl Pharmacol** 1989 Mar 15;98(1):75–80

PHARMACOKINETICS

Method for tracing oxygen-18 in vivo: application to ozone dosimetry in animals. Aissa M, et al. **Basic Life Sci** 1988; 49:195–7

Similarity between man and laboratory animals in regional pulmonary deposition of ozone. Miller FJ, et al. **Environ Res** 1978 Aug;17(1):84–101

Airway permeability in rats exposed to ozone or treated with cytoskeleton-destabilizing drugs. Bhalla DK, et al. **Exp Lung Res** 1988;14(4):501–25

Comparative study of ozone (O3) uptake in three strains of rats and in the guinea pig. Wiester MJ, et al. **Toxicol Appl Pharmacol** 1988 Oct;96(1):140–6

PHARMACOLOGY

In vivo exposure to ozone causes increased in vitro responses of small airways. Beckett WS, et al. **Am Rev Respir Dis** 1988 May;137(5):1236–8

Inhalation of ozone produces a decrease in superoxide anion radical production in mouse alveolar macrophages. Ryer-Powder JE, et al. **Am Rev Respir Dis** 1988 Nov; 138(5):1129–33

Effects of ambient ozone on respiratory function in healthy adults exercising outdoors. Spektor DM, et al. **Am Rev Respir Dis** 1988 Oct;138(4):821–8

Comparison of methods for enumeration of selected coliforms exposed to ozone. Adams JC, et al. **Appl Environ Microbiol** 1989 Jan;55(1):33–5

Duration of enhanced responsiveness upon re-exposure to ozone. Schonfeld BR, et al. **Arch Environ Health** 1989 Jul–Aug;44(4):229–36

Ozone activates transforming genes in vitro and acts as a synergistic co-carcinogen with gamma-rays only if delivered after radiation. Borek C, et al. **Carcinogenesis** 1989 Aug;10(8):1549–51

Metabolic enhancement and increase of alveolar macrophages induced by ozone. Mochitate K, et al. **Environ Res** 1989 Jun;49(1):79–92

Response of rat alveolar macrophages to ozone: quantitative assessment of population size, morphology, and proliferation following acute exposure. Hotchkiss JA, et al. **Exp Lung Res** 1989;15(1):1–16

Effect of 2 ppm ozone exposure on rat lung lipid fatty acids. Rabinowitz JL, et al. **Exp Lung Res** 1988;14(4):477–89

Transport across rat trachea in vitro after exposure to cytoskeleton-active drugs in vitro or to ozone in vivo. Rasmussen RE, et al. **Exp Lung Res** 1989 Mar;15(2):253–68

Morphological study of the effects of ozone on rat lung. II. Long-term exposure. Hiroshima K, et al. **Exp Mol Pathol** 1989 Apr;50(2):270–80

Role of oxyradicals in the inactivation of catalase by ozone. Whiteside C, et al. **Free Radic Biol Med** 1988;5(5–6):305–12

O.35 ppm O3 exposure induces hyperresponsiveness on 24-h reexposure to 0.20 ppm O3. Brookes KA, et al. **J Appl Physiol** 1989 Jun;66(6):2756–62

Methacholine-induced bronchoconstriction in dogs: effects of lung volume and O3 exposure. Kariya ST, et al. **J Appl Physiol** 1988 Dec;65(6):2679–86

Ozone-induced changes in pulmonary function and bronchial responsiveness in asthmatics. Kreit JW, et al. **J Appl Physiol** 1989 Jan;66(1):217–22

Biocidal activity of ozone versus formaldehyde against poultry pathogens inoculated in a prototype setter. Whistler PE, et al. **Poult Sci** 1989 Aug;68(8):1068–73

Bactericidal activity, eggshell conductance, and hatchability effects of ozone versus formaldehyde disinfection. Whistler PE, et al. **Poult Sci** 1989 Aug;68(8):1074–7

Rat lung benzo(a)pyrene metabolism following three days continuous exposure to 0.6 ppm ozone. Bassett DJ, et al. **Res Commun Chem Pathol Pharmacol** 1988 Jun; 60(3):291–307

Ozone-induced accelerated lung clearance of 99mTc-DTPA aerosol in conscious sheep. Hornof WJ, et al. **Respir Physiol** 1989 Sep;77(3):277–90

Breathing pattern and metabolic rate responses of rats exposed to ozone. Mautz WJ, et al. **Respir Physiol** 1989 Apr;76(1):69–77

[Inactivation of hepatitis A virus in water by ozone] Botzenhart K, et al. **Z Gesamte Hyg** 1988 Sep;34(9):508–10 (Eng. Abstr.) **(Ger)**

[Studies on the antibacterial action of ozone in aquaous phase—effects of reaction temperature and dissolved organic carbon on antibacterial action] Yamayoshi T, et al. **Kansenshogaku Zasshi** 1988 Sep;62(9):765–71 (Eng. Abstr.) **(Jpn)**

[Effectiveness of the methods of purification and disinfection of virus-contaminated water] Rusanova NA, et al. **Gig Sanit** 1988 Aug;(8):13–5 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

[Ozone as an adjuvant in the treatment of respiratory insufficiency: preliminary study] Catenacci N, et al. **Ann Ital Chir** 1987;59(1–6):65–9 (Eng. Abstr.) **(Ita)**

TOXICITY

Sequential changes of lamellar body hydrolases during ozone-induced alveolar injury and repair. Glew RH, et al. **Am J Pathol** 1989 May;134(5):1143–50

Unattenuated structural and biochemical alterations in the rat lung during functional adaptation to ozone. Tepper JS, et al. **Am Rev Respir Dis** 1989 Aug;140(2):493–501

Effects of ozone exposure: a comparison between oral and nasal breathing. Hynes B, et al. **Arch Environ Health** 1988 Sep–Oct;43(5):357–60

The effect of ozone on reactivity of upper and lower airways in guinea-pigs. Holroyde MC, et al. **Br J Pharmacol** 1988 Jul;94(3):938–46

Ozone inhalation in rats: effects on alkaline phosphatase and lactic dehydrogenase isoenzymes in lavage and plasma. Nachtman JP, et al. **Bull Environ Contam Toxicol** 1988 Oct; 41(4):502–7

Impairment of humoral immune responses in mice exposed to nitrogen dioxide and ozone mixtures. Fujimaki H. **Environ Res** 1989 Apr;48(2):211–7

Effects of short- and long-term exposure to ozone on heart rate and blood pressure of emphysematous rats. Uchiyama I, et al. **Environ Res** 1989 Feb;48(1):76–86

Effects of buthionine sulfoximine on the development of ozone-induced pulmonary fibrosis. Sun JD, et al. **Exp Mol Pathol** 1988 Oct;49(2):254–66

Evaluation of effects of ozone exposure on influenza infection in mice using several indicators of susceptibility. Selgrade MK, et al. **Fundam Appl Toxicol** 1988 Jul;11(1):169–80

Release of epithelium-derived relaxing factor after ozone inhalation in dogs. Jones GL, et al. **J Appl Physiol** 1988 Sep;65(3):1238–43

Mechanical properties of rabbit lung with edema caused by exposure to ozone. Yokoyama E, et al. **J Environ Pathol Toxicol Oncol** 1989;9(1):95–108

Rat lung recovery from 3 days of continuous exposure to 0.75 ppm ozone. Bassett DJ, et al. **J Toxicol Environ Health** 1988;25(3):329–47

In vitro ozone exposure inhibits mitogen-induced lymphocyte proliferation and IL-2 production. Becker S, et al. **J Toxicol Environ Health** 1989;26(4):469–83

Study of the effects of ozone in emphysematous rats. Dormans JA, et al. **J Toxicol Environ Health** 1989; 26(1):1–18

Effects of nitrogen dioxide and ozone on blood-borne cancer cell colonization of the lungs. Richters A. **J Toxicol Environ Health** 1988;25(3):383–90

Circulating factors that modify lung cell DNA synthesis following exposure to inhaled oxidants. I. Effect of serum and lavage on lung fibroblasts following exposure of adult rats to 1 ppm ozone. Tanswell AK, et al. **J Toxicol Environ Health** 1989;27(2):239–54

Adaptation by older individuals repeatedly exposed to 0.45 parts per million ozone for two hours. Bedi JF, et al. **JAPCA** 1989 Feb;39(2):194–9

Health effects of ozone. A critical review. Lippmann M. **JAPCA** 1989 May;39(5):672–95 (160 ref.)

Ozone and ultraviolet light act as additive cocarcinogens to induce in vitro neoplastic transformation. Borek C, et al. **Teratogenesis Carcinog Mutagen** 1989;9(2):71–4

Effects of low levels of NO2 on terminal bronchiolar cells and its relative toxicity compared to O3. Chang LY, et al. **Toxicol Appl Pharmacol** 1988 Dec;96(3):451–64

Characterization of the oxidant generation by inflammatory cells lavaged from rat lungs following acute exposure to ozone. Esterline RL, et al. **Toxicol Appl Pharmacol** 1989 Jun 15;99(2):229–39

Comparison of acute ozone-induced nasal and pulmonary inflammatory responses in rats. Hotchkiss JA, et al. **Toxicol Appl Pharmacol** 1989 Apr;98(2):289–302

DNA damage from ozone and radiation in human epithelial cells. Borek C, et al. **Toxicol Ind Health** 1988 Dec; 4(4):547–53

Pulmonary function responses of young and older adults to mixtures of O3, NO2 and PAN. Drechsler-Parks DM, et al. **Toxicol Ind Health** 1989 May;5(3):505–17

Research needs and advances in inhalation dosimetry identified through the use of mathematical dosimetry models of ozone. Miller FJ, et al. **Toxicol Lett** 1988 Dec; 44(3):231–46

Effects of nitrogen dioxide and ozone in combination on xenobiotic metabolizing activities of rat lungs. Takahashi Y, et al. **Toxicology** 1989 Jun 16;56(3):253–62

Synergistic interaction of ozone and respirable aerosols on rat lungs. IV. Protection by quenchers of reactive oxygen species. Warren DL, et al. **Toxicology** 1988 Dec 16; 53(1):113–33

P BLOOD-GROUP SYSTEM see under **BLOOD GROUPS**

P-CELL STIMULATING FACTOR see **INTERLEUKIN 3**

PACEMAKER, ARTIFICIAL

Automatic implantable defibrillator with VVI pacemaker in a patient with chronic Chagas myocarditis and total atrioventricular block. de Paola AA, et al. **Am Heart J** 1989 Aug;118(2):415–7

Adverse response to ventricular pacing but favorable response to atrial pacing in polymorphous ventricular tachycardia. Hill PE, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1355–7

Pacemakers in children: an update. Kugler JD, et al. **Am Heart J** 1989 Mar;117(3):665–79 (141 ref.)

Effects of dexamethasone elution on tissue reaction around stimulating electrodes of endocardial pacing leads in dogs. Radovsky AS, et al. **Am Heart J** 1989 Jun;117(6):1288–98

Eccentricities of Activitrax pulse generators. Castellanos A, et al. **Am J Cardiol** 1989 Apr 1;63(12):874–6

Usefulness of transcutaneous triggering of conventional implanted pulse generators by an activity-sensing pacemaker for predicting effectiveness of rate response pacing. Fetter J, et al. **Am J Cardiol** 1988 Nov 1; 62(13):901–5

Use of balloon flotation pacing catheters for prophylactic temporary pacing during diagnostic and therapeutic catheterization procedures. Harvey JR, et al. **Am J Cardiol** 1988 Nov 1;62(13):941–4

Comparison of exercise performance of six rate-adaptive right ventricular cardiac pacemakers. Lau CP, et al. **Am J Cardiol** 1989 Apr 1;63(12):833–8

Influence of left atrial systolic emptying on left ventricular early filling dynamics by Doppler in patients with sequential atrioventricular pacemakers. Rokey R, et al. **Am J Cardiol** 1988 Nov 1;62(13):968–71

Failure of electrocardiographic monitoring to detect cardiac arrest in patients with pacemakers. Brownlee JR, et al. **Am J Dis Child** 1989 Jan;143(1):105–7

Pacemaker failure associated with therapeutic radiation. Brooks C, et al. **Am J Emerg Med** 1988 Nov;6(6):591–3

Transthoracic pacemaker insertion failure caused by needle lumen obstruction [letter] Ma FH. **Am J Emerg Med** 1989 Jan;7(1):124–5

Cases in electrocardiography. Zimmers T, et al. **Am J Emerg Med** 1989 Jul;7(4):434–6

Suicide attempted by aiming slaughtering gun at pacemaker [letter] Hochmeister MN, et al. **Am J Forensic Med Pathol** 1989 Sep;10(3):268

An unusual case of failure to pace [letter] Cook RJ. **Anaesth Intensive Care** 1989 May;17(2):235

External transthoracic pacemaking [letter] Allen PW, et al. **Anaesthesia** 1988 Oct;43(10):895–6

Anaesthetic management of the patient with a permanent pacemaker. Bloomfield P, et al. **Anaesthesia** 1989 Jan; 44(1):42–6 (16 ref.)

Hemodynamic benefits of atrial ventricular sequential pacing in complete heart block and left ventricular failure: case study. Sacher HL, et al. **Angiology** 1989 May;40(5):489–93

Pacemaker function during helicopter transport. French RS, et al. **Ann Emerg Med** 1989 Mar;18(3):305–7

External transcutaneous pacemakers in interhospital transport of cardiac patients. Vukov LF, et al. **Ann Emerg Med** 1989 Jul;18(7):738–40

Tunneling of defibrillator leads [letter] Almassi GH, et al. **Ann Thorac Surg** 1989 Mar;47(3):486

FDA recalls: how do pacemaker manufacturers compare? Tyers GF. **Ann Thorac Surg** 1989 Sep;48(3):390–6

Pacemaker implant. Implications for perioperative nurses. Welch TC. **AORN J** 1989 Jan;49(1):257–67

Pacemakers and NCS [letter] Gilbert MB. **Arch Phys Med Rehabil** 1988 Oct;69(10):899

Pacemaker infection. Spelman D. **Aust Fam Physician** 1988 Oct;17(10):903

In vivo degradation of polymers. I. Change of mechanical properties in polyethylene pacemaker lead insulations during long-term implantation in the human body. Doležel B, et al. **Biomaterials** 1989 Mar;10(2):96–100

Compensation of chronotropic incompetence with temperature-controlled rate adaptive pacing. Schaldach M. **Biomed Tech (Berlin)** 1988 Dec;33(12):286–94 (26 ref.)

Pacemaker twiddler: a twist in the tail? Been M, et al. **BMJ** 1988 Dec 24–31;297(6664):1642–3

Is severe bradycardia in veteran athletes an indication for a permanent pacemaker? Northcote RJ, et al. **BMJ** 1989

Jan 28;298(6668):231-2
Benefits of dual chamber pacing in sick sinus syndrome. Mitsuoka T, et al. **Br Heart J** 1988 Oct;60(4):338-47
Anaesthesia in a patient with complete heart block. Madsen A, et al. **Br J Hosp Med** 1989 May;41(5):494
Modern cardiac pacing: the role of dual chamber systems. Murray NH. **Br J Hosp Med** 1989 Aug;42(2):134-6, 138 (11 ref.)
Automatic implantable defibrillators--lost opportunities [letter] Weale F. **Br J Hosp Med** 1989 Mar;41(3):299
Anaesthetic problems associated with the treatment of cardiovascular disease: III. Artificial pacemakers. Chung DC. **Can Anaesth Soc J** 1983 May;30(3 Pt 2):S1-4 (7 ref.)
Termination of sustained ventricular tachycardia with a new antitachycardia pacemaker: role of the nonautomatic mode to follow pacemaker function. Fromer M, et al. **Can J Cardiol** 1989 Jan-Feb;5(1):42-6
A prospective trial of new versus refurbished cardiac pacemakers: a Canadian experience. Rosengarten M, et al. **Can J Cardiol** 1989 Apr;5(3):155-60
Medical devices labelled for single use: the reuse of permanent cardiac pacemakers. Rosengarten M. **Can Med Assoc J** 1989 Jun 1;140(11):1274-6
Bradyarrhythmias, abnormalities of conduction, and indications for pacing in acute myocardial infarction. Rosenfeld LE. **Cardiol Clin** 1988 Feb;6(1):49-61 (43 ref.)
Ventricular arrhythmias: medical therapy, device treatment, and indications for electrophysiologic study. Sager PT, et al. **Cardiol Clin** 1988 Feb;6(1):37-47 (102 ref.)
Chronic bundle branch block and use of temporary transvenous pacemakers during coronary arteriography. Gilchrist IC, et al. **Cathet Cardiovasc Diagn** 1988; 15(4):229-32
Use of temporary pacemakers during coronary angioplasty: an evolving experience with ventricular fibrillation in 400 cases. Johnson LW, et al. **Cathet Cardiovasc Diagn** 1988; 15(3):150-4
Systemic chemoprophylaxis in pacemaker surgery: a prospective randomized study. Bonini W, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):584-5
Treatment by pacemaker in familial amyloid polyneuropathy. Anzai N, et al. **Chest** 1989 Jul;96(1):80-4
Sudden death and pacemakers [letter] Friedman HS. **Chest** 1989 Jan;95(1):251
Single-chamber cardiac pacing with two forms of respiration-controlled rate-responsive pacemaker. Lau CP, et al. **Chest** 1989 Feb;95(2):352-8
Clinical application of antitachycardia pacemaker. A report of 6 cases. Sun RL, et al. **Chin Med J [Engl]** 1988 Oct; 101(10):731-6
Supernormal excitation in pacemaker exit block. Shyong WC, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Oct;40(4):405-8
First clinical results with a new temperature-controlled rate-responsive pacemaker. Comparison of Activitrax and Nova MR pacemakers with VVI/AAI pacing. Alt E, et al. **Circulation** 1988 Nov;78(5 Pt 2):III116-24
Subsidiary pacemaker function in complete heart block after His-bundle ablation. Schmidinger H, et al. **Circulation** 1988 Oct;78(4):893-8
Implantable electrical devices in the management of tachyarrhythmias. de Belder MA, et al. **Clin Cardiol** 1989 Aug;12(8):461-8 (68 ref.)
Pulse generator failure due to blunt trauma. Gould L, et al. **Clin Cardiol** 1988 Aug;11(8):581-2
Temporary pacing catheter placement in patients requiring continuous external pacing. Tilkemeier P, et al. **Clin Cardiol** 1989 Mar;12(3):155-6
Septic complications in patients with permanent pacemakers. Löffler S, et al. **Cor Vasa** 1988;30(6):400-4
Use of Holter functions of the implantable pacemaker to control antiarrhythmic therapy of supraventricular and ventricular recurrent tachycardias. Lukl J. **Cor Vasa** 1988; 30(6):413-22
The pacemaker syndrome: a haemodynamic complication of ventricular pacing. Witte J, et al. **Cor Vasa** 1988;30(6):393-9
Assessment of the optimal atrio-ventricular delay in DDD paced patients by impedance plethysmography. Eugene M, et al. **Eur Heart J** 1989 Mar;10(3):250-5
Incidence of arrhythmias after atrial or dual-chamber pacemaker implantation. Jordaens L, et al. **Eur Heart J** 1989 Feb;10(2):102-7
Survival rate and causes of death in patients with pacemakers: dependence on symptoms leading to pacemaker implantation. Müller C, et al. **Eur Heart J** 1988 Sep; 9(9):1003-9
Indications for pacemaker implantation in the Kearns-Sayre syndrome. Polak PE, et al. **Eur Heart J** 1989 Mar; 10(3):281-2
Physiological variation in the termination window of re-entry tachycardia studied by non-invasive programmed stimulation. Schmidinger H, et al. **Eur Heart J** 1988 Sep; 9(9):997-1002
Enhancing activity levels of patients with permanent cardiac pacemakers. Tamarisk NK. **Heart Lung** 1988 Nov;17(6 Pt 1):698-705 (37 ref.)
Implantable devices and electrotherapy for arrhythmias. Franklin JO, et al. **Hosp Pract [Off]** 1988 Dec 15; 23(12):135-40, 145-6, 149-50 (8 ref.)
Development of a closed-loop pacemaker controller regulating mixed venous oxygen saturation level. Inbar GF, et al. **IEEE Trans Biomed Eng** 1988 Sep;35(9):679-90
Management of infected permanent pacemaker--feasibility of one stage radical surgery. Garg A, et al. **Indian Heart J** 1988 May-Jun;40(3):190-4
Acute and chronic pacing thresholds of various permanent pacing leads: a comparative study. Kaul U, et al. **Indian Heart J** 1988 May-Jun;40(3):183-9
Cellular electrophysiologic effects of dexamethasone sodium phosphate: implications for cardiac stimulation with steroid-eluting electrodes. Benditt DG, et al. **Int J Cardiol** 1989 Jan;22(1):67-73
Percutaneous removal of ventricular pacemaker electrodes using a Dormier basket. Foster CJ, et al. **Int J Cardiol** 1988 Nov;21(2):127-34
The atrial pacemaker: retrospective analysis of complications and life expectancy in patients with sinus node dysfunction. Lemke B, et al. **Int J Cardiol** 1989 Feb;22(2):185-93
Combined automatic implantable cardioverter-defibrillator and pacemaker systems: implantation techniques and follow-up. Epstein AE, et al. **J Am Coll Cardiol** 1989 Jan; 13(1):121-31
Combined automatic implantable cardioverter-defibrillator and pacemaker systems... [editorial] Furman S. **J Am Coll Cardiol** 1989 Jan;13(1):132-3
The hemodynamic benefit of differential atrioventricular delay intervals for sensed and paced atrial events during physiologic pacing. Janosik DL, et al. **J Am Coll Cardiol** 1989 Aug;14(2):499-507
Evaluation of ventricular contractility indexes in the dog with left ventricular dysfunction induced by rapid atrial pacing. Morgan DE, et al. **J Am Coll Cardiol** 1989 Aug; 14(2):489-95; discussion 496-8
Pacemaker-implantation complication rates: an analysis of some contributing factors. Parsonnet V, et al. **J Am Coll Cardiol** 1989 Mar 15;13(4):917-21
Hemodynamic benefit of atrioventricular synchrony: prediction from baseline Doppler-echocardiographic variables. Pearson AC, et al. **J Am Coll Cardiol** 1989 Jun; 13(7):1613-21
Permanent pacemakers in centenarians. Cobler JL, et al. **J Am Geriatr Soc** 1989 Aug;37(8):753-6
The use of silicone/polyurethane graft polymers as a means of eliminating surface cracking of polyurethane prostheses. Pinchuk L, et al. **J Biomater Appl** 1988 Oct;3(2):260-96
Polyether polyurethanes: biostable or not? Stokes KB. **J Biomater Appl** 1988 Oct;3(2):228-59
Use of the pacing pulmonary arterial catheter to detect endocardial electrical activity during hypothermic cardioplegic arrest. Roth JV, et al. **J Clin Monit** 1988 Jul; 4(3):178-80
Pacemaker therapy for academic medicine. Mirvis DM, et al. **J Electrocardiol** 1989 Apr;22(2):99-103
Recurrent resemblance in potential topography at different instants during ventricular depolarization and repolarization. Normal conduction contrasted with left bundle branch block and paced beats. Sridharan MR, et al. **J Electrocardiol** 1989 Jul;22(3):211-9
Long-term follow-up of patients treated with the QT interval sensing rate-responsive pacemaker. Hedman A. **J Intern Med** 1989 Jun;225(6):385-91
ECG of the month. Read my blips. Ventricular bigeminal rhythm. Martinez-Lopez JI. **J La State Med Soc** 1989 Apr; 141(4):5, 9-10
The development of a system for the evaluation of electromagnetic interference with pacemaker function: hazards in the aircraft environment. McDeller AG, et al. **J Med Eng Technol** 1989 May-Jun;13(3):161-5
Psychosocial responses of children to cardiac pacemakers. Alpern D, et al. **J Pediatr** 1989 Mar;114(3):494-501
Synchronously stimulated skeletal muscle graft for left ventricular assistance. Case report. Molteni L, et al. **J Thorac Cardiovasc Surg** 1989 Mar;97(3):439-46
Violent cardiology: rhythm reversion by patient inversion [letter] Gould LA, et al. **JAMA** 1989 Apr 14;261(14):2063
Automatic implantable cardioverter defibrillator. Current status. Manolis AS, et al. **JAMA** 1989 Sep 8;262(10):1362-8 (82 ref.)
Pursuing the perfect pacemaker. Brinker JA. **Mayo Clin Proc** 1989 May;64(5):587-91 (15 ref.)
Utility of rate histograms in programming and follow-up of a DDDR pacemaker. Hayes DL, et al. **Mayo Clin Proc** 1989 May;64(5):495-502
Follow-up of an activity-sensing, rate-modulated pacing device, including transtelephonic exercise assessment. Hayes DL, et al. **Mayo Clin Proc** 1989 May;64(5):503-8
Chest-wall and transesophageal stimulation in the functional evaluation of patients with permanent pacemakers. Cotoi S, et al. **Med Interne** 1988 Oct-Dec;26(4):323-7
Pacemaker therapy in a group of 132 patients with sick sinus syndrome--indications and results. Vintilă M, et al. **Med Interne** 1988 Oct-Dec;26(4):305-9
Pacemaker registration electronic-card. A proposal for a computerised system of storing of the pacemaker registration card. Barbaro V, et al. **Med Prog Technol** 1988; 14(1):35-8
Catheter ablation of the atrioventricular junction in patients with refractory atrial arrhythmias. Hood MA, et al. **N Z Med J** 1989 Jul 12;102(871):344-7
Pacing and the non-invasive evaluation of myocardial fatty acid metabolism by means of 17-123I-heptadecanoic acid scintigraphy. Duwel CM, et al. **Nuklearmedizin** 1988 Oct; 27(5):204-8
Cardiostim '88. June 15-18, 1988, Monaco. Proceedings. **PACE** 1988 Nov;11(11 Pt 2):1627-2148
Nuclear magnetic resonance imaging in a patient with a DDD Pacemaker [letter] Alagona P Jr, et al. **PACE** 1989 Apr;12(4 Pt 1):619
A new mechanical sensor for detecting body activity and posture, suitable for rate responsive pacing. Alt E, et al. **PACE** 1988 Nov;11(11 Pt 2):1875-81
A new rate-modulated pacemaker system optimized by combination of two sensors. Alt E, et al. **PACE** 1988 Aug; 11(8):1119-29
Pregnancy and cesarean section in a patient with a rate-responsive pacemaker. Andersen C, et al. **PACE** 1989 Feb;12(2):386-91
Intermittent oversensing due to internal insulation damage of temperature sensing rate responsive pacemaker lead in subclavian venipuncture method. Arakawa M, et al. **PACE** 1989 Aug;12(8):1312-6
DDD pacing: an effective treatment modality for recurrent atrial arrhythmias. Attuel P, et al. **PACE** 1988 Nov;11(11 Pt 2):1647-54
Filter characteristics of the atrial sensing circuit of a rate responsive pacemaker. To see or not to see. Aubert AE, et al. **PACE** 1989 Apr;12(4 Pt 1):525-36
Improved pattern of rate responsiveness with dynamic slope setting for the QT sensing pacemaker. Baig MW, et al. **PACE** 1989 Feb;12(2):311-20
Pacemaker elective replacement indicators: latched or unlatched? Barold SS, et al. **PACE** 1989 Jun;12(6):990-5
Electrocardiographic manifestations of the rapid recharge function of pulse generators after sensing. Barold SS, et al. **PACE** 1988 Aug;11(8):1215-9
Upper rate of DDD pacemakers. The view from the atrial side. Barold SS. **PACE** 1988 Dec;11(12):2149-59
An advanced data base pacemaker follow-up system that's customizable. Batey RL, et al. **PACE** 1988 Dec; 11(12):2180-92
Automatic refractory period. Begemann MJ, et al. **PACE** 1988 Nov;11(11 Pt 2):1684-6
Heart rate monitoring in implanted pacemakers. Begemann MJ, et al. **PACE** 1988 Nov;11(11 Pt 2):1687-92
Studies of the tissue reaction induced by transvenous pacemaker electrodes. I. Microscopic examination of the extent of connective tissue around the electrode tip in the human right ventricle. Beyersdorf F, et al. **PACE** 1988 Nov;11(11 Pt 2):1753-9
Long-term follow-up of patients with the QT rate adaptive pacemaker. Bloomfield P, et al. **PACE** 1989 Jan;12(1 Pt 1):111-4
Do electrode and lead design differences for permanent cardiac pacing translate into clinically demonstrable differences? (Comparison of sintered platinum and activated vitreous and porous carbon electrodes). Bourke JP, et al. **PACE** 1989 Aug;12(8):1419-25 (21 ref.)
Introduction of an automatic QT interval driven rate responsive pacemaker. Boute W, et al. **PACE** 1988 Nov; 11(11 Pt 2):1804-14
Morphology of endocardial T-waves of fusion beats. Boute W, et al. **PACE** 1988 Nov;11(11 Pt 2):1693-7
Far-field QRS complex sensing via the atrial pacemaker lead. II. Prevalence, clinical significance and possibility of intraoperative prediction in DDD pacing. Brandt J, et al. **PACE** 1988 Nov;11(11 Pt 1):1540-4
Test of implanted pacemaker function with respiration arrhythmia [letter] Bredikis JJ, et al. **PACE** 1988 Aug; 11(8):1240-1
Composite electrode tips containing externally placed drug releasing collars. Brewer G, et al. **PACE** 1988 Nov;11(11 Pt 2):1760-9
Properties of ultrasonically marked leads. Breyer B, et al. **PACE** 1989 Aug;12(8):1369-80 (25 ref.)
Ventricular and dual chamber pacing for treatment of carotid sinus syndrome. Brignole M, et al. **PACE** 1989 Apr;12(4 Pt 1):582-90
Is DDD superior to VVI pacing in mixed carotid sinus syndrome? An acute and medium-term study. Brignole M, et al. **PACE** 1988 Nov;11(11 Pt 2):1902-10
Natural and unnatural history of patients with severe carotid sinus hypersensitivity: a preliminary study. Brignole M, et al. **PACE** 1988 Nov;11(11 Pt 2):1628-35
Toward optimizing the detection of atrial depolarization with floating bipolar electrodes. Brownlee RR. **PACE** 1989 Mar; 12(3):431-42
DDD pacemakers maximize hemodynamic benefits and minimize complications for most patients. Byrd CL, et al. **PACE** 1988 Nov;11(11 Pt 2):1911-6
Problems with permanent atrial pacing in the Fontan patient. Case CL, et al. **PACE** 1989 Jan;12(1 Pt 1):92-6
The tricuspid valve: an unusual site of endocardial pacemaker lead fracture. Clarke B, et al. **PACE** 1989 Jul;12(7 Pt 1):1077-9
Effects of extracorporeal shock wave lithotripsy on cardiac pacemakers and its safety in patients with implanted cardiac pacemakers. Cooper D, et al. **PACE** 1988 Nov;11(11 Pt 1):1607-16
Traumatic heart block. Copperman Y, et al. **PACE** 1989 Jan; 12(1 Pt 1):25-8
The effect of metal detector gates on implanted permanent pacemakers. Copperman Y, et al. **PACE** 1988 Oct; 11(10):1386-7
Clinical evaluation of VDD pacing with a unipolar single-pass lead. Cornacchia D, et al. **PACE** 1989 Apr;12(4 Pt 1):604-18
Atrioventricular synchrony: good or bad? [letter] Das G.

PACE 1989 Jul;12(7 Pt 1):1138
Modern pacemakers: implantable artificial intelligence? [published erratum appears in PACE 1989 Jan;12(1 Pt 1):following Table of Contents] Dassen WR, et al. PACE 1988 Nov;11(11 Pt 2):2114–20
Improved rate responsive algorithm in QT driven pacemakers—evaluation of initial response to exercise. den Heijer P, et al. PACE 1989 May;12(5):805–11
Long-term follow-up of patients treated with VVI pacing and sequential pacing with special reference to VA retrograde conduction. Ebagosti A, et al. PACE 1988 Nov; 11(11 Pt 2):1929–34
QT sensing rate responsive pacing and myocardial infarction: a case report. Edelstam C, et al. PACE 1989 Mar; 12(3):502–4
Iliac vein approach to permanent pacemaker implantation. Ellestad MH, et al. PACE 1989 Jul;12(7 Pt 1):1030–3
FDA approval to export reprocessed pacemakers [letter] Elsholz JF. PACE 1989 Jun;12(6):1008–9
Evaluation and management of a supraventricular tachycardia with a standard bradycardia support pacemaker [published erratum appears in PACE 1989 Mar;12(3):preceding 399] Estrada AQ, et al. PACE 1988 Dec;11(12):2193–7
Heart rate correlation, response time and effect of previous exercise using an advanced pacing rate algorithm for temperature-based rate modulation. Fearnot NE, et al. PACE 1988 Nov;11(11 Pt 2):1846–52
A new approach to an old procedure [letter] Feldman S. PACE 1989 Jul;12(7 Pt 1):1137
Effects of extracorporeal shock wave lithotripsy on single chamber rate response and dual chamber pacemakers. Fetter J, et al. PACE 1989 Sep;12(9):1494–501
Physiological benefits of a pacemaker with dual chamber pacing at low heart rates and single chamber rate responsive pacing during exercise. French WJ, et al. PACE 1988 Nov;11(11 Pt 2):1840–5
Sensors for rate modulated pacing [editorial] Furman S. PACE 1988 Sep;11(9):1249
Lead connectors [editorial] Furman S. PACE 1989 Jan;12(1 Pt 1):1
Pacemaker longevity [editorial] Furman S. PACE 1989 Sep; 12(9):1437–8
The Bilitch report: performance of implantable cardiac rhythm management devices. Furman S, et al. PACE 1989 Mar;12(3):510–8
Simultaneous insulation deterioration associated with side-by-side subclavian placement of two polyurethane leads. Fyke FE 3d. PACE 1988 Nov;11(11 Pt 1):1571–4
Chronic lung collapse: a predictable impediment to ipsilateral lead placement. Fyke FE 3d. PACE 1989 May;12(5):835–9
Cardiac pacing and valvular surgery. Gaillard D, et al. PACE 1988 Nov;11(11 Pt 2):2142–8
STIMAREC report. Pacemaker failures due to electrocautery and external electric shock. Godin JF, et al. PACE 1989 Jun;12(6):1011
Noninvasive temporary pacemakers. Gould BA, et al. PACE 1988 Sep;11(9):1331–5
Pacemaker patients—use and misuse. Greatbatch W. PACE 1989 Jan;12(1 Pt 1):115–6
Termination of malignant ventricular tachycardias by use of an automatical defibrillator (AICD) in combination with an antitachycardial pacemaker. Greve H, et al. PACE 1988 Nov;11(11 Pt 2):2040–4
Circumvention of maximum tracking limitations with a rate modulated dual chamber pacemaker. Hanich RF, et al. PACE 1989 Feb;12(2):392–7
Noninvasive diagnosis and treatment of atrial flutter utilizing previously implanted dual chamber pacemaker. Hassett JA, et al. PACE 1988 Nov;11(11 Pt 2):1662–6
Usefulness of rate responsive atrial pacing in patients with sick sinus syndrome. Hatano K, et al. PACE 1989 Jan;12(1 Pt 1):16–24
Electrocardiographic manifestations of a dual-chamber, rate-modulated (DDDR) pacemaker. Hayes DL, et al. PACE 1989 Apr;12(4 Pt 1):555–62
A novel approach to atrial endocardial pacing. Hayes DL, et al. PACE 1989 Jan;12(1 Pt 1):125–30
QT sensing rate responsive pacing compared to fixed rate ventricular inhibited pacing: a controlled clinical study. Hedman A, et al. PACE 1989 Feb;12(2):374–85
Which patient is most likely to benefit from a rate responsive pacemaker? Heinz M, et al. PACE 1988 Nov;11(11 Pt 2):1834–9
Sensor-driven rate smoothing in a DDDR pacemaker. Higano ST, et al. PACE 1989 Jun;12(6):922–9
P wave tracking above the maximum tracking rate in a DDDR pacemaker. Higano ST, et al. PACE 1989 Jul;12(7 Pt 1):1044–8
Malfunctioning of a programmable cardiac stimulator can result in severe electrical shock hazard [letter] Hondeghem LM. PACE 1989 Mar;12(3):507–9
Temporal relationship between exercise and QT shortening in patients with QT pacemakers. Horstmann E, et al. PACE 1989 Jul;12(7 Pt 1):1080–4
Atrial inhibited pacing in the sick sinus node syndrome: clinical value and the demand for rate responsiveness. Kallryd A, et al. PACE 1989 Jun;12(6):954–61
A new low threshold platinized epicardial pacing electrode: comparative evaluation in immature canines. Karpawich PP, et al. PACE 1988 Aug;11(8):1139–48
Impedance to transesophageal atrial pacing: significance regarding power sources. Kerr CR, et al. PACE 1989 Jun; 12(6):930–5
Association between stimulated QT interval and ventricular rhythm disturbances: influence of autonomic nervous system. Kocovic D, et al. PACE 1988 Nov;11(11 Pt 2):1722–31
Clinical experience with the rate responsive pacemaker Sensolog 703. Kubisch K, et al. PACE 1988 Nov;11(11 Pt 2):1829–33
Comparison of two myoepicardial pacemaker leads: follow-up in 80 children, adolescents, and young adults. Kugler J, et al. PACE 1988 Dec;11(12):2216–22
Computer-assisted pacemaker management systems: three years of clinical experience. Kühl M, et al. PACE 1988 Nov;11(11 Pt 2):2071–6
Course of symptoms and spontaneous ECG in pacemaker patients: a 5-year follow-up study. Langenfeld H, et al. PACE 1988 Dec;11(12):2198–206
Clinical experience with Sensolog 703: a new activity sensing rate responsive pacemaker. Lau CP, et al. PACE 1988 Oct; 11(10):1444–55
A comparative evaluation of a minute ventilation sensing and activity sensing adaptive-rate pacemakers during daily activities. Lau CP, et al. PACE 1989 Sep;12(9):1514–21
Selective vibration sensing: a new concept for activity-sensing rate-responsive pacing. Lau CP, et al. PACE 1988 Sep;11(9):1299–309
Initial clinical experience with a minute ventilation sensing rate modulated pacemaker: improvements in exercise capacity and symptomatology. Lau CP, et al. PACE 1988 Nov;11(11 Pt 2):1815–22
Myopotential interference in unipolar rate responsive pacemakers. Lau CP, et al. PACE 1989 Aug;12(8):1324–30
Bradyarrhythmia profile and associated diseases in 1,265 patients with cardiac pacing. Levander-Lindgren M, et al. PACE 1988 Dec;11(12):2207–15
Therapeutic and diagnostic benefits of intentional crosstalk mediated ventricular output inhibition. Levine PA, et al. PACE 1988 Aug;11(8):1194–201
Design dependent loss of telemetry: uplink telemetry hold. Lindenberg BS, et al. PACE 1989 May;12(5):823–6
Atrial capture detection with endocardial electrodes. Livingston AR, et al. PACE 1988 Nov;11(11 Pt 2):1770–6
The impact of a manufacturer's revision of pacemaker service life on the workload of a large pacing center. Llewellyn MJ, et al. PACE 1989 Jul;12(7 Pt 1):1014–7
Treadmill assessment of an activity-modulated pacemaker: the importance of individual programming. McAlister HF, et al. PACE 1989 Mar;12(3):486–501
Atrial electrogram analysis: antegrade versus retrograde. McAlister HF, et al. PACE 1988 Nov;11(11 Pt 2):1703–7
Confusion in interpreting pacemaker related rhythms [letter] McBride JW, et al. PACE 1989 May;12(5):875–6
Pacemaker system failure and other events in children with surgically induced heart block. McGrath LB, et al. PACE 1988 Aug;11(8):1182–7
Clinical experience with a new activity sensing rate modulated pacemaker using autoprogrammability. Mahaux V, et al. PACE 1989 Aug;12(8):1362–8
Diagnosis of paced electrocardiograms by inverse computer modeling of pacemaker actions. Malik M, et al. PACE 1988 Nov;11(11 Pt 2):2093–100
Computer modeling of cardiac rhythm disturbances and heart-pacemaker interaction. Malik M, et al. PACE 1988 Nov;11(11 Pt 2):2101–9
Noninvasive measurement of retrograde conduction times in pacemaker patients. Marco DD, et al. PACE 1988 Nov; 11(11 Pt 2):1673–8
Reliability of atrial screw-in leads. Markewitz A, et al. PACE 1988 Nov;11(11 Pt 2):1777–83
Comparative evaluation of chronotropic responses of QT sensing and activity sensing rate responsive pacemakers. Mehta D, et al. PACE 1988 Oct;11(10):1405–12
Assessment of VVI diagnostic pacing mode in patients with cardioinhibitory carotid sinus syndrome. Menozzi C, et al. PACE 1988 Nov;11(11 Pt 2):1641–6
Subjective consequences of permanent pacemaker therapy in patients under the age of retirement. Mickley H, et al. PACE 1989 Mar;12(3):401–5
A comparison of platinized grooved electrode performance with ring-tip electrodes. Midei MG, et al. PACE 1989 May; 12(5):752–6
Long-term follow-up of patients treated with automatic scanning antitachycardia pacemaker. Møller M, et al. PACE 1989 Mar;12(3):425–30
Rate responsive pacing using a minute ventilation sensor. Mond H, et al. PACE 1988 Nov;11(11 Pt 2):1866–74
Rate responsive cardiac pacing—a perspective [editorial] Mond HG. PACE 1989 Aug;12(8):1309–11
Chronic rapid atrial pacing to maintain atrial fibrillation: use to permit control of ventricular rate in order to treat tachycardia induced cardiomyopathy. Moreira DA, et al. PACE 1989 May;12(5):761–75
Pacemaker electrode repositioning using the loop-snare technique. Morris DC, et al. PACE 1989 Jun;12(6):996–9
Clinical experience with new leads. Mugica J, et al. PACE 1988 Nov;11(11 Pt 2):1745–52
Permanent antitachycardia pacemaker therapy for ventricular tachycardia. Newman DM, et al. PACE 1989 Aug; 12(8):1387–95 (21 ref.)
Rate responsive pacing and exercise capacity—a comment [editorial] Nordlander R, et al. PACE 1989 May; 12(5):749–51 (15 ref.)
Problems of sensing tachyarrhythmias by an antitachycardia pacemaker (Symbios 7008). Nürnberg M, et al. PACE 1989 Apr;12(4 Pt 1):537–41
Reuse of pacing catheters: a survey of safety and efficacy. O'Donoghue S, et al. PACE 1988 Sep;11(9):1279–80
Design and evaluation of a low threshold, porous tip lead with a mannitol coated screw-in tip ("Sweet Tip"). Ormerod D, et al. PACE 1988 Nov;11(11 Pt 2):1784–90
Bilitch report [letter] Palmer EP. PACE 1989 Jun; 12(6):1009–10
Sympathetic nerve activity during VVI and DDD pacing [letter] Pehrsson SK, et al. PACE 1989 May;12(5):877
Clinical experience with steroid-eluting unipolar electrodes. Pirzada FA, et al. PACE 1988 Nov;11(11 Pt 2):1739–44
Reversible congestive cardiomyopathy due to chronic ventricular tachycardia. Rakovec P, et al. PACE 1989 Apr; 12(4 Pt 1):542–5
Respiratory-dependent atrial pacing, management of sinus node disease. Rognoni G, et al. PACE 1988 Nov;11(11 Pt 2):1853–9
Atrial pacing and the risk for AV block: is there a time for change in attitude? Rosenqvist M, et al. PACE 1989 Jan; 12(1 Pt 1):97–101 (40 ref.)
Transcutaneous pacing for cardiac emergencies. Rosenthal E, et al. PACE 1988 Dec;11(12):2160–7
Effects of encainide on the function of implanted pacemakers. Salel AF, et al. PACE 1989 Sep;12(9):1439–44
Long-term follow-up of patients with sick sinus syndrome: a comparison of clinical aspects among unpaced, ventricular inhibited paced, and physiologically paced groups. Sasaki Y, et al. PACE 1988 Nov;11(11 Pt 1):1575–83
Long-term results of antitachycardia pacing in patients with supraventricular tachycardia. Schnittger I, et al. PACE 1989 Jun;12(6):936–41
Pacemaker reuse [letter] Shammash JB. PACE 1989 Apr;12(4 Pt 1):620
Implanted automatic defibrillators: effects of drugs and pacemakers. Singer I, et al. PACE 1988 Dec;11(12):2250–62 (41 ref.)
Initial clinical experience with a rate responsive pacemaker. Singer I, et al. PACE 1989 Sep;12(9):1458–64
Reuse of cardiac pacemakers [editorial] Sloman G, et al. PACE 1988 Aug;11(8):1117–8
The Bilitch report. Performance of implantable cardiac rhythm management devices. Song SL. PACE 1989 Sep; 12(9):1555–6
Physical movement sensitive pacing: comparison of two "activity"-triggered pacing systems. Stangl K, et al. PACE 1989 Jan;12(1 Pt 1):102–10
First clinical experience with an oxygen saturation controlled pacemaker in man. Stangl K, et al. PACE 1988 Nov;11(11 Pt 2):1882–7
Influence of AV synchrony on the plasma levels of atrial natriuretic peptide (ANP) in patients with total AV block. Stangl K, et al. PACE 1988 Aug;11(8):1176–81
The combined use of hysteresis and Holter functions improves diagnosis and therapy in patients with sick sinus syndrome. Stangl K, et al. PACE 1988 Nov;11(11 Pt 2):1698–702
Implantation of double screw-in leads. Stirbys P. PACE 1988 Oct;11(10):1482–4
Preliminary studies on a new steroid eluting epicardial electrode. Stokes KB. PACE 1988 Nov;11(11 Pt 2):1797–803
Crosstalk during bipolar pacing. Sweesy MW, et al. PACE 1988 Nov;11(11 Pt 1):1512–6
Output inhibition upon application or programming head [letter] Sweesy MW, et al. PACE 1988 Aug;11(8):1239–40
Undersensing in VVI-pacemakers detected by Holter monitoring. Van Gelder LM, et al. PACE 1988 Nov;11(11 Pt 1):1507–11
Single versus double chamber rate responsive cardiac pacing: comparison by cardiopulmonary noninvasive exercise testing. Vogt P, et al. PACE 1988 Nov;11(11 Pt 2):1896–901
VOOR—nondemand rate modulated pacing necessitated by myopotential inhibition. Volosin KJ, et al. PACE 1989 Mar; 12(3):421–30
Pacemaker implantation in children: a 21-year experience. Walsh CA, et al. PACE 1988 Nov;11(11 Pt 2):1940–4
In vitro estimation of the electrical performance of bipolar pacing electrode systems. Walton C, et al. PACE 1988 Nov; 11(11 Pt 2):1791–6
Rate response during submaximal exercise: comparison of three different sensors. Zegelman M, et al. PACE 1988 Nov; 11(11 Pt 2):1888–95
Transvenous pacemaker electrodes placed unintentionally in the left ventricle: three cases. Winner SJ, et al. **Postgrad Med J** 1989 Feb;65(760):98–102
Gated blood pool scintigraphy (GBPS) for optimal setting of programmable cardiac pacemakers. Otto HJ, et al. **Rays** 1988 May-Aug;13(2):69–73
Setting the pace. Burnham L. **Sci Am** 1988 Mar;258(3):35, 37
Pacemakers and exercise. Current status, future developments and practical implications of physiological pacemakers. Estes NA 3d, et al. **Sports Med** 1989 Jul;8(1):1–8 (33 ref.)
Therapy with permanent pacemaker: experience with 161 patients over 17 years. Ko YL, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Aug;87(8):780–6
Sudden cardiac death. Schmidt SB, et al. **W V Med J** 1989

Mar;85(3):87-9 (24 ref.)
[Automatic diagnosis of implanted pacemaker function] Malík M, et al. **Cas Lek Cesk** 1989 Feb 3;128(6):178-85 (Eng. Abstr.) (Cze)
[A permanent pacemaker with variable frequency] Andersen C, et al. **Ugeskr Laeger** 1989 Mar 6;151(10):640-1 (Dan)
[The occupational situation of patients with pacemakers] Petersen J, et al. **Ugeskr Laeger** 1988 Nov 21; 150(47):2896-8 (Eng. Abstr.) (Dan)
[Pacemaker implantation for complete atrioventricular block due to Lyme borreliosis] Kuiper H, et al. **Ned Tijdschr Geneeskd** 1988 Nov 12;132(46):2109-11 (Eng. Abstr.) (Dut)
[Which pacemaker for which patient?] Godin JF, et al. **Ann Cardiol Angeiol (Paris)** 1988 Dec;37(10):569-73 (Eng. Abstr.) (Fre)
[Deprogrammation of an artificial pacemaker with the electric scalpel (letter)] Bussac JJ, et al. **Ann Fr Anesth Reanim** 1988;7(4):361-2 (Fre)
[Cardiac pacemaker deprogramming by electrocautery. An update] Caramella JP, et al. **Ann Fr Anesth Reanim** 1989; 8(3):290-2 (13 ref.) (Fre)
[Anesthesia and cardiac pacing] Caramella JP, et al. **Ann Fr Anesth Reanim** 1988;7(4):309-19 (84 ref.) (Eng. Abstr.) (Fre)
[Development at 5 years of chronic branchial blocks in 164 patients fitted with pacemakers without documented spontaneous atrioventricular block. Study of predictive criteria] Poupet JY, et al. **Arch Mal Coeur** 1989 Apr; 82(4):533-40 (Eng. Abstr.) (Fre)
[Motion energy as a control variable for adapting stimulation frequency] Hubmann M, et al. **Biomed Tech (Berlin)** 1989 Jul-Aug;34(7-8):191-6 (Eng. Abstr.) (Ger)
[Central venous blood temperature as a sensor for a frequency-adapted pacemaker system] Isbruch FM, et al. **Biomed Tech (Berlin)** 1988 Dec;33(12):295-9 (Eng. Abstr.) (Ger)
[Pre-ejection period controlled cardiac pacemaker] Schaldach M. **Biomed Tech (Berlin)** 1989 Jul-Aug; 34(7-8):177-84 (Eng. Abstr.) (Ger)
[Titanium nitride cardiac pacemaker electrodes] Schaldach M, et al. **Biomed Tech (Berlin)** 1989 Jul-Aug;34(7-8):185-90 (Eng. Abstr.) (Ger)
[Modification of atrial natriuretic factor by the AV transmission time in pacemaker patients] Noll B, et al. **Dtsch Med Wochenschr** 1988 Dec 23;113(51-52):1994-6 (Eng. Abstr.) (Ger)
[Endocardial dual-chamber stimulation in an anomalous persistent left superior vena cava] Scherer HE, et al. **Dtsch Med Wochenschr** 1989 Feb 24;114(8):298-300 (Eng. Abstr.) (Ger)
[A heart rate adaptable "physiologic" pacemaker. Is the effort worthwhile?] Sigmund M, et al. **Fortschr Med** 1989 May 20;107(15):345-7 (12 ref.) (Eng. Abstr.) (Ger)
[Transcutaneous stimulation in the emergency therapy of cardiac arrhythmias] Hoffmann E, et al. **Internist (Berlin)** 1989 Feb;30(2):73-6 (Ger)
[Pacemaker therapy in children] Brüggemann G, et al. **Klin Padiatr** 1988 Sep-Oct;200(5):399-403 (Eng. Abstr.) (Ger)
[A report on the status of the compilation of the registry paper: "cardiac pacemaker patients"] Dietrich R, et al. **Radiobiol Radiother (Berl)** 1989;30(1):87-91 (Eng. Abstr.) (Ger)
[Optimal setting of a programmable pacemaker using radionuclide ventriculography] Pundrich R, et al. **Radiol Diagn (Berl)** 1988;29(3):532-7 (Ger)
[Anti-tachycardia pacemakers: welcome alternative in the therapy of paroxysmal supraventricular tachycardia] Mohacsi P, et al. **Schweiz Med Wochenschr** 1988 Dec 24; 118(51):1950-2 (Eng. Abstr.) (Ger)
[Negative effect of cardiac pacemakers on cerebral perfusion? A transcranial Doppler ultrasound study] Kessler G, et al. **Vasa Suppl** 1988;26:168-72 (Ger)
[Development of a physiological pacing concept at the 2d Surgical Department of the University of Vienna] Laczkovics A, et al. **Wien Klin Wochenschr** 1989 Jan 20; 101(2):63-6 (Eng. Abstr.) (Ger)
[A case of pacemaker-dependent Lyme carditis] Borgmann H, et al. **Z Gesamte Inn Med** 1989 Apr 15;44(8):247-8 (Eng. Abstr.) (Ger)
[Modification of cardiac pacemakers of the MCP and LCP series by electrodiagnostic and electrotherapy procedures] Burck G, et al. **Z Gesamte Inn Med** 1988 Oct 15; 43(20):572-6 (Eng. Abstr.) (Ger)
[Annual meeting of the Working Group on Cardiac Pacemakers of the German Society of Heart and Circulatory Research. Münster, 2-4 March 1989. Abstracts] **Z Kardiol** 1989 Feb;78(2):135-46 (Ger)
[Cardiopulmonary stress test in variable frequency stimulation: a comparison of Activitrax and Nova-MR pacemakers in VVI/AAI stimulation] Alt E, et al. **Z Kardiol** 1988 Jul;77(7):456-63 (Eng. Abstr.) (Ger)
[Initial clinical experiences with mechanical heart stimulation] Bloching H, et al. **Z Kardiol** 1989 Jul; 78(7):459-64 (Eng. Abstr.) (Ger)
[Supraventricular tachycardia: therapy with a variable antitachycardia stimulation program] Pfitzner P, et al. **Z Kardiol** 1988 Jun;77(6):366-72 (Eng. Abstr.) (Ger)
[Torsade de pointes ventricular tachycardia in idiopathic QT syndrome: successful treatment with AAI pacing (published erratum appears in Z Kardiol 1988 Aug;77(8):543)] Trappe HJ, et al. **Z Kardiol** 1988 Jun; 77(6):389-92 (Eng. Abstr.) (Ger)
[Long-term results of pacemaker therapy in hypersensitive carotid sinus syndrome] Waldecker B, et al. **Z Kardiol** 1989 Jul;78(7):453-8 (Eng. Abstr.) (Ger)
[Usefulness of ambulatory ECG in the follow-up of patients with pacemakers] Mirolo R, et al. **G Ital Cardiol** 1987 Dec; 17(12):1130-8 (Eng. Abstr.) (Ita)
[A case of stone former with pacemaker treated by extracorporeal shock wave lithotripsy] Kanazawa T, et al. **Hinyokika Kiyo** 1988 Aug;34(8):1415-9 (Eng. Abstr.) (Jpn)
[Pacemaker ECG] Ohnishi S, et al. **Kokyu To Junkan** 1988 Jun;36(6):631-40 (Jpn)
[Transvenous permanent pacemaker implantation for Fabry's disease. 3 cases report] Yoshida K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb;37(2):386-90 (Eng. Abstr.) (Jpn)
[Diaphragm pacing in the treatment of central alveolar hypoventilation syndrome] Yasuma F. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Dec; 26(12):1279-83 (Eng. Abstr.) (Jpn)
[Diaphragmatic pacing by electrical stimulation of the phrenic nerve—a case report] Touho H, et al. **No To Shinkei** 1989 Mar;41(3):289-92 (Eng. Abstr.) (Jpn)
[Permanent transvenous cardiac pacing in children and adolescents. Personal experience] Kuroczyński W, et al. **Kardiol Pol** 1988;31(11):733-9 (Eng. Abstr.) (Pol)
[The science of arrhythmia] Stopczyk M. **Kardiol Pol** 1988; 31(11):673-5 (Pol)
[Our experience with using programmable pacemakers for atrial (AAI) and right-ventricular (VVI) stimulation] Swiątecka G, et al. **Kardiol Pol** 1988;31(11):740-5 (Eng. Abstr.) (Pol)
[Programming of pacemaker's parameters in patients with permanent cardiac stimulation] Swiątecka G, et al. **Kardiol Pol** 1988;31(11):746-51 (36 ref.) (Pol)
[Value of cardiac stimulation in the treatment of ventricular tachycardia of the torsade de pointes type] Zerbe F. **Kardiol Pol** 1988;31(10):639-42 (Eng. Abstr.) (Pol)
[Guidelines for the implantation of permanent artificial pacemakers (1988)] Lorga AM, et al. **Arq Bras Cardiol** 1988 Mar;50(3):209-12 (Por)
[Artificial pacemaker of VVI type with frequency response. Hemodynamic evaluation] Maia IG, et al. **Arq Bras Cardiol** 1988 Oct;51(4):327-30 (Eng. Abstr.) (Por)
[Electrocardiographic aspects in patients with implanted cardiac pacemakers] Luca C, et al. **Rev Med Interna [Med Interna]** 1988 Jul-Aug;40(4):333-43 (Eng. Abstr.) (Rum)
[Morphologic changes of the heart conduction system in the late period after transvenous electrodestruction of the atrio-ventricular junction] Rezapov BR, et al. **Kardiologiia** 1989 May;29(5):111-3 (Rus)
[Medical and vocational rehabilitation of patients with implanted pacemakers] Stirbis PP, et al. **Kardiologiia** 1988 Nov;28(11):12-5 (Eng. Abstr.) (Rus)
[2-stage electrocardiostimulation at a provincial clinical hospital] Kolesov EV, et al. **Klin Khir** 1988;(10):43-4 (Eng. Abstr.) (Rus)
[Psychological rehabilitation of patients with implanted electrocardiostimulators] Krylov VI, et al. **Klin Med (Mosk)** 1989 Apr;67(4):74-7 (Eng. Abstr.) (Rus)
[Development of a technic and methodology of myoventriculoplasty using programmable cardio-synchronized electro-neurostimulation] Dumchius AS, et al. **Med Tekh** 1988 Jul-Aug;(4):11-5 (Eng. Abstr.) (Rus)
[Statistical analysis of the replacement circuit of the electrode- biological object-electrode system in electric stimulation of the heart] Grigorov SS, et al. **Med Tekh** 1989 Jan-Feb;(1):7-10 (Eng. Abstr.) (Rus)
[Social and health characteristics and rehabilitation of patients with sick sinus syndrome after pacemaker implantation] Popov SE, et al. **Sov Med** 1989;(3):68-70 (Rus)
[Effect of pacemaker implantation on the psychoemotional status of patients] Zubarev RP, et al. **Sov Med** 1988;(7):73-6 (Rus)
[Pilot experience with implantations of 100 continuous atrial pacemakers in sick sinus syndrome: advances, problems, prospects] Egorov DF, et al. **Ter Arkh** 1989;61(1):61-3 (Eng. Abstr.) (Rus)
[Status of fitness for work of patients with sick sinus syndrome treated by implantation of a pacemaker] Tarasov AN, et al. **Ter Arkh** 1989;61(1):63-6 (Rus)
[Clinical x-ray study of the blood circulation system in patients with an artificial pacemaker] Koledinov VI, et al. **Vestn Rentgenol Radiol** 1988 Jul-Aug;(4):22-6 (Eng. Abstr.) (Rus)
[Observation of patients with artificial cardiac pacemakers] Roshchin SI, et al. **Vrach Delo** 1988 Nov;(11):116-8 (Rus)
[Infection and its prevention in cardiac electrostimulation] Cebašek R, et al. **Acta Chir Iugosl** 1988;35(1):69-76 (Eng. Abstr.) (Scc)
[Monitoring of patients with implanted pacemakers] Djordjević M. **Srp Arh Celok Lek** 1988 Nov-Dec; 116(11-12):1119-28 (Scc)
[Long-term experience with the endocardial Spectraflex tined electrode] Djordjević M, et al. **Srp Arh Celok Lek** 1988 Nov-Dec;116(11-12):1029-39 (Eng. Abstr.) (Scc)
[The effect of microwave diathermy equipment on pacemaker function] Đorđević Z, et al. **Vojnosanit Pregl** 1988 Nov-Dec;45(6):431-3 (Scr)
[A puncture method for implantation of permanent pacemakers] Pezo I, et al. **Vojnosanit Pregl** 1988 Sep-Oct; 45(5):343-5 (Eng. Abstr.) (Scr)
[Informatics in cardiology: proposal for standardized terminology in clinical records and in permanent cardiac electrostimulation] Fiorista F, et al. **Arch Inst Cardiol Mex** 1988 Jul-Aug;58(4):333-7 (Eng. Abstr.) (Spa)
[Double-chamber pacemakers. Implantation in a schoolboy for a traumatic lesion of the conduction tissue] Patrón Amador E, et al. **Arch Inst Cardiol Mex** 1988 May-Jun; 58(3):219-22 (Eng. Abstr.) (Spa)
[Methodology for the implantation of definitive cardiac pacemakers] Trevethan S. **Arch Inst Cardiol Mex** 1988 Sep-Oct;58(5):475-83 (23 ref.) (Eng. Abstr.) (Spa)
[Prevention of ventricular fibrillation after long RR intervals using a pacemaker] Nilsson G, et al. **Lakartidningen** 1989 Mar 15;86(11):957-60 (Swe)
[Better quality of life with modern pacemaker treatment] Schüller H. **Lakartidningen** 1988 Dec 21;85(51):4503-4 (Swe)

ADVERSE EFFECTS

Pacemaker lead-induced tricuspid stenosis: diagnosis by Doppler echocardiography. Old WD, et al. **Am Heart J** 1989 May;117(5):1165-7
Pacemaker-induced ventricular tachycardia in normally functioning ventricular demand pacemakers. Karbenn U, et al. **Am J Cardiol** 1989 Jan 1;63(1):120-2
Pacemaker twiddler's syndrome. Roberts JS, et al. **Am J Cardiol** 1989 Apr 15;63(13):1013-6
Pacemaker electrode perforation of the myocardium: an unusual etiology for recurrent abdominal pain. Green SM. **Am J Emerg Med** 1989 Mar;7(2):180-4
Pacemaker-mediated tachycardia induced by intraoperative somatosensory evoked potential stimuli. Merritt WT, et al. **Anesthesiology** 1988 Nov;69(5):766-8
Pacing lead fracture after a deceleration injury. Grieco JG, et al. **Ann Thorac Surg** 1989 Mar;47(3):453-4
Right heart endocarditis and endocardial pacemakers [letter] Rubio-Alvarez J, et al. **Ann Thorac Surg** 1989 Jul;48(1):147
Degradation of explanted polyurethane cardiac pacing leads and of polyurethane. Chawla AS, et al. **Biomater Artif Cells Artif Organs** 1988;16(4):785-800
2:1 atrial capture as the cause of pacemaker alternans. Jordaens LJ, et al. **Cardiology** 1988;75(4):283-6
Right ventricular pacing wire thrombus presenting as pyrexia of unknown origin. Grunewald RA, et al. **Clin Cardiol** 1989 Feb;12(2):106-8
Runaway pacemaker: a still existing complication and therapeutic guidelines. Mickley H, et al. **Clin Cardiol** 1989 Jul;12(7):412-4
Infections of prosthetic heart valves and cardiac pacemakers. Heimberger TS, et al. **Infect Dis Clin North Am** 1989 Jun; 3(2):221-45 (108 ref.)
Digital subtraction venography for assessment of deep venous thrombosis in the arms following pacemaker implantation. Sharma S, et al. **Int J Cardiol** 1989 Apr;23(1):135-6
Interference of automated electroencephalographic processing by an endocardial pacemaker. Clark S, et al. **J Clin Monit** 1989 Jan;5(1):22-5
Clinical problems with temporary pacemakers prior to permanent pacing. Winner S, et al. **J R Coll Physicians Lond** 1989 Jul;23(3):161-3
Total venous obstruction—a possible complication of transvenous dual-chamber pacing. Koike R, et al. **Jpn Circ J** 1988 Nov;52(11):1293-6 (15 ref.)
Tongue necrosis by giant cell arteritis and fatal pacemaker embolism. Peetermans WE, et al. **Neth J Med** 1988 Dec; 33(5-6):232-5
Short-term thrombosis after transvenous permanent pacemaker insertion. Antonelli D, et al. **PACE** 1989 Feb; 12(2):280-2
Far-field QRS complex sensing via the atrial pacemaker lead. I. Mechanism, consequences, differential diagnosis and countermeasures in AAI and VDD/DDD pacing. Brandt J, et al. **PACE** 1988 Oct;11(10):1432-8
Pacemaker-mediated tachycardia: engineering solutions. Calfee RV. **PACE** 1988 Nov;11(11 Pt 2):1917-28
Ventricular tachycardia with alternating cycle lengths: self-entrainment of parasystolic rhythm? Castellanos A, et al. **PACE** 1988 Sep;11(9):1291-5
Pacemaker syndrome with AAI rate variable pacing: importance of atrioventricular conduction properties, medication, and pacemaker programmability. den Dulk K, et al. **PACE** 1988 Aug;11(8):1226-33
A case of cross stimulation. Doi Y, et al. **PACE** 1989 Apr; 12(4 Pt 1):569-73
Prevention and termination of pacemaker-mediated tachycardia in a new DDD pacing system (Siemens-Pacesetter model 2010T). Duncan JL, et al. **PACE** 1988 Nov;11(11 Pt 2):1679-83
DDD-pacemaker pseudomalfunction during supraventricular tachycardia. Fontaine JM, et al. **PACE** 1988 Oct;11(10):1380-5

Pediatric transvenous pacing: a concern for venous thrombosis? Gillette PC, et al. **PACE** 1988 Nov;11(11 Pt 2):1935–9

Active fixation atrial leads: randomized comparison of two lead designs. Kay GN, et al. **PACE** 1989 Aug;12(8):1355–61

A new algorithm for a high level of protection against pacemaker–mediated tachycardia. Lamaison D, et al. **PACE** 1988 Nov;11(11 Pt 2):1715–21

Atrial fibrillation and embolic complications in paced patients. Langenfeld H, et al. **PACE** 1988 Nov;11(11 Pt 2):1667–72

Pericardial tamponade associated with pacemaker catheter manipulation. Sandler MA, et al. **PACE** 1989 Jul;12(7 Pt 1):1085–8

Utility of the atrial endocardial electrogram concurrent with dual–chamber pacing in the determination of a pacemaker–mediated arrhythmia. Shandling AH, et al. **PACE** 1988 Oct;11(10):1419–25

The superfast atrial recharge pulse: a cause of pectoral muscle stimulation in patients equipped with a unipolar DDD pacemaker. Stroobandt R, et al. **PACE** 1989 Mar; 12(3):451–5

P–wave sensing in VVI pacemakers: useful or a problem? van Gelder LM, et al. **PACE** 1988 Oct;11(10):1413–8

Apparent undersensing due to oversensing of low amplitude pulses in a thoracic impedance–sensing, rate–responsive pacemaker. Wilson JH, et al. **PACE** 1988 Oct; 11(10):1479–81

[Complications of temporary transvenous endocardial pacemaker therapy] Volkmann H, et al. **Z Gesamte Inn Med** 1989 Jan 1;44(1):12–5 (Eng. Abstr.) **(Ger)**

[Pacemaker malfunctioning caused by subcutaneous emphysema] Berisso MZ, et al. **G Ital Cardiol** 1988 Aug; 18(8):676–9 (Eng. Abstr.) **(Ita)**

[Retention of tined electrodes complicated by infection—a case report on its removal under total cardiopulmonary bypass] Ikeda K, et al. **Kyobu Geka** 1988 Sep;41(10):838–40 (12 ref.) (Eng. Abstr.) **(Jpn)**

[Total removal of infected pacemaker electrodes with cardiopulmonary bypass] Kohama M, et al. **Kyobu Geka** 1988 Dec;41(13):1095–8 (10 ref.) (Eng. Abstr.) **(Jpn)**

[A permanent pacemaker] Skeie S, et al. **Tidsskr Nor Laegeforen** 1989 Jun 20;109(17–18):1883–4 (Eng. Abstr.) **(Nor)**

[Inhibition of QRS–guided pacemakers of the VVI type by skeletal muscle potentials] Zerbe F, et al. **Kardiol Pol** 1988; 31(11):727–32 (Eng. Abstr.) **(Pol)**

[A case of extreme elongation of the QT interval associated with the breaking of an endocavitary electrode] Tomaszewski A, et al. **Wiad Lek** 1988 Oct 15;41(20):1373–5 (Eng. Abstr.) **(Pol)**

[Infectious complications during constant electrostimulation of the heart: state of the problem and means of resolving it] Bredikis IuIu, et al. **Grudn Khir** 1988 Nov–Dec;(6):78–81 (44 ref.) **(Rus)**

[Increased incidence of supraventricular tachycardia attacks: characteristics of its clinical picture] Stirbis PP, et al. **Kardiologiia** 1989 Mar;29(3):110–1 **(Rus)**

[A case of cardiac tamponade and pneumothorax during electric cardiac stimulation] Stirbis PP, et al. **Kardiologiia** 1989 May;29(5):105–7 **(Rus)**

[Echocardiographic diagnosis of complications of endocardiac electrocardiostimulation] Gusak VK, et al. **Klin Khir** 1988;(10):41–3 (Eng. Abstr.) **(Rus)**

[Complication of electrocardiostimulation in a pregnant woman] Gusak VK, et al. **Klin Khir** 1988;(10):56 **(Rus)**

[The course of ischemic heart disease as affected by continuous electric stimulation of the heart] Tokmachev IuK, et al. **Sov Med** 1988;(11):50–3 **(Rus)**

[Mental disorders in patients with implanted cardiac pacemakers] Krylov VI. **Zh Nevropatol Psikhiatr** 1989; 89(2):62–6 (Eng. Abstr.) **(Rus)**

[Retrograde conduction and atrial fibrillation in VVI pacemakers (letter)] Quesada Dorador A, et al. **Rev Esp Cardiol** 1988 Jun–Jul;41(6):382 **(Spa)**

CLASSIFICATION

Combination of sensors to provide optimal pacing rate response. Paul V, et al. **Clin Cardiol** 1989 Jul;12(7):400–4

[Current coding of implanted devices for correction of cardiac rhythm disorders] Bredikis IuIu, et al. **Kardiologiia** 1988 Dec;28(12):123–5 **(Rus)**

ECONOMICS

Cost effectiveness of today's cardiac pacing. Galassi A, et al. **Cardiologia** 1989 Feb;34(2):113–6

[The next step to the perfect pacemaker? A bifocal system with an activity sensor—suitable for every second patient? Large increase in cost] Schwing C. **Fortschr Med** 1989 May 10;107(14):98–9 **(Ger)**

HISTORY

A century of cardiac pacing [editorial] Bloomfield P, et al. **BMJ** 1989 Feb 11;298(6670):343–4

The first implanted tachycardia–terminating pacemaker. Barold SS, et al. **PACE** 1989 May;12(5):870–4

Initial use of a pH triggered pacemaker. Cammilli L. **PACE** 1989 Jun;12(6):1000–7

The first pacemaker implant in America [published erratum appears in PACE 1989 Jan;12(1 Pt 1):following Table of Contents] Fiandra O. **PACE** 1988 Aug;11(8):1234–8

MORTALITY

Survival rates after pacemaker implantation: a study of patients paced for sick sinus syndrome and atrioventricular block. Zanini R, et al. **PACE** 1989 Jul;12(7 Pt 1):1065–9

[The natural history of patients with an artificial pacemaker] Krasoń–Rzeszutek E, et al. **Wiad Lek** 1988 Jul 1; 41(13):842–5 (Eng. Abstr.) **(Pol)**

NURSING

Pacemaker battery change. An outpatient procedure. Huffman M. **AORN J** 1988 Oct;48(4):733–9

STANDARDS

Medtronic model 5923 pulse generator [letter] Condon JK. **PACE** 1989 Apr;12(4 Pt 1):621

STIMAREC 1988 annual review. Godin JF, et al. **PACE** 1989 Apr;12(4 Pt 1):624–5

Pacemaker standards [editorial] Irnich W. **PACE** 1989 Feb; 12(2):269–70

Analysis accuracy and susceptibility to faults of Holter functions in diagnostic pacemakers. Stangl K, et al. **PACE** 1988 Nov;11(11 Pt 2):1708–14

Reliability of different temporary myocardial pacing leads. Wirtz S, et al. **Thorac Cardiovasc Surg** 1989 Jun;37(3):163–8

STATISTICS & NUMERICAL DATA

[Implantation of permanent pacemakers in Sweden in 1986—an inquiry study] Edhag O, et al. **Lakartidningen** 1988 Dec 21;85(51):4521–2 **(Swe)**

UTILIZATION

Results of pacemaker therapy in the German Democratic Republic. Organizational, methodological and technical aspects. Witte J, et al. **Cor Vasa** 1989;31(2):98–109

Indications for pacemaker implantation [editorial] Furman S. **PACE** 1988 Nov;11(11 Pt 1):1503

The influence of cardiac staffing resources on permanent cardiac pacemaker implantation rates. Jacyna MR, et al. **Scott Med J** 1988 Jun;33(3):261–3

PACEMAKERS, BIOLOGICAL see **BIOLOGICAL CLOCKS**

PACHYCURARES see **CURARE–LIKE AGENTS**

PACHYDERMOPERIOSTOSIS see **OSTEOARTHROPATHY, PRIMARY HYPERTROPHIC**

PACIFIERS see **INFANT CARE**

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PADUTIN see **KALLIKREIN**

PAECILOMYCES see under **HYPHOMYCETES**

PAF–ACETHER see **PLATELET ACTIVATING FACTOR**

PAGET'S DISEASE, EXTRA–MAMMARY

Extramammary Paget's disease: an annotated review. Balducci L, et al. **Cancer Invest** 1988;6(3):293–303 (63 ref.)

ANALYSIS

[Immunohistochemical study of the distribution of carcinoembryonic antigen and keratin in 2 cases of extramammary Paget disease] Betlloch Mas I, et al. **Med Cutan Ibero Lat Am** 1989;17(1):67–9 (Eng. Abstr.) **(Spa)**

MICROBIOLOGY

Paget's disease of the vulva: search for herpes simplex virus antigens and human papillomavirus antigen and DNA. Bornstein J, et al. **Gynecol Oncol** 1988 Nov;31(3):384–8

PATHOLOGY

Immunohistochemical demonstration of epithelial membrane antigen (EMA), carcinoembryonic antigen (CEA), and keratin on mammary and extramammary Paget's disease. Mori O, et al. **Acta Histochem (Jena)** 1989;85(1):93–100

Adenocarcinoma of Bartholin's gland associated with extramammary Paget's disease of the vulva. Hastrup N, et al. **Acta Obstet Gynecol Scand** 1988;67(4):375–7

Paget's extension of esophageal carcinoma. Immunohistochemical and mucin histochemical evidence of Paget's cells in the esophageal mucosa. Norihisa Y, et al. **Acta Pathol Jpn** 1988 May;38(5):651–8

Histogenesis of extramammary and mammary Paget cells. An immunohistochemical study. Guarner J, et al. **Am J Dermatopathol** 1989 Aug;11(4):313–8

Extramammary Paget's disease of the oral mucosa with in situ carcinoma of minor salivary gland ducts. Theaker JM. **Am J Surg Pathol** 1988 Nov;12(11):890–5

Perianal Paget's disease. Schellenberger RR, et al. **Aust N Z J Surg** 1988 Sep;58(9):727–32

Distinguishing tumour cells of mammary from extramammary Paget's disease using antibodies to two different glycoproteins from human milk–fat–globule membrane. Imam A, et al. **Br J Cancer** 1988 Sep; 58(3):373–8

Paget's disease of the anus: a clinicopathological study. Armitage NC, et al. **Br J Surg** 1989 Jan;76(1):60–3

Extra–mammary Paget's disease of the penis. Jenkins IL, et al. **Br J Urol** 1989 Jan;63(1):103–4

Paget's disease primarily involving the scrotum. Perez MA, et al. **Cancer** 1989 Mar 1;63(5):970–5

The histogenesis of mammary and extramammary Paget's disease. Jones RR, et al. **Histopathology** 1989 Apr; 14(4):409–16

Immunohistochemical staining properties of keratin type intermediate filaments in mammary and extramammary Paget's disease. Yoneda K. **J Dermatol (Tokyo)** 1989 Feb; 16(1):47–53

Extramammary Paget disease of the inguinoscrotal area. Hartley EL, et al. **N Y State J Med** 1988 Oct;88(10):546–8

Premalignant lesions of the anal margin. Beck DE, et al. **South Med J** 1989 Apr;82(4):470–4

[Cytologic diagnosis of Paget's disease of the vulva] Kühn W, et al. **Geburtshilfe Frauenheilkd** 1989 Jan;49(1):67–9 (Eng. Abstr.) **(Ger)**

[Genital Paget's disease] Hayashibara Y, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–3):1714–20 (Eng. Abstr.) **(Jpn)**

[Paget's disease of the scrotum] Takahashi Y, et al. **Hinyokika Kiyo** 1988 Jun;34(6):1069–72 (Eng. Abstr.) **(Jpn)**

SURGERY

Surgical treatment of the penoscrotal Paget's disease. Lai CS, et al. **Ann Plast Surg** 1989 Aug;23(2):141–6

Conservative management of extramammary Paget's disease of the vulva. Bergen S, et al. **Gynecol Oncol** 1989 May; 33(2):151–6

Pelvic exenteration for perianal Paget's disease [letter] Matsumoto K, et al. **J Clin Gastroenterol** 1988 Oct; 10(5):591–2

[Reconstruction using the gulteus maximus myocutaneous flap following resection of vulval cancer] Ogino M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep;40(9):1475–8 **(Jpn)**

THERAPY

Paget's disease of the anal margin. Jensen SL, et al. **Br J Surg** 1988 Nov;75(11):1089–92

ULTRASTRUCTURE

Genital Paget's disease: a transmission–, scanning–, and immuno–electron microscopic study. Miyamoto T, et al. **J Dermatol (Tokyo)** 1988 Jun;15(3):224–9

[Extra–mammary Paget's disease with a vulvar site. Ultrastructural findings] Virgili A, et al. **G Ital Dermatol Venereol** 1988 Jul–Aug;123(7–8):367–71 (Eng. Abstr.) **(Ita)**

PAGET'S DISEASE OF BONE see **OSTEITIS DEFORMANS**

PAGET'S DISEASE OF BREAST see under **CARCINOMA, DUCTAL**

PAIN

see related **ANALGESIA**

Sonography of the painful hip in children: 500 consecutive cases. Miralles M, et al. **AJR** 1989 Mar;152(3):579–82

The sonographic diagnosis of acute gangrenous cholecystitis: importance of the Murphy sign. Simeone JF, et al. **AJR** 1989 Feb;152(2):289–90

Severe flank pain as the predominant symptom of IgA nephropathy. Paller MS, et al. **Am J Kidney Dis** 1989 Jun; 13(6):494–6

McArdle's disease aggravates nuchal and cranial muscle contraction pains [letter] Yamut BI, et al. **Arch Neurol** 1989 Apr;46(4):361–2

Comment on the article by Summers et al [letter] Steiman I. **Arthritis Rheum** 1988 Nov;31(11):1452

RSI—regional pain syndrome: the importance of nomenclature [letter] Brooks P. **Br J Rheumatol** 1989 Apr; 28(2):180–2

Chronic pain is an invisible reality. McGeachy J. **Can Med Assoc J** 1988 Nov 1;139(9):887–8

Inadequate teaching about pain [letter] Watson CP, et al.

Can Med Assoc J 1989 Aug 1;141(3):189, 192
Relationship between pain sensitivity, cardiovascular reactivity to cold pressor test and indexes of activity of the adrenergic and opioid system. Rosa C, et al. Clin Exp Hypertens [A] 1988;10 Suppl 1:383–90
Disability, pain, and suffering. Loeser JD. Clin Neurosurg 1989;35:398–408
Pain in the newborn. Porter F. Clin Perinatol 1989 Jun; 16(2):549–64 (113 ref.)
Effect of physical exercise on pain thresholds and plasma beta-endorphins in patients with silent and symptomatic myocardial ischaemia. Droste C, et al. Eur Heart J 1988 Dec;9 Suppl N:25–33
Painful heel syndrome: radiographic and treatment assessment. Amis J, et al. Foot Ankle 1988 Oct;9(2):91–5
Abdominal pain and anorectal disease in AIDS. Barone JE, et al. Gastroenterol Clin North Am 1988 Sep;17(3):631–8 (43 ref.)
Diagnostic investigation and special treatment of chronic abdominal ischaemia. Petrovsky BV, et al. Int Angiol 1988 Jul–Sep;7(3):214–8
Psychological treatment of an asthmatic patient in crisis. Dreams, biofeedback, and pain behavior modification. Meany J, et al. J Asthma 1988;25(3):141–51
Permanent anterior dislocation of the proximal tibiofibular joint. Molitor PJ, et al. J Bone Joint Surg [Br] 1989 Mar; 71(2):240–1
Concordance between galvanic skin response and spinal palpation findings in pain-free males. Nansel DD, et al. J Manipulative Physiol Ther 1988 Aug;11(4):267–72
Re: Phantom pain: a lesson in the necessity for careful clinical research on chronic pain problems [letter] Pinzur MS. J Rehabil Res Dev 1988 Fall;25(4):83
Epoprostenol in systemic capillary leak syndrome [letter] Fellows IW, et al. Lancet 1988 Nov 12;2(8620):1143
Prolonged hypalgesia following "acupuncture" in monkeys. Vierck CJ Jr, et al. Life Sci 1974 Oct 1;15(7):1277–89
Is extracorporeal biliary lithotripsy painless? My experience with three shock-wave sources [letter] Staritz M. N Engl J Med 1989 Mar 23;320(12):811
Effects of extraversion and neuroticism on experimental pain, clinical pain, and illness behavior. Harkins SW, et al. Pain 1989 Feb;36(2):209–18
Labour pain: correlations with menstrual pain and acute low-back pain before and during pregnancy. Melzack R, et al. Pain 1989 Feb;36(2):225–9
Effects of diffuse noxious inhibitory controls (DNICs) on the sensory-discriminative dimension of pain perception. Talbot JD, et al. Pain 1989 Feb;36(2):231–8
Acute pain in children. Pediatr Clin North Am 1989 Aug; 36(4):781–1052
The neuroanatomy, neurophysiology, and neurochemistry of pain, stress, and analgesia in newborns and children. Anand KJ, et al. Pediatr Clin North Am 1989 Aug;36(4):795–822 (201 ref.)
Musculoskeletal pain syndromes. Prim Care 1988 Dec; 15(4):689–847
Hip pain in three children accompanied by transient abnormal findings on MR images. Pay NT, et al. Radiology 1989 Apr;171(1):147–9
Punctuality, pain and time-orientation among Sicilian-Canadians. Migliore S. Soc Sci Med 1989; 28(8):851–9
Cross leg pain and trunk list. Khuffash B, et al. Spine 1989 Jun;14(6):602–3
Colonoscopic appendicography. A new method for the differential diagnosis of pain in the right lower quadrant. Weiss H. Surg Endosc 1988;2(3):197–200
The urethral syndrome. Bodner DR. Urol Clin North Am 1988 Nov;15(4):699–704 (37 ref.)
Pathology, pathophysiology, and pathogenesis of painful bladder diseases. Holm-Bentzen M. Urol Res 1989; 17(4):203–9 (69 ref.)
Severe perimenstrual symptoms: prevalence and effects on absenteeism and health care seeking in a non-clinical sample. Busch CM, et al. Women Health 1988;14(1):59–74
[Pelipathy] Cepický P. Cesk Gynekol 1988 Aug;53(7):522–8 (Cze)
[Persistence of joint pain in Whipple's disease] Nuutila P, et al. Duodecim 1988;104(5):332–5 (Fin)
[Talalgia and enthesopathy of the ankle] Onkelinx A. Acta Belg Med Phys 1988 Oct–Dec;11(4):179–83 (Fre)
[Role of imaging in the study of painful Paget's bone (excluding axial sites)] Martin B, et al. Ann Radiol (Paris) 1988;31(5):315–21 (31 ref.) (Eng. Abstr.) (Fre)
[Benelux Society of Phlebology. Ghent, 27 February 1988. Proceedings] Phlebologie 1988 Jul–Oct;41(3):624–89 (Fre)
[Contractures of the ischio-crural muscle group and femoropatellar pain syndrome in bicycling. Effects of muscle stretching exercises] Arnold MP, et al. Schweiz Z Sportmed 1988 Dec;36(4):187–90 (Eng. Abstr.) (Ger)
[Peripheral neurologic causes of shoulder and arm pain] Mumenthaler M. Ther Umsch 1988 Nov;45(11):774–9 (Eng. Abstr.) (Ger)
[Proposal to use the McGill Pain Questionnaire (MPQ) in the prediction and evaluation of labor pain] Caltabiano M, et al. Minerva Ginecol 1988 Mar;40(3):173–7 (Eng. Abstr.) (Ita)
[Recurrent abdominal pain in childhood] Li Voti G, et al. Minerva Pediatr 1988 Jul;40(7):429–31 (Eng. Abstr.) (Ita)
[Local bone pain and osseous scintigraphic findings in patients with metastatic bone tumor] Imaeda T, et al. Kaku Igaku 1988 Dec;25(12):1319–27 (Eng. Abstr.) (Jpn)
[Painful ophthalmoplegia: the Tolosa-Hunt syndrome and orbital pseudotumor syndrome] Nishida Y, et al. No To Shinkei 1988 Aug;40(8):759–62 (Eng. Abstr.) (Jpn)
[The painful joint in childhood—use of the microcomputer for differential diagnosis] Harjaček M, et al. Lijec Vjesn 1988 Nov;110(11):354–8 (Eng. Abstr.) (Scr)
[Abdominal echography in recurrent abdominal pain: study in 100 cases] Rubio Quiñones F, et al. An Esp Pediatr 1988 Sep;29(3):217–9 (Eng. Abstr.) (Spa)
[Children and acute pain] Olofsson T, et al. Lakartidningen 1988 Sep 28;85(39):3153, 3156–7 (Swe)

BLOOD

Platelet activation during pain crisis in sickle cell anemia patients. Beurling-Harbury C, et al. Am J Hematol 1989 Aug;31(4):237–41
Rheologic predictors of the severity of the painful sickle cell crisis. Ballas SK, et al. Blood 1988 Oct;72(4):1216–23
[3H]imipramine binding sites are decreased in platelets of chronic pain patients. Magni G, et al. Clin Neuropharmacol 1987 Apr;10(2):175–7
Serum pepsinogen I and IgG antibody to Campylobacter pylori in non-specific abdominal pain in childhood. Oderda G, et al. Gut 1989 Jul;30(7):912–6
Beta-endorphin levels during pregnancy and labor: a role in pain modulation? Cahill CA. Nurs Res 1989 Jul–Aug; 38(4):200–3
Platelet 3H-imipramine binding in psychogenic pain patients. Mellerup ET, et al. Psychiatry Res 1988 Nov;26(2):149–56
[Nocigenic changes in the blood viscosity indices of rats] Shuvaeva VN, et al. Fiziol Zh SSSR 1988 Oct; 74(10):1390–8 (Eng. Abstr.) (Rus)

CEREBROSPINAL FLUID

Significance of opioid peptides and other potential markers of neuropeptide systems in cerebrospinal fluid. Terenius L. Prog Brain Res 1988;77:419–29 (46 ref.)
[Evaluation of endogenous leucine enkephalin like substance in human cerebrospinal fluid—Part 2] Hasumi K, et al. Masui 1988 Jul;37(7):798–803 (Eng. Abstr.) (Jpn)

CHEMICALLY INDUCED

Propofol as an induction agent in children: pain on injection and pharmacokinetics. Valtonen M, et al. Acta Anaesthesiol Scand 1989 Feb;33(2):152–5
Pain on injection of propofol [letter] Gamil M. Anaesthesia 1988 Nov;43(11):995
Pain after spinal intrathecal clonidine. An adverse interaction with tricyclic antidepressants? Hardy PA, et al. Anaesthesia 1988 Dec;43(12):1026–7
Pain on injection of methohexitone. The use of lignocaine to modify pain on injection of methohexitone during anaesthesia for electroconvulsive therapy. Simpson KH, et al. Anaesthesia 1989 Aug;44(8):688–9
Painful injection of propofol [letter] Whitlock JE, et al. Anaesthesia 1989 Jul;44(7):618
Interleukin-2 initiates metabolic responses associated with critical illness in humans. Michie HR, et al. Ann Surg 1988 Oct;208(4):493–503
Acute painful proximal myopathy associated with nalidixic acid. Carmichael AJ, et al. BMJ 1988 Sep 17;297(6650):742
Pharmacological characterization of the algesic response to the subplantar injection of serotonin in the rat. Vinegar R, et al. Eur J Pharmacol 1989 May 30;164(3):497–505
The burning truth [letter] Shulkin DJ, et al. Int J Dermatol 1989 Sep;28(7):483
Current contrast media and ioxilan. Comparative evaluation of vascular pain by aversion conditioning. Sovak M, et al. Invest Radiol 1988 Sep;23 Suppl 1:S84–7
Endothelin-1 participation in overt and inflammatory pain. Ferreira SH, et al. J Cardiovasc Pharmacol 1989;13 Suppl 5:S220–2
The narcotic bowel syndrome. Rogers M, et al. J Clin Gastroenterol 1989 Apr;11(2):132–5 (22 ref.)
Codeine-induced abdominal pain [letter] Wilkinson JE. J Emerg Med 1989 May-Jun;7(3):292
A new writhing model of factor XII activator-induced pain for assessment of non-steroidal anti-inflammatory agents. I. Kaolin-induced writhing in mice. Fujiyoshi T, et al. J Pharmacobiodyn 1989 Mar;12(3):132–6
Suxamethonium myalgia [editorial] Lancet 1988 Oct 22; 2(8617):944–5 (18 ref.)
Iloprost-induced writhing in mice and its suppression by morphine. Akarsu ES, et al. Methods Find Exp Clin Pharmacol 1989 Apr;11(4):273–5
Resiniferatoxin, a phorbol-related diterpene, acts as an ultrapotent analog of capsaicin, the irritant constituent in red pepper. Szallasi A, et al. Neuroscience 1989; 30(2):515–20
A comparison of pain induced by procaine and benzyl penicillin. Harari M, et al. P N G Med J 1988 Sep; 31(3):169–71
Effects of lysergic acid diethylamide (LSD) and adjuvant-induced inflammation on desensitization to and metabolism of substance P in the mouse spinal cord. Larson AA, et al. Pain 1989 Jun;37(3):365–73
Dose-dependent pain and mechanical hyperalgesia in humans after intradermal injection of capsaicin. Simone DA, et al. Pain 1989 Jul;38(1):99–107
Psychophysical and neurophysiological studies of chemically induced cutaneous pain and itch. The case of the missing nociceptor. Lamotte RH. Prog Brain Res 1988;74:331–5
The hyperalgesic effect of naloxone is attenuated in streptozotocin-diabetic mice. Ramabadran K, et al. Psychopharmacology (Berlin) 1989;97(2):169–74
Ortho-iodosobenzoic acid: its acute toxicity and neurobehavioral effects in mice. Liu WF, et al. Toxicol Lett 1989 Feb;45(2–3):289–98
[Sensitive painful polyneuropathy probably caused by poisoning by perchloroethylene. Apropos of 1 case] Herruzo Pérez A, et al. Rev Esp Anestesiol Reanim 1989 May-Jun;36(3):180–1 (Spa)

CLASSIFICATION

The P-A-I-N MMPI classification system: a critical review. Robinson ME, et al. Pain 1989 May;37(2):211–4
Taxonomy of pain of the IASP [letter] Vervest AC, et al. Pain 1988 Sep;34(3):318–21
Priority setting with regard to placement on waiting list to a pain clinic. The feasibility of a delegated ranking procedure. Brattberg G. Scand J Soc Med 1988;16(3):173–8

COMPLICATIONS

Chronic abdominal pain, lymphopenia, and hypogammaglobulinemia in a 9-year-old female [clinical conference] Perrick D, et al. Ann Allergy 1989 Apr; 62(4):287–8, 326–8
Recurrent fever and abdominal pain in a 4-year-old boy [clinical conference] Wong DW, et al. Ann Allergy 1989 May;62(5):393–4, 441–4
Differential effects of acetylsalicylic acid and acetaminophen on sleep abnormalities in a rat chronic pain model. Landis CA, et al. Brain Res 1989 May 29;488(1–2):195–201
The influence of problems with concentration and memory on emotional distress and daily activities in chronic pain patients. Jamison RN, et al. Int J Psychiatry Med 1988; 18(2):183–91
Depression among chronic pain patients: cognitive-behavioral analysis and effect on rehabilitation outcome. Kerns RD, et al. J Consult Clin Psychol 1988 Dec;56(6):870–6
Chest pain without radiographic sacroiliitis in relatives of patients with ankylosing spondylitis. van der Linden SM, et al. J Rheumatol 1988;15(5):836–9
Musculoskeletal manifestations in patients with hypercholesterolemia. Wysenbeek AJ, et al. J Rheumatol 1989 May;16(5):643–5
Crural and axial myoclonic dystonia following meralgia paraesthetica. ter Bruggen JP, et al. Mov Disord 1988; 3(2):176–8
Pain syndromes in multiple sclerosis [see comments] Moulin DE, et al. Neurology 1988 Dec;38(12):1830–4. Comment in: Neurology 1989 Jul;39(7):1000–1
The reflex sympathetic dystrophy syndrome associated with traumatic myelopathy: report of 5 cases. Cremer SA, et al. Pain 1989 May;37(2):187–92
Pain management as an antidepressant: long-term resolution of pain-associated depression. Maruta T, et al. Pain 1989 Mar;36(3):335–7
Chronic pain and depression: toward a cognitive-behavioral mediation model. Rudy TE, et al. Pain 1988 Nov; 35(2):129–40
[Ascites, abdominal pain and a marginally functioning liver in a young woman] Pikkarainen P, et al. Duodecim 1989; 105(12):1211–9 (Fin)

DIAGNOSIS

Assessment of pain: a comparison between patients and doctors. Forrest M, et al. Acta Anaesthesiol Scand 1989 Apr;33(3):255–6
The value of herniography in elderly women with groin pain of obscure origin. Ekberg O, et al. Acta Chir Scand 1989 Feb;155(2):99–101
Normative model for cold pressor test. Walsh NE, et al. Am J Phys Med Rehabil 1989 Feb;68(1):6–11
Postpartum abdominal pain [clinical conference] Brennan DF, et al. Ann Emerg Med 1989 Jan;18(1):83–9
The Functional Assessment Screening Questionnaire: application for evaluating pain-related disability. Millard RW. Arch Phys Med Rehabil 1989 Apr;70(4):303–7
Anterior knee pain [published errartum appears in Aust Fam Physician 1989 Mar;18(3):195] Fricker P. Aust Fam Physician 1988 Dec;17(12):1055–6
Groin pain in athletes. Zimmerman G. Aust Fam Physician 1988 Dec;17(12):1046–52
Surface EMG recordings and pain-related disorders: a diagnostic framework. Cram JR. Biofeedback Self Regul 1988 Jun;13(2):123–38
The closed eyes sign: an aid to diagnosing non-specific abdominal pain. Gray DW, et al. BMJ 1988 Oct 1; 297(6652):837
Treatable causes of a painful heel [letter] Golding DN. Br J Hosp Med 1988 Dec;40(6):478–9
Computers and the diagnosis of acute abdominal pain. Wellwood JM, et al. Br J Hosp Med 1989 Jun;41(6):564–7
Diagnosis of anterior knee pain. Jacobson KE, et al. Clin Sports Med 1989 Apr;8(2):179–95 (45 ref.)

Computer-assisted diagnosis of acute abdominal pain. Sturman MF, et al. **Compr Ther** 1989 Feb;15(2):26–35 (16 ref.)

Differences and similarities between patient and physician perceptions of patient pain. Sutherland JE, et al. **Fam Med** 1988 Sep–Oct;20(5):343–6

Chronic pain: measurement and assessment. Grabois M, et al. **Int J Rehabil Res** 1987;10(4 Suppl 5):266–70

The clinical assessment of chronic pain in rheumatic disease: evaluating the use of two instruments. Davis GC. **J Adv Nurs** 1989 May;14(5):397–402

Pain dysfunction syndromes. Teaching physicians how to recognize and treat them [letter] Kummel BM. **J Bone Joint Surg [Am]** 1989 Jan;71(1):151–2

Diagnosing and treating chronic pain. A challenge for both practitioner and patient. Anthony JE Jr. **J Med Assoc Ga** 1988 Dec;77(12):879–83

Predictors of pelvic adhesions. Stovall TG, et al. **J Reprod Med** 1989 May;34(5):345–8

Unilateral painful shoulder: a very unusual presenting form of giant cell arteritis [letter] Cid MC, et al. **J Rheumatol** 1988 Aug;15(8):1312–3

Persistent pain following trauma. Ashburn MA, et al. **Milit Med** 1989 Feb;154(2):86–9 (37 ref.)

Neurological evaluation of occupational hand pain. Corwin HM, et al. **Occup Med** 1989 Jul–Sep;4(3):393–403 (8 ref.)

Hip pain in children: an anatomic approach. Hodges DL, et al. **Orthop Rev** 1988 Mar;17(3):251–6 (10 ref.)

The disability determination dilemma: toward a multiaxial solution. Turk DC, et al. **Pain** 1988 Sep;34(3):217–29 (30 ref.)

Emergency ultrasound in the evaluation of acute-onset abdominal pain in children. See CC, et al. **Pediatr Emerg Care** 1988 Sep;4(3):169–71

Abdominal epilepsy misdiagnosed as psychogenic pain. Singhi PD, et al. **Postgrad Med J** 1988 Apr;64(750):281–2

Neck pain. Goodman BW Jr. **Prim Care** 1988 Dec; 15(4):689–708 (70 ref.)

Hip pain. Roberts WN, et al. **Prim Care** 1988 Dec; 15(4):783–93 (9 ref.)

Finger pain. Shmerling RH. **Prim Care** 1988 Dec; 15(4):751–66 (27 ref.)

The painful shoulder: diagnosis and treatment. Spiegel TM, et al. **Prim Care** 1988 Dec;15(4):709–24 (22 ref.)

Ankle and foot pain. Stern SH. **Prim Care** 1988 Dec; 15(4):809–26 (36 ref.)

Wrist pain. Wade JP, et al. **Prim Care** 1988 Dec;15(4):737–49 (17 ref.)

Elbow pain. Watrous BG, et al. **Prim Care** 1988 Dec; 15(4):725–35 (21 ref.)

Measurement of the chronic pain experience: development of an instrument. Davis GC. **Res Nurs Health** 1989 Aug; 12(4):221–7

Chronic non-organic upper abdominal pain: diagnostic safety and prognosis of gastrointestinal and non-intestinal symptoms. A 5- to 7-year follow-up study. Sloth H, et al. **Scand J Gastroenterol** 1988 Dec;23(10):1275–80

[Diagnosis of neck, arm, lumbar and leg pain by electromyography of the cervical and lumbar rotator brevis muscles] Tian DH. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Aug;8(8):466–8, 452 (Eng. Abstr.) **(Chi)**

[Painless myocardial ischemia: its pathogenesis, diagnosis and treatment] Vertkin AL, et al. **Kardiologiia** 1989 Apr; 29(4):118–22 (73 ref.) **(Rus)**

[Symptom of "brisk walk" in the differential diagnosis of vertebrogenic syndromes (preliminary report)] Korzh NA, et al. **Ortop Travmatol Protez** 1988 Jun;(6):40–3 (Eng. Abstr.) **(Rus)**

[Abdominal pain syndrome and its significance in pediatric practice] Tebenchuk GM, et al. **Pediatriia** 1988;(7):72–7 **(Rus)**

[The semeiotics of psychopathological syndromes in dental patients with stomatalgia (glossalgia)] Matveev VF, et al. **Stomatologiia (Mosk)** 1988 Nov–Dec;67(6):34–6 (Eng. Abstr.) **(Rus)**

[Differential diagnosis of acute abdominal pain] Orlov VA. **Ter Arkh** 1988;60(7):135–8 **(Rus)**

[Clinical aspects of trigeminal neuralgia] Stepanchenko AV. **Zh Nevropatol Psikhiatr** 1989;89(4):8–12 (Eng. Abstr.) **(Rus)**

DIET THERAPY

Caffeine restriction as initial treatment for breast pain. Russell LC. **Nurse Pract** 1989 Feb;14(2):36–7, 40

DRUG THERAPY

Opioid drugs in chronic non-malignant pain? Adriaensen H. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):67–70

Long term spinal opiate treatment. Müller H, et al. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):83–6

Treatment of chronic pain syndromes with transcutaneous iontophoresis of vinca alkaloids, with special regard to post-herpetic neuralgia. Tajti J, et al. **Acta Med Hung** 1989; 46(1):3–12 (35 ref.)

Treatment of premenstrual mastalgia with tamoxifen. Messinis IE, et al. **Acta Obstet Gynecol Scand** 1988; 67(4):307–9

Patient-controlled analgesia improves pain relief [news] **Am Fam Physician** 1989 Jan;39(1):319–20

Antidepressants in chronic pain syndromes. Krishnan KR, et al. **Am Fam Physician** 1989 Apr;39(4):233–7 (20 ref.)

Nalbuphine analgesia in the prehospital setting. Stene JK, et al. **Am J Emerg Med** 1988 Nov;6(6):634–9

Certification of pharmacists involved in pain management [letter] McClellan M, et al. **Am J Hosp Pharm** 1988 Nov; 45(11):2325

Narcotics plus methylphenidate (Ritalin) for advanced cancer pain. Bruera E, et al. **Am J Nurs** 1988 Nov;88(11):1555–6

The effect of continuous epidural analgesia on cesarean section for dystocia in nulliparous women. Thorp JA, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):670–5

Ibuprofen in the treatment of acute ankle joint injuries. A double-blind study. Fredberg U, et al. **Am J Sports Med** 1989 Jul–Aug;17(4):564–6

Epidural fentanyl and perineal pain in labour. Reynolds F, et al. **Anaesthesia** 1989 Apr;44(4):341–4

Clinical use of subarachnoid neuropeptides: an experimental contribution [letter] Candeletti S, et al. **Anesth Analg** 1989 Sep;69(3):416

Epidural clonidine in lower limb deafferentation pain [letter] Coventry DM, et al. **Anesth Analg** 1989 Sep;69(3):424–5

Time-dependent changes in bupivacaine pharmacokinetics [letter] Denson DD. **Anesth Analg** 1989 Sep;69(3):423–4

Epidural narcotic use for outpatient pain treatment [letter] Parker EO. **Anesth Analg** 1989 Sep;69(3):408

Pain management in sickle cell disease. Rationale and techniques. Payne R. **Ann N Y Acad Sci** 1989;565:189–206 (65 ref.)

Intravenous pentoxifylline in the treatment of rest pain: a preliminary report. McCollum PT, et al. **Ann Vasc Surg** 1989 Jul;3(3):220–3

Examination and treatment of sleep-related painful erections—a case report. Steiger A, et al. **Arch Sex Behav** 1989 Jun;18(3):263–7

The treatment of symptomatic benign breast disease with danazol. Ramsey-Stewart G. **Aust N Z J Obstet Gynaecol** 1988 Nov;28(4):299–304

Treatment of cancer pain with orally and spinally administered opioids. Cousins MJ, et al. **Aust N Z J Surg** 1989 Apr;59(4):307–15 (23 ref.)

Management of pain in children. Schechter NL. **Aust Paediatr J** 1989 Feb;25(1):1–2 (24 ref.)

Drug treatment of pain in rheumatoid disorders. Capell HA, et al. **Baillieres Clin Rheumatol** 1987 Apr;1(1):91–121 (67 ref.)

Chemical mediators and treatment of pain in rheumatic disease. Kantor TG. **Baillieres Clin Rheumatol** 1987 Apr; 1(1):57–70 (28 ref.)

Pain relief in active patients with cancer: analgesic drugs are the foundation of management. Baines M. **BMJ** 1989 Jan 7;298(6665):36, 38 (8 ref.)

Progesterone cream for cyclic breast pain. McFadyen IJ, et al. **BMJ** 1989 Apr 8;298(6678):931

Lignocaine–prilocaine cream in postherpetic neuralgia [letter] Milligan KA, et al. **BMJ** 1989 Jan 28;298(6668):253

Opioids in chronic pain. McQuay HJ. **Br J Anaesth** 1989 Aug;63(2):213–26 (78 ref.)

Local anaesthetic cream for the alleviation of pain during venepuncture in Tanzanian schoolchildren. Hellgren U, et al. **Br J Clin Pharmacol** 1989 Aug;28(2):205–6

Joint pain and quality of life; results of a randomised trial. Parr G, et al. **Br J Clin Pharmacol** 1989 Feb;27(2):235–42

Dosage and duration of tamoxifen treatment for mastalgia: a controlled trial. Fentiman IS, et al. **Br J Surg** 1988 Sep; 75(9):845–6

Behavioural evidence for a bidirectional effect of systemic naloxone in a model of experimental neuropathy in the rat. Attal N, et al. **Brain Res** 1989 Aug 14;494(2):276–84

Tolerance to morphine analgesia from brief exposure to a palatable solution. Klein SP, et al. **Brain Res Bull** 1988 Dec;21(6):963–5

Patient-controlled analgesia for burn patients: a preliminary report. Kinsella J, et al. **Burns Incl Therm Inj** 1988 Dec; 14(6):500–3

Clinical differences in spinal opioid efficacy. Organowski S, et al. **Can J Anaesth** 1989 Jul;36(4):448–9

Control of severe pain with sustained-release morphine tablets v. oral morphine solution. Arkinstall WW, et al. **Can Med Assoc J** 1989 Mar 15;140(6):653–7, 661

Management of cancer pain. Fort Lauderdale, Florida, April 14–17, 1988. **Cancer** 1989 Jun 1;63(11 Suppl):2257–386

Prolonged morphine self-administration and addiction liability. Evaluation of two theories in a bone marrow transplant unit. Chapman CR, et al. **Cancer** 1989 Apr 15; 63(8):1636–44

Evaluation of a cancer pain model for the testing of long-acting analgesics. The effect of MS Contin in a double-blind, randomized crossover design. Cundiff D, et al. **Cancer** 1989 Jun 1;63(11 Suppl):2355–9

Controversies in cancer pain. Medical perspectives. Foley KM. **Cancer** 1989 Jun 1;63(11 Suppl):2257–65 (76 ref.)

Analgesic response to single and multiple doses of controlled-release morphine tablets and morphine oral solution in cancer patients. Goughnour BR, et al. **Cancer** 1989 Jun 1;63(11 Suppl):2294–7

Controlled-release morphine (MST Contin) in advanced cancer. The European experience. Hanks GW. **Cancer** 1989 Jun 1;63(11 Suppl):2378–82 (31 ref.)

Pain management in a drug-oriented society. Hill CS Jr. **Cancer** 1989 Jun 1;63(11 Suppl):2383–6

Management of cancer pain. Pharmacology and principles of management. Inturrisi CE. **Cancer** 1989 Jun 1;63(11 Suppl):2308–20 (51 ref.)

Oral controlled-release morphine sulfate. Analgesic efficacy and side effects of a 100-mg tablet in cancer pain patients. Portenoy RK, et al. **Cancer** 1989 Jun 1;63(11 Suppl):2284–8

Pharmacokinetics and clinical efficacy of oral morphine solution and controlled-release morphine tablets in cancer patients. Thirlwell MP, et al. **Cancer** 1989 Jun 1;63(11 Suppl):2275–83

Evaluation of dosing guidelines for the use of oral controlled-release morphine (MS Contin tablets). Warfield CA. **Cancer** 1989 Jun 1;63(11 Suppl):2360–4

Guidelines for use of controlled-release oral morphine in cancer pain management. Correlation with clinical experience. Lapin J, et al. **Cancer Nurs** 1989 Aug; 12(4):202–8

Chronic chlorimipramine does not reverse the reduction of cerebrospinal fluid Met-enkephalin-like immunoreactivity in chronic-pain patients. Bourgoin S, et al. **Clin Neuropharmacol** 1987 Oct;10(5):434–42

The rational use of analgesics in the management of patients with acute and chronic pain. Foley KM. **Clin Neurosurg** 1989;35:360–84

Enterohepatic circulation of opioid drugs. Is it clinically relevant in the treatment of cancer patients? Hanks GW, et al. **Clin Pharmacokinet** 1989 Aug;17(2):65–8 (34 ref.)

Sore throat pain in the evaluation of mild analgesics. Schachtel BP, et al. **Clin Pharmacol Ther** 1988 Dec; 44(6):704–11

Relief of epigastric pain in nonulcer dyspepsia: controlled trial of the promotility drug cisapride. De Nutte N, et al. **Clin Ther** 1989;11(1):62–8

Analgesic effect of intranasal salmon calcitonin in the treatment of osteoporotic vertebral fractures. Pun KK, et al. **Clin Ther** 1989 Mar–Apr;11(2):205–9

Analgesia in myocardial infarction. Herlitz J. **Drugs** 1989 Jun; 37(6):939–44 (36 ref.)

Nimesulide. A preliminary review of its pharmacological properties and therapeutic efficacy in inflammation and pain states. Ward A, et al. **Drugs** 1988 Dec;36(6):732–53 (69 ref.)

Peripheral and central antinociceptive actions of ethylketocyclazocine in the formalin test. Abbott FV. **Eur J Pharmacol** 1988 Jul 26;152(1–2):93–100

Adequate analgesia [editorial] Edmeads J. **Headache** 1988 May;28(4):280–1

The phenomenon of pain and critical care nursing [letter] Kraus M. **Heart Lung** 1988 Nov;17(6 Pt 1):720

Local-anesthetic analgesia—'no humbug' [letter] Stadtner DA. **Hosp Pract [Off]** 1988 Oct 30;23(10A):16

The use of analgesics for cancer pain. Evans WO. **Indiana Med** 1989 Apr;82(4):274–7 (18 ref.)

The undertreatment of pain. Evans WO. **Indiana Med** 1988 Oct;81(10):842–3

Measurement of post-operative pain and narcotic administration in infants using a new clinical scoring system. Barrier G, et al. **Intensive Care Med** 1989;15 Suppl 1:S37–9

Prehospital pain control: nitrous oxide inhalation. Peterson TD, et al. **Iowa Med** 1989 Jan;79(1):15–7

Colchicine treatment of abdominal pains in porphyric patients. Wysenbeek AJ, et al. **Isr J Med Sci** 1989 Feb; 25(2):95–7

The influence of anxiety and locus of control on adolescents' response to naproxen sodium for mild to moderate pain. DuRant RH, et al. **J Adolesc Health Care** 1988 Sep; 9(5):424–30

Intrathecal morphine as analgesia for labor pain. Edwards RD, et al. **J Am Board Fam Pract** 1988 Oct–Dec; 1(4):245–50

Use of L-tryptophan [letter] Shapira IL. **J Am Dent Assoc** 1989 Jun;118(6):682

Palliative care in the cancer patient [letter] Fernandez F, et al. **J Am Geriatr Soc** 1988 Oct;36(10):961

Effectiveness of nalbuphine for relief of burn debridement pain. Lee JJ, et al. **J Burn Care Rehabil** 1989 May–Jun; 10(3):241–6

Determination of morphine in plasma by gas chromatography using a macrobore column and thermoionic detection after Extrelut column extraction: application to follow-up morphine treatment in cancer patients. Wasels R, et al. **J Chromatogr** 1989 Apr 14;489(2):411–18

Ketoprofen (Orudis): U.S. and European experience in arthritis and pain. **J Clin Pharmacol** 1988 Dec;28(12 Suppl):S1–54

A double-blind parallel evaluation of the efficacy and safety of a single dose of ketoprofen in cancer pain. Stambaugh J, et al. **J Clin Pharmacol** 1988 Dec;28(12 Suppl):S34–9

Analgesic efficacy of ketoprofen in postpartum, general surgery, and chronic cancer pain. Sunshine A, et al. **J Clin Pharmacol** 1988 Dec;28(12 Suppl):S47–54 (11 ref.)

A rational approach to cancer pain management [editorial] Black DJ. **J Fam Pract** 1989 Mar;28(3):267–8

Principles of cancer pain management. Use of long-acting oral morphine. Brooks I, et al. **J Fam Pract** 1989 Mar; 28(3):275–80

Pain of chronic nature. Prasad P. **J Indian Med Assoc** 1988 Nov;86(11):309–10 (4 ref.)

A comparison of dothiepin versus placebo in the treatment of pain in rheumatoid arthritis and the association of pain with depression. Sarzi Puttini P, et al. **J Int Med Res** 1988 Sep–Oct;16(5):331–7

The use of a hand-held computer to record clinical trial data in general practice: a pilot study. Tattersall AB, et al.

J Int Med Res 1989 Mar–Apr;17(2):185–9
Intraspinal analgesia: a new route for an old drug. Arnold C. J Neurosci Nurs 1989 Feb;21(1):30–7
Therapeutic narcotics in the workplace [letter] J Occup Med 1989 Jul;31(7):583
Pain, the neonate, and the neonatologist. Kaplan M. J Perinatol 1988 Fall;8(4):354–5
Maintenance therapy of cyclical mastalgia using low-dose danazol. Harrison BJ, et al. J R Coll Surg Edinb 1989 Apr; 34(2):79–81
Antidepressant analgesia in rheumatoid arthritis. Frank RG, et al. J Rheumatol 1988 Nov;15(11):1632–8
Stylohyoid syndrome [letter] Jan ^.. JPMA 1989 Jan;39(1):23
A preliminary study of long-term epidural morphine for cancer pain via a subcutaneously implanted reservoir. Liew E, et al. Ma Tsui Hsueh Tsa Chi 1989 Mar;27(1):5–12
The availability of heroin [letter] Med J Aust 1989 Jun 5; 150(11):666–7
The availability of heroin [letter] Leyden M. Med J Aust 1989 Jan 2;150(1):56
Epidural xylocaine and pethidine for control of labor pain—a comparative study. Takrouri MS, et al. Middle East J Anesthesiol 1988 Oct;9(6):545–51
Morphine: immediate release vs. controlled release. Homesley HD. N C Med J 1989 Jul;50(7):390–4
Topical lidocaine for relief of superficial pain in postherpetic neuralgia. Kissin I, et al. Neurology 1989 Aug;39(8):1132–3
A double-blind randomized study of clomipramine versus maprotiline in patients with idiopathic pain syndromes. Eberhard G, et al. Neuropsychobiology 1988;19(1):25–34
B vitamins suppress spinal dorsal horn nociceptive neurons in the cat. Fu QG, et al. Neurosci Lett 1988 Dec 19; 95(1–3):192–7
Comparison of cyproterone acetate and danazol in the treatment of pelvic pain associated with endometriosis. Fedele L, et al. Obstet Gynecol 1989 Jun;73(6):1000–4
Behavioural and electrophysiological evidence for an analgesic effect of a non-steroidal anti-inflammatory agent, sodium diclofenac. Attal N, et al. Pain 1988 Dec; 35(3):341–8
Pain responses to perineuromal injection of normal saline, gallamine, and lidocaine in humans. Chabal C, et al. Pain 1989 Mar;36(3):321–5
Can opiates relieve neuropathic pain? [letter] Fields HL. Pain 1988 Dec;35(3):365–7
A double-blind comparison between epidural morphine and epidural clonidine in patients with chronic non-cancer pain. Glynn C, et al. Pain 1988 Aug;34(2):123–8
Ketanserin in reflex sympathetic dystrophy. A double-blind placebo controlled cross-over trial. Hanna MH, et al. Pain 1989 Aug;38(2):145–50
Morphine and ibuprofen compared using the cold pressor test. Jones SF, et al. Pain 1988 Aug;34(2):117–22
Single doses of the serotonin agonists buspirone and m-chlorophenylpiperazine do not relieve neuropathic pain. Kishore-Kumar R, et al. Pain 1989 May;37(2):223–7
Pain management of pancreatic carcinoma: a review. Lebovits AH, et al. Pain 1989 Jan;36(1):1–11 (52 ref.)
Naproxen sodium in treatment of bone pain due to metastatic cancer. Levick S, et al. Pain 1988 Dec;35(3):253–8
The apparent antinociceptive effect of desipramine and zimelidine in the tail flick test in rats is mainly caused by changes in tail skin temperature. Lund A, et al. Pain 1989 Jul;38(1):65–9
Codeine 20 mg increases pain relief from ibuprofen 400 mg after third molar surgery. A repeat-dosing comparison of ibuprofen and an ibuprofen-codeine combination. McQuay HJ, et al. Pain 1989 Apr;37(1):7–13
Epidural patient-controlled analgesia (PCA): an alternative to continuous epidural infusions. Marlowe S, et al. Pain 1989 Apr;37(1):97–101
Double-blind evaluation of analgesic efficacy of orally administered diclofenac, nefopam, and acetylsalicylic acid (ASA) plus codeine in chronic cancer pain. Minotti V, et al. Pain 1989 Feb;36(2):177–83
Transdermal fentanyl for pain control in patients with cancer. Miser AW, et al. Pain 1989 Apr;37(1):15–21
Blockade of tolerance to morphine analgesia by cocaine. Misra AL, et al. Pain 1989 Jul;38(1):77–84
The development of a self-administered psychophysical scaling method: internal consistency and temporal stability in chronic pain patients. Morley S, et al. Pain 1989 Apr; 37(1):33–9
Epidural steroids, epidural morphine and epidural steroids combined with morphine in the treatment of post-laminectomy syndrome. Rocco AG, et al. Pain 1989 Mar;36(3):297–303
Failure of epidural opioid to control cancer pain in a patient previously treated with massive doses of intravenous opioid. Tanelian DL, et al. Pain 1989 Mar;36(3):359–62
The effect of buprenorphine on the analgesic and respiratory depressant effects of pethidine: a preliminary study. Vedig AE, et al. Pain 1988 Sep;34(3):253–9
Central analgesic effect of ketoprofen in humans: electrophysiological evidence for a supraspinal mechanism in a double-blind and cross-over study. Willer JC, et al. Pain 1989 Jul;38(1):1–7
The undertreatment of pain in children: an overview. Schechter NL. Pediatr Clin North Am 1989 Aug; 36(4):781–94 (46 ref.)
Pharmacologic management of pain in children and adolescents. Shannon M, et al. Pediatr Clin North Am 1989 Aug;36(4):855–71 (92 ref.)
Clinical assessment and pharmacologic treatment of pain in children: cancer as a model for the management of chronic or persistent pain. Zeltzer LK, et al. Pediatrician 1989; 16(1–2):64–70
Comparison of the analgesic efficacy of metamizole and tramadol in experimental pain. Rohdewald P, et al. Pharmacology 1988;37(4):209–17
The pain intensity at analgesic intake, and the efficacy of diflunisal in single doses and effervescent acetaminophen in single and repeated doses. Nyström E, et al. Pharmacotherapy 1988;8(3):201–9
Control of pain in cancer patients. Belgrade MJ. Postgrad Med 1989 Mar;85(4):319–23, 326–9
Idiopathic pelvic pain. The relationship to depression. Hahn MB, et al. Postgrad Med 1989 Mar;85(4):263–6, 268, 270
The pain of cancer. Control in the hospice setting [published erratum appears in Postgrad Med 1988 Nov 15;84(7):26] Wener SW. Postgrad Med 1988 Oct;84(5):79–83, 86, 89–92 (23 ref.)
Pizotifen in deafferentation pain. Ghose K. Postgrad Med J 1989 Feb;65(760):79–82
Local injection therapy for the treatment of chronic pain. Bourne J. Practitioner 1988 Jun 8;232(1450):692–4
Comparison of PD 117302, a kappa agonist, and morphine on colonic transit and formalin-induced pain in rats. Porreca F, et al. Proc West Pharmacol Soc 1989;32:185–7
Pain modulation. Papers from a conference. Beaune, France, July, 1987. Prog Brain Res 1988;77:1–454
Endogenous opioids and pain: status of human studies and new treatment concepts. Frederickson RC, et al. Prog Brain Res 1988;77:407–17 (45 ref.)
Paradoxical effects of low doses of naloxone in experimental models of inflammatory pain. Kayser V, et al. Prog Brain Res 1988;77:301–12
Intracerebroventricular morphinotherapy for control of chronic cancer pain. Lazorthes Y, et al. Prog Brain Res 1988;77:395–405 (56 ref.)
Modulation of resynthesis of 1-alkyl-2-arachidonyl-glycero-3-phosphocholine and phosphatidylinositols for interception in vivo of free arachidonic acid, lyso-PAF, diacyl-glycerols, and phosphoinositides. Bauer JA, et al. Prog Clin Biol Res 1989; 308:455–62
Smoking and narcotics use among chronic pain patients. Barton SB, et al. Psychol Rep 1989 Jun;64(3 Pt 2):1253–4
Clomipramine and mianserin in chronic idiopathic pain syndrome. A placebo controlled study. Loldrup D, et al. Psychopharmacology (Berlin) 1989;99(1):1–7
Clodronate therapy of metastatic bone disease in patients with prostatic carcinoma. Adami S, et al. Recent Results Cancer Res 1989;116:67–72
Optimal pharmacological control of chronic cancer pain. Twycross RG. Recent Results Cancer Res 1988;108:9–17 (12 ref.)
Proceedings of the International Symposium on the Uses of Midazolam and Flumazenil in Intensive Care. Saint-Paul-de Vence, France, October 16, 1986. Resuscitation 1988;16 Suppl:S1–106
Improving peri-operative pain control [editorial] Shipton EA. S Afr Med J 1989 Sep 16;76(6):240–1
Drug treatment of pain syndromes. Portenoy RK. Semin Neurol 1987 Jun;7(2):139–49 (112 ref.)
Pain in terminal cancer: its incidence and treatment in a general hospital. Jayaratnam FJ, et al. Singapore Med J 1988 Dec;29(6):557–64
Epidural opiates for the alleviation of pain. Migály P, et al. Ther Hung 1988;36(3):129–31 (26 ref.)
Analgesics: the physician's partner in effective pain management. Rogers AG. Va Med 1989 Apr;116(4):164–70
[Experience with analgesic therapy with pirprofen in oncology patients] Klener P, et al. Cas Lek Cesk 1988 Aug 19;127(34):1080–2 (Eng. Abstr.) (Cze)
[Levomepromazine (Nozinan) and pain therapy in acute myocardial infarction (letter)] Nielsen FE, et al. Ugeskr Laeger 1989 Aug 7;151(32):2048 (Dan)
[Thoracolumbar or sacral epidural administration of clonidine in deafferentation pain: possibilities, limits and long-term follow-up] Farcot JM, et al. Agressologie 1989 Mar; 30(3):139–42 (Eng. Abstr.) (Fre)
[Efficacy of an extract of Ginkgo biloba in the treatment of chronic obliterating arteriopathies of the lower limbs in stage III of Fontaine's classification] Saudreau F, et al. J Mal Vasc 1989;14(3):177–82 (Eng. Abstr.) (Fre)
[Antalgic effect of calcitonin in bone metastases of cancers (letter)] Pihan I, et al. Presse Med 1989 Jan 28;18(3):127–8 (Fre)
[Use of ketamine in emergency medical care] Röse M. Anaesthesiol Reanim 1988;13(5):287–93 (Eng. Abstr.) (Ger)
[Therapy of cancer pain—a comprehensive therapy concept] Tontschev G. Anaesthesiol Reanim 1989;14(3):155–66 (44 ref.) (Eng. Abstr.) (Ger)
[Therapy of cancer pain—a comprehensive therapy concept] Tontschev G. Arch Geschwulstforsch 1989;59(1):53–63 (37 ref.) (Eng. Abstr.) (Ger)
[Elimination of nalbuphine in human milk] Wischnik A, et al. Arzneimittelforschung 1988 Oct;38(10):1496–8 (Eng. Abstr.) (Ger)
[Pain and the origin of treatment. Continuing education course. 25 November 1988, Bad Nauheim] Fortschr Med 1989;107 Suppl 57:1–14 (Ger)
[Comparison of the action of 2 effective analgesics. Experimental study: tramadol versus tilidine/naloxone] Bromm B, et al. Fortschr Med 1989 Jun 10;107(17):385–9 (Eng. Abstr.) (Ger)
[Preclinical analgesia in internal medicine emergency patients] Sefrin P, et al. Fortschr Med 1988 Nov 10; 106(32):636–41 (21 ref.) (Eng. Abstr.) (Ger)
[Continuous subcutaneous opiate infusion] Drexel H, et al. Gynakol Rundsch 1989;29(1):59–61 (Ger)
[Cancer pain—a solvable problem] Ilias W. Gynakol Rundsch 1988;28(4):234–43 (Ger)
[Treatment of tumor pain] Lahousen M. Gynakol Rundsch 1989;29(1):55–9 (Ger)
[Pain measurement and a multi-stage plan in gynecologic oncology] Mitterschiffthaler G. Gynakol Rundsch 1989; 29(1):50–4 (Ger)
[Medicamentous labor facilitation] Pelzer V, et al. Gynakologe 1989 Apr;22(2):104–7 (26 ref.) (Ger)
[Pethidine analgesia and cerebrovascular circulation in very small premature infants] Jorch G, et al. Klin Padiatr 1989 May–Jun;201(3):195–8 (Eng. Abstr.) (Ger)
[Need for standardized pain therapy in pediatric oncology patients] Richter R, et al. Klin Padiatr 1989 Jul–Aug; 201(4):330–2 (Eng. Abstr.) (Ger)
[Assessment of the effectiveness of analgesics in the pain laboratory] Bromm B. Laryngorhinootologie 1989 Jul; 68(7):411–2 (Eng. Abstr.) (Ger)
[Psychopharmaceutic agents in pain treatment] Kocher R. Schweiz Rundsch Med Prax 1989 Apr 4;78(14):394–8 (Eng. Abstr.) (Ger)
[Open clinical trial of tenoxicam in parenteral form in patients with acute rheumatic pain] Marini U, et al. Boll Chim Farm 1988 Jan;127(1):9S–15S (Eng. Abstr.) (Ita)
[Ketoprofen lysine treatment of painful manifestations of spinal osteoarthrosis] Memeo A, et al. Clin Ter 1988 Jul 31;126(2):119–22 (Eng. Abstr.) (Ita)
[Sodium diclofenac in the treatment of biliary pain: a controlled study using hyoscine N-butylbromide] Rossi PC, et al. Clin Ter 1988 Sep 30;126(6):405–10 (Eng. Abstr.) (Ita)
[Open evaluation of a new anti-inflammatory analgesic drug: etodolac. Report of a clinical trial] Russo Frattasi CA, et al. Clin Ter 1989 May 31;129(4):293–8 (Eng. Abstr.) (Ita)
[Drug treatment of pain] Mocavero G. G Clin Med 1988 Nov;69(11):643–50 (Ita)
[Potentiation concept in pharmacology] Panerai AE. Minerva Anestesiol 1988 Apr;54(4):123–6 (Ita)
[Use of synthetic ACTH in combination with low-dose tricyclic antidepressants in chronic deafferentation pain] Salvi E, et al. Minerva Anestesiol 1988 Jun;54(6):275–8 (Eng. Abstr.) (Ita)
[Cancer pain management] Takeda F. Gan To Kagaku Ryoho 1989 Apr;16(4 Pt 2-1):1031–7 (Eng. Abstr.) (Jpn)
[Pain control in terminal cancer] Tsuneto S, et al. Gan To Kagaku Ryoho 1989 Apr;16(4 Pt 1):759–66 (Eng. Abstr.) (Jpn)
[Remarks on some analgesics used in the pain clinic] Yamamura H. Masui 1989 Feb;38(2):152–6 (15 ref.) (Eng. Abstr.) (Jpn)
[Experimental knee pain model in rats and analgesic effect of sodium hyaluronate (SPH)] Gotoh S, et al. Nippon Yakurigaku Zasshi 1988 Jul;92(1):17–27 (Eng. Abstr.) (Jpn)
[Synthesis and pharmacologic properties of s-triazolo-1,4-diazepine derivatives] Guryn R, et al. Acta Pol Pharm 1988;45(6):512–6 (Eng. Abstr.) (Pol)
[Preliminary pharmacologic evaluation of new derivatives of 2-anilinoimidazoline and aminoimidazoline] Jagiełło-Wójtowicz E, et al. Acta Pol Pharm 1988; 45(4):351–8 (Eng. Abstr.) (Pol)
[Pharmacological studies of new derivatives of 7-amino-imidazo-[1,2-A]-pyrimidine] Jagiełło-Wójtowicz E, et al. Acta Pol Pharm 1988;45(5):450–4 (Eng. Abstr.) (Pol)
[Studies of the effects of new derivatives of 3-oxo-2,3,5,6,7-8-hexahydro-S-triazolo[4,3-A]pyrimidine on the central nervous system] Szadowska A, et al. Acta Pol Pharm 1988;45(3):288–93 (Eng. Abstr.) (Pol)
[Pharmacologic stimulation of acupuncture points for postoperative analgesia] Donchenko VS, et al. Anesteziol Reanimatol 1989 Jan–Feb;(1):25–8 (Eng. Abstr.) (Rus)
[Use of klofelin in managing the pain syndrome in patients with acute myocardial infarct] Zaĭtsev AA, et al. Anesteziol Reanimatol 1988 Nov–Dec;(6):30–3 (Rus)
[The analgesic effect of various fractions of the supernatant of a bone marrow cell culture in pathologic pain] Grafova VN, et al. Biull Eksp Biol Med 1988 Dec;106(12):653–5 (Eng. Abstr.) (Rus)
[Selective analgetic effects of angiotensin and bombesin during the action of dental and cutaneous nociceptive irritants] Raevskaia OS, et al. Biull Eksp Biol Med 1988 Oct;106(10):448–50 (Eng. Abstr.) (Rus)
[Stereometric evaluation of the myocardial cardiomyocyte-capillary ratio in emotional and pain-induced stress after administration of thiamine and nicotinamide] Shneider AB. Kardiologiia 1989 Apr; 29(4):97–9 (Eng. Abstr.) (Rus)
[The use of clofelin in the acute period of myocardial infarct]

Zaĭtsev AA, et al. **Vrach Delo** 1989 May;(5):17–20 (Eng. Abstr.) **(Rus)**

[The specific analgesic action of morphine on rats in an experimental pain syndrome] Kiiatkin EA, et al. **Zh Vyssh Nerv Deiat** 1989 Mar–Apr;39(2):356–61 **(Rus)**

[Analgesics in pediatric practice] Olivares López JL, et al. **An Esp Pediatr** 1988 Sep;29 Suppl 32:199–204 **(Spa)**

[Calcitonin in acute pain due to vertebral fracture in osteoporosis. Cooperative study] Arinoviche R, et al. **Rev Med Chil** 1987 Nov;115(11):1039–43 (Eng. Abstr.) **(Spa)**

[3-step pharmacologic treatment of pain in cancer. Preliminary experience in Chile] Paredes H, et al. **Rev Med Chil** 1988 May;116(5):433–8 (Eng. Abstr.) **(Spa)**

[Differences with respect to treatment of acute or chronic pain] Tammisto T. **Nord Med** 1988;103(10):284–6 (Eng. Abstr.) **(Swe)**

EDUCATION

Paralyzed with pain: the need for education. Loper KA, et al. **Pain** 1989 Jun;37(3):315–6

ENZYMOLOGY

Platelet phenolsulphotransferase activity and 'abdominal migraine'. Gibb C, et al. **Arch Dis Child** 1988 Dec; 63(12):1500–1

EPIDEMIOLOGY

Cancer pain. Epidemiology and syndromes. Portenoy RK. **Cancer** 1989 Jun 1;63(11 Suppl):2298–307 (69 ref.)

Abdominal symptoms and gallstone disease: an epidemiological investigation. Jørgensen T. **Hepatology** 1989 Jun;9(6):856–60

The prevalence of pain in a general population. The results of a postal survey in a county of Sweden. Brattberg G, et al. **Pain** 1989 May;37(2):215–22

An epidemiological follow-up survey of persistent pain sufferers in a group family practice and specialty pain clinic. Crook J, et al. **Pain** 1989 Jan;36(1):49–61

Effect of long-term bisphosphonate treatment on morbidity due to bone metastases in breast cancer patients. Cleton FJ, et al. **Recent Results Cancer Res** 1989;116:73–8

[Epigastric pain and regurgitation: descriptive epidemiology in a representative sample of the adult population of France] Bruley des Varannes S, et al. **Gastroenterol Clin Biol** 1988 Oct;12(10):721–8 (Eng. Abstr.) **(Fre)**

[Questionnaire by post. 40 per cent of the population in the county of Gävleborg suffer from chronic pain] Brattberg G, et al. **Lakartidningen** 1988 Nov 23;85(47):4090, 4092–3 **(Swe)**

ETHNOLOGY

Ethnographic methodologic assessment of pain perceptions by verbal description. Moore RA, et al. **Pain** 1988 Aug; 34(2):195–204

[Analysis of variables of Melzack's semantic questionnaire in patients with osteoarthrosis] Nolli M, et al. **Minerva Anestesiol** 1988 May;54(5):215–22 (Eng. Abstr.) **(Ita)**

ETIOLOGY

Torsion of intra-abdominal lipoma—a rare cause of recurrent or acute abdominal pain. Case report. Aunan E, et al. **Acta Chir Scand** 1988 Sep;154(9):539–40

The Tolosa-Hunt syndrome: a problem in differential diagnosis. Hunt WE, et al. **Acta Neurochir Suppl (Wien)** 1988;42:248–52 (25 ref.)

Advancement of the tibial tuberosity for patellar pain. A 5-year follow-up. Engebretsen L, et al. **Acta Orthop Scand** 1989 Feb;60(1):20–2

The Copper-Fix (Cu-Fix): a new concept in IUD technology. Wildemeersch D, et al. **Adv Contracept** 1988 Sep;4(3):197–205

The anatomic basis of vertebrogenic pain and the autonomic syndrome associated with lumbar disk extrusion. Jinkins JR, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1277–89

Intermittent, dose-related fluctuations of pain and ST elevation during infusion of recombinant tissue plasminogen activator during acute myocardial infarction. Barbash GI, et al. **Am J Cardiol** 1989 Jul 15;64(3):225–8

Pacemaker electrode perforation of the myocardium: an unusual etiology for recurrent abdominal pain. Green SM. **Am J Emerg Med** 1989 Mar;7(2):180–4

Postural guarding and hypertension as initial manifestations of Guillain-Barré syndrome. Singer JI, et al. **Am J Emerg Med** 1989 Mar;7(2):177–9

Abdominal pain in hereditary angioedema: the role of acid hypersecretion. Collen MJ, et al. **Am J Gastroenterol** 1989 Aug;84(8):873–7

The significance of elevated ampullary sphincter pressure [editorial] Steinberg WM. **Am J Gastroenterol** 1989 Jul; 84(7):712

Isolated infraspinatus atrophy. A common cause of posterior shoulder pain and weakness in throwing athletes? Bryan WJ, et al. **Am J Sports Med** 1989 Jan–Feb;17(1):130–1

Extensor digitorum brevis manus. An unusual cause of exercise-induced wrist pain. Kuschner SH, et al. **Am J Sports Med** 1989 May–Jun;17(3):440–1

The hamstring syndrome. A new diagnosis of gluteal sciatic pain. Puranen J, et al. **Am J Sports Med** 1988 Sep–Oct; 16(5):517–21

Semimembranosus tendinitis: an overlooked cause of medial knee pain. Ray JM, et al. **Am J Sports Med** 1988 Jul–Aug; 16(4):347–51

An unusual cause of metatarsal pain in a young kendo player. Sakamoto K, et al. **Am J Sports Med** 1989 Mar–Apr; 17(2):296–7

Anaesthesia and the law. Awareness and pain during anaesthesia. Brahams D. **Anaesthesia** 1989 Apr;44(4):352

Tourniquet pain during bupivacaine and tetracaine spinal anesthesia [letter] Gibbons JJ. **Anesth Analg** 1989 Sep; 69(3):410–1

Severe lightning pain after spinal anesthesia in a patient with tabes dorsalis [letter] Sugiyama D, et al. **Anesth Analg** 1989 Aug;69(2):268–9

A 14-year-old boy with persistent abdominal pain [clinical conference] Levine M, et al. **Ann Emerg Med** 1988 Oct; 17(10):1063–8

Retro-peritoneal haemorrhage presenting as hip pain. Wan A. **Arch Emerg Med** 1988 Dec;5(4):246–7

Abdominal pain as a presenting symptom of the Guillain-Barré syndrome. Wong PS, et al. **Arch Emerg Med** 1988 Dec;5(4):242–5

Less painful alcohol block [letter] Way DM. **Arch Ophthalmol** 1989 May;107(5):636

Groin and hip pain due to fractures at or near the pubic symphysis. Nicholas JJ, et al. **Arch Phys Med Rehabil** 1989 Sep;70(9):696–8

Pain on coughing and numbness in sciatica: what exactly do these symptoms mean? [letter] Walk L. **Arch Surg** 1989 Jun;124(6):751

Predicting individual differences in pain and functional impairment among patients with rheumatoid arthritis. Hagglund KJ, et al. **Arthritis Rheum** 1989 Jul;32(7):851–8

Lower abdominal pain [letter] Beavis DS. **Aust Fam Physician** 1989 Aug;18(8):1022

The roles of work and of working in disorders of the upper extremity. Hadler NM. **Baillieres Clin Rheumatol** 1989 Apr; 3(1):121–41 (62 ref.)

The incidence of painful crisis in homozygous sickle cell disease: correlation with red cell deformability. Lande WM, et al. **Blood** 1988 Dec;72(6):2056–9

Anteroposterior radiography in cervical pain of non-traumatic origin [letter] Lloyd M, et al. **BMJ** 1989 Jul 8;299(6691):123–4

Incidence and intensity of postpartum lower abdominal pain. Murray A, et al. **BMJ** 1989 Jun 17;298(6688):1619

Value of anteroposterior radiography in cervical pain of non-traumatic origin. Page JE, et al. **BMJ** 1989 May 13; 298(6683):1293–4

Acute glaucoma presenting with abdominal symptoms. Watson NJ, et al. **BMJ** 1989 Jul 22;299(6693):254

Chemoradiotherapy toxicity during bone marrow transplantation: time course and variation in pain and nausea. Chapko MK, et al. **Bone Marrow Transplant** 1989 Mar;4(2):181–6

Nocturnal pain and duodenal ulcer. Sharma MP, et al. **Br J Clin Pract** 1988 May;42(5):198–9

Linear IgA dermatosis with severe arthralgia. Leigh G, et al. **Br J Dermatol** 1988 Dec;119(6):789–92

Painful red hands: a side-effect of leukaemia therapy. Shall L, et al. **Br J Dermatol** 1988 Aug;119(2):249–53

Treatable causes of a painful heel [letter] White AG. **Br J Hosp Med** 1988 Jul;40(1):82

Infection with Chlamydia trachomatis and Neisseria gonorrhoeae in women with lower abdominal pain admitted to a gynaecology unit. Scott GR, et al. **Br J Obstet Gynaecol** 1989 Apr;96(4):473–7

A review of the diagnoses of hip pain presentation in the adolescent. Hughes RA, et al. **Br J Rheumatol** 1988 Dec; 27(6):450–3

Diagnosis and management of abdominal pain [letter] Gunn AA. **Br J Surg** 1989 Apr;76(4):422

Rectus nerve entrapment causing abdominal pain. Hall PN, et al. **Br J Surg** 1988 Sep;75(9):917

Cholecystokinin (CCK) provocation test: long-term follow-up after cholecystectomy. Rhodes M, et al. **Br J Surg** 1988 Oct;75(10):951–3

Pelviureteric junction obstruction and recurrent abdominal pain in childhood. Ward HC, et al. **Br J Surg** 1989 Aug; 76(8):818–9

Common pain syndromes and their management. Charlton JE. **Can J Anaesth** 1989 May;36(3 Pt 2):S9–12 (33 ref.)

Acute scrotal pain in children: prospective study of diagnosis and management [published erratum appears in Can J Surg 1989 May;32(3):158] Anderson PA, et al. **Can J Surg** 1989 Jan;32(1):29–32

Hepatic artery aneurysm presenting as abdominal pain and hemoperitoneum. Searles GE, et al. **Can J Surg** 1989 Jul; 32(4):292–4

Persistent skin pain after PUVA. Norris PG, et al. **Clin Exp Dermatol** 1987 Nov;12(6):403–5

'Salt and pepper on the face' pain followed by cardiac and respiratory arrests. The stormy postoperative manifestations after the surgery of posterior fossa arteriovenous malformation. Ito M, et al. **Clin Neurol Neurosurg** 1989;91(2):145–51

Use and abuse of drug pumps in cancer pain. Penn RD. **Clin Neurosurg** 1989;35:409–21

Knee pain in middle age and its relationship to occupational work load and psychosocial factors. Bergenudd H, et al. **Clin Orthop** 1989 Aug;(245):210–5

The patellar clunk syndrome. A complication of posterior stabilized total knee arthroplasty. Hozack WJ, et al. **Clin Orthop** 1989 Apr;(241):203–8

Radiologic diagnosis of pain in the athlete. **Clin Sports Med** 1987 Oct;6(4):699–948

Pitfalls to avoid in diagnosing pain in the athlete. Baker BE, et al. **Clin Sports Med** 1987 Oct;6(4):921–34

Radiologic diagnosis of pain in the athlete. Becker E, et al. **Clin Sports Med** 1987 Oct;6(4):699–711

Lumbar and thoracic spine pain in the athlete: radiographic evaluation. Cacayorin ED, et al. **Clin Sports Med** 1987 Oct; 6(4):767–83 (30 ref.)

Evaluation of the peripatellar soft tissues and retinaculum in patients with patellofemoral pain. Fulkerson JP. **Clin Sports Med** 1989 Apr;8(2):197–202

Pain in the athlete's knee. Kaye JJ, et al. **Clin Sports Med** 1987 Oct;6(4):873–83 (16 ref.)

Abdominal pain in athletes. Kenney P. **Clin Sports Med** 1987 Oct;6(4):885–904 (41 ref.)

The role of nuclear medicine bone scans in evaluating pain in athletic injuries. Martire JR. **Clin Sports Med** 1987 Oct; 6(4):713–37 (89 ref.)

The radiographic evaluation of shoulder and elbow pain in the athlete. Newberg AH. **Clin Sports Med** 1987 Oct; 6(4):785–809 (58 ref.)

Roentgen examination of groin and hip pain in the athlete. Pavlov H. **Clin Sports Med** 1987 Oct;6(4):829–43 (32 ref.)

Traumatic ulcers and pain in adults during orthodontic treatment. Kvam E, et al. **Community Dent Oral Epidemiol** 1989 Jun;17(3):154–7

Chronic alcoholism and evolution of pain and prognosis in chronic pancreatitis. Hayakawa T, et al. **Dig Dis Sci** 1989 Jan;34(1):33–8

Abdominal pain in children: an emergency practitioner's guide. Buchert GS. **Emerg Med Clin North Am** 1989 Aug; 7(3):497–517 (97 ref.)

Evaluation of abdominal pain. Hickey MS, et al. **Emerg Med Clin North Am** 1989 Aug;7(3):437–52 (40 ref.)

Nonsurgical and extraperitoneal causes of abdominal pain. Purcell TB. **Emerg Med Clin North Am** 1989 Aug; 7(3):721–40 (90 ref.)

Lateralized lumbar pain during sexual intercourse. Early clinical sign of single ectopic ureter? Cisternino A, et al. **Eur Urol** 1988;14(6):490–2

Serum CA-125 in women with endometriosis and chronic pelvic pain. Pittaway DE, et al. **Fertil Steril** 1989 Jan; 51(1):68–70

Heel pain and body weight. Hill JJ Jr, et al. **Foot Ankle** 1989 Apr;9(5):254–6

Transient myocardial ischemia and cardiac pain. Importance of duration of ischemia, heart rate behaviour and circadian distribution. Baroni M, et al. **Funct Neurol** 1989 Jan–Mar; 4(1):27–30

Increased sympathetic tone in the left arm of patients affected by symptomatic myocardial ischemia. Casale R, et al. **Funct Neurol** 1989 Apr–Jun;4(2):161–3

Relationships between cardiac pain and objective markers of transient myocardial ischemia. Emdin M, et al. **Funct Neurol** 1989 Jan–Mar;4(1):21–5 (23 ref.)

Neuroelectric procedure does not discriminate between painful and paresthetic diabetic neuropathy. Piaggesi A, et al. **Funct Neurol** 1989 Apr–Jun;4(2):141–6

Clinical features of algodystrophy: is the sympathetic nervous system involved? Schott G. **Funct Neurol** 1989 Apr–Jun; 4(2):131–4 (19 ref.)

Algodystrophy and related psychological features. Zucchini M, et al. **Funct Neurol** 1989 Apr–Jun;4(2):153–6

Blocked and nonblocked acid secretion and reported pain in ulcer, nonulcer dyspepsia, and normal subjects. Bates S, et al. **Gastroenterology** 1989 Aug;97(2):376–83

Acid induced duodenal ulcer pain: the influence of symptom status and the effect of an antispasmodic. Kang JY, et al. **Gut** 1989 Feb;30(2):166–70

Endoscopic and gastric acid studies in homozygous sickle cell disease and upper abdominal pain. Lee MG, et al. **Gut** 1989 May;30(5):569–72

Pituitary adenoma presenting as painful intermittent third nerve palsy. Cano M, et al. **Headache** 1989 Jul;29(7):451–2

Leucocytosis and severe pain due to ureteral calculi. Toyoda Y, et al. **Hinyokika Kiyo** 1988 Aug;34(8):1357–61

Pain in the elderly. Nation EM, et al. **Hosp Pract [Off]** 1989 Jul 15;24(7):113, 117–8

Referred shoulder pain in a sexually active woman. Smally AJ. **Hosp Pract [Off]** 1989 Jul 15;24(7):62, 64

Femoral pain of solitary neurofibromatous origin. Sharma SC, et al. **Indian Pediatr** 1988 Dec;25(12):1221–3

Cancer pain syndromes. Evans WO. **Indiana Med** 1989 Mar; 82(3):192–5

Coccygodynia in women. Peyton FW. **Indiana Med** 1988 Aug;81(8):697–8

Radiology clinic. Generalized osteosclerosis in an 83-year-old man with hip pain. Porter D, et al. **Indiana Med** 1988 Nov;81(11):953–4

The painful mouth. Mucositis, gingivitis, and stomatitis. Epstein JB. **Infect Dis Clin North Am** 1988 Mar; 2(1):183–202 (88 ref.)

Trigeminal pain due to whiplash injury. McGlone R, et al. **Injury** 1988 Sep;19(5):366

Clinical experiences with the Spring Coil intrauterine device: a ten-year follow-up study. Batár I.

Int J Gynaecol Obstet 1988 Aug;27(1):123–31
The case of the painful buttock [clinical conference] Gotchall JI, et al. **Iowa Med** 1989 Jun;79(6):283–9
Nerve fibres in osteoid osteoma. Greco F, et al. **Ital J Orthop Traumatol** 1988 Mar;14(1):91–4
Chronic abdominal pain and homesickness in an adolescent male. Cohall AT, et al. **J Adolesc Health Care** 1989 Jul; 10(4):338–9
Abdominal and flank pain as presenting symptoms of schwannoma. Neinstein LS. **J Adolesc Health Care** 1989 Mar;10(2):143–5
Ultrasound examination of adolescent females with lower abdominal pain. Risser WL, et al. **J Adolesc Health Care** 1988 Sep;9(5):407–10
A pseudo-syndrome [letter] Sussman HI. **J Am Dent Assoc** 1989 Aug;119(2):236
Recalcitrant heel pain. Traumatic fibrosis versus heel neuroma. Beito SB, et al. **J Am Podiatr Med Assoc** 1989 Jul;79(7):336–9
Bilateral ankle pain secondary to sarcoidosis. Julsrud M. **J Am Podiatr Med Assoc** 1989 Mar;79(3):116–20
Piriformis syndrome. Julsrud ME. **J Am Podiatr Med Assoc** 1989 Mar;79(3):128–31
A rational approach to the management of heel pain. A protocol proposal. Meltzer EF. **J Am Podiatr Med Assoc** 1989 Feb;79(2):89–92
Late neurological complications of Harrington-rod instrumentation. Hales DD, et al. **J Bone Joint Surg [Am]** 1989 Aug;71(7):1053–7
Pain after total knee arthroplasty caused by soft tissue impingement. Hirsh DM, et al. **J Bone Joint Surg [Br]** 1989 Aug;71(4):591–2
Donor site pain from the ilium. A complication of lumbar spine fusion. Summers BN, et al. **J Bone Joint Surg [Br]** 1989 Aug;71(4):677–80
The painful shoulder: MR imaging of the glenohumeral joint. Zlatkin MB, et al. **J Comput Assist Tomogr** 1988 Nov–Dec; 12(6):995–1001
Heterotopic pregnancy. Boutiette LA, et al. **J Emerg Med** 1989 Jan–Feb;7(1):33–5
Nonacute scrotal pain in adolescents. Zvieli S, et al. **J Fam Pract** 1989 Feb;28(2):226–7, 230
Role of radionuclide imaging in the evaluation of wrist pain. Pin PG, et al. **J Hand Surg [Am]** 1988 Nov;13(6):810–4
Clinical and technologic evaluation of ulnar wrist pain [editorial] Taleisnik J. **J Hand Surg [Am]** 1988 Nov; 13(6):801–2
Palmar wrist pain caused by ulnar nerve entrapment in the flexor carpi ulnaris tendon. Zook EG, et al. **J Hand Surg [Am]** 1988 Sep;13(5):732–5
Bone infarction as a cause of painful fingers in a child. Foy MA, et al. **J Hand Surg [Br]** 1988 Nov;13(4):477–8
Upper limb pain [letter] Fry HJ. **J Hand Surg [Br]** 1988 Nov; 13(4):483
Carbon dioxide laser laparoscopy in treatment of infertility and disorders associated with pelvic pain. Weather L Jr. **J Natl Med Assoc** 1988 Feb;80(2):185–7
Frozen shoulder and other shoulder disturbancies in Parkinson's disease [letter] Cleeves L, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):813–4
Limb pain in migraine and cluster headache. Guiloff RJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug;51(8):1022–31
Radical neck dissection: a subjective and objective evaluation of postoperative disability. Hillel AD, et al. **J Otolaryngol** 1989 Feb;18(1):53–61
Abnormal gastroduodenal motility in children and adolescents with recurrent functional abdominal pain. Piñeiro-Carrero VM, et al. **J Pediatr** 1988 Nov; 113(5):820–5
Proctalgia fugax in teenagers. Weizman Z, et al. **J Pediatr** 1989 May;114(5):813–4
Klippel–Feil syndrome with neck pain. Herring JA, et al. **J Pediatr Orthop** 1989 May–Jun;9(3):343–6
Intraspinal tumors in children presenting primarily with hip symptoms: a report of three cases. Kumar SJ, et al. **J Pediatr Orthop** 1988 Sep–Oct;8(5):529–31
Leg pain: an uncommon presentation of perforated diverticular disease. Haiart DC, et al. **J R Coll Surg Edinb** 1989 Feb;34(1):17–20
Back and neck problems in a teaching institution. Chan KK, et al. **J R Soc Health** 1988 Oct;108(5):182–4, 187
The "repetitive strain injury syndrome" is referred pain from the neck [letter] Miller MH, et al. **J Rheumatol** 1989 Jul; 16(7):1007
Chronic upper limb pain syndrome (repetitive strain injury) in the Australian workforce: a systematic cross sectional rheumatological study of 229 patients. Miller MH, et al. **J Rheumatol** 1988 Nov;15(11):1705–12
The "repetitive strain injury syndrome" is referred pain from the neck. Smythe H. **J Rheumatol** 1988 Nov;15(11):1604–8
Chronic fatigue and abdominal pain. Schreiner RD, et al. **J Tenn Med Assoc** 1989 Feb;82(2):86–7
Rectal pain [letter] Day FJ, et al. **JAMA** 1988 Dec 9; 260(22):3276–7
A case with attacks of right arm pain after disappearance of absence seizures. Miyake S, et al. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):599–600
Pain and cervical laser therapy. **Lancet** 1989 Mar 4; 1(8636):494–5
Sore nipples: the new mother's nemesis. Walker M, et al. MCN 1989 Jul–Aug;14(4):260–5
A significant illness that was produced by the white-tailed spider, Lampona cylindrata [letter; comment] Gray M. **Med J Aust** 1989 Jul 17;151(2):114–6. **Comment on:** Med J Aust 1989 Apr 3;150(7):401–3
A strategy for analysing multiple risk factors with application to cervical pain syndrome. Commenges D, et al. **Methods Inf Med** 1989 Jan;28(1):14–9
Wandering nerve graft technique for management of the recalcitrant painful neuroma in the hand: a case report. Mackinnon SE. **Microsurgery** 1988;9(2):95–102
Torsion of an isolated intra-abdominal fat appendage: rare cause of abdominal pain. Perry RR, et al. **Milit Med** 1988 Nov;153(11):572–3
Lower limb pain and disability following strenuous activity. Volpin G, et al. **Milit Med** 1989 Jun;154(6):294–7
Evaluation of chronic pelvic pain. Gaul JN. **Minn Med** 1988 Sep;71(9):546–8 (31 ref.)
Nose pain and syncope in a patient with coronary artery disease. Soffer AD, et al. **Mo Med** 1987 Mar;84(3):141–2
Pain in Parkinson's disease. Goetz CG, et al. **Mov Disord** 1986;1(1):45–9
Case 1, 1988. Head tilt in a young girl associated with neck pain and limitation of neck movement. Shale H, et al. **Mov Disord** 1988;3(4):347–51
Objective laboratory parameters in the diagnosis of sickle cell pain crisis. Buchanan WP, et al. **N C Med J** 1988 Nov; 49(11):583–4
Left arm pain isn't always angina [published erratum appears in N C Med J 1988 Dec;49(12):636] Campbell PT, et al. **N C Med J** 1988 Nov;49(11):564–7
Myalgic encephalomyelitis [letter] **N Z Med J** 1988 Oct 26; 101(856 Pt 1):672
The ME syndrome [letter] Holborow PL. **N Z Med J** 1988 Dec 14;101(859):835
Myalgic encephalomyelitis [letter] Snow P. **N Z Med J** 1989 Aug 23;102(874):449
Neurologic pain syndromes in patients with cancer. Elliott K, et al. **Neurol Clin** 1989 May;7(2):333–60 (94 ref.)
Pain in multiple sclerosis. Moulin DE. **Neurol Clin** 1989 May; 7(2):321–31
Painful polyneuropathy. Portenoy RK. **Neurol Clin** 1989 May;7(2):265–88 (99 ref.)
Myalgia. Roy EP 3d, et al. **Neurol Clin** 1988 Aug;6(3):621–36 (99 ref.)
Postherpetic neuralgia. Watson CP. **Neurol Clin** 1989 May; 7(2):231–48 (66 ref.)
Gustatory pain: a complication of carotid endarterectomy. Truax BT. **Neurology** 1989 Sep;39(9):1258–60
Acute neck pain due to tendonitis of the longus colli: CT and MRI findings. Artenian DJ, et al. **Neuroradiology** 1989; 31(2):166–9 (10 ref.)
Ocular pain could be caused by occipital neuritis [letter] Bode D. **Ophthalmic Surg** 1988 Sep;19(9):679
The posterior calcaneal tubercle impingement syndrome. Kleiger B. **Orthop Rev** 1988 May;17(5):487–93
Magnetically evoked facial nerve potential. Windmill IM, et al. **Otolaryngol Head Neck Surg** 1989 Apr;100(4):345–7
Pain of first-trimester abortion: a study of psychosocial and medical predictors. Bélanger E, et al. **Pain** 1989 Mar; 36(3):339–50
Central dysesthesia syndrome in spinal cord injury patients. Berić A, et al. **Pain** 1988 Aug;34(2):109–16
Reliability and validity of the evaluation of pain in patients with total knee replacement. Boeckstyns ME, et al. **Pain** 1989 Jul;38(1):29–33
Central post-stroke pain—a study of the mechanisms through analyses of the sensory abnormalities. Boivie J, et al. **Pain** 1989 May;37(2):173–85
The dimensions of pain: a multidimensional scaling comparison of cancer patients and healthy volunteers. Clark WC, et al. **Pain** 1989 Apr;37(1):23–32
Comparing chronic pain from spinal cord injury to chronic pain of other origins. Cohen MJ, et al. **Pain** 1988 Oct; 35(1):57–63
Pericranial muscle tenderness and pressure-pain threshold in the temporal region during common migraine. Jensen K, et al. **Pain** 1988 Oct;35(1):65–70
Immediate and long-term phantom breast syndrome after mastectomy: incidence, clinical characteristics and relationship to pre-mastectomy breast pain. Krøner K, et al. **Pain** 1989 Mar;36(3):327–34
Central post-stroke pain—a controlled trial of amitriptyline and carbamazepine. Leijon G, et al. **Pain** 1989 Jan; 36(1):27–36
Central post-stroke pain—neurological symptoms and pain characteristics. Leijon G, et al. **Pain** 1989 Jan;36(1):13–25
Facial expressions of pain and emotions in chronic TMD patients. LeResche L, et al. **Pain** 1988 Oct;35(1):71–8
Pain descriptions and surgical findings in patients with herniated lumbar intervertebral discs. Ljunggren AE, et al. **Pain** 1988 Oct;35(1):39–46
A novel approach to the diagnosis and assessment of symptomatic diabetic neuropathy. Masson EA, et al. **Pain** 1989 Jul;38(1):25–8
The use of next-of-kin to estimate pain in cancer patients. O'Brien J, et al. **Pain** 1988 Nov;35(2):171–8
Combined neurogenic and nociceptive pain in a patient with Pancoast tumor managed by epidural hydromorphone and oral carbamazepine. Tanelian DL, et al. **Pain** 1989 Jan; 36(1):85–8
Pain from renal/ureteral calculosis: evaluation of sensory thresholds in the lumbar area. Vecchiet L, et al. **Pain** 1989 Mar;36(3):289–95
Post-herpetic neuralgia: post-mortem analysis of a case. Watson CP, et al. **Pain** 1988 Aug;34(2):129–38
The post-mastectomy pain syndrome and the effect of topical capsaicin. Watson CP, et al. **Pain** 1989 Aug;38(2):177–86
Report of Higa et al. [letter] Yanagida H, et al. **Pain** 1988 Sep;34(3):315–7
Acute and chronic pelvic pain. Goldstein DP. **Pediatr Clin North Am** 1989 Jun;36(3):573–80
Pain associated with juvenile rheumatoid arthritis. Lovell DJ, et al. **Pediatr Clin North Am** 1989 Aug;36(4):1015–27 (65 ref.)
Spinal and radicular pain in pseudotumor cerebri. Murray RS, et al. **Pediatr Neurol** 1986 Mar–Apr;2(2):106–7
Ultrasonography of the painful hip. Prospective studies in 204 patients. Dörr U, et al. **Pediatr Radiol** 1988;19(1):36–40
Recurrent abdominal pain: the cost of the aches and the aches of the cost. Coleman WL, et al. **Pediatr Rev** 1986 Nov; 8(5):143–51 (18 ref.)
Pediatric pain: diagnosis, assessment and management. **Pediatrician** 1989;16(1–2):1–124
Pain assessment and management in infants. Johnston CC. **Pediatrician** 1989;16(1–2):16–23 (87 ref.)
The enigma of pain in children: an overview. McGrath PA, et al. **Pediatrician** 1989;16(1–2):6–15 (57 ref.)
Recurrent abdominal pain: theories and pragmatics. Rappaport L. **Pediatrician** 1989;16(1–2):78–84 (33 ref.)
Assessing children's and adolescents' pain. Savedra MC, et al. **Pediatrician** 1989;16(1–2):24–9 (37 ref.)
Assessment and management of recurrent pain in adolescence. Smith MS, et al. **Pediatrician** 1989; 16(1–2):85–93 (48 ref.)
Dietl syndrome: intermittent ureteropelvic junction obstruction as a cause of episodic abdominal pain. Flotte TR. **Pediatrics** 1988 Nov;82(5):792–4
Joint pain. It isn't always arthritis. Baum J. **Postgrad Med** 1989 Jan;85(1):311–3, 316, 321
Abdominal pain. Chlamydia as culprit. Baumgardner DJ. **Postgrad Med** 1989 Jun;85(8):281–8
Joint pain in children. When is it serious? Nelson AM. **Postgrad Med** 1989 Apr;85(5):141–2, 147–9
An unusual cause of hip pain in a child. Phillips D, et al. **Postgrad Med** 1988 Nov 15;84(7):56–8
Intermittent omental torsion—an unusual cause of recurrent abdominal pain? Parr NJ, et al. **Postgrad Med J** 1989 Feb; 65(760):114–5
Myalgias and muscle contractures as the presenting signs of Addison's disease. Shapiro MS, et al. **Postgrad Med J** 1988 Mar;64(749):222–3
Neck pain: considerations for the GP. Million R. **Practitioner** 1988 Nov 8;232(1458):1208–11 (1 ref.)
Evaluation of knee pain. McCune WJ, et al. **Prim Care** 1988 Dec;15(4):795–808 (49 ref.)
The painful shoulder. Rogers LF, et al. **Radiol Clin North Am** 1988 Nov;26(6):1359–71 (25 ref.)
Hysterosalpingography with a balloon catheter versus a cannula: evaluation of patient pain. Varpula M. **Radiology** 1989 Sep;172(3):745–7
Differential diagnosis of pain in cancer patients. Adler RH, et al. **Recent Results Cancer Res** 1988;108:1–8 (11 ref.)
Chronic hip pain and limp in a 3-year-old girl [clinical conference] Salzman AL, et al. **Rev Infect Dis** 1989 Mar–Apr;11(2):341–8
Acute intermittent porphyria—an underdiagnosed cause of abdominal pain [editorial] Hift RJ, et al. **S Afr Med J** 1989 Jul 15;76(2):44–5
Degree of pain and grade of subluxation in the painful hemiplegic shoulder. Van Langenberghe HV, et al. **Scand J Rehabil Med** 1988;20(4):161–6
Neck and shoulder pain and disability. Evaluation by repetitive gripping test. Viikari-Juntura E, et al. **Scand J Rehabil Med** 1988;20(4):167–73
Computer assisted diagnosis of acute scrotal pain. Höeg OM, et al. **Scand J Urol Nephrol Suppl** 1988;110:313–7
Pain in osteoarthritis. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):1–104
Pain in osteoarthritis. Introduction and overview. Altman RD, et al. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):1–3
Pain, synovitis, and articular cartilage changes in osteoarthritis. Brandt KD. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):77–80 (16 ref.)
Factors associated with pain and osteoarthritis in the Tecumseh Community Health Study. Carman WJ. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):10–3
Future directions in therapy of pain in osteoarthritis. Ehrlich GE. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):100–4 (22 ref.)
Epidemiologic associations of pain in osteoarthritis of the knee: data from the National Health and Nutrition Examination Survey and the National Health and Nutrition Examination-I Epidemiologic Follow-up Survey. Hochberg MC, et al. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):4–9
Arthroscopic and synovial correlates of pain in osteoarthritis. Lindblad S. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):91–3
Soft tissue mechanisms of pain in osteoarthritis. Merritt JL. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):51–6 (43 ref.)
Sleep influences on regional and diffuse pain syndromes associated with osteoarthritis. Moldofsky H. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):18–21 (33

ref.)
Osteoarthritis and pain. Schaible HG, et al. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):30–4 (7 ref.)
The role of inflammation and crystals in the pain of osteoarthritis. Schumacher R Jr. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):81–5 (39 ref.)
Pain mechanisms and mediators in osteoarthritis. Zimmermann M. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):22–9 (34 ref.)
Eaton–Lambert syndrome in a patient with acute T cell lymphocytic leukemia. Morrow JD, et al. **South Med J** 1988 Dec;81(12):1578–9 (11 ref.)
Abdominal pain and sicklemia in a patient with sickle cell trait. Prichard JG, et al. **South Med J** 1988 Oct; 81(10):1312–4
The cervical zygapophysial joints as a source of neck pain. Bogduk N, et al. **Spine** 1988 Jun;13(6):610–7
Pain response post–chemonucleolysis or disc excision. Brown MD, et al. **Spine** 1989 Mar;14(3):321–6
The pain of discography. Weinstein J, et al. **Spine** 1988 Dec; 13(12):1344–8
Longstanding groin pain in athletes. A multidisciplinary approach. Ekberg O, et al. **Sports Med** 1988 Jul;6(1):56–61
Chronic exercise–induced pain in the anterior aspect of the lower leg. An overview of diagnosis. Styf J. **Sports Med** 1989 May;7(5):331–9 (62 ref.)
Arboviral causes of non–specific fever and myalgia in a fever hospital patient population in Cairo, Egypt. Darwish MA, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):1001–3
Abnormal renal mobility—an indication for surgical intervention. Glikman L, et al. **Urol Int** 1989;44(3):166–8
Neurofibromatosis presenting as perineal pain and urethral burning. Batta AG, et al. **Urology** 1989 Feb;33(2):138–40
Periumbilical pain secondary to persistent urachal band. Knoll LD, et al. **Urology** 1988 Dec;32(6):526–8
A young woman with vague lower abdominal pain. Benign cystic teratoma (dermoid cyst). Dirlan ME, et al. **West J Med** 1989 Mar;150(3):349–50
[Treatment of mastodynia using Monogest] Vachoušek J, et al. **Cesk Gynekol** 1989 Mar;54(2):110–2 **(Cze)**
[Abdominal pain precipitated by thoracic segment syndrome] Mikkelsen S, et al. **Ugeskr Laeger** 1989 Apr 24; 151(17):1036–8 (Eng. Abstr.) **(Dan)**
[Glossopharyngeal nerve neuralgia: not just a sore throat] Brekelmans GJ, et al. **Ned Tijdschr Geneeskd** 1989 Apr 8;133(14):720–3 (Eng. Abstr.) **(Dut)**
[Intradermal epidermoid cysts as a cause of refractory back pain in children] Heiskanen I, et al. **Duodecim** 1988; 104(21):1694–8 **(Fin)**
[Gastric pain and respiratory sounds in sarcoidosis patients] Järvinen M, et al. **Duodecim** 1988;104(19):1546–9 **(Fin)**
[The uretheral syndrome in men or prostatodynia] Bitker MO, et al. **Ann Urol (Paris)** 1988;22(5):373–5 (Eng. Abstr.) **(Fre)**
[Limb pain due to congenital trapping of the popliteal artery] Buche M, et al. **Phlebologie** 1988 Jul–Oct;41(3):642–8 (Eng. Abstr.) **(Fre)**
[Painful fatigue of the legs due to retroperitoneal fibrosis] Roelens P. **Phlebologie** 1988 Jul–Oct;41(3):684 **(Fre)**
[Internal tibial pain in runners] Sepulchre P, et al. **Phlebologie** 1988 Jul–Oct;41(3):664–72 (Eng. Abstr.) **(Fre)**
[Venous pain] Thiery L. **Phlebologie** 1988 Jul–Oct; 41(3):673–8 (Eng. Abstr.) **(Fre)**
[Differential diagnosis of vascular and radicular leg pains with special consideration given to the frequency of the coincidence of these 2 causes] Van der Molen HR, et al. **Phlebologie** 1989 Jan–Mar;42(1):139–41 **(Fre)**
[Pain in arterial pathology] van der Stricht J. **Phlebologie** 1988 Jul–Oct;41(3):659–63 (Eng. Abstr.) **(Fre)**
[Expression of pain in rheumatic disease. Exploratory study] Carter H, et al. **Rev Rhum Mal Osteoartic** 1988 Oct; 55(10):727–34 (Eng. Abstr.) **(Fre)**
[Costo–vertebral arthrosis disclosed by pseudo–visceral pains] Roux C, et al. **Rev Rhum Mal Osteoartic** 1989 Feb; 56(2):191–5 **(Fre)**
[Whipple's disease: abdominal lymphoma, intermittent fever and recurrent arthralgias] Kraus I, et al. **Dtsch Med Wochenschr** 1989 Aug 4;114(31–32):1207–9 (Eng. Abstr.) **(Ger)**
[The femoropatellar pain syndrome. Clinical and radiologic diagnosis] Haller W, et al. **Fortschr Med** 1988 Aug 30; 106(25):507–10 (15 ref.) (Eng. Abstr.) **(Ger)**
[Indications and results of diagnostic laparoscopy in the assessment of lower abdominal pain] Decker K. **Geburtshilfe Frauenheilkd** 1988 Dec;48(12):884–6 (Eng. Abstr.) **(Ger)**
[Breast pain: differential diagnosis and therapy] Brun del Re R. **Helv Chir Acta** 1989 Apr;55(6):921–32 (40 ref.) (Eng. Abstr.) **(Ger)**
[A 61–year–old patient with a 15–month history of progressive diffuse abdominal pains] Beuers U, et al. **Internist (Berlin)** 1988 Sep;29(9):648–50 **(Ger)**
[Bone pain of arterial origin] Ludwig M, et al. **Internist (Berlin)** 1988 Sep;29(9):W45–56 **(Ger)**
[The significance of testicular scintigraphy for the differential diagnosis of the acute scrotum] Bockisch A, et al. **Nuklearmedizin** 1989 Jun;28(3):84–7 (Eng. Abstr.) **(Ger)**
[Ultrasound versus abdominal visualization of a problem abdomen in a young patient? An unusual cause of epigastric pain] Beck A, et al. **Radiologe** 1989 Feb;29(2):89–91 (Eng. Abstr.) **(Ger)**
[Aneurysm of the proper hepatic artery as a cause of abdominal angina] Rieser R, et al. **Rontgenblatter** 1988 Sep; 41(9):366–8 (Eng. Abstr.) **(Ger)**
[Neurological causes of pain in the extremities] Ludin HP. **Schweiz Rundsch Med Prax** 1988 Sep 6;77(36):939–44 (Eng. Abstr.) **(Ger)**
[Joint pain, facial skin eruption (clinical conference)] Steiner A, et al. **Schweiz Rundsch Med Prax** 1988 Dec 13; 77(50):1383–5 (Eng. Abstr.) **(Ger)**
[Sex– or symptom–specific behavior of male residents? An analysis of diagnosis and therapy of ambulatory female and male patients with abdominal pain] Conen D, et al. **Soz Praventivmed** 1988;33(3):167–72 (Eng. Abstr.) **(Ger)**
[Shoulder and arm syndrome from an orthopedic–traumatologic viewpoint] Jakob RP, et al. **Ther Umsch** 1988 Nov;45(11):801–11 (Eng. Abstr.) **(Ger)**
[Anatomic basis of shoulder and arm pain] Olah AJ. **Ther Umsch** 1988 Nov;45(11):751–6 (Eng. Abstr.) **(Ger)**
[Role of gynecologic laparoscopy in the pelvic pain syndrome] Grio R, et al. **Minerva Ginecol** 1988 Sep; 40(9):531–4 (Eng. Abstr.) **(Ita)**
[Markers of bone pain in hemodialysis patients with renal insufficiency] Oka F, et al. **Radioisotopes** 1988 Oct; 37(10):572–5 (Eng. Abstr.) **(Jpn)**
[Rupture of the medio–patellar plica. One of the many causes of anterior knee pain] Johansen O. **Tidsskr Nor Laegeforen** 1989 Apr 10;109(10):1069–70 (Eng. Abstr.) **(Nor)**
[A rare complication of regional anesthesia] Vagner EA, et al. **Anesteziol Reanimatol** 1989 Mar–Apr;(2):64–6 (Eng. Abstr.) **(Rus)**
[Role of blood flow in the etiology of pain caused by ulcer and its cessation after vagotomy] Koval'chuk LA. **Khirurgiia (Mosk)** 1989 Apr;(4):45–8 (Eng. Abstr.) **(Rus)**
[The effect of pain caused by multiple trauma on gamma–aminobutyric acid metabolism and the functional condition of animals] Ignatov IuD, et al. **Patol Fiziol Eksp Ter** 1989 Jan–Feb;(1):11–4 (Eng. Abstr.) **(Rus)**
[The phenomenon of hyperacusis in adhesive otitis media] Sharifbaev AS, et al. **Vestn Otorinolaringol** 1988 May–Jun; (3):20–2 (Eng. Abstr.) **(Rus)**
[The cystalgia syndrome] Panaitidi NN, et al. **Vrach Delo** 1988 Nov;(11):61–4 (Eng. Abstr.) **(Rus)**
[Myogenic facial pain] Karlov VA. **Zh Nevropatol Psikhiatr** 1989;89(4):60–6 (Eng. Abstr.) **(Rus)**
[Mechanical analysis of inguinal pain in kinesiotherapy of the diseased or injured hip] Horvatek I, et al. **Reumatizam** 1987;34(1–6):31–3 (Eng. Abstr.) **(Scr)**
[Growing pains. Syndrome or chimera?] Arnal Guimerá MC. **Med Clin (Barc)** 1988 May 7;90(18):743–4 **(Spa)**
[Abdominal pain and a hepatic mass in a young man] Franco–Vicario R, et al. **Rev Clin Esp** 1989 Feb; 184(2):104–5 **(Spa)**
[Abdominal pain associated with deficiency of factor XII (letter)] Puente F, et al. **Rev Clin Esp** 1989 Jun;185(2):104–5 **(Spa)**

GENETICS

Genetic influences on brain stimulation–produced analgesia in mice. I. Correlation with stress–induced analgesia. Marek P, et al. **Brain Res** 1989 Jun 5;489(1):182–4

HISTORY

An historical view of pain management. How we got to where we are! Donovan MI. **Cancer Nurs** 1989 Aug; 12(4):257–61
A history of pain relief. Warfield CA. **Hosp Pract [Off]** 1988 Dec 15;23(12):121–2

IMMUNOLOGY

Diminished nociceptive response in mice following immunization with neurokinins. Elliott PJ, et al. **Peptides** 1989 Jan–Feb;10(1):69–71
HLA B27 antigens in patients with chronic arthralgia [letter] Luukkainen R. **Scand J Rheumatol** 1989;18(3):177–8

METABOLISM

Physiological role of alpha 2–adrenoceptors in the regulation of vigilance and pain: effect of medetomidine. Stenberg D. **Acta Vet Scand Suppl** 1989;85:21–8 (64 ref.)
Determinants of the nature of environmentally induced hypoalgesia. Maier SF. **Behav Neurosci** 1989 Feb; 103(1):131–43
Limbic brain structures are important sites of kappa–opioid receptor–mediated actions in the rat: a [14C]–2–deoxyglucose study. Ableitner A, et al. **Brain Res** 1989 Jan 30;478(2):326–36
Induction of c–fos–like protein within the lumbar spinal cord and thalamus of the rat following peripheral stimulation. Bullitt E. **Brain Res** 1989 Jul 31;493(2):391–7
Segmental release of Met–enkephalin–like material from the spinal cord of rats, elicited by noxious thermal stimuli. Cesselin F, et al. **Brain Res** 1989 Apr 10;484(1–2):71–7
Cholecystokinin antagonism by anthramycin, a benzodiazepine antibiotic, in the central nervous system in mice. Kubota K, et al. **Brain Res** 1989 Apr 17;485(1):62–6
Neuropeptides in propriospinal neurones in the rat. Leah J, et al. **Brain Res** 1989 Aug 21;495(1):173–7
Somatostatin: evidence for a role in thermal nociception. Morton CR, et al. **Brain Res** 1989 May 29;488(1–2):89–96
Enhancement of morphine–induced analgesia after repeated injections of methylenedioxymethamphetamine. Nencini P, et al. **Brain Res** 1988 Aug 2;457(1):136–42
A noxious stimulus induces the preprotachykinin–A gene expression in the rat dorsal root ganglion: a quantitative study using in situ hybridization histochemistry. Noguchi K, et al. **Brain Res** 1988 Aug;464(1):31–5
Modality–specific antinociception produced by intrathecal injection of anti–somatostatin antiserum in rats. Ohno H, et al. **Brain Res** 1988 Nov 22;474(1):197–200
Endogenous oxytocin inhibits morphine tolerance through limbic forebrain oxytocin receptors. Sarnyai Z, et al. **Brain Res** 1988 Nov 1;463(2):284–8
Preproenkephalin gene expression in the rat spinal cord after noxious stimuli. Noguchi K, et al. **Brain Res Mol Brain Res** 1989 May;5(3):227–34
Morphine: some puzzles of well–known substance. Kiyatkin EA. **Int J Neurosci** 1989 Apr;45(3–4):231–46
Multiple opioid peptides and the modulation of pain: immunohistochemical analysis of dynorphin and enkephalin in the trigeminal nucleus caudalis and spinal cord of the cat. Cruz L, et al. **J Comp Neurol** 1985 Oct 22;240(4):331–48
Effect of tamoxifen on oestrogen binding, lipid and lipoprotein concentrations and blood clotting parameters in premenopausal women with breast pain. Caleffi M, et al. **J Endocrinol** 1988 Nov;119(2):335–9
Subsensitivity of serotonin and substance P receptors involved in nociception after repeated administration of a serotonin receptor agonist. Eide PK, et al. **J Neural Transm** 1989;77(1):1–10
Antinociceptive effects of the 5–HT2 antagonist ritanserin in rats: evidence for an activation of descending monoaminergic pathways in the spinal cord. Barber A, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):234–8
Endogenous GABA released into the fourth ventricle of the rat brain in vivo is enhanced by noxious stimuli. Ge M, et al. **Neurosci Lett** 1988 Sep 23;92(1):76–81
Reversal of the antinociceptive effects of intrathecally administered serotonin in the rat by a selective 5–HT3 receptor antagonist. Glaum SR, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):313–7
Antinociception induced in rats by intrathecal administration of antiserum against calcitonin gene–related peptide. Kuraishi Y, et al. **Neurosci Lett** 1988 Oct 17;92(3):325–9
Enhancement of preprotachykinin A gene expression by adjuvant–induced inflammation in the rat spinal cord: possible involvement of substance P–containing spinal neurons in nociception. Minami M, et al. **Neurosci Lett** 1989 Mar 13;98(1):105–10
Bimodal effects of noxious stimuli on vasopressin secretion in rats. Onaka T, et al. **Neurosci Res** 1988 Dec;6(2):143–8
Rapid changes in striatal ascorbate in response to tail–pinch monitored by constant potential voltammetry. Boutelle MG, et al. **Neuroscience** 1989;30(1):11–7
Stimulus specificity of peripherally evoked substance P release from the rabbit dorsal horn in situ. Kuraishi Y, et al. **Neuroscience** 1989;30(1):241–50
Induction of the gene encoding pro–dynorphin by experimentally induced arthritis enhances staining for dynorphin in the spinal cord of rats. Weihe E, et al. **Neuroscience** 1989;31(1):77–95
Electrical stimulation of primary afferent A fibres does not reduce substance P release in the dorsal horn of the cat. Hutchison WD, et al. **Pain** 1989 Jun;37(3):357–63
Inflammation of the hind limb as a model of unilateral, localized pain: influence on multiple opioid systems in the spinal cord of the rat. Millan MJ, et al. **Pain** 1988 Dec; 35(3):299–312
Distinguishable effects of intrathecal dynorphins, somatostatin, neurotensin and s–calcitonin on nociception and motor function in the rat. Spampinato S, et al. **Pain** 1988 Oct;35(1):95–104
The sensitivity to noxious heat in relation to brain and liver opioid glucuronidation in inbred strains of mice. Wahlström A, et al. **Pain** 1989 Jul;38(1):71–5
Behavioral and autonomic correlates of the tactile evoked allodynia produced by spinal glycine inhibition: effects of modulatory receptor systems and excitatory amino acid antagonists. Yaksh TL. **Pain** 1989 Apr;37(1):111–23
In vivo and in vitro release of central neurotransmitters in relation to pain and analgesia. Hamon M, et al. **Prog Brain Res** 1988;77:431–44 (91 ref.)
Pharmacology of putative neurotransmitters and receptors: 5–hydroxytryptamine. Roberts MH. **Prog Brain Res** 1988; 77:329–38 (71 ref.)
Spinal dorsal horn circuitry involved in the brain stem control of nociception. Ruda MA. **Prog Brain Res** 1988; 77:129–40 (67 ref.)

NURSING

A comparison of nurses' recorded assessments of pain with perceptions of pain as described by cancer patients. Camp LD. **Cancer Nurs** 1988 Aug;11(4):237–43
Treatment of pain in the cancer patient: the role of the nurse. Dicks B. **Recent Results Cancer Res** 1988;108:33–6 (8 ref.)

PATHOLOGY

Anatomical introduction to analgesia: correlation of activity of neurons of the superficial dorsal horn with pain and

analgesia. Basbaum AI. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):45–6

Muscle changes in work-related chronic myalgia. Larsson SE, et al. **Acta Orthop Scand** 1988 Oct;59(5):552–6

[Ultrastructure of neurosecretory cells of the hypothalamic supraoptic nuclei of albino rats during nociceptive stress and aging] Pelevin IuM, et al. **Neirofiziologiia** 1989; 21(3):389–96 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Effects of physical activity on maternal plasma beta-endorphin levels and perception of labor pain. Varrassi G, et al. **Am J Obstet Gynecol** 1989 Mar; 160(3):707–12

Brainstem modulation of nociceptor-driven withdrawal reflexes. Fields HL, et al. **Ann N Y Acad Sci** 1989;563:34–44 (74 ref.)

Dorsal raphe and external electrical stimulation modulate noxious input to single neurons in nucleus parafascicularis thalami. Qiao JT, et al. **Brain Res Bull** 1988 Oct;21(4):671–5

Involvement of serotonin in nociceptive pathways. Roberts MH. **Drug Des Deliv** 1989 Mar;4(2):77–83 (52 ref.)

Pain-related somatosensory evoked potentials following CO2 laser stimulation in man. Kakigi R, et al. **Electroencephalogr Clin Neurophysiol** 1989 Mar-Apr; 74(2):139–46

Serotonin mediates suppression of focal epileptiform activity induced by noxious stimulation. Neuman RS, et al. **Epilepsia** 1989 May-Jun;30(3):307–13

Encoding of electrical, thermal, and mechanical noxious stimuli by subnucleus reticularis dorsalis neurons in the rat medulla. Villanueva L, et al. **J Neurophysiol** 1989 Feb; 61(2):391–402

The fine structure of chromaffin cell implants in the pain modulatory regions of the rat periaqueductal gray and spinal cord. Pappas GD, et al. **Prog Brain Res** 1988; 78:513–20

[Hyperalgetic effect of low doses of myelopeptides] Vasilenko AM, et al. **Dokl Akad Nauk SSSR** 1989; 306(4):999–1000 (Rus)

PHYSIOPATHOLOGY

The physiological basis of pain pathways and the segmental controls of pain. Besson JM. **Acta Anaesthesiol Belg** 1988; 39(3 Suppl 2):47–51

What the brain tells to the spinal cord? Electrophysiological and behavioural approaches. Besson JM. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):87–90

Dorsal raphe stimulation modulates responses of substantia nigra, pars reticulata neurons to painful stimulation. Moyanova S, et al. **Acta Physiol Pharmacol Bulg** 1988; 14(2):24–32

Pain sensitivity in obesity. Zahorska-Markiewicz B, et al. **Acta Physiol Pol** 1988 May-Jun;39(3):183–7

Studies on the enhanced effect of acupuncture analgesia and acupuncture anesthesia by D-phenylalanine (first report)—effect on pain threshold and inhibition by naloxone. Kitade T, et al. **Acupunct Electrother Res** 1988; 13(2–3):87–97

Effects of the infrared laser therapy at treated and non-treated trigger points. Olavi A, et al. **Acupunct Electrother Res** 1989;14(1):9–14

Laser photobiostimulation-induced hypoalgesia in rats is not naloxone reversible. Ponnudurai RN, et al. **Acupunct Electrother Res** 1988;13(2–3):109–17

Psychological and somatic factors in women with pain due to pelvic congestion. Beard R, et al. **Adv Exp Med Biol** 1988;245:413–21 (42 ref.)

Interleukin-1 enhances pain reflexes. Mediation through increased prostaglandin E2 levels. Schweizer A, et al. **Agents Actions** 1988 Dec;25(3–4):246–51

Phantom angina. Mester SW, et al. **Am Heart J** 1988 Dec; 116(6 Pt 1):1627–8

The effect of purposeful activity on pain tolerance [published erratum appears in Am J Occup Ther 1989 Feb;43(2):103] Heck SA. **Am J Occup Ther** 1988 Sep;42(9):577–81

Saphenous nerve entrapment at the adductor canal. Romanoff ME, et al. **Am J Sports Med** 1989 Jul-Aug;17(4):478–81

Intrathecal somatostatin in cat and mouse studies on pain, motor behavior, and histopathology. Gaumann DM, et al. **Anesth Analg** 1989 May;68(5):623–32

Intrathecal fentanyl depresses nociceptive flexion reflexes in patients with chronic pain. Chabal C, et al. **Anesthesiology** 1989 Feb;70(2):226–9

The effect of neuromuscular blockade with vecuronium on hemodynamic responses to noxious stimuli in the rat. Gibbs NM, et al. **Anesthesiology** 1989 Aug;71(2):214–7

Primary (spontaneous) pneumomediastinum presenting as abdominal pain after swimming [letter] Grant T. **Ann Emerg Med** 1988 Dec;17(12):1368–9

Investigations on dynorphin structurally-related opioid peptides. I. Impact on nociceptive transmission. II. Regulation of pituitary content. Ferri S, et al. **Ann Ist Super Sanita** 1988;24(3):397–402

Receptor organization of opioid and adrenergic regulation of pain. Ignatov YuD, et al. **Ann Ist Super Sanita** 1988; 24(3):405–9

Pain and analgesia in the newborn. Fitzgerald M, et al. **Arch Dis Child** 1989 Apr;64(4):441–3 (29 ref.)

On the nature of the afferent fibers of oculomotor nerve. Manni E, et al. **Arch Ital Biol** 1989 Mar;127(2):99–108

Effects of alpha 2-adrenoceptors blockade on the inhibition of the nociceptive jaw-opening reflex by the lateral reticular nucleus in rabbits. Sotgiu ML. **Arch Ital Biol** 1989 Feb;127(1):63–7

Thalamic pain syndrome of Dejérine-Roussy. Differentiation of four subtypes assisted by somatosensory evoked potentials data. Mauguière F, et al. **Arch Neurol** 1988 Dec; 45(12):1312–20

Electrophysiological measures during acupuncture-induced surgical analgesia. Starr A, et al. **Arch Neurol** 1989 Sep; 46(9):1010–2

The effects of pain from the mandibular joint and muscles on masticatory motor behaviour in man. Stohler CS, et al. **Arch Oral Biol** 1988;33(3):175–82

The convergence projection theory [letter] Garrison D. **Arch Phys Med Rehabil** 1989 May;70(5):418

The convergence projection theory [letter] Garrison D. **Arch Phys Med Rehabil** 1989 Aug;70(8):648

Circadian rhythms in patients with abdominal pain syndromes. Roberts-Thomson IC, et al. **Aust N Z J Med** 1988 Jun;18(4):569–74

An evaluation of transcutaneous electrical nerve stimulation for pain relief in labour. Thomas IL, et al. **Aust N Z J Obstet Gynaecol** 1988 Aug;28(3):182–9

Neurophysiology of rheumatic pain. Harvey AR. **Baillieres Clin Rheumatol** 1987 Apr;1(1):1–26 (40 ref.)

Recent advances in the pathophysiology of acute pain. Woolf CJ. **Br J Anaesth** 1989 Aug;63(2):139–46 (65 ref.)

Blood velocities in the dorsal pedis and radial arteries during labour. Janbu T. **Br J Obstet Gynaecol** 1989 Jan;96(1):70–9

Responses of neurons in nucleus ventralis posterolateralis of the cat thalamus to hypogastric inputs. Asato F, et al. **Brain Res** 1989 May 29;488(1–2):135–42

Afferents and efferents of the rat cuneiformis nucleus: an anatomical study with reference to pain transmission. Bernard JF, et al. **Brain Res** 1989 Jun 19;490(1):181–5

Increased reactivity to chemical but not to heat noxious stimuli in mice producing anti-idiotypic antibodies for substance P. Calvino B, et al. **Brain Res** 1988 Sep 20; 460(2):389–93

Subjective pain sensation is linearly correlated with the flexion reflex in man. Chan CW, et al. **Brain Res** 1989 Feb 6;479(1):145–50

Evidence for the involvement of a descending cholinergic pathway in systemic morphine analgesia. Chiang CY, et al. **Brain Res** 1989 Jan 30;478(2):293–300

Facilitation of the tail-flick reflex by noxious cutaneous stimulation in the rat: antagonism by a substance P analogue. Cridland RA, et al. **Brain Res** 1988 Oct 11; 462(1):15–21

Nociceptive responses of trigeminal neurons in SII-7b cortex of awake monkeys. Dong WK, et al. **Brain Res** 1989 Apr 10;484(1–2):314–24

Evidence for central phenomena participating in the changes of responses of ventrobasal thalamic neurons in arthritic rats. Guilbaud G, et al. **Brain Res** 1989 Apr 10; 484(1–2):383–8

Putative nociceptive modulatory neurons in the dorsolateral pontomesencephalic reticular formation. Haws CM, et al. **Brain Res** 1989 Apr 3;483(2):272–82

Comparison of the antinociceptive effect of morphine and glutamate at coincidental sites in the periaqueductal gray and medial medulla in rats. Jensen TS, et al. **Brain Res** 1989 Jan 2;476(1):1–9

Responses of rat lateral hypothalamic neurons to periaqueductal gray stimulation and nociceptive stimuli. Kai Y, et al. **Brain Res** 1988 Sep 27;461(1):107–17

Cholecystokinin-octapeptide antagonizes morphine analgesia in periaqueductal gray of the rat. Li Y, et al. **Brain Res** 1989 Feb 20;480(1–2):105–10

Electrophysiological evidence for a tonic activity of the spinal cord intrinsic opioid systems in a chronic pain model. Lombard MC, et al. **Brain Res** 1989 Jan 16;477(1–2):48–56

Effect of noxious tail pinch on the discharge rate of mesocortical and mesolimbic dopamine neurons: selective activation of the mesocortical system. Mantz J, et al. **Brain Res** 1989 Jan 9;476(2):377–81

A primate model for the study of tonic pain, pain tolerance and diffuse noxious inhibitory controls. Marchand S, et al. **Brain Res** 1989 May 22;487(2):388–91

Behavioural tolerance to morphine analgesia is supraspinally mediated: a quantitative analysis of dose-response relationships. Milne RJ, et al. **Brain Res** 1989 Jul 10; 491(2):316–27

Involvement of spinal noradrenergic system in the mechanism of an antinociceptive effect of delta-sleep-inducing peptide (DSIP). Nakamura A, et al. **Brain Res** 1989 Feb 20; 480(1–2):82–6

Characterization of superficial T13–L2 dorsal horn neurons encoding for colorectal distension in the rat: comparison with neurons in deep laminae. Ness TJ, et al. **Brain Res** 1989 May 8;486(2):301–9

Electrophysiological properties of ventromedial medulla neurons in response to noxious and non-noxious stimuli in the awake, freely moving rat: a single-unit study. Oliveras JL, et al. **Brain Res** 1989 May 1;486(1):1–14

Effects of thalamic parafascicular stimulation on the periaqueductal gray and adjacent reticular formation neurons. A possible contribution to pain control mechanisms. Sakata S, et al. **Brain Res** 1988 Jun 7; 451(1–2):85–96

Masseter inhibitory periods and sensations evoked by electrical tooth-pulp stimulation in subjects under hypnotic anesthesia. Sharav Y, et al. **Brain Res** 1989 Feb 13; 479(2):247–54

The spinal antinociceptive actions of morphine metabolites morphine-6-glucuronide and normorphine in the rat. Sullivan AF, et al. **Brain Res** 1989 Mar 20;482(2):219–24

Increase in extracellular potassium level in rat spinal dorsal horn induced by noxious stimulation and peripheral injury. Svoboda J, et al. **Brain Res** 1988 Aug 16;458(1):97–105

The contribution of training to sensitivity in the nociceptive paw-withdrawal test. Taiwo YO, et al. **Brain Res** 1989 May 15;487(1):148–51

Characterization of the arachidonic acid metabolites mediating bradykinin and noradrenaline hyperalgesia. Taiwo YO, et al. **Brain Res** 1988 Aug 23;458(2):402–6

Antinociception vs motor effects of intrathecal vasopressin as measured by four pain tests. Thurston CL, et al. **Brain Res** 1988 Oct 25;463(1):1–11

Stress induced analgesia plays an adaptive role in the organization of behavioral responding. Amit Z, et al. **Brain Res Bull** 1988 Dec;21(6):955–8 (40 ref.)

Organismic variables and pain inhibition: roles of gender and aging. Bodnar RJ, et al. **Brain Res Bull** 1988 Dec; 21(6):947–53 (120 ref.)

Effects of lesion and stimulation of rat hypothalamic arcuate nucleus on the pain system. Hamba M. **Brain Res Bull** 1988 Nov;21(5):757–63

Developmental aspects of nociception. Hamm RJ, et al. **Brain Res Bull** 1988 Dec;21(6):933–46 (84 ref.)

Beta-funaltrexamine disrupts the day-night rhythm of nociception in mice. Kavaliers M. **Brain Res Bull** 1989 May; 22(5):783–5

Evolutionary and comparative aspects of nociception. Kavaliers M. **Brain Res Bull** 1988 Dec;21(6):923–31 (93 ref.)

Body-rotation induced analgesia in male mice: effects of duration and type of rotation procedure. Ossenkopp KP, et al. **Brain Res Bull** 1988 Dec;21(6):967–72

Opioid antinociception in amphibians. Stevens CW. **Brain Res Bull** 1988 Dec;21(6):959–62 (56 ref.)

Brainstem auditory and visual evoked potential studies in patients with chronic cervical pain. Jimenez AC, et al. **Bull Hosp Jt Dis Orthop Inst** 1988 Fall;48(2):176–81

Relationship between subjective pain estimation and somatosensory evoked potentials by electrical tooth stimulation. Umino M, et al. **Bull Tokyo Med Dent Univ** 1988 Sep;35(3):67–74

Cancer pain. Anatomy, physiology, and pharmacology. Payne R. **Cancer** 1989 Jun 1;63(11 Suppl):2266–74 (75 ref.)

The suffering associated with lung cancer. Benedict S. **Cancer Nurs** 1989 Feb;12(1):34–40

Some ultrastructure and immunocytochemical findings taken as morphological basis for the gate control theory of pain mechanism. Ai MK, et al. **Chen Tzu Yen Chiu** 1988; 13(2):98–105

Recent progress in the study of acupuncture mechanisms. Han JS. **Chen Tzu Yen Chiu** 1988;13(1):36–42, 35 (0 ref.) (Eng, Chi)

Passive acupuncture points as a physical and physiologic indicator of homeostasis. Dung HC. **Chin Med J [Engl]** 1988 May;101(5):329–33

Preliminary criteria for primary fibromyalgia syndrome (PFS): multivariate analysis of a consecutive series of PFS, other pain patients, and normal subjects. Yunus MB, et al. **Clin Exp Rheumatol** 1989 Jan-Feb;7(1):63–9

Trazodone: from the mental pain to the "dys-stress" hypothesis of depression. Silvestrini B. **Clin Neuropharmacol** 1989;12 Suppl 1:S4–10 (29 ref.)

The relationship of stride characteristics to pain before and after total knee arthroplasty. Kroll MA, et al. **Clin Orthop** 1989 Feb;(239):191–5

Acute painful diabetic neuropathy [letter] Llewelyn JG, et al. **Diabetes Care** 1988 Oct;11(9):748–9

Reaction times to painless and painful CO2 and argon laser stimulation. Arendt-Nielsen L, et al. **Eur J Appl Physiol** 1988;58(3):266–73

The NMDA receptor: central role in pain inhibition in rat periaqueductal gray. Jacquet YF. **Eur J Pharmacol** 1988 Sep 23;154(3):271–6

The mu opiate receptor is responsible for descending pain inhibition originating in the periaqueductal gray region of the rat brain. Smith DJ, et al. **Eur J Pharmacol** 1988 Oct 26;156(1):47–54

The cause of ischaemic nocturnal rest pain. Jelnes R, et al. **Eur J Vasc Surg** 1988 Feb;2(1):31–3

Behavioural and electrophysiological studies on the paradoxical antinociceptive effects of an extremely low dose of naloxone in an animal model of acute and localized inflammation. Kayser V, et al. **Exp Brain Res** 1988; 73(2):402–10

Inhibition of the responses of cat dorsal horn neurons to noxious skin heating by stimulation in medial or lateral medullary reticular formation. Pretel S, et al. **Exp Brain Res** 1988;72(1):51–62

Pharmacologic consequences of the vascular permeability of chromaffin cell transplants in CNS pain modulatory regions. Sagen J, et al. **Exp Neurol** 1988 Dec;102(3):290–7

Cannabinoids and pain responses: a possible role for prostaglandins. Burstein SH, et al. **FASEB J** 1988 Nov; 2(14):3022–6

Interaction between neurovegetative functions and pain control system: experimental and clinical aspects.

Proceedings of the 3rd meeting of the Group for the Study on Autonomic Nervous System. Pisa, May 27-28, 1988. Part II. **Funct Neurol** 1989 Apr-Jun;4(2):131-206

Interaction between neurovegetative functions and pain control system: experimental and clinical aspects. Proceedings of the 3rd meeting of the Group for the Study on Autonomic Nervous System. Pisa, May 27-28, 1988. Part I. **Funct Neurol** 1989 Jan-Mar;4(1):11-111

The semeiology of autonomic pain: terminology and methods. Gandini S. **Funct Neurol** 1989 Jan-Mar;4(1):39-41 (30 ref.)

Sensitized nociceptors in reflex sympathetic dystrophies. Marchettini P, et al. **Funct Neurol** 1989 Apr-Jun; 4(2):135-40 (28 ref.)

Pain threshold and polysynaptic components of the blink reflex in Parkinson's disease. Massetani R, et al. **Funct Neurol** 1989 Apr-Jun;4(2):199-202

The sympathetic system and pain. Nathan PW. **Funct Neurol** 1989 Jan-Mar;4(1):11-5 (4 ref.)

Clinical aspects of visceral pain. Procacci P, et al. **Funct Neurol** 1989 Jan-Mar;4(1):19-20

Comparative study of pain perception and polysynaptic blink reflex responses in man. Rossi B, et al. **Funct Neurol** 1989 Jan-Mar;4(1):47-51

Age-related changes in excitability of nociceptive flexion reflex. An electrophysiological study in school-age children and young adults. Sandrini G, et al. **Funct Neurol** 1989 Jan-Mar;4(1):53-8

Correlation between pain thresholds and polysynaptic components of blink reflex in essential arterial hypertension. Vignocchi G, et al. **Funct Neurol** 1989 Jan-Mar;4(1):59-61

Silent peptic ulceration: deadly silence or golden silence? Pounder R. **Gastroenterology** 1989 Feb;96(2 Pt 2 Suppl):626-31 (32 ref.)

Sensitivity of the esophageal mucosa to pH in gastroesophageal reflux disease. Smith JL, et al. **Gastroenterology** 1989 Mar;96(3):683-9

Pneumococcal pneumonia with abdominal pain. Esposito AL. **Hosp Pract [Off]** 1989 Apr 30;24(4A):61-7, 70-2

The role of neurotransmitters in processing painful stimuli. Kahn CH, et al. **Hosp Pract [Off]** 1989 Jan 15;24(1):165, 169-70

Arterial hypertension is associated with hypalgesia in humans. Ghione S, et al. **Hypertension** 1988 Nov; 12(5):491-7

The nature and evaluation of cancer pain. Evans WO. **Indiana Med** 1989 Feb;82(2):120-2

A comparison between different models of the relation between recorded intradental nerve impulse activity and reported pain in man. Fors UG, et al. **Int J Biomed Comput** 1989 Mar;24(1):17-28

Adaptive pain inhibition in murine resident-intruder interactions. Randall JI, et al. **Int J Neurosci** 1988 Aug; 41(3-4):251-9 (61 ref.)

The understanding and evaluation of chronic pain: subjective vs. objective determinants of pain. Hyyppä MT. **Int J Rehabil Res** 1987;10(4 Suppl 5):243-7

Anaesthetic technique and pain in the newborn. Wren WS. **Intensive Care Med** 1989;15 Suppl 1:S46-9

Maximal isometric patellofemoral contact force in patients with anterior knee pain. Macdonald DA, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):296-9

Depression, pain, and hemispheric activation. Otto MW, et al. **J Nerv Ment Dis** 1989 Apr;177(4):210-8

The correlation of monkey medullary dorsal horn neuronal activity and the perceived intensity of noxious heat stimuli. Dubner R, et al. **J Neurophysiol** 1989 Aug;62(2):450-7

The detection and perceived intensity of noxious thermal stimuli in monkey and in human. Kenshalo DR Jr, et al. **J Neurophysiol** 1989 Aug;62(2):429-36

Nociceptive neurons in rat superior colliculus: response properties, topography, and functional implications. McHaffie JG, et al. **J Neurophysiol** 1989 Aug;62(2):510-25

Responses of monkey medullary dorsal horn neurons during the detection of noxious heat stimuli. Maixner W, et al. **J Neurophysiol** 1989 Aug;62(2):437-49

Vagal afferent modulation of spinal nociceptive transmission in the rat. Ren K, et al. **J Neurophysiol** 1989 Aug; 62(2):401-15

An improved method for tail-flick testing with adjustment for tail-skin temperature. Tjølsen A, et al. **J Neurosci Methods** 1989 Jan;26(3):259-65

Pain in the sternocleidomastoid muscle and occlusal interferences. Kohno S, et al. **J Oral Rehabil** 1988 Jul; 15(4):385-92

Wrist pain and distal growth plate closure of the radius in gymnasts. Albanese SA, et al. **J Pediatr Orthop** 1989 Jan-Feb;9(1):23-8

Intracerebroventricular morphine decreases descending inhibitions acting on lumbar dorsal horn neuronal activities related to pain in the rat. Bouhassira D, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):332-42

Role of mu and kappa opioid receptors in conditional fear-induced analgesia: the antagonistic actions of nor-binaltorphimine and the cyclic somatostatin octapeptide, Cys2Tyr3Orn5Pen7-amide. Fanselow MS, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):825-30

Comparisons of descending pain inhibitory pathways activated by beta-endorphin and morphine as characterized by supraspinal and spinal antinociceptive interactions in mice. Roerig SC, et al. **J Pharmacol Exp Ther** 1988 Dec; 247(3):1107-13

Assessment of the role of A1/A2 adenosine receptors mediating the purine antinociception, motor and autonomic function in the rat spinal cord. Sosnowski M, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):915-22

Methodological refinements to the mouse paw formalin test. An animal model of tonic pain. Murray CW, et al. **J Pharmacol Methods** 1988 Sep;20(2):175-86

Fibromyalgia: generalized pain intolerance and manifold symptom reporting. Quimby LG, et al. **J Rheumatol** 1988 Aug;15(8):1264-70

Observations on clinical therapeutic effect in treating soft tissue injuries by acupuncture, with pain threshold and electromyography as parameters. Yuan CX, et al. **J Tradit Chin Med** 1989 Mar;9(1):40-4

A method for studying pain arising from the urinary bladder in conscious, freely-moving rats. Abelli L, et al. **J Urol** 1989 Jan;141(1):148-51

Subsensitivity to substance P in SART-stressed mice. Hata T, et al. **Jpn J Pharmacol** 1989 Feb;49(2):293-6

Effects of nociceptive stimuli on brain histamine dynamics. Itoh Y, et al. **Jpn J Pharmacol** 1989 Apr;49(4):449-54

Further evidence for possible analgesic mechanism of electroacupuncture: effects on neuropeptides and serotonergic neurons in rat spinal cord. Tsai HY, et al. **Jpn J Pharmacol** 1989 Feb;49(2):181-5

Plasma vasopressin is not involved in footshock-induced analgesia in rats. Hamamura M, et al. **Jpn J Physiol** 1988; 38(5):741-6

Opioid involvement in the perception of pain due to endurance exercise in trained man. Paulev PE, et al. **Jpn J Physiol** 1989;39(1):67-74

Asymptomatic myocardial ischaemia: biobehavioural mechanism [letter] Carney RM, et al. **Lancet** 1989 Feb 4; 1(8632):276-7

Effect of semiconductor GaAs laser irradiation on pain perception in mice. Zarković N, et al. **Lasers Surg Med** 1989;9(1):63-6

Morphine-6-glucuronide: analgesic effects and receptor binding profile in rats. Abbott FV, et al. **Life Sci** 1988; 43(21):1685-95

Antinociceptive activity of salsolinol (racemate, R(+)-, S(-)-enantiomers): evidence of a peripheral mechanism. Eschalier A, et al. **Life Sci** 1989;45(5):431-8

The response to analgesia testing is affected by gonadal steroids in the rat. Forman LJ, et al. **Life Sci** 1989; 45(5):447-54

Running-related injury prevention through innate impact-moderating behavior. Robbins SE, et al. **Med Sci Sports Exerc** 1989 Apr;21(2):130-9

Unreliability of the Cold Pressor Test Method in pain studies. Blasco T, et al. **Methods Find Exp Clin Pharmacol** 1988 Dec;10(12):767-72

Deafferentation pain syndromes. Davar G, et al. **Neurol Clin** 1989 May;7(2):289-304 (97 ref.)

The neurophysiology of pain. Hoffert MJ. **Neurol Clin** 1989 May;7(2):183-203 (34 ref.)

Mechanisms of clinical pain. Observations and speculations. Portenoy RK. **Neurol Clin** 1989 May;7(2):205-30 (142 ref.)

Stump and phantom limb pain. Sherman RA. **Neurol Clin** 1989 May;7(2):249-64 (26 ref.)

Clinical perspectives on the relationship between pain and disability. Vasudevan SV. **Neurol Clin** 1989 May; 7(2):429-39 (12 ref.)

Somatosensory dysfunction in chronic neurogenic pain. Berić A, et al. **Neurologija** 1988;37(3-4):51-7

Mechanism of pain caused by the nerve-root tension test in patients with sciatica. Xavier AV, et al. **Neurology** 1989 Apr;39(4):601-2

Role of endogenous enkephalins in locomotion and nociception studied with peptidase inhibitors in two inbred strains of mice (C57BL/6J and DBA/2J). Michael-Titus A, et al. **Neuropharmacology** 1989 Feb;28(2):117-22

Neuronal and neurochemical mechanisms of hypothalamic inhibition of the nociceptive reflex. Baklavadzhyan OG, et al. **Neurosci Behav Physiol** 1989 Jan-Feb;19(1):42-51

Impulse activity of mesencephalic neurons on nociceptive stimulation in awake rats. Kiyatkin EA, et al. **Neurosci Behav Physiol** 1988 Sep-Oct;18(5):393-400

Chronic amitriptyline decreases autotomy following dorsal rhizotomy in rats. Abad F, et al. **Neurosci Lett** 1989 Apr 24;99(1-2):187-90

Cells of the rat lateral habenula respond to high-threshold somatosensory inputs. Benabid AL, et al. **Neurosci Lett** 1989 Jan 30;96(3):289-94

A possible spino (trigemino)-ponto-amygdaloid pathway for pain. Bernard JF, et al. **Neurosci Lett** 1989 May 22; 100(1-3):83-8

Microinjections of glutamate or morphine at coincident midbrain sites have different effects on nociceptive dorsal horn neurons in the rat. Carstens E, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):185-91

Capsaicin desensitization of peripheral nociceptive fibres does not impair sensitivity to other noxious stimuli. Dray A, et al. **Neurosci Lett** 1989 Apr 24;99(1-2):50-4

Repeated exposure to sham testing procedures reduces reflex withdrawal and hot-plate latencies: attenuation of tonic descending inhibition? Gamble GD, et al. **Neurosci Lett** 1989 Jan 30;96(3):312-7

Dichotomizing unmyelinated afferents supplying pelvic viscera and perineum are rare in the sacral segments of the cat. Häbler HJ, et al. **Neurosci Lett** 1988 Nov 22; 94(1-2):119-24

Electrophysiological evidence for a role of bradykinin in chemical nociception in the rat. Haley JE, et al. **Neurosci Lett** 1989 Feb 13;97(1-2):198-202

Excitatory t. nsmitters, ventral root potentials and [K+]o in the isolated frog leg-spinal cord preparation. Holohean AM, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):173-8

Tooth pulp stimulation advances both medullary off-cell pause and tail flick. Ramírez F, et al. **Neurosci Lett** 1989 May 22;100(1-3):153-6

Effect of deafferentation on the levels of uric acid in the spinal cord of the rat. Weil-Fugazza J, et al. **Neurosci Lett** 1989 Apr 24;99(1-2):181-6

The recording of brain evoked potentials resulting from intra-articular focused ultrasonic stimulation: a new experimental model for investigating joint pain in humans. Wright A, et al. **Neurosci Lett** 1989 Feb 13;97(1-2):145-50

Afferent projections to the rostral anterior pretectal nucleus of the rat: a possible role in the processing of noxious stimuli. Foster GA, et al. **Neuroscience** 1989;29(3):685-94

Pain interventions with children: a meta-analysis of research. Broome ME, et al. **Nurs Res** 1989 May-Jun;38(3):154-8 (37 ref.)

Effects of music and imagery on physiologic and self-report of analogued labor pain. Geden EA, et al. **Nurs Res** 1989 Jan-Feb;38(1):37-41

Pain theories and their relevance to nursing practices. Gedaly-Duff V. **Nurse Pract** 1988 Oct;13(10):66, 68

Chronic pain: a difficult problem. Chaplin ER. **Occup Med** 1989 Jul-Sep;4(3):433-47 (49 ref.)

Approaches to senior care #6. Shoulder pain in the geriatric patient. Part I. Evaluation and pathophysiology. Warren RF, et al. **Orthop Rev** 1989 Jan;18(1):129-35

Evaluation and treatment of chemonucleolysis failures. Burkus JK, et al. **Orthopedics** 1988 Dec;11(12):1677-82

On central pain and central pain mechanisms [editorial] Boivie J. **Pain** 1989 Aug;38(2):121-2

Measurements of human pressure-pain thresholds on fingers and toes. Brennum J, et al. **Pain** 1989 Aug;38(2):211-7

Topographic brain measures of human pain and pain responsivity. Chen AC, et al. **Pain** 1989 May;37(2):129-41

Suppression of noxious thermal evoked responses in thalamic central lateral nucleus by cortical spreading depression. Condés-Lara M, et al. **Pain** 1988 Nov;35(2):199-204

The effect of experimentally induced anxiety on the experience of pressure pain. Cornwall A, et al. **Pain** 1988 Oct;35(1):105-13

An assessment of pain responses to thermal stimuli during stages of pregnancy. Dunbar AH, et al. **Pain** 1988 Dec; 35(3):265-9

Behavioral and thalamic nociceptive responses in rats following noxious ischaemia of the tail. Gelgor L, et al. **Pain** 1988 Aug;34(2):205-11

The Descriptor Differential Scale: applying psychophysical principles to clinical pain assessment. Gracely RH, et al. **Pain** 1988 Dec;35(3):279-88

Sensitivity to cold pressor pain in dysmenorrheic and non-dysmenorrheic women as a function of menstrual cycle phase. Hapidou EG, et al. **Pain** 1988 Sep;34(3):277-83

Long-term changes in discharge behaviour of cat dorsal horn neurones following noxious stimulation of deep tissues. Hoheisel U, et al. **Pain** 1989 Feb;36(2):239-47

Dose-dependent inhibition by naloxone of nociceptive activity evoked in the rat thalamus. Jurna I. **Pain** 1988 Dec; 35(3):349-54

Heterotopic conditioning stimuli on first and second pain [letter] Le Bars D, et al. **Pain** 1989 Aug;38(2):231-4

Evoked potentials directly recorded from the trigeminal root in man. Leandri M, et al. **Pain** 1988 Nov;35(2):227-9

Attempts to gauge the relative importance of pre- and postsynaptic effects of morphine on the transmission of noxious messages in the dorsal horn of the rat spinal cord. Lombard MC, et al. **Pain** 1989 Jun;37(3):335-45

On the difficulties of coding pain-related data [letter] Meilman PW. **Pain** 1989 Jan;36(1):133-4

Pressure pain thresholds in normal muscles: reliability, measurement effects, and topographic differences. Ohrbach R, et al. **Pain** 1989 Jun;37(3):257-63

Differing correlations between pain measures in syndromes with or without explicable organic pathology. Perry F, et al. **Pain** 1988 Aug;34(2):185-9

Effects of heterotopic conditioning stimuli on first and second pain: a psychophysical evaluation in humans. Price DD, et al. **Pain** 1988 Sep;34(3):245-52

Counterstimulation and pain perception: effects of electrocutaneous vs. auditory stimulation upon cold pressor pain. Riley JF, et al. **Pain** 1988 Dec;35(3):259-64

Spinal recordings suggest that wide-dynamic-range neurons mediate sympathetically maintained pain. Roberts WJ, et al. **Pain** 1988 Sep;34(3):289-304

Identification of afferents contributing to sympathetically evoked activity in wide-dynamic-range neurons. Roberts WJ, et al. **Pain** 1988 Sep;34(3):305-14

Relationship between cardiovascular neurones and descending antinociceptive pathways in the rostral ventrolateral medulla of the cat. Siddall PJ, et al. **Pain** 1989 Jun;37(3):347-55

Naloxone does not alter the perception of pain induced by electrical and thermal stimulation of the skin in healthy humans. Stacher G, et al. **Pain** 1988 Sep;34(3):271-6

Pain perception in a man with total corpus callosum transection. Stein BE, et al. **Pain** 1989 Jul;38(1):51-6

Diurnal variations in pain perception and thermal sensitivity.

Strian F, et al. **Pain** 1989 Jan;36(1):125–31

Effects of lesions to rat spinal cord lamina I cell projection pathways on reactions to acute and chronic noxious stimuli. Wall PD, et al. **Pain** 1988 Dec;35(3):327–39

Toward a set of reliable and valid measures for chronic pain assessment and outcome research. Williams RC. **Pain** 1988 Dec;35(3):239–51 (104 ref.)

Neonatal pain associated with caregiving procedures. Marshall RE. **Pediatr Clin North Am** 1989 Aug; 36(4):885–903 (82 ref.)

The differentiation of NSAIDs and prostaglandin action using a mechanical visceral pain model in the rat. DeLeo JA, et al. **Pharmacol Biochem Behav** 1989 May;33(1):253–5

Prenatal stress alters morphine- and stress-induced analgesia in male and female rats. Kinsley CH, et al. **Pharmacol Biochem Behav** 1988 May;30(1):123–8

ICV-CRH alters stress-induced freezing behavior without affecting pain sensitivity. Sherman JE, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):801–7

Unilateral inflammation of the hindpaw in rats as a model of prolonged noxious stimulation: alterations in behavior and nociceptive thresholds. Stein C, et al. **Pharmacol Biochem Behav** 1988 Oct;31(2):455–51

The apparent hyperalgesic effect of a serotonin antagonist in the tail flick test is mainly due to increased tail skin temperature. Tjølsen A, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):601–5

Effects of Librium and shock controllability upon nociception and contextual fear. Warren DA, et al. **Pharmacol Biochem Behav** 1988 May;30(1):209–14

Comparison of effects of transcutaneous electrical nerve stimulation of auricular, somatic, and the combination of auricular and somatic acupuncture points on experimental pain threshold. Lein DH Jr, et al. **Phys Ther** 1989 Aug; 69(8):671–8

Brief exposure to a natural predator, the short-tailed weasel, induces benzodiazepine-sensitive analgesia in white-footed mice. Kavaliers M. **Physiol Behav** 1988;43(2):187–93

Opioid peptides in relation to antinociception. Przewłocki R. **Pol J Pharmacol Pharm** 1987 Sep–Oct;39(5):609–21 (88 ref.)

Pharmacological and human studies with a highly potent opioid peptide, D-Met2, Pro5-enkephalinamide. Székely JI, et al. **Pol J Pharmacol Pharm** 1987 Sep–Oct;39(5):641–56 (20 ref.)

Evidence for opioid receptor interactions in vivo. Heyman JS, et al. **Proc West Pharmacol Soc** 1988;31:287–9

antinociceptive properties of [D-Ala2, NMPhe4, Gly-ol]-enkephalin (DAGO) in tests of acute and tonic pain in mice. Mulvaney SA, et al. **Proc West Pharmacol Soc** 1988;31:285–6

Some views on the influence of morphine on brain stem pain modulating neurons and descending controls acting on the spinal cord. Dickenson A. **Prog Brain Res** 1988;77:259–62 (18 ref.)

Stimulation-produced antinociception. Dostrovsky JO. **Prog Brain Res** 1988;77:159–64 (14 ref.)

The effect of behavioral state on the sensory processing of nociceptive and non-nociceptive information. Dubner R. **Prog Brain Res** 1988;77:213–28 (26 ref.)

Tonic descending inhibition and spinal nociceptive transmission. Duggan AW, et al. **Prog Brain Res** 1988; 77:193–211 (103 ref.)

Brain stem neuronal circuitry underlying the antinociceptive action of opiates. Fields HL, et al. **Prog Brain Res** 1988; 77:245–57 (51 ref.)

Effects of morphine given in the brain stem on the activity of dorsal horn nociceptive neurons. Gebhart GF, et al. **Prog Brain Res** 1988;77:229–43 (49 ref.)

Endogenous opioid peptides in the descending control of nociceptive responses of spinal dorsal horn neurons. Herz A, et al. **Prog Brain Res** 1988;77:263–73 (55 ref.)

The use of microiontophoresis in the study of the descending control of nociceptive transmission. Hill RG. **Prog Brain Res** 1988;77:339–47 (37 ref.)

Direct and indirect pathways to lamina I in the medulla oblongata and spinal cord of the cat. Holstege G. **Prog Brain Res** 1988;77:47–94 (151 ref.)

Electrophysiological evidence for the activation of descending inhibitory controls by nociceptive afferent pathways. Le Bars D, et al. **Prog Brain Res** 1988;77:275–99 (127 ref.)

Stimulation-produced analgesia in animals: behavioural investigations. Oliveras JL, et al. **Prog Brain Res** 1988; 77:141–57 (124 ref.)

Pharmacologic evidence for the modulation of nociception by noradrenergic neurons. Proudfit HK. **Prog Brain Res** 1988;77:357–70 (114 ref.)

Anatomy, physiology and pharmacology of the periaqueductal gray contribution to antinociceptive controls. Reichling DB, et al. **Prog Brain Res** 1988;77:31–46 (101 ref.)

Neuronal effects of controlled superfusion of the spinal cord with monoaminergic receptor antagonists in the cat. Sandkühler J, et al. **Prog Brain Res** 1988;77:321–7

Effects of proprioceptive inputs on vestibulo-ocular and vestibulospinal mechanisms. Thoden U, et al. **Prog Brain Res** 1988;76:109–20 (63 ref.)

Anatomy and physiology of descending control of nociceptive responses of dorsal horn neurons: comprehensive review. Willis WD Jr. **Prog Brain Res** 1988; 77:1–29 (183 ref.)

Sites of action of opiates in production of analgesia. Yaksh TL, et al. **Prog Brain Res** 1988;77:371–94 (123 ref.)

Serotonin receptor subtypes and the modulation of pain transmission. Zemlan FP, et al. **Prog Brain Res** 1988; 77:349–55 (33 ref.)

Objective assessment of opioid action by facial muscle surface electromyography (SEMG). Edmonds HL Jr, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(5):727–38

Production of prostacyclin in mice following intraperitoneal injection of acetic acid, phenylbenzoquinone and zymosan: its role in the writhing response. Berkenkopf JW, et al. **Prostaglandins** 1988 Nov;36(5):693–709

Psychophysiology of chronic pain: do chronic pain patients exhibit symptom-specific psychophysiological responses? Flor H, et al. **Psychol Bull** 1989 Mar;105(2):215–59 (140 ref.)

Pain fibers in osteoarthritis: a review. Konttinen YT, et al. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):35–40 (26 ref.)

Decreased slow-wave and paradoxical sleep in a rat chronic pain model. Landis CA, et al. **Sleep** 1989 Apr;12(2):167–77

Mesothalamic discharge sites. Andy OJ. **Stereotact Funct Neurosurg** 1989;52(2–4):176–82

Thalamic stimulation and recording in patients with deafferentation and central pain. Gorecki J, et al. **Stereotact Funct Neurosurg** 1989;52(2–4):219–26

Recordings of abnormal activity in patients with deafferentation and central pain. Hirayama T, et al. **Stereotact Funct Neurosurg** 1989;52(2–4):120–6

An idiopathic febrile necrotizing arteritis syndrome in the dog: beagle pain syndrome. Hayes TJ, et al. **Toxicol Pathol** 1989;17(1 Pt 2):129–37

[Effect of electroacupuncture on the pain-evoked potential in hypothalamic arcuate nucleus area] Duanmu ZX, et al. **Chen Tzu Yen Chiu** 1988;13(1):48–51 (Eng. Abstr.) **(Chi)**

[Influence of stimulating somatosensory area III (SIII) on cortical response to slow pain] Feng JQ, et al. **Chen Tzu Yen Chiu** 1988;13(1):43–7 (Eng. Abstr.) **(Chi)**

[Frequency of electroacupuncture as a cardinal factor determining the potency of analgesia and its vulnerability to naloxone blockade in rabbits] Wang XM, et al. **Chen Tzu Yen Chiu** 1988;13(1):56–60 (Eng. Abstr.) **(Chi)**

[Influence of electroacupuncture and antagonism of electroacupuncture analgesia by naloxone on enkephalin-like immunoreactivity in guinea pig's adrenal and spinal cord] Wang XT, et al. **Chen Tzu Yen Chiu** 1988; 13(3):231–8 (Eng. Abstr.) **(Chi)**

[Microsurgical reconstruction of inferior alveolar nerve defects during resection of the mandible and evaluation of sensory function after surgery] Dong YJ. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Jul; 23(4):231–3, 255 (Eng. Abstr.) **(Chi)**

[Antagonism of CaCl2 injected into periaqueductal gray on the inhibitory action of morphine on pain-evoked discharges of parafascicular nucleus in rats] Chen ZX, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Nov;9(6):504–7 (Eng. Abstr.) **(Chi)**

[Effects of nucleus raphe magnus and locus coeruleus in descending modulation of the habenula on pain threshold and acupuncture analgesia] Liu GJ, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jan;9(1):18–22 (Eng. Abstr.) **(Chi)**

[Site of analgesic action of aconitine and the relation between its action and the central noradrenergic system] Zheng P, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Nov;9(6):481–5 (Eng. Abstr.) **(Chi)**

[The influence of blocking habenulae or medial forebrain bundles on the analgesic effect elicited by administration L-glutamic acid into the septa] Liu GJ, et al. **Sheng Li Hsueh Pao** 1988 Dec;40(6):547–52 (Eng. Abstr.) **(Chi)**

[Effects of noxious heat stimulation in the central nervous system studied by [3H] 2-deoxyglucose method] Wang QP, et al. **Sheng Li Hsueh Pao** 1988 Apr;40(2):125–30 (Eng. Abstr.) **(Chi)**

[Effect of intraseptal noradrenaline on somatic and visceral pain threshold of rabbits] Wang S, et al. **Sheng Li Hsueh Pao** 1989 Apr;41(2):128–35 (Eng. Abstr.) **(Chi)**

[Effect of dorsal raphe nucleus stimulation on nociceptive response of dorsal horn neurons and efferent pathway analysis in rats] Yu GD, et al. **Sheng Li Hsueh Pao** 1988 Jun;40(3):231–9 (Eng. Abstr.) **(Chi)**

[Objective evaluation of the effect of suggestion analgesia on the pain threshold] Říha J. **Cas Lek Cesk** 1989 May 5;128(19):583–5 (Eng. Abstr.) **(Cze)**

[Cerebral evoked potentials and nociception] Manil J, et al. **Acta Belg Med Phys** 1988 Jul–Sep;11(3):129–30 **(Dut)**

[Cystic fibrosis and abdominal pain] de Meer K, et al. **Ned Tijdschr Geneeskd** 1988 Dec 31;132(53):2393–6 **(Dut)**

[A painful and acute disorder of the leg. Rupture of the tendon of the femoral biceps] Choffray DU. **Acta Belg Med Phys** 1988 Oct–Dec;11(4):175–7 **(Fre)**

[Wegener's disease. Unusual initial symptomatology: acute pain in the lower limbs] Ghilain S, et al. **Acta Neurol Belg** 1988 May–Jul;88(3):140–7 (Eng. Abstr.) **(Fre)**

[Nociceptive flexion reflex. Principles and applications of the threshold determination] Dalmas S, et al. **Ann Fr Anesth Reanim** 1989;8(3):284–6 (Eng. Abstr.) **(Fre)**

[Implication of serotoninergic and peptidergic systems in the mechanisms of pain] Hamon M. **Arch Int Physiol Biochim** 1988 Aug;96(3):A90–1 **(Fre)**

[Interactions between basic and clinical research. 2 examples drawn from a personal experience] Albe-Fessard D. **Can J Neurol Sci** 1988 Aug;15(3):324–32 (Eng. Abstr.) **(Fre)**

[Medial tibial pain in runners] Sepulchre P, et al. **Int Orthop** 1988;12(3):217–21 (Eng. Abstr.) **(Fre)**

[Physiopathology of leg pain] Thiery L. **Phlebologie** 1988 Jul–Oct;41(3):624–34 (Eng. Abstr.) **(Fre)**

[Clinical evaluation of pain. Value of a 2-dimensional index of pain] Harrewyn JM. **Rev Rhum Mal Osteoartic** 1989 Jan;56(1):75–8 **(Fre)**

[What changes in pregnancy? Physiologic principles of anesthesia in labor] Diemer HP. **Gynakologe** 1989 Apr; 22(2):110–4 (49 ref.) **(Ger)**

[Pain modulation in labor by endogenous opiates] Distler W. **Gynakologe** 1989 Apr;22(2):100–3 (35 ref.) **(Ger)**

[Arm pain due to vascular causes] Bollinger A. **Ther Umsch** 1988 Nov;45(11):794–800 (Eng. Abstr.) **(Ger)**

[Pseudoradicular shoulder and arm pain and brachialgia due to stress] Fahrer H. **Ther Umsch** 1988 Nov;45(11):787–93 (Eng. Abstr.) **(Ger)**

[Rheumatologic causes of brachialgia and their treatment] Hasler F, et al. **Ther Umsch** 1988 Nov;45(11):780–6 (Eng. Abstr.) **(Ger)**

[Ontogeny of GABAergic modulation on locomotor activity and pain reactivity in mice] Laviola G. **Ann Ist Super Sanita** 1988;24(4):559–62 (Eng. Abstr.) **(Ita)**

[Physiopathology of intraoperative and postoperative pain] Giron GP, et al. **Minerva Anestesiol** 1988 Apr;54(4):115–22 (21 ref.) **(Ita)**

[Role of an endorphin in pain caused by pulpal stimulation. Study on an experimental animal model] Manzon L. **Minerva Stomatol** 1989 May;38(5):493–5 (Eng. Abstr.) **(Ita)**

[Pain and polymodal receptor] Kumazawa T. **Nippon Seirigaku Zasshi** 1989;51(1):1–15 (70 ref.) **(Jpn)**

[Pain and chemical transmitters] Otsuka M. **Rinsho Shinkeigaku** 1988 Dec;28(12):1367–9 (Eng. Abstr.) **(Jpn)**

[Effect of eating and mazindol on the pain threshold in obese and lean persons] Zahorska-Markiewicz B, et al. **Pol Arch Med Wewn** 1985 Sep;74(3):203–6 (Eng. Abstr.) **(Pol)**

[Changes in the neuronal reactions of the substantia nigra to nociceptive stimuli during electroacupuncture] Ta TL, et al. **Biol Nauki** 1988;(7):53–8 (Eng. Abstr.) **(Rus)**

[The selective role of the nucleus raphe magnus in the mechanisms of analgesia in electrocutaneous pain stimulation, cold stress and the action of morphine] Bragin EO, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):561–3 (Eng. Abstr.) **(Rus)**

[Effects of repeated acupuncture action on pain sensitivity and beta-endorphin contents of the hypothalamus and midbrain of the rat] Bragin EO, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):59–61 (Eng. Abstr.) **(Rus)**

[The role of catecholaminergic group-A5 neurons in analgesia induced by auricular electroacupuncture and in electrodermal pain stimulation] Bragin EO, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):310–2 (Eng. Abstr.) **(Rus)**

[Effect of 5,7-dihydroxytryptamine on pain sensitivity and analgesic activity of morphine] Ignatov IuD, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):311–4 (Eng. Abstr.) **(Rus)**

[changes in the microcirculation system during pain syndrome of spinal etiology] Kryzhanovskiĭ GN, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):280–2 (Eng. Abstr.) **(Rus)**

[The biphasic selective effect of an antiserum to beta-endorphin on pain sensitivity in rats] Litvinova SV, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):402–4 (Eng. Abstr.) **(Rus)**

[Effect of angiotensin II and naloxone on the nociceptive sensitivity of rabbits undergoing electrostimulation of the skin and dental pulp] Raevskaia OS, et al. **Farmakol Toksikol** 1988 Sep–Oct;51(5):23–7 (Eng. Abstr.) **(Rus)**

[Basic principles of the functional organization of the nociceptive and antinociceptive systems of the brain] Limanskiĭ IuP. **Fiziol Zh** 1989 Mar–Apr;35(2):110–21 (58 ref.) (Eng. Abstr.) **(Rus)**

[Neuromuscular excitation and pain sensitivity of rats with various levels of arterial pressure] Bachmanov AA. **Fiziol Zh SSSR** 1989 Apr;75(4):486–92 (Eng. Abstr.) **(Rus)**

[Dynamic changes in the heart beat frequency of rabbits to auditory and nociceptive signals against the background of neuroleptic action] Trubachev VV, et al. **Fiziol Zh SSSR** 1988 Sep;74(9):1269–77 (Eng. Abstr.) **(Rus)**

[Increasing the threshold of skin sensitivity to pain in patients with a predominantly painless form of ischemic heart disease] Kosmachev AA, et al. **Kardiologiia** 1989 Jan; 29(1):56–9 (Eng. Abstr.) **(Rus)**

[The central regulation of pain sensitivity in rats after irradiation with high doses of ionizing radiation]

Abdrakhmanov AA, et al. **Radiobiologiia** 1989 Mar-Apr; 29(2):183-7 (Eng. Abstr.) **(Rus)**

[The possibilities for correcting interhemispheric EEG asymmetry during reflexotherapy of depressive states with pain syndromes] Kočkina OI, et al. **Zh Nevropatol Psikhiatr** 1988;88(10):102-7 (Eng. Abstr.) **(Rus)**

[The lateralization of hemispheric control over pain-induced vocalizations in rats] Bianki VL, et al. **Zh Vyssh Nerv Deiat** 1988 Sep-Oct;38(5):939-44 (Eng. Abstr.) **(Rus)**

[Individual characteristics of the nociceptive sensitivity of rats during the formation of a negative emotional reaction] Bykova EV, et al. **Zh Vyssh Nerv Deiat** 1988 Jul-Aug; 38(4):738-43 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

The reduction of pain on injection of propofol: the effect of addition of lignocaine. Helbo-Hansen S, et al. **Acta Anaesthesiol Scand** 1988 Aug;32(6):502-4

Stimulation of internal capsule, thalamic sensory nucleus (VPM) and cerebral cortex inhibited deafferentation hyperactivity provoked after gasserian ganglionectomy in cat. Namba S, et al. **Acta Neurochir Suppl (Wien)** 1988; 42:243-7

The effects of hypnotic suggestion on pain report. Malone MD, et al. **Am J Clin Hypn** 1989 Apr;31(4):221-30

"Statistical power" and interpretation of small studies: does atracurium pretreatment reduce the incidence of succinylcholine fasciculations? [letter] Burton P, et al. **Anesth Analg** 1989 Aug;69(2):263

Assessment and management of donor pain following marrow harvest for allogeneic bone marrow transplantation. Hill HF, et al. **Bone Marrow Transplant** 1989 Mar;4(2):157-61

Prevention of tourniquet pain by spinal isobaric bupivacaine with clonidine. Bonnet F, et al. **Br J Anaesth** 1989 Jul; 63(1):93-6

Effect of diluting propofol on the incidence of pain on injection and venous sequelae. Stokes DN, et al. **Br J Anaesth** 1989 Feb;62(2):202-3

Hypnosis and pain in patients with severe burns: a pilot study [published erratum appears in Burns Incl Therm Inj 1989 Feb;15(1):67] Van der Does AJ, et al. **Burns Incl Therm Inj** 1988 Oct;14(5):399-404

Narcotics and cancer pain control. Hill CS Jr. **CA** 1988 Nov-Dec;38(6):322-6

Practical aspects of pain control in the patient with cancer. Portenoy RK. **CA** 1988 Nov-Dec;38(6):327-52 (123 ref.)

Effect of caerulein on abdominal pain following transcatheter hepatic arterial embolization in malignant liver cancer patients. Ido K, et al. **Cancer Chemother Pharmacol** 1989; 23 Suppl:S65-7

Soothing pain-elicited distress in infants with swaddling and pacifiers. Campos RG. **Child Dev** 1989 Aug;60(4):781-92

The combination of ibuprofen and oxycodone/acetaminophen in the management of chronic cancer pain. Stambaugh JE Jr, et al. **Clin Pharmacol Ther** 1988 Dec;44(6):665-9

Practical aspects of pain management in cancer patients. Schauer PK, et al. **Conn Med** 1989 Apr;53(4):211-5

Continuous thoracic epidural analgesia for the control of pain associated with pleural sclerosis. Culling RD, et al. **Gynecol Oncol** 1989 Jan;32(1):76-8

Antitumor, nerve blocks and neuroablative therapies for cancer pain. Evans WO. **Indiana Med** 1989 Jun;82(6):446-8 (20 ref.)

Effects of hypnotic analgesia and hypnotizability on experimental ischemic pain. DeBenedittis G, et al. **Int J Clin Exp Hypn** 1989 Jan;37(1):55-69

Guidelines for teaching the Comprehensive Control of Pain and Anxiety in Dentistry. Council on Dental Education, American Dental Association. **J Dent Educ** 1989 May-Jun; 53(5-6):305-10

Issues of pain and anxiety control training and continuing education. Jastak JT. **J Dent Educ** 1989 May-Jun; 53(5-6):293-6

Pain relief after free flap reconstruction in adriamycin necrosis on the dorsum of the hand. A case report. Nettelblad H, et al. **J Hand Surg [Br]** 1989 Feb;14(1):45-6

Reduction in injection pain by buffering of local anesthetic solutions. Eppley BL, et al. **J Oral Maxillofac Surg** 1989 Jul;47(7):762-3

Is cervical laser therapy painful? [editorial] **Lancet** 1989 Jan 14;1(8629):83

Topical anaesthesia for fistula cannulation in haemodialysis patients. Watson AR, et al. **Nephrol Dial Transplant** 1988; 3(6):800-2

Topical skin anesthesia for venous, subcutaneous drug reservoir and lumbar punctures in children. Halperin DL, et al. **Pediatrics** 1989 Aug;84(2):281-4

Concepts in pain control. Kantor TG. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):94-9 (27 ref.)

Neurosurgical concepts of pain control. Young HF. **Va Med** 1989 Apr;116(4):173, 176-7

[Treatment of cancer pain with buprenorphine. Personal experience] Trombatore G, et al. **G Ital Oncol** 1988 Jul-Dec;8(3-4):113-5 (Eng. Abstr.) **(Ita)**

[Evaluation of analgesic protection using RIA determination of prolactin, ACTH, cortisol and aldosterone during general anesthesia with enflurane-isoflurane and buprenorphine] Alteri S, et al. **Minerva Anestesiol** 1987 Nov;53(11):633-7 (Eng. Abstr.) **(Ita)**

[Thermal analgesia following intrathecal capsaicin administration] Harada Y, et al. **Masui** 1988 Sep; 37(9):1101-7 (Eng. Abstr.) **(Jpn)**

[Intrathecal clonidine--how does it work in spinal fentanyl analgesia in rats?] Harada Y, et al. **Masui** 1989 Apr; 38(4):505-11 (Eng. Abstr.) **(Jpn)**

[The efficacy of epidural anesthesia in preventing pain following TAE of liver malignancies] Saito Y, et al. **Rinsho Hoshasen** 1988 Sep;33(9):977-80 (Eng. Abstr.) **(Jpn)**

[Prevention by electropuncture of the hypoalgesic effect of fasting] Vasilenko AM, et al. **Patol Fiziol Eksp Ter** 1989 Jan-Feb;(1):14-7 (Eng. Abstr.) **(Rus)**

[Analgesic effect of physiotherapy in osteoarthritis] Shvartsova I, et al. **Revmatologiia (Moskva)** 1988 Jul-Sep; (3):76-7 **(Rus)**

PSYCHOLOGY

Anxiety, pain and sedation: some psychiatric aspects. Mindus P. **Acta Anaesthesiol Scand Suppl** 1988;88:7-12 (32 ref.)

Psychalgic depressive disorder: a descriptive and comparative study. Chaturvedi SK. **Acta Psychiatr Scand** 1989 Jan;79(1):98-102

Pain in non-psychotic psychiatric patients: life events, symptomatology and personality traits. Jensen J. **Acta Psychiatr Scand** 1988 Aug;78(2):201-7

An indirect method of discovering primary traumatic experiences: two case examples. Cheek DB. **Am J Clin Hypn** 1989 Jul;32(1):41-7

Flashbacks: the character of pain. Sievers MK. **Am J Nurs** 1989 May;89(5):784

Compensation status and symptoms reported by patients with chronic pain. Tait RC, et al. **Arch Phys Med Rehabil** 1988 Dec;69(12):1027-9

Pain control and rational thinking. Implications for rheumatoid arthritis. Parker JC, et al. **Arthritis Rheum** 1989 Aug;32(8):984-90

Tonic pain and social behavior in male rabbits. Farabollini F, et al. **Behav Brain Res** 1988 Dec 1;31(2):169-75

Thoughts provoked by pain. Philips HC. **Behav Res Ther** 1989;27(4):469-73

Accurate and inaccurate predictions of pain. Rachman S, et al. **Behav Res Ther** 1988;26(4):291-6

Cognitive-behavior therapy in the management of chronic, occupational pain of the upper limbs. Spence SH. **Behav Res Ther** 1989;27(4):435-46

Painful crises in sickle cell disease--patients' perspectives. Murray N, et al. **BMJ** 1988 Aug 13;297(6646):452-4

Some personality factors related to dental anxiety and fear of pain. Frazer M, et al. **Br Dent J** 1988 Dec 24; 165(12):436-9

Frequency of use and rated effectiveness of cognitive and behavioural coping responses to burn pain. Blew AF, et al. **Burns Incl Therm Inj** 1989 Feb;15(1):20-2

Chronic pain patients with and without alexithymia. Chaturvedi SK. **Can J Psychiatry** 1988 Dec;33(9):830-3

Use of imagery to describe functional abdominal pain as an aid to diagnosis in a pediatric population. Geist R. **Can J Psychiatry** 1989 Aug;34(6):506-11

Psychiatry and chronic pain. Merskey H. **Can J Psychiatry** 1989 May;34(4):329-36 (49 ref.)

Chronic pain is an invisible reality [letter] Sheffman EJ. **Can Med Assoc J** 1988 Dec 15;139(12):1129

Psychiatric management of cancer pain. Breitbart W. **Cancer** 1989 Jun 1;63(11 Suppl):2336-42 (49 ref.)

The association of psychosocial factors with the resolution of abdominal pain. Adelman AM, et al. **Fam Med** 1988 Jul-Aug;20(4):266-70

Psychopathology and aggressive behaviour in cancer pain perception. Orsolini GC, et al. **Funct Neurol** 1989 Apr-Jun; 4(2):185-8

Anxiety and depression in patients with the abdominal pelvic pain syndrome. Slocumb JC, et al. **Gen Hosp Psychiatry** 1989 Jan;11(1):48-53

A clinical analysis of hysteria and psychalgia. Nimgaonkar SL, et al. **Indian Pediatr** 1989 Mar;26(3):251-6

A romance with pain: a telephone perversion in a woman? Richards AK. **Int J Psychoanal** 1989;70 (Pt 1):153-64

Construction of an observation scale for the behaviour of pain patients. Vlaeyen JW, et al. **Int J Rehabil Res** 1987; 10(4 Suppl 5):263-6

Cognitive mediators in the reduction of pain: the role of expectancy, strategy use, and self-presentation. Marino J, et al. **J Abnorm Psychol** 1989 Aug;98(3):256-62

Psychogenic pain and depressive disorders: an empirical study. Valdés M, et al. **J Affective Disord** 1989 Jan-Feb; 16(1):21-5

Empirically derived Symptom Checklist 90 subgroups of chronic pain patients: a cluster analysis. Jamison RN, et al. **J Behav Med** 1988 Apr;11(2):147-58

Research note: recurrent headaches and stomachaches in preschool children. Stevenson J, et al. **J Child Psychol Psychiatry** 1988 Nov;29(6):897-900

Millon Behavioral Health Inventory norms for chronic pain patients. Labbé EE, et al. **J Clin Psychol** 1989 May; 45(3):383-90

Active coping reduces reports of pain from childbirth. Leventhal EA, et al. **J Consult Clin Psychol** 1989 Jun; 57(3):365-71

Effects of sensory and procedural information on coping with stressful medical procedures and pain: a meta-analysis. Suls J, et al. **J Consult Clin Psychol** 1989 Jun;57(3):372-9

Psychological treatment of distress, pain, and anxiety for young children with cancer. Kuttner L, et al. **J Dev Behav Pediatr** 1988 Dec;9(6):374-81

Changes in pain reactivity induced by unconditioned and conditioned excitatory and inhibitory stimuli. Lysle DT, et al. **J Exp Psychol [Anim Behav]** 1988 Oct;14(4):376-89

Discomfort and disability in upper respiratory tract infection. Lane RS, et al. **J Gen Intern Med** 1988 Nov-Dec;3(6):540-6

Alleviating distress for children in treatment [news] Burklow J. **J Natl Cancer Inst** 1989 May 10;81(10):731-2

Risk factors in the psychosocial work environment for neck and shoulder pain in secretaries. Linton SJ, et al. **J Occup Med** 1989 Jul;31(7):609-13

Spiritual pain. Saunders C. **J Palliat Care** 1988 Sep;4(3):29-32

The role of social modeling in unexplained pediatric pain. Osborne RB, et al. **J Pediatr Psychol** 1989 Mar;14(1):43-61

Children with recurrent abdominal pain and their parents: more somatic complaints, anxiety, and depression than other patient families? Walker LS, et al. **J Pediatr Psychol** 1989 Jun;14(2):231-43

Perceived self-efficacy in coping with cognitive stressors and opioid activation. Bandura A, et al. **J Pers Soc Psychol** 1988 Sep;55(3):479-88

The use of common pain experiences in designing a pain intensity scale for epidemiological purposes. Brattberg G, et al. **J Psychosom Res** 1988;32(4-5):505-12

Fears and beliefs in patients with the pelvic pain syndrome. Kellner R, et al. **J Psychosom Res** 1988;32(3):303-10

Is the MMPI invalid for assessing psychological disturbance in pain related organic conditions? Leavitt F, et al. **J Rheumatol** 1989 Apr;16(4):521-6

How to read The Body in Pain. Morris DB. **Lit Med** 1987; 6:139-55

The clinical significance of pain and cognitive activity in latent labor [letter] Sinclair C. **Obstet Gynecol** 1989 Jun; 73(6):1054

The clinical significance of pain and cognitive activity in latent labor [letter] Turner MI, et al. **Obstet Gynecol** 1989 Aug;74(2):285-6

The clinical significance of pain and cognitive activity in latent labor. Wuitchik M, et al. **Obstet Gynecol** 1989 Jan; 73(1):35-42

Human pain responsivity in a tonic pain model: psychological determinants. Chen AC, et al. **Pain** 1989 May;37(2):143-60 (34 ref.)

The relationship of locus of control to pain coping strategies and psychological distress in chronic pain patients. Crisson JE, et al. **Pain** 1988 Nov;35(2):147-54

Coping with persistent pain: a comparison of persistent pain sufferers in a specialty pain clinic and in a family practice clinic. Crook J, et al. **Pain** 1988 Aug;34(2):175-84

Relationships between depressive symptoms and descriptions of chronic pain. Doan BD, et al. **Pain** 1989 Jan;36(1):75-84

A comparison of family functioning when mothers have chronic pain. Dura JR, et al. **Pain** 1988 Oct;35(1):79-89

The utility of cognitive coping strategies for altering pain perception: a meta-analysis. Fernandez E, et al. **Pain** 1989 Aug;38(2):123-35 (92 ref.)

Relationship of pain impact and significant other reinforcement of pain behaviors: the mediating role of gender, marital status and marital satisfaction. Flor H, et al. **Pain** 1989 Jul;38(1):45-50

The relationship between pain drawings and the psychological state. Ginzburg BM, et al. **Pain** 1988 Nov; 35(2):141-6

The influence of physical and psychosocial factors on accuracy of memory for pain in chronic pain patients. Jamison RN, et al. **Pain** 1989 Jun;37(3):289-94

Coping with rheumatoid arthritis pain: catastrophizing as a maladaptive strategy. Keefe FJ, et al. **Pain** 1989 Apr; 37(1):51-6

Personalized evaluation of self-hypnosis as a treatment of chronic pain: a repertory grid analysis. Large RG, et al. **Pain** 1988 Nov;35(2):155-69

Anxiety and pain response changes across treatment: sensory decision analysis. Malow RM, et al. **Pain** 1989 Jul; 38(1):35-44

Biofeedback of somatosensory event-related potentials: can individual pain sensations be modified by biofeedback-induced self-control of event-related potentials? Miltner W, et al. **Pain** 1988 Nov;35(2):205-13

The dimensionality of verbal descriptors in Tursky's pain perception profile. Morley S. **Pain** 1989 Apr;37(1):41-9

Japanese version of the MPQ and pentagon profile illustrated perceptual characteristics of pain [letter] Satow A, et al. **Pain** 1989 Apr;37(1):125-6

Motivational effects of opioids in an animal model of prolonged inflammatory pain: alteration in the effects of kappa- but not of mu-receptor agonists. Shippenberg TS, et al. **Pain** 1988 Nov;35(2):179-86

The detection of psychiatric illness and psychological handicaps in a British pain clinic population. Tyrer SP, et al. **Pain** 1989 Jan;36(1):63-74

Conditioned response models of placebo phenomena: further support. Voudouris NJ, et al. **Pain** 1989 Jul;38(1):109-16

An empirical assessment of pain beliefs. Williams DA, et al. **Pain** 1989 Mar;36(3):351-8

The cold pressor pain paradigm in children: feasibility of an intervention model (Part II). Zeltzer LK, et al. **Pain** 1989 Jun;37(3):305-13

Developmental and psychological factors in children's pain.

McGrath PJ, et al. **Pediatr Clin North Am** 1989 Aug; 36(4):823–36 (47 ref.)
Suffering children hurt us. Barber J. **Pediatrician** 1989; 16(1–2):119–23
Pediatric pain: the parents' role. Dolgin MJ, et al. **Pediatrician** 1989;16(1–2):103–9 (28 ref.)
Children's strategies for coping with pain. Siegel LJ, et al. **Pediatrician** 1989;16(1–2):110–8 (44 ref.)
Gender effects in pain perception. Lander J, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1088–90
SDT analysis of experimental thermal pain, with "signal" and "no-signal" being determined psychophysically. Lautenbacher S, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1019–30
DST in chronic pain patients not suffering from major depression. Magni G, et al. **Pharmacopsychiatry** 1989 Jan; 22(1):8–10
Depression and anxiety in patients with chronic pelvic pain. Grandi S, et al. **Psychiatr Med** 1988;6(4):1–7
Consumption of attention versus affect elicited by cognitions in modifying acute pain. Stevens MJ, et al. **Psychol Rep** 1989 Feb;64(1):284–6
Engel's "Psychogenic Pain and the Pain-Prone Patient:" a retrospective, controlled clinical study. Adler RH, et al. **Psychosom Med** 1989 Jan–Feb;51(1):87–101
Discomfort or disability in patients with chronic pain syndrome. Poulsen DL, et al. **Psychother Psychosom** 1987; 48(1–4):60–2
Psychogenic pain and psychological variables: a psychometric study. Valdés M, et al. **Psychother Psychosom** 1988;50(1):15–21
Explaining the pain of active labor: the importance of maternal confidence. Lowe NK. **Res Nurs Health** 1989 Aug;12(4):237–45
Psychogenic pain disorder in children. Pillay AL, et al. **S Afr Med J** 1989 Sep 2;76(5):195–6
The development of the Dallas Pain Questionnaire. An assessment of the impact of spinal pain on behavior. Lawlis GF, et al. **Spine** 1989 May;14(5):511–6
Psychological aspects of pain management. Klinger RL, et al. **Va Med** 1989 Apr;116(4):177–9, 182
[Psychological factors associated with chronic pain] Magni G, et al. **Presse Med** 1989 Apr 15;18(15):770–5 (27 ref.) (Eng. Abstr.) **(Fre)**
[Behavioral conceptualization of chronic pain] Gaha L, et al. **Tunis Med** 1989 Jan;67(1):11–5 (23 ref.) **(Fre)**
[The patient with chronic pelvic pain] Springer-Kremser M. **Gynakol Rundsch** 1988;28 Suppl 2:84–9 (6 ref.) **(Ger)**
[Theory and practice of preparation for labor] Stauber M. **Gynakologe** 1989 Apr;22(2):84–9 (46 ref.) **(Ger)**
[Engel's "psychogenic pain and the patient susceptible to pain": a retrospective, controlled clinical study] Adler RH, et al. **Psychother Psychosom Med Psychol** 1989 Jun; 39(6):209–18 (Eng. Abstr.) **(Ger)**
[Object related function of pain and depression] Ahrens S, et al. **Psychother Psychosom Med Psychol** 1989 Jun; 39(6):219–22 (Eng. Abstr.) **(Ger)**
[Psychogenic pain as a representation of the maternal object] Hirsch M. **Psychother Psychosom Med Psychol** 1989 Jun; 39(6):202–8 (43 ref.) (Eng. Abstr.) **(Ger)**
[The patient with psychogenic and psychosomatic pain. Outline of psychoanalytically oriented nosology] Hoffmann SO, et al. **Psychother Psychosom Med Psychol** 1989 Jun; 39(6):193–201 (43 ref.) (Eng. Abstr.) **(Ger)**
[Psychodynamic aspects of the patient with pain] Hoffmann SO, et al. **Psychother Psychosom Med Psychol** 1989 Jun; 39(6):183–4 **(Ger)**
[Early psychoanalytic concepts of pain] Kütemeyer M, et al. **Psychother Psychosom Med Psychol** 1989 Jun; 39(6):185–92 (69 ref.) (Eng. Abstr.) **(Ger)**
[Validity of the diagnosis "psychogenic pain" in a 5-year follow-up study] Sauvant JD, et al. **Schweiz Rundsch Med Prax** 1988 Dec 13;77(50):1379–82 (Eng. Abstr.) **(Ger)**
[Pain and personality—a review of the literature with special reference to depressive syndromes] Classen W. **Z Klin Psychol Psychopathol Psychother** 1989;37(2):146–61 (130 ref.) (Eng. Abstr.) **(Ger)**
[Psychological aspects of the pathogenesis of pain] Lazowski J. **Przegl Lek** 1989;46(4):415–9 (28 ref.) **(Pol)**
[Effect of neuroses on dopamine metabolism in the brain of rats with various activities on the "open field" test] Sau'skaia NB. **Fiziol Zh SSSR** 1989 Mar;75(3):397–400 **(Rus)**
[A psycholinguistic method in the complex differential diagnostic examination of patients with abdominal pain syndromes] Vanchakova NP, et al. **Zh Nevropatol Psikhiatr** 1988;88(7):124–9 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Diagnosis and treatment of obscure ulnar-sided wrist pain. Bottke CA, et al. **Orthopedics** 1989 Aug;12(8):1075–9
Neck pain after trauma. Swischuk LE. **Pediatr Emerg Care** 1988 Sep;4(3):219–21

RADIONUCLIDE IMAGING

Diagnosis of acute bone pain using isotope bone imaging. Reichl M, et al. **Arch Emerg Med** 1988 Sep;5(3):169–72

RADIOTHERAPY

Pulsed electromagnetic energy and childbirth [letter] Ross MD. **Lancet** 1989 Aug 5;2(8658):331

REHABILITATION

Advances in electromyographic monitoring and biofeedback in the treatment of chronic cervical and low back pain. Middaugh SJ, et al. **Adv Clin Rehabil** 1987;1:137–72 (80 ref.)
Pain management by occupational therapists. McCormack GL. **Am J Occup Ther** 1988 Sep;42(9):582–90 (69 ref.)
Biomechanical and osteopathic approach to shoulder pain. Goldman S. **J Am Osteopath Assoc** 1989 Jan;89(1):53–7

STANDARDS

The accumulation of organotins in adult and seed oysters from selected estuaries prior to the introduction of U.K. regulations governing the use of tributyltin-based antifouling paints. Ebdon L, et al. **Sci Total Environ** 1989 Jul 1;83(1–2):63–84

SURGERY

Advances in stereotactic and functional neurosurgery 8. Proceedings of the 8th meeting of the European Society for Stereotactic and Functional Neurosurgery. Budapest, 1988. **Acta Neurochir Suppl (Wien)** 1989;46:1–114
Thalamic pain and stereotactic mesencephalotomy. Shieff C, et al. **Acta Neurochir Suppl (Wien)** 1988;42:239–42
Myelotomies for chronic pain. van Roost D, et al. **Acta Neurochir Suppl (Wien)** 1989;46:69–72 (14 ref.)
The surgical management of pain. Rowley DI. **Baillieres Clin Rheumatol** 1987 Apr;1(1):155–81 (53 ref.)
Neurosurgery in the treatment of cancer pain. Sundaresan N, et al. **Cancer** 1989 Jun 1;63(11 Suppl):2365–77 (84 ref.)
The status of dorsal root entry zone lesions in 1987. Nashold BS Jr, et al. **Clin Neurosurg** 1989;35:422–8
Operative treatment of subcalcaneal pain. Anderson RB, et al. **Foot Ankle** 1989 Jun;9(6):317–23 (38 ref.)
Metatarsal osteotomy for primary metatarsalgia: radiographic and pedobarographic study. Dreeben SM, et al. **Foot Ankle** 1989 Apr;9(5):214–8
Of pancreas, pain, and papilla. **Lancet** 1988 Nov 12; 2(8620):1116–7 (28 ref.)
Microsurgical DREZ-otomy for the treatment of spasticity and pain in the lower limbs. Sindou M, et al. **Neurosurgery** 1989 May;24(5):655–70
Drez lesions for brachial plexus injury [letter] Sindou M. **Neurosurgery** 1988 Oct;23(4):528
Neurosurgical treatment of persistent pain. Physiological and pathological mechanisms of human pain. Gybels JM, et al. **Pain Headache** 1989;11:1–402 (1158 ref.)
Evoked potentials from the human thalamus: correlation with microstimulation and single unit recording. Yamashiro K, et al. **Stereotact Funct Neurosurg** 1989;52(2–4):127–35
[The Helal procedure in the treatment of static metatarsalgia due to flatfoot] Vichard P, et al. **Rev Chir Orthop** 1988; 74 Suppl 2:227–9 **(Fre)**
[Experiences with the "epigastric pain syndrome"] Meier W. **Helv Chir Acta** 1989 Jan;55(5):731–6 (Eng. Abstr.) **(Ger)**
[Spinal and medullary DREZ lesions for deafferentation pain] Ishijima B. **No Shinkei Geka** 1988 Nov;16(12):1331–7 **(Jpn)**

THERAPY

Recent evolution of the pain clinic concept and the role of the anesthesiologist. Devoghel JC, et al. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):91–3
Thoracic paravertebral block: a method of pain control. Gilbert J, et al. **Acta Anaesthesiol Scand** 1989 Feb; 33(2):142–5
Stereotactic mesencephalic tractotomy in the treatment of chronic cancer pain. Frank F, et al. **Acta Neurochir (Wien)** 1989;99(1–2):38–40
Management of pain after thermal injury. Ahrenholz DH, et al. **Adv Clin Rehabil** 1987;1:215–29 (41 ref.)
Pain management in cancer rehabilitation. Wu WH. **Adv Clin Rehabil** 1987;1:289–317 (68 ref.)
A framework for management of chronic pain. Amadio P Jr, et al. **Am Fam Physician** 1988 Nov;38(5):155–60
Hypnotherapy as an adjunct to narcotic analgesia for the treatment of pain for burn debridement. Patterson DR, et al. **Am J Clin Hypn** 1989 Jan;31(3):156–63
Hypnotic versus active cognitive strategies for alleviation of procedural distress in pediatric oncology patients. Wall VJ, et al. **Am J Clin Hypn** 1989 Jan;31(3):181–91
Saphenous nerve entrapment at the adductor canal. Romanoff ME, et al. **Am J Sports Med** 1989 Jul–Aug;17(4):478–81
Epidural morphine delivered by a percutaneous epidural catheter for outpatient treatment of cancer pain. Downing JE, et al. **Anesth Analg** 1988 Dec;67(12):1159–61
Unilateral Horner's syndrome associated with interpleural catheter injection of local anesthetic. Parkinson SK, et al. **Anesth Analg** 1989 Jan;68(1):61–2
Pain of delayed traumatic splenic rupture masked by intrapleural lidocaine. Pond WW, et al. **Anesthesiology** 1989 Jan;70(1):154–5
Percutaneous CT guided nerve block of the coeliac plexus and splanchnic nerves. Herpels V, et al. **Ann Radiol (Paris)** 1988;31(5):291–6 (13 ref.)
Injections and physiotherapy for the painful stiff shoulder. Dacre JE, et al. **Ann Rheum Dis** 1989 Apr;48(4):322–5
Femoral nerve block for analgesia in fractures of the femoral neck. Finlayson BJ, et al. **Arch Emerg Med** 1988 Sep; 5(3):173–6
Chronic pain: its treatment in geriatric and younger patients. Middaugh SJ, et al. **Arch Phys Med Rehabil** 1988 Dec; 69(12):1021–6
Chronic lower leg pain in sport. James T. **Aust Fam Physician** 1988 Dec;17(12):1041–5
Physiotherapy methods of relieving pain. Moncur C, et al. **Baillieres Clin Rheumatol** 1987 Apr;1(1):183–93 (45 ref.)
Psychiatric aspects of pain and their treatment. Pilowsky I. **Baillieres Clin Rheumatol** 1987 Apr;1(1):195–209 (35 ref.)
The place of the pain clinic. Wells JC. **Baillieres Clin Rheumatol** 1987 Apr;1(1):123–53 (17 ref.)
Pain relief in active patients with cancer: the early use of nerve blocks improves the quality of life. Lipton S. **BMJ** 1989 Jan 7;298(6665):37–8 (9 ref.)
Recent advances in the treatment of chronic pain. Budd K. **Br J Anaesth** 1989 Aug;63(2):207–12 (63 ref.)
Pain control in breast cancer. A panel discussion. McGuire WL, et al. **Breast Cancer Res Treat** 1989 Jan;13(1):5–15 (0 ref.)
Pain relief in burns—how we do it. Wilson GR, et al. **Burns Incl Therm Inj** 1988 Aug;14(4):331–2
Continuity of care for the cancer patient with chronic pain. Coyle N. **Cancer** 1989 Jun 1;63(11 Suppl):2289–93
Pain experience and pain management among hospitalized cancer patients. A clinical study. Dorrepaal KL, et al. **Cancer** 1989 Feb 1;63(3):593–8
Quality of life as an outcome variable in the management of cancer pain. Ferrell BR, et al. **Cancer** 1989 Jun 1;63(11 Suppl):2321–7
Anesthetic techniques for the management of cancer pain. Ferrer-Brechner T. **Cancer** 1989 Jun 1;63(11 Suppl):2343–7 (25 ref.)
Integration of pain management into comprehensive cancer care. Levy MH. **Cancer** 1989 Jun 1;63(11 Suppl):2328–35
Pain relief for cancer patients. Dalton JA, et al. **Cancer Nurs** 1988 Dec;11(6):322–8
Initial experience in a special pain clinic in Nigeria. Umeh B. **Cent Afr J Med** 1989 Mar;35(3):351–5
Behavioral techniques in pain modification. McKee MG. **Cleve Clin J Med** 1989 Jul–Aug;56(5):502–8 (45 ref.)
Occurrence and treatment of pain after brachial plexus injury. Bruxelle J, et al. **Clin Orthop** 1988 Dec;(237):87–95
A conservative approach to anterior knee pain. Whitelaw GP Jr, et al. **Clin Orthop** 1989 Sep;(246):234–7
Growing pains. Doughty RA. **Del Med J** 1988 Nov; 60(11):641–4
Social work's role in managing chronic pain. Montague J, et al. **Dimens Health Serv** 1989 Apr;66(3):23–6
Effect of acupuncture on sinus pain and experimentally induced pain. Lundeberg T, et al. **Ear Nose Throat J** 1988 Aug;67(8):565–6, 571–2, 574–5
Algodystrophy: treatment. Bossi L, et al. **Funct Neurol** 1989 Apr–Jun;4(2):157–60 (13 ref.)
Combating pain [letter] McNeely C. **Geriatr Nurs (New York)** 1988 Nov–Dec;9(6):317
Ongoing treatment of a Hmong widow who suffers from pain and depression. Frances A. **Hosp Community Psychiatry** 1989 Jul;40(7):691–3
Effects of restricted environmental stimulation: enhancement of hypnotizability for experimental and chronic pain control. Barabasz AF, et al. **Int J Clin Exp Hypn** 1989 Jul;37(3):217–31
Quality of life following treatment: a preliminary study of in- and outpatients with chronic pain. Tait RC, et al. **Int J Psychiatry Med** 1988;18(3):271–82
The nursing management of pain in the community: a theoretical framework. Walker JM, et al. **J Adv Nurs** 1989 Mar;14(3):240–7
Management of pain during abortion. Wells N. **J Adv Nurs** 1989 Jan;14(1):56–62
50 patients with an ion transfer unit, the Phoresor by Iomed [letter] Karlin MT. **J Am Podiatr Med Assoc** 1989 Sep; 79(9):466
Electroacupuncture therapy for stump neuroma pain. A case report. Sidlow CJ, et al. **J Am Podiatr Med Assoc** 1989 Jan;79(1):31–4
Pain-patient Minnesota Multiphasic Personality Inventory (MMPI) subgroups: evaluation of long-term treatment outcome. Guck TP, et al. **J Behav Med** 1988 Apr; 11(2):159–69
Compliance with an outpatient stress reduction program: rates and predictors of program completion. Kabat-Zinn J, et al. **J Behav Med** 1988 Aug;11(4):333–52
An inventory to measure medical staff knowledge of behavioral methods with pediatric pain patients. Tarnowski KJ, et al. **J Behav Ther Exp Psychiatry** 1988 Dec; 19(4):281–4
Cancer pain education: a call for role models [editorial] Weissman DE. **J Clin Oncol** 1988 Dec;6(12):1793–4
A comparison of cognitive-behavioral and hypnotic treatments of chronic pain. Edelson J, et al. **J Clin Psychol** 1989 Mar;45(2):316–23
Cognitive-behavioral treatment of recurrent nonspecific abdominal pain in children: an analysis of generalization, maintenance, and side effects. Sanders MR, et al. **J Consult Clin Psychol** 1989 Apr;57(2):294–300
Chiropractic distractive decompression in treating pelvic pain and multiple system pelvic organic dysfunction. Browning

JE. **J Manipulative Physiol Ther** 1989 Aug;12(4):265–74
Chiropractic distractive decompression in the treatment of pelvic pain and organic dysfunction in patients with evidence of lower sacral nerve root compression. Browning JE. **J Manipulative Physiol Ther** 1988 Oct;11(5):426–32
Osteochondrosis of the tibial tuberosity (Osgood–Schlatter's disease). Irowa GO. **J Manipulative Physiol Ther** 1989 Feb; 12(1):46–9
Management of pain in patients with malignancy. Brena SF, et al. **J Med Assoc Ga** 1989 Aug;78(8):567–71
Spinal cord stimulation in management of chronic pain. A 9-year experience. Meglio M, et al. **J Neurosurg** 1989 Apr; 70(4):519–24
Managing minor pain in pregnancy [letter] Beal MW. **J Nurse Midwifery** 1989 Jan–Feb;34(1):50
Effects of active and completed litigation on treatment results: workers' compensation patients compared with other litigation patients. Talo S, et al. **J Occup Med** 1989 Mar;31(3):265–9
Assessing the quality of cancer pain management. Mohide EA, et al. **J Palliat Care** 1988 Sep;4(3):9–15
Consensus: pain management ineffective. Copp LA. **J Prof Nurs** 1986 Sep–Oct;2(5):272, 333 (7 ref.)
Psychological treatment of chronic pain: a selective review. Benjamin S. **J Psychosom Res** 1989;33(2):121–31 (54 ref.)
Chronic pain in the United States [letter] Kuczmierczyk AR. **J Psychosom Res** 1988;32(4–5):551
Hypnotic techniques for the management of pain. Carasso RL, et al. **J R Soc Health** 1988 Oct;108(5):176–9 (44 ref.)
Shoulder pain. Ji XP. **J Tradit Chin Med** 1988 Dec;8(4):310–2
Electroimpulse acupuncture treatment of 110 cases of abdominal pain as a sequela of abdominal surgery. Wang XM. **J Tradit Chin Med** 1988 Dec;8(4):269–70
Treatment of acute gastric pain by needling acupoints Liangqiu and Weishu. Xu PC. **J Tradit Chin Med** 1989 Jun;9(2):84–6
Ultrasound/PEME for perineal pain [editorial] **Lancet** 1989 Jul 1;2(8653):22–3
Pain management programs. Clinical and research perspectives. Keefe FJ, et al. **N C Med J** 1988 Oct; 49(10):526–9 (13 ref.)
Myalgic encephalomyelitis [letter] **N Z Med J** 1988 Nov 23; 101(858):800–1
Myalgic encephalomyelitis [letter] Willoughby E. **N Z Med J** 1989 Jan 25;102(860):19–20
Spinal cord stimulation for relief of chronic pain in vasospastic disorders of the upper limbs. Robaina FJ, et al. **Neurosurgery** 1989 Jan;24(1):63–7
An association between phantom limb sensations and stump skin conductance during transcutaneous electrical nerve stimulation (TENS) applied to the contralateral leg: a case study. Katz J, et al. **Pain** 1989 Mar;36(3):367–77
Central post-stroke pain—the effect of high and low frequency TENS. Leijon G, et al. **Pain** 1989 Aug; 38(2):187–91
Meta-analysis of non-medical treatments for chronic pain [published erratum appears in Pain 1989 Apr;37(1):128] Malone MD, et al. **Pain** 1988 Sep;34(3):231–44 (122 ref.)
Psychophysical observations on patients with neuropathic pain relieved by a sympathetic block. Price DD, et al. **Pain** 1989 Mar;36(3):273–88
Continuing care: a major issue in cancer pain management. Ventafridda V. **Pain** 1989 Feb;36(2):137–43
The treatment of cancer pain in children. Miser AW, et al. **Pediatr Clin North Am** 1989 Aug;36(4):979–99 (52 ref.)
Hypnotherapy: a cyberphysiologic strategy in pain management. Olness K. **Pediatr Clin North Am** 1989 Aug; 36(4):873–84 (36 ref.)
Management of burn pain in children. Osgood PF, et al. **Pediatr Clin North Am** 1989 Aug;36(4):1001–13 (61 ref.)
The treatment of pain in the emergency department. Selbst SM, et al. **Pediatr Clin North Am** 1989 Aug;36(4):965–78 (49 ref.)
The management of pain in sickle cell disease. Shapiro BS. **Pediatr Clin North Am** 1989 Aug;36(4):1029–45 (108 ref.)
Managing pain in the pediatric emergency department. Selbst SM. **Pediatr Emerg Care** 1989 Mar;5(1):56–63 (79 ref.)
Pediatric pain clinics: recommendations for their development. Berde C, et al. **Pediatrician** 1989; 16(1–2):94–102 (41 ref.)
Management of young children's acute pain and anxiety during invasive medical procedures. Kuttner L. **Pediatrician** 1989;16(1–2):39–44 (19 ref.)
Assessment and management of chronic and recurrent pain in children with chronic diseases. Varni JW, et al. **Pediatrician** 1989;16(1–2):56–63 (51 ref.)
Effects of auricular transcutaneous electrical nerve stimulation on distal extremity pain: a pilot study. Longobardi AG, et al. **Phys Ther** 1989 Jan;69(1):10–7
Selected problems in the use of transcutaneous electrical nerve stimulation for pain control—an appraisal with proposed solutions. A special communication. Nolan MF. **Phys Ther** 1988 Nov;68(11):1694–8 (23 ref.)
Studies of PAG/PVG stimulation for pain relief in humans. Barbaro NM. **Prog Brain Res** 1988;77:165–73 (33 ref.)
Current issues regarding subcortical electrical stimulation for pain control in humans. Hosobuchi Y. **Prog Brain Res** 1988; 77:189–92 (26 ref.)
Problems and controversies in PVG and sensory thalamic stimulation as treatment for pain. Meyerson BA. **Prog Brain Res** 1988;77:175–88 (61 ref.)
Treating chronic pain [letter] Kuczmierczyk AR. **Psychosomatics** 1989 Winter;30(1):118
Electrostimulation and neurosurgical measures in cancer pain. Siegfried J. **Recent Results Cancer Res** 1988;108:28–32 (8 ref.)
Epidural opiates and nerve blocks. Zenz M. **Recent Results Cancer Res** 1988;108:18–27 (24 ref.)
Effect of vibratory stimulation on experimental and clinical pain. Lundeberg T, et al. **Scand J Rehabil Med** 1988; 20(4):149–59
Future directions in therapy of pain in osteoarthritis. Ehrlich GE. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):100–4 (22 ref.)
Management of pain and other symptoms of advanced prostatic cancer. Labasky RF, et al. **Semin Urol** 1988 Nov; 6(4):311–21 (34 ref.)
Pain: its experience and treatments. Baszanger I. **Soc Sci Med** 1989;29(3):425–34
Percutaneous dorsal column stimulator for chronic pain control. Racz GB, et al. **Spine** 1989 Jan;14(1):1–4
Electrical stimulation across the midline and between basal ganglion nuclei. Heimburger RF. **Stereotact Funct Neurosurg** 1989;52(2–4):227–33
Transcutaneous electrical nerve stimulation and spinal cord stimulation for pain relief in reflex sympathetic dystrophy. Robaina FJ, et al. **Stereotact Funct Neurosurg** 1989; 52(1):53–62
Control of pain by electrical stimulation [editorial] Mooney V. **Tex Med** 1988 Nov;84(11):6
Pain management across age groups. Burke SO, et al. **West J Nurs Res** 1989 Apr;11(2):164–78; discussion 178–80
Effects of music in patients who had chronic cancer pain. Zimmerman L, et al. **West J Nurs Res** 1989 Jun; 11(3):298–309
[Cross-transvertebral puncture in spinal ganglion block in the treatment of pain. Initial experience with a new percutaneous method] Kolařík J, et al. **Cesk Neurol Neurochir** 1988 Sep;51(5):323–7 (Eng. Abstr.) (Cze)
[Therapy of tumor pain] Polák J, et al. **Sb Lek** 1988 Nov; 90(11–12):358–63 (Eng. Abstr.) (Cze)
[Low-dose laser treatment of pain of the locomotor apparatus (letter)] Jensen H. **Ugeskr Laeger** 1989 Jul 24;151(30):1944 (Dan)
[Inguinal and hip pain] Lindgren KA, et al. **Duodecim** 1988; 104(13):1001–3 (Fin)
[Treatment of chronic pain of the musculoskeletal system by epidural stimulation] Husson JL, et al. **J Chir (Paris)** 1988 Aug–Sep;125(8–9):522–4 (Eng. Abstr.) (Fre)
[Hemodilution and pain] Duruble M, et al. **Phlebologie** 1989 Jan–Mar;42(1):131–6 (Eng. Abstr.) (Fre)
[Technical possibilities in the treatment of leg pain] Verschraegen R. **Phlebologie** 1988 Jul–Oct;41(3):635–41 (Fre)
[New treatments of pain in digestive tumor pathology] Brasseur L, et al. **Presse Med** 1988 Oct 1;17(33):1673–4 (Fre)
[Effects of naloxone on the analgesia induced by vibratory stimulation (letter)] Guieu R, et al. **Presse Med** 1989 Jun 17;18(24):1207–8 (Fre)
[Blockade of the suprascapular nerve in shoulder pain] Bruns J, et al. **Anasth Intensivther Notfallmed** 1989 Apr; 24(2):100–2 (Eng. Abstr.) (Ger)
[Combination therapy of transcutaneous electric nerve stimulation and iontophoresis with benzydamine and diclofenac] Bremerich A, et al. **Arzneimittelforschung** 1988 Jun;38(6):842–5 (Eng. Abstr.) (Ger)
[Nerve block procedures in cancer pain] Porges P. **Gynakol Rundsch** 1988;28(4):244–7 (Ger)
[The effect of lumbar catheter peridural anesthesia on the course of labor] Albrecht H. **Gynakologe** 1989 Apr; 22(2):115–20 (24 ref.) (Ger)
[Cooperation between obstetrics and anesthesia] Beck L. **Gynakologe** 1989 Apr;22(2):132–5 (Ger)
[Cooperation between obstetrics and anesthesia. II. From the viewpoint of anesthesiology] Dick W. **Gynakologe** 1989 Apr;22(2):136–8 (Ger)
[Anesthesia in high risk pregnancies from the viewpoint of obstetrics] Diemer HP, et al. **Gynakologe** 1989 Apr; 22(2):121–3 (6 ref.) (Ger)
[Acupuncture in labor preparation] Lackinger I. **Gynakologe** 1989 Apr;22(2):90–5 (10 ref.) (Ger)
[Effect of analgesia and anesthesia in obstetrics on the fetus and newborn infant] Pelzer V, et al. **Gynakologe** 1989 Apr; 22(2):124–31 (62 ref.) (Ger)
[Transvaginal conduction and infiltration anesthesias] von Matthiessen H. **Gynakologe** 1989 Apr;22(2):108–9 (12 ref.) (Ger)
[Use of psychological pain-control technics in psychiatry] Petermann H, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1988 May; 40(5):257–63 (14 ref.) (Eng. Abstr.) (Ger)
[Catheter epidural analgesia in serial rib fractures] Sandtner W, et al. **Unfallchirurg** 1989 Apr;92(4):159–63 (Eng. Abstr.) (Ger)
[Considerations of the placebo problem in acupuncture. Reflections on usefulness, ethical justification, standardization and differentiated use of placebos in acupuncture] Kubiena G. **Wien Klin Wochenschr** 1989 May 12;101(10):362–7 (35 ref.) (Eng. Abstr.) (Ger)
[Pain therapy other than with drugs with special reference to headache] Barolin GS. **Wien Med Wochenschr** 1988 Dec 31;138(23–24):600–4 (4 ref.) (Eng. Abstr.) (Ger)
[Hypnosis in the control of pain] Arnon G, et al. **Harefuah** 1988 Oct;115(7–8):187–90 (47 ref.) (Heb)
[Medial tibial pain syndrome] Almdahl SM, et al. **Tidsskr Nor Laegeforen** 1988 Aug 30;108(24):1912–3 (Eng. Abstr.) (Nor)
[Psychological aspects of the treatment of pain] Tazowski J. **Przegl Lek** 1989;46(3):360–2 (15 ref.) (Pol)
[Acupuncture reflex therapy in the treatment of coccygodynia] Gataullin IG, et al. **Khirurgiia (Mosk)** 1989 Feb;(2):64–6 (Eng. Abstr.) (Rus)
[Clinico-physiologic aspects of local hypothermia of the extremities] Vogulkin SE, et al. **Vestn Khir** 1988 Oct; 141(10):68–71 (Eng. Abstr.) (Rus)
[Use of transcranial electrical action for the treatment of painful neurologic syndromes] Akimov GA, et al. **Voen Med Zh** 1989 Mar;(3):27–8 (Rus)
[19th national meeting of the Spanish Society of Anesthesiology, Resuscitation and Pain Therapy. Santander, 10–13 May 1989. Abstracts] **Rev Esp Anestesiol Reanim** 1989 May;36 Suppl 1:1–125 (Spa)
[Trans-sacral neurolytic block for the treatment of chronic perineal pain of oncologic origin] Miralles Pardo FS, et al. **Rev Esp Anestesiol Reanim** 1988 May–Jun;35(3):130–5 (Eng. Abstr.) (Spa)
[Muscular training in neck and shoulder problems is an effective therapeutic method of pain relief] Dyrssen T, et al. **Lakartidningen** 1989 May 31;86(22):2116, 2118–20 (Swe)

URINE

Radioimmunoassay of buprenorphine in urine: studies in patients and in a drug clinic. Hand CW, et al. **J Anal Toxicol** 1989 Mar–Apr;13(2):100–4

VETERINARY

Effects of medetomidine on the experimental auricular pain in dogs. Ylisela E, et al. **Acta Vet Scand Suppl** 1989; 85:187–91
Management of pain in the traumatized animal. Raffe MR. **Semin Vet Med Surg (Small Anim)** 1988 Aug;3(3):210–5

PAIN, FACIAL see **FACIAL PAIN**

PAIN INSENSITIVITY, CONGENITAL see **ANALGESIA, CONGENITAL**

PAIN, INTRACTABLE

Schools of thought on pain. Vrancken MA. **Soc Sci Med** 1989;29(3):435–44

CLASSIFICATION

The Edmonton staging system for cancer pain: preliminary report. Bruera E, et al. **Pain** 1989 May;37(2):203–9

DRUG THERAPY

Analgesic effect and bioavailability of oral ketogan given as tablets or mixture to patients with chronic pain of malignant origin. Kjaer M, et al. **Acta Oncol** 1988; 27(5):583–9
Effects of microtubular transport blockade in peripheral nerve axons on chronic unallayable root pain. Pěničková V, et al. **Acta Univ Palacki Olomuc Fac Med** 1988; 118:93–105
Long-term post-thoracotomy cancer pain management with interpleural bupivacaine. Fineman SP. **Anesth Analg** 1989 May;68(5):694–7
The radionuclide assessment of a system for slow intrathecal infusion of drugs. Hicks RJ, et al. **Clin Nucl Med** 1989 Apr;14(4):275–7
Hydromorphone levels and pain control in patients with severe chronic pain. Reidenberg MM, et al. **Clin Pharmacol Ther** 1988 Oct;44(4):376–82
Tolerance during long-term administration of intrathecal morphine. Ali NM, et al. **Conn Med** 1989 May;53(5):266–8
Percutaneous epidural catheterization for intractable pain in terminal cancer patients. Ali NM, et al. **Gynecol Oncol** 1989 Jan;32(1):22–5
Pamidronate to reduce bone pain in normocalcaemic patient with disseminated prostatic carcinoma [letter] Masud T, et al. **Lancet** 1989 May 6;1(8645):1021–2
Spinal bupivacaine for the pain of cancer [letter] Hunt R, et al. **Med J Aust** 1989 Mar 20;150(6):350
Intrathecal administration of hypertonic saline [letter] Savitz MH, et al. **Neurosurgery** 1988 Aug;23(2):270–1
Does intravenous methadone provide longer lasting analgesia than intravenous morphine? A randomized, double-blind study. Grochow L, et al. **Pain** 1989 Aug;38(2):151–7
Analgesia with epidural calcitonin in cancer patients. Miseria S, et al. **Tumori** 1989 Apr 30;75(2):183–4
Treatment of painful prostatic bone metastases with oral etidronate disodium. Carey PO, et al. **Urology** 1988 Nov; 32(5):403–7
[Relief of stable pains of advanced primary hepatic cancer patients by an injection of morphine administered through a duct retained in the extradural cave] Chen ZD. **Chung Hua Hu Li Tsa Chih** 1988 Aug;23(8):463–4 (Chi)
[Iontophoretic administration of vinblastine in the control of refractory spinal root pain and postherpetic neuralgia]

Opavský J, et al. **Cas Lek Cesk** 1989 May 5;128(19):590–4 (Eng. Abstr.) (Cze)

[Intracerebroventricular morphine therapy. Apropos of 79 patients] Blond S, et al. **Neurochirurgie** 1989;35(1):52–7 (Eng. Abstr.) (Fre)

[Continuous intrathecal opiate therapy with a portable drug pump in cancer pain] Motsch J, et al. **Anasth Intensivther Notfallmed** 1988 Oct;23(5):271–5 (Eng. Abstr.) (Ger)

[Retard morphine in the long-term therapy of severe tumor pain] Zenz M, et al. **Dtsch Med Wochenschr** 1989 Jan 13; 114(2):43–7 (Eng. Abstr.) (Ger)

[Use of strong opioids in the treatment of cancer pain in adults and children] Sorge J. **Klin Padiatr** 1989 Jul–Aug; 201(4):333–6 (Eng. Abstr.) (Ger)

[Results in Miacalcic therapy in the analgesic treatment of patients with bone metastases] Mándi A, et al. **Magy Traumatol Orthop Helyreallito Sebesz** 1989; 32(2):145–50 (Eng. Abstr.) (Hun)

[Effect of morphine in cancer pain] Nukariya N, et al. **Gan No Rinsho** 1989 Jan;35(1):51–4 (Eng. Abstr.) (Jpn)

[Remarkable pain relief in the treatment with high-dose medroxyprogesterone acetate in advanced prostatic carcinoma] Sasagawa I, et al. **Gan No Rinsho** 1989 May; 35(6):767–71 (Eng. Abstr.) (Jpn)

[Pain relief by high-dose medroxyprogesterone acetate in advanced prostatic cancer] Sasagawa I, et al. **Hinyokika Kiyo** 1989 Apr;35(4):603–8 (Eng. Abstr.) (Jpn)

[Experience of Elcitonin treatment in metastatic bony pain of urological tumors] Tokunaka S, et al. **Hinyokika Kiyo** 1988 Jul;34(7):1273–7 (Eng. Abstr.) (Jpn)

ETIOLOGY

Abdominal angina in young adults [letter] Witte CL, et al. **Surgery** 1989 Jun;105(6):811–2

PHYSIOPATHOLOGY

Epidurally recorded cervical spinal activity evoked by electrical and mechanical stimulation in pain patients. Hallström YT, et al. **Electroencephalogr Clin Neurophysiol** 1989 May–Jun; 74(3):175–85

Physical findings in patients with chronic intractable benign pain of the neck and/or back. Rosomoff HL, et al. **Pain** 1989 Jun;37(3):279–87

PREVENTION & CONTROL

Clinical cancer: 31. Barriers to the management of cancer pain: the roles of patient and family. Cleeland CS. **Wis Med J** 1988 Nov;87(11):13–5

PSYCHOLOGY

Fear, alexithymia and cancer pain. Dalton JA, et al. **Pain** 1989 Aug;38(2):159–70

RADIOTHERAPY

Strontium-89: treatment results and kinetics in patients with painful metastatic prostate and breast cancer in bone. Robinson RG, et al. **Radiographics** 1989 Mar;9(2):271–81

Is it possible to plan the radiation treatment of cancer pain in order to make it complementary to other therapeutic methods? Basso-Ricci S, et al. **Rays** 1988 Sep–Dec; 13(3):123–8

Palliative hemibody irradiation in hormonally refractory metastatic prostate cancer. Nseyo UO, et al. **Urology** 1989 Aug;34(2):76–9

[Radiotherapy in bone metastases—with special reference to its effect on relieving pain] Murai N, et al. **Gan No Rinsho** 1989 Sep;35(10):1149–52 (Eng. Abstr.) (Jpn)

SURGERY

Clinical use of nociceptive flexion reflex recording in the evaluation of functional neurosurgical procedures. García-Larrea L, et al. **Acta Neurochir Suppl (Wien)** 1989; 46:53–7

Intra-operative spinal cord evoked potentials during cervical and lumbo-sacral microsurgical DREZ-tomy (MDT) for chronic pain and spasticity (preliminary data). Jeanmonod D, et al. **Acta Neurochir Suppl (Wien)** 1989;46:58–61

CT-guided percutaneous cordotomy. Kanpolat Y, et al. **Acta Neurochir Suppl (Wien)** 1989;46:67–8

Lateral percutaneous spinothalamic tractotomy. Palma A, et al. **Acta Neurochir (Wien)** 1988;93(3–4):100–3

THERAPY

Transcatheter thoracic epidural neurolysis using ethyl alcohol. Korevaar WC. **Anesthesiology** 1988 Dec; 69(6):989–93

Pain relief clinics under anaesthetic management in Scotland. Bisset WI. **Ann R Coll Surg Engl** 1988 Nov;70(6):392–4

Analysis of combined back clinic outcome [letter] Emery P, et al. **Br J Rheumatol** 1988 Dec;27(6):494–5

Brain and spinal stimulation: how and to whom! Young RF. **Clin Neurosurg** 1989;35:429–47

Pain therapy for pancreatic carcinoma with neurolytic celiac plexus block. Squier R, et al. **Conn Med** 1989 May; 53(5):269–71

Palliation of pain in advanced oral cancer. Narayanan RS, et al. **Headache** 1988 May;28(4):258–9

Psychological, social and physical interventions for cancer pain. Evans WO. **Indiana Med** 1989 Jul;82(7):524–5

Intractable pain: a neglected area of medical education in the UK. Marcer D, et al. **J R Soc Med** 1988 Dec; 81(12):698–700

Epidural analgesia in the management of symptomatic symphysis pubis diastasis. Fuller JG, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):855–7

Multidisciplinary intervention in the control of cancer pain. Botturi M, et al. **Rays** 1988 Sep–Dec;13(3):137–43

Management of pain in pancreatic cancer. Saltzburg D, et al. **Surg Clin North Am** 1989 Jun;69(3):629–49 (93 ref.)

[Celiac neurolysis. Anterior approach and x-ray computed tomographic guidance: a simple and logical technic] Derhy S, et al. **Ann Radiol (Paris)** 1989;32(3):230–3 (Eng. Abstr.) (Fre)

[The story of M. H. or the life of a 3d-year medical student during a medicosocial term outside of the hospital] Delay N. **Rev Med Suisse Romande** 1988 Oct;108(10):884–7 (Fre)

[Spinal cord neurostimulators in chronic severe ischemia of the limbs] Bracale GC, et al. **Minerva Chir** 1989 Feb 15; 44(3):493–7 (Ita)

[Pain treatment in terminal cancer] Takeda F. **Gan No Rinsho** 1989 Jan;Spec No:49–56 (Jpn)

[Pain relief by using medical elastic stocking] Kanba M, et al. **Rinsho Shinkeigaku** 1988 Jun;28(6):605–8 (Eng. Abstr.) (Jpn)

PAIN MEASUREMENT

see related

SENSORY THRESHOLDS

Assessment of pain: a comparison between patients and doctors. Forrest M, et al. **Acta Anaesthesiol Scand** 1989 Apr;33(3):255–6

The analgesic effect of peripheral nerve stimulation in various tests of nociception in rats. Jørum E. **Acta Physiol Scand** 1988 Jun;133(2):131–8

Assessment of experienced pain associated with transvaginal ultrasonography-guided oocyte recovery in in vitro fertilization patients. Shatford LA, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):1002–6

Perception of discomfort by patients undergoing orthodontic treatment. Ngan P, et al. **Am J Orthod Dentofacial Orthop** 1989 Jul;96(1):47–53

Analgesic and hyperalgesic effects of midazolam: dependence on route of administration. Niv D, et al. **Anesth Analg** 1988 Dec;67(12):1169–73

The measurement of pain. Bird HA, et al. **Baillieres Clin Rheumatol** 1987 Apr;1(1):71–89 (78 ref.)

Place avoidance learning and stress-induced analgesia in the attacked mouse: role of endogenous opioids. Siegfried B, et al. **Behav Neural Biol** 1989 Jul;52(1):95–107

Subjective pain sensation is linearly correlated with the flexion reflex in man. Chan CW, et al. **Brain Res** 1989 Feb 6;479(1):145–50

Validating and treating the complaint of chronic back pain: the Mensana Clinic approach. Hendler N. **Clin Neurosurg** 1989;35:385–97

Methods of study of post-operative pain [letter] Kay B. **Eur J Anaesthesiol** 1988 May;5(3):217

Differences and similarities between patient and physician perceptions of patient pain. Sutherland JE, et al. **Fam Med** 1988 Sep–Oct;20(5):343–6

Hypnosis, suggestion, and placebo in the reduction of experimental pain. Spanos NP, et al. **J Abnorm Psychol** 1989 Aug;98(3):285–93

Acute and chronic pain: pain dimensions and psychological status. Ackerman MD, et al. **J Clin Psychol** 1989 Mar; 45(2):223–8

Visual analogue scales as a measure of pain in arthritis: a study of overall pain and pain in individual joints at rest and on movement. Badley EM, et al. **J Rheumatol** 1989 Jan;16(1):102–5

Measurement of the discomfort component of illness. Haig TH, et al. **Med Care** 1989 Mar;27(3):280–7

Acceptability of visual analogue scales in the clinical setting: a comparison with verbal rating scales in postoperative pain. Baños JE, et al. **Methods Find Exp Clin Pharmacol** 1989 Feb;11(2):123–7

Maximum tolerated temperature in the rat tail: a broadly sensitive test of analgesic activity. Farré AJ, et al. **Methods Find Exp Clin Pharmacol** 1989 May;11(5):303–7

Morphine-induced analgesia in the rat paw pressure test is blocked by CCK and enhanced by the CCK antagonist MK-329. O'Neill MF, et al. **Neuropharmacology** 1989 Mar; 28(3):243–7

The recording of brain evoked potentials resulting from intra-articular focused ultrasonic stimulation: a new experimental model for investigating joint pain in humans. Wright A, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):145–50

Reliability and validity of the evaluation of pain in patients with total knee replacement. Boeckstyns ME, et al. **Pain** 1989 Jul;38(1):29–33

Human pain responsivity in a tonic pain model: psychological determinants. Chen AC, et al. **Pain** 1989 May;37(2):143–60 (34 ref.)

The dimensions of pain: a multidimensional scaling comparison of cancer patients and healthy volunteers. Clark WC, et al. **Pain** 1989 Apr;37(1):23–32

An investigation of cold pressor pain in children (Part I). LeBaron S, et al. **Pain** 1989 May;37(2):161–71

Ethnographic methodologic assessment of pain perceptions by verbal description. Moore RA, et al. **Pain** 1988 Aug; 34(2):195–204

The dimensionality of verbal descriptors in Tursky's pain perception profile. Morley S. **Pain** 1989 Apr;37(1):41–9

Pressure pain thresholds in normal muscles: reliability, measurement effects, and topographic differences. Ohrbach R, et al. **Pain** 1989 Jun;37(3):257–63

Differing correlations between pain measures in syndromes with or without explicable organic pathology. Perry F, et al. **Pain** 1988 Aug;34(2):185–9

Cutaneous pain and detection thresholds to short CO2 laser pulses in humans: evidence on afferent mechanisms and the influence of varying stimulus conditions. Pertovaara A, et al. **Pain** 1988 Sep;34(3):261–9

Effects of heterotopic conditioning stimuli on first and second pain: a psychophysical evaluation in humans. Price DD, et al. **Pain** 1988 Sep;34(3):245–52

Effect of 5-hydroxytryptamine precursors on morphine analgesia in the formalin test. Abbott FV, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):855–60

The relative contribution of ascending and descending serotonergic pathways in p-chloroamphetamine-induced antinociception. Bjørkum AA, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):135–40

Potentiation of opioid and nonopioid forms of swim analgesia by cimetidine. Robertson JA, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):107–12

Analgesia induced by continuous versus intermittent cold water swim in the rat: differential effects of intrathecal administration of phentolamine and methysergide. Rochford J, et al. **Pharmacol Biochem Behav** 1988 Sep; 31(1):27–31

The effect of methylxanthines on morphine analgesia in mice and rats. Malec D, et al. **Pol J Pharmacol Pharm** 1988 May–Jun;40(3):223–32

Opiate-like peptides. Part XI. 2-[2-phenyl-1,3-indandionyl]—amides of enkephalin analogs. Synthesis and analgesic activity. Nedev H, et al. **Pol J Pharmacol Pharm** 1988 May–Jun;40(3):303–11

Do low levels of labour pain reflect low sensitivity to noxious stimulation? Niven CA, et al. **Soc Sci Med** 1989;29(4):585–8

The use of pain drawings in screening for psychological involvement in complaints of low-back pain. Hildebrandt J, et al. **Spine** 1988 Jun;13(6):681–5

[Pain measurement and a multi-stage plan in gynecologic oncology] Mitterschiffthaler G. **Gynakol Rundsch** 1989; 29(1):50–4 (Ger)

[Considerations of the placebo problem in acupuncture. Reflections on usefulness, ethical justification, standardization and differentiated use of placebos in acupuncture] Kubiena G. **Wien Klin Wochenschr** 1989 May 12;101(10):362–7 (35 ref.) (Eng. Abstr.) (Ger)

[Analysis of variables of Melzack's semantic questionnaire in patients with osteoarthrosis] Nolli M, et al. **Minerva Anestesiol** 1988 May;54(5):215–22 (Eng. Abstr.) (Ita)

INSTRUMENTATION

Visual analogue pain scale with convenient digitizer [letter] Watanabe S, et al. **Anesthesiology** 1989 Sep;71(3):481

A gnathodynanometer as an objective means of pain assessment following wisdom tooth removal. High AS, et al. **Br J Oral Maxillofac Surg** 1988 Aug;26(4):284–91

The development of a motor performance method for the measurement of pain. Satow A, et al. **Ergonomics** 1989 Mar; 32(3):307–16

An evaluation of the Semmes-Weinstein 6.10 monofilament as compared with 6 nylon in leprosy patients. Dorairaj A, et al. **Indian J Lepr** 1988 Jul;60(3):413–7

The clinical assessment of chronic pain in rheumatic disease: evaluating the use of two instruments. Davis GC. **J Adv Nurs** 1989 May;14(5):397–402

An analgesiometry system for use in rabbits with some preliminary data on the effects of buprenorphine and lofentanil. Wootton R, et al. **Lab Anim** 1988 Jul; 22(3):217–22

[Measuring pressure pain of tendons and muscles in healthy probands and patients with generalized tendomyopathy (fibromyalgia syndrome)] Lautenschläger J, et al. **Z Rheumatol** 1988 Nov–Dec;47(6):397–404 (Eng. Abstr.) (Ger)

METHODS

Normative model for cold pressor test. Walsh NE, et al. **Am J Phys Med Rehabil** 1989 Feb;68(1):6–11

Methods of clinical assessment of anti-rheumatic drugs. Bellamy N. **Baillieres Clin Rheumatol** 1988 Aug;2(2):339–62 (92 ref.)

Psychiatric aspects of pain and their treatment. Pilowsky I. **Baillieres Clin Rheumatol** 1987 Apr;1(1):195–209 (35 ref.)

The closed eyes sign [letter] Bhopal RS. **BMJ** 1988 Nov 12;297(6658):1272

Relationship between subjective pain estimation and somatosensory evoked potentials by electrical tooth stimulation. Umino M, et al. **Bull Tokyo Med Dent Univ** 1988 Sep;35(3):67–74

Use of imagery to describe functional abdominal pain as an aid to diagnosis in a pediatric population. Geist R. **Can J Psychiatry** 1989 Aug;34(6):506–11

Chronic pain: measurement and assessment. Grabois M, et al. **Int J Rehabil Res** 1987;10(4 Suppl 5):266–70

Psychological factors in back pain: self-rated back pain. Lindal E. **Int J Rehabil Res** 1987;10(4 Suppl 5):248–58 (55 ref.)

The dynamics of vertebrogenic pain and autodermographic recording. Pfeiffer J. **Int J Rehabil Res** 1987;10(4 Suppl 5):260–3

Chiropractic chronic low back pain sufferers and self-report assessment methods. Part I. A reliability study of the Visual Analogue Scale, the Pain Drawing and the McGill Pain Questionnaire. Love A, et al. **J Manipulative Physiol Ther** 1989 Feb;12(1):21–5

An improved method for tail-flick testing with adjustment for tail-skin temperature. Tjølsen A, et al. **J Neurosci Methods** 1989 Jan;26(3):259–65

A new writhing model of factor XII activator-induced pain for assessment of non-steroidal anti-inflammatory agents. I. Kaolin-induced writhing in mice. Fujiyoshi T, et al. **J Pharmacobiodyn** 1989 Mar;12(3):132–6

Tail immersion test for the evaluation of a nociceptive reaction in mice. Methodological considerations. Ramabadran K, et al. **J Pharmacol Methods** 1989 Mar; 21(1):21–31

The use of common pain experiences in designing a pain intensity scale for epidemiological purposes. Brattberg G, et al. **J Psychosom Res** 1988;32(4–5):505–12

The quality of pain in arthritis: the words patients use to describe overall pain and pain in individual joints at rest and on movement. Papageorgiou AC, et al. **J Rheumatol** 1989 Jan;16(1):106–12

Unreliability of the Cold Pressor Test Method in pain studies. Blasco T, et al. **Methods Find Exp Clin Pharmacol** 1988 Dec;10(12):767–72

Comparison of verbal and visual analogue scales for measuring the intensity and unpleasantness of experimental pain. Duncan GH, et al. **Pain** 1989 Jun;37(3):295–303

The relationship between pain drawings and the psychological state. Ginzburg BM, et al. **Pain** 1988 Nov; 35(2):141–6

The Descriptor Differential Scale: applying psychophysical principles to clinical pain assessment. Gracely RH, et al. **Pain** 1988 Dec;35(3):279–88

The use of next-of-kin to estimate pain in cancer patients. O'Brien J, et al. **Pain** 1988 Nov;35(2):171–8

The perceived structure of 176 pain descriptive words. Verkes RJ, et al. **Pain** 1989 Aug;38(2):219–29

Toward a set of reliable and valid measures for chronic pain assessment and outcome research. Williams RC. **Pain** 1988 Dec;35(3):239–51 (104 ref.)

The assessment of pain in children. Beyer JE, et al. **Pediatr Clin North Am** 1989 Aug;36(4):837–54 (69 ref.)

Assessment and management of postoperative pain in children. Beyer JE, et al. **Pediatrician** 1989;16(1–2):30–8 (70 ref.)

Pain assessment and management in infants. Johnston CC. **Pediatrician** 1989;16(1–2):16–23 (87 ref.)

Assessing children's and adolescents' pain. Savedra MC, et al. **Pediatrician** 1989;16(1–2):24–9 (37 ref.)

Assessment and management of recurrent pain in adolescence. Smith MS, et al. **Pediatrician** 1989; 16(1–2):85–93 (48 ref.)

Assessment and management of chronic and recurrent pain in children with chronic diseases. Varni JW, et al. **Pediatrician** 1989;16(1–2):56–63 (51 ref.)

SDT analysis of experimental thermal pain, with "signal" and "no-signal" being determined psychophysically. Lautenbacher S, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1019–30

Objective measurement of pain in the wrist: analyses of basic factors for normative data and a case study. Taniguchi S, et al. **Percept Mot Skills** 1988 Aug;67(1):37–8

Research procedure [letter] Nolan MF. **Phys Ther** 1989 Jul; 69(7):618–20

The difference in the tail-flick but not hot-plate response latency between C57BL/6 and DBA/2J mice. Vetulani J, et al. **Pol J Pharmacol Pharm** 1988 Jul–Aug;40(4):381–5

Measurement of the chronic pain experience: development of an instrument. Davis GC. **Res Nurs Health** 1989 Aug; 12(4):221–7

Pain assessment in osteoarthritis: experience with the WOMAC osteoarthritis index. Bellamy N. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):14–7

The development of the Dallas Pain Questionnaire. An assessment of the impact of spinal pain on behavior. Lawlis GF, et al. **Spine** 1989 May;14(5):511–6

[An improved paw-pressure test for nociception] Sun ZQ, et al. **Sheng Li Hsueh Pao** 1988 Dec;40(6):608–13 (Eng. Abstr.) **(Chi)**

[Assessment of the effectiveness of analgesics in the pain laboratory] Bromm B. **Laryngorhinootologie** 1989 Jul; 68(7):411–2 (Eng. Abstr.) **(Ger)**

[Validity of the Hoppe List. An empirical study of patients with backache] Schermelleh-Engel K. **Z Klin Psychol Psychopathol Psychother** 1989;37(1):30–9 (Eng. Abstr.) **(Ger)**

[Assessment of the functional origin of shoulder pain in chronic polyarthritis by diagnostic local anesthesia of inflamed distal joints. A pilot study] Hiemeyer K, et al. **Z Rheumatol** 1989 May–Jun;48(3):139–42 (Eng. Abstr.) **(Ger)**

[Localized pressure pain in the diagnosis of generalized tendomyopathy (fibromyalgia)] Lautenschläger J, et al. **Z Rheumatol** 1989 May–Jun;48(3):132–8 (Eng. Abstr.) **(Ger)**

[The relation between the onset time of sympathetic nerve blockade and that of analgesia in epidural anesthesia] Mizuyama K, et al. **Masui** 1988 Jul;37(7):804–8 (Eng. Abstr.) **(Jpn)**

[Results of the studies of intermittent claudication distance by the treadmill test] Piecuch T, et al. **Pol Tyg Lek** 1988 Jun 13;43(24):771–2 (Eng. Abstr.) **(Pol)**

[An experimental pain model: the formaldehyde test] Seijo F, et al. **Arch Neurobiol (Madr)** 1989 May–Jun;52(3):134–9 (Eng. Abstr.) **(Spa)**

PSYCHOLOGY

Coping styles, paradox, and the cold pressor task. Efran JS, et al. **J Behav Med** 1989 Feb;12(1):91–103

VETERINARY

Sheep slaughtering procedures. V. Responsiveness to potentially painful stimuli following electrical stunning. Gregory NG, et al. **Br Vet J** 1988 Nov–Dec;144(6):573–80

Narcotic analgesics, their detection and pain measurement in the horse: a review. Kamerling S, et al. **Equine Vet J** 1989 Jan;21(1):4–12 (63 ref.)

Method of objective assessment of analgesia in the dog. Hamlin RL, et al. **J Vet Pharmacol Ther** 1988 Jun; 11(2):215–20

PAIN, POSTOPERATIVE

Recurrent pain following interdigital neurectomy—a plantar approach. Beskin JL, et al. **Foot Ankle** 1988 Aug;9(1):34–9

Pain response post-chemonucleolysis or disc excision. Brown MD, et al. **Spine** 1989 Mar;14(3):321–6

[Complaints in the postoperative phase related to anesthetics] Guggenberger H, et al. **Anaesthesist** 1988 Dec; 37(12):746–51 (Eng. Abstr.) **(Ger)**

[Peridural anesthesia in cardiovascular and thoracic surgery. Perioperative evaluation] Trajano A, et al. **Arq Bras Cardiol** 1988 Dec;51(6):447–50 (Eng. Abstr.) **(Por)**

[The pain syndrome following cholecystectomy] Pomelov VS, et al. **Sov Med** 1988;(11):30–5 (46 ref.) **(Rus)**

BLOOD

[The response of plasma beta-endorphin to postoperative pain after epidural morphine] Wang JJ, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Oct;40(4):369–74 **(Chi)**

CHEMICALLY INDUCED

Back pain following epidurally administered Nesacaine-MPF. Fibuch EE, et al. **Anesth Analg** 1989 Jul; 69(1):113–5

Muscle pain occurs after outpatient laparoscopy despite the substitution of vecuronium for succinylcholine. Zahl K, et al. **Anesthesiology** 1989 Mar;70(3):408–11

COMPLICATIONS

Respiratory effects of pain in a child after thoracotomy. Tyler DC. **Anesthesiology** 1989 May;70(5):873–4

DIAGNOSIS

Methods of study of post-operative pain [letter] Kay B. **Eur J Anaesthesiol** 1988 May;5(3):217

DRUG THERAPY

Comparison of intramuscular nalbuphine and nicomorphine in the treatment of post-operative pain. Admiraal PV, et al. **Acta Anaesthesiol Belg** 1989;40(1):59–64

Double-blind comparison between nalbuphine and pentazocine in the control of postoperative pain after orthopedic surgery. Donadoni R, et al. **Acta Anaesthesiol Belg** 1988;39(4):251–6

Epidural clonidine for treatment of postoperative pain after thoracotomy. A double-blind placebo-controlled study. Gordh T Jr. **Acta Anaesthesiol Scand** 1988 Nov;32(8):702–9

Treatment of post-thoracotomy pain with intermittent instillations of intrapleural bupivacaine. Scheinin B, et al. **Acta Anaesthesiol Scand** 1989 Feb;33(2):156–9

The politics of pain relief [editorial] Siwek J. **Am Fam Physician** 1989 Sep;40(3):90, 93

How do you give continuous epidural fentanyl? Powell AH, et al. **Am J Nurs** 1989 Sep;89(9):1197–200

Interpleural administration of bupivacaine after cholecystectomy: a comparison with intercostal nerve block. Blake DW, et al. **Anaesth Intensive Care** 1989 Aug; 17(3):269–74

Patient-controlled analgesia in children. Gaukroger PB, et al. **Anaesth Intensive Care** 1989 Aug;17(3):264–8

Postoperative epidural morphine analgesia in Papua New Guinea. Oberoi GS, et al. **Anaesth Intensive Care** 1989 Aug; 17(3):332–5

The influence of patient characteristics on the requirements for postoperative analgesia. A reassessment using patient-controlled analgesia. Burns JW, et al. **Anaesthesia** 1989 Jan;44(1):2–6

Failure of rectal diclofenac to augment opioid analgesia after cholecystectomy. Colquhoun AD, et al. **Anaesthesia** 1989 Jan;44(1):57–60

Variables of patient-controlled analgesia. 1. Bolus size. Owen H, et al. **Anaesthesia** 1989 Jan;44(1):7–10

Variables of patient-controlled analgesia. 2. Concurrent infusion. Owen H, et al. **Anaesthesia** 1989 Jan;44(1):11–3

A double-blind comparison of epidural ketamine and diamorphine for postoperative analgesia. Peat SJ, et al. **Anaesthesia** 1989 Jul;44(7):555–8

Patient-controlled analgesia—the need for caution. A case report and review of adverse incidents. Thomas DW, et al. **Anaesthesia** 1988 Sep;43(9):770–2 (17 ref.)

Extradural fentanyl and dystrophia myotonica [letter] Youssef MS. **Anaesthesia** 1989 Apr;44(4):360–1

Interpleural bupivacaine for postoperative pain during lactation. Baker PA, et al. **Anesth Analg** 1989 Sep; 69(3):400–2

Epidural opioids—the preferred route of administration [editorial] Campbell C. **Anesth Analg** 1989 Jun;68(6):710–1

Epidural hydromorphone with and without epinephrine for post-operative analgesia after cesarean delivery. Dougherty TB, et al. **Anesth Analg** 1989 Mar;68(3):318–22

Long-term post-thoracotomy cancer pain management with interpleural bupivacaine. Fineman SP. **Anesth Analg** 1989 May;68(5):694–7

A dose-response study of intrathecal morphine: efficacy, duration, optimal dose, and side effects. Jacobson L, et al. **Anesth Analg** 1988 Nov;67(11):1082–8

Failure of proglumide, a cholecystokinin antagonist, to potentiate clinical morphine analgesia. A randomized double-blind postoperative study using patient-controlled analgesia (PCA). Lehmann KA, et al. **Anesth Analg** 1989 Jan;68(1):51–6

Epidural morphine after anterior cruciate ligament repair: a comparison with patient-controlled intravenous morphine. Loper KA, et al. **Anesth Analg** 1989 Mar; 68(3):350–2

Prophylactic transdermal scopolamine patches reduce nausea in postoperative patients receiving epidural morphine. Loper KA, et al. **Anesth Analg** 1989 Feb;68(2):144–6

Intrathecal morphine—an underused combination for postoperative pain management. Stoelting RK. **Anesth Analg** 1989 Jun;68(6):707–9 (14 ref.)

Minimal effective dose of intrathecal morphine for pain relief following transabdominal hysterectomy. Yamaguchi H, et al. **Anesth Analg** 1989 Apr;68(4):537–40

A postoperative pain management service [letter] Brodsky JB, et al. **Anesthesiology** 1989 Apr;70(4):719–20

High thoracic epidural sufentanil for post-thoracotomy pain: influence of epinephrine as an adjuvant—a double blind study. Hasenbos MA, et al. **Anesthesiology** 1988 Dec; 69(6):1017–22

The dose response of caudal morphine in children. Krane EJ, et al. **Anesthesiology** 1989 Jul;71(1):48–52

Subcutaneous ketamine analgesia: postoperative analgesia using subcutaneous infusions of ketamine and morphine. Bristow A, et al. **Ann R Coll Surg Engl** 1989 Jan;71(1):64–6

Postoperative pain relief; a new approach: narcotics compared with non-steroidal anti-inflammatory drugs. Buchanan JM, et al. **Ann R Coll Surg Engl** 1988 Sep; 70(5):332–5

Continuous intravenous morphine for pain relief after abdominal surgery. Ray DC, et al. **Ann R Coll Surg Engl** 1988 Sep;70(5):317–21

Patient-controlled analgesia. A new system for pain management. Kresl JS. **AORN J** 1988 Sep;48(3):481–4, 486–7

Pain relief. Choonara IA. **Arch Dis Child** 1989 Aug; 64(8):1101–2 (24 ref.)

Intrapleural regional analgesia for pain management in cholecystectomy. el-Naggar MA, et al. **Arch Surg** 1989 May;124(5):568–70

Intraarticular bupivacaine (Marcaine) after arthroscopic meniscectomy: a randomized double-blind controlled study. Chirwa SS, et al. **Arthroscopy** 1989;5(1):33–5

Oral nalbuphine for the treatment of pain after dental extractions. Kay B, et al. **Br J Anaesth** 1988 Sep;61(3):313–7

Transdermal fentanyl for the relief of pain after upper abdominal surgery. Rowbotham DJ, et al. **Br J Anaesth** 1989 Jul;63(1):36–9

An evaluation of different doses of soluble aspirin and aspirin tablets in postoperative dental pain. Holland IS, et al. **Br J Clin Pharmacol** 1988 Oct;26(4):463–8

Effect of continuous postoperative epidural analgesia on intestinal motility. Ahn H, et al. **Br J Surg** 1988 Dec; 75(12):1176–8

Continuous wound perfusion with bupivacaine for postoperative wound pain. Gibbs P, et al. **Br J Surg** 1988 Sep;75(9):923–4

Assessment of the analgesic efficacy of nefopam hydrochloride after upper abdominal surgery: a study using patient controlled analgesia. McLintock TT, et al. **Br J Surg** 1988 Aug;75(8):779–81

Wound instillation for postoperative pain relief [letter] Pfeiffer U, et al. **Br J Surg** 1989 Mar;76(3):315

Control of pain in the perioperative period. Hull CJ. **Br Med Bull** 1988 Apr;44(2):341–56 (58 ref.)

Severe hypotension from epidural meperidine in a high-risk patient after thoracotomy. Balaban M, et al.

Can J Anaesth 1989 Jul;36(4):450–3
Clinical differences in spinal opioid efficacy. Organowski S, et al. Can J Anaesth 1989 Jul;36(4):448–9
Management of post-operative pain. Smith G.
Can J Anaesth 1989 May;36(3 Pt 2):S1–4 (26 ref.)
Oxymorphone in patient-controlled analgesia. Sinatra RS, et al. Clin Pharm 1989 Aug;8(8):541, 544
Residual analgesic effects of morphine in 55 four-period crossover analgesic studies. Forrest WH Jr, et al.
Clin Pharmacol Ther 1988 Oct;44(4):383–8
Proglumide potentiates morphine analgesia for acute postsurgical pain. Lavigne GJ, et al.
Clin Pharmacol Ther 1989 Jun;45(6):666–73
Comparative analgesic efficacy and tolerability of ketorolac tromethamine and glafenine in patients with post-operative pain. Arsac M, et al. Curr Med Res Opin 1988;11(4):214–20
Evaluation of the analgesic activity and tolerability of aceclofenac in the treatment of post-episiotomy pain. Movilia PG. Drugs Exp Clin Res 1989;15(1):47–51
Aceclofenac and paracetamol in episiotomal pain. Yscla A. Drugs Exp Clin Res 1988;14(7):491–4
The efficacy of benorylate in postoperative dental pain. Moore U, et al. Eur J Clin Pharmacol 1989;36(1):35–8
Treatment of postoperative pain: comparison between administration at fixed hours and 'on demand' with intramuscular analgesics. De Conno F, et al.
Eur J Surg Oncol 1989 Jun;15(3):242–6
Efficacy & dose-response of intrathecal pentazocine for post-operative pain relief. Chawla R, et al.
Indian J Med Res 1989 Jun;90:220–3
The use of epidural morphine in patients undergoing total knee arthroplasty. Baker MW, et al. J Arthroplasty 1989; 4(2):157–61
Intraspinal opioids: implications for monitoring. Monitoring in the intensive care unit is essential. LaPorta RF, et al. J Clin Monit 1989 Jul;5(3):186–9 (26 ref.)
Monitoring in the intensive care unit is not always necessary. Mott JM, et al. J Clin Monit 1989 Jul;5(3):190–1
Ketoprofen in oral surgery pain: a review. Cooper SA.
J Clin Pharmacol 1988 Dec;28(12 Suppl):S40–6 (12 ref.)
Tonazocine mesylate in postoperative pain patients: a double-blind placebo controlled analgesic study. Lippmann M, et al. J Clin Pharmacol 1989 Apr;29(4):373–8
Ibuprofen and acetaminophen in the relief of postpartum episiotomy pain. Schachtel BP, et al. J Clin Pharmacol 1989 Jun;29(6):550–3
Augmentation of acetaminophen analgesia by the antihistamine phenyltoloxamine. Sunshine A, et al.
J Clin Pharmacol 1989 Jul;29(7):660–4
Analgesic efficacy of ketoprofen in postpartum, general surgery, and chronic cancer pain. Sunshine A, et al.
J Clin Pharmacol 1988 Dec;28(12 Suppl):S47–54 (11 ref.)
Double-blind parallel comparison of ketoprofen (Orudis), acetaminophen plus codeine, and placebo in postoperative pain. Turek MD, et al. J Clin Pharmacol 1988 Dec;28(12 Suppl):S23–8
Effect on intrathecal pentazocine on postoperative pain relief. Swaraj, et al. J Indian Med Assoc 1988 Apr;86(4):93–6
Analgesic activity of flupirtine maleate: a controlled double-blind study with diclofenac sodium in orthopaedics. Mastronardi P, et al. J Int Med Res 1988 Sep–Oct; 16(5):338–48
Comparative study of ketorolac and paracetamol/codeine in alleviating pain following gynaecological surgery. Vangen O, et al. J Int Med Res 1988 Nov–Dec;16(6):443–51
Post-tonsillectomy analgesia: the use of benzocaine lozenges. Dempster JH. J Laryngol Otol 1988 Sep;102(9):813–4
Can post-tonsillectomy pain be reduced by topical bupivacaine? Double blind controlled trial. Violaris NS, et al. J Laryngol Otol 1989 Jun;103(6):592–3
Sublingual buprenorphine and pethidine for immediate postoperative pain relief in major gynecologic surgery: a comparative study. Tungphaisal S, et al.
J Med Assoc Thai 1989 Mar;72(3):150–3
Use of patient-controlled analgesia (PCA) in children [letter] Gaukroger PB, et al. J Pediatr Surg 1988 Dec; 23(12):1227–8
The effective use of intrapleural bupivacaine for analgesia after thoracic and subcostal incisions in children. McIlvaine WB, et al. J Pediatr Surg 1988 Dec;23(12):1184–7
Transdermal fentanyl for postoperative pain management. A double-blind placebo study. Caplan RA, et al. JAMA 1989 Feb 17;261(7):1036–9
Trials of dipyrone in Thailand [letter] Lancet 1989 Apr 8; 1(8641):788
Comparison of analgesic requirements after liver transplantation and cholecystectomy. Eisenach JC, et al. Mayo Clin Proc 1989 Mar;64(3):356–9
Putting patient-controlled analgesia to the test. Bucknell S, et al. MCN 1989 Jan–Feb;14(1):37–40
Acceptability of visual analogue scales in the clinical setting: a comparison with verbal rating scales in postoperative pain. Baños JE, et al.
Methods Find Exp Clin Pharmacol 1989 Feb;11(2):123–7
Postoperative epidural analgesia. After vaginal hysterectomy. Mayfield WR, et al. Mo Med 1988 Dec;85(12):795–8
A double-blind single-dose evaluation of the relative analgesic efficacy and safety of carprofen in the treatment of postoperative pain after oral surgery. Clark MS, et al. Oral Surg Oral Med Oral Pathol 1989 Sep;68(3):273–8
A prospective randomized double-blind trial on efficacy of dexamethasone for endodontic interappointment pain in teeth with asymptomatic inflamed pulps. Glassman G, et al. Oral Surg Oral Med Oral Pathol 1989 Jan;67(1):96–100
Management of endodontic pain with nonsteroidal anti-inflammatory agents: a double-blind, placebo-controlled study. Negm MM.
Oral Surg Oral Med Oral Pathol 1989 Jan;67(1):88–95
The use of epidural bupivacaine following total knee arthroplasty. Pettine KA, et al. Orthop Rev 1989 Aug; 18(8):894–901
Patient-controlled analgesia in orthopedic procedures. Scalley RD, et al. Orthop Rev 1988 Nov;17(11):1106–13
Oral dantrolene sodium for tonsillectomy pain [letter] Wackym PA, et al. Otolaryngol Head Neck Surg 1988 Dec; 99(6):607
The transdermal administration of fentanyl in the treatment of postoperative pain: pharmacokinetics and pharmacodynamic effects. Gourlay GK, et al. Pain 1989 May;37(2):193–202
Patient-controlled analgesia: a randomized, prospective comparison between two commercially available PCA pumps and conventional analgesic therapy for postoperative pain. Hecker BR, et al. Pain 1988 Oct; 35(1):115–20
Relief of persistent postamputation stump and phantom limb pain with intrathecal fentanyl. Jacobson L, et al. Pain 1989 Jun;37(3):317–22
Comparison of one technique of patient-controlled postoperative analgesia with intramuscular meperidine. McGrath D, et al. Pain 1989 Jun;37(3):265–70
Comparison of ketamine and pethidine in experimental and postoperative pain. Maurset A, et al. Pain 1989 Jan; 36(1):37–41
Intrathecal Opioids, Potency and Lipophilicity [letter] Shir Y. Pain 1989 Aug;38(2):235–6
Assessment and management of postoperative pain in children. Beyer JE, et al. Pediatrician 1989;16(1–2):30–8 (70 ref.)
Preoperative flurbiprofen in oral surgery: a method of choice in controlling postoperative pain. Dupuis R, et al.
Pharmacotherapy 1988;8(3):193–200
An evaluation of flurbiprofen, aspirin, and placebo in postoperative oral surgery pain. Forbes JA, et al.
Pharmacotherapy 1989;9(2):66–73
Objective assessment of opioid action by facial muscle surface electromyography (SEMG). Edmonds HL Jr, et al.
Prog Neuropsychopharmacol Biol Psychiatry 1988; 12(5):727–38
Severe respiratory depression from patient-controlled analgesia in renal failure. Covington EC, et al.
Psychosomatics 1989 Spring;30(2):226–8
Intraspinal narcotic analgesia. A comparison of two methods of postoperative pain relief. Johnson RG, et al. Spine 1989 Apr;14(4):363–6
The use of dexamethasone in primary lumbar disc surgery. A prospective, randomized, double-blind study. Watters WC 3d, et al. Spine 1989 Apr;14(4):440–2
[Combined effect of intrathecal morphine and nalbuphine for postoperative analgesia] Chen CH, et al.
Ma Tsui Hsueh Tsa Chi 1988 Sep;26(3):257–64 (Eng. Abstr.) (Chi)
[Lack of depression of ventilatory responses to CO2 following epidural or intravenous infusion of ketamine in postoperative analgesia after upper abdominal surgery] Mui WC, et al. Ma Tsui Hsueh Tsa Chi 1988 Dec;26(4):381–6 (Eng. Abstr.) (Chi)
[Glaphenine: toothache or a matter of choice? (letter)] Arnolds JA. Ned Tijdschr Geneeskd 1988 Dec 3; 132(49):2259 (Dut)
[Apnea following epidural administration of sufentanil] Overweg-van Kints J, et al. Ned Tijdschr Geneeskd 1989 May 13;133(19):988–91 (Eng. Abstr.) (Dut)
[Comparative study of sodium valproate and ketoprofen in the treatment of postoperative pain] Martin C, et al.
Ann Fr Anesth Reanim 1988;7(5):387–92 (Eng. Abstr.) (Fre)
[Comparison of nalbuphine and pentazocine in the treatment of postoperative pain by self-administration] Pandèle G, et al. Ann Fr Anesth Reanim 1989;8(2):85–9 (Eng. Abstr.) (Fre)
[The use of buprenorphine in the postoperative period in heart surgery. Evaluation of its efficacy and tolerance] Grill S, et al. Can Anesthesiol 1989 Mar–Apr;37(2):89–93 (Eng. Abstr.) (Fre)
[Value of ketoprofen in obstetrical surgery (letter)] Schillinger D, et al. Presse Med 1988 Sep 24;17(32):1651–2 (Fre)
[Pain following the treatment of vulvo-vaginal condylomatous lesions. Efficacy of benzydamine] Dargent D. Rev Fr Gynecol Obstet 1988 Oct;83(10):663–6 (Eng. Abstr.) (Fre)
[Patient-controlled analgesia. A technical toy or a contribution to the treatment of pain?] Suttmann H, et al. Anaesthesist 1988 Aug;37(8):543–50 (Eng. Abstr.) (Ger)
[Cumulative pharmacokinetics and clinical effects of nalbuphine in patients in the postoperative phase. An open multicenter study] Arzneimittelforschung 1989 Jun; 39(6):724–7 (Eng. Abstr.) (Ger)
[Continuous axillary catheter plexus anesthesia—a method of postoperative analgesia and sympathetic nerve block following hand surgery] Büttner J, et al.
Handchir Mikrochir Plast Chir 1989 Jan;21(1):29–32 (Eng. Abstr.) (Ger)
[Which analgesics do you recommend following tonsillectomy? (letter)] Terrahe K. Laryngorhinootologie 1989 Mar;68(3):189 (Ger)
[Intrapleural marcaine for postoperative analgesia] Landesberg G, et al. Harefuah 1989 Mar 15;116(6):313–4 (Eng. Abstr.) (Heb)
[Continuous intravenous infusion with patient-controlled anesthesia for postoperative analgesia in cesarean section: morphine versus buprenorphine] Capogna G, et al.
Minerva Anestesiol 1989 Jan–Feb;55(1–2):33–8 (Eng. Abstr.) (Ita)
[Potentiation of morphine analgesia by nifedipine in postoperative pain] Carta F, et al. Minerva Anestesiol 1988 Apr;54(4):127–30 (Ita)
[Potentiating drugs in postoperative pain control with opiates for patient controlled analgesia] Cuocolo R, et al.
Minerva Anestesiol 1988 Apr;54(4):105–14 (Ita)
[Evaluation of the analgesic efficacy of nefopam in postoperative pain] Giudice G, et al. Minerva Anestesiol 1988 Jan–Feb;54(1–2):19–23 (Eng. Abstr.) (Ita)
[Nefopam in postoperative analgesia. Comparison with meperidine and morphine] Novelli GP, et al.
Minerva Anestesiol 1988 Jun;54(6):259–67 (Eng. Abstr.) (Ita)
[Possible potentiation of morphine analgesia by proglumide] Pagnoni B, et al. Minerva Anestesiol 1988 Apr;54(4):131–6 (Ita)
[Postoperative analgesia with peridural morphine. Comparative study in thoracic and abdominal surgery] Pelliccia E, et al. Minerva Anestesiol 1988 Dec;54(12):521–4 (Eng. Abstr.) (Ita)
[Stress and postoperative analgesia] Stacca R, et al.
Minerva Anestesiol 1988 Oct;54(10):445–50 (Eng. Abstr.) (Ita)
[Naproxen sodium compared with ketoprofen lysine and lysine acetylsalicylate in the management of postoperative pain in gynecologic surgery] Rossi S, et al.
Minerva Ginecol 1988 May;40(5):329–35 (32 ref.) (Eng. Abstr.) (Ita)
[Evaluation of the efficacy and tolerability of nimesulide in various odonto-stomatologic pathologies] Moniaci D, et al. Minerva Stomatol 1988 Apr;37(4):291–4 (Eng. Abstr.) (Ita)
[Analgesic and anti-inflammatory treatment with sodium naproxen in odontostomatology] Moniaci D, et al.
Minerva Stomatol 1988 Dec;37(12):1011–3 (Eng. Abstr.) (Ita)
[Change of analgesic effect of intrathecal buprenorphine combined with local anesthetic used for postoperative pain relief] Inagaki Y, et al. Masui 1988 Aug;37(8):955–60 (Eng. Abstr.) (Jpn)
[Effect of continuous epidural infusion of morphine for postoperative analgesia on pituitary-adrenocortical function] Murakawa T, et al. Masui 1989 May;38(5):625–31 (Eng. Abstr.) (Jpn)
[Clinical evaluation of buprenorphine suppositories in postoperative patients—plasma concentrations and effects on the respiratory and circulatory system] Tashiro C, et al. Masui 1989 Feb;38(2):182–9 (Eng. Abstr.) (Jpn)
[Postoperative period upon use of epidural morphine analgesia in urological patients] Novozhilov VA, et al.
Urol Nefrol (Mosk) 1988 Nov–Dec;(6):63–5 (Eng. Abstr.) (Rus)
[Postoperative analgesia using endolymphatic administration of promedol in children after spinal surgery] Ul'rikh EV, et al. Vestn Khir 1989 Jan;142(1):97–9 (Rus)
[Administration of Trodon in the postoperative period after gynecologic operations] Hrabovski B, et al. Med Pregl 1988;41(1–2):62–3 (Eng. Abstr.) (Scr)
[Analysis of the treatment of postoperative pain at 3 hospitals] Baños JE, et al. Rev Clin Esp 1989 Mar;184(4):177–81 (Eng. Abstr.) (Spa)
[Postoperative analgesia using caudal morphine in pediatric surgery: randomized double-blind study compared with bupivacaine] Marco Valls J, et al.
Rev Esp Anestesiol Reanim 1989 Mar–Apr;36(2):88–92 (22 ref.) (Eng. Abstr.) (Spa)
[Intrapleural analgesia in thoracic pathology (letter)] Rojas Castro A, et al. Rev Esp Anestesiol Reanim 1988 Sep–Oct; 35(5):274 (Spa)
[Cephalic migration of methadone administered by the spinal route (letter)] Villalonga Morales A, et al.
Rev Esp Anestesiol Reanim 1989 Jan–Feb;36(1):60 (Spa)

ETIOLOGY

Postoperative pain: a comparison of laparoscopic sterilisation and diagnostic laparoscopy [letter] Davis A, et al.
Anaesthesia 1988 Sep;43(9):796–7
Postoperative pain after laparoscopic sterilisation [letter] McKenzie R. Anaesthesia 1989 May;44(5):450
Pain quantum and wound healing: a comparison of interrupted inversion PDS and standard nylon sutures in abdominal skin closure [letter] Johnson CD.
Ann R Coll Surg Engl 1989 Mar;71(2):145
The spinal accessory nerve plexus, the trapezius muscle, and shoulder stabilization after radical neck cancer surgery. Brown H, et al. Ann Surg 1988 Nov;208(5):654–61 (13 ref.)
Pain after intra-ocular operations. Nolan J.
Bull Soc Belge Ophtalmol 1987;224:171–7
The correlation between suxamethonium injection and post-operative muscle pain in Chinese. Chu HY, et al.
Ma Tsui Hsueh Tsa Chi 1988 Dec;26(4):411–6

Misdiagnosis using endoscopic retrograde cholangiopancreatography in a patient with postcholecystectomy pain. Chan CK, et al. **Surg Endosc** 1987;1(3):179–80

[Postcholecystectomy syndrome after simple cholecystectomy] Rothenbühler JM, et al. **Helv Chir Acta** 1989 Jun;56(1–2):175–8 (Eng. Abstr.) **(Ger)**

[Pain following operations of the lumbar spine. The "failed back surgery syndrome"] Seelig W, et al. **Z Orthop** 1989 May–Jun;127(3):346–53 (Eng. Abstr.) **(Ger)**

[Migraine after subarachnoid anesthesia: etiopathogenic hypothesis] Bonarelli S, et al. **Minerva Anestesiol** 1988 Jun; 54(6):269–73 (Eng. Abstr.) **(Ita)**

[Internal lateral sphincterectomy. Results] Viso Pons L, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 1):589–92 (Eng. Abstr.) **(Spa)**

NURSING

A nursing process approach to epidural analgesia. Henrikson ML, et al. **J Obstet Gynecol Neonatal Nurs** 1988 Sep–Oct; 17(5):316–20

PHYSIOPATHOLOGY

Breathing patterns during postoperative analgesia in patients after lower abdominal operations. Nishino T, et al. **Anesthesiology** 1988 Dec;69(6):967–72

Surgical stress: the role of pain and analgesia. Kehlet H. **Br J Anaesth** 1989 Aug;63(2):189–95 (46 ref.)

A gnathodynanometer as an objective means of pain assessment following wisdom tooth removal. High AS, et al. **Br J Oral Maxillofac Surg** 1988 Aug;26(4):284–91

Does acute intraoral pain alter cutaneous sensibility? Hansson P, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug; 51(8):1032–6

Post-axillary dissection pain in breast cancer due to a lesion of the intercostobrachial nerve. Vecht CJ, et al. **Pain** 1989 Aug;38(2):171–6

[Physiopathology of intraoperative and postoperative pain] Giron GP, et al. **Minerva Anestesiol** 1988 Apr;54(4):115–22 (21 ref.) **(Ita)**

PREVENTION & CONTROL

Spinal buprenorphine for postoperative analgesia after caesarean section. Celleno D, et al. **Acta Anaesthesiol Scand** 1989 Apr;33(3):236–8

The effect of continuous intravenous indomethacin infusion on bleeding time and postoperative pain in patients undergoing emergency surgery of the lower extremities. Taivainen T, et al. **Acta Anaesthesiol Scand** 1989 Jan; 33(1):58–60

Effects of epidural bupivacaine and epidural morphine on bowel function and pain after hysterectomy. Thorén T, et al. **Acta Anaesthesiol Scand** 1989 Feb;33(2):181–5

Influence of intraperitoneal anesthesia on pain and the sympathoadrenal response to abdominal surgery. Wallin G, et al. **Acta Anaesthesiol Scand** 1988 Oct;32(7):553–8

Pharmacokinetics and protein binding of bupivacaine in postoperative epidural analgesia. Wulf H, et al. **Acta Anaesthesiol Scand** 1988 Oct;32(7):530–4

Corticosteroids and anterior cruciate ligament repair. Vargas JH 3d, et al. **Am J Sports Med** 1989 Jul–Aug;17(4):532–4

Epidural morphine by the thoracic or lumbar routes in cholecystectomy. Effect on postoperative pain and respiratory variables. Hakanson E, et al. **Anaesth Intensive Care** 1989 May;17(2):166–9

Epidural pethidine or fentanyl during caesarean section: a double-blind comparison. Paech MJ. **Anaesth Intensive Care** 1989 May;17(2):157–65

A new method of analgesia for relief of circumcision pain. Andersen KH. **Anaesthesia** 1989 Feb;44(2):118–20

Effect of diluent volume on analgesia produced by epidural fentanyl. Birnbach DJ, et al. **Anesth Analg** 1989 Jun; 68(6):808–10

Mini-dose intrathecal morphine for analgesia following cesarean section [letter] Abboud TK. **Anesthesiology** 1988 Nov;69(5):805

Intrathecal methadone and morphine for postoperative analgesia: a comparison of the efficacy, duration, and side effects. Jacobson L, et al. **Anesthesiology** 1989 May; 70(5):742–6

Low-dose intrathecal morphine for postoperative pain control in patients undergoing transurethral resection of the prostate. Kirson LE, et al. **Anesthesiology** 1989 Aug; 71(2):192–5

A comparison of morphine, meperidine, and oxymorphone as utilized in patient-controlled analgesia following cesarean delivery. Sinatra RS, et al. **Anesthesiology** 1989 Apr;70(4):585–90

Hanging-drop technique for intrapleural analgesia [letter] Squier RC, et al. **Anesthesiology** 1989 May;70(5):882

Pain quantum and wound healing: a comparison of interrupted inversion PDS and standard nylon sutures in abdominal skin closure. Cassie AB, et al. **Ann R Coll Surg Engl** 1988 Nov;70(6):339–42

Cryoanalgesia for postthoracotomy pain [editorial] Katz J. **Ann Thorac Surg** 1989 Jul;48(1):5

Intraoperative cryoanalgesia for postthoracotomy pain relief. Müller LC, et al. **Ann Thorac Surg** 1989 Jul;48(1):15–8

A controlled comparison of effectiveness of bupivacaine for post-operative pain control. Chapman PJ. **Aust Dent J** 1988 Aug;33(4):288–90

A comparison of ibuprofen and dihydrocodeine in relieving pain following wisdom teeth removal. Frame JW, et al. **Br Dent J** 1989 Feb 25;166(4):121–4

Postoperative pain—prevention or relief? [editorial] Armitage EN. **Br J Anaesth** 1989 Aug;63(2):136–8

Ilioinguinal nerve blockade for analgesia after caesarean section. Bunting P, et al. **Br J Anaesth** 1988 Dec;61(6):773–5

Electroacupuncture and postoperative pain. Christensen PA, et al. **Br J Anaesth** 1989 Mar;62(3):258–62

The control of acute postoperative pain. Mitchell RW, et al. **Br J Anaesth** 1989 Aug;63(2):147–58 (46 ref.)

Low-dose intrathecal diamorphine analgesia following major orthopaedic surgery. Reay BA, et al. **Br J Anaesth** 1989 Mar;62(3):248–52

Continuous thoracic extradural 0.5% bupivacaine with or without morphine: effect on quality of blockade, lung function and the surgical stress response. Scott NB, et al. **Br J Anaesth** 1989 Mar;62(3):253–7

Do local analgesics injected at the time of third molar removal under general anaesthesia reduce significantly post operative analgesic requirements? A double-blind controlled trial. Tuffin JR, et al. **Br J Oral Maxillofac Surg** 1989 Feb;27(1):27–32

Incisions with knife or diathermy and postoperative pain. Hussain SA, et al. **Br J Surg** 1988 Dec;75(12):1179–80

A single dose study of a new analgesic. Ciramadol. Symington JM, et al. **Can Dent Assoc J** 1988 Sep; 54(9):675–8

A comparison of the incidence of pruritus following epidural opioid administration in the parturient. Ackerman WE, et al. **Can J Anaesth** 1989 Jul;36(4):388–91

Intrapleural analgesia for post-thoracotomy pain and blood levels of bupivacaine following intrapleural injection. Kambam JR, et al. **Can J Anaesth** 1989 Mar;36(2):106–9

Interpleural block [editorial] Lewis GW. **Can J Anaesth** 1989 Mar;36(2):103–5 **(Eng, Fre)**

Epidural sufentanil for post-operative pain relief: effects of adrenaline. Verborgh C, et al. **Eur J Anaesthesiol** 1988 May; 5(3):183–91

Manipulation for postop pain [letter] Heath DM. **Hosp Pract [Off]** 1989 Sep 15;24(9):13

A comparison of paracetamol and diflunisal for pain control following 3rd molar surgery. Rodrigo C, et al. **Int J Oral Maxillofac Surg** 1989 Jun;18(3):130–2

TENS for post-surgical analgesia following gastroplasty. Caterine JM, et al. **Iowa Med** 1988 Aug;78(8):369–71

Comparison of preoperative and postoperative diflunisal for suppression of postoperative pain. Sisk AL, et al. **J Oral Maxillofac Surg** 1989 May;47(5):464–8

Is cervical laser therapy painful? [letter] **Lancet** 1989 Feb 11;1(8633):335

The effects of peritonsillar infiltration on the reduction of intraoperative blood loss and post-tonsillectomy pain in children. Broadman LM, et al. **Laryngoscope** 1989 Jun;99(6 Pt 1):578–81

Management of postoperative pain [letter] **Med J Aust** 1989 Jul 3;151(1):52–3

Pain clinic #8. Patient-controlled analgesia for postoperative pain in orthopaedic patients. Raj PP, et al. **Orthop Rev** 1987 Dec;16(12):953–9

Marcaine spray [letter] Hoefflin SM. **Plast Reconstr Surg** 1989 Sep;84(3):543

Postoperative ketamine analgesia in children: efficacy and safety after halothane anesthesia. Forestner JE. **South Med J** 1988 Oct;81(10):1253–7

Clinical evaluation of FasTENS, an inexpensive, disposable transcutaneous electrical nerve stimulator designed specifically for postoperative electroanalgesia. Merrill DC. **Urology** 1989 Jan;33(1):27–30

[Postoperative analgesia with morphine versus morphine and paracetamol. A double-blind clinically controlled study with a placebo] Jespersen TW, et al. **Ugeskr Laeger** 1989 Jun 19;151(25):1615–8 (Eng. Abstr.) **(Dan)**

[Preoperative epidural blockade and phantom pain after below-knee amputation] Noreng MF, et al. **Ugeskr Laeger** 1988 Dec 12;150(50):3111–3 (Eng. Abstr.) **(Dan)**

[Postoperative analgesia: epidural injection of dexamethasone sodium phosphate] Ang ET, et al. **Ann Fr Anesth Reanim** 1988;7(4):289–93 (Eng. Abstr.) **(Fre)**

[Management of postoperative pain using intrathecal opiate analgesia and taking into consideration different anesthetic procedures] König HJ. **Anaesthesiol Reanim** 1988; 13(6):333–7 (Eng. Abstr.) **(Ger)**

[The clinical significance of drug interactions between opiates and calcium antagonists. A randomized double-blind study using fentanyl and nimodipine within the framework of postoperative intravenous on-demand analgesia] Lehmann KA, et al. **Anaesthesist** 1989 Mar;38(3):110–5 (Eng. Abstr.) **(Ger)**

[Use of continuous block of the lumbar plexus ("3-in-1 block") for pain management in children (letter)] Dahl JB, et al. **Reg Anaesth** 1989 Jul;12(4):86 **(Ger)**

[Periodic sublingual buprenorphine for pain relief after upper abdominal surgery] Hayakawa J, et al. **Masui** 1989 Apr; 38(4):493–7 (Eng. Abstr.) **(Jpn)**

[Optimum dose of intravenous butorphanol as a supplemental drug during regional anesthesia] Nomura T, et al. **Masui** 1989 Apr;38(4):498–504 (Eng. Abstr.) **(Jpn)**

[Effect of extradural marcaine analgesia on the phagocytic activity of granulocytes in the NBT test] Gajdosz R, et al. **Wiad Lek** 1988 Aug 1;41(15):1005–9 (Eng. Abstr.) **(Pol)**

[Etiology of pruritus after epidural administration of narcotic analgesics] Semenikhin AA. **Anesteziol Reanimatol** 1988 May–Jun;(3):62–4 (Eng. Abstr.) **(Rus)**

[Use of long-term epidural analgesia] Safronov VS, et al. **Vestn Khir** 1989 Mar;142(3):82 **(Rus)**

PSYCHOLOGY

Pain development and consumption of analgesics after oral surgery in relation to personality characteristics. Hansson P, et al. **Pain** 1989 Jun;37(3):271–7

RADIONUCLIDE IMAGING

A comparative study of indium-111 DTPA radionuclide and iothalamate meglumine roentgenographic arthrography in the evaluation of painful total hip arthroplasty. Maxon HR, et al. **Clin Orthop** 1989 Aug;(245):156–9

[Bone scintigraphy in patients with hip joint prostheses. Use of bone scintigraphy in hip pain after total hip replacement] Petersen MM, et al. **Ugeskr Laeger** 1989 Apr 10; 151(15):940–1 (Eng. Abstr.) **(Dan)**

SURGERY

[Indications and results of sensory rhizotomy in cicatricial lumbar radiculitis syndromes] Kocks W, et al. **Zentralbl Neurochir** 1988;49(4):336–9 (Eng. Abstr.) **(Ger)**

[Surgical treatment of chronic alcoholic pancreatitis and its complications] Blagovidov DF, et al. **Sov Med** 1988; (10):54–9 (58 ref.) **(Rus)**

THERAPY

Methods for postoperative acute pain management. Lehmann KA. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):53–61 (102 ref.)

Regional blockade vs analgesic therapy against postoperative pain. Wiklund L. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):63–6

Postoperative analgesia. Bridenbaugh PO. **Acta Chir Scand Suppl** 1989;550:177–81

The stress response to surgery: release mechanisms and the modifying effect of pain relief. Kehlet H. **Acta Chir Scand Suppl** 1989;550:22–8 (75 ref.)

The influence of anesthesia and postoperative analgesic management of lung function. Sydow FW. **Acta Chir Scand Suppl** 1989;550:159–65; discussion 165–8 (20 ref.)

Postoperative pain relief and gastrointestinal motility. Wattwil M. **Acta Chir Scand Suppl** 1989;550:140–5 (37 ref.)

The effects of cold therapy in the postoperative management of pain in patients undergoing anterior cruciate ligament reconstruction. Cohn BT, et al. **Am J Sports Med** 1989 May–Jun;17(3):344–9

The control of post-thoracotomy pain [letter; comment] Bromage PR. **Anaesthesia** 1989 May;44(5):445–6. **Comment on:** Anaesthesia 1988 Sep;43(9):780–3

Continuous blockade of the lumbar plexus after knee surgery—postoperative analgesia and bupivacaine plasma concentrations. A controlled clinical trial. Dahl JB, et al. **Anaesthesia** 1988 Dec;43(12):1015–8

Continuous lumbar plexus block after arthroplasty [letter] Dahl JB, et al. **Anaesthesia** 1988 Nov;43(11):989

The control of post-thoracotomy pain. A comparative evaluation of thoracic epidural fentanyl infusions and cryo-analgesia [see comments] Gough JD, et al. **Anaesthesia** 1988 Sep;43(9):780–3. **Comment in:** Anaesthesia 1989 May;44(5):445–6

Poststernotomy neuralgia: a new pain syndrome. Defalque RJ, et al. **Anesth Analg** 1989 Jul;69(1):81–2

Influence of bupivacaine as an adjuvant to epidural morphine for analgesia after cesarean section. Douglas MJ, et al. **Anesth Analg** 1988 Dec;67(12):1138–41

Fentanyl and alfentanil versus morphine for epidural analgesia [letter] Bledsoe SW, et al. **Anesthesiology** 1988 Dec;69(6):1024–5

Bleeding after intercostal nerve block in a patient anticoagulated with heparin. Nielsen CH. **Anesthesiology** 1989 Jul;71(1):162–4

Caudal epidural morphine for control of pain following open heart surgery in children. Rosen KR, et al. **Anesthesiology** 1989 Mar;70(3):418–21

Caudal anaesthesia for postoperative pain relief in children: a comparative trial of different regimens using plain bupivacaine. Coad NR, et al. **Ann R Coll Surg Engl** 1989 Jul;71(4):245–8

Bupivacaine squirting [letter] Foate JA, et al. **Ann R Coll Surg Engl** 1989 Jan;71(1):72

Continuous intercostal nerve block for pain relief after thoracotomy. Sabanathan S, et al. **Ann Thorac Surg** 1988 Oct;46(4):425–6

Paravertebral block for post-cholecystectomy pain relief [letter] Kumar CM. **Br J Anaesth** 1989 Jul;63(1):129

Transcutaneous electrical nerve stimulation in the management of acute postoperative pain. McCallum MI, et al. **Br J Anaesth** 1988 Sep;61(3):308–12

Comparison of continuous paravertebral and extradural infusions of bupivacaine for pain relief after thoracotomy. Matthews PJ, et al. **Br J Anaesth** 1989 Feb;62(2):204–5

Postoperative intercostal block [letter] Murphy DF.

Br J Anaesth 1988 Sep;61(3):370–1
Postoperative paravertebral blocks for thoracic surgery [letter] Purcell-Jones G, et al. Br J Anaesth 1988 Sep; 61(3):369–70
Developments in local anaesthetic drugs and techniques for pain relief. Wildsmith JA. Br J Anaesth 1989 Aug; 63(2):159–64 (48 ref.)
Postoperative wound pain [letter] Eng JB, et al. Br J Surg 1989 Jan;76(1):101–2
Auricular electroacupuncture for postthoracotomy pain. Wang FH, et al. Chung Hua I Hsueh Tsa Chih 1988 May; 41(5):349–56
Management of pain in the postoperative neonate. Truog R, et al. Clin Perinatol 1989 Mar;16(1):61–78 (62 ref.)
Transcutaneous electrical nerve stimulation for pain relief following inguinal hernia repair: a controlled trial. Smedley F, et al. Eur Surg Res 1988;20(4):233–7
Management of postoperative pain. Warfield CA. Hosp Pract [Off] 1989 May 30;24(5A):53–4, 56, 59
Relief of postoperative pain: advances awaiting application. Cousins MJ, et al. Med J Aust 1989 Apr 3;150(7):354–6
Postoperative analgesia. Wilson PR. Med J Aust 1989 Apr 3;150(7):391, 394–6 (42 ref.)
Use of transcutaneous electrical nerve stimulation for postoperative pain. Hargreaves A, et al. Nurs Res 1989 May-Jun;38(3):159–61
Pediatric postoperative pain management. Berde CB. Pediatr Clin North Am 1989 Aug;36(4):921–40 (97 ref.)
The management of pain associated with pediatric procedures. Zeltzer LK, et al. Pediatr Clin North Am 1989 Aug;36(4):941–64 (93 ref.)
Transcutaneous electrical nerve stimulation for pain control after cholecystectomy: lack of expected benefits. Reuss R, et al. South Med J 1988 Nov;81(11):1361–3 (17 ref.)
Intercostal blockade and pulmonary function after cholecystectomy. Ross WB, et al. Surgery 1989 Feb;105(2 Pt 1):166–9
[Body traction using centrifugal force in the treatment of spinal diseases] Kelp HH. Z Orthop 1989 May-Jun; 127(3):354–7 (Eng. Abstr.) (Ger)
[Continuous epidural infusion of morphine with a pump to obtain postoperative analgesia after upper abdominal surgery] Murakawa T, et al. Masui 1988 Jun;37(6):745–51 (Eng. Abstr.) (Jpn)

PAIN RECEPTORS see NOCICEPTORS

PAINT

Contamination by organic solvents in auto paint shops. de Medinilla J, et al. Ann Occup Hyg 1988;32(4):509–13
[Level of urinary phenol and hippuric acid in control subjects and subjects exposed to benzene and toluene] Premel-Cabic A, et al. Ann Biol Clin (Paris) 1988;46(8):683–7 (22 ref.) (Eng. Abstr.) (Fre)
[Evaluation of the electric field in the work area of operators of manual electric painting equipment] Artamonov AF, et al. Gig Tr Prof Zabol 1988 Dec;(12):39–41 (Eng. Abstr.) (Rus)
[Ways to rationalize the nutrition of workers in the paint and varnish industry] Aldashev AA, et al. Vopr Pitan 1988 Sep-Oct;(5):34–7 (Rus)

ADVERSE EFFECTS

Disability, mortality, and incidence of cancer among Geneva painters and electricians: a historical prospective study. Gubéran E, et al. Br J Ind Med 1989 Jan;46(1):16–23
Cadmium, NAG activity, and beta 2-microglobulin in the urine of cadmium pigment workers. Kawada T, et al. Br J Ind Med 1989 Jan;46(1):52–5
Allergic contact dermatitis from triglycidyl isocyanurate in polyester paint pigments. Mathias CG. Contact Dermatitis 1988 Jul;19(1):67–8
Sensory thresholds among construction trade painters: a cross-sectional study using new methods for measuring temperature and vibration sensitivity. Bove FJ, et al. J Occup Med 1989 Apr;31(4):320–5
Chronic toxic encephalopathy among house painters with disability pension. Tvedt B, et al. J Oslo City Hosp 1989 Jun-Jul;39(6–7):74–80
Your worksite lunch may be lethal if you're a construction welder. Rekus JF. Occup Health Saf 1988 Oct;57(11):30–4
Olfactory function in painters exposed to organic solvents. Sandmark B, et al. Scand J Work Environ Health 1989 Feb;15(1):60–3
Isocyanate exposure and hypersensitivity pneumonitis—report of a probable case and prevalence of specific immunoglobulin G antibodies among exposed individuals. Seldén AI, et al. Scand J Work Environ Health 1989 Jun;15(3):234–7
The role of personal beliefs and social influences as determinants of respirator use among construction painters. White MC, et al. Scand J Work Environ Health 1988 Aug; 14(4):239–45
[The occupational risk in the manufacture of mineral pigments and iron oxide dyes] Khinkova L, et al. Probl Khig 1988;13:118–23 (Eng. Abstr.) (Bul)
[Fertility among painters according to questionnaires (letter)] Sherson DL. Ugeskr Laeger 1988 Oct 3;150(40):2415–6 (Dan)
[Damage to the respiratory system caused by varnishes and paints] Maintz G, et al. Z Gesamte Hyg 1988 May; 34(5):274–8 (82 ref.) (Eng. Abstr.) (Ger)

ANALYSIS

Evaluation of the applicability of fourier transform infrared (FTIR) spectroscopy for quantitation of the components of airborne solvent vapors in air. Ying LS, et al. Am Ind Hyg Assoc J 1989 Jul;50(7):360–5
Gas-chromatography/mass spectrometry analysis of the pyrolysis products of fire retardant and intumescent paints. Doretti L, et al. Ann Occup Hyg 1988;32(4):463–70
Solvent constituents in paint, glue and thinner for plastic miniature hobby. Saito J, et al. Tohoku J Exp Med 1988 Jul;155(3):275–83
[Characterization of exposure to pollutants in spray painting industries using room air concentration values and an exposure test] Bretschneider K, et al. Z Gesamte Hyg 1989 Jan;35(1):24–7 (Eng. Abstr.) (Ger)
[Industrial hygiene evaluation of painting cabins for small vehicle bodyshops in the Siena area] Borgogni F, et al. Med Lav 1988 Nov-Dec;79(6):474–81 (Eng. Abstr.) (Ita)

POISONING

[Toxic lung edema and inhalation heavy metal poisoning caused by removal of old paint remnants with hot air] Bednarz U, et al. Med Klin 1988 Oct 14;83(20):690–4 (Ger)

TOXICITY

[Study of the mutagenic effect of various chemical substances on Drosophila] Komissarova LA, et al. Gig Sanit 1989 Mar; (3):81–2 (Rus)
[Microelement composition of the hair of workers in the ceramic paint industry] Liubchenko PN, et al. Gig Tr Prof Zabol 1989;(3):7–9 (Eng. Abstr.) (Rus)

PAINTINGS see under ART

PAIR BOND see under SEX BEHAVIOR, ANIMAL

PAIRED-ASSOCIATE LEARNING

Retest reliability of the paired-association learning indices. Komenda S, et al. Acta Univ Palacki Olomuc Fac Med 1988;118:73–81
Semantic processing in patients with Alzheimer's disease. Albert M, et al. Brain Lang 1989 Jul;37(1):163–71
Age differences in primary organization or processing variability? Part II: Evidence for processing variability. Allen PA, et al. Exp Aging Res 1988 Summer-Autumn; 14(2–3):151–7
Age and individual differences in immediate and delayed effectiveness of mnemonic instructions. Erber JT, et al. Exp Aging Res 1988 Summer-Autumn;14(2–3):119–24
Automatic and attentional mechanisms of semantic priming in Alzheimer's disease. Nebes RD, et al. J Clin Exp Neuropsychol 1989 Mar;11(2):219–30
Evidence for auditory temporal distinctiveness: modality effects in order and frequency judgments. Glenberg AM, et al. J Exp Psychol [Learn Mem Cogn] 1988 Oct; 14(4):728–39
Time course of item and associative information: implications for global memory models. Gronlund SD, et al. J Exp Psychol [Learn Mem Cogn] 1989 Sep;15(5):846–58
Contingent dissociation between recognition and fragment completion: the method of triangulation. Hayman CA, et al. J Exp Psychol [Learn Mem Cogn] 1989 Mar;15(2):228–40
Semantic associations and elaborative inference. McKoon G, et al. J Exp Psychol [Learn Mem Cogn] 1989 Mar; 15(2):326–38
Prior knowledge: the effects of natural category size on memory for implicitly encoded concepts. Nelson DL, et al. J Exp Psychol [Learn Mem Cogn] 1989 Sep;15(5):957–67
A bias interpretation of facilitation in perceptual identification. Ratcliff R, et al. J Exp Psychol [Learn Mem Cogn] 1989 May;15(3):378–87
Impaired priming of new associations in amnesia. Shimamura AP, et al. J Exp Psychol [Learn Mem Cogn] 1989 Jul; 15(4):721–8
Bizarre imagery in paired-associate learning: an effective mnemonic aid with mixed context, delayed testing, and self-paced conditions. Iaccino JF, et al. Percept Mot Skills 1989 Feb;68(1):307–16
Priming and cued recall in elderly, alcohol intoxicated and sleep deprived subjects: a case of functionally similar memory deficits. Nilsson LG, et al. Psychol Med 1989 May; 19(2):423–33
Stimulus novelty and significance as determinants of electrodermal responsivity: the serial position effect. Ben-Shakhar G, et al. Psychophysiology 1989 Jan; 26(1):29–38

PALATAL EXPANSION TECHNIC

Expansion of the lower arch concurrent with rapid maxillary expansion. Sandstrom RA, et al. Am J Orthod Dentofacial Orthop 1988 Oct;94(4):296–302
Lower anterior face height and lip incompetence do not predict nasal airway obstruction. Hartgerink DV, et al. Angle Orthod 1989 Spring;59(1):17–23
Maxillary expansion: a retrospective study of three methods of expansion and their long-term sequelae. Herold JS. Br J Orthod 1989 Aug;16(3):195–200
A functional appliance system for the correction of class II relationships. Trenouth MJ. Br J Orthod 1989 Aug; 16(3):169–76
Adaptive functional changes in the swallowing pattern of the tongue following expansion of the maxillary dental arch in subjects with and without cleft palate. Ohkiba T, et al. Cleft Palate J 1989 Jan;26(1):21–30
Slow maxillary expansion: a comparison between banded and bonded appliances. Mossaz-Jœlson K, et al. Eur J Orthod 1989 Feb;11(1):67–76
A long-term study of rapid maxillary expansion and bone grafting in cleft lip and palate patients. Nicholson PT, et al. Eur J Orthod 1989 May;11(2):186–92
The effect of rapid maxillary expansion on nasal airway resistance. White BC, et al. J Otolaryngol 1989 Jun; 18(4):137–43
[Expansion and relapse] Ulgen M, et al. Fortschr Kieferorthop 1988 Aug;49(4):324–30 (Eng. Abstr.) (Ger)

ADVERSE EFFECTS

Bilateral nasopalatine ducts of the premaxilla. Eppley BL, et al. Int J Oral Maxillofac Surg 1988 Dec;17(6):360–2

INSTRUMENTATION

Skeletal changes in vertical and anterior displacement of the maxilla with bonded rapid palatal expansion appliances. Sarver DM, et al. Am J Orthod Dentofacial Orthop 1989 Jun;95(6):462–6
Effects of appliance size, arch wire diameter, and alloy composition on the in vitro force delivery of the quad-helix appliance. Urbaniak JA, et al. Am J Orthod Dentofacial Orthop 1988 Oct;94(4):311–6
A jointed fan-type expander: a newly designed expansion appliance for the upper dental arch of patients with cleft lip and/or palate. Suzuki A, et al. Cleft Palate J 1989 Jul; 26(3):239–41; discussion 241
The quadhelix maxillary expansion appliance: Part I. Mechanics. Jones SP, et al. Eur J Orthod 1989 May; 11(2):169–78
Stability of magnetic versus mechanical palatal expansion. Vardimon AD, et al. Eur J Orthod 1989 May;11(2):107–15

PALATAL MUSCLES see under MUSCLES

PALATAL NEOPLASMS

Acinic cell carcinoma in salivary gland of the palate. Saito K, et al. Int J Oral Maxillofac Surg 1989 Jun;18(3):168–9
Slow-growing, ulcerated mass of the left posterior hard palate. Dent CD, et al. J Am Dent Assoc 1989 May; 118(5):629–30
Multiple synchronous carcinoma of the aero-digestive tract. McCombe A, et al. J Laryngol Otol 1989 Aug;103(8):794–5

BLOOD SUPPLY

Distribution of blood flow in an experimental palatal carcinoma. Baredes S, et al. Am J Otolaryngol 1988 Jul-Aug;9(4):155–60

CONGENITAL

Epignathus. Banerjee KS, et al. Indian Pediatr 1988 Apr; 25(4):388–9

PATHOLOGY

Glycogen-rich clear cell carcinoma arising from minor salivary glands of the uvula. A case report. Hayashi K, et al. Acta Pathol Jpn 1988 Sep;38(9):1227–34
Epignathic teratoma associated with craniopharyngeal canal [letter] Cohen R, et al. AJNR 1989 May-Jun;10(3):652
Histochemical study of the biphasic cellular pattern of tubular adenoid cystic carcinoma with azophloxine, amidoblack and acid blue. Triantafyllou A, et al. Ann Dent 1989 Summer;48(1):20–4
Kaposi's sarcoma of the palate in a patient with AIDS: an unusual presentation. Daly CG, et al. Aust Dent J 1989 Apr;34(2):101–5
Behavior of in vitro grown normal human mucosal epithelial cells and tumorigenic rat cells inoculated into nude mice. Holmstrup P, et al. Exp Cell Biol 1989;57(2):73–80
T-cell lymphoma of palatal midline. Report of 2 cases. Nadimi H, et al. Int J Oral Maxillofac Surg 1988 Dec; 17(6):377–81
Midline granuloma. Nanavati NJ, et al. J Assoc Physicians India 1988 May;36(5):339–41
Benign mesenchymoma of the palate: report of a case. Daly JM, et al. J Oral Maxillofac Surg 1988 Oct;46(10):890–2
Benign osteoblastoma of the maxilla. el-Mofty S, et al. J Oral Maxillofac Surg 1989 Jan;47(1):60–4 (38 ref.)
Malignant lymphoma presenting as a midline lethal granuloma. Platt JC, et al. J Oral Maxillofac Surg 1989 May;47(5):511–3
Heterotopic brain tissue in the oral cavity. Gónzalez García M, et al. Oral Surg Oral Med Oral Pathol 1988 Aug; 66(2):218–22
Nevus unius lateris and intraoral verrucous nevi. Hickman RE, et al. Oral Surg Oral Med Oral Pathol 1988 Aug; 66(2):226–9
Non-Hodgkin's lymphoma of the oral cavity associated with

AIDS. Kaugars GE, et al.
Oral Surg Oral Med Oral Pathol 1989 Apr;67(4):433–6
Squamous odontogenic tumor: immunohistochemical identification of keratins. Tatemoto Y, et al.
Oral Surg Oral Med Oral Pathol 1989 Jan;67(1):63–7
Metastasizing pleomorphic adenoma arising in the soft palate. Wermuth DJ, et al. **Otolaryngol Head Neck Surg** 1988 Nov; 99(5):505–8
Heterogeneity of primary malignant melanomas in oral mucosa: an analysis of 43 cases in Japan. Umeda M, et al. **Pathology** 1988 Jul;20(3):234–41 (56 ref.)
[Muco-epidermoid carcinoma of the minor salivary glands. A case localized in the palate] Amato R, et al.
Minerva Stomatol 1988 Dec;37(12):975–80 (Eng. Abstr.) **(Ita)**
[Histopathological considerations on 8 cases of mixed tumors or pleiomorphic adenomas of the salivary glands] Debernardi C, et al. **Minerva Stomatol** 1989 Feb; 38(2):277–89 (Eng. Abstr.) **(Ita)**
[Granulosa cell tumor of the hard palate. Case report] Marzullo C, et al. **Minerva Stomatol** 1988 Apr;37(4):261–3 (21 ref.) (Eng. Abstr.) **(Ita)**
[Malignant transformation of Bowen's disease of the soft palate] Sysoliatin PG, et al. **Vestn Otorinolaringol** 1988 Jul–Aug;(4):67–8 **(Rus)**

RADIOTHERAPY

Primary radiation therapy in the treatment of squamous cell carcinoma of the soft palate. Horton D, et al. **Cancer** 1989 Jun 15;63(12):2442–5
Non-Hodgkin's lymphoma of the nasopharynx, paranasal sinus and palate. Makepeace AR, et al. **Clin Radiol** 1989 Mar;40(2):144–6

SECONDARY

Metastatic tumors to the jaws: a report of seven cases. Zachariades N, et al. **J Oral Maxillofac Surg** 1989 Sep; 47(9):991–6
[Palatal tumor as the first manifestation of gastric cancer (letter)] Arjona R, et al. **Rev Clin Esp** 1989 Jan;184(1):52–3 **(Spa)**

SURGERY

Immediate microvascular reconstruction of combined palatal and midfacial defects. Shestak KC, et al. **Am J Surg** 1988 Oct;156(4):252–5
Reconstruction of the palate using bilateral temporalis muscle flaps: a case report. Phillips JG, et al.
Br J Oral Maxillofac Surg 1988 Aug;26(4):322–5
Extensive and complex defects of the scalp, middle third of the face, and palate: the role of microsurgical reconstruction. Jones NF, et al. **Plast Reconstr Surg** 1988 Dec;82(6):937–52
[The versatile midface degloving approach. Re-updating the method, apropos of a case] Brasnu D, et al.
Ann Otolaryngol Chir Cervicofac 1989;106(4):268–70 (Eng. Abstr.) **(Fre)**
[Plastic reconstruction of small defects of the soft palate using the tonsil] Bootz F. **Laryngorhinootologie** 1989 Apr; 68(4):246 (Eng. Abstr.) **(Ger)**
[Tumors of the minor salivary glands. A clinical case and review of the literature] D'Ascanio G, et al.
Minerva Stomatol 1989 Jan;38(1):23–6 (23 ref.) (Eng. Abstr.) **(Ita)**

THERAPY

Treatment of haemangioendotheliomas with alpha interferon [letter] Orchard PJ, et al. **Lancet** 1989 Sep 2;2(8662):565–7
Squamous cell carcinoma of the soft palate, uvula, and anterior faucial pillar. Weber RS, et al.
Otolaryngol Head Neck Surg 1988 Jul;99(1):16–23
[Carcinoma of the soft palate and uvula. An analysis of the results and the reasons for failures. A study of 76 cases] Calais G, et al. **Rev Stomatol Chir Maxillofac** 1988; 89(5):306–10 (Eng. Abstr.) **(Fre)**

ULTRASTRUCTURE

Polymorphous low-grade adenocarcinoma of the palate: report of a case with electron microscopy. Nicolatou O, et al. **J Oral Maxillofac Surg** 1988 Nov;46(11):1008–13

PALATAL OBTURATORS

The role of pressure flow and endoscopic assessment in successful palatal obturator revision. Riski JE, et al.
Cleft Palate J 1989 Jan;26(1):56–62
A one-visit obturator technique for infants with cleft palate. Samant A. **J Oral Maxillofac Surg** 1989 May;47(5):539–40
Design and construction of pediatric interim obturators. Aras E, et al. **J Prosthet Dent** 1989 Jul;62(1):54–5
Direct conversion of a solid obturator to a hollow obturator prosthesis. Birnbach S, et al. **J Prosthet Dent** 1989 Jul; 62(1):58–60
An easy, fast technique for making immediate surgical obturators. Caputo TL, et al. **J Prosthet Dent** 1989 Apr; 61(4):473–5
The use of light-cured material for immediate hollow obturator prosthesis. Fischman B. **J Prosthet Dent** 1989 Feb;61(2):215–6
Prosthetic management of post-surgical fistulas in patients with cleft lip and palate [letter] Hupp JR.
J Prosthet Dent 1988 Sep;60(3):401–2
The maxillary immediate surgical obturator prosthesis. Huryn JM, et al. **J Prosthet Dent** 1989 Mar;61(3):343–7
Stabilized record base for maxillary removable partial denture obturator. Knudson RC, et al. **J Prosthet Dent** 1989 Feb; 61(2):247–8
Increased retention of a maxillary obturator prosthesis using osteointegrated intramobile cylinder dental implants: A clinical report. Mentag PJ, et al. **J Prosthet Dent** 1988 Oct; 60(4):411–5
A photoelastic study of stress induced by framework design in a maxillary resection. Myers RE, et al.
J Prosthet Dent 1989 May;61(5):590–4
Prosthodontic principles in the framework design of maxillary obturator prostheses. Parr GR, et al.
J Prosthet Dent 1989 Aug;62(2):205–12
Comparison of weight reduction in different designs of solid and hollow obturator prostheses. Wu YL, et al.
J Prosthet Dent 1989 Aug;62(2):214–7
Preoperative positioning of the protruding premaxilla in the bilateral cleft lip patient. Georgiade NG, et al.
Plast Reconstr Surg 1989 Jan;83(1):32–40
[The effect of passive plates on the arrangement of the alveolar arch segments in unilateral total cheilognathopalatoschisis] Sarnäs KV, et al.
Fortschr Kieferorthop 1989 Feb;50(1):21–34 (Eng. Abstr.) **(Ger)**
[Prosthetic rehabilitation in the sequelae of labiopalatoschisis] Di Paolo C, et al. **Minerva Stomatol** 1989 Apr;38(4):467–76 (Eng. Abstr.) **(Ita)**
[A unit-cast metal obturator for a penetrating defect in total maxillary anodontia] Filippov GF. **Voen Med Zh** 1989 Mar; (3):55 **(Rus)**

METHODS

[Experience and long-term outcome of the use of the base of the nasal vestibule for retention of the obturator] Zhou JL. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Jan; 24(1):27–9 **(Chi)**

PALATE

Posterior lamellar eyelid reconstruction with a hard palate mucosal graft. Bartley GB, et al. **Am J Ophthalmol** 1989 Jun 15;107(6):609–12
A different design of palatal lift appliance: review and case reports. Spratley MH, et al. **Aust Dent J** 1988 Dec; 33(6):491–5
Immunohistochemical study of palatal salivary glands of denture wearing patients. Vigneswaran N, et al.
J Oral Pathol 1988 May;17(5):230–5
Different cross-linked types of collagen implanted in rat palatal gingiva. Minabe M, et al. **J Periodontol** 1989 Jan; 60(1):35–43
Duplicating natural palatal contours in acrylic resin complete dentures. White KC, et al. **J Prosthet Dent** 1989 Apr; 61(4):508–10
[Evaluation of occlusal plane, ala-tragion line, palatal plane and mandibular plane in Chinese] Shen YF, et al.
Chang Keng I Hsueh 1988 Sep 20;11(3):218–23 (Eng. Abstr.) **(Chi)**
[Influence of denture base material used for palate on mechanical properties of upper complete denture] Takayama Y. **Kokubyo Gakkai Zasshi** 1988 Sep;55(3):471–8 (Eng. Abstr.) **(Jpn)**

ABNORMALITIES

Palatine bone in human cyclopia. McGrath P.
Acta Anat (Basel) 1989;135(2):149–57
A terminal deletion (14)(q31.1) in a child with microcephaly, narrow palate, gingival hypertrophy, protuberant ears, and mild mental retardation. Yen FS, et al. **J Med Genet** 1989 Feb;26(2):130–3

ANATOMY & HISTOLOGY

Bony bridge on the hard palate anterior to greater palatine foramen. Khatri K, et al. **Anat Anz** 1988;166(1–5):87–90
Stability of magnetic versus mechanical palatal expansion. Vardimon AD, et al. **Eur J Orthod** 1989 May;11(2):107–15
Morphology of human bony palate. Goździewski S, et al.
Folia Morphol (Warsz) 1987;46(3–4):219–25
Mast cells, elastic fibres and the lamina propria in the hard palate of the rat. Thomas CJ. **J Biol Buccale** 1988 Jun; 16(2):101–7
Relationship of the maxillary canines to the incisive papilla. Grove HF, et al. **J Prosthet Dent** 1989 Jan;61(1):51–3

BLOOD SUPPLY

Serious circulatory disturbance after Le Fort I osteotomy. A case report. Yeo JF, et al. **J Craniomaxillofac Surg** 1989 Jul;17(5):222–5
Microvascular patterns of the hard palatine mucosa in the Japanese monkey (Macaca fuscata). Kajiwara K.
Okajimas Folia Anat Jpn 1989 May;66(1):39–51

CYTOLOGY

The development of mast cells in facial skin, palate and tongue of the mouse. Luke DA. **Arch Oral Biol** 1988; 33(11):827–31
Replacement of Langerhans cells in murine palate. Rittman BR, et al. **J Oral Pathol Med** 1989 May;18(5):279–81

DRUG EFFECTS

Alterations in craniofacial growth induced by isotretinoin (13-cis-retinoic acid) in mouse whole embryo and primary mesenchymal cell culture. Watanabe T, et al.
J Craniofac Genet Dev Biol 1988;8(1):21–33
TCDD alters medial epithelial cell differentiation during palatogenesis. Abbott BD, et al.
Toxicol Appl Pharmacol 1989 Jun 15;99(2):276–86
2,3,7,8-Tetrachlorodibenzo-p-dioxin alters embryonic palatal medial epithelial cell differentiation in vitro. Abbott BD, et al. **Toxicol Appl Pharmacol** 1989 Aug;100(1):119–31
[Teratogen-modified palatogenesis in the Uje: WIST rat. 4. Scanning electron microscopic morphology of the epithelium during the formation of the secondary palate] Zenk W, et al. **Zahn Mund Kieferheilkd** 1989;77(2):161–6 (Eng. Abstr.) **(Ger)**

EMBRYOLOGY

Development and growth of palatal rugae in the mouse. Luke DA. **Acta Anat (Basel)** 1988;133(1):41–4
Relationship of the primary choanae and anterior cranial base in the mouse embryo. Sim DW. **Acta Anat (Basel)** 1989; 134(3):242–4
Morphogenesis of the secondary palate in mouse embryos with special reference to the development of rugae. Sakamoto MK, et al. **Anat Rec** 1989 Mar;223(3):299–310
Histological evidence of fusion between the posterior palatal shelves and the floor of the mouth in Alligator mississippiensis. Shah RM, et al. **Arch Oral Biol** 1988; 33(10):769–71
Medial edge epithelium transforms to mesenchyme after embryonic palatal shelves fuse. Fitchett JE, et al.
Dev Biol 1989 Feb;131(2):455–74
Retinoic acid alters EGF receptor expression during palatogenesis. Abbott BD, et al. **Development** 1988 Apr; 102(4):853–67
Palate development. Ferguson MW. **Development** 1988;103 Suppl:41–60 (101 ref.)
Effects of epidermal growth factor and phorbol 12-myristate 13-acetate on protein phosphorylation in mouse embryo palate mesenchyme cells in vitro. Chepenik KP, et al.
J Craniofac Genet Dev Biol 1988;8(2):147–53
Inhibition of embryonic palatal shelf horizontalization and medial edge epithelial breakdown by cortisol: role of H-2 in the mouse. Goldman AS, et al.
J Craniofac Genet Dev Biol 1988;8(2):135–45
Effect of diazepam on the embryonic development of the palate in the rat. Katz RA. **J Craniofac Genet Dev Biol** 1988;8(2):155–66
Dexamethasone does not interfere with hormone-sensitive PI hydrolysis. London FS, et al. **Teratology** 1989 Feb; 39(2):121–6
Growth of the secondary palate in the hamster following hydrocortisone treatment: shelf area, cell number, and DNA synthesis. Shah RM, et al. **Teratology** 1989 Aug; 40(2):173–80
[Normal and pathologic development of the secondary palate—a new concept] Opitz C, et al.
Zahn Mund Kieferheilkd 1989;77(2):167–73 (Eng. Abstr.) **(Ger)**

INJURIES

Prevention of palatal groove formation in premature neonates requiring intubation. Ginoza G, et al. **J Pediatr** 1989 Jul; 115(1):133–5
[Injuries of the oral mucosa (letter)] van Zanten ME.
Ned Tijdschr Geneeskd 1988 Oct 29;132(44):2035 **(Dut)**

INNERVATION

Nerve pathways between the pterygopalatine ganglion and eye in cats. Lin T, et al. **Anat Rec** 1988 Sep;222(1):95–102
A horseradish peroxidase study of the central projections of primary trigeminal neurons innervating the hard palate in the cat. Arvidsson J, et al. **Brain Res** 1988 Jun 7; 451(1-2):197–204
Responses of neurons in the lamb nucleus tractus solitarius to stimulation of the caudal oral cavity and epiglottis with different stimulus modalities. Sweazey RD, et al.
Brain Res 1989 Feb 20;480(1-2):133–50
Necrotising sialometaplasia presenting as greater palatine nerve anaesthesia. Lamey PJ, et al.
Int J Oral Maxillofac Surg 1989 Apr;18(2):70–2
Fine structure of the lamellated corpuscles in the mouse hard palatine mucosa. Watanabe I, et al.
Z Mikrosk Anat Forsch 1988;102(5):811–6
[Changes in the pterygopalatine and upper cervical sympathetic ganglia in experimental paranasal sinusitis] Spokoinaia VA. **Vestn Otorinolaringol** 1988 Sep-Oct; (5):18–22 (Eng. Abstr.) **(Rus)**

METABOLISM

[Biochemical analysis of myofibroblasts isolated from scar tissue in rat palatal mucoperiosteum] Baba Y.
Kokubyo Gakkai Zasshi 1988 Dec;55(4):599–614 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

A new model for studying bacterial adherence to the respiratory epithelium. Plotkowski MC, et al. **Braz J Med Biol Res** 1988;21(2):285–8

The frog palate mucosa as a model for studying bacterial adhesion to mucus-coated respiratory epithelium. Plotkowski MC, et al. **J Comp Pathol** 1989 Jan;100(1):37–46

PATHOLOGY

Elastic cartilage in the incisive canal region: report of a case. Basu MK, et al. **Br J Oral Maxillofac Surg** 1989 Feb; 27(1):63–6

Rhinolith: an unusual cause of palatal perforation. Flood TR. **Br J Oral Maxillofac Surg** 1988 Dec;26(6):486–90

Persistent sialadenitis of the minor glands—stomatitis glandularis. Williams HK, et al. **Br J Oral Maxillofac Surg** 1989 Jun;27(3):212–6

Involvement of palate and cheek in leprosy. Kumar B, et al. **Indian J Lepr** 1988 Apr;60(2):280–4

Pigmented nasopalatine duct cyst. Report of 2 cases. el-Bardaie A, et al. **Int J Oral Maxillofac Surg** 1989 Jun; 18(3):138–9

Bilateral nasopalatine ducts of the premaxilla. Eppley BL, et al. **Int J Oral Maxillofac Surg** 1988 Dec;17(6):360–2

Reactive lymphoid hyperplasia of the hard palate. Davila MA, et al. **J Oral Maxillofac Surg** 1988 Dec;46(12):1103–5

Malignant lymphoma presenting as a midline lethal granuloma. Platt JC, et al. **J Oral Maxillofac Surg** 1989 May;47(5):511–3

Palatal mucosal changes among reverse smokers in an Indian village. Gavarasana S, et al. **Jpn J Cancer Res** 1989 Mar; 80(3):209–11

Rapp-Hodgkin syndrome: an ectodermal dysplasia involving the teeth, hair, nails, and palate. Report of a case and review of the literature. Crawford PJ, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jan;67(1):50–62 (23 ref.)

Acquired immune deficiency syndrome presenting as a palatal perforation. Fowler CB, et al. **Oral Surg Oral Med Oral Pathol** 1989 Mar;67(3):313–8

A rapidly fatal palatal ulcer: rhinocerebral mucormycosis. Van der Westhuijzen AJ, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jul;68(1):32–6 (24 ref.)

[The height of the palatal vault in infants with Down's syndrome] Fischer-Brandies H, et al. **Orthod Fr** 1987;58 Pt 2:599–606 (Eng. Abstr.) (Fre)

[Necrotizing sialometaplasia. Apropos of a case. Diagnostic and therapeutic problems] Constantini L, et al. **Rev Stomatol Chir Maxillofac** 1988;89(4):234–6 (26 ref.) (Eng. Abstr.) (Fre)

[Comparative studies of the palatal mucosa under physiologic conditions and with removable dentures. I. Epithelial height and papillary bodies] Mai M, et al. **Zahn Mund Kieferheilkd** 1989;77(2):139–44 (Eng. Abstr.) (Ger)

[Comparative studies of the palatal mucosa under physiologic conditions and with removable dentures. II. The regional differentiation of epithelial layers] Mai M, et al. **Zahn Mund Kieferheilkd** 1989;77(3):262–7 (Eng. Abstr.) (Ger)

PHYSIOLOGY

Palate and hypopharynx—sites of inspiratory narrowing of the upper airway during sleep [published erratum appears in Am Rev Respir Dis 1989 Aug;140(2):569] Hudgel DW, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1542–7

Free amino acids in human palatine gland secretions. Mäkinen KK, et al. **Arch Oral Biol** 1988;33(11):847–9

PHYSIOPATHOLOGY

Articulatory description and treatment of "lateral /s/" using electropalatography: a case study. Gibbon F, et al. **Br J Disord Commun** 1987 Dec;22(3):203–17

SECRETION

The role of the periciliary fluid in mucociliary flows: flow velocity profiles in frog palate mucus. Winet H. **Biorheology** 1987;24(6):635–42

SURGERY

Regeneration in surgically produced cleft palate in rabbits. A microscopical study. Griffioen FM, et al. **Acta Morphol Neerl Scand** 1987;25(4):215–25

Acute airway obstruction after uvulopalatopharyngoplasty for obstructive sleep apnea syndrome. Gabrielczyk MR. **Anesthesiology** 1988 Dec;69(6):941–3

Uvulopalatopharyngoplasty: postoperative management and evaluation of results. Macaluso RA, et al. **Ann Otol Rhinol Laryngol** 1989 Jul;98(7 Pt 1):502–7

A comparison of the speech results after early and delayed hard palate closure; a preliminary report. Harding A, et al. **Br J Plast Surg** 1989 Mar;42(2):187–92

The fate of buccal mucosal flaps in primary palatal repair. Freedlander E, et al. **Cleft Palate J** 1989 Apr;26(2):110–2; discussion 112–3

Changes in articulation and resonance after tongue flap closure of palatal fistulas: case reports. Kummer AW, et al. **Cleft Palate J** 1989 Jan;26(1):51–5

Conjunctivoralostomy for treatment of an occluded lacrimal duct in a blood python. Millichamp NJ, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1136–8

Transpalatal approach to the petrous apex. Davis AE, et al. **J Laryngol Otol** 1989 Jan;103(1):94–6

Immediate microvascular reconstruction of combined palatal and midfacial defects using soft tissue only. Shestak KC, et al. **Microsurgery** 1988;9(2):128–31

Levator repositioning and palatal lengthening for submucous clefts. Pensler JM, et al. **Plast Reconstr Surg** 1988 Nov; 82(5):765–9

Speech results in CLP patients operated on with a von Langenbeck palatal closure. Myklebust O, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(1):71–4

Healing of experimental midline osteotomies in the rat palate. Kahnberg KE. **Swed Dent J** 1988;12(6):227–32

[Technics of velopalatal reconstruction] Reychler H. **Ann Chir Plast Esthet** 1989;34(2):129–35 (92 ref.) (Eng. Abstr.) (Fre)

[A new method of x-ray diagnosis of palatopharyngeal functional disorders following uranoplasty] Ananian SG. **Stomatologiia (Mosk)** 1988 Jul-Aug;67(4):46–8 (Eng. Abstr.) (Rus)

[Choice of the method for closing the hard palate defect in conservative uranoplasty] Shul'zhenko VI, et al. **Stomatologiia (Mosk)** 1988 Nov-Dec;67(6):61–2 (Eng. Abstr.) (Rus)

[Use of a nasolabial flap for correcting defects of the hard palate] Ananian SG, et al. **Vestn Khir** 1989 Jan;142(1):91–2 (Eng. Abstr.) (Rus)

PALATE, SOFT

Squamous cell carcinoma of the soft palate, uvula, and anterior faucial pillar. Weber RS, et al. **Otolaryngol Head Neck Surg** 1988 Jul;99(1):16–23

[Carcinoma of the soft palate and uvula. An analysis of the results and the reasons for failures. A study of 76 cases] Calais G, et al. **Rev Stomatol Chir Maxillofac** 1988; 89(5):306–10 (Eng. Abstr.) (Fre)

[Spinocerebellar degeneration with oculopalatal myoclonus: a study on palato-ocular synchrony] Yokota T, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):382–7 (Eng. Abstr.) (Jpn)

[Palatal myoclonus and hypertrophy of the olivary nucleus. Case report] Olejniczak P. **Neuropatol Pol** 1988; 26(3):377–83 (Eng. Abstr.) (Pol)

[Palatine mucormycosis and thrombosis of the cavernous sinus] Ermocilla R, et al. **Rev Med Panama** 1988 May; 13(2):107–10 (Eng. Abstr.) (Spa)

ABNORMALITIES

Rostral displacement of the palatopharyngeal arch in a seven-month-old Hanoverian colt. Klein HJ, et al. **Equine Vet J** 1989 Sep;21(5):382–3

Unsuccessful surgical repair of a short soft palate in a dog. Bauer MS, et al. **J Am Vet Med Assoc** 1988 Dec 15; 193(12):1551–2

Sternothyrohyoideus myectomy in horses: 17 cases (1984–1985). Harrison IW, et al. **J Am Vet Med Assoc** 1988 Nov 15;193(10):1299–302

A significant feature of Nager's syndrome: palatal agenesis. Jackson IT, et al. **Plast Reconstr Surg** 1989 Aug; 84(2):219–26

ANATOMY & HISTOLOGY

Sites and sizes of fat deposits around the pharynx in obese patients with obstructive sleep apnoea and weight matched controls. Horner RL, et al. **Eur Respir J** 1989 Jul; 2(7):613–22

An investigation of the anatomic position of the posterior palatal seal by ultrasound. Narvekar RM, et al. **J Prosthet Dent** 1989 Mar;61(3):331–6

[Comparative anatomy of the velopharyngeal complex in human and non-human primates (2)] Scheye T, et al. **Bull Assoc Anat (Nancy)** 1987 Mar;71(212):25–9 (Eng. Abstr.) (Fre)

[Comparative anatomy of the velopharyngeal complex in mammals—excluding primates (1)] Vergote T, et al. **Bull Assoc Anat (Nancy)** 1987 Mar;71(212):19–24 (Eng. Abstr.) (Fre)

[The distance between the ductus nasolacrimus and the canalis palatinus major on the sidewall of the nasal septum and the distances between the ostium pharyngeum tubae auditivae and canalis palatinus major and the upper side of the soft palate] Lang J, et al. **Anat Anz** 1989; 168(4):315–20 (Eng. Abstr.) (Ger)

GROWTH & DEVELOPMENT

[Is velopharyngeal competence stable with growth in patients with cleft palate?] Caouette-Laberge L, et al. **Chir Pediatr** 1989;30(2):88–90 (Eng. Abstr.) (Fre)

INJURIES

Thrombosis of the internal carotid artery due to soft palate injury. Mains B, et al. **J Laryngol Otol** 1989 Aug; 103(8):796–7

INNERVATION

Electrogustometry of the soft palate as a topographic diagnostic method for facial paralysis. Kikuchi T, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;458:134–8

The motor innervation of the soft palate. An anatomical study in guinea pigs and monkeys. Strutz J, et al. **Arch Otorhinolaryngol** 1988;245(3):180–4

PATHOLOGY

Blood blisters on the soft palate in angina bullosa haemorrhagica. Case reports. Daly CG. **Aust Dent J** 1988 Oct;33(5):400–3

Cephalometric analysis in patients with obstructive sleep apnoea syndrome: II. Soft tissue morphology. Lyberg T, et al. **J Laryngol Otol** 1989 Mar;103(3):293–7

PHYSIOLOGY

Digital, labial, and velopharyngeal reaction times in normal speakers. Dalston RM, et al. **Cleft Palate J** 1988 Jul; 25(3):203–9

Reliability of flexible fiberoptic nasopharyngoscopy for evaluation of velopharyngeal function in a clinical population. D'Antonio LL, et al. **Cleft Palate J** 1989 Jul; 26(3):217–25; discussion 225

The effects of Le Fort I osteotomy with maxillary movement on articulation, resonance, and velopharyngeal function. Kummer AW, et al. **Cleft Palate J** 1989 Jul;26(3):193–9; discussion 199–200

Screening of velopharyngeal inadequacy by differential pressure measurements. Morr KE, et al. **Cleft Palate J** 1989 Jan;26(1):42–5

The role of pressure flow and endoscopic assessment in successful palatal obturator revision. Riski JE, et al. **Cleft Palate J** 1989 Jan;26(1):56–62

Assessment of velopharyngeal competence: a long-term process. Van Demark DR, et al. **Cleft Palate J** 1988 Oct; 25(4):362–73

Effects of velar resistance on speech aerodynamics. Laine T, et al. **Eur J Orthod** 1989 Feb;11(1):52–8

Intraoral speech pressures after experimental loss of velar resistance. Morr KE, et al. **Folia Phoniatr (Basel)** 1988; 40(6):284–9

Autonomic nervous reflexes in respiration elicited by mechanical stimulation of the velopharyngeal region in rabbits. Miyaoka Y, et al. **J Auton Nerv Syst** 1989 Mar; 26(2):177–80

Using simultaneous photodetection and nasometry to monitor velopharyngeal behavior during speech. Dalston RM. **J Speech Hear Res** 1989 Mar;32(1):195–202

Accuracy of pressure-flow estimates of velopharyngeal orifice size in an analog model and human subjects. Guyette TW, et al. **J Speech Hear Res** 1988 Dec;31(4):537–48

Variations in velar position over time: a nasal videoendoscopic study. Karnell MP, et al. **J Speech Hear Res** 1988 Sep;31(3):417–24

A comparison of photodetector and endoscopic evaluations of velopharyngeal function. Karnell MP, et al. **J Speech Hear Res** 1988 Sep;31(3):503–10

An analysis of velopharyngeal timing in normal adult speakers using a microcomputer based photodetector system. Keefe MJ, et al. **J Speech Hear Res** 1989 Mar; 32(1):39–48

Palatoglossus activity during nasal/nonnasal vowels of Hindi. Dixit RP, et al. **Phonetica** 1987;44(4):210–26

Speech results of the Zürich approach in the treatment of unilateral cleft lip and palate. Van Demark DR, et al. **Plast Reconstr Surg** 1989 Apr;83(4):605–13

PHYSIOPATHOLOGY

Perceived articulatory adequacy and velopharyngeal function in dysarthric speakers. Yorkston KM, et al. **Arch Phys Med Rehabil** 1989 Apr;70(4):313–7

Patterns and location of velopharyngeal valving problems: atypical findings on video nasopharyngoscopy. Witzel MA, et al. **Cleft Palate J** 1989 Jan;26(1):63–7

[How can one recognize a velum snorer?] Schäfer J. **Laryngorhinootologie** 1989 May;68(5):290–4 (Eng. Abstr.) (Ger)

RADIOGRAPHY

Evaluation of the upper airway by computerized tomography in patients undergoing uvulopalatopharyngoplasty for obstructive sleep apnea. Shepard JW Jr, et al. **Am Rev Respir Dis** 1989 Sep;140(3):711–6

Absorbed doses and energy imparted from radiographic examination of velopharyngeal function during speech. Isberg A, et al. **Cleft Palate J** 1989 Apr;26(2):105–9

Contrast examination of the soft palate with cross sectional correlation. Rubesin SE, et al. **Radiographics** 1988 Jul; 8(4):641–65

SURGERY

The effect of intravelar veloplasty on velopharyngeal competence following pharyngeal flap surgery. Jarvis BL, et al. **Cleft Palate J** 1988 Oct;25(4):389–94

Intravelar veloplasty: a prospective study. Marsh JL, et al. **Cleft Palate J** 1989 Jan;26(1):46–50

The predictive efficacy of the Müller maneuver in uvulopalatopharyngoplasty. Katsantonis GP, et al. **Laryngoscope** 1989 Jul;99(7 Pt 1):677–80

Changes in pharyngeal properties after uvulopalatopharyngoplasty. Wright S, et al. **Laryngoscope** 1989 Jan;99(1):62–5

Uvulopalatopharyngoplasty as a treatment for snoring. Saunders NA, et al. **Med J Aust** 1989 Feb 20;150(4):177–82
Uvulopalatopharyngoplasty [letter] Finkelstein Y, et al. **Plast Reconstr Surg** 1989 Mar;83(3):577–8
Uvulopalatopharyngoplasty in severe idiopathic obstructive sleep apnoea syndrome. Walker EB, et al. **Thorax** 1989 Mar;44(3):205–8
[Snoring: physiopathology, surgical treatment and a modified uvulo–palato–pharyngoplasty] Piché J, et al. **J Otolaryngol** 1989 Feb;18(1):36–43 (Eng. Abstr.) (Fre)
[Anesthesia problems posed by uvulo–palato–pharyngoplasty (UPPP)] Esteben D, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(3):277–9 (Fre)

ULTRASTRUCTURE

Changes in soft palate taste buds of rats due to aging and zinc deficiency—scanning electron microscopic observation. Naganuma M, et al. **Auris Nasus Larynx** 1988; 15(2):117–27

PALATOPHARYNGEAL INCOMPETENCE see **VELOPHARYNGEAL INSUFFICIENCY**

PALEODONTOLOGY

Third molar agenesis in human prehistoric populations of the Canary Islands. Bermúdez de Castro JM. **Am J Phys Anthropol** 1989 Jun;79(2):207–15
Reflections on the face of Japan: a multivariate craniofacial and odontometric perspective. Brace CL, et al. **Am J Phys Anthropol** 1989 Jan;78(1):93–113
Enlarged occlusal surfaces on first molars due to severe attrition and hypercementosis: examples from prehistoric coastal populations of Texas. Comuzzie AG, et al. **Am J Phys Anthropol** 1989 Jan;78(1):9–15
New hominid fossils from the Swartkrans formation (1979–1986 excavations): craniodental specimens. Grine FE. **Am J Phys Anthropol** 1989 Aug;79(4):409–49
Odontometric profile of a prehistoric southeastern Florida population. Işcan MY. **Am J Phys Anthropol** 1989 Jan; 78(1):3–8
Human skeletal and dental remains from Lapita sites (1600–500 B.C.) in the Mussau Islands, Melanesia. Kirch PV, et al. **Am J Phys Anthropol** 1989 May;79(1):63–76
Prehistoric "fish–eaters" along the eastern Arabian coasts: dental variation, morphology, and oral health in the Ra's al–Hamra community (Qurum, sultanate of Oman, 5th–4th millennia BC). Macchiarelli R. **Am J Phys Anthropol** 1989 Apr;78(4):575–94
Deciduous teeth of the Neandertal mandible from Molare Shelter, near Scario (Salerno, Italy). Mallegni F, et al. **Am J Phys Anthropol** 1989 Aug;79(4):475–82
Tooth wear in Australian aboriginal populations from the River Murray Valley. Molnar S, et al. **Am J Phys Anthropol** 1989 Jun;79(2):185–96
Incidence and patterning of dental enamel hypoplasia among the Neandertals. Ogilvie MD, et al. **Am J Phys Anthropol** 1989 May;79(1):25–41
Sexual dimorphism in Laccopithecus robustus, a late miocene hominoid from China. Pan YR, et al. **Am J Phys Anthropol** 1989 Jun;79(2):137–58
Phenotypic selection on the dentition in a Late Archaic population of Ohio. Sciulli PW, et al. **Am J Phys Anthropol** 1988 Aug;76(4):527–33
Population variation in tooth, jaw, and root size: a radiographic study of two populations in a high–attrition environment. Smith P, et al. **Am J Phys Anthropol** 1989 Jun;79(2):197–206
Yugoslav Mesolithic dental reduction. y'Edynak G. **Am J Phys Anthropol** 1989 Jan;78(1):17–36
Caries experience in the permanent dentition of late mediaeval Scots (1300–1600 a.d.). Kerr NW, et al. **Arch Oral Biol** 1988;33(3):143–8
Scanning electron microscopy of molar enamel structure of cricetodontine neogene rodents. Rodde J, et al. **Arch Oral Biol** 1988;33(10):749–59
Mandibular and dental abnormalities of two Pleistocene American lions (Panthera leo atrox) from Yukon Territory. Beebe BF, et al. **Can J Vet Res** 1988 Oct;52(4):468–72
Modified subfossil aye–aye incisors from southwestern Madagascar: species allocation and paleoecological significance. MacPhee RD, et al. **Folia Primatol (Basel)** 1988;51(2–3):126–42
New specimens of Oligopithecus savagei, early Oligocene primate from the Fayum, Egypt. Rasmussen DT, et al. **Folia Primatol (Basel)** 1988;51(4):182–208
The Carabelli trait in human prehistoric populations of the Canary Islands. Bermúdez De Castro JM. **Hum Biol** 1989 Feb;61(1):117–31
Evolution of tooth structure in the Equoidea. Kozawa Y, et al. **J Nihon Univ Sch Dent** 1988 Dec;30(4):287–96
The hard evidence of alveolar bone loss in early hominids of southern Africa. A short communication. Ripamonti U. **J Periodontol** 1989 Feb;60(2):118–20
Mammal teeth from the Cretaceous of Africa. Jacobs LL, et al. **Nature** 1988 Nov 10;336(6195):158–60
Teeth and prehistory in Asia. Turner CG 2d. **Sci Am** 1989 Feb;260(2):88–91, 94–6 (4 ref.)
Incremental lines in prehistoric cremated teeth. A technical note. Grosskopf B. **Z Morphol Anthropol** 1989;77(3):309–11

PALEONTOLOGY

Fossil platyrrhine forelimb bones from the early miocene of Argentina. Anapol F, et al. **Am J Phys Anthropol** 1988 Aug;76(4):417–28
Intentional cranial vault deformation and induced changes of the cranial base and face. Anton SC. **Am J Phys Anthropol** 1989 Jun;79(2):253–67
Spondylolysis and its relationship to degenerative joint disease in the prehistoric southeastern United States. Bridges PS. **Am J Phys Anthropol** 1989 Jul;79(3):321–9
Stratigraphic context of fossil hominids from the Omo group deposits: northern Turkana Basin, Kenya and Ethiopia. Feibel CS, et al. **Am J Phys Anthropol** 1989 Apr; 78(4):595–622
New hominid fossils from the Swartkrans formation (1979–1986 excavations): craniodental specimens. Grine FE. **Am J Phys Anthropol** 1989 Aug;79(4):409–49
Some additional morphological and metrical observations on Pan brain casts and their relevance to the Taung endocast. Holloway RL. **Am J Phys Anthropol** 1988 Sep;77(1):27–33
Spectrographic analysis of trace elements in archaeological skeletal material from Florida: a preliminary report. Işcan MY, et al. **Am J Phys Anthropol** 1989 Aug;79(4):483–8
A yellow–stained human femur from Tell esh–Shuqafiya, Egypt: evidence of ancient trauma. Jones RN. **Am J Phys Anthropol** 1988 Sep;77(1):77–83
Human skeletal and dental remains from Lapita sites (1600–500 B.C.) in the Mussau Islands, Melanesia. Kirch PV, et al. **Am J Phys Anthropol** 1989 May;79(1):63–76
Migration models of prehistoric postmarital residence. Konigsberg LW. **Am J Phys Anthropol** 1988 Dec; 77(4):471–82
Carnivore alteration of human bone from a late prehistoric site in Illinois. Milner GR, et al. **Am J Phys Anthropol** 1989 May;79(1):43–9
Incidence and patterning of dental enamel hypoplasia among the Neandertals. Ogilvie MD, et al. **Am J Phys Anthropol** 1989 May;79(1):25–41
Model life table fitting by maximum likelihood estimation: a procedure to reconstruct paleodemographic characteristics from skeletal age distributions. Paine RR. **Am J Phys Anthropol** 1989 May;79(1):51–61
Sexual dimorphism in Laccopithecus robustus, a late miocene hominoid from China. Pan YR, et al. **Am J Phys Anthropol** 1989 Jun;79(2):137–58
Treponematosis: a possible case from the late prehistoric of North Carolina. Reichs KJ. **Am J Phys Anthropol** 1989 Jul;79(3):289–303
Cranial morphology of Aegyptopithecus and Tarsius and the question of the tarsier–anthropoidean clade. Simons EL, et al. **Am J Phys Anthropol** 1989 May;79(1):1–23
New first metatarsal (SKX 5017) from Swartkrans and the gait of Paranthropus robustus. Susman RL, et al. **Am J Phys Anthropol** 1988 Sep;77(1):7–15
New hominid fossils from the Swartkrans formation (1979–1986 excavations): postcranial specimens. Susman RL. **Am J Phys Anthropol** 1989 Aug;79(4):451–74
Engis: preparation damage, not ancient cutmarks. White TD, et al. **Am J Phys Anthropol** 1989 Mar;78(3):361–7
Overriding vertebral spinous processes in the extinct horse, Equus occidentalis [published erratum appears in Am J Vet Res 1989 Jun;50(6):989] Klide AM. **Am J Vet Res** 1989 Apr;50(4):592–3
Variations in the shape of foramen magnum in Indian skulls. Zaidi SH, et al. **Anat Anz** 1988;167(4):338–40
Scanning electron microscopy of molar enamel structure of cricetodontine neogene rodents. Rodde J, et al. **Arch Oral Biol** 1988;33(10):749–59
Mandibular and dental abnormalities of two Pleistocene American lions (Panthera leo atrox) from Yukon Territory. Beebe BF, et al. **Can J Vet Res** 1988 Oct;52(4):468–72
Fossil reptilian gelatins. Wyckoff RW, et al. **Comp Biochem Physiol [B]** 1979;64(2):229–30
Gelatinization with formic acid. Wyckoff RW, et al. **Comp Biochem Physiol [B]** 1979;62(4):545–7
Ancient skeletons as silent witnesses of lead exposures in the past. Grandjean P. **CRC Crit Rev Toxicol** 1988;19(1):11–21 (54 ref.)
Foot morphology and locomotor adaptation in Eocene primates. Gebo DL. **Folia Primatol (Basel)** 1988; 50(1–2):3–41
A taxonomic revision of the small catarrhine primates from the early Miocene of East Africa. Harrison T. **Folia Primatol (Basel)** 1988;50(1–2):59–108
New specimens of Oligopithecus savagei, early Oligocene primate from the Fayum, Egypt. Rasmussen DT, et al. **Folia Primatol (Basel)** 1988;51(4):182–208
Multivariate analysis of relative growth in the limb bones of Arikara Indians. Jungers WL, et al. **Growth Dev Aging** 1988 Summer;52(2):103–7
Analysis of the dental morphology of Plio–Pleistocene hominids. V. Maxillary postcanine tooth morphology. Wood BA, et al. **J Anat** 1988 Dec;161:1–35
Paleontologist offers lessons from other eons [news] Merz B. **JAMA** 1989 Jun 2;261(21):3068
A Middle Palaeolithic human hyoid bone. Arensburg B, et al. **Nature** 1989 Apr 27;338(6218):758–60
History revealed from bones [news] Hedges RE. **Nature** 1989 Jan 19;337(6204):213
Short but faithful pieces of ancient DNA [letter] Rollo F, et al. **Nature** 1988 Oct 27;335(6193):774
ESR dates for the hominid burial site of Es Skhul in Israel. Stringer CB, et al. **Nature** 1989 Apr 27;338(6218):756–8
Main long bones of limbs of the Jomon people—proportions in their lengths. Kato K, et al. **Okajimas Folia Anat Jpn** 1989 May;66(1):13–22
Modern mammal origins: evolutionary grades in the Early Cretaceous of North America. Jacobs LL, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4992–5
Ancient DNA: extraction, characterization, molecular cloning, and enzymatic amplification. Pääbo S. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1939–43
A review of early (Silurian and Devonian) vertebrate biogeography and biostratigraphy of China. Jiang P, et al. **Proc R Soc Lond [Biol]** 1988 Oct 22;235(1278):29–61 (120 ref.)
Enamel of Yalkaparidon coheni: representative of a distinctive order of tertiary zalambdodont marsupials. Lester KS, et al. **Scanning Microsc** 1988 Sep;2(3):1491–501
Molecular archaeology. DNA from a 7,000–year–old brain opens new vistas in prehistory. Benditt J. **Sci Am** 1989 Jul; 261(1):25–6
Evolution of human walking. Lovejoy CO. **Sci Am** 1988 Nov; 259(5):118–25
Elevated lead concentrations in Japanese ribs of the Edo era (300–120 BP). Kosugi H, et al. **Sci Total Environ** 1988 Oct 15;76(2–3):109–15
Skepticism fades over pre–Clovis man [news] Lewin R. **Science** 1989 Jun 9;244(4909):1140
Species questions in modern human origins [news] Lewin R. **Science** 1989 Mar 31;243(4899):1666–7
Invisible evidence [news] Lewin R. **Science** 1989 Jun 9; 244(4909):1140
Old bones solve new problems [news] Marshall E. **Science** 1989 Sep 15;245(4923):1185
Trace elements in excavated human hair. Grupe G, et al. **Z Morphol Anthropol** 1989;77(3):297–308
[Atypical indices in human paleontology] Albert A, et al. **Z Morphol Anthropol** 1989;77(3):273–86 (Eng. Abstr.) (Fre)
[Graphic normality test in human paleontology] Leguebe A, et al. **Z Morphol Anthropol** 1989;77(3):259–71 (Eng. Abstr.) (Fre)
[The smallest toy dog from the Roman empire] Boessneck J. **Tierarztl Prax** 1989;17(1):89–91 (Eng. Abstr.) (Ger)
[Phylogenetic precursors of sterols] Wilkomirski B. **Postepy Biochem** 1988;34(3):229–40 (52 ref.) (Pol)
[Occurrence of pleistocenic planorbids in the municipality of Jacobina, Bahia] Lima LC. **Mem Inst Oswaldo Cruz** 1987 Jan–Mar;82(1):71–2 (Eng. Abstr.) (Por)
[History of the geographic ranges and migration routes of ticks in the genus Dermacentor Koch, 1844 (Ixodidae)] Berdyev A. **Parazitologiia** 1989 Mar–Apr;23(2):166–72 (Eng. Abstr.) (Rus)

PALEOPATHOLOGY

Calcaneus secundarius: an osteo–archaeological note. Anderson T. **Am J Phys Anthropol** 1988 Dec;77(4):529–31
Spondylolysis and its relationship to degenerative joint disease in the prehistoric southeastern United States. Bridges PS. **Am J Phys Anthropol** 1989 Jul;79(3):321–9
New method for assessing changes in growth and sexual dimorphism in paleoepidemiology. Clark GA. **Am J Phys Anthropol** 1988 Sep;77(1):105–16
Enlarged occlusal surfaces on first molars due to severe attrition and hypercementosis: examples from prehistoric coastal populations of Texas. Comuzzie AG, et al. **Am J Phys Anthropol** 1989 Jan;78(1):9–15
New hominid fossils from the Swartkrans formation (1979–1986 excavations): craniodental specimens. Grine FE. **Am J Phys Anthropol** 1989 Aug;79(4):409–49
Spectrographic analysis of trace elements in archaeological skeletal material from Florida: a preliminary report. Işcan MY, et al. **Am J Phys Anthropol** 1989 Aug;79(4):483–8
A yellow–stained human femur from Tell esh–Shuqafiya, Egypt: evidence of ancient trauma. Jones RN. **Am J Phys Anthropol** 1988 Sep;77(1):77–83
Possible case of rheumatoid arthritis from Sudanese Nubia. Kilgore L. **Am J Phys Anthropol** 1989 Jun;79(2):177–83
A probable case of prehistoric kidney stone disease from the northern Cape Province, South Africa. Morris AG, et al. **Am J Phys Anthropol** 1989 Aug;79(4):521–7
Treponematosis: a possible case from the late prehistoric of North Carolina. Reichs KJ. **Am J Phys Anthropol** 1989 Jul;79(3):289–303
Cultural ecology of prehistoric parasitism on the Colorado Plateau as evidenced by coprology. Reinhard KJ. **Am J Phys Anthropol** 1988 Nov;77(3):355–66
New hominid fossils from the Swartkrans formation (1979–1986 excavations): postcranial specimens. Susman RL. **Am J Phys Anthropol** 1989 Aug;79(4):451–74
Yugoslav Mesolithic dental reduction. y'Edynak G. **Am J Phys Anthropol** 1989 Jan;78(1):17–36
A comparative cephalometric investigation of the Greek craniofacial pattern through 4,000 years. Argyropoulos E, et al. **Angle Orthod** 1989 Fall;59(3):195–204
Mandibular and dental abnormalities of two Pleistocene American lions (Panthera leo atrox) from Yukon Territory. Beebe BF, et al. **Can J Vet Res** 1988 Oct;52(4):468–72
Multiple bone islands in a skeleton dating from the Neolithic period. Lagier R, et al. **Eur J Radiol** 1989 May;9(2):81–2
Prehistoric parasitism in Tennessee: evidence from the

analysis of desiccated fecal material collected from Big Bone Cave, Van Buren County, Tennessee. Faulkner CT, et al. **J Parasitol** 1989 Jun;75(3):461–3
The hard evidence of alveolar bone loss in early hominids of southern Africa. A short communication. Ripamonti U. **J Periodontol** 1989 Feb;60(2):118–20
Population analysis of symmetrical erosive arthritis in Ohio Woodland Indians (1200 years ago). Woods RJ, et al. **J Rheumatol** 1988 Aug;15(8):1258–63
A threat to paleopathology and medical research [letter] Neiburger EJ. **N Engl J Med** 1989 Mar 2;320(9):600
Existence of syphilis in a Pleistocene bear [letter] Rothschild BM. **Nature** 1988 Oct 13;335(6191):595
Cranial surgery in ancient Peru. Rifkinson-Mann S. **Neurosurgery** 1988 Oct;23(4):411–6
Whither scientific investigation. Gregg JB. **S D J Med** 1989 May;42(5):5–6
Paleoradiologic evaluation of the Egyptian royal mummies. Braunstein EM, et al. **Skeletal Radiol** 1988;17(5):348–52
Causes of infant mortality in the Middle Ages revealed by chemical and palaeopathological analyses of skeletal remains. Hühne-Osterloh G, et al. **Z Morphol Anthropol** 1989;77(3):247–58
[Paleopathologic data on syphilis in the Baltic area] Derums W, et al. **Dermatol Monatsschr** 1988;174(9):554–61 (Eng. Abstr.) **(Ger)**
[Tertiary bone syphilis from the Middle Ages. A paleopathology study] Scheidegger S. **Pathologe** 1989 May; 10(3):177–81 **(Ger)**
[Pathologic changes in the pelvic bones of the ancient inhabitants of Siberia] Zakharov BI, et al. **Ortop Travmatol Protez** 1988 Oct;(10):56–7 **(Rus)**

PALLADIUM

Effect of palladium on sulfide tarnishing of noble metal alloys. Suoninen E, et al. **J Biomed Mater Res** 1985 Oct; 19(8):917–34
Metallurgical aspects of palladium-silver porcelain-bonding alloys. Mezger PR, et al. **J Dent** 1989 Apr;17(2):90–3
The corrosion behaviour of high-palladium porcelain-bonding alloys. Mezger PR, et al. **J Dent** 1989 Feb;17(1):33–7
Metallurgical aspects of high-palladium alloys. Mezger PR, et al. **J Dent Res** 1988 Oct;67(10):1307–11
Synthesis, molecular structure determination, and antitumor activity of platinum(II) and palladium(II) complexes of 2-substituted benzimidazole. Mylonas S, et al. **J Inorg Biochem** 1988 Dec;34(4):265–75
Palladium-silver alloys: a review of the literature. Goodacre CJ. **J Prosthet Dent** 1989 Jul;62(1):34–7 (40 ref.)

ADVERSE EFFECTS

Sensitization to palladium. Guerra L, et al. **Contact Dermatitis** 1988 Oct;19(4):306–7

IMMUNOLOGY

Recent unexplained patch test reactions to palladium. Camarasa JG, et al. **Contact Dermatitis** 1989 May; 20(5):388–9

PHARMACOLOGY

The antitumor activity of some palladium(II) complexes with chelating ligands. Wimmer FL, et al. **Anticancer Res** 1989 May-Jun;9(3):791–3

TOXICITY

Different effects of intraperitoneally and orally administered palladium chloride on the hepatic monooxygenase system of male mice. Phielepeit T, et al. **Arch Toxicol Suppl** 1989; 13:357–62

PALLIATIVE TREATMENT

Evaluation of the palliative effect of radiotherapy for esophageal carcinoma. Albertsson M, et al. **Acta Oncol** 1989;28(2):267–70
Practising physicians' experiences of treating patients with cancer pain. Vainio A. **Acta Oncol** 1989;28(2):177–82
Palliation of valvular aortic stenosis by balloon valvuloplasty as preoperative preparation for noncardiac surgery. Levine MJ, et al. **Am J Cardiol** 1988 Dec 1;62(17):1309–10
Response to Murray et al. [letter] Simko V. **Am J Gastroenterol** 1989 Jul;84(7):839–40
Treatment of biliary obstruction caused by metastatic cancer. Bear HD, et al. **Am J Surg** 1989 Apr;157(4):381–5; discussion 385
A comparison of choledochoenteric bypass and cholecystoenteric bypass in patients with biliary obstruction due to pancreatic cancer. Rosemurgy AS, et al. **Am Surg** 1989 Jan;55(1):55–60
Pain relief with bupivacaine given through a sciatic nerve catheter. Newcombe GN, et al. **Anaesth Intensive Care** 1989 Aug;17(3):370–2
Surgical and endoscopic palliation of esophageal carcinoma. Segalin A, et al. **Ann Thorac Surg** 1989 Aug;48(2):267–71
Internal banding for palliation of truncus arteriosus in the neonate. Young JN, et al. **Ann Thorac Surg** 1989 Apr; 47(4):620–2
Intrahepatic cholangiojejunostomy as a palliative procedure in primary sclerosing cholangitis. Goldenring JR, et al. **Arch Surg** 1989 May;124(5):565–7
Controversial aspects of cytoreductive surgery in epithelial ovarian cancer. Hacker NF. **Baillieres Clin Obstet Gynaecol** 1989 Mar;3(1):49–57 (29 ref.)
The influence of cytoreductive surgery on progression-free interval and survival in epithelial ovarian cancer. Hoskins WJ. **Baillieres Clin Obstet Gynaecol** 1989 Mar;3(1):59–71 (49 ref.)
Cytoreduction in ovarian cancer: achievability and results. Webb MJ. **Baillieres Clin Obstet Gynaecol** 1989 Mar; 3(1):83–94 (15 ref.)
Pain relief in active patients with cancer [letter] **BMJ** 1989 Feb 18;298(6671):461
Pain relief in patients with active cancer [letter] Churcher M. **BMJ** 1989 Feb 4;298(6669):321
Treatment of terminal breast cancer [letter] Moss AL. **BMJ** 1989 Feb 11;298(6670):388
Myoclonus associated with treatment with high doses of morphine: the role of supplemental drugs. Potter JM, et al. **BMJ** 1989 Jul 15;299(6692):150–3
Salmon calcitonin for bone pain in patients with metastatic carcinoma of the prostate. A pilot study. Kadow C, et al. **Br J Clin Pract** 1988 Jan;42(1):24–5
Embolization of liver metastases. Allison DJ. **Br J Hosp Med** 1989 Jan;41(1):60–1
Palliative treatment of hepatic tumours. Bengmark S. **Br J Surg** 1989 Aug;76(8):771–3 (9 ref.)
Endoscopic biliary endoprosthesis in the palliation of malignant obstruction of the distal common bile duct: a randomized trial. Shepherd HA, et al. **Br J Surg** 1988 Dec; 75(12):1166–8
Pain experience and pain management among hospitalized cancer patients. A clinical study. Dorrepaal KL, et al. **Cancer** 1989 Feb 1;63(3):593–8
Supportive care versus supportive care and combination chemotherapy in metastatic non-small cell lung cancer. Does chemotherapy make a difference? Ganz PA, et al. **Cancer** 1989 Apr 1;63(7):1271–8
Development of postoperative intrathoracic chemo-thermotherapy for lung cancer with objective of improving local cure. Kodama K, et al. **Cancer** 1989 Oct 1;64(7):1422–8
Palliative laser therapy for inoperable rectal cancer—does it work? A prospective study of quality of life. McGowan I, et al. **Cancer** 1989 Mar 1;63(5):967–9
Aminoglutethimide in patients with metastatic breast cancer. Nemoto T, et al. **Cancer** 1989 May 1;63(9):1673–5
Diagnosis and Nd-YAG laser treatment of unsuspected malignant tracheal obstruction. Gelb AF, et al. **Chest** 1988 Oct;94(4):767–71
Palliation of massive bronchorrhea [letter] Krawtz SM, et al. **Chest** 1988 Dec;94(6):1313–4
Practical aspects of pain management in cancer patients. Schauer PK, et al. **Conn Med** 1989 Apr;53(4):211–5
Physicians' attitudes and knowledge about the management of cancer-related pain. Schauer PK, et al. **Conn Med** 1988 Dec;52(12):705–7
Quality of life during cytostatic therapy for advanced symptomatic colorectal carcinoma: a randomized comparison of two regimens. Glimelius B, et al. **Eur J Cancer Clin Oncol** 1989 May;25(5):829–35
Urinary diversion in gynecologic malignancies. Janetschek G, et al. **Eur Urol** 1988;14(5):371–6
Endoscopic laser therapy as an alternative to palliative surgery for adenocarcinoma of the rectum—comparison of costs and complications. Mellow MH. **Gastrointest Endosc** 1989 Jul-Aug;35(4):283–7
Endoscopic management of malignant biliary obstruction: stents of 10 French gauge are preferable to stents of 8 French gauge. Speer AG, et al. **Gastrointest Endosc** 1988 Sep-Oct;34(5):412–7
Randomised trial of endoscopic endoprosthesis versus operative bypass in malignant obstructive jaundice. Andersen JR, et al. **Gut** 1989 Aug;30(8):1132–5
Palliative surgery for intestinal obstruction in advanced ovarian cancer. Rubin SC, et al. **Gynecol Oncol** 1989 Jul; 34(1):16–9
Palliative surgical procedures in sequelae of obstetric palsy. Zancolli EA, et al. **Hand Clin** 1988 Nov;4(4):643–69
Palliative surgery in patients with bulbar amyotrophic lateral sclerosis. Short SO, et al. **Head Neck** 1989 Jul-Aug; 11(4):364–9
Palliation of pain in advanced oral cancer. Narayanan RS, et al. **Headache** 1988 May;28(4):258–9
Esophageal exclusion and gastric bypass for unresectable carcinoma of the thoracic esophagus. Gupta NM, et al. **Indian J Gastroenterol** 1989 Apr;8(2):77–9
Adjuvant medications for cancer pain. Evans WO. **Indiana Med** 1989 May;82(5):370–2
Commentary: what role do lasers play in the management of colorectal disease. Bown SG. **Int J Color Dis** 1989; 4(1):26–9
Laser palliation for rectosigmoid cancers. Brunetaud JM, et al. **Int J Color Dis** 1989;4(1):6–8
Endoscopic laser therapy in colorectal cancer. Mellow MH. **Int J Color Dis** 1989;4(1):12–4
Risk factors which determine the long term outcome of Neodymium-YAG laser palliation of colorectal carcinoma. Van Cutsem E, et al. **Int J Color Dis** 1989;4(1):9–11
Radiotherapy in the treatment of multiple myeloma. Bosch A, et al. **Int J Radiat Oncol Biol Phys** 1988 Dec; 15(6):1363–9
Palliative radiotherapy for metastatic malignant melanoma: brain metastases, bone metastases, and spinal cord compression. Rate WR, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):859–64
Palliative therapy of inoperable oesophageal carcinoma with radiotherapy and methotrexate: final results of a controlled clinical trial. Roussel A, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):67–72
Phase II study of multiple daily fractionations in the palliation of advanced pelvic malignancies: preliminary report of RTOG 8502. Spanos W Jr, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):659–61
Low dose reirradiation in combination with hyperthermia: a palliative treatment for patients with breast cancer recurring in previously irradiated areas. van der Zee J, et al. **Int J Radiat Oncol Biol Phys** 1988 Dec;15(6):1407–13
Palliation of complex cardiac anomalies with subaortic obstruction: new operative approach. Di Donato R, et al. **J Am Coll Cardiol** 1989 Feb;13(2):406–12
Palliative care in the cancer patient [letter] Fernandez F, et al. **J Am Geriatr Soc** 1988 Oct;36(10):961
Pulmonary artery banding. Experience with 69 patients. Van Nooten G, et al. **J Cardiovasc Surg (Torino)** 1989 May-Jun; 30(3):334–7
Therapeutic angioinfarction of renal carcinoma: CT follow-up. Jafri SZ, et al. **J Comput Assist Tomogr** 1989 May-Jun;13(3):443–7
Endoscopic Nd:YAG laser therapy for advanced esophageal cancer. Jung SS, et al. **J Ky Med Assoc** 1988 Aug; 86(8):405–8
Simple method to control laryngeal overspill in tracheostomized patients. Eisen SM. **J Laryngol Otol** 1989 Feb;103(2):222–4
Effective palliation of metastatic adenocarcinoma to the liver: a case report. Smith RA, et al. **J Miss State Med Assoc** 1988 Oct;29(10):301–4
Microsurgical DREZ-lesion in the treatment of deafferentation pain. Esposito S, et al. **J Neurosurg Sci** 1988 Jul-Sep;32(3):113–5
Controversies in palliative care. **J Palliat Care** 1988 May; 4(1-2):6–121
Caring together: summary of a report submitted to Health and Welfare Canada (December, 1987). The Expert Working Group on Integrated Palliative Care for Persons with AIDS. **J Palliat Care** 1988 Dec;4(4):76–86
Abstracts: 7th International Congress on Care of the Terminally Ill. October 15-19, 1988, Montréal, Canada. **J Palliat Care** 1988 Sep;4(3):66–88
Seminar on Canadian Medical Education in palliative care—a report. 7th International Congress on care of the terminally ill, Montreal, October 20, 1988. Ajemian I. **J Palliat Care** 1989 Mar;5(1):50–1
Health care delivery: not conducive to teaching palliative care. Benoliel JQ. **J Palliat Care** 1988 May;4(1-2):41–2
All things considered ... then what? Boisvert M. **J Palliat Care** 1988 May;4(1-2):115–8
Palliative care in medical education at McMaster University. Burge FI, et al. **J Palliat Care** 1989 Mar;5(1):16–20
Palliative medicine: on the way to becoming a recognized discipline. Calman KC. **J Palliat Care** 1988 May; 4(1-2):12–4
A generalist team with specialist consultants is preferable. Chekryn J, et al. **J Palliat Care** 1988 May;4(1-2):44–6
Cancer pain control in China. Chen ML. **J Palliat Care** 1989 Jun;5(2):29–31
Oral complications in patients with advanced cancer. De Conno F, et al. **J Palliat Care** 1989 Mar;5(1):7–15 (117 ref.)
Palliative care in the community: a specialized approach. Dunne C, et al. **J Palliat Care** 1988 May;4(1-2):47–8
Policy, resources and practice: a palliative care ward. Henteleff PD. **J Palliat Care** 1989 Jun;5(2):6–9
Is euthanasia a caring thing to do? Husebø S. **J Palliat Care** 1988 May;4(1-2):111–4
Supporting people with AIDS: the Gay Men's Health Crisis model. Katoff L, et al. **J Palliat Care** 1988 Dec;4(4):88–95
Palliative care: special and deserving of specialty status. Levy MH. **J Palliat Care** 1988 May;4(1-2):19–22
Caring for persons with AIDS: initiatives. The Casey House model. Ley DC. **J Palliat Care** 1988 Dec;4(4):111–5
Defining palliative care as a specialty could do more harm than good! Librach SL. **J Palliat Care** 1988 May; 4(1-2):23–4
The experience of AIDS: case narratives and questions. Who's in control? What's in a family? Librach SL. **J Palliat Care** 1988 Dec;4(4):11–2
The health care professional's role when active euthanasia is sought. Lynn J. **J Palliat Care** 1988 May;4(1-2):100–2
Hospice care in the United States: the struggle for definition and survival. McCann BA. **J Palliat Care** 1988 May; 4(1-2):16–8
Pain management. MacDonald N. **J Palliat Care** 1989 Jun; 5(2):40–7
Controversies in palliative care. Macdonald N, et al. **J Palliat Care** 1988 May;4(1-2):6–8
Symptoms control in AIDS. MacFadden DK. **J Palliat Care** 1988 Dec;4(4):42–5
Active euthanasia: a "cop-out"? MacKinnon KJ. **J Palliat Care** 1988 May;4(1-2):110
A chronic care approach to health and social services for people with AIDS. McNally L, et al. **J Palliat Care** 1988 Dec;4(4):96–9

AIDS: home, ambulatory, and palliative care. Mansell PW. **J Palliat Care** 1988 Dec;4(4):29–33
Cancer pain control in Africa (state of the art). Minja BM. **J Palliat Care** 1989 Jun;5(2):31–4
The teaching of palliative care within the context of an undergraduate course on death, dying, and bereavement. Morgan JD. **J Palliat Care** 1988 May;4(1–2):32–3
Caring for persons with AIDS: initiatives. The Mildmay approach. Moss V. **J Palliat Care** 1988 Dec;4(4):102–6
Home care for advanced and very advanced cancer patients: the Bologna experience. Pannuti F, et al. **J Palliat Care** 1988 Sep;4(3):54–7
Not always! Parkes CM. **J Palliat Care** 1988 May;4(1–2):50–2
International standards provide guidelines for curriculum content. Qvarnstrøm U. **J Palliat Care** 1988 May; 4(1–2):38–40
The conditions for meeting the challenge. Reinhardt MA. **J Palliat Care** 1988 May;4(1–2):56–8
Cancer care: toward a global ethics [editorial] Roy DJ. **J Palliat Care** 1989 Jun;5(2):3–5
Pain: diagnosis and management in the palliative care of AIDS. Schofferman J. **J Palliat Care** 1988 Dec;4(4):46–9
Is palliative care a discipline? Scott DH. **J Palliat Care** 1988 May;4(1–2):10–1
Cancer pain control in Canada: the Montebello strategy. Scott JF, et al. **J Palliat Care** 1989 Jun;5(2):34–7
Institutional strategies, a key to successful curriculum change. Sellers EM, et al. **J Palliat Care** 1988 May;4(1–2):34–7
The U.K.: ready, willing, and able. Thorpe GJ. **J Palliat Care** 1988 May;4(1–2):26–8
Palliative care in Italy. A problem of definition and roles. Toscani F. **J Palliat Care** 1989 Mar;5(1):52
Euthanasia: a definition and ethical conditions. van der Meer C. **J Palliat Care** 1988 May;4(1–2):103–6
Palliative medicine: a new approach. Ventafridda V. **J Palliat Care** 1988 May;4(1–2):15
How it can be done: a pilot project in comprehensive home cancer treatment. Vinciguerra V. **J Palliat Care** 1988 May; 4(1–2):53–5
Impediments in preparing physicians for palliative care. Werner PT, et al. **J Palliat Care** 1988 May;4(1–2):29–31
The psychiatric and neuropsychiatric aspects of HIV disease. Woo SK. **J Palliat Care** 1988 Dec;4(4):50–3
Measuring symptoms in terminal cancer: are pain and dyspnoea controlled? Higginson I, et al. **J R Soc Med** 1989 May;82(5):264–7
Dysphagia due to mesothelioma infiltrating the oesophagus: palliative treatment. Lockwood CA, et al. **J R Soc Med** 1989 Mar;82(3):168
Management of malignant obstructive jaundice. Rosen J, et al. **J Surg Oncol** 1989 Apr;40(4):256–60
Neodymium:yttrium–aluminum–garnet laser vaporization for palliation of obstructing esophageal carcinoma. Moon BC, et al. **J Thorac Cardiovasc Surg** 1989 Jul;98(1):11–4; discussion 14–5
Do we really correct congenital heart defects? Stark J. **J Thorac Cardiovasc Surg** 1989 Jan;97(1):1–9
The role of surgical management for symptomatic spinal cord compression in patients with metastatic prostate cancer. Shoskes DA, et al. **J Urol** 1989 Aug;142(2):337–9
Dysphagia in advanced malignant disease [letter] Blauth C, et al. **Lancet** 1988 Oct 22;2(8617):959
Transplantation of adrenal medulla into spinal cord for pain relief: disappointing outcome [letter] Vaquero J, et al. **Lancet** 1988 Dec 3;2(8623):1315
Terminal care: where does it fit in oncology? Alexander C. **Md Med J** 1989 Mar;38(3):211
The availability of heroin [letter] **Med J Aust** 1989 Jun 5; 150(11):666–7
Palliative care [letter] Paterson J. **Med J Aust** 1989 Jan 2; 150(1):49
State of the art: effective palliative radiotherapy and quality of life. Zablow AI. **N J Med** 1988 Oct;85(10):825–7 (16 ref.)
Palliative care for brain metastases of solid tumour types. Pladdet I, et al. **Neth J Med** 1989 Feb;34(1–2):10–21
Treatment of severe cancer pain by low-dose continuous subcutaneous morphine. Drexel H, et al. **Pain** 1989 Feb; 36(2):169–76
Pain management of pancreatic carcinoma: a review. Lebovits AH, et al. **Pain** 1989 Jan;36(1):1–11 (52 ref.)
Central post-stroke pain—a controlled trial of amitriptyline and carbamazepine. Leijon G, et al. **Pain** 1989 Jan; 36(1):27–36
The pain of cancer. Control in the hospice setting [published erratum appears in Postgrad Med 1988 Nov 15;84(7):26] Wener SW. **Postgrad Med** 1988 Oct;84(5):79–83, 86, 89–92 (23 ref.)
Sclerosing cholangitis: palliation with percutaneous cholangioplasty. Skolkin MD, et al. **Radiology** 1989 Jan; 170(1 Pt 1):199–206
Randomized prospective clinical study of small, large and twice-a-day fraction radiotherapy for painful bone metastases. Okawa T, et al. **Radiother Oncol** 1988 Oct; 13(2):99–104
Low dose single fraction radiotherapy in the treatment of metastatic bone pain: a pilot study. Price P, et al. **Radiother Oncol** 1988 Aug;12(4):297–300
Supportive care in cancer patients. St. Gallen, Switzerland, February 18–21, 1987. Proceedings. **Recent Results Cancer Res** 1988;108:1–342
Principles and potential of palliative surgery in patients with advanced cancer. Forbes JF. **Recent Results Cancer Res** 1988;108:134–42 (6 ref.)
Palliative and supportive surgery for gastrointestinal cancer. Metzger U, et al. **Recent Results Cancer Res** 1988;108:143–7 (9 ref.)
Surgical supportive care in pediatric oncology. Plaschkes J. **Recent Results Cancer Res** 1988;108:148–53 (9 ref.)
Pain relief by suprascapular nerve block in gleno-humeral arthritis. Brown DE, et al. **Scand J Rheumatol** 1988; 17(5):411–5
Subxiphoid approach to the pericardium. Konttinen MP, et al. **Scand J Thorac Cardiovasc Surg** 1988;22(3):247–50
Laser therapy of cancer of the gastrointestinal and biliary tracts. Pietrafitta JJ. **Semin Surg Oncol** 1989;5(1):17–29 (26 ref.)
Spinal cord stimulation in deafferentation pain. Sánchez-Ledesma MJ, et al. **Stereotact Funct Neurosurg** 1989;53(1):40–5
Surgical treatment for ductal adenocarcinoma of the pancreas. Condie JD Jr, et al. **Surg Gynecol Obstet** 1989 May;168(5):437–45
Carcinoma of the oesophagus in Transkei: treatment by intubation. Cotton MH, et al. **Thorax** 1989 Jan;44(1):42–7
Diathermy resection and radioactive gold grains for palliation of obstruction due to recurrence of bronchial carcinoma after external irradiation. Ledingham SJ, et al. **Thorax** 1989 Jan;44(1):48–51
Treatment of painful prostatic bone metastases with oral etidronate disodium. Carey PO, et al. **Urology** 1988 Nov; 32(5):403–7
Palliative hemibody irradiation in hormonally refractory metastatic prostate cancer. Nseyo UO, et al. **Urology** 1989 Aug;34(2):76–9
Endoscopic laser therapy in the curative and palliative treatment of upper gastrointestinal cancer. Suzuki H, et al. **World J Surg** 1989 Mar–Apr;13(2):158–64
[Intravenous lidocaine in the treatment of chronic pain caused by bone metastases] Sjøgren P, et al. **Ugeskr Laeger** 1989 Aug 21;151(34):2144–6 (Eng. Abstr.) **(Dan)**
[Home care of terminal patients with cancer] van Weel C. **Ned Tijdschr Geneeskd** 1989 Mar 25;133(12):625–7 **(Dut)**
[Palliative treatment of esophageal cancer by vaporization with a Nd–YAG laser. Our first cases] Mosimann F. **Helv Chir Acta** 1989 Jun;56(1–2):163–7 (Eng. Abstr.) **(Fre)**
[What are the best palliative treatments in cancer of the esophagus in 1988?] Seitz JF. **Presse Med** 1988 Nov 19; 17(41):2164–6 **(Fre)**
[Palliative surgical interventions in primary and secondary bone tumors] Böhm P, et al. **Aktuel Traumatol** 1988 Oct; 18(5):196–203 (17 ref.) (Eng. Abstr.) **(Ger)**
[Therapy of cancer pain—a comprehensive therapy concept] Tontschev G. **Arch Geschwulstforsch** 1989;59(1):53–63 (37 ref.) (Eng. Abstr.) **(Ger)**
[Palliative surgical procedures in advanced colon cancer] Schildberg FW, et al. **Chirurg** 1988 Oct;59(10):625–33 **(Ger)**
[Artificial nutrition at home as supportive and palliative tumor therapy] Kolb S, et al. **Fortschr Med** 1988 Jun 30; 106(19):396–9 (Eng. Abstr.) **(Ger)**
[Palliative therapy of tumor-induced pleural effusions with radioisotopes] Austgen M. **Pneumologie** 1989 Feb; 43(2):88–91 (Eng. Abstr.) **(Ger)**
[Palliative radiophosphorus therapy for analgesia in bone metastases] Grossmann J, et al. **Radiobiol Radiother (Berl)** 1988;29(6):735–6 **(Ger)**
[Endoprosthesis in the palliative treatment of malignant esophageal stenosis] Bertschinger P, et al. **Schweiz Med Wochenschr** 1989 Jun 3;119(22):803–7 (Eng. Abstr.) **(Ger)**
[Palliative surgical therapy of pathologic fractures] Holzheimer RG, et al. **Unfallchirurgie** 1988 Oct; 14(5):283–90 (Eng. Abstr.) **(Ger)**
[Palliative surgery in colorectal cancer] Bodner E. **Wien Med Wochenschr** 1988 Jul 15;138(13):308–9 (Eng. Abstr.) **(Ger)**
[Treatment of hepatic metastases. Our experience] Gosso P, et al. **Minerva Chir** 1988 Oct 15;43(19):1621–3 (Eng. Abstr.) **(Ita)**
[Radiation therapy of osseous metastasis] Morita K, et al. **Gan No Rinsho** 1988 Aug;34(9):1130–8 (Eng. Abstr.) **(Jpn)**
[Clinical study of controlled-release preparation of mitomycin C in the treatment of inoperable cancer patients] Hanyu F, et al. **Gan To Kagaku Ryoho** 1988 Nov; 15(11):3087–93 (Eng. Abstr.) **(Jpn)**
[Pain control in terminal cancer] Tsuneto S, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 1):759–66 (Eng. Abstr.) **(Jpn)**
[Care of seriously ill and dying persons. A 3-year report from an advisory group] Ottesen S. **Tidsskr Nor Laegeforen** 1989 May 30;109(15):1645–8 (Eng. Abstr.) **(Nor)**
[Physical work capacity and social adaptation of patients with tetralogy of Fallot who have undergone the Blalock–Taussig operation at an early age] Il'in RN, et al. **Pediatriia** 1988;(6):53–7 **(Rus)**
[Pleurodesis as a palliative method in the treatment of pleural effusions of malignant etiology] Sikimić S, et al. **Plucne Bolesti** 1988 Jan–Jun;40(1–2):13–7 (Eng. Abstr.) **(Scr)**
[Principles and practice of palliative care (editorial)] Sanz Ortiz J. **Med Clin (Barc)** 1989 Feb 4;92(4):143–5 **(Spa)**
[Ischemic cardiopathy (XV). Indications for myocardial revascularization. Surgery and coronary angioplasty] San José JM, et al. **Rev Esp Cardiol** 1989 May;42(5):337–42 (27 ref.) **(Spa)**
[Parenteral nutrition at home as an alternative to hospital care of patients with cancer] Drott C, et al. **Lakartidningen** 1989 Mar 1;86(9):740–3 **(Swe)**
[Pain relief in terminal care] Wallgren A, et al. **Lakartidningen** 1989 May 24;86(21):1975 **(Swe)**

ECONOMICS

Pain control comment [letter] [published erratum appears in Dimens Health Serv 1989 Feb;66(1):7] Gannon M, et al. **Dimens Health Serv** 1988 Sep;65(6):7, 37
Endoscopic laser therapy as an alternative to palliative surgery for adenocarcinoma of the rectum--comparison of costs and complications. Mellow MH. **Gastrointest Endosc** 1989 Jul–Aug;35(4):283–7

INSTRUMENTATION

Palliation of rectal lesions. Another use of the urologic resectoscope. Pitts WR Jr, et al. **AORN J** 1989 Jul; 50(1):87–9
A comparison of endoesophageal tubes. Improved results with the Atkinson tube. Kratz JM, et al. **J Thorac Cardiovasc Surg** 1989 Jan;97(1):19–23

METHODS

Palliative endoscopic dilatation in carcinoma of the esophagus and esophagogastric junction. Lundell L, et al. **Acta Chir Scand** 1989 Mar;155(3):179–84
Photodynamic laser therapy to alleviate complete bronchial obstruction: comparison of CT and bronchoscopy to predict outcome. Zwirewich CV, et al. **AJR** 1988 Nov; 151(5):897–901
Percutaneous transluminal balloon dilatation in discrete subaortic stenosis [see comments] Arora R, et al. **Am Heart J** 1988 Oct;116(4):1091–2. **Comment in:** Am Heart J 1989 Jun;117(6):1397
Cryosurgical treatment for anorectal cancer. A method of palliative or adjunctive management. Yamamoto Y, et al. **Am Surg** 1989 Apr;55(4):252–6
The use of double valve Denver peritoneal venous shunt for malignant ascites. Li MK, et al. **Ann Acad Med Singapore** 1988 Jan;17(1):129–31
Intestinal obstruction in patients with gynaecological malignancies. Soo KC, et al. **Ann Acad Med Singapore** 1988 Jan;17(1):72–5
Management of biliary obstruction in patients with unresectable carcinoma of the pancreas. McGrath PC, et al. **Ann Surg** 1989 Mar;209(3):284–8
Stage I palliation of hypoplastic left heart syndrome: the importance of neoaorta construction. Gustafson RA, et al. **Ann Thorac Surg** 1989 Jul;48(1):43–50
Bidirectional cavopulmonary shunts: clinical applications as staged or definitive palliation. Mazzera E, et al. **Ann Thorac Surg** 1989 Mar;47(3):415–20
Use of a double-lumen pressure monitoring catheter to facilitate pulmonary artery banding. Phillips SJ, et al. **Ann Thorac Surg** 1989 Jul;48(1):129
Percutaneous anterior approach to the coeliac plexus using ultrasound. Montero Matamala A, et al. **Br J Anaesth** 1989 Jun;62(6):637–40
Advances in the treatment of pulmonary atresia with intact ventricular septum: palliative and definitive repair. Laks H, et al. **Cardiol Clin** 1989 May;7(2):387–98 (34 ref.)
Results of percutaneous valvuloplasty for calcific aortic stenosis with different balloon catheters. Voudris V, et al. **Cathet Cardiovasc Diagn** 1989 Jun;17(2):80–3
Survival experience following Nd:YAG laser photoresection for primary bronchogenic carcinoma. Desai SJ, et al. **Chest** 1988 Nov;94(5):939–44
Percutaneous balloon valvuloplasty in patients with severe aortic stenosis and low ejection fraction. Immediate results and 1-year follow-up. Berland J, et al. **Circulation** 1989 Jun;79(6):1189–96
Optimal management of patients with complete atrioventricular septal defect. Fox LS. **Clin Cardiol** 1989 Mar;12(3):145–7
Closed heart surgery for congenital heart disease in infancy. del Nido PJ, et al. **Clin Perinatol** 1988 Sep;15(3):681–97 (16 ref.)
Palliation of obstructive jaundice with a biliary endoprosthesis. Comparison of insertion by the percutaneous-transhepatic and the combined percutaneous-endoscopic routes. Hall RI, et al. **Clin Radiol** 1989 Mar;40(2):186–9
Radiotherapy and the management of metastatic bone pain. Shepherd S. **Clin Radiol** 1988 Sep;39(5):547–50
Sedation and pain management for the critically ill. Veselis RA. **Crit Care Clin** 1988 Jan;4(1):167–81 (147 ref.)
Social work's role in managing chronic pain. Montague J, et al. **Dimens Health Serv** 1989 Apr;66(3):23–6
Advanced rectal cancer. What is the best palliation? Longo WE, et al. **Dis Colon Rectum** 1988 Nov;31(11):842–7
Use of Cavitron Ultrasonic Surgical Aspirator (CUSA) for palliative resection of recurrent gynecologic malignancies involving the vagina. Deppe G, et al. **Eur J Gynaecol Oncol** 1989;10(1):1–2
Superselective embolization of inoperable renal carcinoma

in patients with solitary kidney. Deutz FJ, et al. **Eur Urol** 1988;15(1-2):134-8
YAG laser or BICAP tumor probe for palliation of esophageal cancer strictures? [letter] Naveau S, et al. **Gastroenterology** 1988 Dec;95(6):1696-7
Acute cholecystitis after stenting of the common bile duct for obstruction secondary to pancreatic cancer. Leung JW, et al. **Gastrointest Endosc** 1989 Mar-Apr;35(2):109-10
A randomized study of a coaxial fiber versus a naked fiber for endoscopic Nd:YAG laser therapy of esophageal and rectal tumors. Naveau S, et al. **Gastrointest Endosc** 1989 May-Jun;35(3):201-6
Endoscopic palliation of obstructive esophagogastric malignancy. Richter JM, et al. **Gastrointest Endosc** 1988 Nov-Dec;34(6):454-8
Successful palliation of the "absent" pulmonary valve syndrome by banding of the pulmonary trunk. Mocellin R, et al. **Int J Cardiol** 1989 Feb;22(2):241-7
Single high dose-large field irradiation for palliation of advanced malignancies. Reed RC, et al. **Int J Radiat Oncol Biol Phys** 1988 Nov;15(5):1243-6
Percutaneous catheter drainage of necrotic tumors: CT demonstration. Abbitt PL, et al. **J Comput Assist Tomogr** 1989 May-Jun;13(3):437-9
The therapeutic equivalence of i.m. and p.o. administration of morphine--1:3 or 1:6? Kaiko RF. **J Palliat Care** 1988 May;4(1-2):64-6
The four essentials. McCorkle R. **J Palliat Care** 1988 May; 4(1-2):59-61
The therapeutic equivalence of oral and subcutaneous/intramuscular morphine sulphate in cancer patients. Twycross RG. **J Palliat Care** 1988 May; 4(1-2):67-8
Pulmonary artery configuration after palliative operations for hypoplastic left heart syndrome. Alboliras ET, et al. **J Thorac Cardiovasc Surg** 1989 Jun;97(6):878-85
Half-body irradiation for treatment of widely metastatic adenocarcinoma of the prostate. Kuban DA, et al. **J Urol** 1989 Mar;141(3):572-4
Palliation of painful bone metastases from prostate cancer using sodium etidronate: results of a randomized, prospective, double-blind, placebo-controlled study. Smith JA Jr. **J Urol** 1989 Jan;141(1):85-7
Parameters affecting laser palliation in patients with advanced digestive cancers. Brunetaud JM, et al. **Lasers Surg Med** 1989;9(2):169-73
Endoscopic laser therapy for esophageal cancer: present status with emphasis on past and future. Fleischer D. **Lasers Surg Med** 1989;9(1):6-16 (50 ref.)
Palliative percutaneous aortic balloon valvuloplasty before noncardiac operations and invasive diagnostic procedures. Hayes SN, et al. **Mayo Clin Proc** 1989 Jul;64(7):753-7
Endoscopic palliation of malignant obstructive jaundice. Fraser AG, et al. **N Z Med J** 1989 Apr 12;102(865):155-7
Palliative internal biliary drainage--a combined percutaneous and endoscopic approach. Elson JD, et al. **Nebr Med J** 1988 Dec;73(12):351-4
Management of metastatic bone pain: preliminary results with single fraction (4 Gy) radiotherapy. Karstens JH, et al. **Onkologie** 1989 Feb;12(1):41-2
Epidural neurostimulation in the treatment of frostbite. Arregui R, et al. **PACE** 1989 Apr;12(4 Pt 2):713-7
Spinal cord electrical stimulation in severe angina pectoris: surgical technique, intraoperative physiology, complications, and side effects. Augustinsson LE. **PACE** 1989 Apr;12(4 Pt 2):693-4
Our experience with spinal cord stimulation (SCS) in peripheral vascular disease. Bracale GC, et al. **PACE** 1989 Apr;12(4 Pt 2):695-7
Spinal cord stimulation (SCS) in peripheral ischemic pain. Fiume D, et al. **PACE** 1989 Apr;12(4 Pt 2):698-704
Epidural spinal electrostimulatory system (ESES) in the management of diabetic foot and peripheral arteriopathies. Franzetti I, et al. **PACE** 1989 Apr;12(4 Pt 2):705-8
Spinal cord stimulation (SCS) in deafferentation pain. Meglio M, et al. **PACE** 1989 Apr;12(4 Pt 2):709-12
Antenatal diagnosis and palliative treatment of non-immune hydrops fetalis secondary to fetal parvovirus B19 infection. Naides SJ, et al. **Prenat Diagn** 1989 Feb;9(2):105-14
The role of radiation therapy in adult T-cell leukemia. Baba Y, et al. **Radiat Med** 1988 Sep-Oct;6(5):248-51
Strontium-89: treatment results and kinetics in patients with painful metastatic prostate and breast cancer in bone. Robinson RG, et al. **Radiographics** 1989 Mar;9(2):271-81
Role of endoprostheses in the management of malignant biliary obstruction. McLean GK, et al. **Radiology** 1989 Mar; 170(3 Pt 2):961-7 (40 ref.)
Is it possible to plan the radiation treatment of cancer pain in order to make it complementary to other therapeutic methods? Basso-Ricci S, et al. **Rays** 1988 Sep-Dec; 13(3):123-8
The role of traditional Chinese medicine in supportive care of cancer patients. Sun Y. **Recent Results Cancer Res** 1988; 108:327-34 (8 ref.)
Supportive care in pediatric oncology. Wagner HP. **Recent Results Cancer Res** 1988;108:301-5 (9 ref.)
Amantadine and the end-stage dementia of Alzheimer's type. Erkulwater S, et al. **South Med J** 1989 May;82(5):550-4
Nonsurgical palliation of jaundice in pancreatic cancer. Cotton PB. **Surg Clin North Am** 1989 Jun;69(3):613-27 (47 ref.)
Surgical palliation for pancreatic cancer. Singh SM, et al. **Surg Clin North Am** 1989 Jun;69(3):599-611 (64 ref.)
Local control of rectal cancer with the Nd-YAG laser. Barr H, et al. **Surg Endosc** 1988;2(1):44-6
Palliation of inoperable esophageal carcinoma. Therapeutic endoscopy as an adjunct to combined chemotherapy and radiotherapy. Chung RS, et al. **Surg Endosc** 1987; 1(3):139-42
Endoscopic palliation of jaundice in gallbladder cancer. Huibregtse K, et al. **Surg Endosc** 1987;1(3):143-6
Carcinoma of the ampulla of Vater. The role of endoscopic drainage. Huibregtse K, et al. **Surg Endosc** 1987;1(2):79-82
Palliation of malignant upper-third oesophageal stricture by bipolar diathermy probe. Robertson CS, et al. **Surg Endosc** 1989;3(2):70-2
Clinical cancer: 31. Barriers to the management of cancer pain: the roles of patient and family. Cleeland CS. **Wis Med J** 1988 Nov;87(11):13-5
[Cancer of the esophago-gastric area. Palliative resection and anastomosis by laparotomy alone] Cosendey BA, et al. **Helv Chir Acta** 1989 Jan;55(5):703-6 (Eng. Abstr.) **(Fre)**
[Endoscopic palliative therapy of malignant esophageal and cardia stenoses. Results--complications--follow-up] Schwegler U, et al. **Bildgebung** 1987-89;56(2):69-75 (Eng. Abstr.) **(Ger)**
[Palliative biliodigestive anastomosis in non-resectable cancer of the head of the pancreas--with or without preventive gastroenterostomy?] Roost HM, et al. **Helv Chir Acta** 1989 Jan;55(5):619-21 (Eng. Abstr.) **(Ger)**
[Value of sonographically controlled ascites puncture in patients with advanced ovarian cancers] Giers H, et al. **Z Arztl Fortbild (Jena)** 1989;83(9):459-61 **(Ger)**
[Long-term follow-up after palliative kidney embolization of patients with inoperable tumors] Müller JH, et al. **Z Arztl Fortbild (Jena)** 1989;83(10):529-32 **(Ger)**
["Tertiary" lymphedema--procedures in lymph drainage therapy] Einfeldt H, et al. **Z Lymphol** 1989 Jul;13(1):57-61 (Eng. Abstr.) **(Ger)**
[Primary neoplasms of the hepatic hilum: palliative resections] Gazzaniga GM, et al. **Minerva Chir** 1989 Jan 31;44(1-2):147-9 **(Ita)**
[Palliative surgical treatment of malignant tumors of the exocrine pancreas] Petrassi A, et al. **Minerva Chir** 1989 Jan 31;44(1-2):191-5 (21 ref.) **(Ita)**
[Is retrosternal gastric bypass a palliative intervention in advanced esophageal carcinoma really an intervention to be proscribed?] Forni E, et al. **Minerva Med** 1989 Jul; 80(7):785-7 **(Ita)**
[Modified surgical treatment of tumors] Nishi M. **Gan No Rinsho** 1988 Aug;34(10):1505-7 (Eng. Abstr.) **(Jpn)**
[X-ray endovascular embolization of the hepatic artery in the palliative treatment of hepatocellular cancer] Granov AM, et al. **Vopr Onkol** 1989;35(6):703-9 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

How voluntary is voluntary euthanasia? van der Sluis I. **J Palliat Care** 1988 May;4(1-2):107-9
Compassion [letter] Wicks WW. **N Y State J Med** 1988 Aug; 88(8):442

STANDARDS

Evaluation of palliative care: current status and future directions. Broadfield L. **J Palliat Care** 1988 Sep;4(3):21-8

TRENDS

Palliative medicine: future directions. MacAdam DB. **Aust Fam Physician** 1988 Nov;17(11):991-2, 995
Future directions in therapy of pain in osteoarthritis. Ehrlich GE. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):100-4 (22 ref.)

PALMITATES see under **PALMITIC ACIDS**

PALMITIC ACIDS

Structure and phase behavior of hydrated mixtures of L-dipalmitoylphosphatidylcholine and palmitic acid. Correlations between structural rearrangements, specific volume changes and endothermic events. Koynova RD, et al. **Chem Phys Lipids** 1988 Oct;48(3-4):205-14
Crystal structure of rat intestinal fatty-acid-binding protein. Refinement and analysis of the Escherichia coli-derived protein with bound palmitate. Sacchettini JC, et al. **J Mol Biol** 1989 Jul 20;208(2):327-39
Identity of maprounic acid with aleuritolic acid. Revision of the structure of maprounic acid: X-ray crystal structure of p-bromobenzyl acetylmaprounate. McPhail AT, et al. **J Nat Prod** 1989 Jan-Feb;52(1):212-6

ANALYSIS

Multiple classes of binding sites for palmitic acid on the fatty acid-binding protein molecule. Fukai F, et al. **Biochem Int** 1989 Jun;18(6):1101-5
Human tissue factor contains thioester-linked palmitate and stearate on the cytoplasmic half-cystine. Bach R, et al. **Biochemistry** 1988 Jun 14;27(12):4227-31
Serum albumin binding of palmitate and stearate. Multiple binding theory for insoluble ligands. Brodersen R, et al. **Eur J Biochem** 1989 Jun 1;182(1):19-25
Chemical identification of cysteine as palmitoylation site in a transmembrane protein (Semliki Forest virus E1). Schmidt M, et al. **J Biol Chem** 1988 Dec 15;263(35):18635-9

BLOOD

Agonist-enhanced palmitoylation of platelet proteins. Huang EM. **Biochim Biophys Acta** 1989 May 10;1011(2-3):134-9
Palmitylation of the glycoprotein IIb-IIIa complex in human blood platelets. Cierniewski CS, et al. **J Biol Chem** 1989 Jul 25;264(21):12158-64
The Rh polypeptide is a major fatty acid-acylated erythrocyte membrane protein. de Vetten MP, et al. **J Biol Chem** 1988 Dec 5;263(34):18193-6
Glycoprotein Ib and glycoprotein IX in human platelets are acylated with palmitic acid through thioester linkages. Muszbek L, et al. **J Biol Chem** 1989 Jun 15;264(17):9716-9

CHEMICAL SYNTHESIS

Synthesis of palmitoyl derivatives of insulin and their biological activities. Hashimoto M, et al. **Pharm Res** 1989 Feb;6(2):171-6

ISOLATION & PURIFICATION

Precipitation of calcium palmitate from bile salt-containing dispersions. Lichtenberg D, et al. **Chem Phys Lipids** 1988 Oct;48(3-4):231-43
3 beta-O-palmityl longispinogenin from Trichocereus chilensis. Morales G, et al. **J Nat Prod** 1989 Mar-Apr; 52(2):381-4

METABOLISM

Palmitate oxidation by isolated working fetal and newborn pig hearts. Werner JC, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):E315-21
Skeletal muscle mitochondrial beta-oxidation. A study of the products of oxidation of [U-14C]hexadecanoate by h.p.l.c. using continuous on-line radiochemical detection. Watmough NJ, et al. **Biochem J** 1988 Jul 15;253(2):541-7
Characterization of [3H]palmitate- and [3H]ethanolamine-labelled proteins in the multicellular parasitic trematode Schistosoma mansoni. Wiest PM, et al. **Biochem J** 1988 Sep 1;254(2):419-26
Hydrophobic modifications of membrane proteins by palmitoylation in vitro. Schmidt MF, et al. **Biochem Soc Trans** 1989 Aug;17(4):625-6
Palmitic and erucic acid metabolism in isolated perfused hearts from weanling pigs. Sauer FD, et al. **Biochim Biophys Acta** 1989 Aug 8;1004(2):205-14
Incorporation of plasma [14C]palmitate into the hypoglossal nucleus following unilateral axotomy of the hypoglossal nerve in adult rat, with and without regeneration. Yamazaki S, et al. **Brain Res** 1989 Jan 16;477(1-2):19-28
All ras proteins are polyisoprenylated but only some are palmitoylated. Hancock JF, et al. **Cell** 1989 Jun 30; 57(7):1167-77
A comparison of the uptake of [1-14C]palmitate into cell fractions of the perfused toad, chick and guinea-pig heart. Gloster J, et al. **Comp Biochem Physiol [B]** 1977;57(2):163-5
Valproate competes with palmitate for binding to serum albumin. Vorum H, et al. **Epilepsia** 1989 May-Jun; 30(3):370-3
Comparison of 16-iodohexadecanoic acid (IHDA) and 15-p-iodophenylpentadecanoic acid (IPPA) metabolism and kinetics in the isolated rat heart. DeGrado TR, et al. **Eur J Nucl Med** 1988;14(12):600-6
Iodomethylated fatty acid metabolism in mice and dogs. Fagret D, et al. **Eur J Nucl Med** 1988;14(12):624-7
Regional cerebral incorporation of plasma [14C]palmitate, and cerebral glucose utilization, in water-deprived Long-Evans and Brattleboro rats. Noronha JG, et al. **Exp Neurol** 1989 Mar;103(3):267-76
Stability of brain incorporation of plasma palmitate in unanesthetized rats of different ages, with appendix on palmitate model. Tabata H, et al. **Exp Neurol** 1988 Nov; 102(2):221-9
Interaction of a hydrophobic model peptide and its fatty acid derivative with lipid vesicles. Joseph M, et al. **FEBS Lett** 1988 Oct 10;238(2):411-4
Cotranslational fatty acylation of mucus glycoprotein. Addition of palmitic acid to peptidyl-tRNA occurs prior to peptide chain completion and its release. Slomiany A, et al. **Int J Biochem** 1988;20(12):1381-90
Lipid modification of Escherichia coli penicillin-binding protein 3. Hayashi S, et al. **J Bacteriol** 1988 Nov; 170(11):5392-5
Fatty acid acylation of the fusion glycoprotein of human respiratory syncytial virus. Arumugham RG, et al. **J Biol Chem** 1989 Jun 25;264(18):10339-42
The oxidation of fatty acids combined with albumin by isolated rat liver mitochondria. Björntorp P. **J Biol Chem** 1966 Apr 10;241(7):1537-43
Palmitylation of viral membrane glycoproteins takes place after exit from the endoplasmic reticulum. Bonatti S, et al. **J Biol Chem** 1989 Jul 25;264(21):12590-5
Acylation of keratinocyte transglutaminase by palmitic and myristic acids in the membrane Anchorage region. Chakravarty R, et al. **J Biol Chem** 1989 Jan 5;264(1):625-9
Palmitoylation of the human beta 2-adrenergic receptor. Mutation of Cys341 in the carboxyl tail leads to an uncoupled nonpalmitoylated form of the receptor. O'Dowd BF, et al. **J Biol Chem** 1989 May 5;264(13):7564-9

Lipid analysis of the glycoinositol phospholipid membrane anchor of human erythrocyte acetylcholinesterase. Palmitoylation of inositol results in resistance to phosphatidylinositol-specific phospholipase C. Roberts WL, et al. **J Biol Chem** 1988 Dec 15;263(35):18766–75

Cation-independent mannose 6-phosphate receptor contains covalently bound fatty acid. Westcott KR, et al. **J Cell Biochem** 1988 Sep;38(1):23–33

Effects of 2-(3-methyl-cinnamyl-hydrazono)-propionate on fatty acid and glucose oxidation in the isolated rat diaphragm using 14C-labelled substrates. Hydrazonopropionic acids, a new class of hypoglycaemic substances, VIII. Binder L, et al. **J Clin Chem Clin Biochem** 1988 Dec;26(12):815–9

Substrate oxidation by adult cardiomyocytes in long-term primary culture. Spahr R, et al. **J Mol Cell Cardiol** 1989 Feb;21(2):175–85

Modeling of palmitate transport in the heart. Bassingthwaighte JB, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24;88(1-2):51–8 (19 ref.)

Study of amino acid formation during palmitate oxidation in rat brain mitochondria. Kawamura N. **Neurochem Res** 1989 Jan;14(1):9–15

Effects of ammonium chloride, salicylate, and carnitine on palmitic acid oxidation in rat liver slices. Maddaiah VT, et al. **Pediatr Res** 1989 Feb;25(2):119–23

Different palmitoylation of paramyxovirus glycoproteins. Veit M, et al. **Virology** 1989 Jan;168(1):173–6

PHARMACOKINETICS

The influence of albumin on palmitate transport in the isolated perfused rat liver. Ferraresi-Filho O, et al. **Braz J Med Biol Res** 1989;22(1):139–43

Metabolism of methyl-branched iodo palmitic acids in cultured hepatocytes. Thomas G, et al. **Eur J Nucl Med** 1989;15(7):367–72

PHARMACOLOGY

The acylation of proteins by xenobiotic amphipathic carboxylic acids in cultured rat hepatocytes. Hertz R, et al. **Biochem J** 1988 Aug 15;254(1):39–44

The induction of liver peroxisomal proliferation by beta,beta'-methyl-substituted hexadecanedioic acid (MEDICA 16). Hertz R, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3571–7

Fatty acid alters glycogen metabolism in contracting vascular smooth muscle. Barron JT, et al. **Biochim Biophys Acta** 1989 Jun 15;1012(1):69–73

Modulation of prostaglandin E2 catabolism and action by fuel substrates in rat hepatocytes. Brass EP, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):233–6

The effect of dietary alpha-bromopalmitate on blood lipids in the rat. Hagve TA, et al. **Biochim Biophys Acta** 1989 Jul 17;1004(1):143–6

Effect of palmitate, acetate and glucose on glutamine metabolism in Ehrlich ascites tumor cells. Medina MA, et al. **Biochimie** 1988 Jun;70(6):833–4

Covalent modification of platelet proteins by palmitate. Muszbek L, et al. **Blood** 1989 Sep;74(4):1339–47

Displacement of bilirubin from adult and newborn serum albumin by a drug and fatty acid. Ivarsen R, et al. **Dev Pharmacol Ther** 1989;12(1):19–29

Palmitate dependence of insulin secretion, "de novo" phospholipid synthesis and 45Ca2+-turnover in glucose stimulated rat islets. Vara E, et al. **Diabetologia** 1988 Sep; 31(9):687–93

Adipose reduction by beta,beta'-tetramethyl-substituted hexadecanedioic acid (MEDICA 16). Tzur R, et al. **Int J Obes** 1989 Jun;13(3):313–26 (33 ref.)

Modification of CaCo-2 cell membrane fatty acid composition by eicosapentaenoic acid and palmitic acid: effect on cholesterol metabolism. Murthy S, et al. **J Lipid Res** 1988 Jun;29(6):773–80

Effect of alpha-1-acid glycoprotein, albumin and palmitic acid on the brain and salivary gland extraction of warfarin in rats. Urien S, et al. **J Pharmacol Exp Ther** 1989 Feb; 248(2):781–5

Effects of palmitate on astrocyte amino acid contents. Yudkoff M, et al. **Neurochem Res** 1989 Apr;14(4):367–70

THERAPEUTIC USE

Hypolipidemic, antiobesity, and hypoglycemic-hypoinsulinemic effects of beta,beta'-methyl-substituted hexadecanedioic acid in sand rats. Tzur R, et al. **Diabetes** 1988 Dec;37(12):1618–24

[Effect of glycine-steatamide or glutamic acid palmitamide on oral dyskinesia, obtained by a single administration of haloperidol combined with GABA-linoleamide in rats] Vamvakidès A. **Ann Pharm Fr** 1988;46(4):261–6 (32 ref.) (Eng. Abstr.) **(Fre)**

PALMITOYL COA HYDROLASE see under **THIOLESTER HYDROLASES**

PALMITOYL COENZYME A see under **ACYL COENZYME A**

PALMITOYLCARNITINE see under **CARNITINE**

PALPATION

Breast examination reminder [letter] Shamsid-Deen S. **Am Fam Physician** 1988 Nov;38(5):36

Is breast self-examination predicted by knowledge, attitudes, beliefs, or sociodemographic characteristics? Fletcher SW, et al. **Am J Prev Med** 1989 Jul-Aug;5(4):207–15

Breast self-examination among college women: predictors for cancer control. Kenney E, et al. **Am J Prev Med** 1989 Jan-Feb;5(1):27–33

Biopsy of nonpalpable breast lesions. Choucair RJ, et al. **Am J Surg** 1988 Dec;156(6):453–6

Treatment and survival of female patients with nonpalpable breast carcinoma. Tinnemans JG, et al. **Ann Surg** 1989 Feb; 209(2):249–53

Metastatic neck disease. Palpation vs ultrasound examination. Baatenburg de Jong RJ, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):689–90

A comparison of palpable and nonpalpable breast cancers. Pagana TJ, et al. **Arch Surg** 1989 Jan;124(1):26–8

Managing the breast lump. Solving the dilemma—reassurance versus investigation. Hirst C. **Aust Fam Physician** 1989 Feb; 18(2):121–123, 126

Teaching of breast self examination. Is it practical? Smart DR, et al. **Aust Fam Physician** 1989 Feb;18(2):115–9

Self examination of the breast [letter] Day NE. **BMJ** 1988 Sep 3;297(6648):624

The closed eyes sign: an aid to diagnosing non-specific abdominal pain. Gray DW, et al. **BMJ** 1988 Oct 1; 297(6652):837

Incentives for breast self-examination: role of the calendar. Baines CJ, et al. **Cancer Detect Prev** 1988;13(2):109–14

Factors involved in nurses' teaching breast self-examination. Clarke DE, et al. **Cancer Nurs** 1989 Feb;12(1):41–6

Motivational factors in breast self-examination. Implications for nurses. Cretain GK. **Cancer Nurs** 1989 Aug;12(4):250–6

The scintigraphic Murphy sign. Colletti PM, et al. **Eur J Nucl Med** 1988;14(9–10):495–7

Breast self-examination and the older woman: field testing an educational approach. Baker JA. **Gerontologist** 1989 Jun; 29(3):405–7

Self-palpation to assess cervical changes in relation to mucus and temperature. Parenteau-Carreau S, et al. **Int J Fertil** 1988;33 Suppl:10–6

Compliance with breast self-examination instruction in healthy adolescents. Cromer BA, et al. **J Adolesc Health Care** 1989 Mar;10(2):105–9

Testicular self-examination: reaching the college male. Pinch WJ, et al. **J Am Coll Health** 1988 Nov;37(3):131–2

Modeling and guided practice as components within a comprehensive testicular self-examination cancer education program. Walker R, et al. **J Am Coll Health** 1989 Mar;37(5):211–5

Incidence of spinal palpatory findings: a review. Beal MC. **J Am Osteopath Assoc** 1989 Aug;89(8):1027–30, 1033–5 (16 ref.)

Is ultrasound of the prostate indicated for screening purposes? An opposing view. Ansell JS. **J Fam Pract** 1988 Nov; 27(5):525–8

How do women compare with internal medicine residents in breast lump detection? A study with silicone models. Fletcher SW, et al. **J Gen Intern Med** 1989 Jul-Aug; 4(4):277–83

Concordance between galvanic skin response and spinal palpation findings in pain-free males. Nansel DD, et al. **J Manipulative Physiol Ther** 1988 Aug;11(4):267–72

Breast self-examination: knowledge, attitudes, and performance among black women. Jacob TC, et al. **J Natl Med Assoc** 1989 Jul;81(7):769–76

Health beliefs, health locus of control, and the frequency of practice of breast self-examination in women. Redeker NS. **J Obstet Gynecol Neonatal Nurs** 1989 Jan-Feb; 18(1):45–51

Evaluation of a testicular cancer curriculum for adolescents. Vaz RM, et al. **J Pediatr** 1989 Jan;114(1):150–3

Breast self examination [letter] Robertson C. **J R Coll Gen Pract** 1988 Oct;38(315):470

A prospective comparison of clinical ultrasound and operative examination of the female pelvis. Andolf E, et al. **J Ultrasound Med** 1988 Nov;7(11):617–20

Real-time ultrasound, axillary mammography, and clinical examination in the detection of axillary lymph node metastases in breast cancer patients. Pamilo M, et al. **J Ultrasound Med** 1989 Mar;8(3):115–20

Diagnostic value of the apex beat. O'Neill TW, et al. **Lancet** 1989 Feb 25;1(8635):410–1

Diagnostic value of the apex beat [letter] Owens D, et al. **Lancet** 1989 Aug 26;2(8661):499

Testicular self-examination: is it still necessary [letter] Dieckmann KP. **Postgrad Med J** 1988 Mar;64(749):250

Breast self-examination practices in women with a known neoplasm. Doyle MA. **Prog Clin Biol Res** 1988;278:171–84

Comparison of the efficacy of digital rectal examination and transrectal ultrasonography in the diagnosis of prostatic cancer. Vallancien G, et al. **Prog Clin Biol Res** 1989;303:1–9

Hypoechoic lesions of the prostate: clinical relevance of tumor size, digital rectal examination, and prostate-specific antigen. Lee F, et al. **Radiology** 1989 Jan;170(1 Pt 1):29–32

Attitudinal variables related to intention, frequency and proficiency of breast self-examination in women 35 and over. Champion VL. **Res Nurs Health** 1988 Oct; 11(5):283–91

Instructional information and breast self-examination practice. Lauver D. **Res Nurs Health** 1989 Feb;12(1):11–9

Carcinoma of the prostate: changing incidence associated with annual urologic screening. Thompson IM. **South Med J** 1989 Mar;82(3):335–7

Technique and guidelines for needle localization biopsy of nonpalpable lesions of the breast. Wilhelm MC, et al. **Surg Gynecol Obstet** 1988 Nov;167(5):439–41

Ultrasonography: an alternative to x-ray-guided needle localization of nonpalpable breast masses. Schwartz GF, et al. **Surgery** 1988 Nov;104(5):870–3

Accuracy of digital palpation for size assessment of the prostate evaluated by transrectal sonography. Ohe H, et al. **Tohoku J Exp Med** 1988 Apr;154(4):323–8

[Prevention, females and physicians: the example of self-examination of the breast] Huguenin M. **Soz Praventivmed** 1988;33(3):181–5 (Eng. Abstr.) **(Fre)**

[Palpation and sonography of lymph node metastasis of the neck] Leicher-Düber A, et al. **Rontgenblatter** 1989 May; 42(5):195–8 (Eng. Abstr.) **(Ger)**

[Vaginal sonography as a method of study in the evaluation of cervix insufficiency. A useful complement to vaginal palpation?] Böhmer S, et al. **Ultraschall Med** 1989 Feb; 10(1):19–24 (Eng. Abstr.) **(Ger)**

[Palpation, echography and echopalpation of the breast: results of a comparison] Dambrosio F. **Ann Ostet Ginecol Med Perinat** 1989;Spec No:32–43 **(Ita)**

[Effectiveness, accuracy, and acceptability of breast self-examination as a breast cancer screening method] Ogawa H, et al. **Gan No Rinsho** 1989 Jan;35(2):195–201 (23 ref.) (Eng. Abstr.) **(Jpn)**

[Comparison of digital examination and transrectal sonography in the assessment of prostatic diseases] Itakura Y. **Nippon Hinyokika Gakkai Zasshi** 1988 Aug; 79(8):1328–36 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Palpation of the uterine scar after vaginal delivery [letter] Schneider G. **Can Med Assoc J** 1989 Jul 15;141(2):98

HISTORY

[The centenary of Obraztsov's method of deep palpation of the abdominal cavity] Gubergrits AIa. **Sov Med** 1988; (8):124–5 **(Rus)**

INSTRUMENTATION

[Thermo-echo-clinical examination of the breast: a new diagnostic method for first level examination. Experience acquired at the L. Mangiagalli Gynecology and Obstetrics Institute in Milan during the period January 1985–August 1988] Dambrosio F. **Ann Ostet Ginecol Med Perinat** 1989; Spec No:65–89 (12 ref.) **(Ita)**

METHODS

Digital rectal examination and resting anal canal pressure [letter] Brandt LJ, et al. **Am J Gastroenterol** 1988 Nov; 83(11):1309

Reading the tuberculin skin test. Who, when, and how? Howard TP, et al. **Arch Intern Med** 1988 Nov; 148(11):2457–9

Breast self-examination for the early detection of breast cancer. Caseldine J, et al. **Aust N Z J Surg** 1988 Apr; 58(4):289–93

Hands on the heart: palpation of the cardiovascular system. Parrino TA. **Hosp Pract [Off]** 1989 Apr 30;24(4A):103–4, 107–10, 115

Practice patterns of teaching testicular self-examination to adolescent patients. Sayger SA, et al. **J Adolesc Health Care** 1988 Sep;9(5):441–2

Reliability of motion palpation procedures to detect sacroiliac joint fixations. Herzog W, et al. **J Manipulative Physiol Ther** 1989 Apr;12(2):86–92

Inter- and intra-examiner reliability of palpation for sacroiliac joint dysfunction [letter] Hobbs D. **J Manipulative Physiol Ther** 1988 Aug;11(4):336–7

Inter- and intraexaminer reliability of palpation for sacroiliac joint dysfunction [letter] Keating JC Jr, et al. **J Manipulative Physiol Ther** 1989 Apr;12(2):155–8

Conservative management of herniated nucleus pulposes: treatment approaches. Sanders M, et al. **J Manipulative Physiol Ther** 1988 Aug;11(4):309–13 (55 ref.)

An evaluation of serial digital rectal examinations in screening for prostate cancer. Mueller EJ, et al. **J Urol** 1988 Dec;140(6):1445–7

Springing test for differentiating a cervical rib tip from a supraclavicular lymph node. Venkatesh Rao PS. **Jpn J Surg** 1988 Sep;18(5):606–7

[Plea for autopalpation of the testis (letter)] Dieckmann KP, et al. **Presse Med** 1989 Jan 7–14;18(1):32 **(Fre)**

[Vaginal sonography versus vaginal palpation: initial experiences in 120 pregnant patients with suspected cervix insufficiency] Böhmer S, et al. **Z Geburtshilfe Perinatol** 1989 May-Jun;193(3):115–23 (Eng. Abstr.) **(Ger)**

[Determination of the location of the greater curvature of the stomach by superficial sliding palpation] Panfilov BK. **Vrach Delo** 1989 Jun;(6):27–8 **(Rus)**

STANDARDS

A study of the reliability of clinical palpation of the spleen. Zhang B, et al. **Clin Lab Haematol** 1989;11(1):7–10

[Accuracy of digital palpation for size assessment of the prostate evaluated by transrectal sonography] Ohnishi K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Feb; 79(2):321–5 (Eng. Abstr.) (Jpn)

PALSY, PROGRESSIVE SUPRANUCLEAR see SUPRANUCLEAR PALSY, PROGRESSIVE

2-PAM COMPOUNDS see PRALIDOXIME COMPOUNDS

PAMPHLETS

An educational booklet diminishes anxiety in parents whose children receive total parenteral nutrition. Laine L, et al. **Am J Dis Child** 1989 Mar;143(3):374–7

Adolescents' knowledge and beliefs about AIDS: did the government brochure help? [letter] Zimet GD, et al. **Am J Dis Child** 1989 May;143(5):518–9

Smoking literature and literacy levels [letter; comment] Jaycox S. **Am J Public Health** 1989 Aug;79(8):1058. **Comment on:** Am J Public Health 1989 Feb;79(2):204–6

Patient literacy and the readability of smoking education literature [published erratum appears in Am J Public Health 1989 Jun;79(6):702] [see comments] Meade CD, et al. **Am J Public Health** 1989 Feb;79(2):204–6. **Comment in:** Am J Public Health 1989 Aug;79(8):1058

Improving patient comprehension of literature on smoking. Meade CD, et al. **Am J Public Health** 1989 Oct; 79(10):1411–2

Readability of health care literature. Oates MS, et al. **Aust Paediatr J** 1989 Feb;25(1):35–8

FDI distributes AIDS leaflets to members worldwide [news] **Can Dent Assoc J** 1989 Feb;55(2):96

Effective local programs for families. **Child Today** 1988 Jul–Aug;17(4):4–5

Educating about AIDS. **Child Today** 1988 Jul–Aug;17(4):3–4

Offering insights on blind children. **Child Today** 1988 Jul–Aug;17(4):4

Who defaults after treatment for gonorrhoea? Randomised controlled study of effect of an educational leaflet. Bewley S. **Genitourin Med** 1988 Aug;64(4):241–4

Do patients need practice information leaflets? Bhopal RS, et al. **Health Bull (Edinb)** 1988 Jul;46(4):205–12

Information booklets for patients with inflammatory bowel disease. Mayberry JF. **Int Disabil Stud** 1988;10(4):179–80

Guide to community resources [letter] Guy LJ. **J Fam Pract** 1989 May;28(5):624

Education of the hypertensive patient: the Ann Arbor approach. Zweifler AJ, et al. **J Hypertens Suppl** 1989 May; 7(3):S89–91

Evaluation of a waiting list leaflet issued to general practitioners [letter] Bennett J, et al. **J R Coll Gen Pract** 1988 May;38(310):227–8

A randomized controlled trial of an information booklet for hypertensive patients in general practice. Watkins CJ, et al. **J R Coll Gen Pract** 1987 Dec;37(305):548–50

Creating community resource pamphlets. Giarratano S, et al. **J Sch Health** 1988 Dec;58(10):417–8

Coverage and readership of the U.S. Surgeon General's AIDS pamphlet in Los Angeles. Montgomery K, et al. **Med Care** 1989 Jul;27(7):758–61

Some answers to patients' questions about food [letter] Roddick IC. **Med J Aust** 1989 May 15;150(10):605–6

Practice information book cuts phone calls, patient irritation. Conomikes GS. **Mo Med** 1986 Dec;83(12):787, 815

Rehabilitation information after total hip replacement [letter] Smaill R, et al. **N Z Med J** 1989 Aug 9;102(873):418–9

Public acceptance of the Surgeon General's brochure on AIDS. Gerbert B, et al. **Public Health Rep** 1989 Mar–Apr; 104(2):130–3

Understanding AIDS: an information brochure being mailed to all US households. **Public Health Rev** 1988;16(1–2):21–33

PAN see CHIMPANSEE TROGLODYTES

PAN AMERICAN HEALTH ORGANIZATION

PAHO guidelines for AIDS. **Bull Pan Am Health Organ** 1989;23(1–2):158–61

First Pan American Teleconference on AIDS. **Bull Pan Am Health Organ** 1989;23(1–2):162–73

Health and law [editorial] Guerra de Macedo C. **Bull Pan Am Health Organ** 1988;22(4):i

[Resolutions of the 101st meeting of the Executive Committee of the Panamerican Health Organization] **Bol Of Sanit Panam** 1988 Sep;105(3):297–310 (Spa)

[Consolidated report of the ALAESP/ASPH/PAHO meetings. Basic document for the First Ibero–Panamerican Conference of Schools of Public Health] **Educ Med Salud** 1989 Jan–Mar;23(1):14–53 (Spa)

[PASCAP: an experience of technical cooperation among countries] Ferreira JR, et al. **Educ Med Salud** 1989 Jul–Sep; 23(3):212–28 (Spa)

PANAX see GINSENG

PANCOAST'S SYNDROME

COMPLICATIONS

Combined neurogenic and nociceptive pain in a patient with Pancoast tumor managed by epidural hydromorphone and oral carbamazepine. Tanelian DL, et al. **Pain** 1989 Jan; 36(1):85–8

[Paroxysmal hemicrania preceding Pancoast's syndrome] Delreux V, et al. **Rev Neurol (Paris)** 1989;145(2):151–2 (Eng. Abstr.) (Fre)

DIAGNOSIS

Superior sulcus tumors: the role of imaging. Takasugi JE, et al. **J Thorac Imaging** 1989 Jan;4(1):41–8 (46 ref.)

Superior sulcus tumors: CT and MR imaging. Heelan RT, et al. **Radiology** 1989 Mar;170(3 Pt 1):637–41

ETIOLOGY

Acute Pancoast's syndrome caused by fungal infection. Shamji FM, et al. **Can J Surg** 1988 Nov;31(6):441–3 (3 ref.)

RADIOGRAPHY

[The value of CT in carcinoma of the lung apex] Schlolaut KH, et al. **ROFO** 1989 Feb;150(2):142–6 (Eng. Abstr.) (Ger)

[Computed tomography of Pancoast tumor] Hirakata K, et al. **Rinsho Hoshasen** 1989 Jan;34(1):79–84 (Eng. Abstr.) (Jpn)

RADIONUCLIDE IMAGING

57Co-bleomycin scintigraphy for the preoperative detection and staging of lung tumors. Sustarsic J, et al. **Nuklearmedizin** 1989 Aug;28(4):160–1

SURGERY

[Pancoast's tumor: multi-disciplinary treatment and combined cervico-thoracic approach] Merlini M, et al. **Helv Chir Acta** 1989 Jan;55(5):727–30 (Eng. Abstr.) (Fre)

PANCREALIPASE see PANCREATIN

PANCREAS

Intraluminal duodenal diverticulum associated with heterotopic pancreatic tissue: case report and literature review. Defraigne JO, et al. **Acta Chir Belg** 1988 Nov–Dec; 88(6):388–91

Cancer of aberrant pancreas in jejunum. Case report. Persson GE, et al. **Acta Chir Scand** 1988 Oct;154(10):599–601

Ectopic pancreas in the stomach presenting as an inflammatory abdominal mass. Kaneda M, et al. **Am J Gastroenterol** 1989 Jun;84(6):663–6

Small-bowel obstruction caused by heterotopic pancreas in an adult. Moen J, et al. **Am Surg** 1989 Aug;55(8):503–4

Clinicohistopathologic and immunohistochemical studies of intrapancreatic development of carcinoma of the head of the pancreas. Nakao A, et al. **Ann Surg** 1989 Feb; 209(2):181–7

Eighteen to 37 hours' preservation of major organs using a new autoperfusion multiorgan preparation. Chien S, et al. **Ann Thorac Surg** 1989 Jun;47(6):860–7

Ectopic pancreas and cystic fibrosis. Dawson KP. **Aust N Z J Med** 1988 Oct;18(6):788–9

Expression and excretion of human pancreatic secretory trypsin inhibitor in lipoprotein-deletion mutant of Escherichia coli. Kanamori T, et al. **Gene** 1988 Jun 30; 66(2):295–300

Gastrobronchial fistula and pancreatic heterotopia. Mohlala ML, et al. **J R Coll Surg Edinb** 1989 Feb;34(1):48–9

Experimental pancreatic preservation prior to islet isolation and transplantation. Field MJ, et al. **J Surg Res** 1989 May; 46(5):474–8

Ectopic endocrine pancreatic tumour simulating splenic angiosarcoma. Sapino A, et al. **Pathol Res Pract** 1989 Mar; 184(3):292–6

Cyst formation in gastric heterotopic pancreas: report of two cases. Claudon M, et al. **Radiology** 1988 Dec;169(3):659–60

Pancreatic heterotopia: a reappraisal and clinicopathologic analysis of 32 cases. Pang LC. **South Med J** 1988 Oct; 81(10):1264–75 (49 ref.)

Autotransplantation of canine pancreatic islets isolated from cryopreserved pancreas. Konishi K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2650–2

Twenty-four-hour hypothermic storage of the canine pancreas before islet isolation. Warnock GL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2646–7

[A duplication of the alimentary tract with unusual localization in the submaxillary region] Marcorelles P, et al. **Ann Pediatr (Paris)** 1989 May;36(5):331–4 (Eng. Abstr.) (Fre)

[Cystic dystrophy on aberrant pancreas. Contribution of ultrasound-endoscopy] Andrieu J, et al. **Gastroenterol Clin Biol** 1989 Jun;13(6–7):630–3 (11 ref.) (Eng. Abstr.) (Fre)

[Anaplastic adenocarcinoma developing on pancreatic heterotopy (letter)] Bou B, et al. **J Chir (Paris)** 1988 Nov; 125(11):672–3 (Fre)

[A calcified heterotopic pancreas in the lesser curvature of the stomach] Gamroth A, et al. **ROFO** 1989 Jun; 150(6):738–9 (Ger)

[Ectopic pancreas in the gastric wall with massive bleeding] Shaked G, et al. **Harefuah** 1989 Apr 2;116(7):358–9 (Eng. Abstr.) (Heb)

[Aberrant pancreas in the stomach: a rare cause of pyloric stenosis] D'Elia F, et al. **Minerva Chir** 1988 Dec 31; 43(23–24):2107–10 (Eng. Abstr.) (Ita)

[Histologic and histochemical evaluation of the exocrine pancreas in rats subjected to resection or extensive jejunoileal bypass] Saad Júnior R, et al. **AMB Rev Assoc Med Bras** 1988 Jul–Aug;34(4):123–8 (Eng. Abstr.) (Por)

[A rare association of peptic ulcer, stomach cancer and accessory pancreas] Voitsov NI. **Khirurgiia (Mosk)** 1989 Apr;(4):133–4 (Rus)

[Carcinoid of the accessory pancreas] Veligotskiĭ NN, et al. **Klin Khir** 1988;(11):59 (Rus)

[Carcinoid tumor in aberrant pancreas of the choledochus] Añez MS, et al. **GEN** 1987 Jul–Sep;41(3):108–12 (Eng. Abstr.) (Spa)

[Intestinal obstruction and diarrhea caused by an aberrant pancreas] Neira J, et al. **Rev Chil Pediatr** 1988 Mar–Apr; 59(2):108–10 (Eng. Abstr.) (Spa)

[Digestive hemorrhage associated with ectopic pancreas] Herrera Merina N, et al. **Rev Esp Enferm Apar Dig** 1989 Jan;75(1):91–4 (Eng. Abstr.) (Spa)

[Gastric pancreatic heterotopias] Manuel Palazuelos JC, et al. **Rev Esp Enferm Apar Dig** 1988 Dec;74(6):652–4 (Eng. Abstr.) (Spa)

ABNORMALITIES

Pancreatitis in the annulus of annular pancreas demonstrated by the combined use of computed tomography and endoscopic retrograde cholangiopancreatography. Itoh Y, et al. **Am J Gastroenterol** 1989 Aug;84(8):961–4

Enlargement of the pancreatic head in patients with pancreas divisum. Soulen MC, et al. **Clin Imaging** 1989 Mar; 13(1):51–7

Isolated ventral pancreatitis in an alcoholic with pancreas divisum. Brinberg DE, et al. **Gastrointest Radiol** 1988 Oct; 13(4):323–6

Annular pancreas: a clinical, endoscopic, and immunohistochemical study. Dowsett JF, et al. **Gut** 1989 Jan;30(1):130–5

Pancreatic pseudotumor in pancreas divisum: CT characteristics. Silverman PM, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):140–1

Chronic pancreatitis and pancreas divisum in an infant: diagnosed by endoscopic retrograde cholangiopancreatography and treated with somatostatin analog. Yaffe MR, et al. **J Pediatr Gastroenterol Nutr** 1989 Jul;9(1):108–11

Surgical treatment of pancreas divisum causing pancreatitis in children. Adzick NS, et al. **J Pediatr Surg** 1989 Jan; 24(1):54–8; discussion 58

Duplication of the hepatopancreatic bud presenting as pyloric stenosis. Gonzalez OR, et al. **J Pediatr Surg** 1988 Nov; 23(11):1053–4

Pancreas divisum, pancreatic pseudocyst, and choledochal cyst in an 8-year-old child. Tuggle DW, et al. **J Pediatr Surg** 1989 Jan;24(1):52–3

Of pancreas, pain, and papilla [letter] Lowes JR. **Lancet** 1988 Dec 24–31;2(8626–8627):1499

Pancreas divisum: thin-section CT. Zeman RK, et al. **Radiology** 1988 Nov;169(2):395–8

[Gallbladder agenesis and ventral pancreas in a child diagnosed intra vitam] Sedláčková M, et al. **Cesk Pediatr** 1988 Nov;43(11):687–8 (Cze)

[Chronic segmental pancreatitis and the annular pancreas: apropos of a case] Etienne J, et al. **Ann Chir** 1989; 43(3):244–7 (Eng. Abstr.) (Fre)

[Calcifying chronic pancreatitis localized in the ventral segment of a pancreas divisum: apropos of a case (letter)] Faulques B, et al. **Gastroenterol Clin Biol** 1989 Mar; 13(3):310–1 (Fre)

[Annular pancreas. Apropos of 4 cases] Etienne J, et al. **J Chir (Paris)** 1989 Jun–Jul;126(6–7):370–3 (21 ref.) (Eng. Abstr.) (Fre)

[Primary adenocarcinoma of the duodenum in combination with pancreas anulare] Rondhuis JJ, et al. **Chirurg** 1989 Apr;60(4):307–8 (Ger)

[Treatment strategies in symptomatic pancreas divisum] Winter J, et al. **Chirurg** 1988 Oct;59(10):679–82 (Ger)

[Duodenal phytobezoar in annular pancreas: an association or a complication?] Arabia R, et al. **Radiol Med (Torino)** 1989 Jul–Aug;78(1–2):119–20 (Ita)

[A case of dorsal pancreas agenesis] Manabe Y, et al. **Rinsho Hoshasen** 1988 Aug;33(8):927–9 (Eng. Abstr.) (Jpn)

[An annular pancreas as a cause of impaired duodenal patency] Sergeev IV, et al. **Klin Khir** 1988;(11):29–30 (Eng. Abstr.) (Rus)

[Usefulness of echography with pancreatic stimulation in the evaluation of acute pancreatitis associated with pancreas divisum] García Coma M, et al. **Rev Esp Enferm Apar Dig** 1989 Jan;75(1):87–90 (Eng. Abstr.) (Spa)

[Computerized tomography findings in annular pancreas in an adult] Rovira A, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 2):695–7 (Eng. Abstr.) (Spa)

ANALYSIS

Sensitivity and detection efficiency of the peroxidase antiperoxidase (PAP), avidin-biotin peroxidase complex (ABC), and peroxidase-labeled avidin-biotin (LAB) methods. Elias JM, et al. **Am J Clin Pathol** 1989 Jul; 92(1):62–7

Oxytocin and vasopressin are present in human and rat pancreas. Amico JA, et al. **Am J Med Sci** 1988 Nov; 296(5):303–7

EGF content in the gastrointestinal tract of rats: effect of age and fasting/feeding. Schaudies RP, et al. **Am J Physiol** 1989 May;256(5 Pt 1):G856–61

Determination of trace elements in a marine reference material of lobster hepatopancreas (TORT-1) using inductively coupled plasma mass spectrometry. Ridout PS, et al. **Analyst** 1988 Sep;113(9):1383–6

Chromogranins A and B and secretogranin II in hormonally identified endocrine cells of the gut and the pancreas. Buffa R, et al. **Basic Appl Histochem** 1988;32(4):471–84

Structure of the pig pancreatic GP-2: role of intramolecular disulfides in the resistance to proteolysis. LeBel D, et al. **Biochem Cell Biol** 1989 Jun;67(6):281–7

A Mr 58,000 glycoprotein specifically expressed in developing hamster pancreas and reexpressed in hamster and human pancreatic carcinomas. Heredia A, et al. **Cancer Res** 1988 Dec 1;48(23):6906–11

Isolation and partial purification of lipid-linked oligosaccharides from calf pancreas. Badet J, et al. **Carbohydr Res** 1988 Jul 15;178:49–65

Introduction of a high-resolution cytochemical method for studying the distribution of phospholipids in biological tissues. Coulombe PA, et al. **Eur J Cell Biol** 1988 Aug; 46(3):564–76

Isolation and structural characterization of insulin from the holocephalan fish, Chimaera monstrosa (rabbit fish). Conlon JM, et al. **Gen Comp Endocrinol** 1988 Oct; 72(1):154–60

The distribution of GAWK-like immunoreactivity in neuroendocrine cells of the human gut, pancreas, adrenal and pituitary glands and its co-localisation with chromogranin B. Bishop AE, et al. **Histochemistry** 1989; 90(6):475–83

The penetration of antibiotics into human pancreas. Büchler M, et al. **Infection** 1989 Jan-Feb;17(1):20–5

Comparative studies on the expression of tumor-associated glycoprotein (TAG-72), CA 19-9 and DU-PAN-2 in normal, benign and malignant pancreatic tissue. Takasaki H, et al. **Int J Cancer** 1988 Nov 15;42(5):681–6

Isolation and characterization of a variant somatostatin-14 and two related somatostatins of 34 and 37 residues from lamprey (Petromyzon marinus). Andrews PC, et al. **J Biol Chem** 1988 Oct 25;263(30):15809–14

Immunocytochemistry of calciosomes in liver and pancreas. Hashimoto S, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2523–31

Expression of the rat amylin (IAPP/DAP) gene. Ferrier GJ, et al. **J Mol Endocrinol** 1989 Jul;3(1):R1–4

Determination of antigen concentration in tissue sections by immunodensitometry. Rahier J, et al. **Lab Invest** 1989 Sep; 61(3):357–63

Lipid abnormalities in pancreatic tissue of streptozotocin-induced diabetic rats. Levy E, et al. **Lipids** 1988 Aug;23(8):771–8

Development and age-related changes in pancreatic cholecystokinin receptors and duodenal cholecystokinin in guinea pigs. Poston GJ, et al. **Mech Ageing Dev** 1988 Dec; 46(1-3):59–66

Demonstration of a high affinity receptor for 1,25-dihydroxyvitamin D3 in rat pancreas. Ishida H, et al. **Mol Cell Endocrinol** 1988 Dec;60(2-3):109–17

Identification by immunoblotting of somatostatin proforms in a rat pancreatic cell line. Lherisson C, et al. **Pancreas** 1988;3(6):668–74

Novel assay for pancreatic cellular damage: 1. Characterization of protein profiles in human pancreatic cytosol and purification and characterization of a pancreatic specific protein. Pousette A, et al. **Pancreas** 1988; 3(4):421–6

Secretin receptors in human pancreatic membranes. Robberecht P, et al. **Pancreas** 1988;3(5):529–35

Characterization of muscarinic receptors in human pancreatic membranes. Waelbroeck M, et al. **Pancreas** 1988; 3(6):627–30

Isolation and characterization of bovine pancreastatin. Nakano I, et al. **Regul Pept** 1989 May;25(2):207–13

Immunoreactive glucagons purified from dog pancreas, stomach and ileum. Shinomura Y, et al. **Regul Pept** 1988 Dec;23(3):299–308

An efficient protein A gold-silver staining method for light microscopic immunohistochemistry. Fujimori O. **Z Mikrosk Anat Forsch** 1988;102(5):858–64

[CO2-high pressure extraction of the pancreas] Sirtl W. **Pharm Unserer Zeit** 1988 Jul;17(4):102–5 (4 ref.) **(Ger)**

[Modulation of the expression of histocompatibility antigens class I (HLA-A,B,C) in the human pancreas] Leprini A, et al. **Boll Soc Ital Biol Sper** 1989 Mar;65(3):187–94 (Eng. Abstr.) **(Ita)**

[Isolation and characterization of human pancreatic kallikrein] Terashima H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jun;85(6):1320 **(Jpn)**

ANATOMY & HISTOLOGY

Magnetic resonance imaging of the pancreas. Kabala J, et al. **Bristol Med Chir J** 1988 May;103(2):25

Morphology of the exocrine pancreas of the southern hemisphere lamprey, Geotria australis, and changes during metamorphosis. Hilliard RW, et al. **J Morphol** 1988 Jul; 197(1):33–52

Sonographic measurement of the pancreas in children. Ueda D. **JCU** 1989 Jul-Aug;17(6):417–23

Gross anatomy of the liver, biliary tree, and pancreas in the black-tailed prairie dog (Cynomys ludovicianus). Grace PA, et al. **Lab Anim** 1988 Oct;22(4):326–9

The pancreatic ductal system of the rat: cell diversity, ultrastructure, and innervation. Madden ME, et al. **Pancreas** 1989;4(4):472–85

[The secretory system of the thrush pancreas] Gentile R, et al. **Boll Soc Ital Biol Sper** 1988 Mar;64(3):281–7 (Eng. Abstr.) **(Ita)**

[Age-related changes in the echographic dimensions and shape of the pancreas in children] Sapozhnikov VG. **Pediatriia** 1988;(11):109–10 **(Rus)**

BLOOD SUPPLY

The effect of pancreatic and intestinal venous blood on hepatic atrophy and compensatory hyperplasia in the rat. Rózga J, et al. **Acta Physiol Pol** 1988 Sep-Dec; 39(5–6):460–74

Sudden death due to ruptured pancreaticoduodenal artery aneurysm. Boglioli LR, et al. **Am J Forensic Med Pathol** 1988 Sep;9(3):267–70 (16 ref.)

Experimental studies on fluosol DA administration in acute pancreatitis. Ohyanagi H, et al. **Biomater Artif Cells Artif Organs** 1988;16(1-3):585–94

Aneurysm of the inferior pancreaticoduodenal artery diagnosed by real-time ultrasound and pulsed Doppler. Grech P, et al. **Br J Radiol** 1989 Aug;62(740):753–5

Three-dimensional morphological study of the pancreatic microvasculature in caerulein-induced experimental pancreatitis. McEntee G, et al. **Br J Surg** 1989 Aug; 76(8):853–5

New canine model of chronic pancreatitis due to chronic ischemia with incomplete pancreatic duct obstruction. Tanaka T, et al. **Digestion** 1988;41(3):149–55

Effects of a newly synthesized pancreatic protease inhibitor (PATM) on pancreatic microcirculation in experimental acute pancreatitis. Nishiwaki H, et al. **Gastroenterol Jpn** 1989 Apr;24(2):177–80

Hepatic haemodynamics as related to blood flow through gut, spleen, and pancreas. Charbon GA, et al. **Gut** 1989 Feb;30(2):265–78 (87 ref.)

The volume and area of the capillaries in the endocrine and exocrine pancreas of the rat. Svensson AM, et al. **Histochemistry** 1988;90(1):43–6

Steroids do not alter pancreatic blood supply in hypovolemic dogs: implications on steroid action in acute pancreatitis. Robert JH, et al. **Int J Pancreatol** 1988 Dec;3(6):449–56

Progressive changes in pancreatic vasculature accompanying copper deficiency-induced glandular atrophy. Weaver FC. **Int J Pancreatol** 1989 Mar;4(2):175–86

Duodenal stenosis caused by ruptured aneurysms of the pancreaticoduodenal artery—a case report. Hayashi T, et al. **Jpn J Surg** 1989 Jan;19(1):63–6

Macroscopic and microscopic vasculature of the duodenal-biliary-pancreatic complex. Rottenberg N. **Morphol Embryol (Bucur)** 1989 Jan-Mar;35(1):15–9 (23 ref.)

Comparison of gas clearance and radioactive microspheres for pancreatic blood flow measurement. DeMar AR, et al. **Pancreas** 1989;4(2):161–8

Glucose stimulation of pancreatic islet blood flow by redistribution of the blood flow within the whole pancreatic gland. Jansson L. **Pancreas** 1988;3(4):409–12

Effect of temporary ischemia upon development and histological patterns of acute pancreatitis in the rat. Spormann H, et al. **Pathol Res Pract** 1989 May; 184(5):507–13

Arteriovenous malformation of the pancreas associated with mesenteric varices: case report and review of the literature. Uchino A, et al. **Radiat Med** 1989 Jan-Feb;7(1):6–9 (26 ref.)

Vascular complications of pancreatitis. Vujic I. **Radiol Clin North Am** 1989 Jan;27(1):81–91 (30 ref.)

Mycotic aneurysm of the inferior pancreaticoduodenal artery: successful nonoperative management. Teich S, et al. **South Med J** 1989 Feb;82(2):267–9

[Henle's trunk and its related veins] Jiang DF, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Mar;26(3):181–3, 192 (Eng. Abstr.) **(Chi)**

[Periarteritis nodosa complicated by intrapancreatic vascular rupture] Jarrousse B, et al. **Gastroenterol Clin Biol** 1988 Aug-Sep;12(8–9):661–3 (16 ref.) (Eng. Abstr.) **(Fre)**

[Aneurysms of digestive arteries. What are the indications?] Mellière D, et al. **J Mal Vasc** 1989;14(3):206–12 (Eng. Abstr.) **(Fre)**

[Radical percutaneous treatment in a case of pseudoaneurysm of the gastroduodenal artery. Double embolization using Gianturco coils] Grosso M, et al. **Radiol Med (Torino)** 1989 Jun;77(6):706–8 **(Ita)**

[Embolization of a ruptured hepatoma through the pancreatic arcades—a case report] Choji K, et al. **Rinsho Hoshasen** 1988 Jun;33(6):723–6 (Eng. Abstr.) **(Jpn)**

[The blood microcirculatory bed of the small intestine, liver and pancreas after resection of the stomach and small intestine] Khudaĭberdyev RI. **Arkh Anat Gistol Embriol** 1988 Sep;95(9):44–9 (Eng. Abstr.) **(Rus)**

[State of the capillaries of the exocrine pancreas in experimental acute pancreatitis] Diubenko KA, et al. **Klin Khir** 1988;(11):18–9 (Eng. Abstr.) **(Rus)**

[Rheography of the pancreas] Kozlov VA, et al. **Sov Med** 1989;(4):26–9 (Eng. Abstr.) **(Rus)**

[Correction of the microcirculation in the pancreas in acute pancreatitis] Diubenko KA, et al. **Vrach Delo** 1988 Jul; (7):63–7 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Formation of secretion granules in the Golgi apparatus of pancreatic acinar cells of the rat. Rambourg A, et al. **Am J Anat** 1988 Nov;183(3):187–99

Role of periductal and ductular epithelial cells of the adult rat pancreas in pancreatic hepatocyte lineage. A change in the differentiation commitment. Rao MS, et al. **Am J Pathol** 1989 May;134(5):1069–86

An optimized procedure for isolation of rat pancreatic acinar cells. Schulz HU, et al. **Anat Anz** 1988;167(2):141–50

Influence of bombesin on gastrointestinal and pancreatic cell growth in adult and suckling animals. Lehy T, et al. **Ann N Y Acad Sci** 1988;547:255–67

Immunohistochemical localization of some endocrine cells in the gastroenteropancreatic system of Erinaceus europaeus. Castaldo L, et al. **Basic Appl Histochem** 1988; 32(4):511–21

Almost total conversion of pancreas to liver in the adult rat: a reliable model to study transdifferentiation. Rao MS, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):131–6

Differentiation of endocrine cells in chick allantoic epithelium combined with pancreatic mesenchyme. Stein B, et al. **Cell Differ Dev** 1989 May;26(3):173–80

Identification of cell types containing S-100b protein-like immunoreactivity in the islets of Langerhans of the guinea pig pancreas with light and electron microscopy. Uchida T, et al. **Cell Tissue Res** 1989 Feb;255(2):379–84

Automated islet isolation from human pancreas. Ricordi C, et al. **Diabetes** 1989 Jan;38 Suppl 1:140–2

Viable purified islets of Langerhans from collagenase-perfused human pancreas. Warnock GL, et al. **Diabetes** 1989 Jan;38 Suppl 1:136–9

Evaluation of cryopreservation techniques of pancreatic fragments and islets in vitro and in vivo. Ishihara K, et al. **Diabetes Res Clin Pract** 1988 Oct 14;5(4):285–93

Isolated cells in suspension for biological research—Part II. Structure and functional properties of cells from pancreatic islets and acini. Hartmann K, et al. **Exp Pathol** 1988; 34(1):1–22 (131 ref.)

Distribution of G-cells in the antrum and duodenum and D-cells in the fundus, antrum, duodenum and pancreas of the guinea pig. Vassilakis JS, et al. **Exp Pathol** 1989; 36(4):211–6

Stimulation of G2-arrested rat liver and pancreas cells by fasting. Daoust R. **Gastroenterology** 1989 Jul;97(1):219–21

Histological and immunocytochemical study of the endocrine pancreas of the lizard Podarcis hispanica Steindachner, 1870 (Lacertidae). López J, et al. **Gen Comp Endocrinol** 1988 Aug;71(2):212–28

Reactivity of CO17-1A and B72.3 in benign and malignant pancreatic diseases. Takiyama Y, et al. **Hum Pathol** 1989 Sep;20(9):832–8

Rat pancreatic interlobular duct epithelium: isolation and culture in collagen gel. Githens S, et al. **In Vitro Cell Dev Biol** 1989 Aug;25(8):679–88

Effects of trypsin, chymotrypsin, and uncoupling on survival of isolated acinar cells from rat pancreas. Letko G, et al. **Int J Pancreatol** 1989 May;4(4):431–41

The activation of 3H-labeled N-nitrosobis(2-oxopropyl)amine by isolated hamster pancreas cells. Lawson T, et al. **J Cancer Res Clin Oncol** 1989;115(1):47–52

Effects of n-alcohols on junctional coupling and amylase secretion of pancreatic acinar cells. Chanson M, et al. **J Cell Physiol** 1989 Apr;139(1):147–56

Inhibition of electrical coupling in pairs of murine pancreatic acinar cells by OAG and isolated protein kinase C. Somogyi R, et al. **J Membr Biol** 1989 Jun;108(3):273–82

Yang-type components of the pancreatic acinar cell surface. Brătilă FC, et al. **J Tradit Chin Med** 1988 Dec;8(4):296–300

Inositol trisphosphate-linked calcium mobilization couples substance P receptors to conductance increase in a rat pancreatic acinar cell line. Song SY, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):143–8

Effect of sodium butyrate, a differentiating agent, on cell surface glycoconjugates of a human pancreatic cell line. Bloom EJ, et al. **Pancreas** 1989;4(1):59–64

Peptide YY: intrapancreatic localization and effects on insulin and glucagon secretion in the mouse. Böttcher G, et al. **Pancreas** 1989;4(3):282–8

The effect of cellophane wrapping of the pancreas in the Syrian golden hamster: autoradiographic observations. Rosenberg L, et al. **Pancreas** 1989;4(1):31–7

Cell-to-cell channel conductance during loss of gap junctional coupling in pairs of pancreatic acinar and Chinese hamster ovary cells. Somogyi R, et al. **Pflugers Arch** 1988 Jul;412(1-2):54–65

Increase in B-cells in the pancreatic remnant after partial pancreatectomy in pigs. An immunocytochemical and

functional study. Löhr M, et al. **Virchows Arch [B]** 1989; 56(4):277–86

[Ontogeny of pancreatic gastrin cells in neonatal rat] Magami Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Apr; 86(4):913–5 (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

Inhibitory effect of calcitonin on pure human pancreatic secretion. Tanaka J, et al. **Acta Med Okayama** 1989 Jun; 43(3):169–74

Bethanechol–induced restricted stimulation of pancreatic juice secretion in mice. Vaccaro MI, et al. **Acta Physiol Pharmacol Latinoam** 1987;37(3):409–13

Effects of pancreatic noradrenaline infusion on basal and stimulated islet hormone secretion in the dog. Ahrén B, et al. **Acta Physiol Scand** 1988 Feb;132(2):143–50

On the regulatory functions of neuropeptide Y (NPY) with respect to vascular resistance and exocrine and endocrine secretion in the pig pancreas. Holst JJ, et al. **Acta Physiol Scand** 1989 Aug;136(4):519–26

Metal–inducible pathology in the liver, pancreas, and kidney of transgenic mice expressing SV40 early region genes. Dyer KR, et al. **Am J Pathol** 1989 Aug;135(2):401–10

Effects of islet hormones on amylase secretion and localization of somatostatin binding sites. Garry DJ, et al. **Am J Physiol** 1989 May;256(5 Pt 1):G897–904

Effect of octreotide acetate on pancreatic exocrine function. Williams ST, et al. **Am J Surg** 1989 May;157(5):459–62

Beta 1 and beta 2 adrenergic agonists in exocrine pancreatic secretion in the rabbit. De Dios I, et al. **Arch Int Physiol Biochim** 1989 Feb;97(1):37–43

Inhibition of the stimulated canine exocrine pancreas by amino acids and fat. Stubbs RS, et al. **Arch Surg** 1989 Apr; 124(4):473–8

Bioactivity of synthetic human pancreastatin on exocrine pancreas. Funakoshi A, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1237–42

Inositol 1,2–cyclic 4,5–trisphosphate is an order of magnitude less potent than inositol 1,4,5–trisphosphate in mobilizing intracellular stores of calcium in mouse pancreatic acinar cells. Lee CH, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):561–5

Effect of transdermal clonidine on the endocrine responses to insulin–induced hypoglycemia in essential hypertension. Guthrie GP Jr, et al. **Clin Pharmacol Ther** 1989 Apr; 45(4):417–23

Effect of alpha–glucosidase inhibitor on exocrine and endocrine pancreatic function in rats fed a high–carbohydrate diet consisting of sucrose or glucose. Otsuki M, et al. **Diabetes Res Clin Pract** 1988 Oct 14; 5(4):257–63

Loxiglumide. A new proglumide analog with potent cholecystokinin antagonistic activity in the rat pancreas. Otsuki M, et al. **Dig Dis Sci** 1989 Jun;34(6):857–64

Combined effects of protein deficiency and chronic ethanol consumption on rat pancreas. Wilson JS, et al. **Dig Dis Sci** 1988 Oct;33(10):1250–9

Different effects of intraperitoneal or subcutaneous administration of H2–antagonists on pancreatic response to chronic administration of caerulein in rats. Mansi C, et al. **Digestion** 1988;41(3):129–35

Effects of a new proglumide analogue CR 1392 on pancreatic exocrine secretion in the rat. Otsuki M, et al. **Digestion** 1989;42(2):61–9

Effect of bombesin and its mammalian counterpart, GRP, on exocrine pancreas in the rat. Varga G, et al. **Digestion** 1988;41(4):229–36

Pancreatic digestive enzymes and ultrastructure after chronic alcohol intake in the rat. Grönroos JM, et al. **Exp Pathol** 1988;35(4):197–208

Effects of cisapride on the pancreatic exocrine secretion in rats. Funakoshi A, et al. **Gastroenterol Jpn** 1988 Oct; 23(5):559–63

Perifusion of isolated rat pancreatic acini: carbamylcholine–induced biphasic amylase release. Nagai M, et al. **Gastroenterol Jpn** 1989 Aug;24(4):393–7

Differential effects of atropine and a cholecystokinin receptor antagonist on pancreatic secretion. Adler G, et al. **Gastroenterology** 1989 Apr;96(4):1158–64

MK–329 has no direct effect on the pancreas [letter] Berlin RG. **Gastroenterology** 1989 Aug;97(2):553–4

Effects of non–peptidal CCK receptor antagonist (L–364,718) on pancreatic responses to cholecystokinin, gastrin, bombesin, and meat feeding in dogs. Konturek SJ, et al. **Gut** 1989 Jan;30(1):110–7

Influence of treatment with pancreatic extracts on pancreatic enzyme secretion. Mössner J, et al. **Gut** 1989 Aug; 30(8):1143–9

Augmentation of streptozotocin–induced hyperglycemia in mice by prior treatment with complete Freund's adjuvant. Kohnert KD, et al. **Int J Pancreatol** 1989 Apr;4(3):321–33

Action of amino acids on stomach, pancreas, and gallbladder in dogs. Kondo T, et al. **Int J Pancreatol** 1989 Feb;4(1):41–9

Alcohol–induced pancreatic injury (Part 2). Evolution of pathogenetic theories. Wilson JS, et al. **Int J Pancreatol** 1989 Apr;4(3):233–50 (135 ref.)

Kinetic analysis of the formation of inositol 1:2–cyclic phosphate in carbachol–stimulated pancreatic minilobules. Half is formed by direct phosphodiesteratic cleavage of phosphatidylinositol. Dixon JF, et al. **J Biol Chem** 1989 Jul 15;264(20):11721–4

Effects of trypsin inhibitor (camostate) on pancreas and CCK release in young and old female rats. Miyasaka K, et al. **J Gerontol** 1989 Jul;44(4):M136–40

Effects of epidermal growth factor and nerve growth factor on isoproterenol–induced DNA synthesis in rat parotid and pancreas following removal of submandibular–sublingual glands. Schneyer CA, et al. **J Oral Pathol** 1988 May; 17(5):250–6

Do D–1 dopamine receptors mediate dopamine–induced pancreatic exocrine secretion in anesthetized dogs? Horiuchi A, et al. **J Pharmacol Exp Ther** 1989 Aug; 250(2):734–9

Effect of estradiol on pancreatic amylase and cholecystokinin binding in ovariectomized guinea pigs. Guo YS, et al. **J Steroid Biochem** 1989 Sep;33(3):459–64

Development of hepatocytes in the pancreas of hamsters treated with 2,3,7,8–tetrachlorodibenzo–p–dioxin. Rao MS, et al. **J Toxicol Environ Health** 1988;25(2):201–5

Effects of DN–9693, a synthesized phosphodiesterase inhibitor, on pancreatic exocrine secretion in dogs. Iwatsuki K, et al. **Jpn J Pharmacol** 1989 Jan;49(1):77–82

Lysolecithin concentration in pancreatic tissue during therapy with phospholipase A2–inhibitors in acute necrotizing pancreatitis. Kahle M, et al. **Klin Wochenschr** 1989 Feb 1;67(3):177–9

Influence of dietary fats on pancreatic phospholipids of chronically ethanol–treated rats. Cronholm T, et al. **Lipids** 1988 Sep;23(9):841–6

Pancreatic hypersensitivity to glucose by young obese Zucker rats (fa/fa). Kuffert A, et al. **Metabolism** 1988 Oct; 37(10):952–7

Effects of verapamil on amylase release from rat pancreatic acini and its relation to calcium fluxes. Duan RD, et al. **Pancreas** 1988;3(4):427–32

Muscarinic cholinergic induced secretin subsensitivity in rat isolated pancreatic acini. Effects on amylase release, cyclic adenosine monophosphate and inositol phosphate formation. Larose L, et al. **Pancreas** 1989;4(1):71–8

Mechanisms of terbutaline–induced inhibition of exocrine pancreatic secretion in humans. Meyer B, et al. **Pancreas** 1988;3(4):399–403

Bioassay of plasma cholecystokinin in rat and human: inhibition of protein synthesis prevents the decrease in the sensitivity and responsiveness of isolated rat pancreatic acini to CCK–8. Otsuki M, et al. **Pancreas** 1989;4(4):447–51

Effects of hydrocortisone on glucose– and cholecystokinin–induced insulin release from the isolated perfused rat pancreas. Otsuki M, et al. **Pancreas** 1988; 3(4):459–64

Effect of fatty acid on secretin release and cholinergic dependence of pancreatic secretion in rats. Shiratori K, et al. **Pancreas** 1989;4(4):452–8

Phorbol ester potentiates VIP–stimulated amylase release in rat pancreatic acini. Suwandito L, et al. **Pancreas** 1989; 4(4):459–63

Effects of external calcium on acetylcholine–evoked increases in membrane capacitance in rat pancreatic acinar cells. Maruyama Y. **Pflugers Arch** 1989 Feb;413(4):438–40

Inhibitory effect of pancreastatin on pancreatic exocrine secretion in the conscious rat. Funakoshi A, et al. **Regul Pept** 1989 May;25(2):157–66

Comparison of helodermin, VIP and PHI in pancreatic secretion and blood flow in dogs. Konturek SJ, et al. **Regul Pept** 1989 Feb;24(2):155–66

Effects of pancreatic polypeptide on the pancreatic exocrine secretion stimulated by secretin and cholecystokinin in the conscious pig. Langlois A, et al. **Regul Pept** 1989 Jan; 24(1):55–65

Evidence for a direct trophic effect of bombesin on the mouse pancreas: in vivo and cell culture studies. Lhoste EF, et al. **Regul Pept** 1989 Jan;24(1):45–54

CCK–antagonist L–364,718: influence on rat pancreatic growth induced by caerulein and bombesin–like peptides. Schmidt WE, et al. **Regul Pept** 1989 Jan;24(1):67–79

Effect of trypsin on the hormonal regulation of the fat–stimulated human exocrine pancreas. Olsen O, et al. **Scand J Gastroenterol** 1988 Sep;23(7):875–81

Time–specific development of pancreatic hypersecretory capacity during chronic caerulein treatment in rats. Varga G, et al. **Scand J Gastroenterol** 1989 Jun;24(5):565–70

The effect of somatostatin analogue (SMS 201–995) on pancreatic blood flow. Conway DR, et al. **Surgery** 1988 Dec;104(6):1024–30

Altered exocrine pancreatic function in rats treated with nicotine. Dubick MA, et al. **Toxicol Appl Pharmacol** 1988 Oct;96(1):132–9

Some endocrine and morphological aspects of the acute toxicity of 2,3,7,8–tetrachlorodibenzo–p–dioxin (TCDD). Gorski JR, et al. **Toxicol Pathol** 1988;16(3):313–20

The effect of terbutaline on exocrine function in the denervated canine pancreas. Garvin PJ, et al. **Transplantation** 1988 Nov;46(5):739–43

[The influence of truncal vagotomy or surgical sympathectomy on the pancreatic trophic effect of trypsin inhibitor upon normal rats and major pancreatectomized rats] Aki T, et al. **Nippon Geka Gakkai Zasshi** 1989 Apr; 90(4):586–97 (Eng. Abstr.) **(Jpn)**

[Role of guanine nucleotide regulatory protein in stimulation of exocrine pancreatic secretion by cholecystokinin in isolated rat pancreatic acini] Matozaki T. **Nippon Naibunpi Gakkai Zasshi** 1988 Oct 20;64(10):1051–64 (Eng. Abstr.) **(Jpn)**

[Effect of islet activating protein on somatostatin–induced inhibition of cellular cyclic AMP content in isolated rat pancreatic acini] Matozaki T, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Jun 20;64(6):523–30 (Eng. Abstr.) **(Jpn)**

[Inhibitory effect of a new proglumide derivative, loxiglumide, on CCK action in isolated rat pancreatic acini] Fujii M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jan; 86(1):77–82 (Eng. Abstr.) **(Jpn)**

[Inhibiting effect of a chalone–containing extract of calf pancreatic tissue on the proliferative activity of normal and tumorous pancreatic cells in vitro and in vivo] Mkrtchian LN, et al. **Eksp Onkol** 1988;10(4):63–6 (Eng. Abstr.) **(Rus)**

[Inhibition of pancreatic secretion by trypsin and trypsinogen] Korot'ko GF, et al. **Fiziol Zh SSSR** 1988 Sep; 74(9):1309–15 (Eng. Abstr.) **(Rus)**

[Effect of acetylcholine on the electrical and secretory activity of the pancreatic acinar cells] Nalivaĭko DG, et al. **Fiziol Zh SSSR** 1988 Sep;74(9):1330–2 **(Rus)**

EMBRYOLOGY

Neuron–specific enolase (NSE) as a neuroendocrine cell marker in the human fetal pancreas. von Dorsche HH, et al. **Acta Histochem (Jena)** 1989;85(2):227–8

Determination of mitoses in the human fetal pancreas—a contribution on islet cell development. Hahn von Dorsche H, et al. **Anat Anz** 1988;167(3):239–41

Insulin gene expression in chicken ontogeny: pancreatic, extrapancreatic, and prepancreatic. Serrano J, et al. **Dev Biol** 1989 Apr;132(2):410–8

Development of a method for isolation of islets from human fetal pancreas. Kover K, et al. **Diabetes** 1989 Jul; 38(7):917–24

Toxicity of FK–506 in human fetal pancreas. Leonard DK, et al. **Diabetes** 1989 Jan;38 Suppl 1:172–5

Tissue culture of human fetal pancreas. Effects of nicotinamide on insulin production and formation of isletlike cell clusters. Sandler S, et al. **Diabetes** 1989 Jan; 38 Suppl 1:168–71

Cellular differentiation in the embryonic rat pancreas, with special reference to the co–existence of substances immunoreactive to both insulin and glucagon antibodies in the same cells. Taki J, et al. **Diabetes Res Clin Pract** 1989 May 15;6(4):247–58

Cultured epithelial cells derived from human foetal pancreas as a model for the study of cystic fibrosis: further analyses on the origins and nature of the cell types. Harris A, et al. **J Cell Sci** 1988 May;90 (Pt 1):73–7

Sonographic detection of the fetal pancreas. Hill LM, et al. **JCU** 1989 Sep;17(7):475–9

Investigations in children who were in utero at onset of insulin–dependent diabetes in their mothers. Buschard K, et al. **Lancet** 1989 Apr 15;1(8642):811–4

Activators of protein kinase C stimulate insulin secretion from the human fetal pancreas. Tuch BE, et al. **Pancreas** 1988;3(6):675–80

Cell differentiation during pancreatic carcinogenesis. Pour PM. **Scand J Gastroenterol Suppl** 1988;151:123–30

Normalization of blood glucose levels in nondiabetic nude mice by human fetal pancreas after induction of diabetes. Tuch BE, et al. **Transplantation** 1988 Oct;46(4):608–11

ENZYMOLOGY

Synthesis and contents of pancreatic exportable enzymes. Effect of oleic acid intraduodenal administration. Calvo EL, et al. **Acta Physiol Pharmacol Latinoam** 1988; 38(2):145–50

Purification of Ca2+–ATPase from rat pancreatic acinar plasma membranes using calmodulin–affinity chromatography. Bridges M, et al. **Adv Exp Med Biol** 1988; 232:83–5

Effects of cholecystokinin on pancreatic ornithine decarboxylase gene expression. Rosewicz S, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G818–21

Pancreatic digestive enzyme gene expression: effects of CCK and soybean trypsin inhibitor. Rosewicz S, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):G733–8

Cholecystokinin and gastrin peptides stimulate ODC activity in a rat pancreatic cell line. Scemama JL, et al. **Am J Physiol** 1989 May;256(5 Pt 1):G846–50

Interaction of peptides related to VIP and secretin with guinea pig pancreatic acini. Zhou ZC, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):G283–90

Total amylase and pancreatic isoamylase in serum and urine: considerations from data on biological variation. Cummings ST, et al. **Ann Clin Biochem** 1989 Jul;26 (Pt 4):335–40

Blood group related carbohydrate antigens in human fetal pancreas. Philipsen EK, et al. **APMIS** 1988 Dec; 96(12):1109–17

Fatty acyl esters potentiate fatty acid induced activation of protein kinase C. Holian O, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1110–6

On the cDNA's for two types of rat pancreatic secretory trypsin inhibitor. Horii A, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):151–9

Calcium–stimulated ATPase activity in plasma membrane vesicles from pancreatic acinar cells. Ochs DL, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):746–51

Secondary structures of rat lipolytic enzymes: circular dichroism studies and relation to hydrophobic moments. Roberts IM, et al. **Biochem Biophys Res Commun** 1989 Jul

14;162(1):95–101
Molecular cloning and nucleotide sequence of human pancreatic prechymotrypsinogen cDNA. Tomita N, et al. **Biochem Biophys Res Commun** 1989 Jan 31;158(2):569–75
Glycosyl–transferase activities in pancreas: comparison between semi–synthetic and commercial diets. Biol MC, et al. **Biochem Int** 1988 Nov;17(5):813–23
Purification and characterization of myosin light–chain kinase from the rat pancreas. Bissonnette M, et al. **Biochem J** 1989 Mar 15;258(3):739–47
Inhibition of pancreatic lipase in vitro by the covalent inhibitor tetrahydrolipstatin. Hadváry P, et al. **Biochem J** 1988 Dec 1;256(2):357–61
Type analysis of the oligosaccharide chains on microheterogeneous components of bovine pancreatic DNAase by the lectin–nitrocellulose sheet method. Kijimoto–Ochiai S, et al. **Biochem J** 1989 Jan 1;257(1):43–9
Hydrolysis of p–nitrophenyl phenylphosphonate catalysed by bovine pancreatic deoxyribonuclease. Liao TH, et al. **Biochem J** 1988 Nov 1;255(3):781–7
Preparation and characterization of dog pancreas microsomal membranes specifically depleted of protein disulphide–isomerase. Paver JL, et al. **Biochem J** 1989 Feb 1;257(3):657–63
Human leukocyte and porcine pancreatic elastase: X–ray crystal structures, mechanism, substrate specificity, and mechanism–based inhibitors. Bode W, et al. **Biochemistry** 1989 Mar 7;28(5):1951–63 (94 ref.)
Rotational dynamics of the single tryptophan of porcine pancreatic phospholipase A2, its zymogen, and an enzyme/micelle complex. A steady–state and time–resolved anisotropy study. Ludescher RD, et al. **Biochemistry** 1988 Aug 23;27(17):6618–28
Refolding of denatured ribonuclease observed by size exclusion chromatography. Shalongo W, et al. **Biochemistry** 1989 May 30;28(11):4820–5
Raman and infrared studies on the conformation of porcine pancreatic and Crotalus durissus terrificus phospholipases A2. Arêas EP, et al. **Biochim Biophys Acta** 1989 Jul 27; 997(1–2):15–26
Investigation of the active center of rat pancreatic elastase. Bieth JG, et al. **Biochim Biophys Acta** 1989 Jan 19; 994(1):64–74
Identity of a cytosolic neutral cholesterol esterase in rat liver with the bile salt stimulated cholesterol esterase in pancreas. Camulli ED, et al. **Biochim Biophys Acta** 1989 Sep 25; 1005(2):177–82
Identification of the rate–limiting step in serine proteinases from the effect of temperature on steady–state kinetics. Fitzpatrick PF. **Biochim Biophys Acta** 1989 Apr 6; 995(2):201–3
Bile salt–dependent, neutral cholesteryl ester hydrolase of rat liver: possible relationship with pancreatic cholesteryl ester hydrolase. Harrison EH. **Biochim Biophys Acta** 1988 Nov 4;963(1):28–34
Purification of pancreatic phospholipase A2 from human duodenal juice. Kozumplik V, et al. **Biochim Biophys Acta** 1989 Apr 26;1002(3):395–7
Kinetics of the inhibition of free and elastin–bound human pancreatic elastase by alpha 1–proteinase inhibitor and alpha 2–macroglobulin. Laurent P, et al. **Biochim Biophys Acta** 1989 Feb 23;994(3):285–8
Lipolytic enzymes of the human pancreas. II. Purification and properties of cholesterol ester hydrolase. Meyer JG. **Biochim Biophys Acta** 1989 Mar 14;1002(1):89–92
Inhibitors of sterol synthesis. Oleate ester of 5 alpha–cholest–8(14)–en–3 beta–ol–15–one as a substrate for pancreatic cholesterol esterase. Stephens TW, et al. **Biochim Biophys Acta** 1988 Dec 16;963(3):395–400
Catalytic activity and association of pancreatic lipase. Antonov VK, et al. **Biochimie** 1988 Sep;70(9):1235–44 (27 ref.)
Minireview on pancreatic lipase and colipase. Chapus C, et al. **Biochimie** 1988 Sep;70(9):1223–34 (84 ref.)
Acetylation of Lys–373 in porcine pancreatic lipase after reaction of the enzyme or its C–terminal fragment [corrected] with p–nitrophenyl acetate [published erratum appears in Biochimie 1989 Apr;71(4):611] De Caro JD, et al. **Biochimie** 1988 Dec;70(12):1785–90
Porcine pancreatic alpha–amylase: a model for structure—function studies of homodepolymerases. Desseaux V, et al. **Biochimie** 1988 Sep;70(9):1163–70
A possible physiological function of pancreatic pro–colipase activation peptide in appetite regulation. Erlanson–Albertsson C, et al. **Biochimie** 1988 Sep; 70(9):1245–50
Effect of sodium taurodeoxycholate, CaCl2 and albumin on the action of pancreatic lipase on droplets of trioleoylglycerol and the release of lipolytic products into aqueous media. Scow RO. **Biochimie** 1988 Sep; 70(9):1251–61
Effect of selective chemical modification and CNBr–cleavage at methionine20 in catalytic activity and substrate binding properties of porcine pancreatic phospholipase A2. van der Wiele FC, et al. **Biochimie** 1988 Sep;70(9):1215–22
Parameters involved in binding of porcine pancreatic alpha–amylase with black bean inhibitor: role of sulfhydryl groups, chloride, calcium, solvent composition and temperature. Whitaker JR, et al. **Biochimie** 1988 Sep; 70(9):1153–61
Pancreatic adaptation to dietary lipids is mediated by changes in lipase mRNA. Wicker C, et al. **Biochimie** 1988 Sep; 70(9):1277–83
Possible lysosomal activation of pancreatic zymogens. Activation of both human trypsinogens by cathepsin B and spontaneous acid. Activation of human trypsinogen 1. Figarella C, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:293–8
Effects of age, and protein malnutrition followed by a balanced diet on the non–parallel change in digestive enzymes in the pancreas and their secretion in the rat. Prost J, et al. **Br J Nutr** 1988 Nov;60(3):619–31
Serum phospholipase A2 activity in acute pancreatitis: an early guide to severity. Bird NC, et al. **Br J Surg** 1989 Jul;76(7):731–2
Phospholipase A2 activation by melittin causes amylase release from exocrine pancreas. Heisler S. **Can J Physiol Pharmacol** 1989 May;67(5):411–6
Characteristics of intracellular calcium changes required for augmentation of phorbol ester–stimulated pancreatic enzyme secretion. Pandol SJ, et al. **Cell Calcium** 1989 May–Jun;10(4):255–62
Generation of alpha– and beta–kallikreins from porcine pancreatic prokallikrein by the action of trypsin. Kamada M, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec;36(12):4891–9
Evaluation of a new assay for pancreatic amylase: performance characteristics and estimation of reference intervals. Junge W, et al. **Clin Biochem** 1989 Apr; 22(2):109–14
ELISA for human pancreatic elastase 1. Sziegoleit A, et al. **Clin Biochem** 1989 Apr;22(2):79–83
Time–resolved immunofluorometric assay of human pancreatic isoamylase in serum, with use of two monoclonal antibodies. Diamandis EP, et al. **Clin Chem** 1989 Sep; 35(9):1915–20
Mechanism of action of human pancreatic and salivary alpha–amylase on 4,6–ethylidene–alpha–4–nitrophenyl–maltoheptaoside substrate [letter] Hägele EO, et al. **Clin Chem** 1989 Jan; 35(1):188–9
Pancreatic amylase measured in serum by use of a monoclonal antibody immunochemically immobilized to a solid phase. Mifflin TE, et al. **Clin Chem** 1989 Jan;35(1):110–4
Diagnostic value of measuring pancreatic lipase and the P3 isoform of the pancreatic amylase isoenzyme in serum of hospitalized hyperamylasemic patients. Panteghini M, et al. **Clin Chem** 1989 Mar;35(3):417–21
Wako UV colorimetric pancreatic lipase assay with 1,2–dilinoleoylglycerol as substrate evaluated. Robbrecht JH, et al. **Clin Chem** 1989 Jul;35(7):1540–1
Direct, rapid assay of pancreatic isoamylase activity by use of monoclonal antibodies with low affinity for macroamylasemic complexes. Rosenblum JL. **Clin Chem** 1988 Dec;34(12):2463–8
Immunocatalytic assay of pancreatic alpha–amylase in serum and urine with a specific monoclonal antibody. Svens E, et al. **Clin Chem** 1989 Apr;35(4):662–4
Multicenter evaluation of a specific pancreatic isoamylase assay based on a double monoclonal–antibody technique. Tietz NW, et al. **Clin Chem** 1988 Oct;34(10):2096–102
Assay of pancreatic amylase with use of monoclonal antibodies evaluated. Zaninotto M, et al. **Clin Chem** 1988 Dec;34(12):2552–5
Single step affinity chromatographic purification of human alpha–amylase from aspirated duodenal juice and its application in the measurement of pancreatic alpha–amylase synthesis rates in man. Ogden JM, et al. **Clin Chim Acta** 1989 Feb 28;180(2):129–39
Application of two monoclonal antibodies to either an immunosorbent enzyme assay or a competitive binding enzyme immunoassay for human serum pancreatic lipase. Ohkaru Y, et al. **Clin Chim Acta** 1989 Jul 14;182(3):295–300
Pancreatic alpha–amylase assay employing the synergism of two monoclonal antibodies. Rauscher E, et al. **Clin Chim Acta** 1989 Jul 31;183(1):41–4
Evaluation of pancreatic amylase immunoassay in acute pancreatitis. Sacchetti L, et al. **Clin Chim Acta** 1989 Jul 31;183(1):95–100
Responses of the pancreatic digestive enzyme secretion to amino acids, glucose and cholecystokinin in chicks. Yang SI, et al. **Comp Biochem Physiol [A]** 1989;92(3):313–7
Some properties of pancreatic lipase in Salmo gairdnerii Rich.:Km, effects of bile salts and Ca2+, gel filtrations. Leger C, et al. **Comp Biochem Physiol [B]** 1977;57(4):359–63
Isozymes of alpha–amylase in the porcine pancreas: population distribution. Strumeyer DH, et al. **Comp Biochem Physiol [B]** 1988;91(2):351–7
Effect of vanadate administration on blood glucose and insulin levels as well as on the exocrine pancreatic function in streptozotocin–diabetic rats. Bendayan M, et al. **Diabetologia** 1989 Aug;32(8):561–7
Pancreatic–type hyperamylasemia in end–stage renal disease. Araki T, et al. **Dig Dis Sci** 1989 Sep;34(9):1425–7
Increase in pancreatic lipase and trypsin activity and their mRNA levels in streptozotocin–induced diabetic rats. Duan RD, et al. **Dig Dis Sci** 1989 Aug;34(8):1243–8
Pancreatic amylase in chronic alcoholic rats [letter] Sankaran H, et al. **Dig Dis Sci** 1989 Jan;34(1):155–7
Oxyntomodulin from distal gut. Role in regulation of gastric and pancreatic functions. Schjoldager B, et al. **Dig Dis Sci** 1989 Sep;34(9):1411–9
Influence of adrenalectomy on pancreatic enzyme secretion. Mössner J, et al. **Digestion** 1988;39(4):219–24
Human pancreatic phospholipase A2 in acute necrotizing pancreatitis. Nordback I, et al. **Digestion** 1989;42(3):128–34
Regulation of pancreatic enzyme secretion in conscious rats by intraluminal somatostatin: mechanism of action. Sarfati P, et al. **Endocrinology** 1989 May;124(5):2406–14
Mechanism of action of bombesin on amylase secretion. Evidence for a Ca2+–independent pathway. Bruzzone R. **Eur J Biochem** 1989 Feb 1;179(2):323–31
Preparation of immobilized monomeric actin and its use in the isolation of protease–free and ribonuclease–free pancreatic deoxyribonuclease I. Nefsky B, et al. **Eur J Biochem** 1989 Jan 15;179(1):215–9
Purification and properties of five different forms of human procarboxypeptidases. Pascual R, et al. **Eur J Biochem** 1989 Feb 15;179(3):609–16
Characterization of the S'–subsite specificity of porcine pancreatic elastase. Schellenberger V, et al. **Eur J Biochem** 1989 Jan 15;179(1):161–3
Glutamic acid 71 and aspartic acid 66 control the binding of the second calcium ion in porcine pancreatic phospholipase A2. van den Bergh CJ, et al. **Eur J Biochem** 1989 Jun 15;182(2):307–13
Changes in mRNA levels of rat pancreatic lipase in the early days of consumption of a high–lipid diet. Wicker C, et al. **Eur J Biochem** 1989 Apr 1;180(3):563–7
An improved system for expressing pancreatic ribonuclease in Escherichia coli. McGeehan GM, et al. **FEBS Lett** 1989 Apr 10;247(1):55–6
CCK and gastrin inhibit adenylate cyclase activity through a pertussis toxin–sensitive mechanism in the tumoral rat pancreatic acinar cell line AR 4–2J. Scemama JL, et al. **FEBS Lett** 1988 Dec 19;242(1):61–4
Distribution and localization of acetylcholinesterase (AChE) activity in the pancreas of Lepus europaeus. Petkov P, et al. **Folia Morphol (Praha)** 1988;36(3):264–7
Effect of somatostatin on pancreatic enzyme secretion. Shinozaki H, et al. **Gastroenterol Jpn** 1988 Dec;23(6):673–9
Role of pancreatic enzymes and their substrates in autodigestion of the pancreas. In vitro studies with isolated rat pancreatic acini. Nagai H, et al. **Gastroenterology** 1989 Mar;96(3):838–47
Pancreatic kallikrein gene expression: effects of glucocorticoids in vivo and in vitro. Rosewicz S, et al. **Gastroenterology** 1989 Oct;97(4):1005–10
Immunohistochemical detection of antibody in tissue sections of non–perfused and ex vivo–perfused organs using a tetrazolium alkaline phosphatase substrate. Doria M, et al. **Histochemistry** 1988;89(5):443–6
Production and characterization of monoclonal antibodies to human pancreatic elastase 2. Shirasu Y, et al. **Hybridoma** 1988 Oct;7(5):485–93
Natural plant enzyme inhibitors: comparison of the action of tuber protease inhibitors on animal pancreatic systems. Rao NM, et al. **Indian J Biochem Biophys** 1985 Dec; 22(6):373–5
The isolation and partial characterization of chymotrypsinogen from the pancreas of the ostrich (Struthio camelus). van der Westhuizen N, et al. **Int J Biochem** 1989;21(1):91–7
Role of lysosomes in pancreatic diseases. Figarella C, et al. **Int J Pancreatol** 1988;3 Suppl 1:S9–18 (17 ref.)
Relationship between pancreatic enzymes and pathological changes in the pancreas in acute pancreatitis. The significance of determination of serum deoxyribonuclease. Kinami Y, et al. **Int J Pancreatol** 1989 May;4(4):371–81
The effect of a new synthetic cholinergic compound (aclatonium napadisilate) on interdigestive motility and pancreatic function in humans. Kölbel CB, et al. **Int J Pancreatol** 1989 Oct;5(3):273–9
High amount of dietary carbohydrate does not cause an adaptational increase of stimulated human pancreatic amylase secretion. Liehr RM, et al. **Int J Pancreatol** 1989 May;4(4):419–30
Pancreatic proteases and antiproteases in pancreatic disease; biochemical, pathophysiological and clinical aspects. Ohlsson K, et al. **Int J Pancreatol** 1988;3 Suppl 1:S67–78 (52 ref.)
Effects of CCK–8 in combination with natural or synthetic secretin on amylase, lipase, trypsin, and chymotrypsin secretion in rats. Rösch T, et al. **Int J Pancreatol** 1989 Oct;5(3):249–61
Elevated activity of pancreatic type amylase in the urine as an early indicator of pancreatic tumors in hamsters. Takahashi M, et al. **Int J Pancreatol** 1989 Jul;5(1):47–53
Biological properties of pancreatic elastase in relation to atherosclerotic disease. Franzone JS, et al. **Int J Tissue React** 1988;10(4):233–43
A comparison of the modes of actions of human salivary and pancreatic alpha–amylases on modified maltooligosaccharides. Nagamine Y, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):667–70
Molecular cloning of complementary DNA encoding one of the human pancreatic protease E isozymes. Shirasu Y, et al. **J Biochem (Tokyo)** 1988 Aug;104(2):259–64
A novel rat carboxypeptidase, CPA2: characterization, molecular cloning, and evolutionary implications on substrate specificity in the carboxypeptidase gene family. Gardell SJ, et al. **J Biol Chem** 1988 Nov 25; 263(33):17828–36
Cyclic GMP does not inhibit protein kinase C–mediated enzyme secretion in rat pancreatic acini. Menozzi D, et al. **J Biol Chem** 1989 Jan 15;264(2):995–9
Structure of the canine pancreatic lipase gene. Mickel FS,

et al. **J Biol Chem** 1989 Aug 5;264(22):12895–901
Cyclic AMP-dependent protein kinase in canine pancreatic rough endoplasmic reticulum. Nigam SK, et al. **J Biol Chem** 1989 Oct 5;264(28):16927–32
Dimerization and activation of porcine pancreatic phospholipase A2 via substrate level acylation of lysine 56. Tomasselli AG, et al. **J Biol Chem** 1989 Jun 15; 264(17):10041–7
Lipid–lipid interactions as regulators of carboxylester lipase activity. Tsujita T, et al. **J Biol Chem** 1989 May 25; 264(15):8612–8
Novel gene exon homologous to pancreatic phospholipase A2: sequence and chromosomal mapping of both human genes. Seilhamer JJ, et al. **J Cell Biochem** 1989 Mar; 39(3):327–37
Some thermodynamic parameters of pancreatic and salivary alpha-amylase in serum. Hafkenscheid JC, et al. **J Clin Chem Clin Biochem** 1989 Mar;27(3):173–4
Novel tool for the study of cholecystokinin-stimulated pancreatic enzyme secretion. Gaisano HY, et al. **J Clin Invest** 1989 Jan;83(1):321–5
Dietary carbohydrates and chronic ethanol both affect rat pancreatic amylase levels [letter] Hoek JB, et al. **J Lab Clin Med** 1989 Feb;113(2):248–9
Secretion of pancreatic secretory trypsin inhibitor by cultured human carcinoma cells. Ogawa M, et al. **J Med** 1988;19(1):13–9
Crystallization and preliminary X-ray study of horse pancreatic lipase. Lombardo D, et al. **J Mol Biol** 1989 Jan 5;205(1):259–61
Evidence for an intraluminal mediator in rat pancreatic enzyme secretion: reconstitution of the pancreatic response with dietary protein, trypsin and the monitor peptide. Fushiki T, et al. **J Nutr** 1989 Apr;119(4):622–7
Effect of diet on intestinal and pancreatic enzyme activities in the pig. Flores CA, et al. **J Pediatr Gastroenterol Nutr** 1988 Nov–Dec;7(6):914–21
Are phospholipid-binding proteins in vivo phospholipase inhibitors? Poensgen J. **Klin Wochenschr** 1989 Feb 1; 67(3):163–5
Inhibition of porcine pancreas phospholipase A2 activation by gabexate mesilate. Schädlich HR, et al. **Klin Wochenschr** 1989 Feb 1;67(3):160–2
Effect of dopamine on amylase secretion from guinea pig pancreatic acinar cells in vitro. Xue BG, et al. **Life Sci** 1989;45(4):311–7
A novel spectrophotometric assay for lipase activity utilizing cis-parinaric acid. Rogel AM, et al. **Lipids** 1989 Jun; 24(6):518–25
Rat pancreas kallikrein. Bailey GS. **Methods Enzymol** 1988; 163:115–28
Pancreatic branched-chain-amino-acid aminotransferase. Kido R. **Methods Enzymol** 1988;166:275–81
Dietary interactions of lima bean (Phaseolus lunatus) trypsin inhibitor, haemagglutinin and cyanide. Part 2. Effect on pancreatic and intestinal alpha-amylase (EC 3.21.1.1) in growing albino rats. Aletor VA. **Nahrung** 1989;33(5):457–61
Effect of dietary sub-lethal doses of lima bean lectin on relative organ weights, pancreatic and intestinal trypsin (EC 3.4.21.4) and chymotrypsin (EC 3.4.21.1) in the rat. Aletor VA. **Nahrung** 1989;33(4):355–60
Immunohistochemical localization of carbonic anhydrase III in the pancreas of the monkey. Nishita T, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):642–5
A fourth trypsinogen (P23) in the rat pancreas induced by CCK. Lütcke H, et al. **Nucleic Acids Res** 1989 Aug 25; 17(16):6736
The fecal chymotrypsin photometric assay in the evaluation of exocrine pancreatic capacity. Comparison with other direct and indirect pancreatic function tests. Cavallini G, et al. **Pancreas** 1989;4(3):300–4
Radioimmunoassay for rat pancreatic alpha-amylase and the effect of Phe-Met-Arg-Phe-amide on amylase secretion in the isolated perfused rat pancreas. Garry DJ, et al. **Pancreas** 1988;3(5):551–8
Effect of pancreastatin on pancreatic endocrine and exocrine secretion. Ishizuka J, et al. **Pancreas** 1989;4(3):277–81
Pancreatic enzyme secretion mediated by novel peptide: monitor peptide hypothesis. Iwai K, et al. **Pancreas** 1988; 3(6):720–8
Synthesis and secretion of rat pancreatic proteins by Xenopus laevis oocytes. Moessner J, et al. **Pancreas** 1988; 3(5):499–507
Role of glucocorticosteroids in the regulation of pancreatic amylase synthesis. Mössner J, et al. **Pancreas** 1989; 4(2):194–203
Inhibition of acetyl- and butyrylcholinesterase and amylase release from canine pancreas. Oguchi Y, et al. **Pancreas** 1989;4(4):423–8
A simple and efficient method of measuring in vitro amylase secretion by dispersed pancreatic acini. Rutledge PL, et al. **Pancreas** 1988;3(5):508–11
Reversal by glucose of pancreatic amylase insufficiency in chronic alcoholic rats. Sankaran H, et al. **Pancreas** 1989; 4(1):107–13
Cholecystokinin (CCK)-induced desensitization of pancreatic enzyme secretion is mediated by low affinity CCK receptors. Menozzi D, et al. **Peptides** 1989 Mar–Apr; 10(2):337–41
Biological activity of oxidized and reduced iodinated bombesins. Vigna SR, et al. **Peptides** 1988 Jul–Aug; 9(4):923–6
Effects of butyric acid and analogues on amylase release from pancreatic segments of sheep and goats. Katoh K, et al. **Pflugers Arch** 1989 Jan;413(3):256–60
The role of calcium ions and bile salts on the pancreatic lipase-catalyzed hydrolysis of triglyceride emulsions stabilized with lecithin. Alvarez FJ, et al. **Pharm Res** 1989 Jun;6(6):449–57
Development of lipase activity in yolk membrane and pancreas of young turkeys. Escribano F, et al. **Poult Sci** 1988 Jul;67(7):1089–97
Evidence for the involvement of tyrosine-69 in the control of stereospecificity of porcine pancreatic phospholipase A2. Kuipers OP, et al. **Protein Eng** 1989 Mar;2(6):467–71
The activation peptide of pancreatic procolipase decreases food intake in rats. Erlanson-Albertsson C, et al. **Regul Pept** 1988 Sep;22(4):325–31
Effect of pancreatic enzyme supplementation on postprandial plasma cholecystokinin secretion in patients with pancreatic insufficiency. Jansen JB, et al. **Regul Pept** 1989 Jun–Jul; 25(3):333–42
Effect of a low-molecular weight serine proteinase inhibitor (camostate) on amylase release from isolated pancreatic acini. Göke B, et al. **Res Exp Med (Berl)** 1989;189(1):33–8
The value of routine pancreatic iso-amylase measurements in the diagnosis of pancreatitis. Mohamed AH, et al. **S Afr Med J** 1989 Sep 16;76(6):258–62
A unique case of intravenous injection of fungal "pancreatic" enzymes causing shock and proteolysis of haemostatic proteins. Seitz R, et al. **Toxicology** 1989 Apr;55(1–2):239–46
Inhibitory effects of cyclosporin on exocrine and endocrine functions of the rat pancreas. Suzuki S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):913–4
[Differentiation of pancreatic lipase and pseudolipase serum activity] Kocna P, et al. **Sb Lek** 1989 Mar;91(2–3):33–9 (Eng. Abstr.) **(Cze)**
[The effects of irradiated wheat flour on C57bl mice. III. Effect on hepatic and pancreatic enzymes] Delcour-Firquet MP. **J Toxicol Clin Exp** 1985 Mar–Apr; 5(2):113–9 (Eng. Abstr.) **(Fre)**
[Determination of blood pancreatic isoamylase after inhibition of salivary isoamylase with monoclonal antibodies] Zoni L. **Medicina (Firenze)** 1988 Jan–Mar; 8(1):83–5 (Eng. Abstr.) **(Ita)**
[Renal microcirculation in experimental acute pancreatitis of dogs—the effect of pancreatic protease inhibitor and dopamine] Nishiwaki H, et al. **Nippon Geka Gakkai Zasshi** 1988 Dec;89(12):1990–6 (Eng. Abstr.) **(Jpn)**
[Study of phospholipase A2 in serum, ascitic exudate and pancreatic tissue in acute pancreatitis in rats] Onoyama H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jan;86(1):60–9 (Eng. Abstr.) **(Jpn)**
[Conformation properties and enzymatic activity of pancreatic ribonuclease in soluble complexes with sodium dextran sulfate] Denisov IG, et al. **Biofizika** 1988 Nov–Dec; 33(6):950–3 (Eng. Abstr.) **(Rus)**
[Cholesterol esterase activity of the duodenal contents in evaluating the external secretory function of the pancreas] Loginov AS, et al. **Klin Med (Mosk)** 1988 Nov;66(11):82–6 **(Rus)**
[Stimulating effect of pancreatic DNase on Bacillus subtilis growth as a function of the physiologic properties of the inoculation culture] Kupriianova FG, et al. **Mikrobiologiia** 1988 Sep–Oct;57(5):745–50 (Eng. Abstr.) **(Rus)**
[Inhibitors of pancreatic proteolytic enzymes] Loginov AS, et al. **Vestn Akad Med Nauk SSSR** 1989;(1):53–61 (55 ref.) **(Rus)**
[Effect of the duodenal contents on changes in catgut sutures] Kostin AE, et al. **Vestn Khir** 1989 Jan;142(1):52–3 **(Rus)**
[Inhibition of the secretion of endogenous insulin and trypsin by exogenous insulin and trypsin in the complex treatment of acute pancreatitis] Sheverdin IuP. **Vestn Khir** 1989 Jan; 142(1):54–5 **(Rus)**
[Enzymatic activity of the pancreas and liver in the cryosurgical treatment of diffuse pancreonecrosis] Tsitsiashvili MSh, et al. **Vestn Khir** 1988 Jun;140(6):46–8 **(Rus)**
[Effect of immobilized inhibitors of proteolysis on the course of experimental pancreatitis] Zubkov OB, et al. **Vestn Khir** 1989 Jan;142(1):56, 69 **(Rus)**
[A radioindicator method of determining the activity of pancreatic lipase in the body] Kendysh IN, et al. **Vopr Med Khim** 1989 Jan–Feb;35(1):137–40 (Eng. Abstr.) **(Rus)**
[The effect of cholesterol esterase on low density lipoproteins. The effect of modified lipoproteins on the accumulation of cholesterol in cultured cells] Kovaleva GG, et al. **Vopr Med Khim** 1989 May–Jun;35(3):47–51 (Eng. Abstr.) **(Rus)**
[Relation between blood hydrolases and small-intestinal contents] Korot'ko GF, et al. **Vopr Pitan** 1988 May–Jun; (3):48–52 (Eng. Abstr.) **(Rus)**
[Theory and practice of oral pancreatic enzyme replacement therapy] Andrén-Sandberg A. **Lakartidningen** 1989 Jun 7; 86(23):2220–2 **(Swe)**

GROWTH & DEVELOPMENT

Down-regulation of pancreatic growth and gallbladder contractility by bile salts. Gomez G, et al. **Am J Surg** 1989 Jan;157(1):20–6
An electron microscope study of the development of the exocrine and endocrine pancreas with special reference to intercellular junctions. Yamamoto M, et al. **Arch Histol Cytol** 1988 Oct;51(4):315–25
Ontogenetic expression of peptidyl-glycine alpha-amidating monooxygenase mRNA in the rat pancreas. Maltese JY, et al. **Biochem Biophys Res Commun** 1989 Jan 16; 158(1):244–50
Concanavalin A variants of the fetoacinar pancreatic protein in the developing human pancreas and other biological sources. Imperial S, et al. **Biochim Biophys Acta** 1988 Oct 13;967(1):25–33
Vitamin D deficiency, pancreatic and small intestinal enzyme development in rats. Jirapinyo P, et al. **Biol Neonate** 1988; 54(1):20–8
Excessive doses of cerulein stimulate pancreatic growth in suckling rats but damage the pancreas of weaned rats. Papp M, et al. **Biol Neonate** 1988;54(6):339–46
Influence of hydrocortisone on the development of pancreas in suckling rats. Ultrastructural morphometric and biochemical studies. Puccio F, et al. **Biol Neonate** 1988; 54(1):35–44
Regulation of rat pancreatic glucocorticoid receptors by thyroxine during development. Lu RB, et al. **Endocrinology** 1988 Nov;123(5):2235–41
Study into the role of cholecystokinin in bombesin-stimulated pancreatic growth in rats and hamsters. Douglas BR, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):209–14
Long-term effect of growth promoting conditions on the exocrine pancreas of rats. Glasbrenner B, et al. **Int J Pancreatol** 1989 Jul;5(1):55–67
The role of glucocorticoid and thyroxine receptors in the ontogeny of the exocrine pancreas. Lebenthal E, et al. **J Pediatr Gastroenterol Nutr** 1989 Jan;8(1):1–5
Aging impairs pancreatic response to refeeding following a protein-free diet. Miyasaka K, et al. **Pancreas** 1989; 4(3):346–52
Alterations of pancreatic growth and of GP-2 content in the reserpinized rat model of cystic fibrosis. Leblond FA, et al. **Pediatr Res** 1989 May;25(5):478–81
Pro-TRH-connecting peptides in the rat pancreas during ontogenesis. Dutour A, et al. **Peptides** 1989 May–Jun; 10(3):523–7

IMMUNOLOGY

Expression of CA125 in pancreatic carcinoma and chronic pancreatitis. Macdonald F, et al. **Br J Cancer** 1988 Oct; 58(4):505–6
Monoclonal antibodies as probes to the differentiated exocrine pancreas react to monoclonal islet tumor tissue. Beck TC, et al. **Exp Clin Endocrinol** 1989 May; 93(2–3):255–60
Human nesidioblastosis tissue as an immunogen for generation of islet cell specific monoclonal antibodies. Gerbitz KD, et al. **J Clin Chem Clin Biochem** 1988 Nov; 26(11):659–66
Tolerance in transgenic mice expressing class II major histocompatibility complex on pancreatic acinar cells. Lo D, et al. **J Exp Med** 1989 Jul 1;170(1):87–104
The role of exocrine tissue in pancreatic islet transplantation. Gray DW. **Transpl Int** 1989 Apr;2(1):41–5 (41 ref.)
Analysis of non-fibroblastic interstitial cells of human pancreas. Nocera A, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):513–4
The distribution and differential expression of MHC class II antigens (HLA-DR, DP, and DQ) in human fetal adrenal, pancreas, thyroid, and gut. Oliver AM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):651–2
Identification of novel blood group-reactive monoclonal antibodies cytotoxic to human acinar cells but not islets. Soon-Shiong P, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2622–3
Abrogation of tissue immunogenicity by immunotoxin treatment of human fetal pancreas. Hullett DA, et al. **Transplantation** 1988 Nov;46(5):771–3
[Production of monoclonal antibodies against differentiation antigens of the exocrine pancreas] Sinn HP, et al. **Verh Dtsch Ges Pathol** 1988;72:369–73 (Eng. Abstr.) **(Ger)**

INJURIES

Hemostasis of solid viscus trauma by intraparenchymal injection of fibrin glue. Hauser CJ. **Arch Surg** 1989 Mar; 124(3):291–3
Emergent endoscopic retrograde cholangiopancreatography. A highly specific test for acute pancreatic trauma. Hayward SR, et al. **Arch Surg** 1989 Jun;124(6):745–6
Pancreatic transection. A concept of evolving injury. Horst HM, et al. **Arch Surg** 1989 Sep;124(9):1093–5
ERCP in pancreatic trauma [letter] Cotton PB. **Gastrointest Endosc** 1988 Sep–Oct;34(5):442
Blunt injury of the neck of the pancreas: a report of nine patients. Keeling P, et al. **Injury** 1987 Mar;18(2):93–5
Closed pancreatic transection treated by Roux-en-Y anastomosis. Laustsen J, et al. **Injury** 1988 Jan;19(1):42–3 (19 ref.)
A case of primary repair of pancreatic transection. Raymond SP, et al. **Injury** 1987 Sep;18(5):354–5
Blunt pancreatic injuries in children: the role of percutaneous external drainage in the treatment of pancreatic pseudocysts. Bass J, et al. **J Pediatr Surg** 1988 Aug; 23(8):721–4

Pancreatic injuries in childhood due to blunt trauma. Smith SD, et al. **J Pediatr Surg** 1988 Jul;23(7):610–4

Pancreatic disorders in infancy and childhood: experience with 92 cases. Vane DW, et al. **J Pediatr Surg** 1989 Aug; 24(8):771–6

Diagnosis and management of blunt pancreatic injury. Chapman WC, et al. **J Tenn Med Assoc** 1989 Feb;82(2):84–5

Injuries of the pancreas. Wilkinson AE. **S Afr J Surg** 1989 Jun;27(2):67–8

Pancreatic injury—a taxing problem [editorial] Blaisdell FW. **West J Med** 1989 Jul;151(1):73–4

Review of pancreatic trauma. Glancy KE. **West J Med** 1989 Jul;151(1):45–51 (71 ref.)

[A case of a lesion of the pancreas during left-sided nephrectomy] Mandevski S. **Khirurgiia (Sofiia)** 1989; 42(2):93 **(Bul)**

[Surgical treatment of severe pancreatic trauma] Qian GX. **Chung Hua Wai Ko Tsa Chih** 1988 Dec;26(12):717–20, 780–1 (Eng. Abstr.) **(Chi)**

[X-ray computed tomography and pancreatic injuries. Apropos of 17 cases] Marsot-Dupuch K, et al. **Ann Radiol (Paris)** 1988;31(5):271–81 (17 ref.) (Eng. Abstr.) **(Fre)**

[Diagnosis and treatment of duodenal-pancreatic injuries. Apropos of 26 cases] Zaouche A, et al. **Tunis Med** 1987 Aug–Sep;65(8–9):525–32 (29 ref.) (Eng. Abstr.) **(Fre)**

[20th anniversary of sonographic diagnosis of the pancreas] Lutz H. **Ultraschall Med** 1989 Jun;10(3):136–42 (37 ref.) (Eng. Abstr.) **(Ger)**

[Flexion-distraction injuries of the thoracolumbar spine with complete pancreatic rupture. Description of a case] Rommens P, et al. **Unfallchirurg** 1989 Jan;92(1):26–8 (Eng. Abstr.) **(Ger)**

[Acute post-traumatic pancreatitis. Diagnostic approach] Maini L, et al. **Ann Ital Chir** 1988;60(1):69–72 (Eng. Abstr.) **(Ita)**

[Diagnostic and therapeutic problems with traumatic lesions of the pancreas] Fasano JJ, et al. **Chir Ital** 1988 Aug–Oct; 40(4–5):279–84 (Eng. Abstr.) **(Ita)**

[Surgical treatment of pancreatic injuries] Naess F, et al. **Tidsskr Nor Laegeforen** 1989 Jan 10;109(1):56–8 (Eng. Abstr.) **(Nor)**

[Pancreatic injuries] Ionescu A, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Jul–Sep;92(3):523–5 (Eng. Abstr.) **(Rum)**

[Cholecystopancreatostomy in trauma of the pancreas] Starosek VN, et al. **Klin Khir** 1988;(11):57–8 **(Rus)**

[Pancreato-pleural fistula as a complication of post-traumatic pancreatic mediastinal pseudocyst] Matejiček E, et al. **Rozhl Chir** 1989 Apr;68(4):240–4 (Eng. Abstr.) **(Slo)**

[Pancreatic injuries. Our approach] Vadra JE, et al. **Acta Gastroenterol Latinoam** 1988;18(1):67–73 (Eng. Abstr.) **(Spa)**

INNERVATION

Re-innervation of pancreatic tissue implants in normal and in sympathetically denervated eyes of rats. Donáth T, et al. **Acta Morphol Hung** 1988;36(3–4):147–54

Galanin release during pancreatic nerve stimulation is sufficient to influence islet function. Dunning BE, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E191–8

Drinking saccharin increases food intake and preference—IV. Cephalic phase and metabolic factors. Tordoff MG, et al. **Appetite** 1989 Feb;12(1):37–56

Pancreatic vagal functional distribution in the secretion of insulin evoked by portal infusion of D-glucose. Yamazaki M, et al. **Brain Res** 1989 Apr 10;484(1–2):357–60

Nervous control of gastric and pancreatic secretory response to 2-deoxy-D-glucose in the dog. Becker S, et al. **Digestion** 1988;39(3):187–96

Pancreatic secretory response to intravenous caerulein and intraduodenal tryptophan studies: before and after stepwise removal of the extrinsic nerves of the pancreas in dogs. Singer MV, et al. **Gastroenterology** 1989 Mar;96(3):925–34

Pancreatic noradrenergic nerves are activated by neuroglucopenia but not by hypotension or hypoxia in the dog. Evidence for stress-specific and regionally selective activation of the sympathetic nervous system. Havel PJ, et al. **J Clin Invest** 1988 Nov;82(5):1538–45

[Acute pancreatitis. Neurovascular and microcirculatory changes. Pathogenic and therapeutic study] Salazar JR, et al. **Acta Gastroenterol Latinoam** 1987;17(3):207–26 (Eng. Abstr.) **(Spa)**

[Exocrine function of the pancreas. Possible existence of a duodenopancreatic reflex not mediated by the vagus. Experimental study in dogs] Candela Polo F, et al. **Rev Esp Enferm Apar Dig** 1988 Dec;74(6):601–5 (Eng. Abstr.) **(Spa)**

METABOLISM

Systemic amyloid deposition in old age and dementia of Alzheimer type: the relationship of brain amyloid to other amyloid. Yamada M, et al. **Acta Neuropathol (Berl)** 1988; 77(2):136–41

Transfer of DOPA from the sympatho-adrenal system to the pancreas, liver and kidney via the blood circulation. Andén NE, et al. **Acta Physiol Scand** 1989 May;136(1):75–9

Insulin-like growth factor I in the pancreas of normal and diabetic adult rats. Hansson HA, et al. **Acta Physiol Scand** 1988 Apr;132(4):569–76

Ornithine decarboxylase and polyamine biosynthesis in pancreatic adaptation. Löser C, et al. **Adv Exp Med Biol** 1988;250:379–88

Pancreatic secretory trypsin inhibitor in cancer. Ogawa M, et al. **Adv Exp Med Biol** 1988;240:547–53 (25 ref.)

Serum pancreatic secretory trypsin inhibitor (PSTI) in patients with inflammatory diseases. Ogawa M, et al. **Adv Exp Med Biol** 1988;240:505–8

Serum pancreatic secretory trypsin inhibitor (PSTI) in seriously injured and septic patients. Tanaka H, et al. **Adv Exp Med Biol** 1988;240:493–8

Ethanol-induced alterations in exocrine pancreatic amino acid transport and secretion. Mann GE, et al. **Alcohol** 1988 Sep–Oct;5(5):359–65

Topographical and planar distribution of Helix pomatia lectin-binding glycoconjugates in secretory granules and plasma membrane of pancreatic exocrine acinar cells of the rat: demonstration of membrane heterogeneity. Kan FW, et al. **Am J Anat** 1989 Jun–Jul;185(2–3):165–76

Kinetic analysis of electrogenic 2 Na+–1 H+ antiport in crustacean hepatopancreas. Ahearn GA, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):R484–93

Potassium transport by pancreatic and parotid zymogen granule membranes. Gasser KW, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C705–11

Internalization and cellular processing of cholecystokinin in rat pancreatic acinar cells. Izzo RS, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):G738–44

G protein in stimulation of PI hydrolysis by CCK in isolated rat pancreatic acinar cells. Matozaki T, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):E652–9

Receptor occupation, calcium mobilization, and amylase release in pancreatic acini: effect of CCK-JMV-180. Sato S, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):G202–9

Cholecystokinin receptors on gallbladder muscle and pancreatic acinar cells: a comparative study. von Schrenck T, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):G512–21

Regulation of bombesin receptors on pancreatic acini by cholecystokinin. Younes M, et al. **Am J Physiol** 1989 Feb; 256(2 Pt 1):G291–8

Effect of glipizide on the surgically altered pancreas. Barr JD, et al. **Am J Surg** 1989 Jan;157(1):103–8

Calcium metabolism and bombesin-stimulated pancreatic enzyme secretion. Pandol SJ, et al. **Ann N Y Acad Sci** 1988; 547:268–76

Calcium transport pathways of pancreatic acinar cells. Muallem S. **Annu Rev Physiol** 1989;51:83–105 (148 ref.)

Biliary and pancreatic excretion of cefamandole. Burns GP, et al. **Antimicrob Agents Chemother** 1989 Jun;33(6):977–9

Analysis of the regulation of phosphatidylinositol-4,5-bisphosphate synthesis by arachidonic acid in exocrine pancreas. Chaudhry A, et al. **Arch Biochem Biophys** 1989 Aug 1;272(2):488–95

Secretagogue induced calcium mobilization in single pancreatic acinar cells. Stuenkel EL, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):863–9

Molecular characterization of the solubilized receptor of somatostatin from rat pancreatic acinar membranes. Knuhtsen S, et al. **Biochem J** 1988 Sep 15;254(3):641–7

Two components of hormone-evoked calcium release from intracellular stores of pancreatic acinar cells. Muallem S, et al. **Biochem J** 1988 Oct 1;255(1):301–7

Use of a nitrotryptophan-containing peptide for photoaffinity labeling the pancreatic cholecystokinin receptor. Klueppelberg UG, et al. **Biochemistry** 1989 Apr 18; 28(8):3463–8

Effects of acetylcholine on the turnover of phosphoryl units in individual phospholipids of pancreas slices and brain cortex slices. 1955 [classical article] Hokin L, et al. **Biochim Biophys Acta** 1989;1000:470–8

Commentary on 'Effects of Acetylcholine on the Turnover of Phosphoryl Units in Individual Phospholipids of Pancreas Slices and Brain Cortex Slices'. Hokin LE, et al. **Biochim Biophys Acta** 1989;1000:465–9

Dietary regulation of amino acid transport activity in the exocrine pancreatic epithelium. Muñoz M, et al. **Biochim Biophys Acta** 1988 Nov 22;945(2):273–80

Amino acid specificity of the Na+/alanine cotransporter in pancreatic acinar cells. Von Blankenfeld G, et al. **Biochim Biophys Acta** 1989 Apr 28;980(3):385–8

Biosynthesis, in calf pancreas microsomes, of three lipid-linked oligosaccharide diphosphates from a synthetic dolichyl diphosphate tetrasaccharide. Goussault Y, et al. **Carbohydr Res** 1988 Aug 15;179:381–92

Modulation of intracellular free Ca2+ concentration by IP3-sensitive and IP3-insensitive nonmitochondrial Ca2+ pools. Schulz I, et al. **Cell Calcium** 1989 Jul;10(5):325–36 (64 ref.)

Somatomedin C in the pancreas of young and adult, normal and obese, hyperinsulinemic mice. Hansson HA, et al. **Cell Tissue Res** 1989 Feb;255(2):467–74

Inhibition of isoproterenol-induced DNA and RNA synthesis in rat parotid and pancreas following removal of submandibular-sublingual glands. Schneyer CA, et al. **Cell Tissue Res** 1989;256(2):361–3

Glucagonostatic and insulinotropic action of glucagonlike peptide I-(7–36)-amide. Komatsu R, et al. **Diabetes** 1989 Jul;38(7):902–5

Age-dependent insulin secretion of the endocrine pancreas in vitro from fetuses of diabetic and nondiabetic patients. Reiher H, et al. **Diabetes Care** 1983 Sep–Oct;6(5):446–51

Paradoxical effects of endogenous and exogenous insulin on amino acid transport activity in the isolated rat pancreas: somatostatin-14 inhibits insulin action. Norman PS, et al. **Diabetologia** 1989 Mar;32(3):177–84

Marked secretion of pyruvate in human duodenal juice stimulated with pancreozymin or secretin. Kuroshima T, et al. **Dig Dis Sci** 1988 Dec;33(12):1554–9

Effects of acute and chronic ethanol administration on the gastrointestinal hormones gastrin, enteroglucagon, pancreatic glucagon and peptide YY in the rat. Simanowski UA, et al. **Digestion** 1989;42(3):167–73

Immunocytochemical localization of the [3H]estradiol-binding protein in rat pancreatic acinar cells. Grossman A, et al. **Endocrinology** 1989 Jun;124(6):2857–66

Secretin internalization and adenosine 3',5'-monophosphate levels in pancreatic acinar cells. Izzo RS, et al. **Endocrinology** 1989 May;124(5):2252–60

Molecular architecture of secretin receptors: the specific covalent labelling of a 51 kDa peptide after cross-linking of [125I]iodosecretin to intact rat pancreatic acini. Gossen D, et al. **FEBS Lett** 1989 Jan 30;243(2):205–8

Measurement of cytosolic free Ca2+ in individual pancreatic acini. Pralong WF, et al. **FEBS Lett** 1988 Dec 19; 242(1):79–84

Oscillations of cytosolic calcium in single pancreatic acinar cells stimulated by acetylcholine. Yule DI, et al. **FEBS Lett** 1988 Nov 7;239(2):358–62

Discrepancy in the changes of pancreatic amylase and trypsinogen concentration after 70% hepatectomy in rats. Hirano T, et al. **Gastroenterol Jpn** 1989 Aug;24(4):449

Gastrin receptors in the human gastrointestinal tract and pancreas. Kumamoto T, et al. **Gastroenterol Jpn** 1989 Apr; 24(2):109–14

Effect of somatostatin on plasma amino acid uptake by human pancreas. Gullo L, et al. **Gastroenterology** 1989 Sep; 97(3):732–6

Rat pancreatic nuclear thyroid hormone receptor: characterization and postnatal development. Lee JT, et al. **Gastroenterology** 1989 Apr;96(4):1151–7

Immunoreactive beta-endorphin and met- and leu-enkephalin contents in pancreas and pituitary of corpulent (cp/cp) rats. Timmers K, et al. **Int J Obes** 1989 Jun;13(3):337–45

The asynchronous transport of secretory proteins in the exocrine pancreas. Compatibility with the hypothesis of a paragranular pathway? Beaudoin AR. **Int J Pancreatol** 1988 Dec;3(6):409–14 (20 ref.)

Alterations in EGF binding to acini during pancreatic regeneration in the rat. Brockenbrough JS, et al. **Int J Pancreatol** 1988 Dec;3(6):415–24

The pancreas and oxygen consumption (Part 2). Steroids do not modify resting pancreatic oxygen consumption in dogs: a preliminary report. Robert JH, et al. **Int J Pancreatol** 1989 Apr;4(3):353–9

The pancreas and oxygen consumption. 1. Pancreatic oxygen consumption in normo- and hypovolemic dogs. Robert JH, et al. **Int J Pancreatol** 1989 Feb;4(1):51–63

The pancreas of Syrian golden hamsters. Age-related autoradiographic observations. Rosenberg L, et al. **Int J Pancreatol** 1989 Apr;4(3):273–80

Identification of a G protein in rough endoplasmic reticulum of canine pancreas. Audigier Y, et al. **J Biol Chem** 1988 Nov 5;263(31):16352–7

Prosomatostatin 1–64 is a major product of somatostatin gene expression in pancreas and gut. Bersani M, et al. **J Biol Chem** 1989 Jun 25;264(18):10633–6

Short-chain pseudopeptide bombesin receptor antagonists with enhanced binding affinities for pancreatic acinar and Swiss 3T3 cells display strong antimitotic activity. Coy DH, et al. **J Biol Chem** 1989 Sep 5;264(25):14691–7

Multiple sources of 1,2-diacylglycerol in isolated rat pancreatic acini stimulated by cholecystokinin. Involvement of phosphatidylinositol bisphosphate and phosphatidylcholine hydrolysis. Matozaki T, et al. **J Biol Chem** 1989 Sep 5;264(25):14729–34

Hormone-evoked calcium release from intracellular stores is a quantal process. Muallem S, et al. **J Biol Chem** 1989 Jan 5;264(1):205–12

Somatostatin receptors on rat cerebrocortical membranes. Structural characterization of somatostatin-14 and somatostatin-28 receptors and comparison with pancreatic type receptors. Sakamoto C, et al. **J Biol Chem** 1988 Oct 5;263(28):14441–5

Inhibition of inositol 1,4,5-trisphosphate-induced Ca2+ release in permeabilized pancreatic acinar cells by hormonal and phorbol ester pretreatment. Willems PH, et al. **J Biol Chem** 1989 Jun 15;264(17):9762–7

Condensation-sorting events in the rough endoplasmic reticulum of exocrine pancreatic cells. Tooze J, et al. **J Cell Biol** 1989 Jul;109(1):35–50

Production of insulin-like growth factor-II by human fetal pancreas in culture. Bryson JM, et al. **J Endocrinol** 1989 May;121(2):367–73

Internalization of horseradish peroxidase isozymes by pancreatic acinar cells in vitro. Oliver C, et al. **J Histochem Cytochem** 1989 Jan;37(1):49–56

Characterization of inositol 1,4,5-trisphosphate-sensitive (IsCaP) and -insensitive (IsCaP) nonmitochondrial Ca2+ pools in rat pancreatic acinar cells. Thévenod F, et al. **J Membr Biol** 1989 Jul;109(2):173–86

Characterization of MgATP-driven H+ uptake into a microsomal vesicle fraction from rat pancreatic acinar cells. Thévenod F, et al. **J Membr Biol** 1989 Mar;107(3):263–75

Influences of age and weaning on in vivo pancreatic protein

synthesis in the lamb. Attaix D, et al. **J Nutr** 1989 Mar; 119(3):463–70

Synthesis of amylase by cultured rat pancreatic acinar cells: effects of antecedent diet. Justice JD, et al. **J Nutr** 1989 May;119(5):805–12

The pH dependence of the equilibrium constant KHyd for the hydrolysis of the Lys15–Ala16 reactive-site peptide bond in bovine pancreatic trypsin inhibitor (aprotinin). Siekmann J, et al. **J Protein Chem** 1988 Oct;7(5):633–40

Pharmacokinetics and tissue uptake of mitomycin C in isolated perfusion of pancreas. Arredondo MA, et al. **J Surg Res** 1989 May;46(5):445–9

Comparison of CCK–8 receptors in the pancreas and brain of rats using CCK–8 analogues. Takeda Y, et al. **Jpn J Pharmacol** 1989 Apr;49(4):471–81

Evidence for the direct action of gastrin-releasing peptide (GRP) on amylase secretion from rat pancreatic acini: an assessment using a perifusion system. Shinozaki H, et al. **Jpn J Physiol** 1988;38(3):299–307

Subcellular distribution of the PI effect in the pancreas of the guinea pig. De Camilli P, et al. **Life Sci** 1974 Aug 15; 15(4):711–21

Thyrotropin releasing hormone in the pancreas of newborn rats from streptozotocin-treated mothers. Strbák V, et al. **Life Sci** 1989;44(12):779–87

Identification of a characteristic 31P NMR signal in acute experimental pancreatitis with the aid of 1H–31P correlated 2D measurements of intact pancreas. Kushnir T, et al. **Magn Reson Med** 1989 Apr;10(1):119–24

Identification of a cell-specific DNA–binding activity that interacts with a transcriptional activator of genes expressed in the acinar pancreas. Cockell M, et al. **Mol Cell Biol** 1989 Jun;9(6):2464–76

Determination of the association and dissociation rate constants of muscarinic antagonists on rat pancreas: rank order of potency varies with time. Waelbroeck M, et al. **Mol Pharmacol** 1989 Sep;36(3):405–11

The pancreas and oxygen consumption: 3. Do steroids improve pancreatic O2 consumption response to hypovolemia? Final Report. Robert JH, et al. **Mt Sinai J Med (NY)** 1988 Oct;55(5):365–8

Elevation of 1,2–diacylglycerol in ras–transformed neonatal liver and pancreas of transgenic mice. Wilkison WO, et al. **Oncogene** 1989 May;4(5):625–8

Pancreatic lipase and colipase activity increase in pancreatic acinar tissue of diabetic rats. Duan RD, et al. **Pancreas** 1989;4(3):329–34

Absence of the "incretin" phenomenon in the autotransplanted human pancreas [letter] Ginier P, et al. **Pancreas** 1988;3(6):740–1

Processing and secretion of prosomatostatin by the pig pancreas. Holst JJ, et al. **Pancreas** 1988;3(6):653–61

Muscarinic receptor desensitization and downregulation induced by full and partial cholinergic agonists in rat pancreatic acini. Hootman SR, et al. **Pancreas** 1989; 4(3):315–22

Subtypes of muscarinic receptors in pancreatic exocrine secretion in anesthetized dog. Iwatsuki K, et al. **Pancreas** 1989;4(3):339–45

Pituitary, hypothalamic and pancreatic 7B2 concentrations in rats with streptozotocin-induced diabetes and spontaneously diabetic mice. Suzuki H, et al. **Pancreas** 1988; 3(6):662–7

The reserpine–treated rat as an experimental animal model for cystic fibrosis: abnormal Cl transport in pancreatic acinar cells. Martinez JR, et al. **Pediatr Res** 1988 Oct; 24(4):427–32

The nonselective cation channel in the basolateral membrane of rat exocrine pancreas. Inhibition by 3',5–dichlorodiphenylamine–2–carboxylic acid (DCDPC) and activation by stilbene disulfonates. Gögelein H, et al. **Pflugers Arch** 1989 Jan;413(3):287–98

Decrease in the number of muscarinic receptors in rat pancreas after chronic alcohol intake. Grönroos JM, et al. **Pharmacol Toxicol** 1989 Apr;64(4):356–9

Biochemical changes in the exocrine pancreas of rats fed caffeine. Dubick MA, et al. **Proc Soc Exp Biol Med** 1989 Jun;191(2):153–8

Reproductive tract and pancreatic norepinephrine levels in pre– and overt–diabetic C57BL/KsJ mice: relationship to body weight, blood glucose, serum insulin, and reproductive dysfunction. Garris DR. **Proc Soc Exp Biol Med** 1988 Oct;189(1):79–83

Oxygen consumption by portal vein–drained organs and by whole animal in conscious growing swine. Yen JT, et al. **Proc Soc Exp Biol Med** 1989 Apr;190(4):393–8

Purification of the pancreatic cholecystokinin receptor. Szecowka J, et al. **Regul Pept** 1989 Mar;24(3):215–24

Identification, characterization and localization of thyrotropin–releasing hormone precursor peptides in perinatal rat pancreas. Wu P, et al. **Regul Pept** 1988 Sep; 22(4):347–60

Calcium fluxes caused by bile salts in rat pancreatic acini. Duan RD, et al. **Scand J Gastroenterol** 1988 Sep;23(7):891–6

Biochemical characterization of the pancreatic cholecystokinin receptor: a possible marker of cell differentiation and development. Miller LJ, et al. **Scand J Gastroenterol Suppl** 1988;151:104–7

Molecular sorting in the secretory pathway. Chung KN, et al. **Science** 1989 Jan 13;243(4888):192–7

Localization of insulin, glucagon and somatostatin in the pancreas of the adult newt, Notophthalmus viridescens. Foty RA, et al. **Tissue Cell** 1989;21(1):1–10

[Combined administration of sodium chloro–2–propionate and insulin on the secretion of glucagon by the pancreas in the diabetic rat] Zerbib A, et al. **C R Soc Biol (Paris)** 1988;182(5):487–93 (Eng. Abstr.) **(Fre)**

[Gastro–entero–pancreatic production and hepatic uptake of gastrin and somatostatin in the preruminant calf receiving milk proteins or milk serum] Guilloteau P, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:163–4 (Eng. Abstr.) **(Fre)**

[Pancreatic kinetics of ampicillin] Koch K, et al. **Zentralbl Chir** 1989;114(2):129–35 (Eng. Abstr.) **(Ger)**

[Abnormal cholecystokinin–acinar function coupling in atrophied pancreatic acini from rats fed ethanol and a high–fat diet] Tsukamoto H, et al. **Arukoru Kenkyuto Yakubutsu Ison** 1988 Dec;23(4):332–50 (Eng. Abstr.) **(Jpn)**

[Metabolic studies of p–iodophenylalanine in the pancreas: a gateway to the development of radioiodinated amino acids for functional diagnosis] Kawai K, et al. **Kaku Igaku** 1988 Nov;25(11):1263–70 (Eng. Abstr.) **(Jpn)**

[Differences in the binding of thiamine and oxythiamine in the pancreas] Ostrovskiĭ IuM. **Dokl Akad Nauk SSSR** 1988; 302(4):995–8 **(Rus)**

[Surgical correction of metabolism in diabetes mellitus] Gal'perin EI, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):6–11 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Determination of avian leucosis virus in chicken pancreas. Neuhybel P, et al. **Arch Exp Veterinarmed** 1989 May; 43(3):335–9

Pathogenic effect of osteopetrosis virus strain MAV–2(0) on guinea fowl pancreas. Kirev TT, et al. **Int J Pancreatol** 1989 Jul;5(1):29–34

[Properties of coxsackieviruses isolated from pancreatic tissue of patients with chronic pancreatitis] Shiprobokov VP, et al. **Mikrobiol Zh** 1988 Jul–Aug;50(4):78–81 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Mucinous cystadenocarcinoma of the pancreas. Ultrasonographic findings in 5 cases. Bastid C, et al. **Acta Radiol** 1989 Jan–Feb;30(1):45–7

Phosphorus–31 nuclear magnetic resonance spectroscopic study of the canine pancreas: applications to acute alcoholic pancreatitis. Janes N, et al. **Adv Alcohol Subst Abuse** 1988; 7(3–4):213–9

Selenium in pancreas of chronic alcoholics. Peneda J, et al. **Alcoholism (NY)** 1988 Dec;12(6):773

Interstitial fibrosis in the pancreas. Shimizu M, et al. **Am J Clin Pathol** 1989 May;91(5):531–4

Ovine ceroid–lipofuscinosis. I: Lipopigment composition is indicative of a lysosomal proteinosis. Palmer DN, et al. **Am J Med Genet Suppl** 1988;5:141–58

The role of intra–operative biopsy in the treatment of resectable neoplasms of the pancreas and periampullary region. Buice WS, et al. **Am Surg** 1989 May;55(5):307–10

Endocrine pancreas in chronic pancreatitis. A qualitative and quantitative study. Lászik Z, et al. **Arch Pathol Lab Med** 1989 Jan;113(1):47–51

How accurate is fine–needle biopsy in malignant neoplasia of the pancreas? Parsons L Jr, et al. **Arch Surg** 1989 Jun; 124(6):681–3

Poliomyelomalacia, pancreatic necrosis, and cerebellar malacia in turkey poults. Frank RK, et al. **Avian Dis** 1988 Jul–Sep;32(3):574–82

Direct retroperitoneal approach to necrosis in severe acute pancreatitis. Fagniez PL, et al. **Br J Surg** 1989 Mar; 76(3):264–7

Debridement and closed cavity irrigation for the treatment of pancreatic necrosis. Larvin M, et al. **Br J Surg** 1989 May;76(5):465–71

Influence of pancreatic resection on systemic complications in acute necrotizing pancreatitis. Teerenhovi O, et al. **Br J Surg** 1988 Aug;75(8):793–5

Pancreatic acinar cell tumors in rats induced by 3,2'–dimethyl–4–aminobiphenyl. Shirai T, et al. **Carcinogenesis** 1989 Jun;10(6):1127–30

Islet amyloid, increased A–cells, reduced B–cells and exocrine fibrosis: quantitative changes in the pancreas in type 2 diabetes. Clark A, et al. **Diabetes Res** 1988 Dec; 9(4):151–9

Clinicopathologic analysis of endoscopic ultrasonograms in pancreatic mass lesions. Hayashi Y, et al. **Endoscopy** 1989 May;21(3):121–5

Pancreatic biopsy under visual control in conjunction with laparoscopy for diagnosis of pancreatic cancer. Watanabe M, et al. **Endoscopy** 1989 Mar;21(2):105–7

Immunocytochemical localization of liver–specific proteins in pancreatic hepatocytes of rat. Usuda N, et al. **Eur J Cell Biol** 1988 Jun;46(2):299–306

Effect of gallstones on pancreatic acinar cells. An ultrastructural study. Lee KT, et al. **Eur Surg Res** 1988; 20(5–6):341–51

Pancreatic islets obtained from pancreases with short–term exocrine atrophy disturbed morphology but normal in vitro response to various stimuli. Bodziony J, et al. **Exp Clin Endocrinol** 1989 May;93(2–3):248–54

Metaplastic pancreatic cells in liver tumors induced by diethylnitrosamine. Lee BC, et al. **Exp Mol Pathol** 1989 Feb;50(1):104–13

Acute pancreatitis and bile duct lesions in rat induced by dibutyltin dichloride. Merkord J, et al. **Exp Pathol** 1989; 36(1):59–62

Diffuse fibrosis of the pancreas: a peculiar pattern of pancreatitis in alcoholic cirrhosis. Martin E, et al. **Gastroenterol Clin Biol** 1989 Jun;13(6–7):579–84

A case of neurofibroma located in the retroperitoneum involving the uncinate process of the pancreas. Imai H, et al. **Gastroenterol Jpn** 1989 Aug;24(4):421–4

Extrahepatic portal venous obstruction of different pathogenesis in pancreatic diseases: reports of 4 autopsy cases with chronic pancreatitis and pancreatic carcinoma. Terada T, et al. **Gastroenterol Jpn** 1989 Aug;24(4):414–20

Influence of cholecystokinin antagonist on the effects of cholecystokinin and bombesin on azaserine–induced lesions in rat pancreas. Douglas BR, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):462–9

Magnetic resonance imaging in hemochromatosis: extrahepatic iron deposition. Housman JF, et al. **Gastrointest Radiol** 1989 Winter;14(1):59–60

Pancreatic ductal mucinous hyperplasia: distribution within the pancreas, and effect of variation in ampullary and pancreatic duct anatomy. Allen–Mersh TG. **Gut** 1988 Oct; 29(10):1392–6

Papillary hyperplasia of the pancreas. Shimizu M, et al. **Hum Pathol** 1989 Aug;20(8):806–7

Papillary cystic tumour of pancreas [letter] Nirmala V, et al. **Indian J Gastroenterol** 1988 Oct;7(4):245

Glycoproteins as markers of pancreatic damage in acute pancreatitis. Imrie CW, et al. **Int J Pancreatol** 1988;3 Suppl 1:S43–52 (13 ref.)

Clinical and pathological features of acute interstitial pancreatitis in the aged. Kimura W, et al. **Int J Pancreatol** 1989 Jul;5(1):1–10

Changes in microvascular structure of the fibrotic pancreas and their influence on pancreatic endocrine function. Yatagai T, et al. **Int J Pancreatol** 1989 Apr;4(3):291–301

Advances in canine diabetes mellitus research: etiopathology and results of islet transplantation. Alejandro R, et al. **J Am Vet Med Assoc** 1988 Nov 1;193(9):1050–5

Pancreatic atrophy in a blue and gold macaw. Quesenberry KE, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1107–8

Hypertrophy and hyperplasia of the rat pancreas produced by short–term dietary administration of soya–derived protein and soybean trypsin inhibitor. Smith JC, et al. **J Appl Toxicol** 1989 Jun;9(3):175–9

Percutaneous fine needle aspiration cytology of the pancreas: advantages and pitfalls. Kocjan G, et al. **J Clin Pathol** 1989 Apr;42(4):341–7

Morphological and biochemical changes in the pancreas of the copper–deficient female rat. Dubick MA, et al. **J Nutr** 1989 Aug;119(8):1165–72

The effect of pancreatic warm ischemia on islet isolation in rats and dogs. Corlett MP, et al. **J Surg Res** 1988 Dec; 45(6):531–6

Effects of chronic alcohol intake and secretory stimulation on sodium taurocholate–induced pancreatic necrosis in the rat. Grönroos JM, et al. **J Surg Res** 1989 Oct;47(4):360–4

Prevention by prostaglandins of caerulein–induced pancreatitis in rats. Robert A, et al. **Lab Invest** 1989 May; 60(5):677–91

Rare tumors of the pancreas. Elias EG. **Md Med J** 1988 Sep;37(9):703–4

Prostaglandin F2 alpha and prostacyclin tissue levels in early phases of trypsin–induced acute pancreatitis in rats. Berger Z, et al. **Pancreas** 1989;4(3):295–9

A novel assay for pancreatic cellular damage: III. Use of a pancreas–specific protein as a marker of pancreatic graft dysfunction in humans. Fernstad R, et al. **Pancreas** 1989; 4(1):44–52

Endocrine pancreatic function during atrophy of the exocrine gland. Fölsch UR, et al. **Pancreas** 1988;3(5):536–42

Increased CCK–response to proteinase inhibitor feeding after induction of pancreatic hypertrophy in rats. Göke B, et al. **Pancreas** 1988;3(5):576–9

Acute terminal pancreatitis. Shimizu M, et al. **Pancreas** 1989; 4(3):375–7

Ductal vasculature in the atrophic pancreas: evidence for autonomous ductal angioarchitecture. Weaver FC. **Pancreas** 1988;3(6):688–99

Islet vasculature in atrophic pancreas: evidence for coexisting parallel and serial (insuloacinar) angioarchitecture. Weaver FC, et al. **Pancreas** 1989;4(1):10–22

Hypergastrinaemia evoked by omeprazole stimulates growth of gastric mucosa but not of pancreas or intestines in hamster, guinea pig and chicken. Håkanson R, et al. **Regul Pept** 1988 Oct;23(1):105–15

Pancreatic hepatocytes associated with chronic 2,6–dichloro–p–phenylenediamine administration in Fischer 344 rats. McDonald MM, et al. **Toxicol Pathol** 1989; 17(1 Pt 1):1–6

Isolated acinar cells from rat pancreas in pathogenic studies on acute pancreatitis. Letko G, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989; 22(4):197–203

Influence of experimental hyperthyroidism on the adult rat pancreas, small intestine, and blood gastrin levels. Noll B, et al. **Z Gastroenterol** 1988 Jun;26(6):331–6

[Acute hemorrhagic–necrotic pancreatitis complicated by

perforation of the choledochus] Dimitrov D. **Khirurgiia (Sofiia)** 1989;42(1):85–7 **(Bul)**

[Correlation of the cytologic, endoscopic and echographic findings in the diagnosis of pancreatic cancer] Ivanova S. **Vutr Boles** 1988;27(4):47–9 (Eng. Abstr.) **(Bul)**

[The study of pancreatic tissue alterations in cirrhosis patients] Lee KT, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1988 Aug; 4(8):451–8 (Eng. Abstr.) **(Chi)**

[Acute necrotizing pancreatitis. The treatment of sterile and of infected necrotic masses] Van Vyve E, et al. **Acta Gastroenterol Belg** 1988 Jan–Feb;51(1):44–50 (Eng. Abstr.) **(Fre)**

[Pathomorphological lesions of the diabetic pancreas and their clinical lessons] Hoet JJ. **Bull Mem Acad R Med Belg** 1987;142(11–12):485–6 **(Fre)**

[Isolated pancreatic fibrosis, chronic pancreatitis and liver cirrhosis] Sarles H. **Gastroenterol Clin Biol** 1989 Jun; 13(6–7):577–8 **(Fre)**

[Experimental studies on the earliest echographic manifestations of incipient pancreatitis and pancreatic necrosis] Maier W. **ROFO** 1988 Nov;149(5):522–5 (Eng. Abstr.) **(Ger)**

[Cytology of the pancreas—fine needle biopsy and analysis of pancreatic juice] Schenck U. **Verh Dtsch Ges Inn Med** 1988;94:101–5 (59 ref.) **(Ger)**

[Fine needle biopsy of the pancreas with computerized tomography control] Hau T, et al. **Zentralbl Chir** 1988; 113(18):1185–9 (Eng. Abstr.) **(Ger)**

[Changes in the endocrine pancreas in chronic pancreatitis] Lászik Z, et al. **Morphol Igazsagugyi Orv Sz** 1988 Jul; 28(3):186–95 (33 ref.) (Eng. Abstr.) **(Hun)**

[Simultaneous occurrence of aberrant pancreas on the pylorus and agenesis of the gallbladder] Schultheisz F, et al. **Orv Hetil** 1989 Jun 18;130(25):1331–3 (Eng. Abstr.) **(Hun)**

[Two autopsy cases of cerebellar lesions found in excessive alcohol drinkers with alcoholic liver cirrhosis and pancreatic fibrosis] Koizumi N, et al. **Arukoru Kenkyuto Yakubutsu Ison** 1988 Dec;23(4):301–7 (Eng. Abstr.) **(Jpn)**

[The modes of spread of pancreas head cancer based on difference of the pancreatic anlagen] Fujii H, et al. **Nippon Geka Gakkai Zasshi** 1989 Mar;90(3):415–22 (Eng. Abstr.) **(Jpn)**

[Analysis of the poor visualization of the pancreas on ultrasonography] Kanazawa S, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jun 25; 48(6):680–6 (Eng. Abstr.) **(Jpn)**

[Quantitative estimation of pancreatic echogenicity and histopathological study of the postmortem pancreas in the elderly] Hanada M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec;85(12):2679–86 (Eng. Abstr.) **(Jpn)**

[Surgically treated giant neoplastic cyst of the pancreas] Kołodziejski L, et al. **Nowotwory** 1988 Apr–Jun; 38(2):139–43 (Eng. Abstr.) **(Pol)**

[Morphological changes in the pancreas in relation to the time of the operation in acute hemorrhagic pancreatitis] Lukasiewicz S, et al. **Pol Tyg Lek** 1988 Sep 19; 43(38):1215–7 (Eng. Abstr.) **(Pol)**

[Use of imaging examinations (ultrasonography and computerized tomography) in the evaluation of the pancreatic structure in patients with a history of acute pancreatitis] Małecka-Panas E, et al. **Pol Tyg Lek** 1988 Sep 19;43(38):1218–21, 1232 (Eng. Abstr.) **(Pol)**

[Acute pancreatitis—autopsy versus clinical studies] Cylwik B. **Wiad Lek** 1988 Nov 15;41(22):1506–10 **(Pol)**

[Value of ultrasonic examination in the diagnosis and evaluation of the course of acute pancreatitis] Kalina Z. **Wiad Lek** 1988 Nov 15;41(22):1496–9 **(Pol)**

[The role of predicting the course of pancreonecrosis in the selection of therapeutic tactics] Savel'ev VS, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):72–9 (Eng. Abstr.) **(Rus)**

[Choice of the method of biopsy in the diagnosis of pancreatic diseases] Chernyĭ VA, et al. **Klin Khir** 1988;(11):5–7 (Eng. Abstr.) **(Rus)**

[Clinico-anatomical comparisons in cancer of the pancreas] Karmilov VA, et al. **Klin Khir** 1988;(11):58–9 **(Rus)**

[Gastric and intestinal fistulas in pancreatic necrosis] Toskin KD, et al. **Klin Khir** 1988;(11):26–7 (Eng. Abstr.) **(Rus)**

[A case of tumor-like parapancreatitis] Baranovskiĭ AIu, et al. **Klin Med (Mosk)** 1989 Feb;67(2):130–1 **(Rus)**

[The state of the hepatobiliary system and the pancreas in patients with eczema and neurodermatitis] Zaerko VV, et al. **Vestn Dermatol Venerol** 1989;(3):38–42 (Eng. Abstr.) **(Rus)**

[Chronic pancreatitis and cancer of the pancreas] Artem'eva NN, et al. **Vestn Khir** 1988 Jun;140(6):31–5 (Eng. Abstr.) **(Rus)**

[Pancreatitis predominantly affecting the caudal part of the pancreas] Filin VI, et al. **Vestn Khir** 1989 Mar;142(3):86–91 (Eng. Abstr.) **(Rus)**

[Acute pancreonecrosis in a child] Komarov NV, et al. **Vestn Khir** 1988 Jun;140(6):94 **(Rus)**

[Intensive lymphoid hyperplasia of the peripancreatic ganglia and extrahepatic cholestasis in Sjögren's syndrome. Report of an unusual case] Guma CL, et al. **Acta Gastroenterol Latinoam** 1988;18(4):263–8 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Evidence for cholecystokinin receptor and intracellular signal transduction in relation to amylase secretion. Kamiya H. **Adv Exp Med Biol** 1988;236:95–109

Heterogeneity of the exocrine pancreas. Adelson JW, et al. **Am J Physiol** 1989 May;256(5 Pt 1):G817–25 (37 ref.)

Pancreatic growth after partial resection of normal and enlarged pancreas in rats fed soya flour. Oates PS, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):G670–5

Interaction of bombesin and related peptides with receptors on pancreatic acinar cells. Jensen RT, et al. **Ann N Y Acad Sci** 1988;547:138–49 (56 ref.)

Contribution of partial pancreatectomy, systemic hormone delivery, and duct obliteration to glucose regulation in canine pancreas. Importance in pancreas transplantation. van der Burg MP, et al. **Diabetes** 1989 Sep;38(9):1082–9

EPC. European Pancreatic Club, XXIst meeting. Glasgow, September 20–23, 1989. Abstracts. **Digestion** 1989; 43(3):123–84

Epidermal growth factor inhibits rat pancreatic cell proliferation, causes acinar cell hypertrophy, and prevents caerulein-induced desensitization of amylase release. Morisset J, et al. **Endocrinology** 1989 Jun;124(6):2693–8

Increase in pancreatic exocrine secretion during uncoupling: evidence for a protein kinase C-independent effect. Chanson M, et al. **Exp Cell Res** 1989 Jun;182(2):349–57

Muscarinic receptor modulation of glucose-induced electrical activity in mouse pancreatic B-cells. Santos RM, et al. **FEBS Lett** 1989 Jun 5;249(2):411–7

Morphological, biochemical and autoradiographic studies of pancreatic acinar cell necrosis and its regeneration induced by 4-hydroxyaminoquinoline-1-oxide in rats. Okamura K. **Gastroenterol Jpn** 1989 Apr;24(2):181–94

Effect of long-term ethanol feeding on the restoration process of acute necrotizing pancreatitis induced in rats. Terasawa K, et al. **Gastroenterol Jpn** 1988 Aug; 23(4):448–56

Exocrine pancreatic function after gastrectomy. Specificity of indirect tests. Heptner G, et al. **Gastroenterology** 1989 Jul;97(1):147–53

Role of the pancreas in the control of interdigestive gastrointestinal motility. Malfertheiner P, et al. **Gastroenterology** 1989 Jan;96(1):200–5

Cholecystokinin influences pancreatic trophism following total gastrectomy in rats. Büchler M, et al. **Int J Pancreatol** 1989 Apr;4(3):261–71

Mechanisms of action of alcohol administration on the trophic effect of soybean trypsin inhibitor and cholecystokinin octapeptide in rat. Pap A, et al. **Int J Pancreatol** 1989 Oct;5(3):263–72

Somatostatin levels and binding in duodenal mucosa of rabbits with ligation of the pancreatic duct. Guijarro LG, et al. **J Endocrinol** 1988 Aug;118(2):227–32

Agonist-induced changes in cell membrane capacitance and conductance in dialysed pancreatic acinar cells of rats. Maruyama Y. **J Physiol (Lond)** 1988 Dec;406:299–313

Exocrine contamination impairs implantation of pancreatic islets transplanted beneath the kidney capsule. Gray DW, et al. **J Surg Res** 1988 Nov;45(5):432–42

Relationship between delta-9-tetrahydrocannabinol-induced arachidonic acid release and secretagogue-evoked phosphoinositide breakdown and Ca2+ mobilization of exocrine pancreas. Chaudhry A, et al. **Mol Pharmacol** 1988 Oct;34(4):543–8

Pulsatile intracellular calcium release does not depend on fluctuations in inositol trisphosphate concentration. Wakui M, et al. **Nature** 1989 May 25;339(6222):317–20

Abstracts: American Pancreatic Association. October 27–28, 1988, Chicago, Illinois. **Pancreas** 1988;3(5):587–623

Influence of steroids on the exocrine pancreas: presence of laminated bodies in the acinar lumen following castration and adrenalectomy. Beaudoin AR, et al. **Pancreas** 1989; 4(2):219–27

Pancreatic trophism following colectomy in rats: the potential role of gastrointestinal hormones. Büchler M, et al. **Pancreas** 1988;3(4):477–83

Fibroblast structure and function during regeneration from hormone-induced acute pancreatitis in the rat. Elsässer HP, et al. **Pancreas** 1989;4(2):169–78

Age and enzyme specificity of the response of developing rat pancreas to the trophic effects of bombesin. Pollack PF. **Pancreas** 1989;4(1):101–6

Long-term canine duct-occluded segmental pancreatic autografts: endocrine function. Williamson P, et al. **Pancreas** 1988;3(6):646–52

Feedback regulation of basal pancreatic secretion in humans. Yasui A, et al. **Pancreas** 1988;3(6):681–7

Pineal-pancreas interaction: pineal hormone E5 action on insulin activity. Neacşu C. **Physiologie** 1988 Jul–Sep; 25(3):119–27

Large aqueous channels in membrane vesicles derived from the rough endoplasmic reticulum of canine pancreas or the plasma membrane of Escherichia coli. Simon SM, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6176–80

Pharmacology of neuroglandular transmission in exocrine glands. Davison JS. **Proc West Pharmacol Soc** 1988; 31:235–6

The effects of pancreatectomy on the rates of glucose utilization, oxidation and production in the sheep fetus. Fowden AL, et al. **Q J Exp Physiol** 1988 Nov;73(6):973–84

Gut peptide-mediated adaptive response of the exocrine pancreas. Büchler M, et al. **Scand J Gastroenterol Suppl** 1988;151:114–22

Role of nutrients in pancreatic adaptation with implication of cholecystokinin release. Malfertheiner P, et al. **Scand J Gastroenterol Suppl** 1988;151:108–13 (41 ref.)

Changes in the weight of the pancreas during preservation in various solutions. Ruka MP, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1372–5

Differentiation of fetal pig pancreas in vitro and in nude mice. Thompson SC, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2669–70

[Functional study of the exocrine pancreas in 1988] Couder J, et al. **Ann Gastroenterol Hepatol (Paris)** 1988 Oct; 24(5):253–9 (66 ref.) **(Fre)**

[Role of adrenal and sex steroids in the regulation of pancreatic exocrine function] Mozheĭko LA. **Probl Endokrinol (Mosk)** 1989 Jan–Feb;35(1):61–4 (Eng. Abstr.) **(Rus)**

[Features of the functional status of the pancreas and liver after vagotomy] Shevchenko BF, et al. **Vrach Delo** 1989 May;(5):53–5 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Pancreatic endocrine function in patients treated with ciclosporine, azathioprine and prednisone after kidney transplantation. Zukowska-Szczechowska E, et al. **Acta Med Pol** 1988;29(1–2):53–64

Exocrine pancreatic function in children with mumps pancreatitis. Kobayashi A, et al. **Acta Paediatr Scand** 1989 Jan;78(1):129–30

Exocrine pancreatic function and protein-calorie malnutrition in Dakar and Abidjan (West Africa): silent pancreatic insufficiency. Sauniere JF, et al. **Am J Clin Nutr** 1988 Nov;48(5):1233–8

Exocrine pancreatic function in Sjögren's syndrome. Coll J, et al. **Arch Intern Med** 1989 Apr;149(4):848–52

Origins of chloride and bicarbonate secretory defects in the cystic fibrosis pancreas, as suggested by pancreatic function studies on control and CF subjects with preserved pancreatic function. Kopelman H, et al. **Clin Invest Med** 1989 Jun;12(3):207–11

Exocrine pancreatic function in tropical fibrocalculous pancreatic diabetes. Mohan V, et al. **Diabetes Care** 1989 Feb;12(2):145–7

The role of the liver in exocrine pancreatic disease. Braganza JM. **Int J Pancreatol** 1988;3 Suppl 1:S19–42 (100 ref.)

Familial concordance of pancreatic function in cystic fibrosis. Corey M, et al. **J Pediatr** 1989 Aug;115(2):274–7

Pathophysiology of the exocrine pancreas in cystic fibrosis. Durie PR, et al. **J R Soc Med** 1989;82 Suppl 16:2–10 (52 ref.)

Exocrine and endocrine pancreatic function in malnutrition-related diabetes mellitus (MRDM) in Yogyakarta, Indonesia. Wiyono P. **Kobe J Med Sci** 1988 Oct;34(5):215–26

Responses of the pancreatic A cell during hypoglycemia and hyperglycemia are dependent on the B cell. McCulloch DK, et al. **Metabolism** 1989 Jul;38(7):702–7

Exocrine pancreatic function in diabetic dogs. Yasuda K, et al. **Nippon Juigaku Zasshi** 1988 Dec;50(6):1271–3

Pancreatic exocrine function in unconscious rats treated with submaximal, maximal, and supramaximal doses of bombesin tetradecapeptide. Wisner JR Jr, et al. **Pancreas** 1989; 4(1):83–9

Exocrine pancreatic function in patients with progressive systemic sclerosis. Hendel L, et al. **Scand J Gastroenterol** 1989 May;24(4):461–6

[Evaluation of exocrine pancreatic function by the haptocorrin degradation test of the duodenal fluid collected by endoscopy] Champigneulle B, et al. **Gastroenterol Clin Biol** 1989 Apr;13(4):372–8 (Eng. Abstr.) **(Fre)**

[Aging of the pancreas. Its implication in malnutrition states in elderly persons] Vellas B, et al. **Presse Med** 1988 Nov 5;17(39):2067–70 (Eng. Abstr.) **(Fre)**

[Motility and the pancreas. Physiologic and pathophysiologic aspects] Layer P, et al. **Fortschr Med** 1988 Aug 20; 106(24):492–5 (24 ref.) (Eng. Abstr.) **(Ger)**

[Functional reserve of the exocrine pancreas in chronic diseases of the liver] D'Ambrosi A, et al. **Recenti Prog Med** 1988 Nov;79(11):441–3 (Eng. Abstr.) **(Ita)**

[Evaluation of the endocrine function and study of the anti-insulin antibodies in hemochromatosis] Marcondes JA, et al. **AMB Rev Assoc Med Bras** 1987 Nov–Dec; 33(11–12):228–32 (Eng. Abstr.) **(Por)**

[Functional evaluation of the exocrine pancreas in patients with chronic Chagas' disease] Mott C de B, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Nov–Dec; 43(6):279–87 (63 ref.) (Eng. Abstr.) **(Por)**

[The exocrine pancreas and Chagas' disease] Mott C de M, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Jul–Aug; 43(4):177–9 (27 ref.) **(Por)**

[Exocrine and endocrine functions of the pancreas in acute myocardial infarct] Gurevich RA, et al. **Klin Med (Mosk)** 1988 Jul;66(7):65–9 (Eng. Abstr.) **(Rus)**

[Functional status of the pancreas in the late period after selective proximal vagotomy] Loranskaia TI, et al. **Sov Med** 1989;(2):113 **(Rus)**

RADIATION EFFECTS

Remission of the newly diagnosed type 1 diabetes by radiation of the pancreas. Dempe A, et al. **Exp Clin Endocrinol** 1988 Sep;92(1):123–5

[Blood amylase: a biological marker in irradiation accidents? Preliminary results obtained at the Gustave-Roussy Institut (GRI) and a literature review] Hennequin C, et al. **Bull Cancer (Paris)** 1989;76(6):617–24 (Eng. Abstr.) **(Fre)**

[Radiation sequelae of the pancreas] Herrmann T. **Radiobiol Radiother (Berl)** 1989;30(1):5–11 (24 ref.) (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Pharmacokinetics of three contrast media in experimental pancreatography. Saari A. **Acta Radiol** 1989 Jan–Feb; 30(1):81–6

Pancreatic phlegmon: what is it? Fan ST, et al. **Am J Surg** 1989 Jun;157(6):544–7

Differentiating pancreatic pseudocyst and pancreatic necrosis using computerized tomography. Mainwaring R, et al. **Ann Surg** 1989 May;209(5):562–7; discussion 567–8

Contrast-enhanced abdominal computed tomography scanning and prediction of severity of acute pancreatitis: a prospective study. London NJ, et al. **Br J Surg** 1989 Mar;76(3):268–72

Innocuous gas collections in pancreatic allografts demonstrated by computed tomography. Vas W, et al. **Gastrointest Radiol** 1989 Spring;14(2):118–22

CT demonstration of pancreatic atrophy following acute pancreatitis. Magnuson JE, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):1050–3

Pancreatic pseudotumor in pancreas divisum: CT characteristics. Silverman PM, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):140–1

Radiology of the pancreas. **Radiol Clin North Am** 1989 Jan; 27(1):1–190

[Duodenal phytobezoar in annular pancreas: an association or a complication?] Arabia R, et al. **Radiol Med (Torino)** 1989 Jul–Aug;78(1–2):119–20 **(Ita)**

[Diagnostic criteria of chronic pancreatitis] Dzieniszewski J, et al. **Wiad Lek** 1988 Apr 15;41(8):531–44 **(Pol)**

[Usefulness of computerized tomography in the diagnosis and observation of the dynamics of acute pancreatitis] Rzymski K, et al. **Wiad Lek** 1988 Nov 15;41(22):1500–5 **(Pol)**

[The role of x-ray study using drugs in the diagnosis of pancreatic diseases] Butvin GK, et al. **Vrach Delo** 1988 Nov;(11):25–8 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

[Labelling of interleukin 2 with 123 iodine and its administration to animals susceptible to diabetes for the visualization of lymphocytic infiltration in the pancreas] Signore A, et al. **Minerva Endocrinol** 1988 Oct–Dec; 13(4):279–85 (Eng. Abstr.) **(Ita)**

[Radionuclide research on the functional state of the stomach, intestines and pancreas in nonspecific ulcerative colitis] Talipov M. **Med Radiol (Mosk)** 1989 Feb;34(2):10–5 **(Rus)**

SECRETION

Effects of arterial pH and carbon dioxide on pancreatic exocrine H+/HCO3- secretion and secretin-dependent translocation of cytoplasmic vesicles in pancreatic duct cells. Buanes T, et al. **Acta Physiol Scand** 1988 May; 133(1):1–9

Immunoreactive pancreatic secretory trypsin inhibitor in gastrointestinal mucosa. Bohe M, et al. **Adv Exp Med Biol** 1988;240:101–5

Histamine receptors in unstimulated pancreatic exocrine secretion of the rabbit. Pariente JA, et al. **Agents Actions** 1989 Aug;28(1–2):62–9

Inhibitory effect of high caloric load of carbohydrates or lipids on human pancreatic secretions: a jejunal brake. Vidon N, et al. **Am J Clin Nutr** 1989 Aug;50(2):231–6

Inhibition of gastric and pancreatic secretion in dogs by CGRP: role of somatostatin. Helton WS, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):G715–20

Effect of duodenectomy on interdigestive pancreatic secretion, gastrointestinal motility, and hormones in dogs. Malfertheiner P, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):G415–22

[Ala6]gastrin-releasing peptide-10: an analogue with dissociated biological activities. Mukai H, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):E235–40

Comparative effects of CCK receptor antagonists on rat pancreatic secretion in vivo. Niederau M, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):G150–7

Hydrocortisone treatment increases the sensitivity and responsiveness to cholecystokinin in rat pancreas. Otsuki M, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):G364–70

Inhibitory regulation of rat exocrine pancreas by peptide YY and pancreatic polypeptide. Putnam WS, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):G698–703

L-leucine or its keto acid potentiate but do not initiate insulin release in chicken. Rideau N, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):E15–9

Role of pancreatic polypeptide in the regulation of pancreatic exocrine secretion in dogs. Shiratori K, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):G535–41

The role of gastrin-releasing peptide in pancreatic exocrine secretion. Holst JJ, et al. **Ann N Y Acad Sci** 1988;547:234–41 (30 ref.)

Role of monovalent cations in fluid secretion from the exocrine rabbit pancreas. Kuijpers GA, et al. **Biochim Biophys Acta** 1989 Aug 21;984(1):63–70

A model for fluid secretion in the exocrine pancreas. Kuijpers GA, et al. **Biochim Biophys Acta** 1989 Aug 21;984(1):71–80

An analogue of substance P with broad receptor antagonist activity. Zhang L, et al. **Biochim Biophys Acta** 1988 Oct 28;972(1):37–44

Effect of a new potent CCK antagonist, lorglumide, on caerulein- and bombesin-induced pancreatic secretion and growth in the rat. Scarpignato C, et al. **Br J Pharmacol** 1989 Mar;96(3):661–9

Inhibitory effect of ouabain and acetazolamide on secretin-stimulated pancreatic exocrine secretion in anaesthetized dog. Iwatsuki K, et al. **Clin Exp Pharmacol Physiol** 1989 Mar;16(3):139–45

Postnatal development of biliary and pancreatic exocrine secretion in piglets. Harada E, et al. **Comp Biochem Physiol [A]** 1988;91(1):43–51

Peptide YY-induced inhibition of pancreatic exocrine secretion is not neurally mediated. DeMar AR, et al. **Curr Surg** 1989 Jan–Feb;46(1):10–3

L-364,718, a new CCK antagonist, inhibits postprandial pancreatic secretion and PP release in dogs. Hosotani R, et al. **Dig Dis Sci** 1989 Mar;34(3):462–7

Effect of natural peptide YY on pancreatic secretion and cholecystokinin release in conscious dogs. Hosotani R, et al. **Dig Dis Sci** 1989 Mar;34(3):468–73

Aging and pancreatic exocrine function. Studies in female conscious rats. Miyasaka K, et al. **Dig Dis Sci** 1989 Jun; 34(6):841–8

Involvement of pancreatic polypeptide (PP) in luminal feedback regulation in the conscious rat. Miyasaka K, et al. **Dig Dis Sci** 1989 Mar;34(3):474–80

Effect of a new cholinergic agonist, aclatonium napadisilate, on exocrine and endocrine rat pancreas. Otsuki M, et al. **Dig Dis Sci** 1989 Aug;34(8):1249–56

Long-term pancreatic-biliary diversion in the rat: persistent loss of mucosal enterokinase, with reinduction by delayed oral pancreatic biliary supplementation. Newman BM, et al. **Digestion** 1988;41(3):172–9

Influence of B-cell impairment on pancreatic acini in NOD mice and streptozotocin-induced diabetic rats. Yokoyama J, et al. **Endocrinol Jpn** 1988 Aug;35(4):549–56

Inhibition of glucose-stimulated insulin release in the perfused rat pancreas by parathyroid secretory protein-I (chromogranin-A). Greeley GH Jr, et al. **Endocrinology** 1989 Mar;124(3):1235–8

Inhibition of pancreatic exocrine secretion in the rat by calcitonin gene-related peptide: involvement of circulating somatostatin. Mulholland MW, et al. **Endocrinology** 1989 Apr;124(4):1849–56

Pancreastatin-like immunoreactivity and insulin are released in parallel from the perfused porcine pancreas. Ostenson CG, et al. **Endocrinology** 1989 Jun;124(6):2986–90

The effect of maturation on insulin secretion after starvation in isolated perfused rat pancreas. Ikeda T, et al. **Exp Clin Endocrinol** 1988 Aug;91(3):282–6

Meal-induced peptide tyrosine tyrosine inhibition of pancreatic secretion in the rat. Aponte GW, et al. **FASEB J** 1989 Jun;3(8):1949–55

Two hypotheses on the feedback regulation of pancreatic enzyme secretion. Fushiki T, et al. **FASEB J** 1989 Feb; 3(2):121–6 (35 ref.)

Pancreatic secretory and trophic response to caerulein in rats: effect of proglumide and lorglumide. Varga G, et al. **Fundam Clin Pharmacol** 1989;3(3):295–306

Clinical usefulness of dual-label Schilling test for pancreatic exocrine function. Chen WL, et al. **Gastroenterology** 1989 May;96(5 Pt 1):1337–45

Prostaglandins in the mediation of secretin-induced inhibition of gastric secretion and stimulation of pancreatic secretion [letter] Konturek SJ. **Gastroenterology** 1989 Aug; 97(2):554–6

Effect of pancreatic juice and trypsin on oleic acid-stimulated pancreatic secretion and plasma secretin in dogs. Shiratori K, et al. **Gastroenterology** 1989 May;96(5 Pt 1):1330–6

Effect of pancreatic juice diversion on secretin release in rats. Sun G, et al. **Gastroenterology** 1989 Apr;96(4):1173–9

Delayed and atypical D-glyceraldehyde-induced insulin secretion from the perfused duodenum pancreas of chicken. Rideau N, et al. **Gen Comp Endocrinol** 1989 Jan; 73(1):129–35

Cholecystokinin release and biliopancreatic secretion in response to selective perfusion of the duodenal loop with aminoacids in man. Colombel JF, et al. **Gut** 1988 Sep; 29(9):1158–66

Effects of peptide YY on dog and rat pancreatic secretion in vivo and in vitro. Bilski J, et al. **Int J Pancreatol** 1988 Jul;3(5):309–21

Intraluminal calcium binding does not mediate fatty acid-induced pancreatic bicarbonate secretion. Fink AS, et al. **Int J Pancreatol** 1989 May;4(4):443–53

Control of pancreatic exocrine secretion. Goldberg DM. **Int J Pancreatol** 1988;3 Suppl 1:S1–8 (42 ref.)

Influence of bile flow obstruction vs bile diversion on pancreatic secretion in the conscious rat. Kurosawa H, et al. **Int J Pancreatol** 1989 Mar;4(2):187–97

Pancreatic calcifications in patients with normal pancreatic function. Lankisch PG, et al. **Int J Pancreatol** 1989 Oct; 5(3):281–93

Pancreatic secretion in infants. The problem of a zero bulk diet. Magee DF. **Int J Pancreatol** 1989 Oct;5(3):223–7 (21 ref.)

Caerulein stimulates pancreatic secretory response in conscious newborn rats. Papp M, et al. **Int J Pancreatol** 1989 Mar;4(2):161–74

Relationship of periodic pancreatic secretion and gallbladder contraction to plasma cholecystokinin in dogs. Magee DF, et al. **Ir J Med Sci** 1988 Aug;157(8):261–4

Circulating amino acids and pancreatic endocrine function after ingestion of a protein-rich meal in obese subjects. Schmid R, et al. **J Clin Endocrinol Metab** 1989 Jun; 68(6):1106–10

The effect of cholecystokinin-related peptides on periodic pancreatic secretion in fasting dogs. Magee DF, et al. **J Physiol (Lond)** 1988 Sep;403:15–25

Elevated pancreatic glucagon in moderately obese patients: relationship of fatty liver and hypertriglyceridemia. Inokuchi T, et al. **Jpn J Med** 1989 May–Jun;28(3):355–61

Effect of glucagon-(1–21)-peptide on secretin-stimulated pancreatic exocrine secretion in anesthetized dogs. Itoh H, et al. **Life Sci** 1989;44(12):819–25

Effects of low-concentration polymyxin B on insulin secretion induced by 12-O-tetradecanoyl-phorbol-13-acetate (TPA), glucose, or tolbutamide from the isolated perfused rat pancreas. Maki Y, et al. **Metabolism** 1989 Apr;38(4):334–7

Effects of enteral nutrition on exocrine pancreatic secretion in dogs. Klein E, et al. **Mt Sinai J Med (NY)** 1988 Oct; 55(5):362–4

Galanin inhibits amylase secretion from isolated rat pancreatic acini. Ahrén B, et al. **Pancreas** 1988;3(5):559–62

Type of dietary lipids exerts a major influence on the secretory activity of the exocrine pancreas: medium-term studies. Beaudoin AR, et al. **Pancreas** 1989;4(4):418–22

Interaction between secretin and a cholecystokinin-like peptide on pancreatic protein secretion and synthesis in the rat. Haarstad H, et al. **Pancreas** 1988;3(5):543–50

Effect of alcohol and alcoholic beverages on nonstimulated pancreatic secretion in humans. Hajnal F, et al. **Pancreas** 1989;4(4):486–91

Analysis in the isolated perfused cat pancreas of factors implicated in the pathogenesis of pancreatitis. Hong SS, et al. **Pancreas** 1988;3(4):450–8

Free cytosolic calcium and secretagogue-stimulated initial pancreatic exocrine secretion. Krims PE, et al. **Pancreas** 1988;3(4):383–90

Stimulatory effect of monitor peptide and human pancreatic secretory trypsin inhibitor on pancreatic secretion and cholecystokinin release in conscious rats. Miyasaka K, et al. **Pancreas** 1989;4(2):139–44

The biological relevance of N-terminal neurotensin fragments in the regulation of exocrine pancreas secretion. Nustede R, et al. **Pancreas** 1989;4(1):114–9

Effect of plaunotol on release of plasma secretin and pancreatic exocrine secretion in humans. Shiratori K, et al. **Pancreas** 1989;4(3):323–8

Effects of synthetic kassinin on splanchnic circulation and exocrine pancreas in dogs. Doi R, et al. **Peptides** 1988 Sep–Oct;9(5):1055–8

Ionic and osmotic dependence of secretion from permeabilised acini of the rat pancreas. Fuller CM, et al. **Pflugers Arch** 1989 Feb;413(4):385–94

Central and peripheral inhibition of exocrine pancreatic secretion by alpha-2 adrenergic agonists in the rat. Chariot J, et al. **Pharmacol Res Commun** 1988 Aug;20(8):707–17

Elevated levels of an exocrine pancreatic secretory protein in Alzheimer disease brain. Ozturk M, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):419–23

The effect of oleate on pancreatic and bile secretion in the conscious rat. Miyasaka K, et al. **Proc Soc Exp Biol Med** 1988 Oct;189(1):94–9

Effects of growth hormone releasing factor on pancreatic secretion in vivo and in vitro. Konturek SJ, et al. **Regul Pept** 1989 Mar;24(3):301–11

Exocrine pancreatic secretion: effect of subarachnoidal application of cholecystokinin octapeptide in rats. Ormai S, et al. **Regul Pept** 1988 Oct;23(1):51–5

Pancreatic secretion and the release of cholecystokinin after a meal in dogs with and without exclusion of pancreatic juice. Kogire M, et al. **Scand J Gastroenterol** 1989 May; 24(4):507–12

Fat and pancreatic secretion. Olsen O, et al. **Scand J Gastroenterol** 1989 Jan;24(1):74–80

Effects of oleic acid and oleyl alcohol on cholecystokinin and secretin in plasma and pancreatobiliary secretion. Olsen O, et al. **Scand J Gastroenterol** 1989 Jun;24(5):529–32

Development of secretagogue responsiveness in the pancreas. Jamieson JD, et al. **Scand J Gastroenterol Suppl** 1988; 151:98–103

The role of phosphatidylinositides in stimulus-secretion coupling in the exocrine pancreas. Schulz I, et al. **Soc Gen Physiol Ser** 1987;42:117–31 (47 ref.)

Alterations in digestive function caused by pancreatic disease. Doty JE, et al. **Surg Clin North Am** 1989 Jun;69(3):447–65 (109 ref.)

[Protein malnutrition and response of pancreatic acinar cells to stimulation by cholecystokinin] Prost J, et al. **C R Soc Biol (Paris)** 1988;182(6):589–99 (Eng. Abstr.) **(Fre)**

[Recent progress in the study of pancreatic exocrine] Kimura H. **Fukuoka Igaku Zasshi** 1989 Apr;80(4):163–6 (2 ref.) (Jpn)

[Effect of human gastrin-releasing peptide (hGRP) on the pancreatic exocrine and endocrine secretion in healthy subjects] Shinozaki H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec;85(12):2673–8 (Eng. Abstr.) (Jpn)

[Inhibitory effect of CR 1409 (cholecystokinin antagonist) on pancreatic exocrine secretion in rats] Shiratori K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jan;86(1):70–6 (Eng. Abstr.) (Jpn)

[Effect of dopamine and haloperidol on the exocrine function of the rat pancreas in vivo] Biedziński TM, et al. **Rocz Akad Med Bialymstoku** 1984–85;29–30:107–16 (Eng. Abstr.) (Pol)

[Exocrine function of the pancreas in patients with ulcerative colitis] Hryszczykowa L, et al. **Wiad Lek** 1988 Oct 1; 41(19):1279–82 (Eng. Abstr.) (Pol)

[Exocrine function in chronic pancreatitis] Grigorescu M, et al. **Rev Med Interna [Med Interna]** 1988 Sep–Oct; 40(5):459–68 (Eng. Abstr.) (Rum)

[The role of calcium in the release of digestive enzymes by acinar cells of the pancreas] Grin'kiv MIa, et al. **Fiziol Zh** 1988 Jul–Aug;34(4):13–8 (Eng. Abstr.) (Rus)

[The mechanism of the change in pancreatic secretion in old rats] Zunnunova SE. **Fiziol Zh SSSR** 1989 Feb;75(2):270–4 (Rus)

[Enteral administration of pancreatic juice with the object of reducing the exocrine activity of the pancreas following pancreatoduodenal resection] Dubitskiĭ AE. **Klin Khir** 1989; (5):44–6 (Eng. Abstr.) (Rus)

[Functional status of the pancreas and small intestine before and after cholecystectomy in young patients] Krivitskiĭ DI, et al. **Klin Khir** 1988;(9):3–4 (Eng. Abstr.) (Rus)

[Pancreatic function in chronic alcoholic intoxication in rats] Kokueva OV, et al. **Patol Fiziol Eksp Ter** 1988 Sep–Oct; (5):23–5 (Eng. Abstr.) (Rus)

[Exocrine secretion of the pancreas during endoscopic catheterization of its duct] D'iakova AM, et al. **Sov Med** 1988;(6):33–4 (Eng. Abstr.) (Rus)

[General mechanisms of regulation of the activity of the stomach and pancreas in peptic ulcer and chronic pancreatitis] Ivashkin VT, et al. **Ter Arkh** 1989;61(2):8–11 (Eng. Abstr.) (Rus)

[Prostaglandins and cyclic nucleotides in chronic pancreatitis] Mosin VI, et al. **Ter Arkh** 1989;61(2):11–5 (Eng. Abstr.) (Rus)

[Effect of the enteral feeding formula on pancreatic exocrine function in patients with chronic pancreatitis] Ivashkin VT, et al. **Voen Med Zh** 1988 May;(5):63–5 (Rus)

SURGERY

Pancreaticogastrostomy for chronic pancreatitis. Ebbehøj N, et al. **Am J Surg** 1989 Mar;157(3):315–7

Pancreaticoduodenectomy. The importance of preserving hepatic blood flow to prevent biliary fistula. Traverso LW, et al. **Am Surg** 1989 Jul;55(7):421–6

Pancreatic sphincteroplasty: indications and outcome [letter] Williamson RC. **Ann R Coll Surg Engl** 1988 Nov; 70(6):398–9

Duodenum-preserving resection of the head of the pancreas in severe chronic pancreatitis. Early and late results. Beger HG, et al. **Ann Surg** 1989 Mar;209(3):273–8

Mortality after surgery for chronic pancreatitis [letter] Levy P, et al. **Br J Surg** 1988 Oct;75(10):1045

Metabolic effect of hemipancreatectomy in donors. Preoperative prediction of postoperative oral glucose tolerance. Kendall DM, et al. **Diabetes** 1989 Jan;38 Suppl 1:101–3 (14 ref.)

Endoscopic pancreatic sphincterotomy—technique and evaluation. Fuji T, et al. **Endoscopy** 1989 Jan;21(1):27–30

Early postoperative complications after (sub)total pancreatoduodenectomy: the AMC experience. Montagne GJ, et al. **Hepatogastroenterology** 1988 Oct;35(5):226–8

Induction of endocrine cell differentiation: a new approach to management of diabetes. Rosenberg L, et al. **J Lab Clin Med** 1989 Jul;114(1):75–83

Contact YAG laser system in abdominal surgery, in particular hepatic and pancreatic surgery. Joffe SN. **Semin Surg Oncol** 1989;5(1):48–56

Surgical management of necrotizing pancreatitis. Beger HG. **Surg Clin North Am** 1989 Jun;69(3):529–49 (60 ref.)

Pancreatic resection for chronic pancreatitis. Frey CF, et al. **Surg Clin North Am** 1989 Jun;69(3):499–528 (100 ref.)

Pancreatic resection for pancreatic cancer. Jordan GL Jr. **Surg Clin North Am** 1989 Jun;69(3):569–97 (61 ref.)

Pancreatoduodenectomy with occlusion of the residual stump by Neoprene injection. Di Carlo V, et al. **World J Surg** 1989 Jan–Feb;13(1):105–10; discussion 110–1

Long-term evaluation of pylorus preservation during pancreaticoduodenectomy. Fink AS, et al. **World J Surg** 1988 Oct;12(5):663–70

A new method of reconstruction after pylorus-preserving pancreatoduodenectomy. Suzuki T, et al. **World J Surg** 1988 Oct;12(5):645–50

[Intraoperative ultrasonic scanning in surgery of the liver, biliary tract and pancreas (letter)] Rokkjaer M. **Ugeskr Laeger** 1989 Aug 21;151(34):2153–4 (Dan)

[Pancreas anastomoses] Reding R. **Chirurg** 1988 Dec; 59(12):820–7 (15 ref.) (Ger)

[Clinical and experimental study on reconstruction after pancreatectomy—Part II. Myoelectric activity of small intestine after pancreatoduodenectomy] Shiota M. **Nippon Geka Gakkai Zasshi** 1988 Aug;89(8):1241–51 (Eng. Abstr.) (Jpn)

[When and how to treat surgically the patients with severe hemorrhagic-necrotic pancreatitis?] Zalewski J, et al. **Wiad Lek** 1988 Nov 15;41(22):1525–9 (Pol)

[Methods of artificial occlusion of the pancreatic ducts in surgery of the pancreas (review of the literature)] Karapetian IR, et al. **Khirurgiia (Mosk)** 1989 Feb;(2):137–41 (64 ref.) (Rus)

[Resection of the pancreas in experimental acute pancreatitis] Kostiuk GIa, et al. **Klin Khir** 1988;(11):16–7 (Eng. Abstr.) (Rus)

[Changes in the external respiration function and hemodynamics after surgery of the pancreas] Vishnevskiĭ VA, et al. **Sov Med** 1989;(3):19–22 (Eng. Abstr.) (Rus)

TRANSPLANTATION

Pancreas transplants: evaluation using perfusion scintigraphy. Kuni CC, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):57–61

Treatment of severe Epstein-Barr virus-induced lymphoproliferative syndrome with ganciclovir: two cases after solid organ transplantation. Pirsch JD, et al. **Am J Med** 1989 Feb;86(2):241–4

Clinical pancreas transplantation. Complete review of eight years experience. Toledo-Pereyra LH, et al. **Am Surg** 1989 Sep;55(9):576–81

Difficult laryngoscopy and diabetes mellitus. Hogan K, et al. **Anesth Analg** 1988 Dec;67(12):1162–5

Experience with simultaneous pancreas-kidney transplantation. Sollinger HW, et al. **Ann Surg** 1988 Oct; 208(4):475–83

Abdominal organ cluster transplantation for the treatment of upper abdominal malignancies. Starzl TE, et al. **Ann Surg** 1989 Sep;210(3):374–85; discussion 385–6

A 10-year experience with 290 pancreas transplants at a single institution. Sutherland DE, et al. **Ann Surg** 1989 Sep; 210(3):274–85; discussion 285–8

Arterial mycotic aneurysm and rupture. A potentially fatal complication of pancreas transplantation in diabetes mellitus. Tzakis AG, et al. **Arch Surg** 1989 Jun;124(6):660–1

Function of pancreas allografts more than 1 year following transplantation. Wright FH, et al. **Arch Surg** 1989 Jul; 124(7):796–9; discussion 799–800

Current status of pancreas transplantation. Sutherland DE. **ASAIO Trans** 1989 Jan–Mar;35(1):14–6 (16 ref.)

Canine whole pancreatic transplantation with exocrine drainage into the bladder. Deane SA, et al. **Aust N Z J Surg** 1989 Aug;59(8):659–64

Monitoring of canine pancreas allograft function with measurements of urinary amylase. Ekberg H, et al. **Aust N Z J Surg** 1988 Jul;58(7):583–6

Monitoring of canine pancreas allograft function with measurements of urinary amylase. Ekberg H, et al. **Aust N Z J Surg** 1988 Jul;58(7):583–6

Current status of pancreas transplantation. Francis DM, et al. **Aust N Z J Surg** 1988 Oct;58(10):757–9 (14 ref.)

Penetration of ciprofloxacin and ofloxacin into pancreatic juice. Brattström C, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):295–7

Pancreas transplantation. Cosimi AB, et al. **Compr Ther** 1989 May;15(5):56–61 (15 ref.)

Proceedings of the First International Congress on Pancreatic and Islet Transplantation. Stockholm, Sweden, 27–29 March 1988. **Diabetes** 1989 Jan;38 Suppl 1:1–335

Insulin-pump treatment of pancreas-graft rejection. Bartoš V, et al. **Diabetes** 1989 Jan;38 Suppl 1:71–3

Islet cell autoimmunity in type I diabetic patients after HLA-mismatched pancreas transplantation. Bosi E, et al. **Diabetes** 1989 Jan;38 Suppl 1:82–4

Markers for pancreas-graft rejection in humans. Brattström C, et al. **Diabetes** 1989 Jan;38 Suppl 1:57–62

Results with combined kidney and paratopic segmental-pancreas transplantation. Brons IG, et al. **Diabetes** 1989 Jan;38 Suppl 1:18–20

Use of UW solution in pancreas transplantation. D'Alessandro AM, et al. **Diabetes** 1989 Jan;38 Suppl 1:7–9

Insulin release from isolated islets of Langerhans after segmental-pancreas autotransplantation in dogs. Duron JJ, et al. **Diabetes** 1989 Jan;38 Suppl 1:117–9

Improvement of canine pancreas-allograft survival with diagnosis of rejection by fine-needle aspiration biopsy. Ekberg H, et al. **Diabetes** 1989 Jan;38 Suppl 1:109–10

Pancreas-specific protein. New serum marker for graft rejection in pancreas-transplant recipients. Fernstad R, et al. **Diabetes** 1989 Jan;38 Suppl 1:55–6

Crossover study on effects of duct obliteration, celiac denervation, and autotransplantation on glucose- and meal-stimulated insulin, glucagon, and pancreatic polypeptide levels. Gooszen HG, et al. **Diabetes** 1989 Jan; 38 Suppl 1:114–6

Fifteen years' experience with pancreas transplantation with pancreaticoenterostomy. Groth CG, et al. **Diabetes** 1989 Jan;38 Suppl 1:13–5 (4 ref.)

Influence of serum amylase and plasma glucose levels in pancreas cadaver donors on graft function in recipients. Hesse UJ, et al. **Diabetes** 1989 Jan;38 Suppl 1:1–3

Successful long-term cryopreservation and transplantation of human fetal pancreas. Hullett DA, et al. **Diabetes** 1989 Apr;38(4):448–53

Fate of late complications in type I diabetic patients after successful pancreas-kidney transplantation. Landgraf R, et al. **Diabetes** 1989 Jan;38 Suppl 1:33–7

Kidney-graft survival in simultaneous kidney-pancreas transplantation. LeFrancois N, et al. **Diabetes** 1989 Jan;38 Suppl 1:38–9

Pancreas-graft immunogenicity and pretreatment with anti-class II monoclonal antibodies. Lloyd DM, et al. **Diabetes** 1989 Jan;38 Suppl 1:104–8

Rejection of kidney and pancreas after pancreas-kidney transplantation. Margreiter R, et al. **Diabetes** 1989 Jan;38 Suppl 1:79–81

Segmental duct-obstructed pancreas grafts versus pancreaticoduodenal grafts with enteric diversion. Martin X, et al. **Diabetes** 1989 Jan;38 Suppl 1:16–7

Impact of immunosuppression on improvement of results in clinical pancreas transplantation. Melandri M, et al. **Diabetes** 1989 Jan;38 Suppl 1:30–2

Quality of life in diabetic patients after combined pancreas-kidney or kidney transplantation. Nakache R, et al. **Diabetes** 1989 Jan;38 Suppl 1:40–2

Quantitative analysis of microvasculature of rat pancreas transplants in acute rejection. Nakai I, et al. **Diabetes** 1989 Jan;38 Suppl 1:111–3

Effects of pancreas transplantation on metabolic and hormonal profiles in IDDM patients. Ostman J, et al. **Diabetes** 1989 Jan;38 Suppl 1:88–93

Method for home monitoring of urinary amylase after pancreas transplantation. Prieto M, et al. **Diabetes** 1989 Jan; 38 Suppl 1:68–70

Monitoring of pancreas-graft perfusion by radionuclide and digital subtraction angiography. Rasmussen K, et al. **Diabetes** 1989 Jan;38 Suppl 1:21–3

Glucose homeostasis and insulin secretion in human recipients of pancreas transplantation. Robertson RP, et al. **Diabetes** 1989 Jan;38 Suppl 1:97–8

Magnetic resonance imaging and computed tomography in long-term-functioning duct-occluded pancreas allotransplants. Schlumpf R, et al. **Diabetes** 1989 Jan;38 Suppl 1:24–6

Do donor age and cold-ischemia time have a detrimental effect on early pancreas-allograft function? Schmid T, et al. **Diabetes** 1989 Jan;38 Suppl 1:4–6

Early detection of rejection in pancreas transplantation. Stratta RJ, et al. **Diabetes** 1989 Jan;38 Suppl 1:63–7

OKT3 rescue therapy in pancreas-allograft rejection. Stratta RJ, et al. **Diabetes** 1989 Jan;38 Suppl 1:74–8

Recurrence of disease in pancreas transplants. Sutherland DE, et al. **Diabetes** 1989 Jan;38 Suppl 1:85–7

Results of pancreas-transplant registry. Sutherland DE, et al. **Diabetes** 1989 Jan;38 Suppl 1:46–54 (12 ref.)

Pancreas-transplant outcome in relation to presence or absence of end-stage renal disease, timing of transplant, surgical technique, and donor source. Sutherland DE, et al. **Diabetes** 1989 Jan;38 Suppl 1:10–2

Pregnancy after combined pancreas-kidney transplantation. Tydén G, et al. **Diabetes** 1989 Jan;38 Suppl 1:43–5

Long-term metabolic control in recipients of segmental-pancreas grafts with pancreaticoenterostomy or duct obstruction. Tydén G, et al. **Diabetes** 1989 Jan;38 Suppl 1:94–6

Contribution of partial pancreatectomy, systemic hormone delivery, and duct obliteration to glucose regulation in canine pancreas. Importance in pancreas transplantation. van der Burg MP, et al. **Diabetes** 1989 Sep;38(9):1082–9

Fetal pancreas transplantation in miniature swine. II. Survival of fetal pig pancreas allografts cultured at room temperature. Yoneda K, et al. **Diabetes** 1989 Jan;38 Suppl 1:213–6

Application of magnetic resonance imaging in pancreas transplant. Yuh WT, et al. **Diabetes** 1989 Jan;38 Suppl 1:27–9

Anaesthesia for combined pancreatic and renal transplantation and potassium homeostasis. Sealey MM. **Eur J Anaesthesiol** 1988 May;5(3):193–206

Innocuous gas collections in pancreatic allografts demonstrated by computed tomography. Vas W, et al. **Gastrointest Radiol** 1989 Spring;14(2):118–22

Penetration of ciprofloxacin and ofloxacin into human allograft pancreatic juice. Brattström C, et al. **J Antimicrob Chemother** 1988 Aug;22(2):213–9

Pancreatic transplantation: the Cambridge experience. Calne RY, et al. **J Diabetic Complications** 1988 Jul–Sep;2(3):121–4

Studies of human fetal pancreatic allografts in diabetic recipients without immunosuppression. Jovanovic-Peterson L, et al. **J Diabetic Complications** 1989 Apr–Jun;3(2):107–12

Renal transplantation in diabetic patients is confirmed therapy while pancreas transplantation should be performed only in an investigational setting. Najarian JS, et al. **J Diabetic Complications** 1988 Jul–Sep;2(3):158–61 (22 ref.)

Pancreas transplantation: the Minnesota experience. Sutherland DE, et al. **J Diabetic Complications** 1988 Jul–Sep;2(3):125–9

Indium-111-labeled platelets in monitoring human pancreatic transplants. Catafau AM, et al. **J Nucl Med** 1989 Sep; 30(9):1470–5

Percutaneous fine needle aspiration biopsy of canine pancreas allograft provides diagnosis of treatable rejection. Ekberg H, et al. **J Surg Res** 1989 Oct;47(4):348–53

The effect of dimethyl PGE2 on canine pancreatic autograft exocrine secretion. Garvin PJ, et al. **J Surg Res** 1989 May; 46(5):502–6

Cold storage preservation of pancreatic tissue prior to and after islet preparation in a dog autotransplantation model. Heise JW, et al. **J Surg Res** 1989 Jul;47(1):30–8

Effect of elimination of OX–19+ and OX–8+ T–cell subsets upon pancreatic allograft survival. Roza AM, et al. **J Surg Res** 1989 Apr;46(4):395–9

Immunologic consequences of combined pancreas–spleen transplantation in the rat. Schulak JA, et al. **J Surg Res** 1989 Jul;47(1):52–8

Pancreatic transplantation [letter] Wolff H. **Lancet** 1989 Mar 25;1(8639):677

Pioneer attempts to cure diabetes by pancreatic transplantation. Morris JC. **Med J Aust** 1988 Dec 5–19; 149(11–12):634–6

Long–term studies of pancreas allotransplantation in experimental diabetes mellitus. Lee S, et al. **Microsurgery** 1988;9(3):217–21

Synchronous renal and pancreatic transplantation. Experience in type I diabetics with end–stage renal disease. Garvin PJ, et al. **Mo Med** 1987 Sep;84(9):587–91

Pancreas transplantation: an immunohistochemical analysis of pancreatic hormones and HLA–DR expression. Lloyd RV, et al. **Mod Pathol** 1989 Jul;2(4):323–30

The effects of pancreas transplantation on the glomerular structure of renal allografts in patients with insulin–dependent diabetes. Bilous RW, et al. **N Engl J Med** 1989 Jul 13;321(2):80–5

Is pancreas transplantation for insulin–dependent diabetics worthwhile? [editorial] Tattersall R. **N Engl J Med** 1989 Jul 13;321(2):112–4

Hypophosphataemia and reversible neurological dysfunction in a patient subjected to combined renal and pancreatic transplantation. Tydén G, et al. **Nephrol Dial Transplant** 1988;3(6):823–5

Procurement of the liver and the whole pancreas from a single cadaver donor. Hesselink EJ, et al. **Neth J Surg** 1989 Feb;41(1):15–7

Pancreatic transplants: CT with clinical and pathologic correlation. Moulton JS, et al. **Radiology** 1989 Jul; 172(1):21–6

Pancreatic transplant rejection: assessment with duplex US. Patel B, et al. **Radiology** 1989 Oct;173(1):131–5

Pancreatic transplants: evaluation with MR imaging. Yuh WT, et al. **Radiology** 1989 Jan;170(1 Pt 1):171–7

Combined hepatic and pancreaticoduodenal procurement for transplantation. Marsh CL, et al. **Surg Gynecol Obstet** 1989 Mar;168(3):254–8

A technique for concomitant whole duodenopancreatectomy and hepatectomy for transplantation in the multiple organ donor. Nghiem DD. **Surg Gynecol Obstet** 1989 Sep; 169(3):257–8

Use of the circular stapler in construction of the duodenoneocystostomy for drainage into the bladder in transplants involving the whole pancreas. Pescovitz MD, et al. **Surg Gynecol Obstet** 1989 Aug;169(2):169–71

Procurement of a whole pancreas and liver from the same cadaveric donor. Delmonico FL, et al. **Surgery** 1989 Jun; 105(6):718–23

Combination harvesting procedure for liver and whole pancreas. Bunzendahl H, et al. **Transpl Int** 1988 Jul; 1(2):99–102

Duplex–Doppler ultrasonography in monitoring clinical pancreas transplantation. Gilabert R, et al. **Transpl Int** 1988 Oct;1(3):172–7

Graft pancreatitis and hemorrhagic cystitis. Treatment with bladder irrigation and protease inhibition [letter] Roxvall LI, et al. **Transpl Int** 1988 Dec;1(4):228–9

Is HLA matching relevant in pancreas transplantation? A registry analysis. Squifflet JP, et al. **Transpl Int** 1988 Apr; 1(1):26–9

Early diagnosis and treatment of pancreas allograft rejection. Stratta RJ, et al. **Transpl Int** 1988 Apr;1(1):6–12

Proceedings of the twelfth International Congress of the Transplantation Society. August 14–19, 1988, Sydney, Australia. Book II. **Transplant Proc** 1989 Feb;21(1 Pt 2):1195–2475

Twelfth international congress of the Transplantation Society. August 14–19, 1988, Sydney, Australia. Proceedings. **Transplant Proc** 1989 Feb;21(1 Pt 1):1–1193

Evidence for reversibility of diabetic microangiopathy following pancreas transplantation. Abendroth D, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2850–1

Diagnosis of pancreas transplant rejection: use of noninvasive tests to assess initial dysfunction in combined pancreas–kidney transplants. Ames SA, et al. **Transplant Proc** 1989 Aug;21(4):3639–42

An immune monitoring program for controlling immunosuppressive therapy. Baehr RV, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1189–91

Donor specific transfusions in rodent pancreatic transplantation. Bartlett ST, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1185–6

The in vitro perfused pancreas: a model for rigorous comparison of pancreatic transplant techniques. Bartlett ST, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2820–2

Heating reduces the sensitization induced by allogeneic blood and red blood cells for rat foetal pancreas allografts. Bowen KM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2687–8

Immunogenicity of rat foetal pancreas allografts: the role of interstitial IA positive cells. Brown MW, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2674–5

Thromboxane flux and urinary eicosanoids as an index of reperfusion injury in pancreas transplantation after different periods of cold storage. Colomer J, et al. **Transplant Proc** 1988 Oct;20(5):1013–5

Successful treatment of a high–output fistula with a somatostatin analogue following pancreas transplantation. Cooper MM, et al. **Transplant Proc** 1989 Aug;21(4):3738–41

Prolongation of allograft and xenograft survival with 15–deoxyspergualin. Corry RJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):530–1

Does exogenous insulin infusion (islet "rest") improve pancreas transplant endocrine function? Dafoe DC, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2827–8

Clinical pancreas transplantation: a learning curve of its management. Daloze P, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 3):2858–61

Simultaneous procurement of pancreas and liver from a single cadaveric donor. Delmonico FL, et al. **Transplant Proc** 1989 Jun;21(3):3521

Duct obstruction of segmental grafts in pancreas transplantation. Dubernard JM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2799–800

Kinetics of increased class II antigen expression in canine pancreas allograft rejection. Ekberg H, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):510–2

The role of oxygen free radicals in preservation injury in pancreas transplantation. Fernández–Cruz L, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1381–3

Results after transplantation of canine pancreatic grafts with preserved exocrine drainage. Florack G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2818–9

Effective preservation of human pancreas grafts. Florack G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1369–71

Discrepancy between renal and pancreatic rejection in combined transplantation. Frisk B, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2835–6

Comparison of fasting serum cholesterol levels between diabetic recipients who undergo renal–pancreas transplants and renal transplantation only. Georgi BA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2839–40

Interleukin–2 assay in serum and urine as a means of monitoring pancreatic allograft rejection. Georgi BA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2784–5

Is there an indication for pancreatic transplantation? Groth CG. **Transplant Proc** 1989 Feb;21(1 Pt 3):2757–8 (5 ref.)

Experimental study on the relationship between prostaglandin production and acute pancreatic rejection. Hashimoto T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):505–6

72–hours preservation of pancreatic autotransplants in dogs using a urinary drainage technique. Heise JW, et al. **Transplant Proc** 1988 Oct;20(5):1029–30

Serum amylase and plasma glucose levels in pancreas cadaver donors: correlation with functional status of the pancreatic graft. Hesse UJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2765–6

Pregraft donor strain transfusions of blood and red blood cells fail to decrease the rate of rejection of rodent foetal pancreas allografts. Hibberd AD, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2721–2

Comparative evaluation of the immunogenicity of isolated islets of Langerhans and the whole pancreas. Hiller WF, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2678–9

Seven–year experience in clinical pancreatic transplantation using duct occlusion technique. Höhnke C, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2862–3

Long–term metabolic control in recipients of duct–occluded segmental pancreatic grafts. Holdaas H, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2854–5

The effect of ex vivo irradiation of donor spleen on pancreas allograft rejection in the dog. Hong JH, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1132–3

Improved human fetal pancreatic tissue survival following hyperbaric oxygen culture. Hullett DA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2659–60

Appearance of type II diabetes mellitus in type I diabetic recipients of pancreas allografts. Hunsicker LG, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2852–3

Puzzling angiographic findings in pancreatic transplantation. Illner WD, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2803

Urinary amylase and immunoreactive metabolites of thromboxane B2 and 6keto–prostaglandin F1 alpha in rat pancreatic allograft rejection. Johnson BF, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2788–90

Comparison of graft survival between orthotopic and heterotopic segmental pancreas allotransplantation. Kaneko G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2806–8

The effect of a distal splenic arteriovenous fistula on tissue blood flow in the pancreatic segment. Kin S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2812–4

Pancreatic juice cytology (PJC) for early detection of pancreas allograft rejection. Klima G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2782–3

Prolonged function of intrasplenic canine pancreatic fragment autografts. Kneteman NM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2619–20

Recent experience with pancreatic juice cytology in monitoring pancreatic graft rejection. Kubota K, et al. **Transplant Proc** 1989 Aug;21(4):3643–5

Is there a future for fetal pancreas transplantation? Lafferty KJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2611–3

Influence of initial immunosuppressive regimen on combined pancreas and kidney transplant results. Lefrançois N, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2833–4

Paratopic and heterotopic pancreas transplantation in the rat—endocrine and exocrine graft function. Limmer J. **Transplant Proc** 1989 Feb;21(1 Pt 3):2815

Does depletion of donor dendritic cells in an organ allograft lead to prolongation of graft survival on transplantation? Lloyd DM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):482–3

Prolongation of mouse allogenic skin grafts on long–term bearers of adult and neonatal pancreatic tissue allografts. Markees TG, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2676–7

Serum immunoreactive anionic trypsin is diagnostic for rejection of vascularized pancreas allograft. Marks WH, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2786–7

Cystoscopically directed biopsy technique in canine pancreaticoduodenal transplantation. Marsh CL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2816–7

Bench surgery under hypothermia for pancreatic allografts before transplantation. Mittal VK, et al. **Transplant Proc** 1988 Oct;20(5):1019–20

Effect of graft pancreatitis on the outcome of whole pancreatic transplants. Mittal VK, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2856–7

The sequence of exocrine and endocrine damage during vascularized rat pancreatic allograft rejection. Morris GE, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):498–9

Reversal of experimental diabetes in miniature swine by fetal pancreas allografts. Mullen Y, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2671–2

Effects of pancreatic transplantation on diabetic complications. Munda R, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 3):2865–6

Quantitative analysis of the microvasculature of rat pancreas transplants during the acute rejection process. Nakai I, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):502–4

Experimental pancreas transplantation in litter mate and random dogs. Nakayama Y, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2809–11

Pancreas donor criteria. Nghiem DD, et al. **Transplant Proc** 1988 Oct;20(5):1007–9

Effects of donor size on long–term function of simultaneous renal and pancreatic transplants from pediatric donors. Nghiem DD, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2841–2

Diagnosis of pancreatic rejection with Tc–99m DTPA scintigraphy. Nghiem DD, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 3):2791–2

Urinary thromboxane B2 as indicator of pancreatic allograft rejection in nonimmunosuppressed dogs. Odor–Morales A, et al. **Transplant Proc** 1989 Aug;21(4):3646–9

Evaluation of the duodenal patch method for intestinal drainage of pancreatic juice in whole pancreas transplantation. Ohtsuka M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2823–6

The multiple organ donor: prospective multicenter analysis of outcome in the United States of America. Peters TG, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1218–20

Efficacy of 48–hour pancreas preservation with UW solution in the dog allograft model. Ploeg RJ, et al. **Transplant Proc** 1988 Oct;20(5):1026–8

The Belzer–UW solution for effective long–term preservation in canine pancreas transplantation. Ploeg RJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1378–80

The exocrine secretions of the grafted pancreas. Sato J, et al. **Transplant Proc** 1989 Jun;21(3):3449–51

Pancreaticoduodenal allotransplantation with cyclosporine and FK506. Sato K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1074–5

Contribution of graft duodenum to metabolic disorders in canine recipients of whole pancreaticoduodenal transplants with bladder drainage. Schang T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2804–5

Synergistic effect of 15–deoxyspergualin and cyclosporin A in pancreatic transplantation. Schubert G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1096

Combined kidney–pancreas transplantation with pancreaticocystostomy. Sollinger HW, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2837–8

Mechanical obstruction of the portal vein as a cause of vascular thrombosis after pancreatic transplantation in humans. Soon–Shiong P, et al. **Transplant Proc** 1988 Oct; 20(5):1059–61

Elevation in urinary prostaglandin (PGE2) as an early marker of pancreas allograft rejection. Soon–Shiong P, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2771–3

Blood transfusions do not contribute to long–term pancreas graft survival. Spillenaar Bilgen EJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1183–4

Attempts to reduce post–transplant pancreatitis in rats and dogs with the somatostatin analogue SMS 201–995. Spillenaar Bilgen EJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2829–30

Who can serve as a pancreas donor? Steiner E, et al. **Transplant Proc** 1988 Oct;20(5):1005–6

Pancreaticoduodenal allograft procurement in combination with liver allograft procurement. Sterioff S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2767–8

Effects of multiple blood transfusions and cyclosporine A treatment on pancreas transplantation in the rat. Stoffregen C, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1175–6

Pancreas Transplantation Registry report. Sutherland DE, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2759–62

Long-term outcome of pancreas transplants functioning at one year. Sutherland DE, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 3):2845–9

Pancreatic secretory trypsin inhibitor as a marker for early detection of rejection in canine pancreas allotransplantation. Suzuki Y, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2793–4

The influence of storage period and reperfusion in pancreas transplantation using lipoperoxides as a tissue damage marker. Targarona EM, et al. **Transplant Proc** 1988 Oct; 20(5):1016–8

Serial radionuclide determinations of graft perfusion in pancreas transplantation. Teule GJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2795–6

Studies of radioimmunoreactive urinary insulin (RUI) in the human: a new test for diagnosis of pancreas rejection. Thomas F, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2797–8

Induction of Ia in rat pancreas allografts: the effect of donor specific blood transfusion pretreatment or cyclosporin A. Thomson NM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):507–9

Surgical complications after segmental pancreatic transplantation with enteric exocrine diversion. Tibell A, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2801–2

Albumin-augmented crystalloid or hyperosmolar colloid solutions for clinical pancreas preservation. Toledo-Pereyra LH, et al. **Transplant Proc** 1988 Oct; 20(5):1021–2

Development of an improved immunosuppressive regimen for pancreas transplantation. Toledo-Pereyra LH, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2769–70

Severe lymphoproliferative disease and Kaposi sarcoma in transplant patients. Touraine JL, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3197–8 (8 ref.)

Reversal of diabetes in hyperglycaemic nude mice by human fetal pancreas. Tuch BE, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 3):2665–6

Diagnosis of pancreatic graft rejection by pancreatic juice cytology. Tydén G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2780–1

Pancreatic transplantation: long-term outcome of 21 grafts. Valente U, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2864

Differences in post-cyclosporin A (CyA) graft acceptance following individual and combined kidney and pancreas transplantation in the rat. Vogt P, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2843–4

Prolongation of islet and pancreas graft survival in spontaneous diabetic BB/W rats by perioperative cyclosporin or 15-deoxyspergualin therapy. von Specht BU, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):965–7

Absence of microvascular complications in long-term duct-occluded segmental pancreas autografts in dogs. Williamson P, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2867–8

Combined retrieval of liver and pancreas grafts: alternatives for organ procurement. Wright FH, et al. **Transplant Proc** 1989 Jun;21(3):3522

Renal allograft and patient survival in combined pancreas/kidney transplantation. Zantvoort FA, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2831–2

Immunohistological observations of rat fetal pancreas allografts transplanted into unmodified and cyclosporine-treated recipients. Brown MW, et al. **Transplantation** 1988 Dec;46(6):800–6

Immunosuppressive effect of the anti-IL-2-receptor monoclonal antibody, AMT-13, on organ-cultured fetal pancreas allograft survival. Burkhardt K, et al. **Transplantation** 1988 Nov;46(5):726–31

An increase in the survival of murine H-2-mismatched cultured fetal pancreas allografts using depleting or nondepleting anti-CD4 monoclonal antibodies, and a further increase with the addition of cyclosporine. Burkhardt K, et al. **Transplantation** 1989 May;47(5):771–5

Human pancreatic graft fistula exocrine suppression by oral pancreatic enzymes. Burton FR, et al. **Transplantation** 1989 May;47(5):888–91

A comparison between pancreas and heart allotransplantation after administration of donor-specific antigen and cyclosporine. Cooke JC, et al. **Transplantation** 1989 Jul; 48(1):15–9

Comparison between duodenal button and duodenal segment in pancreas transplantation. D'Alessandro AM, et al. **Transplantation** 1989 Jan;47(1):120–2

Early diagnosis of rejection of canine pancreas allografts by fine-needle aspiration biopsy. Ekberg H, et al. **Transplantation** 1988 Oct;46(4):485–9

Possible transmission of herpes simplex virus by organ transplantation. Goodman JL. **Transplantation** 1989 Apr; 47(4):609–13

Quantitative assessment of long-term changes in insulin secretion after canine duct-obliterated pancreas transplantation. Gooszen HG, et al. **Transplantation** 1988 Dec;46(6):793–9

Pancreatic enzymes in serum and urine as indicators of pancreatic allograft rejection in the pig. Källén R, et al. **Transplantation** 1989 Sep;48(3):376–81

Seventy-two-hour preservation of the canine pancreas by the two-layer (Euro-Collins' solution/perfluorochemical) cold storage method. Kawamura T, et al. **Transplantation** 1989 May;47(5):776–8

Pancreatic secretory trypsin inhibitor as a marker for early detection of rejection in canine pancreas allotransplantation. Kuroda Y, et al. **Transplantation** 1988 Oct;46(4):493–5

Portal versus peripheral venous drainage in segmental pancreatic transplantation in diabetic rats. Lugagne PM, et al. **Transplantation** 1989 Mar;47(3):420–3

Preservation of dog liver, kidney, and pancreas using the Belzer-UW solution with a high-sodium and low-potassium content. Moen J, et al. **Transplantation** 1989 Jun;47(6):940–5

31P nuclear magnetic resonance of rat pancreatic grafts. Morris GE, et al. **Transplantation** 1989 May;47(5):779–84

Function of simultaneous kidney and pancreas transplants from pediatric donors. Nghiem DD, et al. **Transplantation** 1989 Jun;47(6):1075–9

Resolution of streptozotocin-induced diabetes mellitus by pancreatic transplantation in inbred mice. Pollak R, et al. **Transplantation** 1988 Oct;46(4):611–3

Severe hyponatremia associated with combined pancreatic and renal transplantation. Rabb HA, et al. **Transplantation** 1989 Jul;48(1):157–9

Monitoring urinary amylase and pH in pancreas transplantation with urinary drainage in rats. Schang T, et al. **Transplantation** 1988 Dec;46(6):806–12

Segmental pancreatic autotransplantation in the pig. Shokouh-Amiri MH, et al. **Transplantation** 1989 Jan; 47(1):42–4

Appearance of type II diabetes mellitus in type I diabetic recipients of pancreas allografts. Smith JL, et al. **Transplantation** 1989 Feb;47(2):304–11

Recovery of human fetal pancreas after one year of implantation in the diabetic patient. Tuch BE, et al. **Transplantation** 1988 Dec;46(6):865–70

Evidence that Chinese herbal medicine is of no advantage in murine fetal pancreatic transplants [letter] Tuch BE, et al. **Transplantation** 1989 Feb;47(2):407–8

'AUTO'-anti-ABO antibodies after organ transplantation: a ciclosporin A related phenomenon? [letter] Mazzara R, et al. **Vox Sang** 1988;55(4):246

Current status of pancreas transplantation. Cook DW, et al. **West J Med** 1989 Mar;150(3):309–13 (31 ref.)

Coming of age for pancreas transplantation. Sutherland DE. **West J Med** 1989 Mar;150(3):314–8

Light and electron microscopy of postnatal pancreatic tissue implants in the anterior eye-chamber of CRF rats. Donáth T, et al. **Z Mikrosk Anat Forsch** 1988;102(3):512–22

[Advances in pancreas transplantation] Li YM, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Oct;68(10):598–600 (15 ref.) **(Chi)**

[Preservation of the fetal pancreas and the effect of its clinical application] Qin ZY. **Chung Hua I Hsueh Tsa Chih** 1989 Jan;69(1):33–6 **(Chi)**

[Simultaneous transplantation of the pancreas and kidney in terminal diabetic nephropathies] Burcharth F, et al. **Ugeskr Laeger** 1989 Feb 27;151(9):544–7 (Eng. Abstr.) **(Dan)**

[The value of dual kidney and pancreas transplantation, with bladder drainage in type I diabetic patients with renal insufficiency] Benoit G, et al. **Ann Urol (Paris)** 1988; 22(4):242–5 (Eng. Abstr.) **(Fre)**

[Transplantation of the pancreas. Experience in Lyons and comparison of 2 technics] Dubernard JM, et al. **Chirurgie** 1988;114(4):300–4 (Eng. Abstr.) **(Fre)**

[Segmental transplantation of the pancreas. Technical changes in preventing vascular thrombosis] Visset J, et al. **Chirurgie** 1988;114(10):769–74 (Eng. Abstr.) **(Fre)**

[Results of the treatment of type I insulin-dependent diabetes mellitus with pancreatic transplant] Dubernard JM, et al. **Journ Annu Diabetol Hotel Dieu** 1989;:125–31 **(Fre)**

[Animal models of pancreatic transplant] Duron JJ, et al. **Journ Annu Diabetol Hotel Dieu** 1989;:115–24 (48 ref.) **(Fre)**

[The pancreatic graft and its impact on late complications of diabetes mellitus] Landgraf R, et al. **Journ Annu Diabetol Hotel Dieu** 1989;:133–8 (20 ref.) **(Fre)**

[Indications for pancreatic transplants: realities and hopes] Timsit J, et al. **Journ Annu Diabetol Hotel Dieu** 1989; :139–49 (45 ref.) **(Fre)**

[Early diagnosis of pancreatic allograft rejection: the value of urinary amylase determination] Meurisse M, et al. **Rev Med Liege** 1989 Jun 1;44(11):388–95 **(Fre)**

[Current indications for kidney, pancreas and liver transplantation] Pichlmayr R. **Chirurg** 1988 Jul;59(7):454–8 (25 ref.) **(Ger)**

[The technic of pancreas transplantation] Schlumpf R, et al. **Chirurg** 1988 Aug;59(8):501–8 (16 ref.) **(Ger)**

[Viability of pancreatic transplants] Steiner E, et al. **Chirurg** 1988 Jul;59(7):469–71 (Eng. Abstr.) **(Ger)**

[Pancreatic duct occlusion from the clinical viewpoint: exocrine and endocrine consequences] Schneider MU. **Langenbecks Arch Chir** 1989;374(1):1–3 **(Ger)**

[Radiologic diagnosis following pancreas transplantation] Marincek B, et al. **Radiologe** 1988 Dec;28(12):560–5 (17 ref.) (Eng. Abstr.) **(Ger)**

[Magnetic resonance tomographic studies of pancreatic transplants] Königsrainer A, et al. **ROFO** 1989 Aug; 151(2):154–7 (Eng. Abstr.) **(Ger)**

[Thrombocytosis following pancreas transplantation—a retrospective clinical study] Hunziker D. **Schweiz Rundsch Med Prax** 1989 Feb 21;78(8):191–6 (Eng. Abstr.) **(Ger)**

[Pancreatoduodenal transplantation with and without the spleen in an animal experiment] Friess P, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(3):131–7 (Eng. Abstr.) **(Ger)**

[Adaptive and regenerative processes following pancreas transplantation] Hopt UT. **Z Gastroenterol [Verh]** 1989 Jul; 24:241–3 (10 ref.) **(Ger)**

[Function and morphology of intraperitoneal segmental pancreas allotransplants with cyclosporin monotherapy in the dog—a comparison of 4 drainage procedures of exocrine secretions] Rosenberger J, et al. **Zentralbl Chir** 1988;113(24):1583–92 (Eng. Abstr.) **(Ger)**

[A new method of pancreas transplantation with drainage of exocrine secretion through the gallbladder-bile ducts into the duodenum of the recipient] Wolff H. **Zentralbl Chir** 1989;114(5):313–8 (Eng. Abstr.) **(Ger)**

[Fever and changes in renal function after kidney and pancreas transplant in a 22-year-old diabetic woman (clinical conference)] Strom TB, et al. **Medicina (Firenze)** 1989 Jan-Mar;9(1):83–92 **(Ita)**

[Functional exclusion of the exocrine pancreas in pancreatic transplants: use of polymers in animal experiments] Dominici C, et al. **Minerva Chir** 1988 Jun 30;43(12):1013–8 (Eng. Abstr.) **(Ita)**

[Anesthetic management of combined kidney and pancreas transplantation] Mizuyama K, et al. **Masui** 1989 Jan; 38(1):92–7 (Eng. Abstr.) **(Jpn)**

[Current status and problem of pancreas transplantation] Inoue K. **Nippon Geka Hokan** 1988 Sep 1;57(5):349–50 **(Jpn)**

[Pancreas transplantation. Still an experimental surgery?] Viste A, et al. **Tidsskr Nor Laegeforen** 1988 Oct 30; 108(30):2721–3 (Eng. Abstr.) **(Nor)**

[Compensating for experimental diabetes in rats by transplantation of the fetal pancreas into the anterior eye chamber] Tret'iak TM, et al. **Dokl Akad Nauk SSSR** 1989; 304(2):506–8 **(Rus)**

[Improved results in pancreas transplantation] Tibell A, et al. **Lakartidningen** 1989 Jun 14;86(24):2291–3 **(Swe)**

[Pancreas transplantation] Gerhardsson L. **Nord Med** 1988 ;103(12):350–1, 355 (Eng. Abstr.) **(Swe)**

ULTRASTRUCTURE

Pancreatic duct obstruction in the pig: electron microscopy of chronic pancreatitis. Rahko T, et al. **Acta Vet Scand** 1988;29(2):255–8

Ovine ceroid-lipofuscinosis II: Pathologic changes interpreted in light of biochemical observations. Jolly RD, et al. **Am J Med Genet Suppl** 1988;5:159–70

Sequential ultrastructural changes of the pancreas in zinc toxicosis in ducklings. Kazacos EA, et al. **Am J Pathol** 1989 Mar;134(3):581–95

Ultrastructural analysis of VIP internalization in rat beta- and acinar cells in situ. Anteunis A, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):G689–97

Effects of endotoxin on the pancreatic ultrastructure. Florholmen J, et al. **APMIS** 1988 Nov;96(11):991–6

In vitro stability of pancreatic zymogen granules: roles of pH and calcium. Lebel D, et al. **Biol Cell** 1988;63(3):343–53

Histological alterations to the pancreas and the intestinal tract produced by raw faba bean (Vicia faba L. minor) diets in growing chicks. Rubio LA, et al. **Br Poult Sci** 1989 Mar; 30(1):101–14

Histochemical and ultrastructural characteristics of tubular complexes in human acute pancreatitis. Willemer S, et al. **Dig Dis Sci** 1989 Jan;34(1):46–55

Heterogeneity of the zymogen granule membranes in rat pancreas. Beaudoin AR, et al. **Eur J Cell Biol** 1988 Dec; 47(2):233–40

Immunogold determination of amylase concentrations in pancreatic subcellular compartments. Posthuma G, et al. **Eur J Cell Biol** 1988 Jun;46(2):327–35

The gap junction: a channel for multiple functions? Bruzzone R, et al. **Eur J Clin Invest** 1988 Oct;18(5):444–53 (109 ref.)

Morphometric study of the rat exocrine pancreas after diversion of bile and pancreatic juice from the intestine. Kashima K, et al. **Gastroenterology** 1988 Dec;95(6):1607–16

The exocrine pancreas in patients with hyperinsulinemic hypoglycemia. A morphometrical and ultrastructural study. Bani D, et al. **Int J Pancreatol** 1989 Oct;5(3):239–48

Anion channels in giant liposomes made of endoplasmic reticulum vesicles from rat exocrine pancreas. Schmid A, et al. **J Membr Biol** 1988 Sep;104(3):275–82

Light and electron microscopy of the exocrine pancreas in the chronically reserpinized rat. Grondin G, et al. **Pediatr Res** 1989 May;25(5):482–9

The Golgi apparatus of the pancreatic acinar cells observed by scanning electron microscopy. Naguro T, et al. **Prog Clin Biol Res** 1989;295:249–56

[Observation of light and electron microscopic structure of pancreas in acute haemorrhagic necrotizing pancreatitis induced by sodium taurocholate in rats] Wu NY, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Sep;19(3):271–4 **(Chi)**

PANCREAS, ARTIFICIAL ENDOCRINE see **INSULIN INFUSION SYSTEMS**

PANCREAS, ENDOCRINE see **ISLANDS OF LANGERHANS**

PANCREASE see **PANCREATIN**

PANCREATECTOMY

The first experimental diabetes mellitus. Keck FS, et al. **Acta Diabetol Lat** 1989 Jan–Mar;26(1):79–81

The effects of pancreatectomy on the sheep fetus. Fowden AL, et al. **Acta Physiol Pol** 1988 Sep–Dec;39(5–6):415–20

Subtotal duodenopancreatectomy for pancreatic duct, distal bile duct and periampullary carcinoma: short- and long-term results. Lygidakis NJ, et al. **Am J Gastroenterol** 1989 Aug;84(8):917–20

Effect of glipizide on the surgically altered pancreas. Barr JD, et al. **Am J Surg** 1989 Jan;157(1):103–8

Distal pancreatectomy with and without splenectomy. A comparative study. Richardson DQ, et al. **Am Surg** 1989 Jan;55(1):21–5

Anesthetic considerations for Beckwith–Wiedemann syndrome. Gurkowski MA, et al. **Anesthesiology** 1989 Apr; 70(4):711–2

The value of angiography in the surgical management of pancreatic disease. Appleton GV, et al. **Ann R Coll Surg Engl** 1989 Mar;71(2):92–6

Total pancreatectomy for ductal cell carcinoma of the pancreas. An update. Brooks JR, et al. **Ann Surg** 1989 Apr; 209(4):405–10

Postprandial plasma gastrin and secretin concentrations after a pancreatoduodenectomy. A comparison between a pylorus-preserving pancreatoduodenectomy and the Whipple procedure. Takada T, et al. **Ann Surg** 1989 Jul; 210(1):47–51

Clinical experience with regional pancreatectomy for adenocarcinoma of the pancreas. Sindelar WF. **Arch Surg** 1989 Jan;124(1):127–32

Influence of pancreatic resection on systemic complications in acute necrotizing pancreatitis. Teerenhovi O, et al. **Br J Surg** 1988 Aug;75(8):793–5

Radical pancreatectomy for ductal cell carcinoma of the head of the pancreas. Manabe T, et al. **Cancer** 1989 Sep 1; 64(5):1132–7

Insulin and glucagon secretion after pancreatectomies. Correlation of secretion and hormonal contents of remaining pancreas. Gotoh M, et al. **Diabetes** 1989 Jul; 38(7):861–7

Compensatory adaption to partial pancreatectomy in the rat. Lee HC, et al. **Endocrinology** 1989 Mar;124(3):1571–5

Subtotal duodeno-pancreatectomy for carcinoma of the head of the pancreas. Preliminary report of an alternative operation to total pancreatectomy. Gall FP. **Eur J Surg Oncol** 1988 Oct;14(5):387–92

In vitro release of pancreatic hormones following 99% pancreatectomy in the chicken. Hazelwood RL, et al. **Gen Comp Endocrinol** 1989 Feb;73(2):308–17

Nitrogen absorption in pancreatectomized patients: protein versus protein hydrolysate as substrate. Steinhardt HJ, et al. **J Lab Clin Med** 1989 Feb;113(2):162–7

Combined subtotal pancreatectomy with selective streptozotocin infusion—a model for the induction of insulin deficiency in dogs. Tschoepe D, et al. **Res Exp Med (Berl)** 1989;189(2):141–52

Correction of malnutrition and maldigestion with enzyme supplementation in patients with surgical suppression of exocrine pancreatic function. Braga M, et al. **Surg Gynecol Obstet** 1988 Dec;167(6):485–92

A technique for concomitant whole duodenopancreatectomy and hepatectomy for transplantation in the multiple organ donor. Nghiem DD. **Surg Gynecol Obstet** 1989 Sep; 169(3):257–8

Insulin antibodies and management of diabetes after total pancreatectomy. Ishikawa O, et al. **Surgery** 1989 Jan; 105(1):57–64

Insulin-dependent and insulin-independent effects after surgical alterations of the pancreas. Krusch DA, et al. **Surgery** 1989 Jul;106(1):60–8

Pancreatoduodenectomy with pyloric preservation for carcinoma of the pancreas: a cautionary note. Sharp KW, et al. **Surgery** 1989 May;105(5):645–53 (34 ref.)

Bench surgery under hypothermia for pancreatic allografts before transplantation. Mittal VK, et al. **Transplant Proc** 1988 Oct;20(5):1019–20

Pancreatic endocrine functions in long-term survivors after pancreatoduodenectomy: special reference to reversibility of insulin and glucagon secretion. Miyata M, et al. **World J Surg** 1988 Oct;12(5):651–7

Changing concepts of islet cell dysplasia in neonatal and infantile hyperinsulinism. Thomas CG Jr, et al. **World J Surg** 1988 Oct;12(5):598–609 (61 ref.)

Total pancreatectomy for ductal adenocarcinoma of the pancreas: an update. van Heerden JA, et al. **World J Surg** 1988 Oct;12(5):658–62

[Prevention of pancreatic and biliary fistula after pancreatoduodenectomy] Wang Y. **Chung Hua Wai Ko Tsa Chih** 1988 Dec;26(12):729–30, 781 (Eng. Abstr.) (Chi)

[Effect of pylorus preservation on nutrition and digestive function after pancreaticoduodenectomy: a follow-up observation] Zhao YP. **Chung Hua Wai Ko Tsa Chih** 1988 Dec;26(12):725–8, 781 (Eng. Abstr.) (Chi)

[Total pancreatectomy in pancreatic cancer] Zheng YJ. **Chung Hua Wai Ko Tsa Chih** 1988 Oct;26(10):614–6, 638–9 (Eng. Abstr.) (Chi)

[Triple pancreatic metastasis of kidney cancer treated by subtotal duodenopancreatectomy (letter)] Guyenne C, et al. **Presse Med** 1989 Feb 11;18(5):231 (Fre)

[Effect of tumor size and lymph node status on the prognosis of pancreatic cancer] Bittner R, et al. **Chirurg** 1989 Apr; 60(4):240–5 (Eng. Abstr.) (Ger)

[Achievements of tumor surgery in tumors of the pancreas] Bodner E. **Langenbecks Arch Chir** 1988;Suppl 2:133–8 (Eng. Abstr.) (Ger)

[Surgical therapy of chronic pancreatitis] Peiper HJ, et al. **Schweiz Med Wochenschr** 1989 May 27;119(21):712–6 (22 ref.) (Eng. Abstr.) (Ger)

[Pathophysiology during follow-up after extensive pancreatectomy] Kita T, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1426–9 (Eng. Abstr.) (Jpn)

[A case of advanced gallbladder carcinoma of a 77-year-old female successfully resected with extended right hepatic lobectomy with caudate lobectomy and pancreatoduodenectomy] Kondoh S, et al. **Nippon Geka Gakkai Zasshi** 1988 Aug;89(8):1302–5 (Eng. Abstr.) (Jpn)

[Diurnal profile of gastrointestinal hormones following pancreatectomy] Manabe T, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1430–2 (Eng. Abstr.) (Jpn)

[Clinical and experimental study on reconstruction after pancreatectomy—Part II. Myoelectric activity of small intestine after pancreatoduodenectomy] Shiota M. **Nippon Geka Gakkai Zasshi** 1988 Aug;89(8):1241–51 (Eng. Abstr.) (Jpn)

[Influence of total pancreatectomy on the secretion of human growth hormone and the endocrine pancreas] Takaesu Y, et al. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1686–91 (Eng. Abstr.) (Jpn)

[Effect of intravenous administration of fat emulsion to depancreatized dogs] Tsubakimoto R. **Nippon Geka Gakkai Zasshi** 1988 Dec;89(12):1997–2009 (Eng. Abstr.) (Jpn)

[Splenic salvage in distal pancreatectomy] Solheim K, et al. **Tidsskr Nor Laegeforen** 1989 Feb 20;109(5):579–80 (Eng. Abstr.) (Nor)

[Indications for pancreatectomy in chronic pancreatitis] Setlacec D, et al. **Rev Chir [Chir]** 1989 Jan–Feb;38(1):27–42 (Eng. Abstr.) (Rum)

[Results of the surgical treatment of primary chronic pancreatitis] Nesterenko IuA, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):79–83 (Eng. Abstr.) (Rus)

[Pancreatoduodenectomy with preservation of the pylorus] Piza Bernal R, et al. **Rev Gastroenterol Mex** 1988 Apr–Jun; 53(2):119–23 (Eng. Abstr.) (Spa)

ADVERSE EFFECTS

Adequate enzyme replacement after total pancreatectomy [letter] Robert A. **JAMA** 1989 May 12;261(18):2638–9

[Computerized tomography in the evaluation of early complications after operations on the pancreas] Todua FI, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):125–30 (Rus)

METHODS

Treatment of chronic alcoholic pancreatitis by pancreatic resection. Keith RG, et al. **Am J Surg** 1989 Jan; 157(1):156–62

Conservation of the spleen with distal pancreatectomy [letter] Sutherland DE, et al. **Arch Surg** 1988 Dec;123(12):1525

Direct retroperitoneal approach to necrosis in severe acute pancreatitis. Fagniez PL, et al. **Br J Surg** 1989 Mar; 76(3):264–7

Pylorus-preserving pancreatectomy: functional results. Hunt DR, et al. **Br J Surg** 1989 Feb;76(2):173–6

Contribution of partial pancreatectomy, systemic hormone delivery, and duct obliteration to glucose regulation in canine pancreas. Importance in pancreas transplantation. van der Burg MP, et al. **Diabetes** 1989 Sep;38(9):1082–9

Localisation of focal lesion permitting partial pancreatectomy in infants [letter] Lyonnet S, et al. **Lancet** 1989 Sep 16; 2(8664):671

Technical considerations in distal pancreatectomy with splenic preservation. Scott-Conner CE, et al. **Surg Gynecol Obstet** 1989 May;168(5):451–2

Is proximal pancreatoduodenectomy with pyloric preservation superior to total pancreatectomy? McAfee MK, et al. **Surgery** 1989 Mar;105(3):347–51

Intraperitonealisation of pancreas and multiple coeliostomy—a possible approach to reduce mortality of acute necrotizing pancreatitis. Nicola T, et al. **Zentralbl Chir** 1989;114(2):84–92

[The solid-cystic pancreas tumor] Kienzle HF, et al. **Chirurg** 1989 Jun;60(6):410–4 (Eng. Abstr.) (Ger)

[Arguments for a revised concept in the therapy of acute pancreatitis. On the indications for conservative, endoscopic and surgical procedures] Sulkowski U, et al. **Chirurg** 1989 Apr;60(4):246–50 (Eng. Abstr.) (Ger)

[Protection of the pancreatico-digestive anastomosis following resection of the head of the pancreas by pancreatic duct occlusion with fibrin (-glue). Animal experiment and clinical experiences] Waclawiczek HW, et al. **Chirurg** 1989 Jun;60(6):403–9 (Eng. Abstr.) (Ger)

[Duodenopancreatectomy. Continuous single pancreaticojejunostomy (video)] Maurer W, et al. **Helv Chir Acta** 1989 Jun;56(1–2):103–6 (Eng. Abstr.) (Ger)

[Comment on the topic: "How do you manage the pancreatic tail in partial duodenopancreatectomy?"] Fritsch A, et al. **Langenbecks Arch Chir** 1989;374(3):189–92 (Ger)

[Insulin reserve and morphology of the tail of the pancreas following resection of the head of the pancreas using various surgical methods] Grossner D, et al. **Langenbecks Arch Chir** 1989;374(1):4–11 (Eng. Abstr.) (Ger)

[Chronic pancreatitis with inflammatory enlargement of the head of the pancreas. Early and late results following duodenum saving resection of the head of the pancreas] Beger HG, et al. **Med Klin** 1988 Sep 2;83(17):548–53, 576 (Eng. Abstr.) (Ger)

[7/8th pancreas resection in nesidioblastosis?] Hümmer HP, et al. **Z Kinderchir** 1988 Aug;43(4):281–3 (Eng. Abstr.) (Ger)

[Duodeno-cephalopancreatectomy with preservation of the pylorus] Kozuschek W. **Zentralbl Chir** 1989;114(11):745–54 (Ger)

[Reconstructive technics after duodeno-cephalo-pancreatectomy] Allegra G. **Minerva Chir** 1989 Jan 31;44(1–2):177–81 (36 ref.) (Ita)

[Distal pancreatectomy with conservation of the spleen. Apropos of 3 consecutive cases] Franchello A, et al. **Minerva Chir** 1989 Jun 15;44(11):1557–60 (Eng. Abstr.) (Ita)

[Indications for right-sided and total pancreatectomy] Bancu EV, et al. **Rev Chir [Chir]** 1989 Jan–Feb;38(1):43–50 (Eng. Abstr.) (Rum)

[Pancreatectomy in complicated chronic pancreatitis] Kadoshchuk TA, et al. **Khirurgiia (Mosk)** 1988 Sep; (9):89–96 (Eng. Abstr.) (Rus)

[Partial resection of the head of the pancreas] Shalimov AA, et al. **Vestn Khir** 1988 Sep;141(9):30–2 (Eng. Abstr.) (Rus)

[Ductal adenocarcinoma of the head of the pancreas: associated pathology of body and tail] Arias Pérez J, et al. **Rev Esp Enferm Apar Dig** 1989 Jan;75(1):78–80 (Eng. Abstr.) (Spa)

MORTALITY

An analysis of the reduced morbidity and mortality rates after pancreaticoduodenectomy. Pellegrini CA, et al. **Arch Surg** 1989 Jul;124(7):778–81

[Does the use of prolaminacid (Ethybloc) reduce mortality in cephalic duodenopancreatectomy? (letter)] Giuly J, et al. **J Chir (Paris)** 1989 Jun–Jul;126(6–7):421 (Fre)

PSYCHOLOGY

[Coping with disease from the psychosomatic-psychotherapeutic viewpoint exemplified by pancreatectomized patients] Lang H, et al. **Psychother Psychosom Med Psychol** 1989 Jul;39(7):239–47 (Eng. Abstr.) (Ger)

VETERINARY

Pancreatectomized swine as a model of diabetes mellitus. Stump KC, et al. **Lab Anim Sci** 1988 Aug;38(4):439–43

A comparison of two methods of partial pancreatectomy in the dog. Allen SW, et al. **Vet Surg** 1989 Jul–Aug; 18(4):274–8

PANCREATIC ALPHA CELLS see **ISLANDS OF LANGERHANS**

PANCREATIC BETA CELLS see **ISLANDS OF LANGERHANS**

PANCREATIC CYST

Psoas muscle pancreatic pseudocyst: CT—US diagnosis and percutaneous drainage. Alvarez-Castells A, et al. **Gastrointest Radiol** 1989 Summer;14(3):229–32

Pseudocyst of pancreas in children. Wakhlu AK, et al. **Indian Pediatr** 1988 Jan;25(1):87–8

Cystic neoplasms and true cysts of the pancreas. Howard JM. **Surg Clin North Am** 1989 Jun;69(3):651–65 (45 ref.)

[Mediastinal pancreas pseudocyst] Gaa J, et al. **Rontgenblatter** 1988 Oct;41(10):406–10 (36 ref.) (Eng. Abstr.) (Ger)

COMPLICATIONS

Fistulous communication of a pancreatic pseudocyst with the common bile duct: demonstration by operative cholangiogram [letter] Bresler L, et al. **Am J Gastroenterol** 1989 Jul;84(7):835–6

Heterotopic pancreas: gastric outlet obstruction secondary to pancreatitis and pancreatic pseudocyst. Burke GW, et al. **Am J Gastroenterol** 1989 Jan;84(1):52–5

Variceal hemorrhage as a consequence of spontaneous rupture of a pancreatic pseudocyst into the splenic vein. Demetrick DJ, et al. **Am J Gastroenterol** 1989 Sep; 84(9):1103–5

Bilateral ureteral obstruction: an unusual complication of pancreatitis. Stone MM, et al. **Am J Gastroenterol** 1989 Jan;84(1):49–51

Pseudocysts in chronic pancreatitis. Surgical results in 102 consecutive patients. Kiviluoto T, et al. **Arch Surg** 1989 Feb;124(2):240–3

Two cases of pseudo-aneurysm of the gastroduodenal artery. Fielding GA, et al. **Aust N Z J Surg** 1988 Aug;58(8):671–3

Excision of a pancreatic pseudocyst causing dysphagia. Steel A, et al. **Br J Hosp Med** 1989 Jan;41(1):84–5

Pancreatic cysts and pseudocysts associated with acute and chronic pancreatitis. Bourliere M, et al. **Dig Dis Sci** 1989 Mar;34(3):343–8

Pancreatic pseudocyst as a cause for secondary achalasia. Woods CA, et al. **Gastroenterology** 1989 Jan;96(1):235–9

Severe hemorrhage associated with pancreatic pseudocysts: report of two cases. Belli G, et al. **Int J Pancreatol** 1989 May;4(4):455–60

Peripheral neuropathy complicating pancreatitis and major pancreatic surgery. Gross ML, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1341–4

Pancreas divisum, pancreatic pseudocyst, and choledochal cyst in an 8-year-old child. Tuggle DW, et al. **J Pediatr Surg** 1989 Jan;24(1):52–3

Bilateral ureteral necrosis and obliteration secondary to pancreatic pseudocyst. Meller S, et al. **J Urol** 1988 Dec; 140(6):1523–5

[A case of chronic pancreatogenic ascites] Dimitrov D, et al. **Khirurgiia (Sofiia)** 1989;42(2):84–7 (Bul)

[Spontaneous perforation of a pancreatic pseudocyst into the duodenum] Ryska M, et al. **Rozhl Chir** 1989 May; 68(5):312–4 (Eng. Abstr.) (Cze)

[Hemobilia following erosion of the gastroduodenal artery and common bile duct by a pancreatic cyst] Krawietz W, et al. **Internist (Berlin)** 1988 Aug;29(8):586–8 (Ger)

[Spontaneous hemoperitoneum caused by hemorrhage and the rupture of pancreatic pseudocysts] Lefemine S, et al. **Minerva Chir** 1989 Jun 15;44(11):1611–6 (14 ref.) (Eng. Abstr.) (Ita)

[Hemoperitoneum in segmental portal hypertension caused by pancreatic pseudocyst] Ruotolo F, et al. **Minerva Chir** 1989 Mar 15;44(5):909–13 (Eng. Abstr.) (Ita)

[Surgically treated giant neoplastic cyst of the pancreas] Kołodziejski L, et al. **Nowotwory** 1988 Apr–Jun; 38(2):139–43 (Eng. Abstr.) (Pol)

[A special case of obstruction of a biliojejunal anastomosis: compression of the anastomotic loop by a pancreatic pseudocyst] Dragomirescu C, et al. **Rev Chir [Chir]** 1989 Mar–Apr;38(2):147–50 (Eng. Abstr.) (Rum)

[Hemorrhage into the abdominal cavity from a pancreatic cyst] Kukharchuk VP, et al. **Klin Khir** 1988;(11):57 (Rus)

[Pancreato-pleural fistula as a complication of post-traumatic pancreatic mediastinal pseudocyst] Matejiček E, et al. **Rozhl Chir** 1989 Apr;68(4):240–4 (Eng. Abstr.) (Slo)

[Isolated obstruction of the splenic vein by a pancreatic pseudocyst] Moreira Vicente VF, et al. **Rev Esp Enferm Apar Dig** 1988 Jun;73(6):721–4 (Eng. Abstr.) (Spa)

DIAGNOSIS

Intrahepatic rupture of a pancreatic pseudocyst: sonographic and CT demonstration [letter] Lantink JA, et al. **AJR Am J Roentgenol** 1989 May;152(5):1129

Thoracic manifestations of internal pancreatic fistulas: report of five cases. Izbicki JR, et al. **Am J Gastroenterol** 1989 Mar;84(3):265–71

Pancreatic pseudocysts: clinical and endoscopic experience. Kolars JC, et al. **Am J Gastroenterol** 1989 Mar;84(3):259–64

Distortion of pancreatic anatomy during ERCP: effects of patient position and endoscopic manipulation [letter] Lough LR, et al. **Am J Gastroenterol** 1989 Sep;84(9):1122–3

Mucinous cystadenoma: pitfalls of differential diagnosis. Sachs JR, et al. **Am J Gastroenterol** 1989 Jul;84(7):811–6

Gastric intramural pseudocyst of the pancreas. Zahlan B, et al. **Can Assoc Radiol J** 1988 Dec;39(4):282–3

Cystadenocarcinoma versus pseudocyst of the pancreas: a difficult differential diagnosis. Lee YT. **Curr Surg** 1989 May–Jun;46(3):202–6 (28 ref.)

Bloody drainage following endoscopic retrograde pancreatography as a presentation of a pseudoaneurysm–containing pseudocyst. Gholson CF, et al. **Gastrointest Endosc** 1989 Mar–Apr;35(2):111–2

Cystic dilation of the major pancreatic duct resembling multiple pancreatic pseudocysts. Simmons TC, et al. **Gastrointest Endosc** 1989 May–Jun;35(3):251–4

Diagnostic dilemmas in patients with cystic neoplasms of the pancreas. Turnage RH, et al. **Int J Pancreatol** 1988 Dec; 3(6):477–89

Gantry tilt technique for CT-guided biopsy and drainage. Yueh N, et al. **J Comput Assist Tomogr** 1989 Jan–Feb; 13(1):182–4

Pancreatic pseudocysts in Ile-Ife, Nigeria: a report of 6 cases. Akinola DO. **Trop Doct** 1988 Oct;18(4):163–6

[Cystic dystrophy on aberrant pancreas. Contribution of ultrasound–endoscopy] Andrieu J, et al. **Gastroenterol Clin Biol** 1989 Jun;13(6–7):630–3 (11 ref.) (Eng. Abstr.) (Fre)

[Diagnosis of an unclear retrocardial pseudomediastinal space–occupying lesion] Reimer P, et al. **ROFO** 1989 Feb; 150(2):221–2 (Ger)

[The role of intraoperative ultrasonic studies in abdominal surgery] Winternitz T, et al. **Orv Hetil** 1989 Jun 25; 130(26):1377–8, 1381–2 (27 ref.) (Eng. Abstr.) (Hun)

[Pseudoaneurysm in a pancreatic pseudocyst] Calzona C, et al. **Radiol Med (Torino)** 1989 Apr;77(4):422–4 (Ita)

[Pancreatic cystic neoplasms. Echographic–CT aspects and differential diagnosis] Rossi A, et al. **Radiol Med (Torino)** 1988 Nov;76(5):425–33 (Eng. Abstr.) (Ita)

[Ultrasonic studies in the diagnosis of diseases of the organs of the abdominal cavity] Portnoĭ LM, et al. **Khirurgiia (Mosk)** 1988 Nov;(11):77–81 (Eng. Abstr.) (Rus)

[Errors in the diagnosis and treatment of pancreatic cysts] Nikhinson RA, et al. **Klin Med (Mosk)** 1989 May; 67(5):104–7 (Eng. Abstr.) (Rus)

DRUG THERAPY

[Treatment of acute pancreatitis with indomethacin. A controlled study of the formation of pseudocysts and their subsequent course] Bredkjaer HE, et al. **Ugeskr Laeger** 1988 Nov 21;150(47):2902–3 (Eng. Abstr.) (Dan)

ENZYMOLOGY

Characterization of phospholipase A2 activity in aspirates of human pancreatic pseudocysts after isolation by reversed-phase high performance liquid chromatography. Göke B, et al. **Klin Wochenschr** 1989 Feb 1;67(3):131–5

EPIDEMIOLOGY

Pseudocysts of the pancreas in children: an African series. Mabogunje OA. **Ann Trop Paediatr** 1988 Dec;8(4):241–3

ETIOLOGY

[Pseudocyst and pancreatitis. Which factors are predictive of development?] Ruchat P, et al. **Schweiz Med Wochenschr** 1989 May 27;119(21):760–1 (Eng. Abstr.) (Fre)

GENETICS

Autosomal dominant polycystic kidney disease with liver and pancreatic involvement in early childhood. Milutinovic J, et al. **Am J Kidney Dis** 1989 Apr;13(4):340–4

PATHOLOGY

Cystadenocarcinoma of the pancreas 9 years after a pancreatic cyst operation: report of a case. Emdin SO, et al. **Eur J Surg Oncol** 1989 Apr;15(2):169–73

Papillary cystic tumour of pancreas [letter] Nirmala V, et al. **Indian J Gastroenterol** 1988 Oct;7(4):245

Immunohistochemical studies on cystic pancreatic neoplasms. Helpap B, et al. **Pathol Res Pract** 1988 Dec;184(1):39–45

Squamous cell carcinoma infiltrating a pancreatic pseudocyst. Morgan J, et al. **South Med J** 1989 Sep;82(9):1161–4

[A papillary-cystic neoplasm of the pancreas, a calcifying-inverted variant] Hayashi T, et al. **Gan No Rinsho** 1989 Sep;35(10):1183–8 (Eng. Abstr.) (Jpn)

[A case of pancreatic pseudocyst intruded into the right lobe of the liver] Shimayama T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Sep;85(9):1708–11 (Jpn)

[Concurrent pancreatic pseudocysts in the thoracic and abdominal cavities] Shavlokhov VS, et al. **Khirurgiia (Mosk)** 1989 Jan;(1):110–1 (Rus)

[Pancreatic pseudocyst. Description of a case in an infant] Bulnes-Mendizábal D, et al. **Bol Med Hosp Infant Mex** 1989 Jun;46(6):422–7 (Eng. Abstr.) (Spa)

RADIOGRAPHY

Differentiating pancreatic pseudocyst and pancreatic necrosis using computerized tomography. Mainwaring R, et al. **Ann Surg** 1989 May;209(5):562–7; discussion 567–8

Preoperative endoscopic retrograde cholangiopancreatography (ERCP) in patients with pancreatic pseudocyst associated with resolving acute and chronic pancreatitis. Nealon WH, et al. **Ann Surg** 1989 May; 209(5):532–8; discussion 538–40

Gastric intramural pseudocyst: computed tomographic diagnosis. Milici LP, et al. **Gastrointest Radiol** 1989 Spring; 14(2):113–4

Mucinous pancreatic duct ectasia in the body of the pancreas. Agostini S, et al. **Radiology** 1989 Mar;170(3 Pt 1):815–6

[CT diagnosis of pseudocyst of the pancreas] Shen FX. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Dec; 22(6):347–50 (Eng. Abstr.) (Chi)

[Papillary-cystic tumor of the pancreas in young women] Schroeder R, et al. **Schweiz Med Wochenschr** 1988 Dec 24;118(51):1957–61 (Eng. Abstr.) (Fre)

[A cystic epigastric tumor? A differentiated urothelial carcinoma on the left with growth into a large pancreatic pseudocyst] Frahm R, et al. **Radiologe** 1988 Aug; 28(8):399–400 (Ger)

RADIONUCLIDE IMAGING

Incidental discovery of a large duplication cyst during Meckel's scintigraphy. Vazquez R, et al. **Clin Nucl Med** 1989 Jul;14(7):537

SURGERY

Percutaneous drainage of traumatic pancreatic pseudocysts in children. Jaffe RB, et al. **AJR** 1989 Mar;152(3):591–5

An internalized double-J catheter for percutaneous transgastric cystogastrostomy. Sacks BA, et al. **AJR** 1989 Mar;152(3):523–6

Blunt pancreatic injuries in children: the role of percutaneous external drainage in the treatment of pancreatic pseudocysts. Bass J, et al. **J Pediatr Surg** 1988 Aug; 23(8):721–4

Pancreatic pseudocyst. Stavas J. **Nebr Med J** 1988 Oct; 73(10):313–5

Percutaneous drainage of immature pancreatic pseudocyst. A preliminary study of 4 cases. D'Egidio A, et al. **S Afr J Surg** 1989 Jul;27(3):96–9

Operative strategies in the management of mediastinal pancreatic pseudocyst. Beauchamp RD, et al. **Surgery** 1989 Sep;106(3):567–70

[New possibilities of treatment of pancreatic pseudocyst] Fischer J, et al. **Rozhl Chir** 1989 May;68(5):315–9 (Eng. Abstr.) (Cze)

[The solid-cystic pancreas tumor] Kienzle HF, et al. **Chirurg** 1989 Jun;60(6):410–4 (Eng. Abstr.) (Ger)

[Chronic pancreatitis with inflammatory enlargement of the head of the pancreas. Early and late results following duodenum saving resection of the head of the pancreas] Beger HG, et al. **Med Klin** 1988 Sep 2;83(17):548–53, 576 (Eng. Abstr.) (Ger)

[Experiences with percutaneous drainage of abscesses and pseudocysts] Freitag J, et al. **Zentralbl Chir** 1989; 114(7):462–6 (Eng. Abstr.) (Ger)

[Giant mediastinal pancreatic pseudocyst removed by thoracotomy] Kecskés L, et al. **Orv Hetil** 1988 Sep 18; 129(38):2033–5 (Eng. Abstr.) (Hun)

[Pseudocysts of the pancreas: diagnostic and therapeutic protocols. Notes on 10 treated cases] Schiavone M, et al. **Minerva Chir** 1989 Apr 30;44(8):1239–47 (Eng. Abstr.) (Ita)

[Surgical treatment of pancreatic pseudocyst] Vietri P, et al. **Minerva Chir** 1988 Oct 31;43(20):1669–76 (Eng. Abstr.) (Ita)

[Pancreatic pseudocysts] Stăncescu M, et al. **Rev Chir [Chir]** 1989 Mar–Apr;38(2):137–46 (Eng. Abstr.) (Rum)

[Pancreatectomy in complicated chronic pancreatitis] Kadoshchuk TA, et al. **Khirurgiia (Mosk)** 1988 Sep; (9):89–96 (Eng. Abstr.) (Rus)

[Computerized tomography in the evaluation of early complications after operations on the pancreas] Todua FI, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):125–30 (Rus)

[Extensive surgery of a multilocular pancreatic cyst] Shevchuk MG, et al. **Klin Khir** 1988;(11):56 (Rus)

[Surgical treatment of complicated cysts of the pancreas] Kurygin AA, et al. **Vestn Khir** 1988 Oct;141(10):35–9 (Eng. Abstr.) (Rus)

[Separate external-internal drainage in the surgical treatment of pancreatic pseudocysts] Shalimov AA, et al. **Vestn Khir** 1988 Aug;141(8):56–7 (Rus)

[Pancreatic pseudocysts. Treatment with percutaneous drainage] Bianchi A, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 2):656–60 (Eng. Abstr.) (Spa)

THERAPY

Cystocolic fistula: a complication in percutaneous drainage of a pseudopancreatic cyst [letter] Gupta A. **AJR Am J Roentgenol** 1989 Jul;153(1):192

Management of pancreatic pseudocysts. Andersson R, et al. **Br J Surg** 1989 Jun;76(6):550–2

Pancreatic cysts and pseudocysts: new rules for a new game. Warshaw AL. **Br J Surg** 1989 Jun;76(6):533–4 (11 ref.)

Changing concepts in the management of pancreatic pseudocysts [editorial] Barkin JS, et al. **Gastrointest Endosc** 1989 Jan–Feb;35(1):62–4

Endoscopic management of cysts and pseudocysts in chronic pancreatitis: long-term follow-up after 7 years of experience. Cremer M, et al. **Gastrointest Endosc** 1989 Jan–Feb;35(1):1–9

Traumatic pancreatitis and pseudocyst in children: current management. Warner RL Jr, et al. **J Trauma** 1989 May; 29(5):597–601 (24 ref.)

Percutaneous drainage of infected and noninfected pancreatic pseudocysts: experience in 101 cases. vanSonnenberg E, et al. **Radiology** 1989 Mar;170(3 Pt 1):757–61

[Percutaneous, endoscopic drainage of pancreatic cysts] Heyder N, et al. **Verh Dtsch Ges Inn Med** 1988;94:127–31 (Ger)

[Gastrointestinal drainage—technic and efficacy] Soehendra N. **Verh Dtsch Ges Inn Med** 1988;94:633–6 (Ger)

[Sonographically controlled percutaneous pancreo-gastric pseudocyst drainage] Heyder N, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:217–8 (Ger)

[Non-operative treatment of abscesses and cysts of the pancreas] Szmeja J, et al. **Wiad Lek** 1988 Nov 15; 41(22):1534–40 (Pol)

[Treatment of pancreatic cysts using percutaneous punctures and drainage under ultrasonic control] Gal'perin EI, et al. **Khirurgiia (Mosk)** 1989 Jan;(1):65–8 (Eng. Abstr.) (Rus)

[Outcome in patients with complicated pancreatic cysts who refused surgery] Smirnov AD. **Klin Khir** 1988;(11):4–5 (Eng. Abstr.) (Rus)

PANCREATIC CYSTIC FIBROSIS see **CYSTIC FIBROSIS**

PANCREATIC DISEASES

see related
HYPERINSULINISM

Tubercular abscess of the pancreas [letter] Aggarwal P, et al. **Am J Gastroenterol** 1989 Aug;84(8):985–6

EPC. European Pancreatic Club, XXIst meeting. Glasgow, September 20–23, 1989. Abstracts. **Digestion** 1989;

43(3):123–84
Gastrointestinal emergencies in the acquired immunodeficiency syndrome. Sievert W, et al. **Gastroenterol Clin North Am** 1988 Jun;17(2):409–18 (34 ref.)
Pancreatic Society of Great Britain and Ireland, 13th annual meeting. London, 16 December 1988. Selected abstracts. **Gut** 1989 Aug;30(8):A1160–4
Peri-pancreatic abscess and septicemia due to Salmonella dublin in a hemodialysis patient [letter] Hoen B, et al. **Infection** 1988 Jul–Aug;16(4):248
Nesidioblastosis in adults. Chines A, et al. **Isr J Med Sci** 1989 Aug;25(8):450–3
Abstracts: American Pancreatic Association. October 27–28, 1988, Chicago, Illinois. **Pancreas** 1988;3(5):587–623
The pancreas. **Surg Clin North Am** 1989 Jun;69(3):447–686
[Pancreatic fistulas] Falcone F. **Minerva Chir** 1989 Jan 31; 44(1–2):211–3 (11 ref.) (Ita)

BLOOD

Serum immunoreactive trypsin in tropical pancreatic diabetes syndrome. Yajnik CS, et al. **Ann Clin Biochem** 1989 Jan; 26 (Pt 1):69–73
Pancreatic nesidioblastosis in adults. Fong TL, et al. **Diabetes Care** 1989 Feb;12(2):108–14 (34 ref.)
Erythrocyte insulin binding abnormalities in fibro calculous pancreatic diabetes. Ramachandran A, et al. **Horm Metab Res** 1988 Nov;20(11):693–7
The measurement of serum immunoreactive pancreatic secretory trypsin inhibitor in gastrointestinal cancer and pancreatic disease. Satake K, et al. **Int J Pancreatol** 1988 Jul;3(5):323–31
[Respiratory function of the blood in patients in critical conditions: saturation of arterial blood with O2 as a function of P50] Riabov GA, et al. **Anesteziol Reanimatol** 1988 May–Jun;(3):28–31 (Eng. Abstr.) (Rus)

CHEMICALLY INDUCED

Sequential ultrastructural changes of the pancreas in zinc toxicosis in ducklings. Kazacos EA, et al. **Am J Pathol** 1989 Mar;134(3):581–95
Prostaglandin analogue protects pancreatic B-cells against cyclosporin A toxicity. Löhr M, et al. **Experientia** 1989 Apr 15;45(4):352–5
Histogenesis of early preneoplastic lesions induced by N-nitrosobis(2-oxopropyl)amine in exocrine pancreas of hamsters. Meijers M, et al. **Int J Pancreatol** 1989 Mar; 4(2):127–37

CLASSIFICATION

Nesidiodysplasia: selection of reliable cell markers [letter] Drut RM, et al. **Hum Pathol** 1989 Sep;20(9):923

COMPLICATIONS

The spectrum of pancreatic disorders in patients with the acquired immune deficiency syndrome. Schwartz MS, et al. **Am J Gastroenterol** 1989 May;84(5):459–62 (42 ref.)
Tuberculous pancreatic abscess as a manifestation of AIDS [letter] Tetzeli JP, et al. **Am J Gastroenterol** 1989 May; 84(5):581–2
Adult nesidioblastosis. An unusual cause of fasting hypoglycemia. McHenry C, et al. **Am Surg** 1989 Jun; 55(6):366–9
Somatostatin analogue SMS 201–995 in the short-term management of neonatal hyperinsulinism due to nesidioblastosis. Sullivan MJ, et al. **Aust Paediatr J** 1988 Dec;24(6):375–8
Pleural effusions and pancreatico-pleural fistulae associated with asymptomatic pancreatic disease. Cooper CB, et al. **Br J Dis Chest** 1988 Jul;82(3):315–20
Dried blood spot glucose measurement in hyperinsulinaemic hypoglycaemia. Rattenbury JM, et al. **Clin Biochem** 1989 Aug;22(4):301–3
Relevance of endocrine pancreas nesidioblastosis to hyperinsulinemic hypoglycemia. Rahier J. **Diabetes Care** 1989 Feb;12(2):164–6 (41 ref.)
Long-acting somatostatin analog in refractory neonatal hypoglycemia: follow-up information [letter] Jackson JA, et al. **J Pediatr** 1988 Dec;113(6):1118
Etiological relationships between choledochal cyst and anomalous junction of the pancreaticobiliary ductal system. Kato T. **Keio J Med** 1989 Jun;38(2):136–51 (79 ref.)
Pathology of anomalous junction of the pancreaticobiliary ductal system: mutagenicity of the contents of the biliary tract and nuclear atypia of the biliary epithelium. Kato T, et al. **Keio J Med** 1989 Jun;38(2):167–76
Silent human pancreatic glucagonoma and "A" nesidioblastosis. Balas D, et al. **Pancreas** 1988;3(6):734–9
Pancreatic lithiasis: a rare cause of gastrointestinal hemorrhage. Marescaux J, et al. **Surgery** 1989 May; 105(5):682–5 (17 ref.)
Tuberculosis of the pancreas: a case report. Crook LD, et al. **Tubercle** 1988 Jun;69(2):148–51
[Diabetes and pancreatic calcifications. Results of a survey in a Cameroon hospital] Jeandel P, et al. **Med Trop (Mars)** 1988 Jul–Sep;48(3):267–71 (Eng. Abstr.) (Fre)
[Splenic vein occlusion due to pancreatic disease: regional portal hypertension from hemodynamic points of view] Ku Y, et al. **Nippon Geka Gakkai Zasshi** 1989 Mar;90(3):409–14 (Eng. Abstr.) (Jpn)
[A case of idiopathic chronic pancreatitis associated with marked dilatation of the pancreatic duct and pancreatic non-opaque concretion] Kitagawa M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jul;85(7):1425–9 (Jpn)
[Age-related amyloidosis of the pancreatic islets and diabetes mellitus] Zykova LD, et al. **Klin Med (Mosk)** 1988 Dec; 66(12):80–4 (Eng. Abstr.) (Rus)
[Spontaneous drainage of a pancreatic abscess into the digestive tract] Vázquez CJ, et al. **Rev Gastroenterol Mex** 1989 Jan–Mar;54(1):31–3 (Eng. Abstr.) (Spa)

DIAGNOSIS

Ultrasound guided percutaneous pancreatic biopsy. Mitchell CJ, et al. **Br J Surg** 1989 Jul;76(7):706–7
The abdominal manifestation of von Hippel-Lindau disease and a radiological screening protocol for an affected family. Jennings CM, et al. **Clin Radiol** 1988 Jul;39(4):363–7 (29 ref.)
Immune-mediated panniculitis, mimicking pancreatic-disease-associated fat necrosis. Hainaut P, et al. **Clin Rheumatol** 1988 Dec;7(4):522–6
Role of serum pancreatic enzyme assays in diagnosis of pancreatic disease. Ventrucci M, et al. **Dig Dis Sci** 1989 Jan;34(1):39–45
Acute diseases of the pancreas and biliary tract. Management in the emergency department. Young M. **Emerg Med Clin North Am** 1989 Aug;7(3):555–73 (52 ref.)
Diagnostic approaches to pancreatic disease: from rags to riches and still searching. Berk JE. **Int J Pancreatol** 1988 Dec;3(6):405–8
Laboratory tests in the diagnosis of the chronic pancreatic diseases. Part 7. Comparison between function tests and morphological investigation in the diagnosis of pancreatic disease. Boyd EJ, et al. **Int J Pancreatol** 1988 Jul;3(5):301–7 (26 ref.)
Pancreatic proteases and antiproteases in pancreatic disease; biochemical, pathophysiological and clinical aspects. Ohlsson K, et al. **Int J Pancreatol** 1988;3 Suppl 1:S67–78 (52 ref.)
Exocrine pancreatic function tests. Li YY, et al. **J Clin Gastroenterol** 1989 Aug;11(4):376–8 (36 ref.)
Time-resolved fluoroimmunoassay of pancreatic phospholipase A2. Nevalainen TJ, et al. **Klin Wochenschr** 1989 Feb 1;67(3):103–5
Microliths causing acute pancreatitis--a diagnostic gap [letter] Born P, et al. **Pancreas** 1989;4(3):392–3
Intrahepatic periportal abnormal intensity on MR images: an indication of various hepatobiliary diseases. Matsui O, et al. **Radiology** 1989 May;171(2):335–8
Sonographic diagnosis and follow-up in a patient with pancreatic roundworms. A case report. Schulman A. **S Afr Med J** 1989 Feb 18;75(4):184–5
Significance of a sonographic secretin test in the diagnosis of pancreatic disease. Results of a prospective study. Glaser J, et al. **Scand J Gastroenterol** 1989 Mar;24(2):179–85
[Rational diagnosis of diseases of the pancreas] Benešová J, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1988;31(1):77–89 (Eng. Abstr.) (Cze)
[Basic abdominal ultrasound diagnosis course. The pancreas] Gresser U. **Bildgebung** 1987–89;56 Suppl 1:44–7 (Ger)
[Exocrine pancreatic failure: rational and efficient functional diagnosis] Lankisch PG. **Dtsch Med Wochenschr** 1989 May 5;114(18):715–7 (21 ref.) (Ger)
[Diagnostic strategies of the pancreas] Beger HG, et al. **Langenbecks Arch Chir** 1988;Suppl 2:441–7 (5 ref.) (Eng. Abstr.) (Ger)
[Sonographic diagnosis of the pancreas] Braun B. **Verh Dtsch Ges Inn Med** 1988;94:554–9 (Ger)
[Ultrasound imaging of the pancreas] Dancygier H. **Verh Dtsch Ges Inn Med** 1988;94:79–89 (28 ref.) (Ger)
[Direct assessments of pancreatic function] Fölsch UR. **Verh Dtsch Ges Inn Med** 1988;94:73–7 (23 ref.) (Ger)
[Testosterone-dihydrotestosterone ratio in the differential diagnosis of pancreatic disease] Sándor Z, et al. **Orv Hetil** 1989 Jun 25;130(26):1387–8 (Eng. Abstr.) (Hun)
[Determination of blood pancreatic isoamylase after inhibition of salivary isoamylase with monoclonal antibodies] Zoni L. **Medicina (Firenze)** 1988 Jan–Mar; 8(1):83–5 (Eng. Abstr.) (Ita)
[Selection and understanding of bedside tests. Pancreatic symptoms] Ikeda M, et al. **Rinsho Byori** 1987 Jul;Spec No 72:160–9 (Jpn)
[Use of imaging examinations (ultrasonography and computerized tomography) in the evaluation of the pancreatic structure in patients with a history of acute pancreatitis] Małecka-Panas E, et al. **Pol Tyg Lek** 1988 Sep 19;43(38):1218–21, 1232 (Eng. Abstr.) (Pol)
[Exercises of clinical reasoning] **Arq Gastroenterol** 1988 Jan–Mar;25(1):59–62 (Por)
[Double penetration of kissing duodenal ulcers into the pancreas and organs of the biliary system] Kolibaba SS, et al. **Klin Med (Mosk)** 1989 Jan;67(1):123–4 (Rus)
[Iridodiagnosis of pancreatic pathology in childhood] Kameneva OP, et al. **Pediatriia** 1988;(5):62–5 (Rus)
[Ultrasonic endoscopic examination in pancreatic diseases] Kotovskiĭ AE, et al. **Vestn Khir** 1989 Jan;142(1):21–4 (Eng. Abstr.) (Rus)
[Reactive protein C in the diagnosis and prognosis of pancreatic disorders (editorial)] Arias Vallejo E. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 2):684 (5 ref.) (Spa)
[Retrospective evaluation of 500 endoscopic cholangiopancreatographies performed at the Instituto Nacional de la Nutrición "Salvador Zubiran"] Elizondo J, et al. **Rev Gastroenterol Mex** 1989 Jan–Mar;54(1):19–26 (Eng. Abstr.) (Spa)
[Usefulness of real-time sonography in the evaluation of a pathology of the pancreas] Rodríguez R, et al. **Rev Med Panama** 1988 May;13(2):92–9 (Eng. Abstr.) (Spa)

DRUG THERAPY

Ceftriaxone in biliary and pancreatic abscesses. Pirich K, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):469–70
[Effect of the antioxidant dibunol on the course of a neurodystrophic process in the rat pancreas] Bykov AV, et al. **Biull Eksp Biol Med** 1989 May;107(5):568–70 (Eng. Abstr.) (Rus)

ENZYMOLOGY

Role of lysosomes in pancreatic diseases. Figarella C, et al. **Int J Pancreatol** 1988;3 Suppl 1:S9–18 (17 ref.)
Fractional urinary clearance of immunoreactive lipase in chronic pancreatic disease. Benini L, et al. **J Clin Chem Clin Biochem** 1988 Aug;26(8):527–9

ETIOLOGY

Nesidioblastosis of the pancreas in an adult with persistent hyperinsulinemic hypoglycemia. Albers N, et al. **Am J Clin Pathol** 1989 Mar;91(3):336–40
Pancreatic abscess following acute pancreatitis. Katsohis CD, et al. **Am Surg** 1989 Jul;55(7):427–34
Pancreatic tuberculous abscess. Meinke AK. **Conn Med** 1989 Mar;53(3):139–41 (19 ref.)
Case-control study on risk factors associated with fibrocalculous pancreatic diabetes. Vannasaeng S, et al. **Diabetic Med** 1988 Dec;5(9):835–9
Mild pancreatic damage in acute viral hepatitis. Taranto D, et al. **Digestion** 1989;42(2):93–7
Pancreatic abscess caused by Clostridium difficile. Sofianou DC. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):528–9
Severe hemorrhage associated with pancreatic pseudocysts: report of two cases. Belli G, et al. **Int J Pancreatol** 1989 May;4(4):455–60
Pancreatic abscess secondary to Candida albicans. Howard JM, et al. **Pancreas** 1989;4(1):120–2
[Alcoholic pancreatic steatosis (letter)] Bedossa P, et al. **Gastroenterol Clin Biol** 1989 Jun;13(6–7):642–3 (Fre)
[Pancreatic sarcoidosis] Robaszkiewicz M, et al. **Gastroenterol Clin Biol** 1989 Mar;13(3):302–4 (10 ref.) (Eng. Abstr.) (Fre)
[Unusual localizations of hydatid cysts. Apropos of 40 cases] Abi F, et al. **J Chir (Paris)** 1989 May;126(5):307–12 (Eng. Abstr.) (Fre)
[Suppuration after obstruction of Wirsung's duct with a solution of prolaminecid (Ethibloc) (letter)] Gossot D, et al. **J Chir (Paris)** 1988 Nov;125(11):674–5 (Fre)
[Nephrocalcinosis and pancreatic calcification after ablation of adrenal adenoma: the role of hypercortisolism?] Picaud JC, et al. **Pediatrie** 1989;44(2):103–7 (10 ref.) (Eng. Abstr.) (Fre)
[Pulmonary aspergillomas and pancreatic localization in disseminated aspergillosis (letter)] Xerri L, et al. **Presse Med** 1988 Oct 1;17(33):1704 (Fre)
[Pancreatic diseases associated with alcoholism] Tajiri H, et al. **Nippon Rinsho** 1988 Aug;46(8):1717–21 (Jpn)
[Pancreatic calculi of a non-alcoholic nature] Savinov IP, et al. **Vestn Khir** 1988 Dec;141(12):37–9 (Rus)

GENETICS

The genetic predisposition to fibrocalculous pancreatic diabetes. Kambo PK, et al. **Diabetologia** 1989 Jan; 32(1):45–51
Mitochondrial DNA deletion in Pearson's marrow/pancreas syndrome [letter] Rotig A, et al. **Lancet** 1989 Apr 22; 1(8643):902–3

IMMUNOLOGY

Immunoreactive trypsin in Shwachman's syndrome. Dossetor JF, et al. **Arch Dis Child** 1989 Mar;64(3):395–6
Human nesidioblastosis tissue as an immunogen for generation of islet cell specific monoclonal antibodies. Gerbitz KD, et al. **J Clin Chem Clin Biochem** 1988 Nov; 26(11):659–66
Modulation of insulitis following thymus transplantation. Georgiou HM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):215–7

METABOLISM

Factors contributing to the accelerated clearance of theophylline and antipyrine in adults with exocrine pancreatic disease. Acheson DW, et al. **Clin Sci** 1989 Apr; 76(4):377–85
Starch digestion in normal subjects and patients with pancreatic disease, using a 13CO2 breath test. Hiele M, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):503–9
Phospholipase and prostaglandins. Figarella C.

Int J Pancreatol 1988;3 Suppl 1:S87–93 (5 ref.)
Selective precipitation of 14 kDa stone/thread proteins by concentration of pancreaticobiliary secretions: relevance to pancreatic ductal obstruction, pancreatic failure, and CF. Forstner GG, et al. J Pediatr Gastroenterol Nutr 1989 Apr; 8(3):313–20
[An immunohistochemical study on obstructive pancreatic disorders] Suda K, et al. Rinsho Byori 1989 Feb; 37(2):178–82 (Jpn)

PATHOLOGY

Diffuse and focal nesidioblastosis. A clinicopathological study of 24 patients with persistent neonatal hyperinsulinemic hypoglycemia. Goossens A, et al. Am J Surg Pathol 1989 Sep;13(9):766–75
Recurrence of disease in pancreas transplants. Sutherland DE, et al. Diabetes 1989 Jan;38 Suppl 1:85–7
Production of pro–insulin, C–peptide, and insulin in nesidioblastosis, focal islet–cell adenomatosis, and genuine insulomas. A correlated radioimmunochemical, immunohistochemical, and ultrastructural investigation with particular regard to the occurrence of argyrophil and pro–insulin immunoreactive cells. Kohnert KD, et al. Diabetes Res 1988 Aug;8(4):151–63
The pancreas in acute graft versus host disease in man. Foulis AK, et al. Histopathology 1989 Feb;14(2):121–8
Ultrastructural formation of Langerhans' cell granules in a case of histiocytosis X [letter] Bruno J, et al. Ultrastruct Pathol 1989 Jan–Feb;13(1):89–90
[Ultrasonically–guided diagnostic punctures in pancreatic and adrenal diseases] Matter D. Bull Cancer (Paris) 1988; 75(9):895–902 (Eng. Abstr.) (Fre)
[Ultrasound controlled fine needle cytology and fine needle histology in circumscribed pancreatic processes] Fröhlich E, et al. Leber Magen Darm 1988 Sep;18(5):236, 239–44 (Eng. Abstr.) (Ger)
[Cytology of the pancreas—fine needle biopsy and analysis of pancreatic juice] Schenck U. Verh Dtsch Ges Inn Med 1988;94:101–5 (59 ref.) (Ger)
[Fine needle biopsy of the pancreas with computerized tomography control] Hau T, et al. Zentralbl Chir 1988; 113(18):1185–9 (Eng. Abstr.) (Ger)
[Choice of the method of biopsy in the diagnosis of pancreatic diseases] Chernyĭ VA, et al. Klin Khir 1988;(11):5–7 (Eng. Abstr.) (Rus)
[Neonatal nesidioblastosis. A cellular endocrine imbalance] Nieto Vázquez B, et al. An Esp Pediatr 1988 Oct; 29(4):349–51 (Spa)

PHYSIOPATHOLOGY

Exocrine pancreatic function in tropical fibrocalculous pancreatic diabetes. Mohan V, et al. Diabetes Care 1989 Feb;12(2):145–7
Respiratory aspects of Shwachman's syndrome in adults. Wiggins J, et al. Eur Respir J 1989 Mar;2(3):285–8
The role of the liver in exocrine pancreatic disease. Braganza JM. Int J Pancreatol 1988;3 Suppl 1:S19–42 (100 ref.)
Exocrine and endocrine pancreatic function in malnutrition–related diabetes mellitus (MRDM) in Yogyakarta, Indonesia. Wiyono P. Kobe J Med Sci 1988 Oct;34(5):215–26
Alterations in digestive function caused by pancreatic disease. Doty JE, et al. Surg Clin North Am 1989 Jun;69(3):447–65 (109 ref.)
[Clinical significance of PFD test and fecal chymotrypsin test in postoperative pancreatic exocrine insufficiency] Yagi M, et al. Nippon Shokakibyo Gakkai Zasshi 1988 Jun; 85(6):1282–7 (Eng. Abstr.) (Jpn)
[Rheography of the pancreas] Kozlov VA, et al. Sov Med 1989;(4):26–9 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

Failure of antioxidant therapy (polyethylene glycol–conjugated catalase) in acute pancreatitis. Guice KS, et al. Am J Surg 1989 Jan;157(1):145–9
Prevention of lymphocytic thyroiditis and insulitis in diabetes–prone BB rats by the depletion of macrophages [letter] Wilkin TJ. Diabetologia 1988 Oct;31(10):779–80

RADIOGRAPHY

The value of angiography in the surgical management of pancreatic disease. Appleton GV, et al. Ann R Coll Surg Engl 1989 Mar;71(2):92–6
Endoscopic retrograde cholangiopancreaticographic features of pancreaticobiliary ascariasis. Bhushan B, et al. Gastrointest Radiol 1988 Oct;13(4):327–30
[Imaging of the pancreas by computerized tomography] Gerhard P, et al. Verh Dtsch Ges Inn Med 1988;94:89–100 (15 ref.) (Ger)
[ERCP in the diagnosis of bilio–pancreatic pathology. Comparison with echography and CT] Scarabino T, et al. Radiol Med (Torino) 1989 Jun;77(6):650–4 (Eng. Abstr.) (Ita)
[Evaluation of rapid sequence CT scan with intravenous bolus injection of a contrast medium in the diagnosis of pancreatic disease] Hase M, et al. Rinsho Hoshasen 1988 Aug;33(8):879–84 (Eng. Abstr.) (Jpn)
[Cholepneumoduodenography in the diagnosis of diseases of the organs of the hepatoduodenopancreatic region] Ivanov VI. Vestn Rentgenol Radiol 1988 Sep–Oct;(5):34–40 (Eng. Abstr.) (Rus)
[The role of x–ray study using drugs in the diagnosis of pancreatic diseases] Butvin GK, et al. Vrach Delo 1988 Nov;(11):25–8 (Eng. Abstr.) (Rus)

SURGERY

Pylorus–preserving pancreatectomy: functional results. Hunt DR, et al. Br J Surg 1989 Feb;76(2):173–6
Haemorrhage in pancreatic disease. Shankar S, et al. Br J Surg 1989 Aug;76(8):863–6
Pancreatoduodenectomy with occlusion of the residual stump by Neoprene injection. Di Carlo V, et al. World J Surg 1989 Jan–Feb;13(1):105–10; discussion 110–1
[7/8th pancreas resection in nesidioblastosis?] Hümmer HP, et al. Z Kinderchir 1988 Aug;43(4):281–3 (Eng. Abstr.) (Ger)
[Diagnosis and surgical therapy of pancreatic abscess] Alberghina A, et al. Minerva Chir 1988 Jun 30; 43(12):1031–6 (Eng. Abstr.) (Ita)
[Intra–operative echographic exploration of the hepatobiliopancreatic system] Ciulli A, et al. Minerva Chir 1989 Feb 28;44(4):555–9 (0 ref.) (Ita)
[Wirsung–septoplasty during interventions on Vater's ampulla] Fronticelli CM, et al. Minerva Chir 1989 Mar 15; 44(5):833–6 (Eng. Abstr.) (Ita)
[Choledochoduodenostomy in benign hepatobiliopancreatic lesions] Stoica T, et al. Rev Chir [Chir] 1988 Nov–Dec; 37(6):423–32 (Rum)
[Tactics of treating patients with pancreatic fistulas] Danilov MV, et al. Klin Khir 1988;(11):1–3 (Eng. Abstr.) (Rus)
[Endoscopic papillosphincterotomy in acute surgical diseases of the biliary tract and pancreas] Sinev IuV, et al. Klin Med (Mosk) 1988 Aug;66(8):108–10 (Eng. Abstr.) (Rus)
[Drainage using an extraperitoneal route: a better alternative in the treatment of patients with pancreatic abscess? (editorial)] Fernández del Castillo C, et al. Rev Gastroenterol Mex 1989 Apr–Jun;54(2):77–8 (Spa)
[Pancreatic abscess. Extraperitoneal drainage] García Carrasco F, et al. Rev Gastroenterol Mex 1989 Jan–Mar; 54(1):1–5 (Eng. Abstr.) (Spa)

THERAPY

Interventional endoscopy in the pancreatobiliary tree. Dowsett JF, et al. Am J Gastroenterol 1988 Dec; 83(12):1328–36 (101 ref.)
Percutaneous anterior approach to the coeliac plexus using ultrasound. Montero Matamala A, et al. Br J Anaesth 1989 Jun;62(6):637–40
Pancreatic disorders in infancy and childhood: experience with 92 cases. Vane DW, et al. J Pediatr Surg 1989 Aug; 24(8):771–6
The management of islet cell dysregulation syndromes in infancy and childhood. Aynsley–Green A. Z Kinderchir 1988 Aug;43(4):267–72
[Indications of enteral nutrition in pancreatic disorders] Botta D, et al. Ann Gastroenterol Hepatol (Paris) 1988 Nov; 24(6):335–8 (20 ref.) (Eng. Abstr.) (Fre)

URINE

[Diagnostic value of a diagnostic strip for determining urinary amylase] Satz N, et al. Schweiz Rundsch Med Prax 1989 Mar 28;78(13):368–71 (Eng. Abstr.) (Ger)

VETERINARY

Sensitivity and specificity of canine serum total amylase and isoamylase activity determinations. Jacobs RM, et al. Can J Vet Res 1988 Oct;52(4):473–5
Pancreatic atrophy in a blue and gold macaw. Quesenberry KE, et al. J Am Vet Med Assoc 1986 Nov 1;189(9):1107–8
Pancreatic abscess in dogs: six cases (1978–1986). Salisbury SK, et al. J Am Vet Med Assoc 1988 Nov 1;193(9):1104–8
Histogenesis of neoformation in the endocrine pancreas of aging horses. Furuoka H, et al. Vet Pathol 1989 Jan; 26(1):40–6
[Diseases of the exocrine pancreas in the cat] Freudiger U. Berl Munch Tierarztl Wochenschr 1989 Feb 1;102(2):37–43 (26 ref.) (Eng. Abstr.) (Ger)

PANCREATIC DUCTS

Subtotal duodenopancreatectomy for pancreatic duct, distal bile duct and periampullary carcinoma: short– and long–term results. Lygidakis NJ, et al. Am J Gastroenterol 1989 Aug;84(8):917–20
Endoscopic placement of pancreatic stents and drains in the management of pancreatitis. Kozarek RA, et al. Ann Surg 1989 Mar;209(3):261–6
Occluded pancreatic endoprostheses—analysis of the clogging material. Provansal–Cheylan M, et al. Endoscopy 1989 Mar;21(2):63–9
Pancreatic duct–portal vein fistula. Willis SM, et al. Gastroenterology 1989 Oct;97(4):1025–7
Fistula to the pancreatic duct from a peptic ulcer. Case report and literature review. Meiselman MS, et al. J Clin Gastroenterol 1988 Oct;10(5):537–40 (7 ref.)
Pancreatic duct occlusion in the management of acute necrotizing pancreatitis in a canine model. Torino F, et al. Mt Sinai J Med 1989 Mar;56(2):79–82
Seven–year experience in clinical pancreatic transplantation using duct occlusion technique. Höhnke C, et al. Transplant Proc 1989 Feb;21(1 Pt 3):2862–3
Long–term metabolic control in recipients of duct–occluded segmental pancreatic grafts. Holdaas H, et al. Transplant Proc 1989 Feb;21(1 Pt 3):2854–5
Absence of microvascular complications in long–term duct–occluded segmental pancreas autografts in dogs. Williamson P, et al. Transplant Proc 1989 Feb;21(1 Pt 3):2867–8
[Modern therapeutic endoscopy of the pancreato–biliary region] Dítě P, et al. Cas Lek Cesk 1989 Mar 17; 128(12):360–2 (Eng. Abstr.) (Cze)
[A diffuse form of canalicular ectasia of pancreas? (letter)] Crinquette JF, et al. Gastroenterol Clin Biol 1988 Nov; 12(11):866–7 (Fre)
[Role of Vater's papilla and Wirsung's duct in acute biliary pancreatitis. Surgery with laser and operating microscope] Casaccia M, et al. Minerva Chir 1989 Jan 31;44(1–2):203–10 (19 ref.) (Ita)
[Functional exclusion of the exocrine pancreas in pancreatic transplants: use of polymers in animal experiments] Dominici C, et al. Minerva Chir 1988 Jun 30;43(12):1013–8 (Eng. Abstr.) (Ita)
[Hemorrhage in the Wirsung's duct caused by aneurysm of the splenic artery in chronic pancreatitis] Uomo G, et al. Minerva Dietol Gastroenterol 1989 Jan–Mar;35(1):55–60 (47 ref.) (Eng. Abstr.) (Ita)
[A case of idiopathic chronic pancreatitis associated with marked dilatation of the pancreatic duct and pancreatic non–opaque concretion] Kitagawa M, et al. Nippon Shokakibyo Gakkai Zasshi 1988 Jul;85(7):1425–9 (Jpn)
[A case of chronic calcifying pancreatitis with serum CA19–9 levels markedly elevated due to the incarceration of the pancreatic calculi into the main pancreatic duct] Tokoo M, et al. Nippon Shokakibyo Gakkai Zasshi 1989 Feb; 86(2):270–4 (Jpn)
[Methods of artificial occlusion of the pancreatic ducts in surgery of the pancreas (review of the literature)] Karapetian IR, et al. Khirurgiia (Mosk) 1989 Feb;(2):137–41 (64 ref.) (Rus)
[Exocrine secretion of the pancreas during endoscopic catheterization of its duct] D'iakova AM, et al. Sov Med 1988;(6):33–4 (Eng. Abstr.) (Rus)
[Ductal adenocarcinoma of the head of the pancreas: associated pathology of body and tail] Arias Pérez J, et al. Rev Esp Enferm Apar Dig 1989 Jan;75(1):78–80 (Eng. Abstr.) (Spa)

ABNORMALITIES

Familial occurrence of anomalous pancreaticobiliary duct union associated with gallbladder neoplasms. Miyazaki K, et al. Am J Gastroenterol 1989 Feb;84(2):176–81
Anomalous biliopancreatic ductal system, recurrent pancreatitis, and choledochal cyst [letter] Shaked G, et al. Am J Gastroenterol 1989 Jun;84(6):685–6
Congenital hepatic fibrosis, bile duct abnormality, long pancreaticobiliary common channel, and pancreatitis [letter] Perisic VN, et al. J Pediatr Gastroenterol Nutr 1988 Sep–Oct;7(5):790–1
A case of a rare anomaly of the common bile duct associated with an abnormal arrangement of the pancreaticobiliary ductal union. Loria LE, et al. Jpn J Surg 1988 Nov; 18(6):718–24
Pancreatitis of pancreas divisum. Kalkay MN, et al. N J Med 1989 Apr;86(4):281–5 (20 ref.)
Pancreatic duct dilatation after secretin stimulation in patients with pancreas divisum. Lowes JR, et al. Pancreas 1989; 4(3):371–4
Pancreas divisum: thin–section CT. Zeman RK, et al. Radiology 1988 Nov;169(2):395–8
The clinical spectrum of anomalous pancreatobiliary junction. Kochhar R, et al. Surg Endosc 1989;3(2):83–6
Pancreatitis caused by congenital anomalies of the pancreatic ducts. Leese T, et al. Surgery 1989 Feb;105(2 Pt 1):125–30
[Treatment strategies in symptomatic pancreas divisum] Winter J, et al. Chirurg 1988 Oct;59(10):679–82 (Ger)
[Posthepatic jaundice caused by abnormalities of the pancreaticobile duct system in early childhood] Müller H, et al. Monatsschr Kinderheilkd 1988 Sep;136(9):640–3 (Eng. Abstr.) (Ger)

ANALYSIS

Argyrophilic and hormone immunoreactive cells in normal and hyperplastic pancreatic ducts and exocrine pancreatic carcinoma. Chen J, et al. Virchows Arch [A] 1988; 413(5):399–405

ANATOMY & HISTOLOGY

The gross anatomy and histology of the gallbladder, extrahepatic bile ducts, Vaterian system, and minor papilla. Frierson HF Jr. Am J Surg Pathol 1989 Feb;13(2):146–62 (62 ref.)
Miniscopes in gastroenterological endoscopy—inspection of the gallbladder and the biliary and pancreatic duct systems in autopsy specimens. Foerster EC, et al. Endoscopy 1988 Nov;20(6):316–20

BLOOD SUPPLY

Ductal vasculature in the atrophic pancreas: evidence for

autonomosis ductal angioarchitecture. Weaver FC. **Pancreas** 1988;3(6):688–99

[The pancreatic duct system in compression stenosis of the celiac trunk] Potashov LV, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):100–3 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Morphological and biochemical characterization of a human pancreatic ductal cell line (PANC-1). Madden ME, et al. **Pancreas** 1988;3(5):512–28

DRUG EFFECTS

Contribution of partial pancreatectomy, systemic hormone delivery, and duct obliteration to glucose regulation in canine pancreas. Importance in pancreas transplantation. van der Burg MP, et al. **Diabetes** 1989 Sep;38(9):1082–9

Impaired response of main pancreatic duct to secretin stimulation in early chronic pancreatitis. Bolondi L, et al. **Dig Dis Sci** 1989 Jun;34(6):834–40

Alcohol-induced chronic pancreatitis in rats after temporary occlusion of biliopancreatic ducts with Ethibloc. Pap A, et al. **Pancreas** 1989;4(2):249–55

[Experimental pancreatic duct occlusion with polyurethane] Klinger K, et al. **Helv Chir Acta** 1989 Jun;56(1–2):189–93 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

DU-PAN-2, mucin type differentiation antigen of normal and malignant pancreatic ductal cells. Metzgar RS, et al. **Prog Clin Biol Res** 1989;288:53–61

INJURIES

Blunt pancreatic trauma: prospective evaluation of early endoscopic retrograde pancreatography. Whittwell AE, et al. **South Med J** 1989 May;82(5):586–91

[Injuries of the bile and pancreatic ducts during gastrectomy for peptic ulcer] Ladniuk BP, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):92–4 **(Rus)**

METABOLISM

Effect of pancreatitis on the absorption of contrast medium from the pancreatic duct. Saari A, et al. **Ann Chir Gynaecol** 1988;77(4):146–50

PATHOLOGY

Distortion of pancreatic anatomy during ERCP: effects of patient position and endoscopic manipulation [letter] Lough LR, et al. **Am J Gastroenterol** 1989 Sep;84(9):1122–3

Magnetic resonance imaging and computed tomography in long-term-functioning duct-occluded pancreas allotransplants. Schlumpf R, et al. **Diabetes** 1989 Jan;38 Suppl 1:24–6

Obstruction of the pancreatic duct by a granular cell tumor. Sekas G, et al. **Dig Dis Sci** 1988 Oct;33(10):1334–7

Unique appearance of the duodenal papilla in pancreatic cystadenocarcinoma. Isaacs PE. **Endoscopy** 1989 Mar; 21(2):102–4

Effect of aging on the pancreatic ducts: a study based on endoscopic retrograde pancreatography. Anand BS, et al. **Gastrointest Endosc** 1989 May–Jun;35(3):210–3

Cystic dilation of the major pancreatic duct resembling multiple pancreatic pseudocysts. Simmons TC, et al. **Gastrointest Endosc** 1989 May–Jun;35(3):251–4

Pancreatic ductal mucinous hyperplasia: distribution within the pancreas, and effect of variation in ampullary and pancreatic duct anatomy. Allen-Mersh TG. **Gut** 1988 Oct; 29(10):1392–6

Mucinous pancreatic duct ectasia in the body of the pancreas. Agostini S, et al. **Radiology** 1989 Mar;170(3 Pt 1):815–6

PHYSIOLOGY

Two types of chloride channel on duct cells cultured from human fetal pancreas. Gray MA, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C240–51

Reflex regulation of the sphincter of Oddi by intrapancreatic ductal pressure in the Japanese monkey. Okazaki K, et al. **Int J Pancreatol** 1989 May;4(4):407–18

Quantitative assessment of long-term changes in insulin secretion after canine duct-obliterated pancreas transplantation. Gooszen HG, et al. **Transplantation** 1988 Dec;46(6):793–9

[Evacuatory activity and motor periodicity of the stomach after transposition of the pancreatic duct into the jejunum] Korot'ko GF, et al. **Fiziol Zh SSSR** 1989 Jan;75(1):85–9 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Pancreatic duct pressure, duct permeability and acute pancreatitis. Harvey MH, et al. **Br J Surg** 1989 Aug; 76(8):859–62

Pressure of papillary sphincter zone and pancreatic main duct in patients with alcoholic and idiopathic chronic pancreatitis. Okazaki K, et al. **Int J Pancreatol** 1988 Dec; 3(6):457–68

RADIOGRAPHY

Pancreatography after recovery from massive pancreatic necrosis. Howard JM, et al. **Ann Surg** 1989 Jan;209(1):31–5

Pancreaticobiliary ductal union in biliary diseases. An endoscopic retrograde cholangiopancreatographic study. Misra SP, et al. **Gastroenterology** 1989 Mar;96(3):907–12

[Selective lower cholangiography with manometric guidance. Normal radio-anatomy of the biliary-pancreatic junction] Yvergneaux JP. **Acta Gastroenterol Belg** 1988 May-Jun;51(3):223–34 (Eng. Abstr.) **(Fre)**

SURGERY

Adenoma and stone formation of the biliary tract in puppies that had choledochopancreatic anastomosis. Miyano T, et al. **J Pediatr Surg** 1989 Jun;24(6):539–42

Monitoring urinary amylase and pH in pancreas transplantation with urinary drainage in rats. Schang T, et al. **Transplantation** 1988 Dec;46(6):806–12

[Recurrent digestive hemorrhage after pancreatic duct-jejunum anastomosis (letter)] Berson A, et al. **Gastroenterol Clin Biol** 1988 Nov;12(11):862 **(Fre)**

[Protection of the pancreatico-digestive anastomosis following resection of the head of the pancreas by pancreatic duct occlusion with fibrin (-glue). Animal experiment and clinical experiences] Waclawiczek HW, et al. **Chirurg** 1989 Jun;60(6):403–9 (Eng. Abstr.) **(Ger)**

[Insulin reserve and morphology of the tail of the pancreas following resection of the head of the pancreas using various surgical methods] Grossner D, et al. **Langenbecks Arch Chir** 1989;374(1):4–11 (Eng. Abstr.) **(Ger)**

[Pancreatic duct occlusion from the clinical viewpoint: exocrine and endocrine consequences] Schneider MU. **Langenbecks Arch Chir** 1989;374(1):1–3 **(Ger)**

[Wirsung-septoplasty during interventions on Vater's ampulla] Fronticelli CM, et al. **Minerva Chir** 1989 Mar 15; 44(5):833–6 (Eng. Abstr.) **(Ita)**

[Pancreatic calculi of a non-alcoholic nature] Savinov IP, et al. **Vestn Khir** 1988 Dec;141(12):37–9 **(Rus)**

[Separate external-internal drainage in the surgical treatment of pancreatic pseudocysts] Shalimov AA, et al. **Vestn Khir** 1988 Aug;141(8):56–7 **(Rus)**

[Reconstructive operations on the biliary and pancreatic ducts] Stulhofer M, et al. **Acta Chir Iugosl** 1988; 35(2):163–76 (Eng. Abstr.) **(Ser)**

TRANSPLANTATION

Duct obstruction of segmental grafts in pancreas transplantation. Dubernard JM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2799–800

Results after transplantation of canine pancreatic grafts with preserved exocrine drainage. Florack G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2818–9

Evaluation of the duodenal patch method for intestinal drainage of pancreatic juice in whole pancreas transplantation. Ohtsuka M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2823–6

Contribution of graft duodenum to metabolic disorders in canine recipients of whole pancreaticoduodenal transplants with bladder drainage. Schang T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2804–5

Combined kidney-pancreas transplantation with pancreaticocystostomy. Sollinger HW, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2837–8

ULTRASTRUCTURE

Effects of arterial pH and carbon dioxide on pancreatic exocrine H+/HCO3- secretion and secretin-dependent translocation of cytoplasmic vesicles in pancreatic duct cells. Buanes T, et al. **Acta Physiol Scand** 1988 May; 133(1):1–9

Secretin-regulated chloride channel on the apical plasma membrane of pancreatic duct cells. Gray MA, et al. **J Membr Biol** 1988 Oct;105(2):131–42

PANCREATIC EXTRACTS

ADMINISTRATION & DOSAGE

Pancreatic enzyme replacement therapy. Importance of gastric acid secretion, H2-antagonists, and enteric coating. Marotta F, et al. **Dig Dis Sci** 1989 Mar;34(3):456–61

[Stimulation of pathologically weak kininogenesis with andekalin microdoses as a method of increasing the effectiveness of the treatment of chronic cotton dust-induced bronchitis] Surovikina MS, et al. **Gig Tr Prof Zabol** 1988 Dec;(12):41–4 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Effect of pancreatic enzyme supplements on iron absorption. Zempsky WT, et al. **Am J Dis Child** 1989 Aug; 143(8):969–72

PHARMACOLOGY

Influence of treatment with pancreatic extracts on pancreatic enzyme secretion. Mössner J, et al. **Gut** 1989 Aug; 30(8):1143–9

THERAPEUTIC USE

Adsorption of alpha-amylase (EC 3.2.1.1) and lipase (EC 3.1.1.3) before and after substitution therapy in exocrine pancreatic insufficiency. Gregar I, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;120:233–43

Use of pancreatic Schilling test to determine efficiency of pancreatic enzyme delivery in pancreatic insufficiency. Brugge WR, et al. **Dig Dis Sci** 1988 Oct;33(10):1226–32

Correction of malnutrition and maldigestion with enzyme supplementation in patients with surgical suppression of exocrine pancreatic function. Braga M, et al. **Surg Gynecol Obstet** 1988 Dec;167(6):485–92

Human pancreatic graft fistula exocrine suppression by oral pancreatic enzymes. Burton FR, et al. **Transplantation** 1989 May;47(5):888–91

[Comparative study of Creon and Eurobiol in the treatment of exocrine pancreatic insufficiency in adults] Emerit J, et al. **Ann Gastroenterol Hepatol (Paris)** 1988 Oct; 24(5):263–7 **(Fre)**

[Treatment of exocrine pancreatic insufficiency: where can progress come from?] Gosselin M. **Gastroenterol Clin Biol** 1988 Nov;12(11):783–6 **(Fre)**

[Comparison of 2 pancreatic enzyme preparations in the treatment of digestive insufficiency in mucoviscidosis (cystic fibrosis)] Gottschalk B, et al. **Monatsschr Kinderheilkd** 1988 Sep;136(9):626–9 (Eng. Abstr.) **(Ger)**

URINE

Renal handling of 125I-labelled homologous pancreatic lipase and amylase in the rat. Mályusz M, et al. **J Clin Chem Clin Biochem** 1988 Oct;26(10):611–5

PANCREATIC FISTULA

Pancreatic duct-portal vein fistula. Willis SM, et al. **Gastroenterology** 1989 Oct;97(4):1025–7

[Pancreatic fistulas] Falcone F. **Minerva Chir** 1989 Jan 31; 44(1–2):211–3 (11 ref.) **(Ita)**

COMPLICATIONS

[Hemorrhagic pancreatitis associated with multiple small-intestinal invaginations] Kuciits SF. **Vestn Khir** 1989 Jan;142(1):55–6 **(Rus)**

DIAGNOSIS

Fistulous communication of a pancreatic pseudocyst with the common bile duct: demonstration by operative cholangiogram [letter] Bresler L, et al. **Am J Gastroenterol** 1989 Jul;84(7):835–6

Thoracic manifestations of internal pancreatic fistulas: report of five cases. Izbicki JR, et al. **Am J Gastroenterol** 1989 Mar;84(3):265–71

Endoscopic examination for pancreatic fistula. Nakagawa K, et al. **Tohoku J Exp Med** 1989 Jan;157(1):61–7

DRUG THERAPY

Short-term administration of SMS 201-995 in the management of an external pancreatic fistula. Kwan D, et al. **Am J Gastroenterol** 1989 Mar;84(3):326–8

Treatment of pancreatic fistula [letter] Fielding GA, et al. **Br J Surg** 1988 Oct;75(10):1044

Failure of somatostatin or an analog to promote closure of end pancreatic fistulae. Miller BM, et al. **Int J Pancreatol** 1989 Feb;4(1):65–72

Successful treatment of a high-output fistula with a somatostatin analogue following pancreas transplantation. Cooper MM, et al. **Transplant Proc** 1989 Aug;21(4):3738–41

ETIOLOGY

Duodenopancreatic fistula accompanying Crohn's disease of the distal duodenum. Simmonds SD, et al. **Am J Gastroenterol** 1989 Jul;84(7):800–3

Pleural effusions and pancreatico-pleural fistulae associated with asymptomatic pancreatic disease. Cooper CB, et al. **Br J Dis Chest** 1988 Jul;82(3):315–20

Fistula to the pancreatic duct from a peptic ulcer. Case report and literature review. Meiselman MS, et al. **J Clin Gastroenterol** 1988 Oct;10(5):537–40 (7 ref.)

[Pancreato-pleural fistula as a complication of post-traumatic pancreatic mediastinal pseudocyst] Matejiček E, et al. **Rozhl Chir** 1989 Apr;68(4):240–4 (Eng. Abstr.) **(Slo)**

PATHOLOGY

Transient expectoration of pancreatic fluids in a patient with pancreaticopleural fistula. Gouin PR, et al. **Crit Care Med** 1989 Mar;17(3):293–4

PREVENTION & CONTROL

Human pancreatic graft fistula exocrine suppression by oral pancreatic enzymes. Burton FR, et al. **Transplantation** 1989 May;47(5):888–91

[Prevention of pancreatic and biliary fistula after pancreatoduodenectomy] Wang Y. **Chung Hua Wai Ko Tsa Chih** 1988 Dec;26(12):729–30, 781 (Eng. Abstr.) **(Chi)**

SURGERY

Management of pancreatic fistulas. Martin FM, et al. **Arch Surg** 1989 May;124(5):571–3

[Surgical treatment of complicated cysts of the pancreas] Kurygin AA, et al. **Vestn Khir** 1988 Oct;141(10):35–9 (Eng. Abstr.) **(Rus)**

[Our experience with the treatment of pancreatic fistula] Radzikhovskiĭ AP. **Vestn Khir** 1988 Jul;141(7):97–102 **(Rus)**

THERAPY

Oral pancreatic enzymes accelerate closure of external pancreatic fistulae. García-Pugés AM, et al. **Br J Surg** 1988 Sep;75(9):924–5

Postoperative abscesses with enteric communication: percutaneous treatment. Lambiase RE, et al. **Radiology** 1989 May;171(2):497–500

PANCREATIC FUNCTION TESTS

Analysis of p-aminobenzoic acid and its metabolites in urine and plasma by ion pair HPLC in the NBT-PABA pancreatic function test. Hung CT, et al. **Biomed Chromatogr** 1987 Feb;2(1):13–6

Detection of pancreatic steatorrhea by oral pancreatic function tests. Lankisch PG, et al. **Dig Dis Sci** 1988 Oct; 33(10):1233–6

Maximal effective dose of cerulein in the secretin–cerulein test. Gullo L. **Digestion** 1988;39(4):225–9

Clinical usefulness of dual-label Schilling test for pancreatic exocrine function. Chen WL, et al. **Gastroenterology** 1989 May;96(5 Pt 1):1337–45

Exocrine pancreatic function after gastrectomy. Specificity of indirect tests. Heptner G, et al. **Gastroenterology** 1989 Jul;97(1):147–53

Pancreolauryl pancreatic function test [letter] Reddy NK, et al. **Gastroenterology** 1989 May;96(5 Pt 1):1377–8

Pancreatic function tests in the diagnosis of pancreatic cancer. Gullo L. **Int J Pancreatol** 1988;3 Suppl 1:S101–5 (15 ref.)

Exocrine pancreatic function tests. Li YY, et al. **J Clin Gastroenterol** 1989 Aug;11(4):376–8 (36 ref.)

Phospholipase A activities in ascites, serum, lymph, and urine in acute pancreatitis following pancreas stimulation with secretin–ceruletid. Zirngibl H, et al. **Klin Wochenschr** 1989 Feb 1;67(3):141–3

Pancreatic abnormalities in patients with eating disorders. Kobayashi N, et al. **Psychosom Med** 1988 Nov–Dec; 50(6):607–14

[Specificity and sensitivity of the 4-N-acetyl-L-tyrosyl-p-aminobenzoic acid test in childhood with serum p-aminobenzoic acid determination] Henker J, et al. **Dtsch Z Verdau Stoffwechselkr** 1988;48(2):80–2 (Eng. Abstr.) **(Ger)**

[Fecal chymotrypsin concentration in childhood. Normal values, specificity, sensitivity] Henker J, et al. **Helv Paediatr Acta** 1989 Jun;43(5–6):397–404 (Eng. Abstr.) **(Ger)**

[Pancreatic duct occlusion from the clinical viewpoint: exocrine and endocrine consequences] Schneider MU. **Langenbecks Arch Chir** 1989;374(1):1–3 **(Ger)**

[Assessment of cholesterol esterase activity in the duodenal contents of man] Loginov AS, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):389–90 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Pancreatic sphincteroplasty: indications and outcome [letter] Williamson RC. **Ann R Coll Surg Engl** 1988 Nov; 70(6):398–9

METHODS

Mixed triglyceride breath test: a noninvasive test of pancreatic lipase activity in the duodenum. Vantrappen GR, et al. **Gastroenterology** 1989 Apr;96(4):1126–34

Pancreatic function testing: serum PABA measurement is a reliable and accurate measurement of exocrine function. Tanner AR, et al. **Gut** 1988 Dec;29(12):1736–40

Pancreatic function testing. Methods to identify exocrine insufficiency. Gilinsky NH. **Postgrad Med** 1989 Aug; 86(2):165–72 (36 ref.)

Exocrine pancreatic response to isoproterenol in the rabbit under secretin and CCK stimulation. De Dios I, et al. **Z Gastroenterol** 1989 Jun;27(6):321–4

Thr28, Nle31 CCK-9—an useful CCK analogue in stimulation tests of pancreatic exocrine function. Schusdziarra V, et al. **Z Gastroenterol** 1988 Dec; 26(12):762–6

[Direct assessments of pancreatic function] Fölsch UR. **Verh Dtsch Ges Inn Med** 1988;94:73–7 (23 ref.) **(Ger)**

[The diagnostic and prognostic value of serum and urine studies in pancreatic diseases] Kopp H. **Verh Dtsch Ges Inn Med** 1988;94:59–66 (100 ref.) **(Ger)**

[Assessment of pancreatic function by indirect (noninvasive) methods] Lankisch PG. **Verh Dtsch Ges Inn Med** 1988; 94:66–72 (60 ref.) **(Ger)**

[Studies on urinary C-peptide excretion in normal children and children with insulin-dependent diabetes mellitus] Kusayanagi T. **Nippon Ika Daigaku Zasshi** 1989 Apr; 56(2):103–22 (Eng. Abstr.) **(Jpn)**

[Clinical significance of PFD test and fecal chymotrypsin test in postoperative pancreatic exocrine insufficiency] Yagi M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jun; 85(6):1282–7 (Eng. Abstr.) **(Jpn)**

VETERINARY

Questions choice of test for exocrine pancreatic function [letter] Childers HE. **J Am Vet Med Assoc** 1988 Oct 1; 193(7):759

Evaluation of two forms of N-benzoyl-L-tyrosyl p-aminobenzoic acid in pancreatic function testing of dogs. Burrows CF, et al. **Res Vet Sci** 1989 Jan;46(1):125–6

PANCREATIC HORMONES

ANALYSIS

The endocrine pancreas in patients with insulinomas. An immunocytochemical and ultrastructural study of the nontumoral tissue with morphometrical evaluations. Bani Sacchi T, et al. **Int J Pancreatol** 1989 Jul;5(1):11–28

The occurrence of pancreastatin in tumours of the diffuse neuroendocrine system. Bishop AE, et al. **Mol Cell Probes** 1988 Sep;2(3):225–35

Pancreastatin-like immunoreactivity in epidermal Merkel cells of pig and man. Hartschuh W, et al. **Neurosci Lett** 1989 Apr 10;98(3):258–63

Pancreastatin distribution and plasma levels in the pig. Bretherton-Watt D, et al. **Peptides** 1988 Sep–Oct; 9(5):1005–14

Isolation and primary structure of tumor-derived peptides related to human pancreastatin and chromogranin A. Schmidt WE, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(21):8231–5

An efficient protein A gold–silver staining method for light microscopic immunohistochemistry. Fujimori O. **Z Mikrosk Anat Forsch** 1988;102(5):858–64

BLOOD

Contribution of partial pancreatectomy, systemic hormone delivery, and duct obliteration to glucose regulation in canine pancreas. Importance in pancreas transplantation. van der Burg MP, et al. **Diabetes** 1989 Sep;38(9):1082–9

Plasma hormone levels in relation to lipid and protein metabolism during prolonged fasting in king penguin chicks. Le Ninan F, et al. **Gen Comp Endocrinol** 1988 Aug; 71(2):331–7

Effect of indomethacin administration on glucose homeostasis and pancreatic hormones in lactating goats. Jacquemet N, et al. **J Dairy Sci** 1989 May;72(5):1302–7

Effects of feeding regimen on blood glucose levels and plasma concentrations of pancreatic hormones and gut regulatory peptides at 9 months of age: comparison between infants fed with milk formula and infants exclusively breast-fed from birth. Salmenperä L, et al. **J Pediatr Gastroenterol Nutr** 1988 Sep–Oct;7(5):651–6

DEFICIENCY

Metabolic changes in coho and chinook salmon resulting from acute insufficiency in pancreatic hormones. Plisetskaya EM, et al. **J Exp Zool** 1989 Feb;249(2):158–64

ISOLATION & PURIFICATION

Isolation and characterization of bovine pancreastatin. Nakano I, et al. **Regul Pept** 1989 May;25(2):207–13

METABOLISM

Effects of dose of ingested glucose on plasma metabolite and hormone responses in type II diabetic subjects. Gannon MC, et al. **Diabetes Care** 1989 Sep;12(8):544–52

Effects of long-term glibenclamide administration on gastrointestinal and pancreatic hormones in normal fasting rats. Filipponi P, et al. **Diabetes Res Clin Pract** 1989 Feb 15;6(2):83–7

Pancreatic hormones are expressed on the surfaces of human and rat islet cells through exocytotic sites. Larsson LI, et al. **Eur J Cell Biol** 1989 Feb;48(1):45–51

In vitro release of pancreatic hormones following 99% pancreatectomy in the chicken. Hazelwood RL, et al. **Gen Comp Endocrinol** 1989 Feb;73(2):308–17

Leanness, peptide hormones and premenopausal breast cancer. Hill P. **Med Hypotheses** 1989 Jan;28(1):45–50 (76 ref.)

Pancreas transplantation: an immunohistochemical analysis of pancreatic hormones and HLA-DR expression. Lloyd RV, et al. **Mod Pathol** 1989 Jul;2(4):323–30

Effect of trypsin on the hormonal regulation of the fat-stimulated human exocrine pancreas. Olsen O, et al. **Scand J Gastroenterol** 1988 Sep;23(7):875–81

PHARMACOLOGY

Bioactivity of synthetic human pancreastatin on exocrine pancreas. Funakoshi A, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1237–42

Bioactivity of human pancreastatin and its localization in pancreas. Funakoshi A, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):913–8

Bioactivity of synthetic C-terminal fragment of rat pancreastatin on endocrine pancreas. Funakoshi A, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):844–9

Pancreastatin: a novel peptide inhibitor of parietal cell signal transduction. Lewis JJ, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):667–73

Intracranial microinfusion of pancreastatin elevates blood glucose, free fatty acids, and corticosterone in rats. Gunion MW, et al. **Brain Res** 1989 Apr 24;485(2):251–7

GLP-1 (glucagon-like peptide 1) and truncated GLP-1, fragments of human proglucagon, inhibit gastric acid secretion in humans. Schjoldager BT, et al. **Dig Dis Sci** 1989 May;34(5):703–8

Pancreastatin, a presumed product of chromogranin-A (secretory protein-I) processing, inhibits secretion from porcine parathyroid cells in culture. Fasciotto BH, et al. **Endocrinology** 1989 Sep;125(3):1617–22

Pancreastatin inhibits insulin release from Rin m 5F cells: reversion by pertussis toxin. Lorinet AM, et al. **Eur J Pharmacol** 1989 Feb 7;160(3):405–7

Galanin and pancreastatin inhibit stimulated insulin secretion in the mouse: comparison of effects. Lindskog S, et al. **Horm Res** 1988;29(5–6):237–40

Pancreastatin inhibits insulin secretion as induced by glucagon, vasoactive intestinal peptide, gastric inhibitory peptide, and 8-cholecystokinin in the perfused rat pancreas. Peiró E, et al. **Metabolism** 1989 Jul;38(7):679–82

Effect of pancreastatin on pancreatic endocrine and exocrine secretion. Ishizuka J, et al. **Pancreas** 1989;4(3):277–81

Effects of porcine pancreastatin on secretion and biosynthesis of insulin and glucose oxidation of isolated rat pancreatic islets. Ostenson CG, et al. **Pancreas** 1989;4(4):441–6

Effects of systemic pancreastatin on memory retention. Flood JF, et al. **Peptides** 1988 Sep–Oct;9(5):1077–80

Effect of pancreastatin on pancreatic endocrine function in the conscious rat. Funakoshi A, et al. **Regul Pept** 1989 Mar; 24(3):225–31

Inhibitory effect of pancreastatin on pancreatic exocrine secretion in the conscious rat. Funakoshi A, et al. **Regul Pept** 1989 May;25(2):157–66

Pancreastatin: a novel peptide inhibitor of parietal cell secretion. Lewis JJ, et al. **Surgery** 1988 Dec;104(6):1031–6

PHYSIOLOGY

Glucoregulatory function of thyroid hormones: role of pancreatic hormones. Müller MJ, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E101–10

Insulin and other islet hormones (somatostatin, glucagon and PP) in the neuroendocrine system of some lower vertebrates and that of invertebrates—a minireview. Conlon JM, et al. **Horm Metab Res** 1988 Jul;20(7):406–10 (39 ref.)

The effect of gastro-entero-pancreatic hormones on the activity of vagal hepatic afferent fibres. Niijima A. **Prog Brain Res** 1988;74:155–60

[Hormonal control of intestinal motility] Buéno L, et al. **Presse Med** 1989 Feb 15;18(6):264–8 (54 ref.) (Eng. Abstr.) **(Fre)**

SECRETION

Pancreastatin-like immunoreactivity and insulin are released in parallel from the perfused porcine pancreas. Ostenson CG, et al. **Endocrinology** 1989 Jun;124(6):2986–90

Effects of portacaval shunt, transposition, and dimethylnitrosamine-induced chronic liver injury on pancreatic hormones and amino acids in dog. Hashimoto N, et al. **J Surg Res** 1989 Jan;46(1):35–40

Hormonal and metabolic changes following severe head injury or noncranial injury. Chioléro R, et al. **JPEN J Parenter Enteral Nutr** 1989 Jan–Feb;13(1):5–12

[Inhibitory effects of somatostatin analog (SMS 201-995) on pancreatic hormones in patients with malignant islet-cell carcinoma] Fukushima H, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Aug 20;64(8):666–76 (Eng. Abstr.) **(Jpn)**

[Pancreatic hormone secretion in patients with newly detected diabetes mellitus] Belovalova IM, et al. **Probl Endokrinol (Mosk)** 1988 Nov–Dec;34(6):3–6 (Eng. Abstr.) **(Rus)**

[Features of incretory function of the pancreas in patients with insulinoma] Furmanenko ED, et al. **Ter Arkh** 1988; 60(9):63–6 **(Rus)**

PANCREATIC INSUFFICIENCY

BLOOD

In vitro restoration by lithium of defective chemotaxis in Shwachman-Diamond syndrome. Azzarà A, et al. **Br J Haematol** 1988 Dec;70(4):502

Effect of pancreatic enzyme supplementation on postprandial plasma cholecystokinin secretion in patients with pancreatic insufficiency. Jansen JB, et al. **Regul Pept** 1989 Jun–Jul; 25(3):333–42

CHEMICALLY INDUCED

[A rat model of chronic pancreatic insufficiency induced by injection of zein-oleic acid-linoleic acid solution into the pancreatic duct] Kataoka K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jul;85(7):1431 **(Jpn)**

COMPLICATIONS

Fecal fat concentration in the differential diagnosis of steatorrhea. Bai JC, et al. **Am J Gastroenterol** 1989 Jan; 84(1):27–30

Nephrocalcinosis in Shwachman's syndrome. D'Angio CT, et al. **Arch Dis Child** 1989 Apr;64(4):614–5

Can villous atrophy be induced by chronic alcohol consumption? Sjölund K, et al. **J Intern Med** 1989 Aug; 226(2):133–5

Giant cell arteritis associated with pericarditis and pancreatic insufficiency in a patient with psoriatic arthritis. Clementz GL, et al. **J Rheumatol** 1989 Jan;16(1):128–9

Enzyme therapy for malabsorption in exocrine pancreatic insufficiency. Roberts IM. **Pancreas** 1989;4(4):496–503 (58 ref.)

DIAGNOSIS

Detection of pancreatic steatorrhea by oral pancreatic function tests. Lankisch PG, et al. **Dig Dis Sci** 1988 Oct; 33(10):1233–6

Maximal effective dose of cerulein in the secretin–cerulein test. Gullo L. **Digestion** 1988;39(4):225–9

[Fecal chymotrypsin concentration in childhood. Normal values, specificity, sensitivity] Henker J, et al. **Helv Paediatr Acta** 1989 Jun;43(5–6):397–404 (Eng. Abstr.) (Ger)

[Direct assessments of pancreatic function] Fölsch UR. **Verh Dtsch Ges Inn Med** 1988;94:73–7 (23 ref.) (Ger)

[Assessment of pancreatic function by indirect (noninvasive) methods] Lankisch PG. **Verh Dtsch Ges Inn Med** 1988; 94:66–72 (60 ref.) (Ger)

DRUG THERAPY

Use of pancreatic Schilling test to determine efficiency of pancreatic enzyme delivery in pancreatic insufficiency. Brugge WR, et al. **Dig Dis Sci** 1988 Oct;33(10):1226–32

Critical examination of therapeutic efficacy of a pH–sensitive enteric–coated pancreatic enzyme preparation in treatment of exocrine pancreatic insufficiency secondary to cystic fibrosis. Dutta SK, et al. **Dig Dis Sci** 1988 Oct; 33(10):1237–44

Duodenal instillation of pancreatin does not abolish steatorrhea in patients with pancreatic insufficiency. Zerega J, et al. **Dig Dis Sci** 1988 Oct;33(10):1245–9

[Treatment of exocrine pancreatic insufficiency: where can progress come from?] Gosselin M. **Gastroenterol Clin Biol** 1988 Nov;12(11):783–6 (Fre)

[Effect of an antacid on duodenal pH in severe excretory pancreatic insufficiency] Gerber B, et al. **Dtsch Z Verdau Stoffwechselkr** 1988;48(3–4):173–7 (Eng. Abstr.) (Ger)

ENZYMOLOGY

Adsorption of alpha–amylase (EC 3.2.1.1) and lipase (EC 3.1.1.3) before and after substitution therapy in exocrine pancreatic insufficiency. Gregar I, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;120:233–43

[The pH dependence of lipase and trypsin activity] Gerber B, et al. **Dtsch Z Verdau Stoffwechselkr** 1988;48(3–4):190–3 (Eng. Abstr.) (Ger)

ETIOLOGY

Exocrine pancreatic function and protein–calorie malnutrition in Dakar and Abidjan (West Africa): silent pancreatic insufficiency. Sauniere JF, et al. **Am J Clin Nutr** 1988 Nov;48(5):1233–8

Hypothesis: Shwachman's syndrome of exocrine pancreatic insufficiency may be caused by neonatal copper deficiency. Paterson CR, et al. **Ann Nutr Metab** 1988;32(3):127–32

Chronic alcoholism and evolution of pain and prognosis in chronic pancreatitis. Hayakawa T, et al. **Dig Dis Sci** 1989 Jan;34(1):33–8

Pancreatic function in Sjögren's syndrome [letter] Lankisch PG, et al. **Dig Dis Sci** 1988 Nov;33(11):1499–500

Carbohydrate malabsorption in alcoholic pancreatic insufficiency. The effect of pancreatic enzyme therapy on intestinal transit time. Keshavarzian A, et al. **J Clin Gastroenterol** 1988 Oct;10(5):528–32

von Hippel–Lindau syndrome presenting as pancreatic endocrine insufficiency: a case report. Thompson RK, et al. **Surgery** 1989 May;105(5):598–604 (12 ref.)

GENETICS

DNA marker haplotype association with pancreatic sufficiency in cystic fibrosis. Kerem BS, et al. **Am J Hum Genet** 1989 Jun;44(6):827–34

Johanson–Blizzard syndrome. Hurst JA, et al. **J Med Genet** 1989 Jan;26(1):45–8 (18 ref.)

METABOLISM

Fecal triglyceride excretion is not excessive in pancreatic insufficiency. Khouri MR, et al. **Gastroenterology** 1989 Mar;96(3):848–52

Fecal lipid excretion in pancreatic insufficiency [letter] Roberts IM. **Gastroenterology** 1989 Jul;97(1):248–9

Active and passive sugar absorption in pancreatic insufficiency. Murphy MS, et al. **J Pediatr Gastroenterol Nutr** 1989 Feb;8(2):189–94

[Comparison of fungal lipase and pancreatic lipase in exocrine pancreatic insufficiency in man. Study of their in vitro properties and intraduodenal bioavailability] Moreau J, et al. **Gastroenterol Clin Biol** 1988 Nov;12(11):787–92 (Eng. Abstr.) (Fre)

PHYSIOPATHOLOGY

Reversible gall bladder dysfunction in severe pancreatic insufficiency. Masclee AA, et al. **Gut** 1989 Jun;30(6):866–72

Endocrine pancreas in the rat model of exocrine pancreatic insufficiency. Tomita T, et al. **Pancreas** 1988;3(5):568–75

Human gastric lipase: variations induced by gastrointestinal hormones and by pathology. Moreau H, et al. **Scand J Gastroenterol** 1988 Nov;23(9):1044–8

SURGERY

[Surgical treatment of chronic alcoholic pancreatitis and its complications] Blagovidov DF, et al. **Sov Med** 1988; (10):54–9 (58 ref.) (Rus)

THERAPY

Acid resistant lipase as replacement therapy in chronic pancreatic exocrine insufficiency: a study in dogs. Griffin SM, et al. **Gut** 1989 Jul;30(7):1012–5

[Comparative study of Creon and Eurobiol in the treatment of exocrine pancreatic insufficiency in adults] Emerit J, et al. **Ann Gastroenterol Hepatol (Paris)** 1988 Oct; 24(5):263–7 (Fre)

[Comparison of 2 pancreatic enzyme preparations in the treatment of digestive insufficiency in mucoviscidosis (cystic fibrosis)] Gottschalk B, et al. **Monatsschr Kinderheilkd** 1988 Sep;136(9):626–9 (Eng. Abstr.) (Ger)

VETERINARY

Effect of exocrine pancreatic insufficiency on cobalamin absorption in dogs. Simpson KW, et al. **Am J Vet Res** 1989 Aug;50(8):1233–6

More on exocrine pancreatic insufficiency [letter] Batt RM. **J Am Vet Med Assoc** 1989 Jan 15;194(2):165–6

Questions choice of test for exocrine pancreatic function [letter] Childers HE. **J Am Vet Med Assoc** 1988 Oct 1; 193(7):759

More on testing for exocrine pancreatic function [letter] Williams DA. **J Am Vet Med Assoc** 1988 Dec 15; 193(12):1480–1

PANCREATIC JUICE

see related
CHYMOTRYPSIN
CHYMOTRYPSINOGEN
TRYPSIN
TRYPSINOGEN

Experimental acute pancreatitis in rats after chronic and chronic plus acute ethanol administration in combination with a pancreatic juice edema. Letko G, et al. **Int Surg** 1989 Apr–Jun;74(2):77–80

The amount of external pancreatic juice drainage in pancreaticojejunostomy insufficiency. Yu SC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Aug;87(8):791–5

ANALYSIS

Identification and characterization of a pancreatic intrinsic factor in the dog. Batt RM, et al. **Am J Physiol** 1989 Mar; 256(3 Pt 1):G517–23

Characterization of two glycoproteins of human pancreatic juice: P35, a truncated protease E and P19, precursor of protein X. Guy–Crotte O, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):318–22

Isolation and characterization of sulfated glycoprotein from human pancreatic juice. Yokoyama M, et al. **Biochim Biophys Acta** 1988 Oct 13;967(1):34–42

The human pancreatic stone protein. De Caro A, et al. **Biochimie** 1988 Sep;70(9):1209–14 (36 ref.)

Purification, characterization and amino–acid sequencing of two pancreatic secretory trypsin inhibitors in rat pancreatic juice. Uda K, et al. **Biol Chem Hoppe Seyler** 1988 May; 369 Suppl:55–61

Analysis of human exocrine pancreatic proteins by means of pore gradient polyacrylamide gel electrophoresis. Appelt G, et al. **Biomed Biochim Acta** 1988;47(2):133–40

Penetration of ciprofloxacin and ofloxacin into pancreatic juice. Brattström C, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):295–7

Transient expectoration of pancreatic fluids in a patient with pancreaticopleural fistula. Gouin PR, et al. **Crit Care Med** 1989 Mar;17(3):293–4

Pancreatic juice composition: new views about the cellular mechanisms that control the concentration of digestive and nondigestive proteins. Beaudoin AR, et al. **Dig Dis** 1989; 7(4):210–20 (50 ref.)

Occluded pancreatic endoprostheses—analysis of the clogging material. Provansal–Cheylan M, et al. **Endoscopy** 1989 Mar;21(2):63–9

Calcium carbonate saturation in human pancreatic juice: possible role of ductal H+ secretion. Gerolami A, et al. **Gastroenterology** 1989 Mar;96(3):881–4

Changes in zymogen granule membrane and pancreatic juice after supramaximal stimulation with caerulein in the rat. Grönroos JM, et al. **Int J Pancreatol** 1988 Jul;3(5):389–99

CA 19–9 in serum and pancreatic juice: its role in the differential diagnosis of resectable pancreatic cancer from chronic pancreatitis. Malesci A, et al. **Int J Pancreatol** 1988; 3 Suppl 1:S119–23

The exocrine secretions of the grafted pancreas. Sato J, et al. **Transplant Proc** 1989 Jun;21(3):3449–51

CYTOLOGY

Cytology in the diagnosis of pancreatic cancer. Del Favero G, et al. **Int J Pancreatol** 1988;3 Suppl 1:S137–41

Pancreatic juice cytology (PJC) for early detection of pancreas allograft rejection. Klima G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2782–3

Recent experience with pancreatic juice cytology in monitoring pancreatic graft rejection. Kubota K, et al. **Transplant Proc** 1989 Aug;21(4):3643–5

Diagnosis of pancreatic graft rejection by pancreatic juice cytology. Tydén G, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2780–1

[Correlation of the cytologic, endoscopic and echographic findings in the diagnosis of pancreatic cancer] Ivanova S. **Vutr Boles** 1988;27(4):47–9 (Eng. Abstr.) (Bul)

[Cytology of the pancreas—fine needle biopsy and analysis of pancreatic juice] Schenck U. **Verh Dtsch Ges Inn Med** 1988;94:101–5 (59 ref.) (Ger)

DRUG EFFECTS

Inhibitory effect of calcitonin on pure human pancreatic secretion. Tanaka J, et al. **Acta Med Okayama** 1989 Jun; 43(3):169–74

Influence of glucocorticoids on the secretion of pancreatic juice in the rat. Manso M, et al. **Arch Int Physiol Biochim** 1988 Jun;96(2):81–7

Responses of the pancreatic digestive enzyme secretion to amino acids, glucose and cholecystokinin in chicks. Yang SI, et al. **Comp Biochem Physiol [A]** 1989;92(3):313–7

ENZYMOLOGY

Effect of ethanol and acetaldehyde on the enzymatic activity of human pancreatic juice in vitro. II. Inhibition of the activity of proteolytic enzymes. Skrzydlewska E, et al. **Acta Med Pol** 1988;29(1–2):47–52

Effect of ethanol and acetaldehyde on the enzymatic activity of human pancreatic juice in vitro. I. Inhibition of alpha–amylase and lipase activity. Zakrzewska I, et al. **Acta Med Pol** 1988;29(1–2):41–5

Alterations of pancreatic juice amylase by glucocorticoid levels in the rat. de Dios I, et al. **Biochem Med Metab Biol** 1988 Aug;40(1):76–85

Limited proteolyses in pancreatic chymotrypsinogens and trypsinogens. Rovery M. **Biochimie** 1988 Sep;70(9):1131–5 (32 ref.)

Elastase 1 and chymotrypsin B in pancreatic juice and feces. Sziegoleit A, et al. **Clin Biochem** 1989 Apr;22(2):85–9

Pancreatic digestive enzymes and ultrastructure after chronic alcohol intake in the rat. Grönroos JM, et al. **Exp Pathol** 1988;35(4):197–208

Identification of a procarboxypeptidase A–truncated protease E binary complex in human pancreatic juice. Moulard M, et al. **FEBS Lett** 1989 Jul 3;250(2):166–70

Lipid–lipid interactions as regulators of carboxylester lipase activity. Tsujita T, et al. **J Biol Chem** 1989 May 25; 264(15):8612–8

The role of the pancreatic enzymes in the pathogenesis of cholelithiasis. Peveretos P, et al. **Mt Sinai J Med (NY)** 1988 Oct;55(5):369–73

Effect of pancreastatin on pancreatic endocrine and exocrine secretion. Ishizuka J, et al. **Pancreas** 1989;4(3):277–81

[Evidence for several storage and exportation pathways of pancreatic digestive enzymes during protein malnutrition followed by refeeding] Prost J, et al. **C R Soc Biol (Paris)** 1988;182(1):86–93 (Eng. Abstr.) (Fre)

[Comparison of fungal lipase and pancreatic lipase in exocrine pancreatic insufficiency in man. Study of their in vitro properties and intraduodenal bioavailability] Moreau J, et al. **Gastroenterol Clin Biol** 1988 Nov;12(11):787–92 (Eng. Abstr.) (Fre)

METABOLISM

Penetration of imipenem into human pancreatic juice following single intravenous dose administration. Brattström C, et al. **Chemotherapy** 1989;35(2):83–7

Pancreatic and biliary excretion of camostat in dogs. Kitagawa M, et al. **Digestion** 1988;39(4):204–9

The asynchronous transport of secretory proteins in the exocrine pancreas. Compatibility with the hypothesis of a paragranular pathway? Beaudoin AR. **Int J Pancreatol** 1988 Dec;3(6):409–14 (20 ref.)

Penetration of ciprofloxacin and ofloxacin into human allograft pancreatic juice. Brattström C, et al. **J Antimicrob Chemother** 1988 Aug;22(2):213–9

Ofloxacin penetration into bile and pancreatic juice. Pederzoli P, et al. **J Antimicrob Chemother** 1989 May;23(5):805–7

[Biliary pancreatic, and lymphatic excretion of mitomycin C and adriamycin on celiac arterial infusion in dogs] Sasaki Y, et al. **Gan To Kagaku Ryoho** 1988 Dec;15(12):3301–3 (Jpn)

PHYSIOLOGY

Morphometric study of the rat exocrine pancreas after diversion of bile and pancreatic juice from the intestine. Kashima K, et al. **Gastroenterology** 1988 Dec;95(6):1607–16

Effect of pancreatic juice and trypsin on oleic acid–stimulated pancreatic secretion and plasma secretin in dogs. Shiratori K, et al. **Gastroenterology** 1989 May;96(5 Pt 1):1330–6

Effect of pancreatic juice diversion on secretin release in rats. Sun G, et al. **Gastroenterology** 1989 Apr;96(4):1173–9

Pancreatic juice enhances fat–stimulated release of enteric

hormones in dogs. Lluis F, et al. **Pancreas** 1989;4(1):23–30

Pancreatic secretion and the release of cholecystokinin after a meal in dogs with and without exclusion of pancreatic juice. Kogire M, et al. **Scand J Gastroenterol** 1989 May; 24(4):507–12

[Enteral administration of pancreatic juice with the object of reducing the exocrine activity of the pancreas following pancreatoduodenal resection] Dubitskiĭ AE. **Klin Khir** 1989; (5):44–6 (Eng. Abstr.) (Rus)

SECRETION

Bethanechol-induced restricted stimulation of pancreatic juice secretion in mice. Vaccaro MI, et al. **Acta Physiol Pharmacol Latinoam** 1987;37(3):409–13

Plasma secretin, CCK, and pancreatic secretion in response to dietary fat in the rat. Green GM, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):G1016–21

A cholecystokinin releasing peptide mediates feedback regulation of pancreatic secretion. Lu L, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):G430–5

Cholecystokinin in the regulation of intestinal motility and pancreatic secretion in dogs. Thor P, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):G498–504

Responses of the pancreatic digestive enzyme secretion to various combinations of amino acids and cholecystokinin in chicks (Gallus domesticus). Yang SI, et al. **Comp Biochem Physiol [A]** 1989;93(4):703–6

Nervous control of gastric and pancreatic secretory response to 2-deoxy-D-glucose in the dog. Becker S, et al. **Digestion** 1988;39(3):187–96

Effect of atropine on intestinal phase of pancreatic secretion in man. Bozkurt T, et al. **Digestion** 1988;41(2):108–15

Two hypotheses on the feedback regulation of pancreatic enzyme secretion. Fushiki T, et al. **FASEB J** 1989 Feb; 3(2):121–6 (35 ref.)

Effects of cisapride on the pancreatic exocrine secretion in rats. Funakoshi A, et al. **Gastroenterol Jpn** 1988 Oct; 23(5):559–63

Effect of alloxan diabetes on exocrine pancreatic secretion in the anesthetized rabbit. Alvarez C, et al. **Int J Pancreatol** 1989 Oct;5(3):229–38

Mechanism of pancreatic hypersecretion in dogs with obstructive jaundice. Kuroda T, et al. **Int J Pancreatol** 1988 Dec;3(6):425–35

Effects of synthetic human gastrin-releasing peptide on pancreatic exocrine secretion and release of pancreatic polypeptide in conscious rats. Miyasaka K, et al. **Int J Pancreatol** 1989 Apr;4(3):251–60

Pure pancreatic juice in humans: orange-lemon-juice-induced secretory effects. Comparative analysis with a regular meal, sorbitol, acidified peptone broth and secretin. Tiscornia OM, et al. **Int J Pancreatol** 1988 Dec;3(6):469–76

Exocrine pancreatic secretion in the elderly. Vellas B, et al. **Int J Pancreatol** 1988 Dec;3(6):497–502

Effects of DN-9693, a synthesized phosphodiesterase inhibitor, on pancreatic exocrine secretion in dogs. Iwatsuki K, et al. **Jpn J Pharmacol** 1989 Jan;49(1):77–82

Effect of glucagon-(1–21)-peptide on secretin-stimulated pancreatic exocrine secretion in anesthetized dogs. Itoh H, et al. **Life Sci** 1989;44(12):819–25

Allopurinol stimulates pancreatic exocrine secretion in the dog. Horiuchi A, et al. **Pancreas** 1989;4(2):179–84

Subtypes of muscarinic receptors in pancreatic exocrine secretion in anesthetized dog. Iwatsuki K, et al. **Pancreas** 1989;4(3):339–45

Somatostatin in pancreatic secretion [editorial] Leibow C. **Pancreas** 1988;3(4):373–4

Mechanisms of terbutaline-induced inhibition of exocrine pancreatic secretion in humans. Meyer B, et al. **Pancreas** 1988;3(4):399–403

Patterns of pancreatic secretion in the anaesthetised guinea pig following stimulation with secretin, cholecystokinin octapeptide, or bombesin. Padfield PJ, et al. **Pancreas** 1989; 4(2):204–9

Secretion of protein, fluid, and immunoreactive somatostatin in rat pure pancreatic juice: adaptation to chronic cerulein and secretin treatment. Sarfati P, et al. **Pancreas** 1988; 3(4):375–82

Central and peripheral effects of prostaglandin E2 and enprostil on exocrine pancreatic secretion in rats. Sautereau D, et al. **Pancreas** 1989;4(2):210–8

Effect of fatty acid on secretin release and cholinergic dependence of pancreatic secretion in rats. Shiratori K, et al. **Pancreas** 1989;4(4):452–8

Effects of synthetic kassinin on splanchnic circulation and exocrine pancreas in dogs. Doi R, et al. **Peptides** 1988 Sep-Oct;9(5):1055–8

Effect of secretin on pancreatic juice proteins in caerulein-induced acute pancreatitis in the rat. Manso MA, et al. **Peptides** 1989 Mar-Apr;10(2):255–60

Biliary and pancreatic secretory component of the migrating myoelectric complex in the pig. Effect on intraduodenal pH. Abello J, et al. **Reprod Nutr Dev** 1988;28(4A):953–67

Influence of "calcium2+-channel blockers" on exocrine pancreatic secretion by isolated rat acini. Mössner J, et al. **Res Exp Med (Berl)** 1988;188(4):255–65

Effect of atropine on feedback regulation of pancreatic secretion in rats. Weidenbach H, et al. **Res Exp Med (Berl)** 1989;189(3):221–8

Inhibitory effect of CR-1409, a competitive inhibitor of cholecystokinin, on pancreatic exocrine secretion in the conscious rat. Miyasaka K, et al. **Tohoku J Exp Med** 1988 Jun;155(2):165–72

Inhibitory effects of cyclosporin on exocrine and endocrine functions of the rat pancreas. Suzuki S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):913–4

[Tetracosactide (ACTH 1–24) stimulates the external pancreatic secretion by a vagal mechanism in the rat] Chariot J, et al. **C R Acad Sci [III]** 1988;307(5):235–8 (Eng. Abstr.) (Fre)

[Function and morphology of intraperitoneal segmental pancreas allotransplants with cyclosporin monotherapy in the dog—a comparison of 4 drainage procedures of exocrine secretions] Rosenberger J, et al. **Zentralbl Chir** 1988;113(24):1583–92 (Eng. Abstr.) (Ger)

[A new method of pancreas transplantation with drainage of exocrine secretion through the gallbladder-bile ducts into the duodenum of the recipient] Wolff H. **Zentralbl Chir** 1989;114(5):313–8 (Eng. Abstr.) (Ger)

[Age related effect of pentagastrin on excretory pancreas stimulation in the human] Tereščenko VP. **ZFA** 1988 Jul-Aug;43(4):191–4 (Ger)

[The effect of somatostatin on pancreatic enzyme secretion in rats in vivo and in vitro] Varga G, et al. **Orv Hetil** 1989 Aug 13;130(33):1769–72 (28 ref.) (Eng. Abstr.) (Hun)

[Effect of dopamine and haloperidol on the exocrine function of the rat pancreas in vivo] Biedziński TM, et al. **Rocz Akad Med Bialymstoku** 1984–85;29–30:107–16 (Eng. Abstr.) (Pol)

[General mechanisms of regulation of the activity of the stomach and pancreas in peptic ulcer and chronic pancreatitis] Ivashkin VT, et al. **Ter Arkh** 1989;61(2):8–11 (Eng. Abstr.) (Rus)

[Prostaglandins and cyclic nucleotides in chronic pancreatitis] Mosin VI, et al. **Ter Arkh** 1989;61(2):11–5 (Eng. Abstr.) (Rus)

PANCREATIC NEOPLASMS

Cancer of the pancreas and periampullary region—diagnosis and surgical therapy. Vogt DP, et al. **Ann Acad Med Singapore** 1988 Jan;17(1):107–12 (29 ref.)

Pancreatic cancer in 1988. Possibilities and probabilities. Warshaw AL, et al. **Ann Surg** 1988 Nov;208(5):541–53 (164 ref.)

Cystadenoma of the pancreas. Report of 4 cases. Ch'en HC, et al. **Chin Med J** 1966 Sep;85(9):629–32

Lymphoma predominantly involving the pancreas. Cappell MS, et al. **Dig Dis Sci** 1989 Jun;34(6):942–7 (45 ref.)

A case of multiple endocrine neoplasia (MEN) type 1; the immunohistochemical and ultrastructural studies of its tumors and the analysis of hormones in tumor extracts. Ishii H, et al. **Endocrinol Jpn** 1989 Feb;36(1):37–45

A new human pancreatic carcinoma cell line developed for adoptive immunotherapy studies with lymphokine-activated killer cells in nude mice. Drucker BJ, et al. **In Vitro Cell Dev Biol** 1988 Dec;24(12):1179–87

International Symposium on Pancreatitis and Pancreatic Cancer: Biochemical and Clinical Aspects. October 24–25, 1986, Padova, Italy. **Int J Pancreatol** 1988;3 Suppl 1:S1–160

Carcinoid tumor with intradural spinal metastases. Rao KC, et al. **J Comput Tomogr** 1988 Oct;12(4):258–60

Ectopic gastric-like duplication of the pancreas. Wold M, et al. **J Pediatr Surg** 1988 Nov;23(11):1051–2

Degeneration, oncogenesis and regeneration of pancreatic beta-cells of islets of Langerhans. Okamoto H. **Nippon Naibunpi Gakkai Zasshi** 1988 Dec 20;64(12):1236–7

Regulation of growth and differentiation in pancreatic cancer. Bethesda, Maryland, September 19 and 20, 1988. **Pancreas** 1989;4(2):256–75

Pancreatic cancer. An update on a deadly disease. Bruckstein AH. **Postgrad Med** 1989 Jun;85(8):101–8, 111

Approach to hepatic involvement by endocrine tumors of the gastrointestinal tract. Stockmann F, et al. **Semin Liver Dis** 1988 Aug;8(3):254–62 (99 ref.)

Cystic neoplasms and true cysts of the pancreas. Howard JM. **Surg Clin North Am** 1989 Jun;69(3):651–65 (45 ref.)

Transplantation of the liver for metastatic endocrine tumors of the intestine and pancreas. Makowka L, et al. **Surg Gynecol Obstet** 1989 Feb;168(2):107–11

Case report: secondary penile carcinoma. Hashimoto H, et al. **Urol Int** 1989;44(1):56–7

[Cystadenoma of the pancreas] Fiala P, et al. **Rozhl Chir** 1988 Dec;67(12):836–42 (Eng. Abstr.) (Cze)

[Cystadenoma and cystadenocarcinoma of the pancreas] Korhoň M, et al. **Rozhl Chir** 1989 May;68(5):320–2 (Eng. Abstr.) (Cze)

[Giant cell carcinoma (osteoclastoma) of the pancreas] Will CH, et al. **ROFO** 1989 Mar;150(3):352–3 (Ger)

[Glucagonoma syndrome. Clinico-therapeutic data relative to personal experience and review of the literature] Biliotti GC, et al. **Minerva Chir** 1989 Jan 31;44(1-2):163–72 (33 ref.) (Ita)

[Endocrine tumors of the pancreas] Kuroda S, et al. **Gan No Rinsho** 1989 Jan;Spec No:337–48 (Jpn)

[Human monoclonal antibody constructed by lymphocytes from pancreatic cancer patients] Tanaka H. **Nippon Geka Gakkai Zasshi** 1989 Jan;90(1):93–101 (Eng. Abstr.) (Jpn)

[IgD-type multiple myeloma associated with tumor of the pancreas] Kanno M, et al. **Rinsho Ketsueki** 1988 Dec; 29(12):2312–6 (Eng. Abstr.) (Jpn)

[Carcinoid of the accessory pancreas] Veligotskiĭ NN, et al. **Klin Khir** 1988;(11):59 (Rus)

[A giant pseudotumor of the pancreas] Zhenchevskiĭ RA, et al. **Klin Khir** 1988;(11):58 (Rus)

[Microcystic cystadenoma of the pancreas] Salvador R, et al. **Rev Esp Enferm Apar Dig** 1989 Feb;75(2):201–4 (Eng. Abstr.) (Spa)

ANALYSIS

Transthyretin in endocrine pancreatic tumors. Jacobsson B, et al. **Am J Pathol** 1989 Feb;134(2):465–71

Composition of glycosaminoglycans in human pancreatic cancer. Masuda H, et al. **Biochem Med Metab Biol** 1989 Jun;41(3):193–200

A Mr 58,000 glycoprotein specifically expressed in developing hamster pancreas and reexpressed in hamster and human pancreatic carcinomas. Heredia A, et al. **Cancer Res** 1988 Dec 1;48(23):6906–11

Identification of tissue factor in two human pancreatic cancer cell lines. Silberberg JM, et al. **Cancer Res** 1989 Oct 1; 49(19):5443–7

Carboxyl terminal glycine extended progastrin (gastrin-G) in human gastric mucosa and gastrinomas. Azuma T, et al. **Clin Chim Acta** 1989 Feb 15;179(2):201–3

Molecular characteristics and evidence for internalization of vasoactive-intestinal-peptide (VIP) receptors in the tumoral rat-pancreatic acinar cell line AR 4–2 J. Svoboda M, et al. **Eur J Biochem** 1988 Oct 1;176(3):707–13

Comparative studies on the expression of tumor-associated glycoprotein (TAG-72), CA 19-9 and DU-PAN-2 in normal, benign and malignant pancreatic tissue. Takasaki H, et al. **Int J Cancer** 1988 Nov 15;42(5):681–6

The endocrine pancreas in patients with insulinomas. An immunocytochemical and ultrastructural study of the nontumoral tissue with morphometrical evaluations. Bani Sacchi T, et al. **Int J Pancreatol** 1989 Jul;5(1):11–28

Presence of calbindin-D 28K in endocrine pancreatic tumoral cells of the RINm5F line. Pochet R, et al. **Int J Pancreatol** 1989 Oct;5(3):295–304

Serum tissue polypeptide antigen in pancreatic cancer and other gastrointestinal diseases [letter] Basso D, et al. **J Clin Pathol** 1989 May;42(5):555

Epidermal growth factor receptors in cancer tissues of esophagus, lung, pancreas, colorectum, breast and stomach. Ozawa S, et al. **Jpn J Cancer Res** 1988 Nov;79(11):1201–7

Pancreatic cancer mucin from xenografts of SW1990 cells: isolation, characterization, and comparison to colon cancer mucin. Nardelli J, et al. **Pancreas** 1988;3(6):631–41

Novel assay for pancreatic cellular damage: 1. Characterization of protein profiles in human pancreatic cytosol and purification and characterization of a pancreatic specific protein. Pousette A, et al. **Pancreas** 1988; 3(4):421–6

Ultrastructure and electron immunocytochemistry of insulin-producing B-cell tumors from transgenic mice: comparison with counterpart human tumors. Holm R, et al. **Ultrastruct Pathol** 1988 Sep-Oct;12(5):547–59

Comparative study of seven neuroendocrine markers in pancreatic endocrine tumours. Bordi C, et al. **Virchows Arch [A]** 1988;413(5):387–98

Argyrophilic and hormone immunoreactive cells in normal and hyperplastic pancreatic ducts and exocrine pancreatic carcinoma. Chen J, et al. **Virchows Arch [A]** 1988; 413(5):399–405

Localization of proinsulin and insulin in human insulinoma: preliminary immunohistochemical results. Roth J, et al. **Virchows Arch [B]** 1989;56(5):287–92

BLOOD

CA 50 and CA 19-9 in serum as tumor markers for pancreatic cancer: a review of the literature. Andrén-Sandberg A. **Acta Chir Scand Suppl** 1989;549:75–81 (44 ref.)

Serologic precursors of cancer: serum micronutrients and the subsequent risk of pancreatic cancer. Burney PG, et al. **Am J Clin Nutr** 1989 May;49(5):895–900

C reactive protein in pancreatic cancer and chronic pancreatitis. Basso D, et al. **Ann Clin Res** 1988;20(6):414–6

An endocrine marker for pancreatic cancer. Tulassay Z, et al. **BMJ** 1988 Dec 3;297(6661):1447–8

Lack of diabetogenic action of calcitonin in subjects affected by insulinoma. Passariello N, et al. **Diabete Metab** 1989 Mar-Apr;15(2):88–92

Blood groups antigens distribution in pancreatic cancer. An immunohistochemical study. Stachura J, et al. **Folia Histochem Cytobiol** 1989;27(1):49–55

CA 19.9 in biliopancreatic diseases. Lamiquiz Vallejo A, et al. **Int J Biol Markers** 1989 Jan-Mar;4(1):51–2

Effects of sandostatin on plasma chromogranin-A levels in neuroendocrine tumors. Moattari AR, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):902–5

Malignant islet cell tumor of the pancreas associated with high plasma calcitonin and somatostatin levels. Howard JM, et al. **Surgery** 1989 Feb;105(2 Pt 1):227–9

Comparative study on the expression of the blood group antigens Le a, Le b, Le x, Le y and the carbohydrate antigens CA 19-9 and CA-50 in chronic pancreatitis and pancreatic carcinoma. Schwenk J, et al. **Virchows Arch [A]** 1989;414(6):465–76

[Low levels of testosterone in patients with pancreatic carcinoma] Militello C, et al. **Minerva Chir** 1988 Apr 15; 43(7):581–6 (Eng. Abstr.) (Ita)

BLOOD SUPPLY

Induction of angiogenesis during the transition from hyperplasia to neoplasia. Folkman J, et al. **Nature** 1989 May 4;339(6219):58–61

[Medical changes in preformed host arteries involved in a tumor—a morphometric study of gastric, colonic, and pancreatic carcinomas in man] Yaegashi H, et al. **Gan No Rinsho** 1988 Sep;34(11):1555–60 (Eng. Abstr.) **(Jpn)**

CHEMICALLY INDUCED

Induction of a mixed ductal–squamous–islet cell carcinoma in a rat treated with a tobacco–specific carcinogen. Pour PM, et al. **Am J Pathol** 1989 Mar;134(3):627–31

Effect of secretin on pancreatic carcinogenesis in the hamster model. Pour PM, et al. **Cancer Lett** 1989 Jul 1;46(1):57–62

Induction of lung and exocrine pancreas tumors in F344 rats by tobacco–specific and Areca–derived N–nitrosamines. Rivenson A, et al. **Cancer Res** 1988 Dec 1;48(23):6912–7

Cycles of repeated augmentation pressure in rapid production of pancreatic and cholangiocellular carcinomas in hamsters initiated with N–nitrosobis(2–oxopropyl)amine. Mizumoto K, et al. **Carcinogenesis** 1989 Aug;10(8):1457–9

Pancreatic acinar cell tumors in rats induced by 3,2'–dimethyl–4–aminobiphenyl. Shirai T, et al. **Carcinogenesis** 1989 Jun;10(6):1127–30

Modifying influence of dehydroepiandrosterone or butylated hydroxytoluene treatment on initiation and development stages of azaserine–induced acinar pancreatic preneoplastic lesions in the rat. Thornton M, et al. **Carcinogenesis** 1989 Feb;10(2):407–10

Modulation of dietary fat–promoted pancreatic carcinogenesis in rats and hamsters by chronic coffee ingestion. Woutersen RA, et al. **Carcinogenesis** 1989 Feb; 10(2):311–6

Effect of dietary omega–3 and omega–6 fatty acids on development of azaserine–induced preneoplastic lesions in rat pancreas. O'Connor TP, et al. **J Natl Cancer Inst** 1989 Jun 7;81(11):858–63

Importance of diabetes in inhibition of pancreatic cancer by streptozotocin. Bell RH Jr, et al. **J Surg Res** 1989 May; 46(5):515–9

Near–simultaneous adenocarcinoma of pancreas in husband and wife [letter] Rubio V, et al. **Lancet** 1989 Jan 21; 1(8630):166–7

Possible enhancement of carcinogenesis by selenium in an animal tumor model. **Nutr Rev** 1989 Jun;47(6):173–5 (16 ref.)

What is the proper experimental unit for long–term rodent studies? An examination of the NTP benzyl acetate study. Young SS. **Toxicology** 1989 Mar;54(3):233–9

COMPLICATIONS

Vitamin A deficiency secondary to pancreatic carcinoid. Case report. Rowe PH, et al. **Acta Chir Scand** 1988 Jul–Aug;154(7–8):487–8

Hyperprealbuminemia, euthyroid hyperthyroxinemia, Zollinger–Ellison–like syndrome and hypercorticism in a pancreatic endocrine tumour. Maye P, et al. **Acta Endocrinol (Copenh)** 1989 Jan;120(1):87–91

Reversible brain cell damage due to hypoglycemia in a patient with insulinoma. Ronquist G, et al. **Acta Neurol Scand** 1989 Jan;79(1):75–6

Heterotopic pancreas: gastric outlet obstruction secondary to pancreatitis and pancreatic pseudocyst. Burke GW, et al. **Am J Gastroenterol** 1989 Jan;84(1):52–5

Filarial ascites associated with carcinoma of the pancreas [letter] Singh S, et al. **Am J Gastroenterol** 1989 Sep; 84(9):1131

Pancreatic adenocarcinoma in a patient with cystic fibrosis. McIntosh JC, et al. **Am J Med** 1988 Oct;85(4):592

A comparison of choledochoenteric bypass and cholecystoenteric bypass in patients with biliary obstruction due to pancreatic cancer. Rosemurgy AS, et al. **Am Surg** 1989 Jan;55(1):55–60

An evaluation of Dacron prostheses in the relief of jaundice due to malignant obstruction. Scott HJ, et al. **Ann R Coll Surg Engl** 1988 Sep;70(5):293–5

Management of biliary obstruction in patients with unresectable carcinoma of the pancreas. McGrath PC, et al. **Ann Surg** 1989 Mar;209(3):284–8

A patient with insulinoma presenting for psychiatric assessment. Steinberg PI, et al. **Can J Psychiatry** 1989 Feb; 34(1):58–9

Extrahepatic portal venous obstruction of different pathogenesis in pancreatic diseases: reports of 4 autopsy cases with chronic pancreatitis and pancreatic carcinoma. Terada T, et al. **Gastroenterol Jpn** 1989 Aug;24(4):414–20

Acute cholecystitis after stenting of the common bile duct for obstruction secondary to pancreatic cancer. Leung JW, et al. **Gastrointest Endosc** 1989 Mar–Apr;35(2):109–10

Carcinoma of tail of pancreas presenting with intra–abdominal hemorrhage [letter] Varty PP, et al. **Indian J Gastroenterol** 1989 Jan;8(1):57–8

New–onset diabetes mellitus as a harbinger of pancreatic carcinoma. A case report and literature review. Rosa JA, et al. **J Clin Gastroenterol** 1989 Apr;11(2):211–5 (27 ref.)

A case of Down's syndrome, insulinoma and anorexia. Morgan JR. **J Ment Defic Res** 1989 Apr;33 (Pt 2):185–7

Glucagonoma presenting as morbid obesity. Martin FM, et al. **J Surg Oncol** 1988 Dec;39(4):256–9

Multiple endocrine neoplasia type II with Zollinger–Ellison syndrome caused by a solitary pancreatic gastrinoma. Maton PN, et al. **JAMA** 1989 Jul 28;262(4):535–7

Infantile myofibromatosis causing biliary and pancreatic obstruction: a case report. Marks MK, et al. **Med Pediatr Oncol** 1988;16(5):363–5

Septic cholangitis caused by Candida tropicalis. Kirchner R, et al. **Mycoses** 1988;Suppl 1:47–53

Cerebrovascular complications of mucinous cancers [published erratum appears in 1989 May;39(5):745] Amico L, et al. **Neurology** 1989 Apr;39(4):522–6

Severe acquired hypocholesterolemia: two case reports. **Nutr Rev** 1989 Jul;47(7):202–7 (25 ref.)

Insulinoma complicating pregnancy presenting with hypoglycemic coma after delivery: a case report and review of the literature. Garner PR, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):847–9 (12 ref.)

Silent human pancreatic glucagonoma and "A" nesidioblastosis. Balas D, et al. **Pancreas** 1988;3(6):734–9

A malignant tumor of the pancreas producing glucagonoma syndrome: immunocytochemistry and ultrastructure of liver metastases and comparison with the primary tumor. Bani D, et al. **Pancreas** 1989;4(4):492–5

Lipomatosis of the pancreas: an unusual cause of massive steatorrhea. Lozano M, et al. **Pancreas** 1988;3(5):580–2

Hypertrophic obstructive cardiomyopathy in neonatal beta–cell adenoma of the pancreas. Hausdorf G, et al. **Pediatr Cardiol** 1988;9(3):179–81

Pancreatic carcinoma. An unusual presentation—inferior vena cava thrombosis. Beyth RJ, et al. **Postgrad Med** 1989 Jul;86(1):229–32

Massive haematemesis—presenting symptoms of cystadenocarcinoma of the pancreas. Baruch Y, et al. **Postgrad Med J** 1989 Jan;65(759):42–4

Pancreatic pleural effusion associated with oncocytic carcinoma of the pancreas. England DW, et al. **Postgrad Med J** 1988 Jun;64(752):465–6

Pancreatic somatostatinoma: presentation with recurrent episodes of severe hyperglycaemia and ketoacidosis. Willcox PA, et al. **Q J Med** 1988 Jul;68(255):559–71

Nonsurgical palliation of jaundice in pancreatic cancer. Cotton PB. **Surg Clin North Am** 1989 Jun;69(3):613–27 (47 ref.)

Hemodynamic study of occlusion of the splenic vein caused by carcinoma of the pancreas. Ku Y, et al. **Surg Gynecol Obstet** 1989 Jan;168(1):17–24 (22 ref.)

Peptic ulcer and gastric acid secretion in patients with insulinoma. Naito H, et al. **Tohoku J Exp Med** 1988 Jul; 155(3):295–301

[Iatrogenic glucagonoma syndrome?] Benhamou PY, et al. **Ann Dermatol Venereol** 1988;115(6–7):717–9 **(Fre)**

[Glucagonoma syndrome] Picard C, et al. **Ann Dermatol Venereol** 1988;115(11):1142–5 **(Fre)**

[Pancreatic tumor with diabetes and necrotic migratory erythema. Glucagonoma or proglucagonoma?] Gillet M, et al. **Chirurgie** 1988;114(5):441–6 (10 ref.) (Eng. Abstr.) **(Fre)**

[Hypoglycemia caused by insulinoma in diabetes mellitus] Heik SC, et al. **Dtsch Med Wochenschr** 1988 Nov 4; 113(44):1714–7 (18 ref.) (Eng. Abstr.) **(Ger)**

[Spontaneous cholecysto–gastric fistula] Harloff M, et al. **Internist (Berlin)** 1988 Aug;29(8):589–90 **(Ger)**

[A 61–year–old patient with Cushing syndrome and pronounced hirsutism] Weber MM, et al. **Internist (Berlin)** 1989 Jul;30(7):451–4 **(Ger)**

[A rare form of internal intestinal fistula] Ushakov ND, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):131–2 **(Rus)**

[Treatment of patients with malignant tumors of organs in the pancreaticobiliary zone complicated by the development of emergency situations] Andriushchenko VP, et al. **Klin Khir** 1989;(5):38–40 (Eng. Abstr.) **(Rus)**

[Surgical correction of duodenal obstruction caused by malignant tumor] Podoprigora AP, et al. **Klin Khir** 1989; (5):36–7 (Eng. Abstr.) **(Rus)**

[Tumor of the pancreas as the cause of Cushing's syndrome (clinical study)] German SV, et al. **Sov Med** 1988; (10):118–20 **(Rus)**

[The convulsive syndrome in pancreatic insuloma] Makhno AD, et al. **Vrach Delo** 1989 Mar;(3):95–6 **(Rus)**

CONGENITAL

Congenital pancreatoblastoma in Beckwith–Wiedemann syndrome: an emerging association. Drut R, et al. **Pediatr Pathol** 1988;8(3):331–9 (35 ref.)

DIAGNOSIS

Immunocytochemical and ultrastructural findings in a case of rare carcinoma of the pancreas with predominance of malignant squamous cells in an intraoperative needle aspirate. Gupta RK, et al. **Acta Cytol** 1989 Mar–Apr; 33(2):153–6

Fine needle aspiration cytology of the pancreas. Al–Kaisi N, et al. **Acta Cytol** 1989 Mar–Apr;33(2):145–52 (25 ref.)

Neuroendocrine pancreatic tumors. Clinical findings in a prospective study of 84 patients. Eriksson B, et al. **Acta Oncol** 1989;28(3):373–7

Radiologic diagnosis of neuroendocrine tumors. Lunderquist A. **Acta Oncol** 1989;28(3):371–2 (4 ref.)

Mucinous cystadenocarcinoma of the pancreas. Ultrasonographic findings in 5 cases. Bastid C, et al. **Acta Radiol** 1989 Jan–Feb;30(1):45–7

Cystic pancreatic tumors: CT and sonographic assessment. Johnson CD, et al. **AJR** 1988 Dec;151(6):1133–8

Mucinous cystadenoma: pitfalls of differential diagnosis. Sachs JR, et al. **Am J Gastroenterol** 1989 Jul;84(7):811–6

C–peptide suppression test and recurrent insulinoma. Argoud GW, et al. **Am J Med** 1989 Mar;86(3):335–7

Increased tear secretion in pancreatic cholera: a newly recognized symptom in an experiment of nature. Gilbard JP, et al. **Am J Med** 1988 Oct;85(4):552–4

Myeloma–like cast nephropathy associated with acinar cell carcinoma of the pancreas. Reducka K, et al. **Am J Nephrol** 1988;8(5):421–4

Diagnosis of pancreatic carcinoma by fine needle aspiration cytology and computerized cytomorphometry. Killough BW, et al. **Anal Quant Cytol Histol** 1989 Aug;11(4):238–42

Tumour markers in pancreatic cancer. Haglund C, et al. **Ann Chir Gynaecol** 1989;78(1):41–53 (114 ref.)

Tumour–associated trypsin inhibitor, TATI. Clinical use and biological function. Stenman UH, et al. **Ann Chir Gynaecol** 1989;78(1):77–82 (49 ref.)

CA19–9 and pancreatic cancer [letter] Dunn PM, et al. **Ann Intern Med** 1989 Aug 15;111(4):343

The serologic marker CA 19–9 and pancreatic cancer [letter; comment] Nardone DA. **Ann Intern Med** 1989 Jul 15; 111(2):184–5. **Comment on:** Ann Intern Med 1989 May 1;110(9):704–9

Evaluation of a serologic marker, CA19–9, in the diagnosis of pancreatic cancer [see comments] Pleskow DK, et al. **Ann Intern Med** 1989 May 1;110(9):704–9. **Comment in:** Ann Intern Med 1989 Jul 15;111(2):184–5

Enzyme–linked PNA lectin binding assay compared with CA19–9 and CEA radioimmunoassay as a diagnostic blood test for pancreatic cancer. Ching CK, et al. **Br J Cancer** 1989 Jun;59(6):949–53

The evaluation of CA 19–9 antigen level in the early detection of pancreatic cancer. A prospective study of 866 patients. Frebourg T, et al. **Cancer** 1988 Dec 1; 62(11):2287–90

The role of the leukocyte adherence inhibition (LAI), CA 19–9, and tissue polypeptide antigen (TPA) tests in the diagnosis of pancreatic cancer. Meduri F, et al. **Cancer** 1989 Sep 1;64(5):1103–6

Ulex Europaeus–I: a marker for differentiation of (pre)cancerous lesions induced in the rat pancreas by azaserine. Takiyama Y, et al. **Carcinogenesis** 1988 Nov; 9(11):2087–92

Diagnostic value of plasma PABA level in pancreatic diseases. Li YH, et al. **Chin Med J [Engl]** 1989 Jan; 102(1):48–52

Serum ribonuclease and its isoenzymes for diagnosis of pancreatic cancer. Wang YM, et al. **Chin Med J [Engl]** 1989 Mar;102(3):183–7

Cystadenocarcinoma versus pseudocyst of the pancreas: a difficult differential diagnosis. Lee YT. **Curr Surg** 1989 May–Jun;46(3):202–6 (28 ref.)

Role of serum pancreatic enzyme assays in diagnosis of pancreatic disease. Ventrucci M, et al. **Dig Dis Sci** 1989 Jan;34(1):39–45

Insulin–producing islet cell tumors. Fajans SS, et al. **Endocrinol Metab Clin North Am** 1989 Mar;18(1):45–74 (65 ref.)

Clinicopathologic analysis of endoscopic ultrasonograms in pancreatic mass lesions. Hayashi Y, et al. **Endoscopy** 1989 May;21(3):121–5

Preoperative evaluation and preparation in pancreatic carcinoma. Burcharth F. **Eur J Surg Oncol** 1988 Dec; 14(6):645–9 (14 ref.)

Small carcinoma of the pancreas with associated chronic pancreatitis: two case reports. Deixonne B, et al. **Eur J Surg Oncol** 1989 Jun;15(3):265–70

A case of neurofibroma located in the retroperitoneum involving the uncinate process of the pancreas. Imai H, et al. **Gastroenterol Jpn** 1989 Aug;24(4):421–4

Endoscopic ultrasonography in the differential diagnosis of pancreatic disease. Kaufman AR, et al. **Gastrointest Endosc** 1989 May–Jun;35(3):214–9

Plasmacytoma of the pancreatic head. Fukuya T, et al. **Gastrointest Radiol** 1989 Summer;14(3):226–8

Uneven lipomatosis: a pitfall in pancreatic sonography. Marchal G, et al. **Gastrointest Radiol** 1989 Summer; 14(3):233–7

CA 19–9 assay in patients with extrahepatic cholestatic jaundice. Barone D, et al. **Int J Biol Markers** 1988 Apr–Jun; 3(2):95–100

The monoclonal antibody–defined CAR–3 antigen is a serological marker associated with pancreatic carcinoma. Prat M, et al. **Int J Biol Markers** 1988 Jan–Mar;3(1):29–35

Uncertainty in the diagnosis of histologically confirmed pancreatic cancer cases. Lyon JL, et al. **Int J Epidemiol** 1989 Jun;18(2):305–8

Tissue polypeptide antigen, galactosyltransferase isoenzyme II and pancreatic oncofetal antigen serum determination: role in pancreatic cancer diagnosis. Basso D, et al. **Int J Pancreatol** 1988;3 Suppl 1:S95–100

Ribonucleases and deoxyribonucleases in pancreatic cancer: clinical value and pathophysiological interrelationships. Del Favero G, et al. **Int J Pancreatol** 1988;3 Suppl 1:S107–12

Cytology in the diagnosis of pancreatic cancer. Del Favero G, et al. **Int J Pancreatol** 1988;3 Suppl 1:S137–41

Pancreatic function tests in the diagnosis of pancreatic cancer. Gullo L. **Int J Pancreatol** 1988;3 Suppl 1:S101–5

(15 ref.)
Fatal clostridial pancreatitis following ERCP and percutaneous needle biopsy. Howard JM, et al. **Int J Pancreatol** 1989 Oct;5(3):305–10
CA 19–9 in serum and pancreatic juice: its role in the differential diagnosis of resectable pancreatic cancer from chronic pancreatitis. Malesci A, et al. **Int J Pancreatol** 1988; 3 Suppl 1:S119–23
Limits of CEA and ferritin in the diagnosis of pancreatic cancer. Plebani M, et al. **Int J Pancreatol** 1988;3 Suppl 1:S113–7
Alpha-fetoprotein-positive adenocarcinoma of the pancreas. Scheithauer W, et al. **Int J Pancreatol** 1989 Feb;4(1):99–103
Elevated activity of pancreatic type amylase in the urine as an early indicator of pancreatic tumors in hamsters. Takahashi M, et al. **Int J Pancreatol** 1989 Jul;5(1):47–53
Diagnostic dilemmas in patients with cystic neoplasms of the pancreas. Turnage RH, et al. **Int J Pancreatol** 1988 Dec; 3(6):477–89
Accuracy of diagnosis of pancreatic cancer decreases with increasing age. Nieman JL, et al. **J Am Geriatr Soc** 1989 Feb;37(2):97–100
Microcystic adenoma of the pancreas: spectrum of computed tomographic findings. Itai Y, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):797–803
CT and MR imaging of advanced Zollinger–Ellison syndrome. Tjon A Tham RT, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):821–8
MR, CT, and ultrasound findings of metastatic vipoma in pancreas. Tjon A Tham RT, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):142–4
Localization of insulinoma by intraoperative ultrasonography [letter] Jacquet N, et al. **J R Soc Med** 1989 May;82(5):317
Localization of an occult impalpable insulinoma by intraoperative ultrasonography. London NJ, et al. **J R Soc Med** 1988 Nov;81(11):663–4
Application of the immunoperoxidase method for rapid intraoperative pathological diagnosis of pancreatic cancer. Ichihara T, et al. **J Surg Oncol** 1989 Jan;40(1):8–16
Carcinoma of pancreas metastasizing to the tunica vaginalis testis. Aquino NM, et al. **JCU** 1989 May;17(4):287–90
Immunocytochemical evidence of phospholipase A2 in pancreatic tumors—diagnostic values. Stömmer P. **Klin Wochenschr** 1989 Feb 1;67(3):136–40
Immunohistochemistry with monoclonal antibody B72.3 as an adjunct in the cytologic diagnosis of pancreatic carcinoma. Ness MJ, et al. **Mod Pathol** 1988 Jul;1(4):279–83
Serum immunoreactive elastase: is it useful for the diagnosis of pancreatic cancer? Gullo L, et al. **Pancreas** 1989; 4(3):335–8
Massive hemorrhage as the initial appearance of "nonfunctioning" islet cell tumors of the pancreas. McPherson GA, et al. **Pancreas** 1989;4(3):381–5
DU-PAN-2 levels in serum and pancreatic ductal fluids of patients with benign and malignant pancreatic disease. Mahvi DM, et al. **Pancreas** 1988;3(4):488–93
Effectiveness of discriminant analysis of serum CA 19–9 and elastase 1 in diagnosis of pancreatic carcinoma. Yamamura H, et al. **Pancreas** 1989;4(4):401–5
Rare pancreatic malignancies. Friedman AC, et al. **Radiol Clin North Am** 1989 Jan;27(1):177–90 (51 ref.)
Pancreatic cystic neoplasms. Mathieu D, et al. **Radiol Clin North Am** 1989 Jan;27(1):163–76 (46 ref.)
Endocrine tumors of the pancreas [published erratum appears in Radiol Clin North Am 1989 May;27(3):following xii] Rossi P, et al. **Radiol Clin North Am** 1989 Jan;27(1):129–61 (56 ref.)
Gastrinomas: comparison of MR imaging with CT, angiography, and US. Frucht H, et al. **Radiology** 1989 Jun; 171(3):713–7
Cystic neoplasms of the pancreas: comparison of MR imaging with CT. Minami M, et al. **Radiology** 1989 Apr;171(1):53–6
Preoperative imaging versus intraoperative localization of tumors in adult surgical patients with hyperinsulinemia: a multicenter study of 338 patients. Proye C, et al. **World J Surg** 1988 Oct;12(5):685–90
Malignant jaundice: results of diagnostic and therapeutic endoscopy. Soehendra N, et al. **World J Surg** 1989 Mar–Apr;13(2):171–7
[Laparoscopic assessment of the operability of pancreatic cancer] Ivanov S, et al. **Khirurgiia (Sofiia)** 1989;42(1):12–4 (Eng. Abstr.) (Bul)
[The differential diagnosis of chronic pancreatitis and pancreatic cancer] Brailski Kh, et al. **Vutr Boles** 1989; 28(2):54–7 (Eng. Abstr.) (Bul)
[Correlation of the cytologic, endoscopic and echographic findings in the diagnosis of pancreatic cancer] Ivanova S. **Vutr Boles** 1988;27(4):47–9 (Eng. Abstr.) (Bul)
[Value of pancreatic secretory trypsin inhibitor by radioimmunoassay in diagnosis of pancreatic diseases] Chen BG. **Chung Hua Wai Ko Tsa Chih** 1988 Dec;26(12):714–6, 780 (Eng. Abstr.) (Chi)
[Determination of lactoferrin in the diagnosis of diseases of the pancreas] Dité P, et al. **Vnitr Lek** 1989 Feb;35(2):132–6 (Eng. Abstr.) (Cze)
[Preoperative imaging of insulinomas of the adult. Reliability, effectiveness: 1977–1987] Proye C, et al. **Ann Chir** 1988; 42(6):391–3 (Eng. Abstr.) (Fre)
[Pancreatic cystadenoma, diagnostic and therapeutic problems. Apropos of a series of 25 cases] Leborgne J. **Chirurgie** 1988;114(9):727–8 (Fre)
[Fibromyoma of the pancreas or mesentery? Apropos of a case] Verhaeghe P, et al. **Chirurgie** 1988;114(6):524–8 (11 ref.) (Eng. Abstr.) (Fre)
[Peroperative echography in 14 cases of pancreatic insulinoma and gastrinoma] Marotel M, et al. **Gastroenterol Clin Biol** 1988 Oct;12(10):713–20 (38 ref.) (Eng. Abstr.) (Fre)
[Pancreatic insulinoma. Peroperative topographical diagnosis] Deixonne B, et al. **Presse Med** 1988 Sep 24; 17(32):1625–8 (Eng. Abstr.) (Fre)
[Diagnosis of organic hyperinsulinism] Arnold R, et al. **Dtsch Med Wochenschr** 1989 Mar 24;114(12):464–7 (Ger)
[Gestagen receptor-positive, solid-cystic acinar-cell tumor of the pancreas] Ludvik B, et al. **Dtsch Med Wochenschr** 1989 Jun 9;114(23):903–6 (Eng. Abstr.) (Ger)
[New aspects of the diagnosis of pancreatic cancer by determination of granulocyte elastase] Dütschke P, et al. **Med Klin** 1989 Feb 15;84(2):77–80 (Eng. Abstr.) (Ger)
[A case from practice (114). Patient: Mr. H. B., born 1948, television technician] Corneo M. **Schweiz Rundsch Med Prax** 1988 Sep 13;77(37):987–8 (Ger)
[Endoscopic sonography of the upper digestive tract] Dancygier H. **Ultraschall Med** 1989 Jun;10(3):164–9 (16 ref.) (Eng. Abstr.) (Ger)
[20th anniversary of sonographic diagnosis of the pancreas] Lutz H. **Ultraschall Med** 1989 Jun;10(3):136–42 (37 ref.) (Eng. Abstr.) (Ger)
[Ultrasound imaging of the pancreas] Dancygier H. **Verh Dtsch Ges Inn Med** 1988;94:79–89 (28 ref.) (Ger)
[Tumor markers] Schmiegel WH. **Verh Dtsch Ges Inn Med** 1988;94:77–9 (Ger)
[Tumor markers in the upper intestinal tract—stomach and pancreas] Pointner R, et al. **Wien Klin Wochenschr** 1989 Jul 14;101(14):482–4 (Eng. Abstr.) (Ger)
[Testosterone-dihydrotestosterone ratio in the differential diagnosis of pancreatic disease] Sándor Z, et al. **Orv Hetil** 1989 Jun 25;130(26):1387–8 (Eng. Abstr.) (Hun)
[Diagnostic difficulties in the differential diagnosis of chronic pancreatitis and pancreatic tumor] Takács T, et al. **Orv Hetil** 1988 Oct 23;129(43):2303–7 (21 ref.) (Eng. Abstr.) (Hun)
[The role of intraoperative ultrasonic studies in abdominal surgery] Winternitz T, et al. **Orv Hetil** 1989 Jun 25; 130(26):1377–8, 1381–2 (27 ref.) (Eng. Abstr.) (Hun)
[Serum pancreatic enzymes in the diagnosis of carcinoma of the pancreas] Pezzilli R, et al. **G Ital Oncol** 1989 Jan–Mar;9(1):7–13 (Eng. Abstr.) (Ita)
[Diagnosis of pancreatic carcinoma. Preliminary results of a prospective study on the reliability of CA 19–9 in a group of selected patients] Montorsi M, et al. **Minerva Chir** 1989 Jan 31;44(1–2):187–90 (Ita)
[Tumor markers in the diagnosis of pancreatic carcinoma] Lemma F, et al. **Minerva Med** 1989 Jul;80(7):645–9 (Ita)
[Ca 19-9 in the diagnosis of pancreatic carcinoma] Meggiato T, et al. **Minerva Med** 1989 May;80(5):431–4 (Eng. Abstr.) (Ita)
[Endocrine neoplasms of the pancreas. Diagnostic aspects and treatment results] Purri P, et al. **Minerva Med** 1989 Jul;80(7):665–7 (Ita)
[Pancreatic cystic neoplasms. Echographic-CT aspects and differential diagnosis] Rossi A, et al. **Radiol Med (Torino)** 1988 Nov;76(5):425–33 (Eng. Abstr.) (Ita)
[Diagnosis of pancreatic cancer] Ariyama J. **Gan No Rinsho** 1989 Jan;Spec No:323–8 (Jpn)
[Microcarcinoma of the pancreas: report of a case] Kin R, et al. **Gan No Rinsho** 1988 Dec;34(15):2102–8 (Eng. Abstr.) (Jpn)
[Clinical characteristics and imaging diagnosis of early cancer in the hepatobiliary and pancreatic region] Mizumoto R, et al. **Gan No Rinsho** 1988 Aug;34(10):1342–8 (Eng. Abstr.) (Jpn)
[Diagnostic usefulness of percutaneous transhepatic portal vein catheterization for tumor localization by the measurement of immunoreactive insulin: 3 cases of insulinoma] Okamura A, et al. **Nippon Naika Gakkai Zasshi** 1988 May;77(5):643–8 (Jpn)
[Insulinoma simultaneously secreting calcitonin and calcitonin gene-related peptide. A case report] Yoshida S, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr;78(4):569–70 (Jpn)
[Diagnostic ability of ultrasonography for very small cancer] Kitamura T, et al. **Nippon Rinsho** 1989 May;47(5):1031–6 (Jpn)
[Definition, diagnosis and treatment of early pancreatic cancer] Tsunoda T, et al. **Nippon Rinsho** 1989 May; 47(5):1114–20 (Jpn)
[Prospective studies on the progress in detecting and treating cancer of the pancreas] Gibiński K, et al. **Pol Tyg Lek** 1988 Nov 21;43(47):1504–7 (Eng. Abstr.) (Pol)
[A rapid radioimmunoassay method for the determination of blood insulin and its application in the intraoperative localization of insulinoma] Ursich MJ, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Jul–Aug; 43(4):211–5 (Eng. Abstr.) (Por)
[Clinical and therapeutic aspects of some rare forms of pancreatic tumors] Chifan M, et al. **Rev Chir [Chir]** 1989 Jan–Feb;38(1):19–26 (Eng. Abstr.) (Rum)
[Current diagnostic and treatment possibilities in pancreatic tumors] Lazăr C, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Jul–Sep;92(3):497–506 (Eng. Abstr.) (Rum)
[Tumor markers in pancreatic cancer] Lencu M, et al. **Rev Med Interna [Med Interna]** 1988 May–Jun;40(3):203–10 (27 ref.) (Rum)
[Diagnosis of cancer of the organs of the pancreatoduodenal zone accompanied by jaundice] Kasumian SA, et al. **Khirurgiia (Mosk)** 1988 Nov;(11):65–8 (Eng. Abstr.) (Rus)
[A case of tumor-like parapancreatitis] Baranovskil ALu, et al. **Klin Med (Mosk)** 1989 Feb;67(2):130–1 (Rus)
[Tumor markers in primary and metastatic liver cancer and cancer of the pancreas] Moroz GS, et al. **Sov Med** 1988; (12):116–7 (Rus)
[The value of radioimmunologic analysis of tumor-associated antigens in the differential diagnosis of pancreatic tumors] Putseva NM, et al. **Vrach Delo** 1989 May;(5):56–8 (Rus)
[Liposarcoma of the pancreas. Report of a clinical case and review of the literature] Milano C, et al. **Acta Gastroenterol Latinoam** 1988;18(2):133–8 (9 ref.) (Eng. Abstr.) (Spa)
[Diagnostic imaging of pancreatic diseases. II: Tumors] Sáiz A, et al. **Rev Clin Esp** 1988 Nov;183(8):416–23 (47 ref.) (Spa)
[Mucinous cystadenoma of the pancreas] Hermoso JC, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 2):699–702 (22 ref.) (Eng. Abstr.) (Spa)

DRUG THERAPY

Development of resistance to a long-acting somatostatin analogue during treatment of two patients with metastatic endocrine pancreatic tumours. Lamberts SW, et al. **Acta Endocrinol (Copenh)** 1988 Dec;119(4):561–6
Aggravation of hypoglycemia in insulinoma patients by the long-acting somatostatin analogue octreotide (Sandostatin). Stehouwer CD, et al. **Acta Endocrinol (Copenh)** 1989 Jul; 121(1):34–40
Treatment of probable subclinical liver metastases and gross pancreatic carcinoma with hepatic artery 5-fluorouracil infusion and radiation therapy. Wiley AL Jr, et al. **Acta Oncol** 1988;27(4):377–81
Mount Sinai clinical experience with leucovorin and 5-fluorouracil. Bruckner HW. **Adv Exp Med Biol** 1988; 244:157–66
Combination chemotherapy with etoposide and 5-fluorouracil in advanced pancreatic adenocarcinoma. Christiansen NP, et al. **Am J Clin Oncol** 1989 Feb; 12(1):46–8
Activity of 5-fluorouracil, mitomycin C, and methyl CCNU in inoperable adenocarcinoma of pancreas. Vaughn C, et al. **Am J Clin Oncol** 1989 Feb;12(1):49–52
Somatostatin analogue: use in the treatment of vipoma with hypercalcemia. Venkatesh S, et al. **Am J Med** 1989 Sep; 87(3):356–7
Dissociation of the verapamil-induced enhancement of doxorubicin's cytotoxicity from changes in cellular accumulation or retention of doxorubicin in pancreatic cancer cell lines. Chang BK, et al. **Anticancer Res** 1989 Mar–Apr;9(2):347–51
Cellular pharmacology of doxorubicinol alone and combined with verapamil in pancreatic cancer cell lines. Chang BK, et al. **Anticancer Res** 1989 Mar–Apr;9(2):341–5
Treatment of unresectable pancreatic carcinoma using irradiation with concurrent intravenous 5-FU infusion therapy. Raju PI, et al. **Cancer Invest** 1988;6(3):263–6
Treatment of N-nitrosobis(2-oxopropyl)amine-induced pancreatic cancer in Syrian golden hamsters with D-Trp-6-LH-RH and somatostatin analogue RC-160 microcapsules [published erratum appears in Cancer Res 1989 Sep 1;49(17):4946] Zalatnai A, et al. **Cancer Res** 1989 Apr 1;49(7):1810–5
Use of long-acting somatostatin analog SMS 201-995 in patients with pancreatic islet cell tumors. Maton PN, et al. **Dig Dis Sci** 1989 Mar;34(3 Suppl):28S–39S (100 ref.)
Octreotide (SMS 201-995) in the treatment of metastatic glucagonoma: report of one case and review of the literature. Rosenbaum A, et al. **Digestion** 1989;42(2):116–20 (12 ref.)
Experimental cancer therapy in mice by adenine nucleotides. Rapaport E. **Eur J Cancer Clin Oncol** 1988 Sep; 24(9):1491–7
An EORTC Gastrointestinal Group phase II evaluation of epirubicin combined with ifosfamide in advanced adenocarcinoma of the pancreas. EORTC Gastrointestinal Group. Wils J, et al. **Eur J Cancer Clin Oncol** 1989 Jul; 25(7):1119–20
The use of SMS 201-995 (somatostatin analogue) in insulinomas. Additional case report and literature review. Hearn PR, et al. **Horm Res** 1988;29(5–6):211–3 (19 ref.)
Cytokines and pancreatic cancer. The effect of rIFN-gamma, HuLeIFN, rTNF-alpha, and LAK-cells on pancreatic and other gastrointestinal tumors in vitro. Kühl JS, et al. **Int J Pancreatol** 1989 Mar;4(2):207–19
Responsiveness of the hamster pancreatic cancer to treatment with microcapsules of D-Trp-6-LH-RH and somatostatin analog RC-160. Histological evidence of improvement. Zalatnai A, et al. **Int J Pancreatol** 1989 Mar;4(2):149–60
Differential sensitivity of pancreatic and colon cancer to cyclosporine and alpha-difluoromethylornithine in vivo. Saydjari R, et al. **Invest New Drugs** 1988 Dec;6(4):265–72

In vitro cytotoxicity of recombinant ricin A chain-antitransferrin receptor immunotoxin against human adenocarcinomas of the colon and pancreas. Griffin TW, et al. **J Biol Response Mod** 1988 Dec;7(6):559–67

Adjuvant chemotherapy after resection of adenocarcinoma of the periampullary region and the head of the pancreas. A non-randomized pilot study. Splinter TA, et al. **J Cancer Res Clin Oncol** 1989;115(2):200–2

Ifosfamide and mesna: marginally active in patients with advanced carcinoma of the pancreas. Ajani JA, et al. **J Clin Oncol** 1988 Nov;6(11):1703–7

Octreotide—a synthetic somatostatin. **Med Lett Drugs Ther** 1989 Jul 14;31(796):66–8

Malignant insulinoma: is combined treatment with verapamil and the long-acting somatostatin analogue octreotide (SMS 201-995) more effective than single therapy with either drug? Stehouwer CD, et al. **Neth J Med** 1989 Aug; 35(1–2):86–94

A case of somatostatinoma: responses to food and SMS 201-995 administration. Davis TM, et al. **Pancreas** 1988; 3(6):729–33

Effects of cytotoxic drugs on tumor marker secretion of gastrointestinal/pancreatic carcinomas—comparison of studies in nude mice and in patients. Klapdor U, et al. **Strahlenther Onkol** 1989 Jul;165(7):550–2

[Metastatic glucagonoma. Complete remission by dacarbazine (5 years' recession)] Jeanmougin M, et al. **Ann Dermatol Venereol** 1988;115(8):833–8 **(Fre)**

[Attempt in treating benign insulinoma by delayed somatostatin. 2 cases (letter)] Picq R, et al. **Presse Med** 1988 Nov 5;17(39):2087 **(Fre)**

[Long-term suppression of acid secretion with omeprazole use in metastatic gastrinoma] Schaub N, et al. **Schweiz Med Wochenschr** 1988 Nov 12;118(45):1660–6 (48 ref.) (Eng. Abstr.) **(Ger)**

[Artificial pancreas in the treatment of insulinomas] Mercati U, et al. **Minerva Chir** 1989 Jan 31;44(1–2):173–6 **(Ita)**

[Long-term arterial infusion chemotherapy in unresectable pancreatic cancer] Kakizaki K, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2740–2 (Eng. Abstr.) **(Jpn)**

[Intra-arterial infusion chemotherapy in non-resectable pancreatic cancer using angiotensin-II and implantable drug delivery system] Maruyama T, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2735–9 (Eng. Abstr.) **(Jpn)**

[Preventive effects of intra-arterial infusion chemotherapy of liver metastasis in non-resectable pancreatic cancer] Yasuda T, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2863–6 (Eng. Abstr.) **(Jpn)**

[Short-term treatment of a VIPoma with somatostatin analogue in advance of curative operation] Yoshioka M, et al. **Nippon Naika Gakkai Zasshi** 1988 Aug;77(8):1276–7 **(Jpn)**

[Inhibiting effect of a chalone-containing extract of calf pancreatic tissue on the proliferative activity of normal and tumorous pancreatic cells in vitro and in vivo] Mkrtchian LN, et al. **Eksp Onkol** 1988;10(4):63–6 (Eng. Abstr.) **(Rus)**

[Treatment of pancreatic apudomas with a somatostatin analog SMS 201-995 (letter)] Varas Lorenzo MJ. **Med Clin (Barc)** 1988 Dec 10;91(20):796 **(Spa)**

ENZYMOLOGY

Cellular and extracellular plasminogen activator and inhibitor in an experimental tumour. Dong Q, et al. **Br J Exp Pathol** 1988 Oct;69(5):685–95

Increased glyceraldehyde-3-phosphate dehydrogenase gene expression in human pancreatic adenocarcinoma. Schek N, et al. **Cancer Res** 1988 Nov 15;48(22):6354–9

CCK and gastrin inhibit adenylate cyclase activity through a pertussis toxin-sensitive mechanism in the tumoral rat pancreatic acinar cell line AR 4-2J. Scemama JL, et al. **FEBS Lett** 1988 Dec 19;242(1):61–4

Modulation of enzymatic activities during spontaneous and induced differentiation in a human pancreatic adenocarcinoma cell line CAPAN-1. Bensaadi N, et al. **Int J Pancreatol** 1989 May;4(4):391–406

An alternate promoter in the glucokinase gene is active in the pancreatic beta cell. Magnuson MA, et al. **J Biol Chem** 1989 Sep 25;264(27):15936–42

Fractional urinary clearance of immunoreactive lipase in chronic pancreatic disease. Benini L, et al. **J Clin Chem Clin Biochem** 1988 Aug;26(8):527–9

Serum isoamylase activities in pancreatic diseases. Na Patalung BO, et al. **J Med Assoc Thai** 1988 Nov; 71(11):632–6

Characterization of variant gamma-glutamyl transpeptidase produced by pancreatocholangiocarcinoma cell lines in a protein-free, chemically defined medium. Yamaguchi N, et al. **Pancreas** 1989;4(4):406–17

EPIDEMIOLOGY

The pattern of pancreatic carcinoma at Kenyatta National Hospital. Ogutu EO. **East Afr Med J** 1989 Feb;66(2):105–8

Protective effect of oestrogen in pancreatic cancer [letter] Devesa SS, et al. **Lancet** 1988 Oct 15;2(8616):905–6

Epidemiology of pancreatic cancer. Fontham ET, et al. **Surg Clin North Am** 1989 Jun;69(3):551–67 (105 ref.)

Increased incidence of pancreatic neoplasia in pernicious anemia. Borch K, et al. **World J Surg** 1988 Dec; 12(6):866–70

[Cancer of the pancreas. Current results and future perspectives (apropos of 31 cases)] Dziri C, et al. **Tunis Med** 1989 Apr;67(4):237–41 (9 ref.) (Eng. Abstr.) **(Fre)**

[Age-sex correlates and pancreatic neoplasia (letter)] Sulé-Suso J, et al. **Med Clin (Barc)** 1988 May 14;90(19):797 **(Spa)**

ETIOLOGY

A case-control study of pancreatic cancer and cigarettes, alcohol, coffee and diet. Olsen GW, et al. **Am J Public Health** 1989 Aug;79(8):1016–9

Oophorectomy has no effect on experimental pancreatic carcinogenesis in the Syrian hamster. Chester JF, et al. **Br J Cancer** 1989 May;59(5):696–7

Modulation of dietary fat-promoted pancreatic carcinogenesis in rats and hamsters by chronic ethanol ingestion. Woutersen RA, et al. **Carcinogenesis** 1989 Mar; 10(3):453–9

Modulation of putative preneoplastic foci in exocrine pancreas of rats and hamsters. Interaction of dietary fat and coffee. Woutersen RA, et al. **Dig Dis Sci** 1989 May; 34(5):789–96

Coffee, alcohol, smoking and cancer of the pancreas: a case-control study. Clavel F, et al. **Int J Cancer** 1989 Jan 15;43(1):17–21

Pancreatic cancer, alcohol, diabetes mellitus and gall-bladder disease. Cuzick J, et al. **Int J Cancer** 1989 Mar 15; 43(3):415–21

Rapid production of pancreatic carcinoma by initiation with N-nitroso-bis(2-oxopropyl)amine and repeated augmentation pressure in hamsters. Mizumoto K, et al. **J Natl Cancer Inst** 1988 Dec 7;80(19):1564–7

Gastric, pancreatic, and colorectal carcinogenesis following remote peptic ulcer surgery. Review of the literature with the emphasis on risk assessment and underlying mechanism. Offerhaus GJ, et al. **Mod Pathol** 1988 Sep;1(5):352–6 (95 ref.)

Cell differentiation during pancreatic carcinogenesis. Pour PM. **Scand J Gastroenterol Suppl** 1988;151:123–30

[Alcohol and pancreatic diseases] Niederau C, et al. **Z Gastroenterol** 1988 Oct;26 Suppl 3:60–74 (127 ref.) (Eng. Abstr.) **(Ger)**

[Surgically treated giant neoplastic cyst of the pancreas] Kołodziejski L, et al. **Nowotwory** 1988 Apr-Jun; 38(2):139–43 (Eng. Abstr.) **(Pol)**

[Chronic pancreatitis and cancer of the pancreas] Artem'eva NN, et al. **Vestn Khir** 1988 Jun;140(6):31–5 (Eng. Abstr.) **(Rus)**

GENETICS

Nuclear DNA distribution in neuroendocrine gastroenteropancreatic tumors before and during treatment. Eriksson B, et al. **Acta Oncol** 1989;28(2):193–7

Juvenile polyposis: a case with early presentation and death attributable to adenocarcinoma of the pancreas. Walpole IR, et al. **Am J Med Genet** 1989 Jan;32(1):1–8

Amplification, expression and localization of the c-myc gene in BSp73 rat tumor cell lines. Birnbaum M, et al. **Anticancer Res** 1988 Nov-Dec;8(6):1185–91

Chromosome abnormalities in a pancreatic adenocarcinoma. Johansson B, et al. **Cancer Genet Cytogenet** 1989 Feb; 37(2):209–13

Loss of the same alleles of HRAS1 and D11S151 in two independent pancreatic cancers from a patient with multiple endocrine neoplasia type 1. Yoshimoto K, et al. **Cancer Res** 1989 May 15;49(10):2716–21

Expression of c-myc and N-ras oncogenes in human hepatocellular carcinoma and pancreatic adenocarcinoma. A biochemical and immunocytochemical study. Lin Y, et al. **Chin Med J [Engl]** 1988 Jul;101(7):523–8

Interferon-gamma induces transcription and differential expression of MHC genes in rat insulinoma cell line RINm5F. Ono SJ, et al. **Diabetes** 1989 Jul;38(7):911–6

Expression of peptide hormone genes in human islet cell tumors. Philippe J, et al. **Diabetes** 1988 Dec;37(12):1647–51

Molecular characterization of size and copy number of the human insulin gene in transfected rat islet tumor cell clones. Andersen LC, et al. **Exp Clin Endocrinol** 1989 May; 93(2-3):272–6

High frequency of Ki-ras codon 12 mutations in pancreatic adenocarcinomas. Grünewald K, et al. **Int J Cancer** 1989 Jun 15;43(6):1037–41

cDNA sequence of neuroendocrine protein 7B2 expressed in beta cell tumors of transgenic mice. Mbikay M, et al. **Int J Pept Protein Res** 1989 Jan;33(1):39–45

Familial pancreatic cancer (Part 1): Genetic pathology review. Lynch HT, et al. **Nebr Med J** 1989 May; 74(5):109–12

Direct sequencing analysis of exon 1 of the c-K-ras gene shows a low frequency of mutations in human pancreatic adenocarcinomas. Gonzalez-Cadavid NF, et al. **Oncogene** 1989 Sep;4(9):1137–40

Beta-cell lines derived from transgenic mice expressing a hybrid insulin gene-oncogene. Efrat S, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9037–41

Co-existence of two aneuploid stemlines in benign adenomas. A report of three cases with stemline heterogeneity. Joensuu H, et al. **Virchows Arch [A]** 1989;415(2):175–80

Oncogene expression in endocrine pancreatic tumors. Höfler H, et al. **Virchows Arch [B]** 1988;55(6):355–61

IMMUNOLOGY

Monoclonal antibody to a human pancreatic carcinoma cell line recognizes gastrointestinal neoplasms. Kahn HJ, et al. **Am J Pathol** 1989 Mar;134(3):641–9

Expression of CA125 in pancreatic carcinoma and chronic pancreatitis. Macdonald F, et al. **Br J Cancer** 1988 Oct; 58(4):505–6

Comparison of portal and peripheral blood levels of carcinoembryonic antigen, CA 19-9, and CA 125 tumor-associated antigens in patients with colorectal and pancreatic cancer. Talbot RW, et al. **Cancer Res** 1989 Feb 1;49(3):542–3

Pancreatic oncofetal antigen and carbohydrate antigen 19-9 in sera of patients with cancer of the pancreas. Shahangian S, et al. **Clin Chem** 1989 Mar;35(3):405–8

Lymphokine-activated killer cell activity in patients with cancer of the pancreas. Marincola FM, et al. **Curr Surg** 1988 Jul-Aug;45(4):298–301

In vitro natural killer cell activity in the spontaneously diabetic BB/Wor rat: effects of serum on lysis of insulinoma cells. Koevary SB. **Diabetes Res** 1988 Jun;8(2):77–84

Class I and II major histocompatibility complex gene product expression by a rat insulinoma cell line in vitro following exposure to gamma interferon. Issa-Chergui B, et al. **Diabetologia** 1988 Sep;31(9):675–80

Pleomorphic carcinoma of the pancreas with osteoclast-like giant cells expressing an epithelial-associated antigen detected by monoclonal antibody 44-3A6. Combs SG, et al. **Diagn Cytopathol** 1988;4(4):316–22

Serum carcinoembryonic antigen in the differential diagnosis of pancreatic cancer: influence of tumour spread, liver impairment, and age. Basso D, et al. **Dis Markers** 1988 Jul-Sep;6(3):203–7

Monoclonal antibodies as probes to the differentiated exocrine pancreas react to monoclonal islet tumor tissue. Beck TC, et al. **Exp Clin Endocrinol** 1989 May; 93(2-3):255–60

Studies on the chemical and immunological destruction of insulin-secreting islet cell tumours. Flatt PR, et al. **Exp Clin Endocrinol** 1989 May;93(2-3):193–202

Biochemical and immunological properties of the human carcinoma antigen CAR-5 defined by the monoclonal antibody BD-5. Prat M, et al. **Int J Cancer** 1989 Jul 15; 44(1):67–74

Tissue expression of the cancer-associated antigens CA 19-9 and CA-50 in chronic pancreatitis and pancreatic carcinoma. Schwenk J, et al. **Int J Pancreatol** 1989 Jul; 5(1):85–98

Intracellular distribution of pancreatic tumor antigen purified from BHP-induced adenocarcinomas in Syrian hamsters. Matsuzaki M, et al. **Pancreas** 1989;4(4):429–35

DU-PAN-2, mucin type differentiation antigen of normal and malignant pancreatic ductal cells. Metzgar RS, et al. **Prog Clin Biol Res** 1989;288:53–61

CA-50 in patients with pancreatic disease—an evaluation of three different laboratory techniques. Masson P, et al. **Scand J Clin Lab Invest** 1988 Dec;48(8):751–5

Tumor marker secretion (CA 19-9, CEA, CA 125) by xenografts of eight different human pancreatic carcinomas compared to the human tumors. Klapdor R, et al. **Strahlenther Onkol** 1989 Jul;165(7):496–7

The in vivo distribution of human peripheral blood lymphocytes and lymphokine-activated killer cells adoptively transferred in human pancreatic cancer-bearing nude mice. Marincola FM, et al. **Surgery** 1989 Jan; 105(1):79–85

[Diagnostic usefulness and limitation of measuring pancreatic cancer associate antigen, SPan-1, in patients with pancreatic cancer] Satake K, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-1):1139–46 (Eng. Abstr.) **(Jpn)**

METABOLISM

In vitro culture of neuroendocrine tumors of the pancreas and gut. Lundqvist M, et al. **Acta Oncol** 1989;28(3):335–9

Pharmacodynamics of 5-fluorouracil and leucovorin. Gustavsson BG, et al. **Adv Exp Med Biol** 1988;244:219–24

Characterization of calcium channels of a glucose-responsive rat insulinoma. Hoenig M, et al. **Am J Physiol** 1989 Apr; 256(4 Pt 1):E488–93

Effects of nutrient and non-nutrient stimuli on cytosolic pH in cultured insulinoma (HIT-T15) cells. Lynch AM, et al. **Biochim Biophys Acta** 1989 Jul 11;1012(2):166–70

Measurements of membrane potential, transmembrane 45Ca fluxes, cytoplasmic free Ca2+ concentration and insulin release by transplantable rat insulinoma cells maintained in tissue culture. Flatt PR, et al. **Br J Cancer** 1988 Jul; 58(1):22–9

Presence of membrane binding sites for [D-TRP6]-luteinizing hormone-releasing hormone in experimental pancreatic cancer. Fekete M, et al. **Cancer Lett** 1989 May;45(2):87–91

Metabolic profiles in patients with insulinoma. Hale PJ, et al. **Clin Endocrinol (Oxf)** 1989 Jan;30(1):29–38

The tumor cells (FA-6) established from a pancreatic cancer associated with humoral hypercalcemia of malignancy: a simultaneous production of parathyroid hormone-like activity and transforming growth factor activity. Nagata N, et al. **Endocrinol Jpn** 1989 Feb;36(1):75–85

In situ localization of transthyretin-mRNA in the adult human liver, choroid plexus and pancreatic islets and in endocrine tumours of the pancreas and gut. Jacobsson B. **Histochemistry** 1989;91(4):299–304

RIN m5F (rat insulinoma) cells possess receptors for atrial natriuretic peptide (ANP) and a functioning cGMP system. Verspohl EJ, et al. **Horm Metab Res** 1988 Dec;20(12):700–1

The penetration of antibiotics into human pancreas. Büchler M, et al. **Infection** 1989 Jan–Feb;17(1):20–5

Formation and metabolism of [3H]inositol phosphates in AR42J pancreatoma cells. Substance P-induced Ca2+ mobilization in the apparent absence of inositol 1,4,5-trisphosphate 3-kinase activity. Horstman DA, et al. **J Biol Chem** 1988 Oct 25;263(30):15297–303

Expression of mouse proopiomelanocortin in an insulinoma cell line. Requirements for beta-endorphin processing. Thorne BA, et al. **J Biol Chem** 1989 Feb 25;264(6):3545–52

Binding sites for peptide-histidine-isoleucine (PHI) on rat insulinoma-derived RINm5F cells. Göke R, et al. **Mol Cell Endocrinol** 1988 Dec;60(2–3):211–5

Identification and characterization of muscarinic receptors in cultured human pancreatic carcinoma cells. Ackerman MS, et al. **Pancreas** 1989;4(3):363–70

Enhanced membrane phospholipid metabolism in human pancreatic adenocarcinoma cell lines detected by low-resolution 1H nuclear magnetic resonance spectroscopy. Murat C, et al. **Pancreas** 1989;4(2):145–52

[Colony stimulating factor producing carcinoma of the pancreas—a case report] Ohwada S, et al. **Gan No Rinsho** 1989 Mar;35(4):523–7 (Eng. Abstr.) **(Jpn)**

[Immunohistochemical study of estrogen and estrogen receptor-related antigen in human pancreatic cancer: preliminary report] Uchida E, et al. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1755 **(Jpn)**

[Inhibitory effects of somatostatin analog (SMS 201-995) on pancreatic hormones in patients with malignant islet-cell carcinoma] Fukushima H, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Aug 20;64(8):666–76 (Eng. Abstr.) **(Jpn)**

MORTALITY

Results of surgery for obstructing carcinomatosis of gastrointestinal, pancreatic, or biliary origin. Turnbull AD, et al. **J Clin Oncol** 1989 Mar;7(3):381–6

[Factors influencing the prognosis of carcinoma of the pancreas—an analysis of 155 cases] Okazaki H, et al. **Gan No Rinsho** 1989 May;35(6):701–4 (Eng. Abstr.) **(Jpn)**

[Cancer of the pancreas: mortality trend in Spain and descriptive study of the principal risk factors] Cortés Vizcaíno C, et al. **Rev Esp Enferm Apar Dig** 1988 Jul; 74(1):5–9 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Gastrinomas. Clinical syndromes. Stadil F. **Acta Oncol** 1989; 28(3):379–81

Diagnostic pathology of gastrointestinal and pancreatic neuroendocrine tumours. Wilander E. **Acta Oncol** 1989; 28(3):363–9 (61 ref.)

Multiple nonfunctional pancreatic islet cell tumor in multiple endocrine neoplasia type I. A case report. Takahashi H, et al. **Acta Pathol Jpn** 1988 May;38(5):667–82

Reliability of ultrasound-guided fine-needle biopsy of pancreatic masses. Ekberg O, et al. **Acta Radiol** 1988 Sep–Oct;29(5):535–9

Round cell anaplastic carcinoma of the pancreas [letter] Lim JH, et al. **AJR** 1988 Nov;151(5):1056

Malignant islet cell tumor with rhabdomyosarcomatous differentiation. Ferreiro J, et al. **Am J Surg Pathol** 1989 May;13(5):422–7

Serous cystadenocarcinoma of the pancreas: a new entity? George DH, et al. **Am J Surg Pathol** 1989 Jan;13(1):61–6

Metastases from carcinomas of the pancreas simulating primary mucinous tumors of the ovary. A report of seven cases. Young RH, et al. **Am J Surg Pathol** 1989 Sep; 13(9):748–56

Papillary cystic neoplasm of the pancreas. A report of a case presenting with carcinomatosis. Hernandez-Maldonado JJ, et al. **Am Surg** 1989 Sep;55(9):552–9

Cytometric and histologic predictors of prognosis in ampullary carcinoma treated with pancreatico-duodenectomy. Galera-Davidson H, et al. **Anal Quant Cytol Histol** 1989 Aug;11(4):243–8

Tumor seeding from percutaneous biliary catheters. Chapman WC, et al. **Ann Surg** 1989 Jun;209(6):708–13; discussion 713–5 (41 ref.)

Clinicohistopathologic and immunohistochemical studies of intrapancreatic development of carcinoma of the head of the pancreas. Nakao A, et al. **Ann Surg** 1989 Feb; 209(2):181–7

How accurate is fine-needle biopsy in malignant neoplasia of the pancreas? Parsons L Jr, et al. **Arch Surg** 1989 Jun; 124(6):681–3

Microcystic adenoma of the pancreas: report of a case and review of the literature. Balsalobre C, et al. **Bol Asoc Med P R** 1988 Nov;80(11):413–6 (10 ref.)

Fine-needle aspiration biopsy of an islet cell tumour simulating pancreatic carcinoma. Zalev AH, et al. **Can J Surg** 1988 Nov;31(6):429–33

Morphologic characteristics of pancreatic carcinoma with diabetes mellitus. Ishikawa O, et al. **Cancer** 1989 Sep 1; 64(5):1107–12

The role of morphometry in predicting prognosis in pancreatic islet cell tumors. Kenny BD, et al. **Cancer** 1989 Jul 15;64(2):460–5

Metastatic islet cell amphicrine carcinoma of the pancreas. Association with an eosinophilic infiltration of the skin. Kniffin WD Jr, et al. **Cancer** 1988 Nov 1;62(9):1999–204

Intraductal papillary neoplasms of the pancreas. A clinicopathologic study of six patients. Morohoshi T, et al. **Cancer** 1989 Sep 15;64(6):1329–35

Selective growth inhibition of ductal pancreatic adenocarcinoma cells by the lysosomotropic agent chloroquine. Zeilhofer HU, et al. **Cancer Lett** 1989 Jan; 44(1):61–6

Establishment of hamster pancreatic ductal carcinoma cell line (PC-1) producing blood group-related antigens. Egami H, et al. **Carcinogenesis** 1989 May;10(5):861–9

Clinicopathologic conference. Jaundice, weight loss, fever and abdominal mass. **Chin Med J [Engl]** 1988 Nov; 101(11):867–70

Neurofibromatosis associated with somatostatinoma: a report of two patients. Swinburn BA, et al. **Clin Endocrinol (Oxf)** 1988 Apr;28(4):353–9

Production of pro-insulin, C-peptide, and insulin in nesidioblastosis, focal islet-cell adenomatosis, and genuine insulomas. A correlated radioimmunochemical, immunohistochemical, and ultrastructural investigation with particular regard to the occurrence of argyrophil and pro-insulin immunoreactive cells. Kohnert KD, et al. **Diabetes Res** 1988 Aug;8(4):151–63

Serum-free culture of insulin-secreting clonal cells from a hamster insulinoma. Kumamoto S, et al. **Diabetes Res Clin Pract** 1989 Jan 3;6(1):1–7

Cytology of solid and papillary epithelial neoplasms of the pancreas: a case report. Stachura J, et al. **Diagn Cytopathol** 1988;4(4):339–41

Obstruction of the pancreatic duct by a granular cell tumor. Sekas G, et al. **Dig Dis Sci** 1988 Oct;33(10):1334–7

Pancreatic islet A2B5- and 3G5-reactive gangliosides are markers of differentiation in rat insulinoma cells. Bartholomeusz RK, et al. **Endocrinology** 1989 Jun; 124(6):2680–5

Unique appearance of the duodenal papilla in pancreatic cystadenocarcinoma. Isaacs PE. **Endoscopy** 1989 Mar; 21(2):102–4

Pancreatic biopsy under visual control in conjunction with laparoscopy for diagnosis of pancreatic cancer. Watanabe M, et al. **Endoscopy** 1989 Mar;21(2):105–7

Peptide hormone influence on exocrine pancreatic cancer. Andrén-Sandberg A. **Eur J Surg Oncol** 1989 Jun; 15(3):236–41 (56 ref.)

Cystadenocarcinoma of the pancreas 9 years after a pancreatic cyst operation: report of a case. Emdin SO, et al. **Eur J Surg Oncol** 1989 Apr;15(2):169–73

Mechanisms of pancreatic beta-cell growth and regeneration: studies on rat insulinoma cells. Nielsen JH. **Exp Clin Endocrinol** 1989 May;93(2–3):277–85

Intrapancreatic lipoma. First case in the literature. Bigard MA, et al. **Gastroenterol Clin Biol** 1989 May;13(5):505–7

Accessory spleen in the head of the pancreas [letter] Landry ML, et al. **Hum Pathol** 1989 May;20(5):497

Reactivity of CO17-1A and B72.3 in benign and malignant pancreatic diseases. Takiyama Y, et al. **Hum Pathol** 1989 Sep;20(9):832–8

Papillary cystic tumour of pancreas [letter] Nirmala V, et al. **Indian J Gastroenterol** 1988 Oct;7(4):245

Differentiation of the human pancreatic adenocarcinoma cell line (Capan-1) in culture and co-culture with fibroblasts dome formation. Levrat JH, et al. **Int J Cancer** 1988 Oct 15;42(4):615–21

The exocrine pancreas in patients with hyperinsulinemic hypoglycemia. A morphometrical and ultrastructural study. Bani D, et al. **Int J Pancreatol** 1989 Oct;5(3):239–48

Percutaneous fine needle aspiration cytology of the pancreas: advantages and pitfalls. Kocjan G, et al. **J Clin Pathol** 1989 Apr;42(4):341–7

Tumour formation and insulin secretion by clonal RINm5F cells following repeated subcutaneous transplantation in NEDH rats. Flatt PR, et al. **J Endocrinol** 1988 Sep; 118(3):429–37

Apudoma of the pancreas: benign or malignant? Trowers EA, et al. **J Natl Med Assoc** 1989 May;81(5):601–3

Peripheral neuropathy associated with functional islet cell adenomas in SV40 transgenic mice. Dyer KR, et al. **J Neuropathol Exp Neurol** 1989 Jul;48(4):399–412

Invasion and metastasis following orthotopic transplantation of human pancreatic cancer in the nude mouse. Vezeridis MP, et al. **J Surg Oncol** 1989 Apr;40(4):261–5

Carcinoma of the pancreas: a clinicopathologic study of 96 cases with immunohistochemical observations. Yamaguchi K, et al. **Jpn J Clin Oncol** 1989 Mar;19(1):14–22

Percutaneous fine needle aspiration biopsy in the early diagnosis of pancreatic carcinoma. Marcus VL. **Nebr Med J** 1989 Jan;74(1):17–9

Calcified brain metastases from acinar-cell carcinoma of pancreas. Ara Callizo JR, et al. **Neuroradiology** 1989; 31(2):200

A malignant tumor of the pancreas producing glucagonoma syndrome: coexistence of glucagon and pancreatic polypeptide (PP) in the tumor cells. Bani D, et al. **Pancreas** 1989;4(4):511–9

Characterization of clones of a human pancreatic adenocarcinoma cell line representing different stages of differentiation. Kim YW, et al. **Pancreas** 1989;4(3):353–62

Vasoactive intestinal peptide inhibits the growth of hamster pancreatic cancer but not human pancreatic cancer in vivo. Poston GJ, et al. **Pancreas** 1988;3(4):439–43

The effects of 2-deoxy-D-glucose and alpha-difluoromethylornithine on the growth of pancreatic cancer in vivo. Saydjari R, et al. **Pancreas** 1989;4(1):38–43

Immunohistochemical studies on cystic pancreatic neoplasms. Helpap B, et al. **Pathol Res Pract** 1988 Dec;184(1):39–45

Mucinous cystic tumour of the pancreas. A histological and histochemical study. Santini D, et al. **Pathol Res Pract** 1988 Nov;183(6):767–70

Percutaneous fine needle aspiration biopsy of tumorous lesions of the liver and the pancreas guided by ultrasonography. Szadowska A, et al. **Patol Pol** 1988 Apr–Jun;39(2):73–82

Pancreatic cystadenoma in an infant: ultrastructural study. Warfel KA, et al. **Pediatr Pathol** 1988;8(5):559–65

Somatostatin analogues inhibit growth of pancreatic cancer by stimulating tyrosine phosphatase. Liebow C, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2003–7

Programmed cell death (apoptosis) in pancreatic cancers of hamsters after treatment with analogs of both luteinizing hormone-releasing hormone and somatostatin. Szende B, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1643–7

Classification and staging of pancreatic nonendocrine tumors. Klöppel G, et al. **Radiol Clin North Am** 1989 Jan; 27(1):105–19 (89 ref.)

Squamous cell carcinoma infiltrating a pancreatic pseudocyst. Morgan J, et al. **South Med J** 1989 Sep;82(9):1161–4

Heterotransplantation of human ductal pancreas carcinoma onto NMRI nu/nu mice. von Bülow M, et al. **Strahlenther Onkol** 1989 Jul;165(7):486–7

Tissue sampling from the common bile duct through endoscopic retrograde cholangiopancreatography, endoscopic papillo(sphinctero)tomy and drainage in juxtapapillary malignancies. Pugliese V, et al. **Surg Endosc** 1987;1(2):83–7

Electron microscopic and immunoelectron microscopic demonstration of pancreatic polypeptide cells in glucagonoma: colocalization of pancreatic peptide and glucagon in single secretory granules. Ooi A, et al. **Ultrastruct Pathol** 1989 Jan–Feb;13(1):15–22

[Pancreatic VIPoma: an ultrastructural, immunohistochemical and cell culture study of one case] Jiang CX. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Jun; 17(2):145–6 (Eng. Abstr.) **(Chi)**

[Fine-needle aspiration cytodiagnosis of tumors of the pancreas and ampullary region: an analysis of 150 cases] Jia ZG. **Chung Hua Wai Ko Tsa Chih** 1988 Dec; 26(12):731–2, 781 (Eng. Abstr.) **(Chi)**

[Inhibition by VIP of the proliferation of pancreatic cancer cells] Yao CZ. **Chung Hua Wai Ko Tsa Chih** 1989 Jan; 27(1):42–4, 62 (Eng. Abstr.) **(Chi)**

[Non-functional or silent endocrine tumors of the pancreas. Apropos of a case of cystic form] Lapeyrie H, et al. **Ann Chir** 1989;43(4):302–5 (29 ref.) (Eng. Abstr.) **(Fre)**

[A case of papillary tumor of the pancreas] De Lagausie P, et al. **Gastroenterol Clin Biol** 1988 Dec;12(12):965–7 (16 ref.) (Eng. Abstr.) **(Fre)**

[Pancreatic mucinous cystadenocarcinoma with a rapidly fatal course (letter)] Hoang C, et al. **Gastroenterol Clin Biol** 1989 Jan;13(1):107–8 **(Fre)**

[Current aspects of a new staging classification of pancreatic cancer and its clinical consequences] Rothmund M, et al. **Chirurg** 1989 Jan;60(1):24–8 **(Ger)**

["Sister Joseph's module"—umbilical metastases of internal tumors] Holzki G, et al. **Hautarzt** 1989 May;40(5):312–5 (Eng. Abstr.) **(Ger)**

[Synaptophysin, chromogranin A and neuron-specific enolase as tumor markers in neuroendocrine tumors of the gastrointestinal tract and lung. An immunohistochemical study] Eberlein-Gonska M, et al. **Pathologe** 1989 Jul; 10(4):228–33 **(Ger)**

[Fine-needle puncture cytology of a solid cystic tumor of the pancreas] Wrba F, et al. **Pathologe** 1988 Nov;9(6):340–4 **(Ger)**

[Sonographic staging of pancreatic cancer. Report of 100 cases] Pichler W, et al. **ROFO** 1989 Mar;150(3):241–5 (Eng. Abstr.) **(Ger)**

[Cytology of the pancreas—fine needle biopsy and analysis of pancreatic juice] Schenck U. **Verh Dtsch Ges Inn Med** 1988;94:101–5 (59 ref.) **(Ger)**

[Cystic pancreas adenoma. On the clinical relevance of histologic typing] Schmidt U, et al. **Z Gastroenterol** 1989 Mar;27(3):140–4 (Eng. Abstr.) **(Ger)**

[Histogenetic classification of exocrine pancreatic carcinomas] Schulz HJ. **Zentralbl Allg Pathol** 1989; 135(4):339–49 (Eng. Abstr.) **(Ger)**

[Adenocarcinoma of the amphicrine cells of the pancreas. Histopathology and pathogenetic hypotheses] Meneghini F, et al. **Ann Ital Chir** 1987;59(1–6):249–57 (Eng. Abstr.) **(Ita)**

[Malignant insulinoma: description of a clinical case] Giunta G, et al. **G Ital Oncol** 1987 Jan–Mar;7(1):61–6 (Eng. Abstr.) **(Ita)**

[Solid and cystic acinar-cell tumor of the pancreas. A case report] Tambussi U, et al. **Minerva Med** 1989 Jul; 80(7):669–72 (17 ref.) **(Ita)**

[Epithelial dysplasia and stroma changes in chronic

pancreatitis and carcinoma of the exocrine pancreas. Morphologico-functional correlations] Chiaramondia M, et al. **Pathologica** 1988 Sep-Oct;80(1069):561-72 (27 ref.) (Eng. Abstr.) **(Ita)**

[Histochemical evaluation of connective collagen in chronic pancreatitis and carcinoma of the exocrine pancreas] Chiaramondia M, et al. **Pathologica** 1987 Sep-Oct; 79(1063):609-16 (Eng. Abstr.) **(Ita)**

[A papillary-cystic neoplasm of the pancreas, a calcifying-inverted variant] Hayashi T, et al. **Gan No Rinsho** 1989 Sep;35(10):1183-8 (Eng. Abstr.) **(Jpn)**

[The modes of spread of pancreas head cancer based on difference of the pancreatic anlagen] Fujii H, et al. **Nippon Geka Gakkai Zasshi** 1989 Mar;90(3):415-22 (Eng. Abstr.) **(Jpn)**

[An autopsy case of calcified squamous cell carcinoma of the pancreas with cystic hepatic metastases] Hachiya H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Sep; 85(9):1712-6 **(Jpn)**

[Clinico-pathological study of pancreas cancers from 64 resected cases] Yamagiwa H. **Rinsho Byori** 1988 Oct; 36(10):1209-12 **(Jpn)**

[Effectiveness of ultrasonographically guided fine-needle biopsy in the diagnosis of abdominal tumors] Stachura J, et al. **Patol Pol** 1988 Jul-Sep;39(3):189-96 (Eng. Abstr.) **(Pol)**

[Glucagonoma syndrome] Baptista AP, et al. **Acta Med Port** 1988 Mar-Apr;1(2):141-4 (Eng. Abstr.) **(Por)**

[Ultrasound study of pancreatic masses] Lacerda A, et al. **Acta Med Port** 1988 Mar-Apr;1(2):133-6 (Eng. Abstr.) **(Por)**

[Glucagonoma syndrome] Tellechea O, et al. **Acta Med Port** 1988 Mar-Apr;1(2):149-52 (57 ref.) (Eng. Abstr.) **(Por)**

[Nonulcerogenic gastrinoma of the pancreas] Gaidar IuA, et al. **Arkh Patol** 1989;51(5):60-3 (Eng. Abstr.) **(Rus)**

[Clinico-anatomical comparisons in cancer of the pancreas] Karmilov VA, et al. **Klin Khir** 1988;(11):58-9 **(Rus)**

[Hyperplasia of the glucagon-producing cells of the pancreas (the glucagonoma syndrome)] Saenko VF, et al. **Klin Khir** 1988;(11):60 **(Rus)**

[Cystadenoma and cystadenocarcinoma of the pancreas] Galindo F, et al. **Acta Gastroenterol Latinoam** 1988; 18(1):57-66 (Eng. Abstr.) **(Spa)**

[Cystadenoma of the pancreas: presentation of 3 new cases] Echenique Elizondo M, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 1):593-6 (Eng. Abstr.) **(Spa)**

[Islet cell tumor of the pancreas (nesidioblastoma)] Jara L, et al. **Rev Med Chil** 1987 Dec;115(12):1181-3 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Pain therapy for pancreatic carcinoma with neurolytic celiac plexus block. Squier R, et al. **Conn Med** 1989 May; 53(5):269-71

Androgen influence on exocrine pancreatic cancer. Andrén-Sandberg A. **Int J Pancreatol** 1989 May;4(4):363-9 (31 ref.)

Nonfunctioning islet cell pancreatic cancer. Perkins DD, et al. **J Am Osteopath Assoc** 1989 Jun;89(6):815-6

Renal tubular dysfunction in pancreatic cancer and chronic pancreatitis. Fabris C, et al. **Nephron** 1989;51(1):56-60

Intraocular transplants of a human gastrinoma in immuno-suppressed rats: morphological, chromatographic and functional studies. Theodorsson E, et al. **Regul Pept** 1989 Jan;24(1):97-110

Management of pain in pancreatic cancer. Saltzburg D, et al. **Surg Clin North Am** 1989 Jun;69(3):629-49 (93 ref.)

[Effect of pylorus preservation on nutrition and digestive function after pancreaticoduodenectomy: a follow-up observation] Zhao YP. **Chung Hua Wai Ko Tsa Chih** 1988 Dec;26(12):725-8, 781 (Eng. Abstr.) **(Chi)**

[Anatomico-functional changes of the duodenum and stomach in pancreatic cancer] Iugov VK, et al. **Vrach Delo** 1989 Apr;(4):21-3 **(Rus)**

PREVENTION & CONTROL

Inhibition of dietary fat promoted development of (pre)neoplastic lesions in exocrine pancreas of rats and hamsters by supplemental selenium and beta-carotene. Woutersen RA, et al. **Cancer Lett** 1988 Sep-Oct; 42(1-2):79-85

Modulation by CR-1409 (lorglumide), a cholecystokinin receptor antagonist, of trypsin inhibitor-enhanced growth of azaserine-induced putative preneoplastic lesions in rat pancreas. Douglas BR, et al. **Cancer Res** 1989 May 1; 49(9):2438-41

Inhibitory effects of estrogen and castration on the early stage of pancreatic carcinogenesis in Fischer rats treated with azaserine. Sumi C, et al. **Cancer Res** 1989 May 1; 49(9):2332-6

Inhibitory effect of butylated hydroxyanisole administration on pancreatic carcinogenesis in Syrian hamsters initiated with N-nitrosobis(2-oxopropyl)amine. Mizumoto K, et al. **Carcinogenesis** 1989 Aug;10(8):1491-4

[Role of laboratory tests and imagings on the screening of pancreatic cancer] Yamamoto M, et al. **Rinsho Byori** 1988 Jul;36(7):767-74 **(Jpn)**

RADIOGRAPHY

Imaging of pancreatic neoplasms: comparison of MR and CT. Steiner E, et al. **AJR** 1989 Mar;152(3):487-91

Obliteration of periarterial retropancreatic fat on CT in pancreatitis: an exception to the rule. Luetmer PH, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):63-4

Pancreatic plasmacytoma: CT findings. Wilson TE, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1227-8

Pancreatic cancer: CT scan. Muzzio PC, et al. **Int J Pancreatol** 1988;3 Suppl 1:S125-30

Pancreatic carcinoma, diagnostic ERCP. Pomerri F, et al. **Int J Pancreatol** 1988;3 Suppl 1:S131-6

Computed tomography of unusual calcified pancreatic tumors. Hertzanu Y, et al. **J Comput Assist Tomogr** 1989 Jan-Feb;13(1):75-6

Pancreatic pseudotumor in pancreas divisum: CT characteristics. Silverman PM, et al. **J Comput Assist Tomogr** 1989 Jan-Feb;13(1):140-1

Computed tomography findings in squamous cell carcinoma of the pancreas. Fajardo LL, et al. **J Comput Tomogr** 1988 Apr;12(2):138-9

Angiogram for localization of insulinoma. Eurvilaichit C. **J Med Assoc Thai** 1988 Jul;71(7):388-93

Pitfalls in diagnosis and treatment of cystic neoplasms of the pancreas. Rinsema W, et al. **Neth J Surg** 1989 Jun; 41(3):71-3

Skeletal muscle metastases from pancreatic cancer. Larson DA, et al. **Onkologie** 1988 Dec;11(6):282-5 (5 ref.)

Pancreatic venous samplings in infants and children with primary hyperinsulinism. Brunelle F, et al. **Pediatr Radiol** 1989;19(2):100-3

General case of the day. Pancreatic microcystic adenoma (benign serous cystadenoma). Belton RL, et al. **Radiographics** 1989 Jul;9(4):766-8

Radiology of the pancreas. **Radiol Clin North Am** 1989 Jan; 27(1):1-190

Radiologic diagnosis and staging of pancreatic ductal adenocarcinoma. Freeny PC. **Radiol Clin North Am** 1989 Jan;27(1):121-8 (16 ref.)

Mucinous pancreatic duct ectasia in the body of the pancreas. Agostini S, et al. **Radiology** 1989 Mar;170(3 Pt 1):815-6

Pancreatic carcinoma masquerading as renal cell carcinoma. Kumar R, et al. **Urol Radiol** 1989;11(1):20-4

[The application of SAG and PTPC in the localization of insulinoma] Zhang TL. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Apr;22(2):96-9 (Eng. Abstr.) **(Chi)**

[Papillary-cystic tumor of the pancreas in young women] Schroeder R, et al. **Schweiz Med Wochenschr** 1988 Dec 24;118(51):1957-61 (Eng. Abstr.) **(Fre)**

[Imaging of the pancreas by computerized tomography] Gerhard P, et al. **Verh Dtsch Ges Inn Med** 1988;94:89-100 (15 ref.) **(Ger)**

[Diagnostic value of computed tomography for the detection of invasion of the caudate bile duct branch in carcinoma of the hepatic hilum] Nagino M, et al. **Nippon Geka Gakkai Zasshi** 1988 Jun;89(6):889-97 (Eng. Abstr.) **(Jpn)**

[Radiologic appearance of pancreatic cystadenocarcinoma] Yamamoto S, et al. **Rinsho Hoshasen** 1988 Jul;33(7):773-9 (Eng. Abstr.) **(Jpn)**

[A case of ectopic insulinoma] Yamauchi T, et al. **Rinsho Hoshasen** 1988 Oct;33(10):1141-2 (Eng. Abstr.) **(Jpn)**

[Successes and failures of endoscopic retrograde cholangiopancreatography in the diagnosis of pancreatic carcinoma] Moreira Vicente VF, et al. **Rev Clin Esp** 1988 Dec;183(9):468-74 (70 ref.) (Eng. Abstr.) **(Spa)**

[Chronic pancreatitis or cancer? Semeiology of pancreatic radiography] Lazo Ramos A, et al. **Rev Esp Enferm Apar Dig** 1989 Apr;75(4):378-82 (Eng. Abstr.) **(Spa)**

RADIONUCLIDE IMAGING

Imaging of pancreatic and colorectal cancer using antibody fragments: a preliminary evaluation. Ballantyne KC, et al. **Eur J Surg Oncol** 1988 Oct;14(5):393-8

[A case of acinar cell carcinoma of the pancreas with increased uptake of 67Ga citrate] Nakayama M, et al. **Rinsho Hoshasen** 1988 Aug;33(8):923-6 (Eng. Abstr.) **(Jpn)**

RADIOTHERAPY

Evaluation of neutron irradiation of pancreatic cancer. Results of a randomized Radiation Therapy Oncology Group clinical trial. Thomas FJ, et al. **Am J Clin Oncol** 1989 Aug;12(4):283-9

Adjuvant radiation therapy in pancreatic carcinoma: a reappraisal [editorial] Kinsella TJ. **Cancer Invest** 1988; 6(6):745-6

Intraoperative brachytherapy in pancreatic cancer. Nori D, et al. **Cancer Invest** 1988;6(6):695-704 (28 ref.)

Intraoperative electron beam therapy for unresectable cancer of the pancreas. Dobelbower RR Jr, et al. **Int J Pancreatol** 1989 Feb;4(1):73-90

Treatment of cancer of the pancreas by intraoperative electron beam therapy: physical and biological aspects. Bagne FR, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan; 16(1):231-42 (29 ref.)

Treatment of cancer of the pancreas by precision high dose (PHD) external photon beam and intraoperative electron beam therapy (IOEBT). Dobelbower RR Jr, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):205-9

Clinical and histopathological appraisal of preoperative irradiation for adenocarcinoma of the pancreatoduodenal region. Ishikawa O, et al. **J Surg Oncol** 1989 Mar; 40(3):143-51

Evaluation of intraoperative radiotherapy for carcinoma of the pancreas: prognostic factors and survival analyses. Nishimura A, et al. **Radiat Med** 1988 Mar-Apr;6(2):85-91

Effect of intraoperative radiotherapy on pancreatic carcinoma: histopathological findings from autopsy cases. Goseki N, et al. **Tohoku J Exp Med** 1988 Nov;156(3):211-9

[Peroperative radiotherapy in tumors of the pancreas] Huguier M, et al. **Minerva Chir** 1989 Mar 15;44(5):827-32 (11 ref.) (Eng. Abstr.) **(Ita)**

[Bissi's "open-field" radiotherapy strategy in pancreatic carcinoma. The experience in 9 cases treated at the San Raffaele Hospital in Milan] Ferla G, et al. **Minerva Med** 1989 Jul;80(7):657-60 **(Ita)**

[Experimental study of the intra-operative radiation therapy in pancreatic cancer] Kodera T, et al. **Nippon Geka Gakkai Zasshi** 1988 Aug;89(8):1233-40 (Eng. Abstr.) **(Jpn)**

SECONDARY

Metastatic vipoma arising from colonic primary tumour. Bradley C, et al. **Eur J Surg Oncol** 1989 Aug;15(4):386-9

Isolated duodenal metastasis from breast carcinoma [letter] Monson JR, et al. **Eur J Surg Oncol** 1988 Oct;14(5):463

Pancreatic metastases of renal cell carcinoma: report of two cases. Strijk SP. **Gastrointest Radiol** 1989 Spring; 14(2):123-6

Solitary pancreatic metastasis from renal cell carcinoma. A rare metastatic site. Sharma SK, et al. **Indian J Cancer** 1988 Mar;25(1):29-32

Nonpancreatic primary tumors with metastasis to the pancreas. Roland CF, et al. **Surg Gynecol Obstet** 1989 Apr; 168(4):345-7

[Gamma-glutamyltranspeptidase and alkaline phosphatase in the blood in the diagnosis of malignant neoplasms] Tokarskaia ZB, et al. **Lab Delo** 1989;(4):72-3 **(Rus)**

SECRETION

Elastase-1-secreting acinar cell carcinoma of the pancreas. A cytologic, electron microscopic and histochemical study. Ishihara A, et al. **Acta Cytol** 1989 Mar-Apr;33(2):157-63

Gastrin secretion by gastrinoma cells in long-term culture. Elouaer-Blanc L, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):G596-602

Recurrent pancreatoblastoma with inappropriate adrenocorticotrophic hormone secretion. Passmore SJ, et al. **Arch Dis Child** 1988 Dec;63(12):1494-6

Unregulated secretion of an exogenous glycotripeptide by rat islets and HIT cells. Gold G, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):457-62

A combined glucagonoma and VIPoma syndrome. First pathologic and clinical report. Cavallo-Perin P, et al. **Cancer** 1988 Dec 15;62(12):2576-9

Exaggerated insulin secretory response in patients with insulinomas to midaglizole, a drug with alpha 2-adrenergic blocking activity. Yamada Y, et al. **Clin Endocrinol (Oxf)** 1988 Jul;29(1):29-34

Phorbol ester-stimulated insulin secretion by RINm5F insulinoma cells is linked with membrane depolarization and an increase in cytosolic free Ca2+ concentration. Yada T, et al. **J Biol Chem** 1989 Feb 15;264(5):2455-62

Successful treatment with SMS 201-995 of Cushing's syndrome caused by ectopic adrenocorticotropin secretion from a metastatic gastrin-secreting pancreatic islet cell carcinoma. Lamberts SW, et al. **J Clin Endocrinol Metab** 1988 Nov;67(5):1080-3

Pancreatic insuloma causing Cushing's syndrome. Torriani F, et al. **J Endocrinol Invest** 1989 May;12(5):313-9

Glucose-stimulated hormone release in rats bearing streptozotocin/nicotinamide-induced islet adenomas: evidence for slow and fast responders. Bauer GE, et al. **Pancreas** 1989;4(4):464-71

Suppression of primary and secondary peptides with somatostatin analog in the therapy of functional endocrine tumors. Woltering EA, et al. **Surg Gynecol Obstet** 1988 Dec;167(6):453-62

[A case of malignant pancreatic apudoma producer of serotonin and pancreatic polypeptide] Gesuelli GC, et al. **Chir Ital** 1988 Apr;40(2):117-25 (19 ref.) (Eng. Abstr.) **(Ita)**

[An autopsy case of glucagonoma associated with production of several hormones] Fujise K, et al. **Nippon Naika Gakkai Zasshi** 1988 Jun;77(6):880-1 **(Jpn)**

[A case of multiple endocrine neoplasia, type 1, with parathyroid adenoma, multinodular adrenal cortical hyperplasia, islet cell tumor and hyperplasia of thyroid with concomitant hypersecretion of gastrin and total glucagon-like immunoreactivity] Shigematsu S, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):357-62 **(Jpn)**

[Features of incretory function of the pancreas in patients with insulinoma] Furmanenko ED, et al. **Ter Arkh** 1988; 60(9):63-6 **(Rus)**

SURGERY

Surgical treatment of carcinoids and endocrine pancreatic

tumours. Akerström G. **Acta Oncol** 1989;28(3):409–14 (62 ref.)
Subtotal duodenopancreatectomy for pancreatic duct, distal bile duct and periampullary carcinoma: short- and long-term results. Lygidakis NJ, et al. **Am J Gastroenterol** 1989 Aug;84(8):917–20
The role of intra-operative biopsy in the treatment of resectable neoplasms of the pancreas and periampullary region. Buice WS, et al. **Am Surg** 1989 May;55(5):307–10
Response of glucagonomas to surgical excision and chemotherapy. Report of two cases and review of the literature. Reyes-Govea J, et al. **Am Surg** 1989 Aug; 55(8):523–7
Total pancreatectomy for ductal cell carcinoma of the pancreas. An update. Brooks JR, et al. **Ann Surg** 1989 Apr; 209(4):405–10
Pancreatic lymphoma. Is surgery mandatory for diagnosis or treatment? Webb TH, et al. **Ann Surg** 1989 Jan; 209(1):25–30
Clinical experience with regional pancreatectomy for adenocarcinoma of the pancreas. Sindelar WF. **Arch Surg** 1989 Jan;124(1):127–32
Endoscopic endoprosthesis insertion following failure of cholecystojejunostomy in pancreatic carcinoma. Dowsett JF, et al. **Br J Surg** 1989 May;76(5):454–6
Stapled bypass procedure for unresectable pancreatic carcinoma. Simon FL, et al. **Can J Surg** 1989 Mar; 32(2):85–7
Radical pancreatectomy for ductal cell carcinoma of the head of the pancreas. Manabe T, et al. **Cancer** 1989 Sep 1; 64(5):1132–7
Subtotal duodeno-pancreatectomy for carcinoma of the head of the pancreas. Preliminary report of an alternative operation to total pancreatectomy. Gall FP, **Eur J Surg Oncol** 1988 Oct;14(5):387–92
Pancreatic cancer: palliative endoscopic biliary drainage. Meduri B, et al. **Int J Pancreatol** 1988;3 Suppl 1:S143–6
Long-term survivors after operation on carcinoma of the pancreas. Tsuchiya R, et al. **Int J Pancreatol** 1988 Dec; 3(6):491–6
Primary cancer of the pancreas: a surgical enigma. Smith EB. **J Natl Med Assoc** 1989 Feb;81(2):153–7
Surgical treatment of insulinomas of the pancreas. Auld CD, et al. **J R Coll Surg Edinb** 1988 Jun;33(3):132–7
Morbidity and mortality associated with intraoperative radiotherapy. Avizonis VN, et al. **J Surg Oncol** 1989 Aug; 41(4):240–5
Insulinoma: 31 years of tumor localization and excision. Zeng XJ, et al. **J Surg Oncol** 1988 Dec;39(4):274–8
Doubts on "curative" resection of pancreatic cancer [letter] Joensuu H, et al. **Lancet** 1989 Apr 29;1(8644):953–4
Carcinoma of the pancreas and periampullary area. Part III: Therapeutic approaches. Elias EG. **Md Med J** 1988 Jul; 37(7):512
Ischemic necrosis of the gastric remnant after (sub) total pancreatoduodenectomy. Montagne GJ, et al. **Neth J Surg** 1988 Oct;40(5):130–2
Pancreatic resection for pancreatic cancer. Jordan GL Jr. **Surg Clin North Am** 1989 Jun;69(3):569–97 (61 ref.)
Surgical palliation for pancreatic cancer. Singh SM, et al. **Surg Clin North Am** 1989 Jun;69(3):599–611 (64 ref.)
Surgical treatment for ductal adenocarcinoma of the pancreas. Condie JD Jr, et al. **Surg Gynecol Obstet** 1989 May;168(5):437–45
Second look operation in managing carcinoma of the pancreas and periampullary region. Hashimi H, et al. **Surg Gynecol Obstet** 1989 Mar;168(3):224–6
The progressive Zollinger-Ellison syndrome in multiple endocrine neoplasia. Luttwak EM, et al. **Surg Gynecol Obstet** 1988 Nov;167(5):415–9
Resectional surgical procedures for carcinoma of the head of the pancreas. Lygidakis NJ, et al. **Surg Gynecol Obstet** 1989 Feb;168(2):157–65
A prospective study of perioperative and postoperative control of acid hypersecretion in patients with Zollinger-Ellison syndrome undergoing gastrinoma resection. Fraker DL, et al. **Surgery** 1988 Dec; 104(6):1054–63
Management of islet cell carcinoma. Legaspi A, et al. **Surgery** 1988 Dec;104(6):1018–23
Pancreatoduodenectomy with pyloric preservation for carcinoma of the pancreas: a cautionary note. Sharp KW, et al. **Surgery** 1989 May;105(5):645–53 (34 ref.)
Islet cell carcinomas of the pancreas: a twenty-year experience. Thompson GB, et al. **Surgery** 1988 Dec; 104(6):1011–7
Total pancreatectomy for ductal adenocarcinoma of the pancreas: an update. van Heerden JA, et al. **World J Surg** 1988 Oct;12(5):658–62
[Surgical resection of 48 patients with malignant disease of the pancreas and periampullary region] Zhu SL. **Chung Hua Chung Liu Tsa Chih** 1988 Sep;10(5):385–7 (Eng. Abstr.) **(Chi)**
[Total pancreatectomy in pancreatic cancer] Zheng YJ. **Chung Hua Wai Ko Tsa Chih** 1988 Oct;26(10):614–6, 638–9 (Eng. Abstr.) **(Chi)**
[Whipple's resection in cancer of Vater's ampulla and the pancreatic head] Schrøder HM, et al. **Ugeskr Laeger** 1989 Jan 2;151(1):21–3 (Eng. Abstr.) **(Dan)**
[Cystadenoma of the pancreas. Which ones should be resected? 25 cases] Nordlinger B, et al. **Chirurgie** 1988; 114(7–8):641–7 (Eng. Abstr.) **(Fre)**
[Triple pancreatic metastasis of kidney cancer treated by subtotal duodenopancreatectomy (letter)] Guyenne C, et al. **Presse Med** 1989 Feb 11;18(5):231 **(Fre)**
[Effect of tumor size and lymph node status on the prognosis of pancreatic cancer] Bittner R, et al. **Chirurg** 1989 Apr; 60(4):240–5 (Eng. Abstr.) **(Ger)**
[The solid-cystic pancreas tumor] Kienzle HF, et al. **Chirurg** 1989 Jun;60(6):410–4 (Eng. Abstr.) **(Ger)**
[Protection of the pancreatico-digestive anastomosis following resection of the head of the pancreas by pancreatic duct occlusion with fibrin (-glue). Animal experiment and clinical experiences] Waclawiczek HW, et al. **Chirurg** 1989 Jun;60(6):403–9 (Eng. Abstr.) **(Ger)**
[Therapy of organic hyperinsulinism] Rothmund M, et al. **Dtsch Med Wochenschr** 1989 Mar 24;114(12):468–70 **(Ger)**
[Palliative biliodigestive anastomosis in non-resectable cancer of the head of the pancreas—with or without preventive gastroenterostomy?] Roost HM, et al. **Helv Chir Acta** 1989 Jan;55(5):619–21 (Eng. Abstr.) **(Ger)**
[Achievements of tumor surgery in tumors of the pancreas] Bodner E. **Langenbecks Arch Chir** 1988;Suppl 2:133–8 (Eng. Abstr.) **(Ger)**
[Cancer of the exocrine pancreas. Clinical aspects—diagnosis—therapy] Sulkowski U, et al. **Med Klin** 1988 Oct 28;83(21):700–4, 734 (Eng. Abstr.) **(Ger)**
[Coping with disease from the psychosomatic-psychotherapeutic viewpoint exemplified by pancreatectomized patients] Lang H, et al. **Psychother Psychosom Med Psychol** 1989 Jul;39(7):239–47 (Eng. Abstr.) **(Ger)**
[Interdisciplinary therapy concepts in gastrointestinal tumors—pancreas cancer] Siewert JR, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:76–81 (25 ref.) **(Ger)**
[Surgery of the endocrine pancreas] Haberland R, et al. **Z Kinderchir** 1988 Aug;43(4):273–80 (Eng. Abstr.) **(Ger)**
[A case of pancreatic carcinoid tumor] Bortolani E, et al. **Minerva Chir** 1988 Nov 15;43(21):1871–4 (Eng. Abstr.) **(Ita)**
[Distal pancreatectomy with conservation of the spleen. Apropos of 3 consecutive cases] Franchello A, et al. **Minerva Chir** 1989 Jun 15;44(11):1557–60 (Eng. Abstr.) **(Ita)**
[Tumors of the pancreas in the geriatric age] Pannella A, et al. **Minerva Chir** 1988 Sep 30;43(18):1451–62 (Eng. Abstr.) **(Ita)**
[Palliative surgical treatment of malignant tumors of the exocrine pancreas] Petrassi A, et al. **Minerva Chir** 1989 Jan 31;44(1–2):191–5 (21 ref.) **(Ita)**
[Pancreatic carcinoma. The evolution of therapeutic choices guided by progress in diagnostic technics] Purri P, et al. **Minerva Med** 1989 Jul;80(7):661–4 **(Ita)**
[Significance of extensive surgery in pancreatic cancer] Miyazaki I. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):1064–9 (Eng. Abstr.) **(Jpn)**
[Advances in and outlook for pancreatic surgery] Sato H. **Nippon Geka Gakkai Zasshi** 1988 Jun;89(6):799–804 **(Jpn)**
[Metabolic and nutritional management after extended radical operation for pancreatobiliary carcinoma] Ueno K, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1367–70 (Eng. Abstr.) **(Jpn)**
[An operative case of multiple endocrine neoplasia type 1 (MEN type 1) with insulinoma] Soyama N, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jun;85(6):1312–6 **(Jpn)**
[Prognosis in patients with cancer of the exocrine pancreas undergoing surgical treatment] Faintuch J, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Jul-Aug; 43(4):206–10 (Eng. Abstr.) **(Por)**
[Partial resection of the head of the pancreas] Shalimov AA, et al. **Vestn Khir** 1988 Sep;141(9):30–2 (Eng. Abstr.) **(Rus)**
[Ductal adenocarcinoma of the head of the pancreas: associated pathology of body and tail] Arias Pérez J, et al. **Rev Esp Enferm Apar Dig** 1989 Jan;75(1):78–80 (Eng. Abstr.) **(Spa)**
[Extrahepatic biliodigestive anastomoses. Analysis of 227 cases] De Vega DS, et al. **Rev Esp Enferm Apar Dig** 1989 Apr;75(4):367–73 (Eng. Abstr.) **(Spa)**
[Carcinomas of the biliopancreatic juncture. Review of 58 cases] Pardo Correcher JM, et al. **Rev Esp Enferm Apar Dig** 1988 Jul;74(1):11–6 (Eng. Abstr.) **(Spa)**
[Pancreatoduodenectomy with preservation of the pylorus] Piza Bernal R, et al. **Rev Gastroenterol Mex** 1988 Apr–Jun; 53(2):119–23 (Eng. Abstr.) **(Spa)**
[Surgical treatment of insulinoma. Experience at the Salvador Zubiran National Nutrition Institute] Campuzano Fernández M, et al. **Rev Invest Clin** 1989 Apr–Jun; 41(2):151–7 (Eng. Abstr.) **(Spa)**

THERAPY

Treatment of neuroendocrine gut and pancreatic tumors with interferons. Oberg K. **Acta Chir Scand Suppl** 1989; 549:56–62 (41 ref.)
Neuroendocrine gut and pancreatic tumours. Biological response modifiers. Kättilö, Sweden, June 12–15, 1988. Proceedings. **Acta Oncol** 1989;28(3):301–449
Medical treatment of neuroendocrine gut and pancreatic tumors. Oberg K, et al. **Acta Oncol** 1989;28(3):425–31 (32 ref.)
Treatment of the pancreatic disease of multiple endocrine neoplasia type 1 (MEN 1). Tisell LE, et al. **Acta Oncol** 1989;28(3):415–7
Islet cell carcinoma of the pancreas. Kim DG, et al. **Am Surg** 1989 Jun;55(6):325–32
Endoscopic biliary endoprosthesis in the palliation of malignant obstruction of the distal common bile duct: a randomized trial. Shepherd HA, et al. **Br J Surg** 1988 Dec; 75(12):1166–8
Prolonged survival of nude mice bearing human pancreatic cancer and treated with lymphokine-activated killer cells and interleukin-2. Marincola FM, et al. **Curr Surg** 1989 Jul-Aug;46(4):304–7
Medical therapy of VIPomas. O'Dorisio TM, et al. **Endocrinol Metab Clin North Am** 1989 Jun;18(2):545–56 (97 ref.)
Treatment of endocrine tumors of the pancreas. Vinik AI, et al. **Endocrinol Metab Clin North Am** 1989 Jun; 18(2):483–518 (186 ref.)
Local hyperthermia using a low powered Nd: YAG laser for pancreatic and gastric carcinoma. Tajiri H, et al. **Hokkaido Igaku Zasshi** 1988 Nov;63(6):889–96
Cytokines and pancreatic cancer. Sensitivity of xenotransplants of predominantly pancreatic carcinomas to rIFN-gamma and rTFN-alpha in nude mice. Kühl JS, et al. **Int J Pancreatol** 1989 Apr;4(3):303–19
Endoscopic treatment of pancreatic cancer. Speer AG, et al. **Int J Pancreatol** 1988;3 Suppl 1:S147–58
Phase I–II study of prophylactic hepatic irradiation with local irradiation and systemic chemotherapy for adenocarcinoma of the pancreas. Komaki R, et al. **Int J Radiat Oncol Biol Phys** 1988 Dec;15(6):1447–52
Combined treatment using radiotherapy for carcinoma of the pancreas involving the adjacent vessels. Manabe T, et al. **Int Surg** 1988 Jul-Sep;73(3):153–6
Conservative treatment for adenocarcinoma of the pancreas. McMahon NG, et al. **Milit Med** 1989 Mar;154(3):133–6
Carcinoma of the pancreas. Is treatment worthwhile? Garcia DM, et al. **Mo Med** 1989 Feb;86(2):89–91
Pancreatic cancer: today's frontier. Howard JM. **Ohio Med** 1989 May;85(5):404–6 (0 ref.)
Combined therapy of xenografts of human pancreatic carcinomas with rTNF-alpha and mitomycin C. Klapdor R, et al. **Onkologie** 1989 Jun;12(3):143–7
Idiotypic cascades in cancer patients treated with monoclonal antibody CO17-1A. Wettendorff M, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3787–91
Effects of MAb BW 494/32 and rTNF-a/rIFN-g alone and in combination in nude mice bearing xenografts of human gastrointestinal/pancreatic carcinomas. Klapdor R, et al. **Strahlenther Onkol** 1989 Jul;165(7):549–50
Gastrinoma. New medical and surgical approaches. Howard TJ, et al. **Surg Clin North Am** 1989 Jun;69(3):667–81 (101 ref.)
[The Kasabach-Merritt syndrome with pancreatic localization in a newborn infant] Pochard J, et al. **Arch Fr Pediatr** 1989 Jun-Jul;46(6):443–6 (Eng. Abstr.) **(Fre)**
[Therapy of pancreatic carcinoma with the monoclonal antibody BW 494/32: first clinical results] Friess H, et al. **Immun Infekt** 1989 Feb;17(1):24–6 (Eng. Abstr.) **(Ger)**
[Immunoscintigraphy of colorectal cancers and specific immunotherapy of pancreatic cancers using monoclonal antibodies] Bosslet K, et al. **Wien Med Wochenschr** 1988 Jun 30;138(11–12):255–7 (Eng. Abstr.) **(Ger)**
[Treatment of inoperable carcinoma of the head of the pancreas] Cohen S, et al. **Harefuah** 1988 Dec 1; 115(11):317–9 (Eng. Abstr.) **(Heb)**
[Malignant tumors of the exocrine pancreas. Strategies of treatment] Marrano D. **Minerva Chir** 1989 Jan 31; 44(1–2):183–5 **(Ita)**
[Treatment of pancreatic cancer] Mizumoto R, et al. **Gan No Rinsho** 1989 Jan;Spec No:329–36 **(Jpn)**
[Multimodality treatment of carcinoma of the pancreas] Tsuchiya R, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):945–50 (Eng. Abstr.) **(Jpn)**
[An experimental attempt to potentiate therapeutic effects of combined use of pulsing magnetic fields and antitumor agents] Omote Y. **Nippon Geka Gakkai Zasshi** 1988 Aug; 89(8):1155–66 (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

Radioreceptor assay for detergent-solubilized rat insulinoma growth hormone receptors. Møldrup A. **Exp Clin Endocrinol** 1989 May;93(2–3):286–92
Mucinous islet cell (amphicrine) carcinoma of the pancreas associated with watery diarrhea and hypokalemia syndrome. Ordóñez NG, et al. **Hum Pathol** 1988 Dec; 19(12):1458–61
Papillary cystic tumor of the pancreas: an immunohistochemical and ultrastructural study of 14 patients. Yamaguchi K, et al. **Jpn J Clin Oncol** 1989 Jun; 19(2):102–11
Malignant oncocytic carcinoid of the pancreas. Carstens PH, et al. **Ultrastruct Pathol** 1989 Jan-Feb;13(1):69–75

VETERINARY

Hyperinsulinism and hypoglycemia associated with pancreatic islet cell tumor in a ferret. Jergens AE, et al. **J Am Vet Med Assoc** 1989 Jan 15;194(2):269–71

An insulinoma causing hypoglycaemia and seizures in a dog: case report and literature review. Eckersley GN, et al. **J S Afr Vet Assoc** 1987 Dec;58(4):187–92 (30 ref.)
Insulinoma and subclinical peripheral neuropathy in two dogs. Braund KG, et al. **J Vet Intern Med** 1987 Apr–Jun; 1(2):86–90
Pancreatic polypeptide and insulin-secreting tumor in a dog with duodenal ulcers and hypertrophic gastritis. Zerbe CA, et al. **J Vet Intern Med** 1989 Jul–Sep;3(3):178–82
[What is your diagnosis? Which treatment do you suggest? Islet cell tumor] Moser M. **Schweiz Arch Tierheilkd** 1988 Nov;130(11):639–42 **(Ger)**
[Tumors of the exocrine pancreas in the cat] Münster M, et al. **Tierarztl Prax** 1988;16(3):317–20 (Eng. Abstr.) **(Ger)**

PANCREATIC POLYPEPTIDE

ANALYSIS

Application of immunogold–silver staining and immunoenzymatic methods in multiple labelling of human pancreatic Langerhans islet cells. Krenács T, et al. **Acta Histochem (Jena)** 1989;85(1):79–85
Localization, quantification, and characterization of pancreatic polypeptide immunoreactivity in the parasitic flatworm Diclidophora merlangi and its fish host (Merlangius merlangus). Maule AG, et al. **Gen Comp Endocrinol** 1989 Apr;74(1):50–6
A malignant tumor of the pancreas producing glucagonoma syndrome: coexistence of glucagon and pancreatic polypeptide (PP) in the tumor cells. Bani D, et al. **Pancreas** 1989;4(4):511–9

BLOOD

Plasma cholecystokinin and pancreatic polypeptide responses after ingestion of a liquid test meal rich in medium-chain fatty acids in patients with chronic pancreatitis. Nakano I, et al. **Am J Clin Nutr** 1989 Feb;49(2):247–51
Neural mechanisms of pancreatic polypeptide release in conscious dogs. Hosotani R, et al. **Am J Physiol** 1989 Jul; 257(1 Pt 1):G134–7
Crossover study on effects of duct obliteration, celiac denervation, and autotransplantation on glucose- and meal-stimulated insulin, glucagon, and pancreatic polypeptide levels. Gooszen HG, et al. **Diabetes** 1989 Jan; 38 Suppl 1:114–6
Changes in plasma glucagon, pancreatic polypeptide and insulin during development of alloxan diabetes mellitus in dog. Tasaka Y, et al. **Endocrinol Jpn** 1988 Jun;35(3):399–404
Effect of cholestyramine on plasma cholecystokinin and pancreatic polypeptide levels, and exocrine pancreatic secretion. Koop I, et al. **Eur J Clin Invest** 1988 Oct; 18(5):517–23
Circulating levels of insulin and avian pancreatic polypeptide in pigeons under different experimental conditions. John TM, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):71–7
Pancreatic polypeptide (PP) response to food in type I diabetics with and without diabetic autonomic neuropathy. Hossdorf T, et al. **Hepatogastroenterology** 1988 Oct; 35(5):238–41
Mechanisms of increased lower esophageal sphincter pressure following intraduodenal peptone infusion in dogs. Sandler AD, et al. **J Surg Res** 1989 May;46(5):496–501
Effects of a gastric implant on body weight and gastrointestinal hormones in cafeteria diet obese rats. Northway MG, et al. **Physiol Behav** 1989 Feb;45(2):331–5
Variations of plasma immunoreactive motilin, pancreatic polypeptide, gastrin and somatostatin along the duodenal motility cycle in the pig. Cuber JC, et al. **Regul Pept** 1988 Oct;23(1):27–35
Plasma basal concentration of pancreatic polypeptide (PP) does not increase with ageing in the female Fischer (F-344) conscious rat. Miyasaka K, et al. **Tohoku J Exp Med** 1988 Dec;156(4):419–20
[Primary ovarian carcinoid with secretion of human pancreatic polypeptide and immunoreactivity to substance P] Proye C, et al. **Chirurgie** 1988;114(3):234–43 (38 ref.) (Eng. Abstr.) **(Fre)**

GENETICS

Different splice site utilization generates diversity between the rat and human pancreatic polypeptide precursors. Kopin AS, et al. **Arch Biochem Biophys** 1988 Dec; 267(2):742–8
Expression of peptide hormone genes in human islet cell tumors. Philippe J, et al. **Diabetes** 1988 Dec;37(12):1647–51
Appalachian spring: variations on ancient gastro-entero-pancreatic themes in New World mammals. Seino S, et al. **Horm Metab Res** 1988 Jul;20(7):430–5 (45 ref.)

IMMUNOLOGY

An immunochemical study of avian pancreatic polypeptide: the nature of the principal epitope. Taylor TC, et al. **Mol Immunol** 1988 Oct;25(10):961–73

METABOLISM

Degradation of 125I-glucagon, -pancreatic polypeptide and -insulin by acid saline extract of rat submaxillary gland and their protection by proteinase inhibitors. Tasaka Y, et al. **Endocrinol Jpn** 1989 Feb;36(1):47–53
Total small bowel resection inhibited bombesin-stimulated release of cholecystokinin and pancreatic polypeptide in anesthetized cats. Inoue K, et al. **J Surg Res** 1989 Jul; 47(1):87–91
Tissue distribution of avian pancreatic polypeptide-degrading activity. Adamo ML, et al. **Proc Soc Exp Biol Med** 1989 Sep;191(4):341–5
Electron microscopic and immunoelectron microscopic demonstration of pancreatic polypeptide cells in glucagonoma: colocalization of pancreatic peptide and glucagon in single secretory granules. Ooi A, et al. **Ultrastruct Pathol** 1989 Jan–Feb;13(1):15–22

PHARMACOLOGY

Inhibitory regulation of rat exocrine pancreas by peptide YY and pancreatic polypeptide. Putnam WS, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):G698–703
Effects of islet hormones on insulin secretion from cloned B cell lines, HIT-T15 and RINm5F. Lambert DG, et al. **J Endocrinol** 1989 Jun;121(3):479–85
Lobe-specific responses of cultured islet cells of canine pancreas to carbamylcholine, glucose, and pancreatic polypeptide. Paquette TL, et al. **Pancreas** 1989;4(2):185–93
Effects of pancreatic polypeptide on the pancreatic exocrine secretion stimulated by secretin and cholecystokinin in the conscious pig. Langlois A, et al. **Regul Pept** 1989 Jan; 24(1):55–65

PHYSIOLOGY

Role of pancreatic polypeptide in the regulation of pancreatic exocrine secretion in dogs. Shiratori K, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):G535–41
Do motilin and pancreatic polypeptide regulate duodenal bile acid delivery? Scott RB, et al. **Can J Physiol Pharmacol** 1988 Dec;66(12):1499–504
Involvement of pancreatic polypeptide (PP) in luminal feedback regulation in the conscious rat. Miyasaka K, et al. **Dig Dis Sci** 1989 Mar;34(3):474–80
[Pancreatic polypeptide (a review of the literature)] Troitskaia VB. **Fiziol Zh SSSR** 1988 Aug;74(8):1171–7 (50 ref.) (Eng. Abstr.) **(Rus)**

SECRETION

Splanchnic neural regulation of pancreatic polypeptide release in the isolated perfused human pancreas. Brunicardi FC, et al. **Am J Surg** 1989 Jan;157(1):50–7
CCK receptors in release of pancreatic polypeptide (PP) in dogs. Konturek SJ, et al. **Dig Dis Sci** 1989 Jun;34(6):849–56
Temporal relationships of cholecystokinin release, pancreatobiliary secretion, and gastric emptying of a mixed meal. Fried M, et al. **Gastroenterology** 1988 Nov; 95(5):1344–50
Effects of synthetic human gastrin-releasing peptide on pancreatic exocrine secretion and release of pancreatic polypeptide in conscious rats. Miyasaka K, et al. **Int J Pancreatol** 1989 Apr;4(3):251–60
Relationship of periodic pancreatic secretion and gallbladder contraction to plasma cholecystokinin in dogs. Magee DF, et al. **Ir J Med Sci** 1988 Aug;157(8):261–4
Effects of the somatostatin analog BIM 23014 on the secretion of growth hormone, thyrotropin, and digestive peptides in normal men. Sassolas G, et al. **J Clin Endocrinol Metab** 1989 Feb;68(2):239–46
Pancreatic polypeptide and insulin-secreting tumor in a dog with duodenal ulcers and hypertrophic gastritis. Zerbe CA, et al. **J Vet Intern Med** 1989 Jul–Sep;3(3):178–82
Role of amino acids in stimulation of postprandial insulin, glucagon, and pancreatic polypeptide in humans. Schmid R, et al. **Pancreas** 1989;4(3):305–14
Protein meal-stimulated pancreatic polypeptide secretion in Prader–Willi syndrome of adults. Tomita T, et al. **Pancreas** 1989;4(4):395–400
Mechanism of actions of cholecystokinin octapeptide on food intake and insulin and pancreatic polypeptide release in the dog. Inui A, et al. **Peptides** 1988 Sep–Oct;9(5):1093–100
Effect of secretin and caerulein on pancreatic polypeptide and on insulin secretion from the isolated perfused ventral area of the rat pancreas. Funakoshi A, et al. **Regul Pept** 1989 Jan;24(1):111–6
Role of circulating catecholamines in the control of pancreatic polypeptide and gastrin release. Mönnikes H, et al. **Res Exp Med (Berl)** 1989;189(3):181–7
[A case of malignant pancreatic apudoma producer of serotonin and pancreatic polypeptide] Gesuelli GC, et al. **Chir Ital** 1988 Apr;40(2):117–25 (19 ref.) (Eng. Abstr.) **(Ita)**

PANCREATIC PSEUDOCYST see under **PANCREATIC CYST**

PANCREATICOJEJUNOSTOMY

Closed pancreatic transection treated by Roux-en-Y anastomosis. Laustsen J, et al. **Injury** 1988 Jan;19(1):42–3 (19 ref.)

ADVERSE EFFECTS

Pylorus-preserving Whipple pancreaticoduodenectomy: postoperative evaluation. Trerotola SO, et al. **Radiology** 1989 Jun;171(3):735–8
The amount of external pancreatic juice drainage in pancreaticojejunostomy insufficiency. Yu SC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Aug;87(8):791–5
Surgical complications after segmental pancreatic transplantation with enteric exocrine diversion. Tibell A, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2801–2

METHODS

Ductal drainage for chronic pancreatitis. Drake DH, et al. **Surgery** 1989 Feb;105(2 Pt 1):131–40
[Duodenopancreatectomy. Continuous single pancreaticojejunostomy (video)] Maurer W, et al. **Helv Chir Acta** 1989 Jun;56(1–2):103–6 (Eng. Abstr.) **(Ger)**
[Separate external-internal drainage in the surgical treatment of pancreatic pseudocysts] Shalimov AA, et al. **Vestn Khir** 1988 Aug;141(8):56–7 **(Rus)**

PANCREATIN

ADMINISTRATION & DOSAGE

Critical examination of therapeutic efficacy of a pH-sensitive enteric-coated pancreatic enzyme preparation in treatment of exocrine pancreatic insufficiency secondary to cystic fibrosis. Dutta SK, et al. **Dig Dis Sci** 1988 Oct; 33(10):1237–44
Duodenal instillation of pancreatin does not abolish steatorrhea in patients with pancreatic insufficiency. Zerega J, et al. **Dig Dis Sci** 1988 Oct;33(10):1245–9
Adequate enzyme replacement after total pancreatectomy [letter] Robert A. **JAMA** 1989 May 12;261(18):2638–9

ANALYSIS

Comparative studies of canine colipase and lipases from bovine, porcine, canine, human and rat pancreases. Lee PC. **Comp Biochem Physiol [B]** 1978;60(4):373–8

METABOLISM

In vitro stability of pancreatic zymogen granules: roles of pH and calcium. Lebel D, et al. **Biol Cell** 1988;63(3):343–53
Effect of atropine on intestinal phase of pancreatic secretion in man. Bozkurt T, et al. **Digestion** 1988;41(2):108–15

RADIATION EFFECTS

[Possible decontamination of pancreatin with gamma rays and chemical agents] Herzog V, et al. **Pharmazie** 1989 Mar; 44(3):204–6 (Eng. Abstr.) **(Ger)**

SECRETION

Translocation and proteolytic processing of nascent secretory polypeptide chains: two functions associated with the ribosomal domain of the endoplasmic reticulum. Amar-Costesec A, et al. **Biol Cell** 1989;65(2):99–108

THERAPEUTIC USE

Oral pancreatic enzymes accelerate closure of external pancreatic fistulae. García-Pugés AM, et al. **Br J Surg** 1988 Sep;75(9):924–5
Use of pancreatic Schilling test to determine efficiency of pancreatic enzyme delivery in pancreatic insufficiency. Brugge WR, et al. **Dig Dis Sci** 1988 Oct;33(10):1226–32
Effectiveness of enteric-coated preparations on nutritional parameters in cystic fibrosis. A long-term study. Carroccio A, et al. **Digestion** 1988;41(4):201–6
Effect of pancreatic enzyme supplementation on postprandial plasma cholecystokinin secretion in patients with pancreatic insufficiency. Jansen JB, et al. **Regul Pept** 1989 Jun–Jul; 25(3):333–42
[Comparative study of Creon and Eurobiol in the treatment of exocrine pancreatic insufficiency in adults] Emerit J, et al. **Ann Gastroenterol Hepatol (Paris)** 1988 Oct; 24(5):263–7 **(Fre)**
[Comparison of 2 pancreatic enzyme preparations in the treatment of digestive insufficiency in mucoviscidosis (cystic fibrosis)] Gottschalk B, et al. **Monatsschr Kinderheilkd** 1988 Sep;136(9):626–9 (Eng. Abstr.) **(Ger)**

PANCREATITIS

Idiopathic recurrent pancreatitis. An approach to diagnosis and treatment. Venu RP, et al. **Dig Dis Sci** 1989 Jan; 34(1):56–60
Pancreatitis as a medical emergency. Moody FG. **Gastroenterol Clin North Am** 1988 Jun;17(2):433–43 (33 ref.)
Emergencies of the biliary tract. Sievert W, et al. **Gastroenterol Clin North Am** 1988 Jun;17(2):245–64 (83 ref.)
International Symposium on Pancreatitis and Pancreatic Cancer: Biochemical and Clinical Aspects. October 24–25, 1986, Padova, Italy. **Int J Pancreatol** 1988;3 Suppl 1:S1–160
Acute pancreatitis in a five-year-old male. Mader TJ, et al. **J S C Med Assoc** 1989 Jul;85(7):317–20
Experimental acute pancreatitis induced by excessive doses of caerulein in rats; protective and therapeutic effects of trypsin inhibitor urinastatin and CCK receptor antagonist CR1392. Tani S. **Kobe J Med Sci** 1988 Apr;34(2):93–112
[Chronic pancreatitis: physiopathology, clinical aspects and therapy. Study of 31 cases] Coraggio F, et al. **Clin Ter** 1987 Jun 30;121(6):485–93 (Eng. Abstr.) **(Ita)**

[Chronic pancreatitis: etiopathogenetic aspects, clinico-diagnostic considerations and therapeutic indications] Pendenza E, et al. **G Clin Med** 1988 Nov; 69(11):681–8 (21 ref.) **(Ita)**

[Acute pancreatitis. Validity and current aspects of prognostic factors] Rodolico A, et al. **Minerva Chir** 1989 Jan 31;44(1–2):215–20 (38 ref.) **(Ita)**

[Acute pancreatitis. Review of the literature and retrospective evaluation of 113 cases] Russo A, et al. **Minerva Chir** 1988 Dec 31;43(23–24):2063–8 (43 ref.) (Eng. Abstr.) **(Ita)**

[A case with recurrent hyperlipidemia and acute pancreatitis in times of pregnancies] Hamada M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jan;86(1):106–10 (15 ref.) **(Jpn)**

[Acute postoperative pancreatitis (editorial)] Arias Vallejo E. **Rev Esp Enferm Apar Dig** 1989 May;75(5):484 **(Spa)**

BLOOD

Plasma cholecystokinin and pancreatic polypeptide responses after ingestion of a liquid test meal rich in medium-chain fatty acids in patients with chronic pancreatitis. Nakano I, et al. **Am J Clin Nutr** 1989 Feb;49(2):247–51

C-reactive protein (CRP) and pancreatic necrosis in acute necrotising pancreatitis. Teerenhovi O, et al. **Ann Chir Gynaecol** 1988;77(2):61–3

C reactive protein in pancreatic cancer and chronic pancreatitis. Basso D, et al. **Ann Clin Res** 1988;20(6):414–6

C-reactive protein and acute pancreatitis [letter] Beger HG, et al. **Br J Surg** 1989 Aug;76(8):877

Threshold for albumin as a prognostic marker in acute pancreatitis. Holliday MP, et al. **Br J Surg** 1989 May; 76(5):472–3

C-reactive protein, antiproteases and complement factors as objective markers of severity in acute pancreatitis. Wilson C, et al. **Br J Surg** 1989 Feb;76(2):177–81

Hemorheologic disturbances in experimental acute necrotizing pancreatitis. Yan LN, et al. **Chin Med J [Engl]** 1988 Nov;101(11):811–4

Effect of FUT-175 (nafamstat mesilate) on platelets in canine acute experimental pancreatitis. Gabryelewicz A, et al. **Digestion** 1988;40(1):19–24

CA 19.9 in biliopancreatic diseases. Lamiquiz Vallejo A, et al. **Int J Biol Markers** 1989 Jan–Mar;4(1):51–2

Early association of duodenal contents and blood with acini during experimental pancreatitis. Bockman DE. **Int J Pancreatol** 1988 Jul;3(5):333–42

Systemic involvement in pancreatic damage: coagulation and fibrinolysis. Lasson A, et al. **Int J Pancreatol** 1988;3 Suppl 1:S79–86

Anaphylatoxin generation and multisystem organ failure in acute pancreatitis. Roxvall L, et al. **Prog Clin Biol Res** 1989;308:265–9

Plasma beta-endorphin and the effect of naloxone on hemodynamic changes during experimental acute pancreatitis in dogs. Satake K, et al. **Surg Gynecol Obstet** 1989 May;168(5):402–6

Does acute experimental pancreatitis affect blood platelet function? Lukaszyk A, et al. **Thromb Res** 1989 Feb 1; 53(3):319–25

Comparative study on the expression of the blood group antigens Le a, Le b, Le x, Le y and the carbohydrate antigens CA 19–9 and CA–50 in chronic pancreatitis and pancreatic carcinoma. Schwenk J, et al. **Virchows Arch [A]** 1989;414(6):465–76

[Pancreatic kinetics of ampicillin] Koch K, et al. **Zentralbl Chir** 1989;114(2):129–35 (Eng. Abstr.) **(Ger)**

[Free radical oxidation in patients with destructive pancreatitis and its correction using hemosorption] Dedenko IK. **Klin Med (Mosk)** 1988 Nov;66(11):86–8 (Eng. Abstr.) **(Rus)**

[Concentration of thyroid hormones and thyrotropin in the blood of patients with chronic pancreatitis] Gidaiatov AA, et al. **Ter Arkh** 1988;60(9):50–2 (Eng. Abstr.) **(Rus)**

[Triglycerides and chylomicrons in acute pancreatitis (editorial)] Arias Vallejo E. **Rev Esp Enferm Apar Dig** 1988 Aug;74(2):150 **(Spa)**

[Prognostic value of fibrinogen measurement in acute pancreatitis] Gómez Rodríguez RA, et al. **Rev Esp Enferm Apar Dig** 1989 Apr;75(4):375–7 (Eng. Abstr.) **(Spa)**

CHEMICALLY INDUCED

Metronidazole-induced pancreatitis. Celifarco A, et al. **Am J Gastroenterol** 1989 Aug;84(8):958–60

Fatal acute pancreatitis associated with pentamidine therapy [letter] Kumar S, et al. **Am J Gastroenterol** 1989 Apr; 84(4):451–3

Erythromycin-induced pancreatitis. Gumaste VV. **Am J Med** 1989 Jun;86(6 Pt 1):725

Excessive drug challenge [letter] Donaldson RM Jr. **Ann Intern Med** 1989 Mar 1;110(5):410

Acute pancreatitis due to 5-aminosalicylate. Sachedina B, et al. **Ann Intern Med** 1989 Mar 15;110(6):490–2

Metronidazole-associated pancreatitis. Sanford KA, et al. **Ann Intern Med** 1988 Nov 1;109(9):756–7

Acute pancreatitis associated with infusion of erythromycin lactobionate. Hawksworth CR. **BMJ** 1989 Jan 21; 298(6667):190

Pancreatitis associated with pentamidine by aerosol. Herer B, et al. **BMJ** 1989 Mar 4;298(6673):605

Morphological, biochemical and autoradiographic studies of pancreatic acinar cell necrosis and its regeneration induced by 4-hydroxyaminoquinoline-1-oxide in rats. Okamura K. **Gastroenterol Jpn** 1989 Apr;24(2):181–94

Effects of somatostatin on acute pancreatitis induced in rats by injection of taurocholate and trypsin into a temporarily closed duodenal loop. De Rai P, et al. **Int J Pancreatol** 1988 Jul;3(5):367–73

A comparison of pancreatitis induced by high or low pressure injections of enzymes into the canine pancreatic duct. Schiller WR, et al. **Int J Pancreatol** 1989 Apr;4(3):281–90

Alcohol-induced pancreatic injury (Part I). Unexplained features and ductular theories of pathogenesis. Wilson JS, et al. **Int J Pancreatol** 1989 Mar;4(2):109–25 (172 ref.)

Pancreatitis induced by 5-aminosalicylic acid [letter] Deprez P, et al. **Lancet** 1989 Aug 19;2(8660):445–6

Drug-induced acute pancreatitis. A critical review. Banerjee AK, et al. **Med Toxicol Adverse Drug Exp** 1989 May–Jun; 4(3):186–98 (127 ref.)

Sulfonamide-induced pancreatitis. Brazer SR, et al. **Pancreas** 1988;3(5):583–6

Oxygen-derived free radicals in cerulein-induced acute pancreatitis. Dąbrowski A, et al. **Scand J Gastroenterol** 1988 Dec;23(10):1245–9

[Must sulfapyridine always be accused? Apropos of a case of acute pancreatitis caused by mesalazine (letter)] Grimaud JC, et al. **Gastroenterol Clin Biol** 1989 Apr;13(4):432 **(Fre)**

[Acute pancreatitis during treatment with salazosulfapyridine (letter)] Aubry A, et al. **Presse Med** 1989 Jan 21;18(2):80 **(Fre)**

[Pyrazolone-induced agranulocytosis, consumption coagulopathy and acute pancreatitis (letter)] Cuenca R, et al. **Med Clin (Barc)** 1989 Apr 22;92(15):596 **(Spa)**

[Acute pancreatitis caused by demeclocycline (letter)] Pedrol E, et al. **Rev Clin Esp** 1989 Apr;184(7):392–3 **(Spa)**

CLASSIFICATION

APACHE-II score for assessment and monitoring of acute pancreatitis. Larvin M, et al. **Lancet** 1989 Jul 22; 2(8656):201–5

Rough sets approach to analysis of data from peritoneal lavage in acute pancreatitis. Słowiński K, et al. **Med Inf (Lond)** 1988 Jul–Sep;13(3):143–59

Classification of pancreatitis. Freeny PC. **Radiol Clin North Am** 1989 Jan;27(1):1–3

Classification and pathogenesis of pancreatitis. Steer ML. **Surg Clin North Am** 1989 Jun;69(3):467–80 (67 ref.)

[Clinical aspects, spontaneous course and therapy of chronic pancreatitis. With special reference to the problem of nomenclature] Ammann R. **Schweiz Med Wochenschr** 1989 May 27;119(21):696–706 (22 ref.) (Eng. Abstr.) **(Ger)**

[Assessment of severity of acute pancreatitis. Computerized method of evaluation] Casolo P, et al. **Minerva Chir** 1989 Jan 31;44(1–2):227–32 **(Ita)**

COMPLICATIONS

Vascular parenchymal sources of upper gastrointestinal bleeding. Savastano S, et al. **Acta Radiol** 1989 Jan–Feb; 30(1):39–43

Heterotopic pancreas: gastric outlet obstruction secondary to pancreatitis and pancreatic pseudocyst. Burke GW, et al. **Am J Gastroenterol** 1989 Jan;84(1):52–5

Biliary pancreatitis and jaundice associated with obstructed peripapillary duodenal diverticulum [letter] Caos A. **Am J Gastroenterol** 1989 Aug;84(8):982–3

Thrombotic thrombocytopenic purpura and pancreatitis. Jackson B, et al. **Am J Gastroenterol** 1989 Jun;84(6):667–9

Anomalous biliopancreatic ductal system, recurrent pancreatitis, and choledochal cyst [letter] Shaked G, et al. **Am J Gastroenterol** 1989 Jun;84(6):685–6

Bilateral ureteral obstruction: an unusual complication of pancreatitis. Stone MM, et al. **Am J Gastroenterol** 1989 Jan;84(1):49–51

Systemic lupus erythematosus presenting initially with acute pancreatitis and a review of the literature. Eaker EY, et al. **Am J Med Sci** 1989 Jan;297(1):38–41 (41 ref.)

Pyelonephritis complicating relapsing acute pancreatitis. Brandes JC, et al. **Am J Nephrol** 1989;9(3):241–3

Comparison of multiple-parameter prognostic systems in acute pancreatitis. Demmy TL, et al. **Am J Surg** 1988 Dec; 156(6):492–6

Splanchnic venous obstruction. A complication of chronic pancreatitis. Fogartie JA, et al. **Am Surg** 1989 Mar; 55(3):191–7

Pancreatic abscess following acute pancreatitis. Katsohis CD, et al. **Am Surg** 1989 Jul;55(7):427–34

Preoperative endoscopic retrograde cholangiopancreatography (ERCP) in patients with pancreatic pseudocyst associated with resolving acute and chronic pancreatitis. Nealon WH, et al. **Ann Surg** 1989 May; 209(5):532–8; discussion 538–40

Pancreatic structure and glucose tolerance in a longitudinal study of experimental pancreatitis-induced diabetes. Yeo CJ, et al. **Ann Surg** 1989 Aug;210(2):150–8

Fat embolism in acute pancreatitis. Guardia SN, et al. **Arch Pathol Lab Med** 1989 May;113(5):503–6

Pseudocysts in chronic pancreatitis. Surgical results in 102 consecutive patients. Kiviluoto T, et al. **Arch Surg** 1989 Feb;124(2):240–3

Two cases of pseudo-aneurysm of the gastroduodenal artery. Fielding GA, et al. **Aust N Z J Surg** 1988 Aug;58(8):671–3

Pancreatic encephalopathy. Menza MA, et al. **Biol Psychiatry** 1989 Mar 15;25(6):781–4

Colonic complications of severe acute pancreatitis. Aldridge MC, et al. **Br J Surg** 1989 Apr;76(4):362–7 (18 ref.)

Acute pancreatitis associated with HIV infection [correction] [letter] **Can Med Assoc J** 1989 Jun 1;140(11):1268

Acute pancreatitis associated with HIV infection [letter] Gagner M. **Can Med Assoc J** 1989 Jul 1;141(1):12–3

Pancreatic abscess: formation, diagnostic procedures and treatment. Balldin G, et al. **Dig Dis** 1989;7(2):104–12 (50 ref.)

Pancreatic cysts and pseudocysts associated with acute and chronic pancreatitis. Bourliere M, et al. **Dig Dis Sci** 1989 Mar;34(3):343–8

Maternal survival after acute haemorrhagic pancreatitis complicating late pregnancy. Bartelink AK, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Sep;29(1):41–50

Extrahepatic portal venous obstruction of different pathogenesis in pancreatic diseases: reports of 4 autopsy cases with chronic pancreatitis and pancreatic carcinoma. Terada T, et al. **Gastroenterol Jpn** 1989 Aug;24(4):414–20

Endoscopic management of cysts and pseudocysts in chronic pancreatitis: long-term follow-up after 7 years of experience. Cremer M, et al. **Gastrointest Endosc** 1989 Jan–Feb;35(1):1–9

Endoscopic observation of ampullary hemorrhage secondary to occult pancreatitis. Wolfe MW, et al. **Gastrointest Endosc** 1989 Jul–Aug;35(4):344–6

Isolated ventral pancreatitis in an alcoholic with pancreas divisum. Brinberg DE, et al. **Gastrointest Radiol** 1988 Oct; 13(4):323–6

Grey Turner's sign and Cullen's sign in acute pancreatitis. Meyers MA, et al. **Gastrointest Radiol** 1989 Winter; 14(1):31–7

Duodenal duplication in the adult: its relationship with pancreatitis. Procacci C, et al. **Gastrointest Radiol** 1988 Oct; 13(4):315–22

Hepatobiliary complications in chronic pancreatitis. Wilson C, et al. **Gut** 1989 Apr;30(4):520–7

Pancreatitis in patients with chronic inflammatory bowel disease. Niemelä S, et al. **Hepatogastroenterology** 1989 Jun; 36(3):175–7

Peripancreatic vascular occlusions as a complication of pancreatitis. Nordback I, et al. **Int Surg** 1989 Jan–Mar; 74(1):36–9

Parathyroid crisis and necrotising pancreatitis. O'Malley MK, et al. **Ir J Med Sci** 1988 Sep;157(9):295–6

Pancreatitis in patients with AIDS presumptively due to CMV. Wolf P, et al. **J Clin Lab Anal** 1989;3(3):152–5

CT demonstration of pancreatic atrophy following acute pancreatitis. Magnuson JE, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):1050–3

Acute pancreatitis in sickle cell crisis. Kumar A, et al. **J Natl Med Assoc** 1989 Jan;81(1):91–2

Peripheral neuropathy complicating pancreatitis and major pancreatic surgery. Gross ML, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1341–4

Wilson's disease associated with pancreatitis. Weizman Z, et al. **J Pediatr Gastroenterol Nutr** 1988 Nov–Dec; 7(6):931–3

Pancreatitis of pancreas divisum. Kalkay MN, et al. **N J Med** 1989 Apr;86(4):281–5 (20 ref.)

Relapsing pleural exudate complicating chronic pancreatitis. Becx MC, et al. **Neth J Med** 1989 Feb;34(1–2):88–92

Thoracic complications of pancreatitis. Iacono C, et al. **Pancreas** 1989;4(2):228–36

Abdominal wall and gastric infarction in acute pancreatitis. Scholefield JH, et al. **Pancreas** 1988;3(4):494–6

Acute pancreatitis associated with paroxysmal atrial fibrillation. A case report. Gullo L, et al. **Panminerva Med** 1988 Apr–Jun;30(2):111–3

Association of small intestinal diverticulosis with chronic pancreatitis leading to severe malabsorption. Report of three cases. Mahida YR, et al. **Postgrad Med J** 1988 Nov; 64(757):893–6

CRP predicts complications in pancreatitis and peritonitis. Lasson A, et al. **Prog Clin Biol Res** 1989;308:725–9

Biliary complications of pancreatitis. Rohrmann CA Jr, et al. **Radiol Clin North Am** 1989 Jan;27(1):93–104 (31 ref.)

Vascular complications of pancreatitis. Vujic I. **Radiol Clin North Am** 1989 Jan;27(1):81–91 (30 ref.)

Intraosseous fat necrosis associated with acute pancreatitis: MR imaging. Haller J, et al. **Radiology** 1989 Oct; 173(1):193–5

Necrotising pancreatitis and diabetes associated with disseminated small cell carcinoma of lung. Evans AT. **Scott Med J** 1988 Dec;33(6):377

Complications of chronic pancreatitis. Bradley EL 3d. **Surg Clin North Am** 1989 Jun;69(3):481–97 (74 ref.)

Obstructive jaundice secondary to chronic pancreatitis in children: report of two cases and review of the literature. Wheatley MJ, et al. **Surgery** 1988 Nov;104(5):863–9 (29 ref.)

The timing of surgery in acute gallstone pancreatitis. Su CH, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Apr;87(4):421–6

Graft pancreatitis and hemorrhagic cystitis. Treatment with bladder irrigation and protease inhibition [letter] Roxvall LI, et al. **Transpl Int** 1988 Dec;1(4):228–9

Hepatic artery thrombosis due to acute pancreatitis following liver transplantation. Badger I, et al. **Transplantation** 1989 Sep;48(3):526–7

Colonic involvement in acute necrotizing pancreatitis: results of surgical treatment. Bouillot JL, et al. **World J Surg** 1989 Jan–Feb;13(1):84–7; discussion 87

[Acute hemorrhagic–necrotic pancreatitis complicated by perforation of the choledochus] Dimitrov D. **Khirurgiia (Sofiia)** 1989;42(1):85–7 **(Bul)**

[Acute pancreatitis with few symptoms complicated by segmentary colitis] Andersen J, et al. **Ugeskr Laeger** 1989 Jan 30;151(5):312 (Eng. Abstr.) **(Dan)**

[Study of an optimal biological profile for demonstrating pancreatic involvement in acute abdominal syndrome] Foucault P, et al. **Ann Biol Clin (Paris)** 1988;46(7):441–8 (Eng. Abstr.) **(Fre)**

[Tropical calcifying pancreatitis: a new cause of pancreatitis and diabetes in Parisian hospitals (letter)] Assan R, et al. **Ann Med Interne (Paris)** 1989;140(3):227 **(Fre)**

[Major hypertriglyceridemia, associated with severe acute pancreatitis, successfully treated with plasma exchange] Deleplanque P, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:86–7 (Eng. Abstr.) **(Fre)**

[Metabolic alkalosis in pancreatitis] Cordebar R, et al. **Cah Anesthesiol** 1988 Sep;36(5):381–2 **(Fre)**

[Hydrocele of pancreatic origin. X-ray computed tomographic study of an intrascrotal collection in an acute outbreak of chronic pancreatitis] Delamarre J, et al. **J Radiol** 1988 Nov;69(11):689–90 (Eng. Abstr.) **(Fre)**

[Pseudocyst and pancreatitis. Which factors are predictive of development?] Ruchat P, et al. **Schweiz Med Wochenschr** 1989 May 27;119(21):760–1 (Eng. Abstr.) **(Fre)**

[Coincidence of chronic pancreatitis and duodenitis] Tessmann D, et al. **Dtsch Z Verdau Stoffwechselkr** 1988; 48(5):244–9 (Eng. Abstr.) **(Ger)**

[Acute pancreatitis. 2: Treatment of the complicated course] Layer P, et al. **Fortschr Med** 1989 Feb 28;107(6):139–43 (23 ref.) (Eng. Abstr.) **(Ger)**

[Recurrent diarrhea, epigastric pain radiating to the back (clinical conference)] Kraft K, et al. **Schweiz Rundsch Med Prax** 1988 Dec 27;77(52):1435–8 (Eng. Abstr.) **(Ger)**

[Subcutaneous fat necroses, arthritis and vasculitis of small skin vessels in chronic pancreatitis] Mayet WJ, et al. **Z Gastroenterol** 1989 Jan;27(1):1–5 (Eng. Abstr.) **(Ger)**

[Necrotizing panniculitis in pancreatitis] Schumacher B, et al. **Z Gastroenterol** 1989 Jan;27(1):6–9 (Eng. Abstr.) **(Ger)**

[Digestive hemorrhage in pancreatitis] Trenti A, et al. **Minerva Chir** 1989 Jan 31;44(1–2):221–6 (90 ref.) **(Ita)**

[Hemorrhage in the Wirsung's duct caused by aneurysm of the splenic artery in chronic pancreatitis] Uomo G, et al. **Minerva Dietol Gastroenterol** 1989 Jan–Mar;35(1):55–60 (47 ref.) (Eng. Abstr.) **(Ita)**

[Effect of artificial surfactant therapy on pulmonary failure in severe acute pancreatitis: preliminary report] Sunamura M, et al. **Nippon Geka Gakkai Zasshi** 1988 Nov;89(11):1930 **(Jpn)**

[Experimental study on the pathogenesis of pulmonary insufficiency in acute pancreatitis and changes in the pulmonary surfactant] Sunamura M, et al. **Nippon Geka Gakkai Zasshi** 1988 Jul;89(7):1049–57 (Eng. Abstr.) **(Jpn)**

[A case of Sjögren's syndrome accompanied by periodic paralysis, pancreatitis, renal tubular acidosis, peripheral neuropathy and renal calcification] Otabe S, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):424–5 **(Jpn)**

[A case of idiopathic chronic pancreatitis associated with marked dilatation of the pancreatic duct and pancreatic non–opaque concretion] Kitagawa M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jul;85(7):1425–9 **(Jpn)**

[A case of ketoacidotic diabetic coma caused by acute pancreatitis] Otsuka S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Aug;85(8):1564–8 (15 ref.) **(Jpn)**

[Normoglycemic control by artificial pancreas in patients with pancreatic diabetes or with primary diabetes mellitus—analysis of patterns of insulin infusion and nocturnal glucose infusion] Yoshida Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Mar;86(3):786–92 (Eng. Abstr.) **(Jpn)**

[Retinopathy as a complication of acute pancreatitis] Berentsen S, et al. **Tidsskr Nor Laegeforen** 1989 Feb 10; 109(4):460–1 (Eng. Abstr.) **(Nor)**

[Use of imaging examinations (ultrasonography and computerized tomography) in the evaluation of the pancreatic structure in patients with a history of acute pancreatitis] Malecka–Panas E, et al. **Pol Tyg Lek** 1988 Sep 19;43(38):1218–21, 1232 (Eng. Abstr.) **(Pol)**

[Hepatic complications in acute pancreatitis] Długosz J. **Postepy Hig Med Dosw** 1988 Nov–Dec;42(6):665–81 (100 ref.) (Eng. Abstr.) **(Pol)**

[Surgical treatment of complications of acute pancreatitis including the use of ceftazidime (fortum)] Puchalski Z, et al. **Wiad Lek** 1988 Nov 15;41(22):1530–3 **(Pol)**

[Involvement of pulmonary microcirculation in experimental acute pancreatitis] Chaib E, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Jul–Aug; 43(4):193–6 (Eng. Abstr.) **(Por)**

[Endolymphatic polytherapy in the complex treatment of endotoxicosis] Mezentsev SS, et al. **Sov Med** 1988;(5):25–8 (Eng. Abstr.) **(Rus)**

[Chronic pancreatitis and cancer of the pancreas] Artem'eva NN, et al. **Vestn Khir** 1988 Jun;140(6):31–5 (Eng. Abstr.) **(Rus)**

[Hemorrhagic pancreatitis associated with multiple small–intestinal invaginations] Kuchits SF. **Vestn Khir** 1989 Jan;142(1):55–6 **(Rus)**

[Pancreatic calculi of a non–alcoholic nature] Savinov IP, et al. **Vestn Khir** 1988 Dec;141(12):37–9 **(Rus)**

[Syndrome of endogenous toxemia in complications of pancreonecrosis] Shurkalin BK. **Vestn Khir** 1989 Mar; 142(3):7–11 (Eng. Abstr.) **(Rus)**

[Psychoneurotic disorders in patients with chronic pancreatitis and their correction] Piskunov GG, et al. **Voen Med Zh** 1988 Dec;(12):35–6 **(Rus)**

[Acute cholecystitis and pancreatitis in pregnancy] Maksimović J, et al. **Jugosl Ginekol Perinatol** 1988 May–Aug;28(3–4):102–5 (Eng. Abstr.) **(Ser)**

[Pancreatic encephalopathy and coma (letter)] García–Casasola G, et al. **Rev Clin Esp** 1988 Sep; 183(4):216–7 **(Spa)**

[Complications of acute pancreatitis. Frequency, moment of onset and multiplicity] Sáez–Royuela Gonzalo F, et al. **Rev Clin Esp** 1989 Apr;184(6):280–4 (Eng. Abstr.) **(Spa)**

[Colonic lesion caused by acute pancreatitis. Use of minimal catheter jejunostomy. Apropos of 6 cases] Alarco HA, et al. **Rev Esp Enferm Apar Dig** 1989 May;75(5):465–9 (38 ref.) (Eng. Abstr.) **(Spa)**

[Solitary congenital liver cyst (diagnosis after an episode of acute pancreatitis] Díaz Rojas F, et al. **Rev Esp Enferm Apar Dig** 1988 Sep;74(3):261–3 (Eng. Abstr.) **(Spa)**

[Primary hyperparathyroidism and pancreatitis. Evidence for a positive association] Fernández Del Castillo C, et al. **Rev Gastroenterol Mex** 1988 Apr–Jun;53(2):61–5 (Eng. Abstr.) **(Spa)**

CONGENITAL

Congenital hepatic fibrosis, bile duct abnormality, long pancreaticobiliary common channel, and pancreatitis [letter] Perisic VN, et al. **J Pediatr Gastroenterol Nutr** 1988 Sep–Oct;7(5):790–1

DIAGNOSIS

Early assessment of acute pancreatitis. A comparative study of computed tomography and laboratory tests. Puolakkainen PA. **Acta Chir Scand** 1989;155(1):25–30

Pancreatitis associated with Campylobacter jejuni infection: diagnosis by ultrasonography. de Bois MH, et al. **BMJ** 1989 Apr 15;298(6679):1004

Painless post–operative pancreatitis. Leslie MD, et al. **Br J Clin Pract** 1988 Jun;42(6):261–2

Diagnostic value of plasma PABA level in pancreatic diseases. Li YH, et al. **Chin Med J [Engl]** 1989 Jan; 102(1):48–52

Detailed graphic analyses and revelation of nuclear magnetic resonance (NMR) in induced pancreatitis. Tsay DG, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Mar;41(3):185–96

Interaction of immobilized anti–salivary amylase antibody with human macroamylases: implications for use in a pancreatic amylase assay to distinguish macroamylasemia from acute pancreatitis. Mifflin TE, et al. **Clin Chem** 1989 Aug;35(8):1651–4

Immunologically–derived pancreatic amylase, pancreatic lipase, and total amylase compared as predictors of pancreatic inflammation. Van Lente F, et al. **Clin Chem** 1989 Jul;35(7):1542

Strategic use of individual and combined enzyme indicators for acute pancreatitis analyzed by receiver–operator characteristics. Werner M, et al. **Clin Chem** 1989 Jun; 35(6):967–71

The importance of objective data in the diagnosis of pancreatitis. Lott JA, et al. **Clin Chim Acta** 1989 Jul 31; 183(1):33–40

Automated selection of high–risk patients with acute pancreatitis. de Bernardinis M, et al. **Crit Care Med** 1989 Apr;17(4):318–22

Normal serum amylase in acute pancreatitis [letter] Ruzena S. **Dig Dis Sci** 1989 Jun;34(6):960–1

Detection of biliary origin of acute pancreatitis. Comparison of laboratory tests, ultrasound, computed tomography, and ERCP. Schölmerich J, et al. **Dig Dis Sci** 1989 Jun; 34(6):830–3

Maximal effective dose of cerulein in the secretin–cerulein test. Gullo L. **Digestion** 1988;39(4):225–9

Magnetic resonance imaging in detecting acute oedematous and haemorrhagic pancreatitis: an experimental study in pigs. Puolakkainen P, et al. **Eur Surg Res** 1989;21(1):25–33

Endoscopic ultrasonography in the differential diagnosis of pancreatic disease. Kaufman AR, et al. **Gastrointest Endosc** 1989 May–Jun;35(3):214–9

Pancreolauryl test—a tubeless test in chronic pancreatitis. Reddy NK, et al. **Indian J Gastroenterol** 1988 Oct; 7(4):235–7

A case of primary sclerosing cholangitis mimicking chronic pancreatitis. Lászik GZ, et al. **Int J Pancreatol** 1988 Dec; 3(6):503–8

CA 19–9 in serum and pancreatic juice: its role in the differential diagnosis of resectable pancreatic cancer from chronic pancreatitis. Malesci A, et al. **Int J Pancreatol** 1988; 3 Suppl 1:S119–23

Trypsin and elastase–1 in chronic pancreatic diseases. Vantini I, et al. **Int J Pancreatol** 1988;3 Suppl 1:S53–7 (9 ref.)

Acute pancreatitis with ischaemic heart disease—an abnormal electrocardiography. Kohli SC, et al. **J Assoc Physicians India** 1988 Jul;36(7):452–4

Serum amylase, isoamylase, and lipase in the acute abdomen. Their diagnostic value for acute pancreatitis. Lin XZ, et al. **J Clin Gastroenterol** 1989 Feb;11(1):47–52

Chronic pancreatitis and pancreas divisum in an infant: diagnosed by endoscopic retrograde cholangiopancreatography and treated with somatostatin analog. Yaffe MR, et al. **J Pediatr Gastroenterol Nutr** 1989 Jul;9(1):108–11

The diagnostic value of amylase isoenzymes. Tsai LY, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1988 Dec; 4(12):655–9

Prognostic value of serum phospholipase A in acute pancreatitis. Büchler M, et al. **Klin Wochenschr** 1989 Feb 1;67(3):186–9

Diagnostic value of immunoreactive phospholipase A2 in acute pancreatitis. Malfertheiner P, et al. **Klin Wochenschr** 1989 Feb 1;67(3):183–5

Phospholipase A activities in ascites, serum, lymph, and urine in acute pancreatitis following pancreas stimulation with secretin–ceruletid. Zirngibl H, et al. **Klin Wochenschr** 1989 Feb 1;67(3):141–3

Microliths causing acute pancreatitis—a diagnostic gap [letter] Born P, et al. **Pancreas** 1989;4(3):392–3

The fecal chymotrypsin photometric assay in the evaluation of exocrine pancreatic capacity. Comparison with other direct and indirect pancreatic function tests. Cavallini G, et al. **Pancreas** 1989;4(3):300–4

Serum elastase 1 in clinical practice. Lesi C, et al. **Pancreas** 1988;3(4):444–9

DU–PAN–2 levels in serum and pancreatic ductal fluids of patients with benign and malignant pancreatic disease. Mahvi DM, et al. **Pancreas** 1988;3(4):488–93

Pancreatic function testing. Methods to identify exocrine insufficiency. Gilinsky NH. **Postgrad Med** 1989 Aug; 86(2):165–72 (36 ref.)

Sonography in acute pancreatitis. Jeffrey RB Jr. **Radiol Clin North Am** 1989 Jan;27(1):5–17 (24 ref.)

Correlation of imaging and function in chronic pancreatitis. Malfertheiner P, et al. **Radiol Clin North Am** 1989 Jan; 27(1):51–64 (61 ref.)

Imaging and interventional radiology for pancreatitis and its complications. vanSonnenberg E, et al. **Radiol Clin North Am** 1989 Jan;27(1):65–72 (23 ref.)

The value of routine pancreatic iso–amylase measurements in the diagnosis of pancreatitis. Mohamed AH, et al. **S Afr Med J** 1989 Sep 16;76(6):258–62

Arthritis complicating acute pancreatitis—a rare but important condition to be distinguished from juvenile rheumatoid arthritis. Marhaug G, et al. **Scand J Rheumatol** 1988;17(5):397–9

Hyperlipidemia, pregnancy and pancreatitis. De Chalain TM, et al. **Surg Gynecol Obstet** 1988 Dec;167(6):469–73

Thr28, Nle31 CCK–9—an useful CCK analogue in stimulation tests of pancreatic exocrine function. Schusdziarra V, et al. **Z Gastroenterol** 1988 Dec; 26(12):762–6

[The differential diagnosis of chronic pancreatitis and pancreatic cancer] Brailski Kh, et al. **Vutr Boles** 1989; 28(2):54–7 (Eng. Abstr.) **(Bul)**

[A study of etiology and imaging diagnosis in chronic pancreatitis] Tsai HF, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Dec;40(6):537–42 (Eng. Abstr.) **(Chi)**

[Value of pancreatic secretory trypsin inhibitor by radioimmunoassay in diagnosis of pancreatic diseases] Chen BG. **Chung Hua Wai Ko Tsa Chih** 1988 Dec;26(12):714–6, 780 (Eng. Abstr.) **(Chi)**

[Diagnostic value of serum pancreatic secretory trypsin inhibitor (PSTI) in acute pancreatitis] Chen BG. **Chung Hua Wai Ko Tsa Chih** 1988 Jun;26(6):365–6, 384 (Eng. Abstr.) **(Chi)**

[Personal experience with the use of sonography in the diagnosis of acute pancreatitis] Sváb J, et al. **Rozhl Chir** 1989 Feb;68(2):110–2 (Eng. Abstr.) **(Cze)**

[Determination of lactoferrin in the diagnosis of diseases of the pancreas] Díté P, et al. **Vnitr Lek** 1989 Feb;35(2):132–6 (Eng. Abstr.) **(Cze)**

[Diagnostic criteria in acute necrotizing pancreatitis] Wettendorff P, et al. **Acta Gastroenterol Belg** 1988 Jan–Feb; 51(1):13–22 (49 ref.) (Eng. Abstr.) **(Fre)**

[Functional study of the exocrine pancreas in 1988] Couder J, et al. **Ann Gastroenterol Hepatol (Paris)** 1988 Oct; 24(5):253–9 (66 ref.) **(Fre)**

[Imaging in chronic pancreatitis] Mirescu D. **Schweiz Med Wochenschr** 1989 May 27;119(21):706–11 (24 ref.) (Eng. Abstr.) **(Fre)**

[Experimental studies on the earliest echographic manifestations of incipient pancreatitis and pancreatic necrosis] Maier W. **ROFO** 1988 Nov;149(5):522–5 (Eng. Abstr.) **(Ger)**

[Clinical aspects of acute pancreatitis] Röthlin M, et al. **Schweiz Med Wochenschr** 1989 May 27;119(21):752–4 (Eng. Abstr.) **(Ger)**

[Upper abdominal pain (clinical conference)] Satz N, et al. **Schweiz Rundsch Med Prax** 1989 Mar 21;78(12):335–7 (Eng. Abstr.) **(Ger)**

[20th anniversary of sonographic diagnosis of the pancreas] Lutz H. **Ultraschall Med** 1989 Jun;10(3):136–42 (37 ref.) (Eng. Abstr.) **(Ger)**

[The diagnostic and prognostic value of serum and urine studies in pancreatic diseases] Kopp H. **Verh Dtsch Ges Inn Med** 1988;94:59–66 (100 ref.) **(Ger)**

[Assessment of pancreatic function by indirect (noninvasive) methods] Lankisch PG. **Verh Dtsch Ges Inn Med** 1988; 94:66–72 (60 ref.) **(Ger)**

[Diagnostic difficulties in the differential diagnosis of chronic pancreatitis and pancreatic tumor] Takács T, et al. **Orv Hetil** 1988 Oct 23;129(43):2303–7 (21 ref.) (Eng. Abstr.) **(Hun)**

[Acute post-traumatic pancreatitis. Diagnostic approach] Maini L, et al. **Ann Ital Chir** 1988;60(1):69–72 (Eng. Abstr.) **(Ita)**

[Current trends in the diagnosis of acute pancreatitis] Lemma F, et al. **Minerva Med** 1989 Jul;80(7):651–5 **(Ita)**

[Acute pancreatitis: new diagnostic possibilities] Dati F, et al. **Ric Clin Lab** 1988;18 Suppl 1:81–94 (32 ref.) **(Ita)**

[Radioimmunoassay of pancreatic phospholipase A2 in human serum] Ueda A, et al. **Rinsho Byori** 1989 May; 37(5):561–5 **(Jpn)**

[Acute pancreatitis—autopsy versus clinical studies] Cylwik B. **Wiad Lek** 1988 Nov 15;41(22):1506–10 **(Pol)**

[Diagnostic criteria of chronic pancreatitis] Dzieniszewski J, et al. **Wiad Lek** 1988 Apr 15;41(8):531–44 **(Pol)**

[Clinical picture of acute pancreatitis] Dzieniszewski J, et al. **Wiad Lek** 1988 Nov 15;41(22):1488–95 **(Pol)**

[Value of ultrasonic examination in the diagnosis and evaluation of the course of acute pancreatitis] Kalina Z. **Wiad Lek** 1988 Nov 15;41(22):1496–9 **(Pol)**

[Determining chymotrypsin level in stools in the diagnosis of chronic pancreatitis] Marlicz K, et al. **Wiad Lek** 1988 Jun 1;41(11):704–7 (Eng. Abstr.) **(Pol)**

[Differential diagnosis of acute pancreatitis and cardiovascular diseases] Kutiakov MG, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):108–11 (Eng. Abstr.) **(Rus)**

[Early diagnosis of acute pancreatitis] Priadkin VV, et al. **Khirurgiia (Mosk)** 1989 Jan;(1):73–8 (Eng. Abstr.) **(Rus)**

[2 cases of acute pancreatitis in young children] Chistiakova MB, et al. **Klin Khir** 1989;(6):75 **(Rus)**

[Diagnostic errors in patients dying from acute pancreatitis] Lashchevker VM, et al. **Klin Khir** 1988;(11):55–6 **(Rus)**

[Diagnosis of acute destructive pancreatitis] Medvedenko AF, et al. **Klin Khir** 1988;(11):24–5 (Eng. Abstr.) **(Rus)**

[A case of tumor-like parapancreatitis] Baranovskiĭ AIu, et al. **Klin Med (Mosk)** 1989 Feb;67(2):130–1 **(Rus)**

[Value of nonspecific biochemical tests in the diagnosis of an exacerbation of chronic pancreatitis] Dotsenko NIa, et al. **Klin Med (Mosk)** 1988 Jul;66(7):90–2 (Eng. Abstr.) **(Rus)**

[Chronic pancreatitis and intestinal hormones] Geller LI. **Klin Med (Mosk)** 1988 Jul;66(7):19–22 (40 ref.) **(Rus)**

[Roentgeno-endoscopic changes in the stomach in chronic pancreatitis] Krasiuk MN, et al. **Sov Med** 1989;(3):95–7 **(Rus)**

[Value of determining the activity of cholesterol esterase in the duodenal contents] Loginov AS, et al. **Sov Med** 1989; (5):24–7 (Eng. Abstr.) **(Rus)**

[Pancreatitis predominantly affecting the caudal part of the pancreas] Filin VI, et al. **Vestn Khir** 1989 Mar;142(3):86–91 (Eng. Abstr.) **(Rus)**

[Endoscopic tactics in acute surgical diseases of the biliary tract and pancreas] Sinëv IuV. **Vestn Khir** 1988 Oct; 141(10):127–9 **(Rus)**

[Diagnosis of acute pancreatitis with special reference to changes in the capillary asymmetry index] Tabatadze KG, et al. **Vestn Khir** 1989 Mar;142(3):54–5 **(Rus)**

[Radionuclide, ultrasonic and thermographic methods of examination in the differential diagnosis of acute pyelonephritis and diseases of the abdominal organs] Vozianov AF, et al. **Vestn Khir** 1987 Dec;139(12):40–3 (Eng. Abstr.) **(Rus)**

[Chronic pancreatitis in patients with the postcholecystectomy syndrome] Gredzhev AF, et al. **Vrach Delo** 1989 Apr;(4):18–20 (Eng. Abstr.) **(Rus)**

[Echographic study of hepatic and pancreatic pathology in children] Enríquez G. **An Esp Pediatr** 1988 Sep;29 Suppl 33:112–3 (5 ref.) **(Spa)**

[Usefulness of echography with pancreatic stimulation in the evaluation of acute pancreatitis associated with pancreas divisum] García Coma M, et al. **Rev Esp Enferm Apar Dig** 1989 Jan;75(1):87–90 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Cefotaxime-related hypoprothrombinemia in a patient with acute pancreatitis: a case with a possible clue to the pathogenesis [letter] Cadranel JF, et al. **Am J Gastroenterol** 1989 Jun;84(6):686–8

Failure of antioxidant therapy (polyethylene glycol-conjugated catalase) in acute pancreatitis. Guice KS, et al. **Am J Surg** 1989 Jan;157(1):145–9

Effect of SMS201-995 (a long-acting somatostatin analog) on bile-induced acute hemorrhagic pancreatitis in the dog. Augelli NV, et al. **Am Surg** 1989 Jun;55(6):389–91

Cholecystokinin augmentation of 'surgical' pancreatitis. Benefits of receptor blockade. Modlin IM, et al. **Arch Surg** 1989 May;124(5):574–8

Intra-peritoneal aprotinin therapy for acute pancreatitis. Preliminary pharmacodynamic studies. Larvin M, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:149–52

Pancreatic enzyme replacement therapy. Importance of gastric acid secretion, H2-antagonists, and enteric coating. Marotta F, et al. **Dig Dis Sci** 1989 Mar;34(3):456–61

Double-blind trial of pirenzepine in acute pancreatitis. Moreno-Otero R, et al. **Digestion** 1989;42(1):51–6

Effect of continuous arterial infusion of protease inhibitor on experimental acute pancreatitis. Kakugawa Y, et al. **Gastroenterol Jpn** 1989 Aug;24(4):448

Continuous arterial infusion of protease inhibitor for severe acute pancreatitis. Takeda K, et al. **Gastroenterol Jpn** 1989 Jun;24(3):340

Effect of FOY-305 (camostate) on severe acute pancreatitis in two experimental animal models. Lankisch PG, et al. **Gastroenterology** 1989 Jan;96(1):193–9

Esterase inhibitors prevent lysosomal enzyme redistribution in two noninvasive models of experimental pancreatitis. Ohshio G, et al. **Gastroenterology** 1989 Mar;96(3):853–9

Somatostatin in the treatment of acute pancreatitis: a prospective randomised controlled trial. Choi TK, et al. **Gut** 1989 Feb;30(2):223–7

Significance of prostaglandin E2 in acute necrotising pancreatitis in rats. van Ooijen B, et al. **Gut** 1989 May; 30(5):671–4

Effect of phenylbutazone on acute hemorrhagic pancreatitis in dogs. Mathur SN, et al. **Indian J Gastroenterol** 1989 Jan; 8(1):37–8

Management of pain caused by pancreatitis [letter] Shapiro BS, et al. **J Pediatr** 1989 Mar;114(3):506–7

Lysolecithin concentration in pancreatic tissue during therapy with phospholipase A2-inhibitors in acute necrotizing pancreatitis. Kahle M, et al. **Klin Wochenschr** 1989 Feb 1;67(3):177–9

Parenteral superoxide dismutase plus catalase diminishes pancreatic edema in sodium taurocholate-induced pancreatitis in the rat. Blind PJ, et al. **Pancreas** 1988; 3(5):563–7

Effect of a new cholecystokinin receptor antagonist CR 1392 on caerulein-induced acute pancreatitis in rats. Otsuki M, et al. **Pancreas** 1989;4(2):237–43

Treatment of pancreatitis. When do antibiotics have a role? Byrne JJ, et al. **Postgrad Med** 1989 Mar;85(4):333–4, 337–9 (25 ref.)

The effect of gabexate mesilate on the outcome of acute hemorrhagic pancreatitis in pigs. Ristkari SK, et al. **Res Exp Med (Berl)** 1989;189(1):1–8

[Protective effects of Salviae miltiorrhizae and anisodamine (654-2) against early lung injury in acute hemorrhagic necrotizing pancreatitis in the dog] Zheng SS. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Mar;9(3):158–60, 134 (Eng. Abstr.) **(Chi)**

[Treatment of acute pancreatitis with indomethacin. A controlled study of the formation of pseudocysts and their subsequent course] Bredkjaer HE, et al. **Ugeskr Laeger** 1988 Nov 21;150(47):2902–3 (Eng. Abstr.) **(Dan)**

[Use of somatostatin in the therapy of acute pancreatitis] Alberghina A, et al. **Minerva Chir** 1988 Aug 31; 43(15–16):1267–73 (Eng. Abstr.) **(Ita)**

[Current approach to the treatment of acute pancreatitis with reference to the use of somatostatin] Clerico D, et al. **Minerva Chir** 1989 May 31;44(10):1503–5 (Eng. Abstr.) **(Ita)**

[Acute necrotic-hemorrhagic pancreatitis. Proposal of a therapeutic plan using an antiseptic agent in infectious complications] Trompetto M, et al. **Minerva Chir** 1988 Apr 15;43(7):605–9 (Eng. Abstr.) **(Ita)**

[Cytostatics in the treatment of acute pancreatitis (review of the literature)] Laptev VV, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):144–8 (63 ref.) **(Rus)**

[Current aspects of the treatment of destructive pancreatitis] Nesterenko IuA, et al. **Khirurgiia (Mosk)** 1988 Oct; (10):16–21 (Eng. Abstr.) **(Rus)**

[Use of antibiotics in acute pancreatitis] Lashchevker VM. **Klin Khir** 1988;(11):48–55 (151 ref.) **(Rus)**

[Dalargin—the first enkephalin analog, used in gastroenterology] Vinogradov VA, et al. **Ter Arkh** 1988; 60(8):147–53 (91 ref.) **(Rus)**

[Treatment of pancreatitis by electrophoresis of cytostatics] Alekseenko AV, et al. **Vestn Khir** 1988 Jul;141(7):65–6 **(Rus)**

[Experience with the treatment of acute pancreatitis with 5-fluorouracil in the light of late results] Aliev RG, et al. **Vestn Khir** 1988 Jun;140(6):28–31 (Eng. Abstr.) **(Rus)**

[Inhibition of the secretion of endogenous insulin and trypsin by exogenous insulin and trypsin in the complex treatment of acute pancreatitis] Sheverdin IuP. **Vestn Khir** 1989 Jan; 142(1):54–5 **(Rus)**

[Effect of immobilized inhibitors of proteolysis on the course of experimental pancreatitis] Zubkov OB, et al. **Vestn Khir** 1989 Jan;142(1):56, 69 **(Rus)**

ENZYMOLOGY

Serum phospholipase A2 activity in acute pancreatitis: an early guide to severity. Bird NC, et al. **Br J Surg** 1989 Jul;76(7):731–2

Measuring carboxypeptidase A activity with a centrifugal analyzer: analytical and clinical considerations. Kazmierczak SC, et al. **Clin Chem** 1989 Feb;35(2):251–5

Diagnostic value of measuring pancreatic lipase and the P3 isoform of the pancreatic amylase isoenzyme in serum of hospitalized hyperamylasemic patients. Panteghini M, et al. **Clin Chem** 1989 Mar;35(3):417–21

Evaluation of pancreatic amylase immunoassay in acute pancreatitis. Sacchetti L, et al. **Clin Chim Acta** 1989 Jul 31;183(1):95–100

Human pancreatic phospholipase A2 in acute necrotizing pancreatitis. Nordback I, et al. **Digestion** 1989;42(3):128–34

Phospholipase A2 activity in taurocholate-induced acute pancreatitis in the rat model. Bird NC, et al. **Int J Pancreatol** 1989 Feb;4(1):3–11

Renal involvement in chronic pancreatic disease: effects on trypsin and amylase plasma-urine transfer. Fabris C, et al. **Int J Pancreatol** 1988;3 Suppl 1:S59–65

Role of lysosomes in pancreatic diseases. Figarella C, et al. **Int J Pancreatol** 1988;3 Suppl 1:S9–18 (17 ref.)

Relationship between pancreatic enzymes and pathological changes in the pancreas in acute pancreatitis. The significance of determination of serum deoxyribonuclease. Kinami Y, et al. **Int J Pancreatol** 1989 May;4(4):371–81

Measurement of pancreatic enzyme synthesis in humans. Problems in patients with calcific pancreatitis. O'Keefe SJ, et al. **Int J Pancreatol** 1989 Feb;4(1):13–27

Sarcoidosis and the pancreas. McCormick PA, et al. **Ir J Med Sci** 1988 Jun;157(6):181–3

Serum isoamylase activities in pancreatic diseases. Na Patalung BO, et al. **J Med Assoc Thai** 1988 Nov; 71(11):632–6

Serum phospholipase A2 in intensive care patients with peritonitis, multiple injury, and necrotizing pancreatitis. Büchler M, et al. **Klin Wochenschr** 1989 Feb 1;67(3):217–21

Characterization of phospholipase A2 activity in aspirates of human pancreatic pseudocysts after isolation by reversed-phase high performance liquid chromatography. Göke B, et al. **Klin Wochenschr** 1989 Feb 1;67(3):131–5

Serum phospholipase—regulatory and pathophysiological aspects. Hoffmann GE, et al. **Klin Wochenschr** 1989 Feb 1;67(3):144–8 (70 ref.)

A rapid phospholipase A2 bioassay using 14C-oleate-labelled E. coli bacterias. Meyer T, et al. **Klin Wochenschr** 1989 Feb 1;67(3):113–8

The role of phospholipase A2 in human acute pancreatitis. Nevalainen TJ. **Klin Wochenschr** 1989 Feb 1;67(3):180–2 (28 ref.)

Involvement of oxygen radicals and phospholipase A2 in acute pancreatitis of the rat. Schoenberg MH, et al. **Klin Wochenschr** 1989 Feb 1;67(3):166–70

Xanthine oxidase inhibitor in acute experimental pancreatitis in rats and mice. Lankisch PG, et al. **Pancreas** 1989; 4(4):436–40

Phospholipase A2 in acute pancreatitis. Nevalainen TJ. **Scand J Gastroenterol** 1988 Oct;23(8):897–904 (107 ref.)

[Study of phospholipase A2 in serum, ascitic exudate and pancreatic tissue in acute pancreatitis in rats] Onoyama H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jan;86(1):60–9 (Eng. Abstr.) **(Jpn)**

[Occurrence of macroamylase in a patient with longstanding, severe chronic pancreatitis] Tozawa T. **Rinsho Byori** 1988 Oct;36(10):1227–9 **(Jpn)**

[Cholesterol esterase activity of the duodenal contents in evaluating the external secretory function of the pancreas] Loginov AS, et al. **Klin Med (Mosk)** 1988 Nov;66(11):82–6 **(Rus)**

[A fluorometric method of determining the cholesterol esterase activity of the duodenal contents in chronic pancreatitis] Shibaeva LO, et al. **Lab Delo** 1988;(8):19–22 (Eng. Abstr.) **(Rus)**

[Macroamylasemia: its current and clinical importance] Domínguez Muñoz JE, et al. **Rev Clin Esp** 1989 May; 184(8):431–4 (62 ref.) (Eng. Abstr.) **(Spa)**

EPIDEMIOLOGY

Acute pancreatitis derived from the Hospital Activity Analysis statistics [letter; comment] Thomson SR, et al. **Am J Surg** 1989 Jun;157(6):616. **Comment on:** Am J Surg 1988 Jan;155(1):10–7

[Is the incidence of painless chronic pancreatitis underestimated?] Buscail L, et al. **Gastroenterol Clin Biol** 1989 Jun;13(6–7):640–1 **(Fre)**

[Epidemiology and presenting form of 106 cases of acute pancreatitis studied prospectively] Gómez Rubio M, et al. **Rev Clin Esp** 1988 Apr;182(7):362–6 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Gallstone pancreatitis in adolescents. De Waele B, et al. **Acta Chir Belg** 1988 Sep-Oct;88(5):319–21

Postoperative pancreatitis after biliary and gastric operations. Jakab F, et al. **Acta Chir Hung** 1988;29(3):241–9 (45 ref.)

Gallstone pancreatitis, a review of literatures. Ehtuish EF. **Acta Chir Iugosl** 1988;35(2):297–302 (41 ref.)

Acute pancreatitis as a complication of Crohn's disease. Matsumoto T, et al. **Am J Gastroenterol** 1989 Jul; 84(7):804–7

Pancreatitis and typhoid fever. Hearne SE, et al. **Am J Med** 1989 Apr;86(4):471–3

Pancreatitis and duodenal obstruction after aortic surgery. Hans SS. **Am Surg** 1989 Mar;55(3):177–9

Sulindac-induced acute pancreatitis mimicking gallstone pancreatitis. Sugerman HJ. **Am Surg** 1989 Sep;55(9):536–8

Post-ERCP acute necrotizing pancreatitis. Nordback I, et al. **Ann Chir Gynaecol** 1988;77(1):15–20 (40 ref.)

Hyperamylasemia after cardiac surgery. Incidence, significance, and management. Rattner DW, et al. **Ann Surg** 1989 Mar;209(3):279–83

Pathogenesis and epidemiology of chronic pancreatitis. Sarles H, et al. **Annu Rev Med** 1989;40:453–68 (90 ref.)

Acute pancreatitis due to Hodgkin's disease in a patient with systemic lupus erythematosus. Liang R.
Aust N Z J Med 1988 Oct;18(6):812–3
Acute pancreatitis in the aged. Fan ST, et al.
Aust N Z J Surg 1988 Sep;58(9):717–21
Pancreatitis and hyperparathyroidism [letter] Jawaheer S.
Br J Surg 1988 Sep;75(9):932
Obstructive pancreatitis: unusual causes of chronic pancreatitis. Lowes JR, et al. **Br J Surg** 1988 Nov; 75(11):1129–33
Lymphoma pancreatitis: a real entity. Kotwall CA, et al.
Can J Surg 1989 Sep;32(5):375–7
Acute pancreatitis associated with HIV infection [published erratum appears in Can Med Assoc J 1989 Jun 1;140(11):1268] Clas D, et al. **Can Med Assoc J** 1989 Apr 1;140(7):823
Mumps with laboratory signs of subclinical pancreatitis may cause a disturbed beta-cell function. Ludvigsson J, et al.
Diabetes Res 1988 Dec;9(4):193–5
Interrelationship of renal and pancreatic disorders. Meshkinpour H, et al. **Dig Dis** 1989;7(5):221–9 (68 ref.)
Severe acute pancreatitis and normal serum amylase activity due to pancreatic isoamylase deficiency. Borgström A, et al. **Dig Dis Sci** 1989 Apr;34(4):644–6
Acute pancreatitis associated with Campylobacter enteritis [letter] Castilla-Higuero L, et al. **Dig Dis Sci** 1989 Jun; 34(6):961–2
Chronic alcoholism and evolution of pain and prognosis in chronic pancreatitis. Hayakawa T, et al. **Dig Dis Sci** 1989 Jan;34(1):33–8
New canine model of chronic pancreatitis due to chronic ischemia with incomplete pancreatic duct obstruction. Tanaka T, et al. **Digestion** 1988;41(3):149–55
The aetiology and presentation of chronic calcific pancreatitis in patients seen at Kenyatta National Hospital. Ogutu EO, et al. **East Afr Med J** 1988 Mar;65(3):155–9
Antioxidants, enzyme induction, and chronic pancreatitis: a reappraisal following studies in patients on anticonvulsants. Uden S, et al. **Eur J Clin Nutr** 1988 Jul;42(7):561–9
Small carcinomas of the pancreas with associated chronic pancreatitis: two case reports. Deixonne B, et al.
Eur J Surg Oncol 1989 Jun;15(3):265–70
Portal hypertension and chronic pancreatitis complicating an inflammatory aortic aneurysm. Thompson JF, et al.
Eur J Vasc Surg 1989 Apr;3(2):181–3
Role of pancreatic enzymes and their substrates in autodigestion of the pancreas. In vitro studies with isolated rat pancreatic acini. Nagai H, et al. **Gastroenterology** 1989 Mar;96(3):838–47
Pancreatitis from intestinal reflux--again? [letter] Blackstone M. **Gut** 1989 Mar;30(3):418–9
Heretical thoughts on the pathogenesis of acute pancreatitis. Keynes M. **Gut** 1988 Oct;29(10):1413–23 (110 ref.)
Pathogenesis of haemorrhagic pancreatic necrosis (HPN) [letter] Keynes M. **Gut** 1989 Mar;30(3):419–22
Relapsing pancreatitis as initial manifestation of cystic fibrosis in a young man without pulmonary disease. Gross V, et al. **Int J Pancreatol** 1989 Mar;4(2):221–8 (31 ref.)
Fatal clostridial pancreatitis following ERCP and percutaneous needle biopsy. Howard JM, et al.
Int J Pancreatol 1989 Oct;5(3):305–10
Bacterial infection is not necessary for lethal necrotizing pancreatitis in mice. Rattner DW, et al.
Int J Pancreatol 1989 Jul;5(1):99–105
Acute pancreatitis in a patient treated for alcoholic hepatitis. The hypothesis of supranormal ecbolic stimulation of the pancreon. Tiscornia-Wasserman PG, et al.
Int J Pancreatol 1989 Apr;4(3):345–52
Alcohol-induced pancreatic injury (Part 2). Evolution of pathogenetic theories. Wilson JS, et al. **Int J Pancreatol** 1989 Apr;4(3):233–50 (135 ref.)
Abdominal complications of infectious mononucleosis. Robinson RG. **J Am Board Fam Pract** 1988 Jul–Sep; 1(3):207–10 (47 ref.)
Pancreatitis and duodenopancreatic reflux in Crohn's disease. Case report and review of the literature. Meltzer SJ, et al. **J Clin Gastroenterol** 1988 Oct;10(5):555–8 (14 ref.)
Pancreatitis following aneurysmectomy [letter] Floyd JB Jr. **J Ky Med Assoc** 1989 Feb;87(2):84
Acute pancreatitis from a duodenal foreign body in a child. Dabadie A, et al. **J Pediatr Gastroenterol Nutr** 1989 May; 8(4):533–5
Surgical treatment of pancreas divisum causing pancreatitis in children. Adzick NS, et al. **J Pediatr Surg** 1989 Jan; 24(1):54–8; discussion 58
Ascariasis [letter] **Lancet** 1989 Jun 10;1(8650):1336
Endoscopic sphincterotomy in acute gallstone pancreatitis [letter] Neoptolemos JP. **Lancet** 1989 Jan 7;1(8628):43
Acute pancreatitis in a case of Werner's syndrome with severe hyperlipidaemia. Naafs MA, et al. **Neth J Med** 1989 Apr;34(3–4):194–9
Analysis in the isolated perfused cat pancreas of factors implicated in the pathogenesis of pancreatitis. Hong SS, et al. **Pancreas** 1988;3(4):450–8
Alcohol-induced chronic pancreatitis in rats after temporary occlusion of biliopancreatic ducts with Ethibloc. Pap A, et al. **Pancreas** 1989;4(2):249–55
Recurrent pancreatitis secondary to hypercalcemia following vitamin D poisoning. Waele BD, et al. **Pancreas** 1989; 4(3):378–80
The superior mesenteric artery syndrome: a rare cause of acute pancreatitis. Ammaturo C, et al. **Panminerva Med** 1988 Apr–Jun;30(2):114–7
Effect of temporary ischemia upon development and histological patterns of acute pancreatitis in the rat. Spormann H, et al. **Pathol Res Pract** 1989 May; 184(5):507–13
Gastrostomy tube pancreatitis. Panicek DM, et al.
Pediatr Radiol 1988;18(5):416–7
Does bile play a fundamental role in inducing and influencing acute reflux pancreatitis in rat? Infantino A, et al.
Res Exp Med (Berl) 1989;189(3):189–94
Acute pancreatitis. Hillbrow Hospital experience. D'Egidio A. **S Afr J Surg** 1988 Dec;26(4):163–5
Pancreatitis and hyperamylasaemia after gynaecological operations [letter] Frohlich EP, et al. **S Afr Med J** 1988 Nov 19;74(10):535–6
The genesis of chronic pancreatitis in the South African black population. Segal I, et al. **S Afr Med J** 1988 Oct 15; 74(8):385–6
Classification and pathogenesis of pancreatitis. Steer ML.
Surg Clin North Am 1989 Jun;69(3):467–80 (67 ref.)
Postoperative pancreatitis. Thompson JS, et al.
Surg Gynecol Obstet 1988 Nov;167(5):377–80
Gallstone pancreatitis: a prospective randomized trial of the timing of surgery. Kelly TR, et al. **Surgery** 1988 Oct; 104(4):600–5
Pancreatitis caused by congenital anomalies of the pancreatic ducts. Leese T, et al. **Surgery** 1989 Feb;105(2 Pt 1):125–30
Complications in cardiac transplant patients requiring general surgery [letter] Mikhailidis DP, et al. **Surgery** 1989 Mar; 105(3):455
Effect of graft pancreatitis on the outcome of whole pancreatic transplants. Mittal VK, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2856–7
Isolated acinar cells from rat pancreas in pathogenic studies on acute pancreatitis. Letko G, et al.
Z Exp Chir Transplant Kunstliche Organe 1989; 22(4):197–203
[Cystic dilatation of the common bile duct. Apropos of a case complicated by choledocholithiasis and disclosed by acute pancreatitis] Crenn Hebert C, et al. **Ann Chir** 1988; 42(9):684–7 (8 ref.) (Eng. Abstr.) **(Fre)**
[Chronic segmental pancreatitis and the annular pancreas: apropos of a case] Etienne J, et al. **Ann Chir** 1989; 43(3):244–7 (Eng. Abstr.) **(Fre)**
[Acute pancreatitis: what is the evidence in favor of a biliary etiology? Value and limits of microscopic examination of the bile] Chamouard P, et al.
Ann Gastroenterol Hepatol (Paris) 1988 Oct;24(5):249–52 (28 ref.) **(Fre)**
[Hydatid cyst of the pancreas responsible for chronic recurrent pancreatitis] Katkhouda N, et al. **Presse Med** 1988 Oct 29;17(38):2021–3 (13 ref.) (Eng. Abstr.) **(Fre)**
[Typhoid fevers complicated by acute renal failure, by rhabdomyolysis and by acute pancreatitis (letter)] Ginsburg C, et al. **Rev Med Interne** 1989 May–Jun;10(3):279–80 **(Fre)**
[Diabetic hyperlipemia with or without acute pancreatitis in patients with chronic alcoholism. A study of 4 cases] Pallot JL, et al. **Rev Med Interne** 1989 Mar–Apr; 10(2):155–62 (Eng. Abstr.) **(Fre)**
[Acute pancreatitis and hydatid cysts of the liver opening into the bile ducts. Apropos of a new case] Fodha M, et al. **Tunis Med** 1989 Mar;67(3):201–5 (12 ref.) (Eng. Abstr.) **(Fre)**
[Villous adenoma of the papilla of Vater and acute necrotizing pancreatitis] Meyer W, et al.
Dtsch Med Wochenschr 1988 Oct 7;113(40):1557–60 (33 ref.) (Eng. Abstr.) **(Ger)**
[Experimental pancreatic duct occlusion with polyurethane] Klinger K, et al. **Helv Chir Acta** 1989 Jun;56(1–2):189–93 (Eng. Abstr.) **(Ger)**
[New aspects of the pathogenesis of pancreatitis] Schneider MU. **Med Klin** 1989 Mar 15;84(3):153–7 (51 ref.) **(Ger)**
[Acute pancreatitis as an initial manifestation of hypercalcemia in primary hyperparathyroidism in childhood] Karitzky D. **Monatsschr Kinderheilkd** 1989 Apr; 137(4):225–7 (Eng. Abstr.) **(Ger)**
[Ileocolic invagination and pancreatitis in an adult--complications of an acute gastroenteritis] Alzen G, et al. **ROFO** 1988 Oct;149(4):429–31 **(Ger)**
[Alcohol and pancreatic diseases] Niederau C, et al.
Z Gastroenterol 1988 Oct;26 Suppl 3:60–74 (127 ref.) (Eng. Abstr.) **(Ger)**
[Biliary pancreatitis--pathogenesis, therapy, results] Arendt R, et al. **Z Gesamte Inn Med** 1989 Jul 1;44(13):401–4 (18 ref.) (Eng. Abstr.) **(Ger)**
[Recurrent juvenile pancreatitis in dermatomyositis] Petrou P, et al. **Orv Hetil** 1989 Sep 3;130(36):1937–9 (Eng. Abstr.) **(Hun)**
[An association of acute pancreatitis and intestinal infarct due to superior mesenteric artery occlusion] Cremonte LG, et al. **Minerva Med** 1989 May;80(5):505–6 (Eng. Abstr.) **(Ita)**
[Clinical study on alcoholic pancreatitis in alcoholics (especially in ERP findings)] Shibata M, et al.
Arukoru Kenkyuto Yakubutsu Ison 1989 Apr;24(2):111–24 (Eng. Abstr.) **(Jpn)**
[Abnormal cholecystokinin-acinar function coupling in atrophied pancreatic acini from rats fed ethanol and a high-fat diet] Tsukamoto H, et al.
Arukoru Kenkyuto Yakubutsu Ison 1988 Dec;23(4):332–50 (Eng. Abstr.) **(Jpn)**
[A case of ulcerative colitis complicated with acute pancreatitis] Kondo K, et al.
Nippon Naika Gakkai Zasshi 1989 Jan;78(1):75–8 **(Jpn)**
[A case of chronic pancreatitis associated with Sjögren's syndrome] Shibata T, et al.
Nippon Shokakibyo Gakkai Zasshi 1989 Apr;86(4):960–4 **(Jpn)**
[Etiology of chronic pancreatitis] Høeg V, et al.
Tidsskr Nor Laegeforen 1988 Nov 10;108(31):2834–7 (Eng. Abstr.) **(Nor)**
[Etiopathogenesis of acute pancreatitis] Gabryelewicz A.
Wiad Lek 1988 Nov 15;41(22):1482–7 **(Pol)**
[Acute lithiasic pancreatitis. Usefulness of a multiple quantitative index] Deus JR, et al. **Acta Med Port** 1989 Jan–Feb;2(1):13–6 (Eng. Abstr.) **(Por)**
[Nutritional chronic pancreatitis] Guarita DR, et al.
Rev Hosp Clin Fac Med Sao Paulo 1988 Mar–Apr; 43(2):85–6 **(Por)**
[Acute pancreatitis due to an apparent nonbiliary cause] Popa G, et al. **Rev Chir [Chir]** 1988 Jul–Aug;37(4):275–82 (Eng. Abstr.) **(Rum)**
[Complications after papillosphincterotomy and the ways of their correction] Kochnev OS, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):87–91 **(Rus)**
[Basic mechanisms of the pathogenesis of chronic pancreatitis in cholelithiasis] Baranov SA. **Klin Med (Mosk)** 1988 Jun; 66(6):26–9 (23 ref.) **(Rus)**
[Immunoreactive trypsin in the blood serum of patients with endogenous hypercorticism] German SV, et al.
Klin Med (Mosk) 1989 Jun;67(6):36–40 (Eng. Abstr.) **(Rus)**
[Role of xanthine oxidase in the genesis of acute pancreatitis] Grigorevskiĭ VP, et al. **Patol Fiziol Eksp Ter** 1989 Mar–Apr;(2):60–3 (Eng. Abstr.) **(Rus)**
[Pathogenesis and diagnosis of pancreatitis of alcoholic etiology] Blagovidov DF, et al. **Sov Med** 1988;(6):49–55 (57 ref.) **(Rus)**
[Possibilities of predicting postoperative complications in patients with cholelithiasis] Ozerov VF, et al.
Vestn Khir 1988 Dec;141(12):59–62 **(Rus)**
[Post-splenectomy pancreatitis] Utkin VV, et al.
Vestn Khir 1988 Jul;141(7):102–5 **(Rus)**
[Characteristics of the course of acute alcoholic pancreatitis] Krylov AA, et al. **Vrach Delo** 1989 Mar;(3):80–2 **(Rus)**
[Acute hemorrhagic pancreatitis--a rare manifestation of choledochal cyst] Mihailović T, et al.
Srp Arh Celok Lek 1988 Oct;116(10):917–22 (Eng. Abstr.) **(Scc)**
[Biliary pancreatitis--indications and timing of care of lithiasis] Pažur M. **Acta Chir Iugosl** 1987;34(1):91–5 (Eng. Abstr.) **(Scr)**
[Acute pancreatitis caused by a congenital choledochal cyst] Peršić M, et al. **Ljec Vjesn** 1988 Sep–Oct;110(9–10):319–22 (Eng. Abstr.) **(Scr)**
[Acute pancreatitis and acquired immunodeficiency syndrome (letter)] Orriols Bernet J, et al.
Med Clin (Barc) 1988 Oct 8;91(11):439 **(Spa)**
[Correlation between size and number of biliary stones and acute pancreatitis] Aguayo Albasini JL, et al.
Rev Esp Enferm Apar Dig 1988 Nov;74(5):528–30 (Eng. Abstr.) **(Spa)**
[Acute pancreatitis: an infrequent complication of cystic fibrosis (mucoviscidosis)] Caballero Plasencia AM, et al.
Rev Esp Enferm Apar Dig 1989 May;75(5):515–8 (Eng. Abstr.) **(Spa)**
[Acute pancreatitis in the midst cystic fibrosis (letter)] García Castaño J, et al. **Rev Esp Enferm Apar Dig** 1988 Nov; 74(5):583 **(Spa)**
[Usefulness of microscopic study of the duodenal bile in the diagnosis of pancreatitis of unknown cause] Humbert P, et al. **Rev Esp Enferm Apar Dig** 1989 May;75(5):471–4 (Eng. Abstr.) **(Spa)**
[Acute pancreatitis and hyperparathyroidism: etiologic relationship or coincidence?] Martínez Prieto C, et al.
Rev Esp Enferm Apar Dig 1988 Aug;74(2):143–4 (Eng. Abstr.) **(Spa)**
[Acute pancreatitis and hyperparathyroidism (letter)] Targarona EM, et al. **Rev Esp Enferm Apar Dig** 1989 Mar; 75(3):319–20 **(Spa)**

GENETICS

[Hereditary pancreatitis] Klujber V, et al. **Orv Hetil** 1989 Aug 13;130(33):1777–8 (Eng. Abstr.) **(Hun)**

IMMUNOLOGY

Expression of CA125 in pancreatic carcinoma and chronic pancreatitis. Macdonald F, et al. **Br J Cancer** 1988 Oct; 58(4):505–6
Tissue expression of the cancer-associated antigens CA 19–9 and CA–50 in chronic pancreatitis and pancreatic carcinoma. Schwenk J, et al. **Int J Pancreatol** 1989 Jul; 5(1):85–98
Anaphylatoxin generation in acute pancreatitis. Roxvall L, et al. **J Surg Res** 1989 Aug;47(2):138–43
CA–50 in patients with pancreatic disease--an evaluation of three different laboratory techniques. Masson P, et al.
Scand J Clin Lab Invest 1988 Dec;48(8):751–5
The anergic state as a predictor of pancreatic sepsis. García-Sabrido JL, et al. **Zentralbl Chir** 1989;114(2):114–20
[A case of chronic calcifying pancreatitis with serum CA19–9 levels markedly elevated due to the incarceration of the

pancreatic calculi into the main pancreatic duct] Tokoo M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Feb; 86(2):270–4 **(Jpn)**

[Indices of nonspecific immunity in patients with acute pancreatitis] Podil'chak MD, et al. **Klin Khir** 1988;(11):61 **(Rus)**

[Clinico-immunological changes in patients with chronic pancreatitis and their correction during the treatment] Gubergrits NB. **Ter Arkh** 1989;61(2):18–21 (Eng. Abstr.) **(Rus)**

METABOLISM

Acute pancreatitis. Biochemical, pathophysiological and therapeutics aspects. Ohlsson K. **Acta Gastroenterol Belg** 1988 Jan–Feb;51(1):3–12 (58 ref.)

Effect of pancreatitis on the absorption of contrast medium from the pancreatic duct. Saari A, et al. **Ann Chir Gynaecol** 1988;77(4):146–50

The human pancreatic stone protein. De Caro A, et al. **Biochimie** 1988 Sep;70(9):1209–14 (36 ref.)

Peritoneal lavage efficiently eliminates protease–alpha–2–macroglobulin complexes and components of the contact system from the peritoneal cavity in patients with severe acute pancreatitis. Aasen AO, et al. **Eur Surg Res** 1989;21(1):1–10

The penetration of antibiotics into human pancreas. Büchler M, et al. **Infection** 1989 Jan–Feb;17(1):20–5

Secretory pancreatic stone protein messenger RNA. Nucleotide sequence and expression in chronic calcifying pancreatitis. Giorgi D, et al. **J Clin Invest** 1989 Jul; 84(1):100–6

In vitro hepatic insulin resistance in chronic pancreatitis in the rat. Seymour NE, et al. **J Surg Res** 1989 May; 46(5):450–6

Energy expenditure during severe acute pancreatitis. Bouffard YH, et al. **JPEN J Parenter Enteral Nutr** 1989 Jan–Feb;13(1):26–9

Identification of a characteristic 31P NMR signal in acute experimental pancreatitis with the aid of 1H–31P correlated 2D measurements of intact pancreas. Kushnir T, et al. **Magn Reson Med** 1989 Apr;10(1):119–24

Urinary and serum zinc levels in chronic pancreatitis. Kondo T, et al. **Pancreas** 1989;4(1):79–82

Effect of trypsin on the hormonal regulation of the fat–stimulated human exocrine pancreas. Olsen O, et al. **Scand J Gastroenterol** 1988 Sep;23(7):875–81

[Biochemistry of the physiopathologic and clinical aspects of free radicals in liver and pancreatic diseases] Kamada T, et al. **Nippon Rinsho** 1988 Oct;46(10):2236–40 **(Jpn)**

[Inhibitors of proteolysis in the pathogenesis and clinical course of acute pancreatitis] Rydzewska G. **Pol Arch Med Wewn** 1985 Apr;73(4):250–5 (27 ref.) **(Pol)**

[Chymotrypsin activity and vitamin D and calcium metabolism in chronic pancreatitis] Marcinowska–Suchowierska E, et al. **Wiad Lek** 1988 Mar 15;41(6):345–50 (Eng. Abstr.) **(Pol)**

[Mechanisms of activation and the role of lipid peroxidation in exacerbation of chronic pancreatitis] Zhukov NA, et al. **Ter Arkh** 1989;61(2):15–8 (Eng. Abstr.) **(Rus)**

[Endogenous toxemia in acute pancreatitis] Shugaev AI, et al. **Vestn Khir** 1989 Mar;142(3):126–30 (58 ref.) **(Rus)**

MICROBIOLOGY

[Properties of coxsackieviruses isolated from pancreatic tissue of patients with chronic pancreatitis] Shiprobokov VP, et al. **Mikrobiol Zh** 1988 Jul–Aug;50(4):78–81 (Eng. Abstr.) **(Rus)**

[Influenza A virus and acute pancreatitis (letter)] Pascual Velasco F. **Med Clin (Barc)** 1989 Apr 8;92(13):516 **(Spa)**

MORTALITY

Mortality after surgery for chronic pancreatitis [letter] Levy P, et al. **Br J Surg** 1988 Oct;75(10):1045

Prognosis and prognostic factors in chronic pancreatitis. Miyake H, et al. **Dig Dis Sci** 1989 Mar;34(3):449–55

Effects of the specific cholecystokinin antagonist L 364,718 in experimental acute pancreatitis in the rat. Sjövall S, et al. **Eur Surg Res** 1988;20(5–6):325–9

Mortality factors associated with chronic pancreatitis. Unidimensional and multidimensional analysis of a medical–surgical series of 240 patients. Levy P, et al. **Gastroenterology** 1989 Apr;96(4):1165–72

APACHE–II score for assessment and monitoring of acute pancreatitis [letter] Al–Hadeedi S, et al. **Lancet** 1989 Sep 23;2(8665):738

Acute pancreatitis as a cause of sudden or unexpected death in Northern Ireland. Heatley MK, et al. **Ulster Med J** 1989 Apr;58(1):51–5

[Infection and acute pancreatitis. Experimental study in rats] Gonçalez Y, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Jul–Aug;43(4):188–92 (Eng. Abstr.) **(Por)**

PATHOLOGY

Experimentally induced chronic pancreatitis in dogs by ligation of pancreatic lobes. Ehtuish FE. **Acta Chir Iugosl** 1989;36(1):83–90

Ultrasonography of the gallbladder in acute pancreatitis. Soiva M. **Acta Radiol** 1989 Jul–Aug;30(4):403–6

Phosphorus–31 nuclear magnetic resonance spectroscopic study of the canine pancreas: applications to acute alcoholic pancreatitis. Janes N, et al. **Adv Alcohol Subst Abuse** 1988; 7(3–4):213–9

Experimental acute pancreatitis induced by platelet activating factor in rabbits. Emanuelli G, et al. **Am J Pathol** 1989 Feb;134(2):315–26

Pancreatography after recovery from massive pancreatic necrosis. Howard JM, et al. **Ann Surg** 1989 Jan;209(1):31–5

Effects of endotoxin on the pancreatic ultrastructure. Florholmen J, et al. **APMIS** 1988 Nov;96(11):991–6

Endocrine pancreas in chronic pancreatitis. A qualitative and quantitative study. Lászik Z, et al. **Arch Pathol Lab Med** 1989 Jan;113(1):47–51

Recurrent pancreatitis in the third trimester in 2 consecutive pregnancies—its relationship to liver histology: a case report. Minakami H, et al. **Asia Oceania J Obstet Gynaecol** 1989 Jun;15(2):147–50

Coxsackievirus B3–induced acute pancreatitis: analysis of histopathological and viral parameters in a mouse model. Vuorinen T, et al. **Br J Exp Pathol** 1989 Aug;70(4):395–403

Three–dimensional morphological study of the pancreatic microvasculature in caerulein–induced experimental pancreatitis. McEntee G, et al. **Br J Surg** 1989 Aug; 76(8):853–5

ERCP findings and the role of endoscopic sphincterotomy in acute gallstone pancreatitis. Neoptolemos JP, et al. **Br J Surg** 1988 Oct;75(10):954–60

Histochemical and ultrastructural characteristics of tubular complexes in human acute pancreatitis. Willemer S, et al. **Dig Dis Sci** 1989 Jan;34(1):46–55

Isolated cells in suspension for biological research—Part II. Structure and functional properties of cells from pancreatic islets and acini. Hartmann K, et al. **Exp Pathol** 1988; 34(1):1–22 (131 ref.)

Acute pancreatitis and bile duct lesions in rat induced by dibutyltin dichloride. Merkord J, et al. **Exp Pathol** 1989; 36(1):59–62

Diffuse fibrosis of the pancreas: a peculiar pattern of pancreatitis in alcoholic cirrhosis. Martin E, et al. **Gastroenterol Clin Biol** 1989 Jun;13(6–7):579–84

Effects of the cholecystokinin receptor antagonist L–364,718 on experimental pancreatitis in mice. Silverman M, et al. **Gastroenterology** 1989 Jan;96(1):186–92

Reactivity of CO17–1A and B72.3 in benign and malignant pancreatic diseases. Takiyama Y, et al. **Hum Pathol** 1989 Sep;20(9):832–8

Lysosomal–mitochondrial interrelationships in damage to the liver in acute experimental pancreatitis in dogs. Treatment with prostacyclin (PGI2). Długosz J, et al. **Int J Pancreatol** 1988 Jul;3(5):343–56

Glycoproteins as markers of pancreatic damage in acute pancreatitis. Imrie CW, et al. **Int J Pancreatol** 1988;3 Suppl 1:S43–52 (13 ref.)

Clinical and pathological features of acute interstitial pancreatitis in the aged. Kimura W, et al. **Int J Pancreatol** 1989 Jul;5(1):1–10

Pancreatic calcifications in patients with normal pancreatic function. Lankisch PG, et al. **Int J Pancreatol** 1989 Oct; 5(3):281–93

Experimental acute pancreatitis in rats after chronic and chronic plus acute ethanol administration in combination with a pancreatic juice edema. Letko G, et al. **Int Surg** 1989 Apr–Jun;74(2):77–80

Computer–assisted analysis of clinical and laboratory data in acute pancreatitis: early formulation of a predictive score. Amorotti C, et al. **Ital J Surg Sci** 1988;18(4):353–60

Sclerosing cholangitis with hepatic microvesicular steatosis in cystic fibrosis and chronic pancreatitis. Benett I, et al. **J Clin Pathol** 1989 May;42(5):466–9

The histological and ultrastructural studies of the duodenal mucosa in a case of chronic pancreatitis. Mitarnun W, et al. **J Med Assoc Thai** 1988 Sep;71(9):508–12

Effects of chronic alcohol intake and secretory stimulation on sodium taurocholate–induced pancreatic necrosis in the rat. Grönroos JM, et al. **J Surg Res** 1989 Oct;47(4):360–4

Prostaglandin F2 alpha and prostacyclin tissue levels in early phases of trypsin–induced acute pancreatitis in rats. Berger Z, et al. **Pancreas** 1989;4(3):295–9

Chronic pancreatitis with diffuse fibrosis in early childhood. Elitsur Y, et al. **Pancreas** 1989;4(4):504–10

Fibroblast structure and function during regeneration from hormone–induced acute pancreatitis in the rat. Elsässer HP, et al. **Pancreas** 1989;4(2):169–78

Temporary pseudochronic lesions during the recovery of acute necrohemorrhagic pancreatitis in rabbits. Iovanna JL, et al. **Pancreas** 1988;3(4):433–8

Serial histologic study of the development, progression, and healing of acute pancreatitis in the rat [letter] Sarles H. **Pancreas** 1988;3(4):497

Acute terminal pancreatitis. Shimizu M, et al. **Pancreas** 1989; 4(3):375–7

Sonography of chronic pancreatitis. Bolondi L, et al. **Radiol Clin North Am** 1989 Jul;27(4):815–33 (82 ref.)

Immunocytochemical and morphometric analysis of acinar zymogen granules in human acute pancreatitis. Willemer S, et al. **Virchows Arch [A]** 1989;415(2):115–23

[Microvascular changes in the pancreatic islands in experimental acute pancreatitis] Huang XQ. **Chung Hua Wai Ko Tsa Chih** 1988 Dec;26(12):709–10, 780 (Eng. Abstr.) **(Chi)**

[Observation of light and electron microscopic structure of pancreas in acute haemorrhagic necrotizing pancreatitis induced by sodium taurocholate in rats] Wu NY, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Sep;19(3):271–4 **(Chi)**

[The ultrastructural study of acute gallstone pancreatitis] Lee KT, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1988 Jul;4(7):392–400 (Eng. Abstr.) **(Chi)**

[Acute pancreatitis: estimation of the severity and anatomical lesions (published erratum appears in Ann Chir 1989;43(3):202)] Fagniez PL. **Ann Chir** 1988;42(10):731–4 (16 ref.) (Eng. Abstr.) **(Fre)**

[Calcifying chronic pancreatitis localized in the ventral segment of a pancreas divisum: apropos of a case (letter)] Faulques B, et al. **Gastroenterol Clin Biol** 1989 Mar; 13(3):310–1 **(Fre)**

[Isolated pancreatic fibrosis, chronic pancreatitis and liver cirrhosis] Sarles H. **Gastroenterol Clin Biol** 1989 Jun; 13(6–7):577–8 **(Fre)**

[Acute pancreatitis in adenoma and carcinoma of Vater's papilla] Foth B, et al. **Med Klin** 1988 Nov 25;83(23):809–12 **(Ger)**

[Morphologic and biochemical changes in acute experimental interstitial pancreatitis] Lászik Z, et al. **Morphol Igazsagugyi Orv Sz** 1989 Apr;29(2):89–97 (Eng. Abstr.) **(Hun)**

[Changes in the endocrine pancreas in chronic pancreatitis] Lászik Z, et al. **Morphol Igazsagugyi Orv Sz** 1988 Jul; 28(3):186–95 (33 ref.) (Eng. Abstr.) **(Hun)**

[Epithelial dysplasia and stroma changes in chronic pancreatitis and carcinoma of the exocrine pancreas. Morphologico–functional correlations] Chiaramondia M, et al. **Pathologica** 1988 Sep–Oct;80(1069):561–72 (27 ref.) (Eng. Abstr.) **(Ita)**

[Histochemical evaluation of connective collagen in chronic pancreatitis and carcinoma of the exocrine pancreas] Chiaramondia M, et al. **Pathologica** 1987 Sep–Oct; 79(1063):609–16 (Eng. Abstr.) **(Ita)**

[Chronic pancreatitis–like syndrome in WBN/Kob rats] Ohashi K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Aug;85(8):1571 **(Jpn)**

[Necrosis of the right side of the colon caused by acute pancreatitis] Marzec B, et al. **Wiad Lek** 1988 Jul 1; 41(13):880–3 (Eng. Abstr.) **(Pol)**

[Chronic pancreatitis: anatomico–clinical and surgical therapy characteristics. Our experience with 321 cases] Grădinaru V, et al. **Rev Chir [Chir]** 1989 Jan–Feb; 38(1):51–64 (Eng. Abstr.) **(Rum)**

[State of the capillaries of the exocrine pancreas in experimental acute pancreatitis] Diubenko KA, et al. **Klin Khir** 1988;(11):18–9 (Eng. Abstr.) **(Rus)**

[Acute pancreonecrosis in a child] Komarov NV, et al. **Vestn Khir** 1988 Jun;140(6):94 **(Rus)**

[Acute pancreatitis. Neurovascular and microcirculatory changes. Pathogenic and therapeutic study] Salazar JR, et al. **Acta Gastroenterol Latinoam** 1987;17(3):207–26 (Eng. Abstr.) **(Spa)**

[Hemorrhagic and necrotic pancreatitis. Prospective study of 32 patients] Hurtado Andrade H, et al. **Rev Gastroenterol Mex** 1988 Apr–Jun;53(2):73–83 (Eng. Abstr.) **(Spa)**

[Prognostic criteria in acute pancreatitis. A useful and applicable alternative in our field] Uscanga L, et al. **Rev Gastroenterol Mex** 1988 Apr–Jun;53(2):67–71 (Eng. Abstr.) **(Spa)**

[52–year–old woman with chronic diarrhea, intermittent fever, abdominal pain and segmental bulging of the small intestine (clinical conference)] Uscanga L, et al. **Rev Invest Clin** 1988 Apr–Jun;40(2):199–206 **(Spa)**

PHYSIOPATHOLOGY

Inhibitory effect of calcitonin on pure human pancreatic secretion. Tanaka J, et al. **Acta Med Okayama** 1989 Jun; 43(3):169–74

Exocrine pancreatic function in children with mumps pancreatitis. Kobayashi A, et al. **Acta Paediatr Scand** 1989 Jan;78(1):129–30

Response to atrial natriuretic peptide in dogs with hypovolemic acute pancreatitis. Levy M, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):F211–7

Hypertonic saline–dextran resuscitation of acute canine bile–induced pancreatitis. Horton JW, et al. **Am J Surg** 1989 Jul;158(1):48–56

Pancreatic duct pressure, duct permeability and acute pancreatitis. Harvey MH, et al. **Br J Surg** 1989 Aug; 76(8):859–62

Simultaneous evaluation of insulin secretion and action using a model. Yamasaki Y, et al. **Diabetes Res Clin Pract** 1989 Jan 3;6(1):17–25

Impaired response of main pancreatic duct to secretin stimulation in early chronic pancreatitis. Bolondi L, et al. **Dig Dis Sci** 1989 Jun;34(6):834–40

Effects of a newly synthesized pancreatic protease inhibitor (PATM) on pancreatic microcirculation in experimental acute pancreatitis. Nishiwaki H, et al. **Gastroenterol Jpn** 1989 Apr;24(2):177–80

Effect of long–term ethanol feeding on the restoration process of acute necrotizing pancreatitis induced in rats. Terasawa K, et al. **Gastroenterol Jpn** 1988 Aug; 23(4):448–56

Chronic pancreatitis and diabetes mellitus: plasma and gastroduodenal mucosal profiles of regulatory peptides (gastrin, motilin, secretin, cholecystokinin, gastric

inhibitory polypeptide, somatostatin, VIP, substance P, pancreatic polypeptide, glucagon, enteroglucagon, neurotensin). Domschke S, et al. **Hepatogastroenterology** 1988 Oct;35(5):229–37

Pressure of papillary sphincter zone and pancreatic main duct in patients with alcoholic and idiopathic chronic pancreatitis. Okazaki K, et al. **Int J Pancreatol** 1988 Dec; 3(6):457–68

Steroids do not alter pancreatic blood supply in hypovolemic dogs: implications on steroid action in acute pancreatitis. Robert JH, et al. **Int J Pancreatol** 1988 Dec;3(6):449–56

Increased peritoneal permeability in acute experimental pancreatitis. Svensson C, et al. **Int J Pancreatol** 1989 Feb; 4(1):91–8

Impaired venous return causes circulatory failure in experimental pancreatitic shock in dogs. Rämä OJ, et al. **Intensive Care Med** 1989;15(2):111–5

Systolic time intervals in canine experimental acute hemorrhagic pancreatitis. Rmö P, et al. **J Surg Res** 1989 Mar;46(3):212–5

Renal tubular dysfunction in pancreatic cancer and chronic pancreatitis. Fabris C, et al. **Nephron** 1989;51(1):56–60

Closed duodenal loop pancreatitis: exclusively from reflux? [letter] Blackstone MO. **Pancreas** 1989;4(3):393–4

Pancreatic duct dilatation after secretin stimulation in patients with pancreas divisum. Lowes JR, et al. **Pancreas** 1989; 4(3):371–4

Effect of secretin on pancreatic juice proteins in caerulein-induced acute pancreatitis in the rat. Manso MA, et al. **Peptides** 1989 Mar–Apr;10(2):255–60

Effect on hemodynamics of therapeutic infusion of gabexate mesilate (FOY) in experimental acute pancreatitis. Dobosz M, et al. **Res Exp Med (Berl)** 1989;189(2):77–84

Alcoholic bile does not intensify acute pancreatitis in rats. Jalovaara P, et al. **Res Exp Med (Berl)** 1988;188(4):235–8

Involvement of cholecystokinin receptors in the adverse effect of glucocorticoids on diet-induced necrotizing pancreatitis. Gomez G, et al. **Surgery** 1989 Aug; 106(2):230–6; discussion 237–8

The time course of beta cell dysfunction in chronic ethanol-induced pancreatitis: a prospective analysis. Nealon WH, et al. **Surgery** 1988 Dec;104(6):1074–9

[Hemodynamic effects of naloxone in early acute pancreatitis in the dog and its efficacy in treating acute pancreatitis] Shen J. **Chung Hua Wai Ko Tsa Chih** 1989 Mar;27(3):173–6, 190 (Eng. Abstr.) **(Chi)**

[Evaluation of exocrine pancreatic function by the haptocorrin degradation test of the duodenal fluid collected by endoscopy] Champigneulle B, et al. **Gastroenterol Clin Biol** 1989 Apr;13(4):372–8 (Eng. Abstr.) **(Fre)**

[Motility and the pancreas. Physiologic and pathophysiologic aspects] Layer P, et al. **Fortschr Med** 1988 Aug 20; 106(24):492–5 (24 ref.) (Eng. Abstr.) **(Ger)**

[Changes in lung function in patients with chronic pancreatitis] Wieser O, et al. **Prax Klin Pneumol** 1988 Jul; 42(7):557–8 (Eng. Abstr.) **(Ger)**

[Isolated acini of the rat pancreas as a model for studying the physiology of the exocrine pancreas and pancreatic diseases] Mössner J. **Z Gastroenterol [Verh]** 1989 Jul; 24:10–1 **(Ger)**

[Hemodynamic characteristics of necrotizing pancreatitis] Schafmayer A, et al. **Zentralbl Chir** 1989;114(2):107–13 (Eng. Abstr.) **(Ger)**

[Renal microcirculation in experimental acute pancreatitis of dogs—the effect of pancreatic protease inhibitor and dopamine] Nishiwaki H, et al. **Nippon Geka Gakkai Zasshi** 1988 Dec;89(12):1990–6 (Eng. Abstr.) **(Jpn)**

[Exocrine function in chronic pancreatitis] Grigorescu M, et al. **Rev Med Interna [Med Interna]** 1988 Sep–Oct; 40(5):459–68 (Eng. Abstr.) **(Rum)**

[Disorders of microcirculation and rheologic properties of the blood in patients with acute pancreatitis] Petrushova LD. **Klin Khir** 1988;(12):29–31 (Eng. Abstr.) **(Rus)**

[Functional status of the hypophysis in patients with chronic pancreatitis] Komarov FI, et al. **Klin Med (Mosk)** 1989 Mar;67(3):95–8 (Eng. Abstr.) **(Rus)**

[Effect of pharmacologic preparations on hepatic blood flow studied by tetrapolar rheo-hepatography] Geller LI, et al. **Ter Arkh** 1988;60(8):77–9 **(Rus)**

[General mechanisms of regulation of the activity of the stomach and pancreas in peptic ulcer and chronic pancreatitis] Ivashkin VT, et al. **Ter Arkh** 1989;61(2):8–11 (Eng. Abstr.) **(Rus)**

[Prostaglandins and cyclic nucleotides in chronic pancreatitis] Mosin VI, et al. **Ter Arkh** 1989;61(2):11–5 (Eng. Abstr.) **(Rus)**

[Disorders of immunologic reactivity in patients with destructive pancreatitis with functional insufficiency of the liver] Koval'chuk VI, et al. **Vestn Khir** 1988 Jul;141(7):45–9 (Eng. Abstr.) **(Rus)**

[Correction of the microcirculation in the pancreas in acute pancreatitis] Diubenko KA, et al. **Vrach Delo** 1988 Jul; (7):63–7 (Eng. Abstr.) **(Rus)**

[Acute pancreatitis: physiopathogenic hypothesis of fat necrosis] Tiscornia OM, et al. **Medicina (B Aires)** 1988; 48(5):530–42 (98 ref.) **(Spa)**

[The kallikrein-kinin system in digestive diseases] Pérez Blanco FJ, et al. **Rev Esp Enferm Apar Dig** 1988 Nov; 74(5):573–6 (61 ref.) (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

Prevention of the spread of experimental acute pancreatitis by intraductal administration of a synthetic protease inhibitor in dogs. Wakayama T, et al. **Am J Gastroenterol** 1989 Mar;84(3):272–8

Evidence for a role of oxygen derived free radicals in the pathogenesis of caerulein induced acute pancreatitis in rats. Wisner J, et al. **Gut** 1988 Nov;29(11):1516–23

The effects of nafamostat mesilate (FUT-175) on caerulein-induced acute pancreatitis in the rat. Wisner JR Jr, et al. **Int J Pancreatol** 1989 May;4(4):383–90

Prevention by prostaglandins of caerulein-induced pancreatitis in rats. Robert A, et al. **Lab Invest** 1989 May; 60(5):677–91

The protective effect of the trypsin inhibitor urinastatin on cerulein-induced acute pancreatitis in rats. Tani S, et al. **Pancreas** 1988;3(4):471–6

Attempts to reduce post-transplant pancreatitis in rats and dogs with the somatostatin analogue SMS 201-995. Spillenaar Bilgen EJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2829–30

[Use of a combination of rheopolyglucin, complamin and trental in the complex treatment of acute postoperative pancreatitis] Lupal'tsev VI. **Klin Khir** 1988;(11):27–9 (Eng. Abstr.) **(Rus)**

[Prevention of postoperative pancreatitis in the surgical treatment of pyloroduodenal ulcers complicated by hemorrhage] Zaĭtsev VT, et al. **Klin Khir** 1988;(11):8–11 (Eng. Abstr.) **(Rus)**

PSYCHOLOGY

[Neurological and electroencephalographic aspects of differential diagnosis of alcoholic delirium and delirious conditions in pancreatitis] Gudkova VV, et al. **Sov Med** 1988;(7):109–12 **(Rus)**

RADIOGRAPHY

The role of computed tomography in the management of acute pancreatitis. Lange JF, et al. **Acta Chir Scand** 1988 Jul–Aug;154(7–8):461–5

Obliteration of periarterial retropancreatic fat on CT in pancreatitis: an exception to the rule. Luetmer PH, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):63–4

Pancreatitis in the annulus of annular pancreas demonstrated by the combined use of computed tomography and endoscopic retrograde cholangiopancreatography. Itoh Y, et al. **Am J Gastroenterol** 1989 Aug;84(8):961–4

Pancreatic phlegmon: what is it? Fan ST, et al. **Am J Surg** 1989 Jun;157(6):544–7

Contrast-enhanced CT scan in the early phase of acute pancreatitis [letter] Clavien PA, et al. **Br J Surg** 1989 Aug; 76(8):878–9

Contrast-enhanced abdominal computed tomography scanning and prediction of severity of acute pancreatitis: a prospective study. London NJ, et al. **Br J Surg** 1989 Mar;76(3):268–72

The interpretation of retrograde pancreatography in the elderly. Jones SN, et al. **Clin Radiol** 1989 Jul;40(4):393–6

Serial computed tomography scanning in acute pancreatitis: a prospective study. London NJ, et al. **Gut** 1989 Mar; 30(3):397–403

Radiology of the pancreas. **Radiol Clin North Am** 1989 Jan; 27(1):1–190

Endoscopic retrograde cholangiopancreatography in chronic pancreatitis. Cambridge classification. Axon AT. **Radiol Clin North Am** 1989 Jan;27(1):39–50 (55 ref.)

CT diagnosis and staging of acute pancreatitis. Balthazar EJ. **Radiol Clin North Am** 1989 Jan;27(1):19–37 (39 ref.)

Gastrointestinal complications of pancreatitis. Safrit HD, et al. **Radiol Clin North Am** 1989 Jan;27(1):73–9 (29 ref.)

Biliary tract dilatation in chronic pancreatitis: CT and sonographic findings. Huntington DK, et al. **Radiology** 1989 Jul;172(1):47–50

Chronic pancreatitis: reassessment with current CT. Luetmer PH, et al. **Radiology** 1989 May;171(2):353–7

[Contribution of x-ray computed tomography in acute pancreatitis] Fagniez PL. **Ann Chir** 1989;43(1):45–7 (Eng. Abstr.) **(Fre)**

[X-ray computed tomography in the initial period of acute pancreatitis] Testas P, et al. **Chirurgie** 1988;114(10):785–9 (Eng. Abstr.) **(Fre)**

[Early endoscopic retrograde cholangiopancreatography in acute pancreatitis] Gebhardt C, et al. **Leber Magen Darm** 1989 May;19(3):125–8, 131, 134 passim (Eng. Abstr.) **(Ger)**

[The value of non-contrast computed tomography in acute pancreatitis] Maier W. **ROFO** 1989 Apr;150(4):458–61 (Eng. Abstr.) **(Ger)**

[Long-term follow-up studies on the chronic pancreatitis—with special reference to the changes of ERP findings] Yamashita Y. **Igaku Kenkyu** 1988 Dec; 58(6):341–65 (Eng. Abstr.) **(Jpn)**

[Usefulness of computerized tomography in the diagnosis and observation of the dynamics of acute pancreatitis] Rzymski K, et al. **Wiad Lek** 1988 Nov 15;41(22):1500–5 **(Pol)**

[Use of computed tomography in the diagnosis of acute and chronic pancreatitis] Aliev RM, et al. **Klin Khir** 1988; (11):21–4 (Eng. Abstr.) **(Rus)**

[Diagnosis by imaging in pancreatic disease. I. Inflammatory lesions] Pedrosa CS, et al. **Rev Clin Esp** 1988 Nov; 183(7):368–76 (26 ref.) (Eng. Abstr.) **(Spa)**

[Chronic pancreatitis or cancer? Semeiology of pancreatic radiography] Lazo Ramos A, et al. **Rev Esp Enferm Apar Dig** 1989 Apr;75(4):378–82 (Eng. Abstr.) **(Spa)**

RADIONUCLIDE IMAGING

The role of Ga-67 citrate imaging in pancreatitis. Aburano T, et al. **Clin Nucl Med** 1988 Nov;13(11):808–11

RADIOTHERAPY

[Effect of intravascular laser irradiation of the blood on blood cells in pancreatitis] Dmitriev AE, et al. **Klin Med (Mosk)** 1989 May;67(5):108–10 (Eng. Abstr.) **(Rus)**

[Ceruloplasmin as an index of the effectiveness of intravascular laser irradiation of the blood in patients with various inflammatory processes] Konovalov EP. **Vrach Delo** 1988 Sep;(9):71–2 (Eng. Abstr.) **(Rus)**

SURGERY

Pancreaticogastrostomy for chronic pancreatitis. Ebbehøj N, et al. **Am J Surg** 1989 Mar;157(3):315–7

Treatment of chronic alcoholic pancreatitis by pancreatic resection. Keith RG, et al. **Am J Surg** 1989 Jan; 157(1):156–62

Timing of surgery for acute gallstone pancreatitis. Kim U, et al. **Am J Surg** 1988 Nov;156(5):393–6

Surgical intervention in severe acute pancreatitis: 476 cases in 20 years. Kune GA, et al. **Ann R Coll Surg Engl** 1989 Jan;71(1):23–7

Duodenum-preserving resection of the head of the pancreas in severe chronic pancreatitis. Early and late results. Beger HG, et al. **Ann Surg** 1989 Mar;209(3):273–8

The surgical management of acute pancreatitis and its complications. Aldridge MC. **Br J Hosp Med** 1989 Mar; 41(3):286–93 (74 ref.)

Direct retroperitoneal approach to necrosis in severe acute pancreatitis. Fagniez PL, et al. **Br J Surg** 1989 Mar; 76(3):264–7

Debridement and closed cavity irrigation for the treatment of pancreatic necrosis. Larvin M, et al. **Br J Surg** 1989 May;76(5):465–71

Influence of pancreatic resection on systemic complications in acute necrotizing pancreatitis. Teerenhovi O, et al. **Br J Surg** 1988 Aug;75(8):793–5

Surgical treatment of acute necrotizing pancreatitis. Wilson C, et al. **Br J Surg** 1988 Nov;75(11):1119–23

Endoscopic pancreatic sphincterotomy—technique and evaluation. Fuji T, et al. **Endoscopy** 1989 Jan;21(1):27–30

Pancreatic remnant abscess after resection for acute necrotising pancreatitis. Teerenhovi O, et al. **Int Surg** 1988 Jul–Sep;73(3):137–9

Peripheral neuropathy complicating pancreatitis [letter] Vallat JM, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun; 52(6):810

Endoscopic sphincterotomy in acute gallstone pancreatitis [letter] **Lancet** 1988 Dec 3;2(8623):1314

Of pancreas, pain, and papilla. **Lancet** 1988 Nov 12; 2(8620):1116–7 (28 ref.)

Percutaneous drainage of immature pancreatic pseudocyst. A preliminary study of 4 cases. D'Egidio A, et al. **S Afr J Surg** 1989 Jul;27(3):96–9

Surgical management of necrotizing pancreatitis. Beger HG. **Surg Clin North Am** 1989 Jun;69(3):529–49 (60 ref.)

Pancreatic resection for chronic pancreatitis. Frey CF, et al. **Surg Clin North Am** 1989 Jun;69(3):499–528 (100 ref.)

Management of gallstone pancreatitis during pregnancy and the postpartum period. Block P, et al. **Surg Gynecol Obstet** 1989 May;168(5):426–8

Delayed débridement and external drainage of massive pancreatic or peripancreatic necrosis. Howard JM. **Surg Gynecol Obstet** 1989 Jan;168(1):25–9

Ductal drainage for chronic pancreatitis. Drake DH, et al. **Surgery** 1989 Feb;105(2 Pt 1):131–40

Laparostomy in acute pancreatitis. Wilson RH, et al. **Ulster Med J** 1988 Oct;57(2):208–11

Intraperitonealisation of pancreas and multiple coeliostomy—a possible approach to reduce mortality of acute necrotizing pancreatitis. Nicola T, et al. **Zentralbl Chir** 1989;114(2):84–92

[Acute pancreatitis] Grigorov G, et al. **Khirurgiia (Sofiia)** 1989;42(2):22–6 (Eng. Abstr.) **(Bul)**

[Post-operative massive hemorrhage in acute necrotizing pancreatitis] Duan ZQ, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Jan;26(1):16–7, 59–60 (Eng. Abstr.) **(Chi)**

[Surgical treatment of acute necrotizing pancreatitis: a review of 81 cases] Zhang SD. **Chung Hua Wai Ko Tsa Chih** 1988 Dec;26(12):721–4, 781 (Eng. Abstr.) **(Chi)**

[Acute necrotizing pancreatitis. The treatment of sterile and of infected necrotic masses] Van Vyve E, et al. **Acta Gastroenterol Belg** 1988 Jan–Feb;51(1):44–50 (Eng. Abstr.) **(Fre)**

[Arguments for a revised concept in the therapy of acute pancreatitis. On the indications for conservative, endoscopic and surgical procedures] Sulkowski U, et al. **Chirurg** 1989 Apr;60(4):246–50 (Eng. Abstr.) **(Ger)**

[Treatment strategies in symptomatic pancreas divisum] Winter J, et al. **Chirurg** 1988 Oct;59(10):679–82 **(Ger)**

[Pancreatic duct occlusion from the clinical viewpoint: exocrine and endocrine consequences] Schneider MU.

Langenbecks Arch Chir 1989;374(1):1-3 (Ger)
[Chronic pancreatitis with inflammatory enlargement of the head of the pancreas. Early and late results following duodenum saving resection of the head of the pancreas] Beger HG, et al. **Med Klin** 1988 Sep 2;83(17):548-53, 576 (Eng. Abstr.) (Ger)
[Coping with disease from the psychosomatic-psychotherapeutic viewpoint exemplified by pancreatectomized patients] Lang H, et al. **Psychother Psychosom Med Psychol** 1989 Jul;39(7):239-47 (Eng. Abstr.) (Ger)
[Surgical therapy of chronic pancreatitis] Peiper HJ, et al. **Schweiz Med Wochenschr** 1989 May 27;119(21):712-6 (22 ref.) (Eng. Abstr.) (Ger)
[Chronic pancreatitis: indications and successes of surgical therapy] Beger HG, et al. **Z Gastroenterol [Verh]** 1989 Jul; 24:107-10 (41 ref.) (Ger)
[Acute pancreatitis: indications and successes of surgical therapy] Horn J. **Z Gastroenterol [Verh]** 1989 Jul;24:99-103 (Ger)
[Duodeno-cephalopancreatectomy with preservation of the pylorus] Kozuschek W. **Zentralbl Chir** 1989;114(11):745-54 (Ger)
[Surgical therapy of acute pancreatitis] Pahlig H, et al. **Zentralbl Chir** 1988;113(18):1130-5 (Eng. Abstr.) (Ger)
[Data on surgical indications in necrotizing pancreatitis--results of a validation study] Roscher R, et al. **Zentralbl Chir** 1989;114(2):77-83 (Eng. Abstr.) (Ger)
[The role of peritoneal lavage in the surgical treatment of acute necrotizing pancreatitis] Sápy P, et al. **Zentralbl Chir** 1989;114(2):99-106 (Eng. Abstr.) (Ger)
[Results of surgical treatment of chronic pancreatitis] Sons HU, et al. **Zentralbl Chir** 1989;114(2):121-8 (Eng. Abstr.) (Ger)
[Role of Vater's papilla and Wirsung's duct in acute biliary pancreatitis. Surgery with laser and operating microscope] Casaccia M, et al. **Minerva Chir** 1989 Jan 31;44(1-2):203-10 (19 ref.) (Ita)
[Distal pancreatectomy with conservation of the spleen. Apropos of 3 consecutive cases] Franchello A, et al. **Minerva Chir** 1989 Jun 15;44(11):1557-60 (Eng. Abstr.) (Ita)
[Surgical treatment of chronic pancreatitis. Our personal experience] Fronda GR, et al. **Minerva Chir** 1988 Oct 31; 43(20):1677-81 (Eng. Abstr.) (Ita)
[The treatment of acute pancreatitis today. The experience of 126 surgical cases] Valle M, et al. **Minerva Med** 1989 Jul;80(7):673-5 (Ita)
[Advances in and outlook for pancreatic surgery] Sato H. **Nippon Geka Gakkai Zasshi** 1988 Jun;89(6):799-804 (Jpn)
[Endoscopic papillotomy in the treatment of acute biliary pancreatitis] Nowak A, et al. **Pol Arch Med Wewn** 1985 Sep;74(3):189-94 (Eng. Abstr.) (Pol)
[Morphological changes in the pancreas in relation to the time of the operation in acute hemorrhagic pancreatitis] Lukasiewicz S, et al. **Pol Tyg Lek** 1988 Sep 19; 43(38):1215-7 (Eng. Abstr.) (Pol)
[Acute pancreatitis of biliary origin as an indication for emergency endoscopic sphincterotomy] Nowak A, et al. **Wiad Lek** 1988 Nov 15;41(22):1515-8 (Pol)
[When and how to treat surgically the patients with severe hemorrhagic-necrotic pancreatitis?] Zalewski J, et al. **Wiad Lek** 1988 Nov 15;41(22):1525-9 (Pol)
[Laparostomy in the treatment of acute pancreatitis] Ionescu NG, et al. **Rev Chir [Chir]** 1988 Jul-Aug;37(4):283-8 (Eng. Abstr.) (Rum)
[Indications for pancreatectomy in chronic pancreatitis] Setlacec D, et al. **Rev Chir [Chir]** 1989 Jan-Feb;38(1):27-42 (Eng. Abstr.) (Rum)
[Pancreatectomy in complicated chronic pancreatitis] Kadoshchuk TA, et al. **Khirurgiia (Mosk)** 1988 Sep; (9):89-96 (Eng. Abstr.) (Rus)
[Surgical treatment of primary and secondary pancreatitis] Mianniste IuE, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):97-100 (Eng. Abstr.) (Rus)
[Results of the surgical treatment of primary chronic pancreatitis] Nesterenko IuA, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):79-83 (Eng. Abstr.) (Rus)
[Endoscopic papillosphincterotomy in acute pancreatitis] Sinev IuV, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):87-9 (Eng. Abstr.) (Rus)
[State of the endocrine function of the pancreas following cryoablation of acute destructive pancreatitis] Al'perovich BI, et al. **Klin Khir** 1988;(11):7-8 (Eng. Abstr.) (Rus)
[Resection of the pancreas in experimental acute pancreatitis] Kostiuk GIa, et al. **Klin Khir** 1988;(11):16-7 (Eng. Abstr.) (Rus)
[Experience with the rational use of intravascular laser irradiation of the blood in suppurative-septic surgical diseases] Shalimov AA, et al. **Klin Khir** 1989;(1):25-7 (Eng. Abstr.) (Rus)
[Surgical treatment of chronic alcoholic pancreatitis and its complications] Blagovidov DF, et al. **Sov Med** 1988; (10):54-9 (58 ref.) (Rus)
[Therapeutic endoscopy in emergency surgical treatment of diseases of the biliary tract and pancreas] Sinev IuV, et al. **Sov Med** 1989;(1):72-6 (Rus)
[Use of dibunol and delagil in the treatment of acute pancreatitis] Buianov VM, et al. **Vestn Khir** 1988 Dec; 141(12):28-32 (Eng. Abstr.) (Rus)
[Surgical treatment of complicated cysts of the pancreas] Kurygin AA, et al. **Vestn Khir** 1988 Oct;141(10):35-9 (Eng. Abstr.) (Rus)
[Surgical treatment of chronic biliopancreatitis] Masalin MM, et al. **Vestn Khir** 1988 Aug;141(8):41-5 (Eng. Abstr.) (Rus)
[Diagnosis and therapeutic tactics in destructive cholecystitis in middle-aged and elderly patients] Rodionov VV, et al. **Vestn Khir** 1989 Jan;142(1):110-3 (Rus)
[Partial resection of the head of the pancreas] Shalimov AA, et al. **Vestn Khir** 1988 Sep;141(9):30-2 (Eng. Abstr.) (Rus)
[Enzymatic activity of the pancreas and liver in the cryosurgical treatment of diffuse pancreonecrosis] Tsitsiashvili MSh, et al. **Vestn Khir** 1988 Jun;140(6):46-8 (Rus)
[Surgical treatment of postoperative ventral hernia using a modification of the Napalkov method] Uglov FG, et al. **Vestn Khir** 1989 Jan;142(1):100-4 (Eng. Abstr.) (Rus)
[Subdiaphragmatic vagotomy in acute experimental pancreatitis] Kul'chitskiĭ KI, et al. **Vrach Delo** 1989 May; (5):50-3 (Eng. Abstr.) (Rus)
[Surgery in chronic pancreatitis] Estrada González L, et al. **Rev Esp Enferm Apar Dig** 1988 Jul;74(1):1-4 (Eng. Abstr.) (Spa)

THERAPY

Treatment of chronic pancreatitis--current status. Clinical review. Ihse I, et al. **Acta Chir Scand** 1988 Oct; 154(10):553-8 (48 ref.)
Endoscopic placement of pancreatic stents and drains in the management of pancreatitis. Kozarek RA, et al. **Ann Surg** 1989 Mar;209(3):261-6
Experimental studies on fluosol DA administration in acute pancreatitis. Ohyanagi H, et al. **Biomater Artif Cells Artif Organs** 1988;16(1-3):585-94
Plasmapheresis and fulminant acute pancreatitis [letter] **BMJ** 1988 Oct 15;297(6654):979-80
Plasmapheresis and fulminant acute pancreatitis? [letter] Larvin M, et al. **BMJ** 1988 Nov 19;297(6659):1332
Plasmapheresis: a rational treatment for fulminant acute pancreatitis? Larvin M, et al. **BMJ** 1988 Sep 3; 297(6648):593-4
High volume lesser sac lavage in acute necrotizing pancreatitis. Teerenhovi O, et al. **Br J Surg** 1989 Apr; 76(4):370-3
Endoscopic treatment of acute biliary pancreatitis [letter] Tulassay Z, et al. **Br J Surg** 1989 May;76(5):525
Synthetic versus natural protease inhibitors in acute experimental pancreatitis [letter] Lankisch PG, et al. **Dig Dis Sci** 1988 Nov;33(11):1497-8
New modalities for treating chronic pancreatitis. Grimm H, et al. **Endoscopy** 1989 Mar;21(2):70-4
Therapeutic regimens in acute experimental hemorrhagic pancreatitis. Effects of hydration, oxygenation, peritoneal lavage, and a potent protease inhibitor. Niederau C, et al. **Gastroenterology** 1988 Dec;95(6):1648-57
A/S/G/E distinguished lecture--endoscopic therapy of pancreatic disease: a new horizon. Geenen JE. **Gastrointest Endosc** 1988 Sep-Oct;34(5):386-9
Continuous peritoneal dialysis in acute experimental pancreatitis in dogs. Effect of aprotinin in the dialysate medium. Bassi C, et al. **Int J Pancreatol** 1989 Jul;5(1):69-75
Fresh frozen plasma therapy in acute pancreatitis: an experimental study. Leese T, et al. **Int J Pancreatol** 1988 Dec;3(6):437-47
Pancreatitis: an analysis of 106 patients admitted to Ramathibodi Hospital during 1969-1984. Pramoolsinsap C, et al. **J Med Assoc Thai** 1989 Feb;72(2):74-81
Traumatic pancreatitis and pseudocyst in children: current management. Warner RL Jr, et al. **J Trauma** 1989 May; 29(5):597-601 (24 ref.)
Controlled trial of urgent endoscopic retrograde cholangiopancreatography and endoscopic sphincterotomy versus conservative treatment for acute pancreatitis due to gallstones. Neoptolemos JP, et al. **Lancet** 1988 Oct 29; 2(8618):979-83
Infusion of dipeptides as nutritional substrates for glutamine, tyrosine, and branched-chain amino acids in patients with acute pancreatitis. Steininger R, et al. **Metabolism** 1989 Aug;38(8 Suppl 1):78-81
Pancreatic duct occlusion in the management of acute necrotizing pancreatitis in a canine model. Torino F, et al. **Mt Sinai J Med** 1989 Mar;56(2):79-82
Total parenteral nutrition and alternate energy substrates in treatment of severe acute pancreatitis. Sitzmann JV, et al. **Surg Gynecol Obstet** 1989 Apr;168(4):311-7
Effect of blood exchange transfusion as an initial treatment of acute hemorrhagic pancreatitis. Takeda K, et al. **Tohoku J Exp Med** 1989 Jan;157(1):31-7
[Resuscitation in acute traumatic pancreatitis in childhood] Kostova S, et al. **Khirurgiia (Sofiia)** 1988;41(5):32-5 (Bul)
[Nutritional support in severe acute pancreatitis] Li JS. **Chung Hua Wai Ko Tsa Chih** 1988 Dec;26(12):711-3, 780 (Eng. Abstr.) (Chi)
[Treatment of intra-abdominal sepsis and necrotizing pancreatitis with staged lavage using a Zipper] Vermassen F, et al. **Acta Chir Belg** 1989 Mar-Apr;89(2):77-81 (Eng. Abstr.) (Dut)
[Belgian experience in percutaneous peritoneal dialysis in the treatment of acute alcoholic necrotizing-hemorrhagic pancreatitis] Allé JL, et al. **Acta Gastroenterol Belg** 1988 Jan-Feb;51(1):23-30 (Eng. Abstr.) (Fre)
[Biochemical justification of drainage of the thoracic duct in acute necrotic-hemorrhagic pancreatitis] Deby-Dupont G, et al. **Acta Gastroenterol Belg** 1988 Jan-Feb;51(1):31-40 (Eng. Abstr.) (Fre)
[Acute severe pancreatitis: limitations of medical treatment] Reynaert MS, et al. **Ann Chir** 1989;43(1):48-51 (Eng. Abstr.) (Fre)
[Current ideas in the treatment of severe acute pancreatitis] Hollender LF, et al. **J Chir (Paris)** 1989 Feb;126(2):95-102 (Eng. Abstr.) (Fre)
[Experimental acute necrotico-hemorrhagic pancreatitis in dogs. Treatment by intraductal block] Torino F, et al. **J Chir (Paris)** 1989 Feb;126(2):88-90 (Eng. Abstr.) (Fre)
[Endoscopy in the diagnosis and treatment of acute obstructive pancreatitis] Neuhaus H, et al. **Bildgebung** 1987-89;56(1):42, 45-6, 48 (33 ref.) (Eng. Abstr.) (Ger)
[Extracorporeal shockwave lithotripsy in chronic pancreatitis] Soehendra N, et al. **Dtsch Med Wochenschr** 1989 Sep 15;114(37):1402-6 (Eng. Abstr.) (Ger)
[Acute pancreatitis. 1: Principles of conservative therapy] Layer P, et al. **Fortschr Med** 1989 Feb 20;107(5):119-23 (42 ref.) (Eng. Abstr.) (Ger)
[Gastrointestinal drainage--technic and efficacy] Soehendra N. **Verh Dtsch Ges Inn Med** 1988;94:633-6 (Ger)
[Indications and successes of surgical and conservative therapy: chronic pancreatitis] Fölsch UR. **Z Gastroenterol [Verh]** 1989 Jul;24:104-6 (21 ref.) (Ger)
[Acute pancreatitis: indications and successes of conservative therapy] Lankisch PG. **Z Gastroenterol [Verh]** 1989 Jul; 24:94-8 (87 ref.) (Ger)
[Intensive therapy of acute necrotizing pancreatitis] Treu TM, et al. **Zentralbl Chir** 1989;114(2):93-8 (Eng. Abstr.) (Ger)
[Role of somatostatin and parenteral nutrition in the treatment of acute pancreatitis. Personal experience] Russello D, et al. **Minerva Chir** 1989 Mar 15;44(5):843-7 (Eng. Abstr.) (Ita)
[Acute pancreatitis in pregnancy. Description of a case] Genova M, et al. **Minerva Ginecol** 1989 Jun;41(6):309-11 (Eng. Abstr.) (Ita)
[Conservative treatment of chronic pancreatitis] Ciok J, et al. **Wiad Lek** 1988 Apr 1;41(7):476-82 (Pol)
[Conservative treatment of acute pancreatitis] Marlicz K. **Wiad Lek** 1988 Nov 15;41(22):1511-4 (Pol)
[Complete parenteral feeding in the treatment of acute pancreatitis] Szczygiel B, et al. **Wiad Lek** 1988 Nov 15; 41(22):1519-23 (Pol)
[Non-operative treatment of abscesses and cysts of the pancreas] Szmeja J, et al. **Wiad Lek** 1988 Nov 15; 41(22):1534-40 (Pol)
[Evaluation of the effectiveness of the use of specific hemosorption in acute experimental pancreatitis] Ogloblina OG, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):430-3 (Eng. Abstr.) (Rus)
[Cryodestruction of the pancreas by abdominal approach in acute destructive pancreatitis] Al'perovich BI, et al. **Khirurgiia (Mosk)** 1989 Jan;(1):98-101 (Rus)
[Intra-arterial therapy in the combination therapy of acute pancreatitis] Briskin BS, et al. **Khirurgiia (Mosk)** 1989 Jan; (1):68-73 (Eng. Abstr.) (Rus)
[The role of predicting the course of pancreonecrosis in the selection of therapeutic tactics] Savel'ev VS, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):72-9 (Eng. Abstr.) (Rus)
[Therapeutic tactics in destructive pancreatitis] Shurkalin BK, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):83-7 (Eng. Abstr.) (Rus)
[Combination therapy of acute destructive pancreatitis] Taranenko LD, et al. **Klin Med (Mosk)** 1988 Nov; 66(11):80-2 (Rus)
[Effect of hemosorption on the functional state of the liver in patients with acute pancreatitis] Dedenko IK, et al. **Vestn Khir** 1988 Jul;141(7):86-7 (Rus)
[Ultraviolet irradiation of the blood and hemosorption in the complex therapy of acute pancreatitis] Marusanov VE, et al. **Vestn Khir** 1989 Mar;142(3):76-9 (Eng. Abstr.) (Rus)
[Effect of the enteral feeding formula on pancreatic exocrine function in patients with chronic pancreatitis] Ivashkin VT, et al. **Voen Med Zh** 1988 May;(5):63-5 (Rus)
[Ambulatory care problems of patients with chronic pancreatitis] Khristich TN. **Vrach Delo** 1989 Jun;(6):20-2 (Eng. Abstr.) (Rus)

URINE

Determination of a glucose-containing tetrasaccharide in urine of patients with acute pancreatitis. Kumlien J, et al. **Int J Pancreatol** 1989 Mar;4(2):139-47

VETERINARY

Pancreatic duct obstruction in the pig: electron microscopy of chronic pancreatitis. Rahko T, et al. **Acta Vet Scand** 1988;29(2):255-8
Circulating concentrations of trypsin-like immunoreactivity and activities of lipase and amylase after pancreatic duct ligation in dogs. Simpson KW, et al. **Am J Vet Res** 1989 May;50(5):629-32
Adenoviral pancreatitis in guinea fowl (Numida meleagris). Zellen GK, et al. **Avian Dis** 1989 Jul-Sep;33(3):586-9

PANCREATOJEJUNOSTOMY see

PANCREATICOJEJUNOSTOMY

PANCREATOPEPTIDASE

Cleavage of human von Willebrand factor by porcine pancreatic elastase. Howard MA, et al. **Blood** 1989 Aug 1;74(2):673–81

Energy minimization and molecular dynamics studies of Asn–102 elastase. Lesyng B, et al. **J Comput Aided Mol Des** 1987 Oct;1(3):211–7

Functional differences between the 40 kDa and 50 to 70 kDa IgG Fc receptors on human neutrophils revealed by elastase treatment and antireceptor antibodies. Tosi MF, et al. **J Immunol** 1988 Sep 15;141(6):2097–103

Interaction of peptide boronic acids with elastase: circular dichroism studies. Berry SC, et al. **Proteins** 1988; 4(3):205–10

ANALYSIS

PMN elastase and leukocyte neutral proteinase inhibitor (LNPI) from granulocytes as inflammation markers in experimental–septicemia. Geiger R, et al. **Adv Exp Med Biol** 1988;240:465–71

Preliminary data on isolation of an elastase–like proteinase and its inhibitor from ovine neutrophil granulocytes. Junger W, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:63–8

Conductimetry: a new tool for studying inhibition of elastolysis. Saulnier J, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:75–8

ELISA for human pancreatic elastase 1. Sziegoleit A, et al. **Clin Biochem** 1989 Apr;22(2):79–83

Assessment of the role of pancreatic proteases in human abdominal aortic aneurysms and occlusive disease. Dubick MA, et al. **Clin Chim Acta** 1988 Sep 30;177(1):1–10

Characterization of the S'-subsite specificity of porcine pancreatic elastase. Schellenberger V, et al. **Eur J Biochem** 1989 Jan 15;179(1):161–3

Possible prediction of neonatal and puerperal infections by intrapartum determination of polymorphonuclear granulocyte elastase levels in maternal blood [letter] Fischbach F, et al. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):588–9

Local increase of antiprotease and neutrophil elastase–alpha 1–proteinase inhibitor complexes in lung cancer. Marchandise FX, et al. **Eur Respir J** 1989 Jul;2(7):623–9

Comparison of human lung surface protein profiles from the central and peripheral airways sampled using two regional lavage techniques. Smith SF, et al. **Eur Respir J** 1988 Oct; 1(9):792–800

Determination of elastase activity by reversed–phase high–performance liquid chromatography. Stein TA, et al. **J Chromatogr** 1989 Jan 6;461:267–70

Diagnostic criteria for adult respiratory distress syndrome: time for reappraisal [published erratum appears in Lancet 1989 Feb 11;1(8633):342] Rocker GM, et al. **Lancet** 1989 Jan 21;1(8630):120–3

[Evaluation of the elastase/alpha 1–antitrypsin balance in normal smokers using bronchoalveolar lavage] Fujita J, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Sep; 26(9):989–94 (Eng. Abstr.) **(Jpn)**

[Elastase activity in bronchoalveolar lavage fluid from patients with chronic respiratory tract infections] Yamada H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Mar; 26(3):260–6 (Eng. Abstr.) **(Jpn)**

ANTAGONISTS & INHIBITORS

Semisynthetic inhibitors of human leukocyte elastase and their protective effect on lung elastin degradation in vitro. Beckmann J, et al. **Adv Exp Med Biol** 1988;240:107–14

Inhibition of human neutrophil elastase by acid–soluble inter–alpha–trypsin inhibitor. Gast A, et al. **Adv Exp Med Biol** 1988;240:75–82

Inhibition of human neutrophil elastase by polyguanylic acid and other synthetic polynucleotides. Simon S, et al. **Adv Exp Med Biol** 1988;240:65–74

Inhibition of neutrophil elastase by alpha–1–proteinase inhibitor oxidized by activated neutrophils. Padrines M, et al. **Am Rev Respir Dis** 1989 Mar;139(3):783–90

Anti–neutrophil–elastase defenses of the lower respiratory tract in alpha 1–antitrypsin deficiency directly augmented with an aerosol of alpha 1–antitrypsin. Hubbard RC, et al. **Ann Intern Med** 1989 Aug 1;111(3):206–12

Substrate inhibition of Pseudomonas aeruginosa elastase by 3–(2–furyl)acryloyl–glycyl–L–phenylalanyl–L–phenylalanine. Poncz L. **Arch Biochem Biophys** 1988 Nov 1;266(2):508–15

Active site chemical mutagenesis of Ecballium elaterium trypsin inhibitor II: new microproteins inhibiting elastase and chymotrypsin. Favel A, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):79–82

Deleterious effect of Brij 35 on alkyl 2–pyrones and other hydrophobic inhibitors of human sputum and leucocyte elastase. Cook L, et al. **Biochem Int** 1988 Oct;17(4):637–46

Monocrotaline–induced cardiopulmonary injury in rats. Modification by the neutrophil elastase inhibitor SC39026. Molteni A, et al. **Biochem Pharmacol** 1989 Aug 1; 38(15):2411–9

Novel inhibitors of human leukocyte elastase and cathepsin G. Sequence variants of squash seed protease inhibitor with altered protease selectivity. McWherter CA, et al. **Biochemistry** 1989 Jul 11;28(14):5708–14

Mucus proteinase inhibitor: a fast–acting inhibitor of leucocyte elastase. Boudier C, et al. **Biochim Biophys Acta** 1989 Mar 16;995(1):36–41

Control of exogenous proteinases and their inhibitors at the macrophage cell surface. Dean RT, et al. **Biochim Biophys Acta** 1989 Aug 18;992(2):174–80

Kinetics of the inhibition of free and elastin–bound human pancreatic elastase by alpha 1–proteinase inhibitor and alpha 2–macroglobulin. Laurent P, et al. **Biochim Biophys Acta** 1989 Feb 23;994(3):285–8

Effect of Cu2+ and Zn2+ on the inhibition of human leucocyte elastase by 6–alkyl–3–(omega–carboxyalkyl)–2–pyrone, oleic acid and sulindac sulfide. Cook L, et al. **Biol Chem Hoppe Seyler** 1989 Jan;370(1):11–9

The elastase–inhibitor eglin has no effect in an ovine model of endotoxemia. Redl H, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:153–6

Synthesis of an elastase inhibitor by monosubstitution of arginine–5 with valine at the reactive site in a trypsin inhibitor from squash seeds (CMTI III). Rolka K, et al. **Biol Chem Hoppe Seyler** 1989 May;370(5):499–502

Synthesis of tripeptide amide derivatives and examination of their inhibitory effect on human leukocyte elastase (HLE). Tsuda Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug; 36(8):3119–24

Inhibitors of elastase and cathepsin G in Chédiak–Higashi (beige) neutrophils. Takeuchi KH, et al. **J Biol Chem** 1989 May 5;264(13):7431–6

Pharmacological profile of the substituted beta–lactam L–659,286: a member of a new class of human PMN elastase inhibitors. Bonney RJ, et al. **J Cell Biochem** 1989 Jan;39(1):47–53

Elastase inhibitors for treatment of emphysema. Approaches to synthesis and biological evaluation. Powers JC, et al. **J Enzym Inhib** 1987;1(4):311–9 (0 ref.)

Elastase inhibitor. Characterization of the human elastase inhibitor molecule associated with monocytes, macrophages, and neutrophils. Remold–O'Donnell E, et al. **J Exp Med** 1989 Mar 1;169(3):1071–86

Inhibition of human neutrophil and Pseudomonas elastases by the amyloid P–component: a constituent of elastic fibers and amyloid deposits. Vachino G, et al. **J Leukoc Biol** 1988 Dec;44(6):529–34

Inhibition of human leukocyte elastase by derivatives of N–hydroxysuccinimide. A structure–activity–relationship study. Groutas WC, et al. **J Med Chem** 1989 Jul; 32(7):1607–11

Interaction between leukocytic elastase and Kunitz–type inhibitors from bovine spleen. Fioretti E, et al. **J Protein Chem** 1989 Feb;8(1):51–60

Reasons for the ineffectiveness of eglin C to ameliorate endotoxin shock in sheep. Junger WG, et al. **Prog Clin Biol Res** 1989;308:953–7

[Anti–elastolytic inhibitory capacity and IgA deficiency—contribution to the etiopathogenesis of COPD] Schultek T, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:307–8 (Eng. Abstr.) **(Ger)**

BIOSYNTHESIS

Synthesis and processing of cathepsin L, an elastase, by human alveolar macrophages. Reilly JJ Jr, et al. **Biochem J** 1989 Jan 15;257(2):493–8

Molecular cloning of human neutrophil elastase. Farley D, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:3–7

Production and partial characterization of elastase of Bacillus subtilis isolated from the cervices of human females. Kaur M, et al. **Can J Microbiol** 1988 Jul;34(7):855–9

Elastase production in clinical isolates of Aspergillus. Rhodes JC, et al. **Diagn Microbiol Infect Dis** 1988 Jul;10(3):165–70

Synthesis, processing, and transport of Pseudomonas aeruginosa elastase. Kessler E, et al. **J Bacteriol** 1988 Nov; 170(11):5241–7

Role of alkaline protease and elastase in the adherence of Pseudomonas aeruginosa to WEHI cells. Trancassini M, et al. **Microbiologica** 1989 Jul;12(3):257–61

BLOOD

Immunoreactive polymorphonuclear leukocyte elastase in complex with alpha 1–antitrypsin in Kawasaki disease. Inamo Y, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Apr; 29(2):202–5

Changes in PMN–elastase in blood and in renal and plasma kallikrein–kinin systems after severe burn injury. Bönner G, et al. **Adv Exp Med Biol** 1988;240:499–503

Colocalization of elastase and myeloperoxidase in human blood and bone marrow neutrophils using a monoclonal antibody and immunogold. Cramer EM, et al. **Am J Pathol** 1989 Jun;134(6):1275–84

Proteolytic inactivation of dog lung surfactant–associated proteins by neutrophil elastase. Pison U, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):251–7

A simple and sensitive chromogen assay for the measurement of elastase–type enzyme activity in human plasma. Franck C, et al. **Biol Chem Hoppe Seyler** 1988 Aug;369(8):677–82

Mechanism of kinin release from human low–molecular–mass–kininogen by the synergistic action of human plasma kallikrein and leukocyte elastase. Sato F, et al. **Biol Chem Hoppe Seyler** 1988 Sep;369(9):1009–17

Neutrophil activation in pregnancy–induced hypertension. Greer IA, et al. **Br J Obstet Gynaecol** 1989 Aug; 96(8):978–82

Effect of cardiopulmonary bypass on circulating concentrations of leucocyte elastase and free radical activity. Hind CR, et al. **Cardiovasc Res** 1988 Jan; 22(1):37–41

Elevated serum elastase and alpha–1–antitrypsin levels in hemolytic uremic syndrome. Kaplan BS, et al. **Clin Nephrol** 1988 Oct;30(4):193–6

Relationship between neopterin and granulocyte elastase plasma levels and the severity of multiple organ failure. Pacher R, et al. **Crit Care Med** 1989 Mar;17(3):221–6

The disturbance of hemostasis in septic shock: role of neutrophil elastase and thrombin, effects of antithrombin III and plasma substitution. Seitz R, et al. **Eur J Haematol** 1989 Jul;43(1):22–8

Effect of piroxicam therapy on granulocyte function and granulocyte elastase concentration in peripheral blood and synovial fluid of rheumatoid arthritis patients. Montecucco C, et al. **Inflammation** 1989 Apr;13(2):211–20

Trypsin and elastase–1 in chronic pancreatic diseases. Vantini I, et al. **Int J Pancreatol** 1988;3 Suppl 1:S53–7 (9 ref.)

Inactivation of human antithrombin by neutrophil elastase. Kinetics of the heparin–dependent reaction. Jordan RE, et al. **J Biol Chem** 1989 Jun 25;264(18):10493–500

Neutrophil elastase and elastic tissue in emphysema [letter] Damiano VV. **J Clin Pathol** 1989 Jan;42(1):114–5

Modification of low density lipoproteins by polymorphonuclear cell elastase leads to enhanced uptake by human monocyte–derived macrophages via the low density lipoprotein receptor pathway. Polacek D, et al. **J Lipid Res** 1988 Jun;29(6):797–808

Phospholipase A in acute lung injury after trauma and sepsis: its relation to the inflammatory mediators PMN–elastase, C3a, and neopterin. Kellermann W, et al. **Klin Wochenschr** 1989 Feb 1;67(3):190–5

The role of leucocyte elastase in malignant tumors of the head and neck. Zöller E. **Laryngoscope** 1989 Sep; 99(9):971–3

Human neutrophil and mast cell proteases implicated in inflammation. Rest RF. **Methods Enzymol** 1988;163:309–27

Serum immunoreactive elastase: is it useful for the diagnosis of pancreatic cancer? Gullo L, et al. **Pancreas** 1989; 4(3):335–8

Serum elastase 1 in clinical practice. Lesi C, et al. **Pancreas** 1988;3(4):444–9

Effectiveness of discriminant analysis of serum CA 19–9 and elastase 1 in diagnosis of pancreatic carcinoma. Yamamura H, et al. **Pancreas** 1989;4(4):401–5

Changes of neutrophil elastase and alpha 1–antitrypsin in systemic lupus erythematosus. Zhang XH, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1989; 4(1):26–9

Structure of human neutrophil elastase in complex with a peptide chloromethyl ketone inhibitor at 1.84–A resolution. Navia MA, et al. **Proc Natl Acad Sci U S A** 1989 Jan; 86(1):7–11

An automated homogeneous enzyme immunoassay for human PMN elastase. Dreher M, et al. **Prog Clin Biol Res** 1989; 308:707–10

Validity of the elastase assay in intensive care medicine. Lang H, et al. **Prog Clin Biol Res** 1989;308:701–6

Plasma levels of granulocyte elastase and neopterin in patients with MOF. Pacher R, et al. **Prog Clin Biol Res** 1989; 308:683–8

Leukocyte neutral proteinase inhibitor of the pig: modification by eglin C and superoxide dismutase of the response to shock. Siebeck M, et al. **Prog Clin Biol Res** 1989;308:945–51

Behavior of leukocyte elastase and immunglobulins in septic toxic multiorgan involvement: observations on 50 gas gangrene cases. Tirpitz D. **Prog Clin Biol Res** 1989; 308:1007–23

Human leucocyte elastase and serum alpha 1–antitrypsin. Savolainen H, et al. **Res Commun Chem Pathol Pharmacol** 1988 Dec; 62(3):519–22

Elastase and papain inhibition by serum of mammals. Schulz H, et al. **Scand J Clin Lab Invest** 1989 Jun;49(4):381–8

Quantitative estimation of elastase–alpha 1–proteinase inhibitor (E–alpha 1 PI) complex in leukemia: marked elevation in cases of acute promyelocytic leukemia. Saito M, et al. **Thromb Res** 1989 Jan 15;53(2):163–71

[Behavior of leukocyte elastase in chronic inflammatory tonsillar diseases] Zöller E. **Laryngorhinootologie** 1989 Jun; 68(6):358–60 (Eng. Abstr.) **(Ger)**

[New aspects of the diagnosis of pancreatic cancer by determination of granulocyte elastase] Dütschke P, et al. **Med Klin** 1989 Feb 15;84(2):77–80 (Eng. Abstr.) **(Ger)**

[Effects of urinastatin on the serum activities of granulocyte elastase, beta–glucuronidase and pancreatic secretory trypsin inhibitor in patients having open cardiac surgery] Doi H, et al. **Masui** 1988 Aug;37(8):975–80 (Eng. Abstr.) **(Jpn)**

[Characteristics of elastolysis and lipid metabolism in arterial hypertension in the middle–aged and elderly] Persidskii IV. **Vrach Delo** 1988 Nov;(11):42–5 (Eng. Abstr.) **(Rus)**

[Plasma leukocyte elastase in septic processes. Experience in surgical patients] León G, et al. **Rev Med Chil** 1988 May; 116(5):449–54 (Eng. Abstr.) **(Spa)**

CEREBROSPINAL FLUID

Cerebrospinal fluid alpha–1–antitrypsin

alpha-1-antitrypsin-elastase complex levels in meningitis. Hoffman HD, et al. **Eur J Clin Invest** 1989 Feb;19(1):26-9

[Polymorphonuclear leukocyte elastase in the cerebrospinal fluid in the diagnosis of acute inflammatory central nervous system diseases] Stöffler A, et al. **Nervenarzt** 1989 Jul; 60(7):420-4 **(Ger)**

GENETICS

The human neutrophil elastase gene. Analysis of the nucleotide sequence reveals three distinct classes of repetitive DNA. Farley D, et al. **Biol Chem Hoppe Seyler** 1989 Jul;370(7):737-44

Differential requirements for cell-specific elastase I enhancer domains in transfected cells and transgenic mice. Swift GH, et al. **Genes Dev** 1989 May;3(5):687-96

Structural gene and complete amino acid sequence of Pseudomonas aeruginosa IFO 3455 elastase. Fukushima J, et al. **J Bacteriol** 1989 Mar;171(3):1698-704

Structure of the human neutrophil elastase gene. Takahashi H, et al. **J Biol Chem** 1988 Oct 15;263(29):14739-47

Expression of the neutrophil elastase gene during human bone marrow cell differentiation. Fouret P, et al. **J Exp Med** 1989 Mar 1;169(3):833-45

Role of exotoxin A and elastase in the pathogenicity of Pseudomonas aeruginosa strain PAO experimental mouse burn infection. Wretlind B, et al. **Microb Pathog** 1987 Jun; 2(6):397-404

IMMUNOLOGY

Production and characterization of monoclonal antibodies to human pancreatic elastase 2. Shirasu Y, et al. **Hybridoma** 1988 Oct;7(5):485-93

Circulating anti-elastase in systemic lupus erythematosus [letter] Nässberger L, et al. **Lancet** 1989 Mar 4;1(8636):509

ISOLATION & PURIFICATION

Human bronchial proteinase inhibitor: rapid purification procedure and inhibition of leucocyte elastase in presence and in absence of human lung elastin. Boudier C, et al. **Adv Exp Med Biol** 1988;240:115-22

Purification and characterization of chymotrypsin, trypsin and elastase like proteinases from cod (Gadus morhua L.). Raae AJ, et al. **Comp Biochem Physiol [B]** 1989; 93(2):317-24

Identification of a uterine elastase in the pregnant rat uterus. Percival S, et al. **Proc Soc Exp Biol Med** 1988 Oct; 189(1):117-29

[Isolation and primary characteristics of elastase from a clinical strain of Pseudomonas aeruginosa] El-Bazza ZE, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Nov; (11):6-11 (Eng. Abstr.) **(Rus)**

METABOLISM

Detection of granulocyte elastase specific IgG split products in rheumatoid synovial fluid. Eckle I, et al. **Adv Exp Med Biol** 1988;240:531-4

Lysosomal enzymes and granulocyte elastase in synovial fluid after multiple traumatic injuries. Hörl M, et al. **Adv Exp Med Biol** 1988;240:519-22

Hemodialysis with cuprophane membranes leads to alteration of granulocyte oxidative metabolism and leukocyte sequestion in the lung. Kolb G, et al. **Adv Exp Med Biol** 1988;240:377-84

Neutrophil elastase, thrombin and plasmin in septic shock. Seitz R, et al. **Adv Exp Med Biol** 1988;240:481-4

Activation of rabbit aortic elastase by nonaortic intraabdominal surgery. Cohen JR, et al. **Ann Vasc Surg** 1988 Apr;2(2):133-7

The role of human neutrophil elastase in the premature rupture of membranes. Kanayama N, et al. **Asia Oceania J Obstet Gynaecol** 1988 Sep;14(3):389-97

Free radicals inactivate human neutrophil elastase and its inhibitors with comparable efficiency. Dean RT, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):821-7

Influence of heparin fragments on the biological activities of elastase(s) and alpha 1 proteinase inhibitor. Redini F, et al. **Biochem Pharmacol** 1988 Nov 15;37(22):4257-61

Schistosome elastases: biological importance, structure, function and stage-specific expression. Newport G, et al. **Biochem Soc Symp** 1987;53:115-21 (23 ref.)

Human leukocyte and porcine pancreatic elastase: X-ray crystal structures, mechanism, substrate specificity, and mechanism-based inhibitors. Bode W, et al. **Biochemistry** 1989 Mar 7;28(5):1951-63 (94 ref.)

An elastase-dependent pathway of plasminogen activation. Machovich R, et al. **Biochemistry** 1989 May 16; 28(10):4517-22

Investigation of the active center of rat pancreatic elastase. Bieth JG, et al. **Biochim Biophys Acta** 1989 Jan 19; 994(1):64-74

Identification of the rate-limiting step in serine proteinases from the effect of temperature on steady-state kinetics. Fitzpatrick PF. **Biochim Biophys Acta** 1989 Apr 6; 995(2):201-3

Esterolytic, elastase-like activity of purified alkaline proteinase from Aspergillus sojae. Gertler A, et al. **Biochim Biophys Acta** 1971 May 12;235(2):378-80

Alterations of elastin and elastase-like activities in aortae of diabetic rats. Kwan CY, et al. **Biochim Biophys Acta** 1988 Nov 17;967(2):322-5

Similar binding sites for unsaturated fatty acids and alkyl 2-pyrone inhibitors of human sputum elastase. Cook L, et al. **Biol Chem Hoppe Seyler** 1988 Jul;369(7):627-31

Column separation using Bio-Gel P100 for the characterization of the products of human lung elastin degradation by leucocyte elastase and cathepsin G. Smyrlaki M, et al. **Biomed Chromatogr** 1986 Feb;1(1):27-30

Chromatographic studies of human lung elastin digestion products obtained by leucocyte elastase: comparison between newborn and adult soluble fragments. Smyrlaki M, et al. **Biomed Chromatogr** 1987;2(2):57-61

Neutrophil function in ischemic heart disease. Mehta J, et al. **Circulation** 1989 Mar;79(3):549-56

Elastase 1 and chymotrypsin B in pancreatic juice and feces. Sziegoleit A, et al. **Clin Biochem** 1989 Apr;22(2):85-9

Elastase-like protease and elastolytic activities expressed in cultured dermal fibroblasts derived from lesional skin of patients with pseudoxanthoma elasticum, actinic elastosis, and cutis laxa. Schwartz E, et al. **Clin Chim Acta** 1988 Aug 31;176(2):219-24

Evidence for lipid-associated serine proteases and metalloproteases in human bronchoalveolar lavage fluid. Burnett D, et al. **Clin Sci** 1988 Dec;75(6):601-7

Elastase activity of bronchoalveolar cells in advanced pulmonary sarcoidosis. Mordelet-Dambrine M, et al. **Eur Respir J** 1988 Aug;1(8):748-57

Immunoelectron-microscopic demonstration of elastase in emphysematous lungs of tight-skin mice. de Santi MM, et al. **Exp Mol Pathol** 1989 Aug;51(1):18-30

Activation of matrix metalloproteinase 3 (stromelysin) and matrix metalloproteinase 2 ('gelatinase') by human neutrophil elastase and cathepsin G. Okada Y, et al. **FEBS Lett** 1989 Jun 5;249(2):353-6

Localization and characterization of the glycosylation site of human pancreatic elastase 1. Wendorf P, et al. **FEBS Lett** 1989 Jun 5;249(2):275-8

Diagnosis of acute myeloid leukaemia with the use of monoclonal anti-neutrophil elastase (NP57) reactive with routinely processed biopsy samples. Ralfkiaer E, et al. **Histopathology** 1989 Jun;14(6):637-43

Elastase in the pathogenic free-living amoebae Naegleria and Acanthamoeba spp. Ferrante A, et al. **Infect Immun** 1988 Dec;56(12):3320-1

Release of elastase from purified human lung mast cells and basophils. Identification as a Hageman factor cleaving enzyme. Meier HL, et al. **Inflammation** 1989 Jun; 13(3):295-308

Specificity of alkaline elastase Bacillus on the oxidized insulin A- and B-chains. Tsai YC, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):416-20

Alveolar fluid neutrophil elastase activity in the adult respiratory distress syndrome is complexed to alpha-2-macroglobulin. Wewers MD, et al. **J Clin Invest** 1988 Oct;82(4):1260-7

Use of monoclonal antibody against human neutrophil elastase in normal and leukaemic myeloid cells. Pulford KA, et al. **J Clin Pathol** 1988 Aug;41(8):853-60

Binding of the recombinant proteinase inhibitor eglin c from leech Hirudo medicinalis to human leukocyte elastase, bovine alpha-chymotrypsin and subtilisin Carlsberg: thermodynamic study. Ascenzi P, et al. **J Enzym Inhib** 1988;2(3):167-72

Characterization of human skin fibroblasts elastase activity. Homsy R, et al. **J Invest Dermatol** 1988 Nov;91(5):472-7

The effect of cigarette smoking on rabbit aortic elastase activity. Cohen JR, et al. **J Vasc Surg** 1989 Apr;9(4):580-2

Granulocyte elastase-mediated proteolysis of alpha 1-antitrypsin in cystic fibrosis bronchopulmonary secretions. Cantin A, et al. **Pediatr Pulmonol** 1989;7(1):12-7

Effect of elastase on blood pressure and urinary excretions of prostaglandins and catecholamines in the spontaneously hypertensive rat (SHR). Watanabe M, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Dec; 34(3):181-6

Evidence for regulation of endothelial plasminogen-activating system by polymorphonuclear leukocyte elastase. Gilboa N, et al. **Thromb Res** 1989 Jun 1;54(5):467-75

Elastase-like activity in cultured aortic endothelial cells. Menashi S, et al. **Thromb Res** 1989 Jan 1;53(1):11-8

The effect of allopurinol on lysosomal enzyme release. Mikulíková D, et al. **Z Rheumatol** 1989 Jan-Feb;48(1):26-9

[Elastase activity of the sputum and the functional activity of serum alpha 1-antitrypsin in patients with chronic obstructive pulmonary disease] Zhou SW. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Oct; 11(5):269-70, 318 (Eng. Abstr.) **(Chi)**

[The role of elastolytic enzymes and smoking in the pathogenesis of emphysema] Szemenyei K. **Morphol Igazsagugyi Orv Sz** 1989 Jan;29(1):30-8 (87 ref.) (Eng. Abstr.) **(Hun)**

PHARMACOKINETICS

Defenses of the hamster lung against human neutrophil and porcine pancreatic elastase. Stone PJ, et al. **Respiration** 1988;54(1):1-15

PHARMACOLOGY

Experimental studies on the adult respiratory distress syndrome: elastase infusion in normal and agranulocytic minipigs. Burchardi H, et al. **Adv Exp Med Biol** 1988; 240:149-57

Human neutrophil elastase causes glycoconjugate release from the epithelial cell surface of hamster trachea in organ culture. Breuer R, et al. **Am Rev Respir Dis** 1989 Mar; 139(3):779-82

The structural basis for neutrophil inactivation of C1 inhibitor. Pemberton PA, et al. **Biochem J** 1989 Feb 15; 258(1):193-8

Elastolytic activity of Pseudomonas aeruginosa elastase. Saulnier JM, et al. **Biochim Biophys Acta** 1989 May 1; 995(3):285-90

Comparative effects of isosorbide dinitrate, prednisolone, indomethacin, and elastase on the development of monocrotaline-induced pulmonary hypertension. Kato T, et al. **Exp Mol Pathol** 1989 Jun;50(3):303-15

Biological properties of pancreatic elastase in relation to atherosclerotic disease. Franzone JS, et al. **Int J Tissue React** 1988;10(4):233-43

Effects of elastase-induced emphysema on airway responsiveness to methacholine in rats. Bellofiore S, et al. **J Appl Physiol** 1989 Feb;66(2):606-12

Effects of starvation and refeeding on elastase-induced emphysema. Sahebjami H, et al. **J Appl Physiol** 1989 Jun; 66(6):2611-6

Distinct and additive effects of elastase and endotoxin on expression of alpha 1 proteinase inhibitor in mononuclear phagocytes. Perlmutter DH, et al. **J Biol Chem** 1988 Nov 5;263(31):16499-503

Cleavage of collagen type X by human synovial collagenase and neutrophil elastase. Gadher SJ, et al. **Matrix** 1989 Mar; 9(2):109-15

PHYSIOLOGY

Neutrophil elastase and cathepsin G: structure, function, and biological control. Watorek W, et al. **Adv Exp Med Biol** 1988;240:23-31

Inactivation of human gamma interferon by Pseudomonas aeruginosa proteases: elastase augments the effects of alkaline protease despite the presence of alpha 2-macroglobulin. Horvat RT, et al. **Infect Immun** 1989 Jun; 57(6):1668-74

Lytic effect of Pseudomonas aeruginosa elastase on gram-positive and -negative bacteria. Kaur M, et al. **Int J Med Microbiol** 1989 Jul;271(2):153-7

The human neutrophil serine proteinases, elastase and cathepsin G, can mediate glomerular injury in vivo. Johnson RJ, et al. **J Exp Med** 1988 Sep 1;168(3):1169-74

Antiglomerular basement membrane nephritis in beige mice. Deficiency of leukocytic neutral proteinases prevents the induction of albuminuria in the heterologous phase. Schrijver G, et al. **J Exp Med** 1989 Apr 1;169(4):1435-48

Morphometric analysis of the degradation of human skin elastic fibres by human leukocyte elastase (EC 3-4-21-37) and human skin fibroblast elastase (EC 3-4-24). Godeau G, et al. **Pathol Biol (Paris)** 1988 Nov;36(9):1133-8 (18 ref.)

Role of elastase and elastase-like enzymes in the pathogenesis of some diseases. Ledvina M. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove** 1988;31(5):455-72 (81 ref.)

[Changes of neutrophil elastase in COPD and the role of elastase in experimental pulmonary hypertension] Yan YZ. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Dec; 11(6):324-6, 384 (Eng. Abstr.) **(Chi)**

[Human leukocyte elastase] Bieth JG. **Pathol Biol (Paris)** 1988 Nov;36(9):1108-11 (9 ref.) (Eng. Abstr.) **(Fre)**

[Elastases and pulmonary pathologies] Lafuma C. **Pathol Biol (Paris)** 1988 Nov;36(9):1124-32 (41 ref.) (Eng. Abstr.) **(Fre)**

[Polymorphonuclear leukocyte elastase (PMNE) levels in sepsis; the effect of PMNE on multiple organ failure (MOF)] Tanaka H, et al. **Nippon Geka Gakkai Zasshi** 1989 Mar;90(3):334-42 (Eng. Abstr.) **(Jpn)**

SECRETION

Elastase-1-secreting acinar cell carcinoma of the pancreas. A cytologic, electron microscopic and histochemical study. Ishihara A, et al. **Acta Cytol** 1989 Mar-Apr;33(2):157-63

Elastase activities of human bladder cancer cell lines derived from high grade invasive tumours. Grant AJ, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):308-15

Release of granulocyte elastase and complement changes during hysterectomy. Wanscher M, et al. **Scand J Clin Lab Invest** 1989 May;49(3):255-8

THERAPEUTIC USE

Promotive effect of elastase on regression of aortic atherosclerosis in cholesterol-fed quails. Toda T, et al. **Exp Pathol** 1989;36(4):201-9

[Histopathological study regarding the protective effect of elastase on cis-platinum-induced renal toxicity] Suzuki M, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 May 20; 24(5):941-7 (Eng. Abstr.) **(Jpn)**

[The effect of elastase on Masugi nephritis in rats] Tsumuraya T, et al. **Nippon Jinzo Gakkai Shi** 1988 Nov;30(11):1333-8 (Eng. Abstr.) **(Jpn)**

TOXICITY

An 18-month study of the effects on hamster lungs of intratracheally administered human neutrophil elastase. Lucey EC, et al. **Exp Lung Res** 1988;14(5):671-86

PANCREOZYMIN see CHOLECYSTOKININ

PANCREOZYMIN RECEPTORS see RECEPTORS, CHOLECYSTOKININ

PANCURONIUM

Effect of N2O on segmental left ventricular function and effective arterial elastance in pigs when added to a halothane–fentanyl–pancuronium anesthetic technique. Coetzee A, et al. **Anesth Analg** 1989 Sep;69(3):313–22

Clinical use of the neuromuscular blocking agents atracurium and pancuronium for equine anesthesia. Hildebrand SV, et al. **J Am Vet Med Assoc** 1989 Jul 15;195(2):212–9

[The effect of pancuronium and norcuron on hemodynamics, coronary circulation and myocardial oxygen consumption in coronary surgery patients] Günnicker M, et al. **Anasth Intensivther Notfallmed** 1989 Apr;24(2):88–93 (Eng. Abstr.) **(Ger)**

[Atracurium in obstetric anesthesia. Comparison with pancuronium bromide] Piva L, et al. **Minerva Anestesiol** 1988 Jan–Feb;54(1–2):49–53 (Eng. Abstr.) **(Ita)**

ADMINISTRATION & DOSAGE

Administration of vecuronium, atracurium and pancuronium in divided doses: effect on onset and duration of action. Brady MM, et al. **Eur J Anaesthesiol** 1988 Jul;5(4):243–9

Simulating the time–course of clinical paralysis. Shanks CA. **Int J Clin Monit Comput** 1988;5(4):201–5

ADVERSE EFFECTS

The incidence of myocardial ischemia during anesthesia for coronary artery bypass surgery in patients receiving pancuronium or vecuronium. O'Connor JP, et al. **Anesthesiology** 1989 Feb;70(2):230–6

Cardiovascular effects of pipecuronium and pancuronium in patients undergoing coronary artery bypass grafting. Tassonyi E, et al. **Anesthesiology** 1988 Nov;69(5):793–6

Pancuronium allergy: a case report. Patriarca G, et al. **Br J Anaesth** 1989 Feb;62(2):210–2

Problems with pancuronium in the neonatal intensive care unit. Bergin AM, et al. **Ir Med J** 1988 Nov;81(1):39–40

Prolonged paralysis associated with long–term pancuronium use. Haas JL, et al. **Pharmacotherapy** 1989;9(3):154–7

ANTAGONISTS & INHIBITORS

Neostigmine and edrophonium as antagonists of atracurium and pancuronium. Sanfilippo M, et al. **Acta Anaesthesiol Scand** 1988 Aug;32(6):437–40

Phenytoin–induced resistance to pancuronium. Use of atracurium infusion in management of a neurosurgical patient. Hickey DR, et al. **Anaesthesia** 1988 Sep;43(9):757–9

Atropine–neostigmine mixture: a dose–response study. Naguib M, et al. **Can J Anaesth** 1989 Jul;36(4):412–7

BLOOD

Pancuronium bromide in the intensive care unit: a case of overdose. Vandenbrom RH, et al. **Anesthesiology** 1988 Dec; 69(6):996–7

DIAGNOSTIC USE

The acute effect of cordocentesis with or without fetal curarization and of intravascular transfusion upon umbilical artery waveform indices. Weiner CP, et al. **Obstet Gynecol** 1989 Feb;73(2):219–24

PHARMACOKINETICS

Uptake and excretion of vecuronium bromide and pancuronium bromide in the isolated perfused rat liver. Bencini AF, et al. **Anesthesiology** 1988 Oct;69(4):487–92

Pipecuronium and pancuronium: comparison of pharmacokinetics and duration of action. Caldwell JE, et al. **Br J Anaesth** 1988 Dec;61(6):693–7

PHARMACOLOGY

Atracurium and pancuronium in renal insufficiency. Berntman L, et al. **Acta Anaesthesiol Scand** 1989 Jan; 33(1):48–52

Train–of–four fade during onset of neuromuscular block with nondepolarising neuromuscular blocking agents. Gibson FM, et al. **Acta Anaesthesiol Scand** 1989 Apr;33(3):204–6

Pancuronium bromide does not lower airway pressures during intermittent positive pressure ventilation in young cats. Norsted T, et al. **Acta Anaesthesiol Scand** 1989 Jan; 33(1):21–5

Intravenous administration of d–tubocurarine and pancuronium in fetal limbs. Chestnut DH, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):510–3

Muscle strength following anaesthesia with atracurium and pancuronium. O'Connor M, et al. **Anaesth Intensive Care** 1988 Aug;16(3):255–9

A comparison of the response of hand and facial muscles to non–depolarising relaxants. Pathak D, et al. **Anaesthesia** 1988 Sep;43(9):747–8

Ketamine potentiates nondepolarizing neuromuscular relaxants in a primate. Tsai SK, et al. **Anesth Analg** 1989 Jan;68(1):5–8

Atracurium, vecuronium, and pancuronium do not alter the minimum alveolar concentration of halothane in humans. Fahey MR, et al. **Anesthesiology** 1989 Jul;71(1):53–6

Pancuronium, gallamine, and d–tubocurarine compared: is speed of onset inversely related to drug potency? Kopman AF. **Anesthesiology** 1989 Jun;70(6):915–20

Cerebral function and muscle afferent activity following intravenous succinylcholine in dogs anesthetized with halothane: the effects of pretreatment with a defasciculating dose of pancuronium [published erratum appears in Anesthesiology 1989 Sep;71(3):482] Lanier WL, et al. **Anesthesiology** 1989 Jul;71(1):87–95

Differential effects of pancuronium on masseter and adductor pollicis muscles in humans. Smith CE, et al. **Anesthesiology** 1989 Jul;71(1):57–61

Actions of enflurane, isoflurane, vecuronium, atracurium, and pancuronium on pulmonary resistance in dogs. Vettermann J, et al. **Anesthesiology** 1988 Nov;69(5):688–95

Variability of Doppler flow velocity and cerebral perfusion pressure is reduced in the neonate by sedation and neuromuscular blockade. Colditz PB, et al. **Aust Paediatr J** 1989 Jun;25(3):171–3

Renal effects of d–tubocurarine and pancuronium in the newborn rabbit. Gouyon JB, et al. **Biol Neonate** 1988; 54(4):218–23

Effects of pipecuronium and pancuronium on the isolated rabbit heart. Deam RK, et al. **Br J Anaesth** 1989 Mar; 62(3):287–9

Influence of suxamethonium on the action of subsequently administered vecuronium or pancuronium. Ono K, et al. **Br J Anaesth** 1989 Mar;62(3):324–6

The induction phase of neuromuscular block after suxamethonium and pancuronium: analysis of the time constant of single–twitch decay (tau T1). Romano E, et al. **Eur J Anaesthesiol** 1988 May;5(3):161–70

Pancuronium–phenytoin interaction: a case of decreased duration of neuromuscular blockade. Liberman BA, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Aug;26(8):371–4

[Onset and duration of action times for the new muscle relaxants vecuronium and atracurium. Comparison with pancuronium] Melloni C, et al. **Minerva Anestesiol** 1988 Jun;54(6):233–48 (Eng. Abstr.) **(Ita)**

[A clinical and experimental study on potentiation with sevoflurane of neuromuscular blocking effects of vecuronium and pancuronium] Itagaki T, et al. **Masui** 1988 Aug;37(8):943–54 (Eng. Abstr.) **(Jpn)**

[Resistance to pancuronium caused by theophylline and forskolin] García E, et al. **Rev Esp Anestesiol Reanim** 1988 Jul–Aug;35(4):191–3 (Eng. Abstr.) **(Spa)**

POISONING

Accidental subarachnoid injection of pancuronium. Peduto VA, et al. **Anesth Analg** 1989 Oct;69(4):516–7

THERAPEUTIC USE

Pancuronium and tetanus in the elderly [letter] Bouffet E, et al. **Chest** 1988 Nov;94(5):1114–5

Nursing interventions: the infant treated with pancuronium bromide. Simoes J, et al. **J Perinatol** 1989 Jun;9(2):215–8 (36 ref.)

Use of pancuronium bromide to inhibit fetal movement during magnetic resonance imaging. A case report. Lenke RR, et al. **J Reprod Med** 1989 Apr;34(4):315–7

[The effect of succinylcholine–induced hyperkalemia following pancuronium pretreatment] Chen WB, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Sep;26(3):289–94 (Eng. Abstr.) **(Chi)**

PANCYTOPENIA

BLOOD

Granulocytic macrophage colony stimulating factor restores in vitro growth of granulocyte–macrophage bone marrow hematopoietic progenitors in dyskeratosis congenita. Michalevicz R, et al. **Isr J Med Sci** 1989 Apr;25(4):193–5

CHEMICALLY INDUCED

Another case of procainamide–induced pancytopenia [letter] Gill KS, et al. **Am J Hematol** 1989 Aug;31(4):298

Pancytopenia and methotrexate with trimethoprim–sulfamethoxazole [letter] Jeurissen ME, et al. **Ann Intern Med** 1989 Aug 1;111(3):261

Methotrexate–associated, early–onset pancytopenia in rheumatoid arthritis. Doolittle GC, et al. **Arch Intern Med** 1989 Jun;149(6):1430–1

Megaloblastic pancytopenia associated with dapsone and trimethoprim treatment of Pneumocystis carinii pneumonia in the acquired immunodeficiency syndrome [letter] McKinsey DS, et al. **Arch Intern Med** 1989 Apr;149(4):965

Pancytopenia induced by low–dose methotrexate for rheumatoid arthritis. Kevat SG, et al. **Aust N Z J Med** 1988 Aug;18(5):697–700

Ulcerative colitis: prolonged remission following azathioprine–induced pancytopenia. Burke DA, et al. **J Clin Gastroenterol** 1989 Jun;11(3):327–30

Pancytopenia, rash and fever caused by diethylstilbestrol used for prostate cancer. Collins D. **J Rheumatol** 1989 Mar; 16(3):408–9

Methotrexate therapy for psoriasis [letter] **JAMA** 1988 Nov 25;260(20):3003–5

[Pancytopenia during low–dose oral methotrexate therapy of psoriatic arthritis] Kohler S, et al. **Dtsch Med Wochenschr** 1989 Aug 25;114(34):1286–8 (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Gangrenous cellulitis associated with gram–negative bacilli in pancytopenic patients: dilemma with respect to effective therapy. Kusne S, et al. **Am J Med** 1988 Oct;85(4):490–4

Ulceration of the entire small intestine accompanied by rash, hepatitis and pancytopenia. Park RH, et al. **Postgrad Med J** 1989 Jan;65(759):45–8

[A syndrome associating severe fever bouts, hepatic disorder, pancytopenia and disseminated intravascular coagulation in the course of Still's disease in adults] Masson C, et al. **Rev Rhum Mal Osteoartic** 1989 Jun;56(7):559–62 (20 ref.) **(Fre)**

[Subacute necrotizing lymphadenitis with pancytopenia and proliferation of histiocytes in bone marrow] Inaba T, et al. **Rinsho Ketsueki** 1988 Jul;29(7):1120–4 (Eng. Abstr.) **(Jpn)**

[Pancytopenia in bronchogenic lung cancer] Kholoshina GI, et al. **Ter Arkh** 1989;61(3):128–9 **(Rus)**

CONGENITAL

A syndrome of progressive pancytopenia with microcephaly, cerebellar hypoplasia and growth failure. Hreidarsson S, et al. **Acta Paediatr Scand** 1988 Sep;77(5):773–5

DIAGNOSIS

Clastogen–induced fragility may differentiate pancytopenia of congenital dyskeratosis from Fanconi anaemia. Schneider A, et al. **Eur J Pediatr** 1988 Oct;148(1):37–9

ETIOLOGY

Myelofibrosis and pancytopenia in systemic lupus erythematosus. el Mouzan MI, et al. **Acta Haematol (Basel)** 1988;80(4):219–21

Marrow hypoplasia associated with a monoclonal CD8 large granular lymphocyte proliferation: reversal with cyclophosphamide and prednisone. Lust JA, et al. **Am J Med** 1989 Aug;87(2):214–7

Human immunodeficiency virus (HIV) and aplastic anemia [letter] Grau JM, et al. **Ann Intern Med** 1989 Apr 1; 110(7):576–7

Human parvovirus B19–induced transient pancytopenia in a child with hereditary spherocytosis. Hanada T, et al. **Br J Haematol** 1988 Sep;70(1):113–5

Pancytopenia in a patient receiving home intravenous nutrition. Wagner S, et al. **Eur J Clin Nutr** 1988 Dec; 42(12):1029–34

Pancytopenia––a rare manifestation of folic acid deficiency. Hansen PB, et al. **J Intern Med** 1989 Feb;225(2):143–4

Transient pancytopenia as an initial manifestation of hereditary spherocytosis. A case report. Frick W, et al. **Mo Med** 1987 Feb;84(2):73–5

Reversible pancytopenia following OKT3. Use in the context of multidrug immunosuppression for kidney allografting. Burke GW 3d, et al. **Transplantation** 1989 Sep;48(3):403–8

[A case of Reiche's tuberculosis, acute tuberculosis with hematologic manifestations] Zegaya M, et al. **Rev Mal Respir** 1988;5(6):655–7 (Eng. Abstr.) **(Fre)**

[A 57–year–old patient with peripheral pancytopenia] Fink M, et al. **Internist (Berlin)** 1989 Mar;30(3):210–3 **(Ger)**

[Splenomegaly and peripheral pancytopenia in a 62–year–old patient] Hoever C, et al. **Internist (Berlin)** 1988 Sep; 29(9):641–5 **(Ger)**

[Lymphomas and cytopenias in AIDS] Hoelzer D. **Verh Dtsch Ges Inn Med** 1988;94:506–11 (16 ref.) **(Ger)**

[AIDS with fever, giant splenomegaly and severe pancytopenia] Matsubara M, et al. **Rinsho Ketsueki** 1988 May;29(5):748–55 (Eng. Abstr.) **(Jpn)**

[A case report of angioimmunoblastic lymphadenopathy accompanying pancytopenia and bone marrow fibrosis] Saito T, et al. **Rinsho Ketsueki** 1988 Nov;29(11):2073–8 (Eng. Abstr.) **(Jpn)**

[Cystic angiomatosis of bone with hematologic involvement. Report of a case] Guisasola FJ, et al. **An Esp Pediatr** 1988 May;28(5):455–8 (Eng. Abstr.) **(Spa)**

[Cytopenia in patients with HIV infection] Martínez Santos P, et al. **Rev Clin Esp** 1988 Nov;183(8):397–400 (Eng. Abstr.) **(Spa)**

GENETICS

Ataxia–pancytopenia and monosomy 7 syndrome. Daghistani D, et al. **J Pediatr** 1989 Jul;115(1):108–10

IMMUNOLOGY

[Evans' syndrome and immunologic pancytopenia in childhood] Muñoz Villa A, et al. **Sangre (Barc)** 1988 Oct; 33(5):383–6 (Eng. Abstr.) **(Spa)**

MICROBIOLOGY

Parvovirus infection, leukaemia, and immunodeficiency [letter] **Lancet** 1989 Jan 14;1(8629):101–2

PATHOLOGY

[Pancytopenia resembling leukemia as the initial symptom of alveolar rhabdomyosarcoma of the testis] Mechtersheimer G, et al. **Pathologe** 1989 Jul;10(4):252–6 **(Ger)**

THERAPY

Successful treatment of infantile immune pancytopenia with simultaneous infusion of high-dose gammaglobulin and methylprednisolone. Hanada T, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Jul;51(4):791-6

PANGAMIC ACID see under **VITAMIN B COMPLEX**

PANIC see under **FEAR**

PANLEUKOPENIA, FELINE see **FELINE INFECTIOUS ENTERITIS**

PANNICULITIS

Lupus erythematosus panniculitis. Izumi AK. **Clin Dermatol** 1985 Jul-Sep;3(3):69-78 (36 ref.)

Lupus erythematosus panniculitis. Peters MS, et al. **Med Clin North Am** 1989 Sep;73(5):1113-26 (46 ref.)

[Panniculitis] Pisklivets ZS, et al. **Klin Khir** 1988;(7):66 (Rus)

BLOOD

Detection of circulating tumour necrosis factor in systemic histiocytosis. Maury CP, et al. **Br J Haematol** 1989 Feb; 71(2):293-5

CHEMICALLY INDUCED

Panniculitis following steroid therapy. Saxena AK, et al. **Cutis** 1988 Oct;42(4):341-2

COMPLICATIONS

Severe periorbital oedema in association with lupus erythematosus profundus. Sheehan-Dare RA, et al. **Clin Exp Dermatol** 1988 Nov;13(6):406-7

Active chronic hepatitis and febrile panniculitis. Banerjee AK, et al. **Gut** 1989 Jul;30(7):1018-9

Plasma cell panniculitis: a unique clinical and pathologic presentation of linear scleroderma. Vincent F, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 2):357-60

DIAGNOSIS

Cytophagic panniculitis and lupus panniculitis versus Weber-Christian disease [letter; comment] Conti JA, et al. **Am J Med** 1989 Jul;87(1):3-4. **Comment on:** Am J Med 1988 Aug;85(2):276-8

Immune-mediated panniculitis, mimicking pancreatic-disease-associated fat necrosis. Hainaut P, et al. **Clin Rheumatol** 1988 Dec;7(4):522-6

Panniculitis in childhood. Aronson IK, et al. **Pediatr Dermatol** 1988 Nov;5(4):216-30 (83 ref.)

ETIOLOGY

Brawny cutaneous induration and granulomatous panniculitis in large cell non-Hodgkin's (T suppressor/cytotoxic cell) lymphoma. Ashworth J, et al. **Br J Dermatol** 1989 Apr; 120(4):563-9

Calcifying panniculitis and kidney failure. Considerations on pathogenesis and treatment of calciphylaxis. Grob JJ, et al. **Int J Dermatol** 1989 Mar;28(2):129-31

[Eosinophilic migratory nodular panniculitis (human gnathostomiasis)] Kaminsky CA, et al. **Med Cutan Ibero Lat Am** 1989;17(3):158-62 (Eng. Abstr.) (Spa)

IMMUNOLOGY

[Follow-up study on cytophagic histiocytic panniculitis with abnormal immunologic findings] Ichikawa H, et al. **Nippon Hifuka Gakkai Zasshi** 1989 Jan;99(1):45-52 (Eng. Abstr.) (Jpn)

MORTALITY

Cytophagic histiocytic panniculitis is not always fatal. White JW Jr, et al. **J Cutan Pathol** 1989 Jun;16(3):137-44

PATHOLOGY

Melanophagic dermatitis and panniculitis. A condition revealing an occult metastatic malignant melanoma. Piérard GE. **Am J Dermatopathol** 1988 Apr;10(2):133-6

Atrophic annular panniculitis of the ankles. Nelson HM. **Clin Exp Dermatol** 1988 Mar;13(2):111-3

Cytophagic histiocytic panniculitis. Case report with resolution after treatment. Alegre VA, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 2):875-8

Histiocytic cytophagic panniculitis. Alegre VA, et al. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 1):177-85 (67 ref.)

[Acute disseminated multinodular non-recurrent fat necrosis in children] Labeille B, et al. **Ann Dermatol Venereol** 1988; 115(11):1134-5 (Fre)

[Lupus erythematosus profundus] Trubuil A, et al. **Ann Dermatol Venereol** 1989;116(2):129-30 (Fre)

[Necrotizing panniculitis in pancreatitis] Schumacher B, et al. **Z Gastroenterol** 1989 Jan;27(1):6-9 (Eng. Abstr.) (Ger)

[Cytophagic histiocytic panniculitis--a T cell disorder with proliferation of macrophages?] Iwasaki M, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Nov;98(12):1235-47 (34 ref.) (Eng. Abstr.) (Jpn)

PANNICULITIS, LUPUS ERYTHEMATOSUS see under **PANNICULITIS**

PANNICULITIS, NODULAR NONSUPPURATIVE

Mesenteric panniculitis. Khachaturian T, et al. **West J Med** 1988 Jun;148(6):700-1

[Pfeifer-Weber-Christian panniculitis] Ivanov BA. **Khirurgiia (Mosk)** 1989 Apr;(4):138 (Rus)

[The clinical spectrum of Weber-Christian disease] Zgradić I, et al. **Med Pregl** 1988;41(9-10):420-2 (Eng. Abstr.) (Scr)

COMPLICATIONS

Weber-Christian disease associated with multiple perforations of the ileum and colon. Kiguchi H, et al. **Am J Gastroenterol** 1989 Jul;84(7):808-10

Relapsing polychondritis and Weber-Christian disease. Smith CR, et al. **Br J Rheumatol** 1988 Dec;27(6):486-9

Systemic Weber-Christian disease with portal hypertension and oesophageal varices. Broe PJ, et al. **J R Soc Med** 1988 Nov;81(11):669-70

Dyslipoproteinemia and an inhibitor of lipolytic enzymes in Weber-Christian disease. Shirai K, et al. **Jpn J Med** 1989 May-Jun;28(3):366-73

[Breast localization of an ischemic appearance disclosing Weber-Christian disease (letter)] Bauduceau B, et al. **Ann Med Interne (Paris)** 1989;140(1):65-8 (21 ref.) (Fre)

[Cytophagic histiocytic panniculitis (CHP) with muscle involvement and disseminated intravascular coagulation (DIC)] Togami S, et al. **Nippon Naika Gakkai Zasshi** 1988 Oct;77(10):1561-5 (Jpn)

[Q fever associated with lobular panniculitis and transient monoclonal gammopathy (letter)] García Castaño J, et al. **Med Clin (Barc)** 1989 May 6;92(17):678 (Spa)

[Weber Christian disease with immunoblastic lymphoma. Apropos of a case] Martínez Albaladejo M, et al. **Rev Clin Esp** 1989 Jun;185(2):74-6 (Eng. Abstr.) (Spa)

DIAGNOSIS

Cytophagic panniculitis and lupus panniculitis versus Weber-Christian disease [letter; comment] Conti JA, et al. **Am J Med** 1989 Jul;87(1):3-4. **Comment on:** Am J Med 1988 Aug;85(2):276-8

[Diagnostic difficulties in a case of Weber-Christian disease with predominant digestive tract symptoms] Szymański Z, et al. **Wiad Lek** 1988 May 1;41(9):576-9 (Eng. Abstr.) (Pol)

[Weber-Christian panniculitis] Liakhovich VM, et al. **Vrach Delo** 1988 Oct;(10):97-8 (Eng. Abstr.) (Rus)

IMMUNOLOGY

An autopsy case of Weber-Christian with immune complex glomerulonephritis. Yoshimura A, et al. **Nippon Jinzo Gakkai Shi** 1988 Mar;30(3):291-6

PATHOLOGY

Histiocytic cytophagic panniculitis. Alegre VA, et al. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 1):177-85 (67 ref.)

Weber Christian disease. Abid S, et al. **JPMA** 1988 Dec; 38(12):330-1

[Cytophagic histiocytic panniculitis] Kariniemi AL, et al. **Duodecim** 1989;105(6):529-35 (Fin)

[Primary multinodular panniculitis or fat necrosis in children] Larbre F, et al. **Pediatrie** 1989;44(3):193-6 (Eng. Abstr.) (Fre)

[Weber-Christian disease. 2 cases] Quibrera R, et al. **Rev Invest Clin** 1967 Apr-Jun;19(2):167-75 (Eng. Abstr.) (Spa)

PANNICULITIS, PERITONEAL

COMPLICATIONS

Mesenteric panniculitis resulting in bowel obstruction: response to steroids. Kikiros CS, et al. **Aust N Z J Surg** 1989 Mar;59(3):287-90 (13 ref.)

ETIOLOGY

[A case of mixed connective tissue disease with mesenteric panniculitis] Watanabe I, et al. **Nippon Naika Gakkai Zasshi** 1989 Jan;78(1):93-4 (Jpn)

RADIOGRAPHY

Mesenteric panniculitis. Monahan DW, et al. **South Med J** 1989 Jun;82(6):782-4 (12 ref.)

[Sclerosing mesenteritis] Martina B, et al. **Schweiz Med Wochenschr** 1988 Aug 27;118(34):1213-6 (Eng. Abstr.) (Ger)

PANNICULITIS, SUBACUTE NODULAR MIGRATORY see **PANNICULITIS**

PANOPHTHALMITIS

ETIOLOGY

Panophthalmitis after penetrating keratoplasty. Case report. Schein OD, et al. **Arch Ophthalmol** 1989 Jan;107(1):21

Aspergillus panophthalmitis complicating treatment of pterygium [published erratum appears in Cornea 1989;8(2):158] Margo CE, et al. **Cornea** 1988;7(4):285-9

[Endophthalmitis caused by the microscopic fungus Fusarium solani] Cechová M, et al. **Cesk Oftalmol** 1988 Sep; 44(5):362-8 (Eng. Abstr.) (Slo)

MICROBIOLOGY

Bacillus cereus panophthalmitis associated with intraocular gas bubble. al-Hemidan A, et al. **Br J Ophthalmol** 1989 Jan;73(1):25-8

PATHOLOGY

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 29-1989. A 79-year-old man with fever, abdominal pain, and inflamed right eye. **N Engl J Med** 1989 Jul 20;321(3):172-82

THERAPY

[Bacillus cereus panophthalmitis] Chen QY, et al. **Yen Ko Hsueh Pao** 1987 Jun;3(2):131-5 (Eng. Abstr.) (Chi)

PANORAMIC RADIOGRAPHY see **RADIOGRAPHY, PANORAMIC**

PANSTRONGYLUS see under **TRIATOMIDAE**

PANTETHEINE see under **SULFHYDRYL COMPOUNDS**

PANTHERINE see **MUSCIMOL**

PANTOTHENIC ACID

ADMINISTRATION & DOSAGE

[Effect of a diet containing calcium pantothenate on urinary vitamin excretion and on the liver and kidney total pantothenic acid level in rats] Lhuissier M, et al. **C R Soc Biol (Paris)** 1988;182(6):600-2 (Eng. Abstr.) (Fre)

ANALOGS & DERIVATIVES

Effects of the anti-dementia drug hopantenate calcium upon striatal dopaminergic neurons in young and aged rats. Toide K. **Arch Int Pharmacodyn Ther** 1989 May-Jun;299:7-13

Effect of the 'antidementia drug' pantoyl-GABA on high affinity transport of choline and on the contents of choline and acetylcholine in rat brain. Nakahiro M, et al. **Br J Pharmacol** 1988 Dec;95(4):1303-7

A possible mechanism on the potentiated vascular effect of coadministration of ifenprodil tartrate and calcium hopantenate: a study in the basilar and vertebral arteries. Shibuya T, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Nov;26(11):534-9

A possible mechanism on the potentiating vascular effect of coadministration of ifenprodil tartrate and calcium hopantenate: a study in the internal carotid artery. Shibuya T, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Sep; 26(9):448-52

The "antidementia drug", pantoyl-GABA, increases choline acetyltransferase activity in mouse brain. Nakahiro M, et al. **Jpn J Pharmacol** 1989 Mar;49(3):407-11

Effect of Ca2+-homopantothenate and mild hypoxia on some enzyme activities evaluated in subcellular fractions from different rat brain regions. Dagani F, et al. **Mol Chem Neuropathol** 1989 Jun;10(3):157-69

[Therapeutic application of cerebral metabolism enhancers to Alzheimer's disease and their limitations] Hasegawa K. **Nippon Rinsho** 1988 Jul;46(7):1575-9 (Jpn)

[Drug therapy of Alzheimer's disease. General concepts on nootropic drugs] Otomo E. **Nippon Rinsho** 1988 Jul; 46(7):1569-74 (Jpn)

[Facilitatory effect of calcium hopantenate on amygdaloid kindling in rats] Suzuki S, et al. **No To Shinkei** 1988 Jun; 40(6):581-4 (Eng. Abstr.) (Jpn)

[Effect of phosphopantothenate on the biosynthesis of cholesterol and its esters from various precursors in the liver of db/db mice] Obrosova IG, et al. **Biokhimiia** 1988 Nov;53(11):1797-802 (Eng. Abstr.) (Rus)

[The protective effect of pantothenic acid derivatives and changes in the system of acetyl CoA metabolism in acute ethanol poisoning] Moiseenok AG, et al. **Farmakol Toksikol** 1988 Sep-Oct;51(5):82-6 (Eng. Abstr.) (Rus)

[The effect of calcium pantothenate and homopantothenate on [14C]-GABA absorption by slices of rat cerebral cortex] Reitarova TE, et al. **Farmakol Toksikol** 1988 Jul-Aug; 51(4):25-9 (Eng. Abstr.) (Rus)

BLOOD

A radiometric microbiological assay for pantothenic acid in biological fluids. Guilarte TR. **Anal Biochem** 1989 Apr; 178(1):63-6

METABOLISM

Pantothenic acid and coenzyme A in cellular modification of proteins. Plesofsky-Vig N, et al. **Annu Rev Nutr** 1988; 8:461-82 (126 ref.)

[Effect of a diet containing calcium pantothenate on urinary

vitamin excretion and on the liver and kidney total pantothenic acid level in rats] Lhuissier M, et al. **C R Soc Biol (Paris)** 1988;182(6):600–2 (Eng. Abstr.) **(Fre)**

PHARMACOLOGY

Effects of ethanol and pantothenic acid on brain acetylcholine synthesis. Rivera-Calimlim L, et al. **Br J Pharmacol** 1988 Sep;95(1):77–82

Role of pantothenic and ascorbic acid in wound healing processes: in vitro study on fibroblasts. Lacroix B, et al. **Int J Vitam Nutr Res** 1988;58(4):407–13

Effects of pantothenic acid on fibroblastic cell cultures. Lacroix B, et al. **Res Exp Med (Berl)** 1988;188(5):391–6

[The effect of calcium pantothenate and homopantothenate on [14C]-GABA absorption by slices of rat cerebral cortex] Reitarova TE, et al. **Farmakol Toksikol** 1988 Jul-Aug; 51(4):25–9 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

[The role of riboflavin and pantothenic acid in the reproductive function of swine] Pocherniaeva GM. **Fiziol Zh** 1989 Mar-Apr;35(2):69–74 (Eng. Abstr.) **(Rus)**

PAPAIN

The electrostatic fields in the active-site clefts of actinidin and papain. Pickersgill RW, et al. **Biochem J** 1988 Aug 15;254(1):235–8

Application of the reaction of dithioesters with epsilon-amino groups in lysine to the chemical modification of proteins. Souppe J, et al. **Biochim Biophys Acta** 1988 Nov 23; 957(2):254–7

Effect of papain digestion on polypeptide subunits and electron-transfer pathways in mitochondrial b-c1 complex. Lorusso M, et al. **Eur J Biochem** 1989 Feb 15;179(3):535–40

Heterogeneity of anti-U demonstrable by the use of papain-treated red cells. Issitt PD, et al. **Transfusion** 1989 Jul-Aug;29(6):508–13

[Trial production of tabellae papaini compositus] Liang YJ. **Chung Kuo Chung Yao Tsa Chih** 1989 Mar;14(3):27–9, 63 (Eng. Abstr.) **(Chi)**

ADMINISTRATION & DOSAGE

[Treatment of patients with lung abscess by local administration of papain] Udod VM, et al. **Vestn Khir** 1989 Mar;142(3):24–7 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Papain anaphylaxis: a case report. Freye HB. **Allergy Proc** 1988 Sep-Oct;9(5):571–4

The tenderizing trap [news] Scherer P. **Am J Nurs** 1988 Dec; 88(12):1629

Single breath N2 washout in papain-induced pulmonary emphysema. Hachenberg T, et al. **Intensive Care Med** 1989; 15(5):308–13

ANALYSIS

The interaction of papain with polycations. Mekras CI, et al. **J Pharm Pharmacol** 1989 Jan;41(1):22–6

ANTAGONISTS & INHIBITORS

Interaction of chicken cystatin with inactivated papains. Björk I, et al. **Biochem J** 1989 May 15;260(1):61–8

Amino acids and peptides. XX. Inhibition of papain by succinyl-Gln-Val-Val-Ala-Ala-p-nitroanilide, a common sequence of endogenous thiol proteinase inhibitors. Okada Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):1982–9

Mechanism of inhibition of papain by chicken egg white cystatin. Inhibition constants of N-terminally truncated forms and cyanogen bromide fragments of the inhibitor. Machleidt W, et al. **FEBS Lett** 1989 Jan 30;243(2):234–8

The 43 kDa papain inhibitor in normal and diseased skin. Aho H, et al. **J Cutan Pathol** 1988 Dec;15(6):367–73

BLOOD

Elastase and papain inhibition by serum of mammals. Schulz H, et al. **Scand J Clin Lab Invest** 1989 Jun;49(4):381–8

GENETICS

The expression in Escherichia coli of a synthetic gene coding for the precursor of papain is prevented by its own putative signal sequence. Vernet T, et al. **Gene** 1989 Apr 30; 77(2):229–36

ISOLATION & PURIFICATION

Affinity purification of the novel cysteine proteinase papaya proteinase IV, and papain from papaya latex. Buttle DJ, et al. **Biochem J** 1989 Jul 15;261(2):469–76

The thiol proteinases from the latex of Carica papaya L. I. Fractionation, purification and preliminary characterization. Dubois T, et al. **Biol Chem Hoppe Seyler** 1988 Aug;369(8):733–40

METABOLISM

Effect of papain digestion on the specificity of fluorescein-labeled immunoglobulins. Mengeling WL, et al. **Am J Vet Res** 1988 Aug;49(8):1235–9

The interplay of electrostatic and binding interactions determining active centre chemistry and catalytic activity in actinidin and papain [letter] Brocklehurst K, et al. **Biochem J** 1989 Jan 1;257(1):309–10

Supracrystallographic resolution of interactions contributing to enzyme catalysis by use of natural structural variants and reactivity-probe kinetics. Brocklehurst K, et al. **Biochem J** 1988 Dec 1;256(2):543–58

Identification of signalling and non-signalling binding contributions to enzyme reactivity. Alternative combinations of binding interactions provide for change in transition-state geometry in reactions of papain. Kowlessur D, et al. **Biochem J** 1989 Mar 15;258(3):755–64

Structural and electrostatic differences between actinidin and papain account for differences in activity [letter] Pickersgill RW, et al. **Biochem J** 1989 Jan 1;257(1):310–2

Kinetics of binding of chicken cystatin to papain. Björk I, et al. **Biochemistry** 1989 Feb 21;28(4):1568–73

Interaction of the cysteine proteinase inhibitor chicken cystatin with papain. Lindahl P, et al. **Biochemistry** 1988 Jul 12;27(14):5074–82

Crystal structure of a papain-E-64 complex. Varughese KI, et al. **Biochemistry** 1989 Feb 7;28(3):1330–2

Isosteric and non-isosteric modification of carboxyl groups of papain. Kooistra C, et al. **Biochim Biophys Acta** 1989 Jul 27;997(1-2):115–20

The 2.0 A X-ray crystal structure of chicken egg white cystatin and its possible mode of interaction with cysteine proteinases. Bode W, et al. **EMBO J** 1988 Aug;7(8):2593–9

Mode of binding of E-64-c, a potent thiol protease inhibitor, to papain as determined by X-ray crystal analysis of the complex. Matsumoto K, et al. **FEBS Lett** 1989 Mar 13; 245(1-2):177–80

Molecular interaction of bovine kininogen and its derivatives with papain. Sueyoshi T, et al. **J Biochem (Tokyo)** 1988 Aug;104(2):200–6

Active and inactive forms of the transition-state analog protease inhibitor leupeptin: explanation of the observed slow binding of leupeptin to cathepsin B and papain. Schultz RM, et al. **J Biol Chem** 1989 Jan 25;264(3):1497–507

The active site of papain. All-atom study of interactions with protein matrix and solvent. Rullmann JA, et al. **J Mol Biol** 1989 Mar 5;206(1):101–18

PHARMACOLOGY

Induction of differentiation in mouse erythroleukaemia cells by the action of papain at the cell surface. Slosberg EA, et al. **Cell Tissue Kinet** 1987 Nov;20(6):571–81

Immunological characterization of papain-induced fragments of Clostridium botulinum type A neurotoxin and interaction of the fragments with brain synaptosomes. Kozaki S, et al. **Infect Immun** 1989 Sep;57(9):2634–9

Intravenous papain-induced cartilage softening decreases preload of tracheal smooth muscle. Moreno RH, et al. **J Appl Physiol** 1989 Apr;66(4):1694–8

THERAPEUTIC USE

[Use of proteolytic enzymes in treating suppurative diseases of the soft tissues in children] Neĭkov GN, et al. **Klin Khir** 1988;(6):49–51 (Eng. Abstr.) **(Rus)**

[Use of papain in combined treatment of patients with fistulous forms of suppurative inflammatory processes] Vetrile ST, et al. **Ortop Travmatol Protez** 1988 Nov; (11):18–22 (Eng. Abstr.) **(Rus)**

[Use of the proteolytic preparation, Lekozim, in the treatment of chalazion] Jovanović M. **Srp Arh Celok Lek** 1988 Jun; 116(6):539–43 (Eng. Abstr.) **(Scc)**

PAPAVER

see related
OPIUM

PAPAVER see under **PLANTS, MEDICINAL**

PAPAVERETUM see **OPIUM**

PAPAVERINE

Pharmacoangiographic assessment of the corpora cavernosa. Bookstein JJ, et al. **Cardiovasc Intervent Radiol** 1988 Aug; 11(4):218–24

Is phentolamine stable in solution with papaverine. Benson GS, et al. **J Urol** 1988 Nov;140(5):970–1

The pH analysis of papaverine-phentolamine and prostaglandin E1 for pharmacologic erection. Seidmon EJ, et al. **J Urol** 1989 Jun;141(6):1458–9

ADMINISTRATION & DOSAGE

Effects of pentoxifylline and papaverine on tissue perfusion during arterial surgery. Niinikoski J, et al. **Acta Chir Scand** 1988 Nov-Dec;154(11-12):641–5

Chemical prosthesis. Zenico T, et al. **Acta Urol Belg** 1989; 57(1):223–6

Treatment of impotence by intrapenile injections of papaverine and phenoxybenzamine: a double blind, controlled trial. Keogh EJ, et al. **Aust N Z J Med** 1989 Apr;19(2):108–12

Intracavernous self-injection for erectile failure. Ruutu M, et al. **Eur Urol** 1988;15(1-2):96–8

Autoinjection of corpus cavernosum with papaverine: a practical application device. Telöken C, et al. **Eur Urol** 1989;16(2):123–4

Intracavernous self-injection for impotence: a long-term therapeutic option? Experience in 78 patients. Girdley FM, et al. **J Urol** 1988 Nov;140(5):972–4

Experience in the management of erectile dysfunction using the intracavernosal self-injection of vasoactive drugs. Watters GR, et al. **J Urol** 1988 Dec;140(6):1417–9

Preliminary results and rationale for the use of intrathecal papaverine for the prevention of paraplegia after aortic surgery. Svensson LG, et al. **S Afr J Surg** 1988 Dec; 26(4):153–60 (60 ref.)

Injections of papaverine and regitine into the corpora cavernosa for erectile dysfunction: clinical results in 60 patients. Nelson RP. **South Med J** 1989 Jan;82(1):26–8

Injection therapy for impotence. Kursh ED, et al. **Urol Clin North Am** 1988 Nov;15(4):625–9 (21 ref.)

[Experience with chemical prosthesis in impotence: report of 138 cases] Wang ZR. **Chung Hua Wai Ko Tsa Chih** 1988 Apr;26(4):203–5, 253 (Eng. Abstr.) **(Chi)**

[The effect of premedication with neurotropic and myotropic vasodilators on the effect of adrenaline in the isolated liver in rabbits. I. Premedication with phenoxybenzamine and papaverine] Tilšer I, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(4):503–12 (Eng. Abstr.) **(Cze)**

[The effect of premedication with neurotropic and myotropic vasodilators on the effect of adrenaline in the isolated liver in rabbits. II. Premedication with phenoxybenzamine, papaverine and Palerol] Tilšer I, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(4):513–26 (Eng. Abstr.) **(Cze)**

[Efficacy of intracavernous injection of papaverine and prostaglandin in the diagnosis and treatment of erectile impotence] Martin-du Pan R. **Rev Med Suisse Romande** 1989 Apr;109(4):291–8 (51 ref.) **(Fre)**

[Erectile impotence. Drug therapy with papaverine--a review of the literature] Küchler J. **Fortschr Med** 1988 Aug 10;106(23):481–4 (69 ref.) (Eng. Abstr.) **(Ger)**

[P.I.C.: the intracavernous injection of papaverine, a diagnostic test in impotence] Zbranca E. **Rev Med Chir Soc Med Nat Iasi** 1988 Jul-Sep;92(3):589–92 (Eng. Abstr.) **(Rum)**

[Positive and negative effects of "antihypoxic agents" on hypoxia tolerance and the aggregative function of thrombocytes in relation to the duration of the adaptation to altitude] Aliev MA, et al. **Kosm Biol Aviakosm Med** 1989 Jan-Feb;23(1):79–81 **(Rus)**

ADVERSE EFFECTS

Papaverine-induced chest pain due to coronary vascular steal: demonstration with angiographic and intracoronary flow velocity measurements. Gudipati CV, et al. **Am Heart J** 1989 Aug;118(2):404–7

Serious ventricular dysrhythmias after intracoronary papaverine. Wilson RF, et al. **Am J Cardiol** 1988 Dec 1; 62(17):1301–2

Penile corporeal fibrosis complicating papaverine self-injection therapy for erectile impotence. Desai KM, et al. **Eur Urol** 1988;15(1-2):132–3

How safe is the treatment of impotence with intracavernous autoinjection? Zentgraf M, et al. **Eur Urol** 1989; 16(3):165–71 (46 ref.)

Papaverine-induced fibrosis of the corpus cavernosum. Fuchs ME, et al. **J Urol** 1989 Jan;141(1):125

Side effects of self-administration of intracavernous papaverine and phentolamine for the treatment of impotence. Levine SB, et al. **J Urol** 1989 Jan;141(1):54–7

Penile ulcer as complication in self-induced papaverine erections. Borgström E. **Urology** 1988 Nov;32(5):416–7

[Drug-induced priapism] Pellerin JP, et al. **J Urol (Paris)** 1989;95(1):64–6 **(Fre)**

[Papaverine-induced priapism. Experiences with a new urologic emergency] Schneider AW, et al. **Dtsch Med Wochenschr** 1989 Feb 10;114(6):214–7 (Eng. Abstr.) **(Ger)**

[Drug-induced priapism--a report of experiences in 101 cases] Porst H, et al. **Urologe [A]** 1989 Mar;28(2):84–7 (Eng. Abstr.) **(Ger)**

[Priapism as a complication following diagnostic papaverine test] Darewicz J, et al. **Z Urol Nephrol** 1989 Jun;82(6):317–9 (Eng. Abstr.) **(Ger)**

ANALOGS & DERIVATIVES

Interaction of tetrahydropapaveroline with inhibition of dopa-decarboxylase by Ro 4-4602 in brain: effects on alcohol drinking in the rat. Miñano FJ, et al. **Alcohol** 1989 Mar-Apr;6(2):133–7

Inhibition of calmodulin dependent c-AMP-phosphodiesterase by moxaverine and papaverine. Mannhold R. **Arzneimittelforschung** 1988 Dec; 38(12):1806–8

A neuroanatomical substrate for alcohol drinking: identification of tetrahydropapaveroline (THP)-reactive sites in the rat brain. Myers RD, et al. **Brain Res Bull** 1989 May;22(5):899–911

Method for the identification of tetrahydropapaveroline using the Pictet-Spengler condensation reaction and high-performance liquid chromatography. Geraghty CA, et al. **J Chromatogr** 1989 Apr 14;489(2):399–403

Tetrahydropapaveroline and salsolinol alter 45Ca2+ efflux

within perfused hippocampus of unrestrained rats. Myers RD, et al. **Neurochem Res** 1988 Oct;13(10):989–95

The effect of tetrahydropapaveroline and naltrexone on voluntary ethanol ingestion in rats. Oster L, et al. **Proc West Pharmacol Soc** 1988;31:277–9

A structure–activity relationship study on papaverine analogs. Gupta SP, et al. **Res Commun Chem Pathol Pharmacol** 1988 Aug;61(2):265–8

[Preparation and in vitro study of suppositories containing No–Spa. I. Significance of choosing the basic substance. Determination of physical parameters of suppositories] Regdon G, et al. **Acta Pharm Hung** 1989 Jan;59(1):23–31 **(Hun)**

[Preparation and in vitro study of suppositories containing No–Spa. II. Determination of release of the active principle by membrane diffusion methods] Regdon G, et al. **Acta Pharm Hung** 1989 Jan;59(1):32–41 (Eng. Abstr.) **(Hun)**

[Use of no-shpa and phenicaberan in hypertonic biliary dyskinesia in patients with viral hepatitis] Andreichin MA, et al. **Vrach Delo** 1988 Nov;(11):100–1 (Eng. Abstr.) **(Rus)**

DIAGNOSTIC USE

Prolonged penile erection following papaverine—experiences with prophylaxis and therapy. Biedermann H. **Arch Ital Urol Nefrol Androl** 1987 Dec;59(2):133–40

Pharmacocavernometry: a modified papaverine test. Dickinson IK, et al. **Br J Urol** 1989 May;63(5):539–45

Diagnosis of male impotence after intracavernous papaverine test. Puppo P, et al. **Eur Urol** 1988;15(3–4):213–8

Can an intracavernous papaverine injection be used to diagnose arteriogenic impotence? Imagawa A, et al. **Hinyokika Kiyo** 1988 Jul;34(7):1185–9

The intracavernous injection of papaverine as a diagnostic procedure in patients with erectile dysfunction. Mouritsen L, et al. **Scand J Urol Nephrol** 1988;22(3):161–3

Intracavernous injections of papaverine and phentolamine: correlation with penile brachial index. Lakin MM, et al. **Urology** 1989 May;33(5):383–6

Diagnosis of vasculogenic impotence: combination of penile xenon–133 washout and papaverine tests. Lin SN, et al. **Urology** 1989 Jul;34(1):28–32

[Diagnosis of impotence by intracavernous injection of papaverine] Lin SN, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Feb;41(2):123–6 (Eng. Abstr.) **(Chi)**

[Intracorporeal injection of papaverine for diagnosis of impotence: clinical evaluation of 120 patients] Chiang HS. **Taiwan I Hsueh Hui Tsa Chih** 1989 Jan;88(1):83–8 (Eng. Abstr.) **(Chi)**

[Diagnosis and treatment of impotence with administration of chemical prosthesis using real–time mechanical sector duplex scanner—with special reference to diabetic patients] Nakajima Y, et al. **Hinyokika Kiyo** 1989 Apr;35(4):623–30 (Eng. Abstr.) **(Jpn)**

[Investigation of intracavernous injection of papaverine for erectile impotence] Takimoto Y, et al. **Hinyokika Kiyo** 1989 Jan;35(1):71–6 (Eng. Abstr.) **(Jpn)**

[Study on human penile hemodynamics after the intra–cavernous papaverine HCl injection] Aoki H, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 May;79(5):799–806 (Eng. Abstr.) **(Jpn)**

[Induction of an erection using papaverine] Terek A, et al. **Urol Nefrol (Mosk)** 1989 May–Jun;(3):69–71 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Papaverine hydrochloride release from ethyl cellulose–walled microcapsules. Forni F, et al. **J Microencapsul** 1988 Apr–Jun;5(2):139–46

PHARMACOLOGY

Inhibitory effect of papaverine on HIV replication in vitro. Turano A, et al. **AIDS Res Hum Retroviruses** 1989 Apr; 5(2):183–92

Comparison of the anti–respiratory syncytial virus activity and toxicity of papaverine hydrochloride and pyrazofurin in vitro and in vivo. Wyde PR, et al. **Antiviral Res** 1989 Feb;11(1):15–26

Inhibition of calmodulin dependent c–AMP–phosphodiesterase by moxaverine and papaverine. Mannhold R. **Arzneimittelforschung** 1988 Dec; 38(12):1806–8

Proconvulsant effect of papaverine on theophylline–induced seizures in rats. Ramzan I. **Clin Exp Pharmacol Physiol** 1989 May;16(5):425–7

Protective effect of vasodilators on liver function after long hypothermic preservation: a study in the isolated perfused rat liver. Chazouillères O, et al. **Hepatology** 1989 Jun; 9(6):824–9

Papaverine–induced erection. Török A, et al. **Int Urol Nephrol** 1989;21(2):195–200

Effect of papaverine on pulmonary vascular permeability to proteins [published erratum appears in J Appl Physiol 1989 Feb;66(2):following Table of Contents] Maron MB, et al. **J Appl Physiol** 1988 Sep;65(3):1367–71

Local and systemic effects of chronic intracavernous injection of papaverine, prostaglandin E1, and saline in primates. Aboseif SR, et al. **J Urol** 1989 Aug;142(2):403–8

Effects of sucrose– or Tris–substitution for Na+ on responses to D 600, papaverine and KCN in the K+–depolarized taenia coli of guinea pigs. Kawagoe J, et al. **Jpn J Pharmacol** 1988 Aug;47(4):341–7

Influence of aging and drug treatment on the cerebral glutathione system. Benzi G, et al. **Neurobiol Aging** 1988 Jul–Aug;9(4):371–5

Action of papaverine and verapamil on norepinephrine and calcium evoked contraction of vascular and non vascular smooth muscle. D'Agostino G, et al. **Pharmacol Res Commun** 1983 Nov;15(10):937–49

Electric field stimulation alters the outputs of prostaglandins from isolated rat urinary bladder preparations. Influences of papaverine and tetradotoxin. Dveksler G, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 May; 36(2):65–8

[Secondary messenger level of inositol triphosphate in fibroblasts after treatment with papaverine] Vályi–Nagy T, et al. **Acta Pharm Hung** 1989 Jul;59(4):189–92 (Eng. Abstr.) **(Hun)**

[An experimental study of cardioplegic solution containing papaverine hydrochloride in rat hearts] Horiuchi M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov; 36(11):2388–95 (Eng. Abstr.) **(Jpn)**

[Effect of papaverine on monosaccharide and glycine transport in the small intestine in vitro] Gurman EG, et al. **Fiziol Zh** 1989 Mar–Apr;35(2):47–50 (Eng. Abstr.) **(Rus)**

[The role of adenine nucleotide catabolism in the interphase death of thymocytes, caused by papaverine and dipyridamole] Dmitrenko NP, et al. **Ukr Biokhim Zh** 1989 Mar–Apr;61(2):59–64 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Treatment of venous air embolism with papaverine. de Lange JJ, et al. **Acta Anaesthesiol Scand** 1989 Apr;33(3):257–9

Penile response to intracavernosal vasoactive intestinal polypeptide alone and in combination with other vasoactive agents. Kiely EA, et al. **Br J Urol** 1989 Aug;64(2):191–4

Therapeutic roles of intracavernosal papaverine. Goldstein I, et al. **Cardiovasc Intervent Radiol** 1988 Aug;11(4):237–9

Effects of intracavernosal pharmacotherapy on self–esteem, performance anxiety and partnership in patients with chronic erectile dysfunction. Bähren W, et al. **Eur Urol** 1989;16(3):175–80

Effect of papaverine on solute transport in peritoneal dialysis. Ilker NY, et al. **Int Urol Nephrol** 1989;21(1):119–23

Recovery of immunological cutaneous responsiveness in the acquired immune deficiency syndrome following treatment with papaverine [letter] Bassetti D, et al. **J Infect** 1989 May;18(3):299–301

Why do so many people drop out from auto–injection therapy for impotence? Althof SE, et al. **J Sex Marital Ther** 1989 Summer;15(2):121–9

Intrathecal papaverine for the prevention of paraplegia after operation on the thoracic or thoracoabdominal aorta. Svensson LG, et al. **J Thorac Cardiovasc Surg** 1988 Nov; 96(5):823–9

Treatment of impotence by intrapenile injections. A comparison of papaverine versus papaverine and phentolamine: a double–blind, crossover trial. Keogh EJ, et al. **J Urol** 1989 Sep;142(3):726–8

Prostaglandin E1 versus phentolamine/papaverine for the treatment of erectile impotence: a double–blind comparison. Lee LM, et al. **J Urol** 1989 Mar;141(3):549–50

The use of a vacuum constrictor device to augment a partial erection following an intracavernous injection. Marmar JL, et al. **J Urol** 1988 Nov;140(5):975–9

A prospective double–blind trial of intracorporeal papaverine versus prostaglandin E1 in the treatment of impotence. Sarosdy MF, et al. **J Urol** 1989 Mar;141(3):551–3

Erectile responses to intracavernous papaverine and phentolamine: comparison of single and combined delivery. Stief CG, et al. **J Urol** 1988 Dec;140(6):1415–6

Intracavernosal injection of pharmacological agents in the diagnosis and treatment of impotence. Siraj QH, et al. **JPMA** 1989 Jul;39(7):172–6

Pharmacologically induced erection in patients with multiple sclerosis. Kirkeby HJ, et al. **Scand J Urol Nephrol** 1988; 22(4):241–4

Corporeal self–injection for erectile failure. Ruutu ML, et al. **Scand J Urol Nephrol Suppl** 1988;110:257–9

Intravenous papaverine in constructing continent urinary reservoir. Malkowicz SB, et al. **Urology** 1989 May; 33(5):431–2

Use of prostaglandin E1 for papaverine–failed erections. Reiss H. **Urology** 1989 Jan;33(1):15–6

[Papaverine and erectile disorders] Andrianne R. **Rev Med Liege** 1989 Jun 15;44(12):422–7 **(Fre)**

[Therapy of erectile dysfunction using papaverine—2 1/2 years' experience] Schnyder von Wartensee M, et al. **Schweiz Med Wochenschr** 1988 Jul 30;118(30):1099–103 (Eng. Abstr.) **(Ger)**

PAPER

Lung function in workers exposed to soft paper dust. Järvholm B, et al. **Am J Ind Med** 1988;14(4):457–64

Job demands, job decision latitude, job support, and social network factors as predictors of mortality in a Swedish pulp and paper company. Astrand NE, et al. **Br J Ind Med** 1989 May;46(5):334–40

Mortality from asthma and chronic obstructive pulmonary disease among workers in a soft paper mill: a case–referent study. Thorén K, et al. **Br J Ind Med** 1989 Mar;46(3):192–5

Preservation of the biomedical literature: an overview. Byrnes MM. **Bull Med Libr Assoc** 1989 Jul;77(3):269–75

Our silent enemy: ashes in our libraries. DeBakey L, et al. **Bull Med Libr Assoc** 1989 Jul;77(3):258–68

Preservation activities and needs in U.S. biomedical libraries: a status report. Kirkpatrick BA. **Bull Med Libr Assoc** 1989 Jul;77(3):276–83

Developing a preservation policy and procedure statement for a health sciences library. Paulson BA. **Bull Med Libr Assoc** 1989 Jul;77(3):293–8

Selection for preservation: considerations for the health sciences. Richards DT, et al. **Bull Med Libr Assoc** 1989 Jul;77(3):284–92

Nasal hyperreactivity to newspapers. Theander C, et al. **Clin Exp Allergy** 1989 Jan;19(1):57–8

Oxidative damage and the preservation of organic artefacts. Daniels V. **Free Radic Res Commun** 1989;5(4–5):213–20

Lung function and respiratory symptoms among workers in a soft paper mill. Thorén K, et al. **Int Arch Occup Environ Health** 1989;61(7):467–71

Prevention of post–operative intra–nasal adhesions (a new material). Eliopoulos PN, et al. **J Laryngol Otol** 1989 Jul; 103(7):664–6

Patterns of mortality in pulp and paper workers. Solet D, et al. **J Occup Med** 1989 Jul;31(7):627–30

The preservation of printed materials [editorial] Glaser JE. **J Public Health Dent** 1988 Fall;48(4):199–200

Non–polluting and recycled paper products [letter] Barson M. **Med J Aust** 1989 Jun 19;150(12):725

[Pulmonary infiltration and pronounced asthma] Hettich R, et al. **Internist (Berlin)** 1988 Dec;29(12):832–5 **(Ger)**

[Quantitative measurement of sulcus fluid with new self–coloring paper indicator strips: a comparison with Periotron] Kohlbecker G, et al. **Schweiz Monatsschr Zahnmed** 1989;99(4):414–8 (Eng. Abstr.) **(Ger)**

[Deformity of the fingers among women workers at a papermaking mill] Tsujita Y, et al. **Sangyo Igaku** 1989 Mar; 31(2):70–6 (Eng. Abstr.) **(Jpn)**

[Oncohygienic evaluation of the possibility of using active sludge] Baranova LN, et al. **Gig Sanit** 1988 Dec;(12):31–2 (Eng. Abstr.) **(Rus)**

[Light optical and electron microscopic study of the microflora of the parchment of an ancient Greek manuscript] Poglazova MN, et al. **Mikrobiologiia** 1988 Jul–Aug;57(4):669–74 (Eng. Abstr.) **(Rus)**

STANDARDS

[Testing specimens of Soviet filter paper for the transport of material relevant to studies on the detection of beta–hemolytic streptococci] Eshchina AS, et al. **Lab Delo** 1988;(7):57–60 (Eng. Abstr.) **(Rus)**

PAPILLARY MUSCLES

Looping of a pulmonary artery flotation catheter around a papillary muscle. Hollis N, et al. **Anaesth Intensive Care** 1989 Aug;17(3):365–7

Influence of rate–dependent cellular uncoupling on conduction change during simulated ischemia in guinea pig papillary muscles: effect of verapamil. Hiramatsu Y, et al. **Circ Res** 1989 Jul;65(1):95–102

ABNORMALITIES

Abnormalities in position of left ventricular papillary muscles in congenital aortic stenosis. Connuck DM, et al. **Int J Cardiol** 1989 Sep;24(3):359–62

ANALYSIS

A comparative study of three methods for intracellular loading of the calcium indicator aequorin in ferret papillary muscles. Kihara Y, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):402–7

A comparative study of chicken ventricular and slow skeletal myosin light chains. Libera LD. **Cell Biol Int Rep** 1988 Dec;12(12):1089–98

ANATOMY & HISTOLOGY

Morphology of the anterior papillary muscle in the right ventricle in human heart. Podlecki K. **Folia Morphol (Warsz)** 1987;46(3–4):187–96

CYTOLOGY

ATP4– and ATP.Mg inhibit the ATP–sensitive K+ channel of rat ventricular myocytes. Findlay I. **Pflugers Arch** 1988 Jul;412(1–2):37–41

DRUG EFFECTS

Anesthetic action in heart muscle: further insights through the study of myocardial mechanics. Rusy BF. **Anesthesiology** 1988 Oct;69(4):445–7

The effect of halothane, enflurane, and isoflurane on the dynamic stiffness of rabbit papillary muscle. Shibata T, et al. **Anesthesiology** 1989 Mar;70(3):496–502

Pharmacological effects on oscillatory afterpotentials in partially depolarized ventricular myocardium. Albitz R, et al. **Biomed Biochim Acta** 1988;47(2):153–62

Mechanisms involved in generation of oscillatory

afterpotentials in myocardium. Nilius B, et al. **Biomed Biochim Acta** 1988;47(2):163–71

The dihydropyridine derivative 202–791: interpretation of the effects of the racemate considering inverse agonistic enantiomers. Damarowsky M, et al. **Br J Pharmacol** 1988 Dec;95(4):1125–32

Acetate–induced depression of electrical and contractile activity in normoxic and hypoxic guinea pig papillary muscle. Hayashi H, et al. **Can J Physiol Pharmacol** 1989 Jul;67(7):734–9

Inotropic effect of histamine on papillary muscle of guinea pig with right ventricular hypertrophy. Zhou CJ, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 May;9(3):228–33

Effects of pimobendan, a novel inotropic agent, on intracellular calcium and tension in isolated ferret ventricular muscle. Lee JA, et al. **Clin Sci** 1989 Jun; 76(6):609–18

Comparative study of the block of Vmax by aprindine and quinidine in the guinea–pig heart muscle. Hisatome I, et al. **Eur J Pharmacol** 1988 Aug 24;153(2–3):285–8

Dual action of d–cis–diltiazem on calcium entry in guinea–pig papillary muscle cells. Punt NC, et al. **Eur J Pharmacol** 1988 Jul 7;151(2):347–8

Antiarrhythmic peptide has no direct cardiac actions. Argentieri T, et al. **Experientia** 1989 Aug 15;45(8):737–8

Effects of bivalent cations on post–rest adaptation in guinea–pig heart muscle. Beyer T, et al. **Gen Physiol Biophys** 1988 Aug;7(4):329–44

Effects of L–propionylcarnitine on electrical and mechanical alterations induced by amphiphilic lipids in isolated guinea pig ventricular muscle. Aomine M, et al. **Heart Vessels** 1988;4(4):197–206

Frequency– and voltage–dependent effects of recainam on the upstroke velocity of action potential in rabbit ventricular muscle. Kamiya K, et al. **J Cardiovasc Pharmacol** 1989 Apr;13(4):630–7

Electrophysiologic effects of TYB–3823, a new antiarrhythmic agent, on isolated guinea pig ventricular muscles. Kodama I, et al. **J Cardiovasc Pharmacol** 1989 Apr;13(4):616–23

Effects of AFD–21, a new class I antiarrhythmic agent, and AFD–19, its active metabolite, on the maximal rate of rise of action potentials in guinea pig papillary muscles: dependence on time, voltage, and action potential duration. Kojima M, et al. **J Cardiovasc Pharmacol** 1989 Mar; 13(3):483–93

Effects of beta–adrenoceptor blocking agents on isolated atrial and papillary muscles from experimentally diabetic rats. Nagamine F, et al. **Jpn J Pharmacol** 1989 Jan; 49(1):67–76

Capillary density and fine structure in rabbit papillary muscles after a high dose of norepinephrine. Brown MD, et al. **Microvasc Res** 1988 Jul;36(1):1–12

A diminished role for the sarcoplasmic reticulum in newborn myocardial contraction: effects of ryanodine. Klitzner TS, et al. **Pediatr Res** 1989 Aug;26(2):98–101

A comparison of the effects and interactions of cromakalim and glibenclamide in cardiac and vascular tissues. BoSmith RE, et al. **Pflugers Arch** 1989;414 Suppl 1:S190

Actions of three local anaesthetics: lidocaine, bupivacaine and ropivacaine on guinea pig papillary muscle sodium channels (Vmax). Arlock P. **Pharmacol Toxicol** 1988 Aug; 63(2):96–104

Effect of peripheral benzodiazepine receptor ligands on the contraction of isolated heart atrium and papillary muscle of rats. Saano V, et al. **Pharmacol Toxicol** 1989 Jan; 64(1):147–9

Actions of flunarizine dihydrochloride on the electrical activity of isolated guinea–pig papillary muscle and rabbit sino–atrial node. Kotake H, et al. **Res Commun Chem Pathol Pharmacol** 1988 Nov; 62(2):147–60

[Sodium p–chloromercuribenzoate induced delayed after depolarizations of guinea pig papillary muscles] Dong LW, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 May;9(3):242–5 (Eng. Abstr.) **(Chi)**

[Effects of China–made amrinone on isolated sino–atrial and papillary muscle, hemodynamics and cardiac performance in dogs] Hei YJ, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec;19(4):380–4 (Eng. Abstr.) **(Chi)**

[Effect of liposomes on the adrenoreactivity of the papillary muscle] Kozlov AG, et al. **Fiziol Zh SSSR** 1989 Feb; 75(2):200–4 (Eng. Abstr.) **(Rus)**

[Effect of trimecaine on myocardial contractility and the rhythmoinotropic properties of the myocardium in hypoxia] Tsyvian PB, et al. **Kardiologiia** 1989 Jun; 29(6):99–102 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Coenzyme Q10 and key enzyme activities in papillary muscle related to left ventricle function in mitral valve disease. Karlsson J, et al. **Mol Cell Biochem** 1988 Nov;84(1):59–64

INJURIES

Traumatic papillary muscle dysfunction: attempted mitral–valve repair and eventual prosthetic replacement. Al Kasab S, et al. **Eur Heart J** 1988 Sep;9(9):1030–3

[A successful procedure in mitral valve rupture accompanied by rupture of the papillary muscle and the chordae tendinae following multiple injuries and blunt thoracic trauma] Sold M, et al. **Anaesthesist** 1989 May;38(5):262–5 (Eng. Abstr.) **(Ger)**

[Successful surgical management of rupture of the papillary muscle diagnosed by ultrasound] Végh G, et al. **Orv Hetil** 1989 May 14;130(20):1057–9 (Eng. Abstr.) **(Hun)**

METABOLISM

Free calcium in rat papillary muscle at contraction assessed with Ca–selective microelectrodes. Gasser R, et al. **Angiology** 1989 Aug;40(8):736–42

Protein synthesis assessed by ribosome analysis in human papillary muscle in relation to oxidative capacity: a comparison with skeletal muscle. Wernerman J, et al. **Cardiovasc Res** 1988 Aug;22(8):562–5

Modulation by the thyroid state of intracellular calcium and contractility in ferret ventricular muscle. MacKinnon R, et al. **Circ Res** 1988 Dec;63(6):1080–9

Sodium channel–blocking properties of flecainide, a class IC antiarrhythmic drug, in guinea–pig papillary muscles. An open channel blocker or an inactivated channel blocker. Kojima M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Apr; 339(4):441–7

Intracellular pH regulation in papillary muscle cells from streptozotocin diabetic rats: an ion–sensitive microelectrode study. Lagadic–Gossmann D, et al. **Pflugers Arch** 1988 Oct; 412(6):613–7

The effects of repeated exposure to anoxia on intracellular calcium, glycogen and lactate in isolated ferret heart muscle. Lee JA, et al. **Pflugers Arch** 1988 Nov;413(1):83–9

PATHOLOGY

The pathology of mitral papillary muscles in mitral regurgitation associated with discrete subaortic stenosis. Allwork SP, et al. **Am J Cardiovasc Pathol** 1988 Apr; 2(1):79–85

[Experimental production of mitral valve and papillary muscle lesions by cervical vagus stimulation in rabbits] Imataka K, et al. **J Cardiol** 1987;17 Suppl 14:21–36 (Eng. Abstr.) **(Jpn)**

[Papillary muscle infarction: echocardiographic features and genetic factors] Izumi S, et al. **J Cardiol** 1987 Dec; 17(4):721–9 (Eng. Abstr.) **(Jpn)**

[Giant negative T waves associated with isolated hypertrophy of the papillary muscles of the left ventricle, in athletes. Report of 2 cases] Batlouni M, et al. **Arq Bras Cardiol** 1988 Mar;50(3):183–7 (Eng. Abstr.) **(Por)**

PHYSIOLOGY

Frequency–dependent and independent effects of tetrodotoxin on Vmax in cardiac fibers. Varró A, et al. **Acta Physiol Hung** 1989;73(1):47–52

Mechanical behavior of rest contractions in cardiac muscle. Vassallo DV, et al. **Acta Physiol Pharmacol Latinoam** 1988; 38(1):87–97

Tension and electrolyte changes with Na+–K+ pump inhibition in rat papillary muscle. Parsons D, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H942–53

Control of segment length or force in isolated papillary muscle: an adaptive approach. Peterson JN, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):H1726–34

Simulated ischemia and intracellular pH in isolated ventricular muscle. Vanheel B, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C365–76

Role of aiNa in positive force–frequency staircase in guinea pig papillary muscle. Wang DY, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C798–807

Mitral valve function after cryoablation of the posterior papillary muscle in the dog. Guiraudon GM, et al. **Ann Thorac Surg** 1989 Jun;47(6):872–6

Contribution of a Ca–dependent component to the transient outward current in rabbit ventricular fibres. Albitz R, et al. **Biomed Biochim Acta** 1988;47(12):1077–80

On the nature and molecular basis of prostacyclin induced late cardiac changes. Szekeres L, et al. **Biomed Biochim Acta** 1988;47(10–11):S6–11

Effects of manganese chloride, verapamil, and hypoxia on the rate–dependent increase in internal longitudinal resistance of rabbit myocardium. Alvarez J, et al. **Can J Physiol Pharmacol** 1989 Apr;67(4):263–8

Voltage–dependent Vmax blockade in Na+–dependent action potentials after beta 1– and H2–receptor stimulation in mammalian ventricular myocardium. Gillis AM, et al. **Can J Physiol Pharmacol** 1988 Oct;66(10):1291–6

Analysis of the direct and indirect effects of adenosine on atrial and ventricular cardiac muscle. Wilson AN, et al. **Can J Physiol Pharmacol** 1989 Apr;67(4):294–303

Frequency and voltage dependent effects of AN–132, a new class I anti–arrhythmic agent, on Vmax of action potential upstroke in guinea pig ventricular muscles. Chihara S, et al. **Cardiovasc Res** 1988 Sep;22(9):648–55

Relaxation of rabbit ventricular muscle by Na–Ca exchange and sarcoplasmic reticulum calcium pump. Ryanodine and voltage sensitivity. Bers DM, et al. **Circ Res** 1989 Aug; 65(2):334–42

Left ventricular time varying elastance behavior does not reflect a basic property of cardiac muscle [letter] Elzinga G, et al. **Circ Res** 1989 Mar;64(3):629–31

Rate–dependent effects of hypoxia on internal longitudinal resistance in guinea pig papillary muscles. Hiramatsu Y, et al. **Circ Res** 1988 Nov;63(5):923–9

Effect of oxygen withdrawal on active and passive electrical properties of arterially perfused rabbit ventricular muscle. Riegger CB, et al. **Circ Res** 1989 Mar;64(3):532–41

Modulation of the Purkinje–ventricular muscle junctional conduction by elevated potassium and hypoxia. Tan RC, et al. **Circulation** 1989 May;79(5):1100–5

Hypothermic effects on action potential and force production of hedgehog and guinea pig papillary muscles. Svensson OL, et al. **Cryobiology** 1988 Oct;25(5):445–50

The effects of amiodarone on repolarization and refractoriness of cardiac fibers. Varró A, et al. **Eur J Pharmacol** 1988 Sep 1;154(1):11–8

Failure of opioids to affect excitation and contraction in isolated ventricular heart muscle. Nawrath H, et al. **Experientia** 1989 Apr 15;45(4):337–9

Chordal geometry determines the shape and extent of systolic anterior mitral motion: in vitro studies. Cape EG, et al. **J Am Coll Cardiol** 1989 May;13(6):1438–48

Sodium current kinetics in intact rat papillary muscle: measurements with the loose–patch–clamp technique. Antoni H, et al. **J Physiol (Lond)** 1988 Dec;406:199–213

Cardiac preload. Physiology and clinical implications. Olivier NB, et al. **J Vet Intern Med** 1987 Apr–Jun;1(2):81–5

Combined effects of hypoxia and elimination of glucose on resting and postextrasystolic potentiated contractions of papillary muscle of guinea pigs. Asayama J, et al. **Jpn Circ J** 1989 Apr;53(4):319–28

[Effects of copper chloride on the slow response action potential and oscillatory afterpotential induced by ouabain] Zhang ST, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Sep; 9(5):415–8 (Eng. Abstr.) **(Chi)**

[Experimental studies on the viscous stiffness of isolated rat cardiac muscle] Wang JX, et al. **Sheng Li Hsueh Pao** 1988 Oct;40(5):480–5 (Eng. Abstr.) **(Chi)**

[The action of ultrasound on the contraction strength and action potential of the papillary muscle of the rat heart] Zakharov SI, et al. **Biull Eksp Biol Med** 1989 Apr; 107(4):423–6 (Eng. Abstr.) **(Rus)**

[Effect of various concentrations of calcium ions and the frequency of stimulation of papillary muscles of the heart of mature and old rats on its contractile capability] Efimov DA. **Fiziol Zh** 1988 Sep–Oct;34(5):87–91 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Ischemic myocardial necrosis and papillary muscle dysfunction in infants and children. Donnelly WH. **Am J Cardiovasc Pathol** 1987;1(2):173–88 (84 ref.)

Acidosis depresses delayed afterdepolarization in guinea pig myocardium. Yano T, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H996–1004

The abnormal mechanical strength–interval curve of hypoxic rabbit papillary muscle. Goodyer AV. **Can J Physiol Pharmacol** 1988 Jul;66(7):907–16

Effects of acidosis on ventricular muscle from adult and neonatal rats. Solaro RJ, et al. **Circ Res** 1988 Oct; 63(4):779–87

Mechanical properties of papillary muscle in cardiac failure: importance of pathogenesis and of ventricle of origin. Rouleau JL, et al. **J Mol Cell Cardiol** 1989 Aug; 21(8):817–28

[Effects of ventricular hypertrophy following experimental renovascular hypertension on the elasticity of the papillary muscle] Stuyvers B, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:21–7 (Eng. Abstr.) **(Fre)**

[Experimental mitral regurgitation in ischemia–induced papillary muscle dysfunction] Matsuzaki M, et al. **J Cardiol** 1988;18 Suppl 18:121–6, discussion 127 (Eng. Abstr.) **(Jpn)**

[Anterolateral papillary muscle motion before and after septal myotomy in hypertrophic obstructive cardiomyopathy] Nagata S, et al. **J Cardiol** 1988 Jun;18(2):363–72 (Eng. Abstr.) **(Jpn)**

[Asymmetrical changes in electrical activity of Purkinje fibers and muscle cells after administration of BAY K 8644. A new model of cardiac arrhythmia] Undrovinas AI, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(1):6–11 (Eng. Abstr.) **(Rus)**

[Characteristics of cardiac insufficiency in myocardial infarction in the pre–rupture period] Golikov AP, et al. **Ter Arkh** 1988;60(7):17–20 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

An ultrastructural study of the hypertrophied human papillary muscle cell with special emphasis on specific staining patterns, mitochondrial projections and association between mitochondria and SR. Dalen H. **Virchows Arch [A]** 1989;414(3):187–98

PAPILLEDEMA

CHEMICALLY INDUCED

Ischemic papillopathy and contraceptives. Li ZH, et al. **Chin Med J [Engl]** 1988 Jun;101(6):446–7

[Papilledema caused by minocycline: apropos of a case] Le Bris P, et al. **J Fr Ophtalmol** 1988;11(10):681–4 (14 ref.) (Eng. Abstr.) **(Fre)**

COMPLICATIONS

Pseudo-pseudo-Foster Kennedy syndrome. Gelwan MJ, et al. **J Clin Neuro Ophthalmol** 1988 Mar;8(1):49–52

Successful treatment of cryptococcal ventriculoatrial shunt infection with systemic therapy alone. Yadav SS, et al. **Neurosurgery** 1988 Sep;23(3):372–3

Macular abnormalities in papilledema from pseudotumor cerebri. Gittinger JW Jr, et al. **Ophthalmology** 1989 Feb; 96(2):192–4

[Cor pulmonale associated with ocular changes] Härkönen M, et al. **Duodecim** 1988;104(14):1070–2 **(Fin)**

[A case of multiple epitheliopathy associated with sub-retinal neovascularization] Espinasse-Berrod MA, et al. **J Fr Ophtalmol** 1988;11(2):191–4 (Eng. Abstr.) **(Fre)**

[Clinico-morphological diagnosis of temporal arteritis in acute optic vascular neuropathies] Eremenko AI, et al. **Oftalmol Zh** 1988;(4):219–21 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Acute retinal necrosis syndrome presenting with papillitis and arcuate neuroretinitis. Margolis T, et al. **Ophthalmology** 1988 Jul;95(7):937–40

ETIOLOGY

Papilloedema and the optic disc. Cullen JF. **Ann Acad Med Singapore** 1989 Mar;18(2):222–5

Bilateral pheochromocytoma with papilloedema. Pushpakumari P, et al. **J Assoc Physicians India** 1988 Dec; 36(12):738–9

A closer look at the eye in homocystinuria: a screened population. Burke JP, et al. **J Inherited Metab Dis** 1988; 11 Suppl 2:237–9

Optic disc drusen and primary megalencephaly in children. Hoover DL, et al. **J Pediatr Ophthalmol Strabismus** 1989 Mar-Apr;26(2):81–5

The association of papilledema with syringomyelia: case report. Marks SJ, et al. **Mt Sinai J Med (NY)** 1988 Sep; 55(4):333–8

Diagnosis and management of vision-threatening papilledema. Sergott RC. **Semin Neurol** 1986 Jun; 6(2):176–84 (43 ref.)

[Experimental study on papilledema in animals under raised intracranial pressure] Wang HQ. **Chung Hua I Hsueh Tsa Chih** 1988 Jul;68(7):395–7 **(Chi)**

[Ischemic papilledema in Horton's disease] Mazal Z. **Cesk Oftalmol** 1988 Sep;44(5):357–61 (Eng. Abstr.) **(Cze)**

[Drusen of the optic disk and fascicular deficit] Risse JF, et al. **Bull Soc Ophtalmol Fr** 1988 May;88(5):685–90 (22 ref.) **(Fre)**

PHYSIOPATHOLOGY

Intracranial hypertension causing visual failure in cryptococcus meningitis. Tan CT. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):944–6

PAPILLOMA

see related
WARTS

Laryngeal papillomas. Steinberg BM, et al. **Clin Dermatol** 1985 Oct-Dec;3(4):130–8

Laryngeal papillomatosis: analysis of 113 patients. Quiney RE, et al. **Clin Otolaryngol** 1989 Jun;14(3):217–25

Skin tags for the diagnosis of colorectal polyps [letter] Graffeo M, et al. **Gastrointest Endosc** 1989 Jan-Feb; 35(1):70–1

Schneiderian papilloma. Schultz RC, et al. **J La State Med Soc** 1988 Nov;140(11):11–4 (12 ref.)

Recurrent respiratory papillomatosis [editorial] **Lancet** 1988 Dec 17;2(8625):1406

[Inverted papillomas] Klozar J, et al. **Sb Lek** 1989 Jun; 91(6):177–85 (Eng. Abstr.) **(Cze)**

[2 cases of malignant papillomatosis of the bile ducts] Rambaud S, et al. **Ann Gastroenterol Hepatol (Paris)** 1988 Dec;24(7):355–6 (Eng. Abstr.) **(Fre)**

[Development of laryngeal papillomatosis in children. Apropos of 17 cases] Cathelineau L, et al. **Arch Fr Pediatr** 1988 Jun-Jul;45(6):387–92 (Eng. Abstr.) **(Fre)**

[Papilloma of the larynx as a dyshormonal tumor] Shadyev KhD, et al. **Vestn Otorinolaringol** 1988 Nov-Dec;(6):54–6 **(Rus)**

ANALYSIS

Expression of epidermal growth factor receptor on oral squamous cell carcinoma. Partridge M, et al. **Br J Oral Maxillofac Surg** 1988 Oct;26(5):381–9

Keratin expression in mouse epidermal tumors. Roop DR, et al. **Carcinog Compr Surv** 1989;11:257–71 (40 ref.)

Sensitive detection of nucleic acids and protein of human papillomavirus type 6 in respiratory and genital tract papillomata. Wu TC, et al. **J Virol Methods** 1989 Jul; 25(1):31–47

In situ hybridization and immunohistochemical study of human papillomavirus infection in adult laryngeal papillomas. Tsutsumi K, et al. **Laryngoscope** 1989 Jan; 99(1):80–5

CHEMICALLY INDUCED

Acetic acid, a potent agent of tumor progression in the multistage mouse skin model for chemical carcinogenesis. Rotstein JB, et al. **Cancer Lett** 1988 Sep-Oct;42(1-2):87–90

Dose and frequency effect in mouse skin tumor promotion. Chouroulinkov I, et al. **Cancer Res** 1989 Apr 15; 49(8):1964–9

Tumor progression in Sencar mouse skin as a function of initiator dose and promoter dose, duration, and type. Ewing MW, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7048–54

Induction of terminal differentiation-resistant epidermal cells in mouse skin and in papillomas by different initiators during two-stage carcinogenesis. Miller DR, et al. **Cancer Res** 1989 Jan 15;49(2):410–4

Effects of oral versus topical administration of cyclosporine on phorbol ester promotion of murine epidermal carcinogenesis. Yokota K, et al. **Cancer Res** 1989 Aug 15; 49(16):4586–90

Strong promoting activity by uracil on urinary bladder carcinogenesis and a possible inhibitory effect on thyroid tumorigenesis in rats initiated with N-methyl-N-nitrosourea. Masui T, et al. **Carcinogenesis** 1989 Aug;10(8):1471–4

Effects of TPA dose variation and mezerein on skin tumorigenesis by initiation promotion protocol in S/RV Cri mice. Bhisey RA, et al. **Indian J Exp Biol** 1988 Oct; 26(10):764–7

Cutaneous papillomatous hyperplasia in cyclosporine-A treated beagles. Seibel W, et al. **J Invest Dermatol** 1989 Aug;93(2):224–30

Promoting effect of polybrominated biphenyls on tracheal papillomas in Syrian golden hamsters. Wasito, et al. **J Toxicol Environ Health** 1989;27(2):173–87

Acceleration of papilloma growth in mice fed high-fat diets during promotion of two-stage skin carcinogenesis. Birt DF, et al. **Nutr Cancer** 1989;12(2):161–8

Epidermal tumor promotion by damage in the skin of mice. Argyris TS. **Prog Clin Biol Res** 1989;298:63–80 (21 ref.)

Malignant conversion: the first stage in progression from benign to malignant tumors. Hennings H. **Prog Clin Biol Res** 1989;298:95–100

[Mutagenicity and carcinogenicity of T-2 toxin, a trichothecene produced by Fusarium fungi] Li MX. **Chung Hua Chung Liu Tsa Chih** 1988 Sep;10(5):326–9 (Eng. Abstr.) **(Chi)**

[Papilloma of forestomach induced by Fusarium T-2 toxin in mice] Yang S. **Chung Hua Chung Liu Tsa Chih** 1988 Sep;10(5):339–41 (Eng. Abstr.) **(Chi)**

[Studies on the promoting and initiating effects of Fusarium T-2 toxin] Yang S, et al. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Jun;17(2):107–10 (Eng. Abstr.) **(Chi)**

COMPLICATIONS

Diffuse papillomatosis of the gallbladder complicated with tuberculosis. Nakajo S, et al. **Acta Pathol Jpn** 1988 Nov; 38(11):1473–80

Conjunctival and canalicular papillomas and ichthyosis vulgaris. Slade CS, et al. **Ann Ophthalmol** 1988 Jul; 20(7):251–5

[Pulmonary papillomatosis] Leroy M, et al. **Ann Chir** 1989; 43(2):138–41 (18 ref.) (Eng. Abstr.) **(Fre)**

[Association of leiomyosarcoma and bladder papillomatosis] Furbetta A, et al. **J Urol (Paris)** 1989;95(1):45–7 (Eng. Abstr.) **(Fre)**

[Adenomatosis of the bile ducts as a rare cause of cholestasis] Rabast U, et al. **Dtsch Med Wochenschr** 1989 Jun 2; 114(22):866–70 (Eng. Abstr.) **(Ger)**

[Ureteral invagination secondary to papilloma: an unusual cause of urinary tract obstruction] Del Boca C, et al. **Arch Ital Urol Nefrol Androl** 1988 Sep;60(3):301–6 (Eng. Abstr.) **(Ita)**

CONGENITAL

Congenital choroid plexus papilloma of the fourth ventricle. Lippa C, et al. **J Child Neurol** 1989 Apr;4(2):127–30

DIAGNOSIS

Inverted papilloma: a follow-up study including primarily unacknowledged cases. Buchwald C, et al. **Am J Otolaryngol** 1989 Jul-Aug;10(4):273–81

Diagnostic significance of mean numbers of nucleolar organizer regions in benign and malignant transitional tumours of nose. Egan M, et al. **Histopathology** 1988 Nov; 13(5):579–81

The viewbox. Juvenile laryngeal papillomatosis. Benjoya R. **IMJ** 1988 Sep;174(3):122, 158–9

Case for diagnosis. Sinonasal papilloma, inverted type. Durham JC. **Milit Med** 1989 May;154(5):271, 274–5

Ultrasound diagnosis of gallbladder papilloma in childhood. Sirinelli D, et al. **Pediatr Radiol** 1989;19(3):203

[Sonography of the larynx in children. New perspectives due to the use of computerized sonography: 2: Sonographic findings in a case of laryngeal papillomatosis] Grunert D, et al. **Klin Padiatr** 1989 May-Jun;201(3):206–8 (Eng. Abstr.) **(Ger)**

[Juvenile laryngeal papilloma in the differential diagnosis of bronchial asthma in childhood: report of a case] Soares FJ, et al. **Rev Paul Med** 1988 Jan-Feb;106(1):47–9 (Eng. Abstr.) **(Por)**

[Adenomatosis and papillomatosis of the major bile ducts] Artem'eva NN, et al. **Vestn Khir** 1989 Mar;142(3):53–4 **(Rus)**

DRUG THERAPY

The use of cis-retinoic acid in recurrent respiratory papillomatosis of the larynx: a randomized pilot study. Bell R, et al. **Am J Otolaryngol** 1988 Jul-Aug;9(4):161–4

[Confluent and reticulated papillomatosis of Gougerot and Carteaud. Treatment by minocycline] Petit A, et al. **Ann Dermatol Venereol** 1989;116(1):29–30 **(Fre)**

ENZYMOLOGY

Presence of a functionally altered ornithine decarboxylase activity in chrysarobin-promoted mouse epidermal papillomas. O'Brien TG, et al. **Carcinogenesis** 1988 Nov; 9(11):2081–5

[Lactate dehydrogenase activity in the serum of patients with polyps and papilloma of the larynx] Gołąbek W. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:5–11 (Eng. Abstr.) **(Pol)**

EPIDEMIOLOGY

Clinical study of juvenile laryngeal papilloma. Antarasena S. **Acta Otolaryngol Suppl (Stockh)** 1988;458:163–6

Inverted papilloma of upper urinary tract. Four case reports. Aubert J, et al. **Eur Urol** 1988;15(1-2):150–2

[Primary tumors of the choroid plexus. Frequency, localization and age] Jänisch W, et al. **Zentralbl Allg Pathol** 1989;135(3):235–40 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Association of papillomavirus with cancers of the head and neck. Brandsma JL, et al. **Arch Otolaryngol Head Neck Surg** 1989 May;115(5):621–5

Acrochordon: a cutaneous sign of carbohydrate intolerance. Agarwal JK, et al. **Australas J Dermatol** 1987 Dec; 28(3):132–3

Cell proliferation induced by uracil-calculi and subsequent development of reversible papillomatosis in the rat urinary bladder. Shirai T, et al. **Cancer Res** 1989 Jan 15; 49(2):378–83

Recent concepts in human papillomavirus. Rivera Y, et al. **P R Health Sci J** 1988 Dec;7(3):233–43 (33 ref.)

[Nephrogenic metaplasia of the bladder in renal transplant patients] Buzelin F, et al. **J Urol (Paris)** 1988;94(7):323–7 (Eng. Abstr.) **(Fre)**

[Effects of thermal burns of the esophagus on carcinogenesis induced by ethyl ethers of N-nitrososarcosine in rats] Novikov AI, et al. **Vopr Onkol** 1989;35(7):848–52 (Eng. Abstr.) **(Rus)**

GENETICS

Two unrelated clonal chromosome rearrangements in a nasal papilloma. Jin YS, et al. **Cancer Genet Cytogenet** 1989 May; 39(1):29–34

Basosquamous papilloma. A benign epithelial skin tumor with multiple cytogenetic clones. Mertens F, et al. **Cancer Genet Cytogenet** 1989 Feb;37(2):235–9

Cellular gene expression in papillomas of the choroid plexus from transgenic mice that express the simian virus 40 large T antigen. Marks JR, et al. **J Virol** 1989 Feb;63(2):790–7

Sequential trisomization of chromosomes 6 and 7 in mouse skin premalignant lesions. Aldaz CM, et al. **Mol Carcinog** 1989;2(1):22–6

Activation of the cellular Harvey ras gene in mouse skin tumors initiated with urethane. Bonham K, et al. **Mol Carcinog** 1989;2(1):34–9

TGF alpha stimulates growth of skin papillomas by autocrine and paracrine mechanisms but does not cause neoplastic progression. Finzi E, et al. **Mol Carcinog** 1988;1(1):7–12

Induction of metallothionein mRNA by tumor promoters in mouse skin and its constitutive expression in papillomas. Hashiba H, et al. **Mol Carcinog** 1989;2(2):95–100

Association of DNA aneuploidy with human papillomavirus-induced malignant transformation of sinonasal transitional papillomas. Klemi PJ, et al. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):563–7

Mouse skin papillomas as a stage in cancer progression. Burns FJ. **Prog Clin Biol Res** 1989;298:81–93

The expression of viral and cellular genes in papillomas of the choroid plexus induced in transgenic mice. Marks J, et al. **Prog Clin Biol Res** 1988;284:163–86

DNA ploidy in papillary tumours of the breast. Tiltman AJ. **S Afr Med J** 1989 Apr 15;75(8):379–80

IMMUNOLOGY

Production of bronchial papilloma with calcitonin-like immunoreactivity in rats exposed to urban ambient air. Ito T, et al. **Exp Pathol** 1989;36(2):89–96

METABOLISM

Distribution of epithelial membrane antigen in normal and neoplastic human ependyma. Uematsu Y, et al. **Acta Neuropathol (Berl)** 1989;78(3):325–8

Cellular retinol-binding protein in mucosa, in benign and malignant non-squamous cell tumours of the head and neck. Wahlberg P, et al. **Acta Otolaryngol (Stockh)** 1989

Mar-Apr;107(3-4):313-20
Choroid plexus papillomas: an immunohistochemical study with particular reference to the coexpression of prealbumin. Matsushima T, et al. **Neurosurgery** 1988 Sep;23(3):384-9

MICROBIOLOGY

Papilloma viruses in cancers and papillomas of the aerodigestive tract. de Villiers EM. **Biomed Pharmacother** 1989;43(1):31-6 (51 ref.)
Human papillomavirus 6/11 and 16/18 in Schneiderian inverted papillomas. In situ hybridization with human papillomavirus RNA probes. Brandwein M, et al. **Cancer** 1989 May 1;63(9):1708-13
Juvenile and adult laryngeal papillomata: classification by in-situ hybridization for human papillomavirus. Terry RM, et al. **Clin Otolaryngol** 1989 Apr;14(2):135-9
Laryngeal papillomatosis: correlation between severity of disease and presence of HPV 6 and 11 detected by in situ DNA hybridisation. Quiney RE, et al. **J Clin Pathol** 1989 Jul;42(7):694-8
Human papilloma virus type 11 in a fatal case of esophageal and bronchial papillomatosis. Hørding M, et al. **Scand J Infect Dis** 1989;21(2):229-31
Genetic analysis of CRPV pathogenesis: the L1 open reading frame is dispensable for cellular transformation but is required for papilloma formation. Nasseri M, et al. **Virology** 1989 May;170(1):321-5
Detection of the human papillomavirus 6b E2 gene product in genital condyloma and laryngeal papilloma tissues. Sekine H, et al. **Virology** 1989 May;170(1):92-8
Heterogeneity in mRNA of human papillomavirus type-6 subtypes in respiratory tract lesions. Ward P, et al. **Virology** 1989 Jan;168(1):1-12
[Ultrastructural demonstration of the human papilloma virus (HPV) in oral proliferative lesions] Broich G, et al. **Acta Otorhinolaryngol Ital** 1989 Mar-Apr;9(2):189-97 (Eng. Abstr.) **(Ita)**

PATHOLOGY

Fallopian tube papilloma in a patient with primary sterility. Kaspersen P, et al. **Acta Obstet Gynecol Scand** 1988; 67(1):93-4
Human papillomavirus type 11 DNA in squamous cell carcinomas and pre-existing multiple laryngeal papillomas. Lindeberg H, et al. **Acta Otolaryngol (Stockh)** 1989 Jan-Feb;107(1-2):141-9
Papillary adenoma of the stomach. Pathologic and immunohistochemical study. Ito H, et al. **Arch Pathol Lab Med** 1989 Sep;113(9):1030-4
Focal dermal hypoplasia syndrome with incomplete transverse facial cleft and tumour of the lips. Mizuno A, et al. **Br J Oral Maxillofac Surg** 1989 Feb;27(1):71-6
Multiple simultaneous inverted papillomas of the upper urinary tract. A case report with a review of ureteral and renal pelvic inverted papillomas. Kyriakos M, et al. **Cancer** 1989 Jan 15;63(2):368-80 (50 ref.)
The premalignant nature of mouse skin papillomas: histopathologic, cytogenetic, and biochemical evidence. Aldaz CM, et al. **Carcinog Compr Surv** 1989;11:227-42 (34 ref.)
Pathology of human and experimental skin tumors. Klein-Szanto AJ. **Carcinog Compr Surv** 1989;11:19-53 (111 ref.)
Development of murine skin neoplasia studied with enzymes used as cell markers. Reddy AL, et al. **Carcinog Compr Surv** 1989;11:213-26 (27 ref.)
Widespread oral papillomatosis due to chronic buccal trauma. Mosovich B, et al. **Cutis** 1989 Mar;43(3):254-7
Inverted urothelial papilloma: a lesion with malignant potential. Risio M, et al. **Eur Urol** 1988;14(4):333-8
Choroid plexus papillomas: an immunohistological study of 16 cases. Cruz-Sanchez FF, et al. **Histopathology** 1989 Jul; 15(1):61-9
Mucinous biliary papillomatosis: a tumour in need of wider recognition. Padfield CJ, et al. **Histopathology** 1988 Dec; 13(6):687-94
Squamous papillary neoplasia of the adult upper aerodigestive tract. Crissman JD, et al. **Hum Pathol** 1988 Dec; 19(12):1387-96
Pigmented squamous cell papilloma--a case report. Mathur A, et al. **Indian J Ophthalmol** 1987 May-Jun;35(3):158-9
Renal perfusion model for NMR spectroscopy. Wunderlich CC, et al. **Invest Radiol** 1989 Aug;24(8):619-25
Acantholytic acanthoma. Brownstein MH. **J Am Acad Dermatol** 1988 Nov;19(5 Pt 1):783-6
Giant clear cell acanthoma in an atypical location. Langtry JA, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 1):313-5
Rapidly expanding pigmented lesion of the buccal mucosa [published erratum appears in J Am Dent Assoc 1989 Apr;118(4):412] Whitt JC, et al. **J Am Dent Assoc** 1988 Oct;117(5):620-2
Diffuse papillomatosis of gall bladder. Arunabh, et al. **J Assoc Physicians India** 1988 Mar;36(3):228-9
Transitional type papilloma of the nasopharynx. O'Reilly BJ, et al. **J Laryngol Otol** 1989 May;103(5):528-30
Co-existent inverted papilloma and squamous carcinoma of the nasal septum. Sim DW. **J Laryngol Otol** 1989 Aug; 103(8):774-5
Carcinoma of the ureter: a clinicopathologic study of 49 cases. Anderström C, et al. **J Urol** 1989 Aug;142(2):280-3
Fine-needle aspiration in the management of breast masses. Layfield LJ, et al. **Pathol Annu** 1989;24 Pt 2:23-62 (152 ref.)
Genital warts. Newly discovered consequences of an ancient disease. Peterson IM, et al. **Postgrad Med** 1989 Sep 1; 86(3):197-204
Juvenile papillomatosis of the breast: sonographic appearance. Kersschot EA, et al. **Radiology** 1988 Dec; 169(3):631-3
Inverted papilloma of renal pelvis associated with transitional cell carcinoma of the bladder. Yamaguchi K, et al. **Urol Int** 1988;43(5):302-4
[Intraductal papilloma of the breast. A report of 110 cases] Yang JQ, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Jun;19(2):207-9 (Eng. Abstr.) **(Chi)**
[Confluent and reticular papillomatosis with Acanthosis nigricans. Hyperprolactinemia] Pinquier L, et al. **Ann Dermatol Venereol** 1988;115(11):1234-6 **(Fre)**
[Confluent and reticular papillomatosis of Gougerot-Carteaud with cutaneous amyloid deposit] Toppe F, et al. **Ann Dermatol Venereol** 1988;115(11):1233-4 **(Fre)**
[Prostatic type papillary tumor of the urethra with endocrine cells. Immunohistochemical study] Fetissof F, et al. **Ann Pathol** 1989;9(3):209-13 (Eng. Abstr.) **(Fre)**
[The immunogold-silver technic in detecting cellular nucleic acids and antigens in squamous epithelial cancers] Henke RP, et al. **Acta Histochem Suppl (Jena)** 1989;37:73-8 **(Ger)**
[Grading of urinary bladder tumors by automated microscopic image analysis] Wenzelides K. **Gegenbaurs Morphol Jahrb** 1989;135(1):63-6 (Eng. Abstr.) **(Ger)**
[Congestive lymphostatic papillomatosis] Stöberl C, et al. **Hautarzt** 1988 Jul;39(7):441-6 (Eng. Abstr.) **(Ger)**
[A rare case of benign ureteral tumor] Hoffmann L, et al. **Z Urol Nephrol** 1988 Sep;81(9):595-8 (Eng. Abstr.) **(Ger)**
[Anatomo-clinical considerations on an unusual case of breast disease: intraductal papilloma associated with controlateral carcinoma] Scarpellini M, et al. **Pathologica** 1988 May-Jun; 80(1067):353-62 (Eng. Abstr.) **(Ita)**
[Inverted papilloma of the bladder with mild atypia] Yokoyama O, et al. **Hinyokika Kiyo** 1989 Mar;35(3):489-92 (19 ref.) (Eng. Abstr.) **(Jpn)**
[Malignant degeneration of laryngotracheal papillomas] Cotulbea S, et al. **Rev Chir [Otorinolaringol]** 1988 Oct-Dec; 33(4):295-8 (Eng. Abstr.) **(Rum)**
[Precancerous importance of chronic cystitis and papilloma of the bladder] Romanenko AM, et al. **Arkh Patol** 1988; 50(10):27-32 (Eng. Abstr.) **(Rus)**
[Inverted papilloma of the bladder. Apropos of 6 cases] Tesedo X, et al. **Actas Urol Esp** 1988 Sep-Oct;12(5):439-42 (Eng. Abstr.) **(Spa)**
[Inverted papilloma of the bladder: a new case] Sánchez García A, et al. **Arch Esp Urol** 1988 May;41(4):319-20 (Eng. Abstr.) **(Spa)**
[Papillomas of the esophagus: presentation of 5 cases and review of the literature] Valerdiz S, et al. **Rev Esp Enferm Apar Dig** 1989 Mar;75(3):259-61 (24 ref.) (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Malignant progression of papilloma-derived keratinocytes: differential effects of the ras, neu, and p53 oncogenes. Dotto GP, et al. **Mol Carcinog** 1988;1(3):171-9

RADIOGRAPHY

Progressive papillomatosis of the intrahepatic and extrahepatic bile ducts. Case report. Böttger T, et al. **Acta Chir Scand** 1989 Feb;155(2):125-9
Inverted papilloma of the ureter. Kostakopoulos A, et al. **Acta Urol Belg** 1988;56(3):471-4
Neuroradiology case of the day. Choroid plexus papilloma, third ventricle. Romano AJ, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1333-5
Galactography in the investigation of nipple discharge. Rubin E. **Ala J Med Sci** 1988 Jul;25(3):280-2
Pedunculated squamous papilloma of the laryngopharynx. Desai S, et al. **J Laryngol Otol** 1989 Feb;103(2):209-10
Choroid plexus papillomas of neonates, infants and children. Tomita T, et al. **Pediatr Neurosci** 1988;14(1):23-30
[Inverted type transitional cell papilloma of the bladder: apropos of a case] Castillo JM, et al. **Actas Urol Esp** 1989 Mar-Apr;13(2):137-9 (Eng. Abstr.) **(Spa)**

SURGERY

Malignant papillomatosis of the bile ducts: a new indication for liver transplantation? [letter] Rambaud S, et al. **Am J Gastroenterol** 1989 Apr;84(4):448-9
Anaesthesia for carbon dioxide laser laryngeal surgery in infants [letter] Spargo PM, et al. **Anaesthesia** 1989 Jan; 44(1):80-1
Slow-intensity diathermy for juvenile laryngeal papillomas [letter] Raman R. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):749
Tracheal papillomatosis treated with Nd-Yag laser resection. Hunt JM, et al. **Aust N Z J Med** 1988 Oct;18(6):781-4
Tracheotomy in children with recurrent respiratory papillomatosis. Cole RR, et al. **Head Neck** 1989 May-Jun; 11(3):226-30
Cryosurgical treatment of clear cell acanthoma. Altman AR, et al. **Int J Dermatol** 1989 Jun;28(5):334-5
Excision of papillary endocardial tumor. Akagawa H, et al. **J Cardiovasc Surg (Torino)** 1989 Jan-Feb;30(1):47-9 (13 ref.)
Surgical excision of papillary endocardial tumors [letter] Bortolotti U, et al. **J Cardiovasc Surg (Torino)** 1989 Jul-Aug;30(4):713
Recurrent respiratory papillomatosis: a 10 year study. Benjamin B, et al. **J Laryngol Otol** 1988 Nov; 102(11):1022-8
Choroid plexus papillomas: long-term follow-up results in a surgically treated series. McGirr SJ, et al. **J Neurosurg** 1988 Dec;69(6):843-9
Tumors of the choroid plexus in children. Ellenbogen RG, et al. **Neurosurgery** 1989 Sep;25(3):327-35
Human fibroblast interferon adjuvant to CO2 laser in the treatment of recurrent juvenile laryngeal papillomatosis: experience with 7 cases. Chiesa F, et al. **Tumori** 1989 Jun 30;75(3):259-62
[Inverted papilloma of the face] Bournerias I, et al. **Ann Dermatol Venereol** 1988;115(11):1196-9 **(Fre)**
[An approach to tumors of the face by degloving. An elegant treatment of inverted papillomas and various sinus cancers. Values. Limitations and extension] Trotoux J, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(5):346-50 (Eng. Abstr.) **(Fre)**
[Progressive papillomatosis of the intra- and extrahepatic bile ducts] Böttger T, et al. **Chirurg** 1989 Feb;60(2):110-4 (Eng. Abstr.) **(Ger)**
[Tumors of the upper excretory tract. Cases contribution and review of the literature] Morbidelli A, et al. **Minerva Chir** 1989 Mar 15;44(5):883-94 (20 ref.) (Eng. Abstr.) **(Ita)**
[A case of solitary bronchial papilloma and a review of the literature] Aota M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul;36(7):1194-9 (44 ref.) (Eng. Abstr.) **(Jpn)**
[Prevention of the development of laryngeal tumors] Orlov GM. **Vestn Otorinolaringol** 1989 Jan-Feb;(1):58-9 **(Rus)**

THERAPY

Juvenile laryngeal papillomatosis and epidermoid carcinoma. Chaput M, et al. **J Pediatr** 1989 Feb;114(2):269-72
Superficial bladder cancer treated with bacillus Calmette-Guerin: a multivariate analysis of factors affecting tumor progression. Herr HW, et al. **J Urol** 1989 Jan;141(1):22-9
Clinical effects of alpha-interferon dose variation on laryngeal papillomas. Mullooly VM, et al. **Laryngoscope** 1988 Dec;98(12):1324-9
Treatment modalities in superficial bladder cancer. Irwin R, et al. **Semin Urol** 1989 Feb;7(1 Suppl 1):1-12
[Laryngeal papillomatosis in childhood: therapeutic course] Catalano GB, et al. **Acta Otorhinolaryngol Ital** 1988;8 Suppl 19:107-10 (Eng. Abstr.) **(Ita)**
[Ultrasonic disintegration of laryngeal papilloma in children] Vinitskiĭ ME, et al. **Vestn Otorinolaringol** 1989 Mar-Apr; (2):47-51 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Comparative aspects of cell fine structure in three cases of inverted, Schneiderian papilloma. Reger JF, et al. **J Submicrosc Cytol Pathol** 1989 Apr;21(2):329-38

VETERINARY

Histomorphological description of papilloma in calves in the United Arab Emirates. el-Mahdi MM. **Arch Exp Veterinarmed** 1989 Jan;43(1):61-5
Cutaneous papillomas associated with a herpesvirus-like infection in a herd of captive African elephants. Jacobson ER, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1075-8
Expression of lectin binding in cutaneous papillomas of animals. Whiteley HE, et al. **J Comp Pathol** 1988 Jul; 99(1):83-92
Characterization of papillomavirus polypeptides from bovine cutaneous fibropapillomas. Della Torre G, et al. **J Gen Virol** 1988 Nov;69 (Pt 11):2919-24
Successful surgical repair of a vascular shunt of the corpus cavernosum penis and penile fibropapilloma in a bull. Gilbert RO, et al. **J S Afr Vet Assoc** 1987 Dec;58(4):193-5
Ileal papilloma in a rat. Rahman MH, et al. **Jikken Dobutsu** 1989 Jan;38(1):97-9
Morphological studies of esophageal papilloma naturally occurring in cattle. Hamada M, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):345-51
Adenomatous papilloma of the uterine tube (oviduct) fimbriae in a dog. Sailasuta A, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):632-3
Papillomas and carcinomas associated with a papillomavirus in European harvest mice (Micromys minutus). Sundberg JP, et al. **Vet Pathol** 1988 Sep;25(5):356-61
Papilloma in Hynobius lichenatus Boulenger 1883 (Amphibia, Urodela). Asashima M, et al. **Z Mikrosk Anat Forsch** 1988; 102(5):756-9

PAPILLOMA, SHOPE see **TUMOR VIRUS INFECTIONS**

PAPILLOMAVIRUSES

see related
CONDYLOMATA ACUMINATA

Sensitivity of urethral cytologic diagnosis of human papillomavirus infection in men [letter] Iossa A, et al. **Acta Cytol** 1989 Sep–Oct;33(5):686–7

Cervical koilocytotic atypia and human papillomavirus infection [letter] Meisels A. **Acta Cytol** 1989 Sep–Oct; 33(5):686

Enhancement of bovine papillomavirus–induced cell transformation by tumour promoters. Tsang SS, et al. **Cancer Lett** 1988 Dec 1;43(1–2):93–8

Isolation of a new type of human papillomavirus (HPV52b) with a transforming activity from cervical cancer tissue. Yajima H, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7164–72

Warts/human papillomaviruses. **Clin Dermatol** 1985 Oct–Dec;3(4):1–220

Human papillomaviruses: present knowledge, future approaches. Howley PM. **Clin Dermatol** 1985 Oct–Dec; 3(4):204–11

Bovine papillomaviruses. Jarrett WF. **Clin Dermatol** 1985 Oct–Dec;3(4):8–19

Shope rabbit papilloma—carcinoma complex. A model system of HPV infections. Kreider JW, et al. **Clin Dermatol** 1985 Oct–Dec;3(4):20–6

Papillomaviruses. Lowy DR, et al. **Clin Dermatol** 1985 Oct–Dec;3(4):1–7

Histopathology of skin lesions in renal allograft recipients—an assessment of viral features and dysplasia. Blessing K, et al. **Histopathology** 1989 Feb;14(2):129–39

18th annual UCLA symposium. Abstracts: Papillomaviruses. **J Cell Biochem Suppl** 1989;13C:169–236

In situ hybridization and immunohistochemical study of human papillomavirus infection in adult laryngeal papillomas. Tsutsumi K, et al. **Laryngoscope** 1989 Jan; 99(1):80–5

Papillomaviruses in human cancers. Zur Hausen H. **Mol Carcinog** 1988;1(3):147–50

Macrophage killing of human papillomavirus type 16–transformed cells. Denis M, et al. **Virology** 1989 May; 170(1):342–5

[Detection of human papilloma virus DNA in cervical carcinoma cells in Chinese patients] Gau H. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Aug; 10(4):276–8 (Eng. Abstr.) **(Chi)**

[Warts and epidermoid carcinoma after renal transplantation] Euvrard S, et al. **Ann Dermatol Venereol** 1989; 116(3):201–11 (29 ref.) **(Fre)**

[Clinical, histological and molecular biological study of condyloma acuminatum of Japanese male patients] Kim HY, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Apr; 98(5):547–59 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Diagnosis of HPV by DNA hybridization techniques. Lancaster WD, et al. **IARC Sci Publ** 1989;(94):87–103 (55 ref.)

Molecular characteristics and physical state of human papillomavirus DNA change with progressing malignancy: studies in a patient with epidermodysplasia verruciformis. Yabe Y, et al. **Int J Cancer** 1989 Jun 15;43(6):1022–8

Characterization of papillomavirus polypeptides from bovine cutaneous fibropapillomas. Della Torre G, et al. **J Gen Virol** 1988 Nov;69 (Pt 11):2919–24

Demonstration of in vitro synthesis of human papilloma viral proteins from hand and foot warts. Fey SJ, et al. **J Invest Dermatol** 1989 Jun;92(6):817–24

Comparison of formalin, buffered formalin, and Bouin's fixation on the detection of human papillomavirus deoxyribonucleic acid from genital lesions. Nuovo GJ, et al. **Lab Invest** 1988 Nov;59(5):720–4

Sandwich hybridization in solution: a rapid method to screen HPV 16 DNA in cervical scrapes. Parkkinen S, et al. **Mol Cell Probes** 1989 Mar;3(1):1–11

Sensitive detection and typing of human papillomavirus DNA in gynecological cell scrapings by slot–blot hybridization. Gerber–Huber SN, et al. **Virchows Arch [B]** 1988;56(2):119–25

[Detection of papillomaviruses by in situ hybridization with sulfonated probes] Clavel C, et al. **Ann Pathol** 1989; 9(2):137–9 (Eng. Abstr.) **(Fre)**

CLASSIFICATION

Human papillomaviruses: are we ready to type? Roman A, et al. **Clin Microbiol Rev** 1989 Apr;2(2):166–90 (226 ref.)

Comparison of human papillomavirus type 1 serotyping by monoclonal antibodies with genotyping by in situ hybridization of plantar warts. Jenson AB, et al. **J Cutan Pathol** 1989 Apr;16(2):54–9

Typing of human papillomaviruses in cervical intraepithelial neoplasia grade 3 biopsies from Cape Town. Williamson AL, et al. **J Med Virol** 1989 Jul;28(3):146–9

Unusual HPV types in oral warts in association with HIV infection. Greenspan D, et al. **J Oral Pathol** 1988 Nov; 17(9–10):482–8

Human papillomavirus typing of penile condyloma. O'Brien WM, et al. **J Urol** 1989 Apr;141(4):863–5

Human papillomavirus subtype 16a [letter] Ward P, et al. **Lancet** 1989 Jul 15;2(8655):170

GENETICS

Two human papillomavirus DNAs molecularly cloned from a patient with epidermodysplasia verruciformis: restriction maps. Yabe Y, et al. **Acta Med Okayama** 1988 Aug; 42(4):243–5

Detection of human papillomavirus DNA in anogenital exophytic lesions by in situ hybridization to paraffin sections. Yun K, et al. **Acta Pathol Jpn** 1988 Sep; 38(9):1131–9

Combined herpes simplex virus type 2 and human papillomavirus type 16 or 18 deoxyribonucleic acid leads to oncogenic transformation. Iwasaka T, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1251–5

Comparison of filter in situ deoxyribonucleic acid hybridization with cytologic, colposcopic, and histopathologic examination for detection of human papillomavirus infection in women with cervical intraepithelial neoplasia. McNicol PJ, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):265–70

Increased frequency of detection of human papillomavirus deoxyribonucleic acid in exfoliated cervical cells during pregnancy. Rando RF, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):50–5

Detection of human papillomavirus deoxyribonucleic acid in exfoliated cervicovaginal cells as a predictor of cervical neoplasia in a high–risk population. Ritter DB, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1517–25

Topography of early HPV 16 transcription in high–grade genital precancers. Crum CP, et al. **Am J Pathol** 1989 Jun; 134(6):1183–8

Buffered formalin is the superior fixative for the detection of HPV DNA by in situ hybridization analysis. Nuovo GJ, et al. **Am J Pathol** 1989 Apr;134(4):837–42

Correlation of histology and human papiliomavirus DNA detection in condyloma acuminatum and condyloma–like vulvar lesions. Nuovo GJ, et al. **Am J Surg Pathol** 1989 Aug;13(8):700–6

The genetics of bovine papillomavirus type 1. Lambert PF, et al. **Annu Rev Genet** 1988;22:235–58 (85 ref.)

Correlation of histologic types of carcinoma of the uterine cervix and human papillomavirus and herpes simplex virus type 2 DNA sequences in the uterine cervical biopsies. Seth P, et al. **Arch Virol** 1988;102(1–2):141–6

Human papillomaviruses in oncogenesis. Lazo PA. **Bioessays** 1988 Nov;9(5):158–62 (31 ref.)

Detection of human papillomavirus genes in human oral tissue biopsies and cultures by polymerase chain reaction. Maitland NJ, et al. **Br J Cancer** 1989 May;59(5):698–703

Viral and cellular oncogenes in papillomavirus–associated cancers. Campo MS. **Br J Cancer Suppl** 1988 Dec;9:80–4 (59 ref.)

R–loop mapping of RNA transcripts from bovine papillomavirus type 4. Coggins LW, et al. **Br J Cancer Suppl** 1988 Dec;9:85–8

Karyotypic analysis of two related cervical carcinoma cell lines that contain human papillomavirus type 18 DNA and express divergent differentiation. James GK, et al. **Cancer Genet Cytogenet** 1989 Mar;38(1):53–60

Presence of human papillomavirus type 16 genome in bladder carcinoma in situ of a patient with mild immunodeficiency. Kitamura T, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7207–11

Amplification of the integrated viral transforming genes of human papillomavirus 18 and its 5'–flanking cellular sequence located near the myc protooncogene in HeLa cells. Lazo PA, et al. **Cancer Res** 1989 Aug 1; 49(15):4305–10

Characterization of integrated human papillomavirus type 11 DNA in primary and metastatic tumors from a renal transplant recipient. Manias DA, et al. **Cancer Res** 1989 May 1;49(9):2514–9

Tumorigenicity, invasiveness and metastatic capability of FR3T3 rat cells before and after transfection with bovine papilloma virus type 1 DNA. Coopman P, et al. **Clin Exp Metastasis** 1989 Jan–Feb;7(1):69–84

Detection of a human papilloma virus type 5 DNA in a renal allograft patient from Scotland. Rüdlinger R, et al. **Dermatologica** 1988;177(5):280–6

Detection of human papillomavirus DNA in fine–needle aspirations of metastatic squamous–cell carcinoma of the uterine cervix using the polymerase chain reaction. Shibata D, et al. **Diagn Cytopathol** 1989;5(1):40–3

Human papillomavirus DNA in condylomata acuminata from Japanese males. Sakuma S, et al. **Diagn Microbiol Infect Dis** 1988 May;10(1):23–9

Continued expression of HPV–16 E7 protein is required for maintenance of the transformed phenotype of cells co–transformed by HPV–16 plus EJ–ras. Crook T, et al. **EMBO J** 1989 Feb;8(2):513–9

A dimer of BPV–1 E2 containing a protease resistant core interacts with its DNA target. Dostatni N, et al. **EMBO J** 1988 Dec 1;7(12):3807–16

Structural and mutational analysis of E2 trans–activating proteins of papillomaviruses reveals three distinct functional domains. Giri I, et al. **EMBO J** 1988 Sep; 7(9):2823–9

Sequence–specific and general transcriptional activation by the bovine papillomavirus–1 E2 trans–activator require an N–terminal amphipathic helix–containing E2 domain. Haugen TH, et al. **EMBO J** 1988 Dec 20;7(13):4245–53

The bovine papillomavirus P2443 promoter is E2 trans–responsive: evidence for E2 autoregulation. Hermonat PL, et al. **EMBO J** 1988 Sep;7(9):2815–22

Expression of an immunoglobulin kappa light–chain gene in lymphoid cells using a bovine papillomavirus–1 (BPV–1) vector. Baker MD, et al. **Gene** 1988 Sep 30;69(2):349–55

Functional analysis of the papilloma virus E2 trans–activator in Saccharomyces cerevisiae. Lambert PF, et al. **Genes Dev** 1989 Jan;3(1):38–48

Specific recognition nucleotides and their DNA context determine the affinity of E2 protein for 17 binding sites in the BPV–1 genome. Li R, et al. **Genes Dev** 1989 Apr; 3(4):510–26

Human papillomavirus and epithelial ovarian neoplasia. Leake JF, et al. **Gynecol Oncol** 1989 Sep;34(3):268–73

Two colour DNA in situ hybridization for the detection of two viral genomes using non–radioactive probes. Mullink H, et al. **Histochemistry** 1989;91(3):195–8

Human papillomavirus & herpes simplex virus type 2 DNA sequences with chronic cervicitis & invasive cervical cancer. Manjunath N, et al. **Indian J Med Res** 1988 Nov; 88:381–6

Correlative study of human papillomavirus DNA, histopathology and morphometry in cervical condyloma and intraepithelial neoplasia. Fu YS, et al. **Int J Gynecol Pathol** 1988;7(4):297–307

The analysis of carcinomas of the vagina for human papillomavirus DNA. Ostrow RS, et al. **Int J Gynecol Pathol** 1988;7(4):308–14

Human papillomavirus DNA in adenocarcinoma in situ, microinvasive adenocarcinoma of the uterine cervix, and coexisting cervical squamous intraepithelial neoplasia. Tase T, et al. **Int J Gynecol Pathol** 1989;8(1):8–17

Correlation of the histologic appearance of intraepithelial neoplasia of the cervix with human papillomavirus types. Emphasis on low grade lesions including so–called flat condyloma. Willett GD, et al. **Int J Gynecol Pathol** 1989; 8(1):18–25

Optimization of human papillomavirus genotype detection in cervical scrapes by a modified filter in situ hybridization test. Melchers WJ, et al. **J Clin Microbiol** 1989 Jan; 27(1):106–10

Interphase cytogenetics using biotin and digoxigenin labelled probes I: relative sensitivity of both reporter molecules for detection of HPV16 in CaSki cells. Herrington CS, et al. **J Clin Pathol** 1989 Jun;42(6):592–600

Interphase cytogenetics using biotin and digoxigenin labelled probes II: Simultaneous differential detection of human and papilloma virus nucleic acids in individual nuclei. Herrington CS, et al. **J Clin Pathol** 1989 Jun;42(6):601–6

Expression of Epstein–Barr virus membrane antigen gp340/220 in mouse fibroblasts using a bovine papillomavirus vector. Conway M, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):729–34

Use of retroviral vectors for mapping of splice sites in cottontail rabbit papillomavirus. Dostatni N, et al. **J Gen Virol** 1988 Dec;69 (Pt 12):3093–100

Identification of L2 open reading frame gene products of bovine papillomavirus type 1 using monoclonal antibodies. Jin XW, et al. **J Gen Virol** 1989 May;70 (Pt 5):1133–40

Immortalization of primary human epithelial cells by cloned cervical carcinoma DNA containing human papillomavirus type 16 E6/E7 open reading frames. Kaur P, et al. **J Gen Virol** 1989 May;70 (Pt 5):1261–6

Oestrogen stimulates differential transcription of human papillomavirus type 16 in SiHa cervical carcinoma cells. Mitrani–Rosenbaum S, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2227–32

Structure and expression of an integrated human papillomavirus type 16 genome amplified in a cervical carcinoma cell line. Shirasawa H, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1913–9

Mapping of two novel transcripts of bovine papillomavirus type 4. Stamps AC, et al. **J Gen Virol** 1988 Dec;69 (Pt 12):3033–45

Expression in Escherichia coli of seven DNA fragments comprising the complete L1 and L2 open reading frames of human papillomavirus type 6b and localization of the 'common antigen' region. Strike DG, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):543–55

Characterization of bovine papillomavirus type 1–transformed clones which show distinct transformed phenotypes. Tada A, et al. **J Gen Virol** 1989 Jun;70 (Pt 6):1593–9

A novel deletion within the upstream regulatory region of episomal human papillomavirus type 16. Tidy J, et al. **J Gen Virol** 1989 Apr;70 (Pt 4):999–1004

Identification of papillomaviral DNA sequences in hairless mouse tumours induced by ultraviolet irradiation. Tilbrook PA, et al. **J Gen Virol** 1989 Apr;70 (Pt 4):1005–9

Presence of human papillomavirus type 18 DNA in vulvar carcinomas and its integration into the cell genome. Venuti A, et al. **J Gen Virol** 1989 Jun;70 (Pt 6):1587–92

Detection of human papillomavirus deoxyribonucleic acid by filter in situ hybridization during pregnancy. Czeglédy J, et al. **J Med Virol** 1989 Aug;28(4):250–4

Nucleic acid spot hybridization with nonradioactive labeled probes in screening for human papillomavirus DNA sequences. Melki R, et al. **J Med Virol** 1988 Oct; 26(2):137–43

Expression of human papillomavirus types 16 and 18 DNA sequences in cervical carcinoma cell lines. Pater MM, et al. **J Med Virol** 1988 Oct;26(2):185–95

Papillomavirus and cervical cancer: a clinical and laboratory study. Zhang WH, et al. **J Med Virol** 1988 Oct;26(2):163–74

Evidence for multiple vegetative DNA replication origins and alternative replication mechanisms of bovine

papillomavirus type 1. Burnett S, et al. **J Mol Biol** 1989 Mar 5;206(1):239–44

Loss of leukoregulin up-regulation of natural killer but not lymphokine-activated killer lymphocytotoxicity in human papillomavirus 16 DNA-immortalized cervical epithelial cells. Furbert-Harris PM, et al. **J Natl Cancer Inst** 1989 Jul 19;81(14):1080–5

Changes in DNA copy numbers of bovine papillomavirus type 1 after termination of retinoic acid treatment. Li G, et al. **J Natl Cancer Inst** 1988 Dec 7;80(19):1567–70

Human papillomavirus (HPV) DNA sequences in oral precancerous lesions and squamous cell carcinoma demonstrated by in situ hybridization. Syrjänen SM, et al. **J Oral Pathol** 1988 Jul;17(6):273–8

Detection of human papillomavirus (HPV) DNA in focal epithelial hyperplasia. Garlick JA, et al. **J Oral Pathol Med** 1989 Mar;18(3):172–7

Transcriptional termination between bovine papillomavirus type 1 (BPV-1) early and late polyadenylation sites blocks late transcription in BPV-1-transformed cells. Baker CC, et al. **J Virol** 1989 Aug;63(8):3529–34

Identification of human papillomavirus type 18 transforming genes in immortalized and primary cells. Bedell MA, et al. **J Virol** 1989 Mar;63(3):1247–55

The human papillomavirus type 18 (HPV18) E2 gene product is a repressor of the HPV18 regulatory region in human keratinocytes. Bernard BA, et al. **J Virol** 1989 Oct; 63(10):4317–24

Loss of bovine papillomavirus DNA replication control in growth-arrested transformed cells. Burnett S, et al. **J Virol** 1989 May;63(5):2215–25

Progesterone and glucocorticoid response elements occur in the long control regions of several human papillomaviruses involved in anogenital neoplasia. Chan WK, et al. **J Virol** 1989 Aug;63(8):3261–9

Identification of a novel constitutive enhancer element and an associated binding protein: implications for human papillomavirus type 11 enhancer regulation. Chin MT, et al. **J Virol** 1989 Jul;63(7):2967–76

Bovine papillomavirus type 1 encodes two forms of a transcriptional repressor: structural and functional analysis of new viral cDNAs. Choe J, et al. **J Virol** 1989 Apr; 63(4):1743–55

A point mutational analysis of human papillomavirus type 16 E7 protein. Edmonds C, et al. **J Virol** 1989 Jun; 63(6):2650–6

Interplay of viral and cellular proteins along the long control region of human papillomavirus type 18. Garcia-Carranca A, et al. **J Virol** 1988 Nov;62(11):4321–30

Activation of human papillomavirus type 18 gene expression by herpes simplex virus type 1 viral transactivators and a phorbol ester. Gius D, et al. **J Virol** 1989 Feb;63(2):555–63

Intracellular localization and DNA-binding properties of human papillomavirus type 18 E6 protein expressed with a baculovirus vector. Grossman SR, et al. **J Virol** 1989 Jan;63(1):366–74

Bovine papillomavirus type 1 E1 replication-defective mutants are altered in their transcriptional regulation. Lambert PF, et al. **J Virol** 1988 Nov;62(11):4009–15

Genetic assignment of multiple E2 gene products in bovine papillomavirus-transformed cells. Lambert PF, et al. **J Virol** 1989 Jul;63(7):3151–4

A viral-cellular junction fragment from a human papillomavirus type 16-positive tumor is competent in transformation of NIH 3T3 cells. Le JY, et al. **J Virol** 1988 Nov;62(11):4420–6

Cloning and partial DNA sequencing of two new human papillomavirus types associated with condylomas and low-grade cervical neoplasia. Lörincz AT, et al. **J Virol** 1989 Jun;63(6):2829–34

Trans activation by the bovine papillomavirus E2 protein in Saccharomyces cerevisiae. Morrissey LC, et al. **J Virol** 1989 Oct;63(10):4422–5

The E6 and E7 genes of the human papillomavirus type 16 together are necessary and sufficient for transformation of primary human keratinocytes. Münger K, et al. **J Virol** 1989 Oct;63(10):4417–21

Open reading frames E6 and E7 of bovine papillomavirus type 1 are both required for full transformation of mouse C127 cells. Neary K, et al. **J Virol** 1989 Jan;63(1):259–66

Identification of bovine papillomavirus E1 mutants with increased transforming and transcriptional activity. Schiller JT, et al. **J Virol** 1989 Apr;63(4):1775–82

Induction of anchorage-independent growth of human embryonic fibroblasts with a deletion in the short arm of chromosome 11 by human papillomavirus type 16 DNA. Smits HL, et al. **J Virol** 1988 Dec;62(12):4538–43

Oncogenic and nononcogenic human genital papillomaviruses generate the E7 mRNA by different mechanisms. Smotkin D, et al. **J Virol** 1989 Mar; 63(3):1441–7

Tissue site-specific enhancer function of the upstream regulatory region of human papillomavirus type 11 in cultured keratinocytes. Steinberg BM, et al. **J Virol** 1989 Feb;63(2):957–60

Identification of a transforming gene of human papillomavirus type 16. Tanaka A, et al. **J Virol** 1989 Mar; 63(3):1465–9

Mutational analysis of bovine papillomavirus E6 gene. Vousden KH, et al. **J Virol** 1989 May;63(5):2340–2

Immortalization of human foreskin keratinocytes by various human papillomavirus DNAs corresponds to their association with cervical carcinoma. Woodworth CD, et al. **J Virol** 1989 Jan;63(1):159–64

Transcriptional regulatory elements in the noncoding region of human papillomavirus type 6. Wu TC, et al. **J Virol** 1988 Dec;62(12):4722–9

Human papillomavirus type 16 DNA in periungual squamous cell carcinomas. Moy RL, et al. **JAMA** 1989 May 12; 261(18):2669–73

Heterotransplantation of argyrophil small cell carcinoma of the uterine cervix integrating HPV16 DNA into nude mice. Ichimura H, et al. **Jpn J Cancer Res** 1988 Dec;79(12):1255–8

Detection of human papillomavirus type 16 DNA and papillomavirus genus-specific antigens in vulva and cervix from patients with Bowenoid papulosis. Sugase M, et al. **Jpn J Cancer Res** 1989 Jan;80(1):19–23

Human papillomaviruses and the polymerase chain reaction. **Lancet** 1989 May 13;1(8646):1051–2 (13 ref.)

Papillomavirus DNA in cervical carcinoma specimens from central China [letter] Xiao X, et al. **Lancet** 1988 Oct 15; 2(8616):902

Human papillomavirus (HPV) type 6 and 16 DNA sequences in bronchial squamous cell carcinomas demonstrated by in situ DNA hybridization. Syrjänen K, et al. **Lung** 1989; 167(1):33–42

Chromatin structure and transcriptional regulation of human papillomavirus type 18 DNA in HeLa cells. Rösl F, et al. **Mol Carcinog** 1989;2(2):72–80

Papillomaviruses in human cancers. Zur Hausen H. **Mol Carcinog** 1988;1(3):147–50

Selective enhancement of bovine papillomavirus type 1 DNA replication in Xenopus laevis eggs by the E6 gene product. Romanczuk H, et al. **Mol Cell Biol** 1989 Feb;9(2):406–14

Cell-heritable stages of tumor progression in transgenic mice harboring the bovine papillomavirus type 1 genome. Sippola-Thiele M, et al. **Mol Cell Biol** 1989 Mar; 9(3):925–34

Selective detection of human papilloma virus DNAs by specific synthetic DNA probes. Cravador A, et al. **Mol Cell Probes** 1989 Jun;3(2):143–58

DNA of human papillomavirus type 16 in dysplastic and malignant lesions of the conjunctiva and cornea [published erratum appears in N Engl J Med 1989 Jul 6;321(10:63] McDonnell JM, et al. **N Engl J Med** 1989 Jun 1; 320(22):1442–6

Cervical cancer. News on papillomaviruses [news] McCance DJ. **Nature** 1988 Oct 27;335(6193):765–6

Glucocorticoid-dependent oncogenic transformation by type 16 but not type 11 human papilloma virus DNA. Pater MM, et al. **Nature** 1988 Oct 27;335(6193):832–5

Clusters of nuclear factor I binding sites identify enhancers of several papillomaviruses but alone are not sufficient for enhancer function. Gloss B, et al. **Nucleic Acids Res** 1989 May 11;17(9):3519–33

Multiple cooperative interactions constrain BPV-1 E2 dependent activation of transcription. Sowden M, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):2959–72

Human papillomavirus DNA in glandular dysplasia and microglandular hyperplasia: presumed precursors of adenocarcinoma of the uterine cervix. Tase T, et al. **Obstet Gynecol** 1989 Jun;73(6):1005–8

Induction of human cervical squamous cell carcinoma by sequential transfection with human papillomavirus 16 DNA and viral Harvey ras. DiPaolo JA, et al. **Oncogene** 1989 Apr;4(4):395–9

Amplification of specific DNA sequences in C127 mouse cells transformed by bovine papillomavirus type 4. Smith KT, et al. **Oncogene** 1989 Apr;4(4):409–13

The E7 open reading frame of human papillomavirus type 16 encodes a transforming gene. Vousden KH, et al. **Oncogene Res** 1988 Sep;3(2):167–75

A novel spontaneous mutation of the bovine papillomavirus-1 genome. Burnett S, et al. **Plasmid** 1988 Jul;20(1):61–74

Successive steps in the process of immortalization identified by transfer of separate bovine papillomavirus genes into rat fibroblasts. Cerni C, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3266–70

Human papillomavirus type 16 cooperates with activated ras and fos oncogenes in the hormone-dependent transformation of primary mouse cells. Crook T, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):8820–4

Constitutive expression of c-myc oncogene confers hormone independence and enhanced growth-factor responsiveness on cells transformed by human papilloma virus type 16. Crook T, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(15):5713–7

Specific chromosomal abnormalities characterize fibrosarcomas of bovine papillomavirus type 1 transgenic mice. Lindgren V, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5025–9

E2 polypeptides encoded by bovine papillomavirus type 1 form dimers through the common carboxyl-terminal domain: transactivation is mediated by the conserved amino-terminal domain. McBride AA, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):510–4

Differential effects of human papillomavirus type 6, 16, and 18 DNAs on immortalization and transformation of human cervical epithelial cells. Pecoraro G, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):563–7

Efficient transactivation and morphologic transformation by bovine papillomavirus genes expressed from a bovine papillomavirus/simian virus 40 recombinant virus. Settleman J, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):9007–11

The human papilloma virus-16 E7 oncoprotein is able to bind to the retinoblastoma gene product. Dyson N, et al. **Science** 1989 Feb 17;243(4893):934–7

Prevalence of human papillomavirus type 18 DNA in adenocarcinoma and adenosquamous carcinoma of the uterine cervix occurring in Japan. Tase T, et al. **Tohoku J Exp Med** 1988 Sep;156(1):47–53

Regulatory mechanisms of the papillomaviruses. Ward P, et al. **Trends Genet** 1989 Apr;5(4):97–9 (26 ref.)

Identification of DNA-protein interactions and enhancer activity at the 5' end of the upstream regulatory region in human papillomavirus type 11. Auborn KJ, et al. **Virology** 1989 May;170(1):123–30

Characterization of an HPV type 11 isolate propagated in human foreskin implants in nude mice. Dollard SC, et al. **Virology** 1989 Jul;171(1):294–7

Sequence divergence yet conserved physical characteristics among the E4 proteins of cutaneous human papillomaviruses. Doorbar J, et al. **Virology** 1989 Sep; 172(1):51–62

Nucleotide sequence of human papillomavirus type 31: a cervical neoplasia-associated virus. Goldsborough MD, et al. **Virology** 1989 Jul;171(1):306–11

The adeno-associated virus Rep78 gene inhibits cellular transformation induced by bovine papillomavirus. Hermonat PL. **Virology** 1989 Sep;172(1):253–61

Papillomavirus-associated inductions of cellular proteins in mouse C127 cells: correlation with the presence of open reading frame E2. Levenson RM, et al. **Virology** 1989 Sep; 172(1):170–9

The bovine papillomavirus type 1 transcriptional activator E2 protein binds to its DNA recognition sequence as a dimer. Moskaluk CA, et al. **Virology** 1989 Mar;169(1):236–8

Genetic analysis of CRPV pathogenesis: the L1 open reading frame is dispensable for cellular transformation but is required for papilloma formation. Nasseri M, et al. **Virology** 1989 May;170(1):321–5

Identification and characterization of the BPV-2 L2 protein. Rippe RA, et al. **Virology** 1989 Jul;171(1):298–301

Expression of human papillomavirus type 16 E7 gene induces DNA synthesis of rat 3Y1 cells. Sato H, et al. **Virology** 1989 Jan;168(1):195–9

Human papillomavirus type 16 E7 protein expressed in Escherichia coli and monkey COS-1 cells: immunofluorescence detection of the nuclear E7 protein. Sato H, et al. **Virology** 1989 May;170(1):311–5

Amplification of bovine papillomavirus DNA by N-methyl-N'-nitro-N-nitrosoguanidine, ultraviolet irradiation, or infection with herpes simplex virus. Schmitt J, et al. **Virology** 1989 Sep;172(1):73–81

Differentiation-linked human papillomavirus types 6 and 11 transcription in genital condylomata revealed by in situ hybridization with message-specific RNA probes. Stoler MH, et al. **Virology** 1989 Sep;172(1):331–40

Heterogeneity in mRNA of human papillomavirus type-6 subtypes in respiratory tract lesions. Ward P, et al. **Virology** 1989 Jan;168(1):1–12

Identification of HPV 16 early genes retained in cervical carcinomas. Wilczynski SP, et al. **Virology** 1988 Oct; 166(2):624–7

Functional dissociation of transforming genes of human papillomavirus type 16. Yutsudo M, et al. **Virology** 1988 Oct;166(2):594–7

Genome of the European elk papillomavirus (EEPV). Eriksson A, et al. **Virus Genes** 1988 Mar;1(2):123–33

The responsiveness of human papillomavirus upstream regulatory regions to herpes simplex virus immediate early proteins. McCusker CT, et al. **Virus Res** 1988 Oct; 11(3):199–207

Dual loci of DNA bending in the bovine papillomavirus upstream regulatory region. Wilson VG. **Virus Res** 1989 May;13(1):1–14

[Molecular hybridization methods for the diagnosis of papillomavirus infections] Mincheva A. **Akush Ginekol (Sofiia)** 1988;27(5):63–8 (46 ref.) **(Bul)**

[Occurrences of human papilloma virus DNA in cervical carcinomas] Ichimura H, et al. **Gan No Rinsho** 1989 Sep; 35(10):1133–6 (Eng. Abstr.) **(Jpn)**

[Three cases of vulvar bowenoid papulosis: the localization of HPV DNA by in situ hybridization] Kioka H, et al. **Gan No Rinsho** 1989 Sep;35(10):1195–201 (Eng. Abstr.) **(Jpn)**

[Oncogene of human papillomavirus] Hakura A, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 2):542–8 (13 ref.) (Eng. Abstr.) **(Jpn)**

[Biological significance of HPV sequences integrated into cancer cells] Tsunokawa Y. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 2):562–8 (19 ref.) (Eng. Abstr.) **(Jpn)**

[HPV16 participates in progressive transformation of normal epidermal cells] Yasumoto S. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 2):549–61 (16 ref.) (Eng. Abstr.) **(Jpn)**

[The study on in vitro transformation by human papillomavirus type 16 E6/E7 region] Kato H. **Hokkaido Igaku Zasshi** 1989 May;64(3):318–27 (Eng. Abstr.) **(Jpn)**

[In situ hybridization study on the localization of HPV DNA in the precancerous lesions of uterine cervix] Nagai N, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Mar; 41(3):313–20 (Eng. Abstr.) **(Jpn)**

[Detection of HPV types 16 and 18 E6/E7 gene mRNA in cervical precancerous lesions by in situ hybridization with

biotinylated RNA probes] Nagai N, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep;40(9):1455–6 **(Jpn)**

[Detection of human papillomavirus sequences in uterine cervix lesions in Venezuela] Azócar J, et al. **Acta Cient Venez** 1988;39(2):171–4 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Papillomavirus and esophageal cancer in the Japanese and Chinese [letter] Mori M, et al. **Am J Gastroenterol** 1989 Sep;84(9):1126–7

Condylomatous lesion (HPV infection) of uterine cervix. A clinical, colposcopic, cyto, histomorphological and immunohistochemical study. Luthra UK, et al. **Ann Biol Clin (Paris)** 1989;47(5):283–6

Viral etiology of cervical carcinoma. Human papilloma virus and herpes simplex virus type 2. Meng XJ, et al. **Chin Med J [Engl]** 1989 Feb;102(2):94–9

Cell-mediated immunity to human papillomavirus. Chardonnet Y, et al. **Clin Dermatol** 1985 Oct–Dec; 3(4):156–64

Applications of biotechnology to human-papillomavirus-induced diseases. Faras AJ, et al. **Clin Dermatol** 1985 Oct–Dec;3(4):200–3

Detection of papillomavirus common antigens in lesions of skin and mucosa. Jenson AB, et al. **Clin Dermatol** 1985 Oct–Dec;3(4):56–63

Humoral immunity to human papillomaviruses. Kienzler JL. **Clin Dermatol** 1985 Oct–Dec;3(4):144–55 (52 ref.)

A study of HPV 1, 2 and 4 antibody prevalence in patients presenting for treatment with cutaneous warts to general practitioners in N. Ireland. Steele K, et al. **Epidemiol Infect** 1988 Dec;101(3):537–46

Tumour-associated antigens in primary mouse fibroblasts induced by transformation with bovine papillomavirus type 1. Mäntyjärvi RA, et al. **Exp Pathol** 1988;35(1):25–33

Paget's disease of the vulva: search for herpes simplex virus antigens and human papillomavirus antigen and DNA. Bornstein J, et al. **Gynecol Oncol** 1988 Nov;31(3):384–8

Detection of IgA antibodies against human papillomavirus in cervical secretions from patients with cervical intraepithelial neoplasia. Dillner L, et al. **Int J Cancer** 1989 Jan 15;43(1):36–40

Abrogated NK-cell lysis of human papillomavirus (HPV)-16-bearing keratinocytes in patients with pre-cancerous and cancerous HPV-induced anogenital lesions. Malejczyk J, et al. **Int J Cancer** 1989 Feb 15; 43(2):209–14

Papillomavirus and c-myc antigen expression in normal and neoplastic cervical epithelium. Hughes RG, et al. **J Clin Pathol** 1989 Jan;42(1):46–51

Reactivities of polyclonal and monoclonal antibodies raised to the major capsid protein of human papillomavirus type 16. Patel D, et al. **J Gen Virol** 1989 Jan;70 (Pt 1):69–77

Morphologic and immunohistochemical evidence of human papillomavirus capsid antigen in smokeless tobacco keratoses from juveniles and adults. Greer RO Jr, et al. **J Oral Maxillofac Surg** 1988 Nov;46(11):919–29 (66 ref.)

Human antibodies react with an epitope of the human papillomavirus type 6b L1 open reading frame which is distinct from the type-common epitope. Jenison SA, et al. **J Virol** 1989 Feb;63(2):809–18

The expression of histocompatibility antigen HLA-DR in cervical squamous epithelium infected with human papilloma virus. Warhol MJ, et al. **Mod Pathol** 1989 Mar; 2(2):101–4

Epithelial dysplasia produced by carcinogen pretreatment and subsequent wounding. Maeda H, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jul;68(1):50–6

A synthetic peptide defines a serologic IgA response to a human papillomavirus-encoded nuclear antigen expressed in virus-carrying cervical neoplasia. Dillner J, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3838–41

Detection of the human papillomavirus 6b E2 gene product in genital condyloma and laryngeal papilloma tissues. Sekine H, et al. **Virology** 1989 May;170(1):92–8

[The value of viral typing of human papillomaviruses (HPV) in relation to neoplasms of the genital mucosa] Lifrange E, et al. **Rev Med Liege** 1989 Jan 1;44(1):1–14 (97 ref.) **(Fre)**

ISOLATION & PURIFICATION

The frequency of human papillomavirus infections, with or without associated cervical intraepithelial neoplasia, in cervicovaginal smears [letter] Alasio L, et al. **Acta Cytol** 1989 May–Jun;33(3):413–4

Human papillomavirus DNA determination of anal condylomata, dysplasias, and squamous carcinomas with in situ hybridization. Duggan MA, et al. **Am J Clin Pathol** 1989 Jul;92(1):16–21

Detection of human papillomavirus in formalin-fixed, invasive squamous carcinomas using the polymerase chain reaction. Kiyabu MT, et al. **Am J Surg Pathol** 1989 Mar; 13(3):221–4

Association of papillomavirus with cancers of the head and neck. Brandsma JL, et al. **Arch Otolaryngol Head Neck Surg** 1989 May;115(5):621–5

The polymerase chain reaction: a new epidemiological tool for investigating cervical human papillomavirus infection. Young LS, et al. **BMJ** 1989 Jan 7;298(6665):14–8

Warts in fish handlers. Rüdlinger R, et al. **Br J Dermatol** 1989 Mar;120(3):375–81

Human papillomavirus in paired normal and abnormal cervical biopsies—implications for treatment. Cassidy LJ, et al. **Br J Obstet Gynaecol** 1988 Nov;95(11):1092–5

Multicentric intraepithelial neoplasia involving the vulva. Clinical features and association with human papillomavirus and herpes simplex virus. Bornstein J, et al. **Cancer** 1988 Oct 15;62(8):1601–4

Human papillomavirus 6/11 and 16/18 in Schneiderian inverted papillomas. In situ hybridization with human papillomavirus RNA probes. Brandwein M, et al. **Cancer** 1989 May 1;63(9):1708–13

Prognostic significance of the presence of human papillomavirus DNA in patients with invasive carcinoma of the cervix. King LA, et al. **Cancer** 1989 Mar 1; 63(5):897–900

Isolation of a new type of human papillomavirus (HPV52b) with a transforming activity from cervical cancer tissue. Yajima H, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7164–72

Human papilloma virus (HPV) and carcinomas of the head and neck. Lindeberg H, et al. **Clin Otolaryngol** 1988 Dec; 13(6):447–54 (54 ref.)

Juvenile and adult laryngeal papillomata: classification by in-situ hybridization for human papillomavirus. Terry RM, et al. **Clin Otolaryngol** 1989 Apr;14(2):135–9

Papillomaviruses in human skin warts and their incidence in an Argentine population. Corley E, et al. **Diagn Microbiol Infect Dis** 1988 Jun;10(2):93–101

HPV and cervical cancer [letter] v.d. Berg VD, et al. **Hum Pathol** 1989 Aug;20(8):817–8

Inter-laboratory variation as an explanation for varying prevalence estimates of human papillomavirus infection. Brandsma J, et al. **Int J Cancer** 1989 Feb 15;43(2):260–2

Search for human papillomavirus, herpes simplex virus and c-myc oncogene in human genital tumors. Di Luca D, et al. **Int J Cancer** 1989 Apr 15;43(4):570–7

An atypical case of penile carcinoma in situ associated with human papillomavirus DNA type 18. Abdennader S, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 2):887–9

Infectious papillomavirus in the vapor of warts treated with carbon dioxide laser or electrocoagulation: detection and protection. Sawchuk WS, et al. **J Am Acad Dermatol** 1989 Jul;21(1):41–9

The human papillomavirus: an epidemic [editorial] Barclay DL. **J Arkansas Med Soc** 1989 Apr;85(11):485–6

Human papillomavirus detection in urine samples from male patients by the polymerase chain reaction. Melchers WJ, et al. **J Clin Microbiol** 1989 Aug;27(8):1711–4

Detection of human papillomaviruses in exfoliated cervicovaginal cells by in situ DNA hybridization analysis. Pao CC, et al. **J Clin Microbiol** 1989 Jan;27(1):168–73

Laryngeal papillomatosis: correlation between severity of disease and presence of HPV 6 and 11 detected by in situ DNA hybridisation. Quiney RE, et al. **J Clin Pathol** 1989 Jul;42(7):694–8

Human papillomavirus type 52: a new virus associated with cervical neoplasia. Shimoda K, et al. **J Gen Virol** 1988 Nov; 69 (Pt 11):2925–8

Human papillomavirus type 31 infection of the uterine cervix in England. Gibson PE, et al. **J Infect** 1989 May;18(3):265–7

Prevalence of genital papillomavirus infection among women attending a college student health clinic or a sexually transmitted disease clinic. Kiviat NB, et al. **J Infect Dis** 1989 Feb;159(2):293–302

High prevalence of human papillomavirus infection and possible association with betel quid chewing and smoking in oral epidermoid carcinomas in Taiwan. Chang KW, et al. **J Med Virol** 1989 May;28(1):57–61

Polymerase chain reaction for fast, nonradioactive detection of high- and low-risk papillomavirus types in routine cervical specimens and in biopsies. Dallas PB, et al. **J Med Virol** 1989 Feb;27(2):105–11

Detection of EBV and HPV DNA sequences in oral "hairy" leukoplakia by in situ hybridization. Eversole LR, et al. **J Med Virol** 1988 Nov;26(3):271–7

Detection and typing of human papillomavirus infection of the uterine cervix by dot blot hybridisation: comparison of scrapes and biopsies. Hallam N, et al. **J Med Virol** 1989 Apr;27(4):317–21

Increased detection rate of human papillomavirus in cervical scrapes by the polymerase chain reaction as compared to modified FISH and southern-blot analysis. Melchers W, et al. **J Med Virol** 1989 Apr;27(4):329–35

Presence of catenated human papillomavirus type 16 episomes in a cervical carcinoma cell line. Choo KB, et al. **J Virol** 1989 Feb;63(2):782–9

Filter in situ hybridisation: an evaluation of the FISH technique for HPV detection in cervical swabs. Hørding U, et al. **J Virol Methods** 1989 Apr–May;24(1–2):123–30

DNA probes for papillomavirus strains readied for cervical cancer screening [news] Merz B. **JAMA** 1988 Nov 18; 260(19):2777

Detection of human papillomavirus in normal and dysplastic tissue by the polymerase chain reaction. Shibata D, et al. **Lab Invest** 1988 Oct;59(4):555–9

Papillomavirus infection and skin cancer in renal allograft recipients [letter] Barr BB, et al. **Lancet** 1989 Jul 22; 2(8656):224–5

Anal and cervical intraepithelial neoplasia: possible parallel. Scholefield JH, et al. **Lancet** 1989 Sep 30;2(8666):765–9

Detection and localization of human papillomavirus in penile condylomas and squamous cell carcinomas using in situ hybridization with biotinylated DNA viral probes. Weaver MG, et al. **Mod Pathol** 1989 Mar;2(2):94–100

A new and sensitive method of screening for human papillomavirus infection. Tidy JA, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):410–4

Detection of human papillomavirus DNA in cervical lesions by in-situ DNA hybridization. Yun K, et al. **Pathology** 1989 Jan;21(1):1–4

Human papilloma virus type 11 in a fatal case of esophageal and bronchial papillomatosis. Hørding M, et al. **Scand J Infect Dis** 1989;21(2):229–31

Human papillomavirus (HPV) cervical lesions: results from 300 Italian women studied with DNA hybridization techniques and morphology. Nuzzo F, et al. **Tumori** 1988 Dec 31;74(6):745–9

Presence of papilloma virus type 11 in condyloma acuminatum of bladder in female renal transplant recipient. Benoit G, et al. **Urology** 1988 Oct;32(4):343–4

Two newly identified human papillomavirus types (HPV 40 and 57) isolated from mucosal lesions. de Villiers EM, et al. **Virology** 1989 Jul;171(1):248–53

[Condylomata acuminata and similar disorders caused by human papillomavirus; clinical and immunological aspects] van Joost T, et al. **Ned Tijdschr Geneeskd** 1988 Nov 5; 132(45):2052–7 (35 ref.) **(Dut)**

[Detection of HPV 6/11 and 16/18 in normal cervix epithelia and in condylomatous lesions. Comparative study of in situ hybridization and dot-blot hybridization using the streptavidin-alkaline phosphatase system] Kühler C, et al. **Acta Histochem Suppl (Jena)** 1989;37:95–101 **(Ger)**

[HPV infections in tumors of the upper respiratory and digestive tract. In situ hybridization and dot-blot hybridization with biotinylated DNA probes] Milde-Langosch KM, et al. **Acta Histochem Suppl (Jena)** 1989;37:103–8 **(Ger)**

[Detection of viral nucleic acid sequences in paraffin and cryostat sections of clinical study samples using in situ hybridization] Neumann R, et al. **Acta Histochem Suppl (Jena)** 1989;37:109–12 **(Ger)**

[Clinical relevance of nucleic acid detection of human papillomaviruses (HPV) in cells from smears of the cervix uteri] Neumann R, et al. **Geburtshilfe Frauenheilkd** 1989 Jan;49(1):11–6 (Eng. Abstr.) **(Ger)**

[Cervical intraepithelial neoplasia caused by human papillomavirus infection. Cytomorphologic, colposcopic and immunohistochemical correlations] Preti M, et al. **Minerva Ginecol** 1988 Oct;40(10):603–6 (35 ref.) (Eng. Abstr.) **(Ita)**

[Human papillomavirus DNA in vulvar lesions] Sato S, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-3):1708–13 (Eng. Abstr.) **(Jpn)**

METABOLISM

Papillomavirus polypeptides E6 and E7 are zinc-binding proteins. Barbosa MS, et al. **J Virol** 1989 Mar;63(3):1404–7

Numerous nuclear proteins bind the long control region of human papillomavirus type 16: a subset of 6 of 23 DNase I-protected segments coincides with the location of the cell-type-specific enhancer. Gloss B, et al. **J Virol** 1989 Mar;63(3):1142–52

E6 protein of human papillomavirus type 18 binds zinc. Grossman SR, et al. **Oncogene** 1989 Sep;4(9):1089–93

Human papillomavirus type 16 alters human epithelial cell differentiation in vitro. McCance DJ, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7169–73

Phosphorylation of the human papillomavirus type 1 E4 proteins in vivo and in vitro. Grand RJ, et al. **Virology** 1989 May;170(1):201–13

PATHOGENICITY

Human papillomavirus (HPV)-associated male and female genital carcinomas in a Hindu population. The male as vector and victim. Boon ME, et al. **Cancer** 1989 Jul 15; 64(2):559–65

Quantitative keratinocyte assay detects two biological activities of human papillomavirus DNA and identifies viral types associated with cervical carcinoma. Schlegel R, et al. **EMBO J** 1988 Oct;7(10):3181–7

Tumorigenicity of primary mouse fibroblasts transformed by bovine papillomavirus type 1. Mäntyjärvi R, et al. **Intervirology** 1988;29(6):311–9

Human papillomavirus types 6 and 16 in cooperation with Ha-ras transform secondary rat embryo fibroblasts. Chesters PM, et al. **J Gen Virol** 1989 Feb;70 (Pt 2):353–65

Both episomal and integrated forms of human papillomavirus type 16 are involved in invasive cervical cancers. Matsukura T, et al. **Virology** 1989 Sep;172(1):63–72

[Human papillomatosis viruses and cervical cancer] Vasil'ev MIu. **Eksp Onkol** 1989;11(2):8–12 (42 ref.) (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Host response to papilloma virus in focal epithelial hyperplasia. Hernández-Jáuregui P, et al. **Ann Dent** 1989 Summer;48(1):8–12, 52

Pathogenesis and treatment of human genital papillomavirus infections: a review. Reichman RC, et al. **Antiviral Res** 1989 Apr;11(3):109–18 (37 ref.)

Specificity of cytopathic effect of cutaneous human papillomaviruses. Croissant O, et al. **Clin Dermatol** 1985

Oct-Dec;3(4):43-55
Human papillomaviruses. Biochemical and biologic properties. Orth G, et al. **Clin Dermatol** 1985 Oct-Dec; 3(4):27-42 (87 ref.)
Virology of human papillomavirus. Smotkin D. **Clin Obstet Gynecol** 1989 Mar;32(1):117-26 (37 ref.)
Comparison of the in vitro transforming activities of human papillomavirus types. Storey A, et al. **EMBO J** 1988 Jun; 7(6):1815-20
Experimental evidence on oncogenicity of papillomaviruses. Shah KV, et al. **IARC Sci Publ** 1989;(94):105-11 (41 ref.)
Human papillomavirus type 16 transformation of primary human embryonic fibroblasts requires expression of open reading frames E6 and E7. Watanabe S, et al. **J Virol** 1989 Feb;63(2):965-9
44-amino-acid E5 transforming protein of bovine papillomavirus requires a hydrophobic core and specific carboxyl-terminal amino acids. Horwitz BH, et al. **Mol Cell Biol** 1988 Oct;8(10):4071-8
Functional similarity between HPV16E7, SV40 large T and adenovirus E1a proteins. Vousden KH, et al. **Oncogene** 1989 Feb;4(2):153-8
How DNA viruses may cause cancer [news] Marx JL. **Science** 1989 Feb 24;243(4894 Pt 1):1012-3

ULTRASTRUCTURE

The E5 oncoprotein of bovine papillomavirus is oriented asymmetrically in Golgi and plasma membranes. Burkhardt A, et al. **Virology** 1989 May;170(1):334-9
[Ultrastructural demonstration of the human papilloma virus (HPV) in oral proliferative lesions] Broich G, et al. **Acta Otorhinolaryngol Ital** 1989 Mar-Apr;9(2):189-97 (Eng. Abstr.) **(Ita)**

PAPILLON-LEFEVRE DISEASE see under **KERATOSIS PALMARIS ET PLANTARIS**

PAPIO

The spread of exclusive mating in a chacma baboon population. Anderson CM. **Am J Phys Anthropol** 1989 Mar; 78(3):355-60
Zoonotic parasite infections of the Arabian sacred baboon Papio hamadryas arabicus Thomas in Asir Province, Saudi Arabia. Nasher AK. **Ann Parasitol Hum Comp** 1988; 63(6):448-54
Trypanosoma cruzi infection in a colony-born baboon. Gleiser CA, et al. **J Am Vet Med Assoc** 1986 Nov 1; 189(9):1225-6
Congestive heart failure and pneumonia in a baboon. Levin JL, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1226-7
Case of disseminated African histoplasmosis in a baboon. Butler TM, et al. **J Med Primatol** 1988;17(3):153-61
Species of the genus Papio (Cercopithecidae) as subjects of biomedical research: I. Biological basis of experiments on baboons. Fridman EP, et al. **J Med Primatol** 1988; 17(6):291-307 (119 ref.)
Species of the genus Papio (Cercopithecidae, primates) as subjects of biomedical research: II. Quantitative characteristics of contemporary use of baboon species in medical and biological investigations. Fridman EP, et al. **J Med Primatol** 1988;17(6):309-18
Atrio-ventricular block in a baboon (Papio ursinus). Hugo N, et al. **J Med Primatol** 1988;17(3):135-44
A naturally occurring epizootic of simian agent 8 in the baboon. Levin JL, et al. **Lab Anim Sci** 1988 Aug; 38(4):394-7
Handedness and manual specialization in the baboon. Fagot J, et al. **Neuropsychologia** 1988;26(6):795-804
The efficacy of intravenous nimodipine in the treatment of focal cerebral ischemia in a primate model. Hadley MN, et al. **Neurosurgery** 1989 Jul;25(1):63-70
Scintigraphic phase analysis of abnormal A-V conduction in a baboon. Dormehl IC, et al. **Nuklearmedizin** 1988 Oct; 27(5):200-3
Response of various animal species to experimental infection with different strains of Staphylococcus aureus. Kohrman KA, et al. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S231-6; discussion S236-7

ANATOMY & HISTOLOGY

Quantitative morphology of the central fovea in the primate retina. Krebs W, et al. **Am J Anat** 1989 Mar;184(3):225-36
Regional distribution of fiber types in developing baboon diaphragm muscles. Maxwell LC, et al. **Anat Rec** 1989 May; 224(1):66-78
Fine structure of identified neurons in the primate hippocampus: a combined Golgi/EM study in the baboon. Frotscher M, et al. **J Comp Neurol** 1988 Sep 8;275(2):254-70
Morphometry of terminal hepatic veins. 1. Comparative study in man and baboon. Porto LC, et al. **Virchows Arch [A]** 1989;414(2):129-34
[The heart in Papio erxleben, 1777. II. Study of the atrioventricular node region in P. cynocephalus L., 1766] Mandarim-de-Lacerda A, et al. **Bull Assoc Anat (Nancy)** 1987 Sep;71(214):7-9 (Eng. Abstr.) **(Fre)**

BLOOD

Immunochemical characterization and quantitation of lipoprotein (a) in baboons. Development of an assay depending on two antigenically distinct proteins. Rainwater DL, et al. **Atherosclerosis** 1988 Sep;73(1):23-31
Differences in burst morphology among baboon species. Eves EM, et al. **Exp Hematol** 1989 Feb;17(2):73-6
Cardiac allotransplantation across major blood group barriers in the baboon. Cooper DK, et al. **J Med Primatol** 1988; 17(6):333-46
Effects of certain anaesthetics on plasma metabolite concentrations in the baboon (Papio ursinus). Van der Merwe JN, et al. **J S Afr Vet Assoc** 1987 Sep;58(3):125-9

EMBRYOLOGY

Real-time ultrasonic evaluation of the baboon pregnancy: biometric measurements. Farine D, et al. **J Med Primatol** 1988;17(4):215-21

GENETICS

Pedigree analysis of HDL cholesterol concentration in baboons on two diets. MacCluer JW, et al. **Am J Hum Genet** 1988 Oct;43(4):401-13
Detecting genetic effects on lipoprotein phenotypes in baboons: a review of methods and preliminary findings. MacCluer JW, et al. **Genetica** 1987 Aug 31;73(1-2):159-68
The baboon apolipoprotein E gene: structure, expression, and linkage with the gene for apolipoprotein C-1. Hixson JE, et al. **Genomics** 1988 May;2(4):315-23
Apolipoprotein(a) (Apo(a)) glycoprotein isoforms result from size differences in Apo(a) mRNA in baboons. Hixson JE, et al. **J Biol Chem** 1989 Apr 15;264(11):6013-6
Hereditary and dietary effects on apolipoprotein[a] isoforms and Lp[a] in baboons. Rainwater DL, et al. **J Lipid Res** 1989 Apr;30(4):549-58
Cloning and sequencing of cDNA encoding baboon liver alcohol dehydrogenase: evidence for a common ancestral lineage with the human alcohol dehydrogenase beta subunit and for class I ADH gene duplications predating primate radiation. Trezise AE, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5454-8

GROWTH & DEVELOPMENT

Developmental changes of neuropeptides and amino acids in baboon cortex. Beal MF, et al. **Brain Res Dev Brain Res** 1988 Nov 1;44(1):156-9
Development of beta 1 and beta 2 adrenergic receptors in baboon brain: an autoradiographic study using [125I]iodocyanopindolol. Slesinger PA, et al. **J Comp Neurol** 1988 Jul 15;273(3):318-29

IMMUNOLOGY

Long-term observation of baboons, rhesus monkeys, and chimpanzees inoculated with HIV and given periodic immunosuppressive treatment. Morrow WJ, et al. **AIDS Res Hum Retroviruses** 1989 Apr;5(2):233-45
Monoclonal antibody localization of sperm surface antigen secreted by the epididymis of the baboon (Papio cynocephalus). Isahakia MA. **J Reprod Fertil** 1989 May; 86(1):51-8
Improved technique for the mixed lymphocyte response in the Chacma baboon. Smit JA, et al. **Lab Anim** 1988 Jul; 22(3):212-6

METABOLISM

Synthesis and release of estrogen- and progesterone-dependent proteins by the baboon (Papio anubis) uterine endometrium. Fazleabas AT, et al. **Biol Reprod** 1988 Oct;39(3):729-36
Regulation of progesterone biosynthesis by estrogen during baboon pregnancy: placental mitochondrial cholesterol side-chain cleavage activity in antiestrogen (ethamoxytriphetol, MER-25)-treated baboons. Babischkin JS, et al. **Endocrinology** 1989 Apr;124(4):1638-45
Immunological characterization and immunocytochemical localization of oviduct-specific glycoproteins in the baboon (Papio anubis). Verhage HG, et al. **Endocrinology** 1989 May;124(5):2464-72
A differential nuclear uptake and retention of 3H-androgens in the thyroids of baboons. Sheridan PJ, et al. **J Endocrinol Invest** 1988 Sep;11(8):571-5
Is alcohol hepatotoxic in the baboon? Ainley CC, et al. **J Hepatol** 1988 Aug;7(1):85-92
Refined structure of baboon alpha-lactalbumin at 1.7 A resolution. Comparison with C-type lysozyme. Acharya KR, et al. **J Mol Biol** 1989 Jul 5;208(1):99-127
Characterization of prostaglandin E2 binding to uterine membranes from baboon, rabbit and tree shrew (Tupaia belangeri). Hodam JR, et al. **J Mol Endocrinol** 1989 Jul; 3(1):33-42

MICROBIOLOGY

Prevalence of antibodies to SIV in baboons in their native habitat. Kodama T, et al. **AIDS Res Hum Retroviruses** 1989 Jun;5(3):337-43
Characterization of a new polyomavirus (Polyomavirus papionis-2) isolated from baboon kidney cell cultures. Gardner SD, et al. **Arch Virol** 1989;105(3-4):223-33
Replication of baboon endogenous virus in human cells. Kinetics of DNA synthesis and integration. Huang LH, et al. **J Biol Chem** 1989 May 25;264(15):8811-4
Cellular fatty acid composition of Campylobacter pylori from primates and ferrets compared with those of other campylobacters. Goodwin CS, et al. **J Clin Microbiol** 1989 May;27(5):938-43
Experimental infection of baboons (Papio cynocephalus anubis) with Chlamydia pneumoniae strain 'TWAR'. Bell TA, et al. **J Infect** 1989 Jul;19(1):47-9
Transmission of the simian immunodeficiency virus SIVmne in macaques and baboons. Morton WR, et al. **J Med Primatol** 1989;18(3-4):237-45
Isolation and characterization of simian immunodeficiency virus from mandrills in Africa and its relationship to other human and simian immunodeficiency viruses. Tsujimoto H, et al. **J Virol** 1988 Nov;62(11):4044-50
[Mapping of the RNAs coded for by the lymphotropic baboon herpesvirus] Beriia LIa, et al. **Vopr Virusol** 1988 Nov-Dec;33(6):729-32 (Eng. Abstr.) **(Rus)**

PARASITOLOGY

Hepatocystis in populations of baboons (Papio hamadryas s.l.) of Tanzania and Ethiopia [published erratum appears in J Med Primatol 1988;17(5):289-90] Phillips-Conroy JE, et al. **J Med Primatol** 1988;17(3):145-52
[Diversity of the filaria of the genus Cercopithifilaria in baboons in Kenya] Bain O, et al. **Ann Parasitol Hum Comp** 1988;63(3):224-39 (Eng. Abstr.) **(Fre)**

PHYSIOLOGY

The effects of acute proximal basilar artery occlusion on the primate cerebral circulation. Bentivoglio P, et al. **Acta Neurochir (Wien)** 1988;95(1-2):61-71
The effect of estrogen on placental delivery after fetectomy in baboons. Albrecht ED, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):237-41
Vasopressin contributes to maintenance of arterial blood pressure in dehydrated baboons. Ryan KL, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H486-92
Characterization of baboon testicular antigens using monoclonal anti-sperm antibodies. Isahakia MA. **Biol Reprod** 1988 Nov;39(4):889-99
IVT CCK-8 is more effective than IV CCK-8 at decreasing meal size in the baboon. Figlewicz DP, et al. **Brain Res Bull** 1989 May;22(5):849-52
Transmembrane action potentials and intracellular potassium activity of baboon cardiac tissues. Dangman KH, et al. **Cardiovasc Res** 1988 Mar;22(3):204-12
Oculo-manual tracking of visual targets in monkey: role of the arm afferent information in the control of arm and eye movements. Gauthier GM, et al. **Exp Brain Res** 1988; 73(1):138-54
Single unit activity in the auditory cortex of a monkey performing a short term memory task. Gottlieb Y, et al. **Exp Brain Res** 1989;74(1):139-48
A primate model of Huntington's disease: cross-species implantation of striatal precursor cells to the excitotoxically lesioned baboon caudate-putamen. Isacson O, et al. **Exp Brain Res** 1989;75(1):213-20
Cerebellar involvement in the coordination control of the oculo-manual tracking system: effects of cerebellar dentate nucleus lesion. Vercher JL, et al. **Exp Brain Res** 1988; 73(1):155-66
Changes in female reproductive condition following male take-overs in a colony of hamadryas and hybrid baboons. Colmenares F, et al. **Folia Primatol (Basel)** 1988; 50(3-4):157-74
Comparison of blood flow parameters measured by Doppler ultrasound and radionuclide techniques in the baboon (Papio ursinus). Bosman H, et al. **J Med Primatol** 1988; 17(4):223-31
A positive wave at the J-point of electrocardiograms of anaesthetized baboons (Papio ursinus). Hugo N, et al. **J Med Primatol** 1988;17(6):347-52
A method of remote physiological monitoring of a fully mobile primate in a single animal cage. Pearce PC, et al. **Lab Anim** 1989 Apr;23(2):180-7
Chronic instrumentation and longterm investigation in the fetal and maternal baboon: tether system, conditioning procedures and surgical techniques. Stark RI, et al. **Lab Anim Sci** 1989 Jan;39(1):25-32
Bone strength of the radius and ulna in the non-human primate. Mennen U. **Orthopedics** 1989 Jan;12(1):173-80
[Effect of immobilization stress on the gonadotropic function of the hypophysis in male hamadryas baboons (Papio hamadryas)] Katsiia GV, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):231-4 (Eng. Abstr.) **(Rus)**

PAPOVAVIRIDAE

Morphological and immunohistochemical studies of the central nervous system involvement in papovavirus K infection in mice. Ikeda K, et al. **Acta Neuropathol (Berl)** 1988;77(2):175-81

GENETICS

Lymphotropic papovavirus early region is specifically regulated transgenic mice and efficiently induces neoplasia. Chen JD, et al. **J Virol** 1989 May;63(5):2204-14

IMMUNOLOGY

Comparison of an enzyme-linked immunosorbent assay, an immunofluorescence assay and a hemagglutination inhibition assay for detection of antibodies to

K-papovavirus in mice. Groen J, et al. **Lab Anim Sci** 1989 Jan;39(1):21-4

ISOLATION & PURIFICATION

Detection of individual virus-infected cells by filter in situ hybridization. Forbes B, et al. **Mol Cell Probes** 1988 Sep; 2(3):245-53

PATHOGENICITY

Lymphotropic papovavirus early region is specifically regulated transgenic mice and efficiently induces neoplasia. Chen JD, et al. **J Virol** 1989 May;63(5):2204-14

PAPP-D see **PLACENTAL LACTOGEN**

PAPPATACI FEVER

EPIDEMIOLOGY

The epidemiology of Phlebotomus (sandfly) fever. Tesh RB. **Isr J Med Sci** 1989 Apr;25(4):214-7 (19 ref.)

[Sand fly fever among Danish UN troops in Cyprus] Klokker M. **Ugeskr Laeger** 1988 Oct 31;150(44):2660-1 (Eng. Abstr.) **(Dan)**

ETIOLOGY

[The etiology of sandfly fever in Soviet servicemen in Afghanistan] Perepelkin VS, et al. **Voen Med Zh** 1989 Jan; (1):48-9 **(Rus)**

TRANSMISSION

Experimental studies on the maintenance of Toscana and Arbia viruses (Bunyaviridae: Phlebovirus). Ciufolini MG, et al. **Am J Trop Med Hyg** 1989 Jun;40(6):669-75

Experimental infection of Phlebotomus papatasi with sand fly fever Sicilian virus. Watts DM, et al. **Am J Trop Med Hyg** 1988 Dec;39(6):611-6

PAPPATACI FEVER VIRUS see under **BUNYAVIRIDAE**

PARA-CHLOROPHENYLALANINE see **P-CHLOROPHENYLALANINE**

PARA-DIHYDROXYBENZENES see **HYDROQUINONES**

PARA-HYDROXYBENZOIC ACIDS see **PARABENS**

PARA-OCTOPAMINE see **NORSYNEPHRINE**

PARA-AORTIC BODIES see under **CHROMAFFIN SYSTEM**

PARABENS

ADVERSE EFFECTS

Anaphylaxis from rectal lubricant jelly. Jones SA. **Am J Med** 1988 Dec;85(6):890

ANALYSIS

Liquid chromatographic determination of propyl paraben in cigarette filler. Castaño JI, et al. **J Assoc Off Anal Chem** 1988 Nov-Dec;71(6):1115-7

High-performance liquid chromatographic assay of imazodan, methylparaben and propylparaben in imazodan injection. Geria T, et al. **J Chromatogr** 1988 Oct 26; 450(3):407-13

[Simultaneous determination of fluorouracilum and ethylparaben in polyphase liposomes using Kalman filtering spectrophotometry] Liu SQ, et al. **Yao Hsueh Hsueh Pao** 1988 Jun;23(6):435-40 (Eng. Abstr.) **(Chi)**

[Determination of six esters of p-hydroxybenzoic acid in eye liner by high speed liquid chromatography] Saito E, et al. **Eisei Shikenjo Hokoku** 1988;(106):97-101 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Routine patch testing with paraben esters. Menné T, et al. **Contact Dermatitis** 1988 Sep;19(3):189-91

In vitro spermicidal activity of parabens against human spermatozoa. Song BL, et al. **Contraception** 1989 Mar; 39(3):331-5

Parabens as antimicrobial preservatives in creams. Turakka L, et al. **Pharmazie** 1988 Oct;43(10):701-3

PARABIOSIS

Effect of blood purification on the kidney function of the jaundiced rat. Koyama K, et al. **Artif Organs** 1988 Aug; 12(4):305-9

Transmission of hypertension in rats by cross circulation. Zidek W, et al. **Hypertension** 1989 Jul;14(1):61-5

PARACETAMOL see **ACETAMINOPHEN**

PARACHLORAMINE see **MECLIZINE**

PARACHUTING see **AVIATION**

PARACOCCIDIOIDES see under **HYPHOMYCETES**

PARACOCCIDIOIDOMYCOSIS

Systemic fungal infections: diagnosis and treatment. I. Paracoccidioidomycosis. Sugar AM. **Infect Dis Clin North Am** 1988 Dec;2(4):913-24 (30 ref.)

[Acute inflammation of a corneal graft caused by paracoccidioides brasiliensis--a case report] Feng GG, et al. **Yen Ko Hsueh Pao** 1988 Sep;4(3):161-4 (Eng. Abstr.) **(Chi)**

[Visceral paracoccidioidomycosis in a gold miner from Brazil] Köhler C, et al. **Mycoses** 1988 Aug;31(8):395-403 (Eng. Abstr.) **(Ger)**

CLASSIFICATION

Paracoccidioidomycosis: a recently proposed classification of its clinical forms. Franco M, et al. **Rev Soc Bras Med Trop** 1987 Apr-Jun;20(2):129-32

COMPLICATIONS

Squamous-cell carcinoma and lobomycosis (Jorge Lobo's disease). Baruzzi RG, et al. **Int J Dermatol** 1989 Apr; 28(3):183-5

Disseminated paracoccidioidomycosis with skin lesions in a patient with acquired immunodeficiency syndrome [letter] Bakos L, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 1):854-5

Paracoccidioidomycosis in a patient with acquired immunodeficiency syndrome. Goldani LZ, et al. **Mycopathologia** 1989 Feb;105(2):71-4

DIAGNOSIS

Acute disseminated paracoccidioidomycosis. Septic shock. Azulay RD, et al. **Int J Dermatol** 1988 Sep;27(7):510-1

[Use of picrosirius for staining Parachoccidioides brasiliensis] Almeida H de O, et al. **Rev Soc Bras Med Trop** 1988 Apr-Jun;21(2):59-62 (Eng. Abstr.) **(Por)**

[Uncommon aspects of infantile paracoccidioidomycosis] Bittencourt AL, et al. **Rev Soc Bras Med Trop** 1987 Oct-Dec;20(4):223-4 (9 ref.) (Eng. Abstr.) **(Por)**

DRUG THERAPY

Azole derivatives in the treatment of paracoccidioidomycosis. Negroni R. **Ann N Y Acad Sci** 1988;544:497-503 (48 ref.)

[Paracoccidioidomycosis: care at a primary health care level] Pripas S. **Rev Saude Publica** 1988 Jun;22(3):233-6 (Eng. Abstr.) **(Por)**

[Treatment of paracoccidioidomycosis and histoplasmosis by oral itraconazole] Negroni R, et al. **Medicina (B Aires)** 1987; 47(5):505-8 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Measurement of glucose-6-phosphate dehydrogenase and glutathione reductase activity in patients with paracoccidioidomycosis treated with ketoconazole. Barraviera B, et al. **Mycopathologia** 1988 Nov;104(2):87-91

EPIDEMIOLOGY

[Infection caused by Paracoccidioides brasiliensis in people living in Cocle and Veraguas, Republic of Panamá] de Martin MC, et al. **Rev Med Panama** 1989 May;14(2):112-5 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Crossed-antigenicity between the etiologic agents of lobomycosis and paraccocidioidomycosis evidenced by an immunoenzymatic method (PAP). Landman G, et al. **Allergol Immunopathol (Madr)** 1988 Jul-Aug;16(4):215-8

Cellular immunity in lobomycosis (keloidal blastomycosis). Pecher SA, et al. **Allergol Immunopathol (Madr)** 1988 Nov-Dec;16(6):413-5

Regulation of immune responses by T suppressor cells and by serum in chronic paracoccidioidomycosis. Castaneda E, et al. **Cell Immunol** 1988 Nov;117(1):1-11

Increased frequency of HLA-B40 in patients with paracoccidioidomycosis. Lacerda GB, et al. **J Med Vet Mycol** 1988;26(4):253-6

In situ localization of T lymphocyte subsets in human paracoccidioidomycosis. Moscardi-Bacchi M, et al. **J Med Vet Mycol** 1989;27(3):149-58

Secretion of the 43 kDa glycoprotein antigen by Paracoccidioides brasiliensis. Stambuk BU, et al. **J Med Vet Mycol** 1988;26(6):367-73

Digestion of killed Paracoccidioides brasiliensis by neutrophils. Goihman-Yahr M, et al. **Mycopathologia** 1989 Apr;106(1):53-8

METABOLISM

Paracoccidioidomycosis in the region of Botucatu (state of São Paulo, Brazil). Evaluation of serum thyroxine (T4) and triiodothyronine (T3) levels and of the response to thyrotropin releasing hormone (TRH). Kiy Y, et al. **Mycopathologia** 1988 Jul;103(1):3-9

MICROBIOLOGY

Evaluation of the pathogenicity and immunogenicity of seven Paracoccidioides brasiliensis isolates in susceptible inbred mice. Singer-Vermes LM, et al. **J Med Vet Mycol** 1989; 27(2):71-82

Virulence of a variant of Paracoccidioides brasiliensis that exists in the yeast form at room temperature. Villar LA, et al. **J Med Vet Mycol** 1989;27(3):141-8

Interaction between macrophage and parasite cells in lobomycosis. The thickened cell wall of Paracoccidioides loboi exhibits apertures to the extracellular milieu. Sesso A, et al. **J Submicrosc Cytol Pathol** 1988 Jul;20(3):537-48

PATHOLOGY

Intrinsic vascularization of granuloma in experimental paracoccidioidomycosis. Lenzi HL, et al. **Braz J Med Biol Res** 1988;21(5):945-7

Histological and ultrastructural study of the inflammation evoked by Paracoccidioides brasiliensis antigen in previously immunized mice. Defaveri J, et al. **Mycopathologia** 1989 Jan;105(1):53-8

Connective matrix organization in chronic granulomas of experimental paracoccidioidomycosis. Kerr IB, et al. **Mycopathologia** 1988 Jul;103(1):11-20

Paracoccidioidomycosis: a sequential histopathologic study of lesions in experimentally-infected rats. Kerr IB, et al. **Rev Inst Med Trop Sao Paulo** 1988 Sep-Oct;30(5):336-50

PREVENTION & CONTROL

Protective effect of prior immunization on ocular paracoccidioidomycosis in guinea pigs. Kamegasawa A, et al. **Mycopathologia** 1988 Jul;103(1):35-42

RADIOGRAPHY

[Paracoccidioidomycosis infections caused by an adventure vacation in the Amazon] Neveling F. **Prax Klin Pneumol** 1988 Sep;42(9):722-5 (Eng. Abstr.) **(Ger)**

[Computerized tomography in the evaluation of abdominal involvement in paracoccidioidomycosis] Martinez R, et al. **Rev Soc Bras Med Trop** 1988 Apr-Jun;21(2):47-50 (Eng. Abstr.) **(Por)**

PARACOCCUS

ENZYMOLOGY

Immunological comparison of subunits isolated from various hydrogenases of aerobic hydrogen bacteria. Lorenz B, et al. **Biochim Biophys Acta** 1989 Mar 16;995(1):1-9

PARACOCCUS DENITRIFICANS

Preliminary X-ray crystallographic studies of methylamine dehydrogenase and methylamine dehydrogenase--amicyanin complexes from Paracoccus denitrificans [letter] Chen L, et al. **J Mol Biol** 1988 Oct 20;203(4):1137-8

ENZYMOLOGY

Subunit I is the catalytic center of Paracoccus denitrificans cytochrome c oxidase. Müller M, et al. **Ann N Y Acad Sci** 1988;550:13-21

Subunit II of the Paracoccus denitrificans cytochrome c oxidase. Expression studies of its cloned gene in E. coli. Panskus G, et al. **Ann N Y Acad Sci** 1988;550:308-13

Cytochrome o from Escherichia coli is structurally related to cytochrome aa3. Saraste M, et al. **Ann N Y Acad Sci** 1988;550:314-24

Regulation of methanol dehydrogenase synthesis in Paracoccus denitrificans. Harms N, et al. **Antonie Van Leeuwenhoek** 1989 May;56(1):47-50

Steady-state kinetic analysis of the quinoprotein methylamine dehydrogenase from Paracoccus denitrificans. Davidson VL. **Biochem J** 1989 Jul 1;261(1):107-11

Preparation of a one-subunit cytochrome oxidase from Paracoccus denitrificans: spectral analysis and enzymatic activity. Müller M, et al. **Biochemistry** 1988 Sep 20; 27(19):7546-51

The energy-conserving nitric-oxide-reductase system in Paracoccus denitrificans. Distinction from the nitrite reductase that catalyses synthesis of nitric oxide and evidence from trapping experiments for nitric oxide as a free intermediate during denitrification. Carr GJ, et al. **Eur J Biochem** 1989 Feb 15;179(3):683-92

The membrane-bound hydrogenase from Paracoccus denitrificans. Purification and molecular characterization. Knüttel K, et al. **Eur J Biochem** 1989 Jan 15;179(1):101-8

The amino acid sequence of adenylate kinase from Paracoccus denitrificans and its relationship to mitochondrial and microbial adenylate kinases. Spürgin P, et al. **Eur J Biochem** 1989 Feb 15;179(3):621-8

Cytochrome o (bo) is a proton pump in Paracoccus denitrificans and Escherichia coli. Puustinen A, et al. **FEBS Lett** 1989 Jun 5;249(2):163-7

Purification and some characteristics of nitric oxide reductase-containing vesicles from Paracoccus denitrificans. Hoglen J, et al. **J Biol Chem** 1989 May 5; 264(13):7556-63

A bacterial c-type cytochrome can be translocated to the periplasm as an apo form; the biosynthesis of cytochrome cd1 (nitrite reductase) from Paracoccus denitrificans. Page MD, et al. **Mol Microbiol** 1989 May;3(5):653-61

METABOLISM

Electron transport reactions in a cytochrome c-deficient mutant of Paracoccus denitrificans. Bolgiano B, et al. **Biochim Biophys Acta** 1989 Feb 28;973(2):227-34

Cytochrome c-550 mediates electron transfer from inducible periplasmic c-type cytochromes to the cytoplasmic membrane of Paracoccus denitrificans. Davidson VL, et al. **FEBS Lett** 1989 Mar 13;245(1-2):271-3

Complex formation between methylamine dehydrogenase and amicyanin from Paracoccus denitrificans. Gray KA, et al. **J Biol Chem** 1988 Oct 5;263(28):13987-90

PARADENTIUM see PERIODONTIUM

PARADOXICAL SLEEP see SLEEP, REM

PARAFFIN

Sputum wax-worms after plombage. Wood JB, et al. **Br J Dis Chest** 1988 Jul;82(3):321-3

Effects of Parafilm and cheese chewing on human dental plaque pH and metabolism. Higham SM, et al. **Caries Res** 1989;23(1):42-8

Absorption of compounds in medium by the oil covering microdrop cultures. Miller KF, et al. **Gamete Res** 1987 May;17(1):57-61

Plastic or paraffin? [editorial] **Lancet** 1989 Jan 21; 1(8630):139-40

Plastic or paraffin? [letter] Kingsley TC, et al. **Lancet** 1989 Mar 11;1(8637):563

Plastic or paraffin? [letter] Murray GI, et al. **Lancet** 1989 Feb 18;1(8634):387

Detection of 14;18 chromosomal translocation in paraffin-embedded lymphoma tissue [letter] Pezzella F, et al. **Lancet** 1989 Apr 8;1(8641):779-80

A simple procedure to obtain one-micrometer sections of routinely embedded paraffin material. Junqueira LC, et al. **Stain Technol** 1989 Jan;64(1):39-42

ADVERSE EFFECTS

Removal of both breasts for paraffinoma and subsequent replacement. Czeti I, et al. **Acta Chir Plast** 1988;30(2):122-4

Postoperative sequelae of augmentation mammaplasty by injection method in Japan. Ohtake N, et al. **Aesthetic Plast Surg** 1989 Spring;13(2):67-74

[Paraffinoma of the breasts] Tepavicharova P, et al. **Khirurgiia (Sofiia)** 1988;41(4):90-3 (Eng. Abstr.) (Bul)

[2 cases of pulmonary paraffinosis] Dalphin JC, et al. **Rev Med Interne** 1988 Sep-Oct;9(4):410-3 (Fre)

DIAGNOSTIC USE

[Immunocytochemical staining of estrogen receptor in conventional formalin-fixed paraffin sections in human breast cancer] Kawakami S, et al. **Nippon Geka Gakkai Zasshi** 1989 Jan;90(1):102-7 (Eng. Abstr.) (Jpn)

PHARMACOLOGY

[Distribution of plutonium-239 in the bodies of rats after its administration together with tributyl phosphate combined with organic solvents] Kuz'menko OV, et al. **Gig Sanit** 1989 Apr;(4):17-9 (Eng. Abstr.) (Rus)

POISONING

Poisoning of children [letter] James T. S **Afr Med J** 1989 May 6;75(9):453

THERAPEUTIC USE

[Preparations for the external treatment of psoriasis] Kalamkarian AA, et al. **Vestn Dermatol Venerol** 1988; (12):47-9 (Eng. Abstr.) (Rus)

[Experience in the use of ditrastic in the therapy of psoriasis] Shakhtmeister IIa, et al. **Vestn Dermatol Venerol** 1989; (3):52-3 (Eng. Abstr.) (Rus)

TOXICITY

Comparative pathology of Prudhoe Bay crude oil and inert shell sealants in chicken embryos. Couillard CM, et al. **Fundam Appl Toxicol** 1989 Jul;13(1):165-73

The carcinogenic initiating and promoting properties of a lightly refined paraffinic oil. McKee RH, et al. **Fundam Appl Toxicol** 1989 May;12(4):748-56

PARAFFIN JELLY see PETROLATUM

PARAGANGLIA, CHROMAFFIN see under CHROMAFFIN SYSTEM

PARAGANGLIA, NONCHROMAFFIN

ANALYSIS

Regulatory peptides in paraganglia. Heym C, et al. **Prog Histochem Cytochem** 1988;18(2):1-95 (361 ref.)

ANATOMY & HISTOLOGY

The paraganglia within the carotid bifurcation regions of young and old spontaneously hypertensive rats (SHR) after exposure to chronic hypobaric hypoxia. II. The carotid body-like organs. Habeck JO, et al. **Anat Anz** 1988; 167(1):47-55

METABOLISM

Networks of peptide-containing nerve fibres in laryngeal nerve paraganglia. An immunohistochemical study. Dahlqvist A, et al. **Acta Otolaryngol (Stockh)** 1989 Mar-Apr;107(3-4):289-95

PATHOLOGY

Glomus jugulare or tympanicum? The role of CT and MR imaging with gadolinium DTPA. Phelps PD, et al. **J Laryngol Otol** 1988 Sep;102(9):766-76

ULTRASTRUCTURE

Ultrastructural morphometric observations on the extramural aortico-pulmonary bodies of the domestic fowl. Taha AA, et al. **J Anat** 1988 Apr;157:169-73

PARAGANGLIOMA

Paraganglioma of the larynx. Smith O, et al. **J Otolaryngol** 1988 Oct;17(6):293-301 (48 ref.)

[Vagal paraganglioma. Apropos of 2 cases. Review of the literature] Mondie JM, et al. **Rev Stomatol Chir Maxillofac** 1988;89(6):342-7 (20 ref.) (Eng. Abstr.) (Fre)

[Juxtapapillary gangliocytic paraganglioma of the duodenum (letter)] Büchler M, et al. **Dtsch Med Wochenschr** 1989 Jul 14;114(28-29):1138 (Ger)

[A case of retroperitoneal paraganglioma--review of Japanese literature] Tanaka A, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Sep;85(9):1717-21 (6 ref.) (Jpn)

COMPLICATIONS

Malignant paraganglioma causing bilateral pleural effusions. Clarnette RM, et al. **Aust N Z J Med** 1989 Feb;19(1):61-3

Multiple functioning paraganglioma associated with polycythemia. Imai T, et al. **J Surg Oncol** 1988 Dec; 39(4):279-82

[Spontaneous hemoperitoneum complicating intraperitoneal paraganglioma] el Allame L, et al. **J Chir (Paris)** 1989 Apr; 126(4):242-7 (Eng. Abstr.) (Fre)

DIAGNOSIS

Fine needle aspiration of carotid body paraganglioma [letter] Chen LT, et al. **Acta Cytol** 1989 Sep-Oct;33(5):681-2

Paragangliomas of the cauda equina. Hayes E, et al. **AJNR** 1989 Sep-Oct;10(5 Suppl):S45-7

Neurogenic neoplasms in the head and neck region. Ishikawa K, et al. **Auris Nasus Larynx** 1988;15(3):199-210 (21 ref.)

Paragangliomas of the head and neck: immunohistochemical neuroendocrine and intermediate filament typing. Johnson TL, et al. **Mod Pathol** 1988 May;1(3):216-23

[Laterocervical paraganglioma] Thomassin JM, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(2):213-7 (Eng. Abstr.) (Fre)

ETIOLOGY

Gangliocytic paraganglioma in association with a duodenal diverticulum. Damron TA, et al. **Am J Gastroenterol** 1989 Sep;84(9):1109-14 (32 ref.)

METABOLISM

Immunocytochemical demonstration of IGF-II-like immunoreactivity in human paraganglioma of the craniocervical region. Suzuki T, et al. **Virchows Arch [A]** 1989;414(6):515-21

PATHOLOGY

Gangliocytic paraganglioma. Burke AP, et al. **Am J Clin Pathol** 1989 Jul;92(1):1-9

Duodenal gangliocytic paraganglioma with lymph node metastasis in a 17-year-old boy. Inai K, et al. **Cancer** 1989 Jun 15;63(12):2540-5 (29 ref.)

Paragangliomas: assessment of prognosis by histologic, immunohistochemical, and ultrastructural techniques. Kliewer KE, et al. **Hum Pathol** 1989 Jan;20(1):29-39

Malignant paraganglioma. Report of a case and review of the Japanese literature. Tashiro M, et al. **J Craniomaxillofac Surg** 1988 Oct;16(7):324-9 (24 ref.)

Paraganglioma of the cauda equina. Nagata K, et al. **Kurume Med J** 1988;35(2):95-9

Malignant paraganglioma--a case report and literature review. Branham GH, et al. **Otolaryngol Head Neck Surg** 1989 Jul;101(1):99-103 (14 ref.)

Malignant primary pulmonary paraganglioma. Hangartner JR, et al. **Thorax** 1989 Feb;44(2):154-6

[Juxtapapillary gangliocytic paraganglioma of the duodenum] Grouls V, et al. **Dtsch Med Wochenschr** 1989 Apr 14; 114(15):584-8 (Eng. Abstr.) (Ger)

[Immunohistologic findings in paragangliomas in the area of the head and neck] Milewski C, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Aug;67(8):385-8 (Eng. Abstr.) (Ger)

[An autopsied case of malignant paraganglioma of the posterior thoracic cavity] Kitazawa S, et al. **Gan No Rinsho** 1989 Mar;35(4):486-92 (Eng. Abstr.) (Jpn)

[Morphology and histogenesis of paraganglioma] Galil-Ogly GA, et al. **Arkh Patol** 1989;51(1):38-44 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Case report: CT of a duodenal paraganglioma. Alpern MB, et al. **Comput Med Imaging Graph** 1988 Sep-Oct; 12(5):321-3

RADIOTHERAPY

Therapeutic effectiveness of iodine-131 MIBG metastases of a nonsecreting paraganglioma. Baulieu JL, et al. **J Nucl Med** 1988 Dec;29(12):2008-13

SECONDARY

Paraganglioma of the thoracic spinal cord with cerebrospinal fluid metastasis. Constantini S, et al. **Spine** 1989 Jun; 14(6):643-5

SECRETION

Catecholamine-secreting paraganglioma of glomus jugulare region. Kremer R, et al. **Am J Med Sci** 1989 Jan;297(1):46-8

Multiple extra-adrenal paragangliomas associated with catecholamine cardiomyopathy. Behrana AJ, et al. **Eur Heart J** 1989 Feb;10(2):182-5

SURGERY

Nasal and nasopharyngeal paraganglioma. Kuhn JA, et al. **J Surg Oncol** 1989 Jan;40(1):38-45 (27 ref.)

[Neurogenic tumors of the mediastinum. Considerations apropos of 6 operated cases] Ghilardi G, et al. **Minerva Chir** 1988 Dec 31;43(23-24):2125-9 (Eng. Abstr.) (Ita)

[Glomus caroticum tumors] Moravec R, et al. **Rozhl Chir** 1988 Dec;67(12):785-9 (Eng. Abstr.) (Slo)

PARAGANGLIOMA, NONCHROMAFFIN

Primary cardiac paraganglioma (chemodectoma)--a case report and review of literature. Ren H, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(4):239-41 (8 ref.)

[Chemodectoma of the ear with unusual clinical course] Bętkowski A, et al. **Otolaryngol Pol** 1988;42(1-2):136-9 (Eng. Abstr.) (Pol)

[A malignant retroperitoneal paraganglioma] Kniazev VI, et al. **Khirurgiia (Mosk)** 1988 Nov;(11):111 (Rus)

[Chemodectoma of the larynx] Gladkil NI, et al. **Vestn Otorinolaringol** 1988 May-Jun;(3):77-8 (Rus)

COMPLICATIONS

Paraganglioma presenting with an aortic aneurysm. Akosa AB, et al. **Histopathology** 1989 Mar;14(3):305-10

Glomus vagale tumor: the significance of early vocal cord paralysis. Leonetti JP, et al. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):533-7

[Cervical chemodectoma disclosed by coma. Pathogenic hypotheses] Courtheoux P, et al. **J Radiol** 1988 Dec; 69(12):775-8 (12 ref.) (Eng. Abstr.) (Fre)

[Carney's triad. Apropos of a case of recurrent gastric leiomyosarcoma and bilateral pulmonary chondroma] Pignatelli V, et al. **Radiol Med (Torino)** 1988 Dec; 76(6):577-9 (14 ref.) (Eng. Abstr.) (Ita)

DIAGNOSIS

Fine needle aspiration cytologic findings in a case of carotid body paraganglioma (chemodectoma) [letter] Mincione G, et al. **Acta Cytol** 1989 Sep-Oct;33(5):679-81

Paragangliomas of the jugular bulb and carotid body: MR imaging with short sequences and Gd-DTPA enhancement. Vogl T, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):583-7

Multicentric chemodectoma in the head and neck. Havas TE, et al. **Aust N Z J Surg** 1989 Aug;59(8):641-5

Glomus jugulare or tympanicum? The role of CT and MR imaging with gadolinium DTPA. Phelps PD, et al. **J Laryngol Otol** 1988 Sep;102(9):766-76

[Swelling in the neck; not always a lymph node] de Jong KP, et al. **Ned Tijdschr Geneeskd** 1989 May 6;133(18):913-5 (Dut)

[Laterocervical paraganglioma] Thomassin JM, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(2):213-7 (Eng. Abstr.) (Fre)

[Vascular lesions of the ENT organs. Considerations on cases hospitalized at the Coltea ENT Clinic in 1983-1987] Cincă D, et al. **Rev Chir [Otorinolaringol]** 1989 Jan-Mar; 34(1):11-7 (Rum)

GENETICS

Radionuclide angiography and surgery for familial bilateral chemodectomas. Hamilton JR, et al. **Eur J Vasc Surg** 1987 Apr;1(2):97-105

Familial occurrence of paragangliomas. Geysens P, et al. **J Belge Radiol** 1989 Apr;72(2):95-9

[The two cases of carotid body tumor in the same family]

Yagi A, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Dec; 91(12):1987–95 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Paraganglioma of the orbit with extension to the middle cranial fossa: case report. Venkataramana NK, et al. **Neurosurgery** 1989 May;24(5):762–4

Glomus vagale tumors. Davidson J, et al. **Otolaryngol Head Neck Surg** 1988 Jul;99(1):66–70 (34 ref.)

Glomus tumor of the trachea. Immunohistochemical and electron microscopic studies. Ito H, et al. **Pathol Res Pract** 1988 Nov;183(6):778–84

[Chemodectoma of the orbit. Apropos of a case and review of the literature] Aouidj L, et al. **Neurochirurgie** 1988; 34(3):201–4 (24 ref.) (Eng. Abstr.) **(Fre)**

[Chemodectoma: an anatomo-clinical and immunohistochemical study. Apropos of 2 cases] Dellagi K, et al. **Tunis Med** 1987 Jun–Jul;65(6–7):447–52 (Eng. Abstr.) **(Fre)**

[Gangliocytic paraganglioma of the duodenum] Born P, et al. **Z Gastroenterol** 1989 Jun;27(6):339–40 (Eng. Abstr.) **(Ger)**

[An autopsy case of malignant retroperitoneal paraganglioma] Murao T, et al. **Gan No Rinsho** 1988 Aug; 34(9):1195–200 (18 ref.) (Eng. Abstr.) **(Jpn)**

[Nasal cavity paraganglioma with intracranial extension. Case report] Shimoda M, et al. **Neurol Med Chir (Tokyo)** 1989 Feb;29(2):132–6 (Eng. Abstr.) **(Jpn)**

[Glomus tumors of the temporal bone: a report of 6 cases] Arruda WO, et al. **Arq Neuropsiquiatr** 1989 Mar; 47(1):51–60 (Eng. Abstr.) **(Por)**

RADIOGRAPHY

High resolution computed tomography in the evaluation of glomus tumours of the petrous temporal bone. Grattan-Smith JD, et al. **Australas Radiol** 1988 May; 32(2):190–6

Pulsatile neck mass. Lutz JD, et al. **Indiana Med** 1989 Mar; 82(3):190–1

[Jugulo-tympanic glomus tumors: study protocol based on new diagnostic imaging technics] Aguila Artal AF, et al. **An Otorrinolaringol Ibero Am** 1988;15(3):263–76 (Eng. Abstr.) **(Spa)**

RADIONUCLIDE IMAGING

[Diagnosis of extra-adrenal paragangliomas by 131I-MIBG scintigraphy] Yoshikawa T, et al. **Rinsho Hoshasen** 1988 Oct;33(10):1151–4 (Eng. Abstr.) **(Jpn)**

RADIOTHERAPY

Radiotherapy in glomus tumours (paragangliomas). A 25 year–review. Hansen HS, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:151–4

[Current aspects of radiotherapy of glomus jugulare tumors] Feyerabend T, et al. **HNO** 1989 Jul;37(7):295–8 (Eng. Abstr.) **(Ger)**

SECRETION

Catecholamine-secreting paraganglioma of glomus jugulare region. Kremer R, et al. **Am J Med Sci** 1989 Jan;297(1):46–8

[The risk of endocrine activation in interventional procedures on paraganglioma of the head and neck] Kretzschmar K, et al. **Radiologe** 1988 Nov;28(11):497–502 (Eng. Abstr.) **(Ger)**

[Case report of catecholamine-secreting carotid body tumor] Nakamizo M, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Feb;92(2):246–52 (Eng. Abstr.) **(Jpn)**

[Hormone-active paragangliomas of the base of the skull] Koval'IV, et al. **Zh Vopr Neirokhir** 1988 Jul–Aug;(4):19–23 (Eng. Abstr.) **(Rus)**

SURGERY

Glomus vagale tumors. Biller HF, et al. **Ann Otol Rhinol Laryngol** 1989 Jan;98(1 Pt 1):21–6

Carney's triad. McLaughlin SJ, et al. **Aust N Z J Surg** 1988 Aug;58(8):679–81 (10 ref.)

Perioperative management for resection of a malignant non-chromaffin paraganglioma of the bladder. Splinter WM, et al. **Can J Anaesth** 1989 Mar;36(2):215–8

Management of bilateral carotid body tumors and a glomus jugulare tumor in a child. Thompson JW, et al. **Int J Pediatr Otorhinolaryngol** 1989 Feb;17(1):75–87

Endaural extracranial repair for cerebrospinal otorrhoea with human fibrin glue: technical note. Ferrante L, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1438–40

Glomus tympanicum tumors: contemporary concepts in conservation surgery. Jackson CG, et al. **Laryngoscope** 1989 Sep;99(9):875–84

Glomus jugulare tumor [letter] Fox JL. **Nebr Med J** 1988 Aug;73(8):262

A paraneoplastic syndrome associated with glomus tumors of the skull base? Early observations. Jackson CG, et al. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):583–7

Nonfunctioning paraganglioma of the posterior mediastinum. Case report. Évora PR, et al. **Scand J Thorac Cardiovasc Surg** 1988;22(3):295–7

[Surgical treatment of nonchromaffin paragangliomas of the middle ear] Beuthner D. **Z Arztl Fortbild (Jena)** 1988; 82(11):529–31 **(Ger)**

[Neurogenic tumors of the mediastinum. Considerations apropos of 6 operated cases] Ghilardi G, et al. **Minerva Chir** 1988 Dec 31;43(23–24):2125–9 (Eng. Abstr.) **(Ita)**

[Malignant pelvic paraganglioma] Pęszyński J, et al. **Wiad Lek** 1988 Mar 15;41(6):401–3 (Eng. Abstr.) **(Pol)**

THERAPY

Superselective embolization of glomus jugulare tumors. Young NM, et al. **Ann Otol Rhinol Laryngol** 1988 Nov–Dec;97(6 Pt 1):613–20

Treatment of glomus tumours. A retrospective survey. Bundgaard T, et al. **Clin Otolaryngol** 1989 Apr;14(2):155–60

Glomus Tumor: Diagnosis and Management [letter] Cocke EW Jr, et al. **Head Neck Surg** 1988 Mar–Apr;10(4):280

ULTRASTRUCTURE

[Clinico-morphologic and electron microscopic characteristics of chemodectoma of the neck] Karmilov VA, et al. **Arkh Patol** 1989;51(2):78–81 (Eng. Abstr.) **(Rus)**

VETERINARY

Cytomorphological description of an abdominal extra-adrenal paraganglioma in a Fischer 344 rat. Pirak M, et al. **Lab Anim Sci** 1988 Dec;38(6):736–8

PARAGONIMIASIS

COMPLICATIONS

Heart block and paragonimiasis. Morrison WL, et al. **Br Heart J** 1988 Dec;60(6):530–1

DIAGNOSIS

MR imaging of chronic cerebral paragonimiasis. Kadota T, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S21–2

Diagnosis of paragonimiasis by immunoblot. Slemenda SB, et al. **Am J Trop Med Hyg** 1988 Nov;39(5):469–71

Application of the latex agglutination test for human paragonimiasis in South America. Kobayashi M, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):300–2

DRUG THERAPY

The effect of cyclosporin A on the course of Paragonimus miyazakii infection in rats. Hashiguchi Y, et al. **J Helminthol** 1988 Sep;62(3):251–6

Clinical field trials of praziquantel in pulmonary paragonimiasis due to Paragonimus uterobilateralis in endemic populations of the Igwun Basin, Nigeria. Udonsi JK. **Trop Med Parasitol** 1989 Mar;40(1):65–8

The effects of triclabendazole on the lung fluke, Paragonimus uterobilateralis in the experimental host Sigmodon hispidus. Weber P, et al. **Trop Med Parasitol** 1988 Dec;39(4):322–4

EPIDEMIOLOGY

[The application of the two-stage catalytic model in the epidemiology of paragonimiasis] Zhang JL. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1988 Aug; 9(4):235–7 (Eng. Abstr.) **(Chi)**

ETIOLOGY

The man who loved drunken crabs. A case of pulmonary paragonimiasis. Sharma OP. **Chest** 1989 Mar;95(3):670–2

Susceptibility of inbred mice to Paragonimus miyazakii infection. Hata H, et al. **J Parasitol** 1989 Jun;75(3):463–4

IMMUNOLOGY

[Detecting Paragonimus skrjabini circulating antigen using a direct method of AST-ELISA] Luo XR, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Apr;27(4):237–8, 262 (Eng. Abstr.) **(Chi)**

[Anti-IgE autoantibody in patients with parasite infection] Nawata Y, et al. **Arerugi** 1988 Apr;37(4):204–7 (Eng. Abstr.) **(Jpn)**

PARASITOLOGY

[The morphology of the eggs of Paragonimus westermani (Trematoda)] Ditrich O, et al. **Angew Parasitol** 1988 Jun; 29(2):101–5 (Eng. Abstr.) **(Ger)**

VETERINARY

Parasitic pneumonia in a dog caused by a lung fluke of the genus Paragonimus. Van Rensburg IB, et al. **J S Afr Vet Assoc** 1987 Dec;58(4):203–6

PARAGONIMUS

DRUG EFFECTS

The effects of triclabendazole on the lung fluke, Paragonimus uterobilateralis in the experimental host Sigmodon hispidus. Weber P, et al. **Trop Med Parasitol** 1988 Dec;39(4):322–4

[Transmission electron microscopical observations on the effects of pyquiton on Pagumogonimus skrjabini in dogs] Zheng SC, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(3):214–6 (Eng. Abstr.) **(Chi)**

ENZYMOLOGY

Purification of a neutral thiol protease from Paragonimus westermani metacercariae by single-step chromatography and preparation of antibodies. Yamakami K, et al. **Int J Parasitol** 1989 Feb;19(1):9–12

GENETICS

Novel C-banding patterns in Paragonimus ohirai (Trematoda: Platyhelminthes). Hirai H, et al. **J Parasitol** 1989 Feb; 75(1):157–60

IMMUNOLOGY

Diagnosis of paragonimiasis by immunoblot. Slemenda SB, et al. **Am J Trop Med Hyg** 1988 Nov;39(5):469–71

Production of monoclonal antibody to characterize the antigen of Paragonimus westermani. Sugiyama H, et al. **Parasitol Res** 1988;75(2):144–7

Characterization of antigens of Paragonimus miyazakii by ELISA. Takemoto Y, et al. **Southeast Asian J Trop Med Public Health** 1989 Mar; 20(1):87–93

[Detecting Paragonimus skrjabini circulating antigen using a direct method of AST-ELISA] Luo XR, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Apr;27(4):237–8, 262 (Eng. Abstr.) **(Chi)**

[McAb-immunoblotting assay for the detection of circulating antigens of Pagumogonimus skrjabini] Feng RY, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Jun;19(2):120–2 (Eng. Abstr.) **(Chi)**

ISOLATION & PURIFICATION

Parasitic pneumonia in a dog caused by a lung fluke of the genus Paragonimus. Van Rensburg IB, et al. **J S Afr Vet Assoc** 1987 Dec;58(4):203–6

Parasitological survey of the first intermediate host of Paragonimus westermani in Iga area of Mie Prefecture, Japan. Tomimura T, et al. **Nippon Juigaku Zasshi** 1989 Apr; 51(2):315–26

Distribution of Paragonimus heterotremus metacercariae in fresh water crab, Tiwaripotamon beusekomae-Bott 1970. Komalamisra C, et al. **Southeast Asian J Trop Med Public Health** 1988 Jun; 19(2):337–9

Isolation of microcercous cercariae from snails caught in an endemic focus of Paragonimus uterobilateralis in Liberia, West Africa. Sachs R, et al. **Trop Med Parasitol** 1989 Mar; 40(1):69–72

PHYSIOLOGY

Paragonimus ohirai: identification of nucleolar organizer regions (NORs) and silver nitrate staining pattern in spermatogenesis. Hirai H. **Exp Parasitol** 1988 Dec; 67(2):281–6

Fertilization and oogenesis of the lung fluke, Paragonimus ohirai (Trematoda:Troglotrematidae). Orido Y. **Int J Parasitol** 1988 Nov;18(7):973–80

Susceptibility of Tricula aperta (beta race) to Paragonimus heterotremus. Yaemput S, et al. **Southeast Asian J Trop Med Public Health** 1988 Jun; 19(2):337

ULTRASTRUCTURE

Cuticular ultrastructure of Paragonimus from Costa Rica. Hernandez F, et al. **J Electron Microsc (Tokyo)** 1989; 38(1):41–6

[Ultrastructure of the miracidium of Paragonimus westermani] Yuan JH, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(2):126–7 (Eng. Abstr.) **(Chi)**

[Scanning electron microscopical observations on damages on tegument and gut epithelia of Pagumogonimus skrjabini caused by praziquantel] Zheng SC, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 May;9(3):262–3 (Eng. Abstr.) **(Chi)**

[The morphology of the eggs of Paragonimus westermani (Trematoda)] Ditrich O, et al. **Angew Parasitol** 1988 Jun; 29(2):101–5 (Eng. Abstr.) **(Ger)**

PARAIMMUNOGLOBULINEMIAS see **PARAPROTEINEMIAS**

PARA-INFLUENZA

COMPLICATIONS

Bronchial hyperreactivity induced by parainfluenza 3 is partly prevented by atropine. Folkerts G, et al. **Agents Actions** 1989 Jan;26(1–2):66–7

[Unilateral lesions of basal ganglia nuclei in children during myxovirus para-influenzae infection] Parker F, et al. **Rev Neurol (Paris)** 1989;145(3):245–7 (9 ref.) (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Contribution to laboratory diagnosis of mumps and parainfluenza. Fraňková V, et al. **Acta Virol (Praha)** 1988 Nov;32(6):503–14

Parainfluenza 3 infections. Bhattacharya N, et al. **Indian Pediatr** 1988 Nov;25(11):1040–3

ENZYMOLOGY

Neutral endopeptidase and neurogenic inflammation in rats with respiratory infections. Borson DB, et al. **J Appl Physiol** 1989 Jun;66(6):2653–8

EPIDEMIOLOGY

Epidemiology of parainfluenza virus type 3 in England and Wales over a ten-year period. Easton AJ, et al. **Epidemiol Infect** 1989 Jun;102(3):531–5

ETIOLOGY

Sendai virus infection of mice with protein malnutrition. Pena-Cruz V, et al. **J Virol** 1989 Aug;63(8):3541–4

Association of parainfluenza virus type 3 infection with allograft rejection in a liver transplant recipient. Herzog KD, et al. **Pediatr Infect Dis J** 1989 Aug;8(8):534–6

IMMUNOLOGY

Macrophage activation and host augmentation against Sendai or herpes simplex virus (HSV) infections with synthetic polypeptides in mice. Iida J, et al. **Int J Immunopharmacol** 1989;11(3):249–58

Levamisole-induced attenuation of alveolar macrophage dysfunction in respiratory virus-infected calves. Ogunbiyi PO, et al. **Int J Immunopharmacol** 1988;10(4):377–85

Reversal of virus-induced alveolar macrophage bactericidal dysfunction by cyclooxygenase inhibition in vitro. Laegreid WW, et al. **J Leukoc Biol** 1989 Apr;45(4):293–300

Rabbit model for mucosal immunity in the bowel: I. Establishment of virus-infected ileal loops. Holmes MJ, et al. **J Med Virol** 1988 Jul;25(3):271–80

METABOLISM

The effect of parainfluenza 3 infection on guinea pig basophil and lung mast cell histamine release. Graziano FM, et al. **Am Rev Respir Dis** 1989 Mar;139(3):715–20

Virus-induced enhancement of arachidonate metabolism by bovine alveolar macrophages in vitro. Laegreid WW, et al. **J Leukoc Biol** 1989 Apr;45(4):283–92

MICROBIOLOGY

Fatal pneumonia caused by parainfluenza type 3 virus. Ross LA, et al. **West J Med** 1988 Aug;149(2):223

PHYSIOPATHOLOGY

Respiratory tract infections increase susceptibility to neurogenic inflammation in the rat trachea. McDonald DM. **Am Rev Respir Dis** 1988 Jun;137(6):1432–40

PREVENTION & CONTROL

Prophylactic activity against Sendai virus infection and macrophage activation with lipophilic derivatives of N-acetylglucosaminylmuramyl tri- or tetrapeptides. Iida J, et al. **Vaccine** 1989 Jun;7(3):225–8

Protective activity of recombinant cytokines against Sendai virus and herpes simplex virus (HSV) infections in mice. Iida J, et al. **Vaccine** 1989 Jun;7(3):229–33

[BCG-polysaccharides-nucleic acid and its effect in the prophylactic treatment of the common cold] Wang H. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1989 Feb; 12(1):20–3, 61 (Eng. Abstr.) **(Chi)**

VETERINARY

Effect of respiratory infections caused by bovine herpesvirus-1 or parainfluenza-3 virus on bovine alveolar macrophage functions. Brown TT Jr, et al. **Am J Vet Res** 1988 Sep;49(9):1447–51

Evidence for Australia-wide canine parainfluenza infection. McGavin DR, et al. **Aust Vet J** 1989 Jul;66(7):221

Bovine herpesvirus-1 and parainfluenza-3 virus interactions: clinical and immunological response in calves. Ghram A, et al. **Can J Vet Res** 1989 Jan;53(1):62–7

Canine parainfluenza virus-induced encephalitis in ferrets. Baumgärtner W, et al. **J Comp Pathol** 1989 Jan;100(1):67–76

Parainfluenza-3 virus-induced enhancement of histamine release from calf lung mast cells—effect of levamisole. Ogunbiyi PO, et al. **J Vet Pharmacol Ther** 1988 Dec; 11(4):338–44

Infection of rabbits with Sendai virus. Machii K, et al. **Lab Anim Sci** 1989 Jul;39(4):334–7

Kennel cough complex: confirmation and analysis of the outbreak in Japan. Azetaka M, et al. **Nippon Juigaku Zasshi** 1988 Aug;50(4):851–8

Immune production of interferon by cultured peripheral blood mononuclear cells from calves infected with BHV1 and PI3 viruses. Townsend J, et al. **Res Vet Sci** 1988 Sep; 45(2):198–205

Acute and persistent alterations in pulmonary inflammatory cells and airway mast cells induced by Sendai virus infection in neonatal rats [published erratum appears in Vet Pathol 1989 Mar;26(2):187] Castleman WL, et al. **Vet Pathol** 1989 Jan;26(1):18–25

Outbreak of kennel cough in Norway [letter] Ueland K. **Vet Rec** 1989 Jun 17;124(24):642

PARA-INFLUENZA VIRUS TYPE 1

Isolation of a biologically active soluble form of the hemagglutinin-neuraminidase protein of Sendai virus. Thompson SD, et al. **J Virol** 1988 Dec;62(12):4653–60

ANALYSIS

Selective extraction of haemagglutinin and matrix protein from Sendai virions by employing trifluoperazine as a detergent. Baiocchi M, et al. **FEBS Lett** 1988 Sep 26; 238(1):171–4

Comparison of ion-exchange high-performance liquid chromatography columns for purification of Sendai virus integral membrane proteins. Welling-Wester S, et al. **J Chromatogr** 1989 Aug 4;476:477–85

Effect of detergents on the structure of integral membrane proteins of Sendai virus studied with size-exclusion high-performance liquid chromatography and monoclonal antibodies. Welling-Wester S, et al. **J Chromatogr** 1988 Jun 29;443:255–66

DRUG EFFECTS

Inhibition of virus protein glycosylation as the mechanism of the antiviral action of prostaglandin A in Sendai virus-infected cells. Santoro MG, et al. **J Gen Virol** 1989 Apr;70 (Pt 4):789–800

Effects of asymmetrical triazine copper complexes on superoxide radical formation and on the Sendai virus multiplication. Zuivertz A, et al. **Virologie** 1988 Jul-Sep; 39(3):217–20

GENETICS

Inability of translation of mRNA for HVJ (Sendai virus) M protein in a rat glioma cell line at nonpermissive temperatures. Ogura H, et al. **Arch Virol** 1988; 102(3–4):263–8

Cotransfection of nucleic acid segments by Sendai virus envelopes. Bartzatt R. **Biotechnol Appl Biochem** 1989 Feb; 11(1):133–5

Scanning independent ribosomal initiation of the Sendai virus X protein. Curran J, et al. **EMBO J** 1988 Sep;7(9):2869–74

Virus infection and interferon can activate gene expression through a single synthetic element, but endogenous genes show distinct regulation. Raj NB, et al. **J Biol Chem** 1989 Oct 5;264(28):16658–66

Single amino acid change at the cleavage site of the fusion protein is responsible for both enhanced chymotrypsin sensitivity and trypsin resistance of a Sendai virus mutant, TR-5. Itoh M, et al. **J Gen Virol** 1988 Nov;69 (Pt 11):2907–11

Modified model for the switch from Sendai virus transcription to replication. Vidal S, et al. **J Virol** 1989 May;63(5):1951–8

trans activation of type 1 interferon promoters by simian virus 40 T antigen. Hiscott J, et al. **Mol Cell Biol** 1988 Aug; 8(8):3397–405

Coordinate viral induction of tumor necrosis factor alpha and interferon beta in human B cells and monocytes. Goldfeld AE, et al. **Proc Natl Acad Sci U S A** 1989 Mar; 86(5):1490–4

Rescue of Sendai virus from viral ribonucleoprotein-transfected cells by infection with recombinant vaccinia viruses carrying Sendai virus L and P/C genes. Gotoh H, et al. **Virology** 1989 Aug; 171(2):434–43

Molecular cloning and sequence determination of the fusion protein gene of human parainfluenza virus type 1. Merson JR, et al. **Virology** 1988 Nov;167(1):97–105

Replication of the genome RNAs of defective interfering particles of vesicular stomatitis and Sendai viruses using heterologous viral proteins. Moyer SA. **Virology** 1989 Sep; 172(1):341–5

Carboxyl-terminal region of Sendai virus P protein is required for binding to viral nucleocapsids [published erratum appears in Virology 1989 Apr;169(2):489] Ryan KW, et al. **Virology** 1988 Nov;167(1):106–12

GROWTH & DEVELOPMENT

Infection of rabbits with Sendai virus. Machii K, et al. **Lab Anim Sci** 1989 Jul;39(4):334–7

IMMUNOLOGY

Oral immunization with Sendai virus in mice. Nedrud JG, et al. **Curr Top Microbiol Immunol** 1989;146:117–22 (18 ref.)

Human bronchial epithelial cells with integrated SV40 virus T antigen genes retain the ability to undergo squamous differentiation. Ke Y, et al. **Differentiation** 1988 Jun; 38(1):60–6

Monoclonal antibody to rat brain actin antigenically enhanced with HVJ (Sendai virus) M protein. Hiruma S, et al. **Histochemistry** 1988;90(1):1–8

Induction of anti-viral immunity by an anti-idiotypic antibody directed to a Sendai virus specific T helper cell clone. Ertl HC, et al. **Int Rev Immunol** 1986 Jan;1(1):41–65 (81 ref.)

Specificity of anti-H-2 class I antibodies induced by syngeneic immunization with Sendai virus-treated cells is regulated by the mouse MHC and viral antigens. No evidence for MHC-restricted virus-specific antibodies. Kievits F, et al. **J Immunogenet** 1989 Feb;16(1):3–17

The role of the various human peripheral blood mononuclear cells in the production of Sendai virus-induced interferon: IFN mRNA studies. Rosztóczy I, et al. **J Interferon Res** 1989 Jun;9(3):349–52

Mapping of antigenic domains of Sendai virus nucleocapsid protein expressed in Escherichia coli. Gill DS, et al. **J Virol** 1988 Dec;62(12):4805–8

Antigenic variation among Sendai virus strains detected by monoclonal antibodies. Yamaguchi R, et al. **Microbiol Immunol** 1989;33(2):133–9

Crystallization of Sendai virus HN protein complexed with monoclonal antibody Fab fragments. Laver WG, et al. **Virology** 1989 Jul;171(1):291–3

[Adaptation of the avidin-biotin system for identifying and quantifying Sendai virus antigens] Popa LM, et al. **Virologie** 1989 Jan-Mar;40(1):59–63 (Eng. Abstr.) **(Fre)**

METABOLISM

Scanning independent ribosomal initiation of the Sendai virus Y proteins in vitro and in vivo. Curran J, et al. **EMBO J** 1989 Feb;8(2):521–6

Comparison of non-ionic detergents for extraction and ion-exchange high-performance liquid chromatography of Sendai virus integral membrane proteins. Van Ede J, et al. **J Chromatogr** 1989 Aug 4;476:319–27

Expression of five proteins from the Sendai virus P/C mRNA in infected cells. Dillon PJ, et al. **J Virol** 1989 Feb; 63(2):974–7

Addition of high-mannose sugars must precede disulfide bond formation for proper folding of Sendai virus glycoproteins. Vidal S, et al. **J Virol** 1989 Feb; 63(2):892–900

PATHOGENICITY

[Effect of the membrane potential on the fusion of the Sendai viral envelope with the membrane of chick erythrocytes and on virus-induced erythrocyte hemolysis] Slepushkin VA, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):709–11 (Eng. Abstr.) **(Rus)**

[Use of reconstructed Sendai virus envelopes for the microinjection of proteins into monolayer cells] Bokhon'ko AI, et al. **Vopr Virusol** 1988 Sep-Oct;33(5):600–3 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Replication of parainfluenza (Sendai) virus in isolated rat pulmonary type II alveolar epithelial cells. Castleman WL, et al. **Am J Pathol** 1989 May;134(5):1135–42

In vitro Sendai viral replication in pulmonary macrophages from mice treated with 4-ipomeanol. Durham SK, et al. **Am J Vet Res** 1988 Oct;49(10):1677–80

Kinetics of large-scale production of bovine leukocyte interferon, using three viral inducers. Jacobsen KL, et al. **Am J Vet Res** 1988 Sep;49(9):1441–6

Effects of fusion temperature on the lateral mobility of Sendai virus glycoproteins in erythrocyte membranes and on cell fusion indicate that glycoprotein mobilization is required for cell fusion. Aroeti B, et al. **Biochemistry** 1988 Jul 26; 27(15):5654–61

Fusogenic properties of reconstituted hybrid vesicles containing Sendai and influenza envelope glycoproteins: fluorescence dequenching and fluorescence microscopy studies. Lapidot M, et al. **Biochim Biophys Acta** 1989 Apr 28;980(3):281–90

Mechanism of fusion of Sendai virus: role of hydrophobic interactions and mobility constraints of viral membrane proteins. Effects of polyethylene glycol. Hoekstra D, et al. **J Biol Chem** 1989 Apr 25;264(12):6786–92

Mill Hill strain of parainfluenza 1 virus is a potent human interferon inducer. Martins RM, et al. **J Interferon Res** 1989 Aug;9(4):379–83

Adsorption of LLCMK2 cell-grown Sendai virus onto human red blood cells and its release from the virus adsorbed cells. Komatsu H, et al. **Microbiol Immunol** 1988; 32(12):1201–10

Membrane penetration of Sendai virus glycoproteins during the early stages of fusion with liposomes as determined by hydrophobic photoaffinity labeling. Novick SL, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7433–7

A recent field isolate of Sendai virus has a temperature-sensitive HN glycoprotein. Gorman WL, et al. **Virology** 1989 Feb;168(2):413–6

[Effect of urea and uric acid on the hemolytic activity of Sendai virus] Trybala E, et al. **Med Dosw Mikrobiol** 1989; 41(1):43–6 (Eng. Abstr.) **(Pol)**

RADIATION EFFECTS

Fluorescence anisotropy of UV-irradiated viruses. Hörer OL. **Virologie** 1989 Apr-Jun;40(2):115–8

ULTRASTRUCTURE

The Sendai virus nucleocapsid exists in at least four different helical states. Egelman EH, et al. **J Virol** 1989 May; 63(5):2233–43

Cryoelectron microscopy of vitrified Sendai virions. Hosaka Y, et al. **J Virol Methods** 1988 Dec;22(2–3):347–9

PARA-INFLUENZA VIRUS TYPE 2 see under **PARA-INFLUENZA VIRUSES**

PARA-INFLUENZA VIRUS TYPE 3 see under **PARA-INFLUENZA VIRUSES**

PARA-INFLUENZA VIRUSES

ANALYSIS

Identification of amino acids recognized by syncytium-inhibiting and neutralizing monoclonal antibodies to the human parainfluenza type 3 virus fusion protein. Coelingh KV, et al. **J Virol** 1989 Sep;63(9):3755–60

Virus-specific polypeptides of human parainfluenza virus type 4 and their synthesis in infected cells. Komada H, et al. **Virology** 1989 Jul;171(1):254–9

DRUG EFFECTS

Analysis of the in vitro antiviral activity of certain ribonucleosides against parainfluenza virus using a novel computer aided receptor modeling procedure. Ghose AK, et al. **J Med Chem** 1989 Apr;32(4):746–56

GENETICS

Syncytium formation by recombinant vaccinia viruses carrying bovine parainfluenza 3 virus envelope protein genes. Sakai Y, et al. **J Virol** 1989 Sep;63(9):3661–8

Expression of the fusion glycoprotein of human parainfluenza type 3 virus in insect cells by a recombinant baculovirus and analysis of its immunogenic property. Ray R, et al. **Virus Res** 1989 Feb;12(2):169–80

IMMUNOLOGY

Bovine parainfluenza-3 virus proteins recognized by antibodies of aerosol-exposed calves. Toth TE, et al. **Am J Vet Res** 1988 Nov;49(11):1945–9

Evidence for Australia-wide canine parainfluenza infection. McGavin DR, et al. **Aust Vet J** 1989 Jul;66(7):221

Antibodies to parainfluenza virus type 3 in Minnesota swine. Tehteh E, et al. **Br Vet J** 1988 Nov-Dec;144(6):613–5

Current approaches to the development of vaccines effective against parainfluenza viruses. Murphy BR. **Bull WHO** 1988; 66(3):391–7 (28 ref.)

Chlamydia trachomatis and parainfluenza 2 virus: a shared antigenic determinant? Fox AS, et al. **J Clin Microbiol** 1989 Jun;27(6):1407–8

Antigenic and functional organization of human parainfluenza virus type 3 fusion glycoprotein. van Wyke Coelingh K, et al. **J Virol** 1989 Jan;63(1):375–82

Enzyme immunoassays for detection of IgG and IgM antibodies to parainfluenza types 1, 2 and 3. Vuorinen T, et al. **J Virol Methods** 1989 Jan;23(1):63–70

Isolation and characterization of monoclonal antibodies to human parainfluenza virus type 4 and their use in revealing antigenic relation between subtypes 4A and 4B. Komada H, et al. **Virology** 1989 Jul;171(1):28–37

Extensive antigenic diversity among human parainfluenza type 2 virus isolates and immunological relationships among paramyxoviruses revealed by monoclonal antibodies. Tsurudome M, et al. **Virology** 1989 Jul;171(1):38–48

Interactions of a nonneutralizing IgM antibody and complement in parainfluenza virus neutralization. Vasantha S, et al. **Virology** 1988 Dec;167(2):433–41

Current approaches to the development of vaccines effective against parainfluenza and respiratory syncytial viruses. Murphy BR, et al. **Virus Res** 1988 Aug;11(1):1–15 (58 ref.)

[Indices of local antiviral immunity in patients with chronic bronchitis] Makhovenko LV, et al. **Ter Arkh** 1988; 60(11):95–7 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Comparison of monoclonal antibody time-resolved fluoroimmunoassay with monoclonal antibody capture-biotinylated detector enzyme immunoassay for respiratory syncytial virus and parainfluenza virus antigen detection. Hierholzer JC, et al. **J Clin Microbiol** 1989 Jun; 27(6):1243–9

Rabbit model for mucosal immunity in the bowel: I. Establishment of virus-infected ileal loops. Holmes MJ, et al. **J Med Virol** 1988 Jul;25(3):271–80

PATHOGENICITY

[Pathogenicity of parainfluenza virus type 3 in mice] Suzuki T, et al. **Uirusu** 1988 Dec;38(2):131–2 **(Jpn)**

[Mechanism of penetration of human type 3 parainfluenza virus into monkey kidney cells] Anisimova E, et al. **Vopr Virusol** 1989 Jan-Feb;34(1):22–9 (Eng. Abstr.) **(Rus)**

PARAKEETS see under **PSITTACINES**

PARAKERATOSIS see under **KERATOSIS**

PARAKERATOSIS VARIEGATA see **PARAPSORIASIS**

PARALDEHYDE

ADMINISTRATION & DOSAGE

Pharmacokinetics and clinical use of parenteral phenytoin, phenobarbital, and paraldehyde. Ramsay RE. **Epilepsia** 1989;30 Suppl 2:S1–3

BLOOD

The analysis of blood serum for paraldehyde by ultrafiltration and gas chromatography with a wide-bore capillary column. Hessel DW. **J Anal Toxicol** 1988 Nov-Dec; 12(6):350–3

PARALLAX, OCULAR see **VISION DISPARITY**

PARALYSIS

Paralytic disorders of the shoulder girdle. Narakas AO. **Hand Clin** 1988 Nov;4(4):619–32 (11 ref.)

Paralysis including tetraplegia: plenary symposium. Presented at the third international congress of the International Federation of Societies for Surgery of the Hand. Tokyo, Japan, November 1986. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 2):353–66

[Isolated paralysis of the serratus anterior muscle. An unknown pathology] Brientini JM, et al. **Chirurgie** 1988; 114(4):338–43 (Eng. Abstr.) **(Fre)**

[Lower eyelid fixation in paralytic lagophthalmos] Miliudin ES. **Oftalmol Zh** 1988;(8):503–4 **(Rus)**

BLOOD

Simulating the time-course of clinical paralysis. Shanks CA. **Int J Clin Monit Comput** 1988;5(4):201–5

Disorders characterized by spontaneous attacks of weakness connected with changes of serum potassium. Gamstorp I. **Prog Clin Biol Res** 1989;306:175–95 (65 ref.)

CHEMICALLY INDUCED

Experimental paralysis of tensor veli palatini muscle. Casselbrant ML, et al. **Acta Otolaryngol (Stockh)** 1988 Sep-Oct;106(3–4):178–85

Hindlimb paralytic effects of prodynorphin-derived peptides following spinal subarachnoid injection in rats. Long JB, et al. **Eur J Pharmacol** 1988 Aug 9;153(1):45–54

Toxic effects of triethyldodecylammoniumbromide (TEA-C12) on myelinated nerve fibers and blood-nerve barrier in the mouse [published erratum appears in Exp Brain Res 1989;75(3):669–70] Seitz RJ, et al. **Exp Brain Res** 1989;74(2):293–302

Lower limb gangrene and paralysis following umbilical cord injection. Das S, et al. **Indian Pediatr** 1988 Dec; 25(12):1205–8

Comparison evaluation of liquid chromatographic and bioassay methods of analysis for determination of paralytic shellfish poisons in shellfish tissues. Salter JE, et al. **J Assoc Off Anal Chem** 1989 Jul-Aug;72(4):670–3

Drug-induced paralysis (muscle relaxant) therapy in the mechanically ventilated neonate. Moss JE, et al. **J Perinatol** 1988 Fall;8(4):321–4 (24 ref.)

Alterations of spontaneous and evoked release of acetylcholine during dithiobiuret-induced neuromuscular weakness. Atchison WD. **J Pharmacol Exp Ther** 1989 Jun; 249(3):735–43

Neurologic deficits and neuronal injury in rats resulting from nonopioid actions of the delta opioid receptor antagonist ICI 174864. Long JB, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):1169–77

Delayed neurotoxic effects of tri-o-tolyl phosphate in the European ferret. Stumpf AM, et al. **J Toxicol Environ Health** 1989;26(1):61–73

Sprouting of frog motor nerve terminals after long-term paralysis by botulinum type A toxin. Diaz J, et al. **Neurosci Lett** 1989 Jan 16;96(2):127–32

Temporary motor and sensory paralysis associated with intrathecal administration of morphine. Kleiner LI, et al. **Neurosurgery** 1989 May;24(5):756–8

Paralyzed with pain: the need for education. Loper KA, et al. **Pain** 1989 Jun;37(3):315–6

Hindlimb paralytic effects of arginine vasopressin and related peptides following spinal subarachnoid injection in the rat. Long JB, et al. **Peptides** 1988 Nov-Dec;9(6):1335–44

Prolonged paralysis associated with long-term pancuronium use. Haas JL, et al. **Pharmacotherapy** 1989;9(3):154–7

Immobilizing and lethal effects of spider venoms on the cockroach and the common mealbeetle. Friedel T, et al. **Toxicon** 1989;27(3):305–16

[Neurotoxicity following intra-arterial cisplatin chemotherapy: 4 cases of cranial nerve impairment] Barzan L, et al. **Acta Otorhinolaryngol Ital** 1986 Sep-Oct; 6(5):527–33 (Eng. Abstr.) **(Ita)**

[Severe hypopotassemia and rhabdomyolysis in a normotensive subject after use of a nasal spray containing 9-alpha-fluoroprednisolone] Wu SC, et al. **Recenti Prog Med** 1989 Apr;80(4):195–6 (Eng. Abstr.) **(Ita)**

[Effects of organophosphate compounds with remote neurotoxicity] Kokshareva NV, et al. **Gig Sanit** 1988 Oct; (10):83–4 **(Rus)**

[Lysosomal enzyme activity in the nerve tissue of various species of animals after administration of a neurotoxic pesticide aphos] Kuz'minskaia UA, et al. **Gig Sanit** 1988 Nov;(11):86–8 **(Rus)**

[Intermediate syndrome in organophosphorus poisoning (letter)] Gómez Aguinaga MA, et al. **Med Clin (Barc)** 1988 Sep 10;91(7):279 **(Spa)**

[Accidental subdural block. An infrequent complication of peridural anesthesia] Fernández Núñez JA, et al. **Rev Esp Anestesiol Reanim** 1988 Nov-Dec;35(6):326–8 (Eng. Abstr.) **(Spa)**

CLASSIFICATION

Functional classification of the upper limb paralyses. Tubiana R, et al. **Hand Clin** 1988 Nov;4(4):557–62 (13 ref.)

COMPLICATIONS

Contralateral trochlear nerve paresis and ipsilateral Horner's syndrome. Guy J, et al. **Am J Ophthalmol** 1989 Jan 15; 107(1):73–6

Arthropathy of the wrist in leprosy—what changes are caused by long-standing peripheral nerve palsy? Nagano J, et al. **Arch Orthop Trauma Surg** 1989;108(4):210–7

Tuberculous basal meningitis with multiple cranial nerve palsies and leprosy. Mahakul KC, et al. **J Indian Med Assoc** 1988 Sep;86(9):244–6

Diplopia due to 4th nerve palsy and enlargement of the right medial rectus muscle [letter] Goldman JA, et al. **J Rheumatol** 1989 Jul;16(7):1010–1

Ptosis and supranuclear downgaze paralysis. Büttner-Ennever JA, et al. **Neurology** 1989 Mar; 39(3):385–9

Möbius syndrome and transposition of the great vessels. Raroque HG Jr, et al. **Neurology** 1988 Dec;38(12):1894–5

Post-operative respiratory failure due to bilateral phrenic nerve palsy. Burgess RW, et al. **Postgrad Med J** 1989 Jan; 65(759):39–41

CONGENITAL

Brachial plexus palsy: intrauterine onset. Dunn DW, et al. **Pediatr Neurol** 1985 Nov-Dec;1(6):367–9

DIAGNOSIS

Clinical diagnosis, testing, and electromyographic study in brachial plexus traction injuries. Leffert RD. **Clin Orthop** 1988 Dec;(237):24–31

A retrospective electrodiagnostic evaluation of footdrop in 303 patients. Van Langenhove M, et al. **Electromyogr Clin Neurophysiol** 1989 Apr;29(3):145–52

Leiomyosarcoma of a lower limb presenting with multiple cranial nerve palsies. Shotton JC. **Eur J Surg Oncol** 1989 Aug;15(4):380–2

Sleep paralysis: a study in family practice. Herman J, et al. **J R Coll Gen Pract** 1988 Oct;38(315):465–7

Bilateral anterior opercular syndrome: localizing value of SPECT and MRI. Tohgi H, et al. **Neuroradiology** 1988; 30(6):579–81

Confirmation by magnetic resonance imaging of Bell's cruciate paralysis in a young child with Chiari type I malformation and minor head trauma. Erlich V, et al. **Neurosurgery** 1989 Jul;25(1):102–5

[Isolated paralysis of the hypoglossal nerve in a child] de Juan Frigola J, et al. **An Esp Pediatr** 1988 Oct;29(4):341–2 **(Spa)**

DRUG THERAPY

Paralysis reversal: why, when, how much anticholinesterase? Hennart D. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):249–51

Gastric emptying and gastric myoelectrical activity in patients with diabetic gastroparesis: effect of long-term domperidone treatment. Koch KL, et al. **Am J Gastroenterol** 1989 Sep;84(9):1069–75

A multicenter placebo-controlled clinical trial of oral metoclopramide in diabetic gastroparesis. McCallum RW, et al. **Diabetes Care** 1983 Sep-Oct;6(5):463–7

Intrathecal baclofen for severe spinal spasticity. Penn RD, et al. **N Engl J Med** 1989 Jun 8;320(23):1517–21

Treatment of spastic paresis [editorial] Young RR. **N Engl J Med** 1989 Jun 8;320(23):1553–5

ENZYMOLOGY

[Dopamine beta-monooxygenase activity in the brain and adrenal glands of pt rabbits] Kowalczuk K, et al. **Neuropatol Pol** 1988;26(2):225–32 (Eng. Abstr.) **(Pol)**

EPIDEMIOLOGY

Prevalence of post-polio residual paralysis in under-five children in a PHC in Haryana [letter] Kumar S, et al. **Indian Pediatr** 1988 Nov;25(11):1128

ETIOLOGY

Isolated sixth nerve palsy due to intracavernous carotid aneurysm in a young woman. Stracciari A, et al. **Acta Neurol Belg** 1988 May-Jul;88(3):148–51

Hypokalaemic, hypophosphatemic thyrotoxic periodic paralysis. Nora NA, et al. **Am J Kidney Dis** 1989 Mar; 13(3):247–9 (12 ref.)

Thyrotoxic periodic paralysis in a Latin-American taking acetazolamide. Shulkin D, et al. **Am J Med Sci** 1989 May; 297(5):337–8

Brachial plexus neuropraxia complicating a comminuted clavicle fracture in a college football player. Case report and review of the literature. Matz SO, et al. **Am J Sports Med** 1989 Jul-Aug;17(4):581–3 (8 ref.)

A postoperative neurological problem [letter] Kitching A, et al. **Anaesthesia** 1989 Aug;44(8):695–6

Ulnar nerve palsy of unusual etiology [letter] Lee EM, et al. **Anesth Analg** 1988 Nov;67(11):1131

The influence of dextrose administration on neurologic outcome after temporary spinal cord ischemia in the rabbit.

Drummond JC, et al. **Anesthesiology** 1989 Jan;70(1):64–70
A case of malignant pyoderma with neurological manifestations. Lee CT, et al. **Ann Acad Med Singapore** 1988 Oct;17(4):554–6
Hypokalemic periodic paralysis due to the Sjögren syndrome in Chinese patients. Pun KK, et al. **Ann Intern Med** 1989 Mar 1;110(5):405–6
Transient ocular motor paresis associated with acute internal carotid artery occlusion. Wilson WB, et al. **Ann Neurol** 1989 Mar;25(3):286–90
Flaccid quadriparesis associated with Yersinia enterocolitis–induced hypokalemia. Orman RA, et al. **Arch Intern Med** 1989 May;149(5):1193–4
A syndrome of REM and non–REM sleep reduction and lateral gaze paresis after medial tegmental pontine stroke. Computed tomographic scans and anatomical correlations in four patients. Autret A, et al. **Arch Neurol** 1988 Nov; 45(11):1236–42
Chronic isolated sixth nerve palsies. Galetta SL, et al. **Arch Neurol** 1989 Jan;46(1):79–82
Neurofibromatosis with spinal paralysis due to arteriovenous fistula. Wada K, et al. **Arch Orthop Trauma Surg** 1989; 108(5):322–4
Radial nerve palsy: a complication of walker usage. Ball NA, et al. **Arch Phys Med Rehabil** 1989 Mar;70(3):236–8
Gastroparesis following traumatic brain injury and response to metoclopramide therapy. Jackson MD, et al. **Arch Phys Med Rehabil** 1989 Jul;70(7):553–5
Lower motor neurone paralysis due to herpes zoster. Bhattacharyya PK, et al. **Br J Clin Pract** 1988 Feb; 42(2):79–82
Giant cell arteritis presenting as unilateral foot drop. Sachdev D, et al. **Br J Hosp Med** 1988 Jul;40(1):70–2
Paralytic shellfish poisoning—British Columbia. Rideout A. **Can Dis Wkly Rep** 1988 Apr 2;14(13):53–5 **(Eng, Fre)**
Bilateral hypoglossal palsies: a late complication of curative radiotherapy. Johnston EF, et al. **Can J Neurol Sci** 1989 May;16(2):198–9
Traumatic brachial plexus palsy in the adult. Retro– and infraclavicular lesions. Alnot JY. **Clin Orthop** 1988 Dec; (237):9–16
Association of preoperative hip motion and sciatic nerve palsy following total hip arthroplasty. Zechmann JP, et al. **Clin Orthop** 1989 Apr;(241):197–9
Meningovascular syphilis of the spinal cord presenting with incomplete Brown–Séquard syndrome: case report. Terry PM, et al. **Genitourin Med** 1989 Jun;65(3):189–91
Periventricular intraparenchymal cystic lesions: critical determinant of neurodevelopmental outcome in preterm infants. Zorzi C, et al. **Helv Paediatr Acta** 1988 Nov; 43(3):195–202
Paralysis in hind limbs of mouse inoculated with M. leprae [letter] Bhatia VN, et al. **Indian J Lepr** 1988 Jul;60(3):481–2
Late neurological complications of Harrington–rod instrumentation. Hales DD, et al. **J Bone Joint Surg [Am]** 1989 Aug;71(7):1053–7
Isolated paralysis of the descending branch of the posterior interosseous nerve. Report of a case. Hirayama T, et al. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1402–3
Serratia osteomyelitis causing neurological deterioration after spine fracture. A report of two cases. Lowe J, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):256–8
Acute pseudobulbar palsy due to bilateral focal cortical damage: the opercular syndrome of Foix–Chavany–Marie. Grattan–Smith PJ, et al. **J Child Neurol** 1989 Apr; 4(2):131–6
Trochlear nerve palsy following minor head trauma. A sign of structural disorder. Jacobson DM, et al. **J Clin Neuro Ophthalmol** 1988 Dec;8(4):263–8
Abducens nerve palsy and Horner's syndrome revisited. Striph GG, et al. **J Clin Neuro Ophthalmol** 1988 Mar; 8(1):13–7
Posterior interosseous nerve palsy caused by ganglions of the proximal radioulnar joint. McCollam SM, et al. **J Hand Surg [Am]** 1988 Sep;13(5):725–8
Peri–triquetral–lunate dislocation associated with ulnar nerve palsy. Bollen SR. **J Hand Surg [Br]** 1988 Nov;13(4):456–7
Pharyngeal paralysis due to botulinum toxin injection. Koay CE, et al. **J Laryngol Otol** 1989 Jul;103(7):698–9
Multiple cranial nerve palsies as a presenting symptom in primary Sjögren's syndrome. Phanthumchinda K. **J Med Assoc Thai** 1989 May;72(5):291–4
Locked–in state in Borrelia burgdorferi meningitis. Merlo A, et al. **J Neurol** 1989 Jul;236(5):305–6
Is the syndrome of pathological laughing and crying a manifestation of pseudobulbar palsy? Asfora WT, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):523–5
Unilateral paresis of the abdominal wall: a radicular syndrome caused by herniation of the L1–2 disc? [letter] Billet FP, et al. **J Neurol Neurosurg Psychiatry** 1989 May; 52(5):678
Seizures as the initial manifestation of paralytic rabies [letter] Hemachudha T, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):808–10
Isolated palsy of the fourth cranial nerve caused by an intracavernous aneurysm [letter] Maurice–Williams RS, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):679
Epidural compression from metastatic tumor with resultant paralysis. Ampil FL. **J Neurooncol** 1989 Jul;7(2):129–36
Paralysis, dysphagia and balance problems associated with stroke. Delgado JM. **J Neurosci Nurs** 1988 Aug;20(4):260
Metastatic malignant struma ovarii presenting as paraparesis from a spinal metastasis. McDougall IR, et al. **J Nucl Med** 1989 Mar;30(3):407–11
Transient simultaneous sciatic and femoral nerve palsy secondary to iliacus and gluteal hematomas following heparinization for pulmonary embolus in a patient with posterior hip dislocation. An HS, et al. **J Orthop Trauma** 1987;1(2):174–6
Transient paresis in athletes. Berg EE. **J S C Med Assoc** 1988 Oct;84(10):490–3
Accessory nerve injury during carotid endarterectomy. Tucker JA, et al. **J Vasc Surg** 1987 Mar;5(3):440–4
Exploring causes of paralysis in spina bifida [news] Marwick C. **JAMA** 1989 Jun 2;261(21):3069, 3074
Biochemical and immunological characterization of murine leukemia viruses that are paralysis–inducing in rats. Shibamura S, et al. **Jpn J Cancer Res** 1989 Jan;80(1):24–30
Anxiety–induced ulnar paralysis—a case report [letter] Antony P. **Lepr Rev** 1989 Jun;60(2):162
Paraparesis and thoracic disc prolapse [letter] Somerfield SD. **N Z Med J** 1989 Jul 12;102(871):359
Paraparesis due to extruded thoracic disc for 25 years [letter] Stuart RA. **N Z Med J** 1989 Apr 12;102(865):170
Man–in–the–barrel syndrome caused by cerebral metastases. Moore AP, et al. **Neurology** 1989 Aug;39(8):1134–5
Isolated hypoglossal nerve palsy due to metastatic germinoma in the neck: a ventriculoatrial shunt–related complication. Woo E, et al. **Neurosurgery** 1988 Aug;23(2):237–40
Brown–Séquard syndrome associated with posttraumatic cervical epidural hematoma: case report and review of the literature. Zupruk GM, et al. **Neurosurgery** 1989 Aug; 25(2):278–80 (11 ref.)
Congenital fourth nerve palsy and occult cranium bifidum. Bale JF Jr, et al. **Pediatr Neurol** 1988 Sep–Oct;4(5):320–1
Post–herpetic abdominal wall herniation [letter] McLoughlin R, et al. **Postgrad Med J** 1988 Oct;64(756):832–3
Progressive multiple cranial neuropathies presenting as a delayed complication of radiotherapy in infancy. Pall HS, et al. **Postgrad Med J** 1988 Apr;64(750):303–5
Paralysis, rhabdomyolysis and haemolysis caused by bites of Russell's viper (Vipera russelli pulchella) in Sri Lanka: failure of Indian (Haffkine) antivenom. Phillips RE, et al. **Q J Med** 1988 Sep;68(257):691–715
Shoulder deformities from obstetrical brachial plexus paralysis. Pollock AN, et al. **Skeletal Radiol** 1989; 18(4):295–7
Bibrachial palsy due to paraneoplastic encephalomyelitis. Meador KJ, et al. **South Med J** 1989 Aug;82(8):1053–5
Paresis of proximal lumbar roots after reduction of L5–S1 spondylolisthesis. Transfeldt EE, et al. **Spine** 1989 Aug; 14(8):884–7
Lower cranial nerve palsies due to internal carotid dissection. Waespe W, et al. **Stroke** 1988 Dec;19(12):1561–4
Late hypoglossal nerve palsy following fracture of the occipital condyle. Orbay T, et al. **Surg Neurol** 1989 May; 31(5):402–4
Exposure levels for ultrasonic cavitation in the mouse neonate. Lee CS, et al. **Ultrasound Med Biol** 1988; 14(8):735–42
The role of the thymus in the pathogenesis of hind–limb paralysis induced by ts1, a mutant of Moloney murine leukemia virus–TB. Prasad G, et al. **Virology** 1989 Apr; 169(2):332–40
Central cervical spinal cord syndrome due to minor hyperextension injury. Peterson DI, et al. **West J Med** 1989 Jun;150(6):691–4
[Isolated fourth nerve palsy—analysis of 78 cases] Yen MY. **Chung Hua I Hsueh Tsa Chih** 1988 Feb;41(2):131–6 (Eng. Abstr.) **(Chi)**
[Otitis media, petrositis and Gradenigo's syndrome] van Wieringen PM, et al. **Tijdschr Kindergeneeskd** 1989 Apr; 57(2):63–6 (Eng. Abstr.) **(Dut)**
[Skin eruptions and paraparesis resembling pedal signs in a pre– viously healthy male subject] Paul R, et al. **Duodecim** 1988;104(10):782–5 **(Fin)**
[Magnetic resonance imaging in paralysis of the upper limb of traumatic origin] Roger B, et al. **J Radiol** 1989 Mar; 70(3):197–208 (Eng. Abstr.) **(Fre)**
[Paralysis after surgery of the pelvis (letter)] Camus M, et al. **Presse Med** 1988 Sep 24;17(32):1651 **(Fre)**
[Factitious thyrotoxicosis with periodic paralysis (letter)] Garcin JM, et al. **Presse Med** 1988 Oct 22;17(36):1862 **(Fre)**
[12th cranial nerve paralysis in high cervical carotid dissection (letter)] Vernay D, et al. **Presse Med** 1989 May 13;18(19):985–6 **(Fre)**
[Nerve paralysis after surgery of the hip. Apropos of 48 cases] Roblin L, et al. **Rev Chir Orthop** 1989;75(2):104–11 (25 ref.) (Eng. Abstr.) **(Fre)**
[Painless apoplectiform paralysis of the brachial plexus] Destée A, et al. **Rev Neurol (Paris)** 1989;145(3):243–4 (7 ref.) (Eng. Abstr.) **(Fre)**
[Transient paralysis of the phrenic nerve following puncture of the internal jugular vein] Fuchs C, et al. **Anaesthesiol Reanim** 1989;14(1):55–8 (Eng. Abstr.) **(Ger)**
[Acute non–traumatic paralysis. Immediate admission to the clinic—rapid diagnosis is decisive] Braune HJ, et al. **Fortschr Med** 1989 Jul 10;107(20):22–3 **(Ger)**
[Plexus lesions, rhabdomyolysis and heroin] Hecker E, et al. **Schweiz Med Wochenschr** 1988 Dec 31;118(52):1982–8 (Eng. Abstr.) **(Ger)**
[Selective paralysis of the infraspinatus muscle, caused by compression of the infraspinatus branch of the supraspinatus muscle] Jerosch J, et al. **Sportverletz Sportschaden** 1987 Dec;1(4):231–3 (Eng. Abstr.) **(Ger)**
[Hoarseness after removing a cervical schwannoma—a case report] Niimoto M, et al. **Nippon Geka Gakkai Zasshi** 1988 Jul;89(7):1132–6 (Eng. Abstr.) **(Jpn)**
[A case of spinal arachnoid cyst associated with vascular anomaly and repeated transient paraparesis after surgery] Takeichi Y, et al. **Nippon Geka Hokan** 1988 Jul 1; 57(4):309–15 (Eng. Abstr.) **(Jpn)**
[Clinical analysis of postoperative recurrent nerve palsy in patients undergoing operation of carcinoma of the thoracic esophagus] Kitamura M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb;37(2):331–6 (Eng. Abstr.) **(Jpn)**
[Accessory nerve paralysis due to compression of the fenestrated vertebral artery] Kitagawa M, et al. **No Shinkei Geka** 1988 Sep;16(10):1173–7 (Eng. Abstr.) **(Jpn)**
[A case of crushing head injury showing bilateral abducens, facial and acoustic nerve palsies] Kobayashi S, et al. **No Shinkei Geka** 1988 Jun;16(7):869–73 (12 ref.) (Eng. Abstr.) **(Jpn)**
[Localization of the corticobulbar tract in pons] Kawai M, et al. **Rinsho Shinkeigaku** 1988 Aug;28(8):897–901 (Eng. Abstr.) **(Jpn)**
[Paralysis of the hypoglossal nerve after radiotherapy] Szymczyk K, et al. **Otolaryngol Pol** 1988;42(3):158–60 (Eng. Abstr.) **(Pol)**
[Etiology, pathogenesis and treatment of gastroparesis] Legeza VI, et al. **Ter Arkh** 1988;60(11):151–4 (53 ref.) **(Rus)**
[Paralysis of the pathetic nerve associated with dolichobasilar artery (letter)] Leno Camarero C, et al. **Rev Clin Esp** 1989 Mar;184(5):272–3 **(Spa)**
[Prolonged neurologic deficiency after accidental spinal anesthesia] Pita–Romero Caamaño R, et al. **Rev Esp Anestesiol Reanim** 1989 Mar–Apr;36(2):110–3 (33 ref.) (Eng. Abstr.) **(Spa)**

GENETICS

Human leucocyte antigen in a Chinese family with thyrotoxic periodic paralysis in Singapore. Sum CF, et al. **BMJ** 1988 Sep 3;297(6648):594–5
Thoracic disc herniation and paraplegia in Stickler's syndrome. Harkey HL, et al. **Neurosurgery** 1989 Jun; 24(6):909–12

HISTORY

Brachial plexus paralysis. By J.H. Stevens, M.D., 1934 [classical article] Stevens JH. **Clin Orthop** 1988 Dec; (237):4–8

IMMUNOLOGY

Isolation and immunological characterisation of allergens from salivary glands of the Australian paralysis tick Ixodes holocyclus. Gauci M, et al. **Int Arch Allergy Appl Immunol** 1988;87(2):208–12
Role of the immune response in Sindbis virus–induced paralysis of SJL/J mice. Mokhtarian F, et al. **J Immunol** 1989 Jul 15;143(2):633–7

METABOLISM

Erythrocyte sodium–potassium pump in thyrotoxic periodic paralysis. Lam KS, et al. **Aust N Z J Med** 1989 Feb; 19(1):6–10
Monoamine–containing fiber plexuses in the spinal cord of guinea pigs during paralysis, recovery and relapse stages of chronic relapsing experimental allergic encephalomyelitis. White SR, et al. **J Neuroimmunol** 1989 May;22(3):211–21

MICROBIOLOGY

Susceptibility of C58 mice to paralytic disease induced by lactate dehydrogenase–elevating virus correlates with increased expression of endogenous retrovirus in motor neurons. Contag CH, et al. **Microb Pathog** 1988 Oct; 5(4):287–96
Experimental demyelination induced by coronavirus JHM (MHV–4): molecular identification of a viral determinant of paralytic disease. Fleming JO, et al. **Microb Pathog** 1987 Jul;3(1):9–20
Retrovirus–induced murine motor neuron disease: mapping the determinant of spongiform degeneration within the envelope gene. Paquette Y, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3896–900

NURSING

[The care of patients with hypokalemic paralysis] Hu SY, et al. **Chung Hua Hu Li Tsa Chih** 1988 Jul;23(7):397–8 **(Chi)**
[Operative care for abdominal muscle to replace quadriceps femoris musculus without fixation with gypsum] Lu ZC. **Chung Hua Hu Li Tsa Chih** 1988 May;23(5):274, 296 **(Chi)**

PATHOLOGY

Calcitonin gene–related peptide prevents disuse–induced sprouting of rat motor nerve terminals. Tsujimoto T, et

al. J Neurosci 1988 Oct;8(10):3951–7

PHYSIOPATHOLOGY

Anesthesia–paralysis and the diaphragm: in pursuit of an elusive muscle. Froese AB. Anesthesiology 1989 Jun; 70(6):887–90

Position and motion of the human diaphragm during anesthesia–paralysis. Krayer S, et al. Anesthesiology 1989 Jun;70(6):891–8

Paralysis of respiratory muscles and hypoxic ventilatory chemoreflex. Pokorski M, et al. Biomed Biochim Acta 1989; 48(5–6):S573–7

The distribution of muscular weakness in upper motor neuron lesions affecting the arm. Colebatch JG, et al. Brain 1989 Jun;112 (Pt 3):749–63

Transient paresis in myotonic syndromes. A surface EMG study. Zwarts MJ, et al. Brain 1989 Jun;112 (Pt 3):665–80

A sense of movement elicited in paralyzed distal arm by focal magnetic coil stimulation of human motor cortex. Amassian VE, et al. Brain Res 1989 Feb 13;479(2):355–60

TRH fails to antagonize the acute paralytic effects of intrathecal dynorphin A and substance P antagonists in the rat. Martinez-Arizala A, et al. Brain Res 1988 Nov 15; 473(2):385–8

The effects of body weight support on the locomotor pattern of spastic paretic patients. Visintin M, et al. Can J Neurol Sci 1989 Aug;16(3):315–25

Gait electromyograms and surgical decisions for paralytic deformities of the foot. Adler N, et al. Dev Med Child Neurol 1989 Jun;31(3):287–92

Electrophysiological assessment of maturation of regenerating motor nerve fibres in infants with brachial plexus palsy. Kwast O. Dev Med Child Neurol 1989 Feb; 31(1):56–65

Occupational accessory and suprascapular nerve palsy. A clinical and electrophysiological study. Cruz Martínez A, et al. Electromyogr Clin Neurophysiol 1988 Aug–Oct; 28(6):347–52

Body composition of patients with spinal cord injury. Nuhlicek DN, et al. Eur J Clin Nutr 1988 Sep;42(9):765–73

Physiology of gastric emptying and pathophysiology of gastroparesis. Read NW, et al. Gastroenterol Clin North Am 1989 Jun;18(2):359–73 (105 ref.)

Tetanic responses of electrically stimulated paralyzed muscle at varying interpulse intervals. Carroll SG, et al. IEEE Trans Biomed Eng 1989 Jul;36(7):644–53

Recurrent familial neuropathy due to liability to pressure palsies. Marazzi R, et al. Ital J Neurol Sci 1988 Aug; 9(4):355–63

Transdiaphragmatic pressure and rib motion in area of apposition during paralysis. Agostoni E, et al. J Appl Physiol 1988 Sep;65(3):1296–300

Effects of lanthanum on contractile inactivation and D600-induced paralysis in twitch muscle fibres of the frog. Feldmeyer D. Pflugers Arch 1989 Jul;414(3):373–5

Decreased shoulder range of motion on paretic side after stroke. Andrews AW, et al. Phys Ther 1989 Sep; 69(9):768–72

[Cardiopulmonary function during maximal exercise by upper extremities in subjects with longstanding paralysis of lower limbs after poliomyelitis] Chung PC, et al. Taiwan I Hsueh Hui Tsa Chih 1988 Dec;87(12):1214–8 (Eng. Abstr.) (Chi)

[Isolated abducens paralysis—a retrospective study of 165 patients] Berlit P, et al. Fortschr Neurol Psychiatr 1989 Jan;57(1):32–40 (Eng. Abstr.) (Ger)

[Diagnosis and therapy of paralysis of the brachial plexus caused by birth injuries] Mattigk G. Kinderarztl Prax 1988 Nov;56(11):535–8 (Eng. Abstr.) (Ger)

[Idiopathic hypokalemic periodic paralysis presenting peculiar insulin secretion] Satoh J, et al. Rinsho Shinkeigaku 1989 Mar;29(3):355–9 (Eng. Abstr.) (Jpn)

[Quantitative evaluation of muscle tonus examined by tensometric methods in children with neurogenic dysfunction of the locomotor system] Zarzycki D. Przegl Lek 1988;45(11):776–80 (Eng. Abstr.) (Pol)

PREVENTION & CONTROL

High-dose intravenous penicillin G does not prevent further progression in early neurological manifestation of Lyme borreliosis. Kohler J, et al. Infection 1989 Jul–Aug; 17(4):216–7

Preservation of spinal cord function and prevention of paralysis during aortic occlusion via veno-arterial bypass. Grossi EA, et al. J Cardiovasc Surg (Torino) 1989 Jan–Feb; 30(1):95–8

WR-2721, WR-77913 and WR-3689 radioprotection in the rat spinal cord. Spence AM, et al. Pharmacol Ther 1988; 39(1–3):89–91

PSYCHOLOGY

A suicide attempt following removal of conversion paralysis with amobarbital [letter] Menza MA. Gen Hosp Psychiatry 1989 Mar;11(2):137–8

The pattern of isolated sleep paralysis among Nigerian medical students. Ohaeri JU, et al. J Natl Med Assoc 1989 Jul;81(7):805–8

[Risk factors of classical conversion syndrome—psychogenic seizures and paralyses—observations at a neurologic clinic with 172 patients] Maxion H, et al. Psychother Psychosom Med Psychol 1989 Mar–Apr; 39(3–4):121–6 (Eng. Abstr.) (Ger)

RADIOGRAPHY

[Paralysis of the serratus anterior muscle. A misleading trap in pulmonary radiology] Maarek H, et al. Ann Radiol (Paris) 1989;32(3):223–6 (20 ref.) (Eng. Abstr.) (Fre)

REHABILITATION

Aerobic training effects of electrically induced lower extremity exercises in spinal cord injured people. Pollack SF, et al. Arch Phys Med Rehabil 1989 Mar;70(3):214–9

Orthotics and rehabilitation after extensive upper limb paralysis. Parry CB. Hand Clin 1989 Feb;5(1):97–105 (5 ref.)

A flexible, portable system for neuromuscular stimulation in the paralyzed upper extremity. Buckett JR, et al. IEEE Trans Biomed Eng 1988 Nov;35(11):897–904

Hybrid assistive system—the motor neuroprosthesis. Popovic D, et al. IEEE Trans Biomed Eng 1989 Jul;36(7):729–37

Effectiveness of a writing system using a computerized long-range optical pointer and 10-branch abbreviation expansion. Smith RO, et al. J Rehabil Res Dev 1989 Winter; 26(1):51–62

The bionic mind. Horgan J. Sci Am 1988 Oct;259(4):37–8

[Rehabilitation treatment of patients with sequelae of stroke at a specialized rehabilitation center in Leningrad] Demidenko TD, et al. Zh Nevropatol Psikhiatr 1988; 88(9):49–52 (Eng. Abstr.) (Rus)

SURGERY

Duchenne-Erb palsy. Experience with direct surgery. Comtet JJ, et al. Clin Orthop 1988 Dec;(237):17–23

Reconstructive surgery after extensive paralysis of the upper limb I. Hand Clin 1988 Nov;4(4):557–669

Reconstructive surgery after extensive paralysis of the upper limb II. Hand Clin 1989 Feb;5(1):1–109

Is surgical intervention justifiable for total paralysis secondary to multiple avulsion injuries of the brachial plexus? Allieu Y, et al. Hand Clin 1988 Nov;4(4):609–18

Elbow flexion palsy after traumatic lesions of the brachial plexus in adults. Alnot JY. Hand Clin 1989 Feb;5(1):15–22 (19 ref.)

Biomechanical basis of transfers for shoulder paralysis. Comtet JJ, et al. Hand Clin 1989 Feb;5(1):1–14 (42 ref.)

Tendon transfers for shoulder paralysis in children. Gilbert A, et al. Hand Clin 1988 Nov;4(4):633–42

Proximal combined nerve paralysis. Masquelet A. Hand Clin 1989 Feb;5(1):43–52 (51 ref.)

Tendon transfers for treatment of the paralyzed hand following brachial plexus injury. Merle M, et al. Hand Clin 1989 Feb;5(1):33–41 (20 ref.)

Restoration of wrist extension after paralysis. Tubiana R, et al. Hand Clin 1989 Feb;5(1):53–67 (26 ref.)

Triceps to biceps transfer for established brachial plexus palsy. Hoang PH, et al. J Bone Joint Surg [Br] 1989 Mar; 71(2):268–71 (20 ref.)

Surgical therapy of diabetic gastroparesis. Reardon TM, et al. J Clin Gastroenterol 1989 Apr;11(2):204–7

[The role of tendon transfer in paralysis of the shoulder in children] Gilbert A, et al. Rev Chir Orthop 1988;74 Suppl 2:45–6 (Fre)

[Tendon transfer for radial paralysis. Development of technics] Tubiana R. Rev Chir Orthop 1988;74 Suppl 2:52–3 (Fre)

[Results of hand surgery operations in spastic-athetotic paresis] Thom H, et al. Z Orthop 1988 May–Jun; 126(3):274–81 (Eng. Abstr.) (Ger)

[Characteristics of rehabilitation treatment after tendon and muscle plastic surgery in children with sequelae of injuries of the peripheral nerves] Kaptelin AF, et al. Ortop Travmatol Protez 1989 Feb;(2):29–34 (Eng. Abstr.) (Rus)

THERAPY

The utility of electromyographic biofeedback in the treatment of conversion paralysis. Fishbain DA, et al. Am J Psychiatry 1988 Dec;145(12):1572–5

Motor paresis improved by sympathetic block. A motor form of reflex sympathetic dystrophy? Yokota T, et al. Arch Neurol 1989 Jun;46(6):683–7

Treatment of fractures of the shaft of the humerus accompanied by paralysis of the radial nerve. Sonneveld GJ, et al. Injury 1987 Nov;18(6):404–6

Long-term results: botulinum for sixth nerve palsy. Wagner RS, et al. J Pediatr Ophthalmol Strabismus 1989 May–Jun; 26(3):106–8

Treatment of sixth nerve palsy in adults with combined botulinum toxin chemodenervation and surgery. Fitzsimons R, et al. Ophthalmology 1988 Nov;95(11):1535–42

[Electrotherapy of flaccid paralysis] Mokrusch T, et al. Biomed Tech (Berlin) 1988 Oct;33(10):231–5 (Eng. Abstr.) (Ger)

[A method of treating postoperative paralysis of the gastrointestinal tract] Zarkeshev SR. Khirurgiia (Mosk) 1989 Feb;(2):113–4 (Rus)

VETERINARY

Marek's disease virus-induced transient paralysis in chickens: alterations in brain density. Swayne DE, et al. Acta Neuropathol (Berl) 1988;76(3):287–91

An epidemic of fatal posterior paralysis and sudden death in goats: a case report. Maselle RM, et al. Beitr Trop Landwirtsch Veterinarmed 1989;27(2):211–5

Femoral nerve paralysis after general anaesthesia. Dyson S, et al. Equine Vet J 1988 Sep;20(5):376–80

Cerebrospinal nematodiasis in a goat herd. Kopcha M, et al. J Am Vet Med Assoc 1989 May 15;194(10):1439–42

Paraparesis caused by epidural granuloma in a cat. Kraus KH, et al. J Am Vet Med Assoc 1989 Mar 15;194(6):789–90

Diagnostic exercise: paralysis in a Long-Evans rat. Skavlen PA, et al. Lab Anim Sci 1989 Jan;39(1):69–70

A successful case of spastic paresis in a calf by partial tibial neurectomy. Yamada H, et al. Nippon Juigaku Zasshi 1989 Feb;51(1):213–4

Riboflavin requirement of turkey poults fed a corn–soybean meal diet from 1 to 21 days of age. Ruiz N, et al. Poult Sci 1989 May;68(5):715–8

Nonsystemic causes of the downer cow syndrome. Cox VS. Vet Clin North Am [Food Anim Pract] 1988 Jul;4(2):413–33 (52 ref.)

[Lameness of the hindlimbs of the cat] Grevel V. Berl Munch Tierarztl Wochenschr 1989 Aug 1; 102(8):253–61 (Eng. Abstr.) (Ger)

PARALYSIS AGITANS see PARKINSON DISEASE

PARALYSIS, BULBAR

COMPLICATIONS

[A case of Kennedy-Alter-Sung syndrome associated with external ophthalmoplegia—therapeutic efficacy of fluoxymesterone] Harada T, et al. No To Shinkei 1989 Feb; 41(2):143–8 (Eng. Abstr.) (Jpn)

ETIOLOGY

[A case of bulbar palsy associated with Sjögren syndrome] Yamashita K, et al. Nippon Naika Gakkai Zasshi 1988 Aug; 77(8):1280–1 (Jpn)

PHYSIOPATHOLOGY

[Progressive bulbopontine paralysis in children] Beauvais P, et al. Arch Fr Pediatr 1988 Nov;45(9):653–5 (12 ref.) (Eng. Abstr.) (Fre)

PARALYSIS, FAMILIAL PERIODIC

BLOOD

Hypokalemic periodic paralysis: two case reports. Schiller T, et al. Pediatr Emerg Care 1988 Sep;4(3):183–6 (25 ref.)

Disorders characterized by spontaneous attacks of weakness connected with changes of serum potasssium. Gamstorp I. Prog Clin Biol Res 1989;306:175–95 (65 ref.)

CLASSIFICATION

The periodic paralyses. Riggs JE. Neurol Clin 1988 Aug; 6(3):485–98 (141 ref.)

COMPLICATIONS

General anesthesia and hyperkalemic periodic paralysis. Aarons JJ, et al. Anesthesiology 1989 Aug;71(2):303–4

Familial 'hashitoxic' periodic paralysis [letter] Leung AK. J R Soc Med 1989 Apr;82(4):245

Sudden deafness in a man with thyrotoxic hypokalemic periodic paralysis. Moriyama K, et al. Jpn J Med 1988 Aug;27(3):329–32

[Hyperkalemic periodic paralysis] Reinikainen K, et al. Duodecim 1988;104(20):1625–9 (Fin)

DIAGNOSIS

[Periodic paramyotonic paralysis] Badalian LO, et al. Zh Nevropatol Psikhiatr 1988;88(11):3–7 (13 ref.) (Eng. Abstr.) (Rus)

DRUG THERAPY

Improvement of muscle strength in familial hypokalaemic periodic paralysis with acetazolamide. Links TP, et al. J Neurol Neurosurg Psychiatry 1988 Sep;51(9):1142–5

Familial hypokalemic periodic paralysis [letter] Bernick C. Muscle Nerve 1988 Oct;11(10):1092–3

EPIDEMIOLOGY

Familial thyrotoxic periodic paralysis [letter] Leung AK. West J Med 1989 Aug;151(2):209

ETIOLOGY

[Tubular acidosis and hypokalemic periodic paralysis in Sjögren's syndrome] Ivanova AV, et al. Ter Arkh 1988; 60(6):91–3 (Rus)

GENETICS

Hypokalemic periodic paralysis in a hyperthyroid black woman. Hackshaw KV, et al. J Natl Med Assoc 1988 Dec;

80(12):1343–4
Familial thyrotoxic periodic paralysis. Kufs WM, et al. **West J Med** 1989 Apr;150(4):461–3

PHYSIOPATHOLOGY

Abnormalities of the fast sodium current in myotonic dystrophy, recessive generalized myotonia, and adynamia episodica. Rüdel R, et al. **Muscle Nerve** 1989 Apr; 12(4):281–7

PARALYSIS, GENERAL see PARESIS

PARALYSIS, OBSTETRIC

[Pathogenesis of obstetric paralysis of the arm in children] Ratner AIu. **Akush Ginekol (Mosk)** 1989 Jan;(1):71–2 **(Rus)**

COMPLICATIONS

Brachial plexus injury and hypoglossal paralysis. Haenggeli CA, et al. **Pediatr Neurol** 1989 May–Jun;5(3):197–8

ETIOLOGY

Neonatal bilateral diaphragmatic paralysis caused by brain stem haemorrhage. Blazer S, et al. **Arch Dis Child** 1989 Jan;64(1 Spec No):50–2

RADIOGRAPHY

[Myelography in obstetrical paralysis of the brachial plexus] Croci E, et al. **Radiol Med (Torino)** 1988 Oct;76(4):293–6 (Eng. Abstr.) **(Ita)**

SURGERY

Palliative surgical procedures in sequelae of obstetric palsy. Zancolli EA, et al. **Hand Clin** 1988 Nov;4(4):643–69

PARALYSIS, PSEUDOBULBAR see PARALYSIS

PARALYTIC ILEUS see INTESTINAL PSEUDO-OBSTRUCTION

PARAMAGNETIC RESONANCE see ELECTRON SPIN RESONANCE

PARAMECIUM

ANALYSIS

Purification and characterization of the myoglobins of Paramecium tetraurelia. Steers E Jr, et al. **Comp Biochem Physiol [B]** 1979;62(4):393–402
The inositol lipids of Paramecium tetraurelia and preliminary characterizations of phosphoinositide kinase activity in the ciliary membrane. Suchard SJ, et al. **J Protozool** 1989 Mar–Apr;36(2):185–90

CYTOLOGY

Commitment to division in Paramecium: effect of nutrient level on the macronuclear DNA increment. Berger JD, et al. **Exp Cell Res** 1989 May;182(1):90–104

ENZYMOLOGY

Cyclic AMP-dependent protein kinases of Paramecium. II. Catalytic and regulatory properties of type II kinase from cilia. Mason PA, et al. **Biochim Biophys Acta** 1989 Jan 17; 1010(1):116–21
Cyclic AMP-dependent protein kinases of Paramecium. I. Chromatographic and physical properties of the enzymes from cilia. Mason PA, et al. **Biochim Biophys Acta** 1989 Jan 17;1010(1):108–15
Control of ciliary activity in paramecium—IV. Ca2+ modification of Mg2+ dependent dynein ATPase activity. Doughty MJ. **Comp Biochem Physiol [B]** 1979;64(3):255–66
Cyclic AMP-dependent protein kinase in Paramecium tetraurelia. Its purification and the production of monoclonal antibodies against both subunits. Hochstrasser M, et al. **J Biol Chem** 1989 Aug 25;264(24):14510–8
Purification and characterization of a calcium-dependent ATPase from Paramecium tetraurelia. Levin AE, et al. **J Biol Chem** 1989 Mar 15;264(8):4544–51
A novel cGMP-dependent protein kinase from Paramecium. Miglietta LA, et al. **J Biol Chem** 1988 Nov 5; 263(31):16096–105

GENETICS

An unusual region of Paramecium mitochondrial DNA containing chloroplast-like genes. Pritchard AE, et al. **Gene** 1989 May 15;78(1):121–34
New mutants of Paramecium tetraurelia defective in a calcium control mechanism: genetic and behavioral characterizations. Evans TC, et al. **Genetics** 1989 Mar; 121(3):491–500
Update on the molecular genetics of Paramecium. Preer JR Jr. **J Protozool** 1989 Mar–Apr;36(2):182–4 (37 ref.)
Autonomous replication and addition of telomerelike sequences to DNA microinjected into Paramecium tetraurelia macronuclei. Gilley D, et al. **Mol Cell Biol** 1988 Nov;8(11):4765–72

METABOLISM

A new class of Paramecium surface proteins anchored in the plasma membrane by a glycosylinositol phospholipid. Membrane anchor of Paramecium cross-reacting glycoproteins. Deregnaucourt C, et al. **Biochem J** 1988 Jul 15;253(2):395–400
The cilia of Paramecium tetraurelia contain both Ca2+-dependent and Ca2+-inhibitable calmodulin-binding proteins. Evans TC, et al. **Biochem J** 1989 Apr 15;259(2):385–96
In vitro phosphorylation of Paramecium axonemes and permeabilized cells. Hamasaki T, et al. **Cell Motil Cytoskeleton** 1989;12(1):1–11
Uptake and utilization of small organic molecules by Paramecium tetraurelia. Kaneshiro ES, et al. **Eur J Cell Biol** 1989 Jun;49(1):55–60
Uptake and utilization of lipids by Paramecium tetraurelia. Reuter SF, et al. **Eur J Cell Biol** 1989 Jun;49(1):61–5
Free amino acids and cell volume regulation in the euryhaline ciliate Paramecium calkinsi. Cronkite DL, et al. **J Exp Zool** 1989 Sep;251(3):275–84
Sterol synergism in Paramecium tetraurelia. Whitaker BD, et al. **J Gen Microbiol** 1988 Jun;134 (Pt 6):1441–7
Protozoan myoglobin from Paramecium caudatum. Its unusual amino acid sequence. Iwaasa H, et al. **J Mol Biol** 1989 Jul 20;208(2):355–8
A survey of lectin binding in Paramecium. Allen RD, et al. **J Protozool** 1988 Aug;35(3):400–7
Analysis of Paramecium macronuclear DNA using pulsed field gel electrophoresis. Phan HL, et al. **J Protozool** 1989 Jul–Aug;36(4):402–8
Signal transduction events associated with exocytosis in ciliates. Satir BH. **J Protozool** 1989 Jul–Aug;36(4):382–9 (60 ref.)

PHYSIOLOGY

Ion channels in Paramecium, yeast, and Escherichia coli. Saimi Y, et al. **Cold Spring Harb Symp Quant Biol** 1988; 53 Pt 2:667–73
Control of development of the oral apparatus of Paramecium during sexual reproduction: an embryological perspective. Ng SF, et al. **Dev Biol** 1989 Aug;134(2):317–26
Vitamin E supplementation and intense selection increase clonal life span in Paramecium tetraurelia. Thomas J, et al. **Exp Gerontol** 1988;23(6):501–12
Fertilization in Paramecium: processes of the nuclear reorganization. Hiwatashi K, et al. **Int Rev Cytol** 1989; 114:1–19 (63 ref.)
Phagosome formation in Paramecium: effects of solid particles. Fok AK, et al. **J Cell Sci** 1988 Jul;90 (Pt 3):517–24
L-glutamate-induced membrane hyperpolarization and behavioural responses in Paramecium tetraurelia. Preston RR, et al. **J Comp Physiol [A]** 1988 Nov;164(1):75–82
Species distribution of a phosphoprotein (parafusin) involved in exocytosis. Satir BH, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):930–2
Paramecium: a model system for the study of excitable cells. Hinrichsen RD, et al. **Trends Neurosci** 1988 Jan;11(1):27–32 (42 ref.)

ULTRASTRUCTURE

Porin of Paramecium mitochondria isolation, characterization and ion selectivity of the closed state. Ludwig O, et al. **Biochim Biophys Acta** 1989 Jan 30;978(2):319–27
The secretory vesicle in living Paramecium is acidic. Busch GR, et al. **J Cell Sci** 1989 Feb;92 (Pt 2):197–203
Intracellular binding of wheat germ agglutinin by Golgi complexes, phagosomes, and lysosomes of Paramecium multimicronucleatum. Allen RD, et al. **J Histochem Cytochem** 1989 Feb;37(2):195–202

PARAMEDICAL PERSONNEL see ALLIED HEALTH PERSONNEL

PARAMEDICS see ALLIED HEALTH PERSONNEL

PARAMETHASONE

THERAPEUTIC USE

Unresolved problems in the treatment of congenital adrenal hyperplasia. Tanae A, et al. **Acta Paediatr Jpn Overseas Ed** 1988;30 Suppl:93–8

PARAMETRITIS

DRUG THERAPY

[Use of ceftriaxone against parametritis after radical surgery for cancer of the uterine cervix] Hirabayashi K. **Jpn J Antibiot** 1988 May;41(5):588–93 (Eng. Abstr.) **(Jpn)**

ETIOLOGY

[A tumor-like lesion of the parametrium caused by foreign body of the bladder] Sprogis J, et al. **Ginekol Pol** 1988 Dec;59(12):755–7 (Eng. Abstr.) **(Pol)**

PARAMPHISTOMATA see PARAMPHISTOMATIDAE

PARAMPHISTOMATIDAE

ANALYSIS

Protein polymorphism of some amphistomes and their host tissue. Alam SM, et al. **Acta Vet Hung** 1988;36(3–4):247–50

PHYSIOLOGY

The influence of Calicophoron microbothrium on the susceptibility of Bulinus tropicus to Schistosoma bovis. Southgate VR, et al. **Parasitol Res** 1989;75(5):381–91

ULTRASTRUCTURE

Ultrastructure and cytochemistry of the tegument of Orthocoelium scoliocoelium and Paramphistomum cervi (Trematoda: Digenea). Sharma PN, et al. **J Helminthol** 1988 Dec;62(4):331–43

PARAMPHISTOMUM see PARAMPHISTOMATIDAE

PARAMYOCLONUS MULTIPLEX

COMPLICATIONS

Circulatory disease mortality and diabetes incidence in 27 families with Friedreich ataxia. Morrell D, et al. **Genet Epidemiol** 1988;5(6):445–52
[Cardiovascular manifestations in Friedreich's disease (published erratum appears in Tunis Med 1989 Jan;67(1):16)] Mrabet A, et al. **Tunis Med** 1988 Dec; 66(12):851–5 (Eng. Abstr.) **(Fre)**

PARAMYOSIN see TROPOMYOSIN

PARAMYXOVIRIDAE

Multiple sclerosis and paramyxovirus [letter; comment] Russell WC, et al. **Nature** 1989 Jul 13;340(6229):104. **Comment on:** Nature 1989 Apr 27;338(6218):769–71
[Mechanisms of virus-induced membrane and cell fusion reactions] Asano A, et al. **Uirusu** 1988 Jun;38(1):15–22 (55 ref.) **(Jpn)**

ANALYSIS

Polypeptides of pneumonia virus of mice. II. Characterization of the glycoproteins. Ling R, et al. **J Gen Virol** 1989 Jun; 70 (Pt 6):1441–52
Leucine zipper motif extends [letter] Buckland R, et al. **Nature** 1989 Apr 13;338(6216):547

CLASSIFICATION

Antigenic relationships between avian paramyxoviruses. III. A mathematical model of antigenic drift and a computer-assisted approach for construction of a phylogenetic tree. Lipkind M, et al. **Arch Virol** 1988; 103(1–2):83–98
Characterization of a seal morbillivirus [letter] [published erratum appears in Nature 1988 Dec 22–29;336(6201):720] **Nature** 1988 Nov 10;336(6195):115–6
Pneumovirus-like characteristics of the mRNA and proteins of turkey rhinotracheitis virus. Cavanagh D, et al. **Virus Res** 1988 Oct;11(3):241–56
[The occurrence of paramyxoviruses in game birds: epizootiological aspects, characteristics in vivo and in vitro. A review of the literature] Telbis C, et al. **Zentralbl Veterinarmed [B]** 1989 May;36(3):203–16 (110 ref.) (Eng. Abstr.) **(Ger)**

GENETICS

Examination of eight cases of multiple sclerosis and 56 neurological and non-neurological controls for genomic sequences of measles virus, canine distemper virus, simian virus 5 and rubella virus. Cosby SL, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2027–36
The mumps virus fusion protein mRNA sequence and homology among the paramyxoviridae proteins. Elango N, et al. **J Gen Virol** 1989 Apr;70 (Pt 4):801–7

IMMUNOLOGY

Evaluation of mouse monoclonal antibodies raised against an isolate of the variant avian paramyxovirus type 1 responsible for the current panzootic in pigeons. Collins MS, et al. **Arch Virol** 1989;104(1–2):53–61
Characterization of French avian paramyxovirus type 1 (PMV 1) isolates with a Panel of monoclonal antibodies to the Ploufragan strain of Newcastle disease virus. Jestin V, et al. **Arch Virol** 1989;105(3–4):189–98
An ELISA blocking test using a peroxidase-labelled anti-HN monoclonal antibody for the specific titration of antibodies to avian paramyxovirus type 1 (PMV1). Jestin V, et al. **Arch Virol** 1989;105(3–4):199–208
Efficacy of oil-emulsion vaccines prepared with pigeon paramyxovirus-1, Ulster, and La Sota Newcastle disease viruses. Stone HD. **Avian Dis** 1989 Jan–Mar;33(1):157–62
Paramyxovirus membrane protein augments the antibody response to actin in mice. Anomasiri WT, et al. **Clin Exp Immunol** 1988 Oct;74(1):59–62
Polypeptides of pneumonia virus of mice. I. Immunological cross-reactions and post-translational modifications. Ling R, et al. **J Gen Virol** 1989 Jun;70 (Pt 6):1427–40

Humoral and cytotoxic T cell immune responses to internal and external structural proteins of simian virus 5 induced by immunization with solid matrix-antibody-antigen complexes. Randall RE, et al. **J Gen Virol** 1988 Oct;69 (Pt 10):2505–16

Antibody-forming cell assays of avian paramyxoviruses: the serotype-specific response of mice. Russell PH, et al. **J Gen Virol** 1989 Feb;70 (Pt 2):315–23

Paramyxovirus SV5 and multiple sclerosis [see comments] Vandvik B, et al. **Nature** 1989 Apr 27;338(6218):769–71. **Comment in:** Nature 1989 Jul 13;340(6229):104

T cell cross-reactivity among viruses of the paramyxoviridae. Ziola B, et al. **Viral Immunol** 1987;1(2):111–9

Extensive antigenic diversity among human parainfluenza type 2 virus isolates and immunological relationships among paramyxoviruses revealed by monoclonal antibodies. Tsurudome M, et al. **Virology** 1989 Jul;171(1):38–48

[Otosclerosis. A paramyxovirus-induced inflammatory reaction] Arnold W, et al. **HNO** 1989 Jun;37(6):236–41 (Eng. Abstr.) **(Ger)**

ISOLATION & PURIFICATION

Isolation of avian paramyxovirus-2 from domestic and wild birds in Costa Rica. Goodman BB, et al. **Avian Dis** 1988 Oct-Dec;32(4):713–7

Osteoclasts in human osteopetrosis contain viral-nucleocapsid-like nuclear inclusions. Mills BG, et al. **J Bone Miner Res** 1988 Feb;3(1):101–6

Baikal seal virus [letter] Likhoshway YeV, et al. **Nature** 1989 May 25;339(6222):266

The isolation and attenuation of a virus causing rhinotracheitis in turkeys in South Africa. Buys SB, et al. **Onderstepoort J Vet Res** 1989 Jun;56(2):87–98

METABOLISM

Different palmitoylation of paramyxovirus glycoproteins. Veit M, et al. **Virology** 1989 Jan;168(1):173–6

PATHOGENICITY

Studies on the virulence of pigeon paramyxovirus-1 (PMV-1). I. Changes in the virulence of pigeon PMV-1 strains isolated in Hungary upon passage in chickens, embryonated hen's eggs and pigeons. Kissi B. **Acta Vet Hung** 1988;36(3–4):283–92

Studies on the virulence of pigeon paramyxovirus-1 (PMV-1). II. Mechanism of the virulence increase of pigeon PMV-1. Kissi B, et al. **Acta Vet Hung** 1988; 36(3–4):293–8

[Pathogenicity and mode of live paramyxovirus] Nagai Y. **Uirusu** 1988 Dec;38(2):115–26 (68 ref.) **(Jpn)**

[Comparative study of the hemolytic activity of ortho- and paramyxoviruses] Govorkova EA, et al. **Vopr Virusol** 1989 Mar-Apr;34(2):161–4 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Analysis of the relationship between cleavability of a paramyxovirus fusion protein and length of the connecting peptide. Paterson RG, et al. **J Virol** 1989 Mar; 63(3):1293–301

PARAMYXOVIRUS INFECTIONS

Pulmonary infections with respiratory syncytial virus and Chlamydia trachomatis in early infancy. Chiba S, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Jun;30(3):225–30 (17 ref.)

Bacterial superinfection in RSV lower respiratory tract illnesses and the epidemiology of Chlamydia trachomatis pneumonitis of infants in Tokyo. Meguro H, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Jun;30(3):247–52

Fatal respiratory syncytial virus pneumonitis in a previously healthy child. Kurlandsky LE, et al. **Am Rev Respir Dis** 1988 Aug;138(2):468–72

Vitamin A status of children with a history of respiratory syncytial virus infection in infancy. Pinnock CB, et al. **Aust Paediatr J** 1988 Oct;24(5):286–9

COMPLICATIONS

Risk factors for occasional and recurrent wheezing after RSV infection in infancy. Rylander E, et al. **Acta Paediatr Scand** 1988 Sep;77(5):711–5

Accentuated antibody response to paramyxoviruses in individuals infected with human immunodeficiency virus. Kövamees J, et al. **J Med Virol** 1988 Sep;26(1):41–8

Role of respiratory syncytial virus in early hospitalizations for respiratory distress of young infants with cystic fibrosis. Abman SH, et al. **J Pediatr** 1988 Nov;113(5):826–30

[Clinical studies on the secondary bacterial infection in respiratory syncytial virus infection of children] Arimasu O. **Kansenshogaku Zasshi** 1989 Mar;63(3):248–55 (Eng. Abstr.) **(Jpn)**

[Clinico-immunocytological characteristics of mixed cytomegalovirus and respiratory virus infection in young children] Vartanian RV, et al. **Pediatriia** 1988;(9):15–9 (Eng. Abstr.) **(Rus)**

[Apnea attacks in infants: study of 7 cases] Baca Cots M, et al. **An Esp Pediatr** 1989 Feb;30(2):124–6 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Clinical manifestations of respiratory tract infections due to respiratory syncytial virus and rhinoviruses in hospitalized children. Kellner G, et al. **Acta Paediatr Scand** 1989 May; 78(3):390–4

Detection, pathogenesis, and therapy of respiratory syncytial virus infections. Welliver RC. **Clin Microbiol Rev** 1988 Jan; 1(1):27–39 (94 ref.)

Comparison of the Abbott and Ortho enzyme immunoassays and cell culture for the detection of respiratory syncytial virus in nasopharyngeal specimens. Christensen ML, et al. **Diagn Microbiol Infect Dis** 1988 Apr;9(4):245–50

Rapid diagnosis of infections caused by respiratory syncytial virus [letter] Rothbarth PH, et al. **Infection** 1988 Jul-Aug; 16(4):252

Time-resolved fluoroimmunoassay compared with virus isolation for rapid detection of respiratory syncytial virus in nasopharyngeal aspirates. Waris M, et al. **J Clin Microbiol** 1988 Dec;26(12):2581–5

Respiratory syncytial virus pneumonia in a human immunodeficiency virus-infected man [letter] Murphy D, et al. **JAMA** 1989 Feb 24;261(8):1147

Comparative virulence of respiratory syncytial virus subgroups A and B [letter] Taylor CE, et al. **Lancet** 1989 Apr 8;1(8641):777–8

Rapid detection of respiratory syncytial virus in nasopharyngeal secretions by immunofluorescence and ELISA does not justify discontinuation of virus isolation. Percivalle E, et al. **Microbiologica** 1989 Jul;12(3):203–13

Diagnosis of respiratory syncytial virus infection. Stadther J. **Pediatr Infect Dis J** 1988 Oct;7(10):744–5

[Evaluation of serological examination in the diagnosis of RS virus infection in infants] Jankowski M, et al. **Med Dosw Mikrobiol** 1988;40(3):167–72 (Eng. Abstr.) **(Pol)**

DRUG THERAPY

Respiratory syncytial virus infection in infants with congenital heart disease and treatment with human leukocyte interferone. Chiba Y, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Feb;30(1):17–23

Fatal respiratory syncytial virus pneumonitis in a previously healthy child [letter] Cameron D, et al. **Am Rev Respir Dis** 1989 Feb;139(2):569–70

Comparison of the anti-respiratory syncytial virus activity and toxicity of papaverine hydrochloride and pyrazofurin in vitro and in vivo. Wyde PR, et al. **Antiviral Res** 1989 Feb;11(1):15–26

Ribavirin in respiratory syncytial virus infection [letter] Sharland M, et al. **Arch Dis Child** 1989 Mar;64(3):425

Ribavirin aerosol treatment of serious respiratory syncytial virus infection in infants. Rodriguez WJ, et al. **Infect Dis Clin North Am** 1987 Jun;1(2):425–39 (70 ref.)

The exposure of health care workers to ribavirin aerosol [letter] Guglielmo BJ, et al. **JAMA** 1989 Apr 7; 261(13):1880–1

Respiratory syncytial virus infections in infants and children: diagnosis and treatment. McIntosh K. **Pediatr Rev** 1987 Dec;9(6):191–6 (8 ref.)

EPIDEMIOLOGY

Epidemiological and clinical features of influenza and respiratory syncytial virus infections among children in Japan. Takeuchi Y. **Acta Paediatr Jpn Overseas Ed** 1988 Jun;30(3):231–9 (10 ref.)

Respiratory syncytial virus outbreak on American Samoa. Evaluation of risk factors. Hayes EB, et al. **Am J Dis Child** 1989 Mar;143(3):316–21

Respiratory syncytial virus. Sinnott JT 4th, et al. **Infect Control Hosp Epidemiol** 1988 Oct;9(10):465–8 (38 ref.)

RNA fingerprinting of respiratory syncytial virus using ribonuclease protection. Application to molecular epidemiology. Storch GA, et al. **J Clin Invest** 1989 Jun; 83(6):1894–902

The effect of altitude and weather on the occurrence of outbreaks of respiratory syncytial virus infections [letter] Florman AL, et al. **J Infect Dis** 1988 Dec;158(6):1401–2

Prevalence of respiratory syncytial virus subgroups over six consecutive outbreaks: 1981–1987. Hendry RM, et al. **J Infect Dis** 1989 Aug;160(2):185–90

A concurrent epidemic of respiratory syncytial virus and echovirus 7 infections in an intensive care nursery. Wilson CW, et al. **Pediatr Infect Dis J** 1989 Jan;8(1):24–9

Seasonal variation in respiratory syncytial virus infections in children in Benin-City, Nigeria. Nwankwo MU, et al. **Trop Geogr Med** 1988 Oct;40(4):309–13

ETIOLOGY

[Etiology of pneumonia in children] Mizerski J, et al. **Pediatr Pol** 1988 Apr;63(4):216–23 (Eng. Abstr.) **(Pol)**

IMMUNOLOGY

Production of interferon in respiratory syncytial virus bronchiolitis. Isaacs D. **Arch Dis Child** 1989 Jan;64(1):92–5

Flow cytometric analysis of pulmonary lymphocytes from mice infected with respiratory syncytial virus. Openshaw PJ. **Clin Exp Immunol** 1989 Feb;75(2):324–8

Ontogenesis of the formation of secretory antibodies to respiratory syncytial (RS) virus. Leschinskaya NP, et al. **Epidemiol Infect** 1988 Dec;101(3):565–75

Total and specific IgE responses in the acute and recovery phases of respiratory infections in children. Nagayama Y, et al. **J Asthma** 1987;24(3):159–66

Serum immunoglobulin G antibody subclass response to respiratory syncytial virus F and G glycoproteins after first, second, and third infections. Wagner DK, et al. **J Clin Microbiol** 1989 Mar;27(3):589–92

Respiratory syncytial virus-specific antibody responses in immunoglobulin A and E isotypes to the F and G proteins and to intact virus after natural infection. Welliver RC, et al. **J Clin Microbiol** 1989 Feb;27(2):295–9

Cytotoxic T cells clear virus but augment lung pathology in mice infected with respiratory syncytial virus. Cannon MJ, et al. **J Exp Med** 1988 Sep 1;168(3):1163–8

Immunosuppression of the antibody response to respiratory syncytial virus (RSV) by pre-existing serum antibodies: partial prevention by topical infection of the respiratory tract with vaccinia virus-RSV recombinants. Murphy BR, et al. **J Gen Virol** 1989 Aug;70 (Pt 8):2185–90

Immune response to experimentally induced infection with respiratory syncytial virus: possible role in the development of pulmonary disease. Piedra PA, et al. **J Gen Virol** 1989 Feb;70 (Pt 2):325–33

Immunization of cotton rats with the human respiratory syncytial virus F glycoprotein produced using a baculovirus vector. Wathen MW, et al. **J Infect Dis** 1989 Feb;159(2):255–64

Development of cell-mediated cytotoxic immunity to respiratory syncytial virus in human infants following naturally acquired infection. Chiba Y, et al. **J Med Virol** 1989 Jul;28(3):133–9

Immunoglobulin-class-specific immune response to respiratory syncytial virus structural proteins in infants, children, and adults. Popow-Kraupp T, et al. **J Med Virol** 1989 Mar;27(3):215–23

The release of leukotrienes in the respiratory tract during infection with respiratory syncytial virus: role in obstructive airway disease. Volovitz B, et al. **Pediatr Res** 1988 Oct;24(4):504–7

Relation of serum antibody to glycoproteins of respiratory syncytial virus with immunity to infection in children. Kasel JA, et al. **Viral Immunol** 1987–88;1(3):199–205

[Bronchiolitis caused by respiratory syncytial virus in very young infants and transmitted maternal antibodies] Attree O, et al. **Arch Fr Pediatr** 1988 Dec;45(10):791–3 (20 ref.) (Eng. Abstr.) **(Fre)**

[The role of infection] Schlick W. **Prax Klin Pneumol** 1988 Jul;42(7):495–7 (Eng. Abstr.) **(Ger)**

[Comparison between immunofluorescence and immunoenzymatic assay for the rapid diagnosis of the respiratory syncytial virus in nasopharyngeal secretions] Chiparelli H, et al. **Rev Argent Microbiol** 1988 Oct-Dec; 20(4):201–4 (Eng. Abstr.) **(Spa)**

MICROBIOLOGY

Antigenic characterization of respiratory syncytial virus associated with acute respiratory infections in Uruguayan children from 1985 to 1987. Russi JC, et al. **J Clin Microbiol** 1989 Jul;27(7):1464–6

Use of high-speed rolling to detect respiratory syncytial virus in cell culture. Sturgill MA, et al. **J Clin Microbiol** 1989 Mar;27(3):577–9

Evaluation of the Abbott TESTPACK RSV enzyme immunoassay for detection of respiratory syncytial virus in nasopharyngeal swab specimens. Swierkosz EM, et al. **J Clin Microbiol** 1989 Jun;27(6):1151–4

Detection of respiratory syncytial virus in nasopharyngeal secretions by DNA-RNA hybridization. Van Dyke RB, et al. **J Clin Microbiol** 1989 Aug;27(8):1739–43

Primary respiratory syncytial virus infection in mice. Graham BS, et al. **J Med Virol** 1988 Oct;26(2):153–62

Tracheitis and supraglottis associated with Branhamella catarrhalis and respiratory syncytial virus [letter] Alligood GA, et al. **Pediatr Infect Dis J** 1989 Mar;8(3):190–1

PATHOLOGY

[Otosclerosis. A paramyxovirus-induced inflammatory reaction] Arnold W, et al. **HNO** 1989 Jun;37(6):236–41 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Respiratory syncytial virus alters electrophysiologic properties in cotton rat airway epithelium. Cloutier MM, et al. **Pediatr Pulmonol** 1989;6(3):164–8

Bronchial reactivity in infants in acute respiratory failure with viral bronchiolitis. Mallory GB Jr, et al. **Pediatr Pulmonol** 1989;6(4):253–9

Characterization of prolonged apneic episodes associated with respiratory syncytial virus infection. Pickens DL, et al. **Pediatr Pulmonol** 1989;6(3):195–201

PREVENTION & CONTROL

Vitamin A status of children with a history of respiratory syncytial virus infection in infancy. Pinnock CB, et al. **Aust Paediatr J** 1988 Oct;24(5):286–9

Nosocomial viral infections: recent developments and new strategies. Goldmann DA. **Eur J Clin Microbiol Infect Dis** 1989 Jan;8(1):75–81 (44 ref.)

Immunization with solid matrix-antibody-antigen complexes containing surface or internal virus structural proteins protects mice from infection with the paramyxovirus, simian virus 5. Randall RE, et al. **J Gen Virol** 1988 Oct; 69 (Pt 10):2517–26

Seal vaccination success [letter] Osterhaus AD, et al. **Nature** 1989 Jan 5;337(6202):21

The envelope proteins from purified respiratory syncytial virus protect mice from intranasal virus challenge. Levine S, et al. **Proc Soc Exp Biol Med** 1989 Apr;190(4):349–56

[The status of research to develop new vaccines against infection caused by the respiratory syncytial virus] Pervikov IuV, et al. **Vopr Virusol** 1988 Sep–Oct;33(5):523–9 (53 ref.) (Rus)

THERAPY

Topically administered immunoglobulin reduces pulmonary respiratory syncytial virus shedding in owl monkeys. Hemming VG, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1269–70

[Respiratory insufficiency in acute bronchiolitis in infancy] Grubbauer HM, et al. **Pneumologie** 1989 Jun;43(6):295–8 (Eng. Abstr.) (Ger)

[Experience using dimephosphon in the complex treatment of pneumonia in newborn infants] Pikuza OI, et al. **Pediatriia** 1989;(3):39–41 (Rus)

VETERINARY

Studies on the virulence of pigeon paramyxovirus-1 (PMV-1). II. Mechanism of the virulence increase of pigeon PMV-1. Kissi B, et al. **Acta Vet Hung** 1988; 36(3–4):293–8

Studies on the virulence of pigeon paramyxovirus-1 (PMV-1). I. Changes in the virulence of pigeon PMV-1 strains isolated in Hungary upon passage in chickens, embryonated hen's eggs and pigeons. Kissi B. **Acta Vet Hung** 1988;36(3–4):283–92

Studies on the pathogenesis and interspecies transmission of respiratory syncytial virus isolated from sheep. Bryson DG, et al. **Am J Vet Res** 1988 Aug;49(8):1424–30

Prevalence and specificity of antibodies to bovine respiratory syncytial virus in sera from feedlot and range cattle. Collins JK, et al. **Am J Vet Res** 1988 Aug;49(8):1316–9

Prostaglandin and thromboxane concentrations in plasma and lung lavage fluids during sequential infection of vaccinated and nonvaccinated calves with bovine respiratory syncytial virus. Gershwin LJ, et al. **Am J Vet Res** 1989 Aug; 50(8):1254–62

Pathogenesis of naturally acquired bovine respiratory syncytial virus infection in calves: morphologic and serologic findings. Kimman TG, et al. **Am J Vet Res** 1989 May;50(5):684–93

Pathogenesis of naturally acquired bovine respiratory syncytial virus infection in calves: evidence for the involvement of complement and mast cell mediators. Kimman TG, et al. **Am J Vet Res** 1989 May;50(5):694–700

Role of IgE in the pathogenesis of bovine respiratory syncytial virus in sequential infections in vaccinated and nonvaccinated calves. Stewart RS, et al. **Am J Vet Res** 1989 Mar;50(3):349–55

Efficacy of oil-emulsion vaccines prepared with pigeon paramyxovirus-1, Ulster, and La Sota Newcastle disease viruses. Stone HD. **Avian Dis** 1989 Jan–Mar;33(1):157–62

Avian paramyxovirus type 1 infection in pigeons: recent changes in clinical observations. Tangredi BP. **Avian Dis** 1988 Oct–Dec;32(4):839–41

The detection of bovine respiratory syncytial virus in formalin fixed bovine lung with commercially available monoclonal antibodies and avidin biotin complex immunohistochemistry. Haines DM, et al. **Can J Vet Res** 1989 Jul;53(3):366–8

Morbillivirus in seals: isolation and some growth characteristics in cell cultures. Liess B, et al. **DTW** 1989 Apr;96(4):180–2

Analysis of the antibody response to bovine respiratory syncytial virus proteins in calves. Westenbrink F, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):591–601

Detection of IgE antibodies to bovine respiratory syncytial virus. Stewart RS, et al. **Vet Immunol Immunopathol** 1989 Mar;20(4):313–23

Evaluation of ethylenediaminetetraacetic acid, tetrasodium salt dihydrate (EDTA)-Tween 20 treatment versus protease digestion of formalin-fixed tissue sections for detection of bovine respiratory syncytial virus antigen in infected ovine lung. Meehan JT, et al. **Vet Pathol** 1989 Jul;26(4):322–5

An outbreak of paramyxovirus encephalomyelitis in racing pigeons in India. Mangat AP, et al. **Vet Rec** 1988 Nov 5;123(19):496

Veterinarians and seals [letter] Munro R, et al. **Vet Rec** 1988 Oct 22;123(17):451

Clinical signs following experimental lungworm infection and natural bovine respiratory syncytial virus infection in calves. Verhoeff J, et al. **Vet Rec** 1988 Sep 24; 123(13):346–50

[Atypical interstitial pneumonia (AIP) in calves and young cattle in Schleswig-Holstein in conjunction with an infection by the bovine respiratory syncytial virus (BRSV)] Appel G, et al. **DTW** 1989 Apr;96(4):226–8 (Eng. Abstr.) (Ger)

[The occurrence of paramyxoviruses in game birds: epizootiological aspects, characteristics in vivo and in vitro. A review of the literature] Telbis C, et al. **Zentralbl Veterinarmed [B]** 1989 May;36(3):203–16 (110 ref.) (Eng. Abstr.) (Ger)

[Comparative studies of paramyxovirus isolates from wild birds] Telbis C, et al. **Zentralbl Veterinarmed [B]** 1989 Jun; 36(4):279–91 (Eng. Abstr.) (Ger)

PARANASAL SINUS DISEASES

Maxillary antrolith: report of a case. Ishiyama T. **Auris Nasus Larynx** 1988;15(3):185–9 (13 ref.)

Cholesterol granuloma of the paranasal sinuses. Bütler S, et al. **J Laryngol Otol** 1989 Aug;103(8):776–9

Advances in sinus disease in pediatrics. Hawkins DB. **Otolaryngol Clin North Am** 1989 Jun;22(3):553–68 (52 ref.)

[Mucormycosis in paranasal sinuses] Ishida M, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Jan;92(1):21–7 (Eng. Abstr.) (Jpn)

COMPLICATIONS

Craniofacial fibrous dysplasia complicated by mucocele: the role of radionuclide scintigraphic methods in the diagnosis. Garzozi H, et al. **Ann Ophthalmol** 1989 Mar;21(3):108–10

Paranasal sinus mucocele in cystic fibrosis. Guttenplan MD, et al. **Clin Pediatr (Phila)** 1989 Sep;28(9):429–30

Pseudomonas thoracic empyema secondary to nosocomial rhinosinusitis. Meyer P, et al. **Eur Respir J** 1988 Oct; 1(9):868–9

Ophthalmic considerations in fronto-ethmoidal mucoceles. Lund VJ, et al. **J Laryngol Otol** 1989 Jul;103(7):667–9

Non-axial proptosis without diplopia secondary to maxillary pyomucocele. Sharp JF. **J R Soc Med** 1989 Aug; 82(8):506–7

Olfactory dysfunction. Hendriks AP. **Rhinology** 1988 Dec; 26(4):229–51 (93 ref.)

Sinus pathology and respiratory tract disease. Milleron B, et al. **Rhinology** 1988;Suppl 4:13–9 (16 ref.)

Nasal and sinus pain: current diagnosis and treatment. Kennedy DW, et al. **Semin Neurol** 1988 Dec;8(4):303–14 (34 ref.)

[Recurrent unilateral painful oculomotor nerve palsy with an ipsilateral posterior ethmoidal mucocele] Doh-ura K, et al. **Rinsho Shinkeigaku** 1989 Feb;29(2):216–8 (Eng. Abstr.) (Jpn)

[Exophthalmos due to ethmoidal and orbital mucocele] Ivaşcu M, et al. **Rev Chir [Oftalmol]** 1988 Oct–Dec; 32(4):303–5 (Eng. Abstr.) (Rum)

[An inflammatory process of the orbit of nasal sinus origin simulating a tumor of the orbit] Blagoveshchenskaia NS, et al. **Vestn Otorinolaringol** 1988 Nov–Dec;(6):59–60 (Rus)

DIAGNOSIS

Mucoceles of the paranasal sinuses: MR imaging with CT correlation. Van Tassel P, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):407–12

Sphenoid sinus mucocele. Stankiewicz JA. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):735–40

Mucormycosis of the paranasal sinuses. Finn DG. **Ear Nose Throat J** 1988 Nov;67(11):813, 816–8, 821–2 (11 ref.)

MR findings in rhinocerebral mucormycosis. Yousem DM, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):878–82

Diagnostic imaging of the nose and paranasal sinuses. Lloyd GA. **J Laryngol Otol** 1989 May;103(5):453–60

Paranasal sinus mucocele: unusual MR manifestations at 1.5 T. Flanders AE, et al. **Magn Reson Imaging** 1989 May–Jun; 7(3):333–7

Chronically obstructed sinonasal secretions: observations on T1 and T2 shortening. Som PM, et al. **Radiology** 1989 Aug; 172(2):515–20

Benign and malignant sinonasal lesions with intracranial extension: differentiation with MR imaging. Som PM, et al. **Radiology** 1989 Sep;172(3):763–6

An obscure etiology for headache: sphenoid sinus disease. Lee KJ, et al. **Yonsei Med J** 1988;29(3):209–18 (17 ref.)

[Diseases of the nose and paranasal sinuses in workers of the woodworking industry] Savov A. **Probl Khig** 1988; 13:173–82 (Eng. Abstr.) (Bul)

[Paranasal sinus diseases—potentials and limitations of radiology] Mödder U. **Rontgenblatter** 1989 Apr;42(4):166–9 (Ger) (Ger)

[Sonographic studies in odontogenic maxillary sinus diseases] Nitzschke M, et al. **Zahn Mund Kieferheilkd** 1989; 77(1):29–33 (Eng. Abstr.) (Ger)

[Use of nuclear magnetic resonance in cranio-facial pathology. Preliminary study] Cirillo G, et al. **Minerva Stomatol** 1989 Mar;38(3):307–16 (Eng. Abstr.) (Ita)

[Ultrasonography of mucoceles of paranasal sinuses—a secondary report] Shiono H, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jul;91(7):1042–8 (Eng. Abstr.) (Jpn)

[Maxillary antrum mucocele. Comments on 3 cases] Surlin C, et al. **Rev Chir [Otorinolaringol]** 1989 Jan–Mar; 34(1):71–8 (Eng. Abstr.) (Rum)

[Diseases of the nasal cavity and paranasal sinuses] Beliakova LV. **Ter Arkh** 1988;60(10):60–3 (Rus)

DRUG THERAPY

Invasive aspergillosis in a patient with aplastic anemia receiving amphotericin B. Antoine GA, et al. **Head Neck Surg** 1988 Jan–Feb;10(3):199–203

ETIOLOGY

Primary hyperparathyroidism presenting with a maxillary tumour and hydrocephalus. Robinson PJ, et al. **J Laryngol Otol** 1988 Dec;102(12):1164–7

Fatal rhinocerebral mucormycosis and diabetic ketoacidosis. Gans RO, et al. **Neth J Med** 1989 Feb;34(1–2):29–34

Bipolaris: a serious new fungal pathogen of the paranasal sinus. Antoine GA, et al. **Otolaryngol Head Neck Surg** 1989 Feb;100(2):158–62 (12 ref.)

[Unilateral exophthalmos due to mucocele in the frontal or ethmoidal sinus] Xu YZ. **Chung Hua Yen Ko Tsa Chih** 1988 Jul;24(4):209–10 (Eng. Abstr.) (Chi)

[Mucormycosis of nasal sinuses in a patient after kidney transplantation] Koziołowa H, et al. **Pol Arch Med Wewn** 1985 May;73(5):321–8 (Eng. Abstr.) (Pol)

MICROBIOLOGY

Primary paranasal Aspergillus granuloma in Saudi Arabia. Dawlatly EE, et al. **Trop Geogr Med** 1988 Jul;40(3):247–50

PATHOLOGY

Pathologic quiz case 1. Invasive aspergillosis of the maxillary sinus and nose. Boutros A, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jan;115(1):114–6

Aspergillosis of the nose and paranasal sinuses. Milroy CM, et al. **J Clin Pathol** 1989 Feb;42(2):123–7

Fulminant Drechslera sinusitis in an immunocompetent host. Pratt MF, et al. **Laryngoscope** 1988 Dec;98(12):1343–7

[Granuloma gangraenescens with bilateral anterior uveitis] Schenck F, et al. **Fortschr Ophthalmol** 1988;85(6):737–9 (Eng. Abstr.) (Ger)

[A rare case of aspergilloma of the maxillary sinus] Turco GC, et al. **Minerva Stomatol** 1988 Aug;37(8):591–3 (Eng. Abstr.) (Ita)

[Relation between deviation of the nasal septum and diseases of the paranasal sinuses] Točík J. **Cesk Otolaryngol** 1989 Jan;38(1):41–4 (Eng. Abstr.) (Slo)

[Mucoceles of the maxillary sinus. Report of a case] Lahoz Zamarro MT, et al. **An Otorrinolaringol Ibero Am** 1989; 16(2):149–58 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Nasal mucus clearance in nasal and para nasal sinus disorders. Wig U, et al. **Indian J Chest Dis Allied Sci** 1988 Jul–Sep; 30(3):177–82

Sinus headache: a neurologist's viewpoint. Couch JR. **Semin Neurol** 1988 Dec;8(4):298–302 (15 ref.)

RADIOGRAPHY

Radiological study of the paranasal sinuses in lepromatous leprosy. Soni NK. **Indian J Lepr** 1988 Apr;60(2):285–9

Radiologic assessment preoperative to endoscopic sinus surgery. Chow JM, et al. **Otolaryngol Clin North Am** 1989 Aug;22(4):691–701

CT findings in sphenoid sinus aspergillosis. Horton WD 2d, et al. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):606–9

[Changes in the spatial frequency spectrum of the image as a means of diagnosing pathologic changes of the nasal sinuses] Kossovoi AL. **Radiol Diagn (Berl)** 1989;30(1):87–92 (Eng. Abstr.) (Ger)

[The clinical picture of paranasal sinus diseases and demands made by the ear, nose and throat physician on the radiologist] Rudert H. **Rontgenblatter** 1989 Apr; 42(4):158–65 (Eng. Abstr.) (Ger)

[Differential diagnosis of superior orbital fissure syndrome] Berlit P, et al. **Schweiz Med Wochenschr** 1988 Jul 30; 118(30):1104–9 (Eng. Abstr.) (Ger)

[Computed tomography of paranasal sinus mucoceles] Tomioka K, et al. **Rinsho Hoshasen** 1988 Oct; 33(10):1067–70 (Eng. Abstr.) (Jpn)

[Potentialities and methodology of using the UAR-2 device in the diagnosis of paranasal sinus diseases] Kossovoi AL, et al. **Vestn Rentgenol Radiol** 1988 Jul–Aug;(4):46–52 (Eng. Abstr.) (Rus)

SURGERY

Endoscopy and the KTP/532 laser for nasal sinus disease. Levine HL. **Ann Otol Rhinol Laryngol** 1989 Jan;98(1 Pt 1):46–51

Pneumosinus dilatans. Pospisil OA et al. **Br J Oral Maxillofac Surg** 1988 Oct;26(5):375–80

Craniofacial resection for extensive paranasal sinus aspergilloma. Quiney RE, et al. **J Laryngol Otol** 1988 Dec; 102(12):1172–5

Superiorly based osteoplastic flap for frontal sinus disease. Kudryk WH, et al. **J Otolaryngol** 1988 Dec;17(7):395–7

Functional endonasal sinus surgery (FESS) in the pediatric age group. Gross CW, et al. **Laryngoscope** 1989 Mar; 99(3):272–5

Endoscopic sinus surgery for mucoceles: a viable alternative. Kennedy DW, et al. **Laryngoscope** 1989 Sep;99(9):885–95

Fatal and major complications secondary to nasal and sinus surgery. Maniglia AJ. **Laryngoscope** 1989 Mar;99(3):276–83

Difficult decisions in endoscopic sinus surgery. Friedman M, et al. **Otolaryngol Clin North Am** 1989 Aug;22(4):777–99

The role of standard technique in modern sinus surgery. Friedman WH, et al. **Otolaryngol Clin North Am** 1989 Aug; 22(4):759–75

Pediatric functional endonasal sinus surgery. Gross CW, et al. **Otolaryngol Clin North Am** 1989 Aug;22(4):733–8

Lasers and endoscopic rhinologic surgery. Levine HL. **Otolaryngol Clin North Am** 1989 Aug;22(4):739–48

Basic surgical techniques and variations of endoscopic sinus surgery. Rice DH. **Otolaryngol Clin North Am** 1989 Aug; 22(4):713–26

Complications of endoscopic sinus surgery. Stankiewicz JA. **Otolaryngol Clin North Am** 1989 Aug;22(4):749–58

Sinus disease and surgical treatment: a results oriented quality assurance study. Hoffman SR, et al. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):573–7

Treatment of antral pathology—which surgical route. Wigand ME, et al. **Rhinology** 1988 Dec;26(4):253–5

[Development of the facial and periodontal approach to the maxillary sinus] Härle F. **HNO** 1988 Dec;36(12):483–8 (38 ref.) (Eng. Abstr.) (Ger)

THERAPY

Aggressive combined modality treatment of progressive sinonasal fungal infections in immunocompromised patients. Goering P, et al. **Am J Med** 1988 Nov;85(5):619–23

Managing diabetes-related infections in the elderly. Gleckman RA, et al. **Geriatrics** 1989 Aug;44(8):37–9, 43–4, 46 (18 ref.)

[The elimination of dental and sinusal infectious foci in dermatologic pathology. A double-blind study in 27 cases confined to chronic urticaria] Goga D, et al. **Rev Stomatol Chir Maxillofac** 1988;89(5):273–5 (Eng. Abstr.) (Fre)

VETERINARY

Equine paranasal sinus cysts: a report of 15 cases. Lane JG, et al. **Equine Vet J** 1987 Nov;19(6):537–44

PARANASAL SINUS NEOPLASMS

Ossifying fibroma of the maxillary sinus: a case report. Antonelli JR. **Ann Dent** 1989 Summer;48(1):33–6

Fibrosarcoma of the nose and the paranasal sinuses. Olekszyk J, et al. **J Am Osteopath Assoc** 1989 Jul;89(7):901–4

Antro-choanal polyp: a 10-year retrospective study in the pediatric population with a review of the literature. Chen JM, et al. **J Otolaryngol** 1989 Jun;18(4):168–72 (13 ref.)

Paranasal sinus malignancy: a comprehensive update. Sisson GA Sr, et al. **Laryngoscope** 1989 Feb;99(2):143–50

Giant-cell neoplasm of the sphenoid sinus. Suster S, et al. **Mt Sinai J Med** 1989 Mar;56(2):118–22

Mucoepidermoid carcinoma of the maxillary sinus. Simpson RJ, et al. **Otolaryngol Head Neck Surg** 1988 Oct; 99(4):419–23 (21 ref.)

A vascular leiomyoma of the ethmoid. Report of case. Zijlker TD, et al. **Rhinology** 1989 Jun;27(2):129–35

[Adenocarcinoma of the paranasal sinuses in workers in the wood-processing industry] Veselý J, et al. **Cesk Otolaryngol** 1988 Dec;37(6):352–5 (Eng. Abstr.) (Cze)

[Inverted papillomas] Klozar J, et al. **Sb Lek** 1989 Jun; 91(6):177–85 (Eng. Abstr.) (Cze)

[Cancer of the maxillary sinus. A retrospective study of 29 cases] Debry C, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(2):83–90 (Eng. Abstr.) (Fre)

[19th German Cancer Congress. 1988, Frankfurt. Symposium 6: Malignant tumor of the inner nose and paranasal sinuses. Proceedings] **Strahlenther Onkol** 1989 Jun;165(6):415–80 (Ger)

[Osteomas of the paranasal sinuses: review of the literature and personal cases] Sesenna E, et al. **Acta Biomed Ateneo Parmense** 1988;59(5–6):131–45 (Eng. Abstr.) (Ita)

[Adenocarcinoma of the ethmoid] Altissimi G, et al. **Acta Otorhinolaryngol Ital** 1986 Sep–Oct;6(5):541–52 (39 ref.) (Eng. Abstr.) (Ita)

[Recklinghausen's neurofibromatosis: unusual involvement of the maxillary sinus] Piccini A, et al. **Acta Otorhinolaryngol Ital** 1988 Nov–Dec;8(6):617–22 (Eng. Abstr.) (Ita)

[Malignant schwannoma of the cervico-cephalic region. Clinical case] Pomatto E, et al. **Minerva Stomatol** 1988 Nov; 37(11):831–5 (Eng. Abstr.) (Ita)

[A case of extramedullary plasmacytoma of nasal sinus] Ohtsuka T, et al. **Rinsho Ketsueki** 1988 Nov;29(11):2091–5 (Eng. Abstr.) (Jpn)

[Cementoma of the nasal cavity and paranasal sinuses] Akopian RG, et al. **Vestn Otorinolaringol** 1988 Jul–Aug; (4):63–5 (Rus)

[A case of aberrant thyroid goiter in the nasal cavity and paranasal sinuses] Boenko SK, et al. **Vestn Otorinolaringol** 1988 Jul–Aug;(4):72–3 (Rus)

[Melanoma of the nasal cavity and paranasal sinuses] Shtil' AA, et al. **Vestn Otorinolaringol** 1988 Jul–Aug;(4):55–60 (Eng. Abstr.) (Rus)

[Malignant melanomas of the nasal mucosa and paranasal sinuses] Danić D, et al. **Med Pregl** 1988;41(3–4):135–7 (Eng. Abstr.) (Scr)

CHEMICALLY INDUCED

Histopathology of sinonasal and lung cancers in nickel refinery workers. Sunderman FW Jr, et al. **Ann Clin Lab Sci** 1989 Jan–Feb;19(1):44–50

Use of nasal preparations and the incidence of sinonasal cancer. Strader CH, et al. **J Epidemiol Community Health** 1988 Sep;42(3):243–8

CLASSIFICATION

[Classification and documentation of malignoma of the inner nose and paranasal sinuses] Clasen B, et al. **Strahlenther Onkol** 1989 Jun;165(6):416–9 (Eng. Abstr.) (Ger)

COMPLICATIONS

Optic neuropathy associated with chronic lymphomatous meningitis. Coppeto JR, et al. **J Clin Neuro Ophthalmol** 1988 Mar;8(1):39–45

Intracranial pneumocephalus (secondary to frontoethmoidal osteoma). Ferlito A, et al. **J Laryngol Otol** 1989 Jun; 103(6):634–7

Acquired Brown's syndrome caused by frontal sinus osteoma. Biedner B, et al. **J Pediatr Ophthalmol Strabismus** 1988 Sep–Oct;25(5):226–9

Nasal obstruction due to benign and malignant neoplasms. Komisar A. **Otolaryngol Clin North Am** 1989 Apr; 22(2):351–65 (14 ref.)

Metastatic laryngeal carcinoma as a cause of progressive ophthalmoplegia. Weig SG, et al. **South Med J** 1989 Aug; 82(8):1051–2

[A rare case of the combination of a malignant tumor of the frontal sinus with a pyocele] Chkanikov AN, et al. **Vestn Otorinolaringol** 1988 Nov–Dec;(6):53 (Rus)

[Pneumocephalus as a complication of osteoma of the frontal sinus] Bein BN, et al. **Zh Vopr Neirokhir** 1988 Sep–Oct; (5):47–8 (Rus)

DIAGNOSIS

Sinus histiocytosis with massive lymphadenopathy. Salmon JF, et al. **Am J Ophthalmol** 1989 May 15;107(5):549–50

Inverted papilloma: a follow-up study including primarily unacknowledged cases. Buchwald C, et al. **Am J Otolaryngol** 1989 Jul–Aug;10(4):273–81

Carcinoma of the maxillary sinus with pterygoid invasion. Toriumi DM, et al. **Ann Otol Rhinol Laryngol** 1989 Jun; 98(6):485–6

Allergic fungal sinusitis presenting as a paranasal sinus tumour. Robson JM, et al. **Aust N Z J Med** 1989 Aug; 19(4):351–3

Aggressive paranasal sinus ossifying fibroma. Morris MR, et al. **Ear Nose Throat J** 1989 Mar;68(3):260–4 (22 ref.)

Maxillary sinus hemangioma: MR and CT studies. Kulkarni MV, et al. **J Comput Assist Tomogr** 1989 Mar–Apr; 13(2):340–2

MR imaging of perineural metastasis along the vidian nerve. Pandolfo I, et al. **J Comput Assist Tomogr** 1989 May–Jun; 13(3):498–500

Case for diagnosis. Sinonasal papilloma, inverted type. Durham JC. **Milit Med** 1989 May;154(5):271, 274–5

Infrasellar craniopharyngioma. Akimura T, et al. **Neuroradiology** 1989;31(2):180–3

Ectopic prolactinoma within the sphenoid sinus. Heitzmann A, et al. **Neurosurgery** 1989 Feb;24(2):279–82

Benign and malignant sinonasal lesions with intracranial extension: differentiation with MR imaging. Som PM, et al. **Radiology** 1989 Sep;172(3):763–6

Massive schwannoma of the nose and paranasal sinuses. Ross C, et al. **South Med J** 1988 Dec;81(12):1588–91 (12 ref.)

[Diagnostic delay in cancer of the nasal cavity and the paranasal sinuses] Charabi S, et al. **Nord Med** 1989; 104(8–9):221–2 (Eng. Abstr.) (Dan)

[Pseudotumoral naso-sinusal aspergillosis stabilized by itraconazole] Gresenguet G, et al. **Med Trop (Mars)** 1989 Jan–Mar;49(1):73–5 (Eng. Abstr.) (Fre)

[Paranasal sinus diseases—potentials and limitations of radiology] Mödder U. **Rontgenblatter** 1989 Apr;42(4):166–9 (Eng. Abstr.) (Ger)

[Ultrasonics in the diagnosis and follow-up of tumors of the inner nose and paranasal sinuses] Hamann KF. **Strahlenther Onkol** 1989 Jun;165(6):452–4 (Eng. Abstr.) (Ger)

[The value of MR tomography in tumorous diseases of the inner nose and paranasal sinuses] Held P, et al. **Strahlenther Onkol** 1989 Jun;165(6):447–51 (Eng. Abstr.) (Ger)

[A case of chondroma of the nasal cavity and maxillary sinus] Szmeja Z, et al. **Otolaryngol Pol** 1988;42(5):365–8 (Eng. Abstr.) (Pol)

[The value of the ophthalmologic examination in detecting rhinosinusal lesions of tumor origin] Popa DP, et al. **Rev Chir [Oftalmol]** 1988 Oct–Dec;32(4):249–53 (Eng. Abstr.) (Rum)

[Diagnosis and treatment of malignant tumors of the nasal cavity and paranasal sinuses] Pogosov VS, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):56–60 (Eng. Abstr.) (Rus)

[Chondroma of the nose and paranasal sinuses and its clinical characteristics] Revskoĭ IuK, et al. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):54–7 (Eng. Abstr.) (Rus)

[Giant melanoma of the maxillary sinus] Rzaev RM. **Vestn Otorinolaringol** 1989 Mar–Apr;(2):82–4 (Rus)

[Pseudohemopathy caused by rhabdomyosarcoma] Woessner S, et al. **Med Clin (Barc)** 1989 May 20;92(19):738–41 (Eng. Abstr.) (Spa)

DRUG THERAPY

Superselective intra-arterial chemotherapy of advanced paranasal sinus tumors. Lee YY, et al. **Arch Otolaryngol Head Neck Surg** 1989 Apr;115(4):503–11

[Intra-arterial chemotherapy of maxillary sinus carcinoma] Inuyama Y, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2688–91 (Eng. Abstr.) (Jpn)

EPIDEMIOLOGY

Predominance of squamous cell carcinoma and rarity of adenocarcinoma of maxillary sinus among Japanese. Fukuda K, et al. **Kurume Med J** 1989;36(1):1–6 (29 ref.)

[Adenocarcinoma of the paranasal sinuses: the situation in Switzerland and Geneva] Coquoz E, et al. **Soz Praventivmed** 1989;34(1):38–41 (26 ref.) (Eng. Abstr.) (Fre)

[Squamous epithelial carcinoma and undifferentiated carcinoma of the inner nose and paranasal sinuses] Wustrow J, et al. **Strahlenther Onkol** 1989 Jun;165(6):468–73 (Eng. Abstr.) (Ger)

[A case-control study of nasal tumors and occupational exposure] Bimbi G, et al. **Med Lav** 1988 Jul–Aug; 79(4):280–7 (Eng. Abstr.) (Ita)

ETIOLOGY

Chronic sinusitis and woodworking as risk factors for cancer of the maxillary sinus in northeast Japan. Shimizu H, et al. **Laryngoscope** 1989 Jan;99(1):58–61

[Tumors of the inner nose and paranasal sinuses due to asbestos exposure?] Deitmer T. **Strahlenther Onkol** 1989 Jun;165(6):444–6 (Eng. Abstr.) (Ger)

PATHOLOGY

Sinus histiocytosis with massive lymphadenopathy: bilateral orbital involvement spanning 17 years. Marion JR, et al. **Ann Ophthalmol** 1989 Feb;21(2):55–8

Pathologic quiz case 2. Fibromyxoma of the ethmoidal sinus with secondary sphenoidal sinus mucocele. Alleva MD, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jul; 115(7):878–9, 881

Adult T-cell leukemia/lymphoma originating in the paranasal sinus. Inaki S, et al. **Arch Otolaryngol Head Neck Surg** 1988 Dec;114(12):1471–3

Clear cell rhabdomyosarcoma of the nasal cavity and paranasal sinuses. Chan JK, et al. **Histopathology** 1989 Apr; 14(4):391–9

Immunophenotypic analysis of sinonasal non-Hodgkin's lymphomas. Frierson HF Jr, et al. **Hum Pathol** 1989 Jul; 20(7):636–42

Malignant triton tumor of the nose and paranasal sinuses: a case study. Shajrawi I, et al. **Hum Pathol** 1989 Aug; 20(8):811–4

Verrucous carcinoma of the maxillary antrum. Bacon MP, et al. **J Laryngol Otol** 1989 Apr;103(4):415–6

Osteogenic sarcoma of the ethmoid sinus. Bradley C, et al. **J Laryngol Otol** 1988 Dec;102(12):1176–8

Embryonal rhabdomyosarcoma of the sphenoid sinus. Durham L, et al. **J Laryngol Otol** 1988 Sep;102(9):836–7

Fibrosarcoma of the ethmoid. Smith MC, et al. **J Laryngol Otol** 1989 Jul;103(7):686–9 (9 ref.)

Primary malignant melanoma of the maxillary sinus: case report and literature review. Clark DB, et al. **J Oral Maxillofac Surg** 1989 Jul;47(7):754–9 (22 ref.)

Rhabdomyosarcoma of the maxillary sinus: review of the literature and report of a case. Grieman RB, et al. **J Oral Maxillofac Surg** 1988 Dec;46(12):1090–6 (32 ref.)

Angiosarcoma of the maxilla and maxillary sinus: report of a case and review of the literature. Lanigan DT, et al. **J Oral Maxillofac Surg** 1989 Jul;47(7):747–53 (25 ref.)

Primary and secondary orbital teratomas. Weiss AH, et al. **J Pediatr Ophthalmol Strabismus** 1989 Jan–Feb;26(1):44–9

Malignant non-Hodgkin's lymphomas of the nose and paranasal sinuses. Tan J, et al. **Med J Malaysia** 1988 Mar; 43(1):49–54

Mucosal origin of sinonasal tract adenomatous neoplasms. Gnepp DR, et al. **Mod Pathol** 1989 Jul;2(4):365–71

Malignant paraganglioma—a case report and literature review. Branham GH, et al. **Otolaryngol Head Neck Surg** 1989 Jul;101(1):99–103 (14 ref.)

Alveolar soft part sarcoma of the nasal cavity. Barbareschi M, et al. **Pathologica** 1988 May–Jun;80(1067):363–70

Malignant lymphomas of the nasal cavity and paranasal sinuses. Fellbaum C, et al. **Virchows Arch [A]** 1989; 414(5):399–405

[Proposal on T staging of maxillary sinus cancer] Ye M, et al. **Chung Hua Chung Liu Tsa Chih** 1988 Mar;10(2):129–31 (Eng. Abstr.) (Chi)

[A clinico-pathological study of adenocarcinomas of the nasal cavity and paranasal sinuses] Ogawa T. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Mar;92(3):317–33 (Eng. Abstr.) (Jpn)

[A clinico-pathological study of squamous cell carcinomas of the sino-nasal cavity metaplasia and dysplasia] Ogawa

T. Nippon Jibiinkoka Gakkai Kaiho 1989 Mar;92(3):334–46 (Eng. Abstr.) (Jpn)
[Clinical studies on eleven patients with nasal and paranasal lymphoma, with special reference to staging evaluation] Shimizu K, et al. Rinsho Ketsueki 1989 Feb;30(2):181–4 (Eng. Abstr.) (Jpn)
[An autopsy case of malignant melanoma possibly originating in the sphenoid sinus] Shinbori T, et al. Rinsho Shinkeigaku 1988 Jun;28(6):636–42 (Eng. Abstr.) (Jpn)

RADIOGRAPHY

Osseous regeneration after therapy in patients with head and neck tumors. Estrin E, et al. Cancer 1989 Sep 15; 64(6):1222–5
Sphenochoanal polyp: CT findings. Hayes E, et al. J Comput Assist Tomogr 1989 Mar–Apr;13(2):365–6
Computed tomographic features of esthesioneuroblastoma. Hurst RW, et al. Neuroradiology 1989;31(3):253–7
The value of computed tomography in the diagnosis of tumors of the nasopharynx and paranasal sinuses. Rotte KH, et al. Radiol Diagn (Berl) 1988;29(3):391–6
The potential aggressiveness of sinus osteomas. A report of two cases. Sadry F, et al. Skeletal Radiol 1988;17(6):427–30
[Computed tomography of tumors in the infratemporal, parapharyngeal space and pterrgopalatine fossa] Wang DY. Chung Hua Kou Chiang Hsueh Tsa Chih 1988 Mar; 23(2):90–1, 127 (Eng. Abstr.) (Chi)
[Pindborg tumor in the maxillary sinus. An unusual case of atypical facial pain] Larsen PO, et al. Ugeskr Laeger 1989 Jan 2;151(1):32 (Eng. Abstr.) (Dan)
[Changes in the spatial frequency spectrum of the image as a means of diagnosing pathologic changes of the nasal sinuses] Kossovoi AL. Radiol Diagn (Berl) 1989;30(1):87–92 (Eng. Abstr.) (Ger)
[A case of plasmacytoma of the maxillary sinus] Tamamoto F, et al. Rinsho Hoshasen 1988 Jun;33(6):707–10 (16 ref.) (Eng. Abstr.) (Jpn)
[X-ray changes in the pterygopalatine fossa in the diagnosis of tumors of the paranasal sinuses] Kossovoi AL. Vestn Rentgenol Radiol 1988 Nov–Dec;(6):34–9 (Eng. Abstr.) (Rus)

RADIONUCLIDE IMAGING

Radionuclide bone scan in frontal sinus osteoma. Noyek AM, et al. Aust N Z J Surg 1989 Feb;59(2):127–32
[Visualization of bone marrow with N-isopropyl-p-[123I]-iodoamphetamine in a case of malignant melanoma] Otsuka N, et al. Kaku Igaku 1988 Oct;25(10):1111–5 (Eng. Abstr.) (Jpn)

RADIOTHERAPY

Non-Hodgkin's lymphoma of the nasopharynx, paranasal sinus and palate. Makepeace AR, et al. Clin Radiol 1989 Mar;40(2):144–6
The value of treatment planning using CT and an immobilizing shell in radiotherapy for paranasal sinus carcinomas. Tsujii H, et al. Int J Radiat Oncol Biol Phys 1989 Jan;16(1):243–9
[Radiotherapy results in malignant tumors of the inner nose and paranasal sinuses with special reference to neutron therapy] Schwarz R, et al. Strahlenther Onkol 1989 Jun; 165(6):478–80 (Eng. Abstr.) (Ger)
[The value of radiotherapy in treating paranasal sinus tumors] Thiel HJ. Strahlenther Onkol 1989 Jun;165(6):425–36 (57 ref.) (Eng. Abstr.) (Ger)
[Analysis of plasma fibrinogen in evaluating the effectiveness and prognosis of polyradiomodifying therapy of malignant tumors of the upper respiratory tract] Bykov VL, et al. Vestn Otorinolaringol 1989 Mar–Apr;(2):59–62 (Eng. Abstr.) (Rus)

SECONDARY

Malignant melanoma of the maxillary sinus. Hassard AD, et al. Ear Nose Throat J 1989 Jun;68(6):469–71
Squamous cell carcinoma of bladder diverticulum with initial symptoms produced by metastasis to maxillary sinus. Nanbu A, et al. Eur Urol 1988;15(3–4):285–6
Metastatic squamous cell carcinoma of the paranasal sinuses from a primary squamous cell carcinoma of the urinary bladder. Kawai N, et al. J Laryngol Otol 1989 Jun; 103(6):602–4
[Metastasis of cancer of the stomach to the maxillary sinus] Shadyev KhD, et al. Vestn Otorinolaringol 1989 Mar–Apr; (2):85–6 (Rus)
[The upper maxilla as the site of tumor metastasis. Apropos of 1 case] Seijas Rosales T, et al. An Otorrinolaringol Ibero Am 1989;16(4):357–63 (12 ref.) (Eng. Abstr.) (Spa)

SURGERY

Transfacial resection of intracranial tumor. Sataloff RT, et al. Am J Otol 1988 May;9(3):222–8
Long-term results of ethmoid surgery. Sogg A. Ann Otol Rhinol Laryngol 1989 Sep;98(9):699–701
Craniofacial resection of ossifying fibromas and osteomas of the sinuses. Blitzer A, et al. Arch Otolaryngol Head Neck Surg 1989 Sep;115(9):1112–5
Anterior craniofacial resection for ethmoid and nasal cancer with free flap reconstruction. Bridger GP, et al. Arch Otolaryngol Head Neck Surg 1989 Mar;115(3):308–12
Orbital exenteration in surgery of malignant neoplasms of the paranasal sinuses. The value of preoperative computed tomography. Graamans K, et al. Arch Otolaryngol Head Neck Surg 1989 Aug;115(8):977–80
Preservation of the eye in paranasal sinus cancer surgery [letter] Harrison DF. Arch Otolaryngol Head Neck Surg 1989 Feb;115(2):249
Magnetic resonance imaging of paranasal sinus tumors for craniofacial resection. Lund VJ, et al. Head Neck 1989 May–Jun;11(3):279–83
Tumefactive fibroinflammatory lesion of the head and neck. Said H, et al. J Laryngol Otol 1988 Nov;102(11):1064–7
Transcranial resection of tumors of the paranasal sinuses and nasal cavity. Blacklock JB, et al. J Neurosurg 1989 Jul; 71(1):10–5
Le Fort I down-fracture of the maxilla: application to benign antral neoplasm. Armstrong JE, et al. J Otolaryngol 1988 Oct;17(6):288–92
Endoscopic paranasal sinus surgery: indications and considerations. Schaefer SD, et al. Laryngoscope 1989 Jan; 99(1):1–5
Surgical treatment of tumors in the anterior skull base using the transbasal approach. Arita N, et al. Neurosurgery 1989 Mar;24(3):379–84
Pseudotumor of the sellar and parasellar areas. Gartman JJ Jr, et al. Neurosurgery 1989 Jun;24(6):896–901
[Surgical treatment of malignant tumors of the paranasal sinuses with involvement of the base of the skull] Draf W, et al. Strahlenther Onkol 1989 Jun;165(6):474–7 (Eng. Abstr.) (Ger)
[Surgical therapy of malignoma of the inner nose and paranasal sinuses] Glanz H. Strahlenther Onkol 1989 Jun; 165(6):420–4 (Eng. Abstr.) (Ger)
[Ectopic meningioma of the ethmoid sinus: case report and a review of the literature] Minami S, et al. No Shinkei Geka 1989 Jan;17(1):57–62 (31 ref.) (Eng. Abstr.) (Jpn)

THERAPY

Adenocarcinoma of the ethmoid sinuses. Results of a new protocol based on inductive chemotherapy combined with surgery. Four years experience. Roux FX, et al. Acta Neurochir (Wien) 1989;98(3–4):129–34
High-dose chemotherapy and autologous marrow transplantation for esthesioneuroblastoma and sinonasal undifferentiated carcinoma. Stewart FM, et al. Am J Clin Oncol 1989 Jun;12(3):217–21
Olfactory neuroblastoma. O'Connor TA, et al. Cancer 1989 Jun 15;63(12):2426–8
Treatment options for angiofibroma. Cuyler JP. J Otolaryngol 1988 Aug;17(5):214–8
Maxillary sinus carcinoma: a retrospective study. Gobitti C, et al. Rays 1987 Sep–Dec;12(3):67–77
[Malignant tumors of the ethmoid sinuses—treatment and prognosis] Ohizumi Y, et al. Gan No Rinsho 1989 Jan; 35(2):259–63 (Eng. Abstr.) (Jpn)
[A clinical study of non-Hodgkin's lymphoma of the nasal cavity and paranasal sinus] Takenaka T, et al. Nippon Gan Chiryo Gakkai Shi 1988 Dec 20;23(11):2779–84 (Eng. Abstr.) (Jpn)
[A combined treatment of carcinoma of the maxillary sinus—treatment method for T4 cases] Morita M, et al. Nippon Jibiinkoka Gakkai Kaiho 1989 Feb;92(2):169–75 (Eng. Abstr.) (Jpn)

ULTRASTRUCTURE

Malignant oncocytoma of the maxillary sinus—an ultrastructural study. Mikhail RA, et al. Head Neck Surg 1988 Jul–Aug;10(6):427–31

PARANASAL SINUSES

ABNORMALITIES

Tricho-rhino-phalangeal and branchio-oto syndromes in a family with an inherited rearrangement of chromosome 8q. Haan EA, et al. Am J Med Genet 1989 Apr;32(4):490–4
Osteopetrosis (marble bone disease)—agenesis of paranasal sinuses. Paulose KO, et al. J Laryngol Otol 1988 Nov; 102(11):1047–51

ANALYSIS

Concentrations of roxithromycin (RU 28965) in serum and in sinus mucosa [letter] Kropec A, et al. Infection 1988 Jul–Aug;16(4):250

CYTOLOGY

Factors influencing the goblet cell density in paranasal sinuses. Tos M. Acta Otolaryngol Suppl (Stockh) 1988; 458:17–21

INJURIES

[Frontobasal fractures in children] Fiebach A, et al. HNO 1989 Jul;37(7):287–91 (Eng. Abstr.) (Ger)
[The role of blunt trauma in the pathogenesis of rhinogenous phlegmon of the orbit in children] Moskovchenko KP, et al. Oftalmol Zh 1988;(7):437–8 (Rus)

INNERVATION

Sinus headache: a neurologist's viewpoint. Couch JR. Semin Neurol 1988 Dec;8(4):298–302 (15 ref.)

METABOLISM

[Alcohol concentration in the paranasal sinus fluid in drowning] Miltner E, et al. Blutalkohol 1989 Jul;26(4):276–9 (Eng. Abstr.) (Ger)

PATHOLOGY

Magnetic resonance imaging of the paranasal sinuses: frequency and type of abnormalities. Conner BL, et al. Ann Allergy 1989 May;62(5):457–60
MR imaging of normal nasal cycle: comparison with sinus pathology. Zinreich SJ, et al. J Comput Assist Tomogr 1988 Nov–Dec;12(6):1014–9
Diagnostic imaging of the nose and paranasal sinuses. Lloyd GA. J Laryngol Otol 1989 May;103(5):453–60
Acromegaly—the mucosal changes within the nose and paranasal sinuses. Skinner DW, et al. J Laryngol Otol 1988 Dec;102(12):1107–10
Magnetic resonance imaging of the nose and paranasal sinuses. Lloyd GA. J R Soc Med 1989 Feb;82(2):84–7
MRI of the paranasal sinuses and nasal cavity. Shapiro MD, et al. Radiol Clin North Am 1989 Mar;27(2):447–75 (39 ref.)
[Possibilities for using rhinoscopy and otoscopy in forensic autopsy] Saternus KS. Beitr Gerichtl Med 1988;46:497–502 (17 ref.) (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Chronic sinusitis in the allergic child. Rachelefsky GS, et al. Pediatr Clin North Am 1988 Oct;35(5):1091–101 (25 ref.)

RADIOGRAPHY

Computer-aided three-dimensional reconstruction of paranasal sinuses and its application. Yamashita K, et al. Acta Otolaryngol Suppl (Stockh) 1988;458:22–6
Special radiologic imaging of paranasal sinuses. A prerequisite for functional endoscopic sinus surgery. Kopp W, et al. Eur J Radiol 1988 Aug;8(3):153–6
[Radiation dosage and clinical value of conventional tomography and high resolution computerized tomography of the nose and ear] Grobovschek M, et al. HNO 1989 Jan;37(1):23–6 (Eng. Abstr.) (Ger)
[Radiologic examination of the paranasal sinuses in asthmatic children] Novembre E, et al. Pediatr Med Chir 1989 Jan–Feb;11(1):57–9 (Eng. Abstr.) (Ita)

SECRETION

Chronically obstructed sinonasal secretions: observations on T1 and T2 shortening. Som PM, et al. Radiology 1989 Aug; 172(2):515–20

SURGERY

Improved endonasal sinus surgery by use of an operating microscope and a self-retaining retractor speculum. Park IY. Acta Otolaryngol Suppl (Stockh) 1988;458:27–33
Microscopic endonasal surgery of the paranasal sinuses and the parasellar region. Amedee RG, et al. Arch Otolaryngol Head Neck Surg 1989 Sep;115(9):1103–6 (10 ref.)
Secure endoscopic sinus surgery as an adjunct to functional nasal surgery. Toffel PH, et al. Arch Otolaryngol Head Neck Surg 1989 Jul;115(7):822–5
Functional endoscopic sinus surgery. Stubbs WK. J Fla Med Assoc 1989 Feb;76(2):245–8 (4 ref.)
Sublabial rhinotomy with septal transfixion as an approach to the nasal fossa, paranasal sinuses and nasopharynx. Bingham BJ, et al. J Laryngol Otol 1989 Jul;103(7):661–3
Use of a modified microdrill in endoscopic sinus surgery for improved exposure and reduced adhesions. Gaskins RE Jr. Laryngoscope 1989 May;99(5):556–7
Complications in nasal and sinus surgery [letter] Nunez DA. Laryngoscope 1989 Aug;99(8 Pt 1):871
Endoscopic paranasal sinus surgery: indications and considerations. Schaefer SD, et al. Laryngoscope 1989 Jan; 99(1):1–5
Endoscopic sinus surgery. A functional approach. Thawley SE. Mo Med 1987 May;84(5):237–41
Endoscopic sinus surgery. Otolaryngol Clin North Am 1989 Aug;22(4):677–846
Anatomy for endoscopic sinus surgery. Becker SP. Otolaryngol Clin North Am 1989 Aug;22(4):677–82
Office endoscopy—when, why, what, and how. Gustafson RO, et al. Otolaryngol Clin North Am 1989 Aug;22(4):683–9
Instruments and equipment for endoscopic sinus surgery. Krause DE, et al. Otolaryngol Clin North Am 1989 Aug; 22(4):703–11
[Iatrogenic complications of nasal sinuses surgery] Peytral C, et al. Ann Otolaryngol Chir Cervicofac 1988;105(5):373–6 (Eng. Abstr.) (Fre)
[Microsurgery of paranasal sinuses and adjoining regions: discussion] Acta Otorhinolaryngol Ital 1988 May–Jun; 8(3):257–62 (Ita)
[Complications of sinus surgeries—the status quo and backgrounds] Takahashi M, et al. Nippon Jibiinkoka Gakkai Kaiho 1988 Jun;91(6):901–6 (Eng. Abstr.) (Jpn)

PARANEOPLASTIC SYNDROMES

Paraendocrine syndromes of cancer. Odell WD.
Adv Intern Med 1989;34:325–51 (104 ref.)

Bazex's syndrome in a woman with pulmonary adenocarcinoma [letter] Martin RW 3d, et al.
Arch Dermatol 1989 Jun;125(6):847–8

Arterial hypertension as a paraneoplastic phenomenon in hepatocellular carcinoma. Kew MC, et al.
Arch Intern Med 1989 Sep;149(9):2111–3

Benign papular acantholytic non-dyskeratotic eruption: a new paraneoplastic syndrome? [letter] van Joost T, et al.
Br J Dermatol 1989 Jul;121(1):147–8

Cerebellar ataxia as a paraneoplastic syndrome. Dropcho EJ, et al. **Hosp Pract [Off]** 1989 Jan 30;24(1A):69–79, 83–4

Nasopharyngeal carcinoma with dermatomyositis. Teo P, et al. **Int J Radiat Oncol Biol Phys** 1989 Feb;16(2):471–4

Paraneoplastic downbeating nystagmus. A sign of occult malignancy. Guy JR, et al. **J Clin Neuro Ophthalmol** 1988 Dec;8(4):269–72

Malignancy-associated Sweet's syndrome: review of the world literature. Cohen PR, et al. **J Clin Oncol** 1988 Dec; 6(12):1887–97 (111 ref.)

Pulmonary embolism and cancer: predisposition to venous thrombosis and embolism as a paraneoplastic syndrome. Sons HU. **J Surg Oncol** 1989 Feb;40(2):100–6 (82 ref.)

Glomerulopathy as a paraneoplastic phenomenon. Keur I, et al. **Neth J Med** 1989 Jun;34(5–6):270–84 (100 ref.)

Ovarian carcinoma and paraneoplastic cerebellar degeneration. McLellan R, et al. **Obstet Gynecol** 1988 Dec; 72(6):922–5

[Hepatocarcinoma and hypereosinophilia] Salame M, et al. **Acta Gastroenterol Belg** 1988 Mar–Apr;51(2):169–72 (Eng. Abstr.) **(Fre)**

[Anatomo-clinical conference. Hôpital de la Pitié-Salpêtrière. Case n. 1—1988. Lymph nodes, spleen and hypoglycemia] Guillevin L, et al.
Ann Med Interne (Paris) 1988;139(3):219–26 **(Fre)**

[Polyradiculoneuritis disclosing cancer of the lung] M'Raihi L, et al. **Tunis Med** 1988 May;66(5):477–80 (5 ref.) (Eng. Abstr.) **(Fre)**

[Neoplastic hypercalcemia] Natali M, et al. **Clin Ter** 1988 Nov 15;127(3):189–201 (105 ref.) (Eng. Abstr.) **(Ita)**

[Paraneoplastic syndromes and the kidney] Campanacci L, et al. **G Clin Med** 1988 May;69(5):359–69 (33 ref.) **(Ita)**

[Cancer and skin manifestations] Ishihara K, et al.
Gan No Rinsho 1989 Jan;Spec No:628–36 **(Jpn)**

[Hypercalcemia] Kimura S. **Gan No Rinsho** 1989 Jan;Spec No:637–44 **(Jpn)**

[A case of squamous cell carcinoma of the lung associated with muscular stiffness] Kinoshita I, et al.
Rinsho Shinkeigaku 1988 Apr;28(4):372–5 (Eng. Abstr.) **(Jpn)**

[Paraneoplastic dermatoses] Dudenko LI, et al.
Vestn Dermatol Venerol 1988;(12):52–5 (Eng. Abstr.) **(Rus)**

[Hypercalcemia as paraneoplastic syndrome in gallbladder carcinoma. Presentation of a case (letter)] Cuadrado Gómez LM, et al. **Med Clin (Barc)** 1988 Oct 29;91(14):557–8 **(Spa)**

[Acute encephalitis associated with gastric carcinoma (letter)] Palomo F, et al. **Med Clin (Barc)** 1989 Apr 22;92(15):595 **(Spa)**

BLOOD

[Paraneoplastic hypercalcemia] Body JJ. **Rev Med Brux** 1988 Nov;9(9):425–8 (19 ref.) (Eng. Abstr.) **(Fre)**

COMPLICATIONS

Sweet's syndrome associated with adenocarcinoma of the prostate. Dyall-Smith D, et al. **Australas J Dermatol** 1988 Apr;29(1):25–7 (20 ref.)

Paraneoplastic visceral neuropathy as a cause of severe gastrointestinal motor dysfunction. Chinn JS, et al.
Gastroenterology 1988 Nov;95(5):1279–86

A paraneoplastic syndrome associated with glomus tumors of the skull base? Early observations. Jackson CG, et al. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):583–7

[Filiform palmar hyperkeratosis and rectosigmoid cancer] Fegueux S, et al. **Ann Dermatol Venereol** 1988; 115(11):1145–6 **(Fre)**

[Polyarthritis, vasculitis and cancer of the esophagus. Apropos of a new case (letter)] Collantes Estevez E, et al. **Rev Rhum Mal Osteoartic** 1989 Apr;56(5):425 **(Fre)**

[Neuropathy of the chin associated with neoplasms. Presentation of 5 cases and a review of the literature] Vadell Nadal C, et al. **Arch Neurobiol (Madr)** 1989 Jan–Feb; 52(1):17–22 (25 ref.) (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Cutis verticis gyrata as a marker of internal malignancy [letter] Ross JB, et al. **Arch Dermatol** 1989 Mar;125(3):434–5

Psoriasiform dermatitis in a cachectic man. Acrokeratosis paraneoplastica (Bazex' syndrome). Wishner AJ, et al.
Arch Dermatol 1988 Dec;124(12):1852, 1855

Bilateral Baker's cyst as the presenting symptom of paraneoplastic syndrome. Shapira A, et al.
Arch Orthop Trauma Surg 1988;107(6):385–7

Paraneoplastic conditions [letter] Lanzer D.
Australas J Dermatol 1988 Apr;29(1):58

Paraneoplastic limbic encephalopathy with testicular carcinoma. A reversible neurologic syndrome. Burton GV, et al. **Cancer** 1988 Nov 15;62(10):2248–51

My most unforgettable case. A workmanlike job. Levenson I. **Cutis** 1989 Mar;43(3):205

Incidence and diagnostic significance of paraneoplastic thromboembolism disorders. A survey from a community hospital. Naschitz JE, et al. **Int Angiol** 1989 Jan–Mar; 8(1):28–31

Tripe palms and malignancy. Cohen PR, et al.
J Clin Oncol 1989 May;7(5):669–78 (82 ref.)

Limbic encephalitis: two cases. Kohler J, et al.
J Neuroimmunol 1988 Dec;20(2–3):177–8

Paraneoplastic syndromes. How to recognize the remote neurologic effects of cancer. Mandel S. **Postgrad Med** 1989 Jan;85(1):141–4, 149–52

The monitoring of minimal residual disease in patients with malignant tumors. Reizenstein P.
Suppl J Med Oncol Tumor Pharmacother 1988;1:5–15 (48 ref.)

Lymphoreticular disorders masquerading as rheumatic disease syndromes. Lakhanpal S, et al. **Tex Med** 1989 May; 85(5):46–9

[Clinical significance of paraneoplastic syndromes] Klabusay L. **Vnitr Lek** 1989 Mar;35(3):237–41 (Eng. Abstr.) **(Cze)**

[Severe and extensive algodystrophies versus palmar fasciitis with polyarthritis and malignant tumors (letter)] Rodriguez-Moréno J, et al. **Rev Rhum Mal Osteoartic** 1988 Dec;55(12):1037 **(Fre)**

[Circulating antineuronal antibodies—use of a paraneoplastic phenomenon as tumor marker in small cell bronchial carcinoma] Popp W, et al. **Prax Klin Pneumol** 1988 Aug; 42(8):665–7 (Eng. Abstr.) **(Ger)**

[Recurrent thrombophlebitis, weakness (clinical conference)] Predel HG, et al. **Schweiz Rundsch Med Prax** 1989 May 2;78(18):532–4 (Eng. Abstr.) **(Ger)**

[Thrombophilic and hemorrhagic diatheses in cancer] Marx R. **Thromb Diath Haemorrh Suppl** 1968;28:101–17; discussion 143–68 (43 ref.) **(Ger)**

[Paraneoplastic endocrinopathy] Dedov II, et al.
Ter Arkh 1988;60(9):4–9 **(Rus)**

[Features of the diagnosis and treatment of paracancerous pneumonia in bronchogenic pulmonary carcinoma] Iakovlev VN, et al. **Ter Arkh** 1989;61(5):103–8 (Eng. Abstr.) **(Rus)**

[A vascular syndrome as a paraneoplastic reaction] Mokrousov VM. **Ter Arkh** 1988;60(11):133–5 **(Rus)**

[Myeloma-related nephropathy] Sidorova LD, et al.
Ter Arkh 1988;60(6):103–6 **(Rus)**

DRUG THERAPY

Stabilisation of a severe case of P.O.E.M.S. syndrome after tamoxifen administration [letter] Barrier JH, et al.
J Neurol Neurosurg Psychiatry 1989 Feb;52(2):286

ENZYMOLOGY

Evidence for an osteoblast-activating factor in a patient with peripheral T-cell lymphoma and osteosclerosis. Hüfner M, et al. **Klin Wochenschr** 1989 Apr 3;67(7):402–7

EPIDEMIOLOGY

Clinical significance of paraneoplastic syndrome. Naschitz JE, et al. **Oncology** 1989;46(1):40–4

ETIOLOGY

Paraneoplastic syndrome of hypercalcemia and leukocytosis caused by squamous carcinoma cells (T3M-1) producing parathyroid hormone-related protein, interleukin 1 alpha, and granulocyte colony-stimulating factor. Sato K, et al.
Cancer Res 1989 Sep 1;49(17):4740–6

Cardiac tamponade as the initial presentation of malignancy. Aggarwal P, et al. **Int J Cardiol** 1989 Feb;22(2):157–9

Chorea and dystonia: a remote effect of carcinoma. Albin RL, et al. **Mov Disord** 1988;3(2):162–9

A paraneoplastic syndrome of hypercalcemia and leukocytosis associated with solid tumors: production of interleukin 1 alpha (IL-1 alpha) and granulocyte colony-stimulating factor (G-CSF) by clonal squamous cell carcinoma cells. Sato K.
Nippon Naibunpi Gakkai Zasshi 1988 Dec 20;64(12):1223–7

Paraneoplastic hypercalcemia in endometrial carcinoma. Hiller N, et al. **Oncology** 1989;46(1):45–8

Small cell carcinoma of prostate associated with myasthenic (Eaton-Lambert) syndrome. Têtu B, et al. **Urology** 1989 Feb;33(2):148–52

Paraneoplastic cerebellar degeneration due to Hodgkin's disease. Duncan MB, et al. **West J Med** 1989 Apr; 150(4):463–5 (16 ref.)

[Paraneoplastic hypercalcemia and ovarian seminoma. Review of the literature and etiological discussion apropos of a case] Louvet C, et al. **Bull Cancer (Paris)** 1989; 76(4):347–52 (30 ref.) (Eng. Abstr.) **(Fre)**

[Denny-Brown sensory neuropathy disclosing a bilateral ovarian adenocarcinoma] Humbert P, et al.
Rev Fr Gynecol Obstet 1988 Nov;83(11):723–6 (Eng. Abstr.) **(Fre)**

[Paraneoplastic neurological manifestations of pulmonary neoplasms. Apropos of 2 case reports] Buysschaert M, et al. **Rev Med Brux** 1988 Sep;9(6):313–6 (Eng. Abstr.) **(Fre)**

[Algodystrophia and malignant tumors (letter)] Doury P.
Rev Rhum Mal Osteoartic 1989 Jun;56(7):574 **(Fre)**

[Leser-Trélat syndrome] Hoffmann A, et al.
Internist (Berlin) 1989 Jul;30(7):457–8 **(Ger)**

[Paraneoplastic syndrome in kidney cancer] Strohmaier WL, et al. **Med Klin** 1989 Feb 15;84(2):86–9 (Eng. Abstr.) **(Ger)**

[Paraneoplastic polyneuropathies] Rennert H.
Psychiatr Neurol Med Psychol (Leipz) 1989 Mar; 41(3):129–33 (12 ref.) (Eng. Abstr.) **(Ger)**

[Hypo-osmolar syndrome: relation to neoplastic pathology] Taliani U, et al. **G Clin Med** 1988 Apr;69(4):289–94 (34 ref.) **(Ita)**

[Metabolic endocrine syndromes correlated with primary tumors of the retroperitoneal space] Podestà A, et al.
Minerva Chir 1988 Oct 15;43(19):1575–91 (45 ref.) (Eng. Abstr.) **(Ita)**

[Membranous glomerulonephritis in a patient with squamous cell carcinoma of the mandible] Hruby Z, et al.
Pol Tyg Lek 1988 Aug 1–8;43(31–32):1021–2 (Eng. Abstr.) **(Pol)**

[Nephrotic syndrome in a patient with chronic myeloid leukemia] Majdan M, et al. **Pol Tyg Lek** 1988 Dec 12; 43(50):1635–6 **(Pol)**

[Stomatologic care of children with proliferative diseases with special reference to changes in the mouth mucosa] Wójciak L, et al. **Wiad Lek** 1988 May 15;41(10):681–5 (Eng. Abstr.) **(Pol)**

[Lesions of the kidneys and urinary tract in lymphogranulomatosis] Korytova LI, et al.
Urol Nefrol (Mosk) 1988 May-Jun;(3):71–4 (39 ref.) **(Rus)**

IMMUNOLOGY

Selective concentration of anti-Purkinje cell antibody in the CSF of two patients with paraneoplastic cerebellar degeneration. Graus F, et al. **Acta Neurol Scand** 1988 Sep; 78(3):210–3

Reactivity of circulating antineuronal antibodies (CANA) on peripheral nervous system structures. Grisold W, et al.
Acta Neuropathol (Berl) 1988;77(1):109–12

Paraneoplastic cerebellar degeneration: clinical-immunological correlations. Anderson NE, et al.
Ann Neurol 1988 Oct;24(4):559–67

Anti-neuronal autoantibodies and neurological paraneoplastic syndromes. Anderson NE.
Aust N Z J Med 1989 Aug;19(4):379–87 (83 ref.)

Paraneoplastic syndromes: a role for the immune system. Antel JP, et al. **J Neurol** 1989 Jan;236(1):1–3 (23 ref.)

Anti-Purkinje cell antibodies are specific for small-cell lung cancer but not for paraneoplastic neurological disorders [letter] Grisold W, et al. **J Neurol** 1989 Jan;236(1):64

Immunoperoxidase labelling of rat brain sections with sera from patients with paraneoplastic cerebellar degeneration and systemic neoplasia. Greenlee JE, et al.
J Neuropathol Exp Neurol 1988 Sep;47(5):561–71

Characterization of a cDNA encoding a 34-kDa Purkinje neuron protein recognized by sera from patients with paraneoplastic cerebellar degeneration. Furneaux HM, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2873–7

METABOLISM

[Paraneoblastic endocrinne syndromes—mechanisms of paraneoblastic hormcne production] Hrnčiar J.
Vnitr Lek 1989 Mar;35(3):230–6 (Eng. Abstr.) **(Slo)**

PATHOLOGY

Paraneoplastic cortical cerebellar degeneration. A neuropathological study of an autopsy case in comparison with cortical cerebellar degeneration in alcoholics. Mizutani T, et al. **Acta Neuropathol (Berl)** 1988; 77(2):206–12

Seborrhoeic keratoses and internal malignancies. A case control study. Schwengle LE, et al. **Clin Exp Dermatol** 1988 May;13(3):177–9

Late nervous system disorders in cured malignant lymphoma: a clinical and neuropathological study. Vesterby A, et al.
Clin Neuropathol 1988 May-Jun;7(3):134–8

Sweet's syndrome associated with chronic myelogenous leukemia. Hatch ME, et al. **J Am Osteopath Assoc** 1989 Mar;89(3):363–70

Peripheral neuropathy with predominantly motor manifestations in a patient with carcinoma of the uterus. Yamada M, et al. **J Neurol** 1988 Jul;235(6):368–70

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 34–1989. A 74-year-old woman with vertigo and an adnexal mass.
N Engl J Med 1989 Aug 24;321(8):524–35

Limbic encephalitis associated with malignant thymoma. McArdle JP, et al. **Pathology** 1988 Jul;20(3):292–5

[Extensive acrodermatitis chronica atrophicans involving the face] Schmidli J, et al. **Hautarzt** 1989 Jun;40(6):373–5 (Eng. Abstr.) **(Ger)**

[Acquired hyalinosis cutis et mucosae in plasmacytoma with monoclonal IgG-lambda gammopathy] von der Helm D, et al. **Hautarzt** 1989 Mar;40(3):153–7 (Eng. Abstr.) **(Ger)**

[Sweet syndrome in chronic myeloid leukemia] Rauh G, et al. **Klin Wochenschr** 1989 May 2;67(9):506–10 (Eng. Abstr.) **(Ger)**

[Associated glomerulonephritis in immunocytoma] Klette H.
Z Gesamte Inn Med 1988 Sep 1;43(17):488–91 (Eng. Abstr.) **(Ger)**

[Lymphangitis carcinomatosa] Tóth A, et al. **Z Hautkr** 1988 Dec 15;63(12):1037–41 (Eng. Abstr.) **(Ger)**
[Sweet syndrome. Study of 6 cases] Patrizi A, et al. **G Ital Dermatol Venereol** 1988 Apr;123(4):153–6 (Eng. Abstr.) **(Ita)**

PHYSIOPATHOLOGY

Paraneoplastic syndrome in the course of Hodgkin disease. Case report. Maggioni F, et al. **Ital J Neurol Sci** 1989 Apr; 10(2):207–10
Lambert–Eaton myasthenic syndrome: a review. Newsom-Davis J. **Monogr Allergy** 1988;25:116–24 (29 ref.)
Paraneoplastic degeneration of the substantia nigra with dystonia and parkinsonism. Golbe LI, et al. **Mov Disord** 1989;4(2):147–32
The remote effects of cancer on the nervous system. Dropcho EJ. **Neurol Clin** 1989 Aug;7(3):579–603 (156 ref.)
[Gastroesophageal motility disorders in occult cancer] Naschitz JE, et al. **Harefuah** 1988 Oct;115(7–8):168–70 (Eng. Abstr.) **(Heb)**

RADIOGRAPHY

[Acute occlusion of the superficial femoral artery bilaterally as a paraneoplastic syndrome?] Hannibal D, et al. **ROFO** 1989 May;150(5):611–2 **(Ger)**
[Paraneoplastic polyarthritis revealing gastric cancer] Constantinoiu S, et al. **Rev Chir [Chir]** 1988 Nov–Dec; 37(6):441–6 (Eng. Abstr.) **(Rum)**

RADIONUCLIDE IMAGING

Diffuse muscle uptake of technetium–99M MDP in a patient with lung cancer. Krasnow AZ, et al. **Clin Nucl Med** 1988 Jul;13(7):538–40

THERAPY

Continuous arteriovenous hemofiltration—a new treatment in hypercalcemic crisis. Schou H, et al. **Blood Purif** 1988; 6(4):227–9
Chemotherapeutic treatment of the diencephalic syndrome. A case report. Chamberlain MC, et al. **Cancer** 1989 May 1;63(9):1681–4
Complete remission of paraneoplastic sensorimotor neuropathy: a case associated with small–cell lung cancer responsive to chemotherapy, plasma exchange, and radiotherapy. Weissman DE, et al. **J Clin Apheresis** 1989; 5(1):3–6

VETERINARY

Clinical, ultrasonographic and pathological findings in a horse with splenic lymphosarcoma and pseudohyperparathyroidism. Marr CM, et al. **Equine Vet J** 1989 May;21(3):221–6

PARANOIA see PARANOID DISORDERS

PARANOID BEHAVIOR

CHEMICALLY INDUCED

Lithium–induced paranoid hallucinatory state [letter] Kamlana SH. **Br J Psychiatry** 1989 Feb;154:273

PARANOID DISORDER, SHARED see SHARED PARANOID DISORDER

PARANOID DISORDERS

Late paraphrenia or the Paraphrenias? [letter] Holden NL. **Br J Psychiatry** 1988 Apr;152:570

CHEMICALLY INDUCED

Khat–induced paranoid psychosis [letter] Maitai CK, et al. **Br J Psychiatry** 1988 Feb;152:294
Psychosis and anti–tuberculosis therapy [letter] Ball R, et al. **Lancet** 1989 Jul 8;2(8654):105

CLASSIFICATION

An attempt to operationalize reactive delusional psychosis. Jørgensen P, et al. **Acta Psychiatr Scand** 1988 Nov; 78(5):627–31
[Syndromological profile and nosological position of paranoid psychoses in relation to the age at the onset of the disease] Wciórka J. **Psychiatr Pol** 1988 Sep–Oct; 22(5):342–8 (Eng. Abstr.) **(Pol)**

DIAGNOSIS

Long–term course and outcome in delusional disorder. Opjordsmoen S. **Acta Psychiatr Scand** 1988 Nov; 78(5):576–86
Erotomania revisited: from Kraepelin to DSM–III–R. Segal JH. **Am J Psychiatry** 1989 Oct;146(10):1261–6 (18 ref.)
[Significance of the clinical characteristics of manic, manic–paranoid and manic–hebephrenic conditions for differentiated psychopharmacotherapy] Mosolov SN, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):87–93 (Eng. Abstr.) **(Rus)**
[Psychopathologic characteristics of conditions simulating spinal diseases] Ostroglazov VG, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):77–81 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Involutional paranoid disorder: a forgotten syndrome. Jordan HW, et al. **J Natl Med Assoc** 1989 Sep;81(9):950–2
[Drug therapy of paranoid conditions] Opjordsmoen S. **Tidsskr Nor Laegeforen** 1988 Nov 10;108(31):2841–3 (Eng. Abstr.) **(Nor)**

EPIDEMIOLOGY

Paranoid symptoms and disorders among 100 Hmong refugees: a longitudinal study. Westermeyer J. **Acta Psychiatr Scand** 1989 Jul;80(1):47–59

ETIOLOGY

Behavioral symptomatology in dementia of the Alzheimer type. Kumar A, et al. **Alzheimer Dis Assoc Disord** 1988; 2(4):363–5
Paranoid psychosis and AIDS [letter] **Br J Psychiatry** 1988 Mar;152:426–8
Paranoid disorders in the elderly. Casey DA. **J Ky Med Assoc** 1989 Jun;87(6):283–5 (17 ref.)
Childhood precursors of the paranoid–depressive disorder. Millar TP. **Perspect Biol Med** 1989 Summer;32(4):539–46
[Chronic paranoid–hallucinatory psychosis as the initial manifestation of an HIV infection?] Bernhard H, et al. **Dtsch Med Wochenschr** 1989 Mar 31;114(13):503–6 (Eng. Abstr.) **(Ger)**

PSYCHOLOGY

Psychiatric and legal aspects of persistent litigation. Rowlands MW. **Br J Psychiatry** 1988 Sep;153:317–23
Effects of impaired hearing and favorable vs. unfavorable personal feedback on negative emotional reactions. Casanova GM, et al. **J Clin Psychol** 1988 Nov;44(6):982–7
Interrelationship of hypochondriacal, paranoid, depressive, and suicidal symptoms in Chinese psychiatric patients. Chiu LP, et al. **Psychopathology** 1988;21(1):38–43
[Paranoid–hallucinatory psychosis as a manifestation of multiple sclerosis] Piesiur–Strehlow B, et al. **Nervenarzt** 1988 Oct;59(10):621–3 **(Ger)**

THERAPY

New rulings on psychiatric issues by the Supreme Court of Israel. Part I. Levy A, et al. **Med Law** 1988;7(4):391–6

PARANOID PERSONALITY DISORDER see under PERSONALITY DISORDERS

PARANOID PSYCHOSES see PARANOID DISORDERS

PARANOID SCHIZOPHRENIA see SCHIZOPHRENIA, PARANOID

PARAOXON

METABOLISM

Correlation of neuropathy target esterase activity with specific tritiated di–isopropyl phosphorofluoridate–labelled proteins. Thomas TC, et al. **Biochem J** 1989 Jan 1; 257(1):109–16
Structure–activity relationships in the hydrolysis of substrates by the phosphotriesterase from Pseudomonas diminuta. Donarski WJ, et al. **Biochemistry** 1989 May 30; 28(11):4650–5

PHARMACOLOGY

In vitro deacetylation studies with isomeric acetamidobiphenyls using selective carboxylesterase inhibitors. Sertkaya NN, et al. **Anticancer Res** 1988 Nov–Dec;8(6):1345–50
Inhibition of hepatic microsomal carboxylesterase activity by paraoxon. Castle MC. **Arch Int Pharmacodyn Ther** 1988 Sep–Oct;295:7–16
Species distribution of paraoxon–resistant brain polypeptides radiolabelled with diisopropyl phosphorofluoridate ([3H]DiPF): electrophoretic assay for the aged polypeptide of [3H]DiPF–labelled neuropathy target esterase. Meredith C, et al. **J Neurochem** 1989 Apr;52(4):1248–52
Cerebral metabolic effects of organophosphorus anticholinesterase compounds. Miller AL, et al. **Metab Brain Dis** 1986 Jun;1(2):147–56
Comparison of effects of anatoxin–a(s) and paraoxon, physostigmine and pyridostigmine on mouse brain cholinesterase activity. Cook WO, et al. **Toxicon** 1988; 26(8):750–3

POISONING

[A technic for selection of antidotes to an acute lethal poisoning] Trouvé R, et al. **C R Soc Biol (Paris)** 1988; 182(4):421–4 (Eng. Abstr.) **(Fre)**

TOXICITY

Selective activation of striatal output nuclei by organophosphorus intoxication in the rat: EEG and 2–deoxy[3H]glucose metabolic mapping. Pellet–Gondret MH, et al. **Toxicol Lett** 1988 Nov;44(1–2):101–8

PARAPARESIS, TROPICAL SPASTIC

COMPLICATIONS

Pulmonary involvement in patients with HTLV–I–associated myelopathy: increased soluble IL–2 receptors in bronchoalveolar lavage fluid. Sugimoto M, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1329–35
HTLV–I associated tropical spastic paraparesis in an African patient residing in Belgium. Taelman H, et al. **Ann Soc Belg Med Trop** 1989 Mar;69(1):75–6
Spinocerebellar ataxia with localized amyotrophy of the hands, sensorineural deafness and spastic paraparesis [letter] Gemignani F. **J Neurol Sci** 1989 May;90(3):345–6
[The association of HTLV–1 and tropical spastic paraparesis in an African woman (letter)] Neau JP, et al. **Presse Med** 1989 May 27;18(21):1079 **(Fre)**
[HTLV–I associated myelopathy (HAM) complicated with chronic polymyositis] Tanaka T, et al. **Rinsho Shinkeigaku** 1989 Jan;29(1):102–7 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Antibody to HTLV–I in a black South African with a neurological disorder resembling multiple sclerosis [letter] Gledhill RF, et al. **S Afr Med J** 1989 Feb 4;75(3):147–8
[HTLV–I associated encephalo–myelopathy resembling ALS with concurrence of acute promyelocytic leukemia in a member of the relatives] Sahashi K, et al. **Rinsho Shinkeigaku** 1989 Jan;29(1):98–101 (Eng. Abstr.) **(Jpn)**

EPIDEMIOLOGY

Tropical spastic paraparesis. A clinical study of 50 patients from Tumaco (Colombia) and review of the worldwide features of the syndrome. Román GC, et al. **J Neurol Sci** 1988 Oct;87(1):121–38
The history of discovery and clinico–epidemiology of HTLV–I–associated myelopathy(HAM). Osame M, et al. **Jpn J Med** 1989 May–Jun;28(3):412–4
Neuroepidemiology of human T–lymphotrophic virus type–I–associated tropical spastic paraparesis. Molgaard CA, et al. **Neuroepidemiology** 1989;8(3):109–23

ETIOLOGY

HTLV–1 associated myelopathy in Canada. Power C, et al. **Can J Neurol Sci** 1989 Aug;16(3):330–5
The epidemiology of diseases associated with HTLV–I and HTLV–II. Levine PH, et al. **Infect Dis Clin North Am** 1987 Sep;1(3):501–10 (77 ref.)
Clinical neurology. A review. Rudge P. **J R Coll Physicians Lond** 1989 Apr;23(2):83–91 (28 ref.)
Tropical myeloneuropathies—a new aetiology. Rodgers–Johnson PE, et al. **Trends Neurosci** 1988 Dec; 11(12):526–32 (80 ref.)
[Paraplegia associated with HTLV–1 virus] Vernant JC, et al. **Rev Neurol (Paris)** 1989;145(4):260–6 (72 ref.) (Eng. Abstr.) **(Fre)**

GENETICS

[Familial hypo–beta–lipoproteinemia associated with mental retardation and spastic paraparesis] Sueoka E, et al. **Nippon Naika Gakkai Zasshi** 1988 Nov;77(11):1715–20 **(Jpn)**

IMMUNOLOGY

HTLV–I–associated myelopathy: oligoclonal immunoglobulin G bands contain anti–HTLV–I p24 antibody. Grimaldi LM, et al. **Ann Neurol** 1988 Dec; 24(6):727–31
Molecular analysis of HTLV–I proviral integration and T cell receptor arrangement indicates that T cells in tropical spastic paraparesis are polyclonal. Greenberg SJ, et al. **J Infect Dis** 1989 Apr;159(4):741–4
Autoantibodies to brain endothelial cells in the sera of patients with human T–lymphotropic virus type I associated myelopathy and other demyelinating disorders. Tsukada N, et al. **J Neurol Sci** 1989 Mar;90(1):33–42
HTLV–I positive spastic paraparesis in a temperate zone [letter] Cartier–Rovirosa L, et al. **Lancet** 1989 Mar 11; 1(8637):556–7
HTLV–I and neurological disease in South India [letter] Richardson JH, et al. **Lancet** 1989 May 13;1(8646):1079

MICROBIOLOGY

HTLV–1 infection in tropical spastic paraparesis: lymphocyte culture and serologic response. Dalgleish A, et al. **AIDS Res Hum Retroviruses** 1988 Dec;4(6):475–85
T–cell lymphoma, tropical spastic paraparesis, and malignant fibrous histiocytoma in a patient with human T–cell lymphotropic virus, type 1. Lee JW, et al. **Ann Intern Med** 1989 Feb 1;110(3):239–41
Polymyositis and HTLV–I antibodies [letter] Francis DA, et al. **Ann Neurol** 1989 Mar;25(3):311
Enzymatic amplification of exogenous and endogenous retroviral sequences from DNA of patients with tropical spastic paraparesis. Bangham CR, et al. **EMBO J** 1988 Dec 20;7(13):4179–84
Characterization of HTLV–I isolates and T lymphoid cell lines derived from French West Indian patients with

tropical spastic paraparesis. Gessain A, et al. **Int J Cancer** 1989 Feb 15;43(2):327–33

Detection of HTLV–I DNA by polymerase chain reaction in alveolar lymphocytes of patients with tropical spastic paraparesis [letter] Desgranges C, et al. **J Infect Dis** 1989 Jul;160(1):162–3

Characterization of a sequence of human T cell leukemia virus type I from a patient with chronic progressive myelopathy. Kwok S, et al. **J Infect Dis** 1988 Dec; 158(6):1193–7

Comparison of a human T–cell lymphotropic virus type I strain from cerebrospinal fluid of a Jamaican patient with tropical spastic paraparesis with a prototype human T–cell lymphotropic virus type I. Sarin PS, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2021–5

[Neurologic diseases associated with HTLV–I infections] Ryberg B, et al. **Lakartidningen** 1989 Jun 14;86(24):2297–8 **(Swe)**

PATHOLOGY

MR imaging of the brain in myelopathy associated with human T–cell lymphotropic virus type I. Hara Y, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):750–4

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 36–1989. A 34–year–old Jamaican man with fever, hepatic failure, diarrhea, and a progressive gait disorder. **N Engl J Med** 1989 Sep 7; 321(10):663–75

PHYSIOPATHOLOGY

Tropical spastic paraparesis and human T cell lymphotropic virus type 1 in the United Kingdom. Cruickshank JK, et al. **Brain** 1989 Aug;112 (Pt 4):1057–90

Tropical myeloneuropathies: clinical and electrophysiological findings in the Niger delta area of Nigeria. Longe AC. **East Afr Med J** 1988 Sep;65(9):614–20

Recurrent inhibition in human spinal spasticity. Mazzocchio R, et al. **Ital J Neurol Sci** 1989 Jun;10(3):337–47

TRANSMISSION

Isolation and characterization of HTLV–I from symptomatic family members with tropical spastic paraparesis (HTLV–I encephalomyeloneuropathy). McKhann G 2d, et al. **J Infect Dis** 1989 Sep;160(3):371–9

PARAPHILIAS

see related

SEX OFFENSES

Autoerotic death in females. An underdiagnosed syndrome? Byard RW, et al. **Am J Forensic Med Pathol** 1988 Sep; 9(3):252–4

Vacuum cleaner use in autoerotic death. Imami RH, et al. **Am J Forensic Med Pathol** 1988 Sep;9(3):246–8

Child molestation and pedophilia [letter] Lyles B, et al. **JAMA** 1989 Sep 8;262(10):1327

[Forensic expert opinion on sexual delinquents] Zvěřina J. **Cesk Psychiatr** 1989 Apr;85(2):106–12 (Eng. Abstr.) **(Cze)**

COMPLICATIONS

Television–inspired autoerotic asphyxiation [letter; comment] Dietz PE. **J Forensic Sci** 1989 May;34(3):528–9. **Comment on:** J Forensic Sci 1988 Nov;33(6):1491–2

Autoerotic asphyxial death following television broadcast [see comments] O'Halloran RL, et al. **J Forensic Sci** 1988 Nov;33(6):1491–2. **Comment in:** J Forensic Sci 1989 May;34(3):528–9

DIAGNOSIS

Phallometric diagnosis of pedophilia. Freund K, et al. **J Consult Clin Psychol** 1989 Feb;57(1):100–5

Child molestation and pedophilia. An overview for the physician [published erratum appears in JAMA 1989 Apr 21;261(15):2202] Fuller AK. **JAMA** 1989 Jan 27; 261(4):602–6 (95 ref.)

DRUG THERAPY

Use of lithium carbonate in the treatment of autoerotic asphyxia. Cesnik JA, et al. **Am J Psychother** 1989 Apr; 43(2):277–86

Naltrexone suppresses abnormal sexual behavior in Tourette's syndrome. Sandyk R. **Int J Neurosci** 1988 Nov; 43(1–2):107–10

Buspirone hydrochloride in the treatment of transvestic fetishism. Fedoroff JP. **J Clin Psychiatry** 1988 Oct; 49(10):408–9

ETIOLOGY

Indecent exposure—a report of a female [letter] Cassell D, et al. **Br J Psychiatry** 1987 Dec;151:867

MORTALITY

Asphyxiophilia in Scandinavia. Innala SM, et al. **Arch Sex Behav** 1989 Jun;18(3):181–9

PHYSIOPATHOLOGY

Sexual arousal and arousability in a sexual offender population. Hall GC. **J Abnorm Psychol** 1989 May; 98(2):145–9

PREVENTION & CONTROL

The indignant page: techniques of neutralization in the publications of pedophile organizations. de Young M. **Child Abuse Negl** 1988;12(4):583–91

PSYCHOLOGY

Sexual offenders against male children: sexual preferences. Marshall WL, et al. **Behav Res Ther** 1988;26(5):383–91

Sexual attraction to corpses: a psychiatric review of necrophilia. Rosman JP, et al. **Bull Am Acad Psychiatry Law** 1989;17(2):153–63 (59 ref.)

The clinical and forensic psychiatric issues of retifism. Kunjukrishnan R, et al. **Can J Psychiatry** 1988 Dec; 33(9):819–25

The assessment of deviant sexual arousal as a function of intelligence, instructional set and alcohol ingestion. Wormith JS, et al. **Can J Psychiatry** 1988 Dec;33(9):800–8

University males' sexual interest in children: predicting potential indices of "pedophilia" in a nonforensic sample. Briere J, et al. **Child Abuse Negl** 1989;13(1):65–75

Sex abuse prevention programs: offenders' attitudes about their efficacy. Budin LE, et al. **Child Abuse Negl** 1989; 13(1):77–87

A romance with pain: a telephone perversion in a woman? Richards AK. **Int J Psychoanal** 1989;70 (Pt 1):153–64

The fetishistic use of speech. Weich MJ. **Int J Psychoanal** 1989;70 (Pt 2):245–53

On a type of heterosexuality, and the fluidity of object relations. Hershey DW. **J Am Psychoanal Assoc** 1989; 37(1):147–71

Aspects of nonperverse scopophilia within an analysis. Mahony PJ. **J Am Psychoanal Assoc** 1989;37(2):365–99

Fetishism in a woman. Raphling DL. **J Am Psychoanal Assoc** 1989;37(2):465–91

The androgyne: some inconclusive reflections on sexual perversions. Fordham M. **J Anal Psychol** 1988 Jul; 33(3):217–28

The perversions: a philosopher reflects. Wisdom JO. **J Anal Psychol** 1988 Jul;33(3):229–51

Summation of arousal in partial fetishism. Junginger J. **J Behav Ther Exp Psychiatry** 1988 Dec;19(4):297–300

Do sex offenders minimize psychiatric symptoms? Grossman LS, et al. **J Forensic Sci** 1989 Jul;34(4):881–6

A preliminary examination of the pornography experience of sex offenders, paraphiliacs, sexual dysfunction patients, and controls based on Meese Commission recommendations. Condron MK, et al. **J Sex Marital Ther** 1988 Winter;14(4):285–98

The heterogeneity/homogeneity of pedophilia. Bradford JM, et al. **Psychiatr J Univ Ottawa** 1988 Nov;13(4):217–26

[The intelligence level of patients undergoing protective sex therapy] Weiss P, et al. **Cesk Psychiatr** 1989 Jun;85(3):150–4 (Eng. Abstr.) **(Cze)**

[Psychoanalytic perspectives of sexual function and its disturbances] Vauhkonen K. **Duodecim** 1988;104(15):1117–28 **(Fin)**

[Pedophilic–voyeuristic behavior] Fehlow P. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Feb; 41(2):109–11 (Eng. Abstr.) **(Ger)**

[An arsonist with a sexual motivation] Lange E, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Jun;41(6):361–6 (Eng. Abstr.) **(Ger)**

[Vandalism of public telephones according to paragraph 204 of the federal penal code. Coin slot/coin return tray of a coin–operated telephone—vaginal substitute for abnormal sexual gratification] Lange E. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Mar; 41(3):170–1 (Eng. Abstr.) **(Ger)**

[Reflections on sexuality at a large psychiatric hospital] Nitzsche M, et al. **Z Gesamte Hyg** 1988 Oct;34(10):598–600 (Eng. Abstr.) **(Ger)**

[Clinical and social characteristics of persons accused of committing sexual offenses] Pozdniakova SP. **Sud Med Ekspert** 1989 Apr–Jun;32(2):37–9 (Eng. Abstr.) **(Rus)**

SURGERY

Psychiatric and neuropsychological findings after stereotactic hypothalamotomy, in cases of extreme sexual aggressivity. Dieckmann G, et al. **Acta Neurochir Suppl (Wien)** 1988; 44:163–6

THERAPY

Interruption in the maintenance of compulsive sexual disorder: two case studies. Konopacki WP, et al. **Arch Sex Behav** 1988 Oct;17(5):411–9

Should sex offenders be treated? Kosky RJ. **Aust N Z J Psychiatry** 1989 Jun;23(2):176–80 (34 ref.)

The long–term evaluation of a behavioral treatment program for child molesters. Marshall WL, et al. **Behav Res Ther** 1988;26(6):499–511

PARAPHIMOSIS see under **PHIMOSIS**

PARAPHRENIA, INVOLUTIONAL see **DEPRESSION, INVOLUTIONAL**

PARAPLEGIA

Experiences of a paraplegic psychiatry resident on an inpatient psychiatric unit. Lawn BB. **Am J Psychiatry** 1989 Jun;146(6):771–4

Roentgenogram of the month. Chest mass in a paraplegic. Hart CM, et al. **Chest** 1989 May;95(5):1121–2

Caring for a paraplegic patient and her family [clinical conference] Bluestein D, et al. **J Fam Pract** 1988 Oct; 27(4):365–7, 370–1

Professor Alain B. Rossier, MD, immediate past president and medallist of the International Medical Society of Paraplegia: a profile. Tricot A. **Paraplegia** 1989 Apr; 27(2):81–4

CHEMICALLY INDUCED

Intrathecal cytosine arabinoside–induced acute, rapidly reversible paralysis. Saleh MN, et al. **Am J Med** 1989 Jun; 86(6 Pt 1):729–30

[Neurologic complications in organophosphate insecticide poisoning in children] Lysiak M, et al. **Neurol Neurochir Pol** 1988 May–Jun;22(3):252–4 (Eng. Abstr.) **(Pol)**

COMPLICATIONS

Physostigmine as a treatment for anejaculation with paraplegic men. Blockmans D, et al. **Andrologia** 1988 Jul–Aug;20(4):311–3

Postcordotomy spontaneous dysesthesias in macaques: recurrence after spinal cord transection. Levitt M. **Brain Res** 1989 Feb 27;481(1):47–56

Low dosage treatment with propiono–hydroxamic acid in paraplegic patients. Tizzani A, et al. **Eur Urol** 1989; 16(1):36–40

Amyotrophy of the hands and pyramidal features of predominantly the legs segregating within one large family. de Visser M, et al. **J Neurol Sci** 1988 Dec;88(1–3):241–6

Surgical treatment of pressure sores in paraplegic patients: an evaluation. Spauwen PH, et al. **Neth J Surg** 1989 Jun; 41(3):68–70

The use of tissue expansion in lower extremity wounds in paraplegic patients. Yuan RT. **Plast Reconstr Surg** 1989 May;83(5):892–5

[Para–osteoarthropathies in paraplegia] Hanson P. **Acta Belg Med Phys** 1988 Oct–Dec;11(4):195–200 (26 ref.) (Eng. Abstr.) **(Fre)**

[Cancer degeneration: complication of eschars in patients with paraplegia or tetraplegia. Apropos of 3 cases] Avril G, et al. **Ann Chir Plast Esthet** 1988;33(4):373–5 (6 ref.) (Eng. Abstr.) **(Fre)**

[Treatment of chronic decubitus ulcers by fascio–cutaneous and cutaneous flaps in paraplegic patients] Lessan–Salmassi D. **Unfallchirurg** 1989 Jul;92(7):358–62 (Eng. Abstr.) **(Ger)**

[Decubitus ulcer in paraplegic patients—a comparative clinico–pathologic study] Böhm E, et al. **Unfallchirurgie** 1988 Dec;14(6):335–42 (Eng. Abstr.) **(Ger)**

[The status of intermittent self catheterization in the long–term management of paraplegic patients] Göcking K, et al. **Z Urol Nephrol** 1988 Sep;81(9):575–80 (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Problems in writing injury assessment reports. Part III: Spinal injury and paraplegia: the third of a series. Hicks A. **East Afr Med J** 1988 Dec;65(12):862–6

Optic nerve hypoplasia associated with pupillary light–near dissociation, spastic paraparesis and other non–ocular anomalies. Doro D, et al. **Ital J Neurol Sci** 1988 Oct; 9(5):509–13

Abdominal aortic aneurysm presenting as paraplegia: case report. Chatlani PT, et al. **Paraplegia** 1989 Apr;27(2):146–7

ETIOLOGY

Paraplegia after coeliac plexus block. Woodham MJ, et al. **Anaesthesia** 1989 Jun;44(6):487–9

Anterior spinal tuberculosis: paraplegia following laminectomy. Rand C, et al. **Ann R Coll Surg Engl** 1989 Mar;71(2):105–9

Anterior spinal tuberculosis: paraplegia following laminectomy [letter] Statham P, et al. **Ann R Coll Surg Engl** 1989 Jul;71(4):273

Paraplegia and quadriplegia after intrathecal chemotherapy. Werner RA. **Arch Phys Med Rehabil** 1988 Dec; 69(12):1054–6

Infrarenal aortic aneurysm: unusual cause of paraparesis. Joseph MG, et al. **Aust N Z J Surg** 1989 Sep;59(9):743–4

Chylothorax and delayed paraparesis in an infant following improper use of a front seat belt. Laing JH, et al. **Br J Surg** 1989 Feb;76(2):129–30

Spinal traumas: some postoperative complications in experimental animals. Das GD, et al. **Brain Res Bull** 1989 Jan;22(1):33–7

Paraplegia caused by local spinal cord ischemia. An animal spinal cord ischemia model. Zhan MS, et al. **Chin Med J [Engl]** 1989 Jan;102(1):28–33

Paraplegia after lumbar puncture. In an infant with previously undiagnosed hemophilia A. Treatment and peri–operative considerations. Faillace WJ, et al. **Clin Pediatr (Phila)** 1989 Mar;28(3):136–8

Spinal cord necrosis and paraplegia as complications of the

intra-aortic balloon. Riggle KP, et al. **Crit Care Med** 1989 May;17(5):475-6 (8 ref.)

Acute paraplegia as a presenting symptom of acute leukemia. Shenoy A, et al. **Indian Pediatr** 1988 Jun;25(6):569-71

Rheumatoid arthritis causing paraplegia. A case report. Matsumine A, et al. **J Bone Joint Surg [Am]** 1988 Oct; 70(9):1410-1

Acute aortic thrombosis presenting as painless paraplegia. Bolduc ME, et al. **J Cardiovasc Surg (Torino)** 1989 May-Jun;30(3):506-8

Paraplegia as a presenting feature of meningococcal meningitis [letter] Boothman BR, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1241

Paraplegia due to epidural infiltration in a case of chronic lymphocytic leukemia. Lustman F, et al. **J Neurooncol** 1988 Nov;6(3):259-60

Paraplegia caused by brown tumor in primary hyperparathyroidism. Case report. Yokota N, et al. **J Neurosurg** 1989 Sep;71(3):446-8

Thoracic aorta rupture as the cause of paraplegia: a diagnostic dilemma (case report). Bednarski JJ, et al. **J Trauma** 1989 Apr;29(4):531-3

The effect of hyperemia on spinal cord function after temporary thoracic aortic occlusion. Barone GW, et al. **J Vasc Surg** 1988 Oct;8(4):535-40

Spontaneous remission of paralysis due to spinal extradural hematoma: case report. Emery DJ, et al. **Neurosurgery** 1988 Dec;23(6):762-4 (25 ref.)

Paraparesis during myelography associated with a ruptured thoracic intervertebral disc. Lehman LB. **Neurosurgery** 1989 Jun;24(6):912-4

Acute aortic thrombosis causing sudden paraplegia in a patient with known thoraco-lumbar spinal metastasis: the diagnostic usefulness of magnetic resonance imaging. Moore MR, et al. **Neurosurgery** 1989 Jul;25(1):105-9

Spinal angiomas as a cause of non-traumatic paraplegia: case report. Chappel R, et al. **Paraplegia** 1988 Dec;26(6):425-30

Nontraumatic spinal intramedullary hemorrhage in an infant. Mutoh K, et al. **Pediatr Neurol** 1989 Jan-Feb;5(1):53-6

Paraplegia caused by spinal epidural abscess. Stephanides GC, et al. **Postgrad Med J** 1988 Aug;64(754):603-5

Treatment and prevention of spinal metastases of prostatic carcinoma with neurologic complications. Allain YM, et al. **Prog Clin Biol Res** 1989;303:353-68 (37 ref.)

Tuberculous paraplegia during pregnancy. A report of 4 cases. Govender S, et al. **S Afr Med J** 1989 Feb 18; 75(4):190-2

[Vertebrectomy in treating fracture-dislocation of the spine with paraplegia] Xu ST. **Chung Hua Wai Ko Tsa Chih** 1989 Feb;27(2):85-7, 125 (Eng. Abstr.) **(Chi)**

[Paraplegia with carcinomatous epiduritis] Debugne T, et al. **Acta Belg Med Phys** 1988 Oct-Dec;11(4):201-4 **(Fre)**

[Paraplegia caused by extradural spinal hematoma after radical pulmonary lobectomy in cancer] Batellier J, et al. **Ann Chir** 1989;43(3):210-4 (10 ref.) (Eng. Abstr.) **(Fre)**

[Lymphocyte alveolitis and paraplegia associated with HTLV-I (letter)] Couderc LJ, et al. **Presse Med** 1988 Oct 1;17(33):1703 **(Fre)**

[Epidural extraskeletal Ewing's sarcoma: the tenth case] Ben-Meir P, et al. **Rev Neurol (Paris)** 1989;145(4):324-7 (15 ref.) (Eng. Abstr.) **(Fre)**

[Conference at the Salpêtrière Hospital. June 1987. Progressive spastic paraparesis and dermatomyositis. Epidural lipomatosis during corticosteroid therapy of dermatomyositis] Haguenau M, et al. **Rev Neurol (Paris)** 1989;145(4):330-4 **(Fre)**

[Paraplegia associated with HTLV-1 virus] Vernant JC, et al. **Rev Neurol (Paris)** 1989;145(4):260-6 (72 ref.) (Eng. Abstr.) **(Fre)**

[Surgery of aneurysm of the descending thoracic aorta and paraplegia] von Segesser LK, et al. **Helv Chir Acta** 1988 Nov;55(4):503-8 (Eng. Abstr.) **(Ger)**

[Paraplegia following pneumonectomy. An anesthesiological or a surgical complication?] Jöhr M, et al. **Schweiz Med Wochenschr** 1988 Oct 1;118(39):1412-4 (Eng. Abstr.) **(Ger)**

[Paraplegia caused by metastatic testicular tumor] Furuhata A, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Nov; 79(11):1774-81 (Eng. Abstr.) **(Jpn)**

[A clinical study on acute non-traumatic myelopathies] Gomibuchi F. **Nippon Seikeigeka Gakkai Zasshi** 1988 Dec; 62(12):1177-88 (Eng. Abstr.) **(Jpn)**

GENETICS

A familial syndrome of infantile optic atrophy, movement disorder, and spastic paraplegia. Costeff H, et al. **Neurology** 1989 Apr;39(4):595-7

Dominantly inherited spastic paraplegia and multifocal palmoplantar hyperkeratosis. Dyck PJ, et al. **Rev Neurol (Paris)** 1988;144(6-7):421-4

[Juvenile autosomal-recessive spastic paraplegia] Badalian LO, et al. **Pediatriia** 1989;(2):90-2 **(Rus)**

HISTORY

Joë Bousquet: paraplegia as a poet's plight and challenge. Ohry A, et al. **Paraplegia** 1988 Aug;26(4):273-7

[On the centenary of the first Russian monograph by S.S. Korsakov "On alcoholic paralysis"] Akimov GA, et al. **Zh Nevropatol Psikhiatr** 1988;88(9):126-7 **(Rus)**

METABOLISM

Energy requirements of gamefield exercises designed for wheelchair-bound persons. Cardús D, et al. **Arch Phys Med Rehabil** 1989 Feb;70(2):124-7

PATHOLOGY

Magnetic resonance imaging in an HTLV-I antibody positive patient with tropical spastic paraparesis [letter] Kreeger L, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):999

[Experimental observations on spinal cord injury produced by electrifying the vessels of the cord in dogs] Zheng WJ. **Chung Hua Wai Ko Tsa Chih** 1989 Jan;27(1):52-4, 63 (Eng. Abstr.) **(Chi)**

PHYSIOPATHOLOGY

Hypogastric plexus stimulators for obtaining semen from paraplegic men. Brindley GS, et al. **Br J Urol** 1989 Jul; 64(1):72-7

Late flexion reflex in paraplegic patients. Evidence for a spinal stepping generator. Bussel B, et al. **Brain Res Bull** 1989 Jan;22(1):53-6 (22 ref.)

Perspectives in anatomy and pathology of paraplegia in experimental animals. Das GD. **Brain Res Bull** 1989 Jan; 22(1):7-32 (141 ref.)

A dynamic EMG profile index to quantify muscular activation disorder in spastic paretic gait. Fung J, et al. **Electroencephalogr Clin Neurophysiol** 1989 Sep; 73(3):233-44

An investigation into anaerobic performance of wheelchair athletes. Lees A, et al. **Ergonomics** 1988 Nov; 31(11):1529-37

EMG pattern analysis for patient-responsive control of FES in paraplegics for walker-supported walking. Graupe D. **IEEE Trans Biomed Eng** 1989 Jul;36(7):711-9

Paraplegic standing controlled by functional neuromuscular stimulation: Part II--Computer simulation studies. Khang G, et al. **IEEE Trans Biomed Eng** 1989 Sep;36(9):885-94

Paraplegic standing controlled by functional neuromuscular stimulation: Part I--computer model and control-system design. Khang G, et al. **IEEE Trans Biomed Eng** 1989 Sep; 36(9):873-84

Effects of ambulation on the blood flow in paralysed limbs. Messenger N, et al. **J Biomed Eng** 1989 May;11(3):249-52

The paraplegic hand: electrodiagnostic studies and clinical findings. Tun CG, et al. **J Hand Surg [Am]** 1988 Sep; 13(5):716-9

Effects of thoracic aortic occlusion and cerebrospinal fluid drainage on regional spinal cord blood flow in dogs: correlation with neurologic outcome. Bower TC, et al. **J Vasc Surg** 1989 Jan;9(1):135-44

Cardiorespiratory fitness in highly active versus inactive paraplegics. Davis GM, et al. **Med Sci Sports Exerc** 1988 Oct;20(5):463-8

Long latency inhibition of H-reflex recovery by cutaneous tactile stimulation in man: a cutaneous transcortical reflex. Chandran AP, et al. **Neuroscience** 1988 Dec;27(3):1037-48

Central analgesic effect of ketoprofen in humans: electrophysiological evidence for a supraspinal mechanism in a double-blind and cross-over study. Willer JC, et al. **Pain** 1989 Jul;38(1):1-7

Aerobic capacity in early paraplegia: implications for rehabilitation. Ellenberg M, et al. **Paraplegia** 1989 Aug; 27(4):261-8

Haemodynamic, hormonal and urinary responses to postural change in tetraplegic and paraplegic man. Kooner JS, et al. **Paraplegia** 1988 Aug;26(4):233-7

Arm crank versus wheelchair treadmill ergometry to evaluate the performance of paraplegics. McConnell TJ, et al. **Paraplegia** 1989 Aug;27(4):307-13

Transition of physical fitness in wheelchair marathon competitors over several years. Okuma H, et al. **Paraplegia** 1989 Jun;27(3):237-43

Assisted fertility in complete paraplegia: case report. Rawicki H, et al. **Paraplegia** 1988 Dec;26(6):401-4

The Ferrier lecture, 1986. The actions of parasympathetic and sympathetic nerves in human micturition, erection and seminal emission, and their restoration in paraplegic patients by implanted electrical stimulators. Brindley GS. **Proc R Soc Lond [Biol]** 1988 Nov 22;235(1279):111-20 (21 ref.)

Aerobic power during maximal exercise in untrained and well-trained persons with quadriplegia and paraplegia. Eriksson P, et al. **Scand J Rehabil Med** 1988;20(4):141-7

Impaired mental capabilities and hand function in myelomeningocele patients. Mazur JM, et al. **Z Kinderchir** 1988 Dec;43 Suppl 2:24-7

[Development and course of functional urinary retention in paraplegic patients] Gebhardt K, et al. **Z Urol Nephrol** 1988 Jun;81(6):351-7 (Eng. Abstr.) **(Ger)**

[A case of a complete paraplegic fathering a girl following artificial insemination after an intrathecal neostigmine injection] Hazama M, et al. **Hinyokika Kiyo** 1988 Jun; 34(6):1047-50 (12 ref.) (Eng. Abstr.) **(Jpn)**

[Contractile properties of crural muscles in patients with post-stroke movement disorders] Popelianskiĭ IaIu, et al. **Zh Nevropatol Psikhiatr** 1989;89(6):68-71 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Effect of sodium nitroprusside on spinal cord perfusion and paraplegia during aortic cross-clamping. Marini CP, et al. **Ann Thorac Surg** 1989 Mar;47(3):379-83

Prevention of spinal cord ischemia by monitoring spinal cord perfusion pressure and somatosensory evoked potentials. Maeda S, et al. **J Cardiovasc Surg (Torino)** 1989 Jul-Aug; 30(4):565-71

Intrathecal papaverine for the prevention of paraplegia after operation on the thoracic or thoracoabdominal aorta. Svensson LG, et al. **J Thorac Cardiovasc Surg** 1988 Nov; 96(5):823-9

Spinal cord ischemia: an evaluation of pharmacologic agents in minimizing paraplegia after aortic occlusion. Kirshner DL, et al. **J Vasc Surg** 1989 Feb;9(2):305-8

Charybdotoxin improves motor recovery of the rat after spinal cord injury. Ohnishi ST, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):187-91

Preliminary results and rationale for the use of intrathecal papaverine for the prevention of paraplegia after aortic surgery. Svensson LG, et al. **S Afr J Surg** 1988 Dec; 26(4):153-60 (60 ref.)

[Neurophysiological and biomechanical analysis of a gymnastics accident with high transverse paralysis. An example of a sports medicine research study in the area of prevention of sports accidents] Gebauer D, et al. **Sportverletz Sportschaden** 1987 Apr;1(1):53-8 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Computed tomographic findings in children with spastic diplegia: correlation with the severity of their motor abnormality. Yokochi K, et al. **Brain Dev** 1989;11(4):236-40

REHABILITATION

Functional electrical stimulation bicycle ergometry: patient perceptions. Sipski ML, et al. **Am J Phys Med Rehabil** 1989 Jun;68(3):147-9

Kung-Fu: synthesis of wheelchair sport and self-protection. Madorsky JG, et al. **Arch Phys Med Rehabil** 1989 Jun; 70(6):490-2

Scuba diving [letter] Ohry A, et al. **Arch Phys Med Rehabil** 1989 Jun;70(6):495

Rehabilitation in spinal cord injury. Keppler JP. **Crit Care Clin** 1987 Jul;3(3):637-54

Physical therapy for infants with spastic diplegia [letter] Palmer FB, et al. **Dev Med Child Neurol** 1989 Feb; 31(1):128-9

Development and operation of portable and laboratory electrical stimulation systems for walking in paraplegic subjects. Borges G, et al. **IEEE Trans Biomed Eng** 1989 Jul;36(7):798-801

State of the art of implanted multichannel devices to mobilize paraplegics. Thoma H, et al. **Int J Rehabil Res** 1987;10(4 Suppl 5):86-90

Use of functional electrical stimulation in the rehabilitation of patients with incomplete spinal cord injuries. Bajd T, et al. **J Biomed Eng** 1989 Mar;11(2):96-102

Above- and below-lesion EMG pattern mapping for controlling electrical stimulation of paraplegics to facilitate unbraced walker-assisted walking. Graupe D, et al. **J Biomed Eng** 1988 Jul;10(4):305-11

Electrical muscle stimulation in combination with a reciprocating gait orthosis for ambulation by paraplegics. Phillips CA. **J Biomed Eng** 1989 Jul;11(4):338-44 (35 ref.)

Electrically-stimulated muscle hypertrophy in paraplegia: assessment by quantitative CT. Block JE, et al. **J Comput Assist Tomogr** 1989 Sep-Oct;13(5):852-4

A low-cost FES exercise bicycle for training paraplegics at home. Mulder AJ, et al. **J Med Eng Technol** 1989 Jan-Apr;13(1-2):90-2

Pendular model of paraplegic swing-through crutch ambulation. Rovick JS, et al. **J Rehabil Res Dev** 1988 Fall; 25(4):1-16

Which orthosis? [editorial] **Lancet** 1989 Sep 23;2(8665):721

Cycling device powered by the electrically stimulated muscles of paraplegics. Pons DJ, et al. **Med Biol Eng Comput** 1989 Jan;27(1):1-7

A new method of abdominal exercise. Ash CJ, et al. **Mo Med** 1989 Apr;86(4):213-6

Lower extremity telescopic orthosis for immediate fitting in paraplegia. Limbird TJ, et al. **Orthopedics** 1989 Jun; 12(6):851-4

Energy cost of paraplegic locomotion with the ORLAU ParaWalker. Nene AV, et al. **Paraplegia** 1989 Feb; 27(1):5-18

A review of the fundamental design problems of providing ambulation for paraplegic patients. Stallard J, et al. **Paraplegia** 1989 Feb;27(1):70-5

Orthotic compensation for non-functioning hip extensors. Ogilvie C, et al. **Z Kinderchir** 1988 Dec;43 Suppl 2:33-5

THERAPY

Muscle and bone in paraplegic patients, and the effect of functional electrical stimulation. Pacy PJ, et al. **Clin Sci** 1988 Nov;75(5):481-7

Open-loop control of the freely-swinging paralyzed leg. McNeal DR, et al. **IEEE Trans Biomed Eng** 1989 Sep; 36(9):895-905

Hybrid paraplegic locomotion with the ParaWalker using intramuscular stimulation: a single subject study. Nene AV, et al. **Paraplegia** 1989 Apr;27(2):125-32

[Organization and management of a department for patients

with paraplegia. Patient clientele during the first 2 years] Mosdal C, et al. **Ugeskr Laeger** 1989 Mar 20;151(12):770–3 (Eng. Abstr.) **(Dan)**

[Objective assessment of the regional muscle blood flow promoting effect of electrostimulation in paraplegic patients (studies with 201 thallium and 133 xenon)] Kainz A, et al. **Vasa Suppl** 1988;26:209–13 **(Ger)**

PARAPLEGIA, SPASTIC see **PARAPLEGIA**

PARAPROTEINEMIAS

Syndrome of plasma cell dyscrasia, polyneuropathy, organomegaly, endocrinopathy and skin changes with central nervous system involvement. Lai SL, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1988 Aug; 4(8):473–80

BLOOD

Increase in the suppressor-inducer T cell subset in multiple myeloma and monoclonal gammopathy of undetermined significance. Shapira R, et al. **Br J Haematol** 1989 Feb; 71(2):223–5

Strategy for diagnosis of monoclonal gammopathies in serum [letter] Kahn SN. **Clin Chem** 1989 Mar;35(3):508–9

Paraproteinaemias and platelet aggregation: role of whole blood aggregometry. Schinco PC, et al. **Thromb Res** 1989 Jul 15;55(2):267–77

[Comparative evaluation of immunoelectrophoresis, immunofixation and the double ring technic for typing monoclonal immunoglobulin A in the sera of patients] Varlamova EIu, et al. **Lab Delo** 1988;(10):19–23 (Eng. Abstr.) **(Rus)**

CEREBROSPINAL FLUID

IgG paraproteinemias: a comparative CSF and serum study. Arata L, et al. **Eur Neurol** 1989;29(1):53–5

CLASSIFICATION

Immunological phenotype of plasma cells in monoclonal gammopathy of undetermined significance [letter] Miguel-Garcia A, et al. **Blut** 1989 Jan;58(1):51–2

COMPLICATIONS

Pseudothrombocytopenia induced by a monoclonal IgM kappa platelet agglutinin. Hoyt RH, et al. **Am J Hematol** 1989 May;31(1):50–2

Polyneuropathies associated with IgM monoclonal gammopathies. Kelly JJ, et al. **Arch Neurol** 1988 Dec; 45(12):1355–9

Clinical effectiveness of desmopressin in a case of acquired von Willebrand's syndrome associated with benign monoclonal gammopathy. Castaman G, et al. **Blut** 1989 Apr;58(4):211–3

Macroglobulinaemic lymphoma presenting with perirenal masses. Lorigan JG, et al. **Br J Radiol** 1988 Nov; 61(731):1077–8

Sweet's syndrome associated with IgG paraproteinaemia [letter] Bunker CB. **Clin Exp Dermatol** 1988 Mar;13(2):135

CAPD and systemic diseases. Cantaluppi A. **Clin Nephrol** 1988;30 Suppl 1:S8–12 (36 ref.)

Refractory ascites due to POEMS syndrome. Loeb JM, et al. **Gastroenterology** 1989 Jan;96(1):247–9

Double gammopathy during L-3 lymphoblastic leukemia. Zollino M, et al. **Haematologica (Pavia)** 1988 Sep–Oct; 73(5):411–3

Subcorneal pustular dermatosis (Sneddon–Wilkinson disease) in association with a monoclonal IgA gammopathy: a report and review of the literature. Kasha EE Jr, et al. **J Am Acad Dermatol** 1988 Nov;19(5 Pt 1):854–8 (24 ref.)

Coexistence of papular mucinosis and systemic amyloidosis associated with lambda-type IgD paraproteinemia. Ishibashi A, et al. **J Dermatol (Tokyo)** 1989 Feb;16(1):64–7

IgD-lambda monoclonal gammopathy and axonal neuropathy [letter] Hansen PR, et al. **J Intern Med** 1989 Apr;225(4):289–90

Motor dominant neuropathy and IgM paraproteinemia: the IgM M-protein binds to specific gangliosides. Kusunoki S, et al. **J Neuroimmunol** 1989 Feb;21(2-3):177–81

Amyloidosis associated with plasma cell dyscrasia. Isobe T. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec;51(8):1404–9

Paraproteinemic crystalline keratopathy. Ormerod LD, et al. **Ophthalmology** 1988 Feb;95(2):202–12 (52 ref.)

The spectrum of monoclonal immunoglobulin deposition disease associated with immunocytic dyscrasias. Gallo G, et al. **Semin Hematol** 1989 Jul;26(3):234–45 (90 ref.)

Polyneuropathies associated with plasma cell dyscrasias. Kelly JJ Jr. **Semin Neurol** 1987 Mar;7(1):30–9 (24 ref.)

Chronic myeloid leukemia with monoclonal gammopathy terminating in myeloid crisis and immunoblastic lymphoma. Larocca LM, et al. **Tumori** 1989 Apr 30;75(2):106–9

[Deposition of light chains in various organs; light chain deposition disease] van Klaveren RJ, et al. **Ned Tijdschr Geneeskd** 1989 May 6;133(18):943–6 (Eng. Abstr.) **(Dut)**

[Vasculitis with hypocomplementemia, paraproteinemia and plane xanthoma] Escallier F, et al. **Ann Dermatol Venereol** 1988;115(6-7):713–6 **(Fre)**

[Bing-Neel syndrome. Polyneuropathy within the scope of paraproteinemia] Seitzer B, et al. **Fortschr Med** 1989 Apr 30;107(13):291–3 (Eng. Abstr.) **(Ger)**

[Increase in monoclonal immunoglobulins in epithelial malignant tumors. Clinical case] Barletta C, et al. **G Clin Med** 1988 Jun-Jul;69(6-7):467–70 **(Ita)**

[Subclinical neuropathies and paraproteinemias] Guardigni L, et al. **Recenti Prog Med** 1989 Jan;80(1):1–3 (Eng. Abstr.) **(Ita)**

[A case of severe hepatitis A with positive IgM antibody to hepatitis A virus of long duration, monoclonal gammopathy (IgG.lambda) and hemolytic anemia] Fukatani Y, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr; 78(4):573–4 **(Jpn)**

[A case of IgM paraproteinemia and chronic polyneuropathy with serum antibody reacting with PO protein and myelin-associated glycoprotein] Nomura K, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):426–32 (Eng. Abstr.) **(Jpn)**

[Q fever associated with lobular panniculitis and transient monoclonal gammopathy (letter)] García Castaño J, et al. **Med Clin (Barc)** 1989 May 6;92(17):678 **(Spa)**

[Polyneuropathy associated with monoclonal gammapathy of undetermined significance] Mellibovsky Saidler L, et al. **Med Clin (Barc)** 1988 Jun 11;91(3):88–92 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

More on monoclonal gammopathies [letter] Johnson AM, et al. **Clin Chem** 1989 Jun;35(6):1268

Strategy to diagnose monoclonal gammopathies in serum: high-resolution electrophoresis, immunofixation, and kappa/lambda quantification. Keren DF, et al. **Clin Chem** 1988 Nov;34(11):2196–201

Hazard of commercial antiserum cross-reactivity in monoclonal gammopathy evaluation [letter] Register LJ, et al. **Clin Chem** 1989 Sep;35(9):2016–7

Monoclonal gammopathies--their identification and biological significance. Osterland CK. **Clin Chim Acta** 1989 Mar 15;180(1):1–22 (44 ref.)

Diagnostic pitfalls in plasma cell neoplasia [letter] Eadington D, et al. **Nephrol Dial Transplant** 1989;4(1):76–7

Monoclonal gammopathies of undetermined significance. Kyle RA, et al. **Semin Hematol** 1989 Jul;26(3):176–200 (248 ref.)

[IgM paraproteinemia in laboratory diagnosis. Lymphoma demonstrating IgM paraproteinemia] Jarczok K, et al. **Pol Tyg Lek** 1988 Jul 25;43(30):971–3 (Eng. Abstr.) **(Pol)**

ENZYMOLOGY

Sialyltransferase activity and sialic acid levels in multiple myeloma and monoclonal gammopathy. Cohen AM, et al. **Eur J Haematol** 1989 Mar;42(3):289–92

ETIOLOGY

Plasma cell dyscrasia with polyneuropathy, organomegaly, endocrinopathy, M protein, and skin changes: the POEMS syndrome, associated with preceding polycythemia vera. A case report and review of the literature. Tsujimura T, et al. **Acta Pathol Jpn** 1988 Oct;38(10):1337–44 (17 ref.)

Diffuse, ulcerating plaques and nodules. Necrobiotic xanthogranuloma (NXG) with paraproteinemia. Furner BB, et al. **Arch Dermatol** 1989 Feb;125(2):287–8, 290

Monoclonal gammopathy in chronic myeloproliferative disorders. Economopoulos T, et al. **Blut** 1989 Jan;58(1):7–9

Systemic lupus erythematosus and monoclonal gammopathy [letter] Font J, et al. **Br J Rheumatol** 1988 Oct;27(5):412–3

IgA lambda monoclonal gammopathy with Bence Jones proteinuria and intestinal plasmacytoma in a renal transplant recipient. Pascali E, et al. **Quad Sclavo Diagn** 1987 Dec;23(4):363–8

Monoclonal and multiclonal gammopathies after renal transplantation. Stanko CK, et al. **Transplant Proc** 1989 Apr;21(2):3330–2

Immunoglobulin abnormalities in renal transplant recipients. Pollock CA, et al. **Transplantation** 1989 Jun;47(6):952–6

[Monoclonal gammopathy in HIV infection] Löhr HF, et al. **Dtsch Med Wochenschr** 1989 Jul 7;114(27):1069–72 (Eng. Abstr.) **(Ger)**

GENETICS

Occurrence and type of chromosomal abnormalities in consecutive malignant monoclonal gammopathies: correlation with survival. Lisse IM, et al. **Cancer Genet Cytogenet** 1988 Oct 1;35(1):27–36

IMMUNOLOGY

Neuropathy in IgM lambda paraproteinemia. Immunoreactivity to neural proteins and chondroitin sulfate. Yee WC, et al. **Acta Neuropathol (Berl)** 1989; 78(1):57–64

Monoclonal gammopathy and antibody activity against the acetylcholine receptor. Ahlberg RE, et al. **Am J Hematol** 1988 Sep;29(1):49–51

IgG subclass distribution in patients with multiple myeloma or with monoclonal gammopathy of undetermined significance. Papadea C, et al. **Ann Clin Lab Sci** 1989 Jan-Feb;19(1):27–37

Idiotypic analyses of anti-DNA antibodies in systemic lupus and monoclonal gammopathy. Davidson A, et al. **Ann Inst Pasteur Immunol** 1988 Nov-Dec;139(6):645–50

Generation of antibodies to gangliosides GM1 and GD1b. Genetic control of fine antigenic specificity. Ito H, et al. **Ann N Y Acad Sci** 1988;540:258–60

Antibodies to sulfated glucuronic acid containing glycosphingolipids in neuropathy associated with anti-MAG antibodies and in normal individuals. McGinnis S, et al. **Ann N Y Acad Sci** 1988;540:442–4

Immunoglobulin M deposits in sural nerve in mononeuritis multiplex associated with immunoglobulin M paraproteinemia [letter] Seitz RJ. **Ann Neurol** 1988 Oct; 24(4):587–8

Autoimmunity and demyelinating progressive involvement of nervous system. Dysglobulinemic polyneuropathies as possible pathogenetic model. Logullo F, et al. **Boll Soc Ital Biol Sper** 1988 Aug;64(8):779–85

Immune dysregulation in monoclonal gammopathies. Massaia M, et al. **Bone Marrow Transplant** 1989 Jan;4 Suppl 1:165–7

IgM paraprotein reactive with muscle antigens associated with autonomic and peripheral neuropathy. Green AR, et al. **Br J Haematol** 1989 May;72(1):108–9

The detection of anti-Sm-RNP activity in sera of patients with monoclonal gammopathies. Abu-Shakrah M, et al. **Clin Exp Immunol** 1989 Mar;75(3):349–53

Defective generation of alloreactive cytotoxic T lymphocytes (CTL) in human monoclonal gammopathies. Massaia M, et al. **Clin Exp Immunol** 1988 Aug;73(2):214–8

Peripheral neuropathy and anti-MAG antibodies. Latov N, et al. **Crit Rev Neurobiol** 1988;3(4):301–32 (175 ref.)

Direct immunofluorescence in sural nerve biopsies. Schenone A, et al. **Eur Neurol** 1988;28(5):262–9

Influence of long-term antigenic stimulation started in young C57BL mice on the development of age-related monoclonal gammapathies. van den Akker TW, et al. **Int Arch Allergy Appl Immunol** 1988;87(2):165–70

Monoclonal gammopathies in children. Gerritsen E, et al. **J Clin Immunol** 1989 Jul;9(4):296–305

IgM gammopathy and polyneuropathy react with an antigenic glycolipid present in human central nervous system. Jauberteau MO, et al. **Neurosci Lett** 1989 Feb 13; 97(1-2):181–4

Comparative analysis of immunodeficiency in patients with monoclonal gammopathy of undetermined significance and patients with untreated multiple myeloma. Pilarski LM, et al. **Scand J Immunol** 1989 Feb;29(2):217–28

[IgD paraproteinemia in immunocytoma] Papakonstantinou G, et al. **Klin Wochenschr** 1988 Oct 17;66(20):1029–33 (Eng. Abstr.) **(Ger)**

[Autoimmune disease and its carbohydrate epitope] Ariga T, et al. **Tanpakushitsu Kakusan Koso** 1989 Mar; 34(3):225–34 (45 ref.) **(Jpn)**

METABOLISM

Incidence of corneal crystals in the monoclonal gammopathies. Bourne WM, et al. **Am J Ophthalmol** 1989 Feb 15;107(2):192–3

Peanut agglutinin shows specificity for bone marrow plasma cells. Rhodes EG, et al. **Br J Haematol** 1989 Feb; 71(2):183–7

MICROBIOLOGY

Activated T-lymphocytes with polyclonal gammopathy in patients with human T-lymphotropic virus type I—associated myelopathy. Mori M, et al. **Ann Neurol** 1988 Aug;24(2):280–2

PATHOLOGY

Abnormalities in lymphocyte profile and specificity repertoire of patients with Waldenstrom's macroglobulinemia, multiple myeloma, and IgM monoclonal gammopathy of undetermined significance. Pilarski LM, et al. **Am J Hematol** 1989 Feb;30(2):53–60

Bronchoalveolar lavage plasmacytosis in a patient with a plasma cell dyscrasia. Menashe P, et al. **Chest** 1989 Jan; 95(1):226–7

Pathology of dysproteinemia: light chain amyloidosis, non-amyloid immunoglobulin deposition disease, cryoglobulinemia syndromes, and macroglobulinemia of Waldenström. Feiner HD. **Hum Pathol** 1988 Nov; 19(11):1255–72 (209 ref.)

Myeloma cast nephropathy: immunohistochemical and lectin studies. Start DA, et al. **Mod Pathol** 1988 Sep;1(5):336–47

Pathological findings in three non-Japanese patients with the POEMS syndrome. Gherardi R, et al. **Virchows Arch [A]** 1988;413(4):357–65

[Necrobiotic xanthogranuloma in paraproteinemia] Rappersberger K, et al. **Hautarzt** 1989 Jun;40(6):358–63 (Eng. Abstr.) **(Ger)**

[Acquired hyalinosis cutis et mucosae in plasmacytoma with monoclonal IgG-lambda gammopathy] von der Helm D, et al. **Hautarzt** 1989 Mar;40(3):153–7 (Eng. Abstr.) **(Ger)**

[Idiopathic monoclonal gammopathy. Long-term study of 313 cases] Paladini G, et al. **Recenti Prog Med** 1989 Mar; 80(3):123–32 (Eng. Abstr.) **(Ita)**

PHYSIOPATHOLOGY

Recurrence of monoclonal gammopathy-related glomerulonephritis in renal allograft. Cadnapaphornchai P, et al. **Clin Nephrol** 1989 Mar;31(3):156–9

THERAPY

Treatment of systemic capillary leak syndrome [letter]

Lancet 1988 Dec 24–31;2(8626–8627):1496
Removal and recovery rate of paraproteins by plasma exchange. Busnach G, et al. **Life Support Syst** 1983;1 Suppl 1:112–4
[Application of plasmapheresis in patients with malignant paraproteinemia and hyperviscosity syndrome] Wu TJ, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Nov;42(5):367–72 (Eng. Abstr.) (Chi)

VETERINARY

Monoclonal gammopathy associated with naturally occurring canine ehrlichiosis. Breitschwerdt EB, et al. **J Vet Intern Med** 1987 Jan–Mar;1(1):2–9

PARAPROTEINS

ANALYSIS

Precision and reliability of paraprotein determinations by high–resolution agarose gel electrophoresis. Stemerman D, et al. **Am J Clin Pathol** 1989 Apr;91(4):435–40
A unique case of kappa light–chain disease associated with cryoglobulinemia, pyroglobulinemia, and hyperviscosity syndrome. Bachrach HJ, et al. **Am J Med** 1989 May; 86(5):596–602
Circulating monotypic B–cells in multiple myeloma: association with lambda paraproteins. Bagg A, et al. **Br J Haematol** 1989 Jun;72(2):167–72
Strategy for diagnosis of monoclonal gammopathies in serum [letter] Kahn SN. **Clin Chem** 1989 Mar;35(3):508–9
IgE pyroglobulinemia in multiple myeloma. Gallango ML, et al. **Clin Chim Acta** 1988 Aug 31;176(2):151–6
[Light–chain myeloma and non–secretory myeloma—problems in di– agnosis and associated paraproteins] Leinonen P, et al. **Duodecim** 1988; 104(18):1466–70 (21 ref.) (Fin)

METABOLISM

Detection and typing of paraproteins: comparison of different methods in a routine diagnostic laboratory. Guinan JE, et al. **Pathology** 1989 Jan;21(1):35–41

PARAPSORIASIS

CLASSIFICATION

Parapsoriasis and related conditions. Piamphongsant T. **Ann Acad Med Singapore** 1988 Oct;17(4):486–91

COMPLICATIONS

[Parapsoriasis en plaques and mycosis fungoides: an unclear relationship] Pimpinelli N, et al. **G Ital Dermatol Venereol** 1988 Jul–Aug;123(7–8):329–35 (Eng. Abstr.) (Ita)

ETIOLOGY

Unusual chronic maculopapular rash associated with human immunodeficiency virus infection. Wang WC, et al. **South Med J** 1989 Mar;82(3):386–9

PATHOLOGY

Comparative clinicopathological study on pityriasis lichenoides chronica and small plaque parapsoriasis. Benmamán O, et al. **Am J Dermatopathol** 1988 Jun; 10(3):189–96
Progressive erythematous and atrophic eruption in a patient with chronic myelogenous leukemia. Poikilodermal vasculare atrophicans (PVA). Forman AB, et al. **Arch Dermatol** 1989 Sep;125(9):1267, 1269–70

PARAPSYCHOLOGY

The paraconscious. Donovan DM. **J Am Acad Psychoanal** 1989 Summer;17(2):223–51
On the oceanic experience. Harrison IB. **J Am Psychoanal Assoc** 1989;37(2):559–64
Three new cases of the reincarnation type in Sri Lanka with written records made before verification. Stevenson I, et al. **J Nerv Ment Dis** 1988 Dec;176(12):741
Geophysical variables and behavior: LVIII. Autonomic activity, hemolysis, and biological psychokinesis: possible relationships with geomagnetic field activity. Braud WG, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1243–54
Geophysical variables and behavior: LIV. Zeitoun (Egypt) apparitions of the Virgin Mary as tectonic strain–induced luminosities. Derr JS, et al. **Percept Mot Skills** 1989 Feb; 68(1):123–8 (14 ref.)
Geophysical variables and behavior: XXXIII. Onsets of historical and contemporary poltergeist episodes occurred with sudden increases in geomagnetic activity. Gearhart L, et al. **Percept Mot Skills** 1986 Apr;62(2):463–6
[Unethical actions within the framework of a therapeutic relationship] Pfeifer S. **Schweiz Rundsch Med Prax** 1988 May 3;77(18):489–92 (Eng. Abstr.) (Ger)
[Experience of the OBE type (out of body experience) in a patient with schizophrenia] Pilaczyńska E, et al. **Psychiatr Pol** 1988 Mar–Apr;22(2):162 (Pol)
[Altered states of consciousness in healthy persons (the formulation of the question and research prospects)] Spivak LI. **Fiziol Cheloveka** 1988 Jan–Feb;14(1):138–47 (34 ref.) (Rus)

PHYSIOLOGY

Geophysical variables and behavior: LV. Predicting the details of visitor experiences and the personality of experients: the temporal lobe factor. Persinger MA. **Percept Mot Skills** 1989 Feb;68(1):55–65 (70 ref.)

PARAQUAT

In vitro adsorption removal of paraquat by activated carbon and cation exchange resin. Kitakouji M, et al. **Bull Environ Contam Toxicol** 1989 Jun;42(6):926–30
Kinetics of in vitro paraquat removal by cation–exchange resin. Tanada S, et al. **Bull Environ Contam Toxicol** 1988 Jul;41(1):12–6
An electrophysiological study of ganglion blockade by paraquat and diquat. Webb DB, et al. **Hum Toxicol** 1988 Nov;7(6):563–5
[Production of paraquat resistant plants] Furusawa I. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):3184–8 (Jpn)
[E. coli genes to enhance tolerance to paraquat] Morimyo M. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):3178–83 (Jpn)

ADMINISTRATION & DOSAGE

Metallothionein–I accumulation in the rat lung following a single paraquat administration. Sato M, et al. **Toxicol Lett** 1989 Jan;45(1):41–7

ADVERSE EFFECTS

Contact leucoderma from paraquat dichloride? George AO. **Contact Dermatitis** 1989 Mar;20(3):225
Effectiveness of vitamin E and colchicine in amelioration of paraquat lung injuries using an experimental model. Shahar E, et al. **Isr J Med Sci** 1989 Feb;25(2):92–4

ANALYSIS

Determination of paraquat from formalin–fixed tissue. Kuo TL, et al. **Forensic Sci Int** 1988 Sep;38(3–4):243–9
Development and application of immunoassay for paraquat: radioimmunoassay. Nagao M, et al. **J Forensic Sci** 1989 May;34(3):547–52
Determination of paraquat in raw and formalin–fixed tissues by electron spin resonance (ESR) spectroscopy. Minakata K, et al. **Z Rechtsmed** 1989;102(5):337–45

ANTAGONISTS & INHIBITORS

Preventive effect of taurine against acute paraquat intoxication in beagles. Izumi K, et al. **Jpn J Pharmacol** 1989 Jun;50(2):229–33

IMMUNOLOGY

Comparison of paraquat–specific murine monoclonal antibodies produced by in vitro and in vivo immunization. Johnston SC, et al. **Fundam Appl Toxicol** 1988 Aug; 11(2):261–7
Large scale production and purification of paraquat and desipramine monoclonal antibodies and their Fab fragments. Bowles M, et al. **Int J Immunopharmacol** 1988; 10(5):537–45
Development and characterization of monoclonal antibodies reactive with paraquat. Nagao M, et al. **J Immunoassay** 1989;10(1):1–17

METABOLISM

N–methylation as a toxication route for xenobiotics. II. In vivo formation of N,N'–dimethyl–4,4'–bipyridyl ion (paraquat) from 4,4'–bipyridyl in the guinea pig. Godin CS, et al. **Drug Metab Dispos** 1989 Mar–Apr;17(2):180–5
Paraquat is not accumulated in B16 tumor cells by the polyamine transport system. Minchin RF, et al. **Life Sci** 1989;45(1):63–9

PHARMACOKINETICS

Evidence for hydroxyl free radical formation during paraquat but not for nifurtimox liver microsomal biotransformation. A dimethyl–sulfoxide scavenging study. Castro GD, et al. **Arch Toxicol** 1988;62(5):355–8
Autoradiography of [14C]paraquat or [14C]diquat in frogs and mice: accumulation in neuromelanin. Lindquist NG, et al. **Neurosci Lett** 1988 Oct 31;93(1):1–6
Toxicokinetics and bioavailability of paraquat in rats following different routes of administration. Chui YC, et al. **Toxicol Ind Health** 1988 Jun;4(2):203–19

PHARMACOLOGY

Effects of Gramoxone–induced reactive oxygen radicals on eicosanoid synthesis of mouse lung. Matkovics B, et al. **Acta Biol Hung** 1988;39(4):351–9
Environmental stress and parasitic infections: I. The effects of Gramoxone and Hexadrin on embryo and hatching of Fasciola gigantica miracidia. Igbinosa IB, et al. **Angew Parasitol** 1988 Sep;29(3):179–83
Environmental stress and parasitic infections: II. Effects of gramoxone and hexadrin (pesticides) on the survival characteristics of Fasciola gigantica miracidia. Okafor FC, et al. **Angew Parasitol** 1988 Nov;29(4):221–5
Microsomal reduction of low–molecular–weight Fe3+ chelates and ferritin: enhancement by adriamycin, paraquat, menadione, and anthraquinone 2–sulfonate and inhibition by oxygen. Vile GF, et al. **Arch Biochem Biophys** 1988 Dec;267(2):606–13
Membrane permeability and oxidant induced injury. Forman HJ, et al. **Basic Life Sci** 1988;49:523–30
Induction of superoxide dismutase activity by paraquat or EDU in human gingival fibroblasts. Kerr JS, et al. **Basic Life Sci** 1988;49:695–8
Paraquat–resistant HeLa cells. Krall J, et al. **Basic Life Sci** 1988;49:811–4
A cSOD–null mutant of Drosophila confers sensitivity to paraquat and reduced longevity. Phillips JP. **Basic Life Sci** 1988;49:689–93
Synergistic interactions between NADPH–cytochrome P–450 reductase, paraquat, and iron in the generation of active oxygen radicals. Clejan L, et al. **Biochem Pharmacol** 1989 Jun 1;38(11):1779–86
Interactions between paraquat and ferric complexes in the microsomal generation of oxygen radicals. Puntarulo S, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2911–8
Resistance of paraquat and adriamycin in human breast tumor cells: role of free radical formation. Sinha BK, et al. **Biochim Biophys Acta** 1989 Mar 6;1010(3):304–10
Spontaneous lung chemiluminescence upon paraquat administration. Turrens JF, et al. **Free Radic Biol Med** 1988; 5(5–6):319–23
Transition metals potentiate paraquat toxicity. Kohen R, et al. **Free Radic Res Commun** 1985;1(2):79–88
A global response induced in Escherichia coli by redox–cycling agents overlaps with that induced by peroxide stress. Greenberg JT, et al. **J Bacteriol** 1989 Jul; 171(7):3933–9
Zinc protects Escherichia coli against copper–mediated paraquat–induced damage. Korbashi P, et al. **J Biol Chem** 1989 May 25;264(15):8479–82
Effects of MPTP, MPP+ and paraquat on mitochondrial potential and oxidative stress. Lambert CE, et al. **Life Sci** 1989;44(18):1277–84
Paraquat induced thiol modulation of Histoplasma capsulatum morphogenesis. Leith KM, et al. **Mycopathologia** 1988 Jul;103(1):21–7
[Paraquat, an active–oxygen producing herbicide] Matsunaka S. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2790–4 (Jpn)

POISONING

Continuous intravenous infusion of deferoxamine reduces mortality by paraquat in vitamin E–deficient rats. van Asbeck BS, et al. **Am Rev Respir Dis** 1989 Mar; 139(3):769–73
Pulmonary fibrosis following paraquat poisoning. Hettiarachchi J, et al. **Ceylon Med J** 1988 Dec;33(4):141–2
Immunotherapy for the treatment of acute paraquat poisoning. Nagao M, et al. **Hum Toxicol** 1989 Mar; 8(2):121–3
A new method for predicting the outcome and survival period in paraquat poisoning. Suzuki K, et al. **Hum Toxicol** 1989 Jan;8(1):33–8
Paraquat poisoning by skin absorption [letter] Wester RC, et al. **Hum Toxicol** 1989 May;8(3):251–2
Paraquat poisoning [editorial] Bazilinski NG, et al. **Int J Artif Organs** 1989 May;12(5):279–81
Neonatal paraquat poisoning: a case report. Prasarnphanich T, et al. **J Med Assoc Thai** 1988 Dec;71(12):694–8
Paraquat poisoning: biological presentation. Bismuth C, et al. **J Toxicol Clin Exp** 1988 May–Jun;8(3):211–8 (13 ref.)
Light and electron microscopic study of the liver in paraquat poisoning. Takegoshi K, et al. **Liver** 1988 Dec;8(6):330–6
Brain damage due to paraquat poisoning: a fatal case with neuropathological examination of the brain. Hughes JT. **Neurotoxicology** 1988 Summer;9(2):243–8
Studies on the evaluation of adsorbent for primary treatment in paraquat poisoning. Kitakouji M, et al. **Nippon Eiseigaku Zasshi** 1988 Dec;43(5):956–61
Changes in elastic–related fibers in the human paraquat lung. Kawaguchi N, et al. **Nippon Hoigaku Zasshi** 1988 Apr; 42(2):133–41
A comparison of hemoperfusion columns for paraquat. Talbot AR. **Vet Hum Toxicol** 1989 Apr;31(2):131–5
An immunohistochemical study of the fibrosing process in paraquat lung injury. Hara H, et al. **Virchows Arch [A]** 1989;415(4):357–66
[Liver biochemical tests in paraquat intoxication] Kuo CH, et al. **Chang Keng I Hsueh** 1988 Sep 20;11(3):160–6 (Eng. Abstr.) (Chi)
[No Parkinsonian syndrome following acute paraquat poisoning] Zilker T, et al. **Klin Wochenschr** 1988 Nov 15; 66(22):1138–41 (Eng. Abstr.) (Ger)
[Pathomorphology of lung changes caused by gramoxone poisoning. Human pathologic and animal experimental studies] Vadnay I, et al. **Zentralbl Allg Pathol** 1988; 134(7):671–9 (Eng. Abstr.) (Ger)
[4 cases of paraquat poisoning] Hamaguchi T, et al. **Hinyokika Kiyo** 1989 Feb;35(2):367–9 (10 ref.) (Eng. Abstr.) (Jpn)
[A clinical study of pulmonary edema on paraquat poisoning by double indicator dilution method using heat and sodium] Yamamoto I, et al. **Kokyu To Junkan** 1989 May; 37(5):517–22 (Eng. Abstr.) (Jpn)

[Immunohistochemical study of alveolar epithelium in paraquat poisoning] Hara H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 May; 26(5):499–506 (Eng. Abstr.) **(Jpn)**

[Failure of a cyclophosphamide–dexamethasone combination in paraquat poisoning] Nogué S, et al. **Med Clin (Barc)** 1989 Jun 10;93(2):61–3 (39 ref.) (Eng. Abstr.) **(Spa)**

[Paraquat poisoning] Palomar M, et al. **Med Clin (Barc)** 1989 Jun 10;93(2):58–60 (23 ref.) **(Spa)**

[Anti-free radical therapy in paraquat poisoning (letter)] Díaz Lobato S, et al. **Rev Clin Esp** 1988 Dec;183(9):503–4 **(Spa)**

[Hemoperfusion in paraquat poisoning (letter)] Nogué Xarau S, et al. **Rev Clin Esp** 1988 Dec;183(9):504 **(Spa)**

TOXICITY

Neuropathological lesions after microinfusion of paraquat and MPP+ into different areas of the rat brain. Iannone M, et al. **Acta Neurol (Napoli)** 1988 Dec;10(6):313–21

Embryocidal and teratogenic effects of paraquat on chick embryos and white rats. Ahmed AA, et al. **Arch Exp Veterinarmed** 1988 Nov;42(6):848–53

Structure–activity relationship of reversible cholinesterase inhibitors including paraquat. Seto Y, et al. **Arch Toxicol** 1988 Aug;62(1):37–40

Role of active oxygen in paraquat and 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP) cytotoxicity. Sandy MS, et al. **Basic Life Sci** 1988; 49:795–801

The ratio of oxidized/reduced glutathione as an index of oxidative stress in various experimental models of shock syndrome. Németh I, et al. **Biomed Biochim Acta** 1989; 48(2–3):S53–7

Effects of paraquat on parent generation female and F1 suckling mice using different treatment regimes. Dial CA, et al. **Bull Environ Contam Toxicol** 1989 Jul;43(1):66–73

Effect of paraquat administered intraperitoneally on the nonpolar lipids of rabbits. Hassan RA, et al. **Ecotoxicol Environ Safety** 1989 Feb;17(1):47–58

The effect of paraquat lung on mononuclear cells. Barabás K, et al. **Exp Pathol** 1988;34(2):115–8

Inhibition of spontaneous growth and induced differentiation of murine erythroleukaemia cells by paraquat and atrazine. Magnelli L, et al. **Food Chem Toxicol** 1989 Feb;27(2):125–8

Age-dependent resistance to the toxic effects of paraquat in relation to superoxide dismutase activity in rat lung. Petrović VM, et al. **Free Radic Res Commun** 1986; 1(5):305–9

Effects of oxygen and methyl viologen on Thermus aquaticus. MacMichael GJ. **J Bacteriol** 1988 Oct; 170(10):4995–8

Influence of bipyridylium compounds on microsomal mixed-function oxidation activities. Zychlinski L, et al. **J Biochem Toxicol** 1988 Fall;3:173–89

Null mutation of copper/zinc superoxide dismutase in Drosophila confers hypersensitivity to paraquat and reduced longevity. Phillips JP, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2761–5

Does paraquat (PQ) mimic MPP+ toxicity? Woolley DE, et al. **Proc West Pharmacol Soc** 1989;32:191–3

Effects of paraquat on canine bronchoalveolar lavage fluid. Hampson EC, et al. **Toxicol Appl Pharmacol** 1989 Apr; 98(2):206–15

Effect of paraquat on lung calcium transport. Agarwal AK, et al. **Toxicol Lett** 1988 Sep;42(3):317–23

The effects of 24% paraquat (1,1'-dimethyl-4,4'-bipyridylium dichloride) on hemodynamics, blood gases, plasma lactate and plasma catecholamines in dogs. Sone T, et al. **Vet Hum Toxicol** 1989 Apr;31(2):149–53

[Paraquat and diquat: mechanisms of toxicity] Lopes AT, et al. **Acta Med Port** 1989 Jan–Feb;2(1):35–9 (46 ref.) (Eng. Abstr.) **(Por)**

PARASITE EGG COUNT

The relationship of park maintenance and accessibility to dogs to the presence of Toxocara spp. ova in the soil. Ludlam KE, et al. **Am J Public Health** 1989 May; 79(5):633–4

Parasitology: diagnostic yield of stool examination. Senay H, et al. **Can Med Assoc J** 1989 Jun 1;140(11):1329–31

Enterobius vermicularis infection in a children's ward. Ashford RW, et al. **J Hosp Infect** 1988 Oct;12(3):221–4

Quantification of helminth eggs in waste water. Bouhoum K, et al. **Zentralbl Hyg Umweltmed** 1989 Jun; 188(3–4):322–30

[A comparative assessment of sampling methods for pinworm eggs from household objects] Pavlova NG, et al. **Med Parazitol (Mosk)** 1988 Nov–Dec;(6):88–9 (Eng. Abstr.) **(Rus)**

METHODS

[Evaluation of ovoscopic methods in the diagnosis of invasion with the tapeworm, Taenia saginata] Straka S, et al. **Cas Lek Cesk** 1989 Jan 6;128(2):56–8 (Eng. Abstr.) **(Slo)**

VETERINARY

Comparison of egg excretion and serum pepsinogen levels as measures of nematode worm burdens in calves with limited pasture exposure. Murrell KD, et al. **J Parasitol** 1989 Jun;75(3):360–6

PARASITE-HOST RELATIONS see **HOST-PARASITE RELATIONS**

PARASITES

[The consequences of the third edition of the Zoological Code for Nomenclature for parasitology] Eichler W. **Angew Parasitol** 1989 Feb;30(1):51–5 (Eng. Abstr.) **(Ger)**

DRUG EFFECTS

Critical and controlled tests of activity of a macrocyclic lactone (compound F28249-alpha) against natural infections in internal parasites of equids. Lyons ET, et al. **Am J Vet Res** 1989 Jun;50(6):970–4

ENZYMOLOGY

Parasite proteases. McKerrow JH. **Exp Parasitol** 1989 Jan; 68(1):111–5 (19 ref.)

GENETICS

18th annual UCLA symposium. Abstracts: Parasites: molecular biology, drug and vaccine design. **J Cell Biochem Suppl** 1989;13E:63–158

IMMUNOLOGY

Complement evasion by bacteria and parasites. Joiner KA. **Annu Rev Microbiol** 1988;42:201–30 (187 ref.)

Parasite vaccines versus anti-parasite drugs: rivals or running mates? Gutteridge WE. **Parasitology** 1989;98 Suppl:S87–97 (68 ref.)

The Wellcome Trust lecture. Problems specific to parasite vaccines. Mitchell GF. **Parasitology** 1989;98 Suppl:S19–28 (67 ref.)

Immunological control of ticks and tick-borne parasitic diseases of livestock. Morrison WI. **Parasitology** 1989;98 Suppl:S69–86 (121 ref.)

Basic concepts and new aspects of vaccine development. Roitt IM. **Parasitology** 1989;98 Suppl:S7–12 (5 ref.)

Netherlands Society for Parasitology, autumn meeting. Leiden, October 30, 1987. Abstracts. **Trop Geogr Med** 1988 Jul;40(3):274–82

PATHOGENICITY

A competitive exclusion principle for pathogen virulence. Bremermann HJ, et al. **J Math Biol** 1989;27(2):179–90

Host density and the evolution of parasite virulence. Knolle H. **J Theor Biol** 1989 Jan 23;136(2):199–207

[Stress proteins: virulence factors of intracellular disease agents?] Kaufmann SH. **Immun Infekt** 1989 Aug; 17(4):124–8 (47 ref.) (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Biochemical and molecular aspects of endosymbiosis in insects. Ishikawa H. **Int Rev Cytol** 1989;116:1–45 (216 ref.)

[Faunal-ecological relations forming the populations of ectoparasites of Apodemus agrarius (Pall.) and A. flavicollis (Melch.) in the forest regions of Gdansk] Pruszyńska I. **Wiad Parazytol** 1988;34(2):151–9 (Eng. Abstr.) **(Pol)**

[From the theory of the epidemic process to the theory of the "self-regulation" of parasitic systems] Cherkasskiĭ BL. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Sep;(9):110–2 **(Rus)**

[Methodologic aspects of the theory of self-regulation of parasitic systems] Gorin NS. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Sep;(9):90–3 **(Rus)**

PARASITIC DISEASES

Infectious diseases in developing countries. Third Kuwait International Medical Sciences Conference. 1987. **APMIS Suppl** 1988;3:1–106

Nonviral infections of the liver. Ellis CJ. **Baillieres Clin Gastroenterol** 1989 Jan;3(1):67–74 (19 ref.)

Systemic mycoses and parasitic diseases. **Dermatol Clin** 1989 Apr;7(2):193–401

Parasitic diarrhea. Panosian CB. **Infect Dis Clin North Am** 1988 Sep;2(3):685–703 (91 ref.)

Netherlands Society for Parasitology, autumn meeting. Leiden, October 30, 1987. Abstracts. **Trop Geogr Med** 1988 Jul;40(3):274–82

[14th national meeting of the Italian Society of Parasitology. Pisa, 21–24 May 1986. Abstracts] **Parassitologia** 1986 Aug–Dec;28(2–3):167–373 **(Ita)**

[Proceedings of the 15th congress of the Polish Parasitological Society. Katowice, 24–26 September 1987] **Wiad Parazytol** 1988;34(4–6):379–756 **(Pol)**

[Medical residency in infectious and parasitic diseases at the Hospital das Clinicas of the Faculdade de Medicina da Universidade de São Paulo] Focaccia R, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 May–Jun; 43(3):171–5 (Eng. Abstr.) **(Por)**

BLOOD

Rheumatoid factors in leprosy and parasitic diseases. Harboe M. **Scand J Rheumatol Suppl** 1988;75:309–13 (24 ref.)

COMPLICATIONS

Acquired immunodeficiency syndrome (AIDS) and parasitic diseases in Puerto Rico. Hillyer GV, et al. **Bol Asoc Med P R** 1988 Sep;80(9):312–9 (33 ref.)

The vitamin B1 status among young Egyptian males in relation to infection with parasites. Hussein L, et al. **Int J Vitam Nutr Res** 1989;59(1):48–51

Did swimming wake up the worms? [letter] Highet R. **N Z Med J** 1989 Sep 13;102(875):481

Opportunistic parasitic infections in patients with acquired immunodeficiency syndrome. Sun T. **Pathol Annu** 1988;23 Pt 2:1–32 (96 ref.)

[The role of infection in the precipitation of periarteritis nodosa] Smail A, et al. **Ann Med Interne (Paris)** 1988; 139(5):324–30 (25 ref.) (Eng. Abstr.) **(Fre)**

[Opportunistic parasitic diseases and mycoses in AIDS. Their frequencies in Brazzaville (Congo)] Carme B, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3):311–6 (Eng. Abstr.) **(Fre)**

[Parasitic arthritis and rheumatism, reactive arthritis] Doury P. **Presse Med** 1988 Dec 17;17(45):2373–4 **(Fre)**

DIAGNOSIS

Identification of fecal parasites in the quality assessment programme for the year 1984–1987, in Thailand. Eamsobhana P, et al. **J Med Assoc Thai** 1989 Jan;72(1):11–5

Diagnosis of parasitic diseases. Araujo FG. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:464–5

Diagnosis of parasitic diseases using DNA-to-DNA hybridization. Ashall F, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):235–6

Recent applications of the Dot-ELISA in immunoparasitology. Pappas MG. **Vet Parasitol** 1988 Sep; 29(2–3):105–29 (50 ref.)

[Current status in research on the immunodiagnosis of parasitic diseases] Li YH. **Chung Hua Nei Ko Tsa Chih** 1988 Jul;27(7):446–8 (14 ref.) **(Chi)**

[A review of Polish publications on medical parasitology 1984–1987] Kasprzak W, et al. **Wiad Parazytol** 1988; 34(4–6):387–94 **(Pol)**

[Value of immunoserologic tests in the diagnosis of parasitic invasions in persons returning from tropical countries] Myjak P. **Wiad Parazytol** 1988;34(4–6):665–9 **(Pol)**

[Parasitic diseases and immunosuppression (editorial)] González Cappa S, et al. **Medicina (B Aires)** 1988; 48(1):100–3 **(Spa)**

DRUG THERAPY

Treatment of parasitic infections: Canadian versus US recommendations. Committee on Antimicrobial Agents, Canadian Infectious Disease Society [published erratum appears in Can Med Assoc J 1989 Jan 1;140(1):15] **Can Med Assoc J** 1988 Nov 1;139(9):849–51

Treatment of parasitic infections: Canadian versus US recommendations [correction] [letter] **Can Med Assoc J** 1989 Jun 1;140(11):1268

Treatment of parasitic infections: Canadian versus US recommendations [correction] [letter] **Can Med Assoc J** 1989 Jan 1;140(1):15

[Advances in chemotherapy of parasitic diseases] Jiang ZJ. **Chung Hua Nei Ko Tsa Chih** 1988 May;27(5):315–7 (18 ref.) **(Chi)**

[Antimicrobial therapy with nitroheterocyclic compounds, for example, metronidazole and nitrofurantoin] Hof H. **Immun Infekt** 1988 Dec;16(6):220–5 (52 ref.) (Eng. Abstr.) **(Ger)**

[Problems of antiparasitic therapy in pregnancy] Piccione E. **Clin Ter** 1988 May 31;125(4):313–5 **(Ita)**

EPIDEMIOLOGY

Problems with old diseases related to social and pharmaceutical industry situations. Neu HC. **Bull N Y Acad Med** 1988 Jul–Aug;64(6):456–61

A preliminary survey of parasitic infections and nutritional status among school children in Riyadh, Saudi Arabia. Ahmed MM, et al. **J Egypt Soc Parasitol** 1989 Jun; 19(1):101–5

An immunoserological study among blood donors of Makkah region, Saudi Arabia. Safi MA, et al. **J Egypt Soc Parasitol** 1989 Jun;19(1):91–9

A renewal equation with a birth–death process as a model for parasitic infections. Kretzschmar M. **J Math Biol** 1989; 27(2):191–221

Intestinal parasitic infections among school children in Bahrain [letter] Mussiger AO. **J Trop Pediatr** 1989 Feb; 35(1):45–6

Comparison of parasite burdens in two native Amazonian populations. Chernela JM, et al. **Med Anthropol** 1989 Apr; 10(4):279–85

New aspects of parasitic zoonoses. Eckert J. **Vet Parasitol** 1989 Jul 1;32(1):37–55 (81 ref.)

[Preliminary survey of human parasites in the minority groups of Hainan Island] Jiang ZX. **Chung Hua I Hsueh Tsa Chih** 1988 May;68(5):269–71, 20 (Eng. Abstr.) **(Chi)**

[The best estimative figure of mixed sample at low infective rate of parasite] Zhao B, et al. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Jan;22(1):20–1 (Eng. Abstr.) **(Chi)**

[The development of tropical medicine in Hungary in the

past 25 years] Várnai F. **Orv Hetil** 1988 Nov 13; 129(46):2449–55 (40 ref.) (Eng. Abstr.) **(Hun)**

[Epidemiological chronicle] **Przegl Epidemiol** 1989; 43(1):1–123 **(Pol)**

[Epidemiological chronicle] **Przegl Epidemiol** 1988; 42(1):1–120 **(Pol)**

[Occurrence and clinical picture of parasitic diseases among patients of the Infectious Disease Clinic, Medical Academy, in Białystok 1975–1986] Prokopowicz D, et al. **Wiad Parazytol** 1988;34(2):197–207 (Eng. Abstr.) **(Pol)**

ETIOLOGY

Hepatic granuloma in a man from North America caused by a nymph of Linguatula serrata. Baird JK, et al. **Pathology** 1988 Apr;20(2):198–9

Immunoperoxidase techniques in the study of the etiology of infectious and parasitic diseases. Barbosa AJ. **Rev Soc Bras Med Trop** 1988 Jan–Mar;21(1):1–6 **(Eng, Por)**

[Observation on the subject of domestic parasites] Soenen A. **Arch Belg** 1987;45(11–12):461–91 (Eng. Abstr.) **(Fre)**

GENETICS

Study of relationship of ABO and Rh blood group, and HLA antigens with parasitic diseases. Bouree P, et al. **J Egypt Soc Parasitol** 1989 Jun;19(1):67–73

HISTORY

Prehistoric parasitism in Tennessee: evidence from the analysis of desiccated fecal material collected from Big Bone Cave, Van Buren County, Tennessee. Faulkner CT, et al. **J Parasitol** 1989 Jun;75(3):461–3

IMMUNOLOGY

Parasites and immunity: tactical considerations in the war against disease—or, how did the worms learn about Clausewitz? Hayunga EG. **Perspect Biol Med** 1989 Spring; 32(3):349–70 (159 ref.)

T cell clones: tools to investigate host–parasite relationships. Lammie PJ. **Vet Parasitol** 1988 Sep;29(2–3):159–70 (39 ref.)

[Relation of iron supply and iron metabolism to infectious diseases and parasitoses and the competence of the immune system] Kolb E. **Z Gesamte Inn Med** 1988 Nov 1; 43(21):597–601 (46 ref.) (Eng. Abstr.) **(Ger)**

[Causes of increased IgE levels in the body] Romański B. **Pol Tyg Lek** 1988 Oct 17–24;43(42–43):1347–51 **(Pol)**

[Eosinophils and their role in pathologic conditions] Rogala E, et al. **Postepy Hig Med Dosw** 1988 Mar–Apr; 42(2):224–34 (30 ref.) (Eng. Abstr.) **(Pol)**

[Standards for the serology of parasitic diseases] Guimarães CS, et al. **Rev Soc Bras Med Trop** 1987 Jan–Mar;20(1):55–8 **(Por)**

[Immune mechanisms of antiviral, bacterial and parasitic protection] Olinescu A. **Rev Ig [Bacteriol]** 1988 Jan–Mar; 33(1):15–28 (16 ref.) (Eng. Abstr.) **(Rum)**

[The histocompatibility system and its significance in parasitology] Shcherbakov AM. **Med Parazitol (Mosk)** 1988 Sep–Oct;(5):81–8 (73 ref.) **(Rus)**

MORTALITY

Potential gains in life expectancy of Kuwaiti nationals through partial and complete elimination of infectious and parasitic disease mortality. al-Bustan MA, et al. **APMIS Suppl** 1988;3:88–90

Infectious and parasitic disease mortality in Kuwait and the role of health education. al-Bustan M. **Community Med** 1988 Aug;10(3):197–202

PARASITOLOGY

[The behavior of the causative agents of blood and transmissible infections during the preparatory period for a change in host. A review] Alekseev AN. **Parazitologiia** 1989 Mar–Apr;23(2):89–97 (42 ref.) (Eng. Abstr.) **(Rus)**

PATHOLOGY

Proceedings of the Pathological Society of Great Britain and Ireland, 175th meeting. Newcastle-upon-Tyne, 6–8 July 1988. Abstracts. **J Med Microbiol** 1988 Nov;27(3):i–xiii

Light microscope observations of granulomatous reactions against developing Porocephalus crotali (Pentastomida: Porocephalida) in mouse and rat. Ambrose NC, et al. **Parasitology** 1988 Aug;97 (Pt 1):27–42

PREVENTION & CONTROL

Vaccines for parasitic infections. Barbet AF. **Adv Vet Sci Comp Med** 1989;33:345–75 (203 ref.)

Screening for parasites in a selected group of foreign students—Alberta. Clarkson G, et al. **Can Dis Wkly Rep** 1988 Apr 23;14(16):67–8 **(Eng, Fre)**

Safe sushi [letter] **N Engl J Med** 1989 Sep 28;321(13):900–1

Parasite vaccines versus anti-parasite drugs: rivals or running mates? Gutteridge WE. **Parasitology** 1989;98 Suppl:S87–97 (68 ref.)

The Wellcome Trust lecture. Problems specific to parasite vaccines. Mitchell GF. **Parasitology** 1989;98 Suppl:S19–28 (67 ref.)

Man and his parasites: integration of biomedical and social approaches to transmission and control. Holland CV. **Soc Sci Med** 1989;29(3):403–11

[Tropical parasitic diseases and the problems of tropical medicine in Poland] Dolmierski R, et al. **Wiad Parazytol** 1988;34(4–6):641–7 **(Pol)**

PSYCHOLOGY

Psychocutaneous medicine: delusions of parasitosis [letter] Koblenzer CS. **Cutis** 1989 Jul;44(1):72–3

Psychocutaneous medicine: delusions of parasitosis. Novak M. **Cutis** 1988 Dec;42(6):504

Delusions of parasitosis: a case report and management guidelines. Bond WS. **DICP** 1989 Apr;23(4):304–6

Delusional parasitosis. A comparative study to late-onset schizophrenia and organic mental disorders due to cerebral arteriosclerosis. Marneros A, et al. **Psychopathology** 1988; 21(6):267–74

TRANSMISSION

Transfusion transmitted infectious agents, excluding hepatitis and human immunodeficiency viruses. Leikola J. **Acta Anaesthesiol Scand Suppl** 1988;89:20–5 (37 ref.)

Vector saliva and its role in parasite transmission. Ribeiro JM. **Exp Parasitol** 1989 Jul;69(1):104–6 (14 ref.)

[Transmissible diseases through the intermediary of transfusions] Van Laethem Y. **Rev Med Brux** 1989 Apr; 10(4):125–30 (Eng. Abstr.) **(Fre)**

[Infections of pigeons as a risk to the health of humans and animals] Glünder G. **DTW** 1989 Mar;96(3):112–4, 116 (Eng. Abstr.) **(Ger)**

[Biological control of vectors and infectious diseases associated with water] Tarsitani G. **Nuovi Ann Ig Microbiol** 1987 Sep–Dec;38(5–6):335–41 (Eng. Abstr.) **(Ita)**

[Parasitic diseases caused by consumption of imported meat of fish and domestic animals] Iseki M. **Nippon Rinsho** 1989 Jan;47(1):123–8 **(Jpn)**

[The theory of the mechanism of transmission and the epidemic process] Akiev AK. **Zh Mikrobiol Epidemiol Immunobiol** 1989 May;(5):98–100 (23 ref.) **(Rus)**

VETERINARY

Critical and controlled tests of activity of a macrocyclic lactone (compound F28249-alpha) against natural infections in internal parasites of equids. Lyons ET, et al. **Am J Vet Res** 1989 Jun;50(6):970–4

Chemotherapy of fish parasites. Schmahl G, et al. **Parasitol Res** 1989;75(7):503–11 (29 ref.)

Immunological control of ticks and tick-borne parasitic diseases of livestock. Morrison WI. **Parasitology** 1989;98 Suppl:S69–86 (121 ref.)

Proceedings of the 4th International Immunoparasitology Symposium. Lincoln, NE, U.S.A., 29–31 July 1987. **Vet Parasitol** 1988 Sep;29(2–3):85–296

Plenary lectures of the 13th Conference of the World Association for the Advancement of Veterinary Parasitology. Berlin, German Democratic Republic, 7–11 August 1989. **Vet Parasitol** 1989 Jul 1;32(1):1–100

Computational veterinary parasitology with an application to chemical resistance. Gettinby G. **Vet Parasitol** 1989 Jul 1;32(1):57–72 (21 ref.)

Standardized nomenclature of animal parasitic diseases (SNOAPAD). Kassai T, et al. **Vet Parasitol** 1988 Oct; 29(4):299–326

Cerebrospinal fluid eosinophilia and ataxia in five llamas. Lunn DP, et al. **Vet Rec** 1989 Mar 25;124(12):302–5

[Parasitic diseases—a current problem area in intensive pasture management] Hiepe T. **Angew Parasitol** 1989 Feb; 30(1):3–9 (38 ref.) (Eng. Abstr.) **(Ger)**

[The parasite fauna of Stizostedion lucioperca from the bay waters of the Baltic coast of East Germany] Walter U. **Angew Parasitol** 1988 Nov;29(4):215–9 (Eng. Abstr.) **(Ger)**

[The "diseased" or "dead" guillemots (Uria aalge), three-toed gulls (Rissa tridactyla), silver gulls (Larus argentatus) and laughing gulls (Larus ridibundus) found in the area of the German Bay, 1982–1985] Petermann S, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 May;96(5):271–7 (Eng. Abstr.) **(Ger)**

PARASITOLOGY

Introduction of Albert Dean Befus as the Henry Baldwin Ward medalist for 1988. Kemp WM. **J Parasitol** 1988 Dec; 74(6):915

[The consequences of the third edition of the Zoological Code for Nomenclature for parasitology] Eichler W. **Angew Parasitol** 1989 Feb;30(1):51–5 (Eng. Abstr.) **(Ger)**

[Basic problems of evolutionary parasitology] Mikhailov VK. **Med Parazitol (Mosk)** 1988 Nov–Dec;(6):3–6 **(Rus)**

EDUCATION

[Current problems of health education in preventing helminthiasis] Markin AV. **Gig Sanit** 1989 May;(5):45–7 **(Rus)**

HISTORY

The Wellcome Unit No. 1: twenty-one years of contributions in the field of tropical parasitology. Lainson R. **Trans R Soc Trop Med Hyg** 1988;82(1):27–32

[Autobiographical note by Augusto Corradetti] **Parassitologia** 1987 May–Dec;29(2–3):103–11 **(Ita)**

[Publications by Augusto Corradetti] **Parassitologia** 1987 May–Dec;29(2–3):113–21 **(Ita)**

[25th anniversary of the Parasitic and Tropical Disease Clinic, Medical Academy, in Poznań] Jara Z. **Wiad Parazytol** 1988; 34(3):366–70 **(Pol)**

[40th anniversary of the Polish Parasitological Society] Jara Z. **Wiad Parazytol** 1989;35(2):87–92 **(Pol)**

[Organization, activities and scientific problems of the Department of Tropical Parasitology of the Institute of Naval and Tropical Medicine in Gdynia] Wegner Z. **Wiad Parazytol** 1988;34(3):358–66 **(Pol)**

METHODS

A mark-recapture method for ecological studies of schistosomiasis vector snail populations. Woolhouse ME. **Ann Trop Med Parasitol** 1988 Oct;82(5):485–97

Pathogenic protozoa: an overview of in vitro cultivation and susceptibility to chemotherapeutic agents. Fritsche TR. **Clin Lab Med** 1989 Jun;9(2):287–317 (149 ref.)

A novel method for cloning Eimeria praecox in the chicken. Shirley MW, et al. **J Parasitol** 1989 Apr;75(2):324–5

Rapid diagnosis of malaria by acridine orange staining of centrifuged parasites. Rickman LS, et al. **Lancet** 1989 Jan 14;1(8629):68–71

An in vitro method for long-term maintenance of Leishmania donovani chagasi. Beltrán SD, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):234–5

A simple and reliable method for purification of Trichinella spiralis larvae using Percoll. Candolfi E, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):288

Quantification of Trypanosoma cruzi parasitaemia by direct micromethod. de Arias AR, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):248

Coconut water in the culture of Trypanosomatidae [letter] Marzochi MC, et al. **Trans R Soc Trop Med Hyg** 1988; 82(3):511–2

PEHPS medium: an alternative for axenic cultivation of Entamoeba histolytica and E. invadens. Said-Fernández S, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):249–53

A simple semi-defined culture medium for the growth of Trypanosoma rangeli. Takle GB, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):247

In vitro culture of Echinococcus multilocularis: protoscolicidal action of praziquantel and albendazole sulphoxide. Taylor DH, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):265–7

A septate polycarbonate cell culture unit used for Plasmodium falciparum and hybridomas. Thélu J, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):360–2

[A new method for the etiological diagnosis of human scabies] Castro D, et al. **Bol Chil Parasitol** 1987 Jul–Dec; 42(3–4):47–9 (Eng. Abstr.) **(Spa)**

TRENDS

[A review of Polish publications on medical parasitology 1984–1987] Kasprzak W, et al. **Wiad Parazytol** 1988; 34(4–6):387–94 **(Pol)**

[A review of Polish publications on general parasitology 1984–1986] Kazubski SL. **Wiad Parazytol** 1988; 34(4–6):381–6 (Eng. Abstr.) **(Pol)**

[Trends in faunal studies of parasitic Crustacea] Rokicki J. **Wiad Parazytol** 1988;34(4–6):595–6 (Eng. Abstr.) **(Pol)**

PARASYMPATHETIC BLOCKING AGENTS see **PARASYMPATHOLYTICS**

PARASYMPATHETIC GANGLIA see **GANGLIA, PARASYMPATHETIC**

PARASYMPATHETIC NERVOUS SYSTEM

ANATOMY & HISTOLOGY

Types of neurons in the dorasl parasympathetic nucleus of aurochs. Szteyn S, et al. **Folia Morphol (Warsz)** 1987; 46(3–4):153–60

The autonomic innervation of the human vocal cord: neuropeptides. Basterra J, et al. **Laryngoscope** 1989 Mar; 99(3):293–6

[A horseradish peroxidase study of the innervation of the internal eye structures in the cat showing the existence of a nonsynapsing direct parasympathetic pathway to the eye] Tanemoto Y, et al. **Nippon Ganka Gakkai Zasshi** 1988 Aug;92(8):1380–9 (Eng. Abstr.) **(Jpn)**

CYTOLOGY

Transient increase in the number of cholinergic neurons in the developing rat dentate gyrus. Kanaya-Ida S, et al. **Neurosci Lett** 1989 Jun 5;101(1):23–8

DRUG EFFECTS

Effects of aniracetam on one-trial passive avoidance tests and cholinergic neurons in discrete brain regions of rats. Toide K. **Arch Int Pharmacodyn Ther** 1989 Mar–Apr; 298:25–37

Cholinergic contractions induced by GABA-A receptor activation in the guinea-pig ileum are inhibited by

alpha-chymotrypsin and potentiated by diazepam. Tonini M, et al. **Arch Int Pharmacodyn Ther** 1988 Nov-Dec; 296:173-83

Role of acetylcholine in pyridostigmine-induced myocardial injury: possible involvement of parasympathetic nervous system in the genesis of cardiomyopathy. Kato T, et al. **Arch Toxicol** 1989;63(2):137-43

Effect of nerve growth factor and thyrotropin releasing hormone on cholinergic neurones in developing rat brain reaggregate cultures lesioned with ethylcholine mustard aziridinium. Atterwill CK, et al. **Biochem Pharmacol** 1989 May 15;38(10):1631-8

Regionally selective cholinergic stimulation by BRL 24924 in the human isolated gut. Burke TA, et al. **Br J Clin Pharmacol** 1988 Sep;26(3):261-5

Cardiovascular (ECG and systolic time intervals) and anticholinergic effects of repeated doses of femoxetine--a comparison with amitriptyline and placebo in healthy men. Warrington SJ, et al. **Br J Clin Pharmacol** 1989 Mar; 27(3):343-51

Differential susceptibility of cholinergic and noncholinergic neurogenic responses to calcium channel blockers and low Ca2+ medium in rat urinary bladder. Bhat MB, et al. **Br J Pharmacol** 1989 Apr;96(4):837-42

Facilitation by tachykinins of neurotransmission in guinea-pig pulmonary parasympathetic nerves. Hall AK, et al. **Br J Pharmacol** 1989 May;97(1):274-80

Neuromuscular electrophysiology of the filarial helminth Dipetalonema viteae. Rohrer WH, et al. **Comp Biochem Physiol [C]** 1988;91(2):517-23

Stimulation of peripheral cholinergic nerves by glutamate indicates a new peripheral glutamate receptor. Aas P, et al. **Eur J Pharmacol** 1989 May 2;164(1):93-102

Opioid and non-opioid actions of loperamide on cholinergic nerve function in human isolated colon. Burleigh DE. **Eur J Pharmacol** 1988 Jul 26;152(1-2):39-46

GM1 ganglioside counteracts cholinergic and behavioral deficits induced in the rat by intracerebral injection of vincristine. Di Patre PL, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):43-50

Galanin blocks the slow cholinergic EPSP in CA1 pyramidal neurons from ventral hippocampus. Dutar P, et al. **Eur J Pharmacol** 1989 May 19;164(2):355-60

Inhibitory histamine H3-receptors on cholinergic nerves in human airways. Ichinose M, et al. **Eur J Pharmacol** 1989 Apr 25;163(2-3):383-6

Inhibition of cholinergic and non-adrenergic, non-cholinergic bronchoconstriction in the guinea pig mediated by neuropeptide Y and alpha 2-adrenoceptors and opiate receptors. Matran R, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):15-23

Effect of PAF on parasympathetic contraction of canine airways. Bethel RA, et al. **J Appl Physiol** 1989 Jun; 66(6):2629-34

Intraseptal microinjection of adrenocorticotropic hormone1-24 antagonizes pentobarbital-induced narcosis and depression of hippocampal cholinergic activity. Horita A, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):863-6

Effect of l-ephedrine on cholinergic neurotransmission in the isolated guinea pig ileum. Yamamoto R, et al. **Jpn J Pharmacol** 1989 Aug;50(4):511-4

Synchronous facial vascular vasodilation and salivatory response to atropine in the parasympathetically denervated human salivary parotid gland. Levin SL. **Laryngoscope** 1989 Mar;99(3):297-301

AF-DX 116 differentiates between prejunctional muscarine receptors located on noradrenergic and cholinergic nerves. Dammann F, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Mar; 339(3):268-71

Involvement of central histaminergic and cholinergic systems in the morphine-induced increase in blood-brain barrier permeability to sodium fluorescein in mice. Oishi R, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):159-65

Activation of cholinergic neurotransmission by pyridostigmine reverses the inhibitory effect of hyperglycemia on growth hormone (GH) releasing hormone-induced GH secretion in man: does acute hyperglycemia act through hypothalamic release of somatostatin? Peñalva A, et al. **Neuroendocrinology** 1989 May;49(5):551-4

Acute amitriptyline effects on parasympathetic-evoked rat saliva. Yu JH, et al. **Neuropsychobiology** 1989;20(3):132-5

Adrenaline inhibits muscarinic transmission in bullfrog sympathetic ganglia. Akasu T. **Pflugers Arch** 1989 Apr; 413(6):616-21

Excitatory and inhibitory cholinergic effects of yohimbine on isolated guinea-pig small intestine. Del Tacca M, et al. **Pharmacol Res Commun** 1988 Aug;20(8):673-84

Cholinergic dysfunction of heart, pupil, salivary glands, and urinary bladder in healthy volunteers during long-term treatment with clomipramine. Kristensen E, et al. **Psychopharmacology (Berlin)** 1989;98(3):398-402

Potential interactions between GABAb and cholinergic systems: baclofen augments scopolamine-induced performance deficits in the eight-arm radial maze. Sidel ES, et al. **Psychopharmacology (Berlin)** 1988;96(1):116-20

ENZYMOLOGY

Effect of morphine on the rat gastrointestinal cholinergic enzymes. Oriaku ET, et al. **Arch Int Pharmacodyn Ther** 1989 Jan-Feb;297:166-77

Lateralization of brain morphologic and cholinergic abnormalities in Alzheimer's disease. Moossy J, et al. **Arch Neurol** 1989 Jun;46(6):639-42

A brain regional analysis of morphologic and cholinergic abnormalities in Alzheimer's disease. Zubenko GS, et al. **Arch Neurol** 1989 Jun;46(6):634-8

Cholinergic enzyme activities and muscarinic binding in the cerebral cortex of rats of different age and sex. Sirviö J, et al. **Comp Biochem Physiol [C]** 1988;90(1):245-8

Acetylcholinesterase on the dendrites of central cholinergic neurons: an electron microscopical study in the ferret. Henderson Z. **Neuroscience** 1989;28(1):95-108

Reflection of central aminergic-cholinergic imbalance by peripheral enzymes in psychiatric disorders? Fritze J, et al. **Pharmacopsychiatry** 1988 Jul;21(4):182-5

GROWTH & DEVELOPMENT

Development of cholinergic nerve transmission in the chick oesophagus. Miyazaki H, et al. **Br J Pharmacol** 1989 Mar; 96(3):623-30

IMMUNOLOGY

A monoclonal antibody to a parasympathetic neurotrophic factor causes immunoparasympathectomy in mice. Hendry IA, et al. **Brain Res** 1988 Dec 13;475(1):160-3

Alzheimer's disease antibodies bind specifically to a neurofilament protein in Torpedo cholinergic neurons. Chapman J, et al. **J Neurosci** 1989 Aug;9(8):2710-7

METABOLISM

Effect of an original piperazine derivative of tetraline on the adrenergically mediated metabolic responses in cats and rats. Bogoslovova T, et al. **Acta Physiol Pharmacol Bulg** 1988;14(4):55-64

Evidence that cholinergic axon terminals are equipped with both muscarinic and adenosine receptors. Somogyi GT, et al. **Brain Res Bull** 1988 Oct;21(4):575-9

Thyrotropin-releasing hormone (TRH) evokes chloride secretion via cholinergic pathways in the guinea-pig ileum. Carey HV, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):183-6

Cholinergic stimulation of phosphoinositide hydrolysis in the rat pineal gland. Laitinen JT, et al. **Eur J Pharmacol** 1989 Feb 28;161(2-3):237-40

Absence of receptor reserve at striatal dopamine receptors regulating cholinergic neuronal activity. Meller E, et al. **Eur J Pharmacol** 1988 Oct 11;155(1-2):151-4

Acetylcholine and vasoactive intestinal peptide in cerebral blood vessels: effect of extirpation of the sphenopalatine ganglion. Hara H, et al. **J Cereb Blood Flow Metab** 1989 Apr;9(2):204-11

Isolation and characterization of secretory granules storing a vasoactive intestinal polypeptide-like peptide in Torpedo cholinergic electromotor neurones. Agoston DV, et al. **J Neurochem** 1989 Jun;52(6):1729-40

Changes in cholinergic but not in GABAergic markers in amygdala, piriform cortex, and nucleus basalis of the rat brain following systemic administration of kainic acid. Schliebs R, et al. **J Neurochem** 1989 Jul;53(1):212-8

Opiate and peptide inhibition of transmitter release in parasympathetic nerve terminals. Gray DB, et al. **J Neurosci** 1989 May;9(5):1683-92

Opioid mu and kappa receptors on axons of cholinergic excitatory motor neurons supplying the circular muscle of guinea-pig ileum. Johnson SM, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):397-400

Transmitter release patterns of noradrenergic, dopaminergic and cholinergic axons in rabbit brain slices during short pulse trains, and the operation of presynaptic autoreceptors. Mayer A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Dec;338(6):632-43

Central nervous system and insulin secretion. Strubbe JH. **Neth J Med** 1989 Apr;34(3-4):154-67 (24 ref.)

Calcitonin gene-related peptide in rat salivary glands: neuronal localization, depletion upon nerve stimulation, and effects on salivation in relation to substance P. Ekström J, et al. **Neuroscience** 1988 Sep;26(3):933-49

Effects of nerve growth factor on cholinergic brain neurons. Dreyfus CF. **Trends Pharmacol Sci** 1989 Apr;10(4):145-9 (38 ref.)

PHYSIOLOGY

Interactions between noradrenergic and cholinergic mechanisms involved in spinal nociceptive processing. Gordh T Jr, et al. **Acta Anaesthesiol Scand** 1989 Jan; 33(1):39-47

The influence of the pelvic nerves on anorectal motility in the cat. Carlstedt A, et al. **Acta Physiol Scand** 1989 Jan; 135(1):57-64

An electrophysiological in-vivo study on the effects of nerve stimulation, drugs and denervation in the parotid gland of the rat. Thesleff P. **Acta Physiol Scand** 1989 Jun; 136(2):235-43

Effect of passive tilt on sympathetic and parasympathetic components of heart rate variability in normal subjects. Vybiral T, et al. **Am J Cardiol** 1989 May 1;63(15):1117-20

Efferent pelvic nerve activity, ganglionic filtering, and the feline bladder. Satchell P, et al. **Am J Physiol** 1989 Jun; 256(6 Pt 2):R1269-73

Sympathetic-parasympathetic mediation of the cardiac defense response in humans. Fernández MC, et al. **Biol Psychol** 1989 Apr;28(2):123-33

Negative inotropic activity of antilaminin IgG: participation of cholinergic mechanisms. Bacman S, et al. **Br J Pharmacol** 1989 Jun;97(2):377-82

Tachykinin involvement in parasympathetic nerve-evoked salivation of the ferret. Ekström J, et al. **Br J Pharmacol** 1988 Jul;94(3):707-12

Histamine H3-receptors inhibit cholinergic neurotransmission in guinea-pig airways. Ichinose M, et al. **Br J Pharmacol** 1989 May;97(1):13-5

Cholinergic 'blockade' as a model for cholinergic depletion. A comparison of the memory deficits with those of Alzheimer-type dementia and the alcoholic Korsakoff syndrome. Kopelman MD, et al. **Brain** 1988 Oct;111 (Pt 5):1079-110

Loss of neurons in the rat basal forebrain cholinergic projection system after prolonged intake of ethanol. Arendt T, et al. **Brain Res Bull** 1988 Oct;21(4):563-9

Chronotropic responsiveness of developing sinoatrial and ventricular rat myocytes to autonomic agonists following adrenergic and cholinergic innervation in vitro. Atkins DL, et al. **Circ Res** 1989 Jun;64(6):1051-62

Cholinergic constriction in the general circulation and its role in coronary artery spasm. Kalsner S. **Circ Res** 1989 Aug;65(2):237-57 (247 ref.)

Evidence for cholinergically mediated vasodilation at the beginning of isometric exercise in humans. Sanders JS, et al. **Circulation** 1989 Apr;79(4):815-24

Endogenous opioid involvement in the cardiovascular effects of clonidine in rats: role of the parasympathetic nervous system. Kunos G, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:369-74

Central cholinergic pathways and learning and memory processes: presynaptic aspects. Durkin T. **Comp Biochem Physiol [A]** 1989;93(1):273-80 (37 ref.)

Differences in the protein composition of rat parotid salivas evoked by sympathetic and parasympathetic nerve stimulation. Proctor GB, et al. **Comp Biochem Physiol [A]** 1989;92(4):589-92

Modulation of smooth muscle activity by excitatory and inhibitory nerves in the guinea-pig stomach. Komori K, et al. **Comp Biochem Physiol [C]** 1988;91(2):311-9

The effect of sympathetic and parasympathetic activity on QT duration. Clinical study in patients with normal and prolonged QT time. Solti F, et al. **Cor Vasa** 1989;31(1):9-15

Parasympathetic cardiac activity: differential effects of ageing and hypertension. Ajayi AA. **East Afr Med J** 1988 Aug; 65(8):520-4

Cholinergic regulation of thyrotropin secretion in male rats. Männistö PT, et al. **Eur J Pharmacol** 1988 Nov 22; 157(2-3):117-24

Cholinergic antagonism of beta-adrenergic stimulated action potentials and adenylate cyclase activity in rabbit ventricular cardiomyocytes. Watson JM, et al. **Eur J Pharmacol** 1988 Oct 11;155(1-2):101-8

Cholinergically mediated reduction of locomotor activity from the basal forebrain of the rat. Brudzynski SM, et al. **Exp Neurol** 1989 Aug;105(2):197-205

Biochemical evidence for cholinergic activity in retinal blood vessels. Ferrari-Dileo G, et al. **Invest Ophthalmol Vis Sci** 1989 Mar;30(3):473-7

Influence of selective parasympathectomy of the A-V nodal region on atrioventricular conduction in conscious dogs. Dobrowolsky D, et al. **J Auton Nerv Syst** 1988 Aug; 23(2):155-60

Calcium-activated chloride conductance in parasympathetic neurons of the rabbit urinary bladder. Tokimasa T, et al. **J Auton Nerv Syst** 1988 Sep;24(1-2):123-31

Prostaglandin F2 alpha augments the response to parasympathetic fibre stimulation in an isolated innervated preparation of rabbit trachea. Armour CL, et al. **J Auton Pharmacol** 1988 Sep;8(3):251-8

Functional studies on the cholinergic and sympathetic innervation of the rat proximal urethra: effect of pelvic ganglionectomy or experimental diabetes. Maggi CA, et al. **J Auton Pharmacol** 1989 Aug;9(4):231-41

In vivo probe of central cholinergic systems. Meador KJ, et al. **J Gerontol** 1988 Nov;43(6):M158-62

Sympathetic and parasympathetic influence on blood pressure and heart rate variability in Wistar-Kyoto and spontaneously hypertensive rats. Friberg P, et al. **J Hypertens Suppl** 1988 Dec;6(4):S58-60

The bimodal effect of cholinergic blocking agents on the human parotid gland deprived of parasympathetic control. Levin SL. **J Neural Transm** 1988;73(3):239-47

Cholinergic regulation of arterial pressure by the C1 area of the rostral ventrolateral medulla. Giuliano R, et al. **J Neurosci** 1989 Mar;9(3):923-42

Regulation of muscarinic receptors in hippocampus following cholinergic denervation and reinnervation by septal and striatal transplants. Joyce JN, et al. **J Neurosci** 1989 Aug; 9(8):2776-91

Cholinergic synapses and the organization of contrast detection in the crayfish optic lobe. Pfeiffer C, et al. **J Neurosci** 1989 Jun;9(6):1872-82

Autonomic drug effects after chronic lowering of ocular cholinergic input. I. Pupillary responses. Colasanti BK. **J Ocul Pharmacol** 1987 Spring;3(1):23-9

Cholinergic contraction to field stimulation in coronary arteries of cattle. Kalsner S, et al.

J Pharmacol Exp Ther 1989 Jun;249(3):785–9
The effects of atropine and chronic sympathectomy on maximal parasympathetic stimulation of parotid saliva in rats. Ekström J, et al. **J Physiol (Lond)** 1988 Sep;403:105–16
Parasympathetic depression of vas deferens contraction in the guinea–pig involves adenosine receptors. Kurokawa M, et al. **J Physiol (Lond)** 1988 Dec;407:135–53
Possible involvement of the GABAergic system in dopaminergic–cholinergic interactions in electroacupuncture–induced analgesia. Chakrabarti S, et al. **Methods Find Exp Clin Pharmacol** 1988 Sep;10(9):545–9
Cholinergic mechanism in cholecystokinin action on gall bladder motility. Milenov K, et al. **Methods Find Exp Clin Pharmacol** 1988 Dec;10(12):741–6
Age–related impairment in complex maze learning in rats: relationship to neophobia and cholinergic antagonism. Spangler EL, et al. **Neurobiol Aging** 1989 Mar–Apr; 10(2):133–41 (51 ref.)
Effect of arginine vasopressin and oxytocin on acetylcholine–stimulation of corticosteroid and catecholamine secretion from the rat adrenal gland perfused in situ. Porter ID, et al. **Neuropeptides** 1988 Nov–Dec; 12(4):265–71
Fentanyl produces cholinergically–mediated analeptic and EEG arousal effects in rats. Horita A, et al. **Neuropharmacology** 1989 May;28(5):481–6
Modulation of the transmission of signals of the rabbit septum in the presence of influences on the cholinergic system. Brazhnik ES, et al. **Neurosci Behav Physiol** 1989 May–Jun; 19(3):255–63
Enkephalin fibers synapse on cholinergic neurons in the rat sacral intermediolateral nucleus: a double–immunostaining at the light and electron microscopic levels. Kohno J, et al. **Neuroscience** 1989;28(2):487–94
Synaptic potentials induced by postganglionic stimulations in cat bladder parasympathetic neurones. Kumamoto E. **Pflugers Arch** 1989 Jun;414(2):235–44
The Ferrier lecture, 1986. The actions of parasympathetic and sympathetic nerves in human micturition, erection and seminal emission, and their restoration in paraplegic patients by implanted electrical stimulators. Brindley GS. **Proc R Soc Lond [Biol]** 1988 Nov 22;235(1279):111–20 (21 ref.)
Trophic effects on cholinergic striatal interneurons by submaxillary gland transplants. Fischer W, et al. **Prog Brain Res** 1988;78:409–12
Regulation of acetylcholine muscarinic receptors by embryonic septal grafts showing cholinergic innervation of host hippocampus. Joyce JN, et al. **Prog Brain Res** 1988; 78:109–16
Central nervous system grafts of nerve growth factor–rich tissue as an alternative source of trophic support for axotomized cholinergic neurons. Springer JE, et al. **Prog Brain Res** 1988;78:401–7
Physostigmine improves water maze performance following nucleus basalis magnocellularis lesions in rats. Mandel RJ, et al. **Psychopharmacology (Berlin)** 1988;96(3):421–5
The NK–3 tachykinin agonist senktide elicits yawning and chewing mouth movements following subcutaneous administration in the rat. Evidence for cholinergic mediation. Stoessl AJ, et al. **Psychopharmacology (Berlin)** 1988;95(4):502–6
Parasympathetic activation of amylase secretion in the intact and sympathetically denervated rat parotid gland. Asking B, et al. **Q J Exp Physiol** 1989 Jan;74(1):45–52
"Paralytic' secretion after parasympathectomy of rabbit submandibular glands includes a cholinergic component. Garrett JR, et al. **Q J Exp Physiol** 1988 Sep;73(5):737–46
Neurophysiology of penile erection. Jünemann KP, et al. **Urol Res** 1989;17(4):213–7
[Constrictive and stiffening effects of parasympathetic blockade on the pressure response of the aorta to angiotensin in the conscious dog] Cabrera E, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:129–32 (Eng. Abstr.) **(Fre)**
[Inhibitory effect of bronchodilators on cholinergic and peptidergic contractions of guinea–pig isolated bronchial muscle] Kamikawa Y. **Arerugi** 1989 Jan;38(1):23–30 (Eng. Abstr.) **(Jpn)**
[Characteristics of thermograms of the skin of the anterior surface of the trunk in persons with various tonus of the sympathetic and parasympathetic nervous system] Andreichin MA, et al. **Fiziol Zh** 1989 Mar–Apr;35(2):57–61 (Eng. Abstr.) **(Rus)**
[Comparative study of the discharges of sympathetic and parasympathetic nerves during stimulation of the visceral field of the limbic cortex] Baklavadzhian OG, et al. **Fiziol Zh SSSR** 1989 Feb;75(2):161–70 (Eng. Abstr.) **(Rus)**
[The role of the parasympathetic nervous system in regulating the oxygen tension and regional blood flow in the digestive organs of rats] Tsibulevvskil AIu, et al. **Izv Akad Nauk SSSR [Biol]** 1989 May–Jun;(3):461–5 (Eng. Abstr.) **(Rus)**
[Cholinergic neurons in chronically isolated associative cortical slab of the cat] Burchinskaia LF. **Neirofiziologiia** 1989;21(1):60–6 (Eng. Abstr.) **(Rus)**
[The noncholinergic–nonadrenergic nervous system] Bauer V. **Cesk Fyziol** 1986;35(5):399–413 (76 ref.) **(Slo)**

PHYSIOPATHOLOGY

Histamine release from nasal mucosal mast cells in patients with chronic hypertrophic non–allergic rhinitis, after parasympathetic nerve stimulation. Rucci L, et al. **Agents Actions** 1988 Dec;25(3–4):314–20
Subendocardial infarction produces epicardial parasympathetic denervation in canine left ventricle. Martins JB, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H859–66
Parasympathetic denervation of the iris in uremia [letter] [published erratum appears in Ann Intern Med 1989 Apr 1;110(7):578] Idiaquez JC, et al. **Ann Intern Med** 1988 Dec 1;109(11):929
Cognitive deficits in olivopontocerebellar atrophy: implications for the cholinergic hypothesis of Alzheimer's dementia. Kish SJ, et al. **Ann Neurol** 1988 Aug;24(2):200–6
Parasympathetic pupillary involvement in biopsy–proven temporal arteritis. Rabinowich L, et al. **Ann Ophthalmol** 1988 Oct;20(10):400–2
Cholinergic hyperactivity and negative schizophrenic symptoms. A model of cholinergic/dopaminergic interactions in schizophrenia. Tandon R, et al. **Arch Gen Psychiatry** 1989 Aug;46(8):745–53 (135 ref.)
Altered acetylcholine and norepinephrine concentrations in diabetic rat hearts. Role of parasympathetic nervous system in diabetic cardiomyopathy. Akiyama N, et al. **Diabetes** 1989 Feb;38(2):231–6
The relationship of the lock–step phenomenon and precipitous changes in mean arterial blood pressure. Stauffer AZ, et al. **Electroencephalogr Clin Neurophysiol** 1989 Apr;72(4):340–5
The effects of scopolamine and traumatic brain injury on central cholinergic neurons. Saija A, et al. **J Neurotrauma** 1988;5(2):161–70
Concomitant sympathetic and parasympathetic disturbances of myocardial electrogenesis after cerebral contusion in man. Moldoveanu V. **Neurol Psychiatr (Bucur)** 1988 Oct–Dec;26(4):251–7
Contribution of pre– and post–synaptic components to heightened central cholinergic activity in spontaneously hypertensive rats. Makari NF, et al. **Neuropharmacology** 1989 Apr;28(4):379–86
The use of isometric exercise as a means of evaluating the parasympathetic contribution to the tachycardia induced by dynamic exercise in normal man. Gallo L Jr, et al. **Pflugers Arch** 1988 Jul;412(1–2):128–32
Lymphocyte adenylate cyclase: a model for putative adrenergic–cholinergic imbalances in affective disorders? Fritze J, et al. **Pharmacopsychiatry** 1988 Nov;21(6):436–7
[The cholinergic system in the pathophysiology of tardive dyskinesia] Rektor J. **Cesk Psychiatr** 1988 Oct;84(5):289–96 (Eng. Abstr.) **(Cze)**
[Influence of hypertension and age on the sympathetic and parasympathetic components of cardiac baroreflex in the conscious rat] Lo M, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:113–7 (Eng. Abstr.) **(Fre)**
[Parasympathetic component of the regulation of the kallikrein–kinin system in experimental pneumonia] Perevozchikov PN, et al. **Biull Eksp Biol Med** 1988 Oct; 106(10):417–9 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Low–level microwave irradiation and central cholinergic systems. Lai H, et al. **Pharmacol Biochem Behav** 1989 May; 33(1):131–8

SURGERY

Parasympathetic denervation abolishes acetylcholine–induced relaxation in the rat iris dilator. Hasegawa N, et al. **Eur J Pharmacol** 1988 Nov 1; 156(2):291–4

TRANSPLANTATION

Cholinergic grafts in the neocortex or hippocampus of aged rats: reduction of delay–dependent deficits in the delayed non–matching to position task. Dunnett SB, et al. **Exp Neurol** 1988 Oct;102(1):57–64

ULTRASTRUCTURE

Depletion of large dense–cored vesicles from parasympathetic nerve terminals in rat parotid glands after prolonged stimulation of the auriculotemporal nerve. Ekström J, et al. **Regul Pept** 1989 Apr;25(1):61–7
Ultrastructure of cholinergic innervation in the cirrhotic liver in guinea pigs. Neurohistochemical and ultrastructural study. Akiyoshi H. **Virchows Arch [B]** 1989;57(2):81–90

PARASYMPATHOLYTICS

see related

ANTIPARKINSON AGENTS

Antispasmodic effect of amiodarone on gastrointestinal smooth muscle: possible involvement of calcium. Gaion RM, et al. **Arch Int Pharmacodyn Ther** 1988 Jul–Aug; 294:112–24
The antimuscarinic activity of a dopamine receptor agonist (RDS–127) differentiates M2–muscarinic receptors of heart, ileum and trachea in guinea–pig. Sahin I, et al. **Arch Int Pharmacodyn Ther** 1988 Nov–Dec;296:163–72
In vitro comparison of the neuromuscular antinicotinic and intestinal antimuscarinic effects of different nondepolarizing muscle relaxants. Töröcsik A, et al. **Arch Int Pharmacodyn Ther** 1989 May–Jun;299:247–53
Analysis of the side effects of tianeptine. Delalleau B, et al. **Clin Neuropharmacol** 1988;11 Suppl 2:S83–9
Anticholinergic effects of cis–chlorprothixene characterized in rat parotid acini. Undén M, et al. **Eur J Pharmacol** 1989 May 2;164(1):129–38
A study of the anticholinergic activity of terfenadine in normal volunteers. Vargas R, et al. **J Int Med Res** 1989 Mar–Apr;17(2):157–61
Binary antidotes for organophosphate poisoning: aprophen analogues that are both antimuscarinics and carbamates. Leader H, et al. **J Med Chem** 1989 Jul;32(7):1522–8
Structure–activity relationships among methoctramine–related polymethylene tetraamines. Chain–length and substituent effects on M–2 muscarinic receptor blocking activity. Melchiorre C, et al. **J Med Chem** 1989 Jan;32(1):79–84
Bioactivity of the essential oil of Bupleurum fruticosum. Lorente I, et al. **J Nat Prod** 1989 Mar–Apr;52(2):267–72
In vitro study of the anticholinergic and antihistaminic activities of protopine and some derivatives. Ustünes L, et al. **J Nat Prod** 1988 Sep–Oct;51(5):1021–2
Antihistaminic and anticholinergic activities of mequitazine in comparison with clemizole. Martinez–Mir I, et al. **J Pharm Pharmacol** 1988 Sep;40(9):655–6
Comparative anticholinergic properties of thioridazine, mesoridazine and sulforidazine. Niedzwiecki DM, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):126–33
Anti–cholinergic effect of verapamil on the muscarinic acetylcholine receptor–gated K+ channel in isolated guinea–pig atrial myocytes. Ito H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan–Feb; 339(1–2):244–6
Alinidine reverses the descending staircase of isolated rat atria by an antimuscarinic action. Lang U, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Apr; 339(4):456–63
A study to assess the anticholinergic activity of rolipram in healthy elderly volunteers. Ross CE, et al. **Pharmacopsychiatry** 1988 Sep;21(5):222–5
Absence of anticholinergic activity of rolipram, an antidepressant with a novel mechanism of action, in three different animal models in vivo. Wachtel H, et al. **Pharmacopsychiatry** 1988 Sep;21(5):218–21
Antimuscarinic oxotremorine analogs distinguish high and low affinity agonist states of muscarinic receptors. Ringdahl B, et al. **Proc West Pharmacol Soc** 1988;31:57–60
Design and synthesis of antimuscarinics based on physical and mechanical attributes. Gordon RK, et al. **Prog Clin Biol Res** 1989;289:465–70
DARC/PELCO success in anticholinergic research. Mercier C, et al. **Prog Clin Biol Res** 1989;291:203–7
Evaluation of the systemic anticholinergic activity of nasally administered ipratropium bromide. Laurikainen E, et al. **Rhinology** 1988 Jun;26(2):133–8
[Overcoming uterine tube spasm during hysterosalpingography with glucagon] Maleev N, et al. **Akush Ginekol (Sofiia)** 1988;27(6):55–7 (Eng. Abstr.) **(Bul)**
[Preparation and in vitro study of suppositories containing No–Spa. I. Significance of choosing the basic substance. Determination of physical parameters of suppositories] Regdon G, et al. **Acta Pharm Hung** 1989 Jan;59(1):23–31 **(Hun)**
[Preparation and in vitro study of suppositories containing No–Spa. II. Determination of release of the active principle by membrane diffusion methods] Regdon G, et al. **Acta Pharm Hung** 1989 Jan;59(1):32–41 (Eng. Abstr.) **(Hun)**
[Anticholinergic properties of oxitropium bromide (Ba 253) and its metabolites] Kitagawa H, et al. **Nippon Yakurigaku Zasshi** 1989 Feb;93(2):49–54 (Eng. Abstr.) **(Jpn)**

ADMINISTRATION & DOSAGE

Efficacy of cimetropium bromide as pre–medication for double–contrast barium enema. Golfieri G, et al. **Br J Radiol** 1988 Nov;61(731):1087–8
Acetylcholine and choline levels in rabbit fetuses exposed to anticholinergics. McBride WG, et al. **Int J Dev Neurosci** 1987;5(2):117–25
Early morning hyperglycemia in insulin–dependent diabetes: acute and sustained effects of cholinergic blockade. Atiea JA, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):390–5
[Effectiveness of aerosol treatment with spasmolytic agents of obstructive bronchitis in infancy and early childhood] Tatotschenko WK, et al. **Z Erkr Atmungsorgane** 1988; 171(2):168–74 (Eng. Abstr.) **(Ger)**
[Single evening administration of a new antimuscarinic agent telenzepine in therapy of acute duodenal ulcer. Results of a randomized double–blind comparative study versus pirenzepine] Dammann HG, et al. **Z Gastroenterol** 1989 Apr;27(4):203–6 (Eng. Abstr.) **(Ger)**
[Comparative studies of the effect of mictonorm (propiverin hydrochloride) and Spasuret (flavoxate hydrochloride) on the bladder detrusor muscle] Wehnert J, et al. **Z Urol Nephrol** 1989 May;82(5):259–63 (Eng. Abstr.) **(Ger)**
[Effects of long–term administration of oxybutynin hydrochloride (KL007) for the treatment of neurogenic bladder and unstable bladder] Sonoda T, et al. **Hinyokika Kiyo** 1989 Jan;35(1):167–78 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Oxybutynin: is it safe? Baigrie RJ, et al. **Br J Urol** 1988 Oct; 62(4):319–22

Anticholinergic drugs and anaesthesia. Mirakhur RK. **Can J Anaesth** 1988 Sep;35(5):443–7 (27 ref.) **(Eng, Fre)**

Tardive dyskinesia and anticholinergic drugs. A critical review of the literature. Yassa R. **Encephale** 1988 Sep;14 Spec No:233–9 (101 ref.)

Possible mechanisms of anti–cholinergic drug–induced bradycardia. Meyer EC, et al. **Eur J Clin Pharmacol** 1988; 35(5):503–6

Euphorigenic properties of anticholinergics [letter] Knable MB. **J Clin Psychiatry** 1989 May;50(5):186

Identifying persistent adverse effects of anticholinergic drugs in the elderly. Katz IR, et al. **J Geriatr Psychiatry Neurol** 1988 Oct–Dec;1(4):212–7

Side effects of therapeutic drugs against organophosphate poisoning. Wolthuis OL, et al. **Neurotoxicol Teratol** 1989 May–Jun;11(3):221–5

[The central anticholinergic syndrome. An overview] Dworacek B, et al. **Anaesthesiol Reanim** 1988;13(6):319–26 (50 ref.) (Eng. Abstr.) **(Ger)**

ANALYSIS

Radioreceptor assay of anticholinergic drugs. Iisalo E, et al. **Ann Clin Res** 1988;20(5):367–72

Determination of oxybutinin chloride in pharmaceuticals by reversed–phase ion–pair liquid chromatography with two counter–ions in the eluent. De Schutter JA, et al. **J Chromatogr** 1988 Oct 26;450(3):337–42

ANTAGONISTS & INHIBITORS

Inhibition by glibenclamide of the vasorelaxant action of cromakalim in the rat. Buckingham RE, et al. **Br J Pharmacol** 1989 May;97(1):57–64

BLOOD

Determination of telenzepine in human serum by gas chromatography–mass spectrometry. Sturm E, et al. **J Chromatogr** 1988 Aug 19;430(1):43–51

[3H]N–methylscopolamine binding to muscarinic receptors in human peripheral blood lymphocytes: characterization, localization on T–lymphocyte subsets and age–dependent changes. Eva C, et al. **Neuropharmacology** 1989 Jul; 28(7):719–26

CHEMICAL SYNTHESIS

Synthesis of new annellated flavonoid derivatives possessing spasmolytic activity—VII. Ertan R, et al. **Arch Pharm (Weinheim)** 1989 Apr;322(4):237–9

Synthesis of some substituted carbamodithioic acid esters and their anticholinergic properties. Safak C, et al. **Arch Pharm (Weinheim)** 1988 Dec;321(12):859–61

Molecular requirements for antimuscarinic activity in 1,3–oxathiolanes. Angeli P, et al. **Drug Des Deliv** 1988 May; 2(4):263–72

Novel 'soft' anticholinergic agents. Hammer RH, et al. **Drug Des Deliv** 1988 Feb;2(3):207–19

3–(aminoalkyl)–1,2,3,4–tetrahydro–5H–[1]benzopyrano[3,4–c] pyridin–5–ones as potential anticholinergic bronchodilators. Connor DT, et al. **J Med Chem** 1989 Mar;32(3):683–8

Tricyclic compounds as selective muscarinic receptor antagonists. 3. Structure–selectivity relationships in a series of cardioselective (M2) antimuscarinics. Engel WW, et al. **J Med Chem** 1989 Aug;32(8):1718–24

Synthesis and biological evaluation of [125I]– and [123I]–4–iododexetimide, a potent muscarinic cholinergic receptor antagonist. Wilson AA, et al. **J Med Chem** 1989 May;32(5):1057–62

IMMUNOLOGY

Antigenicity tests on propiverine hydrochloride in guinea pigs and mice. Kouchi Y, et al. **J Toxicol Sci** 1989 May; 14(2):143–51

ISOLATION & PURIFICATION

Isoflavones as spasmolytic principles of Piscidia erythrina. Della Loggia R, et al. **Prog Clin Biol Res** 1988;280:365–8

METABOLISM

Tiropramide and metabolites in blood and plasma after intravenous or peroral administration of 14C–tiropramide to the rat. Setnikar I, et al. **Arzneimittelforschung** 1988 Dec; 38(12):1815–9

Metabolism and excretion of 14C–tiropramide after single intravenous or peroral administration to the rat. Setnikar I, et al. **Arzneimittelforschung** 1989 Mar;39(3):328–34

Affinity of muscarinic receptor antagonists for three putative muscarinic receptor binding sites. Delmendo RE, et al. **Br J Pharmacol** 1989 Feb;96(2):457–64

Displacement of [3H]oxotremorine–M binding by muscarinic antagonists in guinea–pig atrial and ileal membrane homogenates. Choo LK, et al. **Eur J Pharmacol** 1988 Jul 7;151(2):197–204

Antagonists and agonists interactions with the muscarinic receptor of the rat large airways. Scott T, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):136–42

Antagonist binding properties of five cloned muscarinic receptors expressed in CHO–K1 cells. Buckley NJ, et al. **Mol Pharmacol** 1989 Apr;35(4):469–76

Determination of the association and dissociation rate constants of muscarinic antagonists on rat pancreas: rank order of potency varies with time. Waelbroeck M, et al. **Mol Pharmacol** 1989 Sep;36(3):405–11

Receptor binding studies of the flavone, REC 15/2053, and other bladder spasmolytics. Abbiati GA, et al. **Pharm Res** 1988 Jul;5(7):430–3

Allosteric stabilization of 3H–N–methylscopolamine binding in guinea–pig myocardium by an antidote against organophosphate intoxication. Jepsen K, et al. **Pharmacol Toxicol** 1988 Sep;63(3):163–8

[The disposition of 2–phenyl–bicyclo[2.2.1]–heptane–2–carbonic acid (4'–diethylamino–propyl)–ester hydrochloride in the rat. 3. The metabolism of the endo–epimers of bornaprin] Neidlein R, et al. **Arch Pharm (Weinheim)** 1988 Nov; 321(11):773–80 (Eng. Abstr.) **(Ger)**

[Studies on the metabolism of the bladder spasmolytic, propiverin (mictonorm) in humans] Wengler A, et al. **Pharmazie** 1988 Sep;43(9):652–3 **(Ger)**

[Individual characteristics and effects of spasmolytics in relation to the oxidation phenotype of the marker preparation amidopyrine in children with digestive and respiratory diseases] Tarakhovskiĭ ML, et al. **Pediatriia** 1988;(4):43–7 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Distribution of tiropramide and metabolites after single intravenous or peroral administration of 14C–tiropramide to the rat. Setnikar I, et al. **Arzneimittelforschung** 1989 May; 39(5):579–86

Pharmacodynamic profile of fenoverine, a novel modulator of smooth muscle motility. De Santis D, et al. **Drugs Exp Clin Res** 1989;15(1):37–42

Tolerability and steady–state pharmacokinetics of terodiline and its main metabolites in elderly patients with urinary incontinence. Hallén B, et al. **Eur J Clin Pharmacol** 1989; 36(5):487–93

[The disposition of bornaprine hydrochloride in the rat. 1. Pharmacokinetics: synthesis, plasma level and elimination] Neidlein R, et al. **Arzneimittelforschung** 1989 Apr; 39(4):484–7 (Eng. Abstr.) **(Ger)**

[Triperiden (Norakin): biotransformation in vivo and in vitro] Haussner M, et al. **Pharmazie** 1988 Jul;43(7):489–92 (Eng. Abstr.) **(Ger)**

PHARMACOLOGY

Status of cyclopentolate as a cycloplegic in children: a comparison with atropine and homatropine. Khurana AK, et al. **Acta Ophthalmol (Copenh)** 1988 Dec;66(6):721–4

Effects of an anti–cholinergic on the function of patulous eustachian tube. Morita M, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;458:63–6

Vagolytic effect of propafenone [letter] Alboni P, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1648

Pentobarbital anesthesia alters pulmonary vascular response to neural antagonists. Nyhan DP, et al. **Am J Physiol** 1989 May;256(5 Pt 2):H1384–92

An "epithelial" preparation from the canine gastric mucosa: responses to secretagogues. Rangachari PK, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):G46–51

Anticholinergic blockade of beta–blocker–induced bronchoconstriction. Ind PW, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1390–4

Influence of various cholinergic and anticholinergic drugs on rectal temperature in rats. Simonić A, et al. **Arch Int Pharmacodyn Ther** 1988 Jul–Aug;294:273–82

Inhibition of calmodulin dependent c–AMP–phosphodiesterase by moxaverine and papaverine. Mannhold R. **Arzneimittelforschung** 1988 Dec; 38(12):1806–8

Bronchospasmolytic effect of oxitropium bromide following powder inhalation in anaesthetized dogs. Traunecker W. **Arzneimittelforschung** 1988 Nov;38(11):1623–4

Facilitation of inhibitory avoidance by hypertonic saline is reversed by a vasopressin and a nicotinic antagonist. Baratti CM, et al. **Behav Neural Biol** 1989 May;51(3):424–35

The potassium channel opening drug cromakalim produces arterioselective vasodilation in the upper limbs of healthy volunteers. Webb DJ, et al. **Br J Clin Pharmacol** 1989 Jun; 27(6):757–61

Subclassification of atrial and intestinal muscarinic receptors of the rat—direct binding studies with agonists and antagonists. Brunner F. **Br J Pharmacol** 1989 Jun; 97(2):572–8

The effect of cromakalim on the smooth muscle of the guinea–pig urinary bladder. Foster CD, et al. **Br J Pharmacol** 1989 May;97(1):281–91

Anti–cholinergic effects of quinidine, disopyramide, and procainamide in isolated atrial myocytes: mediation by different molecular mechanisms. Nakajima T, et al. **Circ Res** 1989 Feb;64(2):297–303

Electrophysiological study of intravenous pinaverium bromide in cardiology. Guerot C, et al. **Curr Med Res Opin** 1988;11(2):73–9

Effects of magnesium citrate and clidinium bromide on the excretion of activated charcoal in normal subjects. Vuignier BI, et al. **DICP** 1989 Jan;23(1):26–9

Further studies on the pharmacodynamic properties and organ selectivity of octylonium bromide. Manzini S, et al. **Drugs Exp Clin Res** 1988;14(4):265–70

Characterization of the antimuscarinic effect of heptane–1,7–bis–(dimethyl–3'–phthalimidopropyl ammonium bromide). Choo LK, et al. **Eur J Pharmacol** 1989 Mar 29;162(3):429–35

UH–AH 37, an ileal–selective muscarinic antagonist that does not discriminate between M2 and M3 binding sites. Doods HN, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):215–8

Interaction of telenzepine with muscarinic receptors in mammalian sympathetic ganglia. Galvan M, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):1–10

p–fluoro–hexahydro–sila–difenidol: the first M2 beta–selective muscarinic antagonist. Lambrecht G, et al. **Eur J Pharmacol** 1988 Jul 26;152(1–2):193–4

Effects of anticholinergic drugs on regional brain neurotensin concentrations. Levant B, et al. **Eur J Pharmacol** 1989 Jun 20;165(2–3):327–30

Methoctramine, a selective M2 alpha muscarinic receptor antagonist, does not inhibit carbachol–induced drinking in the rat. Massi M, et al. **Eur J Pharmacol** 1989 Apr 25; 163(2–3):387–91

Allosteric interactions of three muscarine antagonists at bovine tracheal smooth muscle and cardiac M2 receptors. Roffel AF, et al. **Eur J Pharmacol** 1989 Mar 7;172(1):61–70

The affinity, selectivity and biological activity of telenzepine enantiomers. Schudt C, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):87–96

Effect of M2 muscarinic receptor antagonist 4–DAMP, on prostaglandin synthesis and mechanical function in the isolated rabbit heart. Jaiswal N, et al. **Gen Pharmacol** 1989; 20(4):497–502

Pharmacological properties of tiropramide, an antispasmodic drug. Takayanagi I, et al. **Gen Pharmacol** 1989;20(3):335–9

Effect of muscarinic and nicotinic–cholinergic blockade on the glucagon response to insulin–induced hypoglycemia in normal men. Coiro V, et al. **Horm Metab Res** 1989 Feb; 21(2):102–3

Differences in antagonist affinities at muscarinic receptors in chick and guinea–pig. Choo LK, et al. **J Auton Pharmacol** 1988 Sep;8(3):259–66

Contractile responses of tracheal smooth muscle in organophosphate–treated swine: 2. Effects of antagonists. Murali Mohan P, et al. **J Auton Pharmacol** 1988 Jun; 8(2):107–17

Combined effect of disopyramide and bethanechol: use of bethanechol to prevent anticholinergic side effects of disopyramide without reduction of antiarrhythmic efficacy. Konishi T, et al. **J Cardiovasc Pharmacol** 1989 Aug; 14(2):341–50

Endothelin–1–induced contractions of vascular and tracheal smooth muscle: effects of nicardipine and BRL 34915. Turner NC, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S180–2

Evidence for cholinergic modulation of aldosterone secretion in man. Stern N, et al. **J Clin Endocrinol Metab** 1989 Aug; 69(2):294–8

The bimodal effect of cholinergic blocking agents on the human parotid gland deprived of parasympathetic control. Levin SL. **J Neural Transm** 1988;73(3):239–47

Inositol lipid metabolism in rat hippocampal formation slices: basal metabolism and effects of cholinergic agonists. Stephens LR, et al. **J Neurochem** 1989 Jan;52(1):179–86

Effects of chronic administration of neuroleptic and anticholinergic agents on densities of D2 dopamine and muscarinic cholinergic receptors in rat striatum. Boyson SJ, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):987–93

Binding and functional characterization of the cardioselective muscarinic antagonist methoctramine. Giraldo E, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):1016–20

Contribution of M2 alpha and M2 beta muscarinic receptors to the action of cholinergic stimuli on prostaglandin synthesis and mechanical function in the isolated rabbit heart. Jaiswal N, et al. **J Pharmacol Exp Ther** 1988 Oct; 247(1):104–13

R and S enantiomers of oxybutynin: pharmacological effects in guinea pig bladder and intestine. Kachur JF, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):867–72

Characterization of the striatal M2 muscarinic receptor mediating inhibition of cyclic AMP using selective antagonists: a comparison with the brainstem M2 receptor. McKinney M, et al. **J Pharmacol Exp Ther** 1989 Aug; 250(2):565–72

Irreversible and quaternary muscarinic antagonists discriminate multiple muscarinic receptor binding sites in rat brain. Norman AB, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1116–22

Inhibition of the GABA receptor–gated chloride ion channel in brain by noncompetitive inhibitors of the nicotinic receptor–gated cation channel. Schwartz RD, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):963–70

Spontaneous regeneration of free muscarinic receptor after alkylation by BM 123. I. Recovery in vivo and in cell culture. Waite JJ, et al. **J Pharmacol Exp Ther** 1989 Jan; 248(1):111–8

Spontaneous regeneration of free muscarinic receptor after alkylation by BM 123. II. Recovery in broken cell preparations. Waite JJ, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):119–26

Novel and versatile superfusion system. Its use in the evaluation of some spasmogenic and spasmolytic agents using guinea–pig isolated tracheal smooth muscle. Coleman

RA, et al. **J Pharmacol Methods** 1989 Mar;21(1):71–86

In vitro intravesical instillation of anticholinergic, antispasmodic and calcium blocking agents (rabbit whole bladder model). Kato K, et al. **J Urol** 1989 Jun; 141(6):1471–5

Effect of oxitropium bromide (Ba253) on isolated respiratory smooth muscle and release of chemical mediators from passively sensitized lung fragments. Kohno SW, et al. **Jpn J Pharmacol** 1989 Jun;50(2):207–16

Effect of oxitropium bromide (Ba253) on increased airway resistance induced by various agonists and antigen in the guinea pig. Kohno SW, et al. **Jpn J Pharmacol** 1989 Aug; 50(4):455–66

Time-related facilitation and suppression of drinking by muscarinic anticholinergic drugs in water non-deprived rats. Kuribara H, et al. **Jpn J Pharmacol** 1988 Oct; 48(2):195–201

Effect of cimetropium bromide and other antispasmodic compounds on in vitro guinea-pig gallbladder. Scarpignato C, et al. **Methods Find Exp Clin Pharmacol** 1989 May; 11(5):323–9

Tetrahydroaminoacridine and other allosteric antagonists of hippocampal M1 muscarine receptors. Potter LT, et al. **Mol Pharmacol** 1989 May;35(5):652–60

The relative selectivity of anticholinergic drugs for the M1 and M2 muscarinic receptor subtypes. Burke RE. **Mov Disord** 1986;1(2):135–44

Interaction of agonists and selective antagonists with gastric smooth muscle muscarinic receptors. Lucchesi PA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan–Feb; 339(1–2):145–51

Selective antagonism of muscarinic potentials on the superior cervical ganglion of the rat. Newberry NR, et al. **Neuropharmacology** 1989 May;28(5):487–93

Myorelaxant effect after intrathecal injection of antispastic drugs in rats. Klockgether T, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):221–6

Propranolol and methylatropine antagonize the cardiovascular effects produced by microinjection of the TRH analog MK-771 into the preoptic suprachiasmatic nucleus. Sills MA, et al. **Peptides** 1988 Jul–Aug;9(4):893–8

Antimuscarinic effects of (R)- and (S)- oxyphencyclimine hydrochloride. Schjelderup L, et al. **Pharm Res** 1988 Apr; 5(4):236–7

Brain localization of cholinergic influence on male sex behavior in rats: antagonists. Hull EM, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):175–8

Comparing the cardiac vagolytic effects of atropine and methylatropine in rhesus macaques. Jansen HT, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):175–9

Effects of an irreversible muscarinic agonist (BM123) on avoidance and spontaneous alternation performance. Overstreet DH, et al. **Pharmacol Biochem Behav** 1988 Oct; 31(2):337–43

Control of gastric acid secretion by histamine H2 receptor antagonists and anticholinergics. Bertaccini G, et al. **Pharmacol Res** 1989 Jul–Aug;21(4):339–52 (57 ref.)

Identification of orally administered cimetropium bromide in the colon of the rat and its possible local spasmolytic effect. De Conti L, et al. **Pharmacol Res** 1989 Jan–Feb; 21(1):125–6

Assessment of selectivity of muscarinic antagonists for M1 and M2 receptors in rabbit isolated vas deferens. Eltze M. **Pharmacology** 1988;37 Suppl 1:40–7

An acid-independent antiulcer effect of M1 antimuscarinics in the rat. Kromer W, et al. **Pharmacology** 1988;37 Suppl 1:48–53

Antidepressants and human memory: an investigation of four drugs with different sedative and anticholinergic profiles [published erratum appears in Psychopharmacology (Berlin) 1989;97(1):139] Curran HV, et al. **Psychopharmacology (Berlin)** 1988;95(4):520–7

Effects of cholinergic and anticholinergic drugs on ketamine-induced linguopharyngeal motor activity. Marco LA, et al. **Psychopharmacology (Berlin)** 1988;96(4):484–6

The effect of some selective agonists and antagonists on peripheral muscarinic receptors. Gardner AL, et al. **Trends Pharmacol Sci** 1988 Feb;Suppl:40–3 (31 ref.)

Polymethylene tetramines: a new generation of selective muscarinic antagonists. Melchiorre C. **Trends Pharmacol Sci** 1988 Jun;9(6):216–20 (34 ref.)

Relaxation of isolated corpus cavernosum induced by smooth-muscle relaxant drugs. A comparative study. Barbanti G, et al. **Urol Res** 1988;16(4):299–302

[Effects of eleven muscarinic drugs on the trachea and ileum of the guinea pig in vitro] Xiong WC, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Mar;9(2):115–8 (Eng. Abstr.) (Chi)

[Double-blind study of the effect of cyclotropium bromide on the smooth musculature of the esophagus. Description of a test of spasmolytic action] Lepsien G, et al. **Arzneimittelforschung** 1988 Jul;38(7):927–31 (Eng. Abstr.) (Ger)

[Muscarinic receptors] Heinzl S. **Med Monatsschr Pharm** 1988 Nov;11(11):359–60 (Ger)

[Ultrasonics in the study of gallbladder kinetics and changes after administration of cimetropium bromide] Ganga R, et al. **Minerva Dietol Gastroenterol** 1988 Oct–Dec;34(4):253–6 (Eng. Abstr.) (Ita)

[Effect of oxybutynin on lower urinary tract function] Nishizawa O, et al. **Hinyokika Kiyo** 1988 Aug;34(8):1383–7 (Eng. Abstr.) (Jpn)

[Effect of propiverine hydrochloride on the function of the bladder in dogs] Kaneko S, et al. **Nippon Yakurigaku Zasshi** 1989 Feb;93(2):55–60 (Eng. Abstr.) (Jpn)

[General pharmacological studies on a bronchodilator, oxitropium bromide (Ba 253)] Kitagawa H, et al. **Nippon Yakurigaku Zasshi** 1988 Jul;92(1):49–60 (Eng. Abstr.) (Jpn)

[Peripheral cholinolytic action—one of the effects of sidnofen] Samonina GE, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):449–51 (Eng. Abstr.) (Rus)

[Effect of metatsin on digestive enzyme activity] Zakirov UB, et al. **Farmakol Toksikol** 1989 Mar–Apr;52(2):40–3 (Eng. Abstr.) (Rus)

[Clinical value of the acetylcholine and exercise tests and their safety provided by the use of broncholytics] Khadartsev AA, et al. **Klin Med (Mosk)** 1989 Jun; 67(6):75–9 (Eng. Abstr.) (Rus)

POISONING

An apparent fatal overdose of terodiline. Cattini RA, et al. **J Anal Toxicol** 1989 Mar–Apr;13(2):110–2

Camylofin intoxication reversed by naloxone [letter] Schvartsman S, et al. **Lancet** 1988 Nov 26;2(8622):1246

[Acute drug poisoning: our experience 1966–1985] Pach J, et al. **Pol Tyg Lek** 1989 Jan 2;44(1):7–10 (Pol)

[Usefulness of physostigmine in the treatment of anticholinergic drug poisoning (letter)] Nogué S, et al. **Med Clin (Barc)** 1988 May 7;90(18):756–7 (Spa)

THERAPEUTIC USE

Sebum secretion in idiopathic Parkinson's disease: effect of anticholinergic and dopaminergic drugs. Villares JC, et al. **Acta Neurol Scand** 1989 Jul;80(1):57–63

Oxybutynin chloride for geriatric urinary dysfunction: a double-blind placebo-controlled study. Zorzitto ML, et al. **Age Ageing** 1989 May;18(3):195–200 (28 ref.)

Do anti-allergic drugs or anticholinergic drugs have a role in the treatment of asthma? Lewis AJ. **Agents Actions Suppl** 1988;23:157–72 (38 ref.)

Oral cimetropium bromide, a new antimuscarinic drug, for long-term treatment of irritable bowel syndrome. Centonze V, et al. **Am J Gastroenterol** 1988 Nov;83(11):1262–6

Controversies in pulmonary medicine. Patients with COPD should be started initially on anticholinergic bronchodilators. Chapman KR, et al. **Am Rev Respir Dis** 1988 Oct;138(4):1074–5

Oxybutinin versus propantheline in the management of detrusor instability. A patient-regulated variable dose trial. Holmes DM, et al. **Br J Obstet Gynaecol** 1989 May; 96(5):607–12

P3 and CT scan in patients with chronic schizophrenia [letter] Barrett K, et al. **Br J Psychiatry** 1988 Aug;153:263

Terodiline in the treatment of children with unstable bladders. Hellström AL, et al. **Br J Urol** 1989 Apr; 63(4):358–62

Lack of effect of cholinergic blocking and alpha-adrenergic stimulation on nocturnal incontinence after ileocaecal bladder replacement. A controlled randomised study. Jakobsen H, et al. **Br J Urol** 1989 Apr;63(4):379–83

The use of anticholinergic agents in the treatment of airways disease. Gross NJ. **Clin Chest Med** 1988 Dec;9(4):591–8

Paroxysmal dystonia responsive to anticholinergic drugs. Micheli F, et al. **Clin Neuropharmacol** 1987 Aug;10(4):365–9

Comparison of the gastric antisecretory and antiulcer potencies of telenzepine, pirenzepine, ranitidine and cimetidine in the rat. Riedel R, et al. **Digestion** 1988; 40(1):25–32

Effects of antimuscarinic agents, H2-blockers and omeprazole on rat chronic gastric ulcer after long- and short-term administration. Chiavarini M, et al. **Farmaco [Sci]** 1988 May;43(5):479–87

Motor effects of locally administered pinaverium bromide in the sigmoid tract of patients with irritable bowel syndrome. Passaretti S, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Jan;27(1):47–50

ACTH and the effects of anticholinergic drugs in dystonia. Sandyk R. **Int J Neurosci** 1989 Mar;45(1–2):123–6 (29 ref.)

Global perspectives in the management of asthma. Falliers CJ. **J Asthma** 1988;25(5):285–91 (28 ref.)

Topical oxybutynin chloride for relaxation of dysfunctional bladders. Brendler CB, et al. **J Urol** 1989 Jun;141(6):1350–2

Antimuscarinic drugs. Stockbrügger RW. **Methods Find Exp Clin Pharmacol** 1989;11 Suppl 1:79–86 (34 ref.)

Analysis of open-label trials in torsion dystonia using high dosages of anticholinergics and other drugs. Greene P, et al. **Mov Disord** 1988;3(1):46–60

Anticholinergics and the emergency management of bronchial asthma. Ros SP. **Pediatr Emerg Care** 1988 Sep; 4(3):187–8

M1-selective muscarinic antagonists in peptic ulcer therapy. Proceedings of a workshop. October 2 and 3, 1987, Constance, FRG. **Pharmacology** 1988;37 Suppl 1:1–66

Clinical significance of M1 receptor antagonists. Stockbrügger RW. **Pharmacology** 1988;37 Suppl 1:54–63 (29 ref.)

Comparison of the effect of oxitropium bromide and of slow-release theophylline on nocturnal asthma. Bellia V, et al. **Postgrad Med J** 1988 Aug;64(754):583–6

The relationship of symptomatology and medication to electrodermal activity in schizophrenia. Green MF, et al. **Psychophysiology** 1989 Mar;26(2):148–57

Effect of four-week treatment with oxitropium bromide on lung mucociliary clearance in patients with chronic bronchitis or asthma. Pavia D, et al. **Respiration** 1989; 55(1):33–43

Manometric evaluation of cimetropium bromide activity in patients with the nutcracker oesophagus. Bassotti G, et al. **Scand J Gastroenterol** 1988 Nov;23(9):1079–84

Practical therapy of Parkinson's disease. Kurlan R. **Semin Neurol** 1987 Jun;7(2):160–6 (21 ref.)

The effect of the M1-selective telenzepine on esophageal acid exposure in healthy volunteers. Stockbrügger RW, et al. **Z Gastroenterol** 1988 Jun;26(6):297–302

[Use of aprophen in the preparation for and induction of labor] Grudev D, et al. **Akush Ginekol (Sofiia)** 1988; 27(4):39–43 (Eng. Abstr.) (Bul)

[Effect of spasmolytic agents on microanastomosis of femoral artery of rats] Hou SM. **Taiwan I Hsueh Hui Tsa Chih** 1988 Apr;87(4):459–64 (Eng. Abstr.) (Chi)

[Effect of anticholinergics on cardiovascular reactivity in subjects with essential arterial hypertension being administered a sympathetic agonist] Bubueanu G, et al. **Physiologie** 1988 Oct–Dec;25(4):191–9 (Fre)

[Efficacy of tropatepine in paroxysmal sweats in a parkinsonian patient (letter)] Devoize JL, et al. **Presse Med** 1989 May 27;18(21):1079 (Fre)

[Anticholinergic agents in respiratory tract diseases. Therapeutic chances are underestimated. Therapy forum. 28–30 October 1988, Wiesbaden] **Fortschr Med** 1988;106 Suppl 54:1–19 (Ger)

[Staged therapy of chronic obstructive respiratory tract diseases. Treatment of chronic obstructive respiratory tract diseases by the established physician] Hausen T. **Fortschr Med** 1989 Mar 20;107(9):210–3 (Eng. Abstr.) (Ger)

[Therapy of obstructive respiratory tract diseases. I: Beta 2-sympathomimetic drugs and anticholinergic agents (m-cholinergic receptor blockers)] Ukena D, et al. **Med Klin** 1989 Jun 15;84(6):294–302 (0 ref.) (Ger)

[Receptor diseases. 1: Disorders of adrenergic receptors, cholinergic receptors and neurotransmitters] Nestele M. **Med Monatsschr Pharm** 1989 May;12(5):147–52 (0 ref.) (Ger)

[Holter's ECG monitoring in esophagogastroduodenoscopy. Premedication with tiropramide. Preliminary notes] Cosentino F, et al. **Minerva Dietol Gastroenterol** 1989 Jan–Mar;35(1):31–4 (Eng. Abstr.) (Ita)

[Tiropramide hydrochloride in the premedication of diagnostic and therapeutic proctosigmoidocolonoscopy (endoscopic polypectomy) and the treatment of colonic diverticulosis] De Masi E. **Minerva Med** 1989 Jun; 80(6):587–90 (Eng. Abstr.) (Ita)

[Airway contraction and anti-asthmatic agents] Hakoda H, et al. **Fukuoka Igaku Zasshi** 1989 Feb;80(2):77–80 (0 ref.) (Jpn)

[Clinical study of terodiline hydrochloride on nervous pollakisuria] Park YC, et al. **Hinyokika Kiyo** 1989 Mar; 35(3):537–40 (Eng. Abstr.) (Jpn)

[The ambiguous nature of the action of m-cholinolytics in chlorophos poisoning] Kosmachev AB, et al. **Farmakol Toksikol** 1988 Sep–Oct;51(5):86–9 (Eng. Abstr.) (Rus)

[Use of no-shpa and phenicaberan in hypertonic biliary dyskinesia in patients with viral hepatitis] Andreichin MA, et al. **Vrach Delo** 1988 Nov;(11):100–1 (Eng. Abstr.) (Rus)

[Effect of fenicaberan on liver function in patients with chronic noncalculous cholecystitis] Skroban NV. **Vrach Delo** 1989 Jun;(6):18–20 (Eng. Abstr.) (Rus)

[Treatment of motor disorders in the spastic form of infantile cerebral palsy with galanthamine and ganglerone combined with functional biocontrol technics] Shaltor VM, et al. **Zh Nevropatol Psikhiatr** 1988;88(8):37–9 (Eng. Abstr.) (Rus)

TOXICITY

A new method for long-term inhalation toxicity studies for bronchospasmolytic aerosol formulations in dogs. Pauluhn J, et al. **J Appl Toxicol** 1989 Aug;9(4):259–64

Mutagenicity tests on propiverine hydrochloride. Ohuchida A, et al. **J Toxicol Sci** 1989 May;14(2):131–41

PARASYMPATHOMIMETICS

Nicotine antagonists: phosphoinositide turnover and receptor binding to determine muscarinic properties. Benerjee S, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2933–5

3D-QSAR. Towards a quantitative three-dimensional description of muscarinic agonists. Lagersted A, et al. **Prog Clin Biol Res** 1989;291:333–6

ADVERSE EFFECTS

Systemic side effects of glaucoma medications. Cantor LB. **Indiana Med** 1989 Feb;82(2):105–7

CHEMICAL SYNTHESIS

Synthesis and muscarinic activity of a series of tertiary and quaternary N-substituted guvacine esters structurally related to arecoline and arecaidine propargyl ester. Wolf-Pflugmann M, et al. **Arzneimittelforschung** 1989 May;

39(5):539–44
Alkylating partial muscarinic agonists related to oxotremorine. N-[4-[(2-haloethyl)methylamino]-2-butynyl]-5-methyl-2-pyrrolidones. Ringdahl B, et al. **J Med Chem** 1989 Mar; 32(3):659–63

METABOLISM

Autoradiographic analyses of agonist binding to muscarinic receptor subtypes. Messer WS Jr, et al. **Biochem Pharmacol** 1989 Mar 1;38(5):837–50
Affinities of different cholinergic agonists for the high and low affinity states of hippocampal M1 muscarine receptors. Potter LT, et al. **J Pharmacol Exp Ther** 1989 Mar; 248(3):974–8
Antagonists and agonists interactions with the muscarinic receptor of the rat large airways. Scott T, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):136–42
Binding of semirigid nicotinic agonists to nicotinic and muscarinic receptors. Spivak CE, et al. **Mol Pharmacol** 1989 Jul;36(1):177–84

PHARMACOLOGY

Correlation between the binding parameters of muscarinic agonists and their inhibition of adenylate cyclase activity. Ehlert FJ. **Adv Exp Med Biol** 1988;236:265–76 (36 ref.)
Influence of various cholinergic and anticholinergic drugs on rectal temperature in rats. Simonić A, et al. **Arch Int Pharmacodyn Ther** 1988 Jul–Aug;294:273–82
Role of dentate gyrus cells in retention of a radial arm maze task and sensitivity of rats to cholinergic drugs. Tilson HA, et al. **Behav Neurosci** 1988 Dec;102(6):835–42
Dissociation of alpha-adrenergic and cholinergic stimulated inositol trisphosphate-dependent calcium mobilization at the "post-receptor" level. Kowatch MA, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):347–51
Effect of cholinergic agents on human spermatozoa motility. Dwivedi C, et al. **Biochem Med Metab Biol** 1989 Aug; 42(1):66–70
Formation of inositol polyphosphates in cultured human sweat duct cells in response to cholinergic stimulation. Doughney C, et al. **Biochim Biophys Acta** 1989 Mar 6; 1010(3):352–6
Subclassification of atrial and intestinal muscarinic receptors of the rat—direct binding studies with agonists and antagonists. Brunner F. **Br J Pharmacol** 1989 Jun; 97(2):572–8
Prejunctional modulation of acetylcholine release from the skeletal neuromuscular junction: link between positive (nicotinic)- and negative (muscarinic)-feedback modulation. Vizi ES, et al. **Br J Pharmacol** 1989 May; 97(1):65–70
Desensitization of the nicotinic acetylcholine receptor: molecular mechanisms and effect of modulators. Ochoa EL, et al. **Cell Mol Neurobiol** 1989 Jun;9(2):141–78 (325 ref.)
Effect of a new cholinergic agonist, aclatonium napadisilate, on exocrine and endocrine rat pancreas. Otsuki M, et al. **Dig Dis Sci** 1989 Aug;34(8):1249–56
Mass changes of inositol(1,4,5)trisphosphate in trachealis muscle following agonist stimulation. Chilvers ER, et al. **Eur J Pharmacol** 1989 May 30;164(3):587–90
The effect of strontium on the drug-receptor interaction on cholinergic drugs. Macara B, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):51–8
Heterogeneity of muscarinic autoreceptors and heteroreceptors in the rat brain: effects of a novel M1 agonist, AF102B. Ono S, et al. **Eur J Pharmacol** 1988 Oct 11;155(1-2):77–84
Reciprocal hindlimb scratching and putative subtype-selective muscarinic agents. Raffa RB, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):289–92
Muscarinic agents modify kinetics properties of membrane-bound guanylyl cyclase activity. Lippo de Becemberg I, et al. **FEBS Lett** 1989 Aug 14;253(1-2):16–22
Effect of M2 muscarinic receptor antagonist 4-DAMP, on prostaglandin synthesis and mechanical function in the isolated rabbit heart. Jaiswal N, et al. **Gen Pharmacol** 1989; 20(4):497–502
Methods for analyzing and interpreting cooperativity in dose-response curves--II. Partial agonists acting on muscarinic receptors in smooth muscle. Moore GJ. **Gen Pharmacol** 1989;20(2):199–203
Potentiation of cholinergic tone counteracts the suppressive effect of oral glucose administration on the GH response to GHRH in man. Balzano S, et al. **Horm Metab Res** 1989 Jan;21(1):52–3
Effect of cholinomimetic agents on learning and memory when administered by intra cerebroventricular (ICV) and intraperitonial (ip) routes. Kadlimatti SH, et al. **Indian J Physiol Pharmacol** 1988 Apr–Jun;32(2):158–60
The effect of a new synthetic cholinergic compound (aclatonium napadisilate) on interdigestive motility and pancreatic function in humans. Kölbel CB, et al. **Int J Pancreatol** 1989 Oct;5(3):273–9
Effects of a salivary stimulant, slaframine, on ruminal fermentation, bacterial protein synthesis and digestion in frequently fed steers. Froetschel MA, et al. **J Anim Sci** 1989 Mar;67(3):827–34
Contractile responses of tracheal smooth muscle in organophosphate-treated swine: 1. Agonist changes. Murali Mohan P, et al. **J Auton Pharmacol** 1988 Jun; 8(2):93–106
Muscarinic-stimulated norepinephrine release and phosphoinositide hydrolysis in PC12 cells are independent events. Takashima A, et al. **J Biol Chem** 1989 Jun 25; 264(18):10654–9
Carbamyl analogues of potent nicotinic agonists: pharmacology and computer-assisted molecular modeling study. Spivak CE, et al. **J Med Chem** 1989 Feb;32(2):305–9
The bimodal effect of cholinergic blocking agents on the human parotid gland deprived of parasympathetic control. Levin SL. **J Neural Transm** 1988;73(3):239–47
Muscarinic agonists cause calcium influx and calcium mobilization in forebrain neurons in vitro. Reynolds IJ, et al. **J Neurochem** 1989 Jul;53(1):226–33
Effects of cholinergic drugs on learning impairment in ventral globus pallidus-lesioned rats. Ueki A, et al. **J Neurol Sci** 1989 Mar;90(1):1–21
Distribution of dissociation constant values of muscarinic agonists. Lucchelli A, et al. **J Pharm Pharmacol** 1989 Feb; 41(2):134–5
Negative and positive inotropic responses to muscarinic agonists in guinea pig and rat atria in vitro. Eglen RM, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):911–7
Contribution of M2 alpha and M2 beta muscarinic receptors to the action of cholinergic stimuli on prostaglandin synthesis and mechanical function in the isolated rabbit heart. Jaiswal N, et al. **J Pharmacol Exp Ther** 1988 Oct; 247(1):104–13
Effect of contractile activity on muscarinic receptor density and the response to muscarinic agonists. Levin RM, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):624–9
Cholinergic stimulation of phosphoinositide hydrolysis in renal medullary collecting duct cells. McArdle S, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):682–6
Effects of continuous infusion of cholinergic drugs on memory impairment in rats with basal forebrain lesions. Miyamoto M, et al. **J Pharmacol Exp Ther** 1989 Feb; 248(2):825–35
Prokinetic effects of cisapride, naloxone and parasympathetic stimulation at the equine ileo-caeco-colonic junction. Ruckebusch Y, et al. **J Vet Pharmacol Ther** 1988 Dec; 11(4):322–9
Amelioration of experimental amnesia (passive avoidance failure) in rodents by the selective M1 agonist AF102B. Nakahara N, et al. **Jpn J Pharmacol** 1988 Dec;48(4):502–6
Suppression of intercellular communication in acinar cells from rat submandibular gland by cholinergic and adrenergic agonists. Sasaki Y, et al. **Jpn J Physiol** 1988; 38(4):531–43
Cholinergic responsiveness of intestinal muscle in the pregnant guinea pig. Scott LD, et al. **Life Sci** 1989; 44(7):503–8
Ablation of the area postrema and emesis. Jovanović-Mićić D, et al. **Metab Brain Dis** 1989 Mar;4(1):55–60
Potency ratio for the inhibition of 3H-QNB and 3H-cis-methyldioxolane binding predicts agonist or antagonist activity on muscarinic receptors. Moret C, et al. **Methods Find Exp Clin Pharmacol** 1988 Oct; 10(10):619–21
Muscarinic acetylcholine receptors linked to the inhibition of adenylate cyclase activity in membranes from the rat striatum and myocardium can be distinguished on the basis of agonist efficacy. Keen M, et al. **Mol Pharmacol** 1988 Dec;34(6):769–78
The porcine heart M2 muscarinic receptor: agonist-induced phosphorylation and comparison of properties with the chick heart receptor. Kwatra MM, et al. **Mol Pharmacol** 1989 May;35(5):553–8
The relative potencies of cholinomimetics and muscarinic antagonists on the rat iris in vivo: effects of pH on potency of pirenzepine and telenzepine. Hagan JJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):476–83
Interaction of agonists and selective antagonists with gastric smooth muscle muscarinic receptors. Lucchesi PA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan–Feb; 339(1-2):145–51
Actions of potent cholinergic anthelmintics (morantel, pyrantel and levamisole) on an identified insect neurone reveal pharmacological differences between nematode and insect acetylcholine receptors. Pinnock RD, et al. **Neuropharmacology** 1988 Aug;27(8):843–8
Dual effect of N-methyl-N-(1-methyl-4-pyrolidino)-2-butyl)acetamide on release of (3H)-acetylcholine from the rat hippocampal slices. Sethy VH, et al. **Neuropharmacology** 1988 Nov; 27(11):1191–5
EEG sleep in depression and in remission and the REM sleep response to the cholinergic agonist RS 86. Riemann D, et al. **Neuropsychopharmacology** 1989 Jun;2(2):145–52
Calcium-dependent pirenzepine-sensitive muscarinic response in the rat hippocampal slice. Pitler TA, et al. **Neurosci Lett** 1988 Aug 31;91(2):177–82
Muscarinic excitation and inhibition of neurons in the submucous plexus of the guinea-pig caecum. Mihara S, et al. **Neuroscience** 1989;31(1):247–57
Muscarinic cholinergic induced secretin subsensitivity in rat isolated pancreatic acini. Effects on amylase release, cyclic adenosine monophosphate and inositol phosphate formation. Larose L, et al. **Pancreas** 1989;4(1):71–8
Feeding elicited by cholinergic and adrenergic hypothalamic stimulation of anorectic tumor-bearing rats. Chance WT, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):209–13
Brain localization of cholinergic influence on male sex behavior in rats: agonists. Hull EM, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):169–74
The interaction of RS 86, a centrally acting m-cholinoceptor agonist with M1 and M2 receptors in rat brain and rat heart, respectively. Schubert T, et al. **Pharmacopsychiatry** 1988 Nov;21(6):321–3
Immobilization stress modifies locomotor response to catecholamine receptor agonists in rats. Zebrowska-Lupina I, et al. **Pol J Pharmacol Pharm** 1988 Sep–Oct;40(5):441–50
A Ca2+-linked increase in coupled cAMP synthesis and hydrolysis is an early event in cholinergic and beta-adrenergic stimulation of parotid secretion. Deeg MA, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):7867–71
Differential effects of cholinergic drugs on discriminative cues and self-stimulation produced by electrical stimulation of the ventral tegmental area. Druhan JP, et al. **Psychopharmacology (Berlin)** 1989;97(3):331–8
Hemicholinium-3 impairs spatial learning and the deficit is reversed by cholinomimetics. Hagan JJ, et al. **Psychopharmacology (Berlin)** 1989;98(3):347–56
Effects of cholinergic and anticholinergic drugs on ketamine-induced linguopharyngeal motor activity. Marco LA, et al. **Psychopharmacology (Berlin)** 1988;96(4):484–6
Pharmacological adaptations and muscarinic receptor plasticity in hypothalamus of senescent rats treated chronically with cholinergic drugs. Pedigo NW Jr. **Psychopharmacology (Berlin)** 1988;95(4):497–501
Specific modulation of social memory in rats by cholinomimetic and nootropic drugs, by benzodiazepine inverse agonists, but not by psychostimulants. Perio A, et al. **Psychopharmacology (Berlin)** 1989;97(2):262–8
Effects of autonomic drugs on intraluminal pressure and excretion of rat seminal vesicles in vivo. Terasaki T. **Tohoku J Exp Med** 1989 Apr;157(4):373–9
The effect of some selective agonists and antagonists on peripheral muscarinic receptors. Gardner AL, et al. **Trends Pharmacol Sci** 1988 Feb;Suppl:40–3 (31 ref.)
Bioisosteres of arecoline as novel CNS-active muscarinic agonists. Krogsgaard-Larsen P, et al. **Trends Pharmacol Sci** 1988 Feb;Suppl:69–74 (25 ref.)
Neurochemical and behavioural effects of muscarinic acetylcholine receptor agonists. Spencer DG Jr, et al. **Trends Pharmacol Sci** 1988 Feb;Suppl:61–8 (27 ref.)
Muscarinic stimulation of inositol phosphate formation in rat retina: developmental changes. Osborne NN. **Vision Res** 1988;28(8):875–81
The evocation of rumination in sheep by the close-arterial injection of catecholamines, cholinergic drugs, autacoids and gastrointestinal hormones into the forestomach. Stafford KJ, et al. **Zentralbl Veterinarmed [A]** 1989 Mar; 36(3):230–5
[Effects of eleven muscarinic drugs on the trachea and ileum of the guinea pig in vitro] Xiong WC, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Mar;9(2):115–8 (Eng. Abstr.) **(Chi)**
[Muscarinic receptors] Heinzl S. **Med Monatsschr Pharm** 1988 Nov;11(11):359–60 **(Ger)**
[Effects of autonomic agents and chemical mediators on ion transport by canine tracheal epithelium] Baba T, et al. **Masui** 1988 Jun;37(6):638–45 (Eng. Abstr.) **(Jpn)**
[Changes in the cyclic nucleotide levels during the contraction of smooth muscles exposed to muscarinic cholinomimetics] Danilov AF, et al. **Fiziol Zh SSSR** 1988 Jul;74(7):938–43 (Eng. Abstr.) **(Rus)**
[Factors affecting the cholinomimetic activity of alkyltrimethylammonium compounds in experiments on isolated neurons of the mollusk Planorbarius corneus] Skliarov AI, et al. **Zh Evol Biokhim Fiziol** 1989 May–Jun; 25(3):401–3 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Postnatal development of glutamatergic, GABAergic, and cholinergic neurotransmitter phenotypes in the visual cortex, lateral geniculate nucleus, pulvinar, and superior colliculus in cats. Fosse VM, et al. **J Neurosci** 1989 Feb; 9(2):426–35
Cholinergic regulation of protein III phosphorylation in bovine adrenal chromaffin cells. Haycock JW, et al. **J Neurosci** 1988 Sep;8(9):3233–9

THERAPEUTIC USE

Cholinergic treatments for Alzheimer's disease. Roberts F, et al. **Biochem Soc Trans** 1989 Feb;17(1):76–9 (39 ref.)
Differential responsivity of mood, behavior, and cognition to cholinergic agents in elderly neuropsychiatric populations. Sunderland T, et al. **Brain Res** 1988 Dec; 472(4):371–89 (131 ref.)
Failure of cholinergic agonist RS-86 to improve cognition and movement in PSP despite effects on sleep. Foster NL, et al. **Neurology** 1989 Feb;39(2 Pt 1):257–61
Drug treatment of hyperkinetic movement disorders. Fahn S. **Semin Neurol** 1987 Jun;7(2):192–208 (186 ref.)
[Cholinergic therapy of glaucomas] Merté HJ. **Fortschr Ophthalmol** 1988;85(4):339–47 (0 ref.) (Eng. Abstr.) **(Ger)**
[Receptor diseases. 1: Disorders of adrenergic receptors, cholinergic receptors and neurotransmitters] Nestele M. **Med Monatsschr Pharm** 1989 May;12(5):147–52 (0 ref.) **(Ger)**

PARATHION

Genetic association between highly active esterases and organophosphate resistance in Culex tarsalis. Prabhaker N, et al. **J Am Mosq Control Assoc** 1987 Sep;3(3):473–5

ADVERSE EFFECTS

De novo amplification within a "silent" human cholinesterase gene in a family subjected to prolonged exposure to organophosphorous insecticides. Prody CA, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):690–4

ANALOGS & DERIVATIVES

Scanning electron microscopic examination of cartilage in chicken embryos treated with the insecticide Wofatox 50 EC. Várnagy L, et al. **Acta Vet Hung** 1988;36(1–2):117–21

Methyl parathion toxicity in rats is changed by pretreatment with the pesticides chlordecone, mirex and linuron. Tvede KG, et al. **Arch Toxicol Suppl** 1989;13:446–7

Chronic dose effects of methyl parathion on nuthatches: cholinesterase and ptilochronology. Herbert GB, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):471–5

Methyl parathion redeposition during laundering of functionally finished protective apparel fabrics. Laughlin J, et al. **Bull Environ Contam Toxicol** 1989 May;42(5):691–8

Evaporative dissipation of methyl parathion from laundered protective apparel fabrics. Laughlin J, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):566–73

Changes in nitrogen metabolism of penaeid prawn, Penaeus indicus, during sublethal phosphamidon and methylparathion–induced stress. Reddy MS, et al. **Bull Environ Contam Toxicol** 1988 Sep;41(3):344–51

Brain acetylcholinesterase activity recovery following acute methyl parathion intoxication in two feral rodent species: comparison to laboratory rodents. Roberts DK, et al. **Bull Environ Contam Toxicol** 1988 Jul;41(1):26–35

Hydrolysis of methyl parathion in a flooded soil. Sharmila M, et al. **Bull Environ Contam Toxicol** 1989 Jul;43(1):45–51

Dose–related neurochemical changes in the levels of gangliosides and glycogen in various regions of the rat brain and spinal cord following methyl parathion administration. Khan NA, et al. **Exp Pathol** 1988;35(1):61–5

Identification of organophosphorus insecticides and their hydrolysis products by liquid chromatography in combination with UV and thermospray–mass spectrometric detection. Farran A, et al. **J Chromatogr** 1988 Nov 25; 455:163–72

The role of glutathione in the detoxification of the insecticides methyl parathion and azinphos–methyl in the mouse. Sultatos LG, et al. **Toxicol Appl Pharmacol** 1988 Oct;96(1):168–74

[The fermentation diagnosis and histologic studies in blood and the liver of surviving rats after 1 and 2 administrations of a median toxic dose of parathion methyl. 1. Results of studies on the activities of the plasma enzymes AlAT, AsAT, AP, and gamma–GT] Sonnenschein P, et al. **Arch Exp Veterinarmed** 1989 Jan;43(1):1–8 (Eng. Abstr.) **(Ger)**

[The fermentation diagnosis and histologic studies in blood and the liver of surviving rats after 1 and 2 administrations of a median toxic dose of parathion methyl. 2. Tyrosine aminotransferase and pathologico–morphological findings in the liver] Sonnenschein P, et al. **Arch Exp Veterinarmed** 1989 Jan;43(1):9–15 (Eng. Abstr.) **(Ger)**

[Physiologic functions of machine operators during vineyard treatment with pesticides] Bochkareva AI, et al. **Gig Sanit** 1989 Jan;(1):22–5 (Eng. Abstr.) **(Rus)**

METABOLISM

Activation and degradation of the phosphorothionate insecticides parathion and EPN by rat brain. Forsyth CS, et al. **Biochem Pharmacol** 1989 May 15;38(10):1597–603

Structure–activity relationships in the hydrolysis of substrates by the phosphotriesterase from Pseudomonas diminuta. Donarski WJ, et al. **Biochemistry** 1989 May 30; 28(11):4650–5

Lack of inducibility of brain monooxygenase activities including parathion desulfuration. Chambers JE, et al. **J Biochem Toxicol** 1989 Spring;4(1):65–70

PHARMACOKINETICS

Urinary excretion kinetics of p–nitrophenol following oral administration of parathion in the rabbit. Peña–Egido MJ, et al. **Arch Toxicol** 1988;62(5):351–4

PHARMACOLOGY

Effects of subchronic parathion administration on sodium salicylate excretion kinetics in female rats. Martínez Tabche L, et al. **J Appl Toxicol** 1989 Feb;9(1):5–8

POISONING

Brain acetylcholinesterase after acute parathion poisoning: a comparative quantitative histochemical analysis post mortem. Finkelstein Y, et al. **Ann Neurol** 1988 Aug; 24(2):252–7

[The kinetics of plasma catecholamine in alkylphosphate poisoning and their therapy] Kauert G, et al. **Klin Wochenschr** 1989 Apr 17;67(8):456–62 (Eng. Abstr.) **(Ger)**

[Parathion poisoning] Bordín CI, et al. **Bol Med Hosp Infant Mex** 1989 May;46(5):339–42 (Eng. Abstr.) **(Spa)**

TOXICITY

Scanning electron microscopic examination of cartilage in chicken embryos treated with the insecticide Wofatox 50 EC. Várnagy L, et al. **Acta Vet Hung** 1988;36(1–2):117–21

Effects of formulated ethyl parathion on fertilization of the sea urchin Pseudechinus magellanicus (Philippi). Ferrari L, et al. **Bull Environ Contam Toxicol** 1989 Mar; 42(3):367–74

Chronotoxicological studies on toxicity of parathion. Tong J, et al. **Chin Med J [Engl]** 1988 Oct;101(10):715–8

Comparative response of male rats to parathion and lindane: histopathological and biochemical studies. Dikshith TS, et al. **Environ Res** 1978 Aug;17(1):1–9

Behavioral and biochemical effects of postnatal parathion exposure in the rat. Stamper CR, et al. **Neurotoxicol Teratol** 1988 May–Jun;10(3):261–6

PARATHYROID DISEASES

Recurrent parathyroid cystic disease. Favus LH, et al. **Am Fam Physician** 1989 Jul;40(1):119–22 (10 ref.)

COMPLICATIONS

Exacerbation of hypercalcemia after needle biopsy of a parathyroid cyst [letter] Kobayashi A, et al. **Ann Intern Med** 1989 Feb 15;110(4):326–7

[Surgery of primary hyperparathyroidism in 1988. Strategies during primary operations, in case of failure and in case of cancer] Mellière D, et al. **Rev Rhum Mal Osteoartic** 1988 May;55(7):495–500 (31 ref.) (Eng. Abstr.) **(Fre)**

DIAGNOSIS

MR imaging of thyroid and parathyroid glands: a review of current status. Higgins CB, et al. **AJR** 1988 Dec; 151(6):1095–106 (78 ref.)

EPIDEMIOLOGY

Parathyroid cyst and hyperparathyroidism in Auckland. Koea JB, et al. **N Z Med J** 1988 Oct 26;101(856 Pt 1):655–6

METABOLISM

Analysis of parathyroid hormone in bovine parathyroid cysts. Ayer LM, et al. **J Bone Miner Res** 1989 Jun;4(3):335–40

DNA patterns in parathyroid disease predict postoperative parathyroid hormone secretion. Irvin GL 3d, et al. **Surgery** 1988 Dec;104(6):1115–20

[Parathyroid diseases and disorders of calcium–phosphorus–magnesium metabolism in pregnancy] Sawicki A. **Ginekol Pol** 1988 Sep;59(9):562–6 (20 ref.) (Eng. Abstr.) **(Pol)**

PATHOLOGY

Parathyroid cysts of the neck and mediastinum. Case report. Linos DA, et al. **Acta Chir Scand** 1989 Mar;155(3):211–6

Parathyroid localization, three–dimensional modeling, and percutaneous ablation techniques. Eisenberg H, et al. **Endocrinol Metab Clin North Am** 1989 Sep;18(3):659–700 (65 ref.)

The sites of hormone storage in normal and diseased parathyroid glands: a silver impregnation and immunohistochemical study. Pesce C, et al. **Histopathology** 1989 Aug;15(2):157–66

RADIONUCLIDE IMAGING

Parathyroid subtraction imaging—pitfalls in diagnosis. Blue PW, et al. **Clin Nucl Med** 1989 Jan;14(1):47–57 (13 ref.)

PARATHYROID GLANDS

A technique for the in vitro culture of human parathyroid gland tissue. Matalanis G, et al. **Aust N Z J Surg** 1988 May;58(5):407–11

1,25(OH)2D3 inhibits hormone secretion and proliferation but not functional dedifferentiation of cultured bovine parathyroid cells. Nygren P, et al. **Calcif Tissue Int** 1988 Oct;43(4):213–8

The fifth hyperfunctioning parathyroid gland in end–stage renal disease [letter] Nakatsuka K, et al. **Nephron** 1989; 51(1):140–2

The challenge of the middle mediastinal parathyroid. Curley IR, et al. **World J Surg** 1988 Dec;12(6):818–24

[A case of parathyroid adenoma localized in the middle mediastinum] Deleplanque G, et al. **Ann Chir** 1989; 43(5):393–6 (11 ref.) (Eng. Abstr.) **(Fre)**

[Ectopic parathyroid adenoma of the lateral triangle of the neck] Lunghi F, et al. **Acta Otorhinolaryngol Ital** 1988 Sep–Oct;8(5):533–8 (Eng. Abstr.) **(Ita)**

ANALYSIS

Effects of starvation on the parathyroid glands in golden hamsters of different ages, with special reference to the frequency of lipid droplets. Emura S, et al. **Acta Anat (Basel)** 1988;133(2):96–101

Co–localization of parathyroid hormone and secretory protein–I in bovine parathyroid glands: a double immunocytochemical study at the electron microscopical level. Arps H, et al. **Bone Miner** 1987 May;2(3):175–83

Aluminium overload of parathyroid glands in haemodialysed patients with hyperparathyroidism: effect on bone remodelling. Berland Y, et al. **Nephrol Dial Transplant** 1988; 3(4):417–22

Immunohistochemical demonstration of somatostatin–containing cells in the equine thyroid and parathyroid glands. Tanimura N, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):228–30

Further evidence for a parathyroid hormone–related protein in fetal parathyroid glands of sheep. Loveridge N, et al. **Q J Exp Physiol** 1988 Sep;73(5):781–4

Microfluorometric measurements of cytoplasmic calcium in chief and oxyphil parathyroid cells of adenomatous and hyperplastic glands and of normal–sized glands associated with adenomas. Johansson H, et al. **Surgery** 1989 Sep; 106(3):517–24

[Quantitative morphologic aspects of the normal human parathyroid gland] Cinti S, et al. **Boll Soc Ital Biol Sper** 1988 May;64(5):397–401 (Eng. Abstr.) **(Ita)**

ANATOMY & HISTOLOGY

Topography and identification of the parathyroid glands in the calf. De Schaepdrijver L, et al. **Acta Anat (Basel)** 1988; 133(2):156–61

[Pitfalls of extracapsular thyroid surgery] Sauvage JP, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(2):209–11 (Eng. Abstr.) **(Fre)**

[Quantitative approaches to the morphologic assessment of the functional activity of the parathyroid glands] Pavlov AV. **Arkh Anat Gistol Embriol** 1989 Mar;96(3):92–6 (60 ref.) **(Rus)**

CYTOLOGY

A novel cell type in the parathyroid glands of spontaneously hypertensive rats. Kaneko T, et al. **Am J Hypertens** 1989 Jul;2(7):549–52

Parathyroid histology and cytology with monoclonal antibodies recognizing a calcium sensor of parathyroid cells. Juhlin C, et al. **Am J Pathol** 1989 Aug;135(2):321–8

Parathyroid identification by ultrasonically guided aspiration cytology. Is correct cytological identification possible? Glenthøj A, et al. **APMIS** 1989 Jun;97(6):497–502

Establishment of primary cell cultures from human and canine parathyroid gland explants. Hornicek FJ, et al. **Bone Miner** 1988 Jun;4(2):157–65

Inhibition of cell growth retains differentiated function of bovine parathyroid cells in monolayer culture. Nygren P, et al. **Bone Miner** 1988 Jun;4(2):123–32

Influence of calcium and 1,25–dihydroxycholecalciferol on proliferation and proto–oncogene expression in primary cultures of bovine parathyroid cells. Kremer R, et al. **Endocrinology** 1989 Aug;125(2):935–41

Combined effects of dexamethasone and 1,25–dihydroxyvitamin D3 on parathyroid hormone secretion in cultured bovine parathyroid cells. Sugimoto T, et al. **Endocrinology** 1989 Aug;125(2):638–41

Quantitative assessment of cellular changes provoked by microwave enhanced fixation of parathyroids. Wild P, et al. **Histochemistry** 1989;92(1):69–72

Microencapsulated parathyroid cells as a bioartificial parathyroid. In vivo studies. Fu XW, et al. **Transplantation** 1989 Mar;47(3):432–5

[Cellular renewal in the parenchyma and stroma of the parathyroid glands] Pavlov AV, et al. **Arkh Anat Gistol Embriol** 1989 Jan;96(1):78–81 (Eng. Abstr.) **(Rus)**

[Cytological mechanisms of the growth and regeneration of the parathyroid glands] Pavlov AV. **Ontogenez** 1988 Jul–Aug;19(4):394–9 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

The parathyroid gland and aluminum overload: an overview. Cannata JB, et al. **Contrib Nephrol** 1988;64:113–9 (29 ref.)

Regulation of cytosolic pH in bovine parathyroid cells: effect of fluoride. Sugimoto T, et al. **Endocrinology** 1989 Jan; 124(1):149–56

Regulation by calcium of parathyroid hormone mRNA in cultured parathyroid tissue. Brookman JJ, et al. **J Bone Miner Res** 1986 Dec;1(6):529–37

Estrogen replacement decreases the set point of parathyroid hormone stimulation by calcium in normal postmenopausal women. Boucher A, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):831–6

Lithium treatment increases intact and midregion parathyroid hormone and parathyroid volume. Mallette LE, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):654–60

Trypsinization of bovine parathyroid cells abolishes Ca2+–regulated parathyroid hormone secretion. Muff R, et al. **J Endocrinol** 1989 Jul;122(1):213–8

Calcium–agonistic action of Mn2+ in the parathyroid cell. Johansson H, et al. **Mol Cell Endocrinol** 1988 Sep; 59(1–2):77–82

Dimethyl sulfoxide inhibits proliferation but not hypertrophy and functional dedifferentiation of bovine parathyroid cells in culture. Nygren P, et al. **Res Commun Chem Pathol Pharmacol** 1988 Nov; 62(2):161–71

Recent advances in the structure and function of the

parathyroid gland in animals and the effects of xenobiotics. Capen CC, et al. **Toxicol Pathol** 1989;17(2):333–45 (73 ref.)

EMBRYOLOGY

Ultrastructure of the parathyroid gland of the mouse fetus after calcium chloride or ethylenediaminetetraacetic acid administration. Ishizaki N, et al. **Acta Anat (Basel)** 1989; 135(2):164–70

ENZYMOLOGY

Protein kinase activities in the parathyroid gland: proparathyroid hormone, parathyroid hormone and secretory protein-I as substrates for phosphorylation. Baty L, et al. **Bone Miner** 1988 Jan;3(3):249–57

METABOLISM

Immunocytochemical localization of parathyroid hormone in hamster parathyroid gland. Shoumura S, et al. **Acta Anat (Basel)** 1988;133(2):107–10

Characteristics of secondary hyperparathyroidism in vitamin D-deficient dogs. Hendy GN, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):E765–72

Distinct binding sites for Ins(1,4,5)P3 and Ins(1,3,4,5)P4 in bovine parathyroid glands. Enyedi P, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):200–8

Calcium uptake and inositol trisphosphate-induced calcium release from parathyroid gland membranes. Dean WL, et al. **Bone Miner** 1986 Feb;1(1):59–67

Effect of calcium depletion on the rat parathyroids. Svensson O, et al. **Bone Miner** 1988 Jan;3(3):259–69

Interaction of monoclonal antiparathyroid antibody with Ca2+ agonistic actions of Mn2+ in normal human parathyroid cells. Johansson H, et al. **Cell Calcium** 1989 Jan;10(1):11–5

Divalent cations suppress 3',5'-adenosine monophosphate accumulation by stimulating a pertussis toxin-sensitive guanine nucleotide-binding protein in cultured bovine parathyroid cells. Chen CJ, et al. **Endocrinology** 1989 Jan; 124(1):233–9

The effects of high extracellular Ca2+ and Mg2+ concentrations on the levels of inositol 1,3,4,5-tetrakisphosphate in bovine parathyroid cells. Hawkins D, et al. **Endocrinology** 1989 Feb;124(2):838–44

Relationship between diacylglycerol levels and extracellular Ca2+ in dispersed bovine parathyroid cells. Kifor O, et al. **Endocrinology** 1988 Dec;123(6):2723–9

Characterization of proteoglycans synthesized by a rat parathyroid cell line. Yanagishita M, et al. **J Biol Chem** 1989 Sep 15;264(26):15714–20

Hypocalcemia increases and hypercalcemia decreases the steady-state level of parathyroid hormone messenger RNA in the rat. Yamamoto M, et al. **J Clin Invest** 1989 Mar; 83(3):1053–6

1,25-(OH)2D receptors are decreased in parathyroid glands from chronically uremic dogs. Brown AJ, et al. **Kidney Int** 1989 Jan;35(1):19–23

Unusual calcium-activated potassium channels of bovine parathyroid cells. Jia M, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7236–9

Direct demonstration of D1 dopamine receptors in the bovine parathyroid gland using the D1 selective antagonist [125I]-SCH 23982. Monsma FJ Jr, et al. **Synapse** 1989; 3(3):193–9

Storage and degradation of secretory proteins in adenomatous and secondary hyperplastic parathyroid cells. An immunoelectron microscope study. Berger G, et al. **Virchows Arch [A]** 1989;415(4):305–16

PATHOLOGY

Recurrent hyperparathyroidism due to peroperative seeding of neoplastic or hyperplastic parathyroid tissue. Case report. Akerström G, et al. **Acta Chir Scand** 1988 Sep; 154(9):549–52

Value of parathyroid sonography in secondary hyperparathyroidism [letter] Pavlović D, et al. **Am J Med** 1989 Jun;86(6 Pt 1):641–2

The role of parathyroid ultrasonography in the management of primary hyperparathyroidism. Mallette LE, et al. **Am J Med Sci** 1989 Jul;298(1):51–8

Anatomical heterogeneity of parathyroid glands in posttransplant hyperparathyroidism. McCarron DA, et al. **Am J Nephrol** 1988;8(5):388–91

Clonal rat parathyroid cell line expresses a parathyroid hormone-related peptide but not parathyroid hormone itself. Ikeda K, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):108–15

Ultrasonically guided fine-needle interventional procedures on parathyroid glands. Giangrande A, et al. **Contrib Nephrol** 1989;69:95–100

Parathyroid ultrasonography in patients with primary hyperparathyroidism. Karstrup S, et al. **Dan Med Bull** 1988 Dec;35(6):583–5

Parathyroid localization, three-dimensional modeling, and percutaneous ablation techniques. Eisenberg H, et al. **Endocrinol Metab Clin North Am** 1989 Sep;18(3):659–700 (65 ref.)

The sites of hormone storage in normal and diseased parathyroid glands: a silver impregnation and immunohistochemical study. Pesce C, et al. **Histopathology** 1989 Aug;15(2):157–66

An evaluation of the intraoperative staining technique using methylene blue for the detection of hyperplastic parathyroid glands. Kobayashi S, et al. **Jpn J Surg** 1988 Nov;18(6):729–31

1,25(OH)2 vitamin D3 inhibits parathyroid cell proliferation in experimental uremia. Szabo A, et al. **Kidney Int** 1989 Apr;35(4):1049–56

Parathyroid sonography in secondary hyperparathyroidism: correlation with clinical findings. Tomić Brzac H, et al. **Nephrol Dial Transplant** 1989;4(1):45–50

Parathyroid carcinoma in a case of chronic renal failure on dialysis. Kodama M, et al. **Urol Int** 1989;44(2):110–2

Different responses between the upper and the lower parathyroid gland in a state of secondary hyperfunction. A study on chronic renal failure by morphometry and nuclear DNA analysis. Matsushita H. **Virchows Arch [A]** 1989;414(4):331–7

[Echographic localization diagnosis of enlarged parathyroid glands] Lorenz D, et al. **Radiologe** 1989 Jan;29(1):18–22 (Eng. Abstr.) **(Ger)**

[Echography of echo-guided cytoaspiration in the preoperative diagnosis of primary hyperparathyroidism] Mandetta S, et al. **Ann Ital Chir** 1987;59(1–6):191–9 **(Ita)**

[Parathyroid localization in primary hyperparathyroidism] Higashi K, et al. **Nippon Naika Gakkai Zasshi** 1988 Dec; 77(12):1898–9 **(Jpn)**

[Primary hyperparathyroidism caused by oxyphilic parathyroid adenoma. Presentation of a case and review of the literature] de Pablos PL, et al. **Rev Clin Esp** 1989 Apr;184(7):391–2 (10 ref.) **(Spa)**

[Diagnosis of adenoma and parathyroid hyperplasia using subtraction scintigraphy with thallium 201-Tc99m] González P, et al. **Rev Med Chil** 1988 Jul;116(7):633–9 **(Spa)**

PHYSIOLOGY

Human-parathormone assay for use in dogs: validation, sample handling studies, and parathyroid function testing. Torrance AG, et al. **Am J Vet Res** 1989 Jul;50(7):1123–7

The parathyroid glands in the skeletal development of the ovine foetus. Aaron JE, et al. **Bone Miner** 1989 Aug; 7(1):13–22

Blood pressure response to norepinephrine and angiotensin II in the offspring of parathyroidectomized mother rats. Nakanishi H, et al. **Clin Exp Pharmacol Physiol** 1989 May; 16(5):383–6

Post-transcriptional regulation of 3-hydroxy-3-methylglutaryl-CoA reductase mRNA in rat liver. Glucocorticoids block the stabilization caused by thyroid hormones. Simonet WS, et al. **J Biol Chem** 1989 Jan 5;264(1):569–73

Effects of oxidation of human parathyroid hormone on its biological activity in continuously infused, thyroparathyroidectomized rats. Horiuchi N. **J Bone Miner Res** 1988 Jun;3(3):353–8

Peripheral metabolism of [35S]parathyroid hormone in vivo: influence of alterations in calcium availability and parathyroid status. Bringhurst FR, et al. **J Endocrinol** 1989 Jul;122(1):237–45

Is the effect of calcium diet or parathyroidectomy on the development of hypertension in spontaneously hypertensive rats mediated by atrial natriuretic peptide? Geiger H, et al. **Kidney Int Suppl** 1988 Sep;25:S93–7

Serum calcium and parathyroid function linked to control of respiration. Vadstrup S. **Med Hypotheses** 1989 Mar; 28(3):151–4 (16 ref.)

Effect of intravenous glucagon on the urinary excretion of adenosine 3',5'-monophosphate in man and in rats. Evidence for activation of renal adenylate cyclase and formation of nephrogenous cAMP. Rubinger D, et al. **Miner Electrolyte Metab** 1988;14(4):211–20

Interaction of calcitonin with vitamin D and prostaglandin E2 on renal tubular reabsorption of calcium in thyroparathyroidectomized rats. Su KW, et al. **Miner Electrolyte Metab** 1988;14(4):229–34

Cycloheximide blocks nicotinamide action on phosphate excretion in thyroparathyroidectomized rats. Wu KI, et al. **Miner Electrolyte Metab** 1988;14(5):271–6

The role of 1,25-(OH)2D3 in regulating parathyroid gland function. Sherwood LM, et al. **Proc Soc Exp Biol Med** 1989 Jul;191(3):233–7

Effect of parathyroidectomy on arterial hypertrophy, vascular lesions, and aortic calcium content in deoxycorticosterone-induced hypertension. Yang F, et al. **Res Exp Med (Berl)** 1988;188(4):289–97

[Comparative study of parathyroid function by serum parathyroid hormone, total adenosine cyclic monophosphate in the urine and its nephrogenic fraction] Ivanov I, et al. **Vutr Boles** 1988;27(4):24–8 (Eng. Abstr.) **(Bul)**

[Participation of tissue basophils of the parathyroid glands in the regulation of the morphofunctional state of the organ] Pavlov AV. **Arkh Anat Gistol Embriol** 1988 Jul; 95(7):51–4 (Eng. Abstr.) **(Rus)**

[Biosynthetic activity of parathyroid cells during different function of the parathyroid glands] Pavlov AV, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):98–9 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Parathyroid gland function and the possibility of its correction in patients with obliterative vascular disease of the lower limbs. Zoloev GK, et al. **Cor Vasa** 1989; 31(3):203–9

Parathyroid function in Paget's disease of bone. Siris ES, et al. **J Bone Miner Res** 1989 Feb;4(1):75–9

Substitution of calcium carbonate for aluminum hydroxide in patients on hemodialysis. Effects on acidosis, on parathyroid function, and on calcemia. Anelli A, et al. **Nephron** 1989;52(2):125–32

Pharmacological parathyroidectomy by oral 1,25(OH)2D3 pulse therapy [letter] Tsukamoto Y, et al. **Nephron** 1989; 51(1):130–1

RADIATION EFFECTS

Early changes in parathyroid function after high-dose irradiation of the neck. Holten I, et al. **Cancer** 1988 Oct 15;62(8):1476–8

RADIOGRAPHY

Prospective comparison of radionuclide, ultrasound, and computed tomography in the preoperative localization of parathyroid glands. Carmalt HL, et al. **World J Surg** 1988 Dec;12(6):830–4

RADIONUCLIDE IMAGING

Comparison of techniques for thallium-201-technetium-99m parathyroid imaging. Brownless SM, et al. **Br J Radiol** 1989 Jun;62(738):532–5

The evolving role of parathyroid scintigraphy. Basarab RM. **Clin Nucl Med** 1989 Jan;14(1):58–60

Parathyroid subtraction imaging—pitfalls in diagnosis. Blue PW, et al. **Clin Nucl Med** 1989 Jan;14(1):47–57 (13 ref.)

Improvement of parathyroid Tl-Tc scintigraphy by using a new image subtraction method. Liehn JC, et al. **Eur J Nucl Med** 1988;14(4):184–9

Parathyroid imaging with thallium-201 [letter] Smidt KP. **N Z Med J** 1989 Jul 12;102(871):360

Parathyroid imaging with thallium-201 subtraction scintigraphy: a report of 33 cases. Toomath RJ, et al. **N Z Med J** 1989 May 10;102(867):215–7

Scintigraphy of the parathyroid glands with 201Tl: experience with 250 operated patients. Borsato N, et al. **Nuklearmedizin** 1989 Feb;28(1):26–8

[Reappraisal of Tl-Tc scanning in the preoperative localization of hyperfunctioning parathyroid glands] Kung SP, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Jan; 88(1):78–82 (Eng. Abstr.) **(Chi)**

[Thallium-technetium scintigraphy for presurgical localization of parathyroid adenomas and hyperplasia] Amico S, et al. **Nephrologie** 1988;9(5):211–5 (Eng. Abstr.) **(Fre)**

SECRETION

Inhibitors of cellular proteolysis cause increased secretion from parathyroid cells. MacGregor RR, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1339–43

Structural analysis of parathormone fragments elaborated by cells cultured from a hyperplastic human parathyroid gland. MacGregor RR, et al. **Bone Miner** 1986 Feb; 1(1):41–50

Secretion of intact PTH by dispersed human hyperparathyroid cells. Aston JP, et al. **Clin Endocrinol (Oxf)** 1988 Dec;29(6):643–8

Thyroid and parathyroid response to subtotal thyroidectomy. Eforakopoulou-Gialakidou E, et al. **Endocrinol Exp (Bratisl)** 1988 Sep;22(3):165–9

Pancreastatin, a presumed product of chromogranin-A (secretory protein-I) processing, inhibits secretion from porcine parathyroid cells in culture. Fasciotto BH, et al. **Endocrinology** 1989 Sep;125(3):1617–22

Inhibition of parathyroid hormone release by maitotoxin, a calcium channel activator. Fitzpatrick LA, et al. **Endocrinology** 1989 Jan;124(1):97–103

The effects of protein kinase-C agonists on parathyroid hormone release and intracellular free Ca2+ in bovine parathyroid cells. Membreño L, et al. **Endocrinology** 1989 Feb;124(2):789–97

The biphasic calcium dose-response curve for parathyroid hormone secretion in electropermeabilized adult bovine parathyroid cells. Pocotte SL, et al. **Endocrinology** 1989 Sep;125(3):1587–92

Calcium-binding proteins in the parathyroid gland. Detailed studies of parathyroid secretory protein. Leiser M, et al. **J Biol Chem** 1989 Feb 15;264(5):2792–800

Effects of fluoride on parathyroid hormone secretion and intracellular second messengers in bovine parathyroid cells. Chen CJ, et al. **J Bone Miner Res** 1988 Jun;3(3):279–88

Parathyroid cell surface autoantibodies that inhibit parathyroid hormone secretion from dispersed human parathyroid cells. Posillico JT, et al. **J Bone Miner Res** 1986 Oct;1(5):475–83

Calcium-dependent release of N-terminal fragments and intact immunoreactive parathyroid hormone by human pathological parathyroid tissue in vitro. el-Hajj Fuleihan G, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):860–7

Calcium regulation of parathyroid hormone release. Akerström G, et al. **Ups J Med Sci** 1988;93(2):145–8 (12 ref.)

SURGERY

Parathyroid surgery in Scandinavia. Malmaeus J, et al. **Acta Chir Scand** 1988 Jul-Aug;154(7-8):409-13

Reduction of serum gonadotropin concentrations after parathyroidectomy. Kristoffersson A, et al. **Acta Endocrinol (Copenh)** 1989 Mar;120(3):379-82

Effect of 1,25-vitamin D and parathyroidectomy on the uptake of aluminum in bone of rats with renal insufficiency. Abreo K, et al. **Am J Nephrol** 1988;8(5):426-30

Effect of parathyroidectomy on T cell functions in patients with primary hyperparathyroidism. Shasha SM, et al. **Am J Nephrol** 1989;9(1):25-9

The reasons for failure in parathyroid operations. Levin KE, et al. **Arch Surg** 1989 Aug;124(8):911-4; discussion 914-5

Trabecular and cortical bone in the radii of women with parathyroid adenomata: a greater trabecular deficit, with a preliminary assessment of recovery after parathyroidectomy. Hesp R, et al. **Bone Miner** 1987 Jul; 2(4):301-10

The influence of early parathyroidectomy on aluminum-induced rickets in growing uremic rats. Vukičević S, et al. **Bone Miner** 1989 May;6(2):125-39

Cost effectiveness of ultrasound in primary parathyroid surgery. Kairaluoma MI, et al. **Br J Surg** 1989 Jun; 76(6):596-7

Hypertension and renal dysfunction in primary hyperparathyroidism: effect of parathyroidectomy. Salahudeen AK, et al. **Clin Sci** 1989 Mar;76(3):289-96

Aluminium accumulates on inactive bone surfaces after parathyroidectomy in uremic rats. Vukičević S, et al. **Horm Metab Res** 1989 Jan;21(1):15-7

Elective total parathyroidectomy without autotransplant in end-stage renal disease. Kaye M, et al. **Kidney Int** 1989 Jun;35(6):1390-9

Time-dependent changes in serum gastrin measurements after parathyroidectomy. Weltman MD, et al. **S Afr J Surg** 1989 Mar;27(1):8-9

Regional anesthesia for certain patients undergoing thyroid and parathyroid surgery [letter] Crile G Jr. **Surgery** 1989 Mar;105(3):455

Ionized calcium in monitoring effective parathyroidectomy: a preliminary report. Rosen IB, et al. **World J Surg** 1988 Oct;12(5):630-4

[Personal experience with surgical treatment of hyperparathyroidism in chronic kidney failure. II. Surgical technic, postoperative course and the state of bone metabolism after parathyroidectomy] Kočandrle V, et al. **Cas Lek Cesk** 1989 Jun 9;128(24):748-53 (Eng. Abstr.) (Cze)

[Personal experience with surgical treatment of hyperparathyroidism in chronic kidney failure. I. Etiopathogenesis of secondary hyperparathyroidism, preoperative findings, indications for parathyroidectomy] Sotorník I, et al. **Cas Lek Cesk** 1989 Jun 9;128(24):742-7 (Eng. Abstr.) (Cze)

[Parathyroidectomy in children with renal failure. Retrospective study of 17 cases] Bérard E, et al. **Arch Fr Pediatr** 1989 Jun-Jul;46(6):417-24 (Eng. Abstr.) (Fre)

[Surgical treatment of secondary hyperparathyroidism in hemodialyzed patients with chronic renal failure. Results and choice of a technic] Henry JF, et al. **J Chir (Paris)** 1988 Jun-Jul;125(6-7):395-400 (Eng. Abstr.) (Fre)

[Pseudogout and primary hyperparathyroidism: description of 2 cases after parathyroidectomy] Borghi L, et al. **G Clin Med** 1988 Mar;69(3):193-7 (Eng. Abstr.) (Ita)

TRANSPLANTATION

Total parathyroidectomy with forearm autograft for secondary hyperparathyroidism in chronic renal failure. Takagi H, et al. **Ann Surg** 1988 Nov;208(5):639-44

Ultrastructure of parathyroid autografts in chronic renal failure including the occurrence of concentric membranous bodies and intermediate filaments. Ellis HA, et al. **Histopathology** 1989 Apr;14(4):401-7

Fate of long-term parathyroid autografts in patients with chronic renal failure treated by parathyroidectomy: a histopathological study of autografts, parathyroid glands and bone. Ellis HA. **Histopathology** 1988 Sep;13(3):289-309

Total thyroparathyroidectomy in patients with thyroid cancers and changes in erythrocytic Mg levels following parathyroautotransplantation. Sugiura H, et al. **Jpn J Surg** 1988 Nov;18(6):653-9

Cryopreservation of human parathyroid glands. Marrano D, et al. **Life Support Syst** 1983;1 Suppl 1:414-6

Total parathyroidectomy with autotransplantation in haemodialysis patients: should it be abandoned? [letter] Dubost C, et al. **Nephrol Dial Transplant** 1988;3(3):356

Possible long-term complications of autotransplanted parathyroid glands in haemodialysed patients [letter] Korzets Z, et al. **Nephrol Dial Transplant** 1988;3(5):705

[Care of patients under allotransplantation of the parathyroid gland with a vascular pedicle] Yuan SY, et al. **Chung Hua Hu Li Tsa Chih** 1988 Apr;23(4):200, 216 (Chi)

[Autotransplantation of parathyroid gland tissue--on the indications for total parathyroidectomy with autotransplantation] Goretzki PE. **Langenbecks Arch Chir** 1988;373(6):323-4 (Ger)

[Parathyroidectomy and autotransplantation in renal hyperparathyroidism. I. Morphologic studies for tissue selection] Niederle B, et al. **Langenbecks Arch Chir** 1988; 373(6):325-36 (Eng. Abstr.) (Ger)

[Parathyroidectomy and autotransplantation in renal hyperparathyroidism. II. Functional in vitro studies for tissue selection] Niederle B, et al. **Langenbecks Arch Chir** 1988;373(6):337-44 (Eng. Abstr.) (Ger)

[Autotransplantation of parathyroid glands in thyroid carcinoma surgery and their postoperative function] Takeuchi M, et al. **Nippon Geka Gakkai Zasshi** 1989 Feb; 90(2):273-9 (Eng. Abstr.) (Jpn)

ULTRASTRUCTURE

Effects of hypergravity environment of the ultrastructure of the golden hamster parathyroid gland. Shoumura S, et al. **Acta Anat (Basel)** 1988;133(1):79-85

Effects of hypergravity environment on the parathyroid gland of the isoproterenol-treated hamster. Shoumura S, et al. **Acta Anat (Basel)** 1989;134(2):171-6

The parathyroid glands in the rat as seen by ultrathin step and serial sectioning. Svensson O, et al. **Bone Miner** 1989 Jul;6(3):237-48

Ultrastructural morphometry on human parathyroid tissue. Morphological and functional implications. Thiele J, et al. **J Submicrosc Cytol Pathol** 1988 Jul;20(3):491-500

Histomorphometric study of the parathyroid glands of the spontaneously hypercholesterolemic (SHC) rats with chronic renal failure. Tsukuda R, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):235-43

PARATHYROID HORMONES

Two-dimensional 1H-NMR study of the 1-34 fragment of human parathyroid hormone. Lee SC, et al. **Biopolymers** 1989 Jun;28(6):1115-27

Production of parathyroid hormone-like peptide in a human osteosarcoma cell line: stimulation by phorbol esters and epidermal growth factor. Rodan SB, et al. **J Endocrinol** 1989 Jul;122(1):219-27

Actions of parathyroid hormone-related protein on the rat kidney in vivo. Zhou H, et al. **J Endocrinol** 1989 Jul; 122(1):229-35

ADMINISTRATION & DOSAGE

Parathyroid hormone stimulates prostanoid formation in mouse calvarial bones. Ljunggren O, et al. **Acta Endocrinol (Copenh)** 1989 Mar;120(3):357-61

Parathyroid hormone sensitivity in familial X-linked hypophosphatemic rickets. McElduff A, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):386-9

ANALYSIS

Immunocytochemical distribution of PTH immunoreactivity in vertebrate brains. Pang PK, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):R643-7

Parathyroid hormone-like immunoreactivity in brains of tetrapod vertebrates. Pang PK, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):R635-42

Preparation of a photoreactive analog of parathyroid hormone [Nle8, Lys(N-epsilon-4-azido-2-nitrophenyl)= 13,Nle18,Tyr34]bovine parathyroid hormone-(1-34)NH2, a selective, high-affinity ligand for characterization of parathyroid hormone receptors. Shigeno C, et al. **Anal Biochem** 1989 Jun;179(2):268-73

Parathyroid hormone like bioactivity measured by cytochemical bioassay in a patient with malignant bladder disease. Roche S, et al. **Ir J Med Sci** 1988 Dec; 157(12):388-9

Analysis of parathyroid hormone in bovine parathyroid cysts. Ayer LM, et al. **J Bone Miner Res** 1989 Jun;4(3):335-40

Parathyroid hormone-related protein: immunohistochemical localization in cancers and in normal skin. Danks JA, et al. **J Bone Miner Res** 1989 Apr;4(2):273-8

Multiple forms of parathyroid hormone-like proteins in a human tumour. Docherty HM, et al. **J Mol Endocrinol** 1989 Jan;2(1):11-20

Proton nuclear magnetic resonance studies of intact native bovine parathyroid hormone. Coddington JM, et al. **Mol Endocrinol** 1989 Apr;3(4):749-53

High levels of a parathyroid hormone-like protein in milk. Budayr AA, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(18):7183-5

Further evidence for a parathyroid hormone-related protein in fetal parathyroid glands of sheep. Loveridge N, et al. **Q J Exp Physiol** 1988 Sep;73(5):781-4

[Value of the determination of intact parathyroid hormone in calcium metabolism disorders in children (letter)] Mallet E, et al. **Arch Fr Pediatr** 1988 Oct;45(8):599 (Fre)

[Results of intraoperative localization of hyperactive parathyroid tissue using semiconductor probes in primary hyperparathyroidism] Geipel D, et al. **Zentralbl Chir** 1989; 114(9):606-13 (Ger)

ANTAGONISTS & INHIBITORS

A new highly potent parathyroid hormone antagonist: [D-Trp12,Tyr34]bPTH-(7-34)NH2. Goldman ME, et al. **Endocrinology** 1988 Nov;123(5):2597-9

Cyclosporine A inhibits calcemic hormone-induced bone resorption in vitro. Stewart PJ, et al. **J Bone Miner Res** 1986 Jun;1(3):285-91

The noncalcemic analogue of vitamin D, 22-oxacalcitriol, suppresses parathyroid hormone synthesis and secretion. Brown AJ, et al. **J Clin Invest** 1989 Sep;84(3):728-32

BIOSYNTHESIS

The tumor cells (FA-6) established from a pancreatic cancer associated with humoral hypercalcemia of malignancy: a simultaneous production of parathyroid hormone-like activity and transforming growth factor activity. Nagata N, et al. **Endocrinol Jpn** 1989 Feb;36(1):75-85

Parathyroid hormone suppression by intravenous 1,25-dihydroxyvitamin D. A role for increased sensitivity to calcium. Delmez JA, et al. **J Clin Invest** 1989 Apr; 83(4):1349-55

BLOOD

Clinical applicability of an amino-terminal radioimmunoassay for determination of parathyroid hormone. Mollerup CL, et al. **Acta Chir Scand** 1988 Jul-Aug;154(7-8):419-23

Serum levels of vitamin D metabolites in the elderly. Aksnes L, et al. **Acta Endocrinol (Copenh)** 1989 Jul;121(1):27-33

A single dose of lithium carbonate acutely elevates intact parathyroid hormone levels in humans. Seely EW, et al. **Acta Endocrinol (Copenh)** 1989 Aug;121(2):174-6

Relationship of blood pressure, calcium intake, and parathyroid hormone [letter] Villar J, et al. **Am J Clin Nutr** 1989 Jan;49(1):183-4

Saline infusion causes rapid increase in parathyroid hormone and intracellular calcium levels. Zemel MB, et al. **Am J Hypertens** 1989 Mar;2(3 Pt 1):185-7

Hypomagnesemia masking the appearance of elevated parathyroid hormone concentrations in familial pseudohypoparathyroidism. Allen DB, et al. **Am J Med Genet** 1988 Sep;31(1):153-8

Elevated bone aluminum and suppressed parathyroid hormone levels in hypercalcemic dialysis patients. Piraino B, et al. **Am J Nephrol** 1989;9(3):190-7

Calciotrophic hormone levels and calcium absorption during pregnancy in rats. Quan-Sheng D, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):E118-23

Human-parathormone assay for use in dogs: validation, sample handling studies, and parathyroid function testing. Torrance AG, et al. **Am J Vet Res** 1989 Jul;50(7):1123-7

Is intact PTH a sensitive biochemical indicator of deranged calcium homeostasis in vitamin D deficiency? Ashby JP, et al. **Ann Clin Biochem** 1989 Jul;26 (Pt 4):324-7

A comparison of two intact-molecule parathyroid hormone assays. Bicknell EJ, et al. **Ann Clin Biochem** 1989 Jul;26 (Pt 4):376-7

Clinical and laboratory evaluation of a two-site immunoradiometric assay for intact parathyroid hormone. Newman DJ, et al. **Ann Clin Biochem** 1988 Nov;25 (Pt 6):654-60

Serum parathormone, 25 hydroxycholecalciferol and magnesium concentrations in infants with seizures associated with spontaneous hypocalcemia. Villalpando S, et al. **Arch Invest Med (Mex)** 1988 Apr-Jun;19(2):165-71

The value to the surgeon of parathyroid hormone assays in primary hyperparathyroidism. Gough IR, et al. **Aust N Z J Surg** 1988 May;58(5):381-6

Vitamin D metabolites and bioactive parathyroid hormone levels during Spacelab 2. Morey-Holton ER, et al. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 1):1038-41

Bone resorption and circulating PTH-like bioactivity in an animal model of hypercalcaemia of malignancy. Mehdizadeh S, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1166-71

Effects of decreasing serum calcium on circulating parathyroid hormone and vitamin D metabolites in normocalcaemic and hypercalcaemic patients treated with APD. Papapoulos SE, et al. **Bone Miner** 1986 Feb; 1(1):69-78

PTH bioactivity in osteoporosis. Saphier PW, et al. **Bone Miner** 1987 Oct;3(1):75-83

Circulating parathyroid hormone concentrations in normal and vitamin D-deprived rat pups determined with an N-terminal-specific radioimmunoassay. Toverud SU, et al. **Bone Miner** 1986 Apr;1(2):145-55

Increased serum calcitonin, reduced serum 1,25-(OH)2-vitamin D and normal parathormone concentrations in idiopathic hypercalciuria. Lama G, et al. **Child Nephrol Urol** 1988-89;9(3):135-7

Persistant abnormal serum parathyroid hormone after renal transplantation: correlation between renal graft function. Cheng CH, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Feb; 43(2):81-4

Two-site immunochemiluminometric assay of intact human parathyrin in serum with use of a tracer peptide purified by reversed-phase high-performance liquid chromatography. Böhler U, et al. **Clin Chem** 1989 Feb; 35(2):215-22

Intact parathyrin in patients after kidney transplantation. Bonnin MR, et al. **Clin Chem** 1988 Nov;34(11):2378

Interference with measurement of intact parathyrin in serum from renal dialysis patients. Dilena BA, et al. **Clin Chem** 1989 Jul;35(7):1543-4

Clinical performance of a parathyrin immunoassay with dynamically determined reference values. Lepage R, et al. **Clin Chem** 1988 Dec;34(12):2439-43

Assay of "intact" parathyrin in the immediate and long-term postoperative follow-up of patients treated for

hyperparathyroidism or thyroid tumor [letter] Lundberg PA, et al. **Clin Chem** 1989 Feb;35(2):340–1

Measurement of parathyrin in blood from thyroid veins: two radioimmunoassays compared in patients with primary hyperparathyroidism [published erratum appears in Clin Chem 1988 Nov;34(11):2370] Muñoz-Torres M, et al. **Clin Chem** 1988 Oct;34(10):2148–50

Performance and diagnostic application of a two-site immunoradiometric assay for parathyrin in serum. Ratcliffe WA, et al. **Clin Chem** 1989 Sep;35(9):1957–61

Effects of estrogen on mineral metabolism in postmenopausal women as evaluated by multiple assays measuring parathyrin bioactivity. Stock JL, et al. **Clin Chem** 1989 Jan; 35(1):18–22

Diagnostic utility of immunoassays for parathyrin in hyper- and hypocalcemic states [editorial] Wills MR. **Clin Chem** 1988 Oct;34(10):1955–6

Comparison of the performance and clinical utility of a carboxy-terminal assay and an intact assay for parathyroid hormone. St. John A, et al. **Clin Chim Acta** 1988 Dec 15; 178(2):215–23

Anomalies in the assay of parathyroid hormone in normocalcaemic patients with renal stone disease. Ashby JP, et al. **Clin Endocrinol (Oxf)** 1988 Aug;29(2):131–40

The beneficial effect of ketoacids on serum phosphate and parathyroid hormone in patients with chronic uremia. Schaefer K, et al. **Clin Nephrol** 1988 Aug;30(2):93–6

Effect of fluoride on parathyroid hormone [letter] Gill DS, et al. **Clin Sci** 1989 Jun;76(6):677–8

Parathyroid gland function and the possibility of its correction in patients with obliterative vascular disease of the lower limbs. Zoloev GK, et al. **Cor Vasa** 1989; 31(3):203–9

Serum parathyroid hormone concentration measured by highly sensitive assay in post-thyroidectomy hypocalcemia of patients with Graves' disease. Hamada N, et al. **Endocrinol Jpn** 1989 Apr;36(2):281–8

Measurement of parathyroid hormone. Endres DB, et al. **Endocrinol Metab Clin North Am** 1989 Sep;18(3):611–29 (114 ref.)

Biochemical markers of bone turnover, intact serum parathyroid horn and renal calcium excretion in patients with pseudohypoparathyroidism and hypoparathyroidism before and during vitamin D treatment. Kruse K, et al. **Eur J Pediatr** 1989 Apr;148(6):535–9

Relationship between parathyroid hormone and pituitary-testicular axis in patients on maintenance hemodialysis. Bogićević M, et al. **Exp Clin Endocrinol** 1988 Mar;92(3):357–62

Modulation of serum parathyroid hormone and ionized calcium concentrations during reproduction in rats fed a low calcium diet. Garner SC, et al. **J Bone Miner Res** 1988 Jun;3(3):319–23

Cytochemical bioassay of circulating concentrations of rat parathyroid hormone: application to a study of age and sex. Peng TC, et al. **J Bone Miner Res** 1986 Aug;1(4):351–7

Properties of parathyroid hormone receptors on circulating bovine lymphocytes. Yamamoto I, et al. **J Bone Miner Res** 1988 Jun;3(3):289–95

Estrogen replacement decreases the set point of parathyroid hormone stimulation by calcium in normal postmenopausal women. Boucher A, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):831–6

The metatarsal cytochemical bioassay of parathyroid hormone: validation, specificity, and application to the study of pseudohypoparathyroidism type I. Bradbeer JN, et al. **J Clin Endocrinol Metab** 1988 Dec;67(6):1237–43

Relationship between the concentration and rate of change of calcium and serum intact parathyroid hormone levels in normal humans. Brent GA, et al. **J Clin Endocrinol Metab** 1988 Nov;67(5):944–50

Hysteresis in the relationship between serum ionized calcium and intact parathyroid hormone during recovery from induced hyper- and hypocalcemia in normal humans. Conlin PR, et al. **J Clin Endocrinol Metab** 1989 Sep; 69(3):593–9

Serum bioactive parathyroid hormone in hemodialysis patients. McCarthy JT, et al. **J Clin Endocrinol Metab** 1989 Feb;68(2):340–5

Lithium treatment increases intact and midregion parathyroid hormone and parathyroid volume. Mallette LE, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):654–60

Temporal interrelationships between the circadian rhythms of serum parathyroid hormone and calcium concentrations. Markowitz ME, et al. **J Clin Endocrinol Metab** 1988 Nov; 67(5):1068–73

Reciprocal changes in parathyroid hormone and thyroid function after radioiodine treatment of hyperthyroidism. Ross DS, et al. **J Clin Endocrinol Metab** 1989 Jun; 68(6):1216–9

Ectopic production of parathyroid hormone by small cell lung cancer in a patient with hypercalcemia. Yoshimoto K, et al. **J Clin Endocrinol Metab** 1989 May;68(5):976–81

Use of 1 alpha-hydroxyvitamin D3 in prevention of bovine parturient paresis. 8. Maternal and neonatal plasma calcium, parathyroid hormone, and vitamin D metabolites concentrations. Bar A, et al. **J Dairy Sci** 1988 Oct; 71(10):2723–9

The circadian rhythm of intact parathyroid hormone (1–84) and nephrogenous cyclic adenosine monophosphate in normal men. Logue FC, et al. **J Endocrinol** 1989 Apr; 121(1):R1–3

Immunological evidences for the presence of small late carboxylterminal fragment(s) of human parathyroid hormone (PTH) in circulation in man. D'Amour P, et al. **J Immunoassay** 1989;10(2–3):191–205

Serum electrolytes and parathyroid hormone in patients in a coronary care unit. Joborn H, et al. **J Intern Med** 1989 Jan;225(1):9–14

Experimental and immunohistochemical studies on the possible role of parathyroid hormone in uraemic pruritus. Ståhle-Bäckdahl M, et al. **J Intern Med** 1989 Jun; 225(6):411–5

Modulation of age-related changes in serum 1,25-dihydroxyvitamin D and parathyroid hormone by dietary restriction of Fischer 344 rats. Armbrecht HJ, et al. **J Nutr** 1988 Nov;118(11):1360–5

Hypercalcitoninemia and hypocalcemia in acutely ill children: studies in serum calcium, blood ionized calcium, and calcium-regulating hormones. Sanchez GJ, et al. **J Pediatr** 1989 Jun;114(6):952–6

Intact parathyroid hormone assay and total calcium concentration in the diagnosis of disorders of calcium metabolism in dogs. Torrance AG, et al. **J Vet Intern Med** 1989 Apr–Jun;3(2):86–9

Hypocalcemia due to osteoblastic metastases and diminished parathyroid reserve in a patient with advanced breast cancer. Hermus A, et al. **Klin Wochenschr** 1988 Jul 15; 66(14):643–6

Analysis of the PO4—body pool in the uraemics. Mastrangelo F, et al. **Life Support Syst** 1983;1 Suppl 1:215–8

Serum level of parathyroid hormone in certain rheumatic diseases. Bernacka K, et al. **Med Interne** 1988 Oct–Dec; 26(4):273–8

Aminoaciduria of vitamin D deficiency is independent of PTH levels and urinary cyclic AMP. Dabbagh S, et al. **Miner Electrolyte Metab** 1989;15(4):221–32

Effect of direction and rate of change of calcium on parathyroid hormone secretion in uraemia. Cunningham J, et al. **Nephrol Dial Transplant** 1989;4(5):339–44

Effect of one haemodialysis treatment on the plasma concentrations of intact parathyroid hormone and ionised calcium: usefulness of end-dialysis values in evaluating the suppressibility of hyperparathyroidism. Pietilä K, et al. **Nephrol Dial Transplant** 1989;4(2):115–8

Substitution of calcium carbonate for aluminum hydroxide in patients on hemodialysis. Effects on acidosis, on parathyroid function, and on calcemia. Anelli A, et al. **Nephron** 1989;52(2):125–32

Serum calcium and parathyroid hormone derangements in rhabdomyolysis [letter] García de Vinuesa S, et al. **Nephron** 1989;52(1):107–8

Parameters of evaluation and correlation of renal phosphate handling and of parathyroid function in children. Stark H, et al. **Nephron** 1989;51(4):478–81

Parathyroid hormone and calcitriol changes in normal and insulin-dependent diabetic pregnancies. Mimouni F, et al. **Obstet Gynecol** 1989 Jul;74(1):49–54

Treatment of tumor hypercalcemia with clodronate. Ziegler R, et al. **Recent Results Cancer Res** 1989;116:46–53

Serum calcitriol and parathyroid hormone levels following prolonged infusion of calcitriol in vitamin D replete and depleted rabbits. Long JF, et al. **Res Commun Chem Pathol Pharmacol** 1989 May; 64(2):273–86

Tumors of the parathyroid gland and circulating parathyroid hormone-related protein associated with persistent hypercalcemia. Rosol TJ, et al. **Toxicol Pathol** 1989; 17(2):346–56 (48 ref.)

Long-term renal, endocrine, and hematologic evaluation of kidney donors. Gonzalez R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1946–8

Calcium regulation of parathyroid hormone release. Akerström G, et al. **Ups J Med Sci** 1988;93(2):145–8 (12 ref.)

[Comparative study of parathyroid function by serum parathyroid hormone, total adenosine cyclic monophosphate in the urine and its nephrogenic fraction] Ivanov I, et al. **Vutr Boles** 1988;27(4):24–8 (Eng. Abstr.) **(Bul)**

[Serum parathyroid hormone (1–84) assessed by immunoradiometric methods can differentiate malignant hypercalcemia and primary hyperparathyroidism] Laurberg P, et al. **Ugeskr Laeger** 1988 Nov 28; 150(48):2972–4 (Eng. Abstr.) **(Dan)**

[Results of hormonal studies in 23 adolescents with renal failure treated by chronic dialysis] Garnier P, et al. **Pathol Biol (Paris)** 1988 Oct;36(8):988–94 (Eng. Abstr.) **(Fre)**

[The effect of osteopenia prevention in very small premature infants on hormonal parameters of calcium metabolism and bone mineralization] Reinken L, et al. **Klin Padiatr** 1989 May–Jun;201(3):177–82 (Eng. Abstr.) **(Ger)**

[Calciotrophic hormones and aging] Pioli G, et al. **G Clin Med** 1989 Jun–Jul;70(6–7):439–41, 443–7, 450–6 (120 ref.) **(Ita)**

[Serum ionized calcium, parathormone and plasma renin activity in essential arterial hypertension] Nami R, et al. **Minerva Cardioangiol** 1989 Mar;37(3):91–8 (Eng. Abstr.) **(Ita)**

[Modification of PRA, aldosterone, prolactin, and parathyroid hormone serum levels by "head-out" water immersion] Fiore CE, et al. **Riv Eur Sci Med Farmacol** 1987 Jun;9(2):147–51 (Eng. Abstr.) **(Ita)**

[Measurement of circulating intact human PTH] Kousaka T, et al. **Kaku Igaku** 1988 Aug;25(8):813–20 **(Jpn)**

[A study of bone metabolism in hemodialysis patients. I. Correlation with bone histology and serum levels of PTH, vitamin D metabolites, and vitamin A] Ohara K. **Nippon Jinzo Gakkai Shi** 1988 Apr;30(4):417–36 (Eng. Abstr.) **(Jpn)**

[Immunoreactive parathyroid hormones in the circulation and cerebrospinal fluid from patients with renal failure: possible restriction of parathyroid hormone by the blood-brain barrier] Hironaka T, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Aug 20;64(8):636–44 (Eng. Abstr.) **(Jpn)**

[Abnormal calcium metabolism in myotonic dystrophy (II): Increased level of nephrogenous cyclic AMP and serum immunoreactive parathyroid hormone] Yoshida H, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Jul 20;64(7):539–46 (Eng. Abstr.) **(Jpn)**

[Basic studies on an immunoradiometric assay system for human parathyrin (intact PTH1–84)] Kanao K, et al. **Radioisotopes** 1988 Jul;37(7):402–5 (Eng. Abstr.) **(Jpn)**

[Magnesium, parathyroid hormone and osteocalcin in the sera of hospitalized patients with chronic alcoholism] Torizumi K, et al. **Radioisotopes** 1988 Jul;37(7):406–9 (Eng. Abstr.) **(Jpn)**

[Parathyroid hormone and bone mineral content in male and female patients receiving hemodialysis] Torizumi K, et al. **Radioisotopes** 1988 Jul;37(7):410–3 (Eng. Abstr.) **(Jpn)**

[The correlation of serum parathyroid hormones among patients with dementia of vascular type, hemodialysis, and bone-joint disorders] Yasui M, et al. **Radioisotopes** 1989 Jan;38(1):13–9 (Eng. Abstr.) **(Jpn)**

[Fundamental and clinical evaluation on PTH mid-region RIA kit (PTH kit "YAMASA") for serum PTH] Togashi K, et al. **Rinsho Byori** 1988 Aug;36(8):974–8 **(Jpn)**

[The discrepancy on measurement of parathyroid hormone in blood under the condition of diseases in hemodialysis patients with renal insufficiency and elderly osteoporotic patients] Ueyoshi A, et al. **Ryumachi** 1988 Oct;28(5):324–33 (Eng. Abstr.) **(Jpn)**

[Parathyroid hormone and blood pressure in patients with chronic renal failure treated by repeated hemodialysis] Starzyk J, et al. **Wiad Lek** 1989 Jan 1;42(1):40–3 (Eng. Abstr.) **(Pol)**

[Measurement of parathyroid hormones: clinical value] Leite MO. **AMB Rev Assoc Med Bras** 1988 May–Jun;34(3):77–8 **(Por)**

[Critical analysis of 2 segment-specific radioimmunoassays for the measurement of parathyroid hormones in the diagnosis of primary hyperparathyroidism] Vieira JG, et al. **AMB Rev Assoc Med Bras** 1988 May–Jun;34(3):79–83 (Eng. Abstr.) **(Por)**

[A study of parathyroid hormone, calcitonin and calcium in blood of patients with psoriatic arthritis] Milevskaia SG. **Vestn Dermatol Venerol** 1989;(2):53–5 (Eng. Abstr.) **(Rus)**

[Parathormone, cyclic AMP, 1,25 dihydroxyvitamin D and osteocalcin in hypercalciuric renal lithiasis] Díaz Pérez de Madrid J, et al. **Arch Esp Urol** 1989 Mar;42(2):129–31 (Eng. Abstr.) **(Spa)**

CHEMICAL SYNTHESIS

Preparation of a photoreactive analog of parathyroid hormone [Nle8, Lys(N-epsilon-4-azido-2-nitrophenyl)= 13,Nle18,Tyr34]bovine parathyroid hormone-(1–34)NH2, a selective, high-affinity ligand for characterization of parathyroid hormone receptors. Shigeno C, et al. **Anal Biochem** 1989 Jun;179(2):268–73

Synthetic substrate for eukaryotic signal peptidase. Cleavage of a synthetic peptide analog of the precursor region of preproparathyroid hormone. Caulfield MP, et al. **J Biol Chem** 1989 Sep 25;264(27):15813–7

DIAGNOSTIC USE

The use of an intact molecule parathyroid hormone assay in disorders of calcium metabolism. Bicknell EJ, et al. **Ann Clin Biochem** 1988 Jul;25 (Pt 4):367–72

Synthetic human parathyroid hormone 1–34 fragment for diagnostic testing. Mallette LE. **Ann Intern Med** 1988 Nov 15;109(10):800–4 (24 ref.)

Human PTH(1–34) infusion test in differential diagnosis of various types of hypoparathyroidism: an attempt to establish a standard clinical test. Yamamoto M, et al. **Bone Miner** 1989 May;6(2):199–212

Changes in serum levels of type I and III procollagen extension peptides during infusion of human parathyroid hormone fragment (1–34). Simon LS, et al. **J Bone Miner Res** 1988 Apr;3(2):241–6

Synthetic human parathyroid hormone-(1–34) for the study of pseudohypoparathyroidism. Mallette LE, et al. **J Clin Endocrinol Metab** 1988 Nov;67(5):964–72

GENETICS

Familial hypoparathyroidism due to an abnormal parathyroid hormone molecule. McElduff A, et al. **Aust N Z J Med** 1989 Feb;19(1):22–30

Increased synthesis of human parathyroid hormone in Escherichia coli through alterations of the 5' untranslated region. Morelle G, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):459–62

Mitotic deletions of 11p15.5 in two different tumors indicate

that the CALCA locus is distal to the PTH locus. Henry I, et al. **Cytogenet Cell Genet** 1989;50(2-3):155-7

Calcium regulates parathyroid hormone messenger ribonucleic acid (mRNA), but not calcitonin mRNA in vivo in the rat. Dominant role of 1,25-dihydroxyvitamin D. Naveh-Many T, et al. **Endocrinology** 1989 Jul; 125(1):275-80

The loci for parathyroid hormone and beta-globin are closely linked and map to chromosome 15 in cattle. Fries R, et al. **Genomics** 1988 Nov;3(4):302-7

Cleavage of parathyroid hormone in macrophage endosomes illustrates a novel pathway for intracellular processing of proteins. Diment S, et al. **J Biol Chem** 1989 Aug 15; 264(23):13403-6

Transcriptional regulation of the parathyroid hormone-related peptide gene by glucocorticoids and vitamin D in a human C-cell line. Ikeda K, et al. **J Biol Chem** 1989 Sep 25;264(27):15743-6

Expression of human parathyroid hormone in Escherichia coli. Wingender E, et al. **J Biol Chem** 1989 Mar 15; 264(8):4367-73

Importance of the propeptide sequence of human preproparathyroid hormone for signal sequence function. Wiren KM, et al. **J Biol Chem** 1988 Dec 25;263(36):19771-7

Regulation by calcium of parathyroid hormone mRNA in cultured parathyroid tissue. Brookman JJ, et al. **J Bone Miner Res** 1986 Dec;1(6):529-37

Nucleotide sequence of cloned cDNAs encoding chicken preproparathyroid hormone. Khosla S, et al. **J Bone Miner Res** 1988 Dec;3(6):689-98

Molecular cloning and chromosomal mapping of DNA rearranged with the parathyroid hormone gene in a parathyroid adenoma. Arnold A, et al. **J Clin Invest** 1989 Jun;83(6):2034-40

Hypocalcemia increases and hypercalcemia decreases the steady-state level of parathyroid hormone messenger RNA in the rat. Yamamoto M, et al. **J Clin Invest** 1989 Mar; 83(3):1053-6

Nucleotide sequence of the DNA complementary to avian (chicken) preproparathyroid hormone mRNA and the deduced sequence of the hormone precursor. Russell J, et al. **Mol Endocrinol** 1989 Feb;3(2):325-31

Mutations in signal sequence cleavage domain of preproparathyroid hormone alter protein translocation, signal sequence cleavage, and membrane-binding properties. Wiren KM, et al. **Mol Endocrinol** 1989 Feb; 3(2):240-50

Rat parathyroid hormone-like peptide: comparison with the human homologue and expression in malignant and normal tissue. Yasuda T, et al. **Mol Endocrinol** 1989 Mar; 3(3):518-25

Isolation and characterization of the human parathyroid hormone-like peptide gene. Mangin M, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2408-12

IMMUNOLOGY

Immunological properties of synthetic human parathyroid hormone: effect of deamidation at position 76. Gleed JH, et al. **Bone Miner** 1987 Aug;2(5):375-82

Monoclonal antibodies to bovine parathyroid hormone: production and characterization. Vieira JG, et al. **Braz J Med Biol Res** 1988;21(5):1005-11

ISOLATION & PURIFICATION

Clonal rat parathyroid cell line expresses a parathyroid hormone-related peptide but not parathyroid hormone itself. Ikeda K, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):108-15

Purification and characterization of recombinant human parathyroid hormone-related protein. Hammonds RG Jr, et al. **J Biol Chem** 1989 Sep 5;264(25):14806-11

METABOLISM

Immunocytochemical localization of parathyroid hormone in hamster parathyroid gland. Shoumura S, et al. **Acta Anat (Basel)** 1988;133(2):107-10

Ca2+ concentration influences the hepatic extraction of bioactive human PTH-(1-34) in rats. D'Amour P, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E87-92

Parathyroid hormone-related protein in adult T-cell leukemia-lymphoma. Motokura T, et al. **Ann Intern Med** 1989 Sep 15;111(6):484-8

Demonstration of receptors for parathyroid hormone on cultured rabbit costal chondrocytes. Enomoto M, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1222-9

Existence of parathyroid hormone binding sites on murine hemopoietic blast cells. Hakeda Y, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1481-6

Control of parathyroid hormone-degrading activity in the opossum kidney cell: possible involvement of protein kinase C. Yamaguchi T, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):908-13

Calcium rather than cyclic AMP is an intracellular messenger of parathyroid hormone action on glycogen metabolism in isolated rat hepatocytes. Mine T, et al. **Biochem J** 1989 Mar 15;258(3):889-94

Identification and characterization of parathyroid hormone receptors on dog kidney, human kidney, chick bone and human dermal fibroblast. A comparative study of functional and structural properties. Pun KK, et al. **Biochem J** 1989 May 1;259(3):785-9

Parathyroid hormone degradation by chymotrypsin-like endopeptidase in the clonal osteogenic UMR-106 cell. Yamaguchi T, et al. **Biochim Biophys Acta** 1989 Feb 9; 1010(2):177-83

Protein kinase activities in the parathyroid gland: proparathyroid hormone, parathyroid hormone and secretory protein-I as substrates for phosphorylation. Baty L, et al. **Bone Miner** 1988 Jan;3(3):249-57

Parathyroid hormone-degrading enzyme of high molecular weight in the cytosol of rat renal cortical cells. Fujita T, et al. **Bone Miner** 1986 Dec;1(6):457-65

Immunoreactive parathyroid hormones in the circulation and cerebrospinal fluid from patients with renal failure: possible restriction of parathyroid hormone by the blood-brain barrier. Hironaka T, et al. **Bone Miner** 1987 Sep;2(6):487-94

Separate binding sites for intact PTH 1-84 and synthetic PTH 1-34 in canine kidney. Garcia JC, et al. **Calcif Tissue Int** 1989 Mar;44(3):214-9

Histological manifestations of abnormal parathyroid hormone metabolism in renal osteodystrophy. Teitelbaum SL. **Contrib Nephrol** 1988;64:1-4

Separation of parathyroid hormone-like activity from transforming growth factor-alpha and -beta in the canine adenocarcinoma (CAC-8) model of humoral hypercalcemia of malignancy. Merryman JI, et al. **Endocrinology** 1989 May;124(5):2456-63

Parathyroid hormone degradation by chymotrypsin-like endopeptidase in the opossum kidney cell. Yamaguchi T, et al. **Endocrinology** 1988 Dec;123(6):2812-7

Osteocalcin, parathormone and hypercalciuria. Rico H, et al. **Eur Urol** 1988;15(3-4):239-42

Immunocytochemical demonstration of a novel system of neuroendocrine peptidergic neurons in the pond snail Lymnaea stagnalis, with antisera to the teleostean hormone hypocalcin and mammalian parathyroid hormone. Wendelaar Bonga SE, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):29-38

The sites of hormone storage in normal and diseased parathyroid glands: a silver impregnation and immunohistochemical study. Pesce C, et al. **Histopathology** 1989 Aug;15(2):157-66

Parallel effects of signal peptide hydrophobic core modifications on co-translational translocation and post-translational cleavage by purified signal peptidase. Cioffi JA, et al. **J Biol Chem** 1989 Sep 5;264(25):15052-8

Biotinylated parathyroid hormone as a probe for the parathyroid hormone receptor. Structure-function analysis and detection of specific binding to cultured bone cells by flow cytometry. Newman W, et al. **J Biol Chem** 1989 Oct 5;264(28):16359-65

Interaction of human parathyroid hormone-related peptide with parathyroid hormone receptors in clonal rat osteosarcoma cells. Shigeno C, et al. **J Biol Chem** 1988 Dec 5;263(34):18369-77

Parathyroid hormone receptors in human dermal fibroblasts: structural and functional characterization. Pun KK, et al. **J Bone Miner Res** 1988 Aug;3(4):453-60

Glucocorticoids increase parathyroid hormone receptors in rat osteoblastic osteosarcoma cells (ROS 17/2). Yamamoto I, et al. **J Bone Miner Res** 1988 Dec;3(6):707-12

The calcium channel blocker diltiazem lowers serum parathyroid hormone levels in vivo and in vitro. Seely EW, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1007-12

Peripheral metabolism of [35S]parathyroid hormone in vivo: influence of alterations in calcium availability and parathyroid status. Bringhurst FR, et al. **J Endocrinol** 1989 Jul;122(1):237-45

Vitamin D, parathyroid hormone, and bone mineral content of lumbar spine and femur in primary biliary cirrhosis. Almdal T, et al. **J Intern Med** 1989 Mar;225(3):207-13

Oligosymptomatic hypocalcaemia in a patient with impaired parathyroid hormone activity. Lenox-Smith A, et al. **J R Soc Med** 1988 Dec;81(12):732-3

Studies on parathyroid hormone, vitamin D and pseudohypoparathyroidism: an example of trail from basic science to clinical practice [editorial] Ogata E. **Jpn J Med** 1989 Jan-Feb;28(1):1

The beta-subunit of the bovine mitochondrial F1 ATPase specifically binds the amino terminal domain of parathyroid hormone. Laethem R, et al. **Mol Cell Endocrinol** 1988 Sep; 59(1-2):155-9

N-terminal basic amino acids are not required for translocation and processing of preproparathyroid hormone. Szczesna-Skorupa E, et al. **Mol Endocrinol** 1989 Jan;3(1):174-8

Storage and degradation of secretory proteins in adenomatous and secondary hyperplastic parathyroid cells. An immunoelectron microscope study. Berger G, et al. **Virchows Arch [A]** 1989;415(4):305-16

[Ethanol-induced effect on the central nervous system and the hormones of calcium homeostasis] Balabanova S, et al. **Beitr Gerichtl Med** 1988;46:161-5 (Eng. Abstr.) **(Ger)**

PHARMACOKINETICS

Peripheral metabolism of PTH: fate of biologically active amino terminus in vivo. Bringhurst FR, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):E886-93

PHARMACOLOGY

Parathyroid hormone and noradrenaline-induced enhancement of cyclic AMP in a cloned osteogenic sarcoma cell line (UMR 106) is inhibited by neuropeptide Y. Bjurholm A, et al. **Acta Physiol Scand** 1988 Nov; 134(3):451-2

The effect of parathyroid hormone on cisplatin nephrotoxicity. Capasso G, et al. **Adv Exp Med Biol** 1989; 252:325-9

The action of parathyroid hormone on bone metabolism may be regulated by endogenously synthesized prostaglandin E2. Yang CY, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:435-8

Effect of parathyroid hormone on random migration of human polymorphonuclear leukocytes. Doherty CC, et al. **Am J Nephrol** 1988;8(3):212-9

Parathyroid hormone stimulates ammoniagenesis in canine renal proximal tubular segments. Chobanian MC, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):F847-52

PTH elevates inositol polyphosphates and diacylglycerol in a rat osteoblast-like cell line. Civitelli R, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):E660-7

Beta-receptors in resistance to phosphaturic effect of PTH in respiratory alkalosis. Hoppe A, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):R557-62

Effect of chronic renal failure and parathyroid hormone on phospholipid content of brain synaptosomes. Islam A, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):F705-10

Peptide hormone effects on urinary acidification and acid-base balance: PTH, ADH, and glucagon. Paillard M, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):F973-85 (101 ref.)

Effects of lectins and tunicamycin on cAMP response to parathyroid hormone. Rizzoli R, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E80-6

Regulation of Na-dependent Pi transport by parathyroid hormone in osteoblast-like cells. Selz T, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E93-100

Heterogeneity of bone resorbing factors produced by unstimulated murine osteoblasts in vitro and in response to stimulation by parathyroid hormone and mononuclear cell factors. Meghji S, et al. **Arch Oral Biol** 1988; 33(11):773-8

Parathyroid hormone alteration of free and tRNA-bound proline specific activities in cultured mouse osteoblast-like cells. Hall GE, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):994-1000

Parathyroid hormone (PTH) and PTH-like protein (PLP) stimulate interleukin-6 production by osteogenic cells: a possible role of interleukin-6 in osteoclastogenesis. Löwik CW, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1546-52

Inhibition by 17 beta-estradiol of PTH stimulated resorption and prostaglandin production in cultured neonatal mouse calvariae. Pilbeam CC, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1319-24

Heterologous up-regulation of the 1,25-dihydroxyvitamin D3 receptor by parathyroid hormone (PTH) and PTH-like peptide in osteoblast-like cells. Pols HA, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):588-94

Parathyroid hormone inhibition of Na+/phosphate cotransport in OK cells: generation of second messengers in the regulatory cascade. Quamme G, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):951-7

Parathyroid hormone 1-34, but not 3-34 or 7-34, transiently translocates protein kinase C in cultured renal (OK) cells. Tamura T, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1352-8

Parathyroid hormone inhibition of Na+/phosphate cotransport in OK cells: intracellular [Ca2+] as a second messenger. Quamme G, et al. **Biochim Biophys Acta** 1989 Sep 19;1013(2):166-72

Parathyroid hormone inhibition of Na+/phosphate cotransport in OK cells: requirement of protein kinase C-dependent pathway. Quamme G, et al. **Biochim Biophys Acta** 1989 Sep 19;1013(2):159-65

Bone repletion in vitro: evidence for a locally regulated bone repair response to PTH treatment. Linkhart TA, et al. **Bone** 1988;9(6):371-9

The adenylate cyclase response to parathyroid hormone in cultured rabbit marrow fibroblastic cells. Barling PM, et al. **Bone Miner** 1989 Aug;7(1):23-30

Effect of synthetic human parathyroid hormone on the levels of alkaline phosphatase activity and formation of alkaline phosphatase-rich matrix vesicles by primary cultures of chicken epiphyseal growth plate chondrocytes. Chin JE, et al. **Bone Miner** 1986 Oct;1(5):421-36

A possible mechanism whereby parathyroid hormone stimulates phospholipid synthesis in canine renal tubules. Esbrit P, et al. **Bone Miner** 1988 Apr;4(1):7-16

Membrane potential changes, cAMP stimulation and contraction in osteoblast-like UMR 106 cells in response to calcitonin and parathyroid hormone. Ferrier J, et al. **Bone Miner** 1988 Jun;4(2):133-45

Forskolin mimics the effects of calcitonin but not parathyroid hormone on bone resorption in vitro. Klein RF, et al. **Bone Miner** 1988 Jul;4(3):247-56

Corticosteroid-induced changes in the responsiveness of human osteoblast-like cells to parathyroid hormone. Silve C, et al. **Bone Miner** 1989 Apr;6(1):65-75

Effect of parathyroid hormone and parathyroid hormone fragments on the intracellular ionized calcium concentration in an osteoblast cell line. van Leeuwen JP, et al. **Bone Miner** 1988 Jun;4(2):177-88

Effects of human PTH-related peptide and human PTH on

cyclic AMP production and cytosolic free calcium in an osteoblastic cell clone. Yamada H, et al. **Bone Miner** 1989 Apr;6(1):45–54

1,25 dihydroxyvitamin D3 alone or in combination with parathyroid hormone does not increase bone mass in young rats. Gunness-Hey M, et al. **Calcif Tissue Int** 1988 Nov; 43(5):284–8

Differential effects of parathyroid hormone on protein phosphorylation in two osteoblastlike cell populations isolated from neonatal mouse calvaria. Krieger NS, et al. **Calcif Tissue Int** 1989 Mar;44(3):192–9

Cyclic nucleotides and the rapid inhibitions of bone 45Ca uptake in response to bovine parathyroid hormone and 16,16-dimethyl prostaglandin E2 in chicks. Shaw AJ, et al. **Calcif Tissue Int** 1989 Mar;44(3):209–13

Fast axonal transport alterations in amyotrophic lateral sclerosis (ALS) and in parathyroid hormone (PTH)-treated axons. Breuer AC, et al. **Cell Motil Cytoskeleton** 1988; 10(1–2):321–30

Effect of estrogens on renal responsiveness to parathyroid hormone in elderly female subjects. Imanaka S, et al. **Endocrinol Jpn** 1988 Aug;35(4):593–9

Parathyroid hormone causes translocation of protein kinase-C from cytosol to membranes in rat osteosarcoma cells. Abou-Samra AB, et al. **Endocrinology** 1989 Mar; 124(3):1107–13

Parathyroid hormone (PTH)-related protein is a potent stimulator of osteoclast-like multinucleated cell formation to the same extent as PTH in mouse marrow cultures. Akatsu T, et al. **Endocrinology** 1989 Jul;125(1):20–7

Avian (chicken) parathyroid hormone: synthesis and comparative biological evaluation of the 1-34 fragment. Caulfield MP, et al. **Endocrinology** 1988 Dec; 123(6):2949–51

Parathyroid hormone-related peptide transiently increases cytosolic calcium in osteoblast-like cells: comparison with parathyroid hormone. Civitelli R, et al. **Endocrinology** 1989 Sep;125(3):1204–10

Estradiol effects on proliferation, messenger ribonucleic acid for collagen and insulin-like growth factor-I, and parathyroid hormone-stimulated adenylate cyclase activity in osteoblastic cells from calvariae and long bones. Ernst M, et al. **Endocrinology** 1989 Aug;125(2):825–33

Direct modulation by estradiol of the response of human bone cells (SaOS-2) to human parathyroid hormone (PTH) and PTH-related protein. Fukayama S, et al. **Endocrinology** 1989 Jan;124(1):397–401

Human parathyroid hormone (PTH)-related protein and human PTH: comparative biological activities on human bone cells and bone resorption. Fukayama S, et al. **Endocrinology** 1988 Dec;123(6):2841–8

A new highly potent parathyroid hormone antagonist: [D-Trp12,Tyr34]bPTH-(7–34)NH2. Goldman ME, et al. **Endocrinology** 1988 Nov;123(5):2597–9

Parathyroid hormone stimulates release of insulin-like growth factor-I (IGF-I) and IGF-II from neonatal mouse calvaria in organ culture. Linkhart TA, et al. **Endocrinology** 1989 Sep;125(3):1484–91

Parathyroid hormone enhances the transcript and polypeptide levels of insulin-like growth factor I in osteoblast-enriched cultures from fetal rat bone. McCarthy TL, et al. **Endocrinology** 1989 Mar;124(3):1247–53

Protein kinase-A and the effects of parathyroid hormone on phosphate uptake in opossum kidney cells. Martin KJ, et al. **Endocrinology** 1989 Jul;125(1):295–301

Human parathyroid hormone carboxyterminal peptide (53–84) stimulates alkaline phosphatase activity in dexamethasone-treated rat osteosarcoma cells in vitro. Murray TM, et al. **Endocrinology** 1989 Feb;124(2):1097–9

Parathyroid hormone down-regulates the epidermal growth factor receptors in clonal osteoblastic mouse calvarial cells, MC3T3-E1: possible mediation by adenosine 3'5'-cyclic monophosphate. Ohta S, et al. **Endocrinology** 1989 May; 124(5):2419–26

Renal and adrenal adenosine 3',5'-monophosphate production and corticosteroid secretion in response to synthetic chicken parathyroid hormone-(1–34). Rosenberg J, et al. **Endocrinology** 1989 Aug;125(2):1082–9

Osteoblast-like cells secrete granulocyte-macrophage colony-stimulating factor in response to parathyroid hormone and lipopolysaccharide. Weir EC, et al. **Endocrinology** 1989 Feb;124(2):899–904

The effect of bovine parathormone on ultimobranchial body, parathyroid gland and paravertebral lime sacs as correlated with serum calcium and inorganic phosphorus levels in Bufo melanostictus Schneider. Pandey AK. **Folia Biol (Krakow)** 1988;36(3–4):275–9

Parathyroid induced regulation of calcium and phosphate in rat lens. Srivastava VK, et al. **Indian J Exp Biol** 1988 Sep;26(9):728–9

Cyclic AMP-mediated stabilization of osteocalcin mRNA in rat osteoblast-like cells treated with parathyroid hormone. Noda M, et al. **J Biol Chem** 1988 Dec 5; 263(34):18574–7

The central part of parathyroid hormone stimulates thymidine incorporation of chondrocytes. Schlüter KD, et al. **J Biol Chem** 1989 Jul 5;264(19):11087–92

Consistent patterns of changing hormone responsiveness during continuous culture of cloned rat calvaria cells. Aubin JE, et al. **J Bone Miner Res** 1988 Jun;3(3):333–9

Certain vitamin D metabolites potentiate the expression of parathyroid hormone bioactivity. Bradbeer JN, et al. **J Bone Miner Res** 1988 Feb;3(1):47–52

Growth of rat osteoblast-like cells in a lipid-enriched culture medium and regulation of function by parathyroid hormone and 1,25-dihydroxyvitamin D. Catherwood BD, et al. **J Bone Miner Res** 1988 Aug;3(4):431–8

Stimulation of inositol phosphate formation in ROS 17/2.8 cell membranes by guanine nucleotide, calcium, and parathyroid hormone. Cosman F, et al. **J Bone Miner Res** 1989 Jun;4(3):413–20

Resorption is not essential for the stimulation of bone growth by hPTH-(1–34) in rats in vivo. Hock JM, et al. **J Bone Miner Res** 1989 Jun;4(3):449–58

Effects of oxidation of human parathyroid hormone on its biological activity in continuously infused, thyroparathyroidectomized rats. Horiuchi N. **J Bone Miner Res** 1988 Jun;3(3):353–8

Characterization of isolated and cultured chick osteoclasts: the effects of acetazolamide, calcitonin, and parathyroid hormone on acid production. Hunter SJ, et al. **J Bone Miner Res** 1988 Jun;3(3):297–303

Parathyroid hormone-related protein relaxes rat gastric smooth muscle and shows cross-desensitization with parathyroid hormone. Mok LL, et al. **J Bone Miner Res** 1989 Jun;4(3):433–9

Skeletal contribution of cyclic adenosine monophosphate in response to parathyroid hormone and calcitonin in vivo in the rat. Morrison NE, et al. **J Bone Miner Res** 1988 Dec;3(6):629–34

Factor derived from human lung carcinoma associated with hypercalcemia mimics the effects of parathyroid hormone on phosphate transport in cultured renal epithelia. Pizurki L, et al. **J Bone Miner Res** 1988 Apr;3(2):233–9

Effect of pertussis toxin on parathyroid hormone-stimulated cyclic AMP production in cultured kidney cells. Rizzoli R, et al. **J Bone Miner Res** 1988 Dec;3(6):605–9

Effects of infusion of human parathyroid hormone-related protein-(1–40) in nude mice: histomorphometric and biochemical investigations. Rosol TJ, et al. **J Bone Miner Res** 1988 Dec;3(6):699–706

Characteristics of parathyroid hormone-specific cyclic changes of glucose-6-phosphate dehydrogenase activity in the distal convoluted tubule of the guinea pig. Sakaguchi K, et al. **J Bone Miner Res** 1986 Jun;1(3):259–65

Restoration of spinal bone in osteoporotic men by treatment with human parathyroid hormone (1–34) and 1,25-dihydroxyvitamin D. Slovik DM, et al. **J Bone Miner Res** 1986 Aug;1(4):377–81

Effect of parathyroid hormone on amino acid transport by cultured neonatal mouse calvarial bone cells. Yee JA. **J Bone Miner Res** 1988 Apr;3(2):211–8

Transcriptional regulation of osteopontin production in rat osteoblast-like cells by parathyroid hormone. Noda M, et al. **J Cell Biol** 1989 Feb;108(2):713–8

Stimulation by parathyroid hormone of calcium absorption in confluent Madin-Darby canine kidney cells. Kennedy SM, et al. **J Cell Physiol** 1989 Apr;139(1):83–92

Effects of parathyroid hormone on cytosolic free calcium concentration in individual rabbit connecting tubules. Bourdeau JE, et al. **J Clin Invest** 1989 Feb;83(2):373–9

Insulin-like growth factor I mediates selective anabolic effects of parathyroid hormone in bone cultures. Canalis E, et al. **J Clin Invest** 1989 Jan;83(1):60–5

Desensitization to parathyroid hormone in renal cells from aged rats is associated with alterations in G-protein activity. Hanai H, et al. **J Clin Invest** 1989 Jan;83(1):268–77

Parathyroid hormone and lipopolysaccharide induce murine osteoblast-like cells to secrete a cytokine indistinguishable from granulocyte-macrophage colony-stimulating factor. Horowitz MC, et al. **J Clin Invest** 1989 Jan;83(1):149–57

Actions of synthetic parathyroid hormone-related protein(1–34) on the isolated rat kidney. Ebeling PR, et al. **J Endocrinol** 1989 Jan;120(1):45–50

Rainbow trout hypocalcin stimulates bone resorption in embryonic mouse calvaria in vitro in a PTH-like fashion. Lafeber FP, et al. **J Exp Biol** 1989 May;143:165–75

The effects of dietary phosphorus and parathyroid hormone (PTH) infusion rates on the avian phosphaturic response to PTH. Stanton TS, et al. **J Exp Biol** 1989 Jul;144:521–33

Characterization of the cytoskeleton of isolated chick osteoclasts: effect of calcitonin. Hunter SJ, et al. **J Histochem Cytochem** 1989 Oct;37(10):1529–37

Immunomodulatory effect of bovine PTH extract on lymphocyte response to plant mitogens. Elias AN, et al. **J Med** 1988;19(2):109–17

Verapamil reverses PTH- or CRF-induced abnormal fatty acid oxidation in muscle. Perna AF, et al. **Kidney Int** 1988 Dec;34(6):774–8

Fatty acid oxidation in the myocardium: effects of parathyroid hormone and CRF. Smogorzewski M, et al. **Kidney Int** 1988 Dec;34(6):797–803

Response of isolated renal microvessel and tubule adenylate cyclases to PTH fragments. Helwig JJ, et al. **Kidney Int Suppl** 1988 Sep;25:S45–8

NaF-induced Ca2+ mobilization is dependent upon the culture density in a parathyroid hormone-responsive osteoblast-like cell line [published erratum appears in Life Sci 1989;44(6):439] Kawase T, et al. **Life Sci** 1988; 43(26):2241–7

Inhibition of parathyroid hormone responsiveness in clonal osteoblastic cells expressing a mutant form of 3',5'-cyclic adenosine monophosphate-dependent protein kinase. Bringhurst FR, et al. **Mol Endocrinol** 1989 Jan;3(1):60–7

Parathyroid hormone inhibits collagen synthesis at both ribonucleic acid and protein levels in rat osteogenic sarcoma cells. Partridge NC, et al. **Mol Endocrinol** 1989 Feb;3(2):232–9

Effect of parathyroid hormone on PO4 transport through the human placenta microvilli. Brunette MG, et al. **Pediatr Res** 1989 Jan;25(1):15–8

Restoration of a phosphaturic response to parathyroid hormone in the immature rat. Corn PG, et al. **Pediatr Res** 1989 Jul;26(1):54–7

Tumoral synthetic parathyroid hormone related peptide inhibits amiloride-sensitive sodium transport in cultured renal epithelia. Caverzasio J, et al. **Pflugers Arch** 1988 Nov; 413(1):96–8

Parathyroid hormone and parathyroid hormone-related protein inhibit phasic contraction of pig duodenal smooth muscle. Mok LL, et al. **Proc Soc Exp Biol Med** 1989 Sep; 191(4):337–40

Effects of synthetic bovine parathyroid hormone (1–34) and its analogues on 45Ca uptake and adenylate cyclase activation in bone and plasma calcium levels in the chick. Dacke CG, et al. **Q J Exp Physiol** 1988 Jul;73(4):573–84

[Relaxation effect of bovine parathyroid hormone 1–34 on rabbit aorta] Zeng XP, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jul;9(4):330–3 (Eng. Abstr.) **(Chi)**

[Effect of bovine parathyroid hormone 1–34 on calcium flux and 6-keto-PGF1 alpha release of rabbit aorta] Zeng XP, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 May;9(3):224–7 (Eng. Abstr.) **(Chi)**

[Action of parathyroid hormone on the secretion of renin and arterial pressure in the rabbit] Bechara A, et al. **Arch Esp Urol** 1988 May;41(4):255–63 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Renal response to parathyroid hormone in the weanling rat. Karlén J. **Acta Physiol Scand** 1988 Sep;134(1):17–21

Calcium, parathyroid hormone, and blood pressure. Campese VM. **Am J Hypertens** 1989 Feb;2(2 Pt 2):34S–44S (152 ref.)

Effect of parathyroidectomy on T cell functions in patients with primary hyperparathyroidism. Shasha SM, et al. **Am J Nephrol** 1989;9(1):25–9

Sensitivity of the renal adenylate cyclase receptor system to parathormone during the last third of pregnancy in the rat. Gugi B, et al. **Biol Neonate** 1989;55(3):171–9

Stimulation of collagenolytic enzyme release from cultured bone cells of normal and osteopetrotic (mi/mi) mice by parathyroid hormone and lipopolysaccharide. Jilka RL. **Bone Miner** 1989 Jul;6(3):277–87

Are osteoblastic cells required for the control of osteoclast activity by parathyroid hormone? Jilka RL. **Bone Miner** 1986 Sep;1(4):261–6 (24 ref.)

Forskolin sensitizes parathyroid hormone-induced cyclic AMP response, but not the bone resorptive effect, in mouse calvarial bones. Lerner UH, et al. **Bone Miner** 1989 Jan; 5(2):169–81

The messenger function of Ca2+: from PTH action to smooth muscle contraction. Rasmussen H. **Bone Miner** 1989 Mar;5(3):233–48 (97 ref.)

Alpha 2-adrenoceptor regulation of parathyroid hormone function in the isolated perfused kidney. Jeffries WB, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:133–48

Is parathormone a cardiac toxin in uremia? Himelman RB, et al. **Int J Card Imaging** 1988–89;3(4):209–15

Evidence for cAMP-dependent protein kinase in mediating the parathyroid hormone-stimulated rise in cytosolic free calcium in rabbit connecting tubules. Lau K, et al. **J Biol Chem** 1989 Mar 5;264(7):4028–32

Effects of cisplatin on parathyroid hormone- and human lung tumor-induced bone resorption. Abramson EC, et al. **J Bone Miner Res** 1988 Oct;3(5):541–6

Early effects of parathyroid hormone on membrane potential of rat osteoblasts in culture: role of cAMP and Ca2+. Fritsch J, et al. **J Bone Miner Res** 1988 Oct;3(5):547–54

Parathyroid hormone control of free cytosolic Ca2+ in the kidney. Fujii Y, et al. **J Bone Miner Res** 1988 Oct; 3(5):525–32

Dog and rat kidney proximal tubule cells in culture: responses to parathyroid hormone. Rao LG, et al. **J Bone Miner Res** 1989 Jun;4(3):293–303

Parathyroid hormone and calcitonin modify inositol phospholipid metabolism in fetal rat limb bones. Rappaport MS, et al. **J Bone Miner Res** 1986 Apr;1(2):173–9

Enhancement of parathyroid hormone-responsive renal cortical adenylate cyclase activity by a cytosol protein activator from rat reticulocytes. Shane E, et al. **J Bone Miner Res** 1986 Feb;1(1):41–50

Parathyroid hormone regulation of proline uptake by cultured neonatal mouse osteoblastlike cells. Yee JA, et al. **J Bone Miner Res** 1989 Feb;4(1):23–7

Effects of estrogen on circulating "free" and total 1,25-dihydroxyvitamin D and on the parathyroid-vitamin D axis in postmenopausal women. Cheema C, et al. **J Clin Invest** 1989 Feb;83(2):537–42

Aluminum-induced de novo bone formation in the beagle. A parathyroid hormone-dependent event. Quarles LD, et al. **J Clin Invest** 1989 May;83(5):1644–50

Morphology and biochemistry of bone remodeling: possible control by vitamin D, parathyroid hormone, and other substances. Huffer WE. **Lab Invest** 1988 Oct;59(4):418–42 (347 ref.)

Serum calcium and parathyroid function linked to control of respiration. Vadstrup S. **Med Hypotheses** 1989 Mar; 28(3):151–4 (16 ref.)
Experimental aluminum intoxication and parathormone: effects on the mineralization process. Ballanti P, et al. **Miner Electrolyte Metab** 1989;15(4):233–40
Effect of hypocalcemia on renal phosphorus handling in the rat: interaction with dietary phosphorus and PTH. Guntupalli J, et al. **Miner Electrolyte Metab** 1989; 15(4):201–8
In vitro effect of PTH on normal T cell functions. Shasha SM, et al. **Nephron** 1988;50(3):212–6
Parathyroid hormone—quo vadis? Fujita T. **Nippon Naibunpi Gakkai Zasshi** 1988 Dec 20;64(12):1250–7
Pseudohypoparathyroidism: clinical and molecular aspects. Van Dop C. **Semin Nephrol** 1989 Jun;9(2):168–78 (102 ref.)
[Hypoparathyroidism and pseudohypoparathyroidism. New aspects of the pathogenesis, diagnosis and therapy] Kruse K. **Monatsschr Kinderheilkd** 1988 Oct;136(10):652–66 (72 ref.) (Eng. Abstr.) **(Ger)**
[New aspects of endocrine regulation of calcium metabolism] Reichel H, et al. **Urologe [A]** 1988 Nov;27(6):329–35 (9 ref.) (Eng. Abstr.) **(Ger)**
[The influence of parathyroid hormone on the process of fracture healing] Fukuhara H, et al. **Nippon Seikeigeka Gakkai Zasshi** 1989 Jan;63(1):100–15 (Eng. Abstr.) **(Jpn)**
[Effect of emotional–algesic stress on the hormonal function of thyroid and parathyroid glands] Kuripka VI, et al. **Fiziol Zh** 1989 Jan–Feb;35(1):72–5 (Eng. Abstr.) **(Rus)**

SECRETION

Verapamil induces PTH resistance but increases duodenal calcium absorption in rats. Fox J. **Am J Physiol** 1988 Nov; 255(5 Pt 1):E702–7
Humoral hypercalcemia of malignancy: involvement of a novel hormone. Martin TJ, et al. **Aust N Z J Med** 1988 May;18(3):287–95 (70 ref.)
Inhibitors of cellular proteolysis cause increased secretion from parathyroid cells. MacGregor RR, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1339–43
Calcium, magnesium and the control of PTH secretion. Brown EM, et al. **Bone Miner** 1989 Mar;5(3):249–57 (32 ref.)
Structural analysis of parathormone fragments elaborated by cells cultured from a hyperplastic human parathyroid gland. MacGregor RR, et al. **Bone Miner** 1986 Feb; 1(1):41–50
Vitamin D metabolites do not alter parathyroid hormone secretion acutely. Magliola L, et al. **Bone Miner** 1986 Dec; 1(6):495–505
Inhibition of cell growth retains differentiated function of bovine parathyroid cells in monolayer culture. Nygren P, et al. **Bone Miner** 1988 Jun;4(2):123–32
Co-localization and secretion of parathyrin of Stannius corpuscles (immunoreactive parathyroid hormone) and of secretory glycoproteins including secretory protein-I in the European eel (Anguilla anguilla L.). Tisserand-Jochem EM, et al. **Bone Miner** 1987 May;2(3):163–74
1,25(OH)2D3 inhibits hormone secretion and proliferation but not functional dedifferentiation of cultured bovine parathyroid cells. Nygren P, et al. **Calcif Tissue Int** 1988 Oct;43(4):213–8
Secretion of parathyroid hormone–like activity from human T-cell lymphotropic virus type I–infected lymphocytes. Fukumoto S, et al. **Cancer Res** 1989 Jul 15;49(14):3849–52
Secretion of intact PTH by dispersed human hyperparathyroid cells. Aston JP, et al. **Clin Endocrinol (Oxf)** 1988 Dec;29(6):643–8
Factors modifying the secretion and action of parathyroid hormone in renal failure. Cundy TF, et al. **Contrib Nephrol** 1988;64:5–15 (56 ref.)
Parathyroid hormone secretion: perturbations in chronic renal failure. Slatopolsky E, et al. **Contrib Nephrol** 1988; 64:16–24 (33 ref.)
Parathormone and calcitonin secretion in endemic goiter. Gozariu L, et al. **Endocrinologie** 1989 Jan–Mar;27(1):3–8
Pancreastatin, a presumed product of chromogranin-A (secretory protein-I) processing, inhibits secretion from porcine parathyroid cells in culture. Fasciotto BH, et al. **Endocrinology** 1989 Sep;125(3):1617–22
Inhibition of parathyroid hormone release by maitotoxin, a calcium channel activator. Fitzpatrick LA, et al. **Endocrinology** 1989 Jan;124(1):97–103
The effects of protein kinase-C agonists on parathyroid hormone release and intracellular free Ca2+ in bovine parathyroid cells. Membreño L, et al. **Endocrinology** 1989 Feb;124(2):789–97
The biphasic calcium dose–response curve for parathyroid hormone secretion in electropermeabilized adult bovine parathyroid cells. Pocotte SL, et al. **Endocrinology** 1989 Sep;125(3):1587–92
Combined effects of dexamethasone and 1,25-dihydroxyvitamin D3 on parathyroid hormone secretion in cultured bovine parathyroid cells. Sugimoto T, et al. **Endocrinology** 1989 Aug;125(2):638–41
Serum parathyroid hormone in patients with pheochromocytoma. Broulik PD, et al. **Exp Clin Endocrinol** 1988 Mar;92(3):369–72
Effects of fluoride on parathyroid hormone secretion and intracellular second messengers in bovine parathyroid cells. Chen CJ, et al. **J Bone Miner Res** 1988 Jun;3(3):279–88
Effect of prostaglandin F2 alpha on human parathyroid adenomas: evidence for uncoupling of parathyroid hormone secretion and cAMP accumulation. Fitzpatrick LA, et al. **J Bone Miner Res** 1988 Feb;3(1):81–6
Parathyroid cell surface autoantibodies that inhibit parathyroid hormone secretion from dispersed human parathyroid cells. Posillico JT, et al. **J Bone Miner Res** 1986 Oct;1(5):475–83
Pulse amplitude and frequency modulation of parathyroid hormone in plasma. Harms HM, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):843–51
Trypsinization of bovine parathyroid cells abolishes Ca2+-regulated parathyroid hormone secretion. Muff R, et al. **J Endocrinol** 1989 Jul;122(1):213–8
Normal ionized calcium, parathyroid hypersecretion, and elevated osteocalcin in a family with fluorosis. Srivastava RN, et al. **Metabolism** 1989 Feb;38(2):120–4
Comparison of the effects of dopamine and fenoldopam, a selective dopamine-1 agonist, on parathyroid hormone release in man. Bakris GL, et al. **Miner Electrolyte Metab** 1988;14(6):343–6
Maximal PTH secretory rate and set point for calcium in normal subjects and patients with primary hyperparathyroidism. In vivo studies. Gardin JP, et al. **Miner Electrolyte Metab** 1988;14(4):221–8
The parathyroid hormone–related protein associated with malignancy is secreted by neuroendocrine tumors. Deftos LJ, et al. **Mol Endocrinol** 1989 Mar;3(3):503–8
Abnormalities in parathyroid hormone secretion and 1,25-dihydroxyvitamin D3 formation in women with osteoporosis [letter] Franz KB. **N Engl J Med** 1989 Jun 22;320(25):1697–8
Abnormalities in parathyroid hormone secretion and 1,25-dihydroxyvitamin D3 formation in women with osteoporosis. Silverberg SJ, et al. **N Engl J Med** 1989 Feb 2;320(5):277–81
Mechanisms underlying the inverse control of parathyroid hormone secretion by calcium. Brown EM, et al. **Soc Gen Physiol Ser** 1989;44:251–68
DNA patterns in parathyroid disease predict postoperative parathyroid hormone secretion. Irvin GL 3d, et al. **Surgery** 1988 Dec;104(6):1115–20
[Parathyroidectomy and autotransplantation in renal hyperparathyroidism. II. Functional in vitro studies for tissue selection] Niederle B, et al. **Langenbecks Arch Chir** 1988;373(6):337–44 (Eng. Abstr.) **(Ger)**
[Hormone active versus hormone inactive parathyroid gland cancer] Wahl RA, et al. **Wien Med Wochenschr** 1988 Sep 30;138(18):461–4 (Eng. Abstr.) **(Ger)**
[Abnormal regulation of parathyroid hormone secretion by serum calcium level in myotonic dystrophy] Yoshida H. **Nippon Naibunpi Gakkai Zasshi** 1988 Jul 20;64(7):547–53 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Effect of human parathyroid hormone (PTH(1–34)) on experimental osteopenia of rats induced by ovariectomy. Hori M, et al. **Bone Miner** 1988 Jan;3(3):193–9
Increase of vertebral density by combination therapy with pulsatile 1–38hPTH and sequential addition of calcitonin nasal spray in osteoporotic patients. Hesch RD, et al. **Calcif Tissue Int** 1989 Mar;44(3):176–80
Periparturient hypocalcemia in cows: prevention using intramuscular parathyroid hormone. Goff JP, et al. **J Dairy Sci** 1989 May;72(5):1182–7
Morphological analysis of iliac crest bone biopsies in patients with osteoporosis and treatment according to the ADFR concept with (1–38)hPTH and diphosphonate (EHDP)—Osteoporosis Study I, Hannover. Delling G, et al. **Klin Wochenschr** 1989 May 15;67(10):556
Results of a stimulatory therapy of low bone metabolism in osteoporosis with (1–38)hPTH and diphosphonate EHDP. Protocol of study I, osteoporosis trial Hannover. Hesch RD, et al. **Klin Wochenschr** 1988 Oct 3;66(19):976–84
Effects of glutaurine treatment on electroshock-induced amnesia. Antiamnesic action of glutaurine. Balázs M, et al. **Neuropeptides** 1988 Aug–Sep;12(2):55–8

PARATHYROID NEOPLASMS

A case of multiple endocrine neoplasia (MEN) type 1; the immunohistochemical and ultrastructural studies of its tumors and the analysis of hormones in tumor extracts. Ishii H, et al. **Endocrinol Jpn** 1989 Feb;36(1):37–45
Parathyroid adenocarcinoma. Nazem A, et al. **J Natl Med Assoc** 1989 Jul;81(7):785–9 (13 ref.)
Functioning lipoadenoma of the parathyroid: case report and literature review. Bleiweiss IJ, et al. **Mt Sinai J Med** 1989 Mar;56(2):114–7 (15 ref.)
[A malignant schwannoma of the jejunum associated with multiple neurofibromas and a primary adenoma of the parathyroid] Godlewski G, et al. **Ann Gastroenterol Hepatol (Paris)** 1989 Jan–Feb;25(1):13–7 (Eng. Abstr.) **(Fre)**
[Internal medicine aspects of endocrine tumors. The hypophysis, epithelial bodies and adrenal glands] Raue F, et al. **Radiologe** 1989 Jan;29(1):1–6 (5 ref.) (Eng. Abstr.) **(Ger)**
[Parathyroid carcinoma] Fujimoto Y. **Gan No Rinsho** 1989 Jan;Spec No:187–94 **(Jpn)**

ANALYSIS

ABO blood group antigens in parathyroid adenoma and hyperplasia. Bondeson AG, et al. **Surgery** 1989 Jun; 105(6):734–6
Microfluorometric measurements of cytoplasmic calcium in chief and oxyphil parathyroid cells of adenomatous and hyperplastic glands and of normal-sized glands associated with adenomas. Johansson H, et al. **Surgery** 1989 Sep; 106(3):517–24

BLOOD

Tumors of the parathyroid gland and circulating parathyroid hormone–related protein associated with persistent hypercalcemia. Rosol TJ, et al. **Toxicol Pathol** 1989; 17(2):346–56 (48 ref.)

COMPLICATIONS

Recurrent hyperparathyroidism due to peroperative seeding of neoplastic or hyperplastic parathyroid tissue. Case report. Akerström G, et al. **Acta Chir Scand** 1988 Sep; 154(9):549–52
Spontaneous hematoma of a parathyroid adenoma. Hotes LS, et al. **Am J Med Sci** 1989 May;297(5):331–3 (17 ref.)
Acute hyperparathyroidism with systemic calcinosis. Report of a case. Khafif RA, et al. **Arch Intern Med** 1989 Mar; 149(3):681–4
Parathyroid adenoma associated with neurofibromatosis: correlative scintigraphic and magnetic resonance imaging. Vogelzang PJ, et al. **Clin Nucl Med** 1989 Mar;14(3):168–70
Rapid and accurate diagnosis of acute hyperparathyroid crisis [letter] Gunn IR, et al. **Lancet** 1989 Sep 9;2(8663):618–9
Parathyroid carcinoma in a case of chronic renal failure on dialysis. Kodama M, et al. **Urol Int** 1989;44(2):110–2
[Progressive spinal muscular atrophy and parathyroid adenoma. Clinico-pathologic study of a case] Dubas F, et al. **Rev Neurol (Paris)** 1989;145(1):65–8 (8 ref.) (Eng. Abstr.) **(Fre)**
[Surgery of primary hyperparathyroidism in 1988. Strategies during primary operations, in case of failure and in case of cancer] Mellière D, et al. **Rev Rhum Mal Osteoartic** 1988 May;55(7):495–500 (31 ref.) (Eng. Abstr.) **(Fre)**
[Hypercalcemia in coexistent parathyroid adenoma and multiple myeloma. Problems of differential diagnosis] Schneider W, et al. **Dtsch Med Wochenschr** 1989 Aug 4; 114(31–32):1199–202 (Eng. Abstr.) **(Ger)**
[Unrecognized primary hyperparathyroidism in simultaneous presence of insulin-dependent diabetes mellitus. Joint occurrence of parathyroid adenoma, type I diabetes mellitus, Basedow disease, pernicious anemia and stomach carcinoid] Ollenschläger G, et al. **Med Klin** 1988 Dec 9; 83(24):844–5, 854 **(Ger)**
[Bilateral parathyroid adenoma] Dadan J, et al. **Wiad Lek** 1989 Jan 1;42(1):48–52 (Eng. Abstr.) **(Pol)**
[Metastatic calcinosis] Anokhin VN, et al. **Revmatologiia (Moskva)** 1989 Jan–Mar;(1):61–6 **(Rus)**

DIAGNOSIS

Parathyroid carcinoma with occult bone metastases diagnosed by fine needle aspiration cytology. Sulak LE, et al. **Acta Cytol** 1989 Sep–Oct;33(5):645–8
MR signal intensity of parathyroid adenomas: correlation with histopathology. Auffermann W, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):873–6
Parathyroid identification by ultrasonically guided aspiration cytology. Is correct cytological identification possible? Glenthøj A, et al. **APMIS** 1989 Jun;97(6):497–502
Performance and diagnostic application of a two-site immunoradiometric assay for parathyrin in serum. Ratcliffe WA, et al. **Clin Chem** 1989 Sep;35(9):1957–61
Acute hyperparathyroidism due to cervicomediastinal adenoma. A case report. De Bernardinis G, et al. **Ital J Surg Sci** 1988;18(3):287–9
Parathyroid adenoma. Vereycken H, et al. **J Belge Radiol** 1988;71(6):746–7
The parathyroid adenoma: an imaging/surgical perspective. Davidson J, et al. **J Otolaryngol** 1988 Oct;17(6):282–7
Noninvasive localization of parathyroid adenomas: a comparison of X-ray computerized tomography, ultrasound, scintigraphy and MRI. Erdman WA, et al. **Magn Reson Imaging** 1989 Mar–Apr;7(2):187–94
The use of preoperative localization of adenomas of the parathyroid glands by thallium–technetium subtraction scintigraphy, high-resolution ultrasonography and computed tomography. Roses DF, et al. **Surg Gynecol Obstet** 1989 Feb;168(2):99–106
Prospective comparison of radionuclide, ultrasound, and computed tomography in the preoperative localization of parathyroid glands. Carmalt HL, et al. **World J Surg** 1988 Dec;12(6):830–4
[Middle mediastinal parathyroid adenoma of the aorto-pulmonary window. 2 cases] Proye C, et al. **Chirurgie** 1988;114(2):166–73 (Eng. Abstr.) **(Fre)**
[Cancer of the parathyroid gland: a difficult diagnosis (letter)] Ozoux JP, et al. **J Chir (Paris)** 1988 Jun–Jul;125(6–7):445–6 **(Fre)**
[Parathyroid carcinoma (clinical conference)] Longrée L, et al. **Rev Med Liege** 1989 Apr 1;44(7):272–9 **(Fre)**
[Preoperative diagnosis of parathyroid adenoma using ultrasonography] Hendaoui L, et al. **Tunis Med** 1987 Feb; 65(2):115–20 (20 ref.) (Eng. Abstr.) **(Fre)**

EPIDEMIOLOGY

Parathyroid cyst and hyperparathyroidism in Auckland. Koea JB, et al. **N Z Med J** 1988 Oct 26;101(856 Pt 1):655–6

ETIOLOGY

Simultaneous presentation of parathyroid, thyroid and parotid tumours 44 years after neck irradiation. Delbridge L, et al. **Aust N Z J Surg** 1989 Feb;59(2):187–90

Parathyroid carcinoma in a chronic hemodialysis patient. Krishna GG, et al. **Nephron** 1989;52(2):194–5

[Primary hyperparathyroidism in a child with parathyroid crisis—review of 24 cases reported in Japan] Matsumiya K, et al. **Hinyokika Kiyo** 1989 Feb;35(2):361–6 (31 ref.) (Eng. Abstr.) **(Jpn)**

GENETICS

Clonal loss of one chromosome 11 in a parathyroid adenoma. Arnold A, et al. **J Clin Endocrinol Metab** 1989 Sep; 69(3):496–9

Molecular cloning and chromosomal mapping of DNA rearranged with the parathyroid hormone gene in a parathyroid adenoma. Arnold A, et al. **J Clin Invest** 1989 Jun;83(6):2034–40

Expression of messenger ribonucleic acids encoding a parathyroid hormone–like peptide in normal human and animal tissues with abnormal expression in human parathyroid adenomas. Ikeda K, et al. **Mol Endocrinol** 1988 Dec;2(12):1230–6

Clonality of parathyroid tumors in familial multiple endocrine neoplasia type 1. Friedman E, et al. **N Engl J Med** 1989 Jul 27;321(4):213–8

Association of parathyroid tumors in multiple endocrine neoplasia type 1 with loss of alleles on chromosome 11. Thakker RV, et al. **N Engl J Med** 1989 Jul 27;321(4):218–24

Co–existence of two aneuploid stemlines in benign adenomas. A report of three cases with stemline heterogeneity. Joensuu H, et al. **Virchows Arch [A]** 1989;415(2):175–80

METABOLISM

Effect of prostaglandin F2 alpha on human parathyroid adenomas: evidence for uncoupling of parathyroid hormone secretion and cAMP accumulation. Fitzpatrick LA, et al. **J Bone Miner Res** 1988 Feb;3(1):81–6

Storage and degradation of secretory proteins in adenomatous and secondary hyperplastic parathyroid cells. An immunoelectron microscope study. Berger G, et al. **Virchows Arch [A]** 1989;415(4):305–16

PATHOLOGY

Preoperative localization of parathyroid adenomas. Attie JN, et al. **Am J Surg** 1988 Oct;156(4):323–6

Functioning oxyphil cell adenomas of the parathyroid gland. A study of 15 cases. Wolpert HR, et al. **Am J Surg Pathol** 1989 Jun;13(6):500–4

Functioning parathyroid lipoadenoma—report of four cases: clinicopathological and ultrasonographic features. Obara T, et al. **Endocrinol Jpn** 1989 Feb;36(1):135–45

Cystic parathyroid cancer. Case report. Zbranca E, et al. **Endocrinologie** 1988 Oct–Dec;26(4):273–6

Intravagal parathyroid adenoma. Takimoto T, et al. **J Laryngol Otol** 1989 Jul;103(7):704–6

Functioning lipoadenoma of the parathyroid gland. de Leacy EA, et al. **Pathology** 1988 Oct;20(4):377–80 (6 ref.)

[A combination of ectopic parathyroid adenoma and thalassemia with manifestations of extreme hyperparathyroidism] Lozanov B, et al. **Vutr Boles** 1989; 28(1):97–100 (Eng. Abstr.) **(Bul)**

[Cancer of the parathyroid glands. Apropos of 12 cases] Mattei JP, et al. **Rev Rhum Mal Osteoartic** 1988 May; 55(7):519–23 **(Fre)**

[Fine needle aspiration in otorhinolaryngologic pathology. Cases and results] Chiesa F, et al. **Acta Otorhinolaryngol Ital** 1986;6 Suppl 12:39–46 **(Ita)**

[Cytodiagnosis of the thyroid and parathyroid glands] Ravetto C. **Acta Otorhinolaryngol Ital** 1986;6 Suppl 12:13–8 (9 ref.) **(Ita)**

[A case of parathyroid carcinoma] Nakano M, et al. **Hinyokika Kiyo** 1988 Jun;34(6):1011–5 (20 ref.) (Eng. Abstr.) **(Jpn)**

[Primary hyperparathyroidism caused by oxyphilic parathyroid adenoma. Presentation of a case and review of the literature] de Pablos PL, et al. **Rev Clin Esp** 1989 Apr;184(7):391–2 (10 ref.) **(Spa)**

[The natural history of parathyroid carcinoma. (Analysis of 5 cases)] Rapado A, et al. **Rev Clin Esp** 1988 May; 182(8):407–11 (Eng. Abstr.) **(Spa)**

[Primary hyperparathyroidism. Report of 4 cases] Peña Garza R, et al. **Rev Invest Clin** 1967 Jan–Mar;19(1):35–49 (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

Parathyroid adenomas; computed tomographic imaging and the importance of preoperative localization. Awwad EE, et al. **Comput Med Imaging Graph** 1988 Sep–Oct; 12(5):305–14

Localization of parathyroid adenomas: superselective arterial DSA versus superselective conventional angiography. Miller DL, et al. **Radiology** 1989 Mar;170(3 Pt 2):1003–6

RADIONUCLIDE IMAGING

Preoperative localization of parathyroid adenoma by thallium–technetium subtraction scintigraphy. Coolens JL, et al. **Acta Otorhinolaryngol Belg** 1988;42(5):598–603

I–131 metaiodobenzylguanidine uptake in a parathyroid adenoma. Hayward RS, et al. **Clin Nucl Med** 1988 Sep; 13(9):632–4

Intrathyroidal parathyroid adenoma: preoperative identification and localization by parathyroid imaging. Al–Suhaili AR, et al. **Clin Nucl Med** 1988 Jul;13(7):512–4

Improvement of parathyroid Tl–Tc scintigraphy by using a new image subtraction method. Liehn JC, et al. **Eur J Nucl Med** 1988;14(4):184–9

Thallium–technetium isotope subtraction scanning in primary hyperparathyroidism. Maltby C, et al. **J R Coll Surg Edinb** 1989 Feb;34(1):40–3

Parathyroid imaging with thallium–201 subtraction scintigraphy: a report of 33 cases. Toomath RJ, et al. **N Z Med J** 1989 May 10;102(867):215–7

[Preoperative localization of parathyroid adenoma with technetium and thallium double–labeling scintigraphy. Difficulties related to associated thyroid lesions] Valensi P, et al. **Ann Med Interne (Paris)** 1989;140(4):263–8 (Eng. Abstr.) **(Fre)**

[Thallium–technetium scintigraphy for presurgical localization of parathyroid adenomas and hyperplasia] Amico S, et al. **Nephrologie** 1988;9(5):211–5 (Eng. Abstr.) **(Fre)**

[Value of thallium–technetium scintigraphy in the preoperative localization of parathyroid adenoma. Apropos of 30 cases] Gautier D, et al. **Rev Rhum Mal Osteoartic** 1988 May;55(7):501–4 (44 ref.) **(Fre)**

[Diagnosis of adenoma and parathyroid hyperplasia using subtraction scintigraphy with thallium 201–Tc99m] González P, et al. **Rev Med Chil** 1988 Jul;116(7):633–9 **(Spa)**

SECONDARY

Hypocalcemia due to osteoblastic metastases and diminished parathyroid reserve in a patient with advanced breast cancer. Hermus A, et al. **Klin Wochenschr** 1988 Jul 15; 66(14):643–6

Neoplasms metastatic to parathyroid glands [letter] Gattuso P, et al. **South Med J** 1988 Nov;81(11):1467

SECRETION

Secretion of intact PTH by dispersed human hyperparathyroid cells. Aston JP, et al. **Clin Endocrinol (Oxf)** 1988 Dec;29(6):643–8

[A case of multiple endocrine neoplasia, type 1, with parathyroid adenoma, multinodular adrenal cortical hyperplasia, islet cell tumor and hyperplasia of thyroid with concomitant hypersecretion of gastrin and total glucagon–like immunoreactivity] Shigematsu S, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):357–62 **(Jpn)**

SURGERY

Parathyroid surgery in Scandinavia. Malmaeus J, et al. **Acta Chir Scand** 1988 Jul–Aug;154(7–8):409–13

Elevated angiotensin II and vasopressin in primary hyperparathyroidism. Angiotensin II infusion studies before and after removal of the parathyroid adenoma. Jespersen B, et al. **Acta Endocrinol (Copenh)** 1989 Mar;120(3):362–8

Strategy in reoperative surgery for hyperparathyroidism. Cheung PS, et al. **Arch Surg** 1989 Jun;124(6):676–80

Resection of parathyroid tumor in the aorticopulmonary window without prior neck exploration. McHenry C, et al. **Surgery** 1988 Dec;104(6):1090–4

[Primary cancer of the parathyroid glands] Visset J, et al. **Chirurgie** 1988;114(3):223–33 (36 ref.) (Eng. Abstr.) **(Fre)**

[Mediastinal exploration by sternotomy in surgery of hyperparathyroidism. 36 cases] Dubost CI, et al. **J Chir (Paris)** 1988 Nov;125(11):631–7 (20 ref.) (Eng. Abstr.) **(Fre)**

[Autotransplantation of parathyroid gland tissue—on the indications for total parathyroidectomy with autotransplantation] Goretzki PE. **Langenbecks Arch Chir** 1988;373(6):323–4 **(Ger)**

[Treatment strategies for parathyroid neoplasms] Gottswinter JM, et al. **Wien Med Wochenschr** 1988 Sep 30; 138(18):459–61 (Eng. Abstr.) **(Ger)**

[Hormone active versus hormone inactive parathyroid gland cancer] Wahl RA, et al. **Wien Med Wochenschr** 1988 Sep 30;138(18):461–4 (Eng. Abstr.) **(Ger)**

[Results of intraoperative localization of hyperactive parathyroid tissue using semiconductor probes in primary hyperparathyroidism] Geipel D, et al. **Zentralbl Chir** 1989; 114(9):606–13 **(Ger)**

[Tactics and results of surgical treatment of hyperparathyroidism] Giebel GD, et al. **Zentralbl Chir** 1989;114(9):557–70 (Eng. Abstr.) **(Ger)**

[An operative case of multiple endocrine neoplasia type 1 (MEN type 1) with insulinoma] Soyama N, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jun;85(6):1312–6 **(Jpn)**

[Dynamics of the x–ray changes in hyperparathyroid osteodystrophy following surgical treatment] Spuziak MI. **Vestn Rentgenol Radiol** 1988 Nov–Dec;(6):18–22 (Eng. Abstr.) **(Rus)**

[Cancer of the parathyroid glands] Majlis S, et al. **Rev Med Chil** 1988 Aug;116(8):771–4 (Eng. Abstr.) **(Spa)**

THERAPY

Ethanol ablation of parathyroid tumors [letter] Verbanck J, et al. **Mayo Clin Proc** 1989 Feb;64(2):264

[Percutaneous ethanol injection of parathyroid adenoma under US guidance] Iwasaki T, et al. **Rinsho Hoshasen** 1989 Feb;34(2):261–4 (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

Ultrastructural morphometry on human parathyroid tissue. Morphological and functional implications. Thiele J, et al. **J Submicrosc Cytol Pathol** 1988 Jul;20(3):491–500

VETERINARY

Seminoma and parathyroid adenoma in a snow leopard (Panthera unica). Doster AR, et al. **J Comp Pathol** 1989 May;100(4):475–80

PARATUBERCULOSIS

BLOOD

Experimental paratuberculosis (Johne's disease)—studies on biochemical parameters in cattle. Szilágyi M, et al. **Arch Exp Veterinarmed** 1989 May;43(3):463–70

COMPLICATIONS

The distribution of ferritin, lactoferrin and transferrin in granulomatous lymphadenitis of bovine paratuberculosis. Momotani E, et al. **J Comp Pathol** 1988 Aug;99(2):205–14

DIAGNOSIS

Diagnostic value of mammalian, avian and johnin PPD tuberculins in cattle herds infected by Mycobacterium paratuberculosis. Körmendy B. **Acta Vet Hung** 1988; 36(3–4):177–83

A prospective evaluation of an enzyme–linked immunosorbent assay (ELISA) and agar gel immunodiffusion test (AGID) relative to fecal culture in the diagnosis of clinical and subclinical paratuberculosis in cattle in central Ohio. Spangler L, et al. **Acta Vet Scand Suppl** 1988;84:243–5

Evaluation of the agar gel immunodiffusion test for diagnosis of subclinical paratuberculosis in cattle. Sherman DM, et al. **Am J Vet Res** 1989 Apr;50(4):525–30

Serodiagnosis of ovine paratuberculosis, using lipoarabinomannan in an enzyme–linked immunosorbent assay. Sugden EA, et al. **Am J Vet Res** 1989 Jun;50(6):850–4

ELISA serodiagnosis of Johne's disease in cattle. Maes R, et al. **Int J Med Microbiol** 1989 Jul;271(2):180–5

Development of a diagnostic test for Johne's disease using a DNA hybridization probe. Hurley SS, et al. **J Clin Microbiol** 1989 Jul;27(7):1582–7

Paratuberculosis in cattle: a comparison of three serologic tests with results of fecal culture. Colgrove GS, et al. **Vet Microbiol** 1989 Feb;19(2):183–7

ECONOMICS

Estimation of direct and indirect losses due to Johnes disease in New South Wales, Australia. Scott–Orr H, et al. **Acta Vet Scand Suppl** 1988;84:411–4

EPIDEMIOLOGY

An epidemiological study of paratuberculosis in Ontario dairy cattle: study design and lipoarabinomannan antigen ELISA test results. McNab WB, et al. **Acta Vet Scand Suppl** 1988; 84:206–8

[Paratuberculosis. Diagnosis of the first case in an imported cattle in Senegal] Konte M. **Rev Elev Med Vet Pays Trop** 1988;41(2):147–8 (Eng. Abstr.) **(Fre)**

IMMUNOLOGY

Sequential bacteriological observations in relation to cell–mediated and humoral antibody responses of cattle infected with Mycobacterium paratuberculosis and maintained on normal or high iron intake. Lepper AW, et al. **Aust Vet J** 1989 Feb;66(2):50–5

IgG, IgM and IgA in the serum of cattle naturally infected with Mycobacterium paratuberculosis. Abbas B, et al. **Comp Immunol Microbiol Infect Dis** 1988;11(3–4):171–5

MICROBIOLOGY

Intestinal multiplication of Mycobacterium paratuberculosis in athymic nude gnotobiotic mice. Hamilton HL, et al. **Infect Immun** 1989 Jan;57(1):225–30

PREVENTION & CONTROL

Identification and control of paratuberculosis in a large goat herd [published erratum appears in Am J Vet Res 1989 Jan;50(1):172] Gezon HM, et al. **Am J Vet Res** 1988 Nov; 49(11):1817–23

TRANSMISSION

Bovine fetal infection with Mycobacterium paratuberculosis. Seitz SE, et al. **J Am Vet Med Assoc** 1989 May 15; 194(10):1423–6

PARATYPHOID FEVERS

COMPLICATIONS

Paratyphoid fever: analysis of 18 cases and its unusual complications. Yu KW, et al.
Chung Hua I Hsueh Tsa Chih 1988 Jul;42(1):35–40

Splenic abscess due to Salmonella in a child. Oğuz M, et al. **Turk J Pediatr** 1988 Apr–Jun;30(2):127–30

[Association of salmonella with other etiologic agents in acute enteritis in children] Musso A, et al.
Minerva Pediatr 1988 Sep;40(9):527–34 (Eng. Abstr.) (Ita)

DIAGNOSIS

Isolation of Salmonella paratyphi A from thyroid abscess—a case report. Fule RP, et al. **Indian J Med Sci** 1989 Apr; 43(4):95–6

Salmonellosis, possibly paratyphoid A—problems with the Widal test [letter] van der Heiden MJ, et al.
S Afr Med J 1989 May 20;75(10):505–6

[Diagnostic importance of various methods of determining infectious O-antigenemia in patients with typhoid and paratyphoid fevers A and B] Cherkasov VL, et al.
Ter Arkh 1988;60(11):35–8 (Eng. Abstr.) (Rus)

DRUG THERAPY

Aztreonam in the treatment of enteric fevers. Farid Z, et al. **Ann Trop Med Parasitol** 1987 Dec;81(6):725–6

Trimethoprim in enteric fever. Gargalianos P, et al.
Chemioterapia 1987 Jun;6(2 Suppl):486–7

Ciprofloxacin in enteric fever. Mandal B, et al.
Chemioterapia 1987 Jun;6(2 Suppl):492–3

Open study of ciprofloxacin in enteric fever. Stanley PJ, et al. **J Antimicrob Chemother** 1989 May;23(5):789–91

EPIDEMIOLOGY

[Typhoid and paratyphoid fevers 1986] Gonera E.
Przegl Epidemiol 1988;42(1):44–8 (Pol)

[Simultaneous infection by various species of Salmonella in a family group] Palomino C, et al. **Rev Med Chil** 1988 Mar; 116(3):268–71 (Eng. Abstr.) (Spa)

[Typhoid and paratyphoid fevers in the province of Talca, Chile (letter)] Palomo I, et al. **Rev Med Chil** 1988 Feb; 116(2):180–3 (Spa)

MICROBIOLOGY

Spontaneous bacterial peritonitis [letter] Mathur MD, et al. **J Assoc Physicians India** 1988 Mar;36(3):238–9

PARATYPHOID VACCINE see TYPHOID–PARATYPHOID VACCINES

PARAVACCINIA VIRUS see under POXVIRIDAE

PARAVENTRICULAR HYPOTHALAMIC NUCLEUS

ANALYSIS

The hypothalamic–angiotensin system: location and functional considerations. Felix D, et al.
Clin Exp Hypertens [A] 1988;10 Suppl 1:45–62

Distribution and coexistence of corticotropin-releasing factor–, neurotensin–, enkephalin–, cholecystokinin–, galanin– and vasoactive intestinal polypeptide/peptide histidine isoleucine–like peptides in the parvocellular part of the paraventricular nucleus. Ceccatelli S, et al.
Neuroendocrinology 1989 Mar;49(3):309–23

Angiotensin II receptors in paraventricular nucleus, subfornical organ, and pituitary gland of hypophysectomized, adrenalectomized, and vasopressin-deficient rats. Castrén E, et al.
Proc Natl Acad Sci U S A 1989 Jan;86(2):725–9

ANATOMY & HISTOLOGY

Morphometric analysis of the suprachiasmatic and paraventricular nuclei in the human brain: sex differences and age-dependent changes. Hofman MA, et al. **J Anat** 1988 Oct;160:127–43

CYTOLOGY

Distributions of pro-vasopressin expressing and pro-vasopressin deficient CRH neurons in the paraventricular hypothalamic nucleus of colchicine-treated normal and adrenalectomized rats. Whitnall MH.
J Comp Neurol 1988 Sep 1;275(1):13–28

A morphometric analysis of functionally defined subpopulations of neurons in the paraventricular nucleus of the rat with observations on the effects of colchicine. Rho JH, et al. **J Neurosci** 1989 Apr;9(4):1375–88

Vasopressin neuron is the target of monoclonal antibodies raised against vasopressin-neurophysin injected in vivo. Leon-Henri B, et al. **Neuroendocrinology** 1989 Feb; 49(2):125–33

Thyroid hormone regulation of neurons staining for a pro–TRH–derived cryptic peptide sequence in the rat hypothalamic paraventricular nucleus. Liao N, et al.
Neuroendocrinology 1989 Aug;50(2):217–21

Hypothalamic angiotensinergic fibre systems terminate in the neurohypophysis. Imboden H, et al. **Neurosci Lett** 1989 Jan 2;96(1):42–6

Inhibitory effect of norepinephrine on the single-unit activity of caudally projecting paraventricular neurons. Kim YI, et al. **Synapse** 1989;3(3):213–24

DRUG EFFECTS

Paraventricular stimulation with glutamate elicits bradycardia and pituitary responses. Darlington DN, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R112–9

Changes in cytoplasmic RNA content in neurons of the supraoptic and paraventricular nuclei in mice treated with kainic acid. Srebro Z, et al. **Folia Biol (Krakow)** 1988; 36(1–2):103–8

A karyometric study of the supraoptic and paraventricular nuclei of the hypothalamus of kainic acid–treated mice. Srebro Z, et al. **Folia Biol (Krakow)** 1988;36(1–2):53–8

Influence of vincristine on the neurosecretory nuclei of the hypothalamo–neurohypophyseal system of the developing rat. Pietrzak M. **Neuropatol Pol** 1988;26(4):521–35

EMBRYOLOGY

Scanning electron microscopic studies on the embryonic development of the surface structures of the paraventricular organ in the Brown Leghorn chicken. Hirunagi K, et al. **Z Mikrosk Anat Forsch** 1989;103(2):181–9

ENZYMOLOGY

Tyrosine hydroxylase–containing neurons in the supraoptic and paraventricular nuclei of the adult human. Li YW, et al. **Brain Res** 1988 Sep 27;461(1):75–86

Effect of septal ablation on choline acetyltransferase in the paraventricular nucleus. Oorjitham EG, et al.
Brain Res Bull 1989 Feb;22(2):277–82

Acetylcholinesterase and choline acetyltransferase activity in some hypothalamic nuclei under immobilization stress in rats. Fatranská M, et al. **Endocrinol Exp** 1989 Mar; 23(1):3–10

GROWTH & DEVELOPMENT

Vasopressin and oxytocin gene expression in the supraoptic and paraventricular nucleus of the spontaneously hypertensive rat (SHR) during development of hypertension. van Tol HH, et al. **Brain Res** 1988 Dec; 464(4):303–11

Ontogeny of expression of the corticotropin–releasing factor gene in the hypothalamic paraventricular nucleus and of the proopiomelanocortin gene in rat pituitary. Grino M, et al. **Endocrinology** 1989 Jan;124(1):60–8

METABOLISM

Cultured hypothalamic explants from spontaneously hypertensive rats have decreased vasopressin and oxytocin content and release. Bennett BA, et al.
Am J Hypertens 1989 Jan;2(1):46–51

Diurnal variation in vasopressin and oxytocin messenger RNAs in hypothalamic nuclei of the rat. Burbach JP, et al. **Brain Res** 1988 Sep;464(2):157–60

Measurement of septal release of vasopressin and oxytocin by the push–pull technique following electrical stimulation of the paraventricular nucleus of rats. Neumann I, et al. **Brain Res** 1988 Oct 11;462(1):181–4

Ultrastructural localization of neuropeptide Y and galanin immunoreactivity in the paraventricular nucleus of the hypothalamus in the rat. Sawchenko PE, et al.
Brain Res 1988 Dec 6;474(2):231–45

Presence of catecholaminergic axon–terminals containing beta–adrenergic receptor in the periventricular zone of the rat hypothalamus. Wanaka A, et al. **Brain Res** 1989 Feb 6;479(1):190–3

Simultaneous immunogold labeling of GABAergic terminals and vasopressin–containing neurons in the rat paraventricular nucleus. Decavel C, et al.
Cell Tissue Res 1989 Jan;255(1):77–80

Hypothyroidism may account for reduced prolactin secretion in lactating rats bearing paraventricular area lesions. de Greef WJ, et al. **Endocrinology** 1989 Aug;125(2):612–7

Triiodothyronine exerts direct cell–specific regulation of thyrotropin–releasing hormone gene expression in the hypothalamic paraventricular nucleus. Dyess EM, et al.
Endocrinology 1988 Nov;123(5):2291–7

In vivo hypothalamic release of thyrotropin–releasing hormone after electrical stimulation of the paraventricular area: comparison between push–pull perfusion technique and collection of hypophysial portal blood. Rondeel JM, et al. **Endocrinology** 1989 Aug;125(2):971–5

Diurnal variations in the content of preprocorticotropin–releasing hormone messenger ribonucleic acids in the hypothalamic paraventricular nucleus of rats of both sexes as measured by in situ hybridization. Watts AG, et al. **Endocrinology** 1989 Sep; 125(3):1734–8

Anatomical evidence for interaction of ACTH1–39 immunostained fibers and hypothalamic paraventricular neurons that project to the dorsal vagal complex. Hornby PJ, et al. **Histochemistry** 1988;90(3):201–6

Axons containing neuropeptide Y innervate arginine vasopressin–containing neurons in the rat paraventricular nucleus. Dual electron microscopic immunolabeling. Kagotani Y, et al. **Histochemistry** 1989;91(4):273–81

Differential steroid hormone and neural influences on peptide mRNA levels in CRH cells of the paraventricular nucleus: a hybridization histochemical study in the rat. Swanson LW, et al. **J Comp Neurol** 1989 Jul 22;285(4):413–35

Neuronal cell bodies in the hypothalamic paraventricular nucleus mediate stress–induced renin and corticosterone secretion. Morton KD, et al. **Neuroendocrinology** 1989 Jul; 50(1):73–80

Immuno–gold staining of leu–enkephalin in the rat hypothalamic neurosecretory nuclei. Gajkowska B, et al. **Neuropatol Pol** 1988;26(2):203–10

L–dopa–immunoreactive neurons in the rat hypothalamic tuberal region. Okamura H, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):42–6

Modulation of hypothalamic cholecystokinin receptor density with changes in magnocellular activity: a quantitative autoradiographic study. Day NC, et al.
Neuroscience 1989;29(2):371–83

Morphometrical and microdensitometrical studies on phenylethanolamine–N–methyltransferase– and neuropeptide Y–immunoreactive nerve terminals and on glucocorticoid receptor–immunoreactive nerve cell nuclei in the paraventricular hypothalamic nucleus in adult and old male rats. Zoli M, et al. **Neuroscience** 1988 Aug; 26(2):479–92

Influence of steroids on the hypothalamic corticotropin–releasing factor and preproenkephalin mRNA responses to stress. Lightman SL, et al.
Proc Natl Acad Sci U S A 1989 Jun;86(11):4306–10

[Amount changes in several neuropeptides in hypothalamus paraventricular nuclei of epileptic rats model] Zhang B, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec; 19(4):371–5 (Eng. Abstr.) (Chi)

PATHOLOGY

Circumventricular organs in chronic serum sickness: a model for cerebral lupus. Peress NS, et al. **Biol Psychiatry** 1989 Aug;26(4):397–407

PHYSIOLOGY

Paraventricular nucleus stimulation causes gastroduodenal mucosal necrosis in the rat. Ferguson AV, et al.
Am J Physiol 1988 Nov;255(5 Pt 2):R861–5

Effect of paraventricular nucleus lesions on drinking and pressor responses to ANG II. Gutman MB, et al.
Am J Physiol 1988 Dec;255(6 Pt 2):R882–7

Increase in sympathetic outflow by paraventricular nucleus stimulation in awake rats. Kannan H, et al.
Am J Physiol 1989 Jun;256(6 Pt 2):R1325–30

Inhibition of paraventricular neurons by subfornical organ and AV3V in cats. Osaka T, et al. **Am J Physiol** 1988 Dec; 255(6 Pt 2):R961–7

Influences of the paraventricular and suprachiasmatic nuclei and olfactory bulbs on melatonin responses in the golden hamster. Bittman EL, et al. **Biol Reprod** 1989 Jan; 40(1):118–26

M–octopamine injected into the paraventricular nucleus induces eating in rats: a comparison with noradrenaline–induced eating. Fletcher PJ, et al.
Br J Pharmacol 1989 Jun;97(2):483–9

Periventricular structures and the organization of affective states and their behavioural expression. Schmitt P, et al.
Brain Behav Evol 1989;33(2–3):162–4

Bombesin microinfusion into the rat hypothalamic paraventricular nucleus increases blood glucose, free fatty acids and corticosterone. Gunion MW, et al. **Brain Res** 1989 Jan 23;478(1):47–58

Injection of neuropeptide Y into the paraventricular nucleus of the hypothalamus inhibits gastric acid secretion in the rat. Humphreys GA, et al. **Brain Res** 1988 Jul 26; 456(2):241–8

Effect of norepinephrine, serotonin and tryptophan on the firing rate of sympathetic nerves. Sakaguchi T, et al.
Brain Res 1989 Jul 17;492(1–2):271–80

Inputs from the nucleus of the solitary tract to subfornical organ neurons projecting to the paraventricular nucleus in the rat. Shioya M, et al. **Brain Res** 1989 Mar 27; 483(1):192–5

Effects of norepinephrine infused in the paraventricular hypothalamus on energy expenditure in the rat. Siviy SM, et al. **Brain Res** 1989 May 15;487(1):79–88

The median preoptic nucleus participates in the control of paraventricular vasopressin neurons by the subfornical organ in the rat. Tanaka J, et al. **Brain Res** 1988 Oct 4; 461(2):403–6

Neuronal–glial and synaptic plasticity in the adult rat paraventricular nucleus. Theodosis DT, et al. **Brain Res** 1989 Apr 10;484(1–2):361–6

Hypothalamic norepinephrine mediates limbic effects on adrenocortical secretion. Feldman S, et al.
Brain Res Bull 1988 Oct;21(4):587–90

Neuropeptide Y, epinephrine and norepinephrine in the paraventricular nucleus: stimulation of feeding and the release of corticosterone, vasopressin and glucose. Leibowitz SF, et al. **Brain Res Bull** 1988 Dec;21(6):905–12

Adrenergic stimulation of the paraventricular nucleus and its effects on ingestive behavior as a function of drug dose and time of injection in the light–dark cycle. Leibowitz SF. **Brain Res Bull** 1978 Jul–Aug;3(4):357–63

Paraventricular nucleus projections mediating pineal melatonin and gonadal responses to photoperiod in the hamster. Smale L, et al. **Brain Res Bull** 1989 Feb; 22(2):263–9

Lack of similarity between the effect of lesions of the suprachiasmatic nucleus and subparaventricular hypothalamic zone on behavioral circadian rhythms. Cipolla-Neto J, et al. **Braz J Med Biol Res** 1988;21(3):653–4

Synaptic regulation of paraventricular arginine vasopressin-containing neurons by neuropeptide Y-containing monoaminergic neurons in rats. Electron-microscopic triple labeling. Kagotani Y, et al. **Cell Tissue Res** 1989 Aug;257(2):269–78

Contribution of forebrain mechanisms in the maintenance of deoxycorticosterone acetate-salt hypertension. Ciriello J. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:169–78

Lesions of the hypothalamic paraventricular nucleus and norepinephrine turnover in rats. Yoshida T, et al. **Endocrinol Jpn** 1989 Apr;36(2):187–94

Involvement of the median preoptic nucleus in the regulation of paraventricular vasopressin neurons by the subfornical organ in the rat. Tanaka J. **Exp Brain Res** 1989;76(1):47–54

Alteration by thyroid hormones of TRH in the rat median eminence: role of the hypothalamic paraventricular nucleus. Yamada M, et al. **Exp Clin Endocrinol** 1989 Apr; 93(1):104–10

Collateral axonal projections from the A1 noradrenergic cell group to the paraventricular nucleus and bed nucleus of the stria terminalis in the rat. Woulfe JM, et al. **Exp Neurol** 1988 Oct;102(1):121–4

Effects of volume loading on paraventriculo-spinal neurones in the rat. Lovick TA, et al. **J Auton Nerv Syst** 1988 Dec; 25(2–3):135–40

Circulating atrial natriuretic factor activates vagal afferent inputs to paraventriculo-spinal neurones in the rat. Lovick TA, et al. **J Auton Nerv Syst** 1989 Mar;26(2):129–34

The neuroendocrine paraventricular hypothalamus: receptors, signal transduction, mRNA and neurosecretion. Lightman SL. **J Exp Biol** 1988 Sep;139:31–49 (74 ref.)

Paraventricular and supraoptic bursting oxytocin cells in rat are locally regulated by oxytocin and functionally related. Moos F, et al. **J Physiol (Lond)** 1989;408:1–18

Patterns of extracellular norepinephrine in the paraventricular hypothalamus: relationship to circadian rhythm and deprivation-induced eating behavior. Stanley BG, et al. **Life Sci** 1989;45(4):275–82

The role of 5-HT1B receptors in the paraventricular nucleus of the hypothalamus in the control of feeding [letter] Dourish CT, et al. **Neurobiol Aging** 1989 Mar–Apr; 10(2):209

Destruction of the dorsal anterior hypothalamic region suppresses pulsatile release of follicle stimulating hormone but not luteinizing hormone. Lumpkin MD, et al. **Neuroendocrinology** 1989 Aug;50(2):229–35

Hypothalamic paraventricular nucleus: interaction between alpha 2-noradrenergic system and circulating hormones and nutrients in relation to energy balance. Leibowitz SF. **Neurosci Biobehav Rev** 1988 Summer;12(2):101–9 (82 ref.)

Renal and cardiovascular afferent inputs to hypothalamic paraventriculo-spinal neurons. Caverson MM, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):167–72

Paraventricular nucleus efferents mediating photoperiodism in male golden hamsters. Johnson RF, et al. **Neurosci Lett** 1989 Mar 13;98(1):85–90

Cortisol suppresses noradrenaline-induced excitatory responses of neurons in the paraventricular nucleus; an in vitro study. Kasai M, et al. **Neurosci Lett** 1988 Aug 15; 91(1):65–70

Inhibition by cortisol of neurons in the paraventricular nucleus of the hypothalamus in adrenalectomized rats; an in vitro study. Kasai M, et al. **Neurosci Lett** 1988 Aug 15; 91(1):59–64

Re-evaluation of the effects of norepinephrine on the single-unit activity of paraventricular neurosecretory neurons. Kim YI, et al. **Neurosci Lett** 1989 Feb 13; 97(1–2):103–10

Involvement of the septum in the regulation of paraventricular vasopressin neurons by the subfornical organ in the rat. Tanaka J, et al. **Neurosci Lett** 1988 Oct 5;92(2):187–91

Impaired responsiveness of paraventricular neurosecretory neurons to osmotic stimulation in rats after local anesthesia of the subfornical organ. Tanaka J, et al. **Neurosci Lett** 1989 Mar 13;98(1):51–6

Lateral hypothalamic area and paraventricular nucleus connections with subfornical organ neurons: an electrophysiological study in the rat. Tanaka J, et al. **Neurosci Res** 1988 Oct;6(1):45–52

Peripheral and central satiety factors in neuropeptide Y-induced feeding in rats. Rowland NE. **Peptides** 1988 Sep–Oct;9(5):989–92

Clonidine hyperphagia: neuroanatomic substrates and specific function. Shor-Posner G, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):925–32

Lesions of the hypothalamic paraventricular nucleus disrupt the initiation of maternal behavior. Insel TR, et al. **Physiol Behav** 1989 May;45(5):1033–41

[Inhibition of renal sympathetic efferent activities induced by stimulation of the paraventricular nucleus of the hypothalamus(PVH) in rabbits] Fu WJ, et al. **Sheng Li Hsueh Pao** 1989 Apr;41(2):111–9 (Eng. Abstr.) **(Chi)**

[Effect of injection of 6-hydroxydopamine into the regions of the supraoptic and paraventricular nuclei on the response produced by stimulation of the locus coeruleus in rats] Jin XJ, et al. **Sheng Li Hsueh Pao** 1988 Aug;40(4):382–5 (Eng. Abstr.) **(Chi)**

[Effect of electrical stimulation of the vagus nerve on paraventricular neurons of the hypothalamus] Wang CA, et al. **Sheng Li Hsueh Pao** 1988 Apr;40(2):180–4 (Eng. Abstr.) **(Chi)**

[Responses of hypothalamic paraventricular neurons to locus coeruleus (LC) and dorsal raphe (DR) stimulation in rats] Xing BR, et al. **Sheng Li Hsueh Pao** 1988 Jun;40(3):303–7 (Eng. Abstr.) **(Chi)**

[The efferent pathway of the hypothalamus and its functions] Han ZS, et al. **Sheng Li Ko Hsueh Chin Chan** 1988 Jul; 19(3):222–5 (46 ref.) **(Chi)**

[The mechanism of arterial hypertension in prolonged electrostimulation of the emotiogenic zones in the rabbit hypothalamus] Khomulo PS, et al. **Biull Eksp Biol Med** 1989 May;107(5):520–2 (Eng. Abstr.) **(Rus)**

[The role of the paraventricular hypothalamic nuclei in the reaction of the hypophyseo-adrenal cortex system to cold adaptation] Kormilitsyna NK. **Fiziol Zh SSSR** 1988 Jul; 74(7):933–7 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Regulation of vasopressin and oxytocin release in vitro. Sladek CD, et al. **Adv Exp Med Biol** 1988;245:157–65 (46 ref.)

Paraventricular nucleus lesions attenuate the development of hypertension in DOCA/salt-treated rats. Nakata T, et al. **Am J Hypertens** 1989 Aug;2(8):625–30

Catecholamine activity in paraventricular hypothalamus after hemorrhage in cats. Thrivikraman KV, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R370–6

Role of the area postrema in three putative measures of motion sickness in the rat. Sutton RL, et al. **Behav Neural Biol** 1988 Sep;50(2):133–52

The effect of hypothalamic paraventricular nuclear lesions placed at 108–110 days gestational age on plasma ACTH concentrations in the fetal sheep. McDonald TJ, et al. **J Dev Physiol** 1988 Jun;10(3):191–200

SECRETION

Central catecholaminergic system stimulates secretion of CRH at different sites. Szafarczyk A, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):E463–8

Corticotropin-releasing factor synapses within the paraventricular nucleus of the hypothalamus. Silverman AJ, et al. **Neuroendocrinology** 1989 Mar;49(3):291–9

Characteristics of neurosecretory centers of the hypothalamus of rats which are associated with regulation of the function of the adrenal cortex. Chernigovsakaya EV, et al. **Neurosci Behav Physiol** 1988 Jul–Aug;18(4):289–93

[Vasopressin secretion in hypertension of the hypothalamic origin] Slavnov VN, et al. **Klin Med (Mosk)** 1988 Dec; 66(12):74–8 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

[Effect of complete cerebral ischemia on the ultrastructure of the hypothalamo-hypophyseal neurosecretory system of rats] Gajkowska B, et al. **Neuropatol Pol** 1988; 26(3):317–33 (Eng. Abstr.) **(Pol)**

[Electron-microscopic studies of cytoskeletal elements of the neurosecretory hypothalamic nuclei in rats] Walski M, et al. **Neuropatol Pol** 1988;26(2):233–43 (Eng. Abstr.) **(Pol)**

PARENT-CHILD RELATIONS

see related
SOCIALIZATION

Opiate addicts and their perceived parental rearing. Anasagasti JI, et al. **Acta Psychiatr Scand Suppl** 1988; 344:121–6

On cross-cultural comparative studies with the EMBU: a note on specific methodological issues. Arrindell WA, et al. **Acta Psychiatr Scand Suppl** 1988;344:141–5 (21 ref.)

The early family situation of Hungarian depressed patients. Gaszner P, et al. **Acta Psychiatr Scand Suppl** 1988;344:111–4

Child rearing patterns in Brazil. Gorayeb R. **Acta Psychiatr Scand Suppl** 1988;344:147–9

Parental rearing patterns and drug abuse. Preliminary report. Kokkevi A, et al. **Acta Psychiatr Scand Suppl** 1988; 344:151–7

Child-rearing practices of Chinese parents and their relationship to behavioural problems in toddlers. Kong DS, et al. **Acta Psychiatr Scand Suppl** 1988;344:127–32

A theoretical framework for linking the experience of dysfunctional parental rearing attitudes with manifest psychopathology. Perris C. **Acta Psychiatr Scand Suppl** 1988;344:93–109 (95 ref.)

Sexual behavior, drugs, and relationship patterns on a college campus over thirteen years. Murstein BI, et al. **Adolescence** 1989 Spring;24(93):125–39

What do parents want in parent education? Bernstein ME, et al. **Am Ann Deaf** 1988 Jul;133(3):235–46

Child temperament and parental perceptions of individual child adjustment: an intrafamilial analysis. Brody GH, et al. **Am J Orthopsychiatry** 1988 Oct;58(4):532–42

Sexualized attention: normal interaction or precursor to sexual abuse? Haynes-Seman C, et al. **Am J Orthopsychiatry** 1989 Apr;59(2):238–45

Parent, teacher, and hospital staff evaluations of severely disturbed children. Kazdin AE, et al. **Am J Orthopsychiatry** 1988 Oct;58(4):512–23

Patterns of response in families of chronically disabled children: an assessment in five metropolitan school districts. Palfrey JS, et al. **Am J Orthopsychiatry** 1989 Jan; 59(1):94–104

The Foster Care Research Project: clinical impressions. Steinhauer PD, et al. **Am J Orthopsychiatry** 1989 Jul; 59(3):430–41

The instrumental and the focal child: two patterns of parent-child dynamics in separation-impeding families. von Broembsen F. **Am J Psychoanal** 1988 Fall;48(3):271–9

Attachments beyond infancy. Ainsworth MD. **Am Psychol** 1989 Apr;44(4):709–16

Marital transitions. A child's perspective. Hetherington EM, et al. **Am Psychol** 1989 Feb;44(2):303–12 (68 ref.)

A developmental perspective on antisocial behavior. Patterson GR, et al. **Am Psychol** 1989 Feb;44(2):329–35 (70 ref.)

Inadequate parental understanding of asthma medications. Donnelly JE, et al. **Ann Allergy** 1989 Apr;62(4):337–41

Changing children's food preferences: parent opinions. Casey R, et al. **Appetite** 1989 Jun;12(3):171–82

Intractable atopic eczema suggests major affective disorder: poor parenting is secondary [letter] Allen AD. **Arch Dermatol** 1989 Apr;125(4):567–8

Chronic intractable atopic eczema. Its occurrence as a physical sign of impaired parent-child relationships and psychologic developmental arrest: improvement through parent insight and education. Koblenzer CS, et al. **Arch Dermatol** 1988 Nov;124(11):1673–7 (31 ref.)

The relationship of parental dental anxiety and child's caries status. Lahti S, et al. **ASDC J Dent Child** 1989 May–Jun; 56(3):191–5

Solitude: nurtured in infancy; enjoyed in adulthood [editorial] Teuscher GW. **ASDC J Dent Child** 1989 Jan–Feb;56(1):16

Australian adolescents' perceptions of their parents. Cubis J, et al. **Aust N Z J Psychiatry** 1989 Mar;23(1):35–47

Social implications of achondroplasia—a public health view. Shakespeare WG. **Basic Life Sci** 1988;48:453–5

Programming for generalization to high and low risk parenting situations in families with oppositional developmentally disabled preschoolers. Sanders MR, et al. **Behav Modif** 1989 Jul;13(3):283–305

Interparental conflict and adolescent problem behavior: an examination of mechanisms. Forehand R, et al. **Behav Res Ther** 1989;27(4):365–71

Psychosocial characteristics of children of alcoholics. Proceedings of a symposium. June 1987, Philadelphia. **Br J Addict** 1988 Jul;83(7):783–857

Deliberate family process: a strategy for protecting children of alcoholics. Bennett LA, et al. **Br J Addict** 1988 Jul; 83(7):821–9

Cognitive functioning in children from alcoholic and non-alcoholic families. Johnson JL, et al. **Br J Addict** 1988 Jul;83(7):849–57

A comparison of the home and social environments of children of alcoholic and non-alcoholic parents. Reich W, et al. **Br J Addict** 1988 Jul;83(7):831–9

Depressive affect in school-aged children of alcoholics. Rolf JE, et al. **Br J Addict** 1988 Jul;83(7):841–8

Drug abusers' perceptions of their parents. Schweitzer RD, et al. **Br J Addict** 1989 Mar;84(3):309–14

Expectations about appropriate drinking contexts: comparisons of parents, adolescents and best friends. Wilks J, et al. **Br J Addict** 1988 Sep;83(9):1055–62

Research on children of alcoholics: past and future. Woodside M. **Br J Addict** 1988 Jul;83(7):785–92 (38 ref.)

Predicting adjustment to perinatal death. Murray J, et al. **Br J Med Psychol** 1988 Sep;61 (Pt 3):237–44

Depression and perceptions of early parenting: a longitudinal investigation. Gotlib IH, et al. **Br J Psychiatry** 1988 Jan; 152:24–7

The initial onset of schizophrenia and family expressed emotion. Some methodological considerations. Mintz LI, et al. **Br J Psychiatry** 1989 Feb;154:212–7

The relationship between schizophrenic patients' perceptions of their parents and the course of their illness. Warner R, et al. **Br J Psychiatry** 1988 Sep;153:344–53

The role of culture and family in mental illness [clinical conference] Jaschke V, et al. **Bull Menninger Clin** 1989 Mar;53(2):154–8

Children's adjustment during custody/access disputes: relation to custody arrangement, gender and age of child. Fidler BJ, et al. **Can J Psychiatry** 1988 Aug;33(6):517–23

Marital intimacy in parents of exceptional children. Fisman SN, et al. **Can J Psychiatry** 1989 Aug;34(6):519–25

Our love of children [editorial] MacLean G. **Can J Psychiatry** 1988 Aug;33(6):431–2

Family background and physical health of adolescents admitted to an inpatient psychiatric unit, I: Principal caregivers. Merskey HS, et al. **Can J Psychiatry** 1989 Mar; 34(2):79–83

Child mistreatment: possible reasons for its transgenerational transmission. Ney PG. **Can J Psychiatry** 1989 Aug; 34(6):594–601 (67 ref.)

Family background and physical health of adolescents admitted to an inpatient psychiatric unit, II: Physical health. Swart GT, et al. **Can J Psychiatry** 1989 Mar;34(2):84–8
Distinguishing teaching interactions of physically abusive from nonabusive parent–child dyads. Deitrich–MacLean G, et al. **Child Abuse Negl** 1988;12(4):469–79
Inconsistent response patterns and the prediction of child maltreatment. Milner JS, et al. **Child Abuse Negl** 1989; 13(1):59–64
Parental predictions of their children's knowledge about dangerous situations. Yarmey AD, et al. **Child Abuse Negl** 1988;12(3):355–61
Parents' perceptions regarding the discipline of their hearing–impaired children. Adams JW, et al. **Child Care Health Dev** 1988 Jul–Aug;14(4):265–73
Meeting the needs of young deaf–blind children and their parents. Part 2. Andrew AK. **Child Care Health Dev** 1989 Jul–Aug;15(4):251–64 (20 ref.)
Meeting the needs of young deaf–blind children and their parents. Part 1. Andrew AK. **Child Care Health Dev** 1989 May–Jun;15(3):195–206 (32 ref.)
Psychosocial and background factors in emotional abuse of children. Hickox A, et al. **Child Care Health Dev** 1989 Jul–Aug;15(4):227–40
Parent playfulness: a case study of infant twins with handicaps. McCollum JA. **Child Care Health Dev** 1988 Jul–Aug;14(4):235–53
Social interactions and play patterns of parents and toddlers with feminine, masculine, and neutral toys. Caldera YM, et al. **Child Dev** 1989 Feb;60(1):70–6
Economic hardship, parenting, and distress in adolescence. Lempers JD, et al. **Child Dev** 1989 Feb;60(1):25–39
The effects of parental psychopathology and maltreatment on child behavior: a test of the diathesis–stress model. Walker E, et al. **Child Dev** 1989 Feb;60(1):15–24
The role of foster parents in helping young people develop emancipation skills. Ryan P, et al. **Child Welfare** 1988 Nov–Dec;67(6):563–72 (23 ref.)
Facial reconstruction in Down syndrome: perceptions of the results by parents and normal adolescents. Klaiman P, et al. **Cleft Palate J** 1989 Jul;26(3):186–90; discussion 190–2
Excessive water drinking. A marker of caretaker interaction disturbance. Accardo P, et al. **Clin Pediatr (Phila)** 1989 Sep;28(9):416–8
Divorce: a pediatrician's view. Storlazzi JJ. **Del Med J** 1989 Jul;61(7):351–4
The use of a Teleport system in parent and adolescent support. Farquhar JW. **Diabetic Med** 1989 Sep–Oct; 6(7):635–7
The family systems of Munchausen syndrome by proxy. Griffith JL. **Fam Process** 1988 Dec;27(4):423–37
The transition to parenthood: III. Incorporation of the child into the family. Lewis JM, et al. **Fam Process** 1988 Dec; 27(4):411–21
Is expressed emotion an index of a transactional process? I. Parents' affective style. Miklowitz DJ, et al. **Fam Process** 1989 Jun;28(2):153–67
Symbiosis, the family, and natural systems. Noone RJ. **Fam Process** 1988 Sep;27(3):285–92
Is expressed emotion an index of a transactional process? II. Patient's coping style. Strachan AM, et al. **Fam Process** 1989 Jun;28(2):169–81
A measure of filial anxiety regarding anticipated care of elderly parents. Cicirelli VG. **Gerontologist** 1988 Aug; 28(4):478–82
Using videotape modeling to prepare children psychologically for surgery: influence of parents and costs versus benefits of providing preparation services. Pinto RP, et al. **Health Psychol** 1989;8(1):79–95
An integrated analysis of the contribution made by irrational beliefs and parental interaction to adolescent drug abuse. Denoff MS. **Int J Addict** 1988 Jul;23(7):655–69
The Child Consultation Rating Scale. Krener P, et al. **Int J Psychiatry Med** 1989;19(1):23–39
Parent attitudes and child personality traits in hemophilia: a six–year longitudinal study. Mayes SD, et al. **Int J Psychiatry Med** 1988;18(4):339–55
Parental perception of learning–disabled children's adjustment problems and related stress. Konstantareas MM, et al. **J Abnorm Child Psychol** 1989 Apr;17(2):177–86
Parents' attributions for achieving compliance from attention–deficit–disordered children. Sobol MP, et al. **J Abnorm Child Psychol** 1989 Jun;17(3):359–69
The relationship of early adolescent functioning to parent–reported and adolescent–perceived interparental conflict. Wierson M, et al. **J Abnorm Child Psychol** 1988 Dec;16(6):707–18
Anorexia, psychoanalysis, and feminism: fantasy and reality. Sayers J. **J Adolesc** 1988 Dec;11(4):361–71
Parental representations of depressed outpatients from a U.S.A. sample. Plantes MM, et al. **J Affective Disord** 1988 Sep–Oct;15(2):149–55
Child psychopathology rating scales and interrater agreement: I. Parents' gender and psychiatric symptoms. Jensen PS, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Jul;27(4):442–50
Child psychopathology rating scales and interrater agreement: II. Child and family characteristics. Jensen PS, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Jul; 27(4):451–61
Transition from East to West: Vietnamese adolescents and their parents. Nguyen NA, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jul;28(4):505–15
Children's reactions to loss of parent through violence. Payton JB, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Sep;27(5):563–6
Psychological and family problems associated with learning disabilities: assessment and intervention. Silver LB. **J Am Acad Child Adolesc Psychiatry** 1989 May; 28(3):319–25 (37 ref.)
A Parent Practices Scale and its relation to parent and child mental health. Strayhorn JM, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Sep;27(5):613–8
Should children attend their parent's funeral? Weller EB, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Sep; 27(5):559–62
Intervening with collegiate COAs: can we afford no to? Ponchalek K, et al. **J Am Coll Health** 1988 Nov;37(3):140–1
Parental communication deviance in childhood onset schizophrenia spectrum and depressive disorders. Asarnow JR, et al. **J Child Psychol Psychiatry** 1988 Nov;29(6):825–38
Referral to child psychiatry: parent and doctor motives and expectations. Bailey D, et al. **J Child Psychol Psychiatry** 1989 May;30(3):449–58
Parental bonding and depressive disorders in adolescents. Burbach DJ, et al. **J Child Psychol Psychiatry** 1989 May; 30(3):417–29
Mentally handicapped people as parents. Gath A. **J Child Psychol Psychiatry** 1988 Nov;29(6):739–44 (20 ref.)
Assessing child symptom severity and stress in parents of autistic children. Konstantareas MM, et al. **J Child Psychol Psychiatry** 1989 May;30(3):459–70
The psychological care of children with malignant disease. Lansdown R, et al. **J Child Psychol Psychiatry** 1988 Sep; 29(5):555–67 (56 ref.)
Competence and stress in school children: the moderating effects of individual and family qualities. Masten AS, et al. **J Child Psychol Psychiatry** 1988 Nov;29(6):745–64
Agreement between parents' and teachers' ratings of behavioral/emotional problems of children aged 4–12. Verhulst FC, et al. **J Child Psychol Psychiatry** 1989 Jan; 30(1):123–36
The Children of Alcoholics Screening Test: relationship to sex, family environment, and social adjustment in adolescents. Dinning WD, et al. **J Clin Psychol** 1989 Mar; 45(2):335–9
Observed family interactions among subtypes of eating disorders using structural analysis of social behavior. Humphrey LL. **J Consult Clin Psychol** 1989 Apr; 57(2):206–14
Mothers' and fathers' perceptions of child deviance: roles of parent and child behaviors and parent adjustment. Webster–Stratton C. **J Consult Clin Psychol** 1988 Dec; 56(6):909–15
Thai and American perspectives on over– and undercontrolled child behavior problems: exploring the threshold model among parents, teachers, and psychologists. Weisz JR, et al. **J Consult Clin Psychol** 1988 Aug;56(4):601–9
Denver developmental activities: a preliminary report. Frankenburg WK, et al. **J Dev Behav Pediatr** 1989 Feb; 10(1):22–6
Measuring the communication of social support from adult children. Dean A, et al. **J Gerontol** 1989 Mar;44(2):S71–9
Relative contributions of help by employed and nonemployed sisters to their elderly parents. Matthews SH, et al. **J Gerontol** 1989 Jan;44(1):S36–44
Coming out to mom and dad: a study of gay males and their relationships with their parents. Cramer DW, et al. **J Homosex** 1988;15(3–4):79–91
Parental influences on the self–esteem of gay and lesbian youths: a reflected appraisals model. Savin–Williams RC. **J Homosex** 1989;17(1–2):93–109
Medical college exclusively for doctors' wards [letter] Mathias J. **J Indian Med Assoc** 1988 Apr;86(4):111
The perceived attractiveness of preterm infants with cranial molding. Budreau G. **J Obstet Gynecol Neonatal Nurs** 1989 Jan–Feb;18(1):38–44
Diabetes in adolescence: effects of multifamily group intervention and parent simulation of diabetes. Satin W, et al. **J Pediatr Psychol** 1989 Jun;14(2):259–75
Children with recurrent abdominal pain and their parents: more somatic complaints, anxiety, and depression than other patient families? Walker LS, et al. **J Pediatr Psychol** 1989 Jun;14(2):231–43
Is there a place for parents in the operating room? Gauderer MW, et al. **J Pediatr Surg** 1989 Jul;24(7):705–6; discussion 707
Children of affectively ill parents. Buckwalter KC, et al. **J Psychosoc Nurs Ment Health Serv** 1988 Oct;26(10):8–14
Drinking, drinking styles and drug use in children of alcoholics, depressives and controls. Johnson S, et al. **J Stud Alcohol** 1989 Sep;50(5):427–31
Alcohol–related problems, marital disruption and depressive symptoms among adult children of alcohol abusers in the United States. Parker DA, et al. **J Stud Alcohol** 1988 Jul; 49(4):306–13
The children of alcoholics life–events schedule: a stress scale for children of alcohol–abusing parents. Roosa MW, et al. **J Stud Alcohol** 1988 Sep;49(5):422–9
A piece of my mind. On his shoulders. Parker MB. **JAMA** 1989 Aug 11;262(6):830
Minimizing the impact of deployment separation on military children: stages, current preventive efforts, and system recommendations. Amen DG, et al. **Milit Med** 1988 Sep; 153(9):441–6
Behavioral parent training. A view of the past and suggestions for the future. Egel AL, et al. **Monogr Am Assoc Ment Retard** 1989;(12):153–73 (95 ref.)
The rights approach and the intimacy approach: family suffering and care of defective newborns. Blustein J. **Mt Sinai J Med** 1989 May;56(3):164–7
Parent characteristics, perceived health risk, and smokeless tobacco use among white adolescent males. Bauman KE, et al. **NCI Monogr** 1989;(8):43–8
Parental strategies among the Gusii of Kenya. LeVine RA, et al. **New Dir Child Dev** 1988 Summer;(40):27–35
Parental goals and Italian infant care. New RS. **New Dir Child Dev** 1988 Summer;(40):51–63
Parenthood and infancy in Sweden. Welles–Nystrom B. **New Dir Child Dev** 1988 Summer;(40):75–80
Parent and peer factors associated with drug sampling in early adolescence: implications for treatment. Dishion TJ, et al. **NIDA Res Monogr** 1988;77:69–93
Physician parents. The mothers and fathers behind stethoscopes. Athy D. **Ohio Med** 1989 Feb;85(2):122–4, 126–7, 129
The psychologically battered child: toward a definition. Garbarino J. **Pediatr Ann** 1989 Aug;18(8):502–4
Vulnerable child syndrome and its variants. Green M. **Pediatr Rev** 1986 Sep;8(3):75–80 (30 ref.)
A child's reactions to parents' problems. Woolston JL. **Pediatr Rev** 1986 Dec;8(6):169–76 (18 ref.)
Pediatric pain: the parents' role. Dolgin MJ, et al. **Pediatrician** 1989;16(1–2):103–9 (28 ref.)
Chronic illness and early development. The parent's perspective. Goldberg S, et al. **Pediatrician** 1988; 15(1–2):13–20 (29 ref.)
Supporting the SIDS family. Mandell F, et al. **Pediatrician** 1988;15(4):179–82 (7 ref.)
Cosleeping and sleep problems in Hispanic–American urban young children. Schachter FF, et al. **Pediatrics** 1989 Sep; 84(3):522–30
Effects of parental styles on anxiety and type A behavior pattern. Essau CA, et al. **Percept Mot Skills** 1988 Aug; 67(1):333–4
Children's perception of parental exercise: influence of sex and age. Godin G, et al. **Percept Mot Skills** 1986 Apr; 62(2):511–6
A pilot study on the effect of training parents of language–delayed children in pragmatic interaction strategies. Iven CJ, et al. **Percept Mot Skills** 1989 Aug; 69(1):295–303
The impact of parental head trauma on families with children. Urbach JR. **Psychiatr Med** 1989;7(1):17–36 (56 ref.)
Parental divorce during the college years. Cain BS. **Psychiatry** 1989 May;52(2):135–46
Intergenerational transmission of maltreatment: insights from attachment theory and research. Zeanah CH, et al. **Psychiatry** 1989 May;52(2):177–96 (114 ref.)
Parental communication deviance: its relationship to parent, child, and family system variables. Velligan D, et al. **Psychiatry Res** 1988 Dec;26(3):313–25
Postdischarge observations by parents of adolescent patients hospitalized for acute conditions. Denholm CJ. **Psychol Rep** 1989 Aug;65(1):271–4
Comparisons of parents', teachers', and students' perceptions of self–concept in children from one– and two–parent families. Ensink T, et al. **Psychol Rep** 1989 Aug;65(1):201–2
Family interaction and outcome IQ in high–risk boys. Greenwald DF. **Psychol Rep** 1989 Aug;65(1):95–103
Relations of spanking and other parenting characteristics to self–esteem and perceived fairness of parental discipline. Larzelere RE, et al. **Psychol Rep** 1989 Jun;64(3 Pt 2):1140–2
Psychologists and children of alcoholic parents. Murray JB. **Psychol Rep** 1989 Jun;64(3 Pt 1):859–79 (90 ref.)
Lying by children: why children say one thing, do another? Paniagua FA. **Psychol Rep** 1989 Jun;64(3 Pt 1):971–84 (29 ref.)
Reliability of parental reports using the Katz Adjustment Scales: before and after hospital admission for schizophrenia. Parker G, et al. **Psychol Rep** 1989 Aug; 65(1):251–8
Family environment of adolescents and coping in the hospital. Steiner H, et al. **Psychoneuroendocrinology** 1988; 13(4):333–8
Patterns of response to childhood asthma. Fritz GK, et al. **Psychosom Med** 1989 May–Jun;51(3):347–55
Children of alcoholics: helping a vulnerable group. Woodside M. **Public Health Rep** 1988 Nov–Dec;103(6):643–8
A profile of Alaska's seniors. 3. Income, children, and health. Montgomery RJ, et al. **Res Aging** 1988 Dec;10(4):534–49
Is parent care normative? The experiences of a sample of middle–aged women. Rosenthal CJ, et al. **Res Aging** 1989 Jun;11(2):244–60
Behavior disorders and mental retardation: the family system perspective. Margalit M, et al. **Res Dev Disabil** 1989; 10(3):315–26
Interactions in high– and low–EE families [published erratum appears in Soc Psychiatry Psychiatr Epidemiol 1989 Jul;24(4):186] Hubschmid T, et al. **Soc Psychiatry Psychiatr Epidemiol** 1989 Mar;24(2):113–9
Social control of identity by children of gay fathers. Eozett FW. **West J Nurs Res** 1988 Oct;10(5):550–65
The importance of parenting [editorial] [published erratum appears in Wis Med J 1989 Jul;88(7):5] Lamont JH.

Wis Med J 1989 Jun;88(6):10

Intergenerational transfers within the family context—motivating factors and their implications for caregiving. Cantor MH, et al. **Women Health** 1988; 14(3–4):39–51

Intergenerational transfers: aging parents living with adult children and vice versa. Sundström G, et al. **Z Gerontol** 1989 Mar–Apr;22(2):112–7

[Harmful influences on the prognosis of mental retardation in children] Höllge J. **Cesk Zdrav** 1988 Jul;36(6–7):269–75 (Eng. Abstr.) (Cze)

[The body as hostage of the self. Phenomenological aspects of anorexia nervosa] Jonckheere P. **Acta Psychiatr Belg** 1988 Mar–Apr;88(2):105–16 (Eng. Abstr.) (Fre)

[The psychosocial impact of illness and death in children: current concepts] Razavi D, et al. **Ann Med Psychol (Paris)** 1988 Jun;146(6):523–49 (164 ref.) (Eng. Abstr.) (Fre)

[The 1st lipstick or the fear of femininity in the parents of adolescents] Cournut-Janin M. **Psychiatr Enfant** 1988; 31(2):301–11 (Eng. Abstr.) (Fre)

[Diagnosis: cancer. Age of the patient: 3 years. Parent initiatives in active support of therapeutic efforts] Seidl K. **Fortschr Med** 1989 Jun 20;107(18):88 (Ger)

[Psychological management of children with cancer and their families] Wittmeyer H, et al. **Klin Padiatr** 1989 Jul–Aug; 201(4):350–4 (Eng. Abstr.) (Ger)

[Psychological aspects of families of former patients of a neonatal intensive care unit] Höck S. **Padiatr Grenzgeb** 1988;27(4):233–7 (Eng. Abstr.) (Ger)

[Spoiling the child and neglect] Wurst F. **Padiatr Padol** 1989; 24(2):93–102 (Ger)

[The combined pattern of physiologic and relation dynamic processes in long-term encopresis] Hürter A, et al. **Prax Kinderpsychol Kinderpsychiatr** 1989 May–Jun; 38(5):171–7 (Eng. Abstr.) (Ger)

[Conflicts after divorce—a challenge for counseling and therapy] Reich G, et al. **Prax Kinderpsychol Kinderpsychiatr** 1988 Nov;37(9):346–55 (Eng. Abstr.) (Ger)

[Raising physically and psychologically disabled children and non-disabled children within the family] Siek K, et al. **Z Gesamte Hyg** 1989 Jan;35(1):46–7 (Eng. Abstr.) (Ger)

[The attitude of children of divorce to child custody, court hearings and visiting rights—a survey in Zurich] Felder W. **Z Kinder Jugenpsychiatr** 1989 Jun;17(2):55–62 (Eng. Abstr.) (Ger)

[Child rearing in the family and the sick child's sense of parental acceptance] Janeczko R, et al. **Pediatr Pol** 1988 Aug;63(8):494–501 (Pol)

[Psychological aspects of the battered child syndrome] Popielarska M, et al. **Pediatr Pol** 1988 Apr;63(4):236–42 (Eng. Abstr.) (Pol)

[Effect of bad habits of parents on the health status of younger schoolchildren] Gnatenko OZ, et al. **Pediatriia** 1988;(7):106–7 (Rus)

PARENT, SINGLE see **SINGLE PARENT**

PARENTERAL FEEDING

see related
FAT EMULSIONS, INTRAVENOUS

L-carnitine: effect of intravenous administration on fuel homeostasis in normal subjects and home-parenteral-nutrition patients with low plasma carnitine concentrations. Bowyer BA, et al. **Am J Clin Nutr** 1989 Apr;49(4):618–23

Plasma vitamin E and selenium and breath pentane in home parenteral nutrition patients. Lemoyne M, et al. **Am J Clin Nutr** 1988 Nov;48(5):1310–5

Possible sources of glutamine for parenteral nutrition: impact on glutamine metabolism. Abumrad NN, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):E228–34

The effect of intravenous nutrition on muscle mass and exercise capacity in perioperative patients. Wood CD, et al. **Am J Surg** 1989 Jul;158(1):63–7

Acute gastroenteritis in children—aetiology and comparison of two modes of treatment. Ooi BC, et al. **Ann Acad Med Singapore** 1989 Jan;18(1):40–2

Administration of balanced or BCAA-enriched amino acid solution in septic rats. Effects on protein synthesis in the liver. Pedersen P, et al. **Ann Surg** 1988 Dec;208(6):714–20

Plasma amino acid concentrations in parenterally fed preterm infants. Clark D, et al. **Arch Dis Child** 1989 Jul;64(7):939–42

Association of mineral composition of neonatal intravenous feeding solutions and metabolic bone disease of prematurity. MacMahon P, et al. **Arch Dis Child** 1989 Apr; 64(4):489–93

Nitrogen balance in adult hospitalized patients with the use of a pediatric amino acid model. Gazzaniga AB, et al. **Arch Surg** 1988 Oct;123(10):1275–9

A 2 year experience of a nutritional support service: prospective study of 229 non-intensive care patients receiving parenteral nutrition. Fletcher JP, et al. **Aust N Z J Surg** 1989 Mar;59(3):223–8

Nutritional support. **Baillieres Clin Gastroenterol** 1988 Oct; 2(4):715–954

Integration of nutrition support into oncologic treatment protocols for high and low nutritional risk children with Wilms' tumor. A prospective randomized study. Rickard KA, et al. **Cancer** 1989 Jul 15;64(2):491–509

Nutritional support in the critical care setting (Part 2). Berger R, et al. **Chest** 1989 Aug;96(2):372–80 (114 ref.)

Nutritional support in the critical care setting (Part 1). Berger R, et al. **Chest** 1989 Jul;96(1):139–50 (223 ref.)

Exercise-mediated peripheral tissue and whole-body amino acid metabolism during intravenous feeding in normal man. Albert JD, et al. **Clin Sci** 1989 Jul;77(1):113–20

Effect of parenteral nutrition on protein turnover in endotoxaemic rats. Ash SA, et al. **Clin Sci** 1989 Jun; 76(6):659–66

Metabolic effects of intravenous medium- and long-chain triacylglycerols in critically ill patients. Ball MJ, et al. **Clin Sci** 1989 Feb;76(2):165–70

Withholding artificial nutrition and hydration in Connecticut. The case of Carol McConnell. Healey JM. **Conn Med** 1988 Nov;52(11):691

Nutritional support. **Crit Care Clin** 1987 Jan;3(1):1–238

Nutritional support in the critically ill patient: if, when, how, and what. Baker JP, et al. **Crit Care Clin** 1987 Jan; 3(1):97–113 (74 ref.)

Nutrition in the intensive care patient. Kinney JM. **Crit Care Clin** 1987 Jan;3(1):1–10 (23 ref.)

Nutrition and cardiac disease. Quinn T, et al. **Crit Care Clin** 1987 Jan;3(1):167–84 (87 ref.)

The critically ill surgical patient: nutritional considerations. Starker PM, et al. **Crit Care Clin** 1987 Jan;3(1):205–16 (74 ref.)

The patient with critical neurological disease. Young B, et al. **Crit Care Clin** 1987 Jan;3(1):217–33 (72 ref.)

Validity of urinary urea nitrogen as a measure of total urinary nitrogen in adult patients requiring parenteral nutrition. Loder PB, et al. **Crit Care Med** 1989 Apr;17(4):309–12

High and low parenteral infusion rates decrease pulmonary metastasis in mice bearing Lewis lung carcinoma. Bryant MS, et al. **Curr Surg** 1989 Mar–Apr;46(2):113–5

Influence of intravenously administered intralipid on free fatty acid concentration and albumin binding capacity to bilirubin in newborn infants. Zoban P, et al. **Czech Med** 1989;12(2):68–77

The sick very low birthweight infant fed by parenteral nutrition: studies of nitrogen and energy. Kovar IZ, et al. **Eur J Clin Nutr** 1989 May;43(5):339–46

Nutritional management of patients with ARC or AIDS. Hickey MS, et al. **Gastroenterol Clin North Am** 1988 Sep; 17(3):545–61 (34 ref.)

Meta-analysis of branched-chain amino acids in hepatic encephalopathy [editorial] Berlin JA, et al. **Gastroenterology** 1989 Oct;97(4):1043–5

Nutrition in liver failure [editorial] Blackburn GL, et al. **Gastroenterology** 1989 Oct;97(4):1049–51

Parenteral nutrition with branched-chain amino acids in hepatic encephalopathy. A meta-analysis. Naylor CD, et al. **Gastroenterology** 1989 Oct;97(4):1033–42

Controlled trial of bowel rest and nutritional support in the management of Crohn's disease. Greenberg GR, et al. **Gut** 1988 Oct;29(10):1309–15

Treatment of end stage chronic intestinal pseudo-obstruction by subtotal enterectomy and home parenteral nutrition. Mughal MM, et al. **Gut** 1988 Nov;29(11):1613–7

Hawaii's nutrition and hydration fix: will it be medico-moral, judicial or legislative? Heintz LL. **Hawaii Med J** 1988 Dec; 47(12):560, 563–70

Parenteral nutrition in injury. Mughal MM. **Injury** 1987 Mar; 18(2):82–6 (51 ref.)

The use of parenteral nutrition supplementation in pregnancy complicated by end-stage renal disease. Brookhyser J. **J Am Diet Assoc** 1989 Jan;89(1):93–4

Evaluation of an information booklet for general practitioners with patients on home parenteral nutrition. Malone M. **J Clin Pharm Ther** 1988 Dec;13(6):391–4

An investigation into information provided for patients on home parenteral nutrition. O'Connor M, et al. **J Clin Pharm Ther** 1988 Dec;13(6):403–9

Parenteral nutrition in patients with liver disease. Silk DB. **J Hepatol** 1988 Oct;7(2):269–77 (30 ref.)

Acute respiratory failure in anorexia nervosa with hypophosphataemia. Gustavsson CG, et al. **J Intern Med** 1989 Jan;225(1):63–4

Artificial feeding and the right to die. The legal issues. Snyder L. **J Leg Med** 1988 Sep;9(3):349–75 (97 ref.)

Stability of famotidine in commonly used nutritional infusion fluids. Underberg WJ, et al. **J Parenter Sci Technol** 1988 May–Jun;42(3):94–7

Bacterial infection: the main cause of acute cholestasis in newborn infants receiving short-term parenteral nutrition. Wolf A, et al. **J Pediatr Gastroenterol Nutr** 1989 Apr; 8(3):297–303 (52 ref.)

Calcium, phosphorus, and vitamin D requirements of infants receiving parenteral nutrition. Koo WW. **J Perinatol** 1988 Summer;8(3):263–8 (33 ref.)

Splanchnic transplantation. An approach to the infant dependent on parenteral nutrition who develops irreversible liver disease [published erratum appears in JAMA 1989 Jul 14;262(2):210] Williams JW, et al. **JAMA** 1989 Mar 10;261(10):1458–62

A.S.P.E.N., 13th clinical congress. Abstracts. American Society for Parenteral and Enteral Nutrition. February 5–8, 1989. **JPEN J Parenter Enteral Nutr** 1989 Jan–Feb;13(1 Suppl):1S–32S

Intravenous nutritional support during pregnancy [letter] Agolini G, et al. **JPEN J Parenter Enteral Nutr** 1989 Jul–Aug;13(4):441–2

Intestinal maturation in the rat: the role of enteral nutrients. Castillo RO, et al. **JPEN J Parenter Enteral Nutr** 1988 Sep–Oct;12(5):490–5

Chemical stability of selenious acid in total parenteral nutrition solutions containing ascorbic acid. Ganther HE, et al. **JPEN J Parenter Enteral Nutr** 1989 Mar–Apr; 13(2):185–8

Nutritional support in patients with systemic scleroderma. Grabowski G, et al. **JPEN J Parenter Enteral Nutr** 1989 Mar–Apr;13(2):147–51

Effects of parenteral lipid on leucine metabolism: dependence of fatty acid chain length. Haymond MW, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6 Suppl):94S–97S (41 ref.)

Survey of home nutritional support patients. Herfindal ET, et al. **JPEN J Parenter Enteral Nutr** 1989 May–Jun; 13(3):255–61

Hypersensitivity following lipid emulsion infusion in an adult patient. Hiyama DT, et al. **JPEN J Parenter Enteral Nutr** 1989 May–Jun;13(3):318–20

Neonatal parenteral nutrition with medium-chain triglycerides: rationale for research. Lima LA. **JPEN J Parenter Enteral Nutr** 1989 May–Jun;13(3):312–7 (70 ref.)

Effects of parenteral nutrition on whole body and extremity composition in children and adolescents with active inflammatory bowel disease. Lin CH, et al. **JPEN J Parenter Enteral Nutr** 1989 Jul–Aug;13(4):366–71 (25 ref.)

In vivo biliary function in the adult rat: the effect of parenteral glucose and amino acids. Rivera A Jr, et al. **JPEN J Parenter Enteral Nutr** 1989 May–Jun;13(3):240–5

Protein-sparing effect of substrate infusion in surgical patients is governed by the clinical state, and not by the individual substrate infused. Shaw JH, et al. **JPEN J Parenter Enteral Nutr** 1988 Sep–Oct;12(5):433–40

Improvement of nutritional measures during preoperative parenteral nutrition in patients selected by the prognostic nutritional index: a randomized controlled trial. Smith RC, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec; 12(6):587–91

Maintenance of visceral protein levels in serum during postoperative parenteral nutrition. Tulikoura I. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec; 12(6):597–601

Changes in the gastrointestinal tract during enteral or parenteral feeding. Lo CW, et al. **Nutr Rev** 1989 Jul; 47(7):193–8 (50 ref.)

Acid-independent release of secretin and cholecystokinin by intraduodenal infusion of fat in humans. Rhodes RA, et al. **Pancreas** 1988;3(4):391–8

Duodenal infusion of fat, cholecystokinin secretion and satiety in the pig. Gregory PC, et al. **Physiol Behav** 1989 May;45(5):1021–4

Parenteral nutrition in tumor patients. Müller JM, et al. **Recent Results Cancer Res** 1988;108:185–93

Indications for and results of nutritional therapy in cancer patients. Ollenschläger G, et al. **Recent Results Cancer Res** 1988;108:172–84 (36 ref.)

Enteral versus parenteral glucose as the sole nutritional support after colorectal resection. A prospective, randomized comparison. Magnússon J, et al. **Scand J Gastroenterol** 1989 Jun;24(5):539–49

Differential neutrophil activation before and after endotoxin infusion in enterally versus parenterally fed volunteers. Meyer J, et al. **Surg Gynecol Obstet** 1988 Dec;167(6):501–9

Anti-cancer therapy with valine-depleted amino acid imbalance solution. Nishihira T, et al. **Tohoku J Exp Med** 1988 Nov;156(3):259–70

Metabolism and nutrition in trauma. Vinnars E, et al. **Ups J Med Sci** 1988;93(2):131–8 (60 ref.)

[Modern possibilities of nutrition in clinical practice. 2. Parenteral nutrition] Spičáková V, et al. **Cesk Pediatr** 1988 Jul;43(7):404–11 (Cze)

[Parenteral nutrition in multiple injuries. I] Palyza V, et al. **Rozhl Chir** 1988 Sep;67(8–9):530–5 (Eng. Abstr.) (Cze)

[Parenteral nutrition in multiple injuries. II] Palyza V, et al. **Rozhl Chir** 1988 Sep;67(8–9):536–41 (Eng. Abstr.) (Cze)

[Branched-chain amino acids for parenteral feeding in hepatic failure] Kábrt J, et al. **Sb Lek** 1988 Jul;90(7):206–12 (Eng. Abstr.) (Cze)

[Possible use of indirect energometry (indirect calorimetry) in parenteral nutrition and metabolic care] Pidrman V, et al. **Vnitr Lek** 1988 Aug;34(8):777–85 (Eng. Abstr.) (Cze)

[Small intestine transplantation, a review (letter)] Piegza MA. **Ned Tijdschr Geneeskd** 1989 Jan 28;133(4):179–80 (Dut)

[Trace elements in artificial nutrition. Art and practice] Saudin F, et al. **Ann Fr Anesth Reanim** 1988;7(4):320–32 (69 ref.) (Eng. Abstr.) (Fre)

[Artificial nutrition and alcoholic cirrhosis] Michel H, et al. **Ann Gastroenterol Hepatol (Paris)** 1988 Nov;24(6):329–32 (22 ref.) (Eng. Abstr.) (Fre)

[Nutritional copper deficiency. Apropos of a case] Velin P, et al. **Ann Pediatr (Paris)** 1989 Apr;36(4):269–74 (Eng. Abstr.) (Fre)

[Home parenteral nutrition in children. Evaluation after 8 years' activity with 88 patients] Gorski AM, et al. **Arch Fr Pediatr** 1989 May;46(5):323–9 (Eng. Abstr.) (Fre)

[Artificial nutrition at home as supportive and palliative tumor therapy] Kolb S, et al. **Fortschr Med** 1988 Jun 30; 106(19):396–9 (Eng. Abstr.) (Ger)

[8th combined meeting of the German Working Group for Artificial Nutrition and the Austrian Working Group for Clinical Nutrition. Augsburg, 13–16 April 1989. Abstracts] **Infusionstherapie** 1989 Feb;16(1):4–29 (Ger)

[Hypocaloric nutrition in the early postoperative phase in patients following colorectal surgery] Mory M, et al. **Infusionstherapie** 1989 Feb;16(1):41–3 (Eng. Abstr.) (Ger)

[The sugar substitutes fructose and sorbite: an unnecessary risk in parenteral nutrition] Keller U. **Schweiz Med Wochenschr** 1989 Jan 28;119(4):101–6 (42 ref.) (Eng. Abstr.) (Ger)

[Acute effects of a new type of lipidic emulsion in critical patients] Tomassetti M, et al. **Minerva Anestesiol** 1989 Jan–Feb;55(1–2):39–42 (Eng. Abstr.) (Ita)

[Principles of parenteral feeding of infants] Książyk J, et al. **Pediatr Pol** 1988 Jun;63(6):381–7 (17 ref.) (Pol)

[Breath test using C–13–trioleate in the evaluation of the rate of fatty acid metabolism after parenteral feeding of premature and newborn infants] Zaba R. **Pediatr Pol** 1988 Oct;63(10):661–4 (Pol)

[Problems of nutrition in neoplasms of the digestive system] Hasik J. **Wiad Lek** 1988 Aug 1;41(15):1019–23 (10 ref.) (Eng. Abstr.) (Pol)

[Nyctohemeral rhythm of cortisol and insulin in patients subjected to enteral and parenteral nutritional support] Marchini JS, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Sep–Oct;43(5):232–6 (Eng. Abstr.) (Por)

[Experimental validation of the coagulation method of purifying protein hydrolysates for parenteral nutrition] Koshelev NF, et al. **Gematol Transfuziol** 1989 Jan; 34(1):55–8 (Rus)

[Parenteral feeding of children after nonemergency operations on the abdominal cavity organs] Borova OE, et al. **Klin Khir** 1988;(6):24–7 (Eng. Abstr.) (Rus)

[Changes in lipid metabolism in rats with radiation sickness and a pronounced intestinal syndrome during parenteral feeding with lipofundin and infusolipol] Stepanov SA, et al. **Radiobiologiia** 1988 Nov–Dec;28(6):775–9 (Eng. Abstr.) (Rus)

[Potentially hazardous complications of central venous catheterization] Sloventantor VIu, et al. **Vestn Akad Med Nauk SSSR** 1988;(6):62–9 (Eng. Abstr.) (Rus)

[Status of nitrogen balance and parenteral feeding in peritonitis] Ashkhamaf MKh. **Vestn Khir** 1988 Oct; 141(10):39–42 (Eng. Abstr.) (Rus)

[Nutritional support in pediatrics] López LA, et al. **Rev Chil Pediatr** 1988 Mar–Apr;59(2):129–38 (91 ref.) (Eng. Abstr.) (Spa)

[Clinical nutrition. Infusion of branched–chain amino acids has no positive effect in patients with liver diseases] Eriksson LS, et al. **Lakartidningen** 1988 Nov 23; 85(47):4088–9 (Swe)

[Clinical nutrition. Enteral and parenteral feeding should be complementary to each other] Mossberg T. **Lakartidningen** 1988 Dec 7;85(49):4314–5 (Swe)

[Clinical nutrition. Adequate parenteral nutrition is routine today] Nordenström J. **Lakartidningen** 1988 Nov 16; 85(46):3951–2 (Swe)

[Glutamine—a forgotten amino acid in clinical nutrition] Vinnars E. **Lakartidningen** 1989 Jan 25;86(4):222–4 (Swe)

[Clinical nutrition. Exciting future prospects in the field of amino acids] Wernerman J, et al. **Lakartidningen** 1988 Nov 30;85(48):4215–6 (Swe)

[Equal parts of fat and glucose give the best postoperative nutrition] Wernerman J. **Lakartidningen** 1988 Nov 16; 85(46):3952 (Swe)

ADVERSE EFFECTS

The medical and metabolic consequences of administration of sodium acetate. Veech RL, et al. **Adv Enzyme Regul** 1988;27:313–43

Pancytopenia in a patient receiving home intravenous nutrition. Wagner S, et al. **Eur J Clin Nutr** 1988 Dec; 42(12):1029–34

Plasma manganese concentrations in infants and children receiving parenteral nutrition. Hambidge KM, et al. **JPEN J Parenter Enteral Nutr** 1989 Mar–Apr;13(2):168–71

D–lactate and metabolic bone disease in patients receiving long–term parenteral nutrition. Karton MA, et al. **JPEN J Parenter Enteral Nutr** 1989 Mar–Apr;13(2):132–5

Osteomyelitis of the clavicle secondary to infected Hickman catheter. Kravitz AB. **JPEN J Parenter Enteral Nutr** 1989 Jul–Aug;13(4):426–7

Contaminated enteral nutrition solutions as a cause of nosocomial bloodstream infection: a study using plasmid fingerprinting. Levy J, et al. **JPEN J Parenter Enteral Nutr** 1989 May–Jun;13(3):228–34

Hyperammonaemia and parenteral nutrition in infancy [letter] Puntis JW, et al. **Lancet** 1988 Dec 10;2(8624):1374–5

Is reduced urinary calcium loss in long–term parenteral nutrition patients an adaptive mechanism to limit bone loss? **Nutr Rev** 1989 Jun;47(6):190–2 (13 ref.)

Acute pernicious beriberi in a patient receiving parenteral nutrition. A case report. Naidoo DP, et al. **S Afr Med J** 1989 Jun 3;75(11):546–8

[Hyperosmolar coma in a premature newborn infant: iatrogenic complication of parenteral feeding] Casadevall I, et al. **Pediatrie** 1988;43(3):205–7 (Eng. Abstr.) (Fre)

ECONOMICS

Indications for intravenous nutrition in a regional hospital. Hicks PR. **N Z Med J** 1989 May 10;102(867):218–20

INSTRUMENTATION

Complications of intravenous feeding catheters. Mughal MM. **Br J Surg** 1989 Jan;76(1):15–21 (101 ref.)

Subcutaneous infusion ports for administration of parenteral nutrition at home. Pomp A, et al. **Surg Gynecol Obstet** 1989 Oct;169(4):329–33 (27 ref.)

METHODS

Nutritional management of paediatric patients. Cockburn F, et al. **Baillieres Clin Gastroenterol** 1988 Oct;2(4):887–904 (45 ref.)

Perioperative nutritional support. McMahon MJ. **Baillieres Clin Gastroenterol** 1988 Oct;2(4):751–63 (50 ref.)

Effectiveness of two methods of parenteral nutrition support in improving muscle mass of children with neuroblastoma or Wilms' tumor. A randomized study. Rickard KA, et al. **Cancer** 1989 Jul 1;64(1):116–25

Position of the American Dietetic Association: nutrition monitoring of the home parenteral and enteral patient. **J Am Diet Assoc** 1989 Feb;89(2):263–5

The effects of an anabolic steroid and peripherally administered intravenous nutrition in the early postoperative period. Hansell DT, et al. **JPEN J Parenter Enteral Nutr** 1989 Jul–Aug;13(4):349–58 (54 ref.)

Percutaneous alternatives in nutritional support: a radiologic perspective. Lambiase RE, et al. **JPEN J Parenter Enteral Nutr** 1988 Sep–Oct;12(5):513–20

Partial peritoneal alimentation in an infant. Merritt RJ, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec; 12(6):621–5

Rhoads lecture. The practice of clinical nutrition: how to prepare for the future. Wilmore DW. **JPEN J Parenter Enteral Nutr** 1989 Jul–Aug;13(4):337–43 (20 ref.)

Comparison of the effects of enteral feeding with continuous and intermittent parenteral nutrition on hepatic triglyceride secretion in human beings. Isabel–Martinez L, et al. **Surgery** 1989 Mar;105(3):415–20

[Comparative metabolic effect of continuous enteral nutrition and complete parenteral nutrition] Rigaud D, et al. **Ann Gastroenterol Hepatol (Paris)** 1988 Nov;24(6):285–90 (16 ref.) (Eng. Abstr.) (Fre)

[Parenteral nutrition at home: 2 years' experience] Van Gossum A, et al. **Rev Med Brux** 1989 Jun;10(6):225–32 (Eng. Abstr.) (Fre)

[Controlled artificial nutrition in advanced age] Weiner R. **ZFA** 1988 Jul–Aug;43(4):179–84 (12 ref.) (Eng. Abstr.) (Ger)

[A method of parenteral feeding of children with acute renal failure] Treshchinskiĭ AI, et al. **Klin Khir** 1988;(9):72–3 (Rus)

MORTALITY

Mortality in patients on home parenteral nutrition. Stokes MA, et al. **JPEN J Parenter Enteral Nutr** 1989 Mar–Apr; 13(2):172–5

STANDARDS

[Computerized assessment of the efficacy of parenteral and enteral tube nutrition] Liashchenko IuN, et al. **Vopr Pitan** 1989 Jan–Feb;(1):28–34 (Eng. Abstr.) (Rus)

TRENDS

Invited comment: short–chain fatty acids: present prospect—future alternative? Campos AC, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6 Suppl):98S–101S (43 ref.)

[Current status of the problem of parenteral nutrition and tasks relating to its further development] Vasil'ev PS. **Vestn Akad Med Nauk SSSR** 1988;(9):44–9 (47 ref.) (Eng. Abstr.) (Rus)

UTILIZATION

Patterns of care: an analysis of the quality of nutritional care routinely provided to elderly hospitalized veterans. Sullivan DH, et al. **JPEN J Parenter Enteral Nutr** 1989 May–Jun;13(3):249–54

VETERINARY

Selected aspects of enteral and parenteral nutritional support. Armstrong PJ, et al. **Semin Vet Med Surg (Small Anim)** 1988 Aug;3(3):216–26 (41 ref.)

PARENTERAL HYPERALIMENTATION

Acetate and hypercalciuria during total parenteral nutrition. Berkelhammer CH, et al. **Am J Clin Nutr** 1988 Dec; 48(6):1482–9

Increased plasma carnitine in trauma patients given lipid–supplemented total parenteral nutrition. Davis AT, et al. **Am J Clin Nutr** 1988 Dec;48(6):1400–2

Trace element metabolism in adult patients requiring total parenteral nutrition. Fleming CR. **Am J Clin Nutr** 1989 Mar;49(3):573–9 (64 ref.)

Guidelines for the use of vitamins, trace elements, calcium, magnesium, and phosphorus in infants and children receiving total parenteral nutrition: report of the Subcommittee on Pediatric Parenteral Nutrient Requirements from the Committee on Clinical Practice Issues of the American Society for Clinical Nutrition [published errata appear in Am J Clin Nutr 1989 Jun;49(6):1332 and 1989 Sep;50(3):560] Greene HL, et al. **Am J Clin Nutr** 1988 Nov;48(5):1324–42 (128 ref.)

Clinical relevance of L–carnitine–supplemented total parenteral nutrition in postoperative trauma. Metabolic effects of continuous or acute carnitine administration with special reference to fat oxidation and nitrogen utilization. Pichard C, et al. **Am J Clin Nutr** 1989 Feb;49(2):283–9

Zinc and copper balance studies in infants receiving total parenteral nutrition. Shulman RJ. **Am J Clin Nutr** 1989 May;49(5):879–83

Short–term parenteral nutrition with glucose and Intralipid: effects on serum lipids and lipoproteins. Weinberg RB, et al. **Am J Clin Nutr** 1989 May;49(5):794–8

An educational booklet diminishes anxiety in parents whose children receive total parenteral nutrition. Laine L, et al. **Am J Dis Child** 1989 Mar;143(3):374–7

Spreadsheet program for neonatal and pediatric total parenteral nutrient solutions [letter] Fink RM. **Am J Hosp Pharm** 1989 Jun;46(6):1127–8

Use of standardized total parenteral nutrient solutions for premature neonates. Hartwig SC, et al. **Am J Hosp Pharm** 1989 May;46(5):993–5

Calcium and phosphate solubility in neonatal parenteral nutrient solutions containing Aminosyn–PF or TrophAmine. Lenz GT, et al. **Am J Hosp Pharm** 1988 Nov; 45(11):2367–71

Spreadsheet program with applications to home nutrition therapy [letter] Mitrano FP, et al. **Am J Hosp Pharm** 1989 May;46(5):919–20

Particulate matter contamination associated with automated compounding TPN solutions [letter] Quercia RA. **Am J Hosp Pharm** 1988 Nov;45(11):2324–5

Amino acid composition of Travasol products [letter] Rapp RP, et al. **Am J Hosp Pharm** 1989 Jan;46(1):70–1

Potential incompatibility of insulin and octreotide in total parenteral nutrient solutions [letter] Rosen GH. **Am J Hosp Pharm** 1989 Jun;46(6):1128

Sterility of total parenteral nutrient solutions stored at room temperature for seven days. Takagi J, et al. **Am J Hosp Pharm** 1989 May;46(5):973–7

Role of total parenteral nutrition in the treatment of Crohn's disease. Shiloni E, et al. **Am J Surg** 1989 Jan;157(1):180–5 (23 ref.)

Parenteral nutrition in patients receiving cancer chemotherapy. American College of Physicians. **Ann Intern Med** 1989 May 1;110(9):734–6 (25 ref.)

The total parenteral nutrition service: an update. Clarke PJ, et al. **Ann R Coll Surg Engl** 1988 Sep;70(5):296–9

Subclavian vein catheterisation for parenteral nutrition [letter] Reed MW. **Ann R Coll Surg Engl** 1988 Nov; 70(6):396–7

Insulin and acivicin improve host nutrition and prevent tumor growth during total parenteral nutrition. Chance WT, et al. **Ann Surg** 1988 Oct;208(4):524–31

Addition of glutamine to total parenteral nutrition after elective abdominal surgery spares free glutamine in muscle, counteracts the fall in muscle protein synthesis, and improves nitrogen balance. Hammarqvist F, et al. **Ann Surg** 1989 Apr;209(4):455–61

An integrated analysis of glucose, fat, and protein metabolism in severely traumatized patients. Studies in the basal state and the response to total parenteral nutrition. Shaw JH, et al. **Ann Surg** 1989 Jan;209(1):63–72 (52 ref.)

Home central venous hyperalimentation in fifteen patients with severe scleroderma bowel disease. Ng SC, et al. **Arthritis Rheum** 1989 Feb;32(2):212–6

Insulin infusions in infants of birthweight less than 1250 g and with glucose intolerance. Heron P, et al. **Aust Paediatr J** 1988 Dec;24(6):362–5

Nutritional support. **Baillieres Clin Gastroenterol** 1988 Oct; 2(4):715–954

Nutritional support service: experience and perspectives. Carnielli V, et al. **Beitr Infusionther** 1989;22:129–40 (14 ref.)

Branched chain amino acids as the protein component of parenteral nutrition in cancer cachexia. Hunter DC, et al. **Br J Surg** 1989 Feb;76(2):149–53

High–output external fistulae of the small bowel: management with continuous enteral nutrition. Lévy E, et al. **Br J Surg** 1989 Jul;76(7):676–9

Hyperalimentation in cancer. Souba WW, et al. **CA** 1989 Mar–Apr;39(2):105–14 (42 ref.)

Physical stability of a total nutrient admixture for total parenteral nutrition. Deitel M, et al. **Can J Surg** 1989 Jul; 32(4):240–3

Nutritional support in the critical care setting (Part 2). Berger R, et al. **Chest** 1989 Aug;96(2):372–80 (114 ref.)

Nutritional support in the critical care setting (Part 1). Berger R, et al. **Chest** 1989 Jul;96(1):139–50 (223 ref.)

Management of glucose abnormalities in patients receiving total parenteral nutrition [clinical conference] Knapke CM, et al. **Clin Pharm** 1989 Feb;8(2):136–44 (28 ref.)

Serum fibronectin and somatomedin–C as nutritional markers in adults receiving total parenteral nutrition. Powers DA,

et al. **Clin Pharm** 1988 Dec;7(12):889–93

Predicting human–albumin replacement dosages in hypoalbuminemic patients receiving total parenteral nutrition. Reid DJ, et al. **Clin Pharm** 1988 Dec;7(12):894–7

Total parenteral alimentation: current issues. Thorp FK. **Compr Ther** 1988 Dec;14(12):58–64

Nutrition in acute renal failure. Takala J. **Crit Care Clin** 1987 Jan;3(1):155–66 (60 ref.)

Nutritional care of the critically ill patient with respiratory failure. Weissman C, et al. **Crit Care Clin** 1987 Jan; 3(1):185–203 (94 ref.)

Effect of albumin supplementation during parenteral nutrition on hospital morbidity. Brown RO, et al. **Crit Care Med** 1988 Dec;16(12):1177–82

Failure of APACHE II alone as a predictor of mortality in patients receiving total parenteral nutrition. Hopefl AW, et al. **Crit Care Med** 1989 May;17(5):414–7

Severity measurement and efficacy of nutritional support: neither success nor failure [editorial] Zimmerman JE. **Crit Care Med** 1989 May;17(5):479–80

Stability of cimetidine HCl and copper sulfate in a TPN solutions [letter] Mitrano FP, et al. **DICP** 1989 May; 23(5):429–30

Preoperative total parenteral nutrition for bowel resection in Crohn's disease. Lashner BA, et al. **Dig Dis Sci** 1989 May;34(5):741–6

Statement on guidelines for total parenteral nutrition. The Patient Care Committee of the American Gastroenterological Association. Sitzmann JV, et al. **Dig Dis Sci** 1989 Apr;34(4):489–96 (70 ref.)

Changes in urinary amino acid fractional excretion in neonates undergoing total parenteral nutrition. Rosenthal M. **Early Hum Dev** 1988 Nov;18(1):37–44

Plasma enteroglucagon, peptide YY and gastrin in rats deprived of luminal nutrition, and after urogastrone–EGF administration. A proliferative role for PYY in the intestinal epithelium? Goodlad RA, et al. **Experientia** 1989 Feb 15; 45(2):168–9

Nutritional management of patients with ARC or AIDS. Hickey MS, et al. **Gastroenterol Clin North Am** 1988 Sep; 17(3):545–61 (34 ref.)

Nutritional management of inflammatory bowel disease. Seidman EG. **Gastroenterol Clin North Am** 1989 Mar; 18(1):129–55 (140 ref.)

Total parenteral nutrition and small intestinal growth and differentiation [letter] Guedon C, et al. **Gastroenterology** 1989 Mar;96(3):960–1

Jejunal motility during cyclic total parenteral nutrition in patients with Crohn's disease. Ducrotte P, et al. **Gut** 1989 Jun;30(6):815–9

Total parenteral nutrition as primary treatment in Crohn's disease—RIP? Payne-James JJ, et al. **Gut** 1988 Oct; 29(10):1304–8 (42 ref.)

Glucose, fructose, and xylitol in postoperative hypocaloric parenteral nutrition. Behrendt W, et al. **Infusionstherapie** 1988 Aug;15(4):170–5

Polyamine–directed preferential nutritional repletion of normal tissues in tumor–bearing hosts. Nishioka K, et al. **Int J Cancer** 1988 Nov 15;42(5):744–7

The effect of total enteral tube feeding on the vitamin status of malnourished patients with inflammatory bowel disease. Abad–Lacruz A, et al. **Int J Vitam Nutr Res** 1988; 58(4):428–35

Comparison of medium and long chain triglyceride metabolism in intensive care patients on parenteral nutrition. Ball MJ, et al. **Intensive Care Med** 1989; 15(4):250–4

A program for parenteral and combined parenteral and enteral nutrition of neonates and children in an intensive care unit. Picart D, et al. **Intensive Care Med** 1989; 15(4):279–82

Computer–assisted infusion and nutrition planning in an intensive care burn unit. Piert M, et al. **Intensive Care Med** 1989;15(2):121–5

Use of retinol–binding protein and prealbumin as indicators of the response to nutrition therapy. Winkler MF, et al. **J Am Diet Assoc** 1989 May;89(5):684–7 (28 ref.)

Transitional feeding: the relationship between nutritional intake and plasma protein concentrations. Winkler MF, et al. **J Am Diet Assoc** 1989 Jul;89(7):969–70

Parenteral nutrition in septic shock. Griffin GE. **J Antimicrob Chemother** 1989 Feb;23(2):176–7

Basic nutritional guidelines for pediatric burn patients. O'Neil CE, et al. **J Burn Care Rehabil** 1989 May–Jun;10(3):278–84 (31 ref.)

In vitro quantitative model of catheter infection during simulated parenteral nutrition. Merlino R, et al. **J Clin Microbiol** 1988 Sep;26(9):1659–64

A randomized controlled study of peripheral parenteral nutrition in moderate and severe alcoholic hepatitis. Simon D, et al. **J Hepatol** 1988 Oct;7(2):200–7

Glycyl–dipeptides: new substrates for protein nutrition. Adibi SA. **J Lab Clin Med** 1989 Jun;113(6):665–73 (46 ref.)

Vitamin concentrations in very low birth weight infants given vitamins intravenously in a lipid emulsion: measurement of vitamins A, D, and E and riboflavin. Baeckert PA, et al. **J Pediatr** 1988 Dec;113(6):1057–65

Insulin infusion with parenteral nutrition in extremely low birth weight infants with hyperglycemia. Binder ND, et al. **J Pediatr** 1989 Feb;114(2):273–80

Lipid tolerance in children receiving long–term parenteral nutrition: a biochemical and immunologic study. Dahlström KA, et al. **J Pediatr** 1988 Dec;113(6):985–90

Decreased lipid intake reduces morbidity in sick premature neonates. Hammerman C, et al. **J Pediatr** 1988 Dec; 113(6):1083–8

Parenteral nutrition in propionic and methylmalonic acidemia. Kahler SG, et al. **J Pediatr** 1989 Aug; 115(2):235–41

Simultaneous infusion of calcium and phosphorus in parenteral nutrition for premature infants: use of physiologic calcium/phosphorus ratio. Pelegano JF, et al. **J Pediatr** 1989 Jan;114(1):115–9

Human milk and the rate of small intestinal mucosal recovery in protracted diarrhea. Shulman RJ, et al. **J Pediatr** 1989 Feb;114(2):218–24

Identification of fat overload during total parenteral nutrition [letter] Zlotkin SH. **J Pediatr** 1989 Sep;115(3):498–9

Nutrient interactions with total parenteral nutrition: effect of histidine and cysteine intake on urinary zinc excretion. Zlotkin SH. **J Pediatr** 1989 May;114(5):859–64

Plasma amino acid concentrations in children receiving long–term parenteral nutrition. Dahlström KA, et al. **J Pediatr Gastroenterol Nutr** 1988 Sep–Oct;7(5):748–54

In vitro solubility of calcium glycerophosphate versus conventional mineral salts in pediatric parenteral nutrition solutions. Hanning RM, et al. **J Pediatr Gastroenterol Nutr** 1989 Jul;9(1):67–72

Parenteral vitamins A, D, and E for premature infants. Etches PC, et al. **J Perinatol** 1988 Spring;8(2):93–5 (34 ref.)

Free fatty acid and triglyceride levels in neonates receiving triple mix hyperalimentation. Neal PR, et al. **J Perinatol** 1988 Summer;8(3):199–202

Parenteral nutrition in gynecology. Terada KY, et al. **J Reprod Med** 1988 Dec;33(12):957–60

Structural and functional alterations in the gut of parenterally or enterally fed rats. Hosoda N, et al. **J Surg Res** 1989 Aug;47(2):129–33

Reversal of hepatic steatosis in rats by addition of glucagon to total parenteral nutrition (TPN). Li SJ, et al. **J Surg Res** 1989 Jun;46(6):557–66

TEN versus TPN following major abdominal trauma—reduced septic morbidity. Moore FA, et al. **J Trauma** 1989 Jul;29(7):916–22; discussion 922–3

A.S.P.E.N., 13th clinical congress. Abstracts. American Society for Parenteral and Enteral Nutrition. February 5–8, 1989. **JPEN J Parenter Enteral Nutr** 1989 Jan–Feb;13(1 Suppl):1S–32S

Effects of artificial nutrition on the nutritional status of cancer patients. Bozzetti F. **JPEN J Parenter Enteral Nutr** 1989 Jul–Aug;13(4):406–20 (118 ref.)

Effect of different energy sources on hepatic triglyceride secretion during parenteral nutrition. Burgess P, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6):569–73

Gastric pepsin and acid secretion during total parenteral nutrition and constant–rate enteral nutrition in infancy. de Angelis GL, et al. **JPEN J Parenter Enteral Nutr** 1988 Sep–Oct;12(5):505–8

Imbalance between jejunum and ileum in the response of brush border hydrolases to oral feeding after intravenous alimentation in rats. Galluser M, et al. **JPEN J Parenter Enteral Nutr** 1989 Jan–Feb;13(1):37–40

Impact of fat and glucose administration on metabolic and respiratory interactions in sepsis. Giovannini I, et al. **JPEN J Parenter Enteral Nutr** 1989 Mar–Apr;13(2):141–6

High lipid parenteral nutrition improves portasystemic encephalopathy. Glynn MJ, et al. **JPEN J Parenter Enteral Nutr** 1988 Sep–Oct;12(5):457–61

Influence of total parenteral nutrition on tumor growth and polyamine biosynthesis of fibrosarcoma–bearing rats after induced cachexia. Grossie VB Jr, et al. **JPEN J Parenter Enteral Nutr** 1988 Sep–Oct;12(5):441–4

A newborn rabbit model for total parenteral nutrition: effects of nutritional components on cholestasis. Hata S, et al. **JPEN J Parenter Enteral Nutr** 1989 May–Jun;13(3):265–71

Relative importance of amino acid infusion as a means of sparing protein in surgical patients. Humberstone DA, et al. **JPEN J Parenter Enteral Nutr** 1989 May–Jun; 13(3):223–7

Clinical studies on a newly devised amino acid solution for neonates. Imura K, et al. **JPEN J Parenter Enteral Nutr** 1988 Sep–Oct;12(5):496–504

Alteration of erythrocyte lipid composition following total parenteral nutrition in the rat. Innis SM. **JPEN J Parenter Enteral Nutr** 1989 Jan–Feb;13(1):47–50

Invited comment: use of acetate in total parenteral nutrition solutions. Lazarus DD, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6 Suppl):108S–110S

Differences in the serum amino acid pattern of injured and infected children promoted by two parenteral nutrition solutions. Maldonado J, et al. **JPEN J Parenter Enteral Nutr** 1989 Jan–Feb;13(1):41–6

Blood levels of water–soluble vitamins in pediatric patients on total parenteral nutrition using a multiple vitamin preparation. Marinier E, et al. **JPEN J Parenter Enteral Nutr** 1989 Mar–Apr;13(2):176–84

Total parenteral nutrition and tube feeding for elderly patients: findings of an OTA study. Maslow K. **JPEN J Parenter Enteral Nutr** 1988 Sep–Oct;12(5):425–32

Total parenteral nutrition in germfree colostrum–deprived neonatal miniature piglets: a unique model to study the ontogeny of the immune system. Mehrazar K, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6):563–8

Preliminary studies of a dicarboxylic acid as an energy substrate in man. Mingrone G, et al. **JPEN J Parenter Enteral Nutr** 1989 May–Jun; 13(3):299–305

Two cannula method for parenteral infusion and serial blood sampling in the freely moving rat. Moslen MT, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6):633–7

Nutrition during ten–week life support with successful fetal outcome in a case with fatal maternal brain damage. Nuutinen LS, et al. **JPEN J Parenter Enteral Nutr** 1989 Jul–Aug;13(4):432–5

Effects of L–carnitine supplemented total parenteral nutrition on lipid and energy metabolism in postoperative stress. Pichard C, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6):555–62

Guidewire catheter exchange with triple culture technique in the management of catheter sepsis. Porter KA, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6):628–32

Stability and delivery of vancomycin hydrochloride when admixed in a total parenteral nutrition solution. Schilling CG, et al. **JPEN J Parenter Enteral Nutr** 1989 Jan–Feb; 13(1):63–4

Effect of Intralipid, amino acids, container, temperature, and duration of storage on vitamin stability in total parenteral nutrition admixtures [published erratum appears in JPEN J Parenter Enteral Nutr 1989 Mar–Apr;13(2):167] Smith JL, et al. **JPEN J Parenter Enteral Nutr** 1988 Sep–Oct; 12(5):478–83

Alternative lipids to usual omega 6 PUFAS: gamma–linolenic acid, alpha–linolenic acid, stearidonic acid, EPA, etc. Spielmann D, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6 Suppl):111S–123S (47 ref.)

Serum cobalamins and cobalamin–binding proteins during total parenteral nutrition. van Spreeuwel JP, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6):607–9

Preoperative nutritional assessment to predict postoperative complication in gastric cancer patients. Yamanaka H, et al. **JPEN J Parenter Enteral Nutr** 1989 May–Jun; 13(3):286–91

Effect of parenteral glutamine peptide supplements on muscle glutamine loss and nitrogen balance after major surgery. Stehle P, et al. **Lancet** 1989 Feb 4;1(8632):231–3

Microsomal desaturation–elongation of linoleic acid following parenteral feeding with lipid emulsions in the rat. Innis SM, et al. **Lipids** 1988 Jun;23(6):546–50

Intravenous use of glutamine in peptide form: clinical applications of old and new observations. Adibi SA. **Metabolism** 1989 Aug;38(8 Suppl 1):89–92 (18 ref.)

Infusion of dipeptides as nutritional substrates for glutamine, tyrosine, and branched–chain amino acids in patients with acute pancreatitis. Steininger R, et al. **Metabolism** 1989 Aug;38(8 Suppl 1):78–81

Glutamine and ornithine–alpha–ketoglutarate but not branched–chain amino acids reduce the loss of muscle glutamine after surgical trauma. Wernerman J, et al. **Metabolism** 1989 Aug;38(8 Suppl 1):63–6

Parenteral and partial enteral nutrition, essential fatty acids and trace elements [letter] O'Connor CJ, et al. **N Z Med J** 1989 May 10;102(867):233–4

Advances in nutritional support. **Nurs Clin North Am** 1989 Jun;24(2):301–459

Nutritional support and gastrointestinal disease. Hennessy K. **Nurs Clin North Am** 1989 Jun;24(2):373–82 (25 ref.)

Nutritional support of the bone marrow transplant patient. Keenan AM. **Nurs Clin North Am** 1989 Jun;24(2):383–93 (43 ref.)

Nutritional support in home care. Orr ME. **Nurs Clin North Am** 1989 Jun;24(2):437–45 (29 ref.)

Effects of TPN on wound healing. **Nutr Rev** 1987 Nov; 45(11):331–2 (9 ref.)

Cardiac tamponade in pregnancy during central hyperalimentation. Greenspoon JS, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 2):465–6

Nutritional support: a prophylaxis against stress bleeding after spinal cord injury. Kuric J, et al. **Paraplegia** 1989 Apr; 27(2):140–5

Energy substrate utilization in infants receiving total parenteral nutrition with different glucose to fat ratios. Bresson JL, et al. **Pediatr Res** 1989 Jun;25(6):645–8

Parenteral nutrition in tumor patients. Müller JM, et al. **Recent Results Cancer Res** 1988;108:185–93

Nutritional management of the childhood cancer patient. Rossi MR, et al. **Recent Results Cancer Res** 1988; 108:198–204 (6 ref.)

Total parenteral nutrition and alternate energy substrates in treatment of severe acute pancreatitis. Sitzmann JV, et al. **Surg Gynecol Obstet** 1989 Apr;168(4):311–7

Influence of L–methionine–deprived total parenteral nutrition on the tumor tissue and plasma amino acids fraction and the host metabolism: experimental study with Sato lung carcinoma–bearing rats. Goseki N, et al. **Tohoku J Exp Med** 1989 Mar;157(3):251–60

Intra– and extracellular amino acid concentrations in portacaval–shunted rabbits. Role of hyperammonemia and effects of branched–chain amino acid–enriched parenteral nutrition. Leweling H, et al. **Z Ernahrungswiss** 1989 Jun; 28(2):149–72

[Nutritional support in severe acute pancreatitis] Li JS. **Chung Hua Wai Ko Tsa Chih** 1988 Dec;26(12):711–3, 780 (Eng. Abstr.) **(Chi)**

[Parenteral nutrition of critically ill children with emphasis on catabolism and the amino acid solution used. A group

of 148 patients] Pachl J, et al. **Cesk Pediatr** 1988 Nov; 43(11):641–3 (Eng. Abstr.) (Cze)

[The role of specialized parenteral nutrition in the comprehensive care of Reye's syndrome. Use of branched-chain amino acid solutions in a comparative study of 2 groups (28 and 23) of treated children] Pachl J, et al. **Cesk Pediatr** 1988 Nov;43(11):644–6 (Eng. Abstr.) (Cze)

[The influence of fat emulsions in ternary mixing during total parenteral feeding on biological and galenic parameters] Sarocchi C, et al. **Agressologie** 1989 Apr;30(4):207–14 (Eng. Abstr.) (Fre)

[Infusions of amino acid solutions in the therapy concept of trauma patients. Comparative studies in the early phase of polytrauma] Sefrin P, et al. **Aktuel Traumatol** 1988 Dec; 18(6):240–8 (Eng. Abstr.) (Ger)

[The energy consumption of patients with craniocerebral trauma and spontaneous intracranial hemorrhage in the early postoperative post-traumatic phase] Pick J, et al. **Anasth Intensivther Notfallmed** 1988 Dec;23(6):325–9 (Eng. Abstr.) (Ger)

[Indications and possibilities of home parenteral nutrition] Kolb S. **Dtsch Med Wochenschr** 1988 Oct 28;113(43):1682–3 (Ger)

[Home parenteral feeding in advanced tumor diseases] Schauder P, et al. **Dtsch Med Wochenschr** 1989 Sep 8; 114(36):1358–62 (Eng. Abstr.) (Ger)

[Changes in ultrasonic findings in the liver in relation to parenteral nutrition with long chain triglyceride and medium chain triglyceride/long chain triglyceride lipid solutions] Baldermann H, et al. **Infusionstherapie** 1988 Aug; 15(4):140–3 (Eng. Abstr.) (Ger)

[Studies of solutions with various branched-chain amino acid contents on protein metabolism in the postoperative period. 1. A 15N tracer kinetic animal model for evaluating the effect of parenteral amino acid administration on nitrogen metabolism] Matkowitz R, et al. **Infusionstherapie** 1989 Jun; 16(3):125–31 (Eng. Abstr.) (Ger)

[Protein oriented peripheral venous nutrition following surgical trauma] Mertes N, et al. **Infusionstherapie** 1989 Apr;16(2):60–6 (Eng. Abstr.) (Ger)

[Evaluation of N-acetyl-L-tryptophan in long-term intravenous administration in growing rats] Neuhäuser-Berthold M, et al. **Infusionstherapie** 1988 Aug; 15(4):164–8 (Eng. Abstr.) (Ger)

[Indications for lipid infusion in pediatric patients] Böhles H. **Klin Padiatr** 1989 May-Jun;201(3):146–53 (53 ref.) (Eng. Abstr.) (Ger)

[Effect of L-carnitine supplemented total parenteral nutrition on postoperative lipid and nitrogen utilization] Rössle C, et al. **Klin Wochenschr** 1988 Dec 15;66(24):1202–11 (Eng. Abstr.) (Ger)

[Nitrogen balance in tumor and host in the animal model] Brenner U, et al. **Langenbecks Arch Chir** 1989;374(2):111–7 (Eng. Abstr.) (Ger)

[The effect of preoperative parenteral nutrition on the perioperative course in patients with esophageal cancer] Ebener C, et al. **Langenbecks Arch Chir** 1989;374(4):208–13 (Eng. Abstr.) (Ger)

[Medium-chain triglycerides--useful energy carriers in parenteral nutrition] Wolfram G. **Wien Klin Wochenschr** 1989 Apr 14;101(8):300–3 (26 ref.) (Eng. Abstr.) (Ger)

[The use of different cysteine derivatives in longterm parenteral nutrition] Böhler S, et al. **Z Ernahrungswiss** 1989 Mar;28(1):32–5 (Eng. Abstr.) (Ger)

[Distribution and elimination of medium- and long-chain fatty acids of a fat emulsion in lipoproteins of severely injured patients following bolus injection] Wolfram G, et al. **Z Ernahrungswiss** 1989 Jun;28(2):173–80 (Eng. Abstr.) (Ger)

[Parenteral or enteral hyperalimentation in the treatment of enterocutaneous fistulas?] Wolf G, et al. **Zentralbl Chir** 1988;113(15):973–87 (Eng. Abstr.) (Ger)

[Use of lipid solutions in the total parenteral nutrition of the septic patient: preliminary clinical study] Piermattei A, et al. **Ann Ital Chir** 1987;59(1–6):365–70 (Eng. Abstr.) (Ita)

[Total parenteral nutrition in pregnancy] Salmoiraghi L, et al. **Ann Ostet Ginecol Med Perinat** 1988 Mar-Apr; 109(2):108–15 (Eng. Abstr.) (Ita)

[Clinical experience on the use of total parenteral nutrition in patients subjected to radical cystectomy intervention for infiltrating neoplasms of the bladder] Del Boca C, et al. **Arch Ital Urol Nefrol Androl** 1989 Mar;61(1):69–75 (Eng. Abstr.) (Ita)

[Increased urinary excretion of methionine, cystathionine and cystine in adults during parenteral nutrition] Iapichino G, et al. **G Clin Med** 1988 Mar;69(3):175–81 (Eng. Abstr.) (Ita)

[Anastomotic dehiscence in colorectal surgery and the total parenteral nutrition. A clinical study] Angelici A, et al. **Minerva Chir** 1989 Apr 15;44(7):1095–8 (Eng. Abstr.) (Ita)

[Total gastrectomy after introduction of the stapler and total parenteral nutrition] De Toma G. **Minerva Chir** 1989 Feb 28;44(4):567–70 (22 ref.) (Ita)

[Artificial nutrition of critical surgical patients] Doldi BS, et al. **Minerva Chir** 1988 Aug 31;43(15–16):1235–41 (Eng. Abstr.) (Ita)

[Role of somatostatin and parenteral nutrition in the treatment of acute pancreatitis. Personal experience] Russello D, et al. **Minerva Chir** 1989 Mar 15;44(5):843–7 (Eng. Abstr.) (Ita)

[Role of postoperative peripheral parenteral nutrition in gastric surgery in malnourished patients with cancer] Talpacci A, et al. **Minerva Chir** 1988 Sep 30;43(18):1463–7 (Eng. Abstr.) (Ita)

[Crohn disease of the colon with acute onset at the 17th week of pregnancy. Description of a clinical case] Domeniconi D, et al. **Minerva Dietol Gastroenterol** 1989 Apr-Jun; 35(2):135–7 (Eng. Abstr.) (Ita)

[Influence of short-term total parenteral nutrition on plasma gastrin levels] Mancini S, et al. **Minerva Dietol Gastroenterol** 1988 Apr-Jun;34(2):117–22 (Eng. Abstr.) (Ita)

[A clinical study of amino acid metabolism in cancerous hypoproteinemia—the role of branched chain amino acids (BCAA) and appropriate compositions of BCAA in parenteral nutrition] Fukui S, et al. **Gan No Rinsho** 1989 May;35(6):709–16 (Eng. Abstr.) (Jpn)

[Effects of total parenteral nutrition containing essential trace elements on their concentrations in rats] Matsuda A, et al. **Nippon Eiseigaku Zasshi** 1989 Feb;43(6):1140–8 (Eng. Abstr.) (Jpn)

[A study of adequate energy, amino acid, and carbohydrate requirements in postoperative total parenteral nutrition—the effect of branched chain amino acid (BCAA) and carbohydrate mixture of glucose, fructose, and xylitol (GFX)] Hayashida K, et al. **Nippon Geka Gakkai Zasshi** 1989 Mar;90(3):343–54 (Eng. Abstr.) (Jpn)

[Effects of a nucleoside and nucleotide mixture on metabolism in hepatectomized rats] Mizobuchi S. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1655–61 (Eng. Abstr.) (Jpn)

[Long-term TPN for short bowel syndrome] Yokoyama S, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1403–5 (Eng. Abstr.) (Jpn)

[Fluid and nutritional management in severe head injuries] Yano M, et al. **No To Shinkei** 1989 Jan;41(1):27–33 (Eng. Abstr.) (Jpn)

[Complete parenteral feeding in the treatment of acute pancreatitis] Szczygiel B, et al. **Wiad Lek** 1988 Nov 15; 41(22):1519–23 (Pol)

[Tube hyperalimentation in burns] Kuzin MI, et al. **Sov Med** 1988;(10):99–103 (Rus)

[Total parenteral and enteral nutrition in general surgical practice] Džupa K. **Rozhl Chir** 1989 Apr;68(4):280–7 (Eng. Abstr.) (Slo)

[Effect of peripheral parenteral nutrition on the immediate postoperative period in surgery of the aortic sector] Rimbau V, et al. **Angiologia** 1989 May-Jun;41(3):87–92 (Eng. Abstr.) (Spa)

[Evaluation of central parenteral alimentation in critically ill newborn infants at a provincial pediatric hospital] Yunes-Zárraga JL, et al. **Bol Med Hosp Infant Mex** 1989 Apr;46(4):277–84 (Eng. Abstr.) (Spa)

[Mesenteric venous thrombosis: a new case of favorable course using conservative treatment] Ledo Barro L, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 2):720–2 (Eng. Abstr.) (Spa)

[Parenteral nutrition at home as an alternative to hospital care of patients with cancer] Drott C, et al. **Lakartidningen** 1989 Mar 1;86(9):740–3 (Swe)

[Glutamine in postoperative parenteral nutrition has a positive affect on nitrogen balance] Hammarqvist F, et al. **Lakartidningen** 1989 Jan 25;86(4):229–31 (Swe)

ADVERSE EFFECTS

Glutathione peroxidase and selenium deficiency in patients receiving home parenteral nutrition: time course for development of deficiency and repletion of enzyme activity in plasma and blood cells. Cohen HJ, et al. **Am J Clin Nutr** 1989 Jan;49(1):132–9

Total parenteral nutrition and respiratory failure [letter] McCleane GJ, et al. **Anaesthesia** 1988 Dec;43(12):1056–7

Cardiac complications of total parenteral nutrition: the role of two-dimensional echocardiography in diagnosis [letter] **Ann R Coll Surg Engl** 1989 Jul;71(4):273–4

Cardiac complications of total parenteral nutrition: the role of two-dimensional echocardiography in diagnosis. Chamsi-Pasha H, et al. **Ann R Coll Surg Engl** 1989 Mar; 71(2):120–3

Oerskovia infection caused by contaminated home parenteral nutrition solution. Guss WJ, et al. **Arch Intern Med** 1989 Jun;149(6):1457–8

Macro-creatine kinase type 1 possibly induced by intravenous hyperalimentation [letter] Ihara H, et al. **Clin Chim Acta** 1988 Nov;178(1):109–10

Mural thrombi in children: potentially lethal complication of central venous hyperalimentation. Bagwell CE, et al. **Crit Care Med** 1989 Mar;17(3):295–6

Total parenteral nutrition adversely influences tumour-directed cellular cytotoxic responses in patients with gastrointestinal cancer. Monson JR, et al. **Eur J Surg Oncol** 1988 Oct;14(5):935–43

Cholestasis of total parenteral nutrition: bile acid and bile lipid metabolism in parenterally nourished rats. Lirussi F, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):493–502

Low serum selenium and glutathione peroxidase activity in patients receiving short-term total parenteral nutrition. Korpela H, et al. **Int J Vitam Nutr Res** 1989;59(1):80–4

Acute suppurative parotitis in a patient on total parenteral nutrition. Sriram K, et al. **J Am Coll Nutr** 1988 Oct; 7(5):385–7

The effect of total parenteral nutrition on vasogenic edema development following cold injury in rats. Combs DJ, et al. **J Neurosurg** 1989 Apr;70(4):623–7

Aluminum in parenteral products: overview of chemistry concerns and regulatory actions. Hoiberg CP. **J Parenter Sci Technol** 1989 May-Jun;43(3):127–31

Aluminum in parenteral products: LVP and SVP, FDA medical perspective. Kenealy JC. **J Parenter Sci Technol** 1989 May-Jun;43(3):125–6

Aluminum in parenteral products: medical perspective on large and small volume parenterals. Klein GL. **J Parenter Sci Technol** 1989 May-Jun;43(3):120–4 (39 ref.)

Aluminum in parenteral products: analysis, reduction, and implications for pediatric TPN. Rabinow BE, et al. **J Parenter Sci Technol** 1989 May-Jun;43(3):132–9 (21 ref.)

Decreased cholestasis with enteral instead of intravenous protein in the very low-birth-weight infant. Brown MR, et al. **J Pediatr Gastroenterol Nutr** 1989 Jul;9(1):21–7

Symptomatic selenium deficiency in a child on home parenteral nutrition. Kelly DA, et al. **J Pediatr Gastroenterol Nutr** 1988 Sep-Oct;7(5):783–6

Serial plasma and urinary aluminum levels and tissue loading in preterm twins. Bozynski ME, et al. **JPEN J Parenter Enteral Nutr** 1989 Jul-Aug;13(4):428–31

Changes in liver function tests in patients with inflammatory bowel disease on enteral nutrition. Dolz C, et al. **JPEN J Parenter Enteral Nutr** 1989 Jul-Aug;13(4):401–5 (41 ref.)

Copper deficiency during total parenteral nutrition: clinical analysis of three cases. Fujita M, et al. **JPEN J Parenter Enteral Nutr** 1989 Jul-Aug;13(4):421–5 (15 ref.)

Pulmonary deposition of calcium phosphate crystals as a complication of home total parenteral nutrition. Knowles JB, et al. **JPEN J Parenter Enteral Nutr** 1989 Mar-Apr; 13(2):209–13

Spontaneous retraction of indwelling catheters [letter] Kohlhardt SR, et al. **JPEN J Parenter Enteral Nutr** 1989 Jul-Aug;13(4):442–3

Neonatal metabolic acidosis [letter] Koo W. **JPEN J Parenter Enteral Nutr** 1988 Sep-Oct;12(5):534

Hyperbilirubinemia in neonates associated with total parenteral nutrition. Kubota A, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov-Dec;12(6):602–6

Wernicke's encephalopathy during total parenteral nutrition: observation in one case. Mattioli S, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov-Dec;12(6):626–7

Hepatic complications of total parenteral nutrition. Sax HC, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov-Dec; 12(6):615–8 (32 ref.)

Newly recognized signs of selenium deficiency in humans. **Nutr Rev** 1989 Apr;47(4):117–9 (9 ref.)

Molybdenum deficiency in TPN. **Nutr Rev** 1987 Nov; 45(11):337–41

Biotin deficiency due to total parenteral nutrition alters serum fatty acid composition. **Nutr Rev** 1989 Apr;47(4):121–3 (5 ref.)

Pulmonary nodules secondary to total parenteral alimentation. Landry BA, et al. **Pediatr Radiol** 1989; 19(6-7):456–7

Sonographic hepatic arterialisation in newborns receiving parenteral nutrition. Sellier N, et al. **Pediatr Radiol** 1988; 18(6):471–3

Hepatobiliary abnormalities associated with total parenteral nutrition. Klein S, et al. **Semin Liver Dis** 1988 Aug; 8(3):237–46 (113 ref.)

The effect of total parenteral nutrition-induced cholestasis on theophylline clearance in neonates. Kandrotas RJ, et al. **Ther Drug Monit** 1988;10(4):390–4

Candida lung abscesses complicating parenteral nutrition. O'Driscoll BR, et al. **Thorax** 1988 May;43(5):418–9

[Total parenteral nutrition induced cholestatic cholecystitis] Li JS, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Feb; 26(2):98–100, 125–6 (Eng. Abstr.) (Chi)

[Human selenium deficiency during total parenteral nutrition support (a case report)] Shu H. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Feb; 11(1):74–6 (Eng. Abstr.) (Chi)

[Hepatobiliary changes during exclusive parenteral feeding in infants with severe diarrhea] Larchet M, et al. **Arch Fr Pediatr** 1988 Nov;45(9):623–8 (44 ref.) (Eng. Abstr.) (Fre)

[Hepatic lipid overload in 2 cases of cholestasis associated with parenteral feeding] Levecq H, et al. **Gastroenterol Clin Biol** 1988 Oct;12(10):691–6 (Eng. Abstr.) (Fre)

[Lactic acidosis caused by vitamin B1 deficiency in exclusive parenteral feeding. A case of 1 child (letter)] Chevallier B, et al. **Presse Med** 1988 Dec 10;17(44):2355–6 (Fre)

[A case of preoperative esophageal cancer developing lobar pneumonia due to MRSA infection of the catheter] Inoue H, et al. **Nippon Geka Gakkai Zasshi** 1988 Jul;89(7):1122–6 (Eng. Abstr.) (Jpn)

[Concentration and the fluctuation factor of serum zinc in a long-term intravenous hyperalimentation] Kurinami S, et al. **Rinsho Byori** 1989 Jan;37(1):53–7 (Jpn)

[Hyperchloremic metabolic acidosis during postoperative total parenteral nutrition] Stella G, et al. **Rev Chir [Chir]** 1988 May-Jun;37(3):213–8 (Eng. Abstr.) (Rum)

ECONOMICS

Impact of Medicare prospective reimbursement system on nutritional support service patients: the importance of pass throughs. Clemmer TP, et al. **JPEN J Parenter Enteral Nutr** 1989 Jan-Feb;13(1):71-6

INSTRUMENTATION

Evaluation of a new catheter for total parenteral nutrition. Superina RA, et al. **J Pediatr Gastroenterol Nutr** 1988 Sep-Oct;7(5):657-61

An alternative method of securing broviac catheters in children and infants. Goolishian W, et al. **JPEN J Parenter Enteral Nutr** 1989 Mar-Apr;13(2):218-9

Treatment of an infected silicone right atrial catheter with combined fibrinolytic and antibiotic therapy: case report and review of the literature. Lewis JA, et al. **JPEN J Parenter Enteral Nutr** 1989 Jan-Feb;13(1):92-8 (31 ref.)

Extraction of diethylhexylphthalate from total nutrient solution-containing polyvinyl chloride bags. Mazur HI, et al. **JPEN J Parenter Enteral Nutr** 1989 Jan-Feb;13(1):59-62

Effect of frequent guidewire changes on triple-lumen catheter sepsis. Powell C, et al. **JPEN J Parenter Enteral Nutr** 1988 Sep-Oct;12(5):462-4

Spinal canal extension of hyperalimentation catheter without neurologic sequela. Glasier CM, et al. **Pediatr Radiol** 1989; 19(3):206-7

[The filter effectiveness of common 15-micron filters (DIN 58362). II: Scanning electron microscopy and roentgen analysis] Walpot H, et al. **Infusionstherapie** 1989 Jun; 16(3):133-9 (Eng. Abstr.) (Ger)

[Enteral feeding by endoscopic approaches replaces parenteral nutrition] Schusdziarra V. **Internist (Berlin)** 1988 Dec;29(12):801-6 (50 ref.) (Ger)

[Usefulness of ethyl vinyl acetate bags for total parenteral nutrition in surgery] Bonadimani B, et al. **Minerva Dietol Gastroenterol** 1988 Apr-Jun;34(2):101-4 (Eng. Abstr.) (Ita)

METHODS

Postoperative hypocaloric parenteral nutrition. A study in patients without neoplasm. Figueras J, et al. **Acta Chir Scand** 1988 Jul-Aug;154(7-8):435-8

Problems and organization of a home parenteral nutrition service. Burgess P, et al. **Baillieres Clin Gastroenterol** 1988 Oct;2(4):905-14 (18 ref.)

Vascular access for parenteral nutrition. Sim AJ. **Baillieres Clin Gastroenterol** 1988 Oct;2(4):799-813 (32 ref.)

Practical aspects and complications of total parenteral nutrition. Benotti PN, et al. **Crit Care Clin** 1987 Jan; 3(1):115-31 (46 ref.)

Total parenteral nutrition by intraperitoneal feeding in rabbits. Kalfarentzos F, et al. **Eur Surg Res** 1988; 20(5-6):352-7

Total parenteral nutrition in India. Chaudhari S, et al. **Indian J Pediatr** 1988 Nov-Dec;55(6):935-40

Minimal vitamin D and high calcium and phosphorus needs of preterm infants receiving parenteral nutrition. Koo WW, et al. **J Pediatr Gastroenterol Nutr** 1989 Feb;8(2):225-33

Neonatal nutrition casebook: nutritional management of the newborn with a postoperative chylothorax. Felber S. **J Perinatol** 1987 Winter;7(1):64-6

[The significance of cysteine and its derivatives in parenteral nutrition] Böhler S, et al. **Infusionstherapie** 1988 Oct; 15(5):204-7 (63 ref.) (Eng. Abstr.) (Ger)

[Experiences with a new fat emulsion in surgical intensive care medicine] Mertes N, et al. **Infusionstherapie** 1989 Jun; 16(3):114-7 (Eng. Abstr.) (Ger)

[Stress adapted parenteral amino acid substitution in operated premature and newborn infants] Schober PH, et al. **Infusionstherapie** 1989 Apr;16(2):68-74 (Eng. Abstr.) (Ger)

[The course of blood glucose and electrolyte status in parenteral nutrition with a complete solution following intestinal resection] Walther H, et al. **Infusionstherapie** 1989 Jun;16(3):119-22 (Eng. Abstr.) (Ger)

[Feeding the newborn infant with respiratory insufficiency] Moro G, et al. **Ann Osp Maria Vittoria Torino** 1987-88; 30(1):36-43 (Eng. Abstr.) (Ita)

[Total parenteral nutrition in packages. Methods of application in a general surgery department] Giuliani G, et al. **Minerva Chir** 1989 Jun 30;44(12):1673-6 (Eng. Abstr.) (Ita)

[Parenteral nutrition at home—USA: small risk—socially advantageous as 20 years' experience shows] Dahlström KA. **Lakartidningen** 1989 May 24;86(21):2029-30 (Swe)

[Parenteral nutrition at home—Sweden: the central registry improves therapeutic results] Nordenström J, et al. **Lakartidningen** 1989 May 24;86(21):2027-8 (Swe)

MORTALITY

Deaths associated with thiamine-deficient total parenteral nutrition [published erratum appears in MMWR 1989 Feb 10;38(5):79] **MMWR** 1989 Jan 27;38(3):43-6

NURSING

Total parenteral nutrition. Worthington PH, et al. **Nurs Clin North Am** 1989 Jun;24(2):355-71 (62 ref.)

PSYCHOLOGY

Psychosocial issues of nutritional support. A multidisciplinary interpretation. Srp F, et al. **Nurs Clin North Am** 1989 Jun; 24(2):447-59 (34 ref.)

STANDARDS

Guidelines for administration of total parenteral nutrition: measured versus predicted energy needs. Vignati P, et al. **Curr Surg** 1988 Nov-Dec;45(6):481-3

VETERINARY

Total parenteral nutrition in clinically normal cats. Lippert AC, et al. **J Am Vet Med Assoc** 1989 Mar 1;194(5):669-76

PARENTERAL INFUSIONS see INFUSIONS, PARENTERAL

PARENTS

Parental attitudes to prenatal information about the sex of the fetus. Sjögren B. **Acta Obstet Gynecol Scand** 1988; 67(1):43-6

Psychological adjustment to the results of neonatal hypothyroid screening [letter] Clemens PC, et al. **Acta Paediatr Scand** 1989 May;78(3):447-8

The role of parent-adolescent concordance in compliance with cancer chemotherapy. Tebbi CK, et al. **Adolescence** 1988 Fall;23(91):599-611

Parental hearing status, reading comprehension skills and social-emotional adjustment. Weisel A. **Am Ann Deaf** 1988 Dec;133(5):356-9

Advising parents to stop smoking. Opportunities and barriers in pediatric practice. Frankowski BL, et al. **Am J Dis Child** 1989 Sep;143(9):1091-4

The importance of parents' concerns about their child's development. Glascoe FP, et al. **Am J Dis Child** 1989 Aug; 143(8):955-8

An epidemiologic case-control study of central nervous system tumors in children and parental occupational exposures. Nasca PC, et al. **Am J Epidemiol** 1988 Dec; 128(6):1256-65

Can the birth certificate yield clues to parental occupational exposures? Milham S Jr. **Am J Ind Med** 1989;16(2):235-7

Parental occupational lead exposure and lead concentration of newborn cord blood. Wang JD, et al. **Am J Ind Med** 1989;15(1):111-5

Comparison of parent and teacher ratings of adaptive behavior of children with mental retardation. Foster-Gaitskell D, et al. **Am J Ment Retard** 1989 Sep; 94(2):177-81

The validity of reported parental height in inner city areas in England. Rona RJ, et al. **Ann Hum Biol** 1989 Jan-Feb; 16(1):41-4

Resident parents and shorter hospital stay. Taylor MR, et al. **Arch Dis Child** 1989 Feb;64(2):274-6

Resemblances of parents and twins in sports participation and heart rate. Boomsma DI, et al. **Behav Genet** 1989 Jan; 19(1):123-41

The effects of social homogamy and cultural inheritance on the covariances of twins and their parents: a LISREL model. Eaves LJ, et al. **Behav Genet** 1989 Jan;19(1):113-22

ABC of child abuse. Munchausen syndrome by proxy. Meadow R. **BMJ** 1989 Jul 22;299(6693):248-50 (0 ref.)

Women who kill their parents. d'Orbán PT, et al. **Br J Psychiatry** 1989 Jan;154:27-33 (34 ref.)

Advisability of substance abuse testing in parents who severely maltreat their children: the issue of drug testing before the juvenile/family courts. Famularo R, et al. **Bull Am Acad Psychiatry Law** 1988;16(3):217-23

Experience with parents' presence during anaesthesia induction in children. Hannallah RS, et al. **Can Anaesth Soc J** 1983 May;30(3 Pt 1):286-9

Pertussis vaccine: why do some parents say no? [letter] Feher PJ. **Can Med Assoc J** 1989 Mar 1;140(5):498

Occupational exposures of parents of children with acute nonlymphocytic leukemia: a report from the Childrens Cancer Study Group. Buckley JD, et al. **Cancer Res** 1989 Jul 15;49(14):4030-7

Parental occupation and Wilms' tumor: results of a case-control study. Bunin GR, et al. **Cancer Res** 1989 Feb 1;49(3):725-9

Parental agreement on child rearing during early childhood and the psychological characteristics of adolescents. Vaughn BE, et al. **Child Dev** 1988 Aug;59(4):1020-33

Parents' observations of the effect of a sexual-abuse prevention program on preschool children. Nibert D, et al. **Child Welfare** 1989 Sep-Oct;68(5):539-46

The role of parents and older peers in school-based cardiovascular prevention programs: implications for program development. Cohen RY, et al. **Health Educ Q** 1989 Summer;16(2):245-53

Parent involvement with children's health promotion: a one-year follow-up of the Minnesota home team. Perry CL, et al. **Health Educ Q** 1989 Summer;16(2):171-80

Effects of the nursing mutual participation model of care on parental stress in the pediatric intensive care unit. Curley MA. **Heart Lung** 1988 Nov;17(6 Pt 1):682-8

Klinefelter's syndrome in Sardinia and Scotland. Comparative studies of parental age and other aetiological factors in 47,XXY. Carothers AD, et al. **Hum Genet** 1988 Dec;81(1):71-5

Parental age and the origin of trisomy 21. A study of 302 families. Dagna Bricarelli F, et al. **Hum Genet** 1989 Apr; 82(1):20-6

Coping with parental quarrels. Jenkins JM, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Mar;28(2):182-9

A comparison of teacher and parent views of autism. Stone WL, et al. **J Autism Dev Disord** 1988 Sep;18(3):403-14

Post-placement services for foster and adoptive parents—support, counselling or therapy? Rushton A. **J Child Psychol Psychiatry** 1989 Mar;30(2):197-204 (31 ref.)

The consequences for preschool children of a parent's detention: a preliminary South African clinical study of caregivers' reports. Skinner D, et al. **J Child Psychol Psychiatry** 1989 Mar;30(2):243-59

Compliance with a prescription for psychotherapeutic counseling in childhood. Joost JC, et al. **J Dev Behav Pediatr** 1989 Apr;10(2):98-102 (15 ref.)

Mothers' and fathers' recognition of their newborns' photographs during the postpartum period. Kaitz M, et al. **J Dev Behav Pediatr** 1988 Aug;9(4):223-6

Children's understanding of death according to parents and pediatricians. Vianello R, et al. **J Genet Psychol** 1988 Sep; 149(3):305-16

Parental smoking and middle ear effusions in children. Hinton AE, et al. **J Laryngol Otol** 1988 Nov;102(11):992-6

Acquired subglottic stenosis in infants. The parent's view. Gillinson P. **J Laryngol Otol Suppl** 1988;17:41-4

Parent involvement in physical therapy: a controversial issue. Short DL, et al. **J Pediatr Orthop** 1989 Jul-Aug;9(4):444-6

Adult children of alcoholics. Avery ML. **J Psychosoc Nurs Ment Health Serv** 1989 Aug;27(8):20-4

Age of death of parents of patients with rheumatoid arthritis: data from a middle class sample. Wolfe F. **J Rheumatol** 1989 Jun;16(6):735-9

Distress and self-soothing bedtime behaviors in hospitalized children with non-rooming-in parents. White MA, et al. **Matern Child Nurs J** 1988 Summer;17(2):67-77

Patients', parents', and oncologists' perceptions of informed consent for bone marrow transplantation. Lesko LM, et al. **Med Pediatr Oncol** 1989;17(3):181-7

Court authorizes parents to withdraw life support. Weber RD. **Mich Med** 1989 Jan;88(1):27-9

Two letters about Dr. Halperin's article on abortion [letter; comment] **N C Med J** 1989 Jun;50(6):347-9. **Comment on:** N C Med J 1989 Apr;50(4):214-5

Traumas of the past, problems of the present and fear of the future. Aftermaths of parental chemical dependency. Goebels U, et al. **N C Med J** 1989 Jul;50(7):374-6

Consent for a minor's abortion [editorial] [see comments] Halperin EC. **N C Med J** 1989 Apr;50(4):214-5. **Comment in:** N C Med J 1989 Jun;50(6):347-9

Very low birth-weight infants: parental visiting and telephoning during initial infant hospitalization. Brown LP, et al. **Nurs Res** 1989 Jul-Aug;38(4):233-6

When parents demand treatment. Leikin S. **Pediatr Ann** 1989 Apr;18(4):266-8

Newborn screening for sickle cell disease and other hemoglobinopathies. Parental perspective. Henry DD. **Pediatrics** 1989 May;83(5 Pt 2):910

Parental administration of chemical agents: a cause of apparent life-threatening events. Hickson GB, et al. **Pediatrics** 1989 May;83(5):772-6

Ethical basis for repealing religious exemptions from child abuse statutes [letter] Jecker NS. **Pediatrics** 1989 Apr;83(4 Pt 2):651-2

Parental perceptions of health status and psychologic adjustment of children with asthma. Perrin JM, et al. **Pediatrics** 1989 Jan;83(1):26-30

Parent care and geographically distant children. Schoonover CB, et al. **Res Aging** 1988 Dec;10(4):472-92

Blood pressure norms for healthy young adults: relation to sex, age, and reported parental hypertension. Hahn WK, et al. **Res Nurs Health** 1989 Feb;12(1):53-6

Agreement between parents and physicians regarding clinical evaluation of patients with juvenile rheumatoid arthritis. Vandvik IH, et al. **Scand J Rheumatol** 1988;17(6):459-63

Methodological considerations in the study of parental occupational exposures and congenital malformations in offspring. Shaw GM, et al. **Scand J Work Environ Health** 1988 Dec;14(6):344-55 (88 ref.)

Münchausen syndrome by proxy and sleep disorders medicine. Griffith JL, et al. **Sleep** 1989 Apr;12(2):178-83

Consent requirements for treatment of minors. Thompson HA. **Tex Med** 1989 Aug;85(8):56-9

Information needs of primary caregivers in pediatric liver transplantation. Weichler N, et al. **Transplant Proc** 1989 Jun;21(3):3562

[Screening for glucose-6-phosphate (G-6-PD) deficiency in the Chinese newborns and the correlation between infants with G-6-PD deficiency and their parents' nativities] Chen WP, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Nov; 40(5):443-50 (Eng. Abstr.) (Chi)

[Fetal hypotrophy—a result of HLA incompatibility in the parents?] Presl J, et al. **Cesk Gynekol** 1988 Jul;53(6):446-7 (Cze)

[That's why parents should not smoke] Knol K, et al. **Ned Tijdschr Geneeskd** 1988 Nov 5;132(45):2047-8 (Dut)

[Absence of a relationship between senile dementia and parental age. A case report survey in Upper Normandy] Jouan-Flahault C, et al. **Rev Epidemiol Sante Publique** 1989;37(1):73-5 (Fre)

[Respiratory physio-kinesitherapy in cystic fibrosis: the parents' viewpoint] Battistini A, et al. **Pediatr Med Chir** 1988;10 Suppl 1:1-14 (Eng. Abstr.) (Ita)

[Parental education in relation to fetal death and death during the first year of life] Arntzen A, et al. **Tidsskr Nor Laegeforen** 1988 Nov 30;108(33):3082-5 (Eng. Abstr.) (Nor)

[Childbirth preparation classes—parenteral education on the right track? An evaluation study based on questionnaires sent to women in Sogn and Fjordane] Tjugum J, et al. **Tidsskr Nor Laegeforen** 1989 May 10;109(13):1381-2 (Eng. Abstr.) (Nor)

[Estimation of parental resistance in evaluating the effect of chemical substances on children's health] Prokopenko IuI, et al. **Gig Sanit** 1989 Mar;(3):26-8 (Eng. Abstr.) (Rus)

[Effects of alcoholism of the parents on the arterial pressure of children and adolescents] Kapitonov VF, et al. **Pediatriia** 1988;(9):102-3 (Rus)

[Effect of the health status of parents and family life style on the occurrence of allergic dermatoses and the dermatorespiratory syndrome in children] Nikitina IP. **Pediatriia** 1988;(5):58-61 (Eng. Abstr.) (Rus)

[Methodological approaches to studying the influence of parental occupation on the development of malignant neoplasms in children] Beliakova SV, et al. **Vopr Onkol** 1989;35(1):12-6 (Rus)

[Prevalence of mental health problems in parents of children with malnutrition in one area of Tegucigalpa, Honduras] Meza JM. **Acta Psiquiatr Psicol Am Lat** 1988 Jun; 34(2):145-8 (Eng. Abstr.) (Spa)

EDUCATION

A model for teaching parents of young hearing-impaired children total communication in the home—Project RITCH. Watkins S, et al. **Am Ann Deaf** 1988 Oct; 133(4):289-93

Media-based versus professionally led training for parents of mentally retarded children. Kashima KJ, et al. **Am J Ment Retard** 1988 Sep;93(2):209-17

The Foster Care Research Project: clinical impressions. Steinhauer PD, et al. **Am J Orthopsychiatry** 1989 Jul; 59(3):430-41

State family support and education programs: lessons from the pioneers. Weiss HB. **Am J Orthopsychiatry** 1989 Jan; 59(1):32-48

Project SMART parent program: preliminary results of a chronic disease risk reduction trail. Weber MD, et al. **Ann Med** 1989 Jun;21(3):231-3

Health education in preventive child health care in Sweden. Kornfält R. **Arztl Jugendkd** 1988;79(2):87-90

Social implications of achondroplasia—a public health view. Shakespeare WG. **Basic Life Sci** 1988;48:453-5

Training parents to become better behavior managers. The need for a competency-based approach. Rickert VI, et al. **Behav Modif** 1988 Oct;12(4):475-96

The Foster Care Research Project: summary and analysis [published erratum appears in Can J Psychiatry 1988 Nov;33(8):780] Steinhauer PD, et al. **Can J Psychiatry** 1988 Aug;33(6):509-16

Parental involvement in child abuse prevention training: what do they learn? Berrick JD. **Child Abuse Negl** 1988; 12(4):543-53

Meeting the needs of young deaf-blind children and their parents. Part 2. Andrew AK. **Child Care Health Dev** 1989 Jul-Aug;15(4):251-64 (20 ref.)

Treatment of autistic children: relative effectiveness of residential, out-patient and home-based interventions. Sherman J, et al. **Child Psychiatry Hum Dev** 1988 Winter; 19(2):109-25

Supporting parents with mental retardation. Heighway SM, et al. **Child Today** 1988 Nov-Dec;17(6):24-7

Pre-conception counselling in Asian women with non insulin dependent diabetes and impaired glucose tolerance. Rowe BR, et al. **Diabetes Res** 1988 May;8(1):35-8

Experiences with running a programme of education for diabetic children and their parents. Court S, et al. **Diabetic Med** 1989 May-Jun;6(4):366-8

Behaviour and confidence of parents instructed in home management of febrile seizures by rectal diazepam. Rossi LN, et al. **Helv Paediatr Acta** 1989 Feb;43(4):273-81

Counselling the parents of a child with cerebral palsy. Singhi PD. **Indian Pediatr** 1988 Apr;25(4):368-70

Training young parents to identify and report their children's illnesses. Delgado LE, et al. **J Appl Behav Anal** 1988 Fall; 21(3):311-9

Parent education project. III: Increasing affection and responsivity in developmentally handicapped mothers: component analysis, generalization, and effects on child language. Feldman MA, et al. **J Appl Behav Anal** 1989 Summer;22(2):211-22

Training parents to use the natural language paradigm to increase their autistic children's speech. Laski KE, et al. **J Appl Behav Anal** 1988 Winter;21(4):391-400

Evaluation of burn discharge teaching. Yurko LC, et al. **J Burn Care Rehabil** 1988 Nov-Dec;9(6):643-4

The long-term effectiveness and clinical significance of three cost-effective training programs for families with conduct-problem children. Webster-Stratton C, et al. **J Consult Clin Psychol** 1989 Aug;57(4):550-3

Do parents today need drug education programs as badly as their parents needed them? Manning TM, et al. **J Drug Educ** 1989;19(2):97-102

Early parenting education program seeks to prevent child abuse. Cuomo MR. **J Nurse Midwifery** 1988 Sep-Oct; 33(5):232-3

Clinical specialist pre- and postdischarge teaching of parents of very low birth weight infants. Brooten D, et al. **J Obstet Gynecol Neonatal Nurs** 1989 Jul-Aug;18(4):316-22

Circumcision considerations [letter] Tedder J. **J Obstet Gynecol Neonatal Nurs** 1989 Jul-Aug;18(4):277

Sources of father-infant bonding beliefs: implications for childbirth educators. Palkovitz R. **Matern Child Nurs J** 1988 Summer;17(2):101-13

Teaching parents to provide home-care for ventilator-dependent children. Harrison LL. **MCN** 1989 Jul-Aug;14(4):281

Teaching stimulation strategies to parents of infants at high risk. Harrison LL. **MCN** 1989 Mar-Apr;14(2):125

Helping families to help themselves. Johnson PA, et al. **MCN** 1988 Sep-Oct;13(5):336-9

Sources of parenting education for adolescent mothers. Duggan AK, et al. **Md Med J** 1988 Dec;37(12):945-50

Behavioral parent training. A view of the past and suggestions for the future. Egel AL, et al. **Monogr Am Assoc Ment Retard** 1989;(12):153-73 (95 ref.)

Homeward bound. Discharge teaching for parents of newborns with special needs. Baker K, et al. **Nurs Clin North Am** 1989 Sep;24(3):655-64

A pilot study on the effect of training parents of language-delayed children in pragmatic interaction strategies. Iven CJ, et al. **Percept Mot Skills** 1989 Aug; 69(1):295-303

Training versus nontraining of mothers as home reading tutors. Wilks RT, et al. **Percept Mot Skills** 1988 Aug; 67(1):135-42

[Trends in the broadening of care of oligophrenic children] Höllge J. **Cesk Zdrav** 1989 Apr;37(4):169-73 (Eng. Abstr.) (Cze)

[Training and education for the young diabetic and his parents] Della Porta V, et al. **Minerva Pediatr** 1988 Mar; 40(3):145-50 (14 ref.) (Eng. Abstr.) (Ita)

PSYCHOLOGY

A comparison of parent and teacher nomination of gifted hearing-impaired students. Yewchuk C, et al. **Am Ann Deaf** 1988 Dec;133(5):344-8

An educational booklet diminishes anxiety in parents whose children receive total parenteral nutrition. Laine L, et al. **Am J Dis Child** 1989 Mar;143(3):374-7

Helping families get through the holidays after the death of a child. Wasserman AL. **Am J Dis Child** 1988 Dec; 142(12):1284-6

Support after sudden infant death. Woolsey SF. **Am J Nurs** 1988 Oct;88(10):1347-52

Life events of adolescents in relation to personal and parental substance abuse. Brown SA. **Am J Psychiatry** 1989 Apr; 146(4):484-9

Parents' attitudes and patients' behavior: a prospective study. Greenman DA, et al. **Am J Psychiatry** 1989 Feb; 146(2):226-30

Perinatal loss and parental bereavement. Theut SK, et al. **Am J Psychiatry** 1989 May;146(5):635-9

The effect of occupational, marital and parental roles on mortality: the Alameda County Study. Kotler P, et al. **Am J Public Health** 1989 May;79(5):607-12

Retaining qualitative validity while gaining quantitative reliability and validity: development of the Transition to Parenthood Concerns Scale. Imle MA, et al. **ANS** 1988 Oct;11(1):61-75

Children's car-restraints: use and parental attitudes. Richmond PW, et al. **Arch Emerg Med** 1989 Mar;6(1):41-5

Parents' illness models of schizophrenia. Chesla CA. **Arch Psychiatr Nurs** 1989 Aug;3(4):218-25

Loneliness and disturbed grief: a comparison of parents who lost a child to suicide or accidental death. Kovarsky RS. **Arch Psychiatr Nurs** 1989 Apr;3(2):86-96

Stage-related behavioural problems in the 1-4 year old child: parental expectations in a child development unit referral group compared with a control group. Ticehurst RL, et al. **Aust Paediatr J** 1989 Feb;25(1):39-42

Parents' beliefs about vaccination [letter] **BMJ** 1989 Jul 22; 299(6693):257

Absence from school related to children's and parental smoking habits. Charlton A, et al. **BMJ** 1989 Jan 14; 298(6666):90-2

Babies with spina bifida treated without surgery: parents' views on home versus hospital care. Delight E, et al. **BMJ** 1988 Nov 12;297(6658):1230-3

Parents' beliefs about vaccination: the continuing propagation of false contraindications. Klein N, et al. **BMJ** 1989 Jun 24;298(6689):1687

Imparting the diagnosis of life threatening illness in children. Woolley H, et al. **BMJ** 1989 Jun 17;298(6688):1623-6

Disposal arrangements for fetuses lost in the second trimester [letter] Machin GA. **Br J Obstet Gynaecol** 1988 Dec; 95(12):1337

A study to assess the effectiveness of a professional and lay support service for parents of new-born cleft babies. Turner MM, et al. **Br J Plast Surg** 1988 Nov;41(6):614-8

Parent satisfaction in a child psychiatric service. Kotsopoulos S, et al. **Can J Psychiatry** 1989 Aug;34(6):530-3

Psychological aspects of ultrasound imaging during pregnancy. Villeneuve C, et al. **Can J Psychiatry** 1988 Aug; 33(6):530-6

Pertussis vaccine: why do some parents say no? Goldman B. **Can Med Assoc J** 1988 Dec 15;139(12):1174-7

Long-term follow-up of parental adjustment following a child's death at home or hospital. Lauer ME, et al. **Cancer** 1989 Mar 1;63(5):988-94

"What does it mean?" Sibling and parental appraisals of childhood leukemia. Brett KM, et al. **Cancer Nurs** 1988 Dec;11(6):329-38

The emotional experience of multiple handicap: issues in assessment. McConachie HR, et al. **Child Care Health Dev** 1989 Jan-Feb;15(1):75-8

Constraints upon parenting: experience of a paediatrician. Sonksen PM. **Child Care Health Dev** 1989 Jan-Feb; 15(1):29-36

Constraints upon parenting: experience of a psychologist. Tobin MJ. **Child Care Health Dev** 1989 Jan-Feb; 15(1):37-43

Self-acceptance: a factor in the adoption process. DiGiulio JF. **Child Welfare** 1988 Sep-Oct;67(5):423-9

Child abduction. Parent and child functioning following return. Forehand R, et al. **Clin Pediatr (Phila)** 1989 Jul; 28(7):311-6

Infection control barrier techniques. Used by physicians during routine examinations. Parental attitudes. Siegel LJ, et al. **Clin Pediatr (Phila)** 1989 May;28(5):231-4

Listening carefully. Improving communication about behavior and development. Recognizing parental concerns. Triggs EG, et al. **Clin Pediatr (Phila)** 1989 Apr;28(4):185-92

Dialabetic. Hirst J. **Diabetic Med** 1989 Sep-Oct;6(7):637-8

Parent perceptions of the integration transition process; overcoming artificial barriers. Hanline MF, et al. **Except Child** 1989 Apr;55(6):487-92

An examination of the relationship between parental intelligence and children's age: preliminary findings [letter] Trahan DE. **Exp Aging Res** 1987 Winter;13(4):213-4

The transition to parenthood: III. Incorporation of the child into the family. Lewis JM, et al. **Fam Process** 1988 Dec; 27(4):411-21

The transition to parenthood: II. Stability and change in marital structure. Lewis JM. **Fam Process** 1988 Sep; 27(3):273-83

Psychological implications of fetal diagnosis and therapy. Thomassen-Brepols LJ. **Fetal Ther** 1987;2(3):169-74

Aging parents as family resources. Greenberg JS, et al. **Gerontologist** 1988 Dec;28(6):786-91 (29 ref.)

Previously infertile couples and the newborn intensive care unit. Lind RF, et al. **Health Soc Work** 1989 May; 14(2):127-33

Child life: meeting the psychosocial needs of children and families in the hospital. Newman CO, et al. **Henry Ford Hosp Med J** 1988;36(4):222-6

Emotional stress or acceptance: parental reactions to unexpected developmental processes. Fritz A. **Int J Rehabil Res** 1987;10(4 Suppl 5):168-70

Attitudes of adolescents and parents of adolescents concerning condom advertisements on television. Buchta RM. **J Adolesc Health Care** 1989 May;10(3):220-3

Caring for a child with diabetes: the effect of specialist nurse care on parents' needs and concerns. Moyer A. **J Adv Nurs** 1989 Jul;14(7):536-45

Psychopathology in parents of depressed children and adolescents. Mitchell J, et al. **J Am Acad Child Adolesc Psychiatry** 1989 May;28(3):352-7

Behavior problems in children of parents with anxiety disorders. Silverman WK, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Nov; 27(6):779-84

A Parent Practices Scale and its relation to parent and child mental health. Strayhorn JM, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Sep;27(5):613-8

The continuity of knowledge [letter] Werry JS. **J Am Acad Child Adolesc Psychiatry** 1988 Nov; 27(6):819-20

Psychopathology of parents of abused and neglected children and adolescents. Kaplan SJ, et al. **J Am Acad Child Psychiatry** 1983 May;22(3):238-44

Assisting the parent of a child with asthma. Schwam JS. **J Asthma** 1987;24(1):45-54 (63 ref.)

Parenting stress in raising autistic children. Milgram NA, et al. **J Autism Dev Disord** 1988 Sep;18(3):415-24

Psychological effects of parenting stress on parents of autistic children. Wolf LC, et al. **J Autism Dev Disord** 1989 Mar; 19(1):157-66

Role of the International Rett Syndrome Association. Hunter K. **J Child Neurol** 1988;3 Suppl:S87-8

Recruiting parents of children with a fatal disease as co-investigators. Rapin I. **J Child Neurol** 1988;3 Suppl:S89-90

Assessing child symptom severity and stress in parents of autistic children. Konstantareas MM, et al. **J Child Psychol Psychiatry** 1989 May;30(3):459-70

Parental problem-solving skills, stress, and dietary compliance in phenylketonuria. Fehrenbach AM, et al. **J Consult Clin Psychol** 1989 Apr;57(2):237-41

A home-monitoring program for parents of premature infants: a comparative study of the psychological effects. Leonard BJ, et al. **J Dev Behav Pediatr** 1989 Apr;10(2):92-7

The marihuana perception inventory: stage 3—the parent sample. Cotler MP, et al. **J Drug Educ** 1989;19(1):21-7

Caring for families following the birth of a child with handicaps [clinical conference] Smith MA, et al. **J Fam Pract** 1989 May;28(5):513, 516, 518-20

Nursing interventions for the first three postpartum months. Hampson SJ. **J Obstet Gynecol Neonatal Nurs** 1989 Mar–Apr;18(2):116–22
Child psychopathology and parenting stress in girls and boys having attention deficit disorder with hyperactivity. Breen MJ, et al. **J Pediatr Psychol** 1988 Jun;13(2):265–80
The rationale for supportive care after perinatal death. Lake MF, et al. **J Perinatol** 1987 Spring;7(2):85–9
Successes and struggles of parent support groups in neonatal intensive care units. Stauber SR, et al. **J Perinatol** 1987 Spring;7(2):140–4
The next baby: parents' responses to perinatal experiences subsequent to a stillbirth. Wilson AL, et al. **J Perinatol** 1988 Summer;8(3):188–92
At risk. Children of the mentally ill. Gross D. **J Psychosoc Nurs Ment Health Serv** 1989 Aug;27(8):14–9 (35 ref.)
How parents of gays react to their children's homosexuality and to the threat of AIDS. Skeen P, et al. **J Psychosoc Nurs Ment Health Serv** 1988 Dec;26(12):6–10
Aspirin and Reye's syndrome—do parents know? Hall RW. **J R Coll Gen Pract** 1987 Oct;37(303):459–60
The influence of parental attitude and behavior on early adolescent cigarette smoking. Newman IM, et al. **J Sch Health** 1989 Apr;59(4):150–2
A piece of my mind. Come follow me. Profeta LM. **JAMA** 1988 Oct 21;260(15):2276
Anxiety levels of rooming-in and non-rooming-in parents of young hospitalized children. Alexander D, et al. **Matern Child Nurs J** 1988 Summer;17(2):79–99
As birth and death coincide. Johannsen L. **MCN** 1989 Mar–Apr;14(2):89–92
In moments of crisis. Novak S. **MCN** 1988 Sep–Oct; 13(5):349–51
Nursing care to ease parents' grief. Null S. **MCN** 1989 Mar–Apr;14(2):84–9
Teaching parents about their impaired adolescent's sexuality. Taylor MO. **MCN** 1989 Mar–Apr;14(2):109–12
Parental characteristics in cases of child-battering and abuse. Brook U. **Med Law** 1988;7(3):295–301 (31 ref.)
Stress management training for parents of children with severe handicaps. Singer GH, et al. **Ment Retard** 1988 Oct; 26(5):269–77
Parents for children, children for parents. The adoption alternative. Glidden LM. **Monogr Am Assoc Ment Retard** 1989;(11):i–xii, 1–209
Family support in North Carolina [published erratum appears in **N C Med J** 1989 Jul;50(7):405] Sharp MC, et al. **N C Med J** 1989 Jun;50(6):329–32
Children's diets: what do parents add and avoid? Ford RP, et al. **N Z Med J** 1989 Aug 23;102(874):443–5
The difference between biological heredity and cultural heredity. Preliminary findings in assessment of parental rearing practice by EMBU-inventory in primary alcoholism. Vrasti R, et al. **Neurol Psychiatr (Bucur)** 1988 Jul–Sep;26(3):171–8
Self-reported adjustment, chronic sorrow, and coping of parents of children with Down syndrome. Damrosch SP, et al. **Nurs Res** 1989 Jan–Feb;38(1):25–30
Children of parents with affective disorder. Beardslee WR. **Pediatr Rev** 1989 Apr;10(10):313–9 (36 ref.)
Parents' reactions to sex education in the primary school. Wyss D. **Pediatrician** 1988;15(3):149–52
Miseducation: young children at risk. Elkind D. **Pediatrics** 1989 Jan;83(1):119–21
Newborn screening for sickle cell disease and other hemoglobinopathies. Social work perspective. Hernandez S. **Pediatrics** 1989 May;83(5 Pt 2):903–5
Parental receptivity to neonatal sickle trait identification. Rowley PT. **Pediatrics** 1989 May;83(5 Pt 2):891–3
Effects of parental styles on anxiety and type A behavior pattern. Essau CA, et al. **Percept Mot Skills** 1988 Aug; 67(1):333–4
Expectancies of rural and urban parents applying for children's services at community mental health centers. Munger RL. **Psychol Rep** 1988 Dec;63(3):729–30
Measles vaccination in primary schools—the Colchester project. Rao M, et al. **Public Health** 1988 Sep;102(5):477–83
The Child Care Activities Scale and Parental Role Preference Scale. Cronenwett LR, et al. **Res Nurs Health** 1988 Oct; 11(5):301–8
Effects of family configuration variables on reported indices of parental power among Iranian adolescents. Tashakkori A, et al. **Soc Biol** 1988 Spring–Summer;35(1–2):82–90
Psychological effects of the new reproductive technologies. Schuker E. **Women Health** 1987;13(1–2):141–7
[The identity of the handicapped child and his parents] Matějček Z. **Cas Lek Cesk** 1988 Jul 8;127(28):865–8 (Eng. Abstr.) (Cze)
[Hereditary, what does it mean?] Kirkels VG, et al. **Ned Tijdschr Geneeskd** 1988 Dec 10;132(50):2265–7 (Dut)
[Newborn infants with disordered genital development assigned the female sex; counseling of parents] Slijper FM, et al. **Ned Tijdschr Geneeskd** 1988 Oct 8;132(41):1892–6 (Eng. Abstr.) (Dut)
[Fraud in medicine with the child as victim. Munchausen syndrome by proxy. A review of the literature] Koopman HM, et al. **Tijdschr Kindergeneeskd** 1988 Aug;56(4):141–8 (27 ref.) (Eng. Abstr.) (Dut)
[Motivations of parents taking their children to the hospital in emergencies. Results of a psychosocial survey at the Regional University Hospital Center of Grenoble] Marguet MC, et al. **Pediatrie** 1988;43(5):433–9 (Eng. Abstr.) (Fre)
[Evaluation of inpatient adolescent psychiatric therapy—a comparison of the attitudes of adolescents and parents] Kammerer E. **Prax Kinderpsychol Kinderpsychiatr** 1989 Jul–Aug;38(6):205–9 (Eng. Abstr.) (Ger)
[Parent therapy] Strunk P. **Z Kinder Jugenpsychiatr** 1988 Sep; 16(3):115–6 (Ger)
[Clinical practice of a child and adolescent psychiatric service as evaluated by parents] Wille A, et al. **Z Kinder Jugenpsychiatr** 1988 Sep;16(3):117–23 (Eng. Abstr.) (Ger)

PARESIS

[Dementia paralytica] Hillbom M. **Duodecim** 1988; 104(12):941–3 (Fin)

COMPLICATIONS

Bilateral trochlear nerve paresis in hydrocephalus. Guy JR, et al. **J Clin Neuro Ophthalmol** 1989 Jun;9(2):105–11
Neurofibromatosis with ulnar nerve palsy and skull deformity. Rajendraretnam K, et al. **J Indian Med Assoc** 1988 Jul;86(7):200
Intracranial aneurysms with superior division paresis of the oculomotor nerve. Guy JR, et al. **Ophthalmology** 1989 Jul; 96(7):1071–6

ETIOLOGY

Sixth nerve palsy after lumbar anesthesia. Richer S, et al. **Optom Vis Sci** 1989 May;66(5):320–1

PATHOLOGY

Lissauer form of paretic neurosyphilis with a cerebral mass lesion. Nitrini R, et al. **Arq Neuropsiquiatr** 1988 Sep; 46(3):316–9

THERAPY

[Upper extremity orthosis in various diseases] Watanabe H. **Nippon Seikeigeka Gakkai Zasshi** 1988 Dec;62(12):1233–44 (Jpn)

PARESTHESIA

Vulvodynia. A multifactorial clinical problem. McKay M. **Arch Dermatol** 1989 Feb;125(2):256–62 (20 ref.)

CHEMICALLY INDUCED

Pruritus and paresthesia after i.v. administration of Gd-DTPA. Chan K, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S53
Paresthesia and back pain in a patient receiving vancomycin during hemodialysis. Cohen LG, et al. **Drug Intell Clin Pharm** 1988 Oct;22(10):784–5
Ciguatera fish poisoning. Hashmi MA, et al. **N J Med** 1989 Jun;86(6):469–71
[Antituberculous chemotherapy: a constraining adverse effect of pyrazinamide (letter)] Mignot P, et al. **Rev Pneumol Clin** 1988;44(4):217–8 (Fre)
[Various central determinants of Hoigné's syndrome] Kocur J, et al. **Wiad Lek** 1988 Oct 1;41(19):1322–4 (Eng. Abstr.) (Pol)

COMPLICATIONS

Cervical spinal stenosis with cord neurapraxia and transient quadriplegia. Torg JS, et al. **Clin Sports Med** 1987 Jan; 6(1):115–33 (28 ref.)
Trigeminal trophic syndrome. Arasi R, et al. **Laryngoscope** 1988 Dec;98(12):1330–3
Crural and axial myoclonic dystonia following meralgia paraesthetica. ter Bruggen JP, et al. **Mov Disord** 1988; 3(2):176–8
[Neuropathy of the chin associated with neoplasms. Presentation of 5 cases and a review of the literature] Vadell Nadal C, et al. **Arch Neurobiol (Madr)** 1989 Jan–Feb; 52(1):17–22 (25 ref.) (Eng. Abstr.) (Spa)

DIAGNOSIS

Symptoms mimicking neurologic disorders in fibromyalgia syndrome. Simms RW, et al. **J Rheumatol** 1988 Aug; 15(8):1271–3
[Arguments against current interpretation of the diagnosis of Raynaud's phenomenon] Borovkov SA. **Vestn Khir** 1989 Mar;142(3):58–9 (Rus)
[Thermographic examination of patients with neurologic manifestations of lumbar osteochondrosis] Belova AN, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):31–5 (Eng. Abstr.) (Rus)

ETIOLOGY

Paresthesias or no paresthesias? Nerve complications after neural blockades. Selander D. **Acta Anaesthesiol Belg** 1988; 39(3 Suppl 2):173–4
Extrusion of endodontic filling material into the inferior alveolar canal. Ruprecht A, et al. **Can Dent Assoc J** 1988 Sep;54(9):683–5
Marcher's digitalgia paresthetica among recruits. Stein M, et al. **Foot Ankle** 1989 Jun;9(6):312–3
Neuroelectric procedure does not discriminate between painful and paresthetic diabetic neuropathy. Piaggesi A, et al. **Funct Neurol** 1989 Apr–Jun;4(2):141–6
Ciguatera fish poisoning. A jet age peril. Schatz IJ. **Hosp Pract [Off]** 1989 Sep 15;24(9):79–86, 89, 93–6 (8 ref.)
Hearing of forest workers with vibration-induced white finger: a five-year follow-up. Iki M, et al. **Int Arch Occup Environ Health** 1989;61(7):437–42
Neurological features of acromegaly: a review and report of two cases. Woo CC. **J Manipulative Physiol Ther** 1988 Aug;11(4):314–21 (52 ref.)
Cheiro-oral syndrome with bilateral oral involvement: a study of pontine lesions by high-resolution magnetic resonance imaging. Matsumoto S, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):792–4
Ruptured S1–S2 disc presenting with S2 radiculopathy. Nabors MW, et al. **Neurosurgery** 1989 Feb;24(2):271–2
Pulsatile dysesthesia and an axillary artery pseudoaneurysm associated with a penetrating axillary artery injury. Benzel EC, et al. **Surg Neurol** 1989 May;31(5):400–1
Neurofibromatosis presenting as perineal pain and urethral burning. Batta AG, et al. **Urology** 1989 Feb;33(2):138–40
[Involvement of the median nerve associated with cutaneous lesions and trophic disorders of the fingers (letter)] Besson I, et al. **Presse Med** 1989 Jun 17;18(24):1207 (Fre)
[Temporary exertion-dependent paresthesias in agenesis of the inferior vena cava] Boecken G. **Dtsch Med Wochenschr** 1988 Dec 2;113(48):1879–81 (Eng. Abstr.) (Ger)
[Adynamia, finger paresthesias (clinical conference)] Kraft K, et al. **Schweiz Rundsch Med Prax** 1989 Mar 7; 78(10):270–2 (Eng. Abstr.) (Ger)
[Axonal polyneuritis and macrocytosis: initial signs of vitamin B12 deficiency presenting as intermittent paresthetic claudication] Roquer J, et al. **Med Clin (Barc)** 1988 May 7;90(18):745–7 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Somatosensory evoked potentials in the evaluation of patients with stocking/glove paresthesias. Smith T, et al. **Acta Neurol Scand** 1989 Jan;79(1):63–7
Subclavian perivascular block: influence of location of paresthesia. Hickey R, et al. **Anesth Analg** 1989 Jun; 68(6):767–71
Paraesthesiae and hypaesthesia following prolonged high-frequency stimulation of cutaneous afferents. Burke D, et al. **Brain** 1989 Aug;112 (Pt 4):913–29
Quantitative estimation of aesthesiometric thresholds for assessing impaired tactile sensation in workers exposed to vibration. Bovenzi M, et al. **Int Arch Occup Environ Health** 1989;61(7):431–5

SURGERY

Suprainguinal ligament approach for surgical treatment of meralgia paresthetica. Technical note. Aldrich EF, et al. **J Neurosurg** 1989 Mar;70(3):492–4

THERAPY

[The use of a method of developing and activating artificial stable functional feedbacks of the 2d type for treating patients with paresthesia of the oral mucosa] Reznikova TN, et al. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):21–3 (Eng. Abstr.) (Rus)

PARGYLINE

ANALOGS & DERIVATIVES

19-Hydroxylase inhibition of adrenal mitochondrial P450 11 beta/18/19-hydroxylase by a suicide inhibitor. Griffing GT, et al. **Am J Med Sci** 1989 Aug;298(2):83–8
Biological characterization of 10-(2-propynyl) estr-4-ene-3, 17-dione (MDL 18,962), an enzyme-activated inhibitor of aromatase. Johnston JO. **Steroids** 1987 Jul–Sep; 50(1–3):105–20
Inhibition of aromatase activity and of endocrine-responsive tumor growth by 10-propargylestr-4-ene-3, 17-dione and its 17-propionate derivative. Zimniski SJ, et al. **Steroids** 1987 Jul–Sep;50(1–3):135–46

PHARMACOLOGY

A novel effect of pargyline on cholinergic catecholamine secretion. Dry KL, et al. **Biochem Pharmacol** 1989 May 15;38(10):1699–702
Circadian patterns of serotonin (5-HT) accumulation after pargyline treatment in the rat hypothalamus during development. Jimenez AE, et al. **Int J Dev Neurosci** 1988; 6(2):203–9
Effects of 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine in the dog: effect of pargyline pretreatment. Johannessen JN, et al. **J Neurochem** 1989 Aug;53(2):582–9
In vivo voltammetry in the B3 group of serotonin neurons of the rat medulla oblongata after drug-induced modifications of arterial pressure. Aslanian V, et al. **Life Sci** 1988;43(13):1031–8
5-Hydroxytryptophan uptake and decarboxylating neurons in the cat hypothalamus. Denoyer M, et al. **Neuroscience** 1989;31(1):203–11
Consequences of monoamine oxidase inhibition: increased vesicular accumulation of dopamine and norepinephrine and increased metabolism by catechol-O-methyltransferase

and phenolsulfotransferase. Buu NT, et al.
Prog Neuropsychopharmacol Biol Psychiatry 1989; 13(3–4):563–8

PARIETAL BONE

[Monostotic fibrous dysplasia of the parietal bone. Case report] Itoh J, et al. **Neurol Med Chir (Tokyo)** 1988 Dec; 28(12):1214–7 (Eng. Abstr.) **(Jpn)**

ABNORMALITIES

[Congenital foramina parietalia. Description of a clinical case] Origo C, et al. **Minerva Pediatr** 1988 Jun;40(6):373–5 (Eng. Abstr.) **(Ita)**

ANATOMY & HISTOLOGY

Difference in shape of bone formed by isolated calvarial and scapular osteoblasts transplanted under various conditions. Moskalewski S, et al. **Folia Histochem Cytobiol** 1989; 27(1):25–33

DRUG EFFECTS

In vitro mineralization of fetal rat parietal bones in defined serum-free medium: effect of beta-glycerol phosphate. Gronowicz G, et al. **J Bone Miner Res** 1989 Jun;4(3):313–24

EMBRYOLOGY

Growth of the fetal biparietal diameter in urban Cape coloured families. Coetzee EJ, et al. **S Afr Med J** 1988 Dec 17;74(12):635–7

INJURIES

Growing fractures: an unusual complication of head injuries in pediatric patients. Locatelli D, et al.
Neurochirurgia (Stuttg) 1989 Jul;32(4):101–4

[Temporoparietal bone defects] Bauer T, et al. **Radiologe** 1988 Nov;28(11):541–2 **(Ger)**

[Biomechanical and morphologic reconstruction of a questionable case of child abuse] Müller-Kölbl S, et al. **Z Rechtsmed** 1989;102(5):347–52 (Eng. Abstr.) **(Ger)**

METABOLISM

Platelet-derived growth factor enhances deoxyribonucleic acid and collagen synthesis in osteoblast-enriched cultures from fetal rat parietal bone. Centrella M, et al.
Endocrinology 1989 Jul;125(1):13–9

Differences in the kinetics of the mineralization process in endochondral and intramembranous osteogenesis in human fetal development. Dziedzic-Goclawska A, et al.
J Bone Miner Res 1988 Oct;3(5):533–9

PATHOLOGY

Benign osteoblastoma of the parietal bone: case report. Martin-Ferrer S. **Neurosurgery** 1989 Jul;25(1):109–11; discussion 111–2

Neonatal cranial osteomyelitis: a complication of fetal monitoring. McGregor JA, et al. **Obstet Gynecol** 1989 Mar; 73(3 Pt 2):490–2

[Spontaneous remission in disseminated histiocytosis X] Fasshauer A, et al. **Monatsschr Kinderheilkd** 1989 Feb; 137(2):105–7 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Osteogenic sarcoma of the calvarium in children: CT manifestations. Kornreich L, et al. **Neuroradiology** 1988; 30(5):439–41

[Aneurysmal cysts of the fronto-parietal bone] Alessio L, et al. **Riv Neurol** 1989 Mar-Apr;59(2):53–7 (Eng. Abstr.) **(Ita)**

SURGERY

Massive osteolysis of the skull and its therapeutic implications: a case report. Bouwsma C, et al.
J Neurol Neurosurg Psychiatry 1989 Feb;52(2):279–81

[Augmentation of a frontoparietal bone defect with autogenous rib cartilage] Eskici A, et al.
Fortschr Kiefer Gesichtschir 1989;34:98–100 **(Ger)**

PARIETAL CELLS, GASTRIC

see related
GASTRIC ACID
INTRINSIC FACTOR

ANALYSIS

Identification of a 185-kDa band 3-related polypeptide in oxyntic cells. Thomas HA, et al. **Am J Physiol** 1989 Sep; 257(3 Pt 1):C537–44

Distribution of G-cells in the antrum and duodenum and D-cells in the fundus, antrum, duodenum and pancreas of the guinea pig. Vassilakis JS, et al. **Exp Pathol** 1989; 36(4):211–6

CYTOLOGY

Gastric acid secretion and parietal cell mass: effects of thyroidectomy and thyroxine. Adeniyi KO, et al.
Am J Physiol 1989 Jun;256(6 Pt 1):G975–8

Bombesin ingestion stimulates epithelial digestive cell proliferation in suckling rats. Puccio F, et al.
Am J Physiol 1989 Feb;256(2 Pt 1):G328–34

An autoradiographic study of the developing parietal cell population in neonatal pigs. Tudor EM, et al.
Cell Tissue Kinet 1988 Jan;21(1):3–14

DRUG EFFECTS

Pancreastatin: a novel peptide inhibitor of parietal cell signal transduction. Lewis JJ, et al.
Biochem Biophys Res Commun 1989 Sep 15;163(2):667–73

Increased parietal cell responsiveness to tetragastrin in patients with recurrent duodenal ulcer. Yanaka A, et al.
Dig Dis Sci 1988 Nov;33(11):1459–65

The gastric acid secretagogue gastrin-releasing peptide and the inhibitor oxyntomodulin do not exert their effect directly on the parietal cell in the rat. Gehl J, et al.
Digestion 1988;40(3):144–51

Effects of enprostil[(+/-)-11 alpha, 15 alpha-dihydroxy-9-keto-16-phenoxy-17,18,19,20-tetra-norprosta-4, 5,13-(+)- trienoic acid, methyl ester; EN] on 14C-aminopyrine (AP) accumulation in isolated canine parietal cells. Saito E, et al. **Gastroenterol Jpn** 1989 Apr; 24(2):220

Effect of a new H2-receptor antagonist (roxatidine acetate) on the acid secretion by isolated canine parietal cells. Saito E, et al. **Gastroenterol Jpn** 1989 Apr;24(2):221

Effect of a Campylobacter pylori protein on acid secretion by parietal cells. Cave DR, et al. **Lancet** 1989 Jul 22; 2(8656):187–9

An endogenous inhibitor of Na,K-ATPase isolated from human plasma inhibits the acid pump of the stomach. Mårdh S. **Prog Clin Biol Res** 1988;268B:417–22

Effects of some antisecretory drugs on acid production, intracellular free Ca2+, and cyclic AMP production in isolated pig parietal cells. Mårdh S, et al.
Scand J Gastroenterol 1988 Oct;23(8):977–82

Prostaglandin E analogue inhibition of intrinsic factor release. Zucker KA, et al. **Scand J Gastroenterol** 1988 Aug; 23(6):650–4

[Changes in cytosolic free Ca++ by histamine stimulation in isolated guinea-pig parietal cells. (The 1st report)—a study of using fura-2/AM by double wave length excitation method] Muto N, et al.
Nippon Shokakibyo Gakkai Zasshi 1988 Aug;85(8):1466–74 (Eng. Abstr.) **(Jpn)**

[Effect of nizatidine on the 14C-aminopyrine accumulation by isolated guinea pig parietal cells] Saito E, et al.
Nippon Shokakibyo Gakkai Zasshi 1988 Nov;85(11):2475 **(Jpn)**

[Action of the drug pirenzepine on regenerating parietal cells. Morphological and quantitative study] Ibáñez F, et al.
Rev Esp Enferm Apar Dig 1988 Sep;74(3):205–9 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Carbonic anhydrase II gene expression in isolated canine gastric parietal cells. Campbell VW, et al.
Am J Physiol 1989 Mar;256(3 Pt 1):G631–6

Effects of starvation, feeding, and time of day on the activity of proton transport adenosine triphosphatase in the parietal cells of the mouse gastric glands. Coulton GR, et al.
Anat Rec 1988 Sep;222(1):42–8

Omeprazole, SCH 28080 and doxepin differ in their characteristics to inhibit H+/K+-ATPase driven proton accumulation by parietal cell membrane vesicles. Beil W, et al. **Biochem Pharmacol** 1988 Dec 1;37(23):4487–93

Histamine metabolism of the human gastric mucosa—a study on the regional distribution of the amine and enzyme activities. Lönroth H, et al. **Scand J Clin Lab Invest** 1989 Feb;49(1):23–31

IMMUNOLOGY

Characterization of antigenic structures in auto-immune atrophic gastritis with pernicious anaemia. The parietal cell H,K-ATPase and the chief cell pepsinogen are the two major antigens. Mårdh S, et al. **Acta Physiol Scand** 1989 Aug;136(4):581–7

Relation of parietal cell and thyroid antibodies to the state of gastric mucosa and basal serum gastrin levels during a 6-year follow up. Uibo R, et al. **Clin Exp Immunol** 1989 Aug;77(2):202–5

Parietal cell antibodies in pernicious anemia inhibit H+, K+-adenosine triphosphatase, the proton pump of the stomach. Burman P, et al. **Gastroenterology** 1989 Jun; 96(6):1434–8

Parietal cell autoantigens involved in neonatal thymectomy-induced murine autoimmune gastritis. Studies using monoclonal autoantibodies. Mori Y, et al.
Gastroenterology 1989 Aug;97(2):364–75

Antiparietal cell antibodies in gastritis associated with chronic liver diseases. Massoud A, et al.
J Egypt Soc Parasitol 1989 Jun;19(1):239–45

METABOLISM

The effects of various gastrins on intracellular free Ca2+ in isolated pig parietal cells. Cabero JL, et al.
Acta Physiol Scand 1989 Jul;136(3):301–7

The possible role of histamine-mediated cAMP formation as a link between H2-receptor stimulation and ultrastructural changes in guinea-pig oxyntic cells. Albinus M, et al. **Agents Actions** 1989 Apr;27(1-2):173–6

Carbachol-induced protein phosphorylation in parietal cells: regulation by [Ca2+]i. Brown MR, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):G99–110

Autoregulation of muscarinic and gastrin receptors on gastric parietal cells. Chiba T, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):G356–63

Na-HCO3 cotransport in rabbit parietal cells. Townsley MC, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):G350–6

Inhibition of gastric acid secretion by epidermal growth factor. Effects on cyclic AMP and on prostaglandin production in rat isolated parietal cells. Hatt JF, et al.
Biochem J 1988 Nov 1;255(3):789–94

Arachidonic acid metabolism in isolated gastric mucous and parietal cells. Locher M, et al. **Biochim Biophys Acta** 1989 Jun 8;1003(2):196–200

Stimulation of inositol phosphate and diacylglycerol production by RHC 80267, a diacylglycerol-lipase inhibitor, in rat gastric parietal cells: effects on hydrogen ion secretion. Pfeiffer A, et al. **Biochim Biophys Acta** 1989 Feb 6;1001(2):191–5

A marker of acid-secreting membrane movement in rat gastric parietal cells. Mercier F, et al. **Biol Cell** 1989; 65(1):7–20

Carbohydrate antigen type 2 chain N-acetyllactosamine (2NAcLc) as a histological marker of rat parietal cells. Usumoto R, et al. **Gastroenterol Jpn** 1989 Aug;24(4):446

Acid activation of omeprazole in isolated gastric vesicles, oxyntic cells, and gastric glands. Morii M, et al.
Gastroenterology 1989 Jun;96(6):1453–61

Inhibition of acid formation in rabbit parietal cells by prostaglandins is mediated by the prostaglandin E2 receptor. Seidler U, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):314–20

Measurement of [14C]aminopyrine accumulation in isolated parietal cells [letter] Sewing KF, et al. **Gastroenterology** 1989 Jun;96(6):1625

Acid secretagogue-induced stimulation of gastric parietal cell gene expression. Campbell VW, et al. **J Biol Chem** 1989 Jul 5;264(19):11381–6

Activation of the Na+/H+ and Cl-/HCO3- exchange by stimulation of acid secretion in the parietal cell. Muallem S, et al. **J Biol Chem** 1988 Oct 15;263(29):14703–11

Fura 2 analysis of cytosolic calcium regulation in elutriated rat gastric parietal cells. Black EW, et al.
J Cell Physiol 1989 Jun;139(3):632–40

Heterogenous distribution of free calcium and propagation of calcium transient in gastric parietal cells revealed by digital imaging microscopy. Tsunoda Y, et al.
J Histochem Cytochem 1989 Jul;37(7):999–1005

Anion and cation channels in the basolateral membrane of rabbit parietal cells. Sakai H, et al. **Pflugers Arch** 1989 Jun; 414(2):185–92

Is the parietal cell the major source of gastric mucosal prostaglandin E2? Gerber JG. **Prostaglandins** 1988 Nov; 36(5):581–3 (13 ref.)

Prostaglandin E2 output is greater by isolated rat gastric parietal cells than non-parietal cells. Ota S, et al.
Prostaglandins 1988 Nov;36(5):585–7

Prostaglandin E2 output by isolated rat gastric parietal cells and non-parietal epithelial cells. Ota S, et al.
Prostaglandins 1988 Nov;36(5):589–600

Endocrine cells in the human oxyntic mucosa. A histochemical study. Simonsson M, et al.
Scand J Gastroenterol 1988 Nov;23(9):1089–99

Regulation of receptors on parietal cells on acid secretion. Bertaccini G, et al. **Scand J Gastroenterol Suppl** 1988; 146:22–33 (67 ref.)

Activation of apical chloride channels in the gastric oxyntic cell. Demarest JR, et al. **Science** 1989 Jul 28; 245(4916):402–4

PATHOLOGY

Time-course of development and reversal of gastric endocrine cell hyperplasia after inhibition of acid secretion. Studies with omeprazole and ranitidine in intact and antrectomized rats. Larsson H, et al. **Gastroenterology** 1988 Dec;95(6):1477–86

[Studies of secretory activity and pathomorphology of the gastric mucosa in taeniasis (Taenia saginata)] Stefaniak J. **Wiad Parazytol** 1989;35(2):93–114 (Eng. Abstr.) **(Pol)**

PHYSIOLOGY

Primary culture of secretagogue-responsive parietal cells from rabbit gastric mucosa. Chew CS, et al.
Am J Physiol 1989 Jan;256(1 Pt 1):G254–63

Sites of action of protein kinase C on secretory activity in rat parietal cells. Hatt JF, et al. **Am J Physiol** 1989 Jan; 256(1 Pt 1):G129–38

Interaction of signal transduction pathways in mediating acid secretion by rat parietal cells. Ostrowski J, et al.
Am J Physiol 1989 Apr;256(4 Pt 1):C873–9

Regulation of intracellular pH in resting and in stimulated parietal cells. Paradiso AM, et al. **Am J Physiol** 1989 Sep; 257(3 Pt 1):C554–61

Evidence for a chloride conductance in secretory membrane of parietal cells. Perez A, et al. **Am J Physiol** 1989 Feb; 256(2 Pt 1):G299–305

Effect of CO2 on pHi in rabbit parietal, chief, and surface cells. Seidler U, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G466–75

Characterization of an 80-kDa phosphoprotein involved in parietal cell stimulation. Urushidani T, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):G1070-81

Proton permeability and lipid dynamics of gastric and duodenal apical membrane vesicles. Wilkes JM, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G553-62

Physiology and pharmacology of the parietal cell. Helander HF. **Baillieres Clin Gastroenterol** 1988 Jul;2(3):539-54 (56 ref.)

Acid secretagogues induce Ca2+ mobilization coupled to K+ conductance activation in rat parietal cells in tissue culture. Ueda S, et al. **Biochim Biophys Acta** 1989 Aug 15;1012(3):254-60

Passive and active transport in the parietal cell. Sachs G, et al. **Comp Biochem Physiol [A]** 1988;90(4):727-31 (24 ref.)

Gastrin and the vagus interact in the trophic control of the rat oxyntic mucosa. Axelson J, et al. **Regul Pept** 1988 Aug; 22(3):237-43

SECRETION

Pharmacological properties of the hydroxylated histamine, (+/-)-4(5)-(2-amino-1-hydroxyethyl)-imidazole. Ishikawa T, et al. **Agents Actions** 1989 Mar;26(3-4):261-6

Acid-secretory response and parietal cell sensitivity in patients with duodenal ulcer before and after treatment with sucralfate or ranitidine. Marks IN, et al. **Am J Med** 1989 Jun 9;86(6A):145-7

Intracellular Ca requirements for stimulus-secretion coupling in parietal cell. Negulescu PA, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C241-51

Effect of pertussis toxin on the inhibition of secretory activity by prostaglandin E2, somatostatin, epidermal growth factor and 12-O-tetradecanoylphorbol 13-acetate in parietal cells from rat stomach. Atwell MM, et al. **Biochim Biophys Acta** 1988 Oct 7;971(3):282-8

cAMP- and calcium-mediated modulation of intrinsic factor secretion in isolated rabbit gastric glands. Ballantyne GH, et al. **J Surg Res** 1989 Mar;46(3):241-5

Pancreastatin: a novel peptide inhibitor of parietal cell secretion. Lewis JJ, et al. **Surgery** 1988 Dec;104(6):1031-6

ULTRASTRUCTURE

Immunological localization of an 80-kDa phosphoprotein to the apical membrane of gastric parietal cells. Hanzel DK, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):G1082-9

Ultrastructure of a neuroendocrine complex in oxyntic mucosa of normal human stomach. D'Adda T, et al. **Cell Tissue Res** 1988 Nov;254(2):465-7

Quantitative electron microscopy of endocrine cells in oxyntic mucosa of normal human stomach. D'Adda T, et al. **Cell Tissue Res** 1989 Jan;255(1):41-8

Ultrastructural changes in parietal cells in iron deficiency anemia. Gandhi VK, et al. **Indian J Gastroenterol** 1989 Jul; 8(3):163-4

Membrane-cytoskeleton dynamics in rat parietal cells: mobilization of actin and spectrin upon stimulation of gastric acid secretion. Mercier F, et al. **J Cell Biol** 1989 Feb;108(2):441-53

PARIETAL LOBE

MR and CT characteristics of gangliocytoma: a rare cause of epilepsy in children. Altman NR. **AJNR** 1988 Sep; 9(5):917-21

The effects of lesions of superior temporal gyrus and inferior parietal lobe on temporal and vertex components of the human AEP. Knight RT, et al. **Electroencephalogr Clin Neurophysiol** 1988 Dec; 70(6):499-509

Tactile sensibility in parietal lesions. Tegnér R. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):669-70

High-grade cerebral neuroblastoma: a case study. Wyche M, et al. **Med J Aust** 1989 May 1;150(9):505-7

Giant cerebral mycotic aneurysm: a case report. Cheah FK. **Med J Malaysia** 1987 Sep;42(3):204-6

[Multifocal gliomas in cerebral hemisphere associated with von Recklinghausen's disease: case report] Mukai K, et al. **No Shinkei Geka** 1989 Feb;17(2):197-202 (Eng. Abstr.) **(Jpn)**

[The occurrence of tyrosine hydroxylase-immunoreactive neurons in a parietal lobe ganglioglioma] Wakabayashi K, et al. **No To Shinkei** 1989 Feb;41(2):165-70 (Eng. Abstr.) **(Jpn)**

[Multi-infarct dementia clinically simulating dementia of Alzheimer type. A comparison with angular gyrus syndrome] Nitta E, et al. **Rinsho Shinkeigaku** 1989 Jan; 29(1):115-7 (Eng. Abstr.) **(Jpn)**

[Myelodysplastic syndromes and solid neoplasms. Presentation of a case showing an association of refractory anemia and glioblastoma multiforme (letter)] Pascual Velasco F, et al. **Med Clin (Barc)** 1989 May 6;92(17):676 **(Spa)**

ANATOMY & HISTOLOGY

Projections of the temporo-parietal cortex on vestibular complex in the macaque monkey (Macaca fascicularis). Ventre J, et al. **Exp Brain Res** 1988;72(3):653-8

Anatomic connections of inferior parietal cortex (area 7) with subcortical structures related to vestibulo-ocular function in a monkey (Macaca fascicularis). Faugier-Grimaud S, et al. **J Comp Neurol** 1989 Feb 1;280(1):1-14

[Quantitative characteristics of the inferior parietal cortical formation of the chimpanzee cerebrum] Kravchenko GS. **Arkh Anat Gistol Embriol** 1989 Jan;96(1):30-5 (Eng. Abstr.) **(Rus)**

[Projections of fields 5 and 7 in the subdivision of the sensorimotor area of the cat cerebral cortex] Ipekchian NM, et al. **Neirofiziologiia** 1988;20(3):319-26 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

Reverse pinocytosis induced in cerebral endothelial cells by injection of histamine into the cerebral ventricle. Dux E, et al. **Acta Neuropathol (Berl)** 1988;76(5):484-8

CYTOLOGY

Segregation and overlap of callosal and association neurons in frontal and parietal cortices of primates: a spectral and coherency analysis. Johnson PB, et al. **J Neurosci** 1989 Jul;9(7):2313-26

[Distribution of norepinephrine-containing neurons projecting to the parietal associative cortex and spinal cord in the cat locus coeruleus] Semeniutin AI, et al. **Neirofiziologiia** 1989;21(1):112-21 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Process elimination underlies ontogenetic change in the distribution of callosal projection neurons in the postcentral gyrus of the fetal rhesus monkey. Chalupa LM, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1076-9

ENZYMOLOGY

Reversal of carbon monoxide-cytochrome c oxidase binding by hyperbaric oxygen in vivo. Brown SD, et al. **Adv Exp Med Biol** 1989;248:747-54

GROWTH & DEVELOPMENT

Purinergic modulation of cortical acetylcholine release is decreased in aging rats. Giovannelli L, et al. **Exp Gerontol** 1988;23(3):175-81

Age-related change in the multiple unit activity of the rat brain parietal cortex and the effect of centrophenoxine. Roy D, et al. **Exp Gerontol** 1988;23(3):161-74

INJURIES

Manic-like state after bilateral orbitofrontal and right temporoparietal injury: efficacy of clonidine. Bakchine S, et al. **Neurology** 1989 Jun;39(6):777-81

METABOLISM

Intraventricular injections of galanin reduces 5-HT metabolism in the ventral limbic cortex, the hippocampal formation and the fronto-parietal cortex of the male rat. Fuxe K, et al. **Acta Physiol Scand** 1988 Aug;133(4):579-81

Arachidonic acid metabolism in ischemic neuronal damage. Abe K, et al. **Ann N Y Acad Sci** 1989;559:259-68

Inferior parietal region implicated in neurocognitive impairment in schizophrenia [letter] Cleghorn JM, et al. **Arch Gen Psychiatry** 1989 Aug;46(8):758-60

PATHOLOGY

Balint's syndrome in Alzheimer's disease: specific disruption of the occipito-parietal visual pathway. Hof PR, et al. **Brain Res** 1989 Jul 31;493(2):368-75

Audio-spatial deficits in humans: differential effects associated with left versus right hemisphere parietal damage. Pinek B, et al. **Cortex** 1989 Jun;25(2):175-86

Gliomatosis cerebri with formation of a glioblastoma multiform. Study and follow-up by magnetic resonance and computed tomography. Romero FJ, et al. **J Comput Tomogr** 1988 Oct;12(4):253-7

Bilateral posterior parietal atrophy in an infant rhesus monkey (Macaca mulatta). Brack M, et al. **J Med Primatol** 1989; 18(1):43-54

CT ring sign imitating tumour, disclosed as multiple sclerosis by MRI: a case report. Gütling E, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):903-6

Multiple, primary multifocal brain astrocytoma. Case report. Godlewski A, et al. **Neuropatol Pol** 1988;26(1):111-22

PHYSIOLOGY

Visual and eye movement functions of the posterior parietal cortex. Andersen RA. **Annu Rev Neurosci** 1989;12:377-403 (73 ref.)

Spatial cognitive maps: differential role of parietal cortex and hippocampal formation. DiMattia BD, et al. **Behav Neurosci** 1988 Aug;102(4):471-80

Retrospective and prospective coding of information: dissociation of parietal cortex and hippocampal formation. Kametani H, et al. **Behav Neurosci** 1989 Feb;103(1):84-9

Dissociation of item and order memory following parietal cortex lesions in the rat. Kesner RP, et al. **Behav Neurosci** 1989 Aug;103(4):907-10

Hemispheric asymmetry and emotion: lateralized parietal processing of affect and cognition. Smith BD, et al. **Biol Psychol** 1987 Dec;25(3):247-60

Inferior parietal lobule neurones related to eye and hand reach movements in rhesus monkey. Blum B. **Brain Behav Evol** 1989;33(2-3):104-8

Preparation of visually cued arm movements in monkey. Involvement of inferior parietal cortex. Godschalk M, et al. **Brain Behav Evol** 1989;33(2-3):122-6

Applying a model of saccadic prediction to patients' saccadic eye movements. Ron S, et al. **Brain Behav Evol** 1989; 33(2-3):179-82

Sensory and motor functions of the superior parietal cortex of the monkey as revealed by single-neuron recordings. Seal J. **Brain Behav Evol** 1989;33(2-3):113-7

Color and spatial error in block design in stone-age Auca Indians: ecological underuse of occipital-parietal system in men and of frontal lobes in women. Pontius AA. **Brain Cogn** 1989 May;10(1):54-75

The role of the teacher in learning-based models of parietal area 7a. Zipser D, et al. **Brain Res Bull** 1988 Sep; 21(3):505-12

The role of the posterior parietal cortex in coordinate transformations for visual-motor integration. Andersen RA, et al. **Can J Physiol Pharmacol** 1988 Apr;66(4):488-501

The representation of arm movements in postcentral and parietal cortex. Kalaska JF. **Can J Physiol Pharmacol** 1988 Apr;66(4):455-63 (58 ref.)

Neuronal activity in primate parietal cortex area 5 varies with intended movement direction during an instructed-delay period. Crammond DJ, et al. **Exp Brain Res** 1989;76(2):458-62

Unit activity in monkey parietal cortex related to haptic perception and temporary memory. Koch KW, et al. **Exp Brain Res** 1989;76(2):292-306

Influences of lesions of parietal cortex on visual spatial attention in humans. Petersen SE, et al. **Exp Brain Res** 1989;76(2):267-80

Deficits of visual attention and saccadic eye movements after lesions of parietooccipital cortex in monkeys. Lynch JC, et al. **J Neurophysiol** 1989 Jan;61(1):74-90

Effects of lesions of temporal-parietal junction on perceptual and attentional processing in humans. Robertson LC, et al. **J Neurosci** 1988 Oct;8(10):3757-69

Common cortical and subcortical targets of the dorsolateral prefrontal and posterior parietal cortices in the rhesus monkey: evidence for a distributed neural network subserving spatially guided behavior. Selemon LD, et al. **J Neurosci** 1988 Nov;8(11):4049-68

Differential effects of isoflurane on SEP recorded over parietal and frontal scalp. Nogueira MC, et al. **Neurology** 1989 Sep;39(9):1210-5

Interzonal transcallosal connections of the auditory and parietal cortex. Shramm VA, et al. **Neurosci Behav Physiol** 1989 Mar-Apr;19(2):156-63

Correlation between spike trains of neighboring cortical neurons during conditioning in cats. Varukha EA, et al. **Neurosci Behav Physiol** 1988 Sep-Oct;18(5):438-40

Mesencephalic dopamine innervation of the frontoparietal (sensorimotor) cortex of the rat: a microdialysis study. Herrera-Marschitz M, et al. **Neurosci Lett** 1989 Feb 27; 97(3):266-70

Responsiveness and somatotopic organization of anterior parietal field 3b and adjoining cortex in newborn and infant monkeys. Krubitzer LA, et al. **Somatosens Mot Res** 1988; 6(2):179-205

[Neurophysiological analysis of efferent-afferent interaction of neurons of the parietal associate cortex in cats] Pravdivtsev VA, et al. **Biull Eksp Biol Med** 1988 Oct; 106(10):403-5 (Eng. Abstr.) **(Rus)**

[Interzonal transcallosal connections of the visual and parietal cortices] Bianki VL, et al. **Fiziol Zh SSSR** 1988 Dec; 74(12):1705-13 (Eng. Abstr.) **(Rus)**

[The reaction of cat cervical spine interneurons to stimulation of the parietal zone of the cortex] Koreniuk II. **Fiziol Zh SSSR** 1989 Apr;75(4):447-56 (Eng. Abstr.) **(Rus)**

[Responses of the neurons of the parietal associative cortex of the cat brain to indifferent and conditioned acoustic stimuli] Afonskiĭ AS, et al. **Neirofiziologiia** 1988; 20(5):637-45 (Eng. Abstr.) **(Rus)**

[Reactions of the neurons of the parietal association cortex in the cat that send axons into the pyramidal tract to peripheral stimuli] Koreniuk II, et al. **Neirofiziologiia** 1988; 20(3):310-8 (Eng. Abstr.) **(Rus)**

[Anatomo-functional considerations on the pathways generated by cortical somatosensory evoked potentials of the median nerve. Study in 6 hemispherectomized patients] Villanueva J, et al. **Arch Neurobiol (Madr)** 1988 Nov-Dec; 51(6):316-23 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Role of the parietal cortex for sensorimotor transformation. Evidence from clinical observations. Pause M, et al. **Brain Behav Evol** 1989;33(2-3):136-40

Intermittently occurring right-posterior slow waves (IRP) in psychiatric patients. An electroencephalographic indicator of cerebral dysfunction. Ulrich G, et al. **Eur Arch Psychiatry Neurol Sci** 1988;237(5):258-63

Loss of unilateral eye closure and right parietal lesion [letter] Belin C, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul; 51(7):1008

The effect of frontoparietal lesions on stability and tremor in the finger. Cole JD, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1411-9

Parietal lobe mechanisms of spatial attention: modality-specific or supramodal? Farah MJ, et al. **Neuropsychologia** 1989;27(4):461-70

Unilateral attention deficits and hemispheric asymmetries in the control of visual attention. Làdavas E, et al. **Neuropsychologia** 1989;27(3):353–66

Attention and interference in the processing of global and local information: effects of unilateral temporal–parietal junction lesions. Lamb MR, et al. **Neuropsychologia** 1989; 27(4):471–83

Positive emotions and the right parietal cortex. Horton PC. **Psychiatr Clin North Am** 1988 Sep;11(3):461–74

Increased frontal and reduced parietal glucose metabolism in acute untreated schizophrenia. Cleghorn JM, et al. **Psychiatry Res** 1989 May;28(2):119–33

[Relation of electrophysiological indices in various degrees of negative disorders in patients with schizophrenia] Slezin VB, et al. **Zh Nevropatol Psikhiatr** 1989;89(1):87–91 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Nontraumatic parietal subcortical hemorrhage: clinical–computed tomographic correlations. Weisberg LA, et al. **Comput Med Imaging Graph** 1989 Jul–Aug; 13(4):355–61

Parietal cephaloceles: radiographic and magnetic resonance imaging evaluation. Curnes JT, et al. **Pediatr Neurosci** 1988; 14(2):71–6

[A case of extensive hemangioma of the brain] Ziąber J, et al. **Wiad Lek** 1988 Jun 15;41(12):809–12 (Eng. Abstr.) **(Pol)**

ULTRASTRUCTURE

Acinic cell carcinoma metastatic to the brain: case report and ultrastructural study. Watson PH, et al. **Head Neck Surg** 1987 Nov–Dec;10(2):118–23

[Characteristics of the synaptic apparatus of the parietal associative cortex (area 5b) in the cat brain] Serkov FN, et al. **Neirofiziologiia** 1989;21(2):174–85 (Eng. Abstr.) **(Rus)**

PARITY

Removal risks in Swedish Friesian dairy cows according to parity, stage of lactation, and occurrence of clinical mastitis. Bendixen PH, et al. **Acta Vet Scand** 1989; 30(1):37–42

Parity as a risk factor for cervical cancer. Brinton LA, et al. **Am J Epidemiol** 1989 Sep;130(3):486–96

Combined effect of childbearing, menstrual events, and body size on age-specific breast cancer risk. Kampert JB, et al. **Am J Epidemiol** 1988 Nov;128(5):962–79

The relation of reproductive history and parenthood to subsequent hypertension. Kritz-Silverstein D, et al. **Am J Epidemiol** 1989 Aug;130(2):399–403

Children, age at first birth, and colorectal cancer risk. Data from the Melbourne Colorectal Cancer Study. Kune GA, et al. **Am J Epidemiol** 1989 Mar;129(3):533–42

Re: "Combined effect of childbearing, menstrual events, and body size on age-specific breast cancer risk" [letter] Moolgavkar S, et al. **Am J Epidemiol** 1988 Nov; 128(5):1177–9

The radiographic preauricular groove: its non-relationship to past parity. Spring DB, et al. **Am J Phys Anthropol** 1989 Jun;79(2):247–52

Grandmultiparity: a continuing problem in developing countries. Aziz-Karim S, et al. **Asia Oceania J Obstet Gynaecol** 1989 Jun;15(2):155–60

Parity-associated reductions in behavioral sensitivity to opiates. Kinsley CH, et al. **Biol Reprod** 1988 Sep; 39(2):270–8

Reproductive factors and the risk of invasive and intraepithelial cervical neoplasia. Parazzini F, et al. **Br J Cancer** 1989 May;59(5):805–9

The effects of oral contraceptives and parity on ovarian cancer trends in women under 55 years of age. Villard-Mackintosh L, et al. **Br J Obstet Gynaecol** 1989 Jul;96(7):783–8

The influence of parity on the mode of delivery. Opaneye A. **Cent Afr J Med** 1988 Feb;34(2):26–8

The number of children, use of oral contraceptives and menopausal status in relation to the number of remaining teeth and the periodontal bone height. A population study of women in Gothenburg, Sweden. Halling A, et al. **Community Dent Health** 1989 Mar;6(1):39–45

Measuring sterility from incomplete birth histories. Larsen U, et al. **Demography** 1989 May;26(2):185–201

Dehydroepiandrosterone sulfate in postmenopausal women: lack of influence of parity. Carlström K, et al. **Gynecol Obstet Invest** 1989;28(1):35–7

Lymphocyte subpopulations in mother and newborn: correlation with sex of the newborn and number of pregnancies. Komlos L, et al. **Gynecol Obstet Invest** 1989; 27(3):143–7

Down syndrome. Seasonality and parity effects. Källén B, et al. **Hereditas** 1988;109(1):21–7

The influence of parity and exogenous female hormones on the risk of colorectal cancer. Davis FG, et al. **Int J Cancer** 1989 Apr 15;43(4):587–90

A prospective study of the independent effects of parity and age at first birth on breast cancer incidence in England and Wales. Leon DA. **Int J Cancer** 1989 Jun 15; 43(6):986–91

Parity and perinatal mortality amongst diabetics in a Nigerian Teaching Hospital. Oli JM, et al. **Int J Fertil** 1986 Mar–Apr;31(1):50–5

The third birth in Great Britain. Wright RE, et al. **J Biosoc Sci** 1988 Oct;20(4):489–96

Relationship of maternal height and weight at first prenatal visit with type of delivery in primipara. Pongthai S, et al. **J Med Assoc Thai** 1988 Jul;71 Suppl 2:12–5

Breast-milk fatty acids of rural Gambian mothers: effects of diet and maternal parity. Prentice A, et al. **J Pediatr Gastroenterol Nutr** 1989 May;8(4):486–90

Stimulus requirements for pregnancy initiation in the golden hamster (Mesocricetus auratus) change with age and parity. Huck UW, et al. **J Reprod Fertil** 1988 Nov;84(2):457–60

Measurement of the force necessary for laparoscopic trocar entry [letter] Moreno HS. **J Reprod Med** 1989 Jul;34(7):12

Management of spontaneous rupture of the membranes and no uterine activity in healthy primigravidae after 34 weeks' gestation [letter] Mahmood TA, et al. **Lancet** 1989 Apr 1;1(8640):721

Parity as prognostic factor for malignant mixed müllerian tumours [letter] Marth C, et al. **Lancet** 1989 Apr 29; 1(8644):957

"Madame A is a 30-year-old housewife, gravida X, para Y ...". Pun TC, et al. **Obstet Gynecol** 1989 Feb;73(2):276–7

Parity specific perinatal mortality. A longitudinal study based on sibships. Skjaerven R, et al. **Paediatr Perinat Epidemiol** 1987 Sep;1(2):163–83

Infants' face-recognition by primiparous and multiparous women. Kaitz M, et al. **Percept Mot Skills** 1988 Oct; 67(2):495–502

Are nulliparous sandflies light-shy? Gibb PA, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):342–3

Complications of grand multiparity. Roopnarinesingh S, et al. **West Indian Med J** 1988 Dec;37(4):222–5

[The course of delivery in a group a low-risk primipara women] Ersbak V, et al. **Ugeskr Laeger** 1989 May 15; 151(20):1234–6 (Eng. Abstr.) **(Dan)**

[Effect of parity on the venous system of the leg] Karl C, et al. **Geburtshilfe Frauenheilkd** 1989 Jan;49(1):49–52 (Eng. Abstr.) **(Ger)**

[Use of the new East German percentiles in the classification of newborn infants] Jährig K, et al. **Zentralbl Gynakol** 1989; 111(6):350–5 (Eng. Abstr.) **(Ger)**

[East German percentile values for newborn infants—1985 relation of age, parity, body weight and height of the mother and the birth weight of newborn infants] Voigt M, et al. **Zentralbl Gynakol** 1989;111(6):337–49 (Eng. Abstr.) **(Ger)**

[Observation of a patient with preserved reproductive function after surgical treatment of dysgerminoma] Egorova EV, et al. **Akush Ginekol (Mosk)** 1988 Nov; (11):65–6 **(Rus)**

[The system for identifying groups at risk of delivering large fetuses] Mezinova NN, et al. **Akush Ginekol (Mosk)** 1988 Jul;(7):64–5 **(Rus)**

[Effect of birth intervals on the course of pregnancy and labor in women and the health status of children] Ukybasova TM. **Akush Ginekol (Mosk)** 1988 Jun;(6):66–7 **(Rus)**

[Reproductive function of women and risk of the development of breast cancer] Levshin VF. **Vopr Onkol** 1988;34(10):1178–82 (Eng. Abstr.) **(Rus)**

PARKING FACILITIES see under **FACILITY DESIGN AND CONSTRUCTION**

PARKINSON DISEASE

Parkinsonism and the anaesthetist [see comments] Severn AM. **Br J Anaesth** 1988 Dec;61(6):761–70 (77 ref.). **Comment in:** Br J Anaesth 1989 May;62(5):580–1

Clozapine: an antipsychotic agent in Parkinson's disease? Wolters EC, et al. **Clin Neuropharmacol** 1989 Apr; 12(2):83–90 (51 ref.)

3rd Symposium on a Long Term Clinical Care of Parkinson's Disease. Tokyo, April 23, 1988. Proceedings. **Eur Neurol** 1989;29 Suppl 1:1–38

Toward a definition of Parkinson's disease. Duvoisin RC, et al. **Neurology** 1989 May;39(5):746

Nursing care of patients with Parkinson's disease. Szigeti E. **Neurosci Biobehav Rev** 1988 Fall-Winter;12(3–4):307–9

BLOOD

The lack of effect of succinylcholine on serum potassium in patients with Parkinson's disease [letter] Muzzi DA, et al. **Anesthesiology** 1989 Aug;71(2):322

Levodopa and 3-O-methyldopa plasma levels in parkinsonian patients with stable and fluctuating motor response. Luquin MR, et al. **Clin Neuropharmacol** 1989 Feb; 12(1):46–54

Exercise and the antiparkinsonian response to levodopa. Mouradian MM, et al. **Clin Neuropharmacol** 1987 Aug; 10(4):351–5

Relation of blood serotonin and benzylamine oxidase to clinical symptoms and prognosis in Parkinson's disease. Ishizaki F, et al. **Eur Neurol** 1988;28(5):291–4

Improved high-performance liquid chromatographic analysis with double detection system for L-dopa, its metabolites and carbidopa in plasma of parkinsonian patients under L-dopa therapy. Betto P, et al. **J Chromatogr** 1988 Dec 28;459:341–9

Platelet monoamine oxidase in Parkinson patients: effect of L-deprenyl therapy. Lee DH, et al. **J Neural Transm Park Dis Dement Sect** 1989;1(3):189–94

Overcoming pharmacokinetic problems in the treatment of Parkinson's disease. Obeso JA, et al. **Mov Disord** 1989;4 Suppl 1:S70–85 (64 ref.)

[Use of biological markers in depression in the elderly] Meco G, et al. **Minerva Psichiatr** 1988 Oct–Dec;29(4):175–8 (Eng. Abstr.) **(Ita)**

CEREBROSPINAL FLUID

Cerebrospinal fluid homovanillic acid and parkinsonism in Huntington's disease. Kurlan R, et al. **Ann Neurol** 1988 Aug;24(2):282–4

Alpha-melanocyte-stimulating hormonelike immunoreactivity is increased in cerebrospinal fluid of patients with Parkinson's disease. Rainero I, et al. **Arch Neurol** 1988 Nov;45(11):1224–7

Immunoreactive substance P and somatostatin in the cerebrospinal fluid of senile parkinsonian patients. Cramer H, et al. **Eur Neurol** 1989;29(1):1–5

Cerebrospinal fluid indices of blood-brain barrier permeability following adrenal-brain transplantation in patients with Parkinson's disease. Ahlskog JE, et al. **Exp Neurol** 1989 Aug;105(2):152–61

Cerebrospinal fluid GABA and homocarnosine concentrations in patients with Friedreich's ataxia, Parkinson's disease, and Huntington's chorea. Bonnet AM, et al. **Mov Disord** 1987;2(2):117–23

[Somatostatin and substance P in the cerebrospinal fluid in various neurological diseases] Harigaya Y, et al. **Rinsho Shinkeigaku** 1988 Aug;28(8):891–6 (Eng. Abstr.) **(Jpn)**

CLASSIFICATION

Progression of Parkinson's disease [letter] Weiner WJ, et al. **Neurology** 1989 Aug;39(8):1139

COMPLICATIONS

Clozapine treatment of drug-induced psychotic symptoms in late stages of Parkinson's disease [letter] Ostergaard K, et al. **Acta Neurol Scand** 1988 Oct;78(4):349–50

Diabetic gastroparesis in a patient with Parkinson's disease: effective treatment with domperidone [letter] Day JP, et al. **Am J Gastroenterol** 1989 Jul;84(7):837–8

The olfactory and cognitive deficits of Parkinson's disease: evidence for independence. Doty RL, et al. **Ann Neurol** 1989 Feb;25(2):166–71

Pathogenesis of dyskinesias in Parkinson's disease. Mouradian MM, et al. **Ann Neurol** 1989 May;25(5):523–6

Clinical and pathological aspects of parkinsonism in Alzheimer's disease. A role for extranigral factors? Morris JC, et al. **Arch Neurol** 1989 Jun;46(6):651–7

Use of a gum shield for Parkinson's disease patients [letter] Hussein SB. **Br Dent J** 1989 May 6;166(9):320

Parkinsonism and the anaesthetist [letter; comment] Ho AM. **Br J Anaesth** 1989 May;62(5):580–1. **Comment on:** Br J Anaesth 1988 Dec;61(6):761–70

A survey of headache in Parkinson's disease. Lorentz IT. **Cephalalgia** 1989 Jun;9(2):83–6

The dementia of Parkinson's disease. Mortimer JA. **Clin Geriatr Med** 1988 Nov;4(4):785–97 (77 ref.)

Falls and Parkinson's disease. Koller WC, et al. **Clin Neuropharmacol** 1989 Apr;12(2):98–105

Bradykinesia in Parkinson's disease: disorders of onset and execution of fast movement. Yanagisawa N, et al. **Eur Neurol** 1989;29 Suppl 1:19–28 (41 ref.)

3-Acetylpyridine-induced degeneration of the nigrostriatal dopamine system: an animal model of olivopontocerebellar atrophy-associated parkinsonism. Deutch AY, et al. **Exp Neurol** 1989 Jul;105(1):1–9

Semantic memory in DAT, MID and parkinsonism. Fisher P, et al. **Funct Neurol** 1988 Jul–Sep;3(3):301–7

Serotonergic mechanisms in levodopa-induced "on–off" and sleep disorders in Parkinson's disease. Sandyk R. **Int J Neurosci** 1988 Dec;43(3–4):207–13

Kinematic, acoustic, and perceptual analyses of connected speech produced by parkinsonian and normal geriatric adults. Forrest K, et al. **J Acoust Soc Am** 1989 Jun; 85(6):2608–22

Total knee arthroplasty in the patient with Parkinson's disease. Vince KG, et al. **J Bone Joint Surg [Br]** 1989 Jan; 71(1):51–4

Frozen shoulder and other shoulder disturbancies in Parkinson's disease [letter] Cleeves L, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):813–4

Hand contractures in Parkinson's disease. Kyriakides T, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1221–3

Parkinsonism manifesting depression as the first sign. Kuniyoshi M, et al. **Jpn J Psychiatry Neurol** 1989 Mar; 43(1):37–43

Benign type of malignant syndrome [letter] **Lancet** 1989 Jan 7;1(8628):49–50

Role of subcutaneous apomorphine in parkinsonian voiding dysfunction. Christmas TJ, et al. **Lancet** 1988 Dec 24–31; 2(8626–8627):1451–3

Isoniazid therapy in Parkinson's disease. Gershanik OS, et al. **Mov Disord** 1988;3(2):133–9

Pain in Parkinson's disease. Goetz CG, et al. **Mov Disord** 1986;1(1):45–9

Parkinsonism following dystonia in three patients. Katchen M, et al. **Mov Disord** 1986;1(2):151–7

The relationship of serotonin to depression in Parkinson's disease. Mayeux R, et al. **Mov Disord** 1988;3(3):237–44
Tics in a patient with Parkinson's disease. Shale H, et al. **Mov Disord** 1986;1(1):79–83
Hemiparkinsonism and hemiatrophy [letter] Jankovic J. **Neurology** 1988 Nov;38(11):1815–6
The nucleus basalis of Meynert in parkinsonism–dementia of Guam: a morphometric study. Masullo C, et al. **Neuropathol Appl Neurobiol** 1989 May–Jun;15(3):193–206
Voiding dysfunction in Parkinson's disease. Sotolongo JR Jr. **Semin Neurol** 1988 Summer;8(2):166–9 (10 ref.)
Urinary incontinence in female Parkinson disease patients. Pitfalls of diagnosis. Khan Z, et al. **Urology** 1989 Jun; 33(6):486–9
[Efficacy of tropatepine in paroxysmal sweats in a parkinsonian patient (letter)] Devoize JL, et al. **Presse Med** 1989 May 27;18(21):1079 **(Fre)**
[Parkinson's disease and inappropriate antidiuretic hormone secretion syndrome] Dano P. **Rev Neurol (Paris)** 1988; 144(12):323–5 (20 ref.) (Eng. Abstr.) **(Fre)**
[Dysarthrophonia of Parkinson syndrome] Ackermann H, et al. **Fortschr Neurol Psychiatr** 1989 Apr;57(4):149–60 (150 ref.) (Eng. Abstr.) **(Ger)**
[Iterative dysarthria in Parkinson disease] Machetanz J, et al. **Nervenarzt** 1988 Sep;59(9):559–61 (27 ref.) (Eng. Abstr.) **(Ger)**
[Parkinson's disease associated with trihexyphenidyl (THP) induced dysphonia plicae ventricularis] Yamamoto K, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):423–5 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Disability profiles and objective quantitative assessment in Parkinson's disease. Johnels B, et al. **Acta Neurol Scand** 1989 Mar;79(3):227–38
Essential tremor and Parkinson's disease [letter] Jankovic J. **Ann Neurol** 1989 Feb;25(2):211–2
The influence of speaking rate on articulatory hypokinesia in parkinsonian dysarthria. Caligiuri MP. **Brain Lang** 1989 Apr;36(3):493–502
Magnetic resonance imaging and extrapyramidal movement disorders. Drayer BP. **Eur Neurol** 1989;29 Suppl 1:9–12
Parkinson's mime. Kedas A, et al. **Geriatr Nurs (New York)** 1989 Jul–Aug;10(4):182–3
Multiple system atrophy—the nature of the beast. Quinn N. **J Neurol Neurosurg Psychiatry** 1989 Jun;Suppl:78–89 (71 ref.)
Apomorphine test for dopaminergic responsiveness [letter; comment] **Lancet** 1989 Jun 3;1(8649):1262–3. **Comment on:** Lancet 1989 Mar 25;1(8639):675
Levodopa dose–related fluctuations in presumed olivopontocerebellar atrophy. Lang AE, et al. **Mov Disord** 1986;1(2):93–102
Stop consonant production in isolated and repeated syllables in Parkinson's disease. Connor NP, et al. **Neuropsychologia** 1989;27(6):829–38
Accuracy in the clinical diagnosis of parkinsonian syndromes. Gibb WR. **Postgrad Med J** 1988 May;64(751):345–51 (57 ref.)
[Alzheimer's disease and Parkinson's disease: neuropsychological differentiation] Lavernhe G, et al. **Rev Neurol (Paris)** 1989;145(1):24–30 (56 ref.) (Eng. Abstr.) **(Fre)**
[Applications and uses of static and dynamic measurement of posture (posturography)] Diener HC, et al. **Fortschr Neurol Psychiatr** 1988 Aug;56(8):249–58 (86 ref.) (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Tetrahydrobiopterin and Parkinson's disease. Dissing IC, et al. **Acta Neurol Scand** 1989 Jun;79(6):493–9
The prevalence and aetiology of long–term L–dopa side–effects in elderly parkinsonian patients. Wilson JA, et al. **Age Ageing** 1989 Jan;18(1):11–6
Nicotinamidadenindinucleotide (NADH): the new approach in the therapy of Parkinson's disease. Birkmayer W, et al. **Ann Clin Lab Sci** 1989 Jan–Feb;19(1):38–43
Controlled–release carbidopa–levodopa (Sinemet) in combination with standard Sinemet in advanced Parkinson's disease. Mark MH, et al. **Ann Clin Lab Sci** 1989 Mar–Apr;19(2):101–6
Role of dopamine receptors in neurological drug treatment. Rinne UK. **Ann Clin Res** 1988;20(5):334–9
Peripheral pharmacokinetics of apomorphine in humans. Gancher ST, et al. **Ann Neurol** 1989 Aug;26(2):232–8
Levodopa therapy and motor fluctuations in Parkinson's disease [letter] Obeso JA, et al. **Ann Neurol** 1988 Nov; 24(5):696–7
Pleuropulmonary disease during bromocriptine treatment of Parkinson's disease. McElvaney NG, et al. **Arch Intern Med** 1988 Oct;148(10):2231–6
Bromocriptine and pleuropulmonary disease [editorial] Melmed S, et al. **Arch Intern Med** 1989 Feb;149(2):258–9
Intracerebroventricular infusion of dopamine and its agonists in rodents and primates. An experimental approach to the treatment of Parkinson's disease. Garcia de Yebenes J, et al. **ASAIO Trans** 1988 Oct–Dec;34(4):951–7
Serial cognitive profiles in levodopa–induced hypersexuality. Harvey NS. **Br J Psychiatry** 1988 Dec;153:833–6
Parkinson's disease [see comments] Wolters EC, et al. **Can Med Assoc J** 1989 Mar 1;140(5):507–14 (60 ref.).
Comment in: Can Med Assoc J 1989 Jun 1;140(11):1268
Pleuropulmonary involvement during bromocriptine treatment. Kinnunen E, et al. **Chest** 1988 Nov;94(5):1034–6
Reversibility of upper airway obstruction after levodopa therapy in Parkinson's disease. Vincken WG, et al. **Chest** 1989 Jul;96(1):210–2
Pregnancy and parkinsonism. A case report without problem. Allain H, et al. **Clin Neuropharmacol** 1989 Jun;12(3):217–9
The promise and limitations of controlled–release oral levodopa administration. Cedarbaum JM. **Clin Neuropharmacol** 1989 Jun;12(3):147–66 (75 ref.)
A strategy for measuring the therapeutic properties of new antiparkinsonian drugs, such as +PHNO, in patients with on–off fluctuations. Coleman RJ, et al. **Clin Neuropharmacol** 1989 Feb;12(1):37–45
Increased dosage of carbidopa in parkinsonian patients on low carbidopa–levodopa regimen. Effect on levodopa bioavailability. Contin M, et al. **Clin Neuropharmacol** 1989 Feb;12(1):75–81
Idiopathic Parkinson's disease in a chronic schizophrenic patient: long–term treatment with clozapine and L–dopa. Friedman JH, et al. **Clin Neuropharmacol** 1987 Oct; 10(5):470–5
An open trial of controlled release carbidopa/L–dopa (sinemet CR) for the treatment of mild–to–moderate Parkinson's disease. Friedman JH, et al. **Clin Neuropharmacol** 1989 Jun;12(3):220–3
Deprenyl as symptomatic therapy in Parkinson's disease. Golbe LI. **Clin Neuropharmacol** 1988 Oct;11(5):387–400 (72 ref.)
Hallucinations and confusion after pergolide withdrawal. McHale DM, et al. **Clin Neuropharmacol** 1988 Dec; 11(6):545–8
Piribedil therapy in Parkinson's disease. Use of the drug in the retard form. Mentenopoulos G, et al. **Clin Neuropharmacol** 1989 Feb;12(1):23–8
Double–blind controlled study of pergolide mesylate in the treatment of Parkinson's disease. Olanow CW, et al. **Clin Neuropharmacol** 1987 Apr;10(2):178–85
Combined L–dopa and bromocriptine therapy for Parkinson's disease: a proposed mechanism of action. Robertson HA, et al. **Clin Neuropharmacol** 1987 Aug;10(4):384–7
The antiparkinsonian activity of CQA 206–291, a new D2 dopamine receptor agonist. Temlett JA, et al. **Clin Neuropharmacol** 1989 Feb;12(1):55–9
Low–dose bromocriptine in the early phases of Parkinson's disease. Tolosa E, et al. **Clin Neuropharmacol** 1987 Apr; 10(2):168–74
Clinical trial on the use of cytidine diphosphate choline in Parkinson's disease. Cubells JM, et al. **Clin Ther** 1988; 10(6):664–71
Medical treatment of Parkinson's disease. Ahlskog JE. **Compr Ther** 1989 Mar;15(3):53–9 (14 ref.)
Terguride in parkinsonism. A multicenter trial. Filipová M, et al. **Eur Arch Psychiatry Neurol Sci** 1988;237(5):298–303
Influence of dopamine and disease severity on primitive reflexes in Parkinson's disease. Huber SJ, et al. **Eur Neurol** 1989;29(3):141–4
Second interim report of the nation–wide collaborative study on the long–term effects of bromocriptine in the treatment of parkinsonian patients. Nakanishi T, et al. **Eur Neurol** 1989;29 Suppl 1:3–8
Ludiomil in parkinsonism (EMG and clinical study). Baykoushev S, et al. **Folia Med (Plovdiv)** 1987;29(4):5–6
Motor response complications in advanced Parkinson's disease. Chase TN, et al. **Funct Neurol** 1988 Oct–Dec; 3(4):429–36 (43 ref.)
Factors influencing dopaminergic therapy of Parkinson's disease. Horowski R. **Funct Neurol** 1988 Oct–Dec; 3(4):459–70 (31 ref.)
Continuous dopaminergic stimulation for Parkinson's disease: facts and fancy. Obeso JA, et al. **Funct Neurol** 1988 Oct–Dec;3(4):413–27 (53 ref.)
Pharmacological strategies for controlling motor fluctuations in Parkinson's disease. Ruggieri S, et al. **Funct Neurol** 1988 Oct–Dec;3(4):471–9 (17 ref.)
Optimization of symptomatic therapy in Parkinson's disease. Hacisalihzade SS, et al. **IEEE Trans Biomed Eng** 1989 Mar; 36(3):363–72
L–tryptophan supplementation in Parkinson's disease. Sandyk R, et al. **Int J Neurosci** 1989 Apr;45(3–4):215–9
Treatment of idiopathic parkinsonism with L–dopa in the absence and presence of decarboxylase inhibitors: effects on plasma levels of L–dopa, dopa decarboxylase, catecholamines and 3–O–methyl–dopa. Boomsma F, et al. **J Neurol** 1989 May;236(4):223–30
Amantadine sulphate in treating Parkinson's disease: clinical effects, psychometric tests and serum concentrations. Brenner M, et al. **J Neurol** 1989 Mar;236(3):153–6
Bromocriptine in Parkinson's disease: a double–blind study comparing "low–slow" and "high–fast" introductory dosage regimens in de novo patients. UK Bromocriptine Research Group. **J Neurol Neurosurg Psychiatry** 1989 Jan; 52(1):77–82
Palilalia as a symptom of levodopa induced hyperkinesia in Parkinson's disease [letter] Ackermann H, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):805–7
A double–blind crossover comparison of Sinemet CR4 and standard Sinemet 25/100 in patients with Parkinson's disease and fluctuating motor performance. Cedarbaum JM, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):207–12
Effect of tropatepine, an anticholinergic drug, on regional cerebral blood flow in patients with Parkinson's disease [letter] Celsis P, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):917–8
Efficacy of sinemet CR4 in subgroups of patients with Parkinson's disease. Factor SA, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):83–8
The Sydney Multicentre Study of Parkinson's disease: a report on the first 3 years. Hely MA, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):324–8
Levodopa peripheral pharmacokinetics and duration of motor response in Parkinson's disease. Kempster PA, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):718–23
The on–off phenomenon. Lees AJ. **J Neurol Neurosurg Psychiatry** 1989 Jun;Suppl:29–37 (55 ref.)
A randomised controlled study of bromocriptine versus levodopa in previously untreated Parkinsonian patients: a 3 year follow–up. Montastruc JL, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):773–5
Influence of fluctuations of plasma large neutral amino acids with normal diets on the clinical response to levodopa. Nutt JG, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr; 52(4):481–7
Subcutaneous apomorphine in Parkinson's disease [letter] Pollak P, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr; 52(4):544
The efficacy of (+)–4–propyl–9–hydroxynaphthoxazine as adjunctive therapy in Parkinson's disease. Weiner WJ, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):732–5
Unresponsiveness to L–DOPA in parkinsonian patients: a study of homovanillic acid concentration in the cerebrospinal fluid. Nishi K, et al. **J Neurol Sci** 1989 Aug; 92(1):65–70
Favorable effect of catechol–O–methyltransferase inhibition by OR–462 in experimental models of Parkinson's disease. Lindén IB, et al. **J Pharmacol Exp Ther** 1988 Oct; 247(1):289–93
Should levodopa therapy for Parkinson's disease be started early or late? Clinical course of the major tetrad in 122 parkinsonian patients treated with levodopa over 14 years. Indo T, et al. **Jpn J Med** 1989 Jan–Feb;28(1):30–3
Subcutaneous apomorphine for on–off oscillations in Parkinson's disease [letter] Chaudhuri KR, et al. **Lancet** 1988 Nov 26;2(8622):1260
Treatment of Parkinson's disease with novel dopamine D2 agonist SK&F 101468 [letter] Kapoon R, et al. **Lancet** 1989 Jun 24;1(8652):1445–6
Neuroleptic malignant–like syndrome and lithium [letter] Koehler PJ, et al. **Lancet** 1988 Dec 24–31; 2(8626–8627):1499–500
Side–effects of subcutaneous apomorphine in Parkinson's disease [letter] Poewe W, et al. **Lancet** 1989 May 13; 1(8646):1084–5
Side–effects of subcutaneous apomorphine in Parkinson's disease [letter] Ruggieri S, et al. **Lancet** 1989 Mar 11; 1(8637):566
Jejunal delivery of levodopa methyl ester [letter] Ruggieri S, et al. **Lancet** 1989 Jul 1;2(8653):45–6
Severe oedema after subcutaneous apomorphine in Parkinson's disease [letter] Vermersch P, et al. **Lancet** 1989 Sep 30;2(8666):802
The mechanisms of action of L–dopa in Parkinson's disease. Hornykiewicz O. **Life Sci** 1974 Oct 1;15(7):1249–59 (46 ref.)
Pergolide: long–term use in Parkinson's disease. Ahlskog JE, et al. **Mayo Clin Proc** 1988 Oct;63(10):979–87
Treatment of Parkinson's disease with pergolide: a double–blind study. Ahlskog JE, et al. **Mayo Clin Proc** 1988 Oct;63(10):969–78
Treatment of Parkinson's disease. Lieberman AN. **Mayo Clin Proc** 1988 Oct;63(10):1046–9
Pergolide and selegiline for Parkinson's disease. **Med Lett Drugs Ther** 1989 Sep 8;31(800):81–3
Drugs for parkinsonism. **Med Lett Drugs Ther** 1988 Dec 16; 30(781):113–6
Long term bromocriptine treatment in de novo parkinsonian patients. Herskovits E, et al. **Medicina (B Aires)** 1988; 48(4):345–50
Controversies in the management of Parkinson's disease. Calne DB, et al. **Mov Disord** 1986;1(3):159–62 (18 ref.)
The antiparkinsonian actions and pharmacokinetics of transdermal (+)–4–propyl–9–hydroxynaphthoxazine (+PHNO): preliminary results. Coleman RJ, et al. **Mov Disord** 1989;4(2):129–38
Dementia and treatment with L–dopa in Parkinson's disease. Hietanen M, et al. **Mov Disord** 1988;3(3):263–70
Off–period belching due to a reversible disturbance of oesophageal motility in Parkinson's disease and its treatment with apomorphine. Kempster PA, et al. **Mov Disord** 1989;4(1):47–52
Individual manifestations of Parkinson's disease after ten or more years of levodopa. Klawans HL. **Mov Disord** 1986; 1(3):187–92
Sudden confusion with levodopa withdrawal [letter] Lang AE. **Mov Disord** 1987;2(3):223
Levodopa–induced regional cerebral blood flow changes in normal volunteers and patients with Parkinson's disease. Lack of correlation with clinical or neuropsychological improvements. Montastruc JL, et al. **Mov Disord** 1987; 2(4):279–89
Madopar HBS in fluctuating parkinsonian patients: two–year treatment. Pezzoli G, et al. **Mov Disord** 1988;3(1):37–45

CQP 201-403 in Parkinson's disease: an open-label pilot study. Pfeiffer RF, et al. **Mov Disord** 1989;4(3):278-81
Effects of etybenzatropine and diazepam on levodopa-induced diphasic dyskinesias in Parkinson's disease. Pourcher E, et al. **Mov Disord** 1989;4(3):195-201
Preservation of the substantia nigra and locus coeruleus in a patient receiving levodopa (2 kg) plus decarboxylase inhibitor over a four-year period. Quinn N, et al. **Mov Disord** 1986;1(1):65-8
Early dopamine agonist therapy in Parkinson's disease. Rinne UK. **Mov Disord** 1989;4 Suppl 1:S86-94
Comparison between L-dopa and lisuride intravenous infusions: a clinical study. Ruggieri S, et al. **Mov Disord** 1988;3(4):313-9
Antiparkinsonian activity of CY 208-243, a partial D-1 dopamine receptor agonist, in MPTP-treated marmosets and patients with Parkinson's disease. Temlett JA, et al. **Mov Disord** 1989;4(3):261-5
A double-blind evaluation of ciladopa in Parkinson's disease. Weiner WJ, et al. **Mov Disord** 1987;2(3):211-7
Comparative efficacy of two dopamine agonists, pergolide and lergotrile, in Parkinson disease. Lieberman AN, et al. **N Y State J Med** 1988 Aug;88(8):420-2
Amount and distribution of dietary protein affects clinical response to levodopa in Parkinson's disease. Carter JH, et al. **Neurology** 1989 Apr;39(4):552-6
Clozapine in the treatment of psychosis in Parkinson's disease. Friedman JH, et al. **Neurology** 1989 Sep;39(9):1219-21
Inhibitory action of L-dopa [letter] Gershanik OS, et al. **Neurology** 1989 Aug;39(8):1137
Agonist substitution in advanced Parkinson's disease. Goetz CG, et al. **Neurology** 1989 Aug;39(8):1121-2
Long-term efficacy and safety of deprenyl (selegiline) in advanced Parkinson's disease. Golbe LI. **Neurology** 1989 Aug;39(8):1109-11
Spatial disorientation in Parkinson's disease: no effect of levodopa substitution therapy. Hovestadt A, et al. **Neurology** 1988 Nov;38(11):1802-3
Amitriptyline in the treatment of headache in patients with Parkinson's disease: a double-blind placebo-controlled study. Indaco A, et al. **Neurology** 1988 Nov;38(11):1720-2
Physiology and pharmacology of dopamine D2-receptors: their implications in dopamine-substitute therapy for Parkinson's disease. Mercuri NB, et al. **Neurology** 1989 Aug;39(8):1106-8
Lisuride, a dopamine agonist in the treatment of early Parkinson's disease. Rinne UK. **Neurology** 1989 Mar; 39(3):336-9
Continuous levodopa infusions to treat complex dystonia in Parkinson's disease. Sage JI, et al. **Neurology** 1989 Jul; 39(7):888-91
A double-blind, placebo-controlled, dose-ranging study to investigate the safety and efficacy of CY 208-243 in patients with Parkinson's disease. Tsui JK, et al. **Neurology** 1989 Jun;39(6):856-8
One year treatment with lisuride delivery pump in Parkinson's disease. Ruggieri S, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1-2):173-83
Parkinson's disease, depression, and the on-off phenomenon. Friedenberg DL, et al. **Psychosomatics** 1989 Winter; 30(1):94-9
Big first scored with nerve diseases [news] Lewin R. **Science** 1989 Aug 4;245(4917):467-8
The effect of deprenyl (selegiline) on the natural history of Parkinson's disease. Tetrud JW, et al. **Science** 1989 Aug 4;245(4917):519-22
Practical therapy of Parkinson's disease. Kurlan R. **Semin Neurol** 1987 Jun;7(2):160-6 (21 ref.)
[L-tyrosine: a long term treatment of Parkinson's disease] Lemoine P, et al. **C R Acad Sci [III]** 1989;309(2):43-7 (Eng. Abstr.) **(Fre)**
[Bromocriptine versus levodopa in the early treatment of Parkinson's disease. 1st results after 2 years] Montastruc JL, et al. **Therapie** 1988 Oct-Dec;43(6):461-3 (Eng. Abstr.) **(Fre)**
[The problems of L-dopa therapy in the course of Parkinson syndrome] Emskötter T, et al. **Fortschr Neurol Psychiatr** 1989 May;57(5):192-7 (Eng. Abstr.) **(Ger)**
[Therapeutic experiences with a slow-release preparation of L-dopa (Madopar "HBS") in patients with advanced Parkinson disease] Poewe W, et al. **Nervenarzt** 1989 May; 60(5):294-8 **(Ger)**
[An open study of a new formulation of the levodopa and benserazide combination in the treatment of fluctuations of motor performance in patients with Parkinson's disease] Pezzoli G, et al. **Clin Ter** 1988 Apr 30;125(2):115-20 (Eng. Abstr.) **(Ita)**
[On-off phenomena in Parkinson's disease. Continuous dopaminergic stimulation] Stocchi F, et al. **Clin Ter** 1987 Jul 31;122(2):83-8 (Eng. Abstr.) **(Ita)**
[Long-term therapy of Parkinson's disease] Yanagisawa N. **Nippon Naika Gakkai Zasshi** 1988 Sep;77(9):1378-82 **(Jpn)**
[Pathogenic substances in Parkinson disease and new therapeutics considering the etiologic mechanism] Nagatsu T. **Nippon Rinsho** 1988 Sep;46(9):2086-97 (21 ref.) **(Jpn)**
[L-dopa, biperiden and sebum excretion in Parkinson disease] Villares JC. **Arq Neuropsiquiatr** 1989 Mar;47(1):31-8 (Eng. Abstr.) **(Por)**
[Experience using selective monoamine oxidase inhibitors in treating parkinsonism patients] Stoliarova LG, et al. **Zh Nevropatol Psikhiatr** 1988;88(12):11-3 (Eng. Abstr.) **(Rus)**
[Experience using veroshpiron in the combined therapy of parkinsonism] Vartanian KZ, et al. **Zh Nevropatol Psikhiatr** 1988;88(12):14-8 (Eng. Abstr.) **(Rus)**
[The placebo effect: between mind and brain] Burunat E, et al. **Med Clin (Barc)** 1989 Feb 18;92(6):232-5 **(Spa)**
[Lisuride in Parkinson disease] Leiguarda R, et al. **Medicina (B Aires)** 1985;45(1):29-34 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Acetaminophen metabolism by cytochrome P450 monooxygenases in Parkinson's disease. Factor SA, et al. **Ann Neurol** 1989 Aug;26(2):286-8
Deficiencies in complex I subunits of the respiratory chain in Parkinson's disease. Mizuno Y, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1450-5
Monoamine oxidase, brain ageing and degenerative diseases. Strolin Benedetti M, et al. **Biochem Pharmacol** 1989 Feb 15;38(4):555-61 (62 ref.)
A selective increase in particulate superoxide dismutase activity in parkinsonian substantia nigra. Saggu H, et al. **J Neurochem** 1989 Sep;53(3):692-7
Noradrenaline, adrenaline and tyrosine hydroxylase in adrenal medulla from parkinsonian patients [letter] Cervera P, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug; 51(8):1104-5
Leukocyte glutamate dehydrogenase in patients with degenerative neurological disorders [letter] Plaitakis A. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):424
Oxygen toxicity protecting enzymes in Parkinson's disease. Increase of superoxide dismutase-like activity in the substantia nigra and basal nucleus. Marttila RJ, et al. **J Neurol Sci** 1988 Sep;86(2-3):321-31
Mitochondrial complex I deficiency in Parkinson's disease [letter] [see comments] Schapira AH, et al. **Lancet** 1989 Jun 3;1(8649):1269. **Comment in:** Lancet 1989 Jul 1;2(8653):49
S-methylation in motorneuron disease and Parkinson's disease. Waring RH, et al. **Lancet** 1989 Aug 12; 2(8659):356-7
[Acetylcholinesterase activity in CSF in senile dementia of Alzheimer type, vascular dementia, and Parkinson's disease] Yoshinaga J, et al. **Rinsho Shinkeigaku** 1989 Mar; 29(3):376-8 (Eng. Abstr.) **(Jpn)**

EPIDEMIOLOGY

A community survey of Parkinson's disease. Snow B, et al. **Can Med Assoc J** 1989 Sep 1;141(5):418-22
Validity of a mailed epidemiological questionnaire and physical self-assessment in Parkinson's disease. Golbe LI, et al. **Mov Disord** 1988;3(3):245-54
Epidemiologic study on the association between body burden mercury level and idiopathic Parkinson's disease. Ngim CH, et al. **Neuroepidemiology** 1989;8(3):128-41
Survey and observation of physically handicapped persons living at home due to intractable disease. Makino S, et al. **Nippon Eiseigaku Zasshi** 1988 Oct;43(4):845-52
[Parkinson's disease in a population group in northern Norway] Bekkelund SI, et al. **Tidsskr Nor Laegeforen** 1989 Feb 20;109(5):561-3 (Eng. Abstr.) **(Nor)**

ETHNOLOGY

Prevalence of Parkinson's disease in the Parsi community of Bombay, India. Bharucha NE, et al. **Arch Neurol** 1988 Dec;45(12):1321-3

ETIOLOGY

Studies on the interactions of MPTP(1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine) with the cytochrome P-450 enzyme system--clues to a possible aetiological factor in Parkinson's disease. Shahi GS, et al. **Ann Acad Med Singapore** 1989 Jan;18(1):93-7
Induction of aromatic-L-amino acid decarboxylase by decarboxylase inhibitors in idiopathic parkinsonism. Boomsma F, et al. **Ann Neurol** 1989 Jun;25(6):624-8
Case-control study of early life dietary factors in Parkinson's disease. Golbe LI, et al. **Arch Neurol** 1988 Dec; 45(12):1350-3
Parkinson's disease, vitamin E, and mitochondrial energy metabolism [letter] Hornsby PJ. **Arch Neurol** 1989 Aug; 46(8):840-1
The relationship of the reticular system to the primary pathoetiology of Parkinson's disease. Sandyk R, et al. **Int J Neurosci** 1988 Oct;42(3-4):297-300 (60 ref.)
Parkinsonian syndrome in the course of aqueductal stenosis hydrocephalus. Cantini R, et al. **Ital J Neurol Sci** 1988 Dec;9(6):603-6
Parkinsonism as a feature of temporal lobe glioma. Kumar S, et al. **J Indian Med Assoc** 1988 Jul;86(7):180-1
Is "Parkinson's disease" one disease? Calne DB. **J Neurol Neurosurg Psychiatry** 1989 Jun;Suppl:18-21 (10 ref.)
Current theories on the cause of Parkinson's disease. Langston JW. **J Neurol Neurosurg Psychiatry** 1989 Jun; Suppl:13-7 (27 ref.)
Susceptibility in Parkinson's disease. 'Of mice and men'. Borm PJ, et al. **Med Hypotheses** 1988 Nov;27(3):205-7
A unifying theory of movement and madness: involvement of free radicals in disorders of the isodendritic core of the brainstem. Cadet JL. **Med Hypotheses** 1988 Sep;27(1):59-63 (61 ref.)
Tomatoes and Parkinson's disease. Sage JI. **Med Hypotheses** 1989 Feb;28(2):75-9
Current concepts on the etiology of Parkinson's disease. Calne DB. **Mov Disord** 1989;4 Suppl 1:S11-4 (14 ref.)
Trauma as an etiology of parkinsonism: a historical review of the concept. Factor SA, et al. **Mov Disord** 1988;3(1):30-6 (19 ref.)
Parkinsonism and acquired hydrocephalus. Jankovic J, et al. **Mov Disord** 1986;1(1):59-64
Trauma as an etiologic agent in Parkinson disease [letter] Jellinger K. **Mov Disord** 1989;4(1):90-2
Trauma as an etiology of parkinsonism: opinions in the nineteenth century [letter] Keppel Hesselink JM. **Mov Disord** 1989;4(3):283-5
Movement disorders in multiple sclerosis. Mao CC, et al. **Mov Disord** 1988;3(2):109-16 (21 ref.)
Cryptococcal meningoencephalitis with parkinsonian features. Wszolek Z, et al. **Mov Disord** 1988;3(3):271-3
Risk factors for progression in Parkinson's disease. Goetz CG, et al. **Neurology** 1988 Dec;38(12):1841-4
Environmental factors and Parkinson's disease: a case-control study in China. Tanner CM, et al. **Neurology** 1989 May; 39(5):660-4
Ageing and neurotoxins as causative factors in idiopathic Parkinson's disease--a critical analysis of the neurochemical evidence. Hornykiewicz O. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3-4):319-28 (18 ref.)
Progressive parkinsonism in boxers. Friedman JH. **South Med J** 1989 May;82(5):543-6 (19 ref.)
Addled brains and coffin nails [editorial] Thomison JB. **South Med J** 1989 May;82(5):541-2
New insights into the pathophysiology of Parkinson's disease: the challenge of positron emission tomography. Perlmutter JS. **Trends Neurosci** 1988 May;11(5):203-8
[Seven cases of parkinsonism or Parkinson's disease of various etiology] Tong QJ. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Apr; 21(2):110-2, 128 (Eng. Abstr.) **(Chi)**
[Parkinsonism caused by chronic subdural hematoma. A case report] Amenomori M, et al. **Nippon Naika Gakkai Zasshi** 1989 May;78(5):708-9 **(Jpn)**
[Etiopathogeny of Parkinson disease. The MPTP revolution] Sampaio C, et al. **Acta Med Port** 1988 Jul-Dec;1(4-6):304-7 (29 ref.) (Eng. Abstr.) **(Por)**
[Age factors in the development of parkinsonism (a review of the literature)] Frol'kis VV, et al. **Zh Nevropatol Psikhiatr** 1988;88(9):137-45 (115 ref.) **(Rus)**
[The role of the neurons of the locus coeruleus and ventral tegmental area in the development of catecholamine-deficient conditions] Kucherenko RP, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):110-2 (Eng. Abstr.) **(Rus)**
[Risk factors for the onset of Parkinson's disease] Ičanović H, et al. **Srp Arh Celok Lek** 1988 May;116(5):413-7 (Eng. Abstr.) **(Scc)**

GENETICS

Dominantly inherited dementia and parkinsonism, with non-Alzheimer amyloid plaques: a new neurogenetic disorder. Rosenberg RN, et al. **Ann Neurol** 1989 Feb; 25(2):152-8
A parkinsonian kindred. Degl'Innocenti F, et al. **Ital J Neurol Sci** 1989 Jun;10(3):307-10
Tyrosine hydroxylase and levodopa responsive dystonia. Fletcher NA, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):112-4
Clinical and neuropathological study of a familial case of juvenile parkinsonism. Inose T, et al. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):265-76
Young onset Parkinson's disease. Quinn N, et al. **Mov Disord** 1987;2(2):73-91

HISTORY

Preparkinsonian parkinsonism. Freedman BJ. **BMJ** 1989 Jun 10;298(6687):1573
Parkinson's disease over the last 20 years: a personal view. Calne DB. **Funct Neurol** 1988 Oct-Dec;3(4):395-406 (55 ref.)
Aspects of the history of Parkinson's disease. Pearce JM. **J Neurol Neurosurg Psychiatry** 1989 Jun;Suppl:6-10
Did parkinsonism occur before 1817? Stern G. **J Neurol Neurosurg Psychiatry** 1989 Jun;Suppl:11-2
The history of parkinsonism. Fahn S. **Mov Disord** 1989;4 Suppl 1:S2-10
Charcot on Parkinson's disease. Goetz CG. **Mov Disord** 1986; 1(1):27-32
Did Leonardo describe Parkinson's disease? [letter] Calne DB, et al. **N Engl J Med** 1989 Mar 2;320(9):594
[Parkinson's disease; neuropathology and pathogenesis in conflict in the period 1817-1953] Keppel Hesselink JM. **Ned Tijdschr Geneeskd** 1988 Dec 24;132(52):2367-71 **(Dut)**
[Hitler's Parkinson syndrome. A posthumous motility analysis of film records of the German Weekly News 1940-1945]

Gibbels E. **Nervenarzt** 1988 Sep;59(9):521–8 **(Ger)**

IMMUNOLOGY

Parkinson's disease and autoimmunity. Møller A, et al. **Acta Neurol Scand** 1989 Feb;79(2):173–5

Parkinson's disease: an autoimmune process. Barker RA, et al. **Int J Neurosci** 1988 Nov;43(1–2):1–7

Serum antibodies to brain proteins in a patient with parkinsonism associated with IgM paraproteinemia. Tanaka K, et al. **Jpn J Med** 1988 Aug;27(3):300–4

An antibody in the CSF of Parkinson's disease patients disappears following adrenal medulla transplantation. McRae-Degueurce A, et al. **Neurosci Lett** 1988 Nov 22; 94(1–2):192–7

METABOLISM

Histochemical and X-ray microanalytical localization of aluminum in amyotrophic lateral sclerosis and parkinsonism–dementia of Guam. Piccardo P, et al. **Acta Neuropathol (Berl)** 1988;77(1):1–4

Biochemical analysis of caudate nucleus biopsy samples from parkinsonian patients. Goldstein M, et al. **Ann Neurol** 1988 Nov;24(5):685–8

[3H]spiperone binding to lymphocyte in extrapyramidal disease and in aging. Członkowska A, et al. **Brain Behav Immun** 1987 Sep;1(3):197–203

Substance P-like immunoreactivity in brains with pathological features of Parkinson's and Alzheimer's diseases. Clevens RA, et al. **Brain Res** 1989 May 8; 486(2):387–90

Dopamine receptors in human brain: autoradiographic distribution of D1 and D2 sites in Parkinson syndrome of different etiology. Cortés R, et al. **Brain Res** 1989 Mar 27;483(1):30–8

Brain muscarinic receptor subtypes are differently affected in Alzheimer's disease and Parkinson's disease. Rinne JO, et al. **Brain Res** 1989 Apr 3;483(2):402–6

Regional metal concentrations in Parkinson's disease, other chronic neurological diseases, and control brains. Uitti RJ, et al. **Can J Neurol Sci** 1989 Aug;16(3):310–4

Pharmacokinetic and pharmacodynamic modeling of L-dopa plasma concentrations and clinical effects in Parkinson's disease after Sinemet. Nelson MV, et al. **Clin Neuropharmacol** 1989 Apr;12(2):91–7

[3H]GBR 12935 binding to dopamine uptake sites: subcellular localization and reduction in Parkinson's disease and progressive supranuclear palsy. Maloteaux JM, et al. **Eur J Pharmacol** 1988 Nov 8;156(3):331–40

Decreased catecholamine content in parkinsonian adrenal medullae. Stoddard SL, et al. **Exp Neurol** 1989 Apr; 104(1):22–7

Experimental support for the implication of oxidative stress in the genesis of parkinsonian syndromes. Fariello RG. **Funct Neurol** 1988 Oct-Dec;3(4):407–12 (10 ref.)

The pathochemical perspectives of Parkinson's disease. An attempt at a neurochemical definition. Hornykiewicz O. **Funct Neurol** 1988 Oct-Dec;3(4):379–91 (29 ref.)

Estrogens and the pathophysiology of Parkinson's disease. Sandyk R. **Int J Neurosci** 1989 Mar;45(1–2):119–22

Pro-opiomelanocortin (POMC) processing in Parkinson's disease. Sandyk R. **Int J Neurosci** 1989 Jun;46(3–4):201–4 (23 ref.)

Dopamine-derived alkaloids in alcoholism and in Parkinson's and Huntington's diseases. Dostert P, et al. **J Neural Transm** 1988;74(2):61–74 (61 ref.)

Increased iron (III) and total iron content in post mortem substantia nigra of parkinsonian brain. Sofic E, et al. **J Neural Transm** 1988;74(3):199–205

Galanin-like immunoreactivity is unchanged in Alzheimer's disease and Parkinson's disease dementia cerebral cortex. Beal MF, et al. **J Neurochem** 1988 Dec;51(6):1935–41

Basal lipid peroxidation in substantia nigra is increased in Parkinson's disease. Dexter DT, et al. **J Neurochem** 1989 Feb;52(2):381–9

Increased nigral iron content and alterations in other metal ions occurring in brain in Parkinson's disease. Dexter DT, et al. **J Neurochem** 1989 Jun;52(6):1830–6

Transition metals, ferritin, glutathione, and ascorbic acid in parkinsonian brains. Riederer P, et al. **J Neurochem** 1989 Feb;52(2):515–20

Somatostatin concentrations and binding sites in human frontal cortex are differentially affected in Parkinson's disease associated dementia and in progressive supranuclear palsy. Epelbaum J, et al. **J Neurol Sci** 1988 Nov; 87(2–3):167–74

D1 and D2-type dopamine receptors in patients with Parkinson's disease and progressive supranuclear palsy. Pierot L, et al. **J Neurol Sci** 1988 Sep;86(2–3):291–306

[3H]GBR-12935 binding sites in human striatal membranes: binding characteristics and changes in parkinsonians and schizophrenics. Hirai M, et al. **Jpn J Pharmacol** 1988 Jul; 47(3):237–43

GABAA receptor but not muscarinic receptor density was decreased in the brain of patients with Parkinson's disease. Nishino N, et al. **Jpn J Pharmacol** 1988 Nov;48(3):331–9

Mitochondrial function in Parkinson's disease [letter; comment] Bindoff LA, et al. **Lancet** 1989 Jul 1;2(8653):49 . **Comment on:** Lancet 1989 Jun 3;1(8649):1269

Decrease of serotonin-S2 receptors in temporal cortex of patients with Parkinson's disease and progressive supranuclear palsy. Maloteaux JM, et al. **Mov Disord** 1988; 3(3):255–62

Xenobiotic metabolism in Parkinson's disease. Steventon GB, et al. **Neurology** 1989 Jul;39(7):883–7

Human brain D1 and D2 dopamine receptors in schizophrenia, Alzheimer's, Parkinson's, and Huntington's diseases. Seeman P, et al. **Neuropsychopharmacology** 1987 Dec;1(1):5–15

Free amino acids in the brain of patients with Parkinson's disease. Rinne JO, et al. **Neurosci Lett** 1988 Nov 22; 94(1–2):182–6

Regional distribution of vasoactive intestinal peptide in brains from normal and parkinsonian subjects. Jégou S, et al. **Peptides** 1988 Jul-Aug;9(4):787–93

Striatal phosphoproteins in Parkinson disease and progressive supranuclear palsy. Girault JA, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2493–7

Dopamine turnover and glutathione oxidation: implications for Parkinson disease. Spina MB, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1398–400

Somatostatin and neuropeptide Y immunoreactivity in Parkinson's disease dementia with Alzheimer's changes. Beal MF, et al. **Synapse** 1988;2(4):463–7

Biochemical mechanism of action of the dopaminergic neurotoxin 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP). Sayre LM. **Toxicol Lett** 1989 Aug;48(2):121–49 (244 ref.)

[Biochemistry of the physiopathologic and clinical aspects of free radicals in cerebral degenerative diseases such as Alzheimer's and Parkinson diseases] Hirai S. **Nippon Rinsho** 1988 Oct;46(10):2184–9 **(Jpn)**

[Biochemistry of Parkinson's disease] Nagatsu T. **Seikagaku** 1988 May;60(5):358–66 (16 ref.) **(Jpn)**

MORTALITY

Neuroepidemiology of Parkinson's disease: analysis of mortality data for the U.S.A. and Georgia. Sethi KD, et al. **Int J Neurosci** 1989 Jun;46(3–4):87–92

PATHOLOGY

Parkinson's disease: the presence of Lewy bodies in Auerbach's and Meissner's plexuses. Wakabayashi K, et al. **Acta Neuropathol (Berl)** 1988;76(3):217–221

Juvenile Parkinson's disease with widespread Lewy bodies in the brain. Yoshimura N, et al. **Acta Neuropathol (Berl)** 1988;77(2):213–8

MR imaging of Parkinson disease with spin-echo and gradient-echo sequences. Braffman BH, et al. **AJR** 1989 Jan;152(1):159–65

Dementia, parkinsonism, and motor neuron disease: neurochemical and neuropathological correlates. Gilbert JJ, et al. **Ann Neurol** 1988 Nov;24(5):688–91

Parkinsonism and neurofibrillary tangle pathology in pigmented nuclei. Rajput AH, et al. **Ann Neurol** 1989 Jun; 25(6):602–6

Immunocytochemical characterization of neurofibrillary tangles in amyotrophic lateral sclerosis and parkinsonism–dementia of Guam. Shankar SK, et al. **Ann Neurol** 1989 Feb;25(2):146–51

Neuroleptic malignant syndrome in striatonigral degeneration. Gibb WR. **Br J Psychiatry** 1988 Aug; 153:254–5

[99mTc]-HM-PAO SPECT in Parkinson's disease. Pizzolato G, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S101–8

Alterations in catecholamine neurons of the locus coeruleus in senile dementia of the Alzheimer type and in Parkinson's disease with and without dementia and depression. Chan-Palay V, et al. **J Comp Neurol** 1989 Sep 15; 287(3):373–92

Does signal-attenuation on high-field T2-weighted MRI of the brain reflect regional cerebral iron deposition? Observations on the relationship between regional cerebral water proton T2 values and iron levels. Brooks DJ, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):108–11

Diffuse Lewy body disease: clinical features in 15 cases. Byrne EJ, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun; 52(6):709–17

Neuropathology in movement disorders. Gibb WR. **J Neurol Neurosurg Psychiatry** 1989 Jun;Suppl:55–67 (119 ref.)

A pathological study of the association between Lewy body disease and Alzheimer's disease. Gibb WR, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):701–8

Clues to the mechanism underlying dopamine cell death in Parkinson's disease. Jenner P. **J Neurol Neurosurg Psychiatry** 1989 Jun;Suppl:22–8 (68 ref.)

Asymmetry of substantia nigra neuronal loss in Parkinson's disease and its relevance to the mechanism of levodopa related motor fluctuations. Kempster PA, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):72–6

Anti-ubiquitin immunocytochemistry is more sensitive than conventional techniques in the detection of diffuse Lewy body disease. Lennox G, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):67–71

Lewy bodies contain epitopes both shared and distinct from Alzheimer neurofibrillary tangles. Galloway PG, et al. **J Neuropathol Exp Neurol** 1988 Nov;47(6):654–63

Parkinson's disease and dementia with neuronal inclusions in the cerebral cortex: Lewy bodies or Pick bodies. Tiller-Borcich JK, et al. **J Neuropathol Exp Neurol** 1988 Sep;47(5):526–35

Diffuse Lewy body disease. **Lancet** 1989 Aug 5;2(8658):310–1 (18 ref.)

Case 2, 1988. Congenital mental retardation and juvenile parkinsonism. Jankovic J, et al. **Mov Disord** 1988; 3(4):352–61

Ipsilateral blepharospasm and contralateral hemidystonia and parkinsonism in a patient with a unilateral rostral brainstem-thalamic lesion: structural and functional abnormalities studied with CT, MRI, and PET scanning. Leenders KL, et al. **Mov Disord** 1986;1(1):51–8

Pure akinesia due to lewy body Parkinson's disease: a case with pathology. Quinn NP, et al. **Mov Disord** 1989; 4(1):85–9

Long-term follow-up after stereotaxic basal ganglia surgery in parkinsonism. A neuroanatomical study of a case showing unusual postural disorders. Viallet F, et al. **Mov Disord** 1988;3(2):140–51

Alzheimer pathology in Parkinson's disease [letter] Jellinger K. **Neurology** 1989 Jun;39(6):874–5

[Clinical features of diffuse Lewy body disease. Report of 8 cases and review of the literature] Kuzuhara S, et al. **Rinsho Shinkeigaku** 1988 Nov;28(11):1274–81 (32 ref.) (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

EEG in demented and non-demented parkinsonian patients. Neufeld MY, et al. **Acta Neurol Scand** 1988 Jul;78(1):1–5

Cases in electrocardiography. Zimmers T, et al. **Am J Emerg Med** 1989 Jul;7(4):434–6

Maximal expiratory and inspiratory flow-volume curves in Parkinson's disease. Bogaard JM, et al. **Am Rev Respir Dis** 1989 Mar;139(3):610–4

Respiratory muscle dysfunction in Parkinson's disease. Tzelepis GE, et al. **Am Rev Respir Dis** 1988 Aug; 138(2):266–71

Posture in Parkinson's disease: impairment of reflexes and programming. Dietz V, et al. **Ann Neurol** 1988 Nov; 24(5):660–9

Motor fluctuations in Parkinson's disease: central pathophysiological mechanisms, Part I. Fabbrini G, et al. **Ann Neurol** 1988 Sep;24(3):366–71

Recall and recognition memory in patients with Alzheimer's and Parkinson's diseases. Helkala EL, et al. **Ann Neurol** 1988 Aug;24(2):214–7

Motor fluctuations in Parkinson's disease: central pathophysiological mechanisms, Part II. Mouradian MM, et al. **Ann Neurol** 1988 Sep;24(3):372–8

Motor fluctuations in Parkinson's disease [letter] Nutt JG, et al. **Ann Neurol** 1989 Jun;25(6):633–4

Progress in understanding the pathophysiology of treatment-related fluctuations in Parkinson's disease. Wooten GF. **Ann Neurol** 1988 Sep;24(3):363–5 (16 ref.)

Slowing of cognitive processing in progressive supranuclear palsy. A comparison with Parkinson's disease. Dubois B, et al. **Arch Neurol** 1988 Nov;45(11):1194–9

Parkinsonian deficits in serial multiarticulate movements for speech. Connor NP, et al. **Brain** 1989 Aug;112 (Pt 4):997–1009

The Bereitschaftspotential is abnormal in Parkinson's disease. Dick JP, et al. **Brain** 1989 Feb;112 (Pt 1):233–44

The ability of patients with brain damage to generate mental visual images. Goldenberg G. **Brain** 1989 Apr;112 (Pt 2):305–25

The effects of right and left hemiparkinsonism on prosody. Blonder LX, et al. **Brain Lang** 1989 Feb;36(2):193–207

Effect of striatal implantation of bovine adrenal chromaffin cells on turning behavior in a rat model of Parkinson's disease. Fitzgerald LR, et al. **Brain Res** 1989 Mar 6; 481(2):373–7

Optimal indices for testing parkinsonian rigidity. Teräväinen H, et al. **Can J Neurol Sci** 1989 May;16(2):180–3

Visuospatial dysfunction in Parkinson's disease. Qin Z, et al. **Chin Med J [Engl]** 1988 May;101(5):311–4

Alpha 2-adrenergic sensitivity in Parkinson's disease. Berlan M, et al. **Clin Neuropharmacol** 1989 Apr;12(2):138–44

Motor response following repeated apomorphine administration is reduced in Parkinson's disease. Grandas F, et al. **Clin Neuropharmacol** 1989 Feb;12(1):14–22

Restless legs syndrome and Parkinson's disease: insights into pathophysiology. Lang AE. **Clin Neuropharmacol** 1987 Oct; 10(5):476–8

The nighttime problems of Parkinson's disease. Lees AJ, et al. **Clin Neuropharmacol** 1988 Dec;11(6):512–9

Central mechanisms and levodopa response fluctuations in Parkinson's disease. Mouradian MM, et al. **Clin Neuropharmacol** 1988 Aug;11(4):378–85 (103 ref.)

Measuring parkinsonian symptoms with a tracking device. Hacisalihzade SS, et al. **Comput Methods Programs Biomed** 1988 Nov-Dec; 27(3):257–68

Abnormalities of short-latency somatosensory evoked potentials in parkinsonian patients. Rossini PM, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jul-Aug; 74(4):277–89

The impact of paired motor unit discharges on tremor. Dengler R, et al. **Electromyogr Clin Neurophysiol** 1989 Mar; 29(2):113–7

Motility of Oddi's sphincter in Parkinson's disease, progressive systemic sclerosis, and achalasia. Hagenmüller F, et al. **Endoscopy** 1988 Aug;20 Suppl 1:189–92

Motor dysfunctions in Parkinson's disease and premotor lesions. Freund HJ. **Eur Neurol** 1989;29 Suppl 1:33–7 (23

ref.)
Blink reflex in dyskinetic and nondyskinetic patients with Parkinson's disease. Iriarte LM, et al. **Eur Neurol** 1989; 29(2):67–70
Pathophysiology of rigidity and akinesia in Parkinson's disease. Lee RG. **Eur Neurol** 1989;29 Suppl 1:13–8 (23 ref.)
Characteristic difficulty in rhythmic movement with aging and its relation to Parkinson's disease. Nagasaki H, et al. **Exp Aging Res** 1988 Winter;14(4):171–6
Human fetal dopamine neurons grafted in a rat model of Parkinson's disease: ultrastructural evidence for synapse formation using tyrosine hydroxylase immunocytochemistry. Clarke DJ, et al. **Exp Brain Res** 1988;73(1):115–26
Force production characteristics in Parkinson's disease. Stelmach GE, et al. **Exp Brain Res** 1989;76(1):165–72
Enkephalinergic mechanisms in the "compensated" phase of Parkinson's disease. Sandyk R. **Int J Neurosci** 1988 Oct; 42(3–4):301–3 (38 ref.)
Short-latency somatosensory and brainstem auditory evoked potentials in patients with Parkinson's disease. Tachibana H, et al. **Int J Neurosci** 1989 Feb;44(3–4):321–6
Analysis of vocal tract parameters in parkinsonian speech. Gath I, et al. **J Acoust Soc Am** 1988 Nov;84(5):1628–34
CBF tomograms with [99mTc-HM-PAO in patients with dementia (Alzheimer type and HIV) and Parkinson's disease--initial results. Costa DC, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):S109–15
Nasal airflows in parkinsonian speakers. Hoodin RB, et al. **J Commun Disord** 1989 Jun;22(3):169–80
Galanin hyperinnervates surviving neurons of the human basal nucleus of Meynert in dementias of Alzheimer's and Parkinson's disease: a hypothesis for the role of galanin in accentuating cholinergic dysfunction in dementia. Chan-Palay V. **J Comp Neurol** 1988 Jul 22;273(4):543–57
Is Parkinson's disease of early onset a separate disease entity? Ludin SM, et al. **J Neurol** 1989 May;236(4):203–7
Twenty-four-hour tremor recordings in the evaluation of the treatment of Parkinson's disease. Scholz E, et al. **J Neurol** 1988 Nov;235(8):475–84
Observations on the applicability of the Wartenberg pendulum test to healthy, elderly subjects. Brown RA, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1171–7
Does the Wartenberg pendulum test differentiate quantitatively between spasticity and rigidity? A study in elderly stroke and Parkinsonian patients. Brown RA, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1178–86
Pulmonary function in Parkinson's disease. Hovestadt A, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):329–33
Afferents contributing to the exaggerated long latency reflex response to electrical stimulation in Parkinson's disease. Hunter JP, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov; 51(11):1405–10
Finger tremor in Parkinson's disease. Lakie M, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):392–4
Constipation and paradoxical puborectalis contraction in anismus and Parkinson's disease: a dystonic phenomenon? Mathers SE, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1503–7
Does cognitive impairment in Parkinson's disease result from non-dopaminergic lesions? Pillon B, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):201–6
Preparation of manual movements in hemiparkinsonism. Rafal RD, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar; 52(3):399–402
Frozen shoulder and other shoulder disturbances in Parkinson's disease. Riley D, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):63–6
Evoked potentials, reaction time and cognitive performance in on and off phases of Parkinson's disease. Starkstein SE, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):338–40
Prism adaptation in Parkinson's disease. Stern Y, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1584–7
Involuntary closure of eyelids in parkinsonism. Electrophysiological evidence for prolonged inhibition of the levator palpebrae muscles. Esteban A, et al. **J Neurol Sci** 1988 Jul;85(3):333–45
Electrophysiological differences between Parkinson's disease and vascular parkinsonism. Tachibana H, et al. **Jpn J Med** 1988 Aug;27(3):261–6
F response abnormality in Parkinson's disease. Naito Y, et al. **Jpn J Psychiatry Neurol** 1988 Dec;42(4):811–8
Biochemistry of Parkinson's disease 28 years later: a critical review. Agid Y, et al. **Mov Disord** 1989;4 Suppl 1:S126–44 (132 ref.)
Corneal and blink reflexes in Parkinson's disease with "on–off" fluctuations. Agostino R, et al. **Mov Disord** 1987; 2(4):227–35
Increased shortening reaction in Parkinson's disease reflects a difficulty in modulating long loop reflexes. Diener C, et al. **Mov Disord** 1987;2(1):31–6
Lower body parkinsonism: evidence for vascular etiology. FitzGerald PM, et al. **Mov Disord** 1989;4(3):249–60
Parkinsonism–plus syndromes. Jankovic J. **Mov Disord** 1989; 4 Suppl 1:S95–119 (131 ref.)
Mechanisms underlying neuronal degeneration in Parkinson's disease: an experimental and theoretical treatise. Langston JW. **Mov Disord** 1989;4 Suppl 1:S15–25 (42 ref.)
Slowness of movement in Parkinson's disease. Marsden CD. **Mov Disord** 1989;4 Suppl 1:S26–37 (54 ref.)
Imaging techniques in Parkinson's disease. Martin WR. **Mov Disord** 1989;4 Suppl 1:S63–9 (39 ref.)
A current analysis of behavioral problems in patients with idiopathic Parkinson's disease. Mayeux R. **Mov Disord** 1989;4 Suppl 1:S48–56 (66 ref.)
Dopamine and memory function in Parkinson's disease. Mohr E, et al. **Mov Disord** 1989;4(2):113–20
Menstrual-related fluctuations in Parkinson's disease. Quinn NP, et al. **Mov Disord** 1986;1(1):85–7
Gait disorder of subcortical arteriosclerotic encephalopathy: Binswanger's disease. Thompson PD, et al. **Mov Disord** 1987;2(1):1–8
Parkinson's disease and Alzheimer's disease: new neurochemical parallels. Whitehouse PJ. **Mov Disord** 1989; 4 Suppl 1:S57–62
The dopamine motor system. Wooten GF, et al. **Mov Disord** 1989;4 Suppl 1:S38–47 (16 ref.)
Effect of age at onset on progression and mortality in Parkinson's disease. Diamond SG, et al. **Neurology** 1989 Sep;39(9):1187–90
Supranuclear disturbances of ocular motility in Lytico–Bodig. Lepore FE, et al. **Neurology** 1988 Dec; 38(12):1849–53
Orofacial impairment in Parkinson's [letter] McCutchen CW. **Neurology** 1989 Mar;39(3):454
The effect of dietary protein on the efficacy of L-dopa: a double-blind study. Tsui JK, et al. **Neurology** 1989 Apr; 39(4):549–52
Sequence ability in parkinsonians, patients with frontal lobe lesions and patients who have undergone unilateral temporal lobectomies. Canavan AG, et al. **Neuropsychologia** 1989;27(6):787–98
The performance on learning tasks of patients in the early stages of Parkinson's disease. Canavan AG, et al. **Neuropsychologia** 1989;27(2):141–56
Obstructive hydrocephalus-induced parkinsonism. I: Decreased basal ganglia regional blood flow. Shahar E, et al. **Pediatr Neurol** 1988 Mar-Apr;4(2):117–9
Interrater reliability of a clinical scale of rigidity. Van Dillen LR, et al. **Phys Ther** 1988 Nov;68(11):1679–81
Monkeys with unilateral ventromedial tegmental lesions of the brain stem: models for Parkinson's disease and Lesch-Nyhan syndrome. Goldstein M. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3–4):311–8
Noradrenergic effects in tardive dyskinesia, akathisia and pseudoparkinsonism via the limbic system and basal ganglia. Wilbur R, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(6):849–64 (61 ref.)
Looking and seeing with age-related neurologic disease and normal aging. Hutton JT, et al. **Semin Neurol** 1989 Mar; 9(1):31–8
Loss of reaction time specificity for movement direction in Parkinson's disease. Nakamura R, et al. **Tohoku J Exp Med** 1989 May;158(1):9–16
Excitatory amino acids and the basal ganglia: implications for the therapy of Parkinson's disease [letter] Klockgether T, et al. **Trends Neurosci** 1989 Aug;12(8):285–6
[Pain in muscles and joints as the initial symptom of Parkinson disease] Roos RA, et al. **Ned Tijdschr Geneeskd** 1989 May 13;133(19):961–2 **(Dut)**
[Interactions between basic and clinical research. 2 examples drawn from a personal experience] Albe-Fessard D. **Can J Neurol Sci** 1988 Aug;15(3):324–32 (Eng. Abstr.) **(Fre)**
[Parkinson disease and cognitive evoked potentials] Gil R, et al. **Rev Neurol (Paris)** 1989;145(3):201–7 (Eng. Abstr.) **(Fre)**
[Oculomotor findings in the stages "on" and "off" in Parkinson disease patients] Degl'Innocenti F, et al. **Riv Neurol** 1988 Sep-Oct;58(5):210–5 (Eng. Abstr.) **(Ita)**
[Cerebral blood flow and oxygen metabolism in patients with Parkinson's disease] Kitamura S, et al. **No To Shinkei** 1988 Oct;40(10):979–85 (Eng. Abstr.) **(Jpn)**
[Auditory brainstem responses in patients with dementia] Tachibana H, et al. **Rinsho Byori** 1988 Aug;36(8):979–83 **(Jpn)**
[Somatosensory potentials in hemiparkinsonism] Friedman A, et al. **Neurol Neurochir Pol** 1988 Jul-Aug;22(4):305–9 (Eng. Abstr.) **(Pol)**
[Age-related features of the realization of motor reactions during aging and Parkinson's disease from the results of measuring the duration of a simple motor reaction] Karaban' IN, et al. **Fiziol Zh** 1988 Nov-Dec;34(6):92–7 (Eng. Abstr.) **(Rus)**
[Role of neurons of the thalamus and striopallidar complex of the human brain in ensuring the constancy of visual perception] Medvedev SV, et al. **Neirofiziologiia** 1989; 21(1):93–101 (Eng. Abstr.) **(Rus)**
[Nonspecific systems of the brain in insomnia and parkinsonism in old age] Iadgarov IS. **Zh Nevropatol Psikhiatr** 1989;89(1):38–42 (Eng. Abstr.) **(Rus)**
[Correlation of clinico-physiologic indices and the serotonin content of the blood of patients with parkinsonism] Karimova MKh, et al. **Zh Nevropatol Psikhiatr** 1988; 88(10):50–2 (Eng. Abstr.) **(Rus)**
[Characteristics of the motor potentials in disorders of the subcortical motor structures of the human brain] Troshina EM. **Zh Vyssh Nerv Deiat** 1989 Jan-Feb;39(1):37–43 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Deprenyl as prophylaxis against Parkinson's disease? Sonsalla PK, et al. **Clin Neuropharmacol** 1988 Dec;11(6):500–11 (78 ref.)

PSYCHOLOGY

Platelet MAO-B activity and the psychopathology of Parkinson's disease, senile dementia and multi-infarct dementia. Danielczyk W, et al. **Acta Psychiatr Scand** 1988 Dec;78(6):730–6
Acute postoperative confusion and hallucinations in Parkinson disease. Golden WE, et al. **Ann Intern Med** 1989 Aug 1;111(3):218–22
Accuracy of self-reported disability in patients with parkinsonism. Brown RG, et al. **Arch Neurol** 1989 Sep; 46(9):955–9
Psychiatric aspects of Parkinson's disease [editorial] Baldwin RC, et al. **BMJ** 1989 Jul 1;299(6690):3–4
Psychosocial factors in Parkinson's disease. MacCarthy B, et al. **Br J Clin Psychol** 1989 Feb;28 (Pt 1):41–52
The effects of reduced non-verbal communication in Parkinson's disease. Pentland B, et al. **Br J Disord Commun** 1988 Apr;23(1):31–4
Neuropsychological functioning in hemiparkinsonism. Blonder LX, et al. **Brain Cogn** 1989 Mar;9(2):244–57
Frontal lobe dysfunction in Parkinson's disease: prognostic value for dementia? Piccirilli M, et al. **Eur Neurol** 1989; 29(2):71–6
Patterns of adaptation to Parkinson's disease. Dakof GA, et al. **Health Psychol** 1989;8(3):355–72
The parkinsonian and driving. McLay P. **Int Disabil Stud** 1989;11(1):50–1
A preliminary comparison of flat affect schizophrenics and brain-damaged patients on measures of affective processing. Borod JC, et al. **J Commun Disord** 1989 Apr; 22(2):93–104
Cognitive disturbances in Parkinson's disease. Beatty WW, et al. **J Geriatr Psychiatry Neurol** 1989 Jan-Mar;2(1):22–33
Intellectual impairment in Parkinson's disease: clinical, pathologic, and biochemical correlates. Cummings JL. **J Geriatr Psychiatry Neurol** 1988 Jan;1(1):24–36 (151 ref.)
Correlates of memory in Parkinson's disease. Riklan M, et al. **J Nerv Ment Dis** 1989 Apr;177(4):237–40
Defective concept formation in parkinsonians is independent from mental deterioration. Caltagirone C, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):334–7
Major depression in Parkinson's disease and the mood response to intravenous methylphenidate: possible role of the "hedonic" dopamine synapse. Cantello R, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):724–31
Dementia and cognitive impairment in Parkinson's disease. Girotti F, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec; 51(12):1498–502
Parkinson's disease and depression: psychometric properties of the Beck Depression Inventory. Levin BE, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1401–4
Neuropsychological evidence for multiple implicit memory systems: a comparison of Alzheimer's, Huntington's, and Parkinson's disease patients. Heindel WC, et al. **J Neurosci** 1989 Feb;9(2):582–7
An investigation of the phenomenon of "set" in Parkinson's disease. Brown RG, et al. **Mov Disord** 1988;3(2):152–61
Dose-dependent memory impairment in Parkinson's disease. Huber SJ, et al. **Neurology** 1989 Mar;39(3):438–40
Cognitive impairments associated with early Parkinson's disease. Levin BE, et al. **Neurology** 1989 Apr;39(4):557–61
Cognition in parkinsonism [letter] Meerwaldt JD, et al. **Neurology** 1988 Nov;38(11):1814–5
Cognitive slowing in Parkinson's disease fails to respond to levodopa treatment: the 15-objects test. Pillon B, et al. **Neurology** 1989 Jun;39(6):762–8
Parkinson's disease and dementia [letter] Taylor A, et al. **Neurology** 1989 Apr;39(4):610–1
Spatial disorientation in PD [letter] Taylor A, et al. **Neurology** 1989 Jun;39(6):879–80
Selective visual attention in Alzheimer's and Parkinson's patients: memory- and data-driven control. Cossa FM, et al. **Neuropsychologia** 1989;27(6):887–92
Retrieval from semantic and letter-initial categories in patients with Parkinson's disease. Gurd JM, et al. **Neuropsychologia** 1989;27(5):743–6
Visuo-spatial processing in parkinsonians. Stelmach GE, et al. **Neuropsychologia** 1989;27(4):485–93
Aberrant eating behavior in elderly parkinsonian patients with and without dementia: analysis of video-recorded meals. Athlin E, et al. **Res Nurs Health** 1989 Feb; 12(1):41–51
[Neuropsychological disorders in Parkinson disease. Relations to psychomotor inhibition and obsessive-compulsive disease] Lees AJ. **Nervenarzt** 1989 Feb;60(2):71–9 (64 ref.) **(Ger)**
[Psychosocial aspects of the long-term management of Parkinson patients] Späte HF, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Jul;40(7):385–94 (Eng. Abstr.) **(Ger)**
[Study of inter-observer reliability in the use of qualitative scales assessing Parkinson disease (II)] Martínez-Martín P, et al. **Arch Neurobiol (Madr)** 1988 Sep-Oct;51(5):287–91 (Eng. Abstr.) **(Spa)**

RADIONUCLIDE IMAGING

PET and movement disorders. Brooks DJ, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;Suppl:68–77 (53 ref.)

[SPECT findings in the hemiparkinson syndrome using 99mTc-HMPAO] Neumann C, et al. **Nuklearmedizin** 1989 Jun;28(3):92–4 (Eng. Abstr.) **(Ger)**

RADIOTHERAPY

Risks of radiosurgery [letter] Laitinen LV. **Neurosurgery** 1989 Sep;25(3):480

REHABILITATION

Parkinson's disease and nonpharmacologic treatment programs. Weiner WJ, et al. **J Am Geriatr Soc** 1989 Apr; 37(4):359–63 (25 ref.)

The benefit of a home exercise regimen for ambulatory Parkinson's disease patients. Hurwitz A. **J Neurosci Nurs** 1989 Jun;21(3):180–4

SURGERY

Critical approach to intrastriatal medullary adrenal implants via open surgery in parkinsonism. Case report. Broseta J, et al. **Acta Neurochir Suppl (Wien)** 1989;46:46–7

Transplantation in Parkinson's disease: stereotactic implantation of adrenal medulla and foetal mesencephalon. Hitchcock ER, et al. **Acta Neurochir Suppl (Wien)** 1989; 46:48–50

Adrenal medullary autograft in human brain for Parkinson's disease [letter] Frank F, et al. **Acta Neurochir (Wien)** 1988; 94(3–4):162–3

Perioperative management for transplant of autologous adrenal medulla to the brain for parkinsonism. Hyman SA, et al. **Anesthesiology** 1988 Oct;69(4):618–22

Postmortem analysis of adrenal–medulla–to–caudate autograft in a patient with Parkinson's disease. Hurtig H, et al. **Ann Neurol** 1989 Jun;25(6):607–14

Mucking around with Peter Pan [letter] Landau WM. **Ann Neurol** 1988 Sep;24(3):464

Sex differences in brain and personality correlates of the ability to identify popular word associations. Lansdell H. **Behav Neurosci** 1989 Aug;103(4):893–7

Tissue transplantation for Parkinson's disease [editorial] Calne DB, et al. **Can J Neurol Sci** 1988 Nov;15(4):364–5

PET studies of parkinsonian patients treated with autologous adrenal implants. Guttman M, et al. **Can J Neurol Sci** 1989 Aug;16(3):305–9

Adrenal medulla autografts in Parkinson's disease: a proposed mechanism of action. Riopelle RJ. **Can J Neurol Sci** 1988 Nov;15(4):366–70 (23 ref.)

Functional improvement by transplanting auto–adrenal medulla grafts into caudate in patients with parkinsonism. Ding YJ, et al. **Chin Med J [Engl]** 1988 Sep;101(9):631–6

CNS transplantation: a treatment for Parkinson's disease? Sweeney PJ. **Cleve Clin J Med** 1989 May;56(3):287–9 (12 ref.)

Survival and function of aggregate cultures of rat fetal dopamine neurons grafted in a rat model of Parkinson's disease. Strecker RE, et al. **Exp Brain Res** 1989; 76(2):315–22

Treatment of Parkinson's disease in adult patients by transplantation of human fetal brain tissue obtained from elective abortions. Michejda M. **Fetal Ther** 1987; 2(3):129–34

Non–dopaminergic mechanisms in adrenal medullary transplantation for Parkinson's disease [letter] Sandyk R, et al. **Int J Neurosci** 1989 Apr;45(3–4):259–60

Adrenal chromaffin cells as transplants in animal models of Parkinson's disease. Hansen JT, et al. **J Electron Microsc Tech** 1989 Aug;12(4):308–15 (40 ref.)

Catecholamines in CSF, plasma, and tissue after autologous transplantation of adrenal medulla to the brain in patients with Parkinson's disease. Tyce GM, et al. **J Lab Clin Med** 1989 Aug;114(2):185–92

Transplantation into the human brain: present status and future possibilities. Lindvall O. **J Neurol Neurosurg Psychiatry** 1989 Jun;Suppl:39–54 (119 ref.)

Adrenal medullary transplant as a treatment for Parkinson's disease: perioperative considerations. Berry P, et al. **J Neurosci Nurs** 1988 Dec;20(6):356–61

The return of stereotaxic surgery. Hash CJ, et al. **J Okla State Med Assoc** 1989 Jun;82(6):262–4

Neurosurgeons assess who's, what's, when's, where's, how's of brain grafts [news] [published erratum appears in JAMA 1989 Jul 14;262(2):210] Merz B. **JAMA** 1989 May 5; 261(17):2473–4

Neurologists join neurosurgeons in urging restraint in Parkinson's surgery [news] Merz B. **JAMA** 1989 May 26; 261(20):2929

Fetal brain tissue and Parkinson's disease [letter] Blunt SB. **Lancet** 1989 May 6;1(8645):1021

Fetal dopamine–rich mesencephalic grafts in Parkinson's disease [letter] Lindvall O, et al. **Lancet** 1988 Dec 24–31; 2(8626–8627):1483–4

Hispanic registry of graft procedures for Parkinson's disease [letter] Madrazo I, et al. **Lancet** 1989 Sep 23;2(8665):751–2

Neural transplantation: problems and prospects--where do we go from here? Gash DM, et al. **Mayo Clin Proc** 1989 Mar;64(3):363–7 (26 ref.)

Adrenal medullary autograft transplantation into the striatum of patients with Parkinson's disease. Kelly PJ, et al. **Mayo Clin Proc** 1989 Mar;64(3):282–90

Adrenal medullary autografts in patients with Parkinson's disease [letter] **N Engl J Med** 1989 Aug 3;321(5):324–7

Multicenter study of autologous adrenal medullary transplantation to the corpus striatum in patients with advanced Parkinson's disease. Goetz CG, et al. **N Engl J Med** 1989 Feb 9;320(6):337–41

Autopsy findings in a patient who had an adrenal–to–brain transplant for Parkinson's disease. Peterson DI, et al. **Neurology** 1989 Feb;39(2 Pt 1):235–8

A new surgical approach to Parkinson's disease. Lehman LB. **Postgrad Med** 1989 Sep 1;86(3):78–9

Caution continues over transplants [news] Lewin R. **Science** 1988 Dec 9;242(4884):1379

New trial evaluates parkinsonian therapy [news] Lewin R. **Science** 1989 Feb 17;243(4893):892

Central nervous system grafting in the treatment of parkinsonism. Bakay RA, et al. **Stereotact Funct Neurosurg** 1989;53(1):1–20 (52 ref.)

Fundamental investigation of neural transplantation for Parkinson's disease in mice. Shimizu K, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3171–3

[Intracaudate grafting of the adrenal medulla in the treatment of Parkinson's disease] Zhang WC, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Jan;26(1):1–5, 59 (Eng. Abstr.) **(Chi)**

[Transplantation of cells to the brain in the treatment of Parkinson disease] van Manen J. **Ned Tijdschr Geneeskd** 1989 Mar 4;133(9):428–30 **(Dut)**

[Homografts in the human brain. Current data] Gautier JC. **Bull Acad Natl Med** 1989 Jan;173(1):17–22; discussion 23–5 (33 ref.) (Eng. Abstr.) **(Fre)**

[Correction of the deformed hand in Parkinson disease] Feller AM, et al. **Handchir Mikrochir Plast Chir** 1989 Jan; 21(1):37–40 (Eng. Abstr.) **(Ger)**

[Late results of ventrolateral thalamotomy in parkinsonism and their mathematical prognosis] Asser TK, et al. **Zh Vopr Neirokhir** 1988 Sep–Oct;(5):37–9 (Eng. Abstr.) **(Rus)**

[Surgical technic of injecting autologous adrenal medullary tissue into the caudate nucleus for the treatment of Parkinson disease] Madrazo I, et al. **Gac Med Mex** 1988 Sep–Oct;124(9–10):365–9 **(Spa)**

[Transplants in Parkinson's disease: many questions awaiting answers] Giménez–Roldán S. **Rev Clin Esp** 1988 Oct; 183(5):259–64 (50 ref.) **(Spa)**

THERAPY

Intracerebral transplantation of dopamine neurons: understanding the functional role of the mesolimbocortical dopamine system and developing a therapy for Parkinson's disease. Brundin P, et al. **Ann N Y Acad Sci** 1988;537:148–60 (54 ref.)

Adrenal medullary transplantation to the caudate nucleus in Parkinson's disease. Initial clinical results in 18 patients. Allen GS, et al. **Arch Neurol** 1989 May;46(5):487–91

Human fetal dopamine neurons grafted into the striatum in two patients with severe Parkinson's disease. A detailed account of methodology and a 6–month follow–up. Lindvall O, et al. **Arch Neurol** 1989 Jun;46(6):615–31

Electroconvulsive therapy in parkinsonism with affective disorder. Atre–Vaidya N, et al. **Br J Psychiatry** 1988 Jan; 152:55–8

ECT in parkinsonism with affective disorder [letter] Birkett DP. **Br J Psychiatry** 1988 May;152:712

Parkinson's disease [letter; comment] **Can Med Assoc J** 1989 Jun 1;140(11):1268. **Comment on:** Can Med Assoc J 1989 Mar 1;140(5):507–14

Hypomania in a patient receiving deprenyl (selegiline) after adrenal–striatal implantation for Parkinson's disease. Menza MA, et al. **Clin Neuropharmacol** 1988 Dec;11(6):549–51

Decreased adrenal medullary catecholamines in adrenal transplanted parkinsonian patients compared to nephrectomy patients. Stoddard SL, et al. **Exp Neurol** 1989 Jun;104(3):218–22

Neural transplantation for Parkinson's disease [letter] Bakay RA, et al. **J Neurosurg** 1988 Nov;69(5):807–10

Preparation of adrenal medullary tissue for transplantation in Parkinson's disease: a new procedure. Technical note. López–Lozano JJ, et al. **J Neurosurg** 1989 Sep;71(3):452–4

Fetal brain transplantation for Parkinson's disease: technique for obtaining donor tissue [letter] Gustavii B. **Lancet** 1989 Mar 11;1(8637):565

Clinical, biochemical, and neuropathologic findings following transplantation of adrenal medulla to the caudate nucleus for treatment of Parkinson's disease. Jankovic J, et al. **Neurology** 1989 Sep;39(9):1227–34

Can human fetal dopamine neuron grafts provide a therapy for Parkinson's disease? Brundin P, et al. **Prog Brain Res** 1988;78:441–8 (24 ref.)

Adrenal medullary tissue transplants in the caudate nucleus of Parkinson's patients. Drucker–Colín R, et al. **Prog Brain Res** 1988;78:567–74

Study of adrenal medullary tissue transplantation to striatum in parkinsonism. Jiao SS, et al. **Prog Brain Res** 1988; 78:575–80

Characterization of purified populations of human fetal chromaffin cells: considerations for grafting in parkinsonian patients. Silani V, et al. **Prog Brain Res** 1988;78:551–7

Long–lasting dementia following brain grafting for the treatment of Parkinson's disease. Macías AE, et al. **Transplantation** 1989 Aug;48(2):348

[Transplantation of cells to the brain in the treatment of Parkinson's disease (letter)] Hogenesch RI, et al. **Ned Tijdschr Geneeskd** 1989 Apr 22;133(16):844 **(Dut)**

[Treatment of Parkinson tremor by chronic stimulation of the ventral intermediate nucleus of the thalamus] Benabid AL, et al. **Rev Neurol (Paris)** 1989;145(4):320–3 (Eng. Abstr.) **(Fre)**

[Parkinson syndrome. II: New aspects of therapy] Oertel WH, et al. **Med Klin** 1989 Jun 15;84(6):307–13 (83 ref.) **(Ger)**

[Patients with Parkinson disease: help in management of the disease] Späte HF, et al. **Z Arztl Fortbild (Jena)** 1988; 82(21):1081–3 **(Ger)**

[Interhemispheric artificial stable functional connections] Smirnov VM, et al. **Fiziol Cheloveka** 1988 Jul–Aug; 14(4):531–44 **(Rus)**

[Ethical aspects of the cellular treatment of Parkinson disease] Arlebrink J. **Lakartidningen** 1988 Sep 21;85(38):3073–4 **(Swe)**

[Progress in research on Parkinson disease. Better pharmacologic and surgical treatment] Olsson JE, et al. **Lakartidningen** 1989 Jun 28;86(26–27):2444–5 **(Swe)**

PARKINSON DISEASE, POSTENCEPHALITIC

see related
ENCEPHALITIS, EPIDEMIC

ETIOLOGY

Does idiopathic parkinsonism in Aberdeen follow intrauterine influenza? Ebmeier KP, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):911–3

Could Parkinson's disease follow intra–uterine influenza? A speculative hypothesis [letter] Singer C, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):931

HISTORY

Historical review: abnormal movements associated with epidemic encephalitis lethargica. Krusz JC, et al. **Mov Disord** 1987;2(3):137–41

PATHOLOGY

No viral antigens detected in brain tissue from a case of acute encephalitis lethargica and another case of post–encephalitic parkinsonism [letter] Elizan TS, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):800–1

PARKINSON DISEASE, SYMPTOMATIC

CHEMICALLY INDUCED

Methanol intoxication. Parkinsonism and decreased Met–enkephalin levels due to putaminal necrosis. Verslegers W, et al. **Acta Neurol Belg** 1988 May–Jul; 88(3):163–71

Parkinsonism induced by pyridostigmine [letter] Iwasaki Y, et al. **Acta Neurol Scand** 1988 Sep;78(3):236

Myoclonic encephalopathy due to bismuth salts: treatment with dimercaprol and analysis of CSF transmitters. Molina JA, et al. **Acta Neurol Scand** 1989 Mar;79(3):200–3

Review: drug–induced parkinsonism in elderly patients. Wilson JA, et al. **Age Ageing** 1989 May;18(3):208–10 (19 ref.)

Diltiazem–induced parkinsonism. Dick RS, et al. **Am J Med** 1989 Jul;87(1):95–6

Parkinsonism following neuroleptic withdrawal [letter] Nelli AC, et al. **Arch Gen Psychiatry** 1989 Apr;46(4):383–4

Chemically induced Parkinson's disease. II: Intermediates in the oxidation and reduction reactions of the 1–methyl–4–phenyl–2,3–dihydropyridinium ion and its deprotonated form. Chacón JN, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):63–71

Electroconvulsive therapy in neuroleptic–induced parkinsonism. Goswami U, et al. **Biol Psychiatry** 1989 Jul; 26(3):234–8

Parkinsonism, tremor, and depression induced by cinnarizine and flunarizine. Capellà D, et al. **BMJ** 1988 Sep 17; 297(6650):722–3

A 6–hydroxydopamine–induced selective parkinsonian rat model. Perese DA, et al. **Brain Res** 1989 Aug 14; 494(2):285–93

Young age parkinsonism and common drugs [letter] Ross RT. **Can J Neurol Sci** 1989 Aug;16(3):366–7

Study on MPTP–induced parkinsonian animal model in rhesus monkey and the mechanism of MPTP. Chen SD, et al. **Chin Med J [Engl]** 1988 Dec;101(12):879–83

Parkinsonian syndrome after cardiac arrest: radiological and neurochemical changes. Verslegers W, et al. **Clin Neurol Neurosurg** 1988;90(2):177–9

The D–1 dopamine receptor partial agonist, CY 208–243, exhibits antiparkinsonian activity in the MPTP–treated marmoset. Temlett JA, et al. **Eur J Pharmacol** 1988 Nov 1;156(2):197–206

MPTP–induced parkinsonism. Recent studies on the mechanism of toxicity. Bocchetta A, et al. **Funct Neurol** 1988 Oct–Dec;3(4):439–47 (50 ref.)

Secondary (toxic) parkinsonism as model of Parkinson's disease. Riederer P, et al. **Funct Neurol** 1988 Oct–Dec; 3(4):449–57 (32 ref.)

Effect of tetrahydroisoquinoline (TIQ), one of endogenous substances inducing parkinsonism, on isolated rat vas deferens. Koike K, et al. **Gen Pharmacol** 1989;20(2):259–60

Parkinson disease in farm workers [letter] Stefano E, et al. **Ital J Neurol Sci** 1989 Jun;10(3):379

Migration of tetrahydroisoquinoline, a possible parkinsonian neurotoxin, into monkey brain from blood as proved by gas chromatography–mass spectrometry. Niwa T, et al. **J Chromatogr** 1988 Oct 28;452:85–91

Neuroleptic-induced parkinsonian side effects in the mentally handicapped. Rao JM, et al. **J Ment Defic Res** 1989 Feb; 33 (Pt 1):81–6

Visual contrast sensitivity in drug-induced Parkinsonism. Bulens C, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar; 52(3):341–5

Dystonic–Parkinsonian syndrome after cyanide poisoning: clinical and MRI findings. Carella F, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1345–8

Drug–induced dyskinesia in primates rendered hemiparkinsonian by intracarotid administration of 1–methyl–4–phenyl–1,2,3,6–tetrahydropyridine (MPTP). Clarke CE, et al. **J Neurol Sci** 1989 May;90(3):307–14

Prochlorperazine and the elderly [letter] Bateman DN, et al. **Lancet** 1988 Nov 19;2(8621):1192

Prochlorperazine in the elderly [letter] Fiorini A, et al. **Lancet** 1988 Oct 8;2(8615):851

Cycads and amyotrophic lateral sclerosis/parkinsonism dementia [letter] Garruto RM, et al. **Lancet** 1988 Nov 5; 2(8619):1079

Compensatory responses to nigrostriatal bundle injury. Studies with 6–hydroxydopamine in an animal model of parkinsonism. Zigmond MJ, et al. **Mol Chem Neuropathol** 1989 Jun;10(3):185–200 (65 ref.)

The evolution and distribution of morphological changes in the nervous system of the common marmoset following the acute administration of 1–methyl–4–phenyl–1,2,3,6–tetrahydropyridine. Gibb WR, et al. **Mov Disord** 1989;4(1):53–74

Clinical and CT scan findings in a case of cyanide intoxication. Grandas F, et al. **Mov Disord** 1989;4(2):188–93

Sudden confusion with levodopa withdrawal [letter] Lang AE. **Mov Disord** 1987;2(3):223

Parkinsonism induced by high–dose cytosine arabinoside. Luque FA, et al. **Mov Disord** 1987;2(3):219–22

HLA antigens in drug–induced parkinsonism. Metzer WS, et al. **Mov Disord** 1989;4(2):121–8

Sudden onset of confusion with severe exacerbation of parkinsonism during levodopa therapy. Sage JI, et al. **Mov Disord** 1986;1(4):267–70

Cyanide–induced parkinsonism: clinical, MRI, and 6–fluorodopa PET studies. Rosenberg NL, et al. **Neurology** 1989 Jan;39(1):142–4

A new device for the quantitative assessment of dopaminergic drug effects in unilateral MPTP–lesioned monkeys. Wolters EC, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):257–61

Mechanisms of recovery in MPTP–induced parkinsonism [letter] Sandyk R. **Neuroscience** 1988 Nov;27(2):727–9

Parkinsonism: a clinical marker of exposure to neurotoxins. Bleecker ML. **Neurotoxicol Teratol** 1988 Sep–Oct; 10(5):475–8 (61 ref.)

Does smoking reduce the risk of neuroleptic parkinsonoids? Wagner B, et al. **Pharmacopsychiatry** 1988 Nov;21(6):302–3

Alterations of the central noradrenergic system in MPTP–induced monkey parkinsonism. Miyoshi R, et al. **Res Commun Chem Pathol Pharmacol** 1988 Oct; 62(1):93–102

Environmental toxins and Parkinson's disease [letter] **Trends Neurosci** 1989 May;12(5):182–3

Amyotrophic lateral sclerosis and Parkinson's disease complex on Guam linked to an environmental neurotoxin. Kurland LT. **Trends Neurosci** 1988 Feb;11(2):51–4 (38 ref.)

The role of environmental toxins in the etiology of Parkinson's disease. Tanner CM. **Trends Neurosci** 1989 Feb; 12(2):49–54 (53 ref.)

[Adverse neurologic effects of metoclopramide. Report of 60 cases] Sun B, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Jun;27(6):358–60, 390 (Eng. Abstr.) **(Chi)**

[Transient Parkinson syndrome and tremor caused by the use of sodium valproate] van der Zwan A Jr. **Ned Tijdschr Geneeskd** 1989 Jun 17;133(24):1230–2 (Eng. Abstr.) **(Dut)**

[Striatal hypersensitivity to neuroleptics. Therapeutic difficulties and medico–legal aspects] Antoine C, et al. **Therapie** 1988 Aug–Sep;43(5):437 **(Fre)**

[Significance of the neurotoxin 1–methyl–4–phenyl–1,2,3,6–tetrahydropyridine for the etiology and therapy of idiopathic Parkinson disease] Lange KW. **Fortschr Neurol Psychiatr** 1989 Apr;57(4):142–8 (65 ref.) (Eng. Abstr.) **(Ger)**

[No Parkinsonian syndrome following acute paraquat poisoning] Zilker T, et al. **Klin Wochenschr** 1988 Nov 15; 66(22):1138–41 (Eng. Abstr.) **(Ger)**

[Increase in Parkinson symptoms caused by calcium antagonists] Hefner R, et al. **Nervenarzt** 1989 Mar; 60(3):187–8 **(Ger)**

[Movement patterns of demented and non–demented nursing home patients using the Involuntary Movements and Extrapyramidal Scale. Effects of pharmacotherapy] Schönenberger PM, et al. **Schweiz Arch Neurol Psychiatr** 1989;140(2):147–57 (Eng. Abstr.) **(Ger)**

[MPTP and Parkinson's disease] Imai H. **No To Shinkei** 1988 Nov;40(11):1011–24 (97 ref.) **(Jpn)**

[Parkinson syndrome after administration of acetylcholine into the caudate nuclei] Kryzhanovskiĭ GN, et al. **Biull Eksp Biol Med** 1989 May;107(5):522–5 (Eng. Abstr.) **(Rus)**

[Domperidone and Parkinson disease (letter)] Micheli F, et al. **Medicina (B Aires)** 1988;48(2):218 **(Spa)**

COMPLICATIONS

Dementia in Parkinson's disease is related to neuronal loss in the medial substantia nigra. Rinne JO, et al. **Ann Neurol** 1989 Jul;26(1):47–50

Autonomic dysfunction in recent onset and advanced Parkinson's disease. Piha SJ, et al. **Clin Neurol Neurosurg** 1988;90(3):221–6

Antecollis in parkinsonism [letter] Jorens PG, et al. **Lancet** 1989 Jun 10;1(8650):1320–1

Disproportionate antecollis in multiple system atrophy [letter] Quinn N. **Lancet** 1989 Apr 15;1(8642):844

DIAGNOSIS

Multiple system atrophy—the nature of the beast. Quinn N. **J Neurol Neurosurg Psychiatry** 1989 Jun;Suppl:78–89 (71 ref.)

Subcutaneous apomorphine as a diagnostic test for dopaminergic responsiveness in parkinsonian syndromes [letter] [see comments] Barker R, et al. **Lancet** 1989 Mar 25;1(8639):675. **Comment in:** Lancet 1989 Jun 3;1(8649):1262–3

The significance of the Lewy body in the diagnosis of idiopathic Parkinson's disease. Gibb WR, et al. **Neuropathol Appl Neurobiol** 1989 Jan–Feb;15(1):27–44

[Clinico–electroencephalographic indices of the parkinsonian syndrome induced by MPP+ in rats] Kryzhanovskiĭ GN, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):147–50 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Non–chromaffin tissue plus nerve growth factor reduces experimental parkinsonism in aged rats. Pezzoli G, et al. **Brain Res** 1988 Sep 6;459(2):398–403

An encapsulated dopamine–releasing polymer alleviates experimental parkinsonism in rats. Winn SR, et al. **Exp Neurol** 1989 Sep;105(3):244–50

Bioavailability and acceptability of a dispersible formulation of levodopa–benserazide in parkinsonian patients with and without dysphagia. Bayer AJ, et al. **J Clin Pharm Ther** 1988 Jun;13(3):191–4

Catecholamine metabolism during additional administration of DL–threo–3,4–dihydroxyphenylserine to patients with Parkinson's disease. Teelken AW, et al. **J Neural Transm Park Dis Dement Sect** 1989;1(3):177–88

Therapeutic efficacy of a novel transdermal delivery system for (+)–PHNO in parkinsonian squirrel monkeys [letter] Rupniak NM, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):289–90

Continuous intracerebroventricular infusion of dopamine and dopamine agonists through a totally implanted drug delivery system in animal models of Parkinson's disease. de Yebenes JG, et al. **Mov Disord** 1987;2(3):143–58

Antiparkinsonian activity of a single oral dose of PHNO. Grandas F, et al. **Mov Disord** 1987;2(1):47–51

PHNO, a novel dopamine agonist, in animal models of parkinsonism. Koller W, et al. **Mov Disord** 1987;2(3):193–9

Antiparkinsonian activity of (+)–PHNO in the MPTP–treated common marmoset. Nomoto M, et al. **Mov Disord** 1987;2(1):37–45

Antiparkinsonian efficacy of a novel transdermal delivery system for (+)–PHNO in MPTP–treated squirrel monkeys. Rupniak NM, et al. **Neurology** 1989 Mar;39(3):329–35

Protection against 1–methyl–4–phenyl–1,2,3,6–tetrahydropyridine–induced parkinsonism by the catecholamine uptake inhibitor nomifensine: behavioral analysis in monkeys with partial striatal dopamine depletions. Schultz W, et al. **Neuroscience** 1989;31(1):219–30

ENZYMOLOGY

Different forms of brain acetylcholinesterase and muscarinic binding in Parkinson's disease. Sirviö J, et al. **J Neurol Sci** 1989 Mar;90(1):23–32

Striosomes and extrastriosomal matrix contain different amounts of immunoreactive choline acetyltransferase in the human striatum. Hirsch EC, et al. **Neurosci Lett** 1989 Jan 16;96(2):145–50

ETIOLOGY

Parkinsonism in the presence of intracranial extracerebral haematomas. Pau A, et al. **Acta Neurochir (Wien)** 1989; 96(3–4):159–60

Flunarizine–induced parkinsonism in the elderly. Benvenuti F, et al. **J Clin Pharmacol** 1988 Jul;28(7):600–8

2–Phenylpyridine and 3–phenylpyridine, constituents of tea, are unlikely to cause idiopathic Parkinson's disease. Perry TL, et al. **J Neurol Sci** 1988 Jul;85(3):309–17

What is it? Case 1, 1987: unusual tremors, bradykinesia, and cerebral lucencies. Shale H, et al. **Mov Disord** 1987; 2(4):321–38

Reversible parkinsonism from shunt failure. Brazin ME, et al. **Pediatr Neurol** 1985 Sep–Oct;1(5):306–7

[Extrapyramidal side effects after long–term treatment with thiethylperazine] Brennum J. **Ugeskr Laeger** 1988 Nov 14; 150(46):2827 (Eng. Abstr.) **(Dan)**

[Alzheimer's disease with early association of a hemi–parkinsonian syndrome] Lechevalier B, et al. **Rev Neurol (Paris)** 1988;144(8–9):508–11 (Eng. Abstr.) **(Fre)**

[Parkinson syndrome. I: New aspects in research and diagnosis] Oertel WH, et al. **Med Klin** 1989 May 15; 84(5):258–61 (0 ref.) **(Ger)**

[A case report of pyridostigmine induced parkinsonism] Iwasaki Y, et al. **Rinsho Shinkeigaku** 1988 Jun;28(6):662–4 (Eng. Abstr.) **(Jpn)**

METABOLISM

Sebum secretion in idiopathic Parkinson's disease: effect of anticholinergic and dopaminergic drugs. Villares JC, et al. **Acta Neurol Scand** 1989 Jul;80(1):57–63

GM1 ganglioside–induced recovery of nigrostriatal dopaminergic neurons after MPTP: an immunohistochemical study. Hadjiconstantinou M, et al. **Brain Res** 1989 Apr 10;484(1–2):297–303

Cellular localisation of enkephalin gene expression in MPTP–treated cynomolgus monkeys. Augood SJ, et al. **Brain Res Mol Brain Res** 1989 Jul;6(1):85–92

Hypothesis: a nicotine–dopamine interaction linking smoking with Parkinson's disease and tardive dyskinesia. Kirch DG, et al. **Cell Mol Neurobiol** 1988 Sep;8(3):285–91 (32 ref.)

GM1 ganglioside treatment promotes recovery of striatal dopamine concentrations in the mouse model of MPTP–induced parkinsonism. Schneider JS, et al. **Exp Neurol** 1989 Aug;105(2):177–83

Cerebral metabolism of parkinsonian primates 21 days after MPTP. Schwartzman RJ, et al. **Exp Neurol** 1988 Dec; 102(3):307–13

Chronic L–deprenyl does not alter the restoration of striatal dopamine in MPTP–lesioned mice. Wiener HL, et al. **J Neurosci Res** 1989 Jul;23(3):326–9

Administration of MPTP to the common marmoset does not alter cortical cholinergic function. Garvey J, et al. **Mov Disord** 1986;1(2):129–34

The presence of tau distinguishes Lewy bodies of diffuse Lewy body disease from those of idiopathic Parkinson disease. Galloway PG, et al. **Neurosci Lett** 1989 May 22; 100(1–3):6–10

The neurotoxin MPTP does not reproduce in the rhesus monkey the interregional pattern of striatal dopamine loss typical of human idiopathic Parkinson's disease. Pifl C, et al. **Neurosci Lett** 1988 Oct 5;92(2):228–33

Increased caudate dopamine turnover may contribute to the recovery of motor function in marmosets treated with the dopaminergic neurotoxin MPTP. Rose S, et al. **Neurosci Lett** 1989 Jul 3;101(3):305–10

Altered lipofuscin pigmentation in the basal nucleus (Meynert) in Parkinson's disease. Ulfig N. **Neurosci Res** 1989 Jun;6(5):456–62

Experimental hemiparkinsonism in the rat following chronic unilateral infusion of MPP+ into the nigrostriatal dopamine pathway—II. Differential localization of dopamine and cholecystokinin receptors. Beresford IJ, et al. **Neuroscience** 1988 Oct;27(1):129–43

[Lipid peroxidation in the caudate nuclei in experimental parkinsonian syndrome] Kucherianu VG, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):39–41 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Mitochondria covered with a net of parallel and latticed filaments in nigral neurons of monkeys with experimental parkinsonism. Nakamura H, et al. **Acta Neuropathol (Berl)** 1989;77(5):489–93

The pedunculopontine nucleus in Parkinson's disease. Zweig RM, et al. **Ann Neurol** 1989 Jul;26(1):41–6

Striatonigral degeneration. A case report and a review of the literature. van Leeuwen RB, et al. **Clin Neurol Neurosurg** 1988;90(2):121–4 (35 ref.)

Neuropathology in movement disorders. Gibb WR. **J Neurol Neurosurg Psychiatry** 1989 Jun;Suppl:55–67 (119 ref.)

Parkinsonism as first manifestation of lymphomatoid granulomatosis [letter] Oliveras C, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):999–1001

PHYSIOPATHOLOGY

Rate of cell death in parkinsonism indicates active neuropathological process. McGeer PL, et al. **Ann Neurol** 1988 Oct;24(4):574–6

Parkinsonism and amiodarone therapy. Werner EG, et al. **Ann Neurol** 1989 Jun;25(6):630–2

Hemiparkinsonism in monkeys after unilateral caudate nucleus infusion of 1–methyl–4–phenyl–1,2,3,6–tetrahydropyridine (MPTP): behavior and histology. Imai H, et al. **Brain Res** 1988 Dec 6;474(2):327–32

Alterations in event–related potentials (ERPs) of MPTP–treated monkeys. Glover A, et al. **Electroencephalogr Clin Neurophysiol** 1988 Nov–Dec; 71(6):461–8

Pain threshold and polysynaptic components of the blink reflex in Parkinson's disease. Massetani R, et al. **Funct Neurol** 1989 Apr–Jun;4(2):199–202

Preparatory processes in a case of hemi-parkinsonism. Stelmach GE, et al. **J Neurol** 1989 Mar;236(3):174–6

Electrophysiological differences between Parkinson's disease and vascular parkinsonism. Tachibana H, et al. **Jpn J Med** 1988 Aug;27(3):261–6

Paraneoplastic degeneration of the substantia nigra with dystonia and parkinsonism. Golbe LI, et al. **Mov Disord** 1989;4(2):147–52

Parkinsonism–plus syndromes. Jankovic J. **Mov Disord** 1989; 4 Suppl 1:S95–119 (131 ref.)

Behavioural effects of (+)-4-propyl-9-hydroxynaphthoxazine in primates rendered parkinsonian with 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine. Clarke CE, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jul; 338(1):35–8

Experimental hemiparkinsonism in the rat following chronic unilateral infusion of MPP+ into the nigrostriatal dopamine pathway--I. Behavioural, neurochemical and histological characterization of the lesion. Sirinathsinghji DJ, et al. **Neuroscience** 1988 Oct;27(1):117–28

[EEG changes and symptomatic parkinsonism after intracaudate administration of dopamine antibodies] Kryzhanovskiĭ GN, et al. **Biull Eksp Biol Med** 1989 Jan; 107(1):13–6 (Eng. Abstr.) **(Rus)**

SURGERY

Adrenal grafting for Parkinson's disease: a role for substance P. Barker R. **Int J Neurosci** 1989 May;46(1–2):47–51 (27 ref.)

Transplantation advances in Parkinson's disease. Sladek JR Jr, et al. **Mov Disord** 1989;4 Suppl 1:S120–5

[Transplant–induced recovery from 6–OHDA lesions of the nigro–striatal dopamine neurons in mice] Shimizu K, et al. **No To Shinkei** 1988 Jul;40(7):623–8 (Eng. Abstr.) **(Jpn)**

THERAPY

Transient behavioral recovery in hemiparkinsonian primates after adrenal medullary allografts. Bankiewicz KS, et al. **Prog Brain Res** 1988;78:543–9

Recovery of dopaminergic fibers in striatum of the 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine-treated mouse is enhanced by grafts of adrenal medulla. Bohn MC, et al. **Prog Brain Res** 1988;78:535–42

Transplant improves hemiparkinsonian syndrome in nonhuman primate: intracerebral injection, rotometry, tyrosine hydroxylase immunohistochemistry. Dubach M, et al. **Prog Brain Res** 1988;78:491–6

Transplantation of embryonic marmoset dopaminergic neurons to the corpus striatum of marmosets rendered parkinsonian by 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine. Fine A, et al. **Prog Brain Res** 1988;78:479–89

Paraneuronal grafts in unilateral 6-hydroxydopamine-lesioned rats: morphological aspects of adrenal chromaffin and carotid body glomus cell implants. Hansen JT, et al. **Prog Brain Res** 1988;78:507–11

Fetal dopamine neural grafts: extended reversal of methylphenyltetrahydropyridine-induced parkinsonism in monkeys. Sladek JR Jr, et al. **Prog Brain Res** 1988; 78:497–506

PARKINSONIAN SYNDROME see **PARKINSON DISEASE, SYMPTOMATIC**

PAROMOMYCIN

PHARMACOLOGY

The paromomycin resistance mutation (parr–454) in the 15 S rRNA gene of the yeast Saccharomyces cerevisiae is involved in ribosomal frameshifting. Weiss–Brummer B, et al. **Mol Gen Genet** 1989 Jun;217(2–3):362–9

Mistranslation induces the heat–shock response in the yeast Saccharomyces cerevisiae. Grant CM, et al. **Mol Microbiol** 1989 Feb;3(2):215–20

THERAPEUTIC USE

Leishmania major: histopathological responses before and after topical treatment in experimental animals. El-On J, et al. **Exp Parasitol** 1989 Feb;68(2):144–54

PARONYCHIA

DRUG THERAPY

Iontophoretic treatment of herpetic whitlow. Gangarosa LP Sr, et al. **Arch Phys Med Rehabil** 1989 Apr;70(4):336–40

Allergic contact dermatitis due to thymol in Listerine for treatment of paronychia. Fisher AA. **Cutis** 1989 Jun; 43(6):531–2

[Evaluation of the topical antimycotic treatment in psoriatic onychopathy with severe perionychia] Santagostino L, et al. **G Ital Dermatol Venereol** 1988 May;123(5):253–9 (Eng. Abstr.) **(Ita)**

ETIOLOGY

Nail infections. Jules KT, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):403–16 (24 ref.)

Chronic paronychia from multiple organisms [letter] Rayan G, et al. **J Hand Surg [Am]** 1988 Sep;13(5):790

SURGERY

[Treatment of paronychia in miners] Borisov Bf, et al. **Klin Khir** 1989;(1):24–5 (Eng. Abstr.) **(Rus)**

[Treatment of suppurative diseases of the fingers and hand at a hospital] Bubnova NA, et al. **Klin Khir** 1989;(1):3–6 (Eng. Abstr.) **(Rus)**

[Combined ambulatory treatment of subcutaneous paronychia using cryoglycerin] Kabanov AN, et al. **Klin Khir** 1989; (1):67 **(Rus)**

[A method of treating suppurative diseases of the hand without dressings] Kharchenko VG, et al. **Klin Khir** 1989; (1):66 **(Rus)**

[Use of a continuous action carbon dioxide laser in the treatment of paronychia] Chernov EV, et al. **Vestn Khir** 1989 Mar;142(3):65–6 **(Rus)**

[Use of lasers in polyclinical surgical practice] Krasavtseva LV, et al. **Vestn Khir** 1988 Jul;141(7):114–5 **(Rus)**

[Treatment of complicated paronychia of the fingers with retrograde infusions of lincomycin] Zviagin LM, et al. **Vestn Khir** 1988 Jul;141(7):112–4 **(Rus)**

PAROTID DISEASES

Ultrasonography and computer tomography of the salivary glands in the evaluation of Sjögren's syndrome. Comparison with parotid sialography. de Clerck LS, et al. **J Rheumatol** 1988 Dec;15(12):1777–81

[Parotid tuberculosis. Apropos of 2 cases] Marrakchi R, et al. **Rev Stomatol Chir Maxillofac** 1989;90(4):297–9 (Eng. Abstr.) **(Fre)**

COMPLICATIONS

Facial nerve paralysis with benign parotid masses. DeLozier HL, et al. **Ann Otol Rhinol Laryngol** 1989 Aug;98(8 Pt 1):644–7

Study of AIDS–related lymphadenopathy in the intraparotid and perisubmaxillary gland lymph nodes. Poletti A, et al. **J Oral Pathol** 1988 Apr;17(4):164–7

Salivary gland lymphoproliferative disease in acquired immune disease. de Vries EJ, et al. **Otolaryngol Head Neck Surg** 1988 Jul;99(1):59–62

CONGENITAL

External fistula of the main parotid duct; the alternative procedure. Perdzyński W, et al. **Z Kinderchir** 1988 Dec; 43(6):417–8

DIAGNOSIS

High resolution ultrasonography of the parotid gland in children. Part II. Seibert RW, et al. **Pediatr Radiol** 1988; 19(1):13–8

[A preliminary study on the diagnostic imaging of parotid masses] Yu GY. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Nov; 23(6):342–4, 385 (Eng. Abstr.) **(Chi)**

[Magnetic resonance tomography of the parotid gland: plain diagnosis and Gd–DTPA] Vogl T, et al. **Digitale Bilddiagn** 1989 Jun;9(2):59–68 (Eng. Abstr.) **(Ger)**

[Diagnostic possibilities of ultrasonography of diseases of the parotid gland] Boroń Z. **Radiol Diagn (Berl)** 1988; 29(6):845–8 (Eng. Abstr.) **(Ger)**

EPIDEMIOLOGY

Parotid fistula in children in the tropics. Ijaduola TG, et al. **Ann Trop Paediatr** 1988 Dec;8(4):234–7

ETIOLOGY

A parotid fistula and sialocele complicating temporomandibular joint surgery. Hutchison IL, et al. **Br J Oral Maxillofac Surg** 1989 Jun;27(3):203–8

Pneumoparotid. In cystic fibrosis. David ML, et al. **Clin Pediatr (Phila)** 1988 Oct;27(10):506–8

Transient parotid gland swelling after neurosurgical procedures. Gilsanz F, et al. **J Neurosurg Sci** 1988 Jul–Sep; 32(3):123–5

[Cervicofacial hydatidosis. Apropos of 7 cases] Ennouri A, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(2):169–71 (Eng. Abstr.) **(Fre)**

PATHOLOGY

Fine needle aspiration cytology of parotid sarcoidosis. Mair S, et al. **Acta Cytol** 1989 Mar–Apr;33(2):169–72

Wegener's granulomatosis presenting with unilateral parotid enlargement. Kavanaugh AF, et al. **Am J Med** 1988 Nov; 85(5):741–2

Is parotid lymphadenopathy a new disease or part of AIDS? Shaha A, et al. **Am J Surg** 1988 Oct;156(4):297–300

Sialocysts of the parotid glands. Batsakis JG, et al. **Ann Otol Rhinol Laryngol** 1989 Jun;98(6):487–9

Cystic parotid lesions in patients at risk for the acquired immunodeficiency syndrome. Finfer MD, et al. **Arch Otolaryngol Head Neck Surg** 1988 Nov; 114(11):1290–4

Tuberculosis of the parotid salivary gland--case report. Taher AA. **Br J Oral Maxillofac Surg** 1988 Dec;26(6):514–6

Solitary cysts of the parotid. Maynard JD. **Br J Surg** 1988 Oct;75(10):1043

Immunohistology of the benign lymphoepithelial lesion in AIDS–related lymphadenopathy: a case report. Kornstein MJ, et al. **Hum Pathol** 1988 Nov;19(11):1359–61

Localized primary amyloid tumor of the parotid gland. Stimson PG, et al. **Oral Surg Oral Med Oral Pathol** 1988 Oct;66(4):466–9

[Familial occurrence of increased secretion of S alpha–amylase with recurrent swelling of the parotid glands in one member of the family] Topinková M, et al. **Vnitr Lek** 1988 Oct;34(10):1018–23 (Eng. Abstr.) **(Cze)**

[Cystic lymphoid hyperplasia of the parotid in relation to acquired immunodeficiency syndrome (HIV+). Apropos of 2 cases] Vaillant JM, et al. **Rev Stomatol Chir Maxillofac** 1989;90(2):136–41 (Eng. Abstr.) **(Fre)**

PREVENTION & CONTROL

[A method for the prevention of the formation of salivary fistulae in gunshot wounds of the parotid gland] Zakharov VI. **Voen Med Zh** 1989 Apr;(4):43–4 **(Rus)**

RADIOGRAPHY

Fine needle aspiration and computed tomographic scanning in the evaluation of parotid lesions. Cameron RH, et al. **Ear Nose Throat J** 1989 Mar;68(3):226, 230, 234, passim

SURGERY

Total parotidectomy--a routine treatment for parotid gland swellings? Alajmo E, et al. **J Laryngol Otol** 1989 Feb; 103(2):181–6

[Parotidectomy in children. Apropos of a homogeneous series of 15 cases] Beziat JL, et al. **Rev Stomatol Chir Maxillofac** 1988;89(3):142–7 (Eng. Abstr.) **(Fre)**

THERAPY

Post–traumatic parotid fistulae and sialoceles. A prospective study of conservative management in 51 cases. Parekh D, et al. **Ann Surg** 1989 Jan;209(1):105–11

PAROTID GLAND

Gustatory pain: a complication of carotid endarterectomy. Truax BT. **Neurology** 1989 Sep;39(9):1258–60

ABNORMALITIES

Congenital imperforate parotid duct openings: a case report. Watts KD. **Br J Oral Maxillofac Surg** 1988 Aug; 26(4):341–3

ANALYSIS

Cytochemical demonstration of actin filaments in myoepithelial cells of the human parotid gland. Yoshihara T, et al. **Acta Anat (Basel)** 1988;132(4):317–20

The influence of sympathomimetic and sympatholytic agents on the salivary flow rate and concentration of Ca, P and protein in the parotid gland of the goat. Isac MD, et al. **Acta Physiol Hung** 1988;72(3–4):291–6

Mediation of norepinephrine effects on free cytosolic calcium in rat parotid acinar cells by alpha 1 adrenergic receptors. McMillian MK, et al. **Biochem Pharmacol** 1988 Oct 1; 37(19):3790–3

Immunoelectron microscopic localization of catalytic and regulatory subunits of cAMP–dependent protein kinases in the parotid gland. Joachim S, et al. **Eur J Cell Biol** 1988 Aug;46(3):491–8

Isoprenaline–induced and constitutive members of a proline–rich protein sub–group from mouse parotid glands studied with monoclonal antibody NAL1. Divecha N, et al. **J Mol Endocrinol** 1989 Jul;3(1):7–14

ANATOMY & HISTOLOGY

Microscopic and ultrastructural study of the lymphatic system in the human parotid gland. Marchetti C, et al. **Acta Anat (Basel)** 1989;134(2):106–12

BLOOD SUPPLY

Infarcted ('infected') adenolymphomas. A clinicopathological study of 20 cases. Eveson JW, et al. **Clin Otolaryngol** 1989 Jun;14(3):205–10

[The vascular and nerve supply of the parotid gland in rats using scanning electron microscopy] Mazurová Y. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1988;31(4):467–76 (Eng. Abstr.) **(Cze)**

[The hemodynamics of the parotid glands in children consuming carbohydrates] Sigal ZM, et al. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):65–7 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Capacitative calcium entry in parotid acinar cells. Takemura H, et al. **Biochem J** 1989 Mar 1;258(2):409–12

The short–term effects of a single injection of isoproterenol

on proliferation in the submandibular gland, parotid gland and oesophagus in vivo. Bybee A, et al. **Cell Tissue Kinet** 1988 Mar;21(2):133–41

Endocytosis of native and glycosylated bovine serum albumin by duct cells of the rat parotid gland. Lotti LV, et al. **Cell Tissue Res** 1989 Feb;255(2):333–42

Regulation of proto-oncogenes in rat parotid acinar cells in vitro after stimulation of beta-adrenergic receptors. Kousvelari E, et al. **Exp Cell Res** 1988 Nov;179(1):194–203

The rat parotid gland—a renewing cell population. Schwartz-Arad D, et al. **J Anat** 1988 Dec;161:143–51

Parotid salivary gland of the African elephant (Loxodonta africana): structure and composition of saliva. Raubenheimer EJ, et al. **J S Afr Vet Assoc** 1988 Dec; 59(4):184–7

Calcium-activated potassium channels from rat parotid acinar cells. Dehaye JP. **Pflugers Arch** 1989;414 Suppl 1:S158–9

DRUG EFFECTS

Effects of beta-adrenergic agonists in the parotid gland of the rat—an electrophysiological study. Thesleff P. **Acta Physiol Scand** 1989 Jun;136(2):245–51

The effects of chronic ethanol administration on stimulated parotid secretion in the rat. Scott J, et al. **Alcohol Alcohol** 1989;24(2):145–52

Relationship between serum-amylase activity and intraductal pressures in the rat parotid and submandibular salivary glands after administration of pilocarpine or isoprenaline. Ikeno T, et al. **Arch Oral Biol** 1988;33(6):403–6

Changes in rat parotid saliva protein composition following chronic reserpine treatment and their relation to inanition. Johnson DA. **Arch Oral Biol** 1988;33(7):463–6

Lack of acute effects of methotrexate on rat parotid salivary gland function. Wolff A, et al. **Arch Oral Biol** 1989; 34(2):109–15

Monovalent ion enhancement of beta-adrenergic-stimulated adenylate cyclase activity in mouse parotid gland. Watson EL, et al. **Biochem Pharmacol** 1989 Apr 1;38(7):1069–74

Anticholinergic effects of cis-chlorprothixene characterized in rat parotid acini. Undén M, et al. **Eur J Pharmacol** 1989 May 2;164(1):129–38

Effects of epidermal growth factor and nerve growth factor on isoproterenol-induced DNA synthesis in rat parotid and pancreas following removal of submandibular-sublingual glands. Schneyer CA, et al. **J Oral Pathol** 1988 May; 17(5):250–6

Oscillations of free cytosolic calcium evoked by cholinergic and catecholaminergic agonists in rat parotid acinar cells. Gray PT. **J Physiol (Lond)** 1988 Dec;406:35–53

[Occlusion therapy in chronic recurrent parotitis? A report of clinical experiences with the use of a fibrin glue-gentamycin mixture] Laskawi R, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Jul;67(7):367–8 (Eng. Abstr.) **(Ger)**

EMBRYOLOGY

A contribution to the prenatal development of the lymphatic tissue of the parotid gland. Holibka V. **Acta Univ Palacki Olomuc Fac Med** 1988;120:421–8

ENZYMOLOGY

Activation and distribution of rat parotid cAMP-dependent protein kinase following beta-adrenergic receptor stimulation in vitro. Quissell DO, et al. **Arch Oral Biol** 1989; 34(1):23–6

Eicosanoids evoke the release of amylase and increase cytoplasmic calcium in rat parotid cells. Snowdowne KW, et al. **Biochem Biophys Res Commun** 1989 May 30; 161(1):379–84

Characterisation of a high affinity Ca2+-stimulated, Mg2+-dependent ATPase in the rat parotid plasma membrane. Teo TS, et al. **Biochim Biophys Acta** 1988 Nov 22;945(2):202–10

Inducing effects of chronic administration of isoproterenol on 1-acyl-sn-glycero-3-phosphate and 1-acyl-sn-glycero-3-phosphocholine acyltransferases in rat parotid salivary gland. Yashiro K, et al. **Comp Biochem Physiol [C]** 1988;90(2):397–402

Immunogold localization of the type II regulatory subunit of cyclic AMP-dependent protein kinase. Monoclonal antibody characterization and RII distribution in rat parotid cells. Mednieks MI, et al. **J Histochem Cytochem** 1989 Mar; 37(3):339–46

Localisation of 11 beta-hydroxysteroid dehydrogenase--tissue specific protector of the mineralocorticoid receptor. Edwards CR, et al. **Lancet** 1988 Oct 29;2(8618):986–9

A salivary amylase transgene is efficiently expressed in liver but not in parotid gland of transgenic mice. Jones JM, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6613–23

GROWTH & DEVELOPMENT

A light and electron microscope study of aging parotid and submandibular salivary glands of Swiss-Webster mice. Meisel DL, et al. **Exp Gerontol** 1988;23(3):197–210

INJURIES

Post-traumatic parotid fistulae and sialoceles. A prospective study of conservative management in 51 cases. Parekh D, et al. **Ann Surg** 1989 Jan;209(1):105–11

[Traumatic laceration of facial nerve and Stenone duct. A clinical case] Giordano M, et al. **Minerva Stomatol** 1989 Jan;38(1):31–5 (Eng. Abstr.) **(Ita)**

[A method for the prevention of the formation of salivary fistulae in gunshot wounds of the parotid gland] Zakharov VI. **Voen Med Zh** 1989 Apr;(4):43–4 **(Rus)**

INNERVATION

An electrophysiological in-vivo study on the effects of nerve stimulation, drugs and denervation in the parotid gland of the rat. Thesleff P. **Acta Physiol Scand** 1989 Jun; 136(2):235–43

The co-localisation of substance P and VIP in cholinergic-type terminals of the rat parotid gland. al-Hadithi BA, et al. **J Anat** 1988 Aug;159:83–92

The effects of streptozotocin-induced diabetes on the peptidergic innervation and function of the rat parotid gland. Sharkey KA, et al. **J Auton Nerv Syst** 1989 Jul; 27(2):127–37

Synchronous facial vascular vasodilation and salivatory response to atropine in the parasympathetically denervated human salivary parotid gland. Levin SL. **Laryngoscope** 1989 Mar;99(3):297–301

METABOLISM

Localization of cellular regulatory proteins using postembedding immunogold labeling. Hand AR, et al. **Am J Anat** 1989 Jun-Jul;185(2-3):183–96

Potassium transport by pancreatic and parotid zymogen granule membranes. Gasser KW, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C705–11

H+-dependent calcium uptake into an IP3-sensitive calcium pool from rat parotid gland. Thévenod F, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):G429–40

Endocytosis of parotid salivary proteins by striated duct cells in streptozotocin-diabetic rats. Lotti LV, et al. **Anat Rec** 1988 Aug;221(4):802–11

ATP-dependent Ca2+ transport in the rat parotid basolateral plasma membrane is regulated by calmodulin. Ambudkar IS, et al. **Arch Biochem Biophys** 1989 Feb 1; 268(2):576–84

Effects of liquid diet on amylase activity and mRNA levels in rat parotid gland. Zelles T, et al. **Arch Oral Biol** 1989; 34(1):1–7

Evidence that ATP-dependent Ca2+ transport in rat parotid microsomal membranes requires charge compensation. Baum BJ, et al. **Biochem J** 1988 Sep 15;254(3):649–54

Extracellular ATP increases free cytosolic calcium in rat parotid acinar cells. Differences from phospholipase C-linked receptor agonists. McMillian MK, et al. **Biochem J** 1988 Oct 1;255(1):291–300

Two modes of regulation of the phospholipase C-linked substance-P receptor in rat parotid acinar cells. Sugiya H, et al. **Biochem J** 1988 Jul 15;253(2):459–66

Protein kinase C-dependent and -independent mechanisms regulating the parotid substance P receptor as revealed by differential effects of protein kinase C inhibitors. Sugiya H, et al. **Biochem J** 1988 Dec 1;256(2):677–80

Underestimation of D-glucose phosphorylation as measured by 3H2O production from D-[2-3H]glucose. Malaisse WJ, et al. **Biochem Med Metab Biol** 1988 Aug;40(1):35–41

The relationship of intracellular free calcium activity to amylase secretion in substance P- and isoprenaline-stimulated rat parotid acini. Arkle S, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1257–61

Muscarinic receptor coupling to inositol phospholipid metabolism in guinea-pig cerebral cortex, parotid gland and ileal smooth muscle. Ek B, et al. **Biochem Pharmacol** 1988 Dec 1;37(23):4461–7

The inhibition of cyclic AMP-mediated exocytosis from rat parotid cells by calcium chelation is due to depression of cellular ATP. Hincke MT. **Biochim Biophys Acta** 1988 Nov 17;967(2):204–10

Lack of desensitization to neurokinin A due to partial agonist property of this peptide at parotid substance P receptors. McMillian MK, et al. **Brain Res** 1989 Feb 20;480(1-2):330–4

Modulation of intracellular free Ca2+ concentration by IP3-sensitive and IP3-insensitive nonmitochondrial Ca2+ pools. Schulz I, et al. **Cell Calcium** 1989 Jul;10(5):325–36 (64 ref.)

Inhibition of isoproterenol-induced DNA and RNA synthesis in rat parotid and pancreas following removal of submandibular-sublingual glands. Schneyer CA, et al. **Cell Tissue Res** 1989;256(2):361–3

Difference in saliva/plasma concentration ratio of endogenous urea between mandibular and parotid glands in dogs. Mizuno S, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec;36(12):4921–6

Differences in the protein composition of rat parotid salivas evoked by sympathetic and parasympathetic nerve stimulation. Proctor GB, et al. **Comp Biochem Physiol [A]** 1989;92(4):589–92

Basic proline-rich proteins of murine parotid glands. Induction of mRNA by isoprenaline and post-secretion processing. Bannister AJ, et al. **Eur J Biochem** 1989 May 1;181(2):371–9

Changes in the content and distribution of sialic acid on the basal surface of isoproterenol-stimulated mouse parotid acinar cells. Julieta González M, et al. **Eur J Cell Biol** 1989 Jun;49(1):171–9

Functional characterization of muscarinic receptors in rat parotid acini. Dehaye JP, et al. **Eur J Pharmacol** 1988 Jul 14;151(3):427–34

Decreased signal transduction in rat parotid cell aggregates during aging is not due to loss of alpha 1-adrenergic receptors. Ishikawa Y, et al. **Exp Gerontol** 1989;24(1):25–36

Cytochemical localization of carbohydrates in intercalated duct and acinar cells of mouse parotid gland. Jezernik K, et al. **Histochem J** 1989 Mar;21(3):131–5

Source of 3H-labeled inositol bis- and monophosphates in agonist-activated rat parotid acinar cells. Hughes AR, et al. **J Biol Chem** 1989 Jun 5;264(16):9400–7

The role of HCO3- and Na+/H+ exchange in the response of rat parotid acinar cells to muscarinic stimulation. Melvin JE, et al. **J Biol Chem** 1988 Dec 25;263(36):19564–9

Activation of calcium entry by the tumor promoter thapsigargin in parotid acinar cells. Evidence that an intracellular calcium pool and not an inositol phosphate regulates calcium fluxes at the plasma membrane. Takemura H, et al. **J Biol Chem** 1989 Jul 25; 264(21):12266–71

Effects of muscarinic, alpha-adrenergic, and substance P agonists and ionomycin on ion transport mechanisms in the rat parotid acinar cell. The dependence of ion transport on intracellular calcium. Soltoff SP, et al. **J Gen Physiol** 1989 Feb;93(2):285–319

Coupled Na+/H+ exchange in rat parotid basolateral membrane vesicles. Manganel M, et al. **J Membr Biol** 1988 Jun;102(3):247–54

Dopamine actions in vitro on enzyme and electrolyte secretion from normal and sympathectomized rat parotid glands. Danielsson A, et al. **J Physiol (Lond)** 1988 Oct; 404:145–56

Importance of the presence of the N-terminal tripeptide of substance P for the stimulation of phosphatidylinositol metabolism in rat parotid gland: a possible activation of phospholipases C and D. Rollandy I, et al. **Neuropeptides** 1989 Apr;13(3):175–85

Alpha 1-adrenergic regulation of Cl- and Ca2+ movements in rat parotid acinar cells. Ambudkar IS, et al. **Pflugers Arch** 1988 Jul;412(1-2):75–9

Physiological localization of an agonist-sensitive pool of Ca2+ in parotid acinar cells. Foskett JK, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):167–71

[In vitro effect of pentoxifylline on the metabolism of glycogen and the secretory process in the parotid and lacrimal extraorbital glands in rats] Mauduit P, et al. **Pathol Biol (Paris)** 1988 Oct;36(8 Pt 2):1060–5 (Eng. Abstr.) **(Fre)**

[Penetration of labeled rifampicin into the rat parotid gland] Romano G, et al. **Riv Eur Sci Med Farmacol** 1987 Sep; 9(3):345–7 (Eng. Abstr.) **(Ita)**

MICROBIOLOGY

Whole, submandibular, and parotid saliva-mediated aggregation of Pseudomonas aeruginosa in cystic fibrosis. Komiyama K, et al. **Infect Immun** 1989 Apr;57(4):1299–304

PATHOLOGY

Phase-contrast imaging of the parotid region. Mikulis DJ, et al. **AJNR** 1989 Jan-Feb;10(1):157–64

Sialocysts of the parotid glands. Batsakis JG, et al. **Ann Otol Rhinol Laryngol** 1989 Jun;98(6):487–9

Primary muco-epidermoid carcinoma arising in a parotid lymph node. Adkins GF, et al. **Aust N Z J Surg** 1989 May; 59(5):433–5

Capsular penetration and perforation in pleomorphic adenoma of the parotid salivary gland. Lawson HH. **Br J Surg** 1989 Jun;76(6):594–6

Solitary cysts of the parotid. Maynard JD. **Br J Surg** 1988 Oct;75(10):1043

Lympho-epithelial 'branchial' cysts within the parotid gland. Wyman A, et al. **Br J Surg** 1988 Aug;75(8):818–9

Recurrent parotid gland enlargement as an initial manifestation of Sjögren syndrome in children. Mizuno Y, et al. **Eur J Pediatr** 1989 Feb;148(5):414–6

Histological analysis of parotid and submandibular glands in chronic alcohol abuse: a necropsy study. Scott J, et al. **J Clin Pathol** 1988 Aug;41(8):837–40

MR imaging of parotid mass lesions: attempts at histopathologic differentiation. Swartz JD, et al. **J Comput Assist Tomogr** 1989 Sep-Oct;13(5):789–96

Morphological alterations of salivary gland parenchyma in chronic sialadenitis. Matthews TW, et al. **J Otolaryngol** 1988 Dec;17(7):385–94

Effect of chronic ethanol and nicotine consumption on the function and morphology of the salivary glands. Maier H, et al. **Klin Wochenschr** 1988;66 Suppl 11:140–50

Bilateral parotid enlargement in HIV-seropositive patients. Tunkel DE, et al. **Laryngoscope** 1989 Jun;99(6 Pt 1):590–5

Localized primary amyloid tumor of the parotid gland. Stimson PG, et al. **Oral Surg Oral Med Oral Pathol** 1988 ;66(4):466–9

Parotid gland: US findings in Sjögren syndrome. Work in progress. Bradus RJ, et al. **Radiology** 1988 Dec; 169(3):749–51

[A study on the effect of aging on salivary glands and xerostomia] Konno A, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Nov;91(11):1837–46 (Eng. Abstr.) **(Jpn)**

[Toxoplasmosis associated with a parotid tumor. A case

report] Imamoto C, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):434–5 **(Jpn)**

[Morphologic characteristics of the parotid glands in monkeys in the late period following mumps] Rybakova MG, et al. **Biull Eksp Biol Med** 1989 May;107(5):624–7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

K+ transport and membrane potentials in isolated rat parotid acini. Nauntofte B, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):C508–18

Cholinergic-induced electrolyte transport in rat parotid acini. Nauntofte B, et al. **Comp Biochem Physiol [A]** 1988; 90(4):739–46

Regulation of proline-rich protein and alpha-amylase genes in parotid-hepatoma hybrid cells. Wright PS, et al. **FASEB J** 1988 Dec;2(15):3104–7

The effects of atropine and chronic sympathectomy on maximal parasympathetic stimulation of parotid saliva in rats. Ekström J, et al. **J Physiol (Lond)** 1988 Sep;403:105–16

Regulation of calcium handling by rat parotid acinar cells. Baum BJ, et al. **Mol Cell Biochem** 1988 Jul–Aug; 82(1–2):67–73

The relation of elevation of cytosolic free calcium to activation of membrane conductance in rat parotid acinar cells. Gray PT. **Proc R Soc Lond [Biol]** 1989 Jun 22; 237(1286):99–107

Pharmacology of neuroglandular transmission in exocrine glands. Davison JS. **Proc West Pharmacol Soc** 1988; 31:235–6

RADIATION EFFECTS

Prior x-ray therapy for acne related to tumors of the parotid gland. Preston-Martin S. **Arch Dermatol** 1989 Jul; 125(7):921–4

Transport of alpha-aminoisobutyric acid into rat parotid after X-irradiation. Bodner L. **Int J Radiat Biol** 1989 Apr; 55(4):653–60

[Clinical picture and possible causes of functional disorders of the parotid gland in radioiodine therapy of differentiated thyroid cancer] Deeg M, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Jul;67(7):362–6 (Eng. Abstr.) **(Ger)**

[Clinical and statistical study on the value of the sugar cube test in the measurement of the degree of radio-induced xerostomia] Gandolfo S, et al. **Minerva Stomatol** 1989 Jan; 38(1):71–7 (Eng. Abstr.) **(Ita)**

RADIOGRAPHY

Computed tomography of salivary glands in Sjögren's syndrome. March DE, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jan;115(1):105–6

Parotid sialography and lip biopsy in the evaluation of oral component in Sjögren's syndrome. Vitali C, et al. **Clin Exp Rheumatol** 1989 Mar–Apr;7(2):131–5

[Computerized-tomographic examinations of the parotid gland. I. Methods of examination and radiological anatomy] Mlosek K, et al. **Pol Przegl Radiol (Warszawa)** 1987 Nov–Dec;51(6):290–4 (Eng. Abstr.) **(Pol)**

[Computerized-tomographic examinations of the parotid gland. II. CT symptomatology of tumors of the parotid gland] Mlosek K, et al. **Pol Przegl Radiol (Warszawa)** 1987 Nov–Dec;51(6):295–9 (Eng. Abstr.) **(Pol)**

SECRETION

Altered bacterial aggregation and adherence associated with changes in rat parotid-gland salivary proteins induced in vivo by beta-adrenergic stimulation. Kousvelari EE, et al. **Arch Oral Biol** 1988;33(5):341–6

Isolation and characterization of six proteins from rabbit parotid saliva belonging to a unique family of proline-rich proteins. Spielman AI, et al. **Arch Oral Biol** 1989; 34(2):117–30

Salivary lactoferrin in primary Sjögren's syndrome. Jezequel N, et al. **Clin Exp Rheumatol** 1989 Mar–Apr;7(2):123–5

Evaluation of unstimulated whole saliva flow rate and stimulated parotid flow as confirmatory tests for xerostomia. Skopouli FN, et al. **Clin Exp Rheumatol** 1989 Mar–Apr;7(2):127–9

Functional and structural changes in parotid glands of alcoholic cirrhotic patients. Dutta SK, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):510–8

Oral defense mechanisms are impaired early in HIV-1 infected patients. Yeh CK, et al. **J Acquir Immune Defic Syndr** 1988;1(4):361–6

Signal transmission in exocrine cells is associated with rapid activity changes of acyltransferases and diacylglycerol kinase due to reversible protein phosphorylation. Söling HD, et al. **J Biol Chem** 1989 Jun 25;264(18):10643–8

Gyrase inhibitor ciprofloxacin in human parotid saliva. Adler D, et al. **J Clin Chem Clin Biochem** 1989 Apr;27(4):232–3

Excretion of cadmium in rat parotid saliva. Maier H, et al. **J Clin Chem Clin Biochem** 1989 Apr;27(4):241–3

Estimation of vanillylmandelic acid in parotid saliva. Zielinsky D. **J Clin Chem Clin Biochem** 1989 Apr; 27(4):238–9

5-Hydroxytryptamine modulation of rat parotid salivary gland secretion. Chernick W, et al. **J Dent Res** 1989 Jan; 68(1):59–63

Age changes in secretory function of male and female rat parotid glands in response to methoxamine and pilocarpine. Inanaga A, et al. **J Dent Res** 1988 Mar;67(3):565–73

Role of parotid amylase in starch digestion in the gastro-intestinal tracts of diabetic rats. Kurahashi M, et al. **J Dent Res** 1989 Sep;68(9):1366–9

The bimodal effect of cholinergic blocking agents on the human parotid gland deprived of parasympathetic control. Levin SL. **J Neural Transm** 1988;73(3):239–47

The role of calmodulin in rat parotid amylase secretion: effects of calmodulin antagonists on secretion and acinar cell structure. Tojyo Y, et al. **Jpn J Pharmacol** 1989 Jun; 50(2):149–57

Autosomal recessively inherited electrolyte excretory defect in the parotid of the "cribriform degeneration" mouse mutant--possible analogy to cystic fibrosis. Kaiser D, et al. **Life Sci** 1974 Aug 15;15(4):803–10

Submandibular and parotid salivary secretion after electrolytic lesioning of the brainstem nucleus parvocellularis in the rat. Ramos JM, et al. **Physiol Behav** 1988;44(2):173–80

A Ca2+-linked increase in coupled cAMP synthesis and hydrolysis is an early event in cholinergic and beta-adrenergic stimulation of parotid secretion. Deeg MA, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):7867–71

Parasympathetic activation of amylase secretion in the intact and sympathetically denervated rat parotid gland. Asking B, et al. **Q J Exp Physiol** 1989 Jan;74(1):45–52

On the relation of calcium to ovine parotid secretion. Wright RD, et al. **Q J Exp Physiol** 1989 Mar;74(2):153–68

Secretion of glucose in human parotid saliva after carbohydrate intake. Borg A, et al. **Scand J Dent Res** 1988 Dec;96(6):551–6

SURGERY

Early reexploration of the parotid wound following parotidectomy. Chaffoo RA, et al. **Am J Otolaryngol** 1989 Jan–Feb;10(1):38–41

The role of parotidectomy in the treatment of cutaneous head and neck melanoma. Caldwell CB, et al. **Am J Surg** 1988 Oct;156(4):318–22

Treatment of Warthin's tumor by enucleation. Heller KS, et al. **Am J Surg** 1988 Oct;156(4):294–6

Acinic cell carcinoma—Plymouth's experience with postoperative radical radiotherapy. Tuffin JR, et al. **Br J Oral Maxillofac Surg** 1989 Jun;27(3):186–91 (12 ref.)

Surgical approach to the parotid gland. Reid AP. **Ear Nose Throat J** 1989 Feb;68(2):151–4

Total parotidectomy—a routine treatment for parotid gland swellings? Alajmo E, et al. **J Laryngol Otol** 1989 Feb; 103(2):181–6

Parotidectomy—total or superficial? [letter] Shaheen OH. **J Laryngol Otol** 1989 Feb;103(2):242

Personal experience with an alternate incision for parotidectomy. Cohen S. **J Otolaryngol** 1988 Dec; 17(7):382–4

Surgical management of sialorrhea. Shott SR, et al. **Otolaryngol Head Neck Surg** 1989 Jul;101(1):47–50

Submandibular gland resection and bilateral parotid duct ligation as a management for chronic drooling in cerebral palsy. Brundage SR, et al. **Plast Reconstr Surg** 1989 Mar; 83(3):443–6

[Filling of the residual depression after parotidectomy with a composite arterial subcutaneous flap] Zaoli G. **Ann Chir Plast Esthet** 1989;34(2):123–7 (Eng. Abstr.) **(Fre)**

[The treatment of drooling in handicapped children. Observations apropos of 12 operated cases] Babut JM, et al. **Chir Pediatr** 1988;29(6):297–301 (Eng. Abstr.) **(Fre)**

[Parotidectomy in children. Apropos of a homogeneous series of 15 cases] Beziat JL, et al. **Rev Stomatol Chir Maxillofac** 1988;89(3):142–7 (Eng. Abstr.) **(Fre)**

[Efficacy of superficial parotidectomy in the surgical treatment of parotid nodules] Di Saverio G, et al. **Minerva Chir** 1988 Jul 31;43(13–14):1151–3 (Eng. Abstr.) **(Ita)**

[Choice of skin incision in parotidectomy] Massa G, et al. **Minerva Chir** 1988 Apr 30;43(8):673–6 (Eng. Abstr.) **(Ita)**

[Total parotidectomy with preservation of the facial nerve. Technics and results] Busca GP, et al. **Minerva Stomatol** 1988 Nov;37(11):841–9 (Eng. Abstr.) **(Ita)**

[Experimental restoration of the patency of the efferent ducts of the salivary glands] Dumpis IaP, et al. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):8–9 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Effects of continuous light on rat parotid gland structure and reactivity. Chiarenza AP, et al. **Anat Embryol (Berl)** 1989;179(5):497–501

Characterization of epimyoepithelial islands in benign lymphoepithelial lesions of major salivary gland: an immunohistochemical and ultrastructural study. Dardick I, et al. **Head Neck Surg** 1988 Jan–Feb;10(3):168–78

Ultrastructural immunocytochemical localization of secretory proteins in autophagic vacuoles of parotid acinar cells of starved rats. Hand AR, et al. **J Oral Pathol** 1988 Jul;17(6):279–86

Depletion of large dense-cored vesicles from parasympathetic nerve terminals in rat parotid glands after prolonged stimulation of the auriculotemporal nerve. Ekström J, et al. **Regul Pept** 1989 Apr;25(1):61–7

[Ultrastructural changes in the cells of the striated ducts of the parotid gland in rats during the secretory cycle] Mazurová Y. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(2):223–32 (Eng. Abstr.) **(Cze)**

[Structure of the parotid gland in the rat and its changes during aging] Mazurová Y. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(5):535–612 (Eng. Abstr.) **(Cze)**

PAROTID NEOPLASMS

Aggressive juvenile fibromatosis presenting as a parotid mass. Fata JJ, et al. **Ear Nose Throat J** 1988 Sep;67(9):678, 681–2, 684 passim

Squamous carcinoma arising within a Warthin's tumour of the parotid gland. Morrison GA, et al. **J Laryngol Otol** 1988 Dec;102(12):1189–91 (5 ref.)

Vascular leiomyoma of the parotid gland. Kido T, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(3):187–91 (13 ref.)

[Undifferentiated epithelioma of the parotid and cystadenolymphoma. Apropos of a case] Chomette G, et al. **Rev Stomatol Chir Maxillofac** 1989;90(4):293–6 (Eng. Abstr.) **(Fre)**

[A review of the malignant epithelial tumors of the parotid gland] Reychler H, et al. **Rev Stomatol Chir Maxillofac** 1989;90(4):274–80 (64 ref.) (Eng. Abstr.) **(Fre)**

[Occult adenocarcinoma of the parotid. Apropos of 2 cases] Romain P, et al. **Rev Stomatol Chir Maxillofac** 1989; 90(2):123–30 (31 ref.) (Eng. Abstr.) **(Fre)**

ANALYSIS

Heterogeneous expression of S-100 protein subunits alpha and beta in cystadenolymphomas of salivary glands. Hosaka M, et al. **Acta Histochem (Jena)** 1989;86(1):15–21

Tyrosine-rich crystalloids in pleomorphic adenoma: SEM findings and partial biochemical characterization. Valente PT, et al. **Ultrastruct Pathol** 1988 Nov–Dec;12(6):613–20

COMPLICATIONS

Facial paralysis due to a benign parotid tumor [letter] Corner NB, et al. **Br J Surg** 1989 Jun;76(6):650

Facial paralysis due to a benign parotid tumour. Whillis D, et al. **Br J Surg** 1989 Jan;76(1):95

Parotid mass in a patient with von Recklinghausen's disease [clinical conference] Skouteris CA, et al. **J Oral Maxillofac Surg** 1989 May;47(5):495–501

[Amyloidoma of the right false vocal cord subsequent to extramedullary plasmacytoma of the left parotid gland] Kanoh T, et al. **Nippon Naika Gakkai Zasshi** 1988 May; 77(5):722–5 **(Jpn)**

CONGENITAL

Congenital epithelial tumor of the parotid--sialoblastoma. Taylor GP. **Pediatr Pathol** 1988;8(4):447–52

DIAGNOSIS

Fine needle aspiration cytodiagnosis of an unusual parotid mass. Chan MK, et al. **Acta Cytol** 1989 Mar–Apr; 33(2):274–6

Computed tomography and ultrasonography in parotid tumors. Isaza M, et al. **Acta Radiol** 1989 Jan–Feb;30(1):11–5

Adenocarcinoma of the parotid. Beckford N, et al. **Head Neck** 1989 Jan–Feb;11(1):90–2

Distinction between metastatic melanoma and primary parotid gland carcinoma using monoclonal HMB 45 antimelanoma antibody: report of a case. Podesta A, et al. **Hum Pathol** 1989 Jan;20(1):77–80

Parotid gland cylindroma. Henroteaux D, et al. **J Belge Radiol** 1988;71(6):730–1

MR imaging of parotid mass lesions: attempts at histopathologic differentiation. Swartz JD, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):789–96

Dermoid cyst of the parotid gland. Choi EC, et al. **Yonsei Med J** 1988;29(2):199–203

[Diagnosis and treatment of deep lobe parotid tumors] Yu GY. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Mar; 23(2):108–11, 127 (Eng. Abstr.) **(Chi)**

[A preliminary study on the diagnostic imaging of parotid masses] Yu GY. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Nov; 23(6):342–4, 385 (Eng. Abstr.) **(Chi)**

[Malignant lymphoma of parotid origin mimicking Melkersson-Rosenthal syndrome] Beuchat L, et al. **J Fr Ophtalmol** 1988;11(10):657–60 (Eng. Abstr.) **(Fre)**

[The value of comparison of echography and sialo-tomography in the preoperative evaluation of parotid tumors] Assa A, et al. **Rev Stomatol Chir Maxillofac** 1988; 89(3):135–41 (Eng. Abstr.) **(Fre)**

[Magnetic resonance tomography of the parotid gland: plain diagnosis and Gd-DTPA] Vogl T, et al. **Digitale Bilddiagn** 1989 Jun;9(2):59–68 (Eng. Abstr.) **(Ger)**

[The value of sonography in salivary gland tumors] Klein K, et al. **HNO** 1989 Feb;37(2):71–5 (Eng. Abstr.) **(Ger)**

[Diagnostic possibilities of ultrasonography of diseases of the parotid gland] Boroń Z. **Radiol Diagn (Berl)** 1988;

29(6):845–8 (Eng. Abstr.) (Ger)
[Nodular fasciitis in the differential diagnosis of parotid tumefaction] Bovo R, et al. **Acta Otorhinolaryngol Ital** 1988 Nov–Dec;8(6):623–8 (Eng. Abstr.) (Ita)
[Echography in the study of expansive processes of the parotid] Panzironi G, et al. **Ann Ital Chir** 1987; 59(1–6):335–41 (Eng. Abstr.) (Ita)
[MR imaging of parotid masses] Anzai Y, et al. **Rinsho Hoshasen** 1988 Nov;33(12):1537–41 (Eng. Abstr.) (Jpn)
[Parotid gland tumors. What not to do] Skatvedt O, et al. **Tidsskr Nor Laegeforen** 1989 Jan 20;109(2):196–7 (Eng. Abstr.) (Nor)
[Comparative evaluation of different diagnostic methods in tumors of the parotid and submandibular salivary glands] Gamburg IuL, et al. **Stomatologiia (Mosk)** 1988 Nov–Dec; 67(6):38–40 (Eng. Abstr.) (Rus)

DRUG THERAPY

[5-Fluorouracil, adriamycin, and mitomycin C (FAM) combination chemotherapy in adenocarcinoma of the parotid gland] Inoue K, et al. **Gan No Rinsho** 1989 Mar; 35(4):481–5 (21 ref.) (Eng. Abstr.) (Jpn)

EPIDEMIOLOGY

Oral cancer in children under 15 years of age. A clinicopathological and virological study. Kärjä J, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:145–9
Parotid tumours in black patients. The Baragwanath Hospital experience, 1981–1986. Lakhoo K, et al. **S Afr J Surg** 1989 Mar;27(1):13–5 (11 ref.)

ETIOLOGY

Prior x-ray therapy for acne related to tumors of the parotid gland. Preston-Martin S. **Arch Dermatol** 1989 Jul; 125(7):921–4
Simultaneous presentation of parathyroid, thyroid and parotid tumours 44 years after neck irradiation. Delbridge L, et al. **Aust N Z J Surg** 1989 Feb;59(2):187–90
Ataxia telangiectasia and acinic cell carcinoma of the parotid gland. Mock C, et al. **J Surg Oncol** 1988 Oct;39(2):133–8

GENETICS

Translocation t(11;19)(q21;p13.1) as the sole chromosome abnormality in a cystadenolymphoma (Warthin's tumor) of the parotid gland. Bullerdiek J, et al. **Cancer Genet Cytogenet** 1988 Oct 1;35(1):129–32
Structural rearrangements of chromosome Nr 8 involving 8q12—a primary event in pleomorphic adenoma of the parotid gland. Bullerdiek J, et al. **Genetica** 1987 Jun 15; 72(2):85–92
Karyotypic evolution in a human mucoepidermoid carcinoma. Mark J, et al. **Hereditas** 1989;110(1):75–8

IMMUNOLOGY

Monoclonal antibodies to epithelial sialomucins recognize epitopes at different cellular sites in adenolymphomas of the parotid gland. Zotter S, et al. **Int J Cancer Suppl** 1988; 3:38–44

METABOLISM

Diversity of collagen expression in the pleomorphic adenoma of the parotid gland. Line SR, et al. **Virchows Arch [A]** 1989;414(6):477–83
Sebaceous carcinoma of the parotid gland. An immunohistochemical and ultrastructural study. Takata T, et al. **Virchows Arch [A]** 1989;414(5):459–64 (20 ref.)

MORTALITY

[Quoad vitam prognosis in patients with malignant tumors of the parotid gland] Antalovská Z, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(3):333–42 (Eng. Abstr.) (Cze)

PATHOLOGY

Small cell undifferentiated carcinoma of the parotid gland. Cytologic, histologic, immunohistochemical and ultrastructural features of a neuroendocrine variant. Mair S, et al. **Acta Cytol** 1989 Mar–Apr;33(2):164–8
Warthin's tumor with malignant lymphoma. DNA analysis of paraffin-embedded tissue. Bunker ML, et al. **Am J Clin Pathol** 1989 Mar;91(3):341–4
Malignant dermal cylindroma in a patient with multiple dermal cylindromas, trichoepitheliomas, and bilateral dermal analogue tumors of the parotid gland. Rockerbie N, et al. **Am J Dermatopathol** 1989 Aug;11(4):353–9
Carcinosarcoma of the salivary gland. Chen KT, et al. **Am J Otolaryngol** 1984 Nov–Dec;5(6):415–7
Monomorphic adenoma of the parotid in a premature neonate. Casas LA, et al. **Ann Plast Surg** 1989 Jan; 22(1):47–9
Synchronous tumours of the parotid gland with different histology. Goh PM, et al. **Br J Oral Maxillofac Surg** 1989 Jun;27(3):198–202 (18 ref.)
Bilateral acinic cell carcinoma of the parotid. Millar BG, et al. **Br J Oral Maxillofac Surg** 1989 Jun;27(3):192–7 (26 ref.)
Capsular penetration and perforation in pleomorphic adenoma of the parotid salivary gland. Lawson HH. **Br J Surg** 1989 Jun;76(6):594–6
Solitary cysts of the parotid. Maynard JD. **Br J Surg** 1988 Oct;75(10):1043
Infarcted ('infected') adenolymphomas. A clinicopathological study of 20 cases. Eveson JW, et al. **Clin Otolaryngol** 1989 Jun;14(3):205–10
Synchronous unilateral parotid neoplasms of different histologic types. Schilling JA, et al. **Head Neck** 1989 Mar–Apr;11(2):179–83 (25 ref.)
Epstein-Barr virus (EBV)-associated undifferentiated carcinoma of the parotid gland. Huang DP, et al. **Histopathology** 1988 Nov;13(5):509–17
Immunohistological study of the epithelial components of Warthin's tumor. Segami N, et al. **Int J Oral Maxillofac Surg** 1989 Jun;18(3):133–7
Tumors of the pharyngomaxillary space. Alexander J, et al. **J Am Osteopath Assoc** 1989 Mar;89(3):329–33
Multiple mixed tumor (pleomorphic adenoma): a clinicopathological study. Nakamura S, et al. **J Dermatol (Tokyo)** 1988 Jun;15(3):268–72
Osteoclast-type giant cell neoplasms of the parotid gland. Batsakis JG, et al. **J Laryngol Otol** 1988 Oct;102(10):901–4
Perinatal salivary gland tumours (embryomas). Batsakis JG, et al. **J Laryngol Otol** 1988 Nov;102(11):1007–11 (15 ref.)
Benign metastatic mixed tumours or unrecognized salivary carcinomas? el-Naggar A, et al. **J Laryngol Otol** 1988 Sep; 102(9):810–2 (12 ref.)
Synchronous extra-parotid Warthin's tumour. Nishikawa H, et al. **J Laryngol Otol** 1989 Aug;103(8):792–3
Aggressive behavior in acinic cell carcinoma. Hoffman NR, et al. **Minn Med** 1986 Mar;69(3):131–2
Primary osteosarcoma of the parotid gland. Stimson PG, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jul;68(1):80–6 (23 ref.)
Kaposi's sarcoma of the parotid gland in acquired immunodeficiency syndrome. Yeh CK, et al. **Oral Surg Oral Med Oral Pathol** 1989 Mar;67(3):308–12
Primary Kaposi's of an intraparotid lymph node in a non-immunocompromised patient. Josephson J, et al. **Otolaryngol Head Neck Surg** 1988 Sep;99(3):341–3
Malignant fibrous histiocytoma. Review of the literature and report of a case in a four-year-old child. Xypolyta A, et al. **Rev Stomatol Chir Maxillofac** 1988;89(3):158–61 (23 ref.)
Warthin's tumour in a black patient. A case report. Hatzitheofilou C, et al. **S Afr J Surg** 1988 Dec;26(4):171–2
[Report of 45 cases of salivary gland serous cell carcinoma] Zhang XS. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Jan;24(1):4–7 (Chi)
[Clear cell tumor of the parotid gland] Dhont G. **Acta Otorhinolaryngol Belg** 1988;42(3):405–12 (12 ref.) (Eng. Abstr.) (Dut)
[Parotid tumors of intermediate malignancy. Prognostic assessment. Review of the literature] Marie JP, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(5):304–8 (31 ref.) (Eng. Abstr.) (Fre)
[Cavernous hemangioma of the parotid gland in adults (apropos of a case)] Marrakchi R, et al. **Tunis Med** 1987 Mar;65(3):225–8 (7 ref.) (Eng. Abstr.) (Fre)
[Magnetic resonance tomography in tumors of the salivary glands—a diagnostic advantage?] Mees K, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Jul;67(7):355–61 (Eng. Abstr.) (Ger)
[Multifocal presentation of cystadenolymphoma (Warthin tumor) in the parotid gland and larynx] Loennecken I. **Laryngorhinootologie** 1989 Apr;68(4):212–5 (Eng. Abstr.) (Ger)
[Recurrence of an ameloblastoma in the context of the parotid. Report of a case] Belladonna M, et al. **Minerva Stomatol** 1988 Apr;37(4):265–8 (Eng. Abstr.) (Ita)
[Histopathological considerations on 8 cases of mixed tumors or pleiomorphic adenomas of the salivary glands] Debernardi C, et al. **Minerva Stomatol** 1989 Feb; 38(2):277–89 (Eng. Abstr.) (Ita)
[An autopsy case of parotid clear cell carcinoma with cerebellar invasion and metastasis to the lung] Hirakawa E, et al. **Gan No Rinsho** 1988 Oct;34(12):1705–9 (Eng. Abstr.) (Jpn)
[Pulmonary psuedolymphoma combined with malignant lymphoma of the parotid gland] Hashimoto A, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Apr;26(4):421–5 (Eng. Abstr.) (Jpn)
[Warthin's tumor a prelymphomatous lesion? (letter)] Morente M. **Med Clin (Barc)** 1989 Jan 28;92(3):118 (Spa)

RADIOGRAPHY

Clinical radiology quiz. Warthin's tumors. Som PM. **Am J Otolaryngol** 1989 Jul–Aug;10(4):291–3
Fine needle aspiration and computed tomographic scanning in the evaluation of parotid lesions. Cameron RH, et al. **Ear Nose Throat J** 1989 Mar;68(3):226, 230, 234, passim
Mandibular pathology presenting as a parotid tumour. Ling J, et al. **J Laryngol Otol** 1988 Oct;102(10):896–900
Preoperative assessment of parotid masses: a comparative evaluation of radiologic techniques to histopathologic diagnosis. Byrne MN, et al. **Laryngoscope** 1989 Mar; 99(3):284–92
[The value of sialography in the diagnosis of parotid tumors] Yu GY. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Jan; 24(1):40–2, 63 (Eng. Abstr.) (Chi)
[Computer tomography of parotid gland tumors] Friis M, et al. **Ugeskr Laeger** 1988 Oct 31;150(44):2659–60 (Eng. Abstr.) (Dan)
[Bilateral pleomorphic adenomas of the parotid glands] Walsted A, et al. **Ugeskr Laeger** 1988 Jan 18;150(3):170–1 (Eng. Abstr.) (Dut)
[Synovial chondromatosis of the temporomandibular joint—a differential diagnosis to parotid gland tumor] Reinert S, et al. **Laryngorhinootologie** 1989 Apr;68(4):216–20 (Eng. Abstr.) (Ger)
[CT evaluation of mass lesions in the parotid region] Matsumoto S, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jun 25; 48(6):661–9 (Eng. Abstr.) (Jpn)
[Computerized-tomographic examinations of the parotid gland. I. Methods of examination and radiological anatomy] Mlosek K, et al. **Pol Przegl Radiol (Warszawa)** 1987 Nov–Dec;51(6):290–4 (Eng. Abstr.) (Pol)
[Computerized-tomographic examinations of the parotid gland. II. CT symptomatology of tumors of the parotid gland] Mlosek K, et al. **Pol Przegl Radiol (Warszawa)** 1987 Nov–Dec;51(6):295–9 (Eng. Abstr.) (Pol)

RADIONUCLIDE IMAGING

Bilateral Warthin's tumor. Bocchini T, et al. **Clin Nucl Med** 1988 Dec;13(12):892–5

RADIOTHERAPY

Acinic cell carcinoma—Plymouth's experience with postoperative radical radiotherapy. Tuffin JR, et al. **Br J Oral Maxillofac Surg** 1989 Jun;27(3):186–91 (12 ref.)
Radiation therapy in recurrent pleomorphic adenoma of the parotid. Dawson AK. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):819–21
Postirradiation Merkel cell carcinoma. Tuneu A, et al. **J Am Acad Dermatol** 1989 Mar;20(3):505–7
Facial nerve function following irradiated cable grafts. McGuirt WF, et al. **Laryngoscope** 1989 Jan;99(1):27–34

SECONDARY

Malignant fibrous histiocytoma of the conjunctiva with metastasis. Margo CE, et al. **Am J Ophthalmol** 1989 Apr 15;107(4):433–4
Parotid metastases from carcinoma of the breast. Bissett D, et al. **Clin Radiol** 1989 May;40(3):309–10
Renal cell carcinoma with metastasis to the parotid gland: case reports and review of the literature. Owens RM, et al. **Head Neck** 1989 Mar–Apr;11(2):174–8 (16 ref.)
Metastatic renal cell carcinoma presenting as a parotid tumor: a case report with immunohistochemical findings and a review of the literature. Melnick SJ, et al. **Hum Pathol** 1989 Feb;20(2):195–7 (16 ref.)
Parotid lymph node metastases from primary intra-oral squamous carcinomas. Ord RA, et al. **Int J Oral Maxillofac Surg** 1989 Apr;18(2):104–6 (17 ref.)
Metastatic melanoma of the parotid lymph nodes. Ord RA. **Int J Oral Maxillofac Surg** 1989 Jun;18(3):165–7
Metastatic renal carcinoma to the parotid gland. Günbay MU, et al. **J Laryngol Otol** 1989 Apr;103(4):417–8
Prostate cancer presenting as facial paralysis. Gruber B, et al. **Otolaryngol Head Neck Surg** 1989 Apr;100(4):333–8 (40 ref.)
[Metastatic localizations in the parotid glands of primary tumors in other areas] Casolino D, et al. **Acta Otorhinolaryngol Ital** 1988 Mar–Apr;8(2):175–82 (Eng. Abstr.) (Ita)

SURGERY

Surgical techniques of the parotid tumor. Unno T. **Acta Otolaryngol Suppl (Stockh)** 1988;458:139–43
The superiorly based auricular flap. Hoffman HT, et al. **Am J Otolaryngol** 1988 Sep–Oct;9(5):232–7
Warthin's tumor [letter] Ebbs S. **Am J Surg** 1988 Nov; 156(5):428
Treatment of Warthin's tumor by enucleation. Heller KS, et al. **Am J Surg** 1988 Oct;156(4):294–6
Approach to the pterygomaxillary space and posterior part of the tongue by lateral stair-step mandibulotomy. Pinsolle J, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar; 115(3):313–5
An approach to malignant parotid tumours. Smith JA, et al. **Aust N Z J Surg** 1989 Apr;59(4):317–20
Parotid tumours: a review of parotid tumour surgery in the Northern Regional Health Authority of the United Kingdom 1978–1982. Gunn A, et al. **Br J Surg** 1988 Nov; 75(11):1144–6
Enucleated parotid tumours. Maynard JD. **Br J Surg** 1988 Aug;75(8):764–6
Plunging salivary glands. Maynard JD. **Br J Surg** 1989 Jan; 76(1):96
Parotidectomy—total or superficial? [letter] Shaheen OH. **J Laryngol Otol** 1989 Feb;103(2):242
Problems with reoperation of the parotid gland and facial nerve. Conley JJ. **Otolaryngol Head Neck Surg** 1988 Nov; 99(5):480–8
[Immediate repair of a facial nerve resected in ablation of parotid tumor] Zhang YF. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 May; 23(3):167–8 (Chi)
[Cystadenolymphoma of the parotid gland. A study of 40 cases] Vanhaudenarde JM, et al.

Acta Otorhinolaryngol Belg 1988;42(3):413–21 (Eng. Abstr.) **(Fre)**

[A trap of parotidectomy: nervous tumors of the facial nerve] Breton P, et al. **Ann Chir Plast Esthet** 1988;33(2):172–5 (Eng. Abstr.) **(Fre)**

[Justification of the traditional Chinese method of acupuncture in the complex rehabilitation following oral surgery] Szép B. **Fogorv Sz** 1989 Jun;82(6):179–80 (Eng. Abstr.) **(Hun)**

[Indications, technics and results of lymphadenectomy in malignant tumors of the parotid and submandibular glands] Campana FP, et al. **Ann Ital Chir** 1987;59(1–6):45–56 (Eng. Abstr.) **(Ita)**

[Efficacy of superficial parotidectomy in the surgical treatment of parotid nodules] Di Saverio G, et al. **Minerva Chir** 1988 Jul 31;43(13–14):1151–3 (Eng. Abstr.) **(Ita)**

[Results and reflections on a case material of 7 mucoepidermoid tumors of the parotid gland] Grilli P, et al. **Minerva Chir** 1988 May 15;43(9):767–70 (Eng. Abstr.) **(Ita)**

[Adenolymphoma of the parotid gland] Nanni E, et al. **Minerva Chir** 1988 Jun 15;43(11):987–91 (Eng. Abstr.) **(Ita)**

[Several cases of benign neoplasms of the parotid gland (excluding pleiomorphic adenomas)] Caldarola F, et al. **Minerva Stomatol** 1989 Feb;38(2):273–5 (Eng. Abstr.) **(Ita)**

[Pleomorphic adenoma of the parotid gland. Cases contribution] Caldarola F, et al. **Minerva Stomatol** 1989 Jan;38(1):135–8 (Eng. Abstr.) **(Ita)**

[Cryogenic treatment method in extensive cavernous hemangioma of the parotid area in children] Shafranov VV, et al. **Klin Khir** 1988;(6):55–7 (Eng. Abstr.) **(Rus)**

THERAPY

Tumours de parotid gland—a review of 88 patients & current methods of treatment. Khazanchi RK, et al. **Indian J Cancer** 1988 Mar;25(1):1–6 (20 ref.)

Compression therapy for parotid haemangioma in infants. A report of three cases. Totsuka Y, et al. **J Craniomaxillofac Surg** 1988 Nov;16(8):366–70

Malignant parotid tumors. Diagnostic considerations and therapeutic suggestions. Lippi L, et al. **Tumori** 1989 Feb 28;75(1):53–6

[Cylindroma of the parotid gland. Apropos of 11 cases] Lacomme Y, et al. **Ann Otolaryngol Chir Cervicofac** 1989; 106(1):27–34 (Eng. Abstr.) **(Fre)**

ULTRASTRUCTURE

Primary squamous cell carcinoma of the parotid gland: a case report with electron microscopic findings. Yoshihara T, et al. **Auris Nasus Larynx** 1989;16(1):43–50

Characterization of epimyoepithelial islands in benign lymphoepithelial lesions of major salivary gland: an immunohistochemical and ultrastructural study. Dardick I, et al. **Head Neck Surg** 1988 Jan–Feb;10(3):168–78

VETERINARY

Adenocarcinoma of the salivary gland in a white Swiss mouse. Bundza A, et al. **Can J Vet Res** 1989 Jul;53(3):363–5

PAROTIN see under **HORMONES**

PAROTITIS

The swollen neck. Cervical lymphadenitis, parotitis, thyroiditis, and infected cysts. Brook I. **Infect Dis Clin North Am** 1988 Mar;2(1):221–36 (56 ref.)

[Diagnosis and treatment of chronic parenchymatous parotitis in children] Kruchinskiĭ GV, et al. **Pediatriia** 1988;(12):87–8 **(Rus)**

COMPLICATIONS

Parotitis and facial nerve dysfunction. Andrews JC, et al. **Arch Otolaryngol Head Neck Surg** 1989 Feb;115(2):240–2

Neonatal suppurative parotitis with facial palsy [letter] Mathur NB, et al. **Indian Pediatr** 1988 Aug;25(8):806–7

[Suppurative parotitis in a child with hepatitis A] Franczak T, et al. **Wiad Lek** 1988 Jul 15;41(14):952–4 (Eng. Abstr.) **(Pol)**

DIAGNOSIS

MR imaging of parotid mass lesions: attempts at histopathologic differentiation. Swartz JD, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):789–96

[Yersinia parotitis in children] Markov IS. **Pediatriia** 1989; (3):50–3 **(Rus)**

DRUG THERAPY

[Experience with Tarivid (Ofloxacin) in maxillofacial surgery] Szabó G, et al. **Orv Hetil** 1988 Aug 21; 129(34):1811–3 (Eng. Abstr.) **(Hun)**

[A treatment–prevention combination in the therapy of chronic parenchymatous parotitis in children] Rybalov OV. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):59–60 (Eng. Abstr.) **(Rus)**

[Use of dimethyl sulfoxide in the combined treatment of the exacerbation of chronic parenchymatous parotitis] Varshavskiĭ AI, et al. **Stomatologiia (Mosk)** 1988 Nov–Dec; 67(6):12–4 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

[Epidemic parotitis 1986] Zabicka J. **Przegl Epidemiol** 1988; 42(1):25–8 **(Pol)**

ETIOLOGY

New vaccination—measles, mumps, rubella [letter] Libbey MA. **Br Dent J** 1988 Sep 10;165(5):160

Acute suppurative parotitis in a patient on total parenteral nutrition. Sriram K, et al. **J Am Coll Nutr** 1988 Oct; 7(5):385–7

Acute suppurative parotitis caused by Pseudomonas pseudomallei in children. Dance DA, et al. **J Infect Dis** 1989 Apr;159(4):654–60

[A case of Munchausen syndrome by proxy] Feenstra J, et al. **Tijdschr Kindergeneeskd** 1988 Aug;56(4):148–53 (Eng. Abstr.) **(Dut)**

[2 cases of parotitis in Yersinia infection in adults] Markov IS. **Klin Med (Mosk)** 1989 Feb;67(2):132–3 **(Rus)**

PATHOLOGY

Recurrent bilateral parotitis. Iyer PU, et al. **Indian Pediatr** 1988 Aug;25(8):786–7

SURGERY

[Surgical treatment of patients with chronic inflammatory diseases of the parotid gland] Solntsev AM, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):35–7 (Eng. Abstr.) **(Rus)**

THERAPY

[Occlusion therapy in chronic recurrent parotitis? A report of clinical experiences with the use of a fibrin glue–gentamycin mixture] Laskawi R, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Jul;67(7):367–8 (Eng. Abstr.) **(Ger)**

PAROVARIAN CYST

ETIOLOGY

[Embryonic remnants in the mesosalpinx and parovarian cyst] Guo DH. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Nov; 23(6):365–6, 388 (Eng. Abstr.) **(Chi)**

SURGERY

[Surgery of the female gonads] Schwöbel MG, et al. **Z Kinderchir** 1988 Aug;43(4):289–94 (Eng. Abstr.) **(Ger)**

PARROTS see under **PSITTACINES**

PARSONAGE–TURNER SYNDROME see **CERVICO–BRACHIAL NEURALGIA**

PARTHENOGENESIS

Imprinting of genome precludes parthenogenesis, but uniparental embryos can be rescued to reproduce. Markert CL. **Ann N Y Acad Sci** 1988;541:633–8 (35 ref.)

Suppression of chromosome condensation during meiotic maturation induces parthenogenetic development of mouse oocytes. Clarke HJ, et al. **Development** 1988 Sep; 104(1):97–103

The development potential of parthenogenetically derived cells in chimeric mouse embryos: implications for action of imprinted genes. Clarke HJ, et al. **Development** 1988 Sep;104(1):175–82

Two maternally derived X chromosomes contribute to parthenogenetic inviability. Mann JR, et al. **Development** 1988 Sep;104(1):129–36

Influence of chromosomal determinants on development of androgenetic and parthenogenetic cells. Surani MA, et al. **Development** 1988 May;103(1):171–8

Cytogenetic study of parthenogenetically activated bovine oocytes matured in vivo and in vitro. King WA, et al. **Gamete Res** 1988 Jul;20(3):265–74

Parthenogenetic activation of mouse and rabbit eggs by electric stimulation in vitro. Onodera M, et al. **Gamete Res** 1989 Mar;22(3):277–83

Development of enucleated parthenogenones that received pronuclei or nuclei from fertilized mouse eggs. Tsunoda Y, et al. **Gamete Res** 1988 Oct;21(2):151–5

The developmental fate of androgenetic, parthenogenetic, and gynogenetic cells in chimeric gastrulating mouse embryos. Thomson JA, et al. **Genes Dev** 1988 Oct; 2(10):1344–51

Influence of postovulatory aging on chromosome segregation during the second meiotic division in mouse oocytes: a parthenogenetic analysis. O'Neill GT, et al. **J Exp Zool** 1988 Oct;248(1):125–31

DRUG EFFECTS

Parthenogenetic activation of cattle follicular oocytes in vitro with ethanol. Nagai T. **Gamete Res** 1987 Mar;16(3):243–9

Effects of intracranial implantation of dihydrotestosterone on sexual behavior in male Cnemidophorus inornatus, a direct sexual ancestor of a parthenogenetic lizard. Rozendaal JC, et al. **Horm Behav** 1989 Jun;23(2):194–202

Cytogenetic analysis of ethanol-induced parthenogenesis. O'Neill GT, et al. **J Exp Zool** 1989 Feb;249(2):182–92

PARTIAL MASTECTOMY see **MASTECTOMY, SEGMENTAL**

PARTIAL MONOSOMY see **CHROMOSOME DELETION**

PARTIAL THROMBOPLASTIN TIME see under **BLOOD COAGULATION TESTS**

PARTICLE ACCELERATORS

Synchrotron radiation: a probe for biomedical research. Sweet RM. **Basic Life Sci** 1988;46:79–92

Search for cyclotron resonance in cells in vitro. Parkinson WC, et al. **Bioelectromagnetics** 1989;10(2):129–45

A technique for total skin electron irradiation using six large flattened electron beams: implementation on linear accelerators having different modes of electron beam production. el-Khatib EG, et al. **Br J Radiol** 1989 Aug; 62(740):744–8

Structural changes in oxidised low-density lipoproteins and of the effect of the anti-atherosclerotic drug probucol observed by synchrotron X-ray and neutron solution scattering. Bellamy MF, et al. **Eur J Biochem** 1989 Aug 1;183(2):321–9

Estimation of absorbed dose due to gas bremsstrahlung from electron storage rings. Ban S, et al. **Health Phys** 1989 Sep; 57(3):407–12

Neutron dose equivalent outside the lateral shielding of an electron linear accelerator operating at 0.48–2.15 GeV. Hirayama H, et al. **Health Phys** 1989 Jun;56(6):947–52

Measurements of ozone, oxides of N and nitric acid produced in the tunnel of a high-energy electron storage ring. Kanda Y, et al. **Health Phys** 1989 Jun;56(6):953–6

Measurement of neutron leakage spectra at a 500-MeV proton accelerator. Moritz LE. **Health Phys** 1989 Mar; 56(3):287–96

A non-contacting intraoperative electron cone apparatus. Jones D, et al. **Int J Radiat Oncol Biol Phys** 1989 Jun; 16(6):1643–7

Medical proton accelerator facility. Khoroshkov VS, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):973–8

Microdosimetry of a 42 MeV therapy neutron beam. Kliauga P, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):845–8

Stereotactic radiosurgery for intracranial arteriovenous malformations using a standard linear accelerator. Loeffler JS, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):673–7

Design and characteristics of a facility for total-body and large-field irradiation. Lutz WR, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):1035–40

Stereotactic frame for neuroradiology and charged particle Bragg peak radiosurgery of intracranial disorders. Lyman JT, et al. **Int J Radiat Oncol Biol Phys** 1989 Jun; 16(6):1615–21

A non-docking intraoperative electron beam applicator system. Palta JR, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug;17(2):411–7

Heavy charged-particle stereotactic radiosurgery: cerebral angiography and CT in the treatment of intracranial vascular malformations. Phillips MH, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug;17(2):419–26

Alopecia associated with unexpected leakage from electron cone. Wen BC, et al. **Int J Radiat Oncol Biol Phys** 1989 Jun;16(6):1637–41

Linear accelerator radiosurgery. A clinical experience. Colombo F. **J Neurosurg Sci** 1989 Jan–Mar;33(1):123–5

A solution to the current shortage of clinical and experimental radioisotopes already exists [news] Erdman KL. **J Nucl Med** 1989 Apr;30(4):438–9

Essentials of cyclotron design and operation: corrections to lecture notes [letter] Harris CC. **J Nucl Med** 1989 Jan; 30(1):129

The need for radioisotope production LINAC [news] Lambrecht RM. **J Nucl Med** 1988 Nov;29(11):1758–60

Modification to the side rails of a manufacturer's couch. Biggs PJ. **Med Dosim** 1988;13(2):77–8

Effect of collimator setting on the output of rectangular fields from linear accelerators. Jani SK, et al. **Med Dosim** 1988; 13(2):73–5

Quality control of custom-made compensators. Johnson JM, et al. **Med Dosim** 1988 Sep;13(3):109–11

The Clinac 4/80 attenuation and build up characteristics for Scotchcast casting material. Kohn ML, et al. **Med Dosim** 1988 Dec;13(4):183–5

Economical beamstopper mounted film holder. Zimmer D. **Med Dosim** 1988 Sep;13(3):153–4

Fast Fourier transform convolution calculations of x-ray isodose distributions in homogeneous media. Boyer AL, et al. **Med Phys** 1989 Mar–Apr;16(2):248–53

Unexpectedly large dose rate dependent output from a linear accelerator. Cheng PC, et al. **Med Phys** 1988 Sep–Oct; 15(5):766–7

Dose enhancement in buildup region by lead, aluminum, and lucite absorbers for 15 MVp photon beam. Ciesielski B, et al. **Med Phys** 1989 Jul–Aug;16(4):609–13

Determination of accurate dosimetric parameters for beveled intraoperative electron beam applicators. Dahl RA, et al. **Med Phys** 1989 Jan–Feb;16(1):130–1

Measurements of backscattered radiation from Therac-20

collimator and trimmer jaws into beam monitor chamber. Kubo H, et al. **Med Phys** 1989 Mar-Apr;16(2):292-4
Telescopic measurements of backscattered radiation from secondary collimator jaws to a beam monitor chamber using a pair of slits. Kubo H. **Med Phys** 1989 Mar-Apr; 16(2):295-8
Dose delivery error detection by a computer-controlled linear accelerator. Loyd M, et al. **Med Phys** 1989 Jan-Feb; 16(1):137-9
A method of calculating the output factors of arbitrarily shaped electron fields. McParland BJ. **Med Phys** 1989 Jan-Feb;16(1):88-93
Measurement of the restricted linear energy transfer of stray radiation close to the treatment volume of 12 and 18 MeV clinical photon beams. Makrigiorgos G, et al. **Med Phys** 1989 Mar-Apr;16(2):302-4
Investigation on the reduction of electron contamination with a 6-MV x-ray beam. Parthasaradhi K, et al. **Med Phys** 1989 Jan-Feb;16(1):123-5
Leakage radiation from electron applicators on a medical accelerator. Pennington EC, et al. **Med Phys** 1988 Sep-Oct; 15(5):763-5
Output calibration in solid water for high energy photon beams. Reft CS. **Med Phys** 1989 Mar-Apr;16(2):299-301
Application of Fermi scattering theory to a magnetically scanned electron linear accelerator. Sandison GA, et al. **Med Phys** 1988 Jul-Aug;15(4):498-510
A water phantom controller for automated acquisition of linac beam parameters. Schmid MG, et al. **Med Phys** 1989 Jan-Feb;16(1):126-9
Evaluation of a photon and an electron beam of a 6-MV linear accelerator. Sharma SC, et al. **Med Phys** 1988 Jul-Aug;15(4):525-9
The geometry of avoiding beam intersections and blocking tray collisions. Yorke ED. **Med Phys** 1989 Mar-Apr; 16(2):288-91
UK cancer committee protests against cyclotron grant [news] McGourty C. **Nature** 1988 Oct 13;335(6191):578
Use of the linear accelerator for neurosurgery [letter] Arndt J. **Neurosurgery** 1989 Apr;24(4):641
Stereotactic radiosurgery with the linear accelerator: treatment of arteriovenous malformations. Betti OO, et al. **Neurosurgery** 1989 Mar;24(3):311-21
What is radiosurgery? [letter] Hudgins WR. **Neurosurgery** 1988 Aug;23(2):272-3
Radiosurgery [letter] Leksell D. **Neurosurgery** 1989 Feb; 24(2):297-8
Radiosurgery with the linear accelerator [letter] Patil AA. **Neurosurgery** 1989 Jul;25(1):143
Commissioning of a linear accelerator with independent jaws: computerised data collection and transfer to a planning computer. Klemp PF, et al. **Phys Med Biol** 1988 Jul; 33(7):865-71
Production of photoneutrons in a lead shield by high-energy x-rays. McGinley PH, et al. **Phys Med Biol** 1988 Aug; 33(8):975-80
Radiobiological intercomparison of clinical neutron beams for growth inhibition in Vicia faba bean roots. Beauduin M, et al. **Radiat Res** 1989 Feb;117(2):245-50
Effect of different stopping volumes of clinical pion beams at TRIUMF on the mouse small intestine. Saito T, et al. **Radiat Res** 1989 Jan;117(1):8-20
Accelerated heavy particles and the lens. III. Cataract enhancement by dose fractionation. Worgul BV, et al. **Radiat Res** 1989 Apr;118(1):93-100
Physical characteristics of the M.D. Anderson Hospital clinical neutron beam. Horton JL, et al. **Radiother Oncol** 1988 Sep;13(1):17-22
High energy neutron therapy programme at the Douglas Cyclotron Centre, Clatterbridge Hospital. Errington RD, et al. **Strahlenther Onkol** 1989 Apr;165(4):324-6
[Accelerated irradiation of bone metastases] Rieden K, et al. **Strahlenther Onkol** 1989 Jan;165(1):23-7 (Eng. Abstr.) **(Ger)**
[New diagnostic tools using proton beams obtained from accelerators in KEK (National Laboratory for High Energy Physics), Tsukuba] Masayoshi A. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2-1):1181-7 (Eng. Abstr.) **(Jpn)**
[Dependence of the incidence of the occurrence of ovarian and uterine tumors in rats on the irradiation dosage from accelerated particles and gamma rays] Fedorenko BS, et al. **Eksp Onkol** 1989;11(1):24-7 (Eng. Abstr.) **(Rus)**
[A computerized dosimetric system for studying the radiation fields of equipment for distance radiotherapy] Andriushin OS, et al. **Med Radiol (Mosk)** 1988 Dec;33(12):56-60 (Eng. Abstr.) **(Rus)**
[Local radiation reactions and injuries in neutron and combined therapy of tumors using the U-120 cyclotron] Musabaeva LI, et al. **Med Radiol (Mosk)** 1988 Oct; 33(10):30-5 (Eng. Abstr.) **(Rus)**
[Stereotaxic radiosurgery using photon beam radiation from a linear accelerator] Pozza F. **Med Radiol (Mosk)** 1989 Aug;34(8):36-9 **(Rus)**
[The induction of an SOS system in E. coli cells under the action of accelerated heavy ions] Kozubek S, et al. **Radiobiologia** 1989 May-Jun;29(3):300-4 **(Rus)**

ADVERSE EFFECTS

Risks of radiosurgery [letter] Laitinen LV. **Neurosurgery** 1989 Sep;25(3):480

STANDARDS

Long term variation in beam symmetry as a function of gantry angle for a computer-controlled linear accelerator. Loyd MD, et al. **Med Phys** 1989 Jul-Aug;16(4):614-7

SUPPLY & DISTRIBUTION

Radiotherapy's second setback [letter] **BMJ** 1989 Jan 14; 298(6666):113-4

PARTICLE-INDUCED X-RAY EMISSION SPECTROMETRY see **SPECTROMETRY, X-RAY EMISSION**

PARTICLE SIZE

Particle size analysis of gelatin-acacia coacervate and ethylcellulose walled microcapsules. Ismail N, et al. **J Microencapsul** 1984 Jan-Mar;1(1):9-19

PARTNERSHIP PRACTICE

A gentleman's word [letter] Cassin AM. **Br Dent J** 1988 Sep 10;165(5):160
Interinstitutional collaboration for nursing excellence: Part 1, Creating the partnership. Baker CM, et al. **J Nurs Adm** 1989 Feb;19(2):8-12
Practice partnerships: the newest concept in care delivery. Manthey M. **J Nurs Adm** 1989 Feb;19(2):33-5
Settling in. Heathcote J. **Practitioner** 1988 Jun 8; 232(1450):695-6
What you should know about the proposed "safe" harbors. Grad JD, et al. **Va Med** 1989 May;116(5):211-4
Buying and selling a partnership. Gunn D. **Vet Rec** 1989 Jun 3;124(22):577-9
Partnership responsibilities. Gunn D. **Vet Rec** 1989 Apr 15; 124(15):385-6
Partners' wives [letter] Smith CD. **Vet Rec** 1989 Apr 29; 124(17):472-3

ECONOMICS

New dentists' problems [letter] West MM. **J Am Dent Assoc** 1988 Dec;117(7):812-3

LEGISLATION & JURISPRUDENCE

Restrictive covenants and Georgia physicians. Holland WK. **J Med Assoc Ga** 1988 Aug;77(8):658-9
[Veterinary professional partnership] Lommers H. **Tijdschr Diergeneeskd** 1988 Dec 1;113(23):1303-9 (Eng. Abstr.) **(Dut)**

ORGANIZATION & ADMINISTRATION

Managing the partnership. Colin-Thomé D. **Practitioner** 1988 Sep 22;232(1454 (Pt 2)):999-1003
Being a boss. Heathcote J. **Practitioner** 1988 Sep 8;232(1454 (Pt 1)):972-3
Why consider job sharing? [editorial] Martin P. **Practitioner** 1988 Nov 22;232(1459):1259
Partnership contracts [published erratum appears in Vet Rec 1989 Apr 22;124(16):442] Gripper J. **Vet Rec** 1989 Apr 8; 124(14):361-3
Partnership contracts [letter] Gripper JN. **Vet Rec** 1989 Apr 22;124(16):442

TRENDS

Partnerships in pediatrics. Menna VJ. **Pediatr Rev** 1987 Mar; 8(9):259

PARTNERSHIP PRACTICE, DENTAL see under **PARTNERSHIP PRACTICE**

PARTURIENT PARESIS

BLOOD

The relationship between certain blood cations in cows with milk fever and both the state of consciousness and the position of cows when attended. Fenwick DC. **Aust Vet J** 1988 Dec;65(12):374-5

EPIDEMIOLOGY

Epidemiology of metabolic disorders in dairy cattle: association among host characteristics, disease, and production. Gröhn YT, et al. **J Dairy Sci** 1989 Jul; 72(7):1876-85

IMMUNOLOGY

Periparturient hypocalcemia in cows: effects on peripheral blood neutrophil and lymphocyte function. Kehrli ME Jr, et al. **J Dairy Sci** 1989 May;72(5):1188-96

METABOLISM

Recurring hypocalcemia of bovine parturient paresis is associated with failure to produce 1,25-dihydroxyvitamin D. Goff JP, et al. **Endocrinology** 1989 Jul;125(1):49-53

PATHOLOGY

Fatty acid analysis of lipid components of livers from dairy cows with high levels of serum free fatty acids. Ono E, et al. **Nippon Juigaku Zasshi** 1988 Aug;50(4):900-7
Parturient paresis and hypocalcemia in ruminant livestock. Oetzel GR. **Vet Clin North Am [Food Anim Pract]** 1988 Jul;4(2):351-64

PHYSIOPATHOLOGY

Periparturient diseases and their effect on reproductive performance in five dairy herds. Borsberry S, et al. **Vet Rec** 1989 Mar 4;124(9):217-9

PREVENTION & CONTROL

Use of 1 alpha-hydroxyvitamin D3 in prevention of bovine parturient paresis. 8. Maternal and neonatal plasma calcium, parathyroid hormone, and vitamin D metabolites concentrations. Bar A, et al. **J Dairy Sci** 1988 Oct; 71(10):2723-9
Periparturient hypocalcemia in cows: prevention using intramuscular parathyroid hormone. Goff JP, et al. **J Dairy Sci** 1989 May;72(5):1182-7
Ammonium chloride and ammonium sulfate for prevention of parturient paresis in dairy cows. Oetzel GR, et al. **J Dairy Sci** 1988 Dec;71(12):3302-9
Feeding the dry cow to avoid metabolic disease. Gerloff BJ. **Vet Clin North Am [Food Anim Pract]** 1988 Jul;4(2):379-90 (49 ref.)

PARTURITION see **LABOR**

PARVALBUMINS see under **MUSCLE PROTEINS**

PARVOVIRIDAE

ANALYSIS

A genome-linked copy of the NS-1 polypeptide is located on the outside of infectious parvovirus particles. Cotmore SF, et al. **J Virol** 1989 Sep;63(9):3902-11
Structural polypeptides of feline parvovirus subspecies viruses. Mochizuki M, et al. **Nippon Juigaku Zasshi** 1988 Dec;50(6):1207-14
Characterization of novel populations of MVM virions containing covalent DNA-protein complexes. Faust EA, et al. **Virology** 1989 Jan;168(1):128-37

DRUG EFFECTS

Inhibitory effects of ribavirin alone or combined with human alpha interferon on feline infectious peritonitis virus replication in vitro. Weiss RC, et al. **Vet Microbiol** 1989 Jul;20(3):255-65

GENETICS

Dot blot hybridization assay of B19 virus DNA in clinical specimens. Mori J, et al. **J Clin Microbiol** 1989 Mar; 27(3):459-64
Minute virus of mice non-structural protein NS-1 is necessary and sufficient for trans-activation of the viral P39 promoter. Doerig C, et al. **J Gen Virol** 1988 Oct;69 (Pt 10):2563-73
A novel replicative form DNA of Aleutian disease virus: the covalently closed linear DNA of the parvoviruses. Löchelt M, et al. **J Gen Virol** 1989 May;70 (Pt 5):1105-16
A kinetic hairpin transfer model for parvoviral DNA replication. Chen KC, et al. **J Mol Biol** 1989 Jul 20; 208(2):283-96
The terminal regions of adenovirus and minute virus of mice DNAs are preferentially associated with the nuclear matrix in infected cells. Bodnar JW, et al. **J Virol** 1989 Oct; 63(10):4344-53
Regulated expression of the feline panleukopenia virus P38 promoter on extrachromosomal FPV/EBV chimeric plasmids. Clemens DL, et al. **J Virol** 1989 Jun;63(6):2737-45
Identical ends are not required for the equal encapsidation of plus- and minus-strand parvovirus LuIII DNA. Diffoot N, et al. **J Virol** 1989 Jul;63(7):3180-4
Both excision and replication of cloned autonomous parvovirus DNA require the NS1 (rep) protein. Rhode SL 3d. **J Virol** 1989 Oct;63(10):4249-56
Sequence of the right hand terminal palindrome of the human B19 parvovirus genome has the potential to form a 'stem plus arms' structure. Astell CR, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5857
Human parvovirus B19: historical and clinical review. Thurn J. **Rev Infect Dis** 1988 Sep-Oct;10(5):1005-11 (69 ref.)
Mapping of porcine parvovirus DNA and development of a diagnostic DNA probe. Krell PJ, et al. **Vet Microbiol** 1988 May;17(1):29-43
Canine host range and a specific epitope map along with variant sequences in the capsid protein gene of canine parvovirus and related feline, mink, and raccoon parvoviruses. Parrish CR, et al. **Virology** 1988 Oct; 166(2):293-307
Sequence organization in regulatory regions of DNA of minute virus of mice. Bodnar JW. **Virus Genes** 1989 Mar; 2(2):167-82
Nucleotide sequence of capsid protein gene of porcine parvovirus. Sakurai M, et al. **Virus Res** 1989 May; 13(1):79-86

GROWTH & DEVELOPMENT

Feline parvovirus propagates in cat bone marrow cultures

and inhibits hematopoietic colony formation in vitro. Kurtzman GJ, et al. **Blood** 1989 Jul;74(1):71–81

Inhibition by parvovirus H-1 of the formation of tumors in nude mice and colonies in vitro by transformed human mammary epithelial cells. Dupressoir T, et al. **Cancer Res** 1989 Jun 15;49(12):3203–8

Replication of rat virus in neonatal calvaria in culture. Schuster GS, et al. **In Vitro Cell Dev Biol** 1988 Oct; 24(10):1042–6

Transformation of human cells by oncogenic viruses supports permissiveness for parvovirus H-1 propagation. Faisst S, et al. **J Virol** 1989 May;63(5):2152–8

Plaque formation and replication of porcine parvovirus in embryonic swine kidney cell line, ESK cells. Kawamura H, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):803–8

Limitations to the expression of parvoviral nonstructural proteins may determine the extent of sensitization of EJ-ras-transformed rat cells to minute virus of mice. Van Hille B, et al. **Virology** 1989 Jul;171(1):89–97

IMMUNOLOGY

Efficacy of an inactivated porcine parvovirus (PPV) vaccine under field conditions. Sørensen KJ, et al. **Acta Vet Scand** 1988;29(3–4):295–302

Serum antibody response to canine parvovirus, canine adenovirus-1, and canine distemper virus in dogs with known status of immunization: study of dogs in Sweden. Olson P, et al. **Am J Vet Res** 1988 Sep;49(9):1460–6

Antibodies against canine parvovirus in wolves of Minnesota: a serologic study from 1975 through 1985. Goyal SM, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1092–4

Passive transfer of antiviral antibodies restricts replication of Aleutian mink disease parvovirus in vivo. Alexandersen S, et al. **J Virol** 1989 Jan;63(1):9–17

An enzyme-linked immunosorbent assay for detection of antibodies to porcine parvovirus. Westenbrink F, et al. **J Virol Methods** 1989 Feb;23(2):169–78

Characterization of monoclonal antibodies against human parvovirus B19. Yaegashi N, et al. **Microbiol Immunol** 1989; 33(7):561–7

A serological survey of swine parvovirus infection in Italy. Foni E, et al. **Microbiologica** 1989 Jul;12(3):241–5

The ability by different preparations of porcine parvovirus to enhance humoral immunity in swine and guinea pigs. Gualandi GL, et al. **Microbiologica** 1988 Oct;11(4):363–9

Comparison of feline parvovirus subspecific strains using monoclonal antibodies against a feline panleukopenia virus. Mochizuki M, et al. **Nippon Juigaku Zasshi** 1989 Apr; 51(2):264–72

Detection of antibodies against porcine parvovirus in swine sera by enzyme-linked immunosorbent assay. Hohdatsu T, et al. **Vet Microbiol** 1988 May;17(1):11–9

[Antigen localization in canine parvovirus type 2 infection using the avidin-biotin complex method (ABC) and direct immunofluorescence] Dohse K, et al. **Zentralbl Veterinarmed [B]** 1988 Dec;35(10):717–28 (Eng. Abstr.) **(Ger)**

ISOLATION & PURIFICATION

Monoclonal antibodies applied in an immunoperoxidase method for detection of parvovirus in specimens of small intestine from dog and mink. Jönsson L, et al. **Acta Vet Scand** 1988;29(2):263–4

Infectious anemia caused by a parvovirus-like virus in Georgia broilers. Goodwin MA, et al. **Avian Dis** 1989 Jul-Sep;33(3):438–45

Comparison of isolation in cell culture with conventional and modified mouse antibody production tests for detection of murine viruses. de Souza M, et al. **J Clin Microbiol** 1989 Jan;27(1):185–7

Detection of parvovirus B19 DNA in fetal tissues by in situ hybridisation and polymerase chain reaction. Salimans MM, et al. **J Clin Pathol** 1989 May;42(5):525–30

Rapid detection of human parvovirus B19 DNA by dot-hybridization and the polymerase chain reaction. Salimans MM, et al. **J Virol Methods** 1989 Jan;23(1):19–28

Characterization of a parvovirus isolated from a pig fetus. Foni E, et al. **Microbiologica** 1989 Jul;12(3):277–80

Characterization of a parvovirus isolated from the diarrheic feces of a pig. Yasuhara H, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):337–44

Studies on canine parvovirus infection: preparation of challenge virus. Macartney L, et al. **Res Vet Sci** 1988 Sep; 45(2):170–3

METABOLISM

The terminal protein of minute virus of mice is an 83 kilodalton polypeptide linked to specific forms of double-stranded and single-stranded viral DNA. Gunther M, et al. **FEBS Lett** 1988 Dec 19;242(1):22–6

PATHOGENICITY

Pathogenesis of blue fox parvovirus on blue fox kits and pregnant vixens. Veijalainen PM, et al. **Am J Vet Res** 1988 Nov;49(11):1941–4

Sensitization of human keratinocytes to killing by parvovirus H-1 takes place during their malignant transformation but does not require them to be tumorigenic. Chen YQ, et al. **Carcinogenesis** 1989 Jan;10(1):163–7

[Parvovirus infections] Perol Y. **Presse Med** 1988 Oct 22; 17(36):1834–5 **(Fre)**

[Susceptibility of Aedes Aegypti L. mosquitoes infected with an entomopathogenic virus to malarial plasmodia] Zakharova NF, et al. **Med Parazitol (Mosk)** 1988 Nov–Dec; (6):18–22 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

B19 parvovirus replicates in erythroid leukemic cells in vitro [letter] Takahashi T, et al. **J Infect Dis** 1989 Sep; 160(3):548–9

Polarized entry of canine parvovirus in an epithelial cell line. Basak S, et al. **J Virol** 1989 Jul;63(7):3164–7

Evidence for a ligation step in the DNA replication of the autonomous parvovirus minute virus of mice. Cotmore SF, et al. **J Virol** 1989 Feb;63(2):1002–6

Parvovirus replication in normal and transformed human cells correlates with the nuclear translocation of the early protein NS1. Rhode SL 3d, et al. **J Virol** 1989 Jan; 63(1):349–55

Interactions of minute virus of mice and adenovirus with host nucleoli. Walton TH, et al. **J Virol** 1989 Sep; 63(9):3651–60

Propagation of human parvovirus B19 in primary culture of erythroid lineage cells derived from fetal liver. Yaegashi N, et al. **J Virol** 1989 Jun;63(6):2422–6

Plaque formation and replication of porcine parvovirus in embryonic swine kidney cell line, ESK cells. Kawamura H, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):803–8

[The inactivation of viruses in sewage sludge treatment] Traub F, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1988; 78:107–19 **(Ger)**

ULTRASTRUCTURE

A parvovirus-like agent associated with psittacine beak and feather disease. Gough RE, et al. **Vet Rec** 1989 Jul 8; 125(2):41

[Electron microscopy in the diagnosis of enteritis in cats] Herbst W, et al. **Tijdschr Diergeneeskd** 1989 Mar 15; 114(6):328–33 (Eng. Abstr.) **(Dut)**

PARVOVIRUS INFECTIONS

Parvovirus infection in children. Goldfarb J. **Adv Pediatr Infect Dis** 1989;4:211–22 (74 ref.)

Diseases caused by the human parvovirus B19. Pattison JR. **Arch Dis Child** 1988 Dec;63(12):1426–7 (5 ref.)

Erythema infectiosum (fifth disease). Chorba T, et al. **Clin Dermatol** 1989 Jan–Mar;7(1):65–74 (114 ref.)

Erythema multiforme in a patient with acute human parvovirus B19 infection. Lobkowicz F, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 1):849–50

Human parvovirus infection. Ware R. **J Pediatr** 1989 Mar; 114(3):343–8 (67 ref.)

Parvovirus-associated thrombocytopenic purpura [letter] Evans DI. **Lancet** 1989 Apr 1;1(8640):730

Parvovirus and idiopathic thrombocytopenic purpura [letter] Lefrère JJ, et al. **Lancet** 1989 Feb 4;1(8632):279

Human parvovirus infection in pregnancy. Rodis JF, et al. **Obstet Gynecol** 1988 Nov;72(5):733–8 (22 ref.)

Parvovirus infection in pregnancy. Samra JS, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):832–4 (25 ref.)

[Erythema infectiosum—Parvovirus infection in Finnish? (letter)] Meurman O, et al. **Duodecim** 1988;104(16):1282 **(Fin)**

[Familial cases of acute erythroblastopenia in children with homozygous sickle-cell anemia (letter)] Bégué P, et al. **Presse Med** 1989 Feb 11;18(5):229 **(Fre)**

[Erythema annulare: recommendations during pregnancy (letter)] Schwarz TF, et al. **Dtsch Med Wochenschr** 1989 Jan 27;114(4):157 **(Ger)**

[Hereditary spherocytosis first diagnosed upon the development of aplastic crisis; a case report] Aonuma K, et al. **Rinsho Ketsueki** 1989 Feb;30(2):266–70 (Eng. Abstr.) **(Jpn)**

[Parvovirus infections in humans] Fleites E, et al. **Bol Asoc Med P R** 1989 Aug;81(8):300–7 (64 ref.) (Eng. Abstr.) **(Spa)**

BLOOD

High serum iron in human parvovirus-induced aplastic crisis in iron deficiency anemia. Kojima S, et al. **Acta Haematol (Basel)** 1988;80(3):171–2

Parvovirus B19 infection associated with reticulocytopenia and chronic autoimmune hemolytic anemia. Smith MA, et al. **Am J Pediatr Hematol Oncol** 1989 Summer; 11(2):167–9

Human parvovirus infections—a haematological perspective: any relevance to New Zealand health? Blacklock H. **N Z Med J** 1989 Aug 23;102(874):436–7

COMPLICATIONS

Aplastic crisis due to human B19 parvovirus infection in red cell pyrimidine-5'-nucleotidase deficiency. Rechavi G, et al. **Acta Haematol (Basel)** 1989;82(1):46–9

Clinical manifestations of human parvovirus B19 in adults. Woolf AD, et al. **Arch Intern Med** 1989 May;149(5):1153–6

Human parvovirus B19-induced transient pancytopenia in a child with hereditary spherocytosis. Hanada T, et al. **Br J Haematol** 1988 Sep;70(1):113–5

Prolonged parvovirus B19 infection with severe anaemia in a bone marrow transplant patient [letter] Weiland HT, et al. **Br J Haematol** 1989 Feb;71(2):300

What threat is human parvovirus B19 to the fetus? A review. Brown KE. **Br J Obstet Gynaecol** 1989 Jul;96(7):764–7 (26 ref.)

Aplastic crisis caused by B19 virus in a child during induction therapy for acute lymphoblastic leukemia. Azzi A, et al. **Haematologica (Pavia)** 1989 Mar–Apr;74(2):191–4

Human parvovirus B19 infection associated with vascular purpura and vasculitis [letter] Schwarz TF, et al. **Infection** 1989 May–Jun;17(3):170–1

Severe aplastic anaemia after parvovirus infection in the absence of underlying haemolytic anaemia [letter] Hamon MD, et al. **J Clin Pathol** 1988 Nov;41(11):1242

An association between human parvovirus B-19 infection and autoantibody production [letter] Sasaki T, et al. **J Rheumatol** 1989 May;16(5):708–9

Leads from the MMWR. Risks associated with human parvovirus B19 infection. **JAMA** 1989 Mar 10; 261(10):1406–8 (72 ref.)

Leads from the MMWR. Risks associated with human parvovirus B19 infection. **JAMA** 1989 Mar 17;261(11):1555, 1560, 1563 (72 ref.)

Parvovirus infection, leukaemia, and immunodeficiency [letter] **Lancet** 1989 Jan 14;1(8629):101–2

Parvovirus-associated thrombocytopenic purpura [letter] Foreman NK, et al. **Lancet** 1988 Dec 17;2(8625):1426–7

Persistent B19 parvovirus infection as a cause of severe chronic anaemia in children with acute lymphocytic leukaemia. Kurtzman GJ, et al. **Lancet** 1988 Nov 19; 2(8621):1159–62

Parvovirus infection, leukaemia, and immunodeficiency [letter] Malarme M, et al. **Lancet** 1989 Jun 24;1(8652):1457

Human parvovirus (HPV/B19) infection with purpura. Shiraishi H, et al. **Microbiol Immunol** 1989;33(4):369–72

Risks associated with human parvovirus B19 infection. **MMWR** 1989 Feb 17;38(6):81–8, 93–7 (72 ref.)

Pure red-cell aplasia of 10 years' duration due to persistent parvovirus B19 infection and its cure with immunoglobulin therapy [see comments] Kurtzman G, et al. **N Engl J Med** 1989 Aug 24;321(8):519–23. **Comment in:** N Engl J Med 1989 Aug 24;321(8):536–8

Human parvovirus B19 infection associated with prolonged erythroblastopenia in a leukemic child. Carstensen H, et al. **Pediatr Infect Dis J** 1989 Jan;8(1):56

Aplastic crisis in occult hereditary spherocytosis caused by human parvovirus (HPV B19). Rappaport ES, et al. **South Med J** 1989 Feb;82(2):247–51

Embryonic malformations in a case of intrauterine parvovirus B19 infection. Hartwig NG, et al. **Teratology** 1989 Mar; 39(3):295–302

[Aplastic crisis in sickle cell anemia and other hemolytic disorders are due to the agent of epidemic erythema, the human Parvovirus (Parvovirus B19)] Van Ros G. **Ann Soc Belg Med Trop** 1988 Sep;68(3):179–93 (101 ref.) **(Fre)**

[Rheumatoid manifestations of parvovirus infections. Apropos of 3 cases] Gauvain JB, et al. **Rev Rhum Mal Osteoartic** 1988 Nov;55(11):923–7 **(Fre)**

[Vascular purpura and other cardiovascular alterations in children with acute parvovirus B19 infection. Report of 3 personal cases] Wiersbitzky S, et al. **Kinderarztl Prax** 1989 Apr;57(4):193–7 (Eng. Abstr.) **(Ger)**

[Parvovirus-induced aplastic crisis in a child with hereditary spherocytosis: studies on the mechanisms of hemopoietic suppression] Saitoh H, et al. **Rinsho Ketsueki** 1989 Mar; 30(3):366–70 (Eng. Abstr.) **(Jpn)**

[The importance of human parvovirus infections in pediatrics] Tuncer AM. **Mikrobiyol Bul** 1987 Oct; 21(4):308–10 (11 ref.) (Eng. Abstr.) **(Tur)**

CONGENITAL

Pathogenesis of congenital infection with three diverse viruses: varicella-zoster virus, human parvovirus, and human immunodeficiency virus. Grose C, et al. **Semin Perinatol** 1989 Aug;13(4):278–93 (68 ref.)

DIAGNOSIS

Human parvovirus infection. Schneider AP 2d, et al. **Am Fam Physician** 1989 Jan;39(1):165–9 (20 ref.)

Dot blot hybridization assay of B19 virus DNA in clinical specimens. Mori J, et al. **J Clin Microbiol** 1989 Mar; 27(3):459–64

Elevated maternal serum alpha-fetoprotein and hydrops fetalis in association with fetal parvovirus B-19 infection. Bernstein IM, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):456–7

Antenatal diagnosis and palliative treatment of non-immune hydrops fetalis secondary to fetal parvovirus B19 infection. Naides SJ, et al. **Prenat Diagn** 1989 Feb;9(2):105–14

[Parvovirus B19 infection: not confined to exanthema of erythema infectiosum] Schwarz TF, et al. **Hautarzt** 1989 Jan;40(1):1–3 (14 ref.) (Eng. Abstr.) **(Ger)**

[Erythema infectiosum acutum is not always a harmless disease (published erratum appears in Z Hautkr 1989 Jun 15;64(6):454)] Nasemann TR. **Z Hautkr** 1989 Mar 15; 64(3):161–2 **(Ger)**

ENZYMOLOGY

A novel primase-free form of murine DNA polymerase alpha induced by infection with minute virus of mice. Ho TF, et al. **Biochemistry** 1989 May 30;28(11):4622–8

EPIDEMIOLOGY

Seroprevalence of human parvovirus B19 infection in Sao Tomé and Principe, Malawi and Mascarene Islands. Schwarz TF, et al. **Int J Med Microbiol** 1989 Jul; 271(2):231–6

Human parvovirus B19 infections in women of childbearing age and within families. Koch WC, et al. **Pediatr Infect Dis J** 1989 Feb;8(2):83–7

ETIOLOGY

B19 virus—a pathogenic human parvovirus. Pattison JR. **Blood Rev** 1987 Mar;1(1):58–64 (39 ref.)

Infections in thalassemic patients (hepatitis and bone marrow transplantation related infections excluded). de Montalembert M, et al. **Prog Clin Biol Res** 1989;309:231–8 (15 ref.)

IMMUNOLOGY

The immune system as mediator of virus-associated bone marrow failure: B19 parvovirus and Epstein–Barr virus. Young NS, et al. **Ann N Y Acad Sci** 1989;554:75–80 (16 ref.)

Transient rheumatoid factor positivity in acute human parvovirus B19 infection. Naides SJ, et al. **Arch Intern Med** 1988 Dec;148(12):2587–9

Anti-DNA and antilymphocyte antibodies during acute infection with human parvovirus B19. Soloninka CA, et al. **J Rheumatol** 1989 Jun;16(6):777–81

[Acute benign arthritis of the hip. A systematic study of serology of parvovirus B19 (letter)] Job-Deslandre C, et al. **Presse Med** 1989 May 6;18(18):941 **(Fre)**

MICROBIOLOGY

Human parvovirus B19: historical and clinical review. Thurn J. **Rev Infect Dis** 1988 Sep–Oct;10(5):1005–11 (69 ref.)

[Parvovirus infections] Perol Y. **Presse Med** 1988 Oct 22; 17(36):1834–5 **(Fre)**

[Parvovirus infections in dermatology] Schwarz TF, et al. **Z Hautkr** 1989 Apr 15;64(4):272–3 (17 ref.) (Eng. Abstr.) **(Ger)**

PATHOLOGY

Fetal pathology in human parvovirus B19 infection. Van Elsacker-Niele AM, et al. **Br J Obstet Gynaecol** 1989 Jul; 96(7):768–75

Hepatic disease associated with intrauterine parvovirus B19 infection in a newborn premature infant. Metzman R, et al. **J Pediatr Gastroenterol Nutr** 1989 Jul;9(1):112–4

Parvovirus infections. From benign to life-threatening. Smith MA, et al. **Postgrad Med** 1988 Nov 15;84(7):127–8, 131–4 (37 ref.)

PHYSIOPATHOLOGY

Inhibition by parvovirus H-1 of the formation of tumors in nude mice and colonies in vitro by transformed human mammary epithelial cells. Dupressoir T, et al. **Cancer Res** 1989 Jun 15;49(12):3203–8

PREVENTION & CONTROL

Infection control measures for human parvovirus B19 in the hospital setting. Naides SJ. **Infect Control Hosp Epidemiol** 1989 Jul;10(7):326–9

Laboratory infection with parvovirus B19 [letter] Cohen BJ, et al. **J Clin Pathol** 1988 Sep;41(9):1027–8

Failure of vaccine or virulent strains of canine parvovirus to induce immunosuppressive effects on the immune system of the dog. Phillips TR, et al. **Viral Immunol** 1987; 1(2):135–44

TRANSMISSION

Symptomatic parvovirus B19 infection and heat-treated factor IX concentrate [letter] Lyon DJ, et al. **Lancet** 1989 May 13;1(8646):1085

Human parvovirus B19 [editorial; comment] Anderson LJ, et al. **N Engl J Med** 1989 Aug 24;321(8):536–8. **Comment on:**. **Comment on:** N Engl J Med 1989 Aug 24;31(8):485–91 N Engl J Med 1989 Aug 24;321(8):519–23

Human parvovirus B19 infection among hospital staff members after contact with infected patients [see comments] Bell LM, et al. **N Engl J Med** 1989 Aug 24; 321(8):485–91. **Comment in:** N Engl J Med 1989 Aug 24;321(8):536–8

Human parvovirus B19 infection in a day care worker. Noel GJ, et al. **Pediatr Infect Dis J** 1988 Dec;7(12):880

VETERINARY

Monoclonal antibodies applied in an immunoperoxidase method for detection of parvovirus in specimens of small intestine from dog and mink. Jönsson L, et al. **Acta Vet Scand** 1988;29(2):263–4

Effect of canine parvovirus on erythroid progenitors in phenylhydrazine-induced regenerative hemolytic anemia in dogs. Brock KV, et al. **Am J Vet Res** 1989 Jun; 50(6):965–9

Natural parvovirus infection in laboratory rabbits. Metcalf JB, et al. **Am J Vet Res** 1989 Jul;50(7):1048–51

Pathogenesis of blue fox parvovirus on blue fox kits and pregnant vixens. Veijalainen PM, et al. **Am J Vet Res** 1988 Nov;49(11):1941–4

Persistence of rat parvovirus in athymic rats. Gaertner DJ, et al. **Arch Virol** 1989;105(3–4):259–68

Infectious anemia caused by a parvovirus-like virus in Georgia broilers. Goodwin MA, et al. **Avian Dis** 1989 Jul–Sep;33(3):438–45

Antibodies against canine parvovirus in wolves of Minnesota: a serologic study from 1975 through 1985. Goyal SM, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1092–4

An enzyme-linked immunosorbent assay for detection of antibodies to porcine parvovirus. Westenbrink F, et al. **J Virol Methods** 1989 Feb;23(2):169–78

Characterization of a parvovirus isolated from a pig fetus. Foni E, et al. **Microbiologica** 1989 Jul;12(3):277–80

A serological survey of swine parvovirus infection in Italy. Foni E, et al. **Microbiologica** 1989 Jul;12(3):241–5

Escherichia coli associated endotoxemia in dogs with parvovirus infection. Isogai E, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):597–606

Clinical, hematological and pathological findings in specific pathogen-free cats and conventional cats experimentally infected with canine parvovirus. Uchida E, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):597–604

Characterization of a parvovirus isolated from the diarrheic feces of a pig. Yasuhara H, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):337–44

Studies on canine parvovirus infection: preparation of challenge virus. Macartney L, et al. **Res Vet Sci** 1988 Sep; 45(2):170–3

Detection of antibodies against porcine parvovirus in swine sera by enzyme-linked immunosorbent assay. Hohdatsu T, et al. **Vet Microbiol** 1988 May;17(1):11–9

Mapping of porcine parvovirus DNA and development of a diagnostic DNA probe. Krell PJ, et al. **Vet Microbiol** 1988 May;17(1):29–43

A parvovirus-like agent associated with psittacine beak and feather disease. Gough RE, et al. **Vet Rec** 1989 Jul 8; 125(2):41

Porcine parvovirus vaccination [letter] Hardy BD, et al. **Vet Rec** 1988 Aug 27;123(9):235

[Parvovirus infection of swine (literature review)] Liebermann H, et al. **Arch Exp Veterinarmed** 1988 Nov; 42(6):890–904 (109 ref.) (Eng. Abstr.) **(Ger)**

[Serologic studies of the distribution of bovine parvovirus in Switzerland] Hässig M, et al. **Schweiz Arch Tierheilkd** 1988 Nov;130(11):613–9 (Eng. Abstr.) **(Ger)**

[Microbiological study results (bacteriology and electron microscopy) of diarrhea in dog whelps] Zschöck M, et al. **Tierarztl Prax** 1989;17(1):93–5 (Eng. Abstr.) **(Ger)**

[Antigen localization in canine parvovirus type 2 infection using the avidin–biotin complex method (ABC) and direct immunofluorescence] Dohse K, et al. **Zentralbl Veterinarmed [B]** 1988 Dec;35(10):717–28 (Eng. Abstr.) **(Ger)**

[A modification of the ABC method (avidin–biotin–peroxidase complex) for the detection of viral antigens in coronavirus infections in cats (FIP) and parvovirus type 2 infections in dogs] Walter J, et al. **Zentralbl Veterinarmed [B]** 1989 Jul;36(5):321–32 (Eng. Abstr.) **(Ger)**

PASSIVE ADDICTION, NEONATAL see **NEONATAL ABSTINENCE SYNDROME**

PASSIVE–AGGRESSIVE PERSONALITY DISORDER see under **PERSONALITY DISORDERS**

PASSIVE ANTIBODY TRANSFER see **IMMUNIZATION, PASSIVE**

PASSIVE CUTANEOUS ANAPHYLAXIS

Anaphylactoid reactions induced by fluorocarbon blood substitute. Zhang SN, et al. **Biomater Artif Cells Artif Organs** 1988;16(1–3):505–10

Potency of hexavalent and decavalent anaphylactogens: affinity enhancement by epitope clusters. Schneider CH, et al. **Immunobiology** 1988 Dec;178(3):250–60

Strain difference and mode of inheritance of the susceptibility to passive cutaneous anaphylaxis mediated by allogeneic IgE antibody in the mouse. Harada M, et al. **Immunol Invest** 1989 Jun;18(5):723–35

Comparison of guinea pig IgE antibodies estimated by ELISA with those estimated by passive cutaneous anaphylaxis. Ito K, et al. **Int Arch Allergy Appl Immunol** 1988;87(4):424–9

Quantitative estimation of increased vascular permeability in acute inflammatory reaction in the chicken skin. Pillai AG, et al. **Vet Res Commun** 1988;12(2–3):155–9

A microscopic study of increased vascular permeability and leucocyte emigration in passive cutaneous anaphylaxis in the chicken. Pillai AG, et al. **Vet Res Commun** 1988; 12(6):497–501

Suppression by mepyramine maleate of the increased vascular permeability in passive cutaneous anaphylaxis in the chicken. Pillai AG, et al. **Vet Res Commun** 1988; 12(2–3):161–3

[Individual differences in PCA response in the guinea pig] Yoshida J, et al. **Jikken Dobutsu** 1989 Jan;38(1):11–5 (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

An anti-inflammatory steroid inhibits tissue sensitization by IgE in vivo. Hellewell PG, et al. **Br J Pharmacol** 1989 Jan;96(1):5–7

Studies on heterocyclic compounds. IX. Synthesis and antiallergic activity of furo[2,3–b] [1,8]naphthyridine-3,4(2H,9H)–diones and 4H–furo[2,3–d]pyrido [1,2–alpha]–pyrimidine–3,4(2H)–diones. Kuo SC, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4403–7

Immunopharmacological studies on TBX, a new antiallergic drug (1). Inhibitory effects on passive cutaneous anaphylaxis in rats and guinea pigs. Yanagihara Y, et al. **Jpn J Pharmacol** 1988 Sep;48(1):91–101

[The anti-allergic activity of osthol extracted from the fruits of Cnidium monnieri (L.) Cusson] Chen ZC, et al. **Yao Hsueh Hsueh Pao** 1988 Feb;23(2):96–9 (Eng. Abstr.) **(Chi)**

[Derivatives of pyrimidine 1,2–condensate. IV. Synthesis and pharmacological properties of the N,N–disubstituted 4–amino–2H–pyrido(1,2–a)pyrimidin– 2–ones and 2–amino–4H–pyrido(1,2–a)pyrmidin–4–ones] Di Braccio M, et al. **Farmaco [Sci]** 1988 Sep;43(9):705–23 (Eng. Abstr.) **(Ita)**

[Antiallergic effects of mequitazine. 2. In vivo experiments] Kohno S, et al. **Nippon Yakurigaku Zasshi** 1988 Aug; 92(2):159–65 (Eng. Abstr.) **(Jpn)**

[Inhibitory effect of AD–1590, a non–steroidal anti–inflammatory drug, on allergic inflammation in mice and rats] Nakamura H, et al. **Nippon Yakurigaku Zasshi** 1988 Jul;92(1):29–38 (Eng. Abstr.) **(Jpn)**

PASSIVE TRANSFER OF IMMUNITY see **IMMUNIZATION, PASSIVE**

PASTES see **OINTMENTS**

PASTEURELLA

Effects of Pasteurella haemolytica leukotoxin on cultured bovine lymphoma cells [published erratum appears in Am J Vet Res 1989 Apr;50(4):607] Clinkenbeard KD, et al. **Am J Vet Res** 1989 Feb;50(2):271–5

Modulation of bovine neutrophil antibacterial activities by Pasteurella haemolytica A1 purified capsular polysaccharide. Czuprynski CJ, et al. **Microb Pathog** 1989 Feb;6(2):133–41

Calcium ion involvement in the action of Pasteurella haemolytica leukotoxin. Gerbig DG Jr, et al. **Vet Microbiol** 1989 Apr;19(4):325–35

A protein toxin from Pasteurella multocida type D causes acute and chronic hepatic toxicity in rats. Cheville NF, et al. **Vet Pathol** 1989 Mar;26(2):148–57

A toxin from Pasteurella multocida type D causes acute hepatic necrosis in pigs. Cheville NF, et al. **Vet Pathol** 1988 Nov;25(6):518–20

ANALYSIS

Characterization of outer membrane protein-enriched extracts from Pasteurella multocida isolated from turkeys. Choi KH, et al. **Am J Vet Res** 1989 May;50(5):676–83

Comparison of the Pasteurella haemolytica A1 envelope proteins obtained by two cell disruption methods. Simons KR, et al. **J Clin Microbiol** 1989 Apr;27(4):664–7

CLASSIFICATION

Serotyping of isolates of Pasteurella multocida from chickens. Ireland LA, et al. **Aust Vet J** 1989 Apr;66(4):119–20

Comparison of 16S rRNA sequences from the family Pasteurellaceae: phylogenetic relatedness by cluster analysis. Chuba PJ, et al. **J Gen Microbiol** 1988 Jul;134 (Pt 7):1923–30

Relationship between serotypes, dermonecrotic toxin production of Pasteurella multocida isolates and pneumonic lesions of porcine lung. Iwamatsu S, et al. **Nippon Juigaku Zasshi** 1988 Dec;50(6):1200–6

A new serovar of Pasteurella haemolytica from sheep in Syria. Younan M, et al. **Trop Anim Health Prod** 1989 Feb; 21(1):87

Isolation of P multocida F–3,4 from a calf in the UK [letter] Jones TO, et al. **Vet Rec** 1988 Sep 24;123(13):354

Species identification and serotyping (capsular antigen) of Pasteurella strains from sheep flocks in south Germany and in Syria. Younan M, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):98–109

DRUG EFFECTS

In vitro antimicrobial activity of sulfonamides against some porcine pathogens. Mengelers MJ, et al. **Am J Vet Res** 1989 Jul;50(7):1022–8

Susceptibility to hydrophobic molecules and phospholipid composition in Pasteurella multocida and Actinobacillus lignieresii. Hart ME, et al. **Antimicrob Agents Chemother** 1988 Sep;32(9):1354–9

Resistance to antimicrobial agents and prevalence of R plasmids in Pasteurella multocida from turkeys. Hirsh DC, et al. **Antimicrob Agents Chemother** 1989 May;33(5):670–3

Low propensity for poultry isolates of Pasteurella multocida to acquire adaptive resistance to oxytetracycline. Champlin FR, et al. **Avian Dis** 1988 Jul–Sep;32(3):478–82

In vitro studies with dimethyldithiocarbamate, possible new antimicrobial for use in poultry. Delap SK, et al. **Avian Dis** 1989 Jan–Mar;33(1):8–11

In vitro evaluation of various quinolone antibacterial agents against veterinary mycoplasmas and porcine respiratory bacterial pathogens. Hannan PC, et al. **Res Vet Sci** 1989 Mar;46(2):202–11

Comparing different isolates of Pasteurella haemolytica from beef calves using their in vitro antimicrobial sensitivity patterns. Shoo MK. **Vet Microbiol** 1989 May;20(1):73–8

Kill kinetics of the cephalosporin antibiotics cephalexin and cefuroxime against bacteria of veterinary importance. Silley P, et al. **Vet Rec** 1988 Sep 24;123(13):343–5

ENZYMOLOGY

Genetic determinant of the ROB–1 beta–lactamase in bovine and porcine Pasteurella strains. Livrelli VO, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1282–4

GENETICS

DNA sequence of the Pasteurella haemolytica leukotoxin gene cluster. Highlander SK, et al. **DNA** 1989 Jan–Feb; 8(1):15–28

Cloning, nucleotide sequence, and characterization of genes encoding the secretion function of the Pasteurella haemolytica leukotoxin determinant. Strathdee CA, et al. **J Bacteriol** 1989 Feb;171(2):916–28

Use of an rRNA probe and restriction endonuclease analysis to fingerprint Pasteurella multocida isolated from turkeys and wildlife. Snipes KP, et al. **J Clin Microbiol** 1989 Aug; 27(8):1847–53

Isolation and interspecies–transfer of a plasmid from Pasteurella multocida encoding for streptomycin resistance. Schwarz S, et al. **Med Microbiol Immunol (Berl)** 1989; 178(2):121–5

Detection and interspecies–transformation of a beta–lactamase–encoding plasmid from Pasteurella haemolytica. Schwarz S, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Mar; 270(4):462–9

GROWTH & DEVELOPMENT

Infection of the middle nasal meatus of calves with Pasteurella haemolytica serotype 1. Frank GH, et al. **Am J Vet Res** 1989 Aug;50(8):1297–301

Agarose soy casein digest medium for replacement of blood agar for potency determinations of live Pasteurella vaccines. Rebers PA, et al. **Appl Environ Microbiol** 1989 Jan;55(1):106–8

The relationship of pathogenicity to the growth of Pasteurella multocida serotype 3,4 isolates in normal turkey plasma. Lee MD, et al. **Avian Dis** 1988 Jul–Sep;32(3):509–12

The effects of six environmental variables on Pasteurella multocida populations in water. Bredy JP, et al. **J Wildl Dis** 1989 Apr;25(2):232–9

[Studies on growth of Pasteurella multocida on BTB agar] Arashima Y, et al. **Kansenshogaku Zasshi** 1989 Feb; 63(2):125–9 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Serum antibody response to carbohydrate antigens of Pasteurella haemolytica serotype 1: relation to experimentally induced bovine pneumonic pasteurellosis. Confer AW, et al. **Am J Vet Res** 1989 Jan;50(1):98–105

Development and evaluation of an enzyme–linked immunosorbent assay for bovine antibody (IgG) to Pasteurella haemolytica. Gillette KG, et al. **Am J Vet Res** 1989 Jan;50(1):106–10

Antibodies to Pasteurella haemolytica somatic antigens in two models of the bovine respiratory disease complex. McVey DS, et al. **Am J Vet Res** 1989 Apr;50(4):443–7

Total and antigen–specific serum immunoglobulin isotype concentrations in hyperimmunized cattle that have undergone plasmapheresis. McVey DS, et al. **Am J Vet Res** 1989 May;50(5):758–61

Antibody complement–dependent bacteriolysis in experimentally induced pasteurellosis in mice. McVey DS, et al. **Am J Vet Res** 1989 May;50(5):762–8

Bovine serum and nasal secretion immunoglobulins against Pasteurella haemolytica serotype 1 antigens. Nelson SL, et al. **Am J Vet Res** 1989 Aug;50(8):1244–9

Cellular defense of the avian respiratory system: effects of Pasteurella multocida on respiratory burst activity of avian respiratory tract phagocytes. Ochs DL, et al. **Am J Vet Res** 1988 Dec;49(12):2081–4

Production and partial characterization of monoclonal antibodies to Pasteurella haemolytica A1 capsular polysaccharide and lipopolysaccharide. Penaredondo MV, et al. **Am J Vet Res** 1988 Nov;49(11):1962–8

Blood bactericidal assay (Pasteurella haemolytica) comparison of morbidity in marketed feeder calves. Purdy CW, et al. **Am J Vet Res** 1989 Feb;50(2):221–5

Functional and metabolic activity of bovine pulmonary lavage cells phagocytically stimulated with pathogenic isolates of Pasteurella haemolytica. Richards AB, et al. **Am J Vet Res** 1989 Mar;50(3):329–34

Evaluation of the specificity of Pasteurella multocida somatic antigen–typing antisera prepared in chickens, using ribosome–lipopolysaccharide complexes as inocula. Rimler RB, et al. **Am J Vet Res** 1989 Jan;50(1):29–31

A standard antitoxin for Pasteurella multocida [letter] Roberts DS, et al. **Am J Vet Res** 1988 Dec;49(12):2168

A method to detect rabbit neutrophil phagocytosis of Pasteurella multocida. Rush HG, et al. **Am J Vet Res** 1988 Aug;49(8):1415–8

Immunochemical relationship of three antigens purified from Pasteurella multocida strain P–1059. Tsuji M, et al. **Am J Vet Res** 1988 Sep;49(9):1510–5

Evaluation of relationship among three purified antigens from Pasteurella multocida strain P–1059 and of their protective capacities in turkeys. Tsuji M, et al. **Am J Vet Res** 1988 Sep;49(9):1516–21

Fowl cholera immunity induced by various vaccines in broiler minibreeder chickens determined by enzyme–linked immunosorbent assay. Avakian AP, et al. **Avian Dis** 1989 Jan–Mar;33(1):97–102

Evaluation of Pasteurella multocida mutants of low virulence. II. Immunologic response of turkeys. Hofacre CL, et al. **Avian Dis** 1989 Apr–Jun;33(2):275–8

Solubilization of membrane–associated cross–protection factor(s) of Pasteurella multocida. Rimler RB, et al. **Avian Dis** 1989 Apr–Jun;33(2):258–63

Relationship between anti–Pasteurella multocida antibody titers after CU vaccination and survival after challenge. Schlink GT, et al. **Avian Dis** 1989 Jul–Sep;33(3):506–10

Structure of the O–chain of the lipopolysaccharide of Pasteurella haemolytica serotype T3. Leitch RA, et al. **Biochem Cell Biol** 1988 Oct;66(10):1055–65

Elucidation of the structure of the Pasteurella haemolytica serotype T10 lipopolysaccharide O–antigen by n.m.r. spectroscopy. Richards JC, et al. **Carbohydr Res** 1989 Mar 15;186(2):275–86

Pasteurella haemolytica antigens associated with resistance to pneumonic pasteurellosis. Mosier DA, et al. **Infect Immun** 1989 Mar;57(3):711–6

Effects of parenteral selenium and vitamin E on performance, health and humoral immune response of steers new to the feedlot environment. Droke EA, et al. **J Anim Sci** 1989 May;67(5):1350–9

Field trial of a live streptomycin dependent Pasteurella multocida serotype A:12 vaccine in rabbits. Deeb BJ, et al. **Lab Anim Sci** 1989 May;39(3):229–33

Antibody response to Newcastle disease virus and Pasteurella multocida of two strains of turkeys. Sharaf MM, et al. **Poult Sci** 1988 Oct;67(10):1372–7

ELISA for the measurement of sheep antibodies to the capsular antigens of Pasteurella haemolytica serotypes. Fodor L, et al. **Res Vet Sci** 1988 Nov;45(3):414–5

The evolution of vaccines for bovine pneumonic pasteurellosis. Mosier DA, et al. **Res Vet Sci** 1989 Jul; 47(1):1–10 (140 ref.)

Preincubation of bovine blood neutrophils with bovine herpesvirus–1 does not impair neutrophil interaction with Pasteurella haemolytica A1 in vitro. Noel EJ, et al. **Vet Immunol Immunopathol** 1988 Oct;19(3–4):273–84

Protection of lambs against experimental pneumonic pasteurellosis by transfer of immune serum. Jones GE, et al. **Vet Microbiol** 1989 May;20(1):59–71

Resistance of some capsular serotype D strains of Pasteurella multocida to rabbit polymorphonuclear neutrophil phagocytosis. Rush HG. **Vet Microbiol** 1989 May; 20(1):79–87

A crude cytotoxin vaccine protects sheep against experimental Pasteurella haemolytica serotype A2 infection. Sutherland AD, et al. **Vet Microbiol** 1989 Feb; 19(2):175–81

Protection against progressive atrophic rhinitis by vaccination with Pasteurella multocida toxin purified by monoclonal antibodies. Foged NT, et al. **Vet Rec** 1989 Jul 1;125(1):7–11

An evaluation in pigs of Nobi–Vac AR and an experimental atrophic rhinitis vaccine containing P multocida DNT–toxoid and B bronchiseptica. Kobisch M, et al. **Vet Rec** 1989 Jan 21;124(3):57–61

[Comparative clinical testing of Bordetella and Pasteurella adsorbate vaccines for the immunoprevention of respiratory tract diseases in swine. 1. Results from a large swine breeding unit] Bugnowski H, et al. **Arch Exp Veterinarmed** 1988 Jul;42(4):541–57 (Eng. Abstr.) **(Ger)**

[Rhinitis atrophicans (RA) of swine: a skin test for the detection of antitoxic Pasteurella multocida antibodies] Schimmelpfennig H, et al. **DTW** 1988 Jul–Aug;95(7):285–6 (Eng. Abstr.) **(Ger)**

ISOLATION & PURIFICATION

Isolation of Pasteurella multocida from human clinical specimens: first report in Italy [letter] Casolari C, et al. **Eur J Epidemiol** 1988 Sep;4(3):389–90

Pasteurella haemolytica–like bacterium from a progressive granuloma of cattle in Brazil. Ribeiro GA, et al. **J Clin Microbiol** 1989 Jun;27(6):1401–2

METABOLISM

Plasma– and iron–regulated expression of high molecular weight outer membrane proteins by Pasteurella multocida. Snipes KP, et al. **Am J Vet Res** 1988 Aug;49(8):1336–8

Secretion of the Pasteurella leukotoxin by Escherichia coli. Chang YF, et al. **FEMS Microbiol Lett** 1989 Jul 15; 51(1):169–73

Biochemical properties of catalase–positive avian haemophili. Blackall PJ. **J Gen Microbiol** 1988 Oct;134 (Pt 10):2801–5

Effects of Pasteurella haemolytica leukotoxin on isolated bovine neutrophils. Clinkenbeard KD, et al. **Toxicon** 1989; 27(7):797–804

Antigenic relationship between the dermonecrotic toxins produced by Pasteurella multocida type D and type A. Frymus T, et al. **Zentralbl Veterinarmed [B]** 1989 May; 36(3):199–202

[The control of the biosynthesis of cellular amino acids by pneumonia–causing agents] Kludas KH, et al. **Arch Exp Veterinarmed** 1988 Jul;42(4):484–9 (Eng. Abstr.) **(Ger)**

PATHOGENICITY

Effect of Pasteurella haemolytica (A1) capsular polysaccharide on sheep lung in vivo and on pulmonary surfactant in vitro. Brogden KA, et al. **Am J Vet Res** 1989 Apr;50(4):555–9

Pasteurella multocida recovered from live turkeys: prevalence and virulence in turkeys. Carpenter TE, et al. **Avian Dis** 1989 Jan–Mar;33(1):12–7

Evaluation of Pasteurella multocida mutants of low virulence. I. Development and pathogenicity. Hofacre CL, et al. **Avian Dis** 1989 Apr–Jun;33(2):270–4

Pathogenesis of fowl cholera: influence of encapsulation on the fate of Pasteurella multocida after intravenous inoculation into turkeys. Tsuji M, et al. **Avian Dis** 1989 Apr–Jun;33(2):238–47

Immunoserological comparison of 104–kilodalton proteins associated with hemolysis and cytolysis in Actinobacillus pleuropneumoniae, Actinobacillus suis, Pasteurella haemolytica, and Escherichia coli. Devenish J, et al. **Infect Immun** 1989 Oct;57(10):3210–3

PHYSIOLOGY

Induction of nasal turbinate atrophy in germ–free pigs, using Pasteurella multocida as well as bacterium–free crude and purified dermonecrotic toxin of P multocida. Kamp EM, et al. **Am J Vet Res** 1988 Nov;49(11):1844–9

Comparison of Pasteurella multocida serotype 3,4 isolates from turkeys with fowl cholera. Lee MD, et al. **Avian Dis** 1988 Jul–Sep;32(3):501–8

Transmembrane pore size and role of cell swelling in cytotoxicity caused by Pasteurella haemolytica leukotoxin. Clinkenbeard KD, et al. **Infect Immun** 1989 Feb;57(2):420–5

Haemolytic effect of Pasteurella haemolytica on blood from young mammals. Smith GR, et al. **Res Vet Sci** 1988 Sep; 45(2):255

[Lobar deposition of radioactively–labeled Pasteurella multocida aerosols in the lungs of piglets and calves] Heilmann P, et al. **Arch Exp Veterinarmed** 1988 Jul; 42(4):490–501 (Eng. Abstr.) **(Ger)**

ULTRASTRUCTURE

Presence of bacterial glycocalyx and fimbriae on Pasteurella haemolytica in feedlot cattle with pneumonic pasteurellosis. Morck DW, et al. **Can J Vet Res** 1989 Apr;53(2):167–71

Electron microscopic examination of cells of Pasteurella haemolytica–A1 in experimentally infected cattle. Morck DW, et al. **Can J Vet Res** 1988 Jul;52(3):343–8

Purification of fimbriae from Pasteurella haemolytica A–1. Potter AA, et al. **Microb Pathog** 1988 Apr;4(4):311–6

PASTEURELLA INFECTIONS

Endocarditis due to Pasteurella multocida with glomerulonephritis. Salmon D, et al. **Am J Med** 1989 Apr; 86(4):493

[Septic arthritis due to Pasteurella multocida. 3 new case reports (letter)] Taillan B, et al. **Rev Rhum Mal Osteoartic** 1988 Dec;55(12):1037–8 **(Fre)**

DIAGNOSIS

[Rhinitis atrophicans (RA) of swine: a skin test for the detection of antitoxic Pasteurella multocida antibodies] Schimmelpfennig H, et al. **DTW** 1988 Jul–Aug;95(7):285–6 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Trimethoprim/sulfamethoxazole therapy of Pasteurella multocida infection [letter] Sands M, et al. **J Infect Dis** 1989 Aug;160(2):353–4

Effect of enrofloxacin therapy on shipping fever pneumonia in feedlot cattle. Lekeux P, et al. **Vet Rec** 1988 Aug 20; 123(8):205–7

ETIOLOGY

Animal bites and infections. Chua J, et al. **Aust Fam Physician** 1989 Aug;18(8):1010–2 (5 ref.)

Pasteurellosis and bacteria EF 4, M5 and II J: pathogenic role in man following animal bites and bacterial sensitivity. Canton P, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):26–8

Pasteurella multocida corneal ulcer following a baseball injury. Robinson JD, et al. **J Natl Med Assoc** 1989 May; 81(5):609–10, 614

Fatal Pasteurella multocida pneumonia in an IgA–deficient cat fancier. Henderson JA, et al. **West J Med** 1989 Feb; 150(2):208–10

Pasteurella multocida infection from a cougar bite. A review of cougar attacks. Kizer KW. **West J Med** 1989 Jan;

150(1):87–90 (35 ref.)
[Pasteurellosis after a cat bite. Apropos of a case] Jemni L, et al. **Tunis Med** 1987 Apr;65(4):281–3 (Eng. Abstr.) **(Fre)**

IMMUNOLOGY

Serum antibody response to carbohydrate antigens of Pasteurella haemolytica serotype 1: relation to experimentally induced bovine pneumonic pasteurellosis. Confer AW, et al. **Am J Vet Res** 1989 Jan;50(1):98–105
Pasteurella haemolytica antigens associated with resistance to pneumonic pasteurellosis. Mosier DA, et al. **Infect Immun** 1989 Mar;57(3):711–6
Bovine pneumonic pasteurellosis: immunity to Pasteurella haemolytica. Confer AW, et al. **J Am Vet Med Assoc** 1988 Nov 15;193(10):1308–16 (128 ref.)

MICROBIOLOGY

Septic arthritis and osteomyelitis from a cat bite. Chodakewitz J, et al. **Yale J Biol Med** 1988 Nov–Dec; 61(6):513–8
[Osteomyelitis caused by Pasteurella multocida following dog bite. Differential diagnostic considerations] Dietlein E, et al. **Med Klin** 1988 Jul 15;83(15):494–5 **(Ger)**
[Pasteurella multocida as a cause of septic arthritis in the elderly] Tató F, et al. **Z Rheumatol** 1988 Nov–Dec; 47(6):425–7 (Eng. Abstr.) **(Ger)**

TRANSMISSION

DF-2 infection [letter] Flint EF. **BMJ** 1989 Mar 4; 298(6673):602–3
DF-2 infection [letter] Whitehouse WP. **BMJ** 1989 Jan 21; 298(6667):187–8
Infections associated with animal exposure in two infants [clinical conference] Hsu HW, et al. **Rev Infect Dis** 1989 Jan–Feb;11(1):108–15

VETERINARY

The California Turkey Project. Hird DW, et al. **Acta Vet Scand Suppl** 1988;84:218–20
Effect of Pasteurella haemolytica (A1) capsular polysaccharide on sheep lung in vivo and on pulmonary surfactant in vitro. Brogden KA, et al. **Am J Vet Res** 1989 Apr;50(4):555–9
Serum and tissue concentrations of erythromycin in calves with induced pneumonic pasteurellosis. Burrows GE, et al. **Am J Vet Res** 1989 Jul;50(7):1166–9
Characterization of outer membrane protein–enriched extracts from Pasteurella multocida isolated from turkeys. Choi KH, et al. **Am J Vet Res** 1989 May;50(5):676–83
Serum antibody response to carbohydrate antigens of Pasteurella haemolytica serotype 1: relation to experimentally induced bovine pneumonic pasteurellosis. Confer AW, et al. **Am J Vet Res** 1989 Jan;50(1):98–105
Fatal Pasteurella haemolytica pneumonia in bighorn sheep after direct contact with clinically normal domestic sheep. Foreyt WJ. **Am J Vet Res** 1989 Mar;50(3):341–4
Infection of the middle nasal meatus of calves with Pasteurella haemolytica serotype 1. Frank GH, et al. **Am J Vet Res** 1989 Aug;50(8):1297–301
Induction of nasal turbinate atrophy in germ–free pigs, using Pasteurella multocida as well as bacterium–free crude and purified dermonecrotic toxin of P multocida. Kamp EM, et al. **Am J Vet Res** 1988 Nov;49(11):1844–9
Clinical and microbiologic findings in lambs inoculated with Pasteurella haemolytica after infection with ovine adenovirus type 6. Lehmkuhl HD, et al. **Am J Vet Res** 1989 May;50(5):671–5
Antibodies to Pasteurella haemolytica somatic antigens in two models of the bovine respiratory disease complex. McVey DS, et al. **Am J Vet Res** 1989 Apr;50(4):443–7
Antibody complement–dependent bacteriolysis in experimentally induced pasteurellosis in mice. McVey DS, et al. **Am J Vet Res** 1989 May;50(5):762–8
Bovine serum and nasal secretion immunoglobulins against Pasteurella haemolytica serotype 1 antigens. Nelson SL, et al. **Am J Vet Res** 1989 Aug;50(8):1244–9
Comparison of pathophysiologic changes in the lungs of calves challenge exposed with Escherichia coli–derived endotoxin and Pasteurella haemolytica, alone or in combination. Slocombe RF, et al. **Am J Vet Res** 1989 May; 50(5):701–7
Evaluation of relationship among three purified antigens from Pasteurella multocida strain P–1059 and of their protective capacities in turkeys. Tsuji M, et al. **Am J Vet Res** 1988 Sep;49(9):1516–21
Serotyping of isolates of Pasteurella multocida from chickens. Ireland LA, et al. **Aust Vet J** 1989 Apr;66(4):119–20
Fowl cholera immunity induced by various vaccines in broiler minibreeder chickens determined by enzyme–linked immunosorbent assay. Avakian AP, et al. **Avian Dis** 1989 Jan–Mar;33(1):97–102
Pasteurella multocida recovered from live turkeys: prevalence and virulence in turkeys. Carpenter TE, et al. **Avian Dis** 1989 Jan–Mar;33(1):12–7
Evaluation of Pasteurella multocida mutants of low virulence. I. Development and pathogenicity. Hofacre CL, et al. **Avian Dis** 1989 Apr–Jun;33(2):270–4
Evaluation of Pasteurella multocida mutants of low virulence. II. Immunologic response of turkeys. Hofacre CL, et al. **Avian Dis** 1989 Apr–Jun;33(2):275–8
Comparison of Pasteurella multocida serotype 3,4 isolates from turkeys with fowl cholera. Lee MD, et al. **Avian Dis** 1988 Jul–Sep;32(3):501–8
The relationship of pathogenicity to the growth of Pasteurella multocida serotype 3,4 isolates in normal turkey plasma. Lee MD, et al. **Avian Dis** 1988 Jul–Sep;32(3):509–12
Estimate of economic impact of fowl cholera in turkeys in Georgia in 1986. Morris MP, et al. **Avian Dis** 1988 Oct–Dec;32(4):718–21
Disease prevalence in Georgia turkey flocks in 1986. Morris MP, et al. **Avian Dis** 1988 Jul–Sep;32(3):404–6
Characteristics of fowl cholera outbreaks in turkeys in Georgia in 1986. Morris MP, et al. **Avian Dis** 1989 Apr–Jun; 33(2):213–8
Diagnostic summary of 1986 turkey, broiler breeder, and layer necropsy cases at the University of Georgia. Morris MP, et al. **Avian Dis** 1988 Jul–Sep;32(3):391–403
Solubilization of membrane–associated cross–protection factor(s) of Pasteurella multocida. Rimler RB, et al. **Avian Dis** 1989 Apr–Jun;33(2):258–63
Relationship between anti–Pasteurella multocida antibody titers after CU vaccination and survival after challenge. Schlink GT, et al. **Avian Dis** 1989 Jul–Sep;33(3):506–10
Pathogenesis of fowl cholera: influence of encapsulation on the fate of Pasteurella multocida after intravenous inoculation into turkeys. Tsuji M, et al. **Avian Dis** 1989 Apr–Jun;33(2):238–47
Mycoplasma hyopneumoniae increases the susceptibility of pigs to experimental Pasteurella multocida pneumonia. Ciprián A, et al. **Can J Vet Res** 1988 Oct;52(4):434–8
Pasteurella multocida and Bordetella bronchiseptica in atrophic rhinitis and pneumonia in swine. Cowart RP, et al. **Can J Vet Res** 1989 Jul;53(3):295–300
Electron microscopic examination of cells of Pasteurella haemolytica–A1 in experimentally infected cattle. Morck DW, et al. **Can J Vet Res** 1988 Jul;52(3):343–8
Presence of bacterial glycocalyx and fimbriae on Pasteurella haemolytica in feedlot cattle with pneumonic pasteurellosis. Morck DW, et al. **Can J Vet Res** 1989 Apr;53(2):167–71
Susceptibility of Rocky Mountain bighorn sheep and domestic sheep to pneumonia induced by bighorn and domestic livestock strains of Pasteurella haemolytica. Onderka DK, et al. **Can J Vet Res** 1988 Oct;52(4):439–44
Bovine pneumonic pasteurellosis: immunity to Pasteurella haemolytica. Confer AW, et al. **J Am Vet Med Assoc** 1988 Nov 15;193(10):1308–16 (128 ref.)
Amyloid A protein deposits in a rabbit with pyometra. Hofmann JR Jr, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1155–6
Selenium effects on glutathione peroxidase and the immune response of stressed calves challenged with Pasteurella hemolytica. Stabel JR, et al. **J Anim Sci** 1989 Feb; 67(2):557–64
Pasteurella haemolytica–like bacterium from a progressive granuloma of cattle in Brazil. Ribeiro GA, et al. **J Clin Microbiol** 1989 Jun;27(6):1401–2
Use of an rRNA probe and restriction endonuclease analysis to fingerprint Pasteurella multocida isolated from turkeys and wildlife. Snipes KP, et al. **J Clin Microbiol** 1989 Aug; 27(8):1847–53
Septicemic pasteurellosis in elk (Cervus elaphus) on the United States National Elk Refuge, Wyoming. Franson JC, et al. **J Wildl Dis** 1988 Oct;24(4):715–7
Epizootiological features of avian cholera on the north coast of California. Mensik JG, et al. **J Wildl Dis** 1989 Apr; 25(2):240–5
Field trial of a live streptomycin dependent Pasteurella multocida serotype A:12 vaccine in rabbits. Deeb BJ, et al. **Lab Anim Sci** 1989 May;39(3):229–33
Outbreak of pneumonia caused by Pasteurella haemolytica infection in Shiba goats in Japan. Hayashidani H, et al. **Nippon Juigaku Zasshi** 1988 Aug;50(4):960–2
Relationship between serotypes, dermonecrotic toxin production of Pasteurella multocida isolates and pneumonic lesions of porcine lung. Iwamatsu S, et al. **Nippon Juigaku Zasshi** 1988 Dec;50(6):1200–6
The possible involvement of immunosuppression caused by a lentivirus in the aetiology of jaagsiekte and pasteurellosis in sheep. Myer MS, et al. **Onderstepoort J Vet Res** 1988 Sep;55(3):127–33
Response of two lines of turkeys to challenge with Pasteurella multocida. Sharaf MM, et al. **Poult Sci** 1988 Dec; 67(12):1807–9
Interactions between Bordetella bronchiseptica and toxigenic Pasteurella multocida in atrophic rhinitis of pigs. Chanter N, et al. **Res Vet Sci** 1989 Jul;47(1):48–53
Effect of a new macrolide antibiotic (tilmicosin) on pneumonia experimentally induced in calves by Mycoplasma bovis and Pasteurella haemolytica. Gourlay RN, et al. **Res Vet Sci** 1989 Jul;47(1):84–9
The evolution of vaccines for bovine pneumonic pasteurellosis. Mosier DA, et al. **Res Vet Sci** 1989 Jul; 47(1):1–10 (140 ref.)
A new serovar of Pasteurella haemolytica from sheep in Syria. Younan M, et al. **Trop Anim Health Prod** 1989 Feb; 21(1):87
Effects of immunization with bovine herpesvirus–1 glycoproteins on bovine herpesvirus–1–induced alteration of bovine neutrophil chemotactic and anti–Pasteurella haemolytica activities. Noel EJ, et al. **Vaccine** 1988 Oct; 6(5):433–9
Protection of lambs against experimental pneumonic pasteurellosis by transfer of immune serum. Jones GE, et al. **Vet Microbiol** 1989 May;20(1):59–71
Comparing different isolates of Pasteurella haemolytica from beef calves using their in vitro antimicrobial sensitivity patterns. Shoo MK. **Vet Microbiol** 1989 May;20(1):73–8
A crude cytotoxin vaccine protects sheep against experimental Pasteurella haemolytica serotype A2 infection. Sutherland AD, et al. **Vet Microbiol** 1989 Feb; 19(2):175–81
Acute airsacculitis in turkeys inoculated with Pasteurella multocida. Ficken MD, et al. **Vet Pathol** 1989 May; 26(3):231–7
Evidence that blood–borne infection is involved in the pathogenesis of bovine pneumonic pasteurellosis. Thomas LH, et al. **Vet Pathol** 1989 May;26(3):253–9
Protection against progressive atrophic rhinitis by vaccination with Pasteurella multocida toxin purified by monoclonal antibodies. Foged NT, et al. **Vet Rec** 1989 Jul 1;125(1):7–11
Metaphylactic use of long–acting oxytetracycline in pasteurellosis in lambs. Gilmour NJ, et al. **Vet Rec** 1988 Oct 22;123(17):443–4
Isolation of P multocida F–3,4 from a calf in the UK [letter] Jones TO, et al. **Vet Rec** 1988 Sep 24;123(13):354
Effect of enrofloxacin therapy on shipping fever pneumonia in feedlot cattle. Lekeux P, et al. **Vet Rec** 1988 Aug 20; 123(8):205–7
Prevention of haemorrhagic septicaemia in buffaloes and cattle with a live vaccine. Myint A, et al. **Vet Rec** 1989 May 13;124(19):508–9
Single–dose treatment of neonatal calf pneumonia with the new macrolide antibiotic tilmicosin. Ose EE, et al. **Vet Rec** 1988 Oct 1;123(14):367–9
Cud–dropping in sheep [letter] Roberts NH. **Vet Rec** 1988 Dec 17;123(25):654
Sheep herpesvirus does not increase susceptibility to pneumonic pasteurellosis. Scott FM, et al. **Vet Rec** 1989 Aug 5;125(6):133
Experimental bovine pneumonic pasteurellosis: a review. Shoo MK. **Vet Rec** 1989 Feb 11;124(6):141–4 (53 ref.)
Microbiological and pathological evaluation of vaccination against naturally occurring caprine pasteurellosis. Zamri–Saad M, et al. **Vet Rec** 1989 Feb 18;124(7):171–2
Species identification and serotyping (capsular antigen) of Pasteurella strains from sheep flocks in south Germany and in Syria. Younan M, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):98–109
Changes in the relative concentrations of surfactant phospholipids in young pigs with experimental pneumonia. Sachse K. **Zentralbl Veterinarmed [B]** 1989 Jul;36(5):385–90
[Lobar deposition of radioactively–labeled Pasteurella multocida aerosols in the lungs of piglets and calves] Heilmann P, et al. **Arch Exp Veterinarmed** 1988 Jul; 42(4):490–501 (Eng. Abstr.) **(Ger)**
[The prevention of atrophic rhinitis of swine] Bilkei G. **Berl Munch Tierarztl Wochenschr** 1989 Apr 1;102(4):109–11 (Eng. Abstr.) **(Ger)**
[The occurrence of toxin–forming Pasteurella multocida strains in the tonsil and nose of piglets from breeding stocks unsuspected of atrophic rhinitis] Bechmann G, et al. **DTW** 1988 Jul–Aug;95(7):283–5 (Eng. Abstr.) **(Ger)**

PASTEURELLA PESTIS see **YERSINIA PESTIS**

PASTEURELLA TULARENSIS see **FRANCISELLA TULARENSIS**

PASTEURELLOSIS see **PASTEURELLA INFECTIONS**

PASTORAL CARE

Pastoral psychology. Marteau L. **Br J Psychiatry** 1988 Jan; 152:148–9
The development and practice of pastoral counseling. Young JL, et al. **Hosp Community Psychiatry** 1989 Mar;40(3):271–6
AIDS: the challenge to pastoral care. Bellemare D. **J Palliat Care** 1988 Dec;4(4):58–60
Spiritual care: the software of life. Eaton S. **J Palliat Care** 1988 May;4(1–2):91–3
AIDS: observations of a hospital chaplain. Graydon DN. **J Palliat Care** 1988 Dec;4(4):66–9
Spirituality, pastoral care, and religion: the need for clear distinctions. Smyth P, et al. **J Palliat Care** 1988 May; 4(1–2):86–8
Spiritual or pastoral care: two models. Wald FS. **J Palliat Care** 1988 May;4(1–2):94–7
Ultimate questions and existential vulnerability. Weisman AD. **J Palliat Care** 1988 May;4(1–2):89–90
Spiritual care, ethical choices, and patient advocacy. Salladay SA, et al. **Nurs Clin North Am** 1989 Jun;24(2):543–9
Psychological and social support of cancer patients: report on a program of the radiotherapy department, Erlangen. Sauer R, et al. **Recent Results Cancer Res** 1988;108:311–5

PATCH TESTS see under **SKIN TESTS**

PATELLA

Plica synovialis mediopatellaris. Brabants K, et al. **Acta Orthop Belg** 1988;54(4):474–6

Advancement of the tibial tuberosity for patellar pain. A 5-year follow-up. Engebretsen L, et al. **Acta Orthop Scand** 1989 Feb;60(1):20-2

Chondromalacia induced by patellar subluxation in the rabbit. Møller BN, et al. **Acta Orthop Scand** 1989 Apr;60(2):188-91

Glycosaminoglycans in patellar cartilage. Olsen EB, et al. **Acta Orthop Scand** 1989 Feb;60(1):23-5

Patellar tendinitis ('jumper's knee'). Young D. **Aust Fam Physician** 1989 Aug;18(8):1021

Metastasis in a patella: a rare site. Kwa S, et al. **Aust N Z J Surg** 1989 Apr;59(4):351-2

Osteoblastoma of the patella. Case report and review of the literature. De Coster E, et al. **Clin Orthop** 1989 Jun; (243):216-9 (18 ref.)

Patellar instability after total knee arthroplasty. Grace JN, et al. **Clin Orthop** 1988 Dec;(237):184-9

The treatment of patellar fractures after total knee arthroplasty. Hozack WJ, et al. **Clin Orthop** 1988 Nov; (236):123-7

The patellar clunk syndrome. A complication of posterior stabilized total knee arthroplasty. Hozack WJ, et al. **Clin Orthop** 1989 Apr;(241):203-8

High tibial osteotomy compared with high tibial and Maquet procedures in medial and patellofemoral compartment osteoarthritis. Nguyen C, et al. **Clin Orthop** 1989 Aug; (245):179-87

Bilateral spontaneous concurrent rupture of the patellar tendon in the absence of associated local or systemic disease. Sherlock DA, et al. **Clin Orthop** 1988 Dec; (237):179-83

Patellofemoral problems. **Clin Sports Med** 1989 Apr; 8(2):153-360

Solitary metastasis of the patella as the first manifestation of lung cancer. A case report. Pazzaglia UE, et al. **Int Orthop** 1989;13(1):75-6

Patellofemoral dysplasia in infantile cerebral palsy. Villani C, et al. **Ital J Orthop Traumatol** 1988 Jun;14(2):201-10

An Electron Microscopic Study of Early Pathology in Chondromalacia of the Patella [letter; comment] Oni OO. **J Bone Joint Surg [Am]** 1989 Jun;71(5):788-9, **Comment on:** J Bone Joint Surg [Am] 1988 Jul;70(6):883-99

Use of patellar tendon autograft for anterior cruciate ligament reconstruction in the rabbit: a long-term histologic and biomechanical study. Ballock RT, et al. **J Orthop Res** 1989; 7(4):474-85

Patellar tendon rupture in systemic lupus erythematosus. Pritchard CH, et al. **J Rheumatol** 1989 Jun;16(6):786-8

Patellar complications in total knee arthroplasty. A literature review. Leblanc JM. **Orthop Rev** 1989 Mar;18(3):296-304 (62 ref.)

Primary tumors of the patella. A review of 42 cases. Kransdorf MJ, et al. **Skeletal Radiol** 1989;18(5):365-71

Chondroblastoma of the patella. Moser RP Jr, et al. **Skeletal Radiol** 1988;17(6):413-9

Case report 539. Tophaceous gout of the patella. Walot I, et al. **Skeletal Radiol** 1989;18(3):233-6

Clinical results of surgical correction of medial luxation of the patella in dogs. Willauer CC, et al. **Vet Surg** 1987 Jan-Feb;16(1):31-6

[Splitting of the lateral retinaculum of the knee in retropatellar chondropathy (letter)] Bakx JC. **Ned Tijdschr Geneeskd** 1989 Mar 25;133(12):631-2 **(Dut)**

[Release of the lateral retinaculum of the knee in retropatellar chondropathy] Hommінga GN, et al. **Ned Tijdschr Geneeskd** 1989 Feb 11;133(6):305-7 (Eng. Abstr.) **(Dut)**

[Acute hematogenous osteomyelitis of the patella. Apropos of 3 cases] Papavasiliou VA, et al. **Rev Chir Orthop** 1989; 75(2):130-2 (4 ref.) (Eng. Abstr.) **(Fre)**

[Follow-up studies of surgically treated patients with patellar chondropathy and retropatellar arthrosis] Herrmann G, et al. **Beitr Orthop Traumatol** 1988 Sep;35(9):458-61 (Eng. Abstr.) **(Ger)**

[The femoropatellar pain syndrome. Clinical and radiologic diagnosis] Haller W, et al. **Fortschr Med** 1988 Aug 30; 106(25):507-10 (15 ref.) (Eng. Abstr.) **(Ger)**

[Transposition of the anterior tibial apophysis in the treatment of patellar instability without luxation] Costa P, et al. **Chir Organi Mov** 1988 Oct-Dec;73(4):339-44 (Eng. Abstr.) **(Ita)**

[Aneurysmal bone cyst of the patella: case report] Grillo G, et al. **Chir Organi Mov** 1988 Apr-Jun;73(2):171-3 (Eng. Abstr.) **(Ita)**

ABNORMALITIES

Absent patella and contralateral patella alta observed with scoliosis. Humzah MD, et al. **Anat Anz** 1988;167(1):63-7

[Patella partita. Etiology, clinical aspects, therapy and differential diagnosis] Kern S, et al. **Schweiz Rundsch Med Prax** 1988 Aug 2;77(31-32):820-5 (Eng. Abstr.) **(Ger)**

ANATOMY & HISTOLOGY

The anatomy of the extensor mechanism. Terry GC. **Clin Sports Med** 1989 Apr;8(2):163-77

New measurement of patellar height in the knees of children using the epiphyseal line midpoint. Koshino T, et al. **J Pediatr Orthop** 1989 Mar-Apr;9(2):216-8

INJURIES

Krogius and Roux-Goldthwait operations for recurrent patellar dislocation. Jalovaara P, et al. **Acta Orthop Belg** 1988;54(4):380-3

Recurrent dislocation of the patella. Two principles of treatment prospectively studied. Larsen E, et al. **Acta Orthop Belg** 1988;54(4):434-8

Medial subluxation of the patella as a complication of lateral retinacular release. Hughston JC, et al. **Am J Sports Med** 1988 Jul-Aug;16(4):383-8

Stress fracture of the patella. Jerosch JG, et al. **Am J Sports Med** 1989 Jul-Aug;17(4):579-80

Penetrating knee injuries: the nail gun. Barber FA. **Arthroscopy** 1989;5(3):172-5

Classification of patellofemoral disorders. Merchant AC. **Arthroscopy** 1988;4(4):235-40

Fracture of the patella as a possible complication of medial patellar desmotomy. Wright JD, et al. **Aust Vet J** 1989 Jun;66(6):189-90

Stress fracture of the patella [letter] Schranz PJ. **Br J Sports Med** 1988 Dec;22(4):169

Bilateral simultaneous sleeve fractures of the patella in secondary hyperparathyroidism. Hadlow AT, et al. **Injury** 1987 Nov;18(6):417-8

Periosteal primary resurfacing of joint surface defects of the patella due to injury. Korkala OL. **Injury** 1988 May; 19(3):216-8

Herbert screw fixation of osteochondral fractures of the patella. Rae PS, et al. **Injury** 1988 Mar;19(2):116-9

Vertical intercondylar dislocation of the patella. Rollinson PD. **Injury** 1988 Jul;19(4):281-2

Bilateral spontaneous rupture of the quadriceps tendons misdiagnosed as a "neurological condition". Sagiv P, et al. **J Am Geriatr Soc** 1989 Aug;37(8):750-2

The effect of alignment of the implant on fractures of the patella after condylar total knee arthroplasty. Figgie HE 3d, et al. **J Bone Joint Surg [Am]** 1989 Aug;71(7):1031-9

Subluxation of the patella. Computed tomography analysis of patellofemoral congruence. Inoue M, et al. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1331-7

Lateral release for recurrent dislocation of the patella. Dandy DJ, et al. **J Bone Joint Surg [Br]** 1989 Jan;71(1):121-5

Patellar fixation protected with a load-sharing cable: a mechanical and clinical study. Perry CR, et al. **J Orthop Trauma** 1988;2(3):234-40

The rotational alignment of the lower limbs in recurrent dislocation of the patella. Yamashita F, et al. **Nippon Geka Hokan** 1988 May 1;57(3):215-20

Chondroblastoma of the patella with a pathologic fracture. A case report. James RL, et al. **Orthop Rev** 1987 Nov; 16(11):834-6

Patellar subluxation following plica resection. Limbird TJ. **Orthop Rev** 1988 Mar;17(3):282-5

Depth insufficiency of the proximal trochlear groove on lateral radiographs of the knee: relation to patellar dislocation. Malghem J, et al. **Radiology** 1989 Feb; 170(2):507-10

[Uses of tension band wire in the treatment of fractures: report of 40 cases] Li ZF. **Chung Hua Wai Ko Tsa Chih** 1988 Sep;26(9):552-4, 574 (Eng. Abstr.) **(Chi)**

[Patellar fractures. Modified tension band osteosynthesis] Petersen KK, et al. **Ugeskr Laeger** 1989 Apr 10; 151(15):937-9 (Eng. Abstr.) **(Dan)**

[Patello-femoral instability and malalignment surgically treated by the Trillat method] Sølund K, et al. **Ugeskr Laeger** 1988 Nov 28;150(48):2968-70 (Eng. Abstr.) **(Dan)**

[The femoro-patellar joint and cartilage damage of the knee joint] Cotta H, et al. **Aktuel Traumatol** 1988 Oct;18(5):183-6 (27 ref.) (Eng. Abstr.) **(Ger)**

[Displacement of the tibial tuberosity in retropatellar cartilage damage and recurrent patellar dislocation] Krause R, et al. **Aktuel Traumatol** 1989 Feb;19(1):35-42 (Eng. Abstr.) **(Ger)**

[The value of arthroscopy following traumatic patellar dislocation] Sperner G, et al. **Sportverletz Sportschaden** 1988 Mar;2(1):20-3 (Eng. Abstr.) **(Ger)**

[Rupture of the medio-patellar plica. One of the many causes of anterior knee pain] Johansen O. **Tidsskr Nor Laegeforen** 1989 Apr 10;109(10):1069-70 (Eng. Abstr.) **(Nor)**

[Actual problems of surgical treatment of patellar fractures] Efimov VN. **Vestn Khir** 1988 Jun;140(6):62-5 (Eng. Abstr.) **(Rus)**

INNERVATION

Periosteal and vascular innervation of the human patella in degenerative joint disease. Badalamente MA, et al. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):61-6

PATHOLOGY

Erosion of the patella secondary to gout. A case report. Cohn BT, et al. **Am J Sports Med** 1988 Jul-Aug;16(4):421-3

Observations on patellar height after proximal tibial osteotomy. Scuderi GR, et al. **J Bone Joint Surg [Am]** 1989 Feb;71(2):245-8

Clinical and roentgenological studies on malalignment disorders of the patello-femoral joint. Part III: Lesions of the patellar cartilage and subchondral bone associated with patello-femoral malalignment. Imai N, et al. **Nippon Seikeigeka Gakkai Zasshi** 1989 Jan;63(1):1-17

Late osteoarticular lesions following meningococcemia with disseminated intravascular coagulation. Santos E, et al. **Pediatr Radiol** 1989;19(3):199-202

Patellar tracking abnormalities: clinical experience with kinematic MR imaging in 130 patients. Shellock FG, et al. **Radiology** 1989 Sep;172(3):799-804

Ultrasonic diagnosis of Osgood-Schlatter and Sinding-Larsen-Johansson diseases of the knee. De Flaviis L, et al. **Skeletal Radiol** 1989;18(3):193-7

PHYSIOLOGY

Patellar motion analyzed by magnetic resonance imaging. Kujala UM, et al. **Acta Orthop Scand** 1989 Feb;60(1):13-6

[Behavior of human rib and patella cartilage] Hendel V, et al. **Beitr Orthop Traumatol** 1989 Jun;36(6):248-58 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Patellofemoral rehabilitation. Brunet ME, et al. **Clin Sports Med** 1989 Apr;8(2):319-29 (39 ref.)

Conservative treatment of patellofemoral subluxation. Henry JH. **Clin Sports Med** 1989 Apr;8(2):261-78 (29 ref.)

A comparative study of the extensor force of the quadriceps between subjects with a normal patella and those with patella alta of neurological pathogenesis. Villani C, et al. **Ital J Orthop Traumatol** 1988 Sep;14(3):401-6

Arthroscopic management of the patellar clunk syndrome following posterior stabilized total knee arthroplasty. Vernace JV, et al. **J Arthroplasty** 1989;4(2):179-82

Techniques for measuring the static and dynamic properties of the patella. Minns RJ, et al. **J Biomed Eng** 1989 May; 11(3):209-14

[The patellar tendon reflex in knee injuries. I. A measuring place for assessing parameters of the patellar tendon reflex] Schier G. **Beitr Orthop Traumatol** 1988 Sep;35(9):417-23 (Eng. Abstr.) **(Ger)**

[The patellar tendon reflex in knee injuries. II. Reproducible representation of the patellar tendon reflex and its modification by knee injury] Schier G. **Beitr Orthop Traumatol** 1988 Sep;35(9):423-33 (Eng. Abstr.) **(Ger)**

[The femoropatellar pain syndrome in sports] Munzinger U, et al. **Chirurg** 1988 Nov;59(11):701-7 (11 ref.) **(Ger)**

RADIOGRAPHY

Patellar angle in Osgood-Schlatter disease. Sen RK, et al. **Acta Orthop Scand** 1989 Feb;60(1):26-7

The vertical position of the patella. A new radiographic method for routine use. Egund N, et al. **Acta Radiol** 1988 Sep-Oct;29(5):555-8

Osteolytic lesions of the patella. Ehara S, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):103-6

The role of radiography in the evaluation and treatment of common anarthrotic disorders of the patellofemoral joint. Minkoff J, et al. **Clin Sports Med** 1989 Apr;8(2):203-60 (38 ref.)

CT-scan in the diagnosis of patellar malalignment. Fernandez de Rota JJ, et al. **Int Orthop** 1988;12(3):223-7

Chondromalacia patellae [letter] Meyer JJ, et al. **J Manipulative Physiol Ther** 1989 Feb;12(1):59-60

Patellofemoral joint: 30 degrees axial radiograph with lateral rotation of the leg. Malghem J, et al. **Radiology** 1989 Feb; 170(2):566-7

[X-ray investigation of chondromalacia patellae] Wang S. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Dec; 22(6):337-40 (Eng. Abstr.) **(Chi)**

[Permanent patella dislocation] Pfeil E. **Z Arztl Fortbild (Jena)** 1988;82(11):489-90 **(Ger)**

RADIONUCLIDE IMAGING

The case of the pathetic pagetic patella. D'Haem RJ, et al. **Clin Nucl Med** 1989 Apr;14(4):306-8

SURGERY

Patellectomy for chondromalacia. Jensen DB, et al. **Acta Orthop Scand** 1989 Feb;60(1):17-9

The durability of anterior cruciate ligament reconstruction with the patellar tendon. Sandberg R, et al. **Am J Sports Med** 1988 Jul-Aug;16(4):341-3

The results of operative treatment of osteochondritis dissecans of the patella. Schwarz C, et al. **Am J Sports Med** 1988 Sep-Oct;16(5):522-9

Arthroscopic lateral release for patellar pain or instability. Aglietti P, et al. **Arthroscopy** 1989;5(3):176-83

Arthroscopic treatment of acute patellar dislocations. Dainer RD, et al. **Arthroscopy** 1988;4(4):267-71

An unusual loose body hidden in a sealed suprapatellar pouch. Hendel D, et al. **Arthroscopy** 1988;4(4):282-3

Pitfalls in the use of interference screws for anterior cruciate ligament reconstruction: brief report. Matthews LS, et al. **Arthroscopy** 1989;5(3):225-6

Mechanical and histological response of carbon fibre pads implanted in the rabbit patella. Minns RJ, et al. **Biomaterials** 1989 May;10(4):273-6

Patellar instability with recurrent dislocation due to patellofemoral dysplasia. Results after surgical treatment. Peterson L, et al. **Bull Hosp Jt Dis Orthop Inst** 1988 Fall; 48(2):130-9

Should the patella be resurfaced in total knee arthroplasty? Efficacy of patellar resurfacing. Abraham W, et al. **Clin Orthop** 1988 Nov;(236):128-34

Patellofemoral arthroplasty. A three- to nine-year follow-up study. Arciero RA, et al. **Clin Orthop** 1988 Nov;(236):60-71
Further observations on metal-backed patellar component failure. Bayley JC, et al. **Clin Orthop** 1988 Nov;(236):82-7
Patellar prosthesis positioning in total knee arthroplasty. A roentgenographic study. Gomes LS, et al. **Clin Orthop** 1988 Nov;(236):72-81
Patellar component failure in cementless total knee arthroplasty. Rosenberg AG, et al. **Clin Orthop** 1988 Nov;(236):106-14
Failure mechanisms of metal-backed patellar components. Stulberg SD, et al. **Clin Orthop** 1988 Nov;(236):88-105
Patellar subluxation. A recent history. Hughston JC. **Clin Sports Med** 1989 Apr;8(2):153-62
Arthroscopically assisted reconstruction of the anterior cruciate ligament using a patella tendon bone autograft. Jackson DW, et al. **Clin Sports Med** 1988 Oct;7(4):785-800
Formal extensor mechanism reconstruction. Turba JE. **Clin Sports Med** 1989 Apr;8(2):297-317 (60 ref.)
Surgical complications of the patellofemoral articulation. Youmans WT. **Clin Sports Med** 1989 Apr;8(2):331-42 (62 ref.)
Miyakawa patellectomy. Baker CL, et al. **J Bone Joint Surg [Am]** 1988 Dec;70(10):1489-94
Patellar replacement in bilateral total knee arthroplasty. A study of patients who had rheumatoid arthritis and no gross deformity of the patella. Shoji H, et al. **J Bone Joint Surg [Am]** 1989 Jul;71(6):853-6
Biomechanical evaluation of various forms of fixation of transverse patellar fractures. Benjamin J, et al. **J Orthop Trauma** 1987;1(3):219-22
[The femoropatellar pain syndrome. Conservative and surgical therapy in a long-term comparison (10-20 years) and their therapeutic consequences] Imhoff A, et al. **Z Orthop** 1989 Mar-Apr;127(2):139-51 (Eng. Abstr.) **(Ger)**
[Discussion of the contribution "Patellafemoral pressure and measurements of the contact surface in Jägerhut patella—experimental studies of sagittal osteotomy of the patella" (letter)] Weh L. **Z Orthop** 1988 Sep-Oct; 126(5):596-7 **(Ger)**

TRANSPLANTATION

A biomechanical analysis of anterior cruciate ligament reconstruction with the patellar tendon. A two year followup. Tibone JE, et al. **Am J Sports Med** 1988 Jul-Aug; 16(4):332-5
Mechanical properties of primate vascularized vs. nonvascularized patellar tendon grafts; changes over time. Butler DL, et al. **J Orthop Res** 1989;7(1):68-79

PATENCY, VASCULAR see **VASCULAR PATENCY**

PATENT MEDICINES see **DRUGS, NON-PRESCRIPTION**

PATENTS

Monoclonal antibodies for clinical applications. Patents and literature. Dordick JS. **Appl Biochem Biotechnol** 1988 Dec; 19(3):271-96
Biocatalysis in nonaqueous media. Patents and literature. Dordick JS. **Appl Biochem Biotechnol** 1988 Oct; 19(1):103-12
Life forms protectable as subjects of US patents—microbes to animals (perhaps). Hodgins DS. **Appl Biochem Biotechnol** 1987 Sep-Dec;16:79-93
Animal patents. Hannah HW. **J Am Vet Med Assoc** 1989 Sep 1;195(5):577-8
Patent literature as a source of information for research and development: an investigation on calcium phosphate-containing biomaterials, Part I. Wüstefeld M, et al. **J Biomed Mater Res** 1989 Apr;23(A1 Suppl):41-71
Fostering the triad: a high purpose fraught with danger. Hein JW. **J Dent Res** 1988 Oct;67(10):1349-52
Patenting bio-property [letter] McClung G. **J Natl Cancer Inst** 1989 Jul 5;81(13):1042
Government patents: is there money to be made? [news] Smigel K. **J Natl Cancer Inst** 1988 Dec 21;80(20):1588-9
Towards the patenting of animals [editorial] **Nature** 1988 Nov 24;336(6197):293
AIDS. US patent for Montagnier [news] Ezzell C. **Nature** 1989 Jul 27;340(6231):253
Patentability of engineered proteins. Bahn P. **Protein Eng** 1987 Dec;1(6):446-7
The erosion of effective patent life—an international comparison [editorial] Lis Y, et al. **Regul Toxicol Pharmacol** 1989 Feb;9(1):1-2
Patent medicine. Corcoran E. **Sci Am** 1988 Sep;259(3):128-30
A tiny mouse came forth. Corcoran E. **Sci Am** 1989 Feb; 260(2):73
Patent backlog: solution pending [news] Crawford M. **Science** 1988 Dec 9;242(4884):1374
"Dangerous" liaisons in cell biology [news] Dickson D. **Science** 1989 Jun 30;244(4912):1539-40
Europe says no to animal patents [news] Dickson D. **Science** 1989 Jul 7;245(4913):25
Publish and protect [editorial] Richner-Gilhuys M. **Tumour Biol** 1989;10(1):1-3
[The patented oncomouse. Transgenic animals in medical research—knowledge and risks] Hobom B. **Fortschr Med** 1989 Jun 10;107(17):100-2 **(Ger)**
[Online patent searching—rapid responses to critical questions] Blunck M, et al. **Naturwissenschaften** 1989 Mar; 76(3):96-8 (Eng. Abstr.) **(Ger)**
[Analysis of the relation of research and development and patents] Greif S. **Naturwissenschaften** 1989 Apr;76(4):156-9 (Eng. Abstr.) **(Ger)**
[Significance of the patent-information warranty of scientific research in pediatrics] Titov GN, et al. **Pediatriia** 1989; (6):79-82 **(Rus)**
[Patent information service at the Moscow Research Institute of Tuberculosis] Smirnova LV. **Probl Tuberk** 1989;(5):16-8 (Eng. Abstr.) **(Rus)**
[Elaboration on inventive and innovative proposals at the Chair of Forensic Medicine] Dzhalalov DD. **Sud Med Ekspert** 1989 Jan-Mar;32(1):45-6 **(Rus)**
[The "Patent" Automatic Information-Retrieval System in traumatology and orthopedics] Mattis ER. **Vestn Akad Med Nauk SSSR** 1988;(12):78-82 **(Rus)**
[The length of time a drug patent is effective must be prolonged] Hertzman P. **Lakartidningen** 1989 Apr 12; 86(15):1338, 1343 **(Swe)**

LEGISLATION & JURISPRUDENCE

Life forms protectable as subjects of U.S. patents — microbes to animals (perhaps). Hodgins DS. **Biomater Artif Cells Artif Organs** 1989;17(2):205-24
Biotechnology: product development and evolving patent law [editorial] McLeod DC. **DICP** 1989 Jul-Aug; 23(7-8):605-6
Whose waste is it anyway? The case of John Moore. Annas GJ. **Hastings Cent Rep** 1988 Oct-Nov;18(5):37-9
Essentials of patent law. Amernick B. **J Natl Cancer Inst** 1989 Oct 4;81(19):1450-4
Alteplase (rtPA) patent case. Brahams D. **Lancet** 1988 Nov 26;2(8622):1263
A disputed spleen. Brahams D. **Lancet** 1988 Nov 12; 2(8620):1151-2
Oncomouse seeks European protection [news] Dickman S. **Nature** 1989 Jul 13;340(6229):85
A shadow over immunoassay. Ekins R. **Nature** 1989 Jul 27; 340(6231):256-8
Abbott and Hybritech settle dispute [news] Ezzell C. **Nature** 1989 Aug 10;340(6233):418
Animal patents. Transgenic sticky issues [news] Ezzell C. **Nature** 1989 Mar 30;338(6214):366
New battle over TPA [news] Ezzell C. **Nature** 1989 Aug 10;340(6233):418
Rival claims over DNA amplification [news] Ezzell C. **Nature** 1989 Aug 10;340(6233):418
Generic drug manufacturers lose patent protection battle [news] McGourty C. **Nature** 1988 Oct 27;335(6193):756
Harvard fights first battle [news] Shulman S. **Nature** 1989 Aug 10;340(6233):418
Pacemaker patients—use and misuse. Greatbatch W. **PACE** 1989 Jan;12(1 Pt 1):115-6
Europe tries to untangle laws on patenting life [news] Dickson D. **Science** 1989 Feb 24;243(4894 Pt 1):1002
No patent for Harvard's mouse [news] Dickson D. **Science** 1989 Feb 24;243(4894 Pt 1):1003

PATERNAL AGE

Outreach with teenage fathers: a preliminary report on three ethnic groups. Hendricks LE. **Adolescence** 1988 Fall; 23(91):711-20
A community-based study of parental age at the birth of patients with dementia of the Alzheimer type. Urakami K, et al. **Arch Neurol** 1989 Jan;46(1):38-9
Controversy concerning paternal age effect in 47,+21 Down's syndrome. Stene E, et al. **Hum Genet** 1989 Feb; 81(3):300-1
Parental age and cancer risk in offspring [letter] Neutel I, et al. **Int J Epidemiol** 1988 Dec;17(4):928-9
Parental age and motor neuron disease. Hawkes CH, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):618-21
American Academy of Pediatrics Committee on Adolescence: Care of adolescent parents and their children. **Pediatrics** 1989 Jan;83(1):138-40
Perceptions of parenthood among adolescent fathers. Elsters AB, et al. **Pediatrics** 1989 May;83(5):758-65
[New mutations and paternal age. A special situation in genetic counseling] Lederer D, et al. **Med Klin** 1988 Nov 11;83(22):740-5 (14 ref.) (Eng. Abstr.) **(Ger)**

PATERNAL BEHAVIOR

Paternalism and consumerism in the practice of medicine. Medhat MA, et al. **Kans Med** 1988 Sep;89(9):239-41
Parental values and behavior in the outer Fiji Islands. West MM. **New Dir Child Dev** 1988 Summer;(40):13-25
Differential effects of paternal presence on pup survival in two species of dwarf hamster (Phodopus sungorus and Phodopus campbelli). Wynne-Edwards KE, et al. **Physiol Behav** 1989 Mar;45(3):465-9
Fetal sex identification and prenatal bonding. Wu JH, et al. **Psychol Rep** 1988 Aug;63(1):199-202
Nipple development and pup-induced prolactin release in male rats treated prenatally with the antiandrogen flutamide. Tate-Ostroff BA, et al. **Psychoneuroendocrinology** 1988;13(4):309-16
[New characteristics of the father's role] Novák T. **Cesk Pediatr** 1988 Oct;43(10):625-6 **(Cze)**

PHYSIOLOGY

Prolactin and paternal behavior in the biparental California mouse, Peromyscus californicus. Gubernick DJ, et al. **Horm Behav** 1989 Jun;23(2):203-10

PATERNAL DEPRIVATION

Experience of parental loss and later suicide: data from published biographies. Lester D. **Acta Psychiatr Scand** 1989 May;79(5):450-2
The disenfranchised father. Fay RE. **Adv Pediatr** 1989; 36:407-29 (37 ref.)
Early parental loss and development of adult psychopathology. Breier A, et al. **Arch Gen Psychiatry** 1988 Nov;45(11):987-93
Parental loss in childhood. Its effect in adult life. Tennant C. **Arch Gen Psychiatry** 1988 Nov;45(11):1045-50 (58 ref.)
The unseen tears of children: a Chinese boy who vomited for 14 months. Wong CK. **Can J Psychiatry** 1988 Nov; 33(8):751-3
The effects of deprivation syndrome on the adjustment of orphan, tribal and non-tribal children. Khan MA. **Indian Pediatr** 1988 Jan;25(1):47-50
The dead father: on early psychic trauma and its relation to disturbance in sexual identity and in creative activity. McDougall J. **Int J Psychoanal** 1989;70 (Pt 2):205-19
Father absence: effects on child and maternal psychopathology. Jensen PS, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Mar;28(2):171-5
Minimizing the impact of deployment separation on military children: stages, current preventive efforts, and system recommendations. Amen DG, et al. **Milit Med** 1988 Sep; 153(9):441-6
Seeing the absent father in a visual style. Lourdeaux L. **Psychoanal Rev** 1989 Spring;76(1):83-105
Family intervention and parental involvement in the facilitation of mourning in a 4-year-old boy. Muir E, et al. **Psychoanal Study Child** 1988;43:367-83
[Parent, mother or father loss in childhood and suicidal behavior in adulthood] Lange E, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Apr; 41(4):218-23 (Eng. Abstr.) **(Ger)**

PATERNITY

Probability of paternity: deceased accused man or mother; twins. Lenhart K, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;120:137-52
Exclusion and inclusion of paternity: 1976-1985. Lenhart K, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;119:251-60
Determination of HLA phenotypes of relatives—a contribution to the assessment of paternity probability. I. Lenhart K, et al. **Acta Univ Palacki Olomuc Fac Med** 1988; 119:223-8
Determination of HLA phenotypes of relatives—a contribution to the assessment of paternity probability. II. Lukš A, et al. **Acta Univ Palacki Olomuc Fac Med** 1988; 119:229-50
Calculation of probability of paternity using DNA sequences. Gjertson DW, et al. **Am J Hum Genet** 1988 Dec;43(6):860-9
Characterization of a spontaneous mutation in beta-thalassemia associated with advanced paternal age. Chenhab FF, et al. **Blood** 1989 Aug 1;74(2):852-4
The group specific component/vitamin D binding protein (GC/DBP) system in the analysis of disputed paternities. Constans J, et al. **Electrophoresis** 1988 Aug;9(8):398-403
The use of biotinylated DNA probes in parentage testing: non-isotopic labeling and non-toxic extraction. Dykes DD. **Electrophoresis** 1988 Aug;9(8):359-68
Characterization of genetic variants of human serum transferrin by isoelectric focusing: comparison between conventional and immobilized pH gradients, and application to a protocol for paternity testing. Pascali VL, et al. **Electrophoresis** 1988 Aug;9(8):411-7
The genetic haptoglobin polymorphism: relevance of paternity assessment. Patzelt D, et al. **Electrophoresis** 1988 Aug;9(8):393-7
Application of immobilized pH gradient isoelectric focusing to forensic hemogenetics: a survey on a three year experience with the transferrin (TF) and alpha 1-antitrypsin (PI) systems. Skoda U, et al. **Electrophoresis** 1988 Sep;9(9):606-9
Two-dimensional electrophoresis of human lymphocyte proteins: two-dimensional polymorphisms and paternity testing. Waldinger D, et al. **Electrophoresis** 1988 Aug; 9(8):375-9
Gm and Km frequencies in West Germans: usefulness of typing Gm(1,2,3,10,21) and Km(1,3) in paternity cases. Henke J, et al. **Forensic Sci Int** 1989 Jun;41(3):261-8
Aberrant MN bloodgroup inheritance in a German family: a 'silent' allele? Henke J, et al. **Forensic Sci Int** 1988 Dec; 39(3):279-85
Use of DNA bar codes to resolve a canine paternity dispute. Georges M, et al. **J Am Vet Med Assoc** 1988 Nov 1; 193(9):1095-8
True paternity or exclusion: analysis in the case of a deceased party. Boonlayangoor PW. **J Forensic Sci** 1989 May; 34(3):703-7
Recent application of DNA analysis to issues of paternity [letter] Kobilinsky L, et al. **J Forensic Sci** 1988 Sep; 33(5):1107-8
Establishing paternity using minisatellite DNA probes when

the putative father is unavailable for testing. Odelberg SJ, et al. **J Forensic Sci** 1988 Jul;33(4):921–8

Tests of genetic markers on aborted fetal material. Reisner EG, et al. **J Forensic Sci** 1988 Sep;33(5):1262–6

Congenital central hypoventilation syndrome and Hirschsprung's disease in half sibs. Hamilton J, et al. **J Med Genet** 1989 Apr;26(4):272–4 (11 ref.)

Parentage testing procedures under the Family Law Act [letter] Meibusch P, et al. **Med J Aust** 1988 Dec 5–19; 149(11–12):721–2

Laboratory determination of parentage. Kolins MD, et al. **Obstet Gynecol Surv** 1988 Oct;43(10):590–5 (3 ref.)

DNA fingerprinting for paternity and maternity in group O Cayo Santiago–derived rhesus monkeys at the German Primate Center: results of a pilot study. Arnemann J, et al. **P R Health Sci J** 1989 Apr;8(1):181–4

Paternity exclusion using 18 genetic systems in 2124 cases in four South African population groups. du Toit ED, et al. **S Afr Med J** 1989 Feb 4;75(3):103–5

A case of the A2B3 phenotype. Katsuura Y, et al. **Tokushima J Exp Med** 1988 Jun;35(1–2):43–7

Characteristics of a DNA probe (pa3'HVR) when used for paternity testing. Allen RW, et al. **Transfusion** 1989 Jul–Aug;29(6):477–85

Limitations of paternity testing calculations revisited [letter] Morris JW. **Transfusion** 1989 Mar–Apr;29(3):280

Experimental validation of paternity probability [letter] Morris JW. **Transfusion** 1989 Mar–Apr;29(3):281

Paternity testing with an absent mother. The probability of exclusion of red cell surface antigen, Gm, Hp, and HLA systems in North American whites and blacks. Walker RH, et al. **Transfusion** 1989 Jan;29(1):31–5

Further evidence of a silent plasminogen (PLG) allele in two paternity cases. Weidinger S, et al. **Z Rechtsmed** 1988; 101(2):99–104

[An unusual case of eliminating a man as the father of twins] Májský A, et al. **Cas Lek Cesk** 1989 Jun 2;128(23):729 (Eng. Abstr.) **(Cze)**

[The importance of determining the probability of paternity for the evaluation of HLA antigen test results] Májský A. **Cas Lek Cesk** 1988 Jul 29;127(31):977–9 (Eng. Abstr.) **(Cze)**

[Calculation of the proportion of men excluded from paternity by HLA typing of the mother and child] Seignalet J. **J Genet Hum** 1988 Dec;36(5):397–411 (Eng. Abstr.) **(Fre)**

[Techniques of DNA polymorphisms revealed by probes for the Y chromosome applied to questions of father–son line in analyses of paternity] Guérin P, et al. **Rev Fr Transfus Immunohematol** 1988 Oct;31(3):513–20 (Eng. Abstr.) **(Fre)**

[Probability of paternity related to probable ancestry] Salmon D. **Rev Fr Transfus Immunohematol** 1988 Dec;31(5):763–5 **(Fre)**

[Genetic fingerprinting as a tool in identification and in the study of paternity] Vassart G, et al. **Rev Med Brux** 1988 Nov;9(9):411–4 (Eng. Abstr.) **(Fre)**

[Biostatistical evaluation of HLA–A, B findings in cases with suspected recombination] Fukshansky N, et al. **Z Rechtsmed** 1988;100(4):243–57 (Eng. Abstr.) **(Ger)**

[Sources of error in the determination of transferrin in frozen blood samples and blood stains] Schwerd W, et al. **Z Rechtsmed** 1988;100(4):227–30 (Eng. Abstr.) **(Ger)**

[PMG1(0) gene in a mother–child pair: exclusion of the paternity of 3 men based on subgroups of PMG1 enzyme polymorphism] Kósa F, et al. **Morphol Igazsagugyi Orv Sz** 1989 Jan;29(1):61–6 (28 ref.) **(Hun)**

[Deoxyribonucleic acid (DNA) in tests of filiation, paternity and forensic medicine] Pérez–Comas A. **Bol Asoc Med P R** 1989 Apr;81(4):130–3 (22 ref.) (Eng. Abstr.) **(Spa)**

[Genetic methods for the exclusion and attribution of paternity: experience with 30 cases] Cifuentes L, et al. **Rev Med Chil** 1988 Aug;116(8):736–42 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Anne G. Osborn, fifth Distinguished Scientist, Armed Forces Institute of Pathology. Moser RP Jr. **AJR Am J Roentgenol** 1989 Jul;153(1):213

The diagnostic pattern in histopathology. Bartels PH. **Am J Clin Pathol** 1989 Apr;91(4 Suppl 1):S7–13

Special report: perils, problems, and minimum requirements in shipping pathology slides. Rosen PP. **Am J Clin Pathol** 1989 Mar;91(3):348–54

The 1988 Fred W. Stewart Award. **Am J Surg Pathol** 1989 Aug;13(8):713–4

Expert systems in histopathology. II. Knowledge representation and rule–based systems. Bartels PH, et al. **Anal Quant Cytol Histol** 1989 Jun;11(3):147–53 (12 ref.)

An analysis of pathology knowledge and decision making for the development of artificial intelligence–based consulting systems. Smeulders AW, et al. **Anal Quant Cytol Histol** 1989 Jun;11(3):154–65

Role models in pathology. A new look at an old issue. Vance RP. **Arch Pathol Lab Med** 1989 Jan;113(1):96–101

Are hip fractures underestimated as a cause of death? The influence of coroners and pathologists on the death rate. Pemberton J. **Community Med** 1988 May;10(2):117–23

Gynecology and pathology: the need for an intimate partnership. Janssens J. **Eur J Obstet Gynecol Reprod Biol** 1988 Nov;29(3):235–9

Methods for evaluating reproducibility in anatomic pathology [letter] Cramer SF. **Hum Pathol** 1988 Dec; 19(12):1472–4

Recent developments in pathology residency training programs [letter] Faix JD. **Hum Pathol** 1989 Sep;20(9):922

Faculty development in the pathology department: a 1988 symposium of the Association of Pathology Chairmen. Prichard RW, et al. **Hum Pathol** 1989 Sep;20(9):827–31

Application of molecular "pathology" to forensic pathology [letter] Woodruff KH. **Hum Pathol** 1989 Sep;20(9):922

The confidential enquiry into maternal deaths: its role and importance for pathologists. Dawson I. **J Clin Pathol** 1988 Aug;41(8):820–5

An American pathologist's view of medicine on the island of Grenada. Mark EJ. **JAMA** 1989 May 5;261(17):2553–4

Pathology. Smith RD. **JAMA** 1989 May 19;261(19):2872–4

Histopathologists, malignancies, and undefined high–power fields [letter] Sadler DW, et al. **Lancet** 1989 Apr 8; 1(8641):785–6

United States and Canadian Academy of Pathology (United States–Canadian Division of the International Academy of Pathology) annual meeting. San Francisco, March 5–10, 1989. Abstracts. **Mod Pathol** 1989 Jan;2(1):1A–111A

Society for Pediatric Pathology. Annual meeting. San Francisco, CA, March 4–6, 1989. Abstracts. **Mod Pathol** 1989 Jan;2(1):1P–9P

Need for a symbolic system language (comment on a Maude Abbott lecture) [letter] Fattor RA. **Mod Pathol** 1988 Jul; 1(4):323–4

Integrated pathology reporting, indexing, and retrieval system using natural language diagnoses. Moore GW, et al. **Mod Pathol** 1988 Jan;1(1):44–50

Distinguished Pathologist Award for 1989. Wagner BM, et al. **Mod Pathol** 1989 May;2(3):273

The cell in health and disease. An evaluation of cellular morphologic expression of biologic behavior. 2nd, revised edition. Frost JK. **Monogr Clin Cytol** 1986;2:1–304 (309 ref.)

Autopsy and the cause of death [letter] **N Z Med J** 1989 Mar 8;102(863):112–3

National Cancer Registry [letter] Dervan W, et al. **N Z Med J** 1989 Apr 12;102(865):168

Pathology in the U.S.A., Part I. Hill RB. **Pathol Res Pract** 1988 Sep;183(5):656–9 (14 ref.)

25 years of the European Society of Pathology. The 25th Silver Jubilee Congress of Porto (September 3–9, 1989), Portugal. A pre–congress message from the President of the European Society of Pathology. Llombart–Bosch A. **Pathol Res Pract** 1989 Mar;184(3):361–4

Society for Pediatric Pathology Presidential Awards, 1988. Gilbert–Barness E, et al. **Pediatr Pathol** 1989;9(3):359–67

In the charnel house. Hansen P. **Pharos** 1989 Spring; 52(2):8–11

Magnetic resonance imaging (MRI): a new tool in experimental toxicologic pathology. Dixon D, et al. **Toxicol Pathol** 1988;16(3):386–91

Standard nomenclature and diagnostic criteria in toxicologic pathology [editorial] Streett CS. **Toxicol Pathol** 1988; 16(2):305–6

[Sikl's influence on the development of modern pathology] Jirásek A. **Cesk Patol** 1988 Aug;24(3):133–7 **(Cze)**

[Pathology in Hannover] Georgii A. **Verh Dtsch Ges Pathol** 1988;72:XXVIII–XXXII **(Ger)**

[Opening address by the chairman] Kracht J. **Verh Dtsch Ges Pathol** 1988;72:XXXIII–XLIII **(Ger)**

[Work of pathology bureaus] **Arkh Patol** 1989;51(1):65–75 **(Rus)**

[The computer at the pathologist's laboratory] Gold'berg OA, et al. **Arkh Patol** 1989;51(5):80–3 (Eng. Abstr.) **(Rus)**

[Problems in optimizing international cooperation] Mikheeva LV, et al. **Sov Med** 1988;(12):124–5 **(Rus)**

[Theoretical pathology and medical anthropology] Lolas F. **Acta Psiquiatr Psicol Am Lat** 1988 Mar;34(1):41–6 (Eng. Abstr.) **(Spa)**

EDUCATION

Pathology education should occur during the clinical years of medical school [editorial] Neff JC. **Arch Pathol Lab Med** 1989 Apr;113(4):329

Independent learning in pathology. Does it work? Raskova J, et al. **Arch Pathol Lab Med** 1989 Feb;113(2):204–6

A senior elective program in anatomic pathology. Valdes–Dapena M, et al. **Arch Pathol Lab Med** 1989 Apr; 113(4):330–2

How do we teach pathology? Pathology teaching at Southampton. Gallagher PJ. **J Pathol** 1989 Mar; 157(3):275–7

Teaching systemic pathology in Edinburgh. Gouldesbrough DR, et al. **J Pathol** 1988 Dec;156(4):355–6

Who will pay for intercalated degrees in pathology?[editorial] Gray C. **J Pathol** 1989 Mar;157(3):187–9

How do we teach pathology? Bridging the gap between theory and practice. Kirkpatrick CJ. **J Pathol** 1989 Feb; 157(2):157–9

How do we teach pathology? Kondratowicz GM, et al. **J Pathol** 1989 Jan;157(1):85–7

How do we teach pathology? The laser videodisc and computer–assisted learning. Mercer J, et al. **J Pathol** 1988 Sep;156(1):83–9

Nonneoplastic lung disease. Churg A, et al. **Mod Pathol** 1988 Jan;1(1):64–85

Pathology in the U.S.A., Part II. Hill RB. **Pathol Res Pract** 1988 Nov;183(6):809–11 (6 ref.)

[Introductory lecture on pathologic anatomy for the 3d–year students at the I Medical Department, Medical Academy, in Warsaw on October 2, 1987] Kruś S. **Pol Tyg Lek** 1988 Aug 15;43(33):1069–71 **(Pol)**

[Experience with conducting independent work by students at a department of pathologic anatomy] Dikshtein EA, et al. **Arkh Patol** 1989;51(5):58–60 **(Rus)**

[Current problems of postgraduate training in pathology under perestroika] Khmel'nitskii OK. **Arkh Patol** 1988; 50(12):61–4 **(Rus)**

[Pathologic anatomy in Japan (exemplified by the University of the City of Hirosaki] Nagai K, et al. **Arkh Patol** 1988; 50(7):77–9 **(Rus)**

[Application of the microcomputer "Electronika BK–0010" in programmed monitoring of the degree of students' assimilation of a course in pathologic anatomy according to tests at the first level] Ptashekas RS, et al. **Arkh Patol** 1989;51(1):52–4 (Eng. Abstr.) **(Rus)**

[Restructuring of pathologic anatomy: the place and role of the chair at the medical school] Serov VV. **Arkh Patol** 1988;50(12):65–8 **(Rus)**

[Mathematical analysis of the results of academic experiments in practical exercises on pathological physiology] Zviagintsev NF. **Patol Fiziol Eksp Ter** 1988 Sep–Oct; (5):80–2 (Eng. Abstr.) **(Rus)**

HISTORY

In memoriam: Arkadi M. Rywlin, M.D. July 27, 1923–August 22, 1987. Ackerman AB. **Am J Dermatopathol** 1989 Aug; 11(4):375–83

The sayings of Arkadi M. Rywlin, M.D. Rosen LB. **Am J Dermatopathol** 1989 Aug;11(4):384–5

The lasting contributions of Robert W. Wissler, PhD, MD, to pathology and to the pathobiology of atherosclerosis. Glagov S. **Arch Pathol Lab Med** 1988 Oct;112(10):973–4

Some specimens from William Clift's copy of Matthew Baillie's The Morbid Anatomy of the Human Body (1799–1802). Attwood HD. **Aust N Z J Surg** 1988 Aug; 58(8):665–70

Contributions by Brown–Séquard on spinal cord trauma and pathology. Andrés F. **Brain Res Bull** 1989 Jan;22(1):3–5

E. J. McWeeney: Ireland's first professor of pathology. Healy TM. **Ir J Med Sci** 1989 Jun;158(6):165–7

Neuropathology—then and now. Bailey OT. **JAMA** 1988 Nov 18;260(19):2891–3

AFIP: pathology laboratory to the world [news] Merz B. **JAMA** 1989 May 19;261(19):2807, 2809–10

Knights in shiny armor engage cerebral dragons. Vogel FS. **Mod Pathol** 1989 May;2(3):187–91 (41 ref.)

The history of pathology in Turkey. Paksoy N. **Pathol Res Pract** 1988 Dec;184(1):128–31

[Tribute to Jacques Mignot, 1918–1988] Potet F. **Ann Pathol** 1988;8(4–5):342–4 **(Fre)**

[The 10th anniversary of the "Der Pathologe"] Becker V. **Pathologe** 1989 Jan;10(1):1–2 **(Ger)**

[Pathology before Morgagni] Honti J. **Orv Hetil** 1989 Jan 8;130(2):87–9 **(Hun)**

[General pathology and pathological physiology in Poland (the history of organizational units during the years 1945–1986)] Guzek JW. **Arch Hist Filoz Med** 1988; 51(3):319–57 (Eng. Abstr.) **(Pol)**

[30th anniversary of the Department of Pathologic Anatomy of the Vladivostok Medical Institute] Kaminskiĭ IuV. **Arkh Patol** 1988;50(10):84–6 **(Rus)**

[Recollections of work in Orenburg during World War II (1941–1944)] Strukov AI. **Arkh Patol** 1988;50(7):87–91 **(Rus)**

[The academician A.G. Savinykh and the development of morphologic studies in Tomsk (on the centenary of his birth)] Saks FF, et al. **Vestn Khir** 1988 Sep;141(9):148–50 **(Rus)**

[The man behind the syndrome: Max Wilms. A famous pathologist and a skillful surgeon] Abon P, et al. **Lakartidningen** 1989 Jul 26;86(30–31):2604–5 **(Swe)**

INSTRUMENTATION

Evaluation of two types of 'medically significant error limits' and two quality control procedures on a multichannel analyzer. Campbell BG. **Arch Pathol Lab Med** 1989 Aug; 113(8):834–7

MANPOWER

An impending shortage of community hospital pathologists. Benson ES, et al. **Hum Pathol** 1989 May;20(5):405–6

METHODS

The 1988 Bethesda System for reporting cervical/vaginal cytologic diagnoses. Developed and approved at the National Cancer Institute Workshop, Bethesda, Maryland, U.S.A., December 12–13, 1988. **Acta Cytol** 1989 Sep–Oct; 33(5):567–74

Applications of flow cytometry in diagnostic pathology. Hanson CA. **Am J Clin Pathol** 1989 Apr;91(4 Suppl 1):S27–31 (14 ref.)

Hypermedia in pathology—the Dartmouth Interactive Medical Record project. Shultz EK, et al.

Am J Clin Pathol 1989 Apr;91(4 Suppl 1):S34–8
Telepathology. Long-distance diagnosis. Weinstein RS, et al. **Am J Clin Pathol** 1989 Apr;91(4 Suppl 1):S39–42
Technologic anarchy? [editorial] Wick MR.
Am J Clin Pathol 1989 Apr;91(4 Suppl 1):S1
An anti-organelle antibody in pathology. The chromatolytic reaction studied with a monoclonal antibody against the Golgi apparatus. Croul SE, et al. **Am J Pathol** 1988 Nov; 133(2):355–62
Go to the operating room [editorial] Burger PC.
Am J Surg Pathol 1988 Dec;12(12):961
Expert systems in histopathology. I. Introduction and overview. Bartels PH, et al. **Anal Quant Cytol Histol** 1989 Feb;11(1):1–7 (21 ref.)
Flow cytometry in cytopathology. Overview and perspectives. Darzynkiewicz Z.
Anal Quant Cytol Histol 1988 Dec;10(6):459–61 (15 ref.)
Flow cytometric applications in cytopathology. Johnson TS, et al. **Anal Quant Cytol Histol** 1988 Dec;10(6):423–58 (422 ref.)
Potential applications for digital image processing at the Armed Forces Institute of Pathology. Mehm WJ, et al. **Aviat Space Environ Med** 1988 Oct;59(10):981–5
Nuclear magnetic resonance: principles and applications to pathology. Ballon D, et al. **Clin Lab Med** 1988 Dec; 8(4):737–51 (17 ref.)
Comparison of conventional morphometry and image analysis for the solution of histomorphometric problems. Hufnagl P, et al. **Gegenbaurs Morphol Jahrb** 1989; 135(1):145–50 (20 ref.)
Image analysis in anatomic pathology: what are the issues? [editorial] Gil J. **Hum Pathol** 1989 Mar;20(3):203–4
Image analysis in quantitative cytopathology and histopathology. Wied GL, et al. **Hum Pathol** 1989 Jun; 20(6):549–71 (122 ref.)
Classifying cells from light microscopic bit features by binary logic. Application to grade neuronal injury in cerebral ischemia. Eke A, et al. **Lab Invest** 1989 Aug;61(2):243–52
The value of microbiologic culture of tissue samples in surgical pathology. Braunstein H. **Mod Pathol** 1989 May; 2(3):217–21 (18 ref.)
[Current methods in pathologic anatomy] Bosman FT.
Ned Tijdschr Geneeskd 1989 Mar 25;133(12):606–13 (18 ref.) **(Dut)**
[The use of small and large computers for setting up data banks for morphometry] Wassilew G, et al.
Gegenbaurs Morphol Jahrb 1989;135(1):211–3 (Eng. Abstr.) **(Ger)**
[PARTICLE—an expert system for microscopic image analysis] Wolf G, et al. **Gegenbaurs Morphol Jahrb** 1989; 135(1):67–75 (4 ref.) (Eng. Abstr.) **(Ger)**
[Cell differentiation: a new technology in pathology] Bültmann B. **Verh Dtsch Ges Pathol** 1988;72:43–9 (Eng. Abstr.) **(Ger)**

STANDARDS

Reproducibility of histomorphologic diagnoses with special reference to the kappa statistic. Svanholm H, et al.
APMIS 1989 Aug;97(8):689–98
The impact of new features of laboratory information systems on quality assurance in anatomic pathology [editorial] Friedman BA. **Arch Pathol Lab Med** 1988 Dec; 112(12):1189–91
End points and significance of reproducibility in pathology [editorial] Henson DE. **Arch Pathol Lab Med** 1989 Aug; 113(8):830–1
Should dermatologists read their own slides? [letter] Spigel GT. **Int J Dermatol** 1989 May;28(4):276–7
Review of pathology data for regulatory purposes. Dua PN, et al. **Toxicol Pathol** 1988;16(4):443–50 (16 ref.)

TRENDS

Perestroika, fashion, and the universal glue. Thurlbeck WM. **Am Rev Respir Dis** 1989 May;139(5):1280–1
Pathobiology of atherosclerosis—current concepts and perspectives. A festschrift in tribute to Robert W. Wissler. Buja LM. **Arch Pathol Lab Med** 1988 Oct;112(10):975–6
The pathologist as an educator: time for reappraisal. Skendzel LP. **Hum Pathol** 1989 Feb;20(2):100–1
Crystal ball gazing and the effects of fate. Pennington GW. **J Clin Pathol** 1988 Nov;41(11):1141–7
Histopathology and bacteriology: possible developments for the next seventy-five years. Allison RT, et al.
Med Lab Sci 1987 Oct;44(4):371–5
Technology transfer—the new molecular pathology, opportunities for the future. Fenoglio-Preiser CM.
Mod Pathol 1988 Jul;1(4):251–5
The academy in 2000 [editorial] Wagner BM.
Mod Pathol 1989 Jan;2(1):1
What's new in quantitative pathology? Past developments and outlook. Tosi P, et al. **Pathol Res Pract** 1989 Jun; 184(6):652–5
The Sidney Farber memorial lecture—creative ideation and inquiry in developmental pathology. Bolande RP.
Perspect Pediatr Pathol 1988;12:10–9
[Perspective trends in the development of pathology] Zlateva M. **Eksp Med Morfol** 1989;28(1):1–5 (17 ref.) **(Bul)**
[Pathologic anatomy during perestroika in public health and medical science] Sarkisov DS. **Arkh Patol** 1988;50(10):3–13 (Eng. Abstr.) **(Rus)**
[Stages and prospects of the development of morphologic studies in the field of environmental health] Bonashevskaia TI. **Gig Sanit** 1989 Mar;(3):44–8 (Eng. Abstr.) **(Rus)**
[Toward the 8th All-Union Congress of Neuropathologists, Psychiatrists and Drug Abuse Specialists] Morozov GV. **Zh Nevropatol Psikhiatr** 1988;88(10):3–8 **(Rus)**

PATHOLOGY, CLINICAL

Abstracts: fall meeting of the American Society of Clinical Pathologists and the College of American Pathologists. October 22–28, 1988, Las Vegas, Nevada.
Am J Clin Pathol 1988 Oct;90(4):493–516
The editor's report—1988 [editorial] Beeler MF, et al.
Am J Clin Pathol 1989 Jun;91(6):742–3
To go or not to go [letter] **Am J Surg Pathol** 1989 Oct; 13(10):900–1
A physician office analyzer [letter] Scamurra D.
Arch Pathol Lab Med 1988 Nov;112(11):1083
Cytopathology consultations: what are the challenges, pitfalls, and liabilities? Frable WJ. **Diagn Cytopathol** 1989; 5(2):228–9
The pathologist and the clinical oncologist: a new effective partnership in assessing tumor prognosis. Saccani Jotti G, et al. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):585–98 (93 ref.)
Pathological Society of Great Britain and Ireland, 157th meeting. 6–8 July 1988, Newcastle-upon-Tyne. Abstracts. **J Pathol** 1988 Aug;155(4):339A–354A
Pathological Society of Great Britain and Ireland, 159th meeting. 5–7 July 1989, Aberdeen. **J Pathol** 1989 Aug; 158(4):335A–358A
Pathological Society of Great Britain and Ireland. 158th meeting. 4–6 January 1989, London. Abstracts. **J Pathol** 1989 Feb;157(2):161A–179A
United States and Canadian Academy of Pathology. (United States–Canadian Division of the International Academy of Pathology). Annual meeting. San Francisco, March 5–10, 1989. Abstracts. **Lab Invest** 1989 Jan;60(1):1A–111A
Society for Pediatric Pathology. Annual meeting. San Francisco, CS, March 4–6, 1989. Abstracts. **Lab Invest** 1989 Jan;60(1):1P–9P
Safety in pathology laboratories. Jegathesan M, et al.
Malays J Pathol 1988 Aug;10:1–5
The unitary nature of mammalian pathology [editorial] Leader R, et al. **Mod Pathol** 1989 Jul;2(4):275–6
XIIth European Congress of Pathology. Porto, Portugal, September 3–9, 1989. Abstracts. **Pathol Res Pract** 1989 Jul; 185(1):1–176
Selected topics in pediatric pathology.
Pediatr Clin North Am 1989 Feb;36(1):1–263
Abstracts: Papers and posters from the Third International Conference on Pediatric Pathology. October 24–27, 1988, La Plata, Argentina. **Pediatr Pathol** 1989;9(2):219–30
General principles of multiparameter flow cytometric analysis: applications of flow cytometry in the diagnostic pathology laboratory. Willman CL, et al.
Semin Diagn Pathol 1989 Feb;6(1):3–12 (7 ref.)
Endoscopy and pathology. Hermanek P. **Surg Endosc** 1988; 2(4):251–5
[Relation of symptoms and theories of pathology] Widder J. **Wien Klin Wochenschr** 1988 Oct 21;100(20):688–90 (Eng. Abstr.) **(Ger)**
[Proceedings of the 72d meeting of the German Society of Pathology. 24–28 May 1988, Hannover. Abstracts]
Zentralbl Allg Pathol 1989;135(2):167–227 **(Ger)**
[35th meeting of the Japan Society of Clinical Pathology. Yamaguchi, 20–22 October 1988. Abstracts]
Rinsho Byori 1988;36 Suppl:1–347 **(Jpn)**
[36th meeting of the Japanese Society of Clinical Pathology. Kyoto, 5–7 October 1989. Abstracts] **Rinsho Byori** 1989; 37 Suppl:1–409 **(Jpn)**
[The usefulness of discriminant function for diagnosis of malignant disease] Kimura S, et al. **Rinsho Byori** 1988 Aug; 36(8):913–7 **(Jpn)**
[Views of pathologists and clinicians on autopsy] Milenkov Kh, et al. **Arkh Patol** 1989;51(3):73–6 (Eng. Abstr.) **(Rus)**

ECONOMICS

Budget management of National Health Service pathology laboratories. Lilleyman JS. **Ann Clin Biochem** 1989 Jul;26 (Pt 4):309–10

EDUCATION

Education and training for cytopathologists. Its role in quality assurance. Parker JE. **Acta Cytol** 1989 Jul-Aug; 33(4):448–50
Transfusion medicine: the pathologist's 'brave new world' [editorial] Bryant LR. **Am J Clin Pathol** 1989 Jun; 91(6):744–5
Role models in pathology revisited [letter] Braunstein H.
Arch Pathol Lab Med 1989 Sep;113(9):964–6
Role models in pathology [letter] Przyjemski CJ.
Arch Pathol Lab Med 1989 Sep;113(9):964–6
Fate of gross specimens in pathology [letter] Haboubi NY, et al. **J Clin Pathol** 1988 Nov;41(11):1247
How do we teach pathology? The Oxford Clinical Pathology Course. Athanasou NA, et al. **J Pathol** 1988 Nov; 156(3):267–9
[A clinical chemistry program for clinical pathology residents] Miguel MJ, et al. **Acta Med Port** 1988 Jan-Feb; 1(1):111–4 (Eng. Abstr.) **(Por)**
[Problems in the quantitative assessment of the effectiveness of the postgraduate training of pathologic anatomists] Avtandilov GG. **Arkh Patol** 1988;50(8):62–4 (Eng. Abstr.) **(Rus)**

HISTORY

[Knowledge of endocrine disease pictures from the viewpoint of the pathologist] Lambrecht M. **Z Gesamte Inn Med** 1988 Aug 1;43(15):436–7 (Eng. Abstr.) **(Ger)**
[The man behind the syndrome: Rolf Luft. He discovered the first mitochondrial disease—a milestone in clinical pathology] Löw H, et al. **Lakartidningen** 1989 Apr 12; 86(15):1389–90 **(Swe)**

INSTRUMENTATION

Selection of laboratory equipment. Gharpure SV.
Indian J Pathol Microbiol 1988 Oct;31(4):321–3
Cutting device in ocular pathology. Mansour AM.
Ophthalmologica 1988;197(2):110–2

MANPOWER

Special report—National Manpower Survey of 1987. Manpower needs in community hospital and private laboratory practice of pathology. Anderson RE, et al.
Am J Clin Pathol 1988 Oct;90(4):482–6
The question of oversupply in pathology [letter] Bryant J.
Am J Clin Pathol 1988 Oct;90(4):517–8

METHODS

Biosensors. A new analytic technology for real-time, on-line biochemical monitoring. Hunter KW Jr.
Am J Clin Pathol 1989 Apr;91(4 Suppl 1):S32–3
Turnaround times [letter] Raymond S. **Am J Clin Pathol** 1989 Sep;92(3):398–9
Monte Carlo simulation and the clinical laboratory. Connelly DP, et al. **Arch Pathol Lab Med** 1989 Jul;113(7):750–7
Small expert systems in clinical pathology. Are they useful? [editorial] Healy JC, et al. **Arch Pathol Lab Med** 1989 Sep; 113(9):981–3
Dot diagrams as source documents for evaluations of test performance. Krieg AF, et al. **Arch Pathol Lab Med** 1989 Jul;113(7):746–9
Information characteristic of morphology of the adaptational norm, disadaptation, and pathology under the aspect of diagnostic microscopy. Avtandilov GG.
Gegenbaurs Morphol Jahrb 1989;135(1):169–71
Principles of morphometric grading. Collan Y, et al.
Gegenbaurs Morphol Jahrb 1989;135(1):13–7
Microanalysis in histopathology. Levison DA. **J Pathol** 1989 Feb;157(2):95–7 (14 ref.)
[A simple system for semi-automatic image analysis] Ratinahirana H, et al. **Ann Pathol** 1989;9(1):68–70 (Eng. Abstr.) **(Fre)**
[3d symposium. Morphometry in research and clinical practice with special reference to automated microscopic image analysis] **Gegenbaurs Morphol Jahrb** 1989; 135(1):1–125 **(Ger)**

STANDARDS

Quality assurance in cytopathology. Recommendations and ongoing quality assurance activities of the American Society of Clinical Pathologists. Bonfiglio TA.
Acta Cytol 1989 Jul-Aug;33(4):431–3
Quality assurance activities of the College of American Pathologists. Kraemer BB. **Acta Cytol** 1989 Jul-Aug; 33(4):434–8
An overview of the College of American Pathologists' programs in surgical pathology and cytopathology. Data summary of diagnostic performance in cervical cytopathology. Penner DW. **Acta Cytol** 1989 Jul-Aug; 33(4):439–42
Author guidelines for computer reports: a need for new considerations? [editorial] Boudreau DA, et al.
Am J Clin Pathol 1988 Oct;90(4):490–1
Special report—request for comment. Guidelines for authors submitting reports of computer programs and a call for comments. Powsner ER. **Am J Clin Pathol** 1988 Oct; 90(4):487–9
The virtuous pathologist. An ethical basis for laboratory medicine. Stempsey WE. **Am J Clin Pathol** 1989 Jun; 91(6):730–8
The 1987 Comprehensive Blood Bank Survey of the College of American Pathologists. Cooper ES, et al.
Arch Pathol Lab Med 1989 Sep;113(9):969–74
Reliability of white blood cell counting. Lohmann RC, et al. **Arch Pathol Lab Med** 1989 Sep;113(9):989–94
Caution advised in physician office analyzer evaluations [letter] Ross JW. **Arch Pathol Lab Med** 1988 Nov; 112(11):1082–3
Proficiency testing and laboratory quality. Lessons from the Ontario program [editorial] Savage RA.
Arch Pathol Lab Med 1989 Sep;113(9):983–4
Grading of cervical intraepithelial neoplasia [letter] **BMJ** 1989 May 20;298(6684):1383
Observer variation in histopathological diagnosis and grading of cervical intraepithelial neoplasia [see comments] Ismail SM, et al. **BMJ** 1989 Mar 18;298(6675):707–10. **Comment in:** BMJ 1989 Apr 15;298(6679):1030–1
Laboratory accreditation and audit in pathology. London,

February 7, 1989. Abstracts. **J Clin Pathol** 1989 Jun; 42(6):561–6

Cytopathology: new legislative, regulatory, and proficiency testing requirements. Deboy JM, et al. **Md Med J** 1989 Mar;38(3):214–7

STATISTICS & NUMERICAL DATA

Probability of pathology. Strike PW. **Aviat Space Environ Med** 1989 Jul;60(7 Pt 2):A50–4

TRENDS

Changes in diagnostic pathology — a paradigm of fashion [editorial] Benjamin DR. **Pediatr Pathol** 1989;9(1):iii–iv

PATHOLOGY DEPARTMENT, HOSPITAL see under **HOSPITAL DEPARTMENTS**

PATHOLOGY, ORAL

TRENDS

The future of oral pathology and the need for international training guidelines. van der Waal I. **J Oral Pathol** 1988 Sep;17(8):427–8

PATHOLOGY, SURGICAL

Surgical pathology as a component of the hospital computer: looking for the pony [letter] Foucar E, et al. **Arch Pathol Lab Med** 1989 Jun;113(6):573

Perception testing in surgical pathology. Berbaum KS, et al. **Hum Pathol** 1988 Oct;19(10):1127–31

[Topographical anatomy in the practical activities of pathology: autopsy after surgery] Skorniakov VS. **Arkh Patol** 1989;51(4):92–3 **(Rus)**

EDUCATION

Teaching surgical pathology at the Birmingham General Hospital. Boon AP, et al. **J Pathol** 1988 Aug;155(4):355–6

HISTORY

The laboratory and the clinic: the impact of pathology on surgical diagnosis in the Glasgow Western Infirmary, 1875–1910. Jacyna LS. **Bull Hist Med** 1988 Fall; 62(3):384–406

INSTRUMENTATION

[A high- resolution video-graphic printer for the documentation of surgical specimens] Komminoth P, et al. **Pathologe** 1989 Mar;10(2):131–2 **(Ger)**

METHODS

Use of colloidal gold in diagnostic surgical pathology. Warhol MJ. **Am J Anat** 1989 Jun–Jul;185(2–3):301–9

Treatment of dermatofibrosarcoma protuberans with Mohs micrographic surgery [letter] Woods JE, et al. **Ann Surg** 1988 Nov;208(5):669

Surgical pathology computer systems have come of age [editorial] Aller RD. **Arch Pathol Lab Med** 1988 Dec; 112(12):1186–7

Computers in anatomic pathology. A survey of California hospitals. Gonzales J, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1192–4

A surgical pathology reporting and encoding system using industry-standard hardware and software. Taubman SB. **Arch Pathol Lab Med** 1988 Dec;112(12):1195–9

STANDARDS

Endoscopic biopsy forceps and transfer of tissue between cases [letter] Coghill SB, et al. **Lancet** 1989 Feb 18; 1(8634):388–9

TRENDS

[Transition and trend in rapid frozen section diagnosis at the surgical pathology division of a university hospital] Nemoto N, et al. **Rinsho Byori** 1988 Jun;36(6):737–42 **(Jpn)**

PATHOLOGY, VETERINARY

The unitary nature of mammalian pathology [editorial] Leader R, et al. **Mod Pathol** 1989 Jul;2(4):275–6

HISTORY

Veterinary clinical pathology 1888–1988. McSherry BJ, et al. **J Comp Pathol** 1988 Jul;99(1):27–40

METHODS

[Objectivity, specialization and cooperation in veterinary medicine with immunopathology as an example] Schulz LC. **DTW** 1989 Apr;96(4):160–1 **(Ger)**

TRENDS

Future directions in veterinary pathology [editorial] Shadduck JA. **Vet Pathol** 1989 Jul;26(4):353–5

PATIENT ACCEPTANCE OF HEALTH CARE

Psychosocial research and the hospitalized adolescent: approaches and challenges. Denholm CJ, et al. **Adolescence** 1988 Winter;23(92):925–37 (67 ref.)

Patient use of treatment options at an ATU and ratings of their relative usefulness. Rees DW, et al. **Alcohol Alcohol** 1989;24(1):63–8

Ear acupuncture using semi-permanent needles: acceptability, prospects and problems in Nigeria. Umeh B. **Am J Chin Med** 1988;16(1–2):67–70

Sexual assault history and use of health and mental health services. Golding JM, et al. **Am J Community Psychol** 1988 Oct;16(5):625–44

Attitude of hospital personnel toward hepatitis B vaccination. Scapa E, et al. **Am J Gastroenterol** 1989 Apr;84(4):400–2

Acceptability of alternative treatments for persons with mental retardation: ratings from institutional and community-based staff. Miltenberger RG, et al. **Am J Ment Retard** 1989 Jan;93(4):388–95

Gynecologic screening examinations: does the obstetrician-gynecologist's spouse comply? Petrikovsky B, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):82–5

Influence of nondepressive psychiatric symptoms on whether patients tell a doctor about depression. Bucholz KK, et al. **Am J Psychiatry** 1989 May;146(5):640–4

Partner notification in the control of human immunodeficiency virus infection. Potterat JJ, et al. **Am J Public Health** 1989 Jul;79(7):874–6

Delay between onset of chest pain and seeking medical care: the effect of public education. Ho MT, et al. **Ann Emerg Med** 1989 Jul;18(7):727–31

Acceptance of domiciliary theophylline monitoring using dried blood spots. Rattenbury JM, et al. **Arch Dis Child** 1988 Dec;63(12):1449–52

Analysis of patient response to preoperative computerized video imaging. Thomas JR, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jul;115(7):793–6

Health programme effects upon acceptance of immunisation in northeast Thailand. Limtragool P, et al. **Asia Pac J Public Health** 1989;3(1):26–31

Motivating patients to seek preventive care. Rose AT. **Aust Fam Physician** 1989 Jan;18(1):35

Unemployment and patterns of consultation with the general practitioner [letter] Beale N, et al. **BMJ** 1989 Jun 17; 298(6688):1644

Self referral to an accident and emergency department [letter; comment] Dale J, et al. **BMJ** 1989 Apr 29;298(6681):1182–3 . **Comment on:** BMJ 1989 Apr 1;298(6677):859–62

Non-attendance or non-invitation? A case-control study of failed outpatient appointments. Frankel S, et al. **BMJ** 1989 May 20;298(6684):1343–5

I do not love thee Mr Fell.... Jewell D. **BMJ** 1988 Aug 20–27; 297(6647):498–9

Self referral to an accident and emergency department [letter] Jones C, et al. **BMJ** 1989 Jun 3;298(6686):1519

Self referral to an accident and emergency department for another opinion [see comments] Jones CS, et al. **BMJ** 1989 Apr 1;298(6677):859–62. **Comment in:** BMJ 1989 Apr 29;298(6681):1182–3

Attracting patients to dentists. Lindsay S, et al. **BMJ** 1989 Feb 4;298(6669):273–4

Attendance and non-attendance for breast screening at the south east London breast screening service. McEwen J, et al. **BMJ** 1989 Jul 8;299(6691):104–6

Five years of heartsink patients in general practice. O'Dowd TC. **BMJ** 1988 Aug 20–27;297(6647):528–30

Cervical cytology screening and government policy. Ross SK. **BMJ** 1989 Jul 8;299(6691):101–4

Cervical screening in an inner city area: response to a call system in general practice. Shroff KJ, et al. **BMJ** 1988 Nov 19;297(6659):1317–8

Self referral to accident and emergency department: patients' perceptions. Singh S. **BMJ** 1988 Nov 5;297(6657):1179–80

Consultation for physical illnesses by patients diagnosed and treated for psychiatric disorders by a general practitioner: 20 year follow up study. Wilkinson G, et al. **BMJ** 1988 Sep 24;297(6651):776–8

Clinical trials in cancer: the role of surrogate patients in defining what constitutes an ethically acceptable clinical experiment. Mackillop WJ, et al. **Br J Cancer** 1989 Mar; 59(3):388–95

Audit of medical response to antenatal booking history. Guthrie KA, et al. **Br J Obstet Gynaecol** 1989 May; 96(5):552–6

Reasons for patients' delay in response to symptoms of acute myocardial infarction. Wielgosz AT, et al. **Can Med Assoc J** 1988 Nov 1;139(9):853–7

Discovery of breast changes. Women's responses and nursing implications. Lierman LM. **Cancer Nurs** 1988 Dec; 11(6):352–61

Acceptance of maternal alpha-fetoprotein screening in Wilmington hospital's obstetrical clinic. Byrne-Essif K, et al. **Del Med J** 1988 Oct;60(10):569–71

Hypochondriasis and related disorders. Assessment and management of patients referred for a psychiatric opinion. House A. **Gen Hosp Psychiatry** 1989 May;11(3):156–65 (37 ref.)

Delayed presentation of patients with genital warts [letter] Coker DM, et al. **Genitourin Med** 1988 Aug;64(4):281

Changing elderly persons' attitudes toward mental health professionals. Woodruff JC, et al. **Gerontologist** 1988 Dec; 28(6):800–2

Acceptance of hospital-based respite care by families and elders. Gonyea JG, et al. **Health Soc Work** 1988 Summer; 13(3):201–8

Acceptability of the modified mucus method: study of the psychosocial factors affecting acceptance. Dorairaj K. **Int J Fertil** 1988;33 Suppl:78–86

Perception of nurses in expanded role. Olade RA. **Int J Nurs Stud** 1989;26(1):15–25

Comprehensive health seeking and coping paradigm. Nyamathi A. **J Adv Nurs** 1989 Apr;14(4):281–90 (52 ref.)

Motivations for treatment and outcomes of care. The relationship between motivation for seeking dental treatment and the evaluation of outcomes of care. Reisine S, et al. **J Am Coll Dent** 1989 Summer;56(2):19–25

The elderly lead in seeking treatment. The elderly are leading the increasing use of dental services during the second half of the 1980's. Waldman HB. **J Am Coll Dent** 1988 Summer; 55(2):36–42

Increased utilization of influenza and pneumococcal vaccines in an elderly hospitalized population. Bloom HG, et al. **J Am Geriatr Soc** 1988 Oct;36(10):897–901

Improving compliance for asthmatic patients visiting the emergency department using a health belief model intervention. Jones PK, et al. **J Asthma** 1987;24(4):199–206

Patients who seek a second opinion: are they different from the typical referral? Sutherland LR, et al. **J Clin Gastroenterol** 1989 Jun;11(3):308–13

The ex-dental clinic patient: what can we learn? Francis JL, et al. **J Dent Educ** 1989 Apr;53(4):244–5

Medical morbidity of the homeless. Shanks NJ. **J Epidemiol Community Health** 1988 Jun;42(2):183–6

Patient response to sigmoidoscopy recommendations via mailed reminders. Petravage J, et al. **J Fam Pract** 1988 Oct;27(4):387–9

Identification of factors associated with delayed antenatal care. Joseph CL. **J Natl Med Assoc** 1989 Jan;81(1):57–63

The help-seeking behavior of black Americans. A summary of findings from the National Survey of Black Americans. Neighbors HW. **J Natl Med Assoc** 1988 Sep;80(9):1009–12

Inappropriate use of casualty departments [letter] **J R Coll Gen Pract** 1988 Nov;38(316):519–20

Inappropriate use of casualty departments [letter] Horder E. **J R Coll Gen Pract** 1988 Aug;38(313):372

Study of the women overdue for a smear test in a general practice cervical screening programme. Meadows P. **J R Coll Gen Pract** 1987 Nov;37(304):500–3

Invitation to attend a health check in a general practice setting: comparison of attenders and non-attenders. Pill R, et al. **J R Coll Gen Pract** 1988 Feb;38(307):53–6

Invitation to attend a health check in a general practice setting: the views of a cohort of non-attenders. Pill R, et al. **J R Coll Gen Pract** 1988 Feb;38(307):57–60

Female incontinence: 'the Basingstoke project'. Bayliss V. **J R Soc Health** 1988 Dec;108(6):207–8

Naltrexone treatment—the problem of patient acceptance. Fram DH, et al. **J Subst Abuse Treat** 1989;6(2):119–22

Acceptance of HIV-antibody testing by persons seeking outpatient treatment for cocaine abuse. Weddington WW Jr, et al. **J Subst Abuse Treat** 1988;5(3):145–9

Assessment of MCH services in the district of Solenzo, Burkina Faso. II. Acceptability. Sauerborn R, et al. **J Trop Pediatr** 1989 Jun;35 Suppl 1:10–3

Factors influencing the time from onset of chest pain to arrival at hospital. Leitch JW, et al. **Med J Aust** 1989 Jan 2;150(1):6–10

Patient acceptance and cleansing effectiveness of Golytely for colon surgery. Herbst CA Jr, et al. **N C Med J** 1989 Feb;50(2):63–6

The prevalence of female urinary incontinence and reasons for not seeking treatment. Holst K, et al. **N Z Med J** 1988 Nov 9;101(857):756–8

Multiple daily insulin injections: a multicentre study on acceptability and efficacy. Houtzagers CM, et al. **Neth J Med** 1988 Aug;33(1–2):16–25

Magnetically evoked facial nerve potential. Windmill IM, et al. **Otolaryngol Head Neck Surg** 1989 Apr;100(4):345–7

Absconders from a rural health centre in Papua New Guinea. Buchanan A, et al. **P N G Med J** 1988 Sep;31(3):191–3

Early studies of mental health delivery systems. Phillips EL. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1129–30

Patient access and appointment systems. Allen D, et al. **Practitioner** 1988 Dec;232(1460):1380–2

Functional gut disorders and health care seeking behavior in an Italian non-patient population. Gaburri M, et al. **Recenti Prog Med** 1989 May;80(5):241–4

Nurse-midwives and obstetricians: alternative models of care and client "fit". Aaronson LS. **Res Nurs Health** 1987 Aug; 10(4):217–26

The pattern of attendance at general practice in the years before the diagnosis of cervical cancer. A case control study. Olesen F. **Scand J Prim Health Care** 1988 Nov; 6(4):199–203

Pregnant women's attitudes for accepting or declining a serum-alpha-fetoprotein test. Sandén ML, et al. **Scand J Soc Med** 1988;16(4):265–71

General practice attendance in women with psychosocial problems. Murray J, et al. **Soc Psychiatry Psychiatr Epidemiol** 1988 Jul;23(3):175–83

Psychological distress and the decision to seek medical care. Berkanovic E, et al. **Soc Sci Med** 1988;27(11):1215–21

A psychosocial perspective in the explanation of patients' drug-taking behavior. Ried LD, et al. **Soc Sci Med** 1988; 27(3):277–85

Are people willing and able to pay for health services? Yoder RA. **Soc Sci Med** 1989;29(1):35–42

Diagnosis. Gaarder KR. **South Med J** 1989 Sep;82(9):1153–4

Urban–rural difference in the acceptance of mass health examination in north-eastern Japan. Ikeda M, et al. **Tohoku J Exp Med** 1989 May;158(1):57–72

[Social acceptability of screening for HIV seropositivity in pregnant women. An inquiry in the Paris region] Moatti JP, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989; 18(4):437–43 (Eng. Abstr.) (Fre)

[Acceptability of vaccination against influenza] De Wals P, et al. **Rev Med Brux** 1989 Jan–Feb;10(1–2):49–52 (Eng. Abstr.) (Fre)

[What is acceptable—intervention in the nursing home? Critical considerations on a method] Kuhlmey J. **Z Arztl Fortbild (Jena)** 1988;82(17):833–5 (Ger)

[Need and consent for stomatologic treatment in elderly citizens. A comparative analysis of elderly persons in their own home and residents of retirement and nursing homes in the Hildburghausen district] Hofmann R, et al. **ZFA** 1989 Mar–Apr;44(2):67–71 (Eng. Abstr.) (Ger)

[Effectiveness, accuracy, and acceptability of breast self-examination as a breast cancer screening method] Ogawa H, et al. **Gan No Rinsho** 1989 Jan;35(2):195–201 (23 ref.) (Eng. Abstr.) (Jpn)

[Acceptability of hormonal contraceptives with a low steroid content] Dubnitskaia LV. **Akush Ginekol (Mosk)** 1988 Aug; (8):47–50 (Eng. Abstr.) (Rus)

[Oral hydration. Acceptance by the physician and the community] Mota-Hernández F, et al. **Gac Med Mex** 1988 Nov–Dec;124(11–12):441–3 (Spa)

[Relation of patients and students during clinical training. A study of the hospital activity of the surgical undergraduate] Díez Miralles M, et al. **Rev Clin Esp** 1988 Oct;183(5):273–7 (Eng. Abstr.) (Spa)

ETHNOLOGY

Attendance failure at Middlemore Hospital asthma clinic. McClellan VE, et al. **N Z Med J** 1989 May 10; 102(867):211–3

STATISTICS & NUMERICAL DATA

Factors associated with participation in a community senior health promotion program: a pilot study. Buchner DM, et al. **Am J Public Health** 1989 Jun;79(6):775–7

The acceptance and completion of mammography by older black women. Burack RC, et al. **Am J Public Health** 1989 Jun;79(6):721–6

Use of clinic versus private family planning care by low-income women: access, cost, and patient satisfaction. Radecki SE, et al. **Am J Public Health** 1989 Jun;79(6):692–7

Assessing glycaemic control in non-insulin dependent diabetes: acceptability of blood sampling at home. Tippetts A, et al. **BMJ** 1989 Feb 25;298(6672):497–8

Non-returning patients: a survey of inactive patients in a suburban practice. Merenstein JH, et al. **Fam Med** 1989 May–Jun;21(3):206–10

Determining provider choice for the treatment of mental disorder: the role of health and mental health status. Frank RG, et al. **Health Serv Res** 1989 Apr;24(1):83–103

Whom do mutual-help groups help? A typology of members. Young J, et al. **Hosp Community Psychiatry** 1988 Nov; 39(11):1178–82

Who is the family doctor? Relating primary care to family care. Murata PJ, et al. **J Fam Pract** 1989 Sep;29(3):299–304

Measuring patients' desire for autonomy: decision making and information-seeking preferences among medical patients. Ende J, et al. **J Gen Intern Med** 1989 Jan–Feb; 4(1):23–30

Help-seeking behavior, use, and satisfaction among frequent primary care users in Santiago de Chile. Scarpaci JL. **J Health Soc Behav** 1988 Sep;29(3):199–213

Factors associated with participation in an occupational program for colorectal cancer screening. Vernon SW, et al. **J Occup Med** 1989 May;31(5):458–63

Women's preferences for sex of doctor: a postal survey. Nichols S. **J R Coll Gen Pract** 1987 Dec;37(305):540–3

Maternal reasons for delayed prenatal care. Young C, et al. **Nurs Res** 1989 Jul–Aug;38(4):242–3

The outcome of public health nursing service in a preventive child health program: phase 1, health assessment. Oda DS, et al. **Public Health Nurs** 1988 Dec;5(4):209–13

Mothers' perceptions and use of community health services during the postpartum. Rovers R, et al. **Public Health Nurs** 1988 Dec;5(4):193–200

Use of obstetrical care compared among military and civilian families. Horton JA, et al. **Public Health Rep** 1989 May–Jun;104(3):309–10

Factors influencing early prenatal enrollment in the WIC program. Ku L. **Public Health Rep** 1989 May–Jun; 104(3):301–6

Correlates of participation in AIDS education and HIV antibody testing by methadone patients. Magura S, et al. **Public Health Rep** 1989 May–Jun;104(3):231–40

PATIENT ADMISSION

A comparison between patients admitted to psychiatric hospitals in Botswana and South Australia. Ben-Tovim DI, et al. **Acta Psychiatr Scand** 1988 Aug;78(2):222–6

Admission pattern and diagnostic stability of patients with functional psychoses in Denmark during a two-year observation period. Jørgensen P, et al. **Acta Psychiatr Scand** 1988 Sep;78(3):361–5

Psychiatric admissions of the elderly. Strömgren E. **Acta Psychiatr Scand Suppl** 1988;345:56–60

Admission surgery for the multiple trauma patient. Statistics from a Level I trauma center. Freeman MC, et al. **AORN J** 1989 Jul;50(1):31, 34–6, 38

Hospital resource consumption and outcome. Route of admission and age for hospitalized otolaryngology patients. Muñoz E, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jan;115(1):87–91

Children admitted to adult psychiatric hospitals [letter] Bornstein D, et al. **Aust N Z J Psychiatry** 1988 Sep; 22(3):235

Melbourne hospital causes AIDS furore [news] Swan N. **BMJ** 1989 Apr 1;298(6677):849

Impact of a policy of direct admission to a coronary care unit on use of thrombolytic treatment. Burns JM, et al. **Br Heart J** 1989 Apr;61(4):322–5

Psychiatric admission of mentally ill mothers with their infants. Stewart DE. **Can J Psychiatry** 1989 Feb;34(1):34–8

Diurnal variation in admission to hospital of women in labour. Fraser WD, et al. **Can J Surg** 1989 Jan;32(1):33–5

Analysis of secular trends in surgery for glue ear in the North Western Region (1975–1984). Friedman EH, et al. **Community Med** 1989 Feb;11(1):41–8

Mandatory HIV testing in hospitals. Beck RS. **Conn Med** 1989 Jul;53(7):433

Admitting cancer patients to the intensive care unit. Carlon GC. **Crit Care Clin** 1988 Jan;4(1):183–91 (38 ref.)

Recommendations for intensive care unit admission and discharge criteria [letter] Lockrem JD. **Crit Care Med** 1989 Jun;17(6):597–8

Psychiatric diagnoses of new admissions at Mathari Hospital: a prospective study. Aly OJ, et al. **East Afr Med J** 1988 May;65(5):292–6

The problem of readmission with respect to occupational factors. Course and predictive influences after 5 years. Blumenthal S, et al. **Eur Arch Psychiatry Neurol Sci** 1988 Sep;237(6):327–33

Relationship between preadmission threats and later violent behavior by acute psychiatric inpatients. McNiel DE, et al. **Hosp Community Psychiatry** 1989 Jun;40(6):605–8

Reasons for admission to an adolescent unit. Jaffa T, et al. **J Adolesc** 1989 Jun;12(2):187–95

Benefit from admission to a geriatric assessment and rehabilitation unit. Discrepancy between health professional and client perception of improvement. Caradoc-Davies TH, et al. **J Am Geriatr Soc** 1989 Jan; 37(1):25–8

Elderly patients admitted to the psychiatric unit of a general hospital. Conwell Y, et al. **J Am Geriatr Soc** 1989 Jan; 37(1):35–41

IQ as a prognostic indicator in adult psychiatric first-admissions. Greenwald DF, et al. **J Clin Psychol** 1989 Jan;45(1):37–50

A predictive instrument for acute ischemic heart disease to improve coronary care unit admission practices: a potential on-line tool in a computerized electrocardiograph. Selker HP, et al. **J Electrocardiol** 1988;21 Suppl:S11–7

Characteristics of elderly patients admitted for the first time to a psychiatric facility. Burke WJ, et al. **J Geriatr Psychiatry Neurol** 1988 Jul–Sep;1(3):159–62

Breath analysis and self-reports as measures of alcohol-related emergency room admissions. Cherpitel CJ. **J Stud Alcohol** 1989 Mar;50(2):155–61

Utilization strategies for intensive care units [letter] Franklin C. **JAMA** 1989 Sep 15;262(11):1467–8

Morning admission for a same-day surgical procedure: resolution of a blood bank problem. Moore SB, et al. **Mayo Clin Proc** 1989 Apr;64(4):406–8

Case mix and outcomes of nursing home patients. The importance of prior nursing home care and admission from home versus hospital. Lewis MA, et al. **Med Care** 1989 Apr;27(4):376–85

The place of routine urine testing on admission to hospital. Del Mar C, et al. **Med J Aust** 1989 Aug 7;151(3):151–3

Same-day admission and omission [editorial] Goldwyn RM. **Plast Reconstr Surg** 1988 Nov;82(5):886–7

Postoperative complications in same day admission surgery. Llewellyn J, et al. **QRB** 1989 Feb;15(2):49–53

Identifying factors associated with health care use: a hospital-based risk screening index. Evans RL, et al. **Soc Sci Med** 1988;27(9):947–54

Preadmission screening: an efficacy study. Berkman B, et al. **Soc Work Health Care** 1988;13(3):35–50

Evaluating screening and early intervention: a puzzle with many pieces. Coulton CJ. **Soc Work Health Care** 1988; 13(3):65–72

Findings and implications from preadmission screening of elderly patients waiting for elective surgery. Reardon GT, et al. **Soc Work Health Care** 1988;13(3):51–63

[Emergency referrals and admissions to the Copenhagen County Hospital, Nordvang. An analysis of a 6-month period] Aggernaes H, et al. **Ugeskr Laeger** 1988 Sep 26; 150(39):2338–43 (Eng. Abstr.) (Dan)

[Admissions of persons aged 17–49 years to non-psychiatric departments] Fink P. **Ugeskr Laeger** 1989 Jan 30; 151(5):307–10 (Eng. Abstr.) (Dan)

[Prehospital treatment (editorial)] Hagelsten JO. **Ugeskr Laeger** 1989 Jul 17;151(29):1855–6 (Dan)

[The time interval before hospitalization in acute myocardial infarction] Høegholm A, et al. **Ugeskr Laeger** 1989 Jul 17; 151(29):1861–4 (Eng. Abstr.) (Dan)

[Admissions and bed occupancy at the hospital before and after the beginning of budgeting; a dance of billions] Hoogendoorn D. **Ned Tijdschr Geneeskd** 1989 Jan 28; 133(4):156–61 (Eng. Abstr.) (Dut)

[Admission and bed occupancy at hospitals before and following budgeting; a dance of billions (letter)] van Engelen H. **Ned Tijdschr Geneeskd** 1989 Apr 8; 133(14):744–5 (Dut)

[The value of routine thoracic radiography at the time of admission at a psychogeriatric department] Duvoisin B, et al. **Rev Med Suisse Romande** 1988 Nov;108(11):957–9 (Fre)

[The function of a community hospital: justification and illustration] Söderström D. **Rev Med Suisse Romande** 1988 Oct;108(10):839–42 (Fre)

[Ileus: immediate patient admission. Paralytic and mechanical ileus— symptoms, diagnosis, therapy] Waninger J. **Fortschr Med** 1988 Aug 30;106(25):18–9 (Ger)

[Seasonally-related inpatient admission of affective patients] Wenzel R, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Mar;41(3):151–6 (Eng. Abstr.) (Ger)

[2 to 3 years following inpatient crisis intervention: further inpatient treatment, present adjustment and subjective assessment of the index treatment in retrospect] Kolitzus H, et al. **Psychiatr Prax** 1989 Mar;16(2):71–7 (Eng. Abstr.) (Ger)

[The psychosocial position of internal medicine patients following admission to the hospital—an empirical study] Schmeling-Kludas C, et al. **Psychother Psychosom Med Psychol** 1989 Feb;39(2):75–83 (Eng. Abstr.) (Ger)

[Application for admission to a nursing home—personal motives and possibilities for medical intervention] Pohrt U, et al. **Z Arztl Fortbild (Jena)** 1989;83(8):409–10 (Ger)

[Hospitalization policy following minor head injuries] Burg Z, et al. **Harefuah** 1989 Mar 1;116(5):247–9 (Eng. Abstr.) (Heb)

[Organization of the admission of dental patients at an orthodontics department] Filippov GP, et al. **Stomatologiia (Mosk)** 1989 Jan–Feb;68(1):85 (Rus)

[Detection of adverse reactions to drugs from the hospital admission diagnosis. Method and results] Armadans L, et al. **Med Clin (Barc)** 1988 Jun 18;91(4):124–7 (Eng. Abstr.) (Spa)

[Care in an emergency service: justification of the visits and reasons for the admissions] Muiño Miguez A, et al. **Rev Clin Esp** 1988 Apr;182(7):374–8 (Spa)

ECONOMICS

Caring for out-of-province patients [letter] Silver MD. **Can Med Assoc J** 1989 Mar 1;140(5):494

One hospital's dilemma [editorial] Reppun JI. **Hawaii Med J** 1988 Jul;47(7):315–6

Psychiatric emergency room dispositions of HMO enrollees [published erratum appears in Hosp Community Psychiatry 1989 Aug;4(8):835] Olfson M. **Hosp Community Psychiatry** 1989 Jun;40(6):639–41

Revenues per admission rise for all specialties. Koska MT. **Hospitals** 1988 Nov 20;62(22):74

Preadmission screening of Medicare patients [letter] **JAMA** 1988 Nov 18;260(19):2833–4

Admission MedisGroups score and the cost of hospitalizations. Iezzoni LI, et al. **Med Care** 1988 Nov; 26(11):1068–80

And is it necessary? [news] **Minn Med** 1988 Dec;71(12):783

Financial viability of in-patient admissions from rural oncology outreach clinics. Guy JF, et al. **Prog Clin Biol Res** 1988;278:219–25

[Ambulatory and inpatient costs for diagnosis and therapy of one AIDS patient at the Frankfurt University Clinic, with special reference to the increasing social problem, including social welfare from the time of diagnosis to death] Exner-Freisfeld H, et al. **Off Gesundheitswes** 1989 Jan; 51(1):12–6 (Eng. Abstr.) (Ger)

LEGISLATION & JURISPRUDENCE

The impact of nursing home admission agreements on resident autonomy. Ambrogi DM, et al. **Gerontologist** 1988 Jun;28 Suppl:82–9

New nursing home law creates confusion. **Wis Med J** 1989 Apr;88(4):44

[Report of experiences with a model for the assessment of long-term inpatient psychiatric cases in a large city by the appointed public health service—the Berlin model for long-term psychiatric patients] Lieske V. **Off Gesundheitswes** 1988 Jul;50(7):389–91 (Eng. Abstr.) (Ger)

ORGANIZATION & ADMINISTRATION

Logistics of a university interventional radiology practice. White RI Jr, et al. **Radiology** 1989 Mar;170(3 Pt 2):951–4

STANDARDS

ECMO: regional evaluation of need and applicability of

selection criteria. Cole CH, et al. **Am J Dis Child** 1988 Dec;142(12):1320–4

STATISTICS & NUMERICAL DATA

Changes in admissions, lengths of stay, and discharge diagnoses at a major university–affiliated teaching hospital: implications for medical education. Rosevear GC, et al. **Acad Med** 1989 May;64(5):253–8

Respiratory disease associated with community air pollution and a steel mill, Utah Valley. Pope CA 3d. **Am J Public Health** 1989 May;79(5):623–8

Much data but limited information in the NHS. MacFaul R. **Arch Dis Child** 1988 Oct;63(10):1276–80

Ob/gyns top other specialties in admissions. Koska MT. **Hospitals** 1988 Nov 5;62(21):106–7

End of an experiment: report from an inner city community hospital. Victor CR. **J R Coll Gen Pract** 1988 Sep; 38(314):407–10

Admissions, patterns of utilization and disposition of cases of acute stroke in Brisbane hospitals. Shah SK, et al. **Med J Aust** 1989 Mar 6;150(5):256–60

A peer review of a peer review organization. Dippe SE, et al. **West J Med** 1989 Jul;151(1):93–6

TRENDS

Psychiatry in the community [letter] Greenwood J. **Aust N Z J Psychiatry** 1989 Jun;23(2):163–4

A survey of patients in a regional geriatric psychiatry inpatient unit. Harrison AW, et al. **Aust N Z J Psychiatry** 1988 Dec;22(4):412–7

Trends in paediatric medical admissions [letter] Forfar JO. **BMJ** 1989 Jun 24;298(6689):1711

Trends in paediatric medical admissions. Hill AM. **BMJ** 1989 Jun 3;298(6686):1479–83

Changing pattern of admissions and operations for duodenal ulcer. Bardhan KD, et al. **Br J Surg** 1989 Mar;76(3):230–6

Length of stay, short stay units and psychiatric emergency admissions. Baker B, et al. **Can J Psychiatry** 1989 Feb; 34(1):39–42

Demographic and socio–economic patterns among new admissions to Mathari Mental Hospital, Nairobi. Aly OJ, et al. **East Afr Med J** 1988 May;65(5):325–9 (14 ref.)

Why are hospital admissions of children with acute asthma increasing? Mitchell EA, et al. **Eur Respir J** 1989 May; 2(5):470–2 (33 ref.)

Projecting inpatient admissions to state facilities in the 1990s. Fisher WH, et al. **Hosp Community Psychiatry** 1989 Jul; 40(7):747–9

Admission to general hospital psychiatric wards in Italy. 1. A comparison between two catchment areas with differing provision of outpatient care. de Girolamo G, et al. **Int J Soc Psychiatry** 1988 Winter;34(4):248–57

Admission to general hospital psychiatric wards in Italy. 2. Inpatient characteristics. de Girolamo G, et al. **Int J Soc Psychiatry** 1988 Winter;34(4):258–66

Comparison of trends in admissions and discharges in two adjacent hospitals for the mentally handicapped. Rao JM. **J Ment Defic Res** 1988 Aug;32 (Pt 4):301–7

The emergency bed service—a barometer of London's hospital service. Evans BG. **J R Coll Gen Pract** 1987 Nov; 37(304):491–3

Children admitted to a general intensive care unit. Dawson KP, et al. **N Z Med J** 1989 Feb 22;102(862):75–6

Improved primary care does not prevent the admission of children to hospital. Durojaiye LI, et al. **Public Health** 1989 May;103(3):181–8

Mental hospital admission rates of immigrants to England: a comparison of 1971 and 1981. Cochrane R, et al. **Soc Psychiatry Psychiatr Epidemiol** 1989 Jan;24(1):2–11

The pattern of psychiatric admissions of Caribbean–born immigrants in London. Glover GR. **Soc Psychiatry Psychiatr Epidemiol** 1989 Jan;24(1):49–56

Patterns and correlates of psychiatric hospitalization in a nationwide sample. I. Patterns of hospitalization with special reference to the "new chronic" patients. Lerner Y, et al. **Soc Psychiatry Psychiatr Epidemiol** 1989 May; 24(3):121–6

Neonatal intensive care admissions: changing profile in Georgia, 1974 to 1982. Floyd RL, et al. **South Med J** 1989 Jul;82(7):880–4

[Angiology and vascular surgery in Catalonia] Matas Docampo M. **Angiologia** 1989 Mar–Apr;41(2):78–81 **(Spa)**

UTILIZATION

Effects of a psychiatrists' strike on emergency psychiatric referral and admissions. Schlosberg A, et al. **Soc Psychiatry Psychiatr Epidemiol** 1989 Mar;24(2):84–7

PATIENT ADVOCACY

Adolescent privacy and health care [editorial] Siwek J. **Am Fam Physician** 1989 May;39(5):121

Advocacy for the mentally impaired elderly: a case study analysis. Kayser–Jones J, et al. **Am J Law Med** 1989; 14(4):353–76

Equal opportunities: protecting the rights of AIDS–linked children in the classroom. MacFarlane MA. **Am J Law Med** 1989;14(4):377–430

Constitutional protection of confessions made by mentally retarded defendants. Praiss DM. **Am J Law Med** 1989; 14(4):431–65

Miss Alice and me: a lesson learned [letter] Hurich B. **Am J Med** 1989 Aug;87(2):244–5

Understanding the benefits and burdens of tube feedings [editorial] Lo B, et al. **Arch Intern Med** 1989 Sep; 149(9):1925–6

Representation and role separation in the disability movement: should researchers be advocates? Batavia AI. **Arch Phys Med Rehabil** 1989 Apr;70(4):345–8

Protecting the patient [letter] McKay B. **Aust Fam Physician** 1989 Mar;18(3):195, 197

Ethics and bioethics. Flax HJ. **Bol Asoc Med P R** 1989 Mar; 81(3):103–5

Life–sustaining treatment for patients with AIDS. Wachter RM, et al. **Chest** 1989 Mar;95(3):647–52 (57 ref.)

Withholding and withdrawing treatments: ethics at the bedside. Pellegrino ED. **Clin Neurosurg** 1989;35:164–84

Philosophical, ethical, and legal aspects of resuscitation medicine. II. Recognizing the tragic choice: food, water, and the right to assisted suicide. Schaffner KF. **Crit Care Med** 1988 Oct;16(10):1063–8

What physicians can do regarding decisions about life support [published erratum appears in Del Med J 1989 Apr;61(4):251] Raskin D. **Del Med J** 1989 Mar;61(3):169–70

A bill of rights [editorial] Robbins DC. **Diabetes Care** 1989 May;12(5):371

Preterm labor and prenatal harm. **Hastings Cent Rep** 1989 Mar–Apr;19(2):32; discussion 32–4

Ethics committees. The limits of moral objectivity. Jennings B. **Hastings Cent Rep** 1989 Jan–Feb;19(1):19–20

Physician payment reform: don't forget the patient. Sammons JH. **Health Aff (Millwood)** 1989 Spring;8(1):132–7

Patient access to general practice medical records. Melville AW. **Health Bull (Edinb)** 1989 Jan;47(1):5–8

Love, medicine, and money: issues of access, use, and advocacy [letter] Reynolds JJ. **Health Soc Work** 1989 Feb; 14(1):6–7

Social advocacy. Fowler MD. **Heart Lung** 1989 Jan; 18(1):97–9

In Nigeria: views and notions of patients attending some selected hospitals. Fawole JO. **Hygie** 1988 Jun;7(2):35–8

Patient/client advocates [editorial] Clarke M. **J Adv Nurs** 1989 Jul;14(7):513–4

The severely demented, minimally functional patient: an ethical analysis. Arras JD. **J Am Geriatr Soc** 1988 Oct; 36(10):938–44

How should we treat third parties? [letter] Kalis CC. **J Am Geriatr Soc** 1989 Mar;37(3):286–7

Conflicts of interest in medical decision–making. Lynn J. **J Am Geriatr Soc** 1988 Oct;36(10):945–50

Patient interests: clinical implications of philosophical distinctions. Wikler D. **J Am Geriatr Soc** 1988 Oct; 36(10):951–8

The right to effective behavioral treatment: an editorial view. Bailey JS. **J Appl Behav Anal** 1988 Winter;21(4):325–6

The right to effective behavioral treatment. Van Houten R, et al. **J Appl Behav Anal** 1988 Winter;21(4):381–4

Teen Advocate Program: a unique assessment of case management. Guidry J, et al. **J La State Med Soc** 1989 Aug;141(8):37–40

To tell or not to tell the diagnosis of schizophrenia. Atkinson JM. **J Med Ethics** 1989 Mar;15(1):21–4

The autonomy of demented patients: interviews with caregivers. Ekman SL, et al. **J Med Ethics** 1988 Dec; 14(4):184–7

Ethics of cancer management from the patient's perspective. Jolley MG. **J Med Ethics** 1988 Dec;14(4):188–90

Cancer and AIDS groups push for changes in drug approval process [news] Anderson LF. **J Natl Cancer Inst** 1989 Jun 7;81(11):829–31

Race and diagnostic related group prospective hospital payment for medical patients. Muñoz E, et al. **J Natl Med Assoc** 1989 Aug;81(8):844–8

Developing Do Not Resuscitate policies. Sharp JQ, et al. **J Nurs Adm** 1989 Apr;19(4):25–9

Put the patients back [editorial] Johnson MR. **J Okla State Med Assoc** 1989 Feb;82(2):57

Withholding nutrition from newborn infants [letter] Lantos J. **J Pediatr** 1989 Jan;114(1):165–6

Human rights and the omission or cessation of treatment for infants. Goldworth A. **J Perinatol** 1989 Mar;9(1):79–82

Patient access to psychiatric records: the patients' view. Parrott J, et al. **J R Soc Med** 1988 Sep;81(9):520–2

Maternal brain death during pregnancy [letter; comment] **JAMA** 1989 Mar 24–31;261(12):1728–9. **Comment on:** JAMA 1988 Aug 12;260(6):816–22

Decisions to limit care [letter] Kramer DJ. **JAMA** 1989 Feb 3;261(5):698

Need for a patient advocate. Moore C. **JAMA** 1989 Jul 14; 262(2):259–60

On patients' rights. Warren RD. **Kans Med** 1989 May; 90(5):126

Patients' rights and clinical research [letter] **Lancet** 1988 Dec 10;2(8624):1370–1

NHS white–paper [letter] **Lancet** 1989 Mar 11;1(8637):558–9

Danish experience of statutory right of patients to access hospital records [letter] Andersen T, et al. **Lancet** 1988 Dec 17;2(8625):1428

Sterilisation and mental handicap. Brahams D. **Lancet** 1988 Dec 10;2(8624):1377–8

Obstetric protest [letter; comment] Corbishley H. **Lancet** 1989 Jul 15;2(8655):162. **Comment on:** Lancet 1989 Jun 10;1(8650):1303–4

Cape crusaders [letter] Dent DM, et al. **Lancet** 1989 Sep 30; 2(8666):806

CSF in neonatal unit [letter] Hetherington J. **Lancet** 1989 Sep 9;2(8663):632

A patient voice at the General Medical Council [letter] Pratten B. **Lancet** 1989 Jan 21;1(8630):163

New technologies and patient choice. A lesson from the chymopapain experience. Brushwood DB, et al. **Med Law** 1988;7(3):211–8 (33 ref.)

The ombudsman as a protector of fundamental personal rights. Milton C. **Med Law** 1989;7(5):545–50

Patients' rights in a Third World southern African country, with special reference to Bophuthatswana: is there any potential for privatisation? Nathan C. **Med Law** 1989; 7(6):585–93

Practice what you preach! Poston LM. **Minn Med** 1989 Mar; 72(3):163

The bitter pill—rationing. Singleton MA. **Mo Med** 1989 Sep; 86(9):613–4

AIDS: the duty to treat. A patient advocate's perspective. Dunne RD. **Mt Sinai J Med** 1989 May;56(3):252–3

Your patient advocate is at the beach. Weaver JP. **N C Med J** 1989 Apr;50(4):216–7

Barriers between patients and their medical records [letter] Kaufman JL. **N Engl J Med** 1988 Dec 22;319(25):1672

Empty lifeboat [letter] **N Y State J Med** 1989 Feb;89(2):95–6

Blood: whose choice and whose conscience? Dixon JL. **N Y State J Med** 1988 Sep;88(9):463–4

Jehovah's Witnesses and the right to refuse blood. Findley LJ, et al. **N Y State J Med** 1988 Sep;88(9):464–5

The living will: does it protect the rights of the terminally ill? Rizzo RF. **N Y State J Med** 1989 Feb;89(2):72–9

Jehovah's Witnesses and the transfusion of blood products. Vercillo AP, et al. **N Y State J Med** 1988 Sep;88(9):493–4

Paid fund raisers as advocates for seriously ill children [letter] Ridgway D. **N Z Med J** 1989 Jun 28;102(870):324

AIDS conference: uncertain start in Montreal [news] Ezzell C. **Nature** 1989 Jun 8;339(6224):410

Clinical subjectivity. Advocacy with silent patients. Gadow S. **Nurs Clin North Am** 1989 Jun;24(2):535–41

Spiritual care, ethical choices, and patient advocacy. Salladay SA, et al. **Nurs Clin North Am** 1989 Jun;24(2):543–9

UCR: a different definition. Baumgartner DA Jr. **Ohio Med** 1988 Aug;84(8):601–4

When parents demand treatment. Leikin S. **Pediatr Ann** 1989 Apr;18(4):266–8

The HMO pediatrician as patient advocate. Moreno JD. **Pediatr Ann** 1989 Apr;18(4):269–71

Better care—more hostility [editorial] Goldwyn RM. **Plast Reconstr Surg** 1989 May;83(5):884–5

How to deal with a complaint. Bahrami J. **Practitioner** 1988 May 23;232(1449):622–3

Patients' access to their medical records [editorial] Dean A. **Practitioner** 1988 Jul;232(1452):763–4

The duty to treat patients with AIDS. Jonsen AR. **State Art Rev Occup Med** 1989;4 Suppl:31–4

Delegates approve protocol for third–party telephone review. Dickey NW. **Tex Med** 1989 Aug;85(8):60–1

The fetus as patient [editorial] Mahoney MJ. **West J Med** 1989 Apr;150(4):459–60

Ethical issues in nursing research. Davis AJ. **West J Nurs Res** 1989 Jun;11(3):379–81

AMA policy on treating AIDS patients. **Wis Med J** 1989 Jul;88(7):163

[Access to psychiatric and child psychiatric case records in the Copenhagen County Hospital in Nordvang in 1987] Svendsen AB, et al. **Ugeskr Laeger** 1989 May 29; 151(22):1389–92 (Eng. Abstr.) **(Dan)**

[Testing for HIV infection in cardiology (letter)] **Ned Tijdschr Geneeskd** 1988 Oct 15;132(42):1946–7 **(Dut)**

[Testing for HIV infection in cardiology] Roscam Abbing HD. **Ned Tijdschr Geneeskd** 1988 Sep 10;132(37):1707–8 **(Dut)**

[The physician–patient relation as seen by a specialist: "Am I my brother's keeper?"] Wagener DJ. **Ned Tijdschr Geneeskd** 1988 Oct 22;132(43):1984–8 **(Dut)**

[Patients' rights, being the fourth third of phlebology therapy. Tribute to Glauco Bassi] Tessari L. **Phlebologie** 1989 Apr–Jun;42(2):201–9 (Eng. Abstr.) **(Fre)**

[82d meeting of the Japanese Society of Psychiatry and Neurology. 21–23 May 1986, Morioka] **Seishin Shinkeigaku Zasshi** 1986;88(12):981–1051 **(Jpn)**

[A case of schizophrenia with paternalistic intervention] Kumakura N. **Seishin Shinkeigaku Zasshi** 1989;91(2):73–83 **(Jpn)**

[Human rights of psychiatric patients] Terashima S. **Seishin Shinkeigaku Zasshi** 1986;88(12):1011–27 (103 ref.) **(Jpn)**

[Complaints from cancer patients. Complaints and ways of complaining] Melsom H, et al. **Tidsskr Nor Laegeforen** 1989 Jan 30;109(3):365–7 **(Nor)**

[Truth and the patient] Monge MA. **Rev Med Univ Navarra** 1988 Jul–Sep;32(3):171–5 **(Spa)**

[Physician as patient's ombudsman: a way to increase quality of care] Kaiser PO. **Lakartidningen** 1988 Oct 12; 85(41):3359–60 **(Swe)**

[A patient was not correctly informed about cancer. A correct decision by the Responsibility Board—but was the explanation sufficient?] Lynöe N. **Lakartidningen** 1989 May

24;86(21):1978 (Swe)

ECONOMICS

Enforcing informed consent requirements: form or substance? [editorial] Faden RR. **JAMA** 1989 Apr 7;261(13):1948–9
Enforcing patient preferences. Linking payment for medical care to informed consent. Kapp MB. **JAMA** 1989 Apr 7; 261(13):1935–8 (23 ref.)
The right of a patient with a facial movement disorder to have treatment for wrinkles [letter] Gruber I. **Plast Reconstr Surg** 1989 Jun;83(6):1076

LEGISLATION & JURISPRUDENCE

Rights of deaf hospital patients [editorial] **Am Ann Deaf** 1988 Oct;133(4):253
AIDS—Medicaid coverage of AZT—Weaver v. Reagan. **Am J Law Med** 1989;15(1):132–3
From Rogers to Rivers: the rights of the mentally ill to refuse medication. Clayton EW. **Am J Law Med** 1987;13(1):7–52 (201 ref.)
Consciousness: the most critical moral (constitutional) standard for human personhood. Cranford RE, et al. **Am J Law Med** 1987;13(2–3):233–48
Baby Doe, Congress and the states: challenging the federal treatment standard for impaired infants. Newman SA. **Am J Law Med** 1989;15(1):1–60
Judicial determination of the sexual identity of post-operative transsexuals: a new form of sex discrimination. Taitz J. **Am J Law Med** 1987;13(1):53–69 (108 ref.)
Asserting scientific authority. Cognitive development and adolescent legal rights. Gardner W, et al. **Am Psychol** 1989 Jun;44(6):895–902
The impact of the right to refuse treatment in a forensic patient population: six-month review. Miller RD, et al. **Bull Am Acad Psychiatry Law** 1989;17(2):107–19
Relationships between legal and clinical factors among forensic hospital patients. Rodenhauser P, et al. **Bull Am Acad Psychiatry Law** 1988;16(4):321–32
Regional Review Board: patient's right to withdraw? [letter] Manchanda R, et al. **Can J Psychiatry** 1989 Aug; 34(6):628–9
CLAO, contact lens reclassification and the FDA: who is the patient's advocate? Cavanagh HD. **CLAO J** 1988 Jul–Sep;14(3):120, 122
Protection and advocacy for the mentally ill: new hope for emotionally disturbed children? Petr C, et al. **Community Ment Health J** 1989 Summer;25(2):156–63
AIDS patient's bias claim dismissed. **Conn Med** 1989 Apr; 53(4):215
Ethical issues involved in the growing AIDS crisis. Council on Ethical and Judicial Affairs. **Conn Med** 1988 Jul; 52(7):427–8
Reflections on the withdrawal of treatment from newborn infants. Richards MP. **Early Hum Dev** 1989 Feb; 18(4):263–72
What determines ownership of a cell line? Kelly EH. **FASEB J** 1989 Mar;3(5):1581–2
Dementia, mental retardation, and competency to make decisions. Kaplan KH, et al. **Gen Hosp Psychiatry** 1988 Nov;10(6):385–8
AIDS, judges, and the right to medical care. Annas GJ. **Hastings Cent Rep** 1988 Aug–Sep;18(4):20–2
Precatory prediction and mindless mimicry: the case of Mary O'Connor. Annas GJ. **Hastings Cent Rep** 1988 Dec; 18(6):31–3
State interests in terminating medical treatment. Blake DC. **Hastings Cent Rep** 1989 May–Jun;19(3):5–13 (25 ref.)
Nonvalidated therapies and HIV disease. McGill/Boston Research Group. Freedman B. **Hastings Cent Rep** 1989 May–Jun;19(3):14–20
HIV-infected physicians and the practice of seriously invasive procedures. Gostin L. **Hastings Cent Rep** 1989 Jan–Feb;19(1):32–9
Who owns the patient? [editorial] Billue JS. **Heart Lung** 1989 Sep;18(5):530–2
Titicut Follies: patients' rights and institutional reform. Appelbaum PS. **Hosp Community Psychiatry** 1989 Jul; 40(7):679–80
A comparison of clinical and judicial procedures for reviewing requests for involuntary medication in New York. Cournos F, et al. **Hosp Community Psychiatry** 1988 Aug;39(8):851–5
Involuntary medication and the case of Joyce Brown. Cournos F. **Hosp Community Psychiatry** 1989 Jul; 40(7):736–40
Autonomy and the right to refuse treatment: patients' attitudes after involuntary medication. Schwartz HI, et al. **Hosp Community Psychiatry** 1988 Oct;39(10):1049–54
Hypnotists' associations: a consumer's confusion. Getzlaf SB, et al. **Int J Clin Exp Hypn** 1988 Oct;36(4):262–74
Clinical decision-making in catastrophic situations: the relevance of age. Report of a conference convened by the American Geriatrics Society, April 17–18, 1987. Barondess JA, et al. **J Am Geriatr Soc** 1988 Oct;36(10):919–37 (39 ref.)
Training self-advocacy skills to adults with mild handicaps. Sievert AL, et al. **J Appl Behav Anal** 1988 Fall; 21(3):299–309
The evolving right to treat without consent. Freishtat HW. **J Clin Psychopharmacol** 1988 Aug;8(4):287–9
The presence of counsel at forensic psychiatric examinations. Rachlin S, et al. **J Forensic Sci** 1988 Jul;33(4):1008–14
AIDS and the physician's duty to treat. Geraghty D. **J Leg Med** 1989 Mar;10(1):47–58
Court-ordered cesarean sections. A judicial standard for resolving the conflict between fetal interests and maternal rights. Noble-Allgire AM. **J Leg Med** 1989 Mar; 10(1):211–49 (221 ref.)
Recognizing property interests in bodily tissues. A need for legislative guidance. Parker PM. **J Leg Med** 1989 Jun; 10(2):357–75
The nurse's use of restraint with a neurologically impaired patient. Yorker BC. **J Neurosci Nurs** 1988 Dec;20(6):390–2 (11 ref.)
Patient access to experimental therapy. Delaney M. **JAMA** 1989 Apr 28;261(16):2444, 2447
Right to know in Japan. Brahams D. **Lancet** 1989 Jul 15; 2(8655):173
Court of appeal endorses medical decision to allow baby to die. Brahams D. **Lancet** 1989 Apr 29;1(8644):969–70
Sterilisation of a mentally incapable woman. Brahams D. **Lancet** 1989 Jun 3;1(8649):1275–6
Sterilisation of mentally handicapped woman approved by House of Lords. Brahams D. **Lancet** 1989 May 13; 1(8646):1089
Legal power to sterilise incompetent women. Brahams D. **Lancet** 1989 Apr 15;1(8642):854–5
Beyond the right to life—the right to health. Camissa SM, et al. **Leg Med** 1987;:179–99 (140 ref.)
Euthanasia: where are we? Where are we going? Fish MS. **Leg Med** 1987;:200–12
Planning for medical decision making: living wills and durable powers of attorney. Hoffman DE. **Md Med J** 1989 Feb;38(2):154–8
The Medical Treatment Act. Andrews K. **Med J Aust** 1989 Jan 2;150(1):31–3
The ethics of statutory coercion in the treatment of chemical substance abuse/dependence (addiction). de Miranda S. **Med Law** 1989;7(5):427–32
The right not to be treated or to refuse treatment. Deutsch E. **Med Law** 1989;7(5):433–8
Advance directives and the refusal of treatment. Hackler C. **Med Law** 1989;7(5):457–65
Unreasonable refusal of medical treatment. Levi J. **Med Law** 1988;7(3):303–4
Informed consent: patient rights and the doctor's duty of disclosure in South Africa. van Oosten FF. **Med Law** 1989; 7(5):443–56
AAMR legislative and social goals: 1988–1989. **Ment Retard** 1988 Aug;26(4):231–8
Protecting adults with mental retardation: a model statute. Furey EM, et al. **Ment Retard** 1989 Jun;27(3):135–40
The role of the AAMR in the aversives controversy [editorial] Schroeder SR, et al. **Ment Retard** 1989 Jun; 27(3):iii–v
Conquest of mental retardation. Walker VS. **Ment Retard** 1988 Oct;26(5):251–5
The constitutional right to health care. Denial in the court. Curran WJ. **N Engl J Med** 1989 Mar 23;320(12):788–9
The right to health care [letter] Kaye NS. **N Engl J Med** 1989 Sep 7;321(10):693
Conflicts between patients' wishes to forgo treatment and the policies of health care facilities. Miles SH, et al. **N Engl J Med** 1989 Jul 6;321(1):48–50
Fetal therapy and surgery. Fetal rights versus maternal obligations. Rosner F, et al. **N Y State J Med** 1989 Feb; 89(2):80–4
Balancing legal realities: the courts, the legislature, and public psychiatry. Treffert DA. **New Dir Ment Health Serv** 1989 Summer;(42):63–74 (22 ref.)
Ethical issues in the care of newborn infants. Weil WD Jr. **Pediatr Rev** 1987 Sep;9(3):89–94 (0 ref.)
The institutionalized mental health patient's right to refuse psychotropic medication. Feather RB. **Perspect Psychiatr Care** 1985;23(2):45–68 (54 ref.)
Parens patriae considerations in the commitment process. Bursztajn H, et al. **Psychiatr Q** 1988 Fall;59(3):165–81
The right to refuse treatment: an uncertain future. Leong GB, et al. **Psychiatr Q** 1988 Winter;59(4):284–92
Litigating a right to treatment: Woe is me. Rachlin S. **Psychiatr Q** 1988 Fall;59(3):182–92
[A historical scandal (letter)] Bender J. **Ned Tijdschr Geneeskd** 1988 Aug 20;132(34):1594–5 (Dut)
[The legal status of voluntarily admitted psychiatric patients (published erratum appears in Ned Tijdschr Geneeskd 1988 Dec 24;132(52):2392)] Legemaate J. **Ned Tijdschr Geneeskd** 1988 Nov 19;132(47):2167–70 (Dut)
[The legal position of the voluntarily admitted psychiatric patient] Stolk PJ. **Ned Tijdschr Geneeskd** 1988 Nov 19; 132(47):2139–41 (Dut)
[Timeliness of making obligatory to private or public hospital establishments the issuance to patients on their demand of a resume of their medical case including surgical reports and reports on anatomo-pathological examinations and treatment received] Lortat-Jacob JL. **Bull Acad Natl Med (Paris)** 1988 Nov;172(8):1107–13 (Fre)
["Drug screening" without the patient's knowledge] Rieger HJ. **Dtsch Med Wochenschr** 1988 Sep 23;113(38):1492 (Ger)
[References and recommendations on HIV infection. A contribution by the current Committee of Physicians of the European Association] **Internist (Berlin)** 1988 Dec; 29(12):155–6 (Ger)
[Legal means of citizens against decisions in the area of health and social processes] Gürtler R, et al. **Z Arztl Fortbild (Jena)** 1988;82(9):421–3 (Ger)

STANDARDS

True charity and professional life: a patient advocacy program. Hiatt RL Sr, et al. **J Pediatr Ophthalmol Strabismus** 1988 Sep–Oct; 25(5):249–53
The rights of the patient in clinical research. Herxheimer A. **Lancet** 1988 Nov 12;2(8620):1128–30

TRENDS

Future trends in the legal rights of patients in nursing homes. Hoffman BF. **Can Med Assoc J** 1989 Jul 1;141(1):21–5 (14 ref.)
A citizens' coalition in mental health advocacy: the Maryland experience. Cromwell HS Jr, et al. **Hosp Community Psychiatry** 1988 Sep;39(9):959–62
Organ donation [letter] Jensen DM. **Med J Aust** 1988 Dec 5–19;149(11–12):722–3

PATIENT APPOINTMENTS see **APPOINTMENTS AND SCHEDULES**

PATIENT CARE PLANNING

see related
AFTER CARE
CONSUMER PARTICIPATION

Case managers: guiding the elderly through the health care maze. Parker M, et al. **Am J Nurs** 1988 Dec;88(12):1674–6
Treatment of a dental deep bite in a patient with vertical excess and excessive gingival display. Casko JS, et al. **Am J Orthod Dentofacial Orthop** 1989 Jul;96(1):1–7
A computer system for the interactive planning and prediction of maxillofacial surgery. Moss JP, et al. **Am J Orthod Dentofacial Orthop** 1988 Dec;94(6):469–75
Case report. Presence of fibrous dysplasia affects the treatment approach for a 28-year old female patient. Joondeph DR. **Angle Orthod** 1989 Spring;59(1):65–8
Patient contracting. Boehm S. **Annu Rev Nurs Res** 1989; 7:143–53 (26 ref.)
Malignant hyperthermia. Potential crisis in patient care. Wlody GS. **AORN J** 1989 Aug;50(2):286–7, 289–93, 295 passim (31 ref.)
Doing well with AIDS: three case illustrations. Kendall J, et al. **Arch Psychiatr Nurs** 1989 Jun;3(3):159–65
The restoration of endodontically treated teeth. Part 1. Treatment planning and restorative principles. Hunter A, et al. **Aust Dent J** 1988 Dec;33(6):481–90 (58 ref.)
Diabetes care—a continuing challenge. Beaven DW, et al. **Aust N Z J Med** 1988 May;18(3):297–301
Oral surgery: assessment and treatment. Caplin RL. **Br Dent J** 1989 Feb 25;166(4):128–31
Multidisciplinary treatment planning. Tumor boards. Fleming ID. **Cancer** 1989 Jul 1;64(1 Suppl):279–81; discussion 282–4
The doctor's dilemma (the nurse's Waterloo). Laszlo J, et al. **Cancer Invest** 1988;6(3):361–3
The emotional experience of multiple handicap: issues in assessment. McConachie HR, et al. **Child Care Health Dev** 1989 Jan–Feb;15(1):75–8
Monitoring regional geriatric assessment teams: analysis of client flows and outcomes. Dudgeon P, et al. **Community Health Stud** 1989;13(2):200–10
Computer applications in nursing. A prototypical model for planning nursing care. Bailey DR. **Comput Nurs** 1988 Sep–Oct;6(5):199–203
Corporate standards for nursing care. An integral part of a computerized care plan. Hinson DK, et al. **Comput Nurs** 1988 Jul–Aug;6(4):141–6
Periodontal considerations for provisional restorations. Bral M. **Dent Clin North Am** 1989 Jul;33(3):457–77 (53 ref.)
Development of a program for planned cesarean delivery and immediate pediatric surgical repair of ventral wall defects. Evans MI, et al. **Fetal Ther** 1988;3(1–2):84–8
The Hospice Caregiver Assessment: a study of a case management tool for professional assistance. Etten MJ, et al. **Gerontologist** 1989 Feb;29(1):128–31
Nephrotic syndrome: a nursing care plan based on current pathophysiologic concepts. Johnson DL. **Heart Lung** 1989 Jan;18(1):85–93
Coordinating inpatient and outpatient treatment for a chronically suicidal woman. Frances A, et al. **Hosp Community Psychiatry** 1989 May;40(5):468–70
Caring for the patient with AIDS. An integrated approach. Volberding PA. **Infect Dis Clin North Am** 1988 Jun; 2(2):543–50
Integrative care planning in acute psychiatry. Meades S. **J Adv Nurs** 1989 Aug;14(8):630–9 (12 ref.)
Goal-directed treatment planning and the principles of brief hospitalization. Nurcombe B. **J Am Acad Child Adolesc Psychiatry** 1989 Jan;28(1):26–30
Documenting safe treatment of the medical-risk patient. McCarthy FM, et al. **J Am Dent Assoc** 1989 Sep; 119(3):383–9
Critical care planning [letter] Siebers MJ, et al. **J Am Geriatr Soc** 1989 Aug;37(8):822

Computer-generated model surgery. An exacting approach to complex craniomaxillofacial disharmonies. Guyuron B, et al. **J Craniomaxillofac Surg** 1989 Apr;17(3):101–4
Efficacy of panoramic radiography in dental diagnosis and treatment planning. Kantor ML, et al. **J Dent Res** 1989 May;68(5):810–2
Birth planning. A reality-based script for building confidence. Carty EM, et al. **J Nurse Midwifery** 1989 May–Jun;34(3):111–4
Office management of the HIV-positive patient. Potts DW, et al. **J Okla State Med Assoc** 1988 Oct;81(10):617–22
Choosing your treatments with care [editorial] Laskin DM. **J Oral Maxillofac Surg** 1989 Jan;47(1):1
Video imaging for planning and counseling in orthognathic surgery. Sarver DM, et al. **J Oral Maxillofac Surg** 1988 Nov;46(11):939–45
Volunteers and patient support. Fraser R, et al. **J Palliat Care** 1989 Jun;5(2):52–5
Perinatal acquired immunodeficiency syndrome. Inglis AD, et al. **J Perinatol** 1987 Fall;7(4):356–61
A simplified psychologic questionnaire as a treatment planning aid for patients with temporomandibular joint disorders. Gale EN, et al. **J Prosthet Dent** 1989 Feb; 61(2):235–8
EBV. Managing the physiological and psychosocial implications of the Epstein–Barr virus. Icenhour ML, et al. **J Psychosoc Nurs Ment Health Serv** 1989 Apr;27(4):20–3
Which medical condition shall we treat first? [editorial] **Lancet** 1988 Nov 19;2(8621):1175–6
Bedwetting: a family's recurrent nightmare. Gibson LY. **MCN** 1989 Jul–Aug;14(4):270–2
Fecal incontinence in children: a clinical update. Stroh SE, et al. **MCN** 1989 Jul–Aug;14(4):252–4
Decision making research at the interface between descriptive and prescriptive studies. Cebul RD. **Med Decis Making** 1988 Oct–Dec;8(4):231–2
Selection of a management strategy for pediatric brainstem tumors. Halperin EC, et al. **Med Pediatr Oncol** 1989; 17(2):117–26
Research priorities for the care of the veteran patient. Ventura MR, et al. **Milit Med** 1989 Jan;154(1):32–5
Legal and surgical considerations in evaluating candidates for implant procedures. Burkes J, et al. **N Y State Dent J** 1989 Apr;55(4):38–9
The ethics of compromise. Fry ST. **Nurs Outlook** 1989 May–Jun;37(3):152
The challenge of transferring research results into patient care [editorial] Kupfer C. **Ophthalmology** 1989 Jun; 96(6):737–8
Preoperative crossmatch guidelines for total hip arthroplasty. Grzeskiewicz JL, et al. **Orthopedics** 1989 Apr;12(4):549–53
Consensus: management of Salmonella infection in the first year of life. Geme JW 3d, et al. **Pediatr Infect Dis J** 1988 Sep;7(9):615–21 (32 ref.)
The use of adhesive tape to inform the patient preoperatively [letter] Botti G. **Plast Reconstr Surg** 1989 Mar;83(3):571
Planning for cancer patient care and teaching to enhance the oncology product line. Blauvelt N, et al. **Prog Clin Biol Res** 1988;278:211–8
The coalition model of case management for care of HIV-infected persons. Ryndes T. **QRB** 1989 Jan;15(1):4–8
Radiation treatment planning. The physician's role. Hendrickson FR. **Radiographics** 1988 Sep;8(5):987–91
Multidisciplinary intervention in the control of cancer pain. Botturi M, et al. **Rays** 1988 Sep–Dec;13(3):137–43
[Effective work of head nurses] Huo LJ. **Chung Hua Hu Li Tsa Chih** 1988 Oct;23(10):579–80 **(Chi)**
[Epilepsy and the family physician: accident or main point?] Crobach MJ, et al. **Ned Tijdschr Geneeskd** 1988 Oct 8; 132(41):1888–92 (Eng. Abstr.) **(Dut)**
[Philosophy, planning and priorities in surgery in rheumatoid polyarthritis] Gschwend N. **Acta Orthop Belg** 1988; 54(2):120–3 (Eng. Abstr.) **(Fre)**
[Medical evaluation of travelers returning from the tropics: which diagnostic studies and for whom?] Raeber PA, et al. **Schweiz Rundsch Med Prax** 1989 Jun 20;78(25):710–4 (31 ref.) (Eng. Abstr.) **(Fre)**
[Treatment planning based on oncologic signs of malignant tumors—consequences for breast cancer] Karstens JH, et al. **Rontgenblatter** 1989 Jan;42(1):34–8 (Eng. Abstr.) **(Ger)**
[Vector analysis in die casting planning. The static and biodynamic aspects of the framework planning] Besimo C. **Schweiz Monatsschr Zahnmed** 1988;98(9):993–8 **(Ger, Fre)**
[Do patients with active chronic polyarthritis get "basic therapy"?] Raspe HH, et al. **Soz Praventivmed** 1988; 33(4–5):197–201 (Eng. Abstr.) **(Ger)**
[Organization of the treatment of patients with obstructive jaundice] Balashov GV. **Klin Khir** 1988;(11):30–2 **(Rus)**
[In spite of all the new medical technology—what we need is a romantic scientific view] Petersson L. **Lakartidningen** 1989 Apr 19;86(16):1464 **(Swe)**

ECONOMICS

Treatment plans and cost estimates. Wilkinson MD. **Br Dent J** 1989 Jun 24;166(12):458–61
Financing case management: making the money work. Lehman AF. **New Dir Ment Health Serv** 1988 Winter; (40):67–78

LEGISLATION & JURISPRUDENCE

Dilemmas in decision making for caregivers of cognitively impaired elderly persons. Weisensee MG, et al. **J Prof Nurs** 1989 Jul–Aug;5(4):186–91 (52 ref.)

METHODS

Planning in advance for critical care. Streim JE, et al. **Am J Nurs** 1989 Jan;89(1):37–8, 41
Establishing a cancer caregivers program. An interdisciplinary approach. Cawley MM, et al. **Cancer Nurs** 1988 Oct;11(5):267–73 (14 ref.)
Three dimensional radiation therapy planning using light projection of CT scans. Ludgate CM. **Clin Radiol** 1989 Jul;40(4):426
Health care's new 'middlemen' between elderly patients and their physicians. Champlin L. **Geriatrics** 1989 Mar; 44(3):107, 110, 115–6
Outcomes of five years of continuous intensive case management. Borland A, et al. **Hosp Community Psychiatry** 1989 Apr;40(4):369–76
Clinical case management: definition, principles, components. Kanter J. **Hosp Community Psychiatry** 1989 Apr; 40(4):361–8
A partially computerized treatment plan. Ormiston S, et al. **Hosp Community Psychiatry** 1989 May;40(5):531–3
Focal inpatient treatment planning. Harper G. **J Am Acad Child Adolesc Psychiatry** 1989 Jan;28(1):31–7
Planning time for combined care [letter] Johansen T. **MCN** 1989 Mar–Apr;14(2):130
Clinical case management. **New Dir Ment Health Serv** 1988 Winter;(40):1–101
The link between inpatient care and case management services. Bebout RR. **New Dir Ment Health Serv** 1988 Winter;(40):53–6
Clinical case management for the chronically mentally ill: a conceptual analysis. Harris M, et al. **New Dir Ment Health Serv** 1988 Winter;(40):5–13 (27 ref.)
Case management and continuity of care for the "revolving-door" patient. Harris M, et al. **New Dir Ment Health Serv** 1988 Winter;(40):57–62
A treatment-planning grid for clinical case managers. Harris M, et al. **New Dir Ment Health Serv** 1988 Winter;(40):29–38 (19 ref.)
Clinical issues in the case management relationship. Kanter JS. **New Dir Ment Health Serv** 1988 Winter;(40):15–27 (30 ref.)
"I want to go to the circus": a personal perspective on case management. Swayze FV. **New Dir Ment Health Serv** 1988 Winter;(40):79–86
Orchestrating the process of patient education. Methods and approaches. Armstrong ML. **Nurs Clin North Am** 1989 Sep; 24(3):597–604
Description and analysis of preadmission screening. Lathrop L, et al. **Public Health Nurs** 1989 Mar;6(1):23–7
Dosage-clinical problems related to a method of patient immobilization by mask during external beam radiotherapy. Balducci M, et al. **Rays** 1988 Sep–Dec;13(3):129–36
[The importance of preoperative orthodontic therapy in the planning and performance of osteotomies of the middle face] Kahl B, et al. **Fortschr Kieferorthop** 1988 Dec; 49(6):543–56 (Eng. Abstr.) **(Ger)**
[The prognosis of autologous tooth transplants in orthodontic treatment planning] Schulz S. **Fortschr Kieferorthop** 1989 Jun;50(3):186–95 (Eng. Abstr.) **(Ger)**
[The effects of functional diagnostic measures on orthodontic planning and therapy] Weissenberg J, et al. **Fortschr Kieferorthop** 1989 Feb;50(1):12–20 (Eng. Abstr.) **(Ger)**
[Synoptic treatment planning (I)] Brägger U, et al. **Schweiz Monatsschr Zahnmed** 1989;99(5):586–91 **(Ger, Fre)**
[Old wine in new skins.... A contribution to the planning of framework dentures following the viewpoints of caries prophylaxis and periodontal hygiene] Brunner T. **Schweiz Monatsschr Zahnmed** 1988;98(9):970–9 **(Ger, Fre)**
[Synoptic treatment planning (II)] Hämmerle C, et al. **Schweiz Monatsschr Zahnmed** 1989;99(6):709–14 **(Ger, Fre)**
[Ultrasonic scanning in planning radiation therapy of cancer of the uterine cervix stump] Nazarova IS, et al. **Med Radiol (Mosk)** 1989 Jun;34(6):48–51 **(Rus)**
[Local irradiation planning in prostatic cancer with the use of optimized dosage field variants] Ratner TG, et al. **Med Radiol (Mosk)** 1989 Jul;34(7):53–8 (Eng. Abstr.) **(Rus)**
[The planning of local plastic operations after the radiation therapy of malignant tumors of the head taking into account the blood microcirculation of the skin] Dmitrieva VS, et al. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):39–41 (Eng. Abstr.) **(Rus)**
[Use of computers for setting individual physical loads in the rehabilitation of patients with ischemic heart disease at a sanatorium] Churiukin GD, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Jul–Aug;(4):11–3 (Eng. Abstr.) **(Rus)**

ORGANIZATION & ADMINISTRATION

Social work students as case managers: a model of service delivery and training. Billig NS, et al. **Hosp Community Psychiatry** 1989 Apr;40(4):411–3
The conditions for meeting the challenge. Reinhardt MA. **J Palliat Care** 1988 May;4(1–2):56–8
Teaching the home care client. Johnson EA, et al. **Nurs Clin North Am** 1989 Sep;24(3):687–93
Using case management to monitor community-based long term care. Applebaum R, et al. **QRB** 1988 Jul;14(7):227–31
TIME: tracking information for maintaining the elderly. Johnson SC, et al. **QRB** 1988 Nov;14(11):341–4
Case management by nurses at a county facility. Winder PG. **QRB** 1988 Jul;14(7):215–9
[Status of the marginal periodontium in middle-aged adults. Strategies for care and organizational principles] Borutta A, et al. **Zahn Mund Kieferheilkd** 1988;76(7):711–6 (Eng. Abstr.) **(Ger)**

STANDARDS

Legal aspects of orthodontic practice: risk management concepts. The impacted canine. Machen DE. **Am J Orthod Dentofacial Orthop** 1989 Sep;96(3):270–1
Continuity of care and the control of costs: can case management assure both? Baker F, et al. **J Public Health Policy** 1989 Summer;10(2):204–13
A framework for planning public health nursing services to families. Vahldieck RK, et al. **Public Health Nurs** 1989 Jun;6(2):102–7
Using treatment plans for quality assurance monitoring in a residential center. Price SB, et al. **QRB** 1988 Sep; 14(9):266–74

TRENDS

Computers in hospital management and improvements in patients care—new trends in the United States. Pierskalla WP, et al. **J Med Syst** 1988 Dec;12(6):411–28
New directions for clinical case management. Harris M. **New Dir Ment Health Serv** 1988 Winter;(40):87–96
Reforming the pyramid. A plan for treating rheumatoid arthritis in the 1990s. Healey LA, et al. **Rheum Dis Clin North Am** 1989 Aug;15(3):615–9 (16 ref.)

UTILIZATION

Misconceptions about use of case management services by the chronic mentally ill: a utilization analysis. Harris M, et al. **Hosp Community Psychiatry** 1988 Dec;39(12):1276–80

PATIENT CARE TEAM

Postoperative analgesia. Bridenbaugh PO. **Acta Chir Scand Suppl** 1989;550:177–81
Experiences in home care of cancer patients. A new approach in cancer nursing. Ophof J, et al. **Acta Oncol** 1989; 28(1):35–8
The interdisciplinary team interface between geriatrics and rehabilitation medicine. Saltz CC. **Adv Clin Rehabil** 1988; 2:132–54 (71 ref.)
Pharmacist involvement in a chemical-dependency rehabilitation program. Haynes M. **Am J Hosp Pharm** 1988 Oct;45(10):2099–101
Three simple steps toward clinical services. Lazarus HL. **Am J Hosp Pharm** 1988 Aug;45(8):1701–2
Monitoring and evaluating psychotropic drug use for persons with mental retardation: a follow-up report. Briggs R. **Am J Ment Retard** 1989 May;93(6):633–9
Multidisciplinary team counseling for fetal anomalies. Lorenz RP, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):263–6
A team approach to prevocational services. Mitchell M, et al. **Am J Occup Ther** 1989 Jun;43(6):378–83
Team treatment. Does a specialized unit improve team performance? Cosgrove JL, et al. **Am J Phys Med Rehabil** 1988 Dec;67(6):253–60
Psychiatrists and the management of patients with Alzheimer's disease [letter; comment] **Am J Psychiatry** 1989 Jun;146(6):808–9. **Comment on:** Am J Psychiatry 1988 Dec;145(12):1550–1
Effect of a psychiatric liaison program on consultation rates and on detection of minor psychiatric disorders in cancer patients. McCartney CF, et al. **Am J Psychiatry** 1989 Jul; 146(7):898–901
Team approach to the treatment of cleft lip and palate. Brogan WF. **Ann Acad Med Singapore** 1988 Jul;17(3):335–8
Combined cleft and craniofacial team—multidisciplinary approach to cleft management. Chen YR, et al. **Ann Acad Med Singapore** 1988 Jul;17(3):339–42
Effect of a geriatric consultation team on functional status of elderly hospitalized patients. A randomized, controlled clinical trial [see comments] McVey LJ, et al. **Ann Intern Med** 1989 Jan 1;110(1):79–84. **Comment in:** Ann Intern Med 1989 Jun 1;110(11):942
The geriatric consultation team [letter; comment] Wasserman MR. **Ann Intern Med** 1989 Jun 1;110(11):942. **Comment on:** Ann Intern Med 1989 Jan 1;110(1):79–84
Patients who have undergone amputation [letter] Campbell WB, et al. **Ann R Coll Surg Engl** 1989 Jul;71(4 Suppl):58
SWAT team approach to ventricular assistance. Brugger JP, et al. **Ann Thorac Surg** 1989 Jan;47(1):136–41
Shared care in paediatrics. Bacon CJ. **Arch Dis Child** 1989 Jan;64(1):148–9
Families with congenital heart disease. Emery JL. **Arch Dis Child** 1989 Jan;64(1):150–4
Joint work in paediatrics: a child psychiatry perspective. Sturge JC. **Arch Dis Child** 1989 Jan;64(1):155–8
Status report on interdisciplinary medical rehabilitation.

Melvin JL. **Arch Phys Med Rehabil** 1989 Apr;70(4):273–6
Strategies for working with a patient who has multiple personality disorder. Anderson G, et al. **Arch Psychiatr Nurs** 1988 Aug;2(4):236–43
The roles of speech–language pathologists in service delivery to infants, toddlers, and their families. **ASHA** 1989 May; 31(5):31
Communication-based services for infants, toddlers, and their families. **ASHA** 1989 May;31(5):32–4, 94
Teamwork for the problems of aging [editorial] Williams TF. **ASHA** 1989 Apr;31(4):77
The team approach to the management of ectodermal dysplasias. Farrington FH. **Birth Defects** 1988;24(2):237–42
Case finding in the elderly: does the primary care team already know enough? Hooper J. **BMJ** 1988 Dec 3; 297(6661):1450–2
The practical business of treatment—1. A multidisciplinary and team approach. Spratley TA. **Br J Addict** 1989 Mar; 84(3):259–66
An interdisciplinary programme for cognitive rehabilitation. Conder R, et al. **Brain Inj** 1988 Oct–Dec;2(4):365–85
Parallel process at case conferences. Sigman M. **Bull Menninger Clin** 1989 Jul;53(4):340–9
Home care/hospital care/cooperative care, options for the practice of medicine. Grieco AJ. **Bull N Y Acad Med** 1988 May;64(4):318–26
Hyperactivity in children [letter] Avard D, et al. **Can Med Assoc J** 1988 Dec 1;139(11):1035
Impact of a comprehensive supportive care team on management of hopelessly ill patients with multiple organ failure. Field BE, et al. **Chest** 1989 Aug;96(2):353–6
The role of the speech and language clinician on a multidisciplinary team. Giddan JJ, et al. **Child Psychiatry Hum Dev** 1989 Spring;19(3):180–5
A team approach to developing a district diabetic service. Callaway PL, et al. **Diabetic Med** 1988 Oct;5(7):687–90
The diabetes team [editorial] Home P. **Diabetic Med** 1989 May–Jun;6(4):357
Cost justification of clinical pharmacy services on a general surgery team: focus on diagnosis-related group cases. Bertch KE, et al. **Drug Intell Clin Pharm** 1988 Nov; 22(11):906–11
Gynecology and pathology: the need for an intimate partnership. Janssens J. **Eur J Obstet Gynecol Reprod Biol** 1988 Nov;29(3):235–9
The orthodontist in the team-treatment for children with rheumatoid arthritis. Grosfeld O. **Eur J Orthod** 1989 May; 11(2):120–4
Outcomes of systemic/strategic team consultation: I. Overview and one-month results. Green RJ, et al. **Fam Process** 1989 Mar;28(1):37–58
Combating pain [letter] McNeely C. **Geriatr Nurs (New York)** 1988 Nov–Dec;9(6):317
The wheel of care. Weisberg J, et al. **Geriatr Nurs (New York)** 1989 Mar–Apr;10(2):86–7
Toward a core curriculum for interdisciplinary geriatric care. Bevil CA, et al. **Gerontol Geriatr Educ** 1988;8(3–4):201–15
Interdisciplinary faculty training in geriatrics and gerontology: a non-clinical model. Feather J, et al. **Gerontol Geriatr Educ** 1988;8(3–4):165–79
Inpatient geriatric consultative teams. Miller RL, et al. **Gerontol Geriatr Educ** 1987–88;8(1–2):35–52
A case study in interdisciplinary education in geriatric health care: intellectual, educational and organizational problems. Smith AC 3d, et al. **Gerontol Geriatr Educ** 1988; 8(3–4):181–92
Conceptual and methodological problems in studying the effects of interdisciplinary geriatric teams. Schmitt MH, et al. **Gerontologist** 1988 Dec;28(6):753–64 (32 ref.)
The "multidisciplinary approach" [editorial] Goepfert H. **Head Neck** 1989 Mar–Apr;11(2):109–10
Care giver fidelity in a pediatric bone marrow transplant team. Marsden C. **Heart Lung** 1988 Nov;17(6 Pt 1):617–25
In situ breast cancer: a multidisciplinary approach. Robert NJ, et al. **Hosp Pract [Off]** 1989 Apr 15;24(4):169–76, 179–85 (13 ref.)
Physician exec offers remedy for nurse crisis. Cerne F. **Hospitals** 1988 Dec 5;62(23):64
Caring for the patient with AIDS. An integrated approach. Volberding PA. **Infect Dis Clin North Am** 1988 Jun; 2(2):543–50
An interprofessional approach to the planning of rehabilitation services [letter] Pentland B. **Int Disabil Stud** 1989;11(1):52–3
Organizational diagnosis and training plan for psychiatrists-commanders of small psychiatric teams treating soldiers suffering from combat reactions. Student M, et al. **Isr J Psychiatry Relat Sci** 1988;25(2):102–12
Integrative care planning in acute psychiatry. Meades S. **J Adv Nurs** 1989 Aug;14(8):630–9 (12 ref.)
A model for teaching about interdisciplinary practice in health care settings. Ivey SL, et al. **J Allied Health** 1988 Aug;17(3):189–95
Increasing team skills: an evaluation of program effectiveness. Jacobsen-Webb ML. **J Allied Health** 1985 Nov; 14(4):387–94
The collaborative model: a multidisciplinary approach to student health care. Sossong AE, et al. **J Am Coll Health** 1988 Nov;37(3):135–6
Nutrition education at the work site: a team approach. Sandoval WM, et al. **J Am Diet Assoc** 1989 Apr;89(4):543–4
The team concept in supervised practice: benefits for students and preceptors. Wagstaff MA. **J Am Diet Assoc** 1989 Jan; 89(1):78–81
More on problems in nursing home care [letter] Corcoran RM. **J Am Geriatr Soc** 1989 Sep;37(9):918
The rehabilitation nurse: an able, but often overlooked, member of the burn team. Stearns G, et al. **J Burn Care Rehabil** 1988 Jul–Aug;9(4):422
The religious community as a partner in health care. Olson LM, et al. **J Community Health** 1988 Winter;13(4):249–57
Prospective evaluation of weight gain in both nonorganic and organic failure-to-thrive children: an outpatient trial of a multidisciplinary team intervention strategy. Bithoney WG, et al. **J Dev Behav Pediatr** 1989 Feb;10(1):27–31
Headache and chronic pain in primary care [clinical conference] Greer T, et al. **J Fam Pract** 1988 Nov; 27(5):477–82
Health team networking: Alzheimer's disease care. Doty L, et al. **J Fla Med Assoc** 1989 Feb;76(2):259–60
Using an interdisciplinary team for geriatric education in a nursing home. Thompson RF, et al. **J Med Educ** 1988 Oct; 63(10):796–8
Psychiatric intervention in the community hospital emergency room. Dunn J. **J Nurs Adm** 1989 Oct; 19(10):36–40
Baccalaureate students learn research and teamwork in a community setting. Malloy C, et al. **J Nurs Educ** 1989 Jan; 28(1):36–8
Caring together: summary of a report submitted to Health and Welfare Canada (December, 1987). The Expert Working Group on Integrated Palliative Care for Persons with AIDS. **J Palliat Care** 1988 Dec;4(4):76–86
A generalist team with specialist consultants is preferable. Chekryn J, et al. **J Palliat Care** 1988 May;4(1–2):44–6
Developing community care for patients with AIDS: the role of home care. Stewart R, et al. **J Palliat Care** 1988 Dec; 4(4):107–10
The fetal board. Porter KB, et al. **J Perinatol** 1989 Jun; 9(2):150–3
The clinical nurse specialist on the psychiatric team. Yoest MA. **J Psychosoc Nurs Ment Health Serv** 1989 Mar; 27(3):27–32
Chronic pain in the United States [letter] Kuczmierczyk AR. **J Psychosom Res** 1988;32(4–5):551
William Pickles lecture 1988. All together now. Lawrence M. **J R Coll Gen Pract** 1988 Jul;38(312):296–302
Audit of support given to lay carers of the demented elderly by a primary care team. Philp I, et al. **J R Coll Gen Pract** 1988 Apr;38(309):153–5
Community nursing on the planning board again? [editorial] Stott NC. **J R Coll Gen Pract** 1988 Jun;38(311):247–8
The Special Treatment Team: an inpatient approach to the mentally ill alcoholic patient. Levy MS, et al. **J Subst Abuse Treat** 1988;5(4):219–27 (24 ref.)
What happened? You can tell me: I'm a provider. **JAMA** 1989 Feb 3;261(5):701
Testing source patient blood for HIV antibodies after accidental exposure of health care workers to blood and body fluids [letter] Bauer S. **JAMA** 1989 Sep 15; 262(11):1470–1
Supporting the health care team in caring for patients with AIDS. Volberding P. **JAMA** 1989 Feb 3;261(5):747–8
Comprehensive management of children with epilepsy—from standpoint of a medical practitioner in children's hospital. Miyake S, et al. **Jpn J Psychiatry Neurol** 1988 Sep; 42(3):467–71
Role of the nurse in the multidisciplinary team approach to care of liver transplant patients. Overman JA, et al. **Mayo Clin Proc** 1989 Jun;64(6):690–8
Influence of social network members and health care professionals on infant feeding practices of economically disadvantaged mothers. McLorg PA, et al. **Med Anthropol** 1989 Apr;10(4):265–78
The clinical engineer: a full member of the health care team? Frize M. **Med Biol Eng Comput** 1988 Sep;26(5):461–5 (25 ref.)
Health-care interpreters and cancer [letter] Gorman D, et al. **Med J Aust** 1989 Mar 6;150(5):284
AIDS story disturbing [letter] Jodar LW. **Mich Med** 1989 Feb;88(2):7
Home health care and rehabilitation nursing. Jaffe KB. **Nurs Clin North Am** 1989 Mar;24(1):171–8
Psychosocial issues of nutritional support. A multidisciplinary interpretation. Srp F, et al. **Nurs Clin North Am** 1989 Jun; 24(2):447–59 (34 ref.)
Certified nurse-midwife effectiveness in the health maintenance organization obstetric team. Bell KE, et al. **Obstet Gynecol** 1989 Jul;74(1):112–6
Lower limb amputees: advantages of the team approach. Marks L. **Practitioner** 1987 Oct 8;231(1436):1321–4
Multidisciplinary teams in consultation–liaison psychiatry: the Yale model. Leigh H. **Psychother Psychosom** 1987; 48(1–4):83–9
Doctor, nurse and patient knowledge of prescribed medication in primary care. Ross FM. **Public Health** 1989 Mar;103(2):131–7
Diabetes and pregnancy. Use of an integrated "team" approach provides the necessary comprehensive care. Quevedo SF, et al. **R I Med J** 1989 Apr;72(4):129–32 (30 ref.)
Multidisciplinary approach to complex endoscopic biliary intervention. Chespak LW, et al. **Radiology** 1989 Mar;170(3 Pt 2):995–7
The biliary lithotripsy team: the necessity for an interdisciplinary approach. Torres WE, et al. **Radiology** 1989 Apr;171(1):73–5
Multidisciplinary intervention in the control of cancer pain. Botturi M, et al. **Rays** 1988 Sep–Dec;13(3):137–43
Supporting the supporters of the demented elderly. Philip I. **Scott Med J** 1988 Dec;33(6):355–6
The role of the nutritional support team in neonatal intensive care. Mayfield SR, et al. **Semin Perinatol** 1989 Apr; 13(2):88–96 (23 ref.)
A multidisciplinary approach to reducing morbidity and operative blood loss during resection of carotid body tumor. Robison JG, et al. **Surg Gynecol Obstet** 1989 Feb; 168(2):166–70
Working together for the chronically mentally disabled. Wooff K, et al. **World Health Forum** 1988;9(3):420–5
[A multidisciplinary approach to the management of deaf infants] Loots G, et al. **Acta Otorhinolaryngol Belg** 1988; 42(3):393–404 (Eng. Abstr.) **(Dut)**
[Depression in patients with somatic illnesses (letter)] **Ned Tijdschr Geneeskd** 1989 Jul 1;133(26):1332–3 **(Dut)**
[Home care for terminal cancer patients (letter)] Peeters-Udding LM. **Ned Tijdschr Geneeskd** 1989 May 20; 133(20):1045 **(Dut)**
[Care of patients with AIDS; guidelines from the Public Health Council] Stibbe J. **Ned Tijdschr Geneeskd** 1988 Aug 6;132(32):1470–2 **(Dut)**
[Multidisciplinary management in a (semi)residential child psychiatric setting] Verheij F, et al. **Ned Tijdschr Geneeskd** 1989 Feb 4;133(5):260–3 **(Dut)**
[Collaboration and specific role of the urologist and gynecologist facing a hypofertile couple] Janecek P. **Helv Chir Acta** 1988 Jul;55(3):265–76 (Eng. Abstr.) **(Fre)**
[What can psychiatry expect from genetics?] Geneste J. **J Genet Hum** 1989 Jun;37(2):97–102 (0 ref.) **(Fre)**
[Multidisciplinary consultation for patients with excess weight: observations following a 6-month pilot experience] Crausaz FM, et al. **Ther Umsch** 1989 May;46(5):319–24 (Eng. Abstr.) **(Fre)**
[Special education sports: an interdisciplinary responsibility within the scope of preventive measures and the promotion of physically handicapped children] Böttger W. **Arztl Jugendkd** 1989;80(2):110–4 (Eng. Abstr.) **(Ger)**
[Potentials of the interdisciplinary care of children with ectodermal dysplasia] Zschiesche S, et al. **Fortschr Kieferorthop** 1989 Jun;50(3):207–12 (Eng. Abstr.) **(Ger)**
[Cooperation between obstetrics and anesthesia] Beck L. **Gynakologe** 1989 Apr;22(2):132–5 **(Ger)**
[Cooperation between obstetrics and anesthesia. II. From the viewpoint of anesthesiology] Dick W. **Gynakologe** 1989 Apr;22(2):136–8 **(Ger)**
[An interdisciplinary coordinated therapy concept exemplified by the Cornelia de Lange syndrome] Bonorden SW, et al. **Klin Padiatr** 1988 Nov–Dec;200(6):457–62 (Eng. Abstr.) **(Ger)**
[Integration of psychosocial services into the management of the child with cancer] Janssen F. **Klin Padiatr** 1989 Jul–Aug;201(4):346–9 (Eng. Abstr.) **(Ger)**
[Family therapy approach by the pediatric oncology treatment team] Wirsching M. **Klin Padiatr** 1988 May–Jun; 200(3):279–82 (Eng. Abstr.) **(Ger)**
[Cooperation between pediatric stomatology and pediatrics in the oral-preventive management of infants and preschool children] Graehn G, et al. **Padiatr Grenzgeb** 1988; 27(3):203–9 (Eng. Abstr.) **(Ger)**
[Power in the team—intimate aspects] Buchholz MB. **Prax Kinderpsychol Kinderpsychiatr** 1988 Oct;37(8):281–90 (Eng. Abstr.) **(Ger)**
[The German Society of Pneumology and Tuberculosis. Recommendations for personnel and time requirements in pneumologic studies. Bronchoscopy, thoracoscopy, lung and pleura puncture] **Prax Klin Pneumol** 1988 Dec; 42(12):853–8 (13 ref.) **(Ger)**
[The patient care team—experiences with a problematic therapeutic interaction figure in psychiatry] Kisker KP. **Psychiatr Prax** 1988 Sep;15(5):149–54 (Eng. Abstr.) **(Ger)**
[The hall—reflections on the site of open interaction between patients and the therapeutic team] Schröder S, et al. **Psychiatr Prax** 1989 May;16(3):113–7 (Eng. Abstr.) **(Ger)**
[Perspectives on surgery and anesthesiology in Sri Lanka. A report on the experiences of a surgical team at the Justus Liebig University] Adams HA, et al. **Unfallchirurgie** 1988 Aug;14(4):218–23 **(Ger)**
[Severe injuries of the cervical spine in childhood, an interdisciplinary consideration] Benz G, et al. **Unfallchirurgie** 1989 Apr;15(2):77–82 (Eng. Abstr.) **(Ger)**
[Interdisciplinary exchange of ideas on the problems of managing elderly and demented patients—medical, legal and philosophical approaches] Hacker H, et al. **Z Gerontol** 1988 Sep–Oct;21(5):299–301 **(Ger)**
[Pediatrician–diabetologist relationship for an appropriate control] Garagorri JM. **An Esp Pediatr** 1988 Sep;29 Suppl 33:149 **(Spa)**
[The interdisciplinary management of child abuse with respect to the law and the current treatment] Mirabal B. **Bol Asoc Med P R** 1988 Jul;80(7):251–2 **(Spa)**
[Leadership responsibility in team psychiatry. Even psychologists as leaders] Carlberg A. **Lakartidningen** 1989

May 24;86(21):1976; discussion 1976–7 (Swe)

ECONOMICS

[Biofeedback without a technical team--simple and cost effective] Höhne F, et al.
Psychiatr Neurol Med Psychol (Leipz) 1988 Jul;40(7):421–5 (Eng. Abstr.) (Ger)

LEGISLATION & JURISPRUDENCE

Child abuse disposition: concurrences and differences between a hospital team, child protection agency and the court. Paluszny MJ, et al. **Child Psychiatry Hum Dev** 1989 Fall;20(1):25–38

ORGANIZATION & ADMINISTRATION

Tardive dyskinesia clinic [letter] Darcy L.
Aust N Z J Psychiatry 1988 Sep;22(3):235
Implementation of a trauma team. Deane SA, et al.
Aust N Z J Surg 1989 May;59(5):373–8
Intensive care unit use and collaboration between nurses and physicians. Baggs JG. **Heart Lung** 1989 Jul;18(4):332–8
Palliative care in the community: a specialized approach. Dunne C, et al. **J Palliat Care** 1988 May;4(1–2):47–8
Health care units: an extended alternative to the Cumberlege proposals. Williams EI, et al. **J R Coll Gen Pract** 1987 Nov;37(304):507–9
The day hospital. Rodriguez-Villa F, et al.
New Dir Ment Health Serv 1988 Fall;(39):33–40
Organizing the system. Shore MF.
New Dir Ment Health Serv 1988 Fall;(39):17–24
Multidisciplinary team approach to the pediatric burn patient. Warden GD, et al. **QRB** 1988 Jul;14(7):219–26
[The Statement on Psychogeriatric Diseases; advice from the Public Health Council] Stolk PJ.
Ned Tijdschr Geneeskd 1988 Oct 22;132(43):1963–5 (Dut)
[Septicemia--an interdisciplinary clinical problem] Januszkiewicz J. **Pol Tyg Lek** 1988 Dec 5;43(49):1571 (Pol)
[Organization of the activities of medical personnel on a patient team principle] Litvinenko LIa, et al.
Sov Zdravookhr 1988;(12):41–2 (Rus)

STANDARDS

Social work influence on interdisciplinary ethical decision making in health care settings. Joseph MV, et al.
Health Soc Work 1989 Feb;14(1):22–30
The "slow code": a hidden conflict. Neher JO.
J Fam Pract 1988 Oct;27(4):429–30

TRENDS

The psychiatric nurse in liaison psychiatry. Hicks S.
Aust N Z J Psychiatry 1989 Mar;23(1):89–96
Salute to emergency medicine physicians [editorial] Chapman RM. **Mo Med** 1988 Sep;85(9):583–4
Psychiatric teams and the psychiatrist's authority in the New York State mental health system. Jabitsky IM.
N Y State J Med 1988 Nov;88(11):577–81 (41 ref.)

PATIENT COMPLIANCE

Medication noncompliance [letter] Mason BJ. **Acad Med** 1989 Sep;64(9):517
Children referred for pleoptic treatment. A survey on aspects considering referral for examination, role of screening programmes, previous therapy and compliance. Somersalo M, et al. **Acta Ophthalmol (Copenh)** 1988 Oct;66(5):509–13
Clinical characteristics, health beliefs and compliance with maintenance treatment: a comparison between regular and irregular attenders at a depot clinic. Pan PC, et al.
Acta Psychiatr Scand 1989 Jun;79(6):564–70
The integrated approach. On the significance of pharmacological and nonpharmacological factors when lithium prophylaxis fails. Schou M.
Acta Psychiatr Scand Suppl 1988;345:119–23 (30 ref.)
Motivation in the treatment of alcoholism. Krampen G.
Addict Behav 1989;14(2):197–200
The role of parent-adolescent concordance in compliance with cancer chemotherapy. Tebbi CK, et al.
Adolescence 1988 Fall;23(91):599–611
Response bias in a health status survey of elderly people. Rockwood K, et al. **Age Ageing** 1989 May;18(3):177–82
Adherence to pharmacotherapeutic regimen. Assessment and intervention. Fleece L, et al. **Ala J Med Sci** 1988 Oct;25(4):389–93
Managing the difficult patient [editorial]
Am Fam Physician 1989 Jan;39(1):87, 90
Breast examination reminder [letter] Shamsid-Deen S.
Am Fam Physician 1988 Nov;38(5):36
Reducing costs and improving compliance. Neal WW.
Am J Cardiol 1989 Jan 17;63(4):17B–20B (9 ref.)
Utilization of hypnosis to promote compliance with routine dental flossing. Kelly MA, et al. **Am J Clin Hypn** 1988 Jul;31(1):57–60
Psychosocial determinants of compliance in adolescents with iron deficiency. Cromer BA, et al. **Am J Dis Child** 1989 Jan;143(1):55–8
Differences between alcoholic couples accepting and rejecting an offer of outpatient marital therapy. O'Farrell TJ, et al. **Am J Drug Alcohol Abuse** 1986;12(3):285–94
Using the "Mini-Mental State" examination to predict elderly subjects' completion of a follow-up interview. Liu IY, et al. **Am J Epidemiol** 1989 Aug;130(2):416–22
Lack of antibiotic compliance in patients treated for Campylobacter pylori-associated gastritis [letter] Glupczynski Y, et al. **Am J Gastroenterol** 1989 Sep; 84(9):1125–6
Effect of automated prescription transmittal on number of unclaimed prescriptions. Craghead RM, et al.
Am J Hosp Pharm 1989 Feb;46(2):310–2
From Rogers to Rivers: the rights of the mentally ill to refuse medication. Clayton EW. **Am J Law Med** 1987;13(1):7–52 (201 ref.)
Assessing sincerity of effort in maximal grip strength tests. Smith GA, et al. **Am J Phys Med Rehabil** 1989 Apr; 68(2):73–80
Adoption and maintenance of lifestyle modifications. Rosenstock IM. **Am J Prev Med** 1988 Nov-Dec; 4(6):349–52
Continuing in treatment as a form of selection bias. Edlund MJ, et al. **Am J Psychiatry** 1989 Feb;146(2):254–6
Issues of treatment efficacy in legal proceedings [letter] Kanofsky JD. **Am J Psychiatry** 1988 Dec;145(12):1612
Glaucoma therapy: the pharmacist's role in compliance. O'Dea P. **Am Pharm** 1988 Sep;NS28(9):38–42
Compliance packaging: a patient education tool. Smith DL.
Am Pharm 1989 Feb;NS29(2):42–5, 49–53
Comparing the efficacy of epidural opiates with that of patient-controlled analgesia [letter] Hord AH.
Anesthesiology 1988 Oct;69(4):632–3
Inadequate parental understanding of asthma medications. Donnelly JE, et al. **Ann Allergy** 1989 Apr;62(4):337–41
Assessment of compliance in children using inhaled beta adrenergic agonists. Zora JA, et al. **Ann Allergy** 1989 May; 62(5):406–9
An analysis of the concept of self-neglect. Reed PG, et al. **ANS** 1989 Oct;12(1):39–53 (50 ref.)
Estrogen replacement therapy. A survey of women's knowledge and attitudes. Ferguson KJ, et al.
Arch Intern Med 1989 Jan;149(1):133–6
Reported illness and compliance in US travelers attending an immunization facility. Hilton E, et al.
Arch Intern Med 1989 Jan;149(1):178–9
'Natural' desiccated thyroid. A 'health-food' thyroid preparation. Sawin CT, et al. **Arch Intern Med** 1989 Sep; 149(9):2117–8
Urgent hypertension [letter] Shulman NB.
Arch Intern Med 1989 Sep;149(9):2139
An alternative regimen of hormone replacement therapy to improve patient compliance. Kemp JF, et al.
Aust N Z J Obstet Gynaecol 1989 Feb;29(1):66–9
Community treatment orders [letter] Bartholomew AA.
Aust N Z J Psychiatry 1989 Jun;23(2):162–3
Blood glucose discrimination in insulin-dependent diabetics. Training in feedback and external cues. Gil Roales-Nieto J. **Behav Modif** 1988 Jan;12(1):116–32
Behavioral contracting to increase chest physiotherapy. A study of a young cystic fibrosis patient. Stark LJ, et al.
Behav Modif 1987 Jan;11(1):75–86
Referrals to hospital by general practitioners [letter] Alexander DA, et al. **BMJ** 1989 Jan 7;298(6665):48
Diabetic dietary prescriptions [letter] Baxter MA, et al.
BMJ 1989 Jul 8;299(6691):124
Non-attendance or non-invitation? [letter] Davidson IA.
BMJ 1989 Jul 1;299(6690):53
Compulsory treatment in the community [letter] Dunn J.
BMJ 1989 Jun 17;298(6688):1647
Referrals to hospital by general practitioners: a study of compliance and communication. McGlade KJ, et al.
BMJ 1988 Nov 12;297(6658):1246–8
Adherence to recommendations for early repeat cervical smear tests. Mitchell H, et al. **BMJ** 1989 Jun 17; 298(6688):1605–7
Advice versus extended treatment for alcoholism [letter] Hore BD. **Br J Addict** 1988 Aug;83(8):969
The relationship between impulsivity, empathy and involvement in twelve step self-help substance abuse treatment groups. McCown W. **Br J Addict** 1989 Apr; 84(4):391–3
Drug treatment in the elderly in South Nottinghamshire. A community audit. Brooke A, et al. **Br J Clin Pract** 1988 Jan;42(1):17–20
Profiles of non-compliance with antituberculous therapy. Wardman AG, et al. **Br J Dis Chest** 1988 Jul;82(3):285–9
A note on early indicators of non-adherence to a cardiac rehabilitation programme. Fielding R.
Br J Med Psychol 1989 Mar;62 (Pt 1):97–101
Outpatient myelography: an acceptable and cost-effective technique. Choudhri AH, et al. **Br J Radiol** 1989 Mar; 62(735):253–5
Compliance revisited [editorial] Capell HA.
Br J Rheumatol 1988 Oct;27(5):337–8
The use of a pharmacological indicator to investigate compliance in patients with a poor response to antirheumatic therapy. Pullar T, et al. **Br J Rheumatol** 1988 Oct;27(5):381–4
Application of a token economy with a non-compliant closed head-injured male. Hegel MT. **Brain Inj** 1988 Oct-Dec; 2(4):333–8
Comparing motivational systems with two non-compliant head-injured adolescents. Zencius A, et al. **Brain Inj** 1989 Jan-Mar;3(1):67–71
The impact of the right to refuse treatment in a forensic patient population: six-month review. Miller RD, et al.
Bull Am Acad Psychiatry Law 1989;17(2):107–19
Silent suicide in the elderly. Simon RI.
Bull Am Acad Psychiatry Law 1989;17(1):83–95
Drug treatment refusal and length of hospitalization of insanity acquittees. Williams MH, et al.
Bull Am Acad Psychiatry Law 1988;16(3):279–84
Participation of high-risk subjects in colon cancer screening. Sandler RS, et al. **Cancer** 1989 Jun 1;63(11):2211–5
Incentives for breast self-examination: role of the calendar. Baines CJ, et al. **Cancer Detect Prev** 1988;13(2):109–14
Statistical issues in the planning of prevention studies. Zelen M. **Cancer Invest** 1988;6(5):615–20
Patient compliance and efficacy of low-dose, long-term prophylaxis in patients with recurrent urinary tract infection. Westenfelder M, et al. **Chemioterapia** 1987 Jun; 6(2 Suppl):530–2
Reasons for non-attendance at a child guidance clinic. Nimgaonkar VL, et al. **Child Care Health Dev** 1988 Nov-Dec;14(6):387–93
Enhancing patient compliance with tuberculosis therapy. Cuneo WD, et al. **Clin Chest Med** 1989 Sep;10(3):375–80 (34 ref.)
Apparent warfarin resistance due to poor compliance. Kumar S, et al. **Clin Lab Haematol** 1989;11(2):161–3
Enhancing child compliance with nebulized respiratory treatment. A case study. Reimers TM, et al.
Clin Pediatr (Phila) 1988 Dec;27(12):605–8
Use of a pharmacologic indicator to compare compliance with tablets prescribed to be taken once, twice, or three times daily. Pullar T, et al. **Clin Pharmacol Ther** 1988 Nov; 44(5):540–5
Time to stop counting the tablets? Pullar T, et al.
Clin Pharmacol Ther 1989 Aug;46(2):163–8
The natural history of medication compliance in a drug trial: limitations of pill counts. Rudd P, et al.
Clin Pharmacol Ther 1989 Aug;46(2):169–76
Compliance following referral in the early detection of oral cancer and precancer in Sri Lanka. Warnakulasuriya S, et al. **Community Dent Oral Epidemiol** 1988 Dec; 16(6):326–9
Computer-managed call and recall for cervical screening: a typology of reasons for non-attendance. Elkind A, et al. **Community Med** 1989 May;11(2):157–62
Interventions for reducing missed initial appointments at a community mental health center. Swenson TR, et al.
Community Ment Health J 1988 Fall;24(3):205–18
Why must some schizophrenic patients be involuntarily committed? The role of insight. McEvoy JP, et al.
Compr Psychiatry 1989 Jan-Feb;30(1):13–7
Psychotherapy refusers. Mohl PC, et al.
Compr Psychiatry 1989 May-Jun;30(3):245–50
The association between vaginal bleeding patterns and reasons for discontinuation of contraceptive use. Belsey EM. **Contraception** 1988 Aug;38(2):207–25
Compliance and the patient's perspective: controlling symptoms in everyday life. Hunt LM, et al.
Cult Med Psychiatry 1989 Sep;13(3):315–34
Evaluation of the combination inhaler of salbutamol and beclomethasone dipropionate in the management of asthma. McDonald C, et al. **Curr Med Res Opin** 1988;11(2):116–22
Self-measurement of blood glucose. Accuracy of self-reported data and adherence to recommended regimen. Gonder-Frederick LA, et al. **Diabetes Care** 1988 Jul-Aug; 11(7):579–85
Comparison of different models of diabetes care on compliance with self-monitoring of blood glucose by memory glucometer. Hoskins PL, et al. **Diabetes Care** 1988 Oct;11(9):719–24
Pointing fingers [editorial] Robbins DC. **Diabetes Care** 1988 Oct;11(9):743–4
Adherence to IDDM regimens: relationship to psychosocial variables and metabolic control. Schafer LC, et al.
Diabetes Care 1983 Sep-Oct;6(5):493–8
Diabetes and its complications: blood glucose control vs. genetic susceptibility. Rosenstock J, et al.
Diabetes Metab Rev 1988 Aug;4(5):417–35 (81 ref.)
Psychological factors and metabolic control: time for collaboration [letter] Bradley C. **Diabetic Med** 1988 Oct; 5(7):710–1
Assessment of geriatric patients' functional ability to take medication [see comments] Meyer ME, et al. **DICP** 1989 Feb;23(2):171–4. **Comment in:** DICP 1989 Jun;23(6):513–4
An objective method of compliance assessment with metered-dose inhalers. Nemec MA, et al. **DICP** 1989 Feb; 23(2):128–32
NSAID dosing schedule and compliance [letter] Jacobs J, et al. **Drug Intell Clin Pharm** 1988 Sep;22(9):727–8
Compliance during treatment of epilepsy. Leppik IE.
Epilepsia 1988;29 Suppl 2:S79–84
Compliance in epilepsy. First international workshop. Salzburg, Austria, September 3–5, 1987. Proceedings.
Epilepsy Res Suppl 1988;1:1–182
Self-induction of seizures: the ultimate non-compliance. Binnie CD. **Epilepsy Res Suppl** 1988;1:153–8
Compliance in epilepsy. Pharmacokinetics and medication compliance. Cloyd J. **Epilepsy Res Suppl** 1988;1:101–7 (10 ref.)
Compliance in epilepsy. Strategies to enhance adherence to a medical regimen. Cramer JA, et al.
Epilepsy Res Suppl 1988;1:163–75 (42 ref.)

Psychogenic seizures: a complication of compliance in epileptic patients. Two illustrative case reports. Damaschke T. **Epilepsy Res Suppl** 1988;1:159–60
Compliance—a joint effort of the patient and his doctor. Feuerstein M, et al. **Epilepsy Res Suppl** 1988;1:51–6
Compliant populations: variability in serum concentrations. Graves NM, et al. **Epilepsy Res Suppl** 1988;1:91–9
Denial, delay and disappointment: discovering and overcoming the causes of drug errors and missed appointments. Green LW, et al. **Epilepsy Res Suppl** 1988; 1:7–21 (106 ref.)
Compliance in epileptic children in Japan. Kurokawa T, et al. **Epilepsy Res Suppl** 1988;1:147–51
Consensus statement on compliance in epilepsy. Leppik IE, et al. **Epilepsy Res Suppl** 1988;1:179–82 (0 ref.)
Variability of phenytoin, carbamazepine and valproate concentrations in a clinic population. Leppik IE. **Epilepsy Res Suppl** 1988;1:85–90
Determinants of compliance in epileptic patients. Loiseau P, et al. **Epilepsy Res Suppl** 1988;1:135–40
Aspects of compliance: taking drugs and keeping clinic appointments. Mattson RH, et al. **Epilepsy Res Suppl** 1988; 1:111–7
Compliance in clinical trials: impact on design, analysis and interpretation. Pledger GW. **Epilepsy Res Suppl** 1988; 1:125–33 (20 ref.)
Relevance of poor compliance for seizure control. Schmidt D, et al. **Epilepsy Res Suppl** 1988;1:141–6
Compliance in epilepsy: introduction. Schmidt D, et al. **Epilepsy Res Suppl** 1988;1:3–4
Compliance in children and adults: review of studies. Shope JT. **Epilepsy Res Suppl** 1988;1:23–47 (42 ref.)
Psychological aspects of non-compliance. Thompson PJ. **Epilepsy Res Suppl** 1988;1:71–5 (22 ref.)
Measurement of compliance through patient interviews. Thorbecke R. **Epilepsy Res Suppl** 1988;1:79–83
Patients with epilepsy who discontinue treatment. Thorbecke R. **Epilepsy Res Suppl** 1988;1:119–24
Doctors' orders and patients' self-interest: two views of medication usage? Trostle J. **Epilepsy Res Suppl** 1988; 1:57–69
Diet and reinfarction trial (DART): design, recruitment, and compliance. Burr ML, et al. **Eur Heart J** 1989 Jun; 10(6):558–67
Compliance with anti-tuberculous therapy: a field trial of a pill-box with a concealed electronic recording device. Cheung R, et al. **Eur J Clin Pharmacol** 1988;35(4):401–7
Use of a pharmacological indicator to monitor compliance with thyroxine. Penn ND, et al. **Eur J Clin Pharmacol** 1988; 35(3):327–9
The prediction of patient co-operation in orthodontic treatment. Woolass KF, et al. **Eur J Orthod** 1988 Aug; 10(3):235–43
Objective measurement of compliance with nasal CPAP treatment for obstructive sleep apnoea syndrome. Krieger J, et al. **Eur Respir J** 1988 May;1(5):436–8
Treatment compliance and self-medication in asthma in France. Pretet S, et al. **Eur Respir J** 1989 Apr;2(4):303–7
Improving geriatric preventive care through a patient-held checklist. Dietrich AJ, et al. **Fam Med** 1989 May–Jun; 21(3):195–8
Age as a major factor affecting adherence to medication for hypertension in a general practice population. Weingarten MA, et al. **Fam Pract** 1988 Dec;5(4):294–6 (16 ref.)
Compliance with psychiatric referrals from a general hospital psychiatry outpatient clinic. Krulee DA, et al. **Gen Hosp Psychiatry** 1988 Sep;10(5):339–45
Measuring treatment compliance of men with non-gonococcal urethritis receiving oxytetracycline combined with low dose phenobarbitone. Bignell CJ, et al. **Genitourin Med** 1988 Oct;64(5):312–5
Personality types of women attending an STD clinic: correlation with keeping first review appointments. Hammond D, et al. **Genitourin Med** 1989 Jun;65(3):163–5
Colon polyps in the elderly: appropriate primary care follow-up. Reza FM, et al. **Geriatrics** 1989 Jul;44(7):47–51, 54
Preterm labor and prenatal harm. **Hastings Cent Rep** 1989 Mar–Apr;19(2):32; discussion 32–4
State interests in terminating medical treatment. Blake DC. **Hastings Cent Rep** 1989 May–Jun;19(3):5–13 (25 ref.)
On the pragmatics of sharing [letter; comment] Graves FA. **Hastings Cent Rep** 1989 May–Jun;19(3):44. **Comment on:** Hastings Cent Rep 1988 Apr–May;18(2):8–9
Enhancing the effectiveness of abortive therapy: a controlled evaluation of self-management training. Holroyd KA, et al. **Headache** 1989 Mar;29(3):148–53
Relaxation therapy and compliance in the treatment of adolescent headache. Wisniewski JJ, et al. **Headache** 1988 Oct;28(9):612–7
Program adherence and coping strategies as predictors of success in a smoking treatment program. Kamarck TW, et al. **Health Psychol** 1988;7(6):557–74
Factors associated with participation, attrition, and outcome in a smoking cessation program at the workplace. Klesges RC, et al. **Health Psychol** 1988;7(6):575–89
Consistency of adherence across regimen demands. Orme CM, et al. **Health Psychol** 1989;8(1):27–43
Blood glucose monitoring by diabetic adolescents: compliance and metabolic control. Wysocki T, et al. **Health Psychol** 1989;8(3):267–84
Personal adjustments and regimen compliance 1 year after myocardial infarction. Miller P, et al. **Heart Lung** 1989 Jul; 18(4):339–46
Coping with a coeliac diet after adolescence. Kokkonen J, et al. **Helv Paediatr Acta** 1989 Feb;43(4):261–5
Fair is fair [editorial] Adelman S. **Henry Ford Hosp Med J** 1989;37(1):52
Consumers speak [letter] **Hosp Community Psychiatry** 1988 Aug;39(8):890–1
Factors associated with better compliance with psychiatric aftercare. Axelrod S, et al. **Hosp Community Psychiatry** 1989 Apr;40(4):397–401
Management of HIV-positive psychiatric patients who fail to reduce high-risk behaviors. Carlson GA, et al. **Hosp Community Psychiatry** 1989 May;40(5):511–4
Involuntary medication and the case of Joyce Brown. Cournos F. **Hosp Community Psychiatry** 1989 Jul; 40(7):736–40
A comparison of clinical and judicial procedures for reviewing requests for involuntary medication in New York. Cournos F, et al. **Hosp Community Psychiatry** 1988 Aug;39(8):851–5
The impact of outreach [letter] Davis L. **Hosp Community Psychiatry** 1989 Apr;40(4):420
Drug noncompliance [letter] Geller J. **Hosp Community Psychiatry** 1989 Feb;40(2):191–2
Frequent rehospitalization and noncompliance with treatment. Green JH. **Hosp Community Psychiatry** 1988 Sep;39(9):963–6
Assessing competency in the physically ill: guidelines for psychiatric consultants. Mahler J, et al. **Hosp Community Psychiatry** 1988 Aug;39(8):856–61
Autonomy and the right to refuse treatment: patients' attitudes after involuntary medication. Schwartz HI, et al. **Hosp Community Psychiatry** 1988 Oct;39(10):1049–54
Medication refusal and the rehospitalized mentally ill inmate. Smith LD. **Hosp Community Psychiatry** 1989 May; 40(5):491–6
An affair of the heart [clinical conference] Noonan JA, et al. **Hosp Pract [Off]** 1989 Mar 30;24(3A):71–3, 76, 79–84 passim
Dapsone drug compliance study among leprosy patients: a comparison between qualitative and quantitative methods. Bhatnagar P, et al. **Indian J Lepr** 1989 Jul;61(3):373–8
Drug compliance among self-motivated leprosy patients. Girdhar A, et al. **Indian J Lepr** 1988 Oct;60(4):506–9
Comparative study of different drug compliance tests available in leprosy. Naik SS, et al. **Indian J Lepr** 1988 Apr;60(2):270–6
Multi centre evaluation of "DDS tile test" for detection of dapsone in urine [letter] Naik SS, et al. **Indian J Lepr** 1989 Apr;61(2):301–2
Management of acute leukemias: problems with compliance and follow-up. Shenoy S, et al. **Indian Pediatr** 1988 Aug; 25(8):740–3
Choosing drug use measures for treatment outcome studies. I. The influence of measurement approach on treatment results. Wells EA, et al. **Int J Addict** 1988 Aug;23(8):851–73 (42 ref.)
Choosing drug use measures for treatment outcome studies. II. Timing baseline and follow-up measurement. Wells EA, et al. **Int J Addict** 1988 Aug;23(8):875–85 (27 ref.)
The hypnotic relationship: an investigation of compliance and resistance. Baker EL, et al. **Int J Clin Exp Hypn** 1989 Apr;37(2):145–53
Compliance: the dermatologic patient. Witkowski JA. **Int J Dermatol** 1988 Nov;27(9):608–11 (13 ref.)
The effect of education and written material on compliance of pediatric clients. Zahr LK, et al. **Int J Nurs Stud** 1989; 26(3):213–20
Nonresponse on the Center for Epidemiological Studies-Depression Scale in Chinese Americans. Ying YW. **Int J Soc Psychiatry** 1989 Summer;35(2):156–93
Compliance with breast self-examination instruction in healthy adolescents. Cromer BA, et al. **J Adolesc Health Care** 1989 Mar;10(2):105–9
Reciprocal trust in health care relationships. Thorne SE, et al. **J Adv Nurs** 1988 Nov;13(6):782–9
Are theophylline "levels" a reliable indicator of compliance? Kossoy AF, et al. **J Allergy Clin Immunol** 1989 Jul; 84(1):60–5
More on patient compliance [letter] Spector SL, et al. **J Allergy Clin Immunol** 1989 Sep;84(3):409–10
Sublingual nitroglycerin: improving patient compliance with a demonstration dose. Kelly JM. **J Am Board Fam Pract** 1988 Oct–Dec;1(4):251–4
Mental health first appointment no-shows. Hersh JB, et al. **J Am Coll Health** 1989 Mar;37(5):236–7
Student dietitians' experiences with dietary compliance. Cotugna N, et al. **J Am Diet Assoc** 1989 Sep;89(9):1301–3
Compliance in hemodialysis patients: a review of the literature. Hoover H. **J Am Diet Assoc** 1989 Jul;89(7):957–9 (18 ref.)
Characteristics that enhance adherence to high-carbohydrate/high-fiber diets by persons with diabetes. Kouris A, et al. **J Am Diet Assoc** 1988 Nov; 88(11):1422–5
Improving medication compliance in the elderly. Strategies for the health care provider [editorial] Kazis LE, et al. **J Am Geriatr Soc** 1988 Dec;36(12):1161–2
Elders' nonadherence, its assessment, and computer assisted instruction for medication recall training. Leirer VO, et al. **J Am Geriatr Soc** 1988 Oct;36(10):877–84
Adherence and medication instructions. Review and recommendations. Morrow D, et al. **J Am Geriatr Soc** 1988 Dec;36(12):1147–60 (105 ref.)
Drug compliance and unreported drugs in the elderly. Spagnoli A, et al. **J Am Geriatr Soc** 1989 Jul;37(7):619–24
Improving compliance for asthmatic patients visiting the emergency department using a health belief model intervention. Jones PK, et al. **J Asthma** 1987;24(4):199–206
How useful is riboflavin as a tracer of medication compliance? Babiker IE, et al. **J Behav Med** 1989 Feb; 12(1):25–38
Increasing adherence to behavioral homework assignments. Cox DJ, et al. **J Behav Med** 1988 Oct;11(5):519–22
Compliance with an outpatient stress reduction program: rates and predictors of program completion. Kabat-Zinn J, et al. **J Behav Med** 1988 Aug;11(4):333–52
Impact of blood glucose monitoring on diabetic control: obstacles and interventions. Wysocki T. **J Behav Med** 1989 Apr;12(2):183–205 (85 ref.)
The influence of symptoms of disease and side effects of treatment on compliance with cancer therapy. Richardson JL, et al. **J Clin Oncol** 1988 Nov;6(11):1746–52
Maintenance lithium treatment: side effects and compliance. Gitlin MJ, et al. **J Clin Psychiatry** 1989 Apr;50(4):127–31
Psychometric characteristics of the multidimensional health locus of control scales among psychiatric patients. Wall RE, et al. **J Clin Psychol** 1989 Jan;45(1):94–8
The comparative recidivism rates of voluntary- and coerced-admission male alcoholics. Watson CG, et al. **J Clin Psychol** 1988 Jul;44(4):573–81
Parental problem-solving skills, stress, and dietary compliance in phenylketonuria. Fehrenbach AM, et al. **J Consult Clin Psychol** 1989 Apr;57(2):237–41
Relapse crises and coping among dieters. Grilo CM, et al. **J Consult Clin Psychol** 1989 Aug;57(4):488–95
On dropouts and refusers in child psychotherapy: reply to Garfield. Weisz JR, et al. **J Consult Clin Psychol** 1989 Feb; 57(1):170–1
Psychosocial aspects of compliance in children and adolescents with asthma. Christiaanse ME, et al. **J Dev Behav Pediatr** 1989 Apr;10(2):75–80
Noncompliance in adolescents: a review. Cromer BA, et al. **J Dev Behav Pediatr** 1989 Aug;10(4):207–15 (123 ref.)
Compliance with chronic disease regimens: diabetes. Friedman M. **J Diabetic Complications** 1988 Jul–Sep; 2(3):140–4 (16 ref.)
The emergency patient follow-up: is noncompliance changeable or immutable? [editorial] Rosen P. **J Emerg Med** 1988 Sep–Oct;6(5):421–2
Compliance with five health promotion recommendations in a university-based family practice. Ornstein SM, et al. **J Fam Pract** 1989 Aug;29(2):163–8
Illness visualization and therapeutic adherence. Williams R. **J Fam Pract** 1989 Feb;28(2):185–92
Relationship of patient request fulfillment to compliance, glycemic control, and other health care outcomes in insulin-dependent diabetes. Uhlmann RF, et al. **J Gen Intern Med** 1988 Sep–Oct;3(5):458–63
Group exercise improves patient compliance in mild to moderate hypertension. Gleichmann UM, et al. **J Hypertens Suppl** 1989 May;7(3):S77–80
Improving interviewing of and compliance by the adolescent. Williams S. **J La State Med Soc** 1989 Aug;141(8):41–4
Medical treatment, medical research and informed consent. Gillon R. **J Med Ethics** 1989 Mar;15(1):3–5, 11
Etretinate blood levels in monitoring of compliance and contamination in a chemoprevention trial. Browman GP, et al. **J Natl Cancer Inst** 1989 May 10;81(10):795–8
Assessment of compliance with the expanded program on immunization schedule in King Khalid University Hospital. Anokute CC. **J Natl Med Assoc** 1989 Mar;81(3):293–5
Deuterium oxide as a tracer for measurement of compliance in pediatric clinical drug trials. Rodewald LE, et al. **J Pediatr** 1989 May;114(5):885–91
Measurement of plasma prednisolone level to evaluate a prednisone treatment failure in an adolescent with Crohn's disease. Milov DE, et al. **J Pediatr Gastroenterol Nutr** 1989 Apr;8(3):404–7
The effect of health beliefs on the compliance of periodontal patients with oral hygiene instructions. Kühner MK, et al. **J Periodontol** 1989 Jan;60(1):51–6
Difficult adolescents [letter] **J Psychosoc Nurs Ment Health Serv** 1988 Dec;26(12):34
Medication refusal: what does it mean? Beeber LS. **J Psychosoc Nurs Ment Health Serv** 1988 Dec;26(12):31–2
Diabetes mellitus: attitudes, knowledge and glycaemic control in a cross-sectional population. Thompson AV, et al. **J R Coll Gen Pract** 1988 Oct;38(315):450–2
Patients with rheumatoid arthritis at high risk for noncompliance with salicylate treatment regimens. Beck NC, et al. **J Rheumatol** 1988 Jul;15(7):1081–4
How often is medication taken as prescribed? A novel assessment technique [published erratum appears in JAMA 1989 Sep 15;262(11):1472] Cramer JA, et al. **JAMA** 1989 Jun 9;261(22):3273–7
From the Office of the General Counsel. Physician participation in assisted suicide. Orentlicher D. **JAMA** 1989 Oct 6;262(13):1844–5
Alarming non-compliance to antituberculosis chemotherapy. Ansari G, et al. **JPMA** 1988 Nov;38(11):284–5
Squatting in second stage of labour [letter] Gupta JK, et al. **Lancet** 1989 Sep 2;2(8662):561–2

Long-term prothionamide compliance: a study carried out in India using a combined formulation containing prothionamide, dapsone and isoniazid. Ellard GA, et al. **Lepr Rev** 1988 Jun;59(2):163–75

Clofazimine and dapsone compliance in leprosy. Ellard GA, et al. **Lepr Rev** 1988 Sep;59(3):205–13

Leprosy eradication in Paraguay [letter] Fadalae A, et al. **Lepr Rev** 1988 Sep;59(3):267–8

Health belief model intervention to increase compliance with emergency department patients. Jones SL, et al. **Med Care** 1988 Dec;26(12):1172–84

A randomized trial of computerized reminders for blood pressure screening in primary care. McDowell I, et al. **Med Care** 1989 Mar;27(3):297–305

Language concordance as a determinant of patient compliance and emergency room use in patients with asthma. Manson A. **Med Care** 1988 Dec;26(12):1119–28

Evaluating medical interview process components. Null correlations with outcomes may be misleading. Stiles WB. **Med Care** 1989 Feb;27(2):212–20 (64 ref.)

The Medical Treatment Act. Andrews K. **Med J Aust** 1989 Jan 2;150(1):31–3

Utilization of the "Smokescreen" smoking-cessation programme by general practitioners and their patients. Copeman RC, et al. **Med J Aust** 1989 Jul 17;151(2):83–7

The right not to be treated or to refuse treatment. Deutsch E. **Med Law** 1989;7(5):433–8

More problems with PRO [letter] Kottke TE. **Minn Med** 1988 Dec;71(12):744

The right to refuse medical treatment. Korenchuk KM. **N C Med J** 1989 Aug;50(8):449–51

Assessing patients' capacities to consent to treatment [published erratum appears in N Engl J Med 1989 Mar 16;320(11):748] Appelbaum PS, et al. **N Engl J Med** 1988 Dec 22;319(25):1635–8

Blood: whose choice and whose conscience? Dixon JL. **N Y State J Med** 1988 Sep;88(9):463–4

Jehovah's Witnesses and the right to refuse blood. Findley LJ, et al. **N Y State J Med** 1988 Sep;88(9):464–5

Missed appointments among patients new to a general medical clinic. Starkenburg RJ, et al. **N Y State J Med** 1988 Sep;88(9):473–5

Jehovah's Witnesses and the transfusion of blood products. Vercillo AP, et al. **N Y State J Med** 1988 Sep;88(9):493–4

Death from dialysis termination. Hirsch DJ. **Nephrol Dial Transplant** 1989;4(1):41–4

Acceptance of placebo-control trial design by progressive multiple sclerosis patients. The Canadian Cooperative Multiple Sclerosis Study Group. Noseworthy JH, et al. **Neurology** 1989 Apr;39(4):606–7

Compliance, low literacy, and locus of control. Hussey LC, et al. **Nurs Clin North Am** 1989 Sep;24(3):605–11

Patient compliance: a challenge in practice. Kolton KA, et al. **Nurse Pract** 1988 Dec;13(12):37, 40–1, 44 passim

Factors affecting prescribed medication compliance of the urban homeless adult. Nyamathi A, et al. **Nurse Pract** 1989 Aug;14(8):47–8, 51–2, 54

Why people don't take their medicine. Clouse GD. **Ohio Med** 1988 Sep;84(9):746–50

Absconders from a rural health centre in Papua New Guinea. Buchanan A, et al. **P N G Med J** 1988 Sep;31(3):191–3

Treatment refusal, noncompliance, and the pediatrician's responsibilities. Lantos JD. **Pediatr Ann** 1989 Apr; 18(4):255–60 (30 ref.)

Problems in understanding prescription labels. Mustard TR, et al. **Percept Mot Skills** 1989 Aug;69(1):291–4

The institutionalized mental health patient's right to refuse psychotropic medication. Feather RB. **Perspect Psychiatr Care** 1985;23(2):45–68 (54 ref.)

Autonomy-based informed consent: ethical implications for patient noncompliance. Coy JA. **Phys Ther** 1989 Oct; 69(10):826–33

Do women take the oral contraceptive pill correctly? Denney ML, et al. **Practitioner** 1988 Sep 8;232(1454 (Pt 1)):968–71

General practice, chronic care and the treatment of 'difficult' patients. Doyal L. **Practitioner** 1987 Nov 23; 231(1439):1579–82

Breast self-examination practices in women with a known neoplasm. Doyle MA. **Prog Clin Biol Res** 1988;278:171–84

Barriers and facilitators to compliance with routine mammographic screening. Rimer B, et al. **Prog Clin Biol Res** 1989;293:125–33

An examination of compliance and noncompliance in an HMO cancer screening program. Rimer B, et al. **Prog Clin Biol Res** 1988;278:21–30

An analysis of factors associated with non-compliance with follow-up recommendations after a positive fecal occult blood test. Tressler C, et al. **Prog Clin Biol Res** 1989; 293:307–22

Compliance with therapy in Cooley's anaemia. Vullo C, et al. **Prog Clin Biol Res** 1989;309:43–9

The right to refuse treatment: an uncertain future. Leong GB, et al. **Psychiatr Q** 1988 Winter;59(4):284–92

Outpatient compliance of psychiatric emergency room patients by presenting problems. Solomon P, et al. **Psychiatr Q** 1988 Winter;59(4):271–83

Noncompliance rates in a private practice setting [letter] Burnstein A. **Psychosomatics** 1989 Spring;30(2):236

Effectiveness of iron supplementation compared to iron treatment during pregnancy. Gofin R, et al. **Public Health** 1989 Mar;103(2):139–45

Why women resist screening mammography: patient-related barriers. Rimer BK, et al. **Radiology** 1989 Jul;172(1):243–6

Improving compliance in Xhosa psychiatric patients. Gillis LS, et al. **S Afr Med J** 1989 Sep 2;76(5):205–8

Compliance with chemotherapy in childhood leukaemia in Africa. MacDougall LG, et al. **S Afr Med J** 1989 May 20;75(10):481–4

Retrospective multipractice studies: problems involving attendance, design, and patients [letter] Sørensen HT, et al. **Scand J Prim Health Care** 1989 Mar;7(1):61–2

Compliance and subjective relief by corset treatment in chronic low back pain. Alaranta H, et al. **Scand J Rehabil Med** 1988;20(3):133–6

Bias from non-participation: a study of low-level lead exposure in children. Lyngbye T, et al. **Scand J Soc Med** 1988;16(4):209–15

The impact of a clinic-based educational videotape on knowledge and treatment behavior of men with gonorrhea. Solomon MZ, et al. **Sex Transm Dis** 1988 Jul–Sep; 15(3):127–32

Reasons for non-attendance for computer-managed cervical screening: pilot interviews. Elkind AK, et al. **Soc Sci Med** 1988;27(6):651–60

The relevance of the health belief model to Australian smokers. Knight RA, et al. **Soc Sci Med** 1989;28(12):1311–4 (11 ref.)

A psychosocial perspective in the explanation of patients' drug-taking behavior. Ried LD, et al. **Soc Sci Med** 1988; 27(3):277–85

Introduction of information during the initial medical visit: consequences for patient follow-through with physician recommendations for medication. Rost K, et al. **Soc Sci Med** 1989;28(4):315–21

Medical compliance as an ideology. Trostle JA. **Soc Sci Med** 1988;27(12):1299–308 (58 ref.)

Forcing services on at-risk older adults: when doing good is not so good. Kapp MB. **Soc Work Health Care** 1988; 13(4):1–13

Compliance for low-back pain patients in the emergency department. A randomized trial. Jones SL, et al. **Spine** 1988 May;13(5):553–6

Cardiac rehabilitation exercise programme. Compliance and compliance-enhancing strategies. Oldridge NB. **Sports Med** 1988 Jul;6(1):42–55 (58 ref.)

Factors affecting compliance in the NASA/Johnson Space Center fitness programme. Wier LT, et al. **Sports Med** 1989 Jul;8(1):9–14

Factorial designs in clinical trials: the effects of non-compliance and subadditivity. Brittain E, et al. **Stat Med** 1989 Feb;8(2):161–71

Obstructive sleep apnea: therapeutic compliance. Baker JP, et al. **Trans Am Clin Climatol Assoc** 1987;99:224–30

Psychologic factors related to dialysis in kidney transplant decisions. Callender CO, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 2):1976–8

Noncompliance in organ transplant recipients. Rovelli M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):833–4

Reasons for non-use of family planning methods at Ilorin, Nigeria: male opposition and fear of methods. Fakeye O, et al. **Trop Doct** 1989 Jul;19(3):114–7

Self-administered drug compliance in Nepali leprosy patients. Roche PW, et al. **Trop Doct** 1989 Apr;19(2):59–61

Assessment of patient compliance in a diabetic clinic using glycated proteins compared with blood sugar measurements. Morrison EY, et al. **West Indian Med J** 1988 Sep;37(3):158–61

Compliance and side effects in sleep apnea patients treated with nasal continuous positive airway pressure. Nino-Murcia G, et al. **West J Med** 1989 Feb;150(2):165–9

[The use of drugs in the menopause (letter)] Duursma SA. **Ned Tijdschr Geneeskd** 1989 Jan 7;133(1):43 **(Dut)**

[Patient compliance with antihypertensive medications] Mäenpää H. **Duodecim** 1989;105(16):1460–2 **(Fin)**

[The psychiatrist's and the hospital's responsibility in regard to patient discharge] Jonas C. **Ann Med Psychol (Paris)** 1988 Sep–Oct;146(9):869–72 **(Fre)**

[Predictive value of patient psychological profile and type of physician-patient relationship in compliance of antihypertensive treatment] Consoli SM, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:145–50 (Eng. Abstr.) **(Fre)**

[Adherence to neuroleptic treatment of schizophrenic patients] Blondiaux I, et al. **Encephale** 1988 Nov–Dec; 14(6):431–8 (51 ref.) (Eng. Abstr.) **(Fre)**

[Objective measurement of compliance during treatment of sleep apnea with continuous positive pressure] Krieger J, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:394–5 (Eng. Abstr.) **(Fre)**

[Group work—but with whom? Tips for conducting group therapy—3] Geue B. **Fortschr Med** 1988 Jul 30;106(22):16 **(Ger)**

[At what point should digitalis be given? Contraindicated for prevention—compliance according to need] Haberland FA. **Fortschr Med** 1988 Sep 20;106(27):68 **(Ger)**

[Theophylline therapy: patient compliance and dosage. A clinical study] Kerschl J, et al. **Fortschr Med** 1988 Sep 20; 106(27):554–7 (Eng. Abstr.) **(Ger)**

[Communication, compliance and perinatal risks of Turkish females in Tyrol] Brezinka C, et al. **Geburtshilfe Frauenheilkd** 1989 May;49(5):472–6 (Eng. Abstr.) **(Ger)**

[Compliance: a new monitoring method with the Medication Event Monitoring System. (interview)] Weber E. **Med Monatsschr Pharm** 1988 Sep;11(9):308–9 **(Ger)**

[Compliance improving measures in the treatment of obstructive lung diseases] Holzer R. **Prax Klin Pneumol** 1988 Jul;42(7):535–6 (Eng. Abstr.) **(Ger)**

[Control beliefs and patient compliance: an empirical study exemplified by adolescents with diabetes mellitus, bronchial asthma and alopecia areata] Schmitt GM, et al. **Psychother Psychosom Med Psychol** 1989 Jan;39(1):33–40 (Eng. Abstr.) **(Ger)**

[Therapy and compliance in angina pectoris—analysis of a physician and patient survey] Schoberberger R, et al. **Wien Med Wochenschr** 1989 Jul 30;139(14):321–30 (Eng. Abstr.) **(Ger)**

[Drug compliance behavior of hypertensive patients in 3-shift work with a prescription for 3 or more single doses daily] Zwingenberger W, et al. **Z Gesamte Inn Med** 1989 May 15;44(10):296–300 (Eng. Abstr.) **(Ger)**

[Compliance in forms of drug therapy with special reference to aspects of trust] Bochmann F, et al. **Z Klin Psychol Psychopathol Psychother** 1989;37(2):162–75 (Eng. Abstr.) **(Ger)**

[A case of schizophrenia with paternalistic intervention] Kumakura N. **Seishin Shinkeigaku Zasshi** 1989;91(2):73–83 **(Jpn)**

[Diet among patients with celiac disease. Do patients comply with a gluten-free diet?] Løvik A, et al. **Tidsskr Nor Laegeforen** 1989 Apr 20;109(11):1153–5 (Eng. Abstr.) **(Nor)**

[Decisions to forgo treatment—against international consensus?] Tranøy KE. **Tidsskr Nor Laegeforen** 1989 Apr 10;109(10):1035–6 **(Nor)**

[Preliminary study on non-compliant outpatients and the use of the mail to reschedule them] Marcopito LF, et al. **AMB Rev Assoc Med Bras** 1988 May–Jun;34(3):101–5 (Eng. Abstr.) **(Por)**

[Natural history of coronary artery disease. Long-term clinical follow-up of patients refusing surgical treatment] Hueb WA, et al. **Arq Bras Cardiol** 1988 Mar;50(3):145–51 (Eng. Abstr.) **(Por)**

[Reasons for patients refraining from treatment by an orthodontist] Trezubov VN, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):51–3 (Eng. Abstr.) **(Rus)**

[Patient non-compliance with medication] Lagomarsino AJ. **Acta Psiquiatr Psicol Am Lat** 1988 Jun;34(2):127–34 (Eng. Abstr.) **(Spa)**

[Strategies for improving the therapeutic patterns used in acute diarrhea in primary medical care units. VII. Analysis of compliance with the therapeutic regimens utilized] Martínez C, et al. **Arch Invest Med (Mex)** 1988 Oct–Dec; 19(4):409–17 (Eng. Abstr.) **(Spa)**

[Adverse effects of nifedipine and treatment dropouts (letter)] **Med Clin (Barc)** 1989 May 20;92(19):758–9 **(Spa)**

[Why don't our patients take their medicine? An example from asthma/allergy care] Scherman MH, et al. **Nord Med** 1989;104(3):84–5 **(Swe)**

STATISTICS & NUMERICAL DATA

Prospective randomised controlled trial of methods of call and recall for cervical cytology screening. Pierce M, et al. **BMJ** 1989 Jul 15;299(6692):160–2

Evaluation of a call programme for cervical cytology screening in women aged 50–60. Robertson AJ, et al. **BMJ** 1989 Jul 15;299(6692):163–6

Randomised trial of two strategies offering women mobile screening for breast cancer. Williams EM, et al. **BMJ** 1989 Jul 15;299(6692):158–9

The effect of risk assessment in conjunction with health promotion education on compliance with preventive behaviors. Bamberg R, et al. **J Allied Health** 1989 Spring; 18(3):271–80

PATIENT COOPERATION see **PATIENT COMPLIANCE**

PATIENT CREDIT AND COLLECTION see under **ACCOUNTING**

PATIENT DATA PRIVACY see **CONFIDENTIALITY**

PATIENT DISCHARGE

Updating immunization status at discharge [letter] Walterspiel JN, et al. **Am J Dis Child** 1989 Aug;143(8):879–80

Screening discharge prescriptions. Morrill GB, et al. **Am J Hosp Pharm** 1988 Sep;45(9):1904–5

Follow-up phone calls after discharge. Cave LA. **Am J Nurs** 1989 Jul;89(7):942–3

How to discharge a patient in the AM. Connolly ML. **Am J Nurs** 1989 May;89(5):731

Drug abuse discharges from non-federal short-stay hospitals. Gfroerer JC, et al. **Am J Public Health** 1988 Dec; 78(12):1559–62

New discharge criteria decrease recovery room time after subarachnoid block. Alexander CM, et al. **Anesthesiology** 1989 Apr;70(4):640–3

Discharge surveys. A quality assurance method for ambulatory surgery. Williams M, et al. **AORN J** 1989 May; 49(5):1371–3, 1376–8, 1380

Measuring outcome after discharge from hospital for the elderly—a conceptual and empirical investigation. Victor CR, et al. **Arch Gerontol Geriatr** 1989 Jan;8(1):87–94

Persistent psychotic symptoms at discharge [letter] Ross E. **Aust N Z J Psychiatry** 1988 Dec;22(4):348

How to dictate a discharge summary [letter] **BMJ** 1989 Jun 17;298(6688):1646
Dictate a discharge summary. Penney TM. **BMJ** 1989 Apr 22;298(6680):1084–5
Is an information booklet for patients leaving hospital helpful and useful? Sandler DA, et al. **BMJ** 1989 Apr 1; 298(6677):870–4
Hospital discharge and death communications. Fair JF. **Br J Hosp Med** 1989 Jul;42(1):59–61
Predicting community tenure after psychiatric hospitalization. Sylvester CT, et al. **Community Ment Health J** 1989 Summer;25(2):109–20
Hospital discharges and average length of stay. AMA Center for Health Policy Research. **Conn Med** 1988 Oct; 52(10):612–3
Recommendations for intensive care unit admission and discharge criteria [letter] Lockrem JD. **Crit Care Med** 1989 Jun;17(6):597–8
Early post-myocardial infarction exercise testing. Exercise response and clinical value. Saunamäki KI. **Dan Med Bull** 1988 Dec;35(6):549–64 (148 ref.)
Early and late discharge after hospital birth: father's involvement in infant care. Waldenström U. **Early Hum Dev** 1988 May;17(1):19–28
Where's discharge planning on your list? Johnson J. **Geriatr Nurs (New York)** 1989 May–Jun;10(3):148–9
Improving the discharge planning process: distinguishing between coercion and choice. Dubler NN. **Gerontologist** 1988 Jun;28 Suppl:76–81
Deinstitutionalization of the elderly mentally ill: factors affecting discharge to alternative living arrangements. Sommers I, et al. **Gerontologist** 1988 Oct;28(5):653–8
Is a functionally orientated discharge summary of use to general practitioners? Philp I, et al. **Health Bull (Edinb)** 1988 Sep;46(5):291–4
The progress of 'state' (i.e. 'restricted') patients, after transfer or discharge from the State Hospital at Carstairs, from 1.1.78 to 1.1.88. Ratcliff RA. **Health Bull (Edinb)** 1988 Jul; 46(4):200–4
Discharge planning and other matters [editorial] Carlton TO. **Health Soc Work** 1989 Feb;14(1):3–5
Meeting diagnostic related group goals for elderly patients. Holden MO. **Health Soc Work** 1989 Feb;14(1):13–21
Predicting discharge and follow-up status of hospitalized adolescents. Kowitt MP, et al. **Hosp Community Psychiatry** 1989 Jul;40(7):724–31
Mathematics and the mean LOS [letter] Grant R. **J Am Geriatr Soc** 1988 Nov;36(11):1075
Patients' knowledge concerning their medications on discharge from hospital. Pullar T, et al. **J Clin Pharm Ther** 1989 Feb;14(1):57–9
Clinical specialist pre- and postdischarge teaching of parents of very low birth weight infants. Brooten D, et al. **J Obstet Gynecol Neonatal Nurs** 1989 Jul–Aug;18(4):316–22
Influence of diagnosis-related groups on discharge planning, professional practice, and patient care [published erratum appears in J Prof Nurs 1989 Mar–Apr;5(2):111] Bull MJ. **J Prof Nurs** 1988 Nov–Dec;4(6):415–21
Study of discharge communications from hospital doctors to an inner London general practice. Harding J. **J R Coll Gen Pract** 1987 Nov;37(304):494–5
Leads from the MMWR. Hospital discharge rates for four major cancers—United States, 1970–1986. **JAMA** 1988 Dec 16;260(23):3412, 3416
Assessing hospital-associated deaths from discharge data. The role of length of stay and comorbidities. Jencks SF, et al. **JAMA** 1988 Oct 21;260(15):2240–6
The role of education in discharge planning. Foster SD. **MCN** 1988 Nov–Dec;13(6):403
Small-area variation in hospital discharge rates. Do socioeconomic variables matter? McLaughlin CG, et al. **Med Care** 1989 May;27(5):507–21
The cost-effectiveness of intensive postdischarge care. A randomized trial. Weinberger M, et al. **Med Care** 1988 Nov; 26(11):1092–102
User pays in the mental health service—256 discharges from Ashburn Hall. Dixon GS, et al. **N Z Med J** 1989 Aug 23;102(874):437–40
The link between inpatient care and case management services. Bebout RR. **New Dir Ment Health Serv** 1988 Winter;(40):53–6
Homeward bound. Discharge teaching for parents of newborns with special needs. Baker K, et al. **Nurs Clin North Am** 1989 Sep;24(3):655–64
The application of a computer data base system to the generation of hospital discharge summaries. Smith RP, et al. **Obstet Gynecol** 1989 May;73(5 Pt 1):803–7
Psychiatric discharge summaries—an assessment of need. Rigby JC, et al. **Practitioner** 1988 Jun 8;232(1450):677–9
Psychiatric diagnosis in the medical discharge summary as a measure of consultation outcome. Peterson LG, et al. **Psychiatr Med** 1988;6(3):59–66
Assessment of the potential for surveillance of alcohol-related casualties using National Hospital Discharge Survey data. Towle LH, et al. **Public Health Rep** 1988 Nov–Dec;103(6):597–605
Psychological aspects of early and late discharge after hospital delivery. An interview study of 44 families. Arborelius E, et al. **Scand J Soc Med** 1989;17(1):103–7
Discharge planning strategies for acutely homeless inpatients. Christ WR, et al. **Soc Work Health Care** 1989;14(1):33–45
Delayed discharges for medical and surgical patients in an acute care hospital. Semke J, et al. **Soc Work Health Care** 1989;14(1):15–31
Destinations of stroke patients discharged from the Montreal area acute-care hospitals. Mayo NE, et al. **Stroke** 1989 Mar; 20(3):351–6
National Hospital Discharge Survey. Graves EJ. **Vital Health Stat [13]** 1989 Apr;(99):1–60
[When does an incubator infant go home? (letter)] de Leeuw R. **Ned Tijdschr Geneeskd** 1988 Nov 5;132(45):2075 **(Dut)**
[Quality of surveys on hospital morbidity (letter)] García Benavides F. **Gac Sanit** 1988 May–Jun;2(6):170–1 **(Spa)**
[Validity of the diagnosis at hospital discharge (letter)] Anía BJ. **Med Clin (Barc)** 1988 Jun 4;91(2):78 **(Spa)**
[Ambulatory anesthesia using thiopental: when to discharge the patient? (letter)] Hernández C, et al. **Rev Esp Anestesiol Reanim** 1988 Nov–Dec;35(6):347 **(Spa)**

ECONOMICS

Who's responsible for too-early discharge? Cushing M. **Am J Nurs** 1989 Apr;89(4):471–2
Effects of formal support on mothers' adaptation to the hospital-to-home transition of high-risk infants: the benefits and costs of helping. Affleck G, et al. **Child Dev** 1989 Apr;60(2):488–501
Inappropriate readmissions. Bate W. **Iowa Med** 1989 Mar; 79(3):126
A coalition to influence public policy. Stone JP, et al. **Soc Work Health Care** 1989;14(1):107–12

LEGISLATION & JURISPRUDENCE

Does determining serum alcohol concentrations in emergency department patients influence physicians' civil suit liability? Simel DL, et al. **Arch Intern Med** 1989 May; 149(5):1016–8
Discharge to nursing homes [letter] Millard PH. **BMJ** 1989 Jun 24;298(6689):1710–1
Emerging problems for staff associated with the release of potentially dangerous forensic patients. Miller RD, et al. **Bull Am Acad Psychiatry Law** 1988;16(4):309–20
The progress of 'state' (i.e. 'restricted') patients, after transfer or discharge from the State Hospital at Carstairs, from 1.1.78 to 1.1.88. Ratcliff RA. **Health Bull (Edinb)** 1988 Jul; 46(4):200–4
Hospital antitrust liability in dealings with downstream providers. Testerman MR. **Mo Med** 1989 Jun;86(6):333–6
Assessing the foreseeable risks in discharge planning: the challenge of discharging the brain-injured patient. Levesque JD. **Soc Work Health Care** 1988;13(4):49–63
[The psychiatrist's and the hospital's responsibility in regard to patient discharge] Jonas C. **Ann Med Psychol (Paris)** 1988 Sep–Oct;146(9):869–72 **(Fre)**
[Release of hospital discharge reports to insurance companies] Hollmann A. **Dtsch Med Wochenschr** 1989 Mar 10;114(10):398–9 **(Ger)**

METHODS

Tracking availability of beds in community residences through a talking telephone system. Schwartz MD. **Hosp Community Psychiatry** 1989 Jun;40(6):571–2
Preterm infant care after hospital discharge [published erratum appears in Pediatr Rev 1989 Apr;10(10):312] Bernbaum JC, et al. **Pediatr Rev** 1989 Jan;10(7):195–206 (8 ref.)

ORGANIZATION & ADMINISTRATION

Discharge planning for burn patients. Neville C, et al. **J Burn Care Rehabil** 1988 Jul–Aug;9(4):414–20

STANDARDS

Discharge to nursing homes [letter] Collings AD, et al. **BMJ** 1989 Jul 22;299(6693):262
Towards a network of social health services: redefining discharge planning and expanding the social work domain. Blumenfield S, et al. **Soc Work Health Care** 1988; 13(4):31–48

STATISTICS & NUMERICAL DATA

Which type of hospital discharge report reaches general practitioners most quickly? Kendrick AR, et al. **BMJ** 1989 Feb 11;298(6670):362–3
Coronary heart disease and related procedures. National Hospital Discharge Survey data. Feinleib M, et al. **Circulation** 1989 Jun;79(6 Pt 2):I13–8
Determinants of hospital-to-nursing home placement delays: a pilot study. Weissert WG, et al. **Health Serv Res** 1988 Dec;23(5):619–47
Patterns of surgical and nonsurgical hospital use in Michigan communities from 1980 through 1984. Wolfe RA, et al. **Health Serv Res** 1989 Apr;24(1):67–82
AMA discharges: prediction and treatment outcome. Louks J, et al. **Hosp Community Psychiatry** 1989 Mar; 40(3):299–301
Use of passes on a general hospital psychiatric unit. Remeikis G, et al. **Hosp Community Psychiatry** 1988 Sep;39(9):988–9

TRENDS

Comparison of trends in admissions and discharges in two adjacent hospitals for the mentally handicapped. Rao JM. **J Ment Defic Res** 1988 Aug;32 (Pt 4):301–7
Leads from the MMWR. Hospital discharge rates for cerebrovascular disease—United States, 1970–1986. **JAMA** 1989 May 5;261(17):2486
Hospital discharge rates for cerebrovascular disease—United States, 1970–1986. **MMWR** 1989 Mar 31;38(12):194, 199–201

PATIENT DROPOUTS

see related
PATIENT COMPLIANCE

Discontinuation of orthodontic treatment: a study of the contributing factors. Murray AM. **Br J Orthod** 1989 Feb; 16(1):1–7 (25 ref.)
Factors influencing non-attendance at child psychiatry out-patient appointments. Cottrell D, et al. **Br J Psychiatry** 1988 Feb;152:201–4
Psychiatric clinics in different settings—default rates. Zegleman FE. **Health Bull (Edinb)** 1988 Sep;46(5):286–90
Why do so many people drop out from auto-injection therapy for impotence? Althof SE, et al. **J Sex Marital Ther** 1989 Summer;15(2):121–9
Alarming non-compliance to antituberculosis chemotherapy. Ansari G, et al. **JPMA** 1988 Nov;38(11):284–5
Reducing non-attendance in an outpatient clinic. Jones RB, et al. **Public Health** 1988 Jul;102(4):385–91
Correcting for the bias caused by drop-outs in hypertension trials. Murray GD, et al. **Stat Med** 1988 Sep;7(9):941–6
Tracing defaulters in immunization programmes [letter] Chaudhuri AB. **World Health Forum** 1988;9(4):583–4
[The abandonment of treatment in orthodontics] Fleury JE, et al. **Rev Stomatol Chir Maxillofac** 1989;90(1):30–8 (Eng. Abstr.) **(Fre)**
[Forgetfulness and lack of information are reasons why patients fail to appear] Nilsson J. **Lakartidningen** 1989 Jan 25;86(4):231–2 **(Swe)**

PSYCHOLOGY

Differences in psychological need hierarchy between program completers and dropouts from a drug abuse treatment program. Craig RJ, et al. **Am J Drug Alcohol Abuse** 1988;14(1):89–96
Personality, drug use, and early attrition from substance abuse treatment. Stark MJ, et al. **Am J Drug Alcohol Abuse** 1988; 14(4):475–85
Prediction of early termination from the self-regulatory treatment of chronic headache. Evans DD, et al. **Biofeedback Self Regul** 1988 Sep;13(3):245–56
A naturalistic analytic study of veterans using naltrexone in Puerto Rico. Santos EF. **Bol Asoc Med P R** 1989 Apr; 81(4):134–6
Pre-trial drop-outs [letter] Kaldor A, et al. **Eur J Clin Pharmacol** 1988;35(6):686
Who defaults after treatment for gonorrhoea? Randomised controlled study of effect of an educational leaflet. Bewley S. **Genitourin Med** 1988 Aug;64(4):241–4
AMA discharges: prediction and treatment outcome. Louks J, et al. **Hosp Community Psychiatry** 1989 Mar; 40(3):299–301
Childhood nocturnal enuresis: the prediction of premature withdrawal from behavioral conditioning. Wagner WG, et al. **J Abnorm Child Psychol** 1988 Dec;16(6):687–92
Adolescents' dropout from individual psychotherapy—is it true? Suzuki R. **J Adolesc** 1989 Jun;12(2):197–205
Personality correlates of meditation practice frequency and dropout in an outpatient population. Delmonte MM. **J Behav Med** 1988 Dec;11(6):593–7
Differences in organization of psychological needs between inpatient and outpatient opiate addicts. Craig RJ, et al. **J Clin Psychol** 1989 May;45(3):462–6
Giving up on child psychotherapy: who drops out? Comment on Weisz, Weiss, and Langmeyer. Garfield SL. **J Consult Clin Psychol** 1989 Feb;57(1):168–9
Use of MMPI subtypes in predicting completion of residential alcoholism treatment program. Sheppard D, et al. **J Consult Clin Psychol** 1988 Aug;56(4):590–6
On dropouts and refusers in child psychotherapy: reply to Garfield. Weisz JR, et al. **J Consult Clin Psychol** 1989 Feb; 57(1):170–1
Early discontinuance of borderline patients from psychotherapy. Gunderson JG, et al. **J Nerv Ment Dis** 1989 Jan;177(1):38–42
Elope. Why psychiatric patients go A.W.O.L. McIndoe KI. **J Psychosoc Nurs Ment Health Serv** 1986 Jan;24(1):16–20
Adjustment to illness and dropout of chemotherapy. Gilbar O, et al. **J Psychosom Res** 1989;33(1):1–5
Early studies of mental health delivery systems. Phillips EL. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1129–30
Discharges AMA and AWOL: a new "revolving door syndrome". Chandrasena R, et al. **Psychiatr J Univ Ottawa** 1988 Sep;13(3):154–7
Factors influencing outpatient attrition. Rapaport MH, et al. **Psychiatr Med** 1988;6(4):41–54
Development of a screening questionnaire to study attrition in weight-control programs. Pratt CA. **Psychol Rep** 1989 Jun;64(3 Pt 1):1007–16 (21 ref.)
Noncompliance rates in a private practice setting [letter] Burnstein A. **Psychosomatics** 1989 Spring;30(2):236
Contraceptive discontinuation among married women in the United States. Grady WR, et al. **Stud Fam Plann** 1988

Jul–Aug;19(4):227–35
[Social comparison processes in health psychology and psychotherapy] Haisch J, et al.
Psychother Psychosom Med Psychol 1989 Jan;39(1):26–32 (39 ref.) (Eng. Abstr.) (Ger)

STATISTICS & NUMERICAL DATA

Discontinuation of dialysis therapy as a cause of death. Port FK, et al. **Am J Nephrol** 1989;9(2):145–9

PATIENT DUMPING see PATIENT TRANSFER

PATIENT EDUCATION

Informing patients about phase I trials—how should it be done? Willems Y, et al. **Acta Oncol** 1989;28(1):106–7
Inhaler technique in the elderly. Armitage JM, et al. **Age Ageing** 1988 Jul;17(4):275–8
Inhaler technique and elderly patients [letter] Connolly MJ. **Age Ageing** 1989 Jan;18(1):67
AIDS prevention in homosexual and bisexual men: results of a randomized trial evaluating two risk reduction interventions. Valdiserri RO, et al. **Aids** 1989 Jan;3(1):21–6
What do parents want in parent education? Bernstein ME, et al. **Am Ann Deaf** 1988 Jul;133(3):235–46
Counseling to prevent tobacco use. U.S. Preventive Services Task Force, Washington, D.C. **Am Fam Physician** 1989 Jun;39(6):99–105
Advising parents to stop smoking. Opportunities and barriers in pediatric practice. Frankowski BL, et al. **Am J Dis Child** 1989 Sep;143(9):1091–4
Information sheet for discharge counseling of home i.v. antimicrobial therapy patients [letter] Edmonston GR, et al. **Am J Hosp Pharm** 1989 Mar;46(3):483–4
Survey of patients' knowledge of nosocomial infections. Miller PJ, et al. **Am J Infect Control** 1989 Feb;17(1):31–4
Linking purpose to procedure during interactions with patients. Peloquin SM. **Am J Occup Ther** 1988 Dec; 42(12):775–81
Clinical findings and common symptoms in retinitis pigmentosa [letter] Tongue AC. **Am J Ophthalmol** 1988 Oct 15;106(4):507–8
Oral hygiene program for orthodontic patients. Yeung SC, et al. **Am J Orthod Dentofacial Orthop** 1989 Sep; 96(3):208–13
Effectiveness of patient education to reduce preterm delivery among ordinary risk patients. Andersen HF, et al. **Am J Perinatol** 1989 Apr;6(2):214–7
Asthma education: a national strategy [editorial] Millins RB. **Am Rev Respir Dis** 1989 Sep;140(3):577–8
Why patients can't read [letter] Wingert WA. **Ann Emerg Med** 1988 Dec;17(12):1366
Patient education: Part II. Lindeman CA. **Annu Rev Nurs Res** 1989;7:199–212 (33 ref.)
Alternative explanations of coping with stressful experiences associated with physical illness. Johnson JE, et al. **ANS** 1989 Jan;11(2):39–52 (22 ref.)
Pacemaker battery change. An outpatient procedure. Huffman M. **AORN J** 1988 Oct;48(4):733–9
Smoking cessation counseling by resident physicians in internal medicine, family practice, and pediatrics. Kenney RD, et al. **Arch Intern Med** 1988 Nov;148(11):2469–73
Promoting cancer screening. A randomized, controlled trial of three interventions. McPhee SJ, et al. **Arch Intern Med** 1989 Aug;149(8):1866–72
Facilitating training in tracheoesophageal prosthesis placement. Enderle EE, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jul;115(7):853–5
Incontinence of urine. Fonda D, et al. **Aust Fam Physician** 1988 Aug;17(8):657
Non–functioning gallbladder. Freidin J. **Aust Fam Physician** 1976 Sep;5(8):1049–50, 1056–8, 1061
Patient education. Bereavement. Murtagh J. **Aust Fam Physician** 1989 Jul;18(7):856
Contraception for adolescents. Robertson SI. **Aust Fam Physician** 1988 Oct;17(10):847–52
A drug information system. The patients' responses [published erratum appears in Aust Fam Phjysician 1989 Apr;18(4):421] Trollor J. **Aust Fam Physician** 1989 Jan; 18(1):28–30
Treatment—education. Dunn SM. **Baillieres Clin Endocrinol Metab** 1988 May;2(2):493–506 (56 ref.)
Would primary health care workers give appropriate dietary advice after cholesterol screening? Francis J, et al. **BMJ** 1989 Jun 17;298(6688):1620–2
Randomised controlled trial of general practitioner intervention in patients with excessive alcohol consumption. Wallace P, et al. **BMJ** 1988 Sep 10; 297(6649):663–8
Recommendations for treatment of high blood cholesterol. The National Cholesterol Education Program Adult Treatment Panel. Ernst ND, et al. **Bol Asoc Med P R** 1988 Jul;80(7):258–61
Alcoholism: advice versus extended treatment [letter] Chick JD, et al. **Br J Addict** 1989 Jul;84(7):817–8
The benefits of prescription information leaflets (1). Gibbs S, et al. **Br J Clin Pharmacol** 1989 Jun;27(6):723–39
Pre–operative explanation—a task for general practitioners? Hayward AP. **Br J Clin Pract** 1988 Jul;42(7):280–2
What do we tell patients about mammography? [letter] Plumley PF. **Br J Hosp Med** 1989 Apr;41(4):397
The patient is not a blank sheet: lay beliefs and their relevance to patient education. Donovan JL, et al. **Br J Rheumatol** 1989 Feb;28(1):58–61
Patient understanding of the causes and medical treatment of rheumatoid arthritis. Kay EA, et al. **Br J Rheumatol** 1988 Oct;27(5):396–8
A controlled evaluation of arthritis education. Lindroth Y, et al. **Br J Rheumatol** 1989 Feb;28(1):7–12
Patient understanding of the causes and medical treatment of rheumatic diseases in Spain [letter] Ruiz MT, et al. **Br J Rheumatol** 1989 Aug;28(4):365–6
Framing of information: its influence upon decisions of doctors and patients. Marteau TM. **Br J Soc Psychol** 1989 Mar;28 (Pt 1):89–94
Patient education in the rheumatic diseases—pros and cons. Holman H, et al. **Bull Rheum Dis** 1987;37(5):1–8
Cholesterol education program in the United States. Grundy SM. **Can J Cardiol** 1988 Jul;4 Suppl A:31A–35A
Cost containment: informing patients [letter; comment] Oreopoulos DG. **Can Med Assoc J** 1989 Jul 15;141(2):96 . **Comment on:** Can Med Assoc J 1989 Apr 15;140(8):960–5
A cancer education and prevention center. A community program. Schweitzer RJ. **Cancer** 1988 Oct 15;62(8 Suppl):1821–2
Effect of psychoeducational intervention on anxiety among Egyptian bladder cancer patients. Ali NS, et al. **Cancer Nurs** 1989 Aug;12(4):236–42
Personal control and the needs for hope and information among adults diagnosed with cancer. Brockopp DY, et al. **Cancer Nurs** 1989 Apr;12(2):112–6
Factors involved in nurses' teaching breast self–examination. Clarke DE, et al. **Cancer Nurs** 1989 Feb;12(1):41–6
Educating women about the importance of breast screenings: the nurse's role. Crooks CE, et al. **Cancer Nurs** 1989 Jun; 12(3):161–4
Sexual rehabilitation of the cancer patient. Smith DB. **Cancer Nurs** 1989 Feb;12(1):10–5
Basic drug information to patients attending medical clinics of a teaching hospital. Perera UA, et al. **Ceylon Med J** 1988 Mar;33(1):27–9
Asthma self–management education. Research and implications for clinical practice. Clark NM. **Chest** 1989 May;95(5):1110–3 (30 ref.)
Patient and family participation in the management of respiratory failure in Duchenne's muscular dystrophy. Gilgoff I, et al. **Chest** 1989 Mar;95(3):519–24
The impact of pediatric asthma education on morbidity. Assessing the evidence. Howland J, et al. **Chest** 1988 Nov; 94(5):964–9 (24 ref.)
The role of the orthopedist in injury prevention. Heckman JD, et al. **Clin Orthop** 1989 Mar;(240):5–8
Compliance and the patient's perspective: controlling symptoms in everyday life. Hunt LM, et al. **Cult Med Psychiatry** 1989 Sep;13(3):315–34
Effects of peer–group intervention on metabolic control of adolescents with IDDM. Randomized outpatient study. Anderson BJ, et al. **Diabetes Care** 1989 Mar;12(3):179–83
Development of diabetes attitude scale for health–care professionals. Anderson RM, et al. **Diabetes Care** 1989 Feb; 12(2):120–7
Effects and correlates of blood glucose awareness training among patients with IDDM. Cox DJ, et al. **Diabetes Care** 1989 May;12(5):313–8
Nutrition education and social learning interventions for type II diabetes. Glasgow RE, et al. **Diabetes Care** 1989 Feb; 12(2):150–2
Office care of newly diagnosed IDDM [letter] Held N, et al. **Diabetes Care** 1989 Jan;12(1):40–1
Pre–conception counselling in Asian women with non insulin dependent diabetes and impaired glucose tolerance. Rowe BR, et al. **Diabetes Res** 1988 May;8(1):35–8
An assessment of drug information sheets for diabetic patients: only active involvement by patients is helpful. Kumana CR, et al. **Diabetes Res Clin Pract** 1988 Sep 5; 5(3):225–31
Towards the ultimate outcome [editorial] Home P. **Diabetic Med** 1989 Jan–Feb;6(1):11
Clinical strategies for obesity management. Lean M, et al. **Diabetic Med** 1988 Sep;5(6):515–8
Attitudes, knowledge and blood glucose control. Lockington TJ, et al. **Diabetic Med** 1989 May–Jun;6(4):309–13
Uncontrolled hypertension in type I diabetes: assessment of patients' desires about treatment and improvement of blood pressure control by a structured treatment and teaching programme. Mühlhauser I, et al. **Diabetic Med** 1988 Oct; 5(7):693–8
Giving dietary advice to Asian diabetic patients. Peterson D, et al. **Diabetic Med** 1988 Oct;5(7):683–6
Effect of auxiliary prescription labels on the elderly ambulatory patient's drug knowledge. Gryfe–Becker BM, et al. **DICP** 1989 Apr;23(4):324–9
Comment: effects of labels on patient knowledge [letter] Lisi DM. **DICP** 1989 Mar;23(3):259
Comment: pharmacist not an advisor [letter] Moss JT, et al. **DICP** 1989 Mar;23(3):260–1
Preoperative teaching helps reduce anxiety. Nelmes M. **Dimens Health Serv** 1989 May;66(4):23–5
Community control of hypertension at the worksite in a metallurgical factory: results of 1–year follow–up. Fogari R, et al. **Eur J Epidemiol** 1989 Jun;5(2):164–9
Who defaults after treatment for gonorrhoea? Randomised controlled study of effect of an educational leaflet. Bewley S. **Genitourin Med** 1988 Aug;64(4):241–4
Postintraocular lens implants. Needs of patients. DeBlase R, et al. **Geriatr Nurs (New York)** 1988 Nov–Dec;9(6):342–3
Leadership role of the rheumatologist: toward reaching a consensus. Calin A. **Gerontology** 1988;34 Suppl 1:42–4
What's a pharmacist to do? Resnik DB, et al. **Hastings Cent Rep** 1989 May–Jun;19(3):38–40
Enhancing the effectiveness of abortive therapy: a controlled evaluation of self–management training. Holroyd KA, et al. **Headache** 1989 Mar;29(3):148–53
Negotiating concrete needs: short–term training for high–risk cancer patients. Wool MS, et al. **Health Soc Work** 1989 Aug;14(3):184–95 (31 ref.)
A supportive–educative telephone program: impact on knowledge and anxiety after coronary artery bypass graft surgery. Beckie T. **Heart Lung** 1989 Jan;18(1):46–55
Education of patients undergoing coronary angioplasty: factors affecting learning during a structured educational program. Murphy MC, et al. **Heart Lung** 1989 Jan; 18(1):36–45
Preparation of individuals for participation in a treatment group: development and empirical testing of a model. Meadow D. **Int J Group Psychother** 1988 Jul;38(3):367–85
Rethinking patient education. Luker K, et al. **J Adv Nurs** 1989 Sep;14(9):711–8 (59 ref.)
Rehabilitation information and health beliefs in the post–coronary patient: do we meet their information needs? Murray PJ. **J Adv Nurs** 1989 Aug;14(8):686–93
Study of information given by nurses for catheter care to patients and their carers. Roe BH. **J Adv Nurs** 1989 Mar; 14(3):203–10
Postponing pregnancy after perinatal death: perspectives on doctor advice. Davis DL, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jul;28(4):481–7
The educational role of thrombolytic therapy [letter] Bahr RD. **J Am Coll Cardiol** 1989 Feb;13(2):511–2
Comparison of conventional and videotaped diabetic exchange lists instruction. Bethea CD, et al. **J Am Diet Assoc** 1989 Mar;89(3):405–6
A multifactorial weight control program in a corporate setting. Hermann–Nickell DM, et al. **J Am Diet Assoc** 1989 Apr;89(4):534–7
Social marketing of nutrition education to cardiac patients in acute care. Huebner VD, et al. **J Am Diet Assoc** 1989 Apr;89(4):540–2
Nutritional impact of acquired immune deficiency syndrome: a unique counseling opportunity. Hyman C, et al. **J Am Diet Assoc** 1989 Apr;89(4):520–4 (33 ref.)
Drug–nutrient interaction counseling programs in upper midwestern hospitals: 1986 survey results. Jones CM, et al. **J Am Diet Assoc** 1989 Feb;89(2):243–5
Food stamp use and the nutrition practices of participants in the Colorado Expanded Food and Nutrition Education Program. Lopez L, et al. **J Am Diet Assoc** 1989 Sep; 89(9):1312–3
Teaching self–management skills to cystic fibrosis patients and its effect on their caloric intake. Luder E, et al. **J Am Diet Assoc** 1989 Mar;89(3):359–64
A strategy for designing effective patient education materials. McCabe BJ, et al. **J Am Diet Assoc** 1989 Sep;89(9):1290–2, 1295
Computerized nutrition analysis: a nutrition education model for cardiovascular health. Walt MA, et al. **J Am Diet Assoc** 1989 Sep;89(9):1303–4
Evaluation of a hospital–based education program for patients with diabetes. Wood ER. **J Am Diet Assoc** 1989 Mar;89(3):354–8
Increased utilization of influenza and pneumococcal vaccines in an elderly hospitalized population. Bloom HG, et al. **J Am Geriatr Soc** 1988 Oct;36(10):897–901
Involuntary urine loss: dispelling the myths. Reich M. **J Am Osteopath Assoc** 1988 Sep;88(9):1153–6
A prescription for taking medicine properly. Reich M. **J Am Osteopath Assoc** 1988 Nov;88(11):1421–4
Development and evaluation of an adult asthma self–management program: Wheezers Anonymous. Snyder SE, et al. **J Asthma** 1987;24(3):153–8
Interactive video in health care: blending patient care, computer technology, and research results. Sweeney MA, et al. **J Biocommun** 1988 Fall;15(4):6–11
Evaluation of burn discharge teaching. Yurko LC, et al. **J Burn Care Rehabil** 1988 Nov–Dec;9(6):643–4
Patient knowledge of cardio–respiratory drugs. Kay EA, et al. **J Clin Pharm Ther** 1988 Aug;13(4):263–8
Audiovisual demonstration for patient counselling in the use of pressurised aerosol bronchodilator inhalers. McElnay JC, et al. **J Clin Pharm Ther** 1989 Apr;14(2):135–44
An investigation into information provided for patients on home parenteral nutrition. O'Connor M, et al. **J Clin Pharm Ther** 1988 Dec;13(6):403–9
Patients' knowledge concerning their medications on discharge from hospital. Pullar T, et al. **J Clin Pharm Ther** 1989 Feb;14(1):57–9
Effects of sensory and procedural information on coping with stressful medical procedures and pain: a meta–analysis. Suls J, et al. **J Consult Clin Psychol** 1989 Jun;57(3):372–9
Modern approaches to blood pressure measurements: patient education. IVth Swiss Hypertension Workshop. 15–17 September 1988, Stein am Rhein, Switzerland. Proceedings. **J Hypertens Suppl** 1989 May;7(3):S1–S111
Patient and spouse responses to education early after myocardial infarction. Christie D, et al.

J Psychosom Res 1988;32(3):321–5
Development of a self–administered questionnaire to measure women's knowledge of prenatal screening and diagnostic tests. Marteau TM, et al. **J Psychosom Res** 1988; 32(4–5):403–8
Use of laboratory services and communication of results to patients in an urban practice: an audit. Kelly MH, et al. **J R Coll Gen Pract** 1988 Feb;38(307):64–6
Diabetes mellitus: attitudes, knowledge and glycaemic control in a cross–sectional population. Thompson AV, et al. **J R Coll Gen Pract** 1988 Oct;38(315):450–2
A randomized controlled trial of an information booklet for hypertensive patients in general practice. Watkins CJ, et al. **J R Coll Gen Pract** 1987 Dec;37(305):548–50
GPs' drinking and patient alcohol education. Bicknell MA, et al. **J R Soc Health** 1989 Feb;109(1):36
Intravenous drug users and human immunodeficiency virus testing and counseling [letter] **JAMA** 1989 Sep 8; 262(10):1331–2
Cyanocobalamin injections for patients without documented deficiency. Reasons for administration and patient responses to proposed discontinuation. Lawhorne L, et al. **JAMA** 1989 Apr 7;261(13):1920–3
Educating patients about HIV [letter] Thurn JR, et al. **JAMA** 1989 Oct 13;262(14):1948–9
Write for your patient [editorial] **Lancet** 1989 May 27; 1(8648):1175
Home measurement of blood pressure [letter] Bell C. **Lancet** 1988 Nov 12;2(8620):1149
What must women be told about the pill? Brahams D. **Lancet** 1989 Jul 29;2(8657):285–6
Management of asthma in the community [letter] Strube G. **Lancet** 1989 Sep 23;2(8665):738
When the message gets garbled. Foster SD. **MCN** 1988 Sep–Oct;13(5):367
The patient education bridge. Harrison LL. **MCN** 1989 Jan–Feb;14(1):51
Assessment and education to prevent preterm labor. Johnson FF. **MCN** 1989 May–Jun;14(3):157–60
Patient advice—adult. Cushing M Jr. **MD Comput** 1989 Jan–Feb;6(1):42–3
Do patients understand asthma? [letter] **Med J Aust** 1989 Feb 20;150(4):224–6
Family–planning clinics and educational programmes—a rural experience. Brown SJ, et al. **Med J Aust** 1989 Feb 6;150(3):133–7
Do patients understand asthma? A community survey of asthma knowledge. Rubinfeld AR, et al. **Med J Aust** 1988 Nov 21;149(10):526–30
Practice what you preach! Poston LM. **Minn Med** 1989 Mar; 72(3):163
Listening to patients [editorial] Budd MA. **Mo Med** 1989 Jun;86(6):315–6, 328
Practice information book cuts phone calls, patient irritation. Conomikes GS. **Mo Med** 1986 Dec;83(12):787, 815
Skin: the bare facts. **N C Med J** 1989 Jul;50(7):383–6
How much sun is enough? Sunburns and sun poisoning. **N C Med J** 1989 May;50(5):272–3
Cataract surgery firsthand. Eakes ML. **N C Med J** 1989 May; 50(5):267–70
Protecting your eyes and preserving your vision. Hedgpeth EM Jr, et al. **N C Med J** 1989 Jun;50(6):325–8
Pitfalls in Tay–Sachs carrier detection: physician referral patterns and patient ignorance. Shapiro DA, et al. **N Y State J Med** 1989 Jun;89(6):317–9
Information and consent. Gillett GR. **N Z Med J** 1988 Nov 23;101(858):792–5
Rehabilitation information after total hip replacement [letter] Smaill R, et al. **N Z Med J** 1989 Aug 9;102(873):418–9
Patient teaching. **Nurs Clin North Am** 1989 Sep;24(3):583–693
Client and family learning in the rehabilitation setting. Diehl LN. **Nurs Clin North Am** 1989 Mar;24(1):257–64
The content of prenatal care. Nagey DA. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):516–28 (85 ref.)
New educational materials for you and your patient [news] **Ohio Med** 1988 Aug;84(8):607
Effect of patient experience on the results of automated perimetry in clinically stable glaucoma patients. Werner EB, et al. **Ophthalmology** 1988 Jun;95(6):764–7
Toward good senior health—medication checkups. Zamostien BB. **Pa Med** 1989 Apr;92(4):48–52
The St. Thomas's Hospital maternity case notes study: a randomised controlled trial to assess the effects of giving expectant mothers their own maternity case notes. Lovell A, et al. **Paediatr Perinat Epidemiol** 1987 Apr;1(1):57–66
Some difficulties encountered in teaching physician–parent communication in a pediatric emergency department. Morris RE, et al. **Pediatr Emerg Care** 1989 Jun;5(2):86–93
Discharge pack study [letter] Gelardi RC. **Pediatrics** 1989 Jan;83(1):148–9
Diabetes education: what, who, when, where and how? Coles C. **Practitioner** 1987 Nov 23;231(1439):1567–8, 1570–1
Advising patients about reducing fat consumption. Davies L, et al. **Practitioner** 1988 Mar 22;232(1445):295–6
Practical steps to starting a patients' library. Leverton T. **Practitioner** 1988 Dec;232(1460):1393–6
Metered dose inhalers: the value of instruction. Smith D. **Practitioner** 1988 May 9;232(1448):507, 510
Planning for cancer patient care and teaching to enhance the oncology product line. Blauvelt N, et al. **Prog Clin Biol Res** 1988;278:211–8
Doctor, nurse and patient knowledge of prescribed medication in primary care. Ross FM. **Public Health** 1989 Mar;103(2):131–7
The Swedish back school in chronic low back pain. Part II. Factors predicting the outcome. Hurri H. **Scand J Rehabil Med** 1989;21(1):41–4
The Swedish back school in chronic low back pain. Part I. Benefits. Hurri H. **Scand J Rehabil Med** 1989;21(1):33–40
What should we tell patients with cancer? Reid A, et al. **Scott Med J** 1988 Jun;33(3):260
Contributions of patients to general practitioner consultations in relation to their understanding of doctor's instructions and advice. Robinson EJ, et al. **Soc Sci Med** 1988; 27(9):895–900
Teaching catheterization to children. Hannigan K, et al. **Urol Clin North Am** 1988 Nov;15(4):653–60 (14 ref.)
AIDS. Beware of buzzwords: they mininform, insult, and promote ignorance. **Va Med** 1989 May;116(5):198
Managing hypercholesterolemia [letter] Madwed MP. **West J Med** 1989 Aug;151(2):207–8
The effects of audiovisual modeling and reading on baccalaureate students' patient teaching. Minnick A, et al. **West J Nurs Res** 1988 Dec;10(6):766–77
[Evaluation of the effect of preventing mastitis through ante–partum propaganda and education] Zhang HS. **Chung Hua Hu Li Tsa Chih** 1988 Oct;23(10):586–7 **(Chi)**
[The task of health education in patients with chronic diseases of the locomotor system and its specifics in health spas] Ježek J. **Cesk Zdrav** 1988 Jul;36(6–7):308–13 (Eng. Abstr.) **(Cze)**
[Training of patients with urinary incontinence] Klarskov OP. **Ugeskr Laeger** 1989 Jan 30;151(5):290–3 (Eng. Abstr.) **(Dan)**
[Training of patients with residual urine and/or recurrent urinary tract infections] Klarskov OP. **Ugeskr Laeger** 1989 Jan 30;151(5):293–5 (Eng. Abstr.) **(Dan)**
[Patient information] Lunde IM. **Ugeskr Laeger** 1988 Dec 12;150(50):3094–6 (Eng. Abstr.) **(Dan)**
[Is the information given by doctors understandable?] Lunde IM. **Ugeskr Laeger** 1988 Dec 12;150(50):3096–100 (Eng. Abstr.) **(Dan)**
[Information for women applying for abortion] Nielsen R, et al. **Ugeskr Laeger** 1988 Oct 31;150(44):2644–6 (Eng. Abstr.) **(Dan)**
[Education of the patient on long–term oxygen therapy] Poirson–Chevalier C, et al. **Agressologie** 1988 Sep; 29(8):565–8 (Eng. Abstr.) **(Fre)**
[Contribution to a critical re–examination of the nutrition advice given to diabetic patients] Slama G, et al. **Journ Annu Diabetol Hotel Dieu** 1989;:191–202 (42 ref.) **(Fre)**
[Prevention of backache. Experience at a school of the back] Blotman F, et al. **Rev Rhum Mal Osteoartic** 1988 Oct; 55(10):747–9 **(Fre)**
[Education and social rehabilitation of lumbalgic patients] Drevet JG, et al. **Rev Rhum Mal Osteoartic** 1988 Oct; 55(10):755–9 **(Fre)**
[Group work—but with whom? Tips for conducting group therapy—3] Geue B. **Fortschr Med** 1988 Jul 30;106(22):16 **(Ger)**
[Communication, compliance and perinatal risks of Turkish females in Tyrol] Brezinka C, et al. **Geburtshilfe Frauenheilkd** 1989 May;49(5):472–6 (Eng. Abstr.) **(Ger)**
[The preoperative consultation] Walcher W. **Gynakol Rundsch** 1988;28 Suppl 2:73–8 (10 ref.) **(Ger)**
[Active against the pharmaceutical inferiority complex] Heinzl S. **Med Monatsschr Pharm** 1988 Oct;11(10):325 **(Ger)**
[Knowledge of the diagnosis and drug treatment of psychiatric patients] Luderer HJ. **Nervenarzt** 1989 Apr; 60(4):213–9 (Eng. Abstr.) **(Ger)**
[The effect of information and relaxation groups on lung function and the psychophysical status of asthma patients] Spiess K, et al. **Prax Klin Pneumol** 1988 Jul;42(7):641–4 (Eng. Abstr.) **(Ger)**
[Carcinoma of the breast: information on tumoral disease in hospitalized patients] Monzeglio C, et al. **Minerva Ginecol** 1989 Feb;41(2):95–7 (Eng. Abstr.) **(Ita)**
[Training and education for the young diabetic and his parents] Della Porta V, et al. **Minerva Pediatr** 1988 Mar; 40(3):145–50 (14 ref.) (Eng. Abstr.) **(Ita)**
[Care and health education of coronary patients] **Nippon Rinsho** 1987 Dec;Spec No:1051–86 **(Jpn)**
[Self examination of the breasts] Bjørnland K. **Tidsskr Nor Laegeforen** 1989 Apr 10;109(10):1076–7 (Eng. Abstr.) **(Nor)**
[Dietary advice in hyperlipidemia. A challenge for the health care service] Drevon CA, et al. **Tidsskr Nor Laegeforen** 1989 Feb 20;109(5):586–91 (Eng. Abstr.) **(Nor)**
[Smoking prevention. Courses on smoking prevention conducted at a regional hospital] Omenaas E, et al. **Tidsskr Nor Laegeforen** 1989 Apr 20;109(11):1171–4 (Eng. Abstr.) **(Nor)**
[Childbirth preparation classes—parenteral education on the right track? An evaluation study based on questionnaires sent to women in Sogn and Fjordane] Tjugum J, et al. **Tidsskr Nor Laegeforen** 1989 May 10;109(13):1381–2 (Eng. Abstr.) **(Nor)**
[Preoperative level of information in urologic patients] Torsteinson IO. **Tidsskr Nor Laegeforen** 1989 Jan 10; 109(1):37–40 (Eng. Abstr.) **(Nor)**
[Evaluation of the knowledge of risk factors and the principles of prevention of primary ischemic heart disease] Witczak W, et al. **Kardiol Pol** 1988;31(8):510–4 (Eng. Abstr.) **(Pol)**
[Preoperative preparation and the quality of postoperative recovery in surgery patients: an experimental study] Barath A, et al. **Lijec Vjesn** 1989 Apr–May;111(4–5):116–23 (Eng. Abstr.) **(Scr)**
[Diabetic education (letter)] **Med Clin (Barc)** 1989 Apr 8; 92(13):517 **(Spa)**
[Programs of diabetological education: a basic tool in the treatment of diabetes mellitus] Calle–Pascual AL, et al. **Med Clin (Barc)** 1989 Apr 22;92(15):567–70 (Eng. Abstr.) **(Spa)**
[The Guadalajara Study (3): Changes in clinical and analytical parameters in diabetic patients exposed to a course of continuing diabetes education. Results of 30 months' follow–up] Calle Pascual AL, et al. **Med Clin (Barc)** 1988 May 14;90(19):763–6 (Eng. Abstr.) **(Spa)**
[Use of drugs and medical care of diabetic patients in Tarragona (letter)] Costa B, et al. **Med Clin (Barc)** 1989 Feb 25;92(7):279 **(Spa)**
[Long–term results of a diabetes education program. Effects on the metabolic control and clinical outcome of complications] Figuerola D, et al. **Med Clin (Barc)** 1988 Oct 29;91(14):525–9 (Eng. Abstr.) **(Spa)**
[Review of the effectiveness of medical counseling in quitting smoking in primary care] Nebot Adell M, et al. **Rev Clin Esp** 1989 Mar;184(5):260–4 (47 ref.) (Eng. Abstr.) **(Spa)**
[Level of knowledge of lepers from the city of La Habana about their disease] de Rojas y López del Rincón V. **Rev Cubana Med Trop** 1989 Jan–Apr;41(1):64–75 (Eng. Abstr.) **(Spa)**
[Psychological preparation of children for surgery is also of postoperative importance] Arnbjörnsson E, et al. **Lakartidningen** 1988 Nov 23;85(47):4072–3 (Eng. Abstr.) **(Swe)**
[A patient was not correctly informed about cancer. A correct decision by the Responsibility Board—but was the explanation sufficient?] Lynöe N. **Lakartidningen** 1989 May 24;86(21):1978 **(Swe)**

ECONOMICS

Using videotape modeling to prepare children psychologically for surgery: influence of parents and costs versus benefits of providing preparation services. Pinto RP, et al. **Health Psychol** 1989;8(1):79–95

LEGISLATION & JURISPRUDENCE

Evaluation of the physicians' obligation to provide information in Denmark. Segest E, et al. **Med Law** 1988; 7(2):141–9
[Importance of medical information for the institutionalized patient] Peretti SC, et al. **Can J Psychiatry** 1989 Jun; 34(5):405–12 (Eng. Abstr.) **(Fre)**
[Legal theoretical considerations of responsibility in medical science] Jakobs G. **Beitr Gerichtl Med** 1988;46:9–15 (Eng. Abstr.) **(Ger)**
[HIV infection and driving ability (news)] **Fortschr Med** 1989 Jul 20;107(21):14 **(Ger)**
[Responsibility for education in endoscopy interventions. Legal requirements] Tröger HD. **Fortschr Med** 1989 Mar 15;107(8):187–8 **(Ger)**
[Truth at bedside in relation to poor prognosis. Legal aspects] Schreiber HL. **Langenbecks Arch Chir** 1988;Suppl 2:557–62 (Eng. Abstr.) **(Ger)**
[Physician responsibility for patient education in relation to unconventional methods of treatment] Hirthammer C. **Versicherungsmedizin** 1989 Mar 1;41(2):61–4 (Eng. Abstr.) **(Ger)**
[The health and will of the patient—applied to extended surgical procedures] Bauer G, et al. **Wien Klin Wochenschr** 1988 Nov 18;100(22):725–9 (12 ref.) (Eng. Abstr.) **(Ger)**

METHODS

Use of a computer program in the treatment and education of young diabetics. Laron Z, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Jun;29(3):378–84
An educational booklet diminishes anxiety in parents whose children receive total parenteral nutrition. Laine L, et al. **Am J Dis Child** 1989 Mar;143(3):374–7
How can patient education help attain the objectives for the nation? Bartlett EE. **Am J Prev Med** 1989 Jul–Aug; 5(4):230–9
Improving patient comprehension of literature on smoking. Meade CD, et al. **Am J Public Health** 1989 Oct; 79(10):1411–2
Preventing AIDS and other STDs through condom promotion: a patient education intervention. Solomon MZ, et al. **Am J Public Health** 1989 Apr;79(4):453–8
Readability evaluation of nine patient drug education sources. Mallet L, et al. **Am Pharm** 1988 Nov;NS28(11):33–6
Compliance packaging: a patient education tool. Smith DL. **Am Pharm** 1989 Feb;NS29(2):42–5, 49–53
Preoperative patient teaching. Producing a video account. Barrett JB, et al. **AORN J** 1989 Sep;50(3):602–3, 605, 607–8
Perioperative nursing research. Part I: Preoperative psychoeducational interventions. Rothrock JC. **AORN J**

1989 Feb;49(2):597, 599, 601–2 passim (54 ref.)

2 year old asthmatics can learn to operate a tube spacer by copying their mothers. Croft RD. **Arch Dis Child** 1989 May;64(5):742–3

The beneficial outcomes of the arthritis self-management course are not adequately explained by behavior change. Lorig K, et al. **Arthritis Rheum** 1989 Jan;32(1):91–5

Pelvic inflammatory disease. Murtagh J. **Aust Fam Physician** 1989 Feb;18(2):175

Teaching of breast self examination. Is it practical? Smart DR, et al. **Aust Fam Physician** 1989 Feb;18(2):115–9

Incontinence. The role of the domiciliary nurse. Wellings C. **Aust Fam Physician** 1989 Aug;18(8):965–9 (12 ref.)

Is an information booklet for patients leaving hospital helpful and useful? Sandler DA, et al. **BMJ** 1989 Apr 1; 298(6677):870–4

Pictorial fetal movement charts in a multiracial antenatal clinic. Shafi MI, et al. **BMJ** 1989 Jun 24;298(6689):1688

BACUP—the first two years: evaluation of a national cancer information service [published erratum appears in BMJ 1988 Oct 15;297(6654):970] Slevin ML, et al. **BMJ** 1988 Sep 10;297(6649):669–72

Education and self-hypnosis in the management of low back pain: a component analysis. Spinhoven P, et al. **Br J Clin Psychol** 1989 May;28 (Pt 2):145–53

Getting it taped: the 'bad news' consultation with cancer patients. Hogbin B, et al. **Br J Hosp Med** 1989 Apr; 41(4):330–3

A family information system for education following traumatic brain injury. Eisner J, et al. **Brain Inj** 1989 Jan–Mar;3(1):79–90

An evaluation of selected "I Can Cope" programs by registered participants. Diekmann JM. **Cancer Nurs** 1988 Oct;11(5):274–82

SESAM-DIABETE, an expert system for insulin-requiring diabetic patient education. Levy M, et al. **Comput Biomed Res** 1989 Oct;22(5):442–53

From variables to videodiscs. Interactive video in the clinical setting. Sweeney MA, et al. **Comput Nurs** 1988 Jul–Aug; 6(4):157–63

The usefulness of detailed information to patients with contact allergy. Edman B. **Contact Dermatitis** 1988 Jul; 19(1):43–7

Anti-smoking advice for young diabetic smokers: is it a waste of breath? Ardron M, et al. **Diabetic Med** 1988 Oct; 5(7):667–70

Experiences with running a programme of education for diabetic children and their parents. Court S, et al. **Diabetic Med** 1989 May–Jun;6(4):366–8

Group education for obese patients with type 2 diabetes: greater success at less cost. Heller SR, et al. **Diabetic Med** 1988 Sep;5(6):552–6

Effects of a health activist course on knowledge and awareness of antibiotic use. Hermoni D, et al. **Fam Pract** 1989 Mar;6(1):27–32

Patient education by a family nurse as a model for training residents. Solberg LI, et al. **Fam Pract** 1989 Jun;6(2):114–9

A cognitive-educational treatment for hypochondriasis. Barsky AJ, et al. **Gen Hosp Psychiatry** 1988 Sep;10(5):322–7

Teaching patients to use a new hip. Nolde T, et al. **Geriatr Nurs (New York)** 1989 Mar–Apr;10(2):69–70

Do patients need practice information leaflets? Bhopal RS, et al. **Health Bull (Edinb)** 1988 Jul;46(4):205–12

Seeking information: where do pregnant women go? Aaronson LS, et al. **Health Educ Q** 1988 Fall;15(3):335–45

Aptitude X treatment interactions: implications for patient education research. Holloway RL, et al. **Health Educ Q** 1988 Fall;15(3):241–57 (32 ref.)

Knowledge about AIDS among psychiatric inpatients. Bear JW, et al. **Hosp Community Psychiatry** 1988 Sep; 39(9):986–8

A model library [letter] Gaudron AW. **Hosp Community Psychiatry** 1988 Oct;39(10):1110

One doctor's formula for community outreach. Seizing the moment. **IMJ** 1988 Jul;174(1):37–42

The practical approach to improved oral hygiene. Lange DE. **Int Dent J** 1988 Sep;38(3):154–62 (31 ref.)

Information booklets for patients with inflammatory bowel disease. Mayberry JF. **Int Disabil Stud** 1988;10(4):179–80

Comparison of oral, written and audio-visually based information as preparation for intravenous pyelography. Hjelm-Karlsson K. **Int J Nurs Stud** 1989;26(1):53–68

Effects of preparation for mastectomy/hysterectomy on women's post-operative self-care behaviors. Williams PD, et al. **Int J Nurs Stud** 1988;25(3):191–206

The effect of education and written material on compliance of pediatric clients. Zahr LK, et al. **Int J Nurs Stud** 1989; 26(3):213–20

Increasing patients' knowledge of radiation therapy. Mood DW, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct; 15(4):989–93

Practice patterns of teaching testicular self-examination to adolescent patients. Sayger SA, et al. **J Adolesc Health Care** 1988 Sep;9(5):441–2

The nursing preparation of stoma patients for self-care. Ewing G. **J Adv Nurs** 1989 May;14(5):411–20

Improving recovery following cardiac surgery: a randomized clinical trial. Gortner SR, et al. **J Adv Nurs** 1988 Sep; 13(5):649–61

Education and support for the newly diagnosed cardiac family: a vital link in rehabilitation. Wiggins NC. **J Adv Nurs** 1989 Jan;14(1):63–7

Increased readability improves the comprehension of written information for patients with skin disease. Baker GC, et al. **J Am Acad Dermatol** 1988 Dec;19(6):1135–41

Modeling and guided practice as components within a comprehensive testicular self-examination cancer education program. Walker R, et al. **J Am Coll Health** 1989 Mar;37(5):211–5

Treatment of osteoporosis. The psychological impact of a medical education program on older patients. Gold DT, et al. **J Am Geriatr Soc** 1989 May;37(5):417–22

Improving medication compliance in the elderly. Strategies for the health care provider [editorial] Kazis LE, et al. **J Am Geriatr Soc** 1988 Dec;36(12):1161–2

Elders' nonadherence, its assessment, and computer assisted instruction for medication recall training. Leirer VO, et al. **J Am Geriatr Soc** 1988 Oct;36(10):877–84

Preparation book for hospitalized pediatric patients: content and design. Gross PR. **J Biocommun** 1989;16(2):7–10

Meta-analysis of the effects of educational and psychosocial interventions on management of diabetes mellitus. Padgett D, et al. **J Clin Epidemiol** 1988;41(10):1007–30

Preparation for cesarean delivery: a multicomponent analysis of treatment outcome. Greene PG, et al. **J Consult Clin Psychol** 1989 Aug;57(4):484–7

Noncompliance in adolescents: a review. Cromer BA, et al. **J Dev Behav Pediatr** 1989 Aug;10(4):207–15 (123 ref.)

Comparison between videotape and personalized patient education for anticoagulant therapy. Stone S, et al. **J Fam Pract** 1989 Jul;29(1):55–7

Patient education in hypertension: five essential steps. Grueninger UJ, et al. **J Hypertens Suppl** 1989 May; 7(3):S93–8

Education of the hypertensive patient: the Ann Arbor approach. Zweifler AJ, et al. **J Hypertens Suppl** 1989 May; 7(3):S89–91

A literature review on the efficacy of video in patient education. Gagliano ME. **J Med Educ** 1988 Oct; 63(10):785–92 (27 ref.)

Comparison of the effectiveness of videotape versus live group infant care classes. Leff EW. **J Obstet Gynecol Neonatal Nurs** 1988 Sep–Oct;17(5):338–44

Interpretation and communication of the results of medical field investigations. Schulte PA, et al. **J Occup Med** 1989 Jul;31(7):589–94

A behavioral measure of AIDS information seeking by drug and alcohol inpatients. Kramer TH, et al. **J Subst Abuse Treat** 1989;6(2):83–5

Counseling regarding human immunodeficiency virus-antibody testing: an interactional method of knowledge and risk assessment. Weddington WW Jr, et al. **J Subst Abuse Treat** 1989;6(2):77–82

Preterm birth prevention in a rural practice. Yawn BP, et al. **JAMA** 1989 Jul 14;262(2):230–3

Evaluation of a structured treatment and teaching programme on non-insulin-dependent diabetes. Kronsbein P, et al. **Lancet** 1988 Dec 17;2(8625):1407–11

Informing patients [letter] Tattersall RB. **Lancet** 1989 Jul 29; 2(8657):280

The role of education in discharge planning. Foster SD. **MCN** 1988 Nov–Dec;13(6):403

Interacting with videodisc technology. Harrison LL. **MCN** 1989 May–Jun;14(3):173

Evaluating medical interview process components. Null correlations with outcomes may be misleading. Stiles WB. **Med Care** 1989 Feb;27(2):212–20 (64 ref.)

Unsatisfactory nutritional parameters in non-insulin-dependent diabetes mellitus. Campbell LV, et al. **Med J Aust** 1989 Aug 7;151(3):146, 149–50

Training health profession students to be effective patient teachers. Lorenz RA, et al. **Med Teach** 1987;9(4):403–8

The effectiveness of role playing in cardiac care rehabilitation education. Collins JA. **Milit Med** 1988 Sep;153(9):464–8

Taking a sexual history and educating clients about safe sex. Andrist LC. **Nurs Clin North Am** 1988 Dec;23(4):959–73 (28 ref.)

Concerns of the hospitalized and community psychiatric client. Antai-Otong D. **Nurs Clin North Am** 1989 Sep; 24(3):665–73

Orchestrating the process of patient education. Methods and approaches. Armstrong ML. **Nurs Clin North Am** 1989 Sep; 24(3):597–604

Teaching patients with life-threatening illnesses. Cardiovascular disease, transplantation, and organ donation. Barr WJ. **Nurs Clin North Am** 1989 Sep; 24(3):639–44

Education as the key to rehabilitation. Brillhart B, et al. **Nurs Clin North Am** 1989 Sep;24(3):675–80

Patient teaching in the ambulatory setting. De Muth JS. **Nurs Clin North Am** 1989 Sep;24(3):645–54

Adult education. The cornerstone of patient teaching. Gessner BA. **Nurs Clin North Am** 1989 Sep;24(3):589–95

Teaching the home care client. Johnson EA, et al. **Nurs Clin North Am** 1989 Sep;24(3):687–93

Patient teaching for elders. Kick E. **Nurs Clin North Am** 1989 Sep;24(3):681–6

Perspectives on research in patient teaching. Oberst MT. **Nurs Clin North Am** 1989 Sep;24(3):621–8

Realistically meeting the educational needs of hospitalized acute and short-stay patients. Ruzicki DA. **Nurs Clin North Am** 1989 Sep;24(3):629–37

Cross-cultural perspectives on patient teaching. Tripp-Reimer T, et al. **Nurs Clin North Am** 1989 Sep; 24(3):613–9

Usefulness of head injury instruction forms in home observation of mild head injuries. Warren D, et al. **Pediatr Emerg Care** 1989 Jun;5(2):83–5

Follow-up of children with trait in a rural setting. Harris H. **Pediatrics** 1989 May;83(5 Pt 2):876–7

Educating children and adults on coping with Tourette syndrome. Fisher W, et al. **Percept Mot Skills** 1986 Apr; 62(2):530

Improving compliance in Xhosa psychiatric patients. Gillis LS, et al. **S Afr Med J** 1989 Sep 2;76(5):205–8

The impact of a clinic-based educational videotape on knowledge and treatment behavior of men with gonorrhea. Solomon MZ, et al. **Sex Transm Dis** 1988 Jul–Sep; 15(3):127–32

Long-term outcomes of an arthritis self-management study: effects of reinforcement efforts. Lorig K, et al. **Soc Sci Med** 1989;29(2):221–4

Introduction of information during the initial medical visit: consequences for patient follow-through with physician recommendations for medication. Rost K, et al. **Soc Sci Med** 1989;28(4):315–21

Patients and prescriptions [editorial] **W V Med J** 1989 Sep; 85(9):395

Changes in the exercise of self-care agency. Riesch SK. **West J Nurs Res** 1988 Jun;10(3):257–73

Doctors as teachers. Siem H. **World Health Forum** 1988; 9(2):250–3

[The effect of multidisciplinary group advice for patients with rheumatoid arthritis] Poulsen A, et al. **Ugeskr Laeger** 1988 Dec 5;150(49):3047–50 (Eng. Abstr.) **(Dan)**

[A school for backache in Geneva] Roux E, et al. **Rev Med Suisse Romande** 1989 Feb;109(2):153–5 **(Fre)**

[Information needs of patients with psoriasis] Seikowski K, et al. **Dermatol Monatsschr** 1988;174(10):609–12 (Eng. Abstr.) **(Ger)**

[So that nobody loses face...Tips for managing group therapy—9] Geue B. **Fortschr Med** 1989 Mar 15;107(8):22 **(Ger)**

[Patient education: a part of advanced respiratory therapy] Petro W. **Fortschr Med** 1988 Aug 30;106(25):503–4 **(Ger)**

[Nutrition counseling in the physicians office. Service cooperation with diet specialists] Pospisil E. **Fortschr Med** 1988 Nov 10;106(32):24 **(Ger)**

[Patient education in the therapy of chronic obstructive respiratory tract diseases—the current status] Petro W. **Prax Klin Pneumol** 1988 Dec;42(12):859–66 (37 ref.) **(Ger)**

[Significance of the specialized treatment clinic for the rehabilitation of diabetic patients] Ledermann H, et al. **Rehabilitation (Stuttg)** 1988 Aug;27(3):166–9 (Eng. Abstr.) **(Ger)**

[Methods and means of health counseling in the medical management of patients] Schuchardt W. **Z Arztl Fortbild (Jena)** 1988;82(21):1099–102 **(Ger)**

[Influences on decisions of pregnant patients with breech presentation for external fetal version or cesarean section—information status and anxiety pattern] Kropp S, et al. **Z Geburtshilfe Perinatol** 1989 Mar–Apr;193(2):84–91 (Eng. Abstr.) **(Ger)**

[Mail box on the hospital unit?] Harych I, et al. **Z Gesamte Hyg** 1989 May;35(5):299 (Eng. Abstr.) **(Ger)**

[Strategies for improving the therapeutic patterns used in acute diarrhea in primary medical care units. VIII. Evaluation of the technics for supplementary information during the medical consultation] Guiscafré H, et al. **Arch Invest Med (Mex)** 1988 Oct–Dec;19(4):419–25 (Eng. Abstr.) **(Spa)**

[Diabetologic education at a general hospital in Cataluna: methodology and short-term indicators of effectiveness] Costa B, et al. **Rev Clin Esp** 1989 Jun;185(2):82–90 (Eng. Abstr.) **(Spa)**

[A campaign in the mass media aimed to give advice on chest pain is effective among the population] Blohm M, et al. **Lakartidningen** 1989 Aug 9;86(32–33):2695–6 **(Swe)**

ORGANIZATION & ADMINISTRATION

A new approach to patient education. Kuffner J. **Dimens Health Serv** 1989 May;66(4):20–2

Inpatient diabetes education: a success story. Nathanson H, et al. **Dimens Health Serv** 1989 May;66(4):26

[The role of outpatient services in the prevention of smoking] Milievskaia IL, et al. **Gig Sanit** 1988 Nov;(11):40–3 **(Rus)**

STANDARDS

A reexamination of the effectiveness of self-care education for persons with arthritis. Goeppinger J, et al. **Arthritis Rheum** 1989 Jun;32(6):706–16

Success of communication about renal transplantation between patient and doctor. Lock PM, et al. **Nephrol Dial Transplant** 1989;4(2):119–22

TRENDS

Informed consumerism—education of the cardiac patient in the twenty-first century. Wenger NK. **Ann Acad Med Singapore** 1989 May;18(3):289–91

Educating people with congenital heart disease. Murphy C. **J Med Assoc Ga** 1989 May;78(5):286–90

Overview of patient education. Opportunities and challenges

for the twenty-first century. Smith CE.
Nurs Clin North Am 1989 Sep;24(3):583-7

PATIENT-FAMILY LODGING see **HOUSING**

PATIENT IDENTIFICATION SYSTEMS

[The development of medical triage markings] Orlov VIa, et al. **Voen Med Zh** 1988 May;(5):25-7 **(Rus)**

PATIENT ISOLATION

see related
QUARANTINE

The value of protective isolation procedures in cardiac allograft recipients. Walsh TR, et al. **Ann Thorac Surg** 1989 Apr;47(4):539-44; discussion 544-5

Aggressive behaviour: evaluation of a non-seclusion policy of a district psychiatric service. Kingdon DG, et al.
Br J Psychiatry 1988 Nov;153:631-4

Seclusion and restraint: decreasing the discomfort. Craig C, et al. **J Psychosoc Nurs Ment Health Serv** 1989 Jul; 27(7):16-9

[Prophylactic systemic antibiotherapy with only ceftriaxone in neutropenic patients treated in a protected environment] Harousseau JL, et al. **Pathol Biol (Paris)** 1988 Sep; 36(7):907-11 (Eng. Abstr.) **(Fre)**

[Bacteremias after bone marrow grafts in a protected environment: effects, various aspects and prognosis] Michel G, et al. **Pathol Biol (Paris)** 1988 Sep;36(7):891-5 (Eng. Abstr.) **(Fre)**

HISTORY

[The past activities of the Issi Izolarea Hospital of Contagious Diseases] Alexa I. **Rev Med Chir Soc Med Nat Iasi** 1988 Apr-Jun;92(2):409-18 **(Rum)**

METHODS

Confinement practices [letter] Eilers R.
Hosp Community Psychiatry 1988 Oct;39(10):1109

How simple is disease-specific isolation? [letter] McDonald LL. **Infect Control Hosp Epidemiol** 1989 Apr;10(4):142-4

Isolation policy. The Hospital Infection Control Group of Thailand. **J Med Assoc Thai** 1989 Jul;72 Suppl 2:59-61

The isolation of HIV-positive patients [letter; comment] Smith DA, et al. **JAMA** 1989 Jul 14;262(2):208-9, **Comment on:** JAMA 1989 Mar 17;261(11):1621-30

Reduction of nosocomial infection during pediatric intensive care by protective isolation. Klein BS, et al.
N Engl J Med 1989 Jun 29;320(26):1714-21

[Recommendations for the treatment of dialysis patients infected with HTLV III/LAV] Baumgarten R.
Z Arztl Fortbild (Jena) 1988;82(18):891 **(Ger)**

[A first Lassa fever from Sierra Leone treated in high security ward] Yamaguchi T, et al. **Nippon Rinsho** 1989 Jan; 47(1):76-81 **(Jpn)**

PSYCHOLOGY

The developmental-clinical rationale for the use of seclusion in the psychiatric treatment of children. Cotton NS.
Am J Orthopsychiatry 1989 Jul;59(3):442-50

The use of seclusion: a comparison of two psychiatric intensive care units. Hafner RJ, et al.
Aust N Z J Psychiatry 1989 Jun;23(2):235-9

Does isolation of patients with infections induce mental illness? Wilkins EG, et al. **J Infect** 1988 Jul;17(1):43-7

The angry adolescent. Treatment versus containment practices. Pond VE.
J Psychosoc Nurs Ment Health Serv 1988 Dec;26(12):15-7 (14 ref.)

PATIENT ISOLATORS

Prevention of infectious complications in immunologically compromised patients. Part I: Reverse isolation. Bláha M, et al.
Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove 1988;31(4):299-341

[Use of a controlled abacterial medium in the complex surgical treatment of patients with post-traumatic osteomyelitis of the leg bones] Panchenko MK, et al.
Klin Khir 1988;(12):3-5 (Eng. Abstr.) **(Rus)**

[Anti-bacterial protection of patients during rendering of specialized medical services] Perkovskiĭ AV, et al.
Kosm Biol Aviakosm Med 1989 Jan-Feb;23(1):16-22 (32 ref.) (Eng. Abstr.) **(Rus)**

[Use of the ATU-3 aerotherapeutic equipment] Kuzin MI, et al. **Med Tekh** 1988 Jul-Aug;(4):6-11 (Eng. Abstr.) **(Rus)**

[Use of controlled abacterial medium in the treatment of wound infection of the hand] Kuz'menko VV, et al.
Ortop Travmatol Protez 1989 Jan;(1):4-7 (Eng. Abstr.) **(Rus)**

STANDARDS

Failure of the sterile air-flow component of a protected environment detected by demonstration of Chaetomium species colonization of four consecutive immunosuppressed occupants. Woods GL, et al.
Infect Control Hosp Epidemiol 1988 Oct;9(10):451-6

PATIENT MONITORING see **MONITORING, PHYSIOLOGIC**

PATIENT NON-COMPLIANCE see **PATIENT COMPLIANCE**

PATIENT OMBUDSMEN see **PATIENT ADVOCACY**

PATIENT OUTCOME ASSESSMENT see **OUTCOME AND PROCESS ASSESSMENT (HEALTH CARE)**

PATIENT PARTICIPATION

see related
ATTITUDE TO HEALTH

Planning in advance for critical care. Streim JE, et al.
Am J Nurs 1989 Jan;89(1):37-8, 41

How well do CCU patient-nurse contracts work? Ziemann KM, et al. **Am J Nurs** 1989 May;89(5):691CC-694CC

Patient contracting. Boehm S. **Annu Rev Nurs Res** 1989; 7:143-53 (26 ref.)

Health care decisions among elderly long-term care residents and their potential proxies. Ouslander JG, et al.
Arch Intern Med 1989 Jun;149(6):1367-72

Patient preferences and randomised clinical trials. Brewin CR, et al. **BMJ** 1989 Jul 29;299(6694):313-5

Patients as a direct source of information on adverse drug reactions. Mitchell AS, et al. **BMJ** 1988 Oct 8; 297(6653):891-3

Euthanasia across the North Sea. Rigter H, et al. **BMJ** 1988 Dec 17;297(6663):1593-5

Patient power at AIDS conference [news] Swan N. **BMJ** 1989 Jun 17;298(6688):1602-3

Mastectomy or conservation: the patient's choice. Wilson RG, et al. **BMJ** 1988 Nov 5;297(6657):1167-9

White paper on NHS. **Br J Hosp Med** 1989 Mar;41(3):295

Patients versus surrogates: whose opinion counts on ethics review panels? Llewellyn-Thomas HA, et al. **Clin Res** 1989 Sep;37(3):501-5

The decision. Cohen PR. **Cutis** 1988 Oct;42(4):283-4

Autonomy in long term care: some crucial distinctions. Collopy BJ. **Gerontologist** 1988 Jun;28 Suppl:10-7

Improving the discharge planning process: distinguishing between coercion and choice. Dubler NN. **Gerontologist** 1988 Jun;28 Suppl:76-81

Enhancing the autonomy of mentally impaired nursing home residents. Hegeman C, et al. **Gerontologist** 1988 Jun;28 Suppl:71-5

All in the family: extended autonomy and expectations in surrogate health care decision-making. High DM.
Gerontologist 1988 Jun;28 Suppl:46-51

Autonomy in long term care: background issues and a programmatic response. Hofland BF. **Gerontologist** 1988 Jun;28 Suppl:3-9 (29 ref.)

Guardianship and the elderly: a multi-perspective view of the decisionmaking process. Iris MA. **Gerontologist** 1988 Jun;28 Suppl:39-45

In the borderlands of autonomy: responsibility in long term care facilities. Jameton A. **Gerontologist** 1988 Jun;28 Suppl:18-23 (16 ref.)

Medical decision-making among elderly people in long term care. Tymchuk AJ, et al. **Gerontologist** 1988 Jun;28 Suppl:59-63

Nursing home resident participation in medical decisions: perceptions and preferences. Wetle T, et al.
Gerontologist 1988 Jun;28 Suppl:32-8

Medical empowerment of the elderly. Kapp MB.
Hastings Cent Rep 1989 Jul-Aug;19(4):5-7

Aptitude X treatment interactions: implications for patient education research. Holloway RL, et al.
Health Educ Q 1988 Fall;15(3):241-57 (32 ref.)

Ethics and patient initiative. Stevenson RB.
J Am Dent Assoc 1989 Apr;118(4):414

Dangerous behavior in a demented patient. Preserving autonomy in a patient with diminished competence. Watts DT, et al. **J Am Geriatr Soc** 1989 Jul;37(7):658-62

Living with Asthma. I. Genesis and development of a self-management program for childhood asthma. Creer TL, et al. **J Asthma** 1988;25(6):335-62

Effects of framing and level of probability on patients' preferences for cancer chemotherapy. O'Connor AM.
J Clin Epidemiol 1989;42(2):119-26

Measuring patients' desire for autonomy: decision making and information-seeking preferences among medical patients. Ende J, et al. **J Gen Intern Med** 1989 Jan-Feb; 4(1):23-30

Patients' participation in medical care: effects on blood sugar control and quality of life in diabetes. Greenfield S, et al.
J Gen Intern Med 1988 Sep-Oct;3(5):448-57

Limited autonomy and partnership: professional relationships in health care. Wilson-Barnett J. **J Med Ethics** 1989 Mar; 15(1):12-6

Self-determination, incompetence, and medical jurisprudence. Strudler A. **J Med Philos** 1988 Nov; 13(4):349-65

Birth planning. A reality-based script for building confidence. Carty EM, et al. **J Nurse Midwifery** 1989 May-Jun;34(3):111-4

Children as decision makers: guidelines for pediatricians. King NM, et al. **J Pediatr** 1989 Jul;115(1):10-6

Use of patient-controlled analgesia (PCA) in children [letter] Gaukroger PB, et al. **J Pediatr Surg** 1988 Dec; 23(12):1227-8

Increasing patient participation using an extended consultation: an inner city study. Bird A, et al.
J R Coll Gen Pract 1988 May;38(310):212-14

Involving the patient in reporting adverse drug reactions. Campbell JP, et al. **J R Coll Gen Pract** 1988 Aug; 38(313):370-1

Length of consultation: how well do patient's choose? Lowenthal L, et al. **J R Coll Gen Pract** 1987 Nov; 37(304):498-9

Cancer patients: their desire for information and participation in treatment decisions. Sutherland HJ, et al.
J R Soc Med 1989 May;82(5):260-3

The Medical Directive. A new comprehensive advance care document. Emanuel LL, et al. **JAMA** 1989 Jun 9; 261(22):3288-93

Cyanocobalamin injections for patients without documented deficiency. Reasons for administration and patient responses to proposed discontinuation. Lawhorne L, et al.
JAMA 1989 Apr 7;261(13):1920-3

Patients' and families' preferences for medical intensive care [letter] Patrick DL, et al. **JAMA** 1989 Jan 13;261(2):242-3

Topical NSAIDs: a gimmick or a godsend? [editorial]
Lancet 1989 Sep 30;2(8666):779-80

Patient's choice of animal or human insulin [letter] Barham P. **Lancet** 1988 Oct 29;2(8618):1019-20

Seeing the writing on the wall. And helping patients to make decisions regarding it [editorial] Metzler MH. **Mo Med** 1989 Sep;86(9):611, 614

Legal issues in determining competence to make treatment decisions. Benesch K. **New Dir Ment Health Serv** 1989 Spring;(41):97-105

Enhancing self care through active negotiation. Roberts SJ, et al. **Nurse Pract** 1988 Aug;13(8):44, 47, 50-2

Autonomy-based informed consent: ethical implications for patient noncompliance. Coy JA. **Phys Ther** 1989 Oct; 69(10):826-33

Patients should take more responsibility for their own medical management. Woodward J. **Practitioner** 1988 Feb 22; 232(1443):193-5

Facilitating patient participation: the doctor-patient encounter. Stoffelmayr B, et al. **Prim Care** 1989 Mar; 16(1):265-78 (80 ref.)

Hospice care of Rhode Island: 1989. McDuff HC.
R I Med J 1989 Jul;72(7):237-9

Preferences for treatment control among adults with cancer. Degner LF, et al. **Res Nurs Health** 1988 Dec;11(6):367-74

Information and decision-making preferences of hospitalized adult cancer patients. Blanchard CG, et al.
Soc Sci Med 1988;27(11):1139-45

Patient involvement in decision-making in surgical and orthopaedic practice: the Project Perioperative Risk. Larsson US, et al. **Soc Sci Med** 1989;28(8):829-35

Choice of surgery for early breast cancer: psychosocial considerations. Morris J, et al. **Soc Sci Med** 1988; 27(11):1257-62

A social worker comments: some implications for social work practice in health care settings. Bennett C.
Soc Work Health Care 1988;13(4):15-8

Forcing services on at-risk older adults: when doing good is not so good. Kapp MB. **Soc Work Health Care** 1988; 13(4):1-13

A two-stage trial design for testing treatment, self-selection and treatment preference effects. Rücker G. **Stat Med** 1989 Apr;8(4):477-85

Patients' choice of treatment in stage D prostate cancer. Cassileth BR, et al. **Urology** 1989 May;33(5 Suppl):57-62

Understanding of elderly patients' resuscitation preferences by physicians and nurses. Uhlmann RF, et al.
West J Med 1989 Jun;150(6):705-7

Childbearing and women's choice of nurse-midwives in Washington, D.C. hospitals. Langton PA, et al.
Women Health 1989;15(2):49-65

A short answer to "who decides"? Ruddick W.
Women Health 1987;13(1-2):73-6

Patients: a health care resource. De Maeseneer J, et al.
World Health Forum 1988;9(3):449-53

[The mirror as a possibility of participation in routine gynecologic examination: effects on the psychological status of the female] Blaser A, et al. **Gynakol Rundsch** 1989; 29(2):69-77 (Eng. Abstr.) **(Ger)**

[Cancer treatment in terminal stage] Murakami K, et al.
Gan To Kagaku Ryoho 1989 Apr;16(4 Pt 1):740-5 (Eng. Abstr.) **(Jpn)**

PATIENT READMISSION

Rehospitalization of very-low-birth-weight infants. Combs-Orme T, et al. **Am J Dis Child** 1988 Oct; 142(10):1109-13

Factors in rehospitalization [letter] Feldmann TB, et al.
Hosp Community Psychiatry 1988 Aug;39(8):891-2

Differences in psychological needs among drug abusers: first admissions compared to recidivists. Craig RJ, et al.
Int J Addict 1988 Jun;23(6):649-54

Childhood-onset depressive disorders. A follow-up study of rates of rehospitalization and out-of-home placement among child psychiatric inpatients. Asarnow JR, et al.
J Affective Disord 1988 Nov-Dec;15(3):245-53

Patients with neuroleptic malignant syndrome histories: what happens when they are rehospitalized? Gelenberg AJ, et al. **J Clin Psychiatry** 1989 May;50(5):178-80

Characteristics of the recurrently hospitalized adult. An information synthesis. Wray NP, et al. **Med Care** 1988 Nov; 26(11):1046–56 (33 ref.)

Case management and continuity of care for the "revolving-door" patient. Harris M, et al. **New Dir Ment Health Serv** 1988 Winter;(40):57–62

Gender differences in schizophrenia: rehospitalization and community survival. Angermeyer MC, et al. **Psychol Med** 1989 May;19(2):365–82

[Readmitted patients at a medical ward. 1. Health conditions] Laursen E, et al. **Ugeskr Laeger** 1989 Apr 10;151(15):943–6 (Eng. Abstr.) **(Dan)**

[Readmitted patients at a medical ward. 2. Social and housing conditions] Laursen E, et al. **Ugeskr Laeger** 1989 Apr 10; 151(15):946–9 (Eng. Abstr.) **(Dan)**

[The readmission of schizophrenics: a retrospective study over 5 years] Antonioli D, et al. **Ann Med Psychol (Paris)** 1988 May;146(5):421–38 (30 ref.) (Eng. Abstr.) **(Fre)**

ECONOMICS

Interventions to prevent readmission. The constraints of cost and efficacy. Safran C, et al. **Med Care** 1989 Feb; 27(2):204–11

LEGISLATION & JURISPRUDENCE

Medication refusal and the rehospitalized mentally ill inmate. Smith LD. **Hosp Community Psychiatry** 1989 May; 40(5):491–6

STANDARDS

Inappropriate readmissions. Bate W. **Iowa Med** 1989 Mar; 79(3):126

STATISTICS & NUMERICAL DATA

Reduction in hospital readmission stay of elderly patients by a community based hospital discharge scheme: a randomised controlled trial. Townsend J, et al. **BMJ** 1988 Aug 20–27;297(6647):544–7

Factors affecting early unplanned readmission of elderly patients to hospital. Williams EI, et al. **BMJ** 1988 Sep 24; 297(6651):784–7

Frequent rehospitalization and noncompliance with treatment. Green JH. **Hosp Community Psychiatry** 1988 Sep;39(9):963–6

Factors predicting utilization of acute psychiatric inpatient services by frequently hospitalized patients. Havassy BE, et al. **Hosp Community Psychiatry** 1989 Aug;40(8):820–3

TRENDS

Utilization of psychiatric inpatient care. A study of changes related to the introduction of a sectorized care organization. Hansson L. **Acta Psychiatr Scand** 1989 Jun;79(6):571–8

PATIENT REPRESENTATIVES see **PATIENT ADVOCACY**

PATIENT SATISFACTION see **CONSUMER SATISFACTION**

PATIENT SCHEDULES see **APPOINTMENTS AND SCHEDULES**

PATIENT TRANSFER

Transferring patients without doing burr holes [editorial] Freed HA. **Am J Emerg Med** 1988 Nov;6(6):678

A turnaround tale [letter] Murphy B. **Am J Nurs** 1989 Jun; 89(6):810

Abandonment of patients by home health nursing agencies: an ethical analysis of the dilemma. Reckling JB. **ANS** 1989 Apr;11(3):70–81

Neurodevelopmental outcome of babies weighing less than 2001 g at birth: influence of perinatal transfer and mechanical ventilation. Marlow N, et al. **Arch Dis Child** 1988 Sep;63(9):1069–74

Feasibility and safety of emergency interhospital transport of patients during early hours of acute myocardial infarction. Gore JM, et al. **Arch Intern Med** 1989 Feb; 149(2):353–5

Increased mortality of preterm infants transferred between tertiary perinatal centres. Bowman E, et al. **BMJ** 1988 Oct 29;297(6656):1098–100

Increased mortality of preterm infants transferred between tertiary perinatal centres [letter] Wariyar U, et al. **BMJ** 1989 Feb 4;298(6669):318

The mortality of long-stay patients following interhospital relocation. Morriss RK, et al. **Br J Psychiatry** 1988 May; 152:705–6

Intermittent care for old patients—when should it be offered? Berthold H, et al. **Compr Gerontol [B]** 1988 Dec;2(3):135–40

Training in handling: an evaluative study. St-Vincent M, et al. **Ergonomics** 1989 Feb;32(2):191–210

Continuity of care and outcome in nursing home patients transferred to a community hospital. Susman J, et al. **Fam Med** 1989 Mar–Apr;21(2):118–21

Who gets treated where. A study of patients transferred and not transferred from a consultation-liaison service to a general hospital psychiatry unit. Leibenluft E, et al. **Gen Hosp Psychiatry** 1989 May;11(3):182–6

The progress of 'state' (i.e. 'restricted') patients, after transfer or discharge from the State Hospital at Carstairs, from 1.1.78 to 1.1.88. Ratcliff RA. **Health Bull (Edinb)** 1988 Jul; 46(4):200–4

The hospitalizable patient as commodity: selling in a bear market. Greenberg WM, et al. **Hosp Community Psychiatry** 1989 Feb;40(2):184–5

Relocating elderly patients [letter] Lichtenberg PA, et al. **Hosp Community Psychiatry** 1989 Jul;40(7):755

Problems associated with transfer of patients to a regional burns unit. Palmer JH, et al. **Injury** 1987 Jul;18(4):250–7

Evaluation of the benefit of setting up a decentralised obstetric-surgical structure in order to reduce maternal mortality and transfers in the Ivory Coast. Berardi JC, et al. **Int J Gynaecol Obstet** 1989 May;29(1):13–7

Hospital and community liaison links in nursing: the role of the liaison nurse. Jowett S, et al. **J Adv Nurs** 1988 Sep; 13(5):579–87

Patient transfers to a public hospital. Lebow M, et al. **J Emerg Med** 1988 Sep–Oct;6(5):447–50

Dumping or work aversion? [editorial] Rosen P. **J Emerg Med** 1988 Sep–Oct;6(5):429–31

Emergency interhospital transport of the major trauma patient: air versus ground. Boyd CR, et al. **J Trauma** 1989 Jun;29(6):789–93; discussion 793–4

Presence of three or more rib fractures as an indicator of need for interhospital transfer. Lee RB, et al. **J Trauma** 1989 Jun;29(6):795–9; discussion 799–800

Informed consent in interhospital patient transfer [letter] **N Engl J Med** 1989 Jan 26;320(4):258–9

Transportation of very low birthweight infants in 1986. Darlow BA, et al. **N Z Med J** 1989 Jun 14;102(869):275–7

Maternal and neonatal transport: results of a national collaborative survey of preterm and very low birth weight infants in The Netherlands. Kollée LA, et al. **Obstet Gynecol** 1988 Nov;72(5):729–32

Neonatal back transport: clinical outcomes. Lynch TM, et al. **Pediatrics** 1988 Dec;82(6):845–51

Antenatal transfers and bronchopulmonary dysplasia incidence [letter] Sepkowitz S. **Pediatrics** 1989 May; 83(5):805

Transfer from recovery room to ward [letter] Salim M. **Postgrad Med J** 1988 Apr;64(750):337

[The letter of discharge] van Beusekom JA, et al. **Ned Tijdschr Geneeskd** 1988 Dec 17;132(51):2315–6 **(Dut)**

[Evaluation of the transfer of Algerian children with cancer to the Léon-Bérard center (1984–1987)] Meziane F, et al. **Pediatrie** 1988;43(8):683–90 (Eng. Abstr.) **(Fre)**

[Should hospitals be allowed to transfer surplus patients? A study of the patient load situation at medical and surgical wards in regionalized hospitals in Oslo] Hagen H, et al. **Tidsskr Nor Laegeforen** 1989 Feb 20;109(5):610–1 (Eng. Abstr.) **(Nor)**

ECONOMICS

Correctly defining and assessing the causes of hospital dumping [letter] Koetting MJ. **Am J Public Health** 1989 Jun;79(6):780

Patient dumping. The physician's dilemma [editorial] Rose C. **Chest** 1989 Mar;95(3):490–1

Does receiving referral and transfer patients make hospitals expensive? Jencks SF, et al. **Med Care** 1988 Oct; 26(10):948–58

LEGISLATION & JURISPRUDENCE

Patient dumping in the hospital emergency department: renewed interest in an old problem. Enfield LM, et al. **Am J Law Med** 1988;13(4):561–95 (153 ref.)

The progress of 'state' (i.e. 'restricted') patients, after transfer or discharge from the State Hospital at Carstairs, from 1.1.78 to 1.1.88. Ratcliff RA. **Health Bull (Edinb)** 1988 Jul; 46(4):200–4

HCFA eager to crack down on patient dumping. Holthaus D. **Hospitals** 1988 Nov 5;62(21):82

Patient dumping: a gray area of enforcement. Holthaus D. **Hospitals** 1989 May 20;63(10):58, 60

The correction of interhospital "dumping" by legislation. Zumpft CW. **J Emerg Med** 1988 Sep–Oct;6(5):443–6

Risk management for physicians. Patient transfers—potential hospital and physician liability under Federal law. Gerdes DA. **S D J Med** 1988 Jul;41(7):28–9

COBRA and interhospital transfers. Javurek AJ. **S D J Med** 1988 Oct;41(10):21–2

The devil or the sea? Transfer regs create a dilemma. Jones DB. **Tex Med** 1989 May;85(5):70–5

Federal antidumping law—hospital and physician responsibility. Schneider KC. **Tex Med** 1989 Jan; 85(1):58–60

OIG v. Burditt, MD (it could happen to you). Wilcox DP, et al. **Tex Med** 1989 May;85(5):79–80

Medicare hospitals and emergency cases. **Wis Med J** 1988 Oct;87(10):29–30

METHODS

Facilitating transfer to a nursing home [letter] Goff NW Jr. **J Am Geriatr Soc** 1989 May;37(5):488–9

Invasion. A hospital in transition following the 1983 Grenadian intervention. Walker K, et al. **J Psychosoc Nurs Ment Health Serv** 1989 Jan;27(1):27–30

Community hospital transfers to a VA Medical Center. Kerr HD, et al. **JAMA** 1989 Jul 7;262(1):70–3

ORGANIZATION & ADMINISTRATION

A mock evacuation is an exercise in saving lives. Lafreniere F. **Dimens Health Serv** 1988 Jun;65(5):35–7

[Is regionalization disadvantageous for patients? A registration study based on ambulance transports in Oslo] Stene-Larsen G, et al. **Tidsskr Nor Laegeforen** 1989 Feb 20;109(5):545–8 (Eng. Abstr.) **(Nor)**

STATISTICS & NUMERICAL DATA

Referrals for neonatal medical care in the United Kingdom over one year. British Association of Perinatal Medicine Working Group. **BMJ** 1989 Jan 21;298(6667):169–72

Shifting Medicare patients out of the hospital. Morrisey MA, et al. **Health Aff (Millwood)** 1988 Winter;7(5):52–64

Factors affecting the outcome of maternity care. II. Neonatal outcomes and resources beyond the hospital of birth. Mugford M, et al. **J Epidemiol Community Health** 1988 Jun;42(2):170–6

Changes in the location of death after passage of Medicare's prospective payment system. A national study [see comments] Sager MA, et al. **N Engl J Med** 1989 Feb 16; 320(7):433–9. **Comment in:** N Engl J Med 1989 Jul 6;321(1):56–7

TRENDS

Movement of developmentally disabled individuals among out-of-home residential facilities. Heal LW, et al. **Res Dev Disabil** 1989;10(3):295–313

PATIENTS

Assessment of pain: a comparison between patients and doctors. Forrest M, et al. **Acta Anaesthesiol Scand** 1989 Apr;33(3):255–6

Patients making decisions—do specialist nurses help? [letter] Fenlon D. **Acta Oncol** 1988;27(6b):862–4

Epidemiological aspects of sleep in general public and hospital outpatient samples. Shapiro CM, et al. **Acta Physiol Scand Suppl** 1988;574:41–3

Screening for alcoholism in general medical patients. Hoffmann NG, et al. **Alcohol Alcohol** 1988;23(6):451–3

Patient—or client? [editorial] Johnson EW. **Am J Phys Med Rehabil** 1989 Aug;68(4):161

Predicting falls among patients in a rehabilitation hospital. Mayo NE, et al. **Am J Phys Med Rehabil** 1989 Jun; 68(3):139–46

Patients' understanding of selected pharmacy terms. Shaughnessy AF. **Am Pharm** 1988 Oct;NS28(10):38–42

Patient-controlled analgesia in children. Gaukroger PB, et al. **Anaesth Intensive Care** 1989 Aug;17(3):264–8

Survey of falls of inpatients at the Ryde Hospital in 1986. Lake M, et al. **Aust Clin Rev** 1989 Mar;8(32):242–6

What do psychiatric inpatients really want? McIntyre K, et al. **BMJ** 1989 Jan 21;298(6667):159–60

Patients' perception of their care. Ouellette Kobasa SC. **Cancer** 1989 Jul 1;64(1 Suppl):295–7; discussion 298–301

Significance of low concentrations of creatinine in serum from hospital patients. Hagemann P, et al. **Clin Chem** 1988 Nov;34(11):2311–2

The use of proxy responses for aged patients in long-term care settings. Magaziner J, et al. **Compr Gerontol [B]** 1987 Dec;1(3):118–21

Office care of newly diagnosed IDDM [letter] Held N, et al. **Diabetes Care** 1989 Jan;12(1):40–1

Risk management and an evaluation of patient falls. Campbell M. **Dimens Health Serv** 1988 Jun;65(5):26–7

Absence of antibodies to HIV in long term institutionalized psychiatric patients [letter] Mondelli MU, et al. **Eur J Epidemiol** 1989 Jun;5(2):263–4

The picture of malnutrition. Yen PK. **Geriatr Nurs (New York)** 1989 May–Jun;10(3):159

Telecommunications. Pleasing patients. Lappa K. **Hospitals** 1989 Aug 5;63(15):54, 56

Proteeae groin skin carriage in ambulatory geriatric outpatients. Ehrenkranz NJ, et al. **Infect Control Hosp Epidemiol** 1989 Apr;10(4):150–4

Hyponatremia in internal medicine ward patients: causes, treatment and prognosis. Hochman I, et al. **Isr J Med Sci** 1989 Feb;25(2):73–6

Outpatient consultations from a family practice residency program: nine years' experience. Crump WJ, et al. **J Am Board Fam Pract** 1988 Jul–Sep;1(3):164–6

Implications of the changing medical profile of a dental school patient population. Rhodus NL, et al. **J Am Dent Assoc** 1989 Sep;119(3):414–6

A new instrument for patients' ratings of physician performance in the hospital setting. Matthews DA, et al. **J Gen Intern Med** 1989 Jan–Feb;4(1):14–22

A comparison of patients and patient complaints at six chiropractic college teaching clinics. Nyiendo J, et al. **J Manipulative Physiol Ther** 1989 Apr;12(2):79–85

The need for victimization screening in a poor outpatient medical population. Bell CC, et al. **J Natl Med Assoc** 1988 Aug;80(8):853–60

Providing equal access for deaf clients. Kimmel B. **J Nurs Adm** 1989 Mar;19(3):26–8

South Carolina medical malpractice patients' compensation fund. Kilgore DG Jr, et al. **J S C Med Assoc** 1989 Jan; 85(1):10–1

Alcoholism in hospitalized patients in Switzerland [letter] Yersin B, et al. **JAMA** 1989 Aug 11;262(6):772
Patients and clients [letter] George CR. **Med J Aust** 1988 Nov 21;149(10):568
Effects of regulation, competition, and ownership on mortality rates among hospital inpatients [letter] **N Engl J Med** 1988 Nov 17;319(20):1354–8
Cause of persistent hypouricemia in outpatients. Hisatome I, et al. **Nephron** 1989;51(1):13–6
Issues of candidate selection for a cochlear implant. Gantz BJ. **Otolaryngol Clin North Am** 1989 Feb;22(1):239–47 (17 ref.)
Effect of hospitalwide change in clindamycin dosing schedule on clinical outcome. Buchwald D, et al. **Rev Infect Dis** 1989 Jul–Aug;11(4):619–24
Nightcap: a home-based sleep monitoring system. Mamelak A, et al. **Sleep** 1989 Apr;12(2):157–66
The impact of road construction on hospital in-patient catchments in the Meru District of Kenya. Airey T. **Soc Sci Med** 1989;29(1):95–106
A prospective study to identify the fall-prone patient. Morse JM, et al. **Soc Sci Med** 1989;28(1):81–6
Screening for disease in asymptomatic patients. Kimball HR. **Trans Am Clin Climatol Assoc** 1987;99:23–31
A transplant surgeon's views on social factors in organ transplantation. Monaco AP. **Transplant Proc** 1989 Jun; 21(3):3403–6; discussion 3413–8
Patient selection for organ transplantation: age, incarceration, family support, and other social factors. Robertson JA. **Transplant Proc** 1989 Jun;21(3):3397–402; discussion 3413–8
[Decubitus in the hospital, 4 years later] Haalboom JR. **Ned Tijdschr Geneeskd** 1988 Aug 13;132(33):1544–5 **(Dut)**
[Are the screening procedures of health care agencies necessary?] Fredriksson H. **Duodecim** 1988;104(20):1650–1 **(Fin)**
[Protein-calorie malnutrition in the elderly patient] Rapin CH, et al. **Ther Umsch** 1989 Jan;46(1):43–50 (Eng. Abstr.) **(Fre)**
[Tumor patients and alternative medicine. Attempt at characterizing users of alternative treatment methods in oncology] Berger DP, et al. **Dtsch Med Wochenschr** 1989 Mar 3;114(9):323–30 (Eng. Abstr.) **(Ger)**
[Hepatitis B studies in 2 hospitals in Tehran (Iran)] Haditsch M, et al. **Geogr Med** 1988;Suppl 1:167–76 **(Ger)**
[Inpatient morbidity and mortality of 15- to under-20-year-olds] Fiolka L. **Sante Publique (Bucur)** 1988 Jul–Sep;31(3):249–60 **(Ger)**
[The knowledge of cancer patients about their disease] Sack H, et al. **Strahlenther Onkol** 1988 Oct;164(10):581–92 (Eng. Abstr.) **(Ger)**
[Potentiating drugs in postoperative pain control with opiates for patient controlled analgesia] Cuocolo R, et al. **Minerva Anestesiol** 1988 Apr;54(4):105–14 **(Ita)**
[Idea-generating sessions as an aid in improving patient services in hospitals] Unsgård G, et al. **Tidsskr Nor Laegeforen** 1988 Nov 10;108(31):2867–70 (Eng. Abstr.) **(Nor)**
[Preliminary study on non-compliant outpatients and the use of the mail to reschedule them] Marcopito LF, et al. **AMB Rev Assoc Med Bras** 1988 May–Jun;34(3):101–5 (Eng. Abstr.) **(Por)**
[Epidemiologic study of alcoholism by a university section and a department of psychiatry from 1969 to 1985] Pacheco Yáñez L. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 May–Jun;17(3):188–202 (Eng. Abstr.) **(Spa)**
[Are patients "materials"? (letter)] Batista Miranda JE. **Med Clin (Barc)** 1989 Mar 11;92(9):357 **(Spa)**
[Analysis of hospital mortality as an index of efficiency (editorial)] Segura Benedicto A. **Med Clin (Barc)** 1988 Jun 18;91(4):139–41 **(Spa)**
[Controlled nutritional support in hospitalized patients] Hirsch S, et al. **Rev Med Chil** 1988 Apr;116(4):318–24 (Eng. Abstr.) **(Spa)**
[Assisted and controlled enteral feeding, a necessity for the hospitalized patient] Zavala C. **Rev Med Chil** 1988 Apr; 116(4):359–60 (Eng. Abstr.) **(Spa)**

CLASSIFICATION

Changes in the educational value of inpatients at a major teaching hospital: implications for medical education. Davidson RA. **Acad Med** 1989 May;64(5):259–61
Inst-Risk II: an approach to forecasting relative risk of future institutional placement. Morris JN, et al. **Health Serv Res** 1988 Oct;23(4):511–36
An investigation of the dependence of severely disabled people in a hospital. Stride NM. **J Adv Nurs** 1988 Sep; 13(5):556–64
Hospital and patient characteristics of uncompensated hospital care: policy implications. Saywell RM Jr, et al. **J Health Polit Policy Law** 1989 Summer;14(2):287–307
DRGs and severity of illness measures: an analysis of patient classification systems. Rosko MD. **J Med Syst** 1988 Aug; 12(4):257–74
Patient classification system evaluation. Part 1: Essential system elements. De Groot HA. **J Nurs Adm** 1989 Jun; 19(6):30–5
Patient classification system evaluation: Part 2, System selection and implementation. De Groot HA. **J Nurs Adm** 1989 Jul–Aug;19(7):24–30
Reliability and validity testing of a home health patient classification system. Churness VH, et al. **Public Health Nurs** 1988 Sep;5(3):135–9
Patient acuity systems and productivity. Piper LR. **Top Health Care Financ** 1989 Spring;15(3):43–53

PSYCHOLOGY

Depression among general hospital patients in Greece. Lykouras E, et al. **Acta Psychiatr Scand** 1989 Feb; 79(2):148–52
Attitudes of hospitalized patients toward life support: a survey of 200 medical inpatients. Frankl D, et al. **Am J Med** 1989 Jun;86(6 Pt 1):645–8
The borderline patient on the med-surg unit. Runyon N, et al. **Am J Nurs** 1988 Dec;88(12):1644–50
Disclosure of stigmatizing conditions: the discloser's perspective. Limandri BJ. **Arch Psychiatr Nurs** 1989 Apr; 3(2):69–78 (21 ref.)
Seeing the body after death [letter] Dalling SS, et al. **BMJ** 1988 Nov 19;297(6659):1336–7
Difficult patients: black holes and secrets. Gerrard TJ, et al. **BMJ** 1988 Aug 20–27;297(6647):530–2
Longitudinal evaluation of psychological distress in medical geriatric in-patients. Magni G, et al. **Br J Med Psychol** 1988 Dec;61 (Pt 4):369–75
Characteristics of patients admitted to a newly established mental health center crisis unit. Swigar ME, et al. **Conn Med** 1988 Jul;52(7):391–4
A study of aggressive and violent behaviour among a group of psychiatric in-patients in Kenya. Wazome EG. **East Afr Med J** 1988 Jun;65(6):360–5
Attitudes towards HIV-antibody testing among general practitioners and their patients. Massari V, et al. **Eur J Epidemiol** 1988 Dec;4(4):435–8
Effects of music on patient anxiety in coronary care units [letter] Philip YT. **Heart Lung** 1989 May;18(3):322
Assessment of the person. Stollerman GH. **Hosp Pract [Off]** 1989 Apr 30;24(4A):13–4, 16–7
Assessment of sleep in hospital patients: a review of methods. Closs SJ. **J Adv Nurs** 1988 Jul;13(4):501–10 (52 ref.)
The social bases of discrepancies in health/illness perceptions. Molzahn AE, et al. **J Adv Nurs** 1989 Feb;14(2):132–40 (45 ref.)
Food refusal amongst nursing home patients as conceptualized by nurses' aids and enrolled nurses: an interview study. Norberg A, et al. **J Adv Nurs** 1988 Jul; 13(4):478–83
Patients who seek a second opinion: are they different from the typical referral? Sutherland LR, et al. **J Clin Gastroenterol** 1989 Jun;11(3):308–13
Dress, style, and respect [letter] Zalut T, et al. **J Emerg Med** 1988 Sep–Oct;6(5):433–4
Characteristics of patients who highly utilize telephone medical care in a private practice. Daugird AJ, et al. **J Fam Pract** 1989 Jul;29(1):59–63; discussion 63–4
Patients' attitudes toward physician involvement in family conferences. Kushner K, et al. **J Fam Pract** 1989 Jan; 28(1):73–8
Physician and patient determinants of difficult physician–patient relationships. Schwenk TL, et al. **J Fam Pract** 1989 Jan;28(1):59–63
Patients' attitudes toward the closing of a medical practice. Sinusas K. **J Fam Pract** 1989 May;28(5):561–4
Bedside case presentations: why patients like them but learners don't. Wang-Cheng RM, et al. **J Gen Intern Med** 1989 Jul–Aug;4(4):284–7
House officer interviewing techniques: impact on data elicitation and patient perceptions. Woolliscroft JO, et al. **J Gen Intern Med** 1989 Mar–Apr;4(2):108–14
A nurse practitioner in general practice: patient perceptions and expectations. Drury M, et al. **J R Coll Gen Pract** 1988 Nov;38(316):503–5
Opportunistic health promotion: do patients like it? Sullivan D. **J R Coll Gen Pract** 1988 Jan;38(306):24–5
Health education: patients' perception. Brunetto AL, et al. **J Trop Pediatr** 1988 Oct;34(5):231–3
The loneliness of the long-acting nitrator [letter] Bellomo J, et al. **JAMA** 1989 Jul 7;262(1):33
Hospital violence reduction among high-risk patients. Drummond DJ, et al. **JAMA** 1989 May 5;261(17):2531–4
A piece of my mind. A small price to pay. Frost CL. **JAMA** 1989 Apr 28;261(16):2408
One of at least three of a kind [letter] Spencer FJ. **JAMA** 1989 Jan 6;261(1):46
Memories: a neglected concept in care. Calman KC. **Lancet** 1988 Nov 19;2(8621):1184–5
Patients' reactions and physician-patient communication in a mandatory surgical second-opinion program. Rosenberg SN, et al. **Med Care** 1989 May;27(5):466–77
Assessing patients' capacities to consent to treatment [published erratum appears in N Engl J Med 1989 Mar 16;320(11):748] Appelbaum PS, et al. **N Engl J Med** 1988 Dec 22;319(25):1635–8
The dying patient, the physician, and the fear of death [see comments] Seravalli EP. **N Engl J Med** 1988 Dec 29; 319(26):1728–30. **Comment in:** N Engl J Med 1989 Jun 8;320(23):1557–8
Interactional styles of nurse practitioners and physicians regarding patient decision making. Taylor SG, et al. **Nurs Res** 1989 Jan–Feb;38(1):50–5
Preliminary validation of a nurse-patient interaction tool. Krouse HJ, et al. **Percept Mot Skills** 1988 Aug;67(1):281–2
Outpatient views on direct access to physical therapy in Indiana. Durant TL, et al. **Phys Ther** 1989 Oct;69(10):850–7
Satisfaction among cancer outpatients. Davis SW, et al. **Prog Clin Biol Res** 1988;278:227–32
When critical illness interferes with informed consent. Young EW. **Prog Clin Biol Res** 1989;299:235–9
Patient expectations of radiology in noninteractive encounters. Smith WL, et al. **Radiology** 1989 Jul; 172(1):275–6
Patient perspectives on the family. Amundson LH, et al. **S D J Med** 1988 Jul;41(7):13–9
Subjective disease experience in Sjögren's syndrome. A computerized discrimination analysis [published erratum appears in Scand J Rheumatol 1989;18(3):188] Konttinen YT, et al. **Scand J Rheumatol** 1989;18(1):13–20
Diagnosis. Gaarder KR. **South Med J** 1989 Sep;82(9):1153–4
Communication of information about therapeutic alternatives: end-stage renal disease model. McCauley CR, et al. **South Med J** 1989 Apr;82(4):418–22
Magnitude estimation: issues and practical applications. Sennott-Miller L, et al. **West J Nurs Res** 1988 Aug; 10(4):414–24
[Runaway patients from the psychiatric hospital in Havlíčkuv Brod 1983–1986] Suchomel P. **Cesk Psychiatr** 1988 Dec; 84(6):392–7 (Eng. Abstr.) **(Cze)**
[Identification and appreciation of the psychological distress in hospitalized elderly persons] Magni G, et al. **Rev Epidemiol Sante Publique** 1988;36(6):457–63 (Eng. Abstr.) **(Fre)**
[Psychology in dental practice (interview by Kurt Venner)] Müller-Boschung P. **Schweiz Monatsschr Zahnmed** 1989; 99(4):491–2, 479 **(Ger, Fre)**
[The assessment of anxiety in somatic patients—a pilot study] Cavin C. **Schweiz Rundsch Med Prax** 1989 Jan 17; 78(3):35–8 (Eng. Abstr.) **(Ger)**
[Suicide in psychiatric hospitals] Kacperczyk JM. **Psychiatr Pol** 1988 Sep–Oct;22(5):368–73 (28 ref.) **(Pol)**
[Effect of incentives on the quality and cost of medical services] Stoddart G. **Sov Zdravookhr** 1989;(4):60–1 **(Rus)**
[Patient assessment of the personality and professional qualities of the orthodontist] Trezubov VN. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):52–4 (Eng. Abstr.) **(Rus)**
[Psycho-social and socio-medical problems with modern patients and diseases. II] Filip M. **Cesk Zdrav** 1989 Mar; 37(3):122–8 (Eng. Abstr.) **(Slo)**
[Psychosocial-medical problems in modern patients. I] Filip M. **Cesk Zdrav** 1988 Nov;36(11):476–80 (Eng. Abstr.) **(Slo)**

STATISTICS & NUMERICAL DATA

Renal transplantation experience. A historical review and analysis. Canver CC, et al. **N Y State J Med** 1988 Aug; 88(8):415–7

PATIENTS' RIGHTS see **PATIENT ADVOCACY**

PATIENTS' ROOMS see under **HEALTH FACILITIES**

PATIENTS' VISITORS see **VISITORS TO PATIENTS**

PATTERN RECOGNITION

Computer analysis of nystagmus using a syntactic pattern recognition. Juhola M, et al. **Adv Otorhinolaryngol** 1988; 42:55–8
Software tools for motif and pattern scanning: program descriptions including a universal sequence reading algorithm. Cockwell KY, et al. **Comput Appl Biosci** 1989 Jul;5(3):227–32
Methods for calculating the probabilities of finding patterns in sequences. Staden R. **Comput Appl Biosci** 1989 Apr; 5(2):89–96
Comparison of electrocardiographic data (P waves): test of a shape-based approach. Barone P, et al. **Comput Biomed Res** 1989 Jun;22(3):215–24
Elliptic fourier analysis of cell and nuclear shapes. Diaz G, et al. **Comput Biomed Res** 1989 Oct;22(5):405–14
Pattern recognition display methods for the analysis of computed molecular properties. Hudson B, et al. **J Comput Aided Mol Des** 1989 Mar;3(1):55–65
Pattern recognition study of QSAR substituent descriptors. van de Waterbeemd H, et al. **J Comput Aided Mol Des** 1989 Jun;3(2):111–32
Nonlinear methods for discrimination and their application to classification of protein structures. Klein P, et al. **J Theor Biol** 1988 Feb 21;130(4):461–8
Pattern recognition and artificial intelligence in medical research and clinical practice. Gelsema ES. **Methods Inf Med** 1989 Apr;28(2):63–5
Knowledge engineering for clinical consultation programs: modeling the application area. Musen MA, et al. **Methods Inf Med** 1989 Jan;28(1):28–35
Perspectives on clinical decision-making: the application of pattern analysis. Knoebel SB. **PACE** 1988 Nov;11(11 Pt 2):2077–81
Consistency in manual scoring analysis of gastrointestinal pressure recordings. Andersen MB, et al. **Scand J Gastroenterol** 1989 Apr;24(3):321–8
Biological macromolecules explored by pattern recognition. van Heel M, et al. **Scanning Microsc Suppl** 1988;2:295–301 (73 ref.)
Crossing lines in medicine. Davies NE, et al.

Trans Am Clin Climatol Assoc 1987;99:91–9
[Technique and algorithm of pattern analysis] Shiina S. **Rinsho Byori** 1989 Jan;37(1):31–6 **(Jpn)**
[Classification and identification of toxic polypeptides using a pattern recognition method] Parilis II, et al. **Mol Biol (Mosk)** 1988 Nov–Dec;22(6):1697–701 (Eng. Abstr.) **(Rus)**

PATTERN RECOGNITION, VISUAL see under **FORM PERCEPTION**

PATULIN see under **PYRANS**

PAVOR NOCTURNUS see **SLEEP DISORDERS**

PCA see **PASSIVE CUTANEOUS ANAPHYLAXIS**

PCP ABUSE see **PHENCYCLIDINE ABUSE**

PEAK EXPIRATORY FLOW RATE see under **FORCED EXPIRATORY FLOW RATES**

PEANUTS

Binding of wheat and peanut lectins to human transitional cell carcinomas. Correlation with histopathologic grade, invasion, and DNA ploidy. Langkilde NC, et al. **Cancer** 1989 Aug 15;64(4):849–53
A survey of aflatoxin levels in peanut meal imported into Poland for animal feedingstuffs. Strzelecki EL, et al. **Food Addit Contam** 1988 Oct–Dec;5(4):597–9
Identification of peanut agglutinin binding glycoproteins restricted to Hodgkin's disease-derived cell lines. Flavell DJ, et al. **Hematol Oncol** 1989 May–Jun;7(3):207–17
An outbreak of type A foodborne botulism in Taiwan due to commercially preserved peanuts. Chou JH, et al. **Int J Epidemiol** 1988 Dec;17(4):899–902
Replacement of soybean meal by cottonseed meal and peanut meal or both in low energy diets for broilers. el Boushy AR, et al. **Poult Sci** 1989 Jun;68(6):799–804
Peanut lectin agglutination and isolation of infective forms of Leishmania major. Ready PD, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):418
The Dolichos biflorus and peanut lectins. Bird GW. **Vox Sang** 1989;56(4):288–9

ADVERSE EFFECTS

The natural history of peanut allergy. Bock SA, et al. **J Allergy Clin Immunol** 1989 May;83(5):900–4
Highly atopic children: formation of IgE antibody to food protein, especially peanut. Zimmerman B, et al. **J Allergy Clin Immunol** 1989 Apr;83(4):764–70
Peanutaholic has hyperpeanutemia [letter] Scheier NR. **JAMA** 1989 Jul 28;262(4):500–1
Peanuts in infants: inhalants as well as allergens [letter] Schultz D. **JAMA** 1989 Apr 21;261(15):2202

ANALYSIS

Determination of aflatoxins in corn and peanuts using high performance liquid chromatography. Beaver RW. **Arch Environ Contam Toxicol** 1989 May–Jun;18(3):315–8
Analytical methods for aflatoxins in corn and peanuts. Wilson DM. **Arch Environ Contam Toxicol** 1989 May–Jun; 18(3):308–14
Enzyme-linked immunosorbent (ELISA) determination of aflatoxin B1 in peanut butter: collaborative trial. Mortimer DN, et al. **Food Addit Contam** 1988 Oct–Dec;5(4):601–8
Aflatoxin B1 in peanut meal reference materials: intercomparisons of methods. Van Egmond HP, et al. **Food Addit Contam** 1989 Jul–Sep;6(3):307–19
Visual and semiquantitative spectrophotometric ELISA screening method for aflatoxin B1 in corn and peanut products: follow-up collaborative study. Park DL, et al. **J Assoc Off Anal Chem** 1989 Jul–Aug;72(4):638–43
Simulation of aflatoxin testing plans for shelled peanuts in the United States and in the export market. Whitaker TB, et al. **J Assoc Off Anal Chem** 1989 Jul–Aug;72(4):644–8
Interrelationship of kernel water activity, soil temperature, maturity, and phytoalexin production in preharvest aflatoxin contamination of drought-stressed peanuts. Dorner JW, et al. **Mycopathologia** 1989 Feb;105(2):117–28

ENZYMOLOGY

Immunological similarity of the cationic and the anionic peanut peroxidase isozymes. Hu CF, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):689–94
Mevalonate-metabolizing enzymes in Arachis hypogaea. Lalitha R, et al. **Mol Cell Biochem** 1989 Jun 1;87(2):161–70

MICROBIOLOGY

Aflatoxin contamination of groundnuts in Sudan. Haq Elamin NH, et al. **Mycopathologia** 1988 Oct;104(1):25–31
Mycoflora and mycotoxins of peanut (Arachis hypogaea L.) seeds in Egypt. III. Cellulose-decomposing and mycotoxin-producing fungi. el-Magraby OM, et al. **Mycopathologia** 1988 Oct;104(1):19–24
Differentiation of peanut clump virus serotypes by monoclonal antibodies. Huguenot C, et al. **Res Virol** 1989 Mar–Apr;140(2):87–102

POISONING

Fusarium mycotoxins from peanuts suspected as a cause of sandhill crane mortality. Windingstad RM, et al. **J Wildl Dis** 1989 Jan;25(1):38–46

PEAS see **LEGUMES**

PEAT see **SOIL**

PEAT THERAPY see **MUD THERAPY**

PECTEN OCULI see **RETINAL VESSELS**

PECTINS

Biomass. Part B. Lignin, pectin, and chitin. **Methods Enzymol** 1988;161:1–574

ADMINISTRATION & DOSAGE

Trial of pectin-enriched muffins in patients with severe dumping syndrome after gastric resection. Observations on symptoms and gastric emptying pattern. Andersen JR, et al. **Acta Chir Scand** 1989;155(1):39–41

ANALYSIS

Macromolecular components of tomato fruit pectin. Fishman ML, et al. **Arch Biochem Biophys** 1989 Oct;274(1):179–91

METABOLISM

The pectinolytic enzyme of Selenomonas ruminantium. Heinrichova K, et al. **J Appl Bacteriol** 1989 Feb; 66(2):169–74

PHARMACOLOGY

Sustained pectin ingestion: effect on gastric emptying and glucose tolerance in non-insulin-dependent diabetic patients. Schwartz SE, et al. **Am J Clin Nutr** 1988 Dec; 48(6):1413–7
Differential metabolic basis for the hypocholesterolemic effects of cholestyramine and pectin in rats [letter] Beynen AC, et al. **Atherosclerosis** 1988 Sep;73(1):87–8
Predominant conjugation with glycine of biliary and lumen bile acids in rats fed on pectin. Ide T, et al. **Br J Nutr** 1989 May;61(3):545–57
Grapefruit pectin inhibits hypercholesterolemia and atherosclerosis in miniature swine. Baekey PA, et al. **Clin Cardiol** 1988 Sep;11(9):597–600
The effects of grapefruit pectin on patients at risk for coronary heart disease without altering diet or lifestyle. Cerda JJ, et al. **Clin Cardiol** 1988 Sep;11(9):589–94
Effects of pectin on fatty acid and glucose absorption and on thickness of unstirred water layer in rat and human intestine. Fuse K, et al. **Dig Dis Sci** 1989 Jul;34(7):1109–16
Effect of pectin, a soluble dietary fiber, on functional and morphological parameters of the small intestine in rats. Chun W, et al. **Digestion** 1989;42(1):22–9
Pectin delays gastric emptying and increases satiety in obese subjects. Di Lorenzo C, et al. **Gastroenterology** 1988 Nov; 95(5):1211–5
Modulation of postprandial glycaemia and insulinaemia by pectin in mixed nutrient combinations. Siddhu A, et al. **Indian J Physiol Pharmacol** 1989 Apr–Jun;33(2):77–83
Effects of dietary fish oil or pectin on blood pressure and lipid metabolism in the DOCA-salt hypertensive rat. Bond V, et al. **J Nutr** 1989 May;119(5):813–7
Dietary pectin shortens the biologic half-life of vitamin B-12 in rats by increasing fecal and urinary losses. Cullen RW, et al. **J Nutr** 1989 Aug;119(8):1121–7
The effect of pectin on hepatic lipogenesis in the enterally-fed rat. Rolandelli RH, et al. **J Nutr** 1989 Jan; 119(1):89–93
Isotonic tube feeding formula induces liquid stool in normal subjects: reversal by pectin. Zimmaro DM, et al. **JPEN J Parenter Enteral Nutr** 1989 Mar–Apr;13(2):117–23
An investigation into the floating behaviour of a pectin-containing anti-reflux formulation (FF5005) by means of gamma scintigraphy. Washington N, et al. **Scand J Gastroenterol** 1988 Oct;23(8):920–4
[Effect of a kaolin-pectin combination on the intestinal absorption of sodium and water when using hydration solutions] Vega-Franco L, et al. **Bol Med Hosp Infant Mex** 1988 Sep;45(9):583–7 (Eng. Abstr.) **(Spa)**

THERAPEUTIC USE

The role of grapefruit pectin in health and disease. Cerda JJ. **Trans Am Clin Climatol Assoc** 1987;99:203–13 (32 ref.)

PECTORAL NERVES see **THORACIC NERVES**

PECTORALIS MUSCLES

Subcutaneous infusion ports for administration of parenteral nutrition at home. Pomp A, et al. **Surg Gynecol Obstet** 1989 Oct;169(4):329–33 (27 ref.)
[An indistinct breast tumor. Lipoma underneath the greater pectoral muscle] Uhlig U. **Radiologe** 1989 May;29(5):257–8 **(Ger)**
[Electrophysiological study on the atrophied pectoralis major muscle after modified radical mastectomy] Tashiro K, et al. **Nippon Geka Gakkai Zasshi** 1989 Mar;90(3):429–33 (Eng. Abstr.) **(Jpn)**

ABNORMALITIES

Aplasia of pectoralis major muscle and renal anomalies. Hegde HR, et al. **Am J Med Genet** 1989 Jan;32(1):109–11
A bilateral axillopectoral muscle. Perre CI, et al. **Neth J Surg** 1989 Apr;41(2):49 (5 ref.)

ANATOMY & HISTOLOGY

Effects of electrical stimulation on the post-mortem biochemical changes and texture of broiler pectoralis muscle. Lyon CE, et al. **Poult Sci** 1989 Feb;68(2):249–57
Anatomic basis for the construction of a musculotendinous flap derived from the pectoralis major muscle. Chaffaï MA, et al. **Surg Radiol Anat** 1988;10(4):273–82

BLOOD SUPPLY

[Non-invasive evaluation of the optimal access to the veins using ultrasonic flowmetry in continuous cardiac pacing] Babin AV, et al. **Kardiologiia** 1988 Sep;28(9):93–5 **(Rus)**

CYTOLOGY

The turkey myogenic satellite cell: optimization of in vitro proliferation and differentiation. McFarland DC, et al. **Tissue Cell** 1988;20(6):899–908

DRUG EFFECTS

Influence of sodium pentobarbital on pH, sarcomere length, and muscle tenderness of broiler Pectoralis major muscle. McGinnis JP, et al. **Poult Sci** 1989 Feb;68(2):244–8

INJURIES

Rupture of the pectoralis major muscle. Kretzler HH Jr, et al. **Am J Sports Med** 1989 Jul–Aug;17(4):453–8
Rupture of pectoralis major in weight lifters: a case report and review of the literature. Jones MW, et al. **Injury** 1988 May;19(3):219 (7 ref.)
Rupture of the pectoralis major muscle: a complication. Purnell R. **Injury** 1988 Jul;19(4):284
Rupture of the pectoralis major muscle: a caveat. Smith FC. **Injury** 1988 Jul;19(4):282–3

INNERVATION

Neuromuscular organization of the pectoralis (pars thoracicus) of the pigeon (Columba livia): implications for motor control. Kaplan SR, et al. **Anat Rec** 1989 Jul; 224(3):426–30
Isolated lateral pectoral nerve injury: trauma from a seat belt. Marrero JL, et al. **Arch Phys Med Rehabil** 1989 Mar; 70(3):239–40
Electrophysiological and morphological study of polyneuronal innervation in the cutaneous pectoris muscle of adult frog (Rana esculenta). Diaz J, et al. **J Neurocytol** 1988 Jun;17(3):279–92

METABOLISM

On the carbohydrate metabolism of pectoral muscle in the ontogeny of chicken. Wittenberger C, et al. **Comp Biochem Physiol [B]** 1977;58(2):141–6
Effect of in vivo cold-exposure on intracellular glycogen reserves in the "Starling type" avian pectoralis. Parker GH, et al. **Life Sci** 1974 Oct 15;15(8):1415–23

PATHOLOGY

Late onset of pectoralis major wasting after Patey mastectomy [letter] Wedgwood KR, et al. **Eur J Surg Oncol** 1989 Feb;15(1):90–1

PHYSIOLOGY

The effect of pectoralis muscle training in tetraplegic subjects. Estenne M, et al. **Am Rev Respir Dis** 1989 May; 139(5):1218–22
The superfast atrial recharge pulse: a cause of pectoral muscle stimulation in patients equipped with a unipolar DDD pacemaker. Stroobandt R, et al. **PACE** 1989 Mar; 12(3):451–5

PHYSIOPATHOLOGY

[Inhibition of QRS-guided pacemakers of the VVI type by skeletal muscle potentials] Zerbe F, et al. **Kardiol Pol** 1988; 31(11):727–32 (Eng. Abstr.) **(Pol)**

RADIOGRAPHY

Pectoralis muscle simulating a breast mass. Meyer JE, et al. **AJR** 1989 Mar;152(3):481–2

RADIONUCLIDE IMAGING

Tc-99m pyrophosphate localization in chest wall muscles after bench pressing. Williamson MR, et al. **Clin Nucl Med** 1989 Jul;14(7):546

SURGERY

Clavicular division technique. A new approach for lengthening the pectoralis flap. Freeman MS, et al. **Arch Otolaryngol Head Neck Surg** 1989 Feb;115(2):224–7

Management of mammary subpectoral implant distortion. Maxwell GP, et al. **Clin Plast Surg** 1988 Oct;15(4):601–11
Resectable breast cancer: axillary dissection sparing pectoralis muscles and nerves. Muscolino G, et al. **Eur J Surg Oncol** 1988 Oct;14(5):429–33
Management of necrotic neck wounds with a "sandwich" pectoralis myocutaneous flap. Goldstein RD, et al. **Head Neck Surg** 1988 Mar–Apr;10(4):246–51
Pectoralis minor: a unique muscle for correction of facial palsy. Terzis JK. **Plast Reconstr Surg** 1989 May; 83(5):767–76
[Sequelae of funnel chest: use of the pectoralis major muscle] Wilk A, et al. **Ann Chir Plast Esthet** 1988;33(2):130–4 (Eng. Abstr.) **(Fre)**
[The "musculus rectus preserving" subcostal incision] Wedell J, et al. **Chirurg** 1989 Jun;60(6):431–2 **(Ger)**
[Function of the shoulder joint after pectoralis major transfer—tracking movement and its electromyographical study] Tomonaga H. **Nippon Seikeigeka Gakkai Zasshi** 1988 Dec;62(12):1095–104 (Eng. Abstr.) **(Jpn)**

TRANSPLANTATION

Side-by-side double paddle pectoralis major flap for cheek defects. Ord RA, et al. **Br J Oral Maxillofac Surg** 1989 Jun;27(3):177–85
The pectoralis major muscle flap without skin in intra-oral reconstruction. Phillips JG, et al. **Br J Oral Maxillofac Surg** 1988 Dec;26(6):479–85
Immediate reconstruction following resection of oral cancer with pectoralis major myocutaneous flap. Kusama M, et al. **Bull Tokyo Med Dent Univ** 1988 Jun;35(1–2):1–9
Pharyngeal repair after laryngopharyngectomy: 4-year experience. Rifai M, et al. **Head Neck Surg** 1987 Nov–Dec; 10(2):99–101
Reconstruction of intermediate sized mucosal defects with the pectoralis major myofascial flap. Moloy PJ. **J Otolaryngol** 1989 Feb;18(1):32–5
Neurotization of pectoralis major myocutaneous flap by the hypoglossal nerve in tongue reconstruction: clinical and experimental observations. Katsantonis GP. **Laryngoscope** 1988 Dec;98(12):1313–23
Advantages of pectoralis musculocutaneous flap pharyngeal reconstruction. Stein DW, et al. **Laryngoscope** 1989 Jul;99(7 Pt 1):691–6
[Myocutaneous flaps of the greater pectoral muscle in cervico-maxillo-facial oncologic surgery] D'Ascanio G, et al. **Minerva Stomatol** 1989 Apr;38(4):427–31 (Eng. Abstr.) **(Ita)**

PECTUS EXCAVATUM see **FUNNEL CHEST**

PEDIATRIC ASSISTANTS see under **PHYSICIANS' ASSISTANTS**

PEDIATRIC INTENSIVE CARE UNITS see **INTENSIVE CARE UNITS, PEDIATRIC**

PEDIATRIC NURSING

The effects of a suspected case of Munchausen's syndrome by proxy on a pediatric nursing staff. Blix S, et al. **Gen Hosp Psychiatry** 1988 Nov;10(6):402–9
Effects of the nursing mutual participation model of care on parental stress in the pediatric intensive care unit. Curley MA. **Heart Lung** 1988 Nov;17(6 Pt 1):682–8
Primary cytomegalovirus infection in pediatric nurses: a meta-analysis. Flowers RH 3d, et al. **Infect Control Hosp Epidemiol** 1988 Nov;9(11):491–6
Neonatal intensive care units can be hazardous to nurses' health. Sosnowitz BG, et al. **J Perinatol** 1988 Summer; 8(3):253–7
The patient education bridge. Harrison LL. **MCN** 1989 Jan–Feb;14(1):51
Rehumanizing maternal-child nursing. Phillips CR. **MCN** 1988 Sep–Oct;13(5):313–4, 316, 318

EDUCATION

Helping staff nurses become mini-specialists. Feller NG, et al. **Am J Nurs** 1989 Jul;89(7):991–2
Parent-child nursing education. Alexander CS, et al. **Annu Rev Nurs Res** 1989;7:157–70 (29 ref.)
An inventory to measure medical staff knowledge of behavioral methods with pediatric pain patients. Tarnowski KJ, et al. **J Behav Ther Exp Psychiatry** 1988 Dec; 19(4):281–4
An alternate pediatric clinical placement. Streubert HJ. **J Nurs Educ** 1989 May;28(5):230–1
[Nursing care and the integration of teaching and inservice training between the pediatric services and the School of Nursing and Obstetrics, Valparaíso, Chile] Soya de Lezana E. **Educ Med Salud** 1988;22(1):47–53 (Eng. Abstr.) **(Spa)**

MANPOWER

[Work characteristics of sector nurses in pediatric polyclinics] Manafov IT, et al. **Sov Zdravookhr** 1988;(6):27–9 **(Rus)**

METHODS

Homeward bound. Discharge teaching for parents of newborns with special needs. Baker K, et al. **Nurs Clin North Am** 1989 Sep;24(3):655–64

PEDIATRIC PSYCHOLOGY see **CHILD PSYCHOLOGY**

PEDIATRICS

Is there a place for regional anesthesia in pediatrics?—Yes! Armitage EN. **Acta Anaesthesiol Belg** 1988;39(3):191–5 (13 ref.)
Is there a place for regional anesthesia in pediatrics?—No! Dick W. **Acta Anaesthesiol Belg** 1988;39(3):185–9 (29 ref.)
Swedish Pediatric Orthopedic Society. Stockholm, October 13–14, 1988. Abstracts. **Acta Orthop Scand Suppl** 1989; 231:1–3
Pediatrics in the East and West. An international symposium held in conjunction with the 18th International Pediatric Congress. 20–22 July, 1986, Tokyo. Proceedings. **Acta Paediatr Jpn Overseas Ed** 1987 Feb;29(1):1–188
International symposium: Applications of Genetic Engineering in Pediatric Medicine. Oct. 15–16, 1986, 1986, Tokyo, Japan. Proceedings. **Acta Paediatr Jpn Overseas Ed** 1987 Aug;29(4):479–573
Technical aspects of abdominal CT in infants and children. Kaufman RA. **AJR Am J Roentgenol** 1989 Sep; 153(3):549–54
John L. Gwinn, 1989 Gold Medalist of the Society for Pediatric Radiology. Lee FA. **AJR Am J Roentgenol** 1989 Oct;153(4):798
A family practice approach to the pediatric prenatal visit. Becker PG, et al. **Am Fam Physician** 1989 Aug;40(2):181–6
Program and abstracts. Ambulatory Pediatric Association, twenty-ninth annual meeting. May 1–5, 1989, Washington, DC. **Am J Dis Child** 1989 Apr;143(4):395–439
Ambulatory Pediatric Association. Program and abstracts, twenty-eighth annual meeting. May 2–6, 1988, Washington, DC [published erratum appears in Am J Dis Child 1988 Jun;142(6):632] **Am J Dis Child** 1988 Apr;142(4):365–408
Beware of overtreating children! Cunningham AS. **Am J Dis Child** 1989 Jul;143(7):786–8
Pediatricians' recommendations for antipyretic agents with DTP immunizations: a survey of current practice [letter] Flanagan PJ, et al. **Am J Dis Child** 1989 May;143(5):517–8
Advising parents to stop smoking. Opportunities and barriers in pediatric practice. Frankowski BL, et al. **Am J Dis Child** 1989 Sep;143(9):1091–4
The pediatrician as mother [letter] Furman L. **Am J Dis Child** 1989 Jun;143(6):638
PhD faculty in the clinical department [letter] Gormley GJ. **Am J Dis Child** 1989 Jan;143(1):11
Computers in medicine. Augmenting medical care in pediatric patients with chronic illnesses. Handler EG. **Am J Dis Child** 1989 Sep;143(9):1021–3
Comment on 'The Pediatrician as a Consultant' [letter] Levenson RL Jr, et al. **Am J Dis Child** 1989 Jun; 143(6):641–2
Advances in pediatric cardiology [editorial] [published erratum appears in Am J Dis Child 1989 May;143(5):587] Morgan BC. **Am J Dis Child** 1989 Jan;143(1):24
Health care financing policy for hospitalized pediatric patients. Munoz E, et al. **Am J Dis Child** 1989 Mar; 143(3):312–5
Use of adrenergic bronchodilators by pediatric allergists and pulmonologists. Newcomb RW. **Am J Dis Child** 1989 Apr; 143(4):481–5
Telephone etiquette: the telephone, one of the physician's most necessary and, at times, most hated devices [letter] Stickler GB. **Am J Dis Child** 1989 May;143(5):520
The pediatrician as a consultant. Stickler GB. **Am J Dis Child** 1989 Jan;143(1):73–4
Attitudes toward mental illness prevention in routine pediatric practice. Yager J, et al. **Am J Dis Child** 1989 Sep;143(9):1087–90
Pediatric cardiology [letter] Lin AE. **Am J Obstet Gynecol** 1988 Dec;159(6):1599
Pediatricians' perceptions and practices regarding childhood obesity. Price JH, et al. **Am J Prev Med** 1989 Mar–Apr; 5(2):95–103
Paediatric anaesthesia in a district general hospital. Bowhay AR, et al. **Anaesthesia** 1989 Feb;44(2):139–42
British Paediatric Association, annual general meeting. York, 11–14 April 1989. Abstracts. **Arch Dis Child** 1989 Aug; 64(8):1210–21
James Spence Medallist, 1988. Professor Otto Wolff. **Arch Dis Child** 1988 Sep;63(9):1003–4
Paediatric dialectics in a BPA triennium 1985–1988. Forfar JO. **Arch Dis Child** 1989 Feb;64(2):289–94
Inequalities in child health [letter] Parkin M, et al. **Arch Dis Child** 1988 Oct;63(10):1295
Staff stress and job satisfaction at a children's hospice. Woolley H, et al. **Arch Dis Child** 1989 Jan;64(1):114–8
Psychiatric disorders in pediatric primary care. Prevalence and risk factors. Costello EJ, et al. **Arch Gen Psychiatry** 1988 Dec;45(12):1107–16
The role of the paediatrician in promotion of family health. Sito A. **Arztl Jugendkd** 1988;79(2):69–71
Urinary tract reconstruction in children. McMullin ND. **Aust N Z J Surg** 1988 Aug;58(8):619–29
The Australian College of Paediatrics. Abstracts of papers presented at the annual scientific meeting. May 1988. **Aust Paediatr J** 1988 Dec;24(6):384–97
Paediatric Research Society of Australia. Abstracts of papers presented at the 21st annual scientific meeting. May 1988. **Aust Paediatr J** 1988 Dec;24(6):398–407
The pediatrician and the baby food industry. Principi N. **Beitr Infusionther** 1989;22:117–28
Trends in paediatric medical admissions. Hill AM. **BMJ** 1989 Jun 3;298(6686):1479–83
Pediatric nuclear medicine. Proceedings of the British Institute of Radiology. London, November 23, 1988. Abstracts. **Br J Radiol** 1989 May;62(737):499–503
Pediatric neurosurgery in Latin America. Basauri L. **Childs Nerv Syst** 1988 Dec;4(6):315–6
Quo vadis, neurochirurgia paediatrica? Sano K. **Childs Nerv Syst** 1989 Feb;5(1):3–8
Pediatric neurosurgery around the world—Asia and Australasia. Sato O. **Childs Nerv Syst** 1988 Dec;4(6):317–20
Canadian Paediatric Society, 66th annual meeting. Halifax, Nova Scotia, June 24–28, 1989. Abstracts. **Clin Invest Med** 1989 Jun;12(3 Suppl):A26–47
Language barriers in pediatric care. Holden P, et al. **Clin Pediatr (Phila)** 1989 Apr;28(4):193–4
Carving a niche—the general academic pediatrician as consultant. Part I: The referring physicians and their patients. Listernick R, et al. **Clin Pediatr (Phila)** 1988 Nov; 27(11):519–23
Carving a niche: the general academic pediatrician as consultant. Part II: Academic, financial, and educational concerns. Listernick R, et al. **Clin Pediatr (Phila)** 1988 Dec; 27(12):583–6
Recruitment of a large community of pediatricians in a collaborative research project. Nazarian LF, et al. **Clin Pediatr (Phila)** 1989 May;28(5):210–3
A medical information relational database system (MIRDS). Budd JR, et al. **Comput Biomed Res** 1988 Oct;21(5):419–33
Patch testing in children. Balato N, et al. **Contact Dermatitis** 1989 Apr;20(4):305–7
Paediatric nephrology: a research update. 21st annual meeting of the European Society for Paediatric Nephrology. Budapest, September 2–6, 1987. Proceedings. **Contrib Nephrol** 1988;67:1–236
Multicenter cooperative studies in pediatric nephrology. Brodehl J. **Contrib Nephrol** 1988;67:206–18
Issues in pediatric critical care. **Crit Care Clin** 1988 Oct; 4(4):645–885
Divorce: a pediatrician's view. Storlazzi JJ. **Del Med J** 1989 Jul;61(7):351–4
Paediatric drug dosing. Bodyweight versus surface area. Maxwell GM. **Drugs** 1989 Feb;37(2):113–5
The practice of paediatric surgery at a rural district hospital in Kenya. Nyarango PM. **East Afr Med J** 1987 Oct; 64(10):683–93
The pediatrician's guide to food allergy. Anderson JA. **Henry Ford Hosp Med J** 1988;36(4):198–203 (37 ref.)
Pediatric emergency care: a survey of Michigan emergency departments. Treloar DJ, et al. **Henry Ford Hosp Med J** 1988;36(4):217–8
Evaluation of the critically ill child. Pryor RW, et al. **Indian J Pediatr** 1988 Sep–Oct;55(5):735–7 (5 ref.)
Epidemiology, healthy policies and the pediatrician. Raju TN. **Indian J Pediatr** 1988 Nov–Dec;55(6):835–9
Pediatric emergencies. Surpure JS. **Indian J Pediatr** 1988 May–Jun;55(3):454–9 (6 ref.)
Pediatric trauma and primary health care. Surpure JS. **Indian J Pediatr** 1988 Sep–Oct;55(5):749–51
Pediatric emergencies: newsletter 8. Surpure JS. **Indian J Pediatr** 1988 Nov–Dec;55(6):927–31
The recommended measure [letter] Bansal SK. **Indian Pediatr** 1988 Dec;25(12):1226
XXV. National Conference, Indian Academy of Pediatrics. Benakappa DG. **Indian Pediatr** 1988 Dec;25(12):1143–8
Rational drug therapy in pediatric practice. Ghai OP, et al. **Indian Pediatr** 1988 Nov;25(11):1095–109 (3 ref.)
Rational drug therapy in children: pediatrician's role [editorial] Paul VK. **Indian Pediatr** 1988 Nov;25(11):1031–2
Superstitions in pediatric illnesses among rural mothers. Taneja DK, et al. **Indian Pediatr** 1988 May;25(5):447–52
Childhood cancer: the significant issues. Venkatesh A. **Indian Pediatr** 1988 Jul;25(7):605–6
The place of a pediatric intensivist in our society. Huault G. **Intensive Care Med** 1989;15 Suppl 1:S1–4
Evaluation of pediatric intensive care scoring systems. Price HL, et al. **Intensive Care Med** 1989;15(2):79–83
Experience and training as factors in physician performance in a pediatric emergency room. Shohat M, et al. **Isr J Med Sci** 1989 Jun;25(6):305–9
Attitudes versus performance in providing gynecologic care to adolescents by pediatricians. Nussbaum MP, et al. **J Adolesc Health Care** 1989 May;10(3):203–8
Pediatricians' use of chaperones when performing gynecologic examinations on adolescent females. Sanders JM Jr, et al. **J Adolesc Health Care** 1989 Mar;10(2):110–4
Our changing field [letter] Work HH. **J Am Acad Child Adolesc Psychiatry** 1989 Mar;28(2):301
Early childhood diet: recommendations of pediatric health care providers. Taras HL, et al. **J Am Diet Assoc** 1988 Nov;88(11):1417–21
An evolving new expertise: pediatric emergency medicine [editorial] Barkin RM, et al. **J Emerg Med** 1988 Nov–Dec; 6(6):545
Pediatric emergency medicine. Landsman I. **J Emerg Med** 1988 Nov–Dec;6(6):541–2
Children's understanding of death according to parents and pediatricians. Vianello R, et al. **J Genet Psychol** 1988 Sep; 149(3):305–16
Paediatric endocrinology. Ahuja MM. **J Indian Med Assoc** 1988 Apr;86(4):107–11 (7 ref.)

Children as decision makers: guidelines for pediatricians. King NM, et al. **J Pediatr** 1989 Jul;115(1):10–6
Pediatricians' knowledge of meningomyelocele [letter] Rotenstein D. **J Pediatr** 1989 Jun;114(6):1069–70
Medical decisions and prognostications of pediatricians for infants with meningomyelocele. Siperstein GN, et al. **J Pediatr** 1988 Nov;113(5):835–40
The pediatrician's role in children's adjustment to divorce. Stolberg AL, et al. **J Pediatr** 1989 Feb;114(2):187–93
The future of pediatric psychology. Walker CE. **J Pediatr Psychol** 1988 Dec;13(4):465–77
Papers presented at the 36th annual meeting of the Surgical Section of the American Academy of Pediatrics. New Orleans, Louisiana, October 31–November 2, 1987. Part 2. **J Pediatr Surg** 1988 Jul;23(7):599–673
Papers presented at the 37th annual meeting of the Surgical Section of the American Academy of Pediatrics. San Francisco, California, October 15–17, 1988. Part 2. **J Pediatr Surg** 1989 Aug;24(8):729–845
Papers presented at the 19th annual meeting of the Canadian Association of Paediatric Surgeons. Manitoba, Canada, September 9–12, 1987. **J Pediatr Surg** 1988 Aug; 23(8):695–783
A protocol for pediatric trauma receiving units. Harris BH, et al. **J Pediatr Surg** 1989 May;24(5):419–22
National Pediatric Trauma Registry. Tepas JJ 3d, et al. **J Pediatr Surg** 1989 Feb;24(2):156–8
Pediatric Urology Medal. John K. Lattimer: renaissance man. Ehrlich RM, et al. **J Urol** 1988 Nov;140(5 Pt 2):1165–6
Pediatric Urology Medal. J. Herbert Johnston tribute. Glassberg KI. **J Urol** 1989 Aug;142(2 Pt 2):544–5
Pediatrics. Heins M. **JAMA** 1989 May 19;261(19):2874–5
Society for Pediatric Pathology. Annual meeting. San Francisco, CS, March 4–6, 1989. Abstracts. **Lab Invest** 1989 Jan;60(1):1P–9P
Called to account. Obstetrics. Pediatrics. **Lancet** 1989 Mar 25;1(8639):661–2
Essential drugs in a European setting [letter] Pisacane A, et al. **Lancet** 1989 Mar 4;1(8636):503–4
The treatment of patients with asthma by specialists and generalists. Engel W, et al. **Med Care** 1989 Mar; 27(3):306–14
Educational achievement of long-term survivors of childhood and adolescent cancer. Kelaghan J, et al. **Med Pediatr Oncol** 1988;16(5):320–6
Society for Pediatric Pathology. Annual meeting. San Francisco, CA, March 4–6, 1989. Abstracts. **Mod Pathol** 1989 Jan;2(1):1P–9P
Who comes back to a paediatric outpatient clinic? Ford RP, et al. **N Z Med J** 1989 Mar 8;102(863):102–4
The diseases of childhood. Shannon FT. **N Z Med J** 1988 Oct 26;101(856 Pt 2):688–9
Economic factors in medicine, specifically the market determination of fees [letter] Erickson CG. **Nebr Med J** 1988 Sep;73(9):284
17th annual meeting of the Japanese Neurological Society. Pediatric neuroradiology. Tsukuba, 19–20 February, 1988. Abstracts. **Neuroradiology** 1988;30(5):449–61
The role of the pediatrician in the care of the handicapped child. Diamond M, et al. **Pediatr Ann** 1988 Dec;17(12):738, 740, 742–4
Common psychiatric problems and the pediatrician. Hodgman CH. **Pediatr Ann** 1989 Feb;18(2):90, 92
Treatment refusal, noncompliance, and the pediatrician's responsibilities. Lantos JD. **Pediatr Ann** 1989 Apr; 18(4):255–60 (30 ref.)
A pediatrician's view [editorial] Levine MI. **Pediatr Ann** 1989 Mar;18(3):157–8
A pediatrician's view [editorial] Levine MI. **Pediatr Ann** 1989 Apr;18(4):227–8
A pediatrician's view [editorial] Levine MI. **Pediatr Ann** 1988 Oct;17(10):611–3
A pediatrician's view [editorial] Levine MI. **Pediatr Ann** 1989 Jun;18(6):343–4
The HMO pediatrician as patient advocate. Moreno JD. **Pediatr Ann** 1989 Apr;18(4):269–71
Selected topics in pediatric pathology. **Pediatr Clin North Am** 1989 Feb;36(1):1–263
The value of the pediatric postmortem examination. Beckwith JB. **Pediatr Clin North Am** 1989 Feb;36(1):29–36
Electron microscopy in the diagnosis of pediatric disease. Daugherty CC, et al. **Pediatr Clin North Am** 1989 Feb; 36(1):199–226 (66 ref.)
The pediatric office laboratory. A look at recent trends. Pysher TJ, et al. **Pediatr Clin North Am** 1989 Feb; 36(1):1–28 (85 ref.)
Pediatric specimen collection for chemical analysis. Rutledge JC. **Pediatr Clin North Am** 1989 Feb;36(1):37–47
Increased role for pediatricians in the management of children who suffer severe burns [letter] Kornberg AE, et al. **Pediatr Emerg Care** 1989 Jun;5(2):145–6
Scoring systems in emergency pediatrics: "one cannot see the forest for the trees". Sagy M. **Pediatr Emerg Care** 1989 Jun;5(2):142–4 (33 ref.)
Emergency office supplies: a survey of 80 general pediatric practice sites in Dallas, Texas. Barth EB, et al. **Pediatr Infect Dis J** 1989 Jun;8(6):400–1
Abstracts: Papers and posters from the Third International Conference on Pediatric Pathology. October 24–27, 1988, La Plata, Argentina. **Pediatr Pathol** 1989;9(2):219–30
Society for Pediatric Pathology Presidential Awards, 1988. Gilbert-Barness E, et al. **Pediatr Pathol** 1989;9(3):359–67
Rational use of diagnostic imaging in paediatrics. The report of a World Health Organization Study Group. Merten DF, et al. **Pediatr Radiol** 1989;19(4):216–8
Latin-American Society for Pediatric Research. Abstracts for the 26th annual meeting. November 3–6, 1988, Mar del Plata, Argentina. **Pediatr Res** 1989 Aug;26(2):162–6
The American Pediatric Society and the Society for Pediatric Research. Abstracts and program outline. Washington, D.C., May 1–4, 1989. **Pediatr Res** 1989 Apr;25(4 Pt 2):1A–419A
Plenary lectures and abstracts: European Society for Pediatric Research, annual meeting. June 19–22, 1988, Oslo, Norway. **Pediatr Res** 1988 Aug;24(2):258–84
Howland Award presentation to Joseph Dancis. Krugman S. **Pediatr Res** 1988 Oct;24(4):512–5
Child care and the pediatrician. Aronson SS. **Pediatr Rev** 1989 Mar;10(9):277–86 (0 ref.)
Pediatrician's perspective. Observations of a junior pediatrician. Callahan CW Jr. **Pediatr Rev** 1989 Aug; 11(2):35–6
Pediatricians: generously caring or self-abnegating? Conn CA. **Pediatr Rev** 1987 Sep;9(3):67–8
Adoption: new tasks for the pediatrician. Haberkern RC. **Pediatr Rev** 1988 Nov;10(5):155–8 (12 ref.)
Premature sexual activity, pregnancy, and sexually transmitted diseases: the pediatrician's role as a counselor. Hardy JB. **Pediatr Rev** 1988 Sep;10(3):69–76 (6 ref.)
General pediatrician's role in high-risk deliveries. Keener PA. **Pediatr Rev** 1988 Oct;10(4):119–26 (0 ref.)
Do you know these patients? High-risk pediatric encounters. Korsch BM. **Pediatr Rev** 1988 Oct;10(4):101–5 (0 ref.)
The pediatrician as a member of the community. McInerny TK. **Pediatr Rev** 1986 Jul;8(1):4
The pediatrician as team physician. Menna VJ. **Pediatr Rev** 1987 Aug;9(2):35
The pediatrician, the disabled child, and the family: a special relationship. Miller RL. **Pediatr Rev** 1987 Jan;8(7):195
Sexual behavior: can the pediatrician counsel adolescents? Nazarian LF. **Pediatr Rev** 1988 Sep;10(3):67
The pediatrician and the under toad. Nazarian LF. **Pediatr Rev** 1988 Oct;10(4):99–100
Giving to our patients—should we draw the line? Nazarian LF. **Pediatr Rev** 1986 Sep;8(3):67
Exercise for children [published erratum appears in Pediatr Rev 1989 Mar;10(9):275] Risser WL. **Pediatr Rev** 1988 Nov; 10(5):131–9 (7 ref.)
Colds that were colds and those that were not. Stevens M. **Pediatr Rev** 1988 Feb;9(8):239
When pediatric patients become parents. Weitzman M. **Pediatr Rev** 1987 Oct;9(4):99–100
Delinquency and the pediatrician. Woolf AD. **Pediatr Rev** 1988 Feb;9(8):249–57 (22 ref.)
The general pediatrician as care coordinator for children with chronic illness. McInerny TK. **Pediatrician** 1988; 15(1–2):102–7 (13 ref.)
Expert testimony [letter] **Pediatrics** 1989 Sep;84(3):589–91
American Academy of Pediatrics Committee on Practice and Ambulatory Medicine: Office-based medication dispensing in pediatric practice. **Pediatrics** 1989 Jan;83(1):143–4
American Academy of Pediatrics Committee on Medical Liability: Professional liability coverage for residents [see comments] **Pediatrics** 1989 Feb;83(2):311. **Comment in:** Pediatrics 1989 Jul;84(1):195–6
Professional liability coverage for residents [letter; comment] Cohn B. **Pediatrics** 1989 Jul;84(1):195–6. **Comment on:** Pediatrics 1989 Feb;83(2):311
Ethical issues in preventive pediatrics. Doxiadis SA. **Pediatrics** 1989 Feb;83(2):309–10
Black pediatricians: career concerns and choices. Fleming GV, et al. **Pediatrics** 1989 Jun;83(6):951–7
Pediatric emergencies in office practices: prevalence and office preparedness. Fuchs S, et al. **Pediatrics** 1989 Jun; 83(6):931–9
Nursery privileges of the private attending pediatrician in the care of critically sick neonates in New York state. Harper RG, et al. **Pediatrics** 1989 Jun;83(6):940–4
It's time for pediatricians to 'rally 'round the pool fence'. Orlowski JP. **Pediatrics** 1989 Jun;83(6):1065–6
Pediatrician and parent: a challenge for female physicians. Sells JM, et al. **Pediatrics** 1989 Aug;84(2):355–61
Sunburns, melanoma, and the pediatrician. Williams ML, et al. **Pediatrics** 1989 Aug;84(2):381–2
The reliability and validity of the pediatric appropriateness evaluation protocol. Kemper KJ, et al. **QRB** 1989 Mar; 15(3):77–80
Comparisons of French and U.S.A. pediatric intensive care units. Davis AL, et al. **Resuscitation** 1989 Apr;17(2):143–52
Telephone calls to a paediatric department [letter] Muller PD, et al. **S Afr Med J** 1989 May 6;75(9):454
Doctoring by go-between: aspects of health care for Malay children. Massard J. **Soc Sci Med** 1988;27(8):789–97 (43 ref.)
Morbidity pattern of paediatric emergencies. Kissoon N. **West Indian Med J** 1989 Mar;38(1):30–2 (7 ref.)
A matter of trust. Borgenicht L. **West J Med** 1989 Aug; 151(2):229–30
[Theoretical foundations of pediatric medicine] Houštěk J. **Cas Lek Cesk** 1988 Sep 30;127(39–40):1210–2 **(Cze)**
[The role of pediatric gynecology in the prevention of female infertility] Hořejší J. **Cesk Pediatr** 1988 Oct;43(10):626–7 **(Cze)**
[The position of pediatric surgery in Czechoslovakia] Kabelka M. **Cesk Pediatr** 1989 Apr;44(4):230–3 **(Cze)**
[Analysis of treatment actions in general pediatrics] Karger P, et al. **Cesk Pediatr** 1989 May;44(5):307–8 **(Cze)**
[Prospective aspects of pediatric care and pediatric research in East Germany in the coming years] Menzel K. **Cesk Pediatr** 1989 Mar;44(3):133–5 (Eng. Abstr.) **(Cze)**
[Computer-assisted anesthesia in children] Larsen LE, et al. **Ugeskr Laeger** 1989 Jul 24;151(30):1922–6 (Eng. Abstr.) **(Dan)**
[Use of alternative forms of treatment by patients attending a pediatric outpatient clinic. A questionnaire study] Wolthers OD. **Ugeskr Laeger** 1989 Jan 9;151(2):87–90 (Eng. Abstr.) **(Dan)**
[Quantitative and qualitative inventory of scientific research in pediatrics at the Dutch universities (1981–1985)] Monnens LA, et al. **Tijdschr Kindergeneeskd** 1988 Oct;56 Suppl 2:60–6 (Eng. Abstr.) **(Dut)**
[French Society of Research in Pediatrics. 6th National Congress. Paris, 8 October 1988. Abstracts] **Arch Fr Pediatr** 1989 Apr;46(4):293–306 **(Fre)**
[The physician-interpreter-patient communication. The case of a specialized pediatric consultation] Alfano-Guerrieri C, et al. **Cah Sociol Demogr Med** 1988 Jul–Sep;28(3):217–41 **(Fre)**
[Gastro-esophageal reflux in pediatrics, an ever-present problem (editorial)] Navarro J, et al. **Pediatrie** 1988; 43(7):585–7 **(Fre)**
[Problems posed by the adjusting of a dosage form of a drug for children] Bernheim C. **Therapie** 1989 Mar–Apr; 44(2):145–50 (Eng. Abstr.) **(Fre)**
[Niaprazine and side effects in pediatrics. Cooperative evaluation of French centers of pharmacovigilance] Bodiou C, et al. **Therapie** 1988 Jun–Jul;43(4):307–11 (Eng. Abstr.) **(Fre)**
[Youth from the viewpoint of the pediatrician] Patzer H. **Arztl Jugendkd** 1988;79(3):115–24 (23 ref.) (Eng. Abstr.) **(Ger)**
[Magnetic resonance in pediatric research and clinical practice. I. What can we expect from this new method?] Martin E, et al. **Helv Paediatr Acta** 1988 Aug;43(1–2):53–74 (49 ref.) (Eng. Abstr.) **(Ger)**
[Ethics in pediatrics. Observations on the problem of ethical decision making support in care-giving] Dittmer A. **Kinderarztl Prax** 1988 Aug;56(8):367–8 **(Ger)**
[84th annual meeting of the German Society of Pediatrics. 7–10 September 1988, Mainz. Held jointly with the 26th annual meeting of the German Society of Pediatric Surgery and the 40th annual meeting of the German Society of Social Pediatrics. Abstracts] **Monatsschr Kinderheilkd** 1988 Aug;136(8):481–589 **(Ger)**
[Criteria of radiation risk in x-ray studies of children] Varčenja VZ, et al. **Radiol Diagn (Berl)** 1988;29(5):747–52 (Eng. Abstr.) **(Ger)**
[Swiss Society of Pediatrics, annual meeting. Delsberg, 8–10 June 1989. Abstracts] **Schweiz Med Wochenschr Suppl** 1989; 29:1–28 **(Ger)**
[Preventive medical examinations in infants, children and adolescents] Gnehm HE. **Ther Umsch** 1989 Jun; 46(6):368–74 (Eng. Abstr.) **(Ger)**
[The primary and the secondary in the pediatrician's examination (editorial)] Brook U. **Harefuah** 1988 Nov 15; 115(10):304–5 **(Heb)**
[Decrease in admission to pediatric wards: the contribution of hospital-sponsored ambulatory services] Gorodischer E. **Harefuah** 1989 Jan 15;116(2):115–7 **(Heb)**
[Pluriaxial classification of the psychopathology of the first years of life. A new diagnostic approach of the pediatrician] Russo E, et al. **Pediatr Med Chir** 1988 Jul–Aug;10(4):417–21 (Eng. Abstr.) **(Ita)**
[Autism. Discussion: from the standpoint of pediatrics] Takaki S. **No To Hattatsu** 1989 Mar;21(2):193–5 (Eng. Abstr.) **(Jpn)**
[Recommendations for a pediatric dose in nuclear imaging. Subcommittee for Standardization of Radionuclide Imaging, Medical and Pharmaceutical Committee: Japan Radioisotope Association] **Radioisotopes** 1988 Nov; 37(11):627–32 **(Jpn)**
[Iatrogenic pathology in pediatrics] Cherniavskaia NA, et al. **Arkh Patol** 1988;50(7):71–6 (Eng. Abstr.) **(Rus)**
[Organization of a surgical service for children in a district hospital] Komarov NV. **Khirurgiia (Mosk)** 1988 Jul; (7):113–5 **(Rus)**
[Hospital ambulatory surgical services for children] Komarov NV, et al. **Klin Khir** 1988;(11):34–6 **(Rus)**
[Problems of clinical biochemistry in pediatrics] Vel'tishchev IuE, et al. **Lab Delo** 1989;(5):35–9 (27 ref.) **(Rus)**
[Analytical survey of the research in pediatrics concluded in 1987] Efimova AA, et al. **Pediatriia** 1988;(11):51–8 **(Rus)**
[Evaluation of pediatricians' knowledge in the field of medical genetics] Novikov PV, et al. **Pediatriia** 1989; (1):96–9 **(Rus)**
[Joint work of the AMS USSR Institute of Pediatrics with practical institutions of child health in Moscow] Tatochenko VK, et al. **Pediatriia** 1989;(5):87–9 **(Rus)**
[Significance of the patent-information warranty of scientific research in pediatrics] Titov GN, et al. **Pediatriia** 1989; (6):79–82 **(Rus)**
[Problems of automatic exposure in the x-ray diagnosis of very young children] Filippkin MA, et al. **Vestn Rentgenol Radiol** 1988 Jul–Aug;(4):87–8 **(Rus)**
[Thermography in clinical practice] Rozenfel'd LG.

Vestn Rentgenol Radiol 1989 Jan-Feb;(1):62-8 (Rus)
[The tasks and goals of pediatric neurology] Jeras J. Neurologija 1988;37(1-2):109-16 (Eng. Abstr.) (Scr)
[Current advances and perspectives in pediatric neurology] Križ M. Neurologija 1988;37(1-2):117-23 (Eng. Abstr.) (Scr)
[17th Spanish Congress of Pediatrics. Zaragoza, 21-24 September 1988. Proceedings] An Esp Pediatr 1988 Sep;29 Suppl 33:1-232 (Spa)
[17th Spanish Congress on Pediatrics. Zaragoza, 21-24 September 1988. proceedings] An Esp Pediatr 1988 Sep;29 Suppl 32:1-299 (Spa)
[3d annual meeting of the Pediatric Ambulatory Care Section of the A.E.P. Spanish Association of Pediatrics. Valencia, 6-8 April 1989. Abstracts] An Esp Pediatr 1989 Apr;30 Suppl 36:1-108 (Spa)
[Importance of prenatal diagnosis in pediatrics] Baldellou A. An Esp Pediatr 1988 Sep;29 Suppl 33:189-92 (0 ref.) (Spa)
[Oncologic pediatrics and general pediatrics] Bezanilla Regato JL. An Esp Pediatr 1988 Sep;29 Suppl 33:173-4 (6 ref.) (Spa)
[Practical indications for genetic counseling. Ethical limitations] Delgado A. An Esp Pediatr 1988 Sep;29 Suppl 32:79-82 (Spa)
[Pediatrician-diabetologist relationship for an appropriate control] Garagorri JM. An Esp Pediatr 1988 Sep;29 Suppl 33:149 (Spa)
[Informatics in the service of primary pediatrics] Nogales A, et al. An Esp Pediatr 1988 Sep;29 Suppl 32:48-53 (Spa)
[Genetic counseling in clinical pediatrics] Nogales A. An Esp Pediatr 1988 Sep;29 Suppl 32:67-70 (Spa)
[Expert systems of help in diagnosis] Pastor Durán X. An Esp Pediatr 1988 Sep;29 Suppl 32:46-7 (Spa)
[Pediatric pharmacology: is treatment of children preceded by an adequate investigation?] Rubio González A, et al. An Esp Pediatr 1989 May;30(5):359-62 (13 ref.) (Eng. Abstr.) (Spa)
[The pediatrician confronted by the side effects of oncologic treatment] Sánchez de Toledo Codina J. An Esp Pediatr 1988 Sep;29 Suppl 33:176-8 (10 ref.) (Spa)
[Role of the biochemist-geneticist in genetic counseling] Tamparillas M. An Esp Pediatr 1988 Sep;29 Suppl 32:74-8 (Spa)
[Informatics applications in pediatrics] Zappulla F. An Esp Pediatr 1988 Sep;29 Suppl 32:54-7 (Spa)
[Pediatric referral to child psychiatry] Escobar MC, et al. Rev Chil Pediatr 1987 Sep-Oct;58(5):368-73 (Eng. Abstr.) (Spa)
[What should be the role of the Chilean Society of Pediatrics in the continuing medical education of pediatricians and family practitioners?] Horwitz I. Rev Chil Pediatr 1988 May-Jun;59(3):219-21 (Spa)
[How and who should regulate the professional activity of the pediatrician?] Infante JI. Rev Chil Pediatr 1988 May-Jun;59(3):222-3 (Spa)

CLASSIFICATION

Pediatric emergency physicians [letter] Eitzen EM Jr. Pediatr Emerg Care 1988 Dec;4(4):301

ECONOMICS

The pediatric marketplace. Martinez GA, et al. Am J Dis Child 1989 Aug;143(8):924-8
Community hospitals swallow pediatric losses. Koska MT. Hospitals 1989 Jan 5;63(1):31
Starting a pediatric practice. The second time around. Staub HP. Minn Med 1988 Aug;71(8):471-3
Paediatric fees [letter] Chan MJ. N Z Med J 1989 Aug 23; 102(874):447-8
General practitioners fees for children [letter] Milne I. N Z Med J 1989 Aug 9;102(873):420
Paediatric fees [letter] Wiles AR. N Z Med J 1989 Jul 12; 102(871):358
An agenda for improving physician reimbursement. Blim RD. Pediatr Rev 1987 Jul;9(1):4
Health care systems: a pediatric perspective. Blim RD, et al. Pediatr Rev 1987 Jul;9(1):5-10
The pediatrician as wage earner. Nazarian LF. Pediatr Rev 1987 Jul;9(1):3-4

EDUCATION

A combined primary care residency in internal medicine and pediatrics. Goldenberg K, et al. Acad Med 1989 Sep; 64(9):519-24
Effects of sleep deprivation on cognitive ability and skills of pediatrics residents. Storer JS, et al. Acad Med 1989 Jan;64(1):29-32
Patient care, resident stress, and government regulation. Cohen MI, et al. Am J Dis Child 1989 Feb;143(2):181-2
Why are there no educators with PhD degrees in pediatric departments? [letter] Greenberg LW. Am J Dis Child 1989 Jan;143(1):10-1
Stress experienced during pediatric residency training. Its causes, consequences, recognition, and solutions. Hoekelman RA. Am J Dis Child 1989 Feb;143(2):177-80
The future of subspecialty training in pediatrics. Kappy MS. Am J Dis Child 1988 Nov;142(11):1209-12
Residency training in general pediatrics. Career direction of primary care graduates. Mathieu OR Jr, et al. Am J Dis Child 1989 Feb;143(2):217-9
Documentation of students' clinical reasoning using a computer simulation. Schwartz W. Am J Dis Child 1989 May;143(5):575-9
Demographic features and attitudes of program directors of combined internal medicine and pediatrics residencies. Siegel DM, et al. Am J Dis Child 1988 Oct;142(10):1104-8
Head injury training for pediatric residents. Tyler JS, et al. Am J Dis Child 1989 Aug;143(8):930-2
Does a residents' continuity clinic provide primary care? Wilson ME, et al. Am J Dis Child 1989 Jul;143(7):809-12
Research during residency [letter] Winter RJ. Am J Dis Child 1989 May;143(5):521
A national survey of pediatric emergency medicine: a growing subspecialty [letter] Medina FA, et al. Am J Emerg Med 1989 Jan;7(1):131-2
Survey and commentary on fellowship training for pediatric rehabilitation. Gans BM, et al. Am J Phys Med Rehabil 1988 Dec;67(6):273-4
General practitioner training in paediatrics in the Trent region. Polnay L, et al. BMJ 1989 May 27;298(6685):1434-6
Training in paediatric radiology [editorial] Carty H. Clin Radiol 1989 May;40(3):227-8
Pediatric education in Libya [letter] Singh H. Indian Pediatr 1988 Dec;25(12):1224-5
An inventory to measure medical staff knowledge of behavioral methods with pediatric pain patients. Tarnowski KJ, et al. J Behav Ther Exp Psychiatry 1988 Dec; 19(4):281-4
Residency training programs in child neurology and their accreditation. Bell WE. J Child Neurol 1989 Apr;4(2):80-3
A regional consortium for behavioral pediatrics education in residency programs. Stancin T, et al. J Dev Behav Pediatr 1989 Jun;10(3):149-50
A curriculum guide for developmental-behavioral pediatrics. Yancy WS, et al. J Dev Behav Pediatr 1988 Dec;9(6 Suppl):S1-8
What is sex? Devillier BM. J La State Med Soc 1989 Apr; 141(4):21-2
Introducing child survival and development topics into the medical curriculum of a developing country. Aung MM, et al. J Med Educ 1988 Dec;63(12):916-9
Pediatric orthopedic surgery during the residency--too much, too little? Greene WB, et al. J Pediatr Orthop 1989 Jan-Feb;9(1):86-92 (2 ref.)
The role of pediatric surgery in the medical school curriculum. Karp MP, et al. J Pediatr Surg 1989 Jan; 24(1):39-40; Discussion 41
Adaptation of pediatric education to the specific needs of Taiwan, the Republic of China, an industrialized country. Huang TY. Kao Hsiung I Hsueh Ko Hsueh Tsa Chih 1988 Nov;4(11):592-605 (23 ref.)
Clinical algorithms teach pediatric decisionmaking more effectively than prose. Margolis CZ, et al. Med Care 1989 Jun;27(6):576-92
A community-based learning experience for medical students. Schreier RA, et al. Med Educ 1989 Jan; 23(1):86-90
Congruence between student and instructor perceptions of clinical teaching in paediatrics. Wolf FM, et al. Med Educ 1989 Mar;23(2):161-7
Training in paediatrics for family practice [letter] Watson JR. Med J Aust 1979 Oct 20;2(8):425
Integration of undergraduate teaching in obstetrics/gynaecology and paediatrics. Purdie DW. Med Teach 1988;10(2):159-64
The relationship of examinations to amount of student reading: the examination as symbol. Satran L, et al. Med Teach 1988;10(2):169-74
Pediatric emergency medicine fellowships: a survey. Izsak E, et al. Pediatr Emerg Care 1988 Dec;4(4):243-4
An efficient, inexpensive teaching model for venous cut down procedures. Kanter RK, et al. Pediatr Emerg Care 1988 Sep;4(3):203-4
Merit badge medicine: the good, the bad, and the evil. Seidel JS. Pediatr Emerg Care 1989 Mar;5(1):68-9
Pediatric pathology and the autopsy. Favara BE, et al. Pediatr Pathol 1989;9(2):109-16
Training pediatric scientists. Kelch RP, et al. Pediatr Res 1989 Jan;25(1):1-5
American Board of Pediatrics. Guidelines for combined internal medicine-pediatrics residency training programs. Pediatrics 1989 Jul;84(1):190-4
Pediatric residencies: differences between 1959/1960 and 1984/1985. Bryke CR, et al. Pediatrics 1988 Nov; 82(5):752-5
Combined internal medicine/pediatric residency training programs [see comments] Ferrari ND 3d, et al. Pediatrics 1989 Jul;84(1):94-7. Comment in: Pediatrics 1989 Jul;84(1):181-2
Computer use in pediatric education. Gururaj VJ, et al. Pediatrics 1989 Mar;83(3):425-8
Residency training and child abuse [letter] Johnson CP. Pediatrics 1989 May;83(5):805-7
Pediatric emergency medicine: a developing subspecialty. Li M, et al. Pediatrics 1989 Aug;84(2):336-42
Needle injuries among pediatric housestaff physicians in New York City. Melzer SM, et al. Pediatrics 1989 Aug; 84(2):211-4
Combined medicine/pediatrics training programs [comment] Middelkamp JN. Pediatrics 1989 Jul;84(1):181-2. Comment on: Pediatrics 1989 Jul;84(1):94-7
In-training examinations as predictors of resident clinical performance. Quattlebaum TG, et al. Pediatrics 1989 Jul; 84(1):165-72
Were the good old days better? [letter] Vadakan VV. Pediatrics 1989 Apr;83(4 Pt 2):637-8
Telephone management curriculum for pediatric interns: a controlled trial. Wood PR, et al. Pediatrics 1989 Jun; 83(6):925-30
Predicting resident clinical performance with in-training examinations. Quattlebaum TG, et al. Proc Annu Conf Res Med Educ 1988;27:182-7
[The present state and perspectives in continuing education of pediatricians] Dunovský J. Cas Lek Cesk 1988 Oct 28; 127(44):1347-51 (Eng. Abstr.) (Cze)
[Postgraduate education of pediatricians and its perspectives in Czechoslovakia] Dunovský J. Cesk Pediatr 1989 Feb; 44(2):101-10 (Cze)
[Has the pediatrician a future?] Zimprich H. Helv Paediatr Acta 1988 Nov;43(3):165-70 (Eng. Abstr.) (Ger)
[Preliminary publication of an educational program for the specialist in pediatrics--confirmed by the Minister of Public Health] Schneeweiss B. Kinderarztl Prax 1988 May; 56(5):247-51 (Ger)
[Rubella, measles, mumps--epidemiologic, occupational medicine significance and efficacy of adult vaccination] Hofmann F, et al. Off Gesundheitswes 1989 Jun; 51(6):299-302 (Eng. Abstr.) (Ger)
[Experience in training interns in pediatric surgery] Kushch NL, et al. Klin Khir 1988;(6):59-60 (Rus)
[Experience of teaching in a topical lecture series on gastroenterology in childhood] Aleksandrova NI, et al. Pediatriia 1988;(11):65-7 (Rus)
[Interdisciplinary approach to the instruction of students in pediatrics] Alferov VP, et al. Pediatriia 1988;(11):61-5 (Rus)
[Development of the personality of a physician-pediatrician] Bogomaz TA, et al. Pediatriia 1988;(4):95-7 (Rus)
[Cooperation between the pediatric department of the Sechenov First Moscow Medical Institute and the therapeutic and preventive institutions in Moscow] Fedoseeva NA, et al. Pediatriia 1988;(7):79-81 (Rus)
[The joint work experience of the department of pediatrics of a medical institute and of the public health section of a territorial executive committee and of a branch trade union in promoting the health of children who are frequently ill] Kurshin MA, et al. Pediatriia 1988;(8):79-81 (Rus)
[Improving the planning and determining the goal-oriented courses for the advanced training of pediatricians] Mal'tsev SV, et al. Pediatriia 1989;(2):69-71 (Rus)
[Features of teaching ethics at the undergraduate level in a pediatric department] Mazurin AV, et al. Pediatriia 1988; (7):68-72 (Rus)
[Deontology in the teaching of pediatrics at medical institutes] Zernov NG. Pediatriia 1988;(11):58-61 (Rus)
[A method of conducting practical work in pediatrics with students of the Chair of Therapeutics at a pediatric polyclinic] Zernov NG, et al. Pediatriia 1989;(7):79-80 (Rus)
[Test examinations in social hygiene and public health administration] Emel'ianova GF, et al. Sov Zdravookhr 1988;(9):54-7 (Eng. Abstr.) (Rus)
[Pediatric practice at the university hospital] Ferrer Pi S. An Esp Pediatr 1988 Sep;29 Suppl 33:197, 199-200 (Spa)
[Several current challenges of education in pediatrics (letter)] de Corral VR. Bol Med Hosp Infant Mex 1989 May; 46(5):368-9 (Spa)
[Education in pediatrics: training and updating in pediatrics] Donoso P. Rev Chil Pediatr 1988 May-Jun;59(3):206-8 (Spa)
[Undergraduate education: does it allow to practice in pediatrics?] Radrigán ME. Rev Chil Pediatr 1988 May-Jun; 59(3):210-3 (Spa)
[Systematic education of specialists and subspecialists in pediatrics] Toro C. Rev Chil Pediatr 1988 May-Jun; 59(3):215-9 (Spa)
[A course on pediatric allergology in Reykjavik: the biggest problem is underdiagnosis and undertreatment of asthmatic symptoms] Lindfors A. Lakartidningen 1989 Mar 15; 86(11):953-4 (Swe)

HISTORY

History of medicine in Alaska. Ribar JM. Alaska Med 1989 Jan-Feb;31(1):21-2
Here to observe: a bicentenary wayzgoose for the first medical journalism in Australia. Peam J. Aust Paediatr J 1988 Dec;24(6):369-70
The development of pediatrics in the United States. Mayefsky JH. Henry Ford Hosp Med J 1988;36(4):178-82
Development of pediatric speciality in Rajasthan. Bhandari B. Indian Pediatr 1988 Jan;25(1):33-5
Development of pediatrics in Madhya Pradesh. Kaul KK. Indian Pediatr 1988 Jan;25(1):37-40
Institute of Child Health, Calcutta and the Indian Academy of Pediatrics. Mehrotra GK. Indian Pediatr 1988 Aug; 25(8):721-5
Development of pediatrics in Tamilnadu. Santhanakrishnan BR. Indian Pediatr 1988 Jan;25(1):15-20
Pediatrics in Delhi. Taneja PN. Indian Pediatr 1988 Jan;

25(1):21–4
History of Indian Academy of Pediatrics. Udani PM. **Indian Pediatr** 1988 Jan;25(1):5–13
Gastroenterology in the development of paediatric medicine in Poland. A historical outline and present status. Wilkoszewski E. **Mater Med Pol** 1988 Jan–Mar;20(1):3–5
Arvo Ylppö, Finnish pediatrician. Logan GB, et al. **Mayo Clin Proc** 1989 Mar;64(3):339
The history of pediatric dermatology in the United States. Hurwitz S. **Pediatr Dermatol** 1988 Nov;5(4):280–5
Excellence in search of recognition. The continuing struggle over subspecialty certification. Johnson DG. **Pediatr Neurosci** 1987;13(6):281–92
1988 George Armstrong Award Lecture, Ambulatory Pediatric Association: prophets, disciples, and honorable schoolboys. Pless IB. **Pediatrics** 1989 Jun;83(6):1049–54
[History of pediatric neurology in Czechoslovakia] Lesný I. **Cesk Neurol Neurochir** 1988 Jul;51(4):277–9 **(Cze)**
[The development of pediatrics in Turc] Junas J. **Cesk Pediatr** 1989 Jun;44(6):374–7 **(Cze)**
[Czech and Slovak pediatricians as authors] Káš S. **Cesk Pediatr** 1988 Jul;43(7):435–7 **(Cze)**
[At the 10th congress for pediatrics] Knol K. **Tijdschr Kindergeneeskd** 1988 Oct;56 Suppl 2:45–6 **(Dut)**
[Childhood diseases and pediatrics in the notebooks of Constantijn Huygens (1595–1687)] van Lieburg MJ. **Tijdschr Kindergeneeskd** 1988 Aug;56(4):154–62 (Eng. Abstr.) **(Dut)**
[100 years of "Arztliche Jugendkunde"] Jährig K, et al. **Arztl Jugendkd** 1988;79(3):113–4 **(Ger)**
[Aspects of staff and occupational politics in the pediatric field in the Soviet Zone of Germany 1945–1949 and in East Germany up to the 3d university reform. 1. Problems and motivations of professorship appointments] Radke M. **Kinderarztl Prax** 1988 Sep;56(9):453–5 (Eng. Abstr.) **(Ger)**
[Aspects of staff and professional politics in our specialty in the Soviet occupied zone of Germany 1945 to 1949 and in East Germany up to the 3d higher educational reform. 2. Development of a new generation of pediatric faculty] Radke M. **Kinderarztl Prax** 1988 Oct;56(10):503–5 (Eng. Abstr.) **(Ger)**
[150 years of the Pediatric Department of the Semmelweis University School of Medicine] Miltényi M. **Orv Hetil** 1989 Aug 20;130(34):1833–5 **(Hun)**
[The evolution of pediatric surgery] Esposito G, et al. **Minerva Chir** 1989 Feb 28;44(4):703–8 (Eng. Abstr.) **(Ita)**
[Surgical treatment of children in Poland in the 19th century] Rejmanowski T. **Arch Hist Filoz Med** 1988;51(2):213–9 (Eng. Abstr.) **(Pol)**
[25th anniversary of the Department of Pediatrics of the Institute of Rheumatology] Arendarczyk Z. **Pediatr Pol** 1988 Jul;63(7):409–12 **(Pol)**
[Participation of pediatricians in congresses of Polish physicians and biologists] Wilkoszewski E. **Pediatr Pol** 1988 Oct;63(10):673–9 (Eng. Abstr.) **(Pol)**
[The first all-Russian congress of pediatricians] Mikirtichan GL. **Pediatriia** 1988;(7):90–3 (Eng. Abstr.) **(Rus)**
[The 140th anniversary of Pediiatrika—the first Russian manual on pediatrics] Reshetkina LP, et al. **Pediatriia** 1988;(6):103–5 **(Rus)**
[History of the Department of Psychiatry of the Leningrad Pediatric Medical Institute (on the 50th anniversary of its founding)] Isaev DN, et al. **Zh Nevropatol Psikhiatr** 1988;88(8):120–2 **(Rus)**
[Trends in the development of pediatrics in Vojvodina] Velisavljev MD. **Med Pregl** 1988;41(1–2):5–8 **(Scr)**

INSTRUMENTATION

Modified anesthetic screen for pediatric surgery [letter] Yamashita M. **Anesthesiology** 1988 Oct;69(4):636–7
Usefulness of pediatric colonoscopes in adult colonoscopy. Bat L, et al. **Gastrointest Endosc** 1989 Jul–Aug;35(4):329–32
Pediatric emergency office equipment. Hodge D 3d. **Pediatr Emerg Care** 1988 Sep;4(3):212–4

LEGISLATION & JURISPRUDENCE

[Specialist and superspecialistic consultation] **Ned Tijdschr Geneeskd** 1988 Oct 29;132(44):2028–30 **(Dut)**
[Procedures in the course of subspecialization (pulmonology specialty—internists and pediatricians). Legal foundations] **Z Erkr Atmungsorgane** 1989;172(2):172–9 **(Ger)**

MANPOWER

Paediatric manpower: towards the 21st century. Appleyard WJ, et al. **Arch Dis Child** 1988 Sep;63(9):1094–8
Pediatric manpower in Canada: a cross-country survey. Rieder MJ, et al. **Can Med Assoc J** 1989 Jan 15; 140(2):145–50
Pediatric rheumatology manpower and training: planning for the 1990s. Lehman TJ, et al. **Pediatrics** 1989 Sep; 84(3):567–8
[The status and perspectives of general pediatrics in Czechoslovakia] Dunovský J. **Cesk Pediatr** 1989 May; 44(5):286–90 (Eng. Abstr.) **(Cze)**
[Health status in childhood and adolescence. Which pediatric training does the general practitioner need to approach it?] Romero MI. **Rev Chil Pediatr** 1988 May–Jun;59(3):208–10 **(Spa)**

METHODS

New genetics and the pediatrician. Frézal J. **Acta Paediatr Jpn Overseas Ed** 1987 Aug;29(4):489–94
Pediatric reference ranges for serum aldolase. Visnapuu LA, et al. **Am J Clin Pathol** 1989 Apr;91(4):476–7
Shared care in paediatrics. Bacon CJ. **Arch Dis Child** 1989 Jan;64(1):148–9
Establishing a register of children with special needs. Colver AF, et al. **Arch Dis Child** 1989 Aug;64(8):1200–3
Totally implantable venous access systems in paediatric practice. Essex-Cater A, et al. **Arch Dis Child** 1989 Jan; 64(1):119–23
Joint work in paediatrics: a child psychiatry perspective. Sturge JC. **Arch Dis Child** 1989 Jan;64(1):155–8
Proposed reference chart in paediatric resuscitation [letter] **BMJ** 1988 Nov 19;297(6659):1333–4
Dextromethorphan and caffeine as probes for simultaneous determination of debrisoquin-oxidation and N-acetylation phenotypes in children. Evans WE, et al. **Clin Pharmacol Ther** 1989 May;45(5):568–73
Pediatric rheumatology: a survey of physician practices and fellowship programs. Manheim LM, et al. **J Rheumatol** 1988 Aug;15(8):1274–7
Assessment of children's health status. Field test of new approaches. Lewis CC, et al. **Med Care** 1989 Mar;27(3 Suppl):S54–65
Pediatric endocrinologic recommendations, pediatric practice, and current pediatric training regarding care of children with diabetes. Golden MP, et al. **Pediatrics** 1989 Jul;84(1):138–43
Office pediatric gynecology. Simmons PS. **Prim Care** 1988 Sep;15(3):617–28
[Role of prevention in pediatric urology] Bono AV, et al. **Arch Ital Urol Nefrol Androl** 1988 Jun;60(2):169–73 (12 ref.) (Eng. Abstr.) **(Ita)**
[Adolescents and pediatricians (editorial)] Taracena del Piñal B. **An Esp Pediatr** 1989 Feb;30(2):77–8 **(Spa)**

ORGANIZATION & ADMINISTRATION

Children in specialist hospital departments. Jackson AD. **Arch Dis Child** 1989 Jan;64(1):181–2
A model: systems management of life threatening injuries in children for the state of Maryland, USA. Haller JA, et al. **Intensive Care Med** 1989;15 Suppl 1:S53–6
Effects of a faculty prepaid group practice in a pediatric primary care clinic. Torphy DE, et al. **J Med Educ** 1988 Nov;63(11):839–47
[Analysis of the administrative activity of the pediatrician within the system of comprehensive care] Karger P, et al. **Cesk Pediatr** 1989 Jun;44(6):368–70 **(Cze)**

STANDARDS

Is standard practice in pediatrics 'standard'? A potential lesson for experts and practitioners [editorial] Fulginiti VA. **Am J Dis Child** 1989 May;143(5):529–30
Rational drug therapy [letter] Gupta A. **Indian Pediatr** 1989 Mar;26(3):303–4
Rational drug therapy [letter] Phatak AT. **Indian Pediatr** 1989 Mar;26(3):303
Structuring a departmental quality assurance program: a survey of academic pediatric departments. Weichsel ME Jr, et al. **QRB** 1989 May;15(5):153–5
Standard treatment regimens—a personal account of Papua New Guinea experience. Biddulph J. **Trop Doct** 1989 Jul; 19(3):126–30
[The yield of autopsies in a pediatric practice] Tjon A Ten WE, et al. **Tijdschr Kindergeneeskd** 1989 Apr;57(2):41–4 (Eng. Abstr.) **(Dut)**
[Iatrogenic diseases in pediatrics and their prevention] Erenkova NV. **Pediatriia** 1989;(7):81–6 **(Rus)**
[Qualifications characteristics and their role in the evaluation of the degree of professional competence in the certification of pediatricians] Murav'ev MV, et al. **Pediatriia** 1989; (3):66–9 **(Rus)**

STATISTICS & NUMERICAL DATA

[Statistics of 10 congresses for pediatrics] Schulpen TW, et al. **Tijdschr Kindergeneeskd** 1988 Oct;56 Suppl 2:47–8 **(Dut)**

TRENDS

Some thoughts about the evolution of pediatric endocrinology in the United States and illustrative selected advances. Grumbach MM. **Acta Paediatr Jpn Overseas Ed** 1988 Feb;30(1):1–6
The child in the twenty-first century: their health problems and implications for organization of pediatric services. Haggerty RJ. **Acta Paediatr Jpn Overseas Ed** 1987 Feb; 29(1):1–6
We need to establish a newer scientific basis for pediatrics in the 21st century: holonism in pediatrics. Kobayashi N. **Acta Paediatr Jpn Overseas Ed** 1987 Feb;29(1):7–10
What can pediatricians do for the children in Asia in the 21st century? (the Philippine vision). Santos Ocampo PD. **Acta Paediatr Jpn Overseas Ed** 1988 Dec;30(6):647–53
The new pediatrics in Japan. Tokumaru M. **Acta Paediatr Jpn Overseas Ed** 1987 Aug;29(4):577–83
Advances in pediatric pharmacology and toxicology. Berlin CM Jr. **Adv Pediatr** 1989;36:431–59 (130 ref.)
Position paper on current status and future needs of pediatric nephrology: training and research. American Society of Pediatric Nephrology. **Am J Kidney Dis** 1989 Feb; 13(2):164–6
Trends in paediatric medical admissions [letter] Forfar JO. **BMJ** 1989 Jun 24;298(6689):1711
Paediatric surgery in Kenya [editorial] **East Afr Med J** 1987 Oct;64(10):637
Child and adolescent psychiatry consultation-liaison services in pediatrics: what messages are being conveyed? Lewis M, et al. **J Dev Behav Pediatr** 1988 Dec;9(6):388–90
Psychological research in pediatric settings: lessons from the field. Drotar D. **J Pediatr Psychol** 1989 Mar;14(1):63–74 (40 ref.)
Trends in pediatric rehabilitation. Burkett KW. **Nurs Clin North Am** 1989 Mar;24(1):239–55 (51 ref.)
Current status and future needs of pediatric nephrology. Position paper from American Society of Pediatric Nephrology. Chesney RW. **Pediatr Res** 1988 Dec; 24(6):657–62
Partnerships in pediatrics. Menna VJ. **Pediatr Rev** 1987 Mar; 8(9):259
What's new in pediatric surgery—1988. Grosfeld JL. **Pediatrics** 1989 Apr;83(4):586–90 (59 ref.)
Duration of pediatric and internal medicine practice in Oregon. Schunk GJ, et al. **Pediatrics** 1989 Mar;83(3):428–32
The Sidney Farber memorial lecture—creative ideation and inquiry in developmental pathology. Bolande RP. **Perspect Pediatr Pathol** 1988;12:10–9
The "menace of psychiatry" revisited: the evolving relationship between pediatrics and child psychiatry. Work HH. **Psychosomatics** 1989 Winter;30(1):86–93 (22 ref.)
Pediatric interventional procedures in the 1980s: a period of development, growth, and acceptance. Towbin RB. **Radiology** 1989 Mar;170(3 Pt 2):1081–90 (102 ref.)
[Good general pediatrics is common property] Zoethout HE. **Tijdschr Kindergeneeskd** 1988 Oct;56 Suppl 2:49–55 **(Dut)**
[Pediatrics in Ethiopia] Rohmann E, et al. **Kinderarztl Prax** 1988 Sep;56(9):449–52 (Eng. Abstr.) **(Ger)**
[Pediatric research in the tropics: pros and cons] Ehrich JH, et al. **Monatsschr Kinderheilkd** 1988 Jul;136(7):348–51 (Eng. Abstr.) **(Ger)**
[Pediatrics in the Third World] Köhler V. **Monatsschr Kinderheilkd** 1988 Jul;136(7):341–2 **(Ger)**
[Developments in pediatric surgery] Berg U. **Z Arztl Fortbild (Jena)** 1988;82(16):775–8 **(Ger)**
[Pediatric bronchopneumonology at the present time—need and limits for a subspecialty] Wunderlich P, et al. **Z Erkr Atmungsorgane** 1988;171(2):101–2 **(Ger)**
[New tasks of pediatrics in the light of today's requirements] Boda D. **Orv Hetil** 1988 Jun 19;129(25):1299–303 (Eng. Abstr.) **(Hun)**
[Current views on bed rest in pediatrics] Kaszás T. **Orv Hetil** 1989 Jun 18;130(25):1307–10 (49 ref.) (Eng. Abstr.) **(Hun)**
[Ways of reorganizing the child health system] Baranov AA. **Pediatriia** 1989;(4):5–12 **(Rus)**
[Results and prospects of nephrological research within the framework of interinstitutional cooperation of pediatric clinics in a number of socialist countries] Ignatova MS, et al. **Pediatriia** 1988;(5):5–10 **(Rus)**
[The achievements of pediatric gastroenterology] Mazurin AV, et al. **Pediatriia** 1988;(11):5–11 **(Rus)**
[Results and prospects of the development of pediatric gastroenterology] Mazurin AV, et al. **Pediatriia** 1989; (4):66–9 **(Rus)**
[Scientific-technological progress in pediatrics (editorial)] Vel'tishchev IuE. **Pediatriia** 1989;(1):6–13 **(Rus)**
[Unresolved problems and the developmental outlook of pediatric dermatology] Anton'ev AA, et al. **Vestn Dermatol Venerol** 1988;(5):4–6 (Eng. Abstr.) **(Rus)**
[Informatics in pediatrics: introduction] Argemí Renom J. **An Esp Pediatr** 1988 Sep;29 Suppl 32:40–2 **(Spa)**
[Telematics and its impact on pediatrics] Obach Vidal R. **An Esp Pediatr** 1988 Sep;29 Suppl 32:43–5 **(Spa)**

PEDICULOSIS

DRUG THERAPY

Insecticides in pediculosis capitis. Maunder JW. **Arch Dis Child** 1989 Jan;64(1):69–70
Probable anaphylactoid reaction to a pyrethrin pediculocide shampoo. Culver CA, et al. **Clin Pharm** 1988 Nov; 7(11):846–9
Clinical evaluation of an after-pediculicide nit removal system. DeFelice J, et al. **Int J Dermatol** 1989 Sep; 28(7):468–70
Pediculosis capitis and the stubborn nit. Parish LC, et al. **Int J Dermatol** 1989 Sep;28(7):436–7
Pediculosis capitis: why prefer a solution to shampoo or spray? Armoni M, et al. **Pediatr Dermatol** 1988 Nov; 5(4):273–5
Pseudoresistance to pediculicides in a case of pubic lice. Helm KF, et al. **Pediatr Dermatol** 1988 Aug;5(3):187–8
[Pediculosis of the hairy skin] Teheux J, et al. **Rev Med Liege** 1988 Sep 15;43(18):597–9 **(Fre)**

EPIDEMIOLOGY

Epidemiology of head lice infestation in school children at Peshawar, Pakistan. Suleman M, et al.

J Trop Med Hyg 1988 Dec;91(6):323–32
[Ectoparasitosis in rural schools of the V Region—Valparaiso, Chile, 1986] Neira P, et al.
Bol Chil Parasitol 1987 Jul–Dec;42(3–4):87–9 (Eng. Abstr.) (Spa)

HISTORY

Head lice, Pediculus humanus capitis (Anoplura: Pediculidae) from hair combs excavated in Israel and dated from the first century B.C. to the eighth century A.D.. Mumcuoglu YK, et al. J Med Entomol 1988 Nov;25(6):545–7

PARASITOLOGY

Scalp infestation with Phthirus pubis [letter] Signore RJ, et al. Arch Dermatol 1989 Jan;125(1):133

PREVENTION & CONTROL

Further studies on head lice and their control in Tasmania. Goldsmid JM, et al. Aust Fam Physician 1989 Mar; 18(3):253–5
Large-scale measures applied in the elimination of severe head louse infestation in south Sudan, using pyrethrum and synergists. Sixl W, et al. Geogr Med 1988;Suppl 1:49–50
Updated community approach to head lice. Maunder JW. J R Soc Health 1988 Dec;108(6):201–2
Effectiveness of permethrin-treated military uniform fabric against human body lice. Sholdt LL, et al. Milit Med 1989 Feb;154(2):90–3

THERAPY

Pediculosis capitis: a review. Bratton SL, et al. J Arkansas Med Soc 1988 Aug;85(3):133–5 (17 ref.)

VETERINARY

Seasonal changes in the population of Mallophaga on Acridotheres tristis. Chandra S, et al. Angew Parasitol 1988 Nov;29(4):244–9
Distribution of Mallophaga on the body of Acridotheres tristis (Aves). Chandra S, et al. Angew Parasitol 1989 Feb; 30(1):39–42
Evaluation of strategies for control of sheep lice (Damalinia ovis) with an epidemiological model [published erratum appears in Aust Vet J 1989 Apr;66(4):127] Brightling A. Aust Vet J 1989 Feb;66(2):55–8
Effect of insecticidal ear tags on populations of lice (Damalinia ovis) infesting sheep. James PJ, et al. Aust Vet J 1989 May;66(5):134–7
Recognition of the sucking louse Linognathus africanus on goats. O'Callaghan MG, et al. Aust Vet J 1989 Jul; 66(7):228–9
Crusts on the epidermis of some louse-infested Merino sheep. Sinclair AN. Aust Vet J 1989 May;66(5):151–2
Pediculosis of mule deer and white-tailed deer fawns in captivity. Foreyt WJ, et al. J Am Vet Med Assoc 1986 Nov 1;189(9):1172–3
Management of an infestation of sucking lice in a colony of rhesus macaques. Mader DR, et al. Lab Anim Sci 1989 May;39(3):252–5
Feeding of the chewing louse Damalinia ovis (Schrank) (Phthiraptera:Trichodectidae) on sheep. Sinclair AN, et al. Vet Parasitol 1989 Jan;30(3):233–51
[A review of the mammalian Mallophaga of Europe] Mey E. Angew Parasitol 1988 Jun;29(2):113–26 (52 ref.) (Eng. Abstr.) (Ger)

PEDICULUS

ANATOMY & HISTOLOGY

[Significance of the adhesion site of Pediculus capitis eggs in hair samples collected from barber shop floors] Linardi PM, et al. Rev Soc Bras Med Trop 1987 Oct–Dec; 20(4):209–12 (Eng. Abstr.) (Por)

CLASSIFICATION

[Diagnosis of the species of lice in the genus Pediculus] Tarasevich IV, et al. Med Parazitol (Mosk) 1988 May–Jun; (3):48–52 (Eng. Abstr.) (Rus)

GROWTH & DEVELOPMENT

Clinical evaluation of an after-pediculicide nit removal system. DeFelice J, et al. Int J Dermatol 1989 Sep; 28(7):468–70
Pediculosis capitis and the stubborn nit. Parish LC, et al. Int J Dermatol 1989 Sep;28(7):436–7

ULTRASTRUCTURE

[Ultrastructural characteristics of the simple eyes of the louse Pediculus humanus corporis] Chalka SIu, et al. Parazitologiia 1988 May–Jun;22(3):230–4 (Eng. Abstr.) (Rus)

PEDIGREE

The detection of linkage and heterogeneity in nuclear families for complex disorders: one versus two marker loci. Martinez MM, et al. Am J Hum Genet 1989 Apr; 44(4):552–9
A resolution of the ascertainment sampling problem. III. Pedigrees. Shute NC, et al. Am J Hum Genet 1988 Oct; 43(4):387–95
Clinical, cytogenetic, and pedigree findings in 18 cases of Aicardi syndrome. Donnenfeld AE, et al. Am J Med Genet 1989 Apr;32(4):461–7
Pediplot: A computer-program for drawing pedigrees. Baggesen K, et al. Ann Genet 1989;32(2):126–8
A FORTRAN subroutine to compute inbreeding and kinship coefficients according to the number of ancestral generations. Vu Tien Khang J. Comput Appl Biosci 1989 Jul;5(3):199–204
The time-line genogram: highlighting temporal aspects of family relationships. Friedman H, et al. Fam Process 1988 Sep;27(3):293–303
Drawing pedigrees. Thomas A. IMA J Math Appl Med Biol 1988;5(3):201–13
Two-locus and three-locus gene identity by descent in pedigrees. Thompson EA. IMA J Math Appl Med Biol 1988;5(4):261–79
Development and evaluation of a computer genogram. Ebell MH, et al. J Fam Pract 1988 Nov;27(5):536–8
Clinical, age of onset, nerve conduction studies, electromyography, visual evoked potentials, and Duffy blood group studies in a family with hereditary motor and sensory neuropathy (HMSN). McLeod DR, et al. Prog Clin Biol Res 1989;306:197–201
[Use of genealogical patterns to record family relationships] Cerný M, et al. Cesk Psychiatr 1989 Apr;85(2):97–9 (Eng. Abstr.) (Cze)
[Probability of paternity related to probable ancestry] Salmon D. Rev Fr Transfus Immunohematol 1988 Dec;31(5):763–5 (Fre)
[A computer program that draws pedigree charts for inbred strains of animals] Kasai N, et al. Jikken Dobutsu 1989 Jan;38(1):89–92 (Eng. Abstr.) (Jpn)
[Lupus nephropathy in childhood and familial lupus. Genetic study of a family] Gómez Campdera FJ, et al. Med Clin (Barc) 1989 Apr 15;92(14):543–6 (Eng. Abstr.) (Spa)

PEDIOCOCCUS

Purification, characterization and antimicrobial spectrum of a bacteriocin produced by Pediococcus acidilactici. Bhunia AK, et al. J Appl Bacteriol 1988 Oct;65(4):261–8

METABOLISM

Inhibition of Listeria monocytogenes by using bacteriocin PA-1 produced by Pediococcus acidilactici PAC 1.0. Pucci MJ, et al. Appl Environ Microbiol 1988 Oct;54(10):2349–53
Correlation between depression of catabolite control of xylose metabolism and a defect in the phosphoenolpyruvate:mannose phosphotransferase system in Pediococcus halophilus. Abe K, et al. J Bacteriol 1989 Apr;171(4):1793–800

PEDODONTICS

see related
TOOTH, DECIDUOUS

Psychopharmacologic management of the stress in pedodontic practice. Cupalová R, et al. Acta Univ Palacki Olomuc Fac Med 1988;120:351–6
Orthodontic radiographic usage by pediatric dentists. Atchison KA, et al. ASDC J Dent Child 1989 Jan–Feb; 56(1):26–9
It is still a tough fight. Crompton WW. ASDC J Dent Child 1989 May–Jun;56(3):240
Report of project USAP: the use of sedative agents in pediatric dentistry. Houpt M. ASDC J Dent Child 1989 Jul–Aug;56(4):302–9
Evolving demographic patterns and potential for pediatric dental practice. Waldman HB. ASDC J Dent Child 1989 Sep–Oct;56(5):371–4
Specialists in paediatric dentistry in the United Kingdom. Curzon ME. Br Dent J 1988 Sep 10;165(5):158
Paedodontics. Scheer B. Br Dent J 1988 Aug 20;165(4):143–4
Dentistry for children—are you prepared? Hochberg MS, et al. N Y State Dent J 1989 Feb;55(2):24–5

EDUCATION

Specialisation in dentistry [letter] Curzon ME. Br Dent J 1988 Nov 5;165(9):317
A comparison of 1980 and 1988 predoctoral pediatric dentistry curricula. Posnick WR, et al. J Dent Educ 1989 Aug;53(8):485–8
[Experience with the methodologic guidance of intern training in pediatric dentistry] Mel'nichenko EM, et al. Stomatologiia (Mosk) 1988 Sep–Oct;67(5):85 (Rus)

MANPOWER

Pediatric dentistry in a period of decreasing numbers of dentists. Waldman HB. ASDC J Dent Child 1989 Mar–Apr; 56(2):121–4
Changing number and distribution of pediatric dentists. Waldman HB. ASDC J Dent Child 1989 Sep–Oct; 56(5):375–7

TRENDS

Improving conditions for pediatric dental practice are part of the changing environment for dentistry. Waldman HB. ASDC J Dent Child 1989 Jul–Aug;56(4):262–6 (30 ref.)

PEDOPHILIA see under PARAPHILIAS

PEER GROUP

Lessons drawn from observing young peers together. Eckerman CO, et al. Acta Paediatr Scand Suppl 1988; 344:55–70 (40 ref.)
A developmental analysis of the influence of body weight on the sociometry of children. Cohen R, et al. Addict Behav 1989;14(4):473–6
What mentally retarded and nonretarded children expect of one another. Miller CT, et al. Am J Ment Retard 1989 Jan;93(4):396–405
Childcare responsibilities, peer relations, and sibling conflict: older siblings of mentally retarded children. Stoneman Z, et al. Am J Ment Retard 1988 Sep;93(2):174–83
Surviving the stages of peer consultation. Bilderback B. Am J Nurs 1989 Jan;89(1):113–4, 116
The effectiveness of three group intervention strategies to support family caregivers. Toseland RW, et al. Am J Orthopsychiatry 1989 Jul;59(3):420–9
The effects of isosexual rearing on adult sexual behavior in captive male rhesus macaques. Bercovitch FB, et al. Arch Sex Behav 1988 Oct;17(5):381–8
A peer-mediated intervention with clinic-referred socially isolated girls. Generalization, maintenance, and social validation. Guevremont DC, et al. Behav Modif 1989 Jan; 13(1):32–50
The social image of the young female smoker. Cooper WH, et al. Br J Addict 1989 Aug;84(8):935–41
Peers as perceived by drug abusers in their drug-seeking behaviour. Ong TH. Br J Addict 1989 Jun;84(6):631–7
Expectations about appropriate drinking contexts: comparisons of parents, adolescents and best friends. Wilks J, et al. Br J Addict 1988 Sep;83(9):1055–62
Parent, peer and personal determinants of adolescent drinking. Wilks J, et al. Br J Addict 1989 Jun;84(6):619–30
Qualitative assessment of the effect of play materials in dyadic peer interactions of children with autism. Dewey D, et al. Can J Psychol 1988 Jun;42(2):242–60
Child sexual abuse: very young perpetrators. Cantwell HB. Child Abuse Negl 1988;12(4):579–82
Peer status and self-perception among early elementary school children: the case of the rejected children. Boivin M, et al. Child Dev 1989 Jun;60(3):591–6
Aggression between peers in early childhood: individual continuity and developmental change. Cummings EM, et al. Child Dev 1989 Aug;60(4):887–95
Toddlers' emerging ways of achieving social coordinations with a peer. Eckerman CO, et al. Child Dev 1989 Apr; 60(2):440–53
Heterogeneity of peer-rejected boys: aggressive and nonaggressive subtypes. French DC. Child Dev 1988 Aug; 59(4):976–85
Conflict and the friendship relations of young children. Hartup WW, et al. Child Dev 1988 Dec;59(6):1590–600
Preschool peer communication skills: the role of social status and interaction context. Hazen NL, et al. Child Dev 1989 Aug;60(4):867–76
Conceptions and perceived influence of peer groups: interviews with preadolescents and adolescents. O'Brien SF, et al. Child Dev 1988 Oct;59(5):1360–5
Children's perceptions of peer reputations and their social reputations among peers. Rogosch FA, et al. Child Dev 1989 Jun;60(3):597–610
Social attributional biases of peer-rejected and aggressive children. Waas GA. Child Dev 1988 Aug;59(4):969–75
Prevention of alcohol use and abuse in adolescence: teacher-vs peer-led intervention. Perry CL. Crisis 1989 Apr; 10(1):52–61
An epidemiological study of children's attitudes toward disability. King SM, et al. Dev Med Child Neurol 1989 Apr; 31(2):237–45
Behavioral and autonomic responses to peer separation in pigtail macaque monkey infants. Boccia ML, et al. Dev Psychobiol 1989 Jul;22(5):447–61
Maternal and peer imprinting in mallard ducklings under experimentally simulated natural social conditions. Dyer AB, et al. Dev Psychobiol 1989 Jul;22(5):463–75
Classwide peer tutoring with mildly handicapped high school students. Maheady L, et al. Except Child 1988 Sep; 55(1):52–9
Collaborative skill instruction for promoting positive interactions between mentally handicapped and nonhandicapped children. Putnam JW, et al. Except Child 1989 Apr;55(6):550–7
A network of influences on adolescent drug involvement: neighborhood, school, peer, and family. Brook JS, et al. Genet Soc Gen Psychol Monogr 1989 Feb;115(1):123–45
Predicting changes in teenage drug use: the role of intention-behavior discrepancy. Weng LJ, et al. Genet Soc Gen Psychol Monogr 1989 Feb;115(1):25–48
Peer counselor training for nursing home residents. Scharlach AE. Gerontologist 1988 Aug;28(4):499–502
The role of parents and older peers in school-based cardiovascular prevention programs: implications for program development. Cohen RY, et al. Health Educ Q 1989 Summer;16(2):245–53
Active gamblers as peer counselors. Rosecrance J. Int J Addict 1988 Jul;23(7):751–66 (52 ref.)

Peers and siblings: their neglect in analytic group psychotherapy. Rabin HM. **Int J Group Psychother** 1989 Apr;39(2):209–21

Evaluative factors in social problem solving by aggressive boys. Guerra NG, et al. **J Abnorm Child Psychol** 1989 Jun; 17(3):277–89

A psychometric study of positive and negative nominations and the pupil evaluation inventory. Johnston C, et al. **J Abnorm Child Psychol** 1988 Dec;16(6):617–26

The social behavior of peer-identified aggressive, withdrawn, and aggressive/withdrawn children. Lyons J, et al. **J Abnorm Child Psychol** 1988 Oct;16(5):539–52

Relations between hyperactive and aggressive behavior and peer relations at three elementary grade levels. Pope AW, et al. **J Abnorm Child Psychol** 1989 Jun;17(3):253–67

The predictive power of first-grade peer and teacher ratings of behavior: sex differences in antisocial behavior and personality at adolescence. Tremblay RE, et al. **J Abnorm Child Psychol** 1988 Oct;16(5):571–83

A comparison of childhood backgrounds of teenage mothers and their non-mother peers: a new formulation. Oz S, et al. **J Adolesc** 1988 Sep;11(3):251–61

Peer educators reach college students with nutrition information. Gates G, et al. **J Am Coll Health** 1989 Sep; 38(2):95–6

Preschoolers' responses to peers' distress and beliefs about bystander intervention. Caplan MZ, et al. **J Child Psychol Psychiatry** 1989 Mar;30(2):231–42

An examination of the relationship between childhood depression and social competence amongst primary school children. Kennedy E, et al. **J Child Psychol Psychiatry** 1989 Jul;30(4):561–73

Adolescents' attitudes toward peers who wear visible hearing aids. Silverman FH, et al. **J Commun Disord** 1989 Apr; 22(2):147–50

Does stimulant medication improve the peer status of hyperactive children? Whalen CK, et al. **J Consult Clin Psychol** 1989 Aug;57(4):545–9

Friendship patterns and peer status during early and middle childhood. Ladd GW. **J Dev Behav Pediatr** 1988 Aug; 9(4):229–37 (59 ref.)

Adolescents' perceptions of cannabis use by their peers: does it have anything to do with behavior? Sheppard MA. **J Drug Educ** 1989;19(2):157–64

Positive, negative, and neutral peer interactions as indicators of children's social competency: the issue of concurrent validity. Rosén LA, et al. **J Genet Psychol** 1988 Dec; 149(4):441–6

The social reception of mainstreamed children in the regular classroom. Gillmore JL, et al. **J Ment Defic Res** 1989 Aug; 33 (Pt 4):301–11

Social competence as a future direction for early intervention programmes. Guralnick MJ. **J Ment Defic Res** 1989 Aug; 33 (Pt 4):275–81 (36 ref.)

Peer relationships of mildly retarded young adults living in the community. Koller H, et al. **J Ment Defic Res** 1988 Aug;32 (Pt 4):321–31

A small group can go a long way. Fullar SA, et al. **MCN** 1988 Nov–Dec;13(6):414–8

Peer counseling with adolescents. Rubenstein EM, et al. **Md Med J** 1988 Dec;37(12):942–4

Child to child: an approach to the health education of primary school-age children. Webb JK. **Pediatrician** 1988; 15(3):122–6

Development of perceived adolescent relationship scale. Andrews DW, et al. **Percept Mot Skills** 1989 Aug; 69(1):305–6

Attitudes toward handicapped peers of mainstreamed and nonmainstreamed children in physical education. Archie VW, et al. **Percept Mot Skills** 1989 Aug;69(1):319–22

Peer-based assessment in the study of children's social competence and social skills. Dygdon JA. **Prog Behav Modif** 1988;23:165–207 (75 ref.)

Recent friendships in anxious and depressed school age children. Goodyer IM, et al. **Psychol Med** 1989 Feb; 19(1):165–74

Peer relations and behaviors of adoptive children in residential treatment. Blitz JM, et al. **Psychol Rep** 1989 Feb; 64(1):157–8

Effects of race on interrater reliability of peer ratings. Jordan JL. **Psychol Rep** 1989 Jun;64(3 Pt 2):1221–2

Students teaching AIDS to students: addressing AIDS in the adolescent population. Haven GG, et al. **Public Health Rep** 1989 Jan–Feb;104(1):75–9

Effects of group socialization procedures on the social interactions of preschool children. Brown WH, et al. **Res Dev Disabil** 1988;9(4):359–76

Predictors of non-adoption of cigarette smoking following experimentation. Mittelmark MB, et al. **Scand J Prim Health Care** 1988 Sep;6(3):131–5

Prevention of tobacco use among adolescents in public schools in San Diego County, U.S.A. Elder JP, et al. **Soz Praventivmed** 1989;34(1):24–9

Impaired physicians who are seeking help. Peer assistance, not public identification. Dickison HW. **W V Med J** 1989 Sep;85(9):390

[The knowledge of disabled and non-disabled children of the respective other group] Siek K, et al. **Z Gesamte Hyg** 1989 Jan;35(1):48–9 (Eng. Abstr.) **(Ger)**

PEER REVIEW

On journals: the competition for minds and money. Brogdon BG. **AJR** 1989 Mar;152(3):645–6

Should editorials also be peer-reviewed? [letter] Neel JV. **Am J Hum Genet** 1988 Dec;43(6):981–2

Survey of cause-of-death query criteria used by state vital statistics programs in the US and the efficacy of the criteria used by the Oregon Vital Statistics Program. Hopkins DD, et al. **Am J Public Health** 1989 May;79(5):570–4

Contribution of peer review to scientific progress [editorial] Sly RM. **Ann Allergy** 1989 Aug;63(2):85

Speaking of peer review... [letter] Allen AD. **Arch Dermatol** 1989 Jul;125(7):1001–2

HCFA mandates preapproval for cataract surgery [editorial] Foreman J. **Arch Ophthalmol** 1988 Oct;106(10):1358

The Australian clinical review experience. **Aust Clin Rev** 1988 Sep;8(30):98–101

Use of a concurrent treatment design to analyze the effects of a peer review system in a residential setting. Egan P, et al. **Behav Modif** 1988 Jan;12(1):35–56

A critical approach to the reading of analytical reports. Bulman JS. **Br Dent J** 1988 Sep 10;165(5):180–2

Does peer review have a place in child custody evaluations? Herman SP, et al. **Child Today** 1989 May–Jun;18(3):15–8

Supreme Court hits Oregon docs 1.95 million for anticompetitive behavior done in the name of peer review [news] **Colo Med** 1988 Jul 15;85(14):281–2

Improving peer review of nursing research. Cason GJ, et al. **Comput Nurs** 1988 Nov–Dec;6(6):253–62

Comment: blind peer review of journal articles [letter] Shaughnessy AF. **Drug Intell Clin Pharm** 1988 Dec; 22(12):1006

Chemical dependence treatment review guidelines. Phillips KL. **Gen Hosp Psychiatry** 1989 Jul;11(4):282–7

Guidelines for acute inpatient psychiatric treatment review. Prunier P, et al. **Gen Hosp Psychiatry** 1989 Jul;11(4):278–81

U.S. Supreme Court ruling on medical peer review. **Hawaii Med J** 1988 Oct;47(10):489–91

Peer review and scientific consensus in radiation cancer assessment [letter] Moghissi AA, et al. **Health Phys** 1989 Jun;56(6):959–60

Peer review materials protected by statute. **Indiana Med** 1989 Jul;82(7):562

Peer review proceedings. Strohmeyer RW Jr. **Indiana Med** 1989 May;82(5):382–4

A case for refereed journals [editorial] Young PR. **J Am Board Fam Pract** 1989 Apr–Jun;2(2):77

Quality assurance for 21 years [letter] Birney TH. **J Am Dent Assoc** 1989 Jan;118(1):10

The peer-review process—and an acknowledgement of our peerless reviewers. Feinstein AR, et al. **J Clin Epidemiol** 1989;42(1):1–4

Peer review always helps but never cures [editorial] **J Health Soc Behav** 1989 Sep;30(3):iv–v

1987 Letourneau award. Enforcing hospital responsibility through self-evaluation and review committee confidentiality. Rowland JM. **J Leg Med** 1988 Sep; 9(3):377–419 (284 ref.)

Peer evaluation: a component of faculty performance appraisal. Harwood CH, et al. **J Nurs Educ** 1988 Oct; 27(8):377–9

Profile of a meeting: how abstracts are written and reviewed. Panush RS, et al. **J Rheumatol** 1989 Feb;16(2):145–7

The Department of Defense's external civilian peer review of medical care [letter] **JAMA** 1989 Oct 13;262(14):1950–1

Should pharmacists evaluate the practices of physicians? [letter; comment] Bodey GP. **JAMA** 1989 Jul 14; 262(2):205–6, **Comment on:** JAMA 1988 Dec 23–30;260(24):3592

Peer review and the NCI's clinical alert on node-negative breast cancer [letter] Feinberg BA. **JAMA** 1989 Feb 3; 261(5):695–6

New requirements for authors: signed statements of authorship responsibility and financial disclosure [editorial] Lundberg GD, et al. **JAMA** 1989 Oct 13;262(14):2003–4

The international congress on peer review in biomedical publication [editorial] Rennie D, et al. **JAMA** 1989 Feb 3;261(5):749

Maternal death studies. **Kans Med** 1989 Mar;90(3):69–73

Bureau of standards [editorial] Gray DE. **Kans Med** 1989 Mar;90(3):62

Response to criticism of the GMC [letter] Walton J. **Lancet** 1988 Dec 3;2(8623):1312

Calling Medical Care reviewers first. A randomized trial. Neuhauser D, et al. **Med Care** 1989 Jun;27(6):664–6

Peer review of class handouts. McLeod PJ, et al. **Med Teach** 1988;10(1):69–73

Legal immunity for medical peer-review programs. New policies explored [see comments] Curran WJ. **N Engl J Med** 1989 Jan 26;320(4):233–5. **Comment in:** N Engl J Med 1989 Jul 27;321(4):265

Legal immunity for peer-review programs [letter; comment] Pedersen AB. **N Engl J Med** 1989 Jul 27;321(4):265. **Comment on:** N Engl J Med 1989 Jan 26;320(4):233–5

Medical research—who minds the minders? [letter] **N Z Med J** 1989 Mar 22;102(864):141

Peer review [letter] **Nature** 1989 Jun 8;339(6224):414

Peer review (continued) [letter] **Nature** 1989 Aug 24; 340(6235):588

Peer review. Does it work efficiently? [news] Anderson A. **Nature** 1989 May 18;339(6221):164

New 'integrity' offices appear in Washington [news] Anderson A. **Nature** 1989 Jul 6;340(6228):3

Benveniste under review [news] Coles P. **Nature** 1989 Jul 13;340(6229):89

Peer review [letter] Hershey DR. **Nature** 1989 Aug 10; 340(6233):424

Eight precautions for peer reviewers. Pudlin HP. **Pa Med** 1989 Apr;92(4):34–6

Peer review for publication [letter] Goldwyn RM. **Plast Reconstr Surg** 1989 Feb;83(2):398–9

Peer reviewer agreement for major anesthetic mishaps. Caplan RA, et al. **QRB** 1988 Dec;14(12):363–8

Peer review comes under peer review [news] Sun M. **Science** 1989 May 26;244(4907):910–2

Putting "peer" into PRO. Carroll RP Jr. **Tex Med** 1989 Jun; 85(6):69–72

Reporting peer review actions to the Texas State Board of Medical Examiners. Young MG. **Tex Med** 1989 Jan; 85(1):51–4

Peer review and the Patrick case [editorial] Boulanger WJ. **Wis Med J** 1988 Aug;87(8):5

LEGISLATION & JURISPRUDENCE

Checks and balances in peer review: advice from the Patrick case [editorial] Prout DM. **Ann Intern Med** 1988 Nov 1; 109(9):689–90

The case for legislation to provide legal privilege for quality assurance in NSW in 1988. Stuart D. **Aust Clin Rev** 1988 Sep;8(30):153–6

Psychiatric review boards and medical ethics [letter] Holden TJ. **Can J Psychiatry** 1988 Aug;33(6):570

Civil liability of peer review participants: Patrick v. Burget and the Health Care Quality Improvement Act of 1986. Ronai SE, et al. **Conn Med** 1988 Sep;52(9):537–40

Peer review after Patrick case is alive and well. Holthaus D. **Hospitals** 1988 Oct 20;62(20):34

DPR's physician review process [editorial] Thrasher JE. **J Fla Med Assoc** 1989 Jan;76(1):205–7

Peer review where it counts [editorial] Bryan CS. **J S C Med Assoc** 1989 Apr;85(4):209–11

On a clear day you can see peer review. Lord D. **J Tenn Med Assoc** 1988 Oct;81(10):637–8

Legal discussions in medical literature: is there adequate peer review? Kapp MB. **Med Law** 1988;7(4):317–21

The evaluation of the impaired physician. Logan WS. **New Dir Ment Health Serv** 1989 Spring;(41):33–53

METHODS

Profile of the GMC. Discipline III: The final stages. Smith R. **BMJ** 1989 Jun 17;298(6688):1632–4

Rating intervals: an experiment in peer review. Green JG, et al. **FASEB J** 1989 Jun;3(8):1987–92

The process of reviewing peers. Green SA. **Gen Hosp Psychiatry** 1989 Jul;11(4):264–7

Observation: a useful tool or a relic from the past? Pearson JW. **Hawaii Med J** 1988 Aug;47(8):369–71, 389

Peer review for the nurse-directed health service. Woolard D, et al. **J Am Coll Health** 1989 Sep;38(2):91–3

The effects of peer review in general practice. Grol R, et al. **J R Coll Gen Pract** 1988 Jan;38(306):10–3

Inter-practice visiting [letter] Grout P, et al. **J R Coll Gen Pract** 1988 Feb;38(307):77–8

Does peer review work? Bell J. **JAMA** 1988 Dec 2; 260(21):3213

PROs monitor quality of care. Dechene JC. **JAMA** 1988 Dec 2;260(21):3213

A first report of the Department of Defense external civilian peer review of medical care. Mayer W, et al. **JAMA** 1988 Nov 11;260(18):2690–3

Editors and auditors. Rennie D. **JAMA** 1989 May 5; 261(17):2543–5

Strategies for the review of transfusion practices. Silberstein LE, et al. **JAMA** 1989 Oct 13;262(14):1993–7

Physicians looking at themselves [editorial] Todd JS. **JAMA** 1989 Sep 8;262(10):1376–7

From the Assistant Secretary for Health. Windom RE. **JAMA** 1989 Feb 24;261(8):1108–9

Emperor's clothes are costly [editorial] Bryan JA 2d. **N C Med J** 1988 Nov;49(11):591–2

The Journal's peer-review process [see comments] **N Engl J Med** 1989 Sep 21;321(12):837–9. **Comment in:** N Engl J Med 1989 Sep 21;321(12):827–9

Voluntary review of obstetric and gynecologic services. Gibbs CE, et al. **QRB** 1988 Sep;14(9):290–3

ORGANIZATION & ADMINISTRATION

Profile of the GMC. Discipline II: The preliminary screener—a powerful gatekeeper. Smith R. **BMJ** 1989 Jun 10;298(6687):1569–71

STANDARDS

Board of pharmacy examiners: an overview. **Iowa Med** 1989 Mar;79(3):129–31

Peers reviewed [editorial] **Lancet** 1989 May 20; 1(8647):1115–6

How good is peer review? [editorial; comment] Relman AS, et al. **N Engl J Med** 1989 Sep 21;321(12):827–9. **Comment on:** N Engl J Med 1989 Sep 21;321(12):837–9

The importance of documentation in peer review. Kingsley DI. **N J Med** 1989 Mar;86(3):185–6

Disciplinary matters [letter] Langridge CJ. **N Z Med J** 1988 Dec 14;101(859):829–30
Plagiarism charge casts shadow on peer review [news] Anderson A. **Nature** 1989 Jul 20;340(6230):173
Scrutinizing peer review [editorial] Lichter PR. **Ophthalmology** 1989 Jul;96(7):929–30
The epilepsy "cure": bold claims, weak data [news] Crease RP. **Science** 1989 Sep 29;245(4925):1444–5
NSF peer review under fire from Nader group [news] Marshall E. **Science** 1989 Jul 21;245(4915):250

TRENDS

Peer review: empirical data base and practical implications. el-Guebaly N. **Can J Psychiatry** 1988 Oct;33(7):645–9 (29 ref.)
More problems with PRO [letter] Kottke TE. **Minn Med** 1988 Dec;71(12):744
The expanding scope of PRO review. Explaining Medicare's new review requirements in Missouri. Jaco D. **Mo Med** 1988 Oct;85(10):653–7
Physician peer review in New Jersey. Dwyer WA Jr. **N J Med** 1989 Feb;86(2):127–32
Quality assessment mechanism in Medicare contract with the PRO of New Jersey, Inc. Kingsley DI. **N J Med** 1989 Feb;86(2):105–7
Where next with peer-review? [news] Maddox J. **Nature** 1989 May 4;339(6219):11
Recent changes in NIH peer review system. Demsey A. **Physiologist** 1988 Dec;31(6):155–6
Peer review: time for a change? [letter] Stamford JA. **Trends Pharmacol Sci** 1988 Jul;9(7):234–5

PEER REVIEW ORGANIZATIONS see **PROFESSIONAL REVIEW ORGANIZATIONS**

PEFLOXACIN

ADMINISTRATION & DOSAGE

[Can septicemia and ascitic fluid infections in cirrhotic patients be treated by the oral route alone?] Silvain C, et al. **Gastroenterol Clin Biol** 1989 Apr;13(4):335–9 (Eng. Abstr.) **(Fre)**

ADVERSE EFFECTS

Epileptic attacks associated with pefloxacin treatment in a patient on CAPD [letter] Romano C, et al. **Clin Nephrol** 1989 Jul;32(1):48–9
[Arthropathies following the administration of pefloxacin to an adolescent with mucoviscidosis] Kesseler A, et al. **Ann Pediatr (Paris)** 1989 Apr;36(4):275–8 (Eng. Abstr.) **(Fre)**

PHARMACOKINETICS

Penetration of pefloxacin into bronchial secretions. Bonmarchand G, et al. **Antimicrob Agents Chemother** 1989 Mar;33(3):391–3
Steady-state pharmacokinetics of pefloxacin administered once and twice daily. Couet W, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):303–4
Pharmacokinetics of pefloxacin and amikacin administered simultaneously to patients undergoing resuscitation. Sultan E, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):305–6
Pharmacokinetics of pefloxacin and amikacin administered simultaneously to intensive care patients. Sultan E, et al. **Eur J Clin Pharmacol** 1988;34(6):637–43
Comparative oral pharmacokinetics of fleroxacin and pefloxacin. De Lepeleire I, et al. **J Antimicrob Chemother** 1988 Aug;22(2):197–202
N-oxidation, N-demethylation, and excretion of pefloxacin by the turtle Pseudemys scripta elegans. Vree TB, et al. **Vet Q** 1988 Oct;10(4):277–80
[Kinetics of pefloxacin diffusion in human bone tissue following a single infusion of 800 mg. Evaluation of an extraction technic using chloroform] Etesse-Carsenti H, et al. **Pathol Biol (Paris)** 1988 Jun;36(5 Pt 2):715–8 (Eng. Abstr.) **(Fre)**

PHARMACOLOGY

Influence of two quinolones, ofloxacin and pefloxacin, on human myelopoiesis in vitro. Pallavicini F, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):122–3
Susceptibility of Coxiella burnetii to pefloxacin and ofloxacin in ovo and in persistently infected L929 cells. Raoult D, et al. **Antimicrob Agents Chemother** 1989 May;33(5):621–3
Effect of pefloxacin on adherence of Proteus-Providencia spp to squamous epithelial cells. Cellini L, et al. **Chemioterapia** 1988 Oct;7(5):298–301
In vitro activity of pefloxacin compared with five other quinolones on nalidixic acid-resistant proteae species. Piccolomini R, et al. **Chemioterapia** 1988 Oct;7(5):287–91
Plasmid "curing" by some recently synthetized 4-quinolone compounds. Selan L, et al. **Chemioterapia** 1988 Oct; 7(5):292–4
Pefloxacin. A review of its antibacterial activity, pharmacokinetic properties and therapeutic use. Gonzalez JP, et al. **Drugs** 1989 May;37(5):628–68 (188 ref.)
Effect of subminimal inhibitory concentrations of pefloxacin on the piliation and adherence of E. coli. Desnottes JF, et al. **Drugs Exp Clin Res** 1988;14(10):629–34
Antimicrobial activity and interaction of pefloxacin and its principal metabolites. Collaborative Antimicrobial Susceptibility Testing Group. Jones RN. **Eur J Clin Microbiol Infect Dis** 1989 Jun;8(6):551–6
Interaction between piperacillin and pefloxacin or amikacin on the selection of resistant mutants of Pseudomonas aeruginosa. Boisivon A, et al. **J Antimicrob Chemother** 1988 Nov;22(5):651–7
In-vitro activity of fleroxacin compared with three other quinolones. Bremner DA, et al. **J Antimicrob Chemother** 1988 Oct;22 Suppl D:19–23
Influence of ofloxacin and pefloxacin on human lymphocyte immunoglobulin secretion and on polymorphonuclear leucocyte superoxide anion production. Fantoni M, et al. **J Antimicrob Chemother** 1988 Aug;22(2):193–6
The effect of ciprofloxacin and pefloxacin on bone marrow engraftment in the spleen of mice. Somekh E, et al. **J Antimicrob Chemother** 1989 Feb;23(2):247–51
In-vitro activity of lomefloxacin in comparison with pefloxacin and ofloxacin. Van der Auwera P, et al. **J Antimicrob Chemother** 1989 Feb;23(2):209–19
In vitro effects of ciprofloxacin and pefloxacin on growth of normal human hematopoietic progenitor cells and on leukemic cell lines. Somekh E, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):415–8
[Course of the resistance of Staphylococcus aureus to pefloxacin. A study based on 782 strains isolated in 1985 and 1986] Jean-Pierre H, et al. **Pathol Biol (Paris)** 1988 Oct;36(8):956–8 (Eng. Abstr.) **(Fre)**
[In vitro antibacterial activity of a new fluoroquinolone, fleroxacin as a function of the sensitivity or resistance to nalidixic acid and to pefloxacin] Soussy CJ, et al. **Pathol Biol (Paris)** 1989 May;37(5):364–9 (Eng. Abstr.) **(Fre)**

THERAPEUTIC USE

Resistance emerging after pefloxacin therapy of experimental Enterobacter cloacae peritonitis. Lucain C, et al. **Antimicrob Agents Chemother** 1989 Jun;33(6):937–43
Pefloxacin treatment of meningitis caused by gram-negative bacteria. Segev S, et al. **Arch Intern Med** 1989 Jun; 149(6):1314–6
Monotherapy with pefloxacin in neutropenic febrile patients. Daniels-Bosman MS, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):410
Pefloxacin in the treatment of 24 suppurative infections. Desplaces N, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):394–5
Management of peritonitis related to chronic ambulatory peritoneal dialysis (CAPD) using two daily intraperitoneal injections of 400 mg pefloxacin. Ragnaud JM, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):481–3
Efficacy of pefloxacin in experimental Pseudomonas aeruginosa pyelonephritis. Ritzerfeld W. **Chemioterapia** 1987 Jun;6(2 Suppl):184–5
Clinical experience with pefloxacin in the therapy of typhoid fever. Cristiano P, et al. **Infection** 1989 Mar-Apr;17(2):86–7
Peritonitis during continuous ambulatory peritoneal dialysis. Treatment with pefloxacin: first results and pharmacokinetics. Benzakour M, et al. **Nephron** 1988; 50(2):175–6
[Antibiotic prophylaxis using a combination of pefloxacin and fosfomycin in heart surgery with CEC (extracorporeal circulation) in patients allergic to beta-lactams] Lebreton P, et al. **Can Anesthesiol** 1989 Mar-Apr;37(2):77–87 (Eng. Abstr.) **(Fre)**
[Acute epididymitis and antibiotherapy. Measurement of the epididymal diffusion of pefloxacin] Costa P, et al. **J Urol (Paris)** 1989;95(1):41–4 (Eng. Abstr.) **(Fre)**
[Prospective randomized controlled study of a ceftazidime and pefloxacin combination versus a ceftazidime and amikacin combination in the empirical treatment of pneumonia and nosocomial septicemia at intensive care units] Beuscart C, et al. **Pathol Biol (Paris)** 1989 May; 37(5):496–9 (Eng. Abstr.) **(Fre)**
[Treatment of peritonitis in continuous ambulatory peritoneal dialysis with a combination of fosfomycin and pefloxacin] Michel C, et al. **Pathol Biol (Paris)** 1989 Apr;37(4):269–71 (Eng. Abstr.) **(Fre)**
[Use of an antibioprophylaxis with pefloxacin and fosfomycin in cardiac surgery in patients with beta-lactam hypersensitivity] Vergnaud M, et al. **Pathol Biol (Paris)** 1989 May;37(5):491–5 (Eng. Abstr.) **(Fre)**
[Prevention using pefloxacin of infections in cancer patients with granulocytopenia] Leleux A, et al. **Presse Med** 1989 Jan 7–14;18(1):21–4 (Eng. Abstr.) **(Fre)**
[Controlled randomized prospective study of a ceftazidime-pefloxacin combination versus a ceftazidime-amikacin combination in the empirical treatment of nosocomial pneumonias and septicemias of resuscitation. Preliminary results] Mouton Y, et al. **Presse Med** 1988 Oct 26;17(37):1928–32 (Eng. Abstr.) **(Fre)**
[Pefloxacin in the treatment of severe infections in intensive care] Gritti G, et al. **Minerva Anestesiol** 1988 Sep; 54(9):367–72 (Eng. Abstr.) **(Ita)**

URINE

[Antibacterial activity of pefloxacin in the urine during the 7 days following a single 800 mg oral dose] Guibert J, et al. **Pathol Biol (Paris)** 1989 May;37(5):406–10 (Eng. Abstr.) **(Fre)**

PELGER-HUET ANOMALY

BLOOD

[Study of the leukocyte anomaly of Pelger-Huet with the new Technicon H-1 system (letter)] Mira Y, et al. **Sangre (Barc)** 1989 Jun;34(3):245–6 **(Spa)**

COMPLICATIONS

Erythrocyte pyruvate kinase deficiency. A case of severe congenital hemolytic anemia. O'Connor TA, et al. **Mo Med** 1989 Feb;86(2):92–4

DIAGNOSIS

[A case of marked pseudo-Pelger-Huet anomaly of neutrophils in a patient with myelodysplastic syndrome and partial red cell aplasia (a special type of acute leukemia with pathologic blast differentiation)] Iavorkovskiĭ LL, et al. **Gematol Transfuziol** 1989 May;34(5):46–9 **(Rus)**

ETIOLOGY

[Reversible Pelger-Hüet anomaly associated with acute gastroenteritis caused by salmonella group D] Rosell Arnold E, et al. **An Esp Pediatr** 1989 Feb;30(2):143–4 **(Spa)**

GENETICS

[A case of Pelger-Huet anomaly in a premature infant] Kallo J, et al. **Folia Haematol (Leipz)** 1989;116(1):145–9 (Eng. Abstr.) **(Ger)**

VETERINARY

Leukocyte function in Pelger-Huët anomaly of dogs. Latimer KS, et al. **J Leukoc Biol** 1989 Apr;45(4):301–10

PELIOSIS HEPATIS see under **LIVER DISEASES**

PELIZAEUS-MERZBACHER DISEASE see **CEREBRAL SCLEROSIS, DIFFUSE**

PELLAGRA

DIAGNOSIS

[Pellagroid encephalopathy in chronic alcoholism: diagnostic difficulties (letter)] Tassies MD, et al. **Rev Clin Esp** 1989 Jun;185(1):49–50 **(Spa)**

ETIOLOGY

Interaction of niacin and zinc metabolism in patients with alcoholic pellagra. Vannucchi H, et al. **Am J Clin Nutr** 1989 Aug;50(2):364–9

HISTORY

Hookworm and pellagra: exemplary diseases in the new south. Kunitz SJ. **J Health Soc Behav** 1988 Jun;29(2):139–48

PELLETS, DRUG see **DRUG IMPLANTS**

PELVIC BONES

A case of pelvic osteomyelitis. Matsukura H, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Apr;29(2):277–9
Surgical treatment of primary tumours of the innominate bone. Wong CC, et al. **Ann Acad Med Singapore** 1988 Jan; 17(1):132–41
Unusual features of iliopsoas bursitis [letter] Helfgott SM. **Arthritis Rheum** 1988 Oct;31(10):1331–3
Surgery with intraoperative radiotherapy for sarcomas of the pelvic girdle: a pilot experience. Hoekstra HJ, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):1013–6
Salvage of the limb in the treatment of malignant pelvic tumors. O'Connor MI, et al. **J Bone Joint Surg [Am]** 1989 Apr;71(4):481–94
Computed tomography of isolated osteoblastic colon metastases in the bony pelvis. Paling MR, et al. **J Comput Tomogr** 1988 Jul;12(3):203–7
[Bone and spinal tuberculosis: rare cause of false negative diagnosis with technetium scintigraphy (letter)] Martin A, et al. **Presse Med** 1988 Sep 17;17(31):1587 **(Fre)**
[CT of tumorous lesions of the osseous pelvis] Heller M, et al. **ROFO** 1989 Apr;150(4):383–9 (Eng. Abstr.) **(Ger)**
[Lumbar spine, coxofemoral and calcaneus osteoporosis: clinico-radiologic study] Knoplich J, et al. **Rev Paul Med** 1987 Nov-Dec;105(6):301–11 (Eng. Abstr.) **(Por)**

ABNORMALITIES

[Principles of the diagnosis of transversely narrowed pelvis] Chernukha EA, et al. **Akush Ginekol (Mosk)** 1988 Dec; (12):27–30 (Eng. Abstr.) **(Rus)**
[Characteristics of the course and outcome of labor in women with transversely narrowed pelvis] Galina TV. **Akush Ginekol (Mosk)** 1988 Dec;(12):30–3 (Eng. Abstr.) **(Rus)**

ANATOMY & HISTOLOGY

The hipbone and Nomina Anatomica. Tuttle RH. **Am J Phys Anthropol** 1988 Sep;77(1):133–4

[Anatomic characteristics of the pelvis in children] Lascombes P, et al. **Chir Pediatr** 1988;29(2–3):59–71 (Eng. Abstr.) **(Fre)**

[Macroscopic presentation of the bones of the pelvic limb of Pudu pudu (Molina 1782)] Butendieck E, et al. **Gegenbaurs Morphol Jahrb** 1988;134(4):471–95 (Eng. Abstr.) **(Ger)**

BLOOD SUPPLY

Extensive pelvic infarction diagnosed by radionuclide skeletal and bone marrow imaging. Southee AE, et al. **Clin Nucl Med** 1988 Aug;13(8):613–4

INJURIES

Blunt pelvic trauma. Snyder HS. **Am J Emerg Med** 1988 Nov;6(6):618–27 (71 ref.)

Pelvic fracture hemorrhage. Priorities in management. Evers BM, et al. **Arch Surg** 1989 Apr;124(4):422–4

Closed treatment of pelvic and lower extremity fractures. Connolly JF. **Clin Orthop** 1989 Mar;(240):115–28 (56 ref.)

Stabilization of sacroiliac joint disruption with threaded compression rods. Dabezies EJ, et al. **Clin Orthop** 1989 Sep;(246):165–71

The role of external fixation in pelvic disruptions. Kellam JF. **Clin Orthop** 1989 Apr;(241):66–82 (15 ref.)

Internal fixation of pelvic ring fractures. Matta JM, et al. **Clin Orthop** 1989 May;(242):83–97

A retrospective study of 100 pelvic fractures in horses. Rutkowski JA, et al. **Equine Vet J** 1989 Jul;21(4):256–9

Pelvic injuries associated with traumatic abduction of the leg. Beard JD, et al. **Injury** 1988 Sep;19(5):353–6

Obstruction of the anal canal by a fracture of the pelvis. Donell ST. **Injury** 1988 Jan;19(1):45

Bladder and urethral injuries associated with fractures of the pelvis in Zaria, Nigeria. Muhammad I, et al. **Injury** 1988 Sep;19(5):357–9

The use of peritoneal lavage and urological studies in major fractures of the pelvis—a reassessment. Nallathambi MN, et al. **Injury** 1987 Nov;18(6):379–83

Grading the outcome of pelvic fractures. Majeed SA. **J Bone Joint Surg [Br]** 1989 Mar;71(2):304–6

Comparative study of the Orthofix and Pittsburgh frames for external fixation of unstable pelvic ring fractures. Bell AL, et al. **J Orthop Trauma** 1988;2(2):130–8

Immediate spica casting for pelvic fractures. Cotler HB, et al. **J Orthop Trauma** 1988;2(3):222–8

Pull-out strengths of bone screws at various sites about the pelvis—a preliminary study. Daum WJ, et al. **J Orthop Trauma** 1988;2(3):229–33

Occult rectal perforation in a major pelvic fracture. Ebraheim NA, et al. **J Orthop Trauma** 1988;2(4):340–3

Open pelvic fracture with vaginal laceration and diaphragmatic rupture in a child. Heinrich SD, et al. **J Orthop Trauma** 1988;2(3):257–61

The long-term results of nonoperatively treated major pelvic disruptions. Henderson RC. **J Orthop Trauma** 1989; 3(1):41–7

Biomechanical aspects of pelvic and hip injuries in road traffic accidents. McCoy GF, et al. **J Orthop Trauma** 1989; 3(2):118–23

Mortality after pelvic fractures in the elderly. Rossvoll I, et al. **J Orthop Trauma** 1989;3(2):115–7 (9 ref.)

Air embolism during pulsed saline irrigation of an open pelvic fracture: case report. Brunicardi FC, et al. **J Trauma** 1989 May;29(5):700–1

Pelvic fracture in multiple trauma: classification by mechanism is key to pattern of organ injury, resuscitative requirements, and outcome. Dalal SA, et al. **J Trauma** 1989 Jul;29(7):981–1000; discussion 1000–2

Voiding dysfunction secondary to penetrating bony fragment 20 years after pelvic fracture. Cohen ES, et al. **J Urol** 1989 Mar;141(3):606–7

Vascular complications of transurethral incision of post-traumatic urethral strictures. Gary R, et al. **J Urol** 1988 Dec;140(6):1539–40

Pseudodiverticulum of the bladder: an unusual complication of pelvic trauma. Lastarria E, et al. **J Urol** 1989 Aug;142(2):372–3

Bowel entrapment following pelvic fracture. A case report. Kuhnke M, et al. **Orthopedics** 1989 Aug;12(8):1115–7 (8 ref.)

Avulsion of the nongravid uterus due to pelvic fracture. Smith RJ. **South Med J** 1989 Jan;82(1):70–3

Disruption of the posterior pelvic ring caused by vertical shear. Webb LX, et al. **South Med J** 1988 Oct; 81(10):1217–21

Pelvic fracture and injury to the lower urinary tract. Spirnak JP. **Surg Clin North Am** 1988 Oct;68(5):1057–69 (60 ref.)

Prevention of complications resulting from pelvic fracture urethral injuries—and from their surgical management. Turner-Warwick R. **Urol Clin North Am** 1989 May; 16(2):335–58 (14 ref.)

[Early diagnosis and treatment of fat embolism syndrome after multiple fractures] Fu QZ. **Chung Hua Wai Ko Tsa Chih** 1988 Dec;26(12):739–41, 782 (Eng. Abstr.) **(Chi)**

[Post-traumatic cerebral fat embolism] Thicoïpe M, et al. **Ann Fr Anesth Reanim** 1988;7(5):418–21 (Eng. Abstr.) **(Fre)**

[Fractures of the pelvis in children excluding isolated fractures of the acetabulum and sacrum. Apropos of 267 cases. Anatomic study, contribution of modern radiologic studies, therapeutic management] Ducloyer P, et al. **Chir Pediatr** 1988;29(2–3):72–90 (Eng. Abstr.) **(Fre)**

[Fractures of the pelvis and associated bladder-urethral rupture] Lascombes P, et al. **Chir Pediatr** 1988; 29(2–3):114–9 (Eng. Abstr.) **(Fre)**

[Neural complications of injuries of the pelvis] Lechevallier J, et al. **Chir Pediatr** 1988;29(2–3):120–2 (Eng. Abstr.) **(Fre)**

[The obstetrical future of the post-fractured pelvis of the child. Medico-legal evaluation of obstetrical damages] Soutoul JH, et al. **Chir Pediatr** 1988;29(2–3):153–7 (Eng. Abstr.) **(Fre)**

[Results of biomechanical studies of various external fixation devices of the pelvis] Vécsei V. **Aktuel Traumatol** 1988 Dec;18(6):261–4 (Eng. Abstr.) **(Ger)**

[Life-threatening hemorrhage in pelvic fractures of polytraumatized patients. Diagnostic issues and embolization treatment] Hölting T, et al. **Chirurg** 1988 Aug; 59(8):547–51 (Eng. Abstr.) **(Ger)**

[Changes and progress in surgical treatment of fractures of the pelvic ring and acetabulum] Krueger P, et al. **Orthopade** 1989 Jun;18(3):171–9 (Eng. Abstr.) **(Ger)**

[Diagnosis of pelvic fractures: synoptic views of the pelvis versus CT] Dock W, et al. **ROFO** 1989 Mar;150(3):280–3 (Eng. Abstr.) **(Ger)**

[Percutaneous embolization of retroperitoneal hemorrhages in pelvic fractures] Grabenwöger F, et al. **ROFO** 1989 Mar; 150(3):335–8 (Eng. Abstr.) **(Ger)**

[Apophyseal rupture of the pelvis and lower extremity caused by sports] Ahmadi A, et al. **Sportverletz Sportschaden** 1987 Sep;1(3):113–7 (Eng. Abstr.) **(Ger)**

[Surgical management of injuries to the dorsal pelvic ring by elastic stabilization] Dolati B, et al. **Unfallchirurgie** 1988 Aug;14(4):199–203 (Eng. Abstr.) **(Ger)**

[Treatment of fresh fractures and dislocations of the pelvis with external fixation] Hofmann G. **Z Unfallchir Versicherungsmed Berufskr** 1988;81(2):111–9 **(Ger)**

[A technical variant of closed external fixation of the pelvis] Jeanneret B, et al. **Z Unfallchir Versicherungsmed Berufskr** 1988;81(2):120–5 **(Ger)**

[A successful removal of a misplaced steel coil—a case report of a pelvic fracture] Hori A, et al. **Rinsho Hoshasen** 1988 Nov;33(12):1613–5 (Eng. Abstr.) **(Jpn)**

[Our experience with using the rod equipment for the treatment of patients with injuries of the pelvis] Trubnikov VF, et al. **Ortop Travmatol Protez** 1988 Dec;(12):37–8 **(Rus)**

[Ligation and roentgeno-endovascular occlusion of internal iliac arteries in pelvic injuries] Shapot IuB, et al. **Vestn Khir** 1988 May;140(5):126–9 (30 ref.) **(Rus)**

[Injuries of the pelvis associated with injuries to other organs] Dizdarević S, et al. **Acta Chir Iugosl** 1989;36(1):91–100 (Eng. Abstr.) **(Scr)**

[Traumatic lesions of the posterior urethra in the follow up of 443 cases of pelvic fractures. Treatment and results] Pedemonte J, et al. **Actas Urol Esp** 1988 Jul–Aug; 12(4):321–6 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Test and teach. Number Fifty-eight. Pigmented villonodular synovitis of the hip with invasion of pelvic bone. Chan CW, et al. **Pathology** 1988 Oct;20(4):338–9, 391–2

[Pathologic changes in the pelvic bones of the ancient inhabitants of Siberia] Zakharov BI, et al. **Ortop Travmatol Protez** 1988 Oct;(10):56–7 **(Rus)**

[Value of echography in the diagnosis of chronic osteomyelitis] Vesnin AG, et al. **Vestn Khir** 1988 Oct; 141(10):46–8 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Low back muscle activity and pelvic rotation during walking. Vink P, et al. **Anat Embryol (Berl)** 1988;178(5):455–60

Motions and loads within the human pelvis: a biomechanical model study. Scholten PJ, et al. **J Orthop Res** 1988; 6(6):840–50

PHYSIOPATHOLOGY

Pelvic manifestations of diffuse idiopathic skeletal hyperostosis (DISH): are they clinically relevant? Fahrer H, et al. **Rheumatol Int** 1989;8(6):257–61

[Low back pain and instability of the pelvic ring] Brun JG, et al. **Tidsskr Nor Laegeforen** 1989 Feb 28;109(6):681–3 (Eng. Abstr.) **(Nor)**

RADIOGRAPHY

Treated invasive cervical carcinoma. Utility of computed tomography in distinguishing between skeletal metastases and radiation necrosis. Yousem DM, et al. **Clin Imaging** 1989 Jun;13(2):147–53

The role of standard roentgenograms in the evaluation of instability of pelvic ring disruption. Edeiken-Monroe BS, et al. **Clin Orthop** 1989 Mar;(240):63–76

The use of the pelvic radiograph alone to assess therapeutic response in bone metastases from breast cancer. Twining P, et al. **Clin Radiol** 1988 Nov;39(6):583–5

Osteomesopycnosis. A new case. Schmidt H, et al. **Pediatr Radiol** 1989;19(6–7):489–92

Diffuse idiopathic skeletal hyperostosis: diagnostic significance of radiographic abnormalities of the pelvis. Haller J, et al. **Radiology** 1989 Sep;172(3):835–9

[Radiologic change of cartilage of the pelvis and the upper end of the femur during growth. Application to the surveillance of scolioses] Vital JM, et al. **Chir Pediatr** 1989; 30(2):103–8 (Eng. Abstr.) **(Fre)**

[Diagnosis of pelvic distress by radiopelvimetry using 2 plates. Apropos of 102 cases] Daghfous MH, et al. **Tunis Med** 1987 Oct;65(10):603–7 (Eng. Abstr.) **(Fre)**

[Angiography of the pelvis and the legs using a 4F pigtail catheter and a moving table] Uchino A, et al. **Rinsho Hoshasen** 1988 Aug;33(8):949–50 **(Jpn)**

RADIONUCLIDE IMAGING

Bone scintigraphy in parasymphyseal insufficiency fractures [letter] **Br J Radiol** 1988 Sep;61(729):859–60

SURGERY

Biomechanical analysis of hip function after Chiari pelvic osteotomy. Koržinek K, et al. **Arch Orthop Trauma Surg** 1989;108(2):112–5

Partial pelvic resection as an alternative to hindquarter amputation for skeletal neoplasms. Stephenson RB, et al. **Clin Orthop** 1989 May;(242):201–11

Congenital hip dysplasia treated by the Salter osteotomy. Long-term review of 18 patients. Rinonapoli E, et al. **Ital J Orthop Traumatol** 1987 Dec;13(4):437–50

Allografts of the hemipelvis after tumour resection. Technical aspects of four cases. Langlais F, et al. **J Bone Joint Surg [Br]** 1989 Jan;71(1):58–62

Percutaneous computed-tomography-stabilization of pelvic fractures: preliminary report. Ebraheim NA, et al. **J Orthop Trauma** 1987;1(3):197–204

Salter innominate osteotomies in congenital dislocation of the hip. Waters P, et al. **J Pediatr Orthop** 1988 Nov–Dec; 8(6):650–5

[Results of Salter's innominate osteotomy in residual hip dysplasia in children. Apropos of 60 cases] Fournet-Fayard J, et al. **Rev Chir Orthop** 1988;74(3):243–51 (Eng. Abstr.) **(Fre)**

[Triple osteotomies of the pelvis in children] Monod A, et al. **Rev Chir Orthop** 1988;74 Suppl 2:111–2 **(Fre)**

[Operability of primary inoperable pelvic tumors by preoperative regional hyperthermia in combination with systemic chemotherapy exemplified by Ewing's sarcoma] Böhm P, et al. **Chirurg** 1988 Nov;59(11):734–9 (Eng. Abstr.) **(Ger)**

[Diagnosis and therapy of bone tumors in the area of the pelvis] Becker W. **Z Orthop** 1988 May–Jun;126(3):282–8 (8 ref.) (Eng. Abstr.) **(Ger)**

[Triple osteotomy of pelvic bones in the surgical treatment of congenital hip dysplasia] Szczekot J. **Chir Narzadow Ruchu Ortop Pol** 1988;53(3):195–200 (Eng. Abstr.) **(Pol)**

PELVIC EXENTERATION

The place of pelvic exenteration in surgical management of advanced and recurrent pelvic tumors. D'Addato F, et al. **Eur J Gynaecol Oncol** 1988;9(5):420–3

Low rectal resection and anastomosis at the time of pelvic exenteration. Hatch KD, et al. **Gynecol Oncol** 1988 Oct; 31(2):262–7

Pelvic exenteration for recurrent or persistent gynecologic malignancies: a 10-year review of the Memorial Sloan-Kettering Cancer Center experience (1972–1981). Lawhead RA Jr, et al. **Gynecol Oncol** 1989 Jun; 33(3):279–82

Pelvic exenteration in clear cell adenocarcinoma of the vagina and cervix. Senekjian EK, et al. **Gynecol Oncol** 1989 Sep;34(3):413–6

Pelvic exenteration for perianal Paget's disease [letter] Matsumoto K, et al. **J Clin Gastroenterol** 1988 Oct; 10(5):591–2

Phallic reconstruction during exenterative surgery for invasive urethral carcinoma. McDougal WS, et al. **J Urol** 1989 May;141(5):1201–3

The morbidity and benefits of concurrent gracilis myocutaneous graft with pelvic exenteration. Cain JM, et al. **Obstet Gynecol** 1989 Aug;74(2):185–9

The role of pelvic exenteration for sarcomatous malignancies. Reid GC, et al. **Obstet Gynecol** 1989 Jul;74(1):80–4

Clinical and histopathologic factors predicting recurrence and survival after pelvic exenteration for cancer of the cervix. Shingleton HM, et al. **Obstet Gynecol** 1989 Jun; 73(6):1027–34

METHODS

Gracilis myocutaneous vaginal reconstruction concurrent with total pelvic exenteration. Copeland LJ, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1095–101

Reconstruction of sigmoid vagina and conduit in total pelvic exenteration for recurrent cervical carcinoma. Shiromizu K, et al. **Jpn J Clin Oncol** 1989 Jun;19(2):170–2

[Results of 108 exenteration operations in advanced gynecologic cancers] Friedberg V. **Geburtshilfe Frauenheilkd** 1989 May;49(5):423–7 (Eng. Abstr.) **(Ger)**

[Possibilities for preserving function in extensive gynecologic tumor operations] Friedberg V. **Gynakologe** 1988 Dec;

21(4):315–8 (18 ref.) (Ger)

PELVIC HORN SYNDROME see **NAIL-PATELLA SYNDROME**

PELVIC INFLAMMATORY DISEASE see **ADNEXITIS**

PELVIC NEOPLASMS

Clinical manifestations and classification of endometriosis. Muse K. **Clin Obstet Gynecol** 1988 Dec;31(4):813–22 (27 ref.)

Vaginal adenocarcinoma developing in residual pelvic endometriosis: a clinical dilemma. Orr JW Jr, et al. **Gynecol Oncol** 1989 Apr;33(1):96–8

Malignant granular cell tumour with intraperitoneal dissemination. O'Donovan DG, et al. **Histopathology** 1989 Apr;14(4):417–9

Pelvic neuroblastoma. Knoedler CJ, et al. **J Urol** 1989 Apr; 141(4):905–7

Pelvic neurilemmoma: case report and literature review. Stone CD, et al. **Kans Med** 1988 Dec;89(12):331–3 (8 ref.)

[Clinical manifestations, diagnosis and treatment of extraorgan neoplasms of the small pelvis in children] Konenko NG. **Klin Khir** 1989;(6):34–6 (Eng. Abstr.) (Rus)

[Endoscopic aspects of external genital endometriosis] Skenderović S, et al. **Med Pregl** 1988;41(11–12):453–6 (Eng. Abstr.) (Scr)

COMPLICATIONS

Rhabdomyosarcoma and hypercalcemia. Choi YS, et al. **Arch Intern Med** 1989 May;149(5):1189

Hemorrhagic ascites secondary to endometriosis. Taub WH, et al. **J Clin Gastroenterol** 1989 Aug;11(4):458–60

Pelvic endometriosis presenting as a Supralevator abscess. Anderson BB, et al. **J Natl Med Assoc** 1988 Aug; 80(8):931–3

Internal iliac artery: embolization to control hemorrhage from pelvic neoplasms. Pisco JM, et al. **Radiology** 1989 Aug;172(2):337–9

[Anuria and pelvic cancer] Colombeau P, et al. **J Urol (Paris)** 1989;95(1):54–6 (Fre)

[A combination of an accessory large intestine and teratoid cysts of the intrapelvic tissue] Magomedov AZ, et al. **Khirurgiia (Mosk)** 1988 Nov;(11):118 (Rus)

DIAGNOSIS

Comparison of STIR and spin-echo MR imaging at 1.5 T in 90 lesions of the chest, liver, and pelvis. Shuman WP, et al. **AJR** 1989 Apr;152(4):853–9

Aggressive angiomyxoma first diagnosed as levator hernia. Sutton GP, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):73–5

Pelvic endometriosis simulating colonic malignant neoplasm. Sievert W, et al. **Arch Intern Med** 1989 Apr;149(4):935–8

CA 125 in the diagnosis of pelvic masses. Mogensen O, et al. **Eur J Cancer Clin Oncol** 1989 Aug;25(8):1187–90

Serum CA-125 in women with endometriosis and chronic pelvic pain. Pittaway DE, et al. **Fertil Steril** 1989 Jan; 51(1):68–70

A prospective comparison of clinical ultrasound and operative examination of the female pelvis. Andolf E, et al. **J Ultrasound Med** 1988 Nov;7(11):617–20

The spectrum of sonographic findings in endometriomas. Athey PA, et al. **J Ultrasound Med** 1989 Sep;8(9):487–91

Magnetic resonance imaging of the abdomen and pelvis. Council on Scientific Affairs. **JAMA** 1989 Jan 20; 261(3):420–33 (114 ref.)

Sonographic appearance of the reservoir of an inflatable penile prosthesis. Epstein S, et al. **JCU** 1987 Jun;15(5):353–6

Laser-induced fluorescence of ectopic endometrium in rabbits. Vancaillie TG, et al. **Obstet Gynecol** 1989 Aug; 74(2):225–30

Pelvic endometriosis: MR imaging. Arrivé L, et al. **Radiology** 1989 Jun;171(3):687–92

Pelvic lipomatosis: diagnosis and characterization by magnetic resonance imaging. Demas BE, et al. **Urol Radiol** 1988;10(4):198–202

Imaging the effects of an ectopic spleen on the urinary tract. Nino-Murcia M, et al. **Urol Radiol** 1988;10(4):195–7

[A prospective evaluation of transvaginal ultrasonic scanning in the initial assessment of suspected pelvic masses] Holm J, et al. **Ugeskr Laeger** 1989 Aug 14;151(33):2082–4 (Eng. Abstr.) (Dan)

[Difficulties of the X-ray computed tomographic diagnosis of pelvic tumor recurrence: comparison with other medical imaging techniques (ultrasonography, immunoscintigraphy)] Tournemaine N, et al. **Ann Radiol (Paris)** 1988;31(7–8):426–32 (Eng. Abstr.) (Fre)

[Pelvic cystic lymphangioma. Apropos of a case in an adult] Azais O, et al. **J Radiol** 1989 Mar;70(3):209–12 (22 ref.) (Eng. Abstr.) (Fre)

[Imaging diagnosis of aggressive fibromatosis and the MRT-pathological correlation] Duda S, et al. **ROFO** 1989 Jul;151(1):57–62 (Eng. Abstr.) (Ger)

[A large lipoma in the small pelvic cavity simulating a perineal hernia] Trott VF, et al. **Klin Khir** 1989;(5):62–3 (Rus)

[Diagnosis of nonorganic neoplasms of the lesser pelvis in children] Kononenko NG. **Pediatriia** 1988;(8):51–5 (Rus)

[Possibilities of the ultrasonic method of examination in identifying large lesions of the abdominal cavity and small pelvis organs] Kotliarov PM, et al. **Ter Arkh** 1989; 61(4):117–9 (Eng. Abstr.) (Rus)

[The complex diagnosis of nonorganic neoplasms of the small pelvis] Kononenko NG, et al. **Vopr Onkol** 1989;35(1):69–76 (Eng. Abstr.) (Rus)

[Recurrent nonorganic tumors of the lesser pelvis] Stoliarov VI, et al. **Vopr Onkol** 1988;34(9):1105–8 (Eng. Abstr.) (Rus)

[Echography in unusual pathology of the pelvis] Aso Puértolas C. **An Esp Pediatr** 1988 Sep;29 Suppl 33:110–2 (0 ref.) (Spa)

DRUG THERAPY

Anal submucosal injection: a new route for drug administration in pelvic malignancies. IV. Submucosal anal injection in the treatment of cancer of uterine cervix—preliminary study. Shafik A. **Am J Obstet Gynecol** 1989 Jul;161(1):69–72

Danazol-induced pseudomenopause in the management of endometriosis. Dmowski WP. **Clin Obstet Gynecol** 1988 Dec;31(4):829–39 (43 ref.)

Gonadotropin-releasing hormone (GnRH) agonists in the management of endometriosis: a review. Henzl MR. **Clin Obstet Gynecol** 1988 Dec;31(4):840–56 (57 ref.)

Treatment of endometriosis with estrogen-progestin combination and progestogens alone. Moghissi KS. **Clin Obstet Gynecol** 1988 Dec;31(4):823–8 (20 ref.)

Ovarian suppression induced with Buserelin or danazol in the management of endometriosis: a randomized, comparative study. Dmowski WP, et al. **Fertil Steril** 1989 Mar;51(3):395–400

Endometriosis: treatment with gonadotropin-releasing hormone agonist Buserelin. Franssen AM, et al. **Fertil Steril** 1989 Mar;51(3):401–8

A randomized, prospective comparison of endocrine changes induced with intranasal leuprolide or danazol for treatment of endometriosis. Tummon IS, et al. **Fertil Steril** 1989 Mar; 51(3):390–4

Placebo-controlled comparison of danazol and high-dose medroxyprogesterone acetate in the treatment of endometriosis. Telimaa S, et al. **Gynecol Endocrinol** 1987 Mar;1(1):13–23

Effect of LHRH agonist (buserelin) on pulsatile secretion of LHRH and LH. Okuda K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Dec; 40(12):1889–93

[Successful combination therapy of a metastatic Triton tumor in a 5-year-old boy] Glöckel U, et al. **Monatsschr Kinderheilkd** 1988 Aug;136(8):471–4 (Eng. Abstr.) (Ger)

EPIDEMIOLOGY

The epidemiology of pelvic endometriosis. Houston DE, et al. **Clin Obstet Gynecol** 1988 Dec;31(4):787–800 (50 ref.)

ETIOLOGY

Endometriosis: etiology and pathophysiology of infertility. Metzger DA, et al. **Clin Obstet Gynecol** 1988 Dec; 31(4):801–12 (52 ref.)

GENETICS

Complex cytogenetic aberrations in a well-differentiated chondrosarcoma. Fletcher JA, et al. **Cancer Genet Cytogenet** 1989 Aug;41(1):115–21

IMMUNOLOGY

CA 125 in peritoneal fluid and serum of patients with endometriosis. Fisk NM, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Oct;29(2):153–8

[Increased sensitivity to drugs and endometriosis] Baskakov VP, et al. **Akush Ginekol (Mosk)** 1989 Feb;(2):55–8 (Eng. Abstr.) (Rus)

METABOLISM

Immunohistochemical analysis of estrogen and progesterone receptors in endometriosis: comparison with normal endometrium during the menstrual cycle and the effect of medical therapy. Lessey BA, et al. **Fertil Steril** 1989 Mar; 51(3):409–15

[Estrogen- and progesterone receptor systems in the endometrium in patients with "minor" forms of endometriosis] Minina LS, et al. **Akush Ginekol (Mosk)** 1989 Feb;(2):71–3 (Rus)

PATHOLOGY

Extra-adrenal myelolipoma. Grignon DJ, et al. **Arch Pathol Lab Med** 1989 Jan;113(1):52–4

Pathology of endometriosis. Gerbie AB, et al. **Clin Obstet Gynecol** 1988 Dec;31(4):779–86 (48 ref.)

New concepts in the pathophysiology and treatment of pelvic endometriosis. Brosens IA. **Contrib Gynecol Obstet** 1989; 17:36–43 (20 ref.)

Imaging the direct bidirectional spread of disease between the abdomen and the female pelvis via the subperitoneal space. Oliphant M, et al. **Gastrointest Radiol** 1988 Oct; 13(4):285–98

Pelvic fibromatosis: case report and review of literature. Manetta A, et al. **Gynecol Oncol** 1989 Jan;32(1):91–4 (11 ref.)

Extrarenal Wilms' tumor: an analysis of four cases. Wakely PE Jr, et al. **Hum Pathol** 1989 Jul;20(7):691–5

Mucin secreting adenocarcinoma of pelvis with xanthogranulomatous pyelonephritis (a case report). Ranadive NU, et al. **Indian J Pathol Microbiol** 1987 Oct; 30(4):387–8

Second-look laparoscopy in the treatment of endometriosis. Fedele L, et al. **Int J Fertil** 1988 Jul–Aug;33(4):237–40

Dissemination of endometrial cells at laparoscopy and chromotubation—a preliminary report. Kulenthran A, et al. **Int J Fertil** 1989 Jul–Aug;34(4):256–8

Extrauterine pelvic malignant mixed mesodermal tumors. A study of 10 cases with immunohistochemistry. Deligdisch L, et al. **Int J Gynecol Pathol** 1988;7(4):361–72

US-guided percutaneous fine-needle biopsy of parauterine pelvic tumors. Verbanck JJ, et al. **J Belge Radiol** 1988; 71(6):683–6

The measurement of surface area of endometriotic implants by morphometric analysis. Hughes EG, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):440–3

Pelvic trophoblastic implants after laparoscopic removal of a tubal pregnancy. Thatcher SS, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):514–5

Presacral mesenchymoma: a case report. Beneck D, et al. **Pediatr Pathol** 1988;8(6):643–7

Teratoma of the fallopian tube presenting as a free-floating pelvic mass. Solomon MD, et al. **Tex Med** 1988 Aug; 84(8):42–4 (10 ref.)

[Carcinoid—a clinico-morphological analysis of a case] Viiachki I, et al. **Khirurgiia (Sofiia)** 1988;41(4):68–71 (Bul)

[Pelvic hemangiopericytoma] Prats López J, et al. **Arch Esp Urol** 1988 Jul–Aug;41(6):475–8 (Eng. Abstr.) (Spa)

PHYSIOPATHOLOGY

Comparison of cyproterone acetate and danazol in the treatment of pelvic pain associated with endometriosis. Fedele L, et al. **Obstet Gynecol** 1989 Jun;73(6):1000–4

PREVENTION & CONTROL

Low dose postoperative adjuvant radiation therapy for rectal cancer is ineffective. Feigen M, et al. **Radiother Oncol** 1988 Nov;13(3):181–6

PSYCHOLOGY

The emotional aspects of endometriosis: what the patient expects from her doctor. Weinstein K. **Clin Obstet Gynecol** 1988 Dec;31(4):866–73

RADIOGRAPHY

Anterior extrathecal ependymoma with systemic metastases—a case report and review of the literature. Thornton AS, et al. **Clin Radiol** 1988 Sep;39(5):562–4 (15 ref.)

Pelvic carcinomatous neuropathy: CT findings and implications for radiation treatment planning. Gaeta M, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):811–6

Computerized tomography appearances of pelvic haemangioma involving the large bowel in childhood. Yeoman LJ, et al. **Pediatr Radiol** 1989;19(6–7):414–6

Pathognomonic pelvic cysts. Kreel L. **Postgrad Med J** 1988 Feb;64(748):134–6

Case 7. Pelvic fibrolipomatosis. **Radiographics** 1989 Jan; 9(1):102–4

RADIONUCLIDE IMAGING

Delayed accumulation (flip flop) of Tc-99m DTPA in a leiomyosarcoma. Slavin JD Jr, et al. **Clin Nucl Med** 1988 Sep;13(9):654–6

RADIOTHERAPY

Intra-operative radiation therapy in the treatment of pelvic malignancies: a preliminary report. Yordan EL, et al. **Baillieres Clin Obstet Gynaecol** 1988 Dec;2(4):1023–34

Phase II study of multiple daily fractionations in the palliation of advanced pelvic malignancies: preliminary report of RTOG 8502. Spanos W Jr, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):659–61

Intraoperative radiation therapy for locally advanced cancers. Sindelar WF, et al. **South Med J** 1989 Mar; 82(3):358–63 (21 ref.)

[Possibilities and limits of radiotherapy in the treatment of pelvic tumors in childhood] Habermalz HJ. **Z Kinderchir** 1989 Feb;44(1):17–20 (13 ref.) (Eng. Abstr.) (Ger)

[Some trials in PARMS for the accurate tumor localization and treatment set-ups in fractionated proton therapy] Arimoto T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Apr 25; 48(4):444–53 (Eng. Abstr.) (Jpn)

SECONDARY

The detection of recurrent and metastatic malignant disease in the pelvis using MRI. Goddard P, et al. **Bristol Med Chir J** 1988 May;103(2):32–3

Endolymphatic stromal myosis: surgical and hormonal

therapy for extensive venous recurrence. Montag TW, et al. **Gynecol Oncol** 1989 May;33(2):255–60

Postoperative whole abdomino–pelvic irradiation for patients with high risk endometrial cancer. Martinez A, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug;17(2):371–7

The salvage of recurrent endometrial carcinoma in the vagina and pelvis. Poulsen MG, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):809–13

Abdominopelvic irradiation for persistent advanced ovarian carcinoma. Stephenson JA, et al. **Int J Radiat Oncol Biol Phys** 1989 Aug;17(2):385–8

Prognostic significance of lymph nodal metastases in prostate cancer. Gervasi LA, et al. **J Urol** 1989 Aug;142(2):332–6

Unusual solitary soft tissue metastases from renal cell carcinoma. Lipman JC, et al. **Urol Radiol** 1988;10(2):110–2

[Guided biopsy under endocavitary echography. Diagnosis of pelvic recurrence of anal canal cancer surgically treated (letter)] Giovannini M, et al. **Presse Med** 1988 Sep 17; 17(31):1589 **(Fre)**

SURGERY

The significance of pelvic and para–aortic lymphadenectomy in the operative treatment of ovarian cancer. Burghardt E, et al. **Baillieres Clin Obstet Gynaecol** 1989 Mar; 3(1):157–65 (10 ref.)

Surgical therapy for endometriosis. Wilson EA. **Clin Obstet Gynecol** 1988 Dec;31(4):857–65 (21 ref.)

The place of pelvic exenteration in surgical management of advanced and recurrent pelvic tumors. D'Addato F, et al. **Eur J Gynaecol Oncol** 1988;9(5):420–3

Treatment of endometriosis with a Nd:YAG tissue–contact laser probe via laparoscopy. Corson SL, et al. **Int J Fertil** 1989 Jul–Aug;34(4):284–8

This month in Investigative Urology: urinary reservoirs and pelvic malignancy. Hinman F Jr. **J Urol** 1989 May; 141(5):1216

A second puncture probe for laparoscopic delivery of the Nd:Yag laser. Brumsted JR, et al. **Obstet Gynecol** 1989 Apr;73(4):672–4

Excision of pelvic endometriosis with the carbon dioxide laser laparoscope. Davis GD, et al. **Obstet Gynecol** 1988 Nov;72(5):816–9

Symptomatic internal hernia of the broad ligament: a complication of electrocoagulation therapy of endometriosis. Redwine DB. **Obstet Gynecol** 1989 Mar;73(3 Pt 2):495–6

The role of pelvic exenteration for sarcomatous malignancies. Reid GC, et al. **Obstet Gynecol** 1989 Jul;74(1):80–4

[Liposarcoma of the ischiorectal fossa, an unusual tumoral site] Long Pretz P, et al. **Acta Chir Belg** 1988 May–Jun; 88(3):151–4 (Eng. Abstr.) **(Fre)**

[Right inguino–pelvic cystic lymphangioma (published erratum appears in Chir Pediatr 1988;29(5):294)] Hoeffel JC, et al. **Chir Pediatr** 1988;29(4):219–21 (Eng. Abstr.) **(Fre)**

[Operability of primary inoperable pelvic tumors by preoperative regional hyperthermia in combination with systemic chemotherapy exemplified by Ewing's sarcoma] Böhm P, et al. **Chirurg** 1988 Nov;59(11):734–9 (Eng. Abstr.) **(Ger)**

[Use of the indices of the kallikrein–kinin system of the blood in evaluating the efficacy of the prevention and treatment of postoperative purulent complications in oncologic patients] Kaban AP, et al. **Klin Khir** 1989;(5):10–2 (Eng. Abstr.) **(Rus)**

THERAPY

Chemotherapy and embolization via the inferior epigastric artery for the treatment of primary and metastatic cancer. O'Keeffe F, et al. **AJR** 1989 Feb;152(2):387–90

Percutaneous catheter drainage of necrotic tumors: CT demonstration. Abbitt PL, et al. **J Comput Assist Tomogr** 1989 May–Jun;13(3):437–9

Fibromatosis of the female pelvis. Adcock LL, et al. **Obstet Gynecol Surv** 1989 May;44(5):347–54 (75 ref.)

Recurrent tumors of the head and neck, pelvis, and chest wall: treatment with hyperthermia and brachytherapy. Rafla S, et al. **Radiology** 1989 Sep;172(3):845–50

[Status of regional hyperthermia. Combination with systemic chemotherapy in malignant tumors of the pelvis] Issels R, et al. **Fortschr Med** 1988 Jul 20;106(21):437–8 **(Ger)**

[Clinical results of RF capacitive hyperthermia combined with radiation for abdominal and pelvic deep–seated tumors: analysis of prognostic factors in thermoradiotherapy] Nishimura Y, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Apr 25; 48(4):433–43 (Eng. Abstr.) **(Jpn)**

PELVIMETRY

The relation of the true conjugate to maternal height and obstetric performance in Ghanaians. Adadevoh SW, et al. **Int J Gynaecol Obstet** 1989 Mar;28(3):243–51

Pelvic assessment and cephalo–pelvic disproportion in Central Tanzania. Bauer O, et al. **Int J Gynaecol Obstet** 1988 Dec;27(3):323–5

Fetal dose estimates for CT pelvimetry. Moore MM, et al. **Radiology** 1989 Apr;171(1):265–7

[Principles of the diagnosis of transversely narrowed pelvis] Chernukha EA, et al. **Akush Ginekol (Mosk)** 1988 Dec; (12):27–30 (Eng. Abstr.) **(Rus)**

[Pelvic parameters in women before and after the end of the reproductive cycle in Guinea Bissau] Ulić D. **Med Pregl** 1988;41(3–4):119–23 (Eng. Abstr.) **(Scr)**

INSTRUMENTATION

[New aspects of radiologic pelvimetry. Digital image intensification radiography: preliminary results of validation possibilities and results in various types of pelvic disproportion] Wischnik A, et al. **Z Geburtshilfe Perinatol** 1989 May–Jun;193(3):145–51 (Eng. Abstr.) **(Ger)**

METHODS

Efficacy of the fetal–pelvic index as a predictor of fetal–pelvic disproportion in women with abnormal labor patterns that require labor augmentations. Thurnau GR, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1168–72

Symphysis–fundus measurements in Asian and Caucasian women in Bradford. Depares JC, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Jun;31(3):201–6

CT pelvimetry: replacing conventional with digital. Dobson J, et al. **Radiography** 1988 Jan–Feb;54(613):18–9

Routine lateral pelvimetry: a personal experience. al–Meshari AA. **Rays** 1988 Sep–Dec;13(3):43–8

[Indications of radio–pelvimetry at a university hospital and a district general hospital] Berthet J, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(5):624–8 (Eng. Abstr.) **(Fre)**

[Pelvimetry with magnetic resonance tomography] Dudenhausen JW, et al. **Geburtshilfe Frauenheilkd** 1989 May;49(5):477–80 (Eng. Abstr.) **(Ger)**

[The value of the symphysis–fundus measurement in prenatal care] Feiks A, et al. **Gynakol Rundsch** 1988;28 Suppl 2:135–7 **(Ger)**

[Pelvimetry using magnetic resonance tomography] Woerner H, et al. **ROFO** 1988 Oct;149(4):378–82 (Eng. Abstr.) **(Ger)**

PELVIS

The pathogenesis of genitourinary prolapse and stress incontinence of urine. A histological and histochemical study. Gilpin SA, et al. **Br J Obstet Gynaecol** 1989 Jan; 96(1):15–23

The role of partial denervation of the pelvic floor in the aetiology of genitourinary prolapse and stress incontinence of urine. A neurophysiological study. Smith AR, et al. **Br J Obstet Gynaecol** 1989 Jan;96(1):24–8

Pelvic hematoma diagnosed on technetium–99m methylene diphosphanate bone imaging. Park C, et al. **Clin Nucl Med** 1989 Feb;14(2):139–40

Pelvic drainage after anterior resection of the rectum. Allen–Mersh TG, et al. **Dis Colon Rectum** 1989 Mar; 32(3):223–6

Modified packing technique for control of presacral pelvic bleeding. Metzger PP. **Dis Colon Rectum** 1988 Dec; 31(12):981–2

Serum CA–125 in women with endometriosis and chronic pelvic pain. Pittaway DE, et al. **Fertil Steril** 1989 Jan; 51(1):68–70

Anxiety and depression in patients with the abdominal pelvic pain syndrome. Slocumb JC, et al. **Gen Hosp Psychiatry** 1989 Jan;11(1):48–53

Results of whole abdominopelvic irradiation with nodal boost for patients with endometrial cancer at high risk of failure in the peritoneal cavity. A prospective clinical trial at the Mayo Clinic. Martinez A, et al. **Hematol Oncol Clin North Am** 1988 Sep;2(3):431–46

Female genital prolapse and pelvic floor deficiency. Hudson CN. **Int J Color Dis** 1988 Aug;3(3):181–5 (28 ref.)

Pelvic examination versus fiberoptic laparoscopy. A fictional study of patient preference in 1,534 women. Sturman MF. **J Clin Gastroenterol** 1988 Dec;10(6):612–3

Chiropractic distractive decompression in treating pelvic pain and multiple system pelvic organic dysfunction. Browning JE. **J Manipulative Physiol Ther** 1989 Aug;12(4):265–74

Pelvic endometriosis presenting as a Supralevator abscess. Anderson BB, et al. **J Natl Med Assoc** 1988 Aug; 80(8):931–3

Carbon dioxide laser laparoscopy in treatment of infertility and disorders associated with pelvic pain. Weather L Jr. **J Natl Med Assoc** 1988 Feb;80(2):185–7

Transient simultaneous sciatic and femoral nerve palsy secondary to iliacus and gluteal hematomas following heparinization for pulmonary embolus in a patient with posterior hip dislocation. An HS, et al. **J Orthop Trauma** 1987;1(2):174–6

Fears and beliefs in patients with the pelvic pain syndrome. Kellner R, et al. **J Psychosom Res** 1988;32(3):303–10

Evaluation of tissue healing and adhesion formation after an intraabdominal amniotic membrane graft in the rat. Badawy SZ, et al. **J Reprod Med** 1989 Mar;34(3):198–202

Pelvic floor support in constipation [letter] Lesaffer L. **Lancet** 1989 Mar 25;1(8639):674

An animal study of different treatments to prevent postoperative pelvic adhesions. Graebe RA, et al. **Microsurgery** 1989;10(1):53–5

Evaluation of chronic pelvic pain. Gaul JN. **Minn Med** 1988 Sep;71(9):546–8 (31 ref.)

Idiopathic pelvic pain. The relationship to depression. Hahn MB, et al. **Postgrad Med** 1989 Mar;85(4):263–6, 268, 270

Depression and anxiety in patients with chronic pelvic pain. Grandi S, et al. **Psychiatr Med** 1988;6(4):1–7

A "surgical clip" artifact. Malott JC, et al. **Radiol Technol** 1989 Jan–Feb;60(3):229–30

Pelvic abscess: examination and transvaginal drainage guided by real–time ultrasonography. Loy RA, et al. **South Med J** 1989 Jun;82(6):788–90

Computerized tomography of spontaneous forniceal extravasation. Epstein A, et al. **Urology** 1989 Apr; 33(4):344–5

[Pelipathy] Cepický P. **Cesk Gynekol** 1988 Aug;53(7):522–8 **(Cze)**

[Indications and results of diagnostic laparoscopy in the assessment of lower abdominal pain] Decker K. **Geburtshilfe Frauenheilkd** 1988 Dec;48(12):884–6 (Eng. Abstr.) **(Ger)**

[The patient with chronic pelvic pain] Springer–Kremser M. **Gynakol Rundsch** 1988;28 Suppl 2:84–9 (6 ref.) **(Ger)**

[A rare complication of herniotomy] Kononenko NG. **Khirurgiia (Mosk)** 1989 Apr;(4):135–6 **(Rus)**

[Reconstructive–restorative operations with creation of small intestinal reservoirs in the pelvis in patients following colectomy review of the literature)] Nikitin AM, et al. **Khirurgiia (Mosk)** 1989 Feb;(2):142–8 (50 ref.) **(Rus)**

ABNORMALITIES

Topics in perinatal ultrasonography. Caudal regression syndrome. Bronsteen RA, et al. **J Perinatol** 1987 Summer; 7(3):264–6

[Caudal regression syndrome with complete absence of lumbo–sacral spine in a son of a diabetic woman. Presentation of a case] Altamura G, et al. **Minerva Pediatr** 1988 Jun;40(6):367–71 (Eng. Abstr.) **(Ita)**

[Principles of the diagnosis of transversely narrowed pelvis] Chernukha EA, et al. **Akush Ginekol (Mosk)** 1988 Dec; (12):27–30 (Eng. Abstr.) **(Rus)**

[Characteristics of the course and outcome of labor in women with transversely narrowed pelvis] Galina TV. **Akush Ginekol (Mosk)** 1988 Dec;(12):30–3 (Eng. Abstr.) **(Rus)**

ANALYSIS

Spiramycin concentrations in female pelvic tissues, determined by HPLC: a preliminary report. Allen HH, et al. **J Antimicrob Chemother** 1988 Jul;22 Suppl B:111–6

ANATOMY & HISTOLOGY

Sampling bandwidth and fat suppression: effects on long TR/TE MR imaging of the abdomen and pelvis at 1.5 T. Mitchell DG, et al. **AJR Am J Roentgenol** 1989 Aug; 153(2):419–25

Operative anatomy and technique of radical parametrial resection in the surgical treatment of cervical cancer. Lichtenegger W, et al. **Baillieres Clin Obstet Gynaecol** 1988 Dec;2(4):841–56 (28 ref.)

The action of squatting in the early postnatal period marginally increases pelvic dimensions. Lilford RJ, et al. **Br J Obstet Gynaecol** 1989 Aug;96(8):964–6

Changes in pelvic conformation and peripheral estrone concentrations in pre– and post–partum beef cows. Henson MC, et al. **Domest Anim Endocrinol** 1989 Apr;6(2):95–9

Imaging the direct bidirectional spread of disease between the abdomen and the female pelvis via the subperitoneal space. Oliphant M, et al. **Gastrointest Radiol** 1988 Oct; 13(4):285–98

Transrectal ultrasonography of the caudal portion of abdominal and pelvic cavities in horses. Schmidt AR. **J Am Vet Med Assoc** 1989 Feb 1;194(3):365–71

Anatomy of the abdomen, back, and pelvis as displayed by magnetic resonance imaging: part three. Collins JD, et al. **J Natl Med Assoc** 1989 Aug;81(8):857–61

Anatomy of the abdomen, back, and pelvis as displayed by magnetic resonance imaging: Part Two. Collins JD, et al. **J Natl Med Assoc** 1989 Jul;81(7):809–13

Endovaginal? [letter] [published erratum appears in J Ultrasound Med 1989 Jun;8(6):339] Garret W. **J Ultrasound Med** 1989 Apr;8(4):222

Multiple spin–echo MR imaging of the body: image contrast and motion–induced artifact. Mitchell DG, et al. **Magn Reson Imaging** 1988 Sep–Oct;6(5):535–46

Anatomic correlations of magnetic resonance images with cadaver cryosections. Holliday J, et al. **Radiographics** 1985 Nov;5(6):887–921

Variable–flip–angle spin–echo MR imaging of the pelvis: more versatile T2–weighted images. Mitchell DG, et al. **Radiology** 1989 May;171(2):525–9

Evolution of human walking. Lovejoy CO. **Sci Am** 1988 Nov; 259(5):118–25

Surgical anatomy of the pelvis. Ger R. **Surg Clin North Am** 1988 Dec;68(6):1201–16

[Anatomic characteristics of the pelvis in children] Lascombes P, et al. **Chir Pediatr** 1988;29(2–3):59–71 (Eng. Abstr.) **(Fre)**

[Support and suspension of the pelvic viscera in women. Functional and surgical anatomy] Kamina P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(7):835–48 (Eng. Abstr.) **(Fre)**

[Ultrasonographic anatomy and diagnosis of prostatic and periprostatic region by transabdominal and transperineal scan] Kondo Y, et al.

Nippon Igaku Hoshasen Gakkai Zasshi 1988 Jul 25; 48(7):861–72 (Eng. Abstr.) (Jpn)

BLOOD SUPPLY

Psychological and somatic factors in women with pain due to pelvic congestion. Beard R, et al. Adv Exp Med Biol 1988;245:413–21 (42 ref.)

Congenital arteriovenous malformation of the female pelvis: a gynecologic perspective. Beller U, et al. Am J Obstet Gynecol 1988 Nov;159(5):1153–60

Obturator bypass: a sixteen year experience with 55 cases. Nevelsteen A, et al. Ann Vasc Surg 1987 Dec;1(5):558–63

Adenocarcinoma cell invasion of an obturator artery aneurysm. Scott DJ, et al. Eur J Surg Oncol 1989 Feb; 15(1):83–4

Congenital pelvic arteriovenous malformation with massive prostatic hemorrhage: a case report. Siegelbaum MH, et al. J Urol 1989 Feb;141(2):382–4

Pelvic hemodynamics before and after aortoiliac vascular reconstruction: the significance of penile blood pressure. Kawai M. Jpn J Surg 1988 Sep;18(5):514–20

Diagnosis of thrombosis of the deep veins of the lower extremities and pelvis and pulmonary thromboembolism using 99Tcm human serum albumin macroaggregates. Stevan M, et al. Nucl Med Commun 1989 Mar;10(3):141–7

Intraarterial embolization in combination with surgery in the management of congenital pelvic arteriovenous malformation. Van Poppel H, et al. Urol Radiol 1988; 10(2):89–91

[Pelvic arterio-venous fistula of gestational trophoblastic neoplasms] Yang XY. Chung Hua Fu Chan Ko Tsa Chih 1988 Mar;23(2):91–4, 128 (Eng. Abstr.) (Chi)

[Percutaneous transluminal angioplasty (PTA) of pelvic and lower limb arteries] Andresen JH, et al. Ugeskr Laeger 1988 Oct 24;150(43):2575–9 (Eng. Abstr.) (Dan)

[Vascular injuries of the pelvis and lower extremity] Müller-Wiefel H, et al. Chirurg 1988 Jun;59(6):376–88 (15 ref.) (Ger)

[Studies on the portasystemic shunt in pelvic vein thrombosis and the vena cava inferior syndrome] Zückmantel WR, et al. Radiol Diagn (Berl) 1988;29(4):635–40 (Eng. Abstr.) (Ger)

[Angiography of the pelvic organs] Kuroda C, et al. Rinsho Hoshasen 1988 Oct;33(11):1383–9 (Jpn)

[Surgical tactics in hemorrhage during radical operations on the rectum] Fedorov VD, et al. Khirurgiia (Mosk) 1988 Sep;(9):131–4 (Rus)

[Ligation and roentgeno-endovascular occlusion of internal iliac arteries in pelvic injuries] Shapot IuB, et al. Vestn Khir 1988 May;140(5):126–9 (30 ref.) (Rus)

[Immunoreactive structures of the blood microcirculatory bed in the peritoneum of the lesser pelvis] Chernyshenko LV, et al. Vrach Delo 1988 Jul;(7):58–60 (Eng. Abstr.) (Rus)

[Diagnosis of thrombosis of the deep veins of the lower extremity and the pelvis and pulmonary thromboembolism using 99m Tc HSA, MAA] Marković S, et al. Vojnosanit Pregl 1988 Nov-Dec;45(6):421–4 (Eng. Abstr.) (Scr)

GROWTH & DEVELOPMENT

Morphometric analysis of the development of sexual dimorphism of the mouse pelvis. Iguchi T, et al. Anat Rec 1989 Aug;224(4):490–4

INJURIES

Blunt pelvic trauma. Snyder HS. Am J Emerg Med 1988 Nov;6(6):618–27 (71 ref.)

Traumatic hemipelvectomy: a further case report and comments on management. Ikpeme JO, et al. Injury 1987 May;18(3):206–10

Traumatic hemipelvectomy. Klasen HJ, et al. J Bone Joint Surg [Br] 1989 Mar;71(2):291–5

Pelvic crush injuries with occlusion of the iliac artery. Smejkal R, et al. J Trauma 1988 Oct;28(10):1479–82

Diagnostic imaging of pelvic and chest wall trauma. Heare MM, et al. Radiol Clin North Am 1989 Sep;27(5):873–89

[Pelvic and genital injuries in infants. Paris, December 1987. Proceedings] Chir Pediatr 1988;29(2–3):59–157 (Fre)

[Vascular complications in pelvic injuries in children] Canarelli JP, et al. Chir Pediatr 1988;29(5):233–41 (Eng. Abstr.) (Fre)

[Pelvic and genital injuries in children. Sexual injuries of young girls. Management in a medico-legal context] Soutoul JH, et al. Chir Pediatr 1988;29(2–3):147–52 (Eng. Abstr.) (Fre)

INNERVATION

The role of the pelvic nerves in the realization of the reservoir function of the colon. Atanassova E, et al. Acta Physiol Pharmacol Bulg 1989;15(1):39–46

The influence of the pelvic nerves on anorectal motility in the cat. Carlstedt A, et al. Acta Physiol Scand 1989 Jan; 135(1):57–64

Topography of the pelvic autonomic nerves in human fetuses between 21–29 weeks of gestation. Fritsch H. Anat Embryol (Berl) 1989;180(1):57–64

Faecal incontinence associated with reduced pelvic sensation. Lubowski DZ, et al. Br J Surg 1988 Nov;75(11):1086–8

Afferent fibers in the reproductive system and pelvic viscera of female rats: anterograde tracing and immunocytochemical studies. Nance DM, et al. Brain Res Bull 1988 Oct;21(4):701–9

Neuropeptides in pelvic afferent pathways. de Groat WC. Experientia Suppl 1989;56:334–61 (127 ref.)

Pelvic floor neuropathy [letter] Wald A. Gut 1989 Jan; 30(1):140–1

Do patients with haemorrhoids have pelvic floor denervation? Bruck CE, et al. Int J Color Dis 1988 Nov; 3(4):210–4

Asymmetrical pudendal nerve damage in pelvic floor disorders. Lubowski DZ, et al. Int J Color Dis 1988 Aug; 3(3):158–60

Androgen-specific critical periods for the organization of the major pelvic ganglion. Melvin JE, et al. J Neurosci 1989 Feb;9(2):736–42

Parasympathetic depression of vas deferens contraction in the guinea-pig involves adenosine receptors. Kurokawa M, et al. J Physiol (Lond) 1988 Dec;407:135–53

PARASITOLOGY

[Pelvic hydatidosis in women. Apropos of 3 cases] Ladeb MF, et al. J Gynecol Obstet Biol Reprod (Paris) 1989; 18(4):493–5 (Eng. Abstr.) (Fre)

PATHOLOGY

The role of transvaginal ultrasound in the assessment of the female pelvis. Guy RL, et al. Clin Radiol 1988 Nov; 39(6):669–72

Fatal outcome of pelvic radiotherapy for carcinoma of the cervix in a patient with systemic lupus erythematosis. Olivotto IA, et al. Clin Radiol 1989 Jan;40(1):83–4

Unexpected nature of a pelvic mass in pregnancy: Castleman's disease. Başer İ, et al. Gynecol Obstet Invest 1989;28(1):53–5

General practitioner access to pelvic ultrasound [letter] Manns R. J R Coll Gen Pract 1988 Oct;38(315):470

Neuroanatomy of the pelvis in an infant with cloacal exstrophy: a detailed microdissection with histology. Schlegel PN, et al. J Urol 1989 Mar;141(3):583–5

MRI of thorotrastoma. Keidan RD, et al. Magn Reson Imaging 1988 Nov-Dec;6(6):717–20

Transabdominal versus endovaginal pelvic sonography: prospective study. Tessler FN, et al. Radiology 1989 Feb; 170(2):553–6

Anatomical basis of pelvic growth in bladder exstrophy. Lascombes P, et al. Surg Radiol Anat 1989;11(2):85–9

[Value of anthropometric data in the diagnosis of developmental defects of the anorectal area] Vozdvizhenskiĭ SI, et al. Vestn Khir 1988 Jun;140(6):82–4 (Eng. Abstr.) (Rus)

PHYSIOLOGY

Trainability of the pelvic floor. A prospective study during pregnancy and after delivery. Nielsen CA, et al. Acta Obstet Gynecol Scand 1988;67(5):437–40

Calcium-dependent potassium conductance in neurons of rabbit vesical pelvic ganglia. Nishimura T, et al. J Auton Nerv Syst 1988 Sep;24(1–2):133–45

Rotational and translational movement features of the pelvis and thorax during adult human locomotion. Stokes VP, et al. J Biomech 1989;22(1):43–50

Digital measurement of pelvic muscle strength in childbearing women. Sampselle CM, et al. Nurs Res 1989 May-Jun;38(3):134–8

Objective evaluation of the shoulder dystocia phenomenon: effect of maternal pelvic orientation on force reduction. Gonik B, et al. Obstet Gynecol 1989 Jul;74(1):44–8

Pelvic floor physiology. Cherry DA, et al. Surg Clin North Am 1988 Dec;68(6):1217–30 (62 ref.)

[Pascal's law and pelvic torque in the physiological mechanism of childbirth] Mergoni A. Minerva Ginecol 1988 Mar;40(3):199–214 (Ita)

PHYSIOPATHOLOGY

Excessive pronation: a major biomechanical determinant in the development of chondromalacia and pelvic lists. Rothbart BA, et al. J Manipulative Physiol Ther 1988 Oct; 11(5):373–9

Predictors of pelvic adhesions. Stovall TG, et al. J Reprod Med 1989 May;34(5):345–8

Acute and chronic pelvic pain. Goldstein DP. Pediatr Clin North Am 1989 Jun;36(3):573–80

[Anatomic and functional aspects of the female pelvic floor] Riss P, et al. Gynakol Rundsch 1988;28 Suppl 2:20–5 (Ger)

RADIATION EFFECTS

Tolerance of pelvic normal tissues to hyperfractionated radiation therapy: results of Protocol 83-08 of the Radiation Therapy Oncology Group. Cox JD, et al. Int J Radiat Oncol Biol Phys 1988 Dec;15(6):1331–6

Pelvic irradiation and tamoxifen as risk factors for carcinoma of corpus uteri [letter] Hardell L. Lancet 1988 Dec 17; 2(8625):1432

[Proceedings of the 33d meeting of the Lombard Urologic Society. Milan, 11 June 1988. Problems of urologic surgery in the irradiated pelvis] Arch Ital Urol Nefrol Androl 1988 Dec;60(4):353–411 (Ita)

[Radiobiology of injuries of the pelvic structures] Magno L. Arch Ital Urol Nefrol Androl 1988 Dec;60(4):353–5 (Eng. Abstr.) (Ita)

RADIOGRAPHY

Uses of direct coronal pelvic CT. Leighton DM, et al. Australas Radiol 1989 May;33(2):157–9

The computed tomographic appearance of lymphangiectasia in the pelvis. Fairlie NC, et al. Clin Radiol 1988 Sep; 39(5):560–1

CT detection of intrapelvic origin of lower extremity infections in traumatized limbs. Havel PE, et al. J Orthop Trauma 1987;1(4):306–11

Utility of routine pelvic X-ray during blunt trauma resuscitation. Gillott A, et al. J Trauma 1988 Nov; 28(11):1570–4

The os in os appearance in the spine and pelvis of adults. Butler JC, et al. Orthop Rev 1989 Apr;18(4):445–8

Abdominal and pelvic CT: use of oral metoclopramide to enhance bowel opacification. Thoeni RF, et al. Radiology 1988 Nov;169(2):391–3

Routine lateral pelvimetry: a personal experience. al-Meshari AA. Rays 1988 Sep-Dec;13(3):43–8

[The diagnostic value of transvaginal pelvic phlebography in gynecologic oncology] Sidorenko IuS, et al. Vopr Onkol 1989;35(4):465–73 (Eng. Abstr.) (Rus)

RADIONUCLIDE IMAGING

SPECT imaging of the lumbosacral spine and pelvis. Gates GF. Clin Nucl Med 1988 Dec;13(12):907–14

Unusual manifestations of hemorrhage during technetium-99m red cell blood pool imaging. Moreno AJ, et al. Clin Nucl Med 1989 Jun;14(6):470–1

SURGERY

Pretreatment surgical staging in cervical carcinoma: therapeutic efficacy of pelvic lymph node resection. Downey GO, et al. Am J Obstet Gynecol 1989 May;160(5 Pt 1):1055–61

Swivel purse-string instrument for low anterior resection. Al-Humadi AH. Dis Colon Rectum 1988 Dec;31(12):977–8

Candida albicans pelvic abscess associated with the use of 32% Dextran-70 in conservative pelvic surgery. King IR. Fertil Steril 1989 Jun;51(6):1050–2

Previous pelvic surgery in patients with ovarian cancer. Finazzo MS, et al. South Med J 1988 Dec;81(12):1518–20 (16 ref.)

[The role of abdominopelvic ultrasonography in surgical emergencies. Systematic study with 200 consecutive tests] Dargent J, et al. Ann Chir 1988;42(6):409–12 (Eng. Abstr.) (Fre)

[An experimental analysis of three-dimensional hip joint force after pelvic osteotomies] Hamada T. Nippon Seikeigeka Gakkai Zasshi 1989 Apr;63(4):335–44 (Eng. Abstr.) (Jpn)

[Drainage of the lesser pelvis via the obturator foramen in gynecologic cancer operations] Lokshina IM. Akush Ginekol (Mosk) 1988 May;(5):59–60 (Rus)

PEMOLINE

ADVERSE EFFECTS

Pemoline-induced abnormal involuntary movements. Sallee FR, et al. J Clin Psychopharmacol 1989 Apr;9(2):125–9

ANALYSIS

Determination of pemoline in plasma, urine and tissues by reversed-phase high-performance liquid chromatography. Aoyama T, et al. J Chromatogr 1988 Sep 9;430(2):351–60

PHARMACOKINETICS

Interactions in tissue distribution between methylphenidate and pemoline. II. Effects of methylphenidate or its metabolite on plasma and tissue concentrations of pemoline in the rat. Kotaki H, et al. Chem Pharm Bull (Tokyo) 1988 Nov;36(11):4560–6

Interaction in tissue distribution between methylphenidate and pemoline. I. Tissue distribution of methylphenidate and its metabolite in the rat. Kotaki H, et al. Chem Pharm Bull (Tokyo) 1988 Aug;36(8):3190–5

POISONING

Pemoline and liver function [letter] Jaffe SL. J Am Acad Child Adolesc Psychiatry 1989 May;28(3):457–8

TOXICITY

Methylphenidate and pemoline do not cause depletion of rat brain monoamine markers similar to that observed with methamphetamine. Zaczek R, et al. Toxicol Appl Pharmacol 1989 Sep 1;100(2):227–33

PEMPHIGOID, BENIGN MUCOUS MEMBRANE see under SKIN DISEASES, BULLOUS

PEMPHIGOID, BULLOUS see under SKIN DISEASES, BULLOUS

PEMPHIGUS

Juvenile pemphigus vulgaris: a 4- to 19-year follow-up of 4 patients. David M, et al. **Dermatologica** 1988;177(3):165–9

Pemphigus: a disease of man and animal. Historical and other perspectives. Holubar K. **Int J Dermatol** 1988 Sep; 27(7):516–20 (52 ref.)

Etymology of pemphigus [letter] Holubar K. **J Am Acad Dermatol** 1989 Jul;21(1):155–6

Pemphigus erythematosus: a report of five cases with review of literature. Kohli A, et al. **J Med Assoc Thai** 1988 Oct; 71(10):575–80

Juvenile pemphigus foliaceus, exfoliative type—a case report. Yu BT. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(2):122–3

[Knowing pemphigus] Valentini AF, et al. **Minerva Stomatol** 1989 Jan;38(1):107–30 (236 ref.) (Eng. Abstr.) **(Ita)**

CHEMICALLY INDUCED

Pemphigus-like eruption induced by d-penicillamine and captopril, in the same patient. Blanken R, et al. **Acta Derm Venereol (Stockh)** 1988;68(5):456–7

A case of fatal pemphigus vulgaris in association with beta interferon and interleukin-2 therapy. Ramseur WL, et al. **Cancer** 1989 May 15;63(10):2005–7

Immunohistological study of captopril-induced late cutaneous eruptions. Bretin N, et al. **Dermatologica** 1988; 177(1):11–5

Penicillamine induced pemphigus—a report of 2 cases. Buckley C, et al. **Ir J Med Sci** 1988 Aug;157(8):267–8

[Drug-induced pemphigus diseases] Civatte J. **Dermatol Monatsschr** 1989;175(1):1–7 (0 ref.) (Eng. Abstr.) **(Ger)**

[Pemphigus herpetiformis following D-penicillamine in a patient with HLA B8] Weltfriend S, et al. **Hautarzt** 1988 Sep;39(9):587–8 (Eng. Abstr.) **(Ger)**

[Pemphigus caused by drugs and physical factors] Karadaglić D, et al. **Vojnosanit Pregl** 1988 Sep–Oct;45(5):362–5 **(Scr)**

COMPLICATIONS

Lichen planus pemphigoides with features of lichen planus and pemphigus vulgaris [letter] Lotem M, et al. **Arch Dermatol** 1989 May;125(5):707–8

Concomitant occurrence of oral submucous fibrosis, pemphigus and squamous cell carcinoma. Dayal PK, et al. **Indian J Pathol Microbiol** 1988 Oct;31(4):334–7

Coexistence of pemphigus and bullous pemphigoid. Leibovici V, et al. **Int J Dermatol** 1989 May;28(4):259–60

Pemphigus foliaceus associated with acanthosis nigricans-like lesions and hepatocellular carcinoma. Muramatsu T, et al. **Int J Dermatol** 1989 Sep;28(7):462–3

Contact allergies in patients with familial benign chronic pemphigus (Hailey-Hailey disease). Reitamo S, et al. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 1):506–10

Coexistence of pemphigus foliaceus and Sheehan's syndrome: a case report. Sanaknaki BA, et al. **J Am Acad Dermatol** 1989 Apr;20(4):685–6

Progressive systemic sclerosis and pemphigus vulgaris. Woscoff A, et al. **J Am Acad Dermatol** 1989 Jul;21(1):142–4

Ultrastructural studies of acantholysis induced in vivo by passive transfer of IgG from endemic pemphigus foliaceus (Fogo Selvagem). Futamura S, et al. **J Invest Dermatol** 1989 Oct;93(4):480–5

Isolation of Cryptococcus albidus var. albidus in patient with pemphigus foliaceus. Lin SR, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Feb; 5(2):126–8

[Pemphigus and neoplasia. 2 new clinical cases and a review of the literature] Calzavara PG, et al. **G Ital Dermatol Venereol** 1989 Jan–Feb;124(1–2):25–9 (24 ref.) (Eng. Abstr.) **(Ita)**

[Anesthetic management of a patient with pemphigus vulgaris] Hoashi S, et al. **Masui** 1988 Aug;37(8):989–92 (Eng. Abstr.) **(Jpn)**

CONGENITAL

Neonatal pemphigus. Moncada B, et al. **Int J Dermatol** 1989 Mar;28(2):123–4

DIAGNOSIS

The usefulness of immunofluorescent tests in pemphigus patients in clinical remission. David M, et al. **Br J Dermatol** 1989 Mar;120(3):391–5

Endemic pemphigus foliaceus (fogo selvagem). I. Clinical features and immunopathology. Diaz LA, et al. **J Am Acad Dermatol** 1989 Apr;20(4):657–69 (55 ref.)

The enigma of fogo selvagem [editorial] Stanley JR. **J Am Acad Dermatol** 1989 Apr;20(4):675–6

[Pemphigus vegetans, a rare variant of pemphigus vulgaris] Gold I. **Harefuah** 1989 Mar 1;116(5):258–60 (Eng. Abstr.) **(Heb)**

DRUG THERAPY

Silent bowel perforation occurring during corticosteroid treatment for pemphigus vulgaris. Lauber JS, et al. **Cutis** 1989 Jan;43(1):27–8

Corticosteroid unresponsiveness in a case of pemphigus vulgaris [letter] Gharpuray MB. **Int J Dermatol** 1989 Apr; 28(3):204–5

The course and prognosis of pemphigus. A review of 115 patients. Seidenbaum M, et al. **Int J Dermatol** 1988 Oct; 27(8):580–4

Porokeratosis and immunosuppressive treatment for pemphigus foliaceus [letter] Leibovici V, et al. **J Am Acad Dermatol** 1988 Nov;19(5 Pt 1):910–1

High-dosage intravenous gamma globulin: therapeutic failure in pemphigus and pemphigoid. Tappeiner G, et al. **J Am Acad Dermatol** 1989 Apr;20(4):684–5

Proteinase inhibitors block formation of pemphigus acantholysis in experimental models of neonatal mice and skin explants: effects of synthetic and plasma proteinase inhibitors on pemphigus acantholysis. Naito K, et al. **J Invest Dermatol** 1989 Jul;93(1):173–7

[Hailey-Hailey disease with dissemination and eczema herpeticatum in therapy with etretinate] Stallmann D, et al. **Hautarzt** 1988 Jul;39(7):454–6 (Eng. Abstr.) **(Ger)**

ENZYMOLOGY

In vivo studies on the involvement of urokinase in pemphigus acantholysis [letter] Lotti T, et al. **J Invest Dermatol** 1988 Oct;91(4):372–3

EPIDEMIOLOGY

Relative incidence of intraoral pemphigus vulgaris, mucus membrane pemphigoid and lichen planus. Zegarelli DJ, et al. **Ann Dent** 1989 Summer;48(1):5–7

Endemic pemphigus foliaceus (Fogo Selvagem): II. Current and historic epidemiologic studies. Diaz LA, et al. **J Invest Dermatol** 1989 Jan;92(1):4–12 (42 ref.)

Epidemiology of Fogo Selvagem [editorial] Huff JC. **J Invest Dermatol** 1989 Jan;92(1):3

South American pemphigus foliaceus [editorial] **Lancet** 1988 Nov 12;2(8620):1120

ETIOLOGY

Pemphigus vulgaris following cobalt therapy for bronchial carcinoma. Girolomoni G, et al. **Dermatologica** 1989; 178(1):37–8

[Autoimmune pemphigus combined with alpha 1-antitrypsin deficiency] Vaillant L, et al. **Ann Dermatol Venereol** 1988; 115(10):1017–21 (Eng. Abstr.) **(Fre)**

[The role of cellular immune reactions in the pathogenesis of pemphigus vulgaris] Grando SA, et al. **Vestn Dermatol Venerol** 1988;(5):14–9 (Eng. Abstr.) **(Rus)**

[The results of phylogenetic and experimental research into the etiology of pemphigus vulgaris] Grando SS, et al. **Vestn Dermatol Venerol** 1989;(4):7–9 (Eng. Abstr.) **(Rus)**

[Immunopathogeny of pemphigus] Squiquera L, et al. **Med Cutan Ibero Lat Am** 1988;16(5):385–92 (56 ref.) (Eng. Abstr.) **(Spa)**

GENETICS

Pemphigus—an atavism? [editorial] Holubar K. **Dermatologica** 1989;178(1):6–7

Chronic benign familial pemphigus. Galimberti RL, et al. **Int J Dermatol** 1988 Sep;27(7):495–500

Familial pemphigus vulgaris with oral manifestations affecting two Greek families. Laskaris G, et al. **J Oral Pathol Med** 1989 Jan;18(1):49–53 (16 ref.)

Specific HLA-DQB and HLA-DRB1 alleles confer susceptibility to pemphigus vulgaris. Scharf SJ, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6215–9

HISTORY

The immunopathology of pemphigus and bullous pemphigoid. 1968 [classical article] Beutner EH, et al. **J Invest Dermatol** 1989 Apr;92(4 Suppl):166S; discussion 167S–168S

IMMUNOLOGY

Determination of IgG subclasses in patients with pemphigus with active disease and in remission. David M, et al. **Arch Dermatol** 1989 Jun;125(6):787–90

Complement and antibody deposition in Brazilian pemphigus foliaceus and correlation of disease activity with circulating antibodies. de Messias IT, et al. **Arch Dermatol** 1988 Nov; 124(11):1664–8

Mediators of inflammation in blister fluids from patients with pemphigus vulgaris and bullous pemphigoid. Grando SA, et al. **Arch Dermatol** 1989 Jul;125(7):925–30

Epidermal antigens in pemphigus vegetans. Report of a case. Parodi A, et al. **Br J Dermatol** 1988 Dec;119(6):799–802

Fixation of pemphigus vulgaris and foliaceus antibodies in shedding snake epidermis. Grando SA. **Dermatologica** 1989; 178(1):8–11

Pemphigus foliaceus with anti-intercellular and anti-basement membrane zone antibodies. Blocking immunofluorescence and Western immunoblotting studies. Muramatsu T, et al. **Dermatologica** 1988;177(6):354–9

In vivo binding site of pemphigus vulgaris antibodies and their fate during acantholysis. Iwatsuki K, et al. **J Am Acad Dermatol** 1989 Apr;20(4):578–82

Pemphigus vulgaris immunogenetics [letter] Tzfoni E, et al. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 1):594

Binding modes of IgG from pemphigus autoimmune sera onto guinea pig keratinocytes and the fate of bound IgGs. Milner Y, et al. **J Cell Physiol** 1989 May;139(2):441–54

Pemphigus and pemphigoid as paradigms of organ-specific, autoantibody-mediated diseases. Stanley JR. **J Clin Invest** 1989 May;83(5):1443–8 (60 ref.)

Penicillamine-induced bullous pemphigoid with pemphigus-like antibodies. Rasmussen HB, et al. **J Cutan Pathol** 1989 Jun;16(3):154–7

Characterization of keratinocyte plasminogen activator inhibitors and demonstration of the prevention of pemphigus IgG-induced acantholysis by a purified plasminogen activator inhibitor. Hashimoto K, et al. **J Invest Dermatol** 1989 Mar;92(3):310–4

Deposition of the membrane attack complex of complement in pemphigus vulgaris and pemphigus foliaceus skin. Kawana S, et al. **J Invest Dermatol** 1989 Apr;92(4):588–92

Pemphigus foliaceus antigen: characterization of a keratinocyte envelope associated pool and preparation of a soluble immunoreactive fragment. Labib RS, et al. **J Invest Dermatol** 1989 Aug;93(2):272–9

IgG subclasses of intercellular and basement membrane zone antibodies: the relationship to the capability of complement fixation. Yamada H, et al. **J Invest Dermatol** 1989 Apr; 92(4):585–7

Demonstration of an adhering-junction molecule (plakoglobin) in the autoantigens of pemphigus foliaceus and pemphigus vulgaris. Korman NJ, et al. **N Engl J Med** 1989 Sep 7;321(10):631–5

The pathogenic effect of IgG4 autoantibodies in endemic pemphigus foliaceus (fogo selvagem). Rock B, et al. **N Engl J Med** 1989 Jun 1;320(22):1463–9

Are HLA class II genes controlling susceptibility and resistance to Brazilian pemphigus foliaceus (fogo selvagem)? Petzl-Erler ML, et al. **Tissue Antigens** 1989 Mar;33(3):408–14

[Application of the biotin-avidin system to the study of autoimmune bullous diseases: immunofluorescence method using biotinylated-pemphigus and -pemphigoid antibodies and fluoresceinated avidin] Muramatsu T, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Sep;98(10):977–80 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Mucous membrane manifestations of pemphigus vulgaris. A 25-year survey of 185 patients treated with corticosteroids or with combination of corticosteroids with methotrexate or heparin. Mashkilleyson N, et al. **Acta Derm Venereol (Stockh)** 1988;68(5):413–21

Cytology of concomitant oral lesions. Kalabaka M, et al. **Ann Dent** 1988 Winter;47(2):3–7

Exfoliative cytology of the oral cavity in the early detection of pemphigus vulgaris. A case report. Cardillo MR, et al. **Arch Anat Cytol Pathol** 1988;36(3):93–5

Symmetrical lid margin erosions: a condition specific to pemphigus vulgaris? Case report. Nelson ME, et al. **Arch Ophthalmol** 1988 Dec;106(12):1652–3

Pemphigus associated with Castelman's pseudolymphoma. Monpoint S, et al. **Dermatologica** 1989;178(1):54–7 (23 ref.)

Pemphigus vegetans in an unusual site [letter] Jain VK, et al. **Int J Dermatol** 1989 Jun;28(5):352–3

Pemphigus foliaceus in an 8-year-old girl. Yorav S, et al. **Int J Dermatol** 1989 Mar;28(2):125–6

IgA pemphigus foliaceus. Report of two cases and a review of the literature. Beutner EH, et al. **J Am Acad Dermatol** 1989 Jan;20(1):89–97 (23 ref.)

Squamous cell carcinoma arising in Hailey-Hailey disease. Chun SI, et al. **J Cutan Pathol** 1988 Aug;15(4):234–7

Pemphigus vegetans presenting as scrotal tongue. Iwata M, et al. **J Dermatol** 1989 Apr;16(2):159–60

In vitro pemphigus vulgaris model using organotypic cultures of human epidermal keratinocytes. Hunziker T, et al. **J Invest Dermatol** 1989 Aug;93(2):263–7

Pemphigus vulgaris presenting as a gingival lesion. A case report. Barnett ML. **J Periodontol** 1988 Sep;59(9):611–4

[Cazenave's pemphigus foliaceus: therapeutic difficulties. Aspects of transient acanthosis nigricans during healing] Bilet S, et al. **Ann Dermatol Venereol** 1988;115(11):1140–2 **(Fre)**

[Pemphigus erythematosus with the histologic picture of pemphigus vulgaris. Pathogenetic considerations based on a case] Audring H, et al. **Dermatol Monatsschr** 1988; 174(7):386–94 (Eng. Abstr.) **(Ger)**

[Complement-independent bulla formation in pemphigus vulgaris by IgG4] Rauterberg AD, et al. **Hautarzt** 1988 Jul;39(7):426–9 (Eng. Abstr.) **(Ger)**

[Oral pemphigus. Diagnostic problems] Rengo S, et al. **Minerva Stomatol** 1988 Jun;37(6):461–4 (Eng. Abstr.) **(Ita)**

[Analysis of infiltrating cells in the lesional skin of the autoimmune diseases-pemphigus, pemphigoid, and lupus erythematosus] Hayakawa K. **Nippon Hifuka Gakkai Zasshi** 1988 Sep;98(10):1023–8 (Eng. Abstr.) **(Jpn)**

[A case of oral pemphigus vulgaris involving the esophagus combined with early gastric carcinoma] Ohkawa F, et al. **Nippon Naika Gakkai Zasshi** 1987 Nov;76(11):1725–9 (15 ref.) **(Jpn)**

[Clinico-cytological correlations in true pemphigus of the oral cavity] Nikitin VA, et al. **Lab Delo** 1988;(10):38–40 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Role of plasminogen activator in pemphigus vulgaris. Wilkinson JE, et al. **Am J Pathol** 1989 Mar;134(3):561–9

SURGERY

Wide excision of perineal Hailey–Hailey disease with healing by secondary intention. Shons AR. **Br J Plast Surg** 1989 Mar;42(2):230–2

THERAPY

Indications for future studies on the treatment of pemphigus with plasmapheresis [letter] Blaszczyk M, et al. **Arch Dermatol** 1989 Jun;125(6):843–4

Plasmapheresis therapy of pemphigus. Bystryn JC. **Arch Dermatol** 1988 Nov;124(11):1702–4

Controlled study of plasma exchange in pemphigus. Guillaume JC, et al. **Arch Dermatol** 1988 Nov; 124(11):1659–63

Plasmapheresis and pulse cyclophosphamide therapy in pemphigus vulgaris: a novelty or a reappraisal? [letter] Ruocco V. **Arch Dermatol** 1988 Nov;124(11):1716–8

Aprotinin inhibition of experimental pemphigus in Balb–c mice following passive transfer of pemphigus foliaceus serum. Spillman DH, et al. **Clin Exp Dermatol** 1988 Sep; 13(5):321–7

[Mechanisms of therapeutic effect of extracorporeal detoxication in autoimmune bullous dermatoses] Grando SA, et al. **Vestn Dermatol Venerol** 1988;(7):6–11 (Eng. Abstr.) **(Rus)**

[Treatment of pemphigus vulgaris with plasmapheresis] Woscoff A, et al. **Medicina (B Aires)** 1988;48(4):395–400 (Eng. Abstr.) **(Spa)**

VETERINARY

Pemphigus foliaceus in two Shetland sheepdog littermates. Noxon JO, et al. **J Am Vet Med Assoc** 1989 Feb 15; 194(4):545–6

Pemphigus vulgaris in a pigtail macaque. Wolff PL, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1220–1

PEMPIDINE

PHARMACOLOGY

Antagonism of the nicotine–induced changes of the striatal dopamine metabolism in mice by mecamylamine and pempidine. Haikala H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Aug; 338(2):169–73

THERAPEUTIC USE

[Treatment of hemoptysis and hemorrhage using pyrilen and temechin in patients with pulmonary tuberculosis] Pilipchuk NS, et al. **Probl Tuberk** 1988;(10):28–30 (Eng. Abstr.) **(Rus)**

PENBUTOLOL see under **PROPANOLAMINES**

PENFLURIDOL see under **PIPERIDINES**

PENICILLAMINE

ADMINISTRATION & DOSAGE

Comment on the article by van Kerckhove et al [letter] Mueller MN. **Arthritis Rheum** 1989 Sep;32(9):1185–6

Effect of combined administration of DL–penicillamine and potassium dichromate on lethality, distribution and excretion of chromium in mice. Susa N, et al. **Kitasato Arch Exp Med** 1988 Apr;61(1):51–7

[Effectiveness and limits of D–penicillamine therapy] Behrend T, et al. **Z Rheumatol** 1988;47 Suppl 1:28–33 (Eng. Abstr.) **(Ger)**

[D–penicillamine––a current review of areas of use and dosage guidelines] Sörensen H. **Z Rheumatol** 1988;47 Suppl 1:13–6 (32 ref.) (Eng. Abstr.) **(Ger)**

[Basic and clinical study on combined immunomodulator therapy in rheumatoid arthritis] Hoshi K, et al. **Ryumachi** 1988 Dec;28(6):457–9 **(Jpn)**

ADVERSE EFFECTS

Nail–changes induced by penicillamine. Bjellerup M. **Acta Derm Venereol (Stockh)** 1989;69(4):339–41

Pemphigus–like eruption induced by d–penicillamine and captopril, in the same patient. Blanken R, et al. **Acta Derm Venereol (Stockh)** 1988;68(5):456–7

The natural course of gold and penicillamine nephropathy: a longterm study of 54 patients. Hall CL. **Adv Exp Med Biol** 1989;252:247–56

Response to Drs. Langan and Thomas [letter] Tandon RK. **Am J Gastroenterol** 1989 Feb;84(2):210

Fatal aplastic anaemia and liver toxicity caused by D–penicillamine treatment of rheumatoid arthritis. Fishel B, et al. **Ann Rheum Dis** 1989 Jul;48(7):609–10

Penicillamine dermatopathy with lymphangiectases. A clinical, immunohistologic, and ultrastructural study [published erratum appears in Arch Dermatol 1989 May;125(5):646] Goldstein JB, et al. **Arch Dermatol** 1989 Jan;125(1):92–7

Deterioration of Wilson's disease following the start of penicillamine therapy [letter] Pall HS, et al. **Arch Neurol** 1989 Apr;46(4):359–61

Cicatricial pemphigoid associated with D–penicillamine treatment [letter] Martí–Huguet T, et al. **Arch Ophthalmol** 1989 Aug;107(8):1115

Gold and D–penicillamine and the gastrointestinal tract. Rangachari PK, et al. **Baillieres Clin Rheumatol** 1989 Aug; 3(2):411–23 (50 ref.)

Sulphasalazine in rheumatoid arthritis: haematological problems [letter] Lyle WH. **Br J Rheumatol** 1989 Aug; 28(4):363–4

Penicillamine–induced pseudo–pseudoxanthoma elasticum in a patient with rheumatoid arthritis. Burge S, et al. **Clin Exp Dermatol** 1988 Jul;13(4):255–8

Fine antigenic specificities of antibodies in sera from patients with D–penicillamine–induced myasthenia gravis. Tzartos SJ, et al. **Clin Exp Immunol** 1988 Oct;74(1):80–6

Penicillamine induced pemphigus––a report of 2 cases. Buckley C, et al. **Ir J Med Sci** 1988 Aug;157(8):267–8

D–penicillamine–induced elastosis perforans serpiginosa in a child with juvenile rheumatoid arthritis. Report of a case and review of the literature. Sahn EE, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 2):279–88 (18 ref.)

Penicillamine–induced bullous pemphigoid with pemphigus–like antibodies. Rasmussen HB, et al. **J Cutan Pathol** 1989 Jun;16(3):154–7

Penicillamine induced mammary hyperplasia: report of a case and review of the literature. Craig HR. **J Rheumatol** 1988 Aug;15(8):1294–7

Adverse effects of D–penicillamine. A cooperative study by the French Regional Drug Surveillance Centers [letter] Netter P, et al. **J Rheumatol** 1988 Nov;15(11):1730–2

Induction of anticentromere antibody in patients receiving treatment with D–penicillamine. Haberhauer G. **Klin Wochenschr** 1989 May 15;67(10):535–7

Aetiology of membranous glomerulonephritis: a prospective study of 82 adult patients. Cahen R, et al. **Nephrol Dial Transplant** 1989;4(3):172–80

Occupational asthma in a pharmaceutical worker exposed to penicillamine. Lagier F, et al. **Thorax** 1989 Feb; 44(2):157–8

Drug–induced anticentromere antibody? Haberhauer G, et al. **Z Rheumatol** 1989 Mar–Apr;48(2):99–100

[Pemphigus herpetiformis following D–penicillamine in a patient with HLA B8] Weltfriend S, et al. **Hautarzt** 1988 Sep;39(9):587–8 (Eng. Abstr.) **(Ger)**

[D–penicillamine––side effects, pathogenesis and decreasing the risks] Grasedyck K. **Z Rheumatol** 1988;47 Suppl 1:17–9 (28 ref.) (Eng. Abstr.) **(Ger)**

[Current aspects of D–penicillamine and pregnancy] Miehle W. **Z Rheumatol** 1988;47 Suppl 1:20–3 (14 ref.) (Eng. Abstr.) **(Ger)**

[Basic therapy of chronic inflammatory joint diseases with D–penicillamine and disorders of wound healing in rheumatoid orthopedic interventions] Zacher J, et al. **Z Rheumatol** 1988;47 Suppl 1:41–3 (Eng. Abstr.) **(Ger)**

[A case of Wilson's disease who developed status epilepticus during D–penicillamine therapy] Yoshida K, et al. **Nippon Naika Gakkai Zasshi** 1989 Jan;78(1):70–4 **(Jpn)**

[A case of Wilson's disease recovering from severe brain damage––special reference to trientine and D–penicillamine therapy] Ishitsu T, et al. **No To Hattatsu** 1989 May; 21(3):294–6 **(Jpn)**

[Rheumatoid arthritis treated with penicillamine and bronchiolitis obliterans] Quijada C, et al. **Rev Med Chil** 1988 Feb;116(2):164–8 (Eng. Abstr.) **(Spa)**

ANALOGS & DERIVATIVES

Measurement of urinary cystine and cysteinyl–penicillamine in patients with cystinuria. Sampson DC, et al. **Biomed Chromatogr** 1986 Feb;1(1):21–6

ANALYSIS

Separation and detection of bis(alkylthio)selenides of penicillamine and glutathione by liquid chromatography with electrochemical detection. Killa HM, et al. **J Chromatogr** 1989 Mar 31;465(2):359–68

BLOOD

Assay for D–penicillamine–protein conjugate in human plasma utilising chemical reduction followed by high–performance liquid chromatography with gold/mercury electrochemical detection. Joyce DA, et al. **J Chromatogr** 1988 Sep 9;430(2):319–27

D–penicillamine transport into human erythrocytes. Zolezzi SM, et al. **Proc West Pharmacol Soc** 1988;31:201–2

CHEMICAL SYNTHESIS

A new method for preparing D–penicillamine. Reaction of benzylpenicilloic acid alpha–amides with arylamines. Ogawa T, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun; 36(6):1957–62

HISTORY

[D–penicillamine––a retrospective view] Miehlke K. **Z Rheumatol** 1988;47 Suppl 1:3–5 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

[Antibodies to D–penicillamine in patients with chronic polyarthritis––diagnostic aid in undesired and insufficient drug effects?] Storch W, et al. **Z Rheumatol** 1988;47 Suppl 1:44–7 (Eng. Abstr.) **(Ger)**

METABOLISM

D–penicillamine metabolism in an in–vivo model of inflamed synovium. Joyce DA, et al. **Agents Actions** 1988 Dec; 25(3–4):336–43

The pharmacokinetics of albumin conjugates of D–penicillamine in rats. Joyce DA, et al. **Drug Metab Dispos** 1989 Mar–Apr;17(2):208–11

D–penicillamine metabolism: in vitro studies of S–oxidation mechanisms. Pilkington AE, et al. **Drug Metabol Drug Interact** 1988;6(1):85–93

The metabolism and disposition of D–penicillamine in the DA–strain rat. Pilkington AE, et al. **Eur J Drug Metab Pharmacokinet** 1988 Apr–Jun; 13(2):99–104

PHARMACOKINETICS

D–penicillamine pharmacokinetics and action. Joyce DA. **Agents Actions Suppl** 1988;24:197–206

Pharmacokinetic interactions of penicillamine in rheumatoid arthritis. Seideman P, et al. **J Rheumatol** 1989 Apr; 16(4):473–4

D–penicillamine pharmacokinetics and pharmacodynamics in man. Joyce DA. **Pharmacol Ther** 1989;42(3):405–27 (238 ref.)

PHARMACOLOGY

Antagonism by D–penicillamine of the suppression of PWM–stimulated mononuclear cells by chloroquine. de Vries E, et al. **Agents Actions** 1989 Jan;26(1–2):243–5

Proteoglycan biosynthesis by rabbit articular chondrocytes treated with D–penicillamine. Legendre P, et al. **Agents Actions** 1988 Aug;25(1–2):171–81

Histopathological study into side–effect toxicity of some drugs used in treatment of cancer. el–Shazly MO, et al. **Arch Exp Veterinarmed** 1989 Mar;43(2):319–26

Influence of triethylenetetramine and D–penicillamine on zinc metabolism in mice. Eybl V, et al. **Arch Toxicol Suppl** 1989;13:370–2

D–penicillamine reverses the inhibition of proteoglycan biosynthesis caused by exposure of cultured articular cartilage to hydrogen peroxide. Baker MS, et al. **Biochem Int** 1988 Jun;16(6):1153–62

Inhibition of the covalent binding reaction of complement component C4 by penicillamine, an anti–rheumatic agent. Sim E, et al. **Biochem J** 1989 Apr 15;259(2):415–9

Immunopharmacological studies of new 3–benzoyl–4–mercaptobutyric acid derivatives. II. Immunosuppressive effects. Takeshita K, et al. **Drugs Exp Clin Res** 1988;14(5):311–8

Proteoglycan biosynthesis is stimulated by D–penicillamine in chondrifying high density cell cultures. Módis L, et al. **Exp Pathol** 1988;35(3):159–76

The stimulation of IL–2 production by anti–rheumatic drugs. Oben JA, et al. **Immunology** 1989 Jul;67(3):328–32

Differential effect of D–penicillamine on the cell kinetic parameters of various normal and transformed cellular types. Friteau L, et al. **J Cell Physiol** 1988 Sep;136(3):514–8

Inhibition of human endothelial cell proliferation in vitro and neovascularization in vivo by D–penicillamine. Matsubara T, et al. **J Clin Invest** 1989 Jan;83(1):158–67

Covalent binding to alpha–macroglobulins of a protein with free SH groups produced by activated B cells: blocking by D–penicillamine and gold compounds. Schlesinger C, et al. **Mol Immunol** 1989 Mar;26(3):255–67

Effects of D–penicillamine on mononuclear cells in vitro. Riestra JL, et al. **Rheumatol Int** 1988;8(3):119–24

Cytoprotective value of lysine, penicillamine, and pyridoxal phosphate against the neurotoxicity of acetaldehyde. Phillips SC. **Toxicol Appl Pharmacol** 1989 May; 98(3):553–60

Suggested mode of action of D–penicillamine as an immunosuppressive agent in rheumatoid arthritis. Lipsky PE. **Z Rheumatol** 1988;47 Suppl 1:6–8

[Studies of the in vitro toxicity of D–penicillamine in the Chinese hamster ovary system] Ehrlich W, et al. **Z Rheumatol** 1988;47 Suppl 1:9–12 (Eng. Abstr.) **(Ger)**

POISONING

A suspected case of acute copper toxicity in a horse. Auer DE, et al. **Aust Vet J** 1989 Jun;66(6):191–2

THERAPEUTIC USE

Temporal patterns of response to D–penicillamine, hydroxychloroquine, and placebo in juvenile rheumatoid arthritis patients. van Kerckhove C, et al. **Arthritis Rheum** 1988 Oct;31(10):1252–8

Should one use second–line agents such as gold and D–penicillamine in a patient with active rheumatoid arthritis and asymptomatic microscopic haematuria for which no cause can be determined? Bird HA. **Br J Rheumatol** 1989 Feb;28(1):39

The effect of continuing penicillamine and gold treatment on the course of penicillamine and gold nephropathy. Hall CL, et al. **Br J Rheumatol** 1989 Feb;28(1):53–7

Variation in alpha–1–antitrypsin phenotypes associated with penicillamine therapy. Whitehouse DB, et al. **Clin Chim Acta** 1989 Jan 13;179(1):109–15

D-penicillamine (DPA)-induced anticentromere antibody (ACA) [letter] Haberhauer G. **Clin Exp Rheumatol** 1989 May-Jun;7(3):332-4

The clinical value of measuring immunoglobulins when assessing penicillamine therapy in rheumatoid arthritis. Williams A, et al. **Clin Rheumatol** 1988 Sep;7(3):347-53

The current treatment of scleroderma. Oliver GF, et al. **Drugs** 1989 Jan;37(1):87-96 (22 ref.)

Menkes' disease: long-term treatment with copper and D-penicillamine. Nadal D, et al. **Eur J Pediatr** 1988 Aug; 147(6):621-5

Effects of an in vivo D-penicillamine treatment on glycosaminoglycan biosynthesis by synovial fibroblasts from arthritic-rendered rabbits. Legendre P, et al. **Int J Tissue React** 1988;10(3):121-32

Effect of D-penicillamine treatment on brain metabolism in Wilson's disease: a case study. De Volder A, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):947-9

The Emory mouse cataract: the effects on cataractogenesis of alpha-tocopherol, penicillamine, triethylenetetramine, and mercaptopropionylglycine. Kuck JF Jr, et al. **J Ocul Pharmacol** 1988 Fall;4(3):243-51

Penicillamine for lead poisoning [letter] Sachs HK, et al. **J Pediatr** 1989 Feb;114(2):336-7

Dermal alterations in patients with Wilson's disease treated with D-penicillamine. Pasquali Ronchetti I, et al. **J Submicrosc Cytol Pathol** 1989 Jan;21(1):131-9

Clinical investigation in Duchenne muscular dystrophy: penicillamine and vitamin E. Fenichel GM, et al. **Muscle Nerve** 1988 Nov;11(11):1164-8

Use of penicillamine in children with small lead burdens [letter] Shannon M, et al. **N Engl J Med** 1989 Oct 5; 321(14):979-80

D-penicillamine and retinopathy of prematurity [letter] Lakatos L. **Pediatrics** 1988 Dec;82(6):951-3

Oral cadmium chloride intoxication in mice: effects of penicillamine, dimercaptosuccinic acid and related compounds. Andersen O, et al. **Pharmacol Toxicol** 1988 Nov;63(5):386-9

Sulphasalazine versus penicillamine in the treatment of rheumatoid arthritis. Carroll GJ, et al. **Rheumatol Int** 1989; 8(6):251-5

Progressive joint damage during penicillamine therapy for rheumatoid arthritis. Scott DL, et al. **Rheumatol Int** 1988; 8(3):135-9

The progress of oesophageal involvement in progressive systemic sclerosis during D-penicillamine treatment. Hendel L, et al. **Scand J Rheumatol** 1989;18(3):149-55

Treatment of Wilson's disease. Brewer GJ, et al. **Semin Neurol** 1987 Jun;7(2):209-20 (53 ref.)

Lack of effectiveness of D-penicillamine in experimental arsenic poisoning. Kreppel H, et al. **Vet Hum Toxicol** 1989 Feb;31(1):1-5

Current status of D-penicillamine therapy in Japan. Kashiwazaki S. **Z Rheumatol** 1988;47 Suppl 1:38-40

D-penicillamine in juvenile chronic arthritis. Prieur AM. **Z Rheumatol** 1988;47 Suppl 1:34-7 (27 ref.)

[Evaluation of the usefulness of delayed-action preparations in the treatment of rheumatoid polyarthritis by analyzing the therapeutic maintenance dose] Dougados M, et al. **Rev Rhum Mal Osteoartic** 1989 Jan;56(1):89-92 **(Fre)**

[Effect of penicillin and D-penicillamine on beta-galactosidase activity in patients with progressive scleroderma] Schulze E, et al. **Dermatol Monatsschr** 1988; 174(11):661-6 (Eng. Abstr.) **(Ger)**

[Indications for liver transplantation in Wilson's disease with a fulminant course] Zilker TR, et al. **Dtsch Med Wochenschr** 1989 Jun 2;114(22):871-5 (Eng. Abstr.) **(Ger)**

[D-penicillamine in the treatment of rheumatism. Its value and side-effects. A discussion by international experts. Berlin] **Z Rheumatol** 1988;47 Suppl 1:1-54 **(Ger)**

[The concept of basic therapy of chronic polyarthritis with D-penicillamine: clinical experiences over 10 years] Hohmeister R. **Z Rheumatol** 1988;47 Suppl 1:24-7 (Eng. Abstr.) **(Ger)**

[Hepatocerebral dystrophy in pregnancy] Shekhtman MM, et al. **Akush Ginekol (Mosk)** 1988 Oct;(10):26-30 (Eng. Abstr.) **(Rus)**

[Therapeutic effectiveness of D-penicillamine in ankylosing arthritis of the spine in relation to the degree of pathological changes in the joints] Bernatska K, et al. **Revmatologiia (Moskva)** 1989 Jan-Mar;(1):28-32 (Eng. Abstr.) **(Rus)**

[Comparative evaluation of the effectiveness of gold preparations and D-penicillamine and their tolerance in rheumatoid arthritis. I. The effect on the indicators of their activity and tolerance] Slobodina GA, et al. **Revmatologiia (Moskva)** 1989 Jan-Mar;(1):8-16 (Eng. Abstr.) **(Rus)**

[Fibrinolytic activity in patients with hepatolenticular degeneration: the effect of penicillamine] Babić T, et al. **Lijec Vjesn** 1988 Dec;110(12):420-2 (Eng. Abstr.) **(Scr)**

PENICILLANIC ACIDS

The Garrod lecture. The influence of 6-aminopenicillanic acid on antibiotic development. Rolinson GN. **J Antimicrob Chemother** 1988 Jul;22(1):5-14 (7 ref.)

ANALYSIS

Degradation of beta-lactamase inhibitor, (2S,3R,5S)-3-methyl-7-oxo-3-(1H-1,2,3-triazol-1-yl-methyl)-4-thi a-1- azabicyclo[3.2.0]heptane-2-carboxylic acid 4,4-dioxide (YTR-830H), in aqueous solutions and alkaline methanol solution: pathway and structural elucidation of products. Marunaka T, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4478-87

High-performance liquid chromatographic determination of a new beta-lactamase inhibitor and its metabolite in combination therapy with piperacillin in biological materials. Marunaka T, et al. **J Chromatogr** 1988 Sep 23; 431(1):87-101

Assignment of the C-5 configuration of penicilloic acids. Bird AE, et al. **J Pharm Pharmacol** 1989 Jul;41(7):481-3

CHEMICAL SYNTHESIS

6-APA production in a pilot plant with an immobilized pen V acylase (SEMACYLASE). Møllgaard H, et al. **Ann N Y Acad Sci** 1988;542:360-5

A novel synthetic method for penicillanic acid derivatives by electroreduction. Ikeda S, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):1976-81

METABOLISM

Unexpected influence of ionic strength on branched-pathway interactions between beta-lactamases and beta-halogenopenicillanates. De Meester F, et al. **Biochem J** 1989 Jan 1;257(1):245-9

PHARMACOLOGY

The activity of a sulphone beta-lactamase inhibitor, YTR 830. Moosdeen F, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):206-7

Beta-lactamase inhibition by acetylmethylene penicillanic acid compared to that of clavulanate and sulbactam. Chin NX, et al. **Chemotherapy** 1988;34(4):318-25

Protection of piperacillin and ticarcillin from beta-lactamase hydrolysis by tazobactam (YTR-830) and clavulanic acid [letter] Diver JM, et al. **J Antimicrob Chemother** 1989 Jul; 24(1):89-92

Synergy of clavulanic acid, sulbactam and tazobactam (YTR 830) with amoxycillin against fifty beta-lactamase-producing strains of Haemophilus influenzae. Simonet M, et al. **J Antimicrob Chemother** 1989 May;23(5):798-800

The beta-lactamase of Streptomyces cacaoi: interaction with cefoxitin and beta-iodopenicillanate. Lenzini MV, et al. **J Enzym Inhib** 1985;1(1):25-34

[Efficiency of tazobactam as inhibitor of beta-lactamases, combined with piperacillin, against resistant strains to this penicillin] Roy C, et al. **Med Clin (Barc)** 1989 Mar 18; 92(10):371-4 (Eng. Abstr.) **(Spa)**

PENICILLIC ACID see under **CAPROATES**

PENICILLIN AMIDASE see under **AMIDOHYDROLASES**

PENICILLIN, AMINOBENZYL see **AMPICILLIN**

PENICILLIN, DIMETHOXYPHENYL see **METHICILLIN**

PENICILLIN G

Highly conformationally constrained halogenated 6-spiroepoxypenicillins as probes for the bioactive side-chain conformation of benzylpenicillin. Shute RE, et al. **J Comput Aided Mol Des** 1989 Jun;3(2):149-64

[Sulbenicillin] Gava R. **G Clin Med** 1988 Dec;69(12):789-92 (15 ref.) **(Ita)**

ADMINISTRATION & DOSAGE

Short course chemotherapy for meningococcal meningitis. Isaacs RD, et al. **Aust N Z J Med** 1988 Aug;18(5):731-2

Untreated relapsing secondary syphilis with meningitis. Fiumara NJ, et al. **J Am Acad Dermatol** 1989 Apr; 20(4):682-3

Intravenous benzyl penicillin [letter] Mathur SL, et al. **J Assoc Physicians India** 1988 Sep;36(9):571

Comparison between cefotaxime and a combination of benzylpenicillin and cloxacillin as an antibiotic prophylaxis in cardiac surgery with cardio-pulmonary bypass. Roberts DG, et al. **J Cardiovasc Surg (Torino)** 1988 Nov-Dec; 29(6):650-7

Five days versus one day of penicillin as prophylaxis in elective neurosurgical operations. Cartmill TD, et al. **J Hosp Infect** 1989 Jul;14(1):63-8

Simple peroperative antimicrobial chemoprophylaxis in elective neurosurgical operations. Ingham HR, et al. **J Hosp Infect** 1988 Oct;12(3):225-33

A comparative study of two prophylactic antibiotic regimens in abdominal hysterectomy. Suvonnakote T. **J Med Assoc Thai** 1988 Aug;71(8):431-5

Prophylaxis in patients with rheumatic fever: every three or every four weeks? Ayoub EM. **J Pediatr** 1989 Jul; 115(1):89-91

[The treatment of congenital syphilis with penicillin (letter)] Prinsloo JG, et al. **S Afr Med J** 1989 Sep 16;76(6):282 **(Afr)**

[Resistance of nongroupable streptococci to beta-lactams. Detection by antibiogram and the activity of combinations of penicillin G and gentamicin] Leclercq R, et al. **Pathol Biol (Paris)** 1988 Jun;36(5 Pt 2):626-31 (Eng. Abstr.) **(Fre)**

[Single-dose treatment of acute bronchitis] Ben Hassine K, et al. **Tunis Med** 1988 Nov;66(11):797-800 (Eng. Abstr.) **(Fre)**

[Acute streptococcal pharyngitis: oral or intramuscular treatment? (letter)] Lobos Bejarano JM, et al. **Med Clin (Barc)** 1989 May 6;92(17):677 **(Spa)**

ADVERSE EFFECTS

Improvement of the local tolerance of a potassium penicillin G formulation for injection. Dall V, et al. **Acta Vet Scand** 1988;29(1):101-7

Penicillin-allergic patients react to penicillin-modified "self". Bell SJ, et al. **Allergy** 1989 Apr;44(3):199-203

Seizure propensity with imipenem. Eng RH, et al. **Arch Intern Med** 1989 Aug;149(8):1881-3

Neurotoxicity of benzylpenicillin in experimental Escherichia coli meningitis. Schliamser SE, et al. **J Antimicrob Chemother** 1988 Oct;22(4):521-8

A comparison of pain induced by procaine and benzyl penicillin. Harari M, et al. **P N G Med J** 1988 Sep; 31(3):169-71

Inadvertent intravenous administration of a long-acting depot penicillin preparation [letter] Levetan BN, et al. **S Afr Med J** 1988 Oct 15;74(8):427-8

Penicillin-induced agranulocytosis. Walz B, et al. **West J Med** 1988 Oct;149(4):460-2

[Transverse syndrome following intramuscular injection of penicillin] Runge U, et al. **Z Arztl Fortbild (Jena)** 1989; 83(10):537-8 **(Ger)**

[Acute effect of penicillin G on feline models of focal epilepsy] Tanaka S, et al. **No To Shinkei** 1989 Mar; 41(3):293-8 (Eng. Abstr.) **(Jpn)**

[Pseudopolyvalent drug allergy in a patient with marked hypersensitivity to penicillin] Polubiec M, et al. **Pol Tyg Lek** 1988 Oct 17-24;43(42-43):1381-2 (Eng. Abstr.) **(Pol)**

[Various central determinants of Hoigné's syndrome] Kocur J, et al. **Wiad Lek** 1988 Oct 1;41(19):1322-4 (Eng. Abstr.) **(Pol)**

[Skin tests of diagnostic help in penicillin allergy] Aguilar D, et al. **Rev Alerg Mex** 1988 Nov-Dec;35(5):113-5 **(Spa)**

[Central neurologic damage and local ischemic compromise secondary to injection of benzathine penicillin] Baeza J, et al. **Rev Chil Pediatr** 1987 Sep-Oct;58(5):391-5 (16 ref.) (Eng. Abstr.) **(Spa)**

ANALOGS & DERIVATIVES

Anaphylaxis to amoxycillin but good tolerance for benzyl penicillin. In vivo and in vitro studies of specific IgE antibodies. Blanca M, et al. **Allergy** 1988 Oct;43(7):508-10

Antibacterial properties of (2,3)-alpha- and (2,3)-beta-methylene analogs of penicillin G. Christenson JG, et al. **Antimicrob Agents Chemother** 1988 Jul; 32(7):1005-11

A new method for preparing D-penicillamine. Reaction of benzylpenicilloic acid alpha-amides with arylamines. Ogawa T, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun; 36(6):1957-62

Retinal toxicity of antibiotics: evaluation by electroretinogram. Mochizuki K, et al. **Doc Ophthalmol** 1988 Jun;69(2):195-202

Binding of benzyl penicilloyl to human serum albumin. Evidence for a highly reactive region at the junction of domains 1 and 2 of the albumin molecule. Yvon M, et al. **FEBS Lett** 1989 Apr 24;247(2):273-8

Brain-specific chemical delivery systems for beta-lactam antibiotics. Synthesis and properties of some dihydropyridine and dihydroisoquinoline derivatives of benzylpenicillin. Pop E, et al. **J Med Chem** 1989 Aug; 32(8):1774-81

Brain-specific chemical delivery systems for beta-lactam antibiotics. In vitro and in vivo studies of some dihydropyridine and dihydroisoquinoline derivatives of benzylpenicillin in rats. Wu WM, et al. **J Med Chem** 1989 Aug;32(8):1782-8

Standardized symptomatic treatment versus penicillin as initial therapy for streptococcal pharyngitis. Middleton DB, et al. **J Pediatr** 1988 Dec;113(6):1089-94

On the relationships between molecular conformation, affinity towards penicillin-binding proteins, and biological activity of penicillin G-sulfoxide. Beise F, et al. **Z Naturforsch [C]** 1988 Sep-Oct;43(9-10):656-64

[Penetration of antibiotics into second degree burned skin in rabbits] Yoshida T. **Hokkaido Igaku Zasshi** 1989 Jan; 64(1):18-30 (Eng. Abstr.) **(Jpn)**

[Studies on the maintenance of antimicrobial agents in aqueous humor following topical administration] Tomii T. **Nippon Ganka Gakkai Zasshi** 1988 May;92(5):850-6 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Stability of cefazolin sodium, cefoxitin sodium, ceftazidime, and penicillin G sodium in portable pump reservoirs. Stiles ML, et al. **Am J Hosp Pharm** 1989 Jul;46(7):1408-12

Development of an analytical method for penicillin G in bovine milk by liquid chromatography with ultraviolet-visible detection and confirmation by mass spectrometric detection. Tyczkowska K, et al. **J Chromatogr** 1989 May 5;490(1):101-13

Effect of disc moistening method on Bacillus stearothermophilus disc assay zone diameters. Ryan JJ, et al. **J Dairy Sci** 1988 Sep;71(9):2384–7

BLOOD

A rapid method for the determination of benzylpenicillin in serum by reversed-phase HPLC. Soto-Otero R, et al. **Biomed Chromatogr** 1987;2(4):177–9

Serum levels of cloxacillin and benzylpenicillin in adults undergoing open-heart surgery. Aberg B, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(1):69–73

[Benzylpenicillin levels in the serum and bone tissue of the lower jaw in patients with chronic traumatic osteomyelitis after intraosseous and intramuscular administration] Borodin IuN. **Antibiot Khimioter** 1988 Sep;33(9):694–6 (Eng. Abstr.) **(Rus)**

CEREBROSPINAL FLUID

Penicillin concentrations in cerebrospinal fluid (CSF) during repository treatment regimen for syphilis. van der Valk PG, et al. **Genitourin Med** 1988 Aug;64(4):223–5

IMMUNOLOGY

A dot immunobinding assay for penicillin specific antibodies: allergic diagnosis and prediction. Daxun Z, et al. **Asian Pac J Allergy Immunol** 1989 Jun;7(1):23–8

Drug–protein conjugates—XVII. The effect of storage on the antigenicity and immunogenicity of benzylpenicillin in the rat. Christie G, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4121–8

Observation of antipenicillin antibody. Lan JC, et al. **Chin Med J [Engl]** 1988 May;101(5):373–6

Disposition and immunogenicity of penicillin in the rabbit. Christie G, et al. **Int Arch Allergy Appl Immunol** 1989; 89(2–3):162–8

[Antigenicity of penicillin G in the guinea pig] Nagatahira R, et al. **Jikken Dobutsu** 1989 Apr;38(2):147–50 (Eng. Abstr.) **(Jpn)**

[Allergy to penicillin. Observations on patients with clinical and immunologic discordance treated with beta lactams] Castrejón I, et al. **Rev Alerg Mex** 1988 Sep–Oct;35(4):79–82 (Eng. Abstr.) **(Spa)**

METABOLISM

Identification of lysine residue 199 of human serum albumin as a binding site for benzylpenicilloyl groups. Yvon M, et al. **FEBS Lett** 1988 Nov 7;239(2):237–40

The second peptidoglycan hydrolase of Streptococcus faecium ATCC 9790 covalently binds penicillin. Dolinger DL, et al. **J Bacteriol** 1989 Aug;171(8):4355–61

The effect of drug-specific active immunization on digoxin and benzylpenicillin disposition in the bile duct–cannulated rat. Johnston PC, et al. **J Pharm Pharmacol** 1988 Nov; 40(11):771–5

PHARMACOKINETICS

Influence of the local tolerance on the pharmokinetics of two penicillin G preparations in cattle and swine. Luthman J, et al. **Acta Vet Scand** 1988;29(2):199–206

Effect of experimental synovitis on disposition of penicillin and oxytetracycline in neonatal calves. Guard CL, et al. **Cornell Vet** 1989 Apr;79(2):161–71

Pharmacokinetics of benzathine penicillin G: serum levels during the 28 days after intramuscular injection of 1,200,000 units. Kaplan EL, et al. **J Pediatr** 1989 Jul;115(1):146–50

Facilitated transport of benzylpenicillin through the blood–brain barrier in rats. Suzuki H, et al. **J Pharmacobiodyn** 1989 Mar;12(3):182–5

The concentration of penicillin in bovine conjunctival sac fluid as it pertains to the treatment of Moraxella bovis infection. (I) Subconjunctival injection. Abeynayake P, et al. **J Vet Pharmacol Ther** 1989 Mar;12(1):25–30

Concentrations of sulphadimidine, oxytetracycline and penicillin G in serum, synovial fluid and tissue cage fluid after parenteral administration to calves. Bengtsson B, et al. **J Vet Pharmacol Ther** 1989 Mar;12(1):37–45

Pseudoanaphylaxis: two case studies [letter] Richardson CE. **Milit Med** 1988 Oct;153(10):537

[Effect of sulfalene and furosemide on benzylpenicillin kinetics in rats with aseptic inflammation] Agapitova IV, et al. **Antibiot Khimioter** 1988 Dec;33(12):917–21 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Interaction between cell wall synthesis inhibitors and human granulocytes and monocytes. van den Broek PJ, et al. **Acta Paediatr Hung** 1988–89;29(1–2):163–5

Antibacterial properties of (2,3)-alpha- and (2,3)-beta-methylene analogs of penicillin G. Christenson JG, et al. **Antimicrob Agents Chemother** 1988 Jul; 32(7):1005–11

Postantibiotic effect of penicillin plus gentamicin versus Enterococcus faecalis in vitro and in vivo. Hessen MT, et al. **Antimicrob Agents Chemother** 1989 May;33(5):608–11

Degree and stability of tolerance to penicillin in Streptococcus pyogenes. Michel MF, et al. **Eur J Clin Microbiol Infect Dis** 1989 Mar;8(3):225–32

Genetic diversity of penicillin G-resistant Neisseria meningitidis from Spain. Mendelman PM, et al. **Infect Immun** 1989 Apr;57(4):1025–9

Tolerance to penicillin in streptococci of viridans group. Powley L, et al. **J Clin Pathol** 1989 Jan;42(1):77–80

Interaction between benzylpenicillin and thiopental in the central nervous system of the male rat. Schliamser SE, et al. **Pharmacol Toxicol** 1989 Feb;64(2):222–7

High-level penicillin-resistant gonococcal infections in Port Elizabeth. Meiring JA, et al. **S Afr Med J** 1989 Feb 4; 75(3):118–9

Comparison of in vivo and in vitro activities of antibiotics with different modes of action against a tolerant and a non-tolerant Staphylococcus aureus strain. Hoogeterp JJ, et al. **Scand J Infect Dis** 1989;21(1):95–101

[In vitro activity of penicillin G and amoxicillin against 14 strains of Streptococcus milleri] Berardi-Grassias L, et al. **Pathol Biol (Paris)** 1988 Jun;36(5 Pt 2):632–4 (Eng. Abstr.) **(Fre)**

[Studies on determination of minimum bactericidal concentrations of penicillin-G for beta-hemolytic streptococci] Takizawa Y, et al. **Kansenshogaku Zasshi** 1989 May;63(5):457–62 (Eng. Abstr.) **(Jpn)**

[Synergistic action of combinations of penicillin and perhydroacridine derivatives] Chelysheva GM. **Antibiot Khimioter** 1988 Aug;33(8):587–90 (Eng. Abstr.) **(Rus)**

POISONING

[Morphological changes in the hippocampus and cortex of the rat during status epilepticus induced by penicillin] Morales Bejarano A, et al. **Arch Neurobiol (Madr)** 1988 May–Jun;51(3):159–66 (Eng. Abstr.) **(Spa)**

THERAPEUTIC USE

Possible penicillin treatment failure in primary syphilis. George D, et al. **Ala J Med Sci** 1988 Oct;25(4):427–9

Persistence of neurosyphilis despite multiple treatment regimens. Whiteside CM. **Am J Med** 1989 Aug;87(2):225–7

How much penicillin cures early syphilis? Musher DM. **Ann Intern Med** 1988 Dec 1;109(11):849–51 (14 ref.)

Cefotaxime versus penicillin–chloramphenicol in purulent meningitis: a controlled single-blind clinical trial. Haffejee IE. **Ann Trop Paediatr** 1988 Dec;8(4):225–9

Myonecrosis of the abdominal wall, complicating radical hysterectomy. Giamarellou H. **Chemioterapia** 1987 Jun;6(2 Suppl):616–8

Comparative study of ceftriaxone and benzathine penicillin G in the treatment of primary and secondary syphilis. Katsambas A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):549–50

Comparison of cefotetan versus combination therapy in peritonitis and serious intra-abdominal sepsis. Scott SD, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):475–6

Prevention of pneumonia in an intensive care unit: a randomized multicenter clinical trial. Intensive Care Unit Group of Infection Control. Mandelli M, et al. **Crit Care Med** 1989 Jun;17(6):501–5

High-dose intravenous penicillin G does not prevent further progression in early neurological manifestation of Lyme borreliosis. Kohler J, et al. **Infection** 1989 Jul–Aug; 17(4):216–7

Treatment of a calf with Clostridium chauvoei infection. Hall KE. **J Am Vet Med Assoc** 1989 Jan 15;194(2):272

Incidence and control of subclinical mastitis in intensively managed ewes. McCarthy FD, et al. **J Anim Sci** 1988 Nov; 66(11):2715–21

A comparison of double beta-lactam combinations with netilmicin/ureidopenicillin regimens in the empirical therapy of febrile neutropenic patients. Kibbler CC, et al. **J Antimicrob Chemother** 1989 May;23(5):759–71

Antibiotic treatment of mastitis: comparison of intramammary and intramammary plus intramuscular therapies. Owens WE, et al. **J Dairy Sci** 1988 Nov; 71(11):3143–7

Effect of tissue-type plasminogen activator (t-PA) on the treatment with benzylpenicillin of rabbits with experimental Streptococcus sanguis endocarditis. Buiting AG, et al. **J Infect Dis** 1989 Apr;159(4):780–4

Effectiveness of benzathine penicillin regimen in the treatment of syphilis in pregnancy. Phaosavasdi S, et al. **J Med Assoc Thai** 1989 Feb;72(2):101–8

Central nervous system involvement in early and late syphilis: the problem of asymptomatic neurosyphilis. Wolters EC, et al. **J Neurol Sci** 1988 Dec;88(1–3):229–39

Thoracic, abdominal, and vertebral actinomycosis. Diagnosis and long-term therapy in three dogs. Edwards DF, et al. **J Vet Intern Med** 1988 Oct–Dec;2(4):184–91

Trial of co-trimoxazole versus procaine penicillin with ampicillin in treatment of community-acquired pneumonia in young Gambian children. Campbell H, et al. **Lancet** 1988 Nov 19;2(8621):1182–4

Prevention of neonatal group B streptococcal disease: intrapartum detection and chemoprophylaxis of heavily colonized parturients. Tuppurainen N, et al. **Obstet Gynecol** 1989 Apr;73(4):583–7

Failure of penicillin prophylaxis in laboratory acquired leptospirosis. Gilks CF, et al. **Postgrad Med J** 1988 Mar; 64(749):236–8

Clinical trial of three therapeutic regimens for bovine mastitis. Jarp J, et al. **Vet Rec** 1989 Jun 17;124(24):630–4

[Infections of the parapharyngeal area as complication of a laryngitis (letter)] Lindner JG. **Ned Tijdschr Geneeskd** 1988 Dec 10;132(50):2296 **(Dut)**

[Meningo-radiculitis in Lyme disease resistant to penicillin G (letter)] Gourmelen O, et al. **Presse Med** 1989 Mar 18; 18(11):584 **(Fre)**

[How are neurologic manifestations of Lyme borreliosis treated?] Pfister HW. **Nervenarzt** 1988 Nov;59(11):687–9 (21 ref.) **(Ger)**

[Pneumococcal infections in childhood—meningitis. 2: Discussion of the report on 58 cases and literature review] Handrick W, et al. **Padiatr Grenzgeb** 1988;27(4):287–94 (74 ref.) (Eng. Abstr.) **(Ger)**

[Penicillin G in the treatment of pneumococcus meningitis. Current importance] do Carmo G, et al. **Acta Med Port** 1988 Jan–Feb;1(1):33–6 (Eng. Abstr.) **(Por)**

[The level of penicillin in the blood serum during treatment of gonococcal infection with various doses of bicillin-3 and its combination with etamid] Budiev AIu, et al. **Vestn Dermatol Venerol** 1989;(3):74–5 (Eng. Abstr.) **(Rus)**

[Usefulness of combined benzathine penicillin in the treatment of streptococcal pharyngotonsillitis] Rodríguez RS, et al. **Bol Med Hosp Infant Mex** 1988 Dec; 45(12):797–802 (Eng. Abstr.) **(Spa)**

TOXICITY

Comparative neurotoxicity of benzylpenicillin, imipenem/cilastatin and FCE 22101, a new injectible penem. Schliamser SE, et al. **J Antimicrob Chemother** 1988 Nov;22(5):687–95

Neurotoxicity of beta-lactam antibiotics. Experimental kinetic and neurophysiological studies. Schliamser SE. **Scand J Infect Dis Suppl** 1988;55:1–61

[Acute toxicity of penicillin G and OTC (oxytetracycline) and the products of their thermal degradation] Kiszczak L, et al. **Rocz Panstw Zakl Hig** 1988;39(4):314–8 (Eng. Abstr.) **(Pol)**

[Subchronic toxicity of penicillin G and products of its thermal degradation after peroral administration] Tropiło J, et al. **Rocz Panstw Zakl Hig** 1988;39(5):389–95 (Eng. Abstr.) **(Pol)**

URINE

The tubular excretion of benzylpenicillin in patients with cystic fibrosis. Bins JW, et al. **Br J Clin Pharmacol** 1989 Mar;27(3):291–4

PENICILLIN G, BENZATHINE see under **PENICILLIN G**

PENICILLIN G, PROCAINE see under **PENICILLIN G**

PENICILLIN, METHYLPHENYLISOXAZOLYL see **OXACILLIN**

PENICILLIN, PHENOXYMETHYL

ADMINISTRATION & DOSAGE

Failure of once-daily penicillin V therapy for streptococcal pharyngitis. Gerber MA, et al. **Am J Dis Child** 1989 Feb; 143(2):153–5

Twice-daily therapy for strep? [letter] Gill EC. **Am J Dis Child** 1989 Sep;143(9):997

Neonatal group B streptococcal osteomyelitis and suppurative arthritis. Outpatient therapy. Perkins MD, et al. **Clin Pediatr (Phila)** 1989 May;28(5):229–30

ADVERSE EFFECTS

Successful use of aztreonam in a patient who failed oral penicillin desensitization. Loria RC, et al. **J Allergy Clin Immunol** 1989 Apr;83(4):735–7

ANALOGS & DERIVATIVES

Spectrophotometric assay of hydroxylated by-products in penicillin V fermentations and its application in screening of mutant penicillin producer strains on agar media. Palotás B, et al. **Anal Biochem** 1989 Jun;179(2):288–90

Influence of cefaclor, phenethicillin, co-trimoxazole and doxycycline on colonization resistance in healthy volunteers. Vollaard EJ, et al. **J Antimicrob Chemother** 1988 Nov;22(5):747–58

Five days versus one day of penicillin as prophylaxis in elective neurosurgical operations. Cartmill TD, et al. **J Hosp Infect** 1989 Jul;14(1):63–8

METABOLISM

Spectrophotometric assay of hydroxylated by-products in penicillin V fermentations and its application in screening of mutant penicillin producer strains on agar media. Palotás B, et al. **Anal Biochem** 1989 Jun;179(2):288–90

Kinetic characterization of the acyl-enzyme mechanism for beta-lactamase I. Martin MT, et al. **Biochem J** 1988 Sep 15;254(3):923–5

[Comparative study of the penetration of penicillin V, amoxicillin, cefaclor and josamycin in the tonsils] Bizet C, et al. **Pathol Biol (Paris)** 1989 Apr;37(4):273–5 (Eng. Abstr.) **(Fre)**

THERAPEUTIC USE

Recurrent and penicillin V-resistant otitis media. A treatment

study with amoxycillin/clavulanate and cefaclor. Jacobsson S, et al. **Acta Otolaryngol (Stockh)** 1988 Sep–Oct; 106(3–4):171–7
Early or late start of treatment in acute otitis media. A comparative study. Harder H, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:41–2
Prophylactic penicillin for intraoral wounds. Steele MT, et al. **Ann Emerg Med** 1989 Aug;18(8):847–52
Penicillin and clindamycin therapy in recurrent tonsillitis. Effect of microbial flora. Foote PA Jr, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jul;115(7):856–9
Untreated asymptomatic bacteriuria in girls: II—Effect of phenoxymethylpenicillin and erythromycin given for intercurrent infections. Hansson S, et al. **BMJ** 1989 Apr 1;298(6677):856–9
Double-blind comparison of spiramycin and phenoxymethylpenicillin in treatment of upper respiratory tract infections (tonsillitis and rhinosinusitis). Roenning Arnesen A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):451–2
Cefadroxil versus penicillin in the treatment of streptococcal tonsillopharyngitis. Milatovic D, et al. **Eur J Clin Microbiol Infect Dis** 1989 Apr;8(4):282–8
A prospective double-blind evaluation of penicillin versus clindamycin in the treatment of odontogenic infections. Gilmore WC, et al. **J Oral Maxillofac Surg** 1988 Dec; 46(12):1065–70
A prospective randomized trial on efficacy of antibiotic prophylaxis in asymptomatic teeth with pulpal necrosis and associated periapical pathosis. Abbott AA, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec;66(6):722–33 (49 ref.)
Variation in use of penicillin for treatment of sinusitis in general practice. Bro F, et al. **Scand J Prim Health Care** 1988 Sep;6(3):175–8

TOXICITY

Two-year toxicity and carcinogenicity studies of ampicillin trihydrate and penicillin VK in rodents. Dunnick JK, et al. **Fundam Appl Toxicol** 1989 Feb;12(2):252–7
Toxicity studies of amphetamine sulfate, ampicillin trihydrate, codeine, 8-methoxypsoralen, alpha-methyldopa, penicillin VK and propantheline bromide in rats and mice. Dunnick JK, et al. **Toxicology** 1989 Jun 1;56(2):123–36

PENICILLIN RESISTANCE

Successful oral treatment of methicillin-resistant Staphylococcus aureus osteomyelitis using ciprofloxacin. Westblom TU, et al. **Am J Med** 1988 Dec;85(6):884
Methicillin-resistant staphylococcal mastitis. Kalstone C. **Am J Obstet Gynecol** 1989 Jul;161(1):120
Morbidity and mortality of an endemic pathogen: methicillin-resistant Staphylococcus aureus. Hunt JL, et al. **Am J Surg** 1988 Dec;156(6):524–8
High-level penicillin resistance among isolates of enterococci. Implications for treatment of enterococcal infections. Bush LM, et al. **Ann Intern Med** 1989 Apr 1; 110(7):515–20
Methicillin-resistant staphylococci: genetics and mechanisms of resistance. Hackbarth CJ, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):991–4 (57 ref.)
Methicillin-resistant staphylococci: detection methods and treatment of infections. Hackbarth CJ, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):995–9 (97 ref.)
Surveillance of MRS in Poland. Borowski J. **Br J Clin Pract Symp Suppl** 1988 Feb;57:72–3
Therapeutic approach to methicillin-resistant Staphylococcus aureus (MRSA) infections: vancomycin update. Gennery BA, et al. **Br J Clin Pract Symp Suppl** 1988 Feb;57:100–1 (3 ref.)
Survey on methicillin/oxacillin-resistant staphylococci (MORS) in Hungary. Thege MK, et al. **Br J Clin Pract Symp Suppl** 1988 Feb;57:66–71
Antibiotic resistance of Staphylococcus aureus isolates from community acquired soft tissue infections in Bulawayo. Oliver MJ, et al. **Cent Afr J Med** 1989 Feb;35(2):327–9
Hospital-acquired infection with methicillin-resistant and methicillin-sensitive staphylococci. Law MR, et al. **Epidemiol Infect** 1988 Dec;101(3):623–9
Penicillin-resistant beta-lactamase producing Neisseria meningitidis in Spain [letter] Fontanals D, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jan;8(1):90–1
Immunological detection of penicillin-binding protein 2' in clinical isolates of methicillin-resistant Staphylococcus aureus and Staphylococcus epidermidis [published erratum appears in FEMS Michrobiol Lett 1989 Jul 15;51(1):246] O'Hara DM, et al. **FEMS Microbiol Lett** 1989 Jan 1; 48(1):97–103
Effect of beta-lactamase inhibitor on anaerobic isolates of Calcutta. Chakraborti CK, et al. **Indian J Med Res** 1988 May;87:426–8
Mecillinam: a potential anti-shigella agent [letter] Bhan MK, et al. **Indian Pediatr** 1988 Aug;25(8):804–5
Susceptibility of penicillin-sensitive and -resistant strains of Streptococcus pneumoniae to new antimicrobial agents, including daptomycin, teicoplanin, cefpodoxime and quinolones. Appelbaum PC, et al. **J Antimicrob Chemother** 1989 Apr;23(4):509–16
Adaptation of methicillin-resistant Staphylococcus aureus during antibiotic therapy. Menzies RE, et al. **J Antimicrob Chemother** 1989 Jun;23(6):923–7
Expression and inducibility in Staphylococcus aureus of the mecA gene, which encodes a methicillin-resistant S. aureus-specific penicillin-binding protein. Ubukata K, et al. **J Bacteriol** 1989 May;171(5):2882–5
The epidemiology of methicillin-resistant Staphylococcus aureus in a burn center. Heggers JP, et al. **J Burn Care Rehabil** 1988 Nov–Dec;9(6):610–2
Variation in penicillin-binding protein patterns of penicillin-resistant clinical isolates of pneumococci. Markiewicz Z, et al. **J Clin Microbiol** 1989 Mar; 27(3):405–10
Endocarditis caused by relatively penicillin-resistant Stomatococcus mucilaginosus. Pinsky RL, et al. **J Clin Microbiol** 1989 Jan;27(1):215–6
Rapid chemiluminescent nucleic acid assays for detection of TEM-1 beta-lactamase-mediated penicillin resistance in Neisseria gonorrhoeae and other bacteria. Sanchez-Pescador R, et al. **J Clin Microbiol** 1988 Oct; 26(10):1934–8
Enterococci highly resistant to penicillin and ampicillin: an emerging clinical problem? Sapico FL, et al. **J Clin Microbiol** 1989 Sep;27(9):2091–5
Plasmid analysis of 219 methicillin-resistant Staphylococcus aureus strains with uncommon profiles isolated in Lisbon. Cristino JA, et al. **J Hosp Infect** 1989 Feb;13(2):133–41
The emergence of methicillin-resistant Staphylococcus aureus infections in an Israeli hospital. Finkelstein R, et al. **J Hosp Infect** 1989 Jul;14(1):55–61
Strategies for molecular characterisation of methicillin- and gentamicin-resistant Staphylococcus aureus in a Canadian nosocomial outbreak. Bigelow N, et al. **J Med Microbiol** 1989 Sep;30(1):51–8
Penicillin tolerance among oral streptococci. Holbrook WP, et al. **J Med Microbiol** 1988 Sep;27(1):17–22
Community-acquired pneumonia and septic arthritis caused by penicillin-resistant pneumococci. Fullerton RC, et al. **J Tenn Med Assoc** 1989 Jan;82(1):13–4
Increase in resistance to penicillin in pneumococci in Spain [letter] Casal J, et al. **Lancet** 1989 Apr 1;1(8640):735
World-wide antibiotic resistance in methicillin-resistant Staphylococcus aureus. Maple PA, et al. **Lancet** 1989 Mar 11;1(8637):537–40
Antibiotic resistance in Staphylococcus aureus [editorial] Marples RR. **Med J Aust** 1989 Jan 16;150(2):58–9
A comparison of disc agar diffusion and agar dilution for the detection of methicillin resistant staphylococci. Diller DL, et al. **Methods Find Exp Clin Pharmacol** 1988 Nov; 10(11):695–7
Beta-lactam antibiotics and beta-lactamases: two sides of a continuing story. Richmond MH. **Rev Infect Dis** 1979 Jan–Feb;1(1):30–8 (31 ref.)
Penicillinase-producing Neisseria gonorrhoeae in various seaport cities of Latin America. Escamilla J, et al. **Sex Transm Dis** 1988 Jul–Sep;15(3):141–3
Penicillinase-producing Neisseria gonorrhoeae in Dade County, Florida: phenotypic characterization of isolates from 1983, 1984, and 1986. Zenilman JM, et al. **Sex Transm Dis** 1988 Jul–Sep;15(3):158–63
Disseminated infection caused by penicillin-resistant gonococci in two Jamaicans. Venkatesh S, et al. **West Indian Med J** 1988 Dec;37(4):240–2
[Staphylococcus species: differentiation in lyogroups and incidence of methicillin resistance in various species] Renzini V, et al. **Nuovi Ann Ig Microbiol** 1988 May–Jun; 39(3):271–81 (Eng. Abstr.) **(Ita)**
[Penicillin insensitive and resistant Streptococcus pneumoniae infection in children] Sato K, et al. **Kansenshogaku Zasshi** 1989 Mar;63(3):189–94 (Eng. Abstr.) **(Jpn)**
[Overcoming the penicillin resistance of the causative agent of gonorrhea] Glozman VN. **Vestn Dermatol Venerol** 1988; (10):57–8 (Eng. Abstr.) **(Rus)**
[Experimental phages for differentiating nontypable methicillin-resistant Staphylococcus aureus] Zueva EA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Sep;(9):19–24 (Eng. Abstr.) **(Rus)**
[Neisseria meningitidis with low sensitivity to penicillin] Sanfeliú Sala I, et al. **An Esp Pediatr** 1988 Aug;29(2):113–6 (Eng. Abstr.) **(Spa)**
[Recent isolation of Neisseria meningitidis with decreased sensitivity to penicillin] Fernández Viladrich P. **Med Clin (Barc)** 1988 Sep 10;91(7):261–3 **(Spa)**
[Sepsis caused by Neisseria meningitidis resistant to penicillin and beta lactamase producer (letter)] Fontanals D, et al. **Med Clin (Barc)** 1989 Apr 1;92(12):477 **(Spa)**
[Recent isolation of Neisseria meningitidis with decreased sensitivity to penicillin] Latorre C, et al. **Med Clin (Barc)** 1988 Sep 10;91(7):241–3 (Eng. Abstr.) **(Spa)**
[Infections caused by penicillin-resistant pneumococci] Gudiol F. **Rev Clin Esp** 1989 Feb;184(3):147–50 (26 ref.) **(Spa)**
[Isolation of beta lactamase enzyme in strains of Staphylococcus aureus with the method of starch paper] Prat Lariot A, et al. **Rev Cubana Med Trop** 1989 Jan–Apr; 41(1):114–8 (Eng. Abstr.) **(Spa)**
[Sensitivity of Streptococcus pneumonias and its clinical importance] Juliet C, et al. **Rev Med Chil** 1987 Sep; 115(9):852–7 (Eng. Abstr.) **(Spa)**

GENETICS

Methicillin-resistant staphylococci. Chambers HF. **Clin Microbiol Rev** 1988 Apr;1(2):173–86 (177 ref.)
Conjugative co-transfer of penicillin tolerance and high-level resistance to kanamycin in group A streptococci. Lakshmi TM, et al. **FEMS Microbiol Lett** 1989 Feb;48(3):329–33
Genetic diversity of penicillin G-resistant Neisseria meningitidis from Spain. Mendelman PM, et al. **Infect Immun** 1989 Apr;57(4):1025–9
Genetics of methicillin resistance in Staphylococcus aureus. Berger-Bächi B. **J Antimicrob Chemother** 1989 May; 23(5):671–3
The expression in Staphylococcus aureus of cloned DNA encoding methicillin resistance. Inglis B, et al. **J Gen Microbiol** 1988 Jun;134 (Pt 6):1465–9
Amplification of a section of chromosomal DNA in methicillin-resistant Staphylococcus aureus following growth in high concentrations of methicillin. Matthews PR, et al. **J Gen Microbiol** 1988 Jun;134 (Pt 6):1455–64
Transformation of Streptococcus sanguis to intrinsic penicillin resistance. Zito ET, et al. **J Gen Microbiol** 1988 May;134 (Pt 5):1237–49
Penicillin-binding protein families: evidence for the clonal nature of penicillin resistance in clinical isolates of pneumococci. Jabes D, et al. **J Infect Dis** 1989 Jan; 159(1):16–25
New genetic location of gentamicin-resistance in methicillin-resistant Staphylococcus aureus [letter] Rahman M, et al. **Lancet** 1988 Nov 26;2(8622):1256
Extensive re-modelling of the transpeptidase domain of penicillin-binding protein 2B of a penicillin-resistant South African isolate of Streptococcus pneumoniae. Dowson CG, et al. **Mol Microbiol** 1989 Jan;3(1):95–102
Detection and interspecies-transformation of a beta-lactamase-encoding plasmid from Pasteurella haemolytica. Schwarz S, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Mar; 270(4):462–9

PENICILLIN V see PENICILLIN, PHENOXYMETHYL

PENICILLINASE

ANALYSIS

A comparison of alkaline phosphatase, beta-galactosidase, penicillinase and peroxidase used as labels for progesterone determination in milk by heterologous microtitre plate enzymeimmunoassay. Sauer MJ, et al. **J Steroid Biochem** 1989 Sep;33(3):423–31

ANTAGONISTS & INHIBITORS

Ultrasonic disintegration of bacteria may lead to irreversible inactivation of beta-lactamase. Mett H, et al. **J Antimicrob Chemother** 1988 Sep;22(3):293–8

BIOSYNTHESIS

Heterogeneity of class I beta-lactamase expression in clinical isolates of Pseudomonas aeruginosa. Sanders CC, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1893–5
Inducing capacity and selection of resistant variants of cefpirome (HR 810) in comparison with other beta-lactam compounds. Stobberingh EE, et al. **Chemotherapy** 1988; 34(6):490–6
Penicillin-resistant beta-lactamase producing Neisseria meningitidis in Spain [letter] Fontanals D, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jan;8(1):90–1
Genotypes and phenotypes of beta lactamase producing strains of Neisseria gonorrhoeae from African countries. Falk ES, et al. **Genitourin Med** 1988 Aug;64(4):226–32
Activity of temocillin and other penicillins against beta-lactamase-inducible and -stably derepressed enterobacteria. Yang Y, et al. **J Antimicrob Chemother** 1988 Sep;22(3):299–306
Analysis of an outbreak of penicillinase-producing Neisseria gonorrhoeae in Rhode Island, 1987. Debuono BA, et al. **J Clin Microbiol** 1989 Sep;27(9):2125–7
Evaluation of a method for rapid detection of penicillinase-producing Neisseria gonorrhoeae in urethral exudates. Herve VM, et al. **J Clin Microbiol** 1989 Jan; 27(1):227–8
Fluorescent-antibody-negative penicillinase-producing Neisseria gonorrhoeae. Walton DT. **J Clin Microbiol** 1989 Aug;27(8):1885–6
Adult penicillinase-producing gonococcal keratoconjunctivitis. Saad N, et al. **Med J Aust** 1988 Dec 5–19;149(11–12):710–1
A cluster of cases of penicillinase-producing Neisseria gonorrhoeae in an adolescent detention center. Alcabes P, et al. **N Y State J Med** 1988 Sep;88(9):495–6
Norfloxacin in the treatment of gonorrhea due to penicillinase and non-penicillinase producing Neisseria gonorrheae: a review. Lee CT, et al. **Scand J Infect Dis Suppl** 1988; 56:49–54 (30 ref.)
Penicillinase-producing Neisseria gonorrhoeae in Dade County, Florida: phenotypic characterization of isolates from 1983, 1984, and 1986. Zenilman JM, et al. **Sex Transm Dis** 1988 Jul–Sep;15(3):158–63
[Penicillinase-producing Neisseria gonorrhoeae isolated in Lisbon 1982–1987] Vaz Pato MV, et al. **Pathol Biol (Paris)** 1988 Jun;36(5 Pt 2):639–42 (Eng. Abstr.) **(Fre)**
[Ways of developing the first and second generation

biocatalysts for antibiotic production] Nys PS, et al. **Antibiot Khimioter** 1989 May;34(5):337–43 (Eng. Abstr.) **(Rus)**

[Sepsis caused by Neisseria meningitidis resistant to penicillin and beta lactamase producer (letter)] Fontanals D, et al. **Med Clin (Barc)** 1989 Apr 1;92(12):477 **(Spa)**

[Beta-lactamase-producing Neisseria gonorrhoeae and its antimicrobial susceptibility in Valdivia] Otth L, et al. **Rev Med Chil** 1987 Oct;115(10):956–9 (Eng. Abstr.) **(Spa)**

DIAGNOSTIC USE

Use of enzyme penicillinase as a marker for ELISA. Raghavan VP. **Hindustan Antibiot Bull** 1988 Feb–May; 30(1–2):44–7

GENETICS

The nucleotide sequence of the lipo-penicillinase gene of alkalophilic Bacillus sp. strain 170. Kato C, et al. **Arch Microbiol** 1989;151(2):91–4

Development of gene probes and evolutionary relationships of the PSE-4 bla gene to plasmid-mediated beta-lactamases of gram-negative bacteria. Boissinot M, et al. **Mol Cell Probes** 1989 Jun;3(2):179–88

Construction of miniplasmids from the 7.2-kb and 5.1-kb penicillinase-producing plasmids of Neisseria gonorrhoeae reveals two replication regions. Yeung KH, et al. **Plasmid** 1988 Nov;20(3):232–40

Plasmid-mediated resistance to third-generation cephalosporins caused by point mutations in TEM-type penicillinase genes. Sougakoff W, et al. **Rev Infect Dis** 1988 Jul–Aug;10(4):879–84

HISTORY

An enzyme from bacteria able to destroy penicillin. 1940 [classical article] Abraham EP, et al. **Rev Infect Dis** 1988 Jul–Aug;10(4):677–8

ISOLATION & PURIFICATION

Modified general affinity adsorbent for large-scale purification of penicillinases. Kiss L, et al. **J Chromatogr** 1988 Aug 31;448(1):109–16

[Isolation of beta lactamase enzyme in strains of Staphylococcus aureus with the method of starch paper] Prat Lariot A, et al. **Rev Cubana Med Trop** 1989 Jan–Apr; 41(1):114–8 (Eng. Abstr.) **(Spa)**

METABOLISM

Kinetic characterization of the acyl-enzyme mechanism for beta-lactamase I. Martin MT, et al. **Biochem J** 1988 Sep 15;254(3):923–5

Imipenem as substrate and inhibitor of beta-lactamases. Monks J, et al. **Biochem J** 1988 Jul 15;253(2):323–8

Accumulation of acyl-enzyme intermediates during turnover of penicillins by the class A beta-lactamase of Staphylococcus aureus PC1. Pratt RF, et al. **Biochem J** 1988 Sep 15;254(3):919–22

Conformational states of beta-lactamase: molten-globule states at acidic and alkaline pH with high salt. Goto Y, et al. **Biochemistry** 1989 Feb 7;28(3):945–52

Effects of inner-membrane-associated beta-lactamase on penicillin-binding protein assays. Study of stably derepressed Pseudomonas aeruginosa strains from experimental endocarditis. Parr TR Jr, et al. **Chemotherapy** 1988;34(6):478–83

Enzyme immunosorbent assay of prolactin with penicillinase as label. Shrivastav TG, et al. **Clin Chem** 1988 Nov; 34(11):2205–7

A study of synergism between cloxacillin and gentamicin on resistant staphylococci (penicillinase producing and gentamicin resistant). Coker AO. **East Afr Med J** 1989 Feb; 66(2):141–7

Effect of beta-lactamase inhibitor on anaerobic isolates of Calcutta. Chakraborti CK, et al. **Indian J Med Res** 1988 May;87:426–8

Penicillinase-producing Neisseria gonorrhoeae in various seaport cities of Latin America. Escamilla J, et al. **Sex Transm Dis** 1988 Jul–Sep;15(3):141–3

A penicillinase test incorporated in the rapid carbohydrate fermentation method for rapid detection of beta-lactamase producing Neisseria gonorrhoeae. Lesmana M, et al. **Southeast Asian J Trop Med Public Health** 1989 Mar; 20(1):147–51

PHARMACOLOGY

Bactericidal effect and regrowth of Streptococcus faecalis exposed to amoxicillin following beta-lactamase. Yourassowsky E, et al. **Chemotherapy** 1988;34(6):462–6

PHYSIOLOGY

Penicillinase-type of beta-lactamase responsible for the ampicillin resistance in Escherichia coli NTUH 9501-1. Lin JK, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Jan;88(1):1–7

PENICILLINS

Highly conformationally constrained halogenated 6-spiroepoxypenicillins as probes for the bioactive side-chain conformation of benzylpenicillin. Shute RE, et al. **J Comput Aided Mol Des** 1989 Jun;3(2):149–64

A study of the metal complexation behaviour of some penicillins, cephalosporins and their derivatives. Van Krimpen PC, et al. **Pharm Weekbl [Sci]** 1988 Dec 9; 10(6):259–66

Effects of corpus callosum stimulation on the morphology and frequency of epileptic bursts in the feline topical penicillin generalized model. Cukiert A, et al. **Stereotact Funct Neurosurg** 1989;52(1):18–25

[Synthesis and antibacterial activity of 6-azino- and 6 alpha-methoxy-6 beta-hydrazono-penicillins] Zhong YL, et al. **Yao Hsueh Hsueh Pao** 1988 Nov;23(11):820–4 (Eng. Abstr.) **(Chi)**

[The new penicillins] Borderon JC. **Pediatrie** 1988; 43(5):397–404 (20 ref.) (Eng. Abstr.) **(Fre)**

ADMINISTRATION & DOSAGE

In vitro susceptibility of bacteria to a ticarcillin-clavulanic acid combination. Sparks SE, et al. **Am J Vet Res** 1988 Dec;49(12):2038–40

Synergy between a non-neuroleptic thioxanthene stereo-isomer and penicillin in vivo. Kristiansen JE, et al. **APMIS** 1988 Dec;96(12):1079–84

Quinolones and penicillins incompatibility [letter] Janknegt R, et al. **DICP** 1989 Jan;23(1):91–2

Cross-reactivity between penicillins and cephalosporins: clinical and immunologic studies. Blanca M, et al. **J Allergy Clin Immunol** 1989 Feb;83(2 Pt 1):381–5

Chemical delivery systems for some penicillinase-resistant semisynthetic penicillins. Pop E, et al. **J Med Chem** 1989 Aug;32(8):1789–95

Single injection for treatment of community-acquired pneumonia [letter] Lamb WH. **Lancet** 1989 Feb 11; 1(8633):336–7

Vancomycin, ticarcillin, and amikacin compared with ticarcillin-clavulanate and amikacin in the empirical treatment of febrile, neutropenic children with cancer. Shenep JL, et al. **N Engl J Med** 1988 Oct 20;319(16):1053–8

Treating neurosyphilis [letter] Nitrini R. **West J Med** 1989 Feb;150(2):213

[Comparative study of a combination of amoxicillin and clavulanic acid and a combination of ticarcillin and clavulanic acid on 249 enterobacteria] Aubert G, et al. **Pathol Biol (Paris)** 1988 Jun;36(5 Pt 2):651–4 (Eng. Abstr.) **(Fre)**

[Clinical results with sulbactam/ampicillin in a multicenter study of 425 patients] Lode H, et al. **Med Klin** 1989 May 15;84(5):236–41 (Eng. Abstr.) **(Ger)**

[Oral penicillins. Pharmacodynamic and pharmacokinetic properties] Adam D, et al. **Med Monatsschr Pharm** 1989 Apr;12(4):117–22 (9 ref.) **(Ger)**

[Possibilities of increasing the effectiveness of antibiotics in surgical practice] Shevchuk MG, et al. **Klin Khir** 1989; (1):10–3 (Eng. Abstr.) **(Rus)**

[Acute streptococcal pharyngitis: oral or intramuscular treatment? (letter)] Lobos Bejarano JM, et al. **Med Clin (Barc)** 1989 May 6;92(17):677 **(Spa)**

ADVERSE EFFECTS

Pet food-derived penicillin residue as a potential cause of hypersensitivity myocarditis and sudden death. Markus CK, et al. **Am J Cardiol** 1989 May 1;63(15):1154–6

Penicillin anaphylaxis [letter] Gibson DE. **Am J Emerg Med** 1989 May;7(3):346

Three cases of fatal anaphylaxis to antibiotics in patients with prior histories of allergy to the drug. Hoffman DR, et al. **Ann Allergy** 1989 Feb;62(2):91–3

Penicillin allergy—a rare paediatric condition? Graff-Lonnevig V, et al. **Arch Dis Child** 1988 Nov; 63(11):1342–6

Immediate hypersensitivity reactions to penicillin and related antibiotics. Weiss ME, et al. **Clin Allergy** 1988 Nov; 18(6):515–40 (97 ref.)

Penicillin allergy, gas gangrene and casualty treatment regime [letter] Millar KN. **J R Army Med Corps** 1988 Oct; 134(3):156

Penicillin allergy in childhood. **Lancet** 1989 Feb 25; 1(8635):420 (14 ref.)

Skin test for penicillin hypersensitivity [letter; comment] Ackroyd JF. **Lancet** 1989 Feb 11;1(8633):335. **Comment on:** Lancet 1988 Nov 5;2(8619):1083

Penicillin allergy: a review. Arreaza EE. **Tex Med** 1989 Feb; 85(2):36–43 (25 ref.)

Penicillin allergy [editorial] Diaz J. **Tex Med** 1989 Feb; 85(2):8–9

[Penicillin allergy] Sirensen HT, et al. **Nord Med** 1989; 104(3):76–7,84 (Eng. Abstr.) **(Dan)**

[Penicillin allergy. Diagnosis and treatment] Jørgensen HS, et al. **Ugeskr Laeger** 1988 Oct 31;150(44):2674–8 **(Dan)**

[The kidney and synthetic penicillins, Apropos of 62 cases. Cooperative evaluation of French drug surveillance centers] Castot A, et al. **Therapie** 1988 Aug–Sep; 43(5):399–403 (Eng. Abstr.) **(Fre)**

[A clinical study of drug associated hemorrhagic colitis] Hayashi S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jun;85(6):1233–9 (Eng. Abstr.) **(Jpn)**

[Penicillin allergy—should the problem be silenced?] Andrew M. **Tidsskr Nor Laegeforen** 1989 Jun 20;109(17–18):1896–7 **(Nor)**

[Calcium antagonists in penicillin hypersensitivity] Blazhene AIu, et al. **Sov Med** 1988;(8):10–2 (Eng. Abstr.) **(Rus)**

[Lymphocyte transformation in allergy to penicillin] Aguilar Mézquita JE, et al. **Rev Alerg Mex** 1989 May–Jun; 36(3):117–23 (Eng. Abstr.) **(Spa)**

[Anaphylactic shock caused by penicillin. Presentation of a clinical case] Ortega Gómez H. **Rev Alerg Mex** 1989 Mar–Apr;36(2):72 **(Spa)**

ANALYSIS

HPLC of penicillin antibiotics. Margosis M. **Adv Chromatogr** 1989;28:333–62 (107 ref.)

Flow injection analysis as a diagnostic tool for development and testing of a penicillin sensor. Yerian TD, et al. **Anal Chem** 1988 Jul 1;60(13):1250–6

Iodimetric determination of penicillins by a triangle programmed flow-through titration technique. Fehér Z, et al. **Analyst** 1988 Jun;113(6):881–4

Determination of natural penicillins in fermentation media by high-performance liquid chromatography using pre-column derivatisation with 1-hydroxybenzotriazole. Shah AJ, et al. **Analyst** 1988 Aug;113(8):1197–200

Tandem mass spectrometric studies of the fragmentation of penicillins and their metabolites. Suwanrumpha S, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):381–6

Enzyme sensors based on a coated-wire electrode. Effects of buffer concentration and pH on the potentiometric response of penicillin sensor. Chen CW, et al. **Chem Pharm Bull (Tokyo)** 1988 Sep;36(9):3671–4

Colorimetric determination of amoxycillin in presence of penicillins and cephalosporins. Deshpande BS, et al. **Hindustan Antibiot Bull** 1988 Aug–Nov;30(3–4):72–6

Liquid chromatographic determination of penicillins by postcolumn degradation with sodium hypochlorite using an hollow-fibre membrane reactor. Haginaka J, et al. **J Chromatogr** 1988 Aug 26;447(2):365–72

[Ampicillin ion pair transport in comparison with the transport of other penicillins] Neubert R, et al. **Pharmazie** 1989 Jan;44(1):67–8 **(Ger)**

ANTAGONISTS & INHIBITORS

[Depression of penicillin-evoked seizure discharges of cerebrospinal neurons by magnesium ions] Kornilov OV, et al. **Patol Fiziol Eksp Ter** 1989 Mar–Apr;(2):43–5 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Glucokinase-deficient mutant of Penicillium chrysogenum is derepressed in glucose catabolite regulation of both beta-galactosidase and penicillin biosynthesis. Barredo JL, et al. **Antimicrob Agents Chemother** 1988 Jul;32(7):1061–7

Enzymatic synthesis of penicillins. Alonso MJ, et al. **J Antibiot (Tokyo)** 1988 Aug;41(8):1074–84

delta-(L-alpha-aminoadipyl)-L-cysteinyl-D-valine synthetase from Aspergillus nidulans. The first enzyme in penicillin biosynthesis is a multifunctional peptide synthetase. van Liempt H, et al. **J Biol Chem** 1989 Mar 5;264(7):3680–4

Amplification of the isopenicillin N synthetase gene in a strain of Penicillium chrysogenum producing high levels of penicillin. Smith DJ, et al. **Mol Gen Genet** 1989 Apr; 216(2–3):492–7

The biosynthesis of penicillins and cephalosporins. Baldwin JE, et al. **Nat Prod Rep** 1988 Apr;5(2):129–45 (102 ref.)

[How does a fungus make penicillin? Current research, trends in beta lactam antibiotics. Biosynthesis of penicillin and cephalosporin] Imming P. **Pharm Unserer Zeit** 1989 Jan; 18(1):20–4 **(Ger)**

[Ways of developing the first and second generation biocatalysts for antibiotic production] Nys PS, et al. **Antibiot Khimioter** 1989 May;34(5):337–43 (Eng. Abstr.) **(Rus)**

BLOOD

Facile plasma-catalysed degradation of penicillin alkyl esters but with no liberation of the parent penicillin. Nielsen NM, et al. **J Pharm Pharmacol** 1988 Jul;40(7):506–9

[The level of penicillin in the blood serum during treatment of gonococcal infection with various doses of bicillin-3 and its combination with etamid] Budiev AIu, et al. **Vestn Dermatol Venerol** 1989;(3):74–5 (Eng. Abstr.) **(Rus)**

CEREBROSPINAL FLUID

Penetration of cefoxitin into human cerebrospinal fluid: comparison with cefamandole, ampicillin, and penicillin. Liu C, et al. **Rev Infect Dis** 1979 Jan–Feb;1(1):127–31

CHEMICAL SYNTHESIS

Synthesis and biological activity of a series of piperazine-2,3-dione containing penicillins and 6 alpha-formamidopenicillins. I. Derivatives substituted at C(5) or C(6) of the piperazine ring. Davies DT, et al. **J Antibiot (Tokyo)** 1989 Mar;42(3):367–73

Semisynthetic penicillins and cephalosporins. Diaconu E, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Apr–Jun; 92(2):359–60

[Studies on aminothiazo peniciliate derivatives] Shen ZW, et al. **Yao Hsueh Hsueh Pao** 1988;23(9):662–6 (Eng. Abstr.) **(Chi)**

HISTORY

Milestones in clinical pharmacology. Penicillin 1941. Farrar GE Jr. **Clin Ther** 1989 Jul–Aug;11(4):555–6

Wartime bureaucracy and penicillin allocation: the Committee on Chemotherapeutic and Other Agents, 1942–44. Adams DP. **J Hist Med Allied Sci** 1989 Apr; 44(2):196–217

[The history of dermatology. "Sulfonamides and penicillins"—in memory of the appearance of this book and in memory of Walther Schönfeld, who was born 100 years ago] Schirren C. **Z Hautkr** 1988 Nov 15;63(11):890 **(Ger)**

METABOLISM

A survey of the kinetic parameters of class C beta-lactamases. Penicillins. Galleni M, et al. **Biochem J** 1988 Oct 1; 255(1):119–22

Accumulation of acyl-enzyme intermediates during turnover of penicillins by the class A beta-lactamase of Staphylococcus aureus PC1. Pratt RF, et al. **Biochem J** 1988 Sep 15;254(3):919–22

Penicillin-recognizing enzymes. Frère JM, et al. **Biochem Soc Trans** 1988 Dec;16(6):934–8

Binding of clavulanic acid to the penicillin-binding proteins of Aeromonas hydrophila. Gonzalez-Lama Z, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):56–7

Protection of piperacillin and ticarcillin from beta-lactamase hydrolysis by tazobactam (YTR-830) and clavulanic acid [letter] Diver JM, et al. **J Antimicrob Chemother** 1989 Jul; 24(1):89–92

Multiple isoelectric forms of bacterial penicillin-binding proteins: artefacts or genuine cellular components? Shohayeb M, et al. **J Antimicrob Chemother** 1988 Aug; 22(2):113–8

Penicillin-binding protein families: evidence for the clonal nature of penicillin resistance in clinical isolates of pneumococci. Jabes D, et al. **J Infect Dis** 1989 Jan; 159(1):16–25

The penicillin binding proteins of the genus Haemophilus. Mendelman PM, et al. **J Med Microbiol** 1988 Oct; 27(2):95–8

Plasma protein binding of an N-pyrrolyl derivative penicillin in several mammalian species. Teran MT, et al. **Res Vet Sci** 1988 Jul;45(1):132–3

[Competitive binding of various beta-lactam compounds to penicillin-binding proteins of Escherichia coli] Subbotina NA, et al. **Antibiot Khimioter** 1989 May;34(5):358–65 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Simulation of human serum pharmacokinetics of ticarcillin-clavulanic acid and ceftazidime in rabbits, and efficacy against experimental Klebsiella pneumoniae meningitis. Mizen L, et al. **Antimicrob Agents Chemother** 1989 May;33(5):693–9

Ticarcillin plus clavulanic acid: pharmacokinetic study in renal failure. Stathakis C, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):265–7

The use of in vitro kinetic models in the evaluation of beta-lactamase inhibitors. White A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):202–4

Excretion of penicillins and cephalexin in bovine milk following intramammary administration. Moretain JP, et al. **Food Addit Contam** 1989 Jan–Mar;6(1):79–89

Biliary elimination of ticarcillin plus clavulanic acid (Claventin): experimental and clinical study. Brogard JM, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Mar; 27(3):135–44

Evaluation of antibiotic diffusion into cardiac vegetations by quantitative autoradiography. Cremieux AC, et al. **J Infect Dis** 1989 May;159(5):938–44

The concentration of penicillin in bovine conjunctival sac fluid as it pertains to the treatment of Moraxella bovis infection. (II) Topical application. Abeynayake P, et al. **J Vet Pharmacol Ther** 1989 Mar;12(1):31–6

PHARMACOLOGY

Comparative in vitro activity of temocillin against clinical isolates of Enterobacteriaceae. Van Noyen R, et al. **Acta Clin Belg** 1988;43(6):449–51

Penicillin susceptibility of Streptococcus pneumoniae in a private pediatric hospital in Houston, Texas. Caraway N, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):1111–2

Susceptibility to cephalosporins of penicillin-susceptible and penicillin-resistant strains of Neisseria gonorrhoeae from Philadelphia. Fekete T, et al. **Antimicrob Agents Chemother** 1989 Feb;33(2):164–6

Resistance to ticarcillin-potassium clavulanate among clinical isolates of the family Enterobacteriaceae: role of PSE-1 beta-lactamase and high levels of TEM-1 and SHV-1 and problems with false susceptibility in disk diffusion tests. Sanders CC, et al. **Antimicrob Agents Chemother** 1988 Sep; 32(9):1365–9

Role of beta-lactamase and different testing conditions in oxacillin-borderline-susceptible staphylococci. Sierra-Madero JG, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1754–7

Effects of penicillins and 6-aminohexanoic acid on the kinetics of human plasmin. Higazi AA, et al. **Biochem J** 1989 Jun 1;260(2):609–12

Comparative activity in vitro of ticarcillin and ticarcillin plus clavulanic acid against Enterobacteriaceae, Pseudomonas aeruginosa and Acinetobacter calcoaceticus. Campos P, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):77–8

Different activity of penicillins and cephalosporins on enterococci. Fontana R, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):60–1

Interference of new penicillins and cephalosporins with urine glucose monitoring tests. McCue JD, et al. **Diabetes Care** 1983 Sep–Oct;6(5):504–5

Comparative in vitro susceptibilities of 504 bacteremic isolates to ticarcillin plus clavulanic acid and other antimicrobial agents. Rotstein C, et al. **Diagn Microbiol Infect Dis** 1989 Mar–Apr;12(2):157–63

In vitro evaluations of aminopenicillin/beta-lactamase inhibitor combinations. Jones RN. **Drugs** 1988;35 Suppl 7:17–26

Association of penicillin-tolerant streptococci with epidemics of streptococcal pharyngitis in closed communities. Dagan R, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jul; 8(7):629–31

An ontogenic study of focal seizure induced by penicillin injection into sensorimotor area in rats. Kudo T, et al. **Exp Neurol** 1988 Nov;102(2):254–60

Comparison of sensitivity of Mycobacterium spp. to combinations of clavulanic acid & penicillins with certain antitubercular agents. Bhattacharya CP, et al. **Indian J Med Res** 1988 Aug;88:118–23

Newer penicillins and beta-lactamase inhibitors. Bush LM, et al. **Infect Dis Clin North Am** 1989 Sep;3(3):571–94 (119 ref.)

Structure-activity relationships in a series of piperazine-2,3-dione containing penicillins and cephalosporins. II. Derivatives substituted at N(4) of the piperazine ring. Harrington FP, et al. **J Antibiot (Tokyo)** 1989 Aug;42(8):1241–7

Comparison of disc-diffusion and plate-incorporation susceptibility testing of gram-negative bacilli to ticarcillin, piperacillin and ticarcillin/clavulanate. Elston RA, et al. **J Antimicrob Chemother** 1989 Feb;23(2):285–7

In-vitro activity and beta-lactamase stability of methicillin, isoxazolyl penicillins and cephalothin against coagulase-negative staphylococci. Jarløv JO, et al. **J Antimicrob Chemother** 1988 Aug;22(2):119–25

Penicillin-aminoglycoside synergy and post-antibiotic effect for enterococci. Winstanley TG, et al. **J Antimicrob Chemother** 1989 Feb;23(2):189–99

In-vitro susceptibility of Mycobacterium tuberculosis, Mycobacterium bovis and Mycobacterium kansasii to amoxycillin and ticarcillin in combination with clavulanic acid. Wong CS, et al. **J Antimicrob Chemother** 1988 Dec; 22(6):863–6

Activity of temocillin and other penicillins against beta-lactamase-inducible and -stably derepressed enterobacteria. Yang Y, et al. **J Antimicrob Chemother** 1988 Sep;22(3):299–306

Onset of penicillin-induced bacteriolysis in staphylococci is cell cycle dependent. Maidhof H, et al. **J Bacteriol** 1989 Apr;171(4):2252–7

Susceptibility testing of Neisseria gonorrhoeae to penicillin and spectinomycin in a diagnostic laboratory. Gill MJ, et al. **J Clin Pathol** 1988 Sep;41(9):978–82

Synthesis and antimicrobial properties of substituted beta-aminoxypropionyl penicillins and cephalosporins. Balsamo A, et al. **J Med Chem** 1989 Jun;32(6):1398–401

Effect of some penicillins on the sensitivity of limulus amoebocyte lysate test. al-Khalifa IJ, et al. **J Pharm Pharmacol** 1989 Feb;41(2):127–8

Separation of different types of afterpotentials following penicillin-induced paroxysmal depolarization shifts of neurons in the motor cortex of the rat. Witte OW, et al. **Neurosci Lett** 1989 Jun 5;101(1):51–6

In vitro inhibition of urokinase by penicillins. Higazi AA, et al. **Thromb Haemost** 1988 Oct 31;60(2):305–7

Cardiovascular effects of intravenous sodium penicillin, sodium cefazolin, and sodium citrate in awake and anesthetized horses. Hubbell JA, et al. **Vet Surg** 1987 May–Jun;16(3):245–50

[Cyclosporin-ticarcillin interaction in a renal transplant patient (letter)] Lambert C, et al. **Presse Med** 1989 Feb 11;18(5):230 **(Fre)**

[Positive direct Coombs' test in acute leukemias and other hemoblastoses: relation to clavulanic acid–containing antibiotics?] Blanchard M, et al. **Schweiz Med Wochenschr** 1989 Jan 14;119(2):39–45 (Eng. Abstr.) **(Ger)**

[Change in the susceptibility of the pneumococcus—is still penicillin the drug of choice?] Rottenstreich E, et al. **Harefuah** 1989 Apr 2;116(7):374–7 (41 ref.) **(Heb)**

[Current antimicrobial agent series II: Ticarcillin] Ueda Y. **Jpn J Antibiot** 1988 Jul;41(7):761–81 (42 ref.) **(Jpn)**

THERAPEUTIC USE

In vitro activity of timentin against community and hospital-acquired gram-negative bacterial isolates [letter] Glupczynski Y, et al. **Acta Clin Belg** 1989;44(1):66–7

Cost-effectiveness of antibiotic prophylaxis for dental procedures in patients with artificial joints. Tsevat J, et al. **Am J Public Health** 1989 Jun;79(6):739–43

Penicillin therapy in icteric leptospirosis. Edwards CN, et al. **Am J Trop Med Hyg** 1988 Oct;39(4):388–90

Role of sodium in the protective effect of ticarcillin on gentamicin nephrotoxicity in rats. Ohnishi A, et al. **Antimicrob Agents Chemother** 1989 Jun;33(6):928–32

Temocillin efficacy in experimental Klebsiella pneumoniae meningitis after infusion into rabbit plasma to simulate antibiotic concentrations in human serum. Woodnutt G, et al. **Antimicrob Agents Chemother** 1988 Nov;32(11):1705–9

Ticarcillin plus clavulanic acid (Timentin) compared with standard antibiotic regimes in the treatment of early and late neonatal infections. Miall-Allen VM, et al. **Br J Clin Pract** 1988 Jul;42(7):273–9

Ticarcillin plus clavulanic acid (Timentin)—further UK trial results. Tehan S, et al. **Br J Clin Pract** 1988 Jan;42(1):8–16

The efficacy of amikacin in the treatment of severe infections in a renal unit. Alexopoulos E, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):386–9

European experience of timentin in combination with aminoglycosides as empirical treatment in febrile neutropenic patients. Croydon E, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):405–7

Therapeutic evaluation of the ticarcillin-clavulanic acid combination in severe nephrourologic infections. Dalet F, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):512–3

Efficacy and safety of azlocillin and ticarcillin in febrile neutropenic children with cancer: a comparative study. Kosmidis H, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):396–8

Treatment of neurosyphilis. Wolters EC. **Clin Neuropharmacol** 1987 Apr;10(2):143–54 (76 ref.)

Group A streptococcal rapid test. Antigen detection after 18–24 hours of penicillin therapy. Beach PS, et al. **Clin Pediatr (Phila)** 1989 Jan;28(1):6–10

Clinical commentary. Some thoughts on the treatment of beta hemolytic streptococcal infections. Disney FA. **Clin Pediatr (Phila)** 1989 Jan;28(1):10–1

Borrelia burgdorferi infections. Kurgansky D, et al. **Cutis** 1989 May;43(5):407–8

Changes in penicillin prescribing in general practice. Bro F, et al. **Dan Med Bull** 1988 Jun;35(3):297–9

Clinical and pharmacokinetic studies of sulbactam/penicillin combinations in the treatment of ear, nose and throat infections. Federspil P, et al. **Drugs** 1988;35 Suppl 7:80–3

Eradication of endemic syphilis in Bosnia. Arslanagić N, et al. **Genitourin Med** 1989 Jan;65(1):4–7

Glucose oxidase as an adjunct to penicillin on penicillin resistant staphylococcal isolates. Sharma GK, et al. **Indian J Ophthalmol** 1987;35(5–6):89–90

Prescribing practices in childhood sore throat. Singh S, et al. **Indian Pediatr** 1988 Dec;25(12):1149–54

Chemoprophylaxis of dental patients with prosthetic joints: a simulation model. Jacobson JJ, et al. **J Dent Educ** 1988 Nov;52(11):599–604

Antibiotic prophylaxis in transurethral resection of the prostate with reference to the influence of preoperative catheterization. Taylor EW, et al. **J Hosp Infect** 1988 Aug; 12(2):75–83

A prospective study of tick bites in an endemic area for Lyme disease. Costello CM, et al. **J Infect Dis** 1989 Jan; 159(1):136–9

Neurosyphilis in HIV infection—persistence after high-dose penicillin therapy. Emskötter T, et al. **J Neuroimmunol** 1988 Dec;20(2–3):153–5

Empirical treatment of pneumococcal pneumonia in Spain [letter] Manresa F, et al. **Lancet** 1989 Jun 10;1(8650):1338–9

Overwhelming postsplenectomy infection in patients with thalassemia major. Golematis B, et al. **Mt Sinai J Med** 1989 Mar;56(2):97–8

Cefsulodin for the treatment of Pseudomonas infections—a study comparing cefsulodin and ticarcillin. van der Meer JW, et al. **Neth J Med** 1989 Jun;34(5–6):233–42

Penicillins. Faro S. **Obstet Gynecol Clin North Am** 1989 Jun; 16(2):257–70 (34 ref.)

Timentin therapy for Staphylococcus aureus infections in children: results of a multicenter trial. Jacobs RF, et al. **Pediatr Infect Dis J** 1989 Jul;8(7):441–4

Amoxycillin/clavulanic acid ('Augmentin') compared with a combination of aminopenicillin, aminoglycoside and metronidazole in the treatment of pelvic inflammatory disease. Cirau-Vigneron N, et al. **Pharmatherapeutica** 1989; 5(5):312–9

Treatment of uncomplicated gonococcal urethritis with cefoxitin: comparison with penicillin. Siegel MS, et al. **Rev Infect Dis** 1979 Jan–Feb;1(1):183–8

Streptococcal throat infections: still a complex clinical problem. Lundberg C, et al. **Scand J Infect Dis Suppl** 1988; 57:7–11 (24 ref.)

Variation in use of penicillin for treatment of sinusitis in general practice. Bro F, et al. **Scand J Prim Health Care** 1988 Sep;6(3):175–8

Ticarcillin-clavulanate therapy for infections with ticarcillin-resistant microorganisms. Gelfand MS, et al. **South Med J** 1989 Apr;82(4):433–7

[Acute gonorrheal urethritis: report of 30 cases] Gu TH. **Chung Hua Wai Ko Tsa Chih** 1988 Feb;26(2):107–8, 126 (Eng. Abstr.) **(Chi)**

[Which antibiotics for pneumonia treatment?] Ruutu P. **Duodecim** 1989;105(3):227–9 **(Fin)**

[The new penicillins in the treatment of children] Borderon JC. **Ann Pediatr (Paris)** 1989 Jan;36(1):13–9 (20 ref.) (Eng. Abstr.) **(Fre)**

[Prospective and comparative study of 2 antibiotic therapy protocols in 66 febrile neutropenic patients. Ceftazidime-vancomycin versus ticarcillin-vancomycin-amikacin] Brion JP, et al.

Presse Med 1988 Oct 26;17(37):1964–7 (Eng. Abstr.) (Fre)

[Effect of penicillin and D-penicillamine on beta-galactosidase activity in patients with progressive scleroderma] Schulze E, et al. Dermatol Monatsschr 1988; 174(11):661–6 (Eng. Abstr.) (Ger)

[Purulent meningitis in childhood—some important aspects for basic medical management] Wässer S, et al. Psychiatr Neurol Med Psychol Beih 1988;39:37–40 (Ger)

[Protection against experimental infections in mice by an oral vaccine and its combined role when administered with antibiotics] Gismondo MR, et al. G Batteriol Virol Immunol 1987 Jan–Dec;80(1–12):177–81 (Eng. Abstr.) (Ita)

[Evaluation of the effectiveness of the treatment of bacterial endocarditis with penicillin or cefamandole and determining the indications for surgical treatment. Preliminary report] Pracka H, et al. Kardiol Pol 1988;31 Suppl 2:63–71 (Eng. Abstr.) (Pol)

TOXICITY

Antiepileptic effects of N6-L-phenylisopropyladenosine (L-PIA) on penicillin-induced epileptogenic focus in rabbits. Niglio T, et al. Pharmacol Res Commun 1988 Jul; 20(7):561–72

PENICILLIUM

Penicillium marneffei infection: a follow-up [letter] DiSalvo AF. Am J Clin Pathol 1989 Apr;91(4):507

Penicillium marneffei infection: an underdiagnosed disease? Tsang DN, et al. Histopathology 1988 Sep;13(3):311–8 (12 ref.)

ANALYSIS

FR65814, a novel immunosuppressant isolated from a Penicillium strain. Taxonomy, fermentation, isolation, physico-chemical and biological characteristics and structure assignment. Hatanaka H, et al. J Antibiot (Tokyo) 1988 Aug;41(8):999–1008

DRUG EFFECTS

Improved antifungal effect of thiabendazole against Penicillium digitatum by its application to post-harvest citrus fruit in combination with carbohydrate esters of fatty acids. Nishikawa Y, et al. Chem Pharm Bull (Tokyo) 1988 Aug;36(8):3216–9

ENZYMOLOGY

Release of protoplasts from Penicillium paxilli by Penicillium purpurogenum enzymes. Szajer I, et al. Acta Microbiol Pol 1988;37(2):159–66

Characteristics of the beta-lactam synthesizing enzymes of Streptomyces clavuligerus, Cephalosporium acremonium, and Penicillium chrysogenum. Westlake DW, et al. Ann N Y Acad Sci 1988;542:11–5

Glucokinase-deficient mutant of Penicillium chrysogenum is derepressed in glucose catabolite regulation of both beta-galactosidase and penicillin biosynthesis. Barredo JL, et al. Antimicrob Agents Chemother 1988 Jul;32(7):1061–7

Mode of action and synergism of cellulases from Penicillium funiculosum. Mishra C, et al. Appl Biochem Biotechnol 1988 Nov;19(2):139–50

Induction and catabolite repression of cellulase in Penicillium funiculosum. Rao M, et al. Appl Biochem Biotechnol 1988 Nov;19(2):129–37

Purification and characterization of the sesquiterpene cyclase aristolochene synthase from Penicillium roqueforti. Hohn TM, et al. Arch Biochem Biophys 1989 Jul;272(1):137–43

The mechanism of fungal cellulase action. Synergism between enzyme components of Penicillium pinophilum cellulase in solubilizing hydrogen bond-ordered cellulose. Wood TM, et al. Biochem J 1989 May 15;260(1):37–43

Carboxypeptidase S-1 from Penicillium janthinellum: enzymatic properties in hydrolysis and aminolysis reactions. Breddam K. Carlsberg Res Commun 1988;53(5):309–20

Isolation and sequence analysis of the fatty acid synthetase FAS2 gene from Penicillium patulum. Wiesner P, et al. Eur J Biochem 1988 Oct 15;177(1):69–79

Enzymatic synthesis of penicillins. Alonso MJ, et al. J Antibiot (Tokyo) 1988 Aug;41(8):1074–84

Oxidases involved in biosynthesis of macrolide antibiotic patulolides from Penicillium urticae S11R59. Rodphaya D, et al. J Antibiot (Tokyo) 1989 May;42(5):752–60

Detection of beta-galactofuranosidase production by Penicillium and Aspergillus species using 4-nitrophenyl beta-D-galactofuranoside. Cousin MA, et al. J Appl Bacteriol 1989 Apr;66(4):311–7

A novel acid phosphatase excreted by Penicillium funiculosum that hydrolyzes both phosphodiesters and phosphomonoesters with aryl leaving groups. Yoshida H, et al. J Biochem (Tokyo) 1989 May;105(5):794–8

The "regulatory" sulfhydryl group of Penicillium chrysogenum ATP sulfurylase. Cooperative ligand binding after SH modification; chemical and thermodynamic properties. Martin RL, et al. J Biol Chem 1989 Jul 15; 264(20):11768–75

Sulfate-activating enzymes of Penicillium chrysogenum. The ATP sulfurylase.adenosine 5'-phosphosulfate complex does not serve as a substrate for adenosine 5'-phosphosulfate kinase. Renosto F, et al. J Biol Chem 1989 Jun 5; 264(16):9433–7

An analysis of intracellular proteinases from antibiotic-producing cells of Penicillium urticae. Rollins MJ, et al. Microbios 1988;56(227):105–21

[Localization and dynamics of lipase accumulation in Penicillium solitum hyphae] Toskueva EP. Antibiot Khimioter 1988 Jul;33(7):499–502 (Eng. Abstr.) (Rus)

[Cytophysiology of Penicillium solitum: a producer of lipase] Toskueva EP, et al. Antibiot Khimioter 1988 Sep; 33(9):647–50 (Eng. Abstr.) (Rus)

GENETICS

Spectrophotometric assay of hydroxylated by-products in penicillin V fermentations and its application in screening of mutant penicillin producer strains on agar media. Palotás B, et al. Anal Biochem 1989 Jun;179(2):288–90

Transformation of Penicillium chrysogenum with selection for increased resistance to benomyl. Picknett TM, et al. FEMS Microbiol Lett 1989 Jul 15;51(1):165–8

Transformation of Penicillium chrysogenum to sulfonamide resistance. Carramolino L, et al. Gene 1989 Apr 15; 77(1):31–8

Cloning, sequence analysis and transcriptional study of the isopenicillin N synthase of Penicillium chrysogenum AS-P-78. Barredo JL, et al. Mol Gen Genet 1989 Mar; 216(1):91–8

Amplification of the isopenicillin N synthetase gene in a strain of Penicillium chrysogenum producing high levels of penicillin. Smith DJ, et al. Mol Gen Genet 1989 Apr; 216(2–3):492–7

Sequence of the Penicillium chrysogenum phosphoglycerate kinase gene. van Solingen P, et al. Nucleic Acids Res 1988 Dec 23;16(24):11823

GROWTH & DEVELOPMENT

Growth of Listeria monocytogenes at different pH values in uncultured whey or whey cultured with Penicillium camemberti. Ryser ET, et al. Can J Microbiol 1988 Jun; 34(6):730–4

Microcycle conidiation in submerged cultures of Penicillium cyclopium attained without temperature changes. Pažout J, et al. J Gen Microbiol 1988 Oct;134 (Pt 10):2685–92

[Comparative study of the growth of Trichoderma reesei and Penicillium occitanie] Mosrati R, et al. Arch Inst Pasteur Tunis 1988 Jul–Oct;65(3–4):279–91 (Eng. Abstr.) (Fre)

IMMUNOLOGY

Antigenic relationship of Penicillium marneffei to P. primulinum. Sekhon AS, et al. J Med Vet Mycol 1989; 27(2):105–12

(1——5)-linked beta-D-galactofuranosides are immunodominant in extracellular polysaccharides of Penicillium and Aspergillus species. Notermans S, et al. Mol Immunol 1988 Oct;25(10):975–9

[Using anti-sera and monoclonal antibodies against Aspergillus fumigatus to study its cross-reactions with Alternaria alteria and Penicillium sp.] Chang ZN, et al. Chung Hua I Hsueh Tsa Chih 1989 Feb;43(2):75–80 (Eng. Abstr.) (Chi)

ISOLATION & PURIFICATION

Penicillium marneffei in bronchoalveolar lavage fluid. Chan JK, et al. Acta Cytol 1989 Jul–Aug;33(4):523–6

The connection between the Penicillia and Aspergilli and mycotoxins with special emphasis on misidentified isolates. Frisvad JC. Arch Environ Contam Toxicol 1989 May–Jun; 18(3):452–67

Disseminated penicilliosis associated with HIV infection [letter] Sathapatayavongs B, et al. J Infect 1989 Jul; 19(1):84–5

[Study on psychrophilic/psychrotrophic microorganisms. II. Microbes in cold-storage food] Cui CQ, et al. Wei Sheng Wu Hsueh Pao 1988 Sep;28(3):226–34 (Eng. Abstr.) (Chi)

METABOLISM

Kinetic properties, nutrient-dependent regulation and energy coupling of amino-acid transport systems in Penicillium cyclopium. Roos W. Biochim Biophys Acta 1989 Jan 16; 978(1):119–33

Fungal degradation of polyvinyl acetate. García Trejo A. Ecotoxicol Environ Safety 1988 Aug;16(1):25–35

Lysine biosynthesis in Penicillium chrysogenum is regulated by feedback inhibition of alpha-aminoadipate reductase. Affenzeller K, et al. FEMS Microbiol Lett 1989 Apr; 49(2–3):293–7

Production of free amino acids by some species of Penicillium. Kumari DR, et al. Hindustan Antibiot Bull 1988 Aug–Nov;30(3–4):77–9

Atpenins, new antifungal antibiotics produced by Penicillium sp. Production, isolation, physico-chemical and biological properties. Omura S, et al. J Antibiot (Tokyo) 1988 Dec; 41(12):1769–73

Biosynthesis of the macrolide antibiotic patulolides by Penicillium urticae S11R59: identification of the origin of carbon atoms by 13C NMR spectroscopy. Rodphaya D, et al. J Antibiot (Tokyo) 1988 Nov;41(11):1649–58

Glutathione formation in Penicillium chrysogenum: stimulatory effect of ammonium. Schwartz R, et al. J Gen Microbiol 1988 May;134 (Pt 5):1117–21

Riboflavin formation by mould fungi cultivated on hydrocarbon-containing media. Sabry SA, et al. Microbios 1989;57(230):33–40

[The role of tryptophan in ergot alkaloid biosynthesis in Penicillium gorlenkoanum] Stefanova LN, et al. Acta Microbiol Bulg 1988;22:44–9 (Eng. Abstr.) (Rus)

[Lipids of initial and mutant cultures of Penicillium chrysogenum, producers of penicillin] Konova IV, et al. Antibiot Khimioter 1989 Jan;34(1):3–6 (Eng. Abstr.) (Rus)

[Low molecular weight metabolites produced by various Penicillium species] Pisarnitskiĭ AF, et al. Prikl Biokhim Mikrobiol 1988 Nov–Dec;24(6):760–4 (Eng. Abstr.) (Rus)

PATHOGENICITY

[Effect of the entomopathogenic fungus Penicillium funiculosum on the reproduction of the causative agent of plague in the body of fleas] Lopatina NV, et al. Med Parazitol (Mosk) 1988 May–Jun;(3):28–9 (Rus)

PHYSIOLOGY

Auxotrophic mutants of ovicidal fungus Penicillium lanosum. Lenhart K, et al. Acta Univ Palacki Olomuc Fac Med 1988; 120:41–52

RADIATION EFFECTS

Effect of UV-irradiation on some aspects of metabolic activities in Aspergillus flavus and Penicillium notatum. Osman M, et al. Microbios 1988;56(227):79–87

[Effect of ultraviolet irradiation on the biosynthesis of exogenous beta-galactosidase by a Penicillium canescens Sopp. culture] Gomarteli MM, et al. Mikrobiol Zh 1988 May–Jun;50(3):37–41 (Eng. Abstr.) (Rus)

PENICILLIUM CHRYSOGENUM see under **PENICILLIUM**

PENILE DISEASES

Abscess of corpus cavernosum. Sater AA, et al. J Urol 1989 Apr;141(4):949

Common penile lesions. Coldiron BM, et al. Urol Clin North Am 1988 Nov;15(4):671–85 (104 ref.)

[Urological contingencies in the management of sexual dysfunction in men] Juusela H. Duodecim 1988; 104(15):1191–6 (21 ref.) (Fin)

CHEMICALLY INDUCED

Mystery of the holey prepuce: delayed podophyllin skin damage? [letter] Maiti H, et al. Genitourin Med 1989 Jun; 65(3):201

Genital contact dermatitis. Abdul Gaffoor PM. Indian J Dermatol 1987 Oct;32(4):102–3

Cutaneous fixed drug eruptions from systemic use of drugs [letter] Bhariga JC, et al. Sex Transm Dis 1988 Jul–Sep; 15(3):177

Penile ulcer as complication in self-induced papaverine erections. Borgström E. Urology 1988 Nov;32(5):416–7

COMPLICATIONS

Penile Raynaud's phenomenon: a possible cause of erectile failure. Mooradian AD, et al. Am J Med 1988 Nov; 85(5):748–50

The association of lichen planus of the penis with squamous cell carcinoma in situ and with verrucous squamous carcinoma. Bain L, et al. J Dermatol Surg Oncol 1989 Apr; 15(4):413–7

[Phagedenic hard chancre] Koliadenko VG, et al. Vestn Dermatol Venerol 1988;(10):63–5 (Eng. Abstr.) (Rus)

CONGENITAL

Nesbit procedure in the treatment of congenital penile deviation. Rodríguez Netto N Jr, et al. Arch Esp Urol 1989 May;42(4):386–7

Treatment of congenital penile curvature: an alternative to Nesbit's operation. Reis M, et al. Urol Int 1988;43(6):341–3

[Congenital inward curvature of the penis without hypospadias. Report of 3 new cases] Martínez-Sapiña Llanas I, et al. Arch Esp Urol 1989 May;42(4):317–9 (Eng. Abstr.) (Spa)

[Technical modification in the surgical treatment of curvature of the penis] Serrate Aguilera RG, et al. Arch Esp Urol 1989 May;42(4):313–5 (Eng. Abstr.) (Spa)

DIAGNOSIS

Prolonged penile erection following papaverine—experiences with prophylaxis and therapy. Biedermann H. Arch Ital Urol Nefrol Androl 1987 Dec;59(2):133–40

Cytologic and colposcopic examination in the diagnosis of penile HPV infection. Torrisi A, et al. Clin Exp Obstet Gynecol 1989;16(1):36–43

Penile melanosis. Revuz J, et al. J Am Acad Dermatol 1989 Apr;20(4):567–70

Tuberculosis of the penis presenting as a subcutaneous

nodule. Baskin LS, et al. **J Urol** 1989 Jun;141(6):1430–1
Penile abscess involving the corpus cavernosum: a case report. Niedrach WL, et al. **J Urol** 1989 Feb;141(2):374–5
Electrical activity of corpus cavernosum during flaccidity and erection of the human penis: a new diagnostic method? Wagner G, et al. **J Urol** 1989 Sep;142(3):723–5
[Soft ulcer. Description of a case] Donofrio P, et al. **G Ital Dermatol Venereol** 1988 Sep;123(9):443–4 (Eng. Abstr.) **(Ita)**
[Erectile dysfunction of venous origin: diagnosis by means of cavernometry] Marín Lafuente JC, et al. **Arch Esp Urol** 1989 May;42(4):363–4 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Patient-applied podofilox for treatment of genital warts. Beutner KR, et al. **Lancet** 1989 Apr 15;1(8642):831–4
[Treatment of micropenis with testosterone cyclopentylate] Dorantes-Alvarez LM, et al. **Bol Med Hosp Infant Mex** 1988 Jul;45(7):449–53 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Spontaneous perforation of the foreskin in Sweet's syndrome. Pak K, et al. **Br J Urol** 1989 Jul;64(1):101
Infections of genitourinary prostheses. Blum MD. **Infect Dis Clin North Am** 1989 Jun;3(2):259–74 (43 ref.)
Late circumcision and lichen sclerosus et atrophicus of the penis. Ledwig PA, et al. **J Am Acad Dermatol** 1989 Feb; 20(2 Pt 1):211–4
Penile encrustation due to a condom catheter. Ragi G, et al. **J Am Geriatr Soc** 1989 Feb;37(2):160–2
Total ablation of the penis after circumcision with electrocautery: a method of management and long-term followup. Gearhart JP, et al. **J Urol** 1989 Sep; 142(3):799–801
Candida albicans corpora abscess following penile prosthesis placement. Peppas DS, et al. **J Urol** 1988 Dec;140(6):1541–2
Postoperative fistula following insertion of a penile prosthesis in a diabetic patient. Bamberger MH, et al. **N Y State J Med** 1989 Jun;89(6):359–60
Penile ecthyma gangrenosum. Complication of drug addiction. Cunningham DL, et al. **Urology** 1989 Aug; 34(2):109–10
An unusual complication of diabetes [letter] Hawkins T. **West J Med** 1988 Sep;149(3):346
[Surgical treatment of oleogranuloma of the penis] Iasinskiĭ BV, et al. **Urol Nefrol (Mosk)** 1988 Sep-Oct;(5):54–5 **(Rus)**

MICROBIOLOGY

Tinea of the glans penis. Dekio S, et al. **Dermatologica** 1989; 178(2):112–4

PATHOLOGY

Tuberculosis of the penis. Sofras F, et al. **Acta Urol Belg** 1988;56(3):475–6
Cysts of the testicular parenchyma and tunica albuginea. Nistal M, et al. **Arch Pathol Lab Med** 1989 Aug; 113(8):902–6 (19 ref.)
Lymphatic cyst of the penis. Brooks SG, et al. **Br J Urol** 1989 Mar;63(3):329–30
Verruciform xanthoma of the penis. George WM, et al. **Cutis** 1989 Aug;44(2):167–70
An unusual case of varicella involving the penis. Lim KB. **Cutis** 1988 Sep;42(3):217–8
Gummatous penile ulceration and generalised lymphadenopathy in homosexual man: case report. Kitchen VS, et al. **Genitourin Med** 1988 Aug;64(4):276–9
Herpes simplex mimicking leukemia cutis. Hassel MH, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 2):367–71
Chancroid: clinical variants and other findings from an epidemic in Dallas County, 1986–1987. McCarley ME, et al. **J Am Acad Dermatol** 1988 Aug;19(2 Pt 1):330–7 (26 ref.)
Squamous cell carcinoma arising in Hailey-Hailey disease. Chun SI, et al. **J Cutan Pathol** 1988 Aug;15(4):234–7
Normal penile anatomy and abnormal penile conditions: evaluation with MR imaging. Hricak H, et al. **Radiology** 1988 Dec;169(3):683–90
Giant median raphe cyst of the penis with diffuse melanosis of its epithelial lining. Hitti IF, et al. **Urol Int** 1989; 44(2):121–4
[Hypervascularization syndrome of the penis following arterialization of the dorsal penile vein for erectile impotence] Fritsch P, et al. **Hautarzt** 1989 Jul;40(7):434–6 (Eng. Abstr.) **(Ger)**
[Lentigo of the glans penis] Landthaler M, et al. **Hautarzt** 1989 Apr;40(4):222–5 (Eng. Abstr.) **(Ger)**
[Sclerosing lipogranuloma of the male genitals] Dimitrowa J, et al. **Z Hautkr** 1989 Mar 15;64(3):223–7 (Eng. Abstr.) **(Ger)**
[Verruciform xanthoma of the penis] Amantea A, et al. **G Ital Dermatol Venereol** 1989 Jan-Feb;124(1-2):37–40 (Eng. Abstr.) **(Ita)**
[Necrosis of the penis in Fournier's disease] Moskvin MI. **Urol Nefrol (Mosk)** 1989 Mar-Apr;(2):53–5 **(Rus)**
[Oleogranuloma of the genitalia] Belov AS, et al. **Vestn Dermatol Venerol** 1988;(6):62–5 (Eng. Abstr.) **(Rus)**
[A rare combination of linear scleroderma with cavernous hemangioma of the glans penis] Kovalev VM, et al. **Vestn Dermatol Venerol** 1988;(6):60–1 (Eng. Abstr.) **(Rus)**
[Penoscrotal gangrene] Navalón P, et al. **Actas Urol Esp** 1988 Sep-Oct;12(5):456–9 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

[Holter erectometry. A new approach to erectile disorders] Pointel JP, et al. **J Mal Vasc** 1989;14(2):127–9 (Eng. Abstr.) **(Fre)**

SURGERY

Surgical treatment of the penoscrotal Paget's disease. Lai CS, et al. **Ann Plast Surg** 1989 Aug;23(2):141–6
Caverno-venous leakage: retrograde opacification and resection of the deep dorsal vein completed by ligation of the crural edges of the corpora. Wespes E, et al. **Arch Ital Urol Nefrol Androl** 1987 Dec;59(2):149–54
Save the prepuce. Painless separation of preputial adhesions in the outpatient clinic. MacKinlay GA. **BMJ** 1988 Sep 3;297(6648):590–1
Microsurgical arterialization for vascular impotence. Wagenknecht LV. **Microsurgery** 1988;9(4):258–61
[The Wise technic in the repair of urethro-cutaneous fistula] Nouri A, et al. **Tunis Med** 1988 Aug-Sep;66(8-9):605–8 (Eng. Abstr.) **(Fre)**
[A case of Mondor's disease of the penis] Doi Y, et al. **Hinyokika Kiyo** 1988 Jul;34(7):1245–8 (18 ref.) (Eng. Abstr.) **(Jpn)**
[Surgical treatment of oleogranuloma of the penis] Iasinskiĭ BV, et al. **Urol Nefrol (Mosk)** 1988 Sep-Oct;(5):54–5 **(Rus)**

THERAPY

Penis tuberculid (papulonecrotic tuberculid of the glans penis): treatment with a combination of rifampicin and an extract from tubercle bacilli (T.B. vaccine). Nakamura S, et al. **J Dermatol** 1989 Apr;16(2):150–3 (14 ref.)
Experience with 1-stage repair of hypospadias and chordee using free graft of prepuce. Hendren WH, et al. **J Urol** 1988 Nov;140(5 Pt 2):1259–64

TRANSMISSION

Penile human papillomavirus infection in consorts of women with genital human papillomavirus infection. A pilot study. Hudson S, et al. **S Afr Med J** 1988 Nov 19;74(10):511–2

VETERINARY

Breeding soundness of beef bulls after circumcision: 33 cases (1980–1986). Baxter GM, et al. **J Am Vet Med Assoc** 1989 Apr 1;194(7):948–52
Acquired cutaneous lymphangiectasis in a dog. White SD, et al. **J Am Vet Med Assoc** 1988 Nov 1;193(9):1093–4
Successful surgical repair of a vascular shunt of the corpus cavernosum penis and penile fibropapillomata in a bull. Gilbert RO, et al. **J S Afr Vet Assoc** 1987 Dec;58(4):193–5
Attempted experimental infection of the preputial cavity of three male goats with Campylobacter species. Ellis B, et al. **Vet Rec** 1988 Nov 26;123(22):568
Surgical treatment of priapism in a stallion. Schumacher J, et al. **Vet Surg** 1987 May-Jun;16(3):193–6

PENILE ERECTION

Physiological considerations in radionuclide imaging of the penis during impotence therapy. Chaudhuri TK, et al. **Am J Physiol Imaging** 1989;4(2):75–80 (39 ref.)
Nesbit procedure in the treatment of congenital penile deviation. Rodríguez Netto N Jr, et al. **Arch Esp Urol** 1989 May;42(4):386–7
Physiology, hemodynamics, and pharmacology of penile erection [letter] Goldstein AM. **Arch Ital Urol Nefrol Androl** 1989 Mar;61(1):89–90
Physiology, hemodynamics and pharmacology of penile erection. Nelson RP, et al. **Arch Ital Urol Nefrol Androl** 1988 Mar;60(1):63–6 (13 ref.)
Sexual arousability and sexual orientation of men with erectile dysfunctions. Zvěřina J. **Arch Ital Urol Nefrol Androl** 1987 Dec;59(2):141–4
Synergist erection system in the management of impotence secondary to spinal cord injury. Zasler ND, et al. **Arch Phys Med Rehabil** 1989 Sep;70(9):712–6
Validity and ethics of penile circumference measures of sexual arousal: a critical review. McConaghy N. **Arch Sex Behav** 1989 Aug;18(4):357–69 (40 ref.)
Diagnosis and surgical treatment of erectile dysfunction. Gregory JG, et al. **ASAIO Trans** 1988 Oct-Dec;34(4):991–3
Characterization of cyclic nucleotide and inositol 1,4,5-trisphosphate-sensitive calcium-exchange activity of smooth muscle cells cultured from the human corpora cavernosa. Krall JF, et al. **Biol Reprod** 1988 Nov; 39(4):913–22
Hazards of long distance cycling. Desai KM, et al. **BMJ** 1989 Apr 22;298(6680):1072–3
Erectile dysfunction and premature ejaculation. Hawton K. **Br J Hosp Med** 1988 Dec;40(6):428–36 (43 ref.)
Pharmacocavernometry: a modified papaverine test. Dickinson IK, et al. **Br J Urol** 1989 May;63(5):539–45
Neurophysiological aspects of penile erection: the role of the sympathetic nervous system. Jünemann KP, et al. **Br J Urol** 1989 Jul;64(1):84–92
Functional innervation patterns in the corpus spongiosum and glans in the dog. Kimoto Y, et al. **Br J Urol** 1988 Dec;62(6):597–602
Prostaglandin 15-hydroxydehydrogenase activity in human penile corpora cavernosa and its significance in prostaglandin-mediated penile erection. Roy AC, et al. **Br J Urol** 1989 Aug;64(2):180–2
Intra-individual comparative study of dynamic and pharmacocavernography. Stief CG, et al. **Br J Urol** 1989 Jul;64(1):93–7
The use and abuse of erection measurements: a forensic perspective. Travin S, et al. **Bull Am Acad Psychiatry Law** 1988;16(3):235–50
Fundamentals and hemodynamics of penile erection. Aboseif SR, et al. **Cardiovasc Intervent Radiol** 1988 Aug; 11(4):185–90 (25 ref.)
Pharmacology of penile erection in humans. Adaikan PG, et al. **Cardiovasc Intervent Radiol** 1988 Aug;11(4):191–4 (28 ref.)
Long-term results of deep dorsal penile vein transsection in venous impotence. Lunglmayr G, et al. **Eur Urol** 1988; 15(3-4):209–12
Castration and erection. An animal study. Müller SC, et al. **Eur Urol** 1988;15(1-2):118–24
New treatment of increased venous drainage in organic impotence: ligation of internal iliac veins. Wagenknecht LV. **Eur Urol** 1989;16(3):172–4
Multidisciplinary evaluation in erectile dysfunction after radical prostatectomy. Stief CG, et al. **Int Urol Nephrol** 1988;20(6):617–21
Differential effects of performance demand and distraction on sexually functional and dysfunctional males. Abrahamson DJ, et al. **J Abnorm Psychol** 1989 Aug; 98(3):241–7
Sexual arousal and arousability in a sexual offender population. Hall GC. **J Abnorm Psychol** 1989 May; 98(2):145–9
Phallometric diagnosis of pedophilia. Freund K, et al. **J Consult Clin Psychol** 1989 Feb;57(1):100–5
Radioisotope penile plethysmography: a technique for evaluating corpora cavernosal blood flow during early tumescence. Schwartz AN, et al. **J Nucl Med** 1989 Apr; 30(4):466–73
Nocturnal penile tumescence in the evaluation of erectile disorders: a critical review. Schiavi RC. **J Sex Marital Ther** 1988 Summer;14(2):83–97 (75 ref.)
Erectile response to acute and chronic occlusion of the internal pudendal and penile arteries. Aboseif SR, et al. **J Urol** 1989 Feb;141(2):398–402
Quantitative analysis of outflow pathway of corpora cavernosa by pressure flow technique. Aoki H, et al. **J Urol** 1989 Mar;141(3):645–50
Anatomy of penile venous drainage in potent and impotent men during cavernosography. Fuchs AM, et al. **J Urol** 1989 Jun;141(6):1353–6
Standardized evaluation of erectile dysfunction in 95 consecutive patients. Gerstenberg TC, et al. **J Urol** 1989 Apr;141(4):857–62
Characterization of contraction-mediating prostanoid receptors in human penile erectile tissues. Hedlund H, et al. **J Urol** 1989 Jan;141(1):182–6
Erectile dysfunction in hypertensive men: sleep-related erections, penile blood flow and musculovascular events. Karacan I, et al. **J Urol** 1989 Jul;142(1):56–61
Bulbocavernosus reflex: its validity as a diagnostic test of neurogenic impotence. Lavoisier P, et al. **J Urol** 1989 Feb; 141(2):311–4
The use of a vacuum constrictor device to augment a partial erection following an intracavernous injection. Marmar JL, et al. **J Urol** 1988 Nov;140(5):975–9
Determination of erectile penile volume by ultrasonography. Nelson RP, et al. **J Urol** 1989 May;141(5):1123–6
The rat as a model for the study of penile erection. Quinlan DM, et al. **J Urol** 1989 Mar;141(3):656–61
Acetylcholine as a possible neurotransmitter in penile erection. Stief C, et al. **J Urol** 1989 Jun;141(6):1444–8
Primary erectile dysfunction. Stief CG, et al. **J Urol** 1989 Feb;141(2):315–9
The rationale for pharmacologic cavernosography. Stief CG, et al. **J Urol** 1988 Dec;140(6):1564–6
Electrical activity of corpus cavernosum during flaccidity and erection of the human penis: a new diagnostic method? Wagner G, et al. **J Urol** 1989 Sep;142(3):723–5
Vacuum constriction device for management of erectile impotence. Witherington R. **J Urol** 1989 Feb;141(2):320–2
Sexual function and fertility in patients treated for posterior urethral valves. Woodhouse CR, et al. **J Urol** 1989 Aug; 142(2 Pt 2):586–8; discussion 603–5
Detumescence by exercise bicycle [letter] Alexander W. **Lancet** 1989 Apr 1;1(8640):735
Evaluation of impotence. Monitoring periodic penile erections during sleep. Ware JC. **Psychiatr Clin North Am** 1987 Dec;10(4):675–86 (57 ref.)
Diagnostic performance of nocturnal penile tumescence studies in healthy, dysfunctional (impotent), and depressed men. Thase ME, et al. **Psychiatry Res** 1988 Oct;26(1):79–87
Abnormal venous drainage from the penis examined by dynamic cavernosography and surgically treated. Klevmark B, et al. **Scand J Urol Nephrol Suppl** 1988; 110:261–5

Which examinations are useful in erectile failure? Ruutu ML, et al. **Scand J Urol Nephrol Suppl** 1988;110:251–5
Nocturnal penile tumescence in healthy 20– to 59–year–olds: a revisit. Reynolds CF 3d, et al. **Sleep** 1989 Aug; 12(4):368–73
Evaluation and management of erectile dysfunction. Melman A. **Surg Clin North Am** 1988 Oct;68(5):965–81 (66 ref.)
Ultrasonic technique for penile tumescence measurement in rat sleep. Seno H, et al. **Tokushima J Exp Med** 1988 Dec; 35(3–4):101–5
Morphological changes in penile vessels during erection: the mechanism of obstruction of arteries and veins at the tunica albuginea in dog corpora cavernosa. Hanyu S. **Urol Int** 1988;43(4):219–24
Pharmacocavernosography in the evaluation of erectile failure. Jantos C, et al. **Urol Int** 1988;43(4):225–30
The evaluation of erectile dysfunction. Melman A. **Urol Radiol** 1988;10(3):119–28
Neurophysiology of penile erection. Jünemann KP, et al. **Urol Res** 1989;17(4):213–7
Penile ulcer as complication in self–induced papaverine erections. Borgström E. **Urology** 1988 Nov;32(5):416–7
Successful implantation of penile prostheses in organ transplant patients. Kabalin JN, et al. **Urology** 1989 Apr; 33(4):282–4
Spurious impotence after hypospadias repair. Zeidman EJ, et al. **Urology** 1989 Apr;33(4):300–1
[Phallo–plethysmographic examination in clinical practice] Zvěřina J. **Cesk Psychiatr** 1988 Aug;84(4):231–6 (Eng. Abstr.) **(Cze)**
[Erective dysfunction. Therapeutic consequences of a basal program of investigation] Eldrup J, et al. **Ugeskr Laeger** 1989 Jul 17;151(29):1876–8 (Eng. Abstr.) **(Dan)**
[Nocturnal erectile activity in erectile dysfunction. An examination of nocturnal penile tumescence and rigidity] Poulsen EU, et al. **Ugeskr Laeger** 1989 Jan 9;151(2):81–3 (Eng. Abstr.) **(Dan)**
[Value of the visual stimulation test (VST) as initial paraclinical test in the study of erectile impotence. Classification of psychogenic impotence using computerized rigidimetry. The value of thymoxamine] Schouman M, et al. **Acta Urol Belg** 1989;57(1):127–36 (Eng. Abstr.) **(Fre)**
[Treatment of the unstable erection syndrome caused by venous leakage. Preliminary study] Garbe JF. **J Mal Vasc** 1989;14(2):141–2 **(Fre)**
[Holter erectometry. A new approach to erectile disorders] Pointel JP, et al. **J Mal Vasc** 1989;14(2):127–9 (Eng. Abstr.) **(Fre)**
[Basal Doppler ultrasonography of the penis. Standardization of the method] Meazza A, et al. **J Urol (Paris)** 1989; 95(3):155–60 (Eng. Abstr.) **(Fre)**
[Penis plication–plasty—an alternative to the treatment of penile deviation] Erpenbach K, et al. **Urologe [A]** 1989 Jul; 28(4):213–6 (Eng. Abstr.) **(Ger)**
[Priapism—erectile potency following conservative and surgical treatment] Rassler J, et al. **Z Gesamte Inn Med** 1988 Oct 1;43(19):547–50 (Eng. Abstr.) **(Ger)**
[Dynamic cavernosography. A proposed new method] Veltri A, et al. **Radiol Med (Torino)** 1989 Jul–Aug;78(1–2):69–73 (Eng. Abstr.) **(Ita)**
[Comparison between nocturnal penile tumescence (NPT) and artificial full erection] Aoki M, et al. **Hinyokika Kiyo** 1988 May;34(5):825–31 (Eng. Abstr.) **(Jpn)**
[Study on human penile hemodynamics after the intra–cavernous papaverine HCl injection] Aoki H, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 May;79(5):799–806 (Eng. Abstr.) **(Jpn)**
[Vascular architecture and the mechanism of erection] Kano K. **Nippon Hinyokika Gakkai Zasshi** 1987 Dec; 78(13):2268–9 **(Jpn)**
[Hemodynamic studies of penile erection in dogs—blood flow changes in the corpus cavernosum by arterial ligation] Takagane H. **Nippon Hinyokika Gakkai Zasshi** 1988 Dec; 79(12):1909–18 (Eng. Abstr.) **(Jpn)**
[Endovascular diagnosis and treatment of arteriogenic erectile dysfunction–related impotence] Ovchinnskii MN, et al. **Urol Nefrol (Mosk)** 1988 May–Jun;(3):33–6 **(Rus)**
[Erectile dysfunction of venous origin: diagnosis by means of cavernometry] Marín Lafuente JC, et al. **Arch Esp Urol** 1989 May;42(4):363–4 (Eng. Abstr.) **(Spa)**
[Congenital inward curvature of the penis without hypospadias. Report of 3 new cases] Martínez–Sapiña Llanas I, et al. **Arch Esp Urol** 1989 May;42(4):317–9 (Eng. Abstr.) **(Spa)**
[Technical modification in the surgical treatment of curvature of the penis] Serrate Aguilera RG, et al. **Arch Esp Urol** 1989 May;42(4):313–5 (Eng. Abstr.) **(Spa)**

DRUG EFFECTS

Comparative effects of prazosin and hydrochlorothiazide on sexual function in hypertensive men. Scharf MB, et al. **Am J Med** 1989 Jan 23;86(1B):110–2
Intraoperative management of penile erection by using terbutaline. Shantha TR. **Anesthesiology** 1989 Apr; 70(4):707–9
Central dopamine–oxytocin–adrenocorticotropin link in the expression of yawning and penile erection. Argiolas A, et al. **Ann Ist Super Sanita** 1988;24(3):377–82
Effects of psychotropic drugs on human erection and ejaculation. Segraves RT. **Arch Gen Psychiatry** 1989 Mar; 46(3):275–84 (236 ref.)
Prolonged penile erection following papaverine—experiences with prophylaxis and therapy. Biedermann H. **Arch Ital Urol Nefrol Androl** 1987 Dec;59(2):133–40
Examination and treatment of sleep–related painful erections—a case report. Steiger A, et al. **Arch Sex Behav** 1989 Jun;18(3):263–7
Treatment of impotence by intrapenile injections of papaverine and phenoxybenzamine: a double blind, controlled trial. Keogh EJ, et al. **Aust N Z J Med** 1989 Apr;19(2):108–12
Assessment of erectogenic properties of apomorphine and yohimbine in man. Danjou P, et al. **Br J Clin Pharmacol** 1988 Dec;26(6):733–9
Penile tumescence after injection of a serotonin antagonist (ketanserin). Hørby–Petersen J, et al. **Br J Urol** 1988 Sep; 62(3):277–8
Penile response to intracavernosal vasoactive intestinal polypeptide alone and in combination with other vasoactive agents. Kiely EA, et al. **Br J Urol** 1989 Aug;64(2):191–4
Effect of phentolamine on venous return in human erection. Wespes E, et al. **Br J Urol** 1989 Jan;63(1):95–7
Evidence that apomorphine induces penile erection and yawning by releasing oxytocin in the central nervous system. Melis MR, et al. **Eur J Pharmacol** 1989 May 30; 164(3):565–70
Effects of intracavernosal pharmacotherapy on self–esteem, performance anxiety and partnership in patients with chronic erectile dysfunction. Bähren W, et al. **Eur Urol** 1989;16(3):175–80
Penile corporeal fibrosis complicating papaverine self–injection therapy for erectile impotence. Desai KM, et al. **Eur Urol** 1988;15(1–2):132–3
Diagnosis of male impotence after intracavernous papaverine test. Puppo P, et al. **Eur Urol** 1988;15(3–4):213–8
Intracavernous self–injection for erectile failure. Ruutu M, et al. **Eur Urol** 1988;15(1–2):96–8
How safe is the treatment of impotence with intracavernous autoinjection? Zentgraf M, et al. **Eur Urol** 1989; 16(3):165–71 (46 ref.)
Papaverine–induced erection. Török A, et al. **Int Urol Nephrol** 1989;21(2):195–200
Effects of clomipramine on sleep EEG and nocturnal penile tumescence: a long–term study in a healthy man. Steiger A. **J Clin Psychopharmacol** 1988 Oct;8(5):349–54
Assessment of erectogenic drugs by numeric plethysmography. Danjou P, et al. **J Pharmacol Methods** 1989 Mar;21(1):61–9
Local and systemic effects of chronic intracavernous injection of papaverine, prostaglandin E1, and saline in primates. Aboseif SR, et al. **J Urol** 1989 Aug;142(2):403–8
Safety of intracavernous injections using an alpha–blocking agent. Buvat J, et al. **J Urol** 1989 Jun;141(6):1364–7
Papaverine–induced fibrosis of the corpus cavernosum. Fuchs ME, et al. **J Urol** 1989 Jan;141(1):125
Intracavernous self–injection for impotence: a long–term therapeutic option? Experience in 78 patients. Girdley FM, et al. **J Urol** 1988 Nov;140(5):972–4
Impotence evaluated by the use of prostaglandin E1. Hwang TI, et al. **J Urol** 1989 Jun;141(6):1357–9
Intracavernous injection of prostaglandin E1 for the treatment of erectile impotence. Ishii N, et al. **J Urol** 1989 Feb;141(2):323–5
Re: Effects of prostaglandin E1 on penile erection and erectile failure [letter] Jeremy JY, et al. **J Urol** 1988 Dec; 140(6):1556
Prostaglandin E1 versus phentolamine/papaverine for the treatment of erectile impotence: a double–blind comparison. Lee LM, et al. **J Urol** 1989 Mar;141(3):549–50
Spinal anesthesia and electroerection in dogs and monkeys. Mueller SC, et al. **J Urol** 1989 Jul;142(1):171–5
Topical nitroglycerin: a potential treatment for impotence. Owen JA, et al. **J Urol** 1989 Mar;141(3):546–8
A prospective double–blind trial of intracorporeal papaverine versus prostaglandin E1 in the treatment of impotence. Sarosdy MF, et al. **J Urol** 1989 Mar;141(3):551–3
Treatment of persistent penile erection and priapism using terbutaline. Shantha TR, et al. **J Urol** 1989 Jun; 141(6):1427–9
Effect of yohimbine hydrochloride on erectile impotence: a double–blind study. Susset JG, et al. **J Urol** 1989 Jun; 141(6):1360–3
Intracavernosal injection of pharmacological agents in the diagnosis and treatment of impotence. Siraj QH, et al. **JPMA** 1989 Jul;39(7):172–6
Effects of fenfluramine, m–chlorophenylpiperazine, and other serotonin–related agonists and antagonists on penile erections in nonhuman primates. Szele FG, et al. **Life Sci** 1988;43(16):1297–303
Daedalus. High performance [news] Jones D. **Nature** 1989 Aug 3;340(6232):348
Rapid effect of testosterone on striated muscle activity in rats. Sachs BD, et al. **Neuroendocrinology** 1988 Nov; 48(5):453–8
Inhibition of sexual reflexes by lumbosacral injection of a GABAB agonist in the male rat. Bitran D, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):657–66
Effects of naloxone on penile erection in cats. Domer FR, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):543–5
Stimulation of opioid receptors suppresses penile erectile reflexes and seminal emission in rats. Gomez–Marrero J, et al. **Pharmacol Biochem Behav** 1988 Oct;31(2):393–6
Apomorphine and haloperidol, but not domperidone, affect penile reflexes in rats. Pehek EA, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):201–8
Imidazole and yohimbine antagonize hypomotility, penile erection, stretching and yawning induced in rats by BHT 920, a selective dopamine autoreceptor agonist. Ferrari F, et al. **Pharmacol Res Commun** 1988 Sep;20(9):827–37
Oxytocin–induced penile erection and yawning: structure–activity relationship studies. Melis MR, et al. **Pharmacol Res Commun** 1988 Dec;20(12):1117–8
A component analysis of the effects of DPAT on male rat sexual behavior. Schnur SL, et al. **Physiol Behav** 1989 May; 45(5):897–901
Endorphins in male impotence: evidence for naltrexone stimulation of erectile activity in patient therapy. Fabbri A, et al. **Psychoneuroendocrinology** 1989;14(1–2):103–11
Oxytocin–induced penile erection and yawning in male rats: effect of neonatal monosodium glutamate and hypophysectomy. Argiolas A, et al. **Psychopharmacology (Berlin)** 1989;97(3):383–7
Pharmacologically induced erection in patients with multiple sclerosis. Kirkeby HJ, et al. **Scand J Urol Nephrol** 1988; 22(4):241–4
The intracavernous injection of papaverine as a diagnostic procedure in patients with erectile dysfunction. Mouritsen L, et al. **Scand J Urol Nephrol** 1988;22(3):161–3
Corporeal self–injection for erectile failure. Ruutu ML, et al. **Scand J Urol Nephrol Suppl** 1988;110:257–9
Pharmacoangiography of the penile arteries. Forsberg L, et al. **Urol Radiol** 1988;10(3):132–5
Relaxation of isolated corpus cavernosum induced by smooth–muscle relaxant drugs. A comparative study. Barbanti G, et al. **Urol Res** 1988;16(4):299–302
Intracavernous injection of vasoactive drugs in the rabbit. Stackl W, et al. **Urol Res** 1988;16(6):455–8
Intracavernous injections of papaverine and phentolamine: correlation with penile brachial index. Lakin MM, et al. **Urology** 1989 May;33(5):383–6
Use of prostaglandin E1 for papaverine–failed erections. Reiss H. **Urology** 1989 Jan;33(1):15–6
[Prolonged drug–induced erection. Treatment and prevention] Bondil P, et al. **Ann Urol (Paris)** 1988; 22(6):411–5 (30 ref.) (Eng. Abstr.) **(Fre)**
[Diagnostic and therapeutic applications of intracavernous injection of vasoactive drugs in impotence. Plea for the use of facilitator drugs. 2. Diagnostic and therapeutic applications] Buvat J, et al. **J Urol (Paris)** 1989;95(2):89–96 (86 ref.) **(Fre)**
[Papaverine and erectile disorders] Andrianne R. **Rev Med Liege** 1989 Jun 15;44(12):422–7 **(Fre)**
[Prostaglandin E1 in erectile dysfunction] Porst H. **Urologe [A]** 1989 Mar;28(2):94–8 (Eng. Abstr.) **(Ger)**
[Erection induced by papaverine] Török A, et al. **Orv Hetil** 1988 Nov 6;129(45):2401–3 (Eng. Abstr.) **(Hun)**
[On the eventual psychotropic, cardiovascular and aphrodisiac properties of yohimbine, an old drug with new indications] Costa R, et al. **Clin Ter** 1989 May 15; 129(3):159–68 (128 ref.) (Eng. Abstr.) **(Ita)**
[Investigation of intracavernous injection of papaverine for erectile impotence] Takimoto Y, et al. **Hinyokika Kiyo** 1989 Jan;35(1):71–6 (Eng. Abstr.) **(Jpn)**
[Induction of an erection using papaverine] Terek A, et al. **Urol Nefrol (Mosk)** 1989 May–Jun;(3):69–71 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Sexual function disorders after local radiotherapy for carcinoma of the prostate. van Heeringen C, et al. **Radiother Oncol** 1988 Sep;13(1):47–52

PENILE INDURATION

Peyronie's disease. Gingell JC, et al. **Br J Urol** 1989 Mar; 63(3):223–6 (52 ref.)
Tuberculous cavernositis of the penis: case report. Ramesh V, et al. **Genitourin Med** 1989 Jan;65(1):58–9
[Peyronie's disease: an objective review] Begliomini H, et al. **Rev Paul Med** 1988 Jan–Feb;106(1):42–6 (69 ref.) (Eng. Abstr.) **(Por)**

CHEMICALLY INDUCED

Penile corporeal fibrosis complicating papaverine self–injection therapy for erectile impotence. Desai KM, et al. **Eur Urol** 1988;15(1–2):132–3
Side effects of self–administration of intracavernous papaverine and phentolamine for the treatment of impotence. Levine SB, et al. **J Urol** 1989 Jan;141(1):54–7
Adverse Drug Reactions Advisory Committee. Peyronie's disease. A complication in therapy with beta–adrenoreceptor blocking drugs? **Med J Aust** 1979 Oct 20;2(8):432

DIAGNOSIS

Ultrasonographic evaluation of Peyronie's disease. Balconi G, et al. **Urol Radiol** 1988;10(2):85–8
[NMR and cavernosography in the staging of Peyronie's disease] Bellerofonte C, et al.

Arch Ital Urol Nefrol Androl 1987 Dec;59(2):145–8 (Eng. Abstr.) **(Ita)**

[Peyronie's disease. Ultrasonic evaluation] Bock E, et al. **Radiol Med (Torino)** 1988 Dec;76(6):601–3 (Eng. Abstr.) **(Ita)**

[Echographic diagnosis of Peyronie's disease] Princivalle M, et al. **Radiol Med (Torino)** 1989 Jul–Aug;78(1–2):74–8 (Eng. Abstr.) **(Ita)**

[Ultrasonic monitoring of the efficacy of conservative therapy in Peyronie's disease] Novak Gla, et al. **Vestn Dermatol Venerol** 1988;(11):35 (Eng. Abstr.) **(Rus)**

[Cavernosography in the diagnosis of Peyronie's disease] Castiñeiras J, et al. **Arch Esp Urol** 1988 May;41(4):305–11 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Peyronie's disease [letter] Mohanty KC, et al. **BMJ** 1989 Jan 28;298(6668):254

[Induratio penis plastica. Therapy with orgotein] Bickeböller R, et al. **Fortschr Med** 1988 Sep 20;106(27):558–60 **(Ger)**

[Use of orgotein in the treatment of plastic penile induration] Randone DF, et al. **Minerva Urol Nefrol** 1988 Jan–Mar; 40(1):25–7 (Eng. Abstr.) **(Ita)**

METABOLISM

Isolation and characterization of collagen in Peyronie's disease. Somers KD, et al. **J Urol** 1989 Mar;141(3):629–31

SURGERY

Peyronie's disease: surgical experience and presentation of a proximal approach. Cohen ES, et al. **J Urol** 1989 Sep; 142(3):740–2

[Corporoplasty of congenital and acquired penis deviations. Technic and results in 62 patients] Porst H. **Urologe [A]** 1989 May;28(3):168–71 (Eng. Abstr.) **(Ger)**

[Development and progress in the therapy of penile induration: 15 years' experience] Austoni E, et al. **Arch Ital Urol Nefrol Androl** 1988 Sep;60(3):231–57 (146 ref.) (Eng. Abstr.) **(Ita)**

[Selection of the method of treating various types of penile deformities] Goriunov VG, et al. **Urol Nefrol (Mosk)** 1988 Jul–Aug;(4):51–5 (Eng. Abstr.) **(Rus)**

[Surgical treatment of Peyronie's disease using the modified Nesbit technic] Stojić M, et al. **Med Pregl** 1988; 41(3–4):155–7 (Eng. Abstr.) **(Scr)**

THERAPY

Peyronie's disease. Gingell JC, et al. **BMJ** 1988 Dec 10; 297(6662):1489–90 (24 ref.)

[Therapeutic considerations in induratio penis plastica] Giannotti P, et al. **Arch Ital Urol Nefrol Androl** 1988 Mar; 60(1):67–72 (Eng. Abstr.) **(Ita)**

[Therapeutic means in Peyronie's disease] Llopis M, et al. **Arch Esp Urol** 1988 Nov–Dec;41(9):873–5 (Eng. Abstr.) **(Spa)**

PENILE NEOPLASMS

Kaposi's sarcoma of the penis. Zambolin T, et al. **Br J Urol** 1989 Jun;63(6):645–6

Rhabdomyosarcoma of the penis in children. Dalkin B, et al. **J Urol** 1989 Apr;141(4):908–9 (6 ref.)

[Cancer of the penis] Kawai T. **Gan No Rinsho** 1989 Jan;Spec No:461–7 **(Jpn)**

[Clinical observation of carcinoma of the penis] Uejima S, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Aug; 79(8):1453–7 (Eng. Abstr.) **(Jpn)**

[Carcinoma of the penis. Our experience and review of the literature] Perea J, et al. **Actas Urol Esp** 1989 Jan–Feb; 13(1):24–7 (20 ref.) (Eng. Abstr.) **(Spa)**

COMPLICATIONS

The association of lichen planus of the penis with squamous cell carcinoma in situ and with verrucous squamous carcinoma. Bain L, et al. **J Dermatol Surg Oncol** 1989 Apr; 15(4):413–7

[Fungal involvement of the penis in patients with penile condylomata acuminata] Gallenkemper G, et al. **Z Hautkr** 1989 Jan 15;64(1):21–3 (Eng. Abstr.) **(Ger)**

[Condylomata acuminata and HIV infection—an epidemiologic study] Senff H, et al. **Z Hautkr** 1988 Nov 15;63(11):907–8 (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Is it necessary to put vinegar on the penis when looking for warts? [letter] **J Am Acad Dermatol** 1988 Aug;19(2 Pt 1):372–3

Penile melanosis. Revuz J, et al. **J Am Acad Dermatol** 1989 Apr;20(4):567–70

Urological applications of human papillomavirus typing using deoxyribonucleic acid probes for the diagnosis and treatment of genital condyloma. Zderic SA, et al. **J Urol** 1989 Jan;141(1):63–5

[Metastasis of penile cancer to the ischial bone (letter)] Gun'ko RI, et al. **Med Radiol (Mosk)** 1989 Jan;34(1):75 **(Rus)**

[The first case of acquired immunodeficiency syndrome in an USSR citizen] Pokrovskiĭ VI, et al. **Ter Arkh** 1988; 60(7):10–4 **(Rus)**

DRUG THERAPY

Adjuvant and neoadjuvant vincristine, bleomycin, and methotrexate for inguinal metastases from squamous cell carcinoma of the penis. Pizzocaro G, et al. **Acta Oncol** 1988;27(6b):823–4

Podophyllotoxin 0.5% v podophyllin 20% to treat penile warts. Edwards A, et al. **Genitourin Med** 1988 Aug; 64(4):263–5

cis-Diamminedichloroplatinum in the treatment of advanced epidermoid carcinoma of the penis: a Southwest Oncology Group Study. Gagliano RG, et al. **J Urol** 1989 Jan; 141(1):66–7

EPIDEMIOLOGY

Genital cancer among wives of men with penile cancer. A study between 1958 and 1982. Hellberg D, et al. **Br J Obstet Gynaecol** 1989 Feb;96(2):221–5

GENETICS

DNA pattern and histopathology in carcinoma of the penis. A prospective study. Gustafsson O, et al. **Scand J Urol Nephrol Suppl** 1988;110:219–22

MICROBIOLOGY

An atypical case of penile carcinoma in situ associated with human papillomavirus DNA type 18. Abdennader S, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 2):887–9

Human papillomavirus typing of penile condyloma. O'Brien WM, et al. **J Urol** 1989 Apr;141(4):863–5

Detection and localization of human papillomavirus in penile condylomas and squamous cell carcinomas using in situ hybridization with biotinylated DNA viral probes. Weaver MG, et al. **Mod Pathol** 1989 Mar;2(2):94–100

Papillomaviruses in human cancers. Zur Hausen H. **Mol Carcinog** 1988;1(3):147–50

Penile/anal condylomas and squamous cell cancer. A HPV DNA hybridization study. Löning T, et al. **Virchows Arch [A]** 1988;413(6):491–8

PATHOLOGY

Radiosensitivity and characterisation of a newly established cell line from an epithelioid sarcoma. Kelland LR, et al. **Br J Cancer** 1988 Sep;58(3):322–5

Extra-mammary Paget's disease of the penis. Jenkins IL, et al. **Br J Urol** 1989 Jan;63(1):103–4

Angiosarcoma of the penis. Rasbridge SA, et al. **Br J Urol** 1989 Apr;63(4):440–1

HPV-associated intraepithelial neoplasia of external genitalia. Obalek S, et al. **Clin Dermatol** 1985 Oct–Dec;3(4):104–13

Buschke-Lowenstein tumor of penis [letter] Gürer MA, et al. **Int J Dermatol** 1988 Sep;27(7):521

Penile basal cell carcinoma. Report of a case and review of the literature. Goldminz D, et al. **J Am Acad Dermatol** 1989 Jun;20(6):1094–7 (18 ref.)

Basal cell carcinoma at the base of the penis in a black patient. Greenbaum SS, et al. **J Am Acad Dermatol** 1989 Feb;20(2 Pt 2):317–9

Squamous cell carcinoma arising in Hailey-Hailey disease. Chun SI, et al. **J Cutan Pathol** 1988 Aug;15(4):234–7

Primary malignant melanoma of the penis—a case report and a review of the literature. Nakamura S, et al. **J Dermatol (Tokyo)** 1989 Feb;16(1):68–72 (14 ref.)

Androscopy: a technique for examining men for condyloma. Pfenninger JL. **J Fam Pract** 1989 Sep;29(3):286–8

Leukemia of the penis. Begun FP, et al. **J Urol** 1989 Jul; 142(1):123–4 (8 ref.)

Male partners of women with genital human papillomavirus infection. An assessment of colposcopic abnormalities by histological examination and human papillomavirus hybridization. Selvey L, et al. **Med J Aust** 1989 May 1; 150(9):479–80, 482

Large cell lymphoma presenting as a coronal penile lesion. Scott GC, et al. **Mo Med** 1989 May;86(5):278–9

[Neurofibroma of the penis (letter)] Levillain P, et al. **Ann Pathol** 1989;9(3):222 **(Fre)**

[Buschke-Löwenstein giant condylomata acuminata. A case report] Berowa N, et al. **Dermatol Monatsschr** 1989; 175(4):247–50 (Eng. Abstr.) **(Ger)**

[A case of lymphangioma of penis] Takeyama M, et al. **Hinyokika Kiyo** 1989 Mar;35(3):523–5 (4 ref.) (Eng. Abstr.) **(Jpn)**

[Diagnosis and treatment of regional metastasis of penile cancer] Gotsadze DT, et al. **Urol Nefrol (Mosk)** 1988 Nov–Dec;(6):48–51 (Eng. Abstr.) **(Rus)**

[A rare combination of linear scleroderma with cavernous hemangioma of the glans penis] Kovalev VM, et al. **Vestn Dermatol Venerol** 1988;(6):60–1 (Eng. Abstr.) **(Rus)**

[Lymphogenic metastasis in penile cancer] Gotsadze DT, et al. **Vopr Onkol** 1988;34(12):1501–4 (Eng. Abstr.) **(Rus)**

[Verrucous carcinoma of the penis. Case report] Gómez Veiga F, et al. **Actas Urol Esp** 1988 Sep–Oct;12(5):460–3 (Eng. Abstr.) **(Spa)**

[Tumor of the penis: primary clinical manifestation of a lymphoma] Moreno Avilés J, et al. **Actas Urol Esp** 1988 Sep–Oct;12(5):488–90 (Eng. Abstr.) **(Spa)**

[Melanoma of the glans penis: report of a case and review of the literature] Castiñeiras J, et al. **Arch Esp Urol** 1988 Nov–Dec;41(9):880–3 (19 ref.) (Eng. Abstr.) **(Spa)**

[Verrucous carcinoma of the penis: apropos of 2 cases] Llarena Ibarguren R, et al. **Arch Esp Urol** 1989 Jan–Feb; 42(1):30–2 (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

Urethral hemangioma—a case report. Gupta SK, et al. **Australas Radiol** 1988 Aug;32(3):405–7

RADIOTHERAPY

[Laser treatment of penile cancer] Olsen PR, et al. **Ugeskr Laeger** 1989 Feb 27;151(9):568–70 (Eng. Abstr.) **(Dan)**

[Brachytherapy of cancer of the penis. Analysis of a series of 53 cases] Suchaud JP, et al. **J Urol (Paris)** 1989; 95(1):27–31 (Eng. Abstr.) **(Fre)**

SECONDARY

Carcinoma of the penis as a metastasis. Pálfi Z, et al. **Acta Chir Hung** 1988;29(4):323–6

Penile metastases from esophageal carcinoma [letter] Gupta NM. **Am J Gastroenterol** 1989 Mar;84(3):339–40

Prostatic cancer with metastasis to the penis. Iturregui-Pagán JR, et al. **Bol Asoc Med P R** 1989 Jun;81(6):223–4

Delayed nonurothelial metastatic lesions to the penis: a report of two cases. Adjiman S, et al. **Eur Urol** 1989;16(5):391–2

Secondary carcinoma of the penis. A report of three new cases. Ucar FJ, et al. **Eur Urol** 1989;16(4):308–9

Metastasis of prostate gland adenocarcinoma to penile and scrotal cutaneous tissues. Fiorelli RL, et al. **J Am Osteopath Assoc** 1989 Mar;89(3):349–52

Metastatic tumors of the penis. Perez-Mesa C, et al. **J Surg Oncol** 1989 Sep;42(1):11–5

Re: Cavernosography in diagnosis of metastatic tumors of the penis: 5 new cases and a review of the literature [letter] Haddad FS. **J Urol** 1989 Apr;141(4):959–60

Case report: secondary penile carcinoma. Hashimoto H, et al. **Urol Int** 1989;44(1):56–7

[Penile metastasis disclosing cancer of the rectum. Apropos of a case] Doré B, et al. **Ann Urol (Paris)** 1989;23(2):158–60 (15 ref.) (Eng. Abstr.) **(Fre)**

[Penile metastasis of a prostatic neoplasm. Apropos of a case. Long-term survival] Aubert J, et al. **J Urol (Paris)** 1988; 94(9–10):475–7 (27 ref.) (Eng. Abstr.) **(Fre)**

[Metastatic penile tumor of extragonadal seminoma: a case report] Horii Y, et al. **Hinyokika Kiyo** 1988 Jun; 34(6):1057–61 (19 ref.) (Eng. Abstr.) **(Jpn)**

[The recurrence of bladder cancer in the glans and fossa navicularis of urethra following cystectomy] Nagata Y, et al. **Hinyokika Kiyo** 1988 Jun;34(6):1043–6 (11 ref.) (Eng. Abstr.) **(Jpn)**

[Metastatic tumors of the penis of bladder origin. Apropos of 5 cases. Review of the literature] Puyol M, et al. **Actas Urol Esp** 1988 Jul–Aug;12(4):351–9 (46 ref.) (Eng. Abstr.) **(Spa)**

[Metastasis in the corpus cavernosum of the penis as primary manifestation of epidermoid carcinoma of the lung (letter)] Ortiz Cansado A, et al. **Med Clin (Barc)** 1988 Jun 18; 91(4):159 **(Spa)**

SURGERY

Total resection of glans penis surface by CO2 laser microsurgery. Bandieramonte G, et al. **Acta Oncol** 1988; 27(5):575–8

Carbon dioxide laser treatment of erythroplasia of Queyrat. Greenbaum SS, et al. **J Dermatol Surg Oncol** 1989 Jul; 15(7):747–50

Pearly penile papules: treatment with the carbon dioxide laser. Magid M, et al. **J Dermatol Surg Oncol** 1989 May; 15(5):552–4 (12 ref.)

Congenital genitourinary hemangiomas in a patient with the Klippel-Trenaunay syndrome: management with the neodymium:YAG laser. Hockley NM, et al. **J Urol** 1989 Apr;141(4):940–1

Effective outpatient treatment of Kaposi's sarcoma of the urethral meatus using the neodymium:YAG laser. Wishnow KI, et al. **Lasers Surg Med** 1988;8(4):428–32

[Laser treatment of superficial penile tumors] Lenk S, et al. **Dermatol Monatsschr** 1988;174(10):593–9 (Eng. Abstr.) **(Ger)**

[Carcinoma of the penis] Arocena Lanz F. **Arch Esp Urol** 1989 May;42(4):293–6 **(Spa)**

[Genital rhabdomyosarcoma. Diagnostic and therapeutic considerations. Apropos of a case of cavernous origin] López López C, et al. **Arch Esp Urol** 1989 May; 42(4):375–81 (Eng. Abstr.) **(Spa)**

THERAPY

The treatment of clinically fixed inguinal lymph node metastases from carcinoma of the penis by chemotherapy and surgery. Abratt RP, et al. **Eur J Surg Oncol** 1989 Jun; 15(3):285–6

Treatment of cancer of the penis—a review. Srinivas V, et al. **Int Urol Nephrol** 1989;21(2):185–93 (54 ref.)

Comparative study of systemic interferon alfa-n1 and isotretinoin in the treatment of resistant condylomata acuminata. Olsen EA, et al. **J Am Acad Dermatol** 1989 Jun;20(6):1023–30

Carcinoma of the penis—the Groote Schuur Hospital experience. Barnes RD, et al. **J R Coll Surg Edinb** 1989 Feb;34(1):44–6

Penis cancer: a review by the Joint Radiotherapy Committee

of the European Organisation for Research and Treatment of Cancer (EORTC) Genitourinary and Radiotherapy Groups. Jones WG, et al. **J Surg Oncol** 1989 Apr; 40(4):227–31 (63 ref.)
Contemporary chemotherapy and radiotherapy for inguinal metastases of carcinoma of the penis: a case report. Palmieri G, et al. **Tumori** 1988 Oct 31;74(5):585–6
[Treatment of inguinal lymph nodes in cancer of the penis. Apropos of 85 cases treated at the Institut Curie] Darai E, et al. **Ann Chir** 1988;42(10):748–52 (Eng. Abstr.) **(Fre)**
[Treatment of epidermoid carcinoma of the penis] Adjiman S, et al. **Presse Med** 1989 Jun 3;18(22):1117–9 (Eng. Abstr.) **(Fre)**
[A case of advanced penile cancer treated with multimodal therapy—combination with tensor fascia lata myocutaneous flap] Inagaki N, et al. **Hinyokika Kiyo** 1988 Sep; 34(9):1661–4 (Eng. Abstr.) **(Jpn)**
[Complete remission of stage III penile cancer by multidisciplinary treatment: report of a case] Kuo JY, et al. **Hinyokika Kiyo** 1988 Jun;34(6):1051–5 (Eng. Abstr.) **(Jpn)**

TRANSMISSION

[Screening by colposcope of partners of women with genital human papillomavirus infection] Vallone N, et al. **Minerva Ginecol** 1988 Jul;40(7):403–5 (Eng. Abstr.) **(Ita)**

VETERINARY

Successful surgical repair of a vascular shunt of the corpus cavernosum penis and penile fibropapillomata in a bull. Gilbert RO, et al. **J S Afr Vet Assoc** 1987 Dec;58(4):193–5
Naturally-occurring neoplasms of the preputial and clitoral gland in Han:SPRD rats. Kaspareit-Rittinghausen J, et al. **Zentralbl Veterinarmed [A]** 1988 Sep;35(8):596–603

PENIS

see related

CIRCUMCISION

A well-known 'phallacy' resurrected [letter] Hobbs JT. **Br J Hosp Med** 1989 Mar;41(3):299
Sexual ornaments [letter] Munk PL, et al. **Can Assoc Radiol J** 1989 Jun;40(3):182
Clinical use of penile clamp with automatic electronic alarm. Huaijin C. **Eur Urol** 1988;15(3–4):237–8
Infections of genitourinary prostheses. Blum MD. **Infect Dis Clin North Am** 1989 Jun;3(2):259–74 (43 ref.)
Preputial foreign body in a bull. Van Saun RJ, et al. **J Am Vet Med Assoc** 1989 May 1;194(9):1303–4
Penile retractor. Gelbard MK. **J Urol** 1989 Jan;141(1):91
Experience with 1-stage repair of hypospadias and chordee using free graft of prepuce. Hendren WH, et al. **J Urol** 1988 Nov;140(5 Pt 2):1259–64
Five-year followup of the Scott inflatable penile prosthesis and comparison with semirigid penile prosthesis. Kabalin JN, et al. **J Urol** 1988 Dec;140(6):1428–30
Repair of proximal hypospadias using a preputial free graft for neourethral construction and a preputial pedicle flap for ventral skin coverage. Kaplan GW. **J Urol** 1988 Nov; 140(5 Pt 2):1270–2
OmniPhase penile prosthesis: delayed bilateral central cable breakage. Levinson K, et al. **J Urol** 1989 Mar;141(3):618–9
Removal of a strangulating metal bearing from the penis. McLaughlin T, et al. **J Urol** 1989 Mar;141(3):617
Clinical experience with the Mentor inflatable penile prosthesis in 301 patients. Merrill DC. **J Urol** 1988 Dec; 140(6):1424–7
Use of CX cylinders in association with AMS700 inflatable penile prosthesis. Mulcahy JJ. **J Urol** 1988 Dec; 140(6):1420–1
The Hydroflex self-contained inflatable prosthesis: experience with 100 patients. Mulcahy JJ. **J Urol** 1988 Dec; 140(6):1422–3
Sonographic appearance of the reservoir of an inflatable penile prosthesis. Epstein S, et al. **JCU** 1987 Jun;15(5):353–6
Postoperative fistula following insertion of a penile prosthesis in a diabetic patient. Bamberger MH, et al. **N Y State J Med** 1989 Jun;89(6):359–60
Penile prosthesis as an adjunct to intermittent self-catheterization in patients with neuropathic bladders [letter] Weinberg JJ, et al. **N Y State J Med** 1989 Jun; 89(6):363
Experimental tissue molding for soft-tissue reconstruction: a preliminary report. Fisher J, et al. **Plast Reconstr Surg** 1988 Nov;82(5):857–64
Clinical evaluation of inflatable penile prosthesis with combined pump-reservoir. Fein RL. **Urology** 1988 Oct; 32(4):311–4
[Corpora cavernosa autoinjection therapy. Potency at any price?] Sulke J, et al. **Dtsch Med Wochenschr** 1989 Feb 10;114(6):231–4 **(Ger)**
[From the archives of psychoanalysis. Bertram D. Lewin. The body as phallus] **Psyche (Stuttg)** 1989 Feb;43(2):150–70 **(Ger)**

ABNORMALITIES

Micropenis and congenital adrenal hypoplasia. Bourgeois MJ, et al. **Am J Perinatol** 1989 Jan;6(1):69–71
Pedagogical handicap associated with micropenis and other CHARGE syndrome anomalies of embryogenesis: four 46, XY cases reared as girls. Money J, et al. **Am J Psychother** 1988 Jul;42(3):354–79
Nesbit procedure in the treatment of congenital penile deviation. Rodríguez Netto N Jr, et al. **Arch Esp Urol** 1989 May;42(4):386–7
Congenital penile agenesis. Kothare SV, et al. **Indian Pediatr** 1988 Jun;25(6):572–6
Aphallia. Talwar S, et al. **Indian Pediatr** 1988 Jun; 25(6):579–81
Congenital glanular sinus: possible variant of blind accessory urethral channel. Choudhury SR, et al. **J Urol** 1989 Apr; 141(4):944–5
Value of sonography in true complete diphallia. Marti-Bonmati L, et al. **J Urol** 1989 Aug;142(2):356–7
Small penis and the male sexual role. Reilly JM, et al. **J Urol** 1989 Aug;142(2 Pt 2):569–71; discussion 572
Treatment of congenital penile curvature due to disparate corpora cavernosa by the Nesbit technique: a rule of thumb for the number of wedges of tunica required to achieve correction. Sislow JG, et al. **J Urol** 1989 Jan;141(1):92–3
Aphallia: its classification and management. Skoog SJ, et al. **J Urol** 1989 Mar;141(3):589–92
Diphallia associated with malformation of hindgut derivatives. Cernach MC, et al. **Urology** 1989 Mar; 33(3):209–10
[Scrotopenile inversion: a report of 4 cases] Zhang DS. **Chung Hua Wai Ko Tsa Chih** 1989 Feb;27(2):109, 126 (Eng. Abstr.) **(Chi)**
[Penis agenesis, persistent cloaca and anorectal agenesis] Kraus J. **Monatsschr Kinderheilkd** 1988 Jul;136(7):384–6 (Eng. Abstr.) **(Ger)**
[Corporoplasty of congenital and acquired penis deviations. Technic and results in 62 patients] Porst H. **Urologe [A]** 1989 May;28(3):168–71 (Eng. Abstr.) **(Ger)**
[Selection of the method of treating various types of penile deformities] Goriunov VG, et al. **Urol Nefrol (Mosk)** 1988 Jul-Aug;(4):51–5 (Eng. Abstr.) **(Rus)**
[Physiopathology of micropenis and review of its treatment. Personal report] Romero Tenorio M, et al. **Actas Urol Esp** 1988 May-Jun;12(3):232–7 (Eng. Abstr.) **(Spa)**
[Congenital inward curvature of the penis without hypospadias. Report of 3 new cases] Martínez-Sapiña Llanas I, et al. **Arch Esp Urol** 1989 May;42(4):317–9 (Eng. Abstr.) **(Spa)**
[Technical modification in the surgical treatment of curvature of the penis] Serrate Aguilera RG, et al. **Arch Esp Urol** 1989 May;42(4):313–5 (Eng. Abstr.) **(Spa)**
[Treatment of micropenis with testosterone cyclopentylate] Dorantes-Alvarez LM, et al. **Bol Med Hosp Infant Mex** 1988 Jul;45(7):449–53 (Eng. Abstr.) **(Spa)**

ANALYSIS

Immunohistochemical and immunoblot analyses of collagens in the developing fibrocartilage in the glans penis of the rat. Murakami R. **Acta Morphol Neerl Scand** 1987; 25(4):279–88

ANATOMY & HISTOLOGY

The 'small' penis syndrome. Murtagh J. **Aust Fam Physician** 1989 Mar;18(3):218, 220
The foreskin and urinary tract infections. Lohr JA. **J Pediatr** 1989 Mar;114(3):502–4
Detailed anatomy of penile neurovascular structures: surgical significance. Breza J, et al. **J Urol** 1989 Feb;141(2):437–43
Determination of erectile penile volume by ultrasonography. Nelson RP, et al. **J Urol** 1989 May;141(5):1123–6
Magnetic resonance imaging of the penis: normal anatomy. Satragno L, et al. **Magn Reson Imaging** 1989 Jan-Feb; 7(1):95–100
Normal penile anatomy and abnormal penile conditions: evaluation with MR imaging. Hricak H, et al. **Radiology** 1988 Dec;169(3):683–90

BLOOD SUPPLY

Technique of dorsal penile artery bypass graft with saphenous vein for arteriogenic impotence. Caes F, et al. **Arch Ital Urol Nefrol Androl** 1988 Mar;60(1):59–61
Occluding structures in circumflex veins of the penis. Goldstein AM, et al. **Arch Ital Urol Nefrol Androl** 1987 Dec;59(2):127–31
Caverno-venous leakage: retrograde opacification and resection of the deep dorsal vein completed by ligation of the crural edges of the corpora. Wespes E, et al. **Arch Ital Urol Nefrol Androl** 1987 Dec;59(2):149–54
Radiological investigation of impotence. Hartnell GG. **Br J Hosp Med** 1988 Dec;40(6):438–45 (29 ref.)
Penile venous drainage in erectile dysfunction. Anatomical, radiological and functional considerations. Aboseif SR, et al. **Br J Urol** 1989 Aug;64(2):183–90
Duplex scanning in suspected vasculogenic impotence: a worthwhile exercise? Robinson LQ, et al. **Br J Urol** 1989 Apr;63(4):432–6
Effect of phentolamine on venous return in human erection. Wespes E, et al. **Br J Urol** 1989 Jan;63(1):95–7
Penile vascular catheterization in the diagnosis and treatment of impotence. **Cardiovasc Intervent Radiol** 1988 Aug; 11(4):183–260
Arterial anatomy and arteriographic diagnosis of arteriogenic impotence. Bähren W, et al. **Cardiovasc Intervent Radiol** 1988 Aug;11(4):195–210 (63 ref.)
Penile vascular catheterization in the diagnosis and treatment of impotence. Bookstein JJ. **Cardiovasc Intervent Radiol** 1988 Aug;11(4):183–4
Diagnostic accuracy of Doppler ultrasound technique of the penile arteries in correlation to selective arteriography. Gall H, et al. **Cardiovasc Intervent Radiol** 1988 Aug;11(4):225–31
Severe arterial insufficiency in impotence confirmed with an improved angiographic technique: the impact of smoking and some other etiologic factors. Forsberg L, et al. **Eur Urol** 1989;16(5):357–60
Long-term results of deep dorsal penile vein transsection in venous impotence. Lunglmayr G, et al. **Eur Urol** 1988; 15(3–4):209–12
Diagnosis of male impotence after intracavernous papaverine test. Puppo P, et al. **Eur Urol** 1988;15(3–4):213–8
Microsurgical arterialization for vascular impotence. Wagenknecht LV. **Eur Urol** 1989;16(4):262–6
New treatment of increased venous drainage in organic impotence: ligation of internal iliac veins. Wagenknecht LV. **Eur Urol** 1989;16(3):172–4
Culture of human corpus cavernosum endothelium. Carson MP, et al. **In Vitro Cell Dev Biol** 1989 Mar;25(3 Pt 1):248–54
Algorithm for the delineation and treatment of vasculogenic impotence. A review. Shifrin EG, et al. **Isr J Med Sci** 1989 Mar;25(3):146–51 (39 ref.)
Vasculogenic impotence [editorial] Zelikovski A. **Isr J Med Sci** 1989 Mar;25(3):121–2
Penile blood flow by xenon-133 washout. Haden HT, et al. **J Nucl Med** 1989 Jun;30(6):1032–5
Erectile response to acute and chronic occlusion of the internal pudendal and penile arteries. Aboseif SR, et al. **J Urol** 1989 Feb;141(2):398–402
Quantitative analysis of outflow pathway of corpora cavernosa by pressure flow technique. Aoki H, et al. **J Urol** 1989 Mar;141(3):645–50
Two circulatory routes within the human corpus cavernosum penis: a scanning electron microscopic study of corrosion casts. Banya Y, et al. **J Urol** 1989 Sep;142(3):879–83
Anatomy of penile venous drainage in potent and impotent men during cavernosography. Fuchs AM, et al. **J Urol** 1989 Jun;141(6):1353–6
The vascular anatomy of the cavernous body of green monkeys. Fugleholm K, et al. **J Urol** 1989 Jul;142(1):181–8
Microsurgical penile revascularization using the central corporeal penile artery. Konnak JW, et al. **J Urol** 1989 Aug;142(2):305–8
Experience in diagnosis and treatment of impotence caused by cavernosal leak syndrome. DePalma RG, et al. **J Vasc Surg** 1989 Aug;10(2):117–21
Pelvic hemodynamics before and after aortoiliac vascular reconstruction: the significance of penile blood pressure. Kawai M. **Jpn J Surg** 1988 Sep;18(5):514–20
Microsurgical arterialization for vascular impotence. Wagenknecht LV. **Microsurgery** 1988;9(4):258–61
Cutaneous blood supply of the penis. Grossman JA, et al. **Plast Reconstr Surg** 1989 Feb;83(2):213–6
Ultralong, reverse-curve angiographic catheter. Fellmeth B, et al. **Radiology** 1989 Sep;172(3):872–3
Venous drainage of the bovine corpus cavernosum penis in relationship to penile dimensions and age. Ardalani G, et al. **Res Vet Sci** 1988 Sep;45(2):174–80
Abnormal venous drainage from the penis examined by dynamic cavernosography and surgically treated. Klevmark B, et al. **Scand J Urol Nephrol Suppl** 1988; 110:261–5
Role of Doppler ultrasound in the evaluation of penile hemodynamics in male impotence. Lin MC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Oct;87(10):960–5
Clinical significance of anatomy of penile deep dorsal vein. Tsai TC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Dec; 87(12):1187–90
Morphological changes in penile vessels during erection: the mechanism of obstruction of arteries and veins at the tunica albuginea in dog corpora cavernosa. Hanyu S. **Urol Int** 1988;43(4):219–24
Pharmacoangiography of the penile arteries. Forsberg L, et al. **Urol Radiol** 1988;10(3):132–5
Doppler studies of the penile circulation. Forsberg L, et al. **Urol Radiol** 1988;10(3):129–31
Arteriography and radiology of impotence. Rosen MP, et al. **Urol Radiol** 1988;10(3):136–43
Diagnosis of vasculogenic impotence: combination of penile xenon-133 washout and papaverine tests. Lin SN, et al. **Urology** 1989 Jul;34(1):28–32
Venous surgery in erectile dysfunction: a critical report on 116 patients. Treiber U, et al. **Urology** 1989 Jul;34(1):22–7
[Treatment of vasculogenic impotence by corporeal revascularization and/or ligation of deep dorsal veins: a preliminary report] Lin SN, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Mar;41(3):211–6 (Eng. Abstr.) **(Chi)**
[Treatment of vascular impotence by arterialization of the penile vein: report of 10 cases] Zhang B. **Chung Hua Wai Ko Tsa Chih** 1988 Apr;26(4):201–2, 253 (Eng. Abstr.) **(Chi)**
[Cavernovenous leakage, a surgically treatable cause of erectile impotence] Leliefeld HH, et al. **Ned Tijdschr Geneeskd** 1989 Jun 24;133(25):1265–7 (Eng. Abstr.) **(Dut)**
[Radiologic exploration of impotence] Sarramon JP.

Arch Ital Urol Nefrol Androl 1987 Dec;59(2):113–26 (Eng. Abstr.) **(Fre)**

[Impotence caused by venous incompetence. 80 cases treated with anastomosis between the epigastric artery and the deep dorsal vein of the penis] Levy JB, et al. **Chirurgie** 1988;114(2):182–91 (Eng. Abstr.) **(Fre)**

[Surgical treatment of vascular impotence by arterialization of the dorsal vein of the penis. Experience of 292 cases] Virag R, et al. **Chirurgie** 1988;114(9):703–14 (Eng. Abstr.) **(Fre)**

[Treatment of the unstable erection syndrome caused by venous leakage. Preliminary study] Garbe JF. **J Mal Vasc** 1989;14(2):141–2 **(Fre)**

[Definition and treatment of patients with venous leakage] Wespes E. **J Mal Vasc** 1989;14(2):140–1 **(Fre)**

[Basal Doppler ultrasonography of the penis. Standardization of the method] Meazza A, et al. **J Urol (Paris)** 1989; 95(3):155–60 (Eng. Abstr.) **(Fre)**

[Arterial blood pressure in the penis in patients with erection disorders and premature ejaculation] Tzwetkov D, et al. **Dermatol Monatsschr** 1988;174(6):349–50 **(Ger)**

[Hypervascularization syndrome of the penis following arterialization of the dorsal penile vein for erectile impotence] Fritsch P, et al. **Hautarzt** 1989 Jul;40(7):434–6 (Eng. Abstr.) **(Ger)**

[Surgical therapy of vascular impotence] Schnyder von Wartensee M, et al. **Schweiz Med Wochenschr** 1988 Sep 3;118(35):1237–41 (Eng. Abstr.) **(Ger)**

[Diagnosis of venous insufficiency in erectile dysfunction: comparative studies of cavernosonography and Doppler sonography] Gall H, et al. **Urologe [A]** 1989 Jan;28(1):48–53 (Eng. Abstr.) **(Ger)**

[Diagnosis of a venous fistula as a cause of erection disorders. Experimental principles and practical conclusions] Stief CG, et al. **Urologe [A]** 1989 May;28(3):172–6 (Eng. Abstr.) **(Ger)**

[Leakage correction by resection of the deep dorsal penis vein. Assessment of results after 4 years of venous potency surgery] Weidner W, et al. **Urologe [A]** 1989 Jul; 28(4):217–22 (Eng. Abstr.) **(Ger)**

[Revascularization of the penis in vascular-induced erectile dysfunction: clinical results of the Hauri surgical method] Zumbé J, et al. **Urologe [A]** 1988 Nov;27(6):336–9 (Eng. Abstr.) **(Ger)**

[Ligation of the vena dorsalis penis profunda in treating vascular-induced impotence] Darewicz J, et al. **Z Urol Nephrol** 1989 Apr;82(4):217–20 (Eng. Abstr.) **(Ger)**

[Dynamic cavernosonography in the diagnosis of vascular-induced impotence] Darewicz J, et al. **Z Urol Nephrol** 1989 Jan;82(1):35–7 (Eng. Abstr.) **(Ger)**

[Resection of the deep dorsal penile vein in the treatment of vascular-induced impotence] Darewicz J, et al. **Z Urol Nephrol** 1989 Jun;82(6):321–3 (Eng. Abstr.) **(Ger)**

[Surgical treatment of venous-induced erectile impotence in the male] Török A, et al. **Z Urol Nephrol** 1989 Jan; 82(1):39–44 (Eng. Abstr.) **(Ger)**

[Surgical treatment of impotence caused by venous dysfunction] Török A, et al. **Orv Hetil** 1989 Feb 19; 130(8):391–3 (27 ref.) (Eng. Abstr.) **(Hun)**

[Diagnosis and therapy of impotence] Rigatti P, et al. **Minerva Chir** 1989 Feb 28;44(4):767–71 (10 ref.) **(Ita)**

[Our experience in vascular surgery in male impotence of venous nature] Vaccari R, et al. **Minerva Chir** 1989 Apr 15;44(7):1123–6 (Eng. Abstr.) **(Ita)**

[A case of Mondor's disease of the penis] Doi Y, et al. **Hinyokika Kiyo** 1988 Jul;34(7):1245–8 (18 ref.) (Eng. Abstr.) **(Jpn)**

[Vascular architecture and the mechanism of erection] Kano K. **Nippon Hinyokika Gakkai Zasshi** 1987 Dec; 78(13):2268–9 **(Jpn)**

[Hemodynamic studies of penile erection in dogs—blood flow changes in the corpus cavernosum by arterial ligation] Takagane H. **Nippon Hinyokika Gakkai Zasshi** 1988 Dec; 79(12):1909–18 (Eng. Abstr.) **(Jpn)**

[Surgical treatment of impotence of vascular origin] Dudkin BP, et al. **Klin Med (Mosk)** 1989 Mar;67(3):88–92 (Eng. Abstr.) **(Rus)**

[Radionuclide diagnosis of vasculogenic impotence] SorokinAI, et al. **Med Radiol (Mosk)** 1988 Dec;33(12):3–5 (Eng. Abstr.) **(Rus)**

[Endovascular diagnosis and treatment of arteriogenic erectile dysfunction-related impotence] Ovchininskiĭ MN, et al. **Urol Nefrol (Mosk)** 1988 May–Jun;(3):33–6 **(Rus)**

[Erectile dysfunction of venous origin: diagnosis by means of cavernometry] Marín Lafuente JC, et al. **Arch Esp Urol** 1989 May;42(4):363–4 (Eng. Abstr.) **(Spa)**

CYTOLOGY

[Effect of Na2SeO3 on the damages of genetic materials induced by MNNG in children's foreskin fibroblasts in vitro] An J, et al. **Chung Hua Chung Liu Tsa Chih** 1988 May;10(3):180–3 (Eng. Abstr.) **(Chi)**

DRUG EFFECTS

Responses of erectile tissue from impotent men to pharmacological agents. Creed KE, et al. **Br J Urol** 1989 Apr;63(4):428–31

Synthetic nitrovasodilators are effective, in vitro, in relaxing penile tissue from impotent men: the findings and their implications. Heaton JP. **Can J Physiol Pharmacol** 1989 Jan;67(1):78–81

Local and systemic effects of chronic intracavernous injection of papaverine, prostaglandin E1, and saline in primates. Aboseif SR, et al. **J Urol** 1989 Aug;142(2):403–8

Effect of moxisylyte hydrochloride on isolated human penile corpus cavernosum tissue. Imagawa A, et al. **Life Sci** 1989; 44(9):619–23

Relaxation of isolated corpus cavernosum induced by smooth-muscle relaxant drugs. A comparative study. Barbanti G, et al. **Urol Res** 1988;16(4):299–302

EMBRYOLOGY

Pathogenesis of hypospadias—more questions than answers. Kluth D, et al. **J Pediatr Surg** 1988 Dec;23(12):1095–101

Hypospadias hidden by a complete prepuce. Hatch DA, et al. **Surg Gynecol Obstet** 1989 Sep;169(3):233–4

ENZYMOLOGY

Prostaglandin 15-hydroxydehydrogenase activity in human penile corpora cavernosa and its significance in prostaglandin-mediated penile erection. Roy AC, et al. **Br J Urol** 1989 Aug;64(2):180–2

GROWTH & DEVELOPMENT

Influence of testosterone on the development of the ischiocavernosus muscle of the rat. Vercelli A, et al. **Acta Anat (Basel)** 1989;134(3):177–83

Growth and maturation in the male genitalia from birth to adolescence. II. Change of penile length. Fujieda K, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Apr;29(2):220–3

Sexual maturation of Turkish boys in Ankara. Güvenç H, et al. **Turk J Pediatr** 1988 Jan–Mar;30(1):39–43

INJURIES

Fracture of the penis—review with case report. Tiong JT, et al. **Aust N Z J Surg** 1988 May;58(5):428–31

Burn to toddler's penis from an electrochemical battery. Mecrow IK. **BMJ** 1988 Nov 19;297(6659):1315

Isolated penile burns: a plea for early excision. Laitung JK, et al. **Br J Plast Surg** 1988 Nov;41(6):644–8

Injury to the prepuce. Yip A, et al. **Br J Urol** 1989 May; 63(5):535–8

Bladder catheter knotting: a case report. Goetting MG. **Henry Ford Hosp Med J** 1988;36(4):191–2

Preputial injuries in beef bulls: 172 cases (1980–1985). Memon MA, et al. **J Am Vet Med Assoc** 1988 Aug 15;193(4):481–5

The therapy of genital trauma by dog bite. Donovan JF, et al. **J Urol** 1989 May;141(5):1163–5

Penile trauma: small slam revisited. Gorman RL, et al. **Pediatr Emerg Care** 1989 Jun;5(2):108–9

Management of amputation injuries of the male genitalia. Jordan GH, et al. **Urol Clin North Am** 1989 May; 16(2):359–67 (47 ref.)

Penile rupture. Orvis BR, et al. **Urol Clin North Am** 1989 May;16(2):369–75 (27 ref.)

"Faux pas du coit" with associated rupture of corpora cavernosa and urethra. Bitker MO, et al. **Urology** 1988 Nov; 32(5):447–8

[Complete rupture of the urethra and bilateral fracture of the corpus cavernosum penis] Pavard D, et al. **Ann Urol (Paris)** 1988;22(6):428–30 (Eng. Abstr.) **(Fre)**

[Sclerosing lipogranuloma of the male genitals] Dimitrowa J, et al. **Z Hautkr** 1989 Mar 15;64(3):223–7 (Eng. Abstr.) **(Ger)**

[Self-mutilation of the penis as an emergency surgical condition] Cerović B, et al. **Acta Chir Iugosl** 1988; 35(1):87–92 (Eng. Abstr.) **(Scc)**

INNERVATION

Dorsal nerve of penis block—anatomical and radiological studies. Brown TC, et al. **Anaesth Intensive Care** 1989 Feb; 17(1):34–8

Autonomic innervation of reproductive organs: analysis of the neurons whose axons project in the main penile nerve in the pelvic plexus of the rat. Dail WG, et al. **Anat Rec** 1989 May;224(1):94–101

Cortical evoked potentials in subjects with true premature ejaculation. Fanciullacci F, et al. **Andrologia** 1988 Jul–Aug; 20(4):326–30

Penile block via the subpubic space in 100 children. Dalens B, et al. **Anesth Analg** 1989 Jul;69(1):41–5

Penile and finger sensory thresholds in young, aging, and diabetic males. Rowland DL, et al. **Arch Sex Behav** 1989 Feb;18(1):1–12

Re: Bulbocavernosus reflex latency in the investigation of diabetic impotence [letter; comment] Herbaut AG, et al. **Br J Urol** 1989 Mar;63(3):332. **Comment on:** Br J Urol 1988 Jan;61(1):59–62

Functional innervation patterns in the corpus spongiosum and glans in the dog. Kimoto Y, et al. **Br J Urol** 1988 Dec;62(6):597–602

Parasympathetic nerves in penile erectile tissue of the rat contain choline acetyltransferase. Dail WG, et al. **Brain Res** 1989 May 15;487(1):165–70

Distribution of neurons in the major pelvic ganglion of the rat which supply the bladder, colon or penis. Keast JR, et al. **Cell Tissue Res** 1989 Apr;256(1):105–12

Vasoactive intestinal polypeptide (VIP)- and neuropeptide Y (NPY)-containing nerve fibres in the penile cavernous tissue of green monkeys (Cercopithecus aethiops). Schmalbruch H, et al. **Cell Tissue Res** 1989 Jun; 256(3):529–41

Study of neuropeptide Y-containing nerve fibers in the human penis. Wespes E, et al. **Cell Tissue Res** 1988 Oct; 254(1):69–74

Somatosensory evoked potentials elicited by dorsal penile and posterior tibial nerve stimulation. Fitzpatrick DF, et al. **Electroencephalogr Clin Neurophysiol** 1989 Mar–Apr; 74(2):95–104

Characterization of contraction-mediating prostanoid receptors in human penile erectile tissues. Hedlund H, et al. **J Urol** 1989 Jan;141(1):182–6

The rat as a model for the study of penile erection. Quinlan DM, et al. **J Urol** 1989 Mar;141(3):656–61

Penile desensitization does not affect postcopulatory genital autogrooming in rats: evidence for central motor patterning. Bitran D, et al. **Physiol Behav** 1989 May; 45(5):1001–6

Copulatory performance of penile desensitized male rats following the administration of 8-OH-DPAT. Dahlöf LG, et al. **Physiol Behav** 1988;43(6):841–3

Effects of dorsal penile nerve transection upon the sexual behaviour of the male marmoset (Callithrix jacchus). Dixson AF. **Physiol Behav** 1988;43(2):235–8

Efferent modulation of penile mechanoreceptor activity. Johnson RD. **Prog Brain Res** 1988;74:319–24

Neurophysiology of penile erection. Jünemann KP, et al. **Urol Res** 1989;17(4):213–7

[Measurement of nerve conduction velocity of the dorsal nerve of the penis] Kiwamoto H, et al. **Hinyokika Kiyo** 1988 Jun;34(6):1007–10 (Eng. Abstr.) **(Jpn)**

METABOLISM

Reactivation of the androgen receptor from murine preputial gland by thioredoxin or GSH. Wiegand M, et al. **J Steroid Biochem** 1989 Jan;32(1A):53–8

Androgen receptor levels and 5 alpha-reductase activities in preputial skin and chordee tissue of boys with isolated hypospadias. Gearhart JP, et al. **J Urol** 1988 Nov;140(5 Pt 2):1243–6

Re: Effects of prostaglandin E1 on penile erection and erectile failure [letter] Jeremy JY, et al. **J Urol** 1988 Dec; 140(6):1556

MICROBIOLOGY

Adherence of bacteria to human foreskins. Fussell EN, et al. **J Urol** 1988 Nov;140(5):997–1001

Attempted experimental infection of the preputial cavity of three male goats with Campylobacter species. Ellis B, et al. **Vet Rec** 1988 Nov 26;123(22):568

PATHOLOGY

The histologic spectrum of prepuces from patients with phimosis. Clemmensen OJ, et al. **Am J Dermatopathol** 1988 Apr;10(2):104–8

re Penile gangrene: a separate entity from Fournier's syndrome? [letter] Bour J, et al. **Br J Urol** 1989 Jun; 63(6):654

Extra-mammary Paget's disease of the penis. Jenkins IL, et al. **Br J Urol** 1989 Jan;63(1):103–4

Pharmacoangiographic assessment of the corpora cavernosa. Bookstein JJ, et al. **Cardiovasc Intervent Radiol** 1988 Aug; 11(4):218–24

Techniques for performing cavernosometry and cavernosography. Delcour C, et al. **Cardiovasc Intervent Radiol** 1988 Aug;11(4):211–7

Papular pearly penile pearls. George WM. **J Am Acad Dermatol** 1989 May;20(5 Pt 1):852

Coumarin necrosis of the penis. Barkley C, et al. **J Urol** 1989 Apr;141(4):946–8 (16 ref.)

Tuberculosis of the penis presenting as a subcutaneous nodule. Baskin LS, et al. **J Urol** 1989 Jun;141(6):1430–1

Papaverine-induced fibrosis of the corpus cavernosum. Fuchs ME, et al. **J Urol** 1989 Jan;141(1):125

Penile necrosis caused by condom catheter. Rehman M, et al. **JPMA** 1988 Jul;38(7):193–4

Genital necrosis secondary to warfarin therapy. Kandrotas RJ, et al. **Pharmacotherapy** 1988;8(6):351–4 (17 ref.)

Case report: secondary penile carcinoma. Hashimoto H, et al. **Urol Int** 1989;44(1):56–7

Giant median raphe cyst of the penis with diffuse melanosis of its epithelial lining. Hitti IF, et al. **Urol Int** 1989; 44(2):121–4

Corporeal septal necrosis secondary to penile cylinder aneurysmal dilatation. Collins JP. **Urology** 1989 May; 33(5):416–7

[NMR and cavernosography in the staging of Peyronie's disease] Bellerofonte C, et al. **Arch Ital Urol Nefrol Androl** 1987 Dec;59(2):145–8 (Eng. Abstr.) **(Ita)**

[Necrosis of the penis in Fournier's disease] Moskvin MI. **Urol Nefrol (Mosk)** 1989 Mar–Apr;(2):53–5 **(Rus)**

PHYSIOLOGY

The morphological basis for the Polster theory of penile vascular regulation. Conti G, et al. **Acta Anat (Basel)** 1988; 133(3):209–12

Physiology, hemodynamics, and pharmacology of penile

erection [letter] Goldstein AM.
Arch Ital Urol Nefrol Androl 1989 Mar;61(1):89–90
Characterization of cyclic nucleotide and inositol 1,4,5–trisphosphate–sensitive calcium–exchange activity of smooth muscle cells cultured from the human corpora cavernosa. Krall JF, et al. **Biol Reprod** 1988 Nov; 39(4):913–22
Fundamentals and hemodynamics of penile erection. Aboseif SR, et al. **Cardiovasc Intervent Radiol** 1988 Aug; 11(4):185–90 (25 ref.)
Castration and erection. An animal study. Müller SC, et al. **Eur Urol** 1988;15(1–2):118–24
Bulbocavernosus reflex: its validity as a diagnostic test of neurogenic impotence. Lavoisier P, et al. **J Urol** 1989 Feb; 141(2):311–4
Electrical activity of corpus cavernosum during flaccidity and erection of the human penis: a new diagnostic method? Wagner G, et al. **J Urol** 1989 Sep;142(3):723–5
Penile erection and yawning induced by oxytocin and related peptides: structure–activity relationship. Argiolas A, et al. **Peptides** 1989 May–Jun;10(3):559–63
Higher CNS control of penile responses in rats: the effect of hypothalamic stimulation. Courtois FJ, et al. **Physiol Behav** 1988;44(2):165–71
Role of the bulbospongiosus muscles in sexual behavior and fertility in the house mouse. Elmore LA, et al. **Physiol Behav** 1988;44(1):125–9

PHYSIOPATHOLOGY

Treatment of impotence by intrapenile injections. A comparison of papaverine versus papaverine and phentolamine: a double–blind, crossover trial. Keogh EJ, et al. **J Urol** 1989 Sep;142(3):726–8
The diagnosis of venogenic impotence: dynamic or pharmacologic cavernosometry? Stief CG, et al. **J Urol** 1988 Dec;140(6):1561–3
Impaired neurogenic and endothelium–mediated relaxation of penile smooth muscle from diabetic men with impotence. Saenz de Tejada I, et al. **N Engl J Med** 1989 Apr 20; 320(16):1025–30

RADIOGRAPHY

Radiology of penile prostheses. Cohan RH, et al. **AJR Am J Roentgenol** 1989 May;152(5):925–31 (48 ref.)
The role of dynamic corpora cavernosography in the management of impotence. Glancy JJ, et al. **Australas Radiol** 1989 May;33(2):128–31
Intra–individual comparative study of dynamic and pharmacocavernography. Stief CG, et al. **Br J Urol** 1989 Jul;64(1):93–7
Re: Penile pharmacocavernosography and cavernosometry in the evaluation of impotence [letter] Reiss HF. **J Urol** 1989 Sep;142(3):830–1
The rationale for pharmacologic cavernosography. Stief CG, et al. **J Urol** 1988 Dec;140(6):1564–6
Pharmacocavernosography in the evaluation of erectile failure. Jantos C, et al. **Urol Int** 1988;43(4):225–30
Cavernosography and cavernosometry in the evaluation of impotence. Delcour CP, et al. **Urol Radiol** 1988; 10(3):144–50
[Dynamic cavernosography. A proposed new method] Veltri A, et al. **Radiol Med (Torino)** 1989 Jul–Aug;78(1–2):69–73 (Eng. Abstr.) **(Ita)**
[Cavernosography in the diagnosis of Peyronie's disease] Castiñeiras J, et al. **Arch Esp Urol** 1988 May;41(4):305–11 (Eng. Abstr.) **(Spa)**

RADIONUCLIDE IMAGING

Physiological considerations in radionuclide imaging of the penis during impotence therapy. Chaudhuri TK, et al. **Am J Physiol Imaging** 1989;4(2):75–80 (39 ref.)
Radioisotope penile plethysmography: a technique for evaluating corpora cavernosal blood flow during early tumescence. Schwartz AN, et al. **J Nucl Med** 1989 Apr; 30(4):466–73
99mTc penile scan: an investigative modality in priapism. Hashmat AI, et al. **Urol Radiol** 1989;11(1):58–60
[Radioisotopic pharmacopenography in the diagnosis of penile hemodynamic disorders] Darenkov AF, et al. **Urol Nefrol (Mosk)** 1988 Nov–Dec;(6):60–2 (Eng. Abstr.) **(Rus)**

SECRETION

Male odors that influence the preference of female mice: roles of urinary and preputial factors. Ninomiya K, et al. **Physiol Behav** 1988;44(6):791–5

SURGERY

Total resection of glans penis surface by CO2 laser microsurgery. Bandieramonte G, et al. **Acta Oncol** 1988; 27(5):575–8
Use of Van der Meulen principles in repair of hypospadias cripples without chordee. Kon M, et al. **Ann Plast Surg** 1988 Dec;21(6):544–9
One–stage reconstruction of the penis with composite iliac crest and lateral groin skin flap. Sun GC, et al. **Ann Plast Surg** 1985 Dec;15(6):519–28
Correction of penile curvatures caused by unsuccessful hypospadias repair using the scrotal septum pedicled skin tube principle combined with corporoplasty and a modified meatoglanuloplasty. Yachia D. **Ann Plast Surg** 1989 Sep; 23(3):269–73
Diagnosis and surgical treatment of erectile dysfunction. Gregory JG, et al. **ASAIO Trans** 1988 Oct–Dec;34(4):991–3
Impotence. An historic perspective. Gregory JG, et al. **ASAIO Trans** 1988 Oct–Dec;34(4):987–91
The inflatable penile prosthesis. Porter CH. **ASAIO Trans** 1988 Oct–Dec;34(4):994–5
Mechanical penile prostheses. The OmniPhase and DuraPhase designs. Timm GW. **ASAIO Trans** 1988 Oct–Dec;34(4):996–8
Long–term follow–up of the MAGPI operation for distal hypospadias. Hastie KJ, et al. **Br J Urol** 1989 Mar; 63(3):320–2
The failed MAGPI: management and prevention. Issa MM, et al. **Br J Urol** 1989 Aug;64(2):169–71.
Simple procedure to repair distal penile hypospadias without chordee in adult males. Marzouk E. **Ital J Surg Sci** 1989; 19(2):173–7
Total penile and urethral reconstruction with an expanded sensate lateral arm flap: case report. Shenaq SM, et al. **J Reconstr Microsurg** 1989 Jul;5(3):245–8
Successful surgical repair of a vascular shunt of the corpus cavernosum penis and penile fibropapillomata in a bull. Gilbert RO, et al. **J S Afr Vet Assoc** 1987 Dec;58(4):193–5
Success and failure in penile prosthesis surgery: two cases highlighting the importance of psychosocial factors. Meisler AW, et al. **J Sex Marital Ther** 1988 Summer; 14(2):108–19
Psychosocial follow–up of penile prosthesis implant patients and partners. Tiefer L, et al. **J Sex Marital Ther** 1988 Fall; 14(3):184–201
Inflatable penile prostheses in patients undergoing cystoprostatectomy with urethrectomy. Boyd SD, et al. **J Urol** 1989 Jan;141(1):60–2
Complications of penile prostheses in the spinal cord injury population. Collins KP, et al. **J Urol** 1988 Nov;140(5):984–5
Use of dermal graft and free urethral graft in penile reconstruction. Hendren WH, et al. **J Urol** 1988 Nov;140(5 Pt 2):1265–9
Phallic reconstruction in cloacal exstrophy. Husmann DA, et al. **J Urol** 1989 Aug;142(2 Pt 2):563–4; discussion 572
Phallic reconstruction during exenterative surgery for invasive urethral carcinoma. McDougal WS, et al. **J Urol** 1989 May;141(5):1201–3
Simple aid for upright voiding after partial penectomy. Manson AL. **J Urol** 1989 Apr;141(4):895
Re: Implantation of Model AMS 700 Penile Prosthesis: Long–Term Results [letter; comment] Merrill DC. **J Urol** 1989 Jul;142(1):141. **Comment on:** J Urol 1988 Apr;139(4):741–2
Negative pressure devices in the explanted penile prosthesis population. Moul JW, et al. **J Urol** 1989 Sep;142(3):729–31
Combined implantation of artificial sphincter and penile prosthesis. Parulkar BG, et al. **J Urol** 1989 Sep;142(3):732–5
Erosion of penile prostheses: a complication of urethral catheterization. Steidle CP, et al. **J Urol** 1989 Sep; 142(3):736–9
Re: Small Bowel Obstruction Secondary to Migration of an Inflatable Penile Prosthesis Reservoir: Recognition and Prevention [letter; comment] Walther MM, et al. **J Urol** 1989 Jul;142(1):141–2. **Comment on:** J Urol 1988 May;139(5):1053–4
The GAP (glans approximation procedure) for glanular/coronal hypospadias. Zaontz MR. **J Urol** 1989 Feb;141(2):359–61
The prepuce: a mistake of nature? Winberg J, et al. **Lancet** 1989 Mar 18;1(8638):598–9
Microsurgical phalloplasty. Wagenknecht LV. **Microsurgery** 1988;9(4):262–5
Hypospadias. Duckett JW Jr. **Pediatr Rev** 1989 Aug; 11(2):37–42 (0 ref.)
Reconstruction of the preputium in distal hypospadias [letter] van der Meulen JC. **Plast Reconstr Surg** 1989 Mar; 83(3):573–4
Reconstruction of the penis using a radial forearm free flap. A case report. Mackay DR, et al. **S Afr Med J** 1989 Sep 16;76(6):278–80
Small–bowel obstruction by an inflatable penile prosthesis reservoir. Luks FI, et al. **Surgery** 1989 Jul;106(1):101–4 (19 ref.)
Genitourinary prostheses. **Urol Clin North Am** 1989 Feb; 16(1):1–174
History of the prosthetic treatment of impotence. Bretan PN Jr. **Urol Clin North Am** 1989 Feb;16(1):1–5
Infections in genitourinary prostheses. Carson CC. **Urol Clin North Am** 1989 Feb;16(1):139–47
Corporeal reconstruction procedures for complicated penile implants. Fishman IJ. **Urol Clin North Am** 1989 Feb; 16(1):73–90
Clinical experience with controlled expansion cylinders. The AMS 700 CX inflatable penile prosthesis. Furlow WL, et al. **Urol Clin North Am** 1989 Feb;16(1):67–71
Legal aspects of urologic prosthetic devices. Irwin JR. **Urol Clin North Am** 1989 Feb;16(1):165–74
Penile venous surgery. Lue TF. **Urol Clin North Am** 1989 Aug;16(3):607–11
Mentor inflatable penile prostheses. Merrill DC. **Urol Clin North Am** 1989 Feb;16(1):51–66
Penile prostheses. An overview. Montague DK. **Urol Clin North Am** 1989 Feb;16(1):7–12
The OmniPhase and DuraPhase penile prostheses. Mulcahy JJ. **Urol Clin North Am** 1989 Feb;16(1):25–31
The Hydroflex penile prosthesis. Mulcahy JJ. **Urol Clin North Am** 1989 Feb;16(1):33–8
Semirigid and malleable rod penile prostheses. Nielsen KT, et al. **Urol Clin North Am** 1989 Feb;16(1):13–23
Development of a penile prosthesis. The Hydroflex. Porter CH. **Urol Clin North Am** 1989 Feb;16(1):149–64
Sex therapy for the penile prosthesis recipient. Schover LR. **Urol Clin North Am** 1989 Feb;16(1):91–8
The Flexi–Flate and Flexi–Flate II penile prostheses. Stanisic TH, et al. **Urol Clin North Am** 1989 Feb;16(1):39–49
Penile prostheses. Kirschenbaum A, et al. **Urol Radiol** 1988; 10(3):160–5
Iatrogenic chordee following insertion of inflatable penile prosthesis. Baum N, et al. **Urology** 1988 Nov;32(5):442–3
Silicone foam dressing for penis after reconstructive pediatric surgery. Gaylis FD, et al. **Urology** 1989 Apr;33(4):296–9
Penile prosthesis surgery: review of ten–year experience and examination of reoperations. Kabalin JN, et al. **Urology** 1989 Jan;33(1):17–9
Special considerations for implantation of 12 cm and 15 cm AMS 700 CX cylinders [letter] Whitehead ED. **Urology** 1989 Feb;33(2):165
Surgery of the penis and prepuce. Schumacher J, et al. **Vet Clin North Am [Equine Pract]** 1988 Dec;4(3):473–91 (34 ref.)
[Penile reconstruction using a complex island flap and the iliac crest with two vascular pedicles] Long DC. **Chung Hua Wai Ko Tsa Chih** 1988 Dec;26(12):747–9, 783 (Eng. Abstr.) **(Chi)**
[Priapism in a 13–year–old treated successfully with a double caverno–spongiosum anastomosis] Sauvage P, et al. **Chir Pediatr** 1988;29(5):289–90 (Eng. Abstr.) **(Fre)**
[Penis plication–plasty—an alternative to the treatment of penile deviation] Erpenbach K, et al. **Urologe [A]** 1989 Jul; 28(4):213–6 (Eng. Abstr.) **(Ger)**
[Successful replantation of a self–mutilated penis] Baruchin A, et al. **Harefuah** 1989 Jan 15;116(2):92–4 (Eng. Abstr.) **(Heb)**
[Development and progress in the therapy of penile induration: 15 years' experience] Austoni E, et al. **Arch Ital Urol Nefrol Androl** 1988 Sep;60(3):231–57 (146 ref.) (Eng. Abstr.) **(Ita)**
[Bladder exstrophy: a neonatal emergency. I: Functional reconstruction] Belloli G, et al. **Pediatr Med Chir** 1989 Mar–Apr;11(2):105–10 (Eng. Abstr.) **(Ita)**
[Experience with 11 cases of chordee without hypospadias] Sakakibara N, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Sep;79(9):1555–8 (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

Autoradiographic evidence of muscarinic cholinergic receptors in the corpora cavernosa penis of the rat. Minorsky N, et al. **J Auton Nerv Syst** 1988 Jun;23(1):1–8

PENSIONS

Convergence, institutionalization, and bifurcation: gender and the pension acquisition process. O'Rand AM. **Ann Rev Gerontol Geriatr** 1988;8:132–55 (58 ref.)
Pensions: spoilt for choice? Mackay J. **Br J Hosp Med** 1989 Feb;41(2):191
Gender and race differences in effects of health and pension on retirement before 65. Belgrave LL, et al. **Compr Gerontol [B]** 1987 Dec;1(3):109–17
Towards another major reform? Implications of the Swedish pension scheme of 1913. Abukhanfusa K. **Compr Gerontol [C]** 1988 Dec;2(1):63–5 (2 ref.)
Pension wealth and job changes: the effects of vesting, portability and lump–sum distributions. Clark RL, et al. **Gerontologist** 1988 Aug;28(4):524–32
Retirement financial planning among black professionals. Richardson V, et al. **Gerontologist** 1989 Feb;29(1):32–7
Selling Health Promotion to Corporate America: Uses and Abuses of the Economic Argument [letter] O'Donnell MP. **Health Educ Q** 1989 Spring;16(1):13–5
Excise tax on retirement benefits. Bedel EE. **Indiana Med** 1988 Dec;81(12):1038
Compensating key employees. Wright G. **Indiana Med** 1989 May;82(5):386
More on retirement plans. Miller R. **Iowa Med** 1988 Aug; 78(8):381
Pensions and black monday. Perkins AH. **Iowa Med** 1988 Jul;78(7):330
Re: Schaefer v. AMS (the final chapter). Mitchell MW. **J Arkansas Med Soc** 1989 Jan;85(8):339–40
Pension protection — legislation enacted. Weber RD. **Mich Med** 1989 May;88(5):16–7
Amend retirement plans for 1986 law changes. Health Care Group. **Pa Med** 1989 Jan;92(1):42–5
Withdrawing money from qualified retirement plans. **Pa Med** 1989 Jun;92(6):54–8
Diabetes mellitus and disability pension. A descriptive study of all diabetic subjects granted disability pension in Sweden in 1980. Morén–Hybbinette I, et al. **Scand J Soc Med** 1989; 17(2):193–201
The earnings replacement rate of old–age benefits: an international comparison, 1970 [classical article] Horlick M. **Soc Secur Bull** 1988 Aug;51(8):12–26, 48
Retirement–age women and pensions: findings from the New Beneficiary Survey. Woods JR. **Soc Secur Bull** 1988 Dec; 51(12):5–16

Insurance and pensions. Gripper J. **Vet Rec** 1989 Feb 25; 124(8):182–3, 198

[Physicians' pension fund. Calculation an accounting 1987/1988] **Ugeskr Laeger** 1988 Sep 19;150(38):2270–92 **(Dan)**

[Applicants for disability pensions in the municipality of Tårnby before and after the pension reform of 1984. Social characteristics and abuse of alcohol and drugs] Andersen JS, et al. **Ugeskr Laeger** 1989 Jun 26;151(26):1687–90 (Eng. Abstr.) **(Dan)**

[Early retirement among the 1914 population in Glostrup. Significance of social and health problems in choosing early retirement] Brendstrup T, et al. **Ugeskr Laeger** 1989 Jul 31;151(31):1976–80 (Eng. Abstr.) **(Dan)**

[Insurance conditions of people with impaired health] Nørregaard S, et al. **Ugeskr Laeger** 1989 Jul 24; 151(30):1949–52 **(Dan)**

[Employees without pension arrangements] Scholtz HA. **Tijdschr Gerontol Geriatr** 1989 Feb;20(1):19–24 (Eng. Abstr.) **(Dut)**

[Gliding retirement, part-time work for the aged and partial pension problems and chances for an alternative form of terminating professional life] Bäcker G, et al. **Z Gerontol** 1989 May-Jun;22(3):138–42 (Eng. Abstr.) **(Ger)**

[Work disability and the granting of pensions in psychogenic rheumatic diseases] Mathies H. **Z Rheumatol** 1988 Sep–Oct; 47(5):366–71 (Eng. Abstr.) **(Ger)**

PENTACHLOROPHENOL see under **CHLOROPHENOLS**

PENTAGASTRIN

ADMINISTRATION & DOSAGE

Effect of low-dose exogenous secretin and somatostatin on pentagastrin-stimulated gastric acid secretion in man. Olsen J, et al. **Scand J Gastroenterol** 1989 May;24(4):493–6

ANALOGS & DERIVATIVES

Distribution of distances in thiopeptides by fluorescence energy transfer and frequency-domain fluorometry. Wiczk WM, et al. **Biophys Chem** 1988 Oct;32(1):43–9

ANTAGONISTS & INHIBITORS

Effect of low-dose exogenous secretin on pentagastrin- and meal-stimulated gastric acid secretion in humans. Christiansen J, et al. **Dig Dis Sci** 1988 Oct;33(10):1277–81

DIAGNOSTIC USE

Circulation of a fragment of haemoglobin alpha-chain during a pentagastrin-induced flush in patients with metastatic carcinoid tumours. Balks HJ, et al. **Clin Endocrinol (Oxf)** 1988 Mar;28(3):261–9

Pentagastrin stimulation of calcitonin in pheochromocytoma does not always indicate multiple endocrine neoplasia type II. Hein MD, et al. **J Endocrinol Invest** 1989 Apr; 12(4):265–7

Dose response studies of gastric acid secretion in Nigerians using pentagastrin stimulation. Orjioke CJ, et al. **Scand J Gastroenterol Suppl** 1986;124:67–9

Gastric acid secretion studies in Enugu, using pentagastrin stimulation. Orjioke CJ, et al. **Scand J Gastroenterol Suppl** 1986;124:71–4

[Effect of pharmacologic preparations on hepatic blood flow studied by tetrapolar rheo-hepatography] Geller LI, et al. **Ter Arkh** 1988;60(8):77–9 **(Rus)**

METABOLISM

Role of peptide structure in lipid-peptide interactions: nuclear magnetic resonance study of the interaction of pentagastrin and [Arg4]pentagastrin with dimyristoylphosphatidylcholine. Epand RM, et al. **Chem Phys Lipids** 1988 Nov;49(1-2):105–10

Effect of high dose omeprazole on gastric pepsin secretion and serum pepsinogen levels in man. Ten Kate RW, et al. **Eur J Clin Pharmacol** 1988;35(2):173–6

PHARMACOLOGY

The effects of various gastrins on intracellular free Ca2+ in isolated pig parietal cells. Cabero JL, et al. **Acta Physiol Scand** 1989 Jul;136(3):301–7

Acid in proximal and distal duodenum inhibits, but hyperosmolal solution does not inhibit pentagastrin-stimulated acid secretion in chronic gastric fistula rats. Wallin C, et al. **Acta Physiol Scand** 1988 Apr; 132(4):577–81

Omeprazole and cimetidine versus pentagastrin in canine ex vivo gastric chamber. Larsen KR, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):G390–5

An "epithelial" preparation from the canine gastric mucosa: responses to secretagogues. Rangachari PK, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):G46–51

Pentagastrin induction of spermine/spermidine N1-acetyltransferase and mucosal polyamines. Seidel ER, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):G16–21

Pentagastrin stimulation of human colon carcinoma. McGregor DB, et al. **Arch Surg** 1989 Apr;124(4):470–2

Fade and tachyphylaxis of gastric acid secretory response to pentagastrin in rat isolated gastric mucosa. Hirst BH, et al. **Br J Pharmacol** 1988 Dec;95(4):1047–56

Effect of pirenzepine on basal gastric acid and pepsin secretion and on secretion stimulated with graded doses of pentagastrin in duodenal ulcer patients. Meneghelli UG, et al. **Braz J Med Biol Res** 1988;21(4):781–9

Effect of a long-acting somatostatin analogue (octreotide) on circulating tachykinins and the pentagastrin-induced carcinoid flush. Balks HJ, et al. **Eur J Clin Pharmacol** 1989; 36(2):133–7

Gastric secretion during aging in pyloric-ligated rats and effects of pentagastrin. Maitra RS, et al. **Exp Gerontol** 1988; 23(6):463–72

Growth of colorectal carcinoma cells: regulation in vitro by gastrin, pentagastrin and the gastrin-receptor antagonist proglumide. Imdahl A, et al. **J Cancer Res Clin Oncol** 1989; 115(4):388–92

Effect of chronically administered pentagastrin on the nude mouse. Johnson FE, et al. **J Surg Oncol** 1988 Nov; 39(3):148–53

Effects of cholecystokinin and pentagastrin on rat hippocampal neurones maintained in vitro. Boden PR, et al. **Neuropeptides** 1988 Aug-Sep;12(2):95–103

Intravital microscopy: a new in vivo technique for visualizing and quantifying effects of regulatory peptides on choledochoduodenal junction motility. Cox KL, et al. **Regul Pept** 1989 Jan;24(1):1–14

Effects of some antisecretory drugs on acid production, intracellular free Ca2+, and cyclic AMP production in isolated pig parietal cells. Mårdh S, et al. **Scand J Gastroenterol** 1988 Oct;23(8):977–82

[The stimulatory effect of medullary raphe nuclei injection of gastrin on gastric motility in the rat and localization of gastrin immunoreactive cell] Zhou L, et al. **Sheng Li Hsueh Pao** 1988 Dec;40(6):577–85 (Eng. Abstr.) **(Chi)**

[Role of cyclic AMP in gastric secretion. Mechanism of action of pentagastrin and cimetidine] Karydakis P, et al. **J Chir (Paris)** 1988 Aug-Sep;125(8-9):484–90 (Eng. Abstr.) **(Fre)**

[Effect of pentagastrin on bronchial spasm in patients with bronchial asthma] Krasnowska M, et al. **Pneumonol Pol** 1988 Nov;56(11):513–7 (Eng. Abstr.) **(Pol)**

[Effect of pentagastrin on the secretory, motor and evacuatory functions of the stomach] Tsimmerman IaS, et al. **Lab Delo** 1988;(6):23–6 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Role of gastrin/pentagastrin in regulation of intestinal cytochrome P-450. Pascoe GA, et al. **Comp Biochem Physiol [C]** 1988;90(1):41–6

[Effects of secretin and cholecystokinin-family hormones on hepatic bile secretion in guinea pigs] Al ZL, et al. **Sheng Li Hsueh Pao** 1988 Jun;40(3):223–30 (Eng. Abstr.) **(Chi)**

[Various effects of secretin and pentagastrin on peripheral venous blood gas analysis] von Kleist D, et al. **Dtsch Z Verdau Stoffwechselkr** 1988;48(3-4):194–7 (Eng. Abstr.) **(Ger)**

[Hydrochloric acid, pepsin and mucus secretion in the stomach of healthy probands following a single insulin administration with simultaneous pentagastrin infusion] Zarzycki W. **Dtsch Z Verdau Stoffwechselkr** 1988; 48(5):229–38 (Eng. Abstr.) **(Ger)**

[Age related effect of pentagastrin on excretory pancreas stimulation in the human] Tereščenko VP. **ZFA** 1988 Jul-Aug;43(4):191–4 **(Ger)**

THERAPEUTIC USE

[Effects of pentagastrin in patients with diabetes mellitus] Geller LI, et al. **Probl Endokrinol (Mosk)** 1989 Jan-Feb; 35(1):29–32 (Eng. Abstr.) **(Rus)**

PENTAMETHYLENETETRAZOLE see **PENTYLENETETRAZOLE**

PENTAMIDINE see under **AMIDINES**

PENTANES

Formation of pentane versus 1-pentanol in the ferrous sulfate-initiated decomposition of 15-hydroperoxyeicosatetraenoic acid in hypoxic and hyperoxic conditions. Smith CV, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1362–4

ANALYSIS

Plasma vitamin E and selenium and breath pentane in home parenteral nutrition patients. Lemoyne M, et al. **Am J Clin Nutr** 1988 Nov;48(5):1310–5

Increased lipid peroxidation after lipid infusion as measured by breath pentane output. Van Gossum A, et al. **Am J Clin Nutr** 1988 Dec;48(6):1394–9

Tissue damage in vitamin E deficient rats is not detected by expired ethane and pentane. Duthie GG, et al. **Free Radic Res Commun** 1987;4(1):21–5

Breath pentane excretion as a marker of disease activity in rheumatoid arthritis. Humad S, et al. **Free Radic Res Commun** 1988;5(2):101–6

Determination of ethane and pentane in free oxygen radical-induced lipid peroxidation. Pitkänen OM, et al. **Lipids** 1989 Feb;24(2):157–9

[Study of the processes of lipid peroxidation in patients with endogenous psychoses using gas chromatography] Kovaleva ES, et al. **Zh Nevropatol Psikhiatr** 1989; 89(1):99–103 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Alkane production by isolated rat heart and lung. Dutta S, et al. **Toxicol Lett** 1988 Nov;44(1-2):55–64

BLOOD

Radiation-induced volatile hydrocarbon production in platelets. Radha E, et al. **Life Sci** 1989;44(17):1185–91

METABOLISM

Metabolism of ethane and pentane to carbon dioxide by the rat. Daugherty MS, et al. **Drug Metab Dispos** 1988 Sep-Oct;16(5):666–71

The metabolism of low molecular weight hydrocarbon gases in man. van Rij AM, et al. **Free Radic Res Commun** 1987; 4(2):99–103

PENTANOATES see **VALERATES**

PENTANOIC ACIDS see under **VALERATES**

PENTANOLS see **ALCOHOLS, AMYL**

PENTANONES see under **KETONES**

PENTAZOCINE

Pulmonary granulomatosis secondary to pentazocine abuse mimicking connective tissue diseases. Newell GC, et al. **Am J Med** 1988 Dec;85(6):890–2

Drug discrimination in human postaddicts: agonist-antagonist opioids. Preston KL, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):184–96

[Medicamentous obstetric analgesia with pentazocine in comparison with an untreated control group] Freise K, et al. **Z Geburtshilfe Perinatol** 1988 Sep-Oct;192(5):234–7 (Eng. Abstr.) **(Ger)**

ADMINISTRATION & DOSAGE

Parenteral pentazocine: effects on psychomotor skills and respiration, and interactions with amitriptyline. Saarialho-Kere U, et al. **Eur J Clin Pharmacol** 1988; 35(5):483–9

ADVERSE EFFECTS

Neonatal pentazocine withdrawal syndrome--a case report of conservative treatment. Wu WH, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;42(3):229–32

Opiate withdrawal unmasks Tourette's syndrome. Lichter D, et al. **Clin Neuropharmacol** 1988 Dec;11(6):559–64

ANALYSIS

[Determination of pentazocine in biological liquids] Kintz P, et al. **Cah Anesthesiol** 1988 Dec;36(8):627–9 **(Fre)**

BLOOD

[Effects of famotidine on plasma pentazocine concentration in surgical patients] Takahashi S, et al. **Masui** 1988 Jun; 37(6):701–6 (Eng. Abstr.) **(Jpn)**

CHEMICAL SYNTHESIS

Synthesis and evaluation of optically pure [3H]-(+)-pentazocine, a highly potent and selective radioligand for sigma receptors. de Costa BR, et al. **FEBS Lett** 1989 Jul 17;251(1-2):53–8

METABOLISM

The effect of prototypic sigma ligands on the binding of [3H]dextromethorphan to guinea pig brain. Klein M, et al. **Neurosci Lett** 1989 Feb 13;97(1-2):175–80

PHARMACOLOGY

Effects of pentazocine and other opioids on the potassium-evoked release of [3H]noradrenaline from guinea pig cortical slices. Kinouchi K, et al. **Eur J Pharmacol** 1989 May 2;164(1):63–8

A comparison of GABAergic influences on the analgesic responses to morphine and pentazocine. Germany A, et al. **Gen Pharmacol** 1989;20(2):157–9

Changes in forebrain, cerebellum and brain stem phospholipid patterns from mothers and newborn rats after chronic pentazocine treatment during the gestation period. Andres R, et al. **Ital J Biochem** 1988 Sep-Oct;37(5):275–83

Biochemical, behavioral, and electrophysiologic actions of the selective sigma receptor ligand (+)-pentazocine. Steinfels GF, et al. **Neuropsychopharmacology** 1988 Dec; 1(4):321–7

Interactions between pentazocine and tripelennamine on autonomic and nociceptive measures in the dog. Vaupel DB. **Pharmacol Biochem Behav** 1989 May;33(1):245–51

Effects of d- and l-pentazocine on the release and uptake of norepinephrine in rat brain cortex. Kinouchi K, et al. **Res Commun Chem Pathol Pharmacol** 1989 Feb; 63(2):201–13

[Effects of pentazocine on pulmonary airway dynamics of the rabbit] Taguchi H, et al. **Masui** 1988 Nov; 37(11):1359–63 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Double-blind comparison between nalbuphine and pentazocine in the control of postoperative pain after orthopedic surgery. Donadoni R, et al. **Acta Anaesthesiol Belg** 1988;39(4):251–6

Effect of continuous postoperative epidural analgesia on intestinal motility. Ahn H, et al. **Br J Surg** 1988 Dec; 75(12):1176–8

Efficacy & dose-response of intrathecal pentazocine for post-operative pain relief. Chawla R, et al. **Indian J Med Res** 1989 Jun;90:220–3

Potentiation of pentazocine analgesia by low-dose naloxone. Levine JD, et al. **J Clin Invest** 1988 Nov;82(5):1574–7

Effect on intrathecal pentazocine on postoperative pain relief. Swaraj, et al. **J Indian Med Assoc** 1988 Apr;86(4):93–6

[Comparison of nalbuphine and pentazocine in the treatment of postoperative pain by self-administration] Pandèle G, et al. **Ann Fr Anesth Reanim** 1989;8(2):85–9 (Eng. Abstr.) **(Fre)**

[Buprenorphine and pentazocine in acute myocardial infarct. Study for a differential use] Cecchi CA, et al. **G Ital Cardiol** 1988 Sep;18(9):745–7 (Eng. Abstr.) **(Ita)**

PENTETATES see **DTPA**

PENTETRAZOLE see **PENTYLENETETRAZOLE**

PENTHANIL see **DTPA**

PENTHIOBARBITAL see **THIOPENTAL**

PENTOBARBITAL

Comparison of ketamine and pentobarbital anesthesia with the conscious state in a porcine model of Pseudomonas aeruginosa septicemia. Worek FS, et al. **Acta Anaesthesiol Scand** 1988 Oct;32(7):509–15

Pentobarbital anesthesia alters pulmonary vascular response to neural antagonists. Nyhan DP, et al. **Am J Physiol** 1989 May;256(5 Pt 2):H1384–92

Binding characteristics of t-[35S]butylbicyclophosphorothionate in discrete brain regions of rats made tolerant to and dependent on pentobarbital. Ito Y, et al. **J Neurochem** 1989 Apr; 52(4):1093–8

Interaction of the discriminative stimulus effects of phencyclidine with those of (+)-N-allylnormetazocine, pentobarbital and d-amphetamine. McMillan DE, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):711–5

Brain sulfide levels in anaesthesia: a comparison with hydrogen sulfide intoxication. Warenycia MW, et al. **Toxicol Lett** 1989 Jun;47(3):221–4

EEG power spectra in rats during compression and during pentobarbital infusion at pressure. Ursin R, et al. **Undersea Biomed Res** 1989 Jan;16(1):41–51

[Rhythmic activity of the olfactory bulb of the carp under nembutal anesthesia] Kaplan AIa. **Biol Nauki** 1988; (10):50–4 **(Rus)**

ADMINISTRATION & DOSAGE

IV Nembutal: safe sedation for children undergoing CT. Strain JD, et al. **AJR** 1988 Nov;151(5):975–9

A flavor paired with lithium chloride blocks the formation of a pentobarbital-lithium chloride association. Martin GM, et al. **Behav Neural Biol** 1989 Jul;52(1):108–15

Treatment of refractory generalized tonic-clonic status epilepticus with pentobarbital anesthesia after high-dose phenytoin. Osorio I, et al. **Epilepsia** 1989 Jul–Aug; 30(4):464–71

Oral self-administration of pentobarbital by rhesus monkeys: relative reinforcing effects under concurrent fixed-ratio schedules. Meisch RA, et al. **J Exp Anal Behav** 1988 Jul; 50(1):75–86

Induction of physical dependence on pentobarbital by new infusion method in the rat. Suzuki T, et al. **Prog Neuropsychopharmacol Biol Psychistry** 1989; 13(1–2):285–95

Evaluation of pentobarbital as a drug for standing sedation in cattle. Valverde A, et al. **Vet Surg** 1989 May–Jun; 18(3):235–8

ADVERSE EFFECTS

Effects of naloxone and picrotoxin on diazepam- or pentobarbital-induced hyperphagia in nondeprived rats. Naruse T, et al. **Pharmacol Biochem Behav** 1988 Nov; 31(3):709–11

ANALOGS & DERIVATIVES

Antihypoxic effect of the hydroxylamine derivative HB-7. Getova D, et al. **Acta Physiol Pharmacol Bulg** 1989; 15(1):83–8

GABA-ergic mechanisms in the anticonvulsive activity of newly synthesized barbiturates. II. Correlation of HB-7 with GABA-ergic agents. Getova D, et al. **Acta Physiol Pharmacol Bulg** 1988;14(2):49–55

Study of the participation of the dopaminergic transmission system in the effects of two newly synthesized barbiturates. Getova D, et al. **Acta Physiol Pharmacol Bulg** 1988; 14(2):56–62

ANTAGONISTS & INHIBITORS

Antagonism of ethanol and pentobarbital actions by benzodiazepine inverse agonists: neurochemical studies. Harris RA, et al. **J Pharmacol Exp Ther** 1988 Dec; 247(3):1012–7

BLOOD

Pentobarbital quantitation using immunoassays in Reye's syndrome patient serum. Turley CP. **Ther Drug Monit** 1989; 11(3):343–6

PHARMACOKINETICS

Effects of hypothermia on drug absorption. Stavchansky S, et al. **Pharm Res** 1987 Jun;4(3):248–50

Oral absorption of sodium pentobarbital and effects on gastrointestinal function. Curd-Sneed CD, et al. **Pharmacol Toxicol** 1989 Jan;64(1):23–7

PHARMACOLOGY

Suppression of the pressor effect of centrally administered thyrotropin-releasing hormone under halothane, pentobarbital and flunitrazepam anaesthesia. Tanaka H, et al. **Acta Anaesthesiol Scand** 1988 Oct;32(7):535–40

Pentobarbital regulation of the kinetic properties of GABA receptor chloride channels. Macdonald RL, et al. **Adv Biochem Psychopharmacol** 1988;45:61–71

Sensitivity to ethanol hypnosis and modulation of chloride channels does not cosegregate with pentobarbital sensitivity in HS mice. Allan AM, et al. **Alcoholism (N Y)** 1989 Jun; 13(3):428–34

Sensitivity to the anticonvulsant effects of ethanol and pentobarbital in mouse lines genetically selected for ethanol sensitivity. Crabbe JC, et al. **Alcoholism (NY)** 1989 Apr; 13(2):291–4

Effects of vasoactive intestinal peptide on vascular conductance are unaffected by anesthesia. Bouder TG, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):R968–73

Anesthetic effects on tonic and reflex renal sympathetic nerve activity in awake cats. Matsukawa K, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R371–8

Pentobarbital attenuates pulmonary vasoconstriction in isolated sheep lungs. Wetzel RC, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H898–903

Interaction of fentanyl and pentobarbital on peripheral and cerebral hemodynamics in newborn lambs. Yaster M, et al. **Anesthesiology** 1989 Mar;70(3):461–9

Interactions of cocaine with barbital, pentobarbital and ethanol. Misra AL, et al. **Arch Int Pharmacodyn Ther** 1989 May–Jun;299:44–54

Heart rate conditioning with pentobarbital as a conditioned stimulus and amphetamine as an unconditioned stimulus. Revusky S, et al. **Behav Neurosci** 1989 Apr;103(2):296–307

Pregnancy and pentobarbital anaesthesia modify hepatic synthesis of acylglycerol glycerol and glycogen from gluconeogenic precursors during fasting in rats. Zorzano A, et al. **Biochem J** 1988 Dec 1;256(2):487–91

Different effects of pentobarbital on two gamma-aminobutyrate receptors from rat brain: channel opening, desensitization, and an additional conformational change. Cash DJ, et al. **Biochemistry** 1988 Jun 14; 27(12):4580–90

Tonic and baroreflex effects on arterial pressure and ventilation of pentobarbital and nicotine on the rat ventral medullary surface. Jung R, et al. **Brain Res** 1989 Apr 24; 485(2):399–402

Effects of pentobarbital on behavioral and synaptic plasticities in crayfish. Winegar BD, et al. **Brain Res** 1988 Dec 13;475(1):21–7

A comparison of the effects of midazolam and pentobarbital on the dose-response of GABA-gated Cl- influx in rat brain microsacs. Yu OF, et al. **Brain Res** 1988 Jun 7; 451(1–2):376–80

Mediation of serotonin-induced analgesia by the 5HT2 receptor in the pentobarbital anesthetized mouse model. Banks WA, et al. **Brain Res Bull** 1988 Dec;21(6):887–91

Comparison between pentobarbital- and muscimol-induced feeding in satiated sheep. Seoane JR, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):703–6

Effects of intrahypothalamic injections of GABA, muscimol, pentobarbital, and L-glutamic acid on feed intake of satiated sheep. Wandji SA, et al. **Can J Physiol Pharmacol** 1989 Jan;67(1):5–9

Failure of sodium pentobarbital anesthesia to alter 1-desamino-8-D-arginine vasopressin-induced elevations of plasma factor VIII/ von Willebrand factor in normal dogs. Johnstone IB, et al. **Can J Vet Res** 1988 Oct; 52(4):416–8

Comparison of saliva secretion rate and composition in the rat using a pentobarbital or a neuroleptanalgesic type of anaesthesia. Johansson I, et al. **Caries Res** 1989;23(2):75–7

Studies on pharmacologically active principles from Indonesian crude drugs. I. Principle prolonging pentobarbital-induced sleeping time from Curcuma xanthorrhiza Roxb. Yamazaki M, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):2070–4

Effects of Ro 15-4513 on the motor impairment and hypnotic effects of ethanol and pentobarbital. Le AD, et al. **Eur J Pharmacol** 1989 Jan 2;159(1):25–31

Inhibition of inositol phospholipid hydrolysis in endothelial cells by pentobarbital. Robinson-White AJ, et al. **Eur J Pharmacol** 1989 Aug 15;172(3):291–303

Interference of pentobarbital and verapamil with the reactivity of middle cerebral artery of cat exposed to experimental subarachnoid hemorrhage. Marin J, et al. **Gen Pharmacol** 1989;20(2):243–8

Effect of benzodiazepines and pentobarbital on the GABA-induced depolarization in cultured astrocytes. Backus KH, et al. **GLIA** 1988;1(2):132–40

Differential effects of pentobarbital and cocaine on punished and nonpunished responding. Dworkin SI, et al. **J Exp Anal Behav** 1989 Mar;51(2):173–84

Pentobarbital's effect in a combination antiemetic regimen for cisplatin induced nausea and vomiting. Wheelock JB. **J Miss State Med Assoc** 1989 Jan;30(1):5–8

Monaural and binaural response properties of neurons in the inferior colliculus of the rabbit: effects of sodium pentobarbital. Kuwada S, et al. **J Neurophysiol** 1989 Feb; 61(2):269–82

Different classes of cat spinal neurons display differential sensitivity to sodium pentobarbital. Paik KS, et al. **J Neurosci Res** 1989 May;23(1):107–15

Effect of pentobarbital on gastric acid secretion elicited by secretagogues or electrical vagal stimulation in rats under urethane anesthesia. Yano S, et al. **J Pharmacobiodyn** 1988 Oct;11(10):662–8

Intraseptal microinjection of adrenocorticotropic hormone1-24 antagonizes pentobarbital-induced narcosis and depression of hippocampal cholinergic activity. Horita A, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):863–6

Pentobarbital-like discriminative stimulus effects of N-methyl-D-aspartate antagonists. Willetts J, et al. **J Pharmacol Exp Ther** 1989 May;249(2):438–43

Differential actions of pentobarbitone on calcium current components of mouse sensory neurones in culture. Gross RA, et al. **J Physiol (Lond)** 1988 Nov;405:187–203

Effect of pentobarbitone sodium and bromocriptine on follicular oestradiol production in the rat. Uilenbroek JT. **J Reprod Fertil** 1989 May;86(1):327–33

Pentobarbital improves nitrogen retention in sepsis. Dickerson RN, et al. **JPEN J Parenter Enteral Nutr** 1989 Jul–Aug;13(4):359–61 (27 ref.)

Effects of pentobarbital and cyproheptadine on brain ischemia induced by bilateral occlusions of carotid arteries and vertebral arteries of second cervical vertebra in rats. Sugio K, et al. **Jpn J Pharmacol** 1988 Jul;47(3):327–9

An effective combination of anaesthetics for 6-h experimentation in the golden Syrian hamster. Reid WD, et al. **Lab Anim** 1989 Apr;23(2):156–62

A role for gamma-aminobutyric acid (GABA) in the evolution of delayed neuronal death following ischemia. Lust WD, et al. **Metab Brain Dis** 1988 Dec;3(4):287–92

Capsaicin-sensitive afferents and blood pressure regulation during pentobarbital anaesthesia in the rat. Bramhall T, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):584–9

Pentobarbital attenuates the antinociceptive effect of intranigral morphine. Baumeister AA, et al. **Neuropharmacology** 1989 Feb;28(2):194–8

Frequency modulation of the neuronal theta bursts in the rabbit's septum deprived of ascending afferent input. Brazhnik ES, et al. **Neurosci Behav Physiol** 1989 Jan–Feb; 19(1):26–33

Blockade of a late inhibitory postsynaptic potential in hippocampal CA3 neurons in vitro reveals a late depolarizing potential that is augmented by pentobarbital. Thalmann RH. **Neurosci Lett** 1988 Dec 19;95(1–3):155–60

Pentobarbital and picrotoxin have reciprocal actions on single GABAA receptor channels. Twyman RE, et al. **Neurosci Lett** 1989 Jan 2;96(1):89–95

Intracellular picrotoxin blocks pentobarbital-gated Cl- conductance. Inomata N, et al. **Neurosci Res** 1988 Oct; 6(1):72–5

Pentobarbital augments serotonin-mediated inhibition of cerebellar Purkinje cells. Strahlendorf JC, et al. **Neuroscience** 1988 Oct;27(1):107–15

Effect of taurine on ethanol-induced sleep time in mice genetically bred for differences in ethanol sensitivity. Ferko AP, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):667–73

Effects of Ro 15-4513, alone or in combination with ethanol, Ro 15-1788, diazepam, and pentobarbital on instrumental behaviors of rats. Hiltunen AJ, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):597–603

Effects of GABA antagonists on the pentobarbital-induced depression of respiration and cough in rats. Kamei J, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):357–60

Effect of chronic pentobarbital treatment on the development of cross-tolerance to ethanol and barbital. Khanna JM, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):179–86

Oral pentobarbital intake in rhesus monkeys: effects of drug concentration under conditions of food deprivation and satiation. Kliner DJ, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):347–54

The hedonic effects of amphetamine and pentobarbital in goldfish. Lett BT, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):355–6

Potentiation of the anticonflict effects of diazepam, but not pentobarbital and phenobarbital, by aminooxyacetic acid (AOAA). McCloskey TC, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):693–8

Interactions of pentobarbital and phenobarbital with GABAergic drugs against chemoconvulsants in rats. Mehta AK, et al. **Pharmacol Biochem Behav** 1988 Aug; 30(4):995–1000

Thigmotaxis as a test for anxiolytic activity in rats. Treit D, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):959–62

Chronic administration of S-(–)-pentobarbital in pigeons and rats: tolerance development. Wenger GR. **Pharmacol Biochem Behav** 1988 Oct;31(2):459–65

The effect of a saturated fat diet on pentobarbital induced sleeping time and phospholipid composition of mouse brain and liver. Aloia RC, et al. **Pharmazie** 1988 Jul;43(7):496–8

The extrasynaptic effect of gamma-aminobutyric acid and pentobarbital and the influence of temperature on the response of parallel fibres of the frog cerebellum in vitro. Bielik P, et al. **Physiol Bohemoslov** 1988;37(6):481–92

Influence of sodium pentobarbital on pH, sarcomere length, and muscle tenderness of broiler Pectoralis major muscle. McGinnis JP, et al. **Poult Sci** 1989 Feb;68(2):244–8

Regional hemodynamic responses to nicotine in conscious and anesthetized dogs: comparative effects of pentobarbital and chloralose. Crystal GJ, et al. **Proc Soc Exp Biol Med** 1989 Sep;191(4):396–402

Pentobarbital-like electroencephalographic rubral rhythm induced by ketamine in rabbits. Sagratella S, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1–2):259–67

Differential generalization to pentobarbital in rats trained to discriminate lorazepam, chlordiazepoxide, diazepam, or triazolam. Ator NA, et al. **Psychopharmacology (Berlin)** 1989;98(1):20–30

Effect of raphe lesions on the development of acute tolerance to ethanol and pentobarbital. Campanelli C, et al. **Psychopharmacology (Berlin)** 1988;96(4):454–7

The contribution of environmental cues to cross-tolerance between ethanol and pentobarbital. el-Ghundi M, et al. **Psychopharmacology (Berlin)** 1989;97(2):194–201

Alteration in hypnotic effect of pentobarbital following repeated agonistic confrontations in mice. Ohdo S, et al. **Psychopharmacology (Berlin)** 1989;97(1):30–4

Respiratory and cardiovascular effects of thyrotropin-releasing hormone as modified by isoflurane, enflurane, pentobarbital and ketamine. Schaefer CF, et al. **Regul Pept** 1989 Mar;24(3):269–82

Enhancement of tetrathiomolybdate-induced biliary copper excretion in sheep by general anaesthesia and the effect on copper excretion in urine and bile. Ke Y, et al. **Res Vet Sci** 1989 May;46(3):344–8

The effects of pentobarbitone, diazepam and alcohol on oral breathing in neonatal and mature sheep. Wood GA, et al. **Respir Physiol** 1989 Jan;75(1):89–104

Effects of a novel bombesin antagonist analogue on bombesin-stimulated gastric acid secretion and growth hormone release in the pentobarbital-anesthetized rat. Rossowski WJ, et al. **Scand J Gastroenterol** 1989 Jan; 24(1):121–8

Induction of theophylline metabolism by pentobarbital. Dahlqvist R, et al. **Ther Drug Monit** 1989;11(4):408–10

Modulation of cardiovascular depressant action of clonidine by pentobarbital anesthesia in rats. Imai Y, et al. **Tohoku J Exp Med** 1989 Mar;157(3):221–7

[Oxygen consumption and RQ-values in rats anesthesized with urethane and pentobarbital during continuous infusion of noradrenaline with and without glucose load] Ankermann H. **Biomed Biochim Acta** 1988;47(7):647–53 (Eng. Abstr.) **(Ger)**

[Effect of the nonsteroidal anti-inflammatory drug 480156-S on hepatic drug-metabolizing activity and pharmacological action of diazepam and pentobarbital in rats] Matsubara T, et al. **Nippon Yakurigaku Zasshi** 1988 Oct;92(4):201–13 (Eng. Abstr.) **(Jpn)**

[Pharmacological interactions between dependence-liable drugs] Kaneto H, et al. **Yakubutsu Seishin Kodo** 1988 Sep; 8(3):405–15 (Eng. Abstr.) **(Jpn)**

[Indicators of systemic and regional hemodynamics in alert rats or rats anesthetized with nembutal or urethane] Medvedev OS, et al. **Fiziol Zh SSSR** 1989 Jan;75(1):143–6 **(Rus)**

POISONING

Protection from pentobarbital lethality mediated by Pavlovian conditioning. Vila J. **Pharmacol Biochem Behav** 1989 Jan;32(1):365–6

TOXICITY

Tolerance to ethanol and cross-tolerance to pentobarbital by isolated hearts from chronic alcoholic rats. Segel LD. **Alcoholism (NY)** 1988 Aug;12(4):523–30

Valproic acid induction of coma in rats: synergism with NH4+ and pentobarbital. Zieve L, et al. **Metab Brain Dis** 1989 Jun;4(2):105–11

PENTOLINIUM TARTRATE

PHARMACOLOGY

Effect of ganglion blockade with pentolinium on circulating neuropeptide Y levels in conscious rats. Corder R, et al. **J Cardiovasc Pharmacol** 1988 Aug;12(2):140–3

PENTOSAN SULFURIC POLYESTER see under **POLYSACCHARIDES**

PENTOSE PHOSPHATE SHUNT see **PENTOSEPHOSPHATE PATHWAY**

PENTOSE SHUNT see **PENTOSEPHOSPHATE PATHWAY**

PENTOSEPHOSPHATE PATHWAY

Gas chromatographic–mass spectrometric analysis of hexose monophosphate shunt activity in cultured cells. Mitchell SL, et al. **Biochem Biophys Res Commun** 1989 Jan 31; 158(2):474–9

Stimulation of rat-kidney hexose monophosphate shunt dehydrogenase activity by chronic metabolic acidosis. Peragón J, et al. **Biochem Int** 1989 May;18(5):1041–50

Studies of protein–protein interaction using countercurrent distribution in aqueous two-phase systems. Partition behaviour of six Calvin-cycle enzymes from a crude spinach (Spinacia oleracea) chloroplast extract. Persson LO, et al. **Biochem J** 1989 May 1;259(3):863–70

Rapid methods for the high yield synthesis of carbon-13 enriched intermediates of the pentose-phosphate pathway. Arora KK, et al. **Biol Chem Hoppe Seyler** 1988 Jul; 369(7):549–57

Pentose phosphate shunt metabolism by cells of the chick growth cartilage. Silverton SF, et al. **Bone** 1989;10(1):45–51

Dehydrogenases of the pentose phosphate pathway in rat liver peroxisomes. Antonenkov VD. **Eur J Biochem** 1989 Jul 15;183(1):75–82

Comparison of computer simulations of the F-type and L-type non-oxidative hexose monophosphate shunts with 31P-NMR experimental data from human erythrocytes. McIntyre LM, et al. **Eur J Biochem** 1989 Mar 15; 180(2):399–420

The enzymes of the classical pentose phosphate pathway display differential activities in procyclic and bloodstream forms of Trypanosoma brucei. Cronin CN, et al. **FEBS Lett** 1989 Feb 13;244(1):26–30

The role of glycolysis and hexose monophosphate pathway in the hypoxic toxicity of misonidazole. De Groot H, et al. **Free Radic Res Commun** 1987;3(1–5):93–8

Why the L-type pentose pathway does not function in liver. Landau BR. **Int J Biochem** 1989;21(1):99–102 (33 ref.)

Dehydrogenase activities of the pentose phosphate pathway in erythrocytes of healthy non iron-deficient subjects. Galan P, et al. **Int J Vitam Nutr Res** 1989;59(1):101

The pentose cycle (hexose monophosphate shunt). Rigorous evaluation of limits to the flux from glucose using 14CO2 data, with applications to peripheral ganglia of chicken embryos. Larrabee MG. **J Biol Chem** 1989 Sep 25; 264(27):15875–9

A study of the role of the hexose monophosphate pathway with respect to fatty acid biosynthesis in sporulation of Saccharomyces cerevisiae. Dickinson JR, et al. **J Gen Microbiol** 1988 Feb;134 (Pt 2):333–7

Effects of different degrees of iron deficiency on cytochrome P450 complex and pentose phosphate pathway dehydrogenases in the rat. Dhur A, et al. **J Nutr** 1989 Jan; 119(1):40–7

Stimulation of the hexose monophosphate shunt in bovine ciliary body under oxidative stress. Shichi H, et al. **J Ocul Pharmacol** 1986 Winter;2(1):59–66

Economy of design in metabolic pathways: further remarks on the game of the pentose phosphate cycle. Meléndez-Hevia E, et al. **J Theor Biol** 1988 May 7; 132(1):97–111

Regulation of the pentose phosphate pathway in human astrocytes and gliomas. Loreck DJ, et al. **Metab Brain Dis** 1987 Mar;2(1):31–46

Allozymes of glucose-6-phosphate isomerase differentially modulate pentose-shunt metabolism in the sea anemone Metridium senile. Zamer WE, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2737–41

Importance of the glutathione level and the activity of the pentose phosphate pathway in cellular heat sensitivity. Konings AW. **Recent Results Cancer Res** 1988;109:109–25 (25 ref.)

Regulation of the pentose phosphate cycle in bass (Dicentrarchus labrax L.) liver. Medina-Puerta MM, et al. **Rev Esp Fisiol** 1988 Dec;44(4):433–9

[Role of disorders of pentosephosphate pathway of glucose oxidation in the pathogenesis of the arrest of fetal development in miscarriage] Kuznetsova VA, et al. **Akush Ginekol (Mosk)** 1989 Jun;(6):36–8 (Eng. Abstr.) **(Rus)**

[Features of glycolysis and pentose phosphate pathway in novobiocin sensitive and novobiocin resistant staphylococci] Vinnikov AI, et al. **Antibiot Khimioter** 1989 Jan;34(1):34–8 (Eng. Abstr.) **(Rus)**

[Effect of exogenous ribose-5-phosphate on the ATP level in a cardiomyocyte culture during "metabolic ischemia" and anoxia] Golubev MA, et al. **Vopr Med Khim** 1988 Jul–Aug;34(4):94–7 (Eng. Abstr.) **(Rus)**

[Activity of the pentosephosphate pathway of glucose metabolism in ischemized skeletal muscles in humans and animals] Kosnikova IV. **Vopr Med Khim** 1989 May–Jun; 35(3):28–30 (Eng. Abstr.) **(Rus)**

[Pentose phosphate pathway of carbohydrate metabolism in various systemic diseases of the connective tissue] Shishkin VI, et al. **Vopr Med Khim** 1988 Nov–Dec;34(6):40–5 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Effect of CCK-8 on pentose phosphate shunt activity, pyridine nucleotides, and glucokinase of rat islets. Verspohl EJ, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E68–73

Prostaglandin E2 and alpha 2 adrenoceptor agonists inhibit the pentose phosphate shunt in pancreatic islets. Laychock SG. **Arch Biochem Biophys** 1989 Feb 15;269(1):354–8

Inhibitory effect of 5-phosphoribosyl 1-pyrophosphate and ADP on the nonoxidative pentose phosphate pathway activity. Hosomi S, et al. **Biochem Med Metab Biol** 1989 Aug;42(1):52–9

Purification and characterization of a cofactor that controls the oxidative phase of the pentose phosphate cycle in liver and other tissues of rat. Garcia G, et al. **Biochim Biophys Acta** 1989 Jan 27;990(1):59–65

The effect of high glucose and high insulin concentrations on pentose phosphate shunt enzymes and malic enzyme in cultured human endothelial cells. Hawthorne GC, et al. **Horm Metab Res** 1988 Oct;20(10):645–7

A 25-kilodalton fraction from Mycobacterium tuberculosis that inhibits hexose monophosphate shunt activity, lysozyme release, and H2O2 production: reversal by gamma interferon. Wadee AA, et al. **Infect Immun** 1989 Mar;57(3):864–9

PENTOSEPHOSPHATES

BIOSYNTHESIS

Evidence for early mitogenic stimulation of metabolic flux through phosphoribosyl pyrophosphate into nucleotides in Swiss 3T3 cells. Ishijima S, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):570–5

BLOOD

Phosphoribosylpyrophosphate in erythrocytes of ten mammalian species: concentration, synthesis and degradation. Tax WJ, et al. **Comp Biochem Physiol [B]** 1978;59(3):219–22

CHEMICAL SYNTHESIS

The synthesis and purification of 2'-carboxy-D-arabinitol 1-phosphate, a natural inhibitor of ribulose 1,5-bisphosphate carboxylase, investigated by 31P n.m.r. Gutteridge S, et al. **Biochem J** 1989 Jun 15;260(3):711–6

METABOLISM

Ribulose 1,5-bisphosphate dependent CO2 fixation in the halophilic archaebacterium, Halobacterium mediterranei. Rawal N, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):451–6

The multiple activities of Escherichia coli endonuclease IV and the extreme lability of 5'-terminal base-free deoxyribose 5-phosphates. Bailly V, et al. **Biochem J** 1989 May 1;259(3):761–8

Interrelationship of number of glucose carriers and intracellular phosphoribosyl diphosphate level of Ehrlich ascites tumor cells in vitro. Choy YM, et al. **Cancer Biochem Biophys** 1988 Nov;10(2):141–7

Intracellular phosphoribosyl diphosphate level and glucose carrier in Ehrlich ascites tumour cells during tumour growth and diabetes in tumour-bearing mice. Choy YM, et al. **Cancer Lett** 1988 Sep–Oct;42(1–2):43–8

DNA deoxyribophosphodiesterase. Franklin WA, et al. **EMBO J** 1988 Nov;7(11):3617–22

Increase in phosphoribosyl pyrophosphate induced by ATP and Pi depletion in hepatocytes. Vincent MF, et al. **FASEB J** 1989 May;3(7):1862–7

Substrate inhibition of adenosine phosphorylation in adenosine deaminase deficiency and adenosine-mediated inhibition of PP-ribose-P dependent nucleotide synthesis in hypoxanthine phosphoribosyltransferase deficient erythrocytes. Snyder FF, et al. **J Inherited Metab Dis** 1988; 11(2):174–83

PHARMACOLOGY

Inhibitory effect of 5-phosphoribosyl 1-pyrophosphate and ADP on the nonoxidative pentose phosphate pathway activity. Hosomi S, et al. **Biochem Med Metab Biol** 1989 Aug;42(1):52–9

[Effect of exogenous ribose-5-phosphate on the ATP level in a cardiomyocyte culture during "metabolic ischemia" and anoxia] Golubev MA, et al. **Vopr Med Khim** 1988 Jul–Aug;34(4):94–7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Mechanism of inhibition of growth of 3T3-L1 fibroblasts and their differentiation to adipocytes by dehydroepiandrosterone and related steroids: role of glucose-6-phosphate dehydrogenase. Shantz LM, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3852–6

PENTOSES

Furanose ring anomerization: a kinetic study of the 5-deoxypentoses and 5-O-methylpentoses. Snyder JR, et al. **Carbohydr Res** 1988 Dec 31;184:13–25

METABOLISM

Clostridium methylpentosum sp. nov.: a ring-shaped intestinal bacterium that ferments only methylpentoses and pentoses. Himelbloom BH, et al. **Arch Microbiol** 1989; 151(4):287–93

Conversion of pentoses to ethanol by yeasts and fungi. Schneider H. **Crit Rev Biotechnol** 1989;9(1):1–40 (246 ref.)

No effect of long-term DHEA treatment on either hepatocyte and adipocyte pentose pathway activity or adipocyte glycerol release. Diersen-Schade DA, et al. **Horm Metab Res** 1989 Jul;21(7):356–8

PHARMACOLOGY

D-xylulose-induced depletion of ATP and Pi in isolated rat hepatocytes. Vincent MF, et al. **FASEB J** 1989 May; 3(7):1855–61

PENTOSYLTRANSFERASES

Orotate phosphoribosyltransferase from yeast: studies of the structure of the pyrimidine substrate binding site. Ashton RW, et al. **Arch Biochem Biophys** 1989 Aug 1;272(2):421–32

The use of folding patterns in the search of protein structural similarities; a three-dimensional model of phosphoribosyl transferases. Busetta B. **Biochim Biophys Acta** 1988 Nov 2;957(1):21–33

Crystallization and purification of the enzyme anthranilate phosphoribosyl transferase. Edwards SL, et al. **J Mol Biol** 1988 Sep 20;203(2):523–4

The stereoselective enzymatic synthesis of 9-beta-D-2'-deoxyribofuranosyl 1-deazapurine. Betbeder D, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4217–22

ANALYSIS

Physico-chemical and immunological properties of bovine liver 5'-deoxy-5'-methylthioadenosine phosphorylase. Della Ragione F, et al. **Adv Exp Med Biol** 1988;250:187–97 (20 ref.)

Assay for detection of adenosine phosphorylase from mycoplasmas. Bonissol C, et al. **Ann Inst Pasteur Microbiol** 1988 Nov-Dec;139(6):703–15

Identification of macrophages in intimal thickening of rat carotid arteries by cytochemical localization of purine nucleoside phosphorylase. Verheyen AK, et al. **Arteriosclerosis** 1988 Nov-Dec;8(6):759–67

Purine nucleoside phosphorylase: a histochemical marker for glial cells. Van Reempts J, et al. **Brain Res** 1988 Oct 11; 462(1):142–7

Determination of adenosine deaminase and purine nucleoside phosphorylase activities using high-performance liquid chromatographic and radiochromatographic methods. Boháček J, et al. **J Chromatogr** 1988 Dec 30;434(2):439–45

Localization of quinolinic acid metabolizing enzymes in the rat brain. Immunohistochemical studies using antibodies to 3-hydroxyanthranilic acid oxygenase and quinolinic acid phosphoribosyltransferase. Köhler C, et al. **Neuroscience** 1988 Oct;27(1):49–76

[Determination of thymidine phosphorylase in adenoma and cancer of the human prostate] Touffet S, et al. **C R Soc Biol (Paris)** 1989;183(1):26–32 (Eng. Abstr.) **(Fre)**

ANTAGONISTS & INHIBITORS

Use of oral uridine as a substitute for parenteral uridine rescue of 5-fluorouracil therapy, with and without the uridine phosphorylase inhibitor 5-benzylacyclouridine. Martin DS, et al. **Cancer Chemother Pharmacol** 1989;24(1):9–14

Effects of pyrimidine nucleoside phosphorylase inhibitors on hepatic fluoropyrimidine elimination in the rat. LaCreta FP, et al. **Cancer Res** 1989 May 15;49(10):2567–73

Inhibition of uridine phosphorylase by pyrimidine nucleoside analogs and consideration of substrate binding to the enzyme based on solution conformation as seen by NMR spectroscopy. Veres Z, et al. **Eur J Biochem** 1988 Dec 1; 178(1):173–81

Alkylation of cysteine 41, but not cysteine 200, decreases the ADP-ribosyltransferase activity of the S1 subunit of pertussis toxin. Kaslow HR, et al. **J Biol Chem** 1989 Apr 15;264(11):6386–90

Inhibition of intestinal pyrimidine nucleoside phosphorylases. Wientjes MG, et al. **Pharm Res** 1987 Oct;4(5):425–8

BLOOD

Studies on human serum 5'-deoxy-5'-methylthioadenosine phosphorylase: molecular properties and clinical perspectives. Russo GL, et al. **Adv Exp Med Biol** 1988; 250:229–38

Mono(ADP-ribosyl)ation of Gi by eukaryotic cysteine-specific mono(ADP-ribosyl) transferase attenuates inhibition of adenylate cyclase by epinephrine. Tanuma S, et al. **Biochim Biophys Acta** 1989 Feb 9; 1010(2):246–9

Purine nucleoside phosphorylase in erythrocytes: determination of optimum reaction conditions. Chu SY, et al. **Clin Biochem** 1989 Feb;22(1):3–9

Activity of adenosine deaminase and purine nucleoside phosphorylase in erythrocytes and lymphocytes of man, horse and cattle. Tax WJ, et al. **Comp Biochem Physiol [B]** 1978;61(3):439–41

T-lymphocyte dysfunction in the elderly associated with zinc deficiency and subnormal nucleoside phosphorylase activity: effect of zinc supplementation. Cossack ZT. **Eur J Cancer Clin Oncol** 1989 Jun;25(6):973–6

Nucleotides in lymphocytes of human subjects with zinc deficiency. Meftah S, et al. **J Lab Clin Med** 1989 Aug; 114(2):114–9

Diagnosis and analysis of the clinical course of T-phenotype acute lymphoblastic leukemia. Babušíková O, et al. **Neoplasma** 1988;35(6):683–90

[Changes in the activities of enzymes of metabolism of DNA precursors in peptic ulcer and cancer of the stomach] Borzenko BG. **Klin Med (Mosk)** 1989 May;67(5):87–91 (Eng. Abstr.) **(Rus)**

DEFICIENCY

Adenine phosphoribosyltransferase deficiency in Iceland. Laxdal T, et al. **Acta Med Scand** 1988;224(6):621–6

High risk screening of adenosine deaminase and purine nucleoside phosphorylase deficiency in Japan. Kishi T, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Feb;29(1):152–4

Methylthioadenosine (MeSAdo) phosphorylase deficiency in malignancy. Carson DA, et al. **Adv Exp Med Biol** 1988; 250:179–85 (15 ref.)

Adenine phosphoribosyltransferase deficiency: 2,8-dihydroxyadenine urolithiasis in a 48-year-old woman. Usenius JP, et al. **Br J Urol** 1988 Dec;62(6):521–4

Fatal graft versus host disease after platelet transfusions in a child with purine nucleoside phosphorylase deficiency. Strobel S, et al. **Eur J Pediatr** 1989 Jan;148(4):312–4

New diagnostic and therapeutic aspects of 2,8-dihydroxyadenine lithiasis. Another case of complete adenine phosphoribosyltransferase deficiency. Jung P, et al. **Eur Urol** 1988;14(6):493–7

Uridine-responsive hypogammaglobulinemia and congenital heart disease in a patient with hereditary orotic aciduria. Alvarado CS, et al. **J Pediatr** 1988 Nov;113(5):867–71

Re: Distribution of patients with 2,8-dihydroxyadenine urolithiasis and adenine phosphoribosyltransferase deficiency in Japan [letter] Gleeson MJ, et al. **J Urol** 1989 Sep;142(3):834

Distribution of patients with 2,8-dihydroxyadenine urolithiasis and adenine phosphoribosyltransferase deficiency in Japan. Kamatani N, et al. **J Urol** 1988 Dec; 140(6):1470–2

Prenatal diagnosis of purine nucleoside phosphorylase deficiency in the first and second trimesters of pregnancy. Kleijer WJ, et al. **Prenat Diagn** 1989 Jun;9(6):401–7

[Are urate calculi always urates?] Usenius JP, et al. **Duodecim** 1988;104(20):1630–4 **(Fin)**

[Immune deficiencies secondary to enzymopathies] Pérignon JL, et al. **Ann Pediatr (Paris)** 1989 Jun;36(6):381–5 (14 ref.) (Eng. Abstr.) **(Fre)**

DIAGNOSTIC USE

Determination of phosphate ions with an enzyme sensor system. Watanabe E, et al. **Biosensors** 1987–88;3(5):297–306

GENETICS

Detection of an amino acid substitution in the mutant enzyme for a special type of adenine phosphoribosyltransferase (APRT) deficiency by sequence-specific protein cleavage. Kamatani N, et al. **Am J Hum Genet** 1989 Aug;45(2):325–31

Genetic control of red-cell nucleoside transport and its association with the B blood-group locus and nucleoside phosphorylase activity in sheep. Tucker EM, et al. **Biochem Genet** 1988 Aug;26(7-8):489–501

A chromosomal mutation mediating increased expression of pyrE in Salmonella typhimurium is located within the proposed attenuator. Neuhard J, et al. **Can J Microbiol** 1988 May;34(5):686–7

Sequence specificity of mutation induced by the anti-tumor drug cisplatin in the CHO aprt gene. de Boer JG, et al. **Carcinogenesis** 1989 Aug;10(8):1363–7

Mapping replication units in animal cells. Handeli S, et al. **Cell** 1989 Jun 16;57(6):909–20

Analysis of Aprt deficient mutants of Friend erythroleukaemia cells. O'Neill R, et al. **Cell Biol Int Rep** 1989 Jun;13(6):493–8

The ura5 gene of the ascomycete Sordaria macrospora: molecular cloning, characterization and expression in Escherichia coli. Le Chevanton L, et al. **Gene** 1989 Apr 15;77(1):39–49

Localization of the gene for uridine monophosphate synthase to human chromosome region 3q13 by in situ hybridization. Qumsiyeh MB, et al. **Genomics** 1989 Jul;5(1):160–2

Orotic aciduria fibroblasts express a labile form of UMP synthase. Perry ME, et al. **J Biol Chem** 1989 Sep 15; 264(26):15522–8

Molecular analysis of ethyl methanesulfonate-induced reversion of a chromosomally integrated mutant shuttle vector gene in mammalian cells. Greenspan JA, et al. **Mol Cell Biol** 1988 Oct;8(10):4185–9

A moveable 5' splice site in adenine phosphoribosyltransferase genes of Drosophila species. Johnson D, et al. **Mol Cell Biol** 1989 May;9(5):2220–3

Molecular and mutational analysis of three genes preceding pyrE on the Escherichia coli chromosome. Poulsen P, et al. **Mol Microbiol** 1989 Mar;3(3):393–404

Comparison of the AS52/XPRT and the CHO/HPRT assays: evaluation of 6 drug candidates. Aaron CS, et al. **Mutat Res** 1989 Jun;223(2):121–8

A genetic analysis of the adenine phosphoribosyl transferase locus in Chinese hamster V79-AP4 cells: relevance to mutagenesis studies. Colella CM, et al. **Mutat Res** 1988 Nov;202(1):185–92

The Chinese hamster aprt gene as a mutational target. Its sequence and an analysis of direct and inverted repeats. de Boer JG, et al. **Mutat Res** 1989 Aug;226(4):239–44

Mutagenic treatments result in inactivation of expression of a transfected bacterial gene integrated into a human cell line. Lehmann AR, et al. **Mutat Res** 1989 Mar-May; 220(2-3):255–62

Molecular analysis of spontaneous mutations at the gpt locus in Chinese hamster ovary (AS52) cells. Tindall KR, et al. **Mutat Res** 1989 Mar-May;220(2-3):241–53

Nucleotide sequence of the Escherichia coli uridine phosphorylase (udp) gene. Walton L, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6741

Targeted homologous recombination at the endogenous adenine phosphoribosyltransferase locus in Chinese hamster cells. Adair GM, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4574–8

A sensitive molecular assay for mutagenesis in mammalian cells: reversion analysis in cells with a mutant shuttle vector gene integrated into chromosomal DNA. Gelbert LM, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9143–7

Preferential loss or inactivation of chromosome Z4 APRT allele in CHO cells. Adair GM, et al. **Somat Cell Mol Genet** 1989 Jul;15(4):271–7

Gene dosage mutants at adenine phosphoribosyltransferase locus induced by colcemid in Chinese hamster V79-AP4 cells. Colella CM, et al. **Somat Cell Mol Genet** 1988 Nov; 14(6):593–604

High-frequency deletion event at aprt locus of CHO cells: detection and characterization of endpoints. Dewyse P, et al. **Somat Cell Mol Genet** 1989 Jan;15(1):19–28

Perspectives on UV light mutagenesis: investigation of the CHO aprt gene carried on a retroviral shuttle vector. Drobetsky EA, et al. **Somat Cell Mol Genet** 1989 Sep; 15(5):401–9

A reversible selection system for UMP synthase gene amplification and deamplification. Suttle DP. **Somat Cell Mol Genet** 1989 Sep;15(5):435–43

Allelic variation linked to adenine phosphoribosyltransferase locus in mouse teratocarcinoma cell line and feral-derived mouse strains. Turker MS, et al. **Somat Cell Mol Genet** 1989 Mar;15(2):159–66

[Interaction of negative (CytT) and positive (cAMP-CRP) regulation in the promoter region of the uridine phosphorylase (udp) gene in Escherichia coli K-12] Mironov AS, et al. **Genetika** 1989 Mar;25(3):438–47 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Purine nucleoside phosphorylase from bovine liver. Ikezawa Z, et al. **Comp Biochem Physiol [B]** 1978;60(2):111–6

Purification and characterization of yeast anthranilate phosphoribosyltransferase. Hommel U, et al. **Eur J Biochem** 1989 Mar 1;180(1):33–40

Quinolinic acid phosphoribosyltransferase: purification and partial characterization from human liver and brain. Okuno E, et al. **J Biochem (Tokyo)** 1988 Jun;103(6):1054–9

Purification and characterization of the adenine phosphoribosyltransferase and hypoxanthine-guanine phosphoribosyltransferase activities from Leishmania donovani. Allen T, et al. **Mol Biochem Parasitol** 1989 Mar 15;33(3):273–81

Purification and characterization of uridine (thymidine) phosphorylase from Giardia lamblia. Lee CS, et al. **Mol Biochem Parasitol** 1988 Sep;30(3):271–7

METABOLISM

MTA phosphorylase in protozoa: a potential target for chemotherapeutic attack. Miller RL, et al. **Adv Exp Med Biol** 1988;250:211–8 (25 ref.)

Human 5'-deoxy-5'-methylthioadenosine phosphorylase: kinetic studies and catalytic mechanism. Zappia V, et al. **Adv Exp Med Biol** 1988;250:165–77 (38 ref.)

Uridine-5'-phosphate synthase: evidence for substrate cycling involving this bifunctional protein. Traut TW. **Arch Biochem Biophys** 1989 Jan;268(1):108–15

The rho gene product expressed in E. coli is a substrate of botulinum ADP-ribosyltransferase C3. Aktories K, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):209–13

The interaction of xylosyltransferase and glucuronyltransferase involved in glucuronoxylan synthesis in pea (Pisum sativum) epicotyls. Baydoun EA, et al. **Biochem J** 1989 Feb 1;257(3):853–8

A xylosyltransferase involved in the synthesis of a protein-associated xyloglucan in suspension-cultured dwarf-French-bean (Phaseolus vulgaris) cells and its interaction with a glucosyltransferase. Campbell RE, et al. **Biochem J** 1988 Aug 1;253(3):795–800

Investigation of alpha-deuterium kinetic isotope effects on the purine nucleoside phosphorylase reaction by the equilibrium-perturbation technique. Lehikoinen PK, et al. **Biochem J** 1989 Jan 15;257(2):355–9

Characterization of adenine phosphoribosyltransferase from the human malaria parasite, Plasmodium falciparum. Queen SA, et al. **Biochim Biophys Acta** 1989 Jul 6;996(3):160–5

Enhanced therapeutic efficacy of 5'deoxy-5-fluorouridine in 5-fluorouracil resistant head and neck tumours in relation

to 5-fluorouracil metabolising enzymes. Peters GJ, et al. **Br J Cancer** 1989 Mar;59(3):327–34

A sensitive non-radioactive assay for pyrimidine nucleoside phosphorylase using reversed-phase high performance liquid chromatography. Laurensse EJ, et al. **Clin Chim Acta** 1988 Nov;178(1):71–8

Enzymes of the de novo and salvage pathways of purine synthesis in renal hypertrophy. Contrasting effects of early diabetes and unilateral nephrectomy. Beardsley SJ, et al. **Enzyme** 1988;40(4):231–7

Stopped flow kinetic studies of adenosine triphosphate phosphoribosyl transferase, the first enzyme in the histidine biosynthesis of Escherichia coli. Dall-Larsen T. **Int J Biochem** 1988;20(8):811–5

Correlations of dihydropyrimidine dehydrogenase, thymidine phosphorylase and thymidine kinase activities in strongly and weakly malignant cultured murine neuroblastoma cells. Williams CS, et al. **Int J Cancer** 1989 May 15;43(5):901–4

Evidence that the iron–sulfur cluster of Bacillus subtilis glutamine phosphoribosylpyrophosphate amidotransferase determines stability of the enzyme to degradation in vivo. Grandoni JA, et al. **J Biol Chem** 1989 Apr 15; 264(11):6058–64

Uridine monophosphate synthase of Jersey bulls. Shanks RD, et al. **J Dairy Sci** 1989 Mar;72(3):722–5

Indicator cell lines for the detection of hidden mycoplasma contamination, using an adenosine phosphorylase screening test. Spierenburg GT, et al. **J Immunol Methods** 1988 Nov 10;114(1–2):115–9

Effect of protein level in the diet on quinolinate phosphoribosyltransferase of rat liver. Ghafoorunissa, et al. **Life Sci** 1974 Nov 1;15(9):1597–602

Properties and substrate specificity of a purine phosphoribosyltransferase from the human malaria parasite, Plasmodium falciparum. Queen SA, et al. **Mol Biochem Parasitol** 1988 Aug;30(2):123–33

AdoP assay detection of mycoplasmal contamination in biological media. Bonissol C, et al. **Res Virol** 1989 May-Jun;140(3):241–51

RADIATION EFFECTS

Purine metabolizing enzyme activities in radiosensitive tissues of mice after sublethal whole-body irradiation. Hošek B, et al. **Gen Physiol Biophys** 1989 Feb;8(1):63–71

PENTOXIFYLLINE see under **THEOBROMINE**

PENTOXYL see under **URACIL**

PENTYLENETETRAZOLE

Rhythmic metrazol activity in rats as a model of human absences. Schickerová R, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):16–20

Chronic ethanol treatment alters the behavioral effects of Ro 15–4513, a partially negative ligand for benzodiazepine binding sites. Mehta AK, et al. **Brain Res** 1989 Jun 5; 489(1):93–100

The role of the nigrotegmental GABAergic pathway in the propagation of pentylenetetrazol-induced seizures. Okada R, et al. **Brain Res** 1989 Feb 20;480(1–2):383–7

Injection of benzodiazepines but not GABA or muscimol into pars reticulata substantia nigra suppresses pentylenetetrazol seizures. Zhang H, et al. **Brain Res** 1989 May 29;488(1–2):73–9

Effects of flunarizine on Metrazol-induced seizures in developing rats. Pohl M, et al. **Epilepsy Res** 1987 Sep; 1(5):302–5

Effect of anticonvulsants on pentylenetetrazol-induced power spectrum changes in electroencephalograms in rats. Sugaya E, et al. **Epilepsy Res** 1987 Sep;1(5):265–71

Inhibitory effect of TJ-960 (SK) on pentylenetetrazol-induced EEG power spectrum changes. Sugaya E, et al. **Epilepsy Res** 1988 Jan–Feb;2(1):27–31

Inhibitory effect of a mixture of herbal drugs (TJ–960, SK) on pentylenetetrazol-induced convulsions in E1 mice. Sugaya E, et al. **Epilepsy Res** 1988 Sep–Oct;2(5):337–9

Specific suppression of pentylenetetrazol-induced epileptiform discharges in CA3 neurons (hippocampal slice, guinea pig) by the organic calcium antagonists flunarizine and verapamil. Bingmann D, et al. **Exp Brain Res** 1989; 74(2):239–48

CNS stimulation and PGE2 release. III. Pentamethylenetetrazole-induced seizures. Navarro E, et al. **J Cereb Blood Flow Metab** 1989 Apr;9(2):180–6

Age-related changes in regional patterns of blood–brain barrier breakdown during epileptiform seizures induced by pentylenetetrazol. Ziylan YZ, et al. **Neurosci Lett** 1989 Jan 16;96(2):179–84

ADMINISTRATION & DOSAGE

Ethanol and Ro 15–4513: behaviour maintained by operant procedures (DRL–72s and PTZ–drug discrimination) in rats. Järbe TU, et al. **Drug Alcohol Depend** 1988 Oct; 22(1–2):83–90

ADVERSE EFFECTS

The making and shaking of memories. Izquierdo I. **Trends Pharmacol Sci** 1988 Mar;9(3):79–80 (9 ref.)

ANALYSIS

High-performance liquid chromatographic determination of chemical convulsant pentylenetetrazol in rat serum, cerebrospinal fluid and brain. Ramzan IM. **J Chromatogr** 1988 Nov 18;432:370–4

ANTAGONISTS & INHIBITORS

Suppression of pentylenetetrazol-elicited seizure activity by intraosseous propranolol in pigs. Jim KF, et al. **J Clin Pharmacol** 1988 Dec;28(12):1106–11

A possible role for spinal noradrenaline in the mechanisms of 6-hydroxydopamine against pentylenetetrazol induced convulsions in rats. Abed WT. **Life Sci** 1988;43(22):1831–6

Modulation of benzodiazepine by lysine and pipecolic acid on pentylenetetrazol-induced seizures. Chang YF, et al. **Life Sci** 1988;43(15):1177–88

Sodium phenobarbitone reverses the anxiogenic effects of compounds acting at three different central sites. Johnston AL, et al. **Neuropharmacology** 1989 Jan;28(1):83–8

Influence of cinromide on metrazol—induced seizures during ontogenesis in rats. Bernášková K, et al. **Physiol Bohemoslov** 1988;37(2):123–30

Antimetrazol action and plasma levels of valproate in developing rats. Mareš P, et al. **Physiol Bohemoslov** 1989; 38(2):97–107

Anti-metrazol action of R 57720 during postnatal development in rats. Pohl M, et al. **Physiol Bohemoslov** 1988;37(2):115–21

PHARMACOKINETICS

Kinetics of drug action in disease states. XXXIV. Effect of experimental thyroid disorders on the pharmacodynamics of phenobarbital, ethanol and pentylenetetrazol. Walker JS, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):6–10

PHARMACOLOGY

Effects of muscimol, cetyl-GABA, pentetrazol and picrotoxin on timidity during intraspecies conflict in mice. Kršiak M. **Act Nerv Super (Praha)** 1989 Apr;31(1):64–6

Piracetam and metrazol-induced ECoG phenomena. Mareš P. **Act Nerv Super (Praha)** 1989 Apr;31(1):67–8

Epileptic discharges induced by pentylenetetrazol: changes of shape of dendrites. Altrup U, et al. **Brain Res** 1988 Jul 26;456(2):401–5

Membrane currents induced by pentylenetetrazol in identified neurons of Helix pomatia. Walden J, et al. **Brain Res** 1988 Nov 15;473(2):294–305

Pentylenetetrazole inhibits glutamate dehydrogenase and aspartate aminotransferase, and stimulates GABA aminotransferase in homogenates from rat cerebral cortex. Lacoste L, et al. **Can J Physiol Pharmacol** 1988 Sep; 66(9):1135–8

Effects of antiepileptic drugs on GABA responses and on reduction of GABA responses by PTZ and DMCM on mouse neurons in cell culture. De Deyn PP, et al. **Epilepsia** 1989 Jan–Feb;30(1):17–25

Intratectal glutamate suppresses pentylenetetrazole-induced spike-and-wave discharges. Redgrave P, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):283–7

Seizures and recovery from experimental brain damage. Hernandez TD, et al. **Exp Neurol** 1988 Dec;102(3):318–24

The effect of pentylenetetrazol on the metacerebral neuron of Helix pomatia. Fehér O, et al. **Gen Physiol Biophys** 1988 Oct;7(5):505–16

The influence of the convulsant pentylenetetrazol on Ca2+-selective microelectrodes (neutral carrier ETH 1001). Lücke A, et al. **J Neurosci Methods** 1989 Aug; 29(2):139–42

Chronic but not acute antidepressant treatment increases pentetrazol-induced convulsions in mice. Escorihuela RM, et al. **J Pharm Pharmacol** 1989 Feb;41(2):143–4

Kinetics of drug action in disease states. XXXIII: Disparate effects of pentylenetetrazol in rats as a function of renal disease model and pharmacologic endpoint. Ramzan I, et al. **J Pharm Sci** 1989 Feb;78(2):142–5

Withdrawal from diazepam substitutes for the discriminative stimulus properties of pentylenetetrazol. Emmett-Oglesby MW, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):892–7

Characterization of a pentylenetetrazol-like interoceptive stimulus produced by ethanol withdrawal. Lal H, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):508–18

Inhibitory effect of intravenous GABA antagonists on gastric acid secretion stimulated by secretagogues in rats. Lin WC, et al. **Jpn J Pharmacol** 1989 Feb;49(2):267–74

Pentylenetetrazol kindling in mice. Karler R, et al. **Neuropharmacology** 1989 Aug;28(8):775–80

The pentylenetetrazol-like interoceptive stimulus produced by ethanol withdrawal is potentiated by bicuculline and picrotoxinin. Idemudia SO, et al. **Neuropsychopharmacology** 1989 Jun;2(2):115–22

A study of pentylenetetrazol kindling in rats and mice. Craig CR, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):867–70

Diazepam reverses the effects of pentylenetetrazole in rat pups by acting at type 2 benzodiazepine receptors. Johnston AL, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):823–5

Anticonvulsant activity of MK-801 and nimodipine alone and in combination against pentylenetetrazole and strychnine. O'Neill SK, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):595–600

A behavioral and electrocorticographic comparison of diazepam and pentylenetetrazol in rat pups. Smythe JW, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):479–82

Time dependent pentylenetetrazol-like cues subsequent to diazepam administration. Barrett RJ, et al. **Psychopharmacology (Berlin)** 1988;96(2):169–73

Sensitivity of pentylenetetrazol discrimination increased by a stimulus fading technique. Harris CM, et al. **Psychopharmacology (Berlin)** 1989;98(4):460–4

The chlordiazepoxide/pentylenetetrazol discrimination: characterization of drug interactions and homeostatic responses to drug challenges. Michaelis RC, et al. **Psychopharmacology (Berlin)** 1988;96(1):15–20

[Proconvulsant effect of morphine on seizures induced by pentylenetetrazol in the mice] Fujii E, et al. **Yakubutsu Seishin Kodo** 1988 Sep;8(3):381–7 (Eng. Abstr.) **(Jpn)**

[Influence of phosphatidylcholine on the threshold dose of pentylenetetrazol for inducing seizure] Noda K, et al. **Yakubutsu Seishin Kodo** 1988 Sep;8(3):417–20 (Eng. Abstr.) **(Jpn)**

[Effect of brain extracts from rats subjected to korazol kindling on generalized epileptic activity] Kryzhanovskiĭ GN, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):271–4 (Eng. Abstr.) **(Rus)**

[Effects of corazol on the dynamics of membrane-bound calcium in the structures of the cerebral cortex] Samoĭlov MO, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):50–1 (Eng. Abstr.) **(Rus)**

[The effect of oxymethacil on the level of membrane-bound calcium in the cerebral cortex under the action of corazol] Samoĭlov MO, et al. **Dokl Akad Nauk SSSR** 1989; 304(5):1269–71 **(Rus)**

[Effect of corazole on the dynamics of oxidative-reductive processes in cerebral cortical neurons] Sofronov GA, et al. **Farmakol Toksikol** 1989 Mar–Apr;52(2):30–3 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Effects of flunarizine on Metrazol-induced seizures in developing rats. Pohl M, et al. **Epilepsy Res** 1987 Sep; 1(5):302–5

TOXICITY

The ionic mechanism of the pentylenetetrazol convulsions. Papp A, et al. **Acta Biol Hung** 1987;38(3–4):349–61

Prostaglandin D2 inhibits pentylenetetrazole-induced convulsions in rats by a serotonin-mediated mechanism. Bhattacharya SK, et al. **Pharm Res** 1987 Oct;4(5):406–8

Effects of ketamine on metrazol-induced seizures during ontogenesis in rats. Velíšek L, et al. **Pharmacol Biochem Behav** 1989 Feb;32(2):405–10

PENTYMAL see **AMOBARBITAL**

PEPSIN

Unique features of monoclonal IgG2b in the cleavage reaction with pepsin. Sumii H, et al. **Acta Med Okayama** 1989 Jun;43(3):135–41

Effect of pepsin treatment on the HIV envelope and core antigens. Ujhelyi E, et al. **Aids** 1989 Jun;3(6):383–7

Isotope-edited proton NMR study on the structure of a pepsin/inhibitor complex. Fesik SW, et al. **Biochemistry** 1988 Nov 1;27(22):8297–301

Specificity of milk-clotting enzymes towards bovine kappa-casein. Drøhse HB, et al. **Biochim Biophys Acta** 1989 May 1;995(3):221–4

Loss of viability by Listeria monocytogenes in commercial bovine pepsin-rennet extract. el-Gazzar FE, et al. **J Dairy Sci** 1989 May;72(5):1098–102

Structures of histamine-releasing peptides formed by the action of acid proteases on mammalian albumin(s). Carraway RE, et al. **J Immunol** 1989 Sep 1;143(5):1680–4

Encapsulation of vitamin A. Markus A, et al. **J Microencapsul** 1989 Jul–Sep;6(3):389–94

[Theoretical studies of the electrostatic interactions in aspartic proteinases, intramolecular interactions in pepsin and penicillopepsin] Miteva A, et al. **Mol Biol (Mosk)** 1988 Nov–Dec;22(6):1456–63 (Eng. Abstr.) **(Rus)**

ANALYSIS

Determination of the pepsin activity in human gastric juice, using defined oligopeptides as substrates. Schnaith E. **Clin Biochem** 1989 Apr;22(2):91–8

Partial characterization of pepsins and gastricsins and their zymogens from human and toad gastric mucosae. Ward PH, et al. **Comp Biochem Physiol [B]** 1978;61(4):491–8

Heterogeneity of human pepsin I, as shown by high-performance ion-exchange chromatography. Peek K, et al. **J Chromatogr** 1989 Aug 4;476:491–8

[Immunohistologic detection of pepsin and gastricsin in carcinoma of the stomach] Marek J, et al. **Cas Lek Cesk** 1989 Apr 7;128(15):456–9 (Eng. Abstr.) **(Cze)**

BIOSYNTHESIS

Analysis of the activation of pepsinogen in the presence of protein substrates and estimation of the intrinsic proteolytic activity of pepsinogen. Kageyama T. **Eur J Biochem** 1988 Oct 1;176(3):543–9

BLOOD

Variation of total pepsin activity in sera with age and under different stimulations of gastric acid secretion. Massarrat S, et al. **Clin Biochem** 1989 Apr;22(2):99–101

IMMUNOLOGY

Induction of anti–pepsin antibodies after immunization with pepsin–extracted collagen. Zlabinger GJ, et al. **Matrix** 1989 Mar;9(2):135–9

ISOLATION & PURIFICATION

Purification and characterization of exudate gelatinases in the chronic–phase of carrageenin–induced inflammation in rats. Sakata K, et al. **J Biochem (Tokyo)** 1989 Mar; 105(3):384–9

Improved separation of human pepsins from gastric juice by high–performance ion–exchange chromatography. Peek K, et al. **J Chromatogr** 1989 Aug 4;476:291–7

METABOLISM

The degradation of collagen by a metalloproteinase from human leucocytes. Kohnert U, et al. **Adv Exp Med Biol** 1988;240:33–44

A reversible unfolding reaction of swine pepsin; implications for pepsinogen's folding mechanism. McPhie P. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):115–9

Gelatinases of murine metastatic tumor cells. Yamagata S, et al. **Biochem Biophys Res Commun** 1989 Jan 16; 158(1):228–34

Characterization of gelatinase from pig polymorphonuclear leucocytes. A metalloproteinase resembling tumour type IV collagenase. Murphy G, et al. **Biochem J** 1989 Mar 1;258(2):463–72

Secondary enzyme–substrate interactions: kinetic evidence for ionic interactions between substrate side chains and the pepsin active site. Pohl J, et al. **Biochemistry** 1988 Jun 28; 27(13):4827–34

Electrophoretic study of the caseinolytic activity of a pepsin from the dogfish Scyliorhinus canicula. Guerard F, et al. **Biochimie** 1989 Jun;71(6):767–70

Enzyme–digestible swelling hydrogels as platforms for long–term oral drug delivery: synthesis and characterization. Park K. **Biomaterials** 1988 Sep; 9(5):435–41

Tuna pepsinogens and pepsins. Purification, characterization and amino–terminal sequences. Tanji M, et al. **Eur J Biochem** 1988 Nov 1;177(2):251–9

Activation of matrix metalloproteinase 3 (stromelysin) and matrix metalloproteinase 2 ('gelatinase') by human neutrophil elastase and cathepsin G. Okada Y, et al. **FEBS Lett** 1989 Jun 5;249(2):353–6

Gelatin–degrading type IV collagenase isolated from human small cell lung cancer. Zucker S, et al. **Invasion Metastasis** 1989;9(3):167–81

Avian retroviral protease and cellular aspartic proteases are distinguished by activities on peptide substrates. Kotler M, et al. **J Biol Chem** 1989 Feb 25;264(6):3428–35

Purification and substrate specificity of a strongly hydrophobic extracellular metalloendopeptidase ("gelatinase") from Streptococcus faecalis (strain 0G1–10). Mäkinen PL, et al. **J Biol Chem** 1989 Feb 25;264(6):3325–34

Comparison of vertebrate collagenase and gelatinase using a new fluorogenic substrate peptide. Stack MS, et al. **J Biol Chem** 1989 Mar 15;264(8):4277–81

Enzyme linked immunosorbent assays (ELISA) for the quantitative determination of human leukocyte collagenase and gelatinase. Bergmann U, et al. **J Clin Chem Clin Biochem** 1989 Jun;27(6):351–9

Proteolysis of alcohol–treated soybean meal proteins by Bacteroides ruminicola, Bacteroides amylophilus, pepsin, trypsin, and in the rumen of steers. Lynch GL, et al. **J Dairy Sci** 1988 Sep;71(9):2416–27

Histamine release induced by proteolytic digests of human serum albumin: isolation and structure of an active peptide from pepsin treatment. Sugiyama K, et al. **Jpn J Pharmacol** 1989 Feb;49(2):165–71

Pepsins and the mucus barrier in peptic ulcer disease. Allen A, et al. **Scand J Gastroenterol Suppl** 1988;146:50–7 (49 ref.)

[Heterogeneity of collagen molecules types I and II according to their resistance to proteolysis] Sokolov BP, et al. **Biokhimiia** 1988 Nov;53(11):1828–36 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Degradation of glomerular basement membrane by purified mammalian metalloproteinases. Baricos WH, et al. **Biochem J** 1988 Sep 1;254(2):609–12

Generation of Met–enkephalin Arg6Phe7 immunoreactivity by proteolytic cleavage of mammalian plasma precursors by pepsin. Giraud AS, et al. **Endocrinology** 1989 Apr; 124(4):1711–6

Potential contribution of mild pepsin treatment at pH4 to the viral safety of human immunoglobulin products. Reid KG, et al. **Vox Sang** 1988;55(2):75–80

SECRETION

Do ranitidine and nizatidine influence pepsin secretion? Vianello F, et al. **Acta Gastroenterol Belg** 1988 Mar–Apr; 51(2):154–8

Effect of pirenzepine on basal gastric acid and pepsin secretion and on secretion stimulated with graded doses of pentagastrin in duodenal ulcer patients. Meneghelli UG, et al. **Braz J Med Biol Res** 1988;21(4):781–9

Relationship between gelatinase secretion and chemotaxis of rat polymorphonuclear leukocytes. Watanabe K, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):2197–203

Effect of high dose omeprazole on gastric pepsin secretion and serum pepsinogen levels in man. Ten Kate RW, et al. **Eur J Clin Pharmacol** 1988;35(2):173–6

Human osteoblasts in vitro secrete tissue inhibitor of metalloproteinases and gelatinase but not interstitial collagenase as major cellular products. Rifas L, et al. **J Clin Invest** 1989 Aug;84(2):686–94

Gastric pepsin and acid secretion during total parenteral nutrition and constant–rate enteral nutrition in infancy. de Angelis GL, et al. **JPEN J Parenter Enteral Nutr** 1988 Sep–Oct;12(5):505–8

Pepsin secretion in situ: a review. Magee DF. **Mt Sinai J Med (NY)** 1988 Sep;55(4):265–71 (62 ref.)

Gastric acid and pepsin secretion after single oral doses of mifentidine in healthy subjects. Lazzaroni M, et al. **Scand J Gastroenterol** 1988 Sep;23(7):788–92

[Hydrochloric acid, pepsin and mucus secretion in the stomach of healthy probands following a single insulin administration with simultaneous pentagastrin infusion] Zarzycki W. **Dtsch Z Verdau Stoffwechselkr** 1988; 48(5):229–38 (Eng. Abstr.) **(Ger)**

[Hydrochloric acid and pepsin secretion in surgically treated patients with cancer of the stomach] Snarska J, et al. **Nowotwory** 1988 Apr–Jun;38(2):101–8 (Eng. Abstr.) **(Pol)**

[Status of the acid and pepsin–producing functions of the stomach in patients after abdominal surgery] Skriabin ON, et al. **Klin Med (Mosk)** 1989 May;67(5):80–4 (Eng. Abstr.) **(Rus)**

PEPSINOGEN

ANALYSIS

Presence of pepsinogens immunoreactive to anti–embryonic chicken pepsinogen antiserum in fish stomachs: possible ancestor molecules of chymosin of higher vertebrates. Yasugi S, et al. **Comp Biochem Physiol [A]** 1988;91(3):565–9

Properties of rabbit pepsinogen granules. Sharma BK, et al. **Gastroenterology** 1989 Apr;96(4):1049–57

Pepsinogens I and II in gastric cancer: an immunohistochemical study using monoclonal antibodies. Huang SC, et al. **Jpn J Cancer Res** 1988 Oct;79(10):1139–46

[Pepsinogen C in the human prostate] Kohout J, et al. **Rozhl Chir** 1989 Feb;68(2):122–7 (Eng. Abstr.) **(Cze)**

BIOSYNTHESIS

Changes in rat and human pepsinogen phenotypes induced by N'–methyl–N'nitro–N–nitrosoguanidine. Defize J, et al. **Cancer** 1988 Nov 1;62(9):1958–61

Control of pepsinogen synthesis and secretion in primary monolayer cultures of canine gastric chief cells. Defize J, et al. **Dig Dis Sci** 1988 Dec;33(12):1583–91

Synthesis, purification, and active site mutagenesis of recombinant porcine pepsinogen. Lin XL, et al. **J Biol Chem** 1989 Mar 15;264(8):4482–9

BLOOD

Pepsinogens and other serum markers in pernicious anemia. Carmel R. **Am J Clin Pathol** 1988 Oct;90(4):442–5

Enzyme–linked immunosorbent assays for serum pepsinogens I and II using monoclonal antibodies—with data on peptic ulcer and gastric cancer. Huang SC, et al. **Clin Chim Acta** 1988 Jun 30;175(1):37–50

Serum pepsinogen I in familial multiple endocrine neoplasia type I. Lamers CB, et al. **Dig Dis Sci** 1988 Oct; 33(10):1274–6

Serum pepsinogen I in relation to some clinical features and complications of duodenal ulcer disease. Faraj FJ, et al. **East Afr Med J** 1989 Apr;66(4):255–8

Effect of high dose omeprazole on gastric pepsin secretion and serum pepsinogen levels in man. Ten Kate RW, et al. **Eur J Clin Pharmacol** 1988;35(2):173–6

Serum pepsinogen I and IgG antibody to Campylobacter pylori in non–specific abdominal pain in childhood. Oderda G, et al. **Gut** 1989 Jul;30(7):912–6

Radioimmunoassay of human pepsinogen A and pepsinogen C. Biemond I, et al. **J Clin Chem Clin Biochem** 1989 Jan; 27(1):19–25

Comparison of egg excretion and serum pepsinogen levels as measures of nematode worm burdens in calves with limited pasture exposure. Murrell KD, et al. **J Parasitol** 1989 Jun;75(3):360–6

Prognostic value of serum pepsinogen I in children with peptic ulcer. Oderda G, et al. **J Pediatr Gastroenterol Nutr** 1988 Sep–Oct;7(5):645–50

The significance of low serum pepsinogen levels to detect stomach cancer associated with extensive chronic gastritis in Japanese subjects. Miki K, et al. **Jpn J Cancer Res** 1989 Feb;80(2):111–4

Serum pepsinogen 1, gastrin, ABO blood groups, secretor status of ABH substances and behavioral factors in patients with duodenal ulcer and their relatives. Sumii K, et al. **Jpn J Med** 1988 Aug;27(3):291–4

Amoxycillin plus tinidazole for Campylobacter pylori gastritis in children: assessment by serum IgG antibody, pepsinogen I, and gastrin levels. Oderda G, et al. **Lancet** 1989 Apr 1;1(8640):690–2

Blood gastrin and pepsinogen responses to subclinical infection with Ostertagia ostertagi in adult dairy cattle. Pitt SR, et al. **Res Vet Sci** 1988 Jul;45(1):130–1

[Pepsinogen] Plebani M, et al. **G Clin Med** 1988 Nov; 69(11):705–6 **(Ita)**

[Serum pepsinogen I level in patients with stomach cancer—its value and limitation in clinical use] Miki K, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):1122–8 (Eng. Abstr.) **(Jpn)**

[Gastric mucosa in patients with fundic hyperplastic polyps] Haruma K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Apr;86(4):851–7 (Eng. Abstr.) **(Jpn)**

[Pepsinogen I and duodenal ulcer] Marchese MA. **Arq Gastroenterol** 1988 Jan–Mar;25(1):37–43 (43 ref.) (Eng. Abstr.) **(Por)**

GENETICS

Differential expression of pepsinogen isozymogens in a patient with Barrett esophagus. Pals G, et al. **Clin Genet** 1988 Aug;34(2):90–7

Pepsinogen gene transcription induced in heterologous epithelial–mesenchymal recombinations of chicken endoderms and glandular stomach mesenchyme. Hayashi K, et al. **Development** 1988 Aug;103(4):725–31

Identification of a Glu greater than Lys substitution in the activation segment of human pepsinogen A–3 and –5 isozymogens by peptide mapping using endoproteinase Lys–C. Bank RA, et al. **FEBS Lett** 1988 Sep 26; 238(1):105–8

Nucleotide sequence comparison of five human pepsinogen A (PGA) genes: evolution of the PGA multigene family. Evers MP, et al. **Genomics** 1989 Apr;4(3):232–9

Human pepsinogen C (progastricsin) polymorphism: evidence for a single locus located at 6p21.1–pter. Pals G, et al. **Genomics** 1989 Feb;4(2):137–48

Family and population studies on the human pepsinogen A multigene family. Bebelman JP, et al. **Hum Genet** 1989 May;82(2):142–6

Primary structure and transcriptional regulation of rat pepsinogen C gene. Ishihara T, et al. **J Biol Chem** 1989 Jun 15;264(17):10193–9

Human pepsinogen C (progastricsin). Isolation of cDNA clones, localization to chromosome 6, and sequence homology with pepsinogen A. Taggart RT, et al. **J Biol Chem** 1989 Jan 5;264(1):375–9

RFLP for the human pepsinogen C gene (PGC). Azuma T, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9372

RFLPs for the human pepsinogen A haplotypes (PGA). Taggart RT, et al. **Nucleic Acids Res** 1988 Oct 11; 16(19):9371

[Human pepsinogen A genes regulation in various tissues] Ichinose M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec;85(12):2563–8 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Characterization of antigenic structures in auto–immune atrophic gastritis with pernicious anaemia. The parietal cell H,K–ATPase and the chief cell pepsinogen are the two major antigens. Mårdh S, et al. **Acta Physiol Scand** 1989 Aug;136(4):581–7

ISOLATION & PURIFICATION

Seminal pepsinogen C is not identical with, but is very similar to gastric pepsinogen C. Szecsi PB, et al. **FEBS Lett** 1988 Sep 26;238(1):101–4

METABOLISM

A reversible unfolding reaction of swine pepsin; implications for pepsinogen's folding mechanism. McPhie P. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):115–9

Studies on the irreversible step of pepsinogen activation. Glick DM, et al. **Biochemistry** 1989 Mar 21;28(6):2626–30

The concentration of pepsinogen C in human semen and the physiological activation of zymogen in the vagina. Szecsi PB, et al. **Biol Reprod** 1989 Mar;40(3):653–9

Proliferation kinetics of pepsinogen altered pyloric gland cells in rats treated with N–methyl–N'–nitro–N–nitrosoguanidine. Tatematsu M, et al. **Carcinogenesis** 1989 May;10(5):907–11

The renal metabolism of pepsinogen A and C in man. ten Kate RW, et al. **Clin Nephrol** 1989 Feb;31(2):103–6

Slow moving proteinase in gastric cancer and its relationship to pepsinogens I and II. An immunohistochemical study. Shiraishi T, et al. **Dig Dis Sci** 1988 Nov;33(11):1466–72

Analysis of the activation of pepsinogen in the presence of protein substrates and estimation of the intrinsic proteolytic activity of pepsinogen. Kageyama T. **Eur J Biochem** 1988 Oct 1;176(3):543–9

Tuna pepsinogens and pepsins. Purification, characterization and amino–terminal sequences. Tanji M, et al. **Eur J Biochem** 1988 Nov 1;177(2):251–9

Activation of human pepsinogens. Foltmann B. **FEBS Lett** 1988 Dec 5;241(1–2):69–72

Difference of activation processes and structure of activation peptides in human pepsinogens A and progastricsin. Kageyama T, et al. **J Biochem (Tokyo)** 1989 Jan;

105(1):15–22
Handling of human pepsinogens by the isolated rat kidney: evidence for a high glomerular sieving coefficient. ten Kate RW, et al. **Renal Physiol Biochem** 1989 Jan–Feb;12(1):41–6
[Pepsinogen activation by microbial proteinases] Petrova EN, et al. **Biokhimiia** 1988 Aug;53(8):1389–96 (Eng. Abstr.) **(Rus)**

SECRETION

Cholecystokinin–induced desensitization of pepsinogen secretion from chief cells. Cherner JA, et al. **Am J Physiol** 1989 May;256(5 Pt 1):G837–45
Characterization of cholinergic receptors mediating pepsinogen secretion from chief cells. Sutliff VE, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):G226–34
125I–iodopindolol binding to frog esophageal peptic cells. Detection of amine uptake and beta–adrenergic receptors coupled to pepsinogen secretion. Dickinson KE, et al. **Biochem Pharmacol** 1989 May 1;38(9):1481–9
Dissociation of pepsinogen and acid secretion [letter; comment] Magee DF. **Gastroenterology** 1989 Feb;96(2 Pt 1):554. **Comment on:** Gastroenterology 1988 Aug;95(2):321–6
Role of gastrin–releasing peptide in the neural control of pepsinogen secretion from the pig stomach. Skak–Nielsen T, et al. **Gastroenterology** 1988 Nov;95(5):1216–20
Effect of hydrochloric acid and prostaglandins on pepsinogen synthesis and secretion in canine gastric chief cell monolayer cultures. Defize J, et al. **Gut** 1989 Jun; 30(6):774–81
The complete amino acid sequence of porcine gastrotropin, an ileal protein which stimulates gastric acid and pepsinogen secretion. Walz DA, et al. **J Biol Chem** 1988 Oct 5;263(28):14189–95
Role of gastrin–releasing peptide in pepsinogen secretion from the isolated perfused rat stomach. Skak–Nielsen T, et al. **Regul Pept** 1988 Oct;23(1):95–104
[Effect of COOH–terminal octapeptide of cholecystokinin or carbachol on free cytosolic Ca++ concentration and pepsinogen secretion in the isolated guinea pig gastric chief cells] Sakamoto C, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jul;85(7):1347–52 (Eng. Abstr.) **(Jpn)**

URINE

Renal handling of pepsinogens A and C in man. ten Kate RW, et al. **Clin Sci** 1988 Dec;75(6):649–54
[Clinical significance of determining the circadian uropepsinogen profile of peptic ulcer patients] Rychagov GP, et al. **Sov Med** 1988;(6):101–3 **(Rus)**

PEPSTATINS see under **OLIGOPEPTIDES**

PEPTIC ULCER

see related
GASTRECTOMY
ZOLLINGER–ELLISON SYNDROME

Incidence and pathology of peptic ulcer disease. Beck H, et al. **Acta Chir Scand Suppl** 1988;547:17–22 (64 ref.)
Peptic ulceration. **Baillieres Clin Gastroenterol** 1988 Jul; 2(3):529–714
Peptic ulcer in children. Fernández–Lube D. **Bol Asoc Med P R** 1989 Jul;81(7):259–66 (77 ref.)
Peptic ulcer disease. Friedman G. **Clin Symp** 1988;40(5):1–32 (21 ref.)
Abstracts of the International Conference on the Biology of Stress Ulcers. May 22–24, 1988, Lake Arrowhead, California. **Dig Dis Sci** 1988 Nov;33(11):1473–82
Emergencies in acid–peptic disease. Miller TA. **Gastroenterol Clin North Am** 1988 Jun;17(2):303–15 (48 ref.)
Peptic ulcer disease in the elderly. Gilinsky NH. **Scand J Gastroenterol Suppl** 1988;146:191–200 (71 ref.)
What's new in peptic ulcer. Yap I, et al. **Singapore Med J** 1988 Dec;29(6):538–9
[Gastroduodenal ulcer in children. Apropos of 19 cases] Ben Salah S, et al. **Tunis Med** 1988 Jan;66(1):43–9 (39 ref.) (Eng. Abstr.) **(Fre)**

BLOOD

Enzyme–linked immunosorbent assays for serum pepsinogens I and II using monoclonal antibodies—with data on peptic ulcer and gastric cancer. Huang SC, et al. **Clin Chim Acta** 1988 Jun 30;175(1):37–50
Haptoglobin types in peptic ulcer. Begum S, et al. **Trop Gastroenterol** 1988 Jul–Aug;9(3):136–8
[Immunohistochemical evaluation of blood group substances A, B and H of the gastric mucosa in patients with peptic ulcer and cancer of the stomach] Słotwiński R, et al. **Pol Tyg Lek** 1988 Nov 21;43(47):1500–3 (Eng. Abstr.) **(Pol)**
[Cyclic AMP level in peripheral blood lymphocytes in patients with peptic ulcer before and after treatment with cimetidine] Klimczak J, et al. **Wiad Lek** 1988 Jul 1; 41(13):855–9 (Eng. Abstr.) **(Pol)**
[Blood serum proteins, IgA, IgG and IgM immunoglobulins and alpha 1–antitrypsin and alpha 1–antichymotrypsin in peptic ulcer treated with altramet] Przybyłowski J, et al. **Wiad Lek** 1988 Oct 15;41(20):1347–50 (Eng. Abstr.) **(Pol)**
[Disseminated intravascular coagulation syndrome in stomach and duodenal ulcers] Levitan BN, et al. **Sov Med** 1988;(7):6–9 (Eng. Abstr.) **(Rus)**
[Changes in the rheologic properties of the blood in peptic ulcer] Nosova VP, et al. **Sov Med** 1989;(4):87–90 **(Rus)**

CHEMICALLY INDUCED

Peptic ulcer in rheumatoid arthritis [letter; comment] Roth SH. **Ann Rheum Dis** 1989 May;48(5):438–9. **Comment on:** Ann Rheum Dis 1988 Jun;47(6):478–80
Non–steroidal anti–inflammatory drugs in patients with peptic ulcer disease: to be considered in certain circumstances. Doherty M. **BMJ** 1989 Jan 21; 298(6667):176, 178–9 (37 ref.)
Non–steroidal anti–inflammatory drugs in patients with peptic ulcer disease: rarely justified in terms of cost or patient benefit. Hawkey C. **BMJ** 1989 Jan 21; 298(6667):177–8 (25 ref.)
Non–steroidal anti–inflammatory drugs and peptic ulceration. Logan R. **BMJ** 1988 Oct 29;297(6656):1130
Non–steroidal anti–inflammatory drugs and pain free peptic ulceration in the elderly. Skander MP, et al. **BMJ** 1988 Oct 1;297(6652):833–4
Prevalence of upper gastrointestinal mucosal abnormalities at a rheumatology clinic [published erratum appears in Bol Asoc Med P R 1989 Feb;81(2):60] Senior J, et al. **Bol Asoc Med P R** 1988 Jul;80(7):241–4
Effects of prostaglandin D2 and omeprazole on indomethacin–induced gastric ulcers in rats. Fukui A, et al. **Clin Exp Pharmacol Physiol** 1988 Dec;15(12):919–26
NSAID–induced mucosal injury. Liebowitz D. **J Clin Gastroenterol** 1988 Dec;10(6):609–11
Efficacy of misoprostol in upper gastro–intestinal lesions in arthritic patients on non–steroidal anti–inflammatory drugs (NSAIDS)—an Indian experience. Bhatt CB, et al. **J Postgrad Med** 1988 Oct;34(4):224–8
Paracetamol and peptic ulcer [letter] [see comments] Piper DW, et al. **Lancet** 1988 Nov 19;2(8621):1192. **Comment in:** Lancet 1989 Jan 28;1(8631):213
Paracetamol and peptic ulcer [letter; comment] Walker AM, et al. **Lancet** 1989 Jan 28;1(8631):213. **Comment on:** Lancet 1988 Nov 19;2(8621):1192
[Gastric mucosa barrier and the effect of non–steroidal anti–inflammatory agents and corticosteroid hormones on the gastric and duodenal mucosa] Daskalov A, et al. **Vutr Boles** 1988;27(3):13–7 (0 ref.) **(Bul)**
[Prostaglandin analogues in ulcer disease (letter)] Malmquist J. **Ugeskr Laeger** 1989 Apr 17;151(16):1005 **(Dan)**
[Prevention and treatment of gastroduodenal lesions caused by NSAID] Grangé JD, et al. **Ann Gastroenterol Hepatol (Paris)** 1989 Jun–Sep; 25(4):147–9 **(Fre)**
[Frequency and severity of gastric and duodenal lesions induced by non–steroidal anti–inflammatory agents and aspirin] Florent C, et al. **Gastroenterol Clin Biol** 1989 Mar; 13(3):235–8 **(Fre)**
[Ulcer healing with ranitidine and antacids despite continued therapy with non–steroidal anti–rheumatic drugs] Stock KP, et al. **Z Rheumatol** 1988 May–Jun;47(3):177–81 (Eng. Abstr.) **(Ger)**

CLASSIFICATION

[Considerations on the classification of peptic ulcer] Grebenev AL, et al. **Klin Med (Mosk)** 1989 Jan;67(1):142–5 **(Rus)**

COMPLICATIONS

Campylobacter pylori—associated gastritis and peptic ulcer disease in children. Kilbridge PM, et al. **Am J Dis Child** 1988 Nov;142(11):1149–52
Nonsteroidal anti–inflammatory drugs and peptic ulcer [letter] Masi AT. **Ann Intern Med** 1989 Feb 1;110(3):246–7
Acute complications of peptic ulcer disease [editorial] Martin CJ. **Aust N Z J Surg** 1988 Jul;58(7):523–4
Acute complications of peptic ulcer disease [editorial] Martin CJ. **Aust N Z J Surg** 1988 Jul;58(7):523–4
Endoscopic and gastric acid studies in homozygous sickle cell disease and upper abdominal pain. Lee MG, et al. **Gut** 1989 May;30(5):569–72
Peptic (contact ulcer) granuloma of the larynx. Miko TL. **J Clin Pathol** 1989 Aug;42(8):800–4
Spontaneous choledochoduodenal fistula complicating peptic ulcer disease—a case report. Misra MC, et al. **Jpn J Surg** 1989 May;19(3):367–9
Peptic ulcer and gastric acid secretion in patients with insulinoma. Naito H, et al. **Tohoku J Exp Med** 1988 Jul; 155(3):295–301
Glaucomatocyclitic crises and systemic disease: peptic ulcer, other gastrointestinal disorders, allergy and stress. Knox DL. **Trans Am Ophthalmol Soc** 1989;86:473–94; discussion 494–5
[9 cases of early gastric cancer disclosed on chronic ulcer with or without complications] Marra A, et al. **J Chir (Paris)** 1989 May;126(5):347–9 (Eng. Abstr.) **(Fre)**
[Two cases of pachydermoperiostosis with peptic ulcers] Ooi S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Feb; 86(2):253–6 **(Jpn)**
[Diagnosis and treatment of gastric campylobacteriosis in patients with peptic ulcer and chronic gastritis] Klemashev IS, et al. **Klin Med (Mosk)** 1989 Jan;67(1):90–5 (Eng. Abstr.) **(Rus)**
[Pharmacologic correction of microcirculatory disorders in recurrent peptic ulcer] Pavlova NI. **Klin Med (Mosk)** 1988 Oct;66(10):106–9 (Eng. Abstr.) **(Rus)**
[Enteral feeding in the complex preoperative care of patients with cicatricial and ulcerous pyloroduodenal stenosis] Kakharov AN, et al. **Vestn Khir** 1988 Aug;141(8):29–32 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

The Hsiao study, cost containment, and quality care [letter] Dagradi AE. **Am J Gastroenterol** 1989 Jun;84(6):680–1
Peptic ulcer disease at Kenyatta National Hospital: an endoscopic experience. Lule GN, et al. **East Afr Med J** 1987 Oct;64(10):638–42
Diagnostic yield of upper gastrointestinal endoscopy in relation to age: retrospective analysis of 8,043 patients. Börsch G, et al. **Hepatogastroenterology** 1989 Apr; 36(2):113–9
Investigating young patients with dyspepsia [letter] **Lancet** 1989 Jan 7;1(8628):50–1
Natural history of peptic ulcer in children. Five–year prospective endoscopic examinations. Part III. Recurrences of duodenal ulcer. Michalowicz–Wojczyńska E, et al. **Mater Med Pol** 1988 Jan–Mar;20(1):40–4
Upper gastrointestinal endoscopy as an initial investigation in dyspepsia—a Malaysian experience. Kudva MV, et al. **Med J Malaysia** 1988 Dec;43(4):311–7
Do we need to listen to the patient? The predictive value of symptoms. Petersen H, et al. **Scand J Gastroenterol Suppl** 1988;155:30–6
[Occurrence of cancer among users of antiulcer agents (letter)] Møller H, et al. **Ugeskr Laeger** 1989 May 29; 151(22):1405–6 **(Dan)**
[Possibilities of identifying patients at risk for stress ulcer] Serdev N, et al. **Khirurgiia (Sofiia)** 1988;41(3):11–7 (Eng. Abstr.) **(Rus)**
[Cybernetic prognostic methods in peptic ulcer] Gusak VK, et al. **Klin Khir** 1988;(8):44–7 (50 ref.) **(Rus)**
[Laparoscopy in surgical planning] Mitiuk II, et al. **Klin Khir** 1989;(1):39–41 (Eng. Abstr.) **(Rus)**
[Evaluation of surgical results in peptic ulcer using fiber gastroduodenoscopy and guided endoscopic pH measurement] Nechiporuk VM, et al. **Klin Khir** 1988;(8):4–6 (Eng. Abstr.) **(Rus)**
[The phases of recurrence of peptic ulcer] Chernin VV. **Klin Med (Mosk)** 1988 Oct;66(10):153–5 (Eng. Abstr.) **(Rus)**
[Campylobacter pyloridis in chronic gastritis and peptic ulcer] Grigor'ev PIa, et al. **Sov Med** 1988;(6):99–100 **(Rus)**
[Use of a computer in an endoscopic unit] Rapoport SI, et al. **Sov Med** 1988;(7):63–5 **(Rus)**
[Infrared irradiation of the anterior abdominal wall in pathology of the gastroduodenal area (mechanisms of formation of the radiation foci and clinical evaluation)] Krylov AA, et al. **Ter Arkh** 1989;61(2):39–42 (Eng. Abstr.) **(Rus)**
[Peptic ulcer recurrence after vagotomy] Pavlovskiĭ MP, et al. **Vrach Delo** 1989 Apr;(4):13–6 (Eng. Abstr.) **(Rus)**
[Peptic ulcer recurrence after selective proximal vagotomy] Polous IuM, et al. **Vrach Delo** 1989 Apr;(4):16–8 (Eng. Abstr.) **(Rus)**
[Validity of the study of gastric secretions (editorial)] Schraier M. **Acta Gastroenterol Latinoam** 1988;18(1):75–6 **(Spa)**
[Primary peptic ulcer in childhood: apropos of 20 cases studied using digestive fiberendoscopy] Polo Martín P, et al. **An Esp Pediatr** 1989 Feb;30(2):99–103 (26 ref.) (Eng. Abstr.) **(Spa)**
[The unsolved case of ulcerations in the small intestine—what happened later on?] Lindell G, et al. **Lakartidningen** 1989 Jan 18;86(3):123 **(Swe)**

DRUG THERAPY

Medical treatment of peptic ulcer disease. Andersen BN. **Acta Chir Scand Suppl** 1988;547:88–92 (29 ref.)
Medical treatment of peptic ulcer disease. Ohning G, et al. **Am Fam Physician** 1989 Apr;39(4):257–70 (29 ref.)
Placebos in clinical trials of peptic ulcer. ACG Committee on FDA–Related Matters. Smith JL. **Am J Gastroenterol** 1989 May;84(5):469–74
A critical look at the clinical use of antacids in acid–peptic disease and gastric acid rebound. Texter EC Jr. **Am J Gastroenterol** 1989 Feb;84(2):97–108 (59 ref.)
Implications of sucralfate–induced ulcer healing and relapse. Lam SK. **Am J Med** 1989 Jun 9;86(6A):122–6 (75 ref.)
Comparative study of sucralfate versus cimetidine in the treatment of acute gastroduodenal ulcer. Randomized trial with 667 patients. Rey JF, et al. **Am J Med** 1989 Jun 9; 86(6A):116–21
Cimetidine and adverse reactions: a meta–analysis of randomized clinical trials of short–term therapy. Richter JM, et al. **Am J Med** 1989 Sep;87(3):278–84
Effect of sucralfate and cimetidine on rheumatoid patients with active gastroduodenal lesions who are taking nonsteroidal anti–inflammatory drugs. A pilot study. Shepherd HA, et al. **Am J Med** 1989 Jun 9;86(6A):49–54
Peptic ulcer disease, cytoprotection, and prostaglandins [editorial] Fiske SC. **Arch Intern Med** 1988 Oct; 148(10):2112–3
Misoprostol heals gastroduodenal injury in patients with

rheumatoid arthritis receiving aspirin. Roth S, et al. **Arch Intern Med** 1989 Apr;149(4):775–9
Peptic ulcer. Piper DW. **Aust N Z J Med** 1988 May; 18(3):237–44 (58 ref.)
Medical regimens in short- and long-term ulcer management. Chiverton SG, et al. **Baillieres Clin Gastroenterol** 1988 Jul; 2(3):655–76 (131 ref.)
Antacids: the past, the present, and the future. Lam SK. **Baillieres Clin Gastroenterol** 1988 Jul;2(3):641–54 (75 ref.)
Prostaglandin analogues. Lauritsen K, et al. **Baillieres Clin Gastroenterol** 1988 Jul;2(3):621–8 (48 ref.)
Site-protective agents. Marks IN. **Baillieres Clin Gastroenterol** 1988 Jul;2(3):609–20 (59 ref.)
Maintenance treatment with H2 receptor antagonists in patients with peptic ulcer disease: rarely justified in terms of cost or patient benefit. Howden CW. **BMJ** 1988 Nov 26;297(6660):1393–4
Maintenance treatment with H2 receptor antagonists in patients with peptic ulcer disease: reduces morbidity in a significant minority of patients. Wormsley KG. **BMJ** 1988 Nov 26;297(6660):1392, 1394
Combined administration of controlled release theophylline and ranitidine: a 53-day controlled survey in patients with chronic obstructive lung disease (COLD) and peptic disease. Dal Negro R, et al. **Br J Clin Pract** 1987 Nov; 41(11):1004–8
Therapeutic milestones. Cimetidine. Venables C. **Br J Clin Pract** 1988 Mar;42(3):121–3
Comparison between continuous and intermittent infusion regimens of cimetidine in ulcer patients. Frank W, et al. **Clin Pharmacol Ther** 1989 Aug;46(2):234–9
Long-term management of peptic ulcer disease. Lewis JH. **Compr Ther** 1989 Feb;15(2):55–61 (47 ref.)
Drug therapy in peptic ulcer disease. Debas HT, et al. **Curr Probl Surg** 1989 Jan;26(1):1–54 (148 ref.)
Interaction of growth hormone-releasing factor and somatostatin on ulcer healing and mucosal growth in rats: role of gastrin and epidermal growth factor. Konturek SJ, et al. **Digestion** 1988;41(3):121–8
Comment: peptic ulcer H2-receptor antagonist therapy [letter] Kinniry A, et al. **Drug Intell Clin Pharm** 1988 Sep; 22(9):728–30
Prostaglandins, H2-receptor antagonists and peptic ulcer disease. Bright-Asare P, et al. **Drugs** 1988;35 Suppl 3:1–9 (21 ref.)
Appendix 1. Therapeutic resistance of peptic ulcers. Classen M. **Drugs** 1988;35 Suppl 3:140–1
Optimal reduction of gastric acid secretion in the treatment of peptic ulceration. Dammann HG, et al. **Drugs** 1988;35 Suppl 3:106–13 (25 ref.)
Ranitidine. An updated review of its pharmacodynamic and pharmacokinetic properties and therapeutic use in peptic ulcer disease and other allied diseases. Grant SM, et al. **Drugs** 1989 Jun;37(6):801–70 (455 ref.)
Clinical studies on the use of roxatidine acetate for the treatment of peptic ulcer in Japan. Inoue M. **Drugs** 1988; 35 Suppl 3:114–9
Colloidal bismuth subcitrate. A review of its pharmacodynamic and pharmacokinetic properties, and its therapeutic use in peptic ulcer disease. Wagstaff AJ, et al. **Drugs** 1988 Aug;36(2):132–57 (136 ref.)
Zinc compounds, a new treatment in peptic ulcer. Escolar G, et al. **Drugs Exp Clin Res** 1989;15(2):83–9 (30 ref.)
Bacteriological and pharmacological basis for the treatment of Campylobacter pylori infection. McNulty CA. **Gastroenterol Clin Biol** 1989;13(1 Pt 1):96B–100B (30 ref.)
Common gastrointestinal diseases in the elderly. Erwin WG. **Geriatrics** 1988 Dec;43 Suppl:75–82 (30 ref.)
Frequent non-response to histamine H2-receptor antagonists in cirrhotics. Walker S, et al. **Gut** 1989 Aug;30(8):1105–9
Ranitidine and acute intermittent porphyria [letter] Bhadoria DP, et al. **J Assoc Physicians India** 1988 Apr;36(4):295–6
Relative potency and cost effectiveness of different antacids: in vitro study. Singh KP, et al. **J Assoc Physicians India** 1988 May;36(5):323–5
Treatment of upper gastro-intestinal bleeding with the H2-receptor antagonist famotidine. Aoki T. **J Int Med Res** 1989;17 Suppl 1:32A–40A
Pharmacology of H2-receptor antagonists: an overview. Schunack W. **J Int Med Res** 1989;17 Suppl 1:9A–16A (12 ref.)
Recent advances in the treatment of digestive diseases. Sun HS. **J Int Med Res** 1989;17 Suppl 1:2A–8A (21 ref.)
The use of H2-receptor antagonist in the treatment of peptic ulcer disease in children. Tam PK, et al. **J Pediatr Gastroenterol Nutr** 1989 Jan;8(1):41–6
Zinc compounds as therapeutic agents in peptic ulcer. Baños JE, et al. **Methods Find Exp Clin Pharmacol** 1989;11 Suppl 1:117–22 (39 ref.)
Antacids in the treatment of peptic ulcer disease. Garrigues-Gil V. **Methods Find Exp Clin Pharmacol** 1989; 11 Suppl 1:73–7 (56 ref.)
Sucralfate and other non-antisecretory agents in the treatment of peptic ulcer disease. May B. **Methods Find Exp Clin Pharmacol** 1989;11 Suppl 1:113–6 (55 ref.)
Therapeutic failure and relapse in peptic ulcer. Ponce J, et al. **Methods Find Exp Clin Pharmacol** 1989;11 Suppl 1:123–30 (43 ref.)
Therapeutic approach to peptic ulcer relapse. Rodrigo JM, et al. **Methods Find Exp Clin Pharmacol** 1989;11 Suppl 1:131–5 (22 ref.)
Acid inhibition and long-term treatment of peptic ulcer disease. Sáinz-Samitier R, et al. **Methods Find Exp Clin Pharmacol** 1989;11 Suppl 1:137–45 (106 ref.)
Antimuscarinic drugs. Stockbrügger RW. **Methods Find Exp Clin Pharmacol** 1989;11 Suppl 1:79–86 (34 ref.)
Clinical utility and safety of omeprazole. Walan A. **Methods Find Exp Clin Pharmacol** 1989;11 Suppl 1:107–11 (30 ref.)
Clinical importance of the new H2-antagonists. Walt RP. **Methods Find Exp Clin Pharmacol** 1989;11 Suppl 1:97–9 (23 ref.)
Glaxo presents its views ... [letter] Bauman JH, et al. **Mo Med** 1989 Feb;86(2):71–2
H2 receptor antagonist usage in Missouri Medicaid recipients. Douglas KC, et al. **Mo Med** 1988 Dec;85(12):779–80
M1-selective muscarinic antagonists in peptic ulcer therapy. Proceedings of a workshop. October 2 and 3, 1987, Constance, FRG. **Pharmacology** 1988;37 Suppl 1:1–66
Recent developments in peptic ulcer treatment. Bianchi Porro G, et al. **Scand J Gastroenterol Suppl** 1988;146:159–65 (47 ref.)
Does the choice of acute treatment influence future ulcer relapse? Bodemar G. **Scand J Gastroenterol Suppl** 1988; 155:141–51 (43 ref.)
Therapeutic approach in patients with concomitant disease/drug—drug interactions (roxatidine acetate). Collins JD. **Scand J Gastroenterol Suppl** 1988;146:89–99 (22 ref.)
Future trends in the management of peptic ulcer disease. Misiewicz JJ. **Scand J Gastroenterol Suppl** 1988;146:175–84 (43 ref.)
Bismuth is better. Tytgat GN. **Scand J Gastroenterol Suppl** 1988;155:16–7
Prostaglandin treatment for peptic ulcer. Walt RP. **Scand J Gastroenterol Suppl** 1988;146:40–9 (57 ref.)
The pathophysiological and pharmacological basis of peptic ulcer therapy. Freston JW. **Toxicol Pathol** 1988;16(2):260–6 (52 ref.)
[Antibacterial treatment of Campylobacter pylori-associated gastritis and peptic ulcer] Andreasen JJ, et al. **Ugeskr Laeger** 1989 Apr 24;151(17):1030–3 (Eng. Abstr.) (Dan)
[Basis for ulcus therapy in general practice] Gormsen M, et al. **Ugeskr Laeger** 1988 Sep 12;150(37):2169–71 (Eng. Abstr.) (Dan)
[Omeprazole. An effective antisecretory agent in ulcerative disease and reflux esophagitis] Lauritsen K, et al. **Ugeskr Laeger** 1989 Jul 10;151(28):1831–3 (Dan)
[Prostaglandin analogues in the treatment of peptic ulcer disease] Laursen LS, et al. **Ugeskr Laeger** 1989 Jan 9; 151(2):74–8 (30 ref.) (Eng. Abstr.) (Dan)
[Is strong inhibition of gastric acid in the treatment of peptic ulcer sensible?] de Bruijne JW, et al. **Ned Tijdschr Geneeskd** 1989 Apr 1;133(13):657–62 (29 ref.) (Dut)
[Strong inhibition of gastric acid secretion: advantages and possible hazards] Festen HP. **Ned Tijdschr Geneeskd** 1989 Apr 1;133(13):653–7 (66 ref.) (Dut)
[The effects of gastric acid inhibitors (letter)] van de Ven LL. **Ned Tijdschr Geneeskd** 1989 Jun 24;133(25):1285 (Dut)
[Have prostaglandins found their role in the treatment of gastroduodenal disease?] Bader JP. **Presse Med** 1989 Jan 7–14;18(1):9–11 (Fre)
[Gastroduodenal ulcers resistant to medical treatment] Miazza B. **Rev Med Suisse Romande** 1989 May;109(5):361–3 (Fre)
[German language reprints of original papers from the supplement "Nizatidine in peptic ulcer disease" of the Scandinavian Journal of Gastroenterology, Volume 22, Supplement 136, 1987] **Fortschr Med** 1989 Jan 11;Spec No:1–48 (Ger)
[What is safe in long-term therapy of peptic ulcer?] Schepp W, et al. **Internist (Berlin)** 1988 Nov;29(11):734–44 (46 ref.) (Ger)
[Campylobacter pylori and therapy with bismuth salts] Börsch G. **Med Monatsschr Pharm** 1988 Sep;11(9):301–7 (34 ref.) (Ger)
[Morphologic change in Campylobacter pylori associated gastritis in and following successful antibacterial therapy] Rühl GH, et al. **Pathologe** 1989 Jan;10(1):64–5 (Ger)
[Therapy of peptic ulcer. ATPase inhibitors] Arnold R. **Verh Dtsch Ges Inn Med** 1988;94:276–81 (29 ref.) (Ger)
[Therapy of peptic ulcer. Bismuth salts] Börsch G. **Verh Dtsch Ges Inn Med** 1988;94:284–92 (34 ref.) (Ger)
[Therapy of peptic ulcer. H2 receptor blockers] Domschke W. **Verh Dtsch Ges Inn Med** 1988;94:272–5 (15 ref.) (Ger)
[Therapy of peptic ulcer. Antacids] Kurtz W. **Verh Dtsch Ges Inn Med** 1988;94:281–4 (16 ref.) (Ger)
[Therapy of peptic ulcer. Prostaglandin analogs] Peskar BM. **Verh Dtsch Ges Inn Med** 1988;94:292–8 (25 ref.) (Ger)
[Indications and successes of conservative therapy in gastroenterology: peptic ulcer] Gugler R. **Z Gastroenterol [Verh]** 1989 Jul;24:82–4 (13 ref.) (Ger)
[Drugs used in the therapy of peptic ulcer with special reference to H2 receptor blockaders] De Natale G, et al. **Clin Ter** 1989 Apr 15;129(1):3–16 (6 ref.) (Eng. Abstr.) (Ita)
[Current trends in medical therapy of gastroduodenal ulcer] Grassi M, et al. **Clin Ter** 1987 Dec 31;123(6):475–86 (103 ref.) (Eng. Abstr.) (Ita)
[Peptic ulcer] Gava R, et al. **G Clin Med** 1989 Apr; 70(4):293–304 (0 ref.) (Ita)
[Medical therapy of peptic ulcer: problems and prospects] Trabucchi E, et al. **Minerva Dietol Gastroenterol** 1989 Jan–Mar;35(1):1–6 (23 ref.) (Eng. Abstr.) (Ita)
[Sucralfate. What place does this drug have in the treatment of patients with digestive diseases?] Rydning A. **Tidsskr Nor Laegeforen** 1989 Aug 10;109(22):2157–8 (Nor)
[Current trends in the treatment of peptic ulcer] Gibiński K. **Pol Arch Med Wewn** 1985 Sep;74(3):149–56 (Pol)
[Multicenter clinical studies of the effectiveness of sucralfate in the treatment of peptic ulcer] Gabryelewicz A, et al. **Pol Tyg Lek** 1988 Aug 29;43(35):1123–5 (Eng. Abstr.) (Pol)
[Interactions of cimetidine and ranitidine with other drugs] Paradowski L, et al. **Pol Tyg Lek** 1988 Aug 29; 43(35):1120–2 (Pol)
[Treatment of peptic ulcer with milide (proglumide)] Brailski Kh, et al. **Klin Med (Mosk)** 1989 Mar;67(3):104–6 (Rus)
[Colloidal bismuth subcitrate (de-nol) in the treatment of peptic ulcer] Grigor'ev PIa, et al. **Klin Med (Mosk)** 1989 May;67(5):17–22 (46 ref.) (Rus)
[Pathophysiologic bases of the pharmacotherapy of peptic ulcer] Grigor'ev PIa, et al. **Klin Med (Mosk)** 1988 Nov; 66(11):19–27 (55 ref.) (Rus)
[Effect of calcium channel blockers on the functional and morphologic conditions of the stomach and duodenum] Orlov VA, et al. **Klin Med (Mosk)** 1989 Mar;67(3):24–30 (47 ref.) (Rus)
[Current drug therapy of peptic ulcer] Ryss ES, et al. **Klin Med (Mosk)** 1989 Jan;67(1):49–55 (36 ref.) (Rus)
[Local administration of contrical in the complex treatment of gastrointestinal ulcers] Lutsevich EV, et al. **Sov Med** 1989;(5):27–9 (Eng. Abstr.) (Rus)
[Drug therapy and therapeutic tactics in gastroduodenal ulcer] Grigor'ev PIa, et al. **Ter Arkh** 1988;60(8):118–26 (Rus)
[Chronomedicine: its achievements and objectives] Komarov FI, et al. **Ter Arkh** 1988;60(8):12–7 (Rus)
[Dalargin--the first enkephalin analog, used in gastroenterology] Vinogradov VA, et al. **Ter Arkh** 1988; 60(8):147–53 (91 ref.) (Rus)
[Therapeutic endoscopy in the complex treatment of patients with chronic gastroduodenal ulcer] Tsarev NI, et al. **Vestn Khir** 1989 Mar;142(3):28–31 (Eng. Abstr.) (Rus)
[New developments in the treatment of peptic ulcer] Kapitanenko AM, et al. **Voen Med Zh** 1988 May;(5):37–9 (Rus)
[Reparative agents in the treatment of patients with peptic ulcer] Kreĭdich AM, et al. **Vrach Delo** 1988 Aug;(8):7–9 (Eng. Abstr.) (Rus)
[The treatment of peptic ulcer] Zeligman VS, et al. **Vrach Delo** 1989 Apr;(4):7–10 (Eng. Abstr.) (Rus)
[Potential risk of pharmacologically induced hypochlorhydria in the treatment of peptic ulcer disease] Ljubičić N, et al. **Med Pregl** 1989;42(1–2):65–8 (Eng. Abstr.) (Scr)
[Results of treatment of peptic ulcers using Gastrozepine and antacids in the endoscopic picture] Sorf M, et al. **Vnitr Lek** 1989 Feb;35(2):120–5 (Eng. Abstr.) (Slo)
[Gastroduodenal ulcer and Campylobacter pylori. Behavior under treatment with de-nol or metronidazole] Velasco Elizalde C, et al. **GEN** 1987 Jul–Sep;41(3):99–103 (21 ref.) (Eng. Abstr.) (Spa)
[Treatment with sucralfate in stress ulcer reduces the number of nosocomial pneumonias] Enkvist C. **Lakartidningen** 1989 Apr 19;86(16):1469, 1471 (Swe)

ECONOMICS

Economic assessment of peptic ulcer disease treatments. Jensen DM. **Scand J Gastroenterol Suppl** 1988;146:214–24 (21 ref.)

ENZYMOLOGY

Prognostic value of serum pepsinogen I in children with peptic ulcer. Oderda G, et al. **J Pediatr Gastroenterol Nutr** 1988 Sep–Oct;7(5):645–50
[Changes in the activities of enzymes of metabolism of DNA precursors in peptic ulcer and cancer of the stomach] Borzenko BG. **Klin Med (Mosk)** 1989 May;67(5):87–91 (Eng. Abstr.) (Rus)

EPIDEMIOLOGY

Campylobacter pylori gastritis and peptic ulcer in children [letter] **Am J Dis Child** 1989 Aug;143(8):877–8
Techniques related to the clinical epidemiology of peptic ulcer disease. Heller RF. **Baillieres Clin Gastroenterol** 1988 Jul;2(3):529–37 (15 ref.)
Ulcer epidemiology: an overview and proposed research framework. Kurata JH. **Gastroenterology** 1989 Feb;96(2 Pt 2 Suppl):569–80 (94 ref.)
Prevalence of peptic ulcer in India: an endoscopic and epidemiological study in urban Kashmir. Khuroo MS, et al. **Gut** 1989 Jul;30(7):930–4
Epidemiologic aspects of peptic ulcer disease in northern Italy. Pelissero A, et al. **J Clin Gastroenterol** 1989 Jun; 11(3):351–6
Natural history of peptic ulcer in children. Five-year

prospective endoscopic examinations. Part I. Incidence and clinical symptoms. Michałowicz-Wojczyńska E, et al. **Mater Med Pol** 1988 Jan-Mar;20(1):31-5

Observations on the presentation and management of peptic ulcer disease in Nigeria. Akande B, et al. **Scand J Gastroenterol Suppl** 1986;124:1-8

Factors which influence the incidence and course of peptic ulcer. Sonnenberg A. **Scand J Gastroenterol Suppl** 1988; 155:119-40 (157 ref.)

Peptic ulcer and non-ulcer dyspepsia—a disease and a disorder. Johnsen R, et al. **Scand J Prim Health Care** 1988 Nov;6(4):239-43

[Peptic ulcer in the elderly] Pannella A, et al. **Minerva Chir** 1989 May 15;44(9):1335-43 (Eng. Abstr.) **(Ita)**

[Prevalence of peptic ulcer in smokers and non-smokers in Aragon] Márquez M, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 1):566-71 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Gastroduodenal physiology in relation to peptic ulcer disease. Jensen SL, et al. **Acta Chir Scand Suppl** 1988;547:23-5

The role of infections in the pathogenesis of peptic ulcer disease. Meisner S, et al. **Acta Chir Scand Suppl** 1988; 547:35-8 (31 ref.)

Campylobacters and gastroduodenal inflammation. Blaser MJ, et al. **Adv Intern Med** 1989;34:21-42 (103 ref.)

Allergy to cockroach antigens in patients with peptic ulcers and chronic gastritis. Romanski B, et al. **Allergol Immunopathol (Madr)** 1988 Jul-Aug;16(4):219-24

Re: "Smoking, Nonsteroidal Anti-Inflammatory Drugs, and Acetaminophen in Gastric Ulcer [letter] Kauffmann F, et al. **Am J Epidemiol** 1989 Sep;130(3):616-8

Bacteria in ulcer pathogenesis. Yeomans ND. **Baillieres Clin Gastroenterol** 1988 Jul;2(3):573-91 (110 ref.)

Proteolytic activities of human Campylobacter pylori and ferret gastric Campylobacter-like organism. Baxter A, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):1-7

Stress ulceration: the enigma continues. MacLellan DG. **Dig Dis** 1989;7(3):159-68 (51 ref.)

Abstracts of the Hans Selye Symposium on Neuroendocrinology and Stress. September 13-15, 1989, Estérel, Quebec, Canada. Neuroendocrine aspects of gastrointestinal (GI) ulceration. **Dig Dis Sci** 1989 Aug; 34(8):1311-23

Nonsecretors and peptic ulceration. No link with Campylobacter pylori [letter] Mohiuddin J, et al. **Dig Dis Sci** 1989 May;34(5):804

The significance of gastrin in the pathogenesis and therapy of peptic ulcer disease. Lamers CB. **Drugs** 1988;35 Suppl 3:10-6 (31 ref.)

Relative impact of smoking and reduced pulmonary function on peptic ulcer risk. A prospective study of Japanese men in Hawaii. Stemmermann GN, et al. **Gastroenterology** 1989 Jun;96(6):1419-24

Cytomegalovirus associated gastroduodenal ulceration [letter] Bramwell NH. **Gut** 1989 Mar;30(3):423

Role of dopaminergic mechanisms in the central amygdalar nucleus in the regulation of stress-induced gastric ulcer formation in rats. Ray A, et al. **Indian J Med Res** 1989 Jun;90:224-8

The role of smoking in peptic ulcer disease. Eastwood GL. **J Clin Gastroenterol** 1988;10 Suppl 1:S19-23 (35 ref.)

Gastric surface epithelial cell damage induced by restraint and water-immersion stress in rats. Protective effects of 16,16-dimethyl-prostaglandin E2. Ohno T, et al. **J Clin Gastroenterol** 1988;10 Suppl 1:S46-52

A laboratory preparation mimicking human peptic ulceration: a chronic antral peptic ulcer postsection and reanastomosis at the antral-fundic junction in the rat. Tiscornia OM, et al. **Mt Sinai J Med (NY)** 1988 Oct;55(5):357-61

Factors influencing the development of gastrointestinal complications after neurosurgery: results of multivariate analysis. Chan KH, et al. **Neurosurgery** 1989 Sep; 25(3):378-82

Asymptomatic and symptomatic gastroduodenal patients affected by rheumatic disease treated with non-steroidal anti-inflammatory drugs. Magarò M, et al. **Panminerva Med** 1989 Jan-Mar;31(1):16-8

Stress ulcer and open-field behavior of spontaneously hypertensive, normotensive, and Wistar rats. Paré WP. **Pavlov J Biol Sci** 1989 Apr-Jun;24(2):54-7

Is an increased vagal tone involved in the pathogenesis of gastroduodenal ulcers? Jaup BH. **Pharmacology** 1988;37 Suppl 1:4-10 (25 ref.)

Pepsins and the mucus barrier in peptic ulcer disease. Allen A, et al. **Scand J Gastroenterol Suppl** 1988;146:50-7 (49 ref.)

The Campylobacter pylori story. Marshall BJ. **Scand J Gastroenterol Suppl** 1988;146:58-66

Campylobacter pylori. Tytgat GN, et al. **Scand J Gastroenterol Suppl** 1988;155:68-81 (65 ref.)

The role of Campylobacter pylori in the pathogenesis of peptic ulcer disease. Wyatt JI. **Scand J Gastroenterol Suppl** 1989;157:7-11; discussion 21-2 (37 ref.)

[Role of campylobacter pylori in gastritis and peptic ulcer] Yang HT. **Chung Hua I Hsueh Tsa Chih** 1988 Jul; 68(7):366-70, 26 (Eng. Abstr.) **(Chi)**

[Endoscopic characteristics of burn-related mucosal lesions of the gastrointestinal tract and their relation to sepsis] Fang CH. **Chung Hua Wai Ko Tsa Chih** 1988 Nov;26(11):679-81, 702 (Eng. Abstr.) **(Chi)**

[Role of the central nervous system in the pathogenesis of stress ulcer] Yang H. **Sheng Li Ko Hsueh Chin Chan** 1988 Jul;19(3):218-22 (31 ref.) **(Chi)**

[Pathogenic heterogeneity of Barrett's ulcers. Apropos of 38 case reports] Ollyo JB, et al. **Schweiz Med Wochenschr** 1989 May 27;119(21):747-51 (Eng. Abstr.) **(Fre)**

[Peptic ulcer—a disease of bacterial etiology?] Arber N, et al. **Harefuah** 1988 Nov 15;115(10):291-3 (32 ref.) **(Heb)**

[Pathophysiology following biliary reconstruction procedures, with special reference to gastric acid secretion, peptic ulcer, metabolism of carbohydrate and fat, and gastrointestinal hormone release] Imamura M, et al. **Nippon Geka Gakkai Zasshi** 1988 Aug;89(8):1167-74 (Eng. Abstr.) **(Jpn)**

[Campylobacter pylori: a new light on the etiology of chronic gastritis and peptic ulcer?] Coelho LG. **AMB Rev Assoc Med Bras** 1988 Jan-Feb;34(1):14-8 (59 ref.) (Eng. Abstr.) **(Por)**

[Campylobacter pylori, gastritis, ulcer and defense mechanisms of the gastroduodenal mucosa] Zeitune JM, et al. **AMB Rev Assoc Med Bras** 1988 Jan-Feb;34(1):3-4 **(Por)**

[Acute peptic lesions of the gastroduodenal mucosa in patients with obstructive jaundice] Upyrev AV, et al. **Khirurgiia (Mosk)** 1989 Jan;(1):42-6 (Eng. Abstr.) **(Rus)**

[Stress-induced ulcers in thoraco-abdominal injuries] Kharitonov VA, et al. **Klin Khir** 1989;(4):68-9 **(Rus)**

[Campylobacter pyloridis and its relation to peptic ulcer and chronic gastritis] Saenko VF, et al. **Klin Khir** 1988;(8):51-5 (66 ref.) **(Rus)**

[Acute erosive-ulcerous lesions of the digestive tract in patients with acute appendicitis] Shevchuk Im, et al. **Klin Khir** 1989;(4):17-9 (Eng. Abstr.) **(Rus)**

[Hepatogenic ulcer (various aspects of its pathogenesis)] Kataev SS, et al. **Klin Med (Mosk)** 1989 Jun;67(6):32-6 (Eng. Abstr.) **(Rus)**

[The problem of acute ulcers in myocardial infarction] Mokrousov VM. **Klin Med (Mosk)** 1988 Oct;66(10):37-9 (Eng. Abstr.) **(Rus)**

[The role of the regeneration of the mucous membrane of the organs of the gastroduodenal system and mutations of epitheliocytes in the pathogenesis of peptic ulcer] Rabinovich PD. **Klin Med (Mosk)** 1988 Nov;66(11):140-1 **(Rus)**

[Status of the acid and pepsin-producing functions of the stomach in patients after abdominal surgery] Skriabin ON, et al. **Klin Med (Mosk)** 1989 May;67(5):80-4 (Eng. Abstr.) **(Rus)**

[The role of the hematosalivary barrier in the development of peptic ulcer in children] Komarova LG. **Pediatriia** 1988; (5):110-1 **(Rus)**

[Surface activity of gastric juice in peptide ulcer] Ivashkevich GA, et al. **Sov Med** 1988;(5):22-5 (Eng. Abstr.) **(Rus)**

[The role of Campylobacter pyloridis in the etiology and pathogenesis of peptic ulcer] Loginov AS, et al. **Ter Arkh** 1988;60(11):141-4 (80 ref.) **(Rus)**

[Acute gastroduodenal ulcers in the early postoperative period] Kurygin AA, et al. **Vestn Khir** 1989 Jan;142(1):11-3 (Eng. Abstr.) **(Rus)**

[Principles of the development of a chronic course of peptic ulcer in young people] Uspenskiĭ VM, et al. **Voen Med Zh** 1988 Oct;(10):62-4 **(Rus)**

[Pathogenesis and classification of peptic ulcer] Belousov AS, et al. **Vrach Delo** 1989 Mar;(3):70-3 (Eng. Abstr.) **(Rus)**

[Campylobacter pylori. A causative agent of gastritis and ulcer disease or a commonly associated agent?] Sarić A, et al. **Vojnosanit Pregl** 1988 Jul-Aug;45(4):276-8 **(Scr)**

GENETICS

[Genetic characteristics in yang deficiency patients] Feng DN, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Jan; 9(1):24-5, 6 (Eng. Abstr.) **(Chi)**

HISTORY

Milestones in clinical pharmacology. Remember the Sippy regimen for peptic ulcer? Farrar GE Jr. **Clin Ther** 1989 Mar-Apr;11(2):278-9

[Contribution of Polish scientists to studies on the role of histamine in the physiological and pathological functions of the digestive and circulatory systems] Śródka A. **Pol Tyg Lek** 1988 Aug 29;43(35):1129-31 **(Pol)**

IMMUNOLOGY

Role of endogenous prostaglandins in preventing gastrointestinal ulceration: induction of ulcers by antibodies to prostaglandins. Redfern JS, et al. **Gastroenterology** 1989 Feb;96(2 Pt 2 Suppl):596-605 (49 ref.)

[Presence of immune complexes in patients with peptic ulcer] Rachel F, et al. **Pol Tyg Lek** 1988 Sep 12;43(37):1193-4 **(Pol)**

[Causes of increased IgE levels in the body] Romański B. **Pol Tyg Lek** 1988 Oct 17-24;43(42-43):1347-51 **(Pol)**

[Carcinoembryonic antigen levels in the serum and gastric juice of patients with cancer of the stomach and in patients with various non-neoplastic diseases of the digestive tract] Zmudziński J, et al. **Pol Tyg Lek** 1988 Nov 21;43(47):1496-9 (Eng. Abstr.) **(Pol)**

METABOLISM

Marked basal gastric acid hypersecretion and peptic ulcer disease [letter] Treem WR. **J Pediatr Gastroenterol Nutr** 1988 Nov-Dec;7(6):936-7

Interactions of thyrotropin-releasing hormone (TRH) with neurotensin and dopamine in the central nucleus of the amygdala during stress ulcer formation in rats. Henke PG, et al. **Neurosci Lett** 1988 Aug 15;91(1):95-100

Hormonal regulation of gastric acid in peptic ulcer disease. Lamers CB. **Scand J Gastroenterol Suppl** 1988;146:5-10 (40 ref.)

[Eicosanoids and the gastrointestinal tract] de Boer SY, et al. **Ned Tijdschr Geneeskd** 1989 Apr 29;133(17):870-3 (37 ref.) **(Dut)**

MICROBIOLOGY

The incidence of Campylobacter pylori in chronic gastropathy. Rusu V, et al. **Arch Roum Pathol Exp Microbiol** 1988 Jul-Dec; 47(3-4):247-60

Campylobacter pylori—gastroduodenal pathogen or opportunistic bystander? [editorial] Lambert JR, et al. **Aust N Z J Med** 1988 Jun;18(4):555-6

A review of Campylobacter pylori in upper gastrointestinal disease. Walker SJ, et al. **Br J Hosp Med** 1988 Jul;40(1):27, 30-6 (76 ref.)

Campylobacter pylori: what is it doing there? [editorial] Joshi VR, et al. **J Assoc Physicians India** 1988 Feb;36(2):133-4

Cytotoxin production by Campylobacter pylori strains isolated from patients with peptic ulcers and from patients with chronic gastritis only. Figura N, et al. **J Clin Microbiol** 1989 Jan;27(1):225-6

Campylobacter-like organisms and Candida in peptic ulcers and similar lesions of the upper gastrointestinal tract: a study of 247 cases. Kalogeropoulos NK, et al. **J Clin Pathol** 1988 Oct;41(10):1093-8

Biotyping of Campylobacter pylori. Kung JS, et al. **J Med Microbiol** 1989 Jul;29(3):203-6

Campylobacter pylori in gastroduodenal disease. Baqai R. **JPMA** 1988 Oct;38(10):253-5

Role of Campylobacter pylori in the etiology of peptic ulcer. López-Brea M, et al. **Methods Find Exp Clin Pharmacol** 1989;11 Suppl 1:13-7 (46 ref.)

Campylobacter pylori in peptic ulcer disease. II. Endoscopic findings and cultivation of C. pylori. Andersen LP, et al. **Scand J Gastroenterol** 1988 Aug;23(6):760-4

[Campylobacter pyloridis and gastroduodenal inflammation] Geng PQ. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Jun; 10(3):170-5 (Eng. Abstr.) **(Chi)**

[Histologic demonstration of Campylobacter pylori] De Mascarel A, et al. **Gastroenterol Clin Biol** 1989;13(1 Pt 1):26B-30B (42 ref.) **(Fre)**

[Contribution of pathologic anatomy to the study of the pathogenicity of Campylobacter pylori] Fléjou JF. **Gastroenterol Clin Biol** 1989;13(1 Pt 1):53B-58B (76 ref.) **(Fre)**

[Campylobacter '88] Demling L. **Fortschr Med** 1988 Nov 20;106(33):655-6 **(Ger)**

[Campylobacter pylori, chronic gastritis and ulcer disease (editorial)] Stalder GA. **Schweiz Rundsch Med Prax** 1988 Dec 13;77(50):1369-70 **(Ger)**

[The significance of Campylobacter pylori infection in gastroenterologic and diabetic practice] Simon L, et al. **Orv Hetil** 1989 Jun 18;130(25):1325-9 (42 ref.) (Eng. Abstr.) **(Hun)**

[Presence of Campylobacter pylori in the gastric mucosa of healthy persons and in patients with peptic ulcer and non-ulcer dyspepsia] Muszyński J, et al. **Pol Tyg Lek** 1988 Aug 29;43(35):1111-3 (Eng. Abstr.) **(Pol)**

[Occurrence of Campylobacter pylori in patients with gastritis and peptic ulcer] Carneiro Leão G, et al. **Arq Gastroenterol** 1988 Jan-Mar;25(1):23-8 (Eng. Abstr.) **(Por)**

[Campylobacter pyloridis: prevalence in normal endoscopies, atrophic gastritis and peptic ulcer] Giglio M, et al. **Rev Med Chil** 1988 Mar;116(3):229-32 (Eng. Abstr.) **(Spa)**

[Campylobacter pylori—an amazing discovery still of current interest] Gustavsson S, et al. **Lakartidningen** 1989 Feb 8; 86(6):423-4 **(Swe)**

MORTALITY

Factors affecting mortality in patients operated upon for complications of peptic ulcer disease. Greiser WB, et al. **Am Surg** 1989 Jan;55(1):7-11

Death from undiagnosed peptic ulcer complications: a continuing challenge. Armstrong CP, et al. **Br J Surg** 1988 Nov;75(11):1112-4

NURSING

Stress ulceration in the critically ill [letter] Clochesy JM. **Heart Lung** 1989 Jan;18(1):103

PATHOLOGY

Fibrinolysis and peptic ulcer. Helgstrand U. **Acta Chir Scand Suppl** 1988;547:39-41

Epidermal growth factor in the gastroprotective and ulcer-healing actions of sucralfate in rats. Konturek SJ,

et al. **Am J Med** 1989 Jun 9;86(6A):32–7

[Effect of age and the duration of the peptic ulcer on reflux changes of the esophageal mucosa] Simitchev S. **Vutr Boles** 1989;28(3):33–7 (Eng. Abstr.) **(Bul)**

[Comparison of the degree of chronic gastritis in the resected gastric body with histologic findings in postoperative gastric biopsy] Hájek J, et al. **Vnitr Lek** 1989 Feb; 35(2):112–9 (Eng. Abstr.) **(Cze)**

[Diagnostic esophago-gastro-duodenoscopy in patients under 40 years of age] Pilegaard HK, et al. **Ugeskr Laeger** 1988 Nov 7;150(45):2746–8 (Eng. Abstr.) **(Dan)**

[Clinical, endoscopic and histologic findings in 1,100 patients of whom 574 were colonized by Campylobacter pylori] Deltenre M, et al. **Gastroenterol Clin Biol** 1989;13(1 Pt 1):89B–95B (Eng. Abstr.) **(Fre)**

[Morphologic assessment of chronic gastritis in peptic ulcer and stomach cancer] Deineka SV, et al. **Klin Khir** 1988; (8):23–6 (Eng. Abstr.) **(Rus)**

[Dyspepsia, dyspepsia with ulcers and non-organic dyspepsia. I: concept, classifications and clinical manifestations] Caballero Plasencia AM, et al. **Rev Esp Enferm Apar Dig** 1988 Sep;74(3):285–8 (53 ref.) (Eng. Abstr.) **(Spa)**

[Solitary rectal ulcer] Ruiz-Cabello M, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 2):483–5 (Eng. Abstr.) **(Spa)**

[Solitary cecal ulcer. Report of a case and review of the literature] Sáenz de Santamaría Morales FJ, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 2):480–2 (13 ref.) (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Regulatory peptides and their pathophysiologic role in peptic ulcer disease. Jensen SL, et al. **Acta Chir Scand Suppl** 1988; 547:32–4

Central nervous system action of TRH to influence gastrointestinal function and ulceration. Taché Y, et al. **Ann N Y Acad Sci** 1989;553:269–85 (102 ref.)

The effect of a new gastric proton pump inhibitor on serotonin-induced gastric mucosal lesions in rats. Tsukamoto Y, et al. **Gastroenterol Jpn** 1988 Oct;23(5):501–5

Biogenic amines in relation to gastric acid secretion in hepatic cirrhosis. Rao JJ, et al. **Indian J Med Sci** 1988 Jul; 42(7):157–61

Involvement of leukotrienes in acute gastric damage. Boughton-Smith NK. **Methods Find Exp Clin Pharmacol** 1989;11 Suppl 1:53–9 (39 ref.)

The gastric mucosal barrier. Clamp JR, et al. **Methods Find Exp Clin Pharmacol** 1989;11 Suppl 1:19–25 (26 ref.)

Prostaglandins: mucosal protection and peptic ulceration. Hawkey CJ. **Methods Find Exp Clin Pharmacol** 1989;11 Suppl 1:45–51 (39 ref.)

The importance of acid in peptic ulceration. Kerr GD. **Methods Find Exp Clin Pharmacol** 1989;11 Suppl 1:9–12 (24 ref.)

Extracellular mucus and repair of superficial mucosal injury by restitution. Wallace JL. **Methods Find Exp Clin Pharmacol** 1989;11 Suppl 1:27–33

The defensive role played by the gastric microcirculation. Whittle BJ. **Methods Find Exp Clin Pharmacol** 1989;11 Suppl 1:35–43 (31 ref.)

[Stress ulcer disease and its prevention] Gyr K, et al. **Schweiz Med Wochenschr** 1989 Apr 5;119(13–14):423–9 (34 ref.) (Eng. Abstr.) **(Ger)**

[Peptic ulcer] Gava R, et al. **G Clin Med** 1989 Apr; 70(4):293–304 (0 ref.) **(Ita)**

[Effect of Campylobacter pyloridis and other parietal microflora on gastric epitheliocytes in peptic ulcer and following vagotomy] Baibekov IM, et al. **Arkh Patol** 1988; 50(12):51–4 (Eng. Abstr.) **(Rus)**

[Reasons for nonhealing and ulcer recurrence after proximal vagotomy and pyloroplasty] Sibul' UF, et al. **Klin Khir** 1988;(8):58 **(Rus)**

[Intestinal function in patients with peptic ulcer] Furs LN. **Klin Med (Mosk)** 1989 May;67(5):113–6 **(Rus)**

[Neurohumoral regulation of gastric secretion in stomach and duodenal ulcers] Raikhlin NT, et al. **Sov Med** 1988; (7):38–41 (54 ref.) **(Rus)**

[General mechanisms of regulation of the activity of the stomach and pancreas in peptic ulcer and chronic pancreatitis] Ivashkin VT, et al. **Ter Arkh** 1989;61(2):8–11 (Eng. Abstr.) **(Rus)**

[Endoscopic and morphologic criteria of the healing process in peptic ulcer] Krichmar IM, et al. **Vestn Khir** 1989 Jan; 142(1):139–42 (45 ref.) **(Rus)**

[Mucosal blood flow and the functional state of the stomach and duodenum in peptic ulcer] Koval'chuk LA, et al. **Vrach Delo** 1988 Nov;(11):6–8 (Eng. Abstr.) **(Rus)**

[The regulatory mechanisms of gastric secretory function in peptic ulcer (a review of the literature)] Mysh VG. **Vrach Delo** 1989 Apr;(4):3–7 (34 ref.) **(Rus)**

[Gastric evacuatory function in peptic ulcer studied using radionuclide research data] Tsimmerman IaS, et al. **Vrach Delo** 1989 Mar;(3):67–70 (Eng. Abstr.) **(Rus)**

[Arterial and venous hemodynamics in peptic ulcer and the preulcerous state] Uspenskii VM, et al. **Vrach Delo** 1989 Apr;(4):10–3 (Eng. Abstr.) **(Rus)**

[Gastric emptying of liquids measured by ultrasonography in idiopathic functional dyspepsia and gastroduodenal ulcer] Varas MJ, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 1):318–22 (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

Antacid in the prevention of upper gastrointestinal bleeding in burns. Steen J, et al. **Acta Chir Scand Suppl** 1988;547:93–5

Misoprostol: a prostaglandin for peptic ulcer. DiPalma JR. **Am Fam Physician** 1989 Aug;40(2):217–9

Failure of cimetidine prophylaxis in neurosurgery. Chan KH, et al. **Aust N Z J Surg** 1989 Feb;59(2):133–6

Preventive measures for stress ulcers in burn patients. Rath T, et al. **Burns Incl Therm Inj** 1988 Dec;14(6):504–7

Ranitidine—bolus or infusion prophylaxis for stress ulcer [letter] Böhrer H, et al. **Crit Care Med** 1989 Apr;17(4):381–2

Prevention of ulcer relapse: rationale. Dobrilla G. **Hepatogastroenterology** 1988 Dec;35(6):295–9 (58 ref.)

Synthesis and biological activity of 3-substituted imidazo[1,2-a]pyridines as antiulcer agents. Starrett JE Jr, et al. **J Med Chem** 1989 Sep;32(9):2204–10

Misoprostol and ulcer prophylaxis [letter] [see comments] Graham DY. **Lancet** 1988 Dec 24–31;2(8626–8627):1484–5 . **Comment in:** Lancet 1989 Jan 28;1(8631):212–3

Misoprostol and ulcer prophylaxis [letter; comment] Shield MJ, et al. **Lancet** 1989 Jan 14;1(8629):98–9. **Comment on:** Lancet 1988 Dec 3;2(8623):1293–4

Imipramine prevents stress gastric glandular lesions in rats. Hernandez DE, et al. **Neurosci Lett** 1989 Aug 28; 103(2):209–12

Prophylaxis with ranitidine against peptic ulcer disease after liver transplantation. Klompmaker IJ, et al. **Transpl Int** 1988 Dec;1(4):209–12

Misoprostol: a prostaglandin E1 analogue versus antacid in the prevention of stress ulcers in kidney transplant patients. Alijani MR, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2145–6

Patient counselling in prevention of peptic ulcer relapse. Gupta MC. **Trop Gastroenterol** 1988 Jul–Aug;9(3):111–2

[3-year trial of preventing recurrence of peptic ulcer with ranitidine] Gibinski K, et al. **Pol Arch Med Wewn** 1985 Nov–Dec;74(5–6):308–15 (Eng. Abstr.) **(Pol)**

[The role of epidural anesthesia in preventing the development of acute postoperative erosion and ulcers of the stomach and duodenum] Chepkil LP, et al. **Klin Khir** 1988;(12):27–9 (Eng. Abstr.) **(Rus)**

[Successive pediatric and therapeutic services for improved prevention of peptic ulcer in young people] Samson EI, et al. **Klin Med (Mosk)** 1988 Oct;66(10):96–9 (Eng. Abstr.) **(Rus)**

[Prevention of acute erosions and ulcers of the esophagus, stomach and duodenum after surgery] Khokholia VP, et al. **Vestn Khir** 1988 Dec;141(12):10–7 (Eng. Abstr.) **(Rus)**

[Antiulcerogenic properties of bran rice oil in rats] Gimeno Forner L, et al. **Rev Esp Enferm Apar Dig** 1989 Mar; 75(3):225–30 (Eng. Abstr.) **(Spa)**

PSYCHOLOGY

Type A behavior pattern and illness other than coronary heart disease. Wrześniewski K, et al. **Soc Sci Med** 1988; 27(6):623–6

RADIONUCLIDE IMAGING

Chemical aspects of labeling sucralfate with 99mTcO4. Billinghurst MW, et al. **J Nucl Med** 1989 Apr;30(4):523–30

RADIOTHERAPY

[Effect of low-energy laser radiation on the levels of cyclic nucleotides and lactic acid of the mucous membranes in gastric and duodenal ulcers] Balalykin AS, et al. **Klin Med (Mosk)** 1989 Mar;67(3):108–10 (Eng. Abstr.) **(Rus)**

[Local treatment of gastroduodenal ulcers using green laser light] Matiushichev VB, et al. **Klin Med (Mosk)** 1988 Nov; 66(11):77–80 (Eng. Abstr.) **(Rus)**

[A method of reinfusing UV-irradiated autologous blood in the treatment of peptic ulcer] Murashko VV, et al. **Klin Med (Mosk)** 1989 Mar;67(3):106–8 (Eng. Abstr.) **(Rus)**

[Effectiveness of the treatment of gastric and duodenal ulcers by low-intensity electromagnetic (laser) radiation] Nogaller AM, et al. **Klin Med (Mosk)** 1989 Mar;67(3):110–5 (Eng. Abstr.) **(Rus)**

[Yellow-light laser therapy of peptic ulcer] Matiushichev VB, et al. **Sov Med** 1989;(5):86–9 **(Rus)**

[Treatment of peptic ulcer by electromagnetic irradiation of the millimetric range] Poslavskii MV, et al. **Sov Med** 1989; (1):29–31 (Eng. Abstr.) **(Rus)**

[Ambulatory treatment of peptic ulcer by autologous transfusion of photo-modified blood] Marchenko AV, et al. **Vestn Khir** 1988 Jun;140(6):117–9 (Eng. Abstr.) **(Rus)**

[Endoscopic laser treatment of esophagogastroduodenal ulcers] Matiushichev VB, et al. **Vestn Khir** 1988 Dec; 141(12):93–6 **(Rus)**

[Treatment of peptic ulcer patients using yellow laser light] Matiushichev VB, et al. **Vrach Delo** 1989 Jan;(1):82–3 (Eng. Abstr.) **(Rus)**

REHABILITATION

[Principles of the dispensary care of peptic ulcer patients following organ-preserving operations with vagotomy] Pavlovskii MP, et al. **Klin Khir** 1988;(8):42–4 **(Rus)**

[Staged rehabilitative observation and treatment of patients with chronic gastroduodenitis and peptic ulcer in adolescence and youth] Gotsuliak OF. **Pediatriia** 1988; (5):88–91 **(Rus)**

SURGERY

Second follow-up study of mucosal changes in the gastric remnant after resection for peptic ulcer disease. Ovaska JT, et al. **Acta Chir Scand** 1989;155(1):35–8

Studies on peptic ulcer disease in Department of Surgery I, Kommunehospitalet, Copenhagen. In honour of Hans-Eric Jensen on his 60th birthday. **Acta Chir Scand Suppl** 1988;547:1–96

Indications for elective surgery and selection of operation in peptic ulcer disease. Amdrup E. **Acta Chir Scand Suppl** 1988;547:42–4

The outcome of gastric resection for peptic ulcer disease. Fischer A, et al. **Acta Chir Scand Suppl** 1988;547:65–7 (29 ref.)

Gastric stump carcinoma—is prophylactic screening indicated? Fischer A, et al. **Acta Chir Scand Suppl** 1988; 547:86–7

Operative technique of highly selective (parietal cell) vagotomy. Johnston D. **Acta Chir Scand Suppl** 1988; 547:49–53

Pre- and postoperative approach to the peptic ulcer patient. Kehlet H. **Acta Chir Scand Suppl** 1988;547:45–8 (42 ref.)

Psychiatric morbidity and cause of death following gastrectomy for peptic ulcer. Knop J, et al. **Acta Chir Scand Suppl** 1988;547:68–70

The outcome of vagotomy for peptic ulcer disease. Meisner S, et al. **Acta Chir Scand Suppl** 1988;547:59–64 (68 ref.)

Histological changes in the gastric stump mucosa and late clinical results after Billroth I, Billroth II and Roux-en-Y operations for peptic ulcer disease. Ovaska JT, et al. **Ann Chir Gynaecol** 1988;77(1):1–5

Current status of proximal gastric vagotomy. Schirmer BD. **Ann Surg** 1989 Feb;209(2):131–48 (251 ref.)

Gastric cancer after peptic ulcer surgery. A historic prospective cohort investigation. Toftgaard C. **Ann Surg** 1989 Aug;210(2):159–64

Surgery and its sequelae. Amdrup E. **Baillieres Clin Gastroenterol** 1988 Jul;2(3):699–710 (31 ref.)

Current indications for elective peptic ulcer surgery. Taylor TV. **Br J Surg** 1989 May;76(5):427–8 (8 ref.)

Surgery for peptic ulcer disease in the era of H2 receptor blockers. Jamieson GG. **Dig Dis** 1989;7(2):76–85 (57 ref.)

Comparative analysis between early and late postoperative gastric emptying [letter] Lazaro da Silva A, et al. **Dig Dis Sci** 1989 Aug;34(8):1309–10

Consequences of gastric surgery for benign conditions: an overview. Tytgat GN, et al. **Hepatogastroenterology** 1988 Dec;35(6):271–8 (50 ref.)

Expedient surgical treatment of chronic ulcer stenosis. A case for proximal gastric vagotomy. Gleysteen JJ, et al. **J Clin Gastroenterol** 1988 Dec;10(6):619–22

The preventive and therapeutic effects of vagotomy for stress ulcer—experimental studies on the aspects of gastric submucosal blood flow and ulcer index. Watanabe Y, et al. **Jpn J Surg** 1988 Jul;18(4):446–54

Gastric, pancreatic, and colorectal carcinogenesis following remote peptic ulcer surgery. Review of the literature with the emphasis on risk assessment and underlying mechanism. Offerhaus GJ, et al. **Mod Pathol** 1988 Sep;1(5):352–6 (95 ref.)

Gastroduodenal ulcer disease. Therapy, complications of therapy, mortality and recurrences. Smejkal K. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove** 1988;31(2):125–91 (209 ref.)

Surgery is preferable in patients with severe chronic peptic ulcer disease. Amdrup E. **Scand J Gastroenterol Suppl** 1988; 155:155–8

Peptic ulcer disease—trends in surgical management in Sweden. Gustavsson S. **Scand J Gastroenterol Suppl** 1988; 155:152–4

A simplified technique for rapid truncal vagotomy. Roberts JP, et al. **Surg Gynecol Obstet** 1989 Jun;168(6):539–41

Prospective comparison of gastric secretory function after gastrectomy with either Billroth II or Roux-en-Y anastomosis. Rieu PN, et al. **Surgery** 1989 Mar;105(3):331–6

Time trends in peptic ulcer surgery in Sweden. A preliminary report of a nation-wide survey. Gustavsson S, et al. **Ups J Med Sci** 1988;93(2):149–54

[Ulcer surgery on the cross road?] Christiansen J. **Ugeskr Laeger** 1989 Mar 27;151(13):811 **(Dan)**

[Long-term survival after surgical treatment of peptic ulcer. Results of the Aarhus County Vagotomy Trial] Ditlevsen S. **Ugeskr Laeger** 1988 Jan 18;150(3):144–7 (Eng. Abstr.) **(Dut)**

[Gastroduodenal ulcer disease: what surgical indications are left?] Cuttat JF, et al. **Schweiz Med Wochenschr** 1989 May 27;119(21):729–30 (Eng. Abstr.) **(Fre)**

[Postoperative gastrointestinal motility disorders. 1: Sequelae following general abdominal surgery and ulcer surgery] Stockbrügger R. **Fortschr Med** 1988 Oct 10;106(29):590–2 (9 ref.) (Eng. Abstr.) **(Ger)**

[Surgical therapy in the treatment concept of ulcer disease. A critical evaluation] Winkeltau G, et al. **Leber Magen Darm** 1988 Sep;18(5):229–35 (57 ref.) (Eng. Abstr.) **(Ger)**

[Indications and successes of surgical therapy in

gastroenterology: peptic ulcer] Becker HD. **Z Gastroenterol [Verh]** 1989 Jul;24:85–7 **(Ger)**

[Gastroduodenal ulcer. New therapy and new clinical practice?] Hollender LF, et al. **Zentralbl Chir** 1989; 114(11):693–704 (47 ref.) (Eng. Abstr.) **(Ger)**

[Digestive tract tumors after gastrectomy of peptic ulcer] Bajtai A, et al. **Orv Hetil** 1989 May 21;130(21):1087–91 (Eng. Abstr.) **(Hun)**

[Prostaglandin content of the gastrointestinal mucosa after partial gastrectomy of peptic ulcer] Dobó I, et al. **Orv Hetil** 1988 Nov 13;129(46):2469–70, 7475–6 (Eng. Abstr.) **(Hun)**

[Long-term implications of gastroduodenal resection in peptic ulcer] Giuliani A, et al. **Minerva Chir** 1989 Feb 15; 44(3):295–300 **(Ita)**

[Results of long follow-up study for peptic ulcer patients treated with gastrectomy] Nishiwaki H, et al. **Nippon Geka Gakkai Zasshi** 1988 Nov;89(11):1789–95 (Eng. Abstr.) **(Jpn)**

[Risk factors for peptic ulcers treated surgically] Inagaki H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Mar; 86(3):700–6 (Eng. Abstr.) **(Jpn)**

[Analysis of postprandial disorders in patients after gastrectomy for peptic ulcer] Piecuch T, et al. **Wiad Lek** 1988 Mar 15;41(6):357–63 (Eng. Abstr.) **(Pol)**

[Evaluation of the nutritional status of patients after gastrectomy by the Billroth II method for peptic ulcer] Piecuch T, et al. **Wiad Lek** 1988 Apr 1;41(7):437–42 (Eng. Abstr.) **(Pol)**

[Peptic ulcer. Disadvantages of the surgical treatment. Alkaline gastritis? (editorial)] Rahal F. **AMB Rev Assoc Med Bras** 1987 Nov–Dec;33(11–12):214 **(Por)**

[Postoperative peptic ulcer: contribution of the scintigraphic method in diagnosing retained antral mucosa] Szego T, et al. **AMB Rev Assoc Med Bras** 1988 Nov–Dec;34(6):205–8 (Eng. Abstr.) **(Por)**

[Effect of controlled normovolemic hemodilution on the activity of neurohumoral adaptive reactions in patients after operations on the abdominal organs] Kuznetsov NA, et al. **Anesteziol Reanimatol** 1988 Jul–Aug;(4):51–3 (Eng. Abstr.) **(Rus)**

[Endoscopic treatment of gastric and duodenal ulcers with low-intensity laser] Koshelev VN, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):107–10 **(Rus)**

[Injuries of the bile and pancreatic ducts during gastrectomy for peptic ulcer] Ladniuk BP, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):92–4 **(Rus)**

[Simultaneous surgery in gastroduodenal ulcer] Myshkin KI, et al. **Khirurgiia (Mosk)** 1989 Apr;(4):3–6 (Eng. Abstr.) **(Rus)**

[Recurrence of peptic ulcer following selective proximal vagotomy] Pantsyrev IuM, et al. **Khirurgiia (Mosk)** 1988 Oct;(10):11–6 (Eng. Abstr.) **(Rus)**

[Immediate and late results of selective proximal vagotomy in pyloroduodenal ulcers] Rzaev NM, et al. **Khirurgiia (Mosk)** 1989 Apr;(4):11–5 (Eng. Abstr.) **(Rus)**

[The stress reaction to surgical trauma in peptic ulcer and stomach cancer patients depending on the nature of the preoperative preparation] Makshanov IIa, et al. **Klin Khir** 1988;(8):65–6 **(Rus)**

[Surgical treatment of peptic ulcer in women] Polous IuM, et al. **Klin Khir** 1988;(8):32–4 (Eng. Abstr.) **(Rus)**

[Gastroesophageal reflux in the surgical treatment of peptic ulcer] Polous IuM, et al. **Klin Khir** 1988;(8):21–3 (Eng. Abstr.) **(Rus)**

[Recurrent ulcers following selective proximal vagotomy (10 years' results)] Saenko VF, et al. **Klin Khir** 1989;(3):10–3 (Eng. Abstr.) **(Rus)**

[Use of the copper-vapor laser in the combined treatment of peptic ulcer] Soldatov AI, et al. **Klin Khir** 1988;(8):64 **(Rus)**

[Postgastrectomy disorders] Korzhukova PI. **Klin Med (Mosk)** 1988 Oct;66(10):148–52 **(Rus)**

[Histologic characteristics of the gastric and duodenal mucosa in post-vagotomy complications] Lirman AV, et al. **Klin Med (Mosk)** 1988 Oct;66(10):102–6 **(Rus)**

[Comparative evaluation of late results of the Hoffmeister-Finsterer gastrectomy and the method of valve anastomoses in peptic ulcer] Vlasov AV. **Klin Med (Mosk)** 1989 May;67(5):84–7 (Eng. Abstr.) **(Rus)**

[Preservation of optimal gastric blood flow after gastrectomy in patients with peptic ulcer] Koval'chuk LA, et al. **Sov Med** 1988;(7):93–6 **(Rus)**

[Functional status of the pancreas in the late period after selective proximal vagotomy] Loranskaia TI, et al. **Sov Med** 1989;(2):113 **(Rus)**

[Economic effectiveness of the rehabilitation of patients after operations on the stomach and biliary tract] Vygodner EB, et al. **Sov Zdravookhr** 1988;(8):12–5 (Eng. Abstr.) **(Rus)**

[Relaparotomy in the planned surgical treatment of peptic ulcer] Chernyshev VN, et al. **Vestn Khir** 1988 Jul; 141(7):93–6 **(Rus)**

[Prevention and treatment of early complications of surgical treatment of peptic ulcer] Gorbashko AI, et al. **Vestn Khir** 1989 Feb;142(2):79–82 (Eng. Abstr.) **(Rus)**

[Endoscopic evaluation of reflux gastritis in patients operated on for stomach and duodenal ulcers] Gorbashko AI, et al. **Vestn Khir** 1988 Oct;141(10):22–6 (Eng. Abstr.) **(Rus)**

[Clinical anatomy of the upper part of the abdominal cavity in reoperations on the stomach after organ-sparing surgery] Gusak VK, et al. **Vestn Khir** 1988 Oct;141(10):16–8 (Eng. Abstr.) **(Rus)**

[Operation in postvagotomy peptic ulcer of the gastro-duodeno-anastomosis] Khachiev LG, et al. **Vestn Khir** 1988 May;140(5):110–1 **(Rus)**

[Motor-emptying functions of the stomach after its resection with a laser scalpel and by the usual method] Koshelev VN, et al. **Vestn Khir** 1989 Jan;142(1):49–51 **(Rus)**

[Electric stimulation of the duodenal stump in the early postoperative period after gastrectomy by the Billroth II method] Kostin AE. **Vestn Khir** 1989 Feb;142(2):101 **(Rus)**

[Surgical treatment of combined ulcers of the stomach and duodenum] Nechai AI, et al. **Vestn Khir** 1988 Oct; 141(10):19–22 (Eng. Abstr.) **(Rus)**

[A method of tubular resection of the stomach with formation of a rectangular oblique gastro-jejunal anastomosis] Panazov FK, et al. **Vestn Khir** 1989 Mar;142(3):100–2 (Eng. Abstr.) **(Rus)**

[Ways to increase the competence of sutures of the duodenal stump in the surgical treatment of complicated gastroduodenal ulcers] Papazov FK, et al. **Vestn Khir** 1989 Feb;142(2):111–3 (Eng. Abstr.) **(Rus)**

[Effect of tubal small-intestinal feeding on the results of the surgical treatment of peptic ulcer] Spivak VP, et al. **Vestn Khir** 1988 May;140(5):25–8 (Eng. Abstr.) **(Rus)**

[Various aspects of endoscopic examination of the operated-on stomach] Umanskii ME. **Vestn Khir** 1988 Sep; 141(9):54–5 **(Rus)**

[Causes of post-gastrectomy and post-vagotomy recurrences of peptic ulcer] Zavgorodnii LG, et al. **Vestn Khir** 1988 Aug;141(8):25–9 (Eng. Abstr.) **(Rus)**

[Pathogenesis, prevention and treatment of dumping syndrome] Zemlianoĭ AG. **Vestn Khir** 1988 Jul;141(7):22–6 (Eng. Abstr.) **(Rus)**

[Evaluation of the surgical treatment of peptic ulcer patients] Benedikt VV, et al. **Vrach Delo** 1989 Jun;(6):6–8 (Eng. Abstr.) **(Rus)**

[Truncal vagotomy, antrectomy and Roux-en-Y gastrojejunostomy in the surgical treatment of ulcer disease] Maksimović V, et al. **Vojnosanit Pregl** 1988 Sep–Oct;45(5):328–33 (Eng. Abstr.) **(Scr)**

[Intraluminal gastrointestinal lesion in a patient after previous abdominal surgery] Diego Rey P, et al. **Rev Clin Esp** 1989 Jan;184(1):44–6 **(Spa)**

THERAPY

If I should suffer from a peptic ulcer. Gazzard B. **Br J Clin Pract** 1988 Jan;42(1):5–7

Comparison of endoscopic polidocanol injection and YAG laser therapy for bleeding peptic ulcers. Rutgeerts P, et al. **Lancet** 1989 May 27;1(8648):1164–7

Cytoprotection of gastroduodenal mucous membrane with analogues of prostaglandins. Lauritsen K, et al. **Recenti Prog Med** 1989 Jun;80(6):344–52 (50 ref.)

Comparison between medical and elective surgical treatment of peptic ulcers. Ström M. **Scand J Gastroenterol Suppl** 1988;155:159–65 (13 ref.)

[Sanatorium-health resort treatment as a factor in the secondary prevention of peptic ulcer] Gembitskii EV, et al. **Klin Med (Mosk)** 1989 Mar;67(3):99–102 (Eng. Abstr.) **(Rus)**

[Treatment of gastroduodenal ulcers using endoscopic technics] Mironov AV. **Sov Med** 1988;(11):27–30 (43 ref.) **(Rus)**

[Evaluation of the therapeutic effect of hyperbaric oxygenation and anginin in peptic ulcer] Elizavetina GA, et al. **Ter Arkh** 1989;61(2):46–8 (Eng. Abstr.) **(Rus)**

[Current methods of surgical and conservative treatment of peptic ulcer] Marchenko AV, et al. **Vestn Khir** 1989 Feb; 142(2):121–5 (43 ref.) **(Rus)**

[Mass screening, treatment and rehabilitation of patients with peptic ulcer in a medical outpatient care unit] Zemlianoĭ AG, et al. **Vestn Khir** 1988 May;140(5):97–9 **(Rus)**

[Treatment of patients with peptic ulcer using low-intensity noncoherent red light] Aliferov SI, et al. **Vrach Delo** 1988 Nov;(11):9–10 **(Rus)**

[Long-term results of treating acute erosion and ulcer of the digestive tract] Khokholia VP, et al. **Vrach Delo** 1989 May; (5):40–3 (Eng. Abstr.) **(Rus)**

URINE

[Clinical significance of determining the circadian uropepsinogen profile of peptic ulcer patients] Rychagov GP, et al. **Sov Med** 1988;(6):101–3 **(Rus)**

[Urinary excretion of proteoglycans in duodenal peptic ulcer] Rabinovich PD, et al. **Vrach Delo** 1988 Nov;(11):11–3 (Eng. Abstr.) **(Rus)**

PEPTIC ULCER HEMORRHAGE

Peptic ulcer complications and how to treat them. Bille-Brahe NE, et al. **Acta Chir Scand Suppl** 1988; 547:75–81 (56 ref.)

Emergencies in acid-peptic disease. Miller TA. **Gastroenterol Clin North Am** 1988 Jun;17(2):303–15 (48 ref.)

[131 cases of hemorrhagic ulcer] Mejdoub S, et al. **Tunis Med** 1989 Apr;67(4):243–8 (12 ref.) (Eng. Abstr.) **(Fre)**

BLOOD

[Disseminated intravascular coagulation syndrome in stomach and duodenal ulcers] Levitan BN, et al. **Sov Med** 1988;(7):6–9 (Eng. Abstr.) **(Rus)**

CHEMICALLY INDUCED

Aspirin and bleeding peptic ulcers in the elderly. Faulkner G, et al. **BMJ** 1988 Nov 19;297(6659):1311–3

COMPLICATIONS

Rupture of the stomach complicating bleeding peptic ulcer. Case report. Almskog BA, et al. **Acta Chir Scand** 1988 Sep; 154(9):543–5

[Programmed peritoneal lavage in suppurative complications of perforated ulcer of the stomach] Kuzin NM, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):121–3 **(Rus)**

DIAGNOSIS

APACHE II score in massive upper gastrointestinal haemorrhage from peptic ulcer: prognostic value and potential clinical applications. Schein M, et al. **Br J Surg** 1989 Jul;76(7):733–6

[Malignant neurinoma (schwannoma) of the stomach simulating the picture of a bleeding ulcer] Manolov G, et al. **Khirurgiia (Sofiia)** 1989;42(2):89–91 **(Bul)**

[Errors in the diagnosis of perforated gastroduodenal ulcer] Ushakova EI. **Vestn Khir** 1988 Jul;141(7):116–8 **(Rus)**

DRUG THERAPY

Somatostatin versus cimetidine in the treatment of actively bleeding duodenal ulcer: a prospective, randomized, controlled trial. Tulassay Z, et al. **Am J Gastroenterol** 1989 Jan;84(1):6–9

Endoscopic hemostasis in upper GI hemorrhage with tissue adhesion. Li ZL, et al. **Chin Med J [Engl]** 1988 Nov; 101(11):823–7

Effect of continuous intravenous infusion of secretin preparation (secrepan) in patients with hemorrhage from chronic peptic ulcer and AGML. Watanabe Y, et al. **Gastroenterol Jpn** 1988 Oct;23(5):506–13

Placebo-controlled trial with the somatostatin analogue SMS 201-995 in peptic ulcer bleeding. Christiansen J, et al. **Gastroenterology** 1989 Sep;97(3):568–74

Pharmacotherapy of bleeding peptic ulcer—is it time to give up the search? [editorial] Peterson WL. **Gastroenterology** 1989 Sep;97(3):796–7

Treatment of upper gastro-intestinal bleeding with the H2-receptor antagonist famotidine. Aoki T. **J Int Med Res** 1989;17 Suppl 1:32A–40A

H2 antagonists in the treatment of upper gastrointestinal bleeding. Langman MJ. **Scand J Gastroenterol Suppl** 1988; 146:185–90 (7 ref.)

[A clinical study on the treatment of acute upper digestive tract hemorrhage with wen-she decoction] Gong QM, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 May;9(5):272–3, 260 (Eng. Abstr.) **(Chi)**

[Clinical study on the treatment of acute upper digestive tract hemorrhage using a zidi decoction] Qiu HM. **Chung Yao Tung Pao** 1988 Aug;13(8):48–51, 64 (Eng. Abstr.) **(Chi)**

[Therapy of peptic ulcer. Prostaglandin analogs] Peskar BM. **Verh Dtsch Ges Inn Med** 1988;94:292–8 (25 ref.) **(Ger)**

ETIOLOGY

Epidemiological assessment of the association between NSAIDS and peptic ulcer complications. Henry DA. **Agents Actions Suppl** 1988;24:85–94

Hepatocellular carcinoma metastatic to the stomach presenting as bleeding multiple craterogenic ulcers. Lynch P, et al. **Am J Gastroenterol** 1989 Jun;84(6):653–5

Duodenal ulcer in hereditary haemorrhagic telangiectasia. Ridley N, et al. **Cent Afr J Med** 1988 Jul;34(7):164–6

Vena caval penetration by gastric ulcer: massive hemorrhage and embolization of gastric contents to lungs. Palmer RC. **J Clin Gastroenterol** 1989 Aug;11(4):455–7

Factors influencing the development of gastrointestinal complications after neurosurgery: results of multivariate analysis. Chan KH, et al. **Neurosurgery** 1989 Sep; 25(3):378–82

[Bleeding from the upper segment of the digestive tract as a complication of external biliary drainage] Sowier J, et al. **Wiad Lek** 1988 Dec 15;41(24):1668–71 (Eng. Abstr.) **(Pol)**

[Gastroduodenal hemorrhage after insertion of heart valve prosthesis] Maĭstrenko NA, et al. **Khirurgiia (Mosk)** 1989 Apr;(4):117–9 **(Rus)**

[Gastroduodenofibroscopy in the prognostic evaluation of local factors of hemostasis in acute gastrointestinal hemorrhage] Zaĭtsev VT, et al. **Klin Khir** 1989;(4):7–9 (Eng. Abstr.) **(Rus)**

[Profuse hemorrhage from stomach ulcer after correction of the blood flow through the celiac trunk in its stenosis and in Leriche's syndrome] Gadzhiev MM, et al. **Vestn Khir** 1988 Aug;141(8):55 **(Rus)**

METABOLISM

[Free-radical lipid peroxidation in patients with acute gastro-intestinal hemorrhage] Bekh ND, et al. **Klin Khir** 1989;(4):10–2 (Eng. Abstr.) **(Rus)**

MORTALITY

Bleeding gastric ulcer: a prospective evaluation of rebleeding and mortality. Branicki FJ, et al. **Aust N Z J Surg** 1989 Jul;59(7):551–62

[Decrease in postoperative mortality caused by bleeding peptic ulcer] Checa Ceballos J, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 2):671–5 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Silent peptic ulceration: deadly silence or golden silence? Pounder R. **Gastroenterology** 1989 Feb;96(2 Pt 2 Suppl):626–31 (32 ref.)

[Microcirculatory aspects of Reilly's phenomena] Tsuchiya M, et al. **Bull Acad Natl Med (Paris)** 1988 Mar; 172(3):409–19 (Eng. Abstr.) **(Fre)**

[Regional blood flow and gastric motor function following truncal vagotomy in patients with duodenal ulcer complicated by hemorrhage] Koval'chuk LA, et al. **Klin Khir** 1988;(8):8–10 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Antacid in the prevention of upper gastrointestinal bleeding in burns. Steen J, et al. **Acta Chir Scand Suppl** 1988;547:93–5

Incidence of massive rebleeding from nonbleeding visible vessels in benign gastroduodenal lesions and prospective study in assessing the efficacy of endoscopic hemostasis with local ethanol injection for prevention of rebleeding. Chen LT, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Mar; 5(3):180–4

Protective effect of an orally administered, highly potent somatostatin analog (RC–121) against absolute ethanol–induced hemorrhagic erosions of the rat gastric mucosa. László F, et al. **Life Sci** 1989;44(21):1573–8

Prevention of recurrent ulcer bleeding, a multicentre study of the effect of ranitidine and trimipramine over one year. Stave R, et al. **Scand J Gastroenterol Suppl** 1986;124:55–62

Evaluation of endoscopic hemostasis using an improved clipping apparatus. Hachisu T. **Surg Endosc** 1988;2(1):13–7

[Prevention of stress hemorrhage in an internal medicine intensive care station: sucralfate versus ranitidine] Laggner AN, et al. **Anaesthesist** 1988 Nov;37(11):704–10 (Eng. Abstr.) **(Ger)**

[Prevention of stress–induced hemorrhage of the upper gastrointestinal tract in neurosurgical intensive care patients. A controlled, randomized double–blind study with ranitidine alone and in combination with pirenzepine] Krakamp B, et al. **Med Klin** 1989 Mar 15;84(3):133–4, 172 (Eng. Abstr.) **(Ger)**

PSYCHOLOGY

[Clinical conference at the Brazilian Institute for Study and Research in Gastroenterology] **Arq Gastroenterol** 1987 Apr–Jun;24(2):122–32 **(Por)**

SURGERY

Peptic ulcer surgery: immediate complications. Balslev I, et al. **Acta Chir Scand Suppl** 1988;547:71–4 (39 ref.)

Factors affecting mortality in patients operated upon for complications of peptic ulcer disease. Greiser WB, et al. **Am Surg** 1989 Jan;55(1):7–11

Surgical treatment of high bleeding gastric ulcer. Ovaska JT, et al. **Ann Chir Gynaecol** 1988;77(1):6–8

Multipolar electrocoagulation in the treatment of peptic ulcers with nonbleeding visible vessels. A prospective, controlled trial. Laine L. **Ann Intern Med** 1989 Apr 1; 110(7):510–4

Should we be changing our operative strategies for the acute complications of peptic ulcer disease? Jamieson GG. **Aust N Z J Surg** 1988 Jul;58(7):525–7

Cholecystoduodenostomy in the management of complicated duodenal ulcer. Woods SD, et al. **Aust N Z J Surg** 1989 Jul;59(7):590–1

Controlled trial of heater probe treatment in bleeding peptic ulcers. Fullarton GM, et al. **Br J Surg** 1989 Jun;76(6):541–4

Heat probe therapy for severe hemorrhage from a peptic ulcer with a visible vessel. Lin HJ, et al. **Endoscopy** 1988 Jul;20(4):131–3

Microwave energy compared with heater probe and BICAP in canine models of peptic ulcer hemorrhage. Michaletz PA, et al. **Gastroenterology** 1989 Sep;97(3):676–84

Proximal gastric vagotomy for complicated duodenal ulcer and benign gastric ulcer disease. Gupta R, et al. **Indian J Gastroenterol** 1988 Oct;7(4):223–5

The precordial stethoscope can be indispensable in patient monitoring [letter] Horrow JC. **J Clin Monit** 1988 Jul; 4(3):230–1

Surgical treatment of bleeding and perforated peptic ulcer diseases. Huang TJ, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 May; 5(5):291–8

Laser probe coagulation of bleeding canine ulcers. Van Stiegmann G, et al. **Lasers Surg Med** 1988;8(4):409–12

Operative management of bleeding post–bulbar duodenal ulcers and possible injury to the common bile duct. Gerding H, et al. **S Afr J Surg** 1989 Mar;27(1):16–8

[Surgical procedures in duodenal ulcer hemorrhage] Merdzhanov A, et al. **Khirurgiia (Sofiia)** 1989;42(2):7–10 (Eng. Abstr.) **(Bul)**

[Indications for elective surgery of stomach ulcer. A physician's views] Rune S. **Ugeskr Laeger** 1989 Mar 27; 151(13):814–6 (Eng. Abstr.) **(Dan)**

[Hemorrhagic gastroduodenal ulcer: when is it necessary to operate?] Picaud R, et al. **Ann Chir** 1989;43(1):52–4 (Eng. Abstr.) **(Fre)**

[Hemorrhagic gastric ulcer: which procedures should be performed?] Picaud R, et al. **Ann Chir** 1989;43(1):55–7 (Eng. Abstr.) **(Fre)**

[Hemorrhagic duodenal ulcer: which procedure should be performed?] Richelme H, et al. **Ann Chir** 1989;43(1):58–61 (Eng. Abstr.) **(Fre)**

[Complicated gastric ulcers. Therapeutic measures] Khalfallah T, et al. **Tunis Med** 1988 Mar;66(3):198–202 **(Fre)**

[Technical modification of surgical therapy of esophageal perforation] Hausmaninger C, et al. **Chirurg** 1989 Jan; 60(1):55–7 **(Ger)**

[A rare complication following vagotomy with circular myotomy of the esophagus and hemifundoplication. A case report] Zornig C, et al. **Chirurg** 1989 Feb;60(2):119–20 **(Ger)**

[Upper gastrointestinal bleeding from ulcer: reduction of mortality by early elective surgical therapy of patients at risk] Siewert JR, et al. **Dtsch Med Wochenschr** 1989 Mar 24;114(12):447–52 (Eng. Abstr.) **(Ger)**

[Laser therapy of arterial ulcer hemorrhage. Effect of local adrenaline infiltration] Heldwein W. **Fortschr Med** 1989 May 30;107(16):361–2 **(Ger)**

[Can truncal vagotomy still be justified?] Olah A, et al. **Helv Chir Acta** 1989 Jan;55(5):571–6 (Eng. Abstr.) **(Ger)**

[Results of surgery of the hemorrhaging stomach and duodenal ulcer—a 10–year retrospective study] Heinz J, et al. **Zentralbl Chir** 1989;114(11):705–13 (Eng. Abstr.) **(Ger)**

[Surgical therapy of duodenal ulcer today] Natalini E, et al. **Minerva Chir** 1989 Feb 15;44(3):283–8 (39 ref.) **(Ita)**

[Perforated and hemorrhagic duodenal ulcer: the problems of the surgical procedure and technic] Angelescu N, et al. **Rev Chir [Chir]** 1989 Mar–Apr;38(2):121–5 (Eng. Abstr.) **(Rum)**

[Treatment of patients with gastroduodenal hemorrhage] Bondarenko NM, et al. **Khirurgiia (Mosk)** 1989 Feb;(2):81–3 **(Rus)**

[Anterior seromyotomy of the stomach combined with posterior truncal vagotomy in the treatment of duodenal ulcer complicated by hemorrhage or perforation] Petrov VI, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):18–21 (Eng. Abstr.) **(Rus)**

[Reasons for the need to resect bleeding chronic ulcers of the duodenum and stomach] Zaĭtsev VT, et al. **Khirurgiia (Mosk)** 1989 Apr;(4):18–20 (Eng. Abstr.) **(Rus)**

[Improved methods of laser photocoagulation in hemorrhaging stomach and duodenal ulcers] Grubnik VV. **Klin Khir** 1988;(8):74 **(Rus)**

[Ways of improving the results in treating patients with acute gastrointestinal hemorrhage of peptic ulcer etiology] Kharaberiush VA, et al. **Klin Khir** 1989;(4):1–4 (Eng. Abstr.) **(Rus)**

[Surgical procedures in patients with acute hemorrhaging from stomach and duodenal ulcers] Kharaberiush VA, et al. **Klin Khir** 1988;(8):19–21 (Eng. Abstr.) **(Rus)**

[A case of a severe course of complicated duodenal peptic ulcer] Kolibaba SS, et al. **Klin Khir** 1988;(8):64–5 **(Rus)**

[Surgical treatment of recurrent hemorrhage in a child with a duodenal ulcer] Markevich MN, et al. **Klin Khir** 1989; (6):73–4 **(Rus)**

[Diagnosis and surgical treatment of acute gastrointestinal hemorrhage] Mazurik MF, et al. **Klin Khir** 1989;(4):5–7 (Eng. Abstr.) **(Rus)**

[Emergency surgical intervention in hemorrhaging gastric and duodenal ulcer] Nesterenko IuA, et al. **Klin Khir** 1988; (8):16–8 (Eng. Abstr.) **(Rus)**

[Prevention of postoperative pancreatitis in the surgical treatment of pyloroduodenal ulcers complicated by hemorrhage] Zaĭtsev VT, et al. **Klin Khir** 1988;(11):8–11 (Eng. Abstr.) **(Rus)**

[Surgical treatment of complicated gastroduodenal ulcers in children] Batrov GG, et al. **Pediatriia** 1988;(9):101–2 **(Rus)**

[Surgical treatment of large bleeding duodenal ulcers] Komorovskiĭ IuT, et al. **Vestn Khir** 1988 Sep;141(9):7–11 (Eng. Abstr.) **(Rus)**

[Selection of the method of surgical treatment of bleeding gastroduodenal ulcers] Korovich AIa, et al. **Vestn Khir** 1989 Jan;142(1):51–2 **(Rus)**

[Surgical treatment of bleeding penetrating ulcers of the stomach and duodenum] Krivitskiĭ DI, et al. **Vestn Khir** 1989 Jan;142(1):104–7 **(Rus)**

[Unsolved problems in the surgical treatment of complicated ulcers of the stomach and duodenum] Lytkin MI, et al. **Vestn Khir** 1988 Sep;141(9):3–7 (Eng. Abstr.) **(Rus)**

[Peptic ulcer perforation in children] Neĭkov GN, et al. **Vestn Khir** 1989 Mar;142(3):70–1 **(Rus)**

[A method of tubular resection of the stomach with formation of a rectangular oblique gastro–jejunal anastomosis] Panazov FK, et al. **Vestn Khir** 1989 Mar;142(3):100–2 (Eng. Abstr.) **(Rus)**

[Surgical tactics in ulcer–related gastroduodenal hemorrhage in middle–aged and elderly patients] Verushkin IuI, et al. **Vestn Khir** 1989 Jan;142(1):13–5 (Eng. Abstr.) **(Rus)**

[Characteristics of emergency interventions in perforated and bleeding recurrent gastroduodenal ulcers] Zavgorodniĭ LG, et al. **Vestn Khir** 1988 Jul;141(7):15–9 (Eng. Abstr.) **(Rus)**

THERAPY

Conference covers endoscopy and bleeding ulcers. **Am Fam Physician** 1989 Aug;40(2):304, 307–8 (0 ref.)

Should we be changing our operative strategies for the acute complications of peptic ulcer disease? Jamieson GG. **Aust N Z J Surg** 1988 Jul;58(7):525–7

Endoscopic hemostasis by local injection of epinephrine and polidocanol in bleeding ulcer. A prospective randomized trial. Balanzó J, et al. **Endoscopy** 1988 Nov;20(6):289–91

Endoscopic sclerosis in bleeding ulcers. Can results be improved? [letter] Panés J, et al. **Endoscopy** 1989 Jul; 21(4):196

Experimental studies of injection therapy for severe nonvariceal bleeding in dogs. Rutgeerts P, et al. **Gastroenterology** 1989 Sep;97(3):610–21

Heater probe in massive peptic ulcer hemorrhage and shock. Lin HJ, et al. **J Clin Gastroenterol** 1988 Dec;10(6):623–6

Consensus conference: Therapeutic endoscopy and bleeding ulcers. **JAMA** 1989 Sep 8;262(10):1369–72 (0 ref.)

Comparison of endoscopic polidocanol injection and YAG laser therapy for bleeding peptic ulcers. Rutgeerts P, et al. **Lancet** 1989 May 27;1(8648):1164–7

Cytoprotection of gastroduodenal mucous membrane with analogues of prostaglandins. Lauritsen K, et al. **Recenti Prog Med** 1989 Jun;80(6):344–52 (50 ref.)

Initial experience with the endoscopic application of fibrin tissue adhesive in the upper gastrointestinal tract. Groitl H, et al. **Surg Endosc** 1987;1(2):93–7

Reduction of surgery and mortality rate of bleeding peptic ulcer by endoscopic haemostasis with alcohol. Pascu O, et al. **Surg Endosc** 1988;2(4):237–9

Heater–probe treatment of bleeding peptic ulcers. Sung JY, et al. **Surg Endosc** 1988;2(4):234–6

Endoscopic treatment of bleeding peptic ulcers. Nakagawa K, et al. **World J Surg** 1989 Mar–Apr;13(2):154–7

[Hemorrhagic gastroduodenal ulcer: contribution of new medical treatments] Petite JP, et al. **Ann Chir** 1989; 43(1):62–7 (31 ref.) (Eng. Abstr.) **(Fre)**

[Recent progress in diagnosis and treatment of digestive diseases. I. Chronic gastritis and peptic ulcer. 2. Medical endoscopic treatment of massive bleeding due to peptic ulcer] Okabe H. **Nippon Naika Gakkai Zasshi** 1988 Nov; 77(11):1643–5 **(Jpn)**

[Long–term results of treating acute erosion and ulcer of the digestive tract] Khokholia VP, et al. **Vrach Delo** 1989 May; (5):40–3 (Eng. Abstr.) **(Rus)**

[Hemorrhagic recurrence in upper digestive hemorrhage caused by peptic ulcer (letter)] Martínez Prieto C, et al. **Med Clin (Barc)** 1989 Mar 4;92(8):316–7 **(Spa)**

PEPTIC ULCER PERFORATION

Peptic ulcer complications and how to treat them. Bille–Brahe NE, et al. **Acta Chir Scand Suppl** 1988; 547:75–81 (56 ref.)

Emergencies in acid–peptic disease. Miller TA. **Gastroenterol Clin North Am** 1988 Jun;17(2):303–15 (48 ref.)

BLOOD

[Disseminated intravascular coagulation syndrome in stomach and duodenal ulcers] Levitan BN, et al. **Sov Med** 1988;(7):6–9 (Eng. Abstr.) **(Rus)**

COMPLICATIONS

Acute epigastric and chest pain. Evans J. **Aust Fam Physician** 1988 Dec;17(12):1065

Perforated chronic duodenal ulcer in children with coexistence of acute appendicitis. Toubanakis G. **Aust Paediatr J** 1988 Dec;24(6):371–2

Retroperitoneal extravasation from perforated duodenal ulcer. Weston–Davies WH, et al. **Br J Surg** 1988 Sep; 75(9):878–9 (14 ref.)

Barrett's ulcer: cause of spontaneous oesophageal perforation. Limburg AJ, et al. **Gut** 1989 Mar;30(3):404–5

Spontaneous neonatal gastric perforation causing hemo–pneumo–peritoneum. Basu AK, et al. **Indian Pediatr** 1988 Jul;25(7):690–2

Vena caval penetration by gastric ulcer: massive hemorrhage and embolization of gastric contents to lungs. Palmer RC. **J Clin Gastroenterol** 1989 Aug;11(4):455–7

Perforation of a gastrojejunal ulcer into the pericardium. Yazicioglu N, et al. **N Y State J Med** 1989 Jun;89(6):358–9

[Retroperitoneal perforation of duodenal ulcer responsible for abscess] Camilleri L, et al. **Ann Chir** 1989;43(5):388–90 (Eng. Abstr.) **(Fre)**

[Pyopneumothorax disclosing perforation of gastric ulcer without associated peritonitis. Apropos of 2 cases (letter)] Naouri A, et al. **Gastroenterol Clin Biol** 1989;13(2):227–8 **(Fre)**

[A spontaneous fluid pneumopericardium as a complication of a gastric ulcer] Buchberger W, et al. **ROFO** 1989 Apr; 150(4):490–1 **(Ger)**

DIAGNOSIS

Sonographic demonstration of free air in perforated peptic ulcers: comparison of sonography with radiography.

Chang-Chien CS, et al. **JCU** 1989 Feb;17(2):95–100
[The perforation of acute stomach and duodenal ulcers] Ponomarev AA, et al. **Klin Khir** 1988;(8):48–50 (50 ref.) **(Rus)**
[Perforating ulcers of the stomach and duodenum in young adults and children] Neĭmark II. **Vestn Khir** 1989 Feb; 142(2):18–20 (Eng. Abstr.) **(Rus)**
[Errors in the diagnosis of perforated gastroduodenal ulcer] Ushakova EI. **Vestn Khir** 1988 Jul;141(7):116–8 **(Rus)**

EPIDEMIOLOGY

Seasonal periodicity of perforated gastric ulcer. Christensen A, et al. **Dan Med Bull** 1988 Jun;35(3):281–2
Perforated peptic ulcer in south-eastern Nigeria 1973–1982. Otu AA. **Scand J Gastroenterol Suppl** 1986;124:219–22
[Chronobiological changes in patients with perforated gastric and duodenal ulcers] Epanchintsev GM, et al. **Voen Med Zh** 1988 May;(5):39–41 **(Rus)**
[Perforated peptic ulcer, 237 cases] Rodero D, et al. **Rev Esp Enferm Apar Dig** 1988 Jul;74(1):47–51 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Epidemiological assessment of the association between NSAIDS and peptic ulcer complications. Henry DA. **Agents Actions Suppl** 1988;24:85–94
Perforated duodenal ulcer after gastric bypass surgery. Bjorkman DJ, et al. **Am J Gastroenterol** 1989 Feb; 84(2):170–2
All perforated ulcers are not alike. Horowitz J, et al. **Ann Surg** 1989 Jun;209(6):693–6; discussion 696–7
Temporal arteritis and intestinal perforation. Report of three cases. Patsner B, et al. **N Y State J Med** 1989 Aug; 89(8):476–7
Factors influencing the development of gastrointestinal complications after neurosurgery: results of multivariate analysis. Chan KH, et al. **Neurosurgery** 1989 Sep; 25(3):378–82
[Ulcer of the gastric fundus after abdominal fundoplication. A peculiar entity?] Tissot E, et al. **J Chir (Paris)** 1989 Jun-Jul;126(6-7):379–81 (10 ref.) (Eng. Abstr.) **(Fre)**

GENETICS

[A case of perforating ulcer in monozygotic twins] Khasanov AG, et al. **Klin Med (Mosk)** 1989 Jan;67(1):124 **(Rus)**

METABOLISM

[Status of gastric juice glycoproteins in patients with perforated duodenal ulcer] Sakhautdinov VG, et al. **Vestn Khir** 1989 Mar;142(3):51 **(Rus)**

MORTALITY

A multifactorial analysis of factors related to lethality after treatment of perforated gastroduodenal ulcer. 1935–1985. Svanes C, et al. **Ann Surg** 1989 Apr;209(4):418–23
Operative mortality after perforated peptic ulcer. Ball AB, et al. **Br J Surg** 1989 May;76(5):521–2
Operative mortality after perforated peptic ulcer [letter] Crofts TJ, et al. **Br J Surg** 1989 Aug;76(8):878
Mortality and perforated peptic ulcer: a case for risk stratification in elderly patients. Irvin TT. **Br J Surg** 1989 Mar;76(3):215–8

PATHOLOGY

A man with obstructive jaundice, gastrointestinal hemorrhage, hemiplegia and coma [clinical conference] Zeng ZQ, et al. **Chin Med J [Engl]** 1988 Aug;101(8):615–20
[A report of an atypical case of Degos' disease with multiple perforations of the stomach and small intestine] Kanai M, et al. **Nippon Geka Gakkai Zasshi** 1988 Jul;89(7):1127–31 (19 ref.) (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Silent peptic ulceration: deadly silence or golden silence? Pounder R. **Gastroenterology** 1989 Feb;96(2 Pt 2 Suppl):626–31 (32 ref.)

PREVENTION & CONTROL

Sucralfate in the prevention of porcine experimental peptic ulceration. Stapleton GN, et al. **Am J Med** 1989 Jun 9; 86(6A):21–2

RADIONUCLIDE IMAGING

Radionuclide detection of duodenal ulcer perforation. Applegate GR, et al. **J Nucl Med** 1989 May;30(5):700–2

SURGERY

Peptic ulcer surgery: immediate complications. Balslev I, et al. **Acta Chir Scand Suppl** 1988;547:71–4 (39 ref.)
Treatment of giant ulcer [letter] Miller JM. **Am J Surg** 1989 May;157(5):535
Factors affecting mortality in patients operated upon for complications of peptic ulcer disease. Greiser WB, et al. **Am Surg** 1989 Jan;55(1):7–11
The need for definitive therapy in the management of perforated gastric ulcers. Review of 202 cases. Hodnett RM, et al. **Ann Surg** 1989 Jan;209(1):36–9
Should we be changing our operative strategies for the acute complications of peptic ulcer disease? Jamieson GG. **Aust N Z J Surg** 1988 Jul;58(7):525–7
Retroperitoneal perforation of a peptic ulcer situated in the second part of the duodenum. Vellar ID, et al. **Aust N Z J Surg** 1989 Jul;59(7):592–3
Cholecystoduodenostomy in the management of complicated duodenal ulcer. Woods SD, et al. **Aust N Z J Surg** 1989 Jul;59(7):590–1
Changing pattern of admissions and operations for duodenal ulcer. Bardhan KD, et al. **Br J Surg** 1989 Mar;76(3):230–6
Perforated gastric ulcer. Lanng C, et al. **Br J Surg** 1988 Aug; 75(8):758–9
Perforated benign gastric ulcer: the case for simple closure. Thurston OG. **Can J Surg** 1989 Mar;32(2):94–6
Long term results of perforated duodenal ulcer following surgery. Bose SM, et al. **Indian J Gastroenterol** 1988 Oct; 7(4):227–9
Surgical treatment of bleeding and perforated peptic ulcer diseases. Huang TJ, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 May; 5(5):291–8
Peptic ulcer disease—trends in surgical management in Sweden. Gustavsson S. **Scand J Gastroenterol Suppl** 1988; 155:152–4
Proximal gastric vagotomy for duodenal ulcer disease. Malangoni MA, et al. **South Med J** 1989 Jun;82(6):733–5 (14 ref.)
Immediate definitive surgery for perforated duodenal ulcer does not increase operative mortality: a prospective controlled trial. Hay JM, et al. **World J Surg** 1988 Oct; 12(5):705–9
[Current data concerning the treatment of perforated duodenal ulcer] Hollender LF, et al. **Minerva Chir** 1989 Jan 31;44(1-2):197–202 (42 ref.) **(Fre)**
[Simple suture technic in gastroduodenal perforation] Lavigne JP, et al. **Rev Med Liege** 1988 Sep 1;43(17):558–62 **(Fre)**
[Complicated gastric ulcers. Therapeutic measures] Khalfallah T, et al. **Tunis Med** 1988 Mar;66(3):198–202 **(Fre)**
[Technical modification of surgical therapy of esophageal perforation] Hausmaninger C, et al. **Chirurg** 1989 Jan; 60(1):55–7 **(Ger)**
[Can truncal vagotomy still be justified?] Olah A, et al. **Helv Chir Acta** 1989 Jan;55(5):571–6 (Eng. Abstr.) **(Ger)**
[Cholera following Billroth II stomach resection] Eggeling T, et al. **Med Klin** 1988 Jul 15;83(15):480–1 **(Ger)**
[Perforation of gastroduodenal ulcer. Risk factors and choice of procedure] de Heer K, et al. **Zentralbl Chir** 1989; 114(11):714–21 (Eng. Abstr.) **(Ger)**
[Surgical therapy of perforated duodenal ulcer, today] Bernardini P. **Minerva Chir** 1989 Feb 15;44(3):267–70 (16 ref.) **(Ita)**
[Treatment of perforated duodenal ulcer. Our experience] Ferraris R, et al. **Minerva Chir** 1989 May 31;44(10):1465–72 (Eng. Abstr.) **(Ita)**
[Treatment of perforated duodenal ulcer] Huguier M, et al. **Minerva Chir** 1988 Jun 30;43(12):1007–11 (18 ref.) (Eng. Abstr.) **(Ita)**
[Surgical therapy of duodenal ulcer today] Natalini E, et al. **Minerva Chir** 1989 Feb 15;44(3):283–8 (39 ref.) **(Ita)**
[Long-term evaluation of the treatment of perforated gastroduodenal ulcer using a median suture] Ucchedda A, et al. **Minerva Chir** 1989 Jun 30;44(12):1637–41 (Eng. Abstr.) **(Ita)**
[Proximal gastric vagotomy with single-layer sutures—the method of choice in perforated duodenal ulcers (15 years' experience)] Peev A, et al. **Acta Chir Iugosl** 1987;34 Suppl 2:43–9 (Eng. Abstr.) **(Mac)**
[Perforated and hemorrhagic duodenal ulcer: the problems of the surgical procedure and technic] Angelescu N, et al. **Rev Chir [Chir]** 1989 Mar-Apr;38(2):121–5 (Eng. Abstr.) **(Rum)**
[Anterior seromyotomy of the stomach combined with posterior truncal vagotomy in the treatment of duodenal ulcer complicated by hemorrhage or perforation] Petrov VI, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):18–21 (Eng. Abstr.) **(Rus)**
[Repeat operations in patients after the suturing of perforated stomach and duodenal ulcers] Chernobrovyi NP, et al. **Klin Khir** 1988;(8):60–1 **(Rus)**
[A method for applying a gastroenteric anastomosis in perforating duodenal ulcer] Godlevskiĭ AI. **Klin Khir** 1988; (8):61 **(Rus)**
[Surgical treatment of perforating duodenal ulcer] Gusak VK, et al. **Klin Khir** 1988;(8):71–2 **(Rus)**
[Radical operations in perforating stomach and duodenal ulcers] Krivitskiĭ DI, et al. **Klin Khir** 1988;(8):29–31 (Eng. Abstr.) **(Rus)**
[Clinical characteristics and the surgical treatment of patients with perforated gastroduodenal ulcers] Lutsenko SM. **Klin Khir** 1989;(4):12–4 (Eng. Abstr.) **(Rus)**
[Endoscopic control following the suturing of perforated gastric and duodenal ulcers] Sakhautdinov VG, et al. **Klin Med (Mosk)** 1988 Nov;66(11):75–7 (Eng. Abstr.) **(Rus)**
[Surgical treatment of complicated gastroduodenal ulcers in children] Batrov GG, et al. **Pediatriia** 1988;(9):101–2 **(Rus)**
[Treatment of "kissing" duodenal ulcers] Mitiuk II, et al. **Sov Med** 1989;(2):76–7 **(Rus)**
[Complex prevention of suture incompetence of the duodenal stump in penetrating duodenal ulcers] Godlevskiĭ AI. **Vestn Khir** 1989 Mar;142(3):32–4 (Eng. Abstr.) **(Rus)**
[Injury of the common bile duct during gastrectomy in penetrating duodenal ulcer] Godlevskiĭ AI. **Vestn Khir** 1989 Jan;142(1):123–4 **(Rus)**
[Surgical treatment of bleeding penetrating ulcers of the stomach and duodenum] Krivitskiĭ DI, et al. **Vestn Khir** 1989 Jan;142(1):104–7 **(Rus)**
[Unsolved problems in the surgical treatment of complicated ulcers of the stomach and duodenum] Lytkin MI, et al. **Vestn Khir** 1988 Sep;141(9):3–7 (Eng. Abstr.) **(Rus)**
[Peptic ulcer perforation in children] Neĭkov GN, et al. **Vestn Khir** 1989 Mar;142(3):70–1 **(Rus)**
[Surgical treatment of perforation of gastroduodenal ulcers at a regional hospital] Veselovskiĭ BA, et al. **Vestn Khir** 1988 Sep;141(9):122–3 **(Rus)**
[Risk factors in perforated gastroduodenal ulcer] Zaĭtsev VT, et al. **Vestn Khir** 1988 Oct;141(10):124–7 **(Rus)**
[Characteristics of emergency interventions in perforated and bleeding recurrent gastroduodenal ulcers] Zavgorodniĭ LG, et al. **Vestn Khir** 1988 Jul;141(7):15–9 (Eng. Abstr.) **(Rus)**
[Gastric ulcer following suture of a perforated duodenal ulcer] Popović M, et al. **Acta Chir Iugosl** 1987;34(1):75–83 (Eng. Abstr.) **(Scr)**

THERAPY

Nonoperative treatment of perforated duodenal ulcer. Berne TV, et al. **Arch Surg** 1989 Jul;124(7):830–2
Perforated peptic ulcer: a deliberative approach. Cocks JR, et al. **Aust N Z J Surg** 1989 May;59(5):379–85
Should we be changing our operative strategies for the acute complications of peptic ulcer disease? Jamieson GG. **Aust N Z J Surg** 1988 Jul;58(7):525–7
Peptic erosion of the cystic artery with massive duodenal hemorrhage: therapeutic embolization. Cooper SG, et al. **Cardiovasc Intervent Radiol** 1988 Oct;11(5):278–80
Nonoperative treatment for perforated peptic ulcer [letter] **N Engl J Med** 1989 Oct 12;321(15):1050–1
A randomized trial of nonoperative treatment for perforated peptic ulcer. Crofts TJ, et al. **N Engl J Med** 1989 Apr 13;320(15):970–3
[Long-term results of treating acute erosion and ulcer of the digestive tract] Khokholia VP, et al. **Vrach Delo** 1989 May; (5):40–3 (Eng. Abstr.) **(Rus)**

PEPTICHEMIO see under **MELPHALAN**

PEPTIDASE INHIBITORS see **PROTEASE INHIBITORS**

PEPTIDE CHAIN ELONGATION

see related
PEPTIDE ELONGATION FACTORS

Mutations in ribosomal proteins L7/L12 perturb EF-G and EF-Tu functions. Bilgin N, et al. **Biochimie** 1988 May; 70(5):611–8
Adenosine deaminase gene expression. Tissue-dependent regulation of transcriptional elongation. Chinsky JM, et al. **J Biol Chem** 1989 Aug 25;264(24):14561–5
The allosteric three-site model for the ribosomal elongation cycle. Analysis with a heteropolymeric mRNA. Gnirke A, et al. **J Biol Chem** 1989 May 5;264(13):7291–301
Role of yeast elongation factor 3 in the elongation cycle. Kamath A, et al. **J Biol Chem** 1989 Sep 15;264(26):15423–8
Suppression of amber codons in vivo as evidence that mutants derived from Escherichia coli initiator tRNA can act at the step of elongation in protein synthesis. Seong BL, et al. **J Biol Chem** 1989 Apr 15;264(11):6504–8
HSP70 mRNA translation in chicken reticulocytes is regulated at the level of elongation. Theodorakis NG, et al. **J Biol Chem** 1988 Oct 5;263(28):14579–85
Molecular basis for congenital deficiency of alpha 2-plasmin inhibitor. A frameshift mutation leading to elongation of the deduced amino acid sequence. Miura O, et al. **J Clin Invest** 1989 May;83(5):1598–604
Autoregulatory control of beta-tubulin mRNA stability is linked to translation elongation. Gay DA, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5763–7
[A modified method of isolation of "tight" 70S ribosomes from Escherichia coli highly active at different stages of the elongation cycle] Makhno VI, et al. **Mol Biol (Mosk)** 1988 May-Jun;22(3):670–9 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

The effect of viomycin on elongation steps in cell-free polypeptide synthesis. Yamada T. **J Antibiot (Tokyo)** 1988 Sep;41(9):1277–80
Effects of high mobility group proteins 1 and 2 on initiation and elongation of specific transcription by RNA polymerase II in vitro. Tremethick DJ, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11107–23

PEPTIDE CHAIN INITIATION

see related
PEPTIDE INITIATION FACTORS

Initiation of protein synthesis in a cell-free system prepared from rat hepatocytes. Kimball SR, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):C28–34

Escherichia coli 3'-terminal 16S rRNA sequence modulated fidelity during translation. Latif FA, et al. **Biochimie** 1988 Dec;70(12):1831-9

The poly(A) binding protein is required for poly(A) shortening and 60S ribosomal subunit-dependent translation initiation. Sachs AB, et al. **Cell** 1989 Sep 8; 58(5):857-67

Coupling of GCN4 mRNA translational activation with decreased rates of polypeptide chain initiation. Tzamarias D, et al. **Cell** 1989 Jun 16;57(6):947-54

Messenger RNA recognition in Escherichia coli: a possible second site of interaction with 16S ribosomal RNA. Petersen GB, et al. **EMBO J** 1988 Dec 1;7(12):3957-62

Unexpected translation initiation within the coding region of eukaryotic genes expressed in Escherichia coli. Preibisch G, et al. **Gene** 1988 Dec 10;72(1-2):179-86

Hypoxanthine-xanthine oxidase-related defect in polypeptide chain initiation by endothelium. Jornot L, et al. **J Appl Physiol** 1989 Jan;66(1):450-7

Genetic analysis of bacteriophage lambda cIII gene: mRNA structural requirements for translation initiation. Kornitzer D, et al. **J Bacteriol** 1989 May;171(5):2563-72

Inhibition of translational initiation in eukaryotic cells by calcium ionophore. Brostrom CO, et al. **J Biol Chem** 1989 Jan 25;264(3):1644-9

The chicken progesterone receptor A and B isoforms are products of an alternate translation initiation event. Conneely OM, et al. **J Biol Chem** 1989 Aug 25; 264(24):14062-4

Mechanism of the nucleotide exchange reaction in eukaryotic polypeptide chain initiation. Characterization of the guanine nucleotide exchange factor as a GTP-binding protein. Dholakia JN, et al. **J Biol Chem** 1989 Jan 5; 264(1):546-50

Sites of initiation and pausing in the Escherichia coli rnpB (M1 RNA) transcript. Lee Y, et al. **J Biol Chem** 1989 Mar 25;264(9):5098-103

Interaction of bovine mitochondrial ribosomes with messenger RNA. Liao HX, et al. **J Biol Chem** 1989 May 5;264(13):7518-22

Translation initiation at non-AUG triplets in mammalian cells. Peabody DS. **J Biol Chem** 1989 Mar 25;264(9):5031-5

Ribosome binding to inosine-substituted mRNAs in the absence of ATP and mRNA factors. Seal SN, et al. **J Biol Chem** 1989 May 5;264(13):7363-8

Suppression of amber codons in vivo as evidence that mutants derived from Escherichia coli initiator tRNA can act at the step of elongation in protein synthesis. Seong BL, et al. **J Biol Chem** 1989 Apr 15;264(11):6504-8

Mechanism of inhibition of polypeptide chain initiation in calcium-depleted Ehrlich ascites tumor cells. Kumar RV, et al. **J Cell Biol** 1989 Jun;108(6):2107-15

Initiation of protein synthesis by internal entry of ribosomes into the 5' nontranslated region of encephalomyocarditis virus RNA in vivo. Jang SK, et al. **J Virol** 1989 Apr; 63(4):1651-60

Extension inhibition analysis of translation initiation complexes. Hartz D, et al. **Methods Enzymol** 1988; 164:419-25

Efficiency of translation initiation by non-AUG codons in Saccharomyces cerevisiae. Clements JM, et al. **Mol Cell Biol** 1988 Oct;8(10):4533-6

Determinants of translational initiation efficiency in the atp operon of Escherichia coli. McCarthy JE, et al. **Mol Microbiol** 1988 Jul;2(4):455-65

Biosynthesis of the reverse transcriptase of hepatitis B viruses involves de novo translational initiation not ribosomal frameshifting. Chang LJ, et al. **Nature** 1989 Jan 26; 337(6205):364-8

Translation of chloroplast-encoded mRNA: potential initiation and termination signals. Bonham-Smith PC, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2057-80

Efficient initiation of mammalian mRNA translation at a CUG codon. Dasso MC, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6485-97

Determination of secondary structure in the initiation region of ovalbumin mRNA. Liarakos CD, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11249-65

Translational reinitiation in the presence and absence of a Shine and Dalgarno sequence. Spanjaard RA, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5501-7

An additional ribosome-binding site on mRNA of highly expressed genes and a bifunctional site on the colicin fragment of 16S rRNA from Escherichia coli: important determinants of the efficiency of translation-initiation. Thanaraj TA, et al. **Nucleic Acids Res** 1989 Apr 25; 17(8):2973-85

Effect of nucleotide sequences directly downstream from the AUG on the expression of bovine somatotropin in E. coli. Tomich CS, et al. **Nucleic Acids Res** 1989 Apr 25; 17(8):3179-97

Yeast translation initiation suppressor sui2 encodes the alpha subunit of eukaryotic initiation factor 2 and shares sequence identity with the human alpha subunit. Cigan AM, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2784-8

Human basic fibroblast growth factor gene encodes four polypeptides: three initiate translation from non-AUG codons. Florkiewicz RZ, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):3978-81

Mutation at position 791 in Escherichia coli 16S ribosomal RNA affects processes involved in the initiation of protein synthesis. Tapprich WE, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4927-31

Cap-binding proteins of eukaryotic messenger RNA: functions in initiation and control of translation. Sonenberg N. **Prog Nucleic Acid Res Mol Biol** 1988;35:173-207 (197 ref.)

tRNAi(met) functions in directing the scanning ribosome to the start site of translation. Cigan AM, et al. **Science** 1988 Oct 7;242(4875):93-7

Alternatives for the initiation of translation. Herman RC. **Trends Biochem Sci** 1989 Jun;14(6):219-22 (36 ref.)

Identification of the initiation codons for translation of cowpea mosaic virus middle component RNA using site-directed mutagenesis of an infectious cDNA clone. Holness CL, et al. **Virology** 1989 Sep;172(1):311-20

[Effectiveness of translation initiation on specific template polynucleotides in Escherichia coli cell-free systems] Berzin'VM, et al. **Dokl Akad Nauk SSSR** 1988;301(2):470-3 **(Rus)**

DRUG EFFECTS

Effect of vasopressin on the regulation of protein synthesis initiation in liver cells. Menaya J, et al. **Biochem J** 1988 Sep 15;254(3):773-9

Mechanism of inhibition of eukaryotic translational initiation by the trinucleotide ApUpG. Wagner T, et al. **FEBS Lett** 1989 Jul 3;250(2):147-52

In vitro localization of the protein synthesis defect associated with experimental phenylketonuria. Elsliger MA, et al. **Neurochem Res** 1989 Jan;14(1):81-4

Effects of high mobility group proteins 1 and 2 on initiation and elongation of specific transcription by RNA polymerase II in vitro. Tremethick DJ, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11107-23

[Influence of myleran on globin chain synthesis ratio in anemic rhesus monkeys] Ao ZH. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1989 Apr; 11(2):120-4 (Eng. Abstr.) **(Chi)**

PEPTIDE CHAIN TERMINATION

see related

PEPTIDE TERMINATION FACTORS

Effects of release factor context at UAA codons in Escherichia coli. Martin R, et al. **J Bacteriol** 1988 Oct; 170(10):4714-7

Role of transcriptional termination in the regulation of mu mRNA expression in B lymphocytes. Weiss EA, et al. **J Immunol** 1989 Aug 1;143(3):1046-52

Translational readthrough of the murine leukemia virus gag gene amber codon does not require virus-induced alteration of tRNA. Feng YX, et al. **J Virol** 1989 May;63(5):2405-10

Transfer ribonucleic acid-mediated suppression of termination codons in Escherichia coli. Eggertsson G, et al. **Microbiol Rev** 1988 Sep;52(3):354-74 (231 ref.)

Translation of chloroplast-encoded mRNA: potential initiation and termination signals. Bonham-Smith PC, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2057-80

Role of the ribosome in suppressing transcriptional termination at the pyrBI attenuator of Escherichia coli K-12. Roland KL, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7149-53

DRUG EFFECTS

[Tropomyosin and myosin subfragment 1 induce in thin muscle fiber filaments differing conformational changes in the C-terminal portion of the polypeptide chain of actin] Borovikov IuS, et al. **Tsitologiia** 1988 Aug;30(8):1014-7 (Eng. Abstr.) **(Rus)**

PEPTIDE CHLOROMETHYL KETONES see **AMINO ACID CHLOROMETHYL KETONES**

PEPTIDE ELONGATION FACTOR TU

Crystallization and preliminary X-ray diffraction studies of intact EF-Tu from Thermus aquaticus YT-1. Lippmann C, et al. **FEBS Lett** 1988 Nov 21;240(1-2):139-42

ANALOGS & DERIVATIVES

Preparation of Escherichia coli elongation factor Tu-guanosine 5'-triphosphate analogs. Delaria K, et al. **Anal Biochem** 1989 Feb 15;177(1):188-93

ANALYSIS

Structure-function relationships of elongation factor Tu. Isolation and activity of the guanine-nucleotide-binding domain. Jensen M, et al. **Eur J Biochem** 1989 Jun 15; 182(2):247-55

GENETICS

Phylogenetic conservation of antigenic determinants in archaebacterial elongation factors (Tu proteins). Cammarano P, et al. **Can J Microbiol** 1989 Jan;35(1):2-10

Darkness and antibiotics increase the steady-state transcripts of the elongation factor gene (tuf) in Chlamydomonas reinhardtii. Silk GW, et al. **Curr Genet** 1988 Aug; 14(2):119-26

Structure-function relationships in the GTP binding domain of EF-Tu: mutation of Val20, the residue homologous to position 12 in p21. Jacquet E, et al. **EMBO J** 1988 Sep; 7(9):2861-7

Nucleotide sequence of the gene coding for the elongation factor Tu from the extremely thermophilic eubacterium Thermotoga maritima. Bachleitner M, et al. **FEMS Microbiol Lett** 1989 Jan 1;48(1):115-20

Duplication of the tuf gene: a new insight into the phylogeny of eubacteria. Sela S, et al. **J Bacteriol** 1989 Jan; 171(1):581-4

Translational frameshifts induced by mutant species of the polypeptide chain elongation factor Tu of Escherichia coli. Vijgenboom E, et al. **J Biol Chem** 1989 Aug 5; 264(22):13012-17

The elongation factor EF-Tu from E. coli binds to the upstream activator region of the tRNA-tufB operon. Vijgenboom E, et al. **Nucleic Acids Res** 1988 Nov 11; 16(21):10183-97

Inquiries into the cloning and expression of the tuf gene of Thermus thermophilus HB8. Kushiro A, et al. **Nucleic Acids Symp Ser** 1988;(19):161-4

ISOLATION & PURIFICATION

Unusually strong immunological cross-reaction between elongation factor Tu of Escherichia coli and Bacillus subtilis. Wenzig P, et al. **Arch Microbiol** 1989;152(3):258-62

METABOLISM

Effects of elfamycins on elongation factor Tu from Escherichia coli and Staphylococcus aureus. Hall CC, et al. **Antimicrob Agents Chemother** 1989 Mar;33(3):322-5

Time-resolved fluorescence studies on the ternary complex formed between bacterial elongation factor Tu, guanosine 5'-triphosphate, and phenylalanyl-tRNAPhe. Hazlett TL, et al. **Biochemistry** 1989 May 2;28(9):4109-17

Affinity labeling of the GDP/GTP binding site in Thermus thermophilus elongation factor Tu. Peter ME, et al. **Biochemistry** 1988 Dec 27;27(26):9132-9

tRNA and the guanosinetriphosphatase activity of elongation factor Tu. Swart GW, et al. **Biochemistry** 1989 Jan 10; 28(1):327-32

The elongation factor Tu.GTPase reaction: effect of 2'(3')-O-aminoacyl oligoribonucleotides. Tezuka M, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):463-5

Modification of Bacillus subtilis elongation factor Tu by N-tosyl-L-phenylalanyl chloromethane abolishes its ability to interact with the 3'-terminal polynucleotide structure but not with the acyl bond in aminoacyl-tRNA. Jonák J, et al. **FEBS Lett** 1989 Jul 17;251(1-2):121-4

Crosslinking of elongation factor Tu to tRNA(Phe) by trans-diamminedichloroplatinum (II). Characterization of two crosslinking sites on EF-Tu. Metz-Boutigue MH, et al. **FEBS Lett** 1989 Mar 13;245(1-2):194-200

Mutagenesis of bacterial elongation factor Tu at lysine 136. A conserved amino acid in GTP regulatory proteins. Hwang YW, et al. **J Biol Chem** 1989 May 15;264(14):8304-9

Effect of guanine nucleotides on the conformation and stability of chloroplast elongation factor Tu. Lapadat MA, et al. **J Biol Chem** 1989 Apr 5;264(10):5510-4

Negative correlation between the abundance of Escherichia coli aminoacyl-tRNA families and their affinities for elongation factor Tu-GTP. Jakubowski H. **J Theor Biol** 1988 Aug 8;133(3):363-70

EFTu provides an internal kinetic standard for translational accuracy. Thompson RC. **Trends Biochem Sci** 1988 Mar; 13(3):91-3 (24 ref.)

[Structural changes of the ribosomes during interaction with the elongation factor Tu] Bubunenko MG, et al. **Dokl Akad Nauk SSSR** 1988;303(2):494-6 **(Rus)**

PHYSIOLOGY

Mutations in ribosomal proteins L7/L12 perturb EF-G and EF-Tu functions. Bilgin N, et al. **Biochimie** 1988 May; 70(5):611-8

PEPTIDE ELONGATION FACTORS

Sequence similarity between cyclophilin and elongation factor 2 [letter] Gschwendt M, et al. **Biochem J** 1988 Dec 15;256(3):1061

The yeast peptide elongation factor 3 (EF-3) carries an active site for ATP hydrolysis which can interact with various nucleoside triphosphates in the absence of ribosomes. Miyazaki M, et al. **J Biochem (Tokyo)** 1988 Sep; 104(3):445-50

ANALYSIS

Identification of Nsp100 as elongation factor 2 (EF-2). Koizumi S, et al. **FEBS Lett** 1989 Aug 14;253(1-2):55-8

Organization and nucleotide sequence of a transcriptional unit of Methanococcus vannielii comprising genes for protein synthesis elongation factors and ribosomal proteins. Lechner K, et al. **J Mol Evol** 1989 Jul;29(1):20-7

ANTAGONISTS & INHIBITORS

Inhibition of protein synthesis by a Vero toxin (VT2 or Shiga-like toxin II) produced by Escherichia coli O157:H7 at the level of elongation factor 1-dependent aminoacyl-tRNA binding to ribosomes. Ogasawara T, et al. **Microb Pathog** 1988 Feb;4(2):127-35

BIOSYNTHESIS

Insulin rapidly induces the biosynthesis of elongation factor 2. Levenson RM, et al. **J Biol Chem** 1989 Jul 15; 264(20):11904–11

GENETICS

Gene organization and structure of two transcriptional units from Methanococcus coding for ribosomal proteins and elongation factors. Auer J, et al. **Can J Microbiol** 1989 Jan;35(1):200–4

The mRNA encoding elongation factor 1–alpha (EF–1 alpha) is a major transcript at the midblastula transition in Xenopus. Krieg PA, et al. **Dev Biol** 1989 May;133(1):93–100

Primary structure of rat liver elongation factor 2 deduced from the cDNA sequence. Oleinikov AV, et al. **FEBS Lett** 1989 May 8;248(1–2):131–6

Mutations in elongation factor EF–1 alpha affect the frequency of frameshifting and amino acid misincorporation in Saccharomyces cerevisiae. Sandbaken MG, et al. **Genetics** 1988 Dec;120(4):923–34

Structure and expression of elongation factor 2 gene during development of Dictyostelium discoideum. Toda K, et al. **J Biol Chem** 1989 Sep 15;264(26):15489–93

Isolation and characterization of the human chromosomal gene for polypeptide chain elongation factor–1 alpha. Uetsuki T, et al. **J Biol Chem** 1989 Apr 5;264(10):5791–8

Characterization of the str operon genes from Spirulina platensis and their evolutionary relationship to those of other prokaryotes. Buttarelli FR, et al. **Mol Gen Genet** 1989 May;217(1):97–104

The Rhizobium meliloti host range nodQ gene encodes a protein which shares homology with translation elongation and initiation factors. Cervantes E, et al. **Mol Microbiol** 1989 Jun;3(6):745–55

Characterization of a putative transcription factor gene expressed in the 20–OH–ecdysone inducible puff 74EF in Drosophila melanogaster. Janknecht R, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4455–64

The complete cDNA sequence of mouse elongation factor 1 alpha (EF 1 alpha) mRNA. Lu XA, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):442

Structure and expression of elongation factor 1 alpha in tomato. Pokalsky AR, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4661–73

[Nonsense–suppression during amplification of the gene coding for protein translation factor] Chernov IuO, et al. **Dokl Akad Nauk SSSR** 1988;301(5):1227–9 **(Rus)**

METABOLISM

ADP–ribosylatable content of elongation factor–2 changes during cell cycle of normal and cancerous human cells. Riis B, et al. **Biochem Biophys Res Commun** 1989 Mar 31; 159(3):1141–6

Effect of alpha–sarcin and ribosome–inactivating proteins on the interaction of elongation factors with ribosomes. Brigotti M, et al. **Biochem J** 1989 Feb 1;257(3):723–7

Phosphorylation of the elongation factor 2: the fifth Ca2+/calmodulin–dependent system of protein phosphorylation. Ryazanov AG, et al. **Biochimie** 1988 May; 70(5):619–26

Characterization of the ribosomal properties required for formation of a GTPase active complex with the eukaryotic elongation factor 2. Nygård O, et al. **Eur J Biochem** 1989 Feb 15;179(3):603–8

Mammalian valyl–tRNA synthetase forms a complex with the first elongation factor. Motorin YuA, et al. **FEBS Lett** 1988 Oct 10;238(2):262–4

Mechanism of elongation factor 2 (EF–2) inactivation upon phosphorylation. Phosphorylated EF–2 is unable to catalyze translocation. Ryazanov AG, et al. **FEBS Lett** 1989 Jul 17;251(1–2):187–90

Evidence of a yeast proteinase specific for elongation factor 2. Servillo L, et al. **FEBS Lett** 1988 Dec 5;241(1–2):257–60

The immunosuppressant FK–506, like cyclosporins and didemnin B, inhibits calmodulin–dependent phosphorylation of the elongation factor 2 in vitro and biological effects of the phorbol ester TPA on mouse skin in vivo. Gschwendt M, et al. **Immunobiology** 1989 Mar; 179(1):1–7

Role of yeast peptide elongation factor 3 (EF–3) at the AA–tRNA binding step. Uritani M, et al. **J Biochem (Tokyo)** 1988 Jul;104(1):118–26

Role of yeast elongation factor 3 in the elongation cycle. Kamath A, et al. **J Biol Chem** 1989 Sep 15;264(26):15423–8

Thrombin and histamine stimulate the phosphorylation of elongation factor 2 in human umbilical vein endothelial cells. Mackie KP, et al. **J Biol Chem** 1989 Jan 25; 264(3):1748–53

Biosynthetic incorporation of [3H]ethanolamine into protein synthesis elongation factor 1 alpha reveals a new post–translational protein modification. Rosenberry TL, et al. **J Biol Chem** 1989 May 5;264(13):7096–9

Properties of a Drosophila RNA polymerase II elongation factor. Sluder AE, et al. **J Biol Chem** 1989 May 25; 264(15):8963–9

Comparative analysis of phosphorylation of translational initiation and elongation factors by seven protein kinases. Tuazon PT, et al. **J Biol Chem** 1989 Feb 15;264(5):2773–7

Murine elongation factor 1 alpha (EF–1 alpha) is posttranslationally modified by novel amide–linked ethanolamine–phosphoglycerol moieties. Addition of ethanolamine–phosphoglycerol to specific glutamic acid residues on EF–1 alpha. Whiteheart SW, et al. **J Biol Chem** 1989 Aug 25;264(24):14334–41

Elongation factor 2 as the major substrate for Ca2+/calmodulin–dependent protein kinase in rat adrenal glomerulosa cells. Kigoshi T, et al. **J Steroid Biochem** 1989 Mar;32(3):381–5

Pre–steady–state kinetic studies on ribosomal translocation. Robertson JM, et al. **Methods Enzymol** 1988;164:581–97

Phosphorylation–dependent activation of the adenovirus–inducible E2F transcription factor in a cell–free system. Bagchi S, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4352–6

Endogenous ADP–ribosylation of elongation factor 2 in polyoma virus–transformed baby hamster kidney cells. Fendrick JL, et al. **Proc Natl Acad Sci U S A** 1989 Jan; 86(2):554–7

His–426 of the Pseudomonas aeruginosa exotoxin A is required for ADP–ribosylation of elongation factor II. Wozniak DJ, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):8880–4

PHYSIOLOGY

Mutations in ribosomal proteins L7/L12 perturb EF–G and EF–Tu functions. Bilgin N, et al. **Biochimie** 1988 May; 70(5):611–8

The histidine residue of codon 715 is essential for function of elongation factor 2. Omura F, et al. **Eur J Biochem** 1989 Mar 1;180(1):1–8

Calcium ion binding to delta– and to beta–crystallins. The presence of the "EF–hand" motif in delta–crystallin that aids in calcium ion binding. Sharma Y, et al. **J Biol Chem** 1989 Aug 5;264(22):12794–9

PEPTIDE FRAGMENTS

Structural characteristics of peptides required for their interaction with IAd. Grey HM, et al. **Ann N Y Acad Sci** 1988;546:72–9 (14 ref.)

Amino acid sequence of a 15 kilodalton actin–binding fragment of turkey gizzard caldesmon: similarity with dystrophin, tropomyosin and the tropomyosin–binding region of troponin T. Leszyk J, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):210–6

Caldesmon structure and function: sequence analysis of a 35 kilodalton actin– and calmodulin–binding fragment from the C–terminus of the turkey gizzard protein. Leszyk J, et al. **Biochem Biophys Res Commun** 1989 May 15; 160(3):1371–8

The three–dimensional structure of interleukin–1 beta. Priestle JP, et al. **Biochem Soc Trans** 1988 Dec;16(6):949–53

Nucleotide–induced states of myosin subfragment 1 cross–linked to actin. Duong AM, et al. **Biochemistry** 1989 Apr 18;28(8):3502–9

Photo–CIDNP studies of Bence Jones proteins, immunoglobulins, and their proteolytic fragments. Hayashi F, et al. **Biochemistry** 1989 May 2;28(9):3976–81

Thermal unfolding of myosin rod and light meromyosin: circular dichroism and tryptophan fluorescence studies. King L, et al. **Biochemistry** 1989 Apr 18;28(8):3498–502

NMR study of the solution conformation of rat atrial natriuretic factor 7–23 in sodium dodecyl sulfate micelles. Olejniczak ET, et al. **Biochemistry** 1988 Sep 6; 27(18):7124–31

Conformation of a heptadecapeptide comprising the segment encephalitogenic in rhesus monkey. Price WS, et al. **Biochemistry** 1988 Dec 13;27(25):8990–9

Solution conformation of a synthetic fragment of human pituitary growth hormone. Two–dimensional NMR of an alpha–helical dimer. Roongta V, et al. **Biochemistry** 1989 Feb 7;28(3):1048–54

Effect of the substitution Ala——Gly at each of five residue positions in the C–peptide helix. Strehlow KG, et al. **Biochemistry** 1989 Mar 7;28(5):2130–3

Conformation of peptide fragments of proteins in aqueous solution: implications for initiation of protein folding. Wright PE, et al. **Biochemistry** 1988 Sep 20;27(19):7167–75 (95 ref.)

Conformation and pairing properties of the N–terminal fragments of trichorzianine and alamethicin: a theoretical study. Furois–Corbin S, et al. **Biochim Biophys Acta** 1988 Oct 20;944(3):399–413

Conformational properties of the isolated 1–23 fragment of human hemoglobin alpha–chain. Peña MC, et al. **Biochim Biophys Acta** 1988 Dec 2;957(3):380–9

Amino–acid sequence of the short subfragment–2 in adult chicken skeletal muscle myosin. Watanabe B. **Biol Chem Hoppe Seyler** 1989 Jun;370(6):549–58

Two–dimensional 1H–NMR study of the 1–34 fragment of human parathyroid hormone. Lee SC, et al. **Biopolymers** 1989 Jun;28(6):1115–27

Secondary structure of the human growth hormone releasing factor (GRF 1–29) by two–dimensional 1H–nmr spectroscopy. Theriault Y, et al. **Biopolymers** 1988 Dec; 27(12):1897–904

Choriogonadotropin discriminatory zone and ultrasonography [letter] Askew G, et al. **Clin Chem** 1989 Sep;35(9):2019

Folding of thermolysin fragments. Hydrodynamic properties of isolated domains and subdomains. Vita C, et al. **Eur J Biochem** 1989 Aug 15;183(3):513–8

Primary structure of rabbit sperm protamine, the first protamine of its type with an aberrant N–terminal. Ammer H, et al. **FEBS Lett** 1988 Dec 19;242(1):111–6

Correlation among the proton charges and molecular masses of myosin subunits. Béchet JJ, et al. **FEBS Lett** 1989 May 22;249(1):8–12

Conformational behavior of the linear hexapeptide senktide: a receptor specific tachykinin analog. Sumner SC, et al. **FEBS Lett** 1989 Aug 14;253(1–2):117–20

The complete amino acid sequences of beta–subunits of two distinct chum salmon GTHs. Itoh H, et al. **Gen Comp Endocrinol** 1988 Sep;71(3):438–51

The POU domain: a large conserved region in the mammalian pit–1, oct–1, oct–2, and Caenorhabditis elegans unc–86 gene products. Herr W, et al. **Genes Dev** 1988 Dec;2(12a):1513–6

Unique pattern of cleavage of vasoactive intestinal peptide by human lymphocytes. Goetzl EJ, et al. **Immunology** 1989 Apr;66(4):554–8

Peptide conformations—49(1): synthesis and structure–activity relationships of side chain modified peptides of cyclo(–D–Pro–Phe–Thr–Lys–Trp–Phe.). Kessler H, et al. **Int J Pept Protein Res** 1988 Sep; 32(3):183–93

Acid–base properties for each protonation site of six corticotropin fragments. Noszál B, et al. **Int J Pept Protein Res** 1989 Feb;33(2):162–6

The conformation of alpha–human atrial natriuretic polypeptide in solution. Kobayashi Y, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):322–5

Secondary structure of diphtheria toxin and its fragments interacting with acidic liposomes studied by polarized infrared spectroscopy. Cabiaux V, et al. **J Biol Chem** 1989 Mar 25;264(9):4928–38

Recognition properties of peptides hydropathically complementary to residues 356–375 of the c–raf protein. Fassina G, et al. **J Biol Chem** 1989 Jul 5;264(19):11252–7

X–ray grade crystals of the enzymatic fragment of diphtheria toxin. Kantardjieff K, et al. **J Biol Chem** 1989 Jun 25; 264(18):10402–4

Crystallization of amino–terminal domains and domain fragments of variant surface glycoproteins from Trypanosoma brucei brucei. Metcalf P, et al. **J Biol Chem** 1988 Nov 15;263(32):17030–3

The molecular defect in a COOH–terminal–modified and shortened mutant of human serum albumin. Minchiotti L, et al. **J Biol Chem** 1989 Feb 25;264(6):3385–9

Photolabeling of calmodulin with basic, amphiphilic alpha–helical peptides containing p–benzoylphenylalanine. O'Neil KT, et al. **J Biol Chem** 1989 Aug 25;264(24):14571–8

Preliminary crystallographic data and primary sequence for anti–peptide Fab' B13I2 and its complex with the C–helix peptide from myohemerythrin. Stura EA, et al. **J Biol Chem** 1989 Sep 15;264(26):15721–5

Conformation and model membrane interactions of diphtheria toxin fragment A. Zhao JM, et al. **J Biol Chem** 1988 Oct 25;263(30):15369–77

Comparison of the structure of myosin subfragment 1 bound to actin and free in solution. A neutron scattering study using actin made "invisible" by deuteration. Curmi PM, et al. **J Mol Biol** 1988 Oct 5;203(3):781–98

Electron microscopic mappings of myosin head with site–directed antibodies. Sutoh K, et al. **J Mol Biol** 1989 Mar 20;206(2):357–63

Structure of prothrombin fragment 1 refined at 2.8 A resolution. Tulinsky A, et al. **J Mol Biol** 1988 Aug 20; 202(4):885–901

Local interactions favor the native 8–residue disulfide loop in the oxidation of a fragment corresponding to the sequence Ser–50–Met–79 derived from bovine pancreatic ribonuclease A. Milburn PJ, et al. **J Protein Chem** 1988 Aug;7(4):377–98

Microsequencing evidence for the maturation of human proopiomelanocortin into an 18 amino acid beta–melanocyte stimulating hormone [h beta MSH(5–22)] in nonpituitary tissue. Bertagna X, et al. **Peptides** 1989 Jan–Feb;10(1):83–7

Protein fragments as probes in the study of protein folding mechanisms: differential effects of dihydrofolate reductase fragments on the refolding of the intact protein. Hall JG, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3060–4

The Q–linker: a class of interdomain sequences found in bacterial multidomain regulatory proteins. Wootton JC, et al. **Protein Eng** 1989 May;2(7):535–43

[A pharmacological and clinical review on the activity of a bovine factor VIII derivative obtained by enzymatic hydrolysis] Ammannati P, et al. **Clin Ter** 1989 Feb 28; 128(4):271–90 (31 ref.) (Eng. Abstr.) **(Ita)**

[Arginylendopeptidase] Matsushita H, et al. **Tanpakushitsu Kakusan Koso** 1989 Apr;34(4):374–9 **(Jpn)**

[Amphiphilic properties of angiotensin and its fragments] Galaktionov SG, et al. **Biofizika** 1988 Jul–Aug;33(4):556–8 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Repeated GH–releasing hormone administration unravels different GH secretory patterns in normal adults and children. Ghigo E, et al. **Acta Endocrinol (Copenh)** 1989 May;120(5):598–601

Parathyroid hormone stimulates prostanoid formation in mouse calvarial bones. Ljunggren O, et al. **Acta Endocrinol (Copenh)** 1989 Mar;120(3):357–61

Neutralization of cholera toxin by rat IgA secretory antibodies induced by a free synthetic peptide. Delmas A,

et al. **Biochem Biophys Res Commun** 1989 Mar 15; 159(2):707–12

Regulation of the immune response to allergens by immunosuppressive allergenic fragments. 1. Peptic fragments of honey bee venom phospholipase A2. Litwin A, et al. **Int Arch Allergy Appl Immunol** 1988;87(4):361–6

Use of osmotic pumps for subcutaneous infusion of growth hormone–releasing factors in steers and wethers. Wheaton JE, et al. **J Anim Sci** 1988 Nov;66(11):2876–85

Plasma steroid responses to circadian–stage–specified injection of different doses of the ACTH analogue alsactide (ACTH 1–17) in healthy adult human males. Veglio F, et al. **Ric Clin Lab** 1988 Apr–Sep;18(2–3):95–104

[Telethermographic evaluation of the intra–articular administration of thymopentin in rheumatoid arthritis of the knee] Pappalardo A, et al. **Clin Ter** 1989 Mar 15; 128(5):321–7 (Eng. Abstr.) **(Ita)**

ANALYSIS

Development of an oxyntomodulin/glicentin C–terminal radioimmunoassay using a "thiol–maleoyl" coupling method for preparing the immunogen. Blache P, et al. **Anal Biochem** 1988 Aug 15;173(1):151–9

Measurement of immunoreactive angiotensin peptides in rat tissues: some pitfalls in angiotensin II analysis. De Silva PE, et al. **Anal Biochem** 1988 Oct;174(1):80–7

Cyanogen bromide cleavage at methionine residues of polypeptides containing disulfide bonds. Villa S, et al. **Anal Biochem** 1989 Feb 15;177(1):161–4

Neuromedin B and neuromedin Ca. Two mammalian bombesin–like peptides identified in porcine spinal cord and brain. Minamino N, et al. **Ann N Y Acad Sci** 1988; 547:373–90

Correlation of the activation of the fourth component of complement (C4) with disease activity in systemic lupus erythematosus. Senaldi G, et al. **Ann Rheum Dis** 1988 Nov; 47(11):913–7

Mapping of antigenic domains on phytochrome from etiolated Avena sativa L. by immunoblot analysis of proteolytically derived peptides. Pratt LH, et al. **Arch Biochem Biophys** 1988 Dec;267(2):723–35

Covalent structure of collagen: amino acid sequence of three cyanogen bromide–derived peptides from human alpha 1(V) collagen chain. Seyer JM, et al. **Arch Biochem Biophys** 1989 May 15;271(1):120–9

Calcitonin, katacalcin, and calcitonin gene–related peptide in the human prostate. An immunocytochemical and immunoelectron microscopic study. di Sant'Agnese PA, et al. **Arch Pathol Lab Med** 1989 Jul;113(7):790–6

Reversed phase high performance liquid chromatography of adrenocorticotropin 1–39 and its fragments in the native and oxidized forms. Antonini G, et al. **Biochem Int** 1988 Jun;16(6):1009–17

Structural characterization of a high–molecular–mass form of calcitonin [procalcitonin–(60–116)–peptide] and its corresponding N–terminal flanking peptide [procalcitonin–(1–57)–peptide] in a human medullary thyroid carcinoma. Conlon JM, et al. **Biochem J** 1988 Nov 15;256(1):245–50

Fluorescent oligonucleotides and deoxynucleotide triphosphates: preparation and their interaction with the large (Klenow) fragment of Escherichia coli DNA polymerase I. Allen DJ, et al. **Biochemistry** 1989 May 30; 28(11):4601–7

Glutamic acid–88 is close to SH–1 in the tertiary structure of myosin subfragment 1. Lu RC, et al. **Biochemistry** 1989 May 30;28(11):4826–9

Persistence of the alpha–helix stop signal in the S–peptide in trifluoroethanol solutions. Nelson JW, et al. **Biochemistry** 1989 Jun 13;28(12):5256–61

Amino–acid sequence of the hinge region in chicken myosin subfragment–2. Watanabe B. **Biol Chem Hoppe Seyler** 1989 Jan;370(1):55–61

Factors affecting the fragmentation of peptides in fast atom bombardment mass spectrometry. Naylor S, et al. **Biomed Environ Mass Spectrom** 1989 Jun;18(6):405–12

Studies of peptidergic input to the lateral spinal nucleus. Cliffer KD, et al. **Brain Res** 1988 Sep 20;460(2):356–60

Neurons containing a N–terminal sequence of the TRH–prohormone (preproTRH53–74) are present in a unique location of the midbrain periaqueductal gray of the rat. Van den Bergh P, et al. **Brain Res** 1988 Sep 27; 461(1):53–63

C–PON containing neurons in the rat striatum are also positive for NADPH–diaphorase activity. A light microscopic study. Villalba RM, et al. **Brain Res** 1988 Oct 18;462(2):359–62

Type 3 procollagen peptide in bronchoalveolar lavage fluid. Poor indicator of course and prognosis in sarcoidosis. O'Connor C, et al. **Chest** 1989 Aug;96(2):339–44

Hb G–Philadelphia, or [alpha 68(E17)Asn——Lys], in north Sardinia: detection by isoelectric focusing and identification by HPLC of tryptic peptides. Manca L, et al. **Clin Chim Acta** 1988 Oct 31;177(3):231–8

Characterization of human corticotrophin–releasing hormone and pro–opiomelanocortin–related peptides in a thymic carcinoid tumour responsible for Cushing's syndrome. Raux Demay MC, et al. **Clin Endocrinol (Oxf)** 1988 Dec; 29(6):649–57

Quantitation of collagen fragments and gelatin by deconvolution of polarimetry denaturation curves. Condell RA, et al. **Coll Relat Res** 1988 Sep;8(5):407–18

Assessment of the activation pathways of the complement in psoriatic patients by use of complement fragment C4d and Bb measurements. Takematsu H, et al. **Dermatologica** 1989;179 Suppl 1:16–9

Analysis of tubulin proteins and peptides in neuronal and non–neuronal tissues using immobilized pH gradients. Field DJ, et al. **Electrophoresis** 1988 Sep;9(9):555–62

Oxyntomodulin and glicentin: brain–gut peptides in the rat. Blache P, et al. **Endocrinology** 1988 Dec;123(6):2782–7

High performance liquid chromatographic analysis of insulin degradation products from a cultured kidney cell line. Duckworth WC, et al. **Endocrinology** 1988 Dec; 123(6):2701–8

Antipeptide antibodies recognize c–erbA and a related protein in human A431 carcinoma cells. Fukuda T, et al. **Endocrinology** 1988 Dec;123(6):2646–52

Identification of immunoreactive gastrin–releasing peptide related substances in adult rat Leydig cells. Gnessi L, et al. **Endocrinology** 1989 Jan;124(1):558–60

Synthetic peptide segments of inhibin alpha– and beta–subunits: preparation and characterization of polyclonal antibodies. Saito S, et al. **Endocrinology** 1989 Aug;125(2):898–905

Analysis of N–acetyl–4–O–acetylneuraminic–acid–containing N–linked carbohydrate chains released by peptide–N4–(N–acetyl–beta–glucosaminyl)asparagine amidase F. Application to the structure determination of the carbohydrate chains of equine fibrinogen. Damm JB, et al. **Eur J Biochem** 1989 Mar 1;180(1):101–10

Effect of papain digestion on polypeptide subunits and electron–transfer pathways in mitochondrial b–c1 complex. Lorusso M, et al. **Eur J Biochem** 1989 Feb 15;179(3):535–40

Characterization of proteolytic fragments of the laminin–nidogen complex and their activity in ligand–binding assays. Mann K, et al. **Eur J Biochem** 1988 Dec 1;178(1):71–80

Characterization of a 48–kDa nucleic–acid–binding fragment of nucleolin. Sapp M, et al. **Eur J Biochem** 1989 Feb 15; 179(3):541–8

Refolding of bacteriorhodopsin. Protease V8 fragmentation and chromophore reconstitution from proteolytic V8 fragments. Sigrist H, et al. **Eur J Biochem** 1988 Oct 15; 177(1):125–33

beta–HCG–positive seminoma of testis weighing 1 kg in a 59–year–old man. Steffens J, et al. **Eur Urol** 1989; 16(2):151–2

Beta–human chorionic gonadotropin levels in cul–de–sac [letter] Dericks–Tan JS. **Fertil Steril** 1988 Nov;50(5):828–9

Propagation of Acto–S–1 ATPase reaction–coupled conformational change in actin along the filament. Ando T. **J Biochem (Tokyo)** 1989 May;105(5):818–22

Measurement of ATPase activity of immobilized myosin heads. Hayashi H, et al. **J Biochem (Tokyo)** 1989 Jun; 105(6):875–7

Processing of thyrotropin–releasing hormone prohormone (pro–TRH) generates pro–TRH–connecting peptides. Identification and characterization of prepro–TRH–(160–169) and prepro–TRH–(178–199) in the rat nervous system. Bulant M, et al. **J Biol Chem** 1988 Nov 15;263(32):17189–96

Identification of angiotensin–(1–7) in rat brain. Evidence for differential processing of angiotensin peptides. Chappell MC, et al. **J Biol Chem** 1989 Oct 5;264(28):16518–23

Separation of synthetic cardiodilatin/atrial natriuretic factor and related peptides by reversed–phase high–performance liquid chromatography. Dörner T, et al. **J Chromatogr** 1989 May 30;490(2):411–7

Isolation and analysis of peptidic fragments of alpha–gliadin using reversed–phase high–performance liquid chromatography. Kocna P, et al. **J Chromatogr** 1988 Dec 30;434(2):429–38

Prosomatostatin–derived antrin is present in gastric D cells and in portal blood. Ravazzola M, et al. **J Clin Invest** 1989 Feb;83(2):362–6

Production of GAWK (chromogranin–B 420–493)–like immunoreactivity by endocrine tumors and its possible diagnostic value. Sekiya K, et al. **J Clin Invest** 1989 Jun; 83(6):1834–42

Immunocytochemical demonstration of dynorphin(PH–8P)–like immunoreactive elements in the human hypothalamus. Abe J, et al. **J Comp Neurol** 1988 Oct 22;276(4):508–13

Demonstration of desacetyl alpha–melanocyte–stimulating hormone in fetal and adult human anterior pituitary corticotrophs. Coates PJ, et al. **J Endocrinol** 1989 Mar; 120(3):525–30

Peptides related to alpha–melanocyte–stimulating hormone are commonly produced by human pituitary corticotroph adenomas: no relationship with pars intermedia origin. Coates PJ, et al. **J Endocrinol** 1989 Mar;120(3):531–6

Alpha–amidated peptides derived from pro–opiomelanocortin in human pituitary tumours. Fenger M, et al. **J Endocrinol** 1988 Aug;118(2):329–38

Des–acetyl–alpha–MSH and not alpha–MSH is the major form of alpha–MSH in amniotic fluid. Mauri A, et al. **J Endocrinol Invest** 1988 May;11(5):345–9

Immunocytochemical localization of natriuretic peptide sequences in the human right auricle. Skepper JN, et al. **J Mol Cell Cardiol** 1988 Apr;20(4):343–53

Histamine release induced by proteolytic digests of human serum albumin: isolation and structure of an active peptide from pepsin treatment. Sugiyama K, et al. **Jpn J Pharmacol** 1989 Feb;49(2):165–71

Myosin ATPase activity during avian cardiac and skeletal muscle development. Breckler JL, et al. **Mech Ageing Dev** 1988 Dec;46(1–3):47–58

A cysteine for glycine substitution at position 1017 in an alpha 1(I) chain of type I collagen in a patient with mild dominantly inherited osteogenesis imperfecta. Labhard ME, et al. **Mol Biol Med** 1988 Dec;5(3):197–207

Human joining peptide: a proopiomelanocortin product secreted as a homodimer. Bertagna X, et al. **Mol Endocrinol** 1988 Nov;2(11):1108–14

A neuroendocrine peptide derived from the amino–terminal half of rat procalcitonin. Burns DM, et al. **Mol Endocrinol** 1989 Jan;3(1):140–7

Distribution of alpha–bungarotoxin binding sites over residues 173–204 of the alpha subunit of the acetylcholine receptor. Wilson PT, et al. **Mol Pharmacol** 1988 Nov; 34(5):643–50

HIV receptors (CD4 antigen) in normal human glomerular cells [letter] Karlsson–Parra A, et al. **N Engl J Med** 1989 Mar 16;320(11):741

A short synthetic peptide fragment of human interleukin–1 beta increases both human and murine natural killer activity. Peppoloni S, et al. **Nat Immun Cell Growth Regul** 1989;8(1):10–9

A low hippocampal dynorphin A (1–8) immunoreactivity in spontaneously hypertensive rats. Li SJ, et al. **Neuropeptides** 1989 Apr;13(3):197–200

Measurement and chromatographic characterization of prodynorphin–derived peptides in the guinea–pig ileum. Steele PA, et al. **Neuropeptides** 1989 Apr;13(3):207–13

Immunostaining for peptides of the egg–laying hormone/bag cell peptide precursor protein in the head ganglia of Aplysia. Pulst SM, et al. **Neuroscience** 1988 Oct; 27(1):363–71

Immunocytochemical localization of angiotensin–(1–7) in the rat forebrain. Block CH, et al. **Peptides** 1988 Nov–Dec; 9(6):1395–401

Cholecystokinin–58 is the major molecular form in man, dog and cat but not in pig, beef and rat intestine. Eberlein GA, et al. **Peptides** 1988 Sep–Oct;9(5):993–8

Structural identification, subcellular localization and secretion of bovine adrenomedullary neuromedin C [GRP–(18–27)] Lemaire S, et al. **Peptides** 1989 Mar–Apr; 10(2):355–60

Vasoactive intestinal polypeptide carboxy–terminal fragment, VIP(22–28), and other fragments of VIP, in the central nervous system of the rat. Romualdi P, et al. **Peptides** 1989 May–Jun;10(3):621–6

Different gamma delta T–cell receptors are expressed on thymocytes at different stages of development. Ito K, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):631–5

An amino–terminal fragment of cholecystokinin–58 is present in the gut: evidence for a similar processing site of procholecystokinin in canine gut and brain. Eysselein VE, et al. **Regul Pept** 1988 Aug;22(3):205–15

Determination of biologically active region in toxic shock syndrome toxin 1. Kokan–Moore NP, et al. **Rev Infect Dis** 1989 Jan–Feb;11 Suppl 1:S125–9

Crystal structure determination of desheptapeptide (B24—B30)–insulin. Wang DC, et al. **Sci China [B]** 1989 Feb;32(2):155–65

Hemostatic markers in acute stroke. Feinberg WM, et al. **Stroke** 1989 May;20(5):592–7

Hyaluronan and type III procollagen peptide concentrations in bronchoalveolar lavage fluid in idiopathic pulmonary fibrosis. Bjermer L, et al. **Thorax** 1989 Feb;44(2):126–31

In vivo measurements of fibrin formation and fibrinolysis in operable breast cancer. McCulloch P, et al. **Thromb Haemost** 1989 Apr 25;61(2):318–21

Amino acid analysis of human von Willebrand factor fragments cleaved by porcine calpain II. Nozaki H. **Tokai J Exp Clin Med** 1987 Nov;12(4):223–7

[Alpha–hANP–like immunoreactivity in lung cancer] An SZ, et al. **Chung Hua Chung Liu Tsa Chih** 1988 May;10(3):171–3 (Eng. Abstr.) **(Chi)**

[Ectopic HCG in transitional cell carcinoma of the bladder by immuno–histochemical survey] Wu WY. **Chung–hua Ping Li Hsueh Tsa Chih** 1989 Mar;18(1):34–6 (Eng. Abstr.) **(Chi)**

[Chorionic gonadotrophic hormone and transitional cell carcinoma of the bladder. Immunohistochemical characterization of HCG and its alpha and beta subunits] Fetissof F, et al. **Ann Pathol** 1988;8(4–5):276–80 (Eng. Abstr.) **(Fre)**

[Procollagen III peptide (P–3–P): is it necessary in liver diagnosis?] Pott G, et al. **Med Klin** 1989 Mar 15;84(3):158–9, 172 (18 ref.) **(Ger)**

[Clinical studies on type III procollagen N terminal peptide and fibronectin in the sera and bronchoalveolar lavage fluids in patients with various pulmonary diseases] Takada K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jun; 26(6):594–601 (Eng. Abstr.) **(Jpn)**

[Conformation possibilities of the lipotropic acton of human somatotropin] Mzareulov KD. **Biokhimiia** 1988 Jul; 53(7):1156–62 (Eng. Abstr.) **(Rus)**

[Domain structure of myosin subfragment 1] Shnyrov VL, et al. **Dokl Akad Nauk SSSR** 1989;304(6):1497–9 **(Rus)**

[Location of amino acid substitutions in human hemoglobin. Mass spectrometric rapid analysis of tryptic peptides] Molchanova TP, et al. **Mol Biol (Mosk)** 1989 Jan–Feb; 23(1):225–39 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Alpha 2-macroglobulin is the primary inhibitor of miniplasmin in vitro and in vivo in the mouse. Comparison with alpha 2-antiplasmin in simultaneous reaction experiments. Gonias SL, et al. **Biochem J** 1988 Oct 15; 255(2):725–30

N alpha-acetyl-[Arg8]vasopressin antagonizes the behavioral effect of [Cyt6]vasopressin-(5–9), but not of vasopressin. Kovács GL, et al. **Eur J Pharmacol** 1989 Feb 14; 161(1):27–35

BIOSYNTHESIS

Ectopic beta-human chorionic gonadotropin production by a dermoid cyst. Downey GP, et al.
Am J Obstet Gynecol 1989 Feb;160(2):449–51

Effects of adenine nucleotides on choriogonadotropin alpha and beta subunit synthesis. Otani F, et al.
Biochem Biophys Res Commun 1989 Apr 14;160(1):6–11

Thyroid hormone induces synthesis and accumulation of tropomyosin and myosin heavy chain in limb buds of premetamorphic tadpoles. Dhanarajan ZC, et al.
Biochem Cell Biol 1988 Jul;66(7):724–34

Synthesis and copper(II)-binding properties of the N-terminal peptide of human alpha-fetoprotein. Lau SJ, et al. **Biochem J** 1989 Feb 1;257(3):745–50

Fast myosin heavy chain expression during the early and late embryonic stages of chicken skeletal muscle development. Van Horn R, et al. **Dev Biol** 1989 Aug; 134(2):279–88

Fibroblast growth factor enhances human chorionic gonadotropin synthesis independent of mitogenic stimulation in Jar choriocarcinoma cells. Oberbauer AM, et al. **Endocrinology** 1988 Dec;123(6):2696–700

Conformational intermediates in the production of the combinable form of the beta-subunit of chorionic gonadotropin. Ruddon RW, et al. **Endocrinology** 1989 Feb; 124(2):862–9

Altered expression of myosin light-chain isoforms in chronically stimulated fast-twitch muscle of the rat. Bär A, et al. **Eur J Biochem** 1989 Jan 2;178(3):591–4

BLOOD

Serum aminoterminal propeptide of type III procollagen in progressive systemic sclerosis and localized scleroderma. Zachariae H, et al. **Acta Derm Venereol (Stockh)** 1989; 69(1):66–70

Serum aminoterminal propeptide of type III procollagen. A non-invasive test for liver fibrogenesis in methotrexate-treated psoriatics. Zachariae H, et al.
Acta Derm Venereol (Stockh) 1989;69(3):241–4

Determination of the aminoterminal peptide of procollagen type III and laminin P1 in serum of patients with chronic liver disease. Kárteszi M, et al. **Acta Med Hung** 1988; 45(3–4):277–86

Serum type-III-procollagen and laminin concentration after interferon therapy in chronic myeloproliferative disorders. Sréter L, et al. **Acta Med Hung** 1988;45(3–4):323–8

Atrial natriuretic polypeptide in patients with subarachnoid haemorrhage due to aneurysmal rupture. Correlation to hyponatremia. Shimoda M, et al. **Acta Neurochir (Wien)** 1989;97(1–2):53–61

Liver involvement in human schistosomiasis mansoni. Regression of immunological and biochemical disease markers after specific treatment. Zwingenberger K, et al.
Acta Trop (Basel) 1988 Sep;45(3):263–75

Simultaneous measurement of alpha-human atrial natriuretic factor (hANF) and NH2-terminal fragment of pro-hANF in essential hypertension. Matsubara H, et al.
Am Heart J 1989 Sep;118(3):494–9

Prohormone atrial natriuretic peptides 1–30, 31–67, and 99–126 increase in proportion to right ventricular pacing rate. Ngo L, et al. **Am Heart J** 1989 Feb;117(2):385–90

Prohormone atrial natriuretic peptides 1–30 and 31–67 increase in hyperthyroidism and decrease in hypothyroidism. Vesely DL, et al. **Am J Med Sci** 1989 Apr;297(4):209–15

Radioimmunoassay of free beta-subunit of human chorionic gonadotropin in diagnosis of high-risk and low-risk gestational trophoblastic disease. Khazaeli MB, et al.
Am J Obstet Gynecol 1989 Feb;160(2):444–9

Cholecystokinin in pig plasma: release of components devoid of a bioactive COOH-terminus. Cantor P, et al.
Am J Physiol 1989 Jan;256(1 Pt 1):G53–61

Evidence for the presence of a free N-terminal fibronectin 30-kDa domain in human plasma by quantitative determination with an indirect immunosorbent assay. Skrha J, et al. **Anal Biochem** 1988 Sep;173(2):228–34

Atrial natriuretic factor. Wilkins MR, et al.
Ann Clin Biochem 1989 Mar;26 (Pt 2):115–8 (50 ref.)

Reliability of patient history in determining the possibility of pregnancy. Ramoska EA, et al. **Ann Emerg Med** 1989 Jan;18(1):48–50

Ectopic production of the beta-subunit of human chorionic gonadotropin in osteosarcoma. Ordóñez NG, et al.
Arch Pathol Lab Med 1989 Apr;113(4):416–9

Water immersion increases the concentration of the immunoreactive N-terminal fragment of proatrial natriuretic factor in human plasma. Gerbes AL, et al.
Biochem Biophys Res Commun 1988 Oct 14;156(1):228–32

Binding of various ovotransferrin fragments to chick-embryo red cells. Oratore A, et al. **Biochem J** 1989 Jan 1; 257(1):301–4

Sensitive and specific two-site immunoradiometric assays for human insulin, proinsulin, 65–66 split and 32–33 split proinsulins. Sobey WJ, et al. **Biochem J** 1989 Jun 1; 260(2):535–41

Mechanism of digestion of bradykinin and lysylbradykinin (kallidin) in human serum. Role of carboxypeptidase, angiotensin-converting enzyme and determination of final degradation products. Sheikh IA, et al.
Biochem Pharmacol 1989 Mar 15;38(6):993–1000

Aminoterminal propeptide of type III procollagen in methotrexate-induced liver fibrosis and cirrhosis. Risteli J, et al. **Br J Dermatol** 1988 Sep;119(3):321–5

Serum procollagen-III-peptide level correlates with disease activity in myelofibrosis with myeloid metaplasia. Barosi G, et al. **Br J Haematol** 1989 May;72(1):16–20

Serum type III procollagen peptide in asbestos workers: an early indicator of pulmonary fibrosis. Cavalleri A, et al. **Br J Ind Med** 1988 Dec;45(12):818–23

Serum type III procollagen peptide concentrations in systemic sclerosis and Raynaud's phenomenon: relationship to disease activity and duration. Black CM, et al.
Br J Rheumatol 1989 Apr;28(2):98–103

Serum procollagen type III aminoterminal peptide in primary fibromyalgia (fibrositis syndrome) [letter] Jensen LT, et al. **Br J Rheumatol** 1988 Dec;27(6):496

Amino-terminal propeptide of type III procollagen: a new prognosis indicator in human ovarian cancer. Kauppila A, et al. **Cancer Res** 1989 Apr 1;49(7):1885–9

Circadian rhythm of prohormone atrial natriuretic peptides 1–30, 31–67 and 99–126 in man. Winters CJ, et al.
Chronobiol Int 1988;5(4):403–9

Quantification of myocardial infarct size after coronary reperfusion by serum cardiac myosin light chain II in conscious dogs. Isobe M, et al. **Circ Res** 1989 Sep; 65(3):684–94

The N-terminus and a 4,000-MW peptide from the midportion of the N-terminus of the atrial natriuretic factor prohormone each circulate in humans and increase in congestive heart failure. Winters CJ, et al. **Circulation** 1989 Sep;80(3):438–49

Beta-hCG vs intact hCG assays in the detection of trophoblastic disease. Rinker AD, et al. **Clin Chem** 1989 Aug;35(8):1799–800

Procollagen III peptide and fibronectin in alcohol-related chronic liver disease: correlations with morphological features and biochemical tests. Gabrielli GB, et al.
Clin Chim Acta 1989 Feb 22;179(3):315–22

Enzyme immunoassay for alpha-human atrial natriuretic polypeptide--direct measurement of plasma level. Hashida S, et al. **Clin Chim Acta** 1988 Jun 30;175(1):11–7

Serum procollagen III N-terminal peptide and laminin P1 fragment concentrations in alcoholic liver disease and primary biliary cirrhosis. van Zanten RA, et al.
Clin Chim Acta 1988 Oct 14;177(2):141–6

Circulation of a fragment of haemoglobin alpha-chain during a pentagastrin-induced flush in patients with metastatic carcinoid tumours. Balks HJ, et al.
Clin Endocrinol (Oxf) 1988 Mar;28(3):261–9

A multiple timepoint study of N-terminal pro-opiomelanocortin in depression using a two-site recognition immunoradiometric assay. Charlton BG, et al.
Clin Endocrinol (Oxf) 1988 Feb;28(2):165–72

Connective tissue metabolites in serum as markers of disease activity in patients with rheumatoid arthritis.
Hørslev-Petersen K, et al. **Clin Exp Rheumatol** 1988 Apr-Jun;6(2):129–34

Assays of serum laminin and type III procollagen peptide for monitoring the clinical course of diabetic microangiopathy. Okazaki R, et al.
Diabetes Res Clin Pract 1988 Sep 5;5(3):163–70

Low levels of serum type III procollagen aminoterminal propeptide confirmed type III collagen deficiency in patients without typical clinical symptoms of Ehlers-Danlos type IV. Dyne KM, et al.
Eur J Clin Invest 1989 Aug;19(4):362–6

The behaviorally active peptide ACTH 4–10: measurement in plasma and pharmacokinetics in man. Bickel U, et al.
Eur J Clin Pharmacol 1988;35(4):371–7

Persistent ectopic gestation [letter] Holtz G. **Fertil Steril** 1989 Mar;51(3):550

Persistent tubal ectopic gestation: patterns of circulating beta-human chorionic gonadotropin and progesterone, and management options. Vermesh M, et al. **Fertil Steril** 1988 Oct;50(4):584–8 (22 ref.)

Predicting pregnancy outcome after in vitro fertilization and embryo transfer using estradiol, progesterone, and human chorionic gonadotropin beta-subunit. Yamashita T, et al.
Fertil Steril 1989 Feb;51(2):304–9

Effects of malotilate treatment on the serum markers of hepatic fibrogenesis in liver cirrhosis. Takase S, et al.
Gastroenterol Jpn 1988 Dec;23(6):639–45

Serum type III procollagen peptide and laminin (Lam-P1) detect alcoholic hepatitis in chronic alcohol abusers. Annoni G, et al. **Hepatology** 1989 May;9(5):693–7

The effect of repetitive haemorrhage on plasma cortisol, beta-endorphin and N-terminal pro-opiomelanocortin in conscious sheep. Smith R, et al. **Horm Metab Res** 1988 Oct;20(10):612–5

Early pregnancy wastage following late implantation of embryos after in-vitro fertilization and embryo transfer. Hamori M, et al. **Hum Reprod** 1989 Aug;4(6):714–7

Declining beta-HCG levels: an indicator for expectant approach in ectopic pregnancy. Adoni A, et al.
Int J Fertil 1986 Mar-Apr;31(1):40–2

Persistence of remnants of hormonally active tubal trophoblast 3 months following linear salpingostomy in the face of undetectable serum beta human chorionic gonadotropin. Katz E, et al. **Int J Gynaecol Obstet** 1989 May;29(1):79–81

In vivo release of beta human chorionic gonadotropin by luteinizing hormone releasing hormone stimulation and its clinical application as a remission criterion in patients with gestational trophoblastic disease. Kim SJ, et al.
Int J Gynaecol Obstet 1988 Oct;27(2):193–8

Serum specific protein 1 and beta-human chorionic gonadotropin concentrations in patients with suspected ectopic pregnancies. Sterzik K, et al.
Int J Gynaecol Obstet 1989 Mar;28(3):253–6

Seminoma testis with elevated serum beta-HCG--a category of germ-cell cancer between seminoma and nonseminoma. Dieckmann KP, et al. **Int Urol Nephrol** 1989;21(2):175–84 (48 ref.)

Plasma N-POMC, ACTH and cortisol following hCRH administration in major depression and dysthymia. Leake A, et al. **J Affective Disord** 1989 Jul-Aug;17(1):57–64

In situ phosphorylation of human platelet myosin heavy and light chains by protein kinase C [published erratum appears in J Biol Chem 1989 May 15;264(14):8442] Kawamoto S, et al. **J Biol Chem** 1989 Feb 5;264(4):2258–65

Changes in serum levels of type I and III procollagen extension peptides during infusion of human parathyroid hormone fragment (1–34). Simon LS, et al.
J Bone Miner Res 1988 Apr;3(2):241–6

Serum aminoterminal propeptide of type III procollagen: a potential predictor of the response to growth hormone therapy. Tapanainen P, et al. **J Clin Endocrinol Metab** 1988 Dec;67(6):1244–9

Circulating prosomatostatin-derived peptides. Differential responses to food ingestion. Ensinck JW, et al.
J Clin Invest 1989 May;83(5):1580–9

Non-invasive investigation of liver disease in haemophilic patients. Miller EJ, et al. **J Clin Pathol** 1988 Oct; 41(10):1039–43

Serum concentrations of laminin P1 in diabetics with advanced nephropathy. Pietschmann P, et al.
J Clin Pathol 1988 Sep;41(9):929–32

Immunological evidences for the presence of small late carboxylterminal fragment(s) of human parathyroid hormone (PTH) in circulation in man. D'Amour P, et al.
J Immunoassay 1989;10(2–3):191–205

Arterial-venous determinations of the "immunoreactive" angiotensin peptides in human subjects. Reams GP, et al.
J Lab Clin Med 1989 Jun;113(6):749–52

Relationship of procollagen type III propeptide-related antigens in serum to somatic growth in healthy children and patients with growth disorders. Danne T, et al.
J Pediatr 1989 Feb;114(2):257–60

Growth velocity, growth hormone therapy, and serum concentrations of the amino-terminal propeptide of type III procollagen. Trivedi P, et al. **J Pediatr** 1989 Feb; 114(2):225–30

Procollagen type III peptide in asymptomatic children with alpha 1-antitrypsin deficiency [letter] Eriksson S, et al.
J Pediatr Gastroenterol Nutr 1988 Nov-Dec;7(6):938–9

Fibrinopeptide A and fibrinopeptide B beta 15–42 in patients with Behçet's disease. Sunakawa M, et al.
Metab Pediatr Syst Ophthalmol 1988;11(4):147–8

Effect of direction and rate of change of calcium on parathyroid hormone secretion in uraemia. Cunningham J, et al. **Nephrol Dial Transplant** 1989;4(5):339–44

Effect of one haemodialysis treatment on the plasma concentrations of intact parathyroid hormone and ionised calcium: usefulness of end-dialysis values in evaluating the suppressibility of hyperparathyroidism. Pietilä K, et al.
Nephrol Dial Transplant 1989;4(2):115–8

Human chorionic gonadotropin levels in pregnancies with aneuploid fetuses. Bogart MH, et al. **Prenat Diagn** 1989 Jun;9(6):379–84

Clinical significance of serum type-III procollagen aminopropeptide in hepatitis B virus-related liver diseases. Chang TT, et al. **Scand J Gastroenterol** 1989 Jun; 24(5):533–8

The value of serum laminin P1 in monitoring disease activity in patients with systemic lupus erythematosus. Schneider M, et al. **Scand J Rheumatol** 1988;17(5):417–22

[Clinical significance of pregnancy-specific beta glycoprotein, human placental lactogen and beta-human chorionic gonadotropin in the serum of patients with trophoblastic diseases] Zhang WY.
Chung Hua I Hsueh Tsa Chih 1989 Apr;69(4):206–8, 16 (Eng. Abstr.) **(Chi)**

[Lysosomal enzymes and N-procollagen peptide in varicose veins] Haustein UF, et al. **Dermatol Monatsschr** 1988; 174(8):476–9 (Eng. Abstr.) **(Ger)**

[The hook effect as a cause of falsely lowered beta-HCG values (letter)] Dahlmann N. **Dtsch Med Wochenschr** 1989 Jan 6;114(1):36–7 **(Ger)**

[The value of hormonal and sonographic parameters in the diagnosis of disordered and normal early pregnancy] Wiedemann R, et al. **Geburtshilfe Frauenheilkd** 1989 Mar; 49(3):237–42 (Eng. Abstr.) **(Ger)**

[Monitoring the course of serum beta-HCG in disordered early pregnancies] von Rechenberg KN, et al.

Gynakol Rundsch 1988;28(3):129–35 (Eng. Abstr.) (Ger)
[Acute myocardial infarct: myosin-light-chain liberation and ventricular function] Katus HA, et al. Klin Wochenschr 1988 Sep 1;66(17):784–9 (Eng. Abstr.) (Ger)
[Detection of pregnancy protein-1 (SP1) in the serum of a patient with beta-HCG negative choriocarcinoma] Göldel N, et al. Med Klin 1988 Jul 15;83(15):490–1 (Ger)
[Procollagen-III-peptide in the serum of patients with Crohn disease] Loeschke K, et al. Z Gastroenterol 1989 Mar; 27(3):137–9 (Eng. Abstr.) (Ger)
[Tubal pregnancies: early pregnancy factor, progesterone, beta-HCG and vaginal sonography as differential diagnostic parameters] Mesrogli M, et al.
Z Geburtshilfe Perinatol 1988 May-Jun;192(3):130–2 (Eng. Abstr.) (Ger)
[Percentile change in the beta-HCG concentration in maternal serum in disordered early pregnancy] von Rechenberg KN. Z Geburtshilfe Perinatol 1989 Mar-Apr; 193(2):72–6 (Eng. Abstr.) (Ger)
[Determination of blood procollagen III peptide as an early indicator of pulmonary fibrosis in exposure to asbestos] Cavalleri A, et al. Med Lav 1988 Sep-Oct;79(5):351–62 (Eng. Abstr.) (Ita)
[Significance of serum determination of beta-HCG in patients with breast cancer] Tolino A, et al. Minerva Ginecol 1988 Nov;40(11):629–33 (Eng. Abstr.) (Ita)
[Studies on the clinical significance of serum type III procollagen peptide levels as a tumor marker in patients with gynecologic tumors] Mori T, et al.
Nippon Gan Chiryo Gakkai Shi 1988 Dec 20;23(11):2732–42 (Eng. Abstr.) (Jpn)
[Studies on the clinical significance of type III procollagen peptide in sera as a tumor marker in patients with ovarian tumors] Mori T, et al. Nippon Gan Chiryo Gakkai Shi 1989 May 20;24(5):974–89 (Eng. Abstr.) (Jpn)
[Predictive value of serum aminoterminal type III procollagen peptide levels, serum laminin levels, and liver membrane antibodies for prognosis of chronic hepatitis] Hirata R. Nippon Shokakibyo Gakkai Zasshi 1989 Apr; 86(4):905–12 (Eng. Abstr.) (Jpn)
[Serum levels of alpha fetoprotein (AFP), B-chorionic gonadotropin (BHCG), ferritin and prostatic acid phosphatase (PAP) in patients with cancer of the stomach] Bukowski J, et al. Wiad Lek 1988 Jul 15;41(14):915–20 (Eng. Abstr.) (Pol)
[Pepsinogen I and duodenal ulcer] Marchese MA.
Arq Gastroenterol 1988 Jan-Mar;25(1):37–43 (43 ref.) (Eng. Abstr.) (Por)
[Calcitonin and related peptides] Drzhevetskiĭ IuM.
Sov Med 1988;(8):28–32 (62 ref.) (Rus)
[Serum determination of N-terminal peptide of type III procollagen as a marker of fibrotic activity] García Montes JM, et al. Rev Esp Enferm Apar Dig 1989 Mar;75(3):241–5 (Eng. Abstr.) (Spa)

CEREBROSPINAL FLUID

Elevated CSF dynorphin A [1–8] in Tourette's syndrome. Leckman JF, et al. Life Sci 1988;43(24):2015–23

CHEMICAL SYNTHESIS

Preparation of a photoreactive analog of parathyroid hormone [Nle8, Lys(N-epsilon-4-azido-2-nitrophenyl)= 13,Nle18,Tyr34]bovine parathyroid hormone-(1–34)NH2, a selective, high-affinity ligand for characterization of parathyroid hormone receptors. Shigeno C, et al.
Anal Biochem 1989 Jun;179(2):268–73
Calcium binding and putative activity of the epidermal growth factor domain of blood coagulation factor IX. Huang LH, et al. Biochem Biophys Res Commun 1989 Apr 14;160(1):133–9
Synthesis of peptide fragments related to eglin c and examination of their inhibitory effect on human leukocyte elastase, cathepsin G and alpha-chymotrypsin. Okada Y, et al. Biochem Biophys Res Commun 1989 May 30; 161(1):272–5
Studies on peptides. CLXVII. Solid-phase syntheses and immunological properties of fragment peptides related to human malaria circumsporozoite protein. Akaji K, et al. Chem Pharm Bull (Tokyo) 1989 Jun;37(6):1612–5
Studies on peptides. CLXVI. Solid-phase syntheses and immunological properties of fragment peptides related to human hepatitis B virus surface antigen (HBsAg) and its pre-S2 gene. Hayashi Y, et al.
Chem Pharm Bull (Tokyo) 1988 Dec;36(12):4993–9
Synthesis of peptide fragments of neuropeptide Y: potent inhibitors of calmodulin-stimulated phosphodiesterase. Ishiguro T, et al. Chem Pharm Bull (Tokyo) 1988 Jul; 36(7):2720–3
2-Phenylethyl ester and 2-phenylethyl amide derivative analogues of the C-terminal hepta- and octapeptide of cholecystokinin. Fulcrand P, et al.
Int J Pept Protein Res 1988 Nov;32(5):384–95
Synthesis and biological activity of substance P analogues. Haro I, et al. Int J Pept Protein Res 1989 May;33(5):335–9
Synthesis, characterization and inhibitory activities of (4-N3[3,5-3H]Phe10)PKI(6–22)amide and its precursors: photoaffinity labeling peptides for the active site of cyclic AMP-dependent protein kinase. Katz BM, et al.
Int J Pept Protein Res 1989 Jun;33(6):439–45
Synthesis and solubility properties of peptide fragments of human hemoglobin alpha-chain (123–136). Narita M, et al. Int J Pept Protein Res 1988 Sep;32(3):200–7
Synthesis of the bis-cystinyl-fragment 225–232/225'–232' of the human IgGl hinge region. Wünsch E, et al.
Int J Pept Protein Res 1988 Nov;32(5):368–83
Anticoagulant activity of synthetic hirudin peptides. Maraganore JM, et al. J Biol Chem 1989 May 25; 264(15):8692–8
Synthesis and hypertensive activity of neuropeptide Y fragments and analogues with modified N- or C-termini or D-substitutions. Boublik JH, et al. J Med Chem 1989 Mar;32(3):597–601
Design of potent linear alpha-melanotropin 4–10 analogues modified in positions 5 and 10. Al-Obeidi F, et al.
J Med Chem 1989 Jan;32(1):174–9
Conformationally restricted analogues of atriopeptin(103–125)amide. Spear KL, et al.
J Med Chem 1989 Jan;32(1):67–72
Melanin concentrating hormone (MCH): synthesis and bioactivity studies of MCH fragment analogues. Matsunaga TO, et al. Peptides 1989 Mar-Apr;10(2):349–54
The synthesis of protective fragments of alpha-human atrial natriuretic polypeptide (alpha-hANP). Cai MS, et al.
Sci Sin [B] 1988 Apr;31(4):444–56
A chemically synthesized Antennapedia homeo domain binds to a specific DNA sequence. Mihara H, et al. Science 1988 Nov 11;242(4880):925–7
[Atrial natriuretic peptides. I. Synthesis of C-terminal fragments] Ovchinnikov MV, et al. Bioorg Khim 1988 Jun; 14(6):759–67 (Eng. Abstr.) (Rus)
[Atrial natriuretic peptides. II. Synthesis of N-terminal fragments] Ovchinnikov MV, et al. Bioorg Khim 1988 Jun; 14(6):768–76 (Eng. Abstr.) (Rus)
[Atrial natriuretic peptides. III. Synthesis and biological activity of alpha-r-ANP, APII, APIII and des-Ser5,Ser6-APII] Ovchinnikov MV, et al.
Bioorg Khim 1988 Jun;14(6):777–82 (Eng. Abstr.) (Rus)

DIAGNOSTIC USE

Synthetic human parathyroid hormone 1-34 fragment for diagnostic testing. Mallette LE. Ann Intern Med 1988 Nov 15;109(10):800–4 (24 ref.)
Alpha 2-adrenoceptor sensitivity in anorexia nervosa: GH response to clonidine or GHRH stimulation. Brambilla F, et al. Biol Psychiatry 1989 Feb 1;25(3):256–64
Comparison of GH responses after human GHRH-44 amide administration and TRH-induced TSH release in depressed patients. Lesch KP, et al. Biol Psychiatry 1989 Jan 15; 25(2):235–8
Human PTH(1–34) infusion test in differential diagnosis of various types of hypoparathyroidism: an attempt to establish a standard clinical test. Yamamoto M, et al.
Bone Miner 1989 May;6(2):199–212
Detection of metavinculin in human platelets using a modified talin overlay assay. Turner CE, et al. Eur J Cell Biol 1989 Jun;49(1):202–6
Changes in serum levels of type I and III procollagen extension peptides during infusion of human parathyroid hormone fragment (1–34). Simon LS, et al.
J Bone Miner Res 1988 Apr;3(2):241–6
Synthetic human parathyroid hormone-(1–34) for the study of pseudohypoparathyroidism. Mallette LE, et al.
J Clin Endocrinol Metab 1988 Nov;67(5):964–72
Thr28, Nle31 CCK-9—an useful CCK analogue in stimulation tests of pancreatic exocrine function. Schusdziarra V, et al. Z Gastroenterol 1988 Dec; 26(12):762–6
[Neuronal tracing with choleragen subunit B—a monoclonal immunocytochemical method] Liang FY.
Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao 1988 Dec; 10(6):448–50 (Eng. Abstr.) (Chi)

GENETICS

Protein metabolism and beta-myosin heavy-chain mRNA in unweighted soleus muscle. Thomason DB, et al.
Am J Physiol 1989 Aug;257(2 Pt 2):R300–5
Characterization and differential expression of human vascular smooth muscle myosin light chain 2 isoform in nonmuscle cells. Kumar CC, et al. Biochemistry 1989 May 2;28(9):4027–35
Megakaryocyte and hepatocyte origins of human fibrinogen biosynthesis exhibit hepatocyte-specific expression of gamma chain-variant polypeptides. Haidaris PJ, et al.
Blood 1989 Aug 1;74(2):743–50
Variants of human tissue-type plasminogen activator that lack specific structural domains of the heavy chain. Gething MJ, et al. EMBO J 1988 Sep;7(9):2731–40
Structure-function relationships in the GTP binding domain of EF-Tu: mutation of Val20, the residue homologous to position 12 in p21. Jacquet E, et al. EMBO J 1988 Sep; 7(9):2861–7
Normal-sized thyroglobulin messenger ribonucleic acid in Dutch goats with a thyroglobulin synthesis defect is translated into a 35,000 molecular weight N-terminal fragment. Sterk A, et al. Endocrinology 1989 Jan; 124(1):477–83
A novel human myosin alkali light chain is developmentally regulated. Expression in fetal cardiac and skeletal muscle and in adult atria. Arnold HH, et al. Eur J Biochem 1988 Dec 1;178(1):53–60
The interaction of nuclear proteins with essential promoter element of the chicken cardiac myosin light chain 2 gene is involved in muscle-specific transcription. Braun T, et al. FEBS Lett 1988 Nov 7;239(2):309–12
A muscle-specific enhancer is located at the 3' end of the myosin light-chain 1/3 gene locus. Donoghue M, et al.
Genes Dev 1988 Dec;2(12B):1779–90
Co-localization to chromosome bands 99E1-3 of the Drosophila melanogaster myosin light chain-2 gene and a haplo-insufficient locus that affects flight behavior. Warmke JW, et al. Genetics 1989 May;122(1):139–51
Chromosomal assignment of two myosin alkali light-chain genes encoding the ventricular/slow skeletal muscle isoform and the atrial/fetal muscle isoform (MYL3, MYL4). Cohen-Haguenauer O, et al. Hum Genet 1989 Feb; 81(3):278–82
Chorionic gonadotrophin-beta mRNA, a trophoblast marker, is expressed in human 8-cell embryos derived from tripronucleate zygotes. Bonduelle ML, et al.
Hum Reprod 1988 Oct;3(7):909–14
Muscle-specific regulation of a transfected rabbit myosin heavy chain beta gene promoter. Cribbs LL, et al.
J Biol Chem 1989 Jun 25;264(18):10672–8
Lithium dramatically potentiates neurotensin/neuromedin N gene expression. Dobner PR, et al. J Biol Chem 1988 Oct 5;263(28):13983–6
Human ventricular/slow twitch myosin alkali light chain gene characterization, sequence, and chromosomal location. Fodor WL, et al. J Biol Chem 1989 Feb 5; 264(4):2143–9
The alkali light chains of human smooth and nonmuscle myosins are encoded by a single gene. Tissue-specific expression by alternative splicing pathways. Lenz S, et al.
J Biol Chem 1989 May 25;264(15):9009–15
Site-specific mutagenesis defines the intracellular role of the asparagine-linked oligosaccharides of chorionic gonadotropin beta subunit. Matzuk MM, et al.
J Biol Chem 1988 Nov 15;263(32):17106–11
Identification of two types of smooth muscle myosin heavy chain isoforms by cDNA cloning and immunoblot analysis. Nagai R, et al. J Biol Chem 1989 Jun 15;264(17):9734–7
Formation of active diphtheria toxin in vitro based on ligated fragments of cloned mutant genes. Olsnes S, et al.
J Biol Chem 1989 Aug 5;264(22):12747–51
Identification of the functional promoter regions in the human gene encoding the myosin alkali light chains MLC1 and MLC3 of fast skeletal muscle. Seidel U, et al.
J Biol Chem 1989 Sep 25;264(27):16109–17
Molecular genetic characterization of a developmentally regulated human perinatal myosin heavy chain. Feghali R, et al. J Cell Biol 1989 May;108(5):1791–7
Regulatory and essential light-chain-binding sites in myosin heavy chain subfragment-1 mapped by site-directed mutagenesis. Mitchell EJ, et al. J Mol Biol 1989 Jul 5; 208(1):199–205
Isolation of the chick myosin alkali light chain gene expressed in embryonic gizzard muscle and transitional expression of the light chain gene family in vivo. Nabeshima Y, et al. J Mol Biol 1988 Dec 5;204(3):497–505
Amplification or rearrangement of the beta-human chorionic gonadotrophin (beta-hCG)—human LH gene cluster is not responsible for the ectopic production of beta-hCG by bladder tumour cells. Iles RK, et al. J Mol Endocrinol 1989 Mar;2(2):113–7
Sequence and expression of human myosin alkali light chain isoforms. Wade R, et al. Mol Cell Biochem 1989 Jun 1; 87(2):119–36
Promoter upstream elements of the chicken cardiac myosin light-chain 2-A gene interact with trans-acting regulatory factors for muscle-specific transcription. Braun T, et al.
Mol Cell Biol 1989 Jun;9(6):2513–25
Regulatory myosin light-chain genes of Caenorhabditis elegans. Cummins C, et al. Mol Cell Biol 1988 Dec; 8(12):5339–49
Isolation and characterization of the human chorionic gonadotropin beta subunit (CG beta) gene cluster: regulation of transcriptionally active CG beta gene by cyclic AMP. Jameson JL, et al. Mol Cell Biol 1988 Dec; 8(12):5100–7
Structures of spontaneous deletions in Caenorhabditis elegans. Pulak RA, et al. Mol Cell Biol 1988 Sep; 8(9):3748–54
Pro-sequence of subtilisin can guide the refolding of denatured subtilisin in an intermolecular process. Zhu XL, et al. Nature 1989 Jun 8;339(6224):483–4
Promoter analysis of myosin alkali light chain genes expressed in mouse striated muscle. Cohen A, et al.
Nucleic Acids Res 1988 Nov 11;16(21):10037–52
Nucleotide sequence of full length human embryonic myosin heavy chain cDNA. Eller M, et al. Nucleic Acids Res 1989 May 11;17(9):3591–2
Presence of beta hCG mRNA in the human pituitary. van Strien A, et al. Nucleic Acids Res 1989 Jul 11;17(13):5406
Dictyostelium discoideum contains a gene encoding a myosin I heavy chain. Jung G, et al.
Proc Natl Acad Sci U S A 1989 Aug;86(16):6186–90
Expression of diphtheria toxin fragment A and hormone-toxin fusion proteins in toxin-resistant yeast mutants. Perentesis JP, et al.
Proc Natl Acad Sci U S A 1988 Nov;85(22):8386–90

IMMUNOLOGY

Immunoreactivity of proteolytic degradation products of human prostatic acid phosphatase. Kuciel R, et al.

Acta Biochim Pol 1988;35(4):319–30

Antibody response to a synthetic peptide covering a LAV-1/HTLV-IIIB neutralization epitope and disease progression. Boucher CA, et al. **Aids** 1989 Feb;3(2):71–6

Site-directed enzyme-linked immunosorbent assay with a synthetic simian immunodeficiency virus SIVmac peptide identifying antibodies against the HIV-2 transmembrane glycoprotein. Norrby E, et al. **Aids** 1989 Jan;3(1):17–20

Accessibility of the highly conserved amino- and carboxy-terminal regions from HIV-1 external envelope glycoproteins. Bahraoui E, et al.
AIDS Res Hum Retroviruses 1989 Aug;5(4):451–63

Neutrophil mobilization induced by complement fragments during experimental group B streptococcal (GBS) infection. Shigeoka AO, et al. **Am J Pathol** 1988 Dec; 133(3):623–9

Comparison of Corynebacterium parvum and Bordetella pertussis with Freund's complete adjuvant as immunopotentiators for beta-human chorionic gonadotropin linked to an atoxic fragment of tetanus toxin. Covey DC, et al. **Am J Reprod Immunol** 1989 Jan; 19(1):17–20

Antibodies against an alpha-bungarotoxin-binding peptide of the alpha-subunit of the acetylcholine receptor. Donnelly-Roberts DL, et al.
Biochem Biophys Res Commun 1989 Apr 14;160(1):289–95

Production of a monoclonal antibody against C terminus of atrial natriuretic factor by in vitro immunization. Rathinavelu A, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):634–8

Are the antibodies to a peptide complementary to angiotensin II useful to isolate the angiotensin II receptor? de Gasparo M, et al. **Biochem J** 1989 Jul 1;261(1):310–1

Antisera to synthetic peptides as probes of structural changes during aging of alpha-crystallin from the bovine lens. Takemoto L, et al. **Biochim Biophys Acta** 1989 May 1; 995(3):259–63

Immunohistochemical distribution of beta-protein kinase C in rat hippocampus determined with an antibody against a synthetic peptide sequence. Roth BL, et al.
Brain Res Bull 1989 May;22(5):893–7

Monoclonal antibodies to bovine parathyroid hormone: production and characterization. Vieira JG, et al.
Braz J Med Biol Res 1988;21(5):1005–11

Immunosuppressive properties of synthetic peptides derived from CD4 and HLA-DR antigens. Mazerolles F, et al. **Cell** 1988 Nov 4;55(3):497–504

Sequence homology between yeast histone H3 and uveitopathogenic site of S-antigen: lymphocyte cross-reaction and adoptive transfer of the disease. Singh VK, et al. **Cell Immunol** 1989 Mar;119(1):211–21

Molecular mimicry between uveitopathogenic site of retinal S-antigen and Escherichia coli protein: induction of experimental autoimmune uveitis and lymphocyte cross-reaction. Singh VK, et al. **Cell Immunol** 1989 Aug; 122(1):262–73

Generation of rabbit antipeptide antibodies to HLA-class II antigens by the use of synthetic peptides. Chersi A, et al. **Clin Exp Immunol** 1988 Jul;73(1):76–81

The molecular context of determinants within the priming antigen establishes a hierarchy of T cell induction: T cell specificities induced by peptides of beta-galactosidase vs. the whole antigen. Shivakumar S, et al. **Eur J Immunol** 1989 Apr;19(4):681–7

Neutrophil response following intratracheal instillation of collagen peptides into rat lungs. Riley DJ, et al.
Exp Lung Res 1988;14(4):549–63

Profile of sequential determinants in tissue polypeptide antigen BrCN:B fragment. Chersi A, et al. **Experientia** 1989 Feb 15;45(2):184–6

A monoclonal antibody raised against a synthetic peptide representative of part of the amino acid sequence of rat immunoglobulin E detects thermally induced changes in that region of the IgE molecule. Hastings GZ, et al.
Immunology 1988 Sep;65(1):149–51

Antigenicity of the carboxyl terminus of insulin: isolation of human insulin-specific monoclonal antibodies. Mirza IH, et al. **Immunology** 1988 Sep;65(1):43–6

A high proportion of anti-peptide antibodies recognize foot-and-mouth disease virus particles. Parry NR, et al.
Immunology 1988 Aug;64(4):567–72

Antigenic determinant of trichosanthin peptide fragments. Ke YP, et al. **Immunopharmacol Immunotoxicol** 1988; 10(2):131–9

Trypanosoma cruzi expresses diverse repetitive protein antigens. Hoft DF, et al. **Infect Immun** 1989 Jul; 57(7):1959–67

Immunological studies of the disulfide bridge region of Pseudomonas aeruginosa PAK and PAO pilins, using anti-PAK pilus and antipeptide antibodies. Lee KK, et al.
Infect Immun 1989 Feb;57(2):520–6

Immunogenicity of two formulations of oral cholera vaccine comprised of killed whole vibrios and the B subunit of cholera toxin. Migasena S, et al. **Infect Immun** 1989 Jan; 57(1):117–20

Antibodies raised against synthetic peptides from the Arg-Gly-Asp-containing region of the Leishmania surface protein gp63 cross-react with human C3 and interfere with gp63-mediated binding to macrophages. Russell DG, et al. **Infect Immun** 1989 Feb;57(2):630–2

Mapping of a putative surface-binding site of human coagulation factor XII. Clarke BJ, et al. **J Biol Chem** 1989 Jul 5;264(19):11497–502

A synthetic peptide-directed antibody as a probe of the phosphorylation site of pyruvate dehydrogenase. Miernyk JA, et al. **J Biol Chem** 1989 Jun 5;264(16):9141–4

Guanine nucleotide binding regulatory proteins and adenylate cyclase in livers of streptozotocin- and BB/Wor-diabetic rats. Immunodetection of Gs and Gi with antisera prepared against synthetic peptides. Lynch CJ, et al. **J Clin Invest** 1989 Jun;83(6):2050–62

Induction of ovalbumin-specific cytotoxic T cells by in vivo peptide immunization. Carbone FR, et al. **J Exp Med** 1989 Mar 1;169(3):603–12

The role of polymorphic I-Ak beta chain residues in presentation of a peptide from myelin basic protein. Davis CB, et al. **J Exp Med** 1989 Jun 1;169(6):2239–44

A 15 amino acid fragment of influenza nucleoprotein synthesized in the cytoplasm is presented to class I-restricted cytotoxic T lymphocytes. Gould K, et al.
J Exp Med 1989 Sep 1;170(3):1051–6

Insulin B chain functions as an effective competitor of antigen presentation via peptide homologies present in the thymus. Miller GG, et al. **J Exp Med** 1989 Jun 1;169(6):2251–6

Antibodies against a peptide representative of a conserved region of human IFN-alpha. Differential effects on the antiviral and antiproliferative effects of IFN. Barasoain I, et al. **J Immunol** 1989 Jul 15;143(2):507–12

A monoclonal antibody to the IL-1 beta peptide 163–171 blocks adjuvanticity but not pyrogenicity of IL-1 beta in vivo [published erratum appears in J Immunol 1989 Aug 15;143(4):1403] Boraschi D, et al. **J Immunol** 1989 Jul 1; 143(1):131–4

Fine specificity of T cell recognition of the same peptide in association with different I-A molecules. Brett SJ, et al. **J Immunol** 1989 Aug 1;143(3):771–9

A monoclonal anti-IgE antibody against an epitope (amino acids 367–376) in the CH3 domain inhibits IgE binding to the low affinity IgE receptor (CD23). Chrétien I, et al. **J Immunol** 1988 Nov 1;141(9):3128–34

Antipeptide antibody specific for the N-terminal of soluble immune response suppressor neutralizes concanavalin A and IFN-induced suppressor cell activity in an in vitro cytotoxic T lymphocyte response. Devens BH, et al.
J Immunol 1988 Nov 1;141(9):3148–55

Mapping of epitopes recognized by alloreactive cytotoxic T lymphocytes using inhibition by MHC peptides. Heath WR, et al. **J Immunol** 1989 Sep 1;143(5):1441–6

Induction of class I MHC-restricted, peptide-specific cytolytic T lymphocytes by peptide priming in vivo. Ishioka GY, et al. **J Immunol** 1989 Aug 15;143(4):1094–100

Immune response to a synthetic peptide corresponding to an epitope of a parasitophorous vacuole membrane antigen from Plasmodium falciparum. Kara U, et al. **J Immunol** 1989 Aug 15;143(4):1334–9

Analysis of the interaction of peptide hen egg white lysozyme (34–45) with the I-Ak molecule. Lambert LE, et al.
J Immunol 1989 Aug 1;143(3):802–7

Localization of an immune functional site on staphylococcal enterotoxin A using the synthetic peptide approach. Pontzer CH, et al. **J Immunol** 1989 Jul 1;143(1):280–4

Epitopic analysis by anti-I-Ak monoclonal antibodies of I-Ak-restricted presentation of lysozyme peptides. Rosloniec EF, et al. **J Immunol** 1989 Jun 15; 142(12):4176–83

Cell-mediated immune responses to vaccine peptides derived from the circumsporozoite protein of Plasmodium falciparum. Russo DM, et al. **J Immunol** 1989 Jul 15; 143(2):655–9

Effect of conformational propensity of peptide antigens in their interaction with MHC class II molecules. Failure to document the importance of regular secondary structures. Sette A, et al. **J Immunol** 1989 Aug 15;143(4):1268–73

A single amino acid substitution in HLA-A2 can alter the selection of the cytotoxic T lymphocyte repertoire that responds to influenza virus matrix peptide 55–73. Shimojo N, et al. **J Immunol** 1989 Jul 15;143(2):558–64

Reactivity of anti-human milk fat globule antibodies with synthetic peptides. Xing PX, et al. **J Immunol** 1989 May 15;142(10):3503–9

A novel and simple procedure for determining T cell epitopes in protein antigens. Demotz S, et al.
J Immunol Methods 1989 Aug 15;122(1):67–72

Production of antibodies against murine class II antigens using unconjugated synthetic peptides of the beta chain region 63–78. McCormick DJ, et al.
J Immunol Methods 1988 Oct 26;113(2):165–74

A radioimmunoassay for parathymosin alpha using antibodies to synthetic N-terminal peptide 1–30. Tsitsiloni OE, et al.
J Immunol Methods 1988 Oct 26;113(2):175–84

Specificity of chimpanzee antibodies binding a strain-specific HIV-1 neutralization epitope of the external envelope. Goudsmit J, et al. **J Med Primatol** 1989;18(3–4):357–62

A synthetic peptide corresponding to the cleavage region of VP3 from rotavirus SA11 induces neutralizing antibodies. Streckert HJ, et al. **J Virol** 1988 Nov; 62(11):4265–9

Minimum requirements for immunogenic and antigenic activities of homologs of a synthetic peptide of influenza virus hemagglutinin. Tang XL, et al. **J Virol** 1988 Dec; 62(12):4745–51

Antipeptide monoclonal antibodies inhibit the binding of rabies virus glycoprotein and alpha-bungarotoxin to the nicotinic acetylcholine receptor. Bracci L, et al.
Mol Immunol 1988 Sep;25(9):881–8

Delivery of synthetic peptides by anti-class II MHC monoclonal antibodies induces specific adjuvant-free IgG responses in vivo. Carayanniotis G, et al. **Mol Immunol** 1988 Sep;25(9):907–11

Functional domains of human interferon gamma probed with antipeptide antibodies. Lord SC, et al. **Mol Immunol** 1989 Jul;26(7):637–40

Immunomodulatory effect of synthetic peptides corresponding to sequences within the CH2 and CH3 domain of human IgG1. Sármay G, et al. **Mol Immunol** 1988 Nov;25(11):1183–8

Probing the surface of Neisseria gonorrhoeae: immunoelectron microscopic studies to localize cyanogen bromide fragment 2 in gonococcal pili. Robinson EN Jr, et al. **Mol Microbiol** 1989 Jan;3(1):57–64

HIV-1 gag-specific cytotoxic T lymphocytes defined with recombinant vaccinia virus and synthetic peptides. Nixon DF, et al. **Nature** 1988 Dec 1;336(6198):484–7

[Antigenic activity of porcine muscle lactate dehydrogenase fragment 180–214 containing the histidine residue of the isoenzyme active center] Grebenshchikova OG, et al.
Biokhimiia 1989 Mar;54(3):361–9 (Eng. Abstr.) **(Rus)**

[Monoclonal antibodies against the beta subunit of human chorionic gonadotropin] Fidler R, et al.
Biull Eksp Biol Med 1988 Dec;106(12):693–5 (Eng. Abstr.) **(Rus)**

[Isolation and characteristics of antibodies against synthetic fragments of oncoproteins. II. Antiserum against the transforming protein pp60src of Rous sarcoma virus] Mazurenko NN, et al. **Mol Biol (Mosk)** 1988 May-Jun; 22(3):844–52 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Identification of histidyl peptide labeled by 2-(4-bromo-2,3-dioxobutylthio)adenosine 5'-monophosphate in an ADP regulatory site of glutamate dehydrogenase. Batra SP, et al. **Arch Biochem Biophys** 1989 Apr;270(1):277–85

Clonal rat parathyroid cell line expresses a parathyroid hormone-related peptide but not parathyroid hormone itself. Ikeda K, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):108–15

Characterization of the carboxyl terminal flanking peptide of rat progastrin. Wu SV, et al.
Biochem Biophys Res Commun 1989 May 30;161(1):69–74

Isolation of a fibrin-binding fragment from blood coagulation factor XIII capable of cross-linking fibrin(ogen). Greenberg CS, et al. **Biochem J** 1988 Dec 15;256(3):1013–9

Domain structure, stability, and interactions of human complement C1s-: characterization of a derivative lacking most of the B chain. Busby TF, et al. **Biochemistry** 1988 Aug 9;27(16):6127–35

Isolation and characterization of the N-terminal 23-kilodalton fragment of myosin subfragment 1. Mahrad A. **Biochemistry** 1989 May 2;28(9):4002–10

Preparation and characterization of heavy meromyosin and subfragment 1 from vertebrate cytoplasmic myosins. Sellers JR, et al. **Biochemistry** 1988 Sep 6;27(18):6977–82

Lysosomal proteinase-sensitive regions in fast and slow skeletal muscle myosins. Dufour E, et al. **Biochimie** 1989 May;71(5):625–32

Isolation from porcine intestinal extracts of a cholecystokinin-like peptide and a peptide with homology to cytochrome oxidase polypeptide VII and chymodenin. McIntosh CH, et al. **Can J Physiol Pharmacol** 1988 Nov; 66(11):1407–14

The light chain composition of embryonic myosin. Perzanowska A. **Comp Biochem Physiol [B]** 1979; 63(2):189–92

Two isoforms of smooth muscle myosin regulatory light chain in chicken gizzard. Inoue A, et al.
Eur J Biochem 1989 Aug 15;183(3):645–51

Isolation and molecular and functional properties of the amino-terminal domain of colicin A. Knibiehler M, et al.
Eur J Biochem 1989 Apr 15;181(1):109–13

Covalent structure of collagen. Amino acid sequence of an arthritogenic cyanogen bromide peptide from type II collagen of bovine cartilage. Seyer JM, et al.
Eur J Biochem 1989 Apr 15;181(1):159–73

Chains and fragments of tetanus toxin. Separation, reassociation and pharmacological properties. Weller U, et al. **Eur J Biochem** 1989 Jul 1;182(3):649–56

Photolabeled tryptic degradation products of benzodiazepine-binding proteins are glycopeptides. Implications for localization of cleavage sites. Schmitz E, et al. **FEBS Lett** 1989 Feb 27;244(2):433–8

The CH3 domain of pig immunoglobulin G. A study of structural heterogeneity and enzymic fragmentation. Vojtíšková J, et al. **Folia Biol (Praha)** 1986;32(5):311–24

Isolation of the tachykinin, des[Ser1Pro2]scyliorhinin II from the intestine of the ray, Torpedo marmorata. Conlon JM, et al. **Gen Comp Endocrinol** 1988 Sep;71(3):383–8

Glucan-binding domain of a glucosyltransferase from Streptococcus sobrinus: isolation of a 55-kilodalton peptide from a trypsin digest of glucosyltransferase prebound to insoluble glucan. Kobayashi S, et al. **Infect Immun** 1989 Jul;57(7):2210–3

Isoelectric focusing of tryptic peptides from hemoglobin subunits by immobilized pH gradients. Wajcman H, et al.
J Biochem Biophys Methods 1989 Feb;18(1):65–75

Preparation of subfragment-1 from abalone smooth muscle

myosin. Asakawa T, et al. **J Biochem (Tokyo)** 1988 Apr; 103(4):667–71

Protein kinase inhibitor-(6–22)-amide peptide analogs with standard and nonstandard amino acid substitutions for phenylalanine 10. Inhibition of cAMP-dependent protein kinase. Glass DB, et al. **J Biol Chem** 1989 Aug 25; 264(24):14579–84

Isolation and characterization of microplasminogen. A low molecular weight form of plasminogen. Shi GY, et al. **J Biol Chem** 1988 Nov 15;263(32):17071–5

The isolation and chemical characterization of phosphorylated enkephalin-containing peptides from bovine adrenal medulla. Watkinson A, et al. **J Biol Chem** 1989 Feb 25;264(6):3061–5

Scale-up methodology for the preparative purification of peptide M. Knight M, et al. **J Chromatogr** 1988 Dec 28; 459:361–7

Structures of histamine-releasing peptides formed by the action of acid proteases on mammalian albumin(s). Carraway RE, et al. **J Immunol** 1989 Sep 1;143(5):1680–4

Two epitopes and one agretope map to a single HLA-A2 peptide recognized by H-2-restricted T cells. Martinon F, et al. **J Immunol** 1989 May 15;142(10):3489–94

Structural basis for the C4d.1/C4d.2 serologic allotypes of murine complement component C4. Taillon-Miller PA, et al. **J Immunol** 1988 Oct 1;141(7):2382–7

Pemphigus foliaceus antigen: characterization of a keratinocyte envelope associated pool and preparation of a soluble immunoreactive fragment. Labib RS, et al. **J Invest Dermatol** 1989 Aug;93(2):272–9

Type VI collagen: high yields of a molecule with multiple forms of alpha 3 chain from avian and human tissues. Colombatti A, et al. **Matrix** 1989 Jun;9(3):177–85

Preparation of diphtheria toxin fragment A coupled to hormone. Oeltmann TN, et al. **Methods Enzymol** 1988; 165:204–10

Chemotactic fragments of fibronectin. Wikner NE, et al. **Methods Enzymol** 1988;162:214–22

Proteolytic fragment or new gene product? [letter] Hoffman EP, et al. **Nature** 1988 Nov 17;336(6196):210

A rapid and simple method for the separation of four molecular forms of human plasminogen. Nieuwenhuizen W, et al. **Thromb Haemost** 1989 Apr 25;61(2):208–10

[Selective isolation of C-terminal peptides with immobilized anhydrotrypsin] Kumazaki T, et al. **Tanpakushitsu Kakusan Koso** 1989 Feb;34(2):168–76 **(Jpn)**

[Various properties of cardiac troponin C tryptic peptides] Verin AD, et al. **Biokhimiia** 1988 Jul;53(7):1069–77 (Eng. Abstr.) **(Rus)**

METABOLISM

Ca2+ concentration influences the hepatic extraction of bioactive human PTH-(1–34) in rats. D'Amour P, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E87–92

Myosin dephosphorylation during rapid relaxation of hog carotid artery smooth muscle. Driska SP, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C315–21

[Ca2+]-dependent myosin phosphorylation in phorbol diester stimulated smooth muscle contraction. Rembold CM, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C719–23

Structural changes in myosin subfragment 1 by mild denaturation and proteolysis probed by antibodies. Rajasekharan KN, et al. **Arch Biochem Biophys** 1989 Oct; 274(1):304–11

Myosin P-light chain isoenzymes in the human heart: evidence for diphosphorylation of the atrial P-LC form. Morano I, et al. **Basic Res Cardiol** 1989 May-Jun; 84(3):298–305

Phosphorylation and dephosphorylation of the natriuretic peptide urodilatin (CDD-/ANP-95–126) and the effect on biological activity. Dörner T, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):830–5

Preferential cleavage of amino- and carboxyl-terminal oligopeptides from vasoactive intestinal polypeptide by human recombinant enkephalinase (neutral endopeptidase, EC 3.4.24.11). Goetzl EJ, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):850–4

Comparison of the conformation and GTP hydrolysing ability of N-terminal ras p21 protein segments. Niu CH, et al. **Biochem Biophys Res Commun** 1989 Apr 14; 160(1):282–8

The effect of nucleotide upon a specific isomerization of actomyosin subfragment 1. Geeves MA, et al. **Biochem J** 1988 Nov 15;256(1):41–6

Effects of deletion of tropomyosin overlap on regulated actomyosin subfragment 1 ATPase. Heeley DH, et al. **Biochem J** 1989 Mar 15;258(3):831–6

Calcium rather than cyclic AMP is an intracellular messenger of parathyroid hormone action on glycogen metabolism in isolated rat hepatocytes. Mine T, et al. **Biochem J** 1989 Mar 15;258(3):889–94

Insulin proteinase liberates from glucagon a fragment known to have enhanced activity against Ca2+ + Mg2+-dependent ATPase. Rose K, et al. **Biochem J** 1988 Dec 15;256(3):847–51

Hydrolysis of alpha-human atrial natriuretic peptide in vitro by human kidney membranes and purified endopeptidase-24.11. Evidence for a novel cleavage site. Vanneste Y, et al. **Biochem J** 1988 Sep 1;254(2):531–7

Location and characterization of the warfarin binding site of human serum albumin. A comparative study of two large fragments. Bos OJ, et al. **Biochem Pharmacol** 1988 Oct 15; 37(20):3905–9

Myosin light chain and heavy chain phosphorylation in smooth muscle: potential regulatory roles for calcium, phospholipids and cyclic nucleotides. Hathaway DR, et al. **Biochem Soc Trans** 1988 Aug;16(4):499–501

Characterization of the ethenoadenosine diphosphate binding site of myosin subfragment 1. Energetics of the equilibrium between two states of nucleotide.S1 and vanadate-induced global conformation changes detected by energy transfer. Aguirre R, et al. **Biochemistry** 1989 Jan 24;28(2):799–807

Cross-linking of the skeletal myosin subfragment 1 heavy chain to the N-terminal actin segment of residues 40–113. Bertrand R, et al. **Biochemistry** 1988 Jul 26;27(15):5728–36

Demembranated muscle fibers catalyze a more rapid exchange between phosphate and adenosine triphosphate than actomyosin subfragment 1. Bowater R, et al. **Biochemistry** 1988 Jul 12;27(14):5314–23

Dicyclohexylcarbodiimide cross-links two conserved residues, Asp-184 and Lys-72, at the active site of the catalytic subunit of cAMP-dependent protein kinase. Buechler JA, et al. **Biochemistry** 1989 Mar 7;28(5):2065–70

Modification of two peptides of bacteriorhodopsin with a pentaamminecobalt (III) complex. Engelhard M, et al. **Biochemistry** 1989 Jun 27;28(13):5432–8

Dynamic interaction between actin and myosin subfragment 1 in the presence of ADP. Geeves MA. **Biochemistry** 1989 Jul 11;28(14):5864–71

Effect of nucleotide structure on cardiac myosin subfragment 1 transient kinetics. Hazzard JH, et al. **Biochemistry** 1989 Jan 24;28(2):807–13

Orientation of actin monomer in the F-actin filament: radial coordinate of glutamine-41 and effect of myosin subfragment 1 binding on the monomer orientation [published erratum appears in Biochemistry 1988 Nov 1;27(22):8508] Kasprzak AA, et al. **Biochemistry** 1988 Jun 14;27(12):4512–22

Primary and secondary structural determinants in the receptor binding sequence beta-(38–57) from human luteinizing hormone. Keutmann HT, et al. **Biochemistry** 1988 Dec 13;27(25):8939–44

The Ff gene 5 protein-d(pA)40–60 complex: 1H NMR supports a localized base-binding model. King GC, et al. **Biochemistry** 1988 Sep 6;27(18):6947–53

Serine-324 of myosin's heavy chain is photoaffinity-labeled by 3'(2')-O-(4-benzoylbenzoyl)adenosine triphosphate. Mahmood R, et al. **Biochemistry** 1989 May 2;28(9):3989–95

High-resolution NMR studies of fibrinogen-like peptides in solution: structure of a thrombin-bound peptide corresponding to residues 7–16 of the A alpha chain of human fibrinogen. Ni F, et al. **Biochemistry** 1989 Apr 4; 28(7):3094–105

Binding of amphiphilic peptides to a carboxy-terminal tryptic fragment of calmodulin. Sanyal G, et al. **Biochemistry** 1988 Aug 23;27(17):6229–36

Cation dependence of opioid receptor binding supports theory on membrane-mediated receptor selectivity. Sargent DF, et al. **Biochemistry** 1988 Jul 12;27(14):4974–7

Subtilisin-cleaved actin: polymerization and interaction with myosin subfragment 1. Schwyter D, et al. **Biochemistry** 1989 Jul 11;28(14):5889–95

Transient kinetics of the interaction of 1,N6-ethenoadenosine 5'-triphosphate with myosin subfragment 1 under normal and cryoenzymic conditions: a comparison with adenosine 5'-triphosphate. Tesi C, et al. **Biochemistry** 1988 Jun 28; 27(13):4903–8

Irreversible degradation of histidine-96 of prothrombin fragment 1 during protein acetylation: another unusually reactive site in the kringle. Welsch DJ, et al. **Biochemistry** 1988 Sep 20;27(19):7513–9

Amino-terminal alanine functions in a calcium-specific process essential for membrane binding by prothrombin fragment 1. Welsch DJ, et al. **Biochemistry** 1988 Jun 28; 27(13):4939–45

Chemical modification of prothrombin fragment 1: documentation of sequential, two-stage loss of protein function. Welsch DJ, et al. **Biochemistry** 1988 Jun 28; 27(13):4933–8

Carbohydrate-linked asparagine-101 of prothrombin contains a metal ion protected acetylation site. Acetylation of this site causes loss of metal ion induced protein fluorescence change. Welsch DJ, et al. **Biochemistry** 1988 Jun 28;27(13):4946–52

Cooperative turning on of myosin subfragment 1 adenosinetriphosphatase activity by the troponin-tropomyosin-actin complex. Williams DL Jr, et al. **Biochemistry** 1988 Sep 6;27(18):6987–93

Binding manner of actin to the lysine-rich sequence of myosin subfragment 1 in the presence and absence of ATP. Yamamoto K. **Biochemistry** 1989 Jun 27;28(13):5573–7

Effects of ATP reduction on the pattern of force development and myosin light chain phosphorylation in intact arterial smooth muscle. Barron JT, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):278–82

The cyanogen bromide fragment I of asialoorosomucoid is transported more efficiently than asialoorosomucoid in rat hepatocytes. Chang TM, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):166–76

Synthetic peptides reproducing the EGF-receptor segment homologous to the pp60v-src phosphoacceptor site. Phosphorylation by tyrosine protein kinases. Cola C, et al. **Biochim Biophys Acta** 1989 Jul 11;1012(2):191–5

The phosphorylation of calmodulin and calmodulin fragments by kinase fractions from bovine brain. Heppel LA, et al. **Biochim Biophys Acta** 1988 Oct 28;972(1):69–78

Pinpointing the sites of hydroxylysine glycosides in peptide alpha 1-CB7 of bovine corneal collagen, and their possible role in determining fibril diameter and thus transparency. Ibrahim J, et al. **Biochim Biophys Acta** 1989 Jul 21; 992(1):9–22

Major proteolytic fragments of the murine band 3 protein as obtained after in situ proteolysis. Raida M, et al. **Biochim Biophys Acta** 1989 Apr 28;980(3):291–8

Interaction of human gamma-carboxyglutamic acid domainless prothrombin with phospholipids. Lecompte MF, et al. **Biochimie** 1989 Jan;71(1):175–81

Pituitary changes of desacetyl-alpha-melanocyte-stimulating hormone throughout development. Facchinetti F, et al. **Biol Neonate** 1988;54(2):86–92

Biochemical kinetics of skeletal actosubfragment-1 at high subfragment-1 concentrations. Stein LA, et al. **Biophys J** 1989 Aug;56(2):263–72

Binding of the neurotrophic peptide Org 2766 to rat spinal cord sections is affected by a sciatic nerve crush. Dekker AJ, et al. **Brain Res** 1989 Jan 16;477(1–2):327–31

L(+)-2-amino-4-phosphonobutyrate inhibits the release of both glutamate and dynorphin from guinea pig but not rat hippocampal mossy fiber synaptosomes. Gannon RL, et al. **Brain Res** 1989 Aug 21;495(1):151–5

Demonstration of calcitonin gene-related peptide immunoreactive axons contacting dynorphin A(1–8) immunoreactive spinal neurons in a rat model of peripheral inflammation and hyperalgesia. Takahashi O, et al. **Brain Res** 1988 Dec 13;475(1):168–72

Beta-adrenergic and opioid receptors on pituicytes cultured from adult rat neurohypophysis: regulation of cell morphology. Bicknell RJ, et al. **Brain Res Bull** 1989 Feb; 22(2):379–88

Expression in heterologous cells of the unusual cytoplasmic domain of rat brain 5B4/NCAM-ld. Ramos P, et al. **Brain Res Mol Brain Res** 1989 Jul;6(1):61–8

Separate binding sites for intact PTH 1–84 and synthetic PTH 1–34 in canine kidney. Garcia JC, et al. **Calcif Tissue Int** 1989 Mar;44(3):214–9

Biochemical kinetics of porcine cardiac subfragment-1. II. Pre-steady-state studies of the initial phosphate burst. Stein LA, et al. **Circ Res** 1989 Aug;65(2):515–25

Aminoterminal propeptide of type III procollagen is cleared from the circulation by receptor-mediated endocytosis in liver endothelial cells. Smedsrød B. **Coll Relat Res** 1988 Jul;8(4):375–88

Calcium binding and calcium-sensitivity of heavy meromyosin and subfragment-1 from squid (Todarodes pacificus) mantle and scallop (Patinopecten yessoensis) adductor muscles. Kamiya S, et al. **Comp Biochem Physiol [B]** 1989;92(3):481–6

Ba and Bb fragments of factor B activation: fragment production, biological activities, neoepitope expression and quantitation in clinical samples. Kolb WP, et al. **Complement Inflamm** 1989;6(3):175–204 (114 ref.)

Binding studies with intact rat prolactin and a 16K fragment of the hormone. Clapp C, et al. **Endocrinology** 1989 Aug; 125(2):1054–9

Morphine directly modulates the release of stimulated corticotrophin-releasing factor-41 from rat hypothalamus in vitro. Tsagarakis S, et al. **Endocrinology** 1989 May; 124(5):2330–5

Biological properties of an initial degradation product of insulin by insulin-degrading enzyme. Yonezawa K, et al. **Endocrinology** 1989 Jan;124(1):496–504

Interaction of staphylococcal delta-toxin and synthetic analogues with erythrocytes and phospholipid vesicles. Biological and physical properties of the amphipathic peptides. Alouf JE, et al. **Eur J Biochem** 1989 Aug 1; 183(2):381–90

The influence of substoichiometric concentrations of myosin subfragment 1 on the state of aggregation of actin under depolymerizing conditions. Grazi E, et al. **Eur J Biochem** 1989 Jun 15;182(2):277–82

Binding and uptake of Col 1(I), a peptide capable of inhibiting collagen synthesis in fibroblasts. Schlumberger W, et al. **Eur J Cell Biol** 1988 Jun;46(2):244–52

NMR studies of the interactions of substrates with enzymes and their peptide fragments. Mildvan AS. **FASEB J** 1989 Apr;3(6):1705–14 (43 ref.)

Highly potent and small neuropeptide Y agonist obtained by linking NPY 1–4 via spacer to alpha-helical NPY 25–36. Beck A, et al. **FEBS Lett** 1989 Feb 13;244(1):119–22

Selective cleavage at lysine of the 50 kDa-20 kDa connector loop segment of skeletal myosin S-1 by endoproteinase Arg-C. Bertrand R, et al. **FEBS Lett** 1989 Mar 27; 246(1–2):171–6

Deglycosylation of the chymotryptic collagen-binding fragment of human plasma fibronectin does not modify its affinity to denatured collagen. Delannoy P, et al. **FEBS Lett** 1989 Apr 10;247(1):25–7

Chemical characterization of ligand binding site fragments from turkey beta-adrenergic receptor. Eshdat Y, et al. **FEBS Lett** 1989 Mar 27;246(1–2):166–70

Selective cleavage of skeletal myosin subfragment-1 to form a 26 kDa peptide which shows ATP-sensitive actin binding. Griffiths AJ, et al. **FEBS Lett** 1989 Jan 2; 242(2):275–8

Binding characteristics of complementary fibronectin

fragments on artificial substrata. Lewandowska K, et al. **FEBS Lett** 1988 Sep 12;237(1-2):35-9

Dependence of the length of the heavy chain of chymotryptic subfragment 1 on the temperature of myosin digestion. Pliszka B, et al. **FEBS Lett** 1989 Jan 16;243(1):30-2

Y1 and Y2 receptors for neuropeptide Y. Sheikh SP, et al. **FEBS Lett** 1989 Mar 13;245(1-2):209-14

Location of DNA-binding segment of a positive regulator, OmpR, involved in activation of the ompF and ompC genes of Escherichia coli. Tate S, et al. **FEBS Lett** 1988 Dec 19;242(1):27-30

Expression of the binding molecules for factor B and its fragment, Bb, of human complement on human monocytes after in vitro cultivation. Saeki T, et al. **Immunol Lett** 1989 Jan 31;20(2):97-101

A comparative study of the change in ATPase activity of proteolytic fragments of myosin in relation to the presence of DTNB light chains. Anand S.
Indian J Biochem Biophys 1985 Dec;22(6):360-3

Cyanogen bromide cleavage of bovine secretory component and its tryptic fragments. Beale D. **Int J Biochem** 1988; 20(8):873-9

Interaction of basic extension peptide fragments of adrenodoxin precursor with phospholipid vesicles. Aoyagi H, et al. **Int J Pept Protein Res** 1988 Nov;32(5):406-14

Estimated membrane structure and receptor subtype selection of an opioid alkaloid-peptide hybrid. Schwyzer R.
Int J Pept Protein Res 1988 Dec;32(6):476-83

Fluorescence quenching studies of fluorescein attached to Lys-61 or Cys-374 in actin: effects of polymerization, myosin subfragment-1 binding, and tropomyosin-troponin binding. Miki M, et al. **J Biochem (Tokyo)** 1988 Aug; 104(2):232-5

Elementary steps of the actin-activated ATPase reaction of cardiac muscle myosin subfragment-1. Miyata M, et al. **J Biochem (Tokyo)** 1988 May;103(5):750-4

The steady state intermediate of scallop smooth muscle myosin ATPase and effect of light chain phosphorylation. A molecular mechanism for catch contraction. Takahashi M, et al. **J Biochem (Tokyo)** 1988 Jul;104(1):102-7

Oxygen exchange during the acto-subfragment-1 ATPase reaction: evidence for the two-route mechanism of the actomyosin ATPase reaction. Yasui M, et al.
J Biochem (Tokyo) 1988 Oct;104(4):550-6

Translocation of a fragment of invertase across microsomal vesicles isolated from Neurospora crassa requires the hydrolysis of a nucleoside triphosphate. Addison R.
J Biol Chem 1988 Oct 5;263(28):14281-7

Increase of the DNA strand assimilation activity of recA protein by removal of the C terminus and structure-function studies of the resulting protein fragment. Benedict RC, et al. **J Biol Chem** 1988 Oct 25; 263(30):15513-20

Binding of ADP and 5'-adenylyl imidodiphosphate to rabbit muscle myofibrils. Biosca JA, et al. **J Biol Chem** 1988 Oct 5;263(28):14231-5

The actin-myosin subfragment-1 complex stabilized by phenyldiglyoxal. Bonet A, et al. **J Biol Chem** 1988 Oct 5;263(28):14115-21

The effect of actin and phosphorylation on the tryptic cleavage pattern of Acanthamoeba myosin IA. Brzeska H, et al. **J Biol Chem** 1989 Jun 15;264(17):10243-50

Isolation and characterization of a small catalytic domain released from the adenylate cyclase from Escherichia coli by digestion with trypsin. Holland MM, et al.
J Biol Chem 1988 Oct 15;263(29):14661-8

Vitamin K-dependent carboxylation. In vitro modification of synthetic peptides containing the gamma-carboxylation recognition site. Hubbard BR, et al. **J Biol Chem** 1989 Aug 25;264(24):14145-50

Characterization of thermotropic state changes in myosin subfragment-1 and heavy meromyosin by UV difference spectroscopy. Kamath U, et al. **J Biol Chem** 1989 Apr 5; 264(10):5586-92

Resistance of heparinase-derived heparin fragments to biotransformation. Larsen AK, et al. **J Biol Chem** 1989 Jan 25;264(3):1570-7

Limited proteolysis of T-kininogen (thiostatin). Release of comparable fragments by different endopeptidases. Moreau T, et al. **J Biol Chem** 1989 Mar 15;264(8):4298-303

Translocation of diphtheria toxin A-fragment to the cytosol. Role of the site of interfragment cleavage. Moskaug JO, et al. **J Biol Chem** 1989 Sep 15;264(26):15709-13

Removal of tropomyosin overlap modifies cooperative binding of myosin S-1 to reconstituted thin filaments of rabbit striated muscle. Pan BS, et al. **J Biol Chem** 1989 May 25;264(15):8495-8

Phospholipid binding properties of bovine prothrombin peptide residues 1-45. Pollock JS, et al. **J Biol Chem** 1988 Oct 5;263(28):14216-23

Conformation-directed recombination of enzyme-activated peptide fragments: a simple and efficient means to protein engineering. Its use in the creation of cytochrome c analogues for structure-function studies. Proudfoot AE, et al. **J Biol Chem** 1989 May 25;264(15):8764-70

Studies of ligand-induced conformational perturbations in myosin subfragment 1. An examination of the environment about the SH2 and SH1 thiols using a photoprobe. Rajasekharan KN, et al. **J Biol Chem** 1989 Jun 25; 264(18):10810-9

Trypsin cleavage in the COOH terminus of the bacteriophage T4 gene 41 DNA helicase alters the primase-helicase activities of the T4 replication complex in vitro. Richardson RW, et al. **J Biol Chem** 1989 Mar 15;264(8):4732-9

Methylation of microinjected isoaspartyl peptides in Xenopus oocytes. Competition with protein carboxyl methylation reactions. Romanik EA, et al. **J Biol Chem** 1989 Aug 25; 264(24):14050-6

Proteolytic fragmentation and peptide mapping of human carboxyamidomethylated tracheobronchial mucin. Rose MC, et al. **J Biol Chem** 1989 May 15;264(14):8193-9

Calcium dependence of myosin light chain phosphorylation in smooth muscle cells. Taylor DA, et al. **J Biol Chem** 1988 Oct 5;263(28):14456-62

The regulatory light chain is required for folding of smooth muscle myosin. Trybus KM, et al. **J Biol Chem** 1988 Nov 5;263(31):16485-92

Regular fragmentation of hydrogen peroxide-treated fibronectin. Vartio T. **J Biol Chem** 1989 Mar 15; 264(8):4471-5

Electrostatic and hydrophobic interactions of synapsin I and synapsin I fragments with phospholipid bilayers. Benfenati F, et al. **J Cell Biol** 1989 May;108(5):1851-62

Expression of normal and mutant avian integrin subunits in rodent cells. Solowska J, et al. **J Cell Biol** 1989 Aug; 109(2):853-61

Metabolic clearance rate and urinary clearance of purified beta-core. Wehmann RE, et al.
J Clin Endocrinol Metab 1989 Sep;69(3):510-7

Endothelial cell-mediated conversion of Glu-plasminogen to Lys-plasminogen. Further evidence for assembly of the fibrinolytic system on the endothelial cell surface. Hajjar KA, et al. **J Clin Invest** 1988 Nov;82(5):1769-78

Binding of Lys-plasminogen to monocytes/macrophages. Silverstein RL, et al. **J Clin Invest** 1988 Dec;82(6):1948-55

Morphological types of spinomesencephalic neurons in the marginal zone (lamina I) of the rat spinal cord, as shown after retrograde labelling with cholera toxin subunit B. Lima D, et al. **J Comp Neurol** 1989 Jan 8;279(2):327-39

Immunofluorescent localization of type III collagen and the N-terminal propeptide of type III procollagen in dentin matrix in osteogenesis imperfecta. Lukinmaa PL.
J Craniofac Genet Dev Biol 1988;8(3):235-43

T cell activation by preformed, long-lived Ia-peptide complexes. Quantitative aspects. Watts TH. **J Immunol** 1988 Dec 1;141(11):3708-14

Pro-opiomelanocortin mRNA levels fall in the fetal sheep pituitary before birth. McMillen IC, et al.
J Mol Endocrinol 1988 Sep;1(2):141-5

The expression of progastrin, procholecystokinin and their hormonal products in pituitary cells. Rehfeld JF.
J Mol Endocrinol 1988 Sep;1(2):87-94 (68 ref.)

SH-1 modification of rabbit myosin interferes with calcium regulation. Titus MA, et al. **J Muscle Res Cell Motil** 1989 Feb;10(1):25-33

Limited tryptic proteolysis of the benzodiazepine binding proteins in different species reveals structural homologies. Friedl W, et al. **J Neurochem** 1988 Dec;51(6):1877-81

Inactivation of dynorphin-(1-8) in isolated preparations by three peptidases. Numata H, et al. **Jpn J Pharmacol** 1988 Aug;47(4):417-23

Postoperative changes in hemostasis analyzed by the serial determination of fibrinopeptides and D-dimer. Kang J, et al. **Jpn J Surg** 1989 May;19(3):262-8 (26 ref.)

Is peptide T, an octapeptide sequence found in the external glycoprotein coat of the human immunodeficiency virus (HIV), a fragment of a retro-copy of the gamma-3-MSH neuropeptide? Dominy SS. **Med Hypotheses** 1988 Sep; 27(1):1-4

Isolation of fragments of ribosomal proteins that recognize rRNA. Changchien LM, et al. **Methods Enzymol** 1988; 164:258-70

Polyphosphoinositides, generation of second messengers, myosin light chain phosphorylation and contraction in rabbit iris sphincter smooth muscle. Abdel-Latif AA.
Mol Cell Biochem 1988 Jul-Aug;82(1-2):125-30

Comparison of ATPase activities and heavy chains of rabbit atrial and thyrotoxic ventricular myosin subfragment-1. Banerjee SK, et al. **Mol Cell Biochem** 1988 Sep;83(1):55-63

Porcine thyroid peroxidase: relationship between the native enzyme and an active, highly purified tryptic fragment [published erratum appears in Mol Endocrinol 1988 Dec;2(12):1201] Yokoyama N, et al. **Mol Endocrinol** 1988 Sep;2(9):838-44

Enhancement of the phosphorylation of membrane bound myosin light chain by antigen stimulation in rat basophilic leukemia cells. Teshima R, et al. **Mol Immunol** 1989 Jul; 26(7):641-8

Analysis of the membrane-binding domain of penicillin-binding protein 5 of Escherichia coli. Jackson ME, et al. **Mol Microbiol** 1988 Sep;2(5):563-8

Formation of reverse rigor chevrons by myosin heads. Reedy MC, et al. **Nature** 1989 Jun 8;339(6224):481-3

Glomerular deposition of C4 cleavage fragment (C4d) and C4-binding protein in idiopathic membranous glomerulonephritis. Kusunoki Y, et al. **Nephron** 1989; 51(1):17-9

Specificity of action of human brain alanyl aminopeptidase on Leu-enkephalin and dynorphin-related peptides. Gibson AM, et al. **Neuropeptides** 1989 May-Jun;13(4):259-62

Modulation of [3H]DAGO binding by substance P (SP) and SP fragments in the mouse brain and spinal cord via MU1 interactions. Krumins SA, et al. **Neuropeptides** 1989 May-Jun;13(4):225-33

Peripheral inflammation is associated with increased dynorphin immunoreactivity in both projection and local circuit neurons in the superficial dorsal horn of the rat lumbar spinal cord. Nahin RL, et al. **Neurosci Lett** 1989 Jan 30;96(3):247-52

Biochemical mapping of cholecystokinin-, substance P-, [Met]enkephalin-, [Leu]enkephalin- and dynorphin A (1-8)-like immunoreactivities in the human cerebral cortex. Taquet H, et al. **Neuroscience** 1988 Dec;27(3):871-83

Enhancement of dynorphin gene expression in spinal cord following experimental inflammation: stimulus specificity, behavioral parameters and opioid receptor binding. Iadarola MJ, et al. **Pain** 1988 Dec;35(3):313-26

Neuropeptide K-(1-24)-peptide: storage and release by carcinoid tumors. Conlon JM, et al. **Peptides** 1988 Jul-Aug; 9(4):859-66

Habenular modulation of dynorphinergic systems in rat ventral mesencephalon. Ichikawa H, et al. **Peptides** 1988 Sep-Oct;9(5):1107-14

Removal of Arg1 and Phe22 from CLIP (ACTH18-39) by rodent pituitary and blood peptidases. McDermott JR, et al. **Peptides** 1988 Jul-Aug;9(4):757-61

Formation of aggregates of tryptic fragments derived from the carboxyl-terminal half of pea phytochrome and localization of the site of contact between the fragments by amino-terminal amino acid sequence analysis. Yamamoto KT, et al. **Photochem Photobiol** 1989 Jul; 50(1):113-20

Decreased [3H]-naloxone binding and elevated dynorphin-A(1-8) content in Zucker rat brain. Roane DS, et al. **Physiol Behav** 1988;43(3):371-4

On the origin and transmission of force in actomyosin subfragment 1. Botts J, et al.
Proc Natl Acad Sci U S A 1989 Apr;86(7):2204-8

Modifying preselected sites on proteins: the stretch of residues 633-642 of the myosin heavy chain is part of the actin-binding site. Chaussepied P, et al.
Proc Natl Acad Sci U S A 1988 Oct;85(20):7471-5

Dynamic properties of membrane proteins: reversible insertion into membrane vesicles of a colicin E1 channel-forming peptide. Xu S, et al.
Proc Natl Acad Sci U S A 1988 Oct;85(20):7531-5

Reduced somatostatin-28-(1-12)-like immunoreactivity in cerebral cortex of dogs with an Eck fistula and somatostatin molecular forms in brain. Tateishi K, et al. **Regul Pept** 1988 Dec;23(3):247-59

Localization and characterization of fibronectin-binding to group A streptococci. An electron microscopic study using protein-gold-complexes. Wagner B, et al.
Zentralbl Bakteriol Mikrobiol Hyg [A] 1988 Nov; 269(4):479-91

[Glucagon is processed to the (19-29) fragment at the level of the hepatocyte membrane] Blache P, et al.
C R Acad Sci [III] 1989;308(17):467-72 (Eng. Abstr.) **(Fre)**

[Enzymatic cleavage of human neurophysin into 2 sub-domains containing 3 and 4 disulfides] Chauvet J, et al. **C R Acad Sci [III]** 1988;307(18):811-6 (Eng. Abstr.) **(Fre)**

[Coagulation and fibrinolysis in chronic subdural hematoma. Measurement of fibrinopeptides] Harada K, et al.
Neurol Med Chir (Tokyo) 1989 Feb;29(2):113-6 (Eng. Abstr.) **(Jpn)**

[Molecular markers of hemostatic mechanisms--fibrinopeptide A and fibrinopeptide B beta 15-42] Kobayashi N. **Rinsho Byori** 1989 Mar;37(3):231-3 **(Jpn)**

[An analysis of disseminated intravascular coagulation by fibrinopeptides] Gando S, et al. **Rinsho Ketsueki** 1988 Dec; 29(12):2250-5 (Eng. Abstr.) **(Jpn)**

[Effect of phosphorylation of light chain myosin and Ca2+ on the conformation of F-actin during skeletal muscle contraction] Borovikov IuS, et al. **Biokhimiia** 1989 Jan; 54(1):162-6 (Eng. Abstr.) **(Rus)**

[The effect of proteolysis of myosin heads on conformational changes induced by them in F-actin] Borovikov IuS, et al. **Biokhimiia** 1988 Oct;53(10):1754-7 (Eng. Abstr.) **(Rus)**

[Binding of lys-plasminogen to E-fragment of fibrinogen] Kudinov SA, et al. **Biokhimiia** 1988 Oct;53(10):1684-90 (Eng. Abstr.) **(Rus)**

[A study of enzymatic hydrolysis of splenopentin and its analogs in human serum] Isakova OL, et al.
Bioorg Khim 1989 Apr;15(4):453-9 (Eng. Abstr.) **(Rus)**

[Receptor properties of the hemagglutinin of influenza virus and its polypeptide fragments] Iurkina EA, et al.
Mol Gen Mikrobiol Virusol 1988 Jun;(6):43-8 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

The immune-enhancing effect of perioperative thymopentin administration in elderly patients undergoing major surgery. Faist E, et al. **Arch Surg** 1988 Dec;123(12):1449-53

Autoradiographic studies of the renal clearance of circulating type I collagen fragments in the rat. Rucklidge GJ, et al. **Coll Relat Res** 1988 Jul;8(4):339-48

Uptake of polypeptide fragments of proteins by rat intestine in vitro and in vivo. Bloch KJ, et al. **Gastroenterology** 1988 Nov;95(5):1272-8

PHARMACOLOGY

Influence of estrogen administration on growth hormone response to GHRH and L-Dopa in patients with Turner's syndrome. Schober E, et al. **Acta Endocrinol (Copenh)** 1989 Apr;120(4):442–6

Response to growth hormone-releasing hormone as evidence of hypothalamic defect in optic nerve hypoplasia. Leaf AA, et al. **Acta Paediatr Scand** 1989 May;78(3):436–9

Effects of calcitonin, katacalcin, and calcitonin gene-related peptide on basal and TSH-stimulated thyroid hormone secretion in the mouse. Ahrén B. **Acta Physiol Scand** 1989 Feb;135(2):133–7

Renal interaction between sympathetic activity and ANP in rats with chronic ischaemic heart failure. Pettersson A, et al. **Acta Physiol Scand** 1989 Apr;135(4):487–92

The action of parathyroid hormone on bone metabolism may be regulated by endogenously synthesized prostaglandin E2. Yang CY, et al.
Adv Prostaglandin Thromboxane Leukotriene Res 1989; 19:435–8

Effect of des arginine9-bradykinin and other bradykinin fragments on the synthesis of prostacyclin and the binding of bradykinin by vascular cells in culture. Cahill M, et al. **Agents Actions** 1988 Jul;24(3–4):224–31

The effects of alpha-human atrial natriuretic polypeptide on steroidogenesis by fetal zone cells of the human fetal adrenal gland. Carr BR, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1361–5

Effects of fibronectin and its peptide fragment on preimplantation mouse embryo. Tsuiki A, et al.
Am J Obstet Gynecol 1989 Mar;160(3):724–8

ANF inhibits glucose-stimulated insulin secretion in mouse and rat. Ahrén B. **Am J Physiol** 1988 Nov;255(5 Pt 1):E579–82

Cardiovascular effects of angiotensin-(1-7) injected into the dorsal medulla of rats. Campagnole-Santos MJ, et al.
Am J Physiol 1989 Jul;257(1 Pt 2):H324–9

Renal dose response and pharmacokinetics of atrial natriuretic factor in dogs. Cernacek P, et al.
Am J Physiol 1988 Dec;255(6 Pt 2):R929–35

Calcitonin gene-related peptide receptor antagonist human CGRP-(8–37). Chiba T, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):E331–5

Parathyroid hormone stimulates ammoniagenesis in canine renal proximal tubular segments. Chobanian MC, et al.
Am J Physiol 1988 Nov;255(5 Pt 2):F847–52

Cardiovascular effects of dynorphin A-(1-13) and arginine vasopressin in fetal lambs. Dunlap CE 3d, et al.
Am J Physiol 1989 Jun;256(6 Pt 2):R1318–24

Beta-receptors in resistance to phosphaturic effect of PTH in respiratory alkalosis. Hoppe A, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):R557–62

Effect of ANP on sustained aldosterone secretion stimulated by angiotensin II. Isales CM, et al. **Am J Physiol** 1989 Jan; 256(1 Pt 1):C89–95

Physiological doses of atrial peptide inhibit angiotensin II-stimulated aldosterone secretion. Metzler CH, et al.
Am J Physiol 1989 May;256(5 Pt 2):R1155–9

[Ala6]gastrin-releasing peptide-10: an analogue with dissociated biological activities. Mukai H, et al.
Am J Physiol 1989 Aug;257(2 Pt 1):E235–40

Effect of synthetic tumoral PTH-related peptide on cAMP production and Na-dependent Pi transport. Pizurki L, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):F957–61

Effects of lectins and tunicamycin on cAMP response to parathyroid hormone. Rizzoli R, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E80–6

Behavioral effects of bombesin. Cowan A.
Ann N Y Acad Sci 1988;547:204–9

Splenopentin—influence on antibody formation in immunosuppressed animals and on phagocytic capability of human granulocytes. Diezel W, et al.
Arch Geschwulstforsch 1989;59(3):161–4

Stimulation of the hyaluronic acid levels of human synovial fibroblasts by recombinant human tumor necrosis factor alpha, tumor necrosis factor beta (lymphotoxin), interleukin-1 alpha, and interleukin-1 beta. Butler DM, et al. **Arthritis Rheum** 1988 Oct;31(10):1281–9

Decrease of bleeding time by a peptide fraction from bovine factor VIII in laboratory animals. Gervasi GB, et al.
Arzneimittelforschung 1988 Sep;38(9):1268–70

Improvement of memory by a vasopressin fragment: importance of individual differences in mnemonic function. Strupp BJ. **Behav Neurosci** 1989 Aug;103(4):743–54

Synthetic peptides based on the calmodulin-binding domain of myosin light chain kinase inhibit activation of other calmodulin-dependent enzymes. Blumenthal DK, et al.
Biochem Biophys Res Commun 1988 Oct 31;156(2):860–5

Bioactivity of synthetic C-terminal fragment of rat pancreastatin on endocrine pancreas. Funakoshi A, et al.
Biochem Biophys Res Commun 1989 Feb 15;158(3):844–9

Parathyroid hormone alteration of free and tRNA-bound proline specific activities in cultured mouse osteoblast-like cells. Hall GE, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):994–1000

Induction of angiotensin-converting enzyme inhibitory activity by acid-limited proteolysis of glyceraldehyde 3-phosphate dehydrogenase. Kohama Y, et al.
Biochem Biophys Res Commun 1989 Jun 15;161(2):456–60

Inhibition by 17 beta-estradiol of PTH stimulated resorption and prostaglandin production in cultured neonatal mouse calvariae. Pilbeam CC, et al.
Biochem Biophys Res Commun 1989 Sep 29;163(3):1319–24

Heterologous up-regulation of the 1,25-dihydroxyvitamin D3 receptor by parathyroid hormone (PTH) and PTH-like peptide in osteoblast-like cells. Pols HA, et al.
Biochem Biophys Res Commun 1988 Oct 14;156(1):588–94

C-terminal angiogenin peptides inhibit the biological and enzymatic activities of angiogenin. Rybak SM, et al.
Biochem Biophys Res Commun 1989 Jul 14;162(1):535–43

Laminin A chain synthetic peptide which supports neurite outgrowth. Sephel GC, et al.
Biochem Biophys Res Commun 1989 Jul 31;162(2):821–9

Parathyroid hormone 1-34, but not 3-34 or 7-34, transiently translocates protein kinase C in cultured renal (OK) cells. Tamura T, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1352–8

Interference of blood-coagulation vitamin K-dependent proteins in the activation of human protein C. Involvement of the 4-carboxyglutamic acid domain in two distinct interactions with the thrombin-thrombomodulin complex and with phospholipids. Freyssinet JM, et al.
Biochem J 1988 Dec 1;256(2):501–7

The peptide encoded by angiotensin II complementary RNA does not interfere with angiotensin II action [letter] Guillemette G, et al. **Biochem J** 1989 Jul 1;261(1):309

Influence of heparin fragments on the biological activities of elastase(s) and alpha 1 proteinase inhibitor. Redini F, et al. **Biochem Pharmacol** 1988 Nov 15;37(22):4257–61

Fibrin(ogen) peptide B beta 15-42 inhibits platelet aggregation and fibrinogen binding to activated platelets. Chen CS, et al. **Biochemistry** 1988 Aug 9;27(16):6121–6

Kinetic analysis of covalent hybrid plasminogen activators: effect of CNBr-degraded fibrinogen on kinetic parameters of Glu1-plasminogen activation. Lee PP, et al.
Biochemistry 1988 Sep 20;27(19):7506–13

An analogue of substance P with broad receptor antagonist activity. Zhang L, et al. **Biochim Biophys Acta** 1988 Oct 28;972(1):37–44

Effects of substance P (SP) and the N-terminal SP-analogue SP (1-4) on inositol phospholipids in rat adrenal medulla slices. Minenko A, et al. **Biomed Biochim Acta** 1988; 47(9):871–9

Effect of the N-terminal tetrapeptide of substance P SP (1-4) and tuftsin on the pre- and postsynaptic transmitter outflow in rat adrenal gland slices. Nieber K, et al.
Biomed Biochim Acta 1988;47(7):663–6

Peptide histidine valine-42 stimulates gastric acid secretion in man. Nikou GC, et al. **Biosci Rep** 1989 Jun;9(3):369–74

Antinociceptive properties of lysozyme fragments. Bruzzese T, et al. **Boll Chim Farm** 1989 Jan;128(1):33–7

Effect of synthetic human parathyroid hormone on the levels of alkaline phosphatase activity and formation of alkaline phosphatase-rich matrix vesicles by primary cultures of chicken epiphyseal growth plate chondrocytes. Chin JE, et al. **Bone Miner** 1986 Oct;1(5):421–36

Effect of parathyroid hormone and parathyroid hormone fragments on the intracellular ionized calcium concentration in an osteoblast cell line. van Leeuwen JP, et al. **Bone Miner** 1988 Jun;4(2):177–88

N,N-diallyl-tyrosyl substitution confers antagonist properties on the kappa-selective opioid peptide [D-Pro10]dynorphin A(1-11). Gairin JE, et al. **Br J Pharmacol** 1988 Dec; 95(4):1023–30

Effects of tetrodotoxin on relaxation of pig duodenal circular muscle induced by C-terminal fragments of cholecystokinin. Kimura I, et al. **Br J Pharmacol** 1989 Mar; 96(3):739–45

Brain CCK-B receptors mediate the suppression of dopamine release by cholecystokinin. Altar CA, et al. **Brain Res** 1989 Apr 3;483(2):321–6

Diazepam binding inhibitor-like immunoreactivity(51-70): distribution in human brain, spinal cord and peripheral tissues. Ball JA, et al. **Brain Res** 1989 Feb 13;479(2):300–5

ACTH-(1-24) enhances the electrically stimulated release of [3H]dopamine from rat septal slices via a dopamine D2 receptor-independent mechanism. Florijn WJ, et al.
Brain Res 1989 Aug 14;494(2):247–54

Neurotensin-induced polydipsia: a structure-activity study. Hawkins MF, et al. **Brain Res** 1989 May 15;487(1):188–91

Antagonism of endogenous CRH systems attenuates stress-induced freezing behavior in rats. Kalin NH, et al.
Brain Res 1988 Aug 2;457(1):130–5

TRH fails to antagonize the acute paralytic effects of intrathecal dynorphin A and substance P antagonists in the rat. Martinez-Arizala A, et al. **Brain Res** 1988 Nov 15; 473(2):385–8

Intra-raphe neurokinin-induced hyperactivity: effects of 5,7-dihydroxytryptamine lesions. Paris JM, et al.
Brain Res 1989 Jan 2;476(1):183–8

Effects of intrahypothalamic administration of opioid peptides selective for mu-, kappa, and delta-receptors on different schedules of water intake in the rat. Ukai M, et al. **Brain Res** 1988 Sep 6;459(2):275–81

Cardiovascular effects of substance P receptor stimulation in the ventrolateral medullary pressor and depressor areas. Urbanski RW, et al. **Brain Res** 1989 Jul 10;491(2):383–9

Effects of locally infused pharmacological agents on spontaneous and sensory-evoked activity of locus coeruleus neurons. Adams LM, et al. **Brain Res Bull** 1988 Sep;21(3):395–400

Cyclic nucleotides and the rapid inhibitions of bone 45Ca uptake in response to bovine parathyroid hormone and 16,16-dimethyl prostaglandin E2 in chicks. Shaw AJ, et al. **Calcif Tissue Int** 1989 Mar;44(3):209–13

Effect of rat cardionatrin I (rat ANF 99-126) on the response of toad skin to angiotensin II. Coviello A, et al.
Can J Physiol Pharmacol 1989 Apr;67(4):362–5

Small fibronectin fragments induce endothelium-dependent vascular relaxations. Laplante C, et al.
Can J Physiol Pharmacol 1988 Jun;66(6):745–8

Neuropharmacological properties of V-9-M, a putative neuropeptide derived from procholecystokinin, in the rat. Takashima A, et al. **Can J Physiol Pharmacol** 1989 Mar; 67(3):223–7

Effect of V-9-M, a peptide fragment derived from procholecystokinin, on memory processes in the rat. Takashima A, et al. **Can J Physiol Pharmacol** 1989 Mar; 67(3):228–31

Serum growth hormone release in response to a growth hormone-releasing factor analog during and after anesthesia in pigs. Dubreuil P, et al. **Can J Vet Res** 1988 Jul;52(3):304–7

Marked reduction of subcutaneous tumor growth by intraperitoneal administration of recombinant human interleukin 2 with a cell accumulator, proteose-peptone, in mice. Tanida S, et al. **Cancer Res** 1989 Jan 15;49(2):284–8

Arg-Lys-Asp-Val-Tyr (thymopentin) accelerates the cholinergic-induced inactivation (desensitization) of reconstituted nicotinic receptor. Ochoa EL, et al.
Cell Mol Neurobiol 1988 Sep;8(3):325–31

Further studies of the effects of somatostatin and related peptides in area CA1 of rabbit hippocampus. Scharfman HE, et al. **Cell Mol Neurobiol** 1988 Dec;8(4):411–29

Role of renal nerves in the potentiation of atriopeptin-induced natriuresis by vasopressin. Hartupee DA, et al. **Circ Res** 1989 Feb;64(2):370–5

Mechanisms underlying atriopeptin-induced increases in hematocrit and vascular permeation in rats. Williamson JR, et al. **Circ Res** 1989 May;64(5):890–9

Hemodynamic and renal effects of atrial natriuretic factor (99-126) in volume expanded sheep. Parkes DG, et al.
Clin Exp Hypertens [A] 1988;10(6):1107–26

Enhancement of renal but not haemodynamic effects of atrial natriuretic peptide (1-28) in sheep treated with ACTH. Parkes DG, et al. **Clin Exp Pharmacol Physiol** 1988 Dec; 15(12):945–53

Renal effects of atrial natriuretic factor (99-126) in water-deprived sheep. Yates NA, et al.
Clin Exp Pharmacol Physiol 1989 May;16(5):433–7

Controversy over effects of peptide T on AIDS virus intensifies [news] **Clin Pharm** 1987 Oct;6(10):752, 754

Effect of intravenous glucagon and glucagon-(1-21)-peptide on motor activity of sphincter of Oddi in humans. Ponce J, et al. **Dig Dis Sci** 1989 Jan;34(1):61–4

GLP-1 (glucagon-like peptide 1) and truncated GLP-1, fragments of human proglucagon, inhibit gastric acid secretion in humans. Schjoldager BT, et al. **Dig Dis Sci** 1989 May;34(5):703–8

Influence of age and sex on basal secretion of growth hormone (GH) and on GH-induced release by porcine GH-releasing factor pGRF(1-29NH2) in growing pigs. Dubreuil P, et al. **Domest Anim Endocrinol** 1987 Oct; 4(4):299–307

Synergism and diurnal variations of human growth hormone-releasing factor (1-29)NH2 and thyrotropin-releasing factor on growth hormone release in dairy calves. Lapierre H, et al.
Domest Anim Endocrinol 1987 Oct;4(4):207–14

Parathyroid hormone (PTH)-related protein is a potent stimulator of osteoclast-like multinucleated cell formation to the same extent as PTH in mouse marrow cultures. Akatsu T, et al. **Endocrinology** 1989 Jul;125(1):20–7

Avian (chicken) parathyroid hormone: synthesis and comparative biological evaluation of the 1-34 fragment. Caulfield MP, et al. **Endocrinology** 1988 Dec; 123(6):2949–51

PTHrP secretion is stimulated by CT and inhibited by CgA peptides. Deftos LJ, et al. **Endocrinology** 1989 Jul; 125(1):563–5

Direct modulation by estradiol of the response of human bone cells (SaOS-2) to human parathyroid hormone (PTH) and PTH-related protein. Fukayama S, et al. **Endocrinology** 1989 Jan;124(1):397–401

Human parathyroid hormone (PTH)-related protein and human PTH: comparative biological activities on human bone cells and bone resorption. Fukayama S, et al.
Endocrinology 1988 Dec;123(6):2841–8

A new highly potent parathyroid hormone antagonist: [D-Trp12,Tyr34]bPTH-(7-34)NH2. Goldman ME, et al.
Endocrinology 1988 Nov;123(5):2597–9

Physiological concentrations of atrial natriuretic factors with intact N-terminal sequences inhibit corticotropin-releasing factor-stimulated adrenocorticotropin secretion from cultured anterior pituitary cells. King MS, et al.
Endocrinology 1989 Jan;124(1):286–92

Inhibition of pulsatile growth hormone (GH) secretion and somatic growth in immature rats with a synthetic GH-releasing factor antagonist. Lumpkin MD, et al.
Endocrinology 1989 Mar;124(3):1154–9

Blockade of growth hormone-releasing factor (GRF) activity in the pituitary and hypothalamus of the conscious rat with a peptidic GRF antagonist. Lumpkin MD, et al.
Endocrinology 1989 Mar;124(3):1522–31

Human parathyroid hormone carboxyterminal peptide (53-84) stimulates alkaline phosphatase activity in

dexamethasone-treated rat osteosarcoma cells in vitro. Murray TM, et al. **Endocrinology** 1989 Feb;124(2):1097-9

Influence of the amino-terminus on in vitro and in vivo biological activity of synthetic parathyroid hormone-like peptides of malignancy. Rabbani SA, et al. **Endocrinology** 1988 Dec;123(6):2709-16

Renal and adrenal adenosine 3',5'-monophosphate production and corticosteroid secretion in response to synthetic chicken parathyroid hormone-(1-34). Rosenberg J, et al. **Endocrinology** 1989 Aug;125(2):1082-9

Growth stimulation of human epidermal cells by urokinase is restricted to the intact active enzyme. Kirchheimer JC, et al. **Eur J Biochem** 1989 Apr 15;181(1):103-7

Effect of human atrial natriuretic peptide on blood glucose concentrations and hormone stimulation during insulin-induced hypoglycaemia in healthy man. Jungmann E, et al. **Eur J Clin Pharmacol** 1989;36(6):593-7

Atrial natriuretic factor inhibits ACTH stimulated aldosterone, but not cortisol, secretion in man. McMurray J, et al. **Eur J Clin Pharmacol** 1988;35(4):409-12

Effects of human ANF-(99-126) on sympathetic nerve function, hemodynamic parameters and plasma cGMP levels in anesthetized, ganglion-blocked dogs. Bergey JL, et al. **Eur J Pharmacol** 1989 Jan 10;159(2):103-12

Dimeric substance P analogue shows a highly potent activity of the in vivo salivary secretion in the rat [published erratum appears in Eur J Pharmacol 1989 May 30;164(3):614] Higuchi Y, et al. **Eur J Pharmacol** 1989 Feb 7;160(3):413-6

Dimerization of neurokinin A and B COOH-terminal heptapeptide fragments enhanced the selectivity for tachykinin receptor subtypes. Kodama H, et al. **Eur J Pharmacol** 1988 Jul 7;151(2):317-20

Hypotensive response to atrial natriuretic factor in conscious chronic pulmonary hypertensive rats. Lee KC, et al. **Eur J Pharmacol** 1988 Dec 6;158(1-2):153-6

Effect of neurotensin and its fragments neurotensin-(1-6) and neurotensin-(8-13) on dopamine release from cat striatum. Markstein R, et al. **Eur J Pharmacol** 1988 Jul 26;152(1-2):147-52

Gamma-preprotachykinin-(72-92)-peptide amide potentiates substance P-induced salivation. Takeda Y, et al. **Eur J Pharmacol** 1989 Feb 28;161(2-3):267-71

Opioids and cytosolic calcium in rat anterior pituitary: dynorphin preparation showed LHRH-like action due to contamination. Knepel W, et al. **Experientia** 1988 Dec 1;44(11-12):1003-5

Inhibition of lipoprotein lipase by the receptor-binding domain of apolipoprotein E. McConathy WJ, et al. **FEBS Lett** 1989 Jul 17;251(1-2):250-2

Cholecystokinin 1-21 stimulates lipolysis in human adipose tissue. Richter WO, et al. **Horm Metab Res** 1989 Apr;21(4):216-7

Potentiation of renal effects of atrial natriuretic factor-(99-126) by SQ 29,072. Seymour AA, et al. **Hypertension** 1989 Jul;14(1):87-97

Human retrovirus-related synthetic peptides inhibit T lymphocyte proliferation. Cianciolo GJ, et al. **Immunol Lett** 1988 Sep;19(1):7-13

Identification of functional antigenic segments of toxic shock syndrome toxin 1 by differential immunoreactivity and by differential mitogenic responses of human peripheral blood mononuclear cells, using active toxin fragments. Edwin C, et al. **Infect Immun** 1989 Jul;57(7):2230-6

The influence of the atrial natriuretic factor on venous tone in man. Ljutić D, et al. **Int J Clin Pharmacol Res** 1989;9(4):255-60

Neuropeptide Y and neuropeptide Y18-36. Structural and biological characterization. Boublik J, et al. **Int J Pept Protein Res** 1989 Jan;33(1):11-5

Novel synthetic heparin binding peptides of laminin and fibronectin which promote the adhesion of melanoma cells. Skubitz AP, et al. **Invasion Metastasis** 1989;9(2):89-101

Sympathetic terminal mediation of the acute cardiovascular response of gamma 2-MSH. Callahan MF, et al. **J Auton Nerv Syst** 1988 Sep;24(1-2):179-82

Amiloride interacts with guanine nucleotide regulatory proteins and attenuates the hormonal inhibition of adenylate cyclase. Anand-Srivastava MB. **J Biol Chem** 1989 Jun 5;264(16):9491-6

Adrenodoxin with a COOH-terminal deletion (des 116-128) exhibits enhanced activity. Cupp JR, et al. **J Biol Chem** 1989 Jan 25;264(3):1602-7

Specific overproduction of very late antigen 1 integrin in two human neuroblastoma cell lines selected for resistance to detachment by an Arg-Gly-Asp-containing synthetic peptide. Dedhar S, et al. **J Biol Chem** 1989 Mar 25;264(9):4832-6

Antithrombin activity of a peptide corresponding to residues 54-75 of heparin cofactor II. Hortin GL, et al. **J Biol Chem** 1989 Aug 25;264(24):13979-82

Cyclic AMP-mediated stabilization of osteocalcin mRNA in rat osteoblast-like cells treated with parathyroid hormone. Noda M, et al. **J Biol Chem** 1988 Dec 5;263(34):18574-7

The central part of parathyroid hormone stimulates thymidine incorporation of chondrocytes. Schlüter KD, et al. **J Biol Chem** 1989 Jul 5;264(19):11087-92

Microthrombomodulin. Residues 310-486 from the epidermal growth factor precursor homology domain of thrombomodulin will accelerate protein C activation. Stearns DJ, et al. **J Biol Chem** 1989 Feb 25;264(6):3352-6

Growth of rat osteoblast-like cells in a lipid-enriched culture medium and regulation of function by parathyroid hormone and 1,25-dihydroxyvitamin D. Catherwood BD, et al. **J Bone Miner Res** 1988 Aug;3(4):431-8

Resorption is not essential for the stimulation of bone growth by hPTH-(1-34) in rats in vivo. Hock JM, et al. **J Bone Miner Res** 1989 Jun;4(3):449-58

Effects of oxidation of human parathyroid hormone on its biological activity in continuously infused, thyroparathyroidectomized rats. Horiuchi N. **J Bone Miner Res** 1988 Jun;3(3):353-8

Skeletal contribution of cyclic adenosine monophosphate in response to parathyroid hormone and calcitonin in vivo in the rat. Morrison NE, et al. **J Bone Miner Res** 1988 Dec;3(6):629-34

Factor derived from human lung carcinoma associated with hypercalcemia mimics the effects of parathyroid hormone on phosphate transport in cultured renal epithelia. Pizurki L, et al. **J Bone Miner Res** 1988 Apr;3(2):233-9

Restoration of spinal bone in osteoporotic men by treatment with human parathyroid hormone (1-34) and 1,25-dihydroxyvitamin D. Slovik DM, et al. **J Bone Miner Res** 1986 Aug;1(4):377-81

Effect of parathyroid hormone on amino acid transport by cultured neonatal mouse calvarial bone cells. Yee JA. **J Bone Miner Res** 1988 Apr;3(2):211-8

The effect of TP-5 on the production of C3, PGE2, and TXB2 by macrophages obtained from burned guinea pigs. Ogle CK, et al. **J Burn Care Rehabil** 1989 Mar-Apr;10(2):146-50

Effects of intranasal administration of synthetic (4-28)human atrial natriuretic peptide to normal volunteers. Delabays A, et al. **J Cardiovasc Pharmacol** 1989 Jan;13(1):173-6

The E8 subfragment of laminin promotes locomotion of myoblasts over extracellular matrix. Goodman SL, et al. **J Cell Biol** 1989 Aug;109(2):799-809

Transcriptional regulation of osteopontin production in rat osteoblast-like cells by parathyroid hormone. Noda M, et al. **J Cell Biol** 1989 Feb;108(2):713-8

Inhibition of human megakaryocytopoiesis in vitro by platelet factor 4 (PF4) and a synthetic COOH-terminal PF4 peptide. Gewirtz AM, et al. **J Clin Invest** 1989 May;83(5):1477-86

Stimulation of glycosaminoglycan synthesis in cultured human dermal fibroblasts by interleukin 1. Induction of hyaluronic acid synthesis by natural and recombinant interleukin 1s and synthetic interleukin 1 beta peptide 163-171. Postlethwaite AE, et al. **J Clin Invest** 1989 Feb;83(2):629-36

Mediation of fibrin-induced release of von Willebrand factor from cultured endothelial cells by the fibrin beta chain. Ribes JA, et al. **J Clin Invest** 1989 Aug;84(2):435-42

Actions of synthetic parathyroid hormone-related protein(1-34) on the isolated rat kidney. Ebeling PR, et al. **J Endocrinol** 1989 Jan;120(1):45-50

Growth hormone (GH) release after administration of GH-releasing hormone in relation to endogenous 24-h GH secretion in short children. Gelander L, et al. **J Endocrinol** 1989 Jul;122(1):61-8

Actions of desacetyl-alpha-melanocyte-stimulating hormone on human adrenocortical cells. Henville KL, et al. **J Endocrinol** 1989 Jun;121(3):579-83

Hypotensive and diuretic effects of atrial natriuretic factor in diabetic patients. Pusterla C, et al. **J Hum Hypertens** 1989 Apr;3(2):79-87

Effect of a chronic infusion of atrial natriuretic factor on glomerular and vascular receptors in spontaneously hypertensive rats. Cachofeiro V, et al. **J Hypertens** 1989 Apr;7(4):335-42

The effect of atrial natriuretic factor on urinary albumin and beta 2-microglobulin excretion in man. McMurray J, et al. **J Hypertens** 1988 Oct;6(10):783-6

Biologic activity of a C2-derived peptide. Demonstration of a specific interaction with guinea pig lung tissues. Cholin S, et al. **J Immunol** 1989 Apr 1;142(7):2401-4

Lymphokine-activated tumor inhibition in mice. Ability of a nonapeptide of the human IL-1 beta to recruit anti-tumor reactivity in recipient mice. Forni G, et al. **J Immunol** 1989 Jan 15;142(2):712-8

Synthetic peptide corresponding to a conserved domain of the retroviral protein p15E blocks IL-1-mediated signal transduction. Gottlieb RA, et al. **J Immunol** 1989 Jun 15;142(12):4321-8

C3 synthetic peptides support growth of human CR2-positive lymphoblastoid B cells. Servis C, et al. **J Immunol** 1989 Apr 1;142(7):2207-12

Immunomodulatory effect of bovine PTH extract on lymphocyte response to plant mitogens. Elias AN, et al. **J Med** 1988;19(2):109-17

A carboxy-terminus truncated analogue of angiotensin II, [Sar1]angiotensin II-(1-7)-amide, provides an entry to a new class of angiotensin II antagonists. Bovy PR, et al. **J Med Chem** 1989 Mar;32(3):520-2

Synthetic peptides corresponding to the sequence of noxiustoxin indicate that the active site of this K+ channel blocker is located on its amino-terminal portion. Gurrola GB, et al. **J Neural Transm** 1989;77(1):11-20

Isolated light chain of tetanus toxin inhibits exocytosis: studies in digitonin-permeabilized cells. Bittner MA, et al. **J Neurochem** 1989 Sep;53(3):966-8

Peptides of myelin basic protein stimulate T lymphocytes from patients with multiple sclerosis. Baxevanis CN, et al. **J Neuroimmunol** 1989 Mar;22(1):23-30

A new approach for the evaluation of recovery after peripheral nerve damage. van der Hoop RG, et al. **J Neurosci Methods** 1988 Dec;26(2):111-6

Neurohormonal regulation of ion transport in the porcine distal jejunum. Actions of neurotensin and its natural homologs. Brown DR, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):348-57

Interaction of non-guanylate cyclase-linked atriopeptin receptor ligand and endopeptidase inhibitor in conscious rats. Koepke JP, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):172-6

Influence of right atrial stretch and atrial natriuretic factor on rat intestinal fluid content. Kaufman S, et al. **J Physiol (Lond)** 1988 Aug;402:1-8

Atrial natriuretic peptide-induced stimulation of cyclic GMP formation by isolated bovine luteal cells. Brunswig B, et al. **J Reprod Fertil** 1989 Jul;86(2):665-9

Effects of ACTH-(11-24) on the corticosteroid production of isolated adrenocortical cells. Szalay KS, et al. **J Steroid Biochem** 1989 Feb;32(2):259-62

Use of D4 peptide in HIV inhibition. Goodwin FK. **JAMA** 1989 Feb 17;261(7):970

Pharmacological actions of synthetic atrial natriuretic factor on coronary vascular smooth muscle. Yanagisawa A, et al. **Jpn Circ J** 1988 Dec;52(12):1436-40

Response of isolated renal microvessel and tubule adenylate cyclases to PTH fragments. Helwig JJ, et al. **Kidney Int Suppl** 1988 Sep;25:S45-8

Effects of gastrin releasing peptide and its related peptides on the release of gastrin. Yamashita Y, et al. **Kurume Med J** 1989;36(1):29-33

Effect of glucagon-(1-21)-peptide on secretin-stimulated pancreatic exocrine secretion in anesthetized dogs. Itoh H, et al. **Life Sci** 1989;44(12):819-25

Inhibition of serotonin release by bombesin-like peptides in rat hypothalamus in vitro. Saporito MS, et al. **Life Sci** 1989;45(1):15-23

Atrial natriuretic peptides cleaved by endopeptidase are inactive in conscious spontaneously hypertensive rats. Seymour AA, et al. **Life Sci** 1988;43(26):2265-74

Effects of MSH on food intake, body weight and coat color of the yellow obese mouse. Shimizu H, et al. **Life Sci** 1989;45(6):543-52

Dynorphin A (1-13), microinjected into the preoptic area, stimulates water intake in rats. Shimizu H, et al. **Life Sci** 1989;45(1):25-30

Behavioral and neurotrophic activity of ACTH-(7-16)NH2. Wolterink G, et al. **Life Sci** 1989;45(8):703-10

Defining agonist peptides of human interleukin-1 beta. Tagliabue A, et al. **Lymphokine Res** 1989 Fall;8(3):311-5

Immunomodulation with thymopentin: in vitro studies. Duchateau J, et al. **Med Oncol Tumor Pharmacother** 1989;6(1):19-23 (27 ref.)

Responses of guinea-pig gastric, ileal and gall bladder smooth muscle to desamino-cholecystokinin-octapeptide (CCK 7). Nieber K, et al. **Methods Find Exp Clin Pharmacol** 1988 Aug;10(8):513-20

Smooth-muscle effects of C-terminal tripeptide of substance P. Zamfirova R, et al. **Methods Find Exp Clin Pharmacol** 1988 Oct;10(10):609-12

Synthetic peptide inhibitors of complement serine proteases—I. Identification of functionally equivalent protease inhibitor sequences in serpins and inhibition of C1s and D. Glover GI, et al. **Mol Immunol** 1988 Dec;25(12):1261-7

Synthetic peptide inhibitors of complement serine proteases—II. Effects on hemolytic activity and production of C3a and C4a. Schasteen CS, et al. **Mol Immunol** 1988 Dec;25(12):1269-75

Org.2766 stimulates collateral sprouting in the soleus muscle of the rat following partial denervation. de Koning P, et al. **Muscle Nerve** 1989 May;12(5):353-9

Beta-endorphin-(1-27) is a naturally occurring antagonist of the reinforcing effects of opioids. Bals-Kubik R, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct;338(4):392-6

Effects of calcitonin gene-related peptide (CGRP), neurokinin A and neurokinin A (4-10) on the mitogenic response of human peripheral blood mononuclear cells. Casini A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Mar;339(3):354-8

Possible involvement of beta endorphin(1-31) and dynorphin(1-13) in the central hypotensive mechanism of action of alpha methyldopa. van Giersbergen PL, et al. **Neuroendocrinology** 1989 Jan;49(1):71-9

Infusion of prepro-VIP derived peptides in man: effect on secretion of prolactin. Yiangou Y, et al. **Neuroendocrinology** 1988 Dec;48(6):615-8

Hypothermia elicited by some prodynorphin-derived peptides: opioid and non-opioid actions. Cavicchini E, et al. **Neuropeptides** 1989 Jul;14(1):45-50

Structure-activity studies of neurokinin A. Rovero P, et al. **Neuropeptides** 1989 May-Jun;13(4):263-70

Modulation of morphine-induced EEG and behavioral effects by dynorphin A-(1-13) in non-tolerant and morphine-tolerant rats. Hong O, et al. **Neuropharmacology** 1988 Aug;27(8):807-12

Beta-endorphin-(1-27) antagonizes beta-endorphin- but not morphine-, D-Pen2-D-Pen5-enkephalin- and U50,488H-induced analgesia in mice. Suh HH, et al. **Neuropharmacology** 1988 Sep;27(9):957-63

The tachykinin NH2-senktide, a selective neurokinin B receptor agonist, is a very potent inhibitor of salt appetite in the rat. Massi M, et al. **Neurosci Lett** 1988 Oct 17; 92(3):341-6

Substance P(1-7) antagonizes substance P-induced aversive behaviour in mice. Sakurada T, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):281-5

The effects of simultaneous or separate infusions of some pro-opiomelanocortin-derived peptides (beta-endorphin, melanocyte stimulating hormone, and corticotrophin-like intermediate polypeptide) and their acetylated derivatives upon sexual and ingestive behaviour of male rats. Hughes AM, et al. **Neuroscience** 1988 Nov;27(2):689-98

Effect of alpha-human atrial natriuretic peptides on intraocular pressure in normal albino rabbits. Tsukahara S, et al. **Ophthalmologica** 1988;197(2):104-9

Bioactivity of growth hormone releasing hormone (1-29) analogues after SC injection in man. Aitman TJ, et al. **Peptides** 1989 Jan-Feb;10(1):1-4

The actions of neurokinins and substance P in canine pylorus, antrum and duodenum. Allescher HD, et al. **Peptides** 1989 May-Jun;10(3):671-9

Effects of ICV administration of neurotensin and analogs on EEG in rats. Castel MN, et al. **Peptides** 1989 Jan-Feb; 10(1):95-101

Antipyretic properties of centrally administered alpha-MSH fragments in the rabbit. Deeter LB, et al. **Peptides** 1988 Nov-Dec;9(6):1285-8

Pre- and postnatally administered ACTH, Organon 2766 and CRF facilitate or inhibit active avoidance task performance in young adult mice. Honour LC, et al. **Peptides** 1988 Jul-Aug;9(4):745-50

Modulation of mitogen-induced spleen cell proliferation and the antibody-forming cell response by beta-endorphin in vivo. Kusnecov AW, et al. **Peptides** 1989 Mar-Apr; 10(2):473-9

Effects of two ACTH analogs on successive odor discrimination learning in rats. Roman F, et al. **Peptides** 1989 Mar-Apr;10(2):303-7

A potent and selective agonist for NK-2 tachykinin receptor. Rovero P, et al. **Peptides** 1989 May-Jun;10(3):593-5

Intracisternal injection of CRF antagonist blocks surgical stress-induced inhibition of gastric secretion in the rat. Stephens RL Jr, et al. **Peptides** 1988 Sep-Oct;9(5):1067-70

Opiate and alpha receptor antagonists block the pressor responses of conscious rats given intravenous dynorphin. Thornhill JA, et al. **Peptides** 1989 Jan-Feb;10(1):171-7

Trophic influences of alpha-MSH and ACTH4-10 on neuronal outgrowth in vitro. Van der Neut R, et al. **Peptides** 1988 Sep-Oct;9(5):1015-20

Neurochemical effects of the synthetic ACTH4-9-analog Hoe 427 (Ebiratide) in rat brain. Wiemer G, et al. **Peptides** 1988 Sep-Oct;9(5):1081-7

Influence of substance P and substance P--sequences on immunocompetent cells. Paegelow I, et al. **Pharmazie** 1989 Feb;44(2):145-6

Behavioral effects of angiotensin II and angiotensin II-(4-8)-pentapeptide in rats. Braszko JJ, et al. **Physiol Behav** 1988;44(3):327-32

Non-opiate effects of neuropeptides derived from beta-endorphin. De Wied D, et al. **Pol J Pharmacol Pharm** 1987 Sep-Oct;39(5):623-32 (61 ref.)

Inhibition of insulin receptor phosphorylation by peptides derived from major histocompatibility complex class I antigens. Hansen T, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3123-6

Effects of hypophysectomy and the insulin-like and anti-insulin pituitary peptides on carbohydrate metabolism in yellow Avy/A (BALB/c x VY)F1 hybrid mice. Salem MA, et al. **Proc Soc Exp Biol Med** 1989 Sep;191(4):408-19

Potentiation of response to insulin and anti-insulin action by two human pituitary peptides in lean agouti A/a, obese yellow Avy/A, and C57BL/6J-ob/ob mice. Salem MA, et al. **Proc Soc Exp Biol Med** 1989 Jun;191(2):113-23

The NK-3 tachykinin agonist senktide elicits yawning and chewing mouth movements following subcutaneous administration in the rat. Evidence for cholinergic mediation. Stoessl AJ, et al. **Psychopharmacology (Berlin)** 1988;95(4):502-6

Effects of synthetic bovine parathyroid hormone (1-34) and its analogues on 45Ca uptake and adenylate cyclase activation in bone and plasma calcium levels in the chick. Dacke CG, et al. **Q J Exp Physiol** 1988 Jul;73(4):573-84

The activation peptide of pancreatic procolipase decreases food intake in rats. Erlanson-Albertsson C, et al. **Regul Pept** 1988 Sep;22(4):325-31

Pre- and postjunctional actions of neuropeptide Y and related peptides. Potter EK, et al. **Regul Pept** 1989 May; 25(2):167-77

Amyloid beta protein enhances the survival of hippocampal neurons in vitro. Whitson JS, et al. **Science** 1989 Mar 17; 243(4897):1488-90

Effects of a behaviorally active LHRH fragment and septal area stimulation on the activity of mediobasal hypothalamic neurons. Dudley CA, et al. **Synapse** 1987;1(3):240-7

Mammalian neuromuscular development accelerated with early but slowed with late gestational administration of ACTH peptide. Rose KJ, et al. **Synapse** 1988;2(3):200-4

Effect of peptide histidine valine on cardiovascular and respiratory function in normal subjects. Chilvers ER, et al. **Thorax** 1988 Oct;43(10):750-5

Comparison of hirudin and hirudin PA C-terminal fragments and related analogs as antithrombin agents. Krstenansky JL, et al. **Thromb Res** 1988 Oct 15;52(2):137-41

Potentiated thrombolysis in a Chandler system using rtPA and lys-plasminogen. Ljungberg J, et al. **Thromb Res** 1989 Mar 15;53(6):569-76

Effect of a peptide derived from fibrinogen degraded by leukocyte elastase on isolated bovine mesenteric arteries. Saldeen K, et al. **Thromb Res** 1989 Feb 1;53(3):279-86

Effect of glicentin-related peptides upon the secretion of insulin and glucagon in the canine pancreas. Ohneda A, et al. **Tohoku J Exp Med** 1988 Jun;155(2):197-204

Cellular distribution of cis-diamminedichloroplatinum(II)-DNA binding in rat dorsal root spinal ganglia: effect of the neuroprotecting peptide ORG.2766. Terheggen PM, et al. **Toxicol Appl Pharmacol** 1989 Jun 15;99(2):334-43

ACTH(4-10) and the neuromuscular junction. Izquierdo I. **Trends Pharmacol Sci** 1988 Jul;9(7):230-1 (13 ref.)

[Relaxation effect of bovine parathyroid hormone 1-34 on rabbit aorta] Zeng XP, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jul;9(4):330-3 (Eng. Abstr.) **(Chi)**

[Effect of bovine parathyroid hormone 1-34 on calcium flux and 6-keto-PGF1 alpha release of rabbit aorta] Zeng XP, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 May;9(3):224-7 (Eng. Abstr.) **(Chi)**

[Effects of atriopeptin III on isolated perfused rat heart] Gao F, et al. **Sheng Li Hsueh Pao** 1988 Dec;40(6):597-602 (Eng. Abstr.) **(Chi)**

[Effects of human atrial natriuretic factor-(99-126) on plasma and brain vasopressin in stroke-prone spontaneously hypertensive rats] Sun SD, et al. **Sheng Li Hsueh Pao** 1989 Feb;41(1):56-62 (Eng. Abstr.) **(Chi)**

[The role of atriopeptin in the hypotensive effect of dynorphin] Yin LY, et al. **Sheng Li Hsueh Pao** 1988 Aug; 40(4):343-8 (Eng. Abstr.) **(Chi)**

[Effects of the administration of various cholecystokinin fragments on dopamine release in basal ganglia: a microdialysis study in halothane anesthetized rats] Ruggeri M. **Ann Ist Super Sanita** 1988;24(4):539-42 (Eng. Abstr.) **(Ita)**

[Effects of atrial natriuretic peptide on left ventricular function in man] Indolfi C, et al. **Cardiologia** 1989 Mar; 34(3):253-7 (Eng. Abstr.) **(Ita)**

[The elimination of disorders in the acquisition of a conditioned active avoidance reaction by using the C-termination fragment of lysyl vasopressin] Titov SA, et al. **Biol Nauki** 1988;(6):45-8 (Eng. Abstr.) **(Rus)**

[Comparison of the effects of thyroliberin and ACTH4-7 PGP on the learning of rats during the solving of spatial orientation tasks] Chepurnova NE, et al. **Fiziol Zh SSSR** 1989 May;75(5):677-83 (Eng. Abstr.) **(Rus)**

[Effect of substance P and its N-terminal fragment on the components of the normal microcirculatory system and under stress] Gorizontova MP. **Fiziol Zh SSSR** 1989 May; 75(5):709-14 (Eng. Abstr.) **(Rus)**

[Tropomyosin and myosin subfragment 1 induce in thin muscle fiber filaments differing conformational changes in the C-terminal portion of the polypeptide chain of actin] Borovikov IuS, et al. **Tsitologiia** 1988 Aug;30(8):1014-7 (Eng. Abstr.) **(Rus)**

[Immunomodulating and analgesic activity of synthetic fragments of various proteins and immunopeptides] Ivanova VP, et al. **Ukr Biokhim Zh** 1988 Sep-Oct;60(5):3-9 (Eng. Abstr.) **(Rus)**

[Effect an ACTH analog on the processes of learning and memory in rats] Getsova VM, et al. **Zh Vyssh Nerv Delat** 1988 Nov-Dec;38(6):1041-7 (Eng. Abstr.) **(Rus)**

[Action of parathyroid hormone on the secretion of renin and arterial pressure in the rabbit] Bechara A, et al. **Arch Esp Urol** 1988 May;41(4):255-63 (Eng. Abstr.) **(Spa)**

[Free proteolytic activity of Serratia marcescens. I. Inductive capacity of several protein substrates] Hernández-Delgadillo R, et al. **Rev Latinoam Microbiol** 1988 Oct-Dec;30(4):363-8 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Cross-bridge dephosphorylation and relaxation of vascular smooth muscle. Hai CM, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C282-7

Urodilatin and beta-ANF: binding properties and activation of particulate guanylate cyclase. Heim JM, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):37-41

A 13 kDa fragment is responsible for the hydrophobic aggregation of brain G4 acetylcholinesterase. Fuentes ME, et al. **Biochem J** 1988 Dec 15;256(3):1047-50

Insulin-like growth factor (IGF)-binding proteins inhibit the biological activities of IGF-1 and IGF-2 but not des-(1-3)-IGF-1. Ross M, et al. **Biochem J** 1989 Feb 15; 258(1):267-72

Fluorescence resonance energy transfer within the complex formed by actin and myosin subfragment 1. Comparison between weakly and strongly attached states. Trayer HR, et al. **Biochemistry** 1988 Jul 26;27(15):5718-27

Microinjection into Acanthamoeba castellanii of monoclonal antibodies to myosin-II slows but does not stop cell locomotion. Sinard JH, et al. **Cell Motil Cytoskeleton** 1989; 12(1):42-52

A substrate of the cell-attachment sequence of fibronectin (Arg-Gly-Asp-Ser) is sufficient to promote transition of arterial smooth muscle cells from a contractile to a synthetic phenotype. Hedin U, et al. **Dev Biol** 1989 Jun; 133(2):489-501

Effects of removal of carboxy-terminal extension from equine luteinizing hormone (LH) beta-subunit on LH and follicle-stimulating hormone receptor-binding activities and LH steroidogenic activity in rat testicular Leydig cells. Bousfield GR, et al. **Endocrinology** 1989 Jan;124(1):379-87

Adrenocorticotropin(1-10) and -(11-24) promote adrenal steroidogenesis by different mechanisms. Li ZG, et al. **Endocrinology** 1989 Aug;125(2):529-6

The role of early post-implantation beta-HCG levels in the outcome of pregnancies following in-vitro fertilization. Dor J, et al. **Hum Reprod** 1988 Jul;3(5):663-7

Biological and immunological properties of the carboxyl terminus of staphylococcal enterotoxin C1. Bohach GA, et al. **Infect Immun** 1989 Jan;57(1):23-8

Role of tropoelastin fragmentation in elastogenesis in rat smooth muscle cells. Franzblau C, et al. **J Biol Chem** 1989 Sep 5;264(25):15115-9

Possible roles of partial sequences at N- and C-termini of amelogenin in protein-enamel mineral interaction. Aoba T, et al. **J Dent Res** 1989 Sep;68(9):1331-6

Absence of induction of IL-1 production in human monocytes by complement fragments. Arend WP, et al. **J Immunol** 1989 Jan 1;142(1):173-8

Polymeric C3dg primes human B lymphocytes for proliferation induced by anti-IgM. Carter RH, et al. **J Immunol** 1989 Sep 15;143(6):1755-60

Intracellular cleavage of newly synthesized low affinity Fc epsilon receptor (Fc epsilon R2) provides a second pathway for the generation of the 28-kDa soluble Fc epsilon R2 fragment. Lee BW, et al. **J Immunol** 1989 Mar 1; 142(5):1614-20

Defective expression of basement membrane-associated C3d,g in papulonodular basal cell carcinomas. Basset-Séguin N, et al. **J Invest Dermatol** 1989 May; 92(5):734-8

The biological relevance of N-terminal neurotensin fragments in the regulation of exocrine pancreas secretion. Nustede R, et al. **Pancreas** 1989;4(1):114-9

Dopaminergic mediation of the diuretic and natriuretic action of centrally administered rat atrial natriuretic factor (99-126). Torres M, et al. **Proc Soc Exp Biol Med** 1989 Jan;190(1):18-22

The contribution of the C-terminal undecapeptide sequence of urogastrone-epidermal growth factor to its biological action. Gregory H, et al. **Regul Pept** 1988 Aug;22(3):217-26

[The effect of fibronectin fragments on proliferative activity of fibroblasts] Zlatopol'skii AD, et al. **Biokhimiia** 1989 Jan; 54(1):74-80 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

UV-induced vanadate-dependent modification and cleavage of skeletal myosin subfragment 1 heavy chain. 2. Oxidation of serine in the 23-kDa NH2-terminal tryptic peptide. Cremo CR, et al. **Biochemistry** 1988 Nov 1;27(22):8415-20

UV-induced vanadate-dependent modification and cleavage of skeletal myosin subfragment 1 heavy chain. 1. Evidence for active site modification. Grammer JC, et al. **Biochemistry** 1988 Nov 1;27(22):8408-15

SECRETION

Structural analysis of parathormone fragments elaborated by cells cultured from a hyperplastic human parathyroid gland. MacGregor RR, et al. **Bone Miner** 1986 Feb; 1(1):41-50

Effect of intraluminal administration of amino acids upon plasma glicentin. Ohneda A, et al. **Diabetes Res Clin Pract** 1988 Oct 14;5(4):265-70

Hyaluronic acid and type III procollagen peptide in jejunal perfusion fluid as markers of connective tissue turnover. Colombel JF, et al. **Gastroenterology** 1989 Jan;96(1):68-73

Adenocarcinoma of the uterine cervix with beta-hCG production: a case report and review of the literature. Collins RJ, et al. **Gynecol Oncol** 1989 Apr;33(1):99-107 (57 ref.)

Regulation of atrial natriuretic factor-(99-126) secretion from neonatal rat primary atrial cultures by activators of protein kinases A and C. Shields PP, et al. **J Biol Chem** 1989 Jun 5;264(16):9322-8

Mediation of fibrin-induced release of von Willebrand factor from cultured endothelial cells by the fibrin beta chain. Ribes JA, et al. **J Clin Invest** 1989 Aug;84(2):435-42

[Evaluation of water-electrolyte metabolism in patients with upper GI tract cancer--the dynamic status of secretion of alpha-hANP levels] Kojima Y. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1603-10 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

N-terminal ACTH fragments increase the CSF beta-EP content in Alzheimer type dementia. Nappi G, et al. **Acta Neurol Scand** 1988 Aug;78(2):146-51

Use of continuous subcutaneous growth hormone-releasing hormone (GHRH (1-29)NH2) infusions to augment growth hormone secretion and to promote growth. Brain C, et al. **Acta Paediatr Scand Suppl** 1989;349:109-13; discussion 123-4

Modification of 24-hour growth hormone secretion after

continuous subcutaneous infusion of growth hormone-releasing hormone (GHRH (1-29)NH2) in short children with low 24-hour growth hormone secretion. Tauber MT, et al. **Acta Paediatr Scand Suppl** 1989; 349:117-22; discussion 123-4

The effects of a new tissue plasminogen activator analogue, Fb-Fb-CF, on cerebral reperfusion in a rabbit embolic stroke model. Phillips DA, et al. **Ann Neurol** 1989 Mar; 25(3):281-5

Treatment of marrow graft recipients with thymopentin. Witherspoon RP, et al. **Bone Marrow Transplant** 1987 Apr; 1(4):365-71

Effect of human parathyroid hormone (PTH(1-34)) on experimental osteopenia of rats induced by ovariectomy. Hori M, et al. **Bone Miner** 1988 Jan;3(3):193-9

Immunomodulation and Sézary syndrome: experience with thymopentin (TP-5). Bernengo MG, et al. **Br J Dermatol** 1988 Aug;119(2):207-21

Criteria for evaluating improvement in schizophrenia in psychopharmacological research (with special reference to gamma endorphin fragments). Manchanda R, et al. **Br J Psychiatry** 1988 Sep;153:354-8

Thymopentin (TP-5) in the treatment of rheumatoid arthritis. Kantharia BK, et al. **Br J Rheumatol** 1989 Apr;28(2):118-23

Increase of vertebral density by combination therapy with pulsatile 1-38hPTH and sequential addition of calcitonin nasal spray in osteoporotic patients. Hesch RD, et al. **Calcif Tissue Int** 1989 Mar;44(3):176-80

Thymopentin treatment in genital warts of long duration. Fransen L, et al. **Cancer Detect Prev** 1988;12(1-6):503-9

An immunomodulating drug, thymopentin, in the treatment of progressive systemic sclerosis [letter] Giordano N, et al. **Clin Rheumatol** 1989 Jun;8(2):293-4

Thymopentin in dermatology. Haneke E. **Curr Probl Dermatol** 1989;18:283-9 (38 ref.)

Thymopentin in the treatment of alopecia areata [letter] Orecchia G. **Dermatologica** 1989;178(4):231

Thymopentin in the treatment of severe alopecia areata. Tosti A, et al. **Dermatologica** 1988;177(3):170-4

Beneficial effect of Org 2766 in treatment of peripheral neuropathy in streptozocin-induced diabetic rats. Van der Zee CE, et al. **Diabetes** 1989 Feb;38(2):225-30

Comparison of growth hormone releasing hormone therapy and growth hormone therapy in growth hormone deficiency. Butenandt O, et al. **Eur J Pediatr** 1989 Feb; 148(5):393-5

Subcutaneous treatment with growth hormone-releasing hormone for short stature. Hernández M, et al. **Horm Res** 1988;30(6):252-7

Effect of a synthetic short-chain ACTH 1-17 (HOE 433) on isoproterenol-induced myocardial infarction in rats. Asha Devi S. **Indian J Exp Biol** 1988 Sep;26(9):685-7

Phenotypical and functional heterogeneity of the large granular lymphocytes increased after various treatments in a patient with combined immunodeficiency. Takagi S, et al. **J Clin Immunol** 1989 Jan;9(1):39-47

In vivo restoration of T cell functions by human IL-1 beta or its 163-171 nonapeptide in immunodepressed mice. Frasca D, et al. **J Immunol** 1988 Oct 15;141(8):2651-5

Immunomodulation in infection caused by human immunodeficiency virus [editorial] Phair JP. **J Lab Clin Med** 1989 Feb;113(2):135-6

Immunologic effects of long-term thymopentin treatment in patients with HIV-induced lymphadenopathy syndrome. Silvestris F, et al. **J Lab Clin Med** 1989 Feb;113(2):139-44

Effect of synthetic human atrial natriuretic peptide (102-126) in nephrotic syndrome. Zietse R, et al. **Kidney Int** 1988 Nov;34(5):717-24

Morphological analysis of iliac crest bone biopsies in patients with osteoporosis and treatment according to the ADFR concept with (1-38)hPTH and diphosphonate (EHDP)—Osteoporosis Study I, Hannover. Delling G, et al. **Klin Wochenschr** 1989 May 15;67(10):556

Results of a stimulatory therapy of low bone metabolism in osteoporosis with (1-38)hPTH and diphosphonate EHDP. Protocol of study I, osteoporosis trial Hannover. Hesch RD, et al. **Klin Wochenschr** 1988 Oct 3;66(19):976-84

Improvement in AIDS patients on peptide T [letter] Bridge TP, et al. **Lancet** 1989 Jul 22;2(8656):226-7

Thymopentin (TP-5) in the treatment of the postburn and postoperative immunodeficiency syndrome. Hamilton G, et al. **Prog Clin Biol Res** 1989;308:995-9

Effect of thymopentin on the anaemia of myelodysplastic syndromes. A preliminary study [letter] Catarini M, et al. **Recenti Prog Med** 1989 Jan;80(1):46

[Local thrombolysis using a combination of RTPA and Lys-plasminogen in ischemia due to a previous thrombosis] Marcon JL, et al. **J Mal Vasc** 1989;14(3):265-6 **(Fre)**

[Thymopentin in a case of autoimmune thrombocytopenia secondary to chronic lymphatic leukemia] Cantore M, et al. **G Clin Med** 1989 Jun-Jul;70(6-7):421, 423, 425 (Eng. Abstr.) **(Ita)**

[Thymopentin treatment of ovarian carcinoma: preliminary clinical results] Garozzo G, et al. **G Ital Oncol** 1988 Jan-Mar;8(1):11-3 (Eng. Abstr.) **(Ita)**

[Use of synthetic ACTH in combination with low-dose tricyclic antidepressants in chronic deafferentation pain] Salvi E, et al. **Minerva Anestesiol** 1988 Jun;54(6):275-8 (Eng. Abstr.) **(Ita)**

[Thymopentin in the treatment of recurrent condylomata acuminata] Ghetti P, et al. **Minerva Ginecol** 1989 Feb; 41(2):113-6 (Eng. Abstr.) **(Ita)**

[A case of juvenile rheumatoid arthritis treated with thymopentin] Tucciarone L, et al. **Minerva Pediatr** 1989 Feb;41(2):109-11 (Eng. Abstr.) **(Ita)**

[Use of thymopentin in the therapy of recurrent oral ulcers] Robotti MP, et al. **Minerva Stomatol** 1988 Jun; 37(6):497-503 (Eng. Abstr.) **(Ita)**

[Use of thymopentin in the treatment of post-radiation cystitis] Martinoli F, et al. **Minerva Urol Nefrol** 1988 Oct-Dec;40(4):275-6 (Eng. Abstr.) **(Ita)**

[Effect of infusion of atrial natriuretic peptide on endocrine function after administration of endotoxin in dogs] Oshima S. **Masui** 1988 Sep;37(9):1083-95 (Eng. Abstr.) **(Jpn)**

[Effect of the N-terminal fragment of substance P1-4 on the somatic manifestations of the stress reaction and on the catecholamine content of the adrenals in rats] Arefolov VA, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):201-4 (Eng. Abstr.) **(Rus)**

TOXICITY

An 18-mer peptide derived from the retinal S antigen induces uveitis and pinealitis in primates. Hirose S, et al. **Clin Exp Immunol** 1989 Jul;77(1):106-11

Localization of dynorphin-induced neurotoxicity in rat spinal cord. Stewart P, et al. **Life Sci** 1989;44(20):1505-14

URINE

Purification and structural determination of urinary NH2-terminal big gastrin fragments. Higashimoto Y, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1364-70

Isolation and structural analysis of "urodilatin", a new peptide of the cardiodilatin-(ANP)-family, extracted from human urine. Schulz-Knappe P, et al. **Klin Wochenschr** 1988 Sep 1;66(17):752-9

Origin and occurrence of human chorionic gonadotropin beta-subunit core fragment. Cole LA, et al. **Mol Endocrinol** 1988 Sep;2(9):825-30

A sensitive bedside urine test for human chorionic gonadotrophin in suspected ectopic pregnancy. Hofmeyr GJ, et al. **S Afr Med J** 1989 Jan 21;75(2):49-50

[Changes in the diagnosis and therapy of extra-uterine pregnancy] Lübke F, et al. **Geburtshilfe Frauenheilkd** 1989 Feb;49(2):172-8 (Eng. Abstr.) **(Ger)**

[Hyaluronic acid and N-terminal procollagen-III-peptide in the urine in inflammatory and degenerative joint diseases] Respondek M, et al. **Z Rheumatol** 1989 May-Jun; 48(3):117-22 (Eng. Abstr.) **(Ger)**

[The role of beta HCG determination and ultrasonic examination in the early diagnosis of extrauterine pregnancy] Poljak B, et al. **Jugoal Ginekol Perinatol** 1988 Sep-Dec;28(5-6):150-2 (Eng. Abstr.) **(Scr)**

PEPTIDE HISTIDINE-ISOLEUCINE see **PEPTIDE PHI**

PEPTIDE HYDROLASE INHIBITORS see **PROTEASE INHIBITORS**

PEPTIDE HYDROLASES

Recent developments in enzymatic synthesis of peptide. Nakanishi K, et al. **Adv Biotechnol Processes** 1988; 10:173-202 (52 ref.)

Proteases II. Potential role in health and disease. Proceedings of the second international conference. May 17-20, 1987, Rothenburg, Federal Republic of Germany. **Adv Exp Med Biol** 1988;240:1-574

Generation of peptides suitable for sequence analysis by proteolytic cleavage in reversed-phase high-performance liquid chromatography solvents. Welinder KG. **Anal Biochem** 1988 Oct;174(1):54-64

Studies on the mechanism of hemorrhage production by five proteolytic hemorrhagic toxins from Crotalus atrox venom. Bjarnason JB, et al. **Biol Chem Hoppe Seyler** 1988 May; 369 Suppl:121-9

Enhanced proteolysis of plasma von Willebrand factor in thrombotic thrombocytopenic purpura and the hemolytic uremic syndrome. Mannucci PM, et al. **Blood** 1989 Aug 15;74(3):978-83

Periplasmic proteases of Escherichia coli. Cook RA. **Crit Rev Biotechnol** 1988;8(3):159-75

Parasite proteases. McKerrow JH. **Exp Parasitol** 1989 Jan; 68(1):111-5 (19 ref.)

Structural inferences for the native skeletal muscle sodium channel as derived from patterns of endogenous proteolysis. Kraner S, et al. **J Biol Chem** 1989 Aug 5;264(22):13273-80

Topography of prostaglandin H synthase. Antiinflammatory agents and the protease-sensitive arginine 253 region. Kulmacz RJ. **J Biol Chem** 1989 Aug 25;264(24):14136-44

Halogenation and proteolysis of complement component C3 on Salmonella typhimurium during phagocytosis by human neutrophils. Joiner KA, et al. **J Immunol** 1989 May 1; 142(9):3164-70

Proteolysis induces increased binding affinity of the monocyte type II FcR for human IgG. van de Winkel JG, et al. **J Immunol** 1989 Jul 15;143(2):571-8

Preliminary crystallographic study of a retroviral protease [letter] Miller M, et al. **J Mol Biol** 1988 Nov 5;204(1):211-2

Molecular organization of a high molecular weight multi-protease complex from rat liver. Tanaka K, et al. **J Mol Biol** 1988 Oct 20;203(4):985-96

Enzymatic semisynthesis of insulin specifically labelled with tritium at position B-30. Davies JG, et al. **Protein Eng** 1987 Oct-Nov;1(5):407-11

[Enrichment of cytochrome P-450 in human liver microsomes by the action of proteases] Isa M, et al. **J Pharm Belg** 1989 Jan-Feb;44(1):41-9 (Eng. Abstr.) **(Fre)**

[Proteasomes—20S ring-shaped particles with multiple proteolytic active sites] Tanaka K. **Seikagaku** 1989 Mar; 61(3):157-76 (88 ref.) **(Jpn)**

[Use of enzyme reaction under high pressure] Kunugi S. **Tanpakushitsu Kakusan Koso** 1989 Feb;34(2):113-8 **(Jpn)**

[Preparation of porous material based on alginic acid, containing immobilized terrilytin] Komissarova AL, et al. **Antibiot Khimioter** 1988 Oct;33(10):735-9 (Eng. Abstr.) **(Rus)**

[Chromogenic and fluorogenic peptide substrates of proteolytic enzymes] Gershkovich AA, et al. **Bioorg Khim** 1988 Nov;14(11):1461-88 (88 ref.) (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Local enzymatic treatment of atherosclerotic plaques. Kerényi T, et al. **Exp Mol Pathol** 1988 Dec;49(3):330-8

[Reduction of postoperative swelling. Objective measurement of swelling of the upper ankle joint in treatment with serrapeptase— a prospective study] Esch PM, et al. **Fortschr Med** 1989 Feb 10;107(4):67-8, 71-2 (Eng. Abstr.) **(Ger)**

[Terrilytin in the combined treatment of patients with pulmonary tuberculosis and chronic alcoholism] Mel'nik VP, et al. **Vrach Delo** 1988 Nov;(11):74-5 (Eng. Abstr.) **(Rus)**

ANALYSIS

Enzyme cytochemistry for the risk assessment of drug administration during pregnancy with special reference to proteases. Gossrau R, et al. **Acta Histochem Suppl (Jena)** 1988;36:361-76

Objective monitoring of the allergic inflammatory response of the nasal mucosa in patients with hay fever during natural allergen exposure. Andersson M, et al. **Am Rev Respir Dis** 1989 Apr;139(4):911-4

Self-quenched fluorogenic protein substrates for the detection of cathepsin D and other protease activities. Ashcom JD, et al. **Anal Biochem** 1989 Feb 1;176(2):261-4

A sensitive microplate assay for the detection of proteolytic enzymes using radiolabeled gelatin. Robertson BD, et al. **Anal Biochem** 1988 Jul;172(1):284-7

The concentration of immunoreactive prostate specific antigen is not decreased in viscous semen samples. Dubé JY, et al. **Andrologia** 1989 Mar-Apr;21(2):136-9

An on-line detection system for aerosols of proteolytic enzymes. Behizad M, et al. **Ann Occup Hyg** 1988; 32(4):499-508

Collagen synthesis and proteolytic activities in rat skeletal muscles: effect of cast-immobilization in the lengthened and shortened positions. Savolainen J, et al. **Arch Phys Med Rehabil** 1988 Nov;69(11):964-9

Evidence that hatching enzyme of the sea urchin Strongylocentrotus purpuratus is a chymotrypsin-like protease. Post LL, et al. **Biochem Cell Biol** 1988 Nov; 66(11):1200-9

Avian peptidase isozymes: tissue distributions, substrate affinities, and assignment of homology. Matson RH. **Biochem Genet** 1989 Apr;27(3-4):137-51

Neutral proteases involved in the reinvasion of erythrocytes by Plasmodium merozoites. Schrevel J, et al. **Biol Cell** 1988; 64(2):233-44

Structure and function of proparts in zymogens for aspartic proteinases. Foltmann B. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:311-4 (30 ref.)

Preliminary data on isolation of an elastase-like proteinase and its inhibitor from ovine neutrophil granulocytes. Junger W, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:63-8

Role of epidermal growth factor in the expression of A431 cancer cell protease and red blood cell cytotoxicity. DiStefano JF, et al. **Cancer Res** 1989 Jan 1;49(1):179-84

Retroviral proteases: first glimpses at the anatomy of a processing machine. Skalka AM. **Cell** 1989 Mar 24; 56(6):911-3 (25 ref.)

Peptidase-associated antigens as markers of differentiation in human kidney and renal adenocarcinoma. Wolf GB, et al. **Cell Mol Biol** 1988;34(3):311-21

New water-soluble fluorogenic amine. 7-Aminocoumarin-4-methanesulfonic acid (ACMS) and related substrates for proteinases. Sato E, et al. **Chem Pharm Bull (Tokyo)** 1988 Sep;36(9):3496-502

An enzyme immunoassay of slow moving protease (SMP) in human gastric mucosa. Matsusako K, et al. **Clin Chim Acta** 1989 Apr 28;181(1):19-26

Protease activity in pancreatic islet isolation by enzymatic digestion. McShane P, et al. **Diabetes** 1989 Jan;38 Suppl 1:126-8

Enzymatic characterization of three aeromonas species using API Peptidase, API "Osidase," and API Esterase test kits. Carnahan AM, et al. **Diagn Microbiol Infect Dis** 1988 Aug; 10(4):195-203

Comparison of the amino acid sequence of the lytic enzyme from broad-host-range bacteriophage PRD1 with sequences of other cell-wall-peptidoglycan lytic enzymes. Pakula TM, et al. **Eur J Biochem** 1989 Mar 1;180(1):149-52

Detection of IgA protease from Haemophilus influenzae by

immunoblotting. Tsuji T, et al. **Eur J Epidemiol** 1989 Jun; 5(2):199–201

Peritoneal lavage efficiently eliminates protease–alpha–2–macroglobulin complexes and components of the contact system from the peritoneal cavity in patients with severe acute pancreatitis. Aasen AO, et al. **Eur Surg Res** 1989;21(1):1–10

Characteristics of a protease of Streptococcus sanguis G9B which degrades the major salivary adhesin. Lamont RJ, et al. **FEMS Microbiol Lett** 1989 Mar;49(1):101–5

Proteolytic activity in electropherograms (SDS–PAGE) of bovine erythrocyte ghosts. Gaczynska M. **Int J Biochem** 1988;20(8):807–10

Proteolytic enzymes in excretory–secretory products from adult Nematospiroides dubius. Monroy FG, et al. **Int J Parasitol** 1989 Feb;19(1):129–31

Solubilization of immobilized protein substrates by metastatic tumor cells. Chen L, et al. **Invasion Metastasis** 1989; 9(1):27–45

Standardization of the electron spin resonance method for the proteolytic activity assay. Gaczyńska M, et al. **J Biochem Biophys Methods** 1989 Jun;18(4):331–3

A modified fibrin plate for rapid detection of proteinases and proteinase inhibitors in fractions after liquid chromatography. Safařik I. **J Biochem Biophys Methods** 1988 Dec;17(4):277–83

A study on the identities of the three species of chromatin–associated proteinases in a mutant of Saccharomyces cerevisiae which lacks four major vacuolar proteinases. Motizuki M, et al. **J Biochem (Tokyo)** 1988 Aug;104(2):192–5

Detection of proteolytic enzymes in fractions after liquid chromatography. Safařik I. **J Chromatogr** 1989 Jan 20; 463(1):212–5

Microtechnique for serum opacity factor characterization of group A streptococci adaptable to the use of human sera. Johnson DR, et al. **J Clin Microbiol** 1988 Oct; 26(10):2025–30

Fluorescent inhibitors of a cell surface protease used to locate leukaemia cells in kidney sections. Steven FS, et al. **J Enzym Inhib** 1987;1(3):203–13

Detection of MCT and MCTC types of human mast cells by immunohistochemistry using new monoclonal anti–tryptase and anti–chymase antibodies. Irani AM, et al. **J Histochem Cytochem** 1989 Oct;37(10):1509–15

Identification of a domain required for autoproteolytic cleavage of murine coronavirus gene A polyprotein. Baker SC, et al. **J Virol** 1989 Sep;63(9):3693–9

An analysis of intracellular proteinases from antibiotic–producing cells of Penicillium urticae. Rollins MJ, et al. **Microbios** 1988;56(227):105–21

Characterization and purification of a placental protein that inactivates GnRH, TRH and angiotensin II. Siler–Khodr TM, et al. **Placenta** 1989 May–Jun;10(3):283–96

The histochemical and cytochemical localization of proteases. Sannes PL. **Prog Histochem Cytochem** 1988; 18(1):1–48 (132 ref.)

Proteases and protease inhibitor balance in peritonitis with different causes. Delshammar M, et al. **Surgery** 1989 Sep; 106(3):555–62

The value of the enzygnost TAT test in the diagnosis of postoperative deep vein thrombosis after hip surgery. The Venous Thrombosis Group. Borris LC, et al. **Thromb Res** 1989 Jun 1;54(5):505–9

[Lung function and protease levels of BAL fluid in sarcoidosis II] Schmidt M, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:227–9 (Eng. Abstr.) **(Ger)**

[Proteases detectable in bronchoalveolar lavage fluid provide references for the prognosis in interstitial lung diseases] Schmidt M. **Prax Klin Pneumol** 1988 Jun;42(6):427–33 (Eng. Abstr.) **(Ger)**

[Levels of thrombin–antithrombin III complex and elastase–alpha 1 proteinase inhibitor complex in plasma in the chronic phase of cerebrovascular diseases] Saito M, et al. **Nippon Ronen Igakkai Zasshi** 1988 Jul;25(4):430–1 **(Jpn)**

[Molecular markers of hemostatic mechanisms—thrombin–antithrombin III complex] Fukutake K. **Rinsho Byori** 1989 Mar;37(3):261–5 **(Jpn)**

[Measurement of thrombin–antithrombin III complex in plasma] Kuroso K, et al. **Rinsho Byori** 1988 Dec; 36(12):1421–5 **(Jpn)**

[Thrombin/antithrombin III complex (TAT)—a new parameter for detection of thrombotic states] Pelzer H. **Rinsho Byori** 1989 Apr;Spec No 81:198–201 **(Jpn)**

[Thrombin–antithrombin complex in healthy subjects and patients with various diseases] Deguchi K, et al. **Rinsho Ketsueki** 1988 Nov;29(11):2048–53 (Eng. Abstr.) **(Jpn)**

[A possible approach to the analysis of protease mixtures] Nedospasov AA, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Jan–Feb;(1):128–32 (Eng. Abstr.) **(Rus)**

[Chemical modification of proteolytic enzymes by low molecular weight agents] Bez'lazychnaia TS, et al. **Prikl Biokhim Mikrobiol** 1988 Jul–Aug;24(4):481–3 (Eng. Abstr.) **(Rus)**

[Gastric juice acidity and intragastric proteolysis in stomach ulcer] Nechai AI, et al. **Sov Med** 1989;(3):6–8 (Eng. Abstr.) **(Rus)**

[The state of the protease–inhibitor system in the bronchoalveolar lavage of patients with diffuse lung diseases] Kaminskaia GO, et al. **Vopr Med Khim** 1988 Nov–Dec;34(6):100–4 (Eng. Abstr.) **(Rus)**

[Proteolytic processes in the bronchial contents in pulmonary tuberculosis] Zaks OV, et al. **Vrach Delo** 1988 Oct;(10):41–2 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Regulation of neurotoxin and protease formation in Clostridium botulinum Okra B and Hall A by arginine. Patterson–Curtis SI, et al. **Appl Environ Microbiol** 1989 Jun;55(6):1544–8

High–level synthesis of cowpea mosaic virus RNA polymerase and protease in Escherichia coli. Richards OC, et al. **Gene** 1989 May 15;78(1):135–46

Effect of streptomycin on extracellular proteases production by Fusarium oxysporum. Gaur R, et al. **Hindustan Antibiot Bull** 1988 Aug–Nov;30(3–4):85–6

IgA1 proteases of oral streptococci: ecological aspects. Kilian M, et al. **Immunol Invest** 1989 Jan–May;18(1–4):161–70

Differences in induction of lysosomal protease activity by protease inhibitors in B16 melanoma cell lines. Nakao H, et al. **Int J Biochem** 1989;21(2):139–42

The substrate of epidermal proteases—effects of in situ activation of epidermal thiol proteases on stratum granulosum cells. Takahashi M, et al. **J Dermatol (Tokyo)** 1989 Feb;16(1):12–9

[Candida species produce IgA proteases—an important biological property] Kett K. **Tidsskr Nor Laegeforen** 1989 Jun 30;109(19–21):2037 (Eng. Abstr.) **(Nor)**

[Hygienic evaluation of factors of the occupational environment at an industrial plant synthesizing microbiological enzyme preparations] Kuchuk AA, et al. **Gig Tr Prof Zabol** 1989;(4):16–8 (Eng. Abstr.) **(Rus)**

[Production by fungi of the genera Aspergillus, Acremonium, Verticillium of extracellular proteases which coagulate blood plasma and lyse ...od clots] Cherdyntseva TA, et al. **Mikrobiologiia** 1988 Jul–Aug;57(4):574–8 (Eng. Abstr.) **(Rus)**

[Combined immobilized cultures producing fibrinolytic proteinases] Egorov NS, et al. **Mikrobiologiia** 1988 Nov–Dec;57(6):945–51 (Eng. Abstr.) **(Rus)**

[Isolation of Actinomycetes synthesizing proteases with thrombolytic activity] Lysenko SV, et al. **Mikrobiologiia** 1988 Jul–Aug;57(4):571–3 (Eng. Abstr.) **(Rus)**

[The isolation, classification and some physiological properties of a protease–producing bacterium] Cihangir N, et al. **Mikrobiyol Bul** 1987 Jul;21(3):223–31 (Eng. Abstr.) **(Tur)**

BLOOD

Murine erythroleukemia cells possess an active ubiquitin– and ATP–dependent proteolytic pathway. Pickart CM, et al. **Arch Biochem Biophys** 1989 Jul;272(1):114–21

Oxidative inactivation of neutrophil granule proteinases: implications for neutrophil–mediated proteolysis. Vissers MC, et al. **Basic Life Sci** 1988;49:845–8

Inhibition of the proteolysis of rat erythrocyte membrane proteins by a synthetic inhibitor of calpain [published erratum appears in Biochem Biophys Res Commun 1989 Feb 28;159(1):371] Mehdi S, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1117–23

Changes in the proteolytic activity of human erythrocyte membrane during red cell aging. Gaczyńska M. **Biochim Biophys Acta** 1989 Jun 6;981(2):173–7

High–molecular–mass proteinases in rabbit reticulocytes: the multicatalytic proteinase is an ATP–independent enzyme and ATP–activated proteolysis is in part associated with a cysteine proteinase complexed to alpha 1–macroglobulin. Kuehn L, et al. **Biochim Biophys Acta** 1989 May 31; 991(2):263–71

An aspartic proteinase of erythrocyte membranes. Proposed mechanism for activation and further molecular properties. Yamamoto K, et al. **Biol Chem Hoppe Seyler** 1988 May; 369 Suppl:315–22

Plasma proteolysis and circulating cells in relation to varying endotoxin concentrations in porcine endotoxemia. Naess F, et al. **Circ Shock** 1989 Jun;28(2):89–100

Dose dependence of endotoxin–induced activation of the plasma contact system: an in vitro study. Roeise O, et al. **Circ Shock** 1988 Dec;26(4):419–30

Degradation of insulin and insulin–like growth factors by enzyme purified from human erythrocytes. Comparison of degradation products observed with A14– and B26–[125I]monoiodoinsulin. Misbin RI, et al. **Diabetes** 1989 Feb;38(2):152–8

Differences between beige and bg/+ mice in the disruption of plasma proteinase regulation in the tumor–bearing state or following Corynebacterium parvum treatment. Evidence for the involvement of polymorphonuclear leukocyte proteinases. Hart DA. **Haemostasis** 1988;18(3):154–62

Pancreatic proteases and antiproteases in pancreatic disease; biochemical, pathophysiological and clinical aspects. Ohlsson K, et al. **Int J Pancreatol** 1988;3 Suppl 1:S67–78 (52 ref.)

Proteolysis in human erythrocytes is triggered only by selected oxidative stressing agents. Di Cola D, et al. **Ital J Biochem** 1988 May–Jun;37(3):129–38

alpha 2–macroglobulin traps a proteinase in the midregion of its arms. An immunoelectron microscopic study. Arakawa H, et al. **J Biol Chem** 1989 Feb 5;264(4):2350–6

Characterization of leukocyte enzymes involved in the release of amino acids in incubated blood cell lysates. Mendz GL, et al. **J Biol Chem** 1989 Feb 5;264(4):2108–17

Time course of appearance and disappearance of human mast cell tryptase in the circulation after anaphylaxis. Schwartz LB, et al. **J Clin Invest** 1989 May;83(5):1551–5

Proteases and inhibitors in the plasma of patients with periodontal disease. Zafiropoulos GG, et al. **J Periodont Res** 1988 Jul;23(4):281–2

Nitrofurantoin–stimulated proteolysis in human erythrocytes: a novel index of toxic insult by nitroaromatics. Novak RF, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):439–44

Basophil–enriched leucocyte populations in an anti–IgE mediated protease degranulation assay. Britton JR, et al. **Med Lab Sci** 1988 Jul;45(3):282–6

Human neutrophil and mast cell proteases implicated in inflammation. Rest RF. **Methods Enzymol** 1988;163:309–27

Detection of parasite peptidase in the plasma of heifers infected with Trypanosoma congolense. Knowles G, et al. **Mol Biochem Parasitol** 1989 Apr;34(1):25–34

The role of plasma proteases in septic shock [editorial] Colman RW. **N Engl J Med** 1989 May 4;320(18):1207–9

HPLC determination of serratiopeptidase in biological fluids. Dallas P, et al. **Pharmazie** 1989 Apr;44(4):297

Role of endotoxin and proteases in multiple organ failure (MOF). Aasen AO, et al. **Prog Clin Biol Res** 1989; 308:315–22

Hemodynamic and proteolytic responses in relation to plasma endotoxin concentrations in porcine endotoxemia. Naess F, et al. **Prog Clin Biol Res** 1989;308:389–93

Serum succinyltrialanine p–nitroanilide–hydrolytic activity in workers occupationally exposed to lead. Ito Y, et al. **Toxicol Lett** 1989 Jul;48(1):83–91

[Chromatographic separation of activated proteases from human plasma] Lehmann B, et al. **Biomed Biochim Acta** 1988;47(4–5):363–71 (Eng. Abstr.) **(Ger)**

[Characteristics of endogenous proteolysis in preparations of human erythrocyte membranes] Gromov PS, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):292–7 (Eng. Abstr.) **(Rus)**

[Proteolytic systems of the body and humoral immunity factors in children with thrombocytic pathology] Bebeshko VG, et al. **Gematol Transfuziol** 1988 Nov;33(11):17–21 (Eng. Abstr.) **(Rus)**

[The use of various fluorogenic substrates for determining peptide hydrolase activity of the blood serum] Dilakian EA, et al. **Vopr Med Khim** 1989 Jan–Feb;35(1):131–6 (Eng. Abstr.) **(Rus)**

[Indices of extracellular proteolytic systems in patients with thrombocytopenic purpura under various treatment regimens] Donskaia SB. **Vrach Delo** 1988 Dec;(12):31–3 (Eng. Abstr.) **(Rus)**

[Proteolytic systems and immune factors in hemophilia patients] Donskaia SD, et al. **Vrach Delo** 1988 Jul;(7):43–5 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

Classification of mouse submaxillary gland esteroproteases by their substrate specificities. Kurosawa N, et al. **Electrophoresis** 1989 Mar;10(3):189–94

GENETICS

Human rhinovirus 3C protease: cloning and expression of an active form in Escherichia coli. Libby RT, et al. **Biochemistry** 1988 Aug 23;27(17):6262–8

Molecular cloning of dog mast cell tryptase and a related protease: structural evidence of a unique mode of serine protease activation. Vanderslice P, et al. **Biochemistry** 1989 May 16;28(10):4148–55

htpR–like gene controls cell division and proteolysis in Pseudomonas aeruginosa. Kiselev VI. **Biotechnol Appl Biochem** 1988 Dec;10(6):589–96

Oncogene ras p21– and v–src pp60–transformed cells exhibit altered expression of proteases. DiStefano JF, et al. **Cancer Invest** 1988;6(5):487–98

Active site mutagenesis of the AIDS virus protease and its alleviation by trans complementation. Le Grice SF, et al. **EMBO J** 1988 Aug;7(8):2547–53

Linkage analyses of human peptidase C (PEPC), human factor H (HF), and coagulation factor XIIIB (F13B). Kömpf J, et al. **Hum Genet** 1989 Aug;83(1):97–8

Genetic polymorphism of human peptidase C, PEPC (E.C.3.4.1.1): formal genetic and population data. Kömpf J, et al. **Hum Genet** 1989 Sep;83(2):197–8

Cloning and sequencing of the immunoglobulin A1 protease gene (iga) of Haemophilus influenzae serotype b. Poulsen K, et al. **Infect Immun** 1989 Oct;57(10):3097–105

Gene encoding a minor extracellular protease in Bacillus subtilis. Sloma A, et al. **J Bacteriol** 1988 Dec; 170(12):5557–63

Integration and mapping of Bacillus megaterium genes which code for small, acid–soluble spore proteins and their protease. Sussman MD, et al. **J Bacteriol** 1988 Oct; 170(10):4942–5

In vivo and in vitro autoprocessing of human immunodeficiency virus protease expressed in Escherichia coli. Giam CZ, et al. **J Biol Chem** 1988 Oct 15; 263(29):14617–20

Transforming growth factor beta 1 and cAMP inhibit transcription of epidermal growth factor– and oncogene–induced transin RNA. Kerr LD, et al. **J Biol Chem** 1988 Nov 15;263(32):16999–7005

The mast cell–specific expression of a protease gene, RMCP

II, is regulated by an enhancer element that binds specifically to mast cell trans-acting factors. Sarid J, et al. **J Biol Chem** 1989 Jan 15;264(2):1022–6

Identification of a doubly spliced viral transcript joining the separated domains for putative protease and reverse transcriptase of hepatitis B virus. Chen PJ, et al. **J Virol** 1989 Oct;63(10):4165–71

Artificial cleavage site recognized by plum pox potyvirus protease in Escherichia coli. García JA, et al. **J Virol** 1989 Jun;63(6):2457–60

Mutational analysis of human immunodeficiency virus type 1 protease suggests functional homology with aspartic proteinases. Loeb DD, et al. **J Virol** 1989 Jan;63(1):111–21

Proteaselike sequence in hepatitis B virus core antigen is not required for e antigen generation and may not be part of an aspartic acid–type protease. Nassal M, et al. **J Virol** 1989 Jun;63(6):2598–604

Malarial proteinase? [letter] Higgins DG, et al. **Nature** 1989 Aug 24;340(6235):604

Sequence of the human adenovirus type 3 protease. Houde A, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11374

Retroviral protease–like gene in the vaccinia virus genome. Slabaugh MB, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(11):4152–5

Sex-linked peptidase–1 patterns in Pleurodeles waltlii Michah (Urodele Amphibian): genetic evidence for a new codominant allele on the W sex chromosome and identification of ZZ, ZW and WW sexual genotypes. Dournon C, et al. **Reprod Nutr Dev** 1988;28(4A):979–87

Human insulin–degrading enzyme shares structural and functional homologies with E. coli protease III. Affholter JA, et al. **Science** 1988 Dec 9;242(4884):1415–8

Growth factors regulate transin gene expression by c-fos–dependent and c-fos–independent pathways. Kerr LD, et al. **Science** 1988 Dec 9;242(4884):1424–7

The protease and gag gene products of the human immunodeficiency virus: authentic cleavage and post–translational modification in an insect cell expression system. Overton HA, et al. **Virology** 1989 May; 170(1):107–16

Alteration of intracellular monovalent cation concentrations by a poliovirus mutant which encodes a defective 2A protease. Garry RF. **Virus Res** 1989 Jun;13(2):129–41

[Genes participating in the maturation of AIDS viruses; retrovirus protease] Yoshinaka Y, et al. **Nippon Rinsho** 1989 Jan;47(1):197–206 **(Jpn)**

[Retroviral protease] Yoshinaka Y, et al. **Seikagaku** 1988 Sep; 60(9):1053–9 **(Jpn)**

IMMUNOLOGY

Contact dermatitis from B. subtilis–derived protease enzymes. Smith DJ, et al. **Contact Dermatitis** 1989 Jan;20(1):58–9

Involvement of tryptase–related cellular protease(s) in human immunodeficiency virus type 1 infection. Hattori T, et al. **FEBS Lett** 1989 May 8;248(1–2):48–52

Antibody response to human immunodeficiency virus type 1 protease according to risk group and disease stage. Boucher CA, et al. **J Clin Microbiol** 1989 Jul;27(7):1577–81

Antigenicity of a proteolytic enzyme of Fasciola hepatica. Coles GC, et al. **J Helminthol** 1988 Sep;62(3):257–60

ISOLATION & PURIFICATION

Purification and characterization of a multicatalytic proteinase from crustacean muscle: comparison of latent and heat–activated forms. Mykles DL. **Arch Biochem Biophys** 1989 Oct;274(1):216–28

Purification and characterization of a prothrombin activator from the venom of the Australian brown snake, Pseudonaja textilis textilis. Masci PP, et al. **Biochem Int** 1988 Nov; 17(5):825–35

Human skin tryptase: purification, partial characterization and comparison with human lung tryptase. Harvima IT, et al. **Biochim Biophys Acta** 1988 Nov 2;957(1):71–80

Purification of a specific peptidase in bovine atria for the processing of pro–atrial natriuretic factor. Imada T, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:113–20

Proteases in cyst fluid from human gross cyst breast disease. Kesner L, et al. **Cancer Res** 1988 Nov 15;48(22):6379–83

Characterization of proteolytic activities in embryos of Xenopus laevis. Miyata S, et al. **Comp Biochem Physiol [B]** 1988;91(4):651–6

The multicatalytic proteinase (prosome) is ubiquitous from eukaryotes to archaebacteria. Dahlmann B, et al. **FEBS Lett** 1989 Jul 17;251(1–2):125–31

Secondary structure of the promastigote surface protease of Leishmania. Jähnig F, et al. **FEBS Lett** 1988 Dec 5; 241(1–2):79–82

Addition of a methyl group changes both the catalytic velocity and thermostability of the neutral protease from Bacillus stearothermophilus. Takagi M, et al. **FEBS Lett** 1989 Aug 28;254(1–2):43–6

A rapid method for purification of homogeneous Legionella pneumophila cytotoxic protease using fast protein liquid chromatography. Rechnitzer C, et al. **FEMS Microbiol Lett** 1989 May;50(1–2):39–44

Isolation of antigens with proteolytic activity from Coccidioides immitis. Cole GT, et al. **Infect Immun** 1989 May;57(5):1524–34

Characterization of sodium dodecyl sulfate–stable Bacteroides gingivalis proteases by polyacrylamide gel electrophoresis. Grenier D, et al. **Infect Immun** 1989 Jan; 57(1):95–9

Purification and characterization of a protease produced by Vibrio cholerae non–O1 and comparison with a protease of V. cholerae O1. Honda T, et al. **Infect Immun** 1989 Sep; 57(9):2799–803

Purification and characterization of multicatalytic proteinase from eggs of the ascidian Halocynthia roretzi. Saitoh Y, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):254–60

Purification of the decomposing enzyme from Nepenthes alata against glycophorin B of human red blood cells by high–performance liquid chromatography. Kamesaki T, et al. **J Chromatogr** 1989 Apr 14;489(2):384–9

Coprecipitation of enzymes with water soluble starch—an alternative to freeze–drying. Randén L, et al. **J Pharm Pharmacol** 1988 Nov;40(11):763–6

Production and isolation of neissereal IgA proteases. Plaut AG. **Methods Enzymol** 1988;165:117–20

Purification of a 44 kilodalton protease which mediates the ecdysis of infective Haemonchus contortus larvae. Gamble HR, et al. **Mol Biochem Parasitol** 1989 Feb;33(1):49–58

Identification of protease(s) capable of further degrading native 3/4– and 1/4–collagen fragments generated by collagenase from native type I collagen in human neutrophils. Sorsa T, et al. **Proc Finn Dent Soc** 1989; 85(1):3–11

Parasite proteases and antimalarial activities of protease inhibitors. Vander Jagt DL, et al. **Prog Clin Biol Res** 1989; 313:105–18

A protease in the venom of king cobra (Ophiophagus hannah): purification, characterization and substrate specificity on oxidized insulin B–chain Yamakawa Y, et al. **Toxicon** 1988;26(12):1145–55

[Methionyl–tRna synthetase from wheat germ. Effect of an endogenous protease and correlations between structural characteristics and catalytic properties.] Archambault de Vençay J. **Eur J Biochem** 1989 Jun 1;182(1):37–43 (Eng. Abstr.) **(Fre)**

[A nutrient medium for isolating proteases of bacteria of the genus Bacillus] Bondarchuk AA, et al. **Mikrobiol Zh** 1987 May–Jun;49(3):110–2 (Eng. Abstr.) **(Rus)**

[Creation of a polyenzyme composition of proteases from Streptomyces griseus and Acremonium chrysogenum] Mishunin IF, et al. **Ukr Biokhim Zh** 1988 Jul–Aug; 60(4):78–81 (Eng. Abstr.) **(Rus)**

METABOLISM

The different mechanisms of protease action have a basic feature in common: proton transfer from the attacking nucleophile to the substrate leaving group. Polgár L. **Acta Biochim Biophys Hung** 1988;23(3–4):207–13

Proteolytic and lysosomal enzymes in acute trauma–induced lung injury in sheep. Andreasson S, et al. **Acta Chir Scand** 1989;155(1):1–6

Effect of ethanol and acetaldehyde on the enzymatic activity of human pancreatic juice in vitro. II. Inhibition of the activity of proteolytic enzymes. Skrzydlewska E, et al. **Acta Med Pol** 1988;29(1–2):47–52

Action of epsilon–aminocaproic acid on the proteolysis system during experimental influenza in mice. Puzis LE, et al. **Acta Virol (Praha)** 1988 Nov;32(6):515–21

Protease histochemistry in normal and uremic rats. Gossrau R, et al. **Adv Exp Med Biol** 1988;240:351–60

Plasma membrane proteases as useful tool in histochemical toxicology. Graf R, et al. **Adv Exp Med Biol** 1988;240:45–55

Nutrition and protease activity. Kopple JD. **Adv Exp Med Biol** 1988;240:411–9 (32 ref.)

Effect of glomerular proteinuria on the activities of lysosomal proteases in isolated segments of rat proximal tubule. Olbricht CJ. **Adv Exp Med Biol** 1988;240:283–91

Proteolytic mechanisms operating at the surface of invasive cells. Pöllänen J, et al. **Adv Exp Med Biol** 1988;233:187–99 (87 ref.)

Proteases and antiproteases in ascites—differentiation of malignant and nonmalignant ascites and prediction of coagulopathy in ascites retransfusion. Schölmerich J, et al. **Adv Exp Med Biol** 1988;240:555–60

The modification of low density lipoproteins by macrophages by oxidation or proteolysis. Rankin SM, et al. **Agents Actions Suppl** 1988;26:233–9

Roles of mast cell tryptase and chymase in airway function. Caughey GH. **Am J Physiol** 1989 Aug;257(2 Pt 1):L39–46 (86 ref.)

Putative tripeptidyl peptidase in renal brush border is due to sequential action of two other exopeptidases [letter] Kenny AJ, et al. **Am J Physiol** 1989 May;256(5 Pt 2):F790–1

Peptidase enzymes of the pulmonary vascular surface. Ryan JW. **Am J Physiol** 1989 Aug;257(2 Pt 1):L53–60 (59 ref.)

Characterization of acetylcholine release from enzyme–dissociated myenteric ganglia. Yau WM, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):G233–9

Activation of pulmonary mast cells by bronchoalveolar allergen challenge. In vivo release of histamine and tryptase in atopic subjects with and without asthma. Wenzel SE, et al. **Am Rev Respir Dis** 1988 May;137(5):1002–8

Protein microinjection by protease permeabilization of fibroblasts. Lemons R, et al. **Anal Biochem** 1988 Jul; 172(1):219–27

Proteases from extreme thermophiles. Coolbear T, et al. **Ann N Y Acad Sci** 1988;542:279–81

Modification of recombinant N alpha–acetyl–eglin c by novel proteases from Nocardia mediterranei. Schar H, et al. **Ann N Y Acad Sci** 1988;542:302–6

Proteases and protease inhibitors in immune complex otitis media in chinchillas. Hamaguchi Y, et al. **Ann Otol Rhinol Laryngol** 1989 Jul;98(7 Pt 1):563–8

Viral proteinases. Kräusslich HG, et al. **Annu Rev Biochem** 1988;57:701–54 (268 ref.)

Inhibition of proteinase–like peptidase activities in serum and tissue from breast cancer patients. Vasishta A, et al. **Anticancer Res** 1988 Jul–Aug;8(4):785–9

Significance of microflora in proteolysis in the colon. Gibson SA, et al. **Appl Environ Microbiol** 1989 Mar;55(3):679–83

In vitro translation of the protease catalyzing Bombyx mori egg–specific protein and identification of a nascent peptide with biological activity. Indrasith LS, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):328–33

Biochemical and histochemical evaluation of tryptase in various human tissues. Harvima IT, et al. **Arch Dermatol Res** 1989;281(4):231–7

Immunoperoxidase and enzyme–histochemical demonstration of human skin tryptase in cutaneous mast cells in normal and mastocytoma skin. Harvima IT, et al. **Arch Dermatol Res** 1988;280(6):363–70

The effect of tumor necrosis factor alpha and gamma–interferon on the resorption of human articular cartilage and on the production of prostaglandin E and of caseinase activity by human articular chondrocytes. Bunning RA, et al. **Arthritis Rheum** 1989 Jun;32(6):780–4

Proteolytic activities of human Campylobacter pylori and ferret gastric Campylobacter–like organism. Baxter A, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):1–7

HIV–1 protease specificity of peptide cleavage is sufficient for processing of gag and pol polyproteins. Darke PL, et al. **Biochem Biophys Res Commun** 1988 Oct 14; 156(1):297–303

Nicking of single chain Clostridium botulinum type A neurotoxin by an endogenous protease. Dekleva ML, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):767–72

Inhibitory action of isovaleryl–L–carnitine on proteolysis in perfused rat liver. Miotto G, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):797–802

Tissue distribution and characterization of prorenin–converting enzyme in mouse. Nakayama K, et al. **Biochem Biophys Res Commun** 1989 Jan 31; 158(2):369–76

Processing of the oxytocin precursor: isolation of an exopeptidase from neurosecretory granules of bovine pituitaries. Nörenberg U, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):898–904

Autodegradation of rat liver proteasomes (large multicatalytic proteinase complexes). Tanaka K, et al. **Biochem Biophys Res Commun** 1989 Jan 31;158(2):548–54

Endothelial cell–derived high molecular weight von Willebrand factor is converted into the plasma multimer pattern by granulocyte proteases. Tsai HM, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):980–5

Membrane peptidases in the pig choroid plexus and on other cell surfaces in contact with the cerebrospinal fluid. Bourne A, et al. **Biochem J** 1989 Apr 1;259(1):69–80

Evidence for an oxyanion hole in serine beta–lactamases and DD–peptidases. Murphy BP, et al. **Biochem J** 1988 Dec 1;256(2):669–72

Insulin proteinase liberates from glucagon a fragment known to have enhanced activity against Ca2+ + Mg2+–dependent ATPase. Rose K, et al. **Biochem J** 1988 Dec 15;256(3):847–51

Characterization of a neural proteinase which may play a key role in demyelinating disease. Chantry A, et al. **Biochem Soc Trans** 1988 Aug;16(4):469–72

Penicillin–recognizing enzymes. Frère JM, et al. **Biochem Soc Trans** 1988 Dec;16(6):934–8

Drosophila insulin degrading enzyme and rat skeletal muscle insulin protease cleave insulin at similar sites. Duckworth WC, et al. **Biochemistry** 1989 Mar 21;28(6):2471–7

HIV–1 reverse transcriptase: crystallization and analysis of domain structure by limited proteolysis. Lowe DM, et al. **Biochemistry** 1988 Dec 13;27(25):8884–9

Esterolytic, elastase–like activity of purified alkaline proteinase from Aspergillus sojae. Gertler A, et al. **Biochim Biophys Acta** 1971 May 12;235(2):378–80

The allosteric effect of salt on human mast cell tryptase. Harvima IT, et al. **Biochim Biophys Acta** 1988 Sep 21; 956(2):133–9

Investigations into the nature of growth–related proteolysis in human fibroblasts. Scott GK, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):160–5

Reflections on chemical modification of proteinases and their protein inhibitors. Feeney RE. **Biochimie** 1988 Sep; 70(9):1171–7

Activation of a Plasmodium falciparum protease correlated with merozoite maturation and erythrocyte invasion. Braun–Breton C, et al. **Biol Cell** 1988;64(2):223–31

The effect of the secretory leukocyte protease inhibitor on leukocyte proteases released during phagocytosis. Axelsson L, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:89–93

Interactions between a viral protease and cystatins. Korant B, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:281–6

Changes in proteinase/proteinase inhibitor levels in rat skeletal muscle tissue during diabetes and fasting. Kuehn L, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:299–305

Tryptase in rat mast cells: properties and inhibition by various inhibitors in comparison with chymase. Muramatu M, et

al. **Biol Chem Hoppe Seyler** 1988 Jul;369(7):617–25
Corticosteroid increases gastrointestinal luminal proteolysis in suckling rats. Britton JR, et al. **Biol Neonate** 1988; 54(6):330–8
Proteolytic enzyme activities in skeletal muscle of high jumping rats. Sohár I, et al. **Biomed Biochim Acta** 1989; 48(5–6):S422–5
Sialic acid prevents loss of large von Willebrand factor multimers by protecting against amino–terminal proteolytic cleavage. Berkowitz SD, et al. **Blood** 1988 Nov; 72(5):1790–6
Combined procoagulant activity and proteolytic activity of acute promyelocytic leukemic cells: reversal of the bleeding disorder by cell differentiation. Wijermans PW, et al. **Blood** 1989 Feb 15;73(3):800–5
Enhanced acid protease activity of lysosomes from papillary thyroid carcinoma. Sinadinović J, et al. **Cancer** 1989 Mar 15;63(6):1179–82
Cytotoxicity of bacterial proteases in various tumor cells mediated through alpha 2–macroglobulin receptor. Maeda H, et al. **Cancer Res** 1989 Feb 1;49(3):660–4
A protein component of Drosophila polar granules is encoded by vasa and has extensive sequence similarity to ATP–dependent helicases. Hay B, et al. **Cell** 1988 Nov 18;55(4):577–87
Action of endogenous proteases on the distribution of tyrosinase isozymes in Harding–Passey mouse melanoma. Martinez JH, et al. **Cell Biochem Funct** 1989 Jan;7(1):21–6
Protease–catalyzed semisynthesis of human neuropeptide Y. Sakina K, et al. **Chem Pharm Bull (Tokyo)** 1989 Mar; 37(3):811–2
Endoprotease in human liver transforming multiple forms of alkaline phosphatase. Seiffert UB, et al. **Clin Biochem** 1989 Apr;22(2):103–7
Determination of human aspartate aminotransferase isoenzymes by their differential sensitivity to proteases. Teranishi H, et al. **Clin Biochem** 1988 Dec;21(6):347–52
Schistosoma mansoni: inhibition of cercarial "penetration" proteases by components of mammalian blood. Asch HL, et al. **Comp Biochem Physiol [B]** 1977;58(1):89–95
AMP deaminase in the gill of trout (Salmo gairdneri R.). Modalities of an activation by cellular proteolytic enzymes. Raffin JP, et al. **Comp Biochem Physiol [B]** 1979;62(1):23–9
Local proteolytic activation after pulmonary trauma is not prevented by high dose steroids. Andréasson S, et al. **Crit Care Med** 1989 Aug;17(8):792–7
Enzymatic barriers to peptide and protein absorption. Lee VH. **Crit Rev Ther Drug Carrier Syst** 1988;5(2):69–97 (188 ref.)
A rapid flow cytometric method for bivariate bromodeoxyuridine/DNA analysis using simultaneous proteolytic enzyme digestion and acid denaturation. van Erp PE, et al. **Cytometry** 1988 Nov;9(6):627–30
Characterization of a proteinase that cleaves zona pellucida glycoprotein ZP2 following activation of mouse eggs. Moller CC, et al. **Dev Biol** 1989 Mar;132(1):103–12
Extracellular protease production by Drosophila imaginal discs. Pino–Heiss S, et al. **Dev Biol** 1989 Apr;132(2):282–91
Skeletal muscle proteolysis in rats with acute streptozocin–induced diabetes. Smith OL, et al. **Diabetes** 1989 Sep;38(9):1117–22
Endocrine regulation of protein breakdown in skeletal muscle. Kettelhut IC, et al. **Diabetes Metab Rev** 1988 Dec; 4(8):751–72 (162 ref.)
Increased proteolysis and leucine aminopeptidase activity in faeces of patients with Crohn's disease. Ruseler–van Embden JG, et al. **Digestion** 1988;40(1):33–40
Peptide mapping of polypeptides separated by two–dimensional electrophoresis: protease digestion directly on the two–dimensional gel followed by electrophoresis in reverse direction. Zivy M, et al. **Electrophoresis** 1988 Jul;9(7):339–43
Insulin degradation: mechanisms, products, and significance. Duckworth WC. **Endocr Rev** 1988 Aug;9(3):319–45 (345 ref.)
Influences of follicle–stimulating hormone, proteases, and antiproteases on permeability of the barrier generated by Sertoli cells in a two–chambered assembly. Ailenberg M, et al. **Endocrinology** 1989 Mar;124(3):1399–407
Estradiol–stimulated proteolytic cleavage of the estrogen receptor in mouse uterus. Horigome T, et al. **Endocrinology** 1988 Nov;123(5):2540–8
Structural properties of the renal parathyroid hormone receptor: hydrodynamic analysis and protease sensitivity. Karpf DB, et al. **Endocrinology** 1988 Dec;123(6):2611–20
Biological properties of an initial degradation product of insulin by insulin–degrading enzyme. Yonezawa K, et al. **Endocrinology** 1989 Jan;124(1):496–504
The influence of water on protease–catalyzed peptide synthesis in acetonitrile/water mixtures. Reslow M, et al. **Eur J Biochem** 1988 Nov 1;177(2):313–8
An ATP–dependent protease and ingensin, the multicatalytic proteinase, in K562 cells. Tsukahara T, et al. **Eur J Biochem** 1988 Nov 1;177(2):261–6
Local pulmonary activation of proteolytic enzymes after Escherichia–coli–induced lung injury in sheep. Andreasson S, et al. **Eur Surg Res** 1988;20(5–6):289–97
Interaction of platelets with endothelial cells: activation of a novel neutral protease. Menashi S, et al. **Exp Cell Res** 1989 Aug;183(2):294–302
Extracellular proteases of Onchocerca. Lackey A, et al. **Exp Parasitol** 1989 Feb;68(2):176–85
Toxocara canis: proteolytic enzymes secreted by the infective larvae in vitro. Robertson BD, et al. **Exp Parasitol** 1989 Jul;69(1):30–6
Activation of interleukin–1 beta by a co–induced protease. Black RA, et al. **FEBS Lett** 1989 Apr 24;247(2):386–90
Stalle and transient expression of mouse submaxillary gland renin cDNA in AtT20 cells: proteolytic processing and secretory pathways. Landenheim, RG, et al. **FEBS Lett** 1989 Mar 13;245(1–2):70–4
Na+, K+–specific inhibition of protein and peptide hydrolyses by proteasomes from human hepatoma tissues. Seol JH, et al. **FEBS Lett** 1989 Apr 24;247(2):197–200
Evidence of a yeast proteinase specific for elongation factor 2. Servillo L, et al. **FEBS Lett** 1988 Dec 5;241(1–2):257–60
Degradation of oxidatively denatured proteins in Escherichia coli. Davies KJ, et al. **Free Radic Biol Med** 1988;5(4):215–23
Oxidatively denatured proteins are degraded by an ATP–independent proteolytic pathway in Escherichia coli. Davies KJ, et al. **Free Radic Biol Med** 1988;5(4):225–36
Acrosomal proteinase activity of human spermatozoa and relation of results to semen quality. Welker B, et al. **Hum Reprod** 1988 Oct;3 Suppl 2:75–80
Role of angiotensin converting enzyme and other peptidases in in vivo metabolism of kinins. Ishida H, et al. **Hypertension** 1989 Sep;14(3):322–7
Use of inhibitory (anti–catalytic) antibodies to study extracellular proteolysis. Birkedal–Hansen H, et al. **Immunol Invest** 1989 Jan–May;18(1–4):211–24
Regulation of Trichophyton rubrum proteolytic activity. Apodaca G, et al. **Infect Immun** 1989 Oct;57(10):3081–90
Proteases released in organ culture by acute dermal inflammatory lesions produced in vivo in rabbit skin by sulfur mustard: hydrolysis of synthetic peptide substrates for trypsin–like and chymotrypsin–like enzymes. Higuchi K, et al. **Inflammation** 1988 Aug;12(4):311–34
The role of proteases in the pathogenesis of bullous dermatoses. Takamori K, et al. **Int J Dermatol** 1988 Oct; 27(8):533–9 (49 ref.)
Modulation of enzymatic activities during spontaneous and induced differentiation in a human pancreatic adenocarcinoma cell line CAPAN–1. Bensaadi N, et al. **Int J Pancreatol** 1989 May;4(4):391–406
Role of lysosomes in pancreatic diseases. Figarella C, et al. **Int J Pancreatol** 1988;3 Suppl 1:S9–18 (17 ref.)
The effect of ascorbate on proteolytic enzyme activities in fish. Dabrowski K, et al. **Int J Vitam Nutr Res** 1989; 59(2):157–60
Tryptase levels in nasal–lavage fluid as an indicator of the immediate allergic response. Castells M, et al. **J Allergy Clin Immunol** 1988 Sep;82(3 Pt 1):348–55
Effects of the oviduct and wheat germ agglutinin on enzymatic digestion of porcine zona pellucidae. Broermann DM, et al. **J Anim Sci** 1989 May;67(5):1324–9
Acceleration of postmortem tenderization in ovine carcasses through infusion of calcium chloride: effect of concentration and ionic strength. Koohmaraie M, et al. **J Anim Sci** 1989 Apr;67(4):934–42
Influence of mucin on glycosidase, protease and arylamidase activities of human gut bacteria grown in a 3–stage continuous culture system. Macfarlane GT, et al. **J Appl Bacteriol** 1989 May;66(5):407–17
Bacteria of the genus Bacillus have a hydrolase stereospecific to the D isomer of benzoyl–arginine–p–nitroanilide. Gofshtein–Gandman LV, et al. **J Bacteriol** 1988 Dec; 170(12):5895–900
Comparison of Escherichia coli K–12 outer membrane protease OmpT and Salmonella typhimurium E protein. Grodberg J, et al. **J Bacteriol** 1989 May;171(5):2903–5
Degradation of a signal peptide by protease IV and oligopeptidase A. Novak P, et al. **J Bacteriol** 1988 Nov; 170(11):5067–75
Proteolysis of bacteriophage phi X174 prohead protein gpB by a protease located in the Escherichia coli outer membrane. Richardson DL Jr, et al. **J Bacteriol** 1988 Dec; 170(12):5564–71
An insoluble chromolytic substrate for the determination of proteolytic activity. Safařík I. **J Biochem Biophys Methods** 1988 Nov;17(3):193–7
A monoclonal antibody that triggers deacylation of an intermediate thrombin–antithrombin III complex. Asakura S, et al. **J Biol Chem** 1989 Aug 15;264(23):13736–9
Synthetic peptides as substrates and inhibitors of human immune deficiency virus–1 protease. Billich S, et al. **J Biol Chem** 1988 Dec 5;263(34):17905–8
Role of bestatin–sensitive exopeptidases in the intracellular degradation of hepatic proteins. Botbol V, et al. **J Biol Chem** 1989 Aug 15;264(23):13504–9
Identification of C–terminal extensions that protect proteins from intracellular proteolysis. Bowie JU, et al. **J Biol Chem** 1989 May 5;264(13):7596–602
Processing endoprotease recognizes a structural feature at the cleavage site of peptide prohormones. The pro–ocytocin/neurophysin model. Brakch N, et al. **J Biol Chem** 1989 Sep 25;264(27):15912–6
Proteinase binding and inhibition by the monomeric alpha–macroglobulin rat alpha 1–inhibitor–3. Enghild JJ, et al. **J Biol Chem** 1989 Jul 5;264(19):11428–35
Structure–function analysis of plasma cholesteryl ester transfer protein by protease digestion and expression of cDNA fragments in Escherichia coli. Hesler CB, et al. **J Biol Chem** 1989 Jul 5;264(19):11317–25
Energy coupling in bacterial periplasmic transport systems. Studies in intact Escherichia coli cells. Joshi AK, et al. **J Biol Chem** 1989 Feb 5;264(4):2126–33
Transport of proteins into chloroplasts. Organization, orientation, and lateral distribution of the plastocyanin processing peptidase in the thylakoid network. Kirwin PM, et al. **J Biol Chem** 1988 Dec 5;263(34):18128–32
Proteolytic enzymes of mast cell granules degrade low density lipoproteins and promote their granule–mediated uptake by macrophages in vitro. Kokkonen JO, et al. **J Biol Chem** 1989 Jun 25;264(18):10749–55
Avian retroviral protease and cellular aspartic proteases are distinguished by activities on peptide substrates. Kotler M, et al. **J Biol Chem** 1989 Feb 25;264(6):3428–35
A novel location for dipeptidyl aminopeptidase processing sites in the alkaline extracellular protease of Yarrowia lipolytica. Matoba S, et al. **J Biol Chem** 1989 Apr 15; 264(11):6037–43
Reconstitution of endosomal proteolysis in a cell–free system. Transfer of immune complexes internalized via Fc receptors to an endosomal proteolytic compartment. Mayorga LS, et al. **J Biol Chem** 1989 Apr 5;264(10):5392–9
Activation of hageman factor and prekallikrein and generation of kinin by various microbial proteinases. Molla A, et al. **J Biol Chem** 1989 Jun 25;264(18):10589–94
A hybrid Escherichia coli alkaline phosphatase formed on proteolysis. Olafsdottir S, et al. **J Biol Chem** 1989 Mar 15; 264(8):4529–35
The structural stability of a protein is an important determinant of its proteolytic susceptibility in Escherichia coli. Parsell DA, et al. **J Biol Chem** 1989 May 5; 264(13):7590–5
Proteolytic processing of the beta–subunit of the lysosomal enzyme, beta–hexosaminidase, in normal human fibroblasts. Quon DV, et al. **J Biol Chem** 1989 Feb 25;264(6):3380–4
Proteolytic fragmentation and peptide mapping of human carboxyamidomethylated tracheobronchial mucin. Rose MC, et al. **J Biol Chem** 1989 May 15;264(14):8193–9
Degradation of structurally characterized proteins injected into HeLa cells. Comparison with their stability in rabbit reticulocyte lysate. Rote K, et al. **J Biol Chem** 1989 Jun 15;264(17):9772–9
Circular pancreatic trypsin inhibitor. A novel substrate for studies on intracellular proteolysis. Rote KV, et al. **J Biol Chem** 1989 Jan 15;264(2):1156–62
Characterization of a glucagon receptor–linked protease from canine hepatic plasma membranes. Partial purification, kinetic analysis, and determination of sites for hormone processing. Sheetz MJ, et al. **J Biol Chem** 1988 Dec 15; 263(35):19210–7
Lysosomal (vacuolar) proteinases of yeast are essential catalysts for protein degradation, differentiation, and cell survival. Teichert U, et al. **J Biol Chem** 1989 Sep 25; 264(27):16037–45
Proteolytic activity associated with the nuclear scaffold. The effect of self–digestion on lamins. Tökés ZA, et al. **J Biol Chem** 1989 Sep 5;264(25):15059–65
Isolation and characterization of a novel large protease accumulated in mammalian cells in the presence of inhibitors. Tsuji A, et al. **J Biol Chem** 1989 Sep 25; 264(27):16093–9
Proteolytic modification of Escherichia coli alkaline phosphatase. Tyler–Cross R, et al. **J Biol Chem** 1989 Mar 15;264(8):4523–8
Binding of protease nexin–1 to the fibroblast surface alters its target proteinase specificity. Wagner SL, et al. **J Biol Chem** 1989 Jan 5;264(1):611–5
Stimulated secretion of lysosomal enzymes by cells in culture. Warren L. **J Biol Chem** 1989 May 25;264(15):8835–42
Both a short hydrophobic domain and a carboxyl–terminal hydrophilic region are important for signal function in the Escherichia coli leader peptidase. Zhu HY, et al. **J Biol Chem** 1989 Jul 15;264(20):11833–8
An evolutionarily conserved enzyme degrades transforming growth factor–alpha as well as insulin. Garcia JV, et al. **J Cell Biol** 1989 Sep;109(3):1301–7
Activation of pro–urokinase and plasminogen on human sarcoma cells: a proteolytic system with surface–bound reactants. Stephens RW, et al. **J Cell Biol** 1989 May; 108(5):1987–95
Down–regulation of proteolytic activity in 12–O–tetradecanoyl–phorbol–13–acetate–induced K562 leukemia cell cultures: depletion of active urokinase by excess type 1 plasminogen activator inhibitor. Alitalo R, et al. **J Cell Physiol** 1989 Jul;140(1):119–30
Direct evidence for nuclear and cytoplasmic colocalization of proteasomes (multiprotease complexes) in liver. Tanaka K, et al. **J Cell Physiol** 1989 Apr;139(1):34–41
Mast cell tryptase causes airway smooth muscle hyperresponsiveness in dogs. Sekizawa K, et al. **J Clin Invest** 1989 Jan;83(1):175–9
Repair of protease–damaged elastin in neonatal rat aortic smooth muscle cell cultures. Stone PJ, et al. **J Clin Invest** 1988 Nov;82(5):1644–54
Partial characterization of intracellular protease activity which participates in the inactivation of carbamyl phosphate synthase in Phycomyces blakesleeanus. Alonso MJ, et al. **J Enzym Inhib** 1988;2(2):143–50
In vivo production of a tissue–destructive protease by Legionella pneumophila in the lungs of experimentally infected guinea–pigs. Conlan JW, et al. **J Gen Microbiol** 1988 Jan;134 (Pt 1):143–9
Characterization of proteases formed by Bacteroides fragilis.

Gibson SA, et al. **J Gen Microbiol** 1988 Aug;134 (Pt 8):2231–40

Studies on the proteolytic activity of Bacteroides fragilis. Gibson SA, et al. **J Gen Microbiol** 1988 Jan;134 (Pt 1):19–27

Enzyme histochemical discrimination between tryptase and chymase in mast cells of human gut. Osman IA, et al. **J Histochem Cytochem** 1989 Apr;37(4):415–21

Age-dependent changes in protease and elastase production in cultures of Pseudomonas aeruginosa. Umeki S. **J Med Microbiol** 1989 Feb;28(2):109–12

Preliminary characterization of extracellular proteolytic enzymes of dermatophytes by chromogenic substrates. Kunert J, et al. **J Med Vet Mycol** 1988 Jun;26(3):187–94

Biochemical basis of the temperature-inducible constitutive protease activity of the RecA441 protein of Escherichia coli. Lavery PE, et al. **J Mol Biol** 1988 Oct 20; 203(4):861–74

Proteolytic cleavage of tetanus toxin increases activity. Bergey GK, et al. **J Neurochem** 1989 Jul;53(1):155–61

Neuropeptide-metabolizing peptidases of nervous tissue [letter] Camargo AC. **J Neurochem** 1989 Jul;53(1):315–6

Proteolytic processing of human brain alpha spectrin (fodrin): identification of a hypersensitive site. Harris AS, et al. **J Neurosci** 1988 Jul;8(7):2640–51

Light and scanning electron microscopy of the ecdysis of Haemonchus contortus infective larvae. Gamble HR, et al. **J Parasitol** 1989 Apr;75(2):303–7

Tryptase-like activity in crevicular fluid from gingivitis and periodontitis patients. Cox SW, et al. **J Periodont Res** 1989 Jan;24(1):41–4

Resistance of alpha-globulin from Sesamum indicum L. to proteases in relationship to its structure. Tasneem R, et al. **J Protein Chem** 1989 Apr;8(2):251–61

In vivo effects of antirheumatic drugs on neutral collagenolytic proteases in human rheumatoid arthritis cartilage and synovium. Martel-Pelletier J, et al. **J Rheumatol** 1988 Aug;15(8):1198–204

Kinetics of a model for zymogen activation: the case of high activating enzyme concentrations. Varón R, et al. **J Theor Biol** 1988 May 7;132(1):51–9

Molecular mechanism of complex infection by bacteria and virus analyzed by a model using serratial protease and influenza virus in mice. Akaike T, et al. **J Virol** 1989 May; 63(5):2252–9

Environmental factors associated with proteolytic activity of estuarine bacteria. Sizemore RK, et al. **Life Sci** 1974 Oct 15;15(8):1425–32

Decline in protease activities with age in the nematode Caenorhabditis elegans. Sarkis GJ, et al. **Mech Ageing Dev** 1988 Nov 30;45(3):191–201

Differential susceptibility of salmonid fishes to furunculosis correlates with differential serum enhancement of Aeromonas salmonicida extracellular protease activity. Ellis AE, et al. **Microb Pathog** 1988 Apr;4(4):299–304

Possibility of Bacteroides gingivalis hemagglutinin possessing protease activity revealed by inhibition studies. Nishikata M, et al. **Microbiol Immunol** 1989;33(1):75–80

Molecular interactions of Leishmania promastigote surface protease with human alpha 2-macroglobulin. Heumann D, et al. **Mol Biochem Parasitol** 1989 Feb;33(1):67–72

Trends in protease inhibition. Fischer G. **Nat Prod Rep** 1988 Oct;5(5):465–95 (490 ref.)

Retroviral proteinases. A second front against AIDS [news] Blundell T, et al. **Nature** 1989 Feb 16;337(6208):596–7

Chronic ethanol ingestion enhances catabolism and muscle protease activity in acutely uremic rats. Teschner M, et al. **Nephron** 1988;50(4):338–44

Non-specific esterases and esterproteases in masticatory muscles from the muscular dystrophic mouse. Kirkeby S, et al. **Neurochem Res** 1989 Mar;14(3):211–5

Potential role of proteolysis in the control of UvrABC incision [corrected and republished article originally printed in Nucleic Acid Res 1988 Oct 25;16(20):9641–50] Caron PR, et al. **Nucleic Acids Res** 1988 Nov 25; 16(22):10903–12

The action of a mast cell protease on the cuticular collagens of Necator americanus. McKean PG, et al. **Parasite Immunol** 1989 May;11(3):293–7

Removal of Arg1 and Phe22 from CLIP (ACTH18–39) by rodent pituitary and blood peptidases. McDermott JR, et al. **Peptides** 1988 Jul-Aug;9(4):757–61

Adhesive receptor Mac-1 coordinates the activation of factor X on stimulated cells of monocytic and myeloid differentiation: an alternative initiation of the coagulation protease cascade. Altieri DC, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7462–6

Survey of amino-terminal proteolytic cleavage sites in mitochondrial precursor proteins: leader peptides cleaved by two matrix proteases share a three-amino acid motif. Hendrick JP, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(11):4056–60

Two mitochondrial matrix proteases act sequentially in the processing of mammalian matrix enzymes. Kalousek F, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7536–40

Activity of purified biosynthetic proteinase of human immunodeficiency virus on natural substrates and synthetic peptides. Kräusslich HG, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):807–11

Tissue distribution of avian pancreatic polypeptide-degrading activity. Adamo ML, et al. **Proc Soc Exp Biol Med** 1989 Sep;191(4):341–5

Effect of Glu-143 and His-231 substitutions on the catalytic activity and secretion of Bacillus subtilis neutral protease. Toma S, et al. **Protein Eng** 1989 Jan;2(5):359–64

Alteration of proteins reacting with antibody to toxic shock syndrome toxin 1 by endogenous proteases of Staphylococcus aureus. Lawellin DW, et al. **Rev Infect Dis** 1989 Jan-Feb;11 Suppl 1:S117–23; discussion S123–4

Molecular modeling of the HIV-1 protease and its substrate binding site. Weber IT, et al. **Science** 1989 Feb 17; 243(4893):928–31

Effects of tiaprofenic acid on interleukin 1, phospholipase A2 activity, prostaglandins, neutral protease, and collagenase activity in rheumatoid synovial fluid. Vignon E, et al. **Semin Arthritis Rheum** 1989 Feb;18(3 Suppl 1):11–5

Activation of blood coagulation and fibrinolysis in diabetes mellitus: evaluation by plasma levels of thrombin-antithrombin III complex and plasmin-alpha 2-plasmin inhibitor complex. Takahashi H, et al. **Thromb Res** 1989 Sep 15;55(6):727–35

Trypanosoma brucei releases proteases extracellularly. Nwagwu M, et al. **Trans R Soc Trop Med Hyg** 1988; 82(4):577

Cell-derived proteases and protease inhibitors as regulators of neurite outgrowth. Monard D. **Trends Neurosci** 1988 Dec;11(12):541–4 (33 ref.)

Characterization of the catalytic residues of the tobacco etch virus 49-kDa proteinase. Dougherty WG, et al. **Virology** 1989 Sep;172(1):302–10

Molecular genetic and biochemical evidence for the involvement of the heptapeptide cleavage sequence in determining the reaction profile at two tobacco etch virus cleavage sites in cell-free assays. Dougherty WG, et al. **Virology** 1989 Sep;172(1):145–55

Proteolytic activity of the plum pox potyvirus NIa-like protein in Escherichia coli. García JA, et al. **Virology** 1989 Jun;170(2):362–9

Properties of retroviral protease responsible for gag precursor cleavage. Hafenrichter R, et al. **Virology** 1989 Sep; 172(1):355–8

An unusual coordinated cleavage event in the processing of encephalomyocarditis virus polypeptides. Jackson RJ. **Virology** 1989 Sep;172(1):363–6

Polypeptide 2A of human rhinovirus type 2: identification as a protease and characterization by mutational analysis. Sommergruber W, et al. **Virology** 1989 Mar;169(1):68–77

Proteases and the processing of precursors to secreted proteins in yeast. Bussey H. **Yeast** 1988 Mar;4(1):17–26 (51 ref.)

[Duration of gelatinolytic activity of acrosomal proteinases of rabbit spermatozoa] Pakzad R, et al. **Acta Histochem (Jena)** 1988;84(2):235–40 (Eng. Abstr.) **(Ger)**

[The gelatinolytic activity of the acrosomal proteinases of rabbit sperm in the female reproductive tract] Pakzad R. **Z Mikrosk Anat Forsch** 1988;102(6):1045–51 (Eng. Abstr.) **(Ger)**

[The role of protease activities in the local infiltrative mechanism of cutaneous malignant tumors] Kurita Y. **Nippon Hifuka Gakkai Zasshi** 1988 Apr;98(4):461–8 (35 ref.) (Eng. Abstr.) **(Jpn)**

[The effect of collagen and fibrin on the lysosomal protease activities of cultured fibrosarcoma (HT-1080)] Kurita Y, et al. **Nippon Hifuka Gakkai Zasshi** 1988 May;98(6):643–6 **(Jpn)**

[Biochemical characteristics of an initial degradation product of insulin by insulin-degrading enzyme] Yonezawa K. **Nippon Naibunpi Gakkai Zasshi** 1988 Nov 20; 64(11):1140–56 (Eng. Abstr.) **(Jpn)**

[Increased thrombin synthesis in patients with fulminant hepatic failure and its treatment with antithrombin III evaluated by plasma levels of thrombin-antithrombin III complex] Tomiya T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Nov;85(11):2473 **(Jpn)**

[Increased complexes between protease and protease inhibitor in the plasma from patients with neoplasm] Okadome T, et al. **Rinsho Ketsueki** 1988 Dec;29(12):2283–6 (Eng. Abstr.) **(Jpn)**

[Protein cellular degradation. Intracellular proteolytic systems and their regulation] Haga HJ. **Tidsskr Nor Laegeforen** 1988 Nov 10;108(31):2850–3 (Eng. Abstr.) **(Nor)**

[The role of enzymes in the pathogenesis of genital tumors] Nagornaia VF. **Akush Ginekol (Mosk)** 1989 Apr;(4):11–5 (64 ref.) **(Rus)**

[Kinetics of dissolution of solid protein substrates by proteinases. Selection of the reaction mechanism] Eremeev NL, et al. **Biokhimiia** 1989 Mar;54(3):503–10 (Eng. Abstr.) **(Rus)**

[A method of screening artificial substrates for proteolytic enzymes] Nedospasov AA, et al. **Bioorg Khim** 1989 Apr; 15(4):444–52 (Eng. Abstr.) **(Rus)**

[Immunochemical analysis of protease-stable DNA-protein complexes: Comparison of the antigenic structure of the proteins of the nuclear matrix and topoisomerase I] Chernokhvostov VV, et al. **Dokl Akad Nauk SSSR** 1988; 303(4):1013–4 **(Rus)**

[Effect of amizil on the activity of enzymes participating in protein hydrolysis in intact animals and animals subjected to stress exposure] ZakirovUB, et al. **Farmakol Toksikol** 1988 Jul-Aug;51(4):78–80 (Eng. Abstr.) **(Rus)**

[A diffusion method of determining acidity combined with a study of proteolysis in the upper digestive tract] Gorshkov VA, et al. **Lab Delo** 1988;(9):35–40 (Eng. Abstr.) **(Rus)**

[A micromethod for the rapid detection of proteolytic activity of microorganisms] Kuznetsova GG. **Lab Delo** 1989;(1):51–3 (Eng. Abstr.) **(Rus)**

[Determination of the proteolytic and antiproteolytic activity of bile] Miroshnichenko VP, et al. **Lab Delo** 1989;(5):55–7 (Eng. Abstr.) **(Rus)**

[A modification of the determination of intra-organ proteolysis using Ferment-2MT equipment] Shmykov IuIa. **Lab Delo** 1989;(2):77–8 **(Rus)**

[DNA and nucleotide triphosphate-activated proteinase from rat liver nuclear matrix specific for H1 histone] Kutsyi MP, et al. **Mol Biol (Mosk)** 1988 Sep-Oct;22(5):1430–6 (Eng. Abstr.) **(Rus)**

[Molecular mechanisms of proteolytic processing of viral proteins and the problem of antiviral chemotherapy and vaccine design] Zhirnov OP. **Mol Biol (Mosk)** 1988 May-Jun;22(3):581–600 (163 ref.) (Eng. Abstr.) **(Rus)**

[Residual protease activity of the gastric mucosa after histamine stimulation normally and in acetate-induced ulcer in arts] Amirov NSh, et al. **Patol Fiziol Eksp Ter** 1988 May-Jun;(3):64–6 (Eng. Abstr.) **(Rus)**

[Activity of enkephalin- and angiotensin II-forming peptidases in the brain and peripheral tissues in chronic stress due to hypergravity] Gomazkov OA, et al. **Patol Fiziol Eksp Ter** 1988 Sep-Oct;(5):52–7 (Eng. Abstr.) **(Rus)**

[Intragastric and intraduodenal proteolysis in children with bronchial asthma] Solov'ev SB, et al. **Pediatriia** 1988; (10):111–2 **(Rus)**

[Effect of ionizing radiation on the structure of human serum albumin. Effect of irradiation on the content of free amino groups and on the ability of HSA to be digested by proteinases] Kondakova NV, et al. **Radiobiologiia** 1988 Nov-Dec;28(6):748–51 (Eng. Abstr.) **(Rus)**

[Role of collagenolytic enzymes in the destruction of joints] Vulli DE. **Revmatologiia (Moskva)** 1988 Jul-Sep;(3):70–4 (12 ref.) **(Rus)**

[Intragastric proteolysis in cancer of the stomach and precancerous diseases] Masevich TsG, et al. **Sov Med** 1988; (11):77–8 **(Rus)**

[Proteolytic activity in the stomach in duodenal ulcer] Nechal AI, et al. **Vestn Khir** 1989 Feb;142(2):14–8 (Eng. Abstr.) **(Rus)**

[Effect of immobilized inhibitors of proteolysis on the course of experimental pancreatitis] Zubkov OB, et al. **Vestn Khir** 1989 Jan;142(1):56, 69 **(Rus)**

[Characteristics of the protease activity of Vibrio cholerae strains and mutants with various biological properties] Uraleva VS, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Sep;(9):7–10 (Eng. Abstr.) **(Rus)**

[Free proteolytic activity of Serratia marcescens. I. Inductive capacity of several protein substrates] Hernández-Delgadillo R, et al. **Rev Latinoam Microbiol** 1988 Oct-Dec;30(4):363–8 (Eng. Abstr.) **(Spa)**

PHARMACOLOGY

Colloidal bismuth subcitrate (De-Nol) inhibits degradation of gastric mucus by Campylobacter pylori protease. Sarosiek J, et al. **Am J Gastroenterol** 1989 May;84(5):506–10

Protease effects on adenylate cyclase in potassium-depleted rabbit kidney. Raymond KH, et al. **Am J Physiol** 1988 Nov; 255(5 Pt 2):F1033–9

Inhibition of proteinase-like peptidase activities in serum and tissue from breast cancer patients. Vasishta A, et al. **Anticancer Res** 1988 Jul-Aug;8(4):785–9

Enzymatic alteration of the ability of mouse egg plasma membrane to interact with sperm. Boldt J, et al. **Biol Reprod** 1988 Aug;39(1):19–27

Directed migration of murine and human tumor cells to collagenases and other proteases. Terranova VP, et al. **Cancer Res** 1989 Sep 1;49(17):4835–41

Rat paw edema induced by trimucase II, a kinin-releasing enzyme from Trimeresurus mucrosquamatus venom. Wang JP, et al. **Eur J Pharmacol** 1988 Nov 15;157(1):61–6

Limited proteolysis of tumor cells increases their plasmin-binding ability. Camacho M, et al. **FEBS Lett** 1989 Mar 13;245(1-2):21–4

Activation of phospholipase A2 of human spermatozoa by proteases. Guérette P, et al. **Gamete Res** 1988 Feb; 19(2):203–14

Lectin binding to rat spermatogenic cells: effects of different fixation methods and proteolytic enzyme treatment. Malmi R, et al. **Histochem J** 1988 May;20(5):276–82

Spermatolysins in Bufo arenarum: their activity on oocyte surface. Cabada MO, et al. **J Exp Zool** 1989 Feb; 249(2):229–34

Inactivation of human alpha-1-antitrypsin by a tissue-destructive protease of Legionella pneumophila. Conlan JW, et al. **J Gen Microbiol** 1988 Feb;134 (Pt 2):481–7

Retrovirus-induced cell fusion is enhanced by protease treatment. Andersen KB, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1921–7

Protease-modulation of neutrophil superoxide response. Kusner DJ, et al. **J Immunol** 1989 Sep 1;143(5):1696–702

Identification of proteases that process distinct epitopes on the same protein. Takahashi H, et al. **J Immunol** 1989 Apr 1;142(7):2221–9

Long junctional epithelium produced by application of bacterial protease in rats. Suzumura Y, et al. **J Periodont Res** 1989 May;24(3):217–21

Mast cell tryptase and chymase reverse airway smooth muscle relaxation induced by vasoactive intestinal peptide in the ferret. Franconi GM, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):947–51

Anticoagulant effect of the protease from Agkistrodon venom mediated by protein C activation in rats. Strukova SM, et al. **Thromb Res** 1989 Jul 1;55(1):149–53

Proteolysis in vitro of low and high density lipoproteins in human plasma by Cerastes cerastes (Egyptian sand viper) venom. el-Asmar MF, et al. **Toxicon** 1988;26(9):809–16

Proteolytic, hemorrhagic and hemolytic activities of snake venoms. Soto JG, et al. **Toxicon** 1988;26(9):875–82

Enzyme processing of La Crosse virus glycoprotein G1: a bunyavirus-vector infection model. Ludwig GV, et al. **Virology** 1989 Jul;171(1):108–13

[Mobility of the structures of live myelinated nerve fibers under the action of proteolytic enzymes] Sotnikov OS, et al. **Biull Eksp Biol Med** 1989 May;107(5):621–4 **(Rus)**

[Effect of free and immobilized terrilytin on the proliferative activity of normal hepatocytes and under physical loading and exposure to vibration] Chalyĭ GA, et al. **Farmakol Toksikol** 1989 Mar-Apr;52(2):86–90 (Eng. Abstr.) **(Rus)**

[Effect of proteolytic enzymes on the functional activity of the neuron] Kazanskiĭ VV. **Fiziol Zh SSSR** 1988 Jun; 74(6):809–13 (Eng. Abstr.) **(Rus)**

[Effect of proteolytic enzymes on the frog neuromuscular junction] Vinogradova IM, et al. **Nerv Sist** 1988;27:16–23 **(Rus)**

[Effect of the duodenal contents on changes in catgut sutures] Kostin AE, et al. **Vestn Khir** 1989 Jan;142(1):52–3 **(Rus)**

PHYSIOLOGY

Various sensitivity of macrophage enzymes for endogenous proteases. Antoni F, et al. **Acta Paediatr Hung** 1988–89; 29(1–2):41–2

Calcium-dependent proteolysis of actin during storage of platelet concentrates. Snyder EL, et al. **Blood** 1989 Apr; 73(5):1380–5

Growth factors in the regulation of pericellular proteolysis: a review. Laiho M, et al. **Cancer Res** 1989 May 15; 49(10):2533–53 (337 ref.)

Developmentally regulated proteolytic processing of a yolk glycoprotein complex in embryos of the sea urchin, Strongylocentrotus purpuratus. Lee GF, et al. **Cell Differ Dev** 1989 Jan;26(1):5–17

Roles of mast cell proteases in airways. Nadel JA, et al. **Chest** 1989 Jun;95(6):1328–30 (27 ref.)

Viral proteases: an emerging therapeutic target. Korant BD. **Crit Rev Biotechnol** 1988;8(2):149–57 (25 ref.)

Roles of mast cell proteases in airways. Nadel JA. **Drugs** 1989;37 Suppl 1:51–5; discussion 69–77 (29 ref.)

Cytokine-mediated proteolysis in tissue remodelling. Masure S, et al. **Experientia** 1989 Jun 15;45(6):542–9 (85 ref.)

Neutrophilic proteases: mediators of formyl-methionyl-leucyl-phenylalanine-induced ileitis in rats. von Ritter C, et al. **Gastroenterology** 1989 Sep; 97(3):605–9

Tryptase and chymase, markers of distinct types of human mast cells. Craig SS, et al. **Immunol Res** 1989;8(2):130–48 (113 ref.)

Proteinase-like activity in the cytotoxic factor produced by T cells during dengue virus infection. Khanna M, et al. **Immunology** 1989 May;67(1):32–7

A protease of Bacteroides gingivalis degrades cell surface and matrix glycoproteins of cultured gingival fibroblasts and induces secretion of collagenase and plasminogen activator. Uitto VJ, et al. **Infect Immun** 1989 Jan; 57(1):213–8

In vitro proteolytic cleavage of the Escherichia coli Ada protein by the ompT gene product. Sedgwick B. **J Bacteriol** 1989 Apr;171(4):2249–51

Characterization of degP, a gene required for proteolysis in the cell envelope and essential for growth of Escherichia coli at high temperature. Strauch KL, et al. **J Bacteriol** 1989 May;171(5):2689–96

Putative convertase involved in the proteolytic conversion of rat proalbumin to serum albumin. Oda K, et al. **J Biochem (Tokyo)** 1988 Aug;104(2):159–61

Cell shedding from human plantar skin in vitro: evidence of its dependence on endogenous proteolysis. Lundström A, et al. **J Invest Dermatol** 1988 Oct;91(4):340–3

Processing of yellow fever virus polyprotein: role of cellular proteases in maturation of the structural proteins. Ruiz-Linares A, et al. **J Virol** 1989 Oct;63(10):4199–209

Role of the protease in the permeability enhancement by Vibrio vulnificus. Miyoshi S, et al. **Microbiol Immunol** 1988; 32(10):1025–32

Proteases as mediators of pulmonary vascular permeability. Neuhof H, et al. **Prog Clin Biol Res** 1989;308:305–14 (19 ref.)

Evidence that Sindbis virus NSP2 is an autoprotease which processes the virus nonstructural polyprotein. Ding MX, et al. **Virology** 1989 Jul;171(1):280–4

[Pulmonary emphysema. Clinical aspects and open questions] Ulmer WT, et al. **Fortschr Med** 1989 Mar 20;107(9):201–4 (16 ref.) (Eng. Abstr.) **(Ger)**

RADIATION EFFECTS

[The action of gamma irradiation on terrilytin immobilized on cellulose-fiber materials] Iudanova TN, et al. **Antibiot Khimioter** 1988 Aug;33(8):578–81 (Eng. Abstr.) **(Rus)**

[Metabolic indices of proteolysis of the blood serum in dogs in the early period following uniform whole-body gamma irradiation] Konnova LA, et al. **Radiobiologiia** 1989 Mar-Apr;29(2):221–5 (Eng. Abstr.) **(Rus)**

SECRETION

Proteases released from Xenopus laevis eggs at activation and their role in envelope conversion. Lindsay LL, et al. **Dev Biol** 1989 Sep;135(1):202–11

Expression pattern of a gene for a secreted metalloproteinase during late stages of tumor progression. Ostrowski LE, et al. **Mol Carcinog** 1988;1(1):13–9

THERAPEUTIC USE

Thrombolysis with a snake venom protease in a rat model of venous thrombosis. Willis TW, et al. **Thromb Res** 1989 Jan 1;53(1):19–29

[Comparative effectiveness of the use of immobilized proteolytic enzyme immozymase in the combined treatment of eye burns] Peretiagin OA, et al. **Oftalmol Zh** 1988; (3):175–9 (Eng. Abstr.) **(Rus)**

[Substantiation of the use of terrilytin in the treatment of spinal cord disorders in tuberculous spondylitis] Bellendir EN, et al. **Probl Tuberk** 1989;(4):46–50 (Eng. Abstr.) **(Rus)**

[A successful physioenzymotherapy using terrilytin in the treatment of a patient with cicatricial changes in the urethra of tubercular origin] Iagafarova RK, et al. **Probl Tuberk** 1988;(10):70–1 **(Rus)**

TOXICITY

Effects of venom proteases on peptide chromogenic substrates and bovine prothrombin. Teng CM, et al. **Toxicon** 1989;27(2):161–7

URINE

Urinary proteinase activity in patients with acute renal failure after trauma and kidney transplantation. Wanner C, et al. **Adv Exp Med Biol** 1988;240:309–14

Urinary excretion of proteolytic activity in catabolic states. Wanner C, et al. **Contrib Nephrol** 1988;68:220–6

PEPTIDE INITIATION FACTORS

Circular dichroism and fluorescence studies on five mutant forms of protein synthesis initiation factor eIF-4E, from the yeast Saccharomyces cerevisiae. McCubbin WD, et al. **FEBS Lett** 1989 Mar 13;245(1–2):261–6

cDNA and derived amino acid sequence of the hypusine containing protein from Dictyostelium discoideum. Sandholzer U, et al. **FEBS Lett** 1989 Mar 27; 246(1–2):94–100

The product of the Drosophila gene vasa is very similar to eukaryotic initiation factor-4A. Lasko PF, et al. **Nature** 1988 Oct 13;335(6191):611–7

ANTAGONISTS & INHIBITORS

Translational control in heat-shocked Drosophila embryos. Evidence for the inactivation of initiation factor(s) involved in the recognition of mRNA cap structure. Maroto FG, et al. **J Biol Chem** 1988 Oct 25;263(30):15720–5

BIOSYNTHESIS

Biosynthesis of hypusine in eIF-4D precursors. Park MH, et al. **Adv Exp Med Biol** 1988;250:435–47 (27 ref.)

The effect of oligonucleotides complementary to the 3' end of the 16S rRNA on the formation of the bacterial 30S initiation complex. Eckert V, et al. **Eur J Biochem** 1989 Jul 1;182(3):557–62

BLOOD

The phosphorylation state of the reticulocyte 90-kDa heat shock protein affects its ability to increase phosphorylation of peptide initiation factor 2 alpha subunit by the heme-sensitive kinase. Szyszka R, et al. **Biochemistry** 1989 Feb 21;28(4):1435–8

GENETICS

High-level synthesis in Escherichia coli of functional cap-binding eukaryotic initiation factor eIF-4E and affinity purification using a simplified cap-analog resin. Edery I, et al. **Gene** 1988 Dec 30;74(2):517–25

Isolation and mapping of a gene for protein synthesis initiation factor 4A and its expression during differentiation of murine erythroleukemia cells. Reddy NS, et al. **Gene** 1988 Oct 30;70(2):231–43

A cellular protein that binds to the 5'-noncoding region of poliovirus RNA: implications for internal translation initiation. Meerovitch K, et al. **Genes Dev** 1989 Jul; 3(7):1026–34

Gene encoding the alpha core subunit of Bacillus subtilis RNA polymerase is cotranscribed with the genes for initiation factor 1 and ribosomal proteins B, S13, S11, and L17. Boylan SA, et al. **J Bacteriol** 1989 May;171(5):2553–62

Site-directed mutagenesis of the tryptophan residues in yeast eukaryotic initiation factor 4E. Effects on cap binding activity. Altmann M, et al. **J Biol Chem** 1988 Nov 25; 263(33):17229–32

A mammalian translation initiation factor can substitute for its yeast homologue in vivo. Altmann M, et al. **J Biol Chem** 1989 Jul 25;264(21):12145–7

In vitro synthesis, phosphorylation, and localization on 48 S initiation complexes of human protein synthesis initiation factor 4E. Hiremath LS, et al. **J Biol Chem** 1989 Jan 15; 264(2):1132–8

Circular dichroism and fluorescence studies on protein synthesis initiation factor eIF-4E and two mutant forms from the yeast Saccharomyces cerevisiae. McCubbin WD, et al. **J Biol Chem** 1988 Nov 25;263(33):17663–71

Sequence determination and cDNA cloning of eukaryotic initiation factor 4D, the hypusine-containing protein. Smit-McBride Z, et al. **J Biol Chem** 1989 Jan 25; 264(3):1578–83

CDC33 encodes mRNA cap-binding protein eIF-4E of Saccharomyces cerevisiae. Brenner C, et al. **Mol Cell Biol** 1988 Aug;8(8):3556–9

Translational initiation factor expression and ribosomal protein gene expression are repressed coordinately but by different mechanisms in murine lymphosarcoma cells treated with glucocorticoids. Huang S, et al. **Mol Cell Biol** 1989 Sep;9(9):3679–84

Identification, cloning and sequence of the Streptococcus faecium infB (translational initiation factor IF2) gene. Friedrich K, et al. **Mol Gen Genet** 1988 Nov;214(3):595–600

The Rhizobium meliloti host range nodQ gene encodes a protein which shares homology with translation elongation and initiation factors. Cervantes E, et al. **Mol Microbiol** 1989 Jun;3(6):745–55

Birth of the D-E-A-D box [letter] [published erratum appears in Nature 1989 Jul 20;340(6230):246] Linder P, et al. **Nature** 1989 Jan 12;337(6203):121–2

An eIF-4A-like protein is a suppressor of an Escherichia coli mutant defective in 50S ribosomal subunit assembly [published erratum appears in Nature 1989 Jul 20;340(6230):246] Nishi K, et al. **Nature** 1988 Dec 1; 336(6198):496–8

Sequence of the genes TIF1 and TIF2 from Saccharomyces cerevisiae coding for a translation initiation factor. Linder P, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10359

Yeast translation initiation suppressor sui2 encodes the alpha subunit of eukaryotic initiation factor 2 and shares sequence identity with the human alpha subunit. Cigan AM, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2784–8

An essential yeast protein, encoded by duplicated genes TIF1 and TIF2 and homologous to the mammalian translation initiation factor eIF-4A, can suppress a mitochondrial missense mutation. Linder P, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2286–90

[Location of the initiating codon AUG in relation to the 5'-end of mRNA mediates the effectiveness of translation in E. coli cells] Kravchenko VV, et al. **Bioorg Khim** 1988 Oct;14(10):1387–92 (Eng. Abstr.) **(Rus)**

[Possible role of translation initiation factors in the regulation of expression of attenuated mutations of poliovirus] Svitkin IuV, et al. **Mol Gen Mikrobiol Virusol** 1989 Apr;(4):3–6 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Further characterization of eukaryotic initiation factor 5 from rabbit reticulocytes. Immunochemical characterization and phosphorylation by casein kinase II. Ghosh S, et al. **J Biol Chem** 1989 Mar 25;264(9):5134–40

Identification and characterization of cap-binding proteins from yeast. Goyer C, et al. **J Biol Chem** 1989 May 5; 264(13):7603–10

METABOLISM

2,3-Bisphosphoglycerate inhibits hemoglobin synthesis and phosphorylation of initiation factor 2 by casein kinase II in reticulocyte lysates. Gonzatti MI, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):134–9

Transfer-RNA, magnesium and the formation of ternary complexes by eukaryotic initiation factor eIF-2. Manchester KL. **Biochem Int** 1989 Jun;18(6):1279–85

Dissociation of double-stranded polynucleotide helical structures by eukaryotic initiation factors, as revealed by a novel assay. Lawson TG, et al. **Biochemistry** 1989 May 30;28(11):4729–34

Natural mRNA is required for directing Met-tRNA(f) binding to 40S ribosomal subunits in animal cells: involvement of Co-eIF-2A in natural mRNA-directed initiation complex formation. Roy AL, et al. **Biochemistry** 1988 Oct 18;27(21):8203–9

Casein kinase-2 phosphorylates serine-2 in the beta-subunit of initiation factor-2. Clark SJ, et al. **Biochim Biophys Acta** 1989 Mar 6;1010(3):377–80

Properties of the subunits of wheat germ initiation factor 3. Heufler C, et al. **Biochim Biophys Acta** 1988 Nov 10; 951(1):182–90

Phosphorylation and guanine nucleotide exchange on polypeptide chain initiation factor-2 from Artemia embryos. Mateu MG, et al. **Biochim Biophys Acta** 1989 Jan 23;1007(1):55–60

The two forms of the beta-subunit of initiation factor-2 from

reticulocyte lysates arise from proteolytic degradation. Price NT, et al. **Biochim Biophys Acta** 1989 Jul 7; 1008(2):177–82

Interaction of Escherichia coli translation-initiation factor IF-1 with ribosomes. Celano B, et al. **Eur J Biochem** 1988 Dec 15;178(2):351–5

A novel role for aminoacyl-tRNA synthetases in the regulation of polypeptide chain initiation. Pollard JW, et al. **Eur J Biochem** 1989 Jun 1;182(1):1–9

Association of mRNA and eIF-2 alpha with the cytoskeleton in cells lacking vimentin. Heuijerjans JH, et al. **Exp Cell Res** 1989 Apr;181(2):317–30

GTP interacts through its ribose and phosphate moieties with different subunits of the eukaryotic initiation factor eIF-2. Bommer UA, et al. **FEBS Lett** 1989 Feb 27;244(2):323–7

Regulation of polypeptide-chain initiation in rat skeletal muscle. Starvation does not alter the activity or phosphorylation state of initiation factor eIF-2. Cox S, et al. **FEBS Lett** 1988 Nov 7;239(2):333–8

Translational inhibition by eIF-2–phospholipid complex in mammalian cell-free systems. Pelaez F, et al. **FEBS Lett** 1989 Jul 3;250(2):523–8

Roles of eIF-2 and eIF-2–associated proteins in regulation of protein synthesis during growth of animal cells in culture. Datta B, et al. **Indian J Biochem Biophys** 1988 Dec; 25(6):478–82

Vaccinia specific kinase inhibitory factor prevents translational inhibition by double-stranded RNA in rabbit reticulocyte lysate. Akkaraju GR, et al. **J Biol Chem** 1989 Jun 15;264(17):10321–5

Evidence that the 59-kDa protein synthesis initiation factor from wheat germ is functionally similar to the 80-kDa initiation factor 4B from mammalian cells. Browning KS, et al. **J Biol Chem** 1989 May 25;264(15):8491–4

Mechanism of the nucleotide exchange reaction in eukaryotic polypeptide chain initiation. Characterization of the guanine nucleotide exchange factor as a GTP-binding protein. Dholakia JN, et al. **J Biol Chem** 1989 Jan 5; 264(1):546–50

Phorbol esters stimulate phosphorylation of eukaryotic initiation factors 3, 4B, and 4F. Morley SJ, et al. **J Biol Chem** 1989 Feb 15;264(5):2401–4

Possible involvement of the 90-kDa heat shock protein in the regulation of protein synthesis. Rose DW, et al. **J Biol Chem** 1989 Apr 15;264(11):6239–44

Ribosome binding to inosine-substituted mRNAs in the absence of ATP and mRNA factors. Seal SN, et al. **J Biol Chem** 1989 May 5;264(13):7363–8

Comparative analysis of phosphorylation of translational initiation and elongation factors by seven protein kinases. Tuazon PT, et al. **J Biol Chem** 1989 Feb 15;264(5):2773–7

The cellular 68,000-Mr protein kinase is highly autophosphorylated and activated yet significantly degraded during poliovirus infection: implications for translational regulation. Black TL, et al. **J Virol** 1989 May; 63(5):2244–51

Physical studies of the interaction of Escherichia coli translational initiation factor 3 protein with ribosomal RNA. Wickstrom E, et al. **Methods Enzymol** 1988; 164:238–58

The phosphorylation state of eucaryotic initiation factor 2 alters translational efficiency of specific mRNAs. Kaufman RJ, et al. **Mol Cell Biol** 1989 Mar;9(3):946–58

A lysine substitution in the ATP-binding site of eucaryotic initiation factor 4A abrogates nucleotide-binding activity. Rozen F, et al. **Mol Cell Biol** 1989 Sep;9(9):4061–3

Altered mRNA cap recognition activity of initiation factor 4E in the yeast cell cycle division mutant cdc33. Altmann M, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):5923–31

Translation in Saccharomyces cerevisiae: initiation factor 4A–dependent cell-free system. Blum S, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6043–6

Modification of protein synthesis initiation factors and the shut-off of host protein synthesis in adenovirus-infected cells. O'Malley RP, et al. **Virology** 1989 Jan;168(1):112–8

PHARMACOLOGY

Alternative occupancy of a dual ribosomal binding site by mRNA affected by translation initiation factors. Canonaco MA, et al. **Eur J Biochem** 1989 Jul 1;182(3):501–6

PHYSIOLOGY

Mechanism of inhibition of polypeptide chain initiation in calcium-depleted Ehrlich ascites tumor cells. Kumar RV, et al. **J Cell Biol** 1989 Jun;108(6):2107–15

Point mutations modify the response of poliovirus RNA to a translation initiation factor: a comparison of neurovirulent and attenuated strains. Svitkin YV, et al. **Virology** 1988 Oct;166(2):394–404

[A nuclear factor interacting with the promoter region of the kappa-genes of immunoglobulins] Stepchenko AG, et al. **Dokl Akad Nauk SSSR** 1988;303(4):1008–10 **(Rus)**

PEPTIDE MAPPING

see related

PEPTIDE FRAGMENTS

Strong-cation-exchange sulfoethyl aspartamide chromatography for peptide mapping of Staphylococcus aureus V8 protein digests. Crimmins DL, et al. **Anal Biochem** 1989 Feb 1;176(2):255–60

Suppression effects in peptide mapping by plasma desorption mass spectrometry. Nielsen PF, et al. **Biomed Environ Mass Spectrom** 1989 Feb;18(2):131–7

Two-dimensional iodopeptide mapping demonstrates that erythrocyte Rh D, c, and E polypeptides are structurally homologous but nonidentical. Blanchard D, et al. **Blood** 1988 Oct;72(4):1424–7

Mapping of monoclonal antibodies to human factor IX. Frazier D, et al. **Blood** 1989 Aug 15;74(3):971–7

Fast and sensitive multiple sequence alignments on a microcomputer. Higgins DG, et al. **Comput Appl Biosci** 1989 Apr;5(2):151–3

A Pascal microcomputer program for prediction of protein secondary structure and hydropathic segments. Parrilla A, et al. **Comput Appl Biosci** 1986 Sep;2(3):211–5

Mapping of four discontiguous antigenic determinants on horse cytochrome c. Oertle M, et al. **Eur J Biochem** 1989 Jul 1;182(3):699–704

Efficient mapping and characterization of a T cell epitope by the simultaneous synthesis of multiple peptides. Van der Zee R, et al. **Eur J Immunol** 1989 Jan;19(1):43–7

Molecular mapping of a new public HLA class I epitope shared by all HLA-B and HLA-C antigens and defined by a monoclonal antibody. Trapani JA, et al. **Immunogenetics** 1989;29(1):25–32

Structure and mapping of antigenic domains of protein antigen b, a 38,000-molecular-weight protein of Mycobacterium tuberculosis. Andersen AB, et al. **Infect Immun** 1989 Aug;57(8):2481–8

Mapping of the human plasmin domain recognized by the unique plasmin receptor of group A streptococci. Broder CC, et al. **Infect Immun** 1989 Sep;57(9):2597–605

Mapping of linear B-cell epitopes of the S2 subunit of pertussis toxin. Schmidt W, et al. **Infect Immun** 1989 Feb; 57(2):438–45

Mapping the ankyrin-binding site of the human erythrocyte anion exchanger. Davis L, et al. **J Biol Chem** 1989 Jun 5;264(16):9665–72

Identification and characterization of the ligand binding subunit of a kainic acid receptor using monoclonal antibodies and peptide mapping. Hampson DR, et al. **J Biol Chem** 1989 Aug 5;264(22):13329–35

Evolutionarily conserved sequences of striated muscle myosin heavy chain isoforms. Epitope mapping by cDNA expression. Miller JB, et al. **J Biol Chem** 1989 Aug 5; 264(22):13122–30

Mechanism of cholesteryl ester transfer protein inhibition by a neutralizing monoclonal antibody and mapping of the monoclonal antibody epitope. Swenson TL, et al. **J Biol Chem** 1989 Aug 25;264(24):14318–26

Mapping the immunodeterminants of the complete streptococcal M6 protein molecule. Identification of an immunodominant region. Fischetti VA, et al. **J Immunol** 1988 Nov 15;141(10):3592–9

The mapping of epitopes of the 18-kDa protein of Mycobacterium leprae recognized by murine T cells in a proliferation assay. Harris DP, et al. **J Immunol** 1989 Sep 15;143(6):2006–12

Cytotoxic T lymphocyte-defined epitope differences between HLA-A2.1 and HLA-A2.2 map to two distinct regions of the molecule. Hogan KT, et al. **J Immunol** 1988 Dec 1;141(11):4005–11

Identification by site-directed mutagenesis of amino acid residues contributing to serologic and CTL-defined epitope differences between HLA-A2.1 and HLA-A2.3. Hogan KT, et al. **J Immunol** 1988 Oct 1;141(7):2519–25

Mapping of immunogenic regions of human T cell leukemia virus type I (HTLV-I) gp46 and gp21 envelope glycoproteins with env-encoded synthetic peptides and a monoclonal antibody to gp46. Palker TJ, et al. **J Immunol** 1989 Feb 1;142(3):971–8

Epitope mapping of the cloned human autoantigen, histidyl-tRNA synthetase. Analysis of the myositis-associated anti-Jo-1 autoimmune response. Ramsden DA, et al. **J Immunol** 1989 Oct 1;143(7):2267–72

Fine mapping of an H-2Kk restricted cytotoxic T lymphocyte epitope in SV40 T antigen by using in-frame deletion mutants and a synthetic peptide. Rawle FC, et al. **J Immunol** 1988 Oct 15;141(8):2734–9

Peptide mapping of conformational epitopes in a human malarial parasite heat shock protein. Richman SJ, et al. **J Immunol** 1989 Jul 1;143(1):285–92

Epitope mapping of HLA-B27 and HLA-B7 antigens by using intradomain recombinants. Toubert A, et al. **J Immunol** 1988 Oct 1;141(7):2503–9

A general approach to the localization of antigenic determinants of a linear type in proteins of unknown primary structure. Beresten SF, et al. **J Immunol Methods** 1988 Oct 26;113(2):247–54

Epitope characterization by modifications of antigens and by mapping on resin-bound peptides. Discriminating epitopes near the C-terminus and N-terminus of Escherichia coli ribosomal protein S13. Syu WJ, et al. **J Immunol Methods** 1989 Mar 31;118(2):153–60

Mapping by synthetic peptides of the binding sites for acetylcholine receptor on alpha-bungarotoxin. Atassi MZ, et al. **J Protein Chem** 1988 Oct;7(5):655–66

Mapping the transition state and pathway of protein folding by protein engineering. Matouschek A, et al. **Nature** 1989 Jul 13;340(6229):122–6

Mapping the enzymatic active site of Pseudomonas aeruginosa exotoxin A. Brandhuber BJ, et al. **Proteins** 1988; 3(3):146–54

Mapping of synovial fibroblast proteins by high resolution two-dimensional polyacrylamide electrophoresis. Glennås A, et al. **Scand J Rheumatol Suppl** 1988;76:105–9

Peptide mapping studies on muscarinic receptors: receptor structure and location of the ligand binding site. Wheatley M, et al. **Trends Pharmacol Sci** 1988 Feb;Suppl:19–24 (46 ref.)

INSTRUMENTATION

Rapid peptide mapping by high-performance liquid chromatography. Kalghatgi K, et al. **J Chromatogr** 1988 Jun 29;443:343–54

METHODS

Peptide mapping by CNBr fragmentation using a sodium dodecyl sulfate-polyacrylamide minigel system. Plaxton WC, et al. **Anal Biochem** 1989 May 1;178(2):391–3

Modified method for peptide mapping of collagen chains using cyanogen bromide-cleavage of protein within polyacrylamide gels. Sokolov BP, et al. **Anal Biochem** 1989 Feb 1;176(2):365–7

A simple in situ cyanogen bromide cleavage method to obtain internal amino acid sequence of proteins electroblotted to polyvinyldifluoride membranes. Scott MG, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1353–9

Peptide mapping of polypeptides separated by two-dimensional electrophoresis: protease digestion directly on the two-dimensional gel followed by electrophoresis in reverse direction. Zivy M, et al. **Electrophoresis** 1988 Jul;9(7):339–43

Formic acid as a milder alternative to trifluoroacetic acid and phosphoric acid in two-dimensional peptide mapping. Poll DJ, et al. **J Chromatogr** 1989 May 19;469:231–9

Landmark mapping: a general method for localizing cysteine residues within a protein. Nefsky B, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3549–53

[Two-dimensional map of membrane proteins from human erythrocytes] Gromov PS, et al. **Biokhimiia** 1988 Aug; 53(8):1316–26 (Eng. Abstr.) **(Rus)**

[Use of electroblotting as a method for preparing samples of proteins and their fragments for microsequencing] Levina NB, et al. **Bioorg Khim** 1989 Jan;15(1):24–31 (Eng. Abstr.) **(Rus)**

PEPTIDE PEPTIDOHYDROLASE INHIBITORS see **PROTEASE INHIBITORS**

PEPTIDE PEPTIDOHYDROLASES

Specificity of endoproteinase Asp-N (Pseudomonas fragi): cleavage at glutamyl residues in two proteins. Ingrosso D, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1528–34

Detection of essential arginine in bacterial peptidyl dipeptidase-4: arginine is not the anion binding site. Lanzillo JJ, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):243–9

Studying the structure of the intracellular moiety of the insulin receptor with a kinase-splitting membranal proteinase. Seger R, et al. **EMBO J** 1989 Feb;8(2):435–40

Isolation of the flavodehydrogenase domain of Hansenula anomala flavocytochrome b2 after mild proteolysis by an H. anomala proteinase. Celerier J, et al. **Eur J Biochem** 1989 Jun 1;182(1):67–75

Identification of a Glu greater than Lys substitution in the activation segment of human pepsinogen A-3 and -5 isozymogens by peptide mapping using endoproteinase Lys-C. Bank RA, et al. **FEBS Lett** 1988 Sep 26; 238(1):105–8

Possible role of some groups in the structure and function of HIV-1 protease as revealed by molecular modeling studies. Pechik IV, et al. **FEBS Lett** 1989 Apr 10; 247(1):118–22

Crystal structure of thermitase from Thermoactinomyces vulgaris at 2.2 A resolution. Teplyakov AV, et al. **FEBS Lett** 1989 Feb 13;244(1):208–12

Structural domains of human apolipoprotein B-100. Differential accessibility to limited proteolysis of B-100 in low density and very low density lipoproteins. Chen GC, et al. **J Biol Chem** 1989 Aug 25;264(24):14369–75

Crystallization of thermitase, a thermostable subtilisin, from a sodium formate solution by means of an automated procedure. Kelders HA, et al. **J Mol Biol** 1989 Feb 5; 205(3):615–6

Crystal structure of a retroviral protease proves relationship to aspartic protease family. Miller M, et al. **Nature** 1989 Feb 9;337(6207):576–9

Conserved folding in retroviral proteases: crystal structure of a synthetic HIV-1 protease. Wlodawer A, et al. **Science** 1989 Aug 11;245(4918):616–21

A unique case of intravenous injection of fungal "pancreatic" enzymes causing shock and proteolysis of haemostatic proteins. Seitz R, et al. **Toxicology** 1989 Apr;55(1–2):239–46

Snake venom hemorrhagins: neutralization by commercial antivenoms. Mebs D, et al. **Toxicon** 1988;26(5):453–8

[Theoretical studies of the electrostatic interactions in aspartic proteinases, intramolecular interactions in pepsin and penicillopepsin] Miteva A, et al. **Mol Biol (Mosk)** 1988 Nov-Dec;22(6):1456–63 (Eng. Abstr.) **(Rus)**

ANALYSIS

Proteolytic activities in bronchoalveolar lavage fluid correlate to stage and course of interstitial lung disease. Schmidt M, et al. **Adv Exp Med Biol** 1988;240:137–44

Occurrence and potential importance of selected peptidases in bull ejaculates. Heder G, et al. **Andrologia** 1989 May–Jun; 21(3):247–55

Continuous spectrophotometric assay for retroviral proteases of HIV-1 and AMV. Nashed NT, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):1079–85

A continuous fluorimetric assay for clostridial collagenase and Pz-peptidase activity. Barrett AJ, et al. **Biochem J** 1989 May 15;260(1):259–63

The Drosophila proteasome undergoes changes in its subunit pattern during development. Haass C, et al. **Exp Cell Res** 1989 Jan;180(1):243–52

Granule proteinases define mast cell heterogeneity in the serosa and the gastrointestinal mucosa of the mouse. Miller HR, et al. **Immunology** 1988 Dec;65(4):559–66

Proteinase and proteinase inhibitor localization in the human placenta. Earl U, et al. **Int J Gynecol Pathol** 1989; 8(2):114–24

Partial immunological characterization of heat-stable proteinases from Pseudomonas spp. of dairy origin. Azcona JI, et al. **J Appl Bacteriol** 1989 Mar;66(3):227–33

Identification and characterization of three different subpopulations of the Drosophila multicatalytic proteinase (proteasome). Falkenburg PE, et al. **J Biol Chem** 1989 Apr 25;264(12):6660–6

Identification of HTLV-I gag protease and its sequential processing of the gag gene product. Hatanaka M, et al. **J Cell Biochem** 1989 May;40(1):15–30

Fractionation of human gastric proteinases by immobilized metal chelate (Fe3+) affinity chromatography. Kučerová Z. **J Chromatogr** 1989 Apr 14;489(2):390–3

Pulmonary alveolar macrophages from patients with active sarcoidosis express type IV collagenolytic proteinase. An enzymatic mechanism for influx of mononuclear phagocytes at sites of disease activity. Agostini C, et al. **J Clin Invest** 1989 Aug;84(2):605–12

Enhanced inactivation of bacterial lipases and proteinases in whole milk by a modified ultra high temperature treatment. Bucky AR, et al. **J Dairy Res** 1988 Aug;55(3):373–80

Milk alkaline proteinase. Grufferty MB, et al. **J Dairy Res** 1988 Nov;55(4):609–30 (115 ref.)

Comparative X-ray crystallographic evidence for a beta-bend conformation as the active structure for peptide T in T4 receptor recognition. Chen J, et al. **J Protein Chem** 1989 Feb;8(1):87–100

Proteinases of Entamoeba histolytica associated with different subcellular fractions. Ostoa-Saloma P, et al. **Mol Biochem Parasitol** 1989 Jan 15;32(2–3):133–43

Characterization and purification of a placental protein that inactivates GnRH, TRH and angiotensin II. Siler-Khodr TM, et al. **Placenta** 1989 May–Jun;10(3):283–96

Proteinases and their inhibitors in cells and tissues. Rappay G. **Prog Histochem Cytochem** 1989;18(4):1–61 (314 ref.)

Thermitase, a thermostable subtilisin: comparison of predicted and experimental structures and the molecular cause of thermostability. Frömmel C, et al. **Proteins** 1989; 5(1):22–37

Yeast KEX2 protease and mannosyltransferase I are localized to distinct compartments of the secretory pathway. Cunningham KW, et al. **Yeast** 1989 Jan–Feb;5(1):25–33

[Neutral proteinase in peroxisomes from rat liver cells] Komov VP, et al. **Biokhimiia** 1988 Sep;53(9):1532–8 (Eng. Abstr.) **(Rus)**

[Mass-spectrometric determination of specificity of proteinases] Aleksandrov ML, et al. **Bioorg Khim** 1988 Jun; 14(6):853–7 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Extracellular proteinase production and the pathogenicity of Nocardiae. Tsuboi R, et al. **Arch Dermatol Res** 1989; 281(1):78–80

Characterisation of chondrocyte activation in response to cytokines synthesised by a synovial cell line. Sung K, et al. **Biochim Biophys Acta** 1988 Sep 16;971(2):148–56

Biosynthesis of lysosomal endopeptidases. Erickson AH. **J Cell Biochem** 1989 May;40(1):31–41 (76 ref.)

Autocatalytic processing of the potyvirus helper component proteinase in Escherichia coli and in vitro. Carrington JC, et al. **J Virol** 1989 Oct;63(10):4459–63

Role of alkaline protease and elastase in the adherence of Pseudomonas aeruginosa to WEHI cells. Trancassini M, et al. **Microbiologica** 1989 Jul;12(3):257–61

BLOOD

Action of epsilon-aminocaproic acid on the proteolysis system during experimental influenza in mice. Puzis LE, et al. **Acta Virol (Praha)** 1988 Nov;32(6):515–21

Multiple (alpha-NH-ubiquitin)protein endoproteases in cells. Jonnalagadda S, et al. **J Biol Chem** 1989 Jun 25; 264(18):10637–42

Thrombin-independent activation of platelet factor XIII by endogenous platelet acid protease. Lynch GW, et al. **Thromb Haemost** 1988 Jun 16;59(3):372–7

[Aspects on the diagnostic relevance of plasma neutral proteinases in cardiology and cardiac surgery] Reichelt D. **Z Med Lab Diagn** 1989;30(1):15–7 **(Ger)**

[Effect of anticoagulants on the activity of trypsin-like proteinases in human blood plasma] Babiĭ AV, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):177–9 (Eng. Abstr.) **(Rus)**

CEREBROSPINAL FLUID

Neuropeptide-processing, -converting, and -inactivating enzymes in human cerebrospinal fluid. Terenius L, et al. **Int Rev Neurobiol** 1988;30:101–21 (82 ref.)

CHEMICAL SYNTHESIS

Genetic locus, primary structure, and chemical synthesis of human immunodeficiency virus protease. Copeland TD, et al. **Gene Anal Tech** 1988 Nov–Dec;5(6):109–15

Chemical synthesis and enzymatic activity of a 99-residue peptide with a sequence proposed for the human immunodeficiency virus protease. Nutt RF, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7129–33

DIAGNOSTIC USE

Ecarin test in diagnosis of dicoumarol therapy, liver diseases and DIC. Kornalik F, et al. **Folia Haematol (Leipz)** 1988; 115(4):483–7

[Use of ecarin in the diagnosis of coagulation disorders] Kornalik F. **Cas Lek Cesk** 1988 Dec 16;127(51):1578–81 (Eng. Abstr.) **(Cze)**

GENETICS

High-level expression of self-processed HIV-1 protease in Escherichia coli using a synthetic gene. Hostomsky Z, et al. **Biochem Biophys Res Commun** 1989 Jun 30; 161(3):1056–63

Chemical synthesis and expression of the HIV-1 protease gene in E. coli. Louis JM, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):87–94

Yeast KEX2 genes encodes an endopeptidase homologous to subtilisin-like serine proteases. Mizuno K, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):246–54

Genetics of proteinases of lactic acid bacteria. Kok J, et al. **Biochimie** 1988 Apr;70(4):475–88 (82 ref.)

Characterization of a cloned chromosomal fragment affecting the proteinase activity of Streptococcus lactis ssp. lactis. Tynkkynen S, et al. **Biochimie** 1988 Apr;70(4):531–4

Fibroblasts of two patients with trisomy 18 show 1.5-fold increase in peptidase A activity over normal human diploid fibroblasts. Namba M, et al. **Clin Genet** 1988 Sep; 34(3):161–4

A second proteinase encoded by a plant potyvirus genome. Carrington JC, et al. **EMBO J** 1989 Feb;8(2):365–70

Molecular cloning of multiple bovine aspartyl protease genes. Lu Q, et al. **Gene** 1988 Nov 15;71(1):135–46

Cloning and expression of the streptococcal C5a peptidase gene in Escherichia coli: linkage to the type 12 M protein gene. Chen CC, et al. **Infect Immun** 1989 Jun;57(6):1740–5

Genetic, immunological, and cytotoxic comparisons of Legionella proteolytic activities. Quinn FD, et al. **Infect Immun** 1989 Sep;57(9):2719–25

Cloning and expression of the alkaline proteinase gene from Pseudomonas aeruginosa IFO 3455. Atsumi Y, et al. **J Bacteriol** 1989 Sep;171(9):5173–5

Conditionally lethal amber mutations in the leader peptidase gene of Escherichia coli. Inada T, et al. **J Bacteriol** 1989 Jan;171(1):585–7

Human gastric cathepsin E. Predicted sequence, localization to chromosome 1, and sequence homology with other aspartic proteinases. Azuma T, et al. **J Biol Chem** 1989 Oct 5;264(28):16748–53

Human immunodeficiency virus protease. Bacterial expression and characterization of the purified aspartic protease. Darke PL, et al. **J Biol Chem** 1989 Feb 5; 264(4):2307–12

Expression of the yeast aspartyl protease, proteinase A. Phosphorylation and binding to the mannose 6-phosphate receptor are altered by addition of cathepsin D sequences. Faust PL, et al. **J Biol Chem** 1989 Jan 5;264(1):479–88

A subunit of mammalian signal peptidase is homologous to yeast SEC11 protein. Greenburg G, et al. **J Biol Chem** 1989 Sep 25;264(27):15762–5

Comparison of the human immunodeficiency virus type 1 and 2 proteases by hybrid gene construction and trans-complementation. Le Grice SF, et al. **J Biol Chem** 1989 Sep 5;264(25):14902–8

cDNA-derived primary structure of the glycoprotein component of canine microsomal signal peptidase complex. Shelness GS, et al. **J Biol Chem** 1988 Nov 15; 263(32):17063–70

Mutational analysis of human immunodeficiency virus type 1 protease suggests functional homology with aspartic proteinases. Loeb DD, et al. **J Virol** 1989 Jan;63(1):111–21

Use of a cloned multidrug resistance gene for coamplification and overproduction of major excreted protein, a transformation-regulated secreted acid protease. Kane SE, et al. **Mol Cell Biol** 1988 Aug;8(8):3316–21

Molecular characterization of a cell wall-associated proteinase gene from Streptococcus lactis NCDO763. Kiwaki M, et al. **Mol Microbiol** 1989 Mar;3(3):359–69

Complete mutagenesis of the HIV-1 protease. Loeb DD, et al. **Nature** 1989 Aug 3;340(6232):397–400

Nucleotide sequence of the Candida albicans aspartyl proteinase gene. Lott TJ, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1779

Human insulin-degrading enzyme shares structural and functional homologies with E. coli protease III. Affholter JA, et al. **Science** 1988 Dec 9;242(4884):1415–8

IMMUNOLOGY

Characteristic distribution of cathepsin E which immunologically cross-reacts with the 86-kDa acid proteinase from rat gastric mucosa. Muto N, et al. **J Biochem (Tokyo)** 1988 Apr;103(4):629–32

ISOLATION & PURIFICATION

Purification of an endopeptidase from bovine adrenal medulla granules which cleaves in vitro at paired but not at single basic residues. Maret GE, et al. **Anal Biochem** 1988 Jul; 172(1):248–58

A peptidyl dipeptidase-4 from Pseudomonas maltophilia: purification and properties. Dasarathy Y, et al. **Arch Biochem Biophys** 1989 Apr;270(1):255–66

Purification and characterization of Pz-peptidase from rabbit muscle. Tisljar U, et al. **Arch Biochem Biophys** 1989 Oct; 274(1):138–44

Affinity purification of endothia protease with a novel renin inhibitor SQ 32,970. Norman JA, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):1–7

Alpha 2-macroglobulin used to isolate intracellular endopeptidases from mammalian cells in culture. Slot LA, et al. **Biochem J** 1988 Oct 15;255(2):437–43

Prooocytocin/neurophysin convertase from bovine neurohypophysis and corpus luteum secretory granules: complete purification, structure-function relationships, and competitive inhibitor. Plevrakis I, et al. **Biochemistry** 1989 Mar 21;28(6):2705–10

Partial purification and properties of neutral PTHase from the cytosolic fraction of rat renal cortex. Sase M, et al. **Bone Miner** 1988 Jan;3(3):211–23

Purification and properties of three endopeptidases from baker's yeast. Nowak J, et al. **Can J Microbiol** 1989 Feb; 35(2):295–303

Partial purification of a prorenin activating enzyme in the aortic wall. Tang SS, et al. **Clin Exp Hypertens [A]** 1988; 10(6):1251–7

Partial purification and substrate analysis of bacterially expressed HIV protease by means of monoclonal antibody. Hansen J, et al. **EMBO J** 1988 Jun;7(6):1785–91

Human lens membrane proteinase: purification and age-related distributional changes in the water-soluble and insoluble protein fractions. Srivastava OP, et al. **Exp Eye Res** 1989 Feb;48(2):161–75

Characterisation and partial purification of a novel prohormone processing enzyme from ovine adrenal medulla. Tezapsidis N, et al. **FEBS Lett** 1989 Mar 27; 246(1–2):44–8

Purification and characterization of a 27,000-Mr extracellular proteinase from Trichophyton rubrum. Apodaca G, et al. **Infect Immun** 1989 Oct;57(10):3072–80

High-molecular-weight neutral proteinase of rat ascites hepatoma cells and their collagenolytic activity. Maruyama R, et al. **Invasion Metastasis** 1988;8(5):285–300

Purification and characterization of an acidic amino acid specific endopeptidase of Streptomyces griseus obtained from a commercial preparation (Pronase). Yoshida N, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):451–6

Studies on prolyl endopeptidase from shakashimeji (Lyophyllum cinerascens): purification and enzymatic properties. Yoshimoto T, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):622–7

Identification of a Mg2+-dependent protease in human placenta which cleaves hydrophobic folate-binding proteins to hydrophilic forms. Antony AC, et al. **J Biol Chem** 1989 Feb 5;264(4):1911–4

Type I procollagen N-proteinase from chick embryo tendons. Purification of a new 500-kDa form of the enzyme and identification of the catalytically active polypeptides. Hojima Y, et al. **J Biol Chem** 1989 Jul 5;264(19):11336–45

Xenopus laevis skin Arg-Xaa-Val-Arg-Gly-endoprotease. A highly specific protease cleaving after a single arginine of a consensus sequence of peptide hormone precursors. Kuks PF, et al. **J Biol Chem** 1989 Sep 5;264(25):14609–12

Crystallization of the aspartylprotease from the human immunodeficiency virus, HIV-1. McKeever BM, et al. **J Biol Chem** 1989 Feb 5;264(4):1919–21

The factor V-activating enzyme (RVV-V) from Russell's viper venom. Identification of isoproteins RVV-V alpha, -V beta, and -V gamma and their complete amino acid sequences. Tokunaga F, et al. **J Biol Chem** 1988 Nov 25; 263(33):17471–81

Solubilization and characterization of yeast signal peptidase. YaDeau JT, et al. **J Biol Chem** 1989 Feb 15;264(5):2928–34

Purification and identification of a neutral endopeptidase in Plasmodium falciparum schizonts and merozoites. Grellier P, et al. **Parasitol Res** 1989;75(6):455–60

[Production and properties of the milk-clotting enzyme] Bernardinelli SE, et al. **Rev Argent Microbiol** 1983; 15(2):95–104 (Eng. Abstr.) **(Spa)**

METABOLISM

Microbial proteinases. Kalisz HM. **Adv Biochem Eng Biotechnol** 1988;36:1–65 (334 ref.)

Regulation of proteinase activity by high molecular weight inhibitors: biosynthesis of rat alpha-macroglobulins. Geiger T, et al. **Adv Exp Med Biol** 1988;240:183–9

Proteolysis and lipid peroxidation--two aspects of cell injury in experimental hypovolemic-traumatic shock. Redl H, et al. **Adv Exp Med Biol** 1988;240:449-55

Endothelial cell killing by neutrophils. Synergistic interaction of oxygen products and proteases. Varani J, et al. **Am J Pathol** 1989 Sep;135(3):435-8

Neutral endopeptidase inhibitors potentiate substance P-induced contraction in gut smooth muscle. Djokic TD, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):G39-43

Putative tripeptidyl peptidase in renal brush border is due to sequential action of two other exopeptidases [letter] Kenny AJ, et al. **Am J Physiol** 1989 May;256(5 Pt 2):F790-1

Evidence that aspartic proteinase is involved in the proteolytic processing event of procathepsin L in lysosomes. Nishimura Y, et al. **Arch Biochem Biophys** 1989 Jun;271(2):400-6

Analysis of thiolester bond cleavage-dependent conformational changes in binary alpha 2-macroglobulin-proteinase complexes. Roche PA, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):285-93

The comparative study of reactive oxygen species generated by polymorphonuclear leukocytes as alpha 1-proteinase inhibitor inactivators-possible application for antioxidant prevention of emphysema. Nowak D. **Arch Immunol Ther Exp (Warsz)** 1988;36(6):723-31

Generation of a subunit III-like protein by autolysis of human and porcine proproteinase e in a binary complex with procarboxypeptidase A. Avilés FX, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1191-6

Specificity of endoproteinase Asp-N (Pseudomonas fragi): cleavage at glutamyl residues in two proteins. Ingrosso D, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1528-34

Intracellular hydrolases of Aspergillus parasiticus and Aspergillus flavus. Sharma A, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):464-71

Half-life of proteasomes (multiprotease complexes) in rat liver. Tanaka K, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1309-15

Activity of Pz-peptidase and endo-oligopeptidase are due to the same enzyme. Tisljar U, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1460-4

Autolysis of the millimolar Ca2+-requiring form of the Ca2+-dependent proteinase from chicken skeletal muscle. Nagainis PA, et al. **Biochem Cell Biol** 1988 Oct; 66(10):1023-31

The 19 S multicatalytic "prosome" proteinase is a constitutive enzyme in HeLa cells. Hendil KB. **Biochem Int** 1988 Sep; 17(3):471-7

Depression of prolylendopeptidase activity in the delayed hypersensitive guinea pig skin lesion induced by bovine gamma-globulin. Shoji S, et al. **Biochem Int** 1989 Jun; 18(6):1183-92

Neuropeptide-degrading endopeptidase activity of locust (Schistocerca gregaria) synaptic membranes. Isaac RE. **Biochem J** 1988 Nov 1;255(3):843-7

Identification of the aspartic proteinases from human erythrocyte membranes and gastric mucosa (slow-moving proteinase) as catalytically equivalent to cathepsin E. Jupp RA, et al. **Biochem J** 1988 Sep 15;254(3):895-8

Is there a tripeptidyl peptidase in the renal brush-border membrane? Kenny AJ, et al. **Biochem J** 1988 Oct 1; 255(1):373-6

Porcine muscle prolyl endopeptidase: limited proteolysis of tryptic peptides from hemoglobin beta-chains at prolyl and alanyl bonds. Moriyama A, et al. **Biochim Biophys Acta** 1988 Sep 21;956(2):151-5

The two forms of the beta-subunit of initiation factor-2 from reticulocyte lysates arise from proteolytic degradation. Price NT, et al. **Biochim Biophys Acta** 1989 Jul 7; 1008(2):177-82

Collagen-stimulated human platelet aggregation is mediated by endogenous calcium-activated neutral protease. Toyo-oka T, et al. **Circ Res** 1989 Feb;64(2):407-10

Chronic bronchitis: the antiproteinase/proteinase balance and the effect of infection and corticosteroids. Stockley RA. **Clin Chest Med** 1988 Dec;9(4):643-56 (85 ref.)

Endopeptidase activities associated with the plasma membrane compartment of an antigen-presenting B cell. Chain BM, et al. **Clin Exp Immunol** 1989 Jan;75(1):87-92

Effect of NaCl on the heating activation of the heat-stable alkaline proteinases from various animal muscles. Toyohara H, et al. **Comp Biochem Physiol [B]** 1989;92(4):715-9

The processing peptidase of yeast mitochondria: the two co-operating components MPP and PEP are structurally related. Pollock RA, et al. **EMBO J** 1988 Nov; 7(11):3493-500

Release of growth hormone binding protein from IM-9 lymphocytes by endopeptidase is dependent on sulfhydryl group inactivation. Trivedi B, et al. **Endocrinology** 1988 Nov;123(5):2201-6

Parathyroid hormone degradation by chymotrypsin-like endopeptidase in the opossum kidney cell. Yamaguchi T, et al. **Endocrinology** 1988 Dec;123(6):2812-7

Reduced acid protease activity in vitro of lysosomes from thyroid gland of rats chronically treated with propylthiouracil and perchlorate. Sinadinović J, et al. **Exp Clin Endocrinol** 1988 Sep;92(1):97-105

Entamoeba histolytica: role of amebic proteinases and polymorphonuclear leukocytes in acute experimental amebiasis in the rat. Becker I, et al. **Exp Parasitol** 1988 Dec;67(2):268-80

Giardia lamblia: characterization of proteinase activity in trophozoites. Hare DF, et al. **Exp Parasitol** 1989 Feb; 68(2):168-75

Involvement of prolyl endopeptidase in ascidian fertilization. Yokosawa H, et al. **Experientia** 1989 Apr 15;45(4):381-3

Production of pro-opiomelanocortin (POMC) by a vaccinia virus transient expression system and in vitro processing of the expressed prohormone by POMC-converting enzyme. Andreasson KI, et al. **FEBS Lett** 1989 May 8; 248(1-2):43-7

Signal peptidase can cleave inside a polytopic membrane protein. Beltzer JP, et al. **FEBS Lett** 1989 Aug 14; 253(1-2):93-8

Selective cleavage at lysine of the 50 kDa-20 kDa connector loop segment of skeletal myosin S-1 by endoproteinase Arg-C. Bertrand R, et al. **FEBS Lett** 1989 Mar 27; 246(1-2):171-6

Alterations in the cleavage site of the signal sequence for the secretion of human lysozyme by Saccharomyces cerevisiae. Nagahora H, et al. **FEBS Lett** 1988 Oct 10; 238(2):329-32

Human follicular fluid protease and antiprotease activities: a suggested correlation with ability of oocytes to undergo in vitro fertilization. Milwidsky A, et al. **Fertil Steril** 1989 Aug;52(2):274-80

Peptic ulcer: the many proteinases of aggression. Samloff IM. **Gastroenterology** 1989 Feb;96(2 Pt 2 Suppl):586-95 (98 ref.)

Antigenic expression of aminopeptidase M, dipeptidyl-peptidase IV and endopeptidase by primary cultures from rabbit kidney proximal tubule. Tauc M, et al. **Histochemistry** 1989;91(1):17-30

Pseudomonas aeruginosa alkaline protease degrades human gamma interferon and inhibits its bioactivity. Horvat RT, et al. **Infect Immun** 1988 Nov;56(11):2925-32

Enhancement of proteinase-mediated degradation of proteins modified by chlorination. Olszowska E, et al. **Int J Biochem** 1989;21(7):799-805

Continuous fluorogenic substrates for atrial dipeptidyl carboxyhydrolase. Importance of Ser in the P1 position. Soler DF, et al. **Int J Pept Protein Res** 1988 Jul;32(1):35-40

Degradation of a signal peptide by protease IV and oligopeptidase A. Novak P, et al. **J Bacteriol** 1988 Nov; 170(11):5067-75

Porcine muscle prolyl endopeptidase and its endogenous substrates. Moriyama A, et al. **J Biochem (Tokyo)** 1988 Jul; 104(1):112-7

Specificity of action on neuropeptides of an endopeptidase from the synaptosomal membranes of guinea pig brain. Yoshikawa S, et al. **J Biochem (Tokyo)** 1988 Dec; 104(6):1007-10

Characterization of an endoprotease from rat small intestinal mucosal secretory granules which generates somatostatin-28 from prosomatostatin by cleavage after a single arginine residue. Beinfeld MC, et al. **J Biol Chem** 1989 Mar 15;264(8):4460-5

Synthetic substrate for eukaryotic signal peptidase. Cleavage of a synthetic peptide analog of the precursor region of preproparathyroid hormone. Caulfield MP, et al. **J Biol Chem** 1989 Sep 25;264(27):15813-7

Cleavage of type I and type II procollagens by type I/II procollagen N-proteinase. Correlation of kinetic constants with the predicted conformations of procollagen substrates. Dombrowski KE, et al. **J Biol Chem** 1988 Nov 15; 263(32):16545-52

H2a-specific proteolysis as a unique probe in the analysis of the histone octamer. Eickbush TH, et al. **J Biol Chem** 1988 Dec 15;263(35):18972-8

Limited proteolysis of T-kininogen (thiostatin). Release of comparable fragments by different endopeptidases. Moreau T, et al. **J Biol Chem** 1989 Mar 15;264(8):4298-303

Uncoupling of co-translational translocation from signal peptidase processing in a mutant rat preapolipoprotein-A-IV with a deletion that includes the COOH-terminal region of its signal peptide. Nothwehr SF, et al. **J Biol Chem** 1989 Mar 15;264(8):4642-7

Proteolysis in heat-stressed HeLa cells. Stabilization of ubiquitin correlates with the loss of proline endopeptidase. Pratt G, et al. **J Biol Chem** 1989 Jul 25;264(21):12526-32

Domain structures of the dihydrolipoyl transacetylase and the protein X components of mammalian pyruvate dehydrogenase complex. Selective cleavage by protease Arg C. Rahmatullah M, et al. **J Biol Chem** 1989 Jan 15; 264(2):1245-51

Deletion of the amino-terminal domain of asialoglycoprotein receptor H1 allows cleavage of the internal signal sequence. Schmid SR, et al. **J Biol Chem** 1988 Nov 15; 263(32):16886-91

A novel bovine spinal cord endoprotease with high specificity for dynorphin B. Silberring J, et al. **J Biol Chem** 1989 Jul 5;264(19):11082-6

Alpha-macroglobulins: structure, shape, and mechanism of proteinase complex formation. Sottrup-Jensen L. **J Biol Chem** 1989 Jul 15;264(20):11539-42 (92 ref.)

In vitro angiogenesis on the human amniotic membrane: requirement for basic fibroblast growth factor-induced proteinases. Mignatti P, et al. **J Cell Biol** 1989 Feb; 108(2):671-82

Synthesis and release of platelet-activating factor is inhibited by plasma alpha 1-proteinase inhibitor or alpha 1-antichymotrypein and is stimulated by proteinases. Camussi G, et al. **J Exp Med** 1988 Oct 1;168(4):1293-306

Proteinase activity in rumen ciliate protozoa. Lockwood BC, et al. **J Gen Microbiol** 1988 Sep;134 (Pt 9):2605-14

Dispase, a neutral protease from Bacillus polymyxa, is a powerful fibronectinase and type IV collagenase. Stenn KS, et al. **J Invest Dermatol** 1989 Aug;93(2):287-90

Degradation of bovine achilles tendon collagen by Candida albicans proteinase. Kaminishi H, et al. **J Med Vet Mycol** 1988;26(5):315-8

Properties of a Leu-Phe-cleaving endopeptidase activity putatively involved in beta-endorphin metabolism in rat brain. Lebouille JL, et al. **J Neurochem** 1989 Jun; 52(6):1714-21

Inhibitory action of synthetic proteinase inhibitors and substrates on the chemotaxis of rat polymorphonuclear leukocytes in vitro. Nakagawa H, et al. **J Pharmacobiodyn** 1988 Oct;11(10):674-8

Chimeric picornavirus polyproteins demonstrate a common 3C proteinase substrate specificity. Dewalt PG, et al. **J Virol** 1989 Aug;63(8):3444-52

Proteolytic cleavage of encephalomyocarditis virus capsid region substrates by precursors to the 3C enzyme. Parks GD, et al. **J Virol** 1989 Mar;63(3):1054-8

Role of human immunodeficiency virus type 1-specific protease in core protein maturation and viral infectivity. Peng C, et al. **J Virol** 1989 Jun;63(6):2550-6

Synthesis and processing of Escherichia coli TEM-beta-lactamase and Bacillus licheniformis alpha-amylase in E. coli: the role of signal peptidase I. Maarten van Dijl J, et al. **Mol Gen Genet** 1988 Sep; 214(1):55-61

Three-dimensional structure of aspartyl protease from human immunodeficiency virus HIV-1. Navia MA, et al. **Nature** 1989 Feb 16;337(6208):615-20

Role of a serine endopeptidase in the hydrolysis of exogenous cholecystokinin by brain slices. Camus A, et al. **Neuroscience** 1989;29(3):595-602

Morphometric analysis of the degradation of human skin elastic fibres by human leukocyte elastase (EC 3-4-21-37) and human skin fibroblast elastase (EC 3-4-24). Godeau G, et al. **Pathol Biol (Paris)** 1988 Nov;36(9):1133-8 (18 ref.)

Atrial dipeptidyl carboxyhydrolase is a zinc-metallo proteinase which possesses tripeptidyl carboxyhydrolase activity. Soler DF, et al. **Peptides** 1989 Jan-Feb;10(1):63-8

Skeletal muscle proteasome can degrade proteins in an ATP-dependent process that does not require ubiquitin. Driscoll J, et al. **Proc Natl Acad Sci U S A** 1989 Feb; 86(3):787-91

Human immunodeficiency virus 1 protease expressed in Escherichia coli behaves as a dimeric aspartic protease. Meek TD, et al. **Proc Natl Acad Sci U S A** 1989 Mar; 86(6):1841-5

Hydrogen bonding in protein ligand interactions: a theoretical dimension of aspartic proteinase crystallography. Goldblum A. **Prog Clin Biol Res** 1989; 289:445-54

Calcitonin gene-related peptide is metabolized by an endopeptidase hydrolyzing substance P. Le Grevès P, et al. **Regul Pept** 1989 Jun-Jul;25(3):277-86

Recent studies of the synthetic selective inhibitors; with special reference to non-plasmin fibrinolytic enzyme, plasmin and plasma-kallikrein. Okamoto S, et al. **Thromb Res Suppl** 1988;8:131-41 (23 ref.)

[Action of muscular proteinases on fast and slow myosins. Relation with post-mortem proteolysis in muscles of variable contractility] Ouali A, et al. **Reprod Nutr Dev** 1988; 28(3B):839-44 (Eng. Abstr.) (Fre)

[Primary structure of the OSCP-protein, conferring the oligomycin sensitivity to the H+-ATPase complex. II. Hydrolysis of OSCP with proteinase from Staphylococcus aureus and reconstruction of the polypeptide chain] Grinkevich VA, et al. **Bioorg Khim** 1988 Jun;14(6):790-6 (Eng. Abstr.) (Rus)

[Insulin-degrading neutral proteinases of the plasma membrane of loach liver and embryo cells] Kusen' SI, et al. **Ukr Biokhim Zh** 1989 Jan-Feb;61(1):23-7 (Eng. Abstr.) (Rus)

[Insulin-degrading neutral protease from plasma membranes of rat liver cells and erythrocytes] Sologub LI, et al. **Ukr Biokhim Zh** 1989 Mar-Apr;61(2):28-33 (Eng. Abstr.) (Rus)

[Proteinases in the bronchopulmonary apparatus of rats with bronchial anaphylaxis] Komov VP, et al. **Vopr Med Khim** 1988 Sep-Oct;34(5):72-6 (Eng. Abstr.) (Rus)

[Effect of silimarine on activity of lysosomal proteinases in the liver and kidneys during tetramethylthiuram disulfide administration] Tabagari SI, et al. **Vopr Med Khim** 1988 Sep-Oct;34(5):110-3 (Eng. Abstr.) (Rus)

[Activity of lysosomal proteinases in the liver, spleen, thymus and peritoneal macrophages after immunization of mice with thymus-dependent and thymus-independent antigens] Vasil'ev AV, et al. **Vopr Med Khim** 1989 Mar-Apr; 35(2):121-3 (Eng. Abstr.) (Rus)

[A comparative study of the biological value of qualitatively different proteins and their susceptibility to attack by digestive proteinases] Nikolayevskaia VR, et al. **Vopr Pitan** 1989 Mar-Apr;(2):37-42 (Eng. Abstr.) (Rus)

PHARMACOLOGY

Effect of glycosidases and proteinases on cobalamin binding and physicochemical properties of purified saturated

haptocorrin and intrinsic factor. Guéant JL, et al. **Biochim Biophys Acta** 1988 Dec 2;957(3):390–8

Effects of peptidases on non–adrenergic, non–cholinergic inhibitory responses of tracheal smooth muscle: a comparison with effects on VIP– and PHI–induced relaxation. Ellis JL, et al. **Br J Pharmacol** 1989 Mar; 96(3):521–6

Neutral endopeptidase modulates tachykinin–induced increase in vascular permeability in guinea pig skin. Iwamoto I, et al. **Int Arch Allergy Appl Immunol** 1989; 88(3):288–93

Influence of dispase and angiogenesis factors on the growth of human xenografts. Köpf–Maier P, et al. **J Cancer Res Clin Oncol** 1988;114(6):547–52

The role of proteinases, interferons and hormones in proliferative activities of nonmalignant and malignant cells. Korbelik M, et al. **Neoplasma** 1988;35(5):555–63

Immunostaining of intermediate filament proteins in paraffin sections. Evaluation of optimal protease treatment to improve the immunoreactivity. Miettinen M. **Pathol Res Pract** 1989 Apr;184(4):431–6

Mutanolysin–induced lysis of actinomyces pyogenes determined by aggregometry. Lämmler C, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(4):447–53

PHYSIOLOGY

Aspartic proteinases and inhibitors for their control in health and disease. Kay J, et al. **Adv Exp Med Biol** 1988;240:1–11

Evidence for the role of proteinases in uremic catabolism. Schaefer RM, et al. **Adv Exp Med Biol** 1988;240:323–9

Identification of a calcium–dependent microsomal proteinase responsible for monobasic cleavage of chicken proalbumin. Peach RJ, et al. **Biochim Biophys Acta** 1989 Mar 24; 990(3):276–9

Aspartic proteinases in fishes and aquatic invertebrates. Gildberg A. **Comp Biochem Physiol [B]** 1988;91(3):425–35 (100 ref.)

Candida proteinases and candidosis. Douglas LJ. **Crit Rev Biotechnol** 1988;8(2):121–9 (50 ref.)

Unique pattern of cleavage of vasoactive intestinal peptide by human lymphocytes. Goetzl EJ, et al. **Immunology** 1989 Apr;66(4):554–8

Inactivation of human gamma interferon by Pseudomonas aeruginosa proteases: elastase augments the effects of alkaline protease despite the presence of alpha 2–macroglobulin. Horvat RT, et al. **Infect Immun** 1989 Jun; 57(6):1668–74

Parallel effects of signal peptide hydrophobic core modifications on co–translational translocation and post–translational cleavage by purified signal peptidase. Cioffi JA, et al. **J Biol Chem** 1989 Sep 5;264(25):15052–8

Proalbumin to albumin conversion by a proinsulin processing endopeptidase of insulin secretory granules. Rhodes CJ, et al. **J Biol Chem** 1989 Aug 25;264(24):14240–5

Proteolytic inactivation of plasma C1– inhibitor in sepsis. Nuijens JH, et al. **J Clin Invest** 1989 Aug;84(2):443–50

In vivo inactivation of neurotensin in dog ileum: major involvement of endopeptidase 24–11. Checler F, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):1040–4

Influence of epithelium on guinea pig airway responses to tachykinins: role of endopeptidase and cyclooxygenase. Frossard N, et al. **J Pharmacol Exp Ther** 1989 Jan; 248(1):292–8

Processing of in vitro–synthesized gag precursor proteins of human immunodeficiency virus (HIV) type 1 by HIV proteinase generated in Escherichia coli. Kräusslich HG, et al. **J Virol** 1988 Nov;62(11):4393–7

Trypanosoma cruzi: involvement of proteolytic activity during cell fusion induced by epimastigote form. Calderon RO, et al. **Mol Cell Biochem** 1989 Apr 11;86(2):189–200

Proteinases, proteolysis and biological control in the yeast Saccharomyces cerevisiae. Achstetter T, et al. **Yeast** 1985 Dec;1(2):139–57 (191 ref.)

[Proteases of the elastase type] Robert L. **Pathol Biol (Paris)** 1988 Nov;36(9):1101–7 (51 ref.) (Eng. Abstr.) (Fre)

SECRETION

Neutral proteinases and inhibitors secreted by human rectal adenocarcinoma cell line (RCM–1). Kataoka H, et al. **Invasion Metastasis** 1989;9(3):149–66

Regulated secretion of pro–opiomelanocortin converting enzyme and an aminopeptidase B–like enzyme from dispersed bovine intermediate lobe pituitary cells. Castro MG, et al. **J Neurochem** 1989 May;52(5):1619–28

TOXICITY

Antithrombin III in Echis carinatus envenomation in northern Nigeria. Mba EC, et al. **Acta Haematol (Basel)** 1989;81(2):98–100

URINE

Relation between urinary proteinases and proteinuria in rats with a glomerular disease. Davin JC, et al. **Adv Exp Med Biol** 1988;240:267–73

PEPTIDE PHI

ANALOGS & DERIVATIVES

Peptide histidine isoleucinamide (PHI)–(1–27)–Gly as a new major form of PHI in the rat small intestine. Cauvin A, et al. **Endocrinology** 1989 Sep;125(3):1296–302

ANALYSIS

Further analysis of presence of peptides in dopamine neurons. Cholecystokinin, peptide histidine–isoleucine/vasoactive intestinal polypeptide and substance P in rat supramammillary region and mesencephalon. Seroogy K, et al. **Exp Brain Res** 1988;72(3):523–34

A peptide with N–terminal histidine and C–terminal isoleucine amide (PHI) and vasoactive intestinal peptide (VIP) are copackaged in myenteric neurones of the guinea pig ileum. Agoston DV, et al. **Peptides** 1989 May–Jun; 10(3):571–3

Peptide histidine isoleucine (PHI) immunoreactivity in the rat retina: identification and characterisation by radioimmunoassay, immunohistochemistry and high–performance liquid chromatography. Armstrong PE, et al. **Regul Pept** 1989 Jun–Jul;25(3):325–32

BIOSYNTHESIS

Synthesis, cloning and expression in Escherichia coli of artificial genes coding for biologically active elongated precursors of the vasoactive intestinal polypeptide. Simoncsits A, et al. **Eur J Biochem** 1988 Dec 15; 178(2):343–50

GENETICS

Chromosomal assignment of human VIP/PHM–27 gene to 6q26——q27 region by spot blot hybridization and in situ hybridization. Gotoh E, et al. **Biochem Int** 1988 Sep; 17(3):555–62

Localization of vasoactive intestinal peptide and peptide histidine isoleucine immunoreactivity and mRNA within the rat suprachiasmatic nucleus. Stopa EG, et al. **Brain Res** 1988 Dec;464(4):319–25

IMMUNOLOGY

The effects of vasoactive intestinal peptide (VIP) antagonists, and VIP and peptide histidine isoleucine antisera on non–adrenergic, non–cholinergic relaxations of tracheal smooth muscle. Ellis JL, et al. **Br J Pharmacol** 1989 Mar; 96(3):513–20

ISOLATION & PURIFICATION

Peptide histidine isoleucinamide (PHI)–(1–27)–Gly as a new major form of PHI in the rat small intestine. Cauvin A, et al. **Endocrinology** 1989 Sep;125(3):1296–302

METABOLISM

Co–localisation of substance P–, bombesin– and peptide histidine isoleucine (PHI)–like peptides in gut endocrine cells of the dogfish Scyliorhinus stellaris. Cimini V, et al. **Anat Embryol (Berl)** 1989;179(6):605–14

Localization of vasoactive intestinal peptide– and peptide histidine isoleucine amide–like immunoreactivities in the rat superior cervical ganglion and its nerve trunks. Sasek CA, et al. **J Comp Neurol** 1989 Feb 22;280(4):522–32

Early postnatal development of vasoactive intestinal polypeptide– and peptide histidine isoleucine–immunoreactive structures in the cat visual cortex. Wahle P, et al. **J Comp Neurol** 1989 Apr 8; 282(2):215–48

Binding sites for peptide–histidine–isoleucine (PHI) on rat insulinoma–derived RINm5F cells. Göke R, et al. **Mol Cell Endocrinol** 1988 Dec;60(2–3):211–5

PHARMACOLOGY

Effects of VIP and PHM in human intracervical arteries. Hansen V, et al. **Acta Obstet Gynecol Scand** 1988; 67(8):699–701

Inhibitory function of VIP–PHI and galanin in canine pylorus. Allescher HD, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):G789–97

Inhibition of antral gastrin cells by peptide histidine isoleucine. Wolfe MM, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):G328–33

A comparison of the differential effects of vasoactive intestinal peptide and peptide histidine isoleucine on the vascular and capsular smooth muscle of the dog spleen. Corder R, et al. **Br J Pharmacol** 1988 Oct;95(2):664–70

Effects of peptidases on non–adrenergic, non–cholinergic inhibitory responses of tracheal smooth muscle: a comparison with effects on VIP– and PHI–induced relaxation. Ellis JL, et al. **Br J Pharmacol** 1989 Mar; 96(3):521–6

The effects of peptide histidine isoleucine and neuropeptide Y on mucus volume output from the ferret trachea. Webber SE. **Br J Pharmacol** 1988 Sep;95(1):49–54

Prolactin, vasoactive intestinal peptide, and peptide histidine methionine elicit selective increases in REM sleep in rabbits. Obal F Jr, et al. **Brain Res** 1989 Jun 26; 490(2):292–300

Peptide histidine isoleucine and vasoactive intestinal polypeptide cause relaxation of opossum internal anal sphincter via two distinct receptors. Nurko S, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):403–13

Novel effect of vasoactive intestinal polypeptide and peptide histidine isoleucine: inhibition of in vitro secretion of prolactin in the tilapia, Oreochromis mossambicus. Kelley KM, et al. **Gen Comp Endocrinol** 1988 Oct;72(1):97–106

Interaction of thymic peptide thymosin alpha 1 with VIP receptors in rat intestinal epithelial cells: comparison with PHI and secretin. Calvo JR, et al. **Gen Pharmacol** 1989; 20(4):503–5

Infusion of prepro–VIP derived peptides in man: effect on secretion of prolactin. Yiangou Y, et al. **Neuroendocrinology** 1988 Dec;48(6):615–8

Peptide histidine methionine (PHM) increases ileostomy output. Calam J, et al. **Regul Pept** 1988 Oct;23(1):57–62

Comparison of helodermin, VIP and PHI in pancreatic secretion and blood flow in dogs. Konturek SJ, et al. **Regul Pept** 1989 Feb;24(2):155–66

PEPTIDE PHM see PEPTIDE PHI

PEPTIDE SYNTHETASES

ANTAGONISTS & INHIBITORS

Structural specificity of inhibition of human folylpolyglutamate synthetase by ornithine–containing folate analogs. McGuire JJ, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3931–9

Effect of inhibition of glutathione synthesis on the metabolism and protein conjugation of [14C]captopril in the rat. Yeung JH, et al. **Biochem Pharmacol** 1989 Apr 1;38(7):1188–92

(1–Aminoethyl)boronic acid: a novel inhibitor for Bacillus stearothermophilus alanine racemase and Salmonella typhimurium D–alanine:D–alanine ligase (ADP–forming). Duncan K, et al. **Biochemistry** 1989 Apr 18;28(8):3541–9

Phosphate regulation of ACV synthetase and cephalosporin biosynthesis in Streptomyces clavuligerus. Jhang J, et al. **FEMS Microbiol Lett** 1989 Jan 15;48(2):145–50

Synthesis of inhibitors of the meso–diaminopimelate–adding enzyme from Escherichia coli. Abo–Ghalia M, et al. **Int J Pept Protein Res** 1988 Sep;32(3):208–22

(3–Amino–2–oxoalkyl)phosphonic acids and their analogues as novel inhibitors of D–alanine:D–alanine ligase. Chakravarty PK, et al. **J Med Chem** 1989 Aug; 32(8):1886–90

Synthesis of an analogue of tabtoxinine as a potential inhibitor of D–alanine:D–alanine ligase (ADP forming). Greenlee WJ, et al. **J Med Chem** 1989 Jan;32(1):165–70

Inhibition of mammalian folylpolyglutamate synthetase and human dihydrofolate reductase by 5,8–dideaza analogues of folic acid and aminopterin bearing a terminal L–ornithine. Patil SA, et al. **J Med Chem** 1989 Jul; 32(7):1559–65

BIOSYNTHESIS

D–alanine–D–alanine ligase (ADP) from Salmonella typhimurium. Overproduction, purification, crystallization and preliminary X–ray analysis. Knox JR, et al. **J Mol Biol** 1989 Jan 20;205(2):461–3

DEFICIENCY

A therapeutic trial with N–acetylcysteine in subjects with hereditary glutathione synthetase deficiency (5–oxoprolinuria). Mårtensson J, et al. **J Inherited Metab Dis** 1989;12(2):120–30

GENETICS

Transcription of the folC gene encoding folylpolyglutamate synthetase–dihydrofolate synthetase in Escherichia coli. Bognar A, et al. **J Bacteriol** 1989 Apr;171(4):1854–61

In vitro construction of gshB::kan in Escherichia coli and use of gshB::kan in mapping the gshB locus. Daws T, et al. **J Bacteriol** 1989 Sep;171(9):5218–21

Molecular cloning and expression in Escherichia coli of the Bacillus licheniformis bacitracin synthetase 2 gene. Ishihara H, et al. **J Bacteriol** 1989 Mar;171(3):1705–11

Organization of the biosynthesis genes for the peptide antibiotic gramicidin S. Krause M, et al. **J Bacteriol** 1988 Oct;170(10):4669–74

Gene cluster containing the genes for tyrocidine synthetases 1 and 2 from Bacillus brevis: evidence for an operon. Mittenhuber G, et al. **J Bacteriol** 1989 Sep;171(9):4881–7

Nucleotide sequence of the murF gene encoding the UDP–MurNAc–pentapeptide synthetase of Escherichia coli. Parquet C, et al. **Nucleic Acids Res** 1989 Jul 11; 17(13):5379

Complete nucleotide sequence of the tycA gene coding the tyrocidine synthetase 1 from Bacillus brevis. Weckermann R, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11841

Increased capacity for glutathione synthesis enhances resistance to radiation in Escherichia coli: a possible model for mammalian cell protection. Moore WR, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1461–4

[Genes for enzymes of glutathione biosynthesis] Kimura A. **Tanpakushitsu Kakusan Koso** 1988 Jul;33(9):1600–9 (25 ref.) (Jpn)

METABOLISM

Measurement of

delta-(L-alpha-aminoadipyl)-L-cysteinyl-D-valine synthetase activity in Streptomyces clavuligerus by high-performance liquid chromatography after precolumn derivatization with o-phthaldialdehyde. White RL, et al. **Anal Biochem** 1989 May 1;178(2):399-403

Proliferation-dependency of folylpolyglutamyl synthetase activity in maturating luminal epithelial cells of mouse small intestine. Sirotnak FM, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4239-41

Dihydrofolate synthetase and folylpolyglutamate synthetase: direct evidence for intervention of acyl phosphate intermediates. Banerjee RV, et al. **Biochemistry** 1988 Dec 13;27(25):9062-70

Complete separation of tyrosinated, detyrosinated, and nontyrosinatable brain tubulin subpopulations using affinity chromatography. Paturle L, et al. **Biochemistry** 1989 Mar 21;28(6):2698-704

Substrate specificity of mammalian folylpoly-gamma-glutamate synthetase for 5,8-dideazafolates and 5,8-dideaza analogues of aminopterin. Cichowicz DJ, et al. **Biochim Biophys Acta** 1988 Dec 2;957(3):363-9

Ubiquitin-calmodulin conjugating activity from cardiac muscle. Jennissen HP, et al. **Biol Chem Hoppe Seyler** 1988 Dec;369(12):1325-30

Tubulin tyrosination in Crithidia: modifying enzymes and modification states of tubulin. Chang SL, et al. **Cell Motil Cytoskeleton** 1988;10(3):400-9

Relationship between the tyrosination state of tubulin and the activities of tubulin:tyrosine ligase and tubulin carboxypeptidase in rat muscle during development. Alonso AC, et al. **Eur J Biochem** 1988 Nov 15; 177(3):517-22

Tyrosination state of tubulin and the activity of tubulin:tyrosine ligase and tubulin carboxypeptidase in the developing retina of the chick. Arregui C, et al. **J Neurochem** 1989 Jun;52(6):1708-13

PHYSIOLOGY

delta-(L-alpha-aminoadipyl)-L-cysteinyl-D-valine synthetase from Aspergillus nidulans. The first enzyme in penicillin biosynthesis is a multifunctional peptide synthetase. van Liempt H, et al. **J Biol Chem** 1989 Mar 5;264(7):3680-4

[Design of catalytic functions of glutathione synthetase] Nishioka T, et al. **Tanpakushitsu Kakusan Koso** 1988 Jul; 33(9):1592-9 (42 ref.) **(Jpn)**

PEPTIDE TERMINATION FACTORS

BLOOD

The N-terminus and a 4,000-MW peptide from the midportion of the N-terminus of the atrial natriuretic factor prohormone each circulate in humans and increase in congestive heart failure. Winters CJ, et al. **Circulation** 1989 Sep;80(3):438-49

GENETICS

Localization of the ribosome-releasing factor gene in the Escherichia coli chromosome. Ichikawa S, et al. **J Bacteriol** 1989 Jul;171(7):3689-95

Conditionally lethal and recessive UGA-suppressor mutations in the prfB gene encoding peptide chain release factor 2 of Escherichia coli. Kawakami K, et al. **J Bacteriol** 1988 Nov;170(11):5378-81

Rapid and precise mapping of the Escherichia coli release factor genes by two physical approaches. Lee CC, et al. **J Bacteriol** 1988 Oct;170(10):4537-41

Use of tRNA suppressors to probe regulation of Escherichia coli release factor 2. Curran JF, et al. **J Mol Biol** 1988 Sep 5;203(1):75-83

Purification and characterization of TTFI, a factor that mediates termination of mouse ribosomal DNA transcription. Bartsch I, et al. **Mol Cell Biol** 1988 Sep; 8(9):3891-7

[Amino acid substitutions in the beta-subunit of RNA-polymerase from E. coli compensating for mutation-induced damage of the rho termination factors] Ogryz'ko EP, et al. **Bioorg Khim** 1988 Jul;14(7):963-4 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Termination of transcription in human mitochondria: identification and purification of a DNA binding protein factor that promotes termination. Kruse B, et al. **Cell** 1989 Jul 28;58(2):391-7

METABOLISM

Interaction of the release factor with the Escherichia coli ribosome: inhibition of the 30S subunit domain by specific antibodies. Tate WP, et al. **Biochem Int** 1988 Jul; 17(1):179-86

On the role of the termination factor RF-2 and the 16S RNA in protein synthesis. Lang A, et al. **Eur J Biochem** 1989 Apr 1;180(3):547-54

Release factor competition is equivalent at strong and weakly suppressed nonsense codons. Martin R, et al. **Mol Gen Genet** 1988 Jul;213(1):144-9

PHYSIOLOGY

Effects of release factor context at UAA codons in Escherichia coli. Martin R, et al. **J Bacteriol** 1988 Oct; 170(10):4714-7

PEPTIDES

Design of peptides and proteins. Degrado WF. **Adv Protein Chem** 1988;39:51-124 (223 ref.)

Laser excitation of fluorescent-labeled polypeptides in polyacrylamide gels. Duffy VE, et al. **Anal Biochem** 1989 Jun;179(2):291-8

Micropreparative procedures for high sensitivity sequencing of peptides and proteins. Simpson RJ, et al. **Anal Biochem** 1989 Mar;177(2):221-36 (91 ref.)

Cyanogen bromide cleavage at methionine residues of polypeptides containing disulfide bonds. Villa S, et al. **Anal Biochem** 1989 Feb 15;177(1):161-4

On periodicities governing the construction of genes and proteins. Ohno S. **Anim Genet** 1988;19(4):305-16 (12 ref.)

Bombesin-like peptides in health and disease. Nomenclature meeting. Report and recommendations. 14 October 1987. **Ann N Y Acad Sci** 1988;547:1-2

Peptide toxins from venomous Conus snails. Gray WR, et al. **Annu Rev Biochem** 1988;57:665-700 (158 ref.)

A model for hydropathy-based peptide interactions. Markus G, et al. **Arch Biochem Biophys** 1989 Aug 1;272(2):433-9

Development of an anaphylatoxin scavenging device. Principle, surface molecular design, and selective adsorption. Matsuda T, et al. **ASAIO Trans** 1988 Jul-Sep; 34(3):556-8

Implication of protein oxidation in protein turnover, aging, and oxygen toxicity. Stadtman ER, et al. **Basic Life Sci** 1988;49:331-9 (23 ref.)

Determination of the primary structure of Paim II, an alpha-amylase inhibitor from Streptomyces coruchorushii, by high-performance tandem mass spectrometry. Akashi S, et al. **Biochem Biophys Res Commun** 1989 Jan 31; 158(2):514-9

Hydrodynamic and circular dichroic analysis of mammary-derived growth inhibitor (MDGI). Behlke J, et al. **Biochem Biophys Res Commun** 1989 May 30; 161(1):363-70

Facile analysis and purification of deblocked N-terminal pyroglutamyl peptides with a strong cation-exchange sulfoethyl aspartamide column. Crimmins DL, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):910-6

Nucleation and accretion of bioelastomeric fibers at biological temperatures and low concentrations. Sciortino F, et al. **Biochem Biophys Res Commun** 1988 Dec 30; 157(3):1061-6

Protein-sequence studies on Rh-related polypeptides suggest the presence of at least two groups of proteins which associate in the human red-cell membrane. Avent ND, et al. **Biochem J** 1988 Dec 15;256(3):1043-6

The primary structures of six human salivary acidic proline-rich proteins (PRP-1, PRP-2, PRP-3, PRP-4, PIF-s and PIF-f). Hay DI, et al. **Biochem J** 1988 Oct 1; 255(i):15-21

Progress in plasma desorption mass spectrometry of peptides and proteins. Roepstorff P, et al. **Biochem Soc Trans** 1989 Feb;17(1):250-4 (13 ref.)

Theoretical studies of the structure and molecular dynamics of a peptide crystal. Kitson DH, et al. **Biochemistry** 1988 Jul 12;27(14):5246-57

Analysis of peptides for helical prediction. Merutka G, et al. **Biochemistry** 1989 Jan 10;28(1):352-7

The spectroscopic analysis for binding of amphipathic and antimicrobial model peptides containing pyrenylalanine and tryptophan to lipid bilayer. Lee S, et al. **Biochim Biophys Acta** 1989 Sep 4;984(2):174-82

Structure and supramolecular architecture of membrane channel-forming peptides. Spach G, et al. **Biochimie** 1989 Jan;71(1):11-21

Peptide conformation in solution. Satellite symposium, 9th International Biophysics Congress. Lasocin, Poland, August 31-September 5, 1987. Proceedings. **Biophys Chem** 1988 Aug;31(1-2):1-196

Conformational properties of a polyglycine chain with secondary and tertiary structures of lysozyme. Dolcet C, et al. **Biophys Chem** 1988 Dec;32(2-3):247-55

The structure of a membrane-spanning polypeptide studied by molecular dynamics. Edholm O, et al. **Biophys Chem** 1988 Jul 15;30(3):279-92

Effects of random copolymers of lysine on the thermotropic behaviour of dipalmitoylphosphatidylglycerol vesicles. A fluorescence anisotropy study. Houbre D, et al. **Biophys Chem** 1988 Jul 15;30(3):245-55

Influence of side-chain-terminating moieties on the conformation of branched polypeptides and their conjugates with 4-ethoxymethylene-2-phenyl-5(4H)-oxazolone. Hudecz F, et al. **Biophys Chem** 1988 Aug;31(1-2):53-61

Two new fluorophore pairs, tyrosine-4'-aminophenylalanine and tyrosine-4'-dimethylaminophenylalanine, in the determination of molecular dimensions in peptides. Jankowski A, et al. **Biophys Chem** 1988 Aug;31(1-2):147-53

Structure of P401 (mast cell degranulating peptide) in solution. Kumar NV, et al. **Biophys Chem** 1988 Aug; 31(1-2):113-9

Combined use of spectroscopic and energy calculation methods for the determination of peptide conformation in solution. Nikiforovich GV, et al. **Biophys Chem** 1988 Aug; 31(1-2):101-6

Reversal in helix sense of copoly(beta-alkyl-L-aspartate-beta-benzyl-L-aspartate). Tsujita Y. **Biophys Chem** 1988 Aug;31(1-2):11-20

First Naples Workshop on Bioactive Peptides. Conformation-activity relationships-interactions. May 24-26, 1988, Capri, Italy. Proceedings. **Biopolymers** 1989 Jan;28(1):1-530

Microcalorimetric studies of solvent-induced conformational change of sodium and cesium salts of poly(L-glutamic acid) in aqueous media. Daoust H, et al. **Biopolymers** 1988 Aug; 27(8):1267-81

Structure and stability of the Boc(D-Pro-L-Pro)2OCH3 Na+ complex: a model of poly(D,L-proline), an alkali ion channel across membranes. De Santis P, et al. **Biopolymers** 1989 Jan;28(1):285-96

Effects of pH and temperature on cardioactive polypeptides from sea anemones: a 1H-NMR study. Gooley PR, et al. **Biopolymers** 1988 Jul;27(7):1143-57

The effect of sequence-specific interactions on the stability of the alpha-helix in synthetic tropomyosin-analogue peptides. Holtzer A. **Biopolymers** 1989 Apr;28(4):901-5

Conformational characteristics of peptides and unanticipated results from crystal structure analyses. Karle IL. **Biopolymers** 1989 Jan;28(1):1-14

Stability of polypeptide conformational states. II. Folding of a polypeptide chain by the scanning simulation method, and calculation of the free energy of the statistical coil. Meirovitch H, et al. **Biopolymers** 1988 Aug;27(8):1189-204

Biologically significant conformation of the Saccharomyces cerevisiae alpha-factor. Naider F, et al. **Biopolymers** 1989 Jan;28(1):487-97

Local dynamics in biological macromolecules. Perico A. **Biopolymers** 1989 Sep;28(9):1527-40

Stereoselective electron transfer between chiral substrates and metal chelates anchored to polypeptides. Pispisa B, et al. **Biopolymers** 1989 Jan;28(1):319-31

On the multiple-minima problem in the conformational analysis of polypeptides. II. An electrostatically driven Monte Carlo method—tests on poly(L-alanine). Ripoll DR, et al. **Biopolymers** 1988 Aug;27(8):1283-303

Comparison of alpha-helix stability in peptides having a negatively or positively charged residue block attached either to the N- or C-terminus of an alpha-helix: the electrostatic contribution and anisotropic stability of the alpha-helix. Takahashi S, et al. **Biopolymers** 1989 May; 28(5):995-1009

Bioactive conformation of linear peptides in solution: an elusive goal? Temussi PA, et al. **Biopolymers** 1989 Jan; 28(1):91-107

Proton nmr relaxation study of the dynamics of anthopleurin-A in solution. Torda AE, et al. **Biopolymers** 1989 Mar;28(3):703-16

Two-dimensional proton NMR studies on poly(VPGVG) and its cyclic conformational correlate, cyclo(VPGVG)3. Urry DW, et al. **Biopolymers** 1989 Apr;28(4):819-33

Polypeptides controlling hematopoietic cell development and activation. I. In vitro results. Herrmann F, et al. **Blut** 1989 Mar;58(3):117-28 (163 ref.)

Lung cancer and autocrine growth factors. Yamaguchi K, et al. **Chest** 1989 Jul;96(1 Suppl):29S-31S (13 ref.)

The role of lateral migration in the formation of acetylcholine receptor clusters induced by basic polypeptide-coated latex beads. Peng HB, et al. **Dev Biol** 1989 Jan;131(1):197-206

Substrate-dependent migration of myelin-associated glycoprotein immunoreactive cells in cultured explants of dorsal root ganglia from chick embryos. Rochat A, et al. **Dev Neurosci** 1988;10(4):236-44

Designing molecules: specific peptides for specific receptors. Hruby VJ. **Epilepsia** 1989;30 Suppl 1:S42-50; discussion S64-8

Short model peptides having a high alpha-helical tendency: design and solution properties. Krstenansky JL, et al. **FEBS Lett** 1989 Jan 2;242(2):409-13

Conformational behavior of fragments of adrenocorticotropin and their antisense peptides determined by NMR spectroscopy and CD spectropolarimetry. Najem ES, et al. **FEBS Lett** 1989 Jul 3;250(2):405-10

Nuclear Overhauser effects in aqueous solution as dynamic probes in short linear peptides. Nieto JL, et al. **FEBS Lett** 1988 Oct 24;239(1):83-7

Backbone folding of the polypeptide cardiac stimulant anthopleurin-A determined by nuclear magnetic resonance, distance geometry and molecular dynamics. Torda AE, et al. **FEBS Lett** 1988 Nov 7;239(2):266-70

Spontaneous polymerization of the antibiotic peptide magainin 2. Urrutia R, et al. **FEBS Lett** 1989 Apr 10; 247(1):17-21

Conformational studies on host-guest peptides containing chiral alpha-methyl-alpha-amino acids. Comparison of the helix-inducing potential of alpha-aminoisobutyric acid, (S)-2-ethylalanine and (S)-2-methylserine. Altmann E, et al. **Int J Pept Protein Res** 1988 Nov;32(5):344-51

9-Acridinylpeptides and 9-acridinyl-4-nitrophenylsulfonylpeptides. Synthesis, binding to DNA, and photoinduced DNA cleavage. Karup G, et al. **Int J Pept Protein Res** 1988 Nov;32(5):331-43

N.m.r. analyses of the histidine microenvironments in a human salivary proline-rich glycoprotein. Loomis RE, et al. **Int J Pept Protein Res** 1988 Aug;32(2):123-9

N.m.r. and computer-simulated conformational analyses of

a nonapeptide found in a human salivary proline-rich glycoprotein. Loomis RE, et al. **Int J Pept Protein Res** 1988 Aug;32(2):130–40

The use of fluorescamine as a detection reagent in protein microcharacterization. Miedel MC, et al. **J Biochem Biophys Methods** 1989 Feb;18(1):37–52

Structure of Saccharomyces cerevisiae mating hormone a-factor. Identification of S-farnesyl cysteine as a structural component. Anderegg RJ, et al. **J Biol Chem** 1988 Dec 5;263(34):18236–40

Characterization of amphiphilic secondary structures in neuropeptide Y through the design, synthesis, and study of model peptides. Minakata H, et al. **J Biol Chem** 1989 May 15;264(14):7907–13

Conformational flexibility and folding of synthetic peptides representing an interdomain segment of polypeptide chain in the pyruvate dehydrogenase multienzyme complex of Escherichia coli. Radford SE, et al. **J Biol Chem** 1989 Jan 15;264(2):767–75

Primary structure of the mating pheromone Er-1 of the ciliate Euplotes raikovi. Raffioni S, et al. **J Biol Chem** 1988 Dec 5;263(34):18152–9

Attachment and growth of fibroblast cells on polypeptide derivatives. Kang IK, et al. **J Biomed Mater Res** 1989 Feb; 23(2):223–39

The interaction of cultured cells with membranes composed of random and block copolypeptides. Minoura N, et al. **J Biomed Mater Res** 1989 Feb;23(2):267–79

Seventh International Symposium on High-Performance Liquid Chromatography of Proteins, Peptides and Polynucleotides. I. Washington, DC, November 2–4, 1987. Proceedings. **J Chromatogr** 1988 Jun 29;443:1–401

Cation-exchange chromatography of peptides on poly(2-sulfoethyl aspartamide)-silica. Alpert AJ, et al. **J Chromatogr** 1988 Jun 29;443:85–96

Peptide characterization with a sulfoethyl aspartamide column. Crimmins DL, et al. **J Chromatogr** 1988 Jun 29; 443:63–71

Comparison of the high-resolution structures of the alpha-amylase inhibitor tendamistat determined by nuclear magnetic resonance in solution and by X-ray diffraction in single crystals. Billeter M, et al. **J Mol Biol** 1989 Apr 20;206(4):677–87

Solution of the phase problem in the X-ray diffraction method for proteins with the nuclear magnetic resonance solution structure as initial model. Patterson search and refinement for the alpha-amylase inhibitor tendamistat. Braun W, et al. **J Mol Biol** 1989 Apr 20;206(4):669–76

A method to identify distinctive charge configurations in protein sequences, with application to human herpesvirus polypeptides. Karlin S, et al. **J Mol Biol** 1989 Jan 5; 205(1):165–77

Determination of the complete three-dimensional structure of the alpha-amylase inhibitor tendamistat in aqueous solution by nuclear magnetic resonance and distance geometry. Kline AD, et al. **J Mol Biol** 1988 Dec 5; 204(3):675–724

Nature and distribution of sites of temperature-sensitive folding mutations in the gene for the P22 tailspike polypeptide chain. Villafane R, et al. **J Mol Biol** 1988 Dec 5;204(3):607–19

Further physicochemical characterization of the novel human brain protein h3. Boliengier F, et al. **J Neurochem** 1989 Apr;52(4):1123–6

Some factors that influence the nonenzymatic glycation of peptides and polypeptides by glyceraldehyde. Bai Y, et al. **J Protein Chem** 1989 Apr;8(2):299–315

Phosphorylation loops in synthetic peptides of the human neurofilament protein middle-sized subunit. Otvos L Jr, et al. **J Protein Chem** 1988 Aug;7(4):365–76

The multiple-minima problem in the conformational analysis of polypeptides. III. An electrostatically driven Monte Carlo method: tests on enkephalin. Ripoll DR, et al. **J Protein Chem** 1989 Apr;8(2):263–87

Manual precyclization of fiberglass filters for microsequence analysis of peptides and proteins. Touchstone B, et al. **J Protein Chem** 1989 Apr;8(2):159–63

Entropic elastic processes in protein mechanisms. I. Elastic structure due to an inverse temperature transition and elasticity due to internal chain dynamics. Urry DW. **J Protein Chem** 1988 Feb;7(1):1–34 (80 ref.)

Fluorescent analogs of peptides and hormones. Maxfield FR. **Methods Cell Biol** 1989;29:13–28 (54 ref.)

Inhibin as an oocyte meiotic inhibitor. O WS, et al. **Mol Cell Endocrinol** 1989 Apr;62(2):307–11

The high affinity interleukin 2 receptor: evidence for three distinct polypeptide chains comprising the high affinity interleukin 2 receptor. Herrmann T, et al. **Mol Immunol** 1988 Nov;25(11):1201–7

Similar binding properties of peptide ligands for a human immunoglobulin and its light chain dimer. Tribbick G, et al. **Mol Immunol** 1989 Jul;26(7):625–35

Imidazole, oxazole, and peptide alkaloids and other miscellaneous alkaloids. Lewis JR. **Nat Prod Rep** 1988 Aug; 5(4):351–61 (66 ref.)

Peptide structure. Beyond transcriptional events [news] Treston AM, et al. **Nature** 1989 Feb 2;337(6206):406

The polymerization of amino acid adenylates on sodium-montmorillonite with preadsorbed polypeptides. Paecht-Horowitz M, et al. **Orig Life Evol Biosph** 1988; 18(4):359–87

Unusually stable helix formation in short alanine-based peptides. Marqusee S, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5286–90

Sodium transport inhibitors. **Prog Biochem Pharmacol** 1988; 23:1–161

Molecular interactions and aggregation involving amino acids and peptides and their role in chemical evolution. Vijayan M. **Prog Biophys Mol Biol** 1988;52(2):71–99 (90 ref.)

Quantification of peptide bioactivities. Peptide antibiotics. Charton M. **Prog Clin Biol Res** 1989;291:307–12

Cholecystokinin inhibitors: a combined OSAR and molecular graphic analysis. Coats EA, et al. **Prog Clin Biol Res** 1989; 291:297–300

Comparative modeling of proteins in the complement pathway. Greer J, et al. **Prog Clin Biol Res** 1989;289:385–97

Computer aided peptide and protein engineering. Robson B. **Prog Clin Biol Res** 1989;291:227–31

Some computational problems in the conformational analysis of polypeptides and proteins. Scheraga HA. **Prog Clin Biol Res** 1989;289:3–18

Peptide QSARS: PLS modelling and design in principal properties. Sjöström M, et al. **Prog Clin Biol Res** 1989; 291:313–7

Modelling the polypeptide backbone with 'spare parts' from known protein structures. Claessens M, et al. **Protein Eng** 1989 Jan;2(5):335–45

Fimbriae of Bacteroides nodosus: protein engineering of the structural subunit for the production of an exogenous peptide. Jennings PA, et al. **Protein Eng** 1989 Jan;2(5):365–9

Interaction of peptide boronic acids with elastase: circular dichroism studies. Berry SC, et al. **Proteins** 1988; 4(3):205–10

Reduced somatostatin-28-(1-12)-like immunoreactivity in cerebral cortex of dogs with an Eck fistula and somatostatin molecular forms in brain. Tateishi K, et al. **Regul Pept** 1988 Dec;23(3):247–59

Synthesis, antineoplastic activity and biodistribution of boron analogues of amino acids and related compounds. Spielvogel BF, et al. **Strahlenther Onkol** 1989 Feb-Mar; 165(2-3):123–5

[Bacterial ferredoxins have a common polypeptide folding] Fukuyama K, et al. **Seikagaku** 1988 Jul;60(7):541–6 **(Jpn)**

[Relative size of collagen body-peptides of the human cornea in the normal state and in keratoconus] L'vov KM, et al. **Biofizika** 1989 May-Jun;34(3):478–80 (Eng. Abstr.) **(Rus)**

[Microcalorimetric study of polypeptides in the conformation of the left helix of the poly-L-proline II type] Makarov AA, et al. **Biofizika** 1989 May-Jun;34(3):521–4 (Eng. Abstr.) **(Rus)**

[A mechanism of inhibition of fibrin self-assembly by a peptide inhibitor] Chiriat'evEA, et al. **Biokhimiia** 1988 Jun; 53(6):1025–32 (Eng. Abstr.) **(Rus)**

[C-terminal amidation of acylamino acids and peptides using a transpeptidation method catalyzed by carboxypeptidase Y] Kapitannikov IuV, et al. **Bioorg Khim** 1988 Jun; 14(6):797–801 (Eng. Abstr.) **(Rus)**

[Principles of quantitative analysis of two-dimensional spectra of nuclear Overhauser effect in evaluation of protein and peptide conformation] Sobol' AG, et al. **Bioorg Khim** 1988 Aug;14(8):997–1013 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Effects of gastrin-releasing peptide on basal and stimulated thyroid hormone secretion in the mouse. Ahrén B. **Acta Endocrinol (Copenh)** 1989 Feb;120(2):245–9

Intraventricular injections of galanin reduces 5-HT metabolism in the ventral limbic cortex, the hippocampal formation and the fronto-parietal cortex of the male rat. Fuxe K, et al. **Acta Physiol Scand** 1988 Aug;133(4):579–81

Centrally administered galanin reduces dopamine utilization in the median eminence and increases dopamine utilization in the medial neostriatum of the male rat. Jansson A, et al. **Acta Physiol Scand** 1989 Feb;135(2):199–200

Intraventricular injections of galanin counteract development of head twitches induced by the 5-HT-2 agonist 1-(2,5-dimethoxyphenyl-4-bromo)-2-aminopropane. Ogren SO, et al. **Acta Physiol Scand** 1989 Jun;136(2):297–8

Intrathecal galanin increases the latency in the tail-flick and hot-plate test in mouse. Post C, et al. **Acta Physiol Scand** 1988 Apr;132(4):583–4

Diffusion of rat atrial natriuretic factor in thermoreversible poloxamer gels. Juhasz J, et al. **Biomaterials** 1989 May; 10(4):265–8

Polypeptides controlling hematopoietic blood cell development and activation. II. Clinical results. Herrmann F, et al. **Blut** 1989 Apr;58(4):173–9 (53 ref.)

Intestinal absorption of peptide enteral formulas in hypoproteinemic (volume expanded) rats: a paired analysis. Brinson RR, et al. **Crit Care Med** 1989 Jul;17(7):657–60

Peptide enteral formulas [editorial] Silk DB. **Crit Care Med** 1989 Jul;17(7):708–9

Alternative delivery systems for peptides and proteins as drugs. Eppstein DA, et al. **Crit Rev Ther Drug Carrier Syst** 1988;5(2):99–139 (305 ref.)

Biodegradable polymers for controlled release of peptides and proteins. Hutchinson FG, et al. **Horiz Biochem Biophys** 1989;9:111–29 (29 ref.)

Formation and use of poly-L-histidine-catalase complexes: protection of cells from hydrogen peroxide-mediated injury. Gibbs D, et al. **Inflammation** 1989 Aug;13(4):465–74

Glomerular actions of endothelin in vivo. Kon V, et al. **J Clin Invest** 1989 May;83(5):1762–7

Direct current iontophoretic transdermal delivery of peptide and protein drugs. Chien YW, et al. **J Pharm Sci** 1989 May;78(5):376–83 (57 ref.)

Transdermal iontophoretic drug delivery: mechanistic analysis and application to polypeptide delivery. Srinivasan V, et al. **J Pharm Sci** 1989 May;78(5):370–5

Biodegradable microparticles for delivery of polypeptides and proteins. Spenlehauer G, et al. **Prog Clin Biol Res** 1989; 292:283–91

Studies of the release of gastrin from the human duodenum induced by gastrin-releasing peptide. Sjövall M, et al. **Scand J Gastroenterol** 1989 May;24(4):445–53

[Differentiated enteral feeding in the post-aggression phase in polytrauma patients. Comparison of a high calorie nutritionally defined diet (whole protein high calorie diet) with a peptide diet] Balogh D, et al. **Infusionstherapie** 1989 Apr;16(2):52–9 (Eng. Abstr.) **(Ger)**

[Use of T-activin and prodigiozan in combined treatment of patients with diabetic retinopathy] Sakalo EA, et al. **Oftalmol Zh** 1988;(4):204–7 (Eng. Abstr.) **(Rus)**

[The immediate and late results of treating neurodermatitis by the indirect endolymphatic administration of drug preparations] Shakhtmeister IIa, et al. **Vestn Dermatol Venerol** 1988;(11):12–3 (Eng. Abstr.) **(Rus)**

[Study of various immunologic indicators in patients with laryngopharyngeal cancer before and after administration of T-activin] Nummaev GM, et al. **Vestn Otorinolaringol** 1989 Jan-Feb;(1):67 **(Rus)**

[The intraperitoneal administration of chemical preparations and taktivin in the combined treatment of stomach cancer] Shchepotin IB, et al. **Vrach Delo** 1988 Sep;(9):3–6 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

AIDS vaccine study begins in England [news] **Ohio Med** 1989 Aug;85(8):596

Genetic hypothesis of idiopathic schizophrenia: its exorphin connection. Dohan FC. **Schizophr Bull** 1988;14(4):489–94 (20 ref.)

ANALOGS & DERIVATIVES

Gas permeability of the film of block and graft copolymers of polydimethylsiloxane and poly(gamma-benzyl L-glutamate). Kang IK, et al. **Biomaterials** 1988 Jul; 9(4):349–55

Methenyltetrahydrofolate synthetase prevents the inhibition of phosphoribosyl 5-aminoimidazole 4-carboxamide ribonucleotide formyltransferase by 5-formyltetrahydrofolate polyglutamates. Bertrand R, et al. **J Biol Chem** 1989 May 25;264(15):8843–6

ANALYSIS

Increases in concentrations of somatostatin- and insulin-like immunoreactivities in submandibular salivary gland of diabetic rats: effect of insulin treatment. Deville de Perière D, et al. **Acta Endocrinol (Copenh)** 1989 Jun;120(6):790–4

Angiotensin II/III and substance P in human follicular fluid obtained during IVF: relation of the peptide content with follicular size. Jarry H, et al. **Acta Endocrinol (Copenh)** 1988 Oct;119(2):277–82

Immunocytochemical localization of peptides in the endocrine pancreas of the snakes Vipera aspis and Natrix maura. Masini MA. **Acta Histochem (Jena)** 1988;84(2):111–9

Immunological relationships between specific sperm proteins and secretory polypeptides from seminal vesicles. Seitz J, et al. **Acta Histochem Suppl (Jena)** 1989;37:231–3

Structure and properties of a novel neutrophil-activating factor (NAF) produced by human monocytes. Walz A, et al. **Agents Actions** 1989 Jan;26(1-2):148–50

Elevated plasma levels of the anaphylatoxins C3a and C4a are associated with a fatal outcome in sepsis. Hack CE, et al. **Am J Med** 1989 Jan;86(1):20–6

Elevated tumor markers in hemodialysis patients. Walz G, et al. **Am J Nephrol** 1988;8(3):187–9

Distribution and function of enteric GAL-IR nerves in dogs: comparison with VIP. Gonda T, et al. **Am J Physiol** 1989 May;256(5 Pt 1):G884–96

Effect of buffer pH and peptide composition on the selectivity of peptide separations by capillary zone electrophoresis. Grossman PD, et al. **Anal Biochem** 1988 Sep;173(2):265–70

A semiempirical model for the electrophoretic mobilities of peptides in free-solution capillary electrophoresis. Grossman PD, et al. **Anal Biochem** 1989 May 15; 179(1):28–33

Microsequence analysis of peptides and proteins. IX. Manual gas-phase microsequencing of multiple samples. Haniu M, et al. **Anal Biochem** 1988 Sep;173(2):296–306

Solid-phase peptide quantitation assay using labeled monoclonal antibody and glutaraldehyde fixation. Kasprzyk PG, et al. **Anal Biochem** 1988 Oct;174(1):224–34

Peptide and protein analysis by electrospray ionization-mass spectrometry and capillary electrophoresis-mass spectrometry. Loo JA, et al. **Anal Biochem** 1989 Jun; 179(2):404–12

Differential identification of Candida species and other yeasts by analysis of [35S]methionine-labeled polypeptide profiles. Shen HD, et al. **Anal Biochem** 1988 Dec;175(2):548–51

Development of an assay for the estimation of N10-propargyl-5,8-dideazafolic acid polyglutamates in tumor cells. Sikora E, et al. **Anal Biochem** 1988 Aug 1; 172(2):344–55

Identification of disulfide-containing peptides by performic acid oxidation and mass spectrometry. Sun Y, et al. **Anal Biochem** 1988 Jul;172(1):130–8

Fast-atom bombardment tandem mass spectrometry studies of organo-alkali-metal ions of small peptides. Competitive interaction of sodium with basic amino acid substituents. Russell DH, et al. **Anal Chem** 1988 Sep 1;60(17):1818–24

Identification of glucagon-like peptide-1(7-36) amide in rat brain. Yoshimoto S, et al. **Ann Clin Biochem** 1989 Mar;26 (Pt 2):169–71

The presence and possible roles of bombesin-like peptides in enteric neurons. Furness JB, et al. **Ann N Y Acad Sci** 1988;547:76–82 (47 ref.)

Quantification of bombesin-like peptides in mammalian spinal cord. Go VL, et al. **Ann N Y Acad Sci** 1988;547:70–5

Consideration of the chemistry of solid-phase matrix interaction leads to improved quantitation of neuropeptides. Kasprzyk PG, et al. **Ann N Y Acad Sci** 1988;547:41–53

Localization and development of bombesin/GRP-like immunoreactivity in the rat central nervous system. Panula P, et al. **Ann N Y Acad Sci** 1988;547:54–69

Immunohistochemical localization of gastrin-releasing peptide in normal and diseased human lung. Tsutsumi Y. **Ann N Y Acad Sci** 1988;547:336–50

Hormone-containing peptides from normal and goiter human thyroglobulins. Dziadik-Turner C, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):377–85

Immunoradiometrical measurement of tissue polypeptide antigen (TPA) and cancer antigen 125 (CA125) in pregnancy and at delivery. Itahashi K, et al. **Arch Gynecol Obstet** 1988;243(4):191–7

Molecular diversity in the abdominal aortic aneurysm phenotype. Tilson MD, et al. **Arch Surg** 1988 Oct; 123(10):1202–6

Complement activation produced by biomaterials. Chenoweth DE. **Artif Organs** 1988 Dec;12(6):508–10

Facile analysis and purification of deblocked N-terminal pyroglutamyl peptides with a strong cation-exchange sulfoethyl aspartamide column. Crimmins DL, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):910–6

Antibodies specific for the pancreatic islet amyloid polypeptide associated with type 2 diabetes mellitus. Glenner GG, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):402–7

Structure-activity relationships of endothelin: importance of the C-terminal moiety. Kimura S, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1182–6

Endothelin immunoreactivity in medium from cultured porcine aortic endothelial cells correlates with the biological activity. Matsumura Y, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):602–8

Atrial natriuretic factor messenger ribonucleic acid and peptide in the human heart during ontogenic development. Mercadier JJ, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):777–82

Radioimmunoassay for endothelin and immunoreactive endothelin in culture medium of bovine endothelial cells. Naruse M, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):662–8

Novel and sensitive noncompetitive enzyme immunoassay for peptides. Tanaka K, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):40–5

Alpha-agglutinin expression in Saccharomyces cerevisiae. Wojciechowicz D, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):46–51

Time domain reflectrometry: the difference method applied to conductive aqueous solutions. Bone S. **Biochim Biophys Acta** 1988 Dec 15;967(3):401–7

Proline-rich protein is a glycoprotein and an acute phase reactant. Funakoshi M, et al. **Biochim Biophys Acta** 1988 Nov 4;963(1):98–108

The Rhodospirillum rubrum cytochrome bc1 complex: peptide composition, prosthetic group content and quinone binding. Kriauciunas A, et al. **Biochim Biophys Acta** 1989 Aug 17;976(1):70–6

Peptide analogues of the anaphylatoxin C3a; syntheses and properties. Ambrosius D, et al. **Biol Chem Hoppe Seyler** 1989 Mar;370(3):217–27

Primary structure of three peptides at the catalytic and allosteric sites of the fructose-1,6-bisphosphate-activated pyruvate kinase from Escherichia coli. Speranza ML, et al. **Biol Chem Hoppe Seyler** 1989 Mar;370(3):211–6

Isolation, structure and protein composition of the perforatorium of rat spermatozoa. Oko R, et al. **Biol Reprod** 1988 Oct;39(3):673–87

Isolation and sequencing of a new biologically active peptide from human lung carcinoma. Hsi KL, et al. **Biomed Chromatogr** 1986 Jun;1(3):119–22

Fast atom bombardment mass spectra of various peptides from sarcoplasmic calcium-binding protein. Aubagnac JL, et al. **Biomed Environ Mass Spectrom** 1988 Oct; 16(1-12):469–72

Contributions of mass spectrometry to peptide and protein structure. Biemann K. **Biomed Environ Mass Spectrom** 1988 Oct;16(1-12):99–111 (38 ref.)

Imaging analysis and selected sequence monitoring of small peptides using planar chromatography/secondary ion mass spectrometry. Dunphy JC, et al. **Biomed Environ Mass Spectrom** 1988 Nov;17(5):405–10

Peptide sequencing by partial methanolysis and fast atom bombardment mass spectrometry. Foti S, et al. **Biomed Environ Mass Spectrom** 1989 Mar;18(3):168–73

Collisionally activated decomposition of modified peptides using a tandem hybrid instrument. Gaskell SJ, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1-12):31–3

Laser-desorption/Laser-ionization mass spectrometry of biomolecules. Grotemeyer J, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1-12):143–9

Identification of amino acids in the fast atom bombardment mass spectra of peptides. Heerma W, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1-12):155–9

Practical hints for peptide sequencing by soft ionization methods. Kausler W, et al. **Biomed Environ Mass Spectrom** 1988 Jul;17(1):15–9

Applications of plasma desorption mass spectrometry in peptide and protein chemistry. Roepstorff P, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1-12):9–18

Identification of a cellular polypeptide that distinguishes between acute lymphoblastic leukemia in infants and in older children. Hanash SM, et al. **Blood** 1989 Feb; 73(2):527–32

Analysis of peptides from pigeon cerebrum: a comparison of sacrifice methods. Barraco RA, et al. **Brain Res Bull** 1978 Nov-Dec;3(6):645–53

The role of the leukocyte adherence inhibition (LAI), CA 19-9, and tissue polypeptide antigen (TPA) tests in the diagnosis of pancreatic cancer. Meduri F, et al. **Cancer** 1989 Sep 1;64(5):1103–6

A rational postoperative follow-up with carcinoembryonic antigen, tissue polypeptide antigen, and urinary hydroxyproline in breast cancer patients. Nicolini A, et al. **Cancer** 1989 May 15;63(10):2037–46

Immunoreactive gastrin-releasing peptide as a specific tumor marker in patients with small cell lung carcinoma. Maruno K, et al. **Cancer Res** 1989 Feb 1;49(3):629–32

Complement activation from protamine sulfate administration after coronary angiography. Click RL, et al. **Cathet Cardiovasc Diagn** 1989 Apr;16(4):221–5

Maturation of hagfish gland thread cells: composition and characterization of intermediate filament polypeptides. Spitzer RH, et al. **Cell Motil Cytoskeleton** 1988;11(1):31–45

Light- and electron-microscopic immunocytochemistry of peptidergic neurons innervating thoracico-abdominal neurohaemal areas in the blowfly. Duve H, et al. **Cell Tissue Res** 1988 Sep;253(3):583–95

Projection pathways, co-existence of peptides and synaptic organization of nerve fibers in the inferior mesenteric ganglion of the guinea-pig. Masuko S, et al. **Cell Tissue Res** 1988 Sep;253(3):507–16

Amino acid sequence of rabbit factor H of complement. Purification of peptides produced by cyanogen bromide cleavage. Choi NH, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug;36(8):3008–11

Studies on Persicae semen. IV. Separation and characterization of globulin polypeptides from Persicae semen. Nagamoto N, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):2226–31

Effects of flavonoids in hybrid membranes on the activity of tripeptide as an enzyme model and their inhibition of hybridoma growth in vitro. Ueoka R, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4640–3

Studies of fluorescence depolarization at high pressures of dimyristoylphosphatidylcholine liposomes containing poly(gamma-benzyl-L-glutamate). Tamura K, et al. **Chem Phys Lipids** 1988 Oct;48(3-4):169–75

Amino acid composition of peptides remaining after in vitro digestion of a gliadin sub-fraction with duodenal mucosa from patients with coeliac disease. Cornell HJ. **Clin Chim Acta** 1988 Sep 15;176(3):279–89

Immunocytochemical localization of regulatory peptides in six species of trematode parasites. Basch PF, et al. **Comp Biochem Physiol [C]** 1988;91(2):565–70

Biogenic amines and active peptides in the skin of fifty-two African amphibian species other than bufonids. Roseghini M, et al. **Comp Biochem Physiol [C]** 1988;91(2):281–6

A microcomputer program to calculate elemental analysis of peptides. Mammi S. **Comput Methods Programs Biomed** 1989 Feb;28(2):119–20

Identification of two endogenous neutrophil-activating peptides in psoriatic skin and inflammatory cells: C5ades arg and NAP. Christophers E, et al. **Dermatologica** 1989; 179 Suppl 1:9–15

Peptide YY concentrations in normal ileum and colon and in idiopathic inflammatory bowel disease. Koch TR, et al. **Dig Dis Sci** 1988 Oct;33(10):1322–8

Multivariate analysis of a tissue CEA, TPA, and CA 19.9 quantitative study in colorectal cancer patients. A preliminary finding. Cosimelli M, et al. **Dis Colon Rectum** 1989 May;32(5):389–97

Quantitative analysis of a new marker for common acute lymphoblastic leukemia detected by two-dimensional electrophoresis. Hanash SM, et al. **Dis Markers** 1988 Oct-Dec;6(4):209–20

The tumor markers CEA, TPA and CA 19-9 in gastric cancer. Putzki H, et al. **Dtsch Z Verdau Stoffwechselkr** 1988;48(3-4):145–8

The application of sodium dodecyl sulphate-polyacrylamide gel electrophoresis to the taxonomic identification of the total body protein band profiles of Diplostomum spp. metacercariae (Digenea), parasites of fish eyes. Faulkner M. **Electrophoresis** 1989 Apr;10(4):260–4

Detection of polypeptides associated with the cold acclimation process in spinach. Guy CL, et al. **Electrophoresis** 1988 Nov;9(11):787–96

Polypeptide changes induced by salt stress, water deficit, and osmotic stress in barley roots: a comparison using two-dimensional gel electrophoresis. Hurkman WJ, et al. **Electrophoresis** 1988 Nov;9(11):781–7

Photocontrol of organelle and cell type specific changes in the polypeptide composition of Euglena and sorghum. Monroy AF, et al. **Electrophoresis** 1988 Nov;9(11):764–73

Peptide mapping of polypeptides separated by two-dimensional electrophoresis: protease digestion directly on the two-dimensional gel followed by electrophoresis in reverse direction. Zivy M, et al. **Electrophoresis** 1988 Jul;9(7):339–43

An insulin-like growth factor-binding protein in ovarian follicular fluid blocks follicle-stimulating hormone-stimulated steroid production by ovarian granulosa cells. Ui M, et al. **Endocrinology** 1989 Aug; 125(2):912–6

The effects of multiple amino acid substitutions on the polypeptide backbone of tuna and horse cytochromes c. Gao Y, et al. **Eur J Biochem** 1989 Jun 1;182(1):57–65

Effect of papain digestion on polypeptide subunits and electron-transfer pathways in mitochondrial b-c1 complex. Lorusso M, et al. **Eur J Biochem** 1989 Feb 15;179(3):535–40

The primary structure of the Chloroflexus aurantiacus reaction-center polypeptides. Shiozawa JA, et al. **Eur J Biochem** 1989 Mar 1;180(1):75–84

Characterization of four different mammalian-cell-derived recombinant human interferon-beta 1s. Identical polypeptides and non-identical carbohydrate moieties compared to natural ones. Utsumi J, et al. **Eur J Biochem** 1989 May 15;181(3):545–53

Domain structure of mitochondrial and chloroplast targeting peptides. von Heijne G, et al. **Eur J Biochem** 1989 Apr 1;180(3):535–45

Autoradiographic localisation of endothelin binding sites in human and porcine coronary arteries. Power RF, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):199–200

GABAergic neurons containing somatostatin-like immunoreactivity in the rat hippocampus and dentate gyrus. Kosaka T, et al. **Exp Brain Res** 1988;71(2):388–98

Radioimmunoassay for thyrotropin-releasing hormone precursor peptide, Lys-Arg-Gln-His-Pro-Gly-Arg-Arg. Mitsuma T, et al. **Exp Clin Endocrinol** 1989 Apr;93(1):53–60

Component X of mammalian pyruvate dehydrogenase complex: structural and functional relationship to the lipoate acetyltransferase (E2) component. Neagle J, et al. **FEBS Lett** 1989 Aug 14;253(1-2):11–5

An endogenous ligand for the central sulfonylurea receptor. Virsolvy-Vergine A, et al. **FEBS Lett** 1988 Dec 19; 242(1):65–9

Conformation of a T cell stimulating peptide in aqueous solution. Waltho JP, et al. **FEBS Lett** 1989 Jul 3; 250(2):400–4

Intermolecular cross-linking of vitelline envelope polypeptides predominates in the hardened sea urchin fertilization envelope. Santiago L, et al. **Gamete Res** 1987 May;17(1):63–75

In situ hybridization demonstrating coexpression of urotensins I, II-alpha, and II-gamma in the caudal neurosecretory neurons of the carp, Cyprinus carpio. Ichikawa T, et al. **Gen Comp Endocrinol** 1988 Sep; 71(3):493–501

Cellular polypeptides overexpressed after herpes simplex infection permit virus subtyping and may help diagnose cervical cancer. Davis JM, et al. **Genitourin Med** 1988 Oct; 64(5):321–6

Immunohistochemical localization of calcitonin gene-related peptide and bombesin/gastrin-releasing peptide in nerve fibers of the rat, guinea pig and pig female genital organs. Häppölä O, et al. **Histochemistry** 1989;92(3):211–8

Complement split products and the pathogenesis of SLE. Abramson SB, et al. **Hosp Pract [Off]** 1988 Dec 15; 23(12):45–56 (9 ref.)

Analysis of amino acid mixtures after pre-column derivatisation by N-methylisatoic anhydride using HPLC. Mehra A, et al. **Indian J Biochem Biophys** 1988 Aug; 25(4):360–3

Cytochemical evidence of lack of basic protein in mucosal mast cells of the small intestine in the rat. Lunardi LO, et al. **Int Arch Allergy Appl Immunol** 1989;88(3):367–8

Tissue polypeptide antigen (TPA) in bronchoalveolar lavage [letter] Blasco R, et al. **Int J Biol Markers** 1989 Apr-Jun; 4(2):119–20

Tissue polypeptide antigen (TPA) modifications in hepatic cirrhosis, aggressive chronic hepatitis, persistent chronic hepatitis, and in minimal pathology. Sabbatani S, et al. **Int J Biol Markers** 1988 Apr-Jun;3(2):127–8

Tissue polypeptide antigen, galactosyltransferase isoenzyme II and pancreatic oncofetal antigen serum determination: role in pancreatic cancer diagnosis. Basso D, et al. **Int J Pancreatol** 1988;3 Suppl 1:S95–100

Serum albumin and its acid hydrolysis peptides dominate preparations of mineral-bound enamel proteins. Limeback H, et al. **J Bone Miner Res** 1989 Apr;4(2):235–41

Tissue polypeptide antigen expression in human prostate tumors. Ghazizadeh M, et al. **J Cancer Res Clin Oncol** 1989; 115(1):84–8

Alpha-fetoprotein, tissue polypeptide antigen and ferritin in

diagnosing primary hepatocellular carcinoma in patients with liver cirrhosis. Leandro G, et al. **J Cancer Res Clin Oncol** 1989;115(3):276–8

Heparin interactions with cultured human vascular endothelial and smooth muscle cells: incidence on vascular smooth muscle cell proliferation. Herbert JM, et al. **J Cell Physiol** 1989 Feb;138(2):424–32

Eighth International Symposium on High-Performance Liquid Chromatography of Proteins, Peptides and Polynucleotides. Copenhagen (Denmark), October 31–November 2, 1988. Proceedings. **J Chromatogr** 1989 Aug 4;476:1–516

Seventh International Symposium on High-Performance Liquid Chromatography of Proteins, Peptides and Polynucleotides. II. Washington, DC, November 2–4, 1987. Proceedings. **J Chromatogr** 1988 Jul 1;444:1–365

High-performance liquid chromatography of amino acids, peptides and proteins. XCII Thermodynamic and kinetic investigations on rigid and soft affinity gels with varying particle and pore sizes. Anspach FB, et al. **J Chromatogr** 1989 Aug 4;476:205–25

New high-performance liquid chromatography-based methodology for monitoring the conformational transitions of self-associating hydrophobic peptides, incorporated into liposomes. Bañó MC, et al. **J Chromatogr** 1988 Dec 23; 458:105–16

The peptide toxin of the cyanobacterium Microcystis aeruginosa PCC 7941. Isolation and analysis by nuclear magnetic resonance and fast atom bombardment mass spectroscopy. Birk IM, et al. **J Chromatogr** 1988 Oct 7; 449(2):423–31

Clostridium difficile toxin B: characterization and sequence of three peptides. Bisseret F, et al. **J Chromatogr** 1989 May 5;490(1):91–100

Micropreparative separation of peptides derived from sodium dodecyl sulphate-solubilized proteins. Bosserhoff A, et al. **J Chromatogr** 1989 Jun 28;473(1):71–7

Strong cation-exchange high-performance liquid chromatography of peptides. Effect of non-specific hydrophobic interactions and linearization of peptide retention behaviour. Burke TW, et al. **J Chromatogr** 1989 Aug 4;476:377–89

Thermospray high-performance liquid chromatographic-mass spectrometric characterization of biological macromolecules. I. Analysis of acid hydrolysate of peptides. Chen TM, et al. **J Chromatogr** 1989 Jan 20; 463(1):95–106

High-performance liquid chromatography of amino acids, peptides and proteins. XCIII. Comparison of methods for the purification of mouse monoclonal immunoglobulin M autoantibodies. Coppola G, et al. **J Chromatogr** 1989 Aug 4;476:269–90

Peptide characterization with a sulfoethyl aspartamide column. Crimmins DL, et al. **J Chromatogr** 1988 Jun 29; 443:63–71

Tyrosylation and purification of peptides for radioiodination. Gether U, et al. **J Chromatogr** 1988 Aug 26;447(2):341–9

High-performance liquid chromatography of amino acids, peptides, proteins and polynucleotides. XCIV. Solid-phase hybridization of complementary oligonucleotides. Guthridge M, et al. **J Chromatogr** 1989 Aug 4;476:445–53

High-performance liquid chromatography of amino acids, peptides and proteins. LXXXVIII. Calculation of the average distance between protein solutes and the stationary phase during isocratic anion-exchange chromatography. Hearn MT, et al. **J Chromatogr** 1988 Dec 23;458:45–56

High-performance liquid chromatography of amino acids, peptides and proteins. LXXXVII. Comparison of retention and bandwidth properties of proteins eluted by gradient and isocratic anion-exchange chromatography. Hearn MT, et al. **J Chromatogr** 1988 Dec 23;458:27–44

High-performance liquid chromatography of amino acids, peptides and proteins. LXXXIX. The influence of different displacer salts on the retention properties of proteins separated by gradient anion-exchange chromatography. Hodder AN, et al. **J Chromatogr** 1989 Aug 4;476:391–411

Computer simulation of high-performance liquid chromatographic separations of peptide and protein digests for development of size-exclusion, ion-exchange and reversed-phase chromatographic methods. Hodges RS, et al. **J Chromatogr** 1988 Dec 23;458:147–67

High-performance liquid chromatography of complex mixtures of cyanogen bromide-produced peptides from different proteins. Iadarola P, et al. **J Chromatogr** 1988 Jun 29;443:317–28

Complementary information from isotachophoresis and high-performance liquid chromatography in peptide analysis. Janssen PS, et al. **J Chromatogr** 1989 May 24; 470(1):171–83

Isotachophoretic analysis of peptides. Selection of electrolyte systems and determination of purity. Kašička V, et al. **J Chromatogr** 1989 May 24;470(1):209–21

Retention behaviour of paracelsin peptides on reversed-phase silicas with varying n-alkyl chain length and ligand density. Lork DK, et al. **J Chromatogr** 1989 Aug 4;476:135–45

Reversed-phase liquid chromatography of elastin peptides. Manning JN, et al. **J Chromatogr** 1989 Jan 27;487(1):41–50

Correlation of protein retention times in reversed-phase chromatography with polypeptide chain length and hydrophobicity. Mant CT, et al. **J Chromatogr** 1989 Aug 4;476:363–75

High-performance liquid chromatographic determination of substance P-like arginine-containing peptide in rat brain by on-line post-column fluorescence derivatization with benzoin. Ohno M, et al. **J Chromatogr** 1989 May 30; 490(2):301–10

High-performance liquid chromatographic separation of peptides on a diol-Gly-Phe-Phe tripeptide-bonded phase. Pinkerton TC, et al. **J Chromatogr** 1988 Dec 23;458:129–45

High-performance liquid chromatography of amino acids, peptides and proteins. XC. Investigations into the relationship between structure and reversed-phase high-performance liquid chromatography retention behaviour of peptides related to human growth hormone. Purcell AW, et al. **J Chromatogr** 1989 Aug 4;476:113–23

High-performance liquid chromatography of amino acids, peptides and proteins. XCI. The influence of temperature on the chromatographic behaviour of peptides related to human growth hormone. Purcell AW, et al. **J Chromatogr** 1989 Aug 4;476:125–33

High-performance liquid chromatographic analysis of arginine-containing peptides in biological fluids by means of a selective post-column reaction with fluorescence detection. Rhodes GR, et al. **J Chromatogr** 1988 Jul 1; 444:123–31

Reversed-phase high-performance liquid chromatographic separation and quantitation of reticulocyte alpha- and beta-globin polypeptide chains from normal and beta-thalassemic mice. Schafer MP. **J Chromatogr** 1988 Sep 23;431(1):177–83

Capillary zone electrophoresis of histidine-containing compounds. Stover FS, et al. **J Chromatogr** 1989 May 24; 470(1):241–50

Immunoreactive somatostatin in male reproductive system in humans. Sasaki A, et al. **J Clin Endocrinol Metab** 1989 May;68(5):996–9

Serum tissue polypeptide antigen in pancreatic cancer and other gastrointestinal diseases [letter] Basso D, et al. **J Clin Pathol** 1989 May;42(5):555

Cranial motor neurons contain either galanin- or calcitonin gene-related peptidelike immunoreactivity. Moore RY. **J Comp Neurol** 1989 Apr 22;282(4):512–22

Antigenic and polypeptide structure of turkey enteric coronaviruses as defined by monoclonal antibodies. Dea S, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1725–41

Polypeptides of pneumonia virus of mice. II. Characterization of the glycoproteins. Ling R, et al. **J Gen Virol** 1989 Jun; 70 (Pt 6):1441–52

Presence of a p70 IL-2-binding peptide on leukemic cells from various hemopoietic lineages. Allouche M, et al. **J Immunol** 1989 Oct 1;143(7):2223–9

A sensitive sandwich-enzyme immunoassay for human endothelin. Suzuki N, et al. **J Immunol Methods** 1989 Mar 31;118(2):245–50

Isoprenaline-induced and constitutive members of a proline-rich protein sub-group from mouse parotid glands studied with monoclonal antibody NAL1. Divecha N, et al. **J Mol Endocrinol** 1989 Jul;3(1):7–14

Cortical somatostatinergic system not affected in Alzheimer's and Parkinson's diseases. Whitford C, et al. **J Neurol Sci** 1988 Aug;86(1):13–8

Levels of tissue polypeptide antigen in serum and the progression of gastric cancer. Hamazoe R, et al. **J Surg Oncol** 1989 Jun;41(2):128–33

An immunoelectron microscopic study of peptide substances in the rat neurohypophysis. Zhu CG, et al. **J Tongji Med Univ** 1989;9(1):29–35

Endothelin and bronchial asthma [letter] Nomura A, et al. **Lancet** 1989 Sep 23;2(8665):747–8

Characterizing molecular heterogeneity of gastrin-releasing peptide and related peptides. Reeve JR Jr, et al. **Methods Enzymol** 1989;168:660–77

High-density multiple antigen-peptide system for preparation of antipeptide antibodies. Tam JP. **Methods Enzymol** 1989; 168:7–15

Characterization of surface polypeptides on different life-cycle stages of Theileria annulata. Shiels B, et al. **Mol Biochem Parasitol** 1989 May 15;34(3):209–20

High-performance liquid chromatography in endocrinology. **Monogr Endocrinol** 1988;30:1–262

Elevated tissue polypeptide antigen as a risk factor for carpal tunnel syndrome in haemodialyzed patients [letter] Walz G, et al. **Nephron** 1988;50(1):83–4

Galanin and vasopressin coexist in the rat hypothalamo-neurohypophyseal system. Skofitsch G, et al. **Neuroendocrinology** 1989 Apr;49(4):419–27

Immunocytochemical demonstration of vertebrate peptides in invertebrates: the homology concept. Veenstra JA. **Neuropeptides** 1988 Aug-Sep;12(2):49–54 (42 ref.)

Galanin-like immunoreactive nerve elements in the small intestine of the rat. An electron microscopic immunocytochemical study. Fehér E, et al. **Neurosci Lett** 1988 Oct 5;92(2):137–42

The analysis of differentiation inhibitory factor to erythroid progenitor cells. Murate T, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec;51(8):1581–9

Peptide YY: intrapancreatic localization and effects on insulin and glucagon secretion in the mouse. Böttcher G, et al. **Pancreas** 1989;4(3):282–8

Distribution of galanin-like immunoreactivity in baboon brain. Beal MF, et al. **Peptides** 1988 Jul-Aug;9(4):847–51

Substance P and gastrin releasing peptide in bovine mesenteric lymphatic vessels: chemical characterization and action. Foy WL, et al. **Peptides** 1989 May-Jun; 10(3):533–7

Tissue-specific sex differences in galanin-like immunoreactivity and galanin mRNA during development in the rat. Gabriel SM, et al. **Peptides** 1989 Mar-Apr; 10(2):369–74

Structural identification, subcellular localization and secretion of bovine adrenomedullary neuromedin C [GRP-(18–27)] Lemaire S, et al. **Peptides** 1989 Mar-Apr; 10(2):355–60

Urotensin I- and CRF-like peptides in Catostomus commersoni brain and pituitary—HPLC and RIA characterization. McMaster D, et al. **Peptides** 1988 Sep-Oct;9(5):1043–8

Sauvagine/urotensin I-like immunoreactivity in the caudal neurosecretory system of a seawater fish Diplodus sargus L. in normal and hyposmotic milieu. Minniti F, et al. **Peptides** 1989 Mar-Apr;10(2):383–9

Fast atom bombardment mass spectrometry and its application to the analysis of some peptides and proteins. Hemling ME. **Pharm Res** 1987 Feb;4(1):5–15 (155 ref.)

Multiple messenger candidates and marker substance in the mammalian Merkel cell-axon complex: a light and electron microscopic immunohistochemical study. Hartschuh W, et al. **Prog Brain Res** 1988;74:181–7

Non-radiometric assays. Technology and application in polypeptide and steroid hormone detection. Proceedings of a meeting. Bethesda, Maryland, October 15–16, 1987. **Prog Clin Biol Res** 1988;285:1–361

Solid state assays: reagents and film technology for dipstick assays. Campbell KL. **Prog Clin Biol Res** 1988;285:237–87 (83 ref.)

Field application of non-isotopic immunoassay of hormones. Grover PK. **Prog Clin Biol Res** 1988;285:343–6

Development of an enzyme-linked immunoassay for follicle regulatory protein. Rodgers K, et al. **Prog Clin Biol Res** 1988;285:221–36

Design of immunoassays for use in developing countries. Sufi SB, et al. **Prog Clin Biol Res** 1988;285:331–41

Further studies of the helix dipole model: effects of a free alpha-NH3+ or alpha-COO- group on helix stability. Fairman R, et al. **Proteins** 1989;5(1):1–7

Characterization of regional proteins in tissues and fluids in the human epididymis. Junera HR, et al. **Reprod Nutr Dev** 1988;28(5):1267–73

Characterization and hormonal regulation of tissue and fluid proteins in the mouse epididymis. Mboungou JR, et al. **Reprod Nutr Dev** 1988;28(5):1275–82

Immunohistochemical localization of various peptides in the infundibular nuclei of human adult hypothalamus. Osamura RY, et al. **Tokai J Exp Clin Med** 1988 Jun;13(2):71–8 (39 ref.)

Sequence homology between sarafotoxins S6 and porcine endothelin [letter] Lee CY, et al. **Toxicon** 1989;27(3):277–9

Predicting the biologically active conformations of short polypeptides. Milner-White EJ. **Trends Pharmacol Sci** 1989 Feb;10(2):70–4 (32 ref.)

Endothelium-derived contracting factor: endothelin and/or superoxide anion? Vanhoutte PM, et al. **Trends Pharmacol Sci** 1988 Jul;9(7):229–30 (23 ref.)

Plasma and tissue CEA and TPA markers in operable breast cancer. Preliminary results. Saccani Jotti G, et al. **Tumori** 1988 Dec 31;74(6):681–8

Molecular pathogenesis of equine coital exanthema: identification and expression of infected cell polypeptides at the restricted temperature during equine herpesvirus 3 infection. Jacob RJ, et al. **Vet Microbiol** 1988 Dec; 18(3–4):363–71

Immunohistochemical and ultrastructural localization of tissue polypeptide antigen in human ovarian tumours. Ghazizadeh M. **Virchows Arch [A]** 1989;414(5):453–7

Further studies on the biological characteristics of an endogenous colon mitosis inhibitor: comparison with some structurally related peptides. Skraastad O, et al. **Virchows Arch [B]** 1989;56(5):321–5

Identification of polypeptides of the carbon metabolism machinery on the two-dimensional protein map of Saccharomyces cerevisiae. Location of 23 additional polypeptides. Bataillé N, et al. **Yeast** 1987 Mar;3(1):11–21

Comparison of protein components of different species and strains of Brucella. Oñate A, et al. **Zentralbl Veterinarmed [B]** 1989 Jul;36(5):397–400

[The diagnostic value of carcinoembryonic antigen (CEA) and tissue polypeptide antigen (TPA) in pleural effusion] Chen TM, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Oct; 40(4):375–82 (Eng. Abstr.) **(Chi)**

[Significance of the detection of early pregnancy factor for monitoring normal and disordered early pregnancy] Straube W, et al. **Geburtshilfe Frauenheilkd** 1988 Dec; 48(12):854–8 (Eng. Abstr.) **(Ger)**

[Diagnostic predictability of CEA and TPA tumor markers in bronchoalveolar lavage fluid] Loos U, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:235–7 (Eng. Abstr.) **(Ger)**

[Detection and significance of tissue polypeptide antigen (TPA) in breast cancer patients] Meissner J, et al. **Zentralbl Gynakol** 1989;111(1):29–32 (Eng. Abstr.) **(Ger)**

[Detection of early pregnancy factor by the rosette inhibition test: use of cyclosporin A] Straube W, et al. **Zentralbl Gynakol** 1989;111(7):472–4 (Eng. Abstr.) **(Ger)**

[Serum CA 125 and TPA determination in malignant neoplasms of the uterus] Gadducci A, et al. **Ann Ostet Ginecol Med Perinat** 1988 May-Jun;109(3):151–5

(Eng. Abstr.) (Ita)
[Pretreatment evaluation of CA 72.4 in patients with carcinoma of the stomach (0-IV stage) versus CEA, TPA, CA 19-9, FER] Buda F, et al. **G Ital Oncol** 1989 Apr–Sep; 9(2–3):67–72 (Eng. Abstr.) (Ita)
[A comparative evaluation of tumor markers (TPA and CEA) in various malignant neoplasms at an advanced stage] Meregalli M, et al. **Minerva Med** 1989 Apr;80(4):345–7 (Eng. Abstr.) (Ita)
[Tissue polypeptide antigen. A new serum marker in pulmonary carcinoma] Purello D'Ambrosio F, et al. **Minerva Med** 1989 Jul;80(7):687–8 (Ita)
[Clinical evaluation of a combination assay of CEA, CA-19-9 and TPA in patients with colorectal cancer] Nishida O, et al. **Gan No Rinsho** 1988 Aug;34(9):1096–100 (Eng. Abstr.) (Jpn)
[Fundamental and clinical evaluation of a TPA immunoradiometric assay kit] Kimura Y, et al. **Kaku Igaku** 1988 Jul;25(7):665–72 (Jpn)
[Biochemical markers of neoplasms of the female genital organs. I. Tissue polypeptide antigen (TPA)] Kamiński K. **Ginekol Pol** 1988 Dec;59(12):739–43 (42 ref.) (Eng. Abstr.) (Pol)
[Proline-rich-polypeptide from ovine colostrum (PRP): its structure and properties. II] Janusz M. **Postepy Hig Med Dosw** 1988 May–Jun;42(3):237–59 (58 ref.) (Pol)
[The structure of the aglycon of eremomycin—a new antibiotic of the polycyclic glycopeptide group] Berdnikova TF, et al. **Antibiot Khimioter** 1988 Aug; 33(8):566–70 (Eng. Abstr.) (Rus)
[Use of electroblotting as a method for preparing samples of proteins and their fragments for microsequencing] Levina NB, et al. **Bioorg Khim** 1989 Jan;15(1):24–31 (Eng. Abstr.) (Rus)
[Presence of a correlation between the lengths of polypeptide chains of proteins] Demchuk EIa, et al. **Dokl Akad Nauk SSSR** 1988;303(5):1262–4 (Rus)
[Isolation and structural characteristics of cDNA coding the major protein of squid lens] Tomarev SI, et al. **Dokl Akad Nauk SSSR** 1989 Mar–Apr;305(1):232–7 (Rus)
[Determination of middle molecule peptides in the blood and amniotic fluid in nephropathy of pregnancy] Avakian ZA, et al. **Lab Delo** 1988;(11):46–8 (Eng. Abstr.) (Rus)
[Clinical importance of a method for determining metabolites of mean molecular weight in the blood and cerebrospinal fluid in meningitis in children] Valiukh SV, et al. **Pediatriia** 1988;(8):44–6 (Rus)
[Tropomyosin and myosin subfragment 1 induce in thin muscle fiber filaments differing conformational changes in the C-terminal portion of the polypeptide chain of actin] Borovikov IuS, et al. **Tsitologiia** 1988 Aug;30(8):1014–7 (Eng. Abstr.) (Rus)
[Atopic dermatitis. II. The status of complement proteins and the pathogenetic role of anaphylatoxins C4a, C3a and C5a] Sergeev IuV, et al. **Vestn Dermatol Venerol** 1989; (4):4–7 (Eng. Abstr.) (Rus)
[Amino acid composition and properties of fibrin self-assembly inhibitors] Chiriat'ev EA, et al. **Vopr Med Khim** 1989 May–Jun;35(3):96–100 (Eng. Abstr.) (Rus)
[Epitope analysis of mumps virus proteins in a persistent cell culture infection: changes in the hemagglutinin-neuraminidase polypeptide] Boriskin IuS, et al. **Vopr Virusol** 1988 Sep–Oct;33(5):595–600 (Eng. Abstr.) (Rus)
[Experimental embryologic, biochemical and molecular biology approaches to the identification of embryonic inducers] Mikhailov AT. **Zh Obshch Biol** 1989 Mar–Apr; 50(2):149–57 (53 ref.) (Eng. Abstr.) (Rus)

ANTAGONISTS & INHIBITORS

Protamine inhibits plasma carboxypeptidase N, the inactivator of anaphylatoxins and kinins. Tan F, et al. **Anesthesiology** 1989 Feb;70(2):267–75
Blockade of endothelin-induced contractions by dichlorobenzamil: mechanism of action. Criscione L, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):247–54
Inhibition of complement activation by high-dose corticosteroids in total hip arthroplasty. Gammer W, et al. **Clin Orthop** 1988 Nov;(236):205–9
Carboxyl-terminal modification of a gastrin releasing peptide derivative generates potent antagonists. Heimbrook DC, et al. **J Biol Chem** 1989 Jul 5;264(19):11258–62
Pharmacology of endothelin-1 in isolated vessels: effect of nicardipine, methylene blue, hemoglobin, and gossypol. D'Orleans-Juste P, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S19–22; discussion S45
[Interaction of a peptide inhibitor with two forms of monomeric fibrin differing in the degree of activation] Chiriat'ev EA, et al. **Ukr Biokhim Zh** 1989 Jan–Feb; 61(1):3–9 (Eng. Abstr.) (Rus)

BIOSYNTHESIS

Analysis of the proinflammatory property of epidermal cyst contents: chemotactic C5a anaphylatoxin generation. Terui T, et al. **Arch Dermatol Res** 1989;281(1):31–4
Concomitant secretion of big endothelin and its C-terminal fragment from human and bovine endothelial cells. Emori T, et al. **Biochem Biophys Res Commun** 1989 Jul 14; 162(1):217–23
Immunoreactive endothelin in rat kidney inner medulla: marked decrease in spontaneously hypertensive rats. Kitamura K, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):38–44
Analysis of endothelin related peptides in culture supernatant of porcine aortic endothelial cells: evidence for biosynthetic pathway of endothelin-1. Sawamura T, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1287–94
Involvement of prostaglandin-induced proteins in the inhibition of herpes simplex virus replication. Yamamoto N, et al. **Biochem Biophys Res Commun** 1989 Jan 16; 158(1):189–94
Hemodynamic shear stress stimulates endothelin production by cultured endothelial cells. Yoshizumi M, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):859–64
Synthesis and initial processing of gastric apomucin. Zalesna G, et al. **Biochem Int** 1989 Apr;18(4):775–84
D-lysergic acid activation and cell-free synthesis of D-lysergyl peptides in enzyme fractions from the ergot fungus Claviceps purpurea. Keller U, et al. **Biochemistry** 1988 Aug 9;27(16):6164–70
Action of erythromycin and virginiamycin S on polypeptide synthesis in cell-free systems. Chinali G, et al. **Biochim Biophys Acta** 1988 Nov 10;951(1):42–52
Peptide enzymatic microsynthesis, using carboxypeptidase Y as the catalyst: application to stepwise synthesis of Leuenkephalin. Hellio F, et al. **Biochimie** 1988 Jun; 70(6):791–802
Synthesis of cholecystokinin-related peptides and their biological properties. Wünsch E, et al. **Biol Chem Hoppe Seyler** 1989 Apr;370(4):317–21
Purification, characterization, and immunocytochemical localization of the major basic protein of pig blastocysts. Baumbach GA, et al. **Biol Reprod** 1988 Dec;39(5):1171–82
Generation and removal of anaphylatoxins during hemofiltration with five different membranes. Jørstad S, et al. **Blood Purif** 1988;6(6):325–35
Biomimetic studies using artificial systems. IV. Biomimetic peptide synthesis by using multifunctionalized crown ethers as a novel enzyme model. A new concept in mimicking of enzyme-catalyzed bond-forming reactions. Sasaki S, et al. **Chem Pharm Bull (Tokyo)** 1989 Apr;37(4):912–9
Production of endothelin 1 by cultured bovine retinal endothelial cells and presence of endothelin receptors on associated pericytes. Takahashi K, et al. **Diabetes** 1989 Sep; 38(9):1200–2
Stage-specific polypeptide and villin expression during thyroid-hormone-induced substitution of the amphibian intestinal epithelium. Figiel A, et al. **Differentiation** 1989 Jun;40(3):166–75
Synthesis of the vasoconstrictor peptide endothelin in kidney cells. Kosaka T, et al. **FEBS Lett** 1989 May 22;249(1):42–6
Synthesis of human endothelin-1 precursors in Escherichia coli. Watanabe T, et al. **FEBS Lett** 1989 Jul 17; 251(1–2):257–60
Production of therapeutic polypeptides through Escherichia coli: a perspective. Ghosh PK, et al. **Hindustan Antibiot Bull** 1988 Feb–May;30(1–2):1–11 (33 ref.)
Effects of superior mesenteric and coeliac ganglionectomy on peptide-producing cells of the small intestinal mucosa in the Hanford mini pig. II. Immunohistochemical study. Holle GE, et al. **J Auton Nerv Syst** 1989 Mar;26(2):147–56
Different times of origin of choline acetyltransferase- and somatostatin-immunoreactive neurons in the rat striatum. Semba K, et al. **J Neurosci** 1988 Oct;8(10):3937–44
Synthesis of polypeptides by the cervix of the baboon (Papio anubis). Beil RE, et al. **J Reprod Fertil** 1989 Jul; 86(2):535–44
Correlation between the release of ovine trophoblast protein-1 by the conceptus and the production of polypeptides by the maternal endometrium of ewes. Sharif SF, et al. **J Reprod Fertil** 1989 Mar;85(2):471–6
Detection of early pregnancy factor (EPF) using the rabbit ovary and oviduct perfused in vitro. Sueoka K, et al. **J Reprod Fertil** 1988 Sep;84(1):325–31
Dexamethasone modulated protein synthesis in polymorphonuclear leukocytes: response in rheumatoid arthritis. Blowers LE, et al. **J Rheumatol** 1988;15(5):785–90
Anaphylatoxin generation in acute pancreatitis. Roxvall L, et al. **J Surg Res** 1989 Aug;47(2):138–43
Impairment of methotrexate (MTX)-polyglutamate formation of MTX-resistant K562 cell lines. Koizumi S. **Jpn J Cancer Res** 1988 Nov;79(11):1230–7
Mg2+/NH4+/polyamine system for polyuridine-dependent polyphenylalanine synthesis with near in vivo characteristics. Bartetzko A, et al. **Methods Enzymol** 1988; 164:650–8
Ribosomal synthesis of polypeptides from aminoacyl-tRNA without polynucleotide template. Spirin AS, et al. **Methods Enzymol** 1988;164:631–49
Cyclic adenosine monophosphate and phorbol ester, like gonadotropin-releasing hormone, stimulate the biosynthesis of luteinizing hormone polypeptide chains in a nonadditive manner. Starzec A, et al. **Mol Endocrinol** 1989 Apr; 3(4):618–24
Estrogen induction of galanin synthesis in the rat anterior pituitary gland demonstrated by in situ hybridization and immunohistochemistry. Vrontakis ME, et al. **Neurosci Lett** 1989 May 22;100(1–3):59–64
Complement activation and anaphylatoxin (C3a and C5a) formation in preeclampsia and by amniotic fluid. Haeger M, et al. **Obstet Gynecol** 1989 Apr;73(4):551–6
Metal-specific synthesis of two metallothioneins and gamma-glutamyl peptides in Candida glabrata. Mehra RK, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):8815–9
Production of mammastatin, a tissue-specific growth inhibitor, by normal human mammary cells. Ervin PR Jr, et al. **Science** 1989 Jun 30;244(4912):1585–7
A continuous cell-free translation system capable of producing polypeptides in high yield. Spirin AS, et al. **Science** 1988 Nov 25;242(4882):1162–4
Cap recognition and the entry of mRNA into the protein synthesis initiation cycle. Rhoads RE. **Trends Biochem Sci** 1988 Feb;13(2):52–6
[The production of epidermal growth factor and polypeptides similar to it in the intestinal mucosa of rats in 1,2-dimethylhydrazine-induced carcinogenesis and compensatory regeneration] Fil'chenko AA, et al. **Eksp Onkol** 1989;11(4):16–20 (Eng. Abstr.) (Rus)
[The role of thymus gland in the regulation of cytomedin synthesis] Kalashnikov SG, et al. **Vopr Med Khim** 1989 Mar–Apr;35(2):33–6 (Eng. Abstr.) (Rus)
[Effect of sodium selenite and its combination with remantadine on the synthesis of virus-specific polypeptides in a cell culture infected with influenza A virus] Abdullaev II, et al. **Vopr Virusol** 1988 Nov–Dec;33(6):676–80 (Eng. Abstr.) (Rus)

BLOOD

Increased serum type IV collagen peptide in carbon tetrachloride-treated rats. Matsumoto E, et al. **Acta Pathol Jpn** 1989 Jan;39(1):23–9
Humoral Na+-K+ pump inhibitory activity in essential hypertension and in normotensive subjects after acute volume expansion. Pamnani MB, et al. **Am J Hypertens** 1989 Jul;2(7):524–31
Platelet activating factor-induced early pregnancy factor activity from the perfused rabbit ovary and oviduct. Sueoka K, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1580–4
Increased pro-opiomelanocortin-derived peptide release in myotonic dystrophy. Jackson RV, et al. **Aust Paediatr J** 1988;24 Suppl 1:70–3
Immunoreactive endothelin in human plasma: marked elevations in patients in cardiogenic shock. Cernacek P, et al. **Biochem Biophys Res Commun** 1989 Jun 15; 161(2):562–7
Endothelin in human plasma and culture medium of aortic endothelial cells—detection and characterization with radioimmunoassay using monoclonal antibody. Saito Y, et al. **Biochem Biophys Res Commun** 1989 May 30; 161(1):320–6
Detection and characterization of endothelin-1-like immunoreactivity in rat plasma. Saito Y, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1512–6
Platelet receptor recognition domain on the gamma chain of human fibrinogen and its synthetic peptide analogues. Kloczewiak M, et al. **Biochemistry** 1989 Apr 4;28(7):2915–9
Effect of plasma biotinyl-peptides on biotinidase activity. Oizumi J, et al. **Biofactors** 1988 Jul;1(2):179–85
Gamma-melanotropin and beta-endorphin after dexamethasone [letter] Meador-Woodruff JH, et al. **Biol Psychiatry** 1989 Apr 1;25(7):975–6
A circulating myocardial depressant substance is associated with cardiac dysfunction and peripheral hypoperfusion (lactic acidemia) in patients with septic shock. Reilly JM, et al. **Chest** 1989 May;95(5):1072–80
Comparative studies on the nonprotein but nondialysable sugar-peptide fraction isolated from the plasma of various classes of vertebrates. Turyna I, et al. **Comp Biochem Physiol [B]** 1977;56(4):403–6
Effects of acute and chronic ethanol administration on the gastrointestinal hormones gastrin, enteroglucagon, pancreatic glucagon and peptide YY in the rat. Simanowski UA, et al. **Digestion** 1989;42(3):167–73
Two-dimensional gel electrophoresis of platelet polypeptides with immobilized pH gradients in capillary tubes. Asakawa J. **Electrophoresis** 1988 Sep;9(9):562–8
Plasma enteroglucagon, peptide YY and gastrin in rats deprived of luminal nutrition, and after urogastrone-EGF administration. A proliferative role for PYY in the intestinal epithelium? Goodlad RA, et al. **Experientia** 1989 Feb 15; 45(2):168–9
Presence of immunoreactive endothelin in human plasma. Ando K, et al. **FEBS Lett** 1989 Mar 13;245(1–2):164–6
Detection of immunoreactive endothelin in plasma of hemodialysis patients. Totsune K, et al. **FEBS Lett** 1989 Jun 5;249(2):239–42
Tissue and serum TPA in subjects at risk for bladder cancer. Giovagnoli MR, et al. **Int J Biol Markers** 1989 Jan–Mar; 4(1):13–7
Purification and characterization of early pregnancy factor from human pregnancy sera. Mehta AR, et al. **J Biol Chem** 1989 Feb 5;264(4):2266–71
Immunoreactive endothelin-1 in plasma detected by a sandwich-type enzyme immunoassay. Suzuki N, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S151–2
Characterization of circulating pro-opiomelanocortin-related peptides in human septic shock. McLoughlin L, et al. **J Endocrinol** 1988 Oct;119(1):159–65
Peptide YY in diabetics treated chronically with an intestinal glucosidase inhibitor. Füessl HS, et al. **Klin Wochenschr** 1988 Oct 3;66(19):985–9

Radioimmunoassay of endothelin [letter] Hartter E, et al. **Lancet** 1989 Apr 22;1(8643):909

Plasma endothelin levels in patients with uraemia. Koyama H, et al. **Lancet** 1989 May 6;1(8645):991–2

Increased plasma concentrations of endothelin–1 and big endothelin–1 in acute myocardial infarction [letter] Miyauchi T, et al. **Lancet** 1989 Jul 1;2(8653):53–4

Modulation of coronary tone in acute myocardial infarction by endothelin [letter] Salminen K, et al. **Lancet** 1989 Sep 23;2(8665):747

Plasma immunoreactive endothelin in uraemia [letter] Webb DJ, et al. **Lancet** 1989 May 27;1(8648):1211

Oxygen toxicity in the infant rhesus monkey: effects on regulatory peptides in lung and blood. Keith IM, et al. **Pediatr Pulmonol** 1988;5(1):31–5

Chemical characterization of a positive inotropic plasma factor in shock. Szabó I, et al. **Prog Clin Biol Res** 1989; 308:253–7

[Lysosomal enzymes and N–procollagen peptide in varicose veins] Haustein UF, et al. **Dermatol Monatsschr** 1988; 174(8):476–9 (Eng. Abstr.) (Ger)

[Tubal pregnancies: early pregnancy factor, progesterone, beta–HCG and vaginal sonography as differential diagnostic parameters] Mesrogli M, et al. **Z Geburtshilfe Perinatol** 1988 May–Jun;192(3):130–2 (Eng. Abstr.) (Ger)

[Correlation of microangiographic findings of colorectal carcinoma with the level of various tumor markers in portal blood] Shimoyama T, et al. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1624–31 (Eng. Abstr.) (Jpn)

[Clinical evaluation of serum type IV collagen peptide on metastatic gastric cancer] Yagi K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Sep;85(9):1722 (Jpn)

[A low–molecular blood serum factor suppressing myocardial function in traumatic shock complicated by massive blood loss] Antonenko VT, et al. **Anesteziol Reanimatol** 1988 Sep–Oct;(5):42–4 (Eng. Abstr.) (Rus)

[Blood middle–molecule peptides as factors in the modification of the erythrocyte membrane in burns] Lifshits RI, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):666–8 (Eng. Abstr.) (Rus)

[An analysis of the importance of low–molecular peptides in regulating human motor functions in diseases of the central nervous system] Naryshkin AG, et al. **Fiziol Zh SSSR** 1989 May;75(5):697–701 (Eng. Abstr.) (Rus)

[Determination of the content of middle molecule peptides in the blood of patients with acute myocardial infarct] Korochkin IM, et al. **Lab Delo** 1988;(9):15–8 (Eng. Abstr.) (Rus)

[A quantitative method of determining middle molecule peptides in the blood serum of patients with chronic renal insufficiency] Salikhova NN, et al. **Lab Delo** 1989;(3):48–52 (Eng. Abstr.) (Rus)

[Mean–molecular–weight peptides as an index of the severity of intestinal toxicosis in nursing infants] Molochnyl VP. **Pediatriia** 1988;(11):108 (Rus)

[Amino acid composition and properties of fibrin self–assembly inhibitors] Chiriat'ev EA, et al. **Vopr Med Khim** 1989 May–Jun;35(3):96–100 (Eng. Abstr.) (Rus)

[Effect of thermal injury and middle molecular weight peptides on plasma chemiluminescence] Riabinin VE, et al. **Vopr Med Khim** 1988 Nov–Dec;34(6):60–4 (Eng. Abstr.) (Rus)

[Possible causes for an increased content of blood peptide hormones in small–cell lung cancer] Raĭkhlin NT, et al. **Vopr Onkol** 1989;35(2):203–7 (Eng. Abstr.) (Rus)

[The content of regulatory peptides in the blood of patients with chronic gastric and duodenal diseases] Starodub EM. **Vrach Delo** 1989 Mar;(3):73–5 (Eng. Abstr.) (Rus)

[Phylogenetic characteristics of the structure and function of polypeptide growth factors localized in the blood platelets of mammals] Stoĭka RS. **Zh Evol Biokhim Fiziol** 1989 May–Jun;25(3):373–9 (27 ref.) (Rus)

[The amino acid composition of a highly purified fraction of adhesin from bovine serum and its action on the proliferation of mammalian cells in vitro] Evstratov AV, et al. **Zh Obshch Biol** 1988 Sep–Oct;49(5):704–8 (Eng. Abstr.) (Rus)

CEREBROSPINAL FLUID

Galanin immunoreactivity in human CSF: studies in eating disorders and Alzheimer's disease. Berrettini WH, et al. **Neuropsychobiology** 1988;19(2):64–8

Cerebrospinal fluid peptide YY immunoreactivity in eating disorders. Berrettini WH, et al. **Neuropsychobiology** 1988; 19(3):121–4

[Somatostatin and substance P in the cerebrospinal fluid in various neurological diseases] Harigaya Y, et al. **Rinsho Shinkeigaku** 1988 Aug;28(8):891–6 (Eng. Abstr.) (Jpn)

CHEMICAL SYNTHESIS

Synthetic peptides in biotechnology. **Adv Biotechnol Processes** 1988;10:1–233

Synthetic fluoropeptides as pharmacologically useful compounds. Imperiali B. **Adv Biotechnol Processes** 1988; 10:97–129 (61 ref.)

Recent developments in enzymatic synthesis of peptide. Nakanishi K, et al. **Adv Biotechnol Processes** 1988; 10:173–202 (52 ref.)

Automation of peptide synthesis. Newton R, et al. **Adv Biotechnol Processes** 1988;10:1–24 (13 ref.)

Structural analysis of sulfido–peptide leukotrienes: application to the design of potent and specific antagonists of leukotriene D4. Young RN. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:643–6

Mass spectrometric evaluation of synthetic peptides for deletions and insertions. Merrifield RB, et al. **Anal Biochem** 1988 Nov 1;174(2):399–414

Automated synthesis of N–bromoacetyl–modified peptides for the preparation of synthetic peptide polymers, peptide–protein conjugates, and cyclic peptides. Robey FA, et al. **Anal Biochem** 1989 Mar;177(2):373–7

Chemical synthesis of peptides and proteins. Kent SB. **Annu Rev Biochem** 1988;57:957–89 (126 ref.)

Total synthesis of the lipopeptide a–mating factor of Saccharomyces cerevisiae. Xue CB, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):253–7

Synthesis and properties of peptidyl derivatives of arginylfluoromethanes. Angliker H, et al. **Biochem J** 1988 Dec 1;256(2):481–6

Synthesis of thiol–functionalized N–acetylmuramyl peptide congeners suitable for their conjugation to target molecules. Moroder L, et al. **Biol Chem Hoppe Seyler** 1989 Apr;370(4):365–75

Synthesis of the dodecapeptide corresponding to domain III of bovine brain calmodulin: alpha–beta shift side reactions during the synthesis by the classical method in solution. Borin G, et al. **Biopolymers** 1989 Jan;28(1):333–52

1H–NMR studies of synthetic polypeptide models of Plasmodium falciparum circumsporozoite protein tandemly repeated sequence. Esposito G, et al. **Biopolymers** 1989 Jan; 28(1):225–46

Design and conformation of non–Aib synthetic peptides enjoying alamethicin–like ionophore activity. Molle G, et al. **Biopolymers** 1989 Jan;28(1):273–83

Structure—activity relationship of fluorine–containing renin inhibitory peptides based upon the tertiary structure of human renin. Akahane K, et al. **Chem Pharm Bull (Tokyo)** 1988 Sep;36(9):3447–52

Studies on peptides. CLIX. Preparation of a protected 33–residue peptide for the synthesis of human cholecystokinin (hCCK–33). Fujii N, et al. **Chem Pharm Bull (Tokyo)** 1988 Sep;36(9):3271–80

Studies on peptides. CLXV.1,2) Combination of a new amide–precursor reagent and trimethylsilyl bromide deprotection for the 9–fluorenylmethyloxycarbonyl–based solid–phase synthesis of chicken antral peptide. Guo L, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec;36(12):4989–92

Studies on peptides. CLXIV. Solutions–phase synthesis of a 36–residue peptide amide corresponding to the entire amino acid sequence of chicken antral peptide. Guo LL, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4364–76

Unexpected chain–terminating side reaction caused by histidine and acetic anhydride in solid–phase peptide synthesis. Ishiguro T, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb;37(2):506–8

Synthesis of N–acyl–gamma–D–glutamyl peptide derivatives containing a C–terminal small fragment of cholecystokinin and their effects on gastric secretion. Iuchi K, et al. **Chem Pharm Bull (Tokyo)** 1988 Sep;36(9):3433–8

Synthesis and effect on gastric secretion of several di– or tripeptides related to proglumide. Iuchi K, et al. **Chem Pharm Bull (Tokyo)** 1988 Oct;36(10):3961–6

A fluoride ion deprotection strategy in peptide synthesis. Combination with selective deprotection using the dilute methanesulfonic acid of alpha–amino protecting groups. Kiso Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec; 36(12):5024–7

Thermolysin–catalyzed synthesis of peptide amides. Sakina K, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov; 36(11):4345–54

Amino acids and peptides. XXIII. Synthesis of N alpha–protected amino acid 6–chloro–2–pyridyl esters and their evaluation for peptide synthesis. Tsuboi S, et al. **Chem Pharm Bull (Tokyo)** 1989 Jan;37(1):46–9

Kinetics and specificity of serine proteases in peptide synthesis catalyzed in organic solvents. Gaertner H, et al. **Eur J Biochem** 1989 Apr 15;181(1):207–13

The influence of water on protease–catalyzed peptide synthesis in acetonitrile/water mixtures. Reslow M, et al. **Eur J Biochem** 1988 Nov 1;177(2):313–8

An actin–interacting heptapeptide in the cofilin sequence. Yonezawa N, et al. **Eur J Biochem** 1989 Jul 15;183(1):235–8

Controlled peptide–protein conjugation by means of 3–nitro–2–pyridinesulfenyl protection–activation. Drijfhout JW, et al. **Int J Pept Protein Res** 1988 Sep;32(3):161–6

Design, synthesis and antibacterial activity of cecropin–like model peptides. Fink J, et al. **Int J Pept Protein Res** 1989 Jun;33(6):412–21

Noninvasive continuous monitoring of solid–phase peptide synthesis by acid–base indicator [letter] Krchňák V, et al. **Int J Pept Protein Res** 1988 Nov;32(5):415–6

Synthesis and disulfide structure determination of porcine endothelin: an endothelium–derived vasoconstricting peptide. Kumagaye S, et al. **Int J Pept Protein Res** 1988 Dec;32(6):519–26

Solid phase synthesis and characterization of two canine gut gastrin–releasing peptides. Milton RC, et al. **Int J Pept Protein Res** 1988 Aug;32(2):141–52

Application of the trimethylsilyl trifluoromethanesulfonate deprotecting procedure for the synthesis of porcine peptide YY (PYY). Ono S, et al. **Int J Pept Protein Res** 1989 Jan; 33(1):29–38

Synthetic substrate for eukaryotic signal peptidase. Cleavage of a synthetic peptide analog of the precursor region of preproparathyroid hormone. Caulfield MP, et al. **J Biol Chem** 1989 Sep 25;264(27):15813–7

Anticoagulant activity of synthetic hirudin peptides. Maraganore JM, et al. **J Biol Chem** 1989 May 25; 264(15):8692–8

Substitutions engineered by chemical synthesis at three conserved sites in mitochondrial cytochrome c. Thermodynamic and functional consequences. Wallace CJ, et al. **J Biol Chem** 1989 Sep 15;264(26):15199–209

Synthesis of endothelin–1 analogues, endothelin–3, and sarafotoxin S6b: structure–activity relationships. Nakajima K, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S8–12; discussion S18

Identification of a major hepatitis B core antigen (HBcAg) determinant by using synthetic peptides and monoclonal antibodies. Colucci G, et al. **J Immunol** 1988 Dec 15; 141(12):4376–80

Mapping of immunogenic regions of human T cell leukemia virus type I (HTLV–I) gp46 and gp21 envelope glycoproteins with env–encoded synthetic peptides and a monoclonal antibody to gp46. Palker TJ, et al. **J Immunol** 1989 Feb 1;142(3):971–8

Design of novel inhibitors of aminopeptidases. Synthesis of peptide–derived diamino thiols and sulfur replacement analogues of bestatin. Gordon EM, et al. **J Med Chem** 1988 Nov;31(11):2199–211

Synthesis of the novel pi–(benzyloxymethyl)–protected histidine analogue of statine. Inhibition of penicillopepsin by pepstatin–derived peptides containing different statine side–chain derivatives. Maibaum J, et al. **J Med Chem** 1989 Jul;32(7):1571–6

Solid–phase synthesis of 16 potent (selective and nonselective) in vivo antagonists of oxytocin. Manning M, et al. **J Med Chem** 1989 Feb;32(2):382–91

Prodrugs of peptides. IV: Bioreversible derivatization of the pyroglutamyl group by N–acylation and N–aminomethylation to effect protection against pyroglutamyl aminopeptidase. Bundgaard H, et al. **J Pharm Sci** 1989 Feb;78(2):122–6

Studies on peptides CLVIII. Model experiments for the synthesis of open–chain unsymmetrical cystine–peptides. Fujii N, et al. **J Protein Chem** 1988 Apr;7(2):151–6

Synthesis of 4% Glu–containing Val1 and Ile1–polypentapeptides: model protein systems for demonstrating mechanochemical coupling. Zhang H, et al. **J Protein Chem** 1989 Apr;8(2):173–82

Preparation and use of complementary peptides. Bost KL, et al. **Methods Enzymol** 1989;168:16–28

Peptide and protein synthesis by segment synthesis–condensation. Kaiser ET, et al. **Science** 1989 Jan 13;243(4888):187–92

Enzymatic catalysts in organic synthesis. Wong CH. **Science** 1989 Jun 9;244(4909):1145–52 (56 ref.)

Synthesis of taurine– and/or acetyl group–conjugated poly(D–Glu, D–Lys) derivatives and their effects on fibrinolysis. Soeda S, et al. **Thromb Res** 1988 Oct 15; 52(2):101–10

Synthesis and analysis of peptide to murine CD4 molecules. Clark GJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):211–2

[A new generation of diagnostic preparations based on synthetic antigens] Krchňák V. **Cas Lek Cesk** 1988 Oct 14;127(42):1287–90 (Eng. Abstr.) (Cze)

[Chemical synthesis of peptide and protein, present and perspective] Aimoto S. **Seikagaku** 1989 Apr;61(4):300–3 (Jpn)

[Peptide synthesis catalyzed by proteases. Elevated nucleophilic activity of naphthylamides of amino acids in acyl transfer reactions catalyzed by alpha–chymotrypsin] Gololobov MIu, et al. **Biokhimiia** 1988 Jul;53(7):1174–80 (Eng. Abstr.) (Rus)

[Amphibian bombesin and its analog alytesin] Kuranova IL, et al. **Bioorg Khim** 1989 Jun;15(6):748–62 (Eng. Abstr.) (Rus)

[Dipentafluorophenyl carbonate—a reagent for peptide synthesis] Medvedkin VN, et al. **Bioorg Khim** 1989 Apr; 15(4):460–4 (Eng. Abstr.) (Rus)

[Semisynthesis of proteins and peptides] Medvedkin VN. **Bioorg Khim** 1989 May;15(5):581–614 (227 ref.) (Rus)

[Synthesis of peptides, catalyzed by ficin] Schuster J, et al. **Bioorg Khim** 1989 Mar;15(3):345–7 (Eng. Abstr.) (Rus)

[Design and synthesis of peptides capable of specific binding to DNA] Grokhovskiĭ SL, et al. **Mol Biol (Mosk)** 1988 Sep–Oct;22(5):1315–34 (Eng. Abstr.) (Rus)

[Stimulating action of polyphosphates on peptide formation from glycine and phenylalanine amides under abiogenic conditions] Chetkauskaĭte AV, et al. **Zh Evol Biokhim Fiziol** 1988 Jul–Aug;24(4):465–70 (Eng. Abstr.) (Rus)

DIAGNOSTIC USE

Application of chemically synthetic peptides in clinical diagnosis of viruses: theoretical and practical considerations. Ariel N, et al. **Adv Biotechnol Processes** 1988;10:81–96 (77 ref.)

Overview on the use of synthetic peptides in human immunodeficiency virus infection. Kennedy RC, et al. **Adv Biotechnol Processes** 1988;10:149–72 (89 ref.)

Synthetic-peptide-based immunodiagnosis of retrovirus infections: current status and future prospects. Wang CY. **Adv Biotechnol Processes** 1988;10:131–48 (54 ref.)

Use of synthetic peptides for the detection of antibodies against the nef regulating protein in sera of HIV-infected patients. Sabatier JM, et al. **Aids** 1989 Apr;3(4):215–20

Enzyme purification by genetically attached polycysteine and polyphenylalanine affinity tails. Persson M, et al. **Anal Biochem** 1988 Aug 1;172(2):330–7

Functional activity of protein S determined with use of protein C activated by venom activator. Kobayashi I, et al. **Clin Chem** 1989 Aug;35(8):1644–8

Peptide-based radioimmunoassay for insulin receptor. Detection of insulin-stimulated downregulation in IM-9 lymphocytes. McFarland KC, et al. **Diabetes** 1989 Aug; 38(8):987–90

Polypeptide fraction from bovine factor VIII used in fluorangiography. Ammannati P, et al. **Ophthalmologica** 1988;197(1):51–5

GENETICS

Regulation of the expression of the human preprogastrin-releasing peptide gene and post-translational processing of its gene product. Battey JF, et al. **Ann N Y Acad Sci** 1988;547:30–40 (49 ref.)

Processing of mammalian preprogastrin-releasing peptide. Reeve JR Jr, et al. **Ann N Y Acad Sci** 1988;547:21–9 (29 ref.)

Molecular biology of bombesin-like peptides. Comparison of cDNAs encoding human gastrin-releasing peptide, human neuromedin B, and amphibian ranatensin. Spindel ER, et al. **Ann N Y Acad Sci** 1988;547:10–20 (28 ref.)

Tissue-specific expression of the mammalian bombesin gene. Sunday ME. **Ann N Y Acad Sci** 1988;547:95–113

Cloning of DNA sequences encoding foreign peptides and their expression in the K88 pili. Thiry G, et al. **Appl Environ Microbiol** 1989 Apr;55(4):984–93

Transforming growth factor-beta stimulates the expression of endothelin mRNA by vascular endothelial cells. Kurihara H, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1435–40

Probable detection of kil peptide derived from colicin E1 plasmid in the envelope fraction of Escherichia coli HB101 carrying pEAP31. Aono R. **Biochem J** 1988 Oct 1; 255(1):365–8

Peptides from the calcitonin genes: molecular genetics, structure and function. Breimer LH, et al. **Biochem J** 1988 Oct 15;255(2):377–90 (247 ref.)

Proline-rich proteins and glycoproteins: expression of salivary gland multigene families. Carlson DM. **Biochimie** 1988 Nov;70(11):1689–95 (46 ref.)

Cloning of cDNA coding for connective tissue activating peptide III from a human platelet-derived lambda gt11 expression library. Wenger RH, et al. **Blood** 1989 May 1; 73(6):1498–503

Constitutive mutants in the yeast pheromone response: ordered function of the gene products. Blinder D, et al. **Cell** 1989 Feb 10;56(3):479–86

Drosophila doublesex gene controls somatic sexual differentiation by producing alternatively spliced mRNAs encoding related sex-specific polypeptides. Burtis KC, et al. **Cell** 1989 Mar 24;56(6):997–1010

A putative protein kinase overcomes pheromone-induced arrest of cell cycling in S. cerevisiae. Courchesne WE, et al. **Cell** 1989 Sep 22;58(6):1107–19

The sex determination locus transformer-2 of Drosophila encodes a polypeptide with similarity to RNA binding proteins. Goralski TJ, et al. **Cell** 1989 Mar 24;56(6):1011–8

RAP-1 factor is necessary for DNA loop formation in vitro at the silent mating type locus HML. Hofmann JF, et al. **Cell** 1989 Jun 2;57(5):725–37

Large deletions result from breakage and healing of P. falciparum chromosomes. Pologe LG, et al. **Cell** 1988 Dec 2;55(5):869–74

DNA cloning and amino acid sequence determination of a major constituent protein of mammalian nucleoli. Correspondence of the nucleoplasmin-related protein N038 to mammalian protein B23. Schmidt-Zachmann MS, et al. **Chromosoma** 1988;96(6):417–26

Analysis of the role of SCG1, a G alpha homolog, and SST2 in pheromone response and desensitization in yeast. Kurjan J, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:577–84

Isolation and characterization of two genes encoding yeast mating pheromone signaling elements: CDC72 and CDC73. Reed SI, et al. **Cold Spring Harb Symp Quant Biol** 1988; 53 Pt 2:621–7

Function of the STE4 and STE18 genes in mating pheromone signal transduction in Saccharomyces cerevisiae. Whiteway M, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:585–90

An alpha-specific gene, SAG1 is required for sexual agglutination in Saccharomyces cerevisiae. Doi S, et al. **Curr Genet** 1989 Jun;15(6):393–8

Two small open reading frames are co-transcribed with the pea chloroplast genes for the polypeptides of cytochrome b-559. Willey DL, et al. **Curr Genet** 1989 Mar;15(3):213–20

Genes for salivary proline-rich proteins and taste for phenylthiourea are not closely linked in humans. O'Hanlon K, et al. **Cytogenet Cell Genet** 1988;49(4):315–7

Gene synthesis by serial cloning of oligonucleotides. Hayden MA, et al. **DNA** 1988 Oct;7(8):571–7

Mapping the double-strand breaks at the mating-type locus in fission yeast by genomic sequencing. Nielsen O, et al. **EMBO J** 1989 Jan;8(1):269–76

Pancreatic proglucagon processing: isolation and structures of glucagon and glucagon-like peptide from gene I. Nichols R, et al. **Endocrinology** 1988 Dec;123(6):2639–45

Basic proline-rich proteins of murine parotid glands. Induction of mRNA by isoprenaline and post-secretion processing. Bannister AJ, et al. **Eur J Biochem** 1989 May 1;181(2):371–9

The genes for the frog skin peptides GLa, xenopsin, levitide and caerulein contain a homologous export exon encoding a signal sequence and part of an amphiphilic peptide. Kuchler K, et al. **Eur J Biochem** 1989 Feb 1;179(2):281–5

Expression of muscle-specific proteins is necessary to regulate translation of the mRNA for a 40-kDa housekeeping polypeptide in rat L6 cells. Pramanik SK, et al. **Eur J Biochem** 1989 Jul 1;182(3):687–98

Characterization of ixodid tick salivary-gland gene products, using recombinant DNA technology. Needham GR, et al. **Exp Appl Acarol** 1989 Jun;7(1):21–32

Plasmodium falciparum: comparison of the genomic organization of the knob protein gene in knobby and knobless variants. Tan-Ariya P, et al. **Exp Parasitol** 1988 Dec;67(2):129–36

Regulation of proline-rich protein and alpha-amylase genes in parotid-hepatoma hybrid cells. Wright PS, et al. **FASEB J** 1988 Dec;2(15):3104–7

A new family of growth factor-like peptides. 'Trefoil' disulphide loop structures as a common feature in breast cancer associated peptide (pS2), pancreatic spasmolytic polypeptide (PSP), and frog skin peptides (spasmolysins). Thim L. **FEBS Lett** 1989 Jun 19;250(1):85–90

Versatility of a vector for expressing foreign polypeptides at the surface of gram-negative bacteria. Charbit A, et al. **Gene** 1988 Oct 15;70(1):181–9

Secretion of glycosylated human erythropoietin from yeast directed by the alpha-factor leader region. Elliott S, et al. **Gene** 1989 Jun 30;79(1):167–80

Structure and expression of a Drosophila male accessory gland gene whose product resembles a peptide pheromone precursor. Monsma SA, et al. **Genes Dev** 1988 Sep; 2(9):1063–73

Flexibility of the yeast alpha 2 repressor enables it to occupy the ends of its operator, leaving the center free. Sauer RT, et al. **Genes Dev** 1988 Jul;2(7):807–16

Possible correlations of polypeptides and Balbiani rings in the salivary glands of Drosophila auraria Peng. Manousis T, et al. **Genetica** 1987 Sep 30;74(1):31–40

Many protein products from a few loci: assignment of human salivary proline-rich proteins to specific loci. Lyons KM, et al. **Genetics** 1988 Sep;120(1):255–65

Length polymorphisms in human proline-rich protein genes generated by intragenic unequal crossing over. Lyons KM, et al. **Genetics** 1988 Sep;120(1):267–78

Heterologous expression of the alpha-amylase inhibitor gene cloned from an amplified genomic sequence of Streptomyces tendae. Koller KP, et al. **J Bacteriol** 1989 Sep;171(9):4953–7

Structural organization and chromosomal assignment of the gene encoding endothelin. Bloch KD, et al. **J Biol Chem** 1989 Jun 25;264(18):10851–7

Polypeptide structure of germin as deduced from cDNA sequencing. Dratewka-Kos E, et al. **J Biol Chem** 1989 Mar 25;264(9):4896–900

A single 12.5-kilobase androgen-regulated mRNA encoding multiple proline-rich polypeptides in the ventral prostate of the rat. Hemschoote K, et al. **J Biol Chem** 1988 Dec 15;263(35):19159–65

The human preproendothelin-1 gene. Complete nucleotide sequence and regulation of expression. Inoue A, et al. **J Biol Chem** 1989 Sep 5;264(25):14954–9

Multiple gastrin-releasing peptide gene-associated peptides are produced by a human small cell lung cancer line. Reeve JR Jr, et al. **J Biol Chem** 1989 Feb 5;264(4):1928–32

The human preproendothelin-1 gene: possible regulation by endothelial phosphoinositide turnover signaling. Yanagisawa M, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S13–7; discussion S18

Localization of plasmid loci necessary for the entry of Shigella flexneri into HeLa cells, and characterization of one locus encoding four immunogenic polypeptides. Baudry B, et al. **J Gen Microbiol** 1987 Dec;133 (Pt 12):3403–13

Genomic structure of the human monocyte-derived neutrophil chemotactic factor IL-8. Mukaida N, et al. **J Immunol** 1989 Aug 15;143(4):1366–71

Replication of mini RK2 plasmid in extracts of Escherichia coli requires plasmid-encoded protein TrfA and host-encoded proteins DnaA, B, G DNA gyrase and DNA polymerase III. Pinkney M, et al. **J Mol Biol** 1988 Oct 20;203(4):927–38

The cpx proteins of Escherichia coli K12. Structure of the cpxA polypeptide as an inner membrane component. Weber RF, et al. **J Mol Biol** 1988 Sep 20;203(2):467–78

A major C-peptide deletion prevents secretion of a mutant human proinsulin from transfected monkey kidney cells. Shakur Y, et al. **J Mol Endocrinol** 1989 Sep;3(2):155–62

Characterization of a partial cDNA clone for the NILE glycoprotein and identification of the encoded polypeptide domain. Prince JT, et al. **J Neurosci** 1989 May;9(5):1825–34

Characterization of a partial cDNA clone for the NILE glycoprotein and identification of the encoded polypeptide domain. Prince JT, et al. **J Neurosci** 1989 Mar;9(3):876–83

Hepatitis B virus particles contain a polypeptide encoded by the largest open reading frame: a putative reverse transcriptase. Mack DH, et al. **J Virol** 1988 Dec; 62(12):4786–90

Mutational analysis of autonomously functioning trans-activating peptides encoded by adenovirus E1A: evidence for two subdomains. Pusztai R, et al. **J Virol** 1989 Aug;63(8):3516–8

Human C5a anaphylatoxin: gene synthesis, expression, and recovery of biologically active material from Escherichia coli. Franke AE, et al. **Methods Enzymol** 1988;162:653–68

Combined antibody-high-performance liquid chromatography approach to assess prohormone processing. Wetsel W, et al. **Methods Enzymol** 1989; 168:517–45

Attenuated deletion mutants of vaccinia virus lacking the vaccinia growth factor are defective in replication in vivo. Lai AC, et al. **Microb Pathog** 1989 Mar;6(3):219–26

Structure of a Plasmodium falciparum gene that encodes a glutamic acid-rich protein (GARP). Triglia T, et al. **Mol Biochem Parasitol** 1988 Nov;31(2):199–201

Posttranslational processing of endogenous and of baculovirus-expressed human gastrin-releasing peptide precursor. Lebacq-Verheyden AM, et al. **Mol Cell Biol** 1988 Aug;8(8):3129–35

Molecular cloning, sequence analysis, and functional expression of a novel growth regulator, oncostatin M. Malik N, et al. **Mol Cell Biol** 1989 Jul;9(7):2847–53

Alpha-factor leader sequence-directed transport of Escherichia coli beta-galactosidase in the secretory pathway of Saccharomyces cerevisiae. Das RC, et al. **Mol Gen Genet** 1989 Aug;218(2):240–8

Expression of MF alpha 1 in MATa cells supersensitive to alpha-factor leads to self-arrest. Whiteway M, et al. **Mol Gen Genet** 1988 Sep;214(1):85–8

Selection of class I MHC-restricted peptides with the strip-of-helix hydrophobicity algorithm. Reyes VE, et al. **Mol Immunol** 1988 Sep;25(9):867–71

A human cDNA sequence for a novel glutathione peroxidase-related selenopeptide, GPRP. Dunn DK, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6390

Canine endothelin-2: cDNA sequence for the mature peptide. Itoh Y, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5389

Cloning and sequencing of a canine gene segment encoding mature endothelin. Kimura C, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3290

Distribution of two distinct messenger ribonucleic acids encoding gastrin-releasing peptide in rat brain. Zoeller RT, et al. **Peptides** 1989 Mar-Apr;10(2):415–22

The yeast STE12 protein binds to the DNA sequence mediating pheromone induction. Dolan JW, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5703–7

The human endothelin family: three structurally and pharmacologically distinct isopeptides predicted by three separate genes. Inoue A, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2863–7

Synthesis and expression in Escherichia coli of the gene encoding monocyte-derived neutrophil-activating factor: biological equivalence between natural and recombinant neutrophil-activating factor. Lindley I, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9199–203

Endothelin: visualization of mRNAs by in situ hybridization provides evidence for local action. MacCumber MW, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7285–9

Isolation and structural characterization of cDNA clones encoding the mating pheromone Er-1 secreted by the ciliate Euplotes raikovi. Miceli C, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3016–20

In vitro reconstitution of osmoregulated expression of proU of Escherichia coli. Ramirez RM, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1153–7

Identification of the cystic fibrosis gene: cloning and characterization of complementary DNA. Riordan JR, et al. **Science** 1989 Sep 8;245(4922):1066–73

Nucleotide sequence of barley stripe mosaic virus RNA alpha: RNA alpha encodes a single polypeptide with homology to corresponding proteins from other viruses. Gustafson G, et al. **Virology** 1989 Jun;170(2):370–7

IMMUNOLOGY

Galanin-like immunoreactivity within Ch2 neurons in the vertical limb of the diagonal band of Broca in aging and Alzheimer's disease. Vogels OJ, et al. **Acta Neuropathol (Berl)** 1989;78(1):90–5

Possibilities and limitations of synthetic peptide vaccines. Barteling SJ. **Adv Biotechnol Processes** 1988;10:25–60 (206 ref.)

Anti-peptide antibodies to oncoproteins: the predetermined specificity and detection of gene products predicted by nucleotide sequence analyses. Tanaka T, et al. **Adv Biotechnol Processes** 1988;10:61–80 (36 ref.)

Impaired glucose tolerance is associated with increased islet amyloid polypeptide (IAPP) immunoreactivity in pancreatic beta cells. Johnson KH, et al. **Am J Pathol** 1989 Aug;135(2):245–50

Immunochemical and molecular properties of antibodies exhibiting binding properties to glutamic acid-tyrosine

homopolymer and to self antigens. Bailey NC, et al. **Ann N Y Acad Sci** 1988;546:63–71 (18 ref.)

Clinical use of a monoclonal antibody to bombesin–like peptide in patients with lung cancer. Mulshine JL, et al. **Ann N Y Acad Sci** 1988;547:360–72

Human autoantibody secreted by immortalized lymphocyte cell line against the 68K polypeptide of the U1 small nuclear ribonucleoprotein. Chen JT, et al. **Arthritis Rheum** 1988 Oct;31(10):1265–71

Immunological and structural characterization of sarafotoxin/endothelin family of peptides. Fleminger G, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1317–23

Antibodies to newly recognized murine 13–18 KDa pituitary peptides crossreact with growth hormone and prolactin from several species, including man. Sinha YN, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):386–93

Immunochemical characterization of mucins. Polypeptide (M1) and polysaccharide (A and Leb) antigens. Bara J, et al. **Biochem J** 1988 Aug 15;254(1):185–93

Antibodies directed against a nonapeptide sequence of the gamma–aminobutyrate (GABA)/benzodiazepine receptor alpha–subunit. Detection of a distinct alpha–like subunit in pig cerebral cortex but not cerebellum. Kirkness EF, et al. **Biochem J** 1988 Nov 15;256(1):291–4

The adipocyte Go alpha–immunoreactive polypeptide is different from the alpha subunit of the brain Go protein. Rouot B, et al. **Biochem J** 1989 May 15;260(1):307–10

Antibodies to a synthetic peptide that react specifically with a common surface region on two hydrocarbon–inducible isoenzymes of cytochrome P–450 in the rat. Edwards RJ, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3735–41

Restriction of anti–peptide antibody specificity by enzyme–modified Sepharose–peptide immunoadsorbents [published erratum appears in Biochimie 1988 Aug;70(8):1126] Trinca ML, et al. **Biochimie** 1988 Jun; 70(6):853–6

Topology of proteolipid protein in the myelin membrane of central nervous system. A study using antipeptide antibodies. Stoffel W, et al. **Biol Chem Hoppe Seyler** 1989 Feb;370(2):165–76

Identification of I–A beta–chain residues critical for T cell recognition of peptide antigens. Esch TR, et al. **Cell Immunol** 1989 Oct 1;123(1):226–35

Different T helper cell subsets elicited in mice utilizing two different adjuvant vehicles: the role of endogenous interleukin 1 in proliferative responses. Grun JL, et al. **Cell Immunol** 1989 Jun;121(1):134–45

Immunoreactive galanin–like material in magnocellular hypothalamo–neurohypophysial neurones of the rat. Gaymann W, et al. **Cell Tissue Res** 1989 Jan;255(1):139–47

Galanin–immunoreactive nerves in the female rat paracervical ganglion and uterine cervix: distribution and reaction to capsaicin. Papka RE, et al. **Cell Tissue Res** 1989 Jul;257(1):41–51

Relationship between urotensin II– and somatostatin–immunoreactive spinal cord neurons of Catostomus commersoni and Oncorhynchus kisutch (Teleostei). Yulis CR, et al. **Cell Tissue Res** 1988; 254(3):539–42

Anti–gliadin antibody specificity for gluten–derived peptides toxic to coeliac patients. Devery JM, et al. **Clin Exp Immunol** 1989 Jun;76(3):384–90

Studies of humoral and cell–mediated immunity to peptides shared by HLA–27.1 and Klebsiella pneumoniae nitrogenase in ankylosing spondylitis. Tsuchiya N, et al. **Clin Exp Immunol** 1989 Jun;76(3):354–60

Characterization of isolated human skin mast cells: the effect of human anaphylatoxin and neutrophils on histamine release from human skin mast cells. Kubota Y, et al. **Dermatologica** 1989;179 Suppl 1:125

Immunolocalization of renal mineralocorticoid receptors with an antiserum against a peptide deduced from the complementary deoxyribonucleic acid sequence. Krozowski ZS, et al. **Endocrinology** 1989 Jul;125(1):192–8

Myosin and Ca2+–sensitive streaming in the alga Chara: detection of two polypeptides reacting with a monoclonal anti–myosin and their localization in the streaming endoplasm. Grolig F, et al. **Eur J Cell Biol** 1988 Oct; 47(1):22–31

T cell interactions generated by synthetic peptides covalently linked to a carrier. Childerstone A, et al. **Eur J Immunol** 1989 Jan;19(1):169–76

Orientation of epitopes influences the immunogenicity of synthetic peptide dimers. Cox JH, et al. **Eur J Immunol** 1988 Dec;18(12):2015–9

Plasmodium falciparum: analysis of B epitopes of a polypeptide antigen expressed in Escherichia coli, using monoclonal antibodies. Blisnick T, et al. **Exp Parasitol** 1988 Dec;67(2):247–56

Profile of sequential determinants in tissue polypeptide antigen BrCN:B fragment. Chersi A, et al. **Experientia** 1989 Feb 15;45(2):184–6

Antibodies against an inter–domain segment of polypeptide chain inhibit active–site coupling in the pyruvate dehydrogenase multienzyme complex. Radford SE, et al. **FEBS Lett** 1989 Jul 3;250(2):336–40

Receptor and effector interactions of Gs. Functional studies with antibodies to the alpha s carboxyl–terminal decapeptide. Simonds WF, et al. **FEBS Lett** 1989 Jun 5; 249(2):189–94

Use of a synthetic peptide adjuvant for the immunization of baboons with denatured and deglycosylated pig zona pellucida glycoproteins. Dunbar BS, et al. **Fertil Steril** 1989 Aug;52(2):311–8

Antimitochondrial autoantibodies in primary biliary cirrhosis recognize cross–reactive epitope(s) on protein X and dihydrolipoamide acetyltransferase of pyruvate dehydrogenase complex. Surh CD, et al. **Hepatology** 1989 Aug;10(2):127–33

Elimination of self–tolerogen turns nonresponder mice into responders. Vidović D. **Immunogenetics** 1989;30(3):194–9

Antibodies to a short synthetic peptide cross–react with human recombinant interleukin 1 alpha. Davies ME, et al. **Immunol Lett** 1988 Dec;19(4):293–7

The T–cell repertoire for antigen and MHC. Marrack P, et al. **Immunol Today** 1988 Oct;9(10):308–15 (64 ref.)

Why peptides? Their possible role in the evolution of MHC–restricted T–cell recognition. Nagy ZA, et al. **Immunol Today** 1989 Apr;10(4):132–8 (62 ref.)

Influenza–specific cytotoxic T–cell recognition is inhibited by peptides unrelated in both sequence and MHC restriction. Bodmer HC, et al. **Immunology** 1989 Feb; 66(2):163–9

Local oral immunization with synthetic peptides induces a dual mucosal IgG and salivary IgA antibody response and prevents colonization of Streptococcus mutans. Lehner T, et al. **Immunology** 1989 Jul;67(3):419–24

Comparison of antibody avidity and titre elicited by peptide as a protein conjugate or as expressed in vaccinia. Lew AM, et al. **Immunology** 1988 Oct;65(2):311–4

Proteolysis of the 185,000 MW streptococcal cell wall antigen generating 4000 and 6000 MW peptides with distinct antigenic determinants. Mitchell CG, et al. **Immunology** 1989 Feb;66(2):246–51

Sequence homology between tetanus and botulinum toxins detected by an antipeptide antibody. Halpern JL, et al. **Infect Immun** 1989 Jan;57(1):18–22

Immuno–affinity purification of specific antibodies against human gastrin releasing peptide (h–GRP) by the h–GRP(1–8)–linked polydimethylacrylamide resin. Takeyama M, et al. **Int J Pept Protein Res** 1989 Jun; 33(6):457–62

Site–directed anti–peptide antibodies define the topography of the beta–adrenergic receptor. Wang H, et al. **J Biol Chem** 1989 Aug 25;264(24):14424–31

Activation of clones producing self–reactive antibodies by foreign antigen and antiidiotype antibody carrying the internal image of the antigen. Bailey NC, et al. **J Clin Invest** 1989 Sep;84(3):744–56

Identical peptides recognized by MHC class I– and II–restricted T cells. Perkins DL, et al. **J Exp Med** 1989 Jul 1;170(1):279–89

Polypeptides of pneumonia virus of mice. I. Immunological cross–reactions and post–translational modifications. Ling R, et al. **J Gen Virol** 1989 Jun;70 (Pt 6):1427–40

Polymorphic residues on the I–A beta chain modulate the stimulation of T cell clones specific for the N–terminal peptide of the autoantigen myelin basic protein. Davis CB, et al. **J Immunol** 1989 Oct 1;143(7):2083–93

Binding to Ia protects an immunogenic peptide from proteolytic degradation. Donermeyer DL, et al. **J Immunol** 1989 Feb 15;142(4):1063–8

Monoclonal antipeptide antibodies as tools to dissect closely related gene products. A model using peptides encoded by the calcitonin gene. Ghillani P, et al. **J Immunol** 1988 Nov 1;141(9):3156–63

Class I–restricted presentation occurs without internalization or processing of exogenous antigenic peptides. Hosken NA, et al. **J Immunol** 1989 Feb 15;142(4):1079–83

Competition between unrelated peptides recognized by H–2–Kd restricted T cells. Pala P, et al. **J Immunol** 1988 Oct 1;141(7):2289–94

I–Ak polymorphisms define a functionally dominant region for the presentation of hen egg lysozyme peptides. Rosloniec EF, et al. **J Immunol** 1989 Jul 1;143(1):50–8

T cell recognition of HIV synthetic peptides in a natural infection. Schrier RD, et al. **J Immunol** 1989 Feb 15; 142(4):1166–76

Production and characterization of monoclonal antibodies against the novel neutrophil activating peptide NAP/IL–8. Sticherling M, et al. **J Immunol** 1989 Sep 1;143(5):1628–34

Consequences of self–presentation of peptide antigen by cytolytic T lymphocytes. Vitiello A, et al. **J Immunol** 1989 Sep 1;143(5):1512–7

A general approach to the localization of antigenic determinants of a linear type in proteins of unknown primary structure. Beresten SF, et al. **J Immunol Methods** 1988 Oct 26;113(2):247–54

Cross–reaction of antibodies to coupling groups used in the production of anti–peptide antibodies. Edwards RJ, et al. **J Immunol Methods** 1989 Feb 24;117(2):215–20

Direct immunization with synthetic peptidyl–polyamide resin. Comparison with antibody production from free peptide and conjugates with carrier proteins. Fischer PM, et al. **J Immunol Methods** 1989 Mar 10;118(1):119–23

Solid–phase immunoassay of serum antibodies to peptides. Covalent antigen binding to adsorbed phenylalanine–lysine copolymers. Hobbs RN. **J Immunol Methods** 1989 Feb 24; 117(2):257–66

Characterisation of antibodies to urinary gonadotrophin peptide. Kardana A, et al. **J Immunol Methods** 1989 Mar 10;118(1):53–8

Carrier–bound synthetic peptides. Use as antigen in HIV–1 ELISA tests and in antiserum production. Modrow S, et al. **J Immunol Methods** 1989 Mar 10;118(1):1–7

Comparison of four bifunctional reagents for coupling peptides to proteins and the effect of the three moieties on the immunogenicity of the conjugates. Peeters JM, et al. **J Immunol Methods** 1989 Jun 2;120(1):133–43

A 230–kD basic protein is the major bullous pemphigoid antigen. Mueller S, et al. **J Invest Dermatol** 1989 Jan; 92(1):33–8

Immunoregulatory pathways in adult responder mice. III. Establishment of a GAT–specific suppressor T cell clone from GAT–tolerant responders which afferently regulates DTH responses. Jenkins MK, et al. **J Mol Cell Immunol** 1985;2(1):1–13

How can T cells confuse the Ek molecule with GLT? An answer to the commentary on self antigenic mimicry and Ir gene control [letter] Nagy ZA. **J Mol Cell Immunol** 1986;2(6):369–70

Identification of high molecular weight peptides in bovine adrenomedullary chromaffin granules using monoclonal antibodies to a preproenkephalin A fusion peptide. Jackson S, et al. **J Mol Endocrinol** 1989 Mar;2(2):119–29

T cell lines selected with synthetic peptides are highly encephalitogenic in SJL/J mice. Bourdette DN, et al. **J Neuroimmunol** 1989 May;22(3):255–60

Measles virus–polypeptide specificity of the cytotoxic T–lymphocyte response in multiple sclerosis. Dhib–Jalbut S, et al. **J Neuroimmunol** 1989 Feb;21(2–3):205–12

An immunodominant and immunogenetically defined polypeptide present in T. cruzi. Ramos R, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:418

Antigenic homology between rat sperm tail polypeptides and Sertoli cell secretory proteins. Abdullah M, et al. **Mol Cell Biochem** 1988 Jun;81(2):165–76

Hepatitis B virus surface antigen (HBsAg) as carrier for synthetic peptides having an attached hydrophobic tail. Neurath AR, et al. **Mol Immunol** 1989 Jan;26(1):53–62

Structural requirements and biological significance of interactions between peptides and the major histocompatibility complex. Grey HM, et al. **Philos Trans R Soc Lond [Biol]** 1989 Jun 12; 323(1217):545–52

Recognition of the HLA class II–peptide complex by T–cell receptor: reversal of major histocompatibility complex restriction of a T–cell clone by a point mutation in the peptide determinant. Rothbard JB, et al. **Philos Trans R Soc Lond [Biol]** 1989 Jun 12; 323(1217):553–64

Development of biologically active peptides based on antibody structure. Williams WV, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5537–41

The cloning and expression of an anti–peptide antibody: a system for rapid analysis of the binding properties of engineered antibodies. Roberts S, et al. **Protein Eng** 1986 Oct–Nov;1(1):59–65

Primary and secondary responses to (NANP) peptides by Plasmodium falciparum sporozoites in various strains of mice. Del Giudice G, et al. **Scand J Immunol** 1989 May; 29(5):555–62

Monoclonal antibodies against measles virus haemagglutinin react with synthetic peptides. Mäkelä MJ, et al. **Scand J Immunol** 1989 Aug;30(2):225–31

Major structural polypeptides of retrovirus produced by a Suncus murinus mammary tumor cell line and type D retrovirus share interspecies antigenic determinants. Aoyama A, et al. **Virology** 1988 Nov;167(1):314–7

Synthetic peptides approach to identification of epitopes on bovine leukemia virus envelope glycoprotein gp51. Portetelle D, et al. **Virology** 1989 Mar;169(1):34–41

Testing efficacy of anti–D sera by a panel of donor red cells with weak reacting D antigen and with partial D antigens. van Rhenen DJ, et al. **Vox Sang** 1989;56(4):274–7

Granulocyte activating factor released from Propionibacterium acnes. A possible mediator of inflammation in acne vulgaris. Pulverer G, et al. **Zentralbl Bakteriol Mikrobiol Hyg** [A] 1988 Nov; 270(1–2):246–51

[Immunocytochemical study pituitary using anti–serum to N terminal polypeptide analog of human prolactin] Liang S. **Chung Hua I Hsueh Tsa Chih** 1988 Aug;68(8):425–7, 30 (Eng. Abstr.) **(Chi)**

[Production and characterization of human antirenin antibodies prepared with synthetic immunogens] Galen FX, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:199–201 (Eng. Abstr.) **(Fre)**

[Technics in molecular biology in cancer research. Immunochemical analyses with antipeptide antibody] Fujiki Y, et al. **Gan To Kagaku Ryoho** 1989 May; 16(5):2121–6 **(Jpn)**

[On the basis of immunogenic peptides for induction of protein–reactive anti–peptide antibodies in view of peptide conformation] Ebina S, et al. **Seikagaku** 1988 May; 60(5):348–52 (16 ref.) **(Jpn)**

[Peptide immunomodulators. I.] Janusz M. **Postepy Hig Med Dosw** 1988 Mar–Apr;42(2):173–97 (89 ref.) (Eng. Abstr.) **(Pol)**

[Antigenic structure of the foot–and–mouth–disease virus. I. Synthesis of protective peptides from the major immunogenic region of VP1 protein of foot–and–mouth virus type O1K] Surovoĭ AIu, et al. **Bioorg Khim** 1988 Oct; 14(10):1352–62 (Eng. Abstr.) **(Rus)**

[Antigenic structure of the foot–and–mouth disease virus. II.

Synthesis of protective peptides from the major immunogenic region of VP1 protein of foot-and-mouth disease virus type A22] Volʹpina OM, et al. **Bioorg Khim** 1988 Oct;14(10):1363-71 (Eng. Abstr.) **(Rus)**

[Effect of the thymus on the activity of immunoreactive peptides] Kalashnikov SG, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):234-6 (Eng. Abstr.) **(Rus)**

[Antigenic properties of synthetic fragments of the heavy chain of influenza virus A hemagglutinin] Samukov VV, et al. **Mol Gen Mikrobiol Virusol** 1988 Jul;(7):35-9 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Chromatographic equipment for large-scale protein and peptide purification. Johansson H, et al. **Adv Biotechnol Processes** 1988;8:127-57

Purified human early pregnancy factor from preimplantation embryo possesses immunosuppresive properties. Bose R, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):954-60

Isolation of a translation-inhibiting peptide from myocardium. Havre PA, et al. **Am J Physiol** 1988 Nov; 255(5 Pt 2):H1024-31

Superoxide anion is an endothelium-derived contracting factor. Katusic ZS, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H33-7

The use of plasma desorption time-of-flight mass spectrometry to screen for products of prohormone processing in crude tissue extracts. Andrews PC, et al. **Anal Biochem** 1988 Oct;174(1):23-31

Sodium dodecyl sulfate-gel electrophoresis: staining of polypeptides using heavy metal salts. Dzandu JK, et al. **Anal Biochem** 1988 Oct;174(1):157-67

Fixation increases sensitivity of India ink staining of proteins and peptides on nitrocellulose paper [published erratum appears in Anal Biochem 1989 Apr;178(1):215] Li KW, et al. **Anal Biochem** 1988 Oct;174(1):97-100

Peptide production from proteins separated by sodium dodecyl-sulfate polyacrylamide gel electrophoresis. Prussak CE, et al. **Anal Biochem** 1989 May 1;178(2):233-8

Coomassie blue-sodium dodecyl sulfate-polyacrylamide gel electrophoresis for direct visualization of polypeptides during electrophoresis. Schägger H, et al. **Anal Biochem** 1988 Aug 15;173(1):201-5

Prevention of aggregation of synthetic membrane-spanning peptides by addition of detergent. Tomich JM, et al. **Anal Biochem** 1988 Oct;174(1):197-203

Generation of peptides suitable for sequence analysis by proteolytic cleavage in reversed-phase high-performance liquid chromatography solvents. Welinder KG. **Anal Biochem** 1988 Oct;174(1):54-64

Application of free-solution capillary electrophoresis to the analytical scale separation of proteins and peptides. Grossman PD, et al. **Anal Chem** 1989 Jun 1;61(11):1186-94

Capillary zone electrophoretic separation of peptides and proteins using low pH buffers in modified silica capillaries. McCormick RM. **Anal Chem** 1988 Nov 1;60(21):2322-8

Toxicity and partial structure of a hepatotoxic peptide produced by the cyanobacterium Nodularia spumigena Mertens emend. L575 from New Zealand. Carmichael WW, et al. **Appl Environ Microbiol** 1988 Sep;54(9):2257-63

Isolation and characterization of six proteins from rabbit parotid saliva belonging to a unique family of proline-rich proteins. Spielman AI, et al. **Arch Oral Biol** 1989; 34(2):117-30

Connective tissue activation. XXXIII. Biologically active cleavage products of CTAP-III from human platelets. Castor CW, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):1071-8

Regional distribution of immunoreactive endothelin in porcine tissue: abundance in inner medulla of kidney [published erratum appears in Biochem Biophys Res Commun 1989 Aug 30;163(1):666] Kitamura K, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):348-52

Presence of endothelin-1 in porcine spinal cord: isolation and sequence determination. Shinmi O, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):340-6

Isolation and primary structure of human peptide YY. Tatemoto K, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):713-7

Purification, characterization, and amino acid sequence of the mating pheromone Er-10 of the ciliate Euplotes raikovi. Raffioni S, et al. **Biochemistry** 1989 Jun 13;28(12):5250-6

Purification and partial characterization of a transcription-inhibitory peptide from Tetrahymena. Andersen HA, et al. **Biol Chem Hoppe Seyler** 1989 Jan; 370(1):41-6

Isolation of the boar sperm acrosin peptide released during the conversion of alpha-form into beta-form. Zelezná B, et al. **Biol Chem Hoppe Seyler** 1989 Apr;370(4):323-7

Characterization of a 23 kDa sperm-binding polypeptide of the golden hamster epididymis. Hoos PC, et al. **Biol Reprod** 1988 Aug;39(1):131-40

Thin layer chromatography of peptides and proteins: a review. Bhushan R, et al. **Biomed Chromatogr** 1989 May; 3(3):95-104 (101 ref.)

Partial purification and characterization of a neurite-promoting factor from the injured goldfish optic nerve. Caday CG, et al. **Brain Res Mol Brain Res** 1989 Jan;5(1):45-50

Isolation from porcine intestinal extracts of a cholecystokinin-like peptide and a peptide with homology to cytochrome oxidase polypeptide VII and chymodenin. McIntosh CH, et al. **Can J Physiol Pharmacol** 1988 Nov; 66(11):1407-14

Copurification of kinesin polypeptides with microtubule-stimulated Mg-ATPase activity and kinetic analysis of enzymatic properties. Wagner MC, et al. **Cell Motil Cytoskeleton** 1989;12(4):195-215

Isolation of a peptide associated with autoimmune haemolytic anaemia from red cell membranes. Kajii E, et al. **Clin Exp Immunol** 1988 Sep;73(3):406-9

A novel group of sperm activating peptides from the sea urchin Glyptocidaris crenularis. Suzuki N, et al. **Comp Biochem Physiol [C]** 1988;90(2):305-11

Immunochemical detection of peptides and proteins on press-blots after direct tissue gel isoelectric focusing. van der Sluis PJ, et al. **Electrophoresis** 1988 Oct;9(10):654-61

Isolation of luteinizing hormone receptor binding inhibitor from ovine corpora lutea. Kumar N, et al. **Endocr Res** 1988-89;14(4):319-43

Isolation and biological activity of corticostatic peptides (anti-ACTH). Zhu Q, et al. **Endocr Res** 1989; 15(1-2):129-49

Isolation and structure of two novel 6-kDa dimeric peptides from the corpora cardiaca of the insect Locusta migratoria. Molecular mass determination by mass spectrometry. Hietter H, et al. **Eur J Biochem** 1989 Jun 1;182(1):77-84

Identification of highly acidic peptides from processing of the skin prepropeptides of Xenopus laevis. Nutkins JC, et al. **Eur J Biochem** 1989 Apr 15;181(1):97-102

A cAMP-triggered release of a hormone-like peptide. Riven-Kreitman R, et al. **FEBS Lett** 1988 Nov 7; 239(2):245-50

Isolation and structure of corazonin, a cardioactive peptide from the American cockroach. Veenstra JA. **FEBS Lett** 1989 Jul 3;250(2):231-4

Isolation of a human seminal plasma peptide with bombesin-like activity. Gnessi L, et al. **Fertil Steril** 1989 Jun;51(6):1034-9

Purification, primary structure, and biological activity of guinea pig neutrophil cationic peptides. Yamashita T, et al. **Infect Immun** 1989 Aug;57(8):2405-9

Solid phase synthesis and biological activity of mast cell degranulating (MCD) peptide: a component of bee venom. Buku A, et al. **Int J Pept Protein Res** 1989 Feb;33(2):86-93

Lanthiopeptin, a new peptide antibiotic. Production, isolation and properties of lanthiopeptin. Naruse N, et al. **J Antibiot (Tokyo)** 1989 Jun;42(6):837-45

A new immunomodulator, FR-900490. Shibata T, et al. **J Antibiot (Tokyo)** 1988 Sep;41(9):1163-9

Isolation of a sexual sporulation hormone from Aspergillus nidulans. Champe SP, et al. **J Bacteriol** 1989 Jul; 171(7):3982-8

Purification of limited tryptic fragments of Ca2+,Mg2+-adenosine triphosphatase of the sarcoplasmic reticulum and identification of conformation-sensitive cleavage sites. Imamura Y, et al. **J Biochem (Tokyo)** 1989 May;105(5):775-81

Tachyplesin, a class of antimicrobial peptide from the hemocytes of the horseshoe crab (Tachypleus tridentatus). Isolation and chemical structure. Nakamura T, et al. **J Biol Chem** 1988 Nov 15;263(32):16709-13

Complete sequences of glucagon-like peptide-1 from human and pig small intestine. Orskov C, et al. **J Biol Chem** 1989 Aug 5;264(22):12826-9

Primary structure of a human small nuclear ribonucleoprotein polypeptide as deduced by cDNA analysis. Rokeach LA, et al. **J Biol Chem** 1989 Mar 25;264(9):5024-30

Hydrophobic interaction chromatography of peptides as an alternative to reversed-phase chromatography. Alpert AJ. **J Chromatogr** 1988 Jul 1;444:269-74

Cation-exchange chromatography of peptides on poly(2-sulfoethyl aspartamide)-silica. Alpert AJ, et al. **J Chromatogr** 1988 Jun 29;443:85-96

Effects of reductive alkylation on peptide retention times. Brown EM, et al. **J Chromatogr** 1988 Jun 29;443:247-54

Rapid preparative-scale purification of peptides derived from caseins using mass ion-exchange chromatography. Chaplin LC, et al. **J Chromatogr** 1988 Oct 26;450(3):420-5

Preparative separation of peptide and protein samples by high-performance liquid chromatography with gradient elution. II. Experimental examples compared with theory. Cox GB, et al. **J Chromatogr** 1988 Jul 1;444:325-44

Isolation and comparative peptide mapping of fibrinogen subunits by reversed-phase high-performance liquid chromatography. Ebert RF, et al. **J Chromatogr** 1988 Jun 29;443:309-16

Analysis and purification of toxic peptides from cyanobacteria by reversed-phase high-performance liquid chromatography. Harada K, et al. **J Chromatogr** 1988 Sep 2;448(2):275-83

High-performance liquid chromatography of amino acids, peptides and proteins. LXXXVI. The influence of different displacer salts on the retention and bandwidth properties of proteins separated by isocratic anion-exchange chromatography. Hearn MT, et al. **J Chromatogr** 1988 Jun 29;443:97-118

Separation of peptides by multimode chromatography on a column packed with vinyl alcohol copolymer gel. Hirata N, et al. **J Chromatogr** 1988 Dec 29;434(1):71-82

Chromatographic resolution of dipeptide enantiomers and diastereomers on chiral stationary phases from poly(L-leucine) or poly(L-phenylalanine). Hirayama C, et al. **J Chromatogr** 1988 Oct 21;450(2):271-6

Preparative purification of peptides by reversed-phase chromatography. Sample displacement mode versus gradient elution mode. Hodges RS, et al. **J Chromatogr** 1988 Jul 1;444:349-62

Applications of preparative high-performance liquid chromatography to the separation and purification of peptides and proteins. Huang JX, et al. **J Chromatogr** 1989 Aug 11;492:431-69 (180 ref.)

Separation of peptides from sodium dodecyl sulphate by high-performance liquid chromatography. Kaplan B, et al. **J Chromatogr** 1989 Feb 24;487(2):450-5

High-performance capillary electrophoresis in the biological sciences. Karger BL, et al. **J Chromatogr** 1989 Aug 11; 492:585-614 (122 ref.)

Rapid analysis of proteins and peptides by reversed-phase chromatography with polymeric micropellicular sorbents. Maa YF, et al. **J Chromatogr** 1988 Jul 8;445(1):71-86

Purification of nucleotide-linked peptide. Pandey VN, et al. **J Chromatogr** 1988 Jul 1;444:133-9

High-performance immobilized-metal-ion affinity chromatography of peptides and proteins. Porath J. **J Chromatogr** 1988 Jun 29;443:3-11

Preparative separation of peptide and protein samples by high-performance liquid chromatography with gradient elution. I. The Craig model as a basis for computer simulations. Snyder LR, et al. **J Chromatogr** 1988 Jul 1; 444:303-24

Application of Marfey's reagent in racemization studies of amino acids and peptides. Szókán G, et al. **J Chromatogr** 1988 Jul 1;444:115-22

Elimination of contaminating Escherichia coli peptides in the purification of Escherichia coli-derived recombinant human interferon-beta 1 by zinc chelate affinity chromatography. Utsumi J, et al. **J Chromatogr** 1989 May 5;490(1):193-7

Peptide separation and isolation with an automated amino acid analyzer. Nicolaou V, et al. **J Chromatogr Sci** 1984 Jul;22(7):285-7

Human polymorphonuclear leukocyte activating factor isolated from Aleurites Fordii Hemsl. (Euphorbiaceae) seed. Shichijo S, et al. **J Clin Lab Immunol** 1988 Dec; 27(4):183-9

Thyrotrophin-releasing hormone-related polypeptides in rabbit prostate and semen are different from those in rabbit hypothalamus. Cockle SM, et al. **J Endocrinol** 1989 Jan; 120(1):31-6

Human eosinophil cytotoxicity-enhancing factor. Purification, physical characteristics, and partial amino acid sequence of an active polypeptide. Silberstein DS, et al. **J Immunol** 1989 Aug 1;143(3):979-83

Preparative isolation of p67, A, B, B' and D from nRNP/Sm and Sm antigens by reverse-phase chromatography. Use in a polypeptide-specific ELISA for independent quantitation of anti-nRNP and anti-Sm antibodies. Williams DG, et al. **J Immunol Methods** 1988 Oct 4; 113(1):25-35

The generation of valosin-like peptides from a precursor protein in vitro as an extraction artifact. Gill JS, et al. **Life Sci** 1989;44(7):483-91

Antibodies to rat sperm tail polypeptides recognize Sertoli cell secretory proteins. Kierszenbaum AL, et al. **Mol Cell Biochem** 1989 Feb 21;85(2):171-9

Structural polypeptides of feline parvovirus subspecies viruses. Mochizuki M, et al. **Nippon Juigaku Zasshi** 1988 Dec;50(6):1207-14

Presence of multiple species of polypeptides immunologically related to transcription factor TFIIIA in adult Xenopus tissues. Yasui W, et al. **Nucleic Acids Res** 1989 Jul 25; 17(14):5597-610

Helodermin-like peptides in thyroid C cells: stimulation of thyroid hormone secretion and suppression of calcium incorporation into bone. Grunditz T, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1357-61

Biochemical consideration of human early pregnancy factor (EPF). Sueoka K, et al. **Prog Clin Biol Res** 1989;294:317-29

The neutrophil-activating protein (NAP-1) is also chemotactic for T lymphocytes. Larsen CG, et al. **Science** 1989 Mar 17;243(4897):1464-6

High resolution of honey bee (Apis mellifera) venom peptides by propionic acid/urea polyacrylamide gel electrophoresis after ethanol precipitation. Chettibi S, et al. **Toxicon** 1989; 27(7):781-7

Improved method for purification of toxic peptides produced by cyanobacteria. Harada K, et al. **Toxicon** 1988; 26(5):433-9

Testicular immunosuppressive peptide. Pöllänen P, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):1144-6

Micro-level protein and peptide separations. Wilson KJ. **Trends Biochem Sci** 1989 Jul;14(7):252-5 (19 ref.)

[Isolation and structure determination of two peptides occurring in human seminal plasma] Schneider K, et al. **Biol Chem Hoppe Seyler** 1989 Apr;370(4):353-6 (Eng. Abstr.) **(Ger)**

METABOLISM

Rescue effect of exogenous reduced folates on methotrexate polyglutamylation and dihydrofolate reductase activity in L1210 cells. Balińska M. **Acta Biochim Pol** 1988; 35(3):199-205

Salivary peptide P-C' of human pancreatic B-cells shares only partly immunoreactivity with salivary peptide P-C

indicating a new B-cell protein which is different from insulin. Ito S, et al. **Acta Endocrinol (Copenh)** 1989 Jan; 120(1):62–8

An immunohistochemical study of somatostatin–containing nerves in the aganglionic colon of human and rat. Hirose R, et al. **Acta Neuropathol (Berl)** 1989;78(4):372–9

Peptide hormone expression and precursor processing. Rehfeld JF, et al. **Acta Oncol** 1989;28(3):315–8 (25 ref.)

Immunohistochemical evidence of galanin in sensory nerves of human digital skin. Johansson O, et al. **Acta Physiol Scand** 1988 Feb;132(2):261–3

Metabolism of peptide leukotrienes in the rat. Rokach J, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:102–7

The liver peptides after chronic administration of ethanol in rats. Farbiszewski R, et al. **Alcohol Alcohol** 1988; 23(4):283–8

In vivo inflammatory activity of neutrophil–activating factor, a novel chemotactic peptide derived from human monocytes. Colditz I, et al. **Am J Pathol** 1989 Apr; 134(4):755–60

Endotoxin–induced shock in the rat. A role for C5a. Smedegård G, et al. **Am J Pathol** 1989 Sep;135(3):489–97

Galanin release during pancreatic nerve stimulation is sufficient to influence islet function. Dunning BE, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E191–8

Signal transmission after GLP–1(7–36)amide binding in RINm5F cells. Göke R, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):G397–401

Autoradiographic distribution in rat tissues of binding sites for endothelin: a neuropeptide? Koseki C, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):R858–66

A peptide from alveolar macrophages that releases neutrophil enzymes into the lungs in patients with the adult respiratory distress syndrome. Cohen AB, et al. **Am Rev Respir Dis** 1988 May;137(5):1151–8

A new metal–peptide complex displays the activity of superoxide dismutase. Luo GM, et al. **Ann N Y Acad Sci** 1988;542:79–82

Fermentation of peptides and amino acids by a monensin–sensitive ruminal Peptostreptococcus. Chen GJ, et al. **Appl Environ Microbiol** 1988 Nov;54(11):2742–9

Modulation of rat prostatic inhibinlike peptide (PIP) by steroids and protein hormones. Teni TR, et al. **Arch Androl** 1988;20(3):211–7

Prothymosin alpha and parathymosin: mRNA and polypeptide levels in rodent tissues. Clinton M, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):256–63

Structure–activity relationships for glycine–extended peptides and the alpha–amidating enzyme derived from medullary thyroid CA–77 cells. Tamburini PP, et al. **Arch Biochem Biophys** 1988 Dec;267(2):623–31

Competitive interaction between endothelin and sarafotoxin: Binding and phosphoinositides hydrolysis in rat atria and brain. Ambar I, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):195–201

High and low affinity binding sites for endothelin on cultured rat glomerular mesangial cells. Badr KF, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):776–81

Functional endothelin/sarafotoxin receptors in the rat uterus. Bousso–Mittler D, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):952–7

A peptide substrate for Escherichia coli protein kinase activity in vitro. Dadssi M, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):552–8

Mutation affecting peptide bond formation in nikkomycin biosynthesis. Engel P, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):695–700

Functional endothelin/sarafotoxin receptors in rat heart myocytes: structure–activity relationships and receptor subtypes. Galron R, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):936–43

Specific receptor for endothelin in cultured rat cardiocytes. Hirata Y, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1438–44

Identification and characterization of endothelin binding sites in rat renal papillary and glomerular membranes. Martin ER, et al. **Biochem Biophys Res Commun** 1989 Jul 14; 162(1):130–7

Cyclosporine increases endothelin–1 binding site density in cardiac cell membranes. Nayler WG, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1270–4

Sarafotoxin S6c is a relatively weak displacer of specifically bound 125I–endothelin. Nayler WG, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):89–94

Identification of two types of specific endothelin receptors in rat mesangial cell. Sugiura M, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1396–401

Two distinct types of endothelin receptors are present on chick cardiac membranes. Watanabe H, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1252–9

Evidence for the involvement of a gastrointestinal peptide in the regulation of glucose uptake in the mammary gland of the lactating rat. Page T. **Biochem J** 1989 Mar 15; 258(3):639–43

Metabolism of vasoactive peptides by vascular endothelium and smooth muscle aminopeptidase M. Palmieri FE, et al. **Biochem Pharmacol** 1989 Jan 1;38(1):173–80

Formation and retention and biological activity of N10–propargyl–5,8–dideazafolic acid (CB3717) polyglutamates in L1210 cells in vitro. Sikora E, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4047–54

Interaction of the Saccharomyces cerevisiae alpha–factor with phospholipid vesicles as revealed by proton and phosphorus NMR. Jelicks LA, et al. **Biochemistry** 1989 May 16;28(10):4233–40

Kinetic properties of the binding of alpha–lytic protease to peptide boronic acids. Kettner CA, et al. **Biochemistry** 1988 Oct 4;27(20):7682–8

High–resolution NMR studies of fibrinogen–like peptides in solution: structure of a thrombin–bound peptide corresponding to residues 7–16 of the A alpha chain of human fibrinogen. Ni F, et al. **Biochemistry** 1989 Apr 4; 28(7):3094–105

Binding of amphiphilic peptides to a carboxy–terminal tryptic fragment of calmodulin. Sanyal G, et al. **Biochemistry** 1988 Aug 23;27(17):6229–36

Phosphorylation of alpha alpha– and beta beta–tropomyosin and synthetic peptide analogues. Watson MH, et al. **Biochemistry** 1988 Jun 14;27(12):4506–12

Binding of alpha–bungarotoxin to synthetic peptides corresponding to residues 173–204 of the alpha subunit of Torpedo, calf, and human acetylcholine receptor and restoration of high–affinity binding by sodium dodecyl sulfate. Wilson PT, et al. **Biochemistry** 1988 Sep 6; 27(18):6667–74

Oxidation of amino acids and peptides in reaction with myeloperoxidase, chloride and hydrogen peroxide. Drozdź R, et al. **Biochim Biophys Acta** 1988 Nov 2;957(1):47–52

Detection and characterization of anionic polypeptide fraction binding sites in rat liver plasma membranes and cultured hepatocytes. Martigne M, et al. **Biochim Biophys Acta** 1989 Mar 13;979(3):341–6

The specificity of two proteinases that cleave adjacent to arginine, C1 esterase and acrosin, for peptide p–nitroanilide substrates. Skoog MT, et al. **Biochim Biophys Acta** 1989 Jun 13;996(1–2):89–94

ADP–ribosyl proteins formed by pertussis toxin are specifically cleaved by mercury ions. Meyer T, et al. **Biol Chem Hoppe Seyler** 1988 Jul;369(7):579–83

Conformation and orientation of regulatory peptides on lipid membranes. Key to the molecular mechanism of receptor selection. Sargent DF, et al. **Biophys Chem** 1988 Aug; 31(1–2):183–93

Conformation and ion binding properties of peptides related to calcium binding domain III of bovine brain calmodulin. Borin G, et al. **Biopolymers** 1989 Jan;28(1):353–69

Structural and energetic parameters of Ca2+ binding to peptides and proteins. Hori K, et al. **Biopolymers** 1988 Dec; 27(12):1865–86

Immunoreactivity of various peptides in typical and atypical bronchopulmonary carcinoid tumours. al–Saffar N, et al. **Br J Cancer** 1988 Dec;58(6):762–6

Binding specificity and presynaptic action of anaphylatoxin C5a in rat brain. Schupf N, et al. **Brain Behav Immun** 1989 Mar;3(1):28–38

VIP–, SS–, and GABA–like immunoreactivity in the mid–hippocampal region of El (epileptic) and C57BL/6 mice. King JT Jr, et al. **Brain Res** 1988 Dec 13;475(1):192–7

Ultrastructural localization of neuropeptide Y and galanin immunoreactivity in the paraventricular nucleus of the hypothalamus in the rat. Sawchenko PE, et al. **Brain Res** 1988 Dec 6;474(2):231–45

Glycine high–affinity uptake labels a subpopulation of somatostatin–like immunoreactive cells in the Rana pipiens retina. Smiley JF, et al. **Brain Res** 1989 Aug 21;495(1):31–44

Basal forebrain lesions differentially alter galanin levels and acetylcholinergic receptors in the hippocampus and neocortex. Wenk GL, et al. **Brain Res** 1988 Sep 13; 460(1):17–21

Neurons with galanin innervate cholinergic cells in the human basal forebrain and galanin and acetylcholine coexist. Chan–Palay V. **Brain Res Bull** 1988 Sep; 21(3):465–72

Methylazoxymethanol–induced microencephaly: persistent increase of cortical somatostatin–like immunoreactivity. Cattabeni F, et al. **Brain Res Dev Brain Res** 1989 May 1;47(1):156–9

The postnatal expression of acetylcholinesterase in somatostatin–positive cells of mouse hippocampus. Forloni G, et al. **Brain Res Dev Brain Res** 1989 Jul 1;48(1):73–85

Inherent resistance of human squamous carcinoma cell lines to methotrexate as a result of decreased polyglutamylation of this drug. Pizzorno G, et al. **Cancer Res** 1989 Oct 1; 49(19):5275–80

The carboxy–terminal segment of the yeast alpha–factor receptor is a regulatory domain. Reneke JE, et al. **Cell** 1988 Oct 21;55(2):221–34

Acrylamide treatment of PtK1 cells causes dephosphorylation of keratin polypeptides. Eckert BS, et al. **Cell Motil Cytoskeleton** 1988;11(1):24–30

Cysteamine and the endocrine pancreas: immunocytochemical, immunochemical, and functional aspects. Ahrén B, et al. **Cell Tissue Res** 1989 Apr; 256(1):159–66

Galanin–, neuropeptide Y– and enkephalin–like immunoreactivities in catecholamine–storing paraganglia of the fetal guinea pig and newborn pig. Fried G, et al. **Cell Tissue Res** 1989 Mar;255(3):495–504

Neuronal galanin is widely distributed in the chicken respiratory tract and coexists with multiple neuropeptides. Luts A, et al. **Cell Tissue Res** 1989 Apr;256(1):95–103

Role of peptide structure in lipid–peptide interactions: nuclear magnetic resonance study of the interaction of pentagastrin and [Arg4]pentagastrin with dimyristoylphosphatidylcholine. Epand RM, et al. **Chem Phys Lipids** 1988 Nov;49(1–2):105–10

Pressure releases a transferable endothelial contractile factor in cat cerebral arteries. Harder DR, et al. **Circ Res** 1989 Jul;65(1):193–8

Serum IgA preferentially binds to cationic polypeptides in IgA nephropathy. Monteiro RC, et al. **Clin Exp Immunol** 1988 Aug;73(2):300–6

Endothelin receptors in rat adrenal gland visualized by quantitative autoradiography. Kohzuki M, et al. **Clin Exp Pharmacol Physiol** 1989 Apr;16(4):239–42

Rat aortic endothelium antagonizes nitroprusside–induced relaxation by release of the peptide endothelin. MacDonald PS, et al. **Clin Exp Pharmacol Physiol** 1989 Apr;16(4):223–7

Binding sites for 125I–labelled endothelin–1 in the kidneys: differential distribution in rat, pig and man demonstrated by using quantitative autoradiography. Davenport AP, et al. **Clin Sci** 1989 Aug;77(2):129–31

Transepithelial transport of peptides. Peterson DR, et al. **Contrib Nephrol** 1988;68:45–52

Occurrence, distribution and motor effects of galanin in the porcine lower esophageal sphincter. Harling H, et al. **Digestion** 1989;42(3):151–7

Regulation and secretion of proopiomelanocortin peptides from isolated perifused dog pituitary pars intermedia cells. Kemppainen RJ, et al. **Endocrinology** 1989 May; 124(5):2208–17

Presence of calcitonin–like peptide in rat milk: possible physiological role in regulation of neonatal prolactin secretion. Shah GV, et al. **Endocrinology** 1989 Jul; 125(1):61–7

Interleukin–2 receptor/p55(Tac)–inducing activity in porcine follicular fluids. Takakura K, et al. **Endocrinology** 1989 Aug;125(2):618–23

Galanin receptor and its ligands in the rat hippocampus. Fisone G, et al. **Eur J Biochem** 1989 Apr 15;181(1):269–76

Sarafotoxin S6b displaces specifically bound 125I–endothelin. Gu XH, et al. **Eur J Pharmacol** 1989 Mar 29;162(3):509–10

Autoradiographic localisation of endothelin binding sites in kidney. Jones CR, et al. **Eur J Pharmacol** 1989 Apr 25; 163(2–3):379–82

Localization of endothelin receptors in rat kidney. Kohzuki M, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):193–4

Thrombin enhances the release of endothelin from cultured porcine aortic endothelial cells. Schini VB, et al. **Eur J Pharmacol** 1989 Jun 20;165(2–3):333–4

Regulatory peptide receptors: visualization by autoradiography. Palacios JM, et al. **Experientia Suppl** 1989;56:70–97 (137 ref.)

Meal–induced peptide tyrosine tyrosine inhibition of pancreatic secretion in the rat. Aponte GW, et al. **FASEB J** 1989 Jun;3(8):1949–55

Neutral endopeptidase 24.11 (enkephalinase) and related regulators of peptide hormones. Erdös EG, et al. **FASEB J** 1989 Feb;3(2):145–51 (42 ref.)

The constituents of storage granules in the dermal glands of Xenopus laevis. Structure of a basic polypeptide deduced from cloned cDNA. Berger H, et al. **FEBS Lett** 1989 Jun 5;249(2):293–6

ATP–dependent peptide release from mitochondria of reticulocytes. Dubiel W, et al. **FEBS Lett** 1989 Jul 3; 250(2):289–92

Binding and receptor down–regulation of a novel vasoconstrictor endothelin in cultured rat vascular smooth muscle cells. Hirata Y, et al. **FEBS Lett** 1988 Oct 24; 239(1):13–7

Identification of zymogen and mature forms of human carboxypeptidase H. A processing enzyme for the synthesis of peptide hormones. Hook VY, et al. **FEBS Lett** 1988 Oct 10;238(2):338–42

The amino–terminal sequences in the pro–alpha and –beta polypeptides of human lysosomal beta–hexosaminidase A and B are retained in the mature isozymes. Hubbes M, et al. **FEBS Lett** 1989 Jun 5;249(2):316–20

Identification and characterization of glucagon–like peptide–1 7–36 amide–binding sites in the rat brain and lung. Kanse SM, et al. **FEBS Lett** 1988 Dec 5; 241(1–2):209–12

Three apparent receptor subtypes for the endothelin/sarafotoxin family. Kloog Y, et al. **FEBS Lett** 1989 Aug 14;253(1–2):199–202

Isolation and characterisation of GLP–1 7–36 amide from rat intestine. Elevated levels in diabetic rats. Kreymann B, et al. **FEBS Lett** 1988 Dec 19;242(1):167–70

Expression and electrophysiological identification of the receptor for bombesin and gastrin–releasing peptide in Xenopus laevis oocytes injected with polyA+ RNA from rat brain. Meyerhof W, et al. **FEBS Lett** 1988 Oct 24; 239(1):109–12

Carboxypeptidase–B–like processing of the C–terminus of glucagon–like peptide–2 in pig and human small intestine. Orskov C, et al. **FEBS Lett** 1989 Apr 24;247(2):193–6

Biochemical and antigenic characterization of CD45 polypeptides expressed on plasma membrane and internal granules of human neutrophils. Pulido R, et al. **FEBS Lett** 1989 Jun 5;249(2):337–42

Na+, K+–specific inhibition of protein and peptide hydrolyses by proteasomes from human hepatoma tissues. Seol JH, et al. **FEBS Lett** 1989 Apr 24;247(2):197–200

Comparative free–radical chemistry in the radiolytic

deamination and dephosphorylation of bio-organic molecules. I. Oxygen-free solutions. Garrison WM. **Free Radic Biol Med** 1989;6(3):285-8

Why does the gastric oxyntic gland mucosa contain gastrin-releasing peptide nerve fibers? [editorial] Walsh JH. **Gastroenterology** 1989 Sep;97(3):793-5

The interaction between fibrinogen and 3H-L-arginine cationic peptides derived from fibrosarcoma in the presence of thrombin. Farbiszewski R, et al. **Haematologia (Budap)** 1988;21(3):169-73

Localisation of mRNA and co-expression and molecular forms of GRP gene products in endocrine cells of fetal human lung. Bhatnagar M, et al. **Histochemistry** 1988; 90(4):299-307

Techniques for the simultaneous demonstrations of neuropeptide y gene expression and peptide storage in single neurons of the human brain. Chan-Palay V. **Histochemistry** 1988;90(2):123-7

Distribution of cytokeratin polypeptides in epithelia of the adult human urinary tract. Schaafsma HE, et al. **Histochemistry** 1989;91(2):151-9

Suppression of LH levels in male rats by a 10 K dalton peptide isolated from human testes. Hurkadli KS, et al. **Indian J Exp Biol** 1988 Jul;26(7):513-5

Adsorbed salivary proline-rich protein 1 and statherin: receptors for type 1 fimbriae of Actinomyces viscosus T14V-J1 on apatitic surfaces. Gibbons RJ, et al. **Infect Immun** 1988 Nov;56(11):2990-3

Intermediate peptides of insulin degradation in liver and cultured hepatocytes of rats. Takahashi S, et al. **Int J Biochem** 1988;20(12):1369-80

Laminin and other basal lamina proteins with neurite promoting activity in medium conditioned by C6 glioma cells. Westermann R, et al. **Int J Dev Neurosci** 1989; 7(2):219-30

A surface component on GH3 pituitary cells that recognizes transforming growth factor-beta, activin, and inhibin. Cheifetz S, et al. **J Biol Chem** 1988 Nov 25;263(33):17225-8

Crystallization of a synthetic analog of calcium-binding site III of rabbit skeletal troponin C. Delbaere LT, et al. **J Biol Chem** 1989 Jun 15;264(17):10261-3

Chemical modification of bovine pancreatic trypsin inhibitor for single site coupling of immunogenic peptides for NMR conformational analysis. Ebina S, et al. **J Biol Chem** 1989 May 15;264(14):7882-8

Wild-type and drug-resistant Leishmania major hydrolyze methotrexate to N-10-methyl-4-deoxy-4-aminopteroate without accumulation of methotrexate polyglutamates. Ellenberger TE, et al. **J Biol Chem** 1989 Sep 25; 264(27):15960-6

Properties of lipid complexes with amphipathic helix-forming peptides. Role of distribution of peptide charges. Epand RM, et al. **J Biol Chem** 1989 Mar 15;264(8):4628-35

Identification and characterization of cellular receptors for the growth regulator, oncostatin M. Linsley PS, et al. **J Biol Chem** 1989 Mar 15;264(8):4282-9

The effects of deletions in the central helix of calmodulin on enzyme activation and peptide binding. Persechini A, et al. **J Biol Chem** 1989 May 15;264(14):8052-8

Peptide analogues compete with the binding of alpha-factor to its receptor in Saccharomyces cerevisiae. Raths SK, et al. **J Biol Chem** 1988 Nov 25;263(33):17333-41

Autoradiographical localization of binding sites for porcine [125I]endothelin-1 in humans, pigs, and rats: functional relevance in humans. Davenport AP, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S166-70

Characterization of [125I]endothelin-1 binding sites in rat cardiac membrane fragments. Gu XH, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S171-3

Endothelin-1 receptors in cultured vascular smooth muscle cells and cardiocytes of rats. Hirata Y. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S157-8

[125I]endothelin-1 binding sites: autoradiographic studies in the brain and periphery of various species including humans. Hoyer D, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S162-5

Binding sites for endothelin-1 in rat tissues: an autoradiographic study. Koseki C, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S153-4

Identification of the endothelin-1 receptor in the chick heart. Miyazaki H, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S155-6

Endothelin-1 receptors in rat renal glomeruli. Orita Y, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S159-61

Autoradiographic localization of endothelin-1 binding sites in the cardiovascular and respiratory systems. Power RF, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S50-6; discussion S74

Characterization of a bombesin receptor on Swiss mouse 3T3 cells by affinity cross-linking. Sinnett-Smith J, et al. **J Cell Biochem** 1988 Dec;38(4):237-49

Cytoplasmic, nuclear, membrane-bound and secreted [35S]methionine-labelled polypeptide pattern in differentiating fibroblast stem cells in vitro. Francz PI, et al. **J Cell Sci** 1989 Feb;92 (Pt 2):231-9

Effect of peptide chain length on peptide retention behaviour in reversed-phase chromatography. Mant CT, et al. **J Chromatogr** 1988 Dec 23;458:193-205

Specific binding of endothelin on human vascular smooth muscle cells in culture. Clozel M, et al. **J Clin Invest** 1989 May;83(5):1758-61

Endothelin binding to cultured calf adrenal zona glomerulosa cells and stimulation of aldosterone secretion. Cozza EN, et al. **J Clin Invest** 1989 Sep;84(3):1032-5

Distribution of somatostatin-like immunoreactivity in the monkey amygdala. Amaral DG, et al. **J Comp Neurol** 1989 Jun 8;284(2):294-313

Light and electron microscopic study of galanin-immunoreactive nerve fibers in the rat posterior thalamus. Blasco I, et al. **J Comp Neurol** 1989 May 1; 283(1):1-12

Distribution of somatostatin (SRIF) in the brain and pituitary of Eigenmannia lineata (Gymnotiformes, Teleostei). An immunohistochemical study. Bonn U, et al. **J Hirnforsch** 1989;30(2):203-12

Quantitative evaluation of congo red binding to amyloid-like proteins with a beta-pleated sheet conformation. Klunk WE, et al. **J Histochem Cytochem** 1989 Aug;37(8):1273-81

Secretion of novel and homologous neutrophil-activating peptides by LPS-stimulated human endothelial cells. Schröder JM, et al. **J Immunol** 1989 Jan 1;142(1):244-51

Structural analysis of peptides capable of binding to more than one Ia antigen. Sette A, et al. **J Immunol** 1989 Jan 1;142(1):35-40

Changes in infectious flacherie virus-specific polypeptides and translatable mRNA in the midgut of the silkworm, Bombyx mori, during larval molt. Choi HK, et al. **J Invertebr Pathol** 1989 Jan;53(1):128-31

DNA-drug interactions. The crystal structure of d(CGATCG) complexed with daunomycin. Moore MH, et al. **J Mol Biol** 1989 Apr 20;206(4):693-705

Galanin-like immunoreactivity is unchanged in Alzheimer's disease and Parkinson's disease dementia cerebral cortex. Beal MF, et al. **J Neurochem** 1988 Dec;51(6):1935-41

Species distribution of paraoxon-resistant brain polypeptides radiolabelled with diisopropyl phosphorofluoridate ([3H]DiPF): electrophoretic assay for the aged polypeptide of [3H]DiPF-labelled neuropathy target esterase. Meredith C, et al. **J Neurochem** 1989 Apr;52(4):1248-52

Biosynthesis of adipokinetic hormones (AKHs): further characterization of precursors and identification of novel products of processing. Hekimi S, et al. **J Neurosci** 1989 Mar;9(3):996-1003

Sexually dimorphic polypeptides in developing antennal sensory neurons of an insect. Kingan TG, et al. **J Neurosci** 1989 Jun;9(6):1951-60

Independent release of peptide YY (PYY) into the circulation and ileal lumen of the awake dog. McFadden DW, et al. **J Surg Res** 1989 Apr;46(4):380-5

Computer automated structure evaluation (CASE): a study of inhibitors of the thermolysin enzyme. Klopman G, et al. **J Theor Biol** 1989 Jan 9;136(1):67-77

Specific receptors for endothelin on membranes from human placenta. Characterization and use in a binding assay. Fischli W, et al. **Life Sci** 1989;44(20):1429-36

Post-translational regulation of Lcr plasmid-mediated peptides in pesticinogenic Yersinia pestis. Sample AK, et al. **Microb Pathog** 1987 Oct;3(4):239-48

Specificity of a cysteine proteinase of Entamoeba histolytica against various unblocked synthetic peptides. Otte J, et al. **Mol Biochem Parasitol** 1989 Mar 15;33(3):257-63

Growth hormone-releasing hormone stimulates and somatostatin inhibits the release of a novel protein by cultured rat pituitary cells. Tachibana K, et al. **Mol Endocrinol** 1988 Oct;2(10):973-8

Gastrin-releasing peptide receptor in rat brain membranes: specific binding and stimulation of phosphoinositide breakdown. Hollingsworth EB. **Mol Pharmacol** 1989 May; 35(5):689-94

125I-neuropeptide Y and 125I-peptide YY bind to multiple receptor sites in rat brain. Walker MW, et al. **Mol Pharmacol** 1988 Dec;34(6):779-92

Isolation and characterization of human brain aminopeptidase which hydrolysis enkephalin-containing peptides. Duarte GI, et al. **Neuropeptides** 1988 Aug-Sep;12(2):67-73

Effect of cysteamine on levels of somatostatin-like immunoreactivity and catecholamines and on electroencephalogram in the rat brain. Pitkänen A, et al. **Neuropeptides** 1989 Jul;14(1):1-9

Effect of cysteamine on somatostatin-like immunoreactivity in the amygdala-kindled rat brain. Pitkänen A, et al. **Neuropeptides** 1989 Jul;14(1):11-6

Binding of growth hormone-releasing hormones and enkephalin-derived growth hormone-releasing peptides to mu and delta opioid receptors in forebrain of rat. Codd EE, et al. **Neuropharmacology** 1988 Oct;27(10):1019-25

Autoradiographic visualization of the binding sites for [125I]endothelin in rat and human brain. Jones CR, et al. **Neurosci Lett** 1989 Feb 27;97(3):276-9

Galanin-like immunoreactivity is present in human substantia innominata and in senile plaques in Alzheimer's disease. Kowall NW, et al. **Neurosci Lett** 1989 Mar 13;98(1):118-23

Development of somatostatin-like immunoreactivity in the hippocampal formation of normal and reeler mice. Naus CC. **Neurosci Lett** 1989 Jan 16;96(2):133-9

Substances released during tetanic stimulation of rabbit neocortex induce neurite growth in PC-12 cells and long-term potentiation in guinea pig hippocampus. Sastry BR, et al. **Neurosci Lett** 1988 Aug 15;91(1):101-5

Galanin-positive nerves of trigeminal origin innervate rat cerebral vessels. Suzuki N, et al. **Neurosci Lett** 1989 May 22;100(1-3):123-9

Sauvagine/urotensin I-like immunoreactivity in the brain of the dogfish, Scyliorhinus canicula. Vallarino M, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):119-24

Somatostatin-like immunoreactive material in associational ganglion cells of human retina. Sagar SM, et al. **Neuroscience** 1988 Nov;27(2):507-16

In vitro methotrexate polyglutamate formation is elevated in acute lymphoid leukemia cells compared with acute myeloid leukemia and normal bone marrow cells. Yamauchi H, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Jul;51(4):766-73

Site-specific location of covalent DNA-polypeptide complexes in the chicken genome. Werner D, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6005-15

Absence of the "incretin" phenomenon in the autotransplanted human pancreas [letter] Ginier P, et al. **Pancreas** 1988;3(6):740-1

Pancreatic enzyme secretion mediated by novel peptide: monitor peptide hypothesis. Iwai K, et al. **Pancreas** 1988; 3(6):720-8

Autoradiographic localization of peptide YY and neuropeptide Y binding sites in the medulla oblongata. Leslie RA, et al. **Peptides** 1988 Sep-Oct;9(5):1071-6

The use of alpha-aminoboronic acid derivatives to stabilize peptide drugs during their intranasal absorption. Hussain MA, et al. **Pharm Res** 1989 Feb;6(2):186-9

Receptor-mediated transport of peptide hormones and its importance in the overall hormone disposition in the body. Sugiyama Y, et al. **Pharm Res** 1989 Mar;6(3):192-202 (77 ref.)

Brain protein kinase C phosphorylating poly(arginine,serine) or lamin B is stimulated by anions and by an activator purified from bovine serum albumin preparations. Abdel-Ghany M, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1761-5

"DAKLI": a multipurpose ligand with high affinity and selectivity for dynorphin (kappa opioid) binding sites. Goldstein A, et al. **Proc Natl Acad Sci U S A** 1988 Oct; 85(19):7375-9

Turnover of Ia-peptide complexes is facilitated in viable antigen-presenting cells: biosynthetic turnover of Ia vs. peptide exchange. Harding CV, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4230-4

Voltage-gated channels formed in lipid bilayers by a positively charged segment of the Na-channel polypeptide. Tosteson MT, et al. **Proc Natl Acad Sci U S A** 1989 Jan; 86(2):707-10

Prevention of anaphylatoxin formation by high-dose corticosteroids in total hip arthroplasty. Gammer W, et al. **Prog Clin Biol Res** 1989;308:879-83

Partial characterization of a thyroid-stimulating hormone-like peptide in neuroendocrine cells of the human prostate gland. Abrahamsson PA, et al. **Prostate** 1989; 14(1):71-81

Post-translational modification of peptide messengers in the gut. Dimaline R. **Q J Exp Physiol** 1988 Nov;73(6):873-902 (203 ref.)

Lysosomal heterogeneity of dipeptidyl peptidase II active on collagen-related peptides. Andersen KJ, et al. **Renal Physiol Biochem** 1989 Jan-Feb;12(1):32-40

Polypeptide-antibody binding mechanism: conformational adaptation investigated by equilibrium and kinetic analysis. Friguet B, et al. **Res Immunol** 1989 May;140(4):355-76

Utilization of amino acids and peptides by Fusobacterium nucleatum. Bakken V, et al. **Scand J Dent Res** 1989 Feb; 97(1):43-53

Neuropeptide Y, peptide YY, and sympathetic control of rectal tone and anal canal pressure in the cat. Hellström PM, et al. **Scand J Gastroenterol** 1989 Mar;24(2):231-43

Autologous peptides constitutively occupy the antigen binding site on Ia. Buus S, et al. **Science** 1988 Nov 18; 242(4881):1045-7

Peptide binding and release by proteins implicated as catalysts of protein assembly. Flynn GC, et al. **Science** 1989 Jul 28; 245(4916):385-90

Plasmin's peptide-binding specificity: characterization of ligand sites in alpha 2-antiplasmin. Hortin GL, et al. **Thromb Res** 1989 Jun 15;54(6):621-32

Non-peptide ligands for peptide receptors. Freidinger RM. **Trends Pharmacol Sci** 1989 Jul;10(7):270-4 (29 ref.)

[Which signals of early pregnancy are known currently, what cer- tainty have they and exactly how far are they applicable in practice?] Straube W. **Zentralbl Gynakol** 1989; 111(3):187-8 **(Ger)**

[Anaphylatoxin in the aqueous humor of rabbit with endotoxin induced endophthalmitis] Kameda H, et al. **Nippon Ganka Gakkai Zasshi** 1989 Jan;93(1):22-7 (Eng. Abstr.) **(Jpn)**

[Glutathione-related peptides] Murata K. **Tanpakushitsu Kakusan Koso** 1988 Jul;33(9):1505-12 (40 ref.) **(Jpn)**

[Phosphorylation of components of high molecular weight aminoacyl-tRNA-synthetase complex from the rabbit liver by associated casein kinase type I] Elizarov SM, et al. **Biokhimiia** 1989 May;54(5):774-83 (Eng. Abstr.) **(Rus)**

[The lysosomal pathway of prolactin degradation in the mammary gland: kinetics of prolactin hydrolysis by cathepsin D and the peptides formed thereby] Marinchenko GV, et al. **Biokhimiia** 1989 Apr;54(4):629-39 (Eng. Abstr.) **(Rus)**

[Klenow fragment of DNA-polymerase I from E. coli. III. The role of internucleotide phosphate groups of the matrix in its binding with the enzyme] Volchkova VA, et al. **Bioorg Khim** 1989 Jan;15(1):78-89 (Eng. Abstr.) **(Rus)**

[Participation of the thymus in controlling cytomedine activity] Kalashnikov SG, et al. **Patol Fiziol Eksp Ter** 1989 Jan-Feb;(1):57-60 (Eng. Abstr.) **(Rus)**

[A study of hydrolysis of various synthetic peptides with gastrointestinal enzymes using thin-layer chromatography] Andreev SM, et al. **Prikl Biokhim Mikrobiol** 1989 Mar-Apr;25(2):166-71 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Gastrointestinal uptake of polypeptide fragments of food protein. Bloch KJ. **Ann Allergy** 1988 Dec;61(6 Pt 2):25-6

Absorption and excretion in the experimental animal of a 14C-ethylmaleimide labelled peptide fraction of bovine factor VIII with antihaemorrhagic activity. Conte A, et al. **Arzneimittelforschung** 1989 Apr;39(4):463-6

Autoradiographic localization of 125J-endothelin in rat tissues. Stasch JP, et al. **Arzneimittelforschung** 1989 Jan; 39(1):59-61

Enzymatic barriers to peptide and protein absorption. Lee VH. **Crit Rev Ther Drug Carrier Syst** 1988;5(2):69-97 (188 ref.)

The fate of radioiodinated endothelin-1 and endothelin-3 in the rat. Anggård E, et al. **J Cardiovasc Pharmacol** 1989; 13 Suppl 5:S46-9; discussion S74

Autoradiographic localization of [125I]endothelin-1 and [125I]atrial natriuretic peptide in rat tissue: a comparative study. Neuser D, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S67-73; discussion S74

Elimination of intravenously injected endothelin-1 from the circulation of the rat. Shiba R, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S98-101; discussion S102

In vivo utilization of cystine-containing synthetic short-chain peptides after intravenous bolus injection in the rat. Stehle P, et al. **J Nutr** 1988 Dec;118(12):1470-4

Systemic delivery of polypeptides with molecular weights of between 300 and 3500 through the eyes. Chiou GC, et al. **J Ocul Pharmacol** 1988 Summer;4(2):165-77

[Reconstruction of drug dispositions in vivo from in vitro studies based on physiological pharmacokinetic modeling: from low-molecular weight drugs to polypeptide compounds] Sugiyama Y. **Yakugaku Zasshi** 1989 Apr; 109(4):199-231 (91 ref.) (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Biological tests for opiate activity of newly-synthesized compounds--opioid peptides and cyclic beta-diketones. Petkov VD, et al. **Acta Physiol Pharmacol Bulg** 1989; 15(1):19-30

Atrial natriuretic factors (ANF) and antidiuretic agents. Croxatto HR, et al. **Acta Physiol Pharmacol Latinoam** 1988; 38(1):1-9

Potent selective vasoconstrictor effects of endothelin in the pig kidney in vivo. Pernow J, et al. **Acta Physiol Scand** 1988 Dec;134(4):573-4

Neuropeptide Y and peptide YY inhibit adenylate cyclase activity in the rat striatum. Westlind-Danielsson A, et al. **Acta Physiol Scand** 1988 Mar;132(3):425-30

Inhibition of adrenergic neuroeffector transmission by endothelin in the guinea-pig femoral artery. Wiklund NP, et al. **Acta Physiol Scand** 1988 Oct;134(2):311-2

Study of the effect of some neuropeptides and endogenous opioid peptides on in vitro histamine release from human lung mast cells and peripheral blood basophils. Miadonna A, et al. **Agents Actions** 1988 Aug;25(1-2):11-6

Influence of endothelin on human coronary arteries and localization of its binding sites. Chester AH, et al. **Am J Cardiol** 1989 Jun 1;63(18):1395-8

Dietary whey proteins and their peptides or amino acids: effects on the jejunal mucosa of starved rats. Poullain MG, et al. **Am J Clin Nutr** 1989 Jan;49(1):71-6

Neurotransmitters and peptides modulate the release of immunoreactive corticotropin-releasing factor from cultured human placental cells. Petraglia F, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):247-51

Inhibitory function of VIP-PHI and galanin in canine pylorus. Allescher HD, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):G789-97

Influence of endothelin on piglet cerebral microcirculation. Armstead WM, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H707-10

Inhibition of platelet hemostatic plug formation by trigramin, a novel RGD-peptide. Cook JJ, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1038-43

Effects of endothelin and vasopressin on cerebral blood vessels. Faraci FM. **Am J Physiol** 1989 Sep;257(3 Pt 2):H799-803

Cardiovascular, renal, and endocrine responses to intravenous endothelin in conscious dogs. Goetz KL, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):R1064-8

Hemodynamic effects of endothelin in conscious rats. Hinojosa-Laborde C, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):H1742-6

Positive inotropic action of novel vasoconstrictor peptide endothelin on guinea pig atria. Ishikawa T, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H970-3

Endothelin: a potent renal and systemic vasoconstrictor peptide. King AJ, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):F1051-8

Regional hemodynamic and baroreflex effects of endothelin in rats. Knuepfer MM, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H918-26

A structural study of the rat proximal and distal nephron: effect of peptide and thyroid hormones. Koechlin N, et al. **Am J Physiol** 1989 May;256(5 Pt 2):814-22

Analysis of regional responses to endothelin in hindquarters vascular bed of cats. Minkes RK, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H598-602

Central effect of endothelin on blood pressure in conscious rats. Ouchi Y, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):H1747-51

Inhibitory regulation of rat exocrine pancreas by peptide YY and pancreatic polypeptide. Putnam WS, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):G698-703

Endothelin has potent ulcerogenic and vasoconstrictor actions in the stomach. Wallace JL, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):G661-6

Effect of galanin on glucose-, arginine-, or potassium-stimulated insulin release. Yoshimura T, et al. **Am J Physiol** 1989 May;256(5 Pt 1):E619-23

Quantitative assessment of the biological effects of follicle regulatory protein on dihydrotestosterone-maintained spermatogenesis in hypophysectomized rat. Ahmad N, et al. **Anat Rec** 1989 Aug;224(4):508-13

Behavioral effects of bombesin. Cowan A. **Ann N Y Acad Sci** 1988;547:204-9

The effect of gastrin-releasing peptide on the endocrine pancreas. McDonald TJ, et al. **Ann N Y Acad Sci** 1988; 547:242-54

Proline-rich polypeptide (PRP) from ovine colostrum. Bi-directional modulation of binding of peanut agglutinin, resistance to hydrocortisone, and helper activity in murine thymocytes. Lisowski J, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(4):381-93

A comparison of the inhibition of blastospore viability and germ-tube development in Candida albicans by histidine peptides and ketoconazole. Santarpia RP 3d, et al. **Arch Oral Biol** 1988;33(8):567-73

Endocrine system--sanguine system relationship: antiaggregant activity of the pineal polypeptidic hormone E5 on blood platelets. Neacşu C. **Arch Roum Pathol Exp Microbiol** 1988 Apr-Jun; 47(2):125-31

Comparative assessment of poly-L-aspartic and poly-L-glutamic acids as protectants against aminoglycoside-induced nephrotoxicity. Kishore BK, et al. **Arch Toxicol Suppl** 1989;13:409-12

Decrease of diffusion of glycosylated albumin in retinal microcirculation by peptide fraction from bovine factor VIII. Ammannati P, et al. **Arzneimittelforschung** 1989 Jun; 39(6):661-4

Endothelin is a potent mitogen for rat vascular smooth muscle cells. Hirata Y, et al. **Atherosclerosis** 1989 Aug; 78(2-3):225-8

Stimulation of phospholipase C-mediated hydrolysis of phosphoinositides by endothelin in cultured rabbit aortic smooth muscle cells. Araki S, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1072-9

Endothelin and the production of cerebral vasospasm in dogs. Asano T, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1345-51

Endothelin and Ca++ agonist Bay K 8644: different vasoconstrictive properties. Auguet M, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):186-92

Neutrophil activating factor (NAF) induces polymorphonuclear leukocyte adherence to endothelial cells and to subendothelial matrix proteins. Carveth HJ, et al. **Biochem Biophys Res Commun** 1989 Jul 14; 162(1):387-93

Effect of endothelin on Ca2+ influx, intracellular free Ca2+ levels and ligand binding to N and L type Ca2+ channels in rat brain. Hamilton MG, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1332-8

Receptor binding activity and cytosolic free calcium response by synthetic endothelin analogs in cultured rat vascular smooth muscle cells. Hirata Y, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):228-34

Endothelin-sensitive intracellular Ca2+ store overlaps with caffeine-sensitive one in rat aortic smooth muscle cells in primary cultures. Kai H, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):235-43

Endothelin-1 induces vasoconstriction through two functionally distinct pathways in porcine coronary artery: contribution of phosphoinositide turnover. Kasuya Y, et al. **Biochem Biophys Res Commun** 1989 Jun 30; 161(3):1049-55

Endothelin-induced Ca-independent contraction of the porcine coronary artery. Kodama M, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1302-8

Endothelin induces two types of contractions of rat uterus: phasic contractions by way of voltage-dependent calcium channels and developing contractions through a second type of calcium channels. Kozuka M, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):317-23

Pharmacological modulation of the bronchopulmonary action of the vasoactive peptide, endothelin, administered by aerosol in the guinea-pig. Lagente V, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):625-32

Endothelin stimulates a sustained 1,2-diacylglycerol increase and protein kinase C activation in bovine aortic smooth muscle cells. Lee TS, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):381-6

In vitro and in vivo activity of chymotrypsin-activated big endothelin (porcine 1-40). McMahon EG, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):406-13

Endothelin action on vascular smooth muscle involves inositol trisphosphate and calcium mobilization. Marsden PA, et al. **Biochem Biophys Res Commun** 1989 Jan 16; 158(1):86-93

Effects of endothelin on sodium transport mechanisms: potential role in cellular Ca2+ mobilization. Meyer-Lehnert H, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):458-65

Does endothelin mobilize calcium from intracellular store sites in rat aortic vascular smooth muscle cells in primary culture? Miasiro N, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):312-7

Endothelin is a positive inotropic agent in human and rat heart in vitro. Moravec CS, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):14-8

Structure-activity relationship of endothelin: importance of charged groups. Nakajima K, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):424-9

Endothelin-mediated stimulation of DNA synthesis in vascular smooth muscle cells. Nakaki T, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):880-3

Irreversible inhibition of serine proteases by peptidyl derivatives of alpha-aminoalkylphosphonate diphenyl esters. Oleksyszyn J, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):143-9

Tissue specific distribution, clearance and vascular effects of endothelin in the pig. Pernow J, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):647-53

Endothelin inhibits renin release from isolated rat glomeruli. Rakugi H, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1244-7

Endothelin stimulates phospholipase C in cultured vascular smooth muscle cells. Resink TJ, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1360-8

Activation of phospholipase A2 by endothelin in cultured vascular smooth muscle cells. Resink TJ, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):279-86

Effect of endothelin-1 on release of arginine-vasopressin from perifused rat hypothalamus. Shichiri M, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1332-7

Endothelin evoked Ca2+ transients and oscillations in A10 vascular smooth muscle cells. Simpson AW, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1223-9

Peptidyl O-acyl hydroxamates: potent new inactivators of cathepsin B. Smith RA, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1201-6

Endothelin action: Inhibition by a protein kinase C inhibitor and involvement of phosphoinositols. Sugiura M, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):170-6

Endothelin-induced biphasic formation of 1,2-diacylglycerol in cultured rabbit vascular smooth muscle cells--mass analysis with a radioenzymatic assay. Sunako M, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):744-50

Endothelin enhances adrenergic vasoconstriction in perfused rat mesenteric arteries. Tabuchi Y, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1304-8

Endothelin inhibits presynaptic adrenergic neurotransmission in rat mesenteric artery. Tabuchi Y, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):803-8

Endothelin: a new inhibitor of renin release. Takagi M, et al. **Biochem Biophys Res Commun** 1988 Dec 30; 157(3):1164-8

Endothelin-induced mobilization of Ca2+ and the possible involvement of platelet activating factor and thromboxane A2. Takayasu M, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):751-7

Molecular mechanism of action of the vasoconstrictor peptide endothelin. Van Renterghem C, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):977-85

A protein kinase C pseudosubstrate peptide inhibits phosphorylation of the CD3 antigen in streptolysin-O-permeabilized human T lymphocytes. Alexander DR, et al. **Biochem J** 1989 Jun 15;260(3):893-901

Minimum requirements for inhibition of smooth-muscle myosin light-chain kinase by synthetic peptides. Hunt JT, et al. **Biochem J** 1989 Jan 1;257(1):73-8

The inhibition of proinsulin-processing endopeptidase activities by active-site-directed peptides. Rhodes CJ, et al. **Biochem J** 1989 Feb 15;258(1):305-8

Inhibition of human dihydrofolate reductase by antifolyl polyglutamates. Kumar P, et al. **Biochem Pharmacol** 1989 Feb 1;38(3):541-3

Endothelin, a novel endothelium-derived peptide. Pharmacological activities, regulation and possible roles in cardiovascular control. Yanagisawa M, et al. **Biochem Pharmacol** 1989 Jun 15;38(12):1877-83 (41 ref.)

Nitrogen-15 NMR spectroscopy of the catalytic-triad histidine of a serine protease in peptide boronic acid inhibitor complexes. Bachovchin WW, et al. **Biochemistry** 1988 Oct 4;27(20):7689-97

Effect of homo poly(L-amino acids) on fibrin assembly: role of charge and molecular weight. Carr ME Jr, et al. **Biochemistry** 1989 Feb 7;28(3):1384-8

Trigramin: primary structure and its inhibition of von Willebrand factor binding to glycoprotein IIb/IIIa complex on human platelets. Huang TF, et al. **Biochemistry** 1989 Jan 24;28(2):661-6

Antiplatelet "hybrid" peptides analogous to receptor recognition domains on gamma and alpha chains of human fibrinogen. Timmons S, et al. **Biochemistry** 1989 Apr 4;

28(7):2919–23
Inhibition of deoxyhypusine hydroxylase by polyamines and by a deoxyhypusine peptide. Abbruzzese A, et al. **Biochim Biophys Acta** 1989 Aug 31;997(3):248–55
Inhibition of the bovine–heart mitochondrial F1–ATPase by cationic dyes and amphipathic peptides. Bullough DA, et al. **Biochim Biophys Acta** 1989 Aug 3;975(3):377–83
Mechanism of membrane damage induced by the amphipathic peptides gramicidin S and melittin. Katsu T, et al. **Biochim Biophys Acta** 1989 Aug 7;983(2):135–41
Inhibition of DNA polymerization and DNA transcription to RNA by seminal plasma peptides. Lugaro G, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):420–8
Magainin 1–induced leakage of entrapped calcein out of negatively–charged lipid vesicles. Matsuzaki K, et al. **Biochim Biophys Acta** 1989 May 19;981(1):130–4
Interaction of inhibitin with the human erythrocyte Na+(Li+)i/Nao+ exchanger. Morgan K, et al. **Biochim Biophys Acta** 1989 Feb 13;979(1):53–61
Basic amphipathic helical peptides induce destabilization and fusion of acidic and neutral liposomes. Suenaga M, et al. **Biochim Biophys Acta** 1989 May 19;981(1):143–50
Triwaglerin: a potent platelet aggregation inducer purified from Trimeresurus wagleri snake venom. Teng CM, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):258–64
Interactions between a new class of eukaryotic antimicrobial agents and isolated rat liver mitochondria. Westerhoff HV, et al. **Biochim Biophys Acta** 1989 Aug 3;975(3):361–9
Lipopeptide derivatives of bacterial lipoprotein constitute potent immune adjuvants combined with or covalently coupled to antigen or hapten. Reitermann A, et al. **Biol Chem Hoppe Seyler** 1989 Apr;370(4):343–52
Response of different mammary epithelial cell lines to a mammary derived growth inhibitor (MDGI). Lehmann W, et al. **Biomed Biochim Acta** 1989;48(1):143–51
Endothelin induces potent microvascular constriction. Brain SD, et al. **Br J Pharmacol** 1988 Dec;95(4):1005–7
The actions of neuropeptide Y and peptide YY on the hepatic arterial and portal vascular beds of the anaesthetized dog. Corder R, et al. **Br J Pharmacol** 1988 Aug;94(4):1149–56
Endothelin– and neuropeptide Y–induced vasoconstriction of human epicardial coronary arteries in vitro. Franco–Cereceda A. **Br J Pharmacol** 1989 Jul;97(3):968–72
The failure of endothelin to displace bound, radioactively–labelled, calcium antagonists (PN 200/110, D888 and diltiazem). Gu XH, et al. **Br J Pharmacol** 1989 Feb;96(2):262–4
Potent contractile activity of endothelin on the human isolated urinary bladder. Maggi CA, et al. **Br J Pharmacol** 1989 Apr;96(4):755–7
Actions of bradykinin and related peptides on rabbit coeliac artery rings. Ritter JM, et al. **Br J Pharmacol** 1989 Jan; 96(1):23–8
Induction of rat gastric damage by the endothelium–derived peptide, endothelin. Whittle BJ, et al. **Br J Pharmacol** 1988 Dec;95(4):1011–3
Galanin inhibits dopamine secretion and activates a potassium channel in pheochromocytoma cells. de Weille JR, et al. **Brain Res** 1989 Apr 17;485(1):199–203
Effects of bombesin and gastrin–releasing peptide on memory processing. Flood JF, et al. **Brain Res** 1988 Sep 20; 460(2):314–22
Subtypes of K+ channels differentiated by the effect of K+ channel openers upon K+ channel blocker–induced seizures. Gandolfo G, et al. **Brain Res** 1989 Aug 21; 495(1):189–92
Renal vasodilatation after central administration of galanin. Gardiner SM, et al. **Brain Res** 1988 Aug 16;458(1):176–9
The effects of intrathecal galanin and C–fiber stimulation on the flexor reflex in the rat. Wiesenfeld–Hallin Z, et al. **Brain Res** 1989 May 8;486(2):205–13
The dual role of polyelectrolytes and proteins as mineralization promoters and inhibitors of calcium oxalate monohydrate. Campbell AA, et al. **Calcif Tissue Int** 1989 Aug;45(2):122–8
Bay K 8644–like contractile effects of a peptide isolated from spontaneously hypertensive rats. Huang BS, et al. **Can J Physiol Pharmacol** 1988 Apr;66(4):332–6
Hypertensive factor: calcium stimulatory activity obtained from different tissues and animal species. Wright GL, et al. **Can J Physiol Pharmacol** 1988 Oct;66(10):1278–81
Galanin–induced inhibition of insulin release from cultured rat islets. Fu XW, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Sep;9(5):437–41
Ionic requirements of the endothelin response in aorta and portal vein. Borges R, et al. **Circ Res** 1989 Aug;65(2):265–71
Identification of two suppressor factors induced by early pregnancy factor. Rolfe BE, et al. **Clin Exp Immunol** 1988 Aug;73(2):219–25
Neutrophil lysosomal degradation of human CRP: CRP–derived peptides modulate neutrophil function. Shephard EG, et al. **Clin Exp Immunol** 1988 Jul; 73(1):139–45
Endothelin is blood vessel selective: studies on a variety of human and dog vessels in vitro and on regional blood flow in the conscious rabbit. Cocks TM, et al. **Clin Exp Pharmacol Physiol** 1989 Apr;16(4):243–6
Cardiovascular actions of human endothelin in conscious sheep. Scoggins BA, et al. **Clin Exp Pharmacol Physiol** 1989 Apr;16(4):235–8
Paradoxical effects of endothelin on cardiovascular noradrenergic neurotransmission. Wong–Dusting HK, et al. **Clin Exp Pharmacol Physiol** 1989 Apr;16(4):229–33
Successful transdermal administration of therapeutic doses of a polypeptide to normal human volunteers. Meyer BR, et al. **Clin Pharmacol Ther** 1988 Dec;44(6):607–12
Further study of effects of synthetic peptides on identifiable giant neurones of an African giant snail (Achatina fulica Férussac). Kim KH, et al. **Comp Biochem Physiol [C]** 1988; 91(2):549–52
Effects of synthetic biologically active peptides on giant neurones identified in the left buccal ganglion of an African giant snail (Achatina fulica Férussac). Matsuoka T, et al. **Comp Biochem Physiol [C]** 1988;90(2):347–50
Actions of cholecystokinin–related peptides on the gallbladder of bony fishes in vitro. Rajjo IM, et al. **Comp Biochem Physiol [C]** 1988;90(1):267–73
Complement C5a receptor antagonism by protamine and poly–L–Arg on human leukocytes. Olsen UB, et al. **Complement** 1988;5(3):153–62
Luteal deficiency caused by human ovarian follicular fluid peptide in post–partum marmosets, Callithrix jacchus. Nandedkar TD, et al. **Contraception** 1989 Jul;40(1):101–9
Shortening of luteal phase in common marmosets by sheep ovarian follicular fluid peptide. Nandedkar TD, et al. **Contraception** 1989 Jul;40(1):91–100
Peptide YY–induced inhibition of pancreatic exocrine secretion is not neurally mediated. DeMar AR, et al. **Curr Surg** 1989 Jan–Feb;46(1):10–3
High–dose porcine galanin infusion and effect on intravenous glucose tolerance in humans. Gilbey SG, et al. **Diabetes** 1989 Sep;38(9):1114–6
Glucagonostatic and insulinotropic action of glucagonlike peptide I–(7–36)–amide. Komatsu R, et al. **Diabetes** 1989 Jul;38(7):902–5
Glucagonlike peptide I (7–37) actions on endocrine pancreas. Weir GC, et al. **Diabetes** 1989 Mar;38(3):338–42
Glucagon–like peptide–1 (7–36 amide): a potent glucagonostatic and insulinotropic hormone. Matsuyama T, et al. **Diabetes Res Clin Pract** 1988 Oct 14;5(4):281–4
Effect of natural peptide YY on pancreatic secretion and cholecystokinin release in conscious dogs. Hosotani R, et al. **Dig Dis Sci** 1989 Mar;34(3):468–73
GLP–1 (glucagon–like peptide 1) and truncated GLP–1, fragments of human proglucagon, inhibit gastric acid secretion in humans. Schjoldager BT, et al. **Dig Dis Sci** 1989 May;34(5):703–8
The gastric acid secretagogue gastrin–releasing peptide and the inhibitor oxyntomodulin do not exert their effect directly on the parietal cell in the rat. Gehl J, et al. **Digestion** 1988;40(3):144–51
Effect of bombesin and its mammalian counterpart, GRP, on exocrine pancreas in the rat. Varga G, et al. **Digestion** 1988;41(4):229–36
Galanin activates nucleotide–dependent K+ channels in insulin–secreting cells via a pertussis toxin–sensitive G–protein. Dunne MJ, et al. **EMBO J** 1989 Feb;8(2):413–20
Protein content and thyroid hormone release in vitro by differentiated thyroid cancer cells in the presence of estradiol, dehydroepiandrosterone, polypeptidic hormones and pesticides. Ghinea E, et al. **Endocrinologie** 1988 Jul–Sep;26(3):165–71
Hormone ontogeny in the ovine fetus. XXIV. Porcine follicular fluid "inhibins" selectively suppress plasma follicle–stimulating hormone in the ovine fetus. Albers N, et al. **Endocrinology** 1989 Aug;125(2):675–8
Comparison of the effects of glucagon–like peptide–1–(1–37) and –(7–37) and glucagon on islet hormone release from isolated perfused canine and rat pancreases. Kawai K, et al. **Endocrinology** 1989 Apr;124(4):1768–73
Possible mechanisms involved in growth hormone secretion induced by galanin in the rat. Murakami Y, et al. **Endocrinology** 1989 Mar;124(3):1224–9
A structurally unique, potent, and selective oxytocin antagonist derived from Streptomyces silvensis. Pettibone DJ, et al. **Endocrinology** 1989 Jul;125(1):217–22
Peptide–YY and neuropeptide–Y inhibit vasoactive intestinal peptide–stimulated adenosine 3',5'–monophosphate production in rat small intestine: structural requirements of peptides for interacting with peptide–YY–preferring receptors. Servin AL, et al. **Endocrinology** 1989 Feb; 124(2):692–700
Homologous and heterologous regulation of the helodermin/vasoactive–intestinal–peptide response in the murine radiation leukemia–virus–induced lymphoma cell line BL/VL3. Abello J, et al. **Eur J Biochem** 1989 Aug 1;183(2):269–74
Mechanism of galanin–inhibited insulin release. Occurrence of a pertussis–toxin–sensitive inhibition of adenylate cyclase. Amiranoff B, et al. **Eur J Biochem** 1988 Oct 15; 177(1):147–52
Structural requirement for galanin action in the pancreatic beta cell line Rin m 5F. Amiranoff B, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):205–7
Galanin protects hippocampal neurons from the functional effects of anoxia. Ari YB, et al. **Eur J Pharmacol** 1989 Jun 20;165(2–3):331–2
Tissue selectivity of endothelin. Borges R, et al. **Eur J Pharmacol** 1989 Jun 20;165(2–3):223–30
The direct observation of arteriolar constriction induced by endothelin in vivo. Brain SD. **Eur J Pharmacol** 1989 Feb 7;160(3):401–3
Endothelin–1 contracts isolated vessels independently of dihydropyridine–sensitive Ca2+ channel activation. D'Orleans–Juste P, et al. **Eur J Pharmacol** 1989 Jun 20; 165(2–3):289–95
Galanin blocks the slow cholinergic EPSP in CA1 pyramidal neurons from ventral hippocampus. Dutar P, et al. **Eur J Pharmacol** 1989 May 19;164(2):355–60
Galanin: Ca2+–dependent contractile effects on the isolated mouse distal colon. Fontaine J, et al. **Eur J Pharmacol** 1989 May 30;164(3):583–6
Effect of endothelin as a coronary vasoconstrictor in the Langendorff–perfused rat heart. Fukuda K, et al. **Eur J Pharmacol** 1989 Jun 20;165(2–3):301–4
Modulatory action of galanin on responses due to antidromic activation of peripheral terminals of capsaicin–sensitive sensory nerves. Giuliani S, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):91–6
Effects of endothelin on regional hemodynamics in conscious rats. Han SP, et al. **Eur J Pharmacol** 1989 Jan 17; 159(3):303–5
Endothelin has potent inotropic effects in rat atria. Hu JR, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):275–8
Endothelin stimulates atrial natriuretic peptide (ANP) release from rat atria. Hu JR, et al. **Eur J Pharmacol** 1988 Dec 6;158(1–2):177–8
Galanin suppresses neurally evoked contractions of circular muscle in the guinea–pig ileum. Kuwahara A, et al. **Eur J Pharmacol** 1989 May 2;164(1):175–8
Effects of endothelin in the systemic and renal vascular beds in vivo. Lippton H, et al. **Eur J Pharmacol** 1988 Oct 11; 155(1–2):197–9
Effect of endothelin on renal function in rats. López–Farré A, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):187–9
Potent contractile effect of endothelin in isolated guinea–pig airways. Maggi CA, et al. **Eur J Pharmacol** 1989 Jan 24; 160(1):179–82
Differential effects of rat endothelin on regional blood flow in the cat. Minkes RK, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):161–4
Influence of endothelin on systemic arterial pressure and regional blood flow in the cat. Minkes RK, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):163–6
Effects of porcine and rat endothelin and an analog on blood pressure in the anesthetized cat. Minkes RK, et al. **Eur J Pharmacol** 1989 May 30;164(3):571–5
Potent cyclo–oxygenase–mediated bronchoconstrictor effects of endothelin in the guinea–pig in vivo. Payne AN, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):303–4
Bradykinin antagonism: differentiation between peptide antagonists and antiinflammatory agents. Rhaleb NE, et al. **Eur J Pharmacol** 1988 Jul 7;151(2):275–9
Comparative pharmacology of rat and porcine endothelin in rat aorta and pulmonary artery. Rodman DM, et al. **Eur J Pharmacol** 1989 Jun 20;165(2–3):297–300
Vasoconstrictor response of large cerebral arteries of cats to endothelin, an endothelium–derived vasoactive peptide. Saito A, et al. **Eur J Pharmacol** 1989 Mar 21;162(2):353–8
Galanin decreases the activity of locus coeruleus neurons in vitro. Seutin V, et al. **Eur J Pharmacol** 1989 May 19; 164(2):373–6
Inotropic effects of endothelin in ferret ventricular myocardium. Shah AM, et al. **Eur J Pharmacol** 1989 Apr 25;163(2–3):365–7
An analysis of the effects of galanin on gastric acid secretion and plasma levels of gastrin in the dog. Soldani G, et al. **Eur J Pharmacol** 1988 Sep 23;154(3):313–8
Endothelin inhibits ex vivo platelet aggregation in the rabbit. Thiemermann C, et al. **Eur J Pharmacol** 1988 Dec 6; 158(1–2):181–2
Effects of endothelin on the renal artery from spontaneously hypertensive and Wistar Kyoto rats. Tomobe Y, et al. **Eur J Pharmacol** 1988 Aug 2;152(3):373–4
Endothelin, a novel vasoconstrictor peptide, as potent bronchoconstrictor. Uchida Y, et al. **Eur J Pharmacol** 1988 Sep 13;154(2):227–8
Comparison of the effects of endothelin–1 and endothelin–3 on the rat stomach. Wallace JL, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):41–7
Rat endothelin is a vasodilator in the isolated perfused mesentery of the rat. Warner TD, et al. **Eur J Pharmacol** 1989 Jan 17;159(3):325–6
Prominent depressor response to endothelin in spontaneously hypertensive rats. Winquist RJ, et al. **Eur J Pharmacol** 1989 Apr 12;163(1):199–203
Trigramin, an RGD–containing peptide from snake venom, inhibits cell–substratum adhesion of human melanoma cells. Knudsen KA, et al. **Exp Cell Res** 1988 Nov;179(1):42–9
Guanine nucleotides inhibit poly–L–arginine–induced membrane damage in polymorphonuclear leukocytes. Elferink JG. **Experientia** 1988 Dec 1;44(11–12):1016–7
In vitro cytocidal effect of novel lytic peptides on Plasmodium falciparum and Trypanosoma cruzi. Jaynes JM, et al. **FASEB J** 1988 Oct;2(13):2878–83
Synergistic stimulatory effect of glucagon–like peptide–1 (7–36) amide and glucose–dependent insulin–releasing polypeptide on the endocrine rat pancreas. Fehmann HC, et al. **FEBS Lett** 1989 Jul 31;252(1–2):109–12
Growth stimulatory effect of pancreatic spasmolytic polypeptide on cultured colon and breast tumor cells. Hoosein NM, et al. **FEBS Lett** 1989 Apr 24;247(2):303–6
A synthetic peptide analog of the putative substrate–binding motif activates protein kinase C. House C, et al. **FEBS Lett** 1989 Jun 5;249(2):243–7
Differential activities of two distinct endothelin family

peptides on ileum and coronary artery. Ishida N, et al. **FEBS Lett** 1989 Apr 24;247(2):337–40

Magainin 2 amide and analogues. Antimicrobial activity, membrane depolarization and susceptibility to proteolysis. Juretić D, et al. **FEBS Lett** 1989 Jun 5;249(2):219–23

Putative precursors of endothelin have less vasoconstrictor activity in vitro but a potent pressor effect in vivo. Kashiwabara T, et al. **FEBS Lett** 1989 Apr 10;247(1):73–6

Endothelin stimulates c-fos and c-myc expression and proliferation of vascular smooth muscle cells [published erratum appears in FEBS Lett 1989 Feb 27;244(2):509] Komuro I, et al. **FEBS Lett** 1988 Oct 10;238(2):249–52

Increase of glucose and lactate output and decrease of flow by human anaphylatoxin C3a but not C5a in perfused rat liver. Püschel GP, et al. **FEBS Lett** 1989 Jan 16;243(1):83–7

Endothelin increases single-channel calcium currents in coronary arterial smooth muscle cells. Silberberg SD, et al. **FEBS Lett** 1989 Apr 10;247(1):68–72

An endogenous 'hypertensive factor' enhances the voltage-dependent calcium current. Simmons MA, et al. **FEBS Lett** 1989 Aug 28;254(1–2):137–40

Galanin inhibits insulin secretion by direct interference with exocytosis. Ullrich S, et al. **FEBS Lett** 1989 Apr 24; 247(2):401–4

The inotropic effect of endothelin-1 on rat atria involves hydrolysis of phosphatidylinositol. Vigne P, et al. **FEBS Lett** 1989 Jun 5;249(2):143–6

Influence of cationic peptides on the activity of the autolytic endo-beta-N-acetylglucosaminidase of Staphylococcus simulans 22. Bierbaum G, et al. **FEMS Microbiol Lett** 1989 Apr;49(2-3):223–7

Practical application of the protein C activator Protac from Agkistrodon contortrix venom. Stocker K, et al. **Folia Haematol (Leipz)** 1988;115(3):260–4

Inhibition of progesterone-mediated maturation of oocytes of Xenopus laevis by oocyte maturation inhibitor from pig follicular fluid: development of a routine assay for the inhibitor with Xenopus oocytes. Pomerantz SH, et al. **Gamete Res** 1987 Jul;17(3):267–78

Inhibitory effect of galanin on postprandial gastrointestinal motility and gut hormone release in humans. Bauer FE, et al. **Gastroenterology** 1989 Aug;97(2):260–4

Peptide YY inhibits the insulinotropic action of gastric inhibitory polypeptide. Guo YS, et al. **Gastroenterology** 1989 Mar;96(3):690–4

Several hypothalamic peptides stimulate in vitro thyrotropin secretion by pituitaries of anuran amphibians. Denver RJ. **Gen Comp Endocrinol** 1988 Dec;72(3):383–93

Metabolic effects of salmon glucagon and glucagon-like peptide in coho and chinook salmon. Plisetskaya EM, et al. **Gen Comp Endocrinol** 1989 Feb;73(2):205–16

Galanin inhibits glucose-induced insulin release in vitro. Leonhardt U, et al. **Horm Metab Res** 1989 Feb;21(2):100–1

Up-regulation of IGF-I receptors on IM-9 cells by IGF-II peptides. Werther GA, et al. **Horm Metab Res** 1989 Mar; 21(3):109–12

Galanin and pancreastatin inhibit stimulated insulin secretion in the mouse: comparison of effects. Lindskog S, et al. **Horm Res** 1988;29(5-6):237–40

Neuropeptide Y and galanin in norepinephrine release in hypothalamic slices. Tsuda K, et al. **Hypertension** 1989 Jul; 14(1):81–6

Enhanced release of atrial natriuretic factor by endothelin in atria from hypertensive rats. Winquist RJ, et al. **Hypertension** 1989 Jul;14(1):111–4

A human embryo fibroblast-derived peptide suppresses the zymosan-induced biochemical activation in human polymorphonuclear leukocytes. Okai Y. **Immunol Lett** 1989 Jan 15;20(1):41–6

Calcium oxalate crystal growth studies in polyacrylamide gels: Part II—Influence of synthetic polypeptides and natural macromolecules on crystal aggregation. Rao MV, et al. **Indian J Exp Biol** 1988 Jul;26(7):553–7

Effects of magainins and cecropins on the sporogonic development of malaria parasites in mosquitoes. Gwadz RW, et al. **Infect Immun** 1989 Sep;57(9):2628–33

Permeabilization and calcium-dependent activation of rabbit polymorphonuclear leukocytes by poly-L-arginine. Elferink JG, et al. **Inflammation** 1989 Jun;13(3):285–94

Histamine-releasing activity of endogenous peptides on mast cells derived from different sites and species. Arock M, et al. **Int Arch Allergy Appl Immunol** 1989;89(2-3):229–35

Polyoma T-antigen-derived synthetic peptides induce polyoma-virus-specific macrophage migration inhibition. Reinholdsson G, et al. **Int J Cancer** 1989 Jun 15; 43(6):1165–8

Macrophage activation and host augmentation against Sendai or herpes simplex virus (HSV) infections with synthetic polypeptides in mice. Iida J, et al. **Int J Immunopharmacol** 1989;11(3):249–58

Effects of peptide YY on dog and rat pancreatic secretion in vivo and in vitro. Bilski J, et al. **Int J Pancreatol** 1988 Jul;3(5):309–21

Effects of galanin on insulin and glucagon secretion in the rat. Lindskog S, et al. **Int J Pancreatol** 1989 Apr; 4(3):335–44

Effects of synthetic human gastrin-releasing peptide on pancreatic exocrine secretion and release of pancreatic polypeptide in conscious rats. Miyasaka K, et al. **Int J Pancreatol** 1989 Apr;4(3):251–60

Endothelin produces pulmonary vasoconstriction and systemic vasodilation. Lippton HL, et al. **J Appl Physiol** 1989 Feb;66(2):1008–12

Inhibitory effects of poly(L-aspartic acid) on the assembly of brain microtubules and the interaction of microtubule-associated protein 2 with F-actin in vitro. Nakamura A, et al. **J Biochem (Tokyo)** 1989 Jul;106(1):93–7

Synthetic transit peptides inhibit import and processing of mitochondrial precursor proteins. Chu TW, et al. **J Biol Chem** 1989 Jun 5;264(16):9552–8

Short-chain pseudopeptide bombesin receptor antagonists with enhanced binding affinities for pancreatic acinar and Swiss 3T3 cells display strong antimitotic activity. Coy DH, et al. **J Biol Chem** 1989 Sep 5;264(25):14691–7

Endothelin stimulates diacylglycerol accumulation and activates protein kinase C in cultured vascular smooth muscle cells. Griendling KK, et al. **J Biol Chem** 1989 May 15;264(14):8237–40

Synthetic amphipathic peptides resembling apolipoproteins stimulate the release of human placental lactogen. Jorgensen EV, et al. **J Biol Chem** 1989 Jun 5;264(16):9215–9

Stimulation of phosphatidylinositol hydrolysis, diacylglycerol release, and gene expression in response to endothelin, a potent new agonist for fibroblasts and smooth muscle cells. Muldoon LL, et al. **J Biol Chem** 1989 May 25; 264(15):8529–36

Suppression of insulin release by galanin and somatostatin is mediated by a G-protein. An effect involving repolarization and reduction in cytoplasmic free Ca2+ concentration. Nilsson T, et al. **J Biol Chem** 1989 Jan 15; 264(2):973–80

Galanin can inhibit insulin release by a mechanism other than membrane hyperpolarization or inhibition of adenylate cyclase. Sharp GW, et al. **J Biol Chem** 1989 May 5; 264(13):7302–9

A novel vasoactive peptide endothelin stimulates mitogenesis through inositol lipid turnover in Swiss 3T3 fibroblasts. Takuwa N, et al. **J Biol Chem** 1989 May 15;264(14):7856–61

Modulation by polyelectrolytes of canine cardiac microsomal calcium uptake and the possible relationship to phospholamban. Xu ZC, et al. **J Biol Chem** 1989 Oct 5; 264(28):16644–51

Effects of endothelin-1 on the rat isolated heart. Baydoun AR, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S193–6

Characterization of endothelin-1 stimulation of catecholamine release from adrenal chromaffin cells. Boarder MR, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S223–4

Endothelin-1: demonstration of potent effects on the microcirculation of humans and other species. Brain SD, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S147–9; discussion S150

Effect of endothelin-1 on blood pressure and bronchopulmonary system of the guinea pig. Braquet P, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S143–6; discussion S150

Vascular mechanism of action of endothelin-1: effect of Ca2+ antagonists. Chabrier PE, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S32–5; discussion S45

Anti-inflammatory effects of endothelin-1. Chander CL, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S218–9

Endothelin-1 is a potent long-lasting vasoconstrictor in dog peripheral vasculature in vivo. Clarke JG, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S211–2

Endothelin-1: contractile responses and autoradiographic localization of receptors in rabbit blood vessels. Dashwood M, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S183–5

Endothelin-1 participation in overt and inflammatory pain. Ferreira SH, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S220–2

Effect of endothelin-1 on arterioles and venules in vivo. Fortes ZB, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S200–1

Stimulation of the Na+, K+ pump and the (Na+, K+, Cl-) cotransport system by endothelin-1 in cultured vascular smooth muscle cells: involvement of cyclo-oxygenase products. Garay R, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S213–5

Regional hemodynamic effects of endothelin-1 in conscious, unrestrained, Wistar rats. Gardiner SM, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S202–4

Effect of endothelin-1 on calcium channel gating by agonists in vascular smooth muscle. Godfraind T, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S112–7; discussion S123

Endothelial cell-derived vasoconstrictors: mechanisms of action in vascular smooth muscle. Highsmith RF, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S36–44; discussion S45

Pressor effects of endothelin-1 and some analogs in the perfused superior mesenteric arterial bed of the rat. Hiley CR, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S197–9

Human vascular responses to endothelin-1: observations in vivo and in vitro. Hughes A□, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S225–8

Conversion of big endothelin-1 to 21-residue endothelin-1 is essential for expression of full vasoconstrictor activity: structure-activity relationships of big endothelin-1. Kimura S, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S5–7; discussion S18

The modulation of gastric mucosal integrity by endothelin-1 and prostacyclin. MacNaughton WK, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S118–22; discussion S123

The discovery, the present state, and the future prospects of endothelin. Masaki T. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S1–4; discussion S18 (33 ref.)

Endothelin-1 stimulates phosphatidylinositol hydrolysis and calcium uptake in isolated canine coronary arteries. Pang DC, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S75–9; discussion S84

Effect of endothelin-1 on regional vascular resistances in the pig. Pernow J, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S205–6

Differential vascular sensitivity to luminally and adventitially applied endothelin-1. Pohl U, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S188–90

Endothelin-1 releases eicosanoids from rabbit isolated perfused kidney and spleen. Rae GA, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S89–92; discussion S102

Endothelin-1 from pulmonary artery and microvessels acts on vascular and airway smooth muscle. Ryan US, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S57–62 discussion S74

Endothelin-1 acts in cerebral arteries from the adventitial but not from the luminal side. Shigeno T, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S174–6

Endothelin-1 activates the phosphoinositide cascade in cultured glomerular mesangial cells. Simonson MS, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S80–3; discussion S84

Studies with endothelin-3 and endothelin-1 on rat blood pressure and isolated tissues: evidence for multiple endothelin receptor subtypes. Spokes RA, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S191–2

Endothelin-1-induced vascular contractions: interactions with drugs affecting the calcium channel. Stasch JP, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S63–6; discussion S74

Endothelin-1 releases prostacyclin and inhibits ex vivo platelet aggregation in the anesthetized rabbit. Thiemermann C, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S138–41; discussion S142

Endothelin-1 is a potent constrictor in conductive and resistive coronary arteries. Tippins JR, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S177–9

Endothelin-1-induced contractions of vascular and tracheal smooth muscle: effects of nicardipine and BRL 34915. Turner NC, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S180–2

Does endothelin-1 mediate endothelium-dependent contractions during anoxia? Vanhoutte PM, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S124–8; discussion S142 (30 ref.)

Molecular mechanism of endothelin-1 action on aortic cells. Van Renterghem C, et al. **J Cardiovasc Pharmacol** 1989; 13 Suppl 5:S186–7

The hemodynamic effects of endothelin-1 in the pithed rat. Walder CE, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S93–7; discussion S102

The mechanism of action of endothelin-1 as compared with other agonists in vascular smooth muscle. Wallnöfer A, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S23–31; discussion S45

Endothelin-1 and endothelin-3 release EDRF from isolated perfused arterial vessels of the rat and rabbit. Warner TD, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S85–8; discussion S102

Positive inotropic and vasoconstrictive effects of endothelin-1 in in vivo and in vitro experiments: characteristics and the role of L-type calcium channels. Watanabe T, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S108–11 discussion s123

Effects of endothelin-1 and endothelin-3 on blood pressure in conscious hypertensive rats. Watanabe TX, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S207–8

Cardiopulmonary and gastric ulcerogenic actions of endothelin-1 in the guinea pig and rat. Whittle BJ, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S103–7; discussion S123

Endothelin-1 causes vasoconstriction and vasodilation in the blood perfused liver of the dog. Withrington PG, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S209–10

Different effects of endothelin-1 on cAMP- and cGMP-mediated vascular relaxation in human arteries and veins: comparison with norepinephrine. Yang ZH, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S129–31; discussion S142

Endothelin-1 depolarizes a ventral root potential in the newborn rat spinal cord. Yoshizawa T, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S216–7

Mesangial cell, glomerular and renal vascular responses to endothelin in the rat kidney. Elucidation of signal transduction pathways. Badr KF, et al. **J Clin Invest** 1989 Jan;83(1):336–42

Integrated cardiac, renal, and endocrine actions of endothelin. Miller WL, et al. **J Clin Invest** 1989 Jan; 83(1):317–20

Endothelin-induced increases in vascular smooth muscle Ca2+ do not depend on dihydropyridine-sensitive Ca2+ channels. Mitsuhashi T, et al. **J Clin Invest** 1989 Aug; 84(2):635–9

Endothelin stimulates phospholipase C, Na+/H+ exchange, c-fos expression, and mitogenesis in rat mesangial cells.

Simonson MS, et al. **J Clin Invest** 1989 Feb;83(2):708–12

Chemicals influencing maturation, activation, and degeneration of bovine oocytes in culture. Sato E, et al. **J Dairy Sci** 1988 Dec;71(12):3482–8

The monocyte-derived neutrophil activating peptide (NAP/interleukin 8) stimulates human neutrophil arachidonate-5-lipoxygenase, but not the release of cellular arachidonate. Schröder JM. **J Exp Med** 1989 Sep 1; 170(3):847–63

A novel arginine vasopressin-binding peptide that blocks arginine vasopressin modulation of immune function. Johnson HM, et al. **J Immunol** 1988 Oct 1;141(7):2420–3

Mastoparan, a wasp venom peptide, identifies two discrete mechanisms for elevating cytosolic calcium and inositol trisphosphates in human polymorphonuclear leukocytes. Perianin A, et al. **J Immunol** 1989 Sep 1;143(5):1669–73

Inhibition of aminopeptidases by peptides containing ketomethylene and hydroxyethylene amide bond replacements. Harbeson SL, et al. **J Med Chem** 1989 Jun; 32(6):1378–92

T cell receptor binding and unrestricted reactivity to GLT in somatic variants of an I-Ek specific T cell hybrid. MacNeil IA, et al. **J Mol Cell Immunol** 1985;2(2):71–9

Galanin inhibits noradrenaline-induced accumulation of cyclic AMP in the rat cerebral cortex. Nishibori M, et al. **J Neurochem** 1988 Dec;51(6):1953–5

Mechanism of action of galanin on myenteric neurons. Tamura K, et al. **J Neurophysiol** 1988 Sep;60(3):966–79

Opiate and peptide inhibition of transmitter release in parasympathetic nerve terminals. Gray DB, et al. **J Neurosci** 1989 May;9(5):1683–92

Inhibition of lymphocyte function by glioblastoma-derived transforming growth factor beta 2. Kuppner MC, et al. **J Neurosurg** 1989 Aug;71(2):211–7

The influence of urotensin II on calcium flux in rat aorta. Gibson A, et al. **J Pharm Pharmacol** 1988 Dec;40(12):893–5

Effects of endothelin on regional blood flows in squirrel monkeys. Clozel M, et al. **J Pharmacol Exp Ther** 1989 Sep; 250(3):1125–31

Mechanisms of endothelin-mediated bronchoconstriction in the guinea pig. Macquin-Mavier I, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):740–5

Cellular mechanisms of endothelin in rabbit aorta. Ohlstein EH, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):548–55

Polyaspartic acid protects against gentamicin nephrotoxicity in the rat. Ramsammy LS, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):149–53

Partial purification of a polypeptide extract derived from ovine pineal that suppresses the growth of human melanoma cells in vitro. Noteborn HP, et al. **J Pineal Res** 1989;6(4):385–96

Conformation of the metastasis-inhibiting laminin pentapeptide. Brandt-Rauf PW, et al. **J Protein Chem** 1989 Feb;8(1):149–57

Inhibition of lymphoproliferation by a synthetic peptide with sequence identity to gp41 of human immunodeficiency virus type 1. Ruegg CL, et al. **J Virol** 1989 Aug; 63(8):3257–60

Endothelin potentiates growth factor-stimulated DNA synthesis in Swiss 3T3 cells. Kusuhara M, et al. **Jpn J Cancer Res** 1989 Apr;80(4):302–5

Pressor response to endothelin in guinea pigs. Li L, et al. **Jpn J Pharmacol** 1989 Apr;49(4):549–52

Endothelin dissociates muscle tension from cytosolic Ca2+ in vascular smooth muscle of rat carotid artery. Ozaki H, et al. **Jpn J Pharmacol** 1989 Aug;50(4):521–4

Evidence for the direct action of gastrin-releasing peptide (GRP) on amylase secretion from rat pancreatic acini: an assessment using a perifusion system. Shinozaki H, et al. **Jpn J Physiol** 1988;38(3):299–307

Effects of gastrin releasing peptide and its related peptides on the release of gastrin. Yamashita Y, et al. **Kurume Med J** 1989;36(1):29–33

Endothelin: an important factor in acute renal failure? Firth JD, et al. **Lancet** 1988 Nov 19;2(8621):1179–82 (37 ref.)

Endothelin induces an initial increase in cardiac output associated with selective vasodilation in rats. Hoffman A, et al. **Life Sci** 1989;45(3):249–55

The endothelium-derived vasoconstrictor peptide endothelin inhibits renin release in vitro. Matsumura Y, et al. **Life Sci** 1989;44(2):149–57

Inhibitory action of galanin on gastric acid secretion in pentobarbital-anesthetized rats [published erratum appears in Life Sci 1989;45(1):105] Rossowski WJ, et al. **Life Sci** 1989;44(24):1807–13

The effect of cholinergic blockade on the growth hormone response to galanin in humans. Chatterjee VK, et al. **Metabolism** 1988 Nov;37(11):1089–91

Prolonged blood pressure elevation after endothelin administration in bilaterally nephrectomized rats. Kohno M, et al. **Metabolism** 1989 Aug;38(8):712–3

Dose-response testing of peptides by hippocampal brain slice recording. Phillips MI, et al. **Methods Enzymol** 1989; 168:129–44

Evaluation of the mutagenic activity of leucinostatins, a novel class of antibiotic peptides produced by Paecilomyces marquandii, in the modul Aspergillus nidulans. Crebelli R, et al. **Microbiologica** 1988 Oct;11(4):299–305

Microvascular effects of endothelin in the rabbit tenuissimus muscle and hamster cheek pouch. Ohlén A, et al. **Microvasc Res** 1989 Jan;37(1):115–8

Regulation of postreceptor signaling in the pheromone response pathway of Saccharomyces cerevisiae. Blinder D, et al. **Mol Cell Biol** 1989 Sep;9(9):3720–6

Role of proteinkinase C and phosphatidylinositol metabolism in lipopeptide-induced leukocyte activation as signal transducing mechanism. Hauschildt S, et al. **Mol Immunol** 1988 Nov;25(11):1081–6

Novel anti-inflammatory peptides from the region of highest similarity between uteroglobin and lipocortin I. Miele L, et al. **Nature** 1988 Oct 20;335(6192):726–30

Inhibition of pluripotential embryonic stem cell differentiation by purified polypeptides. Smith AG, et al. **Nature** 1988 Dec 15;336(6200):688–90

Peptide YY (PYY) stimulates intrinsic enteric motor neurones in the rat small intestine. Krantis A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Sep; 338(3):287–92

Effects of VIP and helodermin on thyroid hormone secretion in the mouse. Ahrén B, et al. **Neuropeptides** 1989 Jan; 13(1):59–64

Insulin and glucagon secretion in the rat: effects of gastrin releasing peptide. Pettersson M, et al. **Neuropeptides** 1988 Oct;12(3):159–63

Characteristics of the galanin-induced depolarization of mudpuppy parasympathetic postganglionic neurons. Konopka LM, et al. **Neurosci Lett** 1989 Apr 24; 99(1–2):142–6

Excitatory and inhibitory amino acids and peptide-induced responses in acutely isolated rat spinal dorsal horn neurons. Murase K, et al. **Neurosci Lett** 1989 Aug 14;103(1):56–63

Adrenergic neuromodulation by endothelin in guinea pig pulmonary artery. Wiklund NP, et al. **Neurosci Lett** 1989 Jul 3;101(3):269–73

Cholinergic neuromodulation by endothelin in guinea pig ileum. Wiklund NP, et al. **Neurosci Lett** 1989 Jul 3; 101(3):342–6

Presynaptic auto- and allelo-receptor regulation of hypothalamic opioid peptide release. Nikolarakis KE, et al. **Neuroscience** 1989;31(1):269–73

Activation of ganglionic tyrosine hydroxylase by peptides of the secretin-glucagon family: structure-function studies. Schwarzschild MA, et al. **Neuroscience** 1989;31(1):159–67

Approaches to studying structure-activity relationships in peptide hormones through the expression of synthetic genes. Taylor JW. **NIDA Res Monogr** 1988;87:20–40 (78 ref.)

Inhibition of ovarian cancer cell proliferation in vivo and incorporation of 3H-thymidine in vitro after follicle regulatory protein administration. Rodgers KE, et al. **Obstet Gynecol** 1989 Jan;73(1):66–74

Galanin inhibits amylase secretion from isolated rat pancreatic acini. Ahrén B, et al. **Pancreas** 1988;3(5):559–62

Does galanin inhibit insulin secretion by opening of the ATP-regulated K+ channel in the beta-cell? Ahrén B, et al. **Peptides** 1989 Mar–Apr;10(2):453–7

Helodermin stimulates glucagon secretion in the mouse. Ahrén B. **Peptides** 1989 May–Jun;10(3):709–11

Dual effect of bombesin and gastrin releasing peptide on gastric emptying in conscious cats. Chikh-Issa AR, et al. **Peptides** 1989 Mar–Apr;10(2):281–7

Actions of galanin fragments on rat, guinea-pig, and canine intestinal motility. Fox JE, et al. **Peptides** 1988 Sep–Oct; 9(5):1183–9

Hemodynamic actions of endothelin in conscious and anesthetized dogs. Given MB, et al. **Peptides** 1989 Jan–Feb; 10(1):41–4

Identification and characterization of the emetic effects of peptide YY. Harding RK, et al. **Peptides** 1989 Jan–Feb; 10(1):21–4

Sauvagine: effects on gastric acid secretion in rats. Improta G, et al. **Peptides** 1988 Jul–Aug;9(4):843–6

The effects of various peptides on the isolated pulmonary artery. Obara H, et al. **Peptides** 1989 Jan–Feb;10(1):241–3

Release of endogenous excitatory amino acids and proteins by the mast cell degranulating peptide in the hippocampus. Aniksztejn L, et al. **Pflugers Arch** 1989;414 Suppl 1:S123–4

Activation of sodium channels is not essential for endothelin induced vasoconstriction. Borges R, et al. **Pflugers Arch** 1989 Jan;413(3):313–5

Positive chronotropic effects of endothelin, a novel endothelium-derived vasoconstrictor peptide. Ishikawa T, et al. **Pflugers Arch** 1988 Nov;413(1):108–10

Pineal-pancreas interaction: pineal hormone E5 action on insulin activity. Neaçşu C. **Physiologie** 1988 Jul–Sep; 25(3):119–27

Pressor effects of circulating endothelin are limited by its removal in the pulmonary circulation and by the release of prostacyclin and endothelium-derived relaxing factor. de Nucci G, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(24):9797–800

Endothelin activates the dihydropyridine-sensitive, voltage-dependent Ca2+ channel in vascular smooth muscle. Goto K, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3915–8

Galanin antagonizes acetylcholine on a memory task in basal forebrain-lesioned rats. Mastropaolo J, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9841–5

Specific inhibition of the T-cell response to myelin basic protein by the synthetic copolymer Cop 1. Teitelbaum D, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9724–8

Magainins and the disruption of membrane-linked free-energy transduction. Westerhoff HV, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6597–601

Relaxing effect of atrial natriuretic factor on endothelin-precontracted vascular strips. Bonhomme MC, et al. **Proc Soc Exp Biol Med** 1989 Jul;191(3):309–15

Endothelin and sarafotoxin produce dissimilar effects on renal blood flow, but both block the antidiuretic effects of vasopressin. Goetz K, et al. **Proc Soc Exp Biol Med** 1989 Sep;191(4):425–7

Inhibition of gastric acid secretion by peptide YY is independent of gastric somatostatin release in the rat. Greeley GH Jr, et al. **Proc Soc Exp Biol Med** 1988 Dec; 189(3):325–8

Role of endothelial relaxing and contracting factors in rabbit cranial artery responses to hypoxia. Pearce WJ. **Proc West Pharmacol Soc** 1989;32:239–45

Pharmacological properties of endothelin in vitro. Swank SR, et al. **Proc West Pharmacol Soc** 1989;32:275

Vasoreactive effects of hypothalamic sodium transport inhibitor. Mir MA, et al. **Prog Biochem Pharmacol** 1988; 23:119–27

Outer membrane structure in smooth and rough strains of Salmonella typhimurium and their susceptibility to the antimicrobial peptides, magainins and defensins. Rana F, et al. **Prog Clin Biol Res** 1989;292:77–85

Lecithin:cholesterol acyltransferase activation by synthetic amphipathic peptides. Subbarao NK, et al. **Proteins** 1988; 3(3):187–98

Effects of peptide YY on intestinal blood flow distribution and motility in the dog. Buell MG, et al. **Regul Pept** 1989 Feb;24(2):195–208

Actions of gastrin-releasing peptide and related mammalian and amphibian peptides on ion transport in the porcine proximal jejunum [published erratum appears in Regul Pept 1989 Mar;24(3):312] Chandan R, et al. **Regul Pept** 1988 Oct;23(1):1–14

Comparison of helodermin, VIP and PHI in pancreatic secretion and blood flow in dogs. Konturek SJ, et al. **Regul Pept** 1989 Feb;24(2):155–66

Gastrin-releasing peptide stimulates cholecystokinin secretion in perfused rat duodenum. Nakano I, et al. **Regul Pept** 1988 Nov;23(2):153–9

Pre- and postjunctional actions of neuropeptide Y and related peptides. Potter EK, et al. **Regul Pept** 1989 May; 25(2):167–77

Effect of glucagon-like peptide-1 on insulin secretion. Shima K, et al. **Regul Pept** 1988 Aug;22(3):245–52

Role of gastrin-releasing peptide in pepsinogen secretion from the isolated perfused rat stomach. Skak-Nielsen T, et al. **Regul Pept** 1988 Oct;23(1):95–104

Inhibition of yeast glyoxalase I by biologically active peptides. Kraus JL, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jul;65(1):105–10

The effect of gastrin-releasing peptide on acid secretion and the release of gastrin, somatostatin, and histamine in the totally isolated, vascularly perfused rat stomach. Sandvik AK, et al. **Scand J Gastroenterol** 1989 Jan;24(1):9–15

Modulation of calcium channels in cardiac and neuronal cells by an endogenous peptide. Callewaert G, et al. **Science** 1989 Feb 3;243(4891):663–6

Monocyto-angiotropin for tumor growth promotion of xenotransplanted carcinomas. Rutt GT. **Strahlenther Onkol** 1989 Jul;165(7):508–10

Inhibition of cancer procoagulant by peptidyl diazomethyl ketones and peptidyl sulfonium salts. Falanga A, et al. **Thromb Res** 1989 Jun 1;54(5):389–98

Fibrinolytic activity of endothelin-3. Korbut R, et al. **Thromb Res** 1989 Sep 15;55(6):797–9

Similarities in mode and sites of action of sarafotoxins and endothelins. Kloog Y, et al. **Trends Pharmacol Sci** 1989 Jun;10(6):212–4 (26 ref.)

[Study of the action of an elastin polypeptide on dermal connective tissue] Vitry G, et al. **Bull Assoc Anat (Nancy)** 1989 Mar;73(220):37–43 (Eng. Abstr.) **(Fre)**

[The entero-insular axis: the new incretin candidate glucagon-like peptide-1(7-36)amide (GLP-1(7-36)amide] Göke R, et al. **Z Gastroenterol** 1988 Nov;26(11):715–9 (30 ref.) (Eng. Abstr.) **(Ger)**

[Contractile effect of bombesin and GRP (gastrin releasing peptide) related peptides on bladder smooth muscle] Gotoh M, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Apr; 79(4):700–4 (Eng. Abstr.) **(Jpn)**

[Effect of human gastrin-releasing peptide (hGRP) on the pancreatic exocrine and endocrine secretion in healthy subjects] Shinozaki H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec;85(12):2673–8 (Eng. Abstr.) **(Jpn)**

[Dynamics of healing of purulent wounds under the influence of immunoregulatory drugs] Guseinov AZ. **Arkh Patol** 1988;50(9):28–34 (Eng. Abstr.) **(Rus)**

[Effect of taktivin on diuresis and tubular cardiotrast secretion in the kidney] Arion VIa, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):264–6 (Eng. Abstr.) **(Rus)**

[Effect of brain extracts from rats subjected to korazol kindling on generalized epileptic activity] Kryzhanovskii GN, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):271–4 (Eng. Abstr.) **(Rus)**

[Characteristics of memory in MRL/1 mice and the effect of thymic peptides] Melekhin VD, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):199–201 (Eng. Abstr.) **(Rus)**

[T-lymphocyte precursors--the target cells of thymocyte

growth factor] Protsak EA, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):462–4 (Eng. Abstr.) **(Rus)**

[The peptide activator of cyclic nucleotide phosphodiesterases: its effect on muscle contractile activity] Shchelkovnikov SA, et al. **Biull Eksp Biol Med** 1988 Dec; 106(12):648–50 (Eng. Abstr.) **(Rus)**

[The structural specificity of factors in the chemical regulation of muscle tonus at the spinal cord level] Vartanian GA, et al. **Biull Eksp Biol Med** 1989 Mar; 107(3):268–71 (Eng. Abstr.) **(Rus)**

[Increase in the longevity and decrease in the tumor incidence in mice given polypeptide thymus and epiphysis factors at different age] Anisimov VN, et al. **Dokl Akad Nauk SSSR** 1988;302(2):473–6 **(Rus)**

[Hyperalgetic effect of low doses of myelopeptides] Vasilenko AM, et al. **Dokl Akad Nauk SSSR** 1989; 306(4):999–1000 **(Rus)**

[Function of the anticoagulant system when difensin is administered into the blood stream] Kudriashov BA, et al. **Fiziol Zh SSSR** 1988 Dec;74(12):1759–64 (Eng. Abstr.) **(Rus)**

[Effect of medium molecular weight blood peptides in burns on the contractility of the isolated myocardium and the regulation of cardiac rhythm] Bal'dman BM, et al. **Patol Fiziol Eksp Ter** 1988 Nov–Dec;(6):40–3 (Eng. Abstr.) **(Rus)**

[Study of mechanisms of neurotropic action of middle molecular weight peptides in the blood of intact blood and dogs with burns] Volchegorskii IA, et al. **Patol Fiziol Eksp Ter** 1989 Jan–Feb;(1):45–9 (Eng. Abstr.) **(Rus)**

[Effect of myelopeptides on the postradiation recovery of the thymus] Kuznetsova SF. **Radiobiologiia** 1989 May–Jun; 29(3):326–30 (Eng. Abstr.) **(Rus)**

[Does the action of regulatory peptides introduced exogenously correspond to their physiologic functions in the plasma and cerebrospinal fluid?] Ashmarin IP, et al. **Vestn Akad Med Nauk SSSR** 1988;(11):55–65 (108 ref.) (Eng. Abstr.) **(Rus)**

[Intranasal administration of regulatory peptides] Kamenskii AA, et al. **Vestn Akad Med Nauk SSSR** 1988;(10):43–8 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

GRP-producing nerves in the control of gastric secretion. Holst JJ, et al. **Acta Chir Scand Suppl** 1988;547:26–31 (32 ref.)

Regulatory peptides and their pathophysiologic role in peptic ulcer disease. Jensen SL, et al. **Acta Chir Scand Suppl** 1988; 547:32–4

Role of the coronary endothelium in the regulation of sympathetic transmitter release in isolated rabbit hearts. Wennmalm A, et al. **Acta Physiol Scand** 1989 May; 136(1):81–7

Interactions between circulating peptides and the central nervous system in hemodynamic regulation. Sander GE, et al. **Am J Cardiol** 1989 Aug 2;64(6):44C–50C

The role of gastrin-releasing peptide in pancreatic exocrine secretion. Holst JJ, et al. **Ann N Y Acad Sci** 1988;547:234–41 (30 ref.)

Bombesin-related peptides in the diffuse neuroendocrine system. Solcia E, et al. **Ann N Y Acad Sci** 1988;547:83–94 (44 ref.)

The interaction between catecholaminergic and peptidergic perivascular nerve fibres in the innervation of the rat mesenteric vascular bed. Woolgar JR, et al. **Artery** 1989; 16(4):223–32

Role of protein X in the function of the mammalian pyruvate dehydrogenase complex. Gopalakrishnan S, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):715–21

Mast cell degranulating peptide forms voltage gated and cation-selective channels in lipid bilayers. Ide T, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):155–60

Endothelin stimulates aldosterone biosynthesis by dispersed rabbit adreno-capsular cells. Morishita R, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):628–32

Mobilization of intracellular calcium by endothelin in Swiss 3T3 cells. Ohnishi A, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):489–95

Endothelin stimulates the release of prostacyclin from rat mesenteric arteries. Rakugi H, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):924–8

Phorbol ester dissociates endothelin-stimulated phosphoinositide hydrolysis and arachidonic acid release in vascular smooth muscle cells. Reynolds EE, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):868–73

Inhibition by nicardipine of endothelin-mediated inositol phosphate formation and Ca2+ mobilization in smooth muscle cell. Xuan YT, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):758–64

Contribution of galanin to non-cholinergic, non-adrenergic transmission in rat ileum. Muramatsu I, et al. **Br J Pharmacol** 1988 Aug;94(4):1241–9

Induction of human B cell differentiation by Fc region activators. I. Identification of an active tetrapeptide. Hobbs MV, et al. **Clin Immunol Immunopathol** 1989 Feb; 50(2):251–63

Recovery from pheromone-induced arrest of the yeast cell cycle: alpha-factor binding and mutants that show pheromone-independent arrest of cell division. Blinder D, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:605–10

Response of yeast alpha cells to a-factor pheromone: topology of the receptor and identification of a component of the response pathway. Clark KL, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:611–20

Postsynaptic modulation of cholinergic transmission by endogenous substances. Akasu T, et al. **Comp Biochem Physiol [C]** 1988;91(1):241–6

The regulation of the corticomelanotropic cell activity in aves. III—Effect of various peptides on the release of MSH from dispersed, perfused duck pituitary cells. Cosecretion of ACTH with MSH. Castro MG, et al. **Comp Biochem Physiol [C]** 1988;91(2):389–93

Characterization of receptors to the anaphylatoxins on isolated cells. Fukuoka Y, et al. **Dermatologica** 1989;179 Suppl 1:35–40 (35 ref.)

Some observations on the role of LH receptor binding inhibitor of ovine corpora lutea in ovarian processes. Dhir RN, et al. **Endocr Res** 1988–89;14(4):345–64

Hormone-induced expression of the CHS1 gene from Saccharomyces cerevisiae. Appeltauer U, et al. **Eur J Biochem** 1989 Apr 15;181(1):243–7

Plasmodium falciparum: cytoadherence of a knobless clone. Biggs BA, et al. **Exp Parasitol** 1989 Aug;69(2):189–97

Trichobilharzia ocellata: influence of infection on the interaction between the dorsal body hormone, a female gonadotropic hormone, and the follicle cells in the gonad of the intermediate snail host Lymnaea stagnalis. de Jong-Brink M, et al. **Exp Parasitol** 1989 Jan;68(1):93–8

The use of cell and tissue culture techniques in the study of regulatory peptides. Hassall CJ, et al. **Experientia Suppl** 1989;56:113–36 (140 ref.)

Control of gastrointestinal motility by peptides: old peptides, new tricks—new peptides, old tricks. Fox JA. **Gastroenterol Clin North Am** 1989 Jun;18(2):163–77 (92 ref.)

Role of gastrin-releasing peptide in the neural control of pepsinogen secretion from the pig stomach. Skak-Nielsen T, et al. **Gastroenterology** 1988 Nov;95(5):1216–20

Effects of prepro-vasoactive intestinal polypeptide-derived peptides on net fluid flux in small intestine of anesthetized rats. Spokes RA, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):327–30

The second-messenger system for peptide hormones. Hanley RM, et al. **Hosp Pract [Off]** 1989 Aug 15;24(8):59–70

Novel neutrophil-stimulating peptides [news] Westwick J, et al. **Immunol Today** 1989 May;10(5):146–7

Pellicle receptors for Actinomyces viscosus type 1 fimbriae in vitro. Clark WB, et al. **Infect Immun** 1989 Oct; 57(10):3003–8

Enhancement of peptidergic synaptic transmission by catecholamines in the bullfrog sympathetic ganglion. Ushijima H, et al. **J Auton Nerv Syst** 1988 Aug;23(2):95–102

Cloning of the glutamine:fructose-6-phosphate amidotransferase gene from yeast. Pheromonal regulation of its transcription. Watzele G, et al. **J Biol Chem** 1989 May 25;264(15):8753–8

The possible role of endothelin-1 in the pathogenesis of coronary vasospasm. Kurihara H, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S132–7; discussion S142

Galanin hyperinnervates surviving neurons of the human basal nucleus of Meynert in dementias of Alzheimer's and Parkinson's disease: a hypothesis for the role of galanin in accentuating cholinergic dysfunction in dementia. Chan-Palay V. **J Comp Neurol** 1988 Jul 22;273(4):543–57

Bacterial adhesion to oral tissues: a model for infectious diseases. Gibbons RJ. **J Dent Res** 1989 May;68(5):750–60 (88 ref.)

Adsorbed salivary acidic proline-rich proteins contribute to the adhesion of Streptococcus mutans JBP to apatitic surfaces. Gibbons RJ, et al. **J Dent Res** 1989 Sep; 68(9):1303–7

Appetite regulation: the role of peptides and hormones. Morley JE. **J Endocrinol Invest** 1989 Feb;12(2):135–47 (150 ref.)

Effect of endogenous vasoconstrictors on maternal intramyometrial and fetal stem villous arteries in pre-eclampsia. Allen J, et al. **J Hypertens** 1989 Jul; 7(7):529–36

A novel peptide vasoconstrictor, endothelin, is produced by vascular endothelium and modulates smooth muscle Ca2+ channels. Yanagisawa M, et al. **J Hypertens Suppl** 1988 Dec;6(4):S188–91

Leukocyte inhibitory factor stimulates neutrophil-endothelial cell adhesion. Schainberg H, et al. **J Immunol** 1988 Nov 1;141(9):3055–60

Characterization of Na+ transport in normal human fibroblasts and neoplastic H.Ep.2 cells and the role of inhibitin. Spurlock G, et al. **J Membr Biol** 1988 Dec; 106(3):219–31

Peptidergic modulation of a multioscillator system in the lobster. I. Activation of the cardiac sac motor pattern by the neuropeptides proctolin and red pigment-concentrating hormone. Dickinson PS, et al. **J Neurophysiol** 1989 Apr; 61(4):833–44

Possible role of complement peptides in SAH [letter] Höllerhage HG. **J Neurosurg** 1988 Nov;69(5):802–3

Adsorption of an ionic homopolypeptide to a flat surface induced by pH change. Vila J, et al. **J Theor Biol** 1988 Oct 21;134(4):445–9

Physiological role of endogenous peptide effectors studied with peptidase inhibitors. Roques BP. **Kidney Int Suppl** 1988 Oct;26:S27–33 (45 ref.)

Role of complement-derived peptides in thrombocytopenia elicited by soluble aggregates of immunoglobulin G in the rat. Fernandez-Gallardo S, et al. **Lab Invest** 1989 May; 60(5):705–13

Peptide regulatory factors: a new Lancet series [editorial] **Lancet** 1989 Apr 1;1(8640):704

Peptide regulatory factors: multifunctional mediators of cellular growth and differentiation. Green AR. **Lancet** 1989 Apr 1;1(8640):705–7 (26 ref.)

Endothelin: a potent vasoconstrictor associated with coronary vasospasm. Kurihara H, et al. **Life Sci** 1989; 44(25):1937–43

Connective tissue activating peptides. Castor CW, et al. **Methods Enzymol** 1988;163:731–48

Role of SGP2, a suppressor of a gpa1 mutation, in the mating-factor signaling pathway of Saccharomyces cerevisiae. Nakayama N, et al. **Mol Cell Biol** 1988 Dec; 8(12):5410–6

Role of STE genes in the mating factor signaling pathway mediated by GPA1 in Saccharomyces cerevisiae. Nakayama N, et al. **Mol Cell Biol** 1988 Sep;8(9):3777–83

The role of endothelin in the pathogenesis of vasospasm following subarachnoid haemorrhage. Ide K, et al. **Neurol Res** 1989 Jun;11(2):101–4

Evidence for an involvement of substance P, but not cholecystokinin-like peptides, in hexamethonium-resistant intestinal peristalsis. Barthó L, et al. **Neuroscience** 1989; 28(1):211–7

The presence and possible role of a galanin-like peptide in the mudpuppy heart. Parsons RL, et al. **Neuroscience** 1989; 29(3):749–59

Regulatory role of galanin in control of hypothalamic-anterior pituitary function. Ottlecz A, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9861–5

Gastrin releases a blood calcium-lowering peptide from the acid-producing part of the rat stomach. Persson P, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2834–8

A postulated role for follicle regulatory protein in follicle selection. diZerega GS, et al. **Prog Clin Biol Res** 1988; 267:201–26 (104 ref.)

Regulatory peptides and amines during ontogeny and in non-endocrine cancers: occurrence and possible functional significance. Larsson LI. **Prog Histochem Cytochem** 1988; 17(4):1–222 (926 ref.)

Structure-function relationships in 3-phosphoglycerate kinase: role of the carboxy-terminal peptide. Mas MT, et al. **Proteins** 1988;4(1):56–62

Abstracts of the 8th national scientific meeting of the Bayless and Starling Society. 15–16 September 1988, London, U.K. **Regul Pept** 1988 Sep;22(4):385–443

Potential involvement of galanin in the regulation of fluid homeostasis in the rat. Koenig JI, et al. **Regul Pept** 1989 Jan;24(1):81–6

Co-existence of galanin and acetylcholine: is galanin involved in memory processes and dementia? Crawley JN, et al. **Trends Neurosci** 1989 Aug;12(8):278–82 (46 ref.)

Functional studies on endothelin catch up with molecular biology. Hiley CR. **Trends Pharmacol Sci** 1989 Feb; 10(2):47–9 (3 ref.)

Basic carboxypeptidases: regulators of peptide hormone activity. Skidgel RA. **Trends Pharmacol Sci** 1988 Aug; 9(8):299–304 (30 ref.)

Bombesin-like peptides as growth factors. Wiedermann CJ. **Wien Klin Wochenschr** 1989 Jun 23;101(13):435–40 (55 ref.)

[Regulatory factors of the psoriatic skin reaction] Christophers E. **Hautarzt** 1989 Jul;40(7):456–60 (44 ref.) **(Ger)**

[Effect of myelopeptides on bone marrow T-lymphocyte precursors] Petrov RV, et al. **Dokl Akad Nauk SSSR** 1989; 305(3):764–7 **(Rus)**

[Cascade unidirectional regulatory processes implemented by short-lived peptides (thyroliberin)] Ashmarin IP, et al. **Fiziol Zh SSSR** 1989 May;75(5):627–32 (Eng. Abstr.) **(Rus)**

[Regulatory peptides as modulators of body protective functions] Korneva EA. **Fiziol Zh SSSR** 1989 May; 75(5):656–63 (32 ref.) **(Rus)**

[The system of natural physiologically active peptides] Zamiatnin AA. **Fiziol Zh SSSR** 1989 May;75(5):646–55 (27 ref.) (Eng. Abstr.) **(Rus)**

[Polypeptide growth factors in animal embryogenesis] Stoĭka RS, et al. **Ontogenez** 1988 May–Jun;19(3):229–39 (63 ref.) (Eng. Abstr.) **(Rus)**

[Strong- and rapid-action regulator peptides] Ashmarin IP. **Patol Fiziol Eksp Ter** 1988 May–Jun;(3):3–8 (50 ref.) **(Rus)**

[The role of regulatory peptides in the development of gastrointestinal tract pathology in children] Tabolin VA, et al. **Pediatriia** 1988;(11):94–8 (48 ref.) **(Rus)**

[Physiopathologic aspects of intestinal regulator peptides] Blázquez Fernández E. **Rev Clin Esp** 1989 May; 184(8):435–42 (20 ref.) **(Spa)**

RADIATION EFFECTS

Particle beam induced reactions between peptides and liquid matrices. Dass C, et al. **Anal Chem** 1988 Dec 15; 60(24):2723–9

[Radiation stimulation of the production of thymocyte growth factor and its possible role in thymus recovery] Protsak EA, et al. **Radiobiologiia** 1989 May–Jun;29(3):321–5 (Eng. Abstr.) **(Rus)**

SECRETION

Appearance of immunoreactive endocrine cells during the development of the rat pancreas, with special reference to polypeptide-secreting cells. Gómez Dumm CL, et al. **Acta Anat (Basel)** 1987;130(2):158–62

Hypoxia stimulates release of endothelium-derived relaxant factor. Pohl U, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):H1595–600

The release of bombesin-like peptides from small cell lung cancer cells. Moody TW, et al. **Ann N Y Acad Sci** 1988; 547:351–9

Secretory mechanism of immunoreactive endothelin in cultured bovine endothelial cells. Emori T, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):93–100

Three growth hormone- and two prolactin-related novel peptides of Mr 13,000–18,000 identified in the anterior pituitary. Sinha YN, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):171–9

Endotoxin stimulates endothelin-release in vivo and in vitro as determined by radioimmunoassay. Sugiura M, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1220–7

Translocation and proteolytic processing of nascent secretory polypeptide chains: two functions associated with the ribosomal domain of the endoplasmic reticulum. Amar-Costesec A, et al. **Biol Cell** 1989;65(2):99–108

Evidence for regulation of peptide-YY release by the proximal gut. Greeley GH Jr, et al. **Endocrinology** 1989 Mar;124(3):1438–43

Secretion of endothelin and related peptides from renal epithelial cell lines. Shichiri M, et al. **FEBS Lett** 1989 Aug 14;253(1–2):203–6

Temporal relationships of cholecystokinin release, pancreatobiliary secretion, and gastric emptying of a mixed meal. Fried M, et al. **Gastroenterology** 1988 Nov; 95(5):1344–50

Uterine secretory alterations coincident with embryonic mortality in the gilt after exogenous estrogen administration. Gries LK, et al. **J Anim Sci** 1989 Jan; 67(1):276–84

Human cultured endothelial cells do secrete endothelin-1. Clozel M, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S229–31

Peptides co-released with luteinizing hormone by perifused pituitary cell aggregates. Sion B, et al. **Mol Cell Endocrinol** 1988 Dec;60(2–3):151–61

Corticotropin-releasing factor (CRF) and neurotransmitters modulate melanotropic peptide release from rat neurointermediate pituitary in vitro. Saland LC, et al. **Neuropeptides** 1988 Aug–Sep;12(2):59–66

Galanin is an estrogen-inducible, secretory product of the rat anterior pituitary. Kaplan LM, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7408–12

Suppression of primary and secondary peptides with somatostatin analog in the therapy of functional endocrine tumors. Woltering EA, et al. **Surg Gynecol Obstet** 1988 Dec;167(6):453–62

[A case of multiple endocrine neoplasia, type 1, with parathyroid adenoma, multinodular adrenal cortical hyperplasia, islet cell tumor and hyperplasia of thyroid with concomitant hypersecretion of gastrin and total glucagon-like immunoreactivity] Shigematsu S, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):357–62 **(Jpn)**

THERAPEUTIC USE

The inhibition of murine lung metastasis by synthetic polypeptides [poly(arg-gly-asp) and poly(tyr-ile-gly-ser-arg)] with a core sequence of cell adhesion molecules. Saiki I, et al. **Br J Cancer** 1989 Feb; 59(2):194–7

Preventive effect of an E. coli-filtrate (Colibiogen) in polymorphous light eruption. Przybilla B, et al. **Br J Dermatol** 1989 Aug;121(2):229–33

Inhibition of the metastasis of murine malignant melanoma by synthetic polymeric peptides containing core sequences of cell-adhesive molecules. Saiki I, et al. **Cancer Res** 1989 Jul 15;49(14):3815–22

Copolymer-I therapy for multiple sclerosis. Rolak LA. **Clin Neuropharmacol** 1987 Oct;10(5):389–96 (40 ref.)

Effect of T-activin on the course of experimental infection with Taenia crassiceps (Zeder, 1800) in mice. Heřmánek J, et al. **Folia Parasitol (Praha)** 1989;36(2):117–26

Limiting HIV infectivity with peptides [letter] Torensma R, et al. **Immunol Today** 1988 Sep;9(9):255–6

Polyaspartic acid prevents experimental aminoglycoside nephrotoxicity. Gilbert DN, et al. **J Infect Dis** 1989 May; 159(5):945–53

It's too early to tell, but polypeptide growth factor research already generates some enthusiasm [news] Kirn TF. **JAMA** 1989 Apr 28;261(16):2298–9

[Taktivin in the combined treatment of patients with ovarian cancer] Griaznova IM, et al. **Akush Ginekol (Mosk)** 1988 Aug;(8):57–61 (Eng. Abstr.) **(Rus)**

[The analgesic effect of various fractions of the supernatant of a bone marrow cell culture in pathologic pain] Grafova VN, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):653–5 (Eng. Abstr.) **(Rus)**

[The immunomodulating action of myelopeptides in hypoxic hypoxia in animals] Sarybaeva DV, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):691–2 (Eng. Abstr.) **(Rus)**

[Inhibiting effect of thymogen on the development of tumors of the esophagus and forestomach induced by N-nitrososarcosine ethyl ester in rats] Bespalov VG, et al. **Eksp Onkol** 1989;11(4):23–6 (Eng. Abstr.) **(Rus)**

[Stage-by-stage complex immunologic correction in patients with bronchial asthma living in a large industrial and power plant region] Grigor'ev MA, et al. **Gig Tr Prof Zabol** 1989; (4):25–7 (Eng. Abstr.) **(Rus)**

[Immunomodulators in the complex therapy of newborn infants with suppurative surgical infections] Samsygin SA, et al. **Khirurgiia (Mosk)** 1988 Jul;(7):101–6 (Eng. Abstr.) **(Rus)**

[Experimental therapy of thermal burns with biogenic peptide-containing preparations] Riabinin VE, et al. **Patol Fiziol Eksp Ter** 1989 Mar-Apr;(2):39–42 (Eng. Abstr.) **(Rus)**

[Efficacy of treating patients with disseminated forms of destructive pulmonary tuberculosis using chemical preparations and T-activin] Chukanov VI, et al. **Probl Tuberk** 1989;(6):30–3 (Eng. Abstr.) **(Rus)**

[Use of taktivin in postoperative intensive therapy in oncology] Gadalov VP, et al. **Vestn Akad Med Nauk SSSR** 1988;(9):68–73 (Eng. Abstr.) **(Rus)**

[Clinico-immunologic evaluation of thymotropin efficacy in dermatosis patients] Khamidov ShA, et al. **Vestn Dermatol Venerol** 1988;(10):7–10 (Eng. Abstr.) **(Rus)**

[Effectiveness of the new Soviet immunomodulator mielopid in the combined treatment of patients with chronic pyoderma] Petrova IV, et al. **Vestn Dermatol Venerol** 1989; (5):67–9 (Eng. Abstr.) **(Rus)**

[Possibility of using T-activin in the treatment of primary glaucoma] Dobritsa TA, et al. **Vestn Oftalmol** 1988 Jul-Aug;104(4):22–4 (Eng. Abstr.) **(Rus)**

TOXICITY

Competitive mechanisms of basic peptides inducing transganglionic degenerative atrophy. Tajti J, et al. **Acta Morphol Hung** 1988;36(1–2):7–14

Lethal ischemia due to intracoronary endothelin in pigs. Ezra D, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H339–43

Analogies and differences in the mode of action and properties of binding sites (localization and mutual interactions) of two K+ channel toxins, MCD peptide and dendrotoxin I. Bidard JN, et al. **Brain Res** 1989 Aug 21; 495(1):45–57

K+ channels openers prevent epilepsy induced by the bee venom peptide MCD. Gandolfo G, et al. **Eur J Pharmacol** 1989 Jan 17;159(3):329–30

Endothelin and cyclosporin nephrotoxicity [letter] Cairns HS, et al. **Lancet** 1988 Dec 24–31;2(8626–8627):1496–7

Partial structural determination of hepatotoxic peptides from Microcystis aeruginosa (cyanobacterium) collected in ponds of central China. Carmichael WW, et al. **Toxicon** 1988;26(12):1213–7

A novel cardiotoxic polypeptide from the venom of Atractaspis engaddensis (burrowing asp): cardiac effects in mice and isolated rat and human heart preparations. Wollberg Z, et al. **Toxicon** 1988;26(6):525–34

[Classification and identification of toxic polypeptides using a pattern recognition method] Parilis II, et al. **Mol Biol (Mosk)** 1988 Nov-Dec;22(6):1697–701 (Eng. Abstr.) **(Rus)**

URINE

Further studies on the nutritional factors affecting the urinary excretion of acid-soluble peptides in rats. Noguchi T, et al. **Br J Nutr** 1988 Sep;60(2):321–37

Prostatic inhibin-like peptide quantified in urine of prostatic cancer patients by enzyme-linked immunosorbent assay. Teni TR, et al. **Clin Chem** 1989 Jul;35(7):1376–9

Urinary excretion of glomerular basement membrane-related peptides in urines of patients with and without renal failure. Wingen AM, et al. **Contrib Nephrol** 1988;68:192–7

Attention deficit disorders: a study of peptide-containing urinary complexes. Hole K, et al. **J Dev Behav Pediatr** 1988 Aug;9(4):205–12

Endothelin in urine [letter] Berbinschi A, et al. **Lancet** 1989 Jul 1;2(8653):46

[Clinical studies on the measurement of urinary tissue polypeptide antigen (TPA) levels using Prolifigen TPA kit "Daiichi"-II in urothelial cancers] Ohmori H, et al. **Hinyokika Kiyo** 1988 Dec;34(12):2101–10 (Eng. Abstr.) **(Jpn)**

[Clinical studies on urinary tissue polypeptide antigen (TPA): problems and improvement in determination] Yoshida M, et al. **Hinyokika Kiyo** 1989 Feb;35(2):217–23 (Eng. Abstr.) **(Jpn)**

[A study of urinary TPA in bladder cancer] Akagi T. **Nippon Hinyokika Gakkai Zasshi** 1988 Aug;79(8):1337–47 (Eng. Abstr.) **(Jpn)**

[Improvement of the determination of urinary tissue polypeptide antigen (TPA) and the clinical study in bladder cancer patients] Morimoto S, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Dec;79(12):1954–61 (Eng. Abstr.) **(Jpn)**

PEPTIDES, CHEMOTACTIC see **CHEMOTACTIC FACTORS**

PEPTIDES, CYCLIC

Catalysis of a rotational transition in a peptide by crystal forces. Kitson DH, et al. **Biochemistry** 1988 Sep 20; 27(19):7176–80

Determination of cyclopeptide conformations in solution using NMR data and conformational energy calculations. Shenderovich MD, et al. **Biophys Chem** 1988 Aug; 31(1–2):163–73

Conformational analysis of cyclic peptides in solution. Kessler H, et al. **Biopolymers** 1989 Jan;28(1):385–95

Ca2+ binding cyclic octapeptides having an alternating Sar and a hydrophobic amino acid in the sequence. Kimura S, et al. **Biopolymers** 1989 Jul;28(7):1235–46

Ca2+ transport through lipid membrane by diastereomer cyclic octapeptides. Kimura S, et al. **Biopolymers** 1989 Jul; 28(7):1247–57

Interactive NMR and computer simulation studies of lanthionine-ring structures. Palmer DE, et al. **Biopolymers** 1989 Jan;28(1):397–408

Regularly alternating L,D-peptides. III. Hexacyclic peptides from valine or phenylalanine. Pavone V, et al. **Biopolymers** 1989 Jan;28(1):215–23

Conformational analysis of cyclolinopeptide A, a cyclic nonapeptide: nuclear Overhauser effect and energy minimization studies. Raghothama S, et al. **Biopolymers** 1989 Feb;28(2):573–88

Comparison of the conformations of cyclolinopeptide A in the solid state and in solution. Tancredi T, et al. **Biopolymers** 1989 Jan;28(1):513–23

Ala analogues of the cyclolinopeptide A. Zanotti G, et al. **Biopolymers** 1989 Jan;28(1):371–83

Bicyclic peptides: solution conformation and Ca2+ binding of the heterodetic bicyclic decapeptide cyclo(Glu1-Leu2-Pro3-Gly4-Ser5-Ile6-Pro7-Ala8)-cyclo(1 gamma——5 beta)Phe9-Gly10. Zanotti G, et al. **Biopolymers** 1989 Jan;28(1):305–17

Structural characterization of toxic cyclic peptides from blue-green algae by tandem mass spectrometry. Krishnamurthy T, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):770–4

ANALYSIS

Selective transport of the salts of amino acid esters through an organic liquid membrane with antamanide as a carrier. Kataoka H, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug; 36(8):3196–8

Conformational stability of antamanide and analogs. Crystal structure of perhydrosymmetric antamanide, cyclic (-Val-Pro-Pro-Cha-Cha-Val-Pro-Pro-Cha-Cha-). Karle IL, et al. **Int J Pept Protein Res** 1989 Jun;33(6):422–7

N.m.r studies of internal mobility in a cyclic tetrapeptide. Kopple KD, et al. **Int J Pept Protein Res** 1989 Feb; 33(2):82–5

Mycobactins and exochelins of Mycobacterium tuberculosis, M. bovis, M. africanum and other related species. Barclay R, et al. **J Gen Microbiol** 1988 Mar;134 (Pt 3):771–6

The distribution of histidyl-proline diketopiperazine [cyclo(His-Pro)] in discrete rat hypothalamic nuclei. Yamada M, et al. **Neuropeptides** 1989 May-Jun;13(4):221–3

Identification and characterization of cyclo(His-Pro)-like immunoreactivity in amniotic fluid. Hilton CW, et al. **Peptides** 1989 Mar-Apr;10(2):299–301

BIOSYNTHESIS

Co-ordinated expression of the components of iron transport (mycobactin, exochelin and envelope proteins) in Mycobacterium neoaurum. Sritharan M, et al. **FEMS Microbiol Lett** 1989 Jul 15;51(1):183–5

BLOOD

Radioimmunoassay of cyclo(His-Pro) in unextracted human plasma: report of a normal range and definition of factors critical for successful assay. Hilton CW, et al. **Neuropeptides** 1989 Jan;13(1):65–70

CHEMICAL SYNTHESIS

Automated synthesis of N-bromoacetyl-modified peptides for the preparation of synthetic peptide polymers, peptide-protein conjugates, and cyclic peptides. Robey FA, et al. **Anal Biochem** 1989 Mar;177(2):373–7

Synthesis and structural studies of N-p-toluensulfonyl cyclodipeptides. Calcagni A, et al. **Biopolymers** 1989 Jan; 28(1):149–60

Synthesis, biological activity and conformational analysis of cyclic GRF analogs. Felix AM, et al. **Int J Pept Protein Res** 1988 Dec;32(6):441–54

Bicyclic peptides. VI. Synthesis, conformation, and ion-binding of two bicyclic nonapeptides. Zanotti GC, et al. **Int J Pept Protein Res** 1988 Dec;32(6):527–35

Cyclic (hydroxyphosphinyl)acyl dipeptides: a new class of angiotensin converting enzyme inhibitors. Weller HN, et al. **J Enzym Inhib** 1988;2(3):183–98

Synthesis of highly mu and delta opioid receptor selective peptides containing a photoaffinity group. Landis G, et al. **J Med Chem** 1989 Mar;32(3):638–43

Conformationally restricted analogues of atriopeptin(103–125)amide. Spear KL, et al. **J Med Chem** 1989 Jan;32(1):67–72

[Cyclic analogs of enkephalin with disulfide bridges between the second and fifth positions] Korol'kov VI, et al.

Bioorg Khim 1989 Mar;15(3):313–24 (Eng. Abstr.) (Rus)
[Cyclic analogs of des-Arg9-[Leu8]bradykinin] Mutule IE, et al. Bioorg Khim 1989 Mar;15(3):325–34 (Eng. Abstr.) (Rus)

IMMUNOLOGY

Production and characterization of antibodies against microcystins. Chu FS, et al. Appl Environ Microbiol 1989 Aug;55(8):1928–33
[Immunologic study of a synthetic peptide with HBsAg activity] Luo KX. Chung Hua I Hsueh Tsa Chih 1989 Jan; 69(1):28–30, 4 (Eng. Abstr.) (Chi)

ISOLATION & PURIFICATION

Occurrence of a novel cardiac natriuretic peptide in rats. Itoh H, et al. Biochem Biophys Res Commun 1989 Jun 15; 161(2):732–9
Novel cytotoxic peptides from the tropical marine cyanobacterium Hormothamnion enteromorphoides. 1. Discovery, isolation and initial chemical and biological characterization of the hormothamnins from wild and cultured material. Gerwick WH, et al. Experientia 1989 Feb 15;45(2):115–21
Purification, composition, and activity of two bactenecins, antibacterial peptides of bovine neutrophils. Gennaro R, et al. Infect Immun 1989 Oct;57(10):3142–6
Novel cytotoxic compounds from the ascidian Lissoclinum bistratum. Degnan BM, et al. J Med Chem 1989 Jun; 32(6):1354–9
New cyclic peptides with cytotoxic activity from the ascidian Lissoclinum patella. Degnan BM, et al. J Med Chem 1989 Jun;32(6):1349–54
[Studies of chemical constituents of Manis pentadactyla] Ma XM, et al. Yao Hsueh Hsueh Pao 1988;23(8):588–92 (Eng. Abstr.) (Chi)

METABOLISM

Role of the conformational element in peptide-receptor interactions. Studies with cyclic opioid peptide analogs. Schiller PW. Biophys Chem 1988 Aug;31(1–2):63–9
Conformational behavior of cyclic CCK-related peptides determined by 400-MHz 1H-NMR: relationships with affinity and selectivity for brain receptors. Roy P, et al. Biopolymers 1989 Jan;28(1):69–79
Hypothalamic regulation of histidyl-proline diketopiperazine binding sites in the rat liver. Ogawa N, et al. Brain Res 1988 Jun 7;451(1–2):115–8
Circular pancreatic trypsin inhibitor. A novel substrate for studies on intracellular proteolysis. Rote KV, et al. J Biol Chem 1989 Jan 15;264(2):1156–62
Thyrotropin releasing hormone in the pancreas of newborn rats from streptozotocin-treated mothers. Strbák V, et al. Life Sci 1989;44(12):779–87
Characterization and solubilization of cyclo(His-Pro) binding from rat liver membranes. Mori M, et al. Proc Soc Exp Biol Med 1989 Jun;191(2):108–12

PHARMACOKINETICS

A model system for studying the bioavailability of intestinally administered microcystin-LR, a hepatotoxic peptide from the cyanobacterium Microcystis aeruginosa. Dahlem AM, et al. Pharmacol Toxicol 1989 Feb;64(2):177–81

PHARMACOLOGY

Biochemical and behavioral effects of alaptide, a spirocyclic dipeptide derived from Pro-Leu-Gly-NH2. Dlohožková N, et al. Act Nerv Super (Praha) 1989 Apr;31(1):79–80
Long-term effects of thyrotropin-releasing hormone and histidyl-proline diketopiperazine on the maturation of homeothermia and mitochondrial enzyme activities in neonatal rats. Miyamori C, et al. Acta Endocrinol (Copenh) 1988 Dec;119(4):575–81
Phallacidin prevents thrombin-induced increases in endothelial permeability to albumin. Phillips PG, et al. Am J Physiol 1989 Sep;257(3 Pt 1):C562–7
Conformationally restrained cyclic peptides as antagonists of luteinizing hormone-releasing hormone. Dutta AS, et al. Biochem Biophys Res Commun 1989 Mar 31; 159(3):1114–20
Azidobenzamido-008, a new photosensitive substrate for the 'multispecific bile acid transporter' of hepatocytes: evidence for a common transport system for bile acids and cyclosomatostatins in basolateral membranes. Ziegler K, et al. Biochim Biophys Acta 1988 Nov 22;945(2):263–72
Ionic pores formed by cyclic peptides. Heitz F, et al. Biochimie 1989 Jan;71(1):71–6
Effects of somatostatin, a somatostatin analog, neurotensin and met-enkephalin in the eye with special reference to the irritative response. Stjernschantz J, et al. J Ocul Pharmacol 1985 Spring;1(1):59–70
Cyclo(His-Pro) and the development of tolerance to the hypothermic effect of ethanol. Prasad C, et al. Neuropeptides 1988 Aug-Sep;12(2):75–9
Responses of anterior hypothalamic-preoptic thermosensitive neurons to thyrotropin releasing hormone and cyclo(His-Pro). Hori T, et al. Neuropharmacology 1988 Sep;27(9):895–901
Modulation of eosinophil recruitment in the rat by the platelet-activating factor (PAF) antagonist, BN 52021, the somatostatin analog, BIM 23014, and by cyclosporin A. Etienne A, et al. Prostaglandins 1989 Mar;37(3):345–57

PHYSIOLOGY

Neurobiology of cyclo(His-Pro). Prasad C. Ann N Y Acad Sci 1989;553:232–51 (137 ref.)
Germ cell-Sertoli cell interactions. Studies of cyclic protein-2 in the seminiferous tubule. Wright WW, et al. Ann N Y Acad Sci 1989;564:173–85

POISONING

Prophylaxis of cyanobacterial and mushroom cyclic peptide toxins. Adams WH, et al. J Pharmacol Exp Ther 1989 May; 249(2):552–6

THERAPEUTIC USE

Blood pressure reduction in hypertensive-diabetic rats by the somatostatin analog MK-678. Hartmann J, et al. Life Sci 1989;45(3):267–74
Didemnin B prolongs rat heart allograft survival. Stevens DW, et al. Transplant Proc 1989 Feb;21(1 Pt 1):1139–40
Efficacy of didemnin B in suppressing allograft rejection in mice and rats. Yuh DD, et al. Transplant Proc 1989 Feb; 21(1 Pt 1):1141–3
[The effect of cyclo(L-alanyl-1-amino-1-cyclopentancarbonyl) —Alaptide on experimental gastric ulcers in rats] Korbová L, et al. Cas Lek Cesk 1988 Dec 16;127(51):1574–7 (Eng. Abstr.) (Cze)

TOXICITY

Leukocytosis in mice following therapy with a novel antitumor agent, RA-700. Kato T, et al. Jpn J Cancer Res 1989 Mar;80(3):290–3
Embryotoxicity of L-prolyl-L-leucyl-glycinamide, cyclo(1-amino-cyclopentanecarbonyl-alanyl) and cyclo(glycyl-leucyl), new potential neuropeptides in chick embryos. Kosař K, et al. Pharmazie 1988 Oct;43(10):715–6
Pathophysiology of cyanoginosin-LR: in vivo and in vitro studies. Adams WH, et al. Toxicol Appl Pharmacol 1988 Nov;96(2):248–57
No effect of modulators of reactive oxygen-induced pathology on microcystin-LR intoxication. Franz DR, et al. Toxicon 1988;26(11):1098–101
Toxicity of microcystin LR, a cyclic heptapeptide hepatotoxin from Microcystis aeruginosa, to rats and mice. Hooser SB, et al. Vet Pathol 1989 May;26(3):246–52

PEPTIDOGLYCAN

Synthesis and reactions of O-acetylated benzyl alpha-glycosides of 6-O-(2-acetamido-2-deoxy-beta-D-glucopyranosyl)-N-acetylmuramoyl-L- alanyl-D-isoglutamine esters: the base-catalysed isoglutamine in equilibrium glutamine rearrangement in peptidoglycan-related structures. Keglević D, et al. Carbohydr Res 1989 Feb 15;186(1):63–75
Transforming growth factor-beta production by synovial tissues from rheumatoid patients and streptococcal cell wall arthritic rats. Studies on secretion by synovial fibroblast-like cells and immunohistologic localization. Lafyatis R, et al. J Immunol 1989 Aug 15;143(4):1142–8

ADMINISTRATION & DOSAGE

Systemic injection of group A streptococcal peptidoglycan-polysaccharide complexes elicits persistent neutrophilia and monocytosis associated with polyarthritis in rats. Wells AF, et al. Infect Immun 1989 Feb;57(2):351–8
Origin and fate of IgE-bearing lymphocytes. II. Modulation of IgE isotype expression on Peyer's patch cells by feeding with certain bacteria and bacterial cell wall components or by thymectomy. Durkin HG, et al. J Immunol 1989 Sep 15;143(6):1777–83

ANALYSIS

Chemical composition of Eubacterium alactolyticum cell wall peptidoglycan. Severin AI, et al. Arch Microbiol 1989; 151(4):348–52
Chemical composition of Eubacterium nodatum cell wall peptidoglycan. Severin AI, et al. Arch Microbiol 1989; 151(4):353–8
Comparison of the amino acid sequence of the lytic enzyme from broad-host-range bacteriophage PRD1 with sequences of other cell-wall-peptidoglycan lytic enzymes. Pakula TM, et al. Eur J Biochem 1989 Mar 1;180(1):149–52
Evidence for divalent cation (Ca2+)-stabilized oligomeric proteins and covalently bound protein-peptidoglycan complexes in the outer membrane of Rhizobium leguminosarum. de Maagd RA, et al. J Bacteriol 1989 Jul; 171(7):3989–95
Peptidoglycan-polysaccharide complex in the cell wall of the filamentous prochlorophyte Prochlorothrix hollandica. Jürgens UJ, et al. J Bacteriol 1989 Jan;171(1):498–502
Unusual composition of peptidoglycan in Bordetella pertussis. Tuomanen E, et al. J Biol Chem 1989 Jul 5;264(19):11093–8
Determination of environmental levels of peptidoglycan and lipopolysaccharide using gas chromatography with negative-ion chemical-ionization mass spectrometry utilizing bacterial amino acids and hydroxy fatty acids as biomarkers. Sonesson A, et al. J Chromatogr 1988 Sep 23; 431(1):1–15
Association between the cell-wall peptidoglycan and the progenitor toxin of Clostridium botulinum type C. Hyun SH, et al. Nippon Juigaku Zasshi 1989 Feb;51(1):169–76

BIOSYNTHESIS

Temperature-sensitive murein synthesis in an Escherichia coli pdx mutant and the role of alanine racemase. Grogan DW. Arch Microbiol 1988;150(4):363–7
Biosynthesis of pseudomurein: isolation of putative precursors from Methanobacterium thermoautotrophicum. König H, et al. Can J Microbiol 1989 Jan;35(1):176–81
The Escherichia coli lov gene product connects peptidoglycan synthesis, ribosomes and growth rate [published erratum appears in EMBO J 1989 Apr;8(4):1290] Bouloc P, et al. EMBO J 1989 Jan;8(1):317–23
Functioning of the cloned phage MS2 lysis protein in Escherichia coli impaired in murein synthesis. Ursinus-Wössner A, et al. FEMS Microbiol Lett 1989 Jan 1;48(1):75–9
Peptidoglycan biosynthesis in stationary-phase cells of Escherichia coli. Blasco B, et al. J Bacteriol 1988 Nov; 170(11):5224–8
Variations in UDP-N-acetylglucosamine and UDP-N-acetylmuramyl-pentapeptide pools in Escherichia coli after inhibition of protein synthesis. Mengin-Lecreulx D, et al. J Bacteriol 1989 Jun;171(6):3282–7
Rate and topography of peptidoglycan synthesis during cell division in Escherichia coli: concept of a leading edge. Wientjes FB, et al. J Bacteriol 1989 Jun;171(6):3412–9
Colicin M inhibits peptidoglycan biosynthesis by interfering with lipid carrier recycling. Harkness RE, et al. J Biol Chem 1989 Apr 15;264(11):6177–82
Enzymes in the D-alanine branch of bacterial cell wall peptidoglycan assembly. Walsh CT. J Biol Chem 1989 Feb 15;264(5):2393–6 (62 ref.)
The rate and topography of cell wall synthesis during the division cycle of Escherichia coli using N-acetylglucosamine as a peptidoglycan label [published erratum appears in J Gen Microbiol 1988 Sep;134(Pt 9):2633] Cooper S, et al. J Gen Microbiol 1988 Jun;134 (Pt 6):1717–21
Talk-back regulation: a regulatory response to the inhibitions of cell surface growth. McDowell TD, et al. Microbios 1989;57(232–233):187–204

DEFICIENCY

Normal growth and division of Escherichia coli with a reduced amount of murein. Prats R, et al. J Bacteriol 1989 Jul;171(7):3740–5

GENETICS

Transformation of a conditionally peptidoglycan-deficient mutant of Staphylococcus aureus with plasmid DNA. Nieuwlandt DT, et al. J Bacteriol 1989 Sep;171(9):4906–13

IMMUNOLOGY

T cell line specific for bacterial peptidoglycan subunit: possible role of the COOH-terminal amino acid of the disaccharide tetrapeptide in binding to the T cell receptor. Katsuki M, et al. Cell Immunol 1989 Jul;121(2):391–7
Immunosuppressive macrophages induced by arthropathic peptidoglycan-polysaccharide polymers from bacterial cell walls. Regan DR, et al. Clin Exp Immunol 1988 Dec; 74(3):365–70
A sensitive chemiluminescence based immunoassay for antibody to staphylococcal peptidoglycan. Minors S, et al. J Immunol Methods 1988 Nov 25;115(1):119–25
Immunostimulation with peptidoglycan or its synthetic derivatives. Stewart-Tull DE. Prog Drug Res 1988; 32:305–28

ISOLATION & PURIFICATION

Separation and quantification of muropeptides with high-performance liquid chromatography. Glauner B. Anal Biochem 1988 Aug 1;172(2):451–64
Primary structure of the peptidoglycan-derived tracheal cytotoxin of Bordetella pertussis. Cookson BT, et al. Biochemistry 1989 Feb 21;28(4):1744–9
Penicillin-binding proteins and peptidoglycan of Treponema pallidum subsp. pallidum. Radolf JD, et al. Infect Immun 1989 Apr;57(4):1248–54

METABOLISM

Protein dynamics from chemical shift and dipolar rotational spin-echo 15N NMR. Garbow JR, et al. Biochemistry 1989 Feb 7;28(3):1362–7
[Peptidoglycan modification of Staphylococcus aureus P18 strain after use of 6 active antibiotics on the bacterial wall] Najioullah F, et al. Pathol Biol (Paris) 1989 May; 37(5):370–4 (Eng. Abstr.) (Fre)

PHARMACOLOGY

The sulfated polysaccharide-peptidoglycan complex potently inhibits embryonic angiogenesis and tumor growth in the presence of cortisone acetate. Inoue K, et al. Carbohydr Res 1988 Oct 1;181:135–42
Cardiovascular reaction pattern during endotoxin or peptidoglycan application in awake sheep. Redl H, et al. Circ Shock 1989 Jun;28(2):101–8

Somnogenic activity of O-acetylated and dimeric muramyl peptides. Johannsen L, et al. **Infect Immun** 1989 Sep; 57(9):2726–32

The action of LPS porins and peptidoglycan fragments on human spermatozoa. Galdiero F, et al. **Infection** 1988; 16(6):349–53

PHYSIOLOGY

Chemotactic response of equine polymorphonuclear leucocytes to Streptococcus equi. Muhktar MM, et al. **Res Vet Sci** 1988 Sep;45(2):225–9

TOXICITY

Eicosanoid regulation of acute intestinal vascular permeability induced by intravenous peptidoglycan–polysaccharide polymers. Woolverton CJ, et al. **Agents Actions** 1989 Mar;26(3–4):301–9

Protracted anemia associated with chronic, relapsing systemic inflammation induced by arthropathic peptidoglycan–polysaccharide polymers in rats. Sartor RB, et al. **Infect Immun** 1989 Apr;57(4):1177–85

PEPTIDYL TRANSFERASES see under **ACYLTRANSFERASES**

PEPTOCOCCACEAE

DRUG EFFECTS

Analysis of antibiotic susceptibility and extrachromosomal DNA content of Ruminococcus albus and Ruminococcus flavefaciens. Champion KM, et al. **Can J Microbiol** 1988 Oct;34(10):1109–15

GENETICS

Molecular cloning of genes from Ruminococcus flavefaciens encoding xylanase and beta(1–3,1–4)glucanase activities. Flint HJ, et al. **Appl Environ Microbiol** 1989 May; 55(5):1230–3

PEPTOCOCCUS

Peptococcus endocarditis. Singhi SC, et al. **Indian Pediatr** 1988 Sep;25(9):876–8

PEPTONES

Nutritional factors and conditions for the axenic culture of free-living nematodes. Rothstein M, et al. **Comp Biochem Physiol [B]** 1978;61(1):99–104

ADMINISTRATION & DOSAGE

Encapsulation of proteins and peptides in milkfat: encapsulation efficiency and temperature and freezing stabilities. Braun SD, et al. **J Microencapsul** 1986 Apr–Jun; 3(2):115–26

PHARMACOLOGY

Effect of roxatidine acetate on daytime and night-time peptone-stimulated gastric acid secretion. Hagenmüller F. **Drugs** 1988;35 Suppl 3:65–8

Effect of medium on the bacteriocin production by Klebsiella pneumoniae. Chhibber S, et al. **Folia Microbiol (Praha)** 1989;34(2):99–105

Pure pancreatic juice in humans: orange-lemon-juice-induced secretory effects. Comparative analysis with a regular meal, sorbitol, acidified peptone broth and secretin. Tiscornia OM, et al. **Int J Pancreatol** 1988 Dec;3(6):469–76

Mechanisms of increased lower esophageal sphincter pressure following intraduodenal peptone infusion in dogs. Sandler AD, et al. **J Surg Res** 1989 May;46(5):496–501

Effect of harvest medium composition on yield and chain nature of recombinant tissue-type plasminogen activator species. Dodd I, et al. **Thromb Res** 1989 Jul 1;55(1):79–85

[Changes in the antibacterial activity of nitrofurantoin preparations induced by peptone and hydrolysates] Marica D, et al. **Rev Ig [Bacteriol]** 1989 Apr–Jun;34(2):133–40 (Eng. Abstr.) **(Rum)**

[Ca-activated potassium conductance in the membrane of peptone-induced peritoneal macrophages in the mouse] Maliaev AA, et al. **Fiziol Zh** 1988 Sep–Oct;34(5):79–84 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

[Peptone stimulation of the lower esophageal sphincter in patients with reflux disease] Lepsien G, et al. **Z Gastroenterol** 1988 Apr;26(4):209–16 (Eng. Abstr.) **(Ger)**

PEPTOSTREPTOCOCCUS

DRUG EFFECTS

The in-vitro activity of three long-acting cephalosporins against Bacteroides fragilis, Peptostreptococcus species and Clostridium perfringens. Watt B, et al. **Chemioterapia** 1988 Aug;7(4):264–6

ENZYMOLOGY

Characterization of NAD-dependent 3 alpha- and 3 beta-hydroxysteroid dehydrogenase and of NADP-dependent 7 beta-hydroxysteroid dehydrogenase from Peptostreptococcus productus. Edenharder R, et al. **Biochim Biophys Acta** 1989 Aug 8;1004(2):230–8

Evidence for a novel flavin prosthetic group associated with NADH dehydrogenase from Peptostreptococcus elsdenii. Mayhew SG, et al. **Biochim Biophys Acta** 1971 May 12; 235(2):303–10

Preformed enzyme profiles of reference strains of gram-positive anaerobic cocci. Murdoch DA, et al. **J Med Microbiol** 1988 Sep;27(1):65–70

The active species of "CO2" formed by carbon monoxide dehydrogenase from Peptostreptococcus productus. Bott M, et al. **Z Naturforsch [C]** 1989 May–Jun;44(5–6):392–6

ISOLATION & PURIFICATION

Peptostreptococcus magnus septic arthritis—a report and review of the English literature. Hunter T, et al. **J Rheumatol** 1988 Oct;15(10):1583–4 (8 ref.)

METABOLISM

Fermentation of peptides and amino acids by a monensin-sensitive ruminal Peptostreptococcus. Chen GJ, et al. **Appl Environ Microbiol** 1988 Nov;54(11):2742–9

Metabolism and some characteristics of ruminal strains of Megasphaera elsdenii. Marounek M, et al. **Appl Environ Microbiol** 1989 Jun;55(6):1570–3

Studies on flavin binding in flavodoxins. Mayhew SG. **Biochim Biophys Acta** 1971 May 12;235(2):289–302

Characterization of albumin-binding properties of Peptostreptococcus magnus. Lämmler C, et al. **Can J Microbiol** 1989 Jun;35(6):614–8

Sodium dependent acetate formation from CO2 in Peptostreptococcus products (strain Marburg). Geerligs G, et al. **FEMS Microbiol Lett** 1989 Feb;48(3):253–7

PATHOGENICITY

Peptostreptococcus magnus does not cause hematogenous infections in experimental arthroplasties. Blomgren G, et al. **Clin Orthop** 1989 Apr;(241):248–50

Empyema caused by Kingella denitrificans and Peptostreptococcus spp. in a patient with bronchogenic carcinoma. Molina R, et al. **Eur Respir J** 1988 Oct; 1(9):870–1

PERACETIC ACID see under **ACETIC ACIDS**

PERAZINE see under **PHENOTHIAZINE TRANQUILIZERS**

PERCEPTION

see related SENSATION

Methods for assessing drivers' perception of specific hazards on the road. Armsby P, et al. **Accid Anal Prev** 1989 Feb; 21(1):45–60

Ten- to sixteen-year-olds' perceptions of advertisements for alcoholic drinks. Aitken PP, et al. **Alcohol Alcohol** 1988; 23(6):491–500

Family practice physicians' perceptions and practices regarding health promotion for the elderly. Price JH, et al. **Am J Prev Med** 1988 Sep–Oct;4(5):274–81

Pediatricians' perceptions and practices regarding childhood obesity. Price JH, et al. **Am J Prev Med** 1989 Mar–Apr; 5(2):95–103

Perception of eating and exercise in children as a function of child and parent weight status. Epstein LH, et al. **Appetite** 1989 Apr;12(2):105–18

Intensity judgments of vibrations in the X axis, Z axis, and X-plus-Z axes. Shoenberger RW. **Aviat Space Environ Med** 1988 Aug;59(8):749–53

Sensations, cognitions and the perception of cues associated with expected and unexpected panic attacks. Street LL, et al. **Behav Res Ther** 1989;27(2):189–98

Maternal perception of sound-provoked fetal movements in low-risk pregnancies during the third trimester. Nyman M, et al. **Br J Obstet Gynaecol** 1989 May;96(5):566–7

Reliability of ratings of perceived effort regulation of exercise intensity. Eston RG, et al. **Br J Sports Med** 1988 Dec; 22(4):153–5

The nature of voluntary action. Brown JW. **Brain Cogn** 1989 May;10(1):105–20

Coaches' goals for young children in a recreational sports program. Stern P, et al. **Clin Pediatr (Phila)** 1989 Jun; 28(6):277–81

Perception testing in surgical pathology. Berbaum KS, et al. **Hum Pathol** 1988 Oct;19(10):1127–31

In Nigeria: views and notions of patients attending some selected hospitals. Fawole JO. **Hygie** 1988 Jun;7(2):35–8

The perceptual presence of the life course. Redfoot DL, et al. **Int J Aging Hum Dev** 1988;27(3):155–70

Friendships in later life: definitions and maintenance patterns. Roberto KA, et al. **Int J Aging Hum Dev** 1989;28(1):9–19

Perceptual evaluation in occupational therapy. Mohl E, et al. **Int J Rehabil Res** 1987;10(4 Suppl 5):271–6

Teenagers' beliefs about AIDS education and physicians' perceptions about them. Manning DT, et al. **J Fam Pract** 1989 Aug;29(2):173–7

House officer interviewing techniques: impact on data elicitation and patient perceptions. Woolliscroft JO, et al. **J Gen Intern Med** 1989 Mar–Apr;4(2):108–14

High school students' perceptions of nursing as a career: a pilot study. Grossman D, et al. **J Nurs Educ** 1989 Jan; 28(1):18–21

Health and occupational correlates of perceived occupational stress in symphony orchestra musicians. Middlestadt SE, et al. **J Occup Med** 1988 Sep;30(9):687–92

First impressions of a women's center. Armstrong M. **J Perinatol** 1988 Spring;8(2):134–5

The effects of distraction on the perception of exercise-induced symptoms. Fillingim RB, et al. **J Psychosom Res** 1989;33(2):241–8

Perception of illness among patients with alcoholic liver disease. Farid BT, et al. **J Stud Alcohol** 1988 Jul;49(4):375–7

Characterizing physicians' perceptions of ambiguity. Curley SP, et al. **Med Decis Making** 1989 Apr–Jun;9(2):116–24

Older persons' definitions of good health: implications for general practitioners. Saltman DC, et al. **Med J Aust** 1989 Apr 17;150(8):426, 428

The use of storage phosphors for portal imaging in radiation therapy: therapists' perception of image quality. Gur D, et al. **Med Phys** 1989 Jan–Feb;16(1):132–6

Evaluation of maternal perception of sound-provoked fetal movement as a test of antenatal fetal health. Arulkumaran S, et al. **Obstet Gynecol** 1989 Feb;73(2):182–6

An empirical assessment of pain beliefs. Williams DA, et al. **Pain** 1989 Mar;36(3):351–8

Perceptions on teaching. Gregory RL. **Perception** 1988; 17(2):143–6

Hands-on to handle-turning man [editorial] Gregory RL. **Perception** 1989;18(2):139–42

A perception experiment to assess the clinical accuracy of various methods of obtaining cardiac phase images. Houston AS, et al. **Phys Med Biol** 1989 Apr;34(4):465–72

Sensory stimulation and energy density in the development of satiety. Rolls BJ, et al. **Physiol Behav** 1988;44(6):727–33

Physicians' perceptions of their role in cardiovascular risk reduction. Mann KV, et al. **Prev Med** 1989 Jan;18(1):45–58

Evolving conceptions of memory storage, selective attention, and their mutual constraints within the human information-processing system. Cowan N. **Psychol Bull** 1988 Sep;104(2):163–91 (236 ref.)

Has the time come to rehabilitate Gestalt theory? Epstein W. **Psychol Res** 1988;50(1):2–6

Gender differences in body weight perception and weight-loss strategies of college students. Connor-Greene PA. **Women Health** 1988;14(2):27–42

Gender role nonconformity and perception of mental illness. Waisberg J, et al. **Women Health** 1988;14(1):3–16

Korean version of the Geriatric Social Readjustment Questionnaire: cross-cultural comparison between Koreans and Americans in the perception of life events. Shin SC, et al. **Yonsei Med J** 1989;30(1):38–44

[Expression of pain in rheumatic disease. Exploratory study] Carter H, et al. **Rev Rhum Mal Osteoartic** 1988 Oct; 55(10):727–34 (Eng. Abstr.) **(Fre)**

[Role perception of medical residents in relation to hospital size and specialty] Notzer N, et al. **Harefuah** 1989 Mar 15;116(6):328–30 (Eng. Abstr.) **(Heb)**

PHYSIOLOGY

Electroreception and magnetoreception in simple and complex organisms. Tenforde TS. **Bioelectromagnetics** 1989;10(3):215–21 (60 ref.)

Perception, cognition and action: the mediating role of affective states. Karli P. **Brain Behav Evol** 1989; 33(2–3):153–6 (20 ref.)

Relationship between subjective pain estimation and somatosensory evoked potentials by electrical tooth stimulation. Umino M, et al. **Bull Tokyo Med Dent Univ** 1988 Sep;35(3):67–74

Hemispheric specialization for tactile perception opposed by contralateral noise. Cohen H, et al. **Cortex** 1988 Sep; 24(3):425–31

The psychology of visual displays. Kosslyn SM. **Invest Radiol** 1989 May;24(5):417–9

Images: cultural, perceptual, and computational. MacCormac ER. **Invest Radiol** 1989 Apr;24(4):331–3

Ultrastructure, morphology and organization of biogenic magnetite from sockeye salmon, Oncorhynchus nerka: implications for magnetoreception. Mann S, et al. **J Exp Biol** 1988 Nov;140:35–49

Perceptual attention in aging and dementia measured by Gottschaldt's Hidden Figure Test. Capitani E, et al. **J Gerontol** 1988 Nov;43(6):P157–63

Effects of lesions of temporal-parietal junction on perceptual and attentional processing in humans. Robertson LC, et al. **J Neurosci** 1988 Oct;8(10):3757–69

Perceived roughness of a grating: correlation with responses of mechanoreceptive afferents innervating the monkey's fingerpad. Sathian K, et al. **J Neurosci** 1989 Apr; 9(4):1273–9

The perception of breathlessness. Bolton JW, et al. **J S C Med Assoc** 1988 Nov;84(11):551–4

Sensory discrimination and the incipient advantage of mutations. Genoni GP. **J Theor Biol** 1988 Oct 7; 134(3):327–9

Opioid involvement in the perception of pain due to endurance exercise in trained man. Paulev PE, et al.

Jpn J Physiol 1989;39(1):67–74
Aspects of perceptual development and rehabilitation. Kanevsky D, et al. **Med Hypotheses** 1988 Sep;27(1):33–4
Synesthesia and mapping of subjective sensory dimensions [editorial] Cytowic RE. **Neurology** 1989 Jun;39(6):849–50
Effects of diffuse noxious inhibitory controls (DNICs) on the sensory-discriminative dimension of pain perception. Talbot JD, et al. **Pain** 1989 Feb;36(2):231–8
A mechanism for the direct perception of change: the example of bacterial chemotaxis. Pittenger JB, et al. **Perception** 1988;17(1):119–33 (32 ref.)
Odor masking in the rat. Laing DG, et al. **Physiol Behav** 1989 Apr;45(4):689–94
Temporal integration and reaction times in human smell. Overbosch P, et al. **Physiol Behav** 1989 Mar;45(3):615–26
A theoretical model for perceived intensity in human taste and smell. II. Temporal integration and reaction times. Overbosch P, et al. **Physiol Behav** 1989 Mar;45(3):607–13
The perception of intention. Dasser V, et al. **Science** 1989 Jan 20;243(4889):365–7
Studies of the Modified Somatic Perceptions Questionnaire (MSPQ) in patients with back pain. Psychometric and predictive properties. Deyo RA, et al. **Spine** 1989 May; 14(5):507–10
[Sensation and sensibility. On John Locke's influence on the concept of sensibility in the 18th century] Stettler A. **Gesnerus** 1988;45 Pt 3–4:445–60 (Eng. Abstr.) **(Ger)**

PERCEPTION, SOCIAL see **SOCIAL PERCEPTION**

PERCEPTUAL DISORDERS

Assessment of perceptual processing deficits in persons with Alzheimer's disease. Rosswurm MA. **West J Nurs Res** 1989 Aug;11(4):458–69

CHEMICALLY INDUCED

[Two cases of psychotic state following normal-dose benzodiazepine withdrawal] Terao T, et al. **Sangyo Ika Daigaku Zasshi** 1988 Sep 1;10(3):337–40 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Unilateral auditory hallucinations [letter] Khan AM, et al. **Br J Psychiatry** 1988 Feb;152:297–8
[Auditory perception errors in verbal apraxia: indications of the nature of the disorder] van der Merwe A, et al. **S Afr J Commun Disord** 1988;35:45–54 (Eng. Abstr.) **(Afr)**

DIAGNOSIS

New tests for identifying hearing-impaired students with visual perceptual deficits: relationship between deficits and ability to comprehend sign language. Ratner V. **Am Ann Deaf** 1988 Dec;133(5):336–43
Visual neglect and extinction: a new test. Anton HA, et al. **Arch Phys Med Rehabil** 1988 Dec;69(12):1013–6
The clinical assessment of obscure auditory dysfunction—1. Auditory and psychological factors. Saunders GH, et al. **Ear Hear** 1989 Jun;10(3):200–8
Perceptual evaluation in occupational therapy. Mohl E, et al. **Int J Rehabil Res** 1987;10(4 Suppl 5):271–6
Auditory perceptual problems in non-organic hearing disorder. Hasbrouck JM. **Laryngoscope** 1989 Aug;99(8 Pt 1):855–60
Stereoscopic depth perception by static stereo-deficient observers in dynamic displays with constant and changing disparity. Rouse MW, et al. **Optom Vis Sci** 1989 Jun; 66(6):355–62
[Effect of changes in binocular vision on the tridimensional perception of moving objects] Sachsenweger M, et al. **Klin Oczna** 1988 Apr–May;90(4–5):175–7 **(Ger)**

EPIDEMIOLOGY

Stereoacuity levels and vision problems in children from 7 to 11 years. Williams S, et al. **Ophthalmic Physiol Opt** 1988; 8(4):386–9
[Ontogenetic aspect of sensory-perceptive disorders in mental diseases] Dem'ianov IuG. **Zh Nevropatol Psikhiatr** 1988;88(8):69–71 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Audio-spatial deficits in humans: differential effects associated with left versus right hemisphere parietal damage. Pinek B, et al. **Cortex** 1989 Jun;25(2):175–86
The role of individual difference in determining the nature of comprehension defects in aphasia. Varney NR, et al. **Cortex** 1989 Mar;25(1):47–55
Immediate and long-term phantom breast syndrome after mastectomy: incidence, clinical characteristics and relationship to pre-mastectomy breast pain. Krøner K, et al. **Pain** 1989 Mar;36(3):327–34
The effects on auditory function of damage to the pontine olivo-cochlear bundle in man. Cohen M, et al. **Scand Audiol** 1988;17(3):185–9

PHYSIOPATHOLOGY

Depth perception after prolonged usage of night vision goggles. Sheehy JB, et al. **Aviat Space Environ Med** 1989 Jun;60(6):573–9
Auditory neglect. De Renzi E, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):613–7
The "motion-blind" patient: low-level spatial and temporal filters. Hess RH, et al. **J Neurosci** 1989 May;9(5):1628–40
[Effect of pathologic gaze deviation caused by brain stem lesion on interhemispheric equilibrium. Study using a non-verbal dichotic listening test] Belin C, et al. **Neuropsychologia** 1988;26(5):753–8 (Eng. Abstr.) **(Fre)**

PSYCHOLOGY

Disturbances of spatial perception in children. Meerwaldt JD, et al. **Behav Brain Res** 1988 Dec 1;31(2):131–4
Attentional shift towards the rightmost stimuli in patients with left visual neglect. De Renzi E, et al. **Cortex** 1989 Jun;25(2):231–7
Auditory agnosia with relative sparing of speech perception. Lambert J, et al. **Cortex** 1989 Mar;25(1):71–82
Full assessment of the child [editorial] Bax M. **Dev Med Child Neurol** 1989 Feb;31(1):1–2
Children with preschool minor neurodevelopmental disorders. V: Neurodevelopmental profiles at age 13. Gillberg IC, et al. **Dev Med Child Neurol** 1989 Feb; 31(1):14–24
Children with preschool minor neurodevelopmental disorders. IV: Behaviour and school achievement at age 13. Gillberg IC, et al. **Dev Med Child Neurol** 1989 Feb; 31(1):3–13
Assessment of perceptual processing deficits in persons with Alzheimer's disease. Rosswurm MA. **West J Nurs Res** 1989 Aug;11(4):458–69

RADIONUCLIDE IMAGING

The potential value of serial cerebral SPECT scanning in the evaluation of psychiatric illness. Notardonato H, et al. **Clin Nucl Med** 1989 May;14(5):319–22

REHABILITATION

Normal adult performance on constructional praxis training tasks. Neistadt ME. **Am J Occup Ther** 1989 Jul;43(7):448–55
Occupational therapy for adults with perceptual deficits. Neistadt ME. **Am J Occup Ther** 1988 Jul;42(7):434–40 (54 ref.)
Alcohol abuse and perceptual-motor dysfunction: the occupational therapist's role. Van Deusen J. **Am J Occup Ther** 1989 Jun;43(6):384–90 (57 ref.)
Treatment of visual perceptual deficits after stroke: four single case studies. Edmans JA, et al. **Int Disabil Stud** 1989; 11(1):25–33
Aspects of perceptual development and rehabilitation. Kanevsky D, et al. **Med Hypotheses** 1988 Sep;27(1):33–4

PERCEPTUAL DISTORTION

see related
PERCEPTUAL DISORDERS

Effects of lateral displacement of the visual field on the development of visual-motor abilities in cats. Hendy HM, et al. **Dev Psychobiol** 1988 Nov;21(7):635–50
Memory distortion in hypnosis. Sheehan PW. **Int J Clin Exp Hypn** 1988 Oct;36(4):296–311
Macropsia, micropsia, and episodic illusions in Japanese adolescents. Abe K, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jul;28(4):493–6
Distortion of body image as an effect of conditioned fear. Giles TR. **J Behav Ther Exp Psychiatry** 1988 Jun; 19(2):143–6
Relationship of body-image distortion to sex-role identifications, irrational cognitions, and body weight in eating-disordered females. Steiger H, et al. **J Clin Psychol** 1989 Jan;45(1):61–5
Pressure sensitivity in bulimic women: a contribution to research in body image distortion. Florin I, et al. **J Psychosom Res** 1988;32(4–5):439–44
Distorted body image in bulimic women. Franzen U, et al. **J Psychosom Res** 1988;32(4–5):445–50
Assessment of facial self-image by means of a distorting mirror and its relationship to personality. Pogrel MA, et al. **J Psychosom Res** 1989;33(1):93–8
Perceptual distortions and hallucinations reported during the course of sleep deprivation. Babkoff H, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):787–98
Body-image distortion in normal-weight college women. Cullari S, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1195–8
Effects of up-down visual inversion on motor skills. Nakajima Y. **Percept Mot Skills** 1988 Oct;67(2):419–22
Distortion of body image in the obese: a sensory phenomenon. Gardner RM, et al. **Psychol Med** 1988 Aug; 18(3):633–41
Spurious complaints of the sexual abuse of children. Mansheim PA. **Va Med** 1988 Sep;115(9):431–3
[The phenomenon of verbal transformation: study of the rhythm of presentation of auditory material and attention of the subjects] Debigaré J. **Can J Psychol** 1988 Sep; 42(3):364–77 (Eng. Abstr.) **(Fre)**
[Experiences with the distorted Freiburg Speech Test—diagnosis and rehabilitation of hearing disorders] Dieroff HG, et al. **Laryngorhinootologie** 1989 Jul; 68(7):372–8 (Eng. Abstr.) **(Ger)**
[Assessment of the distorted video image of the body by schizophrenic patients] Danzinger R. **Nervenarzt** 1989 Jun; 60(6):355–60 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Hypnotic alteration of somatosensory perception. Spiegel D, et al. **Am J Psychiatry** 1989 Jun;146(6):749–54
Prism adaptation in Parkinson's disease. Stern Y, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1584–7
[Amplitude reaction in binocular cortical visual evoked potentials in anamorphotic image relations] Krause K, et al. **Klin Monatsbl Augenheilkd** 1989 Jan;194(1):65–7 (Eng. Abstr.) **(Ger)**

PERCEPTUAL MASKING

Microgenesis as traced by the transient paired-forms paradigm. Bachmann T. **Acta Psychol (Amst)** 1989 Feb; 70(1):3–17
Conservative treatment of tinnitus in Menière's disease. Vernon J. **Am J Otol** 1988 May;9(3):201–2
Sensory input deficits and negative symptoms in schizophrenic patients. Braff DL. **Am J Psychiatry** 1989 Aug;146(8):1006–11
Temporal effects in simultaneous pure-tone masking in subjects with high-frequency sensorineural hearing loss. Bacon SP, et al. **Audiology** 1988;27(6):313–23
Complex interactions between pairs of forward maskers. Lutfi RA. **Hear Res** 1988 Sep 1;35(1):71–8
Frequency discrimination near the spectral edge of simultaneous and forward maskers. Fantini DA. **J Acoust Soc Am** 1989 Apr;85(4):1691–8
Comodulation masking release using SAM tonal complex maskers: effects of modulation depth and signal position. Grose JH, et al. **J Acoust Soc Am** 1989 Mar;85(3):1276–84
Comodulation masking release: evidence for multiple cues. Hall JW 3d, et al. **J Acoust Soc Am** 1988 Nov;84(5):1669–75
Frequency selectivity in amplitude-modulation detection. Houtgast T. **J Acoust Soc Am** 1989 Apr;85(4):1676–80
Models of the additivity of masking. Humes LE, et al. **J Acoust Soc Am** 1989 Mar;85(3):1285–94 (34 ref.)
Forward-masking properties of multicomponent signals in normal and hearing-impaired subjects. Kim M, et al. **J Acoust Soc Am** 1989 Aug;86(2):828–31
Auditory filter shape derived from binaural masking experiments. Kohlrausch A. **J Acoust Soc Am** 1988 Aug; 84(2):573–83
Speech masking. II: Simultaneous masking thresholds under "naturalistic" listening conditions. Spiegel M. **J Acoust Soc Am** 1988 Dec;84(6):2033–44
Comparison of various modes of presenting sentence materials in tests of speech perception in noise. Theodoridis GC, et al. **J Acoust Soc Am** 1988 Dec;84(6):2270–2
The effect of varying the amplitude-frequency response on the masked speech-reception threshold of sentences for hearing-impaired listeners. van Dijkhuizen JN, et al. **J Acoust Soc Am** 1989 Aug;86(2):621–8
Some remarks on Pastore (1988). Watson CS, et al. **J Acoust Soc Am** 1988 Dec;84(6):2266–70
The Lombard effect on alaryngeal speech. Zeine L, et al. **J Commun Disord** 1988 Sep;21(5):373–83
Discriminability, loudness, and masking in the rat (Rattus norvegicus): a confirmation and extension. Raslear TG. **J Comp Psychol** 1989 Sep;103(3):289–96
Visual masking and visual integration across saccadic eye movements. Irwin DE, et al. **J Exp Psychol [Gen]** 1988 Sep;117(3):276–87
Binocular rivalry and dichoptic masking: suppressed stimuli do not mask stimuli in a dominating eye. Westendorf DH. **J Exp Psychol [Hum Percept]** 1989 Aug;15(3):485–92
A bias interpretation of facilitation in perceptual identification. Ratcliff R, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 May;15(3):378–87
Motion interference in speed discrimination. Bowne SF, et al. **J Opt Soc Am [A]** 1989 Jul;6(7):1112–21
Reverberation, masking, filtering, and level effects on speech recognition performance. Loven FC, et al. **J Speech Hear Res** 1988 Dec;31(4):681–95
Judgments and measurements of the loudness of tinnitus before and after masking. Penner MJ. **J Speech Hear Res** 1988 Dec;31(4):582–7
Effects of diffuse noxious inhibitory controls (DNICs) on the sensory-discriminative dimension of pain perception. Talbot JD, et al. **Pain** 1989 Feb;36(2):231–8
Effect of auditory masking on lingual vibrotactile thresholds and magnitude estimation scaling responses. Petrosino L, et al. **Percept Mot Skills** 1988 Oct;67(2):491–4
Effects of auditory masking on lingual vibrotactile magnitude-estimation scaling responses of young children. Petrosino L, et al. **Percept Mot Skills** 1989 Apr;68(2):523–9
Anatomy of a flash. 1. Two-peak masking and a temporal filling-in. Cogan AI. **Perception** 1989;18(2):243–56
Uniform-field flicker masking in control and specifically-disabled readers. Martin F, et al. **Perception** 1988;17(2):203–14
Stereoscopic depth: its relation to image segmentation, grouping, and the recognition of occluded objects. Nakayama K, et al. **Perception** 1989;18(1):55–68
Masked threshold changes associated with angular separation of noise and signal sources. Terhune JM, et al. **Scand Audiol** 1989;18(2):85–9
Opposing the direct and the indirect theory in explaining the tunnel effect. Wagemans JP, et al. **Z Psychol** 1988;

196(3):217–31

PHYSIOLOGY

Evoked-response forward-masking functions in chinchillas with noise-induced permanent hearing loss. Arehole S, et al. **Audiology** 1989;28(2):92–110

Masking level difference at relatively high masker levels: preliminary report. Durrant JD, et al. **Audiology** 1989; 28(4):221–9

Frequency-specific auditory brainstem responses. Effective masking levels and relationship to behavioural thresholds in normal hearing adults. Purdy SC, et al. **Audiology** 1989; 28(2):82–91

Effect of noise masking on the brain-stem and middle-latency auditory evoked potentials: central and peripheral components. Gott PS, et al. **Electroencephalogr Clin Neurophysiol** 1989 Mar–Apr; 74(2):131–8

Tone-derived vs. tone-in-noise-derived filter functions of frog auditory nerve fibers: a comparison. Dunia R, et al. **Hear Res** 1989 Feb;37(3):241–54

Modulation masking: effects of modulation frequency, depth, and phase. Bacon SP, et al. **J Acoust Soc Am** 1989 Jun; 85(6):2575–80

Masking patterns in the bullfrog (Rana catesbeiana). II: Physiological effects. Freedman EG, et al. **J Acoust Soc Am** 1988 Dec;84(6):2081–91

Physiological responses to the pulsation threshold paradigm. I: Pulsation threshold patterns do not reproduce physiological rate profiles of high-pass and low-pass noise maskers. Hellstrom LI. **J Acoust Soc Am** 1989 Jan; 85(1):230–42

Physiological responses to the pulsation threshold paradigm. II: Representations of high-pass noise in average rate measures of auditory-nerve fiber discharge. Hellstrom LI, et al. **J Acoust Soc Am** 1989 Jan;85(1):243–53

Offset AP masker tuning curve and the FFT of the stimulus. Henry KR, et al. **J Acoust Soc Am** 1988 Oct;84(4):1354–62

Masked tonal hearing thresholds in the beluga whale. Johnson CS, et al. **J Acoust Soc Am** 1989 Jun;85(6):2651–4

Temporal overshoot in simultaneous-masked psychophysical tuning curves from normal and hearing-impaired listeners. Kimberley BP, et al. **J Acoust Soc Am** 1989 Apr; 85(4):1660–5

Spectral differences in the ability of temporal gaps to reset the mechanisms underlying overshoot. McFadden D. **J Acoust Soc Am** 1989 Jan;85(1):254–61

A reexamination of forward masking in the auditory nerve. Relkin EM, et al. **J Acoust Soc Am** 1988 Aug;84(2):584–91

Comodulation masking release for various monaural and binaural combinations of the signal, on-frequency, and flanking bands. Schooneveldt GP, et al. **J Acoust Soc Am** 1989 Jan;85(1):262–72

Comodulation masking release (CMR) as a function of masker bandwidth, modulator bandwidth, and signal duration. Schooneveldt GP, et al. **J Acoust Soc Am** 1989 Jan; 85(1):273–81

Auditory time constants for off-frequency forward masking in normal-hearing and hearing-impaired listeners. Nelson DA, et al. **J Speech Hear Res** 1989 Jun;32(2):298–306

Adaptation and the masking of tinnitus. Penner MJ, et al. **J Speech Hear Res** 1989 Jun;32(2):339–46

Heterotopic conditioning stimuli on first and second pain [letter] Le Bars D, et al. **Pain** 1989 Aug;38(2):231–4

Time course of the subjective contrast enhancement for a second stimulus in successively paired above-threshold transient forms: perceptual retouch instead of forward masking. Bachmann T. **Vision Res** 1988;28(11):1255–61

The role of eye movements and masking in monocular rivalry. Bradley A, et al. **Vision Res** 1988;28(10):1129–37

Spatial phase dependence and the role of motion detection in monocular and dichoptic forward masking. Georgeson MA. **Vision Res** 1988;28(11):1193–205

Contrast modulated maskers: test of a late nonlinearity hypothesis. Nachmias J. **Vision Res** 1989;29(1):137–42

PERCEPTUAL MOTOR PERFORMANCE see **PSYCHOMOTOR PERFORMANCE**

PERCH see under **PERCIFORMES**

PERCHLORIC ACIDS

The effect of perchloric acid fixation on DNA preservation in the salivary gland of Bradysia hygida. Larson ML, et al. **Gegenbaurs Morphol Jahrb** 1988;134(6):933–40

ADVERSE EFFECTS

More on KClO(4) and amiodarone associated thyrotoxicosis [letter] Dal Fabbro S, et al. **J Endocrinol Invest** 1988 Oct; 11(9):691–2

PHARMACOLOGY

Reduced acid protease activity in vitro of lysosomes from thyroid gland of rats chronically treated with propylthiouracil and perchlorate. Sinadinović J, et al. **Exp Clin Endocrinol** 1988 Sep;92(1):97–105

Effect of internally loaded iodide, thiocyanate, and perchlorate on sodium-dependent iodide uptake by phospholipid vesicles reconstituted with thyroid plasma membranes: iodide counterflow mediated by the iodide transport carrier. Saito K, et al. **J Biochem (Tokyo)** 1989 May;105(5):790–3

Excitation of skinned muscle fibers by imposed ion gradients. IV. Effects of stretch and perchlorate ion. Stephenson EW. **J Gen Physiol** 1989 Jan;93(1):173–92

THERAPEUTIC USE

Treatment of amiodarone induced hyperthyroidism with potassium perchlorate and methimazole during amiodarone treatment. Reichert LJ, et al. **BMJ** 1989 Jun 10; 298(6687):1547–8

Delayed control of iodine-induced thyrotoxicosis with a thionamide after KClO4 withdrawal [letter] Bonnyns M, et al. **J Endocrinol Invest** 1988 May;11(5):393

[Transitory efficacy of potassium perchlorate in hypothyroidism caused by amiodarone] Foresti V, et al. **Recenti Prog Med** 1989 Apr;80(4):201–3 (Eng. Abstr.) **(Ita)**

PERCHLOROETHYLENE see **TETRACHLOROETHYLENE**

PERCIFORMES

Sudden death by Lepomis macrochirus (the killer fish). Pritchard JR. **Am J Forensic Med Pathol** 1989 Sep; 10(3):245–6

Histopathological changes induced by malathion in the gills of bluegill Lepomis macrochirus. Richmonds C, et al. **Bull Environ Contam Toxicol** 1989 Jul;43(1):123–30

Differential susceptibility of a fish, tilapia Oreochromis mossambicus (Teleostei, Cichlidae) to hepatocarcinogenesis by diethylnitrosamine and methylazoxymethanol acetate. Ding JL, et al. **Carcinogenesis** 1989 Mar;10(3):493–9

Spatial distributions of Anopheles freeborni, Gambusia affinis and Lepomis cyanellus in experimental rice plots. Blaustein L. **J Am Mosq Control Assoc** 1989 Jun;5(2):254–7

Effects of various factors on the efficiency of minnow traps to sample mosquitofish (Gambusia affinis) and green sunfish (Lepomis cyanellus) populations. Blaustein L. **J Am Mosq Control Assoc** 1989 Mar;5(1):29–35

Diet-associated systemic granuloma in African cichlids. Noga EJ. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1145–8

Nickel-induced histopathological alterations in the gill architecture of a tropical freshwater perch, Colisa fasciatus (Bloch & Schn.). Nath K, et al. **Sci Total Environ** 1989 May 15;80(2–3):293–6

[Aeromonas hydrophila-related septicemia in the Nile tilapia Oreochromis niloticus] Faisal M, et al. **Berl Munch Tierarztl Wochenschr** 1989 Mar 1;102(3):87–93 (Eng. Abstr.) **(Ger)**

ANATOMY & HISTOLOGY

Granulopoiesis in the head kidney of Sparus auratus. Zuasti A, et al. **Arch Histol Jpn** 1988 Dec;51(5):425–31

Accommodation motor neurons in the foveate teleost Paralabrax clathratus: horseradish peroxidase labeling and axonal morphometry, with comparisons to other ciliary nerve components. Wathey JC. **Brain Behav Evol** 1988; 32(1):1–16

Connections of the corpus cerebelli in the green sunfish and the common goldfish: a comparison of perciform and cypriniform teleosts. Wullimann MF, et al. **Brain Behav Evol** 1988;32(5):293–316

Anterograde labelling from the optic nerve reveals multiple central targets in teleost, Lethrinus chrysostomus (Perciformes). Collin SP. **Cell Tissue Res** 1989; 256(2):327–35

Cytoskeletal organization and collagen orientation in the fish scales. Zylberberg L, et al. **Cell Tissue Res** 1988 Sep; 253(3):597–607

Immunocytochemical and ultrastructural characterization of the cell types in the adenohypophysis of Sparus aurata L. (teleost). Quesada J, et al. **Gen Comp Endocrinol** 1988 Nov; 72(2):209–25

Two distinct visual pathways through the superficial pretectum in a percomorph teleost. Striedter GF, et al. **J Comp Neurol** 1989 May 15;283(3):342–54

Central projections of the lateral line nerves of Chelon labrosus (teleosts, order Perciformes). Diaz SM, et al. **J Hirnforsch** 1989;30(3):339–47

The hinged attachment of teeth in the black bass, Micropterus salmoides. Kakizawa Y, et al. **J Nihon Univ Sch Dent** 1988 Jun;30(2):128–33

A double-label study of efferent projections from the Edinger-Westphal nucleus in goldfish and kelp bass. Wathey JC, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):121–6

[Volumetric analysis of the principal subdivisions of the brain of Gobioidei (Teleosts, Perciformes)] Kassem M, et al. **J Hirnforsch** 1989;30(1):59–67 (Eng. Abstr.) **(Fre)**

EMBRYOLOGY

Directional cell movement during early development of the teleost Blennius pholis: II. Transformation of the cells of epithelial clusters into dendritic melanocytes, their dissociation from each other, and their migration to and invasion of the pectoral fin buds. Trinkaus JP. **J Exp Zool** 1988 Oct;248(1):55–72

GENETICS

A double-stranded RNA-inducible fish gene homologous to the murine influenza virus resistance gene Mx. Staeheli P, et al. **Mol Cell Biol** 1989 Jul;9(7):3117–21

Nucleotide sequence, genomic organization and evolution of a major repetitive DNA family in tilapia (Oreochromis mossambicus/hornorum). Wright JM. **Nucleic Acids Res** 1989 Jul 11;17(13):5071–9

GROWTH & DEVELOPMENT

Developmental transitions of myosin isoforms and organisation of the lateral muscle in the teleost Dicentrarchus labrax (L.). Scapolo PA, et al. **Anat Embryol (Berl)** 1988;178(4):287–95

Development of tectal neurons in the perciform teleost Haplochromis burtoni. A Golgi study. Wilm C, et al. **Brain Res Dev Brain Res** 1989 May 1;47(1):35–52

Ontogeny of the lymphoid organs in an Antarctic teleost, Harpagifer antarcticus (Notothenioidei: Perciformes). O'Neill JG. **Dev Comp Immunol** 1989 Winter;13(1):25–33

Mechanisms of branchial cartilage growth in Astatotilapia elegans (Teleostei: Cichlidae). Huysseune A, et al. **J Anat** 1988 Jun;158:13–30

IMMUNOLOGY

Phylogeny of regulatory proteins of the complement system. Isolation and characterization of a C4b/C3b inhibitor and a cofactor from sand bass plasma. Kaidoh T, et al. **J Immunol** 1989 Mar 1;142(5):1605–13

METABOLISM

Arylsulfatase and beta-glucuronidase expression in green sunfish, bluegill, and their reciprocal interspecific hybrids. Daniel WL, et al. **Biochem Genet** 1989 Apr;27(3–4):167–81

Bass liver 6-phosphogluconate dehydrogenase: inhibition by nucleoside phosphates and by fructose 1,6 bisphosphate. Medina Puerta MM, et al. **Biochem Int** 1988 Sep; 17(3):479–87

Purification of 6-phosphogluconolactonase from bass (Dicentrarchus labrax L.)liver. Medina-Puerta MM, et al. **Biochem Int** 1988 Dec;17(6):1011–9

NADP-dependent isocitrate dehydrogenase from bass (Dicentrarchus labrax L.) liver. Medina-Puerta MM, et al. **Biochem Int** 1988 Sep;17(3):489–98

Isolation and characterization of an activator protein for the hydrolysis of ganglioside GM2 from the roe of striped mullet (Mugil cephalus). DeGasperi R, et al. **Biochem J** 1989 Jun 15;260(3):777–83

The influence of polyunsaturated fatty acids on spermine inhibition of lipoperoxidation. Studies on liposomes prepared with microsomal and mitochondrial phospholipids of sea bass (Dicentrarchus labrax L.) and rat liver. Cabrini L, et al. **Comp Biochem Physiol [B]** 1989;93(3):647–51

Activation of an alkaline proteinase from fish skeletal muscle by fatty acids and sodium dodecyl sulphate. Folco EJ, et al. **Comp Biochem Physiol [B]** 1988;91(3):473–6

Perch muscle parvalbumin: general characterization and magnesium-binding properties. Lehky P, et al. **Comp Biochem Physiol [B]** 1979;63(2):253–9

An analysis of esterase activities from surgeonfish tissues yields evidence of an atypical pseudocholinesterase. Leibel WS. **Comp Biochem Physiol [B]** 1988;91(3):437–47

Induction of metal binding proteins in striped bass, Morone saxatilis, following cadmium treatment. Baksi SM, et al. **Comp Biochem Physiol [C]** 1988;91(2):355–63

Effects of tributyltin compounds on ionic regulation and gill ATPase activity in estuarine fish. Pinkney AE, et al. **Comp Biochem Physiol [C]** 1989;92(1):125–9

Peptidergic innervation of the adrenocorticotropic hormone (ACTH)- and growth hormone (GH)-producing cells in the pars distalis of the sea bass (Dicentrarchus labrax). Moons L, et al. **Gen Comp Endocrinol** 1988 Nov; 72(2):171–80

Thyroid hormone stimulation of the perch (Anabas testudineus Bloch) ovarian mitochondrial steroidogenesis. Kaul K, et al. **Indian J Exp Biol** 1988 Jun;26(6):413–7

Metabolism of trimethylamines in kelp bass (Paralabrax clathratus) and marine and freshwater pink salmon (Oncorhynchus gorbuscha). Charest RP, et al. **J Comp Physiol [B]** 1988;158(5):609–19

Cold-acclimation-induced protein hypertrophy in channel catfish and green sunfish. Kent J, et al. **J Comp Physiol [B]** 1988;158(2):185–98

Volatile compounds in flavor-tainted fish from the Upper Wisconsin River. Heil TP, et al. **J Environ Sci Health [B]** 1988 Oct;23(5):489–512

Light-induced dopamine release from teleost retinas acts as a light-adaptive signal to the retinal pigment epithelium. Dearry A, et al. **J Neurochem** 1989 Sep;53(3):870–8

Catecholamine-sensitive adenylate cyclase in the white perch (Roccus americanus) retina: evidence for beta-adrenergic and dopamine receptors linked to adenylate cyclase. O'Connor P, et al. **J Neurochem** 1989 Sep;53(3):969–75

Autoradiographic localization of binding sites for vasotocin in the brain and pituitary of the sea bass (Dicentrarchus labrax). Moons L, et al. **Neurosci Lett** 1989 May 22; 100(1–3):11–6

Regulation of glycolysis in sea bass liver: phosphofructokinase isozymes. Fideu MD, et al. **Rev Esp Fisiol** 1989 Jun;45(2):179–86

Accumulation of arsenic in yelloweye mullet (Aldrichetta forsteri) following oral administration of organoarsenic compounds and arsenate. Francesconi KA, et al.

Sci Total Environ 1989 Feb;79(1):59–67
Trace element residues in bluegills and common carp from the lower San Joaquin River, California, and its tributaries [published erratum appears in Sci Total Environ 1988 Nov 1;77(1):91] Saiki MK, et al. **Sci Total Environ** 1988 Aug 1;74:199–217
[Effects of hexavalent chromium at non-lethal concentrations on the enzymology of the intestine of Salmo gairdneri and Dicentrarchus labrax (Pisces)] Boge G, et al.
J Physiol (Paris) 1988–89;83(2):57–63 (Eng. Abstr.) **(Fre)**

MICROBIOLOGY

Mycobacteriosis in yellow perch (Perca flavescens) from two lakes in Alberta. Daoust PY, et al. **J Wildl Dis** 1989 Jan; 25(1):31–7
Penetration of E. coli and F2 bacteriophage into fish tissues. Fattal B, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1988; 78:27–38

PARASITOLOGY

Occurrence of Proteocephalus percae and P. cernuae in the perch and ruff in northern Finland. Valtonen ET, et al. **Folia Parasitol (Praha)** 1989;36(1):33–42
Sexual, seasonal and tissue variation in the encystment of Cotylurus variegatus metacercariae in perch, Perca fluviatilis. Faulkner M, et al. **Int J Parasitol** 1989 May; 19(3):285–90
Interaction of bass tapeworm, Proteocephalus ambloplitis, and Neoechinorhynchus sp. (Acanthocephala) in largemouth bass, Micropterus salmoides. Durborow RM, et al. **J Parasitol** 1988 Dec;74(6):1056–9
Availability of caecal habitat as a density-dependent limit on survivorship of Leptorhynchoides thecatus in green sunfish, Lepomis cyanellus. Ewald JA, et al.
Parasitology 1989 Jun;98 Pt 3:447–50
[Cucculanus bioccai n. sp. (nematoda: cucullanidae), parasite of Mugil cephalus L.] Orecchia P, et al. **Parassitologia** 1987 Apr;29(1):71–4 (Eng. Abstr.) **(Ita)**

PHYSIOLOGY

Enhancement of kainate-gated currents in retinal horizontal cells by cyclic AMP-dependent protein kinase. Liman ER, et al. **Brain Res** 1989 Mar 6;481(2):399–402
Responses of isolated white perch horizontal cells to changes in the concentration of photoreceptor transmitter agonists. Perlman I, et al. **Brain Res** 1989 May 15;487(1):16–25
Effects of water hardness and salinity on the acute toxicity and uptake of fenvalerate by bluegill (Lepomis macrochirus). Dyer SD, et al.
Bull Environ Contam Toxicol 1989 Mar;42(3):359–66
Toxicity of chlorine dioxide to early life stages of marine organisms. Hose JE, et al. **Bull Environ Contam Toxicol** 1989 Mar;42(3):315–9
Electrocardiograms in five bipolar leads recorded from the body surface of three fish species (Cyprinus carpio, Oreochromis niloticus and Pagrus major) in fresh or sea-water. Yoshikawa H, et al.
Comp Biochem Physiol [A] 1988;91(4):759–64
Sonatox-induced impairment of ovarian activity in an exotic cichlid, Oreochromis mossambicus. Bhattacharya L, et al. **Folia Morphol (Praha)** 1989;37(1):33–7
Purification of maturational gonadotropin from Atlantic croaker (Micropogonias undulatus) and development of a homologous radioimmunoassay. Copeland PA, et al.
Gen Comp Endocrinol 1989 Mar;73(3):425–41
Prolactin cell activity and sodium fluxes in tilapia (Oreochromis mossambicus) after long-term acclimation to acid water. Flik G, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):39–45
Localization of growth hormone releasing factor-like immunoreactivity in the hypothalamo-hypophyseal system of the frog (Rana temporaria) and the sea bass (Dicentrarchus labrax). Marivoet S, et al.
Gen Comp Endocrinol 1988 Oct;72(1):72–9
Immunocytochemical demonstration of close relationships between neuropeptidergic nerve fibers and hormone-producing cell types in the adenohypophysis of the sea bass (Dicentrarchus labrax). Moons L, et al.
Gen Comp Endocrinol 1989 Feb;73(2):270–83
Structure-activity relationships of steroids in inducing germinal vesicle breakdown of Atlantic croaker oocytes in vitro. Trant JM, et al. **Gen Comp Endocrinol** 1988 Aug; 71(2):307–17
Regulation of binding of phosphofructokinase to myofibrils in the red and white muscle of the barred sand bass, Paralabrax nebulifer (Serranidae). Roberts SJ, et al.
J Exp Biol 1988 Jul;137:13–27
Spermiogenesis in the bluegill (Lepomis macrochirus): a study of cytoplasmic events including cell volume changes and cytoplasmic elimination [published errata appear in J Morphol 1988;198(3):381 and 1989 Feb;199(2):245] Sprando RL, et al. **J Morphol** 1988 Nov;198(2):165–77
Modulation of cone horizontal cell activity in the teleost fish retina. III. Effects of prolonged darkness and dopamine on electrical coupling between horizontal cells. Tornqvist K, et al. **J Neurosci** 1988 Jul;8(7):2279–88
Microtubule polarity and distribution in teleost photoreceptors. Troutt LL, et al. **J Neurosci** 1988 Jul; 8(7):2371–80
Modulation of cone horizontal cell activity in the teleost fish retina. I. Effects of prolonged darkness and background illumination on light responsiveness. Yang XL, et al.
J Neurosci 1988 Jul;8(7):2259–68
Modulation of cone horizontal cell activity in the teleost fish retina. II. Role of interplexiform cells and dopamine in regulating light responsiveness. Yang XL, et al.
J Neurosci 1988 Jul;8(7):2269–78
The use of electronarcosis as anaesthetic in the cichlid, Oreochromis mossambicus (Peters). II. The effects of changing physical and electrical parameters on the narcotizing ability of alternating current. Barham WT, et al. **Onderstepoort J Vet Res** 1988 Dec;55(4):205–15
The use of electronarcosis as anaesthetic in the cichlid, Oreochromis mossambicus (Peters). III. The effects of changing physical and electrical parameters on the narcotizing ability of half-wave rectified currents. Barham WT, et al. **Onderstepoort J Vet Res** 1989 Mar;56(1):67–71
Rods trigger light adaptive retinomotor movements in all spectral cone types of a teleost fish. Kirsch M, et al.
Vision Res 1989;29(4):389–96

PERCUSSION

Percussion of the chest re-visited: a comparison of the diagnostic value of ausculatory and conventional chest percussion. Bourke S, et al. **Ir J Med Sci** 1989 Apr; 158(4):82–4
Transmission of sound generated by sternal percussion. Bohadana AB, et al. **J Appl Physiol** 1989 Jan;66(1):273–7
Clapping or percussion causes atelectasis in dogs and influences gas exchange. Zidulka A, et al.
J Appl Physiol 1989 Jun;66(6):2833–8
Tinel's sign in the diagnosis of carpal tunnel syndrome [letter] Clark CB. **J Hand Surg [Br]** 1988 Aug;13(3):358
The foam sponge as a teaching aid in the examination of the chest [letter] Benbassat J, et al. **Med Educ** 1988 Nov; 22(6):554–5

METHODS

Skin accelerometer displacement and relative bone movement of adjacent vertebrae in response to chiropractic percussion thrusts. Smith DB, et al. **J Manipulative Physiol Ther** 1989 Feb;12(1):26–37
[Physical respiratory therapy with intrapulmonary percussion] Wolf C. **Prax Klin Pneumol** 1988 Jul; 42(7):639–40 (Eng. Abstr.) **(Ger)**
[Functional dyspeptic syndrome caused by dyskinesia of the bile ducts. Auscultatory percussion diagnosis and therapeutic monitoring] Stagnaro Neri M, et al.
Clin Ter 1988 Dec 15;127(5):363–72 (36 ref.) (Eng. Abstr.) **(Ita)**

PERCUTANEOUS ADMINISTRATION see **ADMINISTRATION, CUTANEOUS**

PERCUTANEOUS NEPHROSTOMY see **NEPHROSTOMY, PERCUTANEOUS**

PERCUTANEOUS TRANSLUMINAL ANGIOPLASTY see **ANGIOPLASTY, TRANSLUMINAL**

PERCUTANEOUS ULTRASONIC LITHOTRIPSY see **LITHOTRIPSY**

PERFLUOROBUTYL TETRAHYDROFURAN see under **FLUOROCARBONS**

PERFLUOROCARBONS see **FLUOROCARBONS**

PERFUME

Interaction of cinnamaldehyde (a sensitizer in fragrance) with protein. Weibel H, et al. **Contact Dermatitis** 1989 Mar; 20(3):161–6
Penetration of the fragrance compounds, cinnamaldehyde and cinnamyl alcohol, through human skin in vitro. Weibel H, et al. **Contact Dermatitis** 1989 Mar;20(3):167–72

ADVERSE EFFECTS

Allergic contact dermatitis from the perfume in Locan cream. Garioch JJ, et al. **Contact Dermatitis** 1989 Jan;20(1):61–2
Contact urticaria from Tilia (lime). Picardo M, et al.
Contact Dermatitis 1988 Jul;19(1):72–3

ANALYSIS

Patch testing with fragrance mix at 16% and 8%, and its individual constituents. Enders F, et al.
Contact Dermatitis 1989 Mar;20(3):237–8
Fluorometric determination of benzylideneacetone in fragrance products by liquid chromatography with post-column derivatization. Yates RL, et al.
J Assoc Off Anal Chem 1988 Sep–Oct;71(5):965–7

PERFUSION

Vitreoperfusion. A new approach to ocular ischemia. Blair NP, et al. **Arch Ophthalmol** 1989 Mar;107(3):417–23
Ex-vivo perfusion of surgically removed organs. Baba S, et al. **Biomater Artif Cells Artif Organs** 1988;16(1–3):623–4
Prolonged perfusion of isolated working rabbit hearts with a perfluorochemical emulsion. Segel LD, et al.
Biomater Artif Cells Artif Organs 1988;16(1–3):619–21
Flow-dependent contraction observed in a myograph-mounted resistance artery. Bevan JA, et al.
Blood Vessels 1988;25(5):261–4
Influence of uptake1 and uptake2 on the relationship between diffusion and metabolism of noradrenaline in the perfused rabbit ear artery. Morris RG, et al. **Blood Vessels** 1988; 25(5):217–31
Pernasal catheter perfusion without dissolution agents following endoscopic sphincterotomy for common duct stones. Martin DF, et al. **Br J Surg** 1989 Apr;76(4):410–1
Preservation of guinea pig hearts by hypothermic gas perfusion. Bailey LE. **Can J Physiol Pharmacol** 1989 Jul; 67(7):692–6
Synchronized diastolic coronary sinus retroperfusion. Technique, physiologic and experimental basis, clinical experience, future perspectives. Di Mario C, et al.
Cardiologia 1988 Nov;33(11):1017–22
Viability assays in organ preservation. Southard JH.
Cryobiology 1989 Jun;26(3):232–8 (36 ref.)
Respiratory and cardiac responses to exercise-simulating peripheral perfusion in endurance trained and untrained rats. I. Reflex responses and changes in perfusion outflow. Thimm F, et al. **Eur J Appl Physiol** 1988;58(1–2):105–11
Respiratory and cardiac responses to exercise-simulating peripheral perfusion in endurance trained and untrained rats. II. Temporal relationships between outflow parameters and cardiac and respiratory responses. Thimm F, et al. **Eur J Appl Physiol** 1988;58(1–2):112–9
Influence of hirudin on the thrombin-induced release of tissue plasminogen activator from isolated perfused pig ear. Klöcking HP, et al. **Folia Haematol (Leipz)** 1988; 115(1–2):110–2
The multiple-indicator dilution technique for characterization of normal and retrograde flow in once-through rat liver perfusions. St-Pierre MV, et al.
Hepatology 1989 Feb;9(2):285–96
Systemic perfusion: a method of enhancing relative tumor uptake of radiolabeled monoclonal antibodies. Wahl RL, et al. **Int J Rad Appl Instrum [B]** 1988;15(6):611–6
Epidermal growth factor inhibits the hydroosmotic effect of vasopressin in the isolated perfused rabbit cortical collecting tubule. Breyer MD, et al. **J Clin Invest** 1988 Oct;82(4):1313–20
Renal bicarbonate reabsorption in the rat. III. Distal tubule perfusion study of load dependence and bicarbonate permeability. Chan YL, et al. **J Clin Invest** 1989 Sep; 84(3):931–8
High yield enzymatic conversion of intravascular leukotriene A4 in blood-free perfused lungs. Grimminger F, et al.
J Immunol 1988 Oct 1;141(7):2431–6
Effects of microdialysis-perfusion with anisoosmotic media on extracellular amino acids in the rat hippocampus and skeletal muscle. Lehmann A. **J Neurochem** 1989 Aug; 53(2):525–35
Uptake of perfusion imaging agents by transplanted hearts: an experimental study in rats. Bergsland J, et al.
J Surg Res 1989 Feb;46(2):184–6
The influence of perfusate viscosity, RBC deformability and drag on the function of an isolated perfused rat kidney. Sumpio BE, et al. **J Surg Res** 1989 Jan;46(1):4–8
Preservation by pulsatile perfusion improves early renal allograft function. Barber WH, et al. **Transplant Proc** 1988 Oct;20(5):865–8
The in vitro perfused pancreas: a model for rigorous comparison of pancreatic transplant techniques. Bartlett ST, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2820–2
Liver perfusion in multiorgan harvesting for transplantation. Colledan M, et al. **Transplant Proc** 1988 Oct;20(5):847–8
Superiority of ex vivo flushing during liver harvesting. Finkelstein I, et al. **Transplant Proc** 1988 Oct;20(5):971–2
Experimental heart preservation for 24 hours: benefits of PGE1 in a nonpulsatile coronary perfusion solution. Herreros J, et al. **Transplant Proc** 1988 Oct;20(5):1033–4
Efficacy of clinical cadaver kidney preservation by continuous perfusion. Hoffmann RM, et al.
Transplant Proc 1988 Oct;20(5):882–4
The isolated perfused rabbit liver as a model for assessment of organ preservation. Jamieson NV, et al.
Transplant Proc 1988 Oct;20(5):996–7
Multiple organ retrieval and preservation with normothermic autoperfusion. Prieto M, et al. **Transplant Proc** 1988 Oct; 20(5):827–8
Preservation of rabbit livers by continuous hypothermic perfusion after donor pretreatment with chlorpromazine and methylprednisolone. Sundberg R, et al.
Transplant Proc 1988 Oct;20(5):998
Improved liver preservation by combined gravity flow perfusion and cold storage. Toledo-Pereyra LH, et al.
Transplant Proc 1988 Oct;20(5):983–5
The usefulness of initial brief pulsatile perfusion in extending the applicability of cold storage for renal transplantation—a preliminary report. Yland MJ, et al. **Transplant Proc** 1988 Oct;20(5):875–81
Combined cold storage-perfusion preservation with a new synthetic perfusate. Hoffmann RM, et al.
Transplantation 1989 Jan;47(1):32–7
[Perfusion of the liver for transplantation. Comparison of technics] Colledan M, et al. **Minerva Chir** 1988 Oct 31; 43(20):1661–7 (Eng. Abstr.) **(Ita)**
[The effect of prostacyclin analog (OP-41483) on pulmonary oxygen toxicity in isolated heart-lung autoperfusion model] Arima T, et al. **Masui** 1988 Jun;37(6):661–6 (Eng. Abstr.)

(Jpn)
[Microprocessor control of perfusion during extracorporeal purification of physiologic fluids] Voltsekhovskaia EKh, et al. **Med Tekh** 1989 Mar–Apr;(2):15–8 (Eng. Abstr.) (Rus)

INSTRUMENTATION

Stirred tank perfusion reactors for cell propagation and monoclonal antibody production. Shevitz J, et al. **Adv Biotechnol Processes** 1989;11:81–106 (81 ref.)
Benefit of the perfusion catheter for emergency coronary artery grafting after failed percutaneous transluminal coronary angioplasty. Sundram P, et al. **Am J Cardiol** 1989 Feb 1;63(5):282–5
Temperature–controlled perfusion apparatus for microscope using transparent conducting film heater. Toyotomi S, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):C214–7
A high precision dual feedback pump for unsteady perfusion of small organs. Sutton DW, et al. **Ann Biomed Eng** 1989; 17(3):269–78
Control of perfusion pressure and flow in isolated heart bioassays. Schima H, et al. **J Biomed Eng** 1988 Oct; 10(5):387–92
Peristaltic versus syringe pumps for push–pull perfusion: tissue pathology and dopamine recovery in rat neostriatum. Privette TH, et al. **J Neurosci Methods** 1989 Jan; 26(3):195–202
Versatile perfusion chamber for high–magnification microscopy. Braga PC. **J Pharmacol Methods** 1989 Aug; 22(1):1–6

METHODS

Combined perfusion and percolation of embalmed animal bodies for removing formaldehyde. Siemiatkowski M, et al. **Acta Anat (Basel)** 1988;133(3):251–4
Perfusion of the inner ear with streptomycin. Shea JJ. **Am J Otol** 1989 Mar;10(2):150–5
Mesenteric shunting during thoracoabdominal aortic clamping to prevent disseminated intravascular coagulation in dogs. Cohen JR, et al. **Ann Vasc Surg** 1988 Jul;2(3):261–7
New autoperfusion preparation for long–term organ preservation. Chien S, et al. **Circulation** 1988 Nov;78(5 Pt 2):III58–65
Surgery for aortic arch aneurysm with selective cerebral perfusion and hypothermic cardiopulmonary bypass. Matsuda H, et al. **Circulation** 1989 Sep;80(3 Pt 1):I243–8
Energy expenditure of autoperfusing heart–lung preparation. Riveron FA, et al. **Circulation** 1988 Nov;78(5 Pt 2):III103–9
Effects of acute hypoxia and reoxygenation in a blood–perfused neonatal heart model. Sadeghi AM, et al. **Circulation** 1988 Nov;78(5 Pt 2):III158–63
Comparison of the effects of adenine–ribose with adenosine for maintenance of ATP concentrations in 5–day hypothermically perfused dog kidneys. McAnulty JF, et al. **Cryobiology** 1988 Oct;25(5):409–16
Effects of chlorpromazine and methylprednisolone on perfusion preservation of rabbit livers. Sundberg R, et al. **Cryobiology** 1988 Oct;25(5):417–24
Noninvasive superfusion of canine tracheal segment to study prostaglandin release in vivo. Aizawa H, et al. **Fukuoka Igaku Zasshi** 1989 Feb;80(2):95–101
Immunohistochemical detection of antibody in tissue sections of non–perfused and ex vivo–perfused organs using a tetrazolium alkaline phosphatase substrate. Doria M, et al. **Histochemistry** 1988;89(5):443–6
A system for long–term corneal perfusion. Brunette I, et al. **Invest Ophthalmol Vis Sci** 1989 Aug;30(8):1813–22
Renal perfusion model for NMR spectroscopy. Wunderlich CC, et al. **Invest Radiol** 1989 Aug;24(8):619–25
Pharmacokinetics and tissue uptake of mitomycin C in isolated perfusion of pancreas. Arredondo MA, et al. **J Surg Res** 1989 May;46(5):445–9
Cerebral perfusion of metabolic inactivators: a new method for rapid fixation of labile lipid pools in brain. Birkle DL, et al. **Neurochem Res** 1988 Sep;13(9):849–52
Eradicating fetomaternal fluid shift during perfusion fixation of the human placenta. Burton GJ, et al. **Placenta** 1988 May–Jun;9(3):327–32
Perfusion method for preparing pig brain cortex for Golgi–Cox impregnation. Grandin T, et al. **Stain Technol** 1988 May;63(3):177–81
[Perfusion of prostaglandins in the cervix uteri. A new method of cervical maturation after premature rupture of the membranes] Body G, et al. **Presse Med** 1989 Jan 21; 18(2):71–3 (Eng. Abstr.) (Fre)
[The results of experimental study of six–hour heart–lung preservation by autoperfusion method—its evaluation of optimal conditions and lung function after preservation] Matsuoka M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Apr;37(4):694–701 (Eng. Abstr.) (Jpn)
[Retrograde coronary sinus perfusion of cardioplegic solution in Jatene operation in neonates and infants] Yonenaga K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb; 37(2):274–80 (Eng. Abstr.) (Jpn)
[Coupled functions of the vessels of the small intestine in various perfusion modes during histamine action] Makovskaia VA. **Fiziol Zh SSSR** 1988 Jun;74(6):833–8 (Eng. Abstr.) (Rus)
[Substantiation of puncture perfusion of the subarachnoid space in experiments with biomanikins] Starykh VS, et al. **Zh Nevropatol Psikhiatr** 1989;89(3):86–9 (Eng. Abstr.) (Rus)
[Arterial circulation in preservation of swine liver by simple perfusion and hypothermic storage] Arias Pérez J, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 1):297–303 (Eng. Abstr.) (Spa)

PERFUSION PUMPS see INFUSION PUMPS

PERFUSION, REGIONAL

Inhibition of proteases during extracorporeal extremity perfusion experimental and clinical results. Walther H, et al. **Adv Exp Med Biol** 1988;240:565–7
Arterial perfusion abnormalities of the liver after hepatic arterial infusion chemotherapy and their correlation with changes in the metastases: evaluation with CT and angiography. Roth J, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):751–4
Role of scintigraphy in establishing optimal perfusion in hepatic arterial infusion pump chemotherapy. Savolaine ER, et al. **Am J Clin Oncol** 1989 Feb;12(1):68–74
Isolated regional perfusion for treatment of limb melanoma in the American black. Muchmore JH, et al. **Am Surg** 1989 Apr;55(4):232–7
Isolated regional perfusion in the treatment of subungual melanoma. Baas PC, et al. **Arch Surg** 1989 Mar;124(3):373–6 (20 ref.)
Hyperthermic isolated regional perfusion in the treatment of extremity melanoma in children and adolescents. Baas PC, et al. **Cancer** 1989 Jan 1;63(1):199–203
Clinical trial with surgery and intraperitoneal hyperthermic perfusion for peritoneal recurrence of gastrointestinal cancer. Fujimoto S, et al. **Cancer** 1989 Jul 1;64(1):154–60
Results of regional isolation perfusion with cytostatics in patients with soft tissue tumors of the extremities. Klaase JM, et al. **Cancer** 1989 Aug 1;64(3):616–21
Temperature distribution and pH changes during hyperthermic regional isolation perfusion. van der Zee J, et al. **Eur J Cancer Clin Oncol** 1989 Aug;25(8):1157–63
The use of a hand–held gamma detector improves the safety of isolated limb perfusion. Sardi A, et al. **J Surg Oncol** 1989 Jul;41(3):172–6
Regional chemotherapy: pharmacokinetic basis and clinical applications. Didolkar MS. **Md Med J** 1989 Aug;38(8):607
Superiority of perfusion over bolus administration in cancer chemotherapy: proposition of a compartmental model. Desoize B, et al. **Med Hypotheses** 1989 May;29(1):21–4
Regional chemotherapy for osteosarcoma. Benjamin RS. **Semin Oncol** 1989 Aug;16(4):323–7 (22 ref.)
[Personal experience with isolated regional hyperthermic perfusion of cytostatic agents in tumors of the extremities] Bříza J, et al. **Rozhl Chir** 1989 Feb;68(2):113–6 (Eng. Abstr.) (Cze)
[Portable infusion pump for ambulatory cytostatic therapy in inoperable liver metastases] Kienzle HF, et al. **Dtsch Med Wochenschr** 1988 Oct 21;113(42):1635–7 (Eng. Abstr.) (Ger)
[Leakage measurements with the dye extraction method and direct methotrexate level determination (enzyme immunoassay) during and after regional cytostatic limb perfusion] Krauss J, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(4):260–3 (Eng. Abstr.) (Ger)
[Therapy monitoring of regional chemotherapy by magnetic resonance spectroscopy] Semmler W, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:202–3 (Ger)

ADVERSE EFFECTS

Functional morbidity after regional isolated perfusion of the limb for melanoma. van Geel AN, et al. **Cancer** 1989 Mar 15;63(6):1092–6

METHODS

Prognostic variables in recurrent limb melanoma treated with hyperthermic antiblastic perfusion. Di Filippo F, et al. **Cancer** 1989 Jun 15;63(12):2551–61
Regional chemotherapy of liver metastases from colorectal carcinoma: hepatic artery or portal vein infusion? Chu DZ, et al. **Cancer Treat Rev** 1988 Dec;15(4):243–56 (154 ref.)
Non–homogeneous intrahepatic drug distribution in intraportal infusional chemotherapy demonstrated by Tc–99m–MAA perfusion SPECT. Aeberhard P, et al. **Eur J Surg Oncol** 1989 Apr;15(2):119–23
Hyperthermic regional perfusion using membrane– instead of bubble–oxygenators. An experimental and clinical study. van Os J, et al. **J Cardiovasc Surg (Torino)** 1989 Jul–Aug; 30(4):523–32
Isolated limb perfusion for stage I melanoma of the extremity: a comparison of melphalan and dacarbazine (DTIC). Edwards MJ, et al. **South Med J** 1989 Aug;82(8):985–7, 989
A useful maneuver for hepatic arterial catheterization in patients with metastatic hepatic disease and abnormal vascular anatomy. Goldberg JA, et al. **Surg Gynecol Obstet** 1989 Jul;169(1):71–2
[The status of intraperitoneal chemotherapy] Ehninger G, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:196–8 (39 ref.) (Ger)

PERGOLIDE

ADVERSE EFFECTS

Hallucinations and confusion after pergolide withdrawal. McHale DM, et al. **Clin Neuropharmacol** 1988 Dec; 11(6):545–8

PHARMACOLOGY

Apomorphine and pergolide induce hypothermia by stimulation of dopamine D–2 receptors. Ogren SO, et al. **Acta Physiol Scand** 1988 May;133(1):91–5
Chronic activation of dopamine receptors in the female infantile rat: effect on hypophyseal hormones and on the onset of puberty. de Mengido IM, et al. **Endocrinology** 1989 Feb;124(2):746–53
Further characterization of tolerance to the corticosterone–elevating effect of pergolide in rats. Gust CM, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):307–11

THERAPEUTIC USE

Double–blind controlled study of pergolide mesylate in the treatment of Parkinson's disease. Olanow CW, et al. **Clin Neuropharmacol** 1987 Apr;10(2):178–85
Treatment of Parkinson's disease with pergolide: a double–blind study. Ahlskog JE, et al. **Mayo Clin Proc** 1988 Oct;63(10):969–78
Pergolide: long–term use in Parkinson's disease. Ahlskog JE, et al. **Mayo Clin Proc** 1988 Oct;63(10):979–87
Pergolide and selegiline for Parkinson's disease. **Med Lett Drugs Ther** 1989 Sep 8;31(800):81–3
Comparative efficacy of two dopamine agonists, pergolide and lergotrile, in Parkinson disease. Lieberman AN, et al. **N Y State J Med** 1988 Aug;88(8):420–2
Influence of pergolide treatment on xenotransplanted human pituitary tumors of prolactinoma. Schumm–Draeger PM, et al. **Strahlenther Onkol** 1989 Jul;165(7):560–1

PERGOLIDE MESYLATE see PERGOLIDE

PERHEXILINE

ADVERSE EFFECTS

[Fatal acute hepatitis during treatment with perhexiline maleate and bezafibrate (letter)] Valmalle R, et al. **Gastroenterol Clin Biol** 1989 May;13(5):530–1 (Fre)

ANALOGS & DERIVATIVES

Soft drug derivatives related to perhexiline. Part II: In vivo studies. Decker N, et al. **Arzneimittelforschung** 1988 Aug; 38(8):1110–4
Soft drug derivatives related to perhexiline. Part I: In vitro studies. Decker N, et al. **Arzneimittelforschung** 1988 Jul; 38(7):905–8
Synthesis and pharmacological properties of "soft drug" derivatives related to perhexiline. Marciniak G, et al. **J Med Chem** 1988 Dec;31(12):2289–96
Prevalence of perhexiline maleate neurotoxicosis [letter] Myers JB. **Med J Aust** 1979 Oct 20;2(8):422

PHARMACOLOGY

Soft drug derivatives related to perhexiline. Part I: In vitro studies. Decker N, et al. **Arzneimittelforschung** 1988 Jul; 38(7):905–8
Perhexiline increases calcium–activated force in skinned psoas fibres by raising calcium affinity of troponin–C. Morano I, et al. **Biomed Biochim Acta** 1989;48(5–6):S329–34
Perhexilene: effects on hepatic lysosomal function in rats. Sewell RB, et al. **Clin Exp Pharmacol Physiol** 1989 Jan; 16(1):25–32
Alteration of calcium sensitivity of skinned frog skeletal muscle fibres by inositol triphosphate and calmodulin antagonists. Isac M, et al. **Pflugers Arch** 1988 Aug; 412(3):253–7
Cardiovascular effects of nitroglycerin and perhexiline in dogs with myocardial ischemia. Daniell HB. **Res Commun Chem Pathol Pharmacol** 1989 Feb;63(2):285–8

PERIADENITIS see STOMATITIS, APHTHOUS

PERIANAL GLAND NEOPLASMS see ANAL GLAND NEOPLASMS

PERIANAL GLANDS

PHYSIOLOGY

Alpha 2u–globulin in modified sebaceous glands with pheromonal functions: localization of the protein and its mRNA in preputial, meibomian, and perianal glands. Mancini MA, et al. **J Histochem Cytochem** 1989 Feb; 37(2):149–57

PERIANEURYSMAL FIBROSIS, INFLAMMATORY see RETROPERITONEAL FIBROSIS

PERIAORTITIS, CHRONIC see RETROPERITONEAL FIBROSIS

PERIAPICAL ABSCESS

COMPLICATIONS

Anxiety, infection, and death. Koloffon CE. **Int J Psychosom** 1988;35(1-4):61-2

Brain abscess from chronic odontogenic cause: report of case. Saal CJ, et al. **J Am Dent Assoc** 1988 Sep;117(3):453-5

Cutaneous sinus tracts of dental etiology. McWalter GM, et al. **Oral Surg Oral Med Oral Pathol** 1988 Nov; 66(5):608-14

[Clinical lessons: various toothaches] Willemsen WL. **Rev Belge Med Dent** 1988;43(1):72-8 **(Fre)**

DIAGNOSIS

[Anaerobic bacteria in suppurative infections] Byczyńska B, et al. **Med Dosw Mikrobiol** 1988;40(4):226-33 (Eng. Abstr.) **(Pol)**

DRUG THERAPY

The microbiology and management of acute dentoalveolar abscess: views of British oral and maxillofacial surgeons. Gill Y, et al. **Br J Oral Maxillofac Surg** 1988 Dec; 26(6):452-7

MICROBIOLOGY

'Oral surgery: problems' [letter] Samaranayake LP. **Br Dent J** 1989 May 20;166(10):361

Antibiotic susceptibilities of bacteria isolated from acute dentoalveolar abscesses. Lewis MA, et al. **J Antimicrob Chemother** 1989 Jan;23(1):69-77

Odontogenic infection secondary to Leuconostoc species. Wenocur HS, et al. **J Clin Microbiol** 1988 Sep;26(9):1893-4

Assessment of the pathogenicity of bacterial species isolated from acute dentoalveolar abscesses. Lewis MA, et al. **J Med Microbiol** 1988 Oct;27(2):109-16

Plaque-related infections. MacFarlane TW. **J Med Microbiol** 1989 Jul;29(3):161-70 (63 ref.)

THERAPY

Electrotherapy for chronic gum and periapical abscesses. al-Waili NS. **JPMA** 1989 Jun;39(6):161-2

PERIAPICAL CYST see **RADICULAR CYST**

PERIAPICAL DISEASES

COMPLICATIONS

The endo-antral syndrome: an endodontic complication. Selden HS. **J Am Dent Assoc** 1989 Sep;119(3):397-8, 401-2

DIAGNOSIS

Periradicular lymphoma: differentiation from inflammation. Keyes GG, et al. **Oral Surg Oral Med Oral Pathol** 1988 Aug;66(2):230-5

DRUG THERAPY

[Calcium oxide therapy of periapical lesions. A clinical contribution] Iacobelli L, et al. **Minerva Stomatol** 1989 Jun; 38(6):623-7 (Eng. Abstr.) **(Ita)**

ETIOLOGY

[Periapical osteolysis of endodontic origin. Immunologic features] Marini R, et al. **Minerva Stomatol** 1988 Dec; 37(12):1025-8 (19 ref.) (Eng. Abstr.) **(Ita)**

IMMUNOLOGY

T helper and T suppressor cell reversal during the development of induced rat periapical lesions. Stashenko P, et al. **J Dent Res** 1989 May;68(5):830-4

RADIOGRAPHY

Radiographic evaluation of pulpal therapy for primary anterior teeth. Flaitz CM, et al. **ASDC J Dent Child** 1989 May-Jun;56(3):182-5

A comparison between xeroradiography and conventional radiography in the diagnosis of endodontic lesions. Barkhordar RA, et al. **Oral Surg Oral Med Oral Pathol** 1988 Oct;66(4):489-93

Individualised restricted intraoral radiography versus full-mouth radiography in the detection of periradicular lesions. Akerblom A, et al. **Swed Dent J** 1988;12(4):151-9

SURGERY

[Surgical treatment of periapical disease of the tooth root; indications and contraindications] Durić DV. **Med Pregl** 1988;41(1-2):54-8 (Eng. Abstr.) **(Scr)**

THERAPY

Apical closure and periapical healing in a non-vital permanent tooth. Case report. Bourke LF. **Aust Dent J** 1988 Oct;33(5):412-4

A prospective randomized trial on efficacy of antibiotic prophylaxis in asymptomatic teeth with pulpal necrosis and associated periapical pathosis. Abbott AA, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec;66(6):722-33 (49 ref.)

Nonsurgical management of periapical lesions: a prospective study. Shah N. **Oral Surg Oral Med Oral Pathol** 1988 Sep; 66(3):365-71

PERIAPICAL GRANULOMA

DIAGNOSIS

[Apical granulomas--foci of active inflammation] Freidin LI, et al. **Stomatologiia (Mosk)** 1988 Nov-Dec;67(6):44-6 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

[Periapical lesions treated with CaO. Histological controls] Iacobelli L, et al. **Minerva Stomatol** 1989 Jun;38(6):639-44 (Eng. Abstr.) **(Ita)**

[Validation of the choice of antibacterial agents for treating periodontitis] Kononovich EF, et al. **Stomatologiia (Mosk)** 1989 May-Jun;68(3):21-3 (Eng. Abstr.) **(Rus)**

ETIOLOGY

[Immunopathologic mechanisms associated with granulomas and odontogenic cysts: a general review] Kalusokoma K, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1989 Jun; 32(2):73-8 (45 ref.) (Eng. Abstr.) **(Fre)**

METABOLISM

Patterns of keratin-expression in rests of Malassez and periapical lesions. Gao Z, et al. **J Oral Pathol** 1988 Apr; 17(4):178-85

MICROBIOLOGY

[Indices of microorganism sensitivity to antiseptics in apical periodontitis] Budevskaia TV, et al. **Stomatologiia (Mosk)** 1989 May-Jun;68(3):23-5 (Eng. Abstr.) **(Rus)**

PATHOLOGY

[A rare case of the clinical manifestation of chronic granulating periodontitis] Ushich AG, et al. **Stomatologiia (Mosk)** 1989 May-Jun;68(3):78-9 **(Rus)**

SURGERY

[Treatment of chronic periodontitis by using tissue trepanation in the area of the periapical focus of destruction] Abdalov KhB. **Stomatologiia (Mosk)** 1989 May-Jun;68(3):77-8 **(Rus)**

PERIAPICAL PERIODONTITIS

DIAGNOSIS

[The combined diagnosis of apical periodontitis by using color x-ray teledensitometry and photoplethysmography] Urman EI. **Stomatologiia (Mosk)** 1989 Mar-Apr;68(2):14-7 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

[Oral amoxicillin 1g b.i.d vs 1g t.i.d. in the treatment of oral periodontitis. Randomized and double-blind pilot trial] Re G, et al. **Minerva Stomatol** 1988 Jun;37(6):507-9 (Eng. Abstr.) **(Ita)**

ENZYMOLOGY

Non specific acid esterase activity in human periapical inflammatory cells. Fonzi L, et al. **J Submicrosc Cytol Pathol** 1988 Jul;20(3):577-81

IMMUNOLOGY

[Immunity in chronic apical periodontitis and the effect of an immunomodulator on its course] Maksimovskiĭ IuM, et al. **Stomatologiia (Mosk)** 1988 Sep-Oct;67(5):21-3 (Eng. Abstr.) **(Rus)**

METABOLISM

[Lipid peroxidation in persons with chronic odontogenic foci of infection] Cherkashin SI. **Stomatologiia (Mosk)** 1989 May-Jun;68(3):15-7 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

[Indices of microorganism sensitivity to antiseptics in apical periodontitis] Budevskaia TV, et al. **Stomatologiia (Mosk)** 1989 May-Jun;68(3):23-5 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Tooth-germ sequestration as a sequela of chronic periapical inflammation of the primary predecessor. Goodman-Topper ED, et al. **ASDC J Dent Child** 1988 Nov-Dec;55(6):455-8

[The role of the lymph nodes in the generalization of the process in experimental apical periodontitis] Iaroshenko IF, et al. **Acta Univ Palacki Olomuc Fac Med** 1987;117:403-7 (Eng. Abstr.) **(Rus)**

PERIAPICAL PERIODONTITIS, CHRONIC NONSUPPURATIVE see **PERIAPICAL GRANULOMA**

PERIAPICAL PERIODONTITIS, SUPPURATIVE see **PERIAPICAL ABSCESS**

PERIAPICAL TISSUE

ENZYMOLOGY

Non specific acid esterase activity in human periapical inflammatory cells. Fonzi L, et al. **J Submicrosc Cytol Pathol** 1988 Jul;20(3):577-81

SURGERY

The laser apicoectomy: endodontic application of the CO2 laser for periapical surgery. Miserendino LJ. **Oral Surg Oral Med Oral Pathol** 1988 Nov;66(5):615-9

[Treatment of chronic periodontitis by using tissue trepanation in the area of the periapical focus of destruction] Abdalov KhB. **Stomatologiia (Mosk)** 1989 May-Jun;68(3):77-8 **(Rus)**

PERIAQUEDUCTAL GRAY

ANATOMY & HISTOLOGY

Neurons containing a N-terminal sequence of the TRH-prohormone (preproTRH53-74) are present in a unique location of the midbrain periaqueductal gray of the rat. Van den Bergh P, et al. **Brain Res** 1988 Sep 27; 461(1):53-63

Anatomical study of the final common pathway for vocalization in the cat. Holstege G. **J Comp Neurol** 1989 Jun 8;284(2):242-52

Serotoninergic projections from the midbrain periaqueductal gray to the nucleus accumbens in the rat. Li YQ, et al. **Neurosci Lett** 1989 Apr 10;98(3):276-9

BLOOD SUPPLY

Trigeminovascular fibers increase blood flow in cortical gray matter by axon reflex-like mechanisms during acute severe hypertension or seizures. Sakas DE, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1401-5

CYTOLOGY

Tissue sections from the mature rat brain and spinal cord as substrates for neurite outgrowth in vitro: extensive growth on gray matter but little growth on white matter. Crutcher KA. **Exp Neurol** 1989 Apr;104(1):39-54

Neuronal relationships between the dorsal periaqueductal nucleus and the inferior colliculus (nucleus commissuralis) in the cat. A Golgi study. Herrera M, et al. **J Anat** 1988 Jun;158:137-45

DRUG EFFECTS

Excitatory amino acids: role in morphine excitation in rat periaqueductal gray. Jacquet YF, et al. **Behav Brain Res** 1988 Nov 1;31(1):85-8

Independence of aversive and pain mechanisms in the dorsal periaqueductal gray matter of the rat. Borges PC, et al. **Braz J Med Biol Res** 1988;21(5):1027-31

Carbamazepine regulates feline aggression elicited from the midbrain periaqueductal gray. Shaikh MB, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):409-15

Naloxone-induced modulation of feline aggression elicited from midbrain periaqueductal gray. Shaikh MB, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):791-6

ENZYMOLOGY

Glutamate decarboxylase-immunoreactive neurons and terminals in the periaqueductal gray of the rat. Barbaresi P, et al. **Neuroscience** 1988 Oct;27(1):183-91

METABOLISM

Effect of acute morphine treatment on peptide levels in the peri-aqueductal grey. Rosén A, et al. **Acta Physiol Scand** 1989 Jul;136(3):493-4

Long-lasting neurochemical and functional changes in rats induced by neonatal administration of substance P antiserum. De Felipe MC, et al. **Brain Res** 1989 Apr 24; 485(2):301-8

Mu-type opioid receptors in rat periaqueductal gray-enriched P2 membrane are coupled to guanine nucleotide binding proteins. Fedynyshyn JP, et al. **Brain Res** 1989 Jan 2;476(1):102-9

Autoradiographic localization of substance P ligand binding sites and distribution of immunoreactive neurons in the periaqueductal gray of the rat. Liu RP, et al. **Brain Res** 1988 Dec 13;475(1):73-9

Characterization of high affinity opioid binding sites in rat periaqueductal gray P2 membrane. Fedynyshyn JP, et al. **Eur J Pharmacol** 1989 Jan 2;159(1):83-8

Opposite control mediated by central 5-HT1A and non-5-HT1A (5-HT1B or 5-HT1C) receptors on periaqueductal gray aversion. Jenck F, et al. **Eur J Pharmacol** 1989 Feb 28;161(2-3):219-21

Blockade of GABAA receptors in the midbrain periaqueductal gray abolishes nociceptive spinal dorsal horn neuronal activity. Sandkühler J, et al.

Eur J Pharmacol 1989 Jan 24;160(1):163–6

A quantitative ultrastructural analysis of neurotensin-like immunoreactive terminals in the midbrain periaqueductal gray: analysis of their possible relationship to periaqueductal gray-raphe magnus projection neurons. Williams FG, et al. **Neuroscience** 1989;29(1):121–34

PATHOLOGY

An autopsy case of familial juvenile Alzheimer's disease with extensive involvement of the subcortical gray and white matters. Fukutani Y, et al. **Acta Neuropathol (Berl)** 1989; 77(3):329–32

PHYSIOLOGY

Differentiation of the substrates for analgesia and vocalizations elicited by midbrain stimulation in rats: refractory period estimates. Schenk S, et al. **Behav Brain Res** 1988 Dec 1;31(2):105–10

Periventricular structures and the organization of affective states and their behavioural expression. Schmitt P, et al. **Brain Behav Evol** 1989;33(2–3):162–4

Viscerotopic control of regional vascular beds by discrete groups of neurons within the midbrain periaqueductal gray. Carrive P, et al. **Brain Res** 1989 Jul 31;493(2):385–90

Anatomical evidence that hypertension associated with the defence reaction in the cat is mediated by a direct projection from a restricted portion of the midbrain periaqueductal grey to the subretrofacial nucleus of the medulla. Carrive P, et al. **Brain Res** 1988 Sep 20; 460(2):339–45

Somatic and autonomic integration in the midbrain of the unanesthetized decerebrate cat: a distinctive pattern evoked by excitation of neurones in the subtentorial portion of the midbrain periaqueductal grey. Carrive P, et al. **Brain Res** 1989 Apr 3;483(2):251–8

Characterization of pretentorial periaqueductal gray matter neurons mediating intraspecific defensive behaviors in the rat by microinjections of kainic acid. Depaulis A, et al. **Brain Res** 1989 May 1;486(1):121–32

Relationship between analgesia and cardiovascular changes induced by electrical stimulation of the mesencephalic periaqueductal gray matter in the rat. Depaulis A, et al. **Brain Res** 1988 Jun 7;451(1–2):326–32

Conditioned place aversion produced by microinjections of semicarbazide into the periaqueductal gray of the rat. Di Scala G, et al. **Brain Res** 1989 Mar 27;483(1):91–7

Responses of rat lateral hypothalamic neurons to periaqueductal gray stimulation and nociceptive stimuli. Kai Y, et al. **Brain Res** 1988 Sep 27;461(1):107–17

Opiate and serotonergic mechanisms of stimulation-produced analgesia within the periaqueductal gray. Nichols DS, et al. **Brain Res Bull** 1989 Apr;22(4):717–24

Cardiovascular change in response to prolonged defense area stimulation in freely moving rats. De Castro MF, et al. **Braz J Med Biol Res** 1989;22(1):115–9

Recent progress in the study of acupuncture mechanisms. Han JS. **Chen Tzu Yen Chiu** 1988;13(1):36–42, 35 (0 ref.) **(Eng, Chi)**

The mu opiate receptor is responsible for descending pain inhibition originating in the periaqueductal gray region of the rat brain. Smith DJ, et al. **Eur J Pharmacol** 1988 Oct 26;156(1):47–54

Serotonin immunocytochemistry of physiologically characterized raphe magnus neurons. Mason P, et al. **Exp Brain Res** 1988;73(1):1–7

Mu type opioid receptors in rat periaqueductal gray–enriched P2 membrane are coupled to G-protein-mediated inhibition of adenylyl cyclase. Fedynyshyn JP, et al. **FEBS Lett** 1989 Aug 14;253(1–2):23–7

Influence of long-term sensitization on long-term habituation of the acoustic startle response in rats: central gray lesions, preexposure, and extinction. Borszcz GS, et al. **J Exp Psychol [Anim Behav]** 1989 Jan;15(1):54–64

Rat CNS white matter, but not gray matter, is nonpermissive for neuronal cell adhesion and fiber outgrowth. Savio T, et al. **J Neurosci** 1989 Apr;9(4):1126–33

Effect of stimulation in three subcortical sites on the thalamocortical augmenting response in the cat. Nowack WJ, et al. **Neurol Res** 1988 Sep;10(3):156–60

Autoradiographic and electrophysiological evidence for excitatory amino acid transmission in the periaqueductal gray projection to nucleus raphe magnus in the rat. Wiklund L, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):158–63

Relationship between cardiovascular neurones and descending antinociceptive pathways in the rostral ventrolateral medulla of the cat. Siddall PJ, et al. **Pain** 1989 Jun;37(3):347–55

Opioid peptides within the midbrain periaqueductal gray suppress affective defense behavior in the cat. Shaikh MB, et al. **Peptides** 1988 Sep–Oct;9(5):999–1004

Modulation by morphine of aversive-like behavior induced by GABAergic blockade in periaqueductal gray or medial hypothalamus. Jenck F, et al. **Pharmacol Biochem Behav** 1988 Sep;31(1):193–200

Supraspinal cerebral areas involved in morphine's intestinal inhibition and analgesia. Parolaro D, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):319–24

The fine structure of chromaffin cell implants in the pain modulatory regions of the rat periaqueductal gray and spinal cord. Pappas GD, et al. **Prog Brain Res** 1988; 78:513–20

Midbrain cholinergic mechanisms regulating cardiovascular responses during hypothalamic defence reaction. Dawra PS, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(5):617–27

Effects of serotonin receptor antagonists on PAG stimulation induced aversion: different contributions of 5HT1, 5HT2 and 5HT3 receptors. Jenck F, et al. **Psychopharmacology (Berlin)** 1989;97(4):489–95

[Antagonism of CaCl2 injected into periaqueductal gray on the inhibitory action of morphine on pain-evoked discharges of parafascicular nucleus in rats] Chen ZX, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Nov;9(6):504–7 (Eng. Abstr.) **(Chi)**

[Potentiation of norepinephrine on rat acupuncture analgesia antagonized by an arcuate nucleus lesion or naloxone-blocked on opiate receptors in periaqueductal gray] Pan JC, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Mar;9(2):118–22 (Eng. Abstr.) **(Chi)**

[Pressor response induced by glutamate injection into caudal ventrolateral part of periaqueductal gray matter and its efferent pathway in brain-stem] Chu ZG, et al. **Sheng Li Hsueh Pao** 1989 Jun;41(3):255–63 (Eng. Abstr.) **(Chi)**

[Inhibitory effect of substantia nigra–stimulation on neuronal activity of nucleus raphe magnus and its mechanism] Wang DB, et al. **Sheng Li Hsueh Pao** 1988 Oct;40(5):444–51 (Eng. Abstr.) **(Chi)**

[Involvement of the arcuate nucleus of the hypothalamus in the descending pathway from the nucleus accumbens to the periaqueductal gray subserving an antinociceptive effect] Yu LC, et al. **Sheng Li Hsueh Pao** 1988 Apr; 40(2):117–24 (Eng. Abstr.) **(Chi)**

[Inhibition of the evoked potentials of the somatosensory cortex by stimulation of the central gray matter of the midbrain in cats] Garkavenko VV, et al. **Fiziol Zh** 1988 Sep–Oct;34(5):91–5 (Eng. Abstr.) **(Rus)**

[Influence of stimulation of the central gray matter on low- and high-threshold startle reflexes] Gokin AP, et al. **Neirofiziologiia** 1989;21(1):71–8 (Eng. Abstr.) **(Rus)**

[Effect of the stimulation of the central gray substance of the midbrain on the neuronal responses of the trigeminal caudal nucleus during peripheral excitations] Gura EV, et al. **Neirofiziologiia** 1988;20(6):729–36 (Eng. Abstr.) **(Rus)**

[Effect of stimulation of the central gray substance on the low- and high-threshold responses of the reticular neurons in the pons and medulla oblongata] Karpukhina MV, et al. **Neirofiziologiia** 1988;20(6):749–57 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Comparison of the antinociceptive effect of morphine and glutamate at coincidental sites in the periaqueductal gray and medial medulla in rats. Jensen TS, et al. **Brain Res** 1989 Jan 2;476(1):1–9

Cholecystokinin–octapeptide antagonizes morphine analgesia in periaqueductal gray of the rat. Li Y, et al. **Brain Res** 1989 Feb 20;480(1–2):105–10

Genetic influences on brain stimulation-produced analgesia in mice. I. Correlation with stress-induced analgesia. Marek P, et al. **Brain Res** 1989 Jun 5;489(1):182–4

Effects of thalamic parafascicular stimulation on the periaqueductal gray and adjacent reticular formation neurons. A possible contribution to pain control mechanisms. Sakata S, et al. **Brain Res** 1988 Jun 7; 451(1–2):85–96

The NMDA receptor: central role in pain inhibition in rat periaqueductal gray. Jacquet YF. **Eur J Pharmacol** 1988 Sep 23;154(3):271–6

Studies of PAG/PVG stimulation for pain relief in humans. Barbaro NM. **Prog Brain Res** 1988;77:165–73 (33 ref.)

Current issues regarding subcortical electrical stimulation for pain control in humans. Hosobuchi Y. **Prog Brain Res** 1988; 77:189–92 (26 ref.)

Problems and controversies in PVG and sensory thalamic stimulation as treatment for pain. Meyerson BA. **Prog Brain Res** 1988;77:175–88 (61 ref.)

Stimulation-produced analgesia in animals: behavioural investigations. Oliveras JL, et al. **Prog Brain Res** 1988; 77:141–57 (124 ref.)

Anatomy, physiology and pharmacology of the periaqueductal gray contribution to antinociceptive controls. Reichling DB, et al. **Prog Brain Res** 1988;77:31–46 (101 ref.)

ULTRASTRUCTURE

Characterization of luteinizing hormone-releasing hormone fibres in the mesencephalic central grey substance of the rat. Buma P. **Neuroendocrinology** 1989 Jun;49(6):623–30

PERIARTERITIS NODOSA

COMPLICATIONS

Periarteritis with intra-abdominal bleeding [letter] Sabo D, et al. **Ann Emerg Med** 1988 Dec;17(12):1368

Bladder neuropathy in periarteritis nodosa [letter] Amarenco P, et al. **Ann Intern Med** 1989 Mar 1;110(5):411–2

Staphylococcus aureus septicaemia: the initial presentation of polyarteritis nodosa. O'Sullivan J, et al. **Br J Rheumatol** 1989 Aug;28(4):347–9

Berger's disease with polyarteritis nodosa. Praderio L, et al. **Br J Rheumatol** 1989 Apr;28(2):161–3

Polyarteritis nodosa presenting as a ruptured renal mass. Menzies DG, et al. **Br J Urol** 1988 Sep;62(3):276–7

Spontaneous perirenal haematoma secondary to polyarteritis nodosa. Tasdemir I, et al. **Br J Urol** 1988 Sep;62(3):219–22

Spontaneous kidney rupture in polyarteritis nodosa. Report of four cases. Kirkali Z, et al. **Eur Urol** 1988;15(1–2):153–5

Hepatitis B-associated polyarteritis nodosa in Alaskan Eskimos: clinical and epidemiologic features and long-term follow-up. McMahon BJ, et al. **Hepatology** 1989 Jan; 9(1):97–101

Cerebral infarction due to systemic necrotizing vasculitis in a patient with rheumatic heart disease, subacute bacterial endocarditis and status epilepticus. Mizutani T, et al. **Histopathology** 1987 Oct;11(10):1093–9

An adolescent with intermittent headache, transient hemiparesis, and urinary abnormalities [clinical conference] Gruskin AB, et al. **J Pediatr** 1988 Oct;113(4):769–76

Polyarteritis nodosa and familial Mediterranean fever: a report of 2 cases and review of the literature. Glikson M, et al. **J Rheumatol** 1989 Apr;16(4):536–9 (28 ref.)

Symptomatic urogenital manifestations of polyarteritis nodosa and Churg–Strauss angiitis: analysis of 8 of 165 patients. Azar N, et al. **J Urol** 1989 Jul;142(1):136–8

Ureteral obstruction caused by vasculitis. Baskin L, et al. **J Urol** 1989 Apr;141(4):933–5

Bilateral ureteral stricture from polyarteritis nodosa. Hefty TR, et al. **J Urol** 1989 Mar;141(3):600–1

Hepatic hematoma in polyarteritis nodosa. Bonomo L, et al. **Rays** 1988 May–Aug;13(2):19–21

[Peripheral neuropathy associated with polyarteritis nodosa: report of the clinical manifestations and pathologic findings of sural nerve biopsy in 21 cases] Guo YP, et al. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Apr; 21(2):97–102, 127 (Eng. Abstr.) **(Chi)**

[Angina without involvement of large coronary trunks and precapillary pulmonary hypertension in a patient with periarteritis nodosa] Marette P, et al. **Ann Cardiol Angeiol (Paris)** 1989 Jun;38(6):305–8 (Eng. Abstr.) **(Fre)**

[Vesical neuropathy in systemic vasculitis: 3 cases] Amarenco P, et al. **Ann Med Interne (Paris)** 1988;139(3):183–5 (Eng. Abstr.) **(Fre)**

[Prognosis and treatment of glomerulonephritis of periarteritis nodosa. The role of plasma exchange] Jarrousse B, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:23–5 (Eng. Abstr.) **(Fre)**

[Chorioretinal manifestations in periarteritis nodosa apropos of 2 cases] Milazzo S, et al. **Bull Soc Ophtalmol Fr** 1988 Aug–Sep;88(8–9):1055–8, 1060 (17 ref.) (Eng. Abstr.) **(Fre)**

[Periarteritis nodosa complicated by intrapancreatic vascular rupture] Jarrousse B, et al. **Gastroenterol Clin Biol** 1988 Aug–Sep;12(8–9):661–3 (16 ref.) (Eng. Abstr.) **(Fre)**

[The liver and periarteritis nodosa] Le Thi Huong D, et al. **Gastroenterol Clin Biol** 1989;13(2):141–8 (51 ref.) **(Fre)**

[Early isolated ophthalmological relapse in a case of periarteritis nodosa related to hepatitis B virus (letter)] Lortholary O, et al. **Presse Med** 1989 Apr 8;18(14):727–8 **(Fre)**

[Mixed cryoglobulinemia with necrotizing angiitis. Apropos of 2 cases] Cordonnier DJ, et al. **Rev Med Interne** 1989 May–Jun;10(3):207–15 (35 ref.) (Eng. Abstr.) **(Fre)**

[Renal involvement in necrotizing angiitis] Ronco P, et al. **Rev Med Interne** 1989 May–Jun;10(3):227–34 **(Fre)**

[Localized Zeek's angiitis of the small intestine. A case with surgical recovery] Taillan B, et al. **Rev Med Interne** 1988 Nov–Dec;9(5):521–3 (10 ref.) **(Fre)**

[Coronary disease of the aneurysmal type in a young patient: a possible expression of panarteritis nodosa] Brusca R, et al. **Minerva Cardioangiol** 1988 Jul–Aug;36(7–8):365–9 (Eng. Abstr.) **(Ita)**

[Subarachnoid hemorrhage as initial manifestation of polyarteritis nodosa] Simonetti C, et al. **Riv Neurol** 1988 Sep–Oct;58(5):180–2 (23 ref.) (Eng. Abstr.) **(Ita)**

[A case of chronic renal failure due to polyarteritis nodosa with slow progression] Hatakeyama S, et al. **Nippon Jinzo Gakkai Shi** 1988 Oct;30(10):1181–8 (Eng. Abstr.) **(Jpn)**

[A case of polyarteritis nodosa associated with primary hypothyroidism] Okayama Y, et al. **Nippon Naika Gakkai Zasshi** 1987 May;76(5):742–3 **(Jpn)**

[A case with polyarteritis nodosa associated with acute renal failure and pericardial cyst] Yoshida A, et al. **Ryumachi** 1989 Apr;29(2):118–25 (Eng. Abstr.) **(Jpn)**

[Peripheral neuron damage in periarteritis nodosa: diagnostic problems] Muszyński J, et al. **Pol Tyg Lek** 1988 Jun 13; 43(24):765–7 **(Pol)**

DIAGNOSIS

A possible role for MRI in polyarteritis nodosa: the "creeping fat" sign. Eckel CG, et al. **Magn Reson Imaging** 1988 Nov–Dec;6(6):713–5

Polyarteritis nodosa presenting as recurrent pneumonia following splenectomy for hairy-cell leukemia. Komadina KH, et al. **Semin Arthritis Rheum** 1989 May;18(4):252–7 (27 ref.)

[Comparative studies of clinical findings and prognosis of polyarteritis nodosa, Wegener's granulomatosis, allergic granulomatous angiitis and malignant rheumatoid arthritis] Hashimoto H, et al. **Ryumachi** 1988 Jun;28(3):145–55 (Eng. Abstr.) **(Jpn)**

[A case of periarteritis nodosa] Talerova LG, et al. **Klin Med (Mosk)** 1989 Mar;67(3):131–2 **(Rus)**
[Pulmonary vasculitis in a patient with periarteritis nodosa] Bulyk MA, et al. **Probl Tuberk** 1988;(9):73–4 **(Rus)**
[Diagnostic difficulties in periarteritis nodosa] Goloshchapov OA, et al. **Sov Med** 1989;(3):83–6 **(Rus)**
[Polyarteritis nodosa diagnosed by duodenopancreatectomy] Bistué R, et al. **Medicina (B Aires)** 1988;48(4):406–8 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Polyarteritis nodosa in pregnancy: a case report and brief literature review. Owen J, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):606–7 (2 ref.)

ETIOLOGY

Giant cell (temporal) arteritis following polyarteritis nodosa [letter] Jawad AS, et al. **Br J Rheumatol** 1989 Jun; 28(3):268–70
Necrotizing vasculitis and HIV replication in peripheral nerves [letter] Gherardi R, et al. **N Engl J Med** 1989 Sep 7;321(10):685–6
Polyarteritis nodosa and necrotizing glomerulonephritis associated with long-standing silicosis. Arnalich F, et al. **Nephron** 1989;51(4):544–7
[The role of infection in the precipitation of periarteritis nodosa] Smail A, et al. **Ann Med Interne (Paris)** 1988; 139(5):324–30 (25 ref.) (Eng. Abstr.) **(Fre)**
[Hepatitis B virus and periarteritis nodosa] Trépo C. **Gastroenterol Clin Biol** 1989;13(2):117–9 **(Fre)**
[Periarteritis nodosa related to hepatitis B virus. Determination of a new therapeutic strategy: 13 cases] Guillevin L, et al. **Presse Med** 1988 Sep 10;17(30):1522–6 (Eng. Abstr.) **(Fre)**
[Periarteritis nodosa following vaccination against hepatitis B (letter)] Le Goff P, et al. **Presse Med** 1988 Oct 8; 17(34):1763 **(Fre)**

IMMUNOLOGY

Familial polyarteritis nodosa: a serologic and immunogenetic analysis. Reveille JD, et al. **J Rheumatol** 1989 Feb; 16(2):181–5
Circulating auto-antibodies to neutrophil cytoplasmic antigens in vasculitis. A report of 3 cases. Pudifin DJ, et al. **S Afr Med J** 1989 Jan 21;75(2):73–5

MORTALITY

[Causes of death in systemic vasculitis of polyarteritis nodosa. Analysis of a series of 165 patients] Cacoub P, et al. **Ann Med Interne (Paris)** 1988;139(6):381–90 (73 ref.) (Eng. Abstr.) **(Fre)**

PATHOLOGY

Sixth nerve palsies, temporal artery biopsy, and necrotizing vasculitis. Sedwick LA, et al. **J Clin Neuro Ophthalmol** 1989 Jun;9(2):119–21
Granulomatous angiitis of the central nervous system: protean manifestations and response to treatment. Koo EH, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep; 51(9):1126–33
Course of cerebral lesions in a patient with periarteritis nodosa studied by magnetic resonance imaging. Koppensteiner R, et al. **Klin Wochenschr** 1989 Apr 3; 67(7):398–401
Case for diagnosis. Periarteritis nodosa. Sabnis SG, et al. **Milit Med** 1989 Apr;154(4):194–5, 200–1
Morphologic differences between polyarteritis and Wegener's granulomatosis using light, electron and immunohistochemical techniques. Antonovych TT, et al. **Mod Pathol** 1989 Jul;2(4):349–59
[A 35-year-old patient with necrotizing exanthema, restrictive cardiomyopathy, liver cirrhosis and acute psychosis] Schön S, et al. **Med Klin** 1989 Mar 15; 84(3):139–43 **(Ger)**
[Pathology of the peripheral nervous system in polyarteritis nodosa: a clinico-pathological study of two autopsy cases] Sobue G, et al. **Rinsho Shinkeigaku** 1989 Feb;29(2):209–15 (Eng. Abstr.) **(Jpn)**
[Clinical features of the peripheral nerve involvement in necrotizing angiitis—characteristics in polyarteritis nodosa and allergic granulomatous angiitis] Sobue G, et al. **Rinsho Shinkeigaku** 1989 Jan;29(1):40–8 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Electrophysiological study in systemic necrotizing vasculitis of the polyarteritis nodosa group. Cruz Martínez A, et al. **Electromyogr Clin Neurophysiol** 1988 May;28(4):167–73
An idiopathic febrile necrotizing arteritis syndrome in the dog: beagle pain syndrome. Hayes TJ, et al. **Toxicol Pathol** 1989;17(1 Pt 2):129–37

RADIOGRAPHY

Angiography and polyarteritis nodosa [letter] Mandell BF. **West J Med** 1988 Sep;149(3):344–5

THERAPY

[Superiority of a new etiopathogenic treatment curing periarteritis nodosa caused by hepatitis B virus, using a combination of brief corticotherapy, vidarabine and plasma exchange] Trepo C, et al. **Presse Med** 1988 Sep 10; 17(30):1527–31 (Eng. Abstr.) **(Fre)**
[Therapy of Wegener's granulomatosis and related vasculitides] Andrassy K, et al. **Dtsch Med Wochenschr** 1989 Jan 6;114(1):27–9 (13 ref.) **(Ger)**

PERIARTHRITIS

[Periarthritis of the shoulder. Symposium presented at the 60th annual meeting of the S.O.F.C.O.T. Paris, November 1985. Proceedings] **Rev Chir Orthop** 1988;74(4):265–347 **(Fre)**
[Periarthritis of the shoulder. Introduction] Lannelongue J. **Rev Chir Orthop** 1988;74(4):267–8 **(Fre)**

COMPLICATIONS

Hydroxyapatite pseudopodagra. A syndrome of young women. Fam AG, et al. **Arthritis Rheum** 1989 Jun; 32(6):741–7 (16 ref.)
[Periarthrosis of the knee joint in patients with gonarthrosis] Bunchuk NV, et al. **Ter Arkh** 1989;61(5):112–5 **(Rus)**

DIAGNOSIS

Calcific periarthritis. Ryan PF. **Aust Fam Physician** 1989 Jun; 18(6):664, 668, 670–2
[Periarthritis of the shoulder. The value of echography in trophic lesions of the rotary cuff of the shoulder] Augereau B, et al. **Rev Chir Orthop** 1988;74(4):287–8 **(Fre)**
[Arthroscopy of the shoulder in scapulo-humeral periarthritis] Coudane H, et al. **Rev Chir Orthop** 1988; 74(4):289 **(Fre)**
[Periarthritis of the shoulder. Symptomology and classification] Walch G. **Rev Chir Orthop** 1988;74(4):279–81 **(Fre)**
[Lofgren syndrome] Brill Z, et al. **Harefuah** 1988 Nov 1; 115(9):228–9 (Eng. Abstr.) **(Heb)**
[Periarticular inflammation of the ankles: clinical variant of Löfgren's syndrome] Valverde J, et al. **Med Clin (Barc)** 1988 Nov 26;91(18):707–9 (Eng. Abstr.) **(Spa)**

METABOLISM

Periarthritis associated with basic calcium phosphate crystal deposition and low levels of serum alkaline phosphatase—report of three cases from one family. Caspi D, et al. **J Rheumatol** 1988;15(5):823–7

PATHOLOGY

Recurrent calcific periarthritis leading to erosive osteoarthritis. Baguley E, et al. **Br J Rheumatol** 1988 Dec; 27(6):490–2

RADIOGRAPHY

Para-acetabular periarthritis calcarea: its radiographic manifestations. Kawashima A, et al. **Skeletal Radiol** 1988; 17(7):476–82
[Periarthritis of the shoulder. Radiologic study of the rotary cuff] Bernageau J. **Rev Chir Orthop** 1988;74(4):282–7 **(Fre)**

RADIOTHERAPY

Treatment of 103 cases of periarthritis of the shoulder by acupoint laser irradiation. Xie KY, et al. **J Tradit Chin Med** 1988 Dec;8(4):265–6

REHABILITATION

Periarthrosis of the shoulder associated with diabetes mellitus. Friedman NA, et al. **Am J Phys Med Rehabil** 1989 Feb;68(1):12–4

SURGERY

Periarthropathia humeroscapularis and cervical disc herniation. Benini A, et al. **Neurochirurgia (Stuttg)** 1989 Mar;32(2):47–9
[Periarthritis of the shoulder. Calcifications] Patte D, et al. **Rev Chir Orthop** 1988;74(4):277–8 **(Fre)**
[Degenerative shoulder diseases—their differentiation and surgical therapy] Ziller R, et al. **Zentralbl Chir** 1988; 113(19):1245–52 (Eng. Abstr.) **(Ger)**

THERAPY

Injections and physiotherapy for the painful stiff shoulder. Dacre JE, et al. **Ann Rheum Dis** 1989 Apr;48(4):322–5
Shoulder pain. Ji XP. **J Tradit Chin Med** 1988 Dec;8(4):310–2
[Distention arthrography in the treatment of adhesive capsulitis of the shoulder] Morency G, et al. **Can Assoc Radiol J** 1989 Apr;40(2):84–6 (Eng. Abstr.) **(Fre)**
[Therapy of periarthropathies] Scendoni P. **Clin Ter** 1987 Sep 15;122(5):357–66 (35 ref.) (Eng. Abstr.) **(Ita)**

PERICARDIAL CYST see **MEDIASTINAL CYST**

PERICARDIAL EFFUSION

see related
CARDIAC TAMPONADE

CHEMICALLY INDUCED

[Pericardial effusion during the therapy of Crohn's disease with 5-aminosalicylic acid] Weber P, et al. **Dtsch Med Wochenschr** 1988 Nov 18;113(46):1806–7 (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Coexistent transient pulmonary edema and pericardial effusion. Newman B, et al. **Pediatr Radiol** 1988;18(6):455–8
[Postoperative hemopericardium compressing the left atrium. Apropos of a case] Laudinat JM, et al. **Arch Mal Coeur** 1989 Jan;82(1):103–7 (Eng. Abstr.) **(Fre)**
[Perforation of the ascending aorta associated with aortic regurgitation and hemopericardium—a report of an unusual case] Kotohda K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug;36(8):1413–6 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Echocardiographic evidence of pericardial effusion in severe chronic pulmonary hypertension. Park B, et al. **Am J Cardiol** 1989 Jan 1;63(1):143–5
Fetal pericardial effusion. Shenker L, et al. **Am J Obstet Gynecol** 1989 Jun;160(6):1505–7; discussion 1507–8
Practical considerations in pericardiocentesis. Iskandrian AS. **Cathet Cardiovasc Diagn** 1989 Jan;16(1):24
Pericardial effusion mimicking left atrial thrombus after coronary bypass surgery. Steffenino G, et al. **Chest** 1989 Feb;95(2):468–70
Pericardial effusion early in acute myocardial infarction. Charlap S, et al. **Clin Cardiol** 1989 May;12(5):252–4
Pericarditis, pericardial effusion, cardiac tamponade, and constriction. Spodick DH. **Crit Care Clin** 1989 Jul; 5(3):455–76 (22 ref.)
Incidence and significance of pericardial effusion in acute myocardial infarction as determined by two-dimensional echocardiography. Sahasakul Y, et al. **J Med Assoc Thai** 1988 Dec;71(12):680–4
Computed tomography and magnetic resonance imaging of the pericardium. Olson MC, et al. **Radiographics** 1989 Jul; 9(4):633–49
Large pericardial effusion after cardiac surgery: role of echocardiography in diagnosis and management. D'Cruz IA, et al. **South Med J** 1989 Mar;82(3):287–91
[Chylothorax and chylopericardium] Smeets RE, et al. **Ned Tijdschr Geneeskd** 1988 Aug 20;132(34):1584–7 (Eng. Abstr.) **(Dut)**
[Neonatal pericardial effusion] Liberatore A, et al. **Radiol Med (Torino)** 1989 Mar;77(3):276–7 **(Ita)**
[Ultrasonics as the first choice in the diagnosis of pericardial effusion] Müller-Suur R, et al. **Lakartidningen** 1988 Dec 14;85(50):4407 **(Swe)**

DRUG THERAPY

Intrapericardial instillation of platin in malignant pericardial effusion. Fiorentino MV, et al. **Cancer** 1988 Nov 1; 62(9):1904–6
Intrapericardial instillation of OK-432 for the management of malignant pericardial effusion: report of three cases. Imamura T, et al. **Jpn J Med** 1989 Jan-Feb;28(1):62–6
Tetracycline treatment for malignant pericardial effusion. Salamon P, et al. **Med Interne** 1989 Jan-Mar;27(1):73–4
[Malignant pericardial effusion after esophageal cancer surgery successfully treated by intrapericardial instillation of CDDP] Murata K, et al. **Gan To Kagaku Ryoho** 1989 Jul;16(7):2433–6 (9 ref.) (Eng. Abstr.) **(Jpn)**

ENZYMOLOGY

[Enzyme chemical studies of pericardial fluid] Miltner E, et al. **Z Rechtsmed** 1989;102(1):25–31 (Eng. Abstr.) **(Ger)**

ETIOLOGY

Fatal hemopericardium due to ruptured solitary myocardial abscess unassociated with infective endocarditis. Winek RR, et al. **Am J Cardiovasc Pathol** 1988;2(3):255–7
Central venous catheter vascular erosions. Diagnosis and clinical course. Ellis LM, et al. **Ann Surg** 1989 Apr; 209(4):475–8
Pericardial effusion associated with ascites secondary to hepatic cirrhosis [letter] Shah A, et al. **Arch Intern Med** 1989 Jun;149(6):1462
Human adjuvant disease. A new cause of chylous effusions. Walsh FW, et al. **Arch Intern Med** 1989 May;149(5):1194–6 (23 ref.)
Pericardial effusion following conditioning for bone marrow transplantation in acute leukaemia. Veys PA, et al. **Bone Marrow Transplant** 1987 Aug;2(2):213–6
Hemothorax and hemopericardium in a patient with Bean's blue rubber bleb nevus syndrome. Langleben D, et al. **Chest** 1989 Jun;95(6):1352–3
Pericardial effusion and tamponade due to Kaposi's sarcoma in acquired immunodeficiency syndrome. Stotka JL, et al. **Chest** 1989 Jun;95(6):1359–61
Increasing pericardial effusion in cardiac transplant recipients. Valantine HA, et al. **Circulation** 1989 Mar; 79(3):603–9
Complications seen in patients undergoing intermittent haemodialysis at the Kenyatta National Hospital in the

period 1984–1986. Mc'Ligeyo SO, et al. **East Afr Med J** 1988 Mar;65(3):147–54

Successful management of malignant pericardial effusion in metastatic squamous cell carcinoma of the uterine cervix. Rieke JW, et al. **Gynecol Oncol** 1988 Oct;31(2):338–51 (83 ref.)

Pericardial effusion as a clinical sign of Legionnaires' disease. Domingo C, et al. **Int J Cardiol** 1989 Jun;23(3):407–9

Haemopericardium in rheumatoid arthritis. Stables RH, et al. **Int J Cardiol** 1989 May;23(2):268–70

Legionella bozemanii infection associated with massive pericardial effusion. Case report. Coto V, et al. **Panminerva Med** 1988 Apr–Jun;30(2):118–20

Refractory supra-ventricular tachyarrhythmias due to early posterior pericardial effusion following open-heart surgery. Angelini GD, et al. **Thorac Cardiovasc Surg** 1988 Jun; 36(3):162–3

Pericardial actinomycosis with cardiac tamponade from a contiguous thoracic lesion. Slutzker AD, et al. **Thorax** 1989 May;44(5):442–3

Cardiovascular and pulmonary complications of epidemic typhus. Diab SM, et al. **Trop Geogr Med** 1989 Jan; 41(1):76–9

Pericarditis with effusion and tamponade complicating left subdiaphragmatic abscesses. Horton JM, et al. **West J Med** 1988 Aug;149(2):213–5

Nonsuppurative pericardial effusion [letter] Trimble GX. **West J Med** 1989 Mar;150(3):347–8

[Pericardial exudates caused by extracardial malignant disease] Karkov J, et al. **Ugeskr Laeger** 1988 Nov 7; 150(45):2741–3 (Eng. Abstr.) **(Dan)**

[Chronic aortic dissection disclosed by pericardial effusion. Apropos of 3 cases] de Groote P, et al. **Arch Mal Coeur** 1988 Oct;81(10):1235–40 (25 ref.) (Eng. Abstr.) **(Fre)**

[Value of pericardioscopy in pericardial effusion. Apropos of 20 patients] Millaire A, et al. **Arch Mal Coeur** 1988 Sep; 81(9):1071–6 (Eng. Abstr.) **(Fre)**

[Use of enoxaparin in hemodialysis: precautions to be taken in case of pericarditis (letter)] Guerin C, et al. **Presse Med** 1989 Feb 4;18(4):181 **(Fre)**

[Increasing stress dyspnea in a 31-year-old patient with enlarged heart shadow] Hettich R, et al. **Internist (Berlin)** 1989 Jan;30(1):64–7 **(Ger)**

[Chronic heart disease caused by irradiation—a study of five cases] Horimoto M, et al. **Kokyu To Junkan** 1988 Jun; 36(6):687–91 (Eng. Abstr.) **(Jpn)**

[A male case of anorexia nervosa with endocrinological disorders, Adams-Stokes-like attack, pericardial effusion and brain atrophy] Minato M, et al. **Nippon Naika Gakkai Zasshi** 1988 Sep;77(9):1417–20 **(Jpn)**

[A case of malignant lymphoma presenting with pleuropericardial effusion] Taniguchi H, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr;78(4):575–6 **(Jpn)**

[The use of MCNU to a patient of primary myelofibrosis complicated with pericardial effusion and proteinuria] Shiga Y, et al. **Rinsho Ketsueki** 1989 Apr;30(4):497–501 (Eng. Abstr.) **(Jpn)**

[Pericardial effusion due to pulmonary lymphangiectasis] Diógenes MS, et al. **Arq Bras Cardiol** 1988 Aug; 51(2):185–92 (Eng. Abstr.) **(Por)**

[Pericardial effusion in hypothyroidism] Kotova LN, et al. **Sov Med** 1988;(9):112–3 **(Rus)**

[A 24-year-old man with hemopericardium (clinical conference)] Fitó R, et al. **Med Clin (Barc)** 1989 Jan 14; 92(1):29–35 **(Spa)**

[Traumatic pericardial effusion in childhood. Follow-up study using bidimensional echocardiography] Cabrera A, et al. **Rev Esp Cardiol** 1988 May;41(5):315–7 (Eng. Abstr.) **(Spa)**

[Recurrent pericarditis with effusion caused by Q fever. Presentation of a case] Martínez Trabanco I, et al. **Rev Esp Cardiol** 1989 May;42(5):346–7 (Eng. Abstr.) **(Spa)**

[Pericardial effusion after open heart surgery is a complication with uncharacteristic symptoms] Persson K, et al. **Lakartidningen** 1988 Sep 28;85(39):3159–60 **(Swe)**

IMMUNOLOGY

[ELISA immunoenzymatic assay in the pericardial fluid: a new method for the post-mortem diagnosis of Chagas disease] Rocha A, et al. **Rev Soc Bras Med Trop** 1987 Oct-Dec;20(4):213–6 (Eng. Abstr.) **(Por)**

METABOLISM

[Massive pericardial effusion in a patient with scleroderma with special reference to concentration of alpha-hANP in plasma and pericardial effusion] Imamura S, et al. **Kokyu To Junkan** 1989 Apr;37(4):449–53 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

New nonsurgical technique for multiple pericardial biopsies. Endrys J, et al. **Cathet Cardiovasc Diagn** 1988;15(2):92–4

Diagnostic usefulness of pericardial fluid cytology. Meyers DG, et al. **Chest** 1989 May;95(5):1142–3 (5 ref.)

Pericardial effusion complicating acute myocardial infarction. Beahrs MM, et al. **Minn Med** 1989 Jan;72(1):33–7

[Atypical clinical course of thoracic aortic dissection with subacute pericardial hemorrhage] Punzengruber C, et al. **Z Kardiol** 1988 Dec;77(12):811–3 (Eng. Abstr.) **(Ger)**

[Clinical diagnosis of malignant lymphoma with pericardial infiltration] Hiyoshi M, et al. **Rinsho Ketsueki** 1988 May; 29(5):728–32 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

The effect of a pericardial effusion on the shunt across an atrial septal defect. Moosvi AR, et al. **Am Heart J** 1989 Sep;118(3):627–30

RADIOGRAPHY

CT diagnosis of acute pericardial tamponade after blunt chest trauma. Goldstein L, et al. **AJR** 1989 Apr;152(4):739–41

[Computerized tomography in the evaluation of serous effusions] Gualdi GF, et al. **Clin Ter** 1988 Aug 31; 126(4):277–9 **(Ita)**

RADIONUCLIDE IMAGING

Detection of impending pericardial tamponade during skeletal imaging. Engeler CM, et al. **Clin Nucl Med** 1989 Jul;14(7):479–81

RADIOTHERAPY

External radiotherapy in the management of malignant pericardial effusion. Fairlamb DJ. **Clin Radiol** 1989 May; 40(3):307–8

SURGERY

Results of subxiphoid pericardiostomy in pericardial effusion. Sinzobahamvya N. **Acta Chir Belg** 1988 May-Jun; 88(3):175–8

Clinical experience with subxiphoid drainage of pericardial effusions. Palatianos GM, et al. **Ann Thorac Surg** 1989 Sep; 48(3):381–5

Radionuclide assessment of patency of pericardio-peritoneal shunt. Jost GM, et al. **Australas Radiol** 1988 Nov; 32(4):510–1

Pointers on pericardiocentesis [letter] Cheng TO. **Cathet Cardiovasc Diagn** 1989 May;17(1):67

[Pericardio-peritoneal shunt with the automatic stapler EEA] Obadia JF, et al. **Presse Med** 1988 Nov 5;17(39):2081–2 (Eng. Abstr.) **(Fre)**

[Two cases of cardiac tamponade, complicated by malignant, effusive pericarditis and treated by creating a pericardial peritoneal window] Yasuma F, et al. **Gan No Rinsho** 1989 Feb;35(3):393–6 (Eng. Abstr.) **(Jpn)**

[Isolated wound of the pericardium treated conservatively] Boufalik RI, et al. **Vestn Khir** 1989 Feb;142(2):66–8 **(Rus)**

THERAPY

What constitutes definitive therapy of malignant pericardial effusion? "Medical" versus surgical treatment. Hawkins JW, et al. **Am Heart J** 1989 Aug;118(2):428–32

Management of postoperative chylopericardium in childhood. Denfield SW, et al. **Am J Cardiol** 1989 Jun 1; 63(18):1416–8

Catheter drainage of the pericardium: its safety and efficacy. Morgan CD, et al. **Can J Surg** 1989 Sep;32(5):331–4

Symptomatic pericardial effusion in cancer patients. Huang CH, et al. **Chang Keng I Hsueh** 1988 Jun;11(2):99–106

Managing malignant pericardial effusion. Buzaid AC, et al. **West J Med** 1989 Feb;150(2):174–9 (91 ref.)

Malignant pericardial effusion [editorial] Lewis JP. **West J Med** 1989 Feb;150(2):202–3

[Management of malignant pericardial effusion] Ben Yosef R, et al. **Harefuah** 1988 Sep;115(5–6):138–41 (31 ref.) **(Heb)**

PERICARDIAL WINDOW TECHNICS

Surgical defects of the pericardium: radiographic findings. Takasugi JE, et al. **AJR Am J Roentgenol** 1989 May; 152(5):951–4

[Two cases of cardiac tamponade, complicated by malignant, effusive pericarditis and treated by creating a pericardial peritoneal window] Yasuma F, et al. **Gan No Rinsho** 1989 Feb;35(3):393–6 (Eng. Abstr.) **(Jpn)**

METHODS

Results of subxiphoid pericardiostomy in pericardial effusion. Sinzobahamvya N. **Acta Chir Belg** 1988 May-Jun; 88(3):175–8

PERICARDIECTOMY

Surgical defects of the pericardium: radiographic findings. Takasugi JE, et al. **AJR Am J Roentgenol** 1989 May; 152(5):951–4

Release of atrial natriuretic factor after pericardiectomy for chronic constrictive pericarditis. Wolozin MW, et al. **Am J Cardiol** 1988 Dec 1;62(17):1323–5

Evaluation of occult cardiac injuries using subxiphoid pericardial window. Duncan AO, et al. **J Trauma** 1989 Jul; 29(7):955–9; discussion 959–60

Early and late results of pericardiectomy in 118 cases of constrictive pericarditis. Bashi VV, et al. **Thorax** 1988 Aug; 43(8):637–41

[A case of tuberculous pericarditis treated with pericardiectomy] Takiguchi Y, et al. **Kekkaku** 1988 Oct; 63(10):661–6 (Eng. Abstr.) **(Jpn)**

[Hemodynamic effect of pericardiectomy] Lytkin MI, et al. **Vestn Khir** 1987 Dec;139(12):21–4 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

[The development of myocardial failure after subtotal pericardectomy] Selivanenko VT, et al. **Klin Khir** 1988; (10):21–3 (Eng. Abstr.) **(Rus)**

METHODS

Late results after pericardectomy for constrictive pericarditis via left thoracotomy. Astudillo R, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):115–9 (18 ref.)

Subxiphoid approach to the pericardium. Konttinen MP, et al. **Scand J Thorac Cardiovasc Surg** 1988;22(3):247–50

Lateral pericardiotomy for a safer second operation. Praeger PI, et al. **Surg Gynecol Obstet** 1989 Apr;168(4):363–4

PERICARDIOSTOMY see **PERICARDIAL WINDOW TECHNICS**

PERICARDIOTOMY see **PERICARDIECTOMY**

PERICARDITIS

[Pericarditis in the pediatric age group—diagnosis and treatment] Zalzstein E, et al. **Harefuah** 1989 Apr 16; 116(8):420–3 (45 ref.) **(Heb)**

CHEMICALLY INDUCED

[Pulmonary edema and pericarditis after inhalation of Teflon fumes] Haugtomt H, et al. **Tidsskr Nor Laegeforen** 1989 Feb 20;109(5):584–5 (Eng. Abstr.) **(Nor)**

COMPLICATIONS

Acute pericarditis complicated by cardiac tamponade during pregnancy. Simpson WG, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):415–6

Streptococcal tonsillitis and acute nonrheumatic myopericarditis. Karjalainen J. **Chest** 1989 Feb; 95(2):359–63

Carditis complicating inflammatory bowel disease in children. Case report and review of the literature. Granot E, et al. **Eur J Pediatr** 1988 Dec;148(3):203–5

Herpes simplex type 2 pericarditis and bilateral facial palsy in a patient with AIDS [letter] Toma E, et al. **J Infect Dis** 1989 Sep;160(3):553–4

Giant cell arteritis associated with pericarditis and pancreatic insufficiency in a patient with psoriatic arthritis. Clementz GL, et al. **J Rheumatol** 1989 Jan;16(1):128–9

Colitis and pericarditis in a patient with eosinophilic fasciitis. A contribution to the multisystem nature of eosinophilic fasciitis. Naschitz JE, et al. **J Rheumatol** 1989 May; 16(5):688–92

Rheumatoid pancarditis in a patient with well controlled rheumatoid arthritis. Sigal LH, et al. **J Rheumatol** 1989 Mar;16(3):368–73

[Myopericarditis in the 3d pregnancy trimester. Apropos of a case] Pajuelo-Gallego A, et al. **Rev Fr Gynecol Obstet** 1988 Nov;83(11):727–9 (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Incidence of Coxsackie virus infection in patients with dilated cardiomyopathy. Riečanský I, et al. **Cor Vasa** 1989; 31(3):225–30

Pericarditis, pericardial effusion, cardiac tamponade, and constriction. Spodick DH. **Crit Care Clin** 1989 Jul; 5(3):455–76 (22 ref.)

The early repolarization syndrome. Eastaugh JA. **J Emerg Med** 1989 May-Jun;7(3):257–62

Acute rheumatic pericarditis. Rathore MH, et al. **Pediatr Infect Dis J** 1989 Mar;8(3):183–4

Computed tomography and magnetic resonance imaging of the pericardium. Olson MC, et al. **Radiographics** 1989 Jul; 9(4):633–49

[Pulmonary embolism and peri-(epi-)carditis] Schinko H, et al. **Prax Klin Pneumol** 1988 Jul;42(7):559–63 (Eng. Abstr.) **(Ger)**

[False echocardiographic images of an atrial thrombus in pericarditis] Beccaria E, et al. **Cardiologia** 1988 Dec; 33(12):1177–9 (Eng. Abstr.) **(Ita)**

[Carditis and pregnancy] Dubiel JP. **Przegl Lek** 1988; 45(7):583–7 **(Pol)**

[Principles of the early diagnosis and treatment of suppurative pericarditis in children] Poliakov VP. **Pediatriia** 1988; (11):48–51 **(Rus)**

[Infarction-like ECG changes in lupus pericarditis] Sarkisian NM, et al. **Ter Arkh** 1988;60(7):90–1 **(Rus)**

DRUG THERAPY

Myocardial infarct expansion during indomethacin or ibuprofen therapy for symptomatic post infarction pericarditis. Influence of other pharmacologic agents during early remodelling. Jugdutt BI, et al. **Can J Cardiol** 1989 May;5(4):211–21 (32 ref.)

Bilateral empyema and purulent pericarditis due to Haemophilus influenzae capsular type b [letter] Mier A. **Thorax** 1989 Jan;44(1):80

ETIOLOGY

Pericarditis in acute myocardial infarction: characterization and clinical significance. Tofler GH, et al. **Am Heart J** 1989 Jan;117(1):86–92

Purulent pericarditis and ventricular pseudoaneurysm in an intravenous drug abuser. Wiegers SE, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1635–7

Suppurative pericarditis due to Angelchik prosthesis. Hill IR, et al. **Am J Forensic Med Pathol** 1989 Mar;10(1):71–2

Cyclosporin A in the treatment of severe aplastic anemia: description of a case complicated by the development of tubercular pericarditis during treatment. Pogliani EM, et al. **Am J Hematol** 1989 Apr;30(4):257–8

Acute pericarditis due to group C Streptococcus: report of a medically treated case. Marsa RJ, et al. **Am J Med** 1989 Apr;86(4):474–6

Pericarditis associated with tick-borne Q fever. Beaman MH, et al. **Aust N Z J Med** 1989 Jun;19(3):254–6

Fatal pericarditis due to Mycobacterium avium-intracellulare in acquired immunodeficiency syndrome. Woods GL, et al. **Chest** 1989 Jun;95(6):1355–7

Myocardial abscess due to Fusobacterium following acute myocardial infarction. Berman DA, et al. **Clin Cardiol** 1988 Aug;11(8):575–7

The wolf inside. Stone J. **Del Med J** 1988 Nov;60(11):647–9

Pericarditis complicating esophageal sclerotherapy [letter] Lewis F, et al. **Gastroenterology** 1989 Jun;96(6):1625–6

Brucellar pericarditis. Rivera JM, et al. **Infection** 1988 Jul–Aug;16(4):254

Hemophilus influenzae pericarditis in an adult. Barnum GM, et al. **J Am Osteopath Assoc** 1988 Dec;88(12):1519–22

Fibrinous pericarditis in alcoholic liver disease. Yang SS, et al. **J Clin Gastroenterol** 1989 Feb;11(1):53–5

Group A streptococcal pericarditis in a previously well child [letter] Pruitt JL. **Pediatr Infect Dis J** 1989 May;8(5):338

Perimyocarditis. Report on an unusual cause. Biton A, et al. **Postgrad Med** 1989 Apr;85(5):77–80

Post-myocardial infarction pericarditis. Chronic symptoms in a middle-aged man. Holloway JD. **Postgrad Med** 1989 Feb 15;85(3):57–60

Pericardial involvement in familial Mediterranean fever. Erol C, et al. **Postgrad Med J** 1988 Jun;64(752):453–4

Exudative pericarditis in sarcoidosis. A case report and echocardiographic study. Diderholm E, et al. **Sarcoidosis** 1989 Mar;6(1):60–2

Bilateral empyema and purulent pericarditis due to Haemophilus influenzae capsular type b. Iggo R, et al. **Thorax** 1988 Jul;43(7):582–3

Pericarditis with effusion and tamponade complicating left subdiaphragmatic abscesses. Horton JM, et al. **West J Med** 1988 Aug;149(2):213–5

[Acute pericarditis in meningococcal infection] Hennion-Bernard C, et al. **Arch Fr Pediatr** 1988 Aug–Sep; 45(7):487–8 (Eng. Abstr.) **(Fre)**

[Complications of rheumatoid pericarditis: constriction and tamponade] Breut C, et al. **Presse Med** 1989 Jun 10; 18(23):1151–3 (Eng. Abstr.) **(Fre)**

[Toxoplasmic pleuro-pericarditis associated with Hodgkin's disease] Guignard E, et al. **Rev Med Interne** 1988 Nov–Dec; 9(5):473–6 (17 ref.) (Eng. Abstr.) **(Fre)**

[Mediastinal teratoma disclosed by pericarditis] Long P, et al. **Rev Med Interne** 1989 Mar–Apr;10(2):150–1 (6 ref.) **(Fre)**

[Rheumatoid pericarditis, an unusual complication of rheumatoid disease: apropos of a clinical case] Kaye O, et al. **Rev Med Liege** 1988 Sep 15;43(18):582–6 (17 ref.) **(Fre)**

[Pericarditis, pleurisy, pulmonary coin lesions: extra-articular manifestations of rheumatoid arthritis?] Breuer HW, et al. **Med Klin** 1988 Oct 28;83(21):727–31 **(Ger)**

[Chronic heart disease caused by irradiation—a study of five cases] Horimoto M, et al. **Kokyu To Junkan** 1988 Jun; 36(6):687–91 (Eng. Abstr.) **(Jpn)**

[Pericarditis caused by Q fever (letter)] Antolín J, et al. **Med Clin (Barc)** 1989 Feb 25;92(7):276 **(Spa)**

[Pericarditis caused by Coxiella burnetti (letter)] López Cortés LF, et al. **Med Clin (Barc)** 1988 Oct 8;91(11):438 **(Spa)**

[Recurrent pericarditis with effusion caused by Q fever. Presentation of a case] Martínez Trabanco I, et al. **Rev Esp Cardiol** 1989 May;42(5):346–7 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Desmin antibodies in acute infectious myopericarditis. Kurki P, et al. **APMIS** 1989 Jun;97(6):527–32

Lymphocyte subsets in patients with acute myopericarditis, arrhythmias and dilated cardiomyopathy. Koga Y, et al. **Jpn Circ J** 1989 Jan;53(1):78–86

Chronic relapsing pericarditis and dilated cardiomyopathy: serological evidence of persistent enterovirus infection. Muir P, et al. **Lancet** 1989 Apr 15;1(8642):804–7

[Cellular response in patients with post-infarction Dresser syndrome studied by the leukocyte migration inhibition test] Domaniewski J, et al. **Pol Tyg Lek** 1988 Oct 17–24; 43(42–43):1363–5 (Eng. Abstr.) **(Pol)**

[Study of IgM against Coxsackie B1 in heart disease (letter)] Sanchís-Bayarri Vaillant V, et al. **Rev Clin Esp** 1989 Feb; 184(3):162–3 **(Spa)**

MICROBIOLOGY

Staphylococcal pericarditis. An atypical presentation. Tsai J, et al. **Arch Intern Med** 1989 Apr;149(4):953–4

Purulent pericarditis due to Yersinia enterocolitica [letter] Lecomte F, et al. **J Infect Dis** 1989 Feb;159(2):363

Streptococcus acidominimus infections in a human. Akaike T, et al. **Jpn J Med** 1988 Aug;27(3):317–20

Salmonella enteritidis phage type 4 infection of broiler chickens: a hazard to public health. Rampling A, et al. **Lancet** 1989 Aug 19;2(8660):436–8

PATHOLOGY

Amoebic pericarditis. Blackett K. **Int J Cardiol** 1988 Nov; 21(2):183–7

Pericardial effusion complicating acute myocardial infarction. Beahrs MM, et al. **Minn Med** 1989 Jan;72(1):33–7

PHYSIOPATHOLOGY

Inhomogeneous enhancement of liver parenchyma secondary to passive congestion: contrast-enhanced CT. Holley HC, et al. **Radiology** 1989 Mar;170(3 Pt 1):795–800

SURGERY

Acute pericarditis with effusion and the general surgeon. Smith F. **Trop Doct** 1989 Jul;19(3):105–8

[Two cases of cardiac tamponade, complicated by malignant, effusive pericarditis and treated by creating a pericardial peritoneal window] Yasuma F, et al. **Gan No Rinsho** 1989 Feb;35(3):393–6 (Eng. Abstr.) **(Jpn)**

[Hemodynamic effect of pericardiectomy] Lytkin MI, et al. **Vestn Khir** 1987 Dec;139(12):21–4 (Eng. Abstr.) **(Rus)**

VETERINARY

Effect of ascorbic acid on the disease caused by Escherichia coli challenge infection. Gross WB, et al. **Avian Dis** 1988 Jul–Sep;32(3):407–9

Hydropericarditis syndrome in broiler chickens in Pakistan. Anjum AD, et al. **Vet Rec** 1989 Mar 11;124(10):247–8

PERICARDITIS, CONSTRICTIVE

Constrictive pericarditis [letter] Pope AR, et al. **Chest** 1989 May;95(5):1172

BLOOD

Low atrial natriuretic factor levels and absent pulmonary edema in pericardial compression of the heart. Spodick DH. **Am J Cardiol** 1989 May 15;63(17):1271–2 (15 ref.)

COMPLICATIONS

Myocardial ischemia in constrictive pericarditis. Navetta FI, et al. **Am Heart J** 1988 Oct;116(4):1107–11

Constrictive pericarditis complicating dermatomyositis. Tamir R, et al. **Ann Rheum Dis** 1988 Nov;47(11):961–3

Constrictive pericarditis presenting as pleural effusion of unknown origin. Tomaselli G, et al. **Arch Intern Med** 1989 Jan;149(1):201–3

Constrictive pericarditis with electrocardiographic evidence of right ventricular hypertrophy. Fukuda K, et al. **Chest** 1989 Sep;96(3):691–3

Antimyosin antibodies and constrictive pericarditis in lupus erythematosus. Wolf RE, et al. **J Rheumatol** 1988 Aug; 15(8):1284–7

[Familial intrauterine nanism with constrictive pericarditis, the MuLiBrEy syndrome] Cotton JB, et al. **Pediatrie** 1988; 43(3):197–203 (22 ref.) (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Abnormal left ventricular-left atrial posterior wall contour: a new two-dimensional echocardiographic sign in constrictive pericarditis. D'Cruz IA, et al. **Am Heart J** 1989 Jul;118(1):128–32

Diagnosis of constrictive pericarditis by pulsed Doppler echocardiography of the hepatic vein. von Bibra H, et al. **Am J Cardiol** 1989 Feb 15;63(7):483–8

Chronic constrictive pericarditis. A case report and review of the literature. Nahass RG, et al. **Arch Intern Med** 1989 May;149(5):1202–3 (12 ref.)

Restrictive cardiomyopathy and constrictive pericarditis: non-invasive distinction by digitised M mode echocardiography. Morgan JM, et al. **Br Heart J** 1989 Jan; 61(1):29–37

Differentiation of constrictive pericarditis and restrictive cardiomyopathy by Doppler echocardiography. Hatle LK, et al. **Circulation** 1989 Feb;79(2):357–70

Pericarditis, pericardial effusion, cardiac tamponade, and constriction. Spodick DH. **Crit Care Clin** 1989 Jul; 5(3):455–76 (22 ref.)

Diagnostic features of localised pericardial constriction. Vallance PJ, et al. **Int J Cardiol** 1988 Sep;20(3):416–9

[Diagnosis of constrictive pericarditis and restrictive cardiomyopathy by pulsed Doppler echocardiography] Vargas-Barrón J, et al. **Arch Inst Cardiol Mex** 1988 Nov–Dec;58(6):539–42 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Constrictive pericarditis after cardiac surgery. Killian DM, et al. **Am Heart J** 1989 Sep;118(3):563–8

Purulent pericarditis caused by Streptococcus milleri. Akashi K, et al. **Arch Intern Med** 1988 Nov;148(11):2446–7

Constrictive pericarditis and anemia post myocardial infarction. Kanawaty DS, et al. **Can J Cardiol** 1989 Apr; 5(3):147–8

Constrictive pericarditis as a complication of closed chest injury. Khan MA, et al. **Injury** 1988 Jan;19(1):39–40

[Postoperative constrictive pericarditis] Sparvieri F, et al. **Minerva Cardioangiol** 1989 May;37(5):233–9 (Eng. Abstr.) **(Ita)**

[A case of post-radiation constrictive pericarditis developing 17 years after radiation therapy] Takasaki I, et al. **Nippon Naika Gakkai Zasshi** 1988 Jun;77(6):834–8 **(Jpn)**

[Pancarditis with constrictive pericarditis after cardiac surgery. A case report] Pereira SN, et al. **Arq Bras Cardiol** 1988 Apr;50(4):263–7 (Eng. Abstr.) **(Por)**

PATHOLOGY

Morphometric analysis to detect suspected myocardial disease. A pilot study. Gregory MA, et al. **S Afr Med J** 1989 Feb 4;75(3):106–9

PHYSIOPATHOLOGY

Transesophageal Doppler echocardiographic demonstration of pulmonary venous flow velocity in restrictive cardiomyopathy and constrictive pericarditis. Schiavone WA, et al. **Am J Cardiol** 1989 May 15;63(17):1286–8

Doppler echocardiographic demonstration of pulmonary venous flow velocity in three patients with constrictive pericarditis before and after pericardiectomy. Schiavone WA, et al. **Am J Cardiol** 1989 Jan 1;63(1):145–7

Assessment of the left ventricular diastolic function in constrictive pericarditis by digitised M-mode echocardiography. Nordrehaug JE, et al. **Ann Clin Res** 1988;20(3):164–8

Kussmaul's sign: an artifact? [letter] Dalvi BV. **Lancet** 1989 Jun 10;1(8650):1337

RADIONUCLIDE IMAGING

Differentiation of constrictive pericarditis and restrictive cardiomyopathy by radionuclide ventriculography. Gerson MC, et al. **Am Heart J** 1989 Jul;118(1):114–20

SURGERY

Release of atrial natriuretic factor after pericardiectomy for chronic constrictive pericarditis. Wolozin MW, et al. **Am J Cardiol** 1988 Dec 1;62(17):1323–5

Surgical treatment for chronic constrictive pericarditis. Potwar SA, et al. **Indian Heart J** 1989 Jan–Feb;41(1):30–3

Late results after pericardectomy for constrictive pericarditis via left thoracotomy. Astudillo R, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):115–9 (18 ref.)

Early and late results of pericardiectomy in 118 cases of constrictive pericarditis. Bashi VV, et al. **Thorax** 1988 Aug; 43(8):637–41

[Surgical treatment of constrictive pericarditis and postoperative jaundice] Qiu NY. **Chung Hua Wai Ko Tsa Chih** 1988 Jun;26(6):349–50, 383 (Eng. Abstr.) **(Chi)**

[Surgical repair of TR and PC caused by cryosurgery of WPW syndrome] Sato T, et al. **Kyobu Geka** 1988 Dec; 41(13):1077–81 (Eng. Abstr.) **(Jpn)**

[Acute purulent pericarditis followed by early constriction—report of three cases] Fukuda S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul;36(7):1175–9 (14 ref.) (Eng. Abstr.) **(Jpn)**

[Surgical treatment of chronic constrictive pericarditis] Stolf NA, et al. **Arq Bras Cardiol** 1988 Jan;50(1):15–8 (Eng. Abstr.) **(Por)**

PERICARDITIS, TUBERCULOUS see under **TUBERCULOSIS, CARDIOVASCULAR**

PERICARDIUM

Cardiac-compressing intrapericardial teratoma at birth. Brabham KR, et al. **Am J Cardiol** 1989 Feb 1;63(5):386–7

Primary pericardial sarcoma in a neonate. Lazarus KH, et al. **Am J Pediatr Hematol Oncol** 1989 Fall;11(3):343–7

Cardiac tamponade due to chylopericardium after cardiac surgery. Pereira WM, et al. **Ann Thorac Surg** 1988 Nov; 46(5):572–3

Unilateral pulmonary edema associated with pulmonary arterial compression. McTigue C, et al. **Australas Radiol** 1988 Aug;32(3):390–3

Tumors of the heart and pericardium. Wilding G, et al. **Cancer Treat Rev** 1988 Sep;15(3):165–81 (120 ref.)

Solitary pericardial metastasis detected by 67Ga scintigraphy in a patient with fever of unknown origin. Hardoff R, et al. **Eur J Nucl Med** 1988;14(4):212–3

Successful management of malignant pericardial effusion in metastatic squamous cell carcinoma of the uterine cervix. Rieke JW, et al. **Gynecol Oncol** 1988 Oct;31(2):338–51 (83 ref.)

Pericardial aspergillosis in a bone marrow transplant recipient [letter] Guerin C, et al. **Intensive Care Med** 1989;15(5):330

Differentiation of restrictive cardiomyopathy from pericardial constriction: assessment of diastolic function by radionuclide angiography. Aroney CN, et al. **J Am Coll Cardiol** 1989 Apr;13(5):1007–14

Noninvasive evaluation of diastolic function: need for hemodynamically and clinically relevant variables. Plotnick GD, et al. **J Am Coll Cardiol** 1989 Apr;13(5):1015–6

The bovine pericardial xenograft: I. Effect of fixation in aldehydes without constraint on the tensile viscoelastic properties of bovine pericardium. Lee JM, et al. **J Biomed Mater Res** 1989 May;23(5):457–75

The bovine pericardial xenograft: II. Effect of tethering or pressurization during fixation on the tensile viscoelastic properties of bovine pericardium. Lee JM, et al. **J Biomed Mater Res** 1989 May;23(5):477–89

The bovine pericardial xenograft: III. Effect of uniaxial and sequential biaxial stress during fixation on the tensile viscoelastic properties of bovine pericardium. Lee JM, et al. **J Biomed Mater Res** 1989 May;23(5):491–506

Effect of delay between tissue harvest and glutaraldehyde pretreatment on mineralization of bovine pericardium used in bioprosthetic heart valves. Maranto AR, et al. **J Biomed Mater Res** 1988 Sep;22(9):819–25

Pericardial haemangiosarcoma in a horse. Birks EK, et al. **J Comp Pathol** 1988 Jul;99(1):105–7

Preliminary studies on a new steroid eluting epicardial electrode. Stokes KB. **PACE** 1988 Nov;11(11 Pt 2):1797–803

Development of a benign intrapericardial tumor between 20 and 40 weeks of gestation. Weber HS, et al. **Pediatr Cardiol** 1988;9(3):153–6

Chylopericardium as a complication of mitral valve replacement. Bar–El Y, et al. **Thorax** 1989 Jan;44(1):74–5

[Left thoracotomy: an alternative to median sternotomy in coronary bypass in cases of pericardial adhesions] Gandjbakhch I, et al. **Arch Mal Coeur** 1989 Jun;82(6):913–5 (Eng. Abstr.) **(Fre)**

[Pericardial hemolymphangioma. Apropos of a case] Nataf P, et al. **Arch Mal Coeur** 1988 Sep;81(9):1137–40 (Eng. Abstr.) **(Fre)**

[Quantitative and qualitative investigations on human pericardial fluid] Wollert HG, et al. **Z Exp Chir Transplant Kunstliche Organe** 1988;21(4):213–21 (Eng. Abstr.) **(Ger)**

[Intrapericardial teratoma in an adult] Meissner A, et al. **Z Kardiol** 1988 Sep;77(9):608–12 (Eng. Abstr.) **(Ger)**

[Retention of tined electrodes complicated by infection—a case report on its removal under total cardiopulmonary bypass] Ikeda K, et al. **Kyobu Geka** 1988 Sep;41(10):838–40 (12 ref.) (Eng. Abstr.) **(Jpn)**

[A case of two staged operation of pericardial abscess after left–ventricular aneurysmectomy] Miyata Y, et al. **Kyobu Geka** 1989 Apr;42(4):307–10 (Eng. Abstr.) **(Jpn)**

[Hydropericardium in hypothyreosis—a possible cause of cardiomegaly] Belokon' NA, et al. **Pediatriia** 1988;(9):92–5 **(Rus)**

[Malignant pericardial mesothelioma] Vinogradova OM, et al. **Ter Arkh** 1988;60(7):118–20 **(Rus)**

[In vitro study of the binding of calcium ions to bovine pericardium used in the construction of cardiac bioprostheses] Jorge–Herrero E, et al. **Rev Esp Cardiol** 1988 Oct;41(8):486–90 (34 ref.) (Eng. Abstr.) **(Spa)**

ABNORMALITIES

Noninvasive diagnostic features of partial absence of the pericardium. Altman CA, et al. **Am J Cardiol** 1989 Jun 15;63(20):1536–7

Differential diagnosis of chest pain and diagnostic findings in pericardial defects combined with coronary artery disease. Auch–Schwelk W, et al. **Clin Cardiol** 1988 Sep; 11(9):650–7

Symptomatic congenital complete absence of the left pericardium. Case report and review of the literature. Gehlmann HR, et al. **Eur Heart J** 1989 Jul;10(7):670–5 (33 ref.)

Congenital absence of pericardium. Coulier B, et al. **J Belge Radiol** 1988;71(6):718–9

Congenital absence of the pericardium and its relationship to the ligamentum arteriosum. Vesely T, et al. **Surg Radiol Anat** 1989;11(2):171–5

Pseudopericardial cyst in a neonate—a case report and review of the literature. Gupta R, et al. **Z Kinderchir** 1989 Jun;44(3):162–3 (11 ref.)

[Magnetic resonance imaging in the diagnosis of agenesis of the pericardium] Kastler B, et al. **Ann Cardiol Angeiol (Paris)** 1989 Mar;38(3):151–3 (Eng. Abstr.) **(Fre)**

[Total agenesis of the left pericardium (letter)] Borgioni L, et al. **G Ital Cardiol** 1989 Jan;19(1):89 **(Ita)**

[Total agenesis of the left pericardium. Description of a case] Di Giovanna F, et al. **G Ital Cardiol** 1988 Jun;18(6):498–501 (Eng. Abstr.) **(Ita)**

[Congenital absence of pericardium in a case of a variant of Marfan syndrome] Corti P, et al. **Recenti Prog Med** 1989 Feb;80(2):63–6 (Eng. Abstr.) **(Ita)**

[Stenosing peptic reflux esophagitis as a consequence of a congenital brachyesophagus in a female patient with complete absence of the pericardium] Privalov VA, et al. **Klin Khir** 1988;(10):64–5 **(Rus)**

ANATOMY & HISTOLOGY

Reducing the variability in durability of heart valve bioprostheses. Key factor for future improvement. Gabbay S, et al. **ASAIO Trans** 1988 Oct–Dec;34(4):1022–6

The lymphatic drainage of the pericardial space in the dog. Miller AJ, et al. **Lymphology** 1988 Dec;21(4):227–33

Anatomic study of the vascularization of the pericardial fat: application to pedicled flaps. Brizard C, et al. **Surg Radiol Anat** 1989;11(1):80–1

CYTOLOGY

Pericardial cells for graft seeding: isolation, culture and identification. Sugimoto JT, et al. **Ann Vasc Surg** 1989 Apr; 3(2):167–9

Development of an antithrombogenic cardiac wall substitute which can be reconstructed by infiltration of host cells. Okoshi T, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):532–7

A study on the cytoplasmic granules of the pericardial gland cells of some bivalve molluscs. Khan HR, et al. **Tissue Cell** 1988;20(4):587–97

ENZYMOLOGY

Phosphatase enzyme activity is retained in glutaraldehyde treated bioprosthetic heart valves. Maranto AR, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):827–30

Alkaline phosphatase activity of glutaraldehyde–treated bovine pericardium used in bioprosthetic cardiac valves. Maranto AR, et al. **Circ Res** 1988 Oct;63(4):844–8

INJURIES

CT diagnosis of traumatic pericardium rupture. Kirsch JD, et al. **J Comput Assist Tomogr** 1989 May–Jun;13(3):523–4

[State of the functional reserves and work capacity of subjects with a history of wounds of the heart and pericardium] Poliankil BA, et al. **Grudn Khir** 1988 Nov–Dec;(6):34–9 (Eng. Abstr.) **(Rus)**

[Unusual gunshot wound of the heart] Vladeev IuV, et al. **Sud Med Ekspert** 1989 Jan–Mar;32(1):49–50 **(Rus)**

[Isolated wound of the pericardium treated conservatively] Boufalik RI, et al. **Vestn Khir** 1989 Feb;142(2):66–8 **(Rus)**

METABOLISM

Penetration of imipenem–cilastatin into the lung tissue and pericardial fluid of thoracotomized patients. Benoni G, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):259–60

PATHOLOGY

Fatal cardiac tamponade in acquired immunodeficiency syndrome with epicardial Kaposi's sarcoma. Steigman CK, et al. **Am Heart J** 1988 Oct;116(4):1105–7

Epicardial lymphocytes: an autopsy study. Grimley CE, et al. **Am J Cardiovasc Pathol** 1988;2(3):225–9

Retardation of calcification of bovine pericardium used in bioprosthetic heart valves by phosphocitrate and a synthetic analogue. Tsao JW, et al. **Biomaterials** 1988 Sep; 9(5):393–7

New nonsurgical technique for multiple pericardial biopsies. Endrys J, et al. **Cathet Cardiovasc Diagn** 1988;15(2):92–4

Alteration of epicardial lymphatics in lymphostatic canine hearts. Okada E. **Heart Vessels** 1988;4(4):215–20

Metastatic malignant mesothelioma in a dog. Smith DA, et al. **J Comp Pathol** 1989 Jan;100(1):97–101

Magnetic resonance imaging of cardiac and paracardiac masses. Brown JJ, et al. **J Thorac Imaging** 1989 Apr; 4(2):58–64

[Intrapericardial teratoma] Weber G, et al. **Pathologe** 1988 Sep;9(5):302–4 **(Ger)**

[An autopsy case of saccular aneurysm of the aortic arch with direct rupture into the pericardium] Nakao T, et al. **Kokyu To Junkan** 1988 Nov;36(11):1247–50 (Eng. Abstr.) **(Jpn)**

[Primary pericardial mesothelioma. Apropos of a case (letter)] Martínez Sande JL, et al. **Rev Clin Esp** 1988 May; 182(8):445–6 **(Spa)**

PHYSIOLOGY

Regional variation in pericardial contact pressure in the canine ventricle. Hoit BD, et al. **Am J Physiol** 1988 Dec; 255(6 Pt 2):H1370–7

Pericardial pressure attenuates release of atriopeptin in volume–expanded dogs. Stone JA, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H648–54

Effect of airway pressure on pericardial pressure. Cabrera MR, et al. **Am Rev Respir Dis** 1989 Sep;140(3):659–67

The mouse pericardium: it allows passage of particulate matter from the pleural to the pericardial cavity. Fukuo Y, et al. **Anat Rec** 1988 Sep;222(1):1–5

Local variation in the tearing strength of chemically modified pericardium. Crofts CE, et al. **Biomaterials** 1989 May; 10(4):230–4

Regional left ventricular epicardial deformation in the passive dog heart. McCulloch AD, et al. **Circ Res** 1989 Apr; 64(4):721–33

Intrathoracic pressures and left ventricular configuration with respiratory maneuvers. Scharf SM, et al. **J Appl Physiol** 1989 Jan;66(1):481–91

Modelling of the heart and pericardium at end–diastole. Shivakumar PN, et al. **J Biomech** 1989;22(3):201–9

Biaxial mechanical behavior of excised epicardium. Humphrey JD, et al. **J Biomech Eng** 1988 Nov; 110(4):349–51

Computerized evaluation of drug–induced changes in guinea–pig epicardial monophasic action potentials. Duker G, et al. **Pharmacol Toxicol** 1988 Aug;63(2):85–9

PHYSIOPATHOLOGY

Epicardial activation after unsuccessful defibrillation shocks in dogs. Shibata N, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H902–9

Sequence of epicardial repolarisation and configuration of the T wave. Cowan JC, et al. **Br Heart J** 1988 Nov; 60(5):424–33

Simultaneous endocardial and epicardial monophasic action potential recordings during brief periods of coronary artery ligation in the dog: influence of adrenaline, beta blockade and alpha blockade. Taggart P, et al. **Cardiovasc Res** 1988 Dec;22(12):900–9

Diastolic filling in acute left ventricular dysfunction: role of the pericardium. Lavine SJ, et al. **J Am Coll Cardiol** 1988 Nov;12(5):1326–33

Atherosclerosis influences the vasomotor response of epicardial coronary arteries to exercise. Gordon JB, et al. **J Clin Invest** 1989 Jun;83(6):1946–52

[Pericardiocentesis: usefulness in the routine determination of intrapericardial pressure] Roca J, et al. **Rev Esp Cardiol** 1989 Feb;42(2):98–104 (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

Surgical defects of the pericardium: radiographic findings. Takasugi JE, et al. **AJR Am J Roentgenol** 1989 May; 152(5):951–4

RADIONUCLIDE IMAGING

Automatic drawing of the left epicardial region of interest on thallium 201 scintigraphic images. Valette H, et al. **Eur J Nucl Med** 1988;14(9–10):485–8

SURGERY

Acute hemodynamic effects of pericardial closure in man. Damen J, et al. **Acta Anaesthesiol Scand** 1989 Apr; 33(3):207–9

Pericardial substitutes: a survey. Heydorn WH, et al. **Ann Thorac Surg** 1988 Nov;46(5):567–9

Pericardial flaps prevent wound complications [letter] Zollinger RW 2d. **Arch Surg** 1988 Dec;123(12):1526

Radionuclide assessment of patency of pericardio–peritoneal shunt. Jost GM, et al. **Australas Radiol** 1988 Nov; 32(4):510–1

Myocardial rupture in expanded infarcts: repair using pericardial patch. Carey JS, et al. **Clin Cardiol** 1989 Mar; 12(3):157–60

Experience with the polytetrafluoroethylene surgical membrane for pericardial closure in operations for congenital cardiac defects. Amato JJ, et al. **J Thorac Cardiovasc Surg** 1989 Jun;97(6):929–34

Long–term results of the clinical use of an expanded polytetrafluoroethylene surgical membrane as a pericardial substitute. Harada Y, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):811–5

A new technique for control of epicardial bleeding. Chaux A, et al. **Mt Sinai J Med (NY)** 1988 Sep;55(4):276–7

Intrapericardial diaphragmatic hernia. A case report. Laric MJ, et al. **S Afr J Surg** 1989 Jul;27(3):100–2

[Pericardio–peritoneal shunt with the automatic stapler EEA] Obadia JF, et al. **Presse Med** 1988 Nov 5;17(39):2081–2 (Eng. Abstr.) **(Fre)**

[Application of epicardial approach technique to the anterior–paraseptal type Wolff–Parkinson–White syndrome] Nakano H, et al. **Kyobu Geka** 1989 May; 42(5):358–62 (Eng. Abstr.) **(Jpn)**

TRANSPLANTATION

Porcine versus pericardial bioprostheses: a comparison of late results in 1,593 patients. Pelletier LC, et al. **Ann Thorac Surg** 1989 Mar;47(3):352–61

Use of autologous pericardium for ventricular aneurysm closure [letter] Vincent JG. **Ann Thorac Surg** 1989 Jul; 48(1):146–7

Pericardial heterografts: a comparative study of suture pull–out and tissue strength. Trowbridge EA, et al. **J Biomed Eng** 1989 Jul;11(4):311–4

Xenogeneic pericardium as a dural substitute in reconstruction of suboccipital dura mater in children. Pařízek J, et al. **J Neurosurg** 1989 Jun;70(6):905–9

Use of cross–linked bovine pericardium as a disc replacement in the rabbit temporomandibular joint. Gibeault JD, et al. **J Oral Maxillofac Surg** 1989 Aug;47(8):828–33

Aortic valve repair using bovine pericardium for cusp extension. al Fagih MR, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):760–4

Myocardial aneurysm of the ascending thoracic aorta: management with pericardial patch and bilateral pectoralis muscle flaps [letter] Peniston C, et al. **J Thorac Cardiovasc Surg** 1989 Aug;98(2):308–10

A simple method for closure of a ventriculotomy incision using pericardium. McKeown PP. **Surg Gynecol Obstet** 1989 Apr;168(4):359–60

[Repair of the dura mater in children using xenogenic pericardium] Pařízek J, et al. **Cas Lek Cesk** 1989 May 26; 128(22):682–4 (Eng. Abstr.) **(Cze)**

[Congenital tracheal stenosis due to complete circular rings. Tracheoplasty using autologous pericardium] Chambran P, et al. **Presse Med** 1988 Oct 15;17(35):1810–2 (Eng. Abstr.) **(Fre)**

ULTRASTRUCTURE

The ultrastructure of the epicardium epithelium of the slug, Arion ater (Linnaeus, 1758), (Pulmonata, Stylommatophora). Angulo E, et al. **Folia Histochem Cytobiol** 1989;27(2):113–9

PERICEMENTITIS see PERIODONTITIS

PERICORONITIS

COMPLICATIONS

A migratory abscess pointing intraorally and extraorally. Case report. Ho KH. **Aust Dent J** 1989 Jun;34(3):226–7

DRUG THERAPY

[Clinical evaluation of roxithromycin in odontogenic infection] Sasaki J, et al. **Jpn J Antibiot** 1989 May; 42(5):1233–55 (Eng. Abstr.) **(Jpn)**

ETIOLOGY

Infectious mononucleosis first manifest by pericoronitis: two case reports. Benoliel R, et al. **Ann Dent** 1989 Summer; 48(1):30–2

PATHOLOGY

The paradental cyst: a clinicopathologic study of six new cases and review of the literature. Fowler CB, et al. **J Oral Maxillofac Surg** 1989 Mar;47(3):243–8 (16 ref.)

PERIDINIUM see DINOFLAGELLIDA

PERIDURAL INJECTIONS see INJECTIONS, EPIDURAL

PERILYMPH see under LABYRINTHINE FLUIDS

PERIMENOPAUSAL BONE LOSS see OSTEOPOROSIS

PERIMETRY

Cartographic deformations in a parabolic visual field map. Lindblom B. **Acta Ophthalmol (Copenh)** 1988 Dec; 66(6):718–20

Retinal ganglion cell atrophy correlated with automated perimetry in human eyes with glaucoma. Quigley HA, et al. **Am J Ophthalmol** 1989 May 15;107(5):453–64

A clinical study of perimetric probability maps. Heijl A, et al. **Arch Ophthalmol** 1989 Feb;107(2):199–203

The effect of perimetric experience in normal subjects. Heijl A, et al. **Arch Ophthalmol** 1989 Jan;107(1):81–6

Computerised densitometry of red-free retinal photographs correlated with automatic perimetry. Cooper RL, et al. **Curr Eye Res** 1988 Aug;7(8):789–98

Electrophysiology and perimetry in acute retrobulbar neuritis. Berninger TA, et al. **Doc Ophthalmol** 1989 Mar; 71(3):293–305

Suppression scotomas in primary microstrabismus—a perimetric artefact. Mehdorn E. **Doc Ophthalmol** 1989 Jan; 71(1):1–18

A cluster analysis for threshold perimetry. Chauhan BC, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(3):216–20

Nerve fibre bundle defects and their perimetric correlation. Menon V, et al. **Indian J Ophthalmol** 1987;35(5–6):448–52

Acuity perimetry: estimation of neural channels. Frisén L. **Int Ophthalmol** 1988;12(3):169–74

A practical method for obtaining an index of lens density with an automated perimeter. Sample PA, et al. **Invest Ophthalmol Vis Sci** 1989 Apr;30(4):786–7

Variability of automated visual fields in clinically stable glaucoma patients. Werner EB, et al. **Invest Ophthalmol Vis Sci** 1989 Jun;30(6):1083–9

Clinical comparison of the threshold-related and single-intensity strategies of the Humphrey Field Analyzer. Comer G, et al. **J Am Optom Assoc** 1988 Aug;59(8):605–9

Perimetric aspects of optic nerve aging. Zingirian M. **Metab Pediatr Syst Ophthalmol** 1989;12(1–3):32–3 (5 ref.)

Temporal summation and perimetry. Krakau CE. **Ophthalmic Res** 1989;21(1):49–55

Perimetric findings in functional disorders [letter] Hill RA, et al. **Ophthalmology** 1988 Jul;95(7):1005

Calculating mean threshold sensitivity in automated perimetry [letter; comment] Jindra LF, et al. **Ophthalmology** 1989 Apr;96(4):570–1. **Comment on:** Ophthalmology 1988 Dec;95(12):1649–55

Effects of pupillary constriction on automated perimetry in normal eyes. Lindenmuth KA, et al. **Ophthalmology** 1989 Sep;96(9):1298–301

Effect of patient experience on the results of automated perimetry in clinically stable glaucoma patients. Werner EB, et al. **Ophthalmology** 1988 Jun;95(6):764–7

Lens rim artifact in automated threshold perimetry. Zalta AH. **Ophthalmology** 1989 Sep;96(9):1302–11

[Do clinical forms of primary open-angle glaucoma exist?] Béchetoille A, et al. **Ophtalmologie** 1988 Jul–Sep;2(3):195–7 (Eng. Abstr.) **(Fre)**

[Very early neuroretinal and functional changes in ocular hypertension] Bertoni G, et al. **Ophtalmologie** 1988 Jul–Sep; 2(3):209–11 (Eng. Abstr.) **(Fre)**

[Automatic perimetry and visual evoked potentials in the study of glaucoma. Analysis of 364 examinations performed with the same instrument] Hache JC, et al. **Ophtalmologie** 1988 Apr–Jun;2(2):93–4 (Eng. Abstr.) **(Fre)**

[Automated campimetry with video screen: analysis of 565 cases with ocular hypertension.] Rouland JF, et al. **Ophthalmologica** 1988;197(3):151–8 (Eng. Abstr.) **(Fre)**

[Parapapillary region in normal and glaucoma eyes. II. Correlation of planimetric findings to intrapapillary, perimetry and general data] Jonas JB, et al. **Klin Monatsbl Augenheilkd** 1988 Aug;193(2):182–8 (Eng. Abstr.) **(Ger)**

[Differential diagnosis of the early stages of macular dystrophy and optic nerve pathology using modern electroretinographic and perimetric tests] Shamshinova AM, et al. **Vestn Oftalmol** 1988 Sep–Oct;104(5):50–2 (Eng. Abstr.) **(Rus)**

HISTORY

[40 years' of the Goldmann perimeter] Fischer FW, et al. **Klin Monatsbl Augenheilkd** 1988 Sep;193(3):237–42 (Eng. Abstr.) **(Ger)**

[Perimetry yesterday and today] Lachenmayr B. **Klin Monatsbl Augenheilkd** 1988 Jul;193(1):80–92 (Eng. Abstr.) **(Ger)**

INSTRUMENTATION

The cumulative defect curve: separation of local and diffuse components of visual field damage. Bebie H, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(1):9–12

[Our experience with automated perimetry using an ophthalmologic monitor] Delplace MP, et al. **Bull Soc Ophtalmol Fr** 1988 Nov;88(11):1305–8, 1311–2, 1314 **(Fre)**

[Perimetry in the follow-up of glaucoma] Gloor B. **Fortschr Ophthalmol** 1988;85(4):353–60 (23 ref.) (Eng. Abstr.) **(Ger)**

[Progression of glaucomatous visual field damage—a clinical study with the Delta program of the Octopus Perimeter 201 in assessing the effect of early damage on visual field loss in glaucoma simplex] Gramer E, et al. **Fortschr Ophthalmol** 1988;85(6):620–5 (Eng. Abstr.) **(Ger)**

[High resolution control of the central visual field with a video campimeter] Krastel H, et al. **Fortschr Ophthalmol** 1988;85(6):750–5 (Eng. Abstr.) **(Ger)**

[Computerized perimetric quantification of late glaucoma damage] Weber J, et al. **Fortschr Ophthalmol** 1988; 85(5):448–51 (Eng. Abstr.) **(Ger)**

[Procedures for the quantitative follow-up control of computerized perimetric findings in glaucoma] Grehn F, et al. **Klin Monatsbl Augenheilkd** 1988 Nov;193(5):493–8 (Eng. Abstr.) **(Ger)**

[Normal values for the Octopus and their importance in the interpretation of findings] Haas AL. **Klin Monatsbl Augenheilkd** 1989 May;194(5):320–1 (Eng. Abstr.) **(Ger)**

[Graphic and numerical presentation of visual field findings] Kaufmann H, et al. **Klin Monatsbl Augenheilkd** 1989 May; 194(5):322–4 (Eng. Abstr.) **(Ger)**

[Sources of error in automated static perimetry] Rabineau PA, et al. **Klin Monatsbl Augenheilkd** 1989 May; 194(5):307–19 (Eng. Abstr.) **(Ger)**

[A study using the computer-controlled perimeter Perimat 206 on the effect of Circo-Maren on visual field defects] Schubert E, et al. **Klin Monatsbl Augenheilkd** 1988 Nov; 193(5):523–9 (Eng. Abstr.) **(Ger)**

[The importance of a new compression test in the diagnosis of preglaucoma and initial glaucoma] Vodovozov AM, et al. **Oftalmol Zh** 1989;(2):81–4 (Eng. Abstr.) **(Rus)**

[A recording attachment for the PRP-60 perimeter] Korovenkov RI. **Voen Med Zh** 1989 Mar;(3):53 **(Rus)**

METHODS

Computerized perimetry in glaucoma management. Heijl A. **Acta Ophthalmol (Copenh)** 1989 Feb;67(1):1–12 (88 ref.)

Interpreting automated perimetry [editorial] Anderson DR. **Am J Ophthalmol** 1989 Aug 15;108(2):189–90

Test–retest variability in glaucomatous visual fields. Heijl A, et al. **Am J Ophthalmol** 1989 Aug 15;108(2):130–5

Automated kinetic perimetry with two peripheral isopters in glaucoma. Miller KN, et al. **Arch Ophthalmol** 1989 Sep; 107(9):1316–20

Automated perimetry. How do we interpret the results? [editorial] Wilensky JT. **Arch Ophthalmol** 1989 Feb; 107(2):185–6

Eye movement perimetry in glaucoma. Trope GE, et al. **Can J Ophthalmol** 1989 Aug;24(5):197–9

Cluster analysis in visual field quantification. Chauhan BC, et al. **Doc Ophthalmol** 1988 May;69(1):25–39

Computerized perimetry: possibilities for individual adaptation and feedback. Frisén L. **Doc Ophthalmol** 1988 May;69(1):3–9

Comparison of automated perimetry and pattern visually evoked cortical potentials in optic neuritis. Fujimoto N, et al. **Doc Ophthalmol** 1988 Jul;69(3):263–9

Comparison of different screening methods for the detection of visual field defects in early glaucoma. Marraffa M, et al. **Int Ophthalmol** 1989 Jan;13(1–2):43–5

Screening for glaucomatous visual field defects: the relationship between sensitivity, specificity and the number of test locations. Henson DB, et al. **Ophthalmic Physiol Opt** 1988;8(2):123–7

Evaluation of the t test as a method of detecting visual field changes. Hills JF, et al. **Ophthalmology** 1988 Feb; 95(2):261–6

The effect of Goldmann applanation tonometry on automated static threshold perimetry. Ruben JB, et al. **Ophthalmology** 1988 Feb;95(2):267–70

Computerized perimetric monitoring and study of scotomatous fluctuations in timolol-treated open-angle glaucoma patients. Pecori-Giraldi J. **Surv Ophthalmol** 1989 Apr;33 Suppl:423–5; discussion 435–6

[The preliminary study of measuring isopters in the kinetic quantitative perimetry] Ge J, et al. **Yen Ko Hsueh Pao** 1985 Sep;1(1):65–9 (Eng. Abstr.) **(Chi)**

[Automatic and semi-automatic perimetry in glaucoma] Kraus H, et al. **Cesk Oftalmol** 1988 Jul;44(4):259–62 (Eng. Abstr.) **(Cze)**

[Strategies in static testing of the visual fields] Charlier J, et al. **Bull Soc Ophtalmol Fr** 1988 Apr;88(4):501–5, 508 **(Fre)**

[Surveillance of advanced glaucoma with automated perimetry] Malbrel C, et al. **Bull Soc Ophtalmol Fr** 1988 Apr;88(4):493–4 (Eng. Abstr.) **(Fre)**

[Automatic perimetry in glaucoma. Value of Humphrey Field Analyzer standard tests] Brusini P. **Ophtalmologie** 1988 Nov–Dec;2(5):449–56 (Eng. Abstr.) **(Fre)**

[Static meridian color photopic perimetry in chronic glaucoma] Le Rebeller MJ, et al. **Ophtalmologie** 1988 Jul–Sep;2(3):199–203 (Eng. Abstr.) **(Fre)**

[Effectiveness of mesopic color perimetry in early glaucoma] Fedorovskaia LI. **Vestn Oftalmol** 1988 Jul–Aug;104(4):12–4 (Eng. Abstr.) **(Rus)**

[A method of autocampimetric study of the visual field] Zurgaft MB. **Vestn Oftalmol** 1988 Sep–Oct;104(5):55–8 (Eng. Abstr.) **(Rus)**

STANDARDS

Threshold equivalence between perimeters. Anderson DR, et al. **Am J Ophthalmol** 1989 May 15;107(5):493–505

Standardization of the tangent screen examination: some neglected parameters. West RW. **Am J Optom Physiol Opt** 1988 Jul;65(7):580–4

Perimetric variability: importance of criterion level. Frisén L. **Doc Ophthalmol** 1988 Dec;70(4):323–30

Assessing the utility of reliability indices for automated visual fields. Testing ocular hypertensives. Bickler-Bluth M, et al. **Ophthalmology** 1989 May;96(5):616–9

PERINATOLOGY

see related

PRENATAL CARE

A national survey on preterm labor. Taslimi MM, et al. **Am J Obstet Gynecol** 1989 Jun;160(6):1352–7; discussion 1357–60

Measurement error in clinical perinatal data. Villar J, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):380–2

Fourteen years' experience of management and use of the perinatal data-base system. Shinozuka N, et al. **Asia Oceania J Obstet Gynaecol** 1989 Mar;15(1):53–7

Ethical dilemmas of neonatal—perinatal surgery. Rostain AL, et al. **Clin Perinatol** 1989 Mar;16(1):275–302 (62 ref.)

Fascination with the mystery of new life in utero. Michejda M, et al. **Fetal Ther** 1986;1(1):3–7

Abstracts presented at the National Perinatal Association—California Perinatal Association annual meeting. October 8–11, San Diego, California. **J Perinatol** 1989 Mar;9(1):102–17

A timely scenario. **J Perinatol** 1987 Winter;7(1):49–51

Consumer participation on a family-centered care committee. Bulger D, et al. **J Perinatol** 1987 Winter;7(1):52–4

Hospital risk management for perinatal care: theory and practice. Raines E. **J Perinatol** 1988 Spring;8(2):96–100

Polemics in perinatology: justice and the medical expert witness. Schifrin BS. **J Perinatol** 1989 Jun;9(2):207–10

Polemics in perinatology: modern reproductive technology—the state of the heart. Schifrin BS. **J Perinatol** 1988 Spring;8(2):132–3

Polemics in perinatology: arguing with geniuses. Schifrin BS. **J Perinatol** 1989 Mar;9(1):90–2

Polemics in perinatology: Cloutopenia and the porcelain-losing encephalopathies—a plangent review with dithyrambic overtones. Schifrin BS. **J Perinatol** 1988 Winter;8(1):36–7

Polemics in perinatology: an econium to Alexander Graham Bell. Schifrin BS. **J Perinatol** 1987 Winter;7(1):47–8

Polemics in perinatology: malpractice obituary. Schifrin BS. **J Perinatol** 1988 Fall;8(4):347–52

Sempere plangere. Stern L. **J Perinatol** 1987 Spring; 7(2):135–7

Perinatal health. Gluckman PD. **N Z Med J** 1988 Oct 26; 101(856 Pt 2):685–7

The tail wags the perinatal dog or beyond orthodox perinatal technology assessment. Wagner MG. **Paediatr Perinat Epidemiol** 1989 Apr;3(2):111–3

Retrospective and prospective identification of unpublished controlled trials: lessons from a survey of obstetricians and pediatricians. Hetherington J, et al. **Pediatrics** 1989 Aug; 84(2):374–80

Neonatal-perinatal medicine—a model subspecialty [letter] Stevenson DK. **West J Med** 1989 Feb;150(2):213–4

[Promotion of conditions for good gynecologic practice within the regional framework] Křesnička J. **Cesk Gynekol** 1988 Dec;53(10):713–5 **(Cze)**

EDUCATION

Maternal–infant competencies for new nurses. A joint effort by educators and practitioners. Sherwen LN. **J Perinatol** 1989 Jun;9(2):173–7

Perinatology—how firm a foundation? [published erratum appears in Paediatr Perinat Epidemiol 1988 Jul;2(3):239] Stirrat GM. **Paediatr Perinat Epidemiol** 1987 Apr;1(1):7–9

HISTORY

Establishment of the Caribbean Primate Research Center. Goodwin WJ. **P R Health Sci J** 1989 Apr;8(1):31–2

Cayo Santiago as a part of the laboratory of perinatal physiology (NINDB). Vandenbergh JG, et al. **P R Health Sci J** 1989 Apr;8(1):29–30

LEGISLATION & JURISPRUDENCE

Polemics in perinatology: malpractice—we have met the enemy. Schifrin BS. **J Perinatol** 1987 Fall;7(4):350–3

Polemics in perinatology: the tango of the sharks. Schifrin BS. **J Perinatol** 1987 Spring;7(2):133–4

MANPOWER

Medical care of the newborn in England and Wales. Summary and recommendations of a report of the Royal College of Physicians. **J R Coll Physicians Lond** 1988 Oct; 22(4):205–8

METHODS

Randomized trials of perinatal interventions in Belgium and Europe. Alexander S. **Biol Neonate** 1989;55(2):84–9

From mainframe to micro: decentralization of perinatal epidemiology. Bottoms SF, et al. **J Perinat Med** 1988; 16(4):345–8

Improving perinatal outcome through data management: the design of the small area analysis system. Gould JB, et al. **J Perinat Med** 1988;16(4):305–14

Random controlled trials in perinatal medicine. Hawkins DF. **J Perinat Med** 1989;17(1):7–12

Randomised trials in peri–natal medicine: suggestions to overcome practical limitations and ethical constraints. Lilford RJ. **J Perinat Med** 1989;17(1):13–8

Assessment of local area network based on the microcomputer system for data processing of perinatal medical information. Nakahara H, et al. **J Perinat Med** 1988;16(4):315–8

A prototype system for perinatal knowledge engineering using an artificial intelligence tool. Sokol RJ, et al. **J Perinat Med** 1988;16(4):273–81

Countrywide analysis of perinatal outcome. Stembera Z, et al. **J Perinat Med** 1988;16(4):391–6

[Computerized obstetrical record of the North Pas–de–Calais region] Delcroix M, et al. **Rev Fr Gynecol Obstet** 1989 Mar 10;84(3):175–7 (Eng. Abstr.) **(Fre)**

ORGANIZATION & ADMINISTRATION

Planning a maternal–fetal medicine program. The hospital employee model. Barford D. **Am J Perinatol** 1989 Apr;6 Suppl:21–3

Planning a maternal–fetal medicine program. The private practice model. Blanco JD. **Am J Perinatol** 1989 Apr;6 Suppl:17–20

Planning a maternal–fetal medicine program. Contracts. Elliott JP. **Am J Perinatol** 1989 Apr;6 Suppl:28–31

Planning a maternal–fetal medicine program. The subspecialist's perspective. Lorenz RP. **Am J Perinatol** 1989 Apr;6 Suppl:12–4

Planning a maternal–fetal medicine program. Relationship to obstetricians. Lorenz RP. **Am J Perinatol** 1989 Apr;6 Suppl:15–6

Planning a maternal–fetal medicine program. The hospital's perspective. Schwartz DB. **Am J Perinatol** 1989 Apr;6 Suppl:3–11

Planning a maternal–fetal medicine program. Joint university and private hospital models. Sokol RJ. **Am J Perinatol** 1989 Apr;6 Suppl:24–7

Regionalized perinatal care in South Carolina. Hulsey TC, et al. **J S C Med Assoc** 1989 Aug;85(8):357–84 (54 ref.)

Emphasis on preventive perinatology: a suitable alternative for developing countries. Torres–Pereyra J. **Semin Perinatol** 1988 Oct;12(4):381–8 (34 ref.)

STANDARDS

Understanding and eliminating errors in perinatal research. Block BS. **Am J Obstet Gynecol** 1989 Jul;161(1):5–9

Perinatal protocol. Second or third trimester bleeding. Tucker SM. **J Perinatol** 1988 Spring;8(2):174–7

[Various problems and prospects of improving the outcome of cesarean section] Krasnopol'skii VI, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):18–21 (Eng. Abstr.) **(Rus)**

STATISTICS & NUMERICAL DATA

Perinatal data reliability in a large teaching obstetric unit. Villar J, et al. **Br J Obstet Gynaecol** 1988 Sep;95(9):841–8

Perinatal statistics, 1984: a commentary on the first annual report of the Irish Perinatal Reporting System. Kirke PN. **Ir J Med Sci** 1988 Sep;157(9):283–6

[Statistical evaluation of obstetric and pediatric care in Belgium] Honggokoesoemo S. **Arch Belg** 1988; 46(3–4):212–22 (54 ref.) (Eng. Abstr.) **(Dut)**

TRENDS

Allocation of resources in perinatal medicine: an editorial discussion. **Aust Paediatr J** 1988 Dec;24(6):322–5

The perinatal paradigm: is it time for a change? Kennell JH, et al. **Clin Perinatol** 1988 Dec;15(4):801–13

New and still emerging field of fetal medicine [editorial] Koop CE. **Fetal Ther** 1986;1(1):1–2

Whose baby is it anyway? Wagner MG. **Paediatr Perinat Epidemiol** 1988 Apr;2(2):118–23

Reflections on future directions of perinatal medicine. Manning FA. **Semin Perinatol** 1989 Aug;13(4):342–51

[Cesarean section in reducing perinatal mortality and morbidity] Savel'eva GM, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):9–13 (Eng. Abstr.) **(Rus)**

[Risk factors and prevention of perinatal pathology] Frolova OG, et al. **Sov Zdravookhr** 1989;(3):20–5 **(Rus)**

PERINEPHRITIS

COMPLICATIONS

Skeletal muscle beta 2–adrenoreceptors and the effect of adrenergic drugs on plasma potassium in perinephritis hypertension in rabbits. Elfellah MS, et al. **J Auton Pharmacol** 1989 Apr;9(2):113–8

[Perinephritic abscess] Pigrau Serrallach C, et al. **Med Clin (Barc)** 1988 Jun 18;91(4):148–50 (41 ref.) **(Spa)**

DIAGNOSIS

Perinephric abscess in pediatric patients: report of six cases and review of the literature. Edelstein H, et al. **Pediatr Infect Dis J** 1989 Mar;8(3):167–70 (16 ref.)

MICROBIOLOGY

[Perinephritic abscess due to salmonella: percutaneous drainage] Montesino Semper M, et al. **Actas Urol Esp** 1988 Sep–Oct;12(5):481–3 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Left ventricular end–systolic wall stress—dimension relationship in unanesthetized dogs with perinephritic hypertension. Matsuno Y, et al. **Jpn Circ J** 1988 Dec; 52(12):1370–6

PERINEUM

Kawasaki disease and perineal rash. Urbach AH, et al. **Am J Dis Child** 1988 Nov;142(11):1174–6

A case–control study of borderline ovarian tumors: the influence of perineal exposure to talc. Harlow BL, et al. **Am J Epidemiol** 1989 Aug;130(2):390–4

A comparative study of perineal ultrasound scanning and urethrocystography in patients with genuine stress incontinence. Kölbl H, et al. **Arch Gynecol Obstet** 1988; 244(1):39–45

Perianal Paget's disease. Schellenberger RR, et al. **Aust N Z J Surg** 1988 Sep;58(9):727–32

Rectus abdominis muscle flap for persistent perineal sinus. Young MR, et al. **Br J Surg** 1988 Dec;75(12):1228

Serum testosterone and estradiol 17–beta concentrations in 15 dogs with perineal hernia. Mann FA, et al. **J Am Vet Med Assoc** 1989 Jun 1;194(11):1578–80

Congenital anal fistula with normal anus. Brem H, et al. **J Pediatr Surg** 1989 Feb;24(2):183–5

Risk factors for perineal seeding of prostate cancer after needle biopsy. Moul JW, et al. **J Urol** 1989 Jul;142(1):86–8

Necrotizing fasciitis in a renal transplant patient. Majeski JA, et al. **South Med J** 1988 Oct;81(10):1315–6

[Extensive cutaneous lesions in Crohn's disease. Apropos of a case treated by musculocutaneous flap] Adloff M, et al. **Chirurgie** 1988;114(5):377–82 (29 ref.) (Eng. Abstr.) **(Fre)**

[Diagnosis of the descending perineum syndrome] Girona J. **Dtsch Med Wochenschr** 1989 Feb 24;114(8):301–2 (12 ref.) **(Ger)**

[Therapy of the descending perineum syndrome] Girona J. **Dtsch Med Wochenschr** 1989 Feb 24;114(8):303–5 (5 ref.) **(Ger)**

[A large lipoma in the small pelvic cavity simulating a perineal hernia] Trott VF, et al. **Klin Khir** 1989;(5):62–3 **(Rus)**

ABNORMALITIES

Accessory perineal scrotum (a case report). Rege VM, et al. **J Postgrad Med** 1988 Jul;34(3):180–1 (4 ref.)

Surgery for abnormal vulvar and perineal conformation in the mare. Trotter GW, et al. **Vet Clin North Am [Equine Pract]** 1988 Dec;4(3):389–405 (18 ref.)

ANATOMY & HISTOLOGY

Clinical features in patients with excessive perineal descent. Mackle EJ, et al. **J R Coll Surg Edinb** 1989 Apr;34(2):88–90

[Suspensory elements of the anal canal. Anatomo–surgical considerations] Garavoglia M, et al. **Minerva Chir** 1989 Jun 30;44(12):1623–6 (6 ref.) (Eng. Abstr.) **(Ita)**

INJURIES

Perineal rupture following vaginal delivery. Long–term consequences. Mellerup Sørensen S, et al. **Acta Obstet Gynecol Scand** 1988;67(4):315–8

Association of episiotomy and delivery position with deep perineal laceration during spontaneous delivery in nulliparous women. Borgatta L, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):294–7

Anal and perianal abnormalities in prepubertal victims of sexual abuse. Muram D. **Am J Obstet Gynecol** 1989 Aug; 161(2):278–81

Episiotomy and its role in the incidence of perineal lacerations in a maternity center and a tertiary hospital obstetric service. Wilcox LS, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1047–52

Ultrasound and pulsed electromagnetic energy treatment for perineal trauma. A randomized placebo–controlled trial. Grant A, et al. **Br J Obstet Gynaecol** 1989 Apr;96(4):434–9

Anteromedial (perineal) dislocation of the hip: a case report. Burrell JC, et al. **Can J Surg** 1989 Jan;32(1):77–8

Cool science for a hot topic. Kerns DL. **Child Abuse Negl** 1989;13(2):177–8

Perianal findings in prepubertal children selected for nonabuse: a descriptive study. McCann J, et al. **Child Abuse Negl** 1989;13(2):179–93

Traumatic cloaca. Abcarian H, et al. **Dis Colon Rectum** 1989 Sep;32(9):783–7

Pelvic injuries associated with traumatic abduction of the leg. Beard JD, et al. **Injury** 1988 Sep;19(5):353–6

Penetrating abdominal trauma following an accident on an artificial ski slope [letter] Moran CG, et al. **Injury** 1988 Jan;19(1):48

Episiotomy and perineal trauma during childbirth. Röckner G, et al. **J Adv Nurs** 1989 Apr;14(4):264–8

Effects of heat and cold on the perineum after episiotomy/laceration. Hill PD. **J Obstet Gynecol Neonatal Nurs** 1989 Mar–Apr;18(2):124–9

Ultrasound/PEME for perineal pain [editorial] **Lancet** 1989 Jul 1;2(8653):22–3

Management of gunshot wounds to the perineum. Snyder M, et al. **Milit Med** 1988 Nov;153(11):586–9

[Early repair of deep burns in the male perineal region, report of 5 cases] Zhu ZX. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Jun;4(2):101–2, 157 (Eng. Abstr.) **(Chi)**

[Lacerations of the perineum in children] Robert M, et al. **Chir Pediatr** 1988;29(2–3):142–6 (Eng. Abstr.) **(Fre)**

[The "third testicle" in a cyclist: an ailment not to be ignored (letter)] Sava P, et al. **Presse Med** 1988 Oct 8;17(34):1761 **(Fre)**

[Perineal laceration and rectovaginal fistula due to non–obstetrical injury apropos of 4 cases] Marzouk A, et al. **Tunis Med** 1988 May;66(5):449–52 (Eng. Abstr.) **(Fre)**

[Anal manometric studies following 3d degree perineal tear] Voigt R, et al. **Geburtshilfe Frauenheilkd** 1989 Jun; 49(6):561–3 (27 ref.) (Eng. Abstr.) **(Ger)**

[Use of lasers in preventing complications of perineal wounds in parturients] Arzhanova ON, et al. **Akush Ginekol (Mosk)** 1988 Sep;(9):50–1 **(Rus)**

[Surgical treatment of rectovaginal fistula and inveterate stage III perineal rupture] Dzhabrailova SSh, et al. **Akush Ginekol (Mosk)** 1989 Apr;(4):74–9 **(Rus)**

[Prevention and treatment of infected wounds of the perineum in puerperants] Lukashevich GA, et al. **Akush Ginekol (Mosk)** 1988 Sep;(9):23–7 (Eng. Abstr.) **(Rus)**

INNERVATION

Dichotomizing unmyelinated afferents supplying pelvic viscera and perineum are rare in the sacral segments of the cat. Häbler HJ, et al. **Neurosci Lett** 1988 Nov 22; 94(1–2):119–24

Neurofibromatosis presenting as perineal pain and urethral burning. Batta AG, et al. **Urology** 1989 Feb;33(2):138–40

[Study of the sensory innervation of the lower limbs and the perineum using evoked somatosensory potentials] Guerit JM, et al. **Acta Urol Belg** 1989;57(2):503–24 **(Fre)**

[Alcock's canal syndrome and perineal neuralgia] Amarenco G, et al. **Rev Neurol (Paris)** 1988;144(8–9):523–6 (Eng. Abstr.) **(Fre)**

[Trans–sacral neurolytic block for the treatment of chronic perineal pain of oncologic origin] Miralles Pardo FS, et al. **Rev Esp Anestesiol Reanim** 1988 May–Jun;35(3):130–5 (Eng. Abstr.) **(Spa)**

MICROBIOLOGY

Comparative effectiveness of chlorhexidine, povidone–iodine, and hexachlorophene on the bacteria of the perineum and groin of pregnant women. Vorherr H, et al. **Am J Infect Control** 1988 Aug;16(4):178–81

The effects of antiperspirant on the perineal skin flora of patients with spinal cord injury. Montgomerie JZ, et al. **J Hosp Infect** 1988 Jul;12(1):43–9

PATHOLOGY

The perineal eruption of Kawasaki syndrome. Friter BS, et al. **Arch Dermatol** 1988 Dec;124(12):1805–10

Fournier's gangrene of the genitalia. Zaitoon MM. **Pa Med** 1988 Sep;91(9):64

Late appearance of perineal implantation of prostatic carcinoma after perineal needle biopsy. Greenstein A, et al. **Urology** 1989 Jan;33(1):59–60

[Perineal endometriosis with a concretion] Goranov M, et al. **Akush Ginekol (Sofiia)** 1988;27(4):81–3 (Eng. Abstr.) (Bul)

PHYSIOLOGY

Surface electrodes in perineal electromyography. O'Donnell P, et al. **Urology** 1988 Oct;32(4):375–9

[The value of preoperative perineal rehabilitation in radical prostatectomy and replacement entero–cystoplasty. Preliminary results] Barre C, et al. **Ann Urol (Paris)** 1988; 22(4):298–300 (Eng. Abstr.) (Fre)

PHYSIOPATHOLOGY

Evaluation of perineal descent by defaecography. Skomorowska E, et al. **Int J Color Dis** 1988 Nov;3(4):191–4

Descending perineum syndrome: control defecogram with a "perineum device", perspective in prevention and conservative therapy. Lesaffer L, et al. **J Belge Radiol** 1988; 71(6):709–12

RADIOGRAPHY

Posterior perineal hernia presenting in infancy as a gluteal mass. Hubbard AM, et al. **Pediatr Radiol** 1989;19(4):246

[Roentgenologic examination of fistulas and abscesses in the perineal area] Timerbulatov VM, et al. **Vestn Khir** 1989 Jan;142(1):116–7 (Rus)

SURGERY

Construction of a neovagina for patients with a flat perineum. Rock JA, et al. **Am J Obstet Gynecol** 1989 Apr; 160(4):845–51; discussion 852–3

A subcutaneous pedicle flap for perineal reconstruction. Sakai S, et al. **Ann Plast Surg** 1989 May;22(5):440–3

Wide excision of perineal Hailey–Hailey disease with healing by secondary intention. Shons AR. **Br J Plast Surg** 1989 Mar;42(2):230–2

Rectus abdominis muscle flap [letter] Heaton ND, et al. **Br J Surg** 1989 May;76(5):525

Perineal continent colostomy. Report of a case. Torres RA, et al. **Dis Colon Rectum** 1988 Dec;31(12):957–60

Perineal hernia repair in the dog by transposition of the internal obturator muscle. II. Complications and results in 100 patients. Sjollema BE, et al. **Vet Q** 1989 Jan;11(1):18–23

Perineal hernia repair in the dog by transposition of the internal obturator muscle. I. Surgical technique. van Sluijs FJ, et al. **Vet Q** 1989 Jan;11(1):12–7

[Pedicled omentum in primary closure of the perineum after amputation of the rectum for cancer] Lo Schiavo F, et al. **Chirurgie** 1988;114(5):387–93 (24 ref.) (Eng. Abstr.) (Fre)

[Sacro–rectopexy by a posterior intersphincteric approach with anteroposterior perineoplasty and mucosal resection. Therapeutic proposal in descending peritoneum syndrome. Apropos of 23 cases] Costalat G, et al. **J Chir (Paris)** 1989 Apr;126(4):265–73 (37 ref.) (Eng. Abstr.) (Fre)

[The value of anterior colporrhaphy and colpoperineoplasty in therapy of stress incontinence] Ralph G, et al. **Gynakol Rundsch** 1988;28 Suppl 2:33–4 (Ger)

[Improvement of perineal wound healing following rectum amputation by omentum flap] John H, et al. **Helv Chir Acta** 1989 Jan;55(5):673–7 (Eng. Abstr.) (Ger)

[Perineal ectopic testis] Dieckmann KP, et al. **Urologe [A]** 1988 Nov;27(6):358–62 (Eng. Abstr.) (Ger)

[Perineoplasty for vulvar vestibulitis] Bornstein J, et al. **Harefuah** 1989 Jan 15;116(2):90–2 (Eng. Abstr.) (Heb)

[A method for treating anoperineal defects following radical operations on anorectal tumors] Dimitrov V, et al. **Khirurgiia (Sofiia)** 1988;41(3):58–61 (Eng. Abstr.) (Rus)

[A method of plastic surgery in postoperative sacro–perineal hernia] Chernyĭ VA, et al. **Vestn Khir** 1988 May;140(5):88–9 (Rus)

[Tamponade of the presacral and perineal region with an omental flap in proctectomy] Potić D, et al. **Srp Arh Celok Lek** 1988 Apr;116(4):305–10 (Eng. Abstr.) (Scc)

[Genital rhabdomyosarcoma. Diagnostic and therapeutic considerations. Apropos of a case of cavernous origin] López López C, et al. **Arch Esp Urol** 1989 May; 42(4):375–81 (Eng. Abstr.) (Spa)

PERIODIC ACID–SCHIFF REACTION see under **HISTOCYTOCHEMISTRY**

PERIODIC ACIDS

Senile plaque–like structures: observation of a probably unknown type of senile plaque by periodic–acid methenamine silver (PAM) electron microscopy. Ikeda K, et al. **Acta Neuropathol (Berl)** 1989;78(2):137–42

Periodate–methylamine degradation of ribonucleotides in rat liver extracts in comparison to extracts of cultured cells. Andersson M. **Anal Biochem** 1988 Oct;174(1):271–4

Structure and function of human hemoglobin covalently labeled with periodate–oxidized adenosine triphosphate. Kavanaugh MP, et al. **J Biol Chem** 1989 Jul 5; 264(19):11009–13

A rapid method for removing silver from stained chromosomes. Denton TE. **Stain Technol** 1989 Jan; 64(1):49–50

ANALYSIS

Simultaneous determination of iodate and periodate by capillary zone electrophoresis: application to carbohydrate analysis. Honda S, et al. **Anal Biochem** 1989 Feb 15; 177(1):62–6

IMMUNOLOGY

Adoptive immunotherapy for stage IV renal cell carcinoma: a novel protocol utilizing periodate and interleukin–2–activated autologous leukocytes and continuous infusions of low–dose interleukin–2. Wang J, et al. **Am J Med** 1987 Dec;83(6):1016–23

PHARMACOLOGY

Enhanced protein phosphorylation, IL–2 receptor expression, and IL–2 production precede cellular proliferation in lymphocytes oxidized by periodic acid. Malinin GI, et al. **Biochem Biophys Res Commun** 1989 Jan 31;158(2):590–4

Macrophage recognition of periodate–treated erythrocytes: involvement of disulfide formation of the erythrocyte membrane proteins. Beppu M, et al. **Biochim Biophys Acta** 1989 Feb 13;979(1):35–45

Periodate–modified gangliosides enhance surface binding of tetanus toxin to PC12 pheochromocytoma cells. Nathan A, et al. **J Neurochem** 1989 Jul;53(1):88–94

Increased susceptibility of periodate–treated tumour cells to human but not to mouse or rat natural killer cells. Axberg I. **Scand J Immunol** 1988 Dec;28(6):697–704

THERAPEUTIC USE

Periodate and recombinant interleukin–2–activated autologous leukocytes can induce regression of metastases of renal cancer. Walle AJ, et al. **Cancer Detect Prev** 1988; 12(1–6):395–411

PERIODIC DISEASE

CLASSIFICATION

[Classification of periodic disease in children] Astvatsatrian VA, et al. **Pediatriia** 1989;(4):93–5 (Rus)

[Classification and terminology of periodic disease in children] Petrosian RE, et al. **Pediatriia** 1988;(6):94–5 (Rus)

COMPLICATIONS

Meningitis in familial Mediterranean fever. Schwabe AD, et al. **Am J Med** 1988 Nov;85(5):715–7 (14 ref.)

IgA nephropathy in patients with familial Mediterranean fever. Said R, et al. **Am J Nephrol** 1988;8(5):417–20

Induction of ovulation causing recurrent bloody ascites in a woman with endometriosis. Feigin RD, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1161–2

Chronic synovitis of the shoulder in familial Mediterranean fever: a disease of symptoms not signs. Hughes RA, et al. **Ann Rheum Dis** 1989 Feb;48(2):163–5

Recurrent pulmonary atelectasis as a manifestation of familial Mediterranean fever [letter] Colebatch HJ. **Arch Intern Med** 1989 Jul;149(7):1698

Systemic lupus erythematosus and periodic peritonitis (FMF) [letter] Bakir F, et al. **Br J Rheumatol** 1989 Feb;28(1):81–2

Polyarteritis nodosa and familial Mediterranean fever: a report of 2 cases and review of the literature. Glikson M, et al. **J Rheumatol** 1989 Apr;16(4):536–9 (28 ref.)

Cyclosporin: poorly tolerated in familial Mediterranean fever. Cohen SL, et al. **Nephrol Dial Transplant** 1989;4(3):201–4

Pericardial involvement in familial Mediterranean fever. Erol C, et al. **Postgrad Med J** 1988 Jun;64(752):453–4

[Fever of unknown origin and colchicine–sensitive amyloidosis: familial Mediterranean fever?] Schneider W, et al. **Dtsch Med Wochenschr** 1989 Jun 16;114(24):951–4 (Eng. Abstr.) (Ger)

[A case of familial Mediterranean fever with paroxysmal pseudo–obstruction of bowel] Sugimoto H, et al. **Nippon Naika Gakkai Zasshi** 1988 Dec;77(12):1859–62 (Jpn)

[Regression of nephrotic syndrome in amyloidosis secondary to familial Mediterranean fever during maintenance therapy using colchicine] Sirera G, et al. **Med Clin (Barc)** 1989 May 20;92(19):757 (Spa)

DIAGNOSIS

The metaraminol test and adverse cardiac effects [letter] Buades J, et al. **Ann Intern Med** 1989 Aug 1;111(3):259–60

Abdominal fat tissue aspirate in amyloidosis of familial Mediterranean fever. Tishler M, et al. **Clin Exp Rheumatol** 1988 Oct–Dec;6(4):395–7

Plasma dopamine beta–hydroxylase: rapid diagnostic test for recurrent hereditary polyserositis. Barakat MH, et al. **Lancet** 1988 Dec 3;2(8623):1280–3

Familial Mediterranean fever in six Australian children. Moore PJ, et al. **Med J Aust** 1989 Jul 17;151(2):108–10 (32 ref.)

[A patient with familial Mediterranean fever] Tel W, et al. **Ned Tijdschr Geneeskd** 1989 Apr 1;133(13):679–81 (Eng. Abstr.) (Dut)

[Familial Mediterranean fever] van der Meer JW. **Ned Tijdschr Geneeskd** 1989 Apr 1;133(13):651–2 (21 ref.) (Dut)

[Differential diagnosis and therapy of cycle–dependent severe attacks of familial Mediterranean fever] Mergelsberg M, et al. **Med Klin** 1989 Jan 15;84(1):23–31, 64 (Ger)

[Familial Mediterranean fever—an important differential diagnosis in systemic juvenile chronic arthritis] Michels H, et al. **Z Rheumatol** 1989 May–Jun;48(3):143–6 (Eng. Abstr.) (Ger)

[Familial Mediterranean fever in the light of our observations] Siemieńska–Rywik S, et al. **Pediatr Pol** 1988 Aug;63(8):490–3 (Pol)

[Clinical aspects and diagnosis of periodic disease in children] Astvatsatrian VA, et al. **Pediatriia** 1988;(4):62–5 (Rus)

[Characteristics of the clinical course of periodic disease in children] Petrosian RE, et al. **Pediatriia** 1988;(4):58–61 (Rus)

[Metaraminol provocation test for familial Mediterranean fever (letter)] Lorente JA, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 1):401–2 (Spa)

DRUG THERAPY

Fatal colchicine toxicity [letter] **Am J Med** 1989 Sep; 87(3):363–5

Fatal colchicine toxicity. Simons RJ, et al. **Am J Med** 1989 Mar;86(3):356–7

EPIDEMIOLOGY

Familial Mediterranean fever (recurrent hereditary polyserositis) in children: analysis of 88 cases. Majeed HA, et al. **Eur J Pediatr** 1989 Jun;148(7):636–41 (33 ref.)

ETHNOLOGY

[Immigrants with abdominal pain: familial Mediterranean fever?] Kingma PJ, et al. **Ned Tijdschr Geneeskd** 1989 Apr 1;133(13):676–9 (Eng. Abstr.) (Dut)

GENETICS

Periodic peritonitis (recurrent polyserositis–or–familial Mediterranean fever) eight decades later. Bakir F. **J Assoc Physicians India** 1988 Jun;36(6):377–9 (27 ref.)

[Familial Mediterranean fever in a German family] Hawle H, et al. **Dtsch Med Wochenschr** 1989 Apr 28;114(17):665–8 (Eng. Abstr.) (Ger)

[Acetylation phenotype in patients with periodic disease] Podymov VK, et al. **Ter Arkh** 1988;60(6):95–8 (Eng. Abstr.) (Rus)

IMMUNOLOGY

The immune regulation in familial Mediterranean fever (FMF). Melamed A, et al. **J Clin Lab Immunol** 1988 Jul; 26(3):125–8

METABOLISM

[Acetylation phenotype in patients with periodic disease] Podymov VK, et al. **Ter Arkh** 1988;60(6):93–5 (Rus)

PERIODICALS

A research methods and statistics journal club for residents. Markert RJ. **Acad Med** 1989 Apr;64(4):223–4

Veterinary clinical research: a survey of epidemiologic study designs and clinical issues appearing in a practice journal. Smith RD. **Acta Vet Scand Suppl** 1988;84:504–6

On journals: the competition for minds and money. Brogdon BG. **AJR** 1989 Mar;152(3):645–6

Industry support of radiologic journals and newsmagazines. MacEwan DW. **AJR** 1989 Jan;152(1):189–90

An author's guide to the Guidelines for Authors. Whalen E. **AJR** 1989 Jan;152(1):195–8

Nobody doesn't read NEJM. But who does? [letter] Radulescu G. **AJR Am J Roentgenol** 1989 Jul;153(1):187–8

Twenty–five years of the Alabama Journal of Medical Sciences [editorial] Smith GT, et al. **Ala J Med Sci** 1988 Jul;25(3):255–6

The editor's report—1988 [editorial] Beeler MF, et al. **Am J Clin Pathol** 1989 Jun;91(6):742–3

Calling Dr. Kenney [letter] Bruder W. **Am J Clin Pathol** 1989 Aug;92(2):251

The single patient report [editorial] Fulginiti VA. **Am J Dis Child** 1988 Oct;142(10):1035

Reprint requests. How and why they were made. Leung AK. **Am J Dis Child** 1989 Jan;143(1):121–3

Multiple authorship, basic research, and other trends in the emergency medicine literature (1975 to 1986). Powers RD. **Am J Emerg Med** 1988 Nov;6(6):647–50

Trends, truth, and consequences in the emergency medicine literature [editorial] White JD. **Am J Emerg Med** 1988 Nov; 6(6):677–8

Appraising a clinical journal article in obstetrics and gynecology. Seifer DB, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):198–201

Format of an obstetrics and gynecology journal club and four years' experience. Thurnau GR, et al.

Am J Obstet Gynecol 1989 Feb;160(2):313–6
The changing standards and formats of "the literature" [letter] Norton LA. **Am J Orthod Dentofacial Orthop** 1989 Jun;95(6):26A–27A
Off and running: a progress report from the AJRCMB [editorial] Brody JS, et al. **Am Rev Respir Dis** 1988 Dec; 138(6):1380–1
Three modest proposals [letter] Rosenberg E. **Am Rev Respir Dis** 1989 Jun;139(6):1571–2
A change in format for Anesthesiology [editorial] Saidman LJ. **Anesthesiology** 1989 Jan;70(1):1–2
The last word [editorial] Thurow RC. **Angle Orthod** 1988 Oct;58(4):290–2
Contribution of peer review to scientific progress [editorial] Sly RM. **Ann Allergy** 1989 Aug;63(2):85
To make an end is to make a beginning [editorial] Krome RL. **Ann Emerg Med** 1988 Dec;17(12):1353–4
Looking ahead. Lindesmith GC. **Ann Thorac Surg** 1989 Jan; 47(1):8
Trends of the ophthalmic literature from 1955 to 1985. De Broff B, et al. **Arch Ophthalmol** 1989 Jan;107(1):35–40
Citation classics: most-cited articles from Archives of PM&R. Key JD. **Arch Phys Med Rehabil** 1988 Dec; 69(12):1058–9
The centennial issue of the Journal [editorial] Hinchcliffe R. **Audiology** 1988;27(4):193–5 (Eng, Fre)
Words on numbers: statistics in medical journals [editorial] Ludbrook J. **Aust N Z J Surg** 1989 Jun;59(6):443–4
Usage of statistics in the surgical literature and the 'orphan P' phenomenon. Oliver D, et al. **Aust N Z J Surg** 1989 Jun;59(6):449–51
The art of the scientific paper. McAllister T. **Australas Phys Eng Sci Med** 1988 Jul–Sep;11(3):119–21
Editorial freedom. International Committee of Medical Journal Editors. **BMJ** 1988 Nov 5;297(6657):1182
A place in the sun? Ben-Shlomo I, et al. **BMJ** 1988 Dec 24–31;297(6664):1631–2
'Representation for all?' [letter; comment] **Br Dent J** 1989 Mar 25;166(6):197. **Comment on:** Br Dent J 1989 Feb 11;166(3):66
The end of the p value? Evans SJ, et al. **Br Heart J** 1988 Sep;60(3):177–80 (10 ref.)
The role of the Journal in the 1900s [editorial] Gurr MI. **Br J Nutr** 1989 Jan;61(1):3–6
I know where I'm going. Do you? [editorial] Usiskin LA. **Br J Orthod** 1989 May;16(2):117–8
Editorial process at the British Journal of Surgery [editorial] Dudley HA. **Br J Surg** 1989 Mar;76(3):211–2
Peers, press, and public: a cautionary note [editorial] Golub ES. **Brain Behav Immun** 1987 Sep;1(3):195–6
Analyzing in-house journal utilization: an added dimension in decision making. Bader SA, et al. **Bull Med Libr Assoc** 1989 Apr;77(2):216–8
Selected list of books and journals in allied health sciences. Brandon AN, et al. **Bull Med Libr Assoc** 1988 Oct; 76(4):346–67
Selected list of books and journals for the small medical library. Brandon AN, et al. **Bull Med Libr Assoc** 1989 Apr; 77(2):139–69
Journal rankings by citation analysis in health sciences librarianship. Fang ML. **Bull Med Libr Assoc** 1989 Apr; 77(2):205–11
Effects on media materials of storage in proximity to a magnetic resonance imaging scanner. Kittle PW. **Bull Med Libr Assoc** 1989 Jan;77(1):67–9
The Bulletin—a special interest journal? [editorial] Pizer IH. **Bull Med Libr Assoc** 1989 Apr;77(2):223–4
Conferring of Honorary Fellowship upon Arnold S. Relman, M.D. Farber SJ. **Bull N Y Acad Med** 1988 Nov; 64(8):887–90
The literature of anaesthesia: what are we learning? Duncan PG, et al. **Can J Anaesth** 1988 Sep;35(5):494–9
The case of the questionable reference. Clarfield AM. **Can Med Assoc J** 1989 Apr 1;140(7):844–5
Biomedical manuscripts: what editors want from authors and peer reviewers [editorial] Squires BP. **Can Med Assoc J** 1989 Jul 1;141(1):17–9
Padding the curriculum vitae: impairing the utility and integrity of the biomedical literature. Reidenberg MM. **Clin Pharmacol Ther** 1989 Apr;45(4):337–9
The community medicine contribution to the British Medical Journal and the Lancet [letter] Bhopal RS, et al. **Community Med** 1988 Nov;10(4):364–5
Sponsorship or not [editorial] Hargrove DS. **Community Ment Health J** 1988 Fall;24(3):171–3
The Annals of Pharmacotherapy—more than a face lift [editorial] Whitney HA Jr. **DICP** 1989 Jan;23(1):73, 87
New journal devoted to AIDS, New York [news] **Dimens Health Serv** 1989 Jun;66(5):7
Comment: blind peer review of journal articles [letter] Shaughnessy AF. **Drug Intell Clin Pharm** 1988 Dec; 22(12):1006
This is FASEB. Publications. Gidez LI. **FASEB J** 1989 Mar; 3(5):1663–6
Progress report [editorial] Whelan WJ. **FASEB J** 1989 Jul; 3(9):2003–4
Reply to Fisher's comment: "Standard for Expression of Powers of 10" [letter] Wijker H. **Health Phys** 1989 Mar; 56(3):377
Back to the future of Immunology Today [editorial] Inglis JR. **Immunol Today** 1988 Oct;9(10):285
Saying Si to SI [editorial] Abraham P.
Indian J Gastroenterol 1989 Jan;8(1):5–6
The correspondence section. Goihman-Yahr M. **Int J Dermatol** 1988 Jul–Aug;27(6):376
Statistics in dental journals and dental education. Some comments and a selected bibliography. Sahai H, et al. **Int J Orthod** 1989 Spring;27(1–2):23–7
Is the published literature a reliable guide for deciding between alternative treatments for patients with early cervical cancer? Zola P, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):785–97
New from WHO: AIDS Technical Bulletin [news] **Int Nurs Rev** 1989 Jan–Feb;36(1):11
Development of special sections [letter] Rinsley DB. **J Am Acad Child Adolesc Psychiatry** 1988 Nov;27(6):820–1
A case for refereed journals [editorial] Young PR. **J Am Board Fam Pract** 1989 Apr–Jun;2(2):77
The dietitian as the nutrition counselor: the 1989 Journal [editorial] **J Am Diet Assoc** 1989 Jan;89(1):43–4
Broadening students' perspectives on literature review. Vickery CE, et al. **J Am Diet Assoc** 1989 Sep;89(9):1286–9
Salutatory [editorial] Solomon DH. **J Am Geriatr Soc** 1989 Jan;37(1):78–9
Valedictory [editorial] Stollerman GH. **J Am Geriatr Soc** 1989 Jan;37(1):76–7
Evaluating the optometric literature: the educated clinician. Dunsky IL. **J Am Optom Assoc** 1989 Feb;60(2):95–104
Multiple authorship of manuscripts [editorial] Cowell HR. **J Bone Joint Surg [Am]** 1989 Jun;71(5):639–40
The Journal of Child Neurology and child neurology: growing together [editorial] Brumback RA, et al. **J Child Neurol** 1988 Oct;3(4):232, 274
Who checks what in the divided responsibilities of editors and authors? Feinstein AR, et al. **J Clin Epidemiol** 1988; 41(10):945–8
The peer-review process—and an acknowledgement of our peerless reviewers. Feinstein AR, et al. **J Clin Epidemiol** 1989;42(1):1–4
A systematic analysis of religious variables in The Journal of Family Practice, 1976–1986. Craigie FC Jr, et al. **J Fam Pract** 1988 Nov;27(5):509–13 (39 ref.)
The Journal of Family Practice 1974–1988. Window to an evolving academic discipline. Geyman JP, et al. **J Fam Pract** 1989 Mar;28(3):301–4
Criticizing the Journal [editorial] **J Gen Intern Med** 1989 May–Jun;4(3):266
An analysis of the quality of research reports in the Journal of General Internal Medicine. Cooper GS, et al. **J Gen Intern Med** 1989 May–Jun;4(3):232–6
Reviewing manuscripts reporting original research—do's and don'ts [letter] Tzamaloukas AH. **J Gen Intern Med** 1989 Jan–Feb;4(1):78
Medical communication—its uses and abuses. Wilgis EF. **J Hand Surg [Am]** 1989 May;14(3):425–8
Problems of medical journalism. Choudhuri PK. **J Indian Med Assoc** 1988 Dec;86(12):333
The 200 most cited articles from The Journal of Investigative Dermatology. **J Invest Dermatol** 1989 Apr;92(4 Suppl):142S–147S
The Scientific Citation Index and The Journal of Investigative Dermatology. Norris DA. **J Invest Dermatol** 1989 Apr;92(4 Suppl):147S–148S
Reviewers and jurors, editors and judges [editorial] Daniel TM. **J Lab Clin Med** 1989 Jan;113(1):1–5
Editorial freedom and the JMPT [editorial] Lawrence DJ. **J Manipulative Physiol Ther** 1989 Feb;12(1):1–2
Journal of Pediatric Psychology: a content analysis of articles over its first 10 years. Elkins PD, et al. **J Pediatr Psychol** 1988 Dec;13(4):575–94
Writing by professionals or professional writing? [editorial] Copp LA. **J Prof Nurs** 1989 May–Jun;5(3):115–6
Wind of change. II. Medical journals in Britain in 1988 [editorial] Medvei VC. **J R Soc Med** 1988 Dec;81(12):686–8
Pulse steroid therapy, rheumatoid arthritis and the Journal of Rheumatology [letter] Kraus A. **J Rheumatol** 1988 Dec; 15(12):1872–4
Journal of Sports Sciences [editorial] Reilly T. **J Sports Sci** 1989 Spring;7(1):1–2
Periodicals in veterinary pharmacology and therapeutics [letter] Gibb M. **J Vet Pharmacol Ther** 1988 Jun;11(2):227–9
Periodicals without tobacco advertising [news] **JAMA** 1989 Sep 8;262(10):1290–1, 1295
Introducing Pulse [editorial] **JAMA** 1988 Nov 4;260(17):2564
From the Office of the General Counsel: a new JAMA column [editorial] Cole HM. **JAMA** 1989 Sep 15; 262(11):1513
The JAMA Journal Club [editorial] Gannon MI, et al. **JAMA** 1989 Feb 3;261(5):750
Magazines to leaf through while waiting ought not to contain any (tobacco) leaves [news] Goldsmith MF. **JAMA** 1989 Sep 8;262(10):1290
Impact of a medical journal club on house-staff reading habits, knowledge, and critical appraisal skills. A randomized control trial. Linzer M, et al. **JAMA** 1988 Nov 4;260(17):2537–41
Introducing the 'Resident Forum' [editorial] Litwin MS. **JAMA** 1989 Sep 8;262(10):1377
Providing reliable medical information to the public—caveat lector [editorial] Lungberg GD. **JAMA** 1989 Aug 18; 262(7):945–6
The inexact use of Fisher's Exact Test in six major medical journals. McKinney WP, et al. **JAMA** 1989 Jun 16; 261(23):3430–3
The international congress on peer review in biomedical publication [editorial] Rennie D, et al. **JAMA** 1989 Feb 3;261(5):749
Some propositions to the Japanese Journal of Cancer Research [letter] Tokudome S. **Jpn J Cancer Res** 1989 Jun; 80(6):597–8
Thrombolysis "update" [letter] **Lancet** 1988 Dec 24–31; 2(8626–8627):1499
The journal club—let's audit [editorial] **Lancet** 1989 Mar 18; 1(8638):594
Peptide regulatory factors: a new Lancet series [editorial] **Lancet** 1989 Apr 1;1(8640):704
Boycotting journals [letter] **Lancet** 1989 Jul 22;2(8656):221–2
Israel and The Lancet [letter] **Lancet** 1989 Mar 25;1(8639):676
Future of French-language journals [letter] Olivier C, et al. **Lancet** 1989 Jul 22;2(8656):222
WHO and PLO [letter] Yoshida T. **Lancet** 1989 Jul 22; 2(8656):222
Remembrance, thanks, and welcome [editorial] Slack WV. **MD Comput** 1989 Jul–Aug;6(4):183–5
Calling Medical Care reviewers first. A randomized trial. Neuhauser D, et al. **Med Care** 1989 Jun;27(6):664–6
What influences prescribing—scientific articles or promotional pressure? [letter] Harvey K. **Med J Aust** 1988 Dec 5–19;149(11–12):720
Legal discussions in medical literature: is there adequate peer review? Kapp MB. **Med Law** 1988;7(4):317–21
Thunder on the right [interview by Richard L. Reece] Davis F. **Minn Med** 1989 Mar;72(3):129–30, 133–7
The power of simple words [interview by Richard L. Reece] Griffin G. **Minn Med** 1989 Mar;72(3):128, 171–3
Pleased with fellowship, Minnesota Medicine [letter] Manahan WD. **Minn Med** 1989 Aug;72(8):449
Thoughts about medical writing, editing, and publishing [editorial] Reece RL. **Minn Med** 1989 Mar;72(3):127, 138
About an old problem, new approaches, a new section [editorial] Franceschi C, et al. **Mutat Res** 1988 Sep;:3–5
Reprints' function [letter] **Nature** 1989 Sep 14;341(6238):99
Peer review [letter] **Nature** 1989 Jun 8;339(6224):414
Room for theory? [letter] Fair CM. **Nature** 1989 Jul 27; 340(6231):260
Glasnost in publications: who's hiding the primary data? McGourty C. **Nature** 1989 Sep 14;341(6238):94
Can journals influence science? [news] Maddox J. **Nature** 1989 Jun 29;339(6227):657
The scientific process—its links, functions and problems. Kinne O. **Naturwissenschaften** 1988 Jun;75(6):275–9
Confidence intervals [editorial] Murray GD. **Nucl Med Commun** 1989 Jun;10(6):387–8
A meterstone [editorial] Downs FS. **Nurs Res** 1989 Jan–Feb; 38(1):3
Analysis of a decade of nursing practice research: 1977–1986. Moody LE, et al. **Nurs Res** 1988 Nov–Dec;37(6):374–9
Death of a country and western songwriter. A case report. Shay C. **Ohio Med** 1988 Jun;84(6):425–6
Paediatric and perinatal epidemiology [editorial] **Paediatr Perinat Epidemiol** 1987 Apr;1(1):1–3
Fumes from the spleen. **Paediatr Perinat Epidemiol** 1989 Jan; 3(1):4–6
Pharmaceutisch Weekblad Scientific edition and the European Society of Clinical Pharmacy [editorial] Hekster YA, et al. **Pharm Weekbl [Sci]** 1989 Feb 24;11(1):1–2
Peer review for publication [letter] Goldwyn RM. **Plast Reconstr Surg** 1989 Feb;83(2):398–9
Publication lag times in Plastic and Reconstructive Surgery [letter] Wirzfeld K, et al. **Plast Reconstr Surg** 1989 Jan; 83(1):200
Sports Illustrated gets an 'F' on NFL drug testing article! [editorial] Griffin GC. **Postgrad Med** 1989 Sep 1;86(3):13–4, 16
Pure gold in a pile of junk! Griffin GC. **Postgrad Med** 1988 Oct;84(5):11–2, 15
Reading scientific articles, or how to cope with the overload. Jewell D. **Practitioner** 1988 Jun 22;232(1451):720, 723–5
The procrustean bed and the self-anointed raters. Di Chiro G. **Radiology** 1989 Feb;170(2):569–70
Frazier reinstated at McLean [news] Culliton BJ. **Science** 1989 Feb 17;243(4893):889
NIH panel finds no fraud in Cell paper but cites errors [news] Culliton BJ. **Science** 1988 Dec 16;242(4885):1499
"L'affaire Pasteur" prompts Canadian outcry [news] Dickson D. **Science** 1989 Apr 21;244(4902):280–1
The underrepresentation syndrome [editorial] Koshland DE Jr. **Science** 1989 Jul 28;245(4916):341
Interactions between statisticians and biomedical journal editors. Marks RG, et al. **Stat Med** 1988 Oct;7(10):1003–11
The impact of mass media advertising on a voluntary sterilization program in Brazil. Foreit KG, et al. **Stud Fam Plann** 1989 Mar–Apr;20(2):107–16
Is surgical endoscopy necessary? [editorial] Berci G. **Surg Endosc** 1987;1(1):2–3
Abstract renders the summary superfluous [published erratum appears in Surg Gynecol Obstet 1989 Aug;169(2):178] Didolkar MS, et al. **Surg Gynecol Obstet** 1989 Mar; 168(3):259–62
"How to write a paper" [editorial] Page AG, et al. **Thorac Cardiovasc Surg** 1989 Feb;37(1):1–2
Current AIDS literature [letter] FitzSimons D. **Trans R Soc Trop Med Hyg** 1988;82(3):511
Transactions & Studies returns as a quarterly publication [editorial] **Trans Stud Coll Physicians Phila** 1989 Mar; 11(1):1–3

New brooms [editorial] Barker A. **Trop Doct** 1989 Jan; 19(1):1–2
Responsible advertising or game show tactics? [letter] Bromhall N. **Vet Rec** 1989 May 20;124(20):548
'Logomach' and English grammar [letter] White DS. **Vet Rec** 1988 Jul 2;123(1):40
The content of advertisements in medical journals: distorting the image of women. Hawkins JW, et al. **Women Health** 1988;14(2):43–59
A WHO newsletter in Burma [letter] Chaudhury RR, et al. **World Health Forum** 1989;10(1):104–5
[Medical journals and editorial freedom (editorial)] Nylenna M, et al. **Nord Med** 1989;104(2):34 (Dan)
[The frequency of citations in Ugeskrift for Laeger—which journals were cited in 1986?] Billesbølle P, et al. **Ugeskr Laeger** 1988 Oct 31;150(44):2650–2 (Eng. Abstr.) (Dan)
[Medicine and language] Balk-Smit Duyzentkunst F. **Ned Tijdschr Geneeskd** 1989 Jan 7;133(1):11–2 (Dut)
[Can bibliometry measure research standards?] Luukkonen T. **Duodecim** 1989;105(9):864–71 (Fin)
[Why a special issue on physiatrics?] Valtonen EJ. **Duodecim** 1989;105(2):83–4 (Fin)
[Submitting an abstract for a scientific article (editorial)] Rozé C. **Ann Pathol** 1988;8(3):166–8 (Fre)
[French medical periodicals in the international scene?] Olivier C, et al. **Bull Acad Natl Med** 1989 Feb;173(2):141–4; discussion 144–7 (Eng. Abstr.) (Fre)
[Medical French. II (a plea for the correct use of French) (editorial)] Bonard EC. **Rev Med Suisse Romande** 1989 Mar; 109(3):165–6 (Fre)
[Description and evaluation of diagnostic measures in German-language clinical journals] Windeler J, et al. **Schweiz Med Wochenschr** 1988 Oct 8;118(40):1437–41 (Eng. Abstr.) (Ger)
[Information dissemination by specialty periodicals] Anschütz F. **Versicherungsmedizin** 1989 Mar 1;41(2):29 (Ger)
[A publication for the family physician] Berndt H. **Z Arztl Fortbild (Jena)** 1989;83(1):3–4 (Ger)
["HAREFUAH" closes the gap (editorial)] Ishay R. **Harefuah** 1988 Dec 15;115(12):403 (Heb)
[Let us know more about the current Hungarian medical literature (letter)] Balogh I. **Orv Hetil** 1988 Dec 11; 129(50):2716 (Hun)
[To the readers of the Giornale Italiano di Cardiologia (editorial)] Piccolo E. **G Ital Cardiol** 1987 Dec; 17(12):1009–15 (Ita)
[To publish in English: an obligatory option] Rebora A. **G Ital Dermatol Venereol** 1988 Sep;123(9):387–91 (Eng. Abstr.) (Ita)
[A journal..."nonviable, lacking editorials, commentaries, presentations on topical themes..., lacking a robust column of letters to the editor" (letter)] Juliani G. **Radiol Med (Torino)** 1989 Jan–Feb;77(1–2):141 (Ita)
[Bibliography of Polish publications on ultrasonic diagnosis 1980–1986] Jakubowski W, et al. **Pol Przegl Radiol (Warszawa)** 1987 Nov–Dec;51(6):331–6, 299, 309 passim (Pol)
[Report of the Revista de Saúde Pública, 1984–1987] de Andrade MT. **Rev Saude Publica** 1988 Jun;22(3):167–9 (Por)
[Study of the use of literature on obstetrics and gynecology by medical specialists] Bokan MG, et al. **Akush Ginekol (Mosk)** 1988 Sep;(9):77–9 (Rus)
[Problems of the study of the effective use of medical literature] Bokan MG, et al. **Sov Zdravookhr** 1988;(10):22–5 (Eng. Abstr.) (Rus)
[Yugoslav medical science in the Science Citation Index. 3. Why do we not have more journals in the international indexes?] Lacković Z, et al. **Lijec Vjesn** 1988 Aug; 110(8):241–51 (Eng. Abstr.) (Ser)
[Publications on adverse reactions to drugs in Spanish pediatric journals between 1980 and 1984] Morales Olivas FJ, et al. **An Esp Pediatr** 1989 Feb;30(2):116–8 (Eng. Abstr.) (Spa)
[Apropos of the omission of bibliographic citations (letter)] **Bol Med Hosp Infant Mex** 1989 Feb;46(2):149–50 (Spa)
[Changes in the Boletin Medico del Hospital Infantil de Mexico (editorial)] Velásquez-Jones L. **Bol Med Hosp Infant Mex** 1989 Feb;46(2):79 (Spa)
[Instructions for authors of medical articles: third edition] Velásquez-Jones L, et al. **Bol Med Hosp Infant Mex** 1989 Jan;46(1):65–74 (Spa)
[Incorporation of Gaceta Sanitaria to Index Medicus. What does it mean?] Pulido Mestre M. **Gac Sanit** 1989 Jan–Feb; 3(10):311–2 (Spa)
[English, an international language in medicine] Villar J. **Med Clin (Barc)** 1988 May 28;91(1):23–4 (Spa)
[Literature, periodicals and video—example for selections for health care center] **Lakartidningen** 1988 Sep 7; 85(36):2867–72 (Swe)
[Citation count—hardly a problem for evaluators] Eklund T. **Lakartidningen** 1989 Jun 14;86(24):2282 (Swe)
[General medicine video-magazines are a complement to traditional teaching materials] Hey M. **Lakartidningen** 1988 Sep 7;85(36):2873–4 (Swe)

ECONOMICS

Book prices and costs for a small-hospital library: a subject analysis. Johnson CA. **Bull Med Libr Assoc** 1989 Jan; 77(1):38–41
Update on inflation of journal prices: medical journals, U.S. journals, and Brandon/Hill list journals. Kronenfeld MR, et al. **Bull Med Libr Assoc** 1989 Jan;77(1):61–4
This St Patrick's Day finds no lack of controversy at Irish Medical Journal [news] Henahan JF. **JAMA** 1989 Mar 17; 261(11):1543–4, 1549

HISTORY

Fifty years of Anesthesiology. Saidman LJ, et al. **Anesthesiology** 1989 Jul;71(1):1–7
The Annales de l'Institut Pasteur, one hundred years later ... Hannoun C. **Ann Inst Pasteur Virol** 1988 Jan–Mar; 139(1):5–12 (Eng, Fre)
The early years. Ellison RG. **Ann Thorac Surg** 1989 Jan; 47(1):4–5
Toward fifty. Ferguson TB. **Ann Thorac Surg** 1989 Jan; 47(1):3
More change. Sloan H. **Ann Thorac Surg** 1989 Jan;47(1):6–7
Golden anniversary of the "British Heart Journal" [editorial] Burchell H. **BMJ** 1989 Jan 14;298(6666):70
A title lost, but a reputation won [editorial] Krikler DM. **Br Heart J** 1989 Jan;61(1):1–3
The origins of alcohol studies: E. M. Jellinek and the documentation of the alcohol research literature. Page PB. **Br J Addict** 1988 Sep;83(9):1095–103
The Editor's prologue 1988. MacKie RM. **Br J Dermatol** 1988 Oct;119(4):413–8
Twenty-five years of the British Journal of Psychiatry. Crammer JL. **Br J Psychiatry** 1988 Oct;153:434–6
In the beginning. Rollin HR. **Br J Psychiatry** 1988 Oct; 153:431–3
British Journal of Sports Medicine—historical development [editorial] Robson HE. **Br J Sports Med** 1988 Dec; 22(4):130–1
Scientific journals in the context of history [editorial] Yankauer A. **Braz J Med Biol Res** 1988;21(3):409–10
Anniversary discourse the purposes and prospects of The General Medical Journal. Relman AS. **Bull N Y Acad Med** 1988 Nov;64(8):875–80
A new era [editorial] Holleb AI. **CA** 1989 Jan–Feb;39(1):1–2
Editor's farewell. Kluthe R. **Clin Nephrol** 1989 Jul;32(1):1–4
FEBS—25th anniversary. Dirheimer G. **FEBS Lett** 1989 Jun 19;250(1):3–8
Check your references or rediscovering the wheel. Hansell P. **J Biol Photogr** 1989 Apr;57(2):45–7
Check your references or Rediscovering the wheel. Hansell P. **J Biol Photogr** 1989 Jan;57(1):26–7
On the 85th birthday of this journal. Grundmann E. **J Cancer Res Clin Oncol** 1988;114(5):443–6
The chronicle of the Society for Investigative Dermatology. 1954 [classical article] Curtis AC. **J Invest Dermatol** 1989 Apr;92(4 Suppl):7S–9S
Biochemistry of the skin: 50 years in The Journal of Investigative Dermatology. Goldsmith LA. **J Invest Dermatol** 1989 Apr;92(4 Suppl):113S–120S (71 ref.)
Fifty years of cell biology in The Journal of Investigative Dermatology. O'Keefe EJ. **J Invest Dermatol** 1989 Apr; 92(4 Suppl):105S–112S (123 ref.)
Fifty years of clinical research in The Journal of Investigative Dermatology. Saurat JH. **J Invest Dermatol** 1989 Apr;92(4 Suppl):132S–141S (92 ref.)
Early medical journalism in South Carolina. Newsom B. **J S C Med Assoc** 1989 Jun;85(6):297
Studies of alcohol: past, present and future. Mendelson JH, et al. **J Stud Alcohol** 1989 Jul;50(4):293–6
The Center of Alcohol Studies and the Journal of Studies on Alcohol: celebrating 50 years. Nathan PE. **J Stud Alcohol** 1989 Jul;50(4):297–300
A science journal, seventy-five years on. Farr AD. **Med Lab Sci** 1988 Jan;45(1):1–4
The image of war in Finland's medical journals. Taipale I, et al. **Med War** 1989 Apr–Jun;5(2):96–106
The evolution of a journal. Hutner G. **N J Med** 1989 Apr; 86(4):269–73
The New York Medical Journal and cigarette smoking [letter] DeFries Z. **N Y State J Med** 1989 May;89(5):294–5
A history of the New York Medical Journal. Imperato PJ. **N Y State J Med** 1989 Jul;89(7):403–14
Biography of a publication. Smith DA. **Pa Med** 1989 Feb; 92(2):9–10, 12
A brief history of Progress in Lipid Research [editorial] Holman RT. **Prog Lipid Res** 1988;27(1):1–4
The Psychoanalytic Review and lay analysis. Lerner L. **Psychoanal Rev** 1988 Fall;75(3):356–60
The Rhode Island Medical Journal heritage. **R I Med J** 1989 Jun;72(6):215–6
The Rhode Island Medical Journal heritage. **R I Med J** 1989 Jul;72(7):259–60
The mission of the Journal [editorial] Aronson SM. **R I Med J** 1989 Jun;72(6):197–8
Surgery and the Society of University Surgeons. Ballinger WF, et al. **Surgery** 1989 Feb;105(2 Pt 2):253–5
A century of letters to the editor. Brandenberg M. **Vet Rec** 1988 Jul 2;123(1):18–9
The pharmaceutical industry and The Veterinary Record. Brander G. **Vet Rec** 1988 Jul 2;123(1):20–3
A matter of confidence? Jackson F. **Vet Rec** 1988 Jul 2; 123(1):27–8
An editor remembers. Mitchell C. **Vet Rec** 1988 Jul 2; 123(1):24–5
William Hunting and The Veterinary Record. Pattison I. **Vet Rec** 1988 Jul 2;123(1):14–7
The Royal College and The Veterinary Record. Porter A. **Vet Rec** 1988 Jul 2;123(1):25–6
[Ugeskrift for laeger—1839–1989. Tradition, quality and renewal] **Ugeskr Laeger** 1989 May 4;151:5–74 (Dan)
[Scientific articles in Ugeskrift for Laeger during a 25-year period. Analysis and interpretation of research results] Gøtzsche PC, et al. **Ugeskr Laeger** 1989 Jan 23;151(4):220–2 (Eng. Abstr.) (Dan)
[Scientific articles in Ugeskrift for Laeger during a 25-year period. Types of articles and experimental design] Jørgensen PE, et al. **Ugeskr Laeger** 1989 Jan 23; 151(4):218–20 (Eng. Abstr.) (Dan)
[Medicine in 1888 from Duodecim articles] Achté K. **Duodecim** 1988;104(9):738–40 (Fin)
[Ephemerides 1889–1939–1989] Dodin A. **Bull Soc Pathol Exot Filiales** 1989 Jan;82(1):9–12 (Fre)
[Obsolete, progressive and permanent trends in the contents of the Journal of School Health since its first edition in 1888] Grimm H. **Arztl Jugendkd** 1988;79(4):181–8 (Eng. Abstr.) (Ger)
[100 years of "Arztliche Jugendkunde"] Jährig K, et al. **Arztl Jugendkd** 1988;79(3):113–4 (Ger)
[43 years of Helvetica Paediatrica Acta—retrospect and prospects] Fanconi A. **Helv Paediatr Acta** 1989 Jun; 43(5–6):357–62 (Ger)
[The 10th anniversary of the "Der Pathologe"] Becker V. **Pathologe** 1989 Jan;10(1):1–2 (Ger)
[A short history of the editing of the "Schweizer Archiv für Tierheilkunde"] Fankhauser R, et al. **Schweiz Arch Tierheilkd** 1988 Sep;130(9):477–516 (Ger)
[500-year anniversary of the publishing house of the Schweizerische Medizinische Wochenschrift] Riva G. **Schweiz Med Wochenschr** 1988 Nov 26;118(47):1741–6 (Ger)
[Robert Kutner and the 'Zeitschrift für ärztliche Fortbildung'] Berndt H. **Z Arztl Fortbild (Jena)** 1988; 82(19):977–9 (Ger)
[On the anniversary. 50 years of the Journal of Rheumatology. Its first editor: public health officer professor Dr. med. Paul Köhler, Bad Elster] Brunner G. **Z Rheumatol** 1988 Nov–Dec;47(6):379–80 (Ger)
[Two medical journals at the turn of the century] Batári G. **Orv Hetil** 1988 Dec 25;129(52):2806–8 (Hun)
[The influence of Markusovszky's intellectual heritage on Hungarian health policy] Füzi I. **Orv Hetil** 1989 Jan 8; 130(2):59–63 (Hun)
[40th anniversary of the re-publication of Orvosi Hetilap] Trencséni T. **Orv Hetil** 1989 Apr 16;130(16):815–9 (Hun)
[75 years of La Radiologia Medica] Di Guglielmo L. **Radiol Med (Torino)** 1989 Jan–Feb;77(1–2):3–8 (Ita)
[The 60th anniversary of "Wiadomości lekarskie"] **Wiad Lek** 1988 Dec 15;41(24):1625–9 (Eng. Abstr.) (Pol)
[50th anniversary of the journal Farmakologiia i toksikologiia] Mashkovskiĭ MD. **Farmakol Toksikol** 1988 Nov–Dec;51(6):5–16 (Rus)
[The publication of the 50th volume of Mikrobiologicheskiĭ zhurnal] Diachenko SS. **Mikrobiol Zh** 1988 Nov–Dec; 50(6):93–8 (Rus)
[The 70th anniversary of the Meditsina Publishing House] Sabitov FM. **Sov Med** 1988;(11):121–3 (Rus)
[On the centenary of founding of the journal "Zemskiĭ vrach"(Zemstvo physician)] Kokhan AI. **Sov Zdravookhr** 1989;(2):74–6 (Rus)
[Review of the articles on dermatology and venereology published in the issues of the Great Medical Encyclopedia (on the 60th anniversary of Soviet medical encyclopedias)] Romanenko GF. **Vestn Dermatol Venerol** 1988;(7):31–6 (Rus)
[M. I. Baranov and the journal Voenno-sanitarnoe delo] **Voen Med Zh** 1989 Jan;(1):64–5 (Rus)
[The history of the journal "Bratislavské Lekárske Listy" and its first founders] Pogády J, et al. **Bratisl Lek Listy** 1989 May;90(5):352–9 (Slo)
[A stage accomplished: Annals..., 1973–1988 (editorial)] Sánchez Villares E. **An Esp Pediatr** 1988 Dec;29(6):423–4 (Spa)
[Results of the analytic and sociometric study of books and articles on otology. 16th–20th centuries (up to 1932). 2] Pisonero Ruiz MP. **An Otorrinolaringol Ibero Am** 1988; 15(3):307–42 (Eng. Abstr.) (Spa)
[The Medical Telegraph (1847–1850) and the introduction of anesthesiology in Spain] Márquez Espinós C. **Rev Esp Anestesiol Reanim** 1989 May–Jun;36(3):161–6 (Eng. Abstr.) (Spa)

STANDARDS

Review policy for papers concerning computer software [letter] Taylor HM. **Am J Clin Pathol** 1989 Aug;92(2):252–3
Requirements for submission of manuscripts [editorial] **Am J Obstet Gynecol** 1989 Jan;160(1):1–2
A new broom, moving the dust around a little bit... [editorial] Macdonald G. **Aust N Z J Med** 1989 Aug;19(4):295–6
Guidelines for writing papers. **BMJ** 1989 Jan 7; 298(6665):40–2
Uniform requirements for manuscripts submitted to biomedical journals. International Committee of Medical Journal Editors. **Bol Asoc Med P R** 1988 Dec;80(12):471–8
Splenic spite and flawless flight [letter] Ross JT. **Can Med Assoc J** 1989 Mar 1;140(5):497–8
An appraisal of the Fife Community Health Report. Kohli HS. **Community Med** 1989 May;11(2):97–101

Benign deception: fragmentation, overlapping publications, and loose authorship [editorial] Kempers RD. **Fertil Steril** 1989 Jun;51(6):931-2
LEAR'S magazine "for the woman who wasn't born yesterday": a critical review. Wang C. **Gerontologist** 1988 Oct;28(5):600-1
A note on book reviews [letter] Anderson JR. **Histopathology** 1989 Feb;14(2):227-8
Sample bias and overinference: two sources of error in interpreting case report data [letter] Coffman JA, et al. **J Clin Psychiatry** 1989 Mar;50(3):105
Uniform requirements for manuscripts submitted to biomedical journals. International Committee of Medical Journal Editors. **J Manipulative Physiol Ther** 1988 Aug; 11(4):247-54
Journal of Manipulative & Physiological Therapeutics: a bibliographic analysis. Keating JC jr, et al. **J Manipulative Physiol Ther** 1989 Feb;12(1):15-20
An International Committee of Chiropractic Journal Editors [editorial] Lawrence DJ. **J Manipulative Physiol Ther** 1989 Jun;12(3):165-6
Guidelines for publications in molecular modeling related to medicinal chemistry. Gund P, et al. **J Med Chem** 1988 Dec;31(12):2230-4
Characteristics of a quality journal [editorial] Copp LA. **J Prof Nurs** 1988 Nov-Dec;4(6):393-4
Instrument validity and reliability in three health education journals, 1980-1987. Lamp E, et al. **J Sch Health** 1989 Mar; 59(3):105-8
Editorial freedom and integrity [editorial] Lundberg GD. **JAMA** 1988 Nov 4;260(17):2563
Editor's opinions and Journal policy [letter] Korn M. **N Engl J Med** 1989 Aug 10;321(6):401-2
Anonymous peer refereeing [letter] **Nature** 1989 Jan 19; 337(6204):202
Complacent reviewing [letter] Crichton RR. **Nature** 1989 Jan 12;337(6203):110
Publishing a manuscript: analysis of reviewed manuscripts with discussion. Part I. Frank ED. **Radiol Technol** 1988 Nov-Dec;60(2):125-9
The epilepsy "cure": bold claims, weak data [news] Crease RP. **Science** 1989 Sep 29;245(4925):1444-5
Random audit of papers proposed [news] Culliton BJ. **Science** 1988 Nov 4;242(4879):657-8
Authorship, data ownership examined [news] Culliton BJ. **Science** 1988 Nov 4;242(4879):658
Misleading articles [letter] Sakamoto A. **West J Med** 1989 Aug;151(2):209
[The revised uniform requirements for manuscripts submitted to biomedical journals] **Ned Tijdschr Geneeskd** 1988 Oct 29;132(44):2001-2 **(Dut)**
[The publishing of advanced knowledge and medical science (letter)] Paul R. **Duodecim** 1988;104(16):1283-5 **(Fin)**
[The problem of improving the publication of scientific articles (a comment on articles in an American journal)] Korzh AA. **Ortop Travmatol Protez** 1989 Feb;(2):70-1 **(Rus)**
[Readers' conference on the work of the editorial board of the journal "Vestnik khirurgii im. I.I. Grekova"] **Vestn Khir** 1989 Jan;142(1):3-6 **(Rus)**
[The Vancouver Declaration and "scientific work"] Beritić T. **Arh Hig Rada Toksikol** 1988 Mar;39(1):3-7 **(Scr)**
[Requirements of uniformity for manuscripts submitted to biomedical journals. International Committee of Medical Journal Editors] **Rev Esp Anestesiol Reanim** 1988 Nov-Dec;35(6):316-22 **(Spa)**
[Uniform requirements for manuscripts submitted to biomedical journals. International Committee of Editors of Medical Journals] Uscanga LF, et al. **Rev Gastroenterol Mex** 1988 Oct-Dec;53(4):237-41 **(Spa)**
[Requests for the submission of manuscripts to biomedical reviews. International Committee of Medical Journal Editors] **Salud Publica Mex** 1988 Nov-Dec;30(6):893-904 **(Spa)**

STATISTICS & NUMERICAL DATA

[Analysis of the periodical Strahlentherapie from 1920 to 1984] Köhler CO, et al. **Strahlenther Onkol** 1988 Dec; 164(12):693-707 (Eng. Abstr.) **(Ger)**

TRENDS

Citation trends of general psychiatric journals. Lloyd GG, et al. **Psychol Med** 1989 Feb;19(1):15-8
[Determining the current status] Gostomzyk. **Off Gesundheitswes** 1989 Jan;51(1):1 **(Ger)**

PERIODICITY

see related
BIOLOGICAL CLOCKS
CIRCADIAN RHYTHM

Periodic ACTH . ADH discharge syndrome: relationship to inappropriate ADH secretion. Ogihara M, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Oct;29(5):772-80
Clinical course and outcome of cycloid psychotic disorder: a three-year prospective study. Maj M. **Acta Psychiatr Scand** 1988 Aug;78(2):182-7
Adult-onset cyclic bicytopenia: a case report and review of treatment of cyclic hematopoiesis. Tefferi A, et al. **Am J Hematol** 1989 Mar;30(3):181-5 (45 ref.)
The moon and menses [letter] Whitten WK. **Am J Obstet Gynecol** 1989 Feb;160(2):519-23
Idiopathic cyclic thrombocytopenia of childhood. Al-Rashid RA. **Am J Pediatr Hematol Oncol** 1989 Spring;11(1):40-3
Effects of melatonin on long-day responses in short-day housed adult Siberian hamsters. Bartness TJ, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R823-30
Breath-by-breath respiratory timing and volume control during periodic breathing. Carley DW, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):R653-60
Adipose tissue dynamics during cyclic weight loss and weight gain of ground squirrels. Dark J, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1286-92
Thermal sensitivity of reptilian melatonin rhythms: "cold" tuatara vs. "warm" skink. Firth BT, et al. **Am J Physiol** 1989 May;256(5 Pt 2):R1160-3
Vole infant development is influenced perinatally by maternal photoperiodic history. Lee TM, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R831-8
On the Journal and the moon [letter] Levy NB. **Am J Psychiatry** 1975 Jan;132(1):85
Photoperiodic influence on the innervation of the ductus epididymidis and ductus deferens of Phodopus sungorus—light microscopic studies. Schindelmeiser J, et al. **Anat Anz** 1989;168(4):347-53
Disruption of the rhythmic activity of the medullary inspiratory neurons and phrenic nerve by fentanyl and reversal with nalbuphine. Tabatabai M, et al. **Anesthesiology** 1989 Mar;70(3):489-95
On periodicities governing the construction of genes and proteins. Ohno S. **Anim Genet** 1988;19(4):305-16 (12 ref.)
Does the biorhythm of morningness or eveningness predict the arterial blood pressure level? Uusitalo A, et al. **Ann Clin Res** 1988;20 Suppl 48:51-3
Trauma and the full moon: a waning theory. Coates W, et al. **Ann Emerg Med** 1989 Jul;18(7):763-5
Neuroendocrine regulation of immune parameters. Photoperiod control of the spleen in Syrian hamsters. Brainard GC, et al. **Ann N Y Acad Sci** 1988;540:704-6
Primidone/phenobarbital-induced periodic alternating nystagmus. Schwankhaus JD, et al. **Ann Ophthalmol** 1989 Jun;21(6):230-2
Nightly variation of periodic leg movements in sleep in middle aged and elderly individuals. Bliwise DL, et al. **Arch Gerontol Geriatr** 1988 Dec;7(4):273-9
Participation of synovial mast cells in intermittent hydrarthrosis [letter] Malone DG, et al. **Arthritis Rheum** 1989 Mar;32(3):357-8
Erythrocyte sodium-potassium pump in thyrotoxic periodic paralysis. Lam KS, et al. **Aust N Z J Med** 1989 Feb; 19(1):6-10
Pineal and ovarian response to 22- and 24-h days in the ewe. English J, et al. **Biol Reprod** 1988 Aug;39(1):9-18
Timing of photorefractoriness in the European starling: significance of photoperiod early and late in the reproductive cycle. Falk H, et al. **Biol Reprod** 1988 Dec; 39(5):1004-8
Long day photoperiods and temperature of 20 degrees C induce spermatogenesis in blinded and non-blinded marbled newts during the period of testicular quiescence. Fraile B, et al. **Biol Reprod** 1988 Oct;39(3):649-55
Termination of the breeding season in the Suffolk ewe: involvement of an endogenous rhythm of reproduction. Malpaux B, et al. **Biol Reprod** 1988 Sep;39(2):254-63
Synchronization between beating cilia. Gheber L, et al. **Biophys J** 1989 Jan;55(1):183-91
Correction of canine cyclic hematopoiesis with recombinant human granulocyte colony-stimulating factor. Lothrop CD Jr, et al. **Blood** 1988 Oct;72(4):1324-8
A time to be born. Chamberlain GV, et al. **BMJ** 1988 Dec 24-31;297(6664):1637
"There is a tide in the affairs of women..." [letter] Rajasingham D, et al. **BMJ** 1989 Feb 25;298(6672):524
Circannual rhythmicity in the occurrence of idiopathic priapism in north-western India. Mandal AK, et al. **Br J Urol** 1989 Mar;63(3):317-9
A melatonin agonist and N-acetyl-N2-formyl-5-methoxykynurenamine accelerate the reentrainment of the melatonin rhythm following a phase advance of the light-dark cycle. Kennaway DJ, et al. **Brain Res** 1989 Aug 28;495(2):349-54
Type A alternating Wenckebach periodicity in the reentrant pathway of interpolated ventricular extrasystoles. Kinoshita S, et al. **Cardiology** 1988;75(6):440-3
Non-circadian rhythm in proliferation of haematopoietic stem cells. Nečas E, et al. **Cell Tissue Kinet** 1988 Mar; 21(2):73-80
Oscillations in blood cells as a consequence of suppressed bone marrow cell production. Tyazhelova VG. **Cell Tissue Kinet** 1987 Nov;20(6):539-49
Light and melatonin as zeitgebers in man. Arendt J, et al. **Chronobiol Int** 1987;4(2):273-82 (56 ref.)
Common 30-day multiple in gestation time of terrestrial placentals. Brown FM. **Chronobiol Int** 1988;5(3):195-210
The influence on survival of season of onset of childhood acute lymphoblastic leukemia (ALL). Cohen P. **Chronobiol Int** 1987;4(2):291-7
Circadian and seasonal variations of plasma insulin and cortisol concentrations in the Syrian hamster, Mesocricetus auratus. de Souza CJ, et al. **Chronobiol Int** 1987;4(2):141-51
Seasonal and daily variations in hypothalamic monoamine levels and monoamine oxidase activity in the teleost Channa punctatus (Bloch). Khan IA, et al. **Chronobiol Int** 1988; 5(4):311-6
Ultradian rhythms in arousal—the problem of masking. Lavie P. **Chronobiol Int** 1989;6(1):21-8
Masking and biological rhythms [editorial] Minors DS, et al. **Chronobiol Int** 1989;6(1):1-2
Circadian and circahemidian rhythms in plasma prolactin of the ram: seasonal changes. Ravault JP, et al. **Chronobiol Int** 1987;4(2):209-17
Induction of early seasonal sensitivity to melatonin in Suffolk-Cross ewes. Symons AM, et al. **Chronobiol Int** 1987;4(2):219-23
Effect of changing the light/dark schedule, the time of onset of the light or dark period, or the daylength, on rhythms of epidermal cell proliferation. Wright ML, et al. **Chronobiol Int** 1988;5(4):317-30
Rhythms in the ovulatory cycle. 1st: Prolactin. Chronobiological Research Group on Synthetic Peptides in Medicine. Carandente F, et al. **Chronobiologia** 1989 Jan-Mar;16(1):35-44
Hormones and blood pressure: clues from chronobiology. Carandente O. **Chronobiologia** 1989 Jan-Mar;16(1):45-88 (285 ref.)
Evidence of an endogenous circannual rhythm in growth-rates in dinoflagellates. Costas E, et al. **Chronobiologia** 1988 Jul-Sep;15(3):223-6
Chronobiological study of several enzymes of lysosomal origin in human plasma. Goi G, et al. **Chronobiologia** 1989 Apr-Jun;16(2):93-103
Osmoregulation of vasopressin secretion and thirst in cyclical oedema. Thompson CJ, et al. **Clin Endocrinol (Oxf)** 1988 Jun;28(6):629-35
A molting rhythm for serum proteins of the cockroach, Blatta orientalis. Duhamel RC, et al. **Comp Biochem Physiol [B]** 1978;60(3):333-7
Seasonal periodicity of perforated gastric ulcer. Christensen A, et al. **Dan Med Bull** 1988 Jun;35(3):281-2
Photoperiodic control of growth hormone secretion and body weight in rams. Barenton B, et al. **Domest Anim Endocrinol** 1988 Jul;5(3):247-55
LHRH and beta-endorphin in the hypothalamus of the ram in relation to photoperiod and reproductive activity. Ebling FJ, et al. **Domest Anim Endocrinol** 1987 Jul;4(3):149-56
Synergism and diurnal variations of human growth hormone-releasing factor (1-29)NH2 and thyrotropin-releasing factor on growth hormone release in dairy calves. Lapierre H, et al. **Domest Anim Endocrinol** 1987 Oct;4(4):207-14
The influence of duration of photoperiod and hemicastration on growth and testicular and endocrine functions of boars. Minton JE, et al. **Domest Anim Endocrinol** 1988 Jan; 5(1):71-80
Diurnal and episodic variations of plasma hydrocortisone concentrations in horses. Toutain PL, et al. **Domest Anim Endocrinol** 1988 Jan;5(1):55-9
Hypothalamic factors involved in the endogenous stimulatory rhythm regulating prolactin secretion. Arey BJ, et al. **Endocrinology** 1989 Feb;124(2):878-83
Prenatal photoperiod influences neonatal prolactin secretion in the sheep. Ebling FJ, et al. **Endocrinology** 1989 Jul; 125(1):384-91
Long-term course of schizoaffective disorders. Part I: Definitions, methods, frequency of episodes and cycles. Marneros A, et al. **Eur Arch Psychiatry Neurol Sci** 1988; 237(5):264-75
Long-term course of schizoaffective disorders. Part II: Length of cycles, episodes, and intervals. Marneros A, et al. **Eur Arch Psychiatry Neurol Sci** 1988;237(5):276-82
Statistical analysis of fever interval data. Stok CJ, et al. **Eur J Clin Invest** 1989 Apr;19(2):154-8
Cycles of juvenile hormone esterase activity during the juvenile hormone-driven cycles of oxygen consumption in pupal diapause of flesh flies. Denlinger DL, et al. **Experientia** 1989 May 15;45(5):474-6
Effects of photoperiod, temperature and testosterone-treatment on plasma T3 and T4 levels in the Djungarian hamster, Phodopus sungorus. Masuda A, et al. **Experientia** 1989 Jan 15;45(1):102-3
New data confirming a circannual rhythm in spermatogenesis. Politoff L, et al. **Fertil Steril** 1989 Sep; 52(3):486-9
Circannual rhythms of sperm parameters of fertile men. Saint Pol P, et al. **Fertil Steril** 1989 Jun;51(6):1030-3
Circannual changes in the serum levels of calcium and magnesium in laboratory mice. Fialkowska M. **Folia Biol (Krakow)** 1988;36(1-2):81-7
Thyroidectomy and the termination of juvenile refractoriness in the red-legged partridge (Alectoris graeca chukar). Creighton JA. **Gen Comp Endocrinol** 1988 Nov;72(2):204-8
Daily cycles in plasma melatonin levels under long or short photoperiod in the common carp, Cyprinus carpio. Kezuka H, et al. **Gen Comp Endocrinol** 1988 Nov;72(2):296-302
Photoperiodic time measurement during the termination of photorefractoriness in the starling (Sturnus vulgaris L.). Schleussner G, et al. **Gen Comp Endocrinol** 1989 Jul; 75(1):54-61
Modeling of a neural pattern generator with coupled nonlinear oscillators. Bay JS, et al. **IEEE Trans Biomed Eng** 1987 Apr;34(4):297-306 (31 ref.)
Moonlight and Champaign. Smith RP, et al. **IMJ** 1988 Sep; 174(3):151-4
Seasonal differences in the rhythmicity of human male and female lymphocyte blastogenic responses. Boctor FN, et

al. **Immunol Invest** 1989 Jul;18(6):775–84
Specific immunological unresponsiveness to bacterial lipopolysaccharides develops in a cyclic manner. Elkins KL, et al. **Infect Immun** 1989 Jul;57(7):2253–5
Experimental formation of 100 nm periodic fibrils in the mouse corneal stroma and trabecular meshwork. Hirano K, et al. **Invest Ophthalmol Vis Sci** 1989 May;30(5):869–74
Effect of traffic noise on the cyclical nature of sleep. Thiessen GJ. **J Acoust Soc Am** 1988 Nov;84(5):1741–3
Two BASIC programs for statistical analysis of periodicity data, based on the sine–wave function. Linley JR. **J Am Mosq Control Assoc** 1985 Jun;1(2):251–3
24–hour pulsatile and circadian patterns of cortisol secretion in alcoholic men. Iranmanesh A, et al. **J Androl** 1989 Jan–Feb;10(1):54–63
Influences of season and artificial photoperiod on stallions: pituitary and testicular responses to exogenous GnRH. Clay CM, et al. **J Anim Sci** 1989 Mar;67(3):763–70
Photoperiod and heat stress influence on lactating sow performance and photoperiod effects on nursery pig performance. McGlone JJ, et al. **J Anim Sci** 1988 Aug; 66(8):1915–9
Daily exercise enhances coronary resistance vessel sensitivity to pharmacological activation. DiCarlo SE, et al. **J Appl Physiol** 1989 Jan;66(1):421–8
Coupling of cardiac and locomotor rhythms. Kirby RL, et al. **J Appl Physiol** 1989 Jan;66(1):323–9
Characteristics of parathyroid hormone–specific cyclic changes of glucose–6–phosphate dehydrogenase activity in the distal convoluted tubule of the guinea pig. Sakaguchi K, et al. **J Bone Miner Res** 1986 Jun;1(3):259–65
Infradian biorhythms of enzymuria in man? Burchardt U, et al. **J Clin Chem Clin Biochem** 1988 Aug;26(8):491–6
Circadian, ultradian, and episodic release of beta–endorphin in men, and its temporal coupling with cortisol. Iranmanesh A, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1019–26
Fasting alters pulsatile and rhythmic cortisol release in normal man. Vance ML, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1013–8
Abnormal responses of myeloid progenitor cells to granulocyte–macrophage colony–stimulating factor in human cyclic neutropenia. Wright DG, et al. **J Clin Invest** 1989 Apr;83(4):1414–8
Neuroendocrine markers in periodic catatonia [letter] McCall WV. **J Clin Psychiatry** 1989 Mar;50(3):109
Full moon: does it influence agitated nursing home residents? Cohen–Mansfield J, et al. **J Clin Psychol** 1989 Jul; 45(4):611–4
Influence of photoperiod and gonadal steroids on hibernation in the European hamster. Darrow JM, et al. **J Comp Physiol** [A] 1988 Jul;163(3):339–48
Photoperiod modifies daily maps of light and dark sensitivity for N–acetyltransferase activity in pineal glands of 3–week old Gallus domesticus. Binkley S, et al. **J Comp Physiol** [B] 1989;159(1):37–42
Pulsatile secretion of LH in women. Perks NF, et al. **J Endocrinol** 1988 Oct;119(1):1–3 (23 ref.)
Changes in the testicular binding of luteinizing hormone and plasma testosterone concentrations in the Djungarian hamster subjected to different photoperiods and temperatures and effects of long–term testosterone treatment on the binding. Tsutsui K, et al. **J Exp Zool** 1989 Jul;251(1):91–100
Effect of a light pulse during the dark on photoperiodic regulation of the rate of thyroxine–induced, spontaneous, and prolactin–inhibited metamorphosis in Rana pipiens tadpoles [published erratum appears in J Exp Zool 1988 Nov;248(2):251] Wright ML, et al. **J Exp Zool** 1988 Jul; 247(1):99–108
Rapid cycling mood disorder in the elderly. Conlon P. **J Geriatr Psychiatry Neurol** 1989 Apr–Jun;2(2):106–8
Poiseuille, periodicity, and perfusion: rhythmic oscillatory vasomotion in the skin. Wilkin JK. **J Invest Dermatol** 1989 Aug;93(2 Suppl):113S–118S
Effects of photoperiod on nymphal diapause in Amblyomma americanum (Acari: Ixodidae). Pound JM, et al. **J Med Entomol** 1988 Nov;25(6):479–83
Effect of different photoperiod exposure on [3H]imipramine binding and serotonin uptake in the rat brain. Rovescalli AC, et al. **J Neurochem** 1989 Feb;52(2):507–14
Periodicity coding in the inferior colliculus of the cat. II. Topographical organization. Schreiner CE, et al. **J Neurophysiol** 1988 Dec;60(6):1823–40
Interruptions of fictive scratch motor rhythms by activation of cutaneous flexion reflex afferents in the turtle. Currie SN, et al. **J Neurosci** 1989 Feb;9(2):488–96
Induction of rhythmic jaw movements by stimulation of the mesencephalic reticular formation in the guinea pig. Hashimoto N, et al. **J Neurosci** 1989 Aug;9(8):2887–901
Effect of pinealectomy, eye enucleation, and melatonin treatment on ovarian activity and vitellogenin levels in the catfish exposed to short photoperiod or long photoperiod. Garg SK. **J Pineal Res** 1989;7(2):91–104
Effects of protein restriction, melatonin administration, and short daylength on brain benzodiazepine receptors in prepubertal male rats. Kennaway DJ, et al. **J Pineal Res** 1988;5(5):455–67
Circannual serum creatine kinase patterns after ganglionectomy and pinealectomy of the Wistar rat. Peschke D, et al. **J Pineal Res** 1989;6(4):375–83
Effects of daily afternoon melatonin administration on body weight and thyroid hormones in female hamsters. Petterborg LJ, et al. **J Pineal Res** 1989;6(4):367–73
Alterations of temperature, sleepiness, mood, and performance in residents are not associated with changes in sulfatoxymelatonin excretion. Sharp KH, et al. **J Pineal Res** 1988;5(6):499–512
Time of the sidereal year affects responsiveness to the phase–resetting effects of photoperiod in the ewe. Jackson GL, et al. **J Reprod Fertil** 1989 Jan;85(1):221–7
Long–term reproductive cycles in rams after pinealectomy or superior cervical ganglionectomy. Lincoln GA, et al. **J Reprod Fertil** 1989 Mar;85(2):687–704
Periodic fluctuation of blood pressure and its management in a patient with pheochromocytoma. Case report and review of the literature. Oishi S, et al. **Jpn Heart J** 1988 May;29(3):389–99 (20 ref.)
Circannual variation in the expression of beta 2–adrenoceptors on human peripheral mononuclear leukocytes (MNLs). Haen E, et al. **Klin Wochenschr** 1988 Jul 1;66(13):579–82
Idiopathic cyclic nausea and vomiting—a disorder of gastrointestinal motility? Abell TL, et al. **Mayo Clin Proc** 1988 Dec;63(12):1169–75
Familial periodic ataxia. Hankey GJ, et al. **Med J Aust** 1989 Mar 6;150(5):277–8
Influence of experimental illumination and seasonal variation on crossbreeding mating in the snail Biomphalaria glabrata. Pimentel–Souza F, et al. **Mem Inst Oswaldo Cruz** 1988 Jan–Mar;83(1):79–85
Destruction of the dorsal anterior hypothalamic region suppresses pulsatile release of follicle stimulating hormone but not luteinizing hormone. Lumpkin MD, et al. **Neuroendocrinology** 1989 Aug;50(2):229–35
Reproductive refractoriness of the ewe to inhibitory photoperiod is not caused by alteration of the circadian secretion of melatonin. Malpaux B, et al. **Neuroendocrinology** 1988 Sep;48(3):264–70
Daily melatonin injections affect the expression of circadian rhythmicity in Djungarian hamsters kept under a long–day photoperiod. Puchalski W, et al. **Neuroendocrinology** 1988 Sep;48(3):280–6
Diurnal and circannual variation in platelet 3H–imipramine binding: comparative data on normal and affectively ill subjects. Baron M, et al. **Neuropsychobiology** 1988; 19(1):9–11
Periodic alternating nystagmus. DiBartolomeo JR, et al. **Otolaryngol Head Neck Surg** 1988 Dec;99(6):552–7
Periodic fever associated with aphthous stomatitis, pharyngitis and cervical adenitis. Feder HM Jr, et al. **Pediatr Infect Dis J** 1989 Mar;8(3):186–7
Geophysical variables and behavior: LI. Temporal variation of suicide in teens and young adults. Frank ML, et al. **Percept Mot Skills** 1988 Oct;67(2):586
Effect of photoperiod and acclimation temperature on nonshivering thermogenesis and GDP–binding of brown fat mitochondria in the Djungarian hamster Phodopus s. sungorus. Wiesinger H, et al. **Pflugers Arch** 1989 Apr; 413(6):667–72
Infrequent periodic sleep disruption: effects on sleep, performance and mood. Bonnet MH. **Physiol Behav** 1989 May;45(5):1049–55
Plasma catecholamine and corticosterone responses to predictable and unpredictable noise stress in rats. De Boer SF, et al. **Physiol Behav** 1989 Apr;45(4):789–95
Stress–rest cyclicity in the pathogenesis of restraint–induced stress gastric ulcers in rats. Murison R, et al. **Physiol Behav** 1989 Apr;45(4):809–13
Sleep cyclicity in infants during the earliest postnatal weeks. Thoman EB, et al. **Physiol Behav** 1989 Mar;45(3):517–22
Relationship between throat feather–color pattern and photodependency of testicular function in the athens randombred control line of Japanese quail. Burke WH, et al. **Poult Sci** 1988 Jul;67(7):1098–101
Effects of photoperiod and filtered light on growth, reproduction, and mating behavior of turkeys. 1. Growth performance of two lines of males and females. Levenick CK, et al. **Poult Sci** 1988 Nov;67(11):1505–13
Daily changes in concentrations of prolactin in serum of prepubertal bulls exposed to short– or long–day photoperiods. Petitclerc D, et al. **Proc Soc Exp Biol Med** 1989 May;191(1):37–42
Lunar phase and birthrate: a 50–year critical review. Martens R, et al. **Psychol Rep** 1988 Dec;63(3):923–34 (32 ref.)
Is it healthy to be chaotic? [news] Pool R. **Science** 1989 Feb 3;243(4891):604–7
Episodic disorders of childhood. Evans OB. **Semin Neurol** 1988 Spring;8(1):42–50 (69 ref.)
Night–to–night variability in sleep apnea and sleep–related periodic leg movements in the elderly. Mosko SS, et al. **Sleep** 1988 Aug;11(4):340–8
Periodic movements in sleep and sleep–wake complaint. Saskin P, et al. **Sleep** 1985 Dec;8(4):319–24
Do weather, day of the week, and address affect the rate of attempted suicide in Hong Kong? Chiu LP. **Soc Psychiatry Psychiatr Epidemiol** 1988 Oct;23(4):229–35
Exploring environmental cycles in psychiatric patients. Temte JL. **Wis Med J** 1989 Jan;88(1):17–20
[Regulatory rhythms in physiological systems. Synchronous proliferation of stem cells in hematopoietic tissue] Nečas E. **Cas Lek Cesk** 1988 Dec 16;127(51):1595–8 (Eng. Abstr.) (Cze)
[The effect of solar activity on lunar changes in cardiovascular mortality] Sitar J. **Cas Lek Cesk** 1989 Mar 31;128(14):425–8 (Eng. Abstr.) (Cze)
[Weekly biological rhythms in morbidity and mortality due to cardiovascular diseases] Sitar J. **Cas Lek Cesk** 1989 May 12;128(20):628–30 (Eng. Abstr.) (Cze)
[The season, melatonin and reproduction] Kauppila A, et al. **Duodecim** 1988;104(21):1687–93 (Fin)
[Temporal correlations and coding of information in the visual cortex of the cat] Lestienne R, et al. **C R Acad Sci [III]** 1988;307(8):511–6 (Eng. Abstr.) (Fre)
[Clinical and experimental applications of biological rhythms] Touitou Y. **Endocrinologie** 1988 Oct–Dec;26(4):239–46 (Fre)
[Annual rhythm of the excretion of indole melanogen in human urine] Schwartze G. **Arch Geschwulstforsch** 1988; 58(5):341–4 (Eng. Abstr.) (Ger)
[Periodic local approximation for the model free description of measurement courses of biorhythmic processes—demonstration example for the selection of smoothness parameters] Peil J, et al. **Gegenbaurs Morphol Jahrb** 1989;135(2):261–9 (Eng. Abstr.) (Ger)
[Familial periodic ataxia] Kurlemann G, et al. **Monatsschr Kinderheilkd** 1988 Aug;136(8):462–3 (Eng. Abstr.) (Ger)
[The biorhythm of gingival temperature] Eismann R, et al. **Zahn Mund Kieferheilkd** 1989;77(2):131–3 (Eng. Abstr.) (Ger)
[Microcomputer–assisted telemetry system for recording ultradian temperature rhythms in large animals] Mohr E, et al. **Zentralbl Veterinarmed** [A] 1989 May;36(5):331–9 (Eng. Abstr.) (Ger)
[Colony stimulating activity, colony inhibiting activity and immunological studies in a case of adult–onset cyclic neutropenia] Arai N, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Aug;51(5):879–84 (Eng. Abstr.) (Jpn)
[Cyclic thrombocytopenia treated by high–dose intravenous immunoglobulin with a favorable response] Aoki Y, et al. **Rinsho Ketsueki** 1988 May;29(5):705–10 (Eng. Abstr.) (Jpn)
[The influence of the moon on deliveries] Backe B, et al. **Tidsskr Nor Laegeforen** 1988 Dec 10;108(34–36):3183–5 (Eng. Abstr.) (Nor)
[Influence of the feeding regimen on the rhythmicity of the processes of secretion of the supraoptic nucleus in C57Bl mice] Iushkantseva SI. **Arkh Anat Gistol Embriol** 1988 Jul; 95(7):24–8 (Eng. Abstr.) (Rus)
[Periodicity of spermatozoa movement] Begma AA, et al. **Biofizika** 1988 Jul–Aug;33(4):637–41 (Eng. Abstr.) (Rus)
[Amplitude–frequency modulation of electroencephalogram associated with rhythmic movements] Gutman SR, et al. **Biofizika** 1988 Sep–Oct;33(5):860–2 (Eng. Abstr.) (Rus)
[The nature and biological role of near–weekly rhythm] Malenkov AG, et al. **Biofizika** 1988 Jul–Aug;33(4):703–7 (Eng. Abstr.) (Rus)
[The study of rhythmic changes in the liver hemodynamics by biophysical methods] Sarbash VI. **Biofizika** 1988 Jul–Aug;33(4):726–7 (Eng. Abstr.) (Rus)
[Rhythmic activity of the olfactory bulb of the carp under nembutal anesthesia] Kaplan AIa. **Biol Nauki** 1988; (10):50–4 (Rus)
[Frequency and phase correlations of the biorhythms of metabolic indices in mice during their postnatal ontogeny] Weinert D, et al. **Biull Eksp Biol Med** 1988 Dec; 106(12):723–6 (Eng. Abstr.) (Rus)
[Evaluation of parameters of psychophysiologic, biorhythmologic and hormonal–metabolic status during adaptation of humans to operator work] Kazin EM, et al. **Fiziol Cheloveka** 1989 Jan–Feb;15(1):167–9 (Rus)
[Biorhythmologic characterization of adaptive changes of the circulatory system in Antarctica] Klopov VP, et al. **Fiziol Cheloveka** 1988 Nov–Dec;14(6):990–1000 (Rus)
[Effect of temperature on the spontaneous rhythmic activity of the neurons in the spinal centers of the frog lymphatic hearts] Ruchinskaia TIu, et al. **Fiziol Zh SSSR** 1989 Feb; 75(2):212–7 (Eng. Abstr.) (Rus)
[Biological rhythms of the blood coagulation control system in rabbits] Subbotina LA, et al. **Gematol Transfuziol** 1988 Jul;33(7):30–3 (Eng. Abstr.) (Rus)
[Cyclicity and the prognosis of tick–borne encephalitis morbidity in the Krasnoyarsk Territory: expert and mathematical assessments] Naumov RL, et al. **Med Parazitol (Mosk)** 1989 May–Jun;(3):3–6 (Eng. Abstr.) (Rus)
[The phasic structure of early disorders of functional capacity following irradiation in rats] Malakhovskii VN, et al. **Radiobiologiia** 1989 May–Jun;29(3):389–94 (Eng. Abstr.) (Rus)
[Periodic phenomenon in the ECoG of newborn rat pups and its correlation with spontaneous motor activity] Dmitrieva LE, et al. **Zh Evol Biokhim Fiziol** 1989 Jan–Feb; 25(1):60–6 (Eng. Abstr.) (Rus)
[Seasonal affective disorders] Lagomarsino AJ. **Acta Psiquiatr Psicol Am Lat** 1988 Sep;34(3):260–1 (Spa)

PERIODONTAL ABSCESS see under **PERIODONTITIS**

PERIODONTAL BONE LOSS see **BONE RESORPTION**

PERIODONTAL CYST

COMPLICATIONS

A lateral periodontal cyst in association with a follicular cyst. Buckley FM, et al. **Br Dent J** 1989 Jul 8;167(1):26–8

CONGENITAL

Simultaneous occurrence of a congenital lateral upper lip sinus and congenital gingival cyst: a case report and discussion of pathogenesis. Garlick JA, et al. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):317–23

PATHOLOGY

Respiratory epithelium in an apical periodontal cyst of the mandible. Redman RS. **Oral Surg Oral Med Oral Pathol** 1989 Jan;67(1):77–80

The inflammatory paradental cyst. Vedtofte P, et al. **Oral Surg Oral Med Oral Pathol** 1989 Aug;68(2):182–8

PERIODONTAL CYST, APICAL see **RADICULAR CYST**

PERIODONTAL DISEASES

Dental patients' knowledge and beliefs about periodontal disease. Bader JD, et al. **Community Dent Oral Epidemiol** 1989 Apr;17(2):60–4

Immediate and delayed effects of a dental health education film on periodontal knowledge, attitudes, and reported behavior of Dutch adolescents. ter Horst G, et al. **Community Dent Oral Epidemiol** 1989 Aug;17(4):183–6

Common dental emergencies. Evaluation and management for emergency physicians. Klokkevold P. **Emerg Med Clin North Am** 1989 Feb;7(1):29–63 (40 ref.)

Awareness and assessment of periodontal problems among dentists and the public. Gift HC. **Int Dent J** 1988 Sep; 38(3):147–53 (56 ref.)

Cotinine in saliva and gingival crevicular fluid of smokers with periodontal disease. McGuire JR, et al. **J Periodontol** 1989 Apr;60(4):176–81

Public health implications of recent research in periodontal diseases. Burt BA. **J Public Health Dent** 1988 Fall; 48(4):252–6 (104 ref.)

Is it time to reassess the public health implications of periodontal diseases? A review of current concepts. Hunt RJ. **J Public Health Dent** 1988 Fall;48(4):241–4 (40 ref.)

Differing opinions re law suits [letter] Shpuntoff H. **N Y State Dent J** 1988 Oct;54(8):10

Expanding horizons in periodontics [editorial] Tillis BP. **N Y State Dent J** 1989 Jun–Jul;55(6):5

Endodontic–periodontic lesions. Part I: Prevalence, aetiology, and diagnosis. Whyman RA. **N Z Dent J** 1988 Jul;84(377):74–7 (37 ref.)

BLOOD

Neutrophil function in patients with localized juvenile periodontitis and with rapidly progressive periodontitis. Zafiropoulos GG, et al. **J Biol Buccale** 1988 Sep; 16(3):151–6

Depressed helper–to–suppressor T–cell ratios in early–onset forms of periodontal disease. Kinane DF, et al. **J Periodont Res** 1989 May;24(3):161–4

[Oxidative metabolism of the peripheral neutrophilic granulocytes in patients with rapidly progressing and with localized juvenile periodontitis] Zafiropoulos GG, et al. **Zahn Mund Kieferheilkd** 1988;76(6):595–602 (Eng. Abstr.) **(Ger)**

CHEMICALLY INDUCED

[Clinical picture of dentition, periodontium and mouth mucosa in pharmaceutical industry workers] Nowicka J, et al. **Med Pr** 1988;39(2):130–6 (Eng. Abstr.) **(Pol)**

[Effect of occupational factors on the condition of the oral cavity in workers engaged in the processing of non–ferrous metals] Abduazimov AD. **Gig Tr Prof Zabol** 1988 Aug; (8):34–6 (Eng. Abstr.) **(Rus)**

COMPLICATIONS

Legal aspects of orthodontic practice: risk management concepts. Periodontal disease in orthodontic practice. Machen DE. **Am J Orthod Dentofacial Orthop** 1989 May; 95(5):445–7

Dental health and acute myocardial infarction [letter] Gilmour H, et al. **BMJ** 1989 Jun 10;298(6687):1579–80

Alveolar bone loss and crowding in adult periodontal patients. Jensen BL, et al. **Community Dent Oral Epidemiol** 1989 Feb;17(1):47–51

Rapidly progressive periodontal disease associated with HIV infection: report of case. Rosenstein DI, et al. **J Am Dent Assoc** 1989 Mar;118(3):313–4

Periodontal considerations of implants and implant associated microbiota. Newman MG, et al. **J Dent Educ** 1988 Dec; 52(12):737–44 (55 ref.)

Management of root–amputated maxillary molar teeth: periodontal and prosthetic considerations. Schmitt SM, et al. **J Prosthet Dent** 1989 Jun;61(6):648–52

Endodontic–periodontic lesions. Part II: Management. Whyman RA. **N Z Dent J** 1988 Oct;84(378):109–11 (19 ref.)

Cervical abrasion in relation to toothbrushing and periodontal health. Bergström J, et al. **Scand J Dent Res** 1988 Oct; 96(5):405–11

[Clinical studies on the corrective orthodontics in periodontal diseases] Tao LM. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Jan;24(1):37–9 **(Chi)**

DIAGNOSIS

Evaluation of simple periodontal screening technique currently used in the UK armed forces. Eaton KA, et al. **Community Dent Oral Epidemiol** 1989 Aug;17(4):190–5

Periodontal status and treatment needs among regular dental patients. Bader JD, et al. **Int Dent J** 1988 Dec;38(4):255–60

Detection of high–risk groups and individuals for periodontal diseases: laboratory markers from analysis of gingival crevicular fluid. Curtis MA, et al. **J Clin Periodontol** 1989 Jan;16(1):1–11 (147 ref.)

Detection of high–risk groups and individuals for periodontal diseases. Clinical assessment of the periodontium. Griffiths GS, et al. **J Clin Periodontol** 1988 Aug;15(7):403–10 (57 ref.)

Detection of high–risk groups and individuals for periodontal diseases: laboratory markers from analysis of saliva. Wilton JM, et al. **J Clin Periodontol** 1989 Sep;16(8):475–83 (51 ref.)

Diagnosis of periodontal diseases. Changing concepts. A challenge for the future. Ference R. **N Y State Dent J** 1989 Jun–Jul;55(6):30–3 (21 ref.)

Subgingival microflora, dental and periodontal conditions in patients with hereditary fructose intolerance. Saxén L, et al. **Scand J Dent Res** 1989 Apr;97(2):150–8

[Periodontal diagnosis. Review of the literature] Matarasso S, et al. **Minerva Stomatol** 1989 May;38(5):557–65 (69 ref.) (Eng. Abstr.) **(Ita)**

[The sign of induced bleeding in the evaluation of individual susceptibility to periodontal disease. Experimental study in diabetic and non–diabetic patients] Paolantonio M, et al. **Minerva Stomatol** 1989 Feb;38(2):195–9 (Eng. Abstr.) **(Ita)**

[Assessment of the somatic and dental status of children with periodontitis of the deciduous teeth taking into account clinical x–ray and hematologic indices] Roginskiĭ VV, et al. **Stomatologiia (Mosk)** 1988 Sep–Oct;67(5):64–7 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Blood serum vitamin E and A levels during peroral therapy of periodontal diseases with zinc sulphate. Cerná H, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;119:187–93

Metronidazole plus amoxycillin in the treatment of Actinobacillus actinomycetemcomitans associated periodontitis. van Winkelhoff AJ, et al. **J Clin Periodontol** 1989 Feb;16(2):128–31

The role of non–steroidal anti–inflammatory drugs in the management of periodontal disease. Heasman PA. **J Dent** 1988 Dec;16(6):247–57 (84 ref.)

Ibuprofen: an inhibitor of alveolar bone resorption in beagles. Williams RC, et al. **J Periodont Res** 1988 Jul;23(4):225–9

Use of antimicrobial containing acrylic strips in the treatment of chronic periodontal disease. A three month follow–up study. Addy M, et al. **J Periodontol** 1988 Sep;59(9):557–64

Chemotherapeutics in periodontics. Bral M. **N Y State Dent J** 1989 Jun–Jul;55(6):38–42 (0 ref.)

[Juvenile periodontitis patients taking gu chi gao] Zhao RF. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Nov; 23(6):368–70, 385 (Eng. Abstr.) **(Chi)**

[Spiramycin] Lamy L, et al. **Can Dent Assoc J** 1989 May; 55(5):393–5 (38 ref.) (Eng. Abstr.) **(Fre)**

[Indications and comparative evaluation of chlorhexidine in periodontal therapy] Crea D, et al. **Minerva Stomatol** 1988 May;37(5):397–407 (52 ref.) (Eng. Abstr.) **(Ita)**

[Use of miocamycin in infections of the oral cavity] Fiorentini F, et al. **Minerva Stomatol** 1989 Jun;38(6):653–5 (Eng. Abstr.) **(Ita)**

[Chlorhexidine in periodontal therapy] Nonato M, et al. **Minerva Stomatol** 1989 May;38(5):547–56 (105 ref.) (Eng. Abstr.) **(Ita)**

[Evaluation of the therapeutic and preventive effectiveness of the use of a polymer film in periodontal lesions in workers in the aluminum industry] Karagezian TA, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):40–2 **(Rus)**

ECONOMICS

Cost–effectiveness analysis of periodontal disease control [letter] Kraal JH. **J Dent Res** 1988 Mar;67(3):611

ENZYMOLOGY

Impaired polymorphonuclear leukocyte 15–lipoxygenase activity in juvenile and rapidly progressive periodontitis. Noguchi K, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Aug; 33(2):137–41

EPIDEMIOLOGY

Dental survey in Nigeria. Part 4. Prevalence and severity of periodontal diseases. Kubota K, et al. **Bull Tokyo Med Dent Univ** 1988 Jun;35(1–2):11–7

Sex differences in the periodontal status of Hong Kong adults aged 35–44 years. Corbet EF, et al. **Community Dent Health** 1989 Mar;6(1):23–30

The dental health status of 6 and 12 year–old Beijing schoolchildren in 1987. Wright FA, et al. **Community Dent Health** 1989 Jun;6(2):121–30

Prevalence of juvenile periodontitis in schoolchildren in Lagos, Nigeria. Harley AF, et al. **Community Dent Oral Epidemiol** 1988 Oct;16(5):299–301

Periodontal disease prevalence in different age groups in Japan as assessed according to the CPITN. Miyazaki H, et al. **Community Dent Oral Epidemiol** 1989 Apr;17(2):71–4

Periodontal conditions in 35–44–year–old factory workers in Shanghai. Pilot T, et al. **Community Dent Oral Epidemiol** 1989 Aug;17(4):216

Periodontal status and treatment needs in the Chiangmai/Lamphun provinces of Thailand. Songpaisan Y, et al. **Community Dent Oral Epidemiol** 1989 Aug; 17(4):196–9

Oral health in SFR Yugoslavia in 1986. Vrbič V, et al. **Community Dent Oral Epidemiol** 1988 Oct;16(5):286–8

Dental caries and periodontal diseases—a hospital based study. Verma M, et al. **Indian Pediatr** 1989 Feb;26(2):166–8

Periodontal diseases in adult Kenyans. Baelum V, et al. **J Clin Periodontol** 1988 Aug;15(7):445–52

Periodontal conditions in insulin–dependent diabetics. Hugoson A, et al. **J Clin Periodontol** 1989 Apr;16(4):215–23

Methods of evaluating periodontal disease data in epidemiological research. Okamoto H, et al. **J Clin Periodontol** 1988 Aug;15(7):430–9

Periodontal status in relation to age and tooth type. A cross–sectional radiographic study. Papapanou PN, et al. **J Clin Periodontol** 1988 Aug;15(7):469–78

Prevalence of interproximal periodontal intrabony defects in an adult population in Sweden. A radiographic study. Wouters FR, et al. **J Clin Periodontol** 1989 Mar;16(3):144–9

Analysis of site–specific data in dental studies. Donner A, et al. **J Dent Res** 1988 Nov;67(11):1392–5

Estimating periodontal treatment needs from epidemiological data [editorial] Douglass CW. **J Periodontol** 1989 Jul; 60(7):417–9

Systematic errors in estimating prevalence and severity of periodontal disease. Kingman A, et al. **J Periodontol** 1988 Nov;59(11):707–13

Clinical periodontal status of regularly attending patients in general dental practices. McFall WT Jr, et al. **J Periodontol** 1989 Mar;60(3):145–50

Trends in the prevalence and severity of periodontal diseases in the US: a public health problem? Capilouto ML, et al. **J Public Health Dent** 1988 Fall;48(4):245–51 (17 ref.)

[Periodontal care in the Eastern Bohemia Region] Dřízhal I, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(3):343–50 (Eng. Abstr.) **(Cze)**

[An epidemiologic survey of caries frequency and periodontal status in children 6 to 15 years of age in 11 provincial regions in central France, Bourgogne and the Ile de France] Lejeune M, et al. **J Biol Buccale** 1989 Mar;17(1):45–50 (Eng. Abstr.) **(Fre)**

[The dental component of the integrated program of preventing chronic noninfectious diseases in the Latvian SSR. I. Epidemiologic study of dental caries and periodontal diseases in the whole population of the Latvian SSR] Kanep VV, et al. **Sante Publique (Bucur)** 1989 Apr–Jun;32(2):139–44 (Eng. Abstr.) **(Fre)**

[Periodontal disease prevalence (CPITN) in the adults of an F–optimized drinking water area] Künzel W, et al. **Zahn Mund Kieferheilkd** 1989;77(1):17–9 (Eng. Abstr.) **(Ger)**

[Study on health status and oral hygiene of children at a primary school. Health status and oral hygiene in schoolchildren] Pizzi S, et al. **Acta Biomed Ateneo Parmense** 1988;59(3–4):93–102 (Eng. Abstr.) **(Ita)**

[Epidemiology, etiopathogenesis and prevention of periodontal disease: review, update] Carcone G, et al. **Nuovi Ann Ig Microbiol** 1986 Jan–Dec;37(1–6):187–204 (60 ref.) (Eng. Abstr.) **(Ita)**

[Buccodental lesions in patients with diabetes mellitus] Bârleanu L, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Apr–Jun;92(2):351–4 (Eng. Abstr.) **(Rum)**

[Dental involvement and the status of the periodontal tissues in children with diabetes mellitus] Smoliar NI, et al. **Stomatologiia (Mosk)** 1988 Nov–Dec;67(6):57–9 (Eng. Abstr.) **(Rus)**

ETHNOLOGY

The dental health of Indo–Chinese and Australian–born adolescents. Durward CS, et al. **Aust Dent J** 1989 Jun; 34(3):233–9

ETIOLOGY

The effect of controlled oral hygiene in overdenture wearers. Budtz–Jørgensen E, et al. **Acta Odontol Scand** 1988 Aug; 46(4):219–5

Causal relation between malocclusion and periodontal health. Helm S, et al. **Acta Odontol Scand** 1989 Aug;47(4):223–8

The age–dependent reaction of the periodontal tissues to dental plaque. Bimstein E, et al. **ASDC J Dent Child** 1989 Sep–Oct;56(5):358–62 (58 ref.)

Dental and oral symptoms of diabetes mellitus. Albrecht M, et al. **Community Dent Oral Epidemiol** 1988 Dec; 16(6):378–80

Detection of high–risk groups and individuals for periodontal

diseases. Johnson NW. **Int Dent J** 1989 Mar;39(1):33–47 (160 ref.)
Periodontal health at first permanent molars adjacent to primary molar stainless steel crowns. Guelmann M, et al. **J Clin Periodontol** 1988 Oct;15(9):531–3
Periodontal disease and oral microbial successions during myelosuppressive cancer chemotherapy. Reynolds MA, et al. **J Clin Periodontol** 1989 Mar;16(3):185–9
Periodontal manifestations of hyperoxaluria and oxalosis. Moskow BS. **J Periodontol** 1989 May;60(5):271–8
Rapidly progressive acute periodontal infection in a patient with acute leukemia. Stansbury DM, et al. **J Periodontol** 1988 Aug;59(8):544–7
Relationships between oro-facial lesions, mutilations and periodontal status in leprosy patients at Lo-Sheng Sanatorium at Taiwan. Wong MY, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Apr;87(4):437–44
[The "chief cause" and the "main route" of the pathogenesis of periodontal diseases (apropos the article by R. D. Barabash Concepts of the etiology and pathogenesis of periodontal diseases)] Tsepov LM. **Stomatologiia (Mosk)** 1989 Mar-Apr;68(2):87–8 **(Rus)**

IMMUNOLOGY

Limit dilution analysis of peripheral blood T lymphocytes specific to periodontopathic bacteria. Mahanonda R, et al. **Clin Exp Immunol** 1989 Feb;75(2):245–51
Distribution of immunoglobulin isotypes including IgA subclasses in adult, juvenile, and rapidly progressive periodontitis. Kilian M, et al. **J Clin Periodontol** 1989 Mar; 16(3):179–84
Effects of race and periodontal status on antibody reactive with Actinobacillus actinomycetemcomitans strain Y4. Gunsolley JC, et al. **J Periodont Res** 1988 Sep;23(5):303–7
IgG subclasses in gingival crevicular fluid from active versus stable periodontal sites. Reinhardt RA, et al. **J Periodontol** 1989 Jan;60(1):44–50
[The distribution of blood antigen associations in persons with periodontal diseases] Savranskiĭ FZ. **Vrach Delo** 1988 Sep; (9):99–100 (Eng. Abstr.) **(Rus)**

METABOLISM

Concentrations of tetracycline in human gingival tissue in patients with chronic periodontal disease [letter] Shifer A, et al. **J Antimicrob Chemother** 1989 Mar;23(3):464–5
Fibronectin levels of unstimulated saliva from naval recruits with and without chronic inflammatory periodontal disease. Lamberts BL, et al. **J Clin Periodontol** 1989 Jul;16(6):342–6
[Humoral indicators of periodontal disease activity] Zarone F, et al. **Minerva Stomatol** 1988 Sep;37(9):701–7 (49 ref.) (Eng. Abstr.) **(Ita)**
[Compensatory-adaptive and alternative processes in periodontal tissues in hypothyroidism] Kerimov EE. **Vrach Delo** 1989 Feb;(2):19–21 **(Rus)**

MICROBIOLOGY

Small-sized oral spirochetes and periodontal disease. Fiehn NE. **APMIS Suppl** 1989;7:1–31 (215 ref.)
Bacteriology of periodontal disease in the cat. Mallonee DH, et al. **Arch Oral Biol** 1988;33(9):677–83
Antibiotic susceptibility of bacteria isolated from active, therapy-resistant periodontal sites. De Luca M. **Chemioterapia** 1988 Oct;7(5):309–12
Biochemical characteristics and pathogenicity of periodontal pathogens. Shah HN, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):16–7
Chemical differences in lipopolysaccharides from Actinobacillus (Haemophilus) actinomycetemcomitans and Haemophilus aphrophilus: clues to differences in periodontopathogenic potential and taxonomic distinction. Brondz I, et al. **Infect Immun** 1989 Oct;57(10):3106–9
Microbiological aspects of diseases [letter] Oshrain HI, et al. **J Clin Periodontol** 1989 Feb;16(2):132
A comparison of Bacteroides ureolyticus isolates from different clinical sources. Duerden BI, et al. **J Med Microbiol** 1989 May;29(1):63–73
Plaque-related infections. MacFarlane TW. **J Med Microbiol** 1989 Jul;29(3):161–70 (63 ref.)
Multivariate analysis of periodontal disease and subgingival microbial compositions--in patients treated with fixed prosthetic appliances. Mega J, et al. **J Nihon Univ Sch Dent** 1988 Sep;30(3):227–36
Ultrastructural observations on bacterial invasion in cementum and radicular dentin of periodontally diseased human teeth. Adriaens PA, et al. **J Periodontol** 1988 Aug; 59(8):493–503
Microbiologic assessments to enhance periodontal diagnosis. Greenstein G. **J Periodontol** 1988 Aug;59(8):508–15 (56 ref.)
Oral hygiene and the prevalence of oral group D streptococci in medically-physically compromised and periodontal disease patients. McCrary BR, et al. **J Periodontol** 1989 May;60(5):255–8
Periodontopathic micro-organisms in the rice rat (Oryzomys palustris). Shklair IL, et al. **Microbios** 1988;55(222):25–31
Outer membranous vesicles and leukotoxic activity of Actinobacillus actinomycetemcomitans from subjects with different periodontal status. Tervahartiala B, et al. **Scand J Dent Res** 1989 Feb;97(1):33–42
Scanning electron microscope and intragingival microorganisms in periodontal diseases. Saglie FR. **Scanning Microsc** 1988 Sep;2(3):1535–40 (31 ref.)
[Smearing examination of subgingival plaque in healthy subjects and in periodontal diseases in humans] Cheng P. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 May; 23(3):158–60, 191 (Eng. Abstr.) **(Chi)**
[Microbiological factors in the epidemiology of periodontal disease] Marino F. **Nuovi Ann Ig Microbiol** 1986 Jan-Dec; 37(1–6):111–25 (Eng. Abstr.) **(Ita)**
[Isolation of viridans streptococci from the lesions of periodontal diseases] Miyamoto Y, et al. **Kansenshogaku Zasshi** 1988 Oct;62(10):916–9 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Localized prepubertal periodontitis: literature review and report of case. Myers DR, et al. **ASDC J Dent Child** 1989 Mar-Apr;56(2):107–11 (13 ref.)
The relationship between microbiological assays and the clinical signs of periodontal disease. Newcomb GM, et al. **Aust Dent J** 1989 Feb;34(1):13–9
Computer-assisted densitometric image analysis (CADIA) for the assessment of alveolar bone density changes in furcations. Bräegger U, et al. **J Clin Periodontol** 1989 Jan; 16(1):46–52
Scanning electron microscopic examination of pocket wall epithelium and associated plaque in localized juvenile periodontitis. Verderame RA, et al. **J Clin Periodontol** 1989 Apr;16(4):234–41
Altered distribution of type I collagen mRNA in periodontal disease. Larjava H, et al. **J Periodont Res** 1989 May; 24(3):171–7
T cells and T-cell subsets in periodontal diseases. Meng HX, et al. **J Periodont Res** 1989 Mar;24(2):121–6
In situ activated T lymphocytes in active versus stable periodontal lesions. Reinhardt RA, et al. **J Periodont Res** 1988 Sep;23(5):295–302
Comparison of scanning and transmission electron microscopy of the epithelial pocket wall in juvenile and adult periodontitis. Shafik SS, et al. **J Periodontol** 1988 Aug;59(8):535–43
Metastatic adenocarcinoma of the colon presenting as periradicular periodontal disease: a case report. Naylor GD, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):162–6
Chemotactic response of neutrophil polymorphonuclear leukocytes in juvenile periodontitis measured by the Leading Front method. Pedersen MM. **Scand J Dent Res** 1988 Oct;96(5):421–7
[Morphologic description and analysis of calculus on the root surface of extracted teeth] Yi GH. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Nov; 23(6):331–3, 384 (Eng. Abstr.) **(Chi)**
[Ultrastructural aspects of chronic superficial marginal periodontopathies] Dobre S, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Apr-Jun;92(2):333–4 (Eng. Abstr.) **(Rum)**

PHYSIOPATHOLOGY

Intrusion of incisors in adult patients with marginal bone loss. Melsen B, et al. **Am J Orthod Dentofacial Orthop** 1989 Sep;96(3):232–41
Effect of placement of occlusive membranes on root resorption and bone regeneration during healing of circumferential periodontal defects in dogs. Claffey N, et al. **J Clin Periodontol** 1989 Jul;16(6):371–9
Neutrophil chemotactic behaviour in patients with early-onset forms of periodontitis (I). Leading front analysis in Boyden chambers. Kinane DF, et al. **J Clin Periodontol** 1989 Apr;16(4):242–6
Neutrophil chemotactic behaviour in patients with early-onset forms of periodontitis (II). Assessment using the under agarose technique. Kinane DF, et al. **J Clin Periodontol** 1989 Apr;16(4):247–51
A 10-year retrospective study of periodontal disease progression. Papapanou PN, et al. **J Clin Periodontol** 1989 Aug;16(7):403–11
Relationship of subgingival microbial complexes to clinical features at the sampled sites. Socransky SS, et al. **J Clin Periodontol** 1988 Aug;15(7):440–4
Hormonal influences on gingival tissue: relationship to periodontal disease. Sooriyamoorthy M, et al. **J Clin Periodontol** 1989 Apr;16(4):201–8 (70 ref.)
Altered free cytosolic calcium changes and neutrophil chemotaxis in patients with juvenile periodontitis. Agarwal S, et al. **J Periodont Res** 1989 Mar;24(2):149–54
A stochastic model for periodontal breakdown. Manji F, et al. **J Periodont Res** 1989 Jul;24(4):279–81
Collagen membranes prevent apical migration of epithelium and support new connective tissue attachment during periodontal wound healing in dogs. Pitaru S, et al. **J Periodont Res** 1989 Jul;24(4):247–53
Retained "hopeless" teeth. Effects on the proximal periodontium of adjacent teeth. DeVore CH, et al. **J Periodontol** 1988 Oct;59(10):647–51
Defective neutrophil chemotaxis in Down's syndrome patients and its relationship to periodontal destruction. Izumi Y, et al. **J Periodontol** 1989 May;60(5):238–42
Periodontal health in 45,X women (Turner's syndrome). Väisänen P, et al. **Proc Finn Dent Soc** 1989;85(1):35–40
[Functional defects of the local granulocytes in periodontal diseases] Jordan T, et al. **Zahn Mund Kieferheilkd** 1988; 76(6):603–4 (Eng. Abstr.) **(Ger)**
[The role of dental root cement in the pathogenesis and therapy of periodontal diseases] Ljušković B, et al. **Vojnosanit Pregl** 1988 Nov-Dec;45(6):444–50 **(Scr)**

PREVENTION & CONTROL

Periodontal considerations for provisional restorations. Bral M. **Dent Clin North Am** 1989 Jul;33(3):457–77 (53 ref.)
Effect of low-protein diet on alveolar bone loss in streptozotocin-induced diabetic rats. Johnson RB, et al. **J Periodontol** 1989 May;60(5):264–70
[Recall or the exigencies of the system (editorial)] Perrier M. **Schweiz Monatsschr Zahnmed** 1989;99(6):649 **(Fre)**
[Old wine in new skins.... A contribution to the planning of framework dentures following the viewpoints of caries prophylaxis and periodontal hygiene] Brunner T. **Schweiz Monatsschr Zahnmed** 1988;98(9):970–9 **(Ger, Fre)**
[The perio-overdenture. The concept of a new framework design for hybrid dentures] Koller MM, et al. **Schweiz Monatsschr Zahnmed** 1988;98(9):980–92 **(Ger, Fre)**
[Periodontal diseases] Saxer UP, et al. **Schweiz Rundsch Med Prax** 1989 Apr 18;78(16):459–66 (Eng. Abstr.) **(Ger)**
[Longitudinal study to demonstrate the effectiveness of prevention-oriented therapy with cast removable partial dentures] Eismann H. **Zahn Mund Kieferheilkd** 1989; 77(1):20–3 (Eng. Abstr.) **(Ger)**
[Integrated approach to the organization of the mass prevention of dental caries and periodontal diseases] Leus PA. **Stomatologiia (Mosk)** 1989 Jan-Feb;68(1):82–4 **(Rus)**

PSYCHOLOGY

Periodontal awareness, health, and treatment need in dental school patients. II. Periodontal conditions. Lie T, et al. **Acta Odontol Scand** 1988 Oct;46(5):297–306

RADIOGRAPHY

Digital imaging in periodontal radiography. A review. Brägger U. **J Clin Periodontol** 1988 Oct;15(9):551–7 (68 ref.)
The detection of in vitro produced periodontal bone lesions by conventional radiography and photographic subtraction radiography using observers and quantitative digital subtraction radiography. Janssen PT, et al. **J Clin Periodontol** 1989 Jul;16(6):335–41
A retrospective radiographic study of alveolar bone loss in the primary dentition in patients with localized juvenile periodontitis. Sjödin B, et al. **J Clin Periodontol** 1989 Feb; 16(2):124–7
Relationship between the radiographic periodontal defect angle and healing after treatment. Steffensen B, et al. **J Periodontol** 1989 May;60(5):248–54
[The advantages and drawbacks of x-ray methods in dental and periodontal diseases and the problems of standardizing x-ray study in therapeutic dentistry] Rabukhina NA, et al. **Stomatologiia (Mosk)** 1988 Sep-Oct;67(5):82–3 **(Rus)**

SURGERY

Effect of porous and dense hydroxyapatite implantation on periodontal tissue regeneration in monkeys. Lin CJ, et al. **Bull Tokyo Med Dent Univ** 1989 Mar;36(1):1–11
A comparative clinical study of solid and granular porous hydroxylapatite implants in human periodontal osseous defects. Kenney EB, et al. **J Biomed Mater Res** 1988 Dec; 22(12):1233–43
Remodelling of interdental alveolar bone after periodontal flap procedures assessed by means of computer-assisted densitometric image analysis (CADIA). Brägger U, et al. **J Clin Periodontol** 1988 Oct;15(9):558–64
Placement of a porous membrane underneath the mucoperiosteal flap and its effect on periodontal wound healing in dogs. Claffey N, et al. **J Clin Periodontol** 1989 Jan;16(1):12–6
Relative stability of deep- versus shallow-side bone levels in angular proximal infrabony defects. Heins P, et al. **J Clin Periodontol** 1989 Jan;16(1):59–64
Guided tissue regeneration in the treatment of furcation defects in mandibular molars. A clinical study of degree III involvements. Pontoriero R, et al. **J Clin Periodontol** 1989 Mar;16(3):170–4
Osseous defect responses to hydroxylapatite grafting versus open flap debridement. Yukna RA. **J Clin Periodontol** 1989 Aug;16(7):398–402
Histological observations on the healing of a periodontal defect five years after an autogenous bone graft. Mattout P, et al. **J Nihon Univ Sch Dent** 1988 Jun;30(2):145–51
Effects on wound healing of hydroxyapatite-collagen complex implants in periodontal osseous defects in the dog. Sugaya A, et al. **J Periodont Res** 1989 Jul;24(4):284–8
Comparison of freeze-dried bone allograft and porous hydroxylapatite in human periodontal defects. Barnett JD, et al. **J Periodontol** 1989 May;60(5):231–7
The use of collagen membranes to guide regeneration of new connective tissue attachment in dogs. Blumenthal NM. **J Periodontol** 1988 Dec;59(12):830–6
The prognosis of tunnel preparations in treatment of class III furcations. A follow-up study. Hellden LB, et al. **J Periodontol** 1989 Apr;60(4):182–7
Histological study of the hydroxyapatite-collagen complex

implants in periodontal osseous defects in dogs. Minabe M, et al. **J Periodontol** 1988 Oct;59(10):671–8

Effects of an air-powder abrasive device used during periodontal flap surgery in dogs. Pippin DJ, et al. **J Periodontol** 1988 Sep;59(9):584–8

[Clinical evaluation of results following periodontal flap surgery with and without periodontal dressing] Li YH. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Jul; 23(4):221–4, 255 (Eng. Abstr.) **(Chi)**

[Alloplastic grafts in the treatment of infrabone lesions] Matarasso S, et al. **Minerva Stomatol** 1989 May; 38(5):579–91 (67 ref.) (Eng. Abstr.) **(Ita)**

THERAPY

Contribution to diagnosis and treatment of pulpal-periodontal lesion from the standpoint of conservative stomatology. Stejskalová J, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;120:367–70

Periodontal treatment in general dental practice [letter] Linden GT. **Br Dent J** 1989 May 20;166(10):360–1

'Windermere relativities inquiry' [letter] Watts TL. **Br Dent J** 1988 Oct 22;165(8):278

An analysis of the community periodontal index of treatment needs. Studies on adults in France. II. Additional treatment needs. Miller NA, et al. **Community Dent Health** 1988 Sep; 5(3):285–90

Factors influencing periodontal therapy for the geriatric patient. Greenwell H, et al. **Dent Clin North Am** 1989 Jan; 33(1):91–100 (43 ref.)

Periodontal problem solving. Interrelationship of periodontal therapy and esthetic dentistry. Rosenberg E, et al. **Dent Clin North Am** 1989 Apr;33(2):221–61, 201–9

Successful periodontal treatment for the elderly. Steinberg BJ, et al. **Dent Clin North Am** 1989 Jan;33(1):101–8 (17 ref.)

Maxillary anterior esthetics. Preservation of the interdental papilla. Takei H, et al. **Dent Clin North Am** 1989 Apr; 33(2):263–73

Prostheses for multi-rooted teeth having badly damaged parodontium. Tafkova K, et al. **Folia Med (Plovdiv)** 1987; 29(4):47–51

Current regenerative periodontal therapy. Carraro JJ. **Int Dent J** 1988 Sep;38(3):170–6 (60 ref.)

Reaching out to the community: the activities of the FDI-WHO Joint Working Group 10 on Periodontal Health Services. Pilot T. **Int Dent J** 1989 Mar;39(1):52–4

Changing concepts of periodontal treatment: surgical and non-surgical. Rylander H. **Int Dent J** 1988 Sep;38(3):163–9 (27 ref.)

Four-year investigation of salt and peroxide regimen compared with conventional oral hygiene. Wolff LF, et al. **J Am Dent Assoc** 1989 Jan;118(1):67–72

Treatment of recurrent periodontal disease by root planing and Ornidazole (Tiberal). Clinical and microbiological findings. Mombelli A, et al. **J Clin Periodontol** 1989 Jan; 16(1):38–45

Role of "diseased" root cementum in healing following treatment of periodontal disease. A clinical study. Nyman S, et al. **J Clin Periodontol** 1988 Aug;15(7):464–8

Effects of subgingival irrigation on A. actinomycetemcomitans. Wikesjö UM, et al. **J Clin Periodontol** 1989 Feb;16(2):116–9

Dental management of the uremic diabetic. Berger JR. **J Diabetic Complications** 1989 Jan–Mar;3(1):56–8

Evaluation of test statistics in split-mouth clinical trials. Hujoel PP, et al. **J Periodont Res** 1988 Nov;23(6):378–80 (25 ref.)

CPITN assessment of periodontal disease in diabetic patients. Bačić M, et al. **J Periodontol** 1988 Dec;59(12):816–22

Radiographic evaluation of the effect of initial periodontal therapy on thickness of the maxillary sinus mucosa. Engström H, et al. **J Periodontol** 1988 Sep;59(9):604–8

Regeneration of attachment apparatus lost due to disease of endodontic origin. Goldman HM, et al. **J Periodontol** 1988 Sep;59(9):609–10

Evaluation of four modalities of periodontal therapy. Mean probing depth, probing attachment level and recession changes. Kaldahl WB, et al. **J Periodontol** 1988 Dec; 59(12):783–93

Evaluation of furcation region response to periodontal therapy. Kalkwarf KL, et al. **J Periodontol** 1988 Dec; 59(12):794–804

The effect of health beliefs on the compliance of periodontal patients with oral hygiene instructions. Kühner MK, et al. **J Periodontol** 1989 Jan;60(1):51–6

The influence of periodontal screening upon dental hygienist practice in the Royal Navy. Woodman AJ. **J R Nav Med Serv** 1988 Winter;74(3):165–71

Clinical attempts at periodontal regeneration. Froum SJ. **N Y State Dent J** 1989 Jun–Jul;55(6):44–5 (0 ref.)

Periodontal ethics and referral modes. Kratenstein DI. **N Y State Dent J** 1989 Jun–Jul;55(6):46–7

Periodontal regeneration. A clinical possibility. Stahl SS. **N Y State Dent J** 1989 Jun–Jul;55(6):34–6 (13 ref.)

Peripheral PMN cell activity in relation to treatment of juvenile periodontitis. Asman B, et al. **Scand J Dent Res** 1988 Oct;96(5):418–20

[Experimental study on the application of calcium phosphate bioceramics in repairing periodontal osseous defects] Zheng ZG. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1989 Jan; 24(1):34–6, 63 (Eng. Abstr.) **(Chi)**

[Clinico-statistical study and therapeutic approach to odontostomatological pathology in heart surgery patients] Bucci E, et al. **Minerva Stomatol** 1989 Jun;38(6):657–66 (19 ref.) (Eng. Abstr.) **(Ita)**

VETERINARY

Excessive granulation tissue of periodontal origin in a horse. Verstraete FJ, et al. **Equine Vet J** 1988 Sep;20(5):380–2

Periodontal status in snow leopards. Cook RA, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1082–3

Spontaneous periodontitis in a sample group of the monkey Macaca fascicularis. Friskopp J, et al. **J Periodont Res** 1988 Jul;23(4):265–7

Periodontal disease in southern African bushpigs (Potamochoerus porcus) and warthogs (Phacochoerus aethiopicus). Woodall PF. **J Wildl Dis** 1989 Jan;25(1):66–9

Oral flora of mongrel and beagle dogs with periodontal disease. Isogai E, et al. **Nippon Juigaku Zasshi** 1989 Feb; 51(1):110–8

Environmental influences on the progression of clinical and microbiological parameters of sheep periodontal disease. Frisken KW, et al. **Res Vet Sci** 1989 Mar;46(2):147–52

Development of periodontal disease in a single flock of sheep: clinical signs, morphology of subgingival plaque and influence of antimicrobial agents. Spence JA, et al. **Res Vet Sci** 1988 Nov;45(3):324–31

Geriatric dentistry. Beard GB, et al. **Vet Clin North Am [Small Anim Pract]** 1989 Jan;19(1):49–74 (31 ref.)

PERIODONTAL DRESSINGS

Effects of atelocollagen on the wound healing reaction following palatal gingivectomy in rats. Minabe M, et al. **J Periodont Res** 1989 May;24(3):178–85

THERAPEUTIC USE

[Clinical evaluation of results following periodontal flap surgery with and without periodontal dressing] Li YH. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Jul; 23(4):221–4, 255 (Eng. Abstr.) **(Chi)**

PERIODONTAL INDEX

Dental caries, visible plaque, and gingival bleeding in young adult Danes in alternative dental programs. Schwarz E. **Acta Odontol Scand** 1989 Jun;47(3):149–57

Periodontal treatment needs in a dental school population. Hoover JN, et al. **Can J Public Health** 1988 Sep–Oct; 79(5):393–4

An analysis of the community periodontal index of treatment needs. Studies on adults in France. II. Additional treatment needs. Miller NA, et al. **Community Dent Health** 1988 Sep; 5(3):285–90

Evaluation of simple periodontal screening technique currently used in the UK armed forces. Eaton KA, et al. **Community Dent Oral Epidemiol** 1989 Aug;17(4):190–5

Periodontal disease prevalence in different age groups in Japan as assessed according to the CPITN. Miyazaki H, et al. **Community Dent Oral Epidemiol** 1989 Apr;17(2):71–4

Correlation of manual dexterity and comprehension with oral hygiene and periodontal status in mentally handicapped adults. Shaw L, et al. **Community Dent Oral Epidemiol** 1989 Aug;17(4):187–9

Periodontal status and treatment needs in the Chiangmai/Lamphun provinces of Thailand. Songpaisan Y, et al. **Community Dent Oral Epidemiol** 1989 Aug; 17(4):196–9

Periodontal status and treatment needs among regular dental patients. Bader JD, et al. **Int Dent J** 1988 Dec;38(4):255–60

Periodontal status in snow leopards. Cook RA, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1082–3

Clinical index systems used to assess the efficacy of mouthrinses on plaque and gingivitis. Fischman SL. **J Clin Periodontol** 1988 Sep;15(8):506–10 (23 ref.)

The effect of patient-associated factors on the reproducibility of the mouth bleeding score. Janssen PT, et al. **J Periodont Res** 1988 Sep;23(5):318–21

CPITN assessment of periodontal disease in diabetic patients. Bačić M, et al. **J Periodontol** 1988 Dec;59(12):816–22

Effect on periodontal status of rotary electric toothbrushes vs. manual toothbrushes during periodontal maintenance. I. Clinical results. Boyd RL, et al. **J Periodontol** 1989 Jul; 60(7):390–5

The relationship between gingivitis and plaque levels. Breuer MM, et al. **J Periodontol** 1989 Apr;60(4):172–5

Associations between bleeding and visual signs of interdental gingival inflammation. Caton J, et al. **J Periodontol** 1988 Nov;59(11):722–7

Correlations among gingival indices: a methodology study. Lobene RR, et al. **J Periodontol** 1989 Mar;60(3):159–62

Clinical periodontal status of regularly attending patients in general dental practices. McFall WT Jr, et al. **J Periodontol** 1989 Mar;60(3):145–50

Cross-sectional study of the periodontal status of removable partial denture patients. Bergman B, et al. **J Prosthet Dent** 1989 Feb;61(2):208–11

The influence of periodontal screening upon dental hygienist practice in the Royal Navy. Woodman AJ. **J R Nav Med Serv** 1988 Winter;74(3):165–71

Factors related to dental health and some salivary factors in Finnish Seventh-Day Adventists. Linkosalo E, et al. **Proc Finn Dent Soc** 1988;84(5–6):279–89

A cross-sectional study of DMFT and CPITN scores in a group of Indonesian soldiers. Gaare D, et al. **Scand J Dent Res** 1989 Feb;97(1):20–4

[Longitudinal study of the gingival status during transitional dentition] Schneider HG, et al. **Fortschr Kieferorthop** 1989 Jun;50(3):220–5 (Eng. Abstr.) **(Ger)**

[The effectiveness of long-term stomatologic outpatient care of adults—results of a study] Neumann PE, et al. **Z Gesamte Hyg** 1989 Mar;35(3):166–8 (Eng. Abstr.) **(Ger)**

[Stomatologic studies of Mozambique children. Periodontal and oral health status] Ulbrich M, et al. **Z Gesamte Hyg** 1988 Dec;34(12):728–30 (Eng. Abstr.) **(Ger)**

[Status of the marginal periodontium in middle-aged adults. Strategies for care and organizational principles] Borutta A, et al. **Zahn Mund Kieferheilkd** 1988;76(7):711–6 (Eng. Abstr.) **(Ger)**

[Periodontal disease prevalence (CPITN) in the adults of an F-optimized drinking water area] Künzel W, et al. **Zahn Mund Kieferheilkd** 1989;77(1):17–9 (Eng. Abstr.) **(Ger)**

[The sign of induced bleeding in the evaluation of individual susceptibility to periodontal disease. Experimental study in diabetic and non-diabetic patients] Paolantonio M, et al. **Minerva Stomatol** 1989 Feb;38(2):195–9 (Eng. Abstr.) **(Ita)**

[The periodontal status of city schoolchildren of the USSR and Finland] Borovskiĭ EV, et al. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):65–8 **(Rus)**

STATISTICS & NUMERICAL DATA

The use of repeated measures analysis of variance for plaque and gingival indices. Gunsolley JC, et al. **J Clin Periodontol** 1989 Mar;16(3):156–63

PERIODONTAL LIGAMENT

Moment to force ratios and the center of rotation. Tanne K, et al. **Am J Orthod Dentofacial Orthop** 1988 Nov; 94(5):426–31

ANALYSIS

Patterns of keratin-expression in rests of Malassez and periapical lesions. Gao Z, et al. **J Oral Pathol** 1988 Apr; 17(4):178–85

ANATOMY & HISTOLOGY

Periodontal ultrasonic diagnosis: experiments on thin bony platelets and on a simulated periodontal ligament space. Löst C, et al. **J Periodont Res** 1988 Nov;23(6):347–51

BLOOD SUPPLY

Tooth extrusion effects on microvessel volumes, endothelial areas, and fenestrae in molar apical periodontal ligament. Lew K, et al. **Am J Orthod Dentofacial Orthop** 1989 Sep; 96(3):221–31

[Healing of bone and the shape of the periosteal vessels after mandible fracture in the rabbit] Sheng LX. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 May; 23(3):147–9, 190–1 (Eng. Abstr.) **(Chi)**

CYTOLOGY

Radioautographic study of [3H]mannose utilization during cementoblast differentiation, formation of acellular cementum, and development of periodontal ligament principal fibers. Cho MI, et al. **Anat Rec** 1989 Feb; 223(2):209–22

Protein content in rabbit periodontal ligament fibroblasts during growth in culture. Stopp M, et al. **Cell Biol Int Rep** 1989 Apr;13(4):385–90

Formation of a new fibrous attachment to human dental roots. Effect of co-culturing periodontal ligament-derived and allogenic cortical bone-derived cells. Bernstein AB, et al. **Cell Tissue Res** 1989 Mar;255(3):631–9

Cell death and the regulation of populations of cells in the periodontal ligament. McCulloch CA, et al. **Cell Tissue Res** 1989 Jan;255(1):129–38

Cell proliferation and 3H-proline incorporation in periodontal ligament exposed to mechanical stress. Kunz J, et al. **Exp Pathol** 1988;34(1):51–8

Alkaline phosphatase activities of cultured human periodontal ligament cells. Ohshima M, et al. **J Nihon Univ Sch Dent** 1988 Sep;30(3):208–17

Expression of heat stress proteins by human periodontal ligament cells. Sauk JJ, et al. **J Oral Pathol** 1988 Nov; 17(9–10):496–9

Immunocytochemical in vivo localization of fibronectin-rich contact sites on fibroblasts of normal periodontal ligament and inflamed gingiva. Cho MI, et al. **J Periodont Res** 1988 Jul;23(4):230–8

Periodontal ligament fibroblasts, preosteoblasts, and prechondrocytes express receptors for epidermal growth factor in vivo: a comparative radioautographic study. Cho MI, et al. **J Periodont Res** 1988 Sep;23(5):287–94

Influence of pulpal treatments on cell and tissue reactions in the marginal periodontium. Blomlöf L, et al. **J Periodontol** 1988 Sep;59(9):577–83

Periodontal ligament cells and gingival fibroblasts respond differently to attachment factors in vitro. Somerman MJ,

et al. **J Periodontol** 1989 Feb;60(2):73–7

Repopulation of dentin surfaces by periodontal ligament cells and endothelial cells. Effect of basic fibroblast growth factor. Terranova VP, et al. **J Periodontol** 1989 Jun; 60(6):293–301

INJURIES

Periodontal damage to third molars prior to transplantation. A histometric study. Schliephake H, et al. **Int J Oral Maxillofac Surg** 1989 Feb;18(1):55–8

INNERVATION

Innervation of the incisors and periodontal ligament in several rodents: an immunohistochemical study of neurofilament protein and glia-specific S-100 protein. Sato O, et al. **Acta Anat (Basel)** 1989;134(2):94–9

The ultrastructure of Ruffini endings in the periodontal ligament of rat incisors with special reference to the terminal Schwann cells (K-cells). Maeda T, et al. **Anat Rec** 1989 Jan;223(1):95–103

Comparison of trigeminal receptor location and structure in the periodontal ligament of different types of teeth from the rat, cat, and monkey. Byers MR, et al. **J Comp Neurol** 1989 Jan 1;279(1):117–27

Functional characteristics of afferent C fibres from tooth pulp and periodontal ligament. Jyväsjärvi E, et al. **Prog Brain Res** 1988;74:237–45

The site and distribution of mechanoreceptors in the periodontal ligament of the cat represented in the mesencephalic nucleus and their possible regeneration following tooth extraction. Linden RW, et al. **Prog Brain Res** 1988;74:231–6

METABOLISM

The effects of cerebral hemidecortication on the eruption rate and uptake of [3H]-glycine by the periodontal ligament of the rat incisor. Tse M do C, et al. **Arch Oral Biol** 1988; 33(8):605–11

PHYSIOLOGY

The effect of cortisone on the eruption rate of root-resected incisors in the rat. Teng CM, et al. **Am J Orthod Dentofacial Orthop** 1989 Jan;95(1):67–71

In re: An American Board of Orthodontics case report [letter] Zuccati G. **Am J Orthod Dentofacial Orthop** 1989 Apr; 95(4):42A

Coordinated regulation of endothelial and fibroblast cell proliferation and matrix synthesis in periodontal ligament adjacent to appositional and resorptive bone surfaces. Nemeth E, et al. **Anat Rec** 1989 Apr;223(4):368–75

A computer model of the periodontal ligament space in man. Katona TR, et al. **Arch Oral Biol** 1988;33(11):839–44

In vitro mechanics of the periodontal ligament in impeded and unimpeded rat mandibular incisors. Komatsu K. **Arch Oral Biol** 1988;33(11):783–91

The effect of rate of force application on the threshold of periodontal ligament mechanoreceptors in the cat canine tooth. Linden RW, et al. **Arch Oral Biol** 1988;33(10):715–9

The response characteristics of mechanoreceptors related to their position in the cat canine periodontal ligament. Linden RW, et al. **Arch Oral Biol** 1988;33(1):51–6

The effect on intrusive tooth mobility of surgically removing the cervical periodontal ligament in monkeys (Macaca fascicularis). Picton DC. **Arch Oral Biol** 1988;33(5):301–4

Central terminations of periodontal mechanoreceptive and tooth pulp afferents in the trigeminal principal and oral nuclei of the cat. Tsuru K, et al. **Brain Res** 1989 Apr 17; 485(1):29–61

The chemoattractive potency of periodontal ligament, cementum and dentin for human gingival fibroblasts. Nishimura K, et al. **J Periodont Res** 1989 Mar;24(2):146–8

The use of collagen membranes to guide regeneration of new connective tissue attachment in dogs. Blumenthal NM. **J Periodontol** 1988 Dec;59(12):830–6

New attachment achieved by guided tissue regeneration in beagle dogs. Caffesse RG, et al. **J Periodontol** 1988 Sep; 59(9):589–94

The effects of exclusion of epithelium from healing periodontal pockets. McHugh WD. **J Periodontol** 1988 Nov;59(11):730–7

An evaluation of new attachment formation using a microfibrillar collagen barrier. Tanner MG, et al. **J Periodontol** 1988 Aug;59(8):524–30

The role of periodontal receptors in the jaw-opening reflex in the cat. Dessem D, et al. **J Physiol (Lond)** 1988 Dec; 406:315–30

PHYSIOPATHOLOGY

Is faulty collagen formation the cause of the exfoliation of the teeth in the Papillon-Lefèvre syndrome? Sutton PR. **Med Hypotheses** 1989 May;29(1):43–4

[Age characteristics of the remnants of the tooth-forming epithelium in man and their reactions in chronic periodontitis] Panikarovskiĭ VV, et al. **Stomatologiia (Mosk)** 1988 Jul-Aug;67(4):6–10 (Eng. Abstr.) **(Rus)**

TRANSPLANTATION

Treatment of a periodontal intrabony pocket in man by a mucoperiosteal free graft combined with a calcium phosphate implant. Bilbeissi MW, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1989 Jun; 32(2):99–104

PERIODONTAL POCKET see under **PERIODONTITIS**

PERIODONTAL PROSTHESIS

Stabilization technique for mobile teeth. Vitsentzos SI. **J Prosthet Dent** 1989 Jan;61(1):6–9

A one visit procedure to stabilize mobile anterior mandibular teeth. Case report. Silver H, et al. **N Y State Dent J** 1988 Oct;54(8):38–9

[Study on prosthodontic procedure in patients with unilateral cleft lip and palate—effects of various extensions of splint on tooth-borne ability of teeth adjacent to the cleft] Suzuki R. **Kokubyo Gakkai Zasshi** 1989 Mar;56(1):121–40 (Eng. Abstr.) **(Jpn)**

[Use of splint prostheses for the treatment and rehabilitation of patients with fractures of the lower jaw] Stepanov PE. **Stomatologiia (Mosk)** 1988 Jul-Aug;67(4):42–3 (Eng. Abstr.) **(Rus)**

PERIODONTAL SPLINTS see under **PERIODONTAL PROSTHESIS**

PERIODONTICS

Periodontics. Zamet JS. **Br Dent J** 1988 Aug 20;165(4):142

Occupational health problems and adverse patient reactions in periodontics. Jacobsen N, et al. **J Clin Periodontol** 1989 Aug;16(7):428–33

Early career experiences of young periodontists. Born DO, et al. **J Periodontol** 1989 Apr;60(4):217–21

Diplomate of the American Board of Periodontology: is it in your future? [letter] Hangorsky U. **J Periodontol** 1988 Sep;59(9):618

Presidential address. Schallhorn RG. **J Periodontol** 1989 Apr; 60(4):225–8

EDUCATION

Teaching of oral medicine, periodontology and oral surgery: students' opinions. Downer CS, et al. **Br Dent J** 1988 Dec 10;165(11):403–6

INSTRUMENTATION

Periodontal probe use in general practice in Florida. Heins PJ, et al. **J Am Dent Assoc** 1989 Jul;119(1):147–50

Histological evaluation of periodontal probe penetration in untreated facial molar furcations. Moriarty JD, et al. **J Clin Periodontol** 1989 Jan;16(1):21–6

Inter- and intra-examiner variability using standard and constant force periodontal probes. Walsh TF, et al. **J Clin Periodontol** 1989 Mar;16(3):140–3

Probing site configuration in patients with untreated periodontitis. A study of horizontal positional error. Watts TL. **J Clin Periodontol** 1989 Sep;16(8):529–33

Gingival resistance to probing forces. I. Determination of optimal probe diameter. Keagle JG, et al. **J Periodontol** 1989 Apr;60(4):167–71

UTILIZATION

[Periodontal care in the Eastern Bohemia Region] Dřízhal I, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity HraJci Kralove Suppl** 1987;30(3):343–50 (Eng. Abstr.) **(Cze)**

PERIODONTITIS

Periodontitis in sheep: a model for human periodontal disease. Ismaiel MO, et al. **J Periodontol** 1989 May;60(5):279–84

BLOOD

Elevated phagocytosis, oxidative burst, and F-actin formation in PMNs from individuals with intraoral manifestations of HIV infection. Ryder MI, et al. **J Acquir Immune Defic Syndr** 1988;1(4):346–53

Neutrophil function in patients with localized juvenile periodontitis and with rapidly progressive periodontitis. Zafiropoulos GG, et al. **J Biol Buccale** 1988 Sep; 16(3):151–6

Depressed helper-to-suppressor T-cell ratios in early-onset forms of periodontal disease. Kinane DF, et al. **J Periodont Res** 1989 May;24(3):161–4

Proteases and inhibitors in the plasma of patients with periodontal disease. Zafiropoulos GG, et al. **J Periodont Res** 1988 Jul;23(4):281–2

[Oxidative metabolism of the peripheral neutrophilic granulocytes in patients with rapidly progressing and with localized juvenile periodontitis] Zafiropoulos GG, et al. **Zahn Mund Kieferheilkd** 1988;76(6):595–602 (Eng. Abstr.) **(Ger)**

CHEMICALLY INDUCED

[Health conditions and the development of mandibular injuries in workers at a yellow phosphorus factory] Teng HQ. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Jul; 23(4):242–3 **(Chi)**

[Experimental data on the effect of iodine vapors on the tissues and organs of the oral cavity] Poliak AL. **Gig Tr Prof Zabol** 1988 Sep;(9):48–9 **(Rus)**

CLASSIFICATION

Classification of mandibular molar distal osseous lesions [published erratum appears in N Y State Dent J 1989 Jan;55(1):39] Sussman HI. **N Y State Dent J** 1988 Nov; 54(9):62, 63

[Comment on the paper "HIV gingivitis/HIV periodontitis in practice" (letter)] Rateitschak KH, et al. **Schweiz Monatsschr Zahnmed** 1989;99(4):498–9 **(Ger)**

COMPLICATIONS

Periodontal implications of orthodontic treatment in adults with reduced or normal periodontal tissues versus those of adolescents. Boyd RL, et al. **Am J Orthod Dentofacial Orthop** 1989 Sep;96(3):191–8

Cutaneous sinus of dental origin: a diagnosis requiring clinical and radiologic correlation. Held JL, et al. **Cutis** 1989 Jan; 43(1):22–4

The relationship of inflammatory periodontal disease to diabetic status in insulin-dependent diabetes mellitus patients. Rosenthal IM, et al. **J Clin Periodontol** 1988 Aug; 15(7):425–9

Dental status of adults with and without periodontitis. Sewón LA, et al. **J Periodontol** 1988 Sep;59(9):595–8

Bone resorption in acute traumatic periodontitis. Macgregor ID, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun; 67(6):781–2

[Orbital complications of odontogenic maxillary sinusitis] Manuilov OE, et al. **Vestn Otorinolaringol** 1988 Sep-Oct; (5):15–7 (Eng. Abstr.) **(Rus)**

[Peritonitis as a complication of mediastinitis secondary to a dental abscess (letter)] Cisneros Alonso C, et al. **Rev Clin Esp** 1988 May;182(8):448–9 **(Spa)**

DIAGNOSIS

Quantification of periodontal attachment at single-rooted teeth. Hujoel P, et al. **J Clin Periodontol** 1989 Apr; 16(4):224–8

Diagnostic problems of periodontitis-like lesions caused by eosinophilic granuloma. Nicopoulou-Karayianni K, et al. **J Clin Periodontol** 1989 Sep;16(8):505–9

Inter- and intra-examiner variability using standard and constant force periodontal probes. Walsh TF, et al. **J Clin Periodontol** 1989 Mar;16(3):140–3

Correlation of the hydrolysis of benzoyl-arginine naphthylamide (BANA) by plaque with clinical parameters and subgingival levels of spirochetes in periodontal patients. Schmidt EF, et al. **J Dent Res** 1988 Dec; 67(12):1505–9

Discrepancies that may arise if periodontitis is assessed on the basis of pocket depth alone [letter] Newman HN. **J Periodont Res** 1988 Jul;23(4):283–4

Enzyme activity in crevicular fluid for detection and prediction of clinical attachment loss in patients with chronic adult periodontitis. Six month results. Lamster IB, et al. **J Periodontol** 1988 Aug;59(8):516–23

[HIV gingivitis/HIV periodontitis in practice. HIV-associated periodontal changes: diagnosis and therapy] Gaberthüel T, et al. **Schweiz Monatsschr Zahnmed** 1989;99(2):188–97 **(Ger, Fre)**

DRUG THERAPY

Refractory chronic periodontitis: effect of oral tetracycline hydrochloride and root planning. Papli R, et al. **Aust Dent J** 1989 Feb;34(1):60–8

Clinical and microbiological effects of in vivo miocamycin therapy on oral infections and in surgical prophylaxis. De Luca M. **Drugs Exp Clin Res** 1988;14(10):659–63

Comparison of spiramycin and tetracycline used adjunctively in the treatment of advanced chronic periodontitis. Chin Quee T, et al. **J Antimicrob Chemother** 1988 Jul;22 Suppl B:171–7

Periodontal and femoral bone status in periodontitis-affected hamsters receiving a high dose indomethacin treatment. Carter-Bartlett P, et al. **J Biol Buccale** 1989 Jun; 17(2):93–101

Systemic metronidazole in the treatment of periodontitis. Jenkins WM, et al. **J Clin Periodontol** 1989 Aug; 16(7):443–50

Clinical effects of local application of collagen film-immobilized tetracycline. Minabe M, et al. **J Clin Periodontol** 1989 May;16(5):291–4

Metronidazole plus amoxycillin in the treatment of Actinobacillus actinomycetemcomitans associated periodontitis. van Winkelhoff AJ, et al. **J Clin Periodontol** 1989 Feb;16(2):128–31

Flurbiprofen treatment of human periodontitis: effect on alveolar bone height and metabolism. Jeffcoat MK, et al. **J Periodont Res** 1988 Nov;23(6):381–5

The effect of ofloxacin on experimental periodontitis in hamsters infected with Actinomyces viscosus ATCC 15987. Kametaka S, et al. **J Periodontol** 1989 May;60(5):285–91

Effect of subgingival irrigation with tetrapotassium peroxydiphosphate on scaled and untreated periodontal pockets. Listgarten MA, et al. **J Periodontol** 1989 Jan; 60(1):4–11

Application of a local drug delivery system to periodontal therapy: I. Development of collagen preparations with

immobilized tetracycline. Minabe M, et al. **J Periodontol** 1989 Feb;60(2):113–7

Effect of periodontal therapy on alveolar bone as measured by subtraction radiography. Schmidt EF, et al. **J Periodontol** 1988 Oct;59(10):633–8

[Metronidazole-containing teflon fibers in the treatment of periodontitis] Fan MW. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Nov; 23(6):324–7, 384 (Eng. Abstr.) **(Chi)**

[Drugs in the periodontal pocket. A review of the literature] Dubrez B. **Schweiz Monatsschr Zahnmed** 1989;99(2):149–61 (129 ref.) (Eng. Abstr.) **(Fre)**

[Systemic antibiotic therapy in chronic periodontitis in adults. I. General criteria] Matarasso S, et al. **Minerva Stomatol** 1988 Aug;37(8):617–20 (18 ref.) (Eng. Abstr.) **(Ita)**

[Systemic antibiotic therapy in chronic periodontitis in adults. II. Rational use of minocycline] Matarasso S, et al. **Minerva Stomatol** 1988 Aug;37(8):621–7 (30 ref.) (Eng. Abstr.) **(Ita)**

[Clinical evaluation of the efficacy of combined amoxicillin and clavulanic acid in acute odontostomatological pathology] Zoccola GC, et al. **Minerva Stomatol** 1988 Dec; 37(12):1005–9 (Eng. Abstr.) **(Ita)**

[Clinical evaluation of roxithromycin in odontogenic infection] Sasaki J, et al. **Jpn J Antibiot** 1989 May; 42(5):1233–55 (Eng. Abstr.) **(Jpn)**

[Assessment of the efficacy of electrophonophoresis in treating chronic periodontitis] Mamedova FM, et al. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):73–4 **(Rus)**

[Clinico-experimental research on the use of collagen in periodontal disease] Mironenko GS, et al. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):7–10 (Eng. Abstr.) **(Rus)**

[Normalization of metabolic disorders in periodontitis using a complex of coenzyme vitamins] Pakhomova VA, et al. **Stomatologiia (Mosk)** 1989 Jan–Feb;68(1):20–1 (Eng. Abstr.) **(Rus)**

[The use of a prolonged-action indomethacin ointment in the combined treatment of periodontitis] Sai VG, et al. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):17–9 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Crevicular fluid myeloperoxidase at healthy, gingivitis and periodontitis sites. Cao CF, et al. **J Clin Periodontol** 1989 Jan;16(1):17–20

Relationship of subgingival plaque flora to lysosomal and cytoplasmic enzyme activity in gingival crevicular fluid. Harper DS, et al. **J Clin Periodontol** 1989 Mar;16(3):164–9

Tryptase-like activity in crevicular fluid from gingivitis and periodontitis patients. Cox SW, et al. **J Periodont Res** 1989 Jan;24(1):41–4

Changes in cyclooxygenase metabolites in experimental periodontitis in Macaca mulatta. Offenbacher S, et al. **J Periodont Res** 1989 Jan;24(1):63–74

Impaired polymorphonuclear leukocyte 15-lipoxygenase activity in juvenile and rapidly progressive periodontitis. Noguchi K, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Aug; 33(2):137–41

[Alkaline phosphatase in crevicular fluid in inflammatory periodontopathies] Schwab W, et al. **Z Med Lab Diagn** 1989;30(1):78–9 **(Ger)**

[Nitrate reductase activity of the oral fluids in periodontitis] Vavilova TP, et al. **Stomatologiia (Mosk)** 1989 Jan–Feb; 68(1):24–6 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Changes in the prevalence of plaque, gingivitis and pocketing in a group of South Wales schoolchildren examined at the ages of 11–12 years and 15–16 years. Addy M, et al. **Community Dent Health** 1988 Dec;5(4):345–54

Probing depth, attachment loss and gingival recession. Findings from a clinical examination in Ushiku, Japan. Yoneyama T, et al. **J Clin Periodontol** 1988 Oct; 15(9):581–91

Wearing of removable partial dentures in relation to periodontal pockets. Tuominen R, et al. **J Oral Rehabil** 1989 Mar;16(2):119–26

Periodontal diseases in the U.S. in 1981: prevalence, severity, extent, and role in tooth mortality. Brown LJ, et al. **J Periodontol** 1989 Jul;60(7):363–70

An estimate of periodontal treatment needs in the U.S. based on epidemiologic data. Oliver RC, et al. **J Periodontol** 1989 Jul;60(7):371–80

[Periodontitis in childhood] Matarasso S, et al. **Minerva Stomatol** 1988 Jul;37(7):553–68 (60 ref.) (Eng. Abstr.) **(Ita)**

[Comparison of the status of the periodontium and oral hygiene among children 8–9 and 13–14 years of age in Poland and in other countries] Arabska-Przedpelska B, et al. **Przegl Epidemiol** 1988;42(3):279–85 (Eng. Abstr.) **(Pol)**

ETIOLOGY

The role of Actinobacillus actinomycetemcomitans in periodontal disease. de Graaff J, et al. **Infection** 1989 Jul–Aug;17(4):269–71

The role of dental plaque in gingivitis and periodontitis. Listgarten MA. **J Clin Periodontol** 1988 Sep;15(8):485–7 (21 ref.)

Facial radicular groove in a maxillary central incisor. A case report. Kozlovsky A, et al. **J Periodontol** 1988 Sep; 59(9):615–7

Severe localised periodontitis in an adult: initiation by orthodontic rubber bands. Ewart NP. **N Z Dent J** 1989 Jul;85(381):92–4

[The role of anaerobic microflora of the root canals in the development of periodontitis] Tyshko AG, et al. **Stomatologiia (Mosk)** 1988 Sep–Oct;67(5):23–5 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

The effect of treatment on IgG, IgA, IgM and alpha-2-macroglobulin in gingival crevicular fluid from patients with chronic adult periodontitis. Sengupta S, et al. **Arch Oral Biol** 1988;33(6):425–31

Local production of IgA- and IgM-rheumatoid factors in adult periodontal disease. Hirsch HZ, et al. **J Clin Immunol** 1989 Jul;9(4):273–8

Distribution of immunoglobulin isotypes including IgA subclasses in adult, juvenile, and rapidly progressive periodontitis. Kilian M, et al. **J Clin Periodontol** 1989 Mar; 16(3):179–84

Serum IgG antibodies reactive with lipoteichoic acid in adult patients with periodontitis. Monefeldt K, et al. **J Clin Periodontol** 1989 Sep;16(8):519–24

Analysis of human IgG and IgA subclass antibody-secreting cells from localized chronic inflammatory tissue. Ogawa T, et al. **J Immunol** 1989 Feb 15;142(4):1150–8

Autoimmunity to collagen in adult periodontal disease. Hirsch HZ, et al. **J Oral Pathol** 1988 Nov;17(9–10):456–9

Effects of race and periodontal status on antibody reactive with Actinobacillus actinomycetemcomitans strain Y4. Gunsolley JC, et al. **J Periodont Res** 1988 Sep;23(5):303–7

Synthesis of antibody specific for nonoral antigen in the gingiva of periodontitis patients. Mallison SM 3d, et al. **J Periodont Res** 1989 May;24(3):214–6

Abnormal lymphocyte profiles and leukotriene B4 status in a patient with Crohn's disease and severe periodontitis. Engel LD, et al. **J Periodontol** 1988 Dec;59(12):841–7

[Local immune responses to periodontopathic bacteria. I. Relationship of the IgG titers in serum and gingival crevicular fluid] Horibe M. **Kokubyo Gakkai Zasshi** 1988 Sep;55(3):483–91 (Eng. Abstr.) **(Jpn)**

[Immune reactivity of persons with odontogenic foci of infection] Cherkashin SI. **Vrach Delo** 1988 Aug;(8):104–6 (Eng. Abstr.) **(Rus)**

METABOLISM

Fibronectin levels of unstimulated saliva from naval recruits with and without chronic inflammatory periodontal disease. Lamberts BL, et al. **J Clin Periodontol** 1989 Jul;16(6):342–6

Concentrations of fibronectin in the sera and crevicular fluid in various stages of periodontal disease. Lopatin DE, et al. **J Clin Periodontol** 1989 Jul;16(6):359–64

Immunohistochemical study of neurochemical markers in gingiva obtained from periodontitis-affected sites. Luthman J, et al. **J Periodont Res** 1989 Jul;24(4):267–78

[Relation of the quantity of lipopolysaccharide in periodontal plaque and in calculus to the degree of periodontal inflammation] Li H. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 May; 23(3):136–9, 190 (Eng. Abstr.) **(Chi)**

[The behavior of selected parameters of sulcus fluids in inflammatory periodontal diseases] Herrmann F, et al. **Z Med Lab Diagn** 1989;30(2):132–3 **(Ger)**

MICROBIOLOGY

Tetracycline resistance and TetM in oral anaerobic bacteria and Neisseria perflava-N. sicca. Roberts MC, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1271–3

Anaerobes and short-chain fatty acids in crevicular fluid from adults with chronic periodontitis. Courtois P, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1989 Jan; 32(1):19–22

Antigens released from four oral bacteria in periodontitis. Tolo K, et al. **Immunol Invest** 1989 Jan–May;18(1–4):171–85

Newly delineated periodontal pathogens with special reference to selenomonas species. Tanner A, et al. **Infection** 1989 May–Jun;17(3):182–7 (42 ref.)

The in-vitro effect of an amine fluoride gel on subgingival plaque bacteria. Bullock S, et al. **J Antimicrob Chemother** 1989 Jan;23(1):59–67

Cell surface protein antigen from Wolinella recta ATCC 33238T. Kokeguchi S, et al. **J Clin Microbiol** 1989 Jun; 27(6):1210–7

Synthesis and secretion of phospholipase C by oral spirochetes. Siboo R, et al. **J Clin Microbiol** 1989 Mar; 27(3):568–70

The in vitro effects of chlorhexidine on subgingival plaque bacteria. Stanley A, et al. **J Clin Periodontol** 1989 Apr; 16(4):259–64

The microbiota of early periodontitis lesions in adults. Tanner A, et al. **J Clin Periodontol** 1989 Aug;16(7):467–71

Effects of subgingival irrigation on A. actinomycetemcomitans. Wikesjö UM, et al. **J Clin Periodontol** 1989 Feb;16(2):116–9

Synthetic oligodeoxynucleotide probes for the rapid detection of bacteria associated with human periodontitis. Chuba PJ, et al. **J Gen Microbiol** 1988 Jul;134 (Pt 7):1931–8

Experimental endocarditis following dental extractions in rats with periodontitis [published erratum appears in J Oral Maxillofac Surg 1989 Feb;47(2):215] Overholser CD, et al. **J Oral Maxillofac Surg** 1988 Oct;46(10):857–61

Prevalence of Bacteroides forsythus and Bacteroides gingivalis in subgingival plaque of prosthodontically treated patients on short recall. Gmür R, et al. **J Periodont Res** 1989 Mar;24(2):113–20

Heterogeneity of virulence among strains of Bacteroides gingivalis. Neiders ME, et al. **J Periodont Res** 1989 May; 24(3):192–8

Quantification of bacterial penetration in spontaneous periodontal disease in beagle dogs. Coons DB, et al. **J Periodontol** 1989 Jan;60(1):23–30

Lipopolysaccharide-stimulated PGE2 release from human monocytes. Comparison of lipopolysaccharides prepared from suspected periodontal pathogens. Garrison SW, et al. **J Periodontol** 1988 Oct;59(10):684–7

Actinobacillus actinomycetemcomitans and Bacteroides gingivalis activate human peripheral monocytes to produce interleukin-1 and tumor necrosis factor. Lindemann RA, et al. **J Periodontol** 1988 Nov;59(11):728–30

Antibodies to Bacteroides gingivalis in patients with treated and untreated periodontal disease. Murray PA, et al. **J Periodontol** 1989 Feb;60(2):96–103

Effect of periodontal status of rotary electric toothbrushes vs. manual toothbrushes during periodontal maintenance. II. Microbiological results. Murray PA, et al. **J Periodontol** 1989 Jul;60(7):396–401

The effect of 2% chlorhexidine digluconate irrigation on clinical parameters and the level of Bacteroides gingivalis in periodontal pockets. Southard SR, et al. **J Periodontol** 1989 Jun;60(6):302–9

Outer membranous vesicles and leukotoxic activity of Actinobacillus actinomycetemcomitans from subjects with different periodontal status. Tervahartiala B, et al. **Scand J Dent Res** 1989 Feb;97(1):33–42

[Microbial populations and periodontal condition--evaluation by differential phase contrast microscopy] Wang JC, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Mar; 5(3):146–55 (Eng. Abstr.) **(Chi)**

[Haemophilus actinomycetemcomitans as a cause of infection in medicine and stomatology] Pfister W, et al. **Z Arztl Fortbild (Jena)** 1989;83(12):609–12 (53 ref.) **(Ger)**

[Subgingival anaerobic flora in periodontal disease in adults] Ramaglia L, et al. **Minerva Stomatol** 1988 May;37(5):355–60 (Eng. Abstr.) **(Ita)**

[Bacterial recolonization of deep periodontal lesions after nonsurgical therapy] Sbordone L, et al. **Minerva Stomatol** 1988 May;37(5):361–71 (Eng. Abstr.) **(Ita)**

[Effect of subgingival plaque control by a direct irrigation technic. I. The clinical and microbiological changes after the irrigation with distilled water or 1/30 diluted iodine complex solution] Hagiwara S, et al. **Kokubyo Gakkai Zasshi** 1988 Sep;55(3):492–501 (Eng. Abstr.) **(Jpn)**

[Ecologic aspects of Actinobacillus actinomycetemcomitans: isolation and characterization of strains] Avila-Campos MJ, et al. **Rev Latinoam Microbiol** 1988 Oct–Dec;30(4):301–5 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Periodontal probe use in general practice in Florida. Heins PJ, et al. **J Am Dent Assoc** 1989 Jul;119(1):147–50

Probing depth at re-evaluation following initial periodontal therapy to indicate the initial response to treatment. Claffey N, et al. **J Clin Periodontol** 1989 Apr;16(4):229–33

The impact of regression towards the mean on probing changes in studies on the effect of periodontal therapy. Egelberg J. **J Clin Periodontol** 1989 Feb;16(2):120–3

A re-examination of within-mouth correlations of attachment level and of change in attachment level. Fleiss JL, et al. **J Clin Periodontol** 1988 Aug;15(7):411–4

Accuracy of repeated single versus averages of repeated duplicates of probing depth measurements. Janssen PT, et al. **J Clin Periodontol** 1988 Oct;15(9):569–74

Effect of probing depth and bleeding tendency on the reproducibility of probing depth measurements. Janssen PT, et al. **J Clin Periodontol** 1988 Oct;15(9):565–8

Clinical effects of root debridement in molar and non-molar teeth. A 2-year follow-up. Loos B, et al. **J Clin Periodontol** 1989 Sep;16(8):498–504

Histological evaluation of periodontal probe penetration in untreated facial molar furcations. Moriarty JD, et al. **J Clin Periodontol** 1989 Jan;16(1):21–6

Periodontal condition and microbiology of healthy and diseased periodontal pockets in type 1 diabetes mellitus patients. Sastrowijoto SH, et al. **J Clin Periodontol** 1989 May;16(5):316–22

Relationships between alveolar bone levels measured at surgery, estimated by transgingival probing and clinical attachment level measurements. Ursell MJ. **J Clin Periodontol** 1989 Feb;16(2):81–6

Scanning electron microscopic examination of pocket wall epithelium and associated plaque in localized juvenile periodontitis. Verderame RA, et al. **J Clin Periodontol** 1989 Apr;16(4):234–41

Probing site configuration in patients with untreated periodontitis. A study of horizontal positional error. Watts

TL. **J Clin Periodontol** 1989 Sep;16(8):529–33

Periodontal disease in adolescents: some clinical and microbiologic correlates of attachment loss. Carlos JP, et al. **J Dent Res** 1988 Dec;67(12):1510–4

Gingival fibroblasts and tissues attachment to curetted cementum surface in periodontally involved teeth. Nishimura K, et al. **J Electron Microsc (Tokyo)** 1989; 38(1):16–23

Histopathologic features of spontaneous periodontitis in adult Macaca fascicularis monkeys. Bosshardt D, et al. **J Periodont Res** 1988 Nov;23(6):352–62

Comparison of NK-cell (Leu-7+ and Leu-11b+) populations in clinically healthy gingiva, chronic gingivitis and chronic adult periodontitis. Cobb CM, et al. **J Periodont Res** 1989 Jan;24(1):1–7

LPS-elicited secretory responses in monocytes: altered release of PGE2 but not IL-1 beta in patients with adult periodontitis. Garrison SW, et al. **J Periodont Res** 1989 Mar;24(2):88–95

T cells and T-cell subsets in periodontal diseases. Meng HX, et al. **J Periodont Res** 1989 Mar;24(2):121–6

Scaling and root planing effectiveness: the effect of root surface access and operator experience. Brayer WK, et al. **J Periodontol** 1989 Jan;60(1):67–72

Periodontitis in a patient with chronic neutropenia. Carrassi A, et al. **J Periodontol** 1989 Jun;60(6):352–7

Evaluation of four modalities of periodontal therapy. Mean probing depth, probing attachment level and recession changes. Kaldahl WB, et al. **J Periodontol** 1988 Dec; 59(12):783–93

Evaluation of furcation region response to periodontal therapy. Kalkwarf KL, et al. **J Periodontol** 1988 Dec; 59(12):794–804

Histological characteristics associated with suppurating periodontal pockets. Passo SA, et al. **J Periodontol** 1988 Nov;59(11):731–40

In situ lymphocyte subpopulations from active versus stable periodontal sites. Reinhardt RA, et al. **J Periodontol** 1988 Oct;59(10):656–70

In situ correlative immuno-identification of mononuclear infiltrates and invasive bacteria in diseased gingiva. Saglie FR, et al. **J Periodontol** 1988 Oct;59(10):688–96

Comparison of scanning and transmission electron microscopy of the epithelial pocket wall in juvenile and adult periodontitis. Shafik SS, et al. **J Periodontol** 1988 Aug;59(8):535–43

Chemotactic response of neutrophil polymorphonuclear leukocytes in juvenile periodontitis measured by the Leading Front method. Pedersen MM. **Scand J Dent Res** 1988 Oct;96(5):421–7

[Cytologic study of the gingival fluid in inflammatory diseases of the periodontium] Erina SV, et al. **Lab Delo** 1989;(6):14–5 (Eng. Abstr.) **(Rus)**

[Cytologic characteristics of mixed saliva and oral washings in patients with chronic inflammatory diseases of the periodontium] Makarova OV, et al. **Lab Delo** 1988; (7):19–21 (Eng. Abstr.) **(Rus)**

[Structural bases of the chronic course of the inflammatory process in periodontal diseases] Danilevskiĭ NF, et al. **Stomatologiia (Mosk)** 1988 Nov–Dec;67(6):49–51 (Eng. Abstr.) **(Rus)**

[Characteristics of the cellular cooperation in the connective tissue base of the gingiva in periodontitis] Lopunova ZhK, et al. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):11–5 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Inflammation of rat molar pulp and periodontium causes increased calcitonin gene-related peptide and axonal sprouting. Kimberly CL, et al. **Anat Rec** 1988 Nov; 222(3):289–300

Neutrophil chemotactic behaviour in patients with early-onset forms of periodontitis (II). Assessment using the under agarose technique. Kinane DF, et al. **J Clin Periodontol** 1989 Apr;16(4):247–51

Neutrophil chemotactic behaviour in patients with early-onset forms of periodontitis (I). Leading front analysis in Boyden chambers. Kinane DF, et al. **J Clin Periodontol** 1989 Apr;16(4):242–6

Chemiluminescence of peripheral polymorphonuclear leukocytes from adult periodontitis patients. Whyte GJ, et al. **J Clin Periodontol** 1989 Feb;16(2):69–74

The effect of patient-associated factors on the reproducibility of the mouth bleeding score. Janssen PT, et al. **J Periodont Res** 1988 Sep;23(5):318–21

Polyclonal B-cell activation in periodontitis. Tew J, et al. **J Periodont Res** 1989 Jul;24(4):225–41 (189 ref.)

The effects of exclusion of epithelium from healing periodontal pockets. McHugh WD. **J Periodontol** 1988 Nov;59(11):750–7

Effects of levamisole on experimental periodontitis. Novak MJ, et al. **J Periodontol** 1989 Mar;60(3):137–44

[Rapidly and slowly progressing forms of periodontitis. Gusztáv Morelli memorial lecture] Sallay K. **Fogorv Sz** 1989 Jan;82(1):1–6 (21 ref.) **(Hun)**

[Age characteristics of the remnants of the tooth-forming epithelium in man and their reactions in chronic periodontitis] Panikarovskiĭ VV, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):6–10 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

The effects of ultrasonic scaling with oral hygiene education on the distribution of pathological pockets using CPITN diagnostic standards. Takahashi Y, et al. **Community Dent Health** 1989 Mar;6(1):31–7

Effects of immunization with B. macacae on induced periodontitis--preliminary findings. Nisengard R, et al. **Immunol Invest** 1989 Jan–May;18(1–4):225–37

RADIOGRAPHY

The effect of in-vivo-occurring errors in the reproducibility of radiographs on the use of the subtraction technique. Janssen PT, et al. **J Clin Periodontol** 1989 Jan;16(1):53–8

SURGERY

Treatment of a periodontal intrabony pocket in man by a mucoperiosteal free graft combined with a calcium phosphate implant. Bilbeissi MW, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1989 Jun; 32(2):99–104

Surgical treatment of severe periodontitis in a haemophilic patient with inhibitors to factor VIII. Report of a case. Sindet-Pedersen S, et al. **J Clin Periodontol** 1988 Nov; 15(10):636–8

Clinical evaluation of the use of citric acid and autologous fibronectin in periodontal surgery. Caffesse RG, et al. **J Periodontol** 1988 Sep;59(9):565–9

New attachment achieved by guided tissue regeneration in beagle dogs. Caffesse RG, et al. **J Periodontol** 1988 Sep; 59(9):589–94

Porous hydroxyapatite grafts in chronic subcrestal periodontal defects in rhesus monkeys: a histological investigation. Ettel RG, et al. **J Periodontol** 1989 Jun; 60(6):342–51

Fibrin and fibronectin sealing system in a guided tissue regeneration procedure. A case report. Pini Prato GP, et al. **J Periodontol** 1988 Oct;59(10):679–83

An evaluation of new attachment formation using a microfibrillar collagen barrier. Tanner MG, et al. **J Periodontol** 1988 Aug;59(8):524–30

The use of bioceramic implants in periodontal treatment. Sewón L, et al. **Proc Finn Dent Soc** 1988;84(4):215–26 (65 ref.)

Technical note on the statistical analysis of one longitudinal periodontal study. Wiskott HW. **Schweiz Monatsschr Zahnmed** 1988;98(6):607–10

[Transplantation of allogeneic freeze-preserved bone spongiosa into periodontal bone defects: clinical results] Günay H. **Schweiz Monatsschr Zahnmed** 1988;98(6):611–8 (Eng. Abstr.) **(Ger)**

THERAPY

Improvement of oral hygiene habits: a psychological approach. 2-year data. Alcouffe F. **J Clin Periodontol** 1988 Nov;15(10):617–20

The effects of periodontal therapy on serum antibody (IgG) levels to plaque microorganisms. Aukhil I, et al. **J Clin Periodontol** 1988 Oct;15(9):544–50

Influence of granulation tissue, dental calculus and contaminated root cementum on periodontal wound healing. An experimental study in monkeys. Blomlöf L, et al. **J Clin Periodontol** 1989 Jan;16(1):27–32

Probing depth at re-evaluation following initial periodontal therapy to indicate the initial response to treatment. Claffey N, et al. **J Clin Periodontol** 1989 Apr;16(4):229–33

The impact of regression towards the mean on probing changes in studies on the effect of periodontal therapy. Egelberg J. **J Clin Periodontol** 1989 Feb;16(2):120–3

Effect of initial treatment of chronic inflammatory periodontal disease in adults on spontaneous peripheral blood lymphocyte proliferation. Evans RI, et al. **J Clin Periodontol** 1989 May;16(5):271–7

The bleeding/plaque ratio in the treatment of periodontal disease. Galgut PN. **J Clin Periodontol** 1988 Nov; 15(10):606–11

Density and localization of lymphocytes with natural-killer (NK) cell activity in periodontal biopsy specimens from patients with severe periodontitis. Kopp W. **J Clin Periodontol** 1988 Nov;15(10):595–600

Comparative longitudinal study of 2 methods of scheduling maintenance visits: 4-year data [published erratum appears in J Clin Periodontol 1989 Jul;16(6):391] Listgarten MA, et al. **J Clin Periodontol** 1989 Feb;16(2):105–15

Clinical and microbiological effects of root debridement in periodontal furcation pockets. Loos B, et al. **J Clin Periodontol** 1988 Aug;15(7):453–63

A combination of platelet-derived and insulin-like growth factors enhances periodontal regeneration. Lynch SE, et al. **J Clin Periodontol** 1989 Sep;16(8):545–8

Treatment of rapidly destructive periodontitis in Papillon-Lefèvre syndrome. Laboratory and clinical observations. Preus HR. **J Clin Periodontol** 1988 Nov; 15(10):639–43

Pulsated jet subgingival irrigation with 0.1% chlorhexidine, simplified oral hygiene and chronic periodontitis. Vignarajah S, et al. **J Clin Periodontol** 1989 Jul;16(6):365–70

Effects of subgingival irrigation on A. actinomycetemcomitans. Wikesjö UM, et al. **J Clin Periodontol** 1989 Feb;16(2):116–9

The effect of 2% chlorhexidine digluconate irrigation on clinical parameters and the level of Bacteroides gingivalis in periodontal pockets. Southard SR, et al. **J Periodontol** 1989 Jun;60(6):302–9

Clinical observations of the effects of nonsurgical periodontal therapy on human periodontal disease. II. Ultrasonic scaling and root planing for 6 months. Hou GL, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Feb; 5(2):72–86

Periodontal hearing after treatment with either the Titan-S sonic scaler or hand instruments. Laurell L, et al. **Swed Dent J** 1988;12(5):187–92

[Synoptic treatment planning (I)] Brägger U, et al. **Schweiz Monatsschr Zahnmed** 1989;99(5):586–91 **(Ger, Fre)**

[Recall systems and intervals] Ramfjord SP. **Schweiz Monatsschr Zahnmed** 1989;99(6):686–97, 714 **(Ger, Fre)**

[Prevention of complications during orthodontic interventions in the combined treatment of periodontitis] Abakarov SI, et al. **Stomatologiia (Mosk)** 1988 Sep–Oct; 67(5):49–52 (Eng. Abstr.) **(Rus)**

[Experience in the use of an endodontal measuring device in the treatment of pulpitis and periodontitis] Barer GM, et al. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):81 **(Rus)**

[Electron-ion reflexotherapy in the combined treatment of periodontitis] Maksimovskiĭ IuM, et al. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):20–1 (Eng. Abstr.) **(Rus)**

[Experience with the use of an ultrahigh-frequency alternating magnetic field in periodontitis] Efanov OI, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Jan–Feb; (1):47–9 **(Rus)**

VETERINARY

Environmental influences on the progression of clinical and microbiological parameters of sheep periodontal disease. Frisken KW, et al. **Res Vet Sci** 1989 Mar;46(2):147–52

PERIODONTITIS, APICAL see **PERIAPICAL PERIODONTITIS**

PERIODONTITIS, APICAL, CHRONIC NONSUPPURATIVE see **PERIAPICAL GRANULOMA**

PERIODONTITIS, APICAL, SUPPURATIVE see **PERIAPICAL ABSCESS**

PERIODONTIUM

[Technic of making a 3-dimension photoelastic model of the tooth and its supporting structures] Wang J. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Mar; 23(2):76–8, 126 (Eng. Abstr.) **(Chi)**

ANATOMY & HISTOLOGY

The anatomy of soft tissues of the lower vestibule in relationship to periodontal tissues of the lower incisor teeth. Epidemiological study. Fialová S. **Acta Univ Palacki Olomuc Fac Med** 1988;120:357–65

Periodontal changes after experimentally induced intrusion of the upper incisors in Macaca fuscata monkeys. Murakami T, et al. **Am J Orthod Dentofacial Orthop** 1989 Feb; 95(2):115–26

Long-term comparison of two surgical flap designs for third molar surgery on the health of the periodontal tissue of the second molar tooth. Schofield ID, et al. **Can Dent Assoc J** 1988 Sep;54(9):689–91

Quantification of periodontal attachment at single-rooted teeth. Hujoel P, et al. **J Clin Periodontol** 1989 Apr; 16(4):224–8

Ultrasonic B-scans of the facial/oral periodontium in pigs. Löst C, et al. **J Clin Periodontol** 1989 Sep;16(8):534–8

Determination of the facial/oral alveolar crest using RF-echograms. An in vitro study on the periodontium of pigs. Löst C, et al. **J Clin Periodontol** 1989 Sep;16(8):539–44

Tooth support in the human mandible. Ralph WJ, et al. **J Oral Rehabil** 1988 Sep;15(5):499–503

[The effect of age on the periodontal status of the golden Syrian hamster (morphologic research)] Wendt A, et al. **Zahn Mund Kieferheilkd** 1989;77(3):276–80 (Eng. Abstr.) **(Ger)**

BLOOD SUPPLY

[Rheographic and photoplethysmographic research on the periodontium in adults with an orthognathic bite, healthy periodontium and an intact dental arch] Milokhov KV, et al. **Stomatologiia (Mosk)** 1989 May–Jun;68(3):25–7 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Lifetime of the osteoblast in mouse periodontium. McCulloch CA, et al. **Anat Rec** 1988 Oct;222(2):128–35

Characterization of one phenotype of human periodontal granulation-tissue fibroblasts. Larjava H, et al. **J Dent Res** 1989 Jan;68(1):20–5

Initial characterization of cells derived from human periodontia. Piche JE, et al. **J Dent Res** 1989 May; 68(5):761–7

In situ lymphocyte subpopulations from active versus stable periodontal sites. Reinhardt RA, et al. **J Periodontol** 1988 Oct;59(10):656–70

[Fibroblasts of the normal human periodontium. Morphology and functional behavior in lattice collagen] Chomette G, et al. **Rev Stomatol Chir Maxillofac** 1988;89(6):357–60 (Eng. Abstr.) **(Fre)**

DRUG EFFECTS

Tissue responses in the rat to trichloracetic acid—an agent used in the treatment of invasive cervical resorption. Heithersay GS, et al. **Aust Dent J** 1988 Dec;33(6):451–61

Hydroxyapatite biomaterial implanted in human periodontal defects: an histological and ultrastructural study. Orly I, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1989 Jun; 32(2):79–86

IMMUNOLOGY

IgG subclasses in gingival crevicular fluid from active versus stable periodontal sites. Reinhardt RA, et al. **J Periodontol** 1989 Jan;60(1):44–50

INJURIES

Periodontal implications of orthodontic treatment in adults with reduced or normal periodontal tissues versus those of adolescents. Boyd RL, et al. **Am J Orthod Dentofacial Orthop** 1989 Sep;96(3):191–8

INNERVATION

Bilateral post-stimulus electromyographic complexes in human masseter muscles after stimulation of periodontal mechanoreceptors of bi- and unilaterally-innervated teeth. van der Glas HW, et al. **Arch Oral Biol** 1988;33(1):41–9

Dual somatosensory representation of the periodontium in nucleus ventralis posteromedialis of the cat thalamus. Yokota T, et al. **Brain Res** 1988 Dec 13;475(1):187–91

Distribution and central projections of primary afferent neurons that innervate the masseter muscle and mandibular periodontium: a double-label study. Capra NF, et al. **J Comp Neurol** 1989 Jan 15;279(3):341–52

[The dentition and its innervation—a continuously changing system] Hildebrand C, et al. **Lakartidningen** 1988 Sep 7; 85(36):2854–7 **(Swe)**

METABOLISM

Penetration and uptake of colloidal gold-labeled concanavalin A in the junctional epithelium of the rat. Takata T, et al. **J Periodontol** 1988 Dec;59(12):823–9

MICROBIOLOGY

Microbiota and crevicular fluid collagenase activity in the osseointegrated dental implant sulcus: a comparison of sites in edentulous and partially edentulous patients. Apse P, et al. **J Periodont Res** 1989 Mar;24(2):96–105

Quantification of bacterial penetration in spontaneous periodontal disease in beagle dogs. Coons DB, et al. **J Periodontol** 1989 Jan;60(1):23–30

The comparative cytotoxicity of periodontal bacteria. Stevens RH, et al. **J Periodontol** 1988 Nov;59(11):741–9

PATHOLOGY

Host genotype, pathogenic challenge and periodontal bone loss in the mouse. Gilbert AD, et al. **Arch Oral Biol** 1988; 33(12):855–61

Prostheses for multi-rooted teeth having badly damaged parodontium. Tafkova K, et al. **Folia Med (Plovdiv)** 1987; 29(4):47–51

Density and localization of lymphocytes with natural-killer (NK) cell activity in periodontal biopsy specimens from patients with severe periodontitis. Kopp W. **J Clin Periodontol** 1988 Nov;15(10):595–600

Histological evaluation of periodontal probe penetration in untreated facial molar furcations. Moriarty JD, et al. **J Clin Periodontol** 1989 Jan;16(1):21–6

Evaluation of four modalities of periodontal therapy. Mean probing depth, probing attachment level and recession changes. Kaldahl WB, et al. **J Periodontol** 1988 Dec; 59(12):783–93

Evaluation of furcation region response to periodontal therapy. Kalkwarf KL, et al. **J Periodontol** 1988 Dec; 59(12):794–804

Enzyme activity in crevicular fluid for detection and prediction of clinical attachment loss in patients with chronic adult periodontitis. Six month results. Lamster IB, et al. **J Periodontol** 1988 Aug;59(8):516–23

[Periodontal reaction to orthodontic measures] Donath K, et al. **Fortschr Kieferorthop** 1989 Apr;50(2):152–63 (Eng. Abstr.) **(Ger)**

[The modifiability of periodontal tissue in Wistar rats by a variation in the magnesium content of the diet] Kleber BM, et al. **Zahn Mund Kieferheilkd** 1988;76(8):799–804 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

In re: An American Board of Orthodontics case report [letter] Zuccati G. **Am J Orthod Dentofacial Orthop** 1989 Apr; 95(4):42A

Localisation of the first-order neurone of the jaw opening reflex elicited by periodontal stimulation. Aigouy L, et al. **Brain Res** 1988 Nov 15;473(2):380–4

Effect of porous and dense hydroxyapatite implantation on periodontal tissue regeneration in monkeys. Lin CJ, et al. **Bull Tokyo Med Dent Univ** 1989 Mar;36(1):1–11

Periodontal condition in adult patients with unilateral complete cleft lip and palate. Ramstad T. **Cleft Palate J** 1989 Jan;26(1):14–20

Current regenerative periodontal therapy. Carraro JJ. **Int Dent J** 1988 Sep;38(3):170–6 (60 ref.)

Influence of granulation tissue, dental calculus and contaminated root cementum on periodontal wound healing. An experimental study in monkeys. Blomlöf L, et al. **J Clin Periodontol** 1989 Jan;16(1):27–32

Placement of a porous membrane underneath the mucoperiosteal flap and its effect on periodontal wound healing in dogs. Claffey N, et al. **J Clin Periodontol** 1989 Jan;16(1):12–6

A combination of platelet-derived and insulin-like growth factors enhances periodontal regeneration. Lynch SE, et al. **J Clin Periodontol** 1989 Sep;16(8):545–8

Guided tissue regeneration in the treatment of furcation defects in mandibular molars. A clinical study of degree III involvements. Pontoriero R, et al. **J Clin Periodontol** 1989 Mar;16(3):170–4

Collagen membranes prevent apical migration of epithelium and support new connective tissue attachment during periodontal wound healing in dogs. Pitaru S, et al. **J Periodont Res** 1989 Jul;24(4):247–53

The use of collagen membranes to guide regeneration of new connective tissue attachment in dogs. Blumenthal NM. **J Periodontol** 1988 Dec;59(12):830–6

Retained "hopeless" teeth. Effects on the proximal periodontium of adjacent teeth. DeVore CH, et al. **J Periodontol** 1988 Oct;59(10):647–51

The effects of exclusion of epithelium from healing periodontal pockets. McHugh WD. **J Periodontol** 1988 Nov;59(11):750–7

Fibrin and fibronectin sealing system in a guided tissue regeneration procedure. A case report. Pini Prato GP, et al. **J Periodontol** 1988 Oct;59(10):679–83

Photoelastic analysis of stress transfer by endodontically treated teeth to the supporting structure using different restorative techniques. Assif D, et al. **J Prosthet Dent** 1989 May;61(5):535–43

Cross-sectional study of the periodontal status of removable partial denture patients. Bergman B, et al. **J Prosthet Dent** 1989 Feb;61(2):208–11

Impact response of periodontal tissues. Oka H, et al. **Med Biol Eng Comput** 1988 May;26(3):260–6

Clinical attempts at periodontal regeneration. Froum SJ. **N Y State Dent J** 1989 Jun–Jul;55(6):44–5 (0 ref.)

Periodontal regeneration. A clinical possibility. Stahl SS. **N Y State Dent J** 1989 Jun–Jul;55(6):34–6 (13 ref.)

Periodontal hearing after treatment with either the Titan-S sonic scaler or hand instruments. Laurell L, et al. **Swed Dent J** 1988;12(5):187–92

[Effect of the nutritional regimen on the dental and periodontal status of experimental animals] Lutskaia IK. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):72 **(Rus)**

[A method for recording the human periodontal muscular reflex] Malevich OE, et al. **Stomatologiia (Mosk)** 1989 Mar–Apr;68(2):10–2 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

The age-dependent reaction of the periodontal tissues to dental plaque. Bimstein E, et al. **ASDC J Dent Child** 1989 Sep–Oct;56(5):358–62 (58 ref.)

Application of mechanical mobility of periodontal tissues to tooth mobility examination. Oka H, et al. **Med Biol Eng Comput** 1989 Jan;27(1):75–81

[Comparative morphogenesis of resorptive osteoid hyperregeneration of the periodontium and endodontium] Hoffmann T, et al. **Zahn Mund Kieferheilkd** 1988; 76(7):704–10 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Computer-assisted image analysis [letter] Benn DK. **J Clin Periodontol** 1988 Oct;15(9):592–3

[Clinical and x-ray characteristics of the periodontium in Sjögren's disease] Pozharitskaia MM, et al. **Stomatologiia (Mosk)** 1989 Jan–Feb;68(1):32–5 (Eng. Abstr.) **(Rus)**

SURGERY

Suturing techniques in periodontal surgery. Galgut PN. **Br Dent J** 1989 Jul 8;167(1):29–31

An aid for teaching periodontal suturing techniques. Hawkins CH. **J Dent Educ** 1989 Apr;53(4):253–4

Effect of collagen solution application on healing following surgical treatment in colony-bred monkeys. Minabe M, et al. **J Periodont Res** 1988 Sep;23(5):313–7

The effect of various concentrations of collagen barrier on periodontal wound healing. Kodama T, et al. **J Periodontol** 1989 Apr;60(4):205–10

Comparison of histological effects of different bioceramic implants on surgically created periodontal defects in monkeys. Wong MY, et al. **Taiwan I Hsueh Hui Tsa Chih** 1989 Feb;88(2):152–8

ULTRASTRUCTURE

Serial section reconstruction using a computer graphics system: applications to intracellular structures in yeast cells and to the periodontal structure of dogs' teeth. Baba N, et al. **J Electron Microsc Tech** 1989 Jan;11(1):16–26

An electron microscopic study on the epithelial attachment of golden hamster molars. Inage T, et al. **J Nihon Univ Sch Dent** 1988 Jun;30(2):104–19

Ultrastructure of the peri-implant junctional epithelium on single-crystal sapphire endosseous dental implant loaded with functional stress. Hashimoto M, et al. **J Oral Rehabil** 1989 May;16(3):261–70

Collagen linkage in periodontal connective tissue reattachment. An ultrastructural study in beagle dogs. Selvig KA, et al. **J Periodontol** 1988 Nov;59(11):758–68

PERIODONTIUM, APICAL see **PERIAPICAL TISSUE**

PERIODONTOSIS see under **PERIODONTAL DISEASES**

PERIOPERATIVE NURSING see **OPERATING ROOM NURSING**

PERIOSTEUM

Parosteal (periosteal) lipoma. Krajewska I, et al. **Pathology** 1988 Apr;20(2):179–83

Periosteal Ewing's sarcoma. Kolář J, et al. **ROFO** 1989 Feb; 150(2):179–82

[Cystic parosteal osteosarcoma. A case treated by resection] Wuisman P, et al. **Rev Chir Orthop** 1988;74(6):576–9 (Eng. Abstr.) **(Fre)**

[A case of remove of foreign body granuloma after extraperiosteal sponge plombage 20 years ago] Suzuki S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct; 36(10):2332–5 (Eng. Abstr.) **(Jpn)**

ANATOMY & HISTOLOGY

On how the periosteal bone of the delphinid humerus becomes cancellous: ontogeny of a histological specialization. de Buffrénil V, et al. **J Morphol** 1988 Nov; 198(2):149–64

[The spinal periosteal layer and the fibrous sheath of the cervical spinal canal] Zadeh J, et al. **Bull Assoc Anat (Nancy)** 1989 Mar;73(220):45–7 (Eng. Abstr.) **(Fre)**

BLOOD SUPPLY

Microvascular networks in tympanic membrane, malleus periosteum, and annulus perichondrium of neonatal mongrel dog: a vasculoanatomic model for surgical considerations. Maher WP. **Am J Anat** 1988 Dec; 183(4):294–302

Blood supply to the periosteum of the canine tibia. Cooper RC Jr, et al. **Am J Vet Res** 1988 Aug;49(8):1419–23

CYTOLOGY

Effect of diffusion chamber pore size on differentiation and proliferation of periosteal cells. An experimental study. Jaroma HJ, et al. **Clin Orthop** 1988 Nov;(236):258–64

Establishment of human osteoblastic cells derived from periosteum in culture. Koshihara Y, et al. **In Vitro Cell Dev Biol** 1989 Jan;25(1):37–43

Differentiation of periosteal cells in muscle. An experimental study using the diffusion chamber method. Jaroma HJ, et al. **Scand J Plast Reconstr Surg Hand Surg** 1988;22(3):193–8

DRUG EFFECTS

Flurbiprofen-induced stimulation of periosteal bone formation and inhibition of bone resorption in older rats. Jee WS, et al. **Bone** 1988;9(6):381–9

METABOLISM

Calcification of dentinal collagen by cultured rabbit periosteum: the role of alkaline phosphatase. Beertsen W, et al. **Matrix** 1989 Mar;9(2):159–71

PARASITOLOGY

Deep onchocercomata close to the thigh bones of a Liberian patient. Kilian HD. **Trop Med Parasitol** 1988 Dec;39 Suppl 4:347–8

PATHOLOGY

Metatarsal periosteal reactions: a common non-specific finding in radiographs of the diabetic foot. Williams CE, et al. **BMJ** 1988 Nov 12;297(6658):1243–4

Retrovirus and periosteal osteogenic cells. Morphology study. Graf B, et al. **Pathol Biol (Paris)** 1988 Sep; 36(7):871–6

Periosteal and vascular innervation of the human patella in degenerative joint disease. Badalamente MA, et al. **Semin Arthritis Rheum** 1989 May;18(4 Suppl 2):61–6

[Periosteal osteosarcoma] Wagner J, et al. **Unfallchirurg** 1988 Oct;91(10):479–83 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Longitudinal growth of the rabbit femur after vascular and periosteal interference, Kuijpers-Jagtman AM, et al. **Anat Anz** 1988;167(5):349–58

The effect of partial periosteal division on growth of the long bones. An experimental study in rabbits. Dimitriou CG, et al. **Clin Orthop** 1988 Nov;(236):265–9

Periosteal bone formation elicited by partially purified bone

morphogenetic protein. Nakahara H, et al. **Clin Orthop** 1989 Feb;(239):299–305
Normal and heterotopic periosteum. Włodarski KH. **Clin Orthop** 1989 Apr;(241):265–77 (111 ref.)
The influence of periosteal elevation on mandibular growth in young rats. Sa'do B, et al. **Int J Oral Maxillofac Surg** 1989 Jun;18(3):175–8
Direct transformation from quiescence to bone formation in the adult periosteum following a single brief period of bone loading. Pead MJ, et al. **J Bone Miner Res** 1988 Dec; 3(6):647–56
Effect of cerclage wires on periosteal bone in growing dogs. Wilson JW. **Vet Surg** 1987 Jul–Aug;16(4):299–302
[Incidence and clinical importance of chronic reactive periosteal new bone formation in the cervical region in patients with differing neurologic symptomatology] Trattnig S, et al. **Rontgenblatter** 1989 Feb;42(2):69–72 (Eng. Abstr.) **(Ger)**
[Localization and invasion of the femur in the rat by a soft tissue tumor induced by pellets made of hydroxypropylcellulose mixed with 20-methylcholanthrene: special reference to effects of the periosteum] Yoshida N. **Nippon Seikeigeka Gakkai Zasshi** 1989 Apr;63(4):345–54 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

An experimental study of the patterns of periosteal and endosteal damage in tibial shaft fractures using a rabbit trauma model. Oni OO, et al. **J Orthop Trauma** 1989; 3(2):142–7
[Osteoblastic periosteal dysplasia: clinical and radiologic characteristics] Grzesiakowska U. **Pol Przegl Radiol (Warszawa)** 1988 Jul–Oct;52(4–5):205–8 (Eng. Abstr.) **(Pol)**

RADIONUCLIDE IMAGING

Indium-111-labeled leukocyte scintigraphy: diagnosis of subperiosteal abscesses complicating osteomyelitis in a child. Outwater E, et al. **J Nucl Med** 1988 Nov; 29(11):1871–4

SURGERY

Effects of primary periosteoplasty on facial growth in unilateral cleft lip and palate: 10-year follow-up. Smahel Z, et al. **Cleft Palate J** 1988 Oct;25(4):356–61
Tips for wound closure. Pearls for minimizing dog-ears and applications of periosteal sutures. Zitelli JA. **Dermatol Clin** 1989 Jan;7(1):123–8
Correction of angular forelimb deformity in a nilgai: periosteal transection and elevation of the radius and partial ulnectomy. Gardner HM, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1176–8
The pericranial flap for reconstruction of anterior skull base defects. Price JC, et al. **Laryngoscope** 1988 Nov; 98(11):1159–64
The radiographic and histologic appearance of controlled surgical manipulation of the equine periosteum. Caron JP, et al. **Vet Surg** 1987 Jan–Feb;16(1):13–20

TRANSPLANTATION

Osteogenic capacity of vascularised periosteum: experimental study using rib periosteum in rabbits. Takato T, et al. **Br J Plast Surg** 1988 Sep;41(5):528–32
Periosteal neochondrogenesis for biologically resurfacing joints: its cellular origin. Zarnett R, et al. **Can J Surg** 1989 May;32(3):171–4
Periosteal primary resurfacing of joint surface defects of the patella due to injury. Korkala OL. **Injury** 1988 May; 19(3):216–8
Laminopediculoplasty: a new method of reconstructing the posterior elements of the thoracic spine. Tsuzuki N, et al. **Int Orthop** 1989;13(1):39–45
Reversed free periosteal grafting of extensive tracheal defects in dogs. Moutsouris C, et al. **J Pediatr Surg** 1989 Jun; 24(6):570–2
The use of free periosteal grafts in extensive lower lid reconstruction. Hurwitz JJ, et al. **Ophthalmic Surg** 1989 Jun;20(6):415–9
Scanning electron microscopy and gel electrophoresis of vascularized periosteal autografts. Burstein FD, et al. **Plast Reconstr Surg** 1989 Mar;83(3):500–10
Periosteal flaps and grafts in primary cleft repair: a follow-up study. Rintala AE, et al. **Plast Reconstr Surg** 1989 Jan; 83(1):17–24
[Vascularized periosteal grafts. Anatomic description, experimental study, preliminary report of clinical experience] Masquelet AC, et al. **Rev Chir Orthop** 1988; 74 Suppl 2:240–3 **(Fre)**
[Periosteal rein-plasty, a simple and safe method in the treatment of chronic fibular instability of the upper ankle joint] Lindenmaier HL, et al. **Z Unfallchir Versicherungsmed Berufskr** 1988;81(3):201–4 **(Ger)**
[Treatment of chronic instability of the shoulder girdle with periosteal reinplasty] Lindenmaier HL, et al. **Z Unfallchir Versicherungsmed Berufskr** 1988;81(2):126–32 **(Ger)**
[Use of a periosteal flap in the surgical management of rupture of the acromioclavicular joint capsule and ligament. Preliminary report] Sánta S, et al. **Magy Traumatol Orthop Helyreallito Sebesz** 1989; 32(1):51–4 (Eng. Abstr.) **(Hun)**

ULTRASTRUCTURE

Periosteal structure and development in a rat caudal vertebra. Ellender G, et al. **J Anat** 1988 Jun;158:173–87

PERIOSTITIS

CHEMICALLY INDUCED

Prostaglandin-induced hyperostosis. A case report. Dravaric DM, et al. **Clin Orthop** 1989 Sep;(246):300–4

ETIOLOGY

Bone invasion in secondary syphilis [letter] Davidson F, et al. **Genitourin Med** 1989 Jan;65(1):60
[Medial stress syndrome in military conscripts] Hald N, et al. **Ugeskr Laeger** 1989 Aug 14;151(33):2070–2 (Eng. Abstr.) **(Dan)**
[Joint periostitis of the lower limb disclosing a fistulated and infected aortic prosthesis (letter)] Lassoued S, et al. **Presse Med** 1988 Oct 15;17(35):1815–6 **(Fre)**
[Periostitis deformans caused by subacute fluorosis. A case of uncommon cause] Prost A, et al. **Rev Rhum Mal Osteoartic** 1988 Jul–Sep;55(9):709–11 (6 ref.) **(Fre)**

HISTORY

[Tertiary bone syphilis from the Middle Ages. A paleopathology study] Scheidegger S. **Pathologe** 1989 May; 10(3):177–81 **(Ger)**

MICROBIOLOGY

Treponemal bone disease in an Ethiopian immigrant. Sperber AD, et al. **Isr J Med Sci** 1989 Aug;25(8):459–61

RADIOGRAPHY

Periostitis ossificans versus Garrè's osteomyelitis. Part II: Radiologic analysis of 93 cases in the jaws. Nortjé CJ, et al. **Oral Surg Oral Med Oral Pathol** 1988 Aug;66(2):249–60
[Recurrent multifocal periostitis in children] Ben Dridi MF, et al. **Tunis Med** 1988 Dec;66(12):867–72 (8 ref.) (Eng. Abstr.) **(Fre)**

PERIPHERAL CATHETERIZATION see **CATHETERIZATION, PERIPHERAL**

PERIPHERAL NERVE DISEASES

POEMS syndrome associated with polycythemia vera. Schulz W, et al. **Cancer** 1989 Mar 15;63(6):1175–8
[Primary neuropathy of the lumbosacral plexus (letter)] Dalmau J, et al. **Med Clin (Barc)** 1988 Dec 10;91(20):797–8 **(Spa)**

BLOOD

Zinc, copper and magnesium concentration in serum and CSF of patients with neurological disorders. Kapaki E, et al. **Acta Neurol Scand** 1989 May;79(5):373–8
Role of variant prealbumin in the pathogenesis of familial amyloidotic polyneuropathy: fate of normal and variant prealbumin in the circulation of rats. Ando Y, et al. **Clin Chim Acta** 1989 Feb 15;179(2):205–6

CEREBROSPINAL FLUID

Cerebrospinal fluid immunoreactive substance P and somatostatin in neurological patients with peripheral and spinal cord disease. Cramer H, et al. **Neuropeptides** 1988 Oct;12(3):119–24

CHEMICALLY INDUCED

Peripheral neuropathy and low dose cisplatin. Greenspan A, et al. **Am J Clin Oncol** 1988 Dec;11(6):660–2
Neurotoxic effects of organic solvents in exposed workers: two controlled follow-up studies after 5.5 and 10.6 years. Gregersen P. **Am J Ind Med** 1988;14(6):681–701
Multiple nerve palsies after anesthesia—a complication of nitrous oxide use? [letter; comment] Lampert BA. **Anesth Analg** 1989 Jul;69(1):136–7. **Comment on:** Anesth Analg 1988 Oct;67(10):1002–4
Neurological abnormalities associated with remote occupational elemental mercury exposure. Albers JW, et al. **Ann Neurol** 1988 Nov;24(5):651–9
Experimental neuropathy produced in rats with industrial solvents (thinner). Barroso-Moguel R, et al. **Arch Invest Med (Mex)** 1989 Jan–Mar;20(1):53–60
Disulfiram neuropathy: electrophysiological study. Palliyath S, et al. **Electromyogr Clin Neurophysiol** 1988 Jun–Jul; 28(5):245–7
Early and long-term toxicity in the management of advanced germ cell testicular tumors. Strohmeyer T, et al. **Eur Urol** 1988;15(3–4):205–8
An electroneurographic assessment of subclinical lead neurotoxicity. He FS, et al. **Int Arch Occup Environ Health** 1988;61(1–2):141–6
Variability in response of the nervous system (central, peripheral) to workplace chemicals. Seppäläinen AM. **Int Arch Occup Environ Health** 1988;Suppl:84–90
Folic acid deficiency, megaloblastic anemia and peripheral polyneuropathy due to oral contraceptives. Kornberg A, et al. **Isr J Med Sci** 1989 Mar;25(3):142–5
Polyneuropathy secondary to ciguatoxin poisoning. Sozzi G, et al. **Ital J Neurol Sci** 1988 Oct;9(5):491–5
Disulfiram neuropathy. Bergouignan FX, et al. **J Neurol** 1988 Jul;235(6):382–3
Peripheral neuropathies during treatment with almitrine: report of 46 cases. Bouche P, et al. **J Neurol** 1989 Jan; 236(1):29–33
Peripheral neuropathy in two workers exposed to 1,1,1-trichloroethane [letter] Liss GM. **JAMA** 1988 Oct 21;260(15):2217
Metronidazole neuropathy: a case report. Takeuchi H, et al. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):291–5
Delayed chronic polyneuropathy following organophosphate poisoning: a case report. Low ET, et al. **Med J Malaysia** 1987 Jun;42(2):113–4
Acute dapsone-induced peripheral neuropathy [letter] Navarro JC, et al. **Muscle Nerve** 1989 Jul;12(7):604–6
Dorsal radiculopathy resulting from podophyllin toxicity. Gorin F, et al. **Neurology** 1989 Apr;39(4):607–8
Temporal relationship of blood-nerve barrier breakdown to the metabolic and morphologic alterations of tellurium neuropathy. Bouldin TW, et al. **Neurotoxicology** 1989 Spring;10(1):79–89
Toxic neurofilamentous axonopathies and fast anterograde axonal transport. I. The effects of single doses of acrylamide on the rate and capacity of transport. Sickles DW. **Neurotoxicology** 1989 Spring;10(1):91–101
Toxic neurofilamentous axonopathies and fast anterograde axonal transport. II. The effects of single doses of neurotoxic and non-neurotoxic diketones and beta, beta'-iminodipropionitrile (IDPN) on the rate and capacity of transport. Sickles DW. **Neurotoxicology** 1989 Spring; 10(1):103–11
Peripheral neuropathy from disulfiram (Antabuse) therapy. Hassard GH, et al. **S D J Med** 1988 Oct;41(10):25–7
Peripheral neuropathies due to toxic exposure [editorial] Kurt TL. **Tex Med** 1988 Aug;84(8):11–2
Poisoning from thallium. Schwartz JG, et al. **Tex Med** 1988 Aug;84(8):46–8
Peripheral nerve function in patients with chronic bronchitis receiving almitrine or placebo. Allen MB, et al. **Thorax** 1989 Apr;44(4):292–7
Hypoxia, almitrine, and peripheral neuropathy. Howard P. **Thorax** 1989 Apr;44(4):247–50 (35 ref.)
Biochemical and clinical tests of the delayed neuropathic potential of some O-alkyl O-dichlorophenyl phosphoramidate analogues of methamidophos (O,S-dimethyl phosphorothioamidate). Johnson MK, et al. **Toxicology** 1989 Jan;54(1):89–100
[Organophosphate-induced delayed neuropathy—a clinical analysis of 8 cases] Wang SF. **Chung Hua Nei Ko Tsa Chih** 1988 Mar;27(3):165–7, 198 (Eng. Abstr.) **(Chi)**
[Drug injuries of peripheral nerves: report of 48 cases] Gu YD. **Chung Hua Wai Ko Tsa Chih** 1988 Aug;26(8):460–1, 509 (Eng. Abstr.) **(Chi)**
[Peripheral neuropathies caused by drugs] Uldry PA, et al. **Schweiz Rundsch Med Prax** 1989 Jun 6;78(23):667–70 (21 ref.) (Eng. Abstr.) **(Fre)**
[Peripheral neuropathy and cyclosporin. Apropos of 2 cases] Blin O, et al. **Therapie** 1989 Jan–Feb;44(1):55–7 (Eng. Abstr.) **(Fre)**
[Successful corticoid treatment of lumbosacral plexus neuropathy in heroin abuse. Clinical aspects, electrophysiology, therapy and follow-up] Herdmann J, et al. **Nervenarzt** 1988 Nov;59(11):683–6 (Eng. Abstr.) **(Ger)**
[Peripheral rheumatoid neuropathy. Description of a clinical case] Lanciani P, et al. **Clin Ter** 1989 Jan 15;128(1):27–31 (Eng. Abstr.) **(Ita)**
[Risk of exposure to solvents in people working at home] Discalzi GL, et al. **Med Lav** 1988 May–Jun;79(3):234–6 (Eng. Abstr.) **(Ita)**
[Peripheral neuropathy caused by cisplatin in patients with lung cancer] Murata M, et al. **Gan To Kagaku Ryoho** 1989 Jun;16(6):2283–8 (Eng. Abstr.) **(Jpn)**
[Two cases of various symptoms and renal dysfunction induced by longterm germanium intake] Obara K, et al. **Nippon Naika Gakkai Zasshi** 1988 Nov;77(11):1704–9 **(Jpn)**
[Arsenical neuropathy. Report of two cases] Nagamatsu K, et al. **Rinsho Shinkeigaku** 1975 Jan;15(1):1–4 (Eng. Abstr.) **(Jpn)**
[Hygienic evaluation of the technologic process of lead recovery from metallurgic dust of a copper-smelting plant] Babkin VO, et al. **Gig Tr Prof Zabol** 1988 Dec;(12):44–6 (Eng. Abstr.) **(Rus)**
[Pathogenetic characteristics of poisoning diseases of the nerve trunks] Golovchenko IuI. **Vrach Delo** 1988 Aug; (8):82–4 (Eng. Abstr.) **(Rus)**
[Sensitive painful polyneuropathy probably caused by poisoning by perchloroethylene. Apropos of 1 case] Herruzo Pérez A, et al. **Rev Esp Anestesiol Reanim** 1989 May–Jun;36(3):180–1 **(Spa)**

CLASSIFICATION

[Apropos of the critical comments of N. S. Misiuk—the author of the article "The classification of diseases of the

peripheral nervous system"] Antonov IP. **Zh Nevropatol Psikhiatr** 1988;88(11):127–8 **(Rus)**

COMPLICATIONS

Systemic mastocytosis associated with membranous nephropathy and peripheral neuropathy. Lal SM, et al. **Am J Kidney Dis** 1988 Dec;12(6):538–43

Hypercalcemia of immobilization in an adult patient with peripheral neuropathy. Osterman J, et al. **Am J Med Sci** 1989 Apr;297(4):254–6

Neuropathy associated with acrodermatitis chronica atrophicans. Clinical and morphological features. Kristoferitsch W, et al. **Ann N Y Acad Sci** 1988;539:35–45

Peripheral neuropathy in essential mixed cryoglobulinemia. Garcia-Bragado F, et al. **Arch Neurol** 1988 Nov; 45(11):1210–4

Polyneuropathies associated with IgM monoclonal gammopathies. Kelly JJ, et al. **Arch Neurol** 1988 Dec; 45(12):1355–9

Neurologic cause of idiopathic incontinence. Laurberg S, et al. **Arch Neurol** 1988 Nov;45(11):1250–3

Leg claudication and peripheral neuropathy as main features of systemic necrotizing vasculitis [letter] Tan WD, et al. **Arthritis Rheum** 1989 Apr;32(4):510–1

Heavy- and free light-chain myeloma associated with peripheral polyneuropathy. Cotariu D, et al. **Clin Chem** 1988 Dec;34(12):2594–5

Neuropsychiatric abnormalities in primary Sjögren's syndrome. Drosos AA, et al. **Clin Exp Rheumatol** 1989 Mar–Apr;7(2):207–9

Peripheral nerve mucoid degeneration of the upper extremity. Allieu PY, et al. **J Hand Surg [Am]** 1989 Mar; 14(2 Pt 1):189–94 (31 ref.)

Neurofibromatosis with ulnar nerve palsy and skull deformity. Rajendraretnam K, et al. **J Indian Med Assoc** 1988 Jul;86(7):200

Infanto-juvenile encephaloneuropathy and pigmentary retinopathy in a girl associated with congenital adrenal insufficiency and altered plasma medium-chain fatty acid levels. Federico A, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:178–82

Familial hypoketotic hypoglycaemia associated with peripheral neuropathy, pigmentary retinopathy and C6–C14 hydroxydicarboxylic aciduria. A new defect in fatty acid oxidation? Poll-The BT, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:183–5

Motor dominant neuropathy and IgM paraproteinemia: the IgM M-protein binds to specific gangliosides. Kusunoki S, et al. **J Neuroimmunol** 1989 Feb;21(2–3):177–81

Scapuloperoneal neuropathy: a distinct clinicopathologic entity. Hyser CL, et al. **J Neurol Sci** 1988 Oct;87(1):91–102

Vitamin B-12 and folate function in chronic alcoholic men with peripheral neuropathy and encephalopathy. Gimsing P, et al. **J Nutr** 1989 Mar;119(3):416–24

Painful polyneuropathy. Portenoy RK. **Neurol Clin** 1989 May;7(2):265–88 (99 ref.)

Peripheral neuropathy in primary Sjögren's syndrome. Mellgren SI, et al. **Neurology** 1989 Mar;39(3):390–4

Neurologic disorders and aspiration. Brin MF, et al. **Otolaryngol Clin North Am** 1988 Nov;21(4):691–9 (35 ref.)

Autonomic dysfunction, peripheral neuropathy, and depression. Rimar S, et al. **Pediatr Neurol** 1985 Mar–Apr; 1(2):120–3

Evidence of central nervous system involvement in chronic demyelinating neuropathies associated with "benign" gammopathies. Provinciali L, et al. **Riv Neurol** 1989 Jan–Feb;59(1):36–44

Faecal incontinence in diabetes mellitus: is it correlated to diabetic autonomic or peripheral neuropathy? Erckenbrecht JF, et al. **Z Gastroenterol** 1988 Dec; 26(12):731–6

[Peripheral neuropathy associated with polyarteritis nodosa: report of the clinical manifestations and pathologic findings of sural nerve biopsy in 21 cases] Guo YP, et al. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Apr; 21(2):97–102, 127 (Eng. Abstr.) **(Chi)**

[Peripheral neuropathy in chronic bronchopathy. A study of 128 patients] Lerebours G, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:400–2 (Eng. Abstr.) **(Fre)**

[Dysglobulinemic neuropathies] Gherardi R, et al. **Rev Neurol (Paris)** 1988;144(6–7):391–408 (175 ref.) (Eng. Abstr.) **(Fre)**

[Study of antiglycolipid antibodies in IgM monoclonal dysglobulinemias associated with peripheral neuropathy] Jauberteau MO, et al. **Rev Neurol (Paris)** 1988; 144(8–9):474–80 (Eng. Abstr.) **(Fre)**

[Rhizomelic pseudo-polyarthritis with distal sensory ischemic neuropathy and arteritis of the lower limbs (letter)] Bisagni-Faure A, et al. **Rev Rhum Mal Osteoartic** 1989 Apr;56(5):426–7 **(Fre)**

[Peripheral neurologic causes of shoulder and arm pain] Mumenthaler M. **Ther Umsch** 1988 Nov;45(11):774–9 (Eng. Abstr.) **(Ger)**

[A case of Sjögren's syndrome accompanied by periodic paralysis, pancreatitis, renal tubular acidosis, peripheral neuropathy and renal calcification] Otabe S, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):424–5 **(Jpn)**

[A case of acute autonomic neuropathy and subperineural edema associated with aseptic meningitis] Kitajima I, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):365–71 (Eng. Abstr.) **(Jpn)**

[Pathogenetic and clinical aspects of perineural Tarlov cysts] Kawiak W, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:69–73 (Eng. Abstr.) **(Pol)**

[Neuropathy of the chin associated with neoplasms. Presentation of 5 cases and a review of the literature] Vadell Nadal C, et al. **Arch Neurobiol (Madr)** 1989 Jan–Feb; 52(1):17–22 (25 ref.) (Eng. Abstr.) **(Spa)**

[Polyneuropathy associated with monoclonal gammapathy of undetermined significance] Mellibovsky Saidler L, et al. **Med Clin (Barc)** 1988 Jun 11;91(3):88–92 (Eng. Abstr.) **(Spa)**

[Severe polyneuropathy as the presenting form of idiopathic hypereosinophilic syndrome (letter)] Martín González R, et al. **Rev Clin Esp** 1989 Apr;184(6):335–6 **(Spa)**

DIAGNOSIS

Wallerian degeneration and inflammation in rat peripheral nerve detected by in vivo MR imaging. Titelbaum DS, et al. **AJNR** 1989 Jul–Aug;10(4):741–6

Tomaculous neuropathy presenting as acute recurrent polyneuropathy. Joy JL, et al. **Ann Neurol** 1989 Jul; 26(1):98–100

Posterior antebrachial cutaneous neuropathy: case report. Chang CW, et al. **Electromyogr Clin Neurophysiol** 1989 Mar;29(2):109–11

Iatrogenic peripheral nerve lesions and acute compressive mononeuropathies—considerations on clinical course and EMG findings. Milić S, et al. **Electromyogr Clin Neurophysiol** 1988 Nov–Dec; 28(7–8):415–9

Delayed short-latency somatosensory evoked potentials in premature diagnosis of medullar disturbances in cervical spondylosis. Rubio Esteban G, et al. **Electromyogr Clin Neurophysiol** 1988 Nov–Dec; 28(7–8):361–8

Benign cystic lesions of peripheral nerves. Høgh J. **Int Orthop** 1988;12(4):269–71

Preliminary report on the use of liquid crystal thermography in podiatry. Baer MS, et al. **J Foot Surg** 1988 Sep–Oct; 27(5):398–403 (31 ref.)

Sitting posture and peroneal neuropathy [letter] Cranberg LD, et al. **Muscle Nerve** 1989 May;12(5):424–5

Examination of the palmaris brevis [letter] Saadeh PB. **Muscle Nerve** 1989 May;12(5):425–6

The diagnostic value of somatosensory evoked potentials in the diseases of peripheral nervous system. Constantinovici A. **Neurol Psychiatr (Bucur)** 1989 Apr–Jun;27(2):111–25

Recent advances in the electrodiagnosis of peripheral neuropathies. Vasilescu C, et al. **Neurol Psychiatr (Bucur)** 1988 Jul–Sep;26(3):123–34 (60 ref.)

Electrodiagnosis of brachial plexopathies [letter] Dall'Agata D, et al. **Neurology** 1989 Aug;39(8):1136–7

The performance and usefulness of nerve conduction studies in the orthopedic office. Feierstein MS. **Orthop Clin North Am** 1988 Oct;19(4):859–66 (2 ref.)

Nerve entrapments: an update. Katz RT. **Orthopedics** 1989 Aug;12(8):1097–107 (102 ref.)

Neurothermography. Green J. **Semin Neurol** 1987 Dec; 7(4):313–6 (47 ref.)

Walking and cycling tests in neurogenic and intermittent claudication. Dong G, et al. **Spine** 1989 Sep;14(9):965–9

The pseudoradicular syndrome. Lower extremity peripheral nerve entrapment masquerading as lumbar radiculopathy. Saal JA, et al. **Spine** 1988 Aug;13(8):926–30

[Diagnosis of brachial plexus injury] Gu YD. **Chung Hua Wai Ko Tsa Chih** 1988 Aug;26(8):455–7, 509 (Eng. Abstr.) **(Chi)**

[Electrodiagnosis of polyneuropathy. The EMG picture of axonal and demyelinating types of disorders] Bednařík J. **Cesk Neurol Neurochir** 1989 Jan;52(1):5–10 **(Cze)**

[Peripheral neuropathy in multiple sclerosis. I. Preliminary electrophysiologic studies] Bednařík J. **Cesk Neurol Neurochir** 1988 Sep;51(5):301–6 (Eng. Abstr.) **(Cze)**

[The role of magnetic stimulation in diagnosis of the peripheral nervous system] Dressler D, et al. **EEG EMG** 1988 Dec;19(4):260–3 (Eng. Abstr.) **(Ger)**

[Percutaneous electrical stimulation (PES) and SEP in peripheral neuropathies] Aizawa H, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):447–52 (Eng. Abstr.) **(Jpn)**

DRUG THERAPY

Influence of ganglioside treatment on acrylamide neuropathy in mice. A morphometric study. Stotzem CD, et al. **Arzneimittelforschung** 1988 Nov;38(11):1563–7

Hypomania in an AIDS patient receiving amitriptyline for neuropathic pain. Holmes VF, et al. **Neurology** 1989 Feb; 39(2 Pt 1):305

[Gangliosides in the treatment of polyneuropathies. Satellite symposium of the 61st annual meeting of the German Society for Neurology. Frankfurt, 21 September 1988. Abstracts] **Fortschr Med** 1989;107 Suppl 59:1–15 **(Ger)**

[Use of neuropeptides in acute neurologic diseases] Akimow GA. **Neurol Neurochir Pol** 1988 Sep–Oct;22(5):410–2 (Eng. Abstr.) **(Pol)**

[The use of deoxypeganin hydrochloride in the combined treatment of patients with diseases of the peripheral nervous system] Tarasiuk VK, et al. **Vrach Delo** 1989 Mar;(3):92–3 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

HTLV-I myeloneuropathy in the Solomon Islands [letter] Ajdukiewicz A, et al. **N Engl J Med** 1989 Aug 31; 321(9):615–6

ETIOLOGY

Microangiopathy of endoneurial vessels in hypoxemic chronic obstructive pulmonary disease (COPD). A quantitative ultrastructural study. Stoebner P, et al. **Acta Neuropathol (Berl)** 1989;78(4):388–95

Abnormalities of peripheral nerve in patients with human immunodeficiency virus infection. Mah V, et al. **Ann Neurol** 1988 Dec;24(6):713–7

Peripheral neuropathy as an early marker of AL amyloidosis. Duston MA, et al. **Arch Intern Med** 1989 Feb;149(2):358–60

Progressive neurological dysfunction during latent HIV infection. Jakobsen J, et al. **BMJ** 1989 Jul 22; 299(6693):225–8

Mononeuritis multiplex and occipital infarction complicating giant cell arteritis. McAlindon TE, et al. **Br J Rheumatol** 1989 Jun;28(3):257–8

Critically ill polyneuropathy associated with burns: a case report. Carver N, et al. **Burns** 1989 Jun;15(3):179–80

The natural history of uremic neuropathy. Albertazzi A, et al. **Contrib Nephrol** 1988;65:130–7

Electrophysiological findings in crutch palsy. Subramony SH. **Electromyogr Clin Neurophysiol** 1989 Jul–Aug; 29(5):281–5

Familial amyloid polyneuropathy: report of an autopsy case with neuropathy, vitreous opacities and polycystic kidney. Scelsi R, et al. **Eur Neurol** 1989;29(1):27–32

Comparative analysis of autonomic and somatic dysfunction in chronic uraemia. Vita G, et al. **Eur Neurol** 1988; 28(6):335–40

Paraneoplastic visceral neuropathy as a cause of severe gastrointestinal motor dysfunction. Chinn JS, et al. **Gastroenterology** 1988 Nov;95(5):1279–86

Subclinical neurological and neuropsychological effect of infection with HIV. Carne CA, et al. **Genitourin Med** 1989 Jun;65(3):151–6

Neuropathies associated with radical pelvic surgery for gynecologic cancer. Hoffman MS, et al. **Gynecol Oncol** 1988 Nov;31(3):462–6

On the article of "Sporotrichoid nerve abscess" published by Guha et al [letter] Ramanujam K. **Indian J Lepr** 1988 Jul;60(3):482–3

Peripheral neuropathy associated with allergic granulomatous angiitis (Churg-Strauss syndrome): clinical features and histological findings. Cavallaro T, et al. **Ital J Neurol Sci** 1988 Dec;9(6):595–8

Neuropathy secondary to vitamin E deficiency in acquired intestinal malabsorption. Palmucci L, et al. **Ital J Neurol Sci** 1988 Dec;9(6):599–602

Complications after total hip replacement. The contralateral limb. Smith JW, et al. **J Bone Joint Surg [Am]** 1989 Apr; 71(4):528–35

Digital nerve calcification in CREST syndrome. Polio JL, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):201–3

Neurological features of acromegaly: a review and report of two cases. Woo CC. **J Manipulative Physiol Ther** 1988 Aug;11(4):314–21 (52 ref.)

Subacute sensory neuronopathy associated with Sjögren's sicca syndrome. Laloux P, et al. **J Neurol** 1988 Jul; 235(6):352–4

Peripheral neuropathy with predominantly motor manifestations in a patient with carcinoma of the uterus. Yamada M, et al. **J Neurol** 1988 Jul;235(6):368–70

Bilateral cheiro-oral syndrome following pontine haemorrhage. Yasuda Y, et al. **J Neurol** 1988 Nov; 235(8):489–90

Peripheral neuropathy complicating pancreatitis and major pancreatic surgery. Gross ML, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1341–4

Peripheral neuropathy associated with Castleman's disease. Donaghy M, et al. **J Neurol Sci** 1989 Feb;89(2–3):253–67

The pathology of early leprous neuropathy. Shetty VP, et al. **J Neurol Sci** 1988 Dec;88(1–3):115–31

High predictivity of neurological manifestations for HIV infection in Africa [letter] Di Costanzo B, et al. **Lancet** 1989 Jul 29;2(8657):270

Electrodiagnostic evolution of carcinomatous sensory neuronopathy. Donofrio PD, et al. **Muscle Nerve** 1989 Jun; 12(6):508–13

The spectrum of peripheral neuropathy associated with ARC and AIDS. Miller RG, et al. **Muscle Nerve** 1988 Aug; 11(8):857–63

Neurologic manifestations of gastrointestinal disease. Albers JW, et al. **Neurol Clin** 1989 Aug;7(3):525–48 (128 ref.)

The remote effects of cancer on the nervous system. Dropcho EJ. **Neurol Clin** 1989 Aug;7(3):579–603 (156 ref.)

Neurologic complications of renal disease. Lockwood AH. **Neurol Clin** 1989 Aug;7(3):617–27 (56 ref.)

Distinction between neoplastic and radiation-induced brachial plexopathy, with emphasis on the role of EMG. Harper CM Jr, et al. **Neurology** 1989 Apr;39(4):502–6

Human neurolymphomatosis by adult T-cell leukemia. Kuroda Y, et al. **Neurology** 1989 Jan;39(1):144–6

Ulnar neuropathy caused by fat necrosis with cystic myxoid degeneration at the upper forearm: case report. Segal R, et al. **Neurosurgery** 1988 Nov;23(5):669–71

Peripheral neuropathy and cadmium toxicity. Blum LW, et

al. **Pa Med** 1989 Apr;92(4):54–6
Hypothermia–induced reversible polyneuropathy: electrophysiologic evidence of axonopathy. Afifi AK, et al. **Pediatr Neurol** 1988 Jan–Feb;4(1):49–53
Myeloradiculopathy associated with wasp sting. Van Antwerpen CL, et al. **Pediatr Neurol** 1988 Nov–Dec; 4(6):379–80 (11 ref.)
Thiamine deficiency neuropathy. It's still common today. Skelton WP 3d, et al. **Postgrad Med** 1989 Jun;85(8):301–6
Brachial plexitis complicating disseminated gonococcal infection. Maroun B, et al. **Postgrad Med J** 1989 Feb; 65(760):118–9
Peripheral nerve injury and Raynaud's syndrome following electric shock. Kinnunen E, et al. **Scand J Work Environ Health** 1988 Oct;14(5):332–3
Lumbosacral plexopathy. Chad DA, et al. **Semin Neurol** 1987 Mar;7(1):97–107 (32 ref.)
Cauda equina lesions following fusion in situ and decompressive laminectomy for severe spondylolisthesis. Four case reports. Maurice HD, et al. **Spine** 1989 Feb; 14(2):214–6
Paresis of proximal lumbar roots after reduction of L5–S1 spondylolisthesis. Transfeldt EE, et al. **Spine** 1989 Aug; 14(8):884–7
Spinal cord involvement as the presenting symptom of acute monocytic leukemia [letter] Sugar O. **Surg Neurol** 1988 Nov;30(5):413
Familial amyloidotic polyneuropathy. Benson MD. **Trends Neurosci** 1989 Mar;12(3):88–92 (31 ref.)
[Brachial irradiation plexopathy] Olsen NK, et al. **Ugeskr Laeger** 1989 Jun 19;151(25):1606–9 (26 ref.) (Eng. Abstr.) **(Dan)**
[Electric shock causing peripheral nerve injury and Raynaud's symptoms] Kinnunen E, et al. **Duodecim** 1988; 104(14):1077–9 **(Fin)**
[Role of the electrophysiologic examination in the diagnosis of Bassen–Kornzweig syndrome] Hirsch E, et al. **Neurophysiol Clin** 1988 Sep;18(5):469–75 (Eng. Abstr.) **(Fre)**
[Sensory nerve involvement in X–linked bulbospinal amyotrophy (Kennedy syndrome). Contributions of electrophysiologic and histologic data] Penisson–Besnier I, et al. **Neurophysiol Clin** 1989 May;19(2):163–70 (Eng. Abstr.) **(Fre)**
[Electrophysiology of the peripheral nervous system in patients with stage II HIV infection (letter)] Dano P, et al. **Presse Med** 1989 May 6;18(18):937 **(Fre)**
[Nerve paralysis after surgery of the hip. Apropos of 48 cases] Roblin L, et al. **Rev Chir Orthop** 1989;75(2):104–11 (25 ref.) (Eng. Abstr.) **(Fre)**
[Peripheral neuropathies disclosing sarcoidosis] Brochet B, et al. **Rev Neurol (Paris)** 1988;144(10):590–5 (19 ref.) (Eng. Abstr.) **(Fre)**
[The peripheral nervous system and HIV infection. 13 cases] Léger JM, et al. **Rev Neurol (Paris)** 1988;144(12):789–95 (31 ref.) (Eng. Abstr.) **(Fre)**
[Lesions of the peripheral nerves in primary care] Mühlau G, et al. **Psychiatr Neurol Med Psychol Beih** 1988;39:80–1 **(Ger)**
[Subclinical neuropathies and paraproteinemias] Guardigni L, et al. **Recenti Prog Med** 1989 Jan;80(1):1–3 (Eng. Abstr.) **(Ita)**
[Carcinomatous neuropathy] Izumo S, et al. **Gan No Rinsho** 1989 Jan;Spec No:687–94 **(Jpn)**
[Neuropathies and myopathies associated with alcoholism] Shimpo T. **Nippon Rinsho** 1988 Aug;46(8):1696–700 **(Jpn)**
[A case of chronic thyroiditis associated with vasculitic neuropathy] Awaki E, et al. **Rinsho Shinkeigaku** 1988 May; 28(5):501–6 (Eng. Abstr.) **(Jpn)**
[Autoimmune disease and its carbohydrate epitope] Ariga T, et al. **Tanpakushitsu Kakusan Koso** 1989 Mar; 34(3):225–34 (45 ref.) **(Jpn)**
[Spondyloptosis of the 4th thoracic vertebra with complete regression of neurologic disorders] Voronovich IR, et al. **Ortop Travmatol Protez** 1988 Nov;(11):53–4 **(Rus)**

GENETICS

Inherited neuromuscular diseases in the mouse. A review of the literature. Torres LF. **Arq Neuropsiquiatr** 1988 Sep; 46(3):298–307 (115 ref.)
Anaesthetic management of a patient with familial amyloid polyneuropathy of the Portuguese type. Castro Tavares J, et al. **Can J Anaesth** 1989 Mar;36(2):209–11
Simplified method for screening populations at risk for transthyretin Met30–associated familial amyloidotic polyneuropathy. Saraiva MJ, et al. **Clin Chem** 1989 Jun; 35(6):1033–5
Familial amyloidotic polyneuropathy: transthyretin (prealbumin) variants in kindreds of Italian origin. Saraiva MJ, et al. **Hum Genet** 1988 Dec;80(4):341–3
IgM monoclonal gammopathy and neuropathy in two siblings. Jensen TS, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1308–15
Molecular genetics of amyloid neuropathy in Europe [letter] Benson MD. **Lancet** 1989 May 27;1(8648):1203
[Diagnosis by recombinant DNA techniques and clinical features of familial amyloid polyneuropathy] Harada T. **No To Shinkei** 1988 Jul;40(7):617–21 (Eng. Abstr.) **(Jpn)**
[Molecular genetic analysis of familial amyloidotic polyneuropathy, an autosomal dominantly inherited disorder] Maeda S. **Seikagaku** 1989 Jan;61(1):1–20 (78 ref.) **(Jpn)**
[Identification of genetic carriers in familial amyloidosis with polyneuropathy is possible with the DNA technic] Holmgren G, et al. **Lakartidningen** 1988 Nov 2; 85(44):3677–9 **(Swe)**

IMMUNOLOGY

Paraneoplastic autoimmunity. Steck AJ, et al. **Ann N Y Acad Sci** 1988;540:91–8 (27 ref.)
Immunoglobulin M deposits in sural nerve in mononeuritis multiplex associated with immunoglobulin M paraproteinemia [letter] Seitz RJ. **Ann Neurol** 1988 Oct; 24(4):587–8
Waldenström's macroglobulinemia with peripheral neuropathy—the role of IgM M–protein in autoimmune mechanism. Wang CR, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1988 Feb;21(1):9–15
Peripheral neuropathy and anti–MAG antibodies. Latov N, et al. **Crit Rev Neurobiol** 1988;3(4):301–32 (175 ref.)
Direct immunofluorescence in sural nerve biopsies. Schenone A, et al. **Eur Neurol** 1988;28(5):262–9
Humoral factors in inflammatory disorders of the central and peripheral nervous system. Tindall RS. **J Neuroimmunol** 1988 Dec;20(2–3):283–96 (54 ref.)
Immune mechanisms in acute and chronic inflammatory polyneuropathies. Toyka KV, et al. **J Neuroimmunol** 1988 Dec;20(2–3):277–81 (46 ref.)
[Clinico–immunological correlations during the acupuncture reflexotherapy of peripheral nerve diseases and injuries] Shapkin VI, et al. **Voen Med Zh** 1988 Dec;(12):32–4 **(Rus)**

METABOLISM

Nerve growth factor receptor immunoreactivity in human benign peripheral nerve sheath tumor. Yasuda T, et al. **Acta Neuropathol (Berl)** 1989;77(6):591–8
Demonstration of calcitonin gene–related peptide immunoreactive axons contacting dynorphin A(1–8) immunoreactive spinal neurons in a rat model of peripheral inflammation and hyperalgesia. Takahashi O, et al. **Brain Res** 1988 Dec 13;475(1):168–72
Adult polyglucosan body myopathy with subclinical peripheral neuropathy: case report and review of diseases associated with polyglucosan body accumulation. Weis J, et al. **Clin Neuropathol** 1988 Nov–Dec;7(6):271–9 (32 ref.)
Peripheral inflammation is associated with increased dynorphin immunoreactivity in both projection and local circuit neurons in the superficial dorsal horn of the rat lumbar spinal cord. Nahin RL, et al. **Neurosci Lett** 1989 Jan 30;96(3):247–52

MICROBIOLOGY

Inflammatory lesions of peripheral nerve in a patient with human T–lymphotropic virus type I—associated myelopathy. Said G, et al. **Ann Neurol** 1988 Aug; 24(2):275–7

PATHOLOGY

The yield of sural nerve biopsy in the evaluation of peripheral neuropathies. Argov Z, et al. **Acta Neurol Scand** 1989 Mar; 79(3):243–5
A pathological study of a peripheral nerve in a case of neonatal adrenoleukodystrophy. Mito T, et al. **Acta Neuropathol (Berl)** 1989;77(4):437–40
Infective endocarditis with inflammatory lesions in the peripheral nervous system. Pamphlett R, et al. **Acta Neuropathol (Berl)** 1989;78(1):101–4
Acute mononeuropathy with angiotropic lymphoma. Vital C, et al. **Acta Neuropathol (Berl)** 1989;78(1):105–7
Overwork weakness in rats with acrylamide neuropathy. Okajima Y, et al. **Am J Phys Med Rehabil** 1989 Apr; 68(2):66–9
Early cerebellar degeneration in twins with infantile neuroaxonal dystrophy. Barlow JK, et al. **Ann Neurol** 1989 Apr;25(4):413–5
Peripheral nerve pathological findings in familial amyloid polyneuropathy: a correlative study of proximal sciatic nerve and sural nerve lesions. Hanyu N, et al. **Ann Neurol** 1989 Apr;25(4):340–50
Chronic peripheral neuropathy in childhood: an overview. Ouvrier RA, et al. **Aust Paediatr J** 1988;24 Suppl 1:80–2
Peripheral neuropathy in elderly CBA mice. Pollock M, et al. **Aust Paediatr J** 1988;24 Suppl 1:64–5
Peripheral neuropathy associated with mitochondrial myopathy. Yiannikas C, et al. **Aust Paediatr J** 1988;24 Suppl 1:62–3
Osteosclerotic myeloma with polyneuropathy and hypocalcemia. Ludescher C, et al. **Blut** 1989 Apr; 58(4):207–10 (22 ref.)
Giant axonal neuropathy. A review. Ouvrier RA. **Brain Dev** 1989;11(4):207–14 (33 ref.)
Neuropathy with onion bulb formations and pure motor manifestations. Auer RN, et al. **Can J Neurol Sci** 1989 May; 16(2):194–7
Peripheral neuropathy associated with angioimmunoblastic lymphadenopathy. Ferrer I, et al. **Clin Neurol Neurosurg** 1988;90(2):159–62
Tibial nerve branching in the tarsal tunnel. Havel PE, et al. **Foot Ankle** 1988 Dec;9(3):117–9
Ultrastructural studies of peripheral nerves in lepromatous leprosy patients. Kumar V, et al. **Indian J Lepr** 1988 Jul; 60(3):360–2
Nerve damage in leprosy. Job CK. **Int J Lepr Other Mycobact Dis** 1989 Jun;57(2):532–9 (19 ref.)
POEMS syndrome associated with cryoglobulinemia, lymphoma, multiple seborrheic keratosis, and ichthyosis. Fishel B, et al. **J Am Acad Dermatol** 1988 Nov;19(5 Pt 2):979–82
Peripheral nerve findings in Rett syndrome. Haas RH, et al. **J Child Neurol** 1988;3 Suppl:S25–30
Cutaneous angioma in Crow–Fukase syndrome: the nature of globules within the endothelial cells. Jitsukawa K, et al. **J Dermatol (Tokyo)** 1988 Dec;15(6):513–22
Non–myelin–forming Schwann cells proliferate rapidly during Wallerian degeneration in the rat sciatic nerve. Clemence A, et al. **J Neurocytol** 1989 Apr;18(2):185–92
Giant axonal neuropathy: observations on a further patient. Donaghy M, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):991–4
Peripheral neuropathy associated with functional islet cell adenomas in SV40 transgenic mice. Dyer KR, et al. **J Neuropathol Exp Neurol** 1989 Jul;48(4):399–412
Comparative histology of skin and nerve granulomas in leprosy patients. Mukherjee A, et al. **Lepr Rev** 1988 Jun; 59(2):177–80
Strychnine–enhanced transsynaptic degeneration of dorsal horn neurons in rats with an experimental painful peripheral neuropathy. Sugimoto T, et al. **Neurosci Lett** 1989 Mar 27;98(2):139–43
Redundant nerve roots of the cauda equina: clinical aspects and consideration of pathogenesis. Suzuki K, et al. **Neurosurgery** 1989 Apr;24(4):521–8
Central and peripheral nervous system pathology of homocystinuria due to 5,10–methylenetetrahydrofolate reductase deficiency. Nishimura M, et al. **Pediatr Neurol** 1985 Nov–Dec;1(6):375–8
Intraneural ganglion of the peroneal nerve: an unusual presentation. Case report. Poppi M, et al. **Surg Neurol** 1989 May;31(5):405–6
Pathological findings in three non–Japanese patients with the POEMS syndrome. Gherardi R, et al. **Virchows Arch [A]** 1988;413(4):357–65
[Non–familial ulcero–mutilating acro–osteopathy of the feet] Eichhorn K, et al. **Hautarzt** 1989 May;40(5):316–8 (Eng. Abstr.) **(Ger)**
[Neuropathia mucinosa cutanea] Vakilzadeh F. **Hautarzt** 1989 Mar;40(3):167–8 (Eng. Abstr.) **(Ger)**
[The culturing of human Schwann cells: a new contribution to the study of polyneuropathy] de Martini I, et al. **Boll Soc Ital Biol Sper** 1989 May;65(5):405–11 (Eng. Abstr.) **(Ita)**
[Peripheral neuropathy during ocular myopathy: description of a case] Aragona F, et al. **Riv Neurol** 1988 Jul–Aug; 58(4):137–9 (Eng. Abstr.) **(Ita)**
[Peripheral nerve biopsy. Indications, methods and principal pathological pictures] Rizzuto N, et al. **Riv Neurol** 1988 Mar–Apr;58(2):89–92 (8 ref.) **(Ita)**
[The leprous neuritis of the lower limbs—histopathological findings and its possible mechanism] Minauchi Y. **Nippon Rai Gakkai Zasshi** 1988 Jul–Sep;57(3):137–48 (Eng. Abstr.) **(Jpn)**
[Peripheral nerve involvement in tabes dorsalis (tabetic polyneuropathy)—histopathologic studies of sural nerve biopsies] Kita K, et al. **Rinsho Shinkeigaku** 1988 Jun; 28(6):674–80 (Eng. Abstr.) **(Jpn)**
[Intra–axonal polyglucosan bodies and relapsing generalized weakness: a case report] Kiuchi T, et al. **Rinsho Shinkeigaku** 1988 Oct;28(10):1122–30 (20 ref.) (Eng. Abstr.) **(Jpn)**
[A case of generalized sarcoidosis with lesions of the intrathoracic lymph nodes and the central and peripheral nervous systems] Repnitskaia ZD, et al. **Probl Tuberk** 1988; (10):71–2 **(Rus)**

PHYSIOPATHOLOGY

Somatosensory potentials evoked by magnetic stimulation of lumbar roots, cauda equina, and leg nerves. Tsuji S, et al. **Ann Neurol** 1988 Oct;24(4):568–73
Peripheral neuropathy in hypothyroidism. I. Clinical and electrophysiological study. Shinoda K, et al. **Bull Osaka Med Sch** 1987 Oct;33(2):137–48
Peripheral nerve compression in the upper extremity. Morgan RF, et al. **Compr Ther** 1989 May;15(5):23–33 (10 ref.)
Cutaneomuscular reflex in a peripheral nerve lesion. Brezinova V. **Electromyogr Clin Neurophysiol** 1988 May; 28(4):183–9
Electrophysiological study in systemic necrotizing vasculitis of the polyarteritis nodosa group. Cruz Martínez A, et al. **Electromyogr Clin Neurophysiol** 1988 May;28(4):167–73
Motor unit recruitment order in neuropathic disease. Herdmann J, et al. **Electromyogr Clin Neurophysiol** 1988 Jan;28(1):53–60
Proximal vs. distal nerve conduction measurements in uremic neuropathy. Marra TR. **Electromyogr Clin Neurophysiol** 1988 Nov–Dec;28(7–8):439–43
Identification of motor conduction block despite desynchronisation. A method. Roth G, et al. **Electromyogr Clin Neurophysiol** 1989 Jul–Aug;29(5):305–13
Changes in microglial cell numbers in the spinal cord dorsal horn following brachial plexus transection in the adult rat.

Cova JL, et al. **Exp Brain Res** 1988;73(1):61–8

Evaluation of peripheral nerve conduction and central visual conduction in chronic alcoholics and in chronic alcoholics after prolonged abstention. Devetag F. **Ital J Neurol Sci** 1988 Dec;9(6):583–92

Motor nerve conduction velocities and neuropathy amongst diabetics. Kumar BR, et al. **J Assoc Physicians India** 1988 Oct;36(10):589–93

Sciatic neuropathies in childhood: a report of ten cases and review of the literature. Jones HR Jr, et al. **J Child Neurol** 1988 Jul;3(3):193–9 (26 ref.)

Complex repetitive discharges in the iliopsoas muscle. Meyer BU, et al. **J Neurol** 1988 Sep;235(7):411–4

The conduction velocities of peripheral nerve fibres conveying sensations of warming and cooling [letter] Fuller GN, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun; 52(6):810–2

Abnormalities of sympathetic vasomotor tone in distal axonal neuropathy. Satchell PM. **J Neurol Sci** 1989 May; 90(3):251–61

The sympathetic skin response: normal values, elucidation of afferent components and application limits. Uncini A, et al. **J Neurol Sci** 1988 Nov;87(2–3):299–306

The natural course of peripheral and autonomic neural function during the first two years after diagnosis of type 1 diabetes. Ziegler D, et al. **Klin Wochenschr** 1988 Nov 1;66(21):1085–92

Motor action potential (M.A.P.) in the evaluation of uremic peripheral neurone damage: influence of middle molecules (M.M.). Coratelli P, et al. **Life Support Syst** 1983;1 Suppl 1:129–32

AAEE case report #17: Peripheral neuropathy in monoclonal gammopathy of undetermined significance. Donofrio PD, et al. **Muscle Nerve** 1989 Jan;12(1):1–8

Myasthenic U-shaped decrement in multifocal cervical radiculopathy. Gilchrist JM, et al. **Muscle Nerve** 1989 Jan; 12(1):64–6

The use of somatosensory evoked potentials for the evaluation of the peripheral nervous system. Eisen A. **Neurol Clin** 1988 Nov;6(4):825–38 (58 ref.)

Common peroneal mononeuropathy: a clinical and electrophysiologic study of 116 lesions. Katirji MB, et al. **Neurology** 1988 Nov;38(11):1723–8

Neuropathy in childhood. Sladky JT. **Semin Neurol** 1987 Mar;7(1):67–75 (25 ref.)

Anterior interosseous nerve syndrome. Ong ET, et al. **Singapore Med J** 1988 Oct;29(5):472–5

[Electrophysiologic research in peripheral neuropathies] Caruso G, et al. **Riv Neurol** 1988 Mar–Apr;58(2):80–3 (24 ref.) **(Ita)**

[Clinical application of the F-wave in various pathological conditions of the peripheral nervous system] Fierro B, et al. **Riv Neurol** 1988 May–Jun;58(3):116–20 (Eng. Abstr.) **(Ita)**

[Bullous lesions in familial amyloid polyneuropathy and treatment with L-threo-3,4-dihydroxyphenylserine—with reference to peripheral circulation response against direct heat stimulation] Yazawa M, et al. **Rinsho Shinkeigaku** 1988 Sep;28(9):1039–45 (Eng. Abstr.) **(Jpn)**

[Functions of the sympathetic-adrenomedullar system and adrenocortex in patients with vibration syndrome. Investigations of plasma and urine catecholamine and plasma cortisol during cold exposure] Kondo H. **Sangyo Igaku** 1988 Jul;30(4):256–65 (Eng. Abstr.) **(Jpn)**

[Contractile function of the anterior tibial muscle of man at different stages of the denervation-reinnervation process] Bogdanov EI, et al. **Biull Eksp Biol Med** 1988 Oct; 106(10):395–7 (Eng. Abstr.) **(Rus)**

[Role of disorders of neurotropic control in the mechanism of formation of painful trigger zones in neuromyofibrosis] Khabirov FA, et al. **Revmatologiia (Moskva)** 1988 Jul–Sep; (3):39–43 (Eng. Abstr.) **(Rus)**

[Electromyographic findings in patients with the vertebral syndrome associated with polyneuropathy] Brenčić-Dlesk M, et al. **Reumatizam** 1987;34(1–6):21–3 (Eng. Abstr.) **(Scr)**

PREVENTION & CONTROL

The effects of hemodialysis with different membranes on middle molecules and uremic neuropathy. Djukanović LJ, et al. **Int J Artif Organs** 1989 Jan;12(1):11–9

RADIOGRAPHY

Pelvic carcinomatous neuropathy: CT findings and implications for radiation treatment planning. Gaeta M, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):811–6

RADIONUCLIDE IMAGING

[Technetium-99m-pyrophosphate single photon emission computed tomography of the heart in familial amyloid polyneuropathy: comparison with thallium-201 myocardial scintigraphy—a case report] Imamoto T, et al. **Kaku Igaku** 1988 Oct;25(10):1117–23 (Eng. Abstr.) **(Jpn)**

REHABILITATION

When eating doesn't come naturally. McNichol J. **MCN** 1989 Jan–Feb;14(1):23–6

[Are alcoholic polyneuropathies reversible?] Wetzel W, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Sep; 40(9):551–4 (Eng. Abstr.) **(Ger)**

[Current problems of the rehabilitative therapy of diseases of the peripheral nervous system and spinal cord in spinal pathology] Strelkova NI. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Sep–Oct;(5):1–7 **(Rus)**

SURGERY

Conclusions on peripheral nerve microsurgery. Ionescu D. **Acta Chir Plast** 1988;30(4):234–9

The surgical conservation of the neuropathic foot. Warren AG. **Ann R Coll Surg Engl** 1989 Jul;71(4):236–42

The surgical management of cervical spondylotic radiculopathy and myelopathy. Herkowitz HN. **Clin Orthop** 1989 Feb;(239):94–108

A case of intraneural cyst of the common peroneal nerve. Meo A, et al. **Ital J Neurol Sci** 1988 Dec;9(6):607–10

THERAPY

Management of the neurologic complications of HIV infection and AIDS. Price RW, et al. **Infect Dis Clin North Am** 1988 Jun;2(2):359–72 (66 ref.)

Complete remission of paraneoplastic sensorimotor neuropathy: a case associated with small-cell lung cancer responsive to chemotherapy, plasma exchange, and radiotherapy. Weissman DE, et al. **J Clin Apheresis** 1989; 5(1):3–6

Therapeutic strategies in promoting peripheral nerve regeneration. Horowitz SH. **Muscle Nerve** 1989 Apr; 12(4):314–22 (71 ref.)

Spinal cord stimulation (SCS) in deafferentation pain. Meglio M, et al. **PACE** 1989 Apr;12(4 Pt 2):709–12

[Plasmapheresis in the treatment of peripheral HIV neuropathy] Salim YS, et al. **Ugeskr Laeger** 1989 Jul 3; 151(27):1754–6 (Eng. Abstr.) **(Dan)**

[Clinical use of IM-PH immuno-columns] Maresca MC, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:69–71 (Eng. Abstr.) **(Fre)**

VETERINARY

Femoral nerve paralysis after general anaesthesia. Dyson S, et al. **Equine Vet J** 1988 Sep;20(5):376–80

Laryngeal paralysis in immature and mature dogs as one sign of a more diffuse polyneuropathy. Braund KG, et al. **J Am Vet Med Assoc** 1989 Jun 15;194(12):1735–40

Insulinoma and subclinical peripheral neuropathy in two dogs. Braund KG, et al. **J Vet Intern Med** 1987 Apr–Jun; 1(2):86–90

Congenital hypomyelinating polyneuropathy in two golden retriever littermates. Braund KG, et al. **Vet Pathol** 1989 May;26(3):202–8

PERIPHERAL NERVE NEOPLASMS

[An unusual location of a myxofibrosarcoma] Reuther G, et al. **ROFO** 1988 Nov;149(5):544–5 **(Ger)**

[A case of schwannoma of intrathoracic right phrenic nerve] Morisaki Y, et al. **Kyobu Geka** 1989 Mar;42(3):239–43 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Malignant peripheral nerve sheath tumors and spindle cell sarcomas: an immunohistochemical analysis of multiple markers. Giangaspero F, et al. **Appl Pathol** 1989;7(2):134–44

Lipocortin-1 immunoreactivity in central and peripheral nervous system glial tumors. Johnson MD, et al. **Hum Pathol** 1989 Aug;20(8):772–6

CHEMICALLY INDUCED

Transplacental induction of peripheral nervous tumor in the Syrian golden hamster by N-nitroso-N-ethylurea. A new animal model for von Recklinghausen's neurofibromatosis. Nakamura T, et al. **Am J Pathol** 1989 Aug;135(2):251–9

COMPLICATIONS

Leukemic relapse presenting as sciatic nerve involvement by chloroma (granulocytic sarcoma). Stillman MJ, et al. **Cancer** 1988 Nov 1;62(9):2047–50

Lumbar intervertebral disk herniation with a concomitant nerve root neurinoma at the same site. Case report and review of the literature. Albert FK, et al. **Neurochirurgia (Stuttg)** 1988 Nov;31(6):222–5 (25 ref.)

Subarachnoid haemorrhage with acute cauda symptom due to spinal tumour. Kulali A, et al. **Neurochirurgia (Stuttg)** 1989 May;32(3):87–90

Two epithelioid malignant schwannomas in a patient with neurofibromatosis. Cytology, histology and DNA-flow-cytometry. Molenaar WM, et al. **Pathol Res Pract** 1989 May;184(5):529–34

Neurofibromatosis presenting as perineal pain and urethral burning. Batta AG, et al. **Urology** 1989 Feb;33(2):138–40

[Sciatica. Neurofibrosarcoma of the thigh] Labauge R, et al. **Rev Neurol (Paris)** 1989;145(2):157–9 (Eng. Abstr.) **(Fre)**

[Spinal subarachnoid hemorrhage due to neurinoma of the cauda equina] Furuno M, et al. **No Shinkei Geka** 1989 May; 17(5):485–8 (14 ref.) (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Small cauda equina neurinoma detected by MR imaging. Komatsu Y, et al. **AJNR** 1988 Nov–Dec;9(6):1243

Ficin in immunohistochemistry [letter] Taschini PA, et al. **Am J Clin Pathol** 1988 Dec;90(6):754–5

Tumors of the cauda equina: the importance of an early diagnosis. HogenEsch RI, et al. **Clin Neurol Neurosurg** 1988;90(4):343–8

Neurilemoma of the sciatic nerve mimicking tarsal tunnel syndrome. Report of a case. Wolock BS, et al. **J Bone Joint Surg [Am]** 1989 Jul;71(6):932–4

Solitary primary lymphoma of the sciatic nerve: case report. Pillay PK, et al. **Neurosurgery** 1988 Sep;23(3):370–1

[Peripheral nerve tumor with rhabdomyosarcomatous differentiation (malignant "triton" tumor)—report of 3 cases] Lin JS, et al. **Chung Hua Chung Liu Tsa Chih** 1988 May;10(3):227–9 (Eng. Abstr.) **(Chi)**

[A case of benign schwannoma of the posterior tibial nerve. Treatment by simple excision without nerve graft (letter)] Tourne Y, et al. **J Chir (Paris)** 1989 Mar;126(3):204–5 **(Fre)**

[Echotomographic diagnosis of a case of schwannoma of the median nerve] Tabasso MD. **Radiol Med (Torino)** 1989 May;77(5):569–72 **(Ita)**

[Immunohistochemical studies of peripheral nerve sheath tumors] Takahashi H. **Nippon Hifuka Gakkai Zasshi** 1988 Sep;98(10):987–96 (Eng. Abstr.) **(Jpn)**

ETIOLOGY

Embryonal neuroepithelial tumors induced by human adenovirus type 12 in rodents. I. Tumor induction in the peripheral nervous system. Ogawa K. **Acta Neuropathol (Berl)** 1989;77(3):244–53

GENETICS

Gene linkage in neurofibromatosis. DiSimone RE, et al. **Clin Orthop** 1989 Aug;(245):49–52

Regulation of N-myc expression is a critical event controlling the ability of human neuroblasts to differentiate. Thiele CJ, et al. **Exp Cell Biol** 1988;56(6):321–33 (34 ref.)

IMMUNOLOGY

Epithelial membrane antigen expression by the perineurium of peripheral nerve and in peripheral nerve tumours. Theaker JM, et al. **Histopathology** 1988 Aug;13(2):171–9

METABOLISM

Epithelial membrane antigen expression by the perineurial cell: further studies of peripheral nerve lesions. Theaker JM, et al. **Histopathology** 1989 Jun;14(6):581–92

The bradykinin-induced release of substance P from nerve fibre endings in the rat saphenous nerve neuroma is not related to electrophysiological excitation. White DM, et al. **Neurosci Lett** 1988 Sep 23;92(1):108–13

Substance P-, CGRP- and NPY-immunoreactive nerve fibers in rat sciatic nerve-end neuromas. Fried K, et al. **Regul Pept** 1989 Apr;25(1):11–24

PATHOLOGY

Brachial plexus meningioma, report of a case with immunohistochemical and ultrastructural examination. Coons SW, et al. **Acta Neuropathol (Berl)** 1989;77(4):445–8

The nature of the cells comprising tactile corpuscle-like structures [letter] Cramer SF. **Am J Dermatopathol** 1989 Feb;11(1):94–5

Malignant peripheral nerve sheath tumors of the skin. George E, et al. **Am J Dermatopathol** 1989 Jun;11(3):213–21

Tactile corpuscle-like structures in peripheral nerve sheath tumors in plastic embedded material. Jurecka W. **Am J Dermatopathol** 1988 Feb;10(1):74–9

Nerve sheath myxoma of digital nerve. Blumberg AK, et al. **Cancer** 1989 Mar 15;63(6):1215–8 (13 ref.)

Intraneural leiomyoma: brief report. Trail IA, et al. **J Bone Joint Surg [Br]** 1989 Jan;71(1):140

Neurothekeoma (peripheral nerve sheath myxoma) of the external auditory canal. Youngs R, et al. **J Otolaryngol** 1989 Apr;18(3):90–3

Paraganglioma of the cauda equina. Nagata K, et al. **Kurume Med J** 1988;35(2):95–9

Neuroblastoma in adults. A report of 3 cases. Behr A, et al. **S Afr Med J** 1989 Apr 1;75(7):333–5

[Dermal myxoma of nerve sheaths (neurothecoma) of Harkin and Reed. Apropos of a case] Mérot Y, et al. **Ann Dermatol Venereol** 1989;116(3):237–40 **(Fre)**

[Apropos of a case of malignant schwannoma with rhabdomyoblastic components. Malignant Triton tumor] Ben Nasr R, et al. **Arch Anat Cytol Pathol** 1988;36(4):175–7 (Eng. Abstr.) **(Fre)**

[Intramedullary mature teratoma associated with an attached cord and an intradural lipoma. Apropos of a surgically treated case. Review of the literature] Pelissou-Guyotat I, et al. **Neurochirurgie** 1988;34(3):205–9 (24 ref.) (Eng. Abstr.) **(Fre)**

[Neurinoma of the L3 spinal nerve root as a cause of stress-induced lumbo-ischialgias] Mayer HM, et al. **Sportverletz Sportschaden** 1988 Mar;2(1):35–8 (Eng. Abstr.) **(Ger)**

[The effect of various surgical technics on neuroma development using the neodymium laser] Mewe R, et al. **Z Orthop** 1989 Jan–Feb;127(1):130–4 (Eng. Abstr.) **(Ger)**

[Malignant peripheral neuroectodermal tumors. Histological and immunohistological conditions in 41 cases] Schmidt D, et al. **Zentralbl Allg Pathol** 1989;135(3):257–68 (Eng.

Abstr.) (Ger)
[A case of mediastinal schwannoma originating from the intrathoracic phrenic nerve] Ayabe H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Nov; 26(11):1187–90 (Eng. Abstr.) (Jpn)
[Primary malignant lymphoma of the left brachial plexus] Usuki K, et al. **Rinsho Ketsueki** 1988 Jul;29(7):1125–8 (Eng. Abstr.) (Jpn)

PHYSIOPATHOLOGY

Contrasting time course of catecholamine accumulation and of spontaneous discharge in experimental neuromas in the rat. Goldstein RS, et al. **Neurosci Lett** 1988 Nov 22; 94(1–2):58–63
[Pronator teres syndrome caused by neurinoma of the median nerve] Berlit P. **Nervenarzt** 1989 Mar;60(3):184–6 (Ger)

PREVENTION & CONTROL

Comparative study of neuroma formation in the rat sciatic nerve after CO2 laser and scalpel neurectomy in combination with milliwatt CO2 laser "sealing". Shapiro S, et al. **Surg Neurol** 1989 Oct;32(4):281–4

RADIOGRAPHY

Multiple schwannomas presenting as a mass of the lateral chest wall [letter] Murray RJ, et al. **AJR** 1988 Dec; 151(6):1250–1
Fibromatosis of the brachial plexus and shoulder girdle. Chui M. **Can Assoc Radiol J** 1989 Feb;40(1):28–31
Unusually low CT density in a peripheral neurofibroma. Tàpies Barba C, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):1086–7
Case report 547: Plexiform neurofibroma involving a dorsal root ganglion. Hallisey MJ, et al. **Skeletal Radiol** 1989; 18(4):314–7

SECONDARY

Paraganglioma of the thoracic spinal cord with cerebrospinal fluid metastasis. Constantini S, et al. **Spine** 1989 Jun; 14(6):643–5

SURGERY

Intraneural lipofibroma of the median nerve. Houpt P, et al. **J Hand Surg [Am]** 1989 Jul;14(4):706–9
Lipofibroma of the superficial branch of the radial nerve. Jacob RA, et al. **J Hand Surg [Am]** 1989 Jul;14(4):704–6
Iatrogenic lumbar meningocoel after excision of a neurofibroma [letter] Ward PJ. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):410–1
Wandering nerve graft technique for management of the recalcitrant painful neuroma in the hand: a case report. Mackinnon SE. **Microsurgery** 1988;9(2):95–102
Neuromas of the superficial radial nerve. Attarian DE. **Milit Med** 1988 Aug;153(8):393–4
The occurrence of different types of spinal tumours in one patient. A case report and review of the literature. Nishiura I, et al. **Neurochirurgia (Stuttg)** 1989 Mar;32(2):52–5 (21 ref.)
Management of synovial sarcoma of the median nerve at the elbow. Rinehart GC, et al. **Plast Reconstr Surg** 1989 Mar; 83(3):528–32
[Schwannoma of the endothoracic phrenic nerve. General review apropos of a case] Grunstein P, et al. **Rev Pneumol Clin** 1988;44(3):146–50 (31 ref.) (Eng. Abstr.) (Fre)
[Reoperations in the treatment of caudal teratomas] Nikitin AM, et al. **Khirurgiia (Mosk)** 1989 May;(5):97–100 (Eng. Abstr.) (Rus)

THERAPY

Experiences in the treatment of neuroblastoma. Joseph VT, et al. **Ann Acad Med Singapore** 1988 Jan;17(1):145–51
Experimental treatment of neuromas in the rat by retrograde axoplasmic transport of ricin with selective destruction of ganglion cells. Brandner MD, et al. **J Hand Surg [Am]** 1989 Jul;14(4):710–4

ULTRASTRUCTURE

Ultrastructural study of a perineurioma. Ohno T, et al. **Ultrastruct Pathol** 1988 Sep–Oct;12(5):495–504 (21 ref.)

PERIPHERAL NERVES

Peripheral nerve stimulator [letter] Blomfield D, et al. **Anaesth Intensive Care** 1989 Aug;17(3):380–1

ABNORMALITIES

The 2-stage neuroskeletal pathomechanism of developmental deformities of the limb skeleton. A contribution to the discussion on the McCredie–McBride hypothesis. Roth M. **Anat Anz** 1988;167(4):271–9

ANALYSIS

Occurrence of an insulin-like peptide in extracts of human nervous tissue. Uvnäs-Moberg K, et al. **Acta Physiol Scand** 1988 Jun;133(2):127–30
Brain and peripheral noradrenergic neuron activity in developing genetically hypertensive rats of the Lyon strain. Sautel M, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:423–29
Use of lead aspartate block staining in quantitative EM autoradiography of phospholipids: application to myelinating peripheral nerve. Gould RM, et al. **J Histochem Cytochem** 1989 Sep;37(9):1393–9
Isolation and characterization of complement receptors CR1 from human peripheral nerves. Vedeler CA, et al. **J Neuroimmunol** 1989 Aug;23(3):215–21
Substance P levels in peripheral nerve, skin, atrial myocardium and gastrointestinal tract of rats with long-term diabetes mellitus. Effects of aldose reductase inhibition. Willars GB, et al. **J Neurol Sci** 1989 Jun; 91(1–2):153–64

ANATOMY & HISTOLOGY

Distribution of elastic system fibers in the peripheral nerves of mammals. Ferreira JM Jr, et al. **Acta Anat (Basel)** 1987; 130(2):169–73
Do certain spinocerebellar neurons in lamina IX at lumbosacral levels send collaterals to peripheral nerves? A retrograde fluorescent double labeling study in the cat. Xu Q, et al. **Arch Ital Biol** 1988 Jun;126(3):179–92
Entrapment of the distal suprascapular nerve. An anatomical study. Kaspi A, et al. **Int Orthop** 1988;12(4):273–5
Nerve fibre morphometry: a comparison of techniques. Ewart DP, et al. **J Neurosci Methods** 1989 Aug;29(2):143–50
Myelinated axons in peripheral nerves of adult beagle dogs: morphometric and electrophysiological measurements. Illanes O, et al. **Res Vet Sci** 1988 Sep;45(2):181–5
End-structure of afferent axons injured in the peripheral and central nervous system. Fried K, et al. **Somatosens Mot Res** 1988;6(1):79–99
[Efferent and primary afferent neural pathways innervating the lower urinary tract of the cat. Part II. Primary afferent neural pathways] Sugaya K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 May;79(5):880–7 (Eng. Abstr.) (Jpn)
[Efferent and primary afferent neural pathways innervating the lower urinary tract of the cat. Part I. Efferent neural pathways] Sugaya K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 May;79(5):868–79 (Eng. Abstr.) (Jpn)
[An experimental study of Karnovsky's stain for differentiating motor and sensory funiculi during peripheral nerve surgery] Sumida J. **Nippon Seikeigeka Gakkai Zasshi** 1989 Jan;63(1):91–9 (Eng. Abstr.) (Jpn)

BLOOD SUPPLY

Peripheral nerve vasculitis: immune characterization of the vascular lesions. Kissel JT, et al. **Ann Neurol** 1989 Mar; 25(3):291–7
Inner perineurial cell vulnerability in ischemia. Benstead TJ, et al. **Brain Res** 1989 Jun 5;489(1):177–81
Is resistance to ischaemic conduction failure induced by hypoxia? Masson EA, et al. **Diabetologia** 1988 Oct; 31(10):762–5
Differential recovery of skeletal muscle and peripheral nerve function after ischemia and reperfusion. Chervu A, et al. **J Surg Res** 1989 Jul;47(1):12–9
Ischemic and reperfusion injury of rat peripheral nerve. Schmelzer JD, et al. **Proc Natl Acad Sci U S A** 1989 Mar; 86(5):1639–42
[Preliminary study on nerve regeneration through an autologous venous tube] Pirenne J, et al. **C R Soc Biol (Paris)** 1988;182(1):126–35 (Eng. Abstr.) (Fre)
[Pathways of microvascularization of the peripheral nerves and their plasticity] Mel'man EP. **Arkh Anat Gistol Embriol** 1988 Dec;95(12):72–5 (64 ref.) (Rus)

CYTOLOGY

Study of the origin of connective tissue sheaths of peripheral nerves in the limb of avian embryos. Haninec P. **Anat Embryol (Berl)** 1988;178(6):553–7
Modulation of Ca channels in peripheral neurons. Carbone E, et al. **Ann N Y Acad Sci** 1989;560:346–57 (54 ref.)
Fluorescent latex microspheres as a retrograde tracer in the peripheral nervous system. Colin W, et al. **Brain Res** 1989 May 8;486(2):334–9
The pelvic innervation in the rat: different spinal origin and projections in Sprague–Dawley and Wistar rats. Pascual JI, et al. **Brain Res** 1989 Feb 20;480(1–2):397–402
Preservation of sensory cells by placing stumps of transected nerve in an impermeable tube. Melville S, et al. **Exp Neurol** 1989 Sep;105(3):311–5
Establishment of Schwann cell cultures from adult rat peripheral nerves. Scarpini E, et al. **Exp Neurol** 1988 Nov; 102(2):167–76
Perineurial cells coexpress genes encoding interstitial collagens and basement membrane zone components. Jaakkola S, et al. **J Cell Biol** 1989 Mar;108(3):1157–63
Differentiating astroglia in nervous tissue histogenesis/regeneration: studies in a model system of regenerating peripheral nerve. Kalderon N. **J Neurosci Res** 1988 Oct–Dec;21(2–4):501–12

DRUG EFFECTS

Autologous fibrin tissue adhesive for cerebrospinal fluid leaks: a controlled study of neurotoxicity. Feldman MD, et al. **Am J Otol** 1988 Jul;9(4):302–5
Propylene oxide causes central-peripheral distal axonopathy in rats. Ohnishi A, et al. **Arch Environ Health** 1988 Sep–Oct; 43(5):353–6
General pharmacological studies on N-(2,6-dimethylphenyl)-8-pyrrolizidineacetamide hydrochloride hemihydrate. 2nd communication: effect on the peripheral nervous system and peripheral organs. Hirotsu I, et al. **Arzneimittelforschung** 1988 Oct; 38(10):1410–7
Peripheral versus central manifestations in the toxic interaction of lithium and pilocarpine. Roth D, et al. **Biol Psychiatry** 1989 Jan 15;25(2):153–8
Neonatal capsaicin treatment of rats reduces ACTH secretion in response to peripheral neuronal stimuli but not to centrally acting stressors. Donnerer J, et al. **Br J Pharmacol** 1988 Jul;94(3):647–52
Local anesthetic agents. Murphy MF. **Emerg Med Clin North Am** 1988 Nov;6(4):769–76
The neuropathology of leptophos in the hen: a chronologic study. Preissig SH, et al. **Environ Res** 1978 Oct;17(2):242–50
Effects of DA-1- and DA-2-dopamine antagonists on apomorphine-induced inhibition of peripheral sympathetic neurotransmission. Hietala J. **J Auton Pharmacol** 1988 Dec; 8(4):297–302
Lack of central sprouting of primary afferent fibers after ricin deafferentation. Pubols LM, et al. **J Comp Neurol** 1988 Sep 8;275(2):282–7
Enhancement of peripheral nerve regeneration by pharmacological activation of the cyclic AMP second messenger system. Klein HW, et al. **Microsurgery** 1989; 10(2):122–5 (26 ref.)
Autotomy behavior in rats following peripheral deafferentation is suppressed by daily injections of amitriptyline, diazepam and saline. Seltzer Z, et al. **Pain** 1989 May;37(2):245–50
Acidic fibroblast growth factor enhances peripheral nerve regeneration in vivo. Cordeiro PG, et al. **Plast Reconstr Surg** 1989 Jun;83(6):1013–9; discussion 1020–1
Biochemical and morphological validation of a rodent model of organophosphorus-induced delayed neuropathy. Padilla S, et al. **Toxicol Ind Health** 1988 Sep;4(3):361–71
[Drug injuries of peripheral nerves: report of 48 cases] Gu YD. **Chung Hua Wai Ko Tsa Chih** 1988 Aug;26(8):460–1, 509 (Eng. Abstr.) (Chi)
[Animal experiment studies of the effect of the hazardous substance carbon tetrachloride on peripheral nerves] Wagner A, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Jun;41(6):352–60 (Eng. Abstr.) (Ger)
[Neurotoxicity in long-term lithium therapy: an electroneurographic study] Eisenstädter A, et al. **Wien Klin Wochenschr** 1989 Mar 3;101(5):166–8 (Eng. Abstr.) (Ger)
[Neurotoxicity of chloramphenicol—an experimental study] Tateishi J, et al. **Rinsho Shinkeigaku** 1975 Mar;15(3):142–9 (Eng. Abstr.) (Jpn)

EMBRYOLOGY

Development of the peripheral nervous system from the neural crest. Le Douarin NM, et al. **Annu Rev Cell Biol** 1988;4:375–404 (75 ref.)
Nerve-muscle interactions in the embryo. Laing NG. **Aust Paediatr J** 1988;24 Suppl 1:40–2 (40 ref.)
Aspects of peripheral motor system development. Lamb AH. **Aust Paediatr J** 1988;24 Suppl 1:37–9 (40 ref.)
The development of lateral-line receptors in Eigenmannia (Teleostei, Gymnotiformes). II. The electroreceptive lateral-line system. Vischer HA. **Brain Behav Evol** 1989; 33(4):223–36
The development of lateral-line receptors in Eigenmannia (Teleostei, Gymnotiformes). I. The mechanoreceptive lateral-line system. Vischer HA. **Brain Behav Evol** 1989; 33(4):205–22
Differential splicing of MAG transcripts during CNS and PNS development. Tropak MB, et al. **Brain Res** 1988 Sep; 464(2):143–55
Formation of the transverse nerve in moth embryos. I. A scaffold of nonneuronal cells prefigures the nerve. Carr JN, et al. **Dev Biol** 1988 Dec;130(2):487–99
An axon growth associated antigen is also an early marker of neuronal determination. Denburg JL, et al. **Dev Biol** 1989 Sep;135(1):99–110

ENZYMOLOGY

The influence of some cations on an adenosine triphosphatase from peripheral nerves. 1957 [classical article] Skou JC. **Biochim Biophys Acta** 1989;1000:439–46
Carbonic anhydrase activity in the peripheral nervous system of rat: the enzyme as a marker for muscle afferents. Szabolcs MJ, et al. **Brain Res** 1989 Jul 17;492(1–2):129–38
Alterations in protective enzymes against peroxidation in the central and peripheral nervous system of control and dysmyelinating mutant mice. Cloëz I, et al. **J Neurochem** 1989 May;52(5):1353–8

GROWTH & DEVELOPMENT

Peripheral competition in the control of sensory neuron numbers in Xenopus frogs reared with a single bilaterally innervated hindlimb. Lamb AH, et al. **Brain Res Dev Brain Res** 1989 Jan 1;45(1):149–53

Peripheral nerve regeneration in quail–chick spinal cord chimeras treated with oral ciclosporin. Uzman BG, et al. **Dev Neurosci** 1989;11(1):65–75

The sprouting of saphenous nerve terminals in the spinal cord following early postnatal sciatic nerve section in the rat. Fitzgerald M. **J Comp Neurol** 1985 Oct 22;240(4):407–13

Age-related changes in the fibre composition of equine peripheral nerve. Wheeler SJ, et al. **J Neurol Sci** 1989 Mar; 90(1):53–66

IMMUNOLOGY

Reactivity of circulating antineuronal antibodies (CANA) on peripheral nervous system structures. Grisold W, et al. **Acta Neuropathol (Berl)** 1988;77(1):109–12

Comparison of indirect immunofluorescence and immunogold–silver staining on cell surface antigens of PNS and CNS cells. Difiglia CJ, et al. **Ann N Y Acad Sci** 1988; 540:327–9

Serum antibodies to peripheral nerve antigens in Guillain–Barré syndrome. Negishi T, et al. **Ann N Y Acad Sci** 1988;540:376–7

Epithelial membrane antigen expression by the perineurium of peripheral nerve and in peripheral nerve tumours. Theaker JM, et al. **Histopathology** 1988 Aug;13(2):171–9

Serum antibodies of normals and leprosy patients show equal binding to peripheral nerve. Ghaswala PS, et al. **Int J Lepr Other Mycobact Dis** 1989 Sep;57(3):690–2

Anti-peripheral nerve myelin antibodies in Guillain–Barre syndrome bind a neutral glycolipid of peripheral myelin and cross-react with Forssman antigen. Koski CL, et al. **J Clin Invest** 1989 Jul;84(1):280–7

Axotomy induces MHC class I antigen expression on rat nerve cells. Maehlen J, et al. **Neurosci Lett** 1988 Sep 23; 92(1):8–13

INJURIES

A prospective study of peripheral nerve lesions occurring in traumatic brain–injured patients. Cosgrove JL, et al. **Am J Phys Med Rehabil** 1989 Feb;68(1):15–7

Passive exercise and reinnervation of the rat denervated extensor digitorum longus muscle after nerve crush. Pachter BR, et al. **Am J Phys Med Rehabil** 1989 Aug; 68(4):179–82

Epidural clonidine in lower limb deafferentation pain [letter] Coventry DM, et al. **Anesth Analg** 1989 Sep;69(3):424–5

Isolated lateral pectoral nerve injury: trauma from a seat belt. Marrero JL, et al. **Arch Phys Med Rehabil** 1989 Mar; 70(3):239–40

Peripheral nerve injury causes transient expression of MHC class I antigens in rat motor neurons and skeletal muscles. Maehlen J, et al. **Brain Res** 1989 Mar 6;481(2):368–72

Medial epicondylitis caused by injury to the medial antebrachial cutaneous nerve: a case report. Richards RR, et al. **Can J Surg** 1989 Sep;32(5):366–7, 369

Surgical management of the peripheral nerve gap. Mackinnon SE. **Clin Plast Surg** 1989 Jul;16(3):587–603 (66 ref.)

Rehabilitation of cervical spine, brachial plexus, and peripheral nerve injuries. Vegso JJ, et al. **Clin Sports Med** 1987 Jan;6(1):135–58

Digital nerve injuries in orthopaedic surgeons. Roberts AP, et al. **Injury** 1988 Jul;19(4):233–4

Management of causalgia after peripheral nerve injury. Girgis FL, et al. **Int Disabil Stud** 1989;11(1):15–20

Degeneration and regeneration of peripheral nerve in the rat trigeminal system: III. Abnormal sensory reinnervation of rat guard hairs following nerve transection and crush. Munger BL, et al. **J Comp Neurol** 1989 May 8;283(2):169–76

Cortical organization after treatment of a peripheral nerve with ricin: an evaluation of the relationship between sensory neuron death and cortical adjustments after nerve injury. Wall JT, et al. **J Comp Neurol** 1988 Nov 22; 277(4):578–92

Morphological and physiological properties of neurons after long–term axonal regeneration: observations on chronic and delayed sequelae of peripheral nerve injury. Bowe CM, et al. **J Neurol Sci** 1989 Jul;91(3):259–92

A new approach for the evaluation of recovery after peripheral nerve damage. van der Hoop RG, et al. **J Neurosci Methods** 1988 Dec;26(2):111–6

Use of peripheral nerve action potentials for intraoperative monitoring. Nelson KR. **Neurol Clin** 1988 Nov;6(4):917–33 (73 ref.)

Peripheral nerve damage facilitates functional innervation of brain grafts in adult sensory cortex. Ebner FF, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):730–4

[Operative injury of peripheral nerve: report of 39 cases] Zhu SX. **Chung Hua Wai Ko Tsa Chih** 1988 Aug; 26(8):458–9, 509 (Eng. Abstr.) **(Chi)**

[Nerve injuries in intra–articular fractures of the distal humeral epiphysis] Ehler E, et al. **Cas Lek Cesk** 1988 Aug 19;127(34):1063–5 (Eng. Abstr.) **(Cze)**

[Results following primary nerve sutures] Mailänder P, et al. **Handchir Mikrochir Plast Chir** 1988 Nov;20(6):342–3 (Eng. Abstr.) **(Ger)**

[Trophic disorders following primary nerve sutures of the upper extremity] Mailänder P, et al. **Handchir Mikrochir Plast Chir** 1989 Mar;21(2):72–3 (Eng. Abstr.) **(Ger)**

[Chronic neuropathy of the suprascapular nerve in high performance athletes] Holzgraefe M, et al. **Nervenarzt** 1988 Sep;59(9):545–8 (Eng. Abstr.) **(Ger)**

[Selective paralysis of the infraspinatus muscle, caused by compression of the infraspinatus branch of the supraspinatus muscle] Jerosch J, et al. **Sportverletz Sportschaden** 1987 Dec;1(4):231–3 (Eng. Abstr.) **(Ger)**

[Evaluation of the results of secondary reconstruction of the nerves of the fingers by nerve transplantation] Molski M, et al. **Pol Tyg Lek** 1988 Nov 14;43(46):1467–9 (Eng. Abstr.) **(Pol)**

[Effects of acetylcholinesterase inhibitors on the process of reinnervation of the mouse skeletal muscle] Balezina OP, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):490–2 (Eng. Abstr.) **(Rus)**

[Injuries to the nerve trunks during osteosynthesis of the long tubular bones] Kim AE, et al. **Khirurgiia (Mosk)** 1988 Aug; (8):33–5 (Eng. Abstr.) **(Rus)**

[Late results of the treatment of inveterate fractures of the humerus and bones of the elbow joint with nerve damage] Razenkov NN, et al. **Khirurgiia (Mosk)** 1988 Aug;(8):57–60 (Eng. Abstr.) **(Rus)**

[Surgical treatment of sequelae of nerve trunk injuries of the lower limbs] Driuk NF, et al. **Ortop Travmatol Protez** 1989 Mar;(3):27–9 (Eng. Abstr.) **(Rus)**

[Clinical and morphological substantiation of the surgical treatment of post–traumatic neurogenic deformations of the limbs in children] Merkulov VN, et al. **Ortop Travmatol Protez** 1989 Apr;(4):38–41 (Eng. Abstr.) **(Rus)**

[Clinico–immunological correlations during the acupuncture reflexotherapy of peripheral nerve diseases and injuries] Shapkin VI, et al. **Voen Med Zh** 1988 Dec;(12):32–4 **(Rus)**

[Current concepts on the pathogenesis, diagnosis and treatment of injuries of the nerve trunks of the extremities (review of the literature)] Akimov GA, et al. **Zh Nevropatol Psikhiatr** 1989;89(5):126–32 (108 ref.) **(Rus)**

[Diagnostic difficulties and possibilities in nerve damage of the extremities] Bersnev VP. **Zh Nevropatol Psikhiatr** 1988; 88(10):46–50 (Eng. Abstr.) **(Rus)**

METABOLISM

Transient increase in insulin–like growth factor I immunoreactivity in rat peripheral nerves exposed to vibrations. Hansson HA, et al. **Acta Physiol Scand** 1988 Jan;132(1):35–41

Effects of microtubular transport blockade in peripheral nerve axons on chronic unallayable root pain. Pěničková V, et al. **Acta Univ Palacki Olomuc Fac Med** 1988; 118:93–105

Alterations of cholesterol synthesis precursors (7–dehydrocholesterol, 7–dehydrodesmosterol, desmosterol) in dysmyelinating neurological mutant mouse (quaking, shiverer and trembler) in the PNS and the CNS. Bourre JM, et al. **Biochim Biophys Acta** 1989 Aug 22; 1004(3):387–90

Calmodulin distribution in peripheral nerve: an EM immunocytochemical study. Mata M, et al. **Brain Res** 1988 Dec 20;475(2):297–304

Effects of capsaicin in rat and pigeon on peripheral nerves containing substance P and calcitonin gene–related peptide. Harti G, et al. **Cell Tissue Res** 1989 Jun;256(3):465–74

Evidence of omega–conotoxin GV1A–sensitive Ca2+ channels in mammalian peripheral nerve terminals. Lundy PM, et al. **Eur J Pharmacol** 1988 Nov 8;156(3):325–30

Increased neural atrial natriuretic factor generation in spontaneously hypertensive rats. Debinski WK, et al. **Hypertension** 1989 Jun;13(6 Pt 2):804–7

Distribution of tau proteins in the normal human central and peripheral nervous system. Trojanowski JQ, et al. **J Histochem Cytochem** 1989 Feb;37(2):209–15

Quantification of axonally transported material using cytofluorimetric scanning. Dahlström A, et al. **J Microsc** 1989 Jul;155 (Pt 1):61–80

Characterization and regional distribution of individual gangliosides in goldfish central nervous system. Tanaka T, et al. **J Neurochem** 1989 Jun;52(6):1931–6

Characterization and localization of a peripheral neural 5–hydroxytryptamine receptor subtype (5–HT1P) with a selective agonist, 3H–5–hydroxyindalpine. Branchek TA, et al. **J Neurosci** 1988 Jul;8(7):2582–95

Immunocytological localization of pedal peptide in the central nervous system and periphery of Aplysia. Pearson WL, et al. **J Neurosci** 1989 Jan;9(1):318–25

Is part of the molecular basis of the perineurial barrier function the lack of endogenous carbohydrate–binding proteins? Bardosi A, et al. **J Neurosci Res** 1989 Jan; 22(1):65–73

Biosynthesis of membrane cholesterol during peripheral nerve development, degeneration and regeneration. Yao JK. **Lipids** 1988 Sep;23(9):857–62

Factors influencing regeneration of retinal ganglion cell axons in adult mammals. Thanos S, et al. **Metab Brain Dis** 1989 Mar;4(1):67–72

Neuropeptide gene transcription in central and peripheral nervous system tissue by nuclear run–on assay. White JD, et al. **Methods Enzymol** 1989;168:681–90

The blood–nerve barrier in Wallerian degeneration: a sequential long–term study. Seitz RJ, et al. **Muscle Nerve** 1989 Aug;12(8):627–35 (47 ref.)

Effects of piperine on calcitonin gene–related peptide (CGRP)–containing nerves in the isolated rat atria. Miyauchi T, et al. **Neurosci Lett** 1988 Aug 31;91(2):222–7

Time required for transmitter accumulation inside monoaminergic storage vesicles differs in peripheral and in central systems. Scherman D, et al. **Neuroscience** 1988 Dec;27(3):1029–35

Uptake of 63Ni2+ in the central and peripheral nervous system of mice after oral administration: effects of treatments with halogenated 8–hydroxyquinolines. Borg K, et al. **Toxicology** 1989 Jan;54(1):59–68

MICROBIOLOGY

Light– and electron–microscopic study of M. leprae–infected armadillo nerves. Liu TC, et al. **Int J Lepr Other Mycobact Dis** 1989 Mar;57(1):65–72

H–2–linked genes influence the severity of herpes simplex virus infection of the peripheral nervous system. Simmons A. **J Exp Med** 1989 Apr 1;169(4):1503–7

Invasion of the peripheral nervous systems of adult mice by the CVS strain of rabies virus and its avirulent derivative AvO1. Coulon P, et al. **J Virol** 1989 Aug;63(8):3550–4

PATHOLOGY

Localized hypertrophic neuropathy: possible focal perineurial barrier defect. Johnson PC, et al. **Acta Neuropathol (Berl)** 1989;77(5):514–8 (22 ref.)

Demyelination of the peripheral nervous system causes neurologic signs in myelin basic protein–induced experimental allergic encephalomyelitis. Implications for the etiology of multiple sclerosis. Pender MP. **Ann N Y Acad Sci** 1988;540:732–4

Spinal cord and peripheral nerve pathology in AIDS: the roles of cytomegalovirus and human immunodeficiency virus. Grafe MR, et al. **Ann Neurol** 1989 Jun;25(6):561–6

Chronic recurrent Guillain–Barré syndrome: report of 3 cases. De Mello AR, et al. **Arq Neuropsiquiatr** 1989 Mar; 47(1):84–90

Peripheral neuropathy in elderly CBA mice. Pollock M, et al. **Aust Paediatr J** 1988;24 Suppl 1:64–5

Peripheral nerve involvement in Werdnig–Hoffmann disease. Chien YY, et al. **Brain Dev** 1989;11(4):221–9

Type III Machado–Joseph disease in a Japanese family: a clinicopathological study with special reference to the peripheral nervous system. Kanda T, et al. **Clin Neuropathol** 1989 May–Jun;8(3):134–41

Amyloid neuropathy in light chain multiple myeloma. Schenone A, et al. **Clin Neuropathol** 1989 May–Jun; 8(3):156–7

Peripheral neural involvement in cutaneous leishmaniasis. A pathologic study of human and experimental animal lesions. Satti MB, et al. **Int J Dermatol** 1989 May;28(4):243–7

Diagnostic efficacy of cutaneous nerve biopsy in primary neuritic leprosy [letter] McDougall AC. **Int J Lepr Other Mycobact Dis** 1989 Mar;57(1):114–5

Nerve damage in leprosy [letter] Shetty VP, et al. **Int J Lepr Other Mycobact Dis** 1988 Dec;56(4):619–21

Isolated paralysis of the descending branch of the posterior interosseous nerve. Report of a case. Hirayama T, et al. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1402–3

The role of nerve biopsies in the diagnosis and management of leprosy. Nilsen R, et al. **Lepr Rev** 1989 Mar;60(1):28–32

Muscle and nerve involvement in AIDS patient with disseminated Mycobacterium avium intracellulare infection [letter] Wrzolek MA, et al. **Muscle Nerve** 1989 Mar; 12(3):247–9

Chronic experimental allergic neuritis in Lewis rats. Adam AM, et al. **Neuropathol Appl Neurobiol** 1989 May–Jun; 15(3):249–64

The effects of thioctic acid on motor nerve terminals in acrylamide–poisoned rats. Kemplay S, et al. **Neuropathol Appl Neurobiol** 1988 Jul–Aug;14(4):275–88

Biological indicators of neurotoxicity in central and peripheral toxic neuropathies. Maroni M, et al. **Neurotoxicol Teratol** 1988 Sep–Oct;10(5):479–84 (27 ref.)

Congenital hypomyelinating polyneuropathy in two golden retriever littermates. Braund KG, et al. **Vet Pathol** 1989 May;26(3):202–8

[Neuropathia mucinosa cutanea] Vakilzadeh F. **Hautarzt** 1989 Mar;40(3):167–8 (Eng. Abstr.) **(Ger)**

[Peripheral nerve biopsy. Indications, methods and principal pathological pictures] Rizzuto N, et al. **Riv Neurol** 1988 Mar–Apr;58(2):89–92 (8 ref.) **(Ita)**

[The pathogenesis of perineural tumor invasion—a computer reconstruction study on its relation with a lymphatic spread in human and experimental carcinomas of the bile duct] Suzuki M, et al. **Gan No Rinsho** 1988 Dec;34(15):2080–90 (Eng. Abstr.) **(Jpn)**

[Pathologic analysis of nerve injury in leprosy] Asano G. **Nippon Rai Gakkai Zasshi** 1989 Jan–Mar;58(1):21–3 **(Jpn)**

[Peripheral nerve lesions of experimental leprosy in monkeys. I. Introduction] Fukunishi Y, et al. **Nippon Rai Gakkai Zasshi** 1987 Jul–Sep;56(3):116–27 (Eng. Abstr.) **(Jpn)**

[Peripheral nerve lesions of experimental leprosy in monkeys. II. Edema] Fukunishi Y, et al. **Nippon Rai Gakkai Zasshi** 1987 Jul–Sep;56(3):128–38 (Eng.

Abstr.) (Ger)
[A case of mediastinal schwannoma originating from the intrathoracic phrenic nerve] Ayabe H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Nov; 26(11):1187–90 (Eng. Abstr.) (Jpn)
[Primary malignant lymphoma of the left brachial plexus] Usuki K, et al. **Rinsho Ketsueki** 1988 Jul;29(7):1125–8 (Eng. Abstr.) (Jpn)

PHYSIOPATHOLOGY

Contrasting time course of catecholamine accumulation and of spontaneous discharge in experimental neuromas in the rat. Goldstein RS, et al. **Neurosci Lett** 1988 Nov 22; 94(1–2):58–63
[Pronator teres syndrome caused by neurinoma of the median nerve] Berlit P. **Nervenarzt** 1989 Mar;60(3):184–6 (Ger)

PREVENTION & CONTROL

Comparative study of neuroma formation in the rat sciatic nerve after CO2 laser and scalpel neurectomy in combination with milliwatt CO2 laser "sealing". Shapiro S, et al. **Surg Neurol** 1989 Oct;32(4):281–4

RADIOGRAPHY

Multiple schwannomas presenting as a mass of the lateral chest wall [letter] Murray RJ, et al. **AJR** 1988 Dec; 151(6):1250–1
Fibromatosis of the brachial plexus and shoulder girdle. Chui M. **Can Assoc Radiol J** 1989 Feb;40(1):28–31
Unusually low CT density in a peripheral neurofibroma. Tàpies Barba C, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):1086–7
Case report 547: Plexiform neurofibroma involving a dorsal root ganglion. Hallisey MJ, et al. **Skeletal Radiol** 1989; 18(4):314–7

SECONDARY

Paraganglioma of the thoracic spinal cord with cerebrospinal fluid metastasis. Constantini S, et al. **Spine** 1989 Jun; 14(6):643–5

SURGERY

Intraneural lipofibroma of the median nerve. Houpt P, et al. **J Hand Surg [Am]** 1989 Jul;14(4):706–9
Lipofibroma of the superficial branch of the radial nerve. Jacob RA, et al. **J Hand Surg [Am]** 1989 Jul;14(4):704–6
Iatrogenic lumbar meningocoel after excision of a neurofibroma [letter] Ward PJ. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):410–1
Wandering nerve graft technique for management of the recalcitrant painful neuroma in the hand: a case report. Mackinnon SE. **Microsurgery** 1988;9(2):95–102
Neuromas of the superficial radial nerve. Attarian DE. **Milit Med** 1988 Aug;153(8):393–4
The occurrence of different types of spinal tumours in one patient. A case report and review of the literature. Nishiura I, et al. **Neurochirurgia (Stuttg)** 1989 Mar;32(2):52–5 (21 ref.)
Management of synovial sarcoma of the median nerve at the elbow. Rinehart GC, et al. **Plast Reconstr Surg** 1989 Mar; 83(3):528–32
[Schwannoma of the endothoracic phrenic nerve. General review apropos of a case] Grunstein P, et al. **Rev Pneumol Clin** 1988;44(3):146–50 (31 ref.) (Eng. Abstr.) (Fre)
[Reoperations in the treatment of caudal teratomas] Nikitin AM, et al. **Khirurgiia (Mosk)** 1989 May;(5):97–100 (Eng. Abstr.) (Rus)

THERAPY

Experiences in the treatment of neuroblastoma. Joseph VT, et al. **Ann Acad Med Singapore** 1988 Jan;17(1):145–51
Experimental treatment of neuromas in the rat by retrograde axoplasmic transport of ricin with selective destruction of ganglion cells. Brandner MD, et al. **J Hand Surg [Am]** 1989 Jul;14(4):710–4

ULTRASTRUCTURE

Ultrastructural study of a perineurioma. Ohno T, et al. **Ultrastruct Pathol** 1988 Sep–Oct;12(5):495–504 (21 ref.)

PERIPHERAL NERVES

Peripheral nerve stimulator [letter] Blomfield D, et al. **Anaesth Intensive Care** 1989 Aug;17(3):380–1

ABNORMALITIES

The 2-stage neuroskeletal pathomechanism of developmental deformities of the limb skeleton. A contribution to the discussion on the McCredie–McBride hypothesis. Roth M. **Anat Anz** 1988;167(4):271–9

ANALYSIS

Occurrence of an insulin-like peptide in extracts of human nervous tissue. Uvnäs-Moberg K, et al. **Acta Physiol Scand** 1988 Jun;133(2):127–30
Brain and peripheral noradrenergic neuron activity in developing genetically hypertensive rats of the Lyon strain. Sautel M, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:423–29
Use of lead aspartate block staining in quantitative EM autoradiography of phospholipids: application to myelinating peripheral nerve. Gould RM, et al. **J Histochem Cytochem** 1989 Sep;37(9):1393–9
Isolation and characterization of complement receptors CR1 from human peripheral nerves. Vedeler CA, et al. **J Neuroimmunol** 1989 Aug;23(3):215–21
Substance P levels in peripheral nerve, skin, atrial myocardium and gastrointestinal tract of rats with long-term diabetes mellitus. Effects of aldose reductase inhibition. Willars GB, et al. **J Neurol Sci** 1989 Jun; 91(1–2):153–64

ANATOMY & HISTOLOGY

Distribution of elastic system fibers in the peripheral nerves of mammals. Ferreira JM Jr, et al. **Acta Anat (Basel)** 1987; 130(2):168–73
Do certain spinocerebellar neurons in lamina IX at lumbosacral levels send collaterals to peripheral nerves? A retrograde fluorescent double labeling study in the cat. Xu Q, et al. **Arch Ital Biol** 1988 Jun;126(3):179–92
Entrapment of the distal suprascapular nerve. An anatomical study. Kaspi A, et al. **Int Orthop** 1988;12(4):273–5
Nerve fibre morphometry: a comparison of techniques. Ewart DP, et al. **J Neurosci Methods** 1989 Aug;29(2):143–50
Myelinated axons in peripheral nerves of adult beagle dogs: morphometric and electrophysiological measurements. Illanes O, et al. **Res Vet Sci** 1988 Sep;45(2):181–5
End-structure of afferent axons injured in the peripheral and central nervous system. Fried K, et al. **Somatosens Mot Res** 1988;6(1):79–99
[Efferent and primary afferent neural pathways innervating the lower urinary tract of the cat. Part II. Primary afferent neural pathways] Sugaya K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 May;79(5):880–7 (Eng. Abstr.) (Jpn)
[Efferent and primary afferent neural pathways innervating the lower urinary tract of the cat. Part I. Efferent neural pathways] Sugaya K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 May;79(5):868–79 (Eng. Abstr.) (Jpn)
[An experimental study of Karnovsky's stain for differentiating motor and sensory funiculi during peripheral nerve surgery] Sumida J. **Nippon Seikeigeka Gakkai Zasshi** 1989 Jan;63(1):91–9 (Eng. Abstr.) (Jpn)

BLOOD SUPPLY

Peripheral nerve vasculitis: immune characterization of the vascular lesions. Kissel JT, et al. **Ann Neurol** 1989 Mar; 25(3):291–7
Inner perineurial cell vulnerability in ischemia. Benstead TJ, et al. **Brain Res** 1989 Jun 5;489(1):177–81
Is resistance to ischaemic conduction failure induced by hypoxia? Masson EA, et al. **Diabetologia** 1988 Oct; 31(10):762–5
Differential recovery of skeletal muscle and peripheral nerve function after ischemia and reperfusion. Chervu A, et al. **J Surg Res** 1989 Jul;47(1):12–9
Ischemic and reperfusion injury of rat peripheral nerve. Schmelzer JD, et al. **Proc Natl Acad Sci U S A** 1989 Mar; 86(5):1639–42
[Preliminary study on nerve regeneration through an autologous venous tube] Pirenne J, et al. **C R Soc Biol (Paris)** 1988;182(1):126–35 (Eng. Abstr.) (Fre)
[Pathways of microvascularization of the peripheral nerves and their plasticity] Mel'man EP. **Arkh Anat Gistol Embriol** 1988 Dec;95(12):72–9 (64 ref.) (Rus)

CYTOLOGY

Study of the origin of connective tissue sheaths of peripheral nerves in the limb of avian embryos. Haninec P. **Anat Embryol (Berl)** 1988;178(6):553–7
Modulation of Ca channels in peripheral neurons. Carbone E, et al. **Ann N Y Acad Sci** 1989;560:346–57 (54 ref.)
Fluorescent latex microspheres as a retrograde tracer in the peripheral nervous system. Colin W, et al. **Brain Res** 1989 May 8;486(2):334–9
The pelvic innervation in the rat: different spinal origin and projections in Sprague–Dawley and Wistar rats. Pascual JI, et al. **Brain Res** 1989 Feb 20;480(1–2):397–402
Preservation of sensory cells by placing stumps of transected nerve in an impermeable tube. Melville S, et al. **Exp Neurol** 1989 Sep;105(3):311–5
Establishment of Schwann cell cultures from adult rat peripheral nerves. Scarpini E, et al. **Exp Neurol** 1988 Nov; 102(2):167–76
Perineurial cells coexpress genes encoding interstitial collagens and basement membrane zone components. Jaakkola S, et al. **J Cell Biol** 1989 Mar;108(3):1157–63
Differentiating astroglia in nervous tissue histogenesis/regeneration: studies in a model system of regenerating peripheral nerve. Kalderon N. **J Neurosci Res** 1988 Oct–Dec;21(2–4):501–12

DRUG EFFECTS

Autologous fibrin tissue adhesive for cerebrospinal fluid leaks: a controlled study of neurotoxicity. Feldman MD, et al. **Am J Otol** 1988 Jul;9(4):302–5
Propylene oxide causes central–peripheral distal axonopathy in rats. Ohnishi A, et al. **Arch Environ Health** 1988 Sep–Oct; 43(5):353–6
General pharmacological studies on N-(2,6-dimethylphenyl)-8-pyrrolizidineacetamide hydrochloride hemihydrate. 2nd communication: effect on the peripheral nervous system and peripheral organs. Hirotsu I, et al. **Arzneimittelforschung** 1988 Oct; 38(10):1410–7
Peripheral versus central manifestations in the toxic interaction of lithium and pilocarpine. Roth D, et al. **Biol Psychiatry** 1989 Jan 15;25(2):153–8
Neonatal capsaicin treatment of rats reduces ACTH secretion in response to peripheral neuronal stimuli but not to centrally acting stressors. Donnerer J, et al. **Br J Pharmacol** 1988 Jul;94(3):647–52
Local anesthetic agents. Murphy MF. **Emerg Med Clin North Am** 1988 Nov;6(4):769–76
The neuropathology of leptophos in the hen: a chronologic study. Preissig SH, et al. **Environ Res** 1978 Oct;17(2):242–50
Effects of DA-1- and DA-2-dopamine antagonists on apomorphine-induced inhibition of peripheral sympathetic neurotransmission. Hietala J. **J Auton Pharmacol** 1988 Dec; 8(4):297–302
Lack of central sprouting of primary afferent fibers after ricin deafferentation. Pubols LM, et al. **J Comp Neurol** 1988 Sep 8;275(2):282–7
Enhancement of peripheral nerve regeneration by pharmacological activation of the cyclic AMP second messenger system. Klein HW, et al. **Microsurgery** 1989; 10(2):122–5 (26 ref.)
Autotomy behavior in rats following peripheral deafferentation is suppressed by daily injections of amitriptyline, diazepam and saline. Seltzer Z, et al. **Pain** 1989 May;37(2):245–50
Acidic fibroblast growth factor enhances peripheral nerve regeneration in vivo. Cordeiro PG, et al. **Plast Reconstr Surg** 1989 Jun;83(6):1013–9; discussion 1020–1
Biochemical and morphological validation of a rodent model of organophosphorus-induced delayed neuropathy. Padilla S, et al. **Toxicol Ind Health** 1988 Sep;4(3):361–71
[Drug injuries of peripheral nerves: report of 48 cases] Gu YD. **Chung Hua Wai Ko Tsa Chih** 1988 Aug;26(8):460–1, 509 (Eng. Abstr.) (Chi)
[Animal experiment studies of the effect of the hazardous substance carbon tetrachloride on peripheral nerves] Wagner A, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Jun;41(6):352–60 (Eng. Abstr.) (Ger)
[Neurotoxicity in long-term lithium therapy: an electroneurographic study] Eisenstädter A, et al. **Wien Klin Wochenschr** 1989 Mar 3;101(5):166–8 (Eng. Abstr.) (Ger)
[Neurotoxicity of chloramphenicol—an experimental study] Tateishi J, et al. **Rinsho Shinkeigaku** 1975 Mar;15(3):142–9 (Eng. Abstr.) (Jpn)

EMBRYOLOGY

Development of the peripheral nervous system from the neural crest. Le Douarin NM, et al. **Annu Rev Cell Biol** 1988;4:375–404 (75 ref.)
Nerve-muscle interactions in the embryo. Laing NG. **Aust Paediatr J** 1988;24 Suppl 1:40–2 (40 ref.)
Aspects of peripheral motor system development. Lamb AH. **Aust Paediatr J** 1988;24 Suppl 1:37–9 (40 ref.)
The development of lateral-line receptors in Eigenmannia (Teleostei, Gymnotiformes). II. The electroreceptive lateral-line system. Vischer HA. **Brain Behav Evol** 1989; 33(4):223–36
The development of lateral-line receptors in Eigenmannia (Teleostei, Gymnotiformes). I. The mechanoreceptive lateral-line system. Vischer HA. **Brain Behav Evol** 1989; 33(4):205–22
Differential splicing of MAG transcripts during CNS and PNS development. Tropak MB, et al. **Brain Res** 1988 Sep; 464(2):143–55
Formation of the transverse nerve in moth embryos. I. A scaffold of nonneuronal cells prefigures the nerve. Carr JN, et al. **Dev Biol** 1988 Dec;130(2):487–99
An axon growth associated antigen is also an early marker of neuronal determination. Denburg JL, et al. **Dev Biol** 1989 Sep;135(1):99–110

ENZYMOLOGY

The influence of some cations on an adenosine triphosphatase from peripheral nerves. 1957 [classical article] Skou JC. **Biochim Biophys Acta** 1989;1000:439–46
Carbonic anhydrase activity in the peripheral nervous system of rat: the enzyme as a marker for muscle afferents. Szabolcs MJ, et al. **Brain Res** 1989 Jul 17;492(1–2):129–38
Alterations in protective enzymes against peroxidation in the central and peripheral nervous system of control and dysmyelinating mutant mice. Cloëz I, et al. **J Neurochem** 1989 May;52(5):1353–8

GROWTH & DEVELOPMENT

Peripheral competition in the control of sensory neuron numbers in Xenopus frogs reared with a single bilaterally innervated hindlimb. Lamb AH, et al. **Brain Res Dev Brain Res** 1989 Jan 1;45(1):149–53

Peripheral nerve regeneration in quail–chick spinal cord chimeras treated with oral cyclosporin. Uzman BG, et al. **Dev Neurosci** 1989;11(1):65–75

The sprouting of saphenous nerve terminals in the spinal cord following early postnatal sciatic nerve section in the rat. Fitzgerald M. **J Comp Neurol** 1985 Oct 22;240(4):407–13

Age–related changes in the fibre composition of equine peripheral nerve. Wheeler SJ, et al. **J Neurol Sci** 1989 Mar; 90(1):53–66

IMMUNOLOGY

Reactivity of circulating antineuronal antibodies (CANA) on peripheral nervous system structures. Grisold W, et al. **Acta Neuropathol (Berl)** 1988;77(1):109–12

Comparison of indirect immunofluorescence and immunogold–silver staining on cell surface antigens of PNS and CNS cells. Difiglia CJ, et al. **Ann N Y Acad Sci** 1988; 540:327–9

Serum antibodies to peripheral nerve antigens in Guillain–Barré syndrome. Negishi T, et al. **Ann N Y Acad Sci** 1988;540:376–7

Epithelial membrane antigen expression by the perineurium of peripheral nerve and in peripheral nerve tumours. Theaker JM, et al. **Histopathology** 1988 Aug;13(2):171–9

Serum antibodies of normals and leprosy patients show equal binding to peripheral nerve. Ghaswala PS, et al. **Int J Lepr Other Mycobact Dis** 1989 Sep;57(3):690–2

Anti–peripheral nerve myelin antibodies in Guillain–Barre syndrome bind a neutral glycolipid of peripheral myelin and cross–react with Forssman antigen. Koski CL, et al. **J Clin Invest** 1989 Jul;84(1):280–7

Axotomy induces MHC class I antigen expression on rat nerve cells. Maehlen J, et al. **Neurosci Lett** 1988 Sep 23; 92(1):8–13

INJURIES

A prospective study of peripheral nerve lesions occurring in traumatic brain–injured patients. Cosgrove JL, et al. **Am J Phys Med Rehabil** 1989 Feb;68(1):15–7

Passive exercise and reinnervation of the rat denervated extensor digitorum longus muscle after nerve crush. Pachter BR, et al. **Am J Phys Med Rehabil** 1989 Aug; 68(4):179–82

Epidural clonidine in lower limb deafferentation pain [letter] Coventry DM, et al. **Anesth Analg** 1989 Sep;69(3):424–5

Isolated lateral pectoral nerve injury: trauma from a seat belt. Marrero JL, et al. **Arch Phys Med Rehabil** 1989 Mar; 70(3):239–40

Peripheral nerve injury causes transient expression of MHC class I antigens in rat motor neurons and skeletal muscles. Maehlen J, et al. **Brain Res** 1989 Mar 6;481(2):368–72

Medial epicondylitis caused by injury to the medial antebrachial cutaneous nerve: a case report. Richards RR, et al. **Can J Surg** 1989 Sep;32(5):366–7, 369

Surgical management of the peripheral nerve gap. Mackinnon SE. **Clin Plast Surg** 1989 Jul;16(3):587–603 (66 ref.)

Rehabilitation of cervical spine, brachial plexus, and peripheral nerve injuries. Vegso JJ, et al. **Clin Sports Med** 1987 Jan;6(1):135–58

Digital nerve injuries in orthopaedic surgeons. Roberts AP, et al. **Injury** 1988 Jul;19(4):233–4

Management of causalgia after peripheral nerve injury. Girgis FL, et al. **Int Disabil Stud** 1989;11(1):15–20

Degeneration and regeneration of peripheral nerve in the rat trigeminal system: III. Abnormal sensory reinnervation of rat guard hairs following nerve transection and crush. Munger BL, et al. **J Comp Neurol** 1989 May 8;283(2):169–76

Cortical organization after treatment of a peripheral nerve with ricin: an evaluation of the relationship between sensory neuron death and cortical adjustments after nerve injury. Wall JT, et al. **J Comp Neurol** 1988 Nov 22; 277(4):578–92

Morphological and physiological properties of neurons after long–term axonal regeneration: observations on chronic and delayed sequelae of peripheral nerve injury. Bowe CM, et al. **J Neurol Sci** 1989 Jul;91(3):259–92

A new approach for the evaluation of recovery after peripheral nerve damage. van der Hoop RG, et al. **J Neurosci Methods** 1988 Dec;26(2):111–6

Use of peripheral nerve action potentials for intraoperative monitoring. Nelson KR. **Neurol Clin** 1988 Nov;6(4):917–33 (73 ref.)

Peripheral nerve damage facilitates functional innervation of brain grafts in adult sensory cortex. Ebner FF, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):730–4

[Operative injury of peripheral nerve: report of 39 cases] Zhu SX. **Chung Hua Wai Ko Tsa Chih** 1988 Aug; 26(8):458–9, 509 (Eng. Abstr.) (Chi)

[Nerve injuries in intra–articular fractures of the distal humeral epiphysis] Ehler E, et al. **Cas Lek Cesk** 1988 Aug 19;127(34):1063–5 (Eng. Abstr.) (Cze)

[Results following primary nerve sutures] Mailänder P, et al. **Handchir Mikrochir Plast Chir** 1988 Nov;20(6):342–3 (Eng. Abstr.) (Ger)

[Trophic disorders following primary nerve sutures of the upper extremity] Mailänder P, et al. **Handchir Mikrochir Plast Chir** 1989 Mar;21(2):72–3 (Eng. Abstr.) (Ger)

[Chronic neuropathy of the suprascapular nerve in high performance athletes] Holzgraefe M, et al. **Nervenarzt** 1988 Sep;59(9):545–8 (Eng. Abstr.) (Ger)

[Selective paralysis of the infraspinatus muscle, caused by compression of the infraspinatus branch of the supraspinatus muscle] Jerosch J, et al. **Sportverletz Sportschaden** 1987 Dec;1(4):231–3 (Eng. Abstr.) (Ger)

[Evaluation of the results of secondary reconstruction of the nerves of the fingers by nerve transplantation] Molski M, et al. **Pol Tyg Lek** 1988 Nov 14;43(46):1467–9 (Eng. Abstr.) (Pol)

[Effects of acetylcholinesterase inhibitors on the process of reinnervation of the mouse skeletal muscle] Balezina OP, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):490–2 (Eng. Abstr.) (Rus)

[Injuries to the nerve trunks during osteosynthesis of the long tubular bones] Kim AE, et al. **Khirurgiia (Mosk)** 1988 Aug; (8):33–5 (Eng. Abstr.) (Rus)

[Late results of the treatment of inveterate fractures of the humerus and bones of the elbow joint with nerve damage] Razenkov NN, et al. **Khirurgiia (Mosk)** 1988 Aug;(8):57–60 (Eng. Abstr.) (Rus)

[Surgical treatment of sequelae of nerve trunk injuries of the lower limbs] Driuk NF, et al. **Ortop Travmatol Protez** 1989 Mar;(3):27–9 (Eng. Abstr.) (Rus)

[Clinical and morphological substantiation of the surgical treatment of post–traumatic neurogenic deformations of the limbs in children] Merkulov VN, et al. **Ortop Travmatol Protez** 1989 Apr;(4):38–41 (Eng. Abstr.) (Rus)

[Clinico–immunological correlations during the acupuncture reflexotherapy of peripheral nerve diseases and injuries] Shapkin VI, et al. **Voen Med Zh** 1988 Dec;(12):32–4 (Rus)

[Current concepts on the pathogenesis, diagnosis and treatment of injuries of the nerve trunks of the extremities (review of the literature)] Akimov GA, et al. **Zh Nevropatol Psikhiatr** 1989;89(5):126–32 (108 ref.) (Rus)

[Diagnostic difficulties and possibilities in nerve damage of the extremities] Bersnev VP. **Zh Nevropatol Psikhiatr** 1988; 88(10):46–50 (Eng. Abstr.) (Rus)

METABOLISM

Transient increase in insulin–like growth factor I immunoreactivity in rat peripheral nerves exposed to vibrations. Hansson HA, et al. **Acta Physiol Scand** 1988 Jan;132(1):35–41

Effects of microtubular transport blockade in peripheral nerve axons on chronic unallayable root pain. Pěničková V, et al. **Acta Univ Palacki Olomuc Fac Med** 1988; 118:93–105

Alterations of cholesterol synthesis precursors (7–dehydrocholesterol, 7–dehydrodesmosterol, desmosterol) in dysmyelinating neurological mutant mouse (quaking, shiverer and trembler) in the PNS and the CNS. Bourre JM, et al. **Biochim Biophys Acta** 1989 Aug 22; 1004(3):387–90

Calmodulin distribution in peripheral nerve: an EM immunocytochemical study. Mata M, et al. **Brain Res** 1988 Dec 20;475(2):297–304

Effects of capsaicin in rat and pigeon on peripheral nerves containing substance P and calcitonin gene–related peptide. Harti G, et al. **Cell Tissue Res** 1989 Jun;256(3):465–74

Evidence of omega–conotoxin GV1A–sensitive Ca2+ channels in mammalian peripheral nerve terminals. Lundy PM, et al. **Eur J Pharmacol** 1988 Nov 8;156(3):325–30

Increased neural atrial natriuretic factor generation in spontaneously hypertensive rats. Debinski WK, et al. **Hypertension** 1989 Jun;13(6 Pt 2):804–7

Distribution of tau proteins in the normal human central and peripheral nervous system. Trojanowski JQ, et al. **J Histochem Cytochem** 1989 Feb;37(2):209–15

Quantification of axonally transported material using cytofluorimetric scanning. Dahlström A, et al. **J Microsc** 1989 Jul;155 (Pt 1):61–80

Characterization and regional distribution of individual gangliosides in goldfish central nervous system. Tanaka T, et al. **J Neurochem** 1989 Jun;52(6):1931–6

Characterization and localization of a peripheral neural 5–hydroxytryptamine receptor subtype (5–HT1P) with a selective agonist, 3H–5–hydroxyindalpine. Branchek TA, et al. **J Neurosci** 1988 Jul;8(7):2582–95

Immunocytological localization of pedal peptide in the central nervous system and periphery of Aplysia. Pearson WL, et al. **J Neurosci** 1989 Jan;9(1):318–25

Is part of the molecular basis of the perineurial barrier function the lack of endogenous carbohydrate–binding proteins? Bardosi A, et al. **J Neurosci Res** 1989 Jan; 22(1):65–73

Biosynthesis of membrane cholesterol during peripheral nerve development, degeneration and regeneration. Yao JK. **Lipids** 1988 Sep;23(9):857–62

Factors influencing regeneration of retinal ganglion cell axons in adult mammals. Thanos S, et al. **Metab Brain Dis** 1989 Mar;4(1):67–72

Neuropeptide gene transcription in central and peripheral nervous system tissue by nuclear run–on assay. White JD, et al. **Methods Enzymol** 1989;168:681–90

The blood–nerve barrier in Wallerian degeneration: a sequential long–term study. Seitz RJ, et al. **Muscle Nerve** 1989 Aug;12(8):627–35 (47 ref.)

Effects of piperine on calcitonin gene–related peptide (CGRP)–containing nerves in the isolated rat atria. Miyauchi T, et al. **Neurosci Lett** 1988 Aug 31;91(2):222–7

Time required for transmitter accumulation inside monoaminergic storage vesicles differs in peripheral and in central systems. Scherman D, et al. **Neuroscience** 1988 Dec;27(3):1029–35

Uptake of 63Ni2+ in the central and peripheral nervous system of mice after oral administration: effects of treatments with halogenated 8–hydroxyquinolines. Borg K, et al. **Toxicology** 1989 Jan;54(1):59–68

MICROBIOLOGY

Light– and electron–microscopic study of M. leprae–infected armadillo nerves. Liu TC, et al. **Int J Lepr Other Mycobact Dis** 1989 Mar;57(1):65–72

H–2–linked genes influence the severity of herpes simplex virus infection of the peripheral nervous system. Simmons A. **J Exp Med** 1989 Apr 1;169(4):1503–7

Invasion of the peripheral nervous systems of adult mice by the CVS strain of rabies virus and its avirulent derivative AvO1. Coulon P, et al. **J Virol** 1989 Aug;63(8):3550–4

PATHOLOGY

Localized hypertrophic neuropathy: possible focal perineurial barrier defect. Johnson PC, et al. **Acta Neuropathol (Berl)** 1989;77(5):514–8 (22 ref.)

Demyelination of the peripheral nervous system causes neurologic signs in myelin basic protein–induced experimental allergic encephalomyelitis. Implications for the etiology of multiple sclerosis. Pender MP. **Ann N Y Acad Sci** 1988;540:732–4

Spinal cord and peripheral nerve pathology in AIDS: the roles of cytomegalovirus and human immunodeficiency virus. Grafe MR, et al. **Ann Neurol** 1989 Jun;25(6):561–6

Chronic recurrent Guillain–Barré syndrome: report of 3 cases. De Mello AR, et al. **Arq Neuropsiquiatr** 1989 Mar; 47(1):84–90

Peripheral neuropathy in elderly CBA mice. Pollock M, et al. **Aust Paediatr J** 1988;24 Suppl 1:64–5

Peripheral nerve involvement in Werdnig–Hoffmann disease. Chien YY, et al. **Brain Dev** 1989;11(4):221–9

Type III Machado–Joseph disease in a Japanese family: a clinicopathological study with special reference to the peripheral nervous system. Kanda T, et al. **Clin Neuropathol** 1989 May–Jun;8(3):134–41

Amyloid neuropathy in light chain multiple myeloma. Schenone A, et al. **Clin Neuropathol** 1989 May–Jun; 8(3):156–7

Peripheral neural involvement in cutaneous leishmaniasis. A pathologic study of human and experimental animal lesions. Satti MB, et al. **Int J Dermatol** 1989 May;28(4):243–7

Diagnostic efficacy of cutaneous nerve biopsy in primary neuritic leprosy [letter] McDougall AC. **Int J Lepr Other Mycobact Dis** 1989 Mar;57(1):114–5

Nerve damage in leprosy [letter] Shetty VP, et al. **Int J Lepr Other Mycobact Dis** 1988 Dec;56(4):619–21

Isolated paralysis of the descending branch of the posterior interosseous nerve. Report of a case. Hirayama T, et al. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1402–3

The role of nerve biopsies in the diagnosis and management of leprosy. Nilsen R, et al. **Lepr Rev** 1989 Mar;60(1):28–32

Muscle and nerve involvement in AIDS patient with disseminated Mycobacterium avium intracellulare infection [letter] Wrzolek MA, et al. **Muscle Nerve** 1989 Mar; 12(3):247–9

Chronic experimental allergic neuritis in Lewis rats. Adam AM, et al. **Neuropathol Appl Neurobiol** 1989 May–Jun; 15(3):249–64

The effects of thioctic acid on motor nerve terminals in acrylamide–poisoned rats. Kemplay S, et al. **Neuropathol Appl Neurobiol** 1988 Jul–Aug;14(4):275–88

Biological indicators of neurotoxicity in central and peripheral toxic neuropathies. Maroni M, et al. **Neurotoxicol Teratol** 1988 Sep–Oct;10(5):479–84 (27 ref.)

Congenital hypomyelinating polyneuropathy in two golden retriever littermates. Braund KG, et al. **Vet Pathol** 1989 May;26(3):202–8

[Neuropathia mucinosa cutanea] Vakilzadeh F. **Hautarzt** 1989 Mar;40(3):167–8 (Eng. Abstr.) (Ger)

[Peripheral nerve biopsy. Indications, methods and principal pathological pictures] Rizzuto N, et al. **Riv Neurol** 1988 Mar–Apr;58(2):89–92 (8 ref.) (Ita)

[The pathogenesis of perineural tumor invasion—a computer reconstruction study on its relation with a lymphatic spread in human and experimental carcinomas of the bile duct] Suzuki M, et al. **Gan No Rinsho** 1988 Dec;34(15):2080–90 (Eng. Abstr.) (Jpn)

[Pathologic analysis of nerve injury in leprosy] Asano G. **Nippon Rai Gakkai Zasshi** 1989 Jan–Mar;58(1):21–3 (Jpn)

[Peripheral nerve lesions of experimental leprosy in monkeys. I. Introduction] Fukunishi Y, et al. **Nippon Rai Gakkai Zasshi** 1987 Jul–Sep;56(3):116–27 (Eng. Abstr.) (Jpn)

[Peripheral nerve lesions of experimental leprosy in monkeys. II. Edema] Fukunishi Y, et al. **Nippon Rai Gakkai Zasshi** 1987 Jul–Sep;56(3):128–38 (Eng.

Abstr.) (Jpn)
[Pathology of the peripheral nervous system in polyarteritis nodosa: a clinico-pathological study of two autopsy cases] Sobue G, et al. **Rinsho Shinkeigaku** 1989 Feb;29(2):209-15 (Eng. Abstr.) (Jpn)

PHYSIOLOGY

Peripheral nerve regeneration through optic nerve grafts. Anderson PN, et al. **Acta Neuropathol (Berl)** 1989; 77(5):525-34
The analgesic effect of peripheral nerve stimulation in various tests of nociception in rats. Jørum E. **Acta Physiol Scand** 1988 Jun;133(2):131-8
Interaction among unitary spike trains: implications for whole nerve measurements. Andresen MC, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):R997-1004
Stimulating somatic afferent fibers alters coronary arterial resistance. Pitetti KH, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1331-9
Somatosensory-evoked and spinal cord-evoked potentials in response to pudendal and tibial nerve stimulation in cats. Sims MH, et al. **Am J Vet Res** 1989 Apr;50(4):542-5
Peripheral nerve stimulators [letter] Beaudoin M. **Anaesth Intensive Care** 1989 May;17(2):235
An evaluation of eight peripheral nerve stimulators for monitoring neuromuscular blockade. Beemer GH, et al. **Anaesth Intensive Care** 1988 Nov;16(4):464-72
A new dual function nerve stimulator. Sansome AJ, et al. **Anaesthesia** 1989 Jun;44(6):494-7
Histologic and physiologic evaluation of electrically stimulated peripheral nerve: considerations for the selection of parameters. Agnew WF, et al. **Ann Biomed Eng** 1989; 17(1):39-60
An intrafascicular electrode for recording of action potentials in peripheral nerves. Malagodi MS, et al. **Ann Biomed Eng** 1989;17(4):397-410
Current perception: preferred test for evaluation of peripheral nerve integrity. Weseley SA, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):188-93
Narrow-sense heritability estimates for nerve conduction velocity and residual latency in mice. Reed TE. **Behav Genet** 1988 Sep;18(5):595-603
Double burst stimulation (DBS): a new pattern of nerve stimulation to identify residual neuromuscular block. Engbaek J, et al. **Br J Anaesth** 1989 Mar;62(3):274-8
Reliability of a widely used test of peripheral cutaneous vibration sensitivity and a comparison of two testing protocols. Gerr FE, et al. **Br J Ind Med** 1988 Sep; 45(9):635-9
Activation of a bradykinin receptor in peripheral nerve and spinal cord in the neonatal rat in vitro. Dray A, et al. **Br J Pharmacol** 1988 Dec;95(4):1008-10
Effect of soluble factors from nerve and muscle on alpha-bungarotoxin binding sites in isolated sarcolemmal membranes of the rat. Harborne AJ, et al. **Br J Pharmacol** 1988 Jul;94(3):968-76
The effect of tissue expansion on peripheral nerves. Milner RH. **Br J Plast Surg** 1989 Jul;42(4):414-21
Maturation of peripheral nerves in preterm infants: proprioceptive and motor nerve conductions of tibial nerve. Tranier S, et al. **Brain Dev** 1989;11(4):215-20
Conditioning lesions of peripheral nerves change regenerated axon numbers. Jenq CB, et al. **Brain Res** 1988 Aug 2; 457(1):63-9
Direct electrical stimulation of the superior ovarian nerve in rats causes an increase in neuronal activity in the ipsilateral ovarian plexus nerve. Klein CM, et al. **Brain Res** 1989 Feb 6;479(1):194-200
Extracellular fluid conditioned during peripheral nerve regeneration stimulates Schwann cell adhesion, migration and proliferation. Le Beau JM, et al. **Brain Res** 1988 Aug 30;459(1):93-104
Effect of age on collateral reinnervation of sweat glands in the mouse. Navarro X, et al. **Brain Res** 1988 Oct 25; 463(1):174-81
Somato-motor components of the pelvic and pudendal nerves of the female rat. Pacheco P, et al. **Brain Res** 1989 Jun 19;490(1):85-94
The nucleus reticularis gigantocellularis modulates the cardiopulmonary responses to central and peripheral drives related to exercise. Richard CA, et al. **Brain Res** 1989 Mar 13;482(1):49-56
Peripheral regulation of stiffness during arm movements by coactivation of the antagonist muscles. Simmons RW, et al. **Brain Res** 1989 Nov 8;473(1):134-40
Perineurial permeability and endoneurial edema during Wallerian degeneration of the frog peripheral nerve. Wadhwani KC, et al. **Brain Res** 1989 Jul 31;493(2):231-9
Prolonged running does not improve muscle coordination after cross-union of tibial and peroneal nerves in mice. Wernig A, et al. **Brain Res** 1989 Jun 12;489(2):352-4
Nerve section alters the interaction between C-fibre activity and intrathecal neuropeptides on the flexor reflex in rat. Wiesenfeld-Hallin Z. **Brain Res** 1989 Jun 5;489(1):129-36
Single fibre motor evoked potentials to brain, spinal roots and nerve stimulation. Comparisons of the 'central' and 'peripheral' response jitter to magnetic and electric stimuli. Zarola F, et al. **Brain Res** 1989 Aug 28;495(2):217-24
Formation of functional endplates by spinal axons regenerating through a peripheral nerve graft. A study in the adult rat. Horvat JC, et al. **Brain Res Bull** 1989 Jan; 22(1):103-14
Cardiac sympathetic afferent cell bodies are located in the peripheral nervous system of the cat. Bosnjak ZJ, et al. **Circ Res** 1989 Mar;64(3):554-62
Amphibian sympathetic ganglia as a model system for investigating regeneration in the vertebrate peripheral nervous system. Kelly ME, et al. **Comp Biochem Physiol [A]** 1989;93(1):133-40
Sensory nerve action potentials elicited by mechanical air-puff stimulation of the index finger in man. Hashimoto I, et al. **Electroencephalogr Clin Neurophysiol** 1989 Apr; 72(4):321-33
Normative data on scalp responses evoked by infraorbital nerve stimulation. Leandri M, et al. **Electroencephalogr Clin Neurophysiol** 1988 Nov-Dec; 71(6):415-21
Comparison of scalp distribution of short latency somatosensory evoked potentials (SSEPs) to stimulation of different nerves in the lower extremity. Pelosi L, et al. **Electroencephalogr Clin Neurophysiol** 1988 Nov-Dec; 71(6):422-8
F-response studies in neonates, infants and children. Misra UK, et al. **Electromyogr Clin Neurophysiol** 1989 May-Jun; 29(4):251-4
Modifications of the N1-P1 component of the somatosensory evoked potential in humans after partial limb amputation as a manifestation of central nervous system remodeling. Sica RE, et al. **Electromyogr Clin Neurophysiol** 1988 Jun-Jul;28(5):227-31
Vibratory detection thresholds following a digital nerve lesion. Morley JW, et al. **Exp Brain Res** 1988;72(1):215-8
Expansion of innervation territory by afferents involved in plasma extravasation after nerve regeneration in adult and neonatal rats. Wiesenfeld-Hallin Z, et al. **Exp Brain Res** 1989;76(1):88-96
Surface anodal stimulation of human peripheral nerves. Winkler T, et al. **Exp Brain Res** 1988;73(3):481-8
Focal stimulation of human peripheral nerve with the magnetic coil: a comparison with electrical stimulation. Amassian VE, et al. **Exp Neurol** 1989 Mar;103(3):282-9
Snug tubular enclosures reduce extrafascicular axonal escape at peripheral nerve repair sites. Stensaas L, et al. **Exp Neurol** 1989 Feb;103(2):135-45
Combined axonal transport tracing and immunocytochemistry for mapping pathways of peptide-containing nerves in the peripheral nervous system. Su HC, et al. **Experientia Suppl** 1989;56:98-112 (107 ref.)
A spiral nerve cuff electrode for peripheral nerve stimulation. Naples GG, et al. **IEEE Trans Biomed Eng** 1988 Nov; 35(11):905-16
The inverse problem in electroneurography--I: Conceptual basis and mathematical formulation. Schoonhoven R, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):769-77
The inverse problem in electroneurography--II: Computational aspects and evaluation using simulated data. Stegeman DF, et al. **IEEE Trans Biomed Eng** 1988 Oct; 35(10):778-88
A modeling study of nerve fascicle stimulation. Veltink PH, et al. **IEEE Trans Biomed Eng** 1989 Jul;36(7):683-92
Somatosensory evoked potential changes during muscle testing. Leisman G, et al. **Int J Neurosci** 1989 Mar; 45(1-2):143-51
Peripheral nerve conduction velocity in normal infants and children. Moglia A, et al. **Ital J Neurol Sci** 1989 Jun; 10(3):311-4
Reinnervation of sweat glands in the rat hind paw following peripheral nerve injury. Bharali LA, et al. **J Auton Nerv Syst** 1988 Aug;23(2):125-9
The use of somatosensory evoked potentials in infants and children. Gilmore R. **J Child Neurol** 1989 Jan;4(1):3-19 (97 ref.)
Expansion of spinal cord primary sensory afferent projection following combined sciatic nerve resection and saphenous nerve crush: a horseradish peroxidase study in the adult rat. Molander C, et al. **J Comp Neurol** 1988 Oct 15; 276(3):436-41
Disruption of muscle reorganization by lesions of the peripheral nerve in transforming claws of snapping shrimps. Mellon D Jr, et al. **J Neurobiol** 1988 Sep;19(6):532-51
Ultrastructural and morphometric analysis of long-term peripheral nerve regeneration through silicone tubes. Le Beau JM, et al. **J Neurocytol** 1988 Apr;17(2):161-72
The conduction velocities of peripheral nerve fibres conveying sensations of warming and cooling. Fowler CJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep; 51(9):1164-70
Electrical activation of the pocket scratch central pattern generator in the turtle. Currie SN, et al. **J Neurophysiol** 1988 Dec;60(6):2122-37
Properties of somata of spinal dorsal root ganglion cells differ according to peripheral receptor innervated. Koerber HR, et al. **J Neurophysiol** 1988 Nov;60(5):1584-96
Functional role of corticoperipheral loop circuits during voluntary movements in the monkey: a preferential bias theory. Favorov O, et al. **J Neurosci** 1988 Sep;8(9):3266-77
Disuse-induced enhancement of Ia synaptic transmission in spinal motoneurons of the rat. Manabe T, et al. **J Neurosci** 1989 Jul;9(7):2455-61
Somatosensory evoked potentials of the dog: recording techniques and normal values. Vanderzant CW, et al. **J Neurosci Methods** 1989 Apr;27(3):253-63
Fibroblast growth factor effects on peripheral nerve regeneration in a silicone chamber model. Danielsen N, et al. **J Neurosci Res** 1988 Jul;20(3):320-30
Effects of propranolol and yohimbine on periarterial nerve stimulation-induced release of endogenous norepinephrine from the mesenteric vasculature of Wistar Kyoto and spontaneously hypertensive rats. Yamamoto R, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):905-11
Membrane properties of primary sensory neurones of the cat after peripheral reinnervation. Belmonte C, et al. **J Physiol (Lond)** 1988 Nov;405:219-32
Neuromuscular and hormonal adaptations during strength and power training. A review. Häkkinen K. **J Sports Med Phys Fitness** 1989 Mar;29(1):9-26 (60 ref.)
Tubulation for peripheral nerve gap: its history and possibility. Suematsu N. **Microsurgery** 1989;10(1):71-4 (48 ref.)
The utility of magnetic stimulation for routine peripheral nerve conduction studies. Evans BA, et al. **Muscle Nerve** 1988 Oct;11(10):1074-8
Conduction studies in peripheral cat nerve using implanted electrodes: I. Methods and findings in controls. Krarup C, et al. **Muscle Nerve** 1988 Sep;11(9):922-32
Conduction studies in peripheral cat nerve using implanted electrodes: II. The effects of prolonged constriction on regeneration of crushed nerve fibers. Krarup C, et al. **Muscle Nerve** 1988 Sep;11(9):933-44
Axonal branching following crush lesions of peripheral nerves of rat. Toft PB, et al. **Muscle Nerve** 1988 Aug; 11(8):880-9
Presynaptic effect of gamma-aminobutyric acid on the inhibitory nerve and nerve terminals in the crayfish neuromuscular junction. Finger W, et al. **Neurosci Lett** 1989 Feb 13;97(1-2):129-34
Mismatches between peripheral receptor type and central projections after peripheral nerve regeneration. Koerber HR, et al. **Neurosci Lett** 1989 Apr 24;99(1-2):67-72
Receptor position, not nerve branch, determines electroreceptor somatotopy in the gymnotiform fish (Apteronotus leptorhynchus). Lannoo MJ, et al. **Neurosci Lett** 1989 Feb 13;97(1-2):11-7
Responses of VPL thalamic neurones to peripheral stimulation in wakefulness and sleep. Mariotti M, et al. **Neurosci Lett** 1989 Jul 17;102(1):70-5
Somatic and vagal afferent convergence on solitary tract neurons in cat: electrophysiological characteristics. Person RJ. **Neuroscience** 1989;30(2):283-95
Conduction velocity changes along the processes of rat primary sensory neurons. Waddell PJ, et al. **Neuroscience** 1989;30(3):577-84
Neurophysiological markers as early signs of organophosphate neurotoxicity. Nagymajtényi L, et al. **Neurotoxicol Teratol** 1988 Sep-Oct;10(5):429-34
Effects of lesions to rat spinal cord lamina I cell projection pathways on reactions to acute and chronic noxious stimuli. Wall PD, et al. **Pain** 1988 Dec;35(3):327-39
Peripheral and central control of food intake. Denbow DM. **Poult Sci** 1989 Jul;68(7):938-47 (102 ref.)
Peripheral nerve regeneration in Gore-tex chambers. Danielsen N, et al. **Scand J Plast Reconstr Surg Hand Surg** 1988;22(3):207-10
Nerve regeneration. Selzer ME. **Semin Neurol** 1987 Mar; 7(1):88-96 (89 ref.)
Abnormal impulse discharge in primary afferent axons injured in the peripheral versus the central nervous system. Papir-Kricheli D, et al. **Somatosens Mot Res** 1988; 6(1):63-77
[Advances in the research on regenerative chemotropism of peripheral nerves] Zhao Q, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Aug;26(8):451-4 (30 ref.) (Chi)
[Transcranial magnetic stimulation of the motor cortex and percutaneous magnetic stimulation of the peripheral nervous structures in the dog] Heckmann R, et al. **Schweiz Arch Tierheilkd** 1989;131(6):341-50 (Eng. Abstr.) (Ger)
[The effect of halothane on the somato-sympathetic reflex] Saeki S, et al. **Masui** 1988 Dec;37(12):1518-28 (Eng. Abstr.) (Jpn)
[The effects of aging on clinical neurophysiology] Takanashi Y, et al. **Rinsho Byori** 1988 Oct;36(10):1144-51 (Jpn)
[Peripheral denervation in the various clinical forms of Chagas' disease] DeFaria CR, et al. **Arq Neuropsiquiatr** 1988 Sep;46(3):225-37 (Eng. Abstr.) (Por)
[Features of neurograms recorded with end and bipolar electrodes] Cherniakov GM, et al. **Fiziol Zh SSSR** 1989 Apr;75(4):599-602 (Rus)
[Mechanisms of central and peripheral nervous system activity] **Nerv Sist** 1988;27:1-149 (Rus)

PHYSIOPATHOLOGY

Peripheral nerve function during hyperglycemic clamping in insulin-dependent diabetic patients. Sindrup SH, et al. **Acta Neurol Scand** 1989 May;79(5):412-8
Orthostatic tremor: report of two cases and an electrophysiological study. Uncini A, et al. **Acta Neurol Scand** 1989 Feb;79(2):119-22
Hypomyelination in the neonatal rat central and peripheral nervous systems following tellurium intoxication. Jackson KF, et al. **Acta Neuropathol (Berl)** 1989;78(3):301-9
Wallerian degeneration and inflammation in rat peripheral nerve detected by in vivo MR imaging. Titelbaum DS, et al. **AJNR** 1989 Jul-Aug;10(4):741-6
Influence of ganglioside treatment on acrylamide neuropathy

in mice. A morphometric study. Stotzem CD, et al. **Arzneimittelforschung** 1988 Nov;38(11):1563–7

Neurophysiological findings in the Rett syndrome, I: EMG, conduction velocity, EEG and somatosensory-evoked potential studies. Bader GG, et al. **Brain Dev** 1989; 11(2):102–9

Induction of c-fos-like protein within the lumbar spinal cord and thalamus of the rat following peripheral stimulation. Bullitt E. **Brain Res** 1989 Jul 31;493(?):391–7

Late flexion reflex in paraplegic patients. Evidence for a spinal stepping generator. Bussel B, et al. **Brain Res Bull** 1989 Jan;22(1):53–6 (22 ref.)

Nerve fibre regeneration across the PNS–CNS interface at the root-spinal cord junction. Carlstedt T, et al. **Brain Res Bull** 1989 Jan;22(1):93–102

Altered peripheral nerve conduction in HIV-patients. Chavanet PY, et al. **Cancer Detect Prev** 1988; 12(1–6):249–55

Evolution of motor, IA and cutaneous nerve-fibre conduction velocities in premature and fullterm newborns. Khater-Boidin J, et al. **Dev Med Child Neurol** 1989 Feb; 31(1):47–55

Diabetic and hypoglycemic neuropathy—a comparison in the BB rat. Sima AA, et al. **Diabetes Res Clin Pract** 1989 May 15;6(4):279–96

Microangiopathy in human diabetic neuropathy: relationship between capillary abnormalities and the severity of neuropathy. Malik RA, et al. **Diabetologia** 1989 Feb; 32(2):92–102

The application of F wave measurements in hepatic patients. Fierro B, et al. **Electroencephalogr Clin Neurophysiol** 1988 Nov;70(5):442–6

Medial antebrachial cutaneous neuropathy: case report. Chang CW, et al. **Electromyogr Clin Neurophysiol** 1988 Jan;28(1):3–5

Comparison of the effects of carbamazepine and oxcarbazepine on peripheral nerve conduction. Danner R, et al. **Epilepsy Res** 1988 Jul–Aug;2(4):272–5

Essential fatty acids prevent slowed nerve conduction in streptozotocin diabetic rats. Julu PO. **J Diabetic Complications** 1988 Oct–Dec;2(4):185–8

Platelet sodium and potassium ATPase [corrected] activity and noradrenaline efflux rate in relation to autonomic and peripheral nerve function in insulin-dependent diabetic patients [published erratum appears in J Intern Med 1989 Jul;226(1):4] Bergström B, et al. **J Intern Med** 1989 Mar; 225(3):185–90

Delayed somatosensory evoked potentials in pernicious anaemia with intact peripheral nerves [letter] Dick JP, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug;51(8):1105–6

The conduction velocities of peripheral nerve fibres conveying sensations of warming and cooling [letter] Fuller GN, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun; 52(6):810–2

A comparison of nerve conduction velocities and current perception thresholds as correlates of clinical severity of diabetic sensory neuropathy. Rendell MS, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):502–11

Guillain–Barré syndrome: a model of random conduction block. van der Meché FG, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1158–63

Hypoglycemic neuropathy in experimental diabetes. Potter CG, et al. **J Neurol Sci** 1988 Dec;88(1–3):293–301

Chronic hypoxia induces selective maldevelopment of peripheral myelin in rat. Benstead TJ, et al. **J Neuropathol Exp Neurol** 1988 Nov;47(6):599–608

Construction of a simple multi-lead electrode for intraoperative nerve recording. Technical note. Ashley RA, et al. **J Neurosurg** 1989 Jun;70(6):962–4

Sensory thresholds among construction trade painters: a cross-sectional study using new methods for measuring temperature and vibration sensitivity. Bove FJ, et al. **J Occup Med** 1989 Apr;31(4):320–5

Capsaicin desensitization of peripheral nociceptive fibres does not impair sensitivity to other noxious stimuli. Dray A, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):50–4

Subclinical cases of lead poisoning specifically concerned with the central and peripheral neurologic findings. Horiguchi S, et al. **Osaka City Med J** 1988 Oct;34(2):237–43

Behavioral and thalamic nociceptive responses in rats following noxious ischaemia of the tail. Gelgor L, et al. **Pain** 1988 Aug;34(2):205–11

[Peripheral neuropathy in multiple sclerosis. I. Preliminary electrophysiologic studies] Bednařik J. **Cesk Neurol Neurochir** 1988 Sep;51(5):301–6 (Eng. Abstr.) **(Cze)**

[The role of magnetic stimulation in diagnosis of the peripheral nervous system] Dressler D, et al. **EEG EMG** 1988 Dec;19(4):260–3 (Eng. Abstr.) **(Ger)**

[Findings in the peripheral motor system following stimulation of the motor nerve roots: polyradiculitis, amyotrophic lateral sclerosis and polyneuropathy] Ludolph AC, et al. **EEG EMG** 1988 Dec;19(4):255–9 (Eng. Abstr.) **(Ger)**

[Pain perception and peripheral pain localization in angina pectoris (published erratum appears in Z Kardiol 1989 Mar;78(3):211)] Droste C. **Z Kardiol** 1988;77 Suppl 5:15–33 (239 ref.) (Eng. Abstr.) **(Ger)**

[Piriformis syndrome. A contribution to the differential diagnosis of lumbago and coccygodynia] Reichel G, et al. **Zentralbl Neurochir** 1988;49(3):178–84 (Eng. Abstr.) **(Ger)**

[Study of the new useful electrophysiological parameter in diagnosing carpal tunnel syndrome associated with diabetes mellitus] Kitamura K, et al. **Rinsho Byori** 1988 Nov; 36(11):1335–9 **(Jpn)**

[Percutaneous electrical stimulation (PES) and SEP in peripheral neuropathies] Aizawa H, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):447–52 (Eng. Abstr.) **(Jpn)**

[Electrophysiologic research on the central and peripheral nervous systems of workers in contact with ultrasound] Ginzburg DA, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):45–6 **(Rus)**

[Proximal and distal peripheral nerve conduction in chronic renal insufficiency] Fernández Liguori NA, et al. **Medicina (B Aires)** 1987;47(5):477–83 (Eng. Abstr.) **(Spa)**

RADIATION EFFECTS

Laser stimulation of peripheral nerve: critical appraisal of reported results [letter] Stellar S. **Lasers Surg Med** 1988; 8(4):435–7

SURGERY

The sensory potential of free flap donor sites. Brown CJ, et al. **Ann Plast Surg** 1989 Aug;23(2):135–40

New directions in peripheral nerve surgery. Mackinnon SE. **Ann Plast Surg** 1989 Mar;22(3):257–73 (73 ref.)

Selection of optimal axon ratio for nerve regeneration. Mackinnon SE, et al. **Ann Plast Surg** 1989 Aug;23(2):129–34

Intrafascicular decompression in the treatment of causalgia with special reference to the mechanism. Zhu SX, et al. **Ann Plast Surg** 1985 Dec;15(6):460–4

Alterations in the morphology of ganglion cell dendrites in the adult rat retina after optic nerve transection and grafting of peripheral nerve segments. Thanos S. **Cell Tissue Res** 1988;254(3):599–609

Neurotization in brachial plexus injuries. Indication and results. Narakas AO, et al. **Clin Orthop** 1988 Dec; (237):43–56 (47 ref.)

Attempts to prevent equine post neurectomy neuroma formation through retrograde transport of two neurotoxins, doxorubicin and ricin. Cummings JF, et al. **Equine Vet J** 1988 Nov;20(6):451–6

Nerve suture and grafting. Bowers WH, et al. **Hand Clin** 1989 Aug;5(3):445–53 (77 ref.)

Peripheral nerve repair: terminology, questions, and facts. Millesi H. **J Reconstr Microsurg** 1985 Oct;2(1):21–31

Nerve transfer versus Teflon injection for vocal cord paralysis: a comparison. Crumley RL, et al. **Laryngoscope** 1988 Nov;98(11):1200–4

Experimental nerve reconnection: importance of initial repair. de Medinaceli L, et al. **Microsurgery** 1989; 10(1):56–70

Results of primary nerve repair in the upper extremity. Mailänder P, et al. **Microsurgery** 1989;10(2):147–50

The relationship between structural features of peripheral nerves and suture methods for nerve repair. Zhong SZ, et al. **Microsurgery** 1988;9(3):181–7

Problems of fibrin adhesion of the nerves. Herter T. **Neurosurg Rev** 1988;11(3–4):249–58 (110 ref.)

Degenerative and regenerative processes in the peripheral nerve after disconnection and reanastomosis using the Neodym Yag laser. Mewe R, et al. **Neurosurg Rev** 1989; 12(2):151–6

The use of intraneural doxorubicin in association with palmar digital neurectomy in 28 horses. Fubini SL, et al. **Vet Surg** 1988 Nov–Dec;17(6):346–9

[Is there a preference among fibrin glues for nerve anastomosis?] Herter T. **HNO** 1989 Jun;37(6):255–8 (Eng. Abstr.) **(Ger)**

[The effect of various surgical technics on neuroma development using the neodymium laser] Mewe R, et al. **Z Orthop** 1989 Jan–Feb;127(1):130–4 (Eng. Abstr.) **(Ger)**

[2-stage microsurgical autoneuroplasty under pharmacologic effects (experimental research)] Chaĭkovskiĭ IuB. **Zh Vopr Neirokhir** 1988 Sep–Oct;(5):18–21 (Eng. Abstr.) **(Rus)**

TRANSPLANTATION

The quality and extension of nerve fibre regeneration in the centrocentral anastomosis of the peripheral nerve. Barberá J, et al. **Acta Neurochir Suppl (Wien)** 1988;43:205–9

Peripheral nerve autografts to the rat spinal cord: a study of the origin of regenerating fibres using fluorescent double labelling. Pallini R, et al. **Acta Neurochir Suppl (Wien)** 1988; 43:210–3

Expression of class II antigens on peripheral nerve allografts. Yu LT, et al. **Ann N Y Acad Sci** 1988;540:472–4

De novo formation of axon-like processes from axotomized retinal ganglion cells which exhibit long distance growth in a peripheral nerve graft in adult hamsters. Cho EY, et al. **Brain Res** 1989 Apr 10;484(1–2):371–7

Brachial plexus injuries. Nerve grafting. Millesi H. **Clin Orthop** 1988 Dec;(237):36–42

Repair of severe traction lesions of the brachial plexus. Sedel L. **Clin Orthop** 1988 Dec;(237):62–6

Use of the anterior branch of the medial antebrachial cutaneous nerve as a graft for the repair of defects of the digital nerve. Nunley JA, et al. **J Bone Joint Surg [Am]** 1989 Apr;71(4):563–7

Influence of autograft size on peripheral nerve regeneration in cats. Pover CM, et al. **J Neurol Sci** 1989 Apr; 90(2):179–85

Experimental repair of spinal cord lesions by grafting from CNS to PNS. Brunelli G, et al. **J Reconstr Microsurg** 1988 Jul;4(4):245–50

Comparative electrophysiologic evaluation of nerve grafts and autogenous vein grafts as nerve conduits: an experimental study. Chiu DT, et al. **J Reconstr Microsurg** 1988 Jul;4(4):303–9, 311–2

Endoneural and epineural blood flow evaluation with free vascularized and conventional nerve grafts in the canine. Daly PJ, et al. **J Reconstr Microsurg** 1985 Oct;2(1):45–9

Vein graft for repair of peripheral nerve gap. Suematsu N, et al. **J Reconstr Microsurg** 1988 Jul;4(4):313–8

Axonal regeneration through peripheral nerve grafts: the effect of proximo-distal orientation. Ansselin AD, et al. **Microsurgery** 1988;9(2):103–13

The use of a semi-permeable tube as a guidance channel for a transected rabbit optic nerve. Aebischer P, et al. **Prog Brain Res** 1988;78:599–603

Functional reinnervation of a denervated skeletal muscle of the adult rat by axons regenerating from the spinal cord through a peripheral nervous system graft. Horvat JC, et al. **Prog Brain Res** 1988;78:219–24

Survival and function of peripheral nerve allografts after cessation of long-term cyclosporin immunosuppression in rats. Yu LT, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3178–80

[Functional reinnervation of a skeletal muscle by means of a peripheral nerve autograft to the spinal cord by dorsal approach. Study in the adult rat] Horvat JC, et al. **Reprod Nutr Dev** 1988;28(3B):769–71 (Eng. Abstr.) **(Fre)**

[Comments on vascular pedicled nerve transplantation in the area of the upper extremity] Frey HP, et al. **Handchir Mikrochir Plast Chir** 1989 Jan;21(1):4–9 (Eng. Abstr.) **(Ger)**

[Do fibrin glue sleeves produce fibrosis in transplanted nerves?] Herter T, et al. **Neurochirurgia (Stuttg)** 1989 Jan; 32(1):16–20 (Eng. Abstr.) **(Ger)**

[The technic of implanting peripheral nerves in the cerebral hemispheres of rabbits for experimental purposes] Sulla L, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989; 22(1):55–8 (Eng. Abstr.) **(Ger)**

[A comparative morphometric study of auto- and alloplasty of peripheral nerves] Chaĭkovskiĭ IuB, et al. **Klin Khir** 1988; (12):31–2 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Vascular innervation in human skeletal muscle with and without neuromuscular disease. A quantitative ultrastructural study with references to the effects of age and different blood pressure. Case CP, et al. **Acta Neuropathol (Berl)** 1988;76(5):511–21

A modified KOH-collagenase method applied to scanning electron microscopic observations of peripheral nerves. Ushiki T, et al. **Arch Histol Cytol** 1988 Jul;51(3):223–32

Ultrastructural changes of the peripheral nerve induced by vibration: an experimental study. Ho ST, et al. **Br J Ind Med** 1989 Mar;46(3):157–64

Cytokeratin filaments and desmosomes in the epithelioid cells of the perineurial and arachnoidal sheaths of some vertebrate species. Achtstätter T, et al. **Differentiation** 1989 May;40(2):129–49

Ultrastructural studies of peripheral nerves in lepromatous leprosy patients. Kumar V, et al. **Indian J Lepr** 1988 Jul; 60(3):360–2

Localization of Fc gamma receptors and complement receptors CR1 on human peripheral nerve fibres by immunoelectron microscopy. Vedeler CA, et al. **J Neuroimmunol** 1989 Jun;23(1):29–33

There is no simple adequate sampling scheme for estimating the myelinated fibre size distribution in human peripheral nerve: a statistical ultrastructural study. Torch S, et al. **J Neurosci Methods** 1989 Mar;27(2):149–64

The spectrum of changes on 20 nerve biopsies in patients with HIV infection. Chaunu MP, et al. **Muscle Nerve** 1989 Jun;12(6):452–9

[Diabetic neuropathy in dogs and cats—a bioptic electron microscopic study] Dahme E, et al. **Tierarztl Prax** 1989; 17(2):177–88 (Eng. Abstr.) **(Ger)**

PERIPHERAL RESISTANCE see **VASCULAR RESISTANCE**

PERIPHLEBITIS see **PHLEBITIS**

PERIPLANETA see under **COCKROACHES**

PERISSODACTYLA

Isolation of A/Equi-2 virus during 1987 equine influenza epidemic in India. Uppal PK, et al. **Equine Vet J** 1989 Sep; 21(5):364–6

Chronic colic associated with volvulus of the large colon in a Grant's zebra. Gardner HM, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1187–8

Abortion and perinatal foal mortality associated with equine herpesvirus type 1 in a herd of Grevy's zebra. Wolff PL, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1185–6

[Individual glycoside therapy using serum concentration determination in heart insufficiency of horses] Staudacher G. **Berl Munch Tierarztl Wochenschr** 1989 Jan 1;102(1):1–3

(Eng. Abstr.) (Ger)

ANATOMY & HISTOLOGY

Evolution of tooth structure in the Equoidea. Kozawa Y, et al. **J Nihon Univ Sch Dent** 1988 Dec;30(4):287–96

The pattern of venous drainage of the equine ileocaecal junction. Kotzé SH. **J S Afr Vet Assoc** 1988 Sep;59(3):131–3

BLOOD

Serum alpha-tocopherol, all-trans retinol, total lipids and cholesterol in the black rhinoceros (Diceros bicornis). Ghebremeskel K, et al. **Comp Biochem Physiol [A]** 1988; 91(2):343–5

Plasma lipids and lipoproteins of some members of the order Perissodactyla. Leat WM, et al. **Comp Biochem Physiol [B]** 1979;63(2):275–81

Isolation and chemical composition of the leucocytes from donkey, horse, mule and pig. Rocha M, et al. **Comp Biochem Physiol [B]** 1978;60(3):239–44

Comparative study on the activity, pH optimum and thermal stability of some glycosidases and acid phosphatase from pig and mule leukocytes. Sevillano FI, et al. **Comp Biochem Physiol [B]** 1978;60(4):413–7

[Performance testing of mules and Haflinger horses used as pack animals] von Rennenkampff F, et al. **DTW** 1989 Jan; 96(1):17–20 (Eng. Abstr.) (Ger)

GENETICS

The variety of sterility and gradual progression to fertility in hybrids of the horse and donkey. Zong E, et al. **Heredity (Edinburgh)** 1989 Jun;62 (Pt 3):393–406

METABOLISM

Common and species-specific esterases of Equidae—IV. Horse of przewalski, onager and Zebra hartmannae. Kaminski M, et al. **Comp Biochem Physiol [B]** 1978; 61(3):357–64

Disposition of triclabendazole in horses, ponies and donkeys. Kinabo LD, et al. **Equine Vet J** 1989 Jul;21(4):305–7

MICROBIOLOGY

Asinine herpesvirus genomes: comparison with those of the equine herpesviruses. Browning GF, et al. **Arch Virol** 1988; 101(3–4):183–90

[Isolation of strains of a new ecological variant of Staphylococcus aureus from asses] Orzuev MI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Nov;(11):16–8 (Eng. Abstr.) (Rus)

PARASITOLOGY

Critical and controlled tests of activity of a macrocyclic lactone (compound F28249-alpha) against natural infections in internal parasites of equids. Lyons ET, et al. **Am J Vet Res** 1989 Jun;50(6):970–4

Characterization of the microbial community colonizing the anal and vulvar pores of helminths from the hindgut of zebras. Mackie RI, et al. **Appl Environ Microbiol** 1989 May; 55(5):1178–86

Schistosomiasis and nutritional myopathy in a Brazilian tapir (Tapirus terrestris). Yamini B, et al. **J Wildl Dis** 1988 Oct; 24(4):703–7

Clinical parameters of donkeys before and after Trypanosoma vivax infection. Kyewalabye Kaggwa E, et al. **Rev Elev Med Vet Pays Trop** 1988;41(3):265–9

The isolation of human serum-resistant Trypanosoma (Trypanozoon) species from zebra and impala in Luangwa Valley, Zambia. Mulla AF, et al. **Trans R Soc Trop Med Hyg** 1988;82(5):718

Prevalence of hydatidosis in donkeys from central Jordan. Abo-Shehada MN. **Vet Parasitol** 1988 Dec;30(2):125–30

Small strongyle infections in donkeys from the highveld in Zimbabwe. Eysker M, et al. **Vet Parasitol** 1989 Mar; 30(4):345–9

Strongylus vulgaris in donkeys (Equus asinus) from the highveld of Zimbabwe. Pandey VS, et al. **Vet Parasitol** 1989 Jul 15;32(2–3):173–9

Baermannization of Dictyocaulus spp. from faeces of cattle, sheep and donkeys. Rode B, et al. **Vet Parasitol** 1989 Jan; 30(3):205–11

Parasites of the stomach in donkeys of the highveld of Zimbabwe. Pandey VS, et al. **Vet Q** 1988 Oct;10(4):246–8

Effects of intravenous corticosteroid on the pathogenicity of Babesia equi infection of donkeys (Equus asinus). Oladosu LA. **Zentralbl Veterinarmed [B]** 1988 Aug; 35(7):509–14

[Botfly larva skin infestation in a donkey] Schumann H, et al. **Angew Parasitol** 1988 Nov;29(4):241–3 (Eng. Abstr.) (Ger)

PHYSIOLOGY

Reproduction in female Hartmann's zebra, Equus zebra hartmannae. Westlin-van Aarde LM, et al. **J Reprod Fertil** 1988 Nov;84(2):505–11

Factors determining the digestive efficiency of the domesticated donkey (Equus asinus asinus). Izraely H, et al. **Q J Exp Physiol** 1989 Jan;74(1):1–6

Reproductive characteristics of the jenny donkey—Equus asinus: a review. Fielding D. **Trop Anim Health Prod** 1988 Aug;20(3):161–6 (22 ref.)

SURGERY

A technique for elective splenectomy of equidae using a transthoracic approach. Rigg DL, et al. **Vet Surg** 1987 Sep–Oct;16(5):389–91

PERISTALSIS see under **GASTROINTESTINAL MOTILITY**

PERITONEAL CAVITY

Long-term survival of murine erythroid progenitors in long-term bone marrow culture and stromal cell culture: differentiation in peritoneal diffusion chamber culture. Ben-Ishay Z, et al. **Blut** 1989 Jun;58(6):295–8

Intraperitoneal recombinant interferon-alpha 2b for recurrent malignant ascites due to ovarian cancer. Bezwoda WR, et al. **Cancer** 1989 Sep 1;64(5):1029–33

Liquid drainage through the peritoneal diaphragmatic surface. Miserocchi G, et al. **J Appl Physiol** 1989 Apr; 66(4):1579–85

[Intraperitoneal insemination. A new method of treatment of various types of sterility. Technic and results] Ménard A, et al. **Rev Fr Gynecol Obstet** 1988 Oct;83(10):625–7 (Eng. Abstr.) (Fre)

ABNORMALITIES

Ileal band in northwest Indian subjects. Jit I. **Anat Rec** 1988 Nov;222(3):301–4

ANALYSIS

Peritoneal lavage efficiently eliminates protease-alpha-2-macroglobulin complexes and components of the contact system from the peritoneal cavity in patients with severe acute pancreatitis. Aasen AO, et al. **Eur Surg Res** 1989;21(1):1–10

CA 125 and CA 19-9 in peritoneal, cyst and amniotic fluids. Inaudi P, et al. **Med Oncol Tumor Pharmacother** 1988; 5(4):233–8

BLOOD SUPPLY

[Ultrasonic study of the large vessels of the peritoneal cavity and the retroperitoneal space in diseases of the liver] Shurandina NV. **Med Radiol (Mosk)** 1988 Oct;33(10):74–9 (61 ref.) (Rus)

CYTOLOGY

Activation of murine peritoneal macrophages by Salmonella typhimurium. Langermans JA, et al. **Agents Actions** 1989 Jan;26(1–2):208–10

A semithin light microscopic study of peritoneal cells of the mouse embryo. Sasaki K, et al. **Arch Histol Cytol** 1988 Jul;51(3):277–83

Secretion of interleukin 1 (IL-1) by peritoneal macrophages upon contact with syngeneic T cells is Ia-restricted and antigen-independent process. Zimecki M, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(6):661–71

Flow cytometric study of immunocompetent cell phenotypes and phagocytosis in CAPD effluent. Brando B, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):441–4

Fine catheter peritoneal cytology for the acute abdomen: a randomized, controlled trial. Stewart RJ, et al. **Aust N Z J Surg** 1988 Dec;58(12):965–70

The beta form is the dominant interleukin 1 released by murine peritoneal macrophages. Chensue SW, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):404–8

Tumor promoters differ in their ability to stimulate superoxide anion radical production by murine peritoneal exudate cells following in vivo administration. Witz G, et al. **Carcinogenesis** 1989 May;10(5):807–11

In vivo interaction of bilirubin with the cells of the immune system in mice: an ultrastructural electronmicroscopic study. Větvička V, et al. **Cell Biol Int Rep** 1989 Mar; 13(3):301–8

A macrophage receptor for liver lysosomal beta-glucosidase. Imai K. **Cell Struct Funct** 1988 Aug;13(4):325–32

The effects of peritoneal macrophages on monolayered luteal cell progestin secretion in the rat. Naito K, et al. **Endocrinol Jpn** 1988 Jun;35(3):439–46

Monoclonal antibody and cytological detection of free malignant cells in the peritoneal cavity during resection of colorectal cancer—can monoclonal antibodies do better? Ambrose NS, et al. **Eur J Surg Oncol** 1989 Apr; 15(2):99–102

The stimulatory effect of bilirubin on phagocytic activity. Bilej M, et al. **Folia Microbiol (Praha)** 1989;34(2):136–40

Peritoneal cytology in malignant mixed müllerian tumors of the uterus. Kanbour AI, et al. **Gynecol Oncol** 1989 Apr; 33(1):91–5

Granule proteinases define mast cell heterogeneity in the serosa and the gastrointestinal mucosa of the mouse. Miller HR, et al. **Immunology** 1988 Dec;65(4):559–66

Macrophage spreading disparity: alveolar vs peritoneal. Bechard DE, et al. **J Clin Lab Immunol** 1988 Jun; 26(2):67–71

Enhanced oxygen metabolism of peritoneal macrophages in the presence of murine neuroblastoma cells is partly caused by enkephalins. Willems J, et al. **J Neuroimmunol** 1988 Oct; 19(4):269–78

Resistance to peritonitis following disruption of peritoneal mast cells. Shin R, et al. **J Surg Res** 1988 Dec;45(6):565–7

Purified human and recombinant murine interleukin-1 alpha induced accumulation of inflammatory peritoneal neutrophils and mononuclear phagocytes: possible contributions to antibacterial resistance. Czuprynski CJ, et al. **Microb Pathog** 1987 Nov;3(5):377–86

The use of murine feeder cells in the cultivation of Plasmodium falciparum asexual blood stages. Trenholme KR, et al. **Parasitol Res** 1989;75(7):518–21

[Effect of astasilid on the stimulation of peritoneal macrophages] Makarenko IG, et al. **Antibiot Khimioter** 1988 Nov;33(11):833–5 (Eng. Abstr.) (Rus)

[Alpha-thrombin stimulation of heparin secretion by the peritoneal mast cells in rats] Umarova BA, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):131–3 (Eng. Abstr.) (Rus)

[Cytostatic action of the peritoneal cells of Syrian hamsters to transformed and tumor cells in vitro and its suppression by prostaglandin E2] Lavnikova NA, et al. **Eksp Onkol** 1989;11(1):57–9 (Eng. Abstr.) (Rus)

ENZYMOLOGY

The comparison of lysosomal enzymes activities in alveolar and peritoneal macrophages of rat. Turyna B, et al. **Biochem Int** 1988 Sep;17(3):433–40

IMMUNOLOGY

Implication of activation of intraperitoneal macrophages with bio-degradable microspheres. Okawa T, et al. **Cell Biol Int Rep** 1989 Jun;13(6):547–53

Cloricromene improves survival rate and peritoneal macrophage function in splanchnic artery occlusion shock in rats. Sturniolo R, et al. **Circ Shock** 1989 Jul;28(3):267–77

Ontogenic development of autoantibody repertoires in spleen and peritoneal cavity of normal mice: examples of T cell-dependent and -independent reactivities. Huetz F, et al. **Eur J Immunol** 1989 Jul;19(7):1195–201

Elevated levels of GM-CSF and IL-1 in the serum, peritoneal and pleural cavities of GM-CSF transgenic mice. Gearing AJ, et al. **Immunology** 1989 Jun;67(2):216–20

Eosinophilia in mouse regulated by multiple factors following repeated stimulations with ascaris eggs into the peritoneal cavity. Kano S, et al. **Int Arch Allergy Appl Immunol** 1989; 89(1):54–9

CA 125 in peritoneal washings and fluid: correlation with plasma CA 125 and peritoneal cytology. Schwartz PE, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):339–42

METABOLISM

Absorption of plasma proteins from peritoneal cavity of normal rats. Regoeczi E, et al. **Am J Physiol** 1989 Apr; 256(4 Pt 1):E447–52

Absorption of fluid and solutes from the peritoneal cavity. Theoretic and therapeutic implications and applications. Mactier RA, et al. **ASAIO Trans** 1989 Apr-Jun; 35(2):122–31 (101 ref.)

Preferential hydrolysis of oxidized phospholipids by peritoneal fluid of rats treated with casein. Itabe H, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):192–200

Exchange of macromolecules between plasma and peritoneal cavity in ascites tumor-bearing, normal, and serotonin-injected mice. Nagy JA, et al. **Cancer Res** 1989 Oct 1;49(19):5448–58

Transperitoneal movement and pharmacokinetics of cefotiam and cefsulodin in patients on continuous ambulatory peritoneal dialysis. Brouard R, et al. **Clin Nephrol** 1988 Oct; 30(4):197–206

Determination of peritoneal glucose kinetics in rats: implications for the peritoneal implantation of closed-loop insulin delivery systems. Velho G, et al. **Diabetologia** 1989 Jun;32(6):331–6

Utilization of a murine model to optimize volume and dwell time of intraperitoneal cisplatin. Pretorius RG, et al. **Gynecol Oncol** 1989 Jul;34(1):66–9

Studies on the accumulation of serum proteins in zymosan-induced inflammation in mouse peritoneum. Lokesh BR, et al. **Immunobiology** 1989 Mar;179(1):109–23

Dialysate volume measurements required for determining peritoneal solute transport. Leypoldt JK, et al. **Kidney Int** 1988 Aug;34(2):254–61

Simulations of peritoneal solute transport during CAPD. Application of two-pore formalism. Rippe B, et al. **Kidney Int** 1989 May;35(5):1234–44

Release of eicosanoids in rat peritoneal cavity stimulated with platelet-activating factor (PAF). Effect of the PAF-antagonist BN-52021. Jancar S, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jul; 37(1):23–4

Androgen metabolism by human peritoneal macrophages. Coddington CC, et al. **Steroids** 1988 Jan-Feb; 51(1–2):143–61

[Mesenteric membrane permeability of salicylamide, salicylic acid and benzoic acid by peritoneal cavity perfusion] Oikawa T, et al. **Yakugaku Zasshi** 1988 Dec; 108(12):1196–202 (Eng. Abstr.) (Jpn)

MICROBIOLOGY

Intraperitoneal host cellular responses and in vivo killing of Bacteroides fragilis in a bacterial containment chamber. Onderdonk AB, et al. **Infect Immun** 1989 Oct;57(10):3030–7

Genetic susceptibility to mucosal damage leads to bacterial

translocation in a murine burn model. Ma L, et al. **J Trauma** 1989 Sep;29(9):1245–51

PARASITOLOGY

Artificial infection by transplantation of juvenile Fasciola worms into the abdominal cavity of rats. Saeki H, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):151–6

PATHOLOGY

Activity of peritoneal macrophages in endometriosis. Samejima T, et al. **Asia Oceania J Obstet Gynaecol** 1989 Jun;15(2):175–81

Kinetics of changes in peritoneal cell populations following acute inflammation. Melnicoff MJ, et al. **Cell Immunol** 1989 Jan;118(1):178–91

Malignant granular cell tumour with intraperitoneal dissemination. O'Donovan DG, et al. **Histopathology** 1989 Apr;14(4):417–9

Extra-tissular Schistosoma mansoni egg granulomata in the peritoneal cavity of mice. Melro MC, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:245–52

Peritoneal fluid cytology and prognosis in patients with endometrial carcinoma. Hirai Y, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):335–8

Prognostic significance of positive peritoneal cytology in clinical stage I adenocarcinoma of the endometrium. Lurain JR, et al. **Obstet Gynecol** 1989 Aug;74(2):175–9

Peritoneal cytology of ovarian cancer patients receiving intraperitoneal therapy: quantitation of malignant cells and response. Sagae S, et al. **Obstet Gynecol** 1988 Nov; 72(5):782–8

[Ultrasonic biometry of the organs and vessels of the peritoneal cavity and the retroperitoneal space] Tsyb AF, et al. **Ter Arkh** 1989;61(4):150–4 (88 ref.) **(Rus)**

PHYSIOLOGY

Modulation of proline and glucosamine incorporation into tissue repair cells by peritoneal macrophages. Fukasawa M, et al. **J Surg Res** 1989 Feb;46(2):166–71

Influence of shaking on peritoneal transfer in rats. Levitt MD, et al. **Kidney Int** 1989 May;35(5):1145–50

Differences in the peritoneal transport of water, solutes and proteins between dialysis with two- and with three-litre exchanges. Krediet RT, et al. **Nephrol Dial Transplant** 1988; 3(2):198–204

RADIOGRAPHY

[X-ray computed tomographic aspects of medium-sized free peritoneal effusions (supramesocolic level)] Radier C, et al. **J Radiol** 1989 Feb;70(2):95–102 (Eng. Abstr.) **(Fre)**

RADIONUCLIDE IMAGING

Verification of peritoneo-pleural fluid communication and mediastinal lymph nodes by intraperitoneal injection of technetium-99m albumin colloid [letter] Shih WJ, et al. **J Nucl Med** 1989 Apr;30(4):559–60

SPECT study of the fluid distribution in the intra-abdominal space during intraperitoneal treatment of ovarian cancer. Slosman D, et al. **Nucl Med Commun** 1985 Feb;6(2):91–6

SURGERY

Pleuro-peritoneal shunting. Alternative therapy for pleural effusions. Little AG, et al. **Ann Surg** 1988 Oct;208(4):443–50

Pleuroperitoneal shunts in the management of persistent chylothorax. Murphy MC, et al. **Ann Thorac Surg** 1989 Aug;48(2):195–200

Radionuclide assessment of patency of pericardio-peritoneal shunt. Jost GM, et al. **Australas Radiol** 1988 Nov; 32(4):510–1

Retrieval of loose peritoneal shunts by laparoscopy. Technical note. Davis FM, et al. **J Neurosurg** 1989 Feb; 70(2):282

Kinetics of interleukin-1 secretion by murine macrophages recovered from the peritoneal cavity after surgery. Abe H, et al. **J Surg Res** 1989 Aug;47(2):178–82

[Pericardio-peritoneal shunt with the automatic stapler EEA] Obadia JF, et al. **Presse Med** 1988 Nov 5;17(39):2081–2 (Eng. Abstr.) **(Fre)**

PERITONEAL DIALYSIS

see related

KIDNEY, ARTIFICIAL

Treatment outcome of maple syrup urine disease. Snyderman SE. **Acta Paediatr Jpn Overseas Ed** 1988 Aug;30(4):417–24

Cohort study of human immunodeficiency virus (HIV) antibody testing among patients receiving long-term dialysis at a university hospital. Johnston BL, et al. **Am J Infect Control** 1988 Dec;16(6):235–40

Intracranial pressure measurement in a patient undergoing hemodialysis and peritoneal dialysis. Krane NK. **Am J Kidney Dis** 1989 Apr;13(4):336–9

Effects of chronic peritoneal dialysis on thyroid function tests. Robey C, et al. **Am J Kidney Dis** 1989 Feb; 13(2):99–103

Estimation of Lymphatic Absorption and Intraperitoneal Volume During Hypertonic Peritoneal Dialysis [letter] Flessner MF, et al. **ASAIO Trans** 1989 Apr–Jun; 35(2):178–81

The minimal importance of the hollow viscera to peritoneal transport during peritoneal dialysis in the rat. Rubin J, et al. **ASAIO Trans** 1988 Oct–Dec;34(4):912–5

Peritoneal dialysis in neonates with acute renal failure. Pereira S, et al. **Indian J Pediatr** 1988 Nov–Dec;55(6):973–8

Suppression of neutrophil superoxide production by conventional peritoneal dialysis solution. Ing BL, et al. **Int J Artif Organs** 1988 Sep;11(5):351–4

Continuous peritoneal dialysis in acute experimental pancreatitis in dogs. Effect of aprotinin in the dialysate medium. Bassi C, et al. **Int J Pancreatol** 1989 Jul;5(1):69–75

Effect of papaverine on solute transport in peritoneal dialysis. Ilker NY, et al. **Int Urol Nephrol** 1989;21(1):119–23

Acute renal failure in the elderly treated by one-time peritoneal dialysis. Sonnenblick M, et al. **J Am Geriatr Soc** 1988 Nov;36(11):1039–44

Flavobacterium meningosepticum infection, in a 32-day-old child on acute peritoneal dialysis, treated with ciprofloxacin. Humphreys H, et al. **J Antimicrob Chemother** 1989 Feb;23(2):292–4

Methods for the determination of trace aluminium contamination in dialysis fluids. Woolfson AD, et al. **J Clin Pharm Ther** 1988 Aug;13(4):243–8 (23 ref.)

Dosing regimen of gentamicin during intermittent peritoneal dialysis. Kaojarern S, et al. **J Clin Pharmacol** 1989 Feb; 29(2):140–3

Peritoneal dialysis in diabetic end-stage renal disease. Khanna R, et al. **J Diabetic Complications** 1989 Jan–Mar;3(1):12–7 (34 ref.)

Bromate poisoning. Lichtenberg R, et al. **J Pediatr** 1989 May; 114(5):891–4

Plasma fluoride concentration in infants receiving long-term peritoneal dialysis. Warady BA, et al. **J Pediatr** 1989 Sep; 115(3):436–9

Kinetics of peritoneal drug transport in rats: an application of the pore theory of transcapillary exchange. Nakashima E, et al. **J Pharm Sci** 1988 Jun;77(6):481–8

Presence of an anti-viral factor in peritoneal dialysis effluent. Pomeranz A, et al. **Kidney Int** 1989 Aug;36(2):280–5

Effects of histamine and its receptor antagonists on peritoneal permeability. Shostak A, et al. **Kidney Int** 1988 Dec; 34(6):786–90

Post-mortem allogeneic vein for graft as vascular access in chronic haemodialysis [letter] Brynitz S, et al. **Lancet** 1988 Oct 15;2(8616):900–1

Treatment of end-stage renal failure due to diabetes mellitus with peritoneal dialysis—treatment of choice? Plaksin J, et al. **Med Interne** 1982 Oct–Dec;20(4):283–8

Accidental poisoning with isoniazid and rifampicin in an infant: role of peritoneal dialysis [letter] Kumar L, et al. **Nephrol Dial Transplant** 1989;4(2):156–7

Pharmacological reduction of lymphatic absorption from the peritoneal cavity increases net ultrafiltration and solute clearances in peritoneal dialysis. Mactier RA, et al. **Nephron** 1988;50(3):229–32

Simple technique of inserting modified double-cuffed peritoneal dialysis catheter that allows the placement of inner cuff within the rectus muscle without laparotomy [letter] Salahudeen AK. **Nephron** 1989;51(1):134–5

Peritoneal dialysis. Current technology and techniques. Twardowski ZJ. **Postgrad Med** 1989 Apr;85(5):161–4, 167, 170 passim (20 ref.)

Features of renal osteodystrophy in pediatric patients receiving regular peritoneal dialysis. Salusky IB, et al. **Semin Nephrol** 1989 Mar;9(1):37–42

Renal transplantation in older patients on peritoneal dialysis. Cardella CJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2022–3

[Acute peritoneal dialysis in low birth weight infants] Law KL, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Feb; 43(2):119–24 (Eng. Abstr.) **(Chi)**

[Experiences with kidney dialysis in the disaster area of Armenia] van der Reijden HJ. **Ned Tijdschr Geneeskd** 1989 Mar 18;133(11):567–70 **(Dut)**

[X-ray computed tomographic aspects of medium-sized free peritoneal effusions (supramesocolic level)] Radier C, et al. **J Radiol** 1989 Feb;70(2):95–102 (Eng. Abstr.) **(Fre)**

[Treatment of refractory congestive cardiac insufficiency by continuous peritoneal dialysis. Long-term course] Mousson C, et al. **Presse Med** 1988 Sep 24;17(32):1617–20 (Eng. Abstr.) **(Fre)**

[Continuous peritoneal dialysis in children] Robitaille P, et al. **Union Med Can** 1989 Jan–Feb;118(1):12–7 (Eng. Abstr.) **(Fre)**

[Peritoneal dialysis in hemolytic-uremic syndrome following ileocecal resection for invagination in postoperative peritonitis] Deindl C, et al. **Z Kinderchir** 1989 Jun; 44(3):169–71 (Eng. Abstr.) **(Ger)**

[Scanning electron microscopy study of the peritoneum as a dialysis membrane—a morphological study on the etiology of sclerosing peritonitis] Korten G, et al. **Z Urol Nephrol** 1988 Jul;81(7):473–9 (Eng. Abstr.) **(Ger)**

[Reserves of bone marrow granulocytes in patients with chronic renal failure treated conservatively and by dialysis procedures] Dragański K. **Pol Arch Med Wewn** 1985 Jun; 73(6):336–44 (Eng. Abstr.) **(Pol)**

[Effect of changes in the temperature of dialysis fluid on the efficiency of peritoneal dialysis] Panasiuk E, et al. **Pol Arch Med Wewn** 1985 Nov–Dec;74(5–6):327–33 (Eng. Abstr.) **(Pol)**

[Effect of sodium nitroprusside, furosemide and dopamine on the efficiency of peritoneal dialysis] Panasiuk E. **Pol Arch Med Wewn** 1985 Nov–Dec;74(5–6):316–26 (Eng. Abstr.) **(Pol)**

[Intermittent peritoneal dialysis and continuous ambulatory peritoneal dialysis] Radovanović Lj, et al. **Srp Arh Celok Lek** 1988 Nov–Dec;116(11–12):967–76 (Eng. Abstr.) **(Scc)**

[Fate of insulin administered via peritoneal dialysis solutions in diabetics] Frati AC, et al. **Arch Invest Med (Mex)** 1988 Jan–Mar;19(1):91–6 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Tuberculous peritonitis complicating long-term peritoneal dialysis. Report of 5 cases and review of the literature. Cheng IK, et al. **Am J Nephrol** 1989;9(2):155–61 (25 ref.)

Rheumatic syndromes and beta 2-microglobulin amyloidosis in patients receiving long-term peritoneal dialysis. Cornélis F, et al. **Arthritis Rheum** 1989 Jun;32(6):785–8

Beta-2-microglobulin amyloidosis as a complication of peritoneal dialysis treatment [letter] Benhamou CL, et al. **Clin Nephrol** 1988 Dec;30(6):346

Clinical features and severity of nonspecific symptoms in dialysis patients. Parfrey PS, et al. **Nephron** 1988; 50(2):121–8

Magnetic resonance imaging of iron overload in children treated with peritoneal dialysis. Querfeld U, et al. **Nephron** 1988;50(3):220–4

[Encapsulating peritonitis: a rare cause of intestinal occlusion in a patient subjected to peritoneal dialysis] Talenti A, et al. **Minerva Chir** 1988 Nov 30;43(22):1973–5 (Eng. Abstr.) **(Ita)**

[Clinical studies of patients with chronic renal failure receiving long-term peritoneal dialysis] Miyake Y. **Igaku Kenkyu** 1988 Oct;58(5):267–78 (Eng. Abstr.) **(Jpn)**

INSTRUMENTATION

The peritoneoscopic implantation of a polyurethane percutaneous access device for peritoneal dialysis. Preliminary experience. Cruz C. **ASAIO Trans** 1988 Oct–Dec;34(4):941–4

Peritoneal catheter development. Currently used catheters—advantages/disadvantages/complications, and catheter tunnel morphology in humans. Twardowski ZJ. **ASAIO Trans** 1988 Oct–Dec;34(4):937–40 (18 ref.)

Continuous flow peritoneal dialysis in pigs, using a silicone rubber double lumen catheter. Geary DF, et al. **Int J Artif Organs** 1989 Jul;12(7):428–32

Successful peritoneal dialysis using 0.9% sodium chloride with modified M/6 sodium lactate solution and recycled catheters. Onwubalili JK. **Nephron** 1989;53(1):24–6

[Surgical aspects of the implantation of catheters for acute peritoneal dialysis in premature, newborn and young infants] Kristen R, et al. **Chirurg** 1988 Aug;59(8):555–7 (Eng. Abstr.) **(Ger)**

METHODS

Placement of peritoneal catheters [letter] Nolph KD. **Ann Intern Med** 1988 Dec 15;109(12):989

A three-year experience with CCPD in a university-based dialysis and transplantation program. Mattern WD, et al. **Clin Nephrol** 1988;30 Suppl 1:S49–52

Intermittent peritoneal dialysis in the treatment of end-stage renal failure. Walker RG, et al. **Med J Aust** 1979 Oct 20; 2(8):393–7

[Belgian experience in percutaneous peritoneal dialysis in the treatment of acute alcoholic necrotizing-hemorrhagic pancreatitis] Allé JL, et al. **Acta Gastroenterol Belg** 1988 Jan–Feb;51(1):23–30 (Eng. Abstr.) **(Fre)**

[Comparison of various pharmacologic and conventional methods of increasing the effectiveness of intermittent peritoneal dialysis. III] Grzegorzewska A. **Przegl Lek** 1988; 45(10):721–8 (Eng. Abstr.) **(Pol)**

[Comparison of various pharmacologic and conventional methods of increasing the effectiveness of peritoneal dialysis. V. Usefulness of selected parameters of peritoneal transfer for evaluating the effectiveness of intermittent peritoneal dialysis] Grzegorzewska A. **Przegl Lek** 1989; 46(5):440–7 (Eng. Abstr.) **(Pol)**

[Comparison of various pharmacological and conventional methods of increasing the effectiveness of peritoneal dialysis. I. Intraperitoneal or intravenous use of furosemide during intermittent peritoneal dialysis] Grzegorzewska A. **Przegl Lek** 1988;45(4):365–73 (Eng. Abstr.) **(Pol)**

[Comparison of various pharmacological and conventional methods of increasing the effectiveness of peritoneal dialysis. II. Intraperitoneal administration of sodium nitroprusside during intermittent peritoneal dialysis] Grzegorzewska A. **Przegl Lek** 1988;45(6):485–90 (Eng. Abstr.) **(Pol)**

PSYCHOLOGY

Psychological aspects of dialytic treatment. Frontori L. **Contrib Nephrol** 1989;69:67–74

STATISTICS & NUMERICAL DATA

[25 years of kidney replacement treatment at a general hospital] Gerlag PG, et al. **Ned Tijdschr Geneeskd** 1989 Jul 1;133(26):1318–22 (Eng. Abstr.) **(Dut)**

UTILIZATION

Discontinuation of dialysis therapy as a cause of death. Port FK, et al. **Am J Nephrol** 1989;9(2):145–9

PERITONEAL DIALYSIS, CONTINUOUS AMBULATORY

Cytology of peritoneal fluid from patients on continuous ambulatory peritoneal dialysis. Fok FK, et al. **Acta Cytol** 1989 Sep–Oct;33(5):595–8

Lavage fluid from continuous ambulatory peritoneal dialysis. A model for mesothelial cell changes. Hoeltermann W, et al. **Acta Cytol** 1989 Sep–Oct;33(5):591–4

Chronic ambulatory peritoneal dialysis in patients aged over seventy. Berisa F, et al. **Age Ageing** 1989 Mar;18(2):134–5

Effect of increasing intraabdominal pressure and volume on left ventricular function in continuous ambulatory peritoneal dialysis (CAPD). Franklin JO, et al. **Am J Kidney Dis** 1988 Oct;12(4):291–8

Isolated presence of antibody to hepatitis B core antigen in dialysis patients: occurrence of subclinical hepatitis? Lai KN, et al. **Am J Kidney Dis** 1989 May;13(5):370–6

A hypothesis: the protein catabolic rate is dependent upon the type and amount of treatment in dialyzed uremic patients. Lindsay RM, et al. **Am J Kidney Dis** 1989 May; 13(5):382–9

Effects of chronic peritoneal dialysis on thyroid function tests. Robey C, et al. **Am J Kidney Dis** 1989 Feb; 13(2):99–103

Mycobacterium gordonae: an unusual peritoneal pathogen in a patient undergoing continuous ambulatory peritoneal dialysis. London RD, et al. **Am J Med** 1988 Nov; 85(5):703–4

Serial cell-mediated immunological changes in terminal uremic patients on continuous ambulatory peritoneal dialysis therapy. Lin CY, et al. **Am J Nephrol** 1988; 8(5):355–62

Determinants of serum creatine kinase activity in dialysis patients. Singhal PC, et al. **Am J Nephrol** 1988;8(3):220–4

Pharmacokinetics and metabolism of intravenous and oral fleroxacin in subjects with normal and impaired renal function and in patients on continuous ambulatory peritoneal dialysis. Stuck AE, et al. **Antimicrob Agents Chemother** 1989 Mar;33(3):373–81

A comparison of employment rates of patients treated with continuous ambulatory peritoneal dialysis vs in-center hemodialysis (Michigan End-Stage Renal Disease Study). Julius M, et al. **Arch Intern Med** 1989 Apr;149(4):839–42

The role of lymphatic drainage in peritoneal mass transfer. Hallett MD, et al. **Artif Organs** 1989 Feb;13(1):28–34

Lipids in diabetic and nondiabetic hemodialysis and CAPD patients. Avram MM, et al. **ASAIO Trans** 1988 Jul–Sep; 34(3):314–6

Flow cytometric study of immunocompetent cell phenotypes and phagocytosis in CAPD effluent. Brando B, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):441–4

Intraperitoneal verapamil therapy in CAPD patients with peritoneal hypopermeability. Effects on ultrafiltration. Lamperi S, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):425–8

Peritoneal clearances. Long-term study. Procaccini DA, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):437–40

Prevalence of HIV virus among patients undergoing continuous ambulatory peritoneal dialysis. Rubin J. **ASAIO Trans** 1989 Apr–Jun;35(2):144–5

Role of catheter removal in therapy of bacterial peritonitis of continuous ambulatory peritoneal dialysis. Zappacosta AR, et al. **ASAIO Trans** 1989 Jan–Mar;35(1):40–5

Current concepts of CAPD. **Blood Purif** 1989;7(2–3):65–180

Control of mineral metabolism in CAPD patients. Delmez JA. **Blood Purif** 1989;7(2–3):167–80 (68 ref.)

Morphology of the peritoneum in CAPD. Dobbie JW. **Blood Purif** 1989;7(2–3):74–85 (17 ref.)

CAPD: after the first ten years. Mactier RA, et al. **Blood Purif** 1989;7(2–3):65–73 (58 ref.)

Alternative osmotic agents. Mistry CD, et al. **Blood Purif** 1989;7(2–3):109–14 (28 ref.)

Further investigations of the defective protein C in hemodialysis, hemofiltration and continuous ambulatory peritoneal dialysis. Sørensen PJ, et al. **Blood Purif** 1989; 7(4):218–22

Clinical value of standardized equilibration tests in CAPD patients. Twardowski ZJ. **Blood Purif** 1989;7(2–3):95–108 (48 ref.)

Withdrawal of continuous ambulatory peritoneal dialysis to treat mild peritonitis. Pagniez DC, et al. **BMJ** 1988 Nov 5;297(6657):1174–5

Pharmacokinetics of intraperitoneal teicoplanin in patients with chronic renal failure on continuous ambulatory peritoneal dialysis. Bonati M, et al. **Br J Clin Pharmacol** 1988 Jun;25(6):761–5

Peritonitis in patients undergoing continuous ambulatory peritoneal dialysis. Gokal R. **Br J Clin Pract Symp Suppl** 1988 Feb;57:79–84 (29 ref.)

Pharmacokinetics of ceftriaxone after intravenous administration to CAPD-patients with and without peritonitis. Favre H, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):273–4

Pharmacokinetics of ceftriaxone in continuous ambulatory peritoneal dialysis patients after intraperitoneal administration. Záruba K, et al. **Chemioterapia** 1987 Jun; 6(2 Suppl):267–70

Renal osteodystrophy in children on CAPD: a prospective trial of 1-alpha-hydroxycholecalciferol therapy. Watson AR, et al. **Child Nephrol Urol** 1988–89;9(4):220–7

Glycan microheterogeneity of alpha 1-acid glycoprotein in sera and dialysates of patients on continuous ambulatory peritoneal dialysis. Fraeyman NH, et al. **Clin Chim Acta** 1989 Apr 28;181(1):47–54

CAPD—Update 1987. **Clin Nephrol** 1988;30 Suppl 1:S1–75

Long-term CAPD—some U.K. experience. Ataman R, et al. **Clin Nephrol** 1988;30 Suppl 1:S71–5

Transperitoneal movement and pharmacokinetics of cefotiam and cefsulodin in patients on continuous ambulatory peritoneal dialysis. Brouard R, et al. **Clin Nephrol** 1988 Oct; 30(4):197–206

CAPD and systemic diseases. Cantaluppi A. **Clin Nephrol** 1988;30 Suppl 1:S8–12 (36 ref.)

Renal osteodystrophy and aluminum bone disease in CAPD patients. Gokal R. **Clin Nephrol** 1988;30 Suppl 1:S64–7 (32 ref.)

Peritoneal kinetics of different drugs. Keller E. **Clin Nephrol** 1988;30 Suppl 1:S24–8

Effects of long-term CAPD on carbohydrate and lipid metabolism. Lameire N, et al. **Clin Nephrol** 1988;30 Suppl 1:S53–8

Alterations in chemotactic factor-induced responses of neutrophils and monocytes from chronic dialysis patients. Lewis SL, et al. **Clin Nephrol** 1988 Aug;30(2):63–72

Evolution of transport theory in CAPD. Lysaght MJ, et al. **Clin Nephrol** 1988;30 Suppl 1:S34–6

CAPD is a first class treatment: results of an eight-year experience with a comparison of patient and method survival in CAPD and hemodialysis. Maiorca R, et al. **Clin Nephrol** 1988;30 Suppl 1:S3–7

Calcium alginate, an aluminum-free phosphate binder, in patients on CAPD. Passlick J, et al. **Clin Nephrol** 1989 Aug; 32(2):96–100

CAPD and transplantation in diabetics. Passlick J, et al. **Clin Nephrol** 1988;30 Suppl 1:S18–23

Epileptic attacks associated with pefloxacin treatment in a patient on CAPD [letter] Romano C, et al. **Clin Nephrol** 1989 Jul;32(1):48–9

The immune status of the uremic patient: hemodialysis vs CAPD. Schollmeyer P, et al. **Clin Nephrol** 1988;30 Suppl 1:S37–40 (30 ref.)

Pharmacological manipulation of peritoneal transport in CAPD. Steinhauer HB. **Clin Nephrol** 1988;30 Suppl 1:S29–33 (49 ref.)

Long-term results of CAPD in Italy: a report from the Italian CAPD Study Group. Tarchini R, et al. **Clin Nephrol** 1988; 30 Suppl 1:S68–70

CAPD in elderly patients with cardiovascular risk factors. Vlachojannis J, et al. **Clin Nephrol** 1988;30 Suppl 1:S13–7

Pharmacokinetics of theophylline and its metabolites in a patient undergoing continuous ambulatory peritoneal dialysis. Vree TB, et al. **Clin Pharmacokinet** 1988 Dec; 15(6):390–5

Teicoplanin pharmacokinetics and bioavailability during peritoneal dialysis. Brouard RJ, et al. **Clin Pharmacol Ther** 1989 Jun;45(6):674–81

Increased levels of immunoreactive plasma renin substrate during infectious peritonitis in patients on continuous ambulatory peritoneal dialysis. Metsärinne K, et al. **Clin Sci** 1988 Oct;75(4):411–4

The viability of the peritoneal membrane in long-term continuous ambulatory peritoneal dialysis patients. Bazzato G, et al. **Contrib Nephrol** 1989;70:312–7

Current trends in peritoneal dialysis in North America. Maher JF. **Contrib Nephrol** 1989;70:284–9 (23 ref.)

Peritoneal dialysis in Italy. Maiorca R, et al. **Contrib Nephrol** 1989;70:301–11

Peritoneal dialysis in Europe. Development of CAPD. Taraba I, et al. **Contrib Nephrol** 1989;70:290–300 (23 ref.)

The treatment of diabetic renal failure by continuous ambulatory peritoneal dialysis. Berisa F, et al. **Diabetic Med** 1989 Jan–Feb;6(1):67–70

Vancomycin-associated exfoliative dermatitis during continuous ambulatory peritoneal dialysis. Gutfeld MB, et al. **Drug Intell Clin Pharm** 1988 Nov;22(11):881–2

Prevalence of peritonitis-associated coagulase-negative staphylococci on the skin of continuous ambulatory peritoneal dialysis patients. Beard-Pegler MA, et al. **Epidemiol Infect** 1989 Jun;102(3):365–78

Effect of pyridoxine supplementation on plasma oxalate concentrations in patients receiving dialysis. Tomson CR, et al. **Eur J Clin Invest** 1989 Apr;19(2):201–5

Influence of continuous ambulatory peritoneal dialysis on serum alpha 1-acid glycoprotein concentration and drug binding. Belpaire FM, et al. **Eur J Clin Pharmacol** 1988; 35(4):339–43

Intraperitoneal heparin in peritoneal dialysis and its effect on fibrinopeptide A in plasma and dialysate. Gries E, et al. **Haemostasis** 1989;19(1):21–5

CAPD with preservation of ultrafiltration capacity in infants and young children during the first 18 months of treatment. van Beek R, et al. **Helv Paediatr Acta** 1988 Aug; 43(1–2):33–40

Lipoprotein and apoprotein levels in different types of dialysis. Cassader M, et al. **Int J Artif Organs** 1989 Jul; 12(7):433–8

Leukocyte tissue-type plasminogen activator activity in dialysis patients. Nishimoto K, et al. **Int J Artif Organs** 1989 Feb;12(2):91–5

Pharmacokinetics of intraperitoneal ciprofloxacin in patients on CAPD. Dharmasena D, et al. **J Antimicrob Chemother** 1989 Feb;23(2):253–9

A selection adjusted comparison of hospitalization on continuous ambulatory peritoneal dialysis and haemodialysis. Burton PR, et al. **J Clin Epidemiol** 1989; 42(6):531–9

Flavimonas oryzihabitans (Pseudomonas oryzihabitans; CDC group Ve-2): an emerging pathogen in peritonitis related to continuous ambulatory peritoneal dialysis? Bendig JW, et al. **J Clin Microbiol** 1989 Jan;27(1):217–8

Effect of monophosphoryl lipid A on the in vitro function of peritoneal leukocytes from uremic patients on continuous ambulatory peritoneal dialysis. Carozzi S, et al. **J Clin Microbiol** 1989 Aug;27(8):1748–53

Clinical and microbiological evaluation of four culture methods for the diagnosis of peritonitis in patients on continuous ambulatory peritoneal dialysis. Doyle PW, et al. **J Clin Microbiol** 1989 Jun;27(6):1206–9

Novel plate culture method to improve the microbiological diagnosis of peritonitis in patients on continuous ambulatory peritoneal dialysis. Gould IM, et al. **J Clin Microbiol** 1988 Sep;26(9):1687–90

Laboratory diagnosis of peritonitis in patients on continuous ambulatory peritoneal dialysis. Ludlam HA, et al. **J Clin Microbiol** 1988 Sep;26(9):1757–62

Transplantation, hemodialysis, and continuous ambulatory peritoneal dialysis for end-stage renal disease in diabetic patients. Jacobson SH, et al. **J Diabetic Complications** 1988 Jul–Sep;2(3):150–7

Peritoneal dialysis in diabetic end-stage renal disease. Khanna R, et al. **J Diabetic Complications** 1989 Jan–Mar;3(1):12–7 (34 ref.)

A survey of the NIH CAPD Registry population with end-stage renal disease attributed to diabetic nephropathy. Lindblad AS, et al. **J Diabetic Complications** 1988 Oct–Dec; 2(4):227–32

Infection with Campylobacter coli and Campylobacter fetus in a patient on continuous ambulatory peritoneal dialysis [letter] Meigh JA, et al. **J Infect** 1988 Sep;17(2):189–91

Infections in continuous ambulatory peritoneal dialysis. Spencer RC. **J Med Microbiol** 1988 Sep;27(1):1–9 (56 ref.)

Intraperitoneal deferoxamine therapy for iron overload in children undergoing CAPD. Andreoli SP, et al. **Kidney Int** 1989 Jun;35(6):1330–5

Erythrocyte Na,K pump activity and arterial hypertension in uremic dialyzed patients. Boero R, et al. **Kidney Int** 1988 Nov;34(5):691–6

CAPD with an amino acid dialysis solution: a long-term, cross-over study. Bruno M, et al. **Kidney Int** 1989 May; 35(5):1189–94

The peritoneal transport of serum proteins and neutral dextran in CAPD patients. Krediet RT, et al. **Kidney Int** 1989 Apr;35(4):1064–72

Plasma and muscle free amino acids during continuous ambulatory peritoneal dialysis. Lindholm B, et al. **Kidney Int** 1989 May;35(5):1219–26

Kinetics of peritoneal dialysis in children: role of lymphatics. Mactier RA, et al. **Kidney Int** 1988 Jul;34(1):82–8

Presence of an anti-viral factor in peritoneal dialysis effluent. Pomeranz A, et al. **Kidney Int** 1989 Aug;36(2):280–5

Simulations of peritoneal solute transport during CAPD. Application of two-pore formalism. Rippe B, et al. **Kidney Int** 1989 May;35(5):1234–44

Plasma levels of atrial natriuretic peptide in chronically dialyzed patients. Deray G, et al. **Kidney Int Suppl** 1988 Sep;25:S86–8

Reduction of cytotoxic antibodies after continuous ambulatory peritoneal dialysis in highly sensitised patients [letter] Latta K, et al. **Lancet** 1988 Oct 8;2(8615):847–8

Pharmacokinetics of recombinant human erythropoietin in patients on continuous ambulatory peritoneal dialysis [see comments] Macdougall IC, et al. **Lancet** 1989 Feb 25; 1(8635):425–7. **Comment in:** Lancet 1989 Jun 17;1(8651):1388–9

Subcutaneous erythropoietin and peritoneal dialysis [letter; comment] Stevens JM, et al. **Lancet** 1989 Jun 17; 1(8651):1388–9. **Comment on:** Lancet 1989 Feb 25;1(8635):424–7

The acute effect of peritoneal dialysis fluid on left ventricular function in patients on CAPD. Deligiannis A, et al. **Life Support Syst** 1983;1 Suppl 1:179–82

Peak 7c and creatinine weekly clearances in various dialytic procedures. Icardi A, et al. **Life Support Syst** 1983;1 Suppl 1:162–5

Intraperitoneal insulin in continuous ambulatory peritoneal dialysis (CAPD): clinical aspects. Triolo G, et al. **Life Support Syst** 1983;1 Suppl 1:454–6

Quantitative and qualitative changes of apolipoprotein AI-containing lipoproteins in patients on continuous ambulatory peritoneal dialysis. Ohta T, et al. **Metabolism** 1989 Sep;38(9):843–9

Survival on renal replacement therapy: data from the EDTA Registry. Brunner FP, et al. **Nephrol Dial Transplant** 1988; 3(2):109–22

Oral treatment of peritonitis in CAPD patients with ofloxacin. Chan MK, et al. **Nephrol Dial Transplant** 1988; 3(2):194–7

Vaccination against hepatitis B in children and adolescent patients on dialysis. Drachman R, et al. **Nephrol Dial Transplant** 1989;4(5):372–4

Treatment of Pseudomonas aeruginosa peritonitis in a CAPD patient with ciprofloxacin [letter] Grave W, et al. **Nephrol Dial Transplant** 1988;3(5):707

Is CAPD competitive with haemodialysis for long-term treatment of uraemic patients? Maiorca R, et al. **Nephrol Dial Transplant** 1989;4(4):244–53 (74 ref.)

Survey of blood lead and plasma aluminium concentrations in patients of a renal unit. Sampson B, et al. **Nephrol Dial Transplant** 1989;4(5):375–81

Pancreatic beta-cell function in CAPD. Smith WG, et al. **Nephrol Dial Transplant** 1988;3(4):448–52

Plasma oxalate in patients receiving continuous ambulatory peritoneal dialysis. Tomson CR, et al. **Nephrol Dial Transplant** 1988;3(3):295–9

Plasma levels of human atrial natriuretic factor in patients treated by hemodialysis and continuous ambulatory peritoneal dialysis. Ando R, et al. **Nephron** 1988;50(3):225–8

Captopril, proteinuria and peritoneal protein leakage in diabetic patients [letter] Coronel F, et al. **Nephron** 1989; 51(3):443

AIDS-related complex by continuous ambulatory peritoneal dialysis [letter] Diskin CJ. **Nephron** 1989;51(4):548

Lipoprotein and apolipoprotein losses during continuous ambulatory peritoneal dialysis. Saku K, et al. **Nephron** 1989; 51(2):220–4

CAPD, protective against developing dialysis-associated amyloid? [letter] Sethi D, et al. **Nephron** 1988;50(1):85–6

Clearance of beta-2-microglobulin using continuous ambulatory peritoneal dialysis. Sethi D, et al. **Nephron** 1989; 52(4):352–5

Increased ultrafiltration after erythropoietin-induced correction of renal anemia in patients on continuous ambulatory peritoneal dialysis. Steinhauer HB, et al. **Nephron** 1989;53(1):91–2

Effect of phosphatidylcholine on peritoneal transport and lymphatic absorption in a CAPD patient with sclerosing peritonitis. Struijk DG, et al. **Nephron** 1989;51(4):577–8

Influence of CAPD and residual diuresis on the serum levels of alpha-1-microglobulin in end-stage renal disease. Weber MH, et al. **Nephron** 1989;51(3):367–9

A comparison of three methods to assess metabolic control in diabetic patients on CAPD treatment. Bilo HJ, et al. **Neth J Med** 1988 Dec;33(5–6):217–24

Dialysate leucocytosis in CAPD patients without clinical infection. Fijen JW, et al. **Neth J Med** 1988 Dec; 33(5–6):270–80

Measurement of intraperitoneal fluid kinetics in CAPD patients by means of autologous haemoglobin. Krediet RT, et al. **Neth J Med** 1988 Dec;33(5–6):281–90

Comparison of hemodialysis and peritoneal dialysis in the management of anemia related to chronic renal disease. Korbet SM. **Semin Nephrol** 1989 Mar;9(1 Suppl 1):9–15 (45 ref.)

Features of renal osteodystrophy in pediatric patients receiving regular peritoneal dialysis. Salusky IB, et al. **Semin Nephrol** 1989 Mar;9(1):37–42

Focal glomerulosclerosis in Hodgkin's disease necessitating peritoneal dialysis. Graham BL Jr, et al. **South Med J** 1989 Sep;82(9):1187–9

Coagulation cascade, fibrinolytic system, antithrombin III, protein C and protein S in patients maintained on continuous ambulatory peritoneal dialysis. Vaziri ND, et al. **Thromb Res** 1989 Jan 15;53(2):173–80

Successful renal transplantation in children treated with CAPD. Ogawa O, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1997–2000

Glycosylated hemoglobin measured by affinity chromatography in diabetic and nondiabetic patients on long-term dialysis therapy. Tzamaloukas AH, et al. **West J Med** 1989 Apr;150(4):415–9

Stomatococcus mucilaginosus as an agent of CAPD peritonitis. Lanzendörfer H, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):326–8

[Fibronectin in patients with chronic renal failure undergoing dialysis] Hou FF, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Jun;27(6):348–51, 389 (Eng. Abstr.) **(Chi)**

[The pathophysiology of fluid transport in continuous ambulatory peritoneal dialysis (published erratum appears in Ned Tijdschr Geneeskd 1989 May 20;133(20):1056)] Krediet RT, et al. **Ned Tijdschr Geneeskd** 1989 Apr 15; 133(15):758–62 (40 ref.) **(Dut)**

[Clinical aspects of continuous ambulatory peritoneal dialysis in diabetics] Rottembourg J, et al. **Nephrologie** 1988; 9(5):227–32 (Eng. Abstr.) **(Fre)**

[Continuous ambulatory peritoneal dialysis. Current concepts after 10 years' experience] Rottembourg J, et al. **Presse Med** 1989 May 20;18(20):1018–23 (Eng. Abstr.) **(Fre)**

[Continuous ambulatory peritoneal dialysis—current concepts after 10 years' experience] Rottembourg J, et al. **Ther Umsch** 1988 Dec;45(12):900–7 (34 ref.) (Eng. Abstr.) **(Fre)**

[Continuous peritoneal dialysis in children] Robitaille P, et al. **Union Med Can** 1989 Jan–Feb;118(1):12–7 (Eng. Abstr.) **(Fre)**

[Elimination of aluminum via continuous ambulatory peritoneal dialysis] Passlick J, et al. **Dtsch Med Wochenschr** 1989 Jan 6;114(1):9–13 (Eng. Abstr.) **(Ger)**

[Interstitial myocardial fibrosis in chronic uremia—the cause of chronic diastolic malfunction in dialysis patients?] Mall G, et al. **Pathologe** 1989 Jul;10(4):200–5 **(Ger)**

[Pediatric inguinal hernia in continuous ambulatory peritoneal dialysis] Schaarschmidt K, et al. **Z Kinderchir** 1988 Oct;43(5):358–60 (Eng. Abstr.) **(Ger)**

[Regression of extraosseous calcinosis in chronic ambulatory peritoneal dialysis treatment] Haag B. **Z Urol Nephrol** 1989 Feb;82(2):81–4 (Eng. Abstr.) **(Ger)**

[Determination of netilmicin in continuous ambulatory peritoneal dialysis (CAPD): comparison of 3 methods] Cavalli G, et al. **Clin Ter** 1988 Jan 31;124(2):103–8 (Eng. Abstr.) **(Ita)**

[Hypertension and CAPD] Ramello A, et al. **Minerva Urol Nefrol** 1988 Jul–Sep;40(3):233–6 **(Ita)**

[Factors affecting transperitoneal calcium flux in patients undergoing continuous ambulatory peritoneal dialysis] Shigematsu T, et al. **Nippon Jinzo Gakkai Shi** 1988 Aug; 30(8):955–62 (Eng. Abstr.) **(Jpn)**

[The factors affecting transperitoneal flux of magnesium and other divalent ions in patients undergoing continuous ambulatory peritoneal dialysis] Shigematsu T, et al. **Nippon Jinzo Gakkai Shi** 1988 Nov;30(11):1365–73 (Eng. Abstr.) **(Jpn)**

[Intermittent peritoneal dialysis and continuous ambulatory peritoneal dialysis] Radovanović Lj, et al. **Srp Arh Celok Lek** 1988 Nov–Dec;116(11–12):967–76 (Eng. Abstr.) **(Scc)**

[Chronic continuous ambulatory peritoneal dialysis: rapid colorimetric method for detecting bacteria in peritoneal fluid] García-Ortiz R, et al. **Rev Med Chil** 1988 Aug; 116(8):765–70 (Eng. Abstr.) **(Spa)**

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Mycobacterium chelonae peritonitis associated with continuous ambulatory peritoneal dialysis. Merlin TL, et al. **Am J Clin Pathol** 1989 Jun;91(6):717–20

Peritoneal dialysis-associated tuberculous peritonitis in an intravenous drug user with acquired immunodeficiency syndrome. Baumgartner DD, et al. **Am J Kidney Dis** 1989 Aug;14(2):154–7

Intraperitoneal (IP) vancomycin therapy for CAPD peritonitis—a prospective, randomized comparison of intermittent v continuous therapy. Boyce NW, et al. **Am J Kidney Dis** 1988 Oct;12(4):304–6

Acinetobacter peritonitis during chronic peritoneal dialysis. Galvao C, et al. **Am J Kidney Dis** 1989 Aug;14(2):101–4

Ultrasound as a tool in the diagnosis and management of exit-site infections in patients undergoing continuous ambulatory peritoneal dialysis. Holley JL, et al. **Am J Kidney Dis** 1989 Sep;14(3):211–6

A prospective evaluation of blood culture versus standard plate techniques for diagnosing peritonitis in continuous ambulatory peritoneal dialysis. Holley JL, et al. **Am J Kidney Dis** 1989 Mar;13(3):184–8

The time course of peritoneal transport kinetics in continuous ambulatory peritoneal dialysis patients who develop sclerosing peritonitis. Krediet RT, et al. **Am J Kidney Dis** 1989 Apr;13(4):299–307

Tuberculous peritonitis in a CAPD patient cured without catheter removal: case report, review of the literature, and guidelines for treatment and diagnosis. Mallat SG, et al. **Am J Kidney Dis** 1989 Feb;13(2):154–7 (15 ref.)

Hyponatremia in the very young chronic peritoneal dialysis patient. Paulson WD, et al. **Am J Kidney Dis** 1989 Sep; 14(3):196–9

Catheter infections as a factor in the transfer of continuous ambulatory peritoneal dialysis patients to hemodialysis. Piraino B, et al. **Am J Kidney Dis** 1989 May;13(5):365–9

Peritoneal mucormycosis in a patient receiving continuous ambulatory peritoneal dialysis. Polo JR, et al. **Am J Kidney Dis** 1989 Mar;13(3):237–9

Successful treatment of Aspergillus peritonitis complicating peritoneal dialysis. Prewitt K, et al. **Am J Kidney Dis** 1989 Jun;13(6):501–3

Timing and characteristics of multiple peritonitis episodes: a report of the National CAPD Registry. Stablein DM, et al. **Am J Kidney Dis** 1989 Jul;14(1):44–9

Group A streptococcal peritonitis in a patient undergoing continuous ambulatory peritoneal dialysis. Cavalieri SJ, et al. **Am J Med** 1989 Feb;86(2):249–50

Pseudomonal and candidal peritonitis as a complication of continuous ambulatory peritoneal dialysis in human immunodeficiency virus-infected patients. Dressler R, et al. **Am J Med** 1989 Jun;86(6 Pt 2):787–90

Fungal peritonitis complicating continuous ambulatory peritoneal dialysis: successful treatment with fluconazole, a new orally active antifungal agent. Levine J, et al. **Am J Med** 1989 Jun;86(6 Pt 2):825–7

Tuberculous peritonitis complicating long-term peritoneal dialysis. Report of 5 cases and review of the literature. Cheng IK, et al. **Am J Nephrol** 1989;9(2):155–61 (25 ref.)

Quiz of the month. Peritonitis complicating continuous ambulatory peritoneal dialysis (CAPD). Norris SH. **Am J Nephrol** 1988;8(6):476, 513

Peritoneal morphology on maintenance dialysis. Pollock CA, et al. **Am J Nephrol** 1989;9(3):198–204

Metabolic effects of continuous ambulatory peritoneal dialysis. Morrison G. **Annu Rev Med** 1989;40:163–72 (50 ref.)

Incidence of peritonitis, distribution of causative bacteria and outcome in continuous ambulatory peritoneal dialysis (CAPD) in Kuwait. al-Hilali N, et al. **APMIS Suppl** 1988; 3:101–3

Cefoperazone in the treatment of peritonitis in continuous ambulatory peritoneal dialysis patients. Leehey DJ, et al. **Artif Organs** 1988 Dec;12(6):482–3

Comparison of peritonitis rates using standard spike versus Y sets in CAPD. Burkart JM. **ASAIO Trans** 1988 Jul–Sep; 34(3):433–6

Response of CAPD patients with a high incidence of peritonitis to intraperitoneal immunoglobulin therapy. Carozzi S, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):635–9

Significance of biofilm-adherent bacterial microcolonies on Tenckhoff catheters of CAPD patients. Dasgupta MK, et al. **Blood Purif** 1989;7(2–3):144–55 (46 ref.)

Composition of peritoneal dialysis solutions: potential hazards. Henderson IS. **Blood Purif** 1989;7(2–3):86–94 (76 ref.)

Immunological defenses in CAPD. Lamperi S, et al. **Blood Purif** 1989;7(2–3):126–43 (31 ref.)

Antimicrobial therapy for CAPD-associated peritonitis. Winton MD, et al. **Blood Purif** 1989;7(2–3):115–25 (63 ref.)

Peritonitis due to Methylobacterium mesophilicum complicating ambulatory peritoneal dialysis—British Columbia. Dewar JW, et al. **Can Dis Wkly Rep** 1988 Dec 3;14(48):217–9 **(Eng, Fre)**

Amyloidosis associated with continuous ambulatory peritoneal dialysis [letter] Boon AP. **Can Med Assoc J** 1989 Feb 15;140(4):364–5

Carpal tunnel syndrome and amyloidosis associated with continuous ambulatory peritoneal dialysis. Gagnon RF, et al. **Can Med Assoc J** 1988 Oct 15;139(8):753–5

Are aminoglycosides essential in the treatment of continuous ambulatory peritoneal dialysis (CAPD) peritonitis? Drinovec J, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):483–4

Management of peritonitis related to chronic ambulatory peritoneal dialysis (CAPD) using two daily intraperitoneal injections of 400 mg pefloxacin. Ragnaud JM, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):481–3

Treatment of resistant CAPD peritonitis by temporary discontinuation of peritoneal dialysis. Cairns HS, et al. **Clin Nephrol** 1989 Jul;32(1):27–30

Peritonitis prevention in CAPD. Carozzi S, et al. **Clin Nephrol** 1988;30 Suppl 1:S45–8

Immunologic patterns in CAPD patients with peritonitis. Lamperi S, et al. **Clin Nephrol** 1988;30 Suppl 1:S41–4 (23 ref.)

Protein and amino acid metabolism in patients undergoing continuous ambulatory peritoneal dialysis (CAPD). Lindholm B, et al. **Clin Nephrol** 1988;30 Suppl 1:S59–63 (28 ref.)

Staphylococcus aureus skin carriage and development of peritonitis in patients on continuous ambulatory peritoneal dialysis. Sesso R, et al. **Clin Nephrol** 1989 May;31(5):264–8

Carcinogenic glutamic acid pyrolysis product in the dialysate of uremic patients treated by continuous ambulatory peritoneal dialysis. Yanagisawa H, et al. **Clin Nephrol** 1988 Aug;30(2):73–8

The clinical utility of the Tc-99m SC intraperitoneal scan in CAPD patients. Berman C, et al. **Clin Nucl Med** 1989 Jun;14(6):405–9

Intraperitoneal imaging [editorial] Smink RD. **Clin Nucl Med** 1989 Jun;14(6):472

Peritonitis prevention in CAPD by intraperitoneal IgG. Lamperi S, et al. **Contrib Nephrol** 1989;70:325–9

Selective peritoneal protein loss. Scarpioni LL, et al. **Contrib Nephrol** 1989;70:318–24

Tuberculous peritonitis in a patient undergoing continuous ambulatory peritoneal dialysis. Yorioka N, et al. **Hiroshima J Med Sci** 1988 Jun;37(2):93–5

Scalp hair as an indicator of aluminium exposure: comparison to bone and plasma. Wilhelm M, et al. **Hum Toxicol** 1989 Jan;8(1):5–9

Infections of continuous ambulatory peritoneal dialysis catheters. Vas SI. **Infect Dis Clin North Am** 1989 Jun; 3(2):301–28 (141 ref.)

Climatic factors and peritonitis in CAPD patients. Chan MK, et al. **Int J Artif Organs** 1989 Jun;12(6):366–8

Acute abdominal events and their impact on morbidity and mortality in a CAPD program. Chandran PK, et al. **Int J Artif Organs** 1989 Mar;12(3):165–9

Clinical significance of hemodialysis performed during the course of continuous ambulatory peritoneal dialysis. Murphy G, et al. **Int J Artif Organs** 1989 May;12(5):303–6

Oral treatment of peritonitis in CAPD patients with two dosage regimens of ofloxacin. Chan MK, et al. **J Antimicrob Chemother** 1988 Sep;22(3):371–5

Peritonitis caused by Pseudomonas mesophilica in a patient undergoing continuous ambulatory peritoneal dialysis. Rutherford PC, et al. **J Clin Microbiol** 1988 Nov; 26(11):2441–3

Cryptococcosis complicating continuous ambulatory peritoneal dialysis. Kaczmarski EB, et al. **J Infect** 1989 May;18(3):289–92

Peritoneal fluid causing inferior attenuation on SPECT thallium-201 myocardial imaging in women. Rab ST, et al. **J Nucl Med** 1988 Nov;29(11):1860–4

Peritonitis in peritoneal dialysis: bacterial colonization by biofilm spread along the catheter surface. Read RR, et al. **Kidney Int** 1989 Feb;35(2):614–21

Houseplant peritonitis [letter] al-Wali W, et al. **Lancet** 1988 Oct 22;2(8617):957

Campylobacter peritonitis [letter] Fleming VA, et al. **Med J Aust** 1989 Aug 21;151(4):239–40

Subcapsular steatonecrosis in response to peritoneal insulin delivery: a clue to the pathogenesis of steatonecrosis in obesity. Wanless IR, et al. **Mod Pathol** 1989 Mar;2(2):69–74

Candida peritonitis in 2 patients on continuous ambulatory peritoneal dialysis (CAPD). Bozkurt F, et al. **Mycoses** 1988; Suppl 1:69–74

Deficiencies of vitamins in CAPD patients: the effect of

supplementation. Boeschoten EW, et al. **Nephrol Dial Transplant** 1988;3(2):187–93

Aspergillus niger peritonitis [letter] Rodriguez-Tudela JL, et al. **Nephrol Dial Transplant** 1988;3(2):232

Dialysis arthropathy, beta 2-microglobulin and the effect of dialyser membrane. Sethi D, et al. **Nephrol Dial Transplant** 1988;3(6):768–72

Vitamin E status in CAPD patients [letter] Taccone-Gallucci M, et al. **Nephrol Dial Transplant** 1989;4(1):75–6

Continuous ambulatory peritoneal dialysis vs haemodialysis: a lesser risk of amyloidosis? Tielemans C, et al. **Nephrol Dial Transplant** 1988;3(3):291–4

Vancomycin and ceftazidime in the treatment of CAPD peritonitis. Beaman M, et al. **Nephron** 1989;51(1):51–5

Peritonitis during continuous ambulatory peritoneal dialysis. Treatment with pefloxacin: first results and pharmacokinetics. Benzakour M, et al. **Nephron** 1988; 50(2):175–6

Fallopian tube capture of a peritoneal dialysis catheter [letter] Harrison NA, et al. **Nephron** 1988;50(3):258

Generalized lymphadenopathy in continuous ambulatory peritoneal dialysis patients associated with Staphylococcus epidermidis infection. Pollock CA, et al. **Nephron** 1989; 52(1):81–2

Surgical prophylaxis and treatment of surgical infections with quinolones. Nord CE. **Rev Infect Dis** 1989 Jul–Aug;11 Suppl 5:S1287–91 (14 ref.)

Multicystic transformation of the kidneys in dialysis patients. Frifelt JJ, et al. **Scand J Urol Nephrol** 1989;23(1):51–4

Corynebacterium equi peritonitis in a patient receiving peritoneal dialysis. Franklin DB Jr, et al. **South Med J** 1989 Aug;82(8):1046–7

[Peritonitis in continuous ambulatory peritoneal dialysis. Experiences after 7 years] Ejlersen E, et al. **Ugeskr Laeger** 1989 Feb 27;151(9):563–6 (Eng. Abstr.) **(Dan)**

[Treatment of peritonitis in continuous ambulatory peritoneal dialysis with a combination of fosfomycin and pefloxacin] Michel C, et al. **Pathol Biol (Paris)** 1989 Apr;37(4):269–71 (Eng. Abstr.) **(Fre)**

[Chronic aluminum poisoning in continuous ambulatory peritoneal dialysis: treatment with deferoxamine] Passlick J, et al. **Dtsch Med Wochenschr** 1989 Feb 17;114(7):253–7 (Eng. Abstr.) **(Ger)**

[Peritonitis in continuous ambulatory peritoneal dialysis (CAPD): problems of microbiologic diagnosis] Hamdan JS. **Rev Latinoam Microbiol** 1988 Oct–Dec;30(4):381–4 (24 ref.) (Eng. Abstr.) **(Por)**

ECONOMICS

A comparison of charges for continuous ambulatory peritoneal dialysis and center hemodialysis. Smith DG, et al. **J Clin Epidemiol** 1988;41(9):817–24

INSTRUMENTATION

Peritonitis secondary to dialysis tubing contamination among patients undergoing continuous ambulatory peritoneal dialysis. Rubin J, et al. **Am J Kidney Dis** 1989 Aug; 14(2):92–5

Percutaneous access for peritoneal dialysis. Daly BD. **ASAIO Trans** 1988 Oct–Dec;34(4):932–4

Development of a new long-term access device for continuous ambulatory peritoneal dialysis. Kantrowitz A, et al. **ASAIO Trans** 1988 Oct–Dec;34(4):930–1

CAPD disconnect systems. Junor BJ. **Blood Purif** 1989; 7(2–3):156–66 (18 ref.)

The ideal continuous ambulatory peritoneal dialysis connector. Buoncristiani U. **Contrib Nephrol** 1989;70:330–9

Value of peritoneoscopy for nonfunctioning continuous ambulatory peritoneal dialysis catheters. Smith DW, et al. **Gastrointest Endosc** 1989 Mar–Apr;35(2):90–2

Gore-tex versus Oreopoulos peritoneal catheters: clinical evaluation and comparison. Böss HP, et al. **Int J Artif Organs** 1989 Jun;12(6):369–72

CAPD system Zurich—smart, safe and simple. Binswanger U, et al. **Life Support Syst** 1983;1 Suppl 1:137–9

METHODS

Removal and replacement of Tenckhoff catheter at single operation [letter] Ludlam HA, et al. **Lancet** 1989 May 6; 1(8645):1028

Differences in the peritoneal transport of water, solutes and proteins between dialysis with two- and with three-litre exchanges. Krediet RT, et al. **Nephrol Dial Transplant** 1988; 3(2):198–204

The use of an amino-acid-based CAPD fluid over 12 weeks. Young GA, et al. **Nephrol Dial Transplant** 1989;4(4):285–92

[Continuous ambulatory peritoneal dialysis: a new method of home dialysis] Dratwa M. **Rev Med Brux** 1988 Nov;Spec No:29–34 (22 ref.) (Eng. Abstr.) **(Fre)**

[Comparison of various pharmacologic and conventional methods of increasing the effectiveness of peritoneal dialysis. IV. A large intraperitoneal dose of furosemide in the modeling of continuous peritoneal dialysis] Grzegorzewska A. **Przegl Lek** 1988;45(11):770–5 (Eng. Abstr.) **(Pol)**

MORTALITY

A six-year comparison of patient and technique survivals in CAPD and HD. Maiorca R, et al. **Kidney Int** 1988 Oct; 34(4):518–24

PSYCHOLOGY

Relationship of dialysis modality and other factors to cognitive function in chronic dialysis patients. Wolcott DL, et al. **Am J Kidney Dis** 1988 Oct;12(4):275–84

Psychological well-being and psychiatric disturbance in dialysis and renal transplant patients. Petrie K. **Br J Med Psychol** 1989 Mar;62 (Pt 1):91–6

TRENDS

Continuous ambulatory peritoneal dialysis—an update. Balfe JW. **Child Nephrol Urol** 1988–89;9(1–2):2–5 (21 ref.)

PERITONEAL DISEASES

CHEMICALLY INDUCED

Does antibiotic peritoneal lavage cause peritoneal adhesion formation? Campana TJ, et al. **Curr Surg** 1989 Mar–Apr; 46(2):118–9

COMPLICATIONS

[Significance of prognostic factors in the treatment of tuboperitoneal infertility] Iakubovich DV, et al. **Akush Ginekol (Mosk)** 1989 Apr;(4):46–9 (Eng. Abstr.) **(Rus)**

[Status of the ovaries in tubal and peritoneal infertility] Shtyrov SV. **Akush Ginekol (Mosk)** 1988 Nov;(11):59–63 (Eng. Abstr.) **(Rus)**

[A case of location of the appendix in the ileal mesentery] Morozov SA, et al. **Klin Khir** 1989;(4):64 **(Rus)**

[Intestinal invagination in adults associated with abdominal calcifications] Molina M, et al. **Rev Esp Enferm Apar Dig** 1989 Mar;75(3):314–6 **(Spa)**

DIAGNOSIS

Retro-peritoneal haemorrhage presenting as hip pain. Wan A. **Arch Emerg Med** 1988 Dec;5(4):246–7

Value of laparoscopy in the diagnosis of hepatic and peritoneal diseases. Sayeed A, et al. **Bangladesh Med Res Counc Bull** 1988 Dec;14(2):90–4

Multilocular peritoneal inclusion cysts (so-called cystic mesotheliomas). Ross MJ, et al. **Cancer** 1989 Sep 15; 64(6):1336–46

Actinomycosis of the greater omentum. Wan YL, et al. **Gastrointest Radiol** 1989 Winter;14(1):38–40

The sonographic signs of the peritoneal pseudocyst obstructing the ventriculo-peritoneal shunt in children. Grunebaum M, et al. **Neuroradiology** 1988;30(5):433–8

[Torsion of the greater omentum in a child] Degovtsov EN. **Klin Khir** 1989;(6):75–6 **(Rus)**

[Laparoscopic diagnosis of diseases of the epiploic appendages of the colon] Abdulzhavadov IM. **Vestn Khir** 1989 Jan;142(1):115–6 **(Rus)**

[Peritoneoscopy in the diagnosis of diseases of the liver, bile ducts and peritoneum] Ragasol A. **Rev Invest Clin** 1967 Jul–Sep;19(3):245–54 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Treatment of disseminated peritoneal hydatid disease with praziquantel [letter] Henriksen TH, et al. **Lancet** 1989 Feb 4;1(8632):272

Effects of clindamycin and gentamicin and other antimicrobial combinations against enterococci in an experimental model of intra-abdominal abscess. Willey SH, et al. **Surg Gynecol Obstet** 1989 Sep;169(3):199–202

EMBRYOLOGY

Embryologic theory of histogenesis of endometriosis in peritoneal pockets. Batt RE, et al. **Obstet Gynecol Clin North Am** 1989 Mar;16(1):15–28 (26 ref.)

ENZYMOLOGY

Reduced human peritoneal plasminogen activating activity: possible mechanism of adhesion formation. Thompson JN, et al. **Br J Surg** 1989 Apr;76(4):382–4

ETIOLOGY

Peritoneal keratin granulomas from transtubal spread of endometrial carcinoma with squamous metaplasia (adenoacanthoma). Case report. Wotherspoon AC, et al. **Br J Obstet Gynaecol** 1989 Feb;96(2):236–40

Effect of intraperitoneal saline irrigation at different temperatures on adhesion formation. Kappas AM, et al. **Br J Surg** 1988 Sep;75(9):854–6

Peritoneal cerebrospinal fluid pseudocysts: a complication of ventriculoperitoneal shunts. Burchianti M, et al. **Childs Nerv Syst** 1988 Oct;4(5):286–90

Fatal hemorrhage from an arterio-portal-peritoneal fistula after percutaneous liver biopsy. Korula J, et al. **Gastroenterology** 1989 Jan;96(1):244–6

Vagino-peritoneal fistula from a cervical carcinoma. Singh P, et al. **Gynecol Oncol** 1988 Oct;31(2):352–6

Pneumoperitoneum due to peritoneovaginal fistula following hysterectomy. Massad LS, et al. **Int J Gynaecol Obstet** 1989 Jul;29(3):257–61 (16 ref.)

Primary torsion of the omentum in a jackhammer operator: another vibration-related injury [see comments] Shields PG, et al. **J Occup Med** 1988 Nov;30(11):892–4. **Comment in:** J Occup Med 1989 Jun;31(6):563

[Unusual localizations of hydatid cysts. Apropos of 40 cases] Abi F, et al. **J Chir (Paris)** 1989 May;126(5):307–12 (Eng. Abstr.) **(Fre)**

[Perforations in free peritoneum in Crohn disease] Della Giovanpaola C, et al. **Minerva Chir** 1989 Jun 30; 44(12):1689–92 (Eng. Abstr.) **(Ita)**

[Liver abscess perforating into the peritoneum, duodenum and colon] Bravo JL, et al. **Rev Invest Clin** 1967 Jan–Mar; 19(1):77–84 (Eng. Abstr.) **(Spa)**

[Peritoneal cyst of cerebrospinal fluid in an adult] Mock AR, et al. **Rev Med Panama** 1988 May;13(2):89–91 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Peritoneal calcification and calciphylaxis [letter] Klemm G. **Nephron** 1989;51(1):124

PARASITOLOGY

[Peritoneal hydatidosis with fistulization into the sigmoid colon] Puras A, et al. **Rev Esp Enferm Apar Dig** 1989 Apr; 75(4):403–5 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Abdominal cocoon. Jain SK, et al. **J Indian Med Assoc** 1988 Nov;86(11):302

Percutaneous aspiration, drainage, and biopsy in children. Liu P, et al. **J Pediatr Surg** 1989 Sep;24(9):865–6

Benign and borderline serous lesions of the peritoneum in women. Bell DA, et al. **Pathol Annu** 1989;24 Pt 2:1–21 (45 ref.)

PHYSIOPATHOLOGY

Retrosternal hemorrhage: an experimental model for study of lymphatic leakage. Levine S, et al. **Lymphology** 1988 Jun;21(2):105–9

PREVENTION & CONTROL

The role of oxygen-derived free radicals in peritoneal adhesion formation induced by ileal ischaemia/reperfusion. Tsimoyiannis EC, et al. **Acta Chir Scand** 1989 Mar; 155(3):171–4

Role of feces, necrotic tissue, and various blocking agents in the prevention of adhesions [letter] Tsimoyiannis EC. **Ann Surg** 1989 Apr;209(4):502–3

Recombinant tissue plasminogen activator reduces adhesion formation in a rabbit uterine horn model. Doody KJ, et al. **Fertil Steril** 1989 Mar;51(3):509–12

Indomethacin decreases carrageenan-induced peritoneal adhesions. DeSimone JM, et al. **Surgery** 1988 Oct; 104(4):788–95

[Chemoprevention of secondary abdominal echinococcosis—experimental study and clinical observation] Stojanow G, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(3):180–3 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Caecal herniation through the foramen of Winslow. Lemish W, et al. **Australas Radiol** 1989 Feb;33(1):109–10

Hernia through the foramen of Winslow. A report of two cases with emphasis on plain film interpretation. Tran TL, et al. **Clin Radiol** 1989 May;40(3):264–6

RADIONUCLIDE IMAGING

The clinical utility of the Tc-99m SC intraperitoneal scan in CAPD patients. Berman C, et al. **Clin Nucl Med** 1989 Jun;14(6):405–9

SURGERY

Laparoscopic and vaginal colpotomy for the excision of infiltrating cul-de-sac endometriosis. Martin DC. **J Reprod Med** 1988 Oct;33(10):806–8

[Abdominal apoplexy] Zhu ZX, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Mar;26(3):165–6, 191 (Eng. Abstr.) **(Chi)**

[Clinical features of a case of cysts of the hepatogastric ligament] De Martino A, et al. **Minerva Chir** 1988 Aug 31;43(15–16):1287–9 (Eng. Abstr.) **(Ita)**

[A case of acute fatty liver of pregnancy that survived two removals of intra-abdominal huge hematoma due to disseminated intravascular coagulation] Sujita K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Nov;85(11):2450–5 **(Jpn)**

[Combination of suppurative and uncomplicated cysts of the omentum majus, phlegmonous appendicitis and ascariasis] Bukhaliuk NA, et al. **Klin Khir** 1988;(6):69 **(Rus)**

[Torsion of the epiploic appendages of the colon] Afendylov SA, et al. **Vestn Khir** 1989 Jan;142(1):113–4 **(Rus)**

PERITONEAL EFFUSION see **ASCITIC FLUID**

PERITONEAL INFUSIONS see **INFUSIONS, PARENTERAL**

PERITONEAL IRRIGATION see **PERITONEAL LAVAGE**

PERITONEAL LAVAGE

see related

ASCITIC FLUID

Peritoneal fluid washings [letter] McGowan L. **Acta Cytol** 1989 May–Jun;33(3):414–5

Cytohistologic correlation of peritoneal washing cytology in gynecologic disease. Zuna RE, et al. **Acta Cytol** 1989 May–Jun;33(3):327–36

The value of continuous 72–hour peritoneal lavage for peritonitis. Dobrin PB, et al. **Am J Surg** 1989 Apr; 157(4):368–71; discussion 371

An algorithm for computed tomography & diagnostic peritoneal lavage [editorial] Doris PE. **Ann Emerg Med** 1989 May;18(5):592

Computed tomography versus diagnostic peritoneal lavage: usefulness in immediate diagnosis of blunt abdominal trauma. Frame SB, et al. **Ann Emerg Med** 1989 May; 18(5):513–6

Peritoneal washing cytology: a retrospective analysis of 175 gynaecological patients. Lowe E, et al. **Aust N Z J Obstet Gynaecol** 1989 Feb;29(1):55–61

Early management of abdominal trauma: the role of diagnostic peritoneal lavage. Danne PD, et al. **Aust N Z J Surg** 1988 Nov;58(11):879–87

High volume lesser sac lavage in acute necrotizing pancreatitis. Teerenhovi O, et al. **Br J Surg** 1989 Apr; 76(4):370–3

Does antibiotic peritoneal lavage cause peritoneal adhesion formation? Campana TJ, et al. **Curr Surg** 1989 Mar–Apr; 46(2):118–9

Does a localized intra–abdominal abscess produce a positive peritoneal lavage? Levine EA, et al. **Curr Surg** 1988 Jul–Aug;45(4):302–3

Peritoneal lavage as an aid in the diagnosis of acute peritonitis of non–traumatic origin. Hoffmann J. **Dig Dis** 1988; 6(4):185–93 (39 ref.)

Peritoneal lavage efficiently eliminates protease–alpha–2–macroglobulin complexes and components of the contact system from the peritoneal cavity in patients with severe acute pancreatitis. Aasen AO, et al. **Eur Surg Res** 1989;21(1):1–10

Therapeutic regimens in acute experimental hemorrhagic pancreatitis. Effects of hydration, oxygenation, peritoneal lavage, and a potent protease inhibitor. Niederau C, et al. **Gastroenterology** 1988 Dec;95(6):1648–57

The use of peritoneal lavage and urological studies in major fractures of the pelvis—a reassessment. Nallathambi MN, et al. **Injury** 1987 Nov;18(6):379–83

Postoperative peritoneal lavage in generalised peritonitis. A prospective analysis. Kumar GV, et al. **Int Surg** 1989 Jan–Mar;74(1):20–2

Peritoneal lavage after abdominal trauma: indications, technique, results. Pattyn P, et al. **Int Surg** 1989 Jan–Mar; 74(1):17–9

Closed peritoneal lavage in the diagnosis of non traumatic acute abdomen. Hay JM, et al. **Ital J Surg Sci** 1988; 18(2):115–20

Diagnosis of intra–abdominal injury with special reference to peritoneal aspiration. Yadav P, et al. **J Indian Med Assoc** 1988 Aug;86(8):204–6

Improved radiolabeled monoclonal antibody uptake by lavage of intraperitoneal carcinomatosis in mice. Wahl RL, et al. **J Nucl Med** 1989 Jan;30(1):60–5

Sonography versus peritoneal lavage in blunt abdominal trauma. Grüessner R, et al. **J Trauma** 1989 Feb;29(2):242–4

Evaluation of computed tomography and diagnostic peritoneal lavage in blunt abdominal trauma. Meyer DM, et al. **J Trauma** 1989 Aug;29(8):1168–70; discussion 1170–2

Percutaneous peritoneal lavage in blunt trauma patients: a safe and accurate diagnostic method. Sherman JC, et al. **J Trauma** 1989 Jun;29(6):801–4; discussion 804–5

Rough sets approach to analysis of data from peritoneal lavage in acute pancreatitis. Słowiński K, et al. **Med Inf (Lond)** 1988 Jul–Sep;13(3):143–59

Cefoxitin levels in guinea pig uterine tissue after post–surgical irrigation. Oortman EH, et al. **Milit Med** 1988 Oct; 153(10):530–3

Preoperative whole–gut lavage vs. traditional three–day bowel preparation in left colon surgery. Soballe PW, et al. **Milit Med** 1989 Apr;154(4):198–201

CA 125 in peritoneal washings and fluid: correlation with plasma CA 125 and peritoneal cytology [letter] Fuith LC. **Obstet Gynecol** 1989 Sep;74(3 Pt 1):432

Diagnostic peritoneal lavage. Questions and answers. Feied CF. **Postgrad Med** 1989 Mar;85(4):40–5, 49 (19 ref.)

To wash or not to wash? Intra–operative peritoneal lavage in the contaminated peritoneal cavity. Schein M, et al. **S Afr J Surg** 1989 Mar;27(1):22–3 (20 ref.)

[Contribution of peritoneal puncture lavage in injuries of the abdomen. Retrospective study of 230 cases] Almou M, et al. **J Chir (Paris)** 1989 Apr;126(4):275–6 (Eng. Abstr.) **(Fre)**

[X–ray computed tomographic aspects of medium–sized free peritoneal effusions (supramesocolic level)] Radier C, et al. **J Radiol** 1989 Feb;70(2):95–102 (Eng. Abstr.) **(Fre)**

[The value of peritoneal lavage] Kern E. **Langenbecks Arch Chir** 1988;373(4):201 **(Ger)**

[Diagnostic peritoneal lavage in abdominal injuries. Our experience] Antonelli W, et al. **Quad Sclavo Diagn** 1987 Sep;23(3):345–50 (Eng. Abstr.) **(Ita)**

[Postoperative laparoscopic treatment of diffuse suppurative peritonitis] Lutsevich OE, et al. **Sov Med** 1989;(1):32–5 (Eng. Abstr.) **(Rus)**

[Ultrasound and peritoneal lavage in the diagnosis of blunt injuries of the abdomen] Bakula B, et al. **Acta Med Iugosl** 1988;42(3):187–200 (Eng. Abstr.) **(Scr)**

[Diagnostic peritoneal lavage in blunt abdominal trauma] Espinoza R, et al. **Rev Med Chil** 1988 Feb;116(2):125–9 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

A complication of povidone–iodine [letter] Joshi P. **Anaesthesia** 1989 Aug;44(8):692

Sudden ventricular dysrhythmias after unintentional mediastinal washout with tetracycline containing solution [letter] Youssef MS. **Anaesthesia** 1988 Nov;43(11):992–3

Peritoneal lavage with mercuric chloride: toxic and unnecessary. Friedland JS, et al. **Br J Surg** 1989 Mar; 76(3):314

Effect of intraperitoneal saline irrigation at different temperatures on adhesion formation. Kappas AM, et al. **Br J Surg** 1988 Sep;75(9):854–6

[Chlorhexidine poisoning] Baranov IuI. **Sud Med Ekspert** 1989 Jan–Mar;32(1):52 **(Rus)**

INSTRUMENTATION

[Use of membrane drainage in treating suppurative peritonitis] Nifantév OE, et al. **Klin Khir** 1989;(1):31–3 (Eng. Abstr.) **(Rus)**

METHODS

A comparison of open peritoneal lavage with modified closed peritoneal lavage in blunt abdominal trauma. Adkinson C, et al. **Am J Emerg Med** 1989 Jul;7(4):352–6

Open versus closed peritoneal lavage with particular attention to time, accuracy, and cost. Howdieshell TR, et al. **Am J Emerg Med** 1989 Jul;7(4):367–71

Methods of diagnostic peritoneal lavage—better to be safe [editorial] Marx JA. **Am J Emerg Med** 1989 Jul;7(4):452–3

Problems of peritoneal access in intraperitoneal treatment and monitoring of ovarian cancer. Redman CW, et al. **Br J Obstet Gynaecol** 1989 Jan;96(1):97–101

Ultrarapid diagnostic peritoneal lavage. Cotter CP, et al. **J Trauma** 1989 May;29(5):615–6

Intraperitoneal povidone–iodine [letter] Goldenheim PD. **JAMA** 1989 Apr 7;261(13):1881–2

Peritoneal lavage in blunt abdominal trauma. Meo G, et al. **Trop Doct** 1989 Apr;19(2):74–5

[Chloramine T solution for intraoperative peritoneal lavage. A statistical analysis] Effenberger T. **Zentralbl Chir** 1988; 113(15):959–67 (Eng. Abstr.) **(Ger)**

[The role of peritoneal lavage in the surgical treatment of acute necrotizing pancreatitis] Sápy P, et al. **Zentralbl Chir** 1989;114(2):99–106 (Eng. Abstr.) **(Ger)**

[Programmed peritoneal lavage in suppurative complications of perforated ulcer of the stomach] Kuzin NM, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):121–3 **(Rus)**

[A "semi–open" method of treating diffuse suppurative peritonitis] Potanin VK. **Vestn Khir** 1988 Sep;141(9):106–7 **(Rus)**

[Scheduled lavage is an uncertain therapeutic method in intra–abdominal infection] Nyström O, et al. **Lakartidningen** 1988 Nov 30;85(48):4208–9 **(Swe)**

STANDARDS

Computed tomography and diagnostic peritoneal lavage in blunt abdominal trauma. Their combined role. Kearney PA Jr, et al. **Arch Surg** 1989 Mar;124(3):344–7

PERITONEAL NEOPLASMS

A case of malignant melanoma of the transverse mesocolon. Yoshida S, et al. **J Pediatr Surg** 1988 Nov;23(11):1036–7

[Diffuse malignant peritoneal mesothelioma (letter)] Pialoux G, et al. **Rev Med Interne** 1988 Nov–Dec;9(5):559 **(Fre)**

[Mesenteric fibromatosis] De Giovanni L, et al. **Minerva Chir** 1988 Oct 31;43(20):1757–9 (Eng. Abstr.) **(Ita)**

[Peritoneal splenosis. Report of a case and pathogenetic considerations] Molan M, et al. **Minerva Chir** 1989 Apr 30;44(8):1311–4 (Eng. Abstr.) **(Ita)**

ANALYSIS

Immunohistologic detection of estrogen and progesterone receptors in disseminated peritoneal leiomyomatosis. Düe W, et al. **Int J Gynecol Pathol** 1989;8(1):46–53

Improved radiolabeled monoclonal antibody uptake by lavage of intraperitoneal carcinomatosis in mice. Wahl RL, et al. **J Nucl Med** 1989 Jan;30(1):60–5

BLOOD

An alpha slow–moving high–density–lipoprotein subfraction in serum of a patient with radiation enteritis and peritoneal carcinosis. Peynet J, et al. **Clin Chem** 1989 Apr;35(4):674–8

[Nitrogen balance in tumor and host in the animal model] Brenner U, et al. **Langenbecks Arch Chir** 1989;374(2):111–7 (Eng. Abstr.) **(Ger)**

CHEMICALLY INDUCED

Postmenopausal endometriosis associated with hormone replacement therapy. A case report. Goodman HM, et al. **J Reprod Med** 1989 Mar;34(3):231–3

Intraperitoneal mesotheliomas induced in mice by a polycyclic aromatic hydrocarbon. Rice JM, et al. **J Toxicol Environ Health** 1989;27(1):153–60

Amosite mesothelioma in a cohort of asbestos workers. Ribak J, et al. **Scand J Work Environ Health** 1989 Apr; 15(2):106–10

[A case of thorotrastoma of the mesentery] Ponzio F, et al. **Minerva Chir** 1988 Jul 31;43(13–14):1195–6 (Eng. Abstr.) **(Ita)**

COMPLICATIONS

Fatal small intestinal infarction due to occlusion by mesenteric carcinoid tumor. Petrik PK. **Am J Forensic Med Pathol** 1989 Jun;10(2):146–8

Catamenial hemoptysis. Maguire PJ. **J Okla State Med Assoc** 1988 Dec;81(12):729–30

Peritonitis due to perforated mesenteric fibroma—an hormonal aetiology? Cole RP. **Postgrad Med J** 1988 Dec; 64(758):971–2

Acute bleeding from leiomyoblastoma of the greater omentum. A case report. Rye BA, et al. **Tumori** 1989 Jun 30;75(3):296–8 (10 ref.)

[Fibromyoma of the greater omentum. Our experience] Amatucci G, et al. **Minerva Chir** 1988 Apr 15;43(7):629–31 (Eng. Abstr.) **(Ita)**

[Hemoperitoneum caused by cavernous angioma of the omentum] Ritossa C, et al. **Minerva Chir** 1989 Mar 15; 44(5):907–8 (Eng. Abstr.) **(Ita)**

[CT features of peritonitis carcinomatosa] Ishii C, et al. **Rinsho Hoshasen** 1988 Dec;33(13):1671–5 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Double contrast barium enema combined with non–invasive imaging in peritoneal mesothelioma. Cozzi G, et al. **Acta Radiol** 1989 Jan–Feb;30(1):21–4

Peritoneal mesothelioma—a case report. Sawhney S, et al. **Australas Radiol** 1988 Nov;32(4):490–2

Diagnostic accuracy of sialic acid in the diagnosis of malignant ascites. Colli A, et al. **Cancer** 1989 Mar 1; 63(5):912–6

Iron pyrite and diagnostic confirmation. Kassirer JP, et al. **Hosp Pract [Off]** 1989 May 15;24(5):19, 22, 25

Mesenteric lipoma. Gupta DK, et al. **Indian Pediatr** 1988 Oct;25(10):1007–9

Utility of sonographic gallbladder wall patterns in differentiating malignant from cirrhotic ascites. Huang YS, et al. **JCU** 1989 Mar–Apr;17(3):187–92

Detection of splenosis: 99Tcm tin colloid scanning and computed transmission tomography compared. Logan H, et al. **Nucl Med Commun** 1988 Dec;9(12):993–7

Cystic teratoma of the mesentery. Prieto ML, et al. **Pediatr Radiol** 1989;19(6–7):439

Cystic mesothelioma of the peritoneum. O'Neil JD, et al. **Radiology** 1989 Feb;170(2):333–7

Intraperitoneal lipoblastoma. Denath FM. **Semin Roentgenol** 1988 Oct;23(4):241–2

[Mesenteric diseases: a report of 73 cases] Liao HL, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Feb;27(2):96–8, 135 (Eng. Abstr.) **(Chi)**

[Fibromyoma of the pancreas or mesentery? Apropos of a case] Verhaeghe P, et al. **Chirurgie** 1988;114(6):524–8 (11 ref.) (Eng. Abstr.) **(Fre)**

[Diagnostic imaging in a case of mesenteric liposarcoma] Francone A, et al. **Clin Ter** 1989 Feb 15;128(3):173–6 (Eng. Abstr.) **(Ita)**

[Benign cystic mesothelioma of the peritoneum] Betta PG, et al. **G Ital Oncol** 1989 Jan–Mar;9(1):39–42 (Eng. Abstr.) **(Ita)**

[Diagnosis and prognosis of malignant mesothelioma. A description of 8 clinical cases] Piffer S, et al. **Minerva Med** 1989 Apr;80(4):405–10 (Eng. Abstr.) **(Ita)**

[A case of mucocele of the appendix diagnosed by imagings before laparotomy] Negami AI, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun;41(6):757–60 **(Jpn)**

[Fibrosarcomatosis of the small intestine mesentery] Zvezdin VP, et al. **Klin Khir** 1989;(5):57 **(Rus)**

[Local tumor–like amyloidosis in a boy] Deliagin VM, et al. **Pediatriia** 1989;(2):88–9 **(Rus)**

[Exogastric leiomyosarcoma of the stomach] Egiazarian VT, et al. **Vestn Khir** 1988 Dec;141(12):34–6 **(Rus)**

[Abdominal non–Hodgkin's lymphoma diagnosed by laparoscopy] Martín Herrera L, et al. **Rev Esp Enferm Apar Dig** 1988 Jun;73(6):735–6 **(Spa)**

DIET THERAPY

[Dietary treatment of patients with lymphangiomyoma] Petersen I, et al. **Ugeskr Laeger** 1989 May 15;151(20):1248–9 (Eng. Abstr.) **(Dan)**

DRUG THERAPY

Activity of pirarubicin (4'–0–tetrahydropyranyladriamycin) in malignant mesothelioma. Sridhar KS, et al. **Cancer** 1989 Mar 15;63(6):1084–91

"Two–route chemotherapy" using cis–diamminedichloroplatinum(II) and its antidote, sodium thiosulfate, combined with angiotensin II is effective against

peritoneally disseminated cancer in rats. Kobayashi H, et al. **Cancer Chemother Pharmacol** 1989;24(3):141–7
Mechanism of immunotherapeutic activity of OK–432 in the treatment of peritoneal carcinomatosis. Fukui H, et al. **Cancer Immunol Immunother** 1989;29(1):1–6
Malignant mixed mesodermal tumour of the peritoneum with a complete response to cyclophosphamide. Ohno S, et al. **Eur J Surg Oncol** 1989 Jun;15(3):287–91
Peritoneal papillary carcinoma. Lele SB, et al. **Gynecol Oncol** 1988 Oct;31(2):315–20 (14 ref.)
A phase II study of VP–16 and cisplatin in patients with unresectable malignant mesothelioma. An NCI Canada Clinical Trials Group Study. Eisenhauer EA, et al. **Invest New Drugs** 1988 Dec;6(4):327–9
Selective intraperitoneal biochemical modulation of methotrexate by dipyridamole. Goel R, et al. **J Clin Oncol** 1989 Feb;7(2):262–9
Phase I clinical and pharmacokinetic study of thiotepa administered intraperitoneally in patients with advanced malignancies. Wadler S, et al. **J Clin Oncol** 1989 Jan; 7(1):132–9
Desmoid tumors: report of a case responsive to antiestrogen and review of the literature. Balducci L, et al. **J Miss State Med Assoc** 1988 Aug;29(8):227–9 (10 ref.)
Efficacy of two–route chemotherapy using intraperitoneal neocarzinostatin and its antidote, intravenous tiopronin, for peritoneally disseminated tumors in mice. Hasuda K, et al. **Jpn J Cancer Res** 1989 Mar;80(3):283–9
[A case of peritoneal malignant mesothelioma with disappearance of ascites result of intraperitoneal instillation of mitomycin C and oral administration of UFT] Hayashi T, et al. **Gan To Kagaku Ryoho** 1989 Jul;16(7):2449–52 (Eng. Abstr.) **(Jpn)**
[Intraoperative chemotherapy with intraperitoneal activated carbon particles adsorbing mitomycin C against peritoneal dissemination of gastric cancer] Iwamoto A, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2748–51 (Eng. Abstr.) **(Jpn)**
[Intraperitoneal chemotherapy in gastric cancer with peritoneal metastasis using totally implantable peritoneal access system] Tokushige M, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2743–7 (Eng. Abstr.) **(Jpn)**
[Autoradiographic and histochemical studies of the effect of verrucarin I on the cells of Ehrlich ascites tumor in different phases of the cell cycle] Wiatr Z. **Rocz Akad Med Bialymstoku** 1984–85;29–30:95–106 (Eng. Abstr.) **(Pol)**

EPIDEMIOLOGY

Endometriosis in multiparous women. Kirshon B, et al. **J Reprod Med** 1989 Mar;34(3):215–7
Epidemiology of endometriosis–associated infertility. Wheeler JM. **J Reprod Med** 1989 Jan;34(1):41–6
The incidence of malignant mesothelioma in Australia, 1947–1980. Musk AW, et al. **Med J Aust** 1989 Mar 6; 150(5):242–3, 246

ETIOLOGY

Gliomatosis peritonei associated with a ventriculoperitoneal shunt. Lovell MA, et al. **Am J Clin Pathol** 1989 Apr; 91(4):485–7
Post–irradiation angiosarcoma of the greater omentum. Westenberg AH, et al. **Eur J Surg Oncol** 1989 Apr; 15(2):175–8
Solitary gumma in a neonate. A case report. Heydenrych JJ, et al. **S Afr Med J** 1988 Nov 5;74(9):464–5
[Lipoma of the mesentery causing ileus] Kalchev E, et al. **Khirurgiia (Sofiia)** 1989;42(2):80–1 **(Bul)**
[Severity of desmoid tumors with retroperitoneal development in Gardner's syndrome. Apropos of 2 cases] Boyer A, et al. **Rev Med Interne** 1989 May–Jun;10(3):223–5 (Eng. Abstr.) **(Fre)**
[Comparative carcinogenic properties of basalt fiber and chrysotile–asbestos] Nikitina OV, et al. **Gig Tr Prof Zabol** 1989;(4):7–11 (Eng. Abstr.) **(Rus)**
[Gaucher's disease associated with peritoneal leiomyomatosis] Bykov SA, et al. **Sov Med** 1989;(5):115–6 **(Rus)**

IMMUNOLOGY

Verification of the histologic diagnosis of malignant mesothelioma in relation to the binding of an antimesothelial cell antibody. Donna A, et al. **Cancer** 1989 Apr 1;63(7):1331–6

METABOLISM

Biodistribution of indium–111–labeled OC 125 monoclonal antibody after intraperitoneal injection in nude mice intraperitoneally grafted with ovarian carcinoma. Thédrez P, et al. **Cancer Res** 1989 Jun 1;49(11):3081–6
[Immunohistochemical and histochemical study of malignant mesothelioma] Yu G. **Chung–hua Ping Li Hsueh Tsa Chih** 1988 Dec;17(4):280–2 (Eng. Abstr.) **(Chi)**

PATHOLOGY

Malignant lymphoma of the gastrointestinal tract and mesentery. A clinico–pathologic study of the significance of histologic classification. NHL Study Group of the Comprehensive Cancer Center West. van Krieken JH, et al. **Am J Pathol** 1989 Aug;135(2):281–9
Peritoneal malignant mesothelioma versus serous papillary adenocarcinoma. A histochemical and immunohistochemical comparison. Bollinger DJ, et al. **Am J Surg Pathol** 1989 Aug;13(8):659–70
Serous surface papillary carcinoma. A clinicopathologic study of 10 cases and comparison with stage III–IV ovarian serous carcinoma. Mills SE, et al. **Am J Surg Pathol** 1988 Nov;12(11):827–34
Lymphangiolipoma of the mesentery. Radivoyevitch MA, et al. **Am Surg** 1989 Jul;55(7):435–7 (16 ref.)
Giant lipoma of the mesentery. Locker A. **Br J Clin Pract** 1987 Oct;41(10):977–8
Peritoneal implants of ovarian serous borderline tumors. Histologic features and prognosis. Bell DA, et al. **Cancer** 1988 Nov 15;62(10):2212–22
Peritoneal carcinomatosis in nongynecologic malignancy. A prospective study of prognostic factors. Chu DZ, et al. **Cancer** 1989 Jan 15;63(2):364–7
Extraovarian peritoneal serous papillary carcinoma. A clinicopathologic study of 31 cases. Dalrymple JC, et al. **Cancer** 1989 Jul 1;64(1):110–5
Radiological detection and diagnosis of pouch of Douglas lesions. Trenkner SW, et al. **CRC Crit Rev Diagn Imaging** 1988;28(4):367–81 (17 ref.)
Mesenteric fibromatosis: cytologic, histologic, and ultrastructural findings in a case. Lin BP, et al. **Diagn Cytopathol** 1989;5(1):69–74
Aspiration biopsy cytology of mesothelioma. Tao LC. **Diagn Cytopathol** 1989;5(1):14–21 (15 ref.)
Laparoscopic appearances of peritoneal endometriosis. Martin DC, et al. **Fertil Steril** 1989 Jan;51(1):63–7
A rabbit model of endometriosis. Dunselman GA, et al. **Gynecol Obstet Invest** 1989;27(1):29–33
Primary papillary serous neoplasia of the peritoneum [letter] Fechner RE, et al. **Hum Pathol** 1989 Sep;20(9):924
Familial mesothelioma: a report of two families. Hammar SP, et al. **Hum Pathol** 1989 Feb;20(2):107–12
Primary papillary serous neoplasia of the peritoneum: a clinicopathologic and ultrastructural study of eight cases. Raju U, et al. **Hum Pathol** 1989 May;20(5):426–36
Gliomatosis peritonei: a rare complication of malignant ovarian teratoma. Vijayaraghavan M, et al. **Indian J Pathol Microbiol** 1987 Oct;30(4):383–6
Mesenteric fibromatosis complicating familial adenomatous polyposis: predisposing factors and results of treatment. Lotfi AM, et al. **Int J Color Dis** 1989;4(1):30–6
Multiple focal extraovarian serous carcinoma. August CZ, et al. **Int J Gynecol Pathol** 1985;4(1):11–23
Serous papillary carcinomas arising from the peritoneum and ovaries. A clinicopathologic and immunohistochemical comparison. Wick MR, et al. **Int J Gynecol Pathol** 1989; 8(3):179–88
Peritoneal pockets and endometriosis. Confirmation of an important relationship, with further observations. Redwine DB. **J Reprod Med** 1989 Apr;34(4):270–2
Extragenital malignant mixed Müllerian tumor: a case report. Nishida T, et al. **Kurume Med J** 1988;35(4):201–5
Leiomyoblastoma of the lesser omentum sac. A case report. Laky D, et al. **Morphol Embryol (Bucur)** 1989 Jan–Mar; 35(1):45–8
Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 5–1089. A 27–year–old Greek woman with portal–vein thrombosis and an epigastric mass. **N Engl J Med** 1989 Feb 2;320(5):301–10
Benign and borderline serous lesions of the peritoneum in women. Bell DA, et al. **Pathol Annu** 1989;24 Pt 2:1–21 (45 ref.)
Serous surface carcinoma of the ovary and peritoneum. A flow cytometric study. Rutledge ML, et al. **Pathol Annu** 1989;24 Pt 2:227–35
Benign cystic mesothelioma of the peritoneum: immunohistochemical and ultrastructural features in a child. Raafat F, et al. **Pediatr Pathol** 1988;8(3):321–9
Primary mucinous cystadenocarcinoma of the appendix with pseudomyxoma peritonei manifested as a splenic mass. Holder PD, et al. **South Med J** 1989 Aug;82(8):1029–31 (14 ref.)
Retroperitoneal teratoma with fetuses. Nadimpalli VR, et al. **Teratology** 1989 Mar;39(3):233–6
Benign lipoblastoma: first case report of a mesenteric origin. Zanetti G. **Tumori** 1988 Aug 31;74(4):495–8
Intra–abdominal metastatic malignant teratoma. Metastatic malignant teratoma (carcinosarcoma), primary in the retroperitoneum. Dardick I, et al. **Ultrastruct Pathol** 1989 Mar–Jun;13(2–3):291–300
Peripheral neuroectodermal tumor of the chest wall in a 19–year–old female. Ordoñez NG, et al. **Ultrastruct Pathol** 1989 Mar–Jun;13(2–3):301–6
[Morphology, diagnosis and differential diagnosis of mesothelioma] Wu RL, et al. **Chung Hua Chung Liu Tsa Chih** 1988 Mar;10(2):123–5 (Eng. Abstr.) **(Chi)**
[Diffuse malignant peritoneal mesothelioma: apropos of a new case, review of the literature] Gilly F, et al. **J Chir (Paris)** 1989 Jun–Jul;126(6–7):388–91 (13 ref.) (Eng. Abstr.) **(Fre)**
[Disseminated peritoneal leiomyomatosis. A rare disease picture] Dallenbach C, et al. **Geburtshilfe Frauenheilkd** 1989 Feb;49(2):201–4 (Eng. Abstr.) **(Ger)**
[Mesenteric fibromatosis in childhood] Roscher R, et al. **Monatsschr Kinderheilkd** 1988 Jul;136(7):393–6 (Eng. Abstr.) **(Ger)**
[Mesenteric fibrosis. Apropos of 1 of our cases] Bayeli P, et al. **Minerva Dietol Gastroenterol** 1988 Oct–Dec; 34(4):273–6 (Eng. Abstr.) **(Ita)**
[A case of malignant fibrous histiocytoma with primary site in greater omentum] Shimazaki M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Feb;86(2):275–9 (12 ref.) **(Jpn)**
[Intensive intraperitoneal growth of human melanoma in immunocompetent mice following whole–body irradiation] Lokshin A, et al. **Vestn Akad Med Nauk SSSR** 1988; (12):69–73 (Eng. Abstr.) **(Rus)**
[Ascites and pleural effusion in a 65–year–old woman with Hodgkin's disease (clinical conference)] **Medicina (B Aires)** 1985;45(1):57–64 **(Spa)**

PHYSIOPATHOLOGY

Nine–year survival in a case of untreated peritoneal mesothelioma. Norman PE, et al. **Med J Aust** 1989 Jan 2;150(1):43–4

PREVENTION & CONTROL

Hyperthermic peritoneal perfusion combined with anticancer chemotherapy as prophylactic treatment of peritoneal recurrence of gastric cancer. Kaibara N, et al. **Hepatogastroenterology** 1989 Apr;36(2):75–8
Optimal coverage of peritoneal surface in whole abdominal radiation for ovarian neoplasms. LaRouere J, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):607–13
[Intraoperative chemotherapy against peritoneal dissemination of gastric cancer with intraperitoneal activated carbon particles adsorbing mitomycin C] Hagiwara A, et al. **Gan To Kagaku Ryoho** 1989 Feb; 16(2):187–92 (Eng. Abstr.) **(Jpn)**

RADIOGRAPHY

Omental cakes in American Burkitt lymphoma. Computed tomography demonstration. Goodman P, et al. **Clin Imaging** 1989 Jun;13(2):117–8
[Hysterosalpingographic aspects of ovarian and peritoneal endometriosis. Case–control study] Querleu D, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(3):303–10 (Eng. Abstr.) **(Fre)**

RADIOTHERAPY

Procedure for intraperitoneal P–32 administration. Sharma SC. **Med Dosim** 1988;13(2):83–6

SECONDARY

Peritoneal carcinomatosis of unknown primary site in women. A distinctive subset of adenocarcinoma. Strnad CM, et al. **Ann Intern Med** 1989 Aug 1;111(3):213–7
'Benign' clear–cell tumor (sugar tumor) of the lung with hepatic metastases ten years after resection of pulmonary primary tumor [letter] Sale GE, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1177–8
A new reproducible model of hepatic and peritoneal metastases from colonic carcinoma. Archer SG, et al. **Eur J Cancer Clin Oncol** 1988 Oct;24(10):1623–32
Multifocal extraovarian serous carcinoma. A histochemical and immunohistochemical study. Resta L, et al. **Eur J Gynaecol Oncol** 1988;9(6):474–8
A new intraperitoneal metastasis from thymoma. Lundblad R, et al. **Eur J Surg Oncol** 1988 Dec;14(6):697–702
Results of whole abdominopelvic irradiation with nodal boost for patients with endometrial cancer at high risk of failure in the peritoneal cavity. A prospective clinical trial at the Mayo Clinic. Martinez A, et al. **Hematol Oncol Clin North Am** 1988 Sep;2(3):431–46
Hyperthermic peritoneal perfusion combined with anticancer chemotherapy as prophylactic treatment of peritoneal recurrence of gastric cancer. Kaibara N, et al. **Hepatogastroenterology** 1989 Apr;36(2):75–8
Abdominal radiotherapy for cancer of the uterine cervix and endometrium. Potish RA. **Int J Radiat Oncol Biol Phys** 1989 Jun;16(6):1453–8
Assessment of peritoneal spread of tumor by scintigraphy. A case report. Iorio F, et al. **Ital J Surg Sci** 1989;19(2):191–4
Ruptured hepatocellular carcinoma evokes risk of implanted metastases. Sonoda T, et al. **J Surg Oncol** 1989 Jul; 41(3):183–6
Potentiation of invasive capacity of rat ascites hepatoma cells by transforming growth factor–beta. Mukai M, et al. **Jpn J Cancer Res** 1989 Feb;80(2):107–10
Peritoneal implants from ovarian tumors: CT findings. Buy JN, et al. **Radiology** 1988 Dec;169(3):691–4
Biliary carcinoma: CT evaluation of extrahepatic spread. Engels JT, et al. **Radiology** 1989 Jul;172(1):35–40
Paratesticular metastases from congenital retroperitoneal tumor. Nistal M, et al. **Urology** 1989 Feb;33(2):131–4
[Relationship between free cancer cells in the abdominal cavity, serosal type and pathologic characteristics of gastric cancer] Liu QH. **Chung Hua Chung Liu Tsa Chih** 1988 Nov; 10(6):430–3 (Eng. Abstr.) **(Chi)**
[The status of intraperitoneal chemotherapy] Ehninger G, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:196–8 (39 ref.) **(Ger)**
[Subcutaneous metastasis of uterine leiomyosarcoma] Zarcone N, et al. **Minerva Ginecol** 1988 Aug;40(8):489–91

(6 ref.) (Eng. Abstr.) (Ita)
[Extended treatment for gastric cancer patients with peritoneal seeding] Fujimoto S, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1524–7 (Eng. Abstr.) (Jpn)
[Carcinoma peritoneal dissemination and milky spots of the greater omentum: preliminary report] Shimotsuma M, et al. **Nippon Geka Gakkai Zasshi** 1988 Dec;89(12):2032 (Jpn)
[Cytologic diagnosis of metastases of stomach cancer during laparoscopy] Petrova AS, et al. **Lab Delo** 1989;(6):9–11 (Eng. Abstr.) (Rus)

SURGERY

Leiomyomatosis peritonealis disseminata. Poulsen TD. **Ann Chir Gynaecol** 1988;77(1):41–4 (22 ref.)
Peritoneal carcinomatosis: the role of debulking procedures. Knight PR. **Can J Surg** 1989 May;32(3):147–8
Surgical treatment of peritoneal carcinomatosis: 1988 Du Pont lecture. Sugarbaker PH. **Can J Surg** 1989 May; 32(3):164–70
Safe laser endoscopic excision or vaporization of peritoneal endometriosis. Nezhat C, et al. **Fertil Steril** 1989 Jul; 52(1):149–51
Peritoneal trophoblastic tissue implants after laparoscopic treatment of tubal ectopic pregnancy. Reich H, et al. **Fertil Steril** 1989 Aug;52(2):337–9
Laparotomy in infertility patients with endometriosis. Use of the CO2 laser. Kelly R, et al. **J Reprod Med** 1989 Jan; 34(1):25–8
Abdominal leiomyosarcoma: aggressive management. Bowers BA, et al. **South Med J** 1989 Mar;82(3):313–7
Intraoperative chemotherapy with carbon particles adsorbing mitomycin C for gastric cancer with peritoneal dissemination in rabbits. Hagiwara A, et al. **Surgery** 1988 Nov;104(5):874–81
[Urachus cancer—a rare malignant form of urachus abnormality] Laqua D, et al. **Chirurg** 1989 May; 60(5):368–70 (Ger)
[Inflammatory pseudotumors of the colon and mesocolon] Gusev VI, et al. **Khirurgiia (Mosk)** 1989 May;(5):57–9 (Eng. Abstr.) (Rus)
[Tumors of the small intestine] Zubarev PN, et al. **Vestn Khir** 1988 Aug;141(8):45–9 (Eng. Abstr.) (Rus)

THERAPY

Involvement of effector cells in the treatment with endotoxins of peritoneal carcinomatosis induced by colon tumour cells. Lagadec P, et al. **Anticancer Res** 1989 Mar–Apr;9(2):421–5
Treatment of peritoneal mesothelioma [letter] Spratt JS. **Arch Surg** 1989 Feb;124(2):256
Effect of yttrium-90-labeled anti-carcinoembryonic antigen monoclonal antibody on the morphology and phenotype of human tumors grown as peritoneal carcinomatosis in athymic mice. Esteban JM, et al. **Cancer** 1989 Apr 1; 63(7):1343–52
Clinical trial with surgery and intraperitoneal hyperthermic perfusion for peritoneal recurrence of gastrointestinal cancer. Fujimoto S, et al. **Cancer** 1989 Jul 1;64(1):154–60
Local regional promotion of tumor growth after abdominal surgery is dominant over immunotherapy with interleukin-2 and lymphokine activated killer cells. Eggermont AM, et al. **Cancer Detect Prev** 1988; 12(1–6):421–9
Regression induced by lentinan, of peritoneal carcinomatoses in a model of colon cancer in rat. Jeannin JF, et al. **Int J Immunopharmacol** 1988;10(7):855–61
Therapeutic considerations in the use of intraperitoneal radiolabelled monoclonal antibodies in ovarian carcinoma. Crowther ME, et al. **Nucl Med Commun** 1989 Mar; 10(3):149–59
[Combined effect of cis-DDP (II), OK-432 and systemic hyperthermia in ascites tumor in mice] Komatsu K, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Mar 20;24(3):626–37 (Eng. Abstr.) (Jpn)
[Antitumor activity of neutrophils induced by a nonspecific immunopotentiator OK-432. I. Experimental study using a rat model of malignant ascites] Umemoto T, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jun 20;23(6):1229–35 (Eng. Abstr.) (Jpn)

ULTRASTRUCTURE

Malignant peritoneal mesothelioma in childhood. Armstrong GR, et al. **Arch Pathol Lab Med** 1988 Nov;112(11):1159–62
Multicystic peritoneal mesothelioma: a case report. Alvarez-Fernandez E, et al. **Histopathology** 1989 Feb; 14(2):199–208
Extrauterine müllerian adenosarcoma of the peritoneal mesothelium: a clinicopathologic and electron microscopic study. Kerner H, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 2):510–3

VETERINARY

Primary ovarian adenocarcinoma associated with teratomatous elements in a mare. Van Camp SD, et al. **J Am Vet Med Assoc** 1989 Jun 15;194(12):1728–30
Metastatic malignant mesothelioma in a dog. Smith DA, et al. **J Comp Pathol** 1989 Jan;100(1):97–101
An ultrastructural study of malignant mesotheliomas in two cows. Hashimoto N, et al. **Nippon Juigaku Zasshi** 1989 Apr; 51(2):327–36

PERITONEOSCOPY

Hemodynamic changes during laparoscopy with positive end-expiratory pressure ventilation. Ekman LG, et al. **Acta Anaesthesiol Scand** 1988 Aug;32(6):447–53
The effect of general anaesthesia on the haemodynamic events during laparoscopy with CO2-insufflation. Johannsen G, et al. **Acta Anaesthesiol Scand** 1989 Feb; 33(2):132–6
Laparoscopy for screening and early diagnosis of ovarian cancer. Tolino A, et al. **Acta Eur Fertil** 1988 Sep–Oct; 19(5):277–8
Removal of extrauterine IUDs by the vaginal route with laparoscopic assistance. Sheth SS. **Adv Contracept** 1988 Sep;4(3):213–6
Diagnostic laparoscopy: a prospective review of 100 cases. Herrera JL, et al. **Am J Gastroenterol** 1989 Sep; 84(9):1051–4
Laparoscopic laser treatment of endometriosis with the Nd:YAG sapphire probe. Corson SL, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):718–23
Ectopic tubal pregnancy treated by operative laparoscopy. Henderson SR. **Am J Obstet Gynecol** 1989 Jun; 160(6):1462–6; discussion 1466–9
Diagnostic laparoscopy. Nagy AG, et al. **Am J Surg** 1989 May;157(5):490–3
Total intravenous anaesthesia for laparoscopy. Bailie R, et al. **Anaesthesia** 1989 Jan;44(1):60–3
The use of perioperative opiates for laparoscopy [letter] Chaffe A. **Anaesthesia** 1989 Feb;44(2):165–6
Postoperative pain: a comparison of laparoscopic sterilisation and diagnostic laparoscopy [letter] Davis A, et al. **Anaesthesia** 1988 Sep;43(9):796–7
Rectus sheath block for diagnostic laparoscopy. Smith BE, et al. **Anaesthesia** 1988 Nov;43(11):947–8
Effect of increased intra-abdominal pressure during laparoscopy on the lower esophageal sphincter. Jones MJ, et al. **Anesth Analg** 1989 Jan;68(1):63–5
Muscle pain occurs after outpatient laparoscopy despite the substitution of vecuronium for succinylcholine. Zahl K, et al. **Anesthesiology** 1989 Mar;70(3):408–11
Value of laparoscopy in the diagnosis of hepatic and peritoneal diseases. Sayeed A, et al. **Bangladesh Med Res Counc Bull** 1988 Dec;14(2):90–4
Comparison of atracurium and vecuronium during anaesthesia for laparoscopy. Bailey DM, et al. **Br J Anaesth** 1988 Nov;61(5):557–9
Effects of nadolol on arrhythmias during laparoscopy performed under general anaesthesia. Burns JM, et al. **Br J Anaesth** 1988 Sep;61(3):345–6
Laparoscopy in endometriosis [letter] **Br J Hosp Med** 1988 Aug;40(2):147–8
The place of laparoscopy in women with ascites. Sheth SS. **Br J Obstet Gynaecol** 1989 Jan;96(1):105–6
Laparoscopy and the management of the impalpable testis. Guiney EJ, et al. **Br J Urol** 1989 Mar;63(3):313–6
Laparoscopic findings in serosal eosinophilic gastroenteritis. Report of two cases. Solis-Herruzo JA, et al. **Endoscopy** 1988 Jul;20(4):152–3
Pancreatic biopsy under visual control in conjunction with laparoscopy for diagnosis of pancreatic cancer. Watanabe M, et al. **Endoscopy** 1989 Mar;21(2):105–7
Second look laparoscopy; evaluation of two different antibiotic regimens after treatment of acute salpingitis. Brihmer C, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Mar;30(3):263–74
The significance of preoperative hysterosalpingography and laparoscopy for predicting the pregnancy outcome in patients with a bilateral hydrosalpinx. te Velde ER, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Apr;31(1):33–45
Endocrine effects of laparoscopic ovarian electrocautery in patients with polycystic ovarian disease, resistant to clomiphene citrate. van der Weiden RM, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Aug;32(2):157–62
Gamete intrafallopian tube transfer (GIFT): making laparoscopy more than "diagnostic". Barad DH, et al. **Fertil Steril** 1988 Dec;50(6):928–30
Peritoneal trophoblastic tissue implants after laparoscopic treatment of tubal ectopic pregnancy. Reich H, et al. **Fertil Steril** 1989 Aug;52(2):337–9
Second-look operative laparoscopy 1 year following reproductive surgery. Tulandi T, et al. **Fertil Steril** 1989 Sep;52(3):421–4
Tuberculous peritonitis: laparoscopic diagnosis of an uncommon disease in the United States. Reddy KR, et al. **Gastrointest Endosc** 1988 Sep–Oct;34(5):422–6
Value of peritoneoscopy for nonfunctioning continuous ambulatory peritoneal dialysis catheters. Smith DW, et al. **Gastrointest Endosc** 1989 Mar–Apr;35(2):90–2
Tubal desterilization through exclusive laparoscopy. Sedbon E, et al. **Hum Reprod** 1989 Feb;4(2):158–9
Second-look laparoscopy in the treatment of endometriosis. Fedele L, et al. **Int J Fertil** 1988 Jul–Aug;33(4):237–40
Dissemination of endometrial cells at laparoscopy and chromotubation—a preliminary report. Kulenthran A, et al. **Int J Fertil** 1989 Jul–Aug;34(4):256–8
Results of operative pelviscopy in 202 cases of ectopic pregnancy. Mecke H, et al. **Int J Fertil** 1989 Mar–Apr; 34(2):93–4, 97–100
Management of ectopic pregnancy: a shift from laparotomy to pelviscopy. Mettler L, et al. **Int J Fertil** 1988 Nov–Dec; 33(6):389–92
Laparoscopic surgery for tubal pregnancies utilizing laser. Huber J, et al. **Int J Gynaecol Obstet** 1989 Jun;29(2):153–7
Hysterosalpingography versus laparoscopy in tubal infertility: comparison based on findings at laparatomy. Okonofua FE, et al. **Int J Gynaecol Obstet** 1989 Feb;28(2):143–7
Ectopic pregnancy without laparotomy: defining the incidence of manageable patients. Sauer MV, et al. **Int J Gynaecol Obstet** 1988 Oct;27(2):247–8
Diagnostic laparoscopy in apparent uterine agenesis. Joshi NP, et al. **J Adolesc Health Care** 1988 Sep;9(5):403–6
Pelvic examination versus fiberoptic laparoscopy. A fictional study of patient preference in 1,534 women. Sturman MF. **J Clin Gastroenterol** 1988 Dec;10(6):612–3
Laparoscopy in the diagnosis of peritoneal tuberculosis [letter] Fitzgerald JM, et al. **J Infect Dis** 1989 May; 159(5):1007
Retrieval of loose peritoneal shunts by laparoscopy. Technical note. Davis FM, et al. **J Neurosurg** 1989 Feb; 70(2):282
Laparoscopically applied fibrin glue in experimental liver trauma. Ishitani MB, et al. **J Pediatr Surg** 1989 Sep; 24(9):867–71
Proceedings of the 17th annual meeting of the American Association of Gynecologic Laparoscopists. Dallas, Texas, November 1988. **J Reprod Med** 1989 Jul;34(7):435–74
Proceedings of the 16th annual meeting of the American Association of Gynecologic Laparoscopists. San Francisco, California, November 1987. **J Reprod Med** 1988 Nov; 33(11):861–920
Laparoscopic removal of intrauterine devices with retracted threads. Kristoffersen SE, et al. **J Reprod Med** 1989 May; 34(5):339–40
Laparoscopic and vaginal colpotomy for the excision of infiltrating cul-de-sac endometriosis. Martin DC. **J Reprod Med** 1988 Oct;33(10):806–8
Endoscopic infertility surgery. Nezhat C, et al. **J Reprod Med** 1989 Feb;34(2):127–34 (56 ref.)
Laparoscopic management of ovarian pregnancy. A case report. Van Coevering RJ 2d, et al. **J Reprod Med** 1988 Sep;33(9):774–6
Laparoscopy: its selected use in patients with unilateral nonpalpable testis after human chorionic gonadotropin stimulation. Naslund MJ, et al. **J Urol** 1989 Jul; 142(1):108–10
The role of laparoscopy in management of nonpalpable testes. Bloom DA, et al. **J Urol (Paris)** 1988;94(9–10):465–70 (21 ref.)
Changes of transcutaneous CO2 and arterial CO2 tension during laparoscopy. Cheng KS, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun;26(2):187–90
A second puncture probe for laparoscopic delivery of the Nd:Yag laser. Brumsted JR, et al. **Obstet Gynecol** 1989 Apr;73(4):672–4
Excision of pelvic endometriosis with the carbon dioxide laser laparoscope. Davis GD, et al. **Obstet Gynecol** 1988 Nov;72(5):816–9
Laparoscopic removal of dermoid cysts [letter] Hakim-Elahi E. **Obstet Gynecol** 1989 Jul;74(1):140
Laparoscopic removal of dermoid cysts. Nezhat C, et al. **Obstet Gynecol** 1989 Feb;73(2):278–81
A laparoscopic approach can be applied to most cases of ectopic pregnancy. Silva PD. **Obstet Gynecol** 1988 Dec; 72(6):944–7
Pelvic trophoblastic implants after laparoscopic removal of a tubal pregnancy. Thatcher SS, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):514–5
Management of unruptured ectopic gestation by linear salpingostomy: a prospective, randomized clinical trial of laparoscopy versus laparotomy. Vermesh M, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):400–4
Management of unruptured ectopic gestation by linear salpingostomy: a prospective, randomized clinical trial of laparoscopy versus laparotomy [letter] Watson WJ. **Obstet Gynecol** 1989 Aug;74(2):282–3
Laparoscopic treatment of endometriosis. Keye WR Jr. **Obstet Gynecol Clin North Am** 1989 Mar;16(1):157–66 (35 ref.)
Diagnostic and therapeutic laparoscopy. An entity often overlooked by the surgeon. Fermelia D, et al. **Surg Endosc** 1987;1(2):73–7
Peritoneoscopy for the diagnosis of acute appendicitis in females of reproductive age. Ragland J, et al. **Surg Endosc** 1988;2(1):36–8
Laparoscopy and Fowler-Stephens orchiopexy in the management of the impalpable testis. Elder JS. **Urol Clin North Am** 1989 May;16(2):399–411 (42 ref.)
[Laparoscopic assessment of the operability of pancreatic cancer] Ivanov S, et al. **Khirurgiia (Sofiia)** 1989;42(1):12–4 (Eng. Abstr.) (Bul)
[Contribution of ultrasonography and laparoscopy in the diagnosis of interstitial pregnancy] Holub Z, et al. **Cesk Gynekol** 1988 Aug;53(7):508–10 (Cze)
[Cholecystectomy by coelioscopy] Dubois F, et al. **Presse Med** 1989 May 13;18(19):980–2 (Eng. Abstr.) (Fre)
[Decrease of HCG level after conservative laparoscopic treatment of extra-uterine pregnancy] Pouly JL, et al. **Reprod Nutr Dev** 1988;28(6B):1741–6 (Eng. Abstr.) (Fre)
[The place of laparoscopy in the diagnosis of cancer of the

gallbladder] Hamdani A, et al. **Tunis Med** 1988 Feb; 66(2):115–9 (Eng. Abstr.) (Fre)
[Laparoscopic findings in suspected adnexitis] Decker K, et al. **Geburtshilfe Frauenheilkd** 1988 Nov;48(11):800–3 (Eng. Abstr.) (Ger)
[Indications and results of diagnostic laparoscopy in the assessment of lower abdominal pain] Decker K. **Geburtshilfe Frauenheilkd** 1988 Dec;48(12):884–6 (Eng. Abstr.) (Ger)
[Organ-saving therapy of small ovarian cystomas and dermoids by surgical laparoscopy--a trial 1985–1987] Dressler F, et al. **Geburtshilfe Frauenheilkd** 1989 Apr; 49(4):390–3 (Eng. Abstr.) (Ger)
[Changes in the diagnosis and therapy of extra-uterine pregnancy] Lübke F, et al. **Geburtshilfe Frauenheilkd** 1989 Feb;49(2):172–8 (Eng. Abstr.) (Ger)
[Pelviscopic treatment of abscess-forming inflammations of the pelvis] Mecke H, et al. **Geburtshilfe Frauenheilkd** 1988 Jul;48(7):479–82 (Eng. Abstr.) (Ger)
[Laparoscopic therapy of cystic ovarian tumors] Mursch-Edlmayr G, et al. **Gynakol Rundsch** 1988;28 Suppl 2:209–11 (Ger)
[Laparoscopy--relevant indications] Henning H. **Verh Dtsch Ges Inn Med** 1988;94:626–8 (Ger)
[Comparison of 2 simple surgical methods: posterior colpoceliotomy versus laparoscopy--competition or synergism?] Lange R, et al. **Zentralbl Gynakol** 1988; 110(18):1145–52 (Eng. Abstr.) (Ger)
[Changes in hemodynamic values in various phases of pelviscopy] Siekmann U, et al. **Zentralbl Gynakol** 1989; 111(2):99–109 (Eng. Abstr.) (Ger)
[The role of laparoscopy in the study of hepatocarcinomas] Miscusi G, et al. **Ann Ital Chir** 1987;59(1–6):259–69 (Eng. Abstr.) (Ita)
[Role of gynecologic laparoscopy in the pelvic pain syndrome] Grio R, et al. **Minerva Ginecol** 1988 Sep; 40(9):531–4 (Eng. Abstr.) (Ita)
[Laparoscopy and ovarian cancer] Tolino A, et al. **Minerva Ginecol** 1988 Jun;40(6):341–6 (Eng. Abstr.) (Ita)
[Laparoscopy in the staging of lymphoma. Personal experience] Reguzzoni G, et al. **Recenti Prog Med** 1988 May;79(5):206–9 (Eng. Abstr.) (Ita)
[The importance of laparoscopy in the diagnosis of chronic salpingo-oophoritis] Antonova LV, et al. **Akush Ginekol (Mosk)** 1988 May;(5):37–40 (Eng. Abstr.) (Rus)
[Burso-omentoscopy] Kozlov VA, et al. **Khirurgiia (Mosk)** 1989 Feb;(2):109–10 (Rus)
[Laparoscopic diagnosis of neoplastic diseases in ambulatory patients] Mazurov ST, et al. **Khirurgiia (Mosk)** 1989 May; (5):69–71 (Eng. Abstr.) (Rus)
[Diagnostic possibilities of laparoscopy in the assessment of the stage in stomach cancer] Popova TN, et al. **Khirurgiia (Mosk)** 1989 May;(5):33–4 (Eng. Abstr.) (Rus)
[Laparoscopic cholecystostomy in acute cholecystitis in patients with increased surgical risk] Postolov PM, et al. **Khirurgiia (Mosk)** 1989 Jan;(1):24–9 (Rus)
[Laparoscopic drainage of the gallbladder in acute cholecystitis] Skliarevskii VV, et al. **Khirurgiia (Mosk)** 1989 Jan;(1):62–5 (Eng. Abstr.) (Rus)
[Laparoscopic diagnosis of a strangulated hernia of the obturator foramen] Datkhaev RIu. **Klin Khir** 1989;(2):62 (Rus)
[Cytologic diagnosis of metastases of stomach cancer during laparoscopy] Petrova AS, et al. **Lab Delo** 1989;(6):9–11 (Eng. Abstr.) (Rus)
[Value of laparoscopy in the diagnosis and treatment of appendicular infiltrates] Buianov VM, et al. **Sov Med** 1989; (4):98–100 (Rus)
[The role of laparoscopy in the diagnosis and treatment of gynecologic patients] Marinkin IO, et al. **Vopr Onkol** 1989; 35(4):480–1 (Rus)
[Diagnostic validity of hysterosalpingography and laparoscopy in infertile women] Gabrić Z, et al. **Jugosl Ginekol Perinatol** 1988 Sep–Dec;28(5–6):131–4 (Eng. Abstr.) (Scr)
[Pregnancy after hysterosalpingography and laparoscopy] Gabrić Z, et al. **Jugosl Ginekol Perinatol** 1989 Jan–Apr; 29(1–2):44–7 (Eng. Abstr.) (Scr)
[Laparoscopy in ascites (letter)] Esteban Mur R. **Med Clin (Barc)** 1988 Oct 8;91(11):437 (Spa)
[Abdominal non-Hodgkin's lymphoma diagnosed by laparoscopy] Martín Herrera L, et al. **Rev Esp Enferm Apar Dig** 1988 Jun;73(6):735–6 (Spa)
[Peritoneoscopy in the diagnosis of diseases of the liver, bile ducts and peritoneum] Ragasol A. **Rev Invest Clin** 1967 Jul–Sep;19(3):245–54 (Eng. Abstr.) (Spa)

ADVERSE EFFECTS

Non-fatal carbon dioxide embolism during laparoscopy. de Plater RM, et al. **Anaesth Intensive Care** 1989 Aug; 17(3):359–61
Laparoscopy and vagal arrest [letter] Doyle DJ, et al. **Anaesthesia** 1989 May;44(5):448
Postoperative pain after laparoscopic sterilisation [letter] McKenzie R. **Anaesthesia** 1989 May;44(5):450
Peritonitis following diagnostic laparoscopy due to injury to a vesicouracha1 diverticulum. Case report. Yong EL, et al. **Br J Obstet Gynaecol** 1989 Mar;96(3):365–8
Nitrous oxide does not increase nausea and vomiting following gynaecological laparoscopy. Hovorka J, et al. **Can J Anaesth** 1989 Mar;36(2):145–8
Prevention of postsurgical adhesions by INTERCEED(TC7), an absorbable adhesion barrier: a prospective randomized multicenter clinical study. INTERCEED(TC7) Adhesion Barrier Study Group. **Fertil Steril** 1989 Jun;51(6):933–8
Inadvertent instrumental perforation of the colon during laparoscopy: nonsurgical repair. Birns MT. **Gastrointest Endosc** 1989 Jan–Feb;35(1):54–6
A comparative study of postoperative adhesions following laser surgery by laparoscopy versus laparotomy in the rabbit model. Luciano AA, et al. **Obstet Gynecol** 1989 Aug; 74(2):220–4
[Extrauterine pregnancy after sterilization via a laparoscope] Kjer JJ, et al. **Ugeskr Laeger** 1989 Mar 20;151(12):765–6 (Eng. Abstr.) (Dan)
[Medicolegal risks of celioscopy. Analysis of 32 cases of complications] Soutoul JH, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(4):439–51 (Eng. Abstr.) (Fre)
[The behavior of central venous pressure and acid-base balance in gynecologic laparoscopy] Domke N, et al. **Zentralbl Gynakol** 1988;110(22):1437–42 (Eng. Abstr.) (Ger)
[Prevention of hemodynamic disorders during diagnostic and surgical laparoscopy in women suffering from sterility] Kurapov EP, et al. **Akush Ginekol (Mosk)** 1988 May; (5):56–7 (Rus)

INSTRUMENTATION

Common problems in laser laparoscopy. Labelle J, et al. **Biomed Instrum Technol** 1989 Jan–Feb;23(1):34–7
Ovarian stimulation with pure follicle-stimulating hormone/human menopausal gonadotropin and improved laparoscopic aspiration needles influence the success of an in vitro fertilization program. Eisermann J, et al. **Fertil Steril** 1989 Jan;51(1):112–6
Tissue effects of a new laparoscopic carbon dioxide laser probe. Tadir Y, et al. **Fertil Steril** 1989 Jun;51(6):1046–9
Experience with a 1.2-mm pneumoperitoneum needle for laparoscopy. Piccigallo E, et al. **Gastrointest Endosc** 1988 Nov–Dec;34(6):471–3
Treatment of endometriosis with a Nd:YAG tissue-contact laser probe via laparoscopy. Corson SL, et al. **Int J Fertil** 1989 Jul–Aug;34(4):284–8
Measurement of the force necessary for laparoscopic trocar entry. Corson SL, et al. **J Reprod Med** 1989 Apr; 34(4):282–4
Transabdominal laser colpotomy. Davis GD, et al. **J Reprod Med** 1989 Jul;34(7):438–40
Ovarian wedge resection with contact Nd:YAG laser irradiation used laparoscopically. Kojima E, et al. **J Reprod Med** 1989 Jul;34(7):444–6
Measurement of the force necessary for laparoscopic trocar entry [letter] Moreno HS. **J Reprod Med** 1989 Jul;34(7):12
Nd:YAG laser therapy for infertility with a contact-type probe. Yanagibori A, et al. **J Reprod Med** 1989 Jul; 34(7):456–60
Laparoscopic ultrasonography in the study of liver diseases. Preliminary results. Fornari F, et al. **Surg Endosc** 1989; 3(1):33–7
[Endoscopic laser incision of the polycystic ovary] Huber J, et al. **Geburtshilfe Frauenheilkd** 1989 Jan;49(1):37–40 (Eng. Abstr.) (Ger)
[Some technical and instrumental references for gynecologic laparoscopy] Kolmorgen K. **Zentralbl Gynakol** 1989; 111(9):609–12 (Eng. Abstr.) (Ger)
[Ovariectomy by laparoscopy] Kolmorgen K. **Zentralbl Gynakol** 1989;111(9):613–7 (Eng. Abstr.) (Ger)
[A new type of trocar with a membrane seal for the second puncture in laparoscopy] Lipenský S, et al. **Cesk Gynekol** 1989 Apr;54(3):196–8 (Slo)

METHODS

Transvaginal ultrasound or laparoscopy for oocyte retrieval (experiences in the Ljubljana IVF program). Tomaževič T, et al. **Acta Eur Fertil** 1988 Jul–Aug;19(4):209–11
Alterations in oxygen saturation and ventilation after intravenous sedation for peritoneoscopy. Brady CE 3d, et al. **Arch Intern Med** 1989 May;149(5):1029–32
Which is the best test to detect the polycystic ovary? Eden JA. **Aust N Z J Obstet Gynaecol** 1988 Aug;28(3):221–4
Positioning the Verres needle. Gupta SP. **Br J Surg** 1989 Apr;76(4):381
Fresh gas flow in the Bain circuit during laparoscopy. Jonsson LO, et al. **Can J Anaesth** 1989 Jul;36(4):423–5
Diagnostic yield and endoscopic patterns of laparoscopy in the diagnosis of granulomatous hepatitis. Moretó M, et al. **Endoscopy** 1988 Nov;20(6):294–7
Postoperative recuperation: relation to the extent of endoscopic surgery. Azziz R, et al. **Fertil Steril** 1989 Jun; 51(6):1061–4
Laser laparoscopy for polycystic ovaries [letter; comment] Cohen BM. **Fertil Steril** 1989 Jul;52(1):167–8. **Comment on:** Fertil Steril 1989 Feb;51(2):232–6
Operative laparoscopy: time for acceptance. Gomel V. **Fertil Steril** 1989 Jul;52(1):1–11 (82 ref.)
Safe laser endoscopic excision or vaporization of peritoneal endometriosis. Nezhat C, et al. **Fertil Steril** 1989 Jul; 52(1):149–51
Laparoscopic sterilization combined with dilation and evacuation up to 18 weeks' gestation. Kaali SG, et al. **J Reprod Med** 1989 Jul;34(7):463–4
Association of previous abdominal surgery and significant adhesions in laparoscopic sterilization patients. Szigetvari I, et al. **J Reprod Med** 1989 Jul;34(7):465–6
Evaluation of the direct trocar insertion technique at laparoscopy. Byron JW, et al. **Obstet Gynecol** 1989 Sep; 74(3 Pt 1):423–5
Mini-laparoscopy in blunt abdominal trauma. Wood D, et al. **Surg Endosc** 1988;2(3):184–9
Use of bedside laparoscopy to identify intestinal ischemia in postoperative cases of aortic reconstruction. Iberti TJ, et al. **Surgery** 1989 May;105(5):686–9
[Per-coelioscopic salpingectomy in extra-uterine pregnancy. A series of 25 cases] Sellam R, et al. **Rev Fr Gynecol Obstet** 1988 Jul–Sep;83(7–9):499–503 (Eng. Abstr.) (Fre)
[Open laparoscopy in patients at risk] Klapp J, et al. **Geburtshilfe Frauenheilkd** 1988 Sep;48(9):615–6 (Eng. Abstr.) (Ger)
[A ketamine-chlordemethyldiazepam combination in celioscopy] Struzziero E, et al. **Minerva Ginecol** 1988 Dec; 40(12):715–7 (Eng. Abstr.) (Ita)
[The value of ultrasonic and x-ray endoscopic methods in the diagnosis of acute surgical diseases of the abdominal organs] Minushkin ON, et al. **Khirurgiia (Mosk)** 1989 Feb; (2):28–32 (Eng. Abstr.) (Rus)
[Postoperative dynamic laparoscopy in children] Gubov IuP, et al. **Klin Khir** 1989;(6):47–8 (Eng. Abstr.) (Rus)
[Laparoscopy in the diagnosis of acute appendicitis in children] Stepanov EA, et al. **Pediatriia** 1988;(6):69–72 (Rus)
[Open laparoscopy] Sipoš Z, et al. **Med Pregl** 1988; 41(11–12):476–7 (Eng. Abstr.) (Scr)
[Laparoscopic hemostatic procedures in patients with coagulation disorders undergoing hepatic and splenic puncture biopsies] Ferrando J, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 2):447–9 (Eng. Abstr.) (Spa)

NURSING

[The care of patients undergoing gynecologic laparoscopy examination] Xia WY. **Chung Hua Hu Li Tsa Chih** 1988 Jul;23(7):407 (Chi)

TRENDS

Closed abdominal surgery [editorial] Elmslie RG. **Aust N Z J Surg** 1988 Apr;58(4):261

UTILIZATION

The frequency distribution of various pelviscopic (laparoscopic) operations, including complications rates--statistics of the Federal Republic of Germany in the years 1983–1985. Riedel HH, et al. **Zentralbl Gynakol** 1989;111(2):78–91
[Distribution of the incidence of various pelviscopic (laparoscopic) surgical procedures and their complication rates. A statistical analysis in West Germany 1983 up to and including 1985] Riedel HH, et al. **Geburtshilfe Frauenheilkd** 1988 Nov;48(11):791–9 (Eng. Abstr.) (Ger)

PERITONEOVENOUS SHUNT

Lumboperitoneal shunt for the treatment of postoperative persistent collection of subcutaneous cerebrospinal fluid (pseudomeningocoele). Aoki N. **Acta Neurochir (Wien)** 1989;98(1–2):32–4
Pregnancy and ventriculoperitoneal shunt. Report of a case and literature review. Hassan A, et al. **Acta Obstet Gynecol Scand** 1988;67(7):669–70
Poor outcome from peritoneovenous shunts for refractory ascites. Scholz DG, et al. **Am J Gastroenterol** 1989 May; 84(5):540–3
Peritoneovenous shunt for intractable ascites of hepatic, nephrogenic, and malignant causes. Holm A, et al. **Am J Surg** 1989 Aug;158(2):162–6
Peritoneovenous shunt (PVS) for malignant ascites. An analysis of outcome. Smith DA, et al. **Am Surg** 1989 Jul; 55(7):445–9
The use of double valve Denver peritoneal venous shunt for malignant ascites. Li MK, et al. **Ann Acad Med Singapore** 1988 Jan;17(1):129–31
Peritoneovenous shunts in the management of ascites. Conn HO. **ASAIO Trans** 1989 Apr–Jun;35(2):160
Advances and new concepts in the designing of peritoneovenous shunts for the treatment of refractory ascites. Guzman E, et al. **ASAIO Trans** 1988 Jul–Sep; 34(3):805–7
The place of the peritoneovenous shunt in the treatment of ascites. LeVeen EG, et al. **ASAIO Trans** 1989 Apr–Jun; 35(2):165–8 (14 ref.)
Peritoneovenous shunt function 2–6 years after insertion for cirrhotic ascites. Stanley MM, et al. **ASAIO Trans** 1989 Apr–Jun;35(2):170–4
Scintigraphic demonstration of restored Denver peritoneovenous shunt patency using urokinase. Balon H, et al. **Clin Nucl Med** 1989 Apr;14(4):310–1
Renal prostaglandin E2 and other vasoactive modulators in refractory hepatic ascites: response to peritoneovenous shunting. Shaw-Stiffel T, et al. **Gastroenterology** 1988 Nov;

95(5):1332–8
Effect of peritoneo–venous shunt on portal pressure. Samanta AK, et al. **Gut** 1989 Jan;30(1):86–9
Acute effects of peritoneovenous shunt (Le Veen) on the hemodynamics and gas exchange in patients with hepatic intractable ascites. Brandi LS, et al. **Ital J Surg Sci** 1988; 18(2):137–42
Chylous ascites following abdominal aortic aneurysmectomy: surgical management with a peritoneovenous shunt. Boyd WD, et al. **J Cardiovasc Surg (Torino)** 1989 Jul–Aug; 30(4):627–9
Progressive hyperbilirubinemia complicating peritoneovenous shunting for malignant ascites [letter] Gholson CF. **J Clin Gastroenterol** 1989 Apr;11(2):236–7
Management of intractable malignant ascites using the Denver peritoneovenous shunt. Millard FC, et al. **J R Coll Surg Edinb** 1988 Jun;33(3):138–9
To shunt or to fenestrate: which is the best surgical treatment for arachnoid cysts in pediatric patients? Raffel C, et al. **Neurosurgery** 1988 Sep;23(3):338–42
[Peritoneovenous shunting in intractable ascites of cirrhosis. Results of a prospective study on improving prognostic factors] Hillaire S, et al. **Gastroenterol Clin Biol** 1988 Oct; 12(10):681–6 (Eng. Abstr.) **(Fre)**
[Cure of recurrent ascites in alcoholic hepatitis following transient placement of a LeVeen shunt] Yersin B, et al. **Schweiz Med Wochenschr** 1989 May 27;119(21):768–9 (Eng. Abstr.) **(Fre)**
[12–year experience with continuous peritoneovenous shunt in the treatment of therapy–resistant ascites and hepatorenal failure: benefits and pitfalls] Kreuzer W. **Wien Klin Wochenschr** 1989 Jan 20;101(2):87–91 (Eng. Abstr.) **(Ger)**
[The peritoneal–jugular shunt in the patient with refractory ascites. Our experience] Sacco R, et al. **Ann Ital Chir** 1987; 59(1–6):377–81 (Eng. Abstr.) **(Ita)**
[Peritoneo–jugular shunt in the treatment of refractory ascites (LeVeen shunt). Clinical case series and personal experience] Fazzini F, et al. **Minerva Chir** 1988 Aug 31; 43(15–16):1231–3 (Eng. Abstr.) **(Ita)**
[Surgical solution to intractable ascites in 3 series of patients treated with continuous peritoneo–venous shunting] Giordani M. **Minerva Chir** 1989 Feb 15;44(3):457–61 (7 ref.) **(Ita)**
[Use of the Leveen shunt in the treatment of clinically intractable ascites] D'Albuquerque LA, et al. **Arq Gastroenterol** 1988 Jul–Sep;25(3):138–44 (Eng. Abstr.) **(Por)**

ADVERSE EFFECTS

Giant right atrial LeVeen shunt pseudocyst. Loh E, et al. **Am J Cardiol** 1989 May 15;63(17):1289–90
Cardiopulmonary thrombosis complicating peritoneovenous shunting: a case report and review of the literature. Goldfarb AN. **Am J Cardiovasc Pathol** 1988;2(3):259–62 (14 ref.)
Fatal air embolism following anesthesia for insertion of a peritoneovenous shunt. Ahmat KP, et al. **Anesthesiology** 1989 Apr;70(4):702–4
Complications of peritoneovenous shunts. Conn HO. **ASAIO Trans** 1989 Apr–Jun;35(2):176–7 (16 ref.)
Peritoneal–venous shunting for refractory ascites [letter] Vass AC. **Br J Hosp Med** 1989 Apr;41(4):398
Peritoneovenous shunts—devices of last resort. Shepherd KE, et al. **Can J Surg** 1988 Nov;31(6):444–7
Percutaneous recanalization and dilatation of a thrombotically occluded superior vena cava in a patient with a peritoneovenous shunt. Meinertz T, et al. **J Hepatol** 1989 Jul;9(1):91–4
Cerebrospinal fluid eosinophilia and sterile shunt malfunction. Traynelis VC, et al. **Neurosurgery** 1988 Nov;23(5):645–9
[Peritoneovenous shunt complicating a glomerulonephritis associated with bacteremia. Description of a clinical case] Rocca F, et al. **Recenti Prog Med** 1989 Apr;80(4):186–7 (Eng. Abstr.) **(Ita)**

INSTRUMENTATION

Peritoneovenous shunting for intractable cirrhotic and cancerous ascites using different types of shunting tubes. Akimaru K, et al. **Jpn J Surg** 1988 Sep;18(5):502–8

METHODS

The Minnesota shunt. Buchwald H, et al. **ASAIO Trans** 1989 Apr–Jun;35(2):168–70 (4 ref.)
[The Denver peritoneojugular shunt. Current indications] Bracci F, et al. **Minerva Med** 1989 Apr;80(4):363–6 (Eng. Abstr.) **(Ita)**
[Characteristics of portal–lymphatic hypertension and surgical treatment of patients with cirrhosis of the liver and persistent ascites] Nazyrov FG, et al. **Vestn Khir** 1989 Feb;142(2):104–6 **(Rus)**

VETERINARY

Management of intractable pleural effusion in a dog with pleuroperitoneal shunt. Smeak DD, et al. **Vet Surg** 1987 May–Jun;16(3):212–6

PERITONEUM

Transperitoneal ovum migration in women with unilateral congenital ovarian absence. Ben–Nun I, et al. **Acta Obstet Gynecol Scand** 1988;67(7):665–7
Role of an intraperitoneal catheter implant in the pathogenesis of experimental Staphylococcus epidermidis peritoneal infection in renal failure mice. Gallimore B, et al. **Am J Nephrol** 1988;8(4):334–43
Partial peritoneal alimentation in an infant. Merritt RJ, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec; 12(6):621–5

ABNORMALITIES

Internal Richter's hernia due to congenital peritoneal defect. Case report. Fiirgaard B, et al. **Acta Chir Scand** 1988 Sep; 154(9):537
Small bowel obstruction [letter; comment] Freud E, et al. **Br J Surg** 1989 Jan;76(1):102–3. **Comment on:** Br J Surg 1988 Mar;75(3):262
Peritoneal encapsulation of the small bowel [letter] Walsh TN, et al. **Br J Surg** 1988 Nov;75(11):1148
Peritoneal pockets and endometriosis. Confirmation of an important relationship, with further observations. Redwine DB. **J Reprod Med** 1989 Apr;34(4):270–2
[The death of a child caused by complications of a congenital defect of the mesentery] Kurbatov VS, et al. **Sud Med Ekspert** 1989 Jan–Mar;32(1):46–7 **(Rus)**

ANATOMY & HISTOLOGY

Morphology of the peritoneum in CAPD. Dobbie JW. **Blood Purif** 1989;7(2–3):74–85 (17 ref.)
[Comparative morphological study of the peritoneal mesothelium and the germinal epithelium of the ovary. Histogenetic evidence for endometriosis] Hoang NM, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(4):479–84 (Eng. Abstr.) **(Fre)**

BLOOD SUPPLY

Induction of angiogenesis by intraperitoneal injection of asbestos fibers. Branchaud RM, et al. **FASEB J** 1989 Apr; 3(6):1747–52
Captopril, proteinuria and peritoneal protein leakage in diabetic patients [letter] Coronel F, et al. **Nephron** 1989; 51(3):443
[Effect of controlled normovolemic hemodilution on the microcirculatory bed and the incidence of postoperative complications in abdominal surgery] Kuznetsov NA, et al. **Vestn Khir** 1987 Dec;139(12):78–82 (Eng. Abstr.) **(Rus)**
[Immunoreactive structures of the blood microcirculatory bed in the peritoneum of the lesser pelvis] Chernyshenko LV, et al. **Vrach Delo** 1988 Jul;(7):58–60 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Prostaglandin E2, thromboxane B2, and leukotriene B4 release from peritoneal macrophages by different osmotic agents in nonuremic guinea pigs. Hain H, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):429–32
Augmentation of release of cytotoxin from murine bone marrow and peritoneal macrophages by tumor transplantation. Yamazaki M, et al. **Cancer Res** 1989 Jan 15;49(2):352–6
Stochastic model for mast cell proliferation in culture of murine peritoneal cells. Kobayashi T, et al. **J Cell Physiol** 1989 Jan;138(1):24–8
Effect of monophosphoryl lipid A on the in vitro function of peritoneal leukocytes from uremic patients on continuous ambulatory peritoneal dialysis. Carozzi S, et al. **J Clin Microbiol** 1989 Aug;27(8):1748–53
Estimation of the mean caliper: a new simple approach. Elmalek M, et al. **J Electron Microsc Tech** 1988 Feb; 8(2):173–7
The mitogenic activity of peritoneal tissue repair cells: control by growth factors. Fukasawa M, et al. **J Surg Res** 1989 Jul;47(1):45–51
Multiple signaling pathways control stimulus–secretion coupling in rat peritoneal mast cells. Penner R. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9856–60

DRUG EFFECTS

[Disturbances in peritoneal differentiation as a reaction to asbestos and asbestos substitutes. Experimental animal studies] Friemann J, et al. **Verh Dtsch Ges Pathol** 1988; 72:312–6 (Eng. Abstr.) **(Ger)**

ENZYMOLOGY

Reduced human peritoneal plasminogen activating activity: possible mechanism of adhesion formation. Thompson JN, et al. **Br J Surg** 1989 Apr;76(4):382–4

IMMUNOLOGY

In vivo activation of murine peritoneal macrophages by intraperitoneal administration of cisplatin. Sodhi A, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(3):303–14
Study on pinocytosis and antigen presentation by murine peritoneal macrophages to T cells in vitro after cisplatin treatment. Sodhi A, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(3):315–23

INJURIES

[Embryologic and anatomo–surgical presuppositions in intraoperative injuries of the spleen. A clinical study] Tocchi A, et al. **Minerva Chir** 1989 Mar 31;44(6):937–42 (11 ref.) (Eng. Abstr.) **(Ita)**

METABOLISM

Effect of viscous macromolecules on peritoneal plasminogen activator activity: a potential mechanism for their ability to reduce postoperative adhesion formation. Mayer M, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):957–63
Intraperitoneal verapamil therapy in CAPD patients with peritoneal hypopermeability. Effects on ultrafiltration. Lamperi S, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):425–8
Peritoneal clearances. Long–term study. Procaccini DA, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):437–40
The minimal importance of the hollow viscera to peritoneal transport during peritoneal dialysis in the rat. Rubin J, et al. **ASAIO Trans** 1988 Oct–Dec;34(4):912–5
Clinical value of standardized equilibration tests in CAPD patients. Twardowski ZJ. **Blood Purif** 1989;7(2–3):95–108 (48 ref.)
Exchange of macromolecules between plasma and peritoneal cavity in ascites tumor–bearing, normal, and serotonin–injected mice. Nagy JA, et al. **Cancer Res** 1989 Oct 1;49(19):5448–58
Pharmacological manipulation of peritoneal transport in CAPD. Steinhauer HB. **Clin Nephrol** 1988;30 Suppl 1:S29–33 (49 ref.)
Incorporation of thymidine by fibroblasts: evidence for complex regulation by postsurgical macrophages. Fukasawa M, et al. **J Surg Res** 1988 Nov;45(5):460–6
The peritoneal transport of serum proteins and neutral dextran in CAPD patients. Krediet RT, et al. **Kidney Int** 1989 Apr;35(4):1064–72
Effects of histamine and its receptor antagonists on peritoneal permeability. Shostak A, et al. **Kidney Int** 1988 Dec; 34(6):786–90
Effect of phosphatidylcholine on peritoneal transport and lymphatic absorption in a CAPD patient with sclerosing peritonitis. Struijk DG, et al. **Nephron** 1989;51(4):577–8
[Diffusion of ceftriaxone in healthy and infected peritoneal tissue] Rio Y, et al. **Pathol Biol (Paris)** 1989 May; 37(5):437–41 (Eng. Abstr.) **(Fre)**
[Cefotiam concentration in the peritoneum in infants during surgery] Obata K, et al. **Jpn J Antibiot** 1989 Apr; 42(4):1014–6 (Eng. Abstr.) **(Jpn)**
[The factors affecting transperitoneal flux of magnesium and other divalent ions in patients undergoing continuous ambulatory peritoneal dialysis] Shigematsu T, et al. **Nippon Jinzo Gakkai Shi** 1988 Nov;30(11):1365–73 (Eng. Abstr.) **(Jpn)**
[Transperitoneal transport of methotrexate: in vitro studies] Czyżewska K, et al. **Przegl Lek** 1988;45(5):421–5 (Eng. Abstr.) **(Pol)**
[Comparison of various pharmacologic and conventional methods of increasing the effectiveness of peritoneal dialysis. V. Usefulness of selected parameters of peritoneal transfer for evaluating the effectiveness of intermittent peritoneal dialysis] Grzegorzewska A. **Przegl Lek** 1989; 46(5):440–7 (Eng. Abstr.) **(Pol)**

PATHOLOGY

Peritoneal morphology on maintenance dialysis. Pollock CA, et al. **Am J Nephrol** 1989;9(3):198–204
Malignant small–cell epithelial tumor of the peritoneum coexpressing mesenchymal–type intermediate filaments. Ordóñez NG, et al. **Am J Surg Pathol** 1989 May; 13(5):413–21
Is "microscopic" peritoneal endometriosis invisible? Redwine DB. **Fertil Steril** 1988 Oct;50(4):665–6
[Scanning electron microscopy study of the peritoneum as a dialysis membrane—a morphological study on the etiology of sclerosing peritonitis] Korten G, et al. **Z Urol Nephrol** 1988 Jul;81(7):473–9 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Effect of peritoneal fluid on sperm motility and velocity distribution using objective measurements. Soldati G, et al. **Fertil Steril** 1989 Jul;52(1):113–9

PHYSIOPATHOLOGY

The viability of the peritoneal membrane in long–term continuous ambulatory peritoneal dialysis patients. Bazzato G, et al. **Contrib Nephrol** 1989;70:312–7
Increased peritoneal permeability in acute experimental pancreatitis. Svensson C, et al. **Int J Pancreatol** 1989 Feb; 4(1):91–8
[The internal variability of the mesothelium during regeneration following trauma applied at various times of the day] Korzhevskiĭ DE, et al. **Arkh Anat Gistol Embriol** 1988 Nov;95(11):69–73 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

[Diagnosis of hernia using peritoneography] Wrazidlo W, et al. **ROFO** 1989 Jun;150(6):699–703 (Eng. Abstr.) **(Ger)**

RADIONUCLIDE IMAGING

The clinical utility of the Tc–99m SC intraperitoneal scan in CAPD patients. Berman C, et al. **Clin Nucl Med** 1989 Jun;14(6):405–9

Intraperitoneal imaging [editorial] Smink RD. **Clin Nucl Med** 1989 Jun;14(6):472

SURGERY

Is reperitonealization of the gallbladder bed a ritual or necessity? Mok SD, et al. **Am J Surg** 1989 Mar;157(3):312–4

Successful transplantation of a free fimbrial graft to the peritoneum. McComb P, et al. **J Reprod Med** 1989 Jan; 34(1):55–8

[Peritonealization with omental mesh autograft] Caramanico L, et al. **Minerva Chir** 1988 Nov 30;43(22):1955–7 (Eng. Abstr.) (Ita)

[Pleuroperitoneal shunt for malignant pleural effusions] Sadahiro S, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Jan 20;24(1):1–6 (Eng. Abstr.) (Jpn)

[Controlled laparostomy in the surgical treatment of peritonitis] Brekhov EI, et al. **Khirurgiia (Mosk)** 1988 Dec; (12):23–8 (Rus)

[Extraperitonealization in the surgical treatment of injuries of the large intestine] Kosachev ID, et al. **Voen Med Zh** 1989 Feb;(2):24–5 (Rus)

[Angiotensometry in peritoneo-anal resection of the rectum in cancer] Martyniuk VV, et al. **Vopr Onkol** 1988; 34(12):1468–71 (Eng. Abstr.) (Rus)

TRANSPLANTATION

[Experimental study on a prefabricated peritoneal tube for venous reconstruction] Zhou J, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Feb;26(2):65–7, 124 (Eng. Abstr.) (Chi)

ULTRASTRUCTURE

Microscopic peritoneal endometriosis [letter] Murphy AA, et al. **Fertil Steril** 1989 Jun;51(6):1072–4

[Formation of reactive peritoneal structures as affected by low-frequency ultrasound] Kotliarov VS. **Vrach Delo** 1988 Jul;(7):56–7 (Eng. Abstr.) (Rus)

PERITONITIS

Spontaneous bacterial peritonitis. Hallak A. **Am J Gastroenterol** 1989 Apr;84(4):345–50 (74 ref.)

Critical abdominal sepsis. Rogers PN, et al. **J R Coll Surg Edinb** 1989 Feb;34(1):1–8 (77 ref.)

[Encapsulating peritonitis. Etiology and current treatments. Apropos of 4 new cases] Germain MA, et al. **Chirurgie** 1988;114(2):199–206 (23 ref.) (Eng. Abstr.) (Fre)

[Peritonitis] Palasciano N. **Ann Ital Chir** 1988;60(1):45–8 (Ita)

[Microbiological and cytochemical parallels in appendicular peritonitis in children] Urdabaev ZhK, et al. **Lab Delo** 1988; (6):44–7 (Eng. Abstr.) (Rus)

BLOOD

Evaluation of the effects of lymph drainage by a thoracic duct fistula in experimental peritonitis. Olofsson P. **Acta Chir Scand** 1988 Jul–Aug;154(7–8):453–9

Increased levels of immunoreactive plasma renin substrate during infectious peritonitis in patients on continuous ambulatory peritoneal dialysis. Metsärinne K, et al. **Clin Sci** 1988 Oct;75(4):411–4

[Respiratory function of the blood in patients in critical conditions: saturation of arterial blood with O2 as a function of P50] Riabov GA, et al. **Anesteziol Reanimatol** 1988 May–Jun;(3):28–31 (Eng. Abstr.) (Rus)

[Erythrocyte deformability and morphology in children with suppurative peritonitis] Sokolova VA, et al. **Anesteziol Reanimatol** 1988 Nov–Dec;(6):62–4 (Eng. Abstr.) (Rus)

[The amino acids of the blood in patients with peritonitis: the significance of Fisher's index] Zhadkevich MM, et al. **Lab Delo** 1989;(2):29–32 (Eng. Abstr.) (Rus)

CHEMICALLY INDUCED

Lack of chemical peritonitis after intraperitoneal use of two brands of vancomycin hydrochloride [letter] Abel SR. **Clin Pharm** 1989 Feb;8(2):91–2

Peritoneal reaction resulting from iodinated contrast material: comparative study. Eisenberg AD, et al. **Radiology** 1989 Jul;172(1):149–51

CLASSIFICATION

Patient stratification in intra-abdominal infection. Wittmann DH, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):460–2

COMPLICATIONS

Spontaneous bacterial peritonitis associated with ascites due to malignant lymphoma [letter] Gonciarz M, et al. **Am J Gastroenterol** 1989 Aug;84(8):988

Pseudomonal and candidal peritonitis as a complication of continuous ambulatory peritoneal dialysis in human immunodeficiency virus-infected patients. Dressler R, et al. **Am J Med** 1989 Jun;86(6 Pt 2):787–90

Neisseria meningitidis and Moraxella osloensis: dual infection in blood and peritoneal fluid. Tiosejo LL, et al. **Diagn Microbiol Infect Dis** 1988 Dec;11(4):209–13

The importance of intraluminal anastomotic fecal contact and peritonitis in colonic anastomotic leakages. An experimental study. Ravo B, et al. **Dis Colon Rectum** 1988 Nov;31(11):868–71

Meconium peritonitis presenting as a giant pseudocyst in a neonate. Kapoor R, et al. **Indian Pediatr** 1988 Nov; 25(11):1113–5

Etiologic factors of jaundice in severely ill patients. A retrospective study in patients admitted to an intensive care unit with severe trauma or with septic intra-abdominal complications following surgery and without evidence of bile duct obstruction. te Boekhorst T, et al. **J Hepatol** 1988 Aug;7(1):111–7

Pneumoperitoneum without peritonitis. Fick TE, et al. **Neth J Surg** 1988 Dec;40(6):152–4

CRP predicts complications in pancreatitis and peritonitis. Lasson A, et al. **Prog Clin Biol Res** 1989;308:725–9

The prognostic value of plasmaproteins in patients with abdominal sepsis. Rogy M, et al. **Prog Clin Biol Res** 1989; 308:719–24

Decreased density distribution of mesenteric and diaphragmatic microvascular anionic charges during murine abdominal sepsis. Gotloib L, et al. **Resuscitation** 1988 Jul;16(3):179–92

Chronic lupus peritonitis with ascites: review of the literature with a case report. Schousboe JT, et al. **Semin Arthritis Rheum** 1988 Nov;18(2):121–6 (42 ref.)

[Meconium peritonitis complicated with Enterobacter aerogenes infection—a case report] Yang CJ, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Jan;43(1):71–4 (Eng. Abstr.) (Chi)

[Value of a cumulated prognostic index in the development of severe peritonitis with adult respiratory distress syndrome (letter)] Aknin P, et al. **Ann Fr Anesth Reanim** 1989;8(1):77 (Fre)

[An unusual abdominal accumulation of air] Sigmund G, et al. **Radiologe** 1989 Jul;29(7):359–60 (Ger)

[Encapsulating peritonitis: a rare cause of intestinal occlusion in a patient subjected to peritoneal dialysis] Talenti A, et al. **Minerva Chir** 1988 Nov 30;43(22):1973–5 (Eng. Abstr.) (Ita)

[A case report of the hypereosinophilic syndrome with eosinophilic peritonitis, revealing abnormal imagings of the liver scintigram and brain computed tomography] Masunaga T, et al. **Nippon Naika Gakkai Zasshi** 1989 May; 78(5):666–71 (Jpn)

[Early diagnosis of acute renal insufficiency in patients with peritonitis] Shestopalov AE, et al. **Anesteziol Reanimatol** 1989 Mar–Apr;(2):56–9 (Eng. Abstr.) (Rus)

[Clinico-biochemical characteristics of hepatic insufficiency in peritonitis] Filipovich NE, et al. **Klin Med (Mosk)** 1988 Jul;66(7):93–6 (Eng. Abstr.) (Rus)

[Syndrome of endogenous toxemia in complications of pancreonecrosis] Shurkalin BK. **Vestn Khir** 1989 Mar; 142(3):7–11 (Eng. Abstr.) (Rus)

CONGENITAL

[Prenatally diagnosed intestinal obstruction—contribution of pediatric surgery] Schwöbel MG, et al. **Geburtshilfe Frauenheilkd** 1989 Jul;49(7):658–61 (Eng. Abstr.) (Ger)

DIAGNOSIS

Lavage fluid from continuous ambulatory peritoneal dialysis. A model for mesothelial cell changes. Hoeltermann W, et al. **Acta Cytol** 1989 Sep–Oct;33(5):591–4

Intra-abdominal abscess and peritonitis. Fritze M, et al. **Clin Nucl Med** 1989 Apr;14(4):296–7

Peritoneal lavage as an aid in the diagnosis of acute peritonitis of non-traumatic origin. Hoffmann J. **Dig Dis** 1988; 6(4):185–93 (39 ref.)

Criteria for diagnosing spontaneous bacterial peritonitis. Ogutu EO, et al. **East Afr Med J** 1988 Oct;65(10):698–706

Evaluation of ascitic fluid polymorphonuclear count & ascitic fluid pH in early diagnosis of spontaneous bacterial peritonitis. Rai RR, et al. **Indian J Med Res** 1988 Jun; 87:600–4

Clinical and microbiological evaluation of four culture methods for the diagnosis of peritonitis in patients on continuous ambulatory peritoneal dialysis. Doyle PW, et al. **J Clin Microbiol** 1989 Jun;27(6):1206–9

Novel plate culture method to improve the microbiological diagnosis of peritonitis in patients on continuous ambulatory peritoneal dialysis. Gould IM, et al. **J Clin Microbiol** 1988 Sep;26(9):1687–90

Laboratory diagnosis of peritonitis in patients on continuous ambulatory peritoneal dialysis. Ludlam HA, et al. **J Clin Microbiol** 1988 Sep;26(9):1757–62

Caution advisable when interpreting gram-stained smears of material from peritoneal paracentesis [letter] Heltberg O. **J Infect** 1989 Jan;18(1):93–4

Meconium pseudocyst presenting as a buttock mass. West DK, et al. **J Pediatr Surg** 1988 Sep;23(9):864–5

Re-evaluation of the value of ascitic fluid pH lactate dehydrogenase and total proteins in the diagnosis of spontaneous bacterial peritonitis (SBP). el-Touny M, et al. **J Trop Med Hyg** 1989 Feb;92(1):6–9

Sonographic findings of generalized meconium peritonitis presenting as neonatal ascites. Wu CC. **JCU** 1988 Jan; 16(1):48–51

The Mannheimer Peritonitis Index: a valuable method in predicting the outcome of severe peritonitis? van Laarhoven CJ, et al. **Neth J Surg** 1988 Dec;40(6):168

[The Fitz-Hugh-Curtis syndrome] Stambolov B, et al. **Akush Ginekol (Sofiia)** 1988;27(3):54–7 (Eng. Abstr.) (Bul)

[Our experience in treating peritonitis following cesarean section] Zheliazkova E, et al. **Akush Ginekol (Sofiia)** 1989; 28(2):27–30 (Eng. Abstr.) (Bul)

[Specialist and superspecialistic consultation] **Ned Tijdschr Geneeskd** 1988 Oct 29;132(44):2028–30 (Dut)

[Meconium peritonitis. The value of prenatal diagnosis] Wakim A, et al. **Chir Pediatr** 1989;30(1):21–4 (Eng. Abstr.) (Fre)

[Peritonitis in continuous ambulatory peritoneal dialysis (CAPD): problems of microbiologic diagnosis] Hamdan JS. **Rev Latinoam Microbiol** 1988 Oct–Dec;30(4):381–4 (24 ref.) (Eng. Abstr.) (Por)

[Clinico-echographic aspects of the diagnosis of acute inflammatory diseases of the small pelvis] Radionchenko AA, et al. **Akush Ginekol (Mosk)** 1989 Feb;(2):22–4 (Eng. Abstr.) (Rus)

[Clinical characteristics and therapeutic procedure in diffuse postabortion peritonitis] Rotkina IE, et al. **Akush Ginekol (Mosk)** 1988 May;(5):65–7 (Rus)

[Value of echography in the diagnosis of postoperative complications] Stygar AM, et al. **Akush Ginekol (Mosk)** 1989 Apr;(4):39–43 (Eng. Abstr.) (Rus)

[Differential diagnosis of diffuse peritonitis and early adhesive intestinal obstruction following appendectomy in children] Baklanov VV, et al. **Khirurgiia (Mosk)** 1988 Jul;(7):45–8 (Eng. Abstr.) (Rus)

[Errors in the diagnosis of peritonitis caused by perforation of an abscess from the kidney into the abdominal cavity] Mazchenko NS, et al. **Khirurgiia (Mosk)** 1989 Apr;(4):116–7 (Rus)

[Diagnosis of infection] Gulima PA, et al. **Klin Khir** 1989; (1):6–8 (Eng. Abstr.) (Rus)

[Characteristics of clinical manifestations of closed abdominal injuries in combined cranio-abdominal trauma] Michurin VF, et al. **Klin Khir** 1989;(4):22–5 (Eng. Abstr.) (Rus)

[Diagnostic and therapeutic laparoscopy in complications after surgical operations on the abdominal organs] Tiukarkin Miu, et al. **Klin Khir** 1989;(1):58 (Rus)

[Meconium peritonitis] Barrera F, et al. **Rev Chil Pediatr** 1988 Mar–Apr;59(2):115–9 (Eng. Abstr.) (Spa)

DRUG THERAPY

Intraperitoneal (IP) vancomycin therapy for CAPD peritonitis—a prospective, randomized comparison of intermittent v continuous therapy. Boyce NW, et al. **Am J Kidney Dis** 1988 Oct;12(4):304–6

Additive effect of an immunomodulator and broad-spectrum antibiotic in fecal peritonitis. Dunn CW, et al. **Am J Surg** 1989 Jun;157(6):548–51

Resistance emerging after pefloxacin therapy of experimental Enterobacter cloacae peritonitis. Lucain C, et al. **Antimicrob Agents Chemother** 1989 Jun;33(6):937–43

Cefoperazone in the treatment of peritonitis in continuous ambulatory peritoneal dialysis patients. Leehey DJ, et al. **Artif Organs** 1988 Dec;12(6):482–3

Antimicrobial therapy for CAPD-associated peritonitis. Winton MD, et al. **Blood Purif** 1989;7(2–3):115–25 (63 ref.)

Severe intra-abdominal sepsis [letter] Schein M. **Br J Surg** 1989 Apr;76(4):421

Are aminoglycosides essential in the treatment of continuous ambulatory peritoneal dialysis (CAPD) peritonitis? Drinovec J, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):483–4

Pharmacokinetics of ceftriaxone after intravenous administration to CAPD-patients with and without peritonitis. Favre H, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):273–4

Treatment of intra-abdominal infections using imipenem/cilastatin. Leaper D, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):467–8

Monotherapy for bacterial peritonitis using cefotetan. Leaper D, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):477–8

A multicenter open clinical trial of cefotetan in the treatment of peritonitis. Mason B, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):479–80

Cefotetan versus clindamycin/tobramycin association in mixed aero-anaerobic peritonitis in rats. Nardone A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):182–3

Cefotetan monotherapy in the treatment of intra-abdominal infection. Pfeiffer M. **Chemioterapia** 1987 Jun;6(2 Suppl):472–4

Ceftriaxone in biliary and pancreatic abscesses. Pirich K, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):469–70

Treatment of bacterial peritonitis. Puleo S, et al. **Chemioterapia** 1988 Aug;7(4):241–4

Therapeutic effect of cefotetan plus netilmicin in the treatment of bacterial peritonitis. Puleo S, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):470–1

Management of peritonitis related to chronic ambulatory peritoneal dialysis (CAPD) using two daily intraperitoneal injections of 400 mg pefloxacin. Ragnaud JM, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):481–3

Comparison of cefotetan versus combination therapy in peritonitis and serious intra-abdominal sepsis. Scott SD, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):475–6

Cephalosporin therapy in intra-abdominal infection: comparative studies of cefotetan, latamoxef and cefoxitin. Wilson SE. **Chemioterapia** 1988 Aug;7(4):213–7

The effects of pentoxifylline on bacterial peritonitis. Price

CI, et al. **Curr Surg** 1989 Jul-Aug;46(4):308-11

Oral treatment of peritonitis in CAPD patients with two dosage regimens of ofloxacin. Chan MK, et al. **J Antimicrob Chemother** 1988 Sep;22(3):371-5

Fluconazole treatment of Candida glabrata peritonitis [letter] Thomas MG, et al. **J Antimicrob Chemother** 1989 Jul; 24(1):94-6

Ibuprofen reduces the progression of permeability edema in an animal model of hyperdynamic sepsis. Gnidec AG, et al. **J Appl Physiol** 1988 Sep;65(3):1024-32

A new model of bacterial peritonitis in mice for evaluation of antibiotics. Effects of aspoxicillin and piperacillin. Matsushita T, et al. **Jpn J Antibiot** 1989 Apr;42(4):887-95

Oral treatment of peritonitis in CAPD patients with ofloxacin. Chan MK, et al. **Nephrol Dial Transplant** 1988; 3(2):194-7

Treatment of Pseudomonas aeruginosa peritonitis in a CAPD patient with ciprofloxacin [letter] Grave W, et al. **Nephrol Dial Transplant** 1988;3(5):707

Urokinase: a treatment for relapsing peritonitis due to coagulase-negative staphylococci. Pickering SJ, et al. **Nephrol Dial Transplant** 1989;4(1):62-5

Vancomycin and ceftazidime in the treatment of CAPD peritonitis. Beaman M, et al. **Nephron** 1989;51(1):51-5

Peritonitis during continuous ambulatory peritoneal dialysis. Treatment with pefloxacin: first results and pharmacokinetics. Benzakour M, et al. **Nephron** 1988; 50(2):175-6

Surgical prophylaxis and treatment of surgical infections with quinolones. Nord CE. **Rev Infect Dis** 1989 Jul-Aug;11 Suppl 5:S1287-91 (14 ref.)

[Traditional Chinese medicine and Western medicine treatment in acute perforative appendicitis with peritonitis] Wang CZ. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Jul; 8(7):429-30 **(Chi)**

[Effects of neutrophils emigration on vascular permeability and anti-inflammatory mechanism of dexamethasone] Hou YN, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 May; 9(3):258-61 (Eng. Abstr.) **(Chi)**

[Treatment of peritonitis in continuous ambulatory peritoneal dialysis with a combination of fosfomycin and pefloxacin] Michel C, et al. **Pathol Biol (Paris)** 1989 Apr;37(4):269-71 (Eng. Abstr.) **(Fre)**

[Clinical efficacy of two-route chemotherapy with CDDP and STS in patients with peritonitis carcinomatosa] Kuwahara A, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2752-5 (Eng. Abstr.) **(Jpn)**

[Two-route chemotherapy with cisplatinum (ip) and its antidote, sodium thiosulfate (iv) against carcinomatous peritonitis following alimentary tract cancers] Takao s, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Aug 20; 23(8):1696-709 (Eng. Abstr.) **(Jpn)**

[Evaluation of the effect of a new polyfungin derivative in chronic infection of albino mice with P-32 labeled Candida albicans] Kurnatowska A, et al. **Med Dosw Mikrobiol** 1989; 41(1):53-9 (Eng. Abstr.) **(Pol)**

[Various new aspects of the prevention and treatment of postpartum and post-abortion suppurative-septic diseases] Bibilelshvili ZA, et al. **Akush Ginekol (Mosk)** 1988 Dec; (12):53-5 **(Rus)**

[Antibacterial therapy in the complex treatment of a disseminated form of peritonitis, complicated by infectious-toxic shock] Savel'ev VS, et al. **Antibiot Khimioter** 1989 Feb;34(2):143-7 **(Rus)**

[Use of ultrasonics in the prevention and treatment of suppurative surgical infection (review of the literature)] Gorfinkel' IV, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):151-6 (54 ref.) **(Rus)**

[Treatment of peritonitis in children using thymalin and metronidazole] Lomachenko IN, et al. **Klin Khir** 1988; (6):41-3 (Eng. Abstr.) **(Rus)**

[Effect of cryoprecipitate on the phagocytic activity of liver cells in peritonitis] Zhadkevich MM, et al. **Sov Med** 1988; (12):3-6 (Eng. Abstr.) **(Rus)**

[Endolymphatic antegrade infusion of drugs in the treatment of suppurative-inflammatory diseases] Sinenchenko GI. **Vestn Khir** 1988 Oct;141(10):143-5 (32 ref.) **(Rus)**

[Intravenous use of a derivative of metronidazole in abdominal surgery] Hut'an M, et al. **Rozhl Chir** 1989 Apr; 68(4):288-93 (Eng. Abstr.) **(Slo)**

ENZYMOLOGY

Local and general defence mechanisms in bacterial and chemical peritonitis. Lasson A, et al. **Adv Exp Med Biol** 1988;240:433-40

Serum phospholipase A2 in intensive care patients with peritonitis, multiple injury, and necrotizing pancreatitis. Büchler M, et al. **Klin Wochenschr** 1989 Feb 1;67(3):217-21

EPIDEMIOLOGY

Prevalence of spontaneous bacterial peritonitis at Kenyatta National Hospital. Ogutu EO, et al. **East Afr Med J** 1988 Aug;65(8):547-51

[Postoperative peritonitis in operations on the large intestine] Viiachki I, et al. **Khirurgiia (Sofiia)** 1988;41(4):100-3 (Eng. Abstr.) **(Bul)**

ETIOLOGY

Inhibition of the accumulation of macrophages and the generation of macrophage chemotactic activity by dexamethasone in concanavalin A-induced peritonitis of mice. Nagaoka I, et al. **Agents Actions** 1988 Aug; 25(1-2):156-63

Toxoplasma peritonitis in AIDS. **Am Fam Physician** 1989 Jan;39(1):284

Mycobacterium chelonae peritonitis associated with continuous ambulatory peritoneal dialysis. Merlin TL, et al. **Am J Clin Pathol** 1989 Jun;91(6):717-20

A case of Encephalitozoon cuniculi peritonitis in a patient with AIDS. Zender HO, et al. **Am J Clin Pathol** 1989 Sep; 92(3):352-6

Listeria monocytogenes peritonitis: an additional case [letter] Lopez-San Roman A, et al. **Am J Gastroenterol** 1989 Apr; 84(4):454-5

Spontaneous peritonitis due to Klebsiella oxytoca in a patient with cardiac ascites [letter] Pascual J, et al. **Am J Gastroenterol** 1988 Nov;83(11):1313-4

Listeria monocytogenes spontaneous peritonitis [letter] Pascual J, et al. **Am J Gastroenterol** 1989 Apr;84(4):455

Peritonitis following colonoscopy in a cirrhotic with ascites [letter] Shrake PD, et al. **Am J Gastroenterol** 1989 Apr; 84(4):453-4

Recurrent spontaneous bacterial peritonitis in a patient with polycythemia vera. Nagler A, et al. **Am J Hematol** 1988 Sep;29(1):54-5

Acinetobacter peritonitis during chronic peritoneal dialysis. Galvao C, et al. **Am J Kidney Dis** 1989 Aug;14(2):101-4

Catheter infections as a factor in the transfer of continuous ambulatory peritoneal dialysis patients to hemodialysis. Piraino B, et al. **Am J Kidney Dis** 1989 May;13(5):365-9

Peritoneal mucormycosis in a patient receiving continuous ambulatory peritoneal dialysis. Polo JR, et al. **Am J Kidney Dis** 1989 Mar;13(3):237-9

Peritonitis secondary to dialysis tubing contamination among patients undergoing continuous ambulatory peritoneal dialysis. Rubin J, et al. **Am J Kidney Dis** 1989 Aug; 14(2):92-5

Timing and characteristics of multiple peritonitis episodes: a report of the National CAPD Registry. Stablein DM, et al. **Am J Kidney Dis** 1989 Jul;14(1):44-9

Group A streptococcal peritonitis in a patient undergoing continuous ambulatory peritoneal dialysis. Cavalieri SJ, et al. **Am J Med** 1989 Feb;86(2):249-50

Fungal peritonitis complicating continuous ambulatory peritoneal dialysis: successful treatment with fluconazole, a new orally active antifungal agent. Levine J, et al. **Am J Med** 1989 Jun;86(6 Pt 2):825-7

Mycobacterium gordonae: an unusual peritoneal pathogen in a patient undergoing continuous ambulatory peritoneal dialysis. London RD, et al. **Am J Med** 1988 Nov; 85(5):703-4

Abdominal candidiasis in surgical patients. Alden SM, et al. **Am Surg** 1989 Jan;55(1):45-9

Disseminated coccidioidomycosis with peritonitis in a patient with acquired immunodeficiency syndrome. Prolonged survival associated with positive skin test reactivity to coccidioidin. Byrne WR, et al. **Arch Intern Med** 1989 Apr; 149(4):947-8

Comparison of peritonitis rates using standard spike versus Y sets in CAPD. Burkart JM. **ASAIO Trans** 1988 Jul-Sep; 34(3):433-6

Meconium peritonitis due to meconium ileus presenting as fetal ascites: a case report. Rachagan SP, et al. **Asia Oceania J Obstet Gynaecol** 1989 Jun;15(2):117-20

Generalized peritonitis due to spontaneous rupture of pyometra. Bui A, et al. **Aust N Z J Obstet Gynaecol** 1989 Feb;29(1):82-3 (10 ref.)

Immunological defenses in CAPD. Lamperi S, et al. **Blood Purif** 1989;7(2-3):126-43 (31 ref.)

Peritonitis in patients undergoing continuous ambulatory peritoneal dialysis. Gokal R. **Br J Clin Pract Symp Suppl** 1988 Feb;57:79-84 (29 ref.)

Inflammation generating potential of long and short fibre amosite asbestos samples. Donaldson K, et al. **Br J Ind Med** 1989 Apr;46(4):271-6

Peritonitis following diagnostic laparoscopy due to injury to a vesicourachal diverticulum. Case report. Yong EL, et al. **Br J Obstet Gynaecol** 1989 Mar;96(3):365-8

T tubes: a comparison of virgin, slit, guttered and sculpted design. Crnojevic L, et al. **Br J Surg** 1989 Apr;76(4):342-3

T tubes: virgin, slit, guttered or sculpted [letter] [see comments] Dawson JL. **Br J Surg** 1988 Sep;75(9):932. **Comment in:** Br J Surg 1989 Jan;76(1):102

Near-fatal urinary peritonitis secondary to ureteric calculus. Paraskevaides EC, et al. **Br J Urol** 1989 Apr;63(4):437-8

The role of intestinal endotoxin in experimental peritonitis. Schoeffel U, et al. **Circ Shock** 1989 Jan;27(1):83-91

Staphylococcus aureus skin carriage and development of peritonitis in patients on continuous ambulatory peritoneal dialysis. Sesso R, et al. **Clin Nephrol** 1989 May;31(5):264-8

Peritonitis prevention in CAPD by intraperitoneal IgG. Lamperi S, et al. **Contrib Nephrol** 1989;70:325-9

Statistician on Board [letter] Milsom J. **Dis Colon Rectum** 1989 Aug;32(8):729

Complication of the Russell PEG method [letter; comment] Banerjee B, et al. **Gastrointest Endosc** 1989 Mar-Apr; 35(2):132-3. **Comment on:** Gastrointest Endosc 1988 Jul-Aug;34(4):339-42

Polymorphonuclear cell count response and duration of antibiotic therapy in spontaneous bacterial peritonitis. Fong TL, et al. **Hepatology** 1989 Mar;9(3):423-6

Infections of continuous ambulatory peritoneal dialysis catheters. Vas SI. **Infect Dis Clin North Am** 1989 Jun; 3(2):301-28 (141 ref.)

Climatic factors and peritonitis in CAPD patients. Chan MK, et al. **Int J Artif Organs** 1989 Jun;12(6):366-8

Postoperative intra-abdominal and pelvic sepsis complicating ileal pouch-anal anastomosis. Scott NA, et al. **Int J Color Dis** 1988 Aug;3(3):149-52

Peritonitis and empyema following the use of dextran in tubal operations. Zamir O, et al. **Int J Gynaecol Obstet** 1989 Jun;29(2):181-3 (11 ref.)

Infections in continuous ambulatory peritoneal dialysis. Spencer RC. **J Med Microbiol** 1988 Sep;27(1):1-9 (56 ref.)

Stab wounds of the trunk; a review of clinical experience [letter] Johnson N. **J R Coll Surg Edinb** 1989 Apr;34(2):111

Acute actinomycotic peritonitis--a new presentation of chronic infection. Stanley D, et al. **J R Soc Med** 1988 Nov; 81(11):667-8

Enhancement of survival from murine polymicrobial peritonitis with increased abdominal abscess formation. Cheadle WG, et al. **J Surg Res** 1989 Aug;47(2):120-3

Idiopathic sclerosing encapsulating peritonitis. Narayanan R, et al. **Lancet** 1989 Jul 15;2(8655):127-9

Houseplant peritonitis [letter] al-Wali W, et al. **Lancet** 1988 Oct 22;2(8617):957

Campylobacter peritonitis [letter] Fleming VA, et al. **Med J Aust** 1989 Aug 21;151(4):239-40

Fimbrial phase variation and systemic E. coli infection studied in the mouse peritonitis model. Nowicki B, et al. **Microb Pathog** 1986 Aug;1(4):335-47

Contaminated povidone-iodine solution--Texas. **MMWR** 1989 Mar 3;38(8):133-4

Candida peritonitis in 2 patients on continuous ambulatory peritoneal dialysis (CAPD). Bozkurt F, et al. **Mycoses** 1988; Suppl 1:69-74

Aspergillus niger peritonitis [letter] Rodriguez-Tudela JL, et al. **Nephrol Dial Transplant** 1988;3(2):232

Loss of mesothelial electronegative fixed charges during murine septic peritonitis. Gotloib L, et al. **Nephron** 1989; 51(1):77-83

Generalized lymphadenopathy in continuous ambulatory peritoneal dialysis patients associated with Staphylococcus epidermidis infection. Pollock CA, et al. **Nephron** 1989; 52(1):81-2

Spontaneous streptococcal peritonitis in renal transplant recipient [letter] Shaked Y, et al. **Nephron** 1988;50(1):72

Peritonitis due to perforated mesenteric fibroma--an hormonal aetiology? Cole RP. **Postgrad Med J** 1988 Dec; 64(758):971-2

Corynebacterium equi peritonitis in a patient receiving peritoneal dialysis. Franklin DB Jr, et al. **South Med J** 1989 Aug;82(8):1046-7

Trichosporon beigelii peritonitis. Parsonnet J. **South Med J** 1989 Aug;82(8):1062-3

Brucellosis: atypical presentation with peritonitis and meningitis. Diab SM, et al. **Trop Geogr Med** 1989 Apr; 41(2):160-3

Peritonitis in children with nephrotic syndrome. Mannenbach M, et al. **Wis Med J** 1988 Oct;87(10):21-3

Stomatococcus mucilaginosus as an agent of CAPD peritonitis. Lanzendörfer H, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1-2):326-8

[Peritonitis in continuous ambulatory peritoneal dialysis. Experiences after 7 years] Ejlersen E, et al. **Ugeskr Laeger** 1989 Feb 27;151(9):563-6 (Eng. Abstr.) **(Dan)**

[A case of peritonitis due to perforation of the small intestines of tubercular etiology. Review of the literature] Chazelet C, et al. **Ann Gastroenterol Hepatol (Paris)** 1988 Oct; 24(5):243-7 (15 ref.) (Eng. Abstr.) **(Fre)**

[Primary meningococcal peritonitis] Saint-Martin J, et al. **Ann Pediatr (Paris)** 1988 Oct;35(8):600-1 **(Fre)**

[Spontaneous perforation of the bile ducts] Brault D, et al. **Arch Fr Pediatr** 1989 Mar;46(3):209-10 (Eng. Abstr.) **(Fre)**

[Neoplastic colonic perforation into the free peritoneum. Therapeutic choice. Apropos of 40 cases] Barth X, et al. **Chirurgie** 1988;114(9):669-77 (53 ref.) (Eng. Abstr.) **(Fre)**

[Prognosis of spontaneous ascitic infection in cirrhotic patients] Ink O, et al. **Gastroenterol Clin Biol** 1989 Jun; 13(6-7):556-61 (Eng. Abstr.) **(Fre)**

[Spontaneous bacterial peritonitis caused by Acinetobacter calcoaceticus. A rare nosocomial infection in the cirrhotic patient (letter)] Sureda A, et al. **Presse Med** 1988 Nov 12; 17(40):2137-8 **(Fre)**

[Peritonitis due to a "minor" salmonella. Case presentation and review of the literature] Humair L, et al. **Rev Med Suisse Romande** 1988 Dec;108(12):1017-21 (0 ref.) **(Fre)**

[Anastomoses of the large intestine in standardized diffuse peritonitis in the rat] Wilker D, et al. **Zentralbl Chir** 1988; 113(15):993-1001 (Eng. Abstr.) **(Ger)**

[Periphepatitis (Fitz-Hugh-Curtis syndrome)] Hagay JZ, et al. **Harefuah** 1989 Mar 15;116(6):325-7 (33 ref.) **(Heb)**

[A case of leiomyosarcoma of the small intestine with perforative peritonitis] Sakai N, et al. **Gan No Rinsho** 1988 Sep;34(11):1607-12 (18 ref.) (Eng. Abstr.) **(Jpn)**

[A case of peritonitis caused by Mycoplasma hominis] Shimada M, et al. **Kansenshogaku Zasshi** 1988 Sep; 62(9):841-4 (Eng. Abstr.) **(Jpn)**

[Spontaneous bacterial peritonitis in a patient with congenital hepatic fibrosis and Caroli's disease] Pereira-Lima JE, et

al. **Arq Gastroenterol** 1988 Jan-Mar;25(1):29-32 (Eng. Abstr.) **(Por)**
[Risk of developing peritonitis after cesarean section] Anisimova MI, et al. **Akush Ginekol (Mosk)** 1989 Mar; (3):42-4 (Eng. Abstr.) **(Rus)**
[The role of the activation of lipid peroxidation in the pathogenesis of experimental peritonitis] Koniukhova SG, et al. **Biull Eksp Biol Med** 1989 May;107(5):557-9 (Eng. Abstr.) **(Rus)**
[Diagnosis and treatment of postoperative peritonitis (review of foreign literature 1980-1985)] Bachev II. **Khirurgiia (Mosk)** 1988 Sep;(9):148-51 (51 ref.) **(Rus)**
[Clinico-laboratory characteristics of appendicular peritonitis in children and the principles of antibacterial therapy] Sultanbaev TZh, et al. **Khirurgiia (Mosk)** 1988 Jul;(7):63-6 (Eng. Abstr.) **(Rus)**
[Peritonitis caused by the rupture of a teratoma] Chopik II, et al. **Klin Khir** 1989;(5):63 **(Rus)**
[Acute inflammation of the appendix located in the mesentery of the transverse colon] Kovalenko IV. **Klin Khir** 1989; (4):63-4 **(Rus)**
[A retroperitoneal urinary phlegmon with abscess formation and rupture into the abdominal cavity, development of local peritonitis and secondary appendicitis] Kozlov VG, et al. **Klin Khir** 1988;(12):54 **(Rus)**
[Peritonitis in diseases of the colon] Sakhautdinov VG, et al. **Sov Med** 1988;(11):94-6 **(Rus)**
[Biliary ascites and biliary peritonitis] Nikolaev NO, et al. **Vestn Khir** 1988 Dec;141(12):25-8 (Eng. Abstr.) **(Rus)**
[Perforative appendicitis complicated by diffuse peritonitis in an intramesenteric location of the appendix] Polukhin SI, et al. **Vestn Khir** 1988 Dec;141(12):39-40 **(Rus)**
[Peritonitis as a complication of mediastinitis secondary to a dental abscess (letter)] Cisneros Alonso C, et al. **Rev Clin Esp** 1988 May;182(8):448-9 **(Spa)**
[The Kehr T tube and biliary peritonitis caused by its removal. Prevention] Díez Cascón A, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 2):455-9 (Eng. Abstr.) **(Spa)**
[Primary peritonitis in a heroin addict] Iturburu Belmonte I, et al. **Rev Esp Enferm Apar Dig** 1988 Sep;74(3):275-7 (Eng. Abstr.) **(Spa)**
[Biliary peritonitis after hepatic biopsy: favorable course with conservative medical treatment] Planas R, et al. **Rev Esp Enferm Apar Dig** 1989 Mar;75(3):281-3 (14 ref.) (Eng. Abstr.) **(Spa)**
[Granulomatous peritonitis due to starch. Apropos of a case] Urdiales Cabal G, et al. **Rev Esp Enferm Apar Dig** 1989 Apr;75(4):411-3 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Changes in the germinal centre and lymphocytic corona after peritoneal inflammation. Steer HW. **Adv Exp Med Biol** 1988;237:251
Role of an intraperitoneal catheter implant in the pathogenesis of experimental Staphylococcus epidermidis peritoneal infection in renal failure mice. Gallimore B, et al. **Am J Nephrol** 1988;8(4):334-43
Immunologic patterns in CAPD patients with peritonitis. Lamperi S, et al. **Clin Nephrol** 1988;30 Suppl 1:S41-4 (23 ref.)
Resistance to peritonitis following disruption of peritoneal mast cells. Shin R, et al. **J Surg Res** 1988 Dec;45(6):565-7
Breakdown of C3 complement and IgG in peritonitis exudate--pathophysiological aspects and therapeutic approach. Billing A, et al. **Prog Clin Biol Res** 1989; 308:527-33
[Insufficiency of intra-abdominal immunity to infection in purulent peritonitis--sequela of disordered foreign body opsonization] Billing A, et al. **Klin Wochenschr** 1989 Mar 15;67(6):349-56 (Eng. Abstr.) **(Ger)**
[Comparative characteristics of various indicators of body reactivity in patients with septic complications after cesarean section and in women with a normal course of the postoperative period] Khodzhaeva AS, et al. **Akush Ginekol (Mosk)** 1988 Jul;(7):57-9 (Eng. Abstr.) **(Rus)**
[Clinico-immunologic characteristics of patients with suppurative complications of acute cholecystitis] Khokhlich IaI, et al. **Klin Khir** 1988;(9):8-10 (Eng. Abstr.) **(Rus)**

METABOLISM

Effect of dichloroacetate on plasma and hepatic amino acids in sterile inflammation and sepsis. Vary TC, et al. **Arch Surg** 1989 Sep;124(9):1071-7
Peritoneal clearances. Long-term study. Procaccini DA, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):437-40
Early impairment of oxidative metabolism and energy production in severe sepsis. Astiz M, et al. **Circ Shock** 1988 Nov;26(3):311-20
Alterations in rat aortic alpha 1-adrenoceptors and alpha 1-adrenergic stimulated phosphoinositide hydrolysis in intraperitoneal sepsis. Carcillo JA, et al. **Circ Shock** 1988 Nov;26(3):331-9
Postinflammatory increase of lymphatic absorption from the peritoneal cavity: role of diaphragmatic stomata. Levine S, et al. **Microcirc Endothelium Lymphatics** 1988 Oct; 4(5):399-413
Effect of phosphatidylcholine on peritoneal transport and lymphatic absorption in a CAPD patient with sclerosing peritonitis. Struijk DG, et al. **Nephron** 1989;51(4):577-8
Proteases and protease inhibitor balance in peritonitis with different causes. Delshammar M, et al. **Surgery** 1989 Sep; 106(3):555-62
[Diffusion of ceftriaxone in healthy and infected peritoneal tissue] Rio Y, et al. **Pathol Biol (Paris)** 1989 May; 37(5):437-41 (Eng. Abstr.) **(Fre)**
[Status of nitrogen balance and parenteral feeding in peritonitis] Ashkhamaf MKh. **Vestn Khir** 1988 Oct; 141(10):39-42 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Peritonitis involving Capnocytophaga ochracea. Testillano Tarrero M, et al. **Am J Gastroenterol** 1989 Feb;84(2):206-7
Response of chronic renal failure mice to peritoneal Staphylococcus epidermidis challenge: impact of repeated peritoneal instillation of dialysis solution. Gallimore B, et al. **Am J Kidney Dis** 1989 Sep;14(3):184-95
A prospective evaluation of blood culture versus standard plate techniques for diagnosing peritonitis in continuous ambulatory peritoneal dialysis. Holley JL, et al. **Am J Kidney Dis** 1989 Mar;13(3):184-8
Peritonitis due to Methylobacterium mesophilicum complicating ambulatory peritoneal dialysis--British Columbia. Dewar JW, et al. **Can Dis Wkly Rep** 1988 Dec 3;14(48):217-9 **(Eng, Fre)**
Primary pneumococcal peritonitis in patients with cardiac ascites: report of 2 cases. Shaked Y, et al. **Cardiology** 1988; 75(5):372-4
Prevalence of peritonitis-associated coagulase-negative staphylococci on the skin of continuous ambulatory peritoneal dialysis patients. Beard-Pegler MA, et al. **Epidemiol Infect** 1989 Jun;102(3):365-78
Spontaneous peritonitis caused by Neisseria meningitidis serogroup B [letter] Bella Cueto F, et al. **Eur J Clin Microbiol Infect Dis** 1988 Oct;7(5):695
Spontaneous bacterial peritonitis [letter] Mathur MD, et al. **J Assoc Physicians India** 1988 Mar;36(3):238-9
Flavimonas oryzihabitans (Pseudomonas oryzihabitans; CDC group Ve-2): an emerging pathogen in peritonitis related to continuous ambulatory peritoneal dialysis? Bendig JW, et al. **J Clin Microbiol** 1989 Jan;27(1):217-8
Peritonitis caused by Pseudomonas mesophilica in a patient undergoing continuous ambulatory peritoneal dialysis. Rutherford PC, et al. **J Clin Microbiol** 1988 Nov; 26(11):2441-3
Pathogenicity of enterococci in a rat model of fecal peritonitis. Matlow AG, et al. **J Infect Dis** 1989 Jul; 160(1):142-5
Reciprocal synergy between Escherichia coli and Bacteroides fragilis in an intra-abdominal infection model. Rotstein OD, et al. **J Med Microbiol** 1989 Aug;29(4):269-76
[Peritonitis, septic shock and endotoxin--an animal experiment study] Gögler H, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(3):159-67 (Eng. Abstr.) **(Ger)**

MORTALITY

Factors influencing the outcome of E. coli peritonitis in rats. Andersson R, et al. **Acta Chir Scand** 1989 Mar;155(3):155-7
[Significance of bacterial shock to thanatogenesis in peritonitis] Kan'shina NF. **Arkh Patol** 1989;51(5):18-23 (Eng. Abstr.) **(Rus)**
[Postoperative mortality in incarcerated abdominal hernia] Ukhanov AP. **Khirurgiia (Mosk)** 1988 Dec;(12):77-8 (Eng. Abstr.) **(Rus)**
[Analysis of the causes of postoperative mortality in tumor-related large-intestinal obstruction] Dotsenko AP, et al. **Klin Khir** 1989;(4):19-22 (Eng. Abstr.) **(Rus)**
[Analysis of mortality in acute peritonitis] Glumov VIa, et al. **Sov Med** 1988;(11):96-9 **(Rus)**
[Causes of insufficient reduction of mortality rate after operations for incarcerated external ventral hernia] Napalkov PN. **Vestn Khir** 1988 Sep;141(9):111-6 **(Rus)**
[Risk factors in perforated gastroduodenal ulcer] Zaĭtsev VT, et al. **Vestn Khir** 1988 Oct;141(10):124-7 **(Rus)**

PARASITOLOGY

Granulomatous peritonitis caused by Ascaris eggs: a report of three cases. Walter N, et al. **J Trop Med Hyg** 1989 Feb; 92(1):17-9

PATHOLOGY

Cytology of peritoneal fluid from patients on continuous ambulatory peritoneal dialysis. Fok FK, et al. **Acta Cytol** 1989 Sep-Oct;33(5):595-8
Monitoring of the inflammatory response in early peritonitis. Schöffel U, et al. **Am J Surg** 1989 Jun;157(6):567-72
Kinetics of changes in peritoneal cell populations following acute inflammation. Melnicoff MJ, et al. **Cell Immunol** 1989 Jan;118(1):178-91
Pentoxifylline reduces pulmonary leucostasis and improves capillary patency in a rabbit peritonitis model. Tighe D, et al. **Circ Shock** 1989 Jun;28(2):159-64
Multi-organ damage resulting from experimental faecal peritonitis. Tighe D, et al. **Clin Sci** 1989 Mar;76(3):269-76
Sclerosing peritonitis. Lee RG. **Dig Dis Sci** 1989 Sep; 34(9):1473-6
Meconium peritonitis in stillbirths. Yavner DL, et al. **Pediatr Pathol** 1988;8(6):617-23
Peritonitis and massive granulocytic infiltration of the spleen in adult Still's disease. Poralla T, et al. **Z Rheumatol** 1988 Sep-Oct;47(5):364-5
[The Mannheim Peritonitis Index. Its reliability for the assessment of prognosis in peritonitis patients] Schirrmacher E, et al. **Fortschr Med** 1988 Jul 30; 106(22):454-6 (Eng. Abstr.) **(Ger)**
[Early phase of healing of anastomoses with special reference to peritonitis and ischemia] Wilker D, et al. **Langenbecks Arch Chir** 1988;373(4):217-21 (Eng. Abstr.) **(Ger)**
[The cell morphology of peritoneal exudate in the course of bacterial peritonitis (experimental animal studies)] Dittrich I, et al. **Z Exp Chir Transplant Kunstliche Organe** 1988;21(6):313-21 (Eng. Abstr.) **(Ger)**
[Course over several decades of echinococcosis with peritoneal and pulmonary spread] Rösner K. **Z Gesamte Inn Med** 1988 Jul 15;43(14):397-8 (Eng. Abstr.) **(Ger)**
[Scanning electron microscopy study of the peritoneum as a dialysis membrane--a morphological study on the etiology of sclerosing peritonitis] Korten G, et al. **Z Urol Nephrol** 1988 Jul;81(7):473-9 (Eng. Abstr.) **(Ger)**
[Features of the destructive and reparative processes of the liver in various types of acute experimental peritonitis] Glumov VIa, et al. **Arkh Patol** 1989;51(5):33-9 (Eng. Abstr.) **(Rus)**
[Changes in the intraorganic vessels of the liver in acute experimental peritonitis] Ivanova GS, et al. **Arkh Patol** 1988;50(7):51-8 (Eng. Abstr.) **(Rus)**
[Morphology of mesotheliocytes from liver capsule in normal conditions and in experimental peritonitis] Khoroshaev va. **Biull Eksp Biol Med** 1988 Sep;106(9):374-7 (Eng. Abstr.) **(Rus)**
[Stages of appendicular peritonitis in children] Solov'ev AE, et al. **Klin Khir** 1989;(6):1-4 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Dietary iron and recovery from peritonitis in guinea pigs. Peck MD, et al. **Am J Clin Nutr** 1989 Sep;50(3):524-7
The time course of peritoneal transport kinetics in continuous ambulatory peritoneal dialysis patients who develop sclerosing peritonitis. Krediet RT, et al. **Am J Kidney Dis** 1989 Apr;13(4):299-307
Interleukin-1 mimics the hyperalgesia induced by a factor obtained by macrophage lysis. Francischi JN, et al. **Braz J Med Biol Res** 1988;21(2):321-31
Association between renal and sympathetic responses to nonhypotensive systemic sepsis. Cumming AD, et al. **Crit Care Med** 1988 Nov;16(11):1132-7
[Fetal meconium peritonitis. Case report] Piattelli L. **Riv Eur Sci Med Farmacol** 1987 Jun;9(2):165-6 (Eng. Abstr.) **(Ita)**
[Effect of acetylcholine on histamine liberation in the early phase of acute aseptic inflammation] Lipshits RU, et al. **Fiziol Zh** 1988 Jul-Aug;34(4):53-6 (Eng. Abstr.) **(Rus)**
[Adaptation reactions in acute peritonitis and their correction using sorption detoxification] Poluéktov LV, et al. **Klin Khir** 1989;(3):43-5 (Eng. Abstr.) **(Rus)**
[Early signs of decompression of the body in acute suppurative peritonitis and ways of increasing the effectiveness of intensive therapy] Shifrin GA, et al. **Klin Khir** 1989;(1):29-31 (Eng. Abstr.) **(Rus)**
[Decompressive volume load as a method of evaluating the functional reserves of the heart] Arinchin VN. **Pediatriia** 1988;(4):50-4 **(Rus)**
[Indicators of the sympathetico-adrenal system in patients with peritonitis after hyperbaric oxygenation] Belokurov IuN, et al. **Vestn Khir** 1989 Feb;142(2):37-41 (Eng. Abstr.) **(Rus)**
[Hepatocyte function and hepatic blood flow in patients with peritonitis] Zhadkevich MM, et al. **Vestn Khir** 1988 Sep; 141(9):26-30 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Inhibition of peritonitis by amide local anesthetics. Rimbäck G, et al. **Anesthesiology** 1988 Dec;69(6):881-6
Response of CAPD patients with a high incidence of peritonitis to intraperitoneal immunoglobulin therapy. Carozzi S, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):635-9
The use of oxygen free radical scavengers in the rat peritonitis model. Limm WM, et al. **Basic Life Sci** 1988; 49:721-4
Peritonitis prevention in CAPD. Carozzi S, et al. **Clin Nephrol** 1988;30 Suppl 1:S45-8
Prevention of intra-abdominal abscesses by fibrinolysis using recombinant tissue plasminogen activator. Rotstein OD, et al. **J Infect Dis** 1988 Oct;158(4):766-72
[Chloramine T solution for intraoperative peritoneal lavage. A statistical analysis] Effenberger T. **Zentralbl Chir** 1988; 113(15):959-67 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

[CT features of peritonitis carcinomatosa] Ishii C, et al. **Rinsho Hoshasen** 1988 Dec;33(13):1671-5 (Eng. Abstr.) **(Jpn)**

SURGERY

Small-bowel perforation complicating the open treatment of

generalized peritonitis. Mastboom WJ, et al. **Arch Surg** 1989 Jun;124(6):689–92
Percutaneous drainage of subphrenic biliary collections using a Ring–McLean sump catheter. Brough WA, et al. **Aust N Z J Surg** 1988 Jul;58(7):579–81
Open abdomen technique in the treatment of peritonitis. Korepanov VI. **Br J Surg** 1989 May;76(5):471
Definitive one-stage emergency large bowel surgery. Mealy K, et al. **Br J Surg** 1988 Dec;75(12):1216–9
Intraincisional antibiotic in addition to systemic antibiotic treatment fails to reduce wound infection rates in contaminated abdominal surgery. A controlled clinical trial. Moesgaard F, et al. **Dis Colon Rectum** 1989 Jan;32(1):36–8
Postoperative peritoneal lavage in generalised peritonitis. A prospective analysis. Kumar GV, et al. **Int Surg** 1989 Jan–Mar;74(1):20–2
Intraperitoneal ascariasis. Rao PL, et al. **J Pediatr Surg** 1988 Oct;23(10):936–8
[Emergency mechanical colorectal anastomosis in septic peritoneum. Apropos of 46 cases of peritonitis caused by sigmoid perforation including 30 generalized cases] Cady J, et al. **Ann Chir** 1988;42(9):647–51 (18 ref.) (Eng. Abstr.) **(Fre)**
[Validation study of the Mannheim Peritonitis Index] Függer R, et al. **Chirurg** 1988 Sep;59(9):598–601 (Eng. Abstr.) **(Ger)**
[Emergency interventions in complicated colonic diverticulosis] Wehrli H, et al. **Helv Chir Acta** 1988 Jun; 55(1–2):55–9 (Eng. Abstr.) **(Ger)**
[Diverticular perforation of the colon. Therapeutic guidelines] Catona A, et al. **Minerva Chir** 1989 Mar 31; 44(6):973–4 (Eng. Abstr.) **(Ita)**
[Treatment of septic complications in diverticular disease of the colon] Viti M, et al. **Minerva Chir** 1989 Jun 30; 44(12):1633–6 (Eng. Abstr.) **(Ita)**
[Programmed reoperations in the treatment of severe peritoneal infections] Rasslan S, et al. **Rev Paul Med** 1988 Mar–Apr;106(2):81–4 (18 ref.) (Eng. Abstr.) **(Por)**
[Primary acute peritonitis in adults] Rădulescu D, et al. **Rev Chir [Chir]** 1989 Mar–Apr;38(2):127–36 (Eng. Abstr.) **(Rum)**
[Treatment of postoperative peritonitis] Bytka PF, et al. **Akush Ginekol (Mosk)** 1988 May;(5):63–5 **(Rus)**
[Controlled laparostomy in the surgical treatment of peritonitis] Brekhov EI, et al. **Khirurgiia (Mosk)** 1988 Dec; (12):23–8 **(Rus)**
[Controlled laparostomy in the treatment of peritonitis] Prusov AL, et al. **Khirurgiia (Mosk)** 1989 Feb;(2):10–3 **(Rus)**
[Semi-open and open methods of treating disseminated purulent peritonitis] Shurkalin BK, et al. **Khirurgiia (Mosk)** 1989 Feb;(2):7–10 **(Rus)**
[Prevention and treatment of postoperative intestinal paresis with serotonin–adipinate] Stupin VA, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):113–5 **(Rus)**
[Acute omentitis] Butsenko VN, et al. **Klin Khir** 1989;(1):34–6 (Eng. Abstr.) **(Rus)**
[Postoperative dynamic laparoscopy in children] Gubov IuP, et al. **Klin Khir** 1989;(6):47–8 (Eng. Abstr.) **(Rus)**
[Hemosorption and intra-arterial infusion of drugs in the complex treatment of diffuse peritonitis] Isaev IuV, et al. **Klin Khir** 1989;(1):57 **(Rus)**
[Use of acupuncture for restoring motor and transit functions of the stomach and intestines in suppurative peritonitis] Kabanov AN, et al. **Klin Khir** 1989;(1):33–4 (Eng. Abstr.) **(Rus)**
[Programmed laparotomy as a method of dynamic observation of the status of the abdominal organs] Mi'lkov BO, et al. **Klin Khir** 1989;(1):58–9 **(Rus)**
[Use of membrane drainage in treating suppurative peritonitis] Nifantév OE, et al. **Klin Khir** 1989;(1):31–3 (Eng. Abstr.) **(Rus)**
[A method of treating diffuse postoperative peritonitis] Shalimov SA, et al. **Klin Khir** 1989;(4):44–7 (Eng. Abstr.) **(Rus)**
[Drainage of the abdominal cavity in appendicular peritonitis in children] Tiktinskiĭ VS, et al. **Klin Khir** 1989;(6):4–6 (Eng. Abstr.) **(Rus)**
[Acute suppurative peritonitis in children] Topuzov VS, et al. **Klin Khir** 1988;(6):16–9 (Eng. Abstr.) **(Rus)**
[Postoperative laparoscopic treatment of diffuse suppurative peritonitis] Lutsevich OE, et al. **Sov Med** 1989;(1):32–5 (Eng. Abstr.) **(Rus)**
[Drainage of the abdominal cavity in peritonitis] Myshkin KI, et al. **Sov Med** 1989;(5):94–7 **(Rus)**
[The use of lysozyme in surgical practice] Briskin BS, et al. **Vestn Khir** 1988 Oct;141(10):118–21 **(Rus)**
[Open treatment of postoperative peritonitis] Bytka PF, et al. **Vestn Khir** 1988 Oct;141(10):109–11 **(Rus)**
[Direct blood transfusion in the complex treatment of children with suppurative surgical infection] Kushch NL, et al. **Vestn Khir** 1988 Aug;141(8):106–8 (Eng. Abstr.) **(Rus)**
[Double resection of the intestines] Magomedov AD, et al. **Vestn Khir** 1988 Jun;140(6):94–5 **(Rus)**
[Surgical tactics in peritonitis] Mil'kov BO, et al. **Vestn Khir** 1988 Sep;141(9):104–6 **(Rus)**
[A "semi-open" method of treating diffuse suppurative peritonitis] Potanin VK. **Vestn Khir** 1988 Sep;141(9):106–7 **(Rus)**
[Diagnosis and therapeutic tactics in destructive cholecystitis in middle-aged and elderly patients] Rodionov VV, et al. **Vestn Khir** 1989 Jan;142(1):110–3 **(Rus)**
[Plasmapheresis in the intensive therapy of renal insufficiency] Starikov AV. **Vestn Khir** 1989 Mar; 142(3):16–20 (Eng. Abstr.) **(Rus)**
[Plasmapheresis in severe forms of suppurative-septic diseases in children] Tsuman VG, et al. **Vestn Khir** 1988 Jun;140(6):67–70 (Eng. Abstr.) **(Rus)**
[Surgical treatment of postoperative ventral hernia using a modification of the Napalkov method] Uglov FG, et al. **Vestn Khir** 1989 Jan;142(1):100–4 (Eng. Abstr.) **(Rus)**
[Laparotomy is a better method in the treatment of intra-abdominal infections] Broomé A. **Lakartidningen** 1989 Jan 18;86(3):122 **(Swe)**

THERAPY

Successful treatment of Aspergillus peritonitis complicating peritoneal dialysis. Prewitt K, et al. **Am J Kidney Dis** 1989 Jun;13(6):501–3
The value of continuous 72-hour peritoneal lavage for peritonitis. Dobrin PB, et al. **Am J Surg** 1989 Apr; 157(4):368–71; discussion 371
A new model for studying nutrition in peritonitis. The adverse effect of overfeeding. Alexander JW, et al. **Ann Surg** 1989 Mar;209(3):334–40
Low protein diets improve survival from peritonitis in guinea pigs. Peck MD, et al. **Ann Surg** 1989 Apr;209(4):448–54
Role of catheter removal in therapy of bacterial peritonitis of continuous ambulatory peritoneal dialysis. Zappacosta AR, et al. **ASAIO Trans** 1989 Jan–Mar;35(1):40–5
Percutaneous drainage of subphrenic biliary collections using a Ring–McLean sump catheter. Brough WA, et al. **Aust N Z J Surg** 1988 Jul;58(7):579–81
Withdrawal of continuous ambulatory peritoneal dialysis to treat mild peritonitis. Pagniez DC, et al. **BMJ** 1988 Nov 5;297(6657):1174–5
Treatment of resistant CAPD peritonitis by temporary discontinuation of peritoneal dialysis. Cairns HS, et al. **Clin Nephrol** 1989 Jul;32(1):27–30
Transnasal biliary drainage for treatment of common bile duct leakage and bile peritonitis. Toriumi D, et al. **Dig Dis Sci** 1989 Feb;34(2):315–9
Removal and replacement of Tenckhoff catheter at single operation [letter] Ludlam HA, et al. **Lancet** 1989 May 6; 1(8645):1028
Stimulation of phagocytosis by immunoglobulins in animal experiment. Frick SW, et al. **Prog Clin Biol Res** 1989; 308:1037–41
The effects of hyperoxia during fulminant sepsis. Garner WL, et al. **Surgery** 1989 Jun;105(6):747–51
[Resuscitation of newborn infants with peritonitis] Boĭcheva A, et al. **Khirurgiia (Sofiia)** 1988;41(5):29–32 **(Bul)**
[Treatment of intra-abdominal sepsis and necrotizing pancreatitis with staged lavage using a Zipper] Vermassen F, et al. **Acta Chir Belg** 1989 Mar–Apr;89(2):77–81 (Eng. Abstr.) **(Dut)**
[Should acute diffuse appendicular peritonitis be drained?] Fodha M, et al. **Tunis Med** 1987 Aug–Sep;65(8–9):511–4 (10 ref.) (Eng. Abstr.) **(Fre)**
[Peritoneal dialysis in hemolytic–uremic syndrome following ileocecal resection for invagination in postoperative peritonitis] Deindl C, et al. **Z Kinderchir** 1989 Jun; 44(3):169–71 (Eng. Abstr.) **(Ger)**
[Phase II clinical study of LC9018 on carcinomatous peritonitis of gastric cancer. Subgroup for Carcinomatous Peritonitis, Cooperative, Study Group of LC9018] Okamura T, et al. **Gan To Kagaku Ryoho** 1989 Jun; 16(6):2257–62 (Eng. Abstr.) **(Jpn)**
[Effect of hyperbaric oxygenation on kidney functions and blood acid–base equilibrium of patients with diffuse peritonitis] Borukhov SA, et al. **Anesteziol Reanimatol** 1988 Nov–Dec;(6):68–70 (Eng. Abstr.) **(Rus)**
[X-ray irradiation of donor blood in the complex treatment of suppurative diseases] Ermolov AS, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):46–51 (Eng. Abstr.) **(Rus)**
[Programmed peritoneal lavage in suppurative complications of perforated ulcer of the stomach] Kuzin NM, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):121–3 **(Rus)**
[Plasmapheresis with extracorporeal membrane oxygenation of the blood in the treatment of peritonitis] Abdullaev EG, et al. **Klin Khir** 1989;(4):47–8 (Eng. Abstr.) **(Rus)**
[Lymphotropic antibacterial therapy and the stimulation of lymphatic drainage in the combined treatment of peritonitis in children] Sultanbaev TZh, et al. **Klin Khir** 1988;(6):43–5 (Eng. Abstr.) **(Rus)**
[Methods and means of controlling endogenous toxemia and multiple organ failure in peritonitis] Bachev II. **Klin Med (Mosk)** 1989 May;67(5):28–32 (35 ref.) **(Rus)**
[Sorption methods and laser irradiation in the treatment of suppurative and septic diseases] Dedenko IK, et al. **Vestn Khir** 1989 Mar;142(3):12–6 (Eng. Abstr.) **(Rus)**
[Non-operative sanitation of suppurative-septic foci] Lytkin MI, et al. **Vestn Khir** 1989 Feb;142(2):3–8 (Eng. Abstr.) **(Rus)**
[Experimental substantiation of enterosorption with polyfepan in acute peritonitis] Miroshnichenko AG, et al. **Vestn Khir** 1988 Sep;141(9):97–8 **(Rus)**
[Effect of enteral feeding on protein metabolism in patients with peritonitis] Zhadkevich MM, et al. **Vestn Khir** 1989 Jan;142(1):19–21 (Eng. Abstr.) **(Rus)**
[Intestinal decompression and transintestinal infusions in the combined treatment of peritonitis in penetrating abdominal wounds] Pashkevich VI, et al. **Voen Med Zh** 1989 Jan; (1):33–6 **(Rus)**
[Scheduled lavage is an uncertain therapeutic method in intra-abdominal infection] Nyström O, et al. **Lakartidningen** 1988 Nov 30;85(48):4208–9 **(Swe)**

TRANSMISSION

Peritonitis in peritoneal dialysis: bacterial colonization by biofilm spread along the catheter surface. Read RR, et al. **Kidney Int** 1989 Feb;35(2):614–21

URINE

The urine from patients with peritonitis as a rich source for purifying human acid sphingomyelinase and other lysosomal enzymes. Quintern LE, et al. **Biochim Biophys Acta** 1989 Jun 8;1003(2):121–4

VETERINARY

Biological and pathological consequences of feline infectious peritonitis virus infection in the cheetah. Evermann JF, et al. **Arch Virol** 1988;102(3–4):155–71
Generalized peritonitis in dogs: 50 cases (1975–1986). Hosgood G, et al. **J Am Vet Med Assoc** 1988 Dec 1; 193(11):1448–50
Effects of castration on peritoneal fluid in the horse. Schumacher J, et al. **J Vet Intern Med** 1988 Jan–Mar; 2(1):22–5
Haematology and serum biochemistry in the racing greyhound following intraperitoneal povidone–iodine. Ndikuwera J, et al. **Vet Res Commun** 1988;12(1):77–86
Increased plasma levels of leukotriene B4 and prostaglandin E2 in cats experimentally inoculated with feline infectious peritonitis virus. Weiss RC, et al. **Vet Res Commun** 1988; 12(4–5):313–23
Intraperitoneal circulation and drainage in the dog. Hosgood G, et al. **Vet Surg** 1989 Jul–Aug;18(4):261–8
A potential technique error in stapled side-to-side anastomosis of the small intestine of the horse. Mackey VS, et al. **Vet Surg** 1987 May–Jun;16(3):189–92
Comparative features of a coronavirus isolated from a cheetah with feline infectious peritonitis. Evermann JF, et al. **Virus Res** 1989 May;13(1):15–27
[The frequency and pathogenesis of feline infectious peritonitis (FIP)] Walter JH, et al. **DTW** 1989 Apr; 96(4):194–6, 201 (Eng. Abstr.) **(Ger)**

PERITONSILLAR ABSCESS

[Peritonsillar abscess in a 4-month-old child] Lapetus VF. **Vestn Otorinolaringol** 1988 Jul–Aug;(4):77 **(Rus)**

DIAGNOSIS

Mucocutaneous lymph node syndrome (Kawasaki syndrome) mimicking a suppurative parapharyngeal space infection. Case report and review of the literature. Ruef C. **Helv Paediatr Acta** 1989 Feb;43(4):307–12 (25 ref.)

DRUG THERAPY

Peritonsillar abscess in an infant. Zohar S, et al. **Int J Pediatr Otorhinolaryngol** 1988 Sep;15(3):291–4

MICROBIOLOGY

[Microflora of the paratonsillar abscesses] Mironov AA, et al. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):49–52 (Eng. Abstr.) **(Rus)**
[Non-spore-forming anaerobes in suppurative-inflammatory diseases of the ORL organs] Mironov AIu, et al. **Vestn Otorinolaringol** 1989 Mar–Apr;(2):62–6 (Eng. Abstr.) **(Rus)**

THERAPY

Peritonsillar abscess in children and its indication for tonsillectomy. Wolf M, et al. **Int J Pediatr Otorhinolaryngol** 1988 Nov;16(2):113–7

PERMEABILITY

Data on gloves disputed [letter] Fay MF. **AORN J** 1989 May; 49(5):1194
Enhanced macromolecular permeability of aortic endothelial cells in association with mitosis [published erratum appears in Atherosclerosis 1989 Jul;78(1):87] Lin SJ, et al. **Atherosclerosis** 1988 Oct;73(2–3):223–32
Magainin 1–induced leakage of entrapped calcein out of negatively-charged lipid vesicles. Matsuzaki K, et al. **Biochim Biophys Acta** 1989 May 19;981(1):130–4
The epithelial tight junction: structure, function and preliminary biochemical characterization. Stevenson BR, et al. **Mol Cell Biochem** 1988 Oct;83(2):129–45 (127 ref.)

PERMEABILITY, CAPILLARY see **CAPILLARY PERMEABILITY**

PERMEABILITY, CELL MEMBRANE see **CELL MEMBRANE PERMEABILITY**

PERMEABILITY, TOOTH see **TOOTH PERMEABILITY**

PERMEASES

Orientation of substrate and two conformations of lactose permease. Dornmair K, et al. **Biochemistry** 1988 Jul 12; 27(14):5008–13

The transmembrane topology of the sn–glycerol–3–phosphate permease of Escherichia coli analysed by phoA and lacZ protein fusions. Gött P, et al. **Mol Microbiol** 1988 Sep;2(5):655–63

GENETICS

Site–directed mutagenesis of Pro327 in the lac permease of Escherichia coli. Lolkema JS, et al. **Biochemistry** 1988 Nov 1;27(22):8307–10

Site–directed mutagenesis of tyrosine residues in the lac permease of Escherichia coli. Roepe PD, et al. **Biochemistry** 1989 Jul 11;28(14):6127–32

Galactoside–dependent proton transport by mutants of the Escherichia coli lactose carrier: substitution of tyrosine for histidine–322 and of leucine for serine–306. King SC, et al. **Biochim Biophys Acta** 1989 Jul 10;982(2):253–64

Positive and negative regulatory elements control the expression of the UGA4 gene coding for the inducible 4–aminobutyric–acid–specific permease in Saccharomyces cerevisiae. Vissers S, et al. **Eur J Biochem** 1989 May 1; 181(2):357–61

Molecular evolution of the telomere–associated MAL loci of Saccharomyces. Charron MJ, et al. **Genetics** 1989 Jun; 122(2):307–16

Effect of mutations causing gluconate kinase or gluconate permease deficiency on expression of the Bacillus subtilis gnt operon. Fujita Y, et al. **J Bacteriol** 1989 Mar; 171(3):1751–4

Insertion proQ220::Tn5 alters regulation of proline porter II, a transporter of proline and glycine betaine in Escherichia coli. Milner JL, et al. **J Bacteriol** 1989 Feb; 171(2):947–51

Lactose transport system of Streptococcus thermophilus: a hybrid protein with homology to the melibiose carrier and enzyme III of phosphoenolpyruvate–dependent phosphotransferase systems. Poolman B, et al. **J Bacteriol** 1989 Jan;171(1):244–53

Amplification of bacterial genomic DNA by the polymerase chain reaction and direct sequencing after asymmetric amplification: application to the study of periplasmic permeases. Shyamala V, et al. **J Bacteriol** 1989 Mar; 171(3):1602–8

Carboxyl–terminal truncations of the melibiose carrier of Escherichia coli. Botfield MC, et al. **J Biol Chem** 1989 Jul 15;264(20):11643–8

Characterization and sequencing of the lac Y54–41 "uncoupled" mutant of the lactose permease. Brooker RJ, et al. **J Biol Chem** 1989 May 15;264(14):8135–40

Primary structure of the lactose permease gene from the yeast Kluyveromyces lactis. Presence of an unusual transcript structure. Chang YD, et al. **J Biol Chem** 1988 Nov 15; 263(32):16696–703

Isolation and characterization of lactose permease mutants with an enhanced recognition of maltose and diminished recognition of cellobiose. Collins JC, et al. **J Biol Chem** 1989 Sep 5;264(25):14698–703

Isolation and characterization of thiodigalactoside–resistant mutants of the lactose permease which possess an enhanced recognition for maltose. Franco PJ, et al. **J Biol Chem** 1989 Sep 25;264(27):15988–92

Amino acid substitutions and alteration in cation specificity in the melibiose carrier of Escherichia coli. Kawakami T, et al. **J Biol Chem** 1988 Oct 5;263(28):14276–80

Characterization of the cyn operon in Escherichia coli K12. Sung YC, et al. **J Biol Chem** 1988 Oct 15;263(29):14769–75

In vitro membrane assembly of a polytopic, transmembrane protein results in an enzymatically active conformation. Ahrem B, et al. **J Cell Biol** 1989 May;108(5):1637–46

Evolutionary relationship and secondary structure predictions in four transport proteins of Saccharomyces cerevisiae. Weber E, et al. **J Mol Evol** 1988;27(4):341–50

Identification of sequences responsible for transcriptional activation of the allantoate permease gene in Saccharomyces cerevisiae. Rai R, et al. **Mol Cell Biol** 1989 Feb;9(2):602–8

Mutations of putP that alter the lithium sensitivity of Salmonella typhimurium. Myers RS, et al. **Mol Microbiol** 1988 Nov;2(6):749–55

A five–residue sequence near the carboxyl terminus of the polytopic membrane protein lac permease is required for stability within the membrane. Roepe PD, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):3992–6

IMMUNOLOGY

Peptide–specific antibody for the melibiose carrier of Escherichia coli localizes the carboxyl terminus to the cytoplasmic face of the membrane. Botfield MC, et al. **J Biol Chem** 1989 Jul 15;264(20):11649–52

ISOLATION & PURIFICATION

Characterization and functional reconstitution of a soluble form of the hydrophobic membrane protein lac permease from Escherichia coli. Roepe PD, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6087–91

METABOLISM

Characterization of site–directed mutants in the lac permease of Escherichia coli. 2. Glutamate–325 replacements. Carrasco N, et al. **Biochemistry** 1989 Mar 21;28(6):2533–9

Effect of distance and orientation between arginine–302, histidine–322, and glutamate–325 on the activity of lac permease from Escherichia coli. Lee JA, et al. **Biochemistry** 1989 Mar 21;28(6):2540–4

Characterization of site–directed mutants in the lac permease of Escherichia coli. 1. Replacement of histidine residues. Püttner IB, et al. **Biochemistry** 1989 Mar 21;28(6):2525–33

Effect of the chronic ethanol action on the activity of the general amino–acid permease from Saccharomyces cerevisiae var. ellipsoideus. Ferreras JM, et al. **Biochim Biophys Acta** 1989 Mar 13;979(3):375–7

Identification and localization of the membrane–associated, ATP–binding subunit of the oligopeptide permease of Salmonella typhimurium. Gallagher MP, et al. **Eur J Biochem** 1989 Mar 1;180(1):133–41

Topological analysis of the amino–terminal region of lactose permease using the Escherichia coli outer membrane protein, OmpA, as a marker. MacIntyre S, et al. **FEBS Lett** 1989 Apr 24;247(2):396–400

Genetic reconstitution of the high–affinity L–arabinose transport system. Horazdovsky BF, et al. **J Bacteriol** 1989 Jun;171(6):3053–9

Identification and characterization of a cyanate permease in Escherichia coli K–12. Sung YC, et al. **J Bacteriol** 1989 Sep;171(9):4674–8

Fast measurement of galactoside transport by lactose permease. Dornmair K, et al. **J Biol Chem** 1989 Jan 5; 264(1):342–6

Galactoside–dependent proton transport by mutants of the Escherichia coli lactose carrier. Replacement of histidine 322 by tyrosine or phenylalanine. King SC, et al. **J Biol Chem** 1989 May 5;264(13):7390–4

Analysis of the structural specificity of the lactose permease toward sugars. Olsen SG, et al. **J Biol Chem** 1989 Sep 25; 264(27):15982–7

The effects of pH on proton sugar symport activity of the lactose permease purified from Escherichia coli. Page MG, et al. **J Biol Chem** 1988 Nov 5;263(31):15897–905

Topography of lactose permease from Escherichia coli. Page MG, et al. **J Biol Chem** 1988 Nov 5;263(31):15906–14

Formaldehyde and photoactivatable cross–linking of the periplasmic binding protein to a membrane component of the histidine transport system of Salmonella typhimurium. Prossnitz E, et al. **J Biol Chem** 1988 Dec 5;263(34):17917–20

Topology of membrane insertion in vitro and plasma membrane assembly in vivo of the yeast arginine permease. Ahmad M, et al. **Mol Microbiol** 1988 Sep;2(5):627–35

Reconstitution of a bacterial periplasmic permease in proteoliposomes and demonstration of ATP hydrolysis concomitant with transport. Bishop L, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6953–7

PHYSIOLOGY

The lactose carrier of Klebsiella pneumoniae M5a1; the physiology of transport and the nucleotide sequence of the lacY gene. McMorrow I, et al. **Biochim Biophys Acta** 1988 Nov 22;945(2):315–23

Reconstitution of periplasmic transport in inside–out membrane vesicles. Energization by ATP. Ames GF, et al. **J Biol Chem** 1989 Mar 5;264(7):3998–4002

Reconstitution of the histidine periplasmic transport system in membrane vesicles. Energy coupling and interaction between the binding protein and the membrane complex. Prossnitz E, et al. **J Biol Chem** 1989 Mar 25;264(9):5006–14

PERMISSIVENESS see under **ATTITUDE**

PERODICTICUS POTTO see **LORISIDAE**

PEROMYSCUS

GENETICS

Retinoic acid synthesis by cytosol from the alcohol dehydrogenase negative deermouse. Posch KC, et al. **Arch Biochem Biophys** 1989 Oct;274(1):171–8

Inheritance of burrow building in Peromyscus. Dawson WD, et al. **Behav Genet** 1988 May;18(3):371–82

Synapsis of a chromosomal pair heterozygous for a pericentric inversion and the presence of a heterochromatic short arm. Hale DW, et al. **Cytogenet Cell Genet** 1988; 48(1):55–7

Synaptic adjustment in Peromyscus beatae (Rodentia: Cricetidae) heterozygous for interstitial heterochromatin. Sudman PD, et al. **Cytogenet Cell Genet** 1989;50(1):1–5

Polymorphism in the major histocompatibility complex class II genes of Peromyscus leucopus. Crew MD, et al. **Immunogenetics** 1989;30(3):214–7

IMMUNOLOGY

White–footed mice: tick burdens and role in the epizootiology of Potomac horse fever in Maryland. Carroll JF, et al. **J Wildl Dis** 1989 Jul;25(3):397–400

METABOLISM

Pineal melatonin content in photoperiodically responsive and non–responsive phenotypes of deer mice. Blank JL, et al. **Comp Biochem Physiol [A]** 1988;91(3):535–7

MICROBIOLOGY

Distribution of the Lyme disease agent in wildlife reservoirs in Ontario. Barker IK, et al. **Can Dis Wkly Rep** 1989 Jul 8;15(27):141–2 **(Eng, Fre)**

Efficacy of the urinary bladder for isolation of Borrelia burgdorferi from naturally infected, wild Peromyscus leucopus. Callister SM, et al. **J Clin Microbiol** 1989 Apr; 27(4):773–4

Borrelia burgdorferi infection surrounding La Crosse, Wis. Callister SM, et al. **J Clin Microbiol** 1988 Dec; 26(12):2632–6

PARASITOLOGY

Isospora peromysci Davis, 1967 (Apicomplexa: Eimeriidae) in Peromyscus leucopus and P. maniculatus (Rodentia: Cricetidae) from Texas. McAllister CT, et al. **J Protozool** 1989 Mar–Apr;36(2):175–6

PHYSIOLOGY

Effects of photoperiod, beta–endorphin, and naloxone on in vitro secretion of testosterone in white–footed mouse (Peromyscus leucopus) testes. Knotts LK, et al. **Biol Reprod** 1988 Aug;39(1):205–12

Water economy of the canyon mouse Peromyscus crinitus stephensi. Abbott KD. **Comp Biochem Physiol [A]** 1971 Jan 1;38(1):37–52

Prolactin and paternal behavior in the biparental California mouse, Peromyscus californicus. Gubernick DJ, et al. **Horm Behav** 1989 Jun;23(2):203–10

Melatonin does not affect in vitro secretion of testosterone in white–footed mouse testis. Knotts LK, et al. **J Pineal Res** 1988;5(6):521–6

Population differences in benzodiazepine sensitive male scent–induced analgesia in the deer mouse, Peromyscus maniculatus. Kavaliers M, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):613–9

Brief exposure to a natural predator, the short–tailed weasel, induces benzodiazepine–sensitive analgesia in white–footed mice. Kavaliers M. **Physiol Behav** 1988;43(2):187–93

PERONEAL NERVE

Peroneal nerve entrapment at the knee localized by short segment stimulation. Kanakamedala RV, et al. **Am J Phys Med Rehabil** 1989 Jun;68(3):116–22

Foot surgery in Vanuatu: results of combined tibial, common peroneal and saphenous nerve blocks in fifty–six adults. Sparks CJ, et al. **Anaesth Intensive Care** 1989 Aug; 17(3):336–9

Injury to the tibial and peroneal nerves due to hemorrhage in the popliteal fossa. Two case reports. Logigian EL, et al. **J Bone Joint Surg [Am]** 1989 Jun;71(5):768–70

Entrapment of the superficial peroneal nerve. Diagnosis and results of decompression. Styf J. **J Bone Joint Surg [Br]** 1989 Jan;71(1):131–5

Ultrasonography of the peroneal nerve muscle group in normal subjects and patients with peroneal paresis. Boonstra AM, et al. **JCU** 1988 Jan;16(1):17–24

Sitting posture and peroneal neuropathy [letter] Cranberg LD, et al. **Muscle Nerve** 1989 May;12(5):424–5

Common peroneal mononeuropathy: a clinical and electrophysiologic study of 116 lesions. Katirji MB, et al. **Neurology** 1988 Nov;38(11):1723–8

The pseudoradicular syndrome. Lower extremity peripheral nerve entrapment masquerading as lumbar radiculopathy. Saal JA, et al. **Spine** 1988 Aug;13(8):926–30

[An unusual location of a myxofibrosarcoma] Reuther G, et al. **ROFO** 1988 Nov;149(5):544–5 **(Ger)**

ANATOMY & HISTOLOGY

Motor nuclei of peroneal muscles in the cat spinal cord. Horcholle–Bossavit G, et al. **J Comp Neurol** 1988 Nov 15; 277(3):430–40

GROWTH & DEVELOPMENT

Mammalian neuromuscular development accelerated with early but slowed with late gestational administration of ACTH peptide. Rose KJ, et al. **Synapse** 1988;2(3):200–4

INJURIES

Peroneal nerve entrapment in runners. Leach RE, et al. **Am J Sports Med** 1989 Mar–Apr;17(2):287–91

Iatrogenic needle–induced peroneal neuropathy in the foot. Preston D, et al. **Ann Intern Med** 1988 Dec 1;109(11):921–2

Peroneal nerve dysfunction as a complication of lateral meniscus repair: a case report and anatomic dissection. Jurist KA, et al. **Arthroscopy** 1989;5(2):141–7

Peroneal nerve palsy following sequential pneumatic compression [letter] Pittman GR. **JAMA** 1989 Apr 21; 261(15):2201–2

Functional evaluation of complete sciatic, peroneal, and posterior tibial nerve lesions in the rat. Bain JR, et al. **Plast Reconstr Surg** 1989 Jan;83(1):129–38

[A method of surgical treatment of talipes equinus in injuries of the peroneal nerve in children and adolescents] Merkulov VN. **Ortop Travmatol Protez** 1989 Feb;(2):53–5 **(Rus)**

PATHOLOGY

A case of intraneural cyst of the common peroneal nerve. Meo A, et al. **Ital J Neurol Sci** 1988 Dec;9(6):607–10

Intraneural ganglion of the peroneal nerve: an unusual presentation. Case report. Poppi M, et al. **Surg Neurol** 1989 May;31(5):405–6

[Peripheral nerve lesions of experimental leprosy in monkeys. III. Intracytoplasmic foamy structure and fibrosis] Fukunishi Y. **Nippon Rai Gakkai Zasshi** 1987 Jul–Sep; 56(3):139–47 (Eng. Abstr.) **(Jpn)**

[Peripheral nerve lesions of experimental leprosy in monkeys. IV. Relationship between progress of histopathological findings and anatomical location of peripheral nerves] Fukunishi Y, et al. **Nippon Rai Gakkai Zasshi** 1987 Jul–Sep; 56(3):148–56 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Effects of nerve compression or ischaemia on conduction properties of myelinated and non-myelinated nerve fibres. An experimental study in the rabbit common peroneal nerve. Dahlin LB, et al. **Acta Physiol Scand** 1989 May; 136(1):97–105

Averaged F-wave conduction velocity of peroneal nerve [letter] Horsley W, et al. **Am J Phys Med Rehabil** 1989 Apr;68(2):103–4

Changes of sympathetic nerve activity induced by 2-deoxy-D-glucose infusion in humans. Fagius J, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):E714–20

Distribution of activity within the cat's peroneus longus muscle when activated in different ways via the central nervous system. Kandou TW, et al. **Brain Res** 1989 May 8;486(2):340–50

Altered expression of myosin light-chain isoforms in chronically stimulated fast-twitch muscle of the rat. Bär A, et al. **Eur J Biochem** 1989 Jan 2;178(3):591–4

Alteration of proprioceptive messages induced by tendon vibration in man: a microneurographic study. Roll JP, et al. **Exp Brain Res** 1989;76(1):213–22

Sympathetic nerve activity in arm and leg muscles during lower body negative pressure in humans. Rea RF, et al. **J Appl Physiol** 1989 Jun;66(6):2778–81

The effects of electrical stimulation on denervated muscle using implantable electrodes. Nemoto K, et al. **J Reconstr Microsurg** 1988 Jul;4(4):251–5, 257

Multielectrode intrafascicular and extraneural stimulation. Veltink PH, et al. **Med Biol Eng Comput** 1989 Jan; 27(1):19–24

Spontaneous reinnervation of a free muscle flap. Sardo MJ, et al. **Muscle Nerve** 1988 Sep;11(9):908–14

Conduction velocity and fibre diameter of the peroneal nerve in normal and growth retarded fetal sheep. Rees S, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):157–63

[Interaction of splanchnic and superficial somatic imputs in central nervous system] Chen ZH, et al. **Chen Tzu Yen Chiu** 1988;13(3):199–204 (Eng. Abstr.) **(Chi)**

[Modulatory effect of deep peroneal nerve stimulation on the carotid body chemoreceptor pressor response in rabbits] Che MX, et al. **Sheng Li Hsueh Pao** 1988 Oct;40(5):486–93 (Eng. Abstr.) **(Chi)**

PHYSIOPATHOLOGY

Afferents contributing to the exaggerated long latency reflex response to electrical stimulation in Parkinson's disease. Hunter JP, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov; 51(11):1405–10

Electrophysiological studies of intermittent claudication in lumbar stenosis. Kondo M, et al. **Spine** 1989 Aug; 14(8):862–6

[Short latency somatosensory evoked potentials following the peripheral nerve stimulation of lower extremities in children] Tomita Y, et al. **No To Hattatsu** 1989 Mar; 21(2):138–44 (Eng. Abstr.) **(Jpn)**

SURGERY

Laser-assisted nerve repair in primates. Bailes JE, et al. **J Neurosurg** 1989 Aug;71(2):266–72

TRANSPLANTATION

Artificial nerve graft compared to autograft in a rat model. Rosen JM, et al. **J Rehabil Res Dev** 1989 Winter;26(1):1–14

The reversed venous arterialized nerve graft in digital nerve reconstruction across scarred beds. Rose EH, et al. **Plast Reconstr Surg** 1989 Apr;83(4):593–604

[An experimental study of cross-facial nerve graft] Zuo QY. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 May; 23(3):133–5, 190 (Eng. Abstr.) **(Chi)**

PEROPERATIVE CARE see **INTRAOPERATIVE CARE**

PEROPERATIVE COMPLICATIONS see **INTRAOPERATIVE COMPLICATIONS**

PEROXIDASE-ANTIPEROXIDASE COMPLEX TECHNIC see **IMMUNOENZYME TECHNICS**

PEROXIDASE-LABELED ANTIBODY TECHNIC see **IMMUNOENZYME TECHNICS**

PEROXIDASES

Localization of the peroxidase active site of PGH synthase. Marnett LJ, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:458–61

Peroxidase-mediated formation of glutathione conjugates from polycyclic aromatic dihydrodiols and insecticides. Foureman GL, et al. **Arch Biochem Biophys** 1989 Feb 15; 269(1):55–68

On the reactions of lignin peroxidase compound III (isozyme H8). Cai DY, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):464–9

Heme pocket interactions in cytochrome c peroxidase studied by site-directed mutagenesis and resonance Raman spectroscopy. Smulevich G, et al. **Biochemistry** 1988 Jul 26;27(15):5477–85

Cytochrome c peroxidase mutant active site structures probed by resonance Raman and infrared signatures of the CO adducts. Smulevich G, et al. **Biochemistry** 1988 Jul 26;27(15):5486–92

A nuclear Overhauser effect study of the heme crevice in the resting state and compound I of horseradish peroxidase: evidence for cation radical delocalization to the proximal histidine. Thanabal V, et al. **Biochemistry** 1988 Jul 26; 27(15):5400–7

Fast kinetics analysis of the peroxidatic reaction catalysed by horse liver alcohol dehydrogenase. Favilla R, et al. **Biochim Biophys Acta** 1988 Oct 12;956(3):285–92

Use of the glucose oxidase/peroxidase method for glucose assay leads to overestimation of the inhibition of gluconeogenesis by aminopyrine. Latos P, et al. **Biochim Biophys Acta** 1989 Apr 25;991(1):152–4

Application of the reaction of dithioesters with epsilon-amino groups in lysine to the chemical modification of proteins. Souppe J, et al. **Biochim Biophys Acta** 1988 Nov 23; 957(2):254–7

Mechanism of horseradish peroxidase-catalyzed conversion of iodine to iodide in the presence of EDTA and H2O2. Banerjee RK. **J Biol Chem** 1989 Jun 5;264(16):9188–94

Resonance Raman spectra of bovine liver catalase compound II. Similarity of the heme environment to horseradish peroxidase compound II. Chuang WJ, et al. **J Biol Chem** 1989 Aug 25;264(24):14209–15

Thiol-mediated oxidation of nonphenolic lignin model compounds by manganese peroxidase of Phanerochaete chrysosporium. Wariishi H, et al. **J Biol Chem** 1989 Aug 25;264(24):14185–91

A sensitive CCD image system for detection of chemiluminescent reactions. Jansen EH, et al. **J Biolumin Chemilumin** 1989 Apr–Jun;3(2):53–7

Immunometric assay for lutropin (hLH) based on the use of universal reagents for enzymatic labelling and magnetic separation and monitored by enhanced chemiluminescence. Pazzagli M, et al. **J Immunol Methods** 1988 Nov 10; 114(1–2):61–8

A simple method for combining HRP-TMB histochemistry with tritiated thymidine autoradiography on the same tissue section. Nandi KN, et al. **J Neurosci Methods** 1988 Sep; 25(2):159–63

Membrane peroxidases. Banerjee RK. **Mol Cell Biochem** 1988 Oct;83(2):105–28 (169 ref.)

Identification by ENDOR of Trp191 as the free-radical site in cytochrome c peroxidase compound ES. Sivaraja M, et al. **Science** 1989 Aug 18;245(4919):738–40

[Peroxidase] Araiso T, et al. **Tanpakushitsu Kakusan Koso** 1987 May;32(6):764–70 (27 ref.) **(Jpn)**

[Scavenging of active oxygen by cytochrome c peroxidase] Hori H, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):2965–72 **(Jpn)**

[Biochemical reactions of peroxidase with activated oxygen species] Hosoya T. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):3042–7 **(Jpn)**

[Peroxygenase: hydroperoxide-dependent mono-oxygenation] Kobayashi S. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):3054–9 **(Jpn)**

[Preparation of immunoenzyme conjugates with beta-lactamase and peroxidase and erythrocyte diagnostic agents using glutaraldehyde] Sakaian NN, et al. **Lab Delo** 1988;(12):63–6 (Eng. Abstr.) **(Rus)**

ANALYSIS

Binding of thiocyanate to lactoperoxidase: 1H and 15N nuclear magnetic resonance studies. Modi S, et al. **Biochemistry** 1989 May 30;28(11):4689–94

Effects of temperature and glycerol on the resonance Raman spectra of cytochrome c peroxidase and selected mutants. Smulevich G, et al. **Biochemistry** 1989 Jun 13; 28(12):5058–64

Immunohistochemical detection of deposits of eosinophil-derived neurotoxin and eosinophil peroxidase in the myocardium of patients with Chagas' disease. Molina HA, et al. **Immunology** 1988 Aug;64(4):725–31

Investigations into lactoperoxidase-catalysed bromination of tyrosine and thyroglobulin. Buchberger W. **J Chromatogr** 1988 Nov 18;432:57–63

Ultrastructural localization of human uterine peroxidase. Ishikawa Y, et al. **J Electron Microsc (Tokyo)** 1988; 37(6):287–93

A comparison of alkaline phosphatase, beta-galactosidase, penicillinase and peroxidase used as labels for progesterone determination in milk by heterologous microtitre plate enzymeimmunoassay. Sauer MJ, et al. **J Steroid Biochem** 1989 Sep;33(3):423–31

ANTAGONISTS & INHIBITORS

Crystal structure of nitric oxide inhibited cytochrome c peroxidase. Edwards SL, et al. **Biochemistry** 1988 Oct 18; 27(21):8074–81

Mechanism-based inactivation of horseradish peroxidase by sodium azide. Formation of meso-azidoprotoporphyrin IX. Ortiz de Montellano PR, et al. **Biochemistry** 1988 Jul 26; 27(15):5470–6

EDTA inhibits peroxidase-catalyzed iodide oxidation through interaction at the iodide binding site. Banerjee RK. **Biochim Biophys Acta** 1989 Sep 15;992(3):393–6

Is the gastric lesion correlated with the inhibition of tissular peroxidase activity induced by indomethacin? Aliño SF, et al. **Cell Mol Biol** 1988;34(4):351–9

Inhibition of endogenous peroxidase for the immunocytochemical demonstration of intermediate filament proteins (IFP). Hittmair A, et al. **J Immunol Methods** 1989 Jan 17;116(2):199–205

BIOSYNTHESIS

Peroxidases produced by the marine sponge Iotrochota birotulata. Baden DG, et al. **Comp Biochem Physiol [B]** 1979;64(3):279–83

Induction of ascorbate peroxidase and glutathione reductase activities by interactions of mixtures of air pollutants. Mehlhorn H, et al. **Free Radic Res Commun** 1987; 3(1–5):193–7

BLOOD

Liquid chromatographic assay of plasma hemoglobin based on oxidative quenching of serotonin by pseudoperoxidase effect of hemoglobin. Takayanagi M, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug;36(8):3164–7

The effect of MS 222 an anaesthetic on the peroxide metabolism enzymes in erythrocytes of freshwater and marine fish species. Gabryelak T, et al. **Comp Biochem Physiol [C]** 1989;92(1):5–8

Uptake of human eosinophil peroxidase and myeloperoxidase by cells involved in the inflammatory process. Zabucchi G, et al. **J Histochem Cytochem** 1989 Apr;37(4):499–508

Ultrastructural analysis of megakaryoblasts by simultaneous detection of platelet peroxidase and platelet glycoproteins. Kishimoto Y, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Feb;52(1):102–12

Sulfhydryl groups and peroxidase-like activity of albumin as scavenger of organic peroxides. Pirisino R, et al. **Pharmacol Res Commun** 1988 Jul;20(7):545–52

[Studies of five cases of lowered eosinophil peroxidase activity found an automated hematology analyzer (Technicon H6000 system)] Takubo T, et al. **Rinsho Ketsueki** 1988 May;29(5):756–9 (Eng. Abstr.) **(Jpn)**

DIAGNOSTIC USE

Lectins as neuroanatomical tracers. Büttner-Ennever JA, et al. **Acta Histochem Suppl (Jena)** 1988;36:141–51 (60 ref.)

Analysis of horseradish peroxidase-amplified chemiluminescence produced by human neutrophils reveals a role for the superoxide anion in the light emitting reaction. Lock R, et al. **Anal Biochem** 1988 Sep; 173(2):450–5

Identification of microinjected cells using biotinylated antibodies and Strep-avidin-conjugated horseradish peroxidase. Riabowol KT. **Anal Biochem** 1988 Nov 1; 174(2):601–12

A hypothesis for the superior sensitivity of wheat germ agglutinin as a neuroanatomical probe. Stieber A, et al. **Brain Res** 1989 Aug 21;495(1):131–9

Screening for hypoglycemia with plasma in neonatal blood of high hematocrit value. Kaplan M, et al. **Crit Care Med** 1989 Mar;17(3):279–82

Concanavalin A—horse radish peroxidase (Con A-HRP) labelling technique in detection and prognosis of cancer of uterine cervix. Sen U. **Eur J Gynaecol Oncol** 1989; 10(4):289–91

Morphology of neurons in area 4 gamma of the cat's cortex studied with intracellular injection of HRP [corrected and issued with original paging in J Comp Neurol 1988 Nov 8;277(2)] Ghosh S, et al. **J Comp Neurol** 1988 Nov 8; 277(2):290–312

Spinocerebellar projections from the upper lumbar segments in the cat, as studied by anterograde transport of wheat germ agglutinin-horseradish peroxidase. Yaginuma H, et al. **J Comp Neurol** 1989 Mar 8;281(2):298–319

Improvement of the tetramethyl benzidine reaction with ammonium molybdate as a stabilizer for light and electron microscopic ligand-HRP neurohistochemistry, immunocytochemistry and double-labelling. Liang FY, et al. **J Neurosci Methods** 1989 Jun;28(3):155–62

Selective suppression of endogenous peroxidase activity: application for enhancing appearance of HRP-labeled neurons in vitro. Metz CB, et al. **J Neurosci Methods** 1989 Jan;26(3):181–8

Use of rabbit Fab'-peroxidase conjugates prepared by the maleimide method for detecting plant viruses by ELISA. Weiss E, et al. **J Virol Methods** 1989 Apr-May;

24(1-2):11-25
Retrograde transneuronal labeling of premotor neurons of horizontal eye movement system in the cat using wheat germ agglutinin conjugated with horseradish peroxidase. Ozaki M, et al. **Jpn J Ophthalmol** 1989;33(1):85-94
[The value of pretreatment of jaundiced blood or plasma with peroxidase and hydrogen peroxide on the kinetic level of creatinine using the Jaffé technic. Use of the IL 508 analyzer (letter)] Nguyen Dai D, et al. **Ann Biol Clin (Paris)** 1988;46(8):702-3 **(Fre)**
[Use of a peroxidase marker to detect the diffusion of protein in gel] Mal'tseva NV, et al. **Lab Delo** 1989;(3):58-9 (Eng. Abstr.) **(Rus)**

GENETICS

Characterization of two lignin peroxidase clones from Phanerochaete chrysosporium. Andrawis A, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):673-80
Tryptophan-191——phenylalanine, a proximal-side mutation in yeast cytochrome c peroxidase that strongly affects the kinetics of ferrocytochrome c oxidation. Mauro JM, et al. **Biochemistry** 1988 Aug 23;27(17):6243-56
cDNA-directed expression of human thyroid peroxidase. Kimura S, et al. **FEBS Lett** 1989 Jul 3;250(2):377-80
Cloning and high-level expression of a chloroperoxidase gene from Pseudomonas pyrrocinia in Escherichia coli. Wolfframm C, et al. **FEBS Lett** 1988 Oct 10;238(2):325-8
Cloning, nucleotide sequence, and expression in Escherichia coli of the Bacillus stearothermophilus peroxidase gene (perA). Loprasert S, et al. **J Bacteriol** 1989 Sep; 171(9):4871-5
Molecular cloning and high-level expression of a bromoperoxidase gene from Streptomyces aureofaciens Tü24. van Pée KH. **J Bacteriol** 1988 Dec;170(12):5890-4
Manganese-dependent peroxidase from Phanerochaete chrysosporium. Primary structure deduced from cDNA sequence. Pease EA, et al. **J Biol Chem** 1989 Aug 15; 264(23):13531-5
Characterization of a cDNA encoding a manganese peroxidase, from the lignin-degrading basidiomycete Phanerochaete chrysosporium. Pribnow D, et al. **J Biol Chem** 1989 Mar 25;264(9):5036-40
Molecular cloning and characterization of a chromosomal gene for human eosinophil peroxidase. Sakamaki K, et al. **J Biol Chem** 1989 Oct 5;264(28):16828-36
Molecular cloning and sequences of lignin peroxidase genes of Phanerochaete chrysosporium. Schalch H, et al. **Mol Cell Biol** 1989 Jun;9(6):2743-7
Molecular cloning, nucleotide sequence, and abscisic acid induction of a suberization-associated highly anionic peroxidase. Roberts E, et al. **Mol Gen Genet** 1989 Jun; 217(2-3):223-32
A human cDNA sequence for a novel glutathione peroxidase-related selenopeptide, GPRP. Dunn DK, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6390

IMMUNOLOGY

Immunological similarity of the cationic and the anionic peanut peroxidase isozymes. Hu CF, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):689-94
Characterization of epitopes on the cationic peanut peroxidase by four monoclonal antibodies. Hu CF, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):500-5
Bispecific antibody-producing hybrid hybridoma and its use in one-step immunoassays for human lymphotoxin. Tada H, et al. **Hybridoma** 1989 Feb;8(1):73-83
Preparation and characterization of monoclonal antibodies to human neutrophil cathepsin G, lactoferrin, eosinophil peroxidase, and eosinophil major basic protein. Skubitz KM, et al. **J Leukoc Biol** 1989 Aug;46(2):109-18
[Isolation and characterization of monoclonal antibodies to horseradish peroxidase] Kolosova LV, et al. **Biokhimiia** 1988 Nov;53(11):1858-63 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

A method for staining and stabilizing peroxidase activity in polyacrylamide gel electrophoresis. Shimoni M, et al. **Anal Biochem** 1988 Nov 15;175(1):35-8
Cytochrome c peroxidase activity of a protease-modified form of cytochrome c-552 from the denitrifying bacterium Pseudomonas perfectomarina. Denariaz CM, et al. **Arch Biochem Biophys** 1989 Apr;270(1):114-25
Lactoperoxidase from human colostrum. Langbakk B, et al. **Biochem J** 1989 May 1;259(3):627-31
Ligninolytic enzymes of the white-rot fungus Phlebia radiata. Niku-Paavola ML, et al. **Biochem J** 1988 Sep 15; 254(3):877-84
Purification and properties of peroxidase from Pinus pinaster needles. Karmali A, et al. **Biochimie** 1988 Oct;70(10):1373-7
Purification, crystallization, and characterization of peroxidase from Coprinus cinereus. Morita Y, et al. **J Biochem (Tokyo)** 1988 Apr;103(4):693-9
Oxidative metabolism of propylthiouracil by peroxidases from rat bone marrow. Lee E, et al. **Xenobiotica** 1988 Oct; 18(10):1135-42

METABOLISM

Involvement of cathepsins B and H in lysosomal degradation of horseradish peroxidase endocytosed by the proximal tubule cells of the rat kidney: I. Histochemical and immunohistochemical studies. Yokota S, et al. **Anat Rec** 1988 Aug;221(4):783-90
Involvement of cathepsins B and H in lysosomal degradation of horseradish peroxidase endocytosed by the proximal tubule cells of the rat kidney: II. Immunocytochemical studies using protein A-gold technique applied to conventional and serial sections. Yokota S, et al. **Anat Rec** 1988 Aug;221(4):791-801
Characterization of an extracellular lignin peroxidase of the lignocellulolytic actinomycete Streptomyces viridosporus. Ramachandra M, et al. **Appl Environ Microbiol** 1988 Dec; 54(12):3057-63
Biomimetic oxidation of nonphenolic lignin models by Mn(III): new observations on the oxidizability of guaiacyl and syringyl substructures. Hammel KE, et al. **Arch Biochem Biophys** 1989 Apr;270(1):404-9
Bromine derivatives of amino acids as intermediates in the peroxidase-catalyzed formation of singlet oxygen. Kanofsky JR. **Arch Biochem Biophys** 1989 Oct; 274(1):229-34
Mechanism of horseradish peroxidase-catalyzed oxidation of malonaldehyde. MacDonald ID, et al. **Arch Biochem Biophys** 1989 Jul;272(1):185-93
The reactions of horseradish peroxidase, lactoperoxidase, and myeloperoxidase with enzymatically generated superoxide. Metodiewa D, et al. **Arch Biochem Biophys** 1989 Jul; 272(1):245-53
The one-electron oxidation of porphyrins to porphyrin pi-cation radicals by peroxidases: an electron spin resonance investigation. Morehouse KM, et al. **Arch Biochem Biophys** 1989 Aug 15;273(1):158-64
Free radical intermediates during peroxidase oxidation of 2-t-butyl-4-methoxyphenol, 2,6-di-t-butyl-4-methylphenol, and related phenol compounds. Valoti M, et al. **Arch Biochem Biophys** 1989 Mar;269(2):423-32
A secondary antioxidant defense role for proteolytic systems. Davies KJ. **Basic Life Sci** 1988;49:575-85 (80 ref.)
The generation of radicals during the normal and abnormal functioning of cytochromes P-450. Dolphin D. **Basic Life Sci** 1988;49:491-500
Gel state chemiluminescence: an artificial electron transport system. Kiel JL, et al. **Basic Life Sci** 1988;49:261-4
Thiyl free radical metabolites of thiol drugs and glutathione. Knecht KT, et al. **Basic Life Sci** 1988;49:75-9
Bovine myeloperoxidase and lactoperoxidase each contain a high affinity site for calcium. Booth KS, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):897-902
Manganese, Mn-dependent peroxidases, and the biodegradation of lignin. Forrester IT, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):992-9
Singlet oxygen production from the peroxidase catalyzed formation of styrene glutathione adducts. Kanofsky JR. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1051-4
Role of oxygen during horseradish peroxidase turnover and inactivation. Ma XY, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):160-5
Evidence for a peroxidatic oxidation of norepinephrine, a catecholamine, by lactoperoxidase. Metodiewa D, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1183-8
The reactions of chloroperoxidase in the presence of xanthine/xanthine oxidase. Metodiewa D, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1086-92
Vanadate activation of bromoperoxidase from Corallina officinalis. Yu H, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):87-92
Similarities in the optical spectra of prostaglandin H synthase during its cyclooxygenase and peroxidase reactions. MacDonald ID, et al. **Biochem Cell Biol** 1989 Jun; 67(6):301-5
pH effects on the haem iron co-ordination state in the nitric oxide and deoxy derivatives of ferrous horseradish peroxidase and cytochrome c peroxidase. Ascenzi P, et al. **Biochem J** 1989 Mar 1;258(2):473-8
Abilities of peroxidases to catalyse peroxidase-oxidase oxidation of thiols. Svensson BE. **Biochem J** 1988 Dec 15; 256(3):757-62
Peroxidase as a model for reduction of tertiary amine oxides catalyzed by rat hepatic supernatant and microsomal fractions. Gillespie SG, et al. **Biochem Pharmacol** 1989 Feb 15;38(4):573-9
Peroxidase catalysed formation of prostaglandins from arachidonic acid. Zilletti L, et al. **Biochem Pharmacol** 1989 Aug 1;38(15):2429-39
Elementary steps in the formation of horseradish peroxidase compound I: direct observation of compound 0, a new intermediate with a hyperporphyrin spectrum. Baek HK, et al. **Biochemistry** 1989 Jul 11;28(14):5714-9
Effects of amino acid replacements in yeast iso-1 cytochrome c on heme accessibility and intracomplex electron transfer in complexes with cytochrome c peroxidase. Hazzard JT, et al. **Biochemistry** 1988 Jun 14;27(12):4445-51
Mechanism of azide binding to chloroperoxidase and horseradish peroxidase: use of an iodine laser temperature-jump apparatus. Holzwarth JF, et al. **Biochemistry** 1988 Aug 23;27(17):6628-33
Interaction of aromatic donor molecules with lactoperoxidase probed by optical difference spectra. Hosoya T, et al. **Biochemistry** 1989 Mar 21;28(6):2639-44
Site-directed mutagenesis of yeast cytochrome c peroxidase shows histidine 181 is not required for oxidation of ferrocytochrome c. Miller MA, et al. **Biochemistry** 1988 Dec 27;27(26):9081-8
Manganese peroxidase from the basidiomycete Phanerochaete chrysosporium: spectral characterization of the oxidized states and the catalytic cycle. Wariishi H, et al. **Biochemistry** 1988 Jul 12;27(14):5365-70
Enhanced oxidation of bilirubin by an immobilized tri-enzyme system of glucose oxidase, bilirubin oxidase and horseradish peroxidase. Daka NJ, et al. **Biochim Biophys Acta** 1989 Jun 27;991(3):487-9
Vanadium K-edge absorption spectrum of bromoperoxidase from Ascophyllum nodosum. Hormes J, et al. **Biochim Biophys Acta** 1988 Oct 12;956(3):293-9
Time-resolved fluorescence studies on protoporphyrin IX-apohorseradish peroxidase. Jullian C, et al. **Biochim Biophys Acta** 1989 Aug 31;997(3):206-10
Binding of aromatic donor molecules to lactoperoxidase: proton NMR and optical difference spectroscopic studies. Modi S, et al. **Biochim Biophys Acta** 1989 Jul 6; 996(3):214-25
Kinetics of the reaction of superoxide anion with ferric horseradish peroxidase. Shimizu N, et al. **Biochim Biophys Acta** 1989 Apr 6;995(2):133-7
Abnormal peroxidase-positive granules in "specific granule" deficiency. Parmley RT, et al. **Blood** 1989 Feb 15; 73(3):838-44
Incorporation of a circulating protein into alpha granules of megakaryocytes. Handagama PJ, et al. **Blood Cells** 1989; 15(1):59-72
The relationship of alpha granules to the membrane systems of platelets and megakaryocytes. Zucker-Franklin D. **Blood Cells** 1989;15(1):73-9
Peroxidase-catalyzed oxidation of (bi)sulfite: reaction of free radical metabolites of (bi)sulfite with (+/-)-7,8-dihydroxy-7, 8-dihydroxy[a]pyrene. Curtis JF, et al. **Carcinogenesis** 1988 Nov;9(11):2015-21
Involvement of cysteine, serotonin and their analogues in peroxidase-oxidase reactions. Svensson BE. **Chem Biol Interact** 1989;70(3-4):305-21
Synergism between substrate and non-substrate thiols in peroxidase-oxidase reactions. Svensson BE. **Chem Biol Interact** 1989;70(3-4):323-37
Comparison of peroxide metabolism enzymes in organs of congenic mice. Novák R, et al. **Comp Biochem Physiol [B]** 1978;60(2):149-50
Peroxidase activity in mast cell granules in urticaria pigmentosa. Akiyama M, et al. **Dermatologica** 1989; 178(3):145-50
Localization and developmental fate of ovoperoxidase and proteoliaisin, two proteins involved in fertilization envelope assembly. Somers CE, et al. **Dev Biol** 1989 Jan; 131(1):226-35
The primary structure of Pseudomonas cytochrome c peroxidase. Rönnberg M, et al. **FEBS Lett** 1989 Jul 3; 250(2):175-8
Cleavages of aromatic ring and beta-O-4 bond of synthetic lignin (DHP) by lignin peroxidase. Umezawa T, et al. **FEBS Lett** 1989 Jan 2;242(2):325-9
Hematin iron valence in catalase and peroxidase compound I: relationship to free radical reaction mechanism. Dounce AL, et al. **Free Radic Biol Med** 1988;5(2):89-93
Interaction of lactoperoxidase with hydrogen peroxide. Formation of enzyme intermediates and generation of free radicals. Kohler H, et al. **Free Radic Biol Med** 1989; 6(3):323-39 (148 ref.)
Enzymatic oxidative activation and transformation of the antitumor agent mitoxantrone. Kolodziejczyk P, et al. **Free Radic Biol Med** 1988;5(1):13-25
Chemiluminescent oxidation of ribose catalyzed by horseradish peroxidase in presence of hydrogen peroxide. Medeiros MH, et al. **Free Radic Biol Med** 1989;6(6):565-71
Antioxidant systems in tumour cells: the levels of antioxidant enzymes, ferritin, and total iron in a human hepatoma cell line. Bannister WH, et al. **Free Radic Res Commun** 1986; 1(6):361-7
Cysteine and crocin oxidation catalyzed by horseradish peroxidase. Osswald WF, et al. **Free Radic Res Commun** 1989;5(4-5):259-65
The effects of monensin on the transport of horseradish peroxidase into intracellular lumina in cultured rat hepatocytes. Hashieh IA, et al. **Hepatology** 1989 Jul; 10(1):61-5
Ultrastructural electron probe X-ray microanalytical reaction product identification of three different enzymes in the same mouse resident peritoneal macrophage. van Dort JB, et al. **Histochemistry** 1989;92(3):243-53
Lack of correlation between in vivo peroxidatic activity patterns and tumoricidal activity in vitro of peritoneal macrophages after intraperitoneal immunization with tumor cells. Dullens HF, et al. **Immunobiology** 1988 Jul; 177(3):293-304
Possible roles for pyruvate:ferredoxin oxidoreductase and thiol-dependent peroxidase and reductase activities in resistance to nitroheterocyclic drugs in Giardia intestinalis. Smith NC, et al. **Int J Parasitol** 1988 Nov;18(7):991-7
Stabilized isoporphyrin intermediates in the inactivation of horseradish peroxidase by alkylhydrazines. Ator MA, et al. **J Biol Chem** 1989 Jun 5;264(16):9250-7
Identification of the fifth axial heme ligand of chloroperoxidase. Blanke SR, et al. **J Biol Chem** 1988 Dec 15;263(35):18739-43
Peroxyl, alkoxyl, and carbon-centered radical formation from organic hydroperoxides by chloroperoxidase.

Chamulitrat W, et al. **J Biol Chem** 1989 May 15; 264(14):7889–99

Structural characterization of cytochrome c peroxidase by resonance Raman scattering. Dasgupta S, et al. **J Biol Chem** 1989 Jan 5;264(1):654–62

Detection of singlet (1O2) oxygen phosphorescence during chloroperoxidase–catalyzed decomposition of ethyl hydroperoxide. Hall RD, et al. **J Biol Chem** 1989 May 15; 264(14):7900–6

Studies on the mechanism of the iodination of tyrosine by lactoperoxidase. Huber RE, et al. **J Biol Chem** 1989 Jan 25;264(3):1381–6

Singlet oxygen production from the peroxidase–catalyzed oxidation of indole–3–acetic acid. Kanofsky JR. **J Biol Chem** 1988 Oct 5;263(28):14171–5

Deuterium NMR study of structural and dynamic properties of horseradish peroxidase. La Mar GN, et al. **J Biol Chem** 1989 Apr 5;264(10):5428–34

Oxygen–17 nuclear magnetic resonance spectroscopic studies of carbonmonoxyperoxidases. Lee HC, et al. **J Biol Chem** 1988 Nov 5;263(31):16118–24

The chloride–activated peroxidation of catechol as a mechanistic probe of chloroperoxidase reactions. Competitive activation as evidence for a catalytic chloride binding site on compound I. Libby RD, et al. **J Biol Chem** 1989 Sep 15;264(26):15284–92

Functional differentiation of cyclooxygenase and peroxidase activities of prostaglandin synthase by trypsin treatment. Possible location of a prosthetic heme binding site. Marnett LJ, et al. **J Biol Chem** 1988 Nov 15;263(32):16532–5

Resonance Raman spectroscopy of horseradish peroxidase derivatives and intermediates with excitation in the near ultraviolet. Palaniappan V, et al. **J Biol Chem** 1989 Sep 25;264(27):16046–53

Alkylaryl sulfides as peroxidase reducing substrates for prostaglandin H synthase. Probes for the reactivity and environment of the ferryl–oxo complex. Plé P, et al. **J Biol Chem** 1989 Aug 25;264(24):13983–93

The non–flavin redox center of the streptococcal NADH peroxidase. I. Thiol reactivity and redox behavior in the presence of urea. Poole LB, et al. **J Biol Chem** 1989 Jul 25;264(21):12322–9

The non–flavin redox center of the streptococcal NADH peroxidase. II. Evidence for a stabilized cysteine–sulfenic acid. Poole LB, et al. **J Biol Chem** 1989 Jul 25; 264(21):12330–8

Reduction of cytochrome c peroxidase compounds I and II by ferrocytochrome c. A stopped–flow kinetic investigation. Summers FE, et al. **J Biol Chem** 1988 Oct 5;263(28):14267–75

Peroxidase–catalyzed oxidation of eugenol: formation of a cytotoxic metabolite(s). Thompson D, et al. **J Biol Chem** 1989 Jan 15;264(2):1016–21

The peroxidase–dependent activation of butylated hydroxyanisole and butylated hydroxytoluene (BHT) to reactive intermediates. Formation of BHT–quinone methide via a chemical–chemical interaction. Thompson DC, et al. **J Biol Chem** 1989 Mar 5;264(7):3957–65

Manganese peroxidase from the lignin–degrading basidiomycete Phanerochaete chrysosporium. Transient state kinetics and reaction mechanism. Wariishi H, et al. **J Biol Chem** 1989 Feb 25;264(6):3335–40

Enhanced chemiluminescence in the peroxidase–luminol–H2O2 system: anomalous reactivity of enhancer phenols with enzyme intermediates. Hodgson M, et al. **J Biolumin Chemilumin** 1989 Jan–Mar;3(1):21–5

Sensitivity limitations encountered in enhanced horseradish peroxidase catalysed chemiluminescence. Motsenbocker MA. **J Biolumin Chemilumin** 1988 Jan–Mar;2(1):9–16

In vitro import of cytochrome c peroxidase into the intermembrane space: release of the processed form by intact mitochondria. Kaput J, et al. **J Cell Biol** 1989 Jul; 109(1):101–12

Thermostable peroxidase from Bacillus stearothermophilus. Loprasert S, et al. **J Gen Microbiol** 1988 Jul;134 (Pt 7):1971–6

Differences in transneuronal transport of horseradish peroxidase conjugated wheat germ agglutinin in the visual system: marmoset monkey and guinea pig compared. Spatz WB. **J Hirnforsch** 1989;30(3):375–84

Differential effects of methylmercuric chloride and mercuric chloride on the histochemistry of rat thyroid peroxidase and the thyroid peroxidase activity of isolated pig thyroid cells. Nishida M, et al. **J Histochem Cytochem** 1989 May; 37(5):723–7

Internalization of horseradish peroxidase isozymes by pancreatic acinar cells in vitro. Oliver C, et al. **J Histochem Cytochem** 1989 Jan;37(1):49–56

Non–deleterious inhibition of endogenous peroxidase activity (EPA) by cyclopropanone hydrate: a definitive approach. Schmid KW, et al. **J Histochem Cytochem** 1989 Apr; 37(4):473–7

Oxygen activation and ligand binding by pure heme–octapeptide microperoxidase–8 (MP–8). Adams PA, et al. **J Inorg Biochem** 1988 Nov;34(3):167–75

Ferriprotoporphyrin IX mediated oxygen activation/insertion reactions: the anerobic reduction of the aniline–Fe3+–microperoxidase–8 complex by NADH. Adams PA, et al. **J Inorg Biochem** 1988 Nov;34(3):177–87

Inactivation kinetics of horseradish peroxidase microinjected into hepatocytes from mice of various ages. Ishigami A, et al. **Mech Ageing Dev** 1988 Dec;46(1–3):125–33

An antioxidant induced alterations in peroxidase activity in ageing Zaprionus paravittiger (Diptera). Wadhwa R, et al. **Mech Ageing Dev** 1988 Nov 30;45(3):277–83

Leishmania mexicana amazonensis: heterogeneity in 5'–nucleotidase and peroxidase activities of mononuclear phagocytes during in vivo and in vitro infection. Côrte–Real S, et al. **Mem Inst Oswaldo Cruz** 1988 Jan–Mar; 83(1):113–21

In vitro bioactivation of phenytoin to a reactive free radical intermediate by prostaglandin synthetase, horseradish peroxidase, and thyroid peroxidase. Kubow S, et al. **Mol Pharmacol** 1989 Apr;35(4):504–11

The effects of blocking nerve conduction on retrograde HRP labeling of rat motoneuron. Kanda K, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):153–6

Chemical evolution of peroxidase—amino acid pentacyanoferrate (II) complexes as model. Kamaluddin, et al. **Orig Life Evol Biosph** 1988;18(3):267–80

Interaction of enzyme–generated species with chlorophyll–alpha and probes bound to serum albumins. Bohne C, et al. **Photochem Photobiol** 1988 Sep;48(3):341–7

Concerted loss of cyclooxygenase and peroxidase activities from prostaglandin H synthase upon proteolytic attack. Kulmacz RJ. **Prostaglandins** 1989 Sep;38(3):277–88

Specificity of an HPETE peroxidase from rat PMN. Skoog MT, et al. **Prostaglandins** 1988 Sep;36(3):373–84

Hydroperoxidase activity of lipoxygenase: a potential pathway for xenobiotic metabolism in the presence of linoleic acid. Kulkarni AP, et al. **Res Commun Chem Pathol Pharmacol** 1988 Sep; 61(3):305–14

Induction of estrogen receptor, peroxidase activity, and epithelial abnormalities in the mouse uterovaginal epithelium after neonatal treatment with diethylstilbestrol. Andersson C, et al. **Teratogenesis Carcinog Mutagen** 1988; 8(6):347–61

Physiological antioxidants and antioxidative enzymes in vitamin E–deficient rats. De AK, et al. **Toxicol Lett** 1988 Nov;44(1–2):47–54

Hydroperoxide–dependent metabolism of goitrogenic thiocarbamides by lactoperoxidase. Doerge DR. **Xenobiotica** 1988 Nov;18(11):1291–6

Metabolism of 3,3'–dichlorobenzidine by horseradish peroxidase. Lang B, et al. **Xenobiotica** 1988 Aug; 18(8):893–904

Glucose oxidase (GOD) as a source of hydrogen peroxide for the lactoperoxidase (LPO) system in milk: antibacterial effect of the GOD–LPO system against mastitis pathogens. Sandholm M, et al. **Zentralbl Veterinarmed [B]** 1988 Jun; 35(5):346–52

[An electron microscopic study on the ultrastructure and enzyme cytochemistry of Pseudomonas putrefaciens] Chen WL, et al. **Wei Sheng Wu Hsueh Pao** 1989 Jun;29(3):232–3 (Eng. Abstr.) **(Chi)**

[A new concept of cardioplegic protection in cardiac surgery: iron chelation] Menasché P, et al. **Arch Mal Coeur** 1988 Jun;81(6):811–6 (Eng. Abstr.) **(Fre)**

[Peroxidase activity in developing rat sublingual glands] Asano T. **Kaibogaku Zasshi** 1988 Oct;63(5):432–41 (Eng. Abstr.) **(Jpn)**

[Ascorbate–peroxidase; scavenging system of hydrogen peroxide in chloroplasts] Asada K. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2957–64 **(Jpn)**

[Contribution of protein conformation to stereochemistry and reactivity of the active center of heme proteins and enzymes. The existence of horseradish peroxidase conformations and their possible role in the catalysis mechanism] Sharonov IuA, et al. **Mol Biol (Mosk)** 1988 Nov–Dec;22(6):1491–506 (Eng. Abstr.) **(Rus)**

[Various features of peroxidase in human saliva] Tkachenko EK, et al. **Ukr Biokhim Zh** 1989 Mar–Apr;61(2):44–9 (Eng. Abstr.) **(Rus)**

[Peroxidases and ethylene formation in olive tree leaves] Vioque B, et al. **Rev Esp Fisiol** 1989 Mar;45(1):47–52 (Eng. Abstr.) **(Spa)**

PHARMACOKINETICS

Sites of egress of inflammatory cells and horseradish peroxidase transport across the blood–brain barrier in a murine model of chronic relapsing experimental allergic encephalomyelitis. Lossinsky AS, et al. **Acta Neuropathol (Berl)** 1989;78(4):359–71

Foreign and endogenous serum protein extravasation during harmaline tremors or kainic acid seizures in the rat: a comparison. Ruth RE, et al. **Acta Neuropathol (Berl)** 1988; 76(4):380–7

Peroxidase activity at CNS nodes of Ranvier and in initial axon segments of lumbosacral alpha–motoneurons after intramuscular administration of horseradish peroxidase. Berthold CH, et al. **Brain Res** 1988 Jul 26;456(2):293–301

False–positive artifacts of tracer strategies distort autonomic connectivity maps. Fox EA, et al. **Brain Res Brain Res Rev** 1989 Jan–Mar;14(1):53–77 (279 ref.)

Topography of the rat blood–testis barrier after intratubular administration of intercellular tracers. Cavicchia JC, et al. **Tissue Cell** 1988;20(4):577–86

PHARMACOLOGY

Enhancement of macrophage spreading and phagocytosis by peroxidative enzymes. Lefkowitz D, et al. **Cell Biol Int Rep** 1988 Nov;12(11):969–78

Peroxidases enhance macrophage–mediated cytotoxicity via induction of tumor necrosis factor. Lefkowitz DL, et al. **Proc Soc Exp Biol Med** 1989 Feb;190(2):144–9

Value of polyethylene glycol (PEG) and horseradish peroxidase (HRP) for hypothermic rabbit heart perfusion. Wicomb WN, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1366–8

TOXICITY

Injurious effect of the eosinophil peroxide–hydrogen peroxide–halide system and major basic protein on human nasal epithelium in vitro. Ayars GH, et al. **Am Rev Respir Dis** 1989 Jul;140(1):125–31

Comparative toxicity of the horse eosinophil peroxidase–H2O2–halide system and granule basic proteins. Klebanoff SJ, et al. **J Immunol** 1989 Jul 1;143(1):239–44

PEROXIDES

An improved method for oxidation of chromium(III) oxide–containing fecal samples by using sodium peroxide fusion. Calvert RJ, et al. **Am J Clin Nutr** 1989 May; 49(5):901–3

The role of cyclooxygenase and lipoxygenase mediators in oxidant–induced lung injury. Farrukh IS, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1343–9

Thermal decomposition of methyl linoleate and methyl linolenate hydroperoxides analyzed by capillary gas chromatography. Frankel EN, et al. **Basic Life Sci** 1988; 49:319–26

Peroxy radicals and singlet oxygen (1O2) from the addition of superoxide ion ($O_2^{-\cdot}$) to CCl4, CF3CCl3, PhCCl3, N–BuBr and N–BuCl in acetonitrile. Matsumoto S, et al. **Basic Life Sci** 1988;49:39–42

Introduction to peroxidation and antioxidation mechanisms. Simic MG, et al. **Basic Life Sci** 1988;49:1–10 (29 ref.)

Peroxyl radicals in aqueous media. von Sonntag C. **Basic Life Sci** 1988;49:47–54

Peroxyl radical– and cytochrome P–450–dependent metabolic activation of (+)–7,8–dihydroxy–7,8–dihydrobenzo(a)pyrene in mouse skin in vitro and in vivo. Pruess–Schwartz D, et al. **Cancer Res** 1989 Apr 1;49(7):1732–7

Acid–base properties of peptide peroxyl radicals in aqueous solution. Mieden OJ, et al. **Free Radic Res Commun** 1989; 6(2–3):127–8

New singlet oxygen source and trapping reagent for peroxide intermediates. Saito I, et al. **Free Radic Res Commun** 1987; 2(4–6):327–36

ESR investigations of the reactions of radiation–produced thiyl and DNA peroxyl radicals: formation of sulfoxyl radicals. Sevilla MD, et al. **Free Radic Res Commun** 1989; 6(2–3):99–102

The cerium perhydroxide–diaminobenzidine (Ce–H2O2–DAB) procedure. New methods for light microscopic phosphatase histochemistry and immunohistochemistry. Halbhuber KJ, et al. **Histochemistry** 1988;90(4):289–97

ADMINISTRATION & DOSAGE

Acne in the adolescent [letter] Connor BH. **Aust Fam Physician** 1988 Oct;17(10):838

[Open, controlled multicenter trial of 2 benzoyl peroxide preparations in the treatment of acne vulgaris] Wokalek H. **Z Hautkr** 1989 Feb 15;64(2):140–4 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Contact dermatitis due to benzoyl peroxide. Morelli R, et al. **Contact Dermatitis** 1989 Mar;20(3):238–9

Allergic bakers' dermatitis due to benzoyl peroxide [news] Fisher AA. **Cutis** 1989 Feb;43(2):128–9

Occupational asthma due to a repair process for polyethylene–coated electrical cables. Stenton SC, et al. **J Soc Occup Med** 1989 Spring;39(1):33–4

Scientific opinion on the carcinogenic risk due to topical administration of benzoylperoxide for the treatment of acne vulgaris. Zbinden G. **Pharmacol Toxicol** 1988 Nov; 63(5):307–9

ANALYSIS

Radio–isotopic determination of subnanomolar amounts of peroxide. Varma SD. **Free Radic Res Commun** 1989; 5(6):359–68

BLOOD

Phycoerythrin fluorescence–based assay for peroxy radicals: a screen for biologically relevant protective agents. De Lange RJ, et al. **Anal Biochem** 1989 Mar;177(2):300–6

Peroxidative events in stored platelet concentrates. Fagiolo E, et al. **Vox Sang** 1989;56(1):32–6

CHEMICAL SYNTHESIS

Amine peroxides as potential antimalarials. Vennerstrom JL. **J Med Chem** 1989 Jan;32(1):64–7 (58 ref.)

METABOLISM

H2O2-induced conversion of cytochrome c oxidase peroxy complex to oxoferryl state. Vygodina TV, et al. **Ann N Y Acad Sci** 1988;550:124–38

Prevention by propionylcarnitine of NADPH and tert-butyl hydroperoxide-dependent chemiluminescence in heart microsomes. Schinetti ML, et al. **Basic Life Sci** 1988; 49:243–7

Magnesium monoperoxophtalate: an efficient single oxygen atom donor in DNA cleavage catalyzed by metalloporphyrin. Pratviel G, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1212–8

Detection of peroxyl and alkoxyl radicals produced by reaction of hydroperoxides with rat liver microsomal fractions. Davies MJ. **Biochem J** 1989 Jan 15;257(2):603–6

Detoxification of DNA hydroperoxide by glutathione transferases and the purification and characterization of glutathione transferases of the rat liver nucleus. Tan KH, et al. **Biochem J** 1988 Sep 15;254(3):841–5

A method for the comparative assessment of antioxidants as peroxyl radical scavengers. Darley-Usmar VM, et al. **Biochem Pharmacol** 1989 May 1;38(9):1465–9

Stimulation of hydroperoxide generation in mouse skins treated with tumor-promoting or carcinogenic agents in vivo and in vitro. Perchellet EM, et al. **Cancer Lett** 1988 Nov;42(3):169–77

Arachidonic acid-dependent peroxidative activation of carcinogenic arylamines by extrahepatic human tissue microsomes. Flammang TJ, et al. **Cancer Res** 1989 Apr 15;49(8):1977–82

Evidence for the metabolism of tumor promoter organic hydroperoxides into free radicals by human carcinoma skin keratinocytes: an ESR-spin trapping study. Athar M, et al. **Carcinogenesis** 1989 Aug;10(8):1499–503

Peroxidative in vitro metabolism of diethylstilbestrol induces formation of 8-hydroxy-2'-deoxyguanosine. Rosier JA, et al. **Carcinogenesis** 1989 Feb;10(2):405–6

Generation of reactive intermediates from the tumor promoter butylated hydroxytoluene hydroperoxide in isolated murine keratinocytes or by hematin. Taffe BG, et al. **Carcinogenesis** 1989 Jul;10(7):1261–8

Glutathione-dependent reduction of peroxides during ferryl- and met-myoglobin interconversion: a potential protective mechanism in muscle. Galaris D, et al. **Free Radic Biol Med** 1989;6(5):473–8

Peroxidation induced changes in synaptosomal transport of dopamine and gamma-aminobutyric acid. Rafalowska U, et al. **Free Radic Biol Med** 1989;6(5):485–92

Catalase protection of neuronal survival in vitro is not directed to the accumulation of peroxides in the culture medium. Martin EM, et al. **Int J Dev Neurosci** 1987; 5(1):1–10

Detection of singlet (1O2) oxygen phosphorescence during chloroperoxidase-catalyzed decomposition of ethyl hydroperoxide. Hall RD, et al. **J Biol Chem** 1989 May 15; 264(14):7900–6

Sulfhydryl groups and peroxidase-like activity of albumin as scavenger of organic peroxides. Pirisino R, et al. **Pharmacol Res Commun** 1988 Jul;20(7):545–52

Vitamin E in the treatment of tardive dyskinesia: the possible involvement of free radical mechanisms. Lohr JB, et al. **Schizophr Bull** 1988;14(2):291–6

PHARMACOLOGY

Involvement of prostaglandins in arteriolar vasodilation to peroxides. Wolin MS, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:281–4

Glutathione protects against exogenous oxidant injury to rabbit renal proximal tubules. Messana JM, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):F874–84

Effect of tert-butyl hydroperoxide on metabolism of liver and hepatoma. Borrello S, et al. **Ann N Y Acad Sci** 1988; 551:144–6

Role of lipids in augmenting the antibacterial activity of benzoyl peroxide against Propionibacterium acnes. Decker LC, et al. **Antimicrob Agents Chemother** 1989 Mar; 33(3):326–30

Damage to protein synthesis concurrent with lipid peroxidation in rat liver slices: effect of halogenated compounds, peroxides, and vitamin E1. Fraga CG, et al. **Arch Biochem Biophys** 1989 Apr;270(1):84–91

Benzoyl peroxide interaction with mitochondria: inhibition of respiration and induction of rapid, large-amplitude swelling. Kennedy CH, et al. **Arch Biochem Biophys** 1989 Jun;271(2):456–70

tert-butyl hydroperoxide kills cultured hepatocytes by peroxidizing membrane lipids. Masaki N, et al. **Arch Biochem Biophys** 1989 Mar;269(2):390–9

tert-butyl hydroperoxide-dependent microsomal release of iron and lipid peroxidation. I. Evidence for the reductive release of nonheme, nonferritin iron. Minotti G. **Arch Biochem Biophys** 1989 Aug 15;273(1):137–43

tert-butyl hydroperoxide-dependent microsomal release of iron and lipid peroxidation. II. Evidence for the involvement of nonheme, nonferritin iron in lipid peroxidation. Minotti G. **Arch Biochem Biophys** 1989 Aug 15;273(1):144–7

Hydroperoxides selectively inhibit human erythrocyte membrane enzymes. Moore RB, et al. **Arch Biochem Biophys** 1989 Sep;273(2):527–34

Membrane permeability and oxidant induced injury. Forman HJ, et al. **Basic Life Sci** 1988;49:523–30

The role of phospholipase A2 in microsomal lipid peroxidation induced with t-butyl hydroperoxide. Borowitz SM, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):1021–8

Radical production in liver mitochondria by peroxidic tumor promoters. Kennedy CH, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1067–72

Inhibition of enzymes and oxidative damage of red blood cells induced by t-butylhydroperoxide-derived radicals. Van der Zee J, et al. **Biochim Biophys Acta** 1989 Apr 14; 980(2):175–80

Modulation of natural killer activity by 12-O-tetradecanoylphorbol-13-acetate and benzoyl peroxide in phorbol ester-sensitive (SENCAR) and resistant (B6C3F1) mice. Updyke LW, et al. **Carcinogenesis** 1988 Nov;9(11):1943–51

Peroxides as oxidant antimalarials. Vennerstrom JL, et al. **Drug Des Deliv** 1989 Jan;4(1):45–54

Role of selenium-dependent glutathione peroxidase in antioxidant defenses in rat alveolar macrophages. Loeb GA, et al. **Exp Lung Res** 1988;14 Suppl:921–36

Benzoyl peroxide enhances the invasive ability of a mouse epidermal carcinoma cell line. Bonfil RD, et al. **Int J Cancer** 1989 Jul 15;44(1):165–9

Hydroperoxide-induced chemiluminescence in rabbit lungs: role of arachidonic acid enzymes. Knoblauch AL, et al. **J Appl Physiol** 1988 Sep;65(3):1340–50

Mepacrine attenuates pulmonary vasoreactivity in rabbits. Shayevitz JR, et al. **J Appl Physiol** 1989 Apr;66(4):1921–6

Effect of t-butyl-hydroperoxide on bradykinin-stimulated changes in cytosolic calcium in vascular endothelial cells. Elliott SJ, et al. **J Biol Chem** 1989 Mar 5;264(7):3806–10

tert-butyl hydroperoxide-induced hemolysis of alpha-tocopherol-decreased erythrocytes from selenium-deficient and selenium-adequate rats. Kim CH, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Oct;34(5):481–90

Deterioration of membrane morphology, phospholipids, and cytoskeletal protein in rat erythrocytes exposed to tert-butyl hydroperoxide: protection by exogenous glutathione fails in selenium deficiency. Suzuki T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Oct;34(5):491–506

Oxidation of vitamin E in red cell membranes by fatty acids, hydroperoxides and selected oxidants. Vatassery GT. **Lipids** 1989 Apr;24(4):299–304

Comparison of croton oil and benzoyl peroxide on DNA synthesis in ultraviolet-irradiated skin. Epstein JH. **Photodermatol** 1988 Oct;5(5):224–6

Hemolysis of chicken erythrocytes by t-butyl hydroperoxide and protection by plasma. Smith RC, et al. **Poult Sci** 1988 Nov;67(11):1632–5

Zinc suppression of free radicals induced in cultures of rat hepatocytes by iron, t-butyl hydroperoxide, and 3-methylindole. Coppen DE, et al. **Proc Soc Exp Biol Med** 1988 Oct;189(1):100–9

Platelet hypersensitivity induced by 1-chloro-2, 4-dinitrobenzene, hydroperoxides and inhibition of lipoxygenase. Hill TD, et al. **Thromb Res** 1989 Mar 1; 53(5):447–55

[H2O2-induced thrombocyte aggregation and deaggregation] Samal' AB, et al. **Gematol Transfuziol** 1988 Nov;33(11):34–7 (Eng. Abstr.) **(Rus)**

POISONING

Brain alterations induced by vitamin E deficiency and intoxication with methyl ethyl ketone peroxide. Chaudiere J, et al. **Neurotoxicology** 1988 Summer;9(2):173–9

THERAPEUTIC USE

A comparative study of benzoyl peroxide and clindamycin phosphate for treating acne vulgaris. Swinyer LJ, et al. **Br J Dermatol** 1988 Nov;119(5):615–22

Comparison of a salicylic acid cleanser and a benzoyl peroxide wash in the treatment of acne vulgaris. Shalita AR. **Clin Ther** 1989 Mar-Apr;11(2):264–7

Benzoyl peroxide in the treatment of acne vulgaris: a double-blind, multi-centre comparative study of 'Quinoderm' cream and 'Quinoderm' cream with hydrocortisone versus their base vehicle alone and a benzoyl peroxide only gel preparation. Jaffé GV, et al. **Curr Med Res Opin** 1989;11(7):453–62

Efficacy and tolerance of a miconazole-benzoyl peroxide cream combination versus a benzoyl peroxide gel in the topical treatment of acne vulgaris. Flückiger R, et al. **Dermatologica** 1988;177(2):109–14

Benzoyl peroxide in acne [letter] Cunliffe WJ. **J Am Acad Dermatol** 1989 Mar;20(3):518–20

Effect of subgingival irrigation [letter] **J Periodontol** 1989 Jul;60(7):413–5

Effect of subgingival irrigation with tetrapotassium peroxydiphosphate on scaled and untreated periodontal pockets. Listgarten MA, et al. **J Periodontol** 1989 Jan; 60(1):4–11

[Value of the Practitioner's Ambulatory Treatment in treating leg ulcers] Kalis B, et al. **Phlebologie** 1989 Jan-Mar; 42(1):169–73 **(Fre)**

[Nosographic and morphometric classification of cervix ectropion. Clinical experience with katoxyn spray] Spagnolo A, et al. **Minerva Ginecol** 1988 Apr;40(4):265–71 (Eng. Abstr.) **(Ita)**

[Benzoyl peroxide in the treatment of decubitus ulcers] Fernández Vozmediano JM, et al. **Med Cutan Ibero Lat Am** 1988;16(5):427–9 (Eng. Abstr.) **(Spa)**

TOXICITY

Mitochondrial damage as a mechanism of cell injury in the killing of cultured hepatocytes by tert-butyl hydroperoxide. Masaki N, et al. **Arch Biochem Biophys** 1989 May 1;270(2):672–80

Cellular protection against damage by hydroperoxides: role of glutathione. Biaglow JE, et al. **Basic Life Sci** 1988; 49:567–73

Comparison of the susceptibility of hepatocytes from postnatal and adult mice to hepatotoxins. Adamson GM, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4183–90

Glutathione uptake and protection against oxidative injury in isolated kidney cells. Hagen TM, et al. **Kidney Int** 1988 Jul;34(1):74–81

Effects of iron chelators and glutathione depletion on the induction and repair of chromosomal aberrations by tert-butyl hydroperoxide in cultured Chinese hamster cells. Ochi T. **Mutat Res** 1989 Aug;213(2):243–8

Effects of ethoxyquin feed preservative and peroxide level on broiler performance. Cabel MC, et al. **Poult Sci** 1988 Dec;67(12):1725–30

Tumor promotion by a hydroperoxide metabolite of butylated hydroxytoluene, 2,6-di-tert-butyl-4-hydroperoxy-4-methyl-2,5-cyclohexadienone, in mouse skin. Taffe BG, et al. **Res Commun Chem Pathol Pharmacol** 1988 Sep; 61(3):291–303

Induction of sfiA SOS function by peroxides using three different E. coli strains. Eder E, et al. **Toxicol Lett** 1989 Sep;48(3):225–34

Correlation between cytosolic Ca2+ concentration and cytotoxicity in hepatocytes exposed to oxidative stress. Nicotera P, et al. **Toxicology** 1988 Nov 14;52(1-2):55–63

Cytotoxicity of an organic hydroperoxide and cellular antioxidant defense system against hydroperoxides in cultured mammalian cells. Ochi T, et al. **Toxicology** 1989 Apr;55(1-2):69–82

[Study of the migration of transformation products of peroxide vulcanization agents from rubber] Novitskaia LP, et al. **Gig Sanit** 1989 May;(5):88–9 **(Rus)**

PEROXISOMES see **MICROBODIES**

PERPHENAZINE

BLOOD

The relationship between perphenazine plasma levels and clinical response in acute schizophrenia. Omérov M, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1-2):159–66

[Serum level of perphenazine determines by liquid chromatography] Dessalles MC, et al. **J Chromatogr** 1989 Jan 27;487(1):215–20 **(Fre)**

PHARMACOKINETICS

Disposition of perphenazine is related to polymorphic debrisoquin hydroxylation in human beings. Dahl-Puustinen ML, et al. **Clin Pharmacol Ther** 1989 Jul; 46(1):78–81

PHARMACOLOGY

Effects of perphenazine, chlorpromazine or CoCl2 on the activities of delta-aminolevulinic acid synthetase and heme oxygenase and on the content of hemoprotein in rat liver. Senda N, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jul;65(1):57–64

THERAPEUTIC USE

Intraindividual comparison of the effect of perphenazine and of the combination of perphenazine and lithium in schizophrenia. Ryšánek R, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):37–8

Controlled cross-over comparison of isofloxythepin and perphenazine in the treatment of schizophrenic psychoses. Svestka J, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):32–4

Cross-over comparison of the therapeutic effects of sulpiride and perphenazine in schizophrenic and schizoaffective psychoses. Svestka J, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):35–6

Sulpiride and perphenazine in schizophrenia. A double-blind clinical trial. Lepola U, et al. **Acta Psychiatr Scand** 1989 Jul;80(1):92–6

Plasma catecholamine metabolites and treatment response at neuroleptic steady state. Bowers MB Jr, et al. **Biol Psychiatry** 1989 Mar 15;25(6):734–8

[Further observations on the effects of the treatment with amitriptyline and perphenazine in essential headache] Pisani RA, et al. **Clin Ter** 1987 Sep 15;122(5):345–50 (Eng. Abstr.) **(Ita)**

PERSISTENT FETAL CIRCULATION SYNDROME

Persistent pulmonary hypertension in the newborn. Burnard

ED. **Aust Paediatr J** 1989 Apr;25(2):59–60 (23 ref.)

COMPLICATIONS

Neurodevelopmental outcome following persistent pulmonary hypertension of the neonate. Leavitt AM, et al. **J Perinatol** 1987 Fall;7(4):288–91

Association of a persistent hyaloid artery and ROP [letter] Nissenkorn I, et al. **Ophthalmology** 1988 Apr;95(4):559–60

Seizures and infarction in neonates with persistent pulmonary hypertension. Scher MS, et al. **Pediatr Neurol** 1986 Nov–Dec;2(6):332–9

Late-onset hearing loss [letter] Nield T, et al. **Pediatrics** 1989 May;83(5):807–8

Hearing loss and persistent fetal circulation [letter] Perry-Marion T. **Pediatrics** 1989 Apr;83(4 Pt 2):655

Ureaplasmal pneumonia and sepsis associated with persistent pulmonary hypertension of the newborn. Waites KB, et al. **Pediatrics** 1989 Jan;83(1):79–85

DRUG THERAPY

Pulmonary artery catheter placement with two-dimensional echocardiographic guidance: a technique applicable in critically ill neonates. Yoshizato T, et al. **Mayo Clin Proc** 1989 Apr;64(4):387–91

[Prostacyclin and pulmonary hypertension in newborn infants (letter)] Parisot S, et al. **Arch Fr Pediatr** 1989 Jun–Jul; 46(6):466 **(Fre)**

ETIOLOGY

Misalignment of lung vessels and alveolar capillary dysplasia: a cause of persistent pulmonary hypertension. Cater G, et al. **J Pediatr** 1989 Feb;114(2):293–300

MORTALITY

Determinants of mortality in patients with the syndrome of persistent pulmonary hypertension of the newborn. Reyes Baez G, et al. **Bol Asoc Med P R** 1989 Feb;81(2):47–50

Historical controls for extracorporeal membrane oxygenation in neonates. Nading JH. **Crit Care Med** 1989 May; 17(5):423–5

Predicting survival in infants with persistent pulmonary hypertension of the newborn. Davis JM, et al. **Pediatr Pulmonol** 1988;5(1):6–9

Survival of infants with persistent pulmonary hypertension without extracorporeal membrane oxygenation. Dworetz AR, et al. **Pediatrics** 1989 Jul;84(1):1–6

PATHOLOGY

The pulmonary vasculature in meconium aspiration. Perlman EJ, et al. **Hum Pathol** 1989 Jul;20(7):701–6

Persistent pulmonary hypertension of the newborn: pulmonary pathologic aspects. Patterson K, et al. **Perspect Pediatr Pathol** 1988;12:139–54 (58 ref.)

PHYSIOPATHOLOGY

Structure and function of the pulmonary vascular bed: an update. Rabinovitch M. **Cardiol Clin** 1989 May;7(2):227–38 (116 ref.)

Color flow mapping to document normal pulmonary venous return in neonates with persistent pulmonary hypertension being considered for extracorporeal membrane oxygenation. Kimball TR, et al. **J Pediatr** 1989 Mar; 114(3):433–7

The significance of ductal shunting during extracorporeal membrane oxygenation. Burch KD, et al. **J Pediatr Surg** 1989 Sep;24(9):855–9

The cardiopulmonary effects of calcium infusion in infants with persistent pulmonary hypertension of the newborn. Bifano E, et al. **Pediatr Res** 1989 Mar;25(3):262–5

RADIOGRAPHY

Intrasellar trigeminal artery. Richardson DN, et al. **AJNR** 1989 Jan–Feb;10(1):205

THERAPY

Neonatal pulmonary hypertension: pathophysiologic-based therapy. Gersony WM. **Acta Paediatr Jpn Overseas Ed** 1987 Feb;29(1):18–23

High-frequency jet ventilation in neonatal pulmonary hypertension. Carlo WA, et al. **Am J Dis Child** 1989 Feb; 143(2):233–8

Persistent pulmonary hypertension of the newborn treated with hyperventilation: clinical features and outcome. John E, et al. **Aust Paediatr J** 1988 Dec;24(6):357–61

Extracorporeal membrane oxygenation in the newborn and beyond. Stork E. **Clin Perinatol** 1988 Dec;15(4):815–29 (38 ref.)

High-frequency oscillation for persistent fetal circulation after repair of congenital diaphragmatic hernia. Fujino Y, et al. **Crit Care Med** 1989 Apr;17(4):376–7

Persistent pulmonary hypertension of the newborn. Peters EA, et al. **Indiana Med** 1989 Jan;82(1):13–7

Clinical use of extracorporeal membrane oxygenation in the treatment of persistent pulmonary hypertension following surgical repair of congenital diaphragmatic hernia. Johnston PW, et al. **J Pediatr Surg** 1988 Oct;23(10):908–12

Transient pulmonary vascular lability: a form of mild pulmonary hypertension of the newborn not requiring mechanical ventilation. Bonta BW. **J Perinatol** 1988 Winter;8(1):19–23

Continuous negative pressure in the treatment of infants with pulmonary hypertension and respiratory failure. Sills JH, et al. **J Perinatol** 1989 Mar;9(1):43–8

Persistent fetal circulation and extracorporeal membrane oxygenation [editorial] **Lancet** 1988 Dec 3;2(8623):1289–91

PERSISTENT PULMONARY HYPERTENSION OF NEWBORN see **PERSISTENT FETAL CIRCULATION SYNDROME**

PERSONAL EXPENDITURES see **FINANCING, PERSONAL**

PERSONAL HEALTH SERVICES

HISTORY

[The history of medical practice; between social history and historical sociology] Horstman K. **Ned Tijdschr Geneeskd** 1989 Apr 15;133(15):781–4 **(Dut)**

UTILIZATION

Use of health services after a myocardial infarction. Maeland JG, et al. **Scand J Soc Med** 1989;17(1):93–102

PERSONAL SATISFACTION

Life satisfaction and adjustment in lithium-treated affective patients in remission. Lepkifker E, et al. **Acta Psychiatr Scand** 1988 Sep;78(3):391–5

Perceptions of life-pattern disintegrity as a link in the relationship between stress and illness. Dixon JP, et al. **ANS** 1989 Jan;11(2):1–11

Sexual satisfaction in marriage as a function of life meaning. McCann JT, et al. **Arch Sex Behav** 1989 Feb;18(1):59–72

Relationships among measures of communication, marital satisfaction and exposure during couples treatment of agoraphobia. Craske MG, et al. **Behav Res Ther** 1989; 27(2):131–40

Job stress and satisfaction among the staff members at a cancer center. Peteet JR, et al. **Cancer** 1989 Aug 15; 64(4):975–82

Measurement of life satisfaction. Developing a life satisfaction scale. Salokangas RK, et al. **Compr Gerontol [B]** 1988 Aug; 2(2):69–74

Cognitive function, cognitive style and life satisfaction in a 68-year-old male population. Steen G, et al. **Compr Gerontol [B]** 1987 Aug;1(2):54–61 (30 ref.)

Indoor and outdoor activities of aged women and men as related to depression and well-being. Lomranz J, et al. **Int J Aging Hum Dev** 1988;26(4):303–14

Life satisfaction of elderly individuals in regular community housing, in low-cost community housing, and high and low self-determination nursing homes. Vallerand RJ, et al. **Int J Aging Hum Dev** 1989;28(4):277–83

Life satisfaction, illness behaviour, and rehabilitation outcome: results of a one year follow-up study with cardiac patients. Myrtek M. **Int J Rehabil Res** 1987;10(4):373–82

Dental esthetic satisfaction in adults. Neumann LM, et al. **J Am Dent Assoc** 1989 May;118(5):565–70

Marital interaction and satisfaction: a longitudinal view. Gottman JM, et al. **J Consult Clin Psychol** 1989 Feb; 57(1):47–52

Sources of stress and satisfaction in emergency practice. Keller KL, et al. **J Emerg Med** 1989 May–Jun;7(3):293–9

The achievement and satisfaction of clinical subjects in old and new curricula of Ramathibodi. Eoaskoon W, et al. **J Med Assoc Thai** 1989 Jan;72 Suppl 1:15–7

Goal utility, task satisfaction, and the self-appraisal hypothesis of type A behavior. Freedman SM, et al. **J Pers Soc Psychol** 1989 Mar;56(3):465–70

Personal investment predictors of life satisfaction among physically active middle-aged and older adults. Tappe MK, et al. **J Psychol** 1988 Nov;122(6):557–66

Dyadic adjustment/sexual satisfaction in women and men as a function of psychological sex role self-perception. Rosenzweig JM, et al. **J Sex Marital Ther** 1989 Spring; 15(1):42–56

Job and life satisfaction among rural physicians. Results of a survey. Pastor WH, et al. **Minn Med** 1989 Apr; 72(4):215–23

Perceptions of health, abilities, and life satisfaction among very old adults. Gfellner BM. **Percept Mot Skills** 1989 Feb; 68(1):203–9

A comparison of student satisfaction with their preclinical environment in a traditional and a problem based curriculum. Blumberg P, et al. **Proc Annu Conf Res Med Educ** 1988;27:60–5

Type A behavior, occupational and life demands, satisfaction, and well-being. Burke RJ. **Psychol Rep** 1988 Oct; 63(2):451–8

Stress in relation to satisfaction with leisure experienced by those performing in therapeutic recreation. Cunningham PH. **Psychol Rep** 1989 Apr;64(2):652

Effects of moral reconation therapy upon moral reasoning, life purpose, and recidivism among drug and alcohol offenders. Little GL, et al. **Psychol Rep** 1989 Feb; 64(1):83–90

A scale for measuring the occurrence of positive states of mind: a preliminary report. Horowitz M, et al. **Psychosom Med** 1988 Sep–Oct;50(5):477–83

Older women living alone. Technical environmental assessment of psychological well-being. Carp FM, et al. **Res Aging** 1986 Sep;8(3):407–25

Gender differences in retirement satisfaction and its antecedents. Seccombe K, et al. **Res Aging** 1986 Sep; 8(3):426–40

Comparison of mental health and life satisfaction of five elderly ethnic groups. Johnson FL, et al. **West J Nurs Res** 1988 Oct;10(5):613–28

[Can research into the needs and motives improve the management of elderly citizens?] Wolf E. **Z Arztl Fortbild (Jena)** 1989;83(8):401–4 (14 ref.) **(Ger)**

[Situational and differential psychologic determinants of personal satisfaction in advanced age] Heineken E, et al. **Z Gerontol** 1988 Sep–Oct;21(5):289–94 (Eng. Abstr.) **(Ger)**

[Life planning—consequences of a steadily growing life span 1650–2000. Considering the longer life span, do we need a life plan?] Imhof AE, et al. **Z Gerontol** 1988 Jul–Aug; 21(4):193–7 (Eng. Abstr.) **(Ger)**

[The significance of professional activity for future concepts of the elderly] Löschner K, et al. **ZFA** 1988 Nov–Dec; 43(6):363–6 (Eng. Abstr.) **(Ger)**

[Significance of the "life satisfaction" concept for gerontology] Mikulas J. **ZFA** 1988 Jul–Aug;43(4):195–202 (32 ref.) (Eng. Abstr.) **(Ger)**

[Psychosocial aspects of the offprint, or the reprint game] Alonso HO. **Medicina (B Aires)** 1987;47(5):549–50 **(Spa)**

PERSONAL SPACE see under **SPATIAL BEHAVIOR**

PERSONALITY

Temperament and neonatal risk in full-term and preterm combined vaginal/cesarean section twin pairs. Riese ML. **Acta Genet Med Gemellol (Roma)** 1988;37(3–4):239–48

Personality and neurosurgery. Proceedings of the third convention of the Academia Eurasiana Neurochirurgica. Brussels, August 30–September 2, 1987. **Acta Neurochir Suppl (Wien)** 1988;44:1–185

Psychic vulnerability as a sequel to perinatal morbidity. A longitudinal twin study with special reference to psychiatric morbidity and inter-twin dependency. Moilanen I. **Acta Paediatr Scand Suppl** 1988;344:95–105

Trends in temperament research. Turunen MM. **Acta Paediatr Scand Suppl** 1988;344:81–6 (13 ref.)

Personality factors and pathological gambling. Roy A, et al. **Acta Psychiatr Scand** 1989 Jul;80(1):37–9

Interpersonal dependency, self-esteem and depression in primary alcoholism. Vrasti R, et al. **Acta Psychiatr Scand** 1988 Oct;78(4):448–50

Runaways who will run away again ? Speck NB, et al. **Adolescence** 1988 Winter;23(92):881–8

Genetic heterogeneity and the classification of alcoholism. Cloninger CR, et al. **Adv Alcohol Subst Abuse** 1988; 7(3–4):3–16 (20 ref.)

Temperamental influences on reactions to unfamiliarity and challenge. Kagan J, et al. **Adv Exp Med Biol** 1988; 245:319–39

The prediction of habitual alcohol use from alcohol related expectancies and personality. Jackson CP, et al. **Alcohol Alcohol** 1988;23(4):305–14

Childhood personality predicts alcohol abuse in young adults. Cloninger CR, et al. **Alcoholism (NY)** 1988 Aug; 12(4):494–505 (75 ref.)

Personality, drug use, and early attrition from substance abuse treatment. Stark MJ, et al. **Am J Drug Alcohol Abuse** 1988; 14(4):475–85

Using strengths of geriatric residents in long-term care. Aizenstein S, et al. **Am J Nurs** 1988 Oct;88(10):1403–4, 1406

The search continues for an orthodontic assistant profile [letter] Salvatoriello FW, et al. **Am J Orthod Dentofacial Orthop** 1989 May;95(5):28A

Search for orthodontic assistant personality profile. Westbrook M, et al. **Am J Orthod Dentofacial Orthop** 1988 Oct;94(4):350–3

Temperament and individuality: a study of Malay children. Banks E. **Am J Orthopsychiatry** 1989 Jul;59(3):390–7

Child temperament and parental perceptions of individual child adjustment: an intrafamilial analysis. Brody GH, et al. **Am J Orthopsychiatry** 1988 Oct;58(4):532–42

Neonatal behavior and early temperament: a longitudinal study of the first six months of life. Green J, et al. **Am J Orthopsychiatry** 1989 Jan;59(1):82–93

Stability of temperament characteristics in childhood. McNeil TF, et al. **Am J Orthopsychiatry** 1988 Oct;58(4):622–6

Personality risk factors for cocaine abuse. Yates WR, et al. **Am J Public Health** 1989 Jul;79(7):891–2

Personality, stress, and injuries in professional ballet dancers. Hamilton LH, et al. **Am J Sports Med** 1989 Mar–Apr; 17(2):263–7

Psychological consequences of blunt head trauma and relation to other indices of severity of injury. Gensemer IB, et al. **Ann Emerg Med** 1989 Jan;18(1):9–12

Personality. Carson RC. **Annu Rev Psychol** 1989;40:227–48 (122 ref.)

The hardiness characteristic: a motivating factor in adaptation. Pollock SE. **ANS** 1989 Jan;11(2):53–62

Relation of personality and attentional factors to cognitive deficits in human immunodeficiency virus-infected subjects. Kovner R, et al. **Arch Neurol** 1989 Mar;

46(3):274–7
Personality alterations in dementia of the Alzheimer type. Petry S, et al. **Arch Neurol** 1988 Nov;45(11):1187–90
Temperament in Australian toddlers. Sewell J, et al. **Aust Paediatr J** 1988 Dec;24(6):343–5
Personal characteristics related to accident histories of Canadian pilots. Platenius PH, et al. **Aviat Space Environ Med** 1989 Jan;60(1):42–5
The biology of personality. Society of Biological Psychiatry, forty-fourth annual convention & scientific program. May 4–8, 1989, San Francisco, California. Abstracts. **Biol Psychiatry** 1989 Apr 1;25(7A):1A–248A
Some personality factors related to dental anxiety and fear of pain. Frazer M, et al. **Br Dent J** 1988 Dec 24; 165(12):436–9
Personality and substance use among adolescents: a longitudinal study. Teichman M, et al. **Br J Addict** 1989 Feb;84(2):181–90
Psychical and adaptive mechanisms in seasickness. Szeluga J, et al. **Bull Inst Marit Trop Med Gdynia** 1988; 39(1–2):39–44
Changing course. Waugh D. **Can Med Assoc J** 1988 Nov 1;139(9):885
Personality and memory in childhood migraine. D'Andrea G, et al. **Cephalalgia** 1989 Mar;9(1):25–8
The effects of "personality" and isolated demographic variables on adverse postpartum reactions: an attempt at prediction. Verinis JS, et al. **Chic Med Sch Q** 1972; 31(1–4):9–13
Inhibited and uninhibited types of children. Kagan J, et al. **Child Dev** 1989 Aug;60(4):838–45
Temperament and the development of inhibited approach. Rothbart MK. **Child Dev** 1988 Oct;59(5):1241–50
Temperament, emotion, and social interactive behavior in the strange situation: a component process analysis of attachment system functioning. Thompson RA, et al. **Child Dev** 1988 Aug;59(4):1102–10
Attachment behavior, attachment security, and temperament during infancy. Vaughn BE, et al. **Child Dev** 1989 Jun; 60(3):728–37
Personality profiles and socioeconomic factors in contraceptive use. González-Olguin A, et al. **Contraception** 1988 Nov;38(5):551–9
Long-term crisis management by furthering group dependence as a narcissistic reinforcement of drug and alcohol dependents. Battegay R. **Crisis** 1988 Nov;9(2):83–92
Family structure and dependency: early transitions to female household headship. McLanahan SS. **Demography** 1988 Feb;25(1):1–16
Psychological predictors of glucose control in patients with IDDM. Lane JD, et al. **Diabetes Care** 1988 Nov–Dec; 11(10):798–800
Idiopathic constipation by colonic dysfunction. Relationship with personality and anxiety. Devroede G, et al. **Dig Dis Sci** 1989 Sep;34(9):1428–33
Behavioral characteristics and early temperament of premature infants with intracranial hemorrhage. Anderson LT, et al. **Early Hum Dev** 1989 Feb;18(4):273–83
Personality differences in the phase of circadian rhythms: a comparison of morningness and extraversion. Vidaček S, et al. **Ergonomics** 1988 Jun;31(6):873–88
Illness behavior and personality changes in patients with chronic prostatitis during a two-year follow-up period. Keltikangas-Järvinen L, et al. **Eur Urol** 1989;16(3):181–4
Self-perception of personality at midlife in elderly people: continuity and change. Gold D, et al. **Exp Aging Res** 1987 Winter;13(4):197–202
Symbiosis, the family, and natural systems. Noone RJ. **Fam Process** 1988 Sep;27(3):285–92
The interrelationship between type of circadian rhythm, its stability and the temperament. Madjirova N, et al. **Folia Med (Plovdiv)** 1987;29(4):13–7
Personality factors in chronic gastric and duodenal ulcers: a controlled study. Magni G, et al. **Gastroenterol Clin Biol** 1988 Dec;12(12):926–30 (19 ref.)
Personality types of women attending an STD clinic: correlation with keeping first review appointments. Hammond D, et al. **Genitourin Med** 1989 Jun;65(3):163–5
Personality profile and affective state of patients with inflammatory bowel disease. Robertson DA, et al. **Gut** 1989 May;30(5):623–6
Different forms of migraine in childhood and adolescence: notes on personality traits. Lanzi G, et al. **Headache** 1988 Oct;28(9):618–22
Personality factors of critical care nurses [letter] Rectanus EF Jr. **Heart Lung** 1989 May;18(3):321
Assessment of the person. Stollerman GH. **Hosp Pract [Off]** 1989 Apr 30;24(4A):13–4, 16–7
Hypnotic transformation—three studies of theatrical role-playing: a brief communication. Fowler K. **Int J Clin Exp Hypn** 1988 Oct;36(4):249–55
Experimental research of a set as a means of a set as a means of understanding specific characteristics of psychological constitutions. Dobrovich AB. **Int J Neurosci** 1989 Jun; 46(3–4):205–7
Hemisphericity and personality. Vingiano W. **Int J Neurosci** 1989 Feb;44(3–4):263–74
Reliability of psychophysiological assessment within temperament-groups. Davis C. **Int J Psychophysiol** 1988 Nov;6(4):299–305
A comparison of depressed and nondepressed disturbed children on measures of attributional style, hopelessness, life stress, and temperament. Benfield CY, et al. **J Abnorm Child Psychol** 1988 Aug;16(4):397–410
Dependency, self-criticism, and depressive attributional style. Brown JD, et al. **J Abnorm Psychol** 1989 May;98(2):187–8
Frontal brain asymmetry predicts infants' response to maternal separation. Davidson RJ, et al. **J Abnorm Psychol** 1989 May;98(2):127–31
Dependency and self-criticism in depression: evaluation in a clinical population. Klein DN, et al. **J Abnorm Psychol** 1988 Nov;97(4):399–404
Infants of postpartum depressed mothers: temperament and cognitive status. Whiffen VE, et al. **J Abnorm Psychol** 1989 Aug;98(3):274–9
An investigation of the dependence of severely disabled people in a hospital. Stride NM. **J Adv Nurs** 1988 Sep; 13(5):556–64
Frequencies and stability of temperament types in childhood. Persson-Blennow I, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Sep;27(5):619–22
Affect attunement, attachment, temperament, and zygosity: a twin study. Szajnberg NM, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Mar;28(2):249–53
Nerds, or neuroevolutionary rostral developers: a contribution to the future of characterology. Forrest DV. **J Am Acad Psychoanal** 1988 Oct;16(4):491–511
Psychoneuroimmunology: blaming the victim? [editorial] McGoldrick KE. **J Am Med Wom Assoc** 1989 Sep–Oct; 44(5):134
A causal model of the relationship among accidents, biodata, personality, and cognitive factors. Hansen CP. **J Appl Psychol** 1989 Feb;74(1):81–90
Comment on paper by Gibbs et al. Carey WB, et al. **J Child Psychol Psychiatry** 1989 Jul;30(4):639–47
Child behavior ratings: the influence of maternal characteristics and child temperament. Lancaster S, et al. **J Child Psychol Psychiatry** 1989 Jan;30(1):137–49
Temperament as a predictor of psychological adjustment in female adult incest victims. Carson DK, et al. **J Clin Psychol** 1989 Mar;45(2):330–5
Family-School context: parent and teacher agreement on child temperament. Victor JB, et al. **J Consult Clin Psychol** 1988 Aug;56(4):573–7
Personality variables as predictors of performance for first-year dental students. Westerman GH, et al. **J Dent Educ** 1989 Apr;53(4):233–7
Temperamental factors associated with rapid weight gain and obesity in middle childhood. Carey WB, et al. **J Dev Behav Pediatr** 1988 Aug;9(4):194–8
Age, personality, and the spontaneous self-concept. McCrae RR, et al. **J Gerontol** 1988 Nov;43(6):S177–85
Psychosocial variables and hypertension: a new look at an old controversy. Sommers-Flanagan J, et al. **J Nerv Ment Dis** 1989 Jan;177(1):15–24 (88 ref.)
Aptitude, previous achievement, and cognitive style: relation to academic achievement in nursing courses of differing content. Talarczyk G. **J Nurs Educ** 1989 Jun;28(6):265–70
Temperament problems and congenital hypothyroidism [letter] Kemper K, et al. **J Pediatr** 1989 Aug;115(2):334–5
Effect of thyroid hormone level on temperament in infants with congenital hypothyroidism detected by screening of neonates. Rovet JF, et al. **J Pediatr** 1989 Jan;114(1):63–8
Temperament, coping, and psychological adjustment in young children with myelomeningocele. Lavigne JV, et al. **J Pediatr Psychol** 1988 Sep;13(3):363–78
Size for gestational age and neonatal temperament in full-term and preterm AGA-SGA twin pairs. Riese ML. **J Pediatr Psychol** 1988 Dec;13(4):521–30
The impact of stress and temperament on medical utilization by school-age children. Wertlieb D, et al. **J Pediatr Psychol** 1988 Sep;13(3):409–21
Long-term stability and change in personality. **J Pers** 1989 Jun;57(2):175–545
Continuities and consequences of interactional styles across the life course. Caspi A, et al. **J Pers** 1989 Jun;57(2):375–406
Self-ratings of personality: a naturalistic comparison of normative, ipsative, and idiothetic standards. Chaplin WF, et al. **J Pers** 1988 Sep;56(3):509–30
Five robust trait dimensions: development, stability, and utility. Digman JM. **J Pers** 1989 Jun;57(2):195–214 (55 ref.)
Children's behavioral inhibition over age and across situations: genetic similarity for a trait during change. Matheny AP Jr. **J Pers** 1989 Jun;57(2):215–35
Consensus in personality judgments at zero acquaintance. Albright L, et al. **J Pers Soc Psychol** 1988 Sep;55(3):387–95
The hardy personality: cognitive and physiological responses to evaluative threat. Allred KD, et al. **J Pers Soc Psychol** 1989 Feb;56(2):257–66
Arousal, affect, and attention as components of temperament. Derryberry D, et al. **J Pers Soc Psychol** 1988 Dec; 55(6):958–66
Personality correlates of physical fitness. Hogan J. **J Pers Soc Psychol** 1989 Feb;56(2):284–8
Use of categorical and individuating information in making inferences about personality. Krueger J, et al. **J Pers Soc Psychol** 1988 Aug;55(2):187–95
Rater bias in the EASI temperament scales: a twin study [published erratum appears in J Pers Soc Psychol 1989 May;56(5):845] Neale MC, et al. **J Pers Soc Psychol** 1989 Mar;56(3):446–55
Neuroticism, extraversion, and related traits in adult twins reared apart and reared together. Pedersen NL, et al. **J Pers Soc Psychol** 1988 Dec;55(6):950–7
Appraisal of life change, depression, and illness in hardy and nonhardy women. Rhodewalt F, et al. **J Pers Soc Psychol** 1989 Jan;56(1):81–8
Genetic and environmental variance in content dimensions of the MMPI. Rose RJ. **J Pers Soc Psychol** 1988 Aug; 55(2):302–11
Conditional hedges and the intuitive psychology of traits. Wright JC, et al. **J Pers Soc Psychol** 1988 Sep;55(3):454–69
Personality and conditioning: a test of four models. Zinbarg R, et al. **J Pers Soc Psychol** 1989 Aug;57(2):301–14
Kinesthetic aftereffect and augmenting/reducing: a two-session procedure, and hence identification of stimulus-governed subjects, is contraindicated. Baker AH. **J Psychol** 1988 Jul;122(4):349–63 (46 ref.)
Resilience. Responding to adversity. Kadner KD. **J Psychosoc Nurs Ment Health Serv** 1989 Jul;27(7):20–5
Caring: commitment to excellence or condemnation to conformity? Sherman JB, et al. **J Psychosoc Nurs Ment Health Serv** 1989 Aug;27(8):25–9
Host moderator variables in the promotion of cervical neoplasia—I. Personality facets. Antoni MH, et al. **J Psychosom Res** 1988;32(3):327–38
Changes in personality associated with changes in aerobic and anaerobic fitness in women and men. Jasnoski ML, et al. **J Psychosom Res** 1988;32(3):273–6
Rationality and antiemotionality as a risk factor for cancer: concept differentiation. van der Ploeg HM, et al. **J Psychosom Res** 1989;33(2):217–25
The relationship of temperament to adjustment in British infant schools. Klein HA, et al. **J Soc Psychol** 1988 Oct; 128(5):585–95
Debrisoquine hydroxylation polymorphism and personality [letter] [see comments] Bertilsson L, et al. **Lancet** 1989 Mar 11;1(8637):555. **Comment in:** Lancet 1989 Jun 17;1(8651):1398
Debrisoquine hydroxylation phenotypes in healthy volunteers [letter; comment] Llerena A, et al. **Lancet** 1989 Jun 17;1(8651):1398. **Comment on:** Lancet 1989 Mar 11;1(8637):555
The moral vision of The Alchemist: tricks, psychotherapy, and personality traits. Netscher RE. **Lit Med** 1988;7:177–94
Personality factors that differentiate homosexual men with positive and negative attitudes toward condom use. Ross MW. **N Y State J Med** 1988 Dec;88(12):626–8
Personality traits of psychotic and nonpsychotic depressive patients. Popescu C, et al. **Neurol Psychiatr (Bucur)** 1989 Apr-Jun;27(2):147–62
The difficult child. Carey WB. **Pediatr Rev** 1986 Aug; 8(2):39–45 (17 ref.)
Commentary on the difficult child. Chess S. **Pediatr Rev** 1986 Aug;8(2):35–7
Feeding and temperament as determinants of early infant crying/fussing behavior. Barr RG, et al. **Pediatrics** 1989 Sep;84(3):514–21
Family functioning, temperament, and psychologic adaptation in children with congenital or acquired limb deficiencies. Varni JW, et al. **Pediatrics** 1989 Aug; 84(2):323–30
The iceberg profile and young competitive swimmers. Furst DM, et al. **Percept Mot Skills** 1988 Oct;67(2):478
Loneliness, personality, and well-being in older widows. Gfellner BM, et al. **Percept Mot Skills** 1988 Aug; 67(1):143–6
Individual differences in cognitive strategy and personality traits as measured by the Sixteen Personality Factor Questionnaire. Kerr CE, et al. **Percept Mot Skills** 1988 Dec; 67(3):943–54
Effects of consistent aerobic exercise on the psychological functioning of women. Labbé EE, et al. **Percept Mot Skills** 1988 Dec;67(3):919–25
The personality sphere in patients with panic attacks. Hebenstreit M, et al. **Pharmacopsychiatry** 1988 Nov; 21(6):463–4
Child temperament as a developmental or an epidemiological concept: a methodological point of view. Maziade M. **Psychiatr Dev** 1988 Autumn;6(3):195–211
Some hypotheses about gender differences in coping with oral dependency conflicts. Fuerstein LA. **Psychoanal Rev** 1989 Summer;76(2):163–84
Perfectionism and Millon basic personality patterns. Broday SF. **Psychol Rep** 1988 Dec;63(3):791–4
Relationship between academic achievement and measured career interest: examination of Holland's theory. Henry P. **Psychol Rep** 1989 Feb;64(1):35–40
Boredom proneness and adolescents' personalities. McGiboney GW, et al. **Psychol Rep** 1988 Dec;63(3):741–2
Personality priorities of adolescents: some Caribbean findings. Richardson AG. **Psychol Rep** 1989 Jun;64(3 Pt 2):1112–4
Personality hardiness, occupational stress, and burnout in critical care nurses. Topf M. **Res Nurs Health** 1989 Jun; 12(3):179–86
Personality as modifier of the life change-distress relationship. A longitudinal modelling approach. Ormel J, et al. **Soc Psychiatry Psychiatr Epidemiol** 1989 Jul; 24(4):187–95
Wayward winds: Malay archetypes, and theory of personality in the context of shamanism. Laderman C. **Soc Sci Med** 1988;27(8):799–810
Dimensions of negative affectivity, self-reported somatic symptoms, and health-related behaviors. Vassend O. **Soc Sci Med** 1989;28(1):29–36
Psychological issues in exercise prescription. Gavin J.

Sports Med 1988 Jul;6(1):1–10 (114 ref.)
Certifying temperament [letter] Stockman MJ. Vet Rec 1989 Apr 1;124(13):356
[Personality characteristics of hypertensive patients] Kubej P, et al. Cas Lek Cesk 1989 Feb 3;128(6):186–8 (Eng. Abstr.) (Cze)
[The effect of the therapist's personality on the course of group psychotherapy] Plháková A. Cesk Psychiatr 1989 Apr;85(2):116–21 (Eng. Abstr.) (Cze)
[What is the cause of postoperative malaise? (letter)] Jelicic M. Ned Tijdschr Geneeskd 1989 Jan 14;133(2):84–5 (Dut)
[What is independence? (editorial)] Munnichs J. Tijdschr Gerontol Geriatr 1989 Feb;20(1):1–2 (Dut)
[Psychoanalytic ideas, dogmatic openings and manipulation] Huttunen MO. Duodecim 1988;104(7):568–70 (Fin)
[Discovery of the "deep personality" and revision of the Kraepelin concept of autonomic mental disease] Baruk H. Ann Med Psychol (Paris) 1989 Jan;147(1):47–56 (Eng. Abstr.) (Fre)
[The individual and the person] Millet L, et al. Ann Med Psychol (Paris) 1988 Sep–Oct;146(9):821–5 (Fre)
[Does the mind drift where it wants? Requirements for medical discoveries] Koelbing HM. Schweiz Med Wochenschr 1988 Aug 20;118(33):1155–62 (Eng. Abstr.) (Fre)
[Assessment of temperament in children] Saile H. Prax Kinderpsychol Kinderpsychiatr 1989 Jan;38(1):6–9 (Eng. Abstr.) (Ger)
[The social dependence of the long-term patient—a study in social psychiatric ambulatory care] Hoffmann H, et al. Psychiatr Prax 1989 Jan;16(1):1–7 (Eng. Abstr.) (Ger)
[Understanding the personality changes following craniocerebral injuries, with special reference to premorbid personality and family structure] Kürten H, et al. Rehabilitation (Stuttg) 1988 Aug;27(3):160–5 (Eng. Abstr.) (Ger)
[Unethical actions within the framework of a therapeutic relationship] Pfeifer S. Schweiz Rundsch Med Prax 1988 May 3;77(18):489–92 (Eng. Abstr.) (Ger)
[Testing the German versions of the temperament questionnaires developed by Carey and assistants] Rennen-Allhoff B, et al. Z Kinder Jugenpsychiatr 1988 Jun; 16(2):61–6 (Eng. Abstr.) (Ger)
[The Guilford–Zimmerman Temperament Survey (GZTS). The results of its first use in military aeronautics: descriptive statistics, intercorrelation matrix and competitive validity with the MMPI. A study on a sample of 150 student officer pilots of the Pozzuoli Aeronautics Academy] Giambelluca A, et al. Riv Med Aeronaut Spaz 1985 Jan–Mar;52(1):29–46 (Eng. Abstr.) (Ita)
[A study of predispositions of vertiginous patients—estimation by the Yatabe-Guilford Personality Test] Yokoyama H. Nippon Jibiinkoka Gakkai Kaiho 1988 Nov;91(11):1847–56 (Eng. Abstr.) (Jpn)
[Personality traits in employees who were dismissed for delinquency] Hara T, et al. Sangyo Igaku 1988 Jul; 30(4):282–3 (Jpn)
[Study of the psychiatric personality] Kirikae T. Seishin Shinkeigaku Zasshi 1986;88(12):981–3 (Jpn)
[Personality, cancer and myocardial infarction—new research results] Gråwe RW, et al. Tidsskr Nor Laegeforen 1989 May 30;109(15):1662–4 (Eng. Abstr.) (Nor)
[Personality and cancer (letter)] Kaasa S, et al. Tidsskr Nor Laegeforen 1989 Aug 20;109(23):2345–7 (Nor)
[Psychological indicators of the effectiveness of drug therapy of endogenous depression (review of the literature)] Habrat E, et al. Psychiatr Pol 1988 Jul–Aug;22(4):333–7 (40 ref.) (Pol)
[Changes in various personality features in patients with myocardial infarction after 1-month sanatorium rehabilitation] Nasiłowska-Barud A, et al. Wiad Lek 1988 Nov 1;41(21):1421–6 (Eng. Abstr.) (Pol)
[Models of personality; methodologic implications] Golu M. Rev Med Chir Soc Med Nat Iasi 1988 Oct–Dec; 92(4):663–71 (11 ref.) (Eng. Abstr.) (Rum)
[Personality in bipolar affective disorders. A study with the aid of a personality inventory] Vrăşti R, et al. Rev Med Interna [Neurol Psihiatr] 1988 Jul–Sep;33(3):231–8 (Eng. Abstr.) (Rum)
[Predicting professional competence of subinterns based on an analysis of personality characteristics] Akunts KB, et al. Akush Ginekol (Mosk) 1988 Nov;(11):69–72 (Rus)
[Structure of the personality in persons with different levels of plasticity of neurodynamic processes] Aldasheva AA. Fiziol Cheloveka 1988 Sep–Oct;14(5):747–53 (Rus)
[Types of responses of the cardiac rhythm to short-term load and their connections with psychophysiologic features of personality (formalized approach)] Vein AM, et al. Fiziol Cheloveka 1988 Nov–Dec;14(6):977–83 (Rus)
[Psychological aspects of the training of public health specialists] Andreeva VG, et al. Gig Sanit 1989 Apr;(4):32–4 (Rus)
[Relation between behavioral risk factors of ischemic heart disease and various somatic indicators in men aged 25–64 years living in Novosibirsk] Gagulin IV, et al. Kardiologiia 1988 Dec;28(12):80–3 (Eng. Abstr.) (Rus)
[Characteristics of personality of patients with chronic renal failure] Lebedev BA, et al. Klin Med (Mosk) 1989 Feb; 67(2):63–7 (Rus)
[Evaluation of various personality characteristics and professional training of interns—internal medicine specialists] Trofimov VI, et al. Klin Med (Mosk) 1989 Mar; 67(3):145–6 (Eng. Abstr.) (Rus)
[Somatic disorders during psychotherapy of patients with different personality characteristics] Rutsitskiĭ EM, et al. Sov Med 1988;(5):83–5 (Rus)
[The personality characteristics of patients with maxillofacial diseases] Panin MG, et al. Stomatologiia (Mosk) 1989 Mar–Apr;68(2):78–80 (Rus)
[An analysis of the psychoemotional tension in patients before oral surgery in relation to their psychological personality traits] Sinichkin VV, et al. Stomatologiia (Mosk) 1989 May–Jun;68(3):28–9 (Eng. Abstr.) (Rus)
[Patient assessment of the personality and professional qualities of the orthodontist] Trezubov VN. Stomatologiia (Mosk) 1989 May–Jun;68(3):52–4 (Eng. Abstr.) (Rus)
[Systematic approach to the evaluation of the role of neuro–psychological factors in the development and course of bronchial asthma] Kuprianov SIu. Vestn Akad Med Nauk SSSR 1989;(2):24–9 (Eng. Abstr.) (Rus)
[Clinical characteristics of premorbid conditions in patients with endogenous affective psychoses] Borisova OA. Zh Nevropatol Psikhiatr 1989;89(4):67–73 (Eng. Abstr.) (Rus)
[Accentuations of character in adolescents with infantile cerebral palsy] Levchenko IIu. Zh Nevropatol Psikhiatr 1988;88(8):83–6 (Eng. Abstr.) (Rus)
[The discrimination of time microintervals by emotionally excitable personalities] Kostandov EA, et al. Zh Vyssh Nerv Deiat 1988 Jul–Aug;38(4):614–9 (Eng. Abstr.) (Rus)
[The emotionally immature personality and possibilities of adaptation to the military environment] Matijäs B. God Vojnomed Akad 1987;29:30–3 (Eng. Abstr.) (Scr)
[Value consciousness in the integrity of the personality] Ciger J. Bratisl Lek Listy 1989 May;90(5):373–82 (Eng. Abstr.) (Slo)
[Relation of social integration and personality] Sacchi CJ, et al. Acta Psiquiatr Psicol Am Lat 1988 Jun;34(2):135–41 (Eng. Abstr.) (Spa)
[Psychopathologic traits of patients addicted to heroin] Cabal Bravo JC, et al. Actas Luso Esp Neurol Psiquiatr Cienc Afines 1989 May–Jun;17(3):161–7 (Eng. Abstr.) (Spa)
[Aggressiveness and the teaching function] Ledesma Jimeno A, et al. Actas Luso Esp Neurol Psiquiatr Cienc Afines 1989 May–Jun;17(3):153–9 (Eng. Abstr.) (Spa)

DRUG EFFECTS

[Determinants of the directed regulation of the functional state in men] Medvedev VI, et al. Fiziol Cheloveka 1988 Nov–Dec;14(6):948–56 (Rus)

PHYSIOLOGY

Sex differences in brain and personality correlates of the ability to identify popular word associations. Lansdell H. Behav Neurosci 1989 Aug;103(4):893–7
The contingent negative variation in a Go/No Go avoidance task: relationships with personality and subjective state. Brown D, et al. Int J Psychophysiol 1989 Mar;7(1):35–45
Alcohol consumption, age and personality characteristics as important determinants of within-subject variability in blood pressure. Puddey IB, et al. J Hypertens Suppl 1988 Dec;6(4):S617–9
A neurotransmitter basis for Eysenck's theory of personality. Lester D. Psychol Rep 1989 Feb;64(1):189–90
[Selective effect of personality markers and psychosocial stress on T lymphocyte subpopulations] Kropiunigg U, et al. Psychother Psychosom Med Psychol 1989 Jan; 39(1):18–25 (Eng. Abstr.) (Ger)
[Personality characteristics and event related potentials (ERP)] Dormann S, et al. Z Psychol 1989;197(1):79–86 (Eng. Abstr.) (Ger)

PERSONALITY ASSESSMENT

Examining for links between expressed emotion and EPI personality variables: can low EE be faked? Parker G, et al. Acta Psychiatr Scand 1988 Nov;78(5):599–602
Dimensions of personality and smoking behaviour. Sijuwola OA. Afr J Med Med Sci 1989 Jun;18(2):105–8
The use of projective drawing techniques in the personality assessment of prelingually deafened young adults: a pilot study. Ouellette SE. Am Ann Deaf 1988 Jul;133(3):212–8
Personality assessment techniques and aptitude testing as aids to the selection of surgical trainees. Symposium. England, 18 November 1987. Ann R Coll Surg Engl 1988 Sep; 70(5):265–79
Premorbid personality assessments of first onset of major depression. Hirschfeld RM, et al. Arch Gen Psychiatry 1989 Apr;46(4):345–50 (24 ref.)
Standardised assessment of personality disorders in mental handicap [letter] Ballinger BR, et al. Br J Psychiatry 1988 Apr;152:577
The extended pediatric assessment—an approach to the child with psychosomatic symptoms. Menahem S.
Child Psychiatry Hum Dev 1988 Winter;19(2):132–44
Standardized clinical evaluation of depressive and anxious symptomatology. Guelfi JD. Clin Neuropharmacol 1988;11 Suppl 2:S59–68
The Bender–Gestalt as a method of personality assessment with adolescents. Belter RW, et al. J Clin Psychol 1989 May;45(3):414–23
Personality assessment and counseling psychology. Watkins CE Jr, et al. J Pers Assess 1989 Summer;53(2):296–307
It only takes one psychologist to demonstrate the impact of psychological assessment. Zacker J. J Pers Assess 1989 Spring;53(1):173–9
Teachers' perceptions concerning the relative values of personal and clinical characteristics and their influence on the assignment of students' clinical grades. Durand RP, et al. Med Educ 1988 Jul;22(4):335–41
A factorial, reliability, and validity study of the Devereux Elementary School Behavior Rating Scale. Finkelman D, et al. Psychol Rep 1989 Apr;64(2):535–47
[Predictive value of patient psychological profile and type of physician–patient relationship in compliance of antihypertensive treatment] Consoli SM, et al. Arch Mal Coeur 1988 Jun;81 Spec No:145–50 (Eng. Abstr.) (Fre)
[Personality test in patients with alopecia areata. Preliminary results] Delfino M, et al. G Ital Dermatol Venereol 1988 Nov;123(11):579–80 (Ita)

METHODS

Personality theory and personality assessment measures: how helpful to the clinician? Vane JR, et al. J Clin Psychol 1989 Jan;45(1):5–19 (85 ref.)
A scale for the assessment of social adjustment in children—reliability and validity data. Chua KL, et al. J Singapore Paediatr Soc 1988;30(1–2):61–6

PERSONALITY DEVELOPMENT

see related
CHILD DEVELOPMENT
GROWTH
SOCIALIZATION

The concept of "persona": substance or relation. Hottois G. Acta Neurochir Suppl (Wien) 1988;44:39–43
The dynamics of personality. An East European view. Kelemen J. Acta Neurochir Suppl (Wien) 1988;44:33–8
Psychic vulnerability as a sequel to perinatal morbidity. A longitudinal twin study with special reference to psychiatric morbidity and inter–twin dependency. Moilanen I. Acta Paediatr Scand Suppl 1988;344:95–105
Clinical differentiation between major depression only, major depression with panic disorder and panic disorder only. Childhood, personality and personality disorder. Alnaes R, et al. Acta Psychiatr Scand 1989 Apr;79(4):370–7
Characteristics of patients with major depression in combination with dysthymic or cyclothymic disorders. Childhood and precipitating events. Alnaes R, et al. Acta Psychiatr Scand 1989 Jan;79(1):11–8
Offspring of women with nonorganic psychosis: mother–infant interaction and fear of strangers during the first year of life. Persson-Blennow I, et al. Acta Psychiatr Scand 1988 Sep;78(3):379–83
Self concept and drinking problems of college students raised in alcohol-abused homes. Rearden JJ, et al. Addict Behav 1989;14(2):225–7
The creative therapeutic encounter at adolescence. Anthony EJ. Adolesc Psychiatry 1988;15:194–216
Masking the self: fictional identities and the construction of self in adolescence. Caughey JL. Adolesc Psychiatry 1988; 15:319–32
Late adolescence: Spock and the ego–ideal. Frenkel RS. Adolesc Psychiatry 1988;15:46–64
Portrait of the artist as adolescent prodigy: Mozart and the Magic Flute. Gedo JE. Adolesc Psychiatry 1988;15:288–99
The semiotics of play fighting at a residential treatment center. Horan R. Adolesc Psychiatry 1988;15:367–81
Creativity and adolescence: introduction to special section. Horowitz HA. Adolesc Psychiatry 1988;15:67–76
Word child: transformations in play story. Kelly–Byrne D. Adolesc Psychiatry 1988;15:333–45
On the relation between creativity and cutting corners. Mechling J. Adolesc Psychiatry 1988;15:346–66
Adolescent substance abuse: introduction. Schwartzberg AZ. Adolesc Psychiatry 1988;15:505–7
The measurement of behavioral autonomy in adolescence: the autonomous functioning checklist. Sigafoos AD, et al. Adolesc Psychiatry 1988;15:432–62
Creativity and the vicissitudes of play. Sutton-Smith B. Adolesc Psychiatry 1988;15:307–18
Adolescent girls in distress: a high–risk intersection. Berger R, et al. Adolescence 1989 Summer;24(94):357–74
The sense-making approach for audience assessment of adolescents. Betts NM, et al. Adolescence 1989 Summer; 24(94):393–402
Future time perspective: adolescents' predictions of their interpersonal lives in the future. Blinn LM, et al. Adolescence 1989 Summer;24(94):289–301
Continuity in childhood depression. Clarizio HF. Adolescence 1989 Summer;24(94):253–67 (36 ref.)
Adolescent language as affectively coded behavior: findings of an observational research project. Danesi M. Adolescence 1989 Summer;24(94):311–20

Adolescent psychic entropy: a response to unacknowledged fears. Faupel KC. **Adolescence** 1989 Summer;24(94):375–9
Family unemployment and its impact on adolescent personality development. Isralowitz RE. **Adolescence** 1989 Spring;24(93):47–52
Psychological concomitants of cystic fibrosis in children and adolescents. Kashani JH, et al. **Adolescence** 1988 Winter; 23(92):873–80
The case for modifying adolescents' cognitive self-statements. Lamke LK, et al. **Adolescence** 1988 Winter; 23(92):967–74
Adolescents' perceptions of and feelings about control and responsibility in their lives. Ortman PE. **Adolescence** 1988 Winter;23(92):913–24
Affective quality of family relations and adolescent identity exploration. Papini DR, et al. **Adolescence** 1989 Summer; 24(94):457–66
Gender differences in patterns of spatial ability, environmental cognition, and math and English achievement in late adolescence. Pearson JL, et al. **Adolescence** 1989 Summer;24(94):421–31
Female identity development and self-reflection in late adolescence. Shain L, et al. **Adolescence** 1989 Summer; 24(94):381–92
The "second skin": perceptions of disturbed and nondisturbed early adolescents on clothing, self-concept, and body image. Sweeney MM, et al. **Adolescence** 1989 Summer; 24(94):411–20
General self-esteem of adolescents from ethnic minorities in The Netherlands and the reflected appraisal process. Verkuyten M. **Adolescence** 1988 Winter;23(92):863–71
Theoretical and methodological considerations of self-concept measurement. Wayment H, et al. **Adolescence** 1989 Summer;24(94):339–48
Alcoholic women in treatment: early histories and early problem behaviors. Gomberg ES. **Adv Alcohol Subst Abuse** 1989;8(2):133–47
Temperamental influences on reactions to unfamiliarity and challenge. Kagan J, et al. **Adv Exp Med Biol** 1988; 245:319–39
Developing and enhancing a positive self-concept in deaf children. Grimes VK, et al. **Am Ann Deaf** 1988 Oct; 133(4):255–7
Temperament and individuality: a study of Malay children. Banks E. **Am J Orthopsychiatry** 1989 Jul;59(3):390–7
The developmental-clinical rationale for the use of seclusion in the psychiatric treatment of children. Cotton NS. **Am J Orthopsychiatry** 1989 Jul;59(3):442–50
Maternal affect and toddlers' social-emotional competence. Denham SA. **Am J Orthopsychiatry** 1989 Jul;59(3):368–76
Neonatal behavior and early temperament: a longitudinal study of the first six months of life. Green J, et al. **Am J Orthopsychiatry** 1989 Jan;59(1):82–93
Stability of temperament characteristics in childhood. McNeil TF, et al. **Am J Orthopsychiatry** 1988 Oct;58(4):622–6
Abuse and victimization: a life-span developmental perspective. Newberger CM, et al. **Am J Orthopsychiatry** 1988 Oct;58(4):505–11 (21 ref.)
High-risk children in young adulthood: a longitudinal study from birth to 32 years. Werner EE. **Am J Orthopsychiatry** 1989 Jan;59(1):72–81
Are "primitive" object relations really preoedipal? Westen D. **Am J Orthopsychiatry** 1989 Jul;59(3):331–45 (60 ref.)
Child abuse, neglect, and adult behavior: research design and findings on criminality, violence, and child abuse. Widom CS. **Am J Orthopsychiatry** 1989 Jul;59(3):355–67
Mental development. Najeeb S. **Am J Psychoanal** 1988 Fall; 48(3):235–46
The psychoaggressive stages of psychological development in an authority-based socialization process. Pearson WS. **Am J Psychoanal** 1988 Winter;48(4):328–46 (19 ref.)
The twinship: a paradigm towards separation and integration. von Broembsen F. **Am J Psychoanal** 1988 Winter; 48(4):355–65
Attachments beyond infancy. Ainsworth MD. **Am Psychol** 1989 Apr;44(4):709–16
Female and male: issues of gender. Jacklin CN. **Am Psychol** 1989 Feb;44(2):127–33 (60 ref.)
The meanings of personality predicates. Kagan J. **Am Psychol** 1988 Aug;43(8):614–20 (51 ref.)
Developmental psychopathology. Current research, issues, and directions. Kazdin AE. **Am Psychol** 1989 Feb; 44(2):180–7 (44 ref.)
Affective disorders in children and adolescents. Kovacs M. **Am Psychol** 1989 Feb;44(2):209–15 (39 ref.)
A developmental perspective on antisocial behavior. Patterson GR, et al. **Am Psychol** 1989 Feb;44(2):329–35 (70 ref.)
Adolescent mental health. Powers SI, et al. **Am Psychol** 1989 Feb;44(2):200–8 (69 ref.)
Children's mental health. The gap between what we know and what we do. Saxe L, et al. **Am Psychol** 1988 Oct; 43(10):800–7 (78 ref.)
The Indian summer of life. A preliminary study of septuagenarians. Shneidman E. **Am Psychol** 1989 Apr; 44(4):684–94
Transformations of narcissism. Bragan K. **Aust N Z J Psychiatry** 1989 Jun;23(2):207–11
Australian adolescents' perceptions of their parents. Cubis J, et al. **Aust N Z J Psychiatry** 1989 Mar;23(1):35–47
Developmental psychiatry: a perspective. Solinski S. **Aust N Z J Psychiatry** 1989 Jun;23(2):197–206 (68 ref.)
Temperament in Australian toddlers. Sewell J, et al. **Aust Paediatr J** 1988 Dec;24(6):343–5
Assortative mating for IQ and personality due to propinquity and personal preference. Mascie-Taylor CG, et al. **Behav Genet** 1988 May;18(3):339–45
Direct marital assortment for cognitive and personality variables. Phillips K, et al. **Behav Genet** 1988 May; 18(3):347–56
Frequency of social contact and intrapair resemblance of adult monozygotic cotwins—or does shared experience influence personality after all? Rose RJ, et al. **Behav Genet** 1988 May;18(3):309–28
Research on children of alcoholics: past and future. Woodside M. **Br J Addict** 1988 Jul;83(7):785–92 (38 ref.)
Type A behaviour and the authoritarian personality. Byrne DG, et al. **Br J Med Psychol** 1989 Jun;62 (Pt 2):163–72
Aggressive behaviour of children aged 6–11: gender differences and their magnitude. Archer J, et al. **Br J Soc Psychol** 1988 Dec;27 (Pt 4):371–84
Development of a young man with Prader-Willi syndrome and secondary functional encopresis. Carpenter SP. **Can J Psychiatry** 1989 Mar;34(2):123–7
Adolescent personality development: three phases, three courses and varying turmoil. Findings from the Toronto Adolescent Longitudinal Study. Golombek H, et al. **Can J Psychiatry** 1989 Aug;34(6):500–4
Relationship between psychiatric illness and conduct disorder in adolescents. Kutcher SP, et al. **Can J Psychiatry** 1989 Aug;34(6):526–9
The development of defenses in childhood. Schibuk M, et al. **Can J Psychiatry** 1989 Aug;34(6):581–8 (45 ref.)
Peer status and self-perception among early elementary school children: the case of the rejected children. Boivin M, et al. **Child Dev** 1989 Jun;60(3):591–6
Biological and social contributions to negative affect in young adolescent girls. Brooks-Gunn J, et al. **Child Dev** 1989 Feb; 60(1):40–55
Coping with family transitions: winners, losers, and survivors. Hetherington EM. **Child Dev** 1989 Feb;60(1):1–14 (26 ref.)
Proximate regulation by mothers: a demonstration of how differing styles affect young children's behavior. Holden GW, et al. **Child Dev** 1989 Feb;60(1):64–9
Stable individual differences in developmentally changing preterm infants: a replicated study. Korner AF, et al. **Child Dev** 1989 Apr;60(2):502–13
Self development and self-conscious emotions. Lewis M, et al. **Child Dev** 1989 Feb;60(1):146–56
Continuity and discontinuity in maternal sensitivity at 6, 24, and 42 months in a high-risk sample. Pianta RC, et al. **Child Dev** 1989 Apr;60(2):481–7
Children's perceptions of peer reputations and their social reputations among peers. Rogosch FA, et al. **Child Dev** 1989 Jun;60(3):597–610
Emotional autonomy versus detachment: revisiting the vicissitudes of adolescence and young adulthood. Ryan RM, et al. **Child Dev** 1989 Apr;60(2):340–56
A longitudinal study of moral reasoning. Walker LJ. **Child Dev** 1989 Feb;60(1):157–66
Childhood victimization: desensitization effects in the later lifespan. Ginsburg H, et al. **Child Psychiatry Hum Dev** 1989 Fall;20(1):59–71
Childhood experiences of borderline patients. Zanarini MC, et al. **Compr Psychiatry** 1989 Jan-Feb;30(1):18–25
Preparing for life: the critical transition of adolescence. Hamburg D. **Crisis** 1989 Apr;10(1):4–15
Skills for adolescence: experience with the International Lions-Quest program. Sprunger B, et al. **Crisis** 1989 Apr; 10(1):88–104
Metaphors for development: how important are experiences early in life? Klopfer P. **Dev Psychobiol** 1988 Nov; 21(7):671–8 (39 ref.)
Prenatal, perinatal, and early childhood risk factors and drug involvement in adolescence. Brook JS, et al. **Genet Soc Gen Psychol Monogr** 1989 May;115(2):221–41
Cultural contributions to constructing locus-of-control attributions. Tyler FB, et al. **Genet Soc Gen Psychol Monogr** 1989 May;115(2):205–20
Predicting changes in teenage drug use: the role of intention-behavior discrepancy. Weng LJ, et al. **Genet Soc Gen Psychol Monogr** 1989 Feb;115(1):25–48
Prevention of psychiatric disorders in children. McClellan J, et al. **Hosp Community Psychiatry** 1989 Jun;40(6):630–6 (57 ref.)
Familial, interpersonal, and intrapersonal correlates of drug use: a longitudinal comparison of adolescents in treatment, drug-using adolescents not in treatment, and non-drug-using adolescents. Needle R, et al. **Int J Addict** 1988;23(12):1211–40
Imaginative involvement and hypnotizability in childhood. LeBaron S, et al. **Int J Clin Exp Hypn** 1988 Oct; 36(4):284–95
Apparent and hidden changes in group members according to the different phases of group psychotherapy. Battegay R. **Int J Group Psychother** 1989 Jul;39(3):337–53
The role of the leader in managing the preoedipal patient in the group setting. Ormont LR. **Int J Group Psychother** 1989 Apr;39(2):147–71
Parent attitudes and child personality traits in hemophilia: a six-year longitudinal study. Mayes SD, et al. **Int J Psychiatry Med** 1988;18(4):339–55
Anorexia nervosa and unresolved rapprochement conflicts. A case study. Fischer N. **Int J Psychoanal** 1989;70 (Pt 1):41–54
The dead father: on early psychic trauma and its relation to disturbance in sexual identity and in creative activity. McDougall J. **Int J Psychoanal** 1989;70 (Pt 2):205–19
On the concept of an autistic-contiguous position. Ogden TH. **Int J Psychoanal** 1989;70 (Pt 1):127–40
Trauma as a shibboleth in psychoanalysis? Sacerdoti G, et al. **Int J Psychoanal** 1989;70 (Pt 1):95–103
The nature of interparental conflict of married and divorced parents: implications for young adolescents. Forehand R, et al. **J Abnorm Child Psychol** 1989 Apr;17(2):235–49
Relations between hyperactive and aggressive behavior and peer relations at three elementary grade levels. Pope AW, et al. **J Abnorm Child Psychol** 1989 Jun;17(3):253–67
Common problems and coping strategies. II: Findings with adolescent suicide attempters. Spirito A, et al. **J Abnorm Child Psychol** 1989 Apr;17(2):213–21
Common problems and coping strategies. I: Findings with normal adolescents. Stark LJ, et al. **J Abnorm Child Psychol** 1989 Apr;17(2):203–12
Overanxious disorder: an examination of developmental differences. Strauss CC, et al. **J Abnorm Child Psychol** 1988 Aug;16(4):433–43
Cognitive biases and depression. Dohr KB, et al. **J Abnorm Psychol** 1989 Aug;98(3):263–7
Depressive symptoms and personality during late adolescence: gender differences in the externalization-internalization of symptom expression. Gjerde F, et al. **J Abnorm Psychol** 1988 Nov;97(4):475–86
Primary early-onset dysthymia: comparison with primary nonbipolar nonchronic major depression on demographic, clinical, familial, personality, and socioenvironmental characteristics and short-term outcome. Klein DN, et al. **J Abnorm Psychol** 1988 Nov;97(4):387–98
Gender differences in identity development: issues of process, domain and timing. Archer SL. **J Adolesc** 1989 Jun; 12(2):117–38
Adolescent ego development: relationship to family cohesion and adaptability. Bakken L, et al. **J Adolesc** 1989 Mar; 12(1):83–94
Identity status and personal construct systems. Berzonsky MD, et al. **J Adolesc** 1988 Sep;11(3):195–204
Dilemmas of adolescents with developmental retardation: a review. Dossetor DR, et al. **J Adolesc** 1989 Jun; 12(2):167–85 (50 ref.)
The adolescent as forgiver. Enright RD, et al. **J Adolesc** 1989 Mar;12(1):95–110
A longitudinal study of the hopes and worries of adolescents. Gillies P. **J Adolesc** 1989 Mar;12(1):69–81
Objective and subjective attractiveness and early adolescent adjustment. Jovanovic J, et al. **J Adolesc** 1989 Jun; 12(2):225–9
Complex role experiences and personal differentiation: a real-life experiment. Rapoport T, et al. **J Adolesc** 1989 Jun; 12(2):207–19
The global world—a domain for development in adolescence? Solantaus T. **J Adolesc** 1989 Mar;12(1):27–40
Transitions in the nuclear age: late adolescence to early adulthood. Van Hoorn J, et al. **J Adolesc** 1989 Mar; 12(1):41–53
Resolved: there is no special developmental consideration in adolescence mitigating against capital punishment for those who committed murder under eighteen years of age. Eth S, et al. **J Am Acad Child Adolesc Psychiatry** 1989 May;28(3):450–4
A three-year follow-up of Cambodian young people traumatized as children. Kinzie JD, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jul;28(4):501–4
Toward a theory of the genesis of violence: a follow-up study of delinquents. Lewis DO, et al. **J Am Acad Child Adolesc Psychiatry** 1989 May;28(3):431–6
Developmental and disruptive behavior disorders among delinquents. Zagar R, et al. **J Am Acad Child Adolesc Psychiatry** 1989 May; 28(3):437–40
Dimension of psychological trauma in abused children. Green AH. **J Am Acad Child Psychiatry** 1983 May;22(3):231–7
Child abuse: the current theory base and future research needs. Newberger EH, et al. **J Am Acad Child Psychiatry** 1983 May;22(3):262–8 (49 ref.)
The fate of the father representation in adolescent sons. Atkins RN. **J Am Acad Psychoanal** 1989 Summer; 17(2):271–91
Infantile anorexia nervosa: a developmental disorder or separation and individuation. Chatoor I. **J Am Acad Psychoanal** 1989 Spring;17(1):43–64
The relationship of models of the mind to clinical work: self psychology. Panel report. **J Am Psychoanal Assoc** 1988; 36(3):741–8
Changing psychic structure through treatment. Panel reports. **J Am Psychoanal Assoc** 1989;37(1):173–85
Current concepts of adult psychic structure. Panel reports. **J Am Psychoanal Assoc** 1989;37(1):187–98
Psychoanalytic reconstructions and empirical data: reciprocal contributions. Barglow P, et al. **J Am Psychoanal Assoc** 1989;37(2):401–35
Psychoanalysis and general psychiatry: obsessive-compulsive disorder as paradigm. Esman AH. **J Am Psychoanal Assoc** 1989;37(2):319–36 (50 ref.)
Motivation, personality organization, and the four psychologies of psychoanalysis. Pine F. **J Am Psychoanal Assoc** 1989;37(1):31–64

The adaptive significance of destructiveness in primitive personalities. Robbins M. **J Am Psychoanal Assoc** 1988; 36(3):627–52

Childhood deafness: compensatory deintegration of the self. Urban E. **J Anal Psychol** 1989 Apr;34(2):143–57

Infant day care and socioemotional development: the United States. Belsky J. **J Child Psychol Psychiatry** 1988 Jul; 29(4):397–406 (60 ref.)

Comment on paper by Gibbs et al. Carey WB, et al. **J Child Psychol Psychiatry** 1989 Jul;30(4):639–47

Social and family relationships of ex–institutional adolescents. Hodges J, et al. **J Child Psychol Psychiatry** 1989 Jan; 30(1):77–97

Development of personality and intelligence in children with congenital heart disease. Kramer HH, et al. **J Child Psychol Psychiatry** 1989 Mar;30(2):299–308

Child behavior ratings: the influence of maternal characteristics and child temperament. Lancaster S, et al. **J Child Psychol Psychiatry** 1989 Jan;30(1):137–49

Pathways from childhood to adult life. Rutter M. **J Child Psychol Psychiatry** 1989 Jan;30(1):23–51 (125 ref.)

Psychological kinship, love, and liking: preliminary validity data. Bailey KG, et al. **J Clin Psychol** 1989 Jul;45(4):587–94

A comparison of the Millon Clinical Multiaxial Inventory and the California Psychological Inventory in assessment of a nonclinical population. Holliman NB, et al. **J Clin Psychol** 1989 May;45(3):373–82

Personality theory and personality assessment measures: how helpful to the clinician? Vane JR, et al. **J Clin Psychol** 1989 Jan;45(1):5–19 (85 ref.)

Defense mechanisms in the anaclitic and introjective personality configuration. Cramer P, et al. **J Consult Clin Psychol** 1988 Aug;56(4):610–6

Levels of hopelessness in children and adolescents: a developmental perspective. Kashani JH, et al. **J Consult Clin Psychol** 1989 Aug;57(4):496–9

Over- and undercontrolled clinic referral problems of Jamaican and American children and adolescents: the culture general and the culture specific. Lambert MC, et al. **J Consult Clin Psychol** 1989 Aug;57(4):467–72

Dimensions of assertiveness: differential relationships to substance use in early adolescence. Wills TA, et al. **J Consult Clin Psychol** 1989 Aug;57(4):473–8

Child life services and persons with mental retardation. Kastner T, et al. **J Dev Behav Pediatr** 1989 Aug; 10(4):198–200

Depressive mood in female college students: father–daughter interactional patterns. Brook JS, et al. **J Genet Psychol** 1988 Dec;149(4):485–504

The child's perceptions of familial relationships: convergence between two assessment techniques. Creasey GL, et al. **J Genet Psychol** 1989 Mar;150(1):59–64

Psychosocial development, self–concept, and gender. Lobel TE, et al. **J Genet Psychol** 1988 Sep;149(3):405–11

The relation of hostile nonverbal communication styles to popularity in preadolescent children. Nowicki S Jr, et al. **J Genet Psychol** 1989 Mar;150(1):39–43

Development of thinking about things and people: social and nonsocial cognition during adolescence. O'Mahony JF. **J Genet Psychol** 1989 Jun;150(2):217–24

The life course of gay and lesbian youth: an immodest proposal for the study of lives. Boxer AM, et al. **J Homosex** 1989;17(3–4):315–55 (200 ref.)

She comes from a nice family [editorial] Messer AA. **J Med Assoc Ga** 1988 Jul;77(7):548–9

Williams' syndrome in adulthood: a case study focusing on psychological and psychiatric aspects. Bradley EA, et al. **J Ment Defic Res** 1989 Apr;33 (Pt 2):175–84

Adjustment of siblings of handicapped children: a comparison. Dyson LL. **J Pediatr Psychol** 1989 Jun; 14(2):215–29

Gender and sex–role influences on children's self–esteem. Alpert–Gillis LJ, et al. **J Pers** 1989 Mar;57(1):97–114

Object relations and ego development: comparison and correlates in middle childhood. Avery RR, et al. **J Pers** 1988 Sep;56(3):547–69

Continuities and consequences of interactional styles across the life course. Caspi A, et al. **J Pers** 1989 Jun;57(2):375–406

Continuities and discontinuities in self–regulatory and self–evaluative processes: a developmental theory relating self and affect. Higgins ET. **J Pers** 1989 Jun;57(2):407–44

Conceptual issues in studying continuity and discontinuity in personality development across life. Lerner RM, et al. **J Pers** 1989 Jun;57(2):343–73

Children's behavioral inhibition over age and across situations: genetic similarity for a trait during change. Matheny AP Jr. **J Pers** 1989 Jun;57(2):215–35

Patterns of personality consistency and change from childhood through adolescence. Ozer DJ, et al. **J Pers** 1989 Jun;57(2):483–507

Life history prototypes in the study of human individuality. Stokes GS, et al. **J Pers** 1989 Jun;57(2):509–45

MMPI scale clinical correlates for adolescent inpatients. Archer RP, et al. **J Pers Assess** 1988 Winter;52(4):707–21

Variability of responses within the aggression categories on the Rosenzweig Picture–Frustration Study, Children's Form. Graybill D, et al. **J Pers Assess** 1989 Fall;53(3):472–7

MMPI adolescent norms: patterns and trends across 4 decades. Pancoast DL, et al. **J Pers Assess** 1988 Winter; 52(4):691–706 (30 ref.)

Primary process thinking, divergent thinking, and coping in children. Russ SW. **J Pers Assess** 1988 Fall;52(3):539–48

Psychometric properties of Loevinger's Sentence Completion Test in an adult psychiatric outpatient sample. Weiss DS, et al. **J Pers Assess** 1989 Fall;53(3):478–86

Personal striving differentiation and affective reactivity. Emmons RA, et al. **J Pers Soc Psychol** 1989 Mar; 56(3):478–84

Personality as the basis for theoretical predilections. Johnson JA, et al. **J Pers Soc Psychol** 1988 Nov;55(5):824–35

The structure of interpersonal traits: Wiggins's circumplex and the five–factor model. McCrae RR, et al. **J Pers Soc Psychol** 1989 Apr;56(4):586–95

The goal of forming accurate impressions during social interactions: attenuating the impact of negative expectancies. Neuberg SL. **J Pers Soc Psychol** 1989 Mar; 56(3):374–86

Intrapersonal and social comparison determinants of happiness: a range–frequency analysis. Smith RH, et al. **J Pers Soc Psychol** 1989 Mar;56(3):317–25

Instrumentality as a life–stress moderator for early versus middle adolescents. Towbes LC, et al. **J Pers Soc Psychol** 1989 Jul;57(1):109–19

Quality of the home environment of toddlers: a validation study of the home inventory. Chua KL, et al. **J Singapore Paediatr Soc** 1989;31(1–2):38–45

Beyond individualism and isolation: a study of communion in adolescent males. Bankart CP, et al. **J Soc Psychol** 1988 Oct;128(5):675–83

The norm of internality: social valorization of internal explanations of behavior and reinforcements in young people. Dubois N. **J Soc Psychol** 1988 Aug;128(4):431–9

Relationships among three concepts of authoritarianism in adolescent schoolchildren. Rigby K. **J Soc Psychol** 1988 Dec;128(6):825–32

The dynamic nature of ethnic identity among Greek–Australian adolescents. Rosenthal D, et al. **J Soc Psychol** 1989 Apr;129(2):249–58

Self–esteem among Dutch and Turkish children in The Netherlands. Verkuyten M. **J Soc Psychol** 1989 Apr; 129(2):269–71

A path analysis of an adolescent drinking behavior model derived from problem behavior theory. Smith MB, et al. **J Stud Alcohol** 1989 Mar;50(2):128–42

The development of emotion expression during the first two years of life. Malatesta CZ, et al. **Monogr Soc Res Child Dev** 1989;54(1–2):1–104; discussion 105–136

Vulnerable child syndrome and its variants. Green M. **Pediatr Rev** 1986 Sep;8(3):75–80 (30 ref.)

Children, adolescents, and television—1989: I. Television violence: a critique. Singer DG. **Pediatrics** 1989 Mar; 83(3):445–6

Children, adolescents, and television—1989: II. The role of pediatricians. Strasburger VC. **Pediatrics** 1989 Mar; 83(3):446–8

Clinical and grid predictions of inconsistencies in individuals' personal constructs. Chambers WV, et al. **Percept Mot Skills** 1986 Apr;62(2):649–50

Personality and body–focused hand movements. Kenner AN. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):907–13

Effects of sports instruction on children's self–concept. Miller R. **Percept Mot Skills** 1989 Feb;68(1):239–42

Divorce: its impact on children. Runyon N, et al. **Perspect Psychiatr Care** 1987–88;24(3–4):101–5 (12 ref.)

Children after divorce. Wounds that don't heal. Wallerstein JS. **Perspect Psychiatr Care** 1987–88;24(3–4):107–13

Development and applications of social skills training: a review and critique. Hollin CR, et al. **Prog Behav Modif** 1988;22:165–214 (310 ref.)

Ego autonomy, creativity, and cognitive style. A neuropsychodynamic approach. Miller L. **Psychiatr Clin North Am** 1988 Sep;11(3):383–97 (92 ref.)

Psychological issues affecting women throughout the life cycle. Seiden AM. **Psychiatr Clin North Am** 1989 Mar; 12(1):1–24 (19 ref.)

A unified biosocial theory of personality and its role in the development of anxiety states: a reply to commentaries. Cloninger CR. **Psychiatr Dev** 1988 Summer;6(2):83–120 (72 ref.)

The catalytic function in psychotherapy. Bennett MJ. **Psychiatry** 1989 Aug;52(3):351–64

Correlates of psychopathology in adolescents. Kashani JH, et al. **Psychiatry Res** 1988 Nov;26(2):141–8

From the archaic matrix of the oedipus complex to the fully developed oedipus complex. Theoretical perspective in relation to clinical experience and technique. Chasseguet–Smirgel J. **Psychoanal Q** 1988 Oct;57(4):505–27

The developmental context of internalized preoedipal object relations. Clinical applications of Mahler's theory of symbiosis and separation–individuation. Kramer S, et al. **Psychoanal Q** 1988 Oct;57(4):547–76

Cognitive style in dreams: a clue to recovery of historical data. Myers WA. **Psychoanal Q** 1989 Apr;58(2):241–4

Further thoughts about "nothing". Shengold L. **Psychoanal Q** 1989 Apr;58(2):227–35

Identity and growth: a psychoanalytic study of divorce. Rosbrow–Reich S. **Psychoanal Rev** 1988 Fall;75(3):419–41

The narcissistic counterpart. Seiden HM. **Psychoanal Rev** 1989 Spring;76(1):67–81

The psychoanalytic process in adults and children. Abrams S. **Psychoanal Study Child** 1988;43:245–61

"I ain't nobody". A study of black male identity formation. Beiser HR. **Psychoanal Study Child** 1988;43:307–18

Communal upbringing in the Kibbutz. The allure and risks of psychoanalytic utopianism. Berman E. **Psychoanal Study Child** 1988;43:319–35

The transference neurosis in child analysis. Chused JF. **Psychoanal Study Child** 1988;43:51–81

Inner themes and outer behaviors in early childhood development. A longitudinal study. Massie HN, et al. **Psychoanal Study Child** 1988;43:213–42

On the early formation of the mind. II. From differentiation to self and object constancy. Tähkä V. **Psychoanal Study Child** 1988;43:101–34 (75 ref.)

Sensitive periods in development: structural characteristics and causal interpretations. Bornstein MH. **Psychol Bull** 1989 Mar;105(2):179–97 (170 ref.)

Type A behaviour pattern among Indian children. Agrawal R, et al. **Psychol Rep** 1989 Aug;65(1):346

The importance of ethnicity in the development of identity of black adolescents. Aries E, et al. **Psychol Rep** 1989 Aug; 65(1):75–82

Aggression and anxiety in day–care graduates. Bagley C. **Psychol Rep** 1989 Feb;64(1):250

Profiles of youthful suicide: disrupted development and current stressors. Bagley CR. **Psychol Rep** 1989 Aug; 65(1):234

Test–retest reliability of Battle's Anxiety Scale for Children. Battle J. **Psychol Rep** 1988 Aug;63(1):127–30

Relation of divorce to self–concepts and grade point averages of fifth grade school children. Beer J. **Psychol Rep** 1989 Aug;65(1):104–6

Comparisons of parents', teachers', and students' perceptions of self–concept in children from one– and two–parent families. Ensink T, et al. **Psychol Rep** 1989 Aug;65(1):201–2

Mental health of Iranian high school and college students. Makaremi A. **Psychol Rep** 1989 Feb;64(1):19–22

Developmental change in subjective probability during adolescence. Nakajima Y, et al. **Psychol Rep** 1989 Feb; 64(1):243–9

Lying by children: why children say one thing, do another? Paniagua FA. **Psychol Rep** 1989 Jun;64(3 Pt 1):971–84 (29 ref.)

Selected MMPI items that identified college women who reported early sexual abuse. Roland BC, et al. **Psychol Rep** 1988 Oct;63(2):447–50

Kinetic Family Drawings and MMPI diagnostic indicators in adolescent psychiatric inpatients. Stawar TL, et al. **Psychol Rep** 1989 Aug;65(1):142–6

The Differential Diagnostic Technique: a visual–motor projective test: further research. Weininger O. **Psychol Rep** 1989 Aug;65(1):64–6

Correlates of empathy and cognitive style in early adolescence. Wise PS, et al. **Psychol Rep** 1988 Aug; 63(1):179–92

Dimensions of the 'endangered self' in anorexia nervosa. Empirical study based on comparison with normal controls. Engel K, et al. **Psychother Psychosom** 1988;50(2):72–80

Personality development and the dually diagnosed person. Zigler E, et al. **Res Dev Disabil** 1989;10(3):225–40 (92 ref.)

A cross–cultural study of personality: Swedish and English children. Eysenck SB, et al. **Scand J Psychol** 1988; 29(3–4):152–61

Children at risk for schizophrenia: converging lines of evidence. Asarnow JR. **Schizophr Bull** 1988;14(4):613–31 (80 ref.)

Adult children of schizophrenic patients [letter] Shannon MT. **Schizophr Bull** 1988;14(4):495–6

The study of suicidal behavior in the schools. Garrison CZ. **Suicide Life Threat Behav** 1989 Spring;19(1):120–30 (20 ref.)

[Dialysis and kidney transplantation in children] Monnens LA. **Ned Tijdschr Geneeskd** 1988 Sep 10;132(37):1683–4 (Dut)

[The outcome of deprived infants: a retrospective study] Plante GC, et al. **Can J Psychiatry** 1989 Aug;34(6):534–41 (Eng. Abstr.) (Fre)

[Armed conflict and trauma: a clinical study of Latin–American refugee children] Rousseau C, et al. **Can J Psychiatry** 1989 Jun;34(5):376–85 (Eng. Abstr.) (Fre)

[Youth from the viewpoint of the pediatrician] Patzer H. **Arztl Jugendkd** 1988;79(3):115–24 (23 ref.) (Eng. Abstr.) (Ger)

[The psychological status of acne patients. Personality structure and physician–patient relations] Korczak D. **Fortschr Med** 1989 May 10;107(14):309–13 (Eng. Abstr.) (Ger)

[Are pediatric and adolescent psychiatric diseases preliminary stages of psychiatric diseases of adulthood?] Remschmidt H, et al. **Fortschr Neurol Psychiatr** 1989 Jul;57(7):281–98 (140 ref.) (Eng. Abstr.) (Ger)

[Pregnancy in adolescence—psychosocial development of young mothers and their children] Eggers H, et al. **Kinderarztl Prax** 1989 Mar;57(3):123–8 (Eng. Abstr.) (Ger)

[Categories of life histories. Their significance for psychiatry and psychotherapy] Zacher A. **Monogr Gesamtgeb Psychiatr (Berlin)** 1988;55:1–204 (240 ref.) (Ger)

[Spoiling the child and neglect] Wurst F. **Padiatr Padol** 1989; 24(2):93–102 (Ger)

[Transformation symbolism in Andersen's tale "The Little Mermaid"] Engel B. **Prax Kinderpsychol Kinderpsychiatr** 1988 Dec;37(10):374–8 (12 ref.) (Eng. Abstr.) (Ger)

[Assessment of temperament in children] Saile H.

Prax Kinderpsychol Kinderpsychiatr 1989 Jan;38(1):6–9 (Eng. Abstr.) (Ger)
[Foster care placement and self determination] Specht F.
Prax Kinderpsychol Kinderpsychiatr 1989 Jul–Aug; 38(6):190–4 (Eng. Abstr.) (Ger)
[Compulsion and personality organization in childhood and adolescence] Streeck-Fischer A.
Prax Kinderpsychol Kinderpsychiatr 1988 Dec; 37(10):367–73 (Eng. Abstr.) (Ger)
[Psychologically conspicuous children in kindergarten: on the consultation and education of teachers] Wolfram WW.
Prax Kinderpsychol Kinderpsychiatr 1989 Jul–Aug; 38(6):201–4 (Eng. Abstr.) (Ger)
[Children of the persecuted. The offspring of the Nazi victims and refugee children today] Herzka HS, et al.
Prax Kinderpsychol Kinderpsychiatr Beih 1989;29:1–154 (180 ref.) (Ger)
[Psychological significance of saying goodbye] Bruns G.
Psyche (Stuttg) 1988 Jul;42(7):628–36 (Eng. Abstr.) (Ger)
[The self system] Deneke FW. **Psyche (Stuttg)** 1989 Jul; 43(7):577–608 (50 ref.) (Eng. Abstr.) (Ger)
[The creative potential of Goethe. Approaches to a contradictory personality profile] Gamm HJ.
Psyche (Stuttg) 1989 Jul;43(7):632–41 (Eng. Abstr.) (Ger)
[Eve and Adam—is a partnership between the male and female actually possible?] Günzel S. **Psyche (Stuttg)** 1989 Mar;43(3):219–37 (Eng. Abstr.) (Ger)
[Dangers of characterology] Küchenhoff J.
Psyche (Stuttg) 1988 Dec;42(12):1129–36 (Ger)
[How did you find Freud? Or: individuation–separation from a founding father] Meyer AE. **Psyche (Stuttg)** 1988 Oct; 42(10):904–14 (Ger)
[Faust—an early disturbed personality? An American's speech to a German public] Müller C. **Psyche (Stuttg)** 1989 Jun;43(6):535–57 (Eng. Abstr.) (Ger)
[The beginning of individuation. A congress report] Plänkers T. **Psyche (Stuttg)** 1988 Oct;42(10):896–903 (Ger)
[Children—vulnerable or unconquerable?] Schmidbauer W. **Psyche (Stuttg)** 1989 Apr;43(4):359–62 (Ger)
[The female gaze and theoretical writing] Schneider M.
Psyche (Stuttg) 1989 Apr;43(4):331–8 (Eng. Abstr.) (Ger)
[Gratification and refusal in the psychoanalysis of a phallic–narcissistic homosexual patient. Case report of a character analysis] von Blarer A. **Psyche (Stuttg)** 1988 Oct; 42(10):849–72 (Eng. Abstr.) (Ger)
[Narcissism: origin and goal of the ego. Reflections of Lou Andreas-Salomé] Weber I. **Psyche (Stuttg)** 1989 Mar; 43(3):256–85 (Eng. Abstr.) (Ger)
[Peculiarities of psychosocial development in patients with endogenous depression] Bach O.
Psychiatr Neurol Med Psychol Beih 1988;41:23–4 (Ger)
[Victimologic-oriented study of perpetrator groups—a possibility for synthesis of various crime determinants] Jähnig HU. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Nov;40(11):665–70 (Eng. Abstr.) (Ger)
[Biographical anamnesis and social amnesia. A review of medical history taking, exploration, clinical interview, biographical analysis and diagnostic-clinical consultation] Kobbé U. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Jun; 40(6):321–35 (69 ref.) (Eng. Abstr.) (Ger)
[Parent, mother or father loss in childhood and suicidal behavior in adulthood] Lange E, et al.
Psychiatr Neurol Med Psychol (Leipz) 1989 Apr; 41(4):218–23 (Eng. Abstr.) (Ger)
[Abnormal psychosocial development and legal responsibility—results of psychopathometric studies] Littmann E, et al.
Psychiatr Neurol Med Psychol (Leipz) 1989 May; 41(5):269–79 (Eng. Abstr.) (Ger)
[Severe abnormal personality development of diagnostic value in adolescents—relations between paragraph 66 and paragraph 16 of the penal code] Sutarski S.
Psychiatr Neurol Med Psychol (Leipz) 1988 Nov; 40(11):678–82 (Eng. Abstr.) (Ger)
[Childhood and child rearing in psychosomatic patients] Kropiunigg U. **Psychother Psychosom Med Psychol** 1989 May;39(5):168–72 (Eng. Abstr.) (Ger)
[Individualization as a social problem] Lüscher K.
Schweiz Arch Neurol Psychiatr 1989;140(3):219–27 (Ger)
[A scale for assessing the social adjustment of children and adolescents] Blanz B, et al. **Z Kinder Jugenpsychiatr** 1988 Dec;16(4):203–9 (Eng. Abstr.) (Ger)
[Parent personality, family status and family dynamics in anorexia nervosa patients with special reference to father-daughter relations (a retrospective study)] Bonenberger R, et al. **Z Kinder Jugenpsychiatr** 1988 Dec; 16(4):186–95 (Eng. Abstr.) (Ger)
[Pediatric depression] Eggers C. **Z Kinder Jugenpsychiatr** 1988 Dec;16(4):196–202 (Eng. Abstr.) (Ger)
[Acclimatization of relocated children and adolescents] Moilanen I, et al. **Z Kinder Jugenpsychiatr** 1989 Mar; 17(1):10–6 (Eng. Abstr.) (Ger)
[Early forms of compassion] Mokrusch T, et al.
Z Kinder Jugenpsychiatr 1989 Jun;17(2):79–84 (Eng. Abstr.) (Ger)
[The mass media and our children] Remschmidt H.
Z Kinder Jugenpsychiatr 1989 Jun;17(2):53–4 (Ger)
[Testing the German versions of the temperament questionnaires developed by Carey and assistants] Rennen-Allhoff B, et al. **Z Kinder Jugenpsychiatr** 1988 Jun; 16(2):61–6 (Eng. Abstr.) (Ger)
[Pain and personality—a review of the literature with special reference to depressive syndromes] Classen W.
Z Klin Psychol Psychopathol Psychother 1989;37(2):146–61 (130 ref.) (Eng. Abstr.) (Ger)
["Does early childhood determine vulnerability?" On the reception of a study] Ernst C.
Z Klin Psychol Psychopathol Psychother 1988;36(1):46–54 (Ger)
[Biography and transcendence within the human psychotherapy image] Kühn R.
Z Klin Psychol Psychopathol Psychother 1989;37(2):228–32 (Eng. Abstr.) (Ger)
[Proof of complex theories regarding conflicts, neuroses and their therapy, exemplified by Mjasiščew's theory of relations] Lauterbach W. **Z Psychol** 1989;197(1):87–96 (Eng. Abstr.) (Ger)
[Early mother–infant separation and psychosocial development. II. Longitudinal study on 42 subjects] Domenici R, et al. **Pediatr Med Chir** 1988 Nov–Dec; 10(6):627–31 (Eng. Abstr.) (Ita)
[Development of the personality of a physician-pediatrician] Bogomaz TA, et al. **Pediatriia** 1988;(4):95–7 (Rus)

PERSONALITY DISORDER, ANTISOCIAL see **ANTISOCIAL PERSONALITY DISORDER**

PERSONALITY DISORDER, HISTRIONIC see **HISTRIONIC PERSONALITY DISORDER**

PERSONALITY DISORDER, SCHIZOID see **SCHIZOID PERSONALITY DISORDER**

PERSONALITY DISORDER, SCHIZOTYPAL see **SCHIZOTYPAL PERSONALITY DISORDER**

PERSONALITY DISORDERS

Paranoia about paranoid personality research [letter] Thompson-Pope SK, et al. **J Clin Psychiatry** 1989 Aug; 50(8):310
[Diagnosis and treatment of personality disorders] Dahl AA.
Tidsskr Nor Laegeforen 1989 Apr 30;109(12):1280–4 (Eng. Abstr.) (Nor)
[The practical significance of the concept of borderline disorders] Fleischer J, et al. **Cesk Psychiatr** 1989 Feb; 85(1):46–52 (26 ref.) (Eng. Abstr.) (Slo)

BLOOD

Plasma levels of fluphenazine and prolactin in psychiatric patients. Kitamura T, et al.
Eur Arch Psychiatry Neurol Sci 1988 Sep;237(6):320–6

CLASSIFICATION

The categorical representation of personality disorder: a cluster analysis of DSM-III-R personality features. Morey LC. **J Abnorm Psychol** 1988 Aug;97(3):314–21
Jung's typology and DSM-III personality disorders: a comparison of two systems of classification. Ekstrom SR. **J Anal Psychol** 1988 Oct;33(4):329–53 (12 ref.)
Psychoanalytic classification and empiricism with borderline personality disorder as a model. Shapiro T.
J Consult Clin Psychol 1989 Apr;57(2):187–94 (59 ref.)
Antisocial and related disorders in a southern community. An application of grade of membership analysis. Jordan BK, et al. **J Nerv Ment Dis** 1989 Sep;177(9):529–41
[Trial of pattern classification of adolescent absenteeism from schools using factor analysis] Watamabe M, et al.
Seishin Shinkeigaku Zasshi 1988;90(10):799–806 (Jpn)

COMPLICATIONS

Personality disorder and suicide intent. Casey PR.
Acta Psychiatr Scand 1989 Mar;79(3):290–5
State versus trait in mental disorders [letter] Reich J.
Am J Psychiatry 1989 Apr;146(4):568–9
Personality and suicidal behavior in depressed patients. Joffe RT, et al. **Compr Psychiatry** 1989 Mar-Apr;30(2):157–60
Axis I phenomenology of borderline personality disorder. Zanarini MC, et al. **Compr Psychiatry** 1989 Mar-Apr; 30(2):149–56
Personality disorders and alcoholism treatment outcome. Poldrugo F, et al. **Drug Alcohol Depend** 1988 Jul; 21(3):171–6
Comorbidity of bulimia nervosa and personality disorder. Yates WR, et al. **J Clin Psychiatry** 1989 Feb;50(2):57–9
The relationship between thought disorder and psychotic symptoms in borderline personality disorder. O'Connell M, et al. **J Nerv Ment Dis** 1989 May;177(5):273–8
Comorbidity for borderline and schizotypal personality disorders. A study of alcoholic women. Vaglum S, et al. **J Nerv Ment Dis** 1989 May;177(5):279–84
Personality factors in drug addiction. Butcher JN.
NIDA Res Monogr 1988;89:87–92
Panic disorder is borderline personality disorder. Weiler MA, et al. **Psychiatr J Univ Ottawa** 1988 Sep;13(3):140–3
[Eating disorders and personality pathology] Ikuta N, et al.
Seishin Shinkeigaku Zasshi 1988;90(10):793–8 (Jpn)

DIAGNOSIS

Methodology of the evaluation of the personality. Huber W.
Acta Neurochir Suppl (Wien) 1988;44:48–53
Discussion on methods for the evaluation of the personality. Normal brain/damaged brain. Sichez-Auclair N.
Acta Neurochir Suppl (Wien) 1988;44:54–5
Use of the MMPI in the prediction of dangerous behavior. Sloore H. **Acta Psychiatr Belg** 1988 Jan-Feb;88(1):42–51
DSM-III symptom disorders (Axis I) and personality disorders (Axis II) in an outpatient population. Alnaes R, et al. **Acta Psychiatr Scand** 1988 Sep;78(3):348–55
The relationship between DSM-III symptom disorders (Axis I) and personality disorders (Axis II) in an outpatient population. Alnaes R, et al. **Acta Psychiatr Scand** 1988 Oct; 78(4):485–92
Psychodynamic features in borderline personality disorder identified by a subliminal test, the Defense Mechanism Test. Sundbom E, et al. **Acta Psychiatr Scand** 1989 Jul; 80(1):101–5
A comparison of three measures for the diagnosis of borderline personality disorder [published erratum appears in Am J Psychiatry 1989 Aug;146(8):1089] Angus LE, et al. **Am J Psychiatry** 1988 Nov;145(11):1453–4
Comorbidity versus misdiagnosis of axis II and axis III disorders [letter] Cowdry RW, et al. **Am J Psychiatry** 1989 Oct;146(10):1356
Self-defeating personality disorder and DSM-III-R: development of the diagnostic criteria. Kass F, et al.
Am J Psychiatry 1989 Aug;146(8):1022–6 (49 ref.)
Seizure disorder misdiagnosed as borderline syndrome [letter] Schmid EM, et al. **Am J Psychiatry** 1989 Mar;146(3):400–1
Issues in personality disorder diagnoses [letter] Sheeley WF.
Am J Psychiatry 1989 Mar;146(3):415–6
Identification of borderline personality disorder with the NIMH Diagnostic Interview Schedule. Swartz MS, et al.
Am J Psychiatry 1989 Feb;146(2):200–5
DSM-III personality disorder diagnoses in a nonpatient sample. Demographic correlates and comorbidity. Zimmerman M, et al. **Arch Gen Psychiatry** 1989 Aug; 46(8):682–9
Personality disorder [letter] **Br J Psychiatry** 1988 Nov; 153:700–2
Standardised assessment of personality disorders in mental handicap [letter] Ballinger BR, et al. **Br J Psychiatry** 1988 Apr;152:577
Borderline personality. A review of recent research. Tarnopolsky A, et al. **Br J Psychiatry** 1987 Dec;151:724–34 (78 ref.)
Evolving concepts of borderline personality disorders. Leichtman M. **Bull Menninger Clin** 1989 May;53(3):229–49
A comparison of clinical and self-report diagnoses of DSM-III personality disorders in 552 patients. Hyler SE, et al. **Compr Psychiatry** 1989 Mar-Apr;30(2):170–8
DSM-III-R personality diagnoses in anxiety disorder patients. Klass ET, et al. **Compr Psychiatry** 1989 May-Jun; 30(3):251–8
Correlates of DSM-III personality disorder in panic disorder and agoraphobia. Mavissakalian M, et al.
Compr Psychiatry 1988 Nov-Dec;29(6):535–44
Psychotic character versus borderline. Frosch J.
Int J Psychoanal 1988;69 (Pt 4):445–56
Comparing borderline definitions: DSM-III borderline and schizotypal personality disorders. Rosenberger PH, et al.
J Abnorm Psychol 1989 May;98(2):161–9
Prevalence and clinical characteristics of borderline patients in an eating-disordered population. Johnson C, et al.
J Clin Psychiatry 1989 Jan;50(1):9–15
Biologic markers in borderline personality disorder: a review. Lahmeyer HW, et al. **J Clin Psychiatry** 1989 Jun; 50(6):217–25 (57 ref.)
Do object relations deficits distinguish BPD from other diagnostic groups? Bell M, et al. **J Clin Psychol** 1988 Jul; 44(4):511–6
The utility of the MCMI as a DSM-III Axis I diagnostic tool. Bonato DP, et al. **J Clin Psychol** 1988 Nov; 44(6):867–75
An update of the Millon Clinical Multiaxial Inventory (MCMI). Dana RH, et al. **J Clin Psychol** 1988 Sep; 44(5):760–3 (51 ref.)
An external validity study of the MMPI Personality Disorder Scales. Dubro AF, et al. **J Clin Psychol** 1989 Jul; 45(4):570–5
Disguise and the structured self-report assessment of psychopathology: II. A clinical replication. Holden RR.
J Clin Psychol 1989 Jul;45(4):583–6
A comparison of the Millon Clinical Multiaxial Inventory and the California Psychological Inventory in assessment of a nonclinical population. Holliman NB, et al.
J Clin Psychol 1989 May;45(3):373–82
MMPI personality disorder scales and the MCMI: concurrent validity. McCann JT. **J Clin Psychol** 1989 May;45(3):365–9
Validity of Millon's computerized interpretation system for the MCMI: comment on Moreland and Onstad. Cash TF, et al. **J Consult Clin Psychol** 1989 Apr;57(2):311–4
Axis II diagnoses in geriatric inpatients. Casey DA, et al.
J Geriatr Psychiatry Neurol 1989 Apr-Jun;2(2):87–8
Update on instruments to measure DSM-III and DSM-III-R personality disorders. Reich JH. **J Nerv Ment Dis** 1989 Jun;177(6):366–70
Psychological test signs of borderline personality disorder: a review of the empirical literature. Gartner J, et al.
J Pers Assess 1989 Fall;53(3):423–41 (65 ref.)
Dual diagnosis: psychoactive substance dependence and the personality disorders. Blume SB. **J Psychoactive Drugs** 1989 Apr-Jun;21(2):139–44 (38 ref.)

Recognizing borderline personality disorder in the primary care client. Johnson CE. **Nurse Pract** 1988 Aug;13(8):11–2, 15–8

Comparing three systems for diagnosing narcissistic personality disorder. Ronningstam E. **Psychiatry** 1988 Aug; 51(3):300–11

EEG sleep, lithium transport, dexamethasone suppression, and monoamine oxidase activity in borderline personality disorder. Lahmeyer HW, et al. **Psychiatry Res** 1988 Jul; 25(1):19–30

Frequency of DSM–III personality disorders in patients with panic disorder: comparison with psychiatric and normal control subjects. Reich J, et al. **Psychiatry Res** 1988 Oct; 26(1):89–100

The Differential Diagnostic Technique: a visual–motor projective test: further research. Weininger O. **Psychol Rep** 1989 Aug;65(1):64–6

Screening for Axis II personality disorders in women with bulimic eating disorders. Yager J, et al. **Psychosomatics** 1989 Summer;30(3):255–62

[The diagnosis of borderline disorders: criteria and their empirical evaluation] Seidler C, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Jul; 40(7):395–404 (Eng. Abstr.) **(Ger)**

[Objective diagnosis of pre–Oedipal disorders] Ehlers W, et al. **Z Psychosom Med Psychoanal** 1988;34(4):325–37 (Eng. Abstr.) **(Ger)**

[Assessment of the limits of tolerance for frustration in disharmonic personality syndromes] Pirozynski T, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Apr–Jun;92(2):277–82 (Eng. Abstr.) **(Rum)**

[Symptoms of urinary and fecal incontinence in the clinical picture of pediatric borderline psychiatry] Buianov MI. **Zh Nevropatol Psikhiatr** 1988;88(8):93–7 (Eng. Abstr.) **(Rus)**

[Clinical picture and dynamics of borderline psychoneurotic disturbances in menstrual cycle disorders in girls at puberty] Mikirtumov BE. **Zh Nevropatol Psikhiatr** 1988; 88(8):75–9 (Eng. Abstr.) **(Rus)**

[Clinical characteristics of the depressive development of personality] Vishnevskiĭ VA. **Zh Nevropatol Psikhiatr** 1988; 88(12):73–8 (Eng. Abstr.) **(Rus)**

[Emotional disorders in the mothers of children treated at a mental health center] Fernández Abeijón MD, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 May–Jun;17(3):176–84 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

An open, noncomparative study of amoxapine in borderline disorders. Jensen HV, et al. **Acta Psychiatr Scand** 1989 Jan; 79(1):89–93

Pharmacotherapy of the borderline patient: a critical review and clinical guidelines. Kutcher SP, et al. **Can J Psychiatry** 1989 May;34(4):347–53 (56 ref.)

Pharmacological treatment of personality disorders. Tyrer P, et al. **Clin Neuropharmacol** 1988 Dec;11(6):493–9 (19 ref.)

Behavioral disinhibition with clonazepam [letter] Marchevsky S, et al. **Gen Hosp Psychiatry** 1988 Nov; 10(6):447

Alprazolam treatment of avoidant personality traits in social phobic patients. Reich J, et al. **J Clin Psychiatry** 1989 Mar; 50(3):91–5

Amitriptyline versus haloperidol in borderlines: final outcomes and predictors of response. Soloff PH, et al. **J Clin Psychopharmacol** 1989 Aug;9(4):238–46

A double–blind trial of essential fatty acid supplementation in patients with tardive dyskinesia. Vaddadi KS, et al. **Psychiatry Res** 1989 Mar;27(3):313–23

[Comparative effectiveness of the combined use of fenazepam, haloperidol, lithium and metabolic preparations in treating the psychopathologic disorders with obsessions in slowly progressive schizophrenia] Kadysheva NM, et al. **Zh Nevropatol Psikhiatr** 1988;88(10):88–92 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Personality disorders in students with depressive pathology. Ionescu R, et al. **Neurol Psychiatr (Bucur)** 1989 Jan–Mar; 27(1):45–55

Prevalence of DSM–III personality disorders in the community. Reich J, et al. **Soc Psychiatry Psychiatr Epidemiol** 1989 Jan;24(1):12–6

ETIOLOGY

Unexpected improvement after prolonged post–traumatic vegetative state. Arts WF, et al. **Acta Neurochir Suppl (Wien)** 1988;44:78–9

Personality change after severe head injury. Brooks N. **Acta Neurochir Suppl (Wien)** 1988;44:59–64 (11 ref.)

A relativistic cybernetic model for the personality disorders caused by head injuries. Oprescu IA, et al. **Acta Neurochir Suppl (Wien)** 1988;44:74–7

Personality traits after prolonged vegetative state. Reflections on "Unexpected Improvement after Prolonged Post–traumatic Vegetative State" by W. Arts, H. van Dongen, J. Meulstee. Thiery E. **Acta Neurochir Suppl (Wien)** 1988;44:80–3

Post–traumatic psychoses. Violon A. **Acta Neurochir Suppl (Wien)** 1988;44:67–9

Psychological and somatic factors and the conditions of service at sea in relation to the different stages of coronary heart disease among sailors. Jerzemowski J. **Bull Inst Marit Trop Med Gdynia** 1987;38(1–2):33–41

Illness behavior and personality changes in patients with chronic prostatitis during a two–year follow–up period. Keltikangas–Järvinen L, et al. **Eur Urol** 1989;16(3):181–4

Traumas of the past, problems of the present and fear of the future. Aftermaths of parental chemical dependency. Goebels U, et al. **N C Med J** 1989 Jul;50(7):374–6

Frontal lobe trauma in the elderly. Personality changes aren't always dementia. Massey EW. **Postgrad Med** 1989 Sep 1; 86(3):187–8, 190, 192

[Characteristics of personality of patients with chronic renal failure] Lebedev BA, et al. **Klin Med (Mosk)** 1989 Feb; 67(2):63–7 **(Rus)**

[Pathomorphosis of personality changes in patients with epilepsy] Boldyrev AI. **Zh Nevropatol Psikhiatr** 1989; 89(6):50–3 (Eng. Abstr.) **(Rus)**

GENETICS

Personality disorder in the families of depressed, schizophrenic, and never–ill probands. Coryell WH, et al. **Am J Psychiatry** 1989 Apr;146(4):496–502

Predicting alcoholism and personality disorder in a 33–year longitudinal study of children of alcoholics. Drake RE, et al. **Br J Addict** 1988 Jul;83(7):799–807

Familiality of DSM–III dramatic and anxious personality clusters. Reich JH. **J Nerv Ment Dis** 1989 Feb; 177(2):96–100

A family history method for DSM–III anxiety and personality disorders. Reich JH. **Psychiatry Res** 1988 Nov; 26(2):131–9

Family interaction and outcome IQ in high–risk boys. Greenwald DF. **Psychol Rep** 1989 Aug;65(1):95–103

NURSING

The borderline patient on the med–surg unit. Runyon N, et al. **Am J Nurs** 1988 Dec;88(12):1644–50

Conflicts in the inpatient treatment of the borderline patient. Johnson M, et al. **Arch Psychiatr Nurs** 1988 Oct;2(5):312–8 (17 ref.)

How nursing staff respond to the label "borderline personality disorder". Gallop R, et al. **Hosp Community Psychiatry** 1989 Aug;40(8):815–9

PATHOLOGY

Cerebral structure in borderline personality disorder. Lucas PB, et al. **Psychiatry Res** 1989 Feb;27(2):111–5

[Behavior problems and personality changes in frontal lesions] Bindschaedler C, et al. **Rev Med Suisse Romande** 1989 Apr;109(4):253–8 **(Fre)**

PHYSIOPATHOLOGY

Serotonergic studies in patients with affective and personality disorders. Correlates with suicidal and impulsive aggressive behavior. Coccaro EF, et al. **Arch Gen Psychiatry** 1989 Jul;46(7):587–99

EEG in borderline personality disorder [letter] Archer RP, et al. **Biol Psychiatry** 1988 Oct;24(6):731–2

Changes in EEG mean frequency associated with anxiety and with amphetamine challenge in BPD. Cornelius JR, et al. **Biol Psychiatry** 1988 Sep;24(5):587–94

Biological markers in borderline personality disorders: an overview [letter] Fleming JA. **Can J Psychiatry** 1988 Dec; 33(9):873

Biologic factors in personality disorders. Zemishlany Z, et al. **Isr J Psychiatry Relat Sci** 1988;25(1):12–23 (59 ref.)

Some biological predispositions and multivariate analysis of the bio–psycho–social correlates of violent prisoners. Shoham SG, et al. **Med Law** 1989;7(6):607–28

PSYCHOLOGY

Surgical treatment of epilepsy. Restoration of personality? Gillingham FJ. **Acta Neurochir Suppl (Wien)** 1988;44:102–5

Aspects of personality in patients with anxiety disorders undergoing capsulotomy. Mindus P, et al. **Acta Neurochir Suppl (Wien)** 1988;44:138–44

Aphasia and personality. Seron X, et al. **Acta Neurochir Suppl (Wien)** 1988;44:113–7

Post–traumatic personality: as many cases as individuals. Sichez–Auclair N. **Acta Neurochir Suppl (Wien)** 1988; 44:65–6

Personality disorders and epilepsy. Trimble MR. **Acta Neurochir Suppl (Wien)** 1988;44:98–101 (16 ref.)

Clinical differentiation between major depression only, major depression with panic disorder and panic disorder only. Childhood, personality and personality disorder. Alnaes R, et al. **Acta Psychiatr Scand** 1989 Apr;79(4):370–7

Personality and personality disorders among patients with major depression in combination with dysthymic or cyclothymic disorders. Alnaes R, et al. **Acta Psychiatr Scand** 1989 Apr;79(4):363–9

Pain in non–psychotic psychiatric patients: life events, symptomatology and personality traits. Jensen J. **Acta Psychiatr Scand** 1988 Aug;78(2):201–7

Bulimics and restrained eaters: a personality comparison. Ruderman AJ, et al. **Addict Behav** 1988;13(4):359–68

A review of the pathogenesis of borderline and narcissistic personality disorders. Rinsley DB. **Adolesc Psychiatry** 1988; 15:387–406 (100 ref.)

The relationship between borderline personality disorder and anxiety disorders. Benjamin J, et al. **Am J Orthopsychiatry** 1989 Jul;59(3):461–7

Borderline personality disorder, boundary violations, and patient–therapist sex: medicolegal pitfalls. Gutheil TG. **Am J Psychiatry** 1989 May;146(5):597–602 (20 ref.)

Childhood trauma in borderline personality disorder. Herman JL, et al. **Am J Psychiatry** 1989 Apr;146(4):490–5

Oscillations of attachment in borderline personality disorder. Melges FT, et al. **Am J Psychiatry** 1989 Sep;146(9):1115–20

Splitting and dissociation, borderline personality and multiple personality [letter] Nakdimen KA. **Am J Psychiatry** 1989 Sep;146(9):1236

Effects of excluding some patients with personality disorders from a study on depression [letter] Pfohl B. **Am J Psychiatry** 1988 Dec;145(12):1608–9

Intent and lethality of suicide attempts among female borderline inpatients. Shearer SL, et al. **Am J Psychiatry** 1988 Nov;145(11):1424–7

Lying and the paranoid personality [letter] Tobak M. **Am J Psychiatry** 1989 Jan;146(1):125

Role identity in personality disorders: validation, valuation, and agency in identity formation. von Broembsen F. **Am J Psychoanal** 1989 Jun;49(2):115–25

The concept of projective identification and its clinical relevance. Ramchandani D. **Am J Psychother** 1989 Apr; 43(2):238–47

Borderline personality and alcohol abuse. Vaccani JM. **Arch Psychiatr Nurs** 1989 Apr;3(2):113–9 (20 ref.)

A tormented mind: clinical and theoretical implications of overwhelming life events. Watson PB. **Aust N Z J Psychiatry** 1989 Mar;23(1):97–102

Psychiatrists' responses to personality disorder [letter] **Br J Psychiatry** 1989 Feb;154:265–6

Personality disorder: the patients psychiatrists dislike. Lewis G, et al. **Br J Psychiatry** 1988 Jul;153:44–9

Psychiatric and legal aspects of persistent litigation. Rowlands MW. **Br J Psychiatry** 1988 Sep;153:317–23

An integration of the views of Kernberg and Adler on borderline pathology. Goldstein WN. **Bull Menninger Clin** 1989 Jul;53(4):300–9

Acting out of separation conflicts in borderline pathology. An empirical case study. Handley RB, et al. **Bull Menninger Clin** 1989 Jan;53(1):18–30

Kurt Schneider's concepts of psychopathy and schizophrenia: a review of the English literature. Crowhurst B, et al. **Can J Psychiatry** 1989 Apr;34(3):238–43 (32 ref.)

Predictors of suicide in borderline personality disorder. Paris J, et al. **Can J Psychiatry** 1989 Feb;34(1):8–9

Follow–up study on borderline versus nonborderline personality disorders. Modestin J, et al. **Compr Psychiatry** 1989 May–Jun;30(3):236–44

Narcissistic traits in psychiatric patients. Ronningstam E, et al. **Compr Psychiatry** 1988 Nov–Dec;29(6):545–9

Childhood experiences of borderline patients. Zanarini MC, et al. **Compr Psychiatry** 1989 Jan–Feb;30(1):18–25

Utilization of medical resources in persons with DSM–III personality disorders in a community sample. Reich J, et al. **Int J Psychiatry Med** 1989;19(1):1–9

Psychotic character versus borderline. Frosch J. **Int J Psychoanal** 1988;69 (Pt 3):347–57 (0 ref.)

Multiaxial empirically based assessment: parent, teacher, observational, cognitive, and personality correlates of child behavior profile types for 6– to 11–year–old boys. McConaughy SH, et al. **J Abnorm Child Psychol** 1988 Oct; 16(5):485–509

The effect of therapist interventions on the therapeutic alliance with borderline patients. Gabbard GO, et al. **J Am Psychoanal Assoc** 1988;36(3):697–727

The adaptive significance of destructiveness in primitive personalities. Robbins M. **J Am Psychoanal Assoc** 1988; 36(3):627–52

A comparison of MMPI profile types across standard and contemporary norms. Munley PH, et al. **J Clin Psychol** 1989 Mar;45(2):229–39

Identity integration and ego pathology in disturbed adolescents. Salwen RS, et al. **J Clin Psychol** 1989 Jan; 45(1):138–49

The prevalence of borderline personality symptomatology among women with eating disorders. Sansone RA, et al. **J Clin Psychol** 1989 Jul;45(4):603–10

Two methods of assessing narcissism: comparison of the Narcissism–Projective (N–P) and the Narcissistic Personality Inventory (NPI). Shulman DG, et al. **J Clin Psychol** 1988 Nov;44(6):857–66

Personality characteristics of the mothers of children with disruptive behavior disorders. Lahey BB, et al. **J Consult Clin Psychol** 1989 Aug;57(4):512–5

Character pathology in the elderly. Sadavoy J. **J Geriatr Psychiatry** 1987;20(2):165–78 (24 ref.)

MMPI scale clinical correlates for adolescent inpatients. Archer RP, et al. **J Pers Assess** 1988 Winter;52(4):707–21

Toward an assessment of the construct validity of four measures of narcissism. Mullins LS, et al. **J Pers Assess** 1988 Winter;52(4):610–25

The assessment of personality characteristics in depressed and dependent psychiatric inpatients. Overholser JC, et al. **J Pers Assess** 1989 Spring;53(1):40–50

An MMPI description of the narcissistic personality. Raskin R, et al. **J Pers Assess** 1989 Spring;53(1):66–80

Personality and depression. Joffe RT, et al. **J Psychiatr Res** 1988;22(4):279–86

On the consistency of the MMPI in borderline personality

disorder. Evans RW, et al. **Percept Mot Skills** 1986 Apr; 62(2):579–85

Patients who hate. Gabbard GO. **Psychiatry** 1989 Feb; 52(1):96–106 (41 ref.)

Assessing psychodynamic conflicts: I. Reliability of the idiographic conflict formulation method. Perry JC, et al. **Psychiatry** 1989 Aug;52(3):289–301

Tonic arousal and activity: relationships to personality and personality disorder traits in panic patients. King RJ, et al. **Psychiatry Res** 1988 Jul;25(1):65–72

An analysis of the re-test artefact in longitudinal studies of psychiatric symptoms and personality. Jorm AF, et al. **Psychol Med** 1989 May;19(2):487–93

Borderline symptom inventory: assessing inpatient and outpatient borderline personality disorders. Mann LS, et al. **Psychopathology** 1988;21(1):44–50

Personality structure of asthmatic and normal children assessed by the Rorschach technique. An experimental study. Faleide AO, et al. **Psychother Psychosom** 1988; 49(1):41–6

Personality development and the dually diagnosed person. Zigler E, et al. **Res Dev Disabil** 1989;10(3):225–40 (92 ref.)

Personality disorders in long term non-psychotic patients. Lesage AD, et al. **Soc Psychiatry Psychiatr Epidemiol** 1988 Jul;23(3):158–62

[Transsexualism as a symptom of personality disorder and its treatment] Küchenhoff B. **Nervenarzt** 1988 Dec; 59(12):734–8 **(Ger)**

[A case of phallic-narcissistic personality] Meissner WW. **Psyche (Stuttg)** 1989 Jan;43(1):67–95 **(Ger)**

[Types of personality disorders in oxycephaly] Fehlow P. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Mar; 41(3):157–60 (Eng. Abstr.) **(Ger)**

[Personality structure and mental anorexia. A study using projective technics] Fagiani MB, et al. **Minerva Psichiatr** 1989 Jan-Mar;30(1):1–8 (Eng. Abstr.) **(Ita)**

[Borderline syndrome and adolescence] Puoti M, et al. **Minerva Psichiatr** 1988 Oct-Dec;29(4):199–201 (0 ref.) (Eng. Abstr.) **(Ita)**

[Personality structure in depression] Ravizza L, et al. **Minerva Psichiatr** 1989 Jan-Mar;30(1):25–37 (49 ref.) (Eng. Abstr.) **(Ita)**

[Clinical conference at the Brazilian Institute for Studies and Research in Gastroenterology] **Arq Gastroenterol** 1988 Apr-Jun;25(2):110–5 **(Por)**

[Clinical conference at the Brazilian Institute for Studies and Research in Gastroenterology] **Arq Gastroenterol** 1988 Jan-Mar;25(1):48–58 **(Por)**

[Social and occupational adaptation of patients with borderline disorders of endogenous-organic origin at a large industrial enterprise] Zapuskalov SV, et al. **Zh Nevropatol Psikhiatr** 1988;88(10):116–20 (Eng. Abstr.) **(Rus)**

REHABILITATION

Co-dependency. Assessment and recovery. Zerwekh JA, et al. **Nurs Clin North Am** 1989 Mar;24(1):109–20 (19 ref.)

SURGERY

Psychosurgery and personality disorders. Cosyns P. **Acta Neurochir Suppl (Wien)** 1988;44:121–4 (8 ref.)

Psychosurgery and personality—some legal considerations. Nys H. **Acta Neurochir Suppl (Wien)** 1988;44:170–2

Posteromedial hypothalamotomy in the treatment of violent, aggressive behaviour. Sano K, et al. **Acta Neurochir Suppl (Wien)** 1988;44:145–51

[Late results of operations in patients with epilepsy with marked mental disorders] Shustin VA, et al. **Zh Vopr Neirokhir** 1988 Jul-Aug;(4):32–5 (Eng. Abstr.) **(Rus)**

THERAPY

Beginning psychotherapy with the borderline patient. Goldstein WN. **Am J Psychother** 1988 Oct;42(4):561–73 (27 ref.)

Inpatient management of a patient with borderline personality disorder: a case study. Freeman SK. **Arch Psychiatr Nurs** 1988 Dec;2(6):360–5

Quality assurance project [letter] **Aust N Z J Psychiatry** 1989 Mar;23(1):10–2

Modifiability of trait anxiety and neuroticism: a meta-analysis of the literature. Jorm AF. **Aust N Z J Psychiatry** 1989 Mar;23(1):21–9

Becoming a constant object for the borderline patient. Cohen CP, et al. **Bull Menninger Clin** 1989 Jul;53(4):287–99

Countertransference dilemmas with borderline patients. The contribution of psychological testing. Shectman F. **Bull Menninger Clin** 1989 Jul;53(4):310–8

Indications for extended psychiatric hospitalization: a study of clinical opinion. Allen JG, et al. **Compr Psychiatry** 1988 Nov-Dec;29(6):604–12

The subacute hospital treatment of the borderline patient. II: An integrated focus on splitting. Lansky MR, et al. **Hillside J Clin Psychiatry** 1988;10(2):188–208

Dice therapy [letter] **Hosp Community Psychiatry** 1989 Jan; 40(1):87–8

Coordinating inpatient and outpatient treatment for a chronically suicidal woman. Frances A, et al. **Hosp Community Psychiatry** 1989 May;40(5):468–70

Treating self-defeating personality disorder. Frances A, et al. **Hosp Community Psychiatry** 1988 Aug;39(8):819–21

Dice therapy: deterring suicidal behavior by a borderline patient. Kuhlman TL, et al. **Hosp Community Psychiatry** 1988 Sep;39(9):992–4

Clinicians' experiences in combining medication and psychotherapy in the treatment of borderline patients. Waldinger RJ, et al. **Hosp Community Psychiatry** 1989 Jul; 40(7):712–8

An analysis of pretraining work behavior as a composition variable in group psychotherapy. Connelly JL, et al. **Int J Group Psychother** 1989 Apr;39(2):173–89

Group psychotherapy of the characterologically difficult patient. Leszcz M. **Int J Group Psychother** 1989 Jul; 39(3):311–35

The role of the leader in managing the preoedipal patient in the group setting. Ormont LR. **Int J Group Psychother** 1989 Apr;39(2):147–71

The "holding function" of the therapist in the treatment of borderline patients. Richard-Jodoin RM. **J Am Acad Psychoanal** 1989 Summer;17(2):305–12

A model of time-limited treatment for the older patient. Kirshner LA. **J Geriatr Psychiatry** 1988;21(2):155–68

Personality disorder and outcome in the treatment of late-life depression. Thompson LW, et al. **J Geriatr Psychiatry** 1988; 21(2):133–53

A critical review of psychotherapeutic treatments of the borderline personality. Historical trends and future directions. Aronson TA. **J Nerv Ment Dis** 1989 Sep; 177(9):511–28 (105 ref.)

Early discontinuance of borderline patients from psychotherapy. Gunderson JG, et al. **J Nerv Ment Dis** 1989 Jan;177(1):38–42

The Quilt-Work Theory: a milieu approach. Goldberg K. **New Dir Ment Health Serv** 1988 Summer;(38):5–21

The Quilt-Work Theory: commentary. Wilner M. **New Dir Ment Health Serv** 1988 Summer;(38):23–9

Television therapy. Young GG. **Ohio Med** 1988 Jun; 84(6):465–71

Borderline personality disorder. When medical care is complicated by mental illness. Moss JH. **Postgrad Med** 1989 Apr;85(5):151–4, 157–8

A comparison of homogeneous and heterogeneous group psychotherapy models for chronic psychiatric outpatients. de Bosset F. **Psychiatr J Univ Ottawa** 1988 Nov;13(4):212–4

From the analysis of a 5-year-old boy with pathological narcissism. Berberich E. **Psychoanal Study Child** 1988; 43:263–78

Application of Osgood's Semantic Differential to the study of psychotherapeutic treatments. Bovet J, et al. **Psychother Psychosom** 1988;50(1):42–56

Brief dynamic psychotherapy for less well-adjusted patients. Pilot study. Høglend P. **Psychother Psychosom** 1988; 49(3-4):197–204

[Inpatient psychoanalytic treatment of patients with structural ego disorders] Ehl M, et al. **Z Psychosom Med Psychoanal** 1988;34(4):309–24 (Eng. Abstr.) **(Ger)**

[Treatment of phobias and compulsive disorders] Holm HJ. **Tidsskr Nor Laegeforen** 1989 Mar 30;109(9):940–1 **(Nor)**

[Principles of the correction of pathogenic forms of behavior in secondary prevention of ischemic heart disease] Zaitsev VP, et al. **Kardiologiia** 1989 Mar;29(3):113–6 **(Rus)**

PERSONALITY, HYSTERICAL see **HISTRIONIC PERSONALITY DISORDER**

PERSONALITY INVENTORY

Personality examinations in individuals with insulin-dependent diabetes mellitus. Iványi J, et al. **Acta Diabetol Lat** 1988 Apr-Jun;25(2):109–16

Use of the Child Behavior Checklist in an Israeli adolescent psychiatric unit. Apter A, et al. **Acta Psychiatr Scand** 1988 Jul;78(1):96–101

Examining for links between expressed emotion and EPI personality variables: can low EE be faked? Parker G, et al. **Acta Psychiatr Scand** 1988 Nov;78(5):599–602

The Rutter Parent Scale A2 and Teacher Scale B2 in Chinese. II. Clinical validity among Chinese children. Wong CK. **Acta Psychiatr Scand** 1988 Jul;78(1):11–7

Psychometric properties and social correlates of assertion measures in chronic alcoholics. Ammerman RT, et al. **Addict Behav** 1989;14(1):11–21

Personality and smokeless tobacco use. Jacobs GA, et al. **Addict Behav** 1988;13(4):311–8

Abortion in adolescence. Campbell NB, et al. **Adolescence** 1988 Winter;23(92):813–23

Assessment of life events during adolescence: the use of self-report inventories. Williams CL, et al. **Adolescence** 1989 Spring;24(93):95–118 (65 ref.)

The problem of confounding social support and depressive symptoms: a brief report on a college sample. Slavin LA, et al. **Am J Community Psychol** 1989 Feb;17(1):57–66

A comparison of three measures for the diagnosis of borderline personality disorder [published erratum appears in Am J Psychiatry 1989 Aug;146(8):1089] Angus LE, et al. **Am J Psychiatry** 1988 Nov;145(11):1453–4

Self-reported anxiety in adolescents. Bernstein GA, et al. **Am J Psychiatry** 1989 Mar;146(3):384–6

Hierarchy of characteristics associated with depressive symptoms in an urban elderly sample. Kennedy GJ, et al. **Am J Psychiatry** 1989 Feb;146(2):220–5

Psychiatric screening in the emergency department: its effect on physician behavior. Gold I, et al. **Ann Emerg Med** 1989 Aug;18(8):875–80

The determination of defense style by questionnaire. Andrews G, et al. **Arch Gen Psychiatry** 1989 May; 46(5):455–60

Spouse similarity for IQ and personality and convergence. Mascie-Taylor CG. **Behav Genet** 1989 Mar;19(2):223–7

Prediction of insomnia from arousability predisposition scores: scale development and cross-validation. Coren S. **Behav Res Ther** 1988;26(5):415–20

The validity of the Social Avoidance and distress Scale and the Fear of Negative Evaluation Scale with social phobic patients. Heimberg RG, et al. **Behav Res Ther** 1988; 26(5):407–13 (18 ref.)

Some further comments on the measurement of social phobia. Turner SM, et al. **Behav Res Ther** 1988;26(5):411–3

The Spielberger Anger Expression Scale: some psychometric data. Knight RG, et al. **Br J Clin Psychol** 1988 Sep;27 (Pt 3):279–81

The Type A behaviour pattern and self-evaluation. Henley S, et al. **Br J Med Psychol** 1989 Mar;62 (Pt 1):51–9

Emotional disturbances in endocrine patients. Validity of the scaled version of the General Health Questionnaire (GHQ-28). Lobo A, et al. **Br J Psychiatry** 1988 Jun; 152:807–12

Eating attitudes as related to demographic and personality characteristics: a high school survey. Chandarana P, et al. **Can J Psychiatry** 1988 Dec;33(9):834–7

Psychologic factors in chronic headache: assessment by means of the SCL-90-R inventory. Puca FM, et al. **Cephalalgia** 1989 Mar;9(1):33–51

Learned helplessness, test anxiety, and academic achievement: a longitudinal analysis. Fincham FD, et al. **Child Dev** 1989 Feb;60(1):138–45

Differentiating inpatient clinically-diagnosed and normal children using the Children's Depression Inventory. Wendel NH, et al. **Child Psychiatry Hum Dev** 1988 Winter; 19(2):98–108

Measures of attention deficit. Part I: Questionnaires. Blondis TA, et al. **Clin Pediatr (Phila)** 1989 May;28(5):222–8

Assessment of dental anxiety in edentulous subjects. Vervoorn JM, et al. **Community Dent Oral Epidemiol** 1989 Aug;17(4):177–9

Development of a graphic psychiatric self-rating scale. Ernst M, et al. **Compr Psychiatry** 1989 Mar-Apr;30(2):189–94

A comparison of clinical and self-report diagnoses of DSM-III personality disorders in 552 patients. Hyler SE, et al. **Compr Psychiatry** 1989 Mar-Apr;30(2):170–8

Factors affecting the outcome of MMPI and neuropsychological assessments of psychogenic and epileptic seizure patients. Wilkus RJ, et al. **Epilepsia** 1989 May-Jun;30(3):339–47

Personality factors predisposing to depression correlate significantly negatively with M1-muscarinic and beta-adrenergic receptor densities on blood cells. Moises HW, et al. **Eur Arch Psychiatry Neurol Sci** 1988; 237(4):209–17

Self-perception of personality at midlife in elderly people: continuity and change. Gold D, et al. **Exp Aging Res** 1987 Winter;13(4):197–202

The Beck Depression Inventory: normative data and problems with generalizability. Williamson HA Jr, et al. **Fam Med** 1989 Jan-Feb;21(1):58–60

Personal stress inventory in the screening and evaluation of family practice patients. Ireton HR, et al. **Fam Pract Res J** 1989 Spring-Summer;8(2):62–74

The measurement of psychodynamic variables. Plutchik R, et al. **Hillside J Clin Psychiatry** 1988;10(2):132–47

Dispositional correlates of hypnosis: a phenomenological approach. Kihlstrom JF, et al. **Int J Clin Exp Hypn** 1989 Jul;37(3):249–63

Spanish norms for the Harvard Group Scale of Hypnotic Susceptibility, Form A. Lamas JR, et al. **Int J Clin Exp Hypn** 1989 Jul;37(3):264–73

A psychometric study of positive and negative nominations and the pupil evaluation inventory. Johnston C, et al. **J Abnorm Child Psychol** 1988 Dec;16(6):617–26

General behavior inventory identification of unipolar and bipolar affective conditions in a nonclinical university population. Depue RA, et al. **J Abnorm Psychol** 1989 May; 98(2):117–26

Nursing and caring: a personal construct theory study of some nurses' self-perceptions. Morrison P. **J Adv Nurs** 1989 May;14(5):421–6

The survey form of the Leyton Obsessional Inventory-Child Version: norms from an epidemiological study. Berg CZ, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Nov; 27(6):759–63

Scales to assess child and adolescent depression: checklists, screens, and nets. Costello EJ, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Nov; 27(6):726–37 (63 ref.)

Obsessive compulsive disorder in adolescence: an epidemiological study. Flament MF, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Nov; 27(6):764–71

The Child Behavior Checklist: normative information for inpatients. Jones RN, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Sep;27(5):632–5

Reliability testing of a children's version of the Eating Attitude Test. Maloney MJ, et al.

J Am Acad Child Adolesc Psychiatry 1988 Sep;27(5):541–3
A Parent Practices Scale and its relation to parent and child mental health. Strayhorn JM, et al.
J Am Acad Child Adolesc Psychiatry 1988 Sep;27(5):613–8
Self-report measures for use with children: a review and comment. Beitchman JH, et al. **J Clin Psychol** 1988 Jul; 44(4):477–90 (103 ref.)
The utility of the MCMI as a DSM-III Axis I diagnostic tool. Bonato DP, et al. **J Clin Psychol** 1988 Nov; 44(6):867–75
DSM-III diagnosis and code types of the Diagnostic Inventory of Personality and Symptoms in public hospital settings. Coker RR, et al. **J Clin Psychol** 1989 Jul; 45(4):521–30
An update of the Millon Clinical Multiaxial Inventory (MCMI). Dana RH, et al. **J Clin Psychol** 1988 Sep; 44(5):760–3 (51 ref.)
Disguise and the structured self-report assessment of psychopathology: II. A clinical replication. Holden RR. **J Clin Psychol** 1989 Jul;45(4):583–6
A comparison of the Millon Clinical Multiaxial Inventory and the California Psychological Inventory in assessment of a nonclinical population. Holliman NB, et al. **J Clin Psychol** 1989 May;45(3):373–82
Treatment outcomes of Vietnam veterans with PTSD and the consistency of the MCMI. Hyer L, et al. **J Clin Psychol** 1989 Jul;45(4):547–52
Millon Behavioral Health Inventory norms for chronic pain patients. Labbé EE, et al. **J Clin Psychol** 1989 May; 45(3):383–90
MMPI personality disorder scales and the MCMI: concurrent validity. McCann JT. **J Clin Psychol** 1989 May;45(3):365–9
Personality and symptom characteristics of continuous vs. episodic drinkers. McMahon RC, et al. **J Clin Psychol** 1989 Jan;45(1):161–8
The MCMI-II as a treatment outcome measure for psychiatric inpatients. Piersma HL. **J Clin Psychol** 1989 Jan;45(1):87–93
The validity of multidimensional self-report anger and hostility measures. Riley WT, et al. **J Clin Psychol** 1989 May;45(3):397–404
The prevalence of borderline personality symptomatology among women with eating disorders. Sansone RA, et al. **J Clin Psychol** 1989 Jul;45(4):603–10
Two methods of assessing narcissism: comparison of the Narcissism-Projective (N-P) and the Narcissistic Personality Inventory (NPI). Shulman DG, et al. **J Clin Psychol** 1988 Nov;44(6):857–66
An inventory for measuring clinical anxiety: psychometric properties. Beck AT, et al. **J Consult Clin Psychol** 1988 Dec;56(6):893–7
Factor-analytic methods of scale development in personality and clinical psychology. Comrey AL. **J Consult Clin Psychol** 1988 Oct;56(5):754–61 (31 ref.)
Depression in children and adolescents: a comparative analysis of the utility and construct validity of two assessment measures. Doerfler LA, et al. **J Consult Clin Psychol** 1988 Oct;56(5):769–72
Psychosocial functioning of learning-disabled children: replicability of statistically derived subtypes. Fuerst DR, et al. **J Consult Clin Psychol** 1989 Apr;57(2):275–80
Self-reported hostility as a function of offense characteristics and response style in a sexual offender population. Hall GC. **J Consult Clin Psychol** 1989 Apr;57(2):306–8
Clinical reliabilities and validities of the Basic Personality Inventory. Holden RR, et al. **J Consult Clin Psychol** 1988 Oct;56(5):766–8
Inventory of interpersonal problems: psychometric properties and clinical applications. Horowitz LM, et al. **J Consult Clin Psychol** 1988 Dec;56(6):885–92
Assessment of positive automatic cognition. Ingram RE, et al. **J Consult Clin Psychol** 1988 Dec;56(6):898–902
Cognitive attributes of depression in children and adolescents. McCauley E, et al. **J Consult Clin Psychol** 1988 Dec; 56(6):903–8
Psychosocial screening in pediatric practice: identifying high-risk children. Walker WO Jr, et al. **J Dev Behav Pediatr** 1989 Jun;10(3):134–8
Sex, ethnic, and social differences in test anxiety among Israeli adolescents. Zeidner M, et al. **J Genet Psychol** 1989 Jun;150(2):175–85
Distressed transvestites. Psychometric characteristics. Fagan PJ, et al. **J Nerv Ment Dis** 1988 Oct;176(10):626–32
Replicated factor structure of the Beck Depression Inventory. Louks J, et al. **J Nerv Ment Dis** 1989 Aug; 177(8):473–9
Decision-making styles: managerial application of the MBTI and type theory. Freund CM. **J Nurs Adm** 1988 Dec; 18(12):5–11
Using the Personality Inventory for Children to identify children with somatoform disorders: MMPI findings revisited. Pritchard CT, et al. **J Pediatr Psychol** 1988 Jun; 13(2):237–45
Reinterpreting the Myers-Briggs Type Indicator from the perspective of the five-factor model of personality. McCrae RR, et al. **J Pers** 1989 Mar;57(1):17–40
The two-factor model of self-reported mood: a cross-cultural replication. Almagor M, et al. **J Pers Assess** 1989 Spring;53(1):10–21
Lao Depression Inventory. Davidson-Muskin MB, et al. **J Pers Assess** 1989 Spring;53(1):161–8
Measuring effective functioning in the elderly: an application of Erikson's theory. Domino G, et al. **J Pers Assess** 1989 Summer;53(2):319–28
Validation of a measure of perfectionism. Hewitt PL, et al. **J Pers Assess** 1989 Spring;53(1):133–44
The anxiety thermometer: a validation study. Houtman IL, et al. **J Pers Assess** 1989 Fall;53(3):575–82
Factor structure of the Millon Clinical Multiaxial Inventory (MCMI) with an offender sample. McCormack JK, et al. **J Pers Assess** 1989 Fall;53(3):442–8
A psychometric study of the PRF ANDRO Scale. Ramanaiah NV, et al. **J Pers Assess** 1989 Spring;53(1):3–9
Validity of the Superiority and Goal Instability scales as measures of defects in the self. Robbins SB. **J Pers Assess** 1989 Spring;53(1):122–32
Diagnosis of major depression by self-report. Wetzler S, et al. **J Pers Assess** 1989 Spring;53(1):22–30
Critique of the act frequency approach to personality. Block J. **J Pers Soc Psychol** 1989 Feb;56(2):234–45
Structure of act-report data: is the five-factor model of personality recaptured? Botwin MD, et al. **J Pers Soc Psychol** 1989 Jun;56(6):988–1001
Assessing coping strategies: a theoretically based approach. Carver CS, et al. **J Pers Soc Psychol** 1989 Feb;56(2):267–83
The structure of interpersonal traits: Wiggins's circumplex and the five-factor model. McCrae RR, et al. **J Pers Soc Psychol** 1989 Apr;56(4):586–95
A simplified psychologic questionnaire as a treatment planning aid for patients with temporomandibular joint disorders. Gale EN, et al. **J Prosthet Dent** 1989 Feb; 61(2):235–8
Personality and depression. Joffe RT, et al. **J Psychiatr Res** 1988;22(4):279–86
A comparison of the psychoticism scale of the EPQ and the EPQ--R. Pearson PR. **J Psychol** 1988 Nov;122(6):623–4
Checklists for measuring response style in hypertensives. Cumes-Rayner DP, et al. **J Psychosom Res** 1989; 33(2):133–46
Development and use of a short self-rating instrument to screen for psychosocial disorder. Corney RH. **J R Coll Gen Pract** 1988 Jun;38(311):263–6
Psychiatric screening in general practice: comparison of the general health questionnaire and the hospital anxiety depression scale. Wilkinson MJ, et al. **J R Coll Gen Pract** 1988 Jul;38(312):311–3
Efficacy of a suicide detection scale in determining lethality of ideation among hospitalized veterans: a case study. Eisenberg MG, et al. **Milit Med** 1989 May;154(5):246–9
The difference between biological heredity and cultural heredity. Preliminary findings in assessment of parental rearing practice by EMBU-inventory in primary alcoholism. Vrasti R, et al. **Neurol Psychiatr (Bucur)** 1988 Jul-Sep;26(3):171–8
Cortisol response to various stressful situations: relationship to personality variables and coping styles. Bossert S, et al. **Neuropsychobiology** 1988;20(1):36–42
Television therapy. Young GG. **Ohio Med** 1988 Jun; 84(6):465–71
The usefulness of the HAD scale in assessing anxiety and depression in patients with burning mouth syndrome. Lamey PJ, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr;67(4):390–2
Screening for psychiatric illness in patients with oral dysesthesia by means of the General Health Questionnaire--twenty-eight item version (GHQ-28) and the Irritability, Depression and Anxiety Scale (IDA). Zilli C, et al. **Oral Surg Oral Med Oral Pathol** 1989 Apr; 67(4):384–9
MMPI changes following behavioral treatment of chronic low back pain. Naliboff BD, et al. **Pain** 1988 Dec; 35(3):271–7
Internal consistency of the Sport Competition Anxiety Test. Brand HJ, et al. **Percept Mot Skills** 1988 Oct;67(2):441–2
Development of a scale to assess jealous behaviors. McIntosh EG. **Percept Mot Skills** 1988 Oct;67(2):554
Note on the reliability and concurrent validity of the Spanish version of the State-Trait Anxiety Inventory. Rodrigo G, et al. **Percept Mot Skills** 1988 Dec;67(3):926
Reexamination of relations between the Myers-Briggs type indicator and field dependence-independence. Schmidt CP, et al. **Percept Mot Skills** 1988 Dec;67(3):691–5
Use of the personal orientation inventory with disabled athletes. Sherrill C, et al. **Percept Mot Skills** 1988 Aug; 67(1):263–6
Effect of relaxation or exercise on undergraduates' test anxiety. Topp R. **Percept Mot Skills** 1989 Aug;69(1):35–41
Tonic arousal and activity: relationships to personality and personality disorder traits in panic patients. King RJ, et al. **Psychiatry Res** 1988 Jul;25(1):65–72
Death anxiety, state and trait anxiety in Kuwaitian samples. Abdel-Khalek AM, et al. **Psychol Rep** 1988 Dec; 63(3):715–8
Perfectionism and Millon basic personality patterns. Broday SF. **Psychol Rep** 1988 Dec;63(3):791–4
Adolescents' self-esteem measured as a specific score on the Strong-Campbell Interest Inventory. Cates BL, et al. **Psychol Rep** 1989 Feb;64(1):209–10
Attention checklist: a rating scale for mildly mentally handicapped adolescents. Das JP, et al. **Psychol Rep** 1989 Jun;64(3 Pt 2):1267–74
The Men's Adult Life Experiences Inventory: an instrument for assessing developmental concerns of middle age. De Lucci MF, et al. **Psychol Rep** 1989 Apr;64(2):479–85
The Childcare Attitude Inventory: preliminary norms, reliability and construct validity. Fay LM, et al. **Psychol Rep** 1988 Dec;63(3):841–2
Concurrent validation of the Million Clinical Multiaxial Inventory among Vietnam veterans with posttraumatic stress disorder. Hyer L, et al. **Psychol Rep** 1988 Aug; 63(1):271–8
Factor analytic study of irrational beliefs. Jacobsen RH, et al. **Psychol Rep** 1988 Dec;63(3):803–9
Personality Inventory for Children: selected scales in differentiating conduct-disordered and emotionally disturbed students. Kelly EJ. **Psychol Rep** 1988 Oct; 63(2):395–401
Maslach Burnout Inventory: factor structures and norms for USA pharmacists. Lahoz MR, et al. **Psychol Rep** 1989 Jun; 64(3 Pt 2):1059–63
Examining 16 PF scores for male felons in a reception and diagnostic center: Part II. Cross-validating four-point codes. Reuter EK, et al. **Psychol Rep** 1988 Aug;63(1):283–6
Discriminating between substance abusers with single and dual diagnoses using MMPI profiles and the Mac Andrews Alcoholism Scale: Axis I and Axis II subtypes. Rozensky RH, et al. **Psychol Rep** 1988 Dec;63(3):985–6
Effectiveness of progressive relaxation on test anxiety and visual perception. Schaer B, et al. **Psychol Rep** 1988 Oct; 63(2):511–8
Further evidence of construct and discriminant validities for the Malouff and Schutte Belief Scale. Zgourides GD, et al. **Psychol Rep** 1988 Dec;63(3):801–2
[Use of psychological personality inventory method in cancer epidemiological survey] Zhang ZW. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1988 Aug; 9(4):230–2 (Eng. Abstr.) **(Chi)**
[A new scale of quantitative and qualitative evaluation of anxiety: the Ferrerri Anxiety Rating Diagram (FARD)] Ferreri M, et al. **Encephale** 1988 Sep-Oct;14(5):385–93 (Eng. Abstr.) **(Fre)**
[The Guilford Zimmerman Temperament Survey (GZTS): concurrent criterion validity. Study of a sample of 150 pilot cadets of the Aeronautics Academy of Pozzuoli] Giambelluca A, et al. **Riv Med Aeronaut Spaz** 1985 Apr-Jun;52(2):139–49 (Eng. Abstr.) **(Ita)**
[A study of the state-trait anxiety inventory (STAI) and its application to noise stress] Iwamoto M, et al. **Nippon Eiseigaku Zasshi** 1989 Feb;43(6):1116–23 (Eng. Abstr.) **(Jpn)**
[Changes in autonomic nerve function during the normal menstrual cycle measured by the coefficient of variation of R-R intervals] Kondo M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 May;41(5):513–8 (Eng. Abstr.) **(Jpn)**
[Personality aspect of intragroup relations under conditions of partial social isolation] Medvedev VI, et al. **Fiziol Cheloveka** 1988 Sep-Oct;14(5):739–46 **(Rus)**
[Spanish adaptation and validation of an anxiety scale derived from the AMDP (AMDP-AT) system. I: Adaptation and convergent validity] Sánchez Blanque A, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1989 Mar-Apr;17(2):132–9 (Eng. Abstr.) **(Spa)**
[Changes in attitude towards mental patients and variations in personality measured by the SCL-90 scale in medical students] Ylla Segura L, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1988 Sep-Oct;16(5):356–66 (Eng. Abstr.) **(Spa)**

INSTRUMENTATION

Validity of Million's computerized interpretation system for the MCMI: comment on Moreland and Onstad. Cash TF, et al. **J Consult Clin Psychol** 1989 Apr;57(2):311–4

PERSONALITY TESTS

Pain in non-psychotic psychiatric patients: life events, symptomatology and personality traits. Jensen J. **Acta Psychiatr Scand** 1988 Aug;78(2):201–7
Patterns of drug use and sensation-seeking among adolescents in Norway. Pedersen W, et al. **Acta Psychiatr Scand** 1989 Apr;79(4):386–90
Ego functions in epilepsy. Sørensen AS, et al. **Acta Psychiatr Scand** 1988 Aug;78(2):211–21
Alcohol expectancies and personality characteristics in young men. Leonard KE, et al. **Addict Behav** 1988;13(4):353–7
Self-efficacy in alcoholics: clinical validation of the Situational Confidence Questionnaire. Miller PJ, et al. **Addict Behav** 1989;14(2):217–24
Bulimics and restrained eaters: a personality comparison. Ruderman AJ, et al. **Addict Behav** 1988;13(4):359–68
Theoretical and methodological considerations of self-concept measurement. Wayment H, et al. **Adolescence** 1989 Summer;24(94):339–48
Differences in psychological need hierarchy between program completers and dropouts from a drug abuse treatment program. Craig RJ, et al. **Am J Drug Alcohol Abuse** 1988;14(1):89–96
The meanings of personality predicates. Kagan J. **Am Psychol** 1988 Aug;43(8):614–20 (51 ref.)
Modifiability of trait anxiety and neuroticism: a meta-analysis of the literature. Jorm AF. **Aust N Z J Psychiatry** 1989 Mar;23(1):21–9
Willingness to drive when drunk and personality: a twin study. Martin NG, et al. **Behav Genet** 1989 Jan;19(1):97–111
Anxiety sensitivity, injury sensitivity, and individual

differences in fearfulness. Reiss S, et al. **Behav Res Ther** 1988;26(4):341–5
Sensation seeking and auditory evoked potentials. Hegerl U, et al. **Biol Psychiatry** 1989 Jan 15;25(2):179–90
Factors of schizoid personality. Raine A, et al. **Br J Clin Psychol** 1989 Feb;28 (Pt 1):31–40
The total score of the Crown–Crisp Experiential Index: a useful and valid measure of psychoneurotic pathology. Birtchnell J, et al. **Br J Med Psychol** 1988 Sep;61 (Pt 3):255–66
Psychological adjustment, close personal relationships and personality. McLennan J, et al. **Br J Med Psychol** 1988 Sep;61 (Pt 3):285–90
Meta-analyses of the reliability of Type A behaviour measures. Yarnold PR, et al. **Br J Med Psychol** 1989 Mar; 62 (Pt 1):43–50
Follow-up study on borderline versus nonborderline personality disorders. Modestin J, et al. **Compr Psychiatry** 1989 May–Jun;30(3):236–44
The Munich Personality Test (MPT)—a short questionnaire for self-rating and relatives' rating of personality traits: formal properties and clinical potential. von Zerssen D, et al. **Eur Arch Psychiatry Neurol Sci** 1988;238(2):73–93
Construction of rating scales for measuring attitudinal and psychological characteristics of drug abusers. Ong TH. **Int J Addict** 1988 Sep;23(9):967–89
Sensation seeking, state and trait anxiety, and depressive mood in adolescent substance users. Teichman M, et al. **Int J Addict** 1989 Feb;24(2):87–99
The predictive power of first-grade peer and teacher ratings of behavior: sex differences in antisocial behavior and personality at adolescence. Tremblay RE, et al. **J Abnorm Child Psychol** 1988 Oct;16(5):571–83
Positive and negative affectivity and their relation to anxiety and depressive disorders. Watson D, et al. **J Abnorm Psychol** 1988 Aug;97(3):346–53
Personality correlates of meditation practice frequency and dropout in an outpatient population. Delmonte MM. **J Behav Med** 1988 Dec;11(6):593–7
Coping styles, paradox, and the cold pressor task. Efran JS, et al. **J Behav Med** 1989 Feb;12(1):91–103
The Fear Survey Schedule III and its correlation with personality in Egyptian samples. Abdel-Khalek AM. **J Behav Ther Exp Psychiatry** 1988 Jun;19(2):113–8
Comment on paper by Gibbs et al. Carey WB, et al. **J Child Psychol Psychiatry** 1989 Jul;30(4):639–47
A failure to find empirical support for Beardslee and Vaillant's prediction about alcoholism. Acevedo A, et al. **J Clin Psychol** 1988 Sep;44(5):837–41
Psychological kinship, love, and liking: preliminary validity data. Bailey KG, et al. **J Clin Psychol** 1989 Jul;45(4):587–94
Interpersonal style differences among drug abusers. Calsyn DA, et al. **J Clin Psychol** 1988 Sep;44(5):821–30
Sensation-seeking congruence in couples as a determinant of marital adjustment: a partial replication and extension. Ficher IV, et al. **J Clin Psychol** 1988 Sep;44(5):803–9
Cross-validation of six short forms of the WAIS-R in a healthy geriatric sample. Hoffman RG, et al. **J Clin Psychol** 1988 Nov;44(6):952–7
Mental health and locus of control: SCL-90-R and Levenson's IPC scales. Holder EE, et al. **J Clin Psychol** 1988 Sep;44(5):753–5
Personality characteristics of work-ready workers' compensation clients. Patrick J. **J Clin Psychol** 1988 Nov; 44(6):1009–12
Development of experimental mood induction procedures for testing personality–event interaction models of depression. Robins CJ. **J Clin Psychol** 1988 Nov;44(6):958–63
Two types of delinquents and their institutional adjustment. Atwood R, et al. **J Consult Clin Psychol** 1989 Feb; 57(1):68–75
Family-School context: parent and teacher agreement on child temperament. Victor JB, et al. **J Consult Clin Psychol** 1988 Aug;56(4):573–7
The role of sympathy and altruistic personality traits in helping: a reexamination. Eisenberg N, et al. **J Pers** 1989 Mar;57(1):41–67
Emotionality as a moderator of cognitive style on the Matching Familiar Figures Test in adults. Davidson WB. **J Pers Assess** 1988 Fall;52(3):506–11
Psychometric properties of the Survey of Personal Beliefs: a rational–emotive measure of irrational thinking. Demaria TP, et al. **J Pers Assess** 1989 Summer;53(2):329–41
Public and private self-consciousness and social phobia. Hope DA, et al. **J Pers Assess** 1988 Winter;52(4):626–39
Personality correlates of type A coronary-prone behavior. Lobel TE. **J Pers Assess** 1988 Fall;52(3):434–40
Comparison of response formats for Multidimensional Health Locus of Control Scales: six levels versus two levels. McCallum DM, et al. **J Pers Assess** 1988 Winter; 52(4):732–6
Toward an assessment of the construct validity of four measures of narcissism. Mullins LS, et al. **J Pers Assess** 1988 Winter;52(4):610–25
Three scales of alexithymia: do they measure the same thing? Norton NC. **J Pers Assess** 1989 Fall;53(3):621–37
Assessing gender-related differences in achievement orientation using two different achievement scales. Piedmont RL, et al. **J Pers Assess** 1989 Summer; 53(2):229–38
Assessment of adolescents' learned helplessness in achievement situations. Reynolds WM, et al. **J Pers Assess** 1989 Summer;53(2):211–28
Psychometric properties of Loevinger's Sentence Completion Test in an adult psychiatric outpatient sample. Weiss DS, et al. **J Pers Assess** 1989 Fall;53(3):478–86
A note on measurement issues in type A research: let's not throw out the baby with the bath water. Yarnold PR, et al. **J Pers Assess** 1988 Fall;52(3):410–9 (43 ref.)
How should multifaceted personality constructs be tested? Issues illustrated by self-monitoring, attributional style, and hardiness. Carver CS. **J Pers Soc Psychol** 1989 Apr; 56(4):577–85 (51 ref.)
Personality types and hetero- versus auto-hypnosis. Moss BF, et al. **J Pers Soc Psychol** 1989 Sep;57(3):532–8
Rater bias in the EASI temperament scales: a twin study [published erratum appears in J Pers Soc Psychol 1989 May;56(5):845] Neale MC, et al. **J Pers Soc Psychol** 1989 Mar;56(3):446–55
Some determinants of factor structures from personality-trait descriptors. Peabody D, et al. **J Pers Soc Psychol** 1989 Sep;57(3):552–67
Optimism, neuroticism, coping, and symptom reports: an alternative interpretation of the Life Orientation Test. Smith TW, et al. **J Pers Soc Psychol** 1989 Apr;56(4):640–8
Psychological dysfunction in psychiatric and general nurse trainees. Dudley M, et al. **J Psychosom Res** 1988; 32(4–5):373–81
Personality and survival time after bone marrow transplantation. Neuser J. **J Psychosom Res** 1988; 32(4–5):451–5
Assessment of facial self-image by means of a distorting mirror and its relationship to personality. Pogrel MA, et al. **J Psychosom Res** 1989;33(1):93–8
Aspects of personality of soldiers presenting to an endoscopy clinic. Wilson KC, et al. **J Psychosom Res** 1989;33(1):85–91
Nuclear war as a source of adolescent worry: relationships with age, gender, trait emotionality, and drug use. Hamilton SB, et al. **J Soc Psychol** 1988 Dec;128(6):745–63
Selecting candidates for a medical school: an evaluation of a selection model based on cognitive and personality predictors. Weiss M, et al. **Med Educ** 1988 Nov;22(6):492–7
Development of perceived adolescent relationship scale. Andrews DW, et al. **Percept Mot Skills** 1989 Aug; 69(1):305–6
Clinical and grid predictions of inconsistencies in individuals' personal constructs. Chambers WV, et al. **Percept Mot Skills** 1986 Apr;62(2):649–50
Field dependence: experimenters' expectancy, sex difference or no difference? Peplin CM, et al. **Percept Mot Skills** 1989 Apr;68(2):355–8
Characterization of stress reactions to the Stroop Color Word Test. Tulen JH, et al. **Pharmacol Biochem Behav** 1989 Jan; 32(1):9–15
Comparing three systems for diagnosing narcissistic personality disorder. Ronningstam E. **Psychiatry** 1988 Aug; 51(3):300–11
Platelet MAO activity and personality variations in normals. Shekim WO, et al. **Psychiatry Res** 1989 Jan;27(1):81–8
The assessment of type A behaviour pattern: results from a spouse-report approach [published erratum appears in Psychol Med 1989 May;19(2):following 547] Condon JT. **Psychol Med** 1988 Aug;18(3):747–55
An analysis of the re-test artefact in longitudinal studies of psychiatric symptoms and personality. Jorm AF, et al. **Psychol Med** 1989 May;19(2):487–93
Noise annoyance with regard to neurophysiological sensitivity, subjective noise sensitivity and personality variables. Ohrström E, et al. **Psychol Med** 1988 Aug; 18(3):605–13
Factorial validity of the EE scales. Parker G, et al. **Psychol Med** 1989 May;19(2):435–46
Development of a new self-report questionnaire to measure self esteem. Robson P. **Psychol Med** 1989 May;19(2):513–8
Test-retest reliability of Battle's Anxiety Scale for Children. Battle J. **Psychol Rep** 1988 Aug;63(1):127–30
Trait-anxiety and sense of coherence: a longitudinal study. Carmel S, et al. **Psychol Rep** 1989 Aug;65(1):221–2
Relationships between adaptation-innovation, experienced control, and state-trait anxiety. Elder RL. **Psychol Rep** 1989 Aug;65(1):47–54
Effects of academic and psychosocial predictors of performance in medical school on coefficients of determination. Hojat M, et al. **Psychol Rep** 1988 Oct; 63(2):383–94
Can androgyny be assessed with a single scale? Kottke JL. **Psychol Rep** 1988 Dec;63(3):987
Relations between preventive health behavior and hardiness. Nagy S, et al. **Psychol Rep** 1989 Aug;65(1):339–45
Comparing 16 PF scores for two groups of offenders. Reuter EK, et al. **Psychol Rep** 1989 Feb;64(1):287–90
Spanish version of the Revised Children's Manifest Anxiety Scale in Uruguay: reliability and concurrent validity. Rodrigo G, et al. **Psychol Rep** 1989 Aug;65(1):94
Relation between coping style and Barron's Ego Strength Scale. Schill T, et al. **Psychol Rep** 1988 Aug;63(1):65–6
Medical students' Edwards Personal Preference Schedule norms. Thorson JA, et al. **Psychol Rep** 1988 Oct; 63(2):465–6
Depth dimension. A psychometric approach and some clinical data. Pethö B. **Psychopathology** 1988;21(2–3):122–5
The Cook-Medley hostility scale: item content and ability to predict survival. Barefoot JC, et al. **Psychosom Med** 1989 Jan–Feb;51(1):46–57
Screening for Axis II personality disorders in women with bulimic eating disorders. Yager J, et al. **Psychosomatics** 1989 Summer;30(3):255–62
Validation of the Toronto Alexithymia Scale with substance abusers. Haviland MG, et al. **Psychother Psychosom** 1988; 50(2):81–7
Toronto Alexithymia Scale: relationships with measures of patient self-disclosure and private self-consciousness. Loiselle CG, et al. **Psychother Psychosom** 1988;50(2):109–16
Relationships between Jenkins Activity Survey scores and responsivity of the dopaminergic system in psychosomatic disorders. Sato S, et al. **Psychother Psychosom** 1987; 48(1–4):7–13
Psychogenic pain and psychological variables: a psychometric study. Valdés M, et al. **Psychother Psychosom** 1988;50(1):15–21
[Personality tests in forensic psychiatry] Hengesch G, et al. **Acta Psychiatr Belg** 1988 Jan–Feb;88(1):28–41 (Eng. Abstr.) (Fre)
[Psychosomatic aspects of females in the climacteric. The climacteric—psychosomatics—personality structure] Enzelsberger H, et al. **Geburtshilfe Frauenheilkd** 1989 Mar; 49(3):289–92 (Eng. Abstr.) (Ger)
[Assessment of temperament in children] Saile H. **Prax Kinderpsychol Kinderpsychiatr** 1989 Jan;38(1):6–9 (Eng. Abstr.) (Ger)
['Commitment-adequate' personality diagnosis using the Seitz (revised) Personality Questionnaire for Prisoners within the scope of forensic-psychologic-psychiatric expert assessment] Littmann E. **Psychiatr Neurol Med Psychol (Leipz)** 1989 May; 41(5):280–7 (Eng. Abstr.) (Ger)
[Assessment of the malignant/benign potential of a neoplastic change in the breast using psychosocial parameters of patients at an ambulatory breast care services] Bilek P, et al. **Psychother Psychosom Med Psychol** 1988 Dec; 38(12):420–4 (Eng. Abstr.) (Ger)
[Situational and differential psychologic determinants of personal satisfaction in advanced age] Heineken E, et al. **Z Gerontol** 1988 Sep–Oct;21(5):289–94 (Eng. Abstr.) (Ger)
[Testing the German versions of the temperament questionnaires developed by Carey and assistants] Rennen-Allhoff B, et al. **Z Kinder Jugenpsychiatr** 1988 Jun; 16(2):61–6 (Eng. Abstr.) (Ger)
[Development of a questionnaire of irrational attitudes: results of a representative survey] Klages U. **Z Klin Psychol Psychopathol Psychother** 1989;37(1):5–13 (Eng. Abstr.) (Ger)
[Verification of control in alcoholism research. Review of the literature and theoretical relations] Krampen G, et al. **Z Klin Psychol Psychopathol Psychother** 1988;36(2):100–17 (90 ref.) (Eng. Abstr.) (Ger)
[Personality markers, defense behavior and illness concept in patients with primary fibromyalgia] Egle UT, et al. **Z Rheumatol** 1989 Mar–Apr;48(2):73–8 (Eng. Abstr.) (Ger)
[Personality, stress and rheumatism: methodologic considerations] Leichner-Hennig R, et al. **Z Rheumatol** 1988 Sep–Oct;47(5):337–41 (22 ref.) (Eng. Abstr.) (Ger)
[Methodologic problems in the evaluation of the psychological capabilities of military recruits] Petković S, et al. **Vojnosanit Pregl** 1988 May–Jun;45(3):192–4 (Scr)

METHODS

Methodology of the evaluation of the personality. Huber W. **Acta Neurochir Suppl (Wien)** 1988;44:48–53
Discussion on methods for the evaluation of the personality. Normal brain/damaged brain. Sichez-Auclair N. **Acta Neurochir Suppl (Wien)** 1988;44:54–5
Experimental research of a set as a means of a set as a means of understanding specific characteristics of psychological constitutions. Dobrovich AB. **Int J Neurosci** 1989 Jun; 46(3–4):205–7
[Psychometric study of the measurement of predisposing behavior to coronary disease (type A) in working populations. I. Bortner's scale] Cesana GC, et al. **Med Lav** 1988 Mar–Apr;79(2):110–9 (Eng. Abstr.) (Ita)
[The Guilford–Zimmerman Temperament Survey (GZTS). The results of its first use in military aeronautics: descriptive statistics, intercorrelation matrix and competitive validity with the MMPI. A study on a sample of 150 student officer pilots of the Pozzuoli Aeronautics Academy] Giambelluca A, et al. **Riv Med Aeronaut Spaz** 1985 Jan–Mar;52(1):29–46 (Eng. Abstr.) (Ita)

STANDARDS

Standardizing the administration of the Profile of Mood States (POMS): development of alternative word lists. Albrecht RR, et al. **J Pers Assess** 1989 Spring;53(1):31–9

PERSONALITY TYPE A see **TYPE A PERSONALITY**

PERSONNEL ADMINISTRATION, HOSPITAL

Why I'm an agency nurse. McElreath BJ. **Am J Nurs** 1989 May;89(5):678–9
Managing in a unionized setting. Part II: The grievance process. Julius DJ. **AORN J** 1988 Dec;48(6):1145, 1147–9,

1151
Developing a multidimensional turnover prevention program. Hutchinson SJ, et al. **Arch Psychiatr Nurs** 1988 Dec;2(6):373–8
The importance of hospital domestics [editorial] Salvage J. **BMJ** 1989 Jan 7;298(6665):5–6
CEO recognizes importance of content workforce. Cerne F. **Hospitals** 1989 Jan 20;63(2):56
Groups try to defuse worker–shortage time bomb. Cerne F. **Hospitals** 1988 Nov 5;62(21):95
CEO shares information with his employees. Cerne F. **Hospitals** 1989 Apr 5;63(7):54
Hospitals maintain their 'beneficial' status. Lappa K. **Hospitals** 1989 May 20;63(10):56
Hiring standards: high quality still top priority. Lappa K. **Hospitals** 1989 Sep 20;63(18):89
Hospital executive works 'triple time' for staff. Lappa K. **Hospitals** 1989 Jul 5;63(13):54
Hospitals learn to deal with unionization. Powills S. **Hospitals** 1989 Jul 5;63(13):44–9
Manager impact on retention of hospital staff: Part 1. Taunton RL, et al. **J Nurs Adm** 1989 Mar;19(3):14–9
Staffing approaches to productivity programs. Zimmer RO. **Top Health Care Financ** 1989 Spring;15(3):27–30

ECONOMICS

Jersey health chief demands "a revolution at the bedside" [news] **Am J Nurs** 1988 Dec;88(12):1715, 1723
Hospitals lag in human resources spending. Cerne F. **Hospitals** 1989 Feb 20;63(4):46
[Many years of experience with a team method of work at a mud therapy clinic of the Saki health resort] Karpovets IP. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 May–Jun; (3):71 **(Rus)**

LEGISLATION & JURISPRUDENCE

Hospitals, unions preparing for labor showdown. Cerne F. **Hospitals** 1989 Feb 5;63(3):65
Mandated benefits affect hospitals as employers. Lappa K. **Hospitals** 1989 Jun 20;63(12):60

METHODS

Management strategies to minimize nursing turnover. Helmer FT, et al. **Health Care Manage Rev** 1989 Winter;14(1):73–80 (15 ref.)
Downsizing: how one hospital responded to decreasing demand. Mullaney AD. **Health Care Manage Rev** 1989 Summer;14(3):41–8
How to avoid strikes in a unionized hospital. Lappa K. **Hospitals** 1989 Jul 5;63(13):48–9
Structuring and implementing productivity programs. Horney BT. **Top Health Care Financ** 1989 Spring; 15(3):1–11

STANDARDS

Management tips. Managing people, time, paperwork. Brooks RR. **AORN J** 1988 Dec;48(6):1139–43
Developing and using standards for work performance. Van Bodergraven A. **Top Health Care Financ** 1989 Spring; 15(3):13–26

TRENDS

Hospital staff reductions. Enright SM. **Am J Hosp Pharm** 1989 Jan;46(1):139–41
Physician exec offers remedy for nurse crisis. Cerne F. **Hospitals** 1988 Dec 5;62(23):64
Labor versus management: the battle of 1989. Cerne F. **Hospitals** 1989 Jan 5;63(1):40
Human resources: no shortage of problems in '88. Cerne F. **Hospitals** 1988 Dec 20;62(24):74–5
Bucks for behavior: hospitals get innovative. Gandossy RP, et al. **Hospitals** 1989 Apr 20;63(8):50
Employee hotline: CEOs act to solve labor shortages. Powills S. **Hospitals** 1989 Apr 20;63(8):48–9, 51–3

PERSONNEL, HOSPITAL

Attitude of hospital personnel toward hepatitis B vaccination. Scapa E, et al. **Am J Gastroenterol** 1989 Apr;84(4):400–2
Human immunodeficiency virus testing in health care: Part 1. **Am J Infect Control** 1989 Aug;17(4):226–9
Management of HIV infection in the hospital. Technical Panel on Infections within Hospitals: American Hospital Association. **Am J Infect Control** 1989 Aug;17(4):24A–44A
Preventing transmission of hepatitis B infection in health care facilities. Favero MS. **Am J Infect Control** 1989 Jun; 17(3):168–71
Hepatitis B vaccines: who, when, why, and how much? Hamory BH. **Am J Infect Control** 1989 Jun;17(3):119–20
Immunogenicity of the intradermal route of hepatitis B vaccination with the use of recombinant hepatitis B vaccine. Lancaster D, et al. **Am J Infect Control** 1989 Jun; 17(3):126–9
Influence of two handwashing frequencies on reduction in colonizing flora with three handwashing products used by health care personnel. Larson E, et al. **Am J Infect Control** 1989 Apr;17(2):83–8
Susceptibility of hospital–based health care personnel to varicella–zoster virus infections. McKinney WP, et al. **Am J Infect Control** 1989 Feb;17(1):26–30
Investigation of a food–borne outbreak of salmonellosis among hospital employees. Opal SM, et al. **Am J Infect Control** 1989 Jun;17(3):141–7
Hepatitis B vaccination programs for hospital workers: results of a statewide survey. Sienko DG, et al. **Am J Infect Control** 1988 Oct;16(5):193–7
Annual tuberculosis screening of hospital employees: an idea lacking supporting data [editorial] Aitken ML, et al. **Am Rev Respir Dis** 1988 Jul;138(1):3–4
Occupational exposure to nitrous oxide in four hospitals. Gray WM. **Anaesthesia** 1989 Jun;44(6):511–4
More protection from HIV exposure [letter] Migden D. **Ann Emerg Med** 1989 Apr;18(4):423
Perioperative nursing research. Part III: Potential intraoperative biological hazards to personnel. Kneedler JA, et al. **AORN J** 1989 Apr;49(4):1066–7, 1070–3, 1076–9 passim
The case against use of paper masks. Kennon J. **Aust Fam Physician** 1988 Dec;17(12):1068
Does wearing two pairs of gloves protect operating theatre staff from skin contamination? Matta H, et al. **BMJ** 1988 Sep 3;297(6648):597–8
Nosocomial outbreak of group C meningococcal disease. Riewerts Eriksen NH, et al. **BMJ** 1989 Mar 4; 298(6673):568–9
The unseen radiation hazards of ultrasound [letter] Havard AC. **Br J Radiol** 1989 Mar;62(735):295–6
A review of occupational exposure in the North–Western Region. Pratt TA, et al. **Br J Radiol** 1989 Aug; 62(740):734–8
Prevalence of cytomegalovirus antibodies in the personnel of a children's hospital, Halifax, Nova Scotia. Embil JA, et al. **Can J Public Health** 1988 Nov–Dec;79(6):455–7
Work–related risk factors for hepatitis B virus infection in personnel of a children's hospital. Hicks RA, et al. **Clin Pediatr (Phila)** 1989 Jun;28(6):245–50
Contact dermatitis from glutaraldehyde. Di Prima T, et al. **Contact Dermatitis** 1988 Sep;19(3):219–20
A back care program for health care workers. Shim M, et al. **Dimens Health Serv** 1989 Mar;66(2):24–5
Hepatitis B virus infection among health care workers at an urban teaching hospital in southern Italy: a low occupational hazard? Antoniello S, et al. **Eur J Epidemiol** 1989 Jun;5(2):228–33
A prospective trial of an anti–splatter device for the protection of endoscopic personnel from potentially AIDS–infective fluids. Laine L. **Gastrointest Endosc** 1988 Nov–Dec;34(6):470–1
Employee suggestion programs in nonprofit hospitals. Richer SG, et al. **Health Care Manage Rev** 1988 Summer; 13(3):59–65
Substance abuse and mandatory drug testing in health care institutions. Tanner J, et al. **Health Care Manage Rev** 1988 Fall;13(4):33–42
AHA opposes routine testing of patients for AIDS, reaffirms use of universal precautions [news] **Hosp Community Psychiatry** 1988 Sep;39(9):1008–9
Hospital CEOs make commitment to child care. Cerne F. **Hospitals** 1989 Mar 5;63(5):54
Hospitals ready for OSHA worker–safety rules. Holthaus D. **Hospitals** 1989 Jul 5;63(13):50, 52
Employee drug tests are unreliable and intrusive. Morgan JP. **Hospitals** 1989 Aug 20;63(16):64
The hospital cafeteria that employees built. Powills S. **Hospitals** 1989 Sep 5;63(17):56
Management of health care workers remotely vaccinated for hepatitis B who sustain significant blood and body fluid exposures. Snyder MB. **Infect Control Hosp Epidemiol** 1988 Oct;9(10):462–4
The use of antiseptics for handwashing by medical personnel. Maki DG. **J Chemother** 1989 Apr;1 Suppl 1:3–11
Benefits of a back care and light duty health promotion program in a hospital setting. Ryden LA, et al. **J Community Health** 1988 Winter;13(4):222–30
Relation of the pre–employment drug testing result to employment status: a one–year follow–up. Parish DC. **J Gen Intern Med** 1989 Jan–Feb;4(1):44–7
Serological studies on health care workers caring for patients with human immunodeficiency virus. Evans R, et al. **J Hosp Infect** 1988 Aug;12(2):85–9
Clostridial hand–carriage and neonatal necrotising enterocolitis [letter] Gorham P, et al. **J Hosp Infect** 1988 Aug;12(2):139–41
Cleansing of hands with emulsion—a solution to skin problems of hospital staff? Kolari PJ, et al. **J Hosp Infect** 1989 May;13(4):377–86
Antibiotic resistance of coagulase–negative staphylococci in an orthopaedic department. Sanzén L, et al. **J Hosp Infect** 1988 Aug;12(2):103–8
Viral hepatitis among the hospital staff. Polz M, et al. **J Hyg Epidemiol Microbiol Immunol** 1989;33(2):157–61
Staphylococcal scalded skin syndrome [letter] Cox RA, et al. **J Infect** 1989 Jan;18(1):90–1
Hepatitis B vaccination in Ramathibodi health personnel 1986–1987. Promjunyakul K, et al. **J Med Assoc Thai** 1989 Jul;72 Suppl 2:23–5
Prevalence of hepatitis B markers among hospital workers in Senegal. Romieu I, et al. **J Med Virol** 1989 Apr; 27(4):282–7
Manager impact on retention of hospital staff: Part 2. Taunton RL, et al. **J Nurs Adm** 1989 Apr;19(4):15–9
Manager impact on retention of hospital staff: Part 1. Taunton RL, et al. **J Nurs Adm** 1989 Mar;19(3):14–9
A study of the rate of postexposure human immunodeficiency virus testing in a hospital requiring written informed consent. Miller PJ, et al. **J Occup Med** 1989 Jun;31(6):524–7
Hepatitis 'B' surface antigen (HBsAg) in hospital staff. Talawadekar NN, et al. **J Postgrad Med** 1988 Oct; 34(4):220–3
Back and neck problems in a teaching institution. Chan KK, et al. **J R Soc Health** 1988 Oct;108(5):182–4, 187
Incidence of pulmonary tuberculosis by occupation of hospital employees in the National Health Service in England and Wales 1980–84. Lunn JA, et al. **J Soc Occup Med** 1989 Spring;39(1):30–2
The exposure of health care workers to ribavirin aerosol [letter] **JAMA** 1989 Oct 13;262(14):1947–8
The exposure of health care workers to ribavirin aerosol [letter] Guglielmo BJ, et al. **JAMA** 1989 Apr 7; 261(13):1880–1
Putting on gloves to box out AIDS [editorial] Bishop BE. **MCN** 1988 Sep–Oct;13(5):311
Chromosome analysis in operating room personnel. Lamberti L, et al. **Mutagenesis** 1989 Mar;4(2):95–7
Human immunodeficiency virus infection among employees in an African hospital [letter] Allebeck P, et al. **N Engl J Med** 1989 Jun 15;320(24):1625
Human immunodeficiency virus infection among employees in an African hospital. N'Galy B, et al. **N Engl J Med** 1988 Oct 27;319(17):1123–7
A role for nurse psychotherapists: primary prevention counseling for general hospital staffs. Campbell JE. **Perspect Psychiatr Care** 1985;23(3):85–90
The risk of skin cancer from occupational exposure to ultraviolet radiation in hospitals. Diffey BL. **Phys Med Biol** 1988 Oct;33(10):1187–93
Antibody response to heat–inactivated hepatitis B vaccine (CLB–3 micrograms) in hemodialysis patients and occupational risk personnel: a one year follow–up. Yoshida FT, et al. **Rev Inst Med Trop Sao Paulo** 1988 Jan–Feb; 30(1):11–6
Occupational low–back injury in a hospital employee population: an epidemiologic analysis of multiple risk factors of a high–risk occupational group. Ryden LA, et al. **Spine** 1989 Mar;14(3):315–20 (36 ref.)
Attitudes to smoking and smoking habit among the staff of a hospital. Davies PD, et al. **Thorax** 1989 May;44(5):378–81
The drug problem. Jaspan N. **Top Health Care Financ** 1988 Winter;15(2):46–50
Mucocutaneous injuries at a university teaching hospital. McCurdy SA, et al. **West J Med** 1989 May;150(5):604–8
A survey on the prevalence of alcoholism among the faculty and house staff of an academic teaching hospital. Siegel BJ, et al. **West J Med** 1988 May;148(5):593–5
[The image of locoregional anesthesia in a hospital setting] Mericq O, et al. **Cah Anesthesiol** 1989 Mar–Apr;37(2):113–6 **(Fre)**
[HIV infection in the surgical clinic: general problems and protective measures] Hoffmann R. **Schweiz Rundsch Med Prax** 1988 Nov 1;77(44):1186–8 (Eng. Abstr.) **(Ger)**
[Long–term observation of the immunogenicity of hepatitis B vaccine in hospital personnel] Hayashi J, et al. **Kansenshogaku Zasshi** 1988 Sep;62(9):805–10 (Eng. Abstr.) **(Jpn)**
[Infection by non–A, non–B acute viral hepatitis in hospital employees] Kiyosawa K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jan;86(1):32–8 (Eng. Abstr.) **(Jpn)**
[Hepatitis B markers in health service personnel with reference to preventive vaccination] Stempień R, et al. **Pol Tyg Lek** 1988 Jul 18;43(29):942–4 (Eng. Abstr.) **(Pol)**
[Immunity to rubella: seroepidemiologic survey at hospitals, State of São Paulo–Brazil] Machado AA, et al. **Rev Saude Publica** 1988 Jun;22(3):192–200 (Eng. Abstr.) **(Por)**
[Evaluation of the degree of irradiation of accelerator operators by using EC–1033 computer] Suslin VP, et al. **Gig Sanit** 1989 Feb;(2):74 **(Rus)**
[Experience in attracting co–workers at a department of clinical laboratory diagnosis to diagnostic and therapeutic work] Zakhariia EA, et al. **Lab Delo** 1989;(2):71–2 (Eng. Abstr.) **(Rus)**
[Work absenteeism at a hospital center (letter) (published erratum appears in Gac Sanit 1989 Mar–Apr;3(11):402)] Fernández Crehuet R, et al. **Gac Sanit** 1989 Jan–Feb; 3(10):339 **(Spa)**
[Occupational risk of infection by human immunodeficiency virus] Hernández E, et al. **Med Clin (Barc)** 1988 May 14; 90(19):767–8 (Eng. Abstr.) **(Spa)**
[Hepatitis B vaccination: immunogenicity of the plasmatic vaccine in hospital personnel] Panizo Delgado A, et al. **Med Clin (Barc)** 1989 Mar 25;92(11):401–4 (Eng. Abstr.) **(Spa)**
[Seroprevalence of hepatitis B virus and human immunodeficiency virus infections in the personnel of a general hospital (letter)] Sánchez Casado ML, et al. **Med Clin (Barc)** 1988 Nov 12;91(16):637 **(Spa)**
[Transmission of HIV in a health population at risk] García Buey L, et al. **Rev Clin Esp** 1988 Apr;182(7):360–1 (Eng. Abstr.) **(Spa)**
[Prevalence of tuberculosis infections among hospital staff (letter)] Olona M, et al. **Rev Clin Esp** 1989 Jun;185(1):44–5

(Spa)

[Protection against ionizing radiation at hospitals] González P. **Rev Med Chil** 1988 Feb;116(2):174–9 (Eng. Abstr.) (Spa)

[Adverse reactions to anti-hepatitis B vaccine in hospital personnel: results end experiences] Panizo Delgado A, et al. **Rev Med Univ Navarra** 1988 Jul–Sep;32(3):131–4 (Eng. Abstr.) (Spa)

ECONOMICS

Merit increases to average 5.1% in 1989. Freundt J. **Hospitals** 1989 Sep 5;63(17):48–53

EDUCATION

Clerical/secretarial education: a joint venture. Dill SA, et al. **Dimens Health Serv** 1988 Sep;65(6):22–3

A mock evacuation is an exercise in saving lives. Lafreniere F. **Dimens Health Serv** 1988 Jun;65(5):35–7

Infection control and emergency care [letter] West K. **Infect Control Hosp Epidemiol** 1988 Oct;9(10):435

Needlestick injuries: how can we teach people better about risk assessment? Morgan DR. **J Hosp Infect** 1988 Nov; 12(4):301–9

Customer relations training: long term impact on staff's behavior. Jones JS. **J Nurs Adm** 1989 Apr;19(4):19, 24, 38

[Quality of life of cancer patients and the education of nursing personnel] Hoerni B. **Bull Cancer (Paris)** 1988; 75(10):957–61 (Fre)

PSYCHOLOGY

Habits and attitudes towards smoking among the health staff of a large Parisian hospital. Cooreman J, et al. **Bull Int Union Tuberc Lung Dis** 1988 Jun;63(2):20

The hospital merger: its effect on employees. Petchers MK, et al. **Health Care Manage Rev** 1988 Fall;13(4):9–14

[The Anti-Tobacco Law in the hospital: perception of employees] Levesque B. **Can J Public Health** 1989 Mar–Apr;80(2):129–30 (Fre)

STANDARDS

AIDS: problem solving in infection control. Universal precautions. **Am J Infect Control** 1988 Oct;16(5):231–4

Hospital-productivity measure draws criticism. Solovy A. **Hospitals** 1989 Apr 20;63(8):81

SUPPLY & DISTRIBUTION

Hospital workers and the health care crisis. O'Cleireacain C. **J Public Health Policy** 1989 Summer;10(2):178–86

TRENDS

Occupational health service in the hospitals: its importance in the context of health for all by 2000 AD. Dasgupta AK. **J Indian Med Assoc** 1988 Jul;86(7):187–91

PERSONNEL, HOSPITAL, ORGANIZATION AND ADMINISTRATION see **PERSONNEL ADMINISTRATION, HOSPITAL**

PERSONNEL LOYALTY see under **PERSONNEL MANAGEMENT**

PERSONNEL MANAGEMENT

see related
PERSONNEL ADMINISTRATION, HOSPITAL

Simulated job interviews as learning devices. Rangachari PK. **Acad Med** 1989 Aug;64(8):438–9

A study of residential care staffing patterns by public residential schools serving the sensorially impaired. Love-Trescott E. **Am Ann Deaf** 1989 Mar;134(1):39–40

Human resources management for a hospital pharmacy department. Chase PA. **Am J Hosp Pharm** 1989 Jun; 46(6):1162–9

Productivity and incentives. Enright SM. **Am J Hosp Pharm** 1989 Jun;46(6):1218–20

Integrating human resources and program-planning strategies. Smith JE. **Am J Hosp Pharm** 1989 Jun; 46(6):1153–61

Effects of staff management on the quality of residential care for mentally retarded individuals. Seys D, et al. **Am J Ment Retard** 1988 Nov;93(3):290–9

A short term in long-term [letter] Kelly FL. **Am J Nurs** 1988 Nov;88(11):1479–80

Hospitals that succeed with nurses [editorial] Mallison MB. **Am J Nurs** 1989 Mar;89(3):313

Occupational therapy management: accepting the challenge. Schell BA. **Am J Occup Ther** 1989 Apr;43(4):215–7

Search for orthodontic assistant personality profile. Westbrook M, et al. **Am J Orthod Dentofacial Orthop** 1988 Oct;94(4):350–3

Postoperative recovery rooms. Staffing and facilities in three regions in the United Kingdom. Goodchild CS. **Anaesthesia** 1988 Oct;43(10):829–32

24-hour coverage [letter] Hockberger RS, et al. **Ann Emerg Med** 1989 Jul;18(7):799–800

Better housestaff schedules [letter] Brown B, et al. **Ann Intern Med** 1989 Feb 1;110(3):247–8

Enjoying management. The positive benefits of liking the job. Davidhizar RE. **AORN J** 1989 Feb;49(2):576–8

Accepting criticism. A positive process. Davidhizar RE. **AORN J** 1989 Sep;50(3):609–12

Managing in a unionized setting. Part II: The grievance process. Julius DJ. **AORN J** 1988 Dec;48(6):1145, 1147–9, 1151

Developing a multidimensional turnover prevention program. Hutchinson SJ, et al. **Arch Psychiatr Nurs** 1988 Dec;2(6):373–8

Scientific and technical staffing of radiation oncology departments. Australasian College of Physical Scientists and Engineers in Medicine Topic Group on Radiotherapy Staffing. **Australas Phys Eng Sci Med** 1989 Jun;12(2):48–54

Descriptive analysis of medical attrition in U.S. Army aviation. Edwards RJ, et al. **Aviat Space Environ Med** 1989 Jul;60(7 Pt 2):A92–7

Intelligent systems for human resources. Kline KB. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 2):A65–8

How to recruit and retain staff: Part 1. Dyro JF. **Biomed Instrum Technol** 1989 Mar–Apr;23(2):92, 94, 96

Disciplining midwives [letter] **BMJ** 1988 Oct 29; 297(6656):1125–6

Disciplining midwives [letter] Alment A. **BMJ** 1988 Oct 15; 297(6654):981

NHS review. Doubtful gains from tighter consultant contracts [interview by Dr. Tony Smith] Appleyard WJ. **BMJ** 1989 Mar 18;298(6675):739–41

Disciplining midwives [editorial] Drife JO. **BMJ** 1988 Oct 1;297(6652):806–7

Write a job description. Firth R. **BMJ** 1989 May 13; 298(6683):1306–7

Real progress with disciplining doctors [editorial] Forsythe M. **BMJ** 1988 Dec 10;297(6662):1487–8

Long hours of work in junior doctors [letter] Gruzelier JH, et al. **BMJ** 1989 Mar 18;298(6675):754–5

'The great debate' [letter] Fearn A. **Br Dent J** 1989 May 6;166(9):318

Deteriorating conditions for ancillary workers [letter] Hirschmann PN. **Br Dent J** 1989 Mar 25;166(6):199

Practice staff: recruitment. Muir J. **Br Dent J** 1988 Oct 22; 165(8):299–300

Practice staff: terms of the contract of employment. Muir J. **Br Dent J** 1988 Nov 5;165(9):342–3

Computerised matching for house officer posts [letter] Ward-Booth RP. **Br Dent J** 1989 Jan 21;166(2):37

Practice prosperity 1989. Part four: Staff morale and productivity. Anderson C. **Can Dent Assoc J** 1989 Apr; 55(4):279

The relationship of child protection worker attitudes to attrition from the field. Fryer GE Jr, et al. **Child Abuse Negl** 1989;13(3):345–50

Characteristics of successful and unsuccessful applicants to orthopedic residency training programs. Clark R, et al. **Clin Orthop** 1989 Apr;(241):257–64

AIDS hysteria in Delaware [editorial] Dickson-Witmer D. **Del Med J** 1988 Sep;60(9):528–9

Incentives for the nursing profession. DeRosario J. **Dimens Health Serv** 1989 Jun;66(5):24–5

Column response [letter] Giovinazzo N. **Dimens Health Serv** 1989 Feb;66(1):7

In praise of Theory Z: management by consensus [see comments] Samuelson K. **Dimens Health Serv** 1988 Sep; 65(6):17–8, **Comment in:** Dimens Health Serv 1989 Mar;66(2):7

An educational program for training physicians in personnel recruitment. Micklitsch CN, et al. **Fam Med** 1988 Sep–Oct; 20(5):356–8

Staffing of a combined general medical service and gastroenterology unit in a district general hospital. A report prepared for the Royal College of Physicians (London). Gastroenterology Committee and the Clinical Services Committee of the British Society of Gastroenterology. Burnham WR, et al. **Gut** 1989 Apr;30(4):546–50

Management strategies to minimize nursing turnover. Helmer FT, et al. **Health Care Manage Rev** 1989 Winter;14(1):73–80 (15 ref.)

An assessment of health care supervisory training needs. Paradis LF, et al. **Health Care Manage Rev** 1989 Spring; 14(2):13–24 (31 ref.)

Employee suggestion programs in nonprofit hospitals. Richer SG, et al. **Health Care Manage Rev** 1988 Summer; 13(3):59–65

CEO recognizes importance of content workforce. Cerne F. **Hospitals** 1989 Jan 20;63(2):56

Well-informed employees are a valuable resource. Droste T. **Hospitals** 1989 Sep 5;63(17):54

Leave out the glitz; conservative wins the job. Droste T. **Hospitals** 1989 Feb 5;63(3):76

Job hunting: how to negotiate the final offer. Droste T. **Hospitals** 1989 May 20;63(10):88

How to use an executive-recruitment firm. Droste T. **Hospitals** 1989 Jan 20;63(2):78

Executive resumes: the ultimate calling card. Droste T. **Hospitals** 1989 Mar 5;63(5):72

Personal questions plague women on way to top. Droste T. **Hospitals** 1989 Apr 20;63(8):88

Networking is key to professional development. Droste T. **Hospitals** 1989 Feb 20;63(4):81

Changing of the guard: survival tips for CEOs. Droste T. **Hospitals** 1989 Apr 5;63(7):66

Outplacement services ease a CEO's job search. Droste T. **Hospitals** 1989 Jul 5;63(13):81

Bucks for behavior: hospitals get innovative. Gandossy RP, et al. **Hospitals** 1989 Apr 20;63(8):50

Hospitals gain efficiency by training managers. Lappa K. **Hospitals** 1989 Aug 5;63(15):68

Technician dismissed for refusal to do AIDS tests. **Indiana Med** 1989 Jul;82(7):563

Survival analysis to explore the characteristics of employee assistance program (EAP) referrals that remain employed. Macdonald S, et al. **Int J Addict** 1989 Feb;24(2):113–22

Self-management "additives" for improving work productivity of mentally retarded workers in sheltered workshops. Mullen H, et al. **Int J Rehabil Res** 1988; 11(2):125–41

Selecting radiology resident candidates. Curtis DJ, et al. **Invest Radiol** 1989 Apr;24(4):324–30

Nursing shortage: focusing on priorities. Moyer D, et al. **Iowa Med** 1989 Mar;79(3):125

The Job Context Index: a guide for improving the 'fit' between nurses and their work environment. Mansfield PK, et al. **J Adv Nurs** 1989 Jun;14(6):501–8

Emphasis. Building a winning team: dentists and their staff. McCann D. **J Am Dent Assoc** 1988 Nov;117(6):707–11

Management activities in community dietetics practice. Brown LM, et al. **J Am Diet Assoc** 1989 Mar;89(3):373–7

A research model for relating job characteristics to job satisfaction of university foodservice employees. Duke KM, et al. **J Am Diet Assoc** 1989 Aug;89(8):1087–91

The effects of self-monitoring and supervisor feedback on staff performance in a residential setting. Richman GS, et al. **J Appl Behav Anal** 1988 Winter;21(4):401–9

Registered nurses and burn care facilities. Factors associated with turnover rates. Fields C, et al. **J Burn Care Rehabil** 1989 Jan–Feb;10(1):94–8

Wife abuse as it affects work behavior in a center for mentally retarded persons. Poteat GM, et al. **J Clin Psychol** 1989 Mar;45(2):324–30

Perceived value of mock interviews as preparation for seeking employment. Everett-Gutmann M. **J Dent Educ** 1988 Oct;52(10):571–3

The perpetual enigma. Greisman SL. **J Emerg Med** 1988 Jul–Aug;6(4):339–40

A library to assist in the development of academic faculty in emergency medicine. Hamilton GC. **J Emerg Med** 1988 Nov–Dec;6(6):551–3

Job performance and prescription vs. non-prescription drugs [letter] Lewy R. **J Gen Intern Med** 1989 Jul–Aug;4(4):361–2

Relation of the pre-employment drug testing result to employment status: a one-year follow-up. Parish DC. **J Gen Intern Med** 1989 Jan–Feb;4(1):44–7

Assigned and participative production standards and feedback affecting worker satisfaction in a repetitive production task. Das B, et al. **J Hum Ergol (Tokyo)** 1988 Sep;17(1):101–8

Analysis of a site visit by senior medical students to an internal medicine residency program. Gordon DL, et al. **J Med Educ** 1988 Nov;63(11):868–70

A final adjustment for staff allocation under environmental uncertainty. Jeang A. **J Med Syst** 1989 Apr;13(2):67–78

Applications of staffing, scheduling, and budgeting methodologies to hospital ancillary units. Kim MK, et al. **J Med Syst** 1989 Feb;13(1):37–47

Staff nurse retention: strategies for success. Lassiter SS. **J Neurosci Nurs** 1989 Apr;21(2):104–7

Certification should not be required for hiring/promotion. delBueno DJ. **J Nurs Adm** 1989 Jul–Aug;19(7):9

Stoplight Grid: a color-coded visual system for per diem staff assignment. Ernst P. **J Nurs Adm** 1989 Feb;19(2):23–7

Setting standards and evaluating nursing performance with a single tool. Fosbinder D, et al. **J Nurs Adm** 1989 Oct; 19(10):23–30

The emotional and behavioral process of staff nurse turnover. Landstrom GL, et al. **J Nurs Adm** 1989 Sep;19(9):23–8

Nursing retention—preventing the domino effect. Lynch MA. **J Nurs Adm** 1989 Oct;19(10):3, 5

Certification should be required for hiring/promotion. Nielsen BB. **J Nurs Adm** 1989 Jul–Aug;19(7):8

Perception of opportunity and job attitudes. Oriol MD. **J Nurs Adm** 1989 Jul–Aug;19(7):30

The quality management maturity grid: a diagnostic method. Schmele JA, et al. **J Nurs Adm** 1989 Sep;19(9):29–34

A design for recruitment and feedback. Schutzenhofer KK, et al. **J Nurs Adm** 1989 Sep;19(9):5

Responding to patients: the unit hostess. Sheedy S. **J Nurs Adm** 1989 Apr;19(4):31–3

A retrospective on Japanese management in nursing. Smith HL, et al. **J Nurs Adm** 1989 Jan;19(1):27–37 (37 ref.)

Recognizing and rewarding excellence: a program for marketing the image of your nursing department. Stolzfus CL, et al. **J Nurs Adm** 1989 Apr;19(4):11

Values and vision in chaotic times. Strasen L. **J Nurs Adm** 1989 Mar;19(3):4–5, 25

Definitions and descriptions of the nursing middle manager and nurse executive. Wilhite M. **J Nurs Adm** 1988 Oct; 18(10):6–7, 14

A comprehensive approach to faculty evaluation. Boland DL, et al. **J Nurs Educ** 1988 Oct;27(8):354–8

Peer evaluation: a component of faculty performance appraisal. Harwood CH, et al. **J Nurs Educ** 1988 Oct; 27(8):377–9

Portfolios: they work for RNs. Lambeth SO, et al. **J Nurs Educ** 1989 Jan;28(1):42–4

MMPI profiles of problem peace officers. Hiatt D, et al. **J Pers Assess** 1988 Winter;52(4):722–31

The relationship among organizational climate variables and

nurse stability in critical care units. Hart SK, et al. **J Prof Nurs** 1989 May–Jun;5(3):124–31 (15 ref.)
Academic tenure in schools of nursing. Messmer PR. **J Prof Nurs** 1989 Jan–Feb;5(1):39–48
The effect of applicant age, job level, and accountability on perceptions of female job applicants. Gordon RA, et al. **J Psychol** 1989 Jan;123(1):59–68
Women doctors [letter] Naidoo N. **J R Coll Gen Pract** 1988 Mar;38(308):126
Residents' work schedules [letter] **JAMA** 1989 Jun 23–30; 261(24):3548–9
A computerized resolution of scheduling conflicts. Bolinger RE, et al. **MD Comput** 1989 Jan–Feb;6(1):20–3, 36
Police educational incentive programs. Swan RD. **Med Sci Law** 1989 Jul;29(3):258–62
Do's and don'ts of writing a personnel manual. Conomides GS. **Mo Med** 1987 Dec;84(12):745–7
How do financial incentives affect physicians' clinical decisions and the financial performance of health maintenance organizations? Hillman AL, et al. **N Engl J Med** 1989 Jul 13;321(2):86–92
Educational level and job performance [letter; comment] Schutzenhofer K. **Nurs Outlook** 1989 Jan–Feb;37(1):8. **Comment on:** Nurs Outlook 1988 Nov–Dec;36(6):275–9
Healthy workers can help make companies productive, profitable. Polakoff PL. **Occup Health Saf** 1988 Oct; 57(11):16
The worst job—firing an employee. The Health Care Group. **Pa Med** 1988 Sep;91(9):48–50
The physician search and triple net gain. Downing J 3d, et al. **Pa Med** 1988 Nov;91(11):36–7
Smoking and performance on simulated firefighting tasks. Fowler RL. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1302
Impact of physical therapy weekend coverage on length of stay in an acute care community hospital. Rapoport J, et al. **Phys Ther** 1989 Jan;69(1):32–7
Filling the talent pool [editorial] Frank M. **Physiologist** 1989 Jun;32(3):37–8
Which employment interview skills best predict the employability of schizophrenic patients? Charisiou J, et al. **Psychol Rep** 1989 Jun;64(3 Pt 1):683–94
Work performance, ability, and voluntary turnover among psychiatric aides. Distefano MK Jr. **Psychol Rep** 1988 Dec; 63(3):875–8
An integrative model of supervisory training for medical center personnel. Frisch MB. **Psychol Rep** 1989 Jun;64(3 Pt 2):1035–42
A proposed scale to measure beliefs about the consequences of employing homosexuals. O'Brien FP, et al. **Psychol Rep** 1988 Oct;63(2):547–51
Evaluating nursing productivity in child health. Clark MJ, et al. **Public Health Nurs** 1989 Jun;6(2):88–96
The nursing shortage: two sides of the equation [editorial] Evans B. **Public Health Nurs** 1989 Jun;6(2):49–50
College assessors: putting policy into action. Price R. **Radiography** 1988 Jul–Aug;54(616):151–3
Management effectiveness. Sinclair JT, et al. **Radiography** 1988 Jul–Aug;54(616):162–4
Innovation and improvements the answer to technology recruitment [letter] Nordling C. **Radiol Technol** 1989 Jul–Aug;60(6):535–6
An analysis of employer evaluations of workers with mental retardation. Shafer MS, et al. **Res Dev Disabil** 1988; 9(4):377–91
Nursing turnover: an integrated model. Parasuraman S. **Res Nurs Health** 1989 Aug;12(4):267–77
Fairness in employment testing [letter] Hartigan J, et al. **Science** 1989 Jul 7;245(4913):14
Returning to work after rehabilitation: aftercare, follow-up, and workplace reliability. Gallegos KV, et al. **State Art Rev Occup Med** 1989 Apr–Jun;4(2):357–71 (71 ref.)
Developing and using standards for work performance. Van Bodergraven A. **Top Health Care Financ** 1989 Spring; 15(3):13–26
Interview technique. Bower J. **Vet Rec** 1989 Jul 8;125(2):45–6
Management of human resources for health. Report of a WHO Expert Committee. **WHO Tech Rep Ser** 1989; 783:1–61
[Study of the methodology for social psychological investigation of the personnel of an enterprise] Liu XH, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Jun; 19(2):180–3 (Eng. Abstr.) **(Chi)**
[Physical examination preceding entry into apprenticeship: preventive measure or administrative burden?] Michaud PA, et al. **Schweiz Rundsch Med Prax** 1989 Feb 28; 78(9):228–31 (Eng. Abstr.) **(Fre)**
[Oslo model: 37.5 hours/week–physicians] Wium P. **Tidsskr Nor Laegeforen** 1988 Oct 25;108(29B):2605–8 **(Nor)**
[How to write a curriculum] da Mota HC. **Acta Med Port** 1988 Jul–Dec;1(4–6):281–4 (Eng. Abstr.) **(Por)**
[Rational work and recreation schedules of physicians and therapists during their work shift] Kutsenko GI. **Gig Sanit** 1988 Nov;(11):73–5 **(Rus)**
[Significance of socio-hygienic conditions at food-processing plants for securing the quality of food products] Kvartovkina LK, et al. **Gig Sanit** 1988 Jul;(7):77–8 **(Rus)**
[Status of immunologic reactivity and prospects of the implementation of occupational selection of workers at a microbiological plant] Artamonova VG, et al. **Gig Tr Prof Zabol** 1989;(1):5–8 (Eng. Abstr.) **(Rus)**
[Occupational selection in the prevention of respiratory platinosis] Rapoport ZhZh, et al. **Gig Tr Prof Zabol** 1989; (1):8–11 (Eng. Abstr.) **(Rus)**
[Substantiation of the reorganization of the activities of medical personnel at schools] Usanova EP, et al. **Pediatriia** 1989;(4):70–4 **(Rus)**
[Functions of a district phthisiologist in ambulatory practice] Shefer LB, et al. **Probl Tuberk** 1988;(6):12–7 (Eng. Abstr.) **(Rus)**
[Complex evaluation of the work of physician–endoscopy specialists] Bokman GB, et al. **Sov Zdravookhr** 1989;(5):25–8 (Eng. Abstr.) **(Rus)**
[Organization of the activities of medical personnel on a patient team principle] Litvinenko LIa, et al. **Sov Zdravookhr** 1988;(12):41–2 **(Rus)**
[Study of the activities of physicians at health education centers of different categories] Purina EA, et al. **Sov Zdravookhr** 1988;(6):34–7 (Eng. Abstr.) **(Rus)**
[Siv Rydheim, physician in rotating internship: the scheduling system must be changes] Johnson K. **Lakartidningen** 1988 Sep 28;85(39):3135–6 **(Swe)**
[Stress and bad personnel policy made nurses to quit their jobs] Lilja A, et al. **Lakartidningen** 1989 Mar 29; 86(13):1145–6 **(Swe)**

ECONOMICS

Pay for performance. Implementing a financial incentive for excellent work. White L. **AORN J** 1989 Feb;49(2):566–7, 570–1, 574
Cost of achieving a balance in the anaesthetic department of a district general hospital. Hurst J, et al. **BMJ** 1988 Oct 22;297(6655):1033–4
Re: An appeal letter for pharmacy department development programme [letter] Bwibo ND, et al. **East Afr Med J** 1986 Dec;63(12):829–30
A human capital approach to ICU nurse retention. Mann EE. **J Nurs Adm** 1989 Oct;19(10):8–16
Award programs reduce costs, improve worker safety records. Morrisey M. **Occup Health Saf** 1988 Sep; 57(10):64–6
A modest proposal for the simultaneous solution of tenure and promotion issues: a satirical essay. Guth L, et al. **Perspect Biol Med** 1989 Spring;32(3):445–8

LEGISLATION & JURISPRUDENCE

Federal judge upholds RN's firing over AIDS test [news] **Am J Nurs** 1989 Jun;89(6):868, 873
Accepting or rejecting an assignment. Part I: Are you abandoning your patients? Cushing M. **Am J Nurs** 1988 Nov;88(11):1470, 1475–6
A nation of suspects: drug testing and the Fourth Amendment. Glantz LH. **Am J Public Health** 1989 Oct; 79(10):1427–31
Sexual harassment in the workplace: an overview of legal issues for pharmacists. Fink JL 3d. **Am Pharm** 1989 Feb; NS29(2):18–9
Legal aspects of whistle-blowing. Murphy EK. **AORN J** 1989 Feb;49(2):480, 482, 484
Maternity, paternity, and parental rights of doctors in the UK. Grüneberg AL. **BMJ** 1988 Nov 26;297(6660):1387–9
Investigating the theft of patient property. Harnden L. **Dimens Health Serv** 1989 May;66(4):10
The age discrimination in employment act: a review of court decisions. Snyder CJ, et al. **Exp Aging Res** 1988 Spring; 14(1):3–47 (189 ref.)
At law. Crack, symbolism, and the constitution. Annas GJ. **Hastings Cent Rep** 1989 May–Jun;19(3):35–7
Employers get broader power to fight drug use. Holthaus D. **Hospitals** 1989 Aug 5;63(15):44
Stark bill, safe harbors may help small hospitals. Larkin H. **Hospitals** 1989 May 5;63(9):20
Physician assistant supervisor regulations. Huckabee MJ. **Iowa Med** 1989 Mar;79(3):109–10
Procedural due process in the dismissal of residents. Keyes G. **J Dent Educ** 1989 Mar;53(3):178–83
The post-Bell Commission residency: sleep vs care [letter] Bloch AL. **JAMA** 1989 Jun 9;261(22):3243–4
Discrimination in the health care profession. A view from the "bench". Martin DK. **Med Law** 1988;7(2):133–40
The impact of the new code regulations on postgraduate medical education in New York State. Reiner SC. **N Y State J Med** 1989 Aug;89(8):457–61
The ADEA amendment and public support for older workers. Ferraro KF. **Res Aging** 1989 Mar;11(1):53–81
[Gliding retirement, part-time work for the aged and partial pension problems and chances for an alternative form of terminating professional life] Bäcker G, et al. **Z Gerontol** 1989 May–Jun;22(3):138–42 (Eng. Abstr.) **(Ger)**
[Professional freedom and personal protection of elderly employees] Belling DW. **Z Gerontol** 1989 May–Jun; 22(3):128–37 (Eng. Abstr.) **(Ger)**

METHODS

Evaluation of emergency medicine residents by nurses. Tintinalli JE. **Acad Med** 1989 Jan;64(1):49–50
Canadian experience in cytology proficiency testing. Thompson DW. **Acta Cytol** 1989 Jul–Aug;33(4):484–6
Strategies for resolving interpersonal conflicts in radiology. Virapongse C. **AJR Am J Roentgenol** 1989 May; 152(5):1119–22
In-service training for residential staff. Mulholland JL. **Am Ann Deaf** 1989 Mar;134(1):41–4
Experience with staffing alternatives in a pediatric teaching institution. King ES. **Am J Hosp Pharm** 1989 Jun; 46(6):1175–8
Polygraphs, honesty tests, and drug screening: a threat to the integrity of a proud profession. Fox TR. **Am Pharm** 1989 Feb;NS29(2):60–1
How knowing the facts about the polygraph test alters pharmacy students' attitudes. Pink LA, et al. **Am Pharm** 1989 Feb;NS29(2):31–3, 37–40
Managing in a unionized setting. Part I: The discipline process. Julius DJ. **AORN J** 1988 Nov;48(5):919–29
Pay for performance. Implementing a financial incentive for excellent work. White L. **AORN J** 1989 Feb;49(2):566–7, 570–1, 574
Tenure for a new age. Ideas for the turn of the century [editorial] Racy JC, et al. **Arch Intern Med** 1989 May; 149(5):1001
USAF pilot selection and classification systems. Carretta TR. **Aviat Space Environ Med** 1989 Jan;60(1):46–9
Aircrew selection systems. Kantor JE, et al. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 2):A32–8
Using productivity measures in clinical engineering departments. Betts WF. **Biomed Instrum Technol** 1989 Mar–Apr;23(2):120–7
How to recruit and retain staff: Part 2. Dyro JF. **Biomed Instrum Technol** 1989 May–Jun;23(3):230, 232
How to recruit and retain staff: Part 1. Dyro JF. **Biomed Instrum Technol** 1989 Mar–Apr;23(2):92, 94, 96
Productivity measurement: taking the first steps. Mahachek AR. **Biomed Instrum Technol** 1989 Jan–Feb;23(1):16–20
Improve the counselling skills of doctors and nurses in cancer care. Maguire P, et al. **BMJ** 1988 Oct 1;297(6652):847–9
Appoint a colleague. Petch MC. **BMJ** 1989 May 20; 298(6684):1365–7
Choosing interns: an exercise in frustration [letter] Conway B. **Can Med Assoc J** 1989 Feb 15;140(4):359
Infectious hazards in the clinical laboratory: a program to protect laboratory personnel. Buesching WJ, et al. **Clin Lab Med** 1989 Jun;9(2):351–61 (23 ref.)
MUMS: can they grow in rural areas? Elliott P. **Dimens Health Serv** 1989 Apr;66(3):21–2
Dissent on "Z" [letter; comment] Morley DC. **Dimens Health Serv** 1989 Mar;66(2):7. **Comment on:** Dimens Health Serv 1988 Sep;65(6):17–8
Selling the organization: the last step. Rayworth F. **Dimens Health Serv** 1989 Jun;66(5):31–2
Performance appraisal systems in rural western hospitals. Timmreck TC. **Health Care Manage Rev** 1989 Spring; 14(2):31–43 (67 ref.)
Thinking aloud [letter] Hauser D. **Heart Lung** 1989 May; 18(3):321–2
Outplacement services ease a CEO's job search. Droste T. **Hospitals** 1989 Jul 5;63(13):81
Physician recruitment takes center stage. Grayson MA. **Hospitals** 1989 Apr 5;63(7):30, 32–4
Meeting the emerging employee shortage. Furneaux D. **Iowa Med** 1989 Feb;79(2):74
Management behaviour of one community health nurse supervisor. Field PA, et al. **J Adv Nurs** 1989 Mar; 14(3):234–9
Evaluating sources of employee feedback in foodservice. Sneed J. **J Am Diet Assoc** 1988 Dec;88(12):1585–6
Team building. Mattingly S. **J Biol Photogr** 1989 Jan; 57(1):15–8
The burn nurse shortage. A national survey. Carrougher GJ. **J Burn Care Rehabil** 1989 Mar–Apr;10(2):180–2
Burn nurse retention. Elements of success. Dembicki R, et al. **J Burn Care Rehabil** 1989 Mar–Apr;10(2):177–80
The predictive validity of a resident selection system. Weiss JC, et al. **J Med Syst** 1988 Jun;12(3):129–34
The International Nurse Exchange Program. Brooks AM. **J Nurs Adm** 1989 Apr;19(4):12–3
Performance evaluation alternatives. Bushardt SC, et al. **J Nurs Adm** 1988 Oct;18(10):40–4
Setting standards and evaluating nursing performance with a single tool. Fosbinder D, et al. **J Nurs Adm** 1989 Oct; 19(10):23–30
Participative staff retention program. Horrigan K. **J Nurs Adm** 1989 Apr;19(4):14
From LPN to RN. Jacobson RB. **J Nurs Adm** 1989 Apr; 19(4):9–10
An evaluation of nurse recruitment methods. Jolma DJ, et al. **J Nurs Adm** 1989 Apr;19(4):20–4
Supporting the middle manager. Strasen L. **J Nurs Adm** 1989 Apr;19(4):6–7
Manager impact on retention of hospital staff: Part 2. Taunton RL, et al. **J Nurs Adm** 1989 Apr;19(4):15–9
Empowering nurses. Trofino J. **J Nurs Adm** 1989 Apr; 19(4):13
Targeting recruitment efforts for increased retention. Whaley BA, et al. **J Nurs Adm** 1989 Apr;19(4):34–8
Impact of critical care physician staffing on patients with septic shock in a university hospital medical intensive care unit. Reynolds HN, et al. **JAMA** 1988 Dec 16; 260(23):3446–50
Anesthesiology job openings online [letter] Zimmerman BL. **MD Comput** 1989 Mar–Apr;6(2):65
Treating aberrant behavior through effective staff

management. A developing technology. Reid DH, et al. **Monogr Am Assoc Ment Retard** 1989;(12):175–90 (85 ref.)
The impact of health professionals should be judged by variety of factors. Chenoweth D. **Occup Health Saf** 1988 Aug;57(9):23
Training of personnel in schools to make health education programs efficient. Sandegård G. **Pediatrician** 1988; 15(3):146–8
A manager's investment [letter] Rusk SP. **Radiol Technol** 1989 Jul–Aug;60(6):535
An investment goal [letter] Warner SL. **Radiol Technol** 1989 Jul–Aug;60(6):535
Occupational medicine. Organizational behavior. Fallon LF Jr. **State Art Rev Occup Med** 1989 Jan–Mar;4(1):93–104 (30 ref.)
Foreword [editorial] Jaspan N, et al. **Top Health Care Financ** 1988 Winter;15(2):vi–vii
Health surveillance and management procedures for food-handling personnel. Report of a WHO consultation. **WHO Tech Rep Ser** 1989;785:1–46 (30 ref.)
[A method of automated classification of the working collective of an industrial plant by socio-hygienic factors] Kochin IV, et al. **Sov Zdravookhr** 1989;(6):8–10 (Eng. Abstr.) **(Rus)**
[Evaluation of the contribution of different categories of medical workers to the activities of a hospital] Nenov NI, et al. **Sov Zdravookhr** 1988;(7):55–7 **(Rus)**
[Use of an automated system for troop unit buildup taking into account the psychological compatibility of the servicemen] Poliakov LE, et al. **Voen Med Zh** 1989 Feb; (2):16–7 **(Rus)**

STANDARDS

Criteria for staff pharmacist selection in Ohio. Sheridan DJ, et al. **Am J Hosp Pharm** 1989 Feb;46(2):295–301
Off-limits policy guides recruitment practices. Droste T. **Hospitals** 1989 Aug 20;63(16):59
Hiring standards: high quality still top priority. Lappa K. **Hospitals** 1989 Sep 20;63(18):89
Interviews in the selection of partners, trainees and medical students [editorial] Pendleton D, et al. **J R Coll Gen Pract** 1988 Apr;38(309):147–8
Valid medical standards reduce hiring hassles, costs for employers. Carmean G, et al. **Occup Health Saf** 1989 May; 58(5):83–5, 88
Home health agency preferences for staff nurse qualifications, and practices in hiring and orientation. Kalnins I. **Public Health Nurs** 1989 Jun;6(2):55–61
[Effectiveness of preliminary medical examinations in evaluating the status of the nervous system in persons to be exposed to organic solvents] Polakowska B. **Med Pr** 1988;39(6):429–33 (Eng. Abstr.) **(Pol)**
[Analysis and ways of improving the organization of activities of sector physicians] Kononov AG. **Sov Zdravookhr** 1989; (5):15–7 (Eng. Abstr.) **(Rus)**
[Evaluation of the work of the teacher] Frolov SS. **Voen Med Zh** 1988 Aug;(8):19–22 **(Rus)**

STATISTICS & NUMERICAL DATA

Does 24-hour supervisory staff coverage in the labour and delivery area change the fetal outcome? A preliminary observation. Chuong CJ, et al. **Br J Clin Pract** 1988 Jun; 42(6):238–40
Absenteeism–retention links. Taunton RL, et al. **J Nurs Adm** 1989 Jun;19(6):13–20
Schedule-related effects on nurse retention. Choi T, et al. **West J Nurs Res** 1989 Feb;11(1):92–107
[Use of the methods of multivariate statistical analysis to improve psychological job selection] Kulagin BV, et al. **Voen Med Zh** 1988 Nov;(11):18–21 **(Rus)**

TRENDS

Hospital staff reductions. Enright SM. **Am J Hosp Pharm** 1989 Jan;46(1):139–41
Recruitment of individuals to the field of cytotechnology: a regional society's efforts [letter] Zaleski S, et al. **Diagn Cytopathol** 1989;5(1):115
Looking into the future: a brief overview. Rayworth F. **Dimens Health Serv** 1989 Mar;66(2):10–1
Temporary CEOs take up the slack in hospitals. Droste T. **Hospitals** 1989 Sep 20;63(18):104
Employee hotline: CEOs act to solve labor shortages. Powills S. **Hospitals** 1989 Apr 20;63(8):48–9, 51–3
Nursing shortage eases: AHA data. Powills S. **Hospitals** 1989 May 5;63(9):32–7
Nursing the statistics: a demonstration study of nurse turnover and retention. Barry JT, et al. **J Adv Nurs** 1989 Jul;14(7):528–35
Nursing turnover: literature review and methodological critique. Cavanagh SJ. **J Adv Nurs** 1989 Jul;14(7):587–96 (58 ref.)
Attributes and qualifications that employers seek when hiring dietitians in business and industry. Kirk D, et al. **J Am Diet Assoc** 1989 Apr;89(4):494–8
Career options of occupational physicians [letter] **J Occup Med** 1989 Jul;31(7):631
Hospital workers and the health care crisis. O'Cleireacain C. **J Public Health Policy** 1989 Summer;10(2):178–86
How do house officers spend their nights? A time study of internal medicine house staff on call. Lurie N, et al. **N Engl J Med** 1989 Jun 22;320(25):1673–7
The residency years [editorial] Mellinkoff SM. **N Engl J Med** 1989 Jun 22;320(25):1689–90
[Changes in the occupational environment. An occupational psychological perspective] Baitsch C. **Schweiz Arch Neurol Psychiatr** 1989;140(3):228–39 **(Ger)**

PERSONNEL SELECTION see under **PERSONNEL MANAGEMENT**

PERSONNEL STAFFING AND SCHEDULING see under **PERSONNEL MANAGEMENT**

PERSONNEL STAFFING AND SCHEDULING INFORMATION SYSTEMS see under **MANAGEMENT INFORMATION SYSTEMS**

PERSONNEL TURNOVER see under **PERSONNEL MANAGEMENT**

PERSUASION see **PERSUASIVE COMMUNICATION**

PERSUASIVE COMMUNICATION

The effects of hypnosis upon cognitive responses to persuasive communication. Malott JM, et al. **Int J Clin Exp Hypn** 1989 Jan;37(1):31–40
Understanding the effects of fear-arousing communications: the role of cognitive factors and amount of fear aroused. Sutton S, et al. **J Behav Med** 1988 Aug;11(4):353–60
Preventive intervention to improve children's discrimination of the persuasive tactics in televised advertising. Peterson L, et al. **J Pediatr Psychol** 1988 Jun;13(2):163–70
Trivial persuasion in the courtroom: the power of (a few) minor details. Bell BE, et al. **J Pers Soc Psychol** 1989 May; 56(5):669–79
Processing deficits and the mediation of positive affect in persuasion. Mackie DM, et al. **J Pers Soc Psychol** 1989 Jul;57(1):27–40
Cardiovascular reactivity and interpersonal influence: active coping in a social context. Smith TW, et al. **J Pers Soc Psychol** 1989 Feb;56(2):209–18
That's easy for you to say: action identification and speech fluency. Vallacher RR, et al. **J Pers Soc Psychol** 1989 Feb; 56(2):199–208
The relationship between characteristics of the victim, persuasive techniques of the batterer, and returning to a battering relationship. Schutte NS, et al. **J Soc Psychol** 1988 Oct;128(5):605–10
[Factors influencing the effectiveness of posters used in anti-alcoholism and anti-smoking propaganda] Anan'ina NL. **Gig Sanit** 1988 Jun;(6):69–72 **(Rus)**
[Methodological approaches to the evaluation of health education posters] Pozdniakova RZ, et al. **Gig Sanit** 1988 Jun;(6):39–41 **(Rus)**

PERTECHNETATE SODIUM see **TECHNETIUM TC 99M PERTECHNETATE**

PERTUSSIGEN see **PERTUSSIS TOXINS**

PERTUSSIS see **WHOOPING COUGH**

PERTUSSIS TOXINS

Effect of protein kinase C inhibitor (H-7) and calmodulin antagonist (W-7) on pertussis toxin-induced IL-1 production by human adherent monocytes. Comparison with lipopolysaccharide as a stimulator of IL-1 production. Taniguchi H, et al. **Immunology** 1989 Jun;67(2):210–5
Role of cysteine 41 of the A subunit of pertussis toxin. Burns DL, et al. **J Biol Chem** 1989 Jan 5;264(1):564–8
Granulocyte-macrophage colony-stimulating factor primes neutrophils by activating a pertussis toxin-sensitive G protein not associated with phosphatidylinositol turnover. Corey SJ, et al. **J Biol Chem** 1989 Aug 25;264(24):14165–71

ANALYSIS

Monoclonal antibodies that define neutralizing epitopes of pertussis toxin: conformational dependence and epitope mapping. Lang AB, et al. **Infect Immun** 1989 Sep; 57(9):2660–5
Mapping of linear B-cell epitopes of the S2 subunit of pertussis toxin. Schmidt W, et al. **Infect Immun** 1989 Feb; 57(2):438–45
The quantitative assay of the clustering activity of the lymphocytosis-promoting factor (pertussis toxin) of Bordetella pertussis on Chinese hamster ovary (CHO) cells. Fujiwara H, et al. **J Biol Stand** 1989 Jan;17(1):53–64
Subunit S1 of pertussis toxin: mapping of the regions essential for ADP-ribosyltransferase activity. Pizza M, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7521–5

ANTAGONISTS & INHIBITORS

An endogenous inhibitor of the ADP-ribosylation of GTP-binding proteins by pertussis toxin is present in bovine brain. Hara-Yokoyama M, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):67–71
Alkylation of cysteine 41, but not cysteine 200, decreases the ADP-ribosyltransferase activity of the S1 subunit of pertussis toxin. Kaslow HR, et al. **J Biol Chem** 1989 Apr 15;264(11):6386–90

BIOSYNTHESIS

Expression and secretion of pertussis toxin subunit S1 in Bacillus subtilis. Runeberg-Nyman K, et al. **Microb Pathog** 1987 Dec;3(6):461–8

BLOOD

GTP-binding proteins in human platelet membranes serving as the specific substrate of islet-activating protein, pertussis toxin. Nagata K, et al. **FEBS Lett** 1988 Sep 12; 237(1–2):113–7

GENETICS

Expression of pertussis toxin in Bordetella bronchiseptica and Bordetella parapertussis carrying recombinant plasmids. Lee CK, et al. **Infect Immun** 1989 May;57(5):1413–8
Expression and secretion of the S-1 subunit and C180 peptide of pertussis toxin in Escherichia coli. Barbieri JT, et al. **J Bacteriol** 1989 Aug;171(8):4362–9
Pertussis toxin promoter sequences involved in modulation. Gross R, et al. **J Bacteriol** 1989 Jul;171(7):4026–30
Expression of pertussis toxin correlates with pathogenesis in Bordetella species. Monack D, et al. **J Infect Dis** 1989 Feb; 159(2):205–10
Genetics of pertussis toxin. Gross R, et al. **Mol Microbiol** 1989 Jan;3(1):119–24 (19 ref.)
Pertussis toxin S1 mutant with reduced enzyme activity and a conserved protective epitope. Burnette WN, et al. **Science** 1988 Oct 7;242(4875):72–4
All species of the genus Bordetella contain genes for pertussis toxin of Bordetella pertussis. Rozinov MN, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Aug; 269(2):205–10

IMMUNOLOGY

Monoclonal antibodies to pertussis toxin: utilization as probes of toxin function. Kenimer JG, et al. **Hybridoma** 1989 Feb; 8(1):37–51
Interactive effects of pertussis toxin and the phorbol ester tumour promotor, phorbol dibutyrate, on T-lymphocyte mitogenesis and the expression of phenotypic determinants. Strnad CF, et al. **Immunology** 1989 Apr;66(4):539–45
Immune response to dimeric subunits of the pertussis toxin B oligomer. Hausman SZ, et al. **Infect Immun** 1989 Jun; 57(6):1760–4
Epitopes on the S1 subunit of pertussis toxin recognized by monoclonal antibodies. Kim KJ, et al. **Infect Immun** 1989 Mar;57(3):944–50
Immunoglobulin E response to pertussis toxin in whooping cough and after immunization with a whole-cell and an acellular pertussis vaccine. Hedenskog S, et al. **Int Arch Allergy Appl Immunol** 1989;89(2–3):156–61
Subclass compositions of immunoglobulin G to pertussis toxin in patients with whooping cough, in healthy individuals, and in recipients of a pertussis toxoid vaccine. Zackrisson G, et al. **J Clin Microbiol** 1989 Jul;27(7):1567–71
Human T cell clones define S1 subunit as the most immunogenic moiety of pertussis toxin and determine its epitope map. De Magistris MT, et al. **J Exp Med** 1989 May 1;169(5):1519–32
MHC-restricted recognition of immunogenic T cell epitopes of pertussis toxin reveals determinants in man distinct from the ADP-ribosylase active site. Oksenberg JR, et al. **J Exp Med** 1988 Nov 1;168(5):1855–64
Toxin-neutralizing antibodies in patients with pertussis, as determined by an assay using Chinese hamster ovary cells. Trollfors B, et al. **J Infect Dis** 1988 Nov;158(5):991–5
Experimental autoimmune uveoretinitis (EAU) in rats: abrogation of resistance to the induction and augmentation of the inflammation by pertussis toxin. Suzuki I, et al. **Jpn J Ophthalmol** 1989;33(1):27–35
Studies of the antigenic structure of two cross-reacting proteins, pertussis and cholera toxins, using synthetic peptides. Presentini R, et al. **Mol Immunol** 1989 Jan; 26(1):95–100

ISOLATION & PURIFICATION

Purification of pertussis toxin. Perera VY. **Methods Enzymol** 1988;165:120–6

METABOLISM

Virulence factors of Bordetella pertussis. Mooi FR. **Antonie Van Leeuwenhoek** 1988;54(5):465–74 (59 ref.)
Different types of ADP-ribose protein bonds formed by botulinum C2 toxin, botulinum ADP-ribosyltransferase C3 and pertussis toxin. Aktories K, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):361–7
G protein beta gamma subunits from bovine brain and retina: equivalent catalytic support of ADP-ribosylation of alpha subunits by pertussis toxin but differential interactions with Gs alpha. Casey PJ, et al. **Biochemistry** 1989 Jan 24; 28(2):611–6
Guanosine 5'-triphosphate binding protein (Gi) and two additional pertussis toxin substrates associated with muscarinic receptors in rat heart myocytes: characterization and age dependency. Moscona-Amir E, et al. **Biochemistry** 1988 Jul 12;27(14):4985–91
ADP-ribosyl proteins formed by pertussis toxin are specifically cleaved by mercury ions. Meyer T, et al. **Biol Chem Hoppe Seyler** 1988 Jul;369(7):579–83
Identification of an active-site residue in subunit S1 of

pertussis toxin by photocrosslinking to NAD. Cockle SA. **FEBS Lett** 1989 Jun 5;249(2):329–32

CD3/T-cell receptor coupling to a pertussis and cholera toxin-insensitive G-protein. Kvanta A, et al. **FEBS Lett** 1989 Jul 3;250(2):536–40

Identification of a G protein in rough endoplasmic reticulum of canine pancreas. Audigier Y, et al. **J Biol Chem** 1988 Nov 5;263(31):16352–7

Adenylate cyclase toxins from Bacillus anthracis and Bordetella pertussis. Different processes for interaction with and entry into target cells. Gordon VM, et al. **J Biol Chem** 1989 Sep 5;264(25):14792–6

Vasopressin V1 receptors on the principal cells of the rabbit cortical collecting tubule. Stimulation of cytosolic free calcium and inositol phosphate production via coupling to a pertussis toxin substrate. Burnatowska-Hledin MA, et al. **J Clin Invest** 1989 Jan;83(1):84–9

The location of filamentous hemagglutinin and pertussis toxin antigens of Bordetella pertussis by immunoelectron microscopy. Watanabe H, et al. **J Electron Microsc (Tokyo)** 1989;38(3):172–81

Identification of amino acid residues essential for the enzymatic activities of pertussis toxin. Locht C, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3075–9

Pertussis toxin blocks an inhibition of hormone-stimulated glycogenolysis by prostaglandin E2 and its analogue in cultured hepatocytes. Okumura T, et al. **Prostaglandins** 1988 Oct;36(4):463–75

PHARMACOLOGY

Function and mechanism of the interaction of GTP-binding proteins with alpha 2-adrenoceptors in the brain. Nomura Y, et al. **Adv Exp Med Biol** 1988;236:301–11

Pertussis toxin-sensitive cholinergic inhibition of somatostatin release from canine D-cells. Chan CB, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):G424–8

Tonic inhibition of renal response to vasopressin by a pertussis toxin substrate. Jeffries WB, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):F1107–15

Pertussis toxin effects on transmitter release from perivascular nerve terminals. Nozaki M, et al. **Am J Physiol** 1989 Feb; 256(2 Pt 2):H455–9

Linkage between somatostatin and acid secretion: evidence from use of pertussis toxin. Schubert ML, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):G418–22

Muscarinic cholinergic inhibition of cyclic AMP accumulation in airway smooth muscle. Role of a pertussis toxin-sensitive protein. Sankary RM, et al. **Am Rev Respir Dis** 1988 Jul;138(1):145–50

Modulation of Ca2+-channel currents in sensory neurons by pertussis toxin-sensitive G-proteins. Dolphin AC, et al. **Ann N Y Acad Sci** 1989;560:387–90 (6 ref.)

Pertussis toxin-sensitive GTP-binding proteins may regulate phospholipase A2 in response to thrombin in rabbit platelets. Kajiyama Y, et al. **Arch Biochem Biophys** 1989 Oct;274(1):200–8

Neurotensin, bradykinin and somatostatin inhibit cAMP production in neuroblastoma N1E115 cells via both pertussis toxin sensitive and insensitive mechanisms. Bozou JC, et al. **Biochem Biophys Res Commun** 1989 Jun 30; 161(3):1144–50

Bradykinin-induced generation of inositol 1,4,5-trisphosphate in fibroblasts and neuroblastoma cells: effect of pertussis toxin, extracellular calcium, and down-regulation of protein kinase C. Fu T, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1429–35

Pertussis toxin inhibits differentiation induced by retinoic acid in a human promyelocytic leukemia cell line HL-60. Hemmi H, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):797–802

Lack of effect of pertussis toxin on TNF-alpha-induced formation of reactive oxygen intermediates by human neutrophils. Meurer R, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):763–9

Purification and identification of two pertussis-toxin-sensitive GTP-binding proteins of bovine spleen. Morishita R, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1280–5

Angiogenin depresses aortic smooth muscle cell cAMP by a pertussis toxin sensitive mechanism. Xiao Y, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):902–7

Mastoparan, a wasp venom, stimulates insulin release by pancreatic islets through pertussis toxin sensitive GTP-binding protein. Yokokawa N, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):712–6

Low density lipoprotein and apoprotein B induce increases in inositol trisphosphate and cytosolic free Ca2+ via pertussis toxin-sensitive GTP-binding protein in vascular smooth muscle cells. Morita R, et al. **Biochem Int** 1989 Mar;18(3):647–53

Effect of pertussis toxin and neomycin on G-protein-regulated polyphosphoinositide phosphodiesterase. A comparison between HL60 membranes and permeabilized HL60 cells. Cockcroft S, et al. **Biochem J** 1988 Dec 1;256(2):343–50

Influence of bacterial toxins and forskolin upon vasopressin-induced inositol phosphate accumulation in WRK 1 cells. Guillon G, et al. **Biochem J** 1989 Jun 15; 260(3):665–72

Techniques used in the identification and analysis of function of pertussis toxin-sensitive guanine nucleotide binding proteins. Milligan G. **Biochem J** 1988 Oct 1;255(1):1–13 (124 ref.)

Inhibition of formation of cyclic AMP and cyclic GMP by vasopressin in smooth-muscle cells is insensitive to pertussis toxin. Nambi P, et al. **Biochem J** 1988 Sep 1;254(2):449–53

Effects of Bordetella pertussis toxin on catecholamine inhibition of insulin release from intact and electrically permeabilized rat islets. Persaud SJ, et al. **Biochem J** 1989 Mar 15;258(3):669–75

G-proteins in skeletal muscle. Evidence for a 40 kDa pertussis-toxin substrate in purified transverse tubules. Toutant M, et al. **Biochem J** 1988 Sep 1;254(2):405–9

Differential sensitivity of alpha o and alpha i to ADP-ribosylation by pertussis toxin in the intact cultured embryonic chick ventricular myocyte. Relationship to the role of G proteins in the coupling of muscarinic cholinergic receptors to inhibition of adenylate cyclase activity. Liang BT, et al. **Biochem Pharmacol** 1988 Dec 1;37(23):4549–55

Alteration of mast cell responsiveness to adenosine by pertussis toxin. Marquardt DL, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):4019–25

Effect of pertussis toxin on the inhibition of secretory activity by prostaglandin E2, somatostatin, epidermal growth factor and 12-O-tetradecanoylphorbol 13-acetate in parietal cells from rat stomach. Atwell MM, et al. **Biochim Biophys Acta** 1988 Oct 7;971(3):282–8

Homologous and heterologous beta-adrenergic desensitization in hepatocytes. Additivity and effect of pertussis toxin. Hernández-Sotomayor SM, et al. **Biochim Biophys Acta** 1988 Dec 9;972(3):311–9

Involvement of a pertussis toxin-sensitive G-protein-coupled phospholipase A2 in lipopolysaccharide-stimulated prostaglandin E2 synthesis in cultured rat mesangial cells. Wang J, et al. **Biochim Biophys Acta** 1988 Dec 16; 963(3):429–35

Stimulation of cardiac alpha receptors increases Na/K pump current and decreases gK via a pertussis toxin-sensitive pathway. Shah A, et al. **Biophys J** 1988 Aug;54(2):219–25

Delayed-type hypersensitivity responses in mice treated with pertussis toxin and betamethasone. Torre D, et al. **Boll Ist Sieroter Milan** 1988;67(2):123–7

Effect of pertussis toxin on A1-receptor-mediated inhibition of insulin secretion. Hillaire-Buys D, et al. **Br J Pharmacol** 1989 Jan;96(1):3–4

Effect of phorbol ester and pertussis toxin on the enhancement of noradrenaline release by angiotensin II in mouse atria. Musgrave IF, et al. **Br J Pharmacol** 1989 Mar; 96(3):609–16

A 5-HT1-like receptor mediates a pertussis toxin-sensitive inhibition of rat ventromedial hypothalamic neurones in vitro. Newberry NR, et al. **Br J Pharmacol** 1988 Sep; 95(1):6–8

Involvement of a pertussis toxin-sensitive G-protein in the pharmacological properties of septo-hippocampal neurones. Rascol O, et al. **Br J Pharmacol** 1989 Apr; 96(4):956–60

Pertussis toxin prevents the inhibitory effect of adenosine and unmasks adenosine-induced excitation of mammalian motor nerve endings. Silinsky EM, et al. **Br J Pharmacol** 1989 May;97(1):16–8

Pertussis toxin lesioning of the nucleus caudate-putamen attenuates adenylate cyclase inhibition and alters neuronal electrophysiological activity. Boyajian CL, et al. **Brain Res** 1989 Aug 21;495(1):66–74

Evidence for G protein mediation of serotonin- and GABAB-induced hyperpolarization of rat dorsal raphe neurons. Innis RB, et al. **Brain Res** 1988 Aug 30; 459(1):27–36

Intrahippocampal injection of pertussis toxin blocks adenosine suppression of synaptic responses. Stratton KR, et al. **Brain Res** 1989 Aug 14;494(2):359–64

Acetylcholine inhibition in rabbit sinoatrial node is prevented by pertussis toxin. Molyvdas PA, et al. **Can J Physiol Pharmacol** 1989 May;67(5):522–5

Inhibition of the effects of adenosine on force of contraction and the slow calcium inward current by pertussis toxin is associated with myocardial lesions. Böhm M, et al. **Cardiovasc Res** 1988 Feb;22(2):87–94

Dual effects of pertussis toxin on in vitro invasive behavior of metastatic lymphoma variants. Verschueren H, et al. **Clin Exp Metastasis** 1989 Sep-Oct;7(5):541–55

Pertussis toxin inhibits 1-methyladenine-induced maturation in starfish oocytes. Shilling F, et al. **Dev Biol** 1989 Jun; 133(2):605–8

Islet cell-activating protein reverses anti-fucosyl GM1 ganglioside antibody-induced inhibition of adenosine 3',5'-monophosphate production in FRTL-5 rat thyroid cells. Kosugi S, et al. **Endocrinology** 1989 Mar; 124(3):1230–4

Characterization of galanin receptors in the insulin-secreting cell line Rin m 5F: evidence for coupling with a pertussis toxin-sensitive guanosine triphosphate regulatory protein. Lagny-Pourmir I, et al. **Endocrinology** 1989 May; 124(5):2635–41

Effects of pertussis toxin on resorption of 19-day-old fetal rat long bones. Vargas SJ, et al. **Endocrinology** 1989 May; 124(5):2159–65

Direct inhibitory effects of a somatostatin analog, SMS 201-995, on AR4-2J cell proliferation via pertussis toxin-sensitive guanosine triphosphate-binding protein-independent mechanism. Viguerie N, et al. **Endocrinology** 1989 Feb;124(2):1017–25

Mechanism of galanin-inhibited insulin release. Occurrence of a pertussis-toxin-sensitive inhibition of adenylate cyclase. Amiranoff B, et al. **Eur J Biochem** 1988 Oct 15; 177(1):147–52

Secretion-stimulating and secretion-inhibiting hormones stimulate high-affinity pertussis-toxin-sensitive GTPases in membranes of a pituitary cell line. Offermanns S, et al. **Eur J Biochem** 1989 Mar 15;180(2):283–7

Correlation between ribosylation of pertussis toxin substrates and inhibition of peptidoglycan-, muramyl dipeptide- and lipopolysaccharide-induced mitogenic stimulation in B lymphocytes. Dziarski R. **Eur J Immunol** 1989 Jan; 19(1):125–30

In vivo pertussis toxin treatment attenuates some, but not all, adenosine A1 effects in slices of the rat hippocampus. Fredholm BB, et al. **Eur J Pharmacol** 1989 Aug 15; 172(3):249–62

Pancreastatin inhibits insulin release from Rin m 5F cells: reversion by pertussis toxin. Lorinet AM, et al. **Eur J Pharmacol** 1989 Feb 7;160(3):405–7

Pertussis toxin sensitivity of drug-induced potentials on the rat superior cervical ganglion. Newberry NR, et al. **Eur J Pharmacol** 1989 Apr 25;163(2-3):245–52

Pertussis toxin inactivates the presynaptic serotonin autoreceptor in the hippocampus. Passarelli F, et al. **Eur J Pharmacol** 1988 Oct 18;155(3):297–9

Pertussis toxin differentially reduces the efficacy of opioids to produce supraspinal analgesia in the mouse. Sánchez-Blázquez P, et al. **Eur J Pharmacol** 1988 Aug 2; 152(3):357–61

Guanine nucleotide-dependent, pertussis toxin-insensitive regulation of phosphoinositide turnover by bradykinin in bovine pulmonary artery endothelial cells. Voyno-Yasenetskaya TA, et al. **FASEB J** 1989 Jan; 3(1):44–51

ATP stimulates secretion in human neutrophils and HL60 cells via a pertussis toxin-sensitive guanine nucleotide-binding protein coupled to phospholipase C. Cockcroft S, et al. **FEBS Lett** 1989 Mar 13;245(1-2):25–9

A pertussis toxin-sensitive GTP-binding protein plays a role in the G0-G1 transition of rat hepatocytes following establishment in primary culture. Fujinaga Y, et al. **FEBS Lett** 1989 Mar 13;245(1-2):117–21

Concanavalin A stimulation of O2 consumption in electropermeabilized neutrophils via a pertussis toxin-insensitive G protein. Lu DJ, et al. **FEBS Lett** 1989 Aug 14;253(1-2):151–6

Stimulation of adenosine receptor enhances alpha 1-adrenergic receptor-mediated activation of phospholipase C and Ca2+ mobilization in a pertussis toxin-sensitive manner in FRTL-5 thyroid cells. Okajima F, et al. **FEBS Lett** 1989 May 8;248(1-2):145–9

Differential sensitivity to pertussis toxin of 3T3 cells transformed with different oncogenes. Rey I, et al. **FEBS Lett** 1988 Sep 12;237(1-2):203–7

CCK and gastrin inhibit adenylate cyclase activity through a pertussis toxin-sensitive mechanism in the tumoral rat pancreatic acinar cell line AR 4-2J. Scemama JL, et al. **FEBS Lett** 1988 Dec 19;242(1):61–4

Pertussis toxin activates protein kinase C and a tyrosine protein kinase in the human T cell line Jurkat. Thom RE, et al. **FEBS Lett** 1989 Feb 13;244(1):181–4

Activation of macrophages to express cytocidal activity correlates with inhibition of their responsiveness to macrophage colony-stimulating factor (CSF-1): involvement of a pertussis toxin-sensitive reaction. Hume DA, et al. **Immunol Cell Biol** 1989 Aug;67 (Pt 4):243–9

Modulation of leukotriene generation by pertussis toxin. Hensler T, et al. **Infect Immun** 1989 Oct;57(10):3165–71

Lectinlike properties of pertussis toxin. Tyrrell GJ, et al. **Infect Immun** 1989 Jun;57(6):1854–7

Influences of pertussis toxin, guanine nucleotides and forskolin on adenylate cyclase in striatal membranes of infant, adult and senescent rats. Nomura Y, et al. **Int J Dev Neurosci** 1987;5(3):271–9

Pertussis toxin and pre-junctional alpha 2-adrenoreceptors in rat heart and vas deferens. Docherty JR. **J Auton Pharmacol** 1988 Sep;8(3):197–201

Activation of inositol phospholipid breakdown in HL60 cells by P2-purinergic receptors for extracellular ATP. Evidence for mediation by both pertussis toxin-sensitive and pertussis toxin-insensitive mechanisms. Dubyak GR, et al. **J Biol Chem** 1988 Dec 5;263(34):18108–17

Fluorescent labeling of signal-transducing G-proteins. Pertussis toxin-catalyzed etheno-ADP ribosylation of transducin. Hingorani VN, et al. **J Biol Chem** 1988 Dec 25;263(36):19804–8

Colony-stimulating factor 1-induced Na+ influx into human monocytes involves activation of a pertussis toxin-sensitive GTP-binding protein. Imamura K, et al. **J Biol Chem** 1988 Oct 5;263(28):14093–8

Coupling of exogenous receptors to phospholipase C in Xenopus oocytes through pertussis toxin-sensitive and -insensitive pathways. Cross-talk through heterotrimeric G-proteins. Moriarty TM, et al. **J Biol Chem** 1989 Aug 15;264(23):13524–30

Insulin inhibits pertussis toxin-catalyzed ADP-ribosylation of G-proteins. Evidence for a novel interaction between insulin receptors and G-proteins. Rothenberg PL, et al. **J Biol Chem** 1988 Oct 25;263(30):15546–52

Possible involvement of a GTP-binding protein in a late event during endogenous ganglioside-modulated cellular proliferation. Spiegel S. **J Biol Chem** 1989 Apr 25;

264(12):6766–72
The in vitro invasive behavior of human myelomonocytic cell lines is modulated by HuIFN-gamma and pertussis toxin. Verhaegen S, et al. **J Biol Response Mod** 1989 Feb; 8(1):97–107
Effect of pertussis toxin on parathyroid hormone–stimulated cyclic AMP production in cultured kidney cells. Rizzoli R, et al. **J Bone Miner Res** 1988 Dec;3(6):605–9
Growth factors, signaling pathways, and the regulation of proliferation and differentiation in BC3H1 muscle cells. I. A pertussis toxin–sensitive pathway is involved. Kelvin DJ, et al. **J Cell Biol** 1989 Jan;108(1):159–67
Growth factors, signaling pathways, and the regulation of proliferation and differentiation in BC3H1 muscle cells. II. Two signaling pathways distinguished by pertussis toxin and a potential role for the ras oncogene. Kelvin DJ, et al. **J Cell Biol** 1989 Jan;108(1):169–76
Interleukin 3–stimulated proliferation is sensitive to pertussis toxin: evidence for a guanyl nucleotide regulatory protein–mediated signal transduction mechanism. Kelvin DJ, et al. **J Cell Physiol** 1989 Feb;138(2):273–80
Signal transduction pathway for IL-1. Involvement of a pertussis toxin–sensitive GTP–binding protein in the activation of adenylate cyclase. Chedid M, et al. **J Immunol** 1989 Jun 15;142(12):4301–6
Pertussis toxin effects on T lymphocytes are mediated through CD3 and not by pertussis toxin catalyzed modification of a G protein. Gray LS, et al. **J Immunol** 1989 Mar 1;142(5):1631–8
Molecular mechanisms of lymphocyte extravasation. III. The loss of lymphocyte extravasation potential induced by pertussis toxin is not mediated via the activation of protein kinase C. Huang K, et al. **J Immunol** 1989 Jul 1; 143(1):229–38
IL-2 secretion is pertussis toxin sensitive in a T lymphocyte hybridoma. Stanley JB, et al. **J Immunol** 1989 May 15; 142(10):3546–52
Subcellular distribution and membrane association of human neutrophil substrates for ADP–ribosylation by pertussis toxin and cholera toxin. Volpp BD, et al. **J Immunol** 1989 May 1;142(9):3206–12
Induction of signal transduction in human neutrophils by Candida albicans hyphae: the role of pertussis toxin–sensitive guanosine triphosphate–binding proteins. Lyman CA, et al. **J Infect Dis** 1988 Nov;158(5):1056–64
Actions of pertussis toxin on the inhibitory effects of dopamine and somatostatin on prolactin and growth hormone release from ovine anterior pituitary cells. Boyd RS, et al. **J Mol Endocrinol** 1988 Nov;1(3):179–86
Interleukin-1 induces a pertussis toxin–sensitive increase in diacylglycerol accumulation in mouse thymoma cells. Dobson PR, et al. **J Mol Endocrinol** 1989 May;2(3):R5–7
Pertussis toxin attenuates 5-hydroxytryptamine1A receptor–mediated inhibition of forskolin–stimulated adenylate cyclase activity in rat hippocampal membranes. Okada F, et al. **J Neurochem** 1989 May;52(5):1566–9
Islet–activating protein inhibits the beta-adrenergic receptor facilitation elicited by gamma–aminobutyric acidB receptors. Wojcik WJ, et al. **J Neurochem** 1989 Sep; 53(3):753–8
Opioid receptors in magnesium–digitonin–solubilized rat brain membranes are tightly coupled to a pertussis toxin–sensitive guanine nucleotide–binding protein. Wong YH, et al. **J Neurochem** 1989 Apr;52(4):999–1009
Muscarine and t-LHRH suppress M-current by activating an IAP–insensitive G-protein. Pfaffinger P. **J Neurosci** 1988 Sep;8(9):3343–53
Evidence that guanosine triphosphate (GTP)–binding proteins control a synaptic response in brain: effect of pertussis toxin and GTP gamma S on the late inhibitory postsynaptic potential of hippocampal CA3 neurons. Thalmann RH. **J Neurosci** 1988 Dec;8(12):4589–602
Clinical, metabolic, and antibody responses of adult volunteers to an investigational vaccine composed of pertussis toxin inactivated by hydrogen peroxide. Sekura RD, et al. **J Pediatr** 1988 Nov;113(5):806–13
Carbachol depolarizes and accelerates pacemaker activity in the sinoatrial node of chicks treated with pertussis toxin. Agnarsson U, et al. **J Pharmacol Exp Ther** 1988 Oct; 247(1):150–5
Differential effects of somatostatin on atrial and ventricular contractile responses in guinea pig heart: influence of pretreatment with islet–activating protein. Endou M, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):726–33
Coupling of hepatic prostaglandin receptors to adenylate cyclase through a pertussis toxin sensitive guanine nucleotide regulatory protein. Garrity MJ, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):979–83
Effect of pertussis toxin treatment on postjunctional alpha–1 and alpha–2 adrenoceptor function in the cardiovascular system of the pithed rat. Nichols AJ, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):203–9
Pertussis toxin inhibits endothelium–dependent relaxations to certain agonists in porcine coronary arteries. Flavahan NA, et al. **J Physiol (Lond)** 1989;408:549–60
Somatostatin induces an inward rectification in rat locus coeruleus neurones through a pertussis toxin–sensitive mechanism. Inoue M, et al. **J Physiol (Lond)** 1988 Dec; 407:177–98
The effects of islet activating protein on oral glucose tolerance in the genetically obese fa/fa rat. Proietto J, et al. **Metabolism** 1989 Apr;38(4):338–42
Role of pertussigen (pertussis toxin) on the mouse protective activity of vaccines made from Bordetella species. Munoz JJ, et al. **Microbiol Immunol** 1989;33(4):341–55
Pertussis toxin enhances follicle–stimulating hormone–stimulated cAMP production in rat seminiferous tubules in a stage–dependent manner. Huhtaniemi I, et al. **Mol Cell Endocrinol** 1989 Mar;62(1):89–94
Site of pertussis toxin–induced ADP–ribosylation on Gi is critical for receptor modulation of GDP interaction with Gi. Gosse ME, et al. **Mol Endocrinol** 1989 Feb;3(2):315–24
The effects of pertussis toxin on autoreceptor–mediated inhibition of dopamine synthesis in the rat striatum. Bean AJ, et al. **Mol Pharmacol** 1988 Dec;34(6):715–8
Pertussis toxin prevents adenosine receptor– and m–cholinoceptor–mediated sinus rate slowing and AV conduction block in the guinea–pig heart. Böhm M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan–Feb; 339(1–2):152–8
The inhibition of alpha 1–adrenoceptor–mediated contractions of rabbit pulmonary artery by Ca2+–withdrawal, pertussis toxin and N–ethylmaleimide is dependent on agonist intrinsic efficacy. Liebau S, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):496–502
Pertussis toxin and N–ethylmaleimide inhibit histamine– but not calcium ionophore–induced endothelium–dependent relaxation. Weinheimer G, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan–Feb; 339(1–2):14–8
Effects of pertussis toxin on opioid regulation of catecholamine release from rat and guinea pig brain slices. Werling LL, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):509–13
Multiple pertussis toxin substrates as candidates for regulatory G proteins of adenylate cyclase coupled to the somatostatin receptor in primary rat astrocytes. Gebicke–Haerter PJ, et al. **Neurochem Res** 1988 Oct; 13(10):997–1001
Pertussis toxin pretreatment discriminates between pre– and postsynaptic actions of baclofen in rat dorsal raphe nucleus in vitro. Colmers WF, et al. **Neurosci Lett** 1988 Nov 11; 93(2–3):300–6
Pertussis toxin pretreatment antagonizes the actions of mu– and delta–opiate agonists in hippocampal slices. Dunwiddie TV, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):329–34
Pertussis toxin treatment counteracts the cardiovascular effects of neuropeptide Y and clonidine in the awake unrestrained rat. Fuxe K, et al. **Neurosci Lett** 1989 Jul 3; 101(3):337–41
GTP–binding proteins mediate the M2–muscarinic effect on the action potential in isolated sympathetic neurons of rabbits. Mochida S, et al. **Neurosci Lett** 1988 Nov 11; 93(2–3):247–52
Pertussis toxin attenuates clonidine inhibition of catecholamine release in adrenal chromaffin cells. Ohara–Imaizumi M, et al. **Neurosci Lett** 1988 Nov 11; 93(2–3):294–9
Identification of the pertussis and cholera toxin substrates in normal and N–ras transformed NIH3T3 fibroblasts and an assessment of their involvement in bombesin–stimulation of inositol phospholipid metabolism. Milligan G, et al. **Oncogene** 1989 May;4(5):659–63
Pertussis toxin inhibits the behavioural and ECoG effects induced by clonidine and yohimbine after their microinfusion into the locus coeruleus. De Sarro GB, et al. **Pharmacol Res Commun** 1988 Dec;20(12):1095–6
Pertussis toxin induces structural changes in G alpha proteins independently of ADP–ribosylation. Ribeiro–Neto FA, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2577–81
Pertussis toxin modulates dopamine inhibition of Na,K–ATPase activity in rat proximal convoluted tubule segments. Bertorello A, et al. **Prog Clin Biol Res** 1988; 268B:353–6
A pertussis toxin–sensitive G protein in hippocampal long–term potentiation. Goh JW, et al. **Science** 1989 May 26;244(4907):980–3
Pertussis toxin–insensitive mechanism for carbachol–induced depolarization and positive inotropic effect in heart muscle. Pappano AJ, et al. **Trends Pharmacol Sci** 1988 Feb; Suppl:35–9 (26 ref.)
[Effect of islet activating protein on somatostatin–induced inhibition of cellular cyclic AMP content in isolated rat pancreatic acini] Matozaki T, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Jun 20;64(6):523–30 (Eng. Abstr.) **(Jpn)**

PHYSIOLOGY

Evidence for a pertussis toxin–sensitive G protein involved in the control of meiotic reinitiation of Xenopus laevis oocytes. Pellaz V, et al. **Exp Cell Res** 1989 Jul; 183(1):245–50
A permissive role of pertussis toxin substrate G–protein in P2–purinergic stimulation of phosphoinositide turnover and arachidonate release in FRTL–5 thyroid cells. Cooperative mechanism of signal transduction systems. Okajima F, et al. **J Biol Chem** 1989 Aug 5;264(22):13029–37

TOXICITY

Effects of pertussis toxin on the behavioural and ECoG spectrum changes induced by clonidine and yohimbine after their microinfusion into the locus coeruleus. De Sarro GB, et al. **Br J Pharmacol** 1989 Jan;96(1):59–64
Effects of pertussis toxin and indomethacin on murine lymphocytes in the bronchoalveolar lavage fluids. Torre D, et al. **FEMS Microbiol Lett** 1989 Jan 15;48(2):209–12
Failure of pertussis toxin to inhibit activation of guanylate cyclase by the heat–stable enterotoxin of Escherichia coli (STa) in the T84 cell line. Crane JK, et al. **Infect Immun** 1989 Apr;57(4):1186–91
Pertussis toxin treatment in vivo is associated with a decline in G–protein beta–subunits. Watkins DC, et al. **J Biol Chem** 1989 Mar 5;264(7):4186–94
Cyclic AMP levels in lung and spleen tissue of mice treated with pertussis toxin. Torre D, et al. **Microbiologica** 1989 Jan;12(1):29–33
Suppression of leukotriene synthesis in human leukocytes by a urea extract of Bordetella pertussis: evidence for mediation by adenylate cyclase toxin. Green FA, et al. **Toxicon** 1988;26(12):1187–91
Effect of hyperreactivity to endotoxin on the toxicity of pertussis vaccine and pertussis toxin in mice. Sidey FM, et al. **Vaccine** 1989 Jun;7(3):237–41
[A study of the ability of Bordetella pertussis toxin to induce the formation of B–suppressors] Pinegin BV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Apr;(4):69–73 (Eng. Abstr.) **(Rus)**

PERTUSSIS VACCINE

Pertussis vaccines in Japan. Kimura M, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Apr;30(2):143–53
Development of acellular pertussis vaccine in Japan. Oda M, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Apr; 30(2):136–42
Pediatricians' recommendations for antipyretic agents with DTP immunizations: a survey of current practice [letter] Flanagan PJ, et al. **Am J Dis Child** 1989 May;143(5):517–8
The current state of pertussis and pertussis vaccines. A report on the Fifth International Symposium on Pertussis [editorial] Fulginiti VA. **Am J Dis Child** 1989 May; 143(5):532–3
DTP immunization status and tetanus antitoxin titers of Mexican American children ages six months through eleven years. Gergen PJ, et al. **Am J Public Health** 1988 Nov; 78(11):1446–50
Parents' beliefs about vaccination [letter] **BMJ** 1989 Jul 22; 299(6693):257
Pertussis vaccine: why do some parents say no? Goldman B. **Can Med Assoc J** 1988 Dec 15;139(12):1174–7
The efficacy of pertussis vaccines under conditions of household exposure. Further analysis of the 1978–80 PHLS/ERL study in 21 area health authorities in England. Fine PE, et al. **Int J Epidemiol** 1988 Sep;17(3):635–42
Human serum antibody responses to Bordetella pertussis infection and pertussis vaccination. Thomas MG, et al. **J Infect Dis** 1989 Feb;159(2):211–8
The hyperacute form of allergic encephalomyelitis produced in rats without the aid of pertussis vaccine. Levine S, et al. **J Neuropathol Exp Neurol** 1989 May;48(3):255–62
The efficacy of acellular pertussis vaccine [letter] [published erratum appears in JAMA 1989 Jul 7;262(1):33] Olin P, et al. **JAMA** 1989 Jan 27;261(4):560
Mortality and morbidity from invasive bacterial infections during a clinical trial of acellular pertussis vaccines in Sweden. Storsaeter J, et al. **Pediatr Infect Dis J** 1988 Sep; 7(9):637–45
Pertussis immunization [letter] Emerson BP. **Pediatrics** 1989 Apr;83(4 Pt 2):638–9
Studies on the optimal conditions for inactivation of Bordetella pertussis organisms with glutaraldehyde for preparation of a safe and potent pertussis vaccine. Gupta RK, et al. **Vaccine** 1988 Dec;6(6):491–6
Intraperitoneal injection of Bordetella pertussis vaccine and thiomersal failed to produce intussusception in mice. Reijnen JA, et al. **Z Versuchstierkd** 1988;31(6):245–7
[A better vaccine against whooping cough?] Rümke HC. **Ned Tijdschr Geneeskd** 1988 Nov 26;132(48):2192–4 **(Dut)**
[Pertussis vaccine—a cause for concern? (editorial)] Weizer S, et al. **Harefuah** 1988 Aug;115(3–4):96–8 **(Heb)**
[The effect of histamine on the rosette–forming ability of T–lymphocytes upon immunization with DPT vaccine and its components] Kamalova MN, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Feb;(2):83–5 (Eng. Abstr.) **(Rus)**
[Vaccination coverage in a school population of Guipúzcoa: DTP, polio and measles] Basterretxea Irurzun M, et al. **Gac Sanit** 1988 Jan–Feb;2(4):26–9 (Eng. Abstr.) **(Spa)**
[Should acellular pertussis vaccine be introduced into Sweden?] Kaijser B. **Lakartidningen** 1988 Oct 19; 85(42):3447 **(Swe)**

ADMINISTRATION & DOSAGE

Poliovirus vaccine policy. Another perspective [editorial] Katz SL. **Am J Dis Child** 1989 Sep;143(9):1007–9
Why wait for DTP–E–IPV? [editorial] Marcuse EK. **Am J Dis Child** 1989 Sep;143(9):1006–7
Comparison of immunogenicity of combined DPT—inactivated injectable polio vaccine (DPT – IPV) and association of DPT and attenuated oral polio vaccine (DPT + OPV) in Pakistani children. Qureshi AW, et al. **JPMA** 1989 Feb;39(2):31–5

Immunization of children who have received fractional doses of diphtheria-tetanus toxoids-pertussis vaccine. **Pediatr Infect Dis J** 1989 Feb;8(2):129–30

Half-dose immunization for diphtheria, tetanus, pertussis: response of preterm infants. Bernbaum J, et al. **Pediatrics** 1989 Apr;83(4):471–6

Optimum needle length for diphtheria-tetanus-pertussis inoculation of infants. Hick JF, et al. **Pediatrics** 1989 Jul; 84(1):136–7

[Whooping cough—not eradicated, but forgotten] Swidsinski S, et al. **Z Arztl Fortbild (Jena)** 1989;83(6):309–12 (29 ref.) **(Ger)**

ADVERSE EFFECTS

Etiology and treatment of infantile spasms: current concepts, including the role of DPT immunization. Millichap JG. **Acta Paediatr Jpn Overseas Ed** 1987 Feb;29(1):54–60

Effect of prophylactic acetaminophen administration on reaction to DTP vaccination. Uhari M, et al. **Acta Paediatr Scand** 1988 Sep;77(5):747–51

Why pertussis immunisation? Tribe P. **Aust Fam Physician** 1989 Aug;18(8):985–90 (40 ref.)

Acellular DTP vaccine produces fewer reactions [news] **Bol Asoc Med P R** 1988 Nov;80(11):440–1

Pertussis vaccine and permanent brain damage. **Can Dis Wkly Rep** 1988 Jul 2;14(26):111–5 **(Eng, Fre)**

Adverse local reactions to fourth and fifth doses of DPT vaccine—Alberta. Hanrahan A, et al. **Can Dis Wkly Rep** 1988 Mar 19;14(11):45–7 **(Eng, Fre)**

Local adverse reactions to adsorbed DPT vaccine—Surrey, British Columbia. Meekison W, et al. **Can Dis Wkly Rep** 1989 Apr 1;15(13):73–5 **(Eng, Fre)**

Local adverse reactions to diphtheria and tetanus toxoids and pertussis vaccine, adsorbed, in Surrey, BC. **Can Med Assoc J** 1989 Aug 15;141(4):312–3

Pertussis vaccine: is the controversy nearly over? Goldman B. **Can Med Assoc J** 1988 Dec 1;139(11):1082–7

The search for a safer pertussis vaccine. Goldman B. **Can Med Assoc J** 1989 Jan 1;140(1):56–9

Pertussis vaccine and encephalopathy after the Loveday trial [editorial] Scheifele DW. **Can Med Assoc J** 1988 Dec 1; 139(11):1045–6

Participation of lipid peroxides in rat pertussis vaccine pleurisy. II. Leucocytes and related enzymes. Yuda Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2490–8

Participation of lipid peroxidation in rat pertussis vaccine pleurisy. I. Thiobarbituric acid (TBA) reactant and ceruloplasmin. Yuda Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2691–4

Infectious episodes following diphtheria-pertussis-tetanus vaccination. A preliminary observation in infants. Jaber L, et al. **Clin Pediatr (Phila)** 1988 Oct;27(10):491–4

Pertussis vaccine. Shendurnikar N. **Indian Pediatr** 1989 Mar; 26(3):270–3 (28 ref.)

Sudden infant death and immunization: an extensive epidemiological approach to the problem in France—winter 1986. Bouvier-Colle MH, et al. **Int J Epidemiol** 1989 Mar;18(1):121–6

Adverse reactions of medical organizations to DTP vaccine: the vaccine-related compensation bill. Sepkowitz S. **J Okla State Med Assoc** 1989 Jan;82(1):21–4

Bulging fontanelle after immunization with diphtheria-tetanus-pertussis vaccine and diphtheria-tetanus vaccine. Gross TP, et al. **J Pediatr** 1989 Mar;114(3):423–5

Relationship of pertussis immunization to the onset of neurologic disorders: a retrospective epidemiologic study. Shields WD, et al. **J Pediatr** 1988 Nov;113(5):801–5

Adverse events following DTP immunization in Maryland, 1987. Siddiqui MA, et al. **Md Med J** 1989 Jul;38(7):556–9

Analyses of adverse reactions to diphtheria and tetanus toxoids and pertussis vaccine by vaccine lot, endotoxin content, pertussis vaccine potency and percentage of mouse weight gain. Baraff LJ, et al. **Pediatr Infect Dis J** 1989 Aug;8(8):502–7

Pertussis: the disease and the vaccine. Fenichel GM. **Pediatr Neurol** 1988 Jul-Aug;4(4):201–6 (34 ref.)

Adverse reactions and serologic response to a booster dose of acellular pertussis vaccine in children immunized with acellular or whole-cell vaccine as infants. Blennow M, et al. **Pediatrics** 1989 Jul;84(1):62–7

Adverse reactions to diphtheria, tetanus, pertussis-polio vaccination at 18 months of age: effect of injection site and needle length. Ipp MM, et al. **Pediatrics** 1989 May; 83(5):679–82

Experiences with acellular pertussis vaccine in Japan and epidemiology of pertussis. Kimura M, et al. **Tokai J Exp Clin Med** 1987 Dec;12(5–6):263–73

Permanent brain damage and pertussis vaccination: is the end of the saga in sight? Griffith AH. **Vaccine** 1989 Jun; 7(3):199–210

Pertussis [editorial] Plotkin SA. **Vaccine** 1989 Jun;7(3):195

Local reactions of Zwittergent-containing meningococcal vaccine after intramuscular injection in rats: comparison with the effect of diphtheria-pertussis-tetanus-polio vaccine. Speijers GJ, et al. **Vaccine** 1988 Oct;6(5):419–22

Unpredictable adverse reactions [letter] Kurtz PH. **West J Med** 1989 Jul;151(1):84

Pertussis—a disease and a vaccine that are not going away [editorial] Orenstein WA, et al. **West J Med** 1989 Mar; 150(3):339–41

[Vaccination of children with reactions to mixed vaccine against diphtheria, tetanus and whooping cough] Bergmannová V, et al. **Cesk Pediatr** 1988 Sep;43(9):522–6 (Eng. Abstr.) **(Cze)**

[Follow-up of a group of children with severe reactions to mixed vaccine against diphtheria, tetanus and whooping cough from the aspect of their immunological profile] Bergmannová V, et al. **Cesk Pediatr** 1988 Oct; 43(10):599–601 (Eng. Abstr.) **(Cze)**

[The pediatric vaccination counseling facility] Wiersbitzky S, et al. **Kinderarztl Prax** 1989 Jun;57(6):295–6 **(Ger)**

[A pediatric vaccination counseling service] Wiersbitzky S, et al. **Kinderarztl Prax** 1988 Nov;56(11):557–8 **(Ger)**

ANALYSIS

Lipopolysaccharides in a traditional pertussis vaccine. Ibsen P, et al. **J Biol Stand** 1988 Oct;16(4):299–309

IMMUNOLOGY

Efficacy and immunogenicity of acellular pertussis vaccine by manufacturer and patient age. Aoyama T, et al. **Am J Dis Child** 1989 Jun;143(6):655–9

Antibody level of New Zealand children immunized with the triple vaccine DTP (diphtheria-tetanus-pertussis). Lau RC. **Epidemiol Infect** 1988 Oct;101(2):405–10

Rapid assessment of the antitetanus immune status of a subject using Dot-ELISA. Mastroeni P, et al. **Eur J Epidemiol** 1989 Mar;5(1):97–100

Role of interferon-gamma in the modulation of the IgE response by 2,4-dinitrophenyl-Bordetella pertussis vaccine in the mouse. Hagen M, et al. **Eur J Immunol** 1989 Mar; 19(3):441–6

Immunoglobulin E response to pertussis toxin in whooping cough and after immunization with a whole-cell and an acellular pertussis vaccine. Hedenskog S, et al. **Int Arch Allergy Appl Immunol** 1989;89(2–3):156–61

In vitro induction of antigen specific antibody synthesis and proliferation of T lymphocytes with acellular pertussis vaccines, pertussis toxin and filamentous haemagglutinin in humans. Wiertz EJ, et al. **J Biol Stand** 1989 Apr; 17(2):181–90

Subclass compositions of immunoglobulin G to pertussis toxin in patients with whooping cough, in healthy individuals, and in recipients of a pertussis toxoid vaccine. Zackrisson G, et al. **J Clin Microbiol** 1989 Jul;27(7):1567–71

Haemophilus influenzae type b anticapsular antibody responses to PRP-pertussis and PRP-D vaccines in Alaska native infants. Ward JI, et al. **J Infect Dis** 1988 Oct; 158(4):719–23

Role of pertussigen (pertussis toxin) on the mouse protective activity of vaccines made from Bordetella species. Munoz JJ, et al. **Microbiol Immunol** 1989;33(4):341–55

[Evaluation on the basis of the rates of secondary attack of whooping cough in families of the vaccination and prophylactic efficacy of pertussis vaccine in 2 districts of the city of Bucharest] Ion-Nedelcu N, et al. **Rev Ig [Bacteriol]** 1988 Oct-Dec;33(4):319–26 (Eng. Abstr.) **(Rum)**

[Evaluation of postvaccinal pertussis immunity by using immunoenzyme analysis] Khardina AA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jan;(1):50–4 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

In vivo beta 2-adrenoceptor hyporesponsiveness in the cardiovascular system of the pig after Bordetella pertussis. Van Heuven-Nolsen D, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):135–41

Elevation of glucose-6-phosphate dehydrogenase levels in alloxan diabetic mice by Bordetella pertussis cell extract. Kala A, et al. **Indian J Biochem Biophys** 1988 Oct; 25(5):413–5

Clinical, metabolic, and antibody responses of adult volunteers to an investigational vaccine composed of pertussis toxin inactivated by hydrogen peroxide. Sekura RD, et al. **J Pediatr** 1988 Nov;113(5):806–13

[Polymyxin B suppresses the stimulating action of pertussis vaccine on hematopoiesis in mice] Sanin AV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Nov;(11):19–23 (Eng. Abstr.) **(Rus)**

STANDARDS

Correlation between mouse intracerebral potency & 50 per cent histamine sensitizing dose of pertussis vaccine. Gupta RK, et al. **Indian J Med Res** 1989 May;89:144–9

Development of a mouse model to estimate the potency of the diphtheria toxoid component of diphtheria-tetanus and diphtheria-tetanus-pertussis vaccines. Maheshwari SC, et al. **J Biol Stand** 1988 Jul;16(3):139–46

Comparing the efficacy of pertussis vaccines [letter] Olin P. **Lancet** 1989 Jan 14;1(8629):95–6

SUPPLY & DISTRIBUTION

DTP vaccine litigation update [letter] Hinman AR. **Am J Dis Child** 1988 Dec;142(12):1275–6

THERAPEUTIC USE

Response of preterm infants to diphtheria-tetanus-pertussis vaccine. Koblin BA, et al. **Pediatr Infect Dis J** 1988 Oct; 7(10):704–11

TOXICITY

Evaluation of the mouse model for study of encephalopathy in pertussis vaccine recipients. Hewlett EL, et al. **Infect Immun** 1989 Mar;57(3):661–3 (29 ref.)

The effects of purified pertussis components and lipopolysaccharide on the results of the mouse weight gain test. Gupta RK, et al. **J Biol Stand** 1988 Oct;16(4):321–31

Determination of the epinephrine-refractory hypoglycaemic activity of whole-cell pertussis vaccine in mice. Horiuchi Y, et al. **J Biol Stand** 1988 Oct;16(4):239–48

The pyrogenicity of pertussis vaccine in mice and the factors in the vaccine responsible for this effect. Ishida S, et al. **J Biol Stand** 1989 Jan;17(1):41–51

Effect of hyperreactivity to endotoxin on the toxicity of pertussis vaccine and pertussis toxin in mice. Sidey FM, et al. **Vaccine** 1989 Jun;7(3):237–41

[Comparative study of the rat paw edema test for evaluating the reactivity of combined vaccines containing a pertussis component] Pruchová J, et al. **Cesk Farm** 1988 Sep; 37(7):322–6 (Eng. Abstr.) **(Cze)**

PERVASIVE CHILD DEVELOPMENT DISORDERS see **CHILD DEVELOPMENT DISORDERS, PERVASIVE**

PERYLENE see under **BENZANTHRACENES**

PES CAVUS see **FOOT DEFORMITIES**

PES PLANUS see **FLATFOOT**

PESSARIES

Vaginal odor chromatographic assays; changes caused by douche or suppository—preliminary data. Keith L, et al. **Chic Med Sch Q** 1970;30(1):1–11

Influence of the maturity of the vaginal epithelium upon the absorption of vaginally administered estradiol-17 beta and progesterone in postmenopausal women. Pschera H, et al. **Gynecol Obstet Invest** 1989;27(4):204–7

Use of prostaglandin E2 vaginal suppositories in third-trimester fetal demise. Martin RW, et al. **Int J Gynaecol Obstet** 1989 Jul;29(3):269–71

[Topical therapy with placental polydeoxyribonucleotide in cervical ectopy and ectropion] de Luca Brunori I, et al. **Ann Ostet Ginecol Med Perinat** 1989 Jan-Feb;110(1):35–41 (Eng. Abstr.) **(Ita)**

ADVERSE EFFECTS

Cardiac standstill induced by prostaglandin pessaries [letter] Kalra PA, et al. **Lancet** 1989 Jun 24;1(8652):1460–1

PESSARIES, INTRACERVICAL see **INTRAUTERINE DEVICES**

PESSARIES, INTRAUTERINE see **INTRAUTERINE DEVICES**

PEST CONTROL

The Venezuelan experience in the control of schistosomiasis mansoni. Incani RN. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:89–93

Why it is difficult to control Biomphalaria glabrata, the vector snail of schistosomiasis. Jurberg P. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:203–7

The intermediate snail-host: an agenda for future study. Michelson EH. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:193–5

A review of achievements of the national schistosomiasis control program in middle and upper Egypt areas. Nassif S. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:83–7

A holistic view of schistosomiasis and snail control. Thomas JD. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:183–92 (36 ref.)

[Varroatosis and methods for its control] Sabolic M, et al. **Tierarztl Prax** 1989;17(2):221–5 (18 ref.) (Eng. Abstr.) **(Ger)**

[Biological activity of precozen I on Musca domestica and Aedes aegypti] Kostina MN. **Med Parazitol (Mosk)** 1989 Mar-Apr;(2):83–7 (Eng. Abstr.) **(Rus)**

[The activity of the Control de Vectores during the 50th anniversary year of the Instituto de Medicina Tropical "Pedro Kouri"] García Avila I, et al. **Rev Cubana Med Trop** 1988 May-Aug;40(2):97–101 (Eng. Abstr.) **(Spa)**

LEGISLATION & JURISPRUDENCE

"Miraculous insecticide chalk"—An unregistered household insecticide [letter] Kizer KW, et al. **West J Med** 1989 Jun; 150(6):698

[The granting of permission for exceptions to section 4 of the drinking water ordinance concerning pesticide contamination] Hässelbarth U, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:601–6; discussion 637–51 **(Ger)**

[Viewpoints of groundwater protection in the execution of plant protection laws] Hertel W. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:77–83; discussion 85–95 **(Ger)**

METHODS

Field evaluation of controlled release copper glass as a molluscicide in snail control. Chandiwana SK, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):952–5

[Effects of a subethal concentration of molluscacide (CuCl2) on the reproductive activity and movements of the molluscan host Lymnaea truncatula Müller] Rondelaud D. **Ann Rech Vet** 1988;19(4):273–8 (Eng. Abstr.) (Fre)

[Combined and alternate control of Lymnaea truncatula Müller: comparative study of 3 technics for spreading of the molluscacide] Rondelaud D. **Ann Rech Vet** 1988; 19(4):279–82 (Eng. Abstr.) (Fre)

TRENDS

The future of vector biology and control in the World Health Organization. Gratz NR. **J Am Mosq Control Assoc** 1985 Sep;1(3):273–8

PEST CONTROL, BIOLOGICAL

Glossina morsitans morsitans: mortalities caused in adults by experimental infection with entomopathogenic fungi. Kaaya GP. **Acta Trop (Basel)** 1989 Mar;46(2):107–14

Biological control of the snail hosts of Schistosoma mansoni in the Caribbean area using Thiara spp. Pointier JP, et al. **Acta Trop (Basel)** 1989 May;46(3):147–55 (48 ref.)

Industrial production of viral pesticides. Shieh TR. **Adv Virus Res** 1989-36:315–43 (37 ref.)

Field tests of Bacillus thuringiensis var. israelensis against Culex mosquito larvae in Dhaka City. Ahmed TU, et al. **Bangladesh Med Res Counc Bull** 1988 Dec;14(2):58–66

The biology of Toxorhynchites splendens (Wiedemann) (Diptera: Culicidae) and its potentiality as a biological control agent to other mosquitoes. Elias M, et al. **Bangladesh Med Res Counc Bull** 1988 Jun;14(1):15–20

Biological control of insect pests affecting man and animals in the tropics. Rawlins SC. **CRC Crit Rev Microbiol** 1989; 16(4):235–52 (103 ref.)

Extracts of Indian plants as mosquito larvicides. Evans DA, et al. **Indian J Med Res** 1988 Jul;88:38–41

Giant gourami (Osphronemus goramy: Anabantoidei) as a potential agent for control of weeds, the breeding source for the vectors of Brugia malayi. Jayasree M, et al. **Indian J Med Res** 1989 Mar;89:110–3

Toxic effect of seaweed extracts on mosquito larvae. Thangam TS, et al. **Indian J Med Res** 1988 Jul;88:35–7

Field experiments on persistence of Culicinomyces clavisporus. Allen GR, et al. **J Am Mosq Control Assoc** 1986 Sep;2(3):368–71

The compatibility of methoprene with the mosquito fungus Culicinomyces clavisporus. Allen GR, et al. **J Am Mosq Control Assoc** 1985 Jun;1(2):243–5

Evaluation of a sustained release formulation of Bacillus thuringiensis (H–14) for control of woodland Culex mosquitoes. Apperson CS, et al. **J Am Mosq Control Assoc** 1986 Sep;2(3):376–8

Encapsulation of the mosquito fungal pathogen Lagenidium giganteum (Oomycetes:Lagenidiales) in calcium alginate. Axtell RC, et al. **J Am Mosq Control Assoc** 1987 Sep; 3(3):450–9

Laboratory evaluation of the bladderwort plant, Utricularia vulgaris (Lentibulariaceae), as a predator of late instar Culex pipiens and assessment of its biocontrol potential. Baumgartner DL. **J Am Mosq Control Assoc** 1987 Sep; 3(3):504–7

Efficacy of Bacillus sphaericus and Bacillus thuringiensis var. israelensis for control of Culex pipiens and floodwater Aedes larvae in Iowa. Berry WJ, et al. **J Am Mosq Control Assoc** 1987 Dec;3(4):579–82

Spatial distributions of Anopheles freeborni, Gambusia affinis and Lepomis cyanellus in experimental rice plots. Blaustein L. **J Am Mosq Control Assoc** 1989 Jun;5(2):254–7

Comparative larvivorous performances of mosquitofish, Gambusia affinis, and juvenile Sacramento blackfish, Orthodon microlepidotus, in experimental paddies. Cech JJ Jr, et al. **J Am Mosq Control Assoc** 1987 Mar;3(1):35–41

Field trials of Tolypocladium cylindrosporum against larvae of Aedes polynesiensis breeding in crab holes in Fiji. Gardner JM, et al. **J Am Mosq Control Assoc** 1986 Sep; 2(3):292–5

Susceptibility of three species of mosquitoes to a Pasteur Institute preparation of Bacillus sphaericus (strain 2297). Gardner JM, et al. **J Am Mosq Control Assoc** 1986 Jun; 2(2):237–8

Preliminary field trials with the entomopathogenic hyphomycete Tolypocladium cylindrosporum in central Alberta. Goettel MS. **J Am Mosq Control Assoc** 1987 Jun; 3(2):239–45

Studies on bioassay of the entomopathogenic hyphomycete fungus Tolypocladium cylindrosporum in mosquitoes. Goettel MS. **J Am Mosq Control Assoc** 1987 Dec;3(4):561–7

Effect of nutrient concentration in culturing three isolates of the mosquito fungal pathogen, Lagenidium giganteum (Oomycetes: Lagenidiales), on sunflower seed extract. Guzman DR, et al. **J Am Mosq Control Assoc** 1986 Jun; 2(2):196–200

Population dynamics of Culex quinquefasciatus and the fungal pathogen Lagenidium giganteum (Oomycetes: Lagenidiales) in stagnant water pools. Guzman DR, et al. **J Am Mosq Control Assoc** 1987 Sep;3(3):442–9

Temperature and water quality effects in simulated woodland pools on the infection of Culex mosquito larvae by Lagenidium giganteum (Oomycetes: Lagenidiales) in North Carolina. Guzman DR, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):211–8

Effects of sublethal exposure to Bacillus thuringiensis var. israelensis on larval development and adult size in Aedes aegypti. Hare SG, et al. **J Am Mosq Control Assoc** 1986 Sep;2(3):325–8

Dose–mortality responses of crawfish and mosquitoes to selected pesticides. Holck AR, et al. **J Am Mosq Control Assoc** 1987 Sep;3(3):407–11

Ground and aerial application of the sexual and asexual stages of Lagenidium giganteum (Oomycetes: Lagenidiales) for mosquito control. Kerwin JL, et al. **J Am Mosq Control Assoc** 1986 Jun;2(2):182–9

Ground and aerial application of the asexual stage of Lagenidium giganteum for control of mosquitoes associated with rice culture in the Central Valley of California. Kerwin JL, et al. **J Am Mosq Control Assoc** 1987 Mar; 3(1):59–64

An evaluation of Gambusia affinis and Bacillus thuringiensis var. israelensis as mosquito control agents in California wild rice fields. Kramer VL, et al. **J Am Mosq Control Assoc** 1988 Dec;4(4):470–8

An evaluation of the mosquitofish, Gambusia affinis, and the inland silverside, Menidia beryllina, as mosquito control agents in California wild rice fields. Kramer VL, et al. **J Am Mosq Control Assoc** 1987 Dec;3(4):626–32

Efficacy of granular formulations of Bacillus thuringiensis (H–14) for the control of Anopheles larvae in rice fields. Lacey LA, et al. **J Am Mosq Control Assoc** 1985 Mar; 1(1):38–42

Beecomist–applied Bacillus sphaericus for the control of riceland mosquitoes. Lacey LA, et al. **J Am Mosq Control Assoc** 1986 Dec;2(4):548–51

Laboratory evaluations of formulations of Arosurf MSF and Bacillus sphaericus against larvae and pupae of Culex quinquefasciatus. Levy R, et al. **J Am Mosq Control Assoc** 1986 Jun;2(2):233–6

Mosquitofish Gambusia affinis holbrooki as a malaria vector control agent in Gezira irrigation canals of the Sudan. Mahmoud AA. **J Am Mosq Control Assoc** 1985 Dec; 1(4):524–6

Laboratory and field efficacy of Bacillus thuringiensis var. Israelensis and Bacillus sphaericus against Anopheles gambiae s.l. and Culex quinquefasciatus in Ouagadougou, Burkina Faso. Majori G, et al. **J Am Mosq Control Assoc** 1987 Mar;3(1):20–5

Studies on potential biological control agents of immature mosquitoes in sewage wastewater in southern California. Mian LS, et al. **J Am Mosq Control Assoc** 1986 Sep; 2(3):329–35

Efficacy and longevity of Bacillus sphaericus 2362 formulations for control of mosquito larvae in dairy wastewater lagoons. Mulla MS, et al. **J Am Mosq Control Assoc** 1988 Dec;4(4):448–52

Swath width determination for Beecomist–applied Bacillus thuringiensis (H–14) against Anopheles quadrimaculatus larvae in rice fields. Sandoski CA, et al. **J Am Mosq Control Assoc** 1986 Dec;2(4):461–8

Genetic sexing system for the preferential elimination of females in Culex quinquefasciatus. Shetty NJ. **J Am Mosq Control Assoc** 1987 Mar;3(1):84–6

Evaluation of methoprene, temephos and Bacillus thuringiensis var. israelensis against Coquillettidia perturbans larvae in Minnesota. Sjogren RD, et al. **J Am Mosq Control Assoc** 1986 Sep;2(3):276–9

Laboratory and field studies with 32P labeled Toxorhynchites rutilus rutilus. Smittle BJ, et al. **J Am Mosq Control Assoc** 1986 Dec;2(4):474–7

Density estimation and population growth of mosquitofish (Gambusia affinis) in rice fields. Stewart RJ, et al. **J Am Mosq Control Assoc** 1985 Mar;1(1):8–13

Vertical distribution of ovipositing Toxorhynchites moctezuma in Trinidad. Tikasingh ES, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):319–21

Measurement of the effect of microsporidian pathogens on mosquito larval mortality under artificial field conditions. Undeen AH, et al. **J Am Mosq Control Assoc** 1987 Mar; 3(1):91–3

Establishment and recycling of Romanomermis culicivorax (Nematoda: Mermithidae) in Louisiana ricelands. Walker TW, et al. **J Am Mosq Control Assoc** 1985 Dec;1(4):468–73

Toxicity in carcasses of Bacillus thuringiensis var. israelensis–killed Aedes aegypti larvae against scavenging larvae: implications to bioassay. Zaritsky A, et al. **J Am Mosq Control Assoc** 1986 Dec;2(4):555–9

18th annual UCLA symposium. Abstracts: New directions in biological control. **J Cell Biochem Suppl** 1989; 13A:147–79

Toxic and morphological effects of Bacillus thuringiensis preparations on larval stages of the oriental rat flea (Siphonaptera: Pulicidae). Maciejewska J, et al. **J Econ Entomol** 1988 Dec;81(6):1656–61

Effect of Bacillus sphaericus and Bacillus thuringiensis on acid–phosphatase activity of mosquito larvae, Culex pipiens and Aedes caspius. Hussein MA, et al. **J Egypt Soc Parasitol** 1989 Jun;19(1):195–203

Laboratory evaluation of three mosquito pathogenic strains of Bacillus sphaericus isolated in Egypt. Gharib AH, et al. **J Invertebr Pathol** 1989 Jul;54(1):57–62

Mortality in adult tsetse, Glossina morsitans morsitans, caused by entomopathogenic bacteria. Kaaya GP, et al. **J Invertebr Pathol** 1989 Jul;54(1):32–8

Pathogenicity of fungi isolated from field–collected larvae of the Western treehole mosquito, Aedes sierrensis (Diptera: Culicidae). Saunders GA, et al. **J Invertebr Pathol** 1988 Sep;52(2):360–3

An electron microscope study of the toxic action of Bacillus sphaericus in Culex quinquefasciatus larvae. Singh GJ, et al. **J Invertebr Pathol** 1988 Sep;52(2):237–47

The utilization of bacilli as larvicidal agents against anopheline and culicine mosquitoes in Turkey. I. Larvicidal activity of Bacillus thuringiensis serotype H–14. Matur A, et al. **J Trop Med Hyg** 1988 Oct;91(5):229–30

Insecticidal crystal proteins of Bacillus thuringiensis. Höfte H, et al. **Microbiol Rev** 1989 Jun;53(2):242–55 (106 ref.)

[Toxic effects of Bacillus thuringiensis var. kurstaki to the immature stage of Aedes aegypti] Chen WJ. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1988 Nov; 4(11):627–32 (Eng. Abstr.) (Chi)

[Entomopathogenic mushrooms of the genus Coelomomyces in Madagascar] Rodhain F. **Arch Inst Pasteur Madagascar** 1988;54(1):243–52 (Fre)

[The biological control of insects of medical importance (editorial)] Papierok PB. **Bull Soc Pathol Exot Filiales** 1989; 82(3):291–5 (Fre)

[Biochemical diagnosis of the presence of poisoning by Bacillus thuringiensis serotype "H3a,3b" in two lepidopterans] Valéro JR, et al. **Can J Microbiol** 1989 Apr; 35(4):444–9 (Eng. Abstr.) (Fre)

[Breeding of Glossina morsitans submorsitans Newstead, 1910 (Diptera–Glossinidae in the CRTA of Bobo–Dioulasso, Burkina Faso. I. Adaptation of a wild strain to the laboratory breeding conditions on feeding hosts] Filledier J, et al. **Rev Elev Med Vet Pays Trop** 1988;41(1):87–92 (Eng. Abstr.) (Fre)

[The use of viruses pathogenic for insects in plant protection] Huber J. **Schriftenr Ver Wasser Boden Lufthyg** 1988; 78:153–63 (14 ref.) (Ger)

[Combined methods of controlling medically significant arthropods] Alekseev AN, et al. **Med Parazitol (Mosk)** 1989 Jan–Feb;(1):3–8 (Rus)

[Freshwater gastropods as eliminators of Opisthorchis felineus Riv, 1884 eggs] Krivenko VV, et al. **Med Parazitol (Mosk)** 1988 Nov–Dec;(6):53–6 (Eng. Abstr.) (Rus)

[Ineffectiveness of bacterial insecticides against egg laying by female mosquitoes] Voitsik AA, et al. **Med Parazitol (Mosk)** 1989 Jan–Feb;(1):81–3 (Eng. Abstr.) (Rus)

[Effect of preparations of Bacillus thuringiensis serotype H–14 on warm–blooded animals] Ignat'ev VI, et al. **Mikrobiol Zh** 1988 Nov–Dec;50(6):73–7 (Rus)

[Effect of Pseudomonas carnea—the active principle of a microbial insecticide—on the body of animals] Omel'anets TG. **Mikrobiol Zh** 1988 Sep–Oct;50(5):80–3 (Eng. Abstr.) (Rus)

INSTRUMENTATION

Effects of various factors on the efficiency of minnow traps to sample mosquitofish (Gambusia affinis) and green sunfish (Lepomis cyanellus) populations. Blaustein L. **J Am Mosq Control Assoc** 1989 Mar;5(1):29–35

An injection method for spraying biological control agents and a monomolecular surface film for control of immature mosquitoes. Hertlein B, et al. **J Am Mosq Control Assoc** 1985 Jun;1(2):255–7

Evaluation of Beecomist–applied Bacillus thuringiensis (H–14) against Anopheles quadrimaculatus larvae in rice fields. Sandoski CA, et al. **J Am Mosq Control Assoc** 1985 Sep;1(3):316–9

METHODS

The biotechnology of Bacillus thuringiensis. Andrews RE Jr, et al. **Crit Rev Biotechnol** 1987;6(2):163–232 (242 ref.)

Indigenous bulk production of Bacillus thuringiensis israelensis (serotype H–14) & its larvicidal action against Anopheles stephensi. Kumar A, et al. **Indian J Med Res** 1988 May;87:440–9

Floating bait formulations increase effectiveness of Bacillus thuringiensis var. israelensis against Anopheles larvae. Aly C, et al. **J Am Mosq Control Assoc** 1987 Dec;3(4):583–8

Infection of a field population of Aedes cantator with a polymorphic microsporidium, Amblyospora connecticus via release of the intermediate copepod host, Acanthocyclops vernalis. Andreadis TG. **J Am Mosq Control Assoc** 1989 Mar;5(1):81–5

Suppression of larval Aedes aegypti populations in household water storage containers in Jakarta, Indonesia, through releases of first–instar Toxorhynchites splendens larvae. Annis B, et al. **J Am Mosq Control Assoc** 1989 Jun; 5(2):235–8

Efficacy of Duplex and Vectobac against Psorophora columbiae and Anopheles quadrimaculatus larvae in Arkansas ricefields. Bassi DG, et al. **J Am Mosq Control Assoc** 1989 Jun;5(2):264–6

Production and maintenance of large numbers of Dugesia tigrina (Turbellaria: Tricladida) for the control of mosquitoes in the field. Callahan JL, et al. **J Am Mosq Control Assoc** 1989 Mar;5(1):10–4

Toxorhynchites moctezuma, a potential biological control agent in Trinidad and Tobago, W. I. Chadee DD.

J Am Mosq Control Assoc 1985 Sep;1(3):376–8

A method for dispensing planaria (Dugesia dorotocephala) for mosquito control. Darby WM, et al. **J Am Mosq Control Assoc** 1988 Dec;4(4):545–6

Control of snow pool mosquitoes with Bacillus thuringiensis serotype H–14 in mountain environments in California and Oregon. Eldridge BF, et al. **J Am Mosq Control Assoc** 1985 Mar;1(1):69–75

An alternative bioassay employing neonate larvae for determining the toxicity of suspended particles to mosquitoes. Ibarra JE, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):187–92

Efficacy of Bacillus thuringiensis (H–14) for larval Aedes mosquito control in intermountain meadows in Wyoming. Jones CJ, et al. **J Am Mosq Control Assoc** 1985 Mar; 1(1):51–5

A genetic sexing strain of Anopheles quadrimaculatus, species A. Kim SS, et al. **J Am Mosq Control Assoc** 1987 Mar; 3(1):50–3

Efficacy of flowable concentrate formulations of Bacillus thuringiensis var. israelensis against black flies (Diptera:Simuliidae). Lacey LA, et al. **J Am Mosq Control Assoc** 1985 Dec;1(4):493–7

Five new mosquito larvicidal strains of Bacillus sphaericus from non–mosquito origins. Lysenko O, et al. **J Am Mosq Control Assoc** 1985 Sep;1(3):369–71

Factors affecting distribution of Bacillus thuringiensis serotype H–14 during flooding of rice fields. McLaughlin RE, et al. **J Am Mosq Control Assoc** 1985 Sep;1(3):381–4

The story of Bacillus thuringiensis var. israelensis (B.t.i.). Margalit J, et al. **J Am Mosq Control Assoc** 1985 Mar; 1(1):1–7 (35 ref.)

The potential of mosquito–indigestible phytoplankton for mosquito control. Marten GG. **J Am Mosq Control Assoc** 1987 Mar;3(1):105–6

Preliminary data on use of the inland silverside, Menidia beryllina, to control mosquito larvae. Middaugh DP, et al. **J Am Mosq Control Assoc** 1985 Dec;1(4):435–41

Efficacy and field evaluation of Bacillus thuringiensis (H–14) and B. sphaericus against floodwater mosquitoes in California. Mulla MS, et al. **J Am Mosq Control Assoc** 1985 Sep;1(3):310–5

Assessment of six benzyl–1,3–benzodioxole compounds for anti–juvenile hormone activity in Culex pipiens. Readio J, et al. **J Am Mosq Control Assoc** 1987 Mar;3(1):15–9

Efficacy of sustained–release formulations of Bacillus thuringiensis var. Israelensis and methoprene for control of Coquillettidia perturbans in Indiana. Walker ED. **J Am Mosq Control Assoc** 1987 Mar;3(1):97–9

Susceptibility of Romanomermis culicivorax (Nematoda: Mermithidae) postparasites to agrichemicals used in Louisiana rice production. Walker TW, et al. **J Am Mosq Control Assoc** 1985 Dec;1(4):477–81

Depth of oviposition by Romanomermis culicivorax (Nematoda: Mermithidae) in Louisiana riceland soils. Walker TW, et al. **J Am Mosq Control Assoc** 1985 Dec; 1(4):528–30

Solubilized crystal of Bacillus thuringiensis subsp. israelensis: effect on adult house flies, stable flies (Diptera: Muscidae), and green lacewings (Neuroptera: Chrysopidae). Wilton BE, et al. **J Am Mosq Control Assoc** 1985 Mar;1(1):97–8

Field evaluation of Lagenidium giganteum (Oömycetes: Lagenidiales) and description of a natural epizoötic involving a new isolate of the fungus. Kerwin JL, et al. **J Med Entomol** 1988 Nov;25(6):452–60

Can satyrs control pests and vectors? Ribeiro JM. **J Med Entomol** 1988 Nov;25(6):431–40

Control of schistosomiasis by use of biological control of snail hosts with special reference to competition. Frandsen F. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:129–33 (17 ref.)

Models to assess the potential of Capillaria hepatica to control population outbreaks of house mice. McCallum HI, et al. **Parasitology** 1989 Jun;98 Pt 3:425–37

[An integrated method of using biological and chemical insecticides for controlling flies] Khramova TV, et al. **Mikrobiol Zh** 1988 Mar–Apr;50(2):82–3 **(Rus)**

STANDARDS

[Hygienic problems of the study of microbial fungicides] Omel'ianets TG, et al. **Gig Sanit** 1988 Aug;(8):29–31 (Eng. Abstr.) **(Rus)**

[Evaluation of safety for humans and the environment of viruses used in insect control] Vasil'eva VL, et al. **Gig Sanit** 1989 Jan;(1):43–8 (50 ref.) **(Rus)**

PESTICIDE RESIDUES

Guidelines for predicting the dietary intake of pesticide residues. Joint FAO/WHO consultation. **Bull WHO** 1988; 66(4):429–34

Codex alimentarius approach to pesticide residue standards. Maybury RB. **J Assoc Off Anal Chem** 1989 May–Jun; 72(3):538–41

Tolerance setting process in the U.S. Environmental Protection Agency. Trichilo CL, et al. **J Assoc Off Anal Chem** 1989 May–Jun;72(3):536–8

Tolerance of agrochemicals in food. Hayama T. **J Toxicol Sci** 1988 Nov;13(4):268–72 (5 ref.)

Predicting pesticide residues to reduce crop contamination. Spynu EI. **Rev Environ Contam Toxicol** 1989;109:89–107

A strategy for reducing the impact of pesticides on groundwater in the U.S. Eiden C. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:341–7; discussion 387–95

[Plant pesticides and ground water. Inventory, prevention and clean–up strategies. Bodies of Water and Plant Pesticides VI. 6th technical discussion. Berlin, 30 May–1 June 1988] **Schriftenr Ver Wasser Boden Lufthyg** 1989; 79:1–702 **(Ger)**

[The behavior of selected pesticides in groundwater close to the surface of heterogenic porous sediments] Ahlsdorf B, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989; 79:375–85; discussion 387–95 **(Ger)**

[Environmental hygiene concepts for avoiding groundwater and drinking water contamination by pesticides] Aurand K. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:661–74; discussion 689–98 **(Ger)**

[The granting of permission for exceptions to section 4 of the drinking water ordinance concerning pesticide contamination] Hässelbarth U, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:601–6; discussion 637–51 **(Ger)**

[Plant protection and groundwater] Hurle K. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:129–35; discussion 151–8 (4 ref.) **(Ger)**

[The consequences of strict groundwater protection from pesticide contamination for agricultural businesses in Münsterland] Krause E. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:653–9; discussion 689–98 **(Ger)**

[Strategies for sanitizing an entry region] Litz N, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:675–87; discussion 689–98 **(Ger)**

[The behavior of pesticides in the groundwater conductor passage] Matthess G, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:295–311; discussion 329–39 **(Ger)**

[Pesticide use and groundwater protection—an introduction to the current questions] Müller–Wegener U, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:9–24; discussion 45–56 (14 ref.) **(Ger)**

[Degradation behavior of pesticides in porous groundwater conductors] Pestemer W, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:313–27; discussion 329–39 **(Ger)**

[Pesticide use without groundwater and drinking water dangers—environmental aspects] Ruchay D. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:39–44; discussion 45–56 **(Ger)**

[Pesticide use without groundwater and drinking water dangers—agricultural aspects] Scholz H. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:25–33; discussion 45–56 **(Ger)**

[The principle of foresight in protecting groundwater and drinking water from pesticide contamination] Staupe J. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:587–600; discussion 637–51 **(Ger)**

[Residue formation of 2–ethylhexenic acid in swine following feeding of ethexen preserved grain] Dunsing M, et al. **Z Gesamte Hyg** 1989 Feb;35(2):93–5 (Eng. Abstr.) **(Ger)**

[Photo–degradation of plant–protecting agents] Goedicke HJ. **Z Gesamte Hyg** 1989 Jan;35(1):5–8 (56 ref.) (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

The residual effect of temephos (Abate 4–E) on nontarget communities. Fortin C, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):282–8

Pesticides and kids [news] Roberts L. **Science** 1989 Mar 10; 243(4896):1280–1

[Pesticide use without groundwater and drinking water dangers—health protection aspects] Steinbach M. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:35–8; discussion 45–56 **(Ger)**

ANALYSIS

The occurrence and variation of organochlorine pesticide residues detected in Australian livestock at slaughter. Neumann GB. **Acta Vet Scand Suppl** 1988;84:299–302

Determination of brodifacoum and bromadiolone residues in rodent and canine liver. Ray AC, et al. **Am J Vet Res** 1989 Apr;50(4):546–50

The great fruit scares of 1989. Newman AR. **Anal Chem** 1989 Jul 15;61(14):861A–863A

Analysis of carbofuran residues in soil by the stopped–flow technique. del Carmen Quintero M, et al. **Analyst** 1989 Apr; 114(4):497–500

Determination of residues of a range of fungicides, anti–sprouting agents and (organochlorine and organophosphorus) insecticides in potatoes by gas–liquid and high–performance liquid chromatography. Martindale RW. **Analyst** 1988 Aug;113(8):1229–33

Analysis of trifluralin and other dinitroaniline herbicide residues by zero–order and derivative ultraviolet spectrophotometry. Traore S, et al. **Analyst** 1989 May; 114(5):609–13

Determination of fentin residues in potatoes and celery. van den Broek HH, et al. **Analyst** 1988 Aug;113(8):1237–9

Pentachlorophenol: environmental partitioning and human exposure. Hattemer–Frey HA, et al. **Arch Environ Contam Toxicol** 1989 Jul–Aug;18(4):482–9 (56 ref.)

Organochlorine chemicals in human breast milk in Hong Kong. Ip HM, et al. **Arch Environ Contam Toxicol** 1989 Jul–Aug;18(4):490–4

Pesticide exposure to greenhouse handgunners. Stamper JH, et al. **Arch Environ Contam Toxicol** 1989 Jul–Aug; 18(4):515–29

Observations on the progress of chlordane contamination in humans by blood and sebum analysis. Warishi M, et al. **Arch Environ Contam Toxicol** 1989 Jul–Aug;18(4):501–7

Residues of organochlorine pesticides in some foodstuffs of animal origin collected in Croatia, Yugoslavia. Krauthacker B, et al. **Arh Hig Rada Toksikol** 1988 Mar;39(1):27–31

Organochlorine pesticide residues in grain storages of New South Wales. Allender WJ. **Bull Environ Contam Toxicol** 1989 Apr;42(4):603–8

Pesticide residues in drinking water in the North Coast region of New South Wales, Australia, 1986–87. Ang C, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):595–602

Organochlorine residues in human adipose tissue in Spain: study of an agrarian area. Camps M, et al. **Bull Environ Contam Toxicol** 1989 Feb;42(2):195–201

Pesticide contamination of endangered gray bats and their food base in Boone County, Missouri, 1982. Clawson RL, et al. **Bull Environ Contam Toxicol** 1989 Mar;42(3):431–7

Visual scoring system for fluorescent tracer evaluation of dermal exposure to pesticides. Fenske RA. **Bull Environ Contam Toxicol** 1988 Nov;41(5):727–36

PCB and DDE residues in milk supplies of Ontario, Canada 1985–1986. Frank R, et al. **Bull Environ Contam Toxicol** 1989 May;42(5):666–9

Residues of organochlorine insecticides in Delhi vegetables. Lal R, et al. **Bull Environ Contam Toxicol** 1989 Jan; 42(1):45–9

Methyl parathion redeposition during laundering of functionally finished protective apparel fabrics. Laughlin J, et al. **Bull Environ Contam Toxicol** 1989 May;42(5):691–8

Organochlorine insecticide residues in fish and birds from three river systems on the North Coast region of New South Wales. McDougall KW, et al. **Bull Environ Contam Toxicol** 1989 Jun;42(6):884–90

Monitoring of hexachlorobenzene residues in Delhi and Faridabad, India. Nair A, et al. **Bull Environ Contam Toxicol** 1989 May;42(5):682–6

Ethion distribution in Florida Valencia oranges. Nigg HN, et al. **Bull Environ Contam Toxicol** 1988 Jul;41(1):151–8

DDT residues in sediments from the Bay of Bengal. Sarkar A, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):664–9

Loss of trifluralin from clay and loam soils containing aged and freshly applied residues. Smith AE, et al. **Bull Environ Contam Toxicol** 1988 Oct;41(4):569–73

Persistence studies with the herbicide clopyralid in prairie soils at different temperatures. Smith AE, et al. **Bull Environ Contam Toxicol** 1989 May;42(5):670–5

Residues of dacthal and metabolites in field–treated Chinese cabbage. Sweet RD, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):642–4

Organochlorine insecticide residues in soils used for vegetable and tropical fruit production in the Cudgen–Duranbah area of New South Wales. Wan H, et al. **Bull Environ Contam Toxicol** 1989 Feb;42(2):177–80

Triclopyr persistence in northern Idaho forest vegetation. Whisenant SG, et al. **Bull Environ Contam Toxicol** 1989 May;42(5):660–5

Pesticide residues in spray aircraft tank rinses and aircraft exterior washes. Woodrow JE, et al. **Bull Environ Contam Toxicol** 1989 Jan;42(1):22–9

DDT residues in human milk samples from Delhi, India. Zaidi SS, et al. **Bull Environ Contam Toxicol** 1989 Mar; 42(3):427–30

Exposure to agricultural treatment residues: some simple statistical considerations based on monitoring data for ethoxyquin on apples. Zapponi G, et al. **Ecotoxicol Environ Safety** 1988 Oct;16(2):143–7

Monitoring Ontario–grown apples for pest control chemicals used in their production, 1978–86. Frank R, et al. **Food Addit Contam** 1989 Apr–Jun;6(2):227–34

Lead, cadmium, mercury and insecticide residue control of fresh vegetables. Köck M, et al. **Geogr Med** 1989;Suppl 2:91–100

An evaluation of the residual lifespan of DDT in malaria control. Mpofu SM, et al. **J Am Mosq Control Assoc** 1988 Dec;4(4):529–35

Food and Drug Administration Pesticide Program. Residues in foods—1987. **J Assoc Off Anal Chem** 1988 Nov–Dec; 71(6):156A–174A

Pesticide residues in milk and fish samples collected from upper Egypt. Dogheim SM, et al. **J Assoc Off Anal Chem** 1988 Sep–Oct;71(5):872–4

Effect of commercial processing on pesticide residues in selected fruits and vegetables. Elkins ER. **J Assoc Off Anal Chem** 1989 May–Jun;72(3):533–5

Changing pesticide technology in meat and poultry products. Ellis RL. **J Assoc Off Anal Chem** 1989 May–Jun; 72(3):521–4

Simultaneous determination of alachlor, metolachlor, atrazine, and simazine in water and soil by isotope dilution gas chromatography/mass spectrometry. Huang LQ. **J Assoc Off Anal Chem** 1989 Mar–Apr;72(2):349–54

Pesticide residue findings by the Luke method in domestic and imported foods and animal feeds for fiscal years 1982–1986. Hundley HK, et al. **J Assoc Off Anal Chem** 1988 Sep–Oct;71(5):875–92

The FDA pesticides program: goals and new approaches. Lombardo P. **J Assoc Off Anal Chem** 1989 May–Jun; 72(3):518–20

State programs for pesticide residues in foods. Minyard JP Jr, et al. **J Assoc Off Anal Chem** 1989 May–Jun; 72(3):525–33

Levels of polychlorinated biphenyls and pesticides in bluefish before and after cooking. Trotter WJ, et al. **J Assoc Off Anal Chem** 1989 May–Jun;72(3):501–3

Residue level determination of the aquatic herbicide fluridone and a potential photoproduct (N–methylformamide) in water. West SD, et al. **J Assoc Off Anal Chem** 1988 Sep–Oct;71(5):1049–53

Gas chromatographic determination of residue levels of the herbicides trifluralin, benefin, ethalfluralin, and isopropalin in soil with confirmation by mass selective detection. West SD, et al. **J Assoc Off Anal Chem** 1988 Nov–Dec; 71(6):1082–5

Selective, on–column extraction of organochlorine pesticide residues from milk. Di Muccio A, et al. **J Chromatogr** 1988 Dec 2;456(1):143–8

Single–step solid–matrix clean–up of vegetable extracts for organophosphorus pesticide residue determination. Di Muccio A, et al. **J Chromatogr** 1988 Dec 2;456(1):149–53

Determination of pyrethroid residues on paddy rice by reversed–phase high–performance liquid chromatography. Haddad PR, et al. **J Chromatogr** 1989 Jan 6;461:337–46

Residue analysis of the herbicides cyanazine and bentazone in sugar maize and surface water using high–performance liquid chromatography and an on–line clean–up column–switching procedure. Hogendoorn EA, et al. **J Chromatogr** 1989 Jul 28;475:432–41

Multiresidue method for fungicide residues in fruit and vegetables. Newsome WH, et al. **J Chromatogr** 1989 Jun 23;472(2):416–21

Determination of diphenylamine residues in apples, and 4–aminobiphenyl residues in diphenylamine, by high–performance liquid chromatography and electrochemical detection. Olek M. **J Chromatogr** 1988 Aug 26;447(2):421–5

Quantitative high–resolution gas chromatography and mass spectrometry of toxaphene residues in fish samples. Onuska FI, et al. **J Chromatogr** 1989 Jun 2;471:161–71

Liquid chromatographic method for the determination of cyanazine in the presence of some normal soil constituents. Sánchez–Rasero F, et al. **J Chromatogr** 1988 Aug 26; 447(2):426–31

Thin–layer chromatography of flucythrinate residues. Singh PP, et al. **J Chromatogr** 1988 Oct 26;450(3):452–4

Large–volume spotting apparatus and its application to the semi–quantitative determination of organochlorine pesticides in tea. Wan H. **J Chromatogr** 1989 May 19; 469:403–5

Determination of pesticide residues in food with a 6% cyanopropylphenyl capillary column. Daft JL. **J Chromatogr Sci** 1989 Feb;27(2):75–8

Residues in fish exposed to sublethal doses of endosulfan and fish collected from cotton growing area. Novak B, et al. **J Environ Sci Health [B]** 1989 Feb;24(1):97–109

Terbufos residues in wheat and barley. Westcott ND. **J Environ Sci Health [B]** 1988 Aug;23(4):317–30

Demographic and seasonal influences on human serum pesticide residue levels. Stehr–Green PA. **J Toxicol Environ Health** 1989;27(4):405–21

Pesticide residue in lanolin [letter] Copeland CA, et al. **JAMA** 1989 Jan 13;261(2):242

Residues of clopyralide (3,6–dichloropicolinic acid) in strawberries and their changes. Hajšlová J, et al. **Nahrung** 1988;32(9):861–5

Pesticide residues in groundwater in The Netherlands: state of observations and future directions of research. Loch JP, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:349–63; discussion 387–95

Insecticide residues in total diet samples in Punjab, India. Singh PP, et al. **Sci Total Environ** 1988 Oct 15; 76(2–3):139–46

Determination of residual bromopropylate and coumaphos in honey and honeycomb by capillary gas chromatography. van Rillaer W, et al. **Z Lebensm Unters Forsch** 1989 Feb; 188(2):135–7

Determination of fumigants in cereals and cereal products by capillary gas chromatography. Van Rillaer WG, et al. **Z Lebensm Unters Forsch** 1988 Aug;187(2):97–101

[TLC identification of organochlorine (BHC, DDT) pesticide residues in crude drugs] Chen RH. **Chung Yao Tung Pao** 1988 Aug;13(8):34–6, 63 (Eng. Abstr.) **(Chi)**

[Total residue analysis of Amitraz in the rabbit tissue by gas chromatography] Huang W, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec;19(4):419–21 (Eng. Abstr.) **(Chi)**

[Chlorinated pesticide residues and polychlorinated biphenyls in fish from various locations in Czechoslovakia] Kredl F, et al. **Vet Med (Praha)** 1989 Apr;34(4):239–50 (Eng. Abstr.) **(Cze)**

[Ability to remove pesticides in the production of dialysis water (1)] Becker FF, et al. **Biomed Tech (Berlin)** 1989 Jun;34(6):139–42 (Eng. Abstr.) **(Ger)**

[Residue situation of DDT, HCH and HCB in grains in the years 1982–1987] Goedicke HJ, et al. **Nahrung** 1988; 32(10):945–53 (Eng. Abstr.) **(Ger)**

[The residue behavior of pirimiphos–methyl of tomatoes, leaf– and soil surfaces in greenhouses] Goedicke HJ. **Nahrung** 1988;32(5):475–80 (Eng. Abstr.) **(Ger)**

[The appearance of pesticides in groundwater in Bavaria] Amann W, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989; 79:159–81; discussion 227–38 **(Ger)**

[Pesticides in surface water, groundwater, and untreated water in Nordrhein–Westfalen: measuring strategy, analysis and results] Friege H, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:397–414; discussion 435–42 **(Ger)**

[Possibilities and limits of studies with C14–labeled herbicides for predicting the tendency of pesticides to wash out into the soil] Führ F, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:107–27; discussion 151–8 **(Ger)**

[Important aspects of the protection of groundwater from pesticide residues—represented by the examples of chlortriazine, atrazine, simazine and terbutylazine] Häfner M. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:261–93; discussion 329–39 **(Ger)**

[The estimation of pesticides in approved treatments in reference to drinking water contamination] Lingk W, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:69–75; discussion 85–95 **(Ger)**

[Compilation of methods of pesticide detection in groundwater in relation to the permissible procedures—claims and reality] Nolting HG. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:97–105; discussion 151–8 **(Ger)**

[The natural groundwater flow and a laboratory column for estimating groundwater pollution by pesticides] Nordmeyer H, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989; 79:239–60; discussion 329–39 **(Ger)**

[Pesticide contamination in groundwater and drinking water—a review of Baden–Württemberg] Roth M. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:365–73; discussion 387–95 **(Ger)**

[Recognition of the water content of pesticides in water plants in West Germany] Schmitz M. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:443–56; discussion 501–10 **(Ger)**

[Pesticides and similar compounds in groundwater and drinking water: tendencies in analysis from the viewpoint of chemical study arrangements] Weber W. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:183–216; discussion 227–38 **(Ger)**

[The development of detection methods for pesticide groups—experiences from a water plant laboratory] Werner G. **Schriftenr Ver Wasser Boden Lufthyg** 1989; 79:217–26; discussion 227–38 **(Ger)**

[Volatilization of plant protective agents from plants and soil as potential sources of exposure] Goedicke HJ. **Z Gesamte Hyg** 1989 Mar;35(3):146–8 (Eng. Abstr.) **(Ger)**

[Behavior of residues of plant pesticides on plant surfaces] Goedicke HJ. **Z Gesamte Hyg** 1988 May;34(5):279–82 (42 ref.) (Eng. Abstr.) **(Ger)**

[Chloro–organic pesticides in milk samples of sheep from areas of Marsala used for protected culture] Oliveri R, et al. **Nuovi Ann Ig Microbiol** 1988 May–Jun;39(3):191–201 (Eng. Abstr.) **(Ita)**

[Use of agricultural chemicals in greenhouse cultivation: problems of pollution in the soil and superficial strata. 3. Further information on the presence of organochlorine pesticides and heavy metals in the water table of Marsala] Oliveri R, et al. **Nuovi Ann Ig Microbiol** 1988 Nov–Dec; 39(6):651–8 (Eng. Abstr.) **(Ita)**

[Penetration of various pesticides into grapes] Vorob'eva TN. **Gig Sanit** 1989 Apr;(4):80–1 **(Rus)**

[Hygienic evaluation of pesticide pollution of coastal seawater] Shibanov SE. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Sep–Oct;(5):40–3 (Eng. Abstr.) **(Rus)**

[Contamination by organochlorine compounds in some foodstuffs from a region of Mexico] Albert LA, et al. **Rev Saude Publica** 1988 Dec;22(6):500–6 (Eng. Abstr.) **(Spa)**

BLOOD

Estimates of the half–life of 2,3,7,8–tetrachlorodibenzo–p–dioxin in Vietnam Veterans of Operation Ranch Hand. Pirkle JL, et al. **J Toxicol Environ Health** 1989;27(2):165–71

METABOLISM

Persistence behavior of HCH in rice soil and its uptake by rice plants. Kathpal TS, et al. **Ecotoxicol Environ Safety** 1988 Jun;15(3):336–8

STANDARDS

[2 projects of decrees relating to the determination of maximal pesticide residue contents in and on fruit and vegetables on the one side and cereals destined for human consumption on the other side] Truhaut R. **Bull Acad Natl Med (Paris)** 1988 Nov;172(8):1141–7 **(Fre)**

TOXICITY

Sport fish consumption advisories and projected cancer risks in the Great Lakes basin. Foran JA, et al. **Am J Public Health** 1989 Mar;79(3):322–5

Pesticide residues in edible oils and oil seeds. Dikshith TS, et al. **Bull Environ Contam Toxicol** 1989 Jan;42(1):50–6

Pesticide residues in Arizona peregrine falcon eggs and prey. Ellis DH, et al. **Bull Environ Contam Toxicol** 1989 Jan; 42(1):57–64

Toxicity bioassay of technical and commercial formulations of carbaryl to the freshwater catfish, Clarias batrachus. Tripathi G, et al. **Ecotoxicol Environ Safety** 1988 Jun; 15(3):277–81

Pesticides and food safety. Fan AM, et al. **Regul Toxicol Pharmacol** 1989 Apr;9(2):158–74 (19 ref.)

Alar: the numbers game [news] Roberts L. **Science** 1989 Mar 17;243(4897):1430

[Toxicological evaluation of pesticide and chemical residues in control of biological processes in vegetables under glass and plastics] Goedicke HJ. **Nahrung** 1988;32(6):565–70 (29 ref.) (Eng. Abstr.) **(Ger)**

[Toxicologic aspects of the estimation of pesticide residues in drinking water] Dieter HH. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:607–35; discussion 637–51 (33 ref.) **(Ger)**

[Chlorinated hydrocarbon residues in hare's fat] Zamojski J, et al. **Rocz Panstw Zakl Hig** 1988;39(5):361–5 (Eng. Abstr.) **(Pol)**

[Toxicological and hygienic evaluation of potatoes grown with the use of a pesticide croneton] Gritsevskaia IL. **Vopr Pitan** 1988 May–Jun;(3):58–61 (Eng. Abstr.) **(Rus)**

URINE

Residues of chlorinated phenols and phenoxy acid herbicides in the urine of Arkansas children. Hill RH Jr, et al. **Arch Environ Contam Toxicol** 1989 Jul–Aug;18(4):469–74

Levels of 4–chloro–2–methylphenoxyacetic acid (MCPA) in the urine of northern italy occupationally exposed agricultural workers. De Felip E, et al. **Ecotoxicol Environ Safety** 1988 Oct;16(2):170–5

PESTICIDES

Pesticides and food safety. Nightingale SL. **Am Fam Physician** 1989 Sep;40(3):289–90

Visual scoring system for fluorescent tracer evaluation of dermal exposure to pesticides. Fenske RA. **Bull Environ Contam Toxicol** 1988 Nov;41(5):727–36

The effects of selected rice and soybean pesticides on the eggs of Psorophora columbiae. Klass MC, et al. **J Am Mosq Control Assoc** 1985 Dec;1(4):458–62

Reinventing the regulatory wheel [news] Gloyd JS. **J Am Vet Med Assoc** 1989 Jul 1;195(1):30–1

Molecular modelling in design of crop protection chemicals. Odell B. **J Comput Aided Mol Des** 1988 Oct;2(3):191–216 (32 ref.)

Frequencies of chromosomal aberrations in smokers exposed to pesticides in cotton fields. Rupa DS, et al. **Mutat Res** 1989 Jan;222(1):37–41

Model for simulating the effects of management practices on pesticide concentrations in groundwater. Dean JD, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:527–80; discussion 581–6

Pesticide use related to cancer incidence as studied in a rural district of Hungary. Páldy A, et al. **Sci Total Environ** 1988 Jul 15;73(3):229–44

Congress passes reforms in pesticide law [news] Sun M. **Science** 1988 Oct 7;242(4875):27

NRDC on alar [letter] Whyatt RM. **Science** 1989 Sep 1; 245(4921):910–1

Pesticide sorption on geologic material of varying organic carbon content [published erratum appears in Toxicol Ind Health 1989 May;5(3):preceding Table of Contents] Bouchard DC, et al. **Toxicol Ind Health** 1988 Sep; 4(3):341–9

Review of pesticides: chemistry, uses and toxicology. Salem H, et al. **Toxicol Ind Health** 1988 Sep;4(3):291–321 (67 ref.)

[Plant pesticides and ground water. Inventory, prevention and clean–up strategies. Bodies of Water and Plant Pesticides VI. 6th technical discussion. Berlin, 30 May–1 June 1988] **Schriftenr Ver Wasser Boden Lufthyg** 1989; 79:1–702 **(Ger)**

[Viewpoints of groundwater protection in the execution of plant protection laws] Hertel W. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:77–83; discussion 85–95 **(Ger)**

[The demonstration by industry of future developments and the use of pesticides with special reference to necessary groundwater protection] Köhler S. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:415–34; discussion 435–42 **(Ger)**

[Good expert practice of agriculture in the water protection area] Meinert G. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:137–50; discussion 151–8 (5 ref.) **(Ger)**

[The use of pesticides in disinfecting soil from ascaris eggs] Grimailo LV, et al. **Med Parazitol (Mosk)** 1989 Mar–Apr; (2):23–5 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

[From the practice of a civil servant] van der Kreek FW. **Tijdschr Diergeneeskd** 1988 Dec 15;113(24):1379–80 **(Dut)**

ADVERSE EFFECTS

Field measurement of plasma and erythrocyte cholinesterases. Magnotti RA Jr, et al. **Clin Chim Acta** 1988 Sep 15;176(3):315–32

Chromosomal aberrations in peripheral lymphocytes of cotton field workers exposed to pesticides. Rupa DS, et al. **Environ Res** 1989 Jun;49(1):1–6

Incidence of cancers of the brain, the lymphatic tissues, and of leukemia and the use of pesticides among Quebec's rural farm population, 1982–1983. Godon D, et al. **Geogr Med** 1989;19:213–32

A variant of mass (epidemic) psychogenic illness in the agricultural work setting. Kurtz PH, et al. **J Occup Med** 1989 Apr;31(4):331–4

Soft tissue sarcoma risk in Swedish licensed pesticide applicators. Wiklund K, et al. **J Occup Med** 1988 Oct; 30(10):801–4

As farmworkers help keep America healthy, illness may be their harvest [news] Goldsmith MF. **JAMA** 1989 Jun 9; 261(22):3207–9, 3213

Risky business. Beardsley TM. **Sci Am** 1989 May;260(5):35–6

Pesticides, risk, and applesauce [letter] Ames BN, et al. **Science** 1989 May 19;244(4906):755–7

EPA sets new policy on pesticide cancer risks [news] Norman C. **Science** 1988 Oct 21;242(4877):366–7

Regulation of pesticides in Canada. Ritter L, et al. **Toxicol Ind Health** 1988 Sep;4(3):331–40

[The action of pesticides on the genitalia and reproductive function] Panova Z. **Akush Ginekol (Sofiia)** 1989; 28(1):88–92 (40 ref.) **(Bul)**

[Contact eczema caused by pesticides in East Germany] Jung HD, et al. **Dermatol Monatsschr** 1989;175(4):203–14 (Eng. Abstr.) **(Ger)**

[Results of occupational medicine pesticide research] Thiele E. **Z Gesamte Hyg** 1989 Apr;35(4):188–91 (Eng. Abstr.) **(Ger)**

ANALYSIS

Pesticides. Sherma J. **Anal Chem** 1989 Jun 15; 61(12):153R–165R (473 ref.)

Experimental assessment of operator exposure by inspiration, for highly-charged droplets produced by an Electrodyn crop sprayer. Johnston AM, et al. **Ann Occup Hyg** 1988; 32(4):451–61

Pesticide degradation in model soil evaporation beds. Hodapp DM, et al. **Bull Environ Contam Toxicol** 1989 Jul; 43(1):36–44

Effect of fabric characteristics on pesticide penetration through selected apparel fabrics. Leonas KK, et al. **Bull Environ Contam Toxicol** 1989 Aug;43(2):231–8

Degradation of N-methylcarbamate and carbamoyl oxime pesticides in chlorinated water. Miles CJ, et al. **Bull Environ Contam Toxicol** 1988 Dec;41(6):838–43

Ethion distribution in Florida Valencia oranges. Nigg HN, et al. **Bull Environ Contam Toxicol** 1988 Jul;41(1):151–8

Pesticide exposure to a greenhouse drencher. Stamper JH, et al. **Bull Environ Contam Toxicol** 1989 Feb;42(2):209–17

FDA Total Diet Study, April 1982–April 1984, dietary intakes of pesticides, selected elements, and other chemicals. Gunderson EL. **J Assoc Off Anal Chem** 1988 Nov-Dec;71(6):1200–9

Levels of polychlorinated biphenyls and pesticides in bluefish before and after cooking. Trotter WJ, et al. **J Assoc Off Anal Chem** 1989 May-Jun;72(3):501–3

Oxidative detection of coulometrically reduced organonitro pesticides in reversed-phase high-performance liquid chromatography. Krause RT, et al. **J Chromatogr** 1988 Dec 28;459:151–62

Determination of diisobutyl- and diisopropylnaphthalenesulphonates in pesticide wettable powders and dispersible granules by high-performance liquid chromatography. Schreuder RH, et al. **J Chromatogr** 1989 Apr 21;467(1):177–84

Determination of cholinesterase-inhibiting pesticides and some of their metabolites in cases of animal poisoning using thin-layer chromatography. Zoun PE, et al. **J Chromatogr** 1989 Jan 13;462:448–53

[Granting special exemptions according to paragraph 4 of the drinking water regulation in plant pesticide contamination] Hässelbarth U, et al. **Off Gesundheitswes** 1988 Nov;50(11):651–3 (Eng. Abstr.) **(Ger)**

[Health-related evaluation of plant protective agents in drinking water] Körber H. **Off Gesundheitswes** 1989 May; 51(5):228–32 (Eng. Abstr.) **(Ger)**

[The behavior of selected pesticides in groundwater and drinking water areas] Frimmel F, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:481–500; discussion 501–10 **(Ger)**

[I. Migration of elements from pesticides into plants] Argenziano Cutolo A, et al. **Boll Chim Farm** 1988 Jul-Aug; 127(7–8):176–7 (Eng. Abstr.) **(Ita)**

CLASSIFICATION

The development of the WHO Recommended Classification of Pesticides by Hazard. Copplestone JF. **Bull WHO** 1988; 66(5):545–51

ISOLATION & PURIFICATION

Bullatacin and bullatacinone: two highly potent bioactive acetogenins from Annona bullata. Hui YH, et al. **J Nat Prod** 1989 May-Jun;52(3):463–77

Pesticide in lanolin [letter] Cade PH. **JAMA** 1989 Aug 4; 262(5):613

METABOLISM

Microbial metabolism of pesticides and structurally related compounds. MacRae IC. **Rev Environ Contam Toxicol** 1989;109:1–87 (363 ref.)

[Ecodynamic processes in soil and groundwater conductors under the influence of pesticides] Klein G. **Schriftenr Ver Wasser Boden Lufthyg** 1989;79:511–25; discussion 581–6 **(Ger)**

PHARMACOLOGY

In vitro inhibition of goat brain acetylcholinesterase by pure and commercial anticholinesterase pesticides. Guhathakurta S, et al. **Ecotoxicol Environ Safety** 1989 Feb; 17(1):16–20

Protein content and thyroid hormone release in vitro by differentiated thyroid cancer cells in the presence of estradiol, dehydroepiandrosterone, polypeptidic hormones and pesticides. Ghinea E, et al. **Endocrinologie** 1988 Jul-Sep;26(3):165–71

Studies on competitive saprophytic colonization of Sclerotium rolfsii sacc. Causing foot-rot disease of barley under certain pesticidal treatments. Singh RK. **Hindustan Antibiot Bull** 1988 Aug-Nov;30(3–4):90–4

QSARs and pesticides design. Tosato ML, et al. **Prog Clin Biol Res** 1989;291:417–20

[Effects of phosphoramidothiolate pesticides on rat erythrocyte membrane acetylcholinesterase] Ding ZM, et al. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Mar; 22(2):82–4 (Eng. Abstr.) **(Chi)**

POISONING

Agricultural pesticide accidents and prevention in Ecuador. Grieshop JI, et al. **Accid Anal Prev** 1989 Aug;21(4):394–8

Pesticide mortality. A Jordanian experience. Abu al-Ragheb SY, et al. **Am J Forensic Med Pathol** 1989 Sep;10(3):221–5

Pesticide illness surveillance: the Nicaraguan experience. Cole DC, et al. **Bull Pan Am Health Organ** 1988; 22(2):119–32

Spot diagnosis of aluminium phosphide ingestion: an application of a simple test. Chugh SN, et al. **J Assoc Physicians India** 1989 Mar;37(3):219–20

Poisoning of wildlife in southern Africa. Basson PA. **J S Afr Vet Assoc** 1987 Dec;58(4):219–28 (43 ref.)

Update on hospitalized pesticide poisonings in South Carolina, 1983–1987. Schuman SH, et al. **J S C Med Assoc** 1989 Feb;85(2):62–6

Evaluation of consumer uses of first aid recommendations on pesticide labels. O'Malley M, et al. **Vet Hum Toxicol** 1989 Jun;31(3):231–6

Accidental pesticide poisoning: the toll is high. Goulding R. **World Health Forum** 1988;9(4):526–30

RADIATION EFFECTS

[Photo-degradation of plant-protecting agents] Goedicke HJ. **Z Gesamte Hyg** 1989 Jan;35(1):5–8 (56 ref.) (Eng. Abstr.) **(Ger)**

STANDARDS

[Pesticide approval practices and groundwater protection] Schinkel K. **Schriftenr Ver Wasser Boden Lufthyg** 1989; 79:57–67; discussion 85–95 **(Ger)**

TOXICITY

Effects of formulated ethyl parathion on fertilization of the sea urchin Pseudechinus magellanicus (Philippi). Ferrari L, et al. **Bull Environ Contam Toxicol** 1989 Mar; 42(3):367–74

Comparative sublethal ovarian pathology of some pesticides in the teleost, Puntius conchonius Hamilton. Kumar S, et al. **Bull Environ Contam Toxicol** 1988 Aug;41(2):227–32

Pesticide exposure to a greenhouse drencher. Stamper JH, et al. **Bull Environ Contam Toxicol** 1989 Feb;42(2):209–17

Use of algal fluorescence for determination of phytotoxicity of heavy metals and pesticides as environmental pollutants. Samson G, et al. **Ecotoxicol Environ Safety** 1988 Dec; 16(3):272–8

Pesticides. Berry CL. **Hum Toxicol** 1988 Sep;7(5):433–6 (14 ref.)

A cage for use with small aquatic animals in field studies. Goodman LR, et al. **J Am Mosq Control Assoc** 1987 Mar; 3(1):109–10

Susceptibility of Romanomermis culicivorax (Nematoda: Mermithidae) postparasites to agrichemicals used in Louisiana rice production. Walker TW, et al. **J Am Mosq Control Assoc** 1985 Dec;1(4):477–81

Morphological changes after acetylcholinesterase (AChE) inhibition by dichlorvos (DDVP) in young rabbit brain. Dąmbska M, et al. **J Hirnforsch** 1988;29(5):569–71

Analysis of sister-chromatid exchanges, cell kinetics and mitotic index in lymphocytes of smoking pesticide sprayers. Rupa DS, et al. **Mutat Res** 1989 Jun;223(2):253–8

Pesticides and food safety. Fan AM, et al. **Regul Toxicol Pharmacol** 1989 Apr;9(2):158–74 (19 ref.)

Recent developments in pesticide toxicology and registration. Proceedings of a symposium. **Toxicol Ind Health** 1988 Sep; 4(3):281–395

Review of the Office of Pesticide Program's current toxicology guidelines for the testing of pesticides. Engler R, et al. **Toxicol Ind Health** 1988 Sep;4(3):323–9

Adoption of new guidelines and data requirements for more extensive neurotoxicity testing under FIFRA. Sette WF. **Toxicol Ind Health** 1989 Mar;5(2):181–94

Evaluation of pesticide immunotoxicity. Sharma RP. **Toxicol Ind Health** 1988 Sep;4(3):373–80

Potential future requirements for immunotoxicology testing of pesticides. Sjoblad RD. **Toxicol Ind Health** 1988 Sep; 4(3):391–5

Behavior as an early indicator of pesticide toxicity. Weiss B. **Toxicol Ind Health** 1988 Sep;4(3):351–60

Effect of pesticides on the growth of aquatic hyphomycetes. Chandrashekar KR, et al. **Toxicol Lett** 1989 Sep;48(3):311–5

[A new approach to setting hygienic pesticide standards] Izmirova N, et al. **Probl Khig** 1988;13:98–109 (Eng. Abstr.) **(Bul)**

[20 years' experience with dermatologic assessment of herbicides and pesticides] Mattheus A, et al. **Z Gesamte Hyg** 1988 Oct;34(10):565–6 (Eng. Abstr.) **(Ger)**

[Determining the toxicity of biologically active chemical substances] Korneichuk EP, et al. **Gig Sanit** 1988 Sep; (9):38–9 **(Rus)**

[Methodological aspects of hygienic standardization of pesticide level in food products] Shitskova AP, et al. **Gig Sanit** 1989 Feb;(2):4–7 (Eng. Abstr.) **(Rus)**

[Ecological and hygienic classification of pesticides] Spynu EI, et al. **Gig Sanit** 1989 Feb;(2):66–8 **(Rus)**

[Comparative studies of the recombinogenic action of some pesticides on yeasts in the absence and presence of metabolic activation] L'vova TS. **Tsitol Genet** 1989 May-Jun;23(3):68–70 (Eng. Abstr.) **(Rus)**

PESTIVIRUSES

Recent advances in pestivirus research. Collett MS, et al. **J Gen Virol** 1989 Feb;70 (Pt 2):253–66 (68 ref.)

Transmission of bovine virus diarrhoea virus (BVDV) by artificial insemination (AI) with semen from a persistently-infected bull. Meyling A, et al. **Vet Microbiol** 1988 Jun;17(2):97–105

CLASSIFICATION

Comparisons of the pestivirus bovine viral diarrhoea virus with members of the flaviviridae. Collett MS, et al. **J Gen Virol** 1988 Oct;69 (Pt 10):2637–43

ENZYMOLOGY

N-terminal domains of putative helicases of flavi- and pestiviruses may be serine proteases. Gorbalenya AE, et al. **Nucleic Acids Res** 1989 May 25;17(10):3889–97

GENETICS

Molecular cloning of complementary DNA from a pneumopathic strain of bovine viral diarrhea virus and its diagnostic application. Brock KV, et al. **Can J Vet Res** 1988 Oct;52(4):451–7

Detection of a trypsin-like serine protease domain in flaviviruses and pestiviruses. Bazan JF, et al. **Virology** 1989 Aug;171(2):637–9

GROWTH & DEVELOPMENT

A rapid, quantitative assay for titration of bovine virus diarrhoea-mucosal disease virus. Roberts PC, et al. **Vet Microbiol** 1988 Dec;18(3–4):209–17

IMMUNOLOGY

BVD virus antigens in tissues of persistently viraemic, clinically normal cattle: implications for the pathogenesis of clinically fatal disease. Bielefeldt Ohmann H. **Acta Vet Scand** 1988;29(1):77–84

Specificity of neutralizing and precipitating antibodies induced in healthy calves by monovalent modified-live bovine viral diarrhea virus vaccines. Bolin SR, et al. **Am J Vet Res** 1989 Jun;50(6):817–21

The application of monoclonal antibody panels to characterize pestivirus isolates from ruminants in Great Britain. Edwards S, et al. **Arch Virol** 1988;102(3–4):197–206

Application of peroxidase labelled antibody assays for detection of porcine IgG antibodies to hog cholera and bovine viral diarrhea viruses. Afshar A, et al. **J Virol Methods** 1989 Mar;23(3):253–61

Development of monoclonal neutralizing antibodies against bovine viral diarrhea virus after pretreatment of mice with normal bovine cells and cyclophosphamide. Weiland E, et al. **J Virol Methods** 1989 Apr-May;24(1–2):237–43

Infantile gastroenteritis associated with excretion of pestivirus antigens. Yolken R, et al. **Lancet** 1989 Mar 11; 1(8637):517–20

Serological comparison of cytopathogenic and non-cytopathogenic bovine viral diarrhea-mucosal disease viruses isolated from cattle with mucosal disease. Shimizu M, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):157–62

Demonstration of bovine virus diarrhoea virus antigen in formalin fixed, paraffin embedded tissue using a streptavidin/biotin technique. Allan GM, et al. **Res Vet Sci** 1989 May;46(3):416–8

Experimental infection of cattle in early pregnancy with a

cytopathic strain of bovine virus diarrhoea virus. Brownlie J, et al. **Res Vet Sci** 1989 May;46(3):307–11
Natural infections of pigs with bovine viral diarrhoea virus associated with signs resembling swine fever. Terpstra C, et al. **Res Vet Sci** 1988 Sep;45(2):137–42
Comparative analysis of monoclonal antibodies against pestiviruses: report of an international workshop. Cay B, et al. **Vet Microbiol** 1989 Jun;20(2):123–9
Protection against respiratory infection with bovine virus diarrhoea virus by passively acquired antibody. Howard CJ, et al. **Vet Microbiol** 1989 Mar;19(3):195–203
Serological characterization of viruses isolated from experimental mucosal disease. Shimizu M, et al. **Vet Microbiol** 1989 Jan;19(1):13–21
Viral antigen distribution in the central nervous system of cattle persistently infected with bovine viral diarrhea virus. Fernandez A, et al. **Vet Pathol** 1989 Jan;26(1):26–32
Evaluation of an enzyme-linked immunosorbent assay for detection of antibodies to bovine virus diarrhoea virus in milk. Niskanen R, et al. **Zentralbl Veterinarmed [B]** 1989 Mar;36(2):113–8
Differentiation of hog cholera and bovine virus diarrhoea viruses in pigs using monoclonal antibodies. Zhou Y, et al. **Zentralbl Veterinarmed [B]** 1989 Feb;36(1):76–80

ISOLATION & PURIFICATION

Evaluation of the quality and virological status of semen from bulls acutely infected with BVDV. Paton DJ, et al. **Vet Rec** 1989 Jan 21;124(3):63–4

PATHOGENICITY

Contamination of a live virus vaccine against pseudorabies (Aujeszky's disease) by an ovine pestivirus pathogen for the pig. Vannier P, et al. **Ann Rech Vet** 1988;19(4):283–90

PHYSIOLOGY

Effect in vitro of bovine viral diarrhea virus on bovine embryos with the zona pellucida intact, damaged and removed. Bielanski A, et al. **Vet Res Commun** 1988; 12(1):19–24

ULTRASTRUCTURE

BVD-virus infection in peripheral blood mononuclear cells from persistently viraemic calves studied by correlative immunoelectron microscopy. Bielefeldt Ohmann H, et al. **Zentralbl Veterinarmed [B]** 1988 Aug;35(7):477–92

PETECHIAE see **PURPURA**

PETHIDINE see **MEPERIDINE**

PETIT MAL STATUS see **STATUS EPILEPTICUS**

PETROLATUM

ADMINISTRATION & DOSAGE

Variations in the quantities of petrolatum applied in patch testing. Antoine JL, et al. **Derm Beruf Umwelt** 1988 Nov–Dec;36(6):191–4

ADVERSE EFFECTS

Acquired gluteal myospherulosis secondary to intramuscular injections of petrolatum-based hormones: a case report diagnosed by fine-needle aspiration cytology. Vuong PN. **Diagn Cytopathol** 1988;4(2):137–9
[Surgical treatment of oleogranuloma of the penis] Iasinskiĭ BV, et al. **Urol Nefrol (Mosk)** 1988 Sep–Oct;(5):54–5 **(Rus)**

THERAPEUTIC USE

Ocular lubricants and corneal injury during anesthesia. Orlin SE, et al. **Anesth Analg** 1989 Sep;69(3):384–5

PETROLATUM, LIQUID see **MINERAL OIL**

PETROLEUM

Measurements of combustion product emission factors of unvented kerosene heaters. Woodring JL, et al. **Am Ind Hyg Assoc J** 1985 Jul;46(7):350–6
Occupational hygiene aspects of the use of oil-based drilling fluids. Davidson RG, et al. **Ann Occup Hyg** 1988; 32(3):325–32
Assessment of occupational benzene exposure in petrol filling stations at Rangoon. Hein R, et al. **Ann Occup Hyg** 1989; 33(1):133–6
32P-postlabelling analysis of DNA adducts in the skin of mice treated with petrol and diesel engine lubricating oils and exhaust condensates. Schoket B, et al. **Carcinogenesis** 1989 Aug;10(8):1485–90
Preventing petrol sniffing in Aboriginal communities. Franks C. **Community Health Stud** 1989;13(1):14–22
Social class as indicated by area of residence: a mortality study within an Australian industrial population. Gordon I, et al. **Community Health Stud** 1989;13(2):170–6
Gas taxes and motor vehicle fatalities. Leigh JP, et al. **J Health Polit Policy Law** 1988 Winter;13(4):723–34
Some peculiarities of the physiological validity of shift work schedules for the crews of floating oil drilling platforms. Alekperov II, et al. **J Hyg Epidemiol Microbiol Immunol** 1988;32(4):385–90
Comparison of participants and nonparticipants in a work site cancer awareness and screening program. Laville EA, et al. **J Occup Med** 1989 Mar;31(3):221–32
Riboflavin formation by mould fungi cultivated on hydrocarbon-containing media. Sabry SA, et al. **Microbios** 1989;57(230):33–40
Evidence from Ames assays of laboratory pulse-flame combustor samples that direct-acting mutagens are not an inevitable consequence of hydrocarbon fuel combustion. Salmeen IT, et al. **Mutat Res** 1989 Sep;227(1):7–11
Carbon monoxide toxicity in a man working outdoors with a gasoline-powered hydraulic machine [letter] Huff JS, et al. **N Engl J Med** 1989 Jun 8;320(23):1564
Alaskan oil spill: survivors return to the wild [news] Buderi R. **Nature** 1989 Aug 10;340(6233):421
Biodegradation of crude oils. Bosecker K, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;80:91–117
Biotechnology for in situ restoration of ground water contaminated by the petroleum industry. Thomas JM, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;80:345–65 (43 ref.)
Use of leaded gasoline and volatile halogenated hydrocarbon emission from automotive exhaust. Gilli G, et al. **Sci Total Environ** 1989 Apr;79(3):281–6
Environmental impact of used motor oil. Vazquez-Duhalt R. **Sci Total Environ** 1989 Feb;79(1):1–23 (14 ref.)
Diesel soot particles catalyze the production of oxy-radicals. Vogl G, et al. **Toxicol Lett** 1989 Apr;47(1):17–23
Comparative study of sandfly trapping techniques. Asimeng EJ. **Trop Med Parasitol** 1988 Jun;39(2):153–4
Oil spill dispersants: good or bad for the environment? McIntosh H. **Vet Hum Toxicol** 1989 Jun;31(3):263–4
[Studies on harmful microbes in recirculating cooling water system of oil refinery] Lu RH, et al. **Wei Sheng Wu Hsueh Pao** 1989 Jun;29(3):204–15 (Eng. Abstr.) **(Chi)**
[A panorama of urban exposure to lead. Temporal development of domestic sources and auto Pb and polarization of risk according to age and habitat] Steenhout A. **J Toxicol Clin Exp** 1988 May–Jun;8(3):175–91 (40 ref.) (Eng. Abstr.) **(Fre)**
[Effect of kerosine hydrocarbons and phenobarbital on components of the microsomal electron transport chain in the rat liver] Starek A, et al. **Folia Med Cracov** 1988; 29(1–2):49–57 (Eng. Abstr.) **(Pol)**
[Physiological determinants of functional conditions of human body during watchmen's work schedules] Urazaev AM, et al. **Fiziol Cheloveka** 1988 Jul–Aug;14(4):679–85 **(Rus)**
[Evaluation of the functional state of the cardiovascular system in watchmen on a shift-work schedule] Shmerling PM, et al. **Gig Sanit** 1989 Apr;(4):90–2 **(Rus)**
[Problems of mass screening of oilmen on dispatcher-watchmen's duty] Karamova LM, et al. **Gig Tr Prof Zabol** 1988 Nov;(11):44–5 **(Rus)**
[Cytochemical determination of acid phosphatase in blood leukocytes to assess the effect of atmospheric pollution] Aliev VA, et al. **Lab Delo** 1988;(9):27–30 (Eng. Abstr.) **(Rus)**
[Effect of environmental factors on the destruction of petroleum products by associative microorganism cultures] Kvasnikov EI, et al. **Mikrobiol Zh** 1987 May–Jun; 49(3):33–8 **(Rus)**
[Prevalence of arterial hypertension among shift schedule workers of the oil and gas complexes of the Western Siberia] Levitskiĭ EF, et al. **Sov Med** 1988;(10):79–80 **(Rus)**
[Adaptation disorders and rehabilitation of drillers working on the shift-expedition schedule in Western Siberia] Mazurik MF, et al. **Sov Med** 1989;(4):66–8 **(Rus)**
[The effect of occupational factors on immunologic indices in workers in the petroleum-refining industry] Guseĭn-zade KM, et al. **Vestn Dermatol Venerol** 1989;(3):44–7 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Critical review of cancer epidemiology in petroleum industry employees, with a quantitative meta-analysis by cancer site. Wong O, et al. **Am J Ind Med** 1989;15(3):283–310
Kerosene "burns": a new case. Mosconi G, et al. **Contact Dermatitis** 1988 Oct;19(4):314–5
Cytogenetic investigations of human subjects occupationally exposed to chemicals from the petroleum-processing industry. Simeonova M, et al. **Environ Res** 1989 Apr; 48(2):145–53
Occupational exposures in petroleum refining; crude oil and major petroleum fuels. IARC Working Group on the Evaluation of Carcinogenic Risks to Humans. **IARC Monogr Eval Carcinog Risks Hum** 1989;45:1–322 (592 ref.)
Mortality study of cancer risk among oil refinery workers. Bertazzi PA, et al. **Int Arch Occup Environ Health** 1989; 61(4):261–70
Behavioral studies in petrol pump workers. Kumar P, et al. **Int Arch Occup Environ Health** 1988;61(1–2):35–8
Mortality from leukemia and other diseases among workers at a petroleum refinery. Wongsrichanalai C, et al. **J Occup Med** 1989 Feb;31(2):106–11
Alaskan oil spill: health risks uncovered [news] Barinaga M. **Science** 1989 Aug 4;245(4917):463
Blood dyscrasia in unofficial vendors of petrol and heavy oil and motor mechanics in Nigeria. Niazi GA, et al. **Trop Doct** 1989 Apr;19(2):55–8
Dermal exposure to kerosene. Upreti RK, et al. **Vet Hum Toxicol** 1989 Feb;31(1):16–20
[Lipid pneumopathy caused by occupational exposure to cutting oil] Perol M, et al. **Rev Mal Respir** 1989;6(3):271–4 (Eng. Abstr.) **(Fre)**
[Protective effect of phenobarbital in toxic liver damage by kerosine hydrocarbons in rats] Kamiński M, et al. **Folia Med Cracov** 1988;29(1–2):87–98 (Eng. Abstr.) **(Pol)**
[Experience with differentiated mass screening and treatment of workers in petrochemical plants with diseases of the liver and biliary tract] Bulatova FD, et al. **Gig Tr Prof Zabol** 1988 Sep;(9):18–20 (Eng. Abstr.) **(Rus)**
[Blastomogenic and nephrotoxic effects of a petroleum product obtained from high-vanadium oil at a temperature of 300–350 degrees C] Karimov MA, et al. **Gig Tr Prof Zabol** 1988 Nov;(11):53–5 **(Rus)**
[A case of pneumonia caused by aspiration of diesel fuel] Vertkin IuI, et al. **Gig Tr Prof Zabol** 1989;(3):41–4 (Eng. Abstr.) **(Rus)**
[Primary disability at petroleum chemical plants] Sumenkov KS. **Sov Zdravookhr** 1988;(9):30–2 **(Rus)**

ANALYSIS

Occurrence of benzo[a]pyrene in combustion effluents of kerosene and diesel burners. Gharaibeh SH, et al. **Bull Environ Contam Toxicol** 1988 Sep;41(3):449–53
Detection of drilling mud-base oil in the bile of trout, Salmo gairdneri. Hellou J, et al. **Bull Environ Contam Toxicol** 1988 Jul;41(1):101–7
Effect of assam crude on photosynthesis and associated electron transport system in Anabaena doliolum. Singh AK, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):776–80
In vitro and in vivo percutaneous absorption of benzo[a]pyrene from petroleum crude-fortified soil in the rat. Yang JJ, et al. **Bull Environ Contam Toxicol** 1989 Aug; 43(2):207–14
A newly designed apparatus for testing blood levels of fuel vapor. Kimura K, et al. **Forensic Sci Int** 1989 Jan; 40(1):57–61
Determination of gasoline hydrocarbons in industrial air by two-stage (chromosorb/charcoal) adsorption, thermal desorption and capillary gas chromatography. Brown RH. **IARC Sci Publ** 1988;(85):243–51
Determination of trace volatile organic compounds in fish tissues by gas chromatography. Murray DA, et al. **J Assoc Off Anal Chem** 1988 Nov–Dec;71(6):1086–9
Hazardous waste minimization: Part V. Waste minimization in the petroleum industry. Leemann JE. **JAPCA** 1988 Jun; 38(6):814–23
NMR imaging of fluid dynamics in reservoir core. Baldwin BA, et al. **Magn Reson Imaging** 1988 Sep–Oct;6(5):493–500
[Determination and occupational health evaluation of pollutant concentrations from combustion engines in occupational environments] Prietsch W, et al. **Z Gesamte Hyg** 1989 Mar;35(3):155–7 (Eng. Abstr.) **(Ger)**

POISONING

Immolation after drinking kerosene. Shiono H, et al. **Am J Forensic Med Pathol** 1989 Sep;10(3):229–31
Aspiration pneumonia following diesel oil siphonage—analysis of 12 cases. Lee CH, et al. **Chang Keng I Hsueh** 1988 Sep 20;11(3):180–4
Kerosene poisoning in children in Riyadh. Mahdi AH. **J Trop Pediatr** 1988 Dec;34(6):316–8
Toxicology of oil field wastes. Hazards to livestock associated with the petroleum industry. Edwards WC. **Vet Clin North Am Food Anim Pract** 1989 Jul;5(2):363–74 (17 ref.)
[Increasing incidence of childhood accidents with lamp oil] Rowedder E. **Schweiz Rundsch Med Prax** 1988 Sep 13; 77(37):969–72 (Eng. Abstr.) **(Ger)**

TOXICITY

Biochemical mechanisms in the effects of kerosene on airways of experimental animals. Garciá Mesa M, et al. **Allergol Immunopathol (Madr)** 1988 Sep–Oct;16(5):363–7
Role of chemical mediators in bronchoconstriction induced by kerosene. García Mesa M, et al. **Allergol Immunopathol (Madr)** 1988 Nov–Dec;16(6):421–3
Effects of the water-soluble fractions of No. 2 fuel oil on the cytokinesis of the quahog clam (Mercenaria mercenaria). Byrne C. **Bull Environ Contam Toxicol** 1989 Jan;42(1):81–6
Long-term effects of land application of aqueous oil effluent on photosynthetic efficiency of certain varieties of Oryza sativa L. Ilangovan K, et al. **Bull Environ Contam Toxicol** 1989 Feb;42(2):187–94
Effect of petroleum aromatic hydrocarbons on monogeneids parasitizing Atlantic cod, Gadus morhua L. Khan RA, et al. **Bull Environ Contam Toxicol** 1988 Jul;41(1):94–100
Effects of two diesel fuel mixtures on fecal coliform bacteria densities. Marcus JM, et al. **Bull Environ Contam Toxicol** 1989 Mar;42(3):395–401
Effects of water soluble crude oil fractions on cirral beat frequency in Balanus balanoides. Ponat A. **Bull Environ Contam Toxicol** 1988 Nov;41(5):759–64

Sensitivity of branchial mucous to crude oil toxicity in a freshwater fish, Colisa fasciatus. Prasad MS. **Bull Environ Contam Toxicol** 1988 Nov;41(5):754–8

Effect of petroleum vapors inhalation on intestinal absorption of glucose and some amino acids in the rat. Szablicka E, et al. **Bull Environ Contam Toxicol** 1989 Feb;42(2):294–300

Early changes produced in mouse skin by the application of three middle distillates. Grasso P, et al. **Cancer Lett** 1988 Sep–Oct;42(1–2):147–55

Effect of a Prudhoe Bay crude oil on hepatic and renal peroxisomal beta-oxidation and mixed-function oxidase activities in rats. Khan S, et al. **Carcinogenesis** 1989 Feb; 10(2):269–72

Quantitative structure–activity relationships for the toxicity of selected shale oil components to mixed marine bacteria. Warne MS, et al. **Ecotoxicol Environ Safety** 1989 Apr; 17(2):133–48

Some effects of ingested petroleum on seawater-adapted ducks (Anas platyrhynchos). Holmes WN, et al. **Environ Res** 1978 Oct;17(2):177–90

Effects of ingested crude and dispersed crude oil on thermoregulation in ducks (Anas platyrhynchos). Jenssen BM. **Environ Res** 1989 Feb;48(1):49–56

Effects of chronic ingestion of south Louisiana crude oil on mallard ducklings. Szaro RC, et al. **Environ Res** 1978 Dec; 17(3):426–36

Comparative pathology of Prudhoe Bay crude oil and inert shell sealants in chicken embryos. Couillard CM, et al. **Fundam Appl Toxicol** 1989 Jul;13(1):165–73

Tumor initiation and promotion effects of petroleum streams in mouse skin. Gerhart JM, et al. **Fundam Appl Toxicol** 1988 Jul;11(1):76–90

Toxicology update. Gasoline. **J Appl Toxicol** 1989 Jun; 9(3):203–10 (106 ref.)

Tumours of the respiratory tract in rats and hamsters following chronic inhalation of engine exhaust emissions. Brightwell J, et al. **J Appl Toxicol** 1989 Feb;9(1):23–31

An evaluation of the acute toxic properties of liquids derived from oil sands. Stubblefield WA, et al. **J Appl Toxicol** 1989 Feb;9(1):59–65

A subchronic inhalation study with unleaded petrol in rats. Vyskočil A, et al. **J Appl Toxicol** 1988 Aug;8(4):239–42

Alterations in platelet aggregation and microsomal benzo-alpha-pyrene hydroxylase activities after exposure of rats to a Prudhoe Bay crude oil. Chaudhury S, et al. **J Biochem Toxicol** 1987 Summer;2:93–104

Phagolysosomal alterations induced by unleaded gasoline in epithelial cells of the proximal convoluted tubules of male rats: effect of dose and treatment duration. Garg BD, et al. **J Toxicol Environ Health** 1989;26(1):101–18

Urinary 1-hydroxypyrene levels in workers handling petroleum coke. Jongeneelen FJ, et al. **J Toxicol Environ Health** 1989;26(1):133–6

Chemical composition and genotoxic activity of petroleum derivatives collected in two working environments. Pasquini R, et al. **J Toxicol Environ Health** 1989; 27(2):225–38

Skin carcinogenicity bioassays of petroleum refinery streams: issues of interpretation. Craig PH. **Prog Clin Biol Res** 1989; 298:381–91

Experience gained by the petroleum industry in the conduct of dermal carcinogenesis bioassays. McKee RH, et al. **Prog Clin Biol Res** 1989;298:363–79

Application of short-term assays by the petroleum industry to identify skin carcinogens. Thomas FB, et al. **Prog Clin Biol Res** 1989;298:393–9 (18 ref.)

Hydrocarbon-induced hyaline droplet nephropathy in male rats during senescence. Murty CV, et al. **Toxicol Appl Pharmacol** 1988 Nov;96(2):380–92

Inhalation toxicity of high flash aromatic naphtha. Clark DG, et al. **Toxicol Ind Health** 1989 May;5(3):415–28

Developmental toxicity of Clarified Slurry Oil applied dermally to rats. Feuston MH, et al. **Toxicol Ind Health** 1989 May;5(3):587–99

Aviation gasoline: comparative subchronic nephrotoxicity study in the male rat. Gérin M, et al. **Toxicol Lett** 1988 Nov;44(1–2):13–9

Dermal carcinogenic activity of petroleum-derived middle distillate fuels. Biles RW, et al. **Toxicology** 1988 Dec 30; 53(2–3):301–14

Kerosene aspiration: immediate and early pulmonary and cardiovascular effects. Goodwin SR, et al. **Vet Hum Toxicol** 1988 Dec;30(6):521–4

[Evaluation of various indicators of cellular immunity in persons exposed to work environment in the Masovian Refinery and Petrochemical Plants in Plock] Tchórzewski H, et al. **Med Pr** 1988;39(2):100–7 (Eng. Abstr.) **(Pol)**

[Various parameters of cellular immunity in persons exposed to petroleum derivatives] Zeman K, et al. **Pol Tyg Lek** 1988 May 16;43(20):626–30 (Eng. Abstr.) **(Pol)**

[Survival of microorganisms in soil contaminated with diesel fuel] Alton LV. **Gig Sanit** 1989 Jan;(1):75–7 **(Rus)**

[Morphobiochemical studies of the effect of inhalation of gasoline] Dolinskaia SI, et al. **Gig Sanit** 1989 Feb;(2):75–7 **(Rus)**

[The nature of various compensatory and adaptive reactions of the body detected after exposure to fuel oil ashes] Iushkova LA, et al. **Gig Sanit** 1988 Dec;(12):84–5 **(Rus)**

[Vanadium level in the urine of workers on a shift-work schedule during drilling of oil wells for high-vanadium petroleum] Karimov MA, et al. **Gig Tr Prof Zabol** 1989; (3):9–12 (Eng. Abstr.) **(Rus)**

[Metabolic processes in the tissues of mussels during adaptation to hydrocarbon intoxication and changes in the environmental conditions of their habitat] Divavin IA, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Mar–Apr;(2):204–11 (Eng. Abstr.) **(Rus)**

PETROLEUM JELLY see **PETROLATUM**

PETROUS BONE

Cholesterol granuloma of the petrous apex: MR and CT evaluation. Greenberg JJ, et al. **AJNR** 1988 Nov–Dec; 9(6):1205–14

Adenomas of the temporal bone. Eby TL, et al. **Ann Otol Rhinol Laryngol** 1988 Nov–Dec;97(6 Pt 1):605–12 (29 ref.)

Management of petrous apex lesions. Franklin DJ, et al. **Arch Otolaryngol Head Neck Surg** 1989 Sep;115(9):1121–5

Radiographic diagnosis, surgical treatment, and long-term follow-up of cholesterol granulomas of the petrous apex. Thedinger BA, et al. **Laryngoscope** 1989 Sep;99(9):896–907

[Otitis media, petrositis and Gradenigo's syndrome] van Wieringen PM, et al. **Tijdschr Kindergeneeskd** 1989 Apr; 57(2):63–6 (Eng. Abstr.) **(Dut)**

[Intrapetrous cholesteatoma. Apropos of 42 cases] Charachon R, et al. **Ann Otolaryngol Chir Cervicofac** 1988; 105(8):567–79 (Eng. Abstr.) **(Fre)**

[Aneurysmal cyst of the petrous bone. Apropos of a case] Legent F, et al. **Ann Otolaryngol Chir Cervicofac** 1988; 105(8):591–6 (Eng. Abstr.) **(Fre)**

[MRI in the diagnosis of recurrent cholesteatoma of the petrous bone] Doyon D, et al. **J Radiol** 1989 Mar; 70(3):151–7 (Eng. Abstr.) **(Fre)**

[Eruptive and progressive cutaneous leiomyomatosis associated with cerebrovascular abnormalities and osteoma of the petrous bone] Sangüeza P, et al. **Med Cutan Ibero Lat Am** 1989;17(3):169–73 (Eng. Abstr.) **(Spa)**

ANATOMY & HISTOLOGY

The subarcuate fossa and cerebellum of extant primates: comparative study of a skull-brain interface. Gannon PJ, et al. **Am J Phys Anthropol** 1988 Oct;77(2):143–64

[Comparison of CT images of the petrous bone with analogous anatomical specimens] Buczyłko K, et al. **Otolaryngol Pol** 1988;42(3):161–7 (Eng. Abstr.) **(Pol)**

INJURIES

Floating petrous bone fracture. Merwin W, et al. **Otolaryngol Head Neck Surg** 1989 Jan;100(1):69–73

[Fine structure analysis of the petrous bone using high-resolution thin-layer computed tomography. 2: Place and success of CT in comparison with conventional x-ray diagnosis of petrous bone fractures] Fritz P, et al. **ROFO** 1989 Aug;151(2):171–4 (Eng. Abstr.) **(Ger)**

PATHOLOGY

Cholesterol granulomas of petrous apex [letter] Benecke JE Jr. **Arch Otolaryngol Head Neck Surg** 1988 Nov; 114(11):1334

[An unusual tumor of the petrous bone: an epidermoid cyst] Darrouzet V, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988; 109(3):265–7 (Eng. Abstr.) **(Fre)**

[Computerized tomography and nuclear magnetic resonance tomography and digital subtraction angiography of the petrous bone and the surrounding area] Valavanis A. **Arch Otorhinolaryngol Suppl** 1989;1:41–70 **(Ger)**

[Computerized tomography of the petrous bone. With magnetic resonance tomography] Köster O. **Fortschr Geb Rontgenstr Nuklearmed Erganzungsband** 1988; 129:1–92 **(Ger)**

RADIOGRAPHY

Differential clinical and radiographic features of cholesterol granulomas and cholesteatomas of the petrous apex. Smith PG, et al. **Ann Otol Rhinol Laryngol** 1988 Nov–Dec;97(6 Pt 1):599–604

The petrous temporal bone and deafness in X-linked hypophosphataemic osteomalacia. O'Malley SP, et al. **Clin Radiol** 1988 Sep;39(5):528–30

Radiological help? [letter] Phelps PD. **J Laryngol Otol** 1989 May;103(5):553

Tumours of the petrous apex: a clinical series. Charachon R, et al. **J Neuroradiol** 1988;15(2):186–201 **(Eng, Fre)**

Correlations between meatocisternography and audiological tests in suspected eight nerve tumors. Jauhiainen T, et al. **Scand Audiol Suppl** 1988;30:189–90

[Observations on the Camurati-Engelmann syndrome. Demonstration of changes of the petrous bone using high-resolution computed tomography] Dannenmaier B, et al. **ROFO** 1989 Aug;151(2):175–8 (Eng. Abstr.) **(Ger)**

[Tumor of the petrous pyramid in a young women] Amarilla Jiménez MA, et al. **Rev Clin Esp** 1988 Nov;183(8):424–6 **(Spa)**

SURGERY

Transpalatal approach to the petrous apex. Davis AE, et al. **J Laryngol Otol** 1989 Jan;103(1):94–6

PETROUS PYRAMID see **PETROUS BONE**

PETS see **ANIMALS, DOMESTIC**

PEUTZ-JEGHERS SYNDROME

[Peutz-Jeghers' syndrome. A review and 2 case reports] Bülow S, et al. **Ugeskr Laeger** 1988 Jan 18;150(3):135–8 (Eng. Abstr.) **(Dut)**

COMPLICATIONS

Pigmented ocular fundus lesions in the inherited gastrointestinal polyposis syndromes and in hereditary nonpolyposis colorectal cancer. Traboulsi EI, et al. **Ophthalmology** 1988 Jul;95(7):964–9

[Peutz-Jeghers syndrome in association with cancer of the stomach complicated by hemorrhage] Akhadov MK, et al. **Khirurgiia (Mosk)** 1989 May;(5):122–3 **(Rus)**

[The Peutz-Touraine-Jeghers syndrome complicated by multiple invaginations of the small intestine] Egitov MB. **Klin Khir** 1989;(6):72 **(Rus)**

DIAGNOSIS

Solitary Peutz-Jeghers type polyp of the stomach in the absence of familial polyposis coli in a teenage boy. Kuwano H, et al. **Endoscopy** 1989 Jul;21(4):188–90

Peutz-Jeghers syndrome. Dhaliwal US, et al. **J Indian Med Assoc** 1988 Jul;86(7):197

[Peutz-Jeghers syndrome. Report and clinical case] Giacomelli L, et al. **Minerva Chir** 1988 Oct 15; 43(19):1649–54 (16 ref.) (Eng. Abstr.) **(Ita)**

[Peutz-Jeghers syndrome] Timerbulatov VM, et al. **Klin Med (Mosk)** 1989 May;67(5):137–8 **(Rus)**

EPIDEMIOLOGY

Peutz-Jeghers syndrome: a clinicopathologic survey of the "Harrisburg family" with a 49-year follow-up. Foley TR, et al. **Gastroenterology** 1988 Dec;95(6):1535–40

GENETICS

A family with Peutz-Jeghers syndrome. Gupta I, et al. **Indian J Gastroenterol** 1989 Jan;8(1):51–2

PATHOLOGY

A solitary Peutz-Jeghers type hamartomatous polyp in the duodenum—a case report. Naitoh H, et al. **Jpn J Surg** 1988 Jul;18(4):475–7

RADIOGRAPHY

[Peutz-Jeghers syndrome: a case description] Pieri L, et al. **Radiol Med (Torino)** 1989 Jan–Feb;77(1–2):137–8 **(Ita)**

SURGERY

[The Peutz-Jeghers syndrome] Ignatsevich IF. **Klin Khir** 1989;(5):60 **(Rus)**

PEYER'S PATCHES

ANALYSIS

Immunohistochemical examination of Peyer's patches in autoimmune mice. Yoshioka H, et al. **Histochemistry** 1988; 90(2):145–50

Pigment resembling atmospheric dust in Peyer's patches. Urbanski SJ, et al. **Mod Pathol** 1989 May;2(3):222–6

CYTOLOGY

Migration and lodging of Peyer's patch IgA precursor cells in the gut lamina propria. Tseng J. **Adv Exp Med Biol** 1988; 237:615–9

Immune cells associated with M cells in the follicle-associated epithelium of Peyer's patches in the rat. An electron- and immuno-electron-microscopic study. Jarry A, et al. **Cell Tissue Res** 1989 Feb;255(2):293–8

Uptake and translocation of fluorescent latex particles by rabbit Peyer's patch follicle epithelium: a quantitative model for M cell uptake. Pappo J, et al. **Clin Exp Immunol** 1989 Apr;76(1):144–8

Automated histochemical analysis of cell populations in the intact follicle-associated epithelium of the mouse Peyer's patch. Smith MW, et al. **Histochem J** 1988 Aug;20(8):443–8

Recombinant murine IL-5 induces high rate IgA synthesis in cycling IgA-positive Peyer's patch B cells. Beagley KW, et al. **J Immunol** 1988 Sep 15;141(6):2035–42

The effects of IL-4 and IL-5 on the IgA response by murine Peyer's patch B cell subpopulations. Lebman DA, et al. **J Immunol** 1988 Sep 15;141(6):2050–6

[Effect of lymphoid cells of Peyer's patches on the immunologic response in mice] Gryglewski A, et al. **Przegl Lek** 1988;45(11):765–9 (Eng. Abstr.) **(Pol)**

IMMUNOLOGY

The identification of murine Peyer's patch T cell-derived factors which enhance IgA responses. Beagley KW, et al. **Adv Exp Med Biol** 1988;237:641–7

T cells and epithelial expression of HLA class II determinants in relation to putative M cells of follicle-associated epithelium in human Peyer's patches. Bjerke K, et al. **Adv Exp Med Biol** 1988;237:695–8

Age-dependence of lymphocyte production in Peyer's patch follicles in contrast to the other Peyer's patch

compartments and the thymus. Rothkötter HJ, et al. **Adv Exp Med Biol** 1988;237:81–5
The differential effect with time of neuropeptides on the proliferative responses of murine Peyer's patch and splenic lymphocytes. Scicchitano R, et al. **Brain Behav Immun** 1987 Sep;1(3):231–7
Generation and characterization of monoclonal antibodies recognizing follicle epithelial M cells in rabbit gut-associated lymphoid tissues. Pappo J. **Cell Immunol** 1989 Apr 15;120(1):31–41
T cell distribution is different in follicle-associated epithelium of human Peyer's patches and villous epithelium. Bjerke K, et al. **Clin Exp Immunol** 1988 Nov;74(2):270–5
Mononuclear phagocyte system of human Peyer's patches: an immunohistochemical study using monoclonal antibodies. Mahida YR, et al. **Clin Exp Immunol** 1989 Jan; 75(1):82–6
Peyer's patch-specific lymphocyte homing receptors consist of a VLA-4-like alpha chain associated with either of two integrin beta chains, one of which is novel. Holzmann B, et al. **EMBO J** 1989 Jun;8(6):1735–41
Modulation of some Peyer's patch leukocyte functions following in vitro exposure to recombinant bovine alpha- and gamma-interferon. Nagi AM, et al. **Immunobiology** 1988 Sep;177(4–5):329–38
Human Peyer's patches: lympho-epithelial relationships and characteristics of immunoglobulin-producing cells. Brandtzaeg P, et al. **Immunol Invest** 1989 Jan–May; 18(1–4):29–45
Autoreactive T cell hybridoma-derived B cell stimulatory factor(s) governing IgA isotype immunoglobulin production by murine Peyer's patch B cells. Kawanishi H, et al. **Immunol Invest** 1988 Aug–Oct;17(6–7):587–613
Lymphocyte subsets in jejunal and ileal Peyer's patches of normal and gnotobiotic minipigs. Rothkötter HJ, et al. **Immunology** 1989 May;67(1):103–8
Binding and transepithelial transport of immunoglobulins by intestinal M cells: demonstration using monoclonal IgA antibodies against enteric viral proteins. Weltzin R, et al. **J Cell Biol** 1989 May;108(5):1673–85
Immunogenicity of Bifidobacterium breve and change in antibody production in Peyer's patches after oral administration. Yasui H, et al. **J Dairy Sci** 1989 Jan; 72(1):30–5
Aging-associated intrinsic defects in IgA production by murine Peyer's patch B cells stimulated by autoreactive Peyer's patch T cell hybridoma-derived B cell stimulatory factors (BSF). Kawanishi H, et al. **Mech Ageing Dev** 1989 Jul;49(1):61–78

METABOLISM

Absence of secretory component expression by epithelial cells overlying rabbit gut-associated lymphoid tissue. Pappo J, et al. **Gastroenterology** 1988 Nov;95(5):1173–7
Origin and fate of IgE-bearing lymphocytes. II. Modulation of IgE isotype expression on Peyer's patch cells by feeding with certain bacteria and bacterial cell wall components or by thymectomy. Durkin HG, et al. **J Immunol** 1989 Sep 15;143(6):1777–83

MICROBIOLOGY

Selective association and transport of Campylobacter jejuni through M cells of rabbit Peyer's patches. Walker RI, et al. **Can J Microbiol** 1988 Oct;34(10):1142–7

PATHOLOGY

M cells and granular mononuclear cells in Peyer's patch domes of mice depleted of their lymphocytes by total lymphoid irradiation. Ermak TH, et al. **Am J Pathol** 1989 Mar;134(3):529–37
Anti-mu treatment suppresses immunoglobulin light-chain gene expression and Peyer's patch development. Woloschak GE, et al. **Mol Immunol** 1989 Apr;26(4):351–8

PHYSIOLOGY

Bacterial characteristics and follicle surface structure: their roles in Peyer's patch uptake and transport of Vibrio cholerae. Owen RL, et al. **Adv Exp Med Biol** 1988; 237:705–15
Identification of a murine Peyer's patch—specific lymphocyte homing receptor as an integrin molecule with an alpha chain homologous to human VLA-4 alpha. Holzmann B, et al. **Cell** 1989 Jan 13;56(1):37–46
Integrin molecules involved in lymphocyte homing to Peyer's patches. Holzmann B, et al. **Immunol Rev** 1989 Apr; 108:45–61 (46 ref.)
Two types of sheep Peyer's patches: location along gut does not influence involution. Reynolds JD, et al. **Immunology** 1989 Feb;66(2):308–11
Enterocyte–lymphocyte interactions in the follicle-associated epithelium of the mouse Peyer's patch. Cremaschi D, et al. **J Physiol (Lond)** 1989;408:605–16

RADIATION EFFECTS

Depletion and repopulation of lymphocytes in Peyer's patches of mice after total lymphoid irradiation. Ermak TH, et al. **Lab Invest** 1988 Nov;59(5):591–7

PEYOTE see **MESCALINE**

PEYRONIE'S DISEASE see **PENILE INDURATION**

PF 4 see **PLATELET FACTOR 4**

PFAUNDLER–HURLER SYNDROME see **LIPOCHONDRODYSTROPHY**

PGE1 see **ALPROSTADIL**

PGE2 see **DINOPROSTONE**

PGE2ALPHA see **DINOPROSTONE**

PGF2 see **DINOPROST**

PGF2ALPHA see **DINOPROST**

PGH SYNTHASE see **PROSTAGLANDIN SYNTHASE**

PH see **HYDROGEN-ION CONCENTRATION**

PH1 CHROMOSOME see **PHILADELPHIA CHROMOSOME**

PHAGE LAMBDA

Lambda vehicles provide new tools for genetic analysis of gram-negative bacteria. Palva ET, et al. **Microb Pathog** 1987 Oct;3(4):227–30 (26 ref.)
[Complete assignment of signals in 1D and 2D H-NMR spectra of a 17-member oligonucleotide, a model symmetrical analog of lambda operators] Kurochkin AV, et al. **Mol Biol (Mosk)** 1989 Jan–Feb;23(1):135–52 (Eng. Abstr.) **(Rus)**

ANALYSIS

Preparation of bacteriophage lambda DNA using the TL-100 ultracentrifuge. Buckley MF, et al. **Anal Biochem** 1988 Nov 15;175(1):281–3
Size-dependent, chromatographic separation of double-stranded DNA which is not based on gel permeation mode. Hirabayashi J, et al. **Anal Biochem** 1989 May 1;178(2):336–41
Filter-supported preparation of lambda phage DNA. Jakobi R, et al. **Anal Biochem** 1988 Nov 15;175(1):196–201
Rapid minipreparations of bacteriophage lambda DNA. Dumanski JP, et al. **Nucleic Acids Res** 1988 Sep 26; 16(18):9044
Cleavage of the cII protein of phage lambda by purified HflA protease: control of the switch between lysis and lysogeny. Cheng HH, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(21):7882–6
[Structural characteristics of alkylated DNA in phage lambda] Tkachuk LV, et al. **Mikrobiol Zh** 1987 Jan–Feb; 49(1):18–23 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Integration host factor (IHF) stimulates binding of the gpNu1 subunit of lambda terminase to cos DNA. Shinder G, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2005–22

GENETICS

Controlled partial restriction digestions of DNA by competition with modification methyltransferases. Hanish J, et al. **Anal Biochem** 1989 Jun;179(2):357–60
Efficient simplified cosmid cloning: construction and characterization of cosmid vectors that carry the two cohesive end sites of lambda phages arrayed in tandem. Ishiura M, et al. **Anal Biochem** 1989 Jan;176(1):117–27
Dynamic, structural, and regulatory aspects of lambda site-specific recombination. Landy A. **Annu Rev Biochem** 1989;58:913–49 (202 ref.)
DNA double-chain breaks in recombination of phage lambda and of yeast. Thaler DS, et al. **Annu Rev Genet** 1988; 22:169–97 (117 ref.)
Nick translation of lambda phage DNA with a deoxycytidine analog spin labeled in the 5 position. Strobel OK, et al. **Arch Biochem Biophys** 1989 Sep;273(2):597–601
Discovery of a protein phosphatase activity encoded in the genome of bacteriophage lambda. Probable identity with open reading frame 221. Cohen PT, et al. **Biochem J** 1989 Jun 15;260(3):931–4
Initiation of lambda DNA replication reconstituted with purified lambda and Escherichia coli replication proteins. Zylicz M, et al. **Biochim Biophys Acta** 1988 Dec 20; 951(2–3):344–50
Expression vectors employing lambda-, trp-, lac-, and lpp-derived promoters. Brosius J. **Biotechnology** 1988; 10:205–25 (105 ref.)
Bacteriophage lambda cloning vectors. Sorge JA. **Biotechnology** 1988;10:43–60 (30 ref.)
A single glutamic acid residue plays a key role in the transcriptional activation function of lambda repressor. Bushman FD, et al. **Cell** 1989 Sep 22;58(6):1163–71
Lambda ZAP: improved strategies for expression library construction and use. Webb R, et al. **DNA** 1989 Jan–Feb; 8(1):69–73
Mutations of the phage lambda attachment site alter the directionality of resolution of Holliday structures. de Massy B, et al. **EMBO J** 1989 May;8(5):1591–9
PL of coliphage lambda: an alternative solution for an efficient promoter. Knaus R, et al. **EMBO J** 1988 Sep; 7(9):2919–23
OR3 operator of bacteriophage lambda in a 23 base-pair DNA fragment: sequence-specific 1H NMR assignments for the non-labile protons and comparison with the isolated 17 base-pair operator. Grütter R, et al. **Eur Biophys J** 1988; 16(5):279–86
Transposition of lambda placMu is mediated by the A protein altered at its carboxy-terminal end. Bremer E, et al. **Gene** 1988 Nov 15;71(1):177–86
Jekyll, a family of phage-plasmid shuttle vectors. Burmeister M, et al. **Gene** 1988 Dec 15;73(1):245–50
Segments of bacteriophage lambda (orf 221) and phi 80 are homologous to genes coding for mammalian protein phosphatases. Cohen PT, et al. **Gene** 1988 Sep 15; 69(1):131–4
Coliphage lambda to terminator lowers the stability of messenger RNA in Escherichia coli hosts. Gross G, et al. **Gene** 1988 Dec 10;72(1–2):119–28
Retroregulation of an int-lacZ gene fusion in a plasmid system. Guarneros G, et al. **Gene** 1988 Dec 10; 72(1–2):129–30
Antisense RNA does not significantly affect expression of the galK gene of Escherichia coli or the N gene of coliphage lambda. Hasan N, et al. **Gene** 1988 Dec 10; 72(1–2):247–52
Functional elements of DNA upstream from the integrase operon that are conserved in bacteriophages 434 and lambda. Limberger RJ, et al. **Gene** 1988 Dec 30;74(2):571–2
Expression vector with two-step control by the cI-pR-Q-p'R-qut-t'R module of coliphage lambda. Petrenko LA, et al. **Gene** 1989 May 15;78(1):85–91
A versatile phage lambda expression vector system for cloning in Escherichia coli. Sieg K, et al. **Gene** 1989 Feb 20;75(2):261–70
High level expression of genes cloned in phage lambda gt11. Stoker NG, et al. **Gene** 1989 May 15;78(1):93–99
Small-scale purification of bacteriophage lambda DNA by an airfuge centrifugation step in cesium chloride gradients. Mirande M, et al. **Gene Anal Tech** 1988 Jul–Aug;5(4):80–2
The effect of attachment site mutations on strand exchange in bacteriophage lambda site-specific recombination. Bauer CE, et al. **Genetics** 1989 Aug;122(4):727–36
Phage lambda Cro protein and cI repressor use two different patterns of specific protein-DNA interactions to achieve sequence specificity in vivo. Benson N, et al. **Genetics** 1989 Jan;121(1):5–12
Phage genetic sites involved in lambda growth inhibition by the Escherichia coli rap mutant. Guzmán P, et al. **Genetics** 1989 Mar;121(3):401–9
Chain-bias of Escherichia coli Rec-mediated lambda patch recombinants is independent of the orientation of lambda cos. Rosenberg SM. **Genetics** 1988 Sep;120(1):7–21
Suppression of recA deficiency in plasmid recombination by bacteriophage lambda beta protein in RecBCD- ExoI- Escherichia coli cells. Berger I, et al. **J Bacteriol** 1989 Jun; 171(6):3523–9
Translesion synthesis is the main component of SOS repair in bacteriophage lambda DNA. Defais M, et al. **J Bacteriol** 1989 Sep;171(9):4938–44
Genetic analysis of bacteriophage lambda cIII gene: mRNA structural requirements for translation initiation. Kornitzer D, et al. **J Bacteriol** 1989 May;171(5):2563–72
Analysis of transcription termination signals in the nin region of bacteriophage lambda: the roc deletion. Leason KR, et al. **J Bacteriol** 1988 Nov;170(11):5051–8
Role of the 5' upstream sequence and tandem promoters in regulation of the rpsU-dnaG-rpoD macromolecular synthesis operon. Nesin M, et al. **J Bacteriol** 1988 Dec; 170(12):5759–64
Retroregulation of the bacteriophage lambda int gene: limited secondary degradation of the RNase III-processed transcript. Plunkett G 3d, et al. **J Bacteriol** 1989 Jan; 171(1):588–92
Structural analysis of the carboxy terminus of bacteriophage lambda repressor determined by antipeptide antibodies. Sussman R, et al. **J Bacteriol** 1989 Mar;171(3):1235–44
Formation of lambda transducing phage in vitro: involvement of DNA gyrase. Tomono M, et al. **J Biochem (Tokyo)** 1989 Mar;105(3):423–8
Ordered assembly of nucleoprotein structures at the bacteriophage lambda replication origin during the initiation of DNA replication. Alfano C, et al. **J Biol Chem** 1989 Jun 25;264(18):10699–708
Heat shock protein-mediated disassembly of nucleoprotein structures is required for the initiation of bacteriophage lambda DNA replication. Alfano C, et al. **J Biol Chem** 1989 Jun 25;264(18):10709–18
Mutational analysis of the fine specificity of binding of monoclonal antibody 51F to lambda repressor. Breyer RM, et al. **J Biol Chem** 1989 Aug 5;264(22):13355–60
Specialized nucleoprotein structures at the origin of replication of bacteriophage lambda. Protein association and disassociation reactions responsible for localized initiation of replication. Dodson M, et al. **J Biol Chem** 1989 Jun 25;264(18):10719–25
Structure and inherent properties of the bacteriophage lambda head shell. VI. DNA-packaging-defective mutants in the major capsid protein. Katsura I. **J Mol Biol** 1989 Jan 20;205(2):397–405
Bacteriophage lambda site-specific recombination proceeds with a defined order of strand exchanges. Kitts PA, et al.

J Mol Biol 1988 Nov 5;204(1):95–107

Lambda cro repressor complex with OR3 operator DNA. 19F nuclear magnetic resonance observations. Metzler WJ, et al. **J Mol Biol** 1989 Jan 5;205(1):149–64

Alleviation of type I restriction in adenine methylase (dam) mutants of Escherichia coli. Efimova EP, et al. **Mol Gen Genet** 1988 Oct;214(2):313–6

Transcription of a region downstream from lambda ori is required for replication of plasmids derived from coliphage lambda. Hase T, et al. **Mol Gen Genet** 1989 Mar; 216(1):120–5

Translational signals of a major head protein gene of bacteriophage lambda. Suissa M, et al. **Mol Gen Genet** 1988 Nov;214(3):570–3

Restriction analysis of lambda EMBL3 background recombinants: occurrence of lambda phages carrying a head to tail oriented left arm DNA sequence. Tröster H, et al. **Mol Gen Genet** 1989 Jun;217(2–3):533–5

The use of lambda plac–Mu hybrid phages in Klebsiella pneumoniae and the isolation of stable Hfr strains. Wehmeier U, et al. **Mol Gen Genet** 1989 Feb;215(3):529–36

Lambda phage shuttle vectors for analysis of mutations in mammalian cells in culture and in transgenic mice. Summers WC, et al. **Mutat Res** 1989 Mar–May; 220(2–3):263–8

Functional replacement of a protein–induced bend in a DNA recombination site. Goodman SD, et al. **Nature** 1989 Sep 21;341(6239):251–4

Interaction at a distance between lambda repressors disrupts gene activation. Hochschild A, et al. **Nature** 1988 Nov 24; 336(6197):353–7

Phasing of protein–induced DNA bends in a recombination complex. Snyder UK, et al. **Nature** 1989 Sep 21; 341(6239):255–7

The role of template superhelicity in the initiation of bacteriophage lambda DNA replication. Alfano C, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9611–30

Flanking DNA–sequences contribute to the specific binding of cI–repressor and OR1. Brenowitz M, et al. **Nucleic Acids Res** 1989 May 25;17(10):3747–55

Effects of all single base substitutions in the loop of boxB on antitermination of transcription by bacteriophage lambda's N protein. Doelling JH, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5565–77

Lambda gt22S, a phage expression vector for the directional cloning of cDNA by the use of a single restriction enzyme SfiI. Han JH, et al. **Nucleic Acids Res** 1988 Dec 23; 16(24):11837

Rapid minipreparation of lambda DNA. Kim DY, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6416

The interaction of E. coli integration host factor and lambda cos DNA: multiple complex formation and protein–induced bending. Kosturko LD, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):317–34

A method for the screening of fusion protein expression by lambda–GT11 recombinant clones without the preparation of lysogens. Ramos BV. **Nucleic Acids Res** 1989 Aug 11; 17(15):6421

Structural bases of a long–stretched deletion: completing the lambda plac5 DNA primary structure. Shpakovski GV, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10199–212

Empirical estimation of protein–induced DNA bending angles: applications to lambda site–specific recombination complexes. Thompson JF, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9687–705

Rapid isolation of lambda phage DNA in micro– and macro–variants. Zabarovsky ER, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10925

lambda SK9—a diphasmid for constructing genomic libraries, capable of converting inserts into plasmid and single stranded forms. Zabarovsky ER, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4407

lambda SK15—a diphasmid for construction expression cDNA libraries at BamHI and EcoRI sites with selection against non–recombinant and false recombinant phages. Zabarovsky ER, et al. **Nucleic Acids Res** 1989 Jun 12; 17(11):4408

Tn5supF, a 264–base–pair transposon derived from Tn5 for insertion mutagenesis and sequencing DNAs cloned in phage lambda. Phadnis SH, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5908–12

Gene Q antiterminator proteins of Escherichia coli phages 82 and lambda suppress pausing by RNA polymerase at a rho–dependent terminator and at other sites. Yang XJ, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5301–5

Cloning of the cDNA from normal brain and brain of patients with Alzheimer's disease in the expression vector lambda GT 11. Octave JN, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(5):813–20

DNA looping generated by DNA bending protein IHF and the two domains of lambda integrase. Moitoso de Vargas L, et al. **Science** 1989 Jun 23;244(4911):1457–61

Q–mediated late gene transcription of bacteriophage lambda: RNA start point and RNase III processing sites in vivo. Daniels DL, et al. **Virology** 1988 Dec;167(2):568–77

Partial FI gene–independence of lambda–21 hybrid phages specifying chimeric terminases. Feiss M, et al. **Virology** 1988 Nov;167(1):323–5

Repression of transcription from the b2–att region of coliphage lambda by integration host factor. Kur J, et al. **Virology** 1989 Feb;168(2):236–44

DNA looping induced by bacteriophage lambda O protein: implications for formation of higher order structures at the lambda origin of replication. Schnos M, et al. **Virology** 1989 Feb;168(2):370–7

[Rpo pathway as a possible recombination mechanism of the interaction between DNA of transducing phages and the Escherichia coli genome] Kholodiĭ GIa, et al. **Genetika** 1988 Oct;24(10):1739–51 (Eng. Abstr.) **(Rus)**

[Expression of the Bacillus pumilus chloramphenicol acetyltransferase gene in Bacillus subtilis, achieved by the P–R–promotor of phage lambda] Luk'ianov EV, et al. **Genetika** 1989 Mar;25(3):555–6 (Eng. Abstr.) **(Rus)**

[The use of phage lambda promotors for expressing genes of secreted proteins in Bacillus subtilis cells] Sorokin AV, et al. **Mol Biol (Mosk)** 1988 Nov–Dec;22(6):1658–66 (Eng. Abstr.) **(Rus)**

[Rapid isolation of phage lambda DNA] Zabarovskiĭ ER, et al. **Mol Biol (Mosk)** 1988 Nov–Dec;22(6):1451–5 (Eng. Abstr.) **(Rus)**

[Transactivation of p'R promoter of phage lambda] Troianovskaia IN, et al. **Mol Gen Mikrobiol Virusol** 1988 Aug;(8):12–7 (Eng. Abstr.) **(Rus)**

[Features of expression of cloned genes under the control of tandem promotors pL and pR of phage lambda] Zheleznaia LA, et al. **Mol Gen Mikrobiol Virusol** 1989 Feb; (2):26–9 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

[Induction of prophage lambda during the irradiation of E. coli cells exposed to radiations of various LET] Bonev M, et al. **Radiobiologiia** 1988 Nov–Dec;28(6):767–71 (Eng. Abstr.) **(Rus)**

[The effect of genotype on the induction of prophage lambda in E. coli cells by ionizing radiation of various LET] Bonev MN, et al. **Radiobiologiia** 1989 Jan–Feb;29(1):30–5 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Production and characterization of monoclonal antibodies to the N–terminal domain of lambda repressor. Breyer RM, et al. **J Biol Chem** 1989 Aug 5;264(22):13348–54

ISOLATION & PURIFICATION

Large scale preparation of bacteriophage lambda by tangential flow ultrafiltration for isolation of lambda DNA. Rembhotkar GW, et al. **Anal Biochem** 1989 Feb 1; 176(2):373–4

METABOLISM

Conformations and orientations of a signal peptide interacting with phospholipid monolayers. Cornell DG, et al. **Biochemistry** 1989 Apr 4;28(7):2789–97

Fluorescence measurement of the kinetics of DNA injection by bacteriophage lambda into liposomes. Novick SL, et al. **Biochemistry** 1988 Oct 4;27(20):7919–24

Initiation of lambda DNA replication with purified host– and bacteriophage–encoded proteins: the role of the dnaK, dnaJ and grpE heat shock proteins. Zylicz M, et al. **EMBO J** 1989 May;8(5):1601–8

Export–defective lamB protein is a target for translational control caused by ompC porin overexpression. Click EM, et al. **J Bacteriol** 1989 Jan;171(1):616–9

Reconstitution of a nine–protein system that initiates bacteriophage lambda DNA replication. Mensa–Wilmot K, et al. **J Biol Chem** 1989 Feb 15;264(5):2853–61

Lambda repressor mutants that are better substrates for RecA–mediated cleavage. Gimble FS, et al. **J Mol Biol** 1989 Mar 5;206(1):29–39

PHYSIOLOGY

A component of the side tail fiber of Escherichia coli bacteriophage lambda can functionally replace the receptor–recognizing part of a long tail fiber protein of the unrelated bacteriophage T4. Montag D, et al. **J Bacteriol** 1989 Aug;171(8):4378–84

Results of microbiological investigations on the permeability of procedure and surgical gloves. Gerhardt GG. **Zentralbl Hyg Umweltmed** 1989 Jun;188(3–4):336–42

RADIATION EFFECTS

Effect of photoreactivation on mutagenesis of lambda phage by ultraviolet light. Hutchinson F, et al. **J Mol Biol** 1988 Aug 5;202(3):593–601

Induction of lambda prophage near the site of focused UV laser radiation. Matchette LS, et al. **Photochem Photobiol** 1989 Feb;49(2):161–7

[Lethal and mutagenic effect of incorporated 6–3H–pyrimidines on extracellular phage lambda] Konevega LV, et al. **Radiobiologiia** 1989 Jan–Feb; 29(1):17–22 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

[The Z–form of bacteriophage lambda DNA, modified in situ] Ulanov BP, et al. **Mol Gen Mikrobiol Virusol** 1989 Feb;(2):29–35 (Eng. Abstr.) **(Rus)**

PHAGE MU 1

GENETICS

Determination of the secondary structure of the DNA binding protein Ner from phage Mu using 1H homonuclear and 15N–1H heteronuclear NMR spectroscopy. Gronenborn AM, et al. **Biochemistry** 1989 Jun 13; 28(12):5081–9

Gin–mediated recombination of catenated and knotted DNA substrates: implications for the mechanism of interaction between cis–acting sites. Kanaar R, et al. **Cell** 1989 Jul 14;58(1):147–59

Efficient Mu transposition requires interaction of transposase with a DNA sequence at the Mu operator: implications for regulation. Mizuuchi M, et al. **Cell** 1989 Jul 28; 58(2):399–408

Translation of the bacteriophage Mu mom gene is positively regulated by the phage com gene product. Wulczyn FG, et al. **Cell** 1989 Jun 30;57(7):1201–10

Isolation and characterization of unusual gin mutants. Klippel A, et al. **EMBO J** 1988 Dec 1;7(12):3983–9

Methylation–dependent gene expression in phage Mu. Bölker M, et al. **Gene** 1988 Dec 25;74(1):187–8

Role of bacteriophage Mu C protein in activation of the mom gene promoter. Bölker M, et al. **J Bacteriol** 1989 Apr; 171(4):2019–27

Bacteriophage Mu late promoters: four late transcripts initiate near a conserved sequence. Margolin W, et al. **J Bacteriol** 1989 Apr;171(4):2003–18

Localization and regulation of bacteriophage Mu promoters. Stoddard SF, et al. **J Bacteriol** 1989 Jun;171(6):3440–8

Suppression of the thermosensitive DNA ligase mutations in Escherichia coli K12 through modulation of gene expression induced by phage Mu. Ghelardini P, et al. **Mol Gen Genet** 1989 Mar;216(1):31–6

Autoregulation of phage mu transposase at the level of translation. Parsons RL, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11285–301

PHYSIOLOGY

Synchronous division induced in Escherichia coli K12 by gemts mutants of phage Mu. Paolozzi L, et al. **Mol Gen Genet** 1989 Jul;218(1):13–7

PHAGE MU 2 see RNA PHAGES

PHAGE PHI X 174

GENETICS

Storage of spheroplasts at –70 degrees C for transfection with phi X174 RF DNA. Malling HV, et al. **Gene Anal Tech** 1987 Mar–Apr;4(2):23–6

Rolling–circle replication of UV–irradiated duplex DNA in the phi X174 replicative–form——single–strand replication system in vitro. Shavitt O, et al. **J Bacteriol** 1989 Jun; 171(6):3530–8

Effect of phi X C protein on leading strand DNA synthesis in the phi X174 replication pathway. Goetz GS, et al. **J Biol Chem** 1988 Nov 5;263(31):16452–60

Studies on the role of the phi X174 gene A protein in phi X174 viral strand synthesis. III. Replication of DNA containing two viral replication origins. Goetz GS, et al. **J Biol Chem** 1988 Nov 5;263(31):16443–51

Studies on the role of the phi X174 gene A protein in phi X viral strand synthesis. II. Effects of DNA replication of mutations in the 30–nucleotide icosahedral bacteriophage origin. Goetz GS, et al. **J Biol Chem** 1988 Nov 5; 263(31):16433–42

Studies on the role of the phi X174 gene A protein in phi X viral strand synthesis. I. Replication of DNA containing an alteration in position 1 of the 30–nucleotide icosahedral bacteriophage origin. Goetz GS, et al. **J Biol Chem** 1988 Nov 5;263(31):16421–32

Evaluation of the interaction of phi X174 gene products E and K in E–mediated lysis of Escherichia coli. Bläsi U, et al. **J Virol** 1988 Nov;62(11):4362–4

mRNA stabilizing signals encoded in the genome of the bacteriophage phi x174. Hayashi MN, et al. **Mol Gen Genet** 1989 Apr;216(2–3):364–71

Use of phi X174 as a shuttle vector for the study of in vivo mammalian mutagenesis. Malling HV, et al. **Mutat Res** 1989 May;212(1):11–21

Effects of palindromes on in vivo DNA replication and mutagenesis in bacteriophage phi X174 RF DNA. Müller UR, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10733–50

IMMUNOLOGY

Human antibody responses to bacteriophage phi X 174: sequential induction of IgM and IgG subclass antibody. Pyun KH, et al. **Clin Immunol Immunopathol** 1989 May; 51(2):252–63

[The viroimmunotest for mass determinations of nanogram amounts of antigens] Skvortsov VT, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):704–6 (Eng. Abstr.) **(Rus)**

METABOLISM

Proteolysis of bacteriophage phi X174 prohead protein gpB by a protease located in the Escherichia coli outer

membrane. Richardson DL Jr, et al. **J Bacteriol** 1988 Dec; 170(12):5564–71

Evidence for membrane-bound oligomerization of bacteriophage phi X174 lysis protein-E. Bläsi U, et al. **J Biol Chem** 1989 Mar 15;264(8):4552–8

In vivo effect of DNA repair on the transition frequency produced from a single O6–methyl– or O6–n–butyl–guanine in a T:G base pair. Chambers RW, et al. **Mol Gen Genet** 1988 Aug;213(2–3):325–31

PHYSIOLOGY

Biochemical characterization of phi X174–protein–E–mediated lysis of Escherichia coli. Witte A, et al. **Eur J Biochem** 1989 Mar 15;180(2):393–8

Lysis of Escherichia coli by the bacteriophage phi X174 E protein: inhibition of lysis by heat shock proteins. Young KD, et al. **J Bacteriol** 1989 Aug;171(8):4334–41

PHAGE RECEPTORS see **RECEPTORS, VIRUS**

PHAGE TYPING see **BACTERIOPHAGE TYPING**

PHAGES, RNA see **RNA PHAGES**

PHAGES T see **T-PHAGES**

PHAGOCYTE BACTERICIDAL DYSFUNCTION

BLOOD

History and implications of the neutrophil glycoprotein deficiencies. Styrt B. **Am J Hematol** 1989 Aug;31(4):288–97 (112 ref.)

COMPLICATIONS

[The role of the macroorganism's resistance in the development endogenous diseases] Il'inskiĭ IuA, et al. **Sov Med** 1989;(2):22–5 **(Rus)**

ETIOLOGY

Disorders of phagocyte killing and digestion (CGD, G–6–PD and myeloperoxidase deficiencies). Czarnetzki BM. **Curr Probl Dermatol** 1989;18:101–5 (11 ref.)

[Granulocyte defects in atopic asthma] Matusiewicz R. **Pol Arch Med Wewn** 1985 Nov–Dec;74(5–6):359–62 (22 ref.) (Eng. Abstr.) **(Pol)**

IMMUNOLOGY

Impaired microbial killing in two patients with defective degranulation of myeloperoxidase. Edwards SW, et al. **Acta Paediatr Hung** 1988–89;29(1–2):101–4

Effect of in vitro formed immune complexes on macrophage functions of Mycobacterium leprae infected mice. Vaishnavi C, et al. **Indian J Lepr** 1988 Apr;60(2):242–51

Myeloperoxidase secretion during phagocytosis: a case of a patient with impaired bactericidal activity. Edwards SW, et al. **J Clin Lab Immunol** 1988 Oct;27(2):97–102

Evaluation of a fluorochrome assay for assessing the bactericidal activity of neutrophils in human phagocyte dysfunctions. Bellinati-Pires R, et al. **J Immunol Methods** 1989 May 12;119(2):189–96

[Evaluation of the metabolism and function of peripheral blood neutrophils in a patient with the lazy leukocyte syndrome] Hrycek A, et al. **Pol Arch Med Wewn** 1985 Jun; 73(6):386–90 (Eng. Abstr.) **(Pol)**

PATHOLOGY

Abnormal peroxidase–positive granules in "specific granule" deficiency. Parmley RT, et al. **Blood** 1989 Feb 15; 73(3):838–44

PHAGOCYTES

Measurement of phagocyte chemiluminescence using a microtitre plate luminometer. Blair AL, et al. **J Biolumin Chemilumin** 1989 Apr–Jun;3(2):67–70

Phagocytic activity of human adult astrocytes and oligodendrocytes in culture. Watabe K, et al. **J Neuropathol Exp Neurol** 1989 Sep;48(5):499–506

Recent developments in leukocyte research. Foy MA, et al. **Year Immunol** 1989;4:208–17 (28 ref.)

[The current concept of mononuclear phagocyte system—a critical review] Kojima M, et al. **Nippon Rinsho** 1989 Mar; 47(3):493–8 **(Jpn)**

CLASSIFICATION

Mast cell typing: demonstration of a distinct hematopoietic cell type and evidence for immunophenotypic relationship to mononuclear phagocytes. Valent P, et al. **Blood** 1989 May 15;73(7):1778–85

CYTOLOGY

Establishment and characterization of an Epstein–Barr virus transformed cell line with strong phagocytic activity. von den Driesch P, et al. **Blood** 1989 Jul;74(1):430–6

The viability of mononuclear phagocytes in vitro is diminished by the interaction of cells with serum proteins bound to the culture substratum. Gregory SH. **Immunol Lett** 1989 Jan 31;20(2):155–62

Origin and fate of autophagosomes in Leydig cells of normal adult rats. Tang XM, et al. **J Androl** 1988 Jul–Aug; 9(4):284–93

Quantitative model of mononuclear phagocyte lineage proliferation in murine bone marrow. Novak JP, et al. **J Leukoc Biol** 1989 Jul;46(1):25–33

Colony–stimulating factors as promoters of ameboid microglia. Giulian D, et al. **J Neurosci** 1988 Dec; 8(12):4707–17

DRUG EFFECTS

The effects of anti–inflammatory and anti–rheumatic drugs on phagocyte cell function. Betts WH, et al. **Agents Actions Suppl** 1988;24:45–53

Interaction of azithromycin and human phagocytic cells. Uptake of the antibiotic and the effect on the survival of ingested bacteria in phagocytes. Wildfeuer A, et al. **Arzneimittelforschung** 1989 Jul;39(7):755–8

Enucleation of phagocytic cells with adenine, guanine, and their nucleosides in combination with centrifugation. Saito T, et al. **Biol Cell** 1988;63(3):287–96

Modulation of myelomonocytic U937 cells by vitamin D metabolites. Hewison M, et al. **Bone Miner** 1989 Mar; 5(3):323–33

Effects of intracellular diphosphonates on cells of the mononuclear phagocyte system: in vivo effects of liposome–encapsulated diphosphonates on different macrophage subpopulations in the spleen. van Rooijen N, et al. **Calcif Tissue Int** 1989 Sep;45(3):153–6

Comparison of the effects of IL–1 alpha and TNF–alpha on phagocyte accumulation and murine antibacterial immunity. Kurlander RJ, et al. **Cell Immunol** 1989 Oct 1; 123(1):9–22

Depression of humoral responses and phagocytic functions in vivo and in vitro by fish oil and eicosapentanoic acid. Virella G, et al. **Clin Immunol Immunopathol** 1989 Aug; 52(2):257–70

Cellular models for the detection and evaluation of drugs that modulate human phagocyte activity. Baggiolini M, et al. **Experientia** 1988 Oct 15;44(10):841–8 (37 ref.)

Tumor necrosis factor and human hematopoiesis: I. Kinetics and diversity of human bone marrow cell response to recombinant tumor necrosis factor alpha in short–term suspension cultures in vitro. Beran M, et al. **Hematol Pathol** 1988;2(1):31–42

Effect of Mycobacterium tuberculosis–derived sulfolipid I on human phagocytic cells. Zhang L, et al. **Infect Immun** 1988 Nov;56(11):2876–83

Mineral fiber–induced malondialdehyde formation and effects of oxidant scavengers in phagocytic cells. Yano E. **Int Arch Occup Environ Health** 1988;61(1–2):19–23

Effect of disodium cromoglycate on inflammatory cells bearing the Fc epsilon receptor type II (Fc epsilon RII). Tsicopoulos A, et al. **Int J Immunopharmacol** 1988; 10(3):227–36

Inhibitory effect of antibiotic cerulenin on the respiratory burst in phagocytes. I. Effects of cerulenin on active oxygen–generation and lipid metabolism in phagocytes. Nakata M, et al. **J Antibiot (Tokyo)** 1989 Jul;42(7):1171–7

Inhibitory effect of antibiotic cerulenin on the respiratory burst in phagocytes. II. Inhibition by cerulenin of intracellular calcium mobilization in human neutrophils. Nakata M, et al. **J Antibiot (Tokyo)** 1989 Jul;42(7):1178–83

The effect of ofloxacin on the intracellular growth of Legionella pneumophila in guinea pig alveolar phagocytes. Fitzgeorge RB, et al. **J Antimicrob Chemother** 1988 Sep; 22 Suppl C:53–7

[Effect of clofoctol on various parameters of phagocyte function] De Rose V, et al. **G Ital Chemioter** 1987 Jan–Dec; 34(1–3):73–6 (Eng. Abstr.) **(Ita)**

[Effect of the lethal Bacillus anthracis toxin on phagocytosis and the dynamics of the change in the enzyme activity of the antioxidative system of peritoneal mononuclear phagocytes in mice with differing hereditary immunity to anthrax] Abalakin VA, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):288–91 (Eng. Abstr.) **(Rus)**

[Peptide Arg–Gly–Asp–Ser amplifies the functional activity of phagocytes, caused by adhesion and phorbol myristate acetate] Zemskov VM, et al. **Dokl Akad Nauk SSSR** 1989; 306(3):748–51 **(Rus)**

[Effect of anabol on the functional activity indices of mononuclear phagocytes] Khlopovskaia EI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Jun;(6):66–8 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

The electron transport chain of the microbicidal oxidase of phagocytic cells and its involvement in the molecular pathology of chronic granulomatous disease. Segal AW. **Biochem Soc Trans** 1989 Jun;17(3):427–34

The electron transport chain of the microbicidal oxidase of phagocytic cells and its involvement in the molecular pathology of chronic granulomatous disease. Segal AW. **J Clin Invest** 1989 Jun;83(6):1785–93 (97 ref.)

Leishmania mexicana amazonensis: heterogeneity in 5'–nucleotidase and peroxidase activities of mononuclear phagocytes during in vivo and in vitro infection. Côrte–Real S, et al. **Mem Inst Oswaldo Cruz** 1988 Jan–Mar; 83(1):113–21

[Esterase activity of the peripheral blood phagocytes and its nonspecific correction in patients with rubromycosis pedis] Svirid SG, et al. **Vrach Delo** 1988 Jul;(7):92–3 (Eng. Abstr.) **(Rus)**

[Changes in the functional and metabolic activity of phagocytes induced by bacterial vaccines in vitro and in vivo] Kotulová D, et al. **Bratisl Lek Listy** 1988 Sep; 89(9):664–72 (Eng. Abstr.) **(Slo)**

IMMUNOLOGY

T lymphocytes, mononuclear phagocytes, Schwann cells and Mycobacterium leprae. Kaufmann SH, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:141–8

Ligation of FcRI and FcRII of human mononuclear phagocytes. Gyimesi E, et al. **Acta Paediatr Hung** 1988–89; 29(1–2):37–40

Interactions of phagocytic cells with immunoglobulins: present concepts and future challenges. Heiniger HJ, et al. **Acta Paediatr Hung** 1988–89;29(1–2):117–23 (24 ref.)

Clinical and laboratory evaluation of phagocyte functions. van den Broek PJ, et al. **Acta Paediatr Hung** 1988–89; 29(1–2):169–77 (32 ref.)

Cellular defense of the avian respiratory system: effects of Pasteurella multocida on respiratory burst activity of avian respiratory tract phagocytes. Ochs DL, et al. **Am J Vet Res** 1988 Dec;49(12):2081–4

High–dose, pulse intravenous methylprednisolone enhances Fc gamma receptor–mediated mononuclear phagocyte function in systemic lupus erythematosus. Salmon JE, et al. **Arthritis Rheum** 1989 Jun;32(6):717–25

Monoclonal antibodies to the human CSF–1 receptor (c–fms proto–oncogene product) detect epitopes on normal mononuclear phagocytes and on human myeloid leukemic blast cells. Ashmun RA, et al. **Blood** 1989 Feb 15; 73(3):827–37

Assessment of phagocytic function using chemiluminescence. Hosker HS, et al. **Blood Rev** 1989 Jun;3(2):88–93 (50 ref.)

The Fc receptor, FcRI, and other activation molecules on human mononuclear phagocytes after treatment with interferon–gamma. Jayaram Y, et al. **Clin Exp Immunol** 1989 Mar;75(3):414–20

C3b receptor (CR1) on phagocytic cells from SLE patients: analysis of the defect and familial study. Mir A, et al. **Clin Exp Immunol** 1988 Sep;73(3):461–6

In vitro determination of phagocytosis and intracellular killing of Brucella melitensis by goat's polymorphonuclear phagocytes. Gallego MC, et al. **Comp Immunol Microbiol Infect Dis** 1989;12(1–2):9–15

Immunoresponsiveness in hemophilia: lymphocyte– and phagocyte–mediated functions. Antonaci S, et al. **Diagn Clin Immunol** 1988;5(6):318–25

Ingestion and killing of Listeria monocytogenes by blood and milk phagocytes from mastitic and normal cattle. Czuprynski CJ, et al. **J Clin Microbiol** 1989 May; 27(5):812–7

Characterization of a platelet derived factor modulating phagocyte functions and cooperating with interleukin 1. Brandt E, et al. **Lymphokine Res** 1989 Fall;8(3):281–7

Purified human and recombinant murine interleukin–1 alpha induced accumulation of inflammatory peritoneal neutrophils and mononuclear phagocytes: possible contributions to antibacterial resistance. Czuprynski CJ, et al. **Microb Pathog** 1987 Nov;3(5):377–86

Chemiluminescence of rainbow trout (Salmo gairdneri) phagocytes and factors affecting their response. Yamada F, et al. **Nippon Juigaku Zasshi** 1988 Oct;50(5):1092–8

Role of hypochlorous acid in Trypanosoma musculi killing by phagocytes. Vincendeau P, et al. **Parasitology** 1989 Apr; 98 Pt 2:253–7

Role of oxygen–dependent mechanisms in monoclonal–antibody–induced lysis of normal T cells by phagocytes. II. Murine phagocytes. Descamps–Latscha B, et al. **Res Immunol** 1989 Jan;140(1):33–54

Fungal surfaces: effects of interactions with phagocytic cells. Diamond RD. **Rev Infect Dis** 1988 Jul–Aug;10 Suppl 2:S428–31 (20 ref.)

Introduction to the immunology of tuberculosis. Piessens WF. **Rev Infect Dis** 1989 Mar–Apr;11 Suppl 2:S436–42 (30 ref.)

Antimicrobial drugs, microorganisms, and phagocytes. van den Broek PJ. **Rev Infect Dis** 1989 Mar–Apr;11(2):213–45 (387 ref.)

Multiple marker studies on a malignant fibrous histiocytoma with primary cutaneous localization. Moretti S, et al. **Tumori** 1988 Oct 31;74(5):609–15

Differentiation antigens on bovine mononuclear phagocytes identified by monoclonal antibodies. Ellis JA, et al. **Vet Immunol Immunopathol** 1988 Oct;19(3–4):325–40

Studies on a biological response modifying LYSAT from Propionibacterium avidum KP 40. Pulverer G, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1–2):237–45

Quantitative characterization of yeast cell incorporation in phagocytes: microscopic methods for differentiation between adherent and ingested particles. Stahl M, et al. **Zentralbl Veterinarmed [B]** 1989 May;36(3):185–90

[Reactive oxygen species and inflammation] Müller–Peddinghaus R. **DTW** 1989 Apr;96(4):210–2 (107 ref.) (Eng. Abstr.) **(Ger)**

[Reproduction of experimental leprous infection in mice with a preliminary modelling of failure of the mononuclear phagocyte system] Vishnevetskiĭ FE, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):574–8 (Eng. Abstr.)

(Rus)
[A luminescent cytochemical method for the quantitative determination of activated phagocytes] Slavinskiĭ AA. **Lab Delo** 1989;(4):32–4 (Eng. Abstr.) (Rus)

METABOLISM

Production of functional complement by human mononuclear phagocytes. Johnson E. **Acta Paediatr Hung** 1988–89; 29(1–2):29–32

Formation of reactive oxygen species by phagocytic cells: functions and dysfunctions. Roos D, et al. **Acta Paediatr Hung** 1988–89;29(1–2):83–91 (22 ref.)

Interaction of phagocytic cells with antibiotics: uptake and intracellular killing activity. Seger RA, et al. **Acta Paediatr Hung** 1988–89;29(1–2):153–8 (13 ref.)

Differential expression of the tumor necrosis factor/cachectin gene by blood and lung mononuclear phagocytes. Martinet Y, et al. **Am Rev Respir Dis** 1988 Sep;138(3):659–65

In vitro and in vivo uptake of azithromycin (CP–62,993) by phagocytic cells: possible mechanism of delivery and release at sites of infection. Gladue RP, et al. **Antimicrob Agents Chemother** 1989 Mar;33(3):277–82

Increased expression of p150,95 and CR3 leukocyte adhesion molecules by mononuclear phagocytes in rheumatoid synovial membranes. Comparison with osteoarthritic and normal synovial membranes. Allen CA, et al. **Arthritis Rheum** 1989 Aug;32(8):947–54

Challenge of phagocyte metabolism by extracorporeal circulation and membrane contact. A biocompatibility test. Vanholder RC, et al. **ASAIO Trans** 1988 Jul–Sep; 34(3):543–5

The molecular biology of selected phagocyte defects. Lomax KJ, et al. **Blood Rev** 1989 Jun;3(2):94–104 (62 ref.)

Uptake of antimicrobial agents by phagocytic cells. Easmon CS. **Chemioterapia** 1987 Jun;6(2 Suppl):231–2

Effects of arachidonic acid and inhibitors of arachidonic acid metabolism on phagocyte-induced sister chromatid exchanges. Weitberg AB. **Clin Genet** 1988 Nov; 34(5):288–92

Virus-induced formation of reactive oxygen intermediates in phagocytic cells. Peterhans E, et al. **Free Radic Res Commun** 1987;3(1–5):39–46

Technetium 99m phagocyte scanning in inflammatory bowel disease [letter] Becker W, et al. **Gastroenterology** 1989 Jul; 97(1):249–50

Investigation of the structural properties of dihydrophenazines which contribute to their pro-oxidative interactions with human phagocytes. Savage JE, et al. **J Antimicrob Chemother** 1989 May;23(5):691–700

Dynamics of the diradylglycerol responses of stimulated phagocytes. Dougherty RW, et al. **J Biol Chem** 1989 Jul 5;264(19):11263–9

Extracellular adenosine triphosphate activates calcium mobilization in human phagocytic leukocytes and neutrophil/monocyte progenitor cells. Cowen DS, et al. **J Clin Invest** 1989 May;83(5):1651–60

Interferon beta 2/interleukin 6 modulates synthesis of alpha 1-antitrypsin in human mononuclear phagocytes and in human hepatoma cells. Perlmutter DH, et al. **J Clin Invest** 1989 Jul;84(1):138–44

Mononuclear phagocytes have the potential for sustained hydroxyl radical production. Use of spin-trapping techniques to investigate mononuclear phagocyte free radical production. Britigan BE, et al. **J Exp Med** 1988 Dec 1;168(6):2367–72

Interleukin-1 and tumor necrosis factor alpha can be induced from mononuclear phagocytes by human immunodeficiency virus type 1 binding to the CD4 receptor. Merrill JE, et al. **J Virol** 1989 Oct;63(10):4404–8

Effect of combinations of antioxidants on phagocyte-induced sister-chromatid exchanges. Weitberg AB. **Mutat Res** 1989 Sep;224(1):1–4

[Changes in the ability to produce reactive oxygen by phagocytes from mice infected or immunized with Plasmodium berghei] Li M, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(3):208–11 (Eng. Abstr.) (Chi)

[Evaluation by chemiluminescence of the in vitro production of oxygen radicals by phagocytic cells in leprosy] Sarthou JL, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:181–3 (Fre)

[NADPH oxidase—O2- -generating system in phagocytes] Tanaka T, et al. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):2756–62 (Jpn)

MICROBIOLOGY

Phagocytosis by somatic cells from dry cow secretion. Bassalik-Chabielska L, et al. **Acta Microbiol Pol** 1988; 37(1):73–82

An in vitro investigation of the intraphagocytic bioactivity of difloxacin, ciprofloxacin, pefloxacin and fleroxacin. van Rensburg CE, et al. **Chemotherapy** 1989;35(4):273–7

Energy is required for maximal adherence of Neisseria gonorrhoeae to phagocytic and nonphagocytic cells. Weber RD, et al. **Infect Immun** 1989 Mar;57(3):785–90

Reactive oxygen intermediates inactivate Mycobacterium leprae in the phagocytes from human peripheral blood. Marolia J, et al. **Int J Lepr Other Mycobact Dis** 1989 Jun; 57(2):483–91

Replication of poliovirus in human mononuclear phagocyte cell lines is dependent on the stage of cell differentiation. Roivainen M, et al. **J Med Virol** 1989 Feb;27(2):91–4

Mononuclear phagocytes of blood and bone marrow: comparative roles as viral reservoirs in human immunodeficiency virus type 1 infections. McElrath MJ, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):675–9

PARASITOLOGY

Enhanced invasion of mononuclear phagocytes by serum-treated Trypanosoma cruzi is due to Clq. Rimoldi MT, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:456–8

PATHOLOGY

Role of endoneural cells in experimental allergic neuritis and characterisation of a resident phagocytic cell. Stevens A, et al. **Acta Neuropathol (Berl)** 1989;77(4):412–9

Isolation and functional characterization of mononuclear phagocytes from human lepromatous lesions. Sarno EN, et al. **Rev Soc Bras Med Trop** 1987 Oct–Dec;20(4):205–7

Liver cell shedding and phagocytic reaction in alcoholic liver disease. An ultrastructural study. Bardadin KA, et al. **Virchows Arch [A]** 1989;415(1):21–9

PHYSIOLOGY

Diagnosis and treatment of phagocytic cell disorders. Proceedings of the first EGID (European Group for Immunodeficiencies) meeting on phagocytes. Debrecen, Hungary, 24–26 April 1988. **Acta Paediatr Hung** 1988–89; 29(1–2):1–237

Mononuclear phagocytes: physiology and functional abnormalities. Johnston RB Jr. **Acta Paediatr Hung** 1988–89;29(1–2):23–8 (14 ref.)

Amniotic fluid mononuclear phagocytes: phenotypes and functions. Polgár K, et al. **Acta Paediatr Hung** 1988–89; 29(1–2):63–7

Phagocytosis of microspheric hydrophile particles (MSHP) by peripheral blood glass-adherent phagocytes of newborns. Miler I, et al. **Allerg Immunol (Leipz)** 1988; 34(4):233–7

Spirometric abnormalities in young smokers correlate with increased chemiluminescence responses of activated blood phagocytes. Richards GA, et al. **Am Rev Respir Dis** 1989 Jan;139(1):181–7

Phagocyte-mediated carcinogenesis: DNA from phagocyte-transformed C3H 10T1/2 cells can transform NIH/3T3 cells. Weitzman S, et al. **Ann N Y Acad Sci** 1988; 551:103–9; discussion 110

Cellular defense of the avian respiratory system: protection against Escherichia coli airsacculitis by Pasteurella multocida-activated respiratory phagocytes. Toth TE, et al. **Avian Dis** 1988 Oct–Dec;32(4):681–7

Phagocyte dioxygenation reactions yielding chemiluminescence: the maximum multiplicity and spin conservation rules relative to oxygen reactivity. Allen RC. **Basic Life Sci** 1988;49:219–22

Bacterial killing by phagocytes: potential role(s) of hypochlorous acid and hydrogen peroxide in protein turnover, DNA synthesis, and RNA synthesis. McKenna SM, et al. **Basic Life Sci** 1988;49:829–32

Role of GM-CSF in phagocyte recruitment and regulation of c-fos protooncogene expression. Wang JM, et al. **Behring Inst Mitt** 1988 Aug;(83):270–3

Serum opsonins and phagocytosis of saturated and unsaturated phospholipid liposomes. Moghimi SM, et al. **Biochim Biophys Acta** 1989 Sep 18;984(3):384–7

Mononuclear phagocytes. Auger MJ. **BMJ** 1989 Mar 4; 298(6673):546–8 (46 ref.)

Mononuclear phagocytes secrete a protein that directly resorbs devitalized bone particles. Gray TK, et al. **Bone Miner** 1986 Jun;1(3):235–45

Phagocytic system stimulation in experimental atherosclerosis of chicks. Gaton E, et al. **Exp Mol Pathol** 1988 Dec; 49(3):291–6

What do we measure by a luminol-dependent chemiluminescence of phagocytes? Vilim V, et al. **Free Radic Biol Med** 1989;6(6):623–9 (65 ref.)

Investigation of the effects of oral administration of ascorbate on the functional activity of serum alpha-1-protease inhibitor and oxidant release by blood phagocytes from cigarette smokers in a placebo-controlled, doubleblind, crossover trial. Theron AJ, et al. **Int J Vitam Nutr Res** 1988;58(2):218–24

Lyt-2+ T cell-mediated protection against listeriosis. Protection correlates with phagocyte depletion but not with IFN-gamma production. Lukacs K, et al. **J Immunol** 1989 Apr 15;142(8):2879–86

Flow cytometric assay for the measurement of serum opsonins to Neisseria meningitidis serogroup B, serotype 15. Sjursen H, et al. **J Immunol Methods** 1989 Jan 17; 116(2):235–43

Phagocytes and monokines: perspectives on metabolic regulation in sepsis. Sacco NA, et al. **Magnesium** 1988; 7(5–6):281–9 (44 ref.)

Age-related changes in functions of peripheral blood phagocytes. Rabatić S, et al. **Mech Ageing Dev** 1988 Nov 30;45(3):223–9

Chemoattractant-induced membrane phenomena of phagocytes. Smith CD, et al. **Methods Enzymol** 1988; 162:271–9

Suppressive substance for the function of phagocytes in the serum of leukemic patients. Uchida T, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Jul;51(4):759–65

Changes in heterophils following antigen injection in immature male chickens. Trout JM, et al. **Poult Sci** 1988 Dec;67(12):1775–7

Superoxide production by phagocytic leukocytes: transmembrane signalling and potential interactions of the second messengers in cell stimulation. Badwey JA, et al. **Prog Clin Biol Res** 1988;282:209–21

The microbicidal oxidase of phagocytic cells and its involvement in the molecular pathology of chronic granulomatous disease. Segal AW. **Prog Clin Biol Res** 1988; 282:225–34 (59 ref.)

Changes in surface hydrophobicity and charge in Neisseria meningitidis and their correlation with the association to phagocytic cells. Ferreirós CM, et al. **Rev Esp Fisiol** 1989 Jun;45(2):105–9

Flow cytometry for the study of phagocyte functions. Bjerknes R, et al. **Rev Infect Dis** 1989 Jan–Feb;11(1):16–33 (165 ref.)

Phagocyte function in reactive arthritis. Leirisalo-Repo M, et al. **Scand J Rheumatol Suppl** 1988;76:73–7 (34 ref.)

A Salmonella locus that controls resistance to microbicidal proteins from phagocytic cells. Fields PI, et al. **Science** 1989 Feb 24;243(4894 Pt 1):1059–62

[The detection of phagocyte function] Li L, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Jan;28(1):54–6 (12 ref.) (Chi)

[Hepatic cytoprotection (2). Mechanisms of toxicity of phagocytic cells. Protective systems] Mavier P. **Gastroenterol Clin Biol** 1989 Jun;13(6–7):568–71 (36 ref.) (Fre)

[Oxygen, phagocytic cells and atheroma] Hakim J. **J Mal Vasc** 1989;14 Suppl A:17–24 (48 ref.) (Eng. Abstr.) (Fre)

[Microbial killing by oxygen radicals from phagocytes] Sasada M. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):3024–30 (Jpn)

ULTRASTRUCTURE

The beta astrocyte: its possible role as a central nervous system phagocyte. Sturrock RR. **Anat Anz** 1988; 166(1–5):331–40

Translocation t(10;17)(p13;q12) in two cases of acute nonlymphocytic leukemia with phagocytic activity of blasts. A new cytogenetic entity? Lai JL, et al. **Cancer Genet Cytogenet** 1989 May;39(1):45–53

PHAGOCYTOSIS

see related

MACROPHAGES

Erythrophagocytosis in the caprine hemal node. Ezeasor DN, et al. **Acta Anat (Basel)** 1989;134(4):341–5

Hypoprotein nutrition, phospholipid content and the phagocytic ability of rat peripheral blood granulocytes. Study II. Todorović V, et al. **Acta Med Iugosl** 1988; 42(5):363–72

Phagocytosis by somatic cells from dry cow secretion. Bassalik-Chabielska L, et al. **Acta Microbiol Pol** 1988; 37(1):73–82

Neuronal autophagy in experimental Creutzfeldt-Jakob's disease. Boellaard JW, et al. **Acta Neuropathol (Berl)** 1989; 78(4):410–8

In vitro interaction of M. leprae-infected Schwann cells and splenic cells. Mehta R, et al. **Acta Neuropathol (Berl)** 1988; 76(4):407–10

Phagocytic cell activity in pre-eclampsia. Berge LN, et al. **Acta Obstet Gynecol Scand** 1988;67(6):499–504

CR1-expression and C3b-mediated phagocytosis of granulocytes in purulent maxillary secretion and peripheral blood from patients with sinusitis. Berg O, et al. **Acta Otolaryngol (Stockh)** 1989 Jan–Feb;107(1–2):130–5

Quantitative study on phagocytosis of human tonsillar adherent cells by the flow cytometric and immunocytochemical methods. Kawaguchi M, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;454:108–12

Clinical manifestations of various phagocytic defects. Bernatowska-Matuszkiewicz E, et al. **Acta Paediatr Hung** 1988–89;29(1–2):209–11

Phagocytosis of microspheric hydrophile particles by peripheral blood glass-adherent phagocytes of healthy and high risk neonates. Borte M, et al. **Acta Paediatr Hung** 1988–89;29(1–2):197–202

Flow cytometric study on phagocyte function and determination of in vitro natural killer (NK) cell cytotoxicity in hairy cell leukaemia (HCL). Comparison with values obtained following post-traumatic splenectomy (SP). Demeter J, et al. **Acta Paediatr Hung** 1988–89; 29(1–2):219–20

The role of serum factors and influence of intravenous immunoglobulins on phagocytosis of campylobacter species. Madaliński K, et al. **Acta Paediatr Hung** 1988–89; 29(1–2):143–6

Effects of serum opsonins and intravenous immunoglobulin on phagocytosis and intracellular killing of Staphylococcus saprophyticus by human granulocytes. Maródi L, et al. **Acta Paediatr Hung** 1988–89;29(1–2):147–51

Studies of phagocytic and killing activity of BAL macrophages in sarcoidosis. Orosi P, et al. **Acta Paediatr Hung** 1988–89;29(1–2):49–50

Wall degradation of antibiotic-pretreated staphylococci within macrophages. Wecke J, et al.

Acta Paediatr Hung 1988-89;29(1-2):159-61

Hyperferritinemia in malignant histiocytosis, virus-associated hemophagocytic syndrome and familial erythrophagocytic lymphohistiocytosis. A survey of pediatric cases. Esumi N, et al. **Acta Paediatr Scand** 1989 Mar;78(2):268-70

Function of peripheral blood granulocytes in infants with protracted enteropathy. Zaba R. **Acta Paediatr Scand** 1989 Mar;78(2):323-4

Deficient phagocytosis secondary to proteolytic breakdown of opsonins in peritonitis exudate. Billing A, et al. **Adv Exp Med Biol** 1988;240:441-8

Recognition and binding of pathogenic yeasts by adhesion molecules of human macrophages. Bullock WE, et al. **Adv Exp Med Biol** 1988;239:45-52 (22 ref.)

Defective intracellular killing of micro-organisms by murine alveolar macrophages. Nibbering PH, et al. **Agents Actions** 1989 Jan;26(1-2):206-7

The relationship between phagocytic activity of polymorphonuclear leukocytes and mastitis in cattle. van der Vliet H, et al. **Agents Actions** 1989 Jan;26(1-2):211-2

Reduced IgG Fc-receptor-mediated phagocytosis in human monocytes isolated from alcoholics. Mørland H, et al. **Alcoholism (NY)** 1988 Dec;12(6):755-9

Primary lymph node presentation of angiocentric lymphoma associated with features of a hemophagocytic syndrome. Kueck BD, et al. **Am J Hematol** 1989 Feb;30(2):104-11

Rapid fragmentation and reorganization of Golgi membranes during frustrated phagocytosis of immobile immune complexes by macrophages. Bainton DF, et al. **Am J Pathol** 1989 Jan;134(1):15-26

Sources of variation introduced into a phagocytosis assay as a result of the isolation of neutrophils from bovine blood. Paape MJ, et al. **Am J Vet Res** 1988 Aug;49(8):1210-3

Functional and metabolic activity of bovine pulmonary lavage cells phagocytically stimulated with pathogenic isolates of Pasteurella haemolytica. Richards AB, et al. **Am J Vet Res** 1989 Mar;50(3):329-34

A method to detect rabbit neutrophil phagocytosis of Pasteurella multocida. Rush HG, et al. **Am J Vet Res** 1988 Aug;49(8):1415-8

Phagocytic and nitroblue tetrazolium reductive properties of mature and immature neutrophils and eosinophils from blood and bone marrow from cows. Silva ID, et al. **Am J Vet Res** 1989 May;50(5):778-81

Asbestos-induced endothelial cell activation and injury. Demonstration of fiber phagocytosis and oxidant-dependent toxicity. Garcia JG, et al. **Am Rev Respir Dis** 1988 Oct;138(4):958-64

The beta astrocyte: its possible role as a central nervous system phagocyte. Sturrock RR. **Anat Anz** 1988; 166(1-5):331-40

Rate of cell death in parkinsonism indicates active neuropathological process. McGeer PL, et al. **Ann Neurol** 1988 Oct;24(4):574-6

Peripheral blood and bone marrow leucocytes in Gambian children with malaria: numerical changes and evaluation of phagocytosis. Abdalla SH. **Ann Trop Paediatr** 1988 Dec; 8(4):250-8

RES-macrophage stimulation and liver tumour growth in rats; evaluation with dynamic liver RES scintigraphy. Holmberg SB, et al. **Anticancer Res** 1988 Nov-Dec; 8(6):1291-5

Dysfunction of the mononuclear phagocytic system in sepsis. Gutiérrez-Fernández J, et al. **APMIS** 1989 May; 97(5):441-6

Engulfment of the Philadelphia strain of Legionella pneumophila within pseudopod coils in human phagocytes. Comparison with other Legionella strains and species. Rechnitzer C, et al. **APMIS** 1989 Feb;97(2):105-14

Phagocytic and bactericidal properties of macrophages of mice immunized with outer membrane proteins (OMP) of Shigella. Czarny A, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(6):701-9

Studies on phagocytosis of mucoid and nonmucoid variants of Pseudomonas aeruginosa. I. Induction of homologous immunity by nonmucoid strains of P. aeruginosa. Gościniak G, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(2):177-84

Studies on phagocytosis of mucoid and nonmucoid variants of Pseudomonas aeruginosa. II. Induction of heterologous immunity by mucoid strains of P. aeruginosa. Gościniak G, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(2):185-93

Studies on phagocytosis of mucoid and nonmucoid variants of Pseudomonas aeruginosa. III. Polyvalent serum against three mucoid immunotypes potentiates phagocytosis of all (7) mucoid immunotypes. Gościniak G, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(2):195-203

Ability of peripheral blood neutrophils from patients with infectious bronchial asthma to engulf latex particles and reduce nitroblue tetrazolium. Matusiewicz R, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(1):55-9

The ability of granulocytes from patients with atopy to engulf neutral latex particles and Staphylococcus aureus. Matusiewicz R, et al. **Arch Immunol Ther Exp (Warsz)** 1987; 35(6):781-5

Evaluation of the effect of staphylococcal serine proteinase on phagocytosis. Międzobrodski J, et al. **Arch Immunol Ther Exp (Warsz)** 1987;35(6):877-85

A simple colorimetric method for the measurement of phagocytosis of crystals of low molecular weight compound by macrophages. Piasecki E, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(4):487-95

Phagocytosis and killing of Listeria by guinea pig macrophages and neutrophils. Rudnicka W, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(2):161-6

Phagocytosis of herpes simplex virus by human granulocytes and monocytes. Van Strijp JA, et al. **Arch Virol** 1989; 104(3-4):287-98

Generation of reactive oxygen metabolites by phagocytosing endothelial cells. Görög P, et al. **Atherosclerosis** 1988 Jul; 72(1):19-27

Regeneration and phagocytic function of devascularized spleens. Clayer MT, et al. **Aust N Z J Surg** 1989 Aug; 59(8):653-8

Reticuloendothelial phagocytic activity in high-altitude acclimatized rats. Cherdrungsi P. **Aviat Space Environ Med** 1989 Apr;60(4):329-31

Bacterial killing by phagocytes: potential role(s) of hypochlorous acid and hydrogen peroxide in protein turnover, DNA synthesis, and RNA synthesis. McKenna SM, et al. **Basic Life Sci** 1988;49:829-32

Superoxide generation of phagocytizing polymorphonuclear leukocytes from patients with chronic renal failure. Tanigawa T, et al. **Basic Life Sci** 1988;49:857-61

Latex beads as vehicles for the study of free radical processes in phagocytic cells. Thomas MJ, et al. **Basic Life Sci** 1988; 49:853-6

Serum opsonins and phagocytosis of saturated and unsaturated phospholipid liposomes. Moghimi SM, et al. **Biochim Biophys Acta** 1989 Sep 18;984(3):384-7

The bactericidal effects of the respiratory burst and the myeloperoxidase system isolated in neutrophil cytoplasts. Odell EW, et al. **Biochim Biophys Acta** 1988 Oct 7; 971(3):266-74

The effect of the secretory leukocyte protease inhibitor on leukocyte proteases released during phagocytosis. Axelsson L, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:89-93

Phagocytosis by guinea pig polymorphonuclear leukocytes of liposomes stabilized with polysaccharides. Atsuta Y, et al. **Biomater Artif Cells Artif Organs** 1989;17(2):125-35

Effect of the size and surface charge of polymer microspheres on their phagocytosis by macrophage. Tabata Y, et al. **Biomaterials** 1988 Jul;9(4):356-62

Elevated soluble interleukin-2 receptor in childhood hemophagocytic histiocytic syndromes. Komp DM, et al. **Blood** 1989 Jun;73(8):2128-32

Tumour necrosis factor may contribute to the anaemia of malaria by causing dyserythropoiesis and erythrophagocytosis. Clark IA, et al. **Br J Haematol** 1988 Sep;70(1):99-103

TMA-DPH a fluorescent probe of membrane dynamics in living cells. How to use it in phagocytosis. Illinger D, et al. **Cell Biophys** 1989 Feb;14(1):17-26

Rapid measurement of phagocytosis by macrophages. Suzuki I, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec;36(12):4871-5

Impact of growth environment on phagocytosis of microorganisms. Dalhoff A. **Chemioterapia** 1987 Jun;6(2 Suppl):227-8

Uptake of antimicrobial agents by phagocytic cells. Easmon CS. **Chemioterapia** 1987 Jun;6(2 Suppl):231-2

Alterations in microbial structure and function induced by exposure to antimicrobial agents: implications for host response to infection. Gemmell CG. **Chemioterapia** 1987 Jun;6(2 Suppl):211-2

Aztreonam uptake by professional phagocytic cells. Mastroeni P, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):232-3

Effect of ibuprofen and dexamethasone on Kupffer cell complement receptor function after endotoxemia and the phagocytosis of erythrocytes. Commins LM, et al. **Circ Shock** 1989 Mar;27(3):237-44

The effect of products from bronchoalveolar-derived neutrophils on oxidant production and phagocytic activity of alveolar macrophages. Donaldson K, et al. **Clin Exp Immunol** 1988 Dec;74(3):477-82

The IgM receptor in mouse peritoneal macrophages. Isaac L, et al. **Clin Exp Immunol** 1988 Jun;72(3):516-20

Defective interleukin-1 production in a familial monocyte disorder with a combined abnormality of mobility and phagocytosis-killing. Komiyama A, et al. **Clin Exp Immunol** 1988 Sep;73(3):500-4

C3b receptor (CR1) on phagocytic cells from SLE patients: analysis of the defect and familial study. Mir A, et al. **Clin Exp Immunol** 1988 Sep;73(3):461-6

Random locomotion and phagocytosis of monocytes in undiluted normal serum and in undiluted SLE serum. Rydgren L, et al. **Clin Exp Rheumatol** 1988 Oct-Dec; 6(4):355-9

The chemiluminescent response of human monocytes to red cells sensitized with monoclonal anti-Rh(D) antibodies. Hadley AG, et al. **Clin Lab Haematol** 1988;10(4):377-84

Chemiluminescence response of polymorphonuclear leucocytes to serum-opsonized zymosan--a predictive parameter for infections and prognosis in multiple myeloma patients. Nagler A, et al. **Clin Lab Haematol** 1988; 10(4):365-75

Interactions of Neisseria gonorrhoeae with human neutrophils. Rest RF, et al. **Clin Microbiol Rev** 1989 Apr; 2 Suppl:S83-91 (136 ref.)

In vitro determination of phagocytosis and intracellular killing of Brucella melitensis by goat's polymorphonuclear phagocytes. Gallego MC, et al. **Comp Immunol Microbiol Infect Dis** 1989;12(1-2):9-15

Self-digestion and vesiculation of bovine erythrocyte ghosts. Gaczyńska M. **Cytobios** 1988;56(226-227):149-56

New, simple flow cytometry technique to discriminate between internalized and membrane-bound particles in phagocytosis. Fattorossi A, et al. **Cytometry** 1989 May; 10(3):320-5

Phagocytosis of yeast by Biomphalaria glabrata: carbohydrate specificity of hemocyte receptors and a plasma opsonin. Fryer SE, et al. **Dev Comp Immunol** 1989 Winter;13(1):9-16

Phagocytotic activity of monocytes from diabetic patients. Katz S, et al. **Diabetes Care** 1983 Sep-Oct;6(5):479-82

Familial hemophagocytic lymphohistiocytosis. Lachman MF, et al. **Diagn Cytopathol** 1988;4(2):121-4

Opsonins in uterine washings influencing in vitro activity of equine neutrophils. Watson ED. **Equine Vet J** 1988 Nov; 20(6):435-7

Human macrophage function and physical exercise: phagocytic and histochemical studies. Fehr HG, et al. **Eur J Appl Physiol** 1989;58(6):613-7

Effect of free or liposome-encapsulated muramyl dipeptide on uptake and intracellular survival of Listeria monocytogenes in mouse peritoneal macrophages in vitro. Bakker-Woudenberg IA, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jul;8(7):603-9

Role of the polymorphonuclear leukocyte: interaction with nosocomial pathogens. Toews GB. **Eur J Clin Microbiol Infect Dis** 1989 Jan;8(1):21-4 (46 ref.)

Phagocytosis of bacterial aggregates by granulocytes. Galdiero F, et al. **Eur J Epidemiol** 1988 Dec;4(4):456-60

Molecular aspects of the phagocytosis resistance of group A streptococci. Manjula BN. **Eur J Epidemiol** 1988 Sep; 4(3):289-300 (97 ref.)

Phagocytosis in Dictyostelium discoideum is inhibited by antibodies directed primarily against common carbohydrate epitopes of a major cell-surface plasma membrane glycoprotein. Chia CP, et al. **Exp Cell Res** 1989 Mar; 181(1):11-26

Phagocytic activity of blood cells in diabetic risk probands and newly diagnosed type 1 diabetics. Köhler E, et al. **Exp Clin Endocrinol** 1988 Aug;91(3):259-64

Phagocytosis by trabecular meshwork cells: sequence of events in cats and monkeys. Sherwood ME, et al. **Exp Eye Res** 1988 Jun;46(6):881-95

Characterization of scavenger receptor activity in resident human lung macrophages. McCusker K, et al. **Exp Lung Res** 1989 Jul;15(4):651-61

Stimulation of autophagic protein degradation by nutrient deprivation in a differentiated murine teratocarcinoma (F9 12-1a) cell line. Lee HK, et al. **Exp Mol Pathol** 1989 Feb; 50(1):139-46

Does protein kinase C control receptor-mediated phagocytosis in human neutrophils? Andersson T, et al. **FEBS Lett** 1988 Nov 7;239(2):371-5

Genetic determination of phagocytic activity of polymorphonuclear leucocytes. Zalkovičová M, et al. **Folia Biol (Praha)** 1988;34(4):240-7

HEMA-particles phagocytosis of rat neutrophils. Berger J. **Folia Haematol (Leipz)** 1988;115(6):833-6

The distribution of peroxidase in phagocytizing human blood platelets, electron microscopy findings. Kemona H, et al. **Folia Haematol (Leipz)** 1988;115(5):653-9

Stimulating effect of Streptococcus faecalis on phagocytosis in gnotobiotic piglets. Mandel L, et al. **Folia Microbiol (Praha)** 1989;34(1):68-76

Scavenging by alginate of free radicals released by macrophages. Simpson JA, et al. **Free Radic Biol Med** 1989; 6(4):347-53

Modulation of phagocytic activity in cultured Sertoli cells. Filippini A, et al. **Gamete Res** 1989 Aug;23(4):367-75

Phagocytosis of yeast by human oocytes: fine structural observations. Koehler JK, et al. **Gamete Res** 1987 Jul; 17(3):237-44

Ultrastructural study of phagocytic activities of young astrocytes in injured neonatal rat brain following intracerebral injection of colloidal carbon. Al-Ali SY, et al. **GLIA** 1988;1(3):211-8

Dynamic morphological responses of mouse astrocytes in primary cultures following medium changes. Devon RM, et al. **GLIA** 1989;2(4):266-72

Interaction of campylobacter species with antibody, complement and phagocytes. Bernatowska E, et al. **Gut** 1989 Jul;30(7):906-11

Reactive hemophagocytosis in Ki-1 positive large cell lymphoma: a case study. Invernizzi R, et al. **Haematologica (Pavia)** 1989 Mar-Apr;74(2):155-9

Peripheral T-cell lymphoma presenting as hemophagocytic syndrome. Chan EY, et al. **Hematol Oncol** 1989 Jul-Aug; 7(4):275-85

The lack of antigenicity of tuftsin: a naturally occurring phagocytosis stimulating tetrapeptide. Naim JO, et al. **Immunol Invest** 1989 Jul;18(6):817-24

Phagocytic activity of peritoneal and omental macrophages of athymic nude mice. Větvička V, et al. **Immunol Invest** 1988 Aug-Oct;17(6-7):531-41

Alpha-fetoprotein and phagocytosis in athymic nude mice. Větvička V, et al. **Immunol Lett** 1988 Oct;19(2):95-8

Macrophage function in chronic experimental alcoholism. I. Modulation of surface receptors and phagocytosis. Bagasra O, et al. **Immunology** 1988 Nov;65(3):405-9

Opsonin-dependent and independent surface phagocytosis of S. aureus proceeds independently of complement and complement receptors. Gordon DL, et al. **Immunology** 1988 Aug;64(4):709-14

Regulation of human neutrophil type 3 complement receptor

(iC3b receptor) expression during phagocytosis of Staphylococcus aureus and Escherichia coli. Gordon DL, et al. **Immunology** 1989 Aug;67(4):460–5

Binding, internalization and degradation of soluble aggregates of human secretory IgA by resident rat peritoneal macrophages. Gorter A, et al. **Immunology** 1988 Aug; 64(4):703–8

Phagocytosis of heat–killed blastospores of Candida albicans by human monocyte beta–glucan receptors. Janusz MJ, et al. **Immunology** 1988 Oct;65(2):181–5

Opsonization–enhanced phagocytosis of foot–and–mouth disease virus. McCullough KC, et al. **Immunology** 1988 Oct; 65(2):187–91

Phagocytic function of monocytes in murine model of Echinococcus granulosus of human origin. Wangoo A, et al. **Indian J Med Res** 1989 Jan;89:40–2

Characterization of the macrophage subset affected and its response to a T suppressor factor (TsFmp) found in cryptococcosis. Blackstock R, et al. **Infect Immun** 1989 Oct; 57(10):2931–7

Characterization of a suppressor factor that regulates phagocytosis by macrophages in murine cryptococcosis. Blackstock R, et al. **Infect Immun** 1989 Jun;57(6):1773–9

Intracellular multiplication of Paracoccidioides brasiliensis in macrophages: killing and restriction of multiplication by activated macrophages. Brummer E, et al. **Infect Immun** 1989 Aug;57(8):2289–94

Internalization of Shigella flexneri into HeLa cells occurs without an increase in cytosolic Ca2+ concentration. Clerc PL, et al. **Infect Immun** 1989 Sep;57(9):2919–22

Fibronectin as an enhancer of nonopsonic phagocytosis of Pseudomonas aeruginosa by macrophages. Kluftinger JL, et al. **Infect Immun** 1989 Sep;57(9):2782–5

Resistance of mucoid Pseudomonas aeruginosa to nonopsonic phagocytosis by alveolar macrophages in vitro. Krieg DP, et al. **Infect Immun** 1988 Dec;56(12):3173–9

Effect of immunoglobulin M from normal human serum on Leishmania donovani promastigote agglutination, complement–mediated killing, and phagocytosis by human monocytes. Navin TR, et al. **Infect Immun** 1989 Apr; 57(4):1343–6

Intraperitoneal host cellular responses and in vivo killing of Bacteroides fragilis in a bacterial containment chamber. Onderdonk AB, et al. **Infect Immun** 1989 Oct;57(10):3030–7

Fibrinogen binding and resistance to phagocytosis of Streptococcus sanguis expressing cloned M protein of Streptococcus pyogenes. Poirier TP, et al. **Infect Immun** 1989 Jan;57(1):29–35

Effects of Histoplasma capsulatum on murine macrophage functions: inhibition of macrophage priming, oxidative burst, and antifungal activities. Wolf JE, et al. **Infect Immun** 1989 Feb;57(2):513–9

Ontogeny of inflammatory cell responsiveness: superoxide anion generation by phorbol ester–stimulated fetal, neonatal, and adult bovine neutrophils. Clifford CB, et al. **Inflammation** 1989 Apr;13(2):221–31

Influence of monoclonal IgM cold agglutinins on adhesiveness, phagocytosis, and bactericidal activity on human granulocytes and monocytes. Pruzanski W, et al. **Inflammation** 1989 Apr;13(2):201–9

Latex beads phagocytosis capacity and ecto–NAD+ glycohydrolase activity of rat brain microglia cells in vitro. Bocchini V, et al. **Int J Dev Neurosci** 1988;6(6):525–34

Role of alpha–hemolysin for the in vitro phagocytosis and intracellular killing of Escherichia coli. Gadeberg OV, et al. **Int J Med Microbiol** 1989 Jul;271(2):205–13

Dead cells can be phagocytosed by any neighboring cell in early developing rat brain. Kálmán M. **Int J Neurosci** 1989 Jun;46(3–4):139–45

Phagocytic labeling of leukocytes with 99mTc–albumin colloid for nuclear imaging. Marcus CS, et al. **Int J Rad Appl Instrum [B]** 1988;15(6):673–82

The effect of ascorbic acid deficiency on leukocyte phagocytosis and killing of actinomyces viscosus. Goldschmidt MC, et al. **Int J Vitam Nutr Res** 1988; 58(3):326–34

Hypodense eosinophilic granulocytes in normal individuals and patients with asthma: generation of hypodense cell populations in vitro. Kloprogge E, et al. **J Allergy Clin Immunol** 1989 Feb;83(2 Pt 1):393–400

Rapid flow cytometric studies of Borrelia burgdorferi phagocytosis by human polymorphonuclear leukocytes. Banfi E, et al. **J Appl Bacteriol** 1989 Jul;67(1):37–45

Comparison of particle clearance and macrophage phagosomal motion in liver and lungs of rats. Weinstock SB, et al. **J Appl Physiol** 1988 Oct;65(4):1811–20

The different roles of two distinct Fc gamma receptors on guinea pig macrophages in the phagocytosis of sensitized sheep erythrocytes. Nakamura T, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):383–7

Energy dependence of different steps in the autophagic–lysosomal pathway. Plomp PJ, et al. **J Biol Chem** 1989 Apr 25;264(12):6699–704

Human pulmonary surfactant protein (SP–A), a protein structurally homologous to C1q, can enhance FcR– and CR1–mediated phagocytosis. Tenner AJ, et al. **J Biol Chem** 1989 Aug 15;264(23):13923–8

Use of a microtitre plate chemiluminescence reader to study surface phagocytosis by human monocytes. Cree IA, et al. **J Biolumin Chemilumin** 1989 Apr–Jun;3(2):71–4

Macrophage phagocytosis of biodegradable microspheres composed of L–lactic acid/glycolic acid homo– and copolymers. Tabata Y, et al. **J Biomed Mater Res** 1988 Oct;22(10):837–58

Prelysosomal acidic vacuoles in Dictyostelium discoideum. Padh H, et al. **J Cell Biol** 1989 Mar;108(3):865–74

Cell adhesion and phagocytosis promoted by monoclonal antibodies not directed against fibronectin receptors. Grinnell F, et al. **J Cell Sci** 1988 Jun;90 (Pt 2):201–14

Evidence that the phagocytosis mediated by the peanut agglutinin–like activity of IgG(Fc) receptors of human monocytes is selectively modulated by estradiol and natural estrogens. Malaise MG, et al. **J Clin Immunol** 1988 Nov; 8(6):495–502

Receptor–mediated phagocytosis in human neutrophils is associated with increased formation of inositol phosphates and diacylglycerol. Elevation in cytosolic free calcium and formation of inositol phosphates can be dissociated from accumulation of diacylglycerol. Fällman M, et al. **J Clin Invest** 1989 Sep;84(3):886–91

Studies on the molecular mechanisms of human Fc receptor–mediated phagocytosis. Amplification of ingestion is dependent on the generation of reactive oxygen metabolites and is deficient in polymorphonuclear leukocytes from patients with chronic granulomatous disease. Gresham HD, et al. **J Clin Invest** 1988 Oct; 82(4):1192–201

Metabolism of procainamide to the cytotoxic hydroxylamine by neutrophils activated in vitro. Rubin RL, et al. **J Clin Invest** 1989 Apr;83(4):1336–43

Macrophage phagocytosis of aging neutrophils in inflammation. Programmed cell death in the neutrophil leads to its recognition by macrophages. Savill JS, et al. **J Clin Invest** 1989 Mar;83(3):865–75

Studies on phagocytosis in patients with acute bacterial infections. Simms HH, et al. **J Clin Invest** 1989 Jan; 83(1):252–60

Complement–mediated phagocytosis of herpes simplex virus by granulocytes. Binding or ingestion. Van Strijp JA, et al. **J Clin Invest** 1989 Jul;84(1):107–12

NK cell activity and monocyte dysfunctions in a patient with common variable hypogammaglobulinemia. Clerici M, et al. **J Clin Lab Immunol** 1988 Nov;27(3):143–7

Cytolysis mediated by phagocytosing neutrophils. Influence of the presence of an alternative target cell population. Dallegri F, et al. **J Clin Lab Immunol** 1988 Jun;26(2):103–6

Myeloperoxidase secretion during phagocytosis: a case of a patient with impaired bactericidal activity. Edwards SW, et al. **J Clin Lab Immunol** 1988 Oct;27(2):97–102

Effects of growth temperature on the ingestion and killing of clinical isolates of Listeria monocytogenes by human neutrophils. Stecha PF, et al. **J Clin Microbiol** 1989 Jul; 27(7):1572–6

Changes in the nuclei of dying neurons as studied with thymidine autoradiography. Clarke PG, et al. **J Comp Neurol** 1989 May 15;283(3):438–49

Endocytosis and autophagy in dying neurons: an ultrastructural study in chick embryos. Hornung JP, et al. **J Comp Neurol** 1989 May 15;283(3):425–37

Haemophagocytosis and other haematological aspects of Mycobacterium lepraemurium disease of mice. Resnick M, et al. **J Comp Pathol** 1988 Jul;99(1):65–75

Phagocytic and postphagocytic activities of bovine neutrophils for pure and mixed bacterial cultures. Silva ID, et al. **J Dairy Sci** 1988 Sep;71(9):2513–9

Potential role of Kupffer cells in initiating liver injury during endotoxemia. Katoh M, et al. **J Exp Pathol** 1989 Summer; 4(3):141–61

Cultured Kupffer cells, isolated from human and rat liver biopsies, ingest endotoxin. Van Bossuyt H, et al. **J Hepatol** 1988 Aug;7(1):45–56

Autophagy of mitochondria in rat liver assessed by immunogold procedures. Knecht E, et al. **J Histochem Cytochem** 1988 Nov;36(11):1433–40

Perturbation of beta–glucan receptors on human neutrophils initiates phagocytosis and leukotriene B4 production. Czop JK, et al. **J Immunol** 1988 Nov 1;141(9):3170–6

An immobile subset of plasma membrane CD11b/CD18 (Mac–1) is involved in phagocytosis of targets recognized by multiple receptors. Graham IL, et al. **J Immunol** 1989 Apr 1;142(7):2352–8

The 40–kDa Fc gamma receptor (FcRII) on human neutrophils is essential for the IgG–induced respiratory burst and IgG–induced phagocytosis. Huizinga TW, et al. **J Immunol** 1989 Apr 1;142(7):2365–9

Halogenation and proteolysis of complement component C3 on Salmonella typhimurium during phagocytosis by human neutrophils. Joiner KA, et al. **J Immunol** 1989 May 1; 142(9):3164–70

Paradoxical role of capsule in murine bronchoalveolar macrophage–mediated killing of Cryptococcus neoformans. Levitz SM, et al. **J Immunol** 1989 Jan 15;142(2):659–65

Phagocytosis of serum–opsonized zymosan down–regulates the expression of CR3 and FcRI in the membrane of human monocytes. Wolf HM, et al. **J Immunol** 1988 Nov 15; 141(10):3537–43

Fc gamma 2b receptor–mediated phagocytosis by a murine macrophage–like cell line (P388D1) and peritoneal resident macrophages. Up–regulation by the inhibitors of phospholipase A2 and cyclooxygenase. Yamada A, et al. **J Immunol** 1989 Apr 1;142(7):2457–63

Staphylococcus aureus phagocytosis. A new cytofluorometric method using FITC and paraformaldehyde. Cantinieaux B, et al. **J Immunol Methods** 1989 Jul 26;121(2):203–8

Simultaneous measurement by flow cytometry of phagocytosis and hydrogen peroxide production of neutrophils in whole blood. Hasui M, et al. **J Immunol Methods** 1989 Feb 8;117(1):53–8

Photometric assays for FcRI–dependent binding, phagocytosis, and antibody–dependent cellular cytotoxicity mediated by monomeric IgG gamma 2a in murine peritoneal macrophages. Leu RW, et al. **J Immunol Methods** 1988 Oct 26;113(2):269–78

A commercially available serum–free medium appropriate for studies of macrophage functions in vitro. Majde JA. **J Immunol Methods** 1988 Nov 25;115(1):89–93

The ability of normal human monocytes to phagocytose IgG–coated red blood cells is related to the number of accessible galactosyl and mannosyl residues in the Fc domain of the anti–red blood cell IgG antibody molecules. Malaise MG, et al. **J Immunol Methods** 1989 May 12; 119(2):231–9

Phagocytosis of opsonized fluorescent microspheres by human neutrophils. A two–color flow cytometric method for the determination of attachment and ingestion. Ogle JD, et al. **J Immunol Methods** 1988 Nov 25;115(1):17–29

Assessment of phagocytosis of plastic adherent group B streptococci by ELISA quenching. Rainard P. **J Immunol Methods** 1988 Oct 4;113(1):137–42

Infection–associated haemophagocytic syndrome in an infant. Jenkins HR, et al. **J Infect** 1988 Sep;17(2):167–70

Phagocytosis of Treponema pallidum pertenue by hamster macrophages on membrane filters. Alder JD, et al. **J Infect Dis** 1989 Aug;160(2):289–97

Phagocytosis and killing of Listeria monocytogenes by alveolar macrophages: smokers versus nonsmokers. King TE Jr, et al. **J Infect Dis** 1988 Dec;158(6):1309–16

Analysis of humoral and phagocytic defenses against Streptococcus pneumoniae serotypes 1 and 3. Fine DP, et al. **J Lab Clin Med** 1988 Oct;112(4):487–97

Neutrophil chemiluminescence induced by opsonized group A streptococcal particles: an effective probe of intravenous immunoglobulin preparations. Rüfenacht R, et al. **J Lab Clin Med** 1989 Mar;113(3):387–95

Lectin–mediated, nonopsonic phagocytosis of type 1 Escherichia coli by human peritoneal macrophages of uremic patients treated by peritoneal dialysis. Boner G, et al. **J Leukoc Biol** 1989 Sep;46(3):239–45

Confocal scanning fluorescence microscopy: a new method for phagocytosis research. Hook GR, et al. **J Leukoc Biol** 1989 Apr;45(4):277–82

Reversal of virus–induced alveolar macrophage bactericidal dysfunction by cyclooxygenase inhibition in vitro. Laegreid WW, et al. **J Leukoc Biol** 1989 Apr;45(4):293–300

Regulation of phagolysosome pH in bovine and human neutrophils: the role of NADPH oxidase activity and an Na+/H+ antiporter. Mayer SJ, et al. **J Leukoc Biol** 1989 Mar;45(3):239–48

Opsonophagocytosis of Campylobacter pylori. Das SS, et al. **J Med Microbiol** 1988 Oct;27(2):125–30

The role of extracellular slime in opsonophagocytosis of Staphylococcus epidermidis. Kristinsson KG, et al. **J Med Microbiol** 1988 Nov;27(3):207–13

Phagocytosis and ingestion of influenza virus by human polymorphonuclear leucocytes in vitro: electron microscopy studies. Yamamoto K, et al. **J Med Microbiol** 1989 Mar;28(3):191–8

Phagocytosis of microcapsules by guinea–pig polymorphonuclear leucocytes. Sano T, et al. **J Microencapsul** 1986 Oct–Dec;3(4):265–73

Myelin phagocytosis by peritoneal macrophages in organ cultures of mouse peripheral nerve. A new model for studying myelin phagocytosis in vitro. Bonnekoh PG, et al. **J Neuropathol Exp Neurol** 1989 Mar;48(2):140–53

Phagocytic activity of hemocytes of M–line Biomphalaria glabrata snails: effect of exposure to the trematode Echinostoma paraensei. Noda S, et al. **J Parasitol** 1989 Apr; 75(2):261–9

Interaction of microspheres with blood constituents. III. Macrophage phagocytosis of various types of polymeric drug carriers. Kanke M, et al. **J Parenter Sci Technol** 1988 Sep–Oct;42(5):157–65

Attachment to and phagocytosis of mineral by alveolar bone osteoclasts. Pierce AM. **J Submicrosc Cytol Pathol** 1989 Jan;21(1):63–71

Phagocyte metabolic functions in iron deficiency anaemia of Indian children. Hasan SM, et al. **J Trop Pediatr** 1989 Feb;35(1):6–9

Neutrophil chemotaxis, phagocytosis and parameters of reactive oxygen species in human aging: cross–sectional and longitudinal studies. Niwa Y, et al. **Life Sci** 1989; 44(22):1655–64

Polymorphonuclear leukocyte activation during hemodialysis: a chemiluminescence study. Mori R, et al. **Life Support Syst** 1983;1 Suppl 1:154–7

Complement activation, phagocytosis, tumor growth and parasitic infection after magnesium supplementation in diet of mice. Stankiewicz M, et al. **Magnesium** 1989;8(2):87–93

Hematophagic histiocytosis. A report of 23 new patients and a review of the literature. Reiner AP, et al. **Medicine (Baltimore)** 1988 Nov;67(6):369–88 (107 ref.)

Modulation of bovine neutrophil antibacterial activities by Pasteurella haemolytica A1 purified capsular polysaccharide. Czuprynski CJ, et al. **Microb Pathog** 1989 Feb;6(2):133–41

Virulence associated ingestion of Legionella pneumophila by HeLa cells. Dreyfus LA. **Microb Pathog** 1987 Jul; 3(1):45–52

Influence of transglutaminase on the functions of mouse peritoneal macrophages. Ishitani K, et al. **Microbiol Immunol** 1989;33(1):59–68

A simple method for observation of phagocytosis on bacterial thin-layer. Seki K, et al. **Microbiol Immunol** 1989; 33(1):81–5

Leukocyte phagocytosis and alterations in microvascular integrity elicited by FITC-dextran 150 and epi-illumination in the microcirculation of the hamster cheek pouch. Gawlowski DM, et al. **Microvasc Res** 1989 Jan;37(1):1–15

Relative abilities of two Fc gamma receptors on guinea-pig macrophages to operate in the phagocytosis of soluble immune complexes. Sato H, et al. **Mol Immunol** 1989 Mar; 26(3):309–17

Digestion of killed Paracoccidioides brasiliensis by neutrophils. Goihman-Yahr M, et al. **Mycopathologia** 1989 Apr;106(1):53–8

Effect of aflatoxin B1 on the delayed type hypersensitivity and phagocytic activity of reticuloendothelial system in chickens. Kadian SK, et al. **Mycopathologia** 1988 Oct; 104(1):33–6

Phagocytosis of autologous lymphocytes by cervical preneoplastic and neoplastic cells. Ghoneum M, et al. **Nat Immun Cell Growth Regul** 1988;7(4):239–48

Hepatic macrophage function in schistosomal glomerulopathy. Barsoum RS, et al. **Nephrol Dial Transplant** 1988;3(5):612–6

Effect of fibronectin on C3b and Fc receptor-mediated phagocytosis by peripheral blood monocytes in uraemic patients. Pertosa G, et al. **Nephrol Dial Transplant** 1989; 4(1):15–20

Clinical significance of an impaired mononuclear phagocyte system immune clearance in human nephritis [letter] Roccatello D, et al. **Nephron** 1989;51(3):428–9

Purification of M. leprae with special reference to the effects of purified M. leprae vaccines on host macrophage cell functions. Saito H, et al. **Nippon Rai Gakkai Zasshi** 1987 Jul-Sep;56(3):101–9

Receptor-mediated phagocytosis by macrophages induces a calcium-dependent transient increase in c-fos transcription. Collart MA, et al. **Oncogene** 1989 Feb;4(2):237–41

Opsonization of yeast by the plasma of Biomphalaria glabrata (Gastropoda): a strain-specific, time-dependent process. Fryer SE, et al. **Parasite Immunol** 1989 May;11(3):269–78

Role of hypochlorous acid in Trypanosoma musculi killing by phagocytes. Vincendeau P, et al. **Parasitology** 1989 Apr; 98 Pt 2:253–7

Phagocytosis: an overview. Chakravarti B, et al. **Pathol Immunopathol Res** 1987;6(5–6):316–42 (193 ref.)

Bacteria, phagocytes, and bystander cells. Interaction between Staphylococcus aureus, polymorphonuclear leukocytes, and endothelial cells. Vandenbroucke-Grauls CM, et al. **Pathol Immunopathol Res** 1988;7(3):149–61 (42 ref.)

Human and rabbit newborn lung macrophages have reduced anti-Candida activity. D'Ambola JB, et al. **Pediatr Res** 1988 Sep;24(3):285–90

Defective leukocyte fungicidal activity in end-organ resistance to 1,25-dihydroxyvitamin D. Etzioni A, et al. **Pediatr Res** 1989 Mar;25(3):276–9

Effect of immune globulin intravenous on opsonization of bacteria by classic and alternative complement pathways in premature serum. Shaio MF, et al. **Pediatr Res** 1989 Jun;25(6):634–40

Phagocytosis-associated functions in neonatal monocyte-derived macrophages. Speer CP, et al. **Pediatr Res** 1988 Aug;24(2):213–6

Monocyte function in chickens with hereditary muscular dystrophy. Chu Y, et al. **Poult Sci** 1989 Feb;68(2):226–32

Histological study on seminal plasma absorption and spermiophagy in the epididymal region of domestic fowl. Nakai M, et al. **Poult Sci** 1989 Apr;68(4):582–9

Vitamin A supplementation improves macrophage function and bacterial clearance during experimental salmonella infection. Hatchigian EA, et al. **Proc Soc Exp Biol Med** 1989 May;191(1):47–54

Complement-mediated lysis with monoclonal antibodies. Howard J, et al. **Prog Allergy** 1988;45:1–15 (35 ref.)

Stimulation of phagocytosis by immunoglobulins in animal experiment. Frick SW, et al. **Prog Clin Biol Res** 1989; 308:1037–41

Diiodotyrosine (DIT): a new marker of leukocyte phagocytic activity in sepsis and severe infections. Gramm HJ, et al. **Prog Clin Biol Res** 1989;308:711–3

Sem observations of the male reproductive tract with special reference to epithelial phagocytosis. Murakami M, et al. **Prog Clin Biol Res** 1989;296:207–14

Surface interaction between bacteria and phagocytic cells. Ohman L, et al. **Prog Drug Res** 1988;32:131–47 (80 ref.)

Macrophage heterogeneity in prostaglandins and thromboxane synthesis: differential activation by Fc- and C3b-dependent bacterial phagocytosis. Coquette A, et al. **Prostaglandins** 1988 Oct;36(4):491–505

Erythrophagocytosis in phenylhydrazine induced acute anaemia in chickens. Datta K, et al. **Res Vet Sci** 1989 Jul; 47(1):136–7

Relative importance of Salmonella-specific antibody isotypes in phagocytosis of Salmonella typhimurium by ovine mammary neutrophils. Mukkur TK, et al. **Res Vet Sci** 1989 Mar;46(2):153–9

Role of the mononuclear phagocyte system in the immunopathogenesis of human immunodeficiency virus infection and the acquired immunodeficiency syndrome. Bender BS, et al. **Rev Infect Dis** 1988 Nov-Dec; 10(6):1142–54

Phagocytes, O2 reduction, and hydroxyl radical. Cohen MS, et al. **Rev Infect Dis** 1988 Nov-Dec;10(6):1088–96 (105 ref.)

Role of the capsule in phagocytosis of Cryptococcus neoformans. Kozel TR, et al. **Rev Infect Dis** 1988 Jul-Aug; 10 Suppl 2:S436–9 (18 ref.)

Human neutrophil antimicrobial activity. Thomas EL, et al. **Rev Infect Dis** 1988 Jul-Aug;10 Suppl 2:S450–6 (50 ref.)

Reduced erythrocyte CR1 (CD 35) receptor function and complement opsonization in factor I-deficient patients is restored by plasma infusion. Jepsen HH, et al. **Scand J Immunol** 1989 Feb;29(2):247–55

Ligand-specific cross-inhibition of monocyte phagocytosis. Kávai M, et al. **Scand J Immunol** 1988 Oct;28(4):397–402

Opioid peptides modulate the organization of vimentin filaments, phagocytic activity, and expression of surface molecules in monocytes. Prieto J, et al. **Scand J Immunol** 1989 Apr;29(4):391–8

Increased expression of leucocyte adherence-related glycoproteins by polymorphonuclear leucocytes during phagocytosis of staphylococci on an endothelial surface. Vandenbroucke-Grauls CM, et al. **Scand J Immunol** 1989 Jul;30(1):91–8

Defective phagocytosis, decreased tumour necrosis factor-alpha production, and lymphocyte hyporesponsiveness predispose patients with systemic lupus erythematosus to infections. Yu CL, et al. **Scand J Rheumatol** 1989;18(2):97–105

Electron microscopic study of phagocytosis in human spleen in falciparum malaria. Pongponratn E, et al. **Southeast Asian J Trop Med Public Health** 1989 Mar; 20(1):31–9

Del red cells sensitized with anti-D are not phagocytosed by monocytes [letter] Ogasawara K, et al. **Transfusion** 1988 Nov-Dec;28(6):603–4

Plasma fibronectin: a third opsonic protein involved in immune clearance and destruction of erythrocytes after infusion of incompatible blood. Hathaway TK, et al. **Transplant Proc** 1988 Dec;20(6):1096–102

The involvement of platelets in non-thrombotic processes. Page CP. **Trends Pharmacol Sci** 1988 Feb;9(2):66–71 (34 ref.)

Ingestion and killing of Streptococcus agalactiae by bovine granulocytes in the presence of natural opsonins. Rainard P, et al. **Vet Microbiol** 1988 Sep;18(1):41–50

Resistance of some capsular serotype D strains of Pasteurella multocida to rabbit polymorphonuclear neutrophil phagocytosis. Rush HG. **Vet Microbiol** 1989 May; 20(1):79–87

In vitro and in vivo interaction between sporocysts of Sarcocystis muris and mouse peritoneal macrophages. Gill HS, et al. **Vet Parasitol** 1989 Aug 1;32(4):341–7

Epidemiological and immunological aspects of human crisis form factor in falciparum malaria: cell-mediated responses? Jensen JB, et al. **Vet Parasitol** 1988 Sep;29(2-3):171–7 (24 ref.)

Phagocytic activity of Kupffer cells in splenectomized rats. Abe T, et al. **Virchows Arch [A]** 1988;413(5):457–62

Rate of interaction of IgG1 and IgG3 sensitized red cells with monocytes in the phagocytosis assay. Brojer E, et al. **Vox Sang** 1989;56(2):101–3

Phagocytosis by human monocytes of red cells sensitized with monoclonal IgG1 and IgG3 anti-D. Hadley AG, et al. **Vox Sang** 1989;57(2):150–1

Lectin-mediated cell-attachment and phagocytosis of Staphylococcus saprophyticus strain S1. Beuth J, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1-2):22–7

In vitro influence of Mycoplasma species on the stimulation of human polymorphonuclear granulocytes. Krausse R, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1-2):228–36

Lectinophagocytosis mediated by bacterial surface lectins. Ofek I. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Mar; 270(4):449–55 (44 ref.)

Investigations on the opsonin-dependent interaction of Klebsiella bacteria and human polymorphonuclear leukocytes. Przondo-Mordarska A, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1-2):252–9

Phagocytosis and intracellular killing of Staphylococcus aureus by bovine blood polymorphonuclear leukocytes after migration in vitro. Niemiałtowski M, et al. **Zentralbl Veterinarmed [B]** 1989 Mar;36(2):154–6

Effects of exogenous estrogen administration to ovariectomized cows on the blood and milk-leukocyte counts and -neutrophil phagocytosis measured by flow cytometry. Saad AM, et al. **Zentralbl Veterinarmed [B]** 1988 Nov;35(9):654–63

Alterations in neutrophil phagocytosis and lymphocyte blastogenesis in dairy cows around parturition. Saad AM, et al. **Zentralbl Veterinarmed [B]** 1989 Jul;36(5):337–45

Quantitative characterization of yeast cell incorporation in phagocytes: microscopic methods for differentiation between adherent and ingested particles. Stahl M, et al. **Zentralbl Veterinarmed [B]** 1989 May;36(3):185–90

[Phagocytic activity in various lung tumors] Mikhova Ts, et al. **Eksp Med Morfol** 1988;27(3):39–43 (Eng. Abstr.) **(Bul)**

[The autophagic activity of Leydig cells in normal rat testes] Tang XM. **Shih Yen Sheng Wu Hsueh Pao** 1988 Mar; 21(1):119–29 (Eng. Abstr.) **(Chi)**

[Changes in the phagocytosis index of blood elements in inflammation of the appendix] Křikava K. **Cesk Epidemiol Mikrobiol Imunol** 1988 Sep;37(5):282–5 (Eng. Abstr.) **(Cze)**

[Use of the tetrazolium salt reduction test in the detection of phagocytic activity in pigs] Granátová M. **Vet Med (Praha)** 1989 Apr;34(4):231–8 (Eng. Abstr.) **(Cze)**

[Familial hemophagocytic histiocytosis in 2 siblings] Carstensen H, et al. **Ugeskr Laeger** 1989 Aug 7; 151(32):2035–6 (Eng. Abstr.) **(Dan)**

[Hepatic cytoprotection (2). Mechanisms of toxicity of phagocytic cells. Protective systems] Mavier P. **Gastroenterol Clin Biol** 1989 Jun;13(6-7):568–71 (36 ref.) **(Fre)**

[A fluorescence monolayer assay in the study of the function of human blood monocytes] Schwartz D. **Beitr Infusionther** 1988;21:240–2 **(Ger)**

[Chemoluminescence study of the influence of phagocytosis of peripheral blood leukocytes using a perfluorocarbon-containing blood substitute] Griepentrog T, et al. **Folia Haematol (Leipz)** 1989;116(1):107–13 (Eng. Abstr.) **(Ger)**

[Lymphoreticular cells in the human endometrial stroma] Buchholz F, et al. **Geburtshilfe Frauenheilkd** 1988 Dec; 48(12):845–9 (Eng. Abstr.) **(Ger)**

[The characterization of phagocytotic processes using morphometry] Schlöffel G, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):141–3 (Eng. Abstr.) **(Ger)**

[Insufficiency of intra-abdominal immunity to infection in purulent peritonitis--sequela of disordered foreign body opsonization] Billing A, et al. **Klin Wochenschr** 1989 Mar 15;67(6):349–56 (Eng. Abstr.) **(Ger)**

[Phagocytic activity of neutrophilic granulocytes in neonatal hyperbilirubinemia before and following phototherapy] Leipe S, et al. **Padiatr Grenzgeb** 1988;27(5):347–58 (Eng. Abstr.) **(Ger)**

[Phagocytosis of Staphylococcus aureus and Pseudomonas aeruginosa by pulmonary macrophages and granulocytes] Hürter T. **Pneumologie** 1989 Mar;43(3):147–58 (Eng. Abstr.) **(Ger)**

[Phagocytic reactivity of granulocytes in the peripheral blood of patients with multiple sclerosis and normal probands] Lehmitz R, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Jan;41(1):50–3 (Eng. Abstr.) **(Ger)**

[Humoral and cellular changes of non-specific immune response following severe trauma] Regel G, et al. **Unfallchirurg** 1989 Jul;92(7):314–20 (Eng. Abstr.) **(Ger)**

[The practicality of an NBT test] Krause B, et al. **Z Med Lab Diagn** 1989;30(4):246–8 **(Ger)**

[Defects in opsonization activity of the serum of patients with chronic arthritis] Böhm U, et al. **Z Rheumatol** 1988 May-Jun;47(3):161–5 (Eng. Abstr.) **(Ger)**

[Enhancement of membrane phospholipid breakdown and synthesis during phagocytosis in cultured chick retinal pigment epithelial cells] Nakashima S, et al. **Nippon Ganka Gakkai Zasshi** 1989 Jan;93(1):142–8 (Eng. Abstr.) **(Jpn)**

[Phosphoinositide turnover and Ca2+ mobilization during phagocytosis in cultured chick retinal pigment epithelial cells] Nakashima S, et al. **Nippon Ganka Gakkai Zasshi** 1989 Jan;93(1):149–54 (Eng. Abstr.) **(Jpn)**

[Phagocytosis in the retinal pigment epithelium of polystyrene particles with different surface characteristics] Ogata N, et al. **Nippon Ganka Gakkai Zasshi** 1988 Aug; 92(8):1406–13 (Eng. Abstr.) **(Jpn)**

[Pathologic response of the retinal pigment epithelium. The effect of mucopolysaccharide in the subretinal space to phagocytosis. Part 5] Ogata N, et al. **Nippon Ganka Gakkai Zasshi** 1989 Feb;93(2):187–95 (Eng. Abstr.) **(Jpn)**

[Follow-up study on cytophagic histiocytic panniculitis with abnormal immunologic findings] Ichikawa H, et al. **Nippon Hifuka Gakkai Zasshi** 1989 Jan;99(1):45–52 (Eng. Abstr.) **(Jpn)**

[Neutrophil chemiluminescence in pneumoconiosis] Saburi Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jan; 27(1):57–63 (Eng. Abstr.) **(Jpn)**

[Infection of Mycobacterium leprae and Mycobacterium lepraemurium into a cloned macrophage like cell line] Tanaka M, et al. **Nippon Rai Gakkai Zasshi** 1987 Jul-Sep; 56(3):110–5 (Eng. Abstr.) **(Jpn)**

[Fibroblasts and mononuclear phagocytes system in the host defense and wound healing of the cornea] Nishida T. **Nippon Rinsho** 1989 Mar;47(3):675–80 **(Jpn)**

[Role of phagocytosis by PMN and macrophages in bio-defense] Nomoto K. **Nippon Saikingaku Zasshi** 1988 Sep;43(5):899–910 (101 ref.) **(Jpn)**

[Phagocytosis-stimulating factor (PSF) produced by polymorphonuclear neutrophils] Ishibashi Y, et al. **Seikagaku** 1989 Jan;61(1):21–6 **(Jpn)**

[Microbial killing by oxygen radicals from phagocytes] Sasada M. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):3024–30 **(Jpn)**

[Effect of Corynebacterium parvum preparation on selected immunologic indicators and clinical results in patients with

chronic post-traumatic osteomyelitis] Perner T, et al. **Chir Narzadow Ruchu Ortop Pol** 1989;54(1):44–8 (Eng. Abstr.) (Pol)

[Selected indicators of immunity in patients with chronic osteomyelitis] Pyzio A, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(4):313–7 (Eng. Abstr.) (Pol)

[Evaluation of the phagocytic activity of peripheral blood neutrophils in patients with hyperthyroidism] Hrycek A, et al. **Endokrynol Pol** 1989;40(1):15–24 (Eng. Abstr.) (Pol)

[Studies of the phagocytic process in Hodgkin's disease. I. Effect of patients' sera on the process of phagocytosis and intracellular bactericidal activity] Grzybek-Hryncewicz K, et al. **Med Dosw Mikrobiol** 1988;40(3):173–8 (Eng. Abstr.) (Pol)

[Identification of Candida albicans products inhibiting macrophage activity] Kaczmarski W, et al. **Med Dosw Mikrobiol** 1988;40(2):98–102 (Eng. Abstr.) (Pol)

[Chemiluminescence as a method of evaluating phagocytic activity] Garliński P, et al. **Pneumonol Pol** 1988 Jul; 56(7):336–9 (18 ref.) (Eng. Abstr.) (Pol)

[The role of phagocytes in diseases of the digestive system] Hermanowicz A, et al. **Pol Arch Med Wewn** 1985 Oct; 74(4):288–93 (Pol)

[Granulocyte defects in atopic asthma] Matusiewicz R. **Pol Arch Med Wewn** 1985 Nov–Dec;74(5–6):359–62 (22 ref.) (Eng. Abstr.) (Pol)

[Eosinophils and their role in pathologic conditions] Rogala E, et al. **Postepy Hig Med Dosw** 1988 Mar–Apr; 42(2):224–34 (30 ref.) (Eng. Abstr.) (Pol)

[Effect of the methods of levamisole administration on selected elements of cellular immunity in guinea pigs] Górska M. **Rocz Akad Med Bialymstoku** 1984–85; 29–30:175–87 (Eng. Abstr.) (Pol)

[Effect of sympathetic nerve block on changes in vascular and tissue granulocyte pools] Gajdosz R. **Wiad Lek** 1988 Aug 1;41(15):1014–8 (Eng. Abstr.) (Pol)

[Nonspecific immunologic response of the host to parasitic infections] Golińska Z. **Wiad Parazytol** 1988;34(4–6):485–95 (42 ref.) (Eng. Abstr.) (Pol)

[Serum lysozyme activity in patients after the acute phase of trichinosis] Prokopowicz D. **Wiad Parazytol** 1988; 34(4–6):625–30 (33 ref.) (Pol)

[Observation of the processes of phagocytosis and digestion of Staphylococcus aureus by Trichomonas vaginalis using a transmission electron microscope] Szreter H, et al. **Wiad Parazytol** 1989;35(2):121–6 (Eng. Abstr.) (Pol)

[Phagocytosis of Salmonella typhimurium labeled with 131I in splenic intraperitoneal autotransplantation with or without topical splenic remnants. Experimental study in rats] Rodrigues Júnior AJ, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Jan–Feb; 43(1):75–80 (Eng. Abstr.) (Por)

[Screening of immunomodulators by using the system of mononuclear phagocytes] Freĭdlin IS, et al. **Antibiot Khimioter** 1988 Dec;33(12):906–9 (Eng. Abstr.) (Rus)

[Electron-radioautographic study of phagocytosis of Pseudomonas aeruginosa by neutrophils] Pal'tsyn AA, et al. **Arkh Patol** 1989;51(5):12–8 (Eng. Abstr.) (Rus)

[Characteristics of the course of abscesses during effects on the system of phagocytosing mononuclear cells] Safuan D, et al. **Arkh Patol** 1988;50(7):45–51 (Eng. Abstr.) (Rus)

[The phenomenon of the accumulation of biological and nonbiological corpuscular particles in mammalian lungs] Kaufman OIa, et al. **Biull Eksp Biol Med** 1988 Dec; 106(12):741–4 (Eng. Abstr.) (Rus)

[Characteristics of the membranes and functional activity of phagocytic alveolar macrophages] Kolosova NG, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):71–4 (Eng. Abstr.) (Rus)

[Detection of the capacity of retina pigmented epithelium cells in the newborn rat for phagocytosis of rod exterior segments] Ershov AV, et al. **Dokl Akad Nauk SSSR** 1988; 303(5):1239–41 (Rus)

[Phagocytic capacity of a leukocyte concentrate from donor blood preserved under high pressure and a temperature lower than 0 degrees C] Pavlenko RA, et al. **Gematol Transfuziol** 1988 Jul;33(7):16–8 (Eng. Abstr.) (Rus)

[Basic principles of protective reactions of phagocytic cells of the respiratory tract to deposition of cytotoxic dust particles and its regulation] Privalova LI. **Gig Sanit** 1989 Mar;(3):28–31 (Eng. Abstr.) (Rus)

[Use of cytochemical methods for evaluating body resistance of laboratory animals] Venglinskaia EA, et al. **Gig Sanit** 1988 Oct;(10):60–1 (Rus)

[Effects of immunization on quartz resistance and phagocytic activity of macrophages] Privalova LI. **Gig Tr Prof Zabol** 1989;(1):11–4 (Eng. Abstr.) (Rus)

[A method of calculating the absolute indices of phagocytosis] Aleksandrov MT, et al. **Lab Delo** 1988; (9):30–2 (Eng. Abstr.) (Rus)

[Determination of the phagocytic activity of peripheral blood monocytes in patients with erysipelas] Frolov VM, et al. **Lab Delo** 1989;(1):59–61 (Rus)

[Modification of the Rebuck test and its use in the differentiated evaluation of the activity of the phagocytic reactions in patients with mycoses of the feet and eczema] Iutskovskiĭ AD, et al. **Lab Delo** 1988;(10):27–9 (Eng. Abstr.) (Rus)

[Hemolymph cells of fleas and their phagocytic activity] Kozlov MP, et al. **Parazitologiia** 1988 Jul–Aug;22(4):321–8 (Eng. Abstr.) (Rus)

[Phagocytic activity of neutrophils in children with hereditary glucose-6-phosphate dehydrogenase deficiency during acute pneumonia] Kasumova SM, et al. **Pediatriia** 1988;(9):24–7 (Eng. Abstr.) (Rus)

[Humoral immunity, phagocytosis and salivary lysozyme in patients with diabetes mellitus] Kolosova GA, et al. **Pediatriia** 1988;(4):18–20 (Eng. Abstr.) (Rus)

[Localization of a defect in phagocytic function in sarcoidosis] Belokrinitskiĭ DV, et al. **Probl Tuberk** 1988; (11):54–8 (Eng. Abstr.) (Rus)

[Phagocytic activity of neutrophils in children with positive reactions to tuberculin] Skliarov SD, et al. **Probl Tuberk** 1988;(10):69–70 (Rus)

[Intracellular activity and phagocyte formation of pathogenic and non-pathogenic strains of Mycobacterium fortuitum] Sosnovskaia AV. **Probl Tuberk** 1988;(6):59–62 (Eng. Abstr.) (Rus)

[Functional activity of neutrophils and lymphocytes in hypertension] Ananchenko VG, et al. **Sov Med** 1988; (7):32–5 (Eng. Abstr.) (Rus)

[The reserve deposition system in the pathogenesis of endogenous toxemia] Asaturov BI. **Sov Med** 1989;(1):48–51 (63 ref.) (Rus)

[Functional activity of blood phagocytes in food poisoning] Chekalina KI, et al. **Sov Med** 1989;(2):10–3 (Eng. Abstr.) (Rus)

[Characteristics of the functional activity of monocytes in acute suppurative-destructive lung diseases] Filev LV, et al. **Sov Med** 1988;(10):15–7 (Eng. Abstr.) (Rus)

[The role of the opsonophagocytic system in the pathogenesis of sepsis] Belotskiĭ SM, et al. **Ter Arkh** 1988;60(5):97–9 (29 ref.) (Rus)

[Intracellular metabolism and phagocytic activity of neutrophilic leukocytes in patients with viral hepatitis B] Nagoev BS. **Ter Arkh** 1988;60(11):15–8 (Rus)

[Phagocytosis and endocytosis in the colorless flagellate Thaumatomonas lauterborni] Karpov SA, et al. **Tsitologiia** 1989 Mar;31(3):347–9 (Eng. Abstr.) (Rus)

[The Rebuck skin window method in the differentiated assessment of the activity of phagocytic reactions in patients with foot mycoses and eczema] Iutskovskiĭ AD. **Vestn Dermatol Venerol** 1988;(6):16–9 (Eng. Abstr.) (Rus)

[Phagocytic activity of leukocytes in syphilis] Kapkaev RA, et al. **Vestn Dermatol Venerol** 1988;(7):69–73 (Eng. Abstr.) (Rus)

[Opsonic cooperation in the neutrophil phagocytosis system in acute myeloblastic leukemia] Guseva SA. **Vrach Delo** 1989 Jan;(1):58–61 (Eng. Abstr.) (Rus)

[Cationic proteins and the phagocytic activity of eosinophils in patients with chronic myeloleukemia and eosinophilic-type leukemoid reactions] Romanova AF, et al. **Vrach Delo** 1988 Nov;(11):60–1 (Eng. Abstr.) (Rus)

[Oxygen-dependent indicators of phagocytosis in an infection caused by Trychophyton rubrum] Svirid SG. **Vrach Delo** 1989 Feb;(2):109–10 (Eng. Abstr.) (Rus)

[The effect of prednisolone on the functional status of phagocytic cells in the peripheral blood of patients with pulmonary sarcoidosis] Tyshko NA. **Vrach Delo** 1989 May; (5):88–90 (Eng. Abstr.) (Rus)

[Phagocytosis of immune complexes by leukocytes in patients with schizophrenia] Vetlugina TP, et al. **Zh Nevropatol Psikhiatr** 1989;89(5):102–4 (Eng. Abstr.) (Rus)

[Changes in the functional and metabolic activity of phagocytes induced by bacterial vaccines in vitro and in vivo] Kotulová D, et al. **Bratisl Lek Listy** 1988 Sep; 89(9):664–72 (Eng. Abstr.) (Slo)

[Recurrent hemophagocytic syndrome and human immunodeficiency virus infection (letter)] García Díaz JD, et al. **Med Clin (Barc)** 1988 Sep 24;91(9):359 (Spa)

DRUG EFFECTS

Metabolic and phagocytic activities of the mouse retina after 6-hydroxydopamine treatment. Yew DT, et al. **Acta Anat (Basel)** 1988;133(1):27–9

The effects of cytokines, antithyroidal drugs and glucocorticoids on phagocytosis by thyroid cells. Matsunaga M, et al. **Acta Endocrinol (Copenh)** 1988 Nov; 119(3):413–9

Oligopeptides and phagocytosis in mice. Dénes L, et al. **Acta Paediatr Hung** 1988–89;29(1–2):45–8

Influence of radiographic contrast media on phagocytosis. Rasmussen F, et al. **Acta Radiol** 1988 Sep–Oct;29(5):589–92

The generation of chemiluminescence by alveolar macrophages is affected by 9-hydroxy-linoleic acid. Henricks PA, et al. **Agents Actions** 1989 Jan;26(1–2):178–9

Unique promotion of erythrophagocytosis by malondialdehyde. Hebbel RP, et al. **Am J Hematol** 1988 Dec;29(4):222–5

Effects of T-2 mycotoxin ingestion on phagocytosis of Aspergillus fumigatus conidia by rabbit alveolar macrophages and on hematologic, serum biochemical, and pathologic changes in rabbits. Niyo KA, et al. **Am J Vet Res** 1988 Oct;49(10):1766–73

Nonimmune-mediated phagocytosis by "premedullary" lung macrophages: effects of concanavalin A, tuftsin, and macrophage-inhibitory peptide. Sorokin SP, et al. **Anat Rec** 1989 Jan;223(1):55–61

Enhancement of phagocytosis and intracellular killing of Candida albicans by human neutrophils in the presence of a morpholine antifungal derivative, Ro 14-4767. Richardson MD, et al. **Ann N Y Acad Sci** 1988;544:403–5

The effect of selenium on phagocytosis in humans. Greenman E, et al. **Anticancer Res** 1988 Jul–Aug;8(4):825–8

Enhanced phagocytosis, killing, and serum sensitivity of Escherichia coli and Staphylococcus aureus treated with sub-MICs of imipenem. Adinolfi LE, et al. **Antimicrob Agents Chemother** 1988 Jul;32(7):1012–8

Possible involvement of a 95-kDa protein phosphorylation in phorbol 12-myristate 13-acetate-induced suppression of zymosan phagocytosis in guinea pig macrophages. Hazeki K, et al. **Arch Biochem Biophys** 1989 May 1;270(2):551–9

Characterization of a monoclonal antibody to guinea pig peritoneal macrophages that inhibits phagocytosis of unopsonized zymosan: structural and functional similarities of the antigen to human and mouse CR3. Tamoto K, et al. **Arch Biochem Biophys** 1989 May 1;270(2):541–50

Splenopentin—influence on antibody formation in immunosuppressed animals and on phagocytic capability of human granulocytes. Diezel W, et al. **Arch Geschwulstforsch** 1989;59(3):161–4

Inhibition of postpyrogenic increase of phagocytic and killing activity of neutrophils by nonsteroid antiinflammatory drugs. Dębowy J, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(3):295–301

Depletion of hepatic glutathione in rats impairs phagocytosis in vivo. Hennighausen G, et al. **Arch Toxicol Suppl** 1989; 13:326–9

Influence of various concentrations of cefotiam and ceftizoxime on the phagocytosis of gonococci by polymorphonuclear granulocytes. Korting HC, et al. **Arzneimittelforschung** 1989 Apr;39(4):428–31

Naturally occurring anti-band 3 antibodies and complement in phagocytosis of oxidatively-stressed and in clearance of senescent red cells. Lutz HU, et al. **Blood Cells** 1988; 14(1):175–203

Effect of iron on polymorphonuclear granulocyte phagocytic capacity: role of oxidation state and effect of ascorbic acid. Hoepelman IM, et al. **Br J Haematol** 1988 Dec; 70(4):495–500

Effect of antibiotics on CR1 receptor levels of human neutrophils and on the binding and phagocytosis of opsonized polystyrene microspheres by these leucocytes. Ogle JD, et al. **Burns** 1989 Jun;15(3):141–4

Enhancement of macrophage spreading and phagocytosis by peroxidative enzymes. Lefkowitz D, et al. **Cell Biol Int Rep** 1988 Nov;12(11):969–78

Short-term stimulation of cellular autophagy by furosemide in the thick ascending limb of Henle's loop in the rat kidney. Bahro M, et al. **Cell Tissue Res** 1988 Sep;253(3):625–9

Prostaglandins may play a signal-coupling role during phagocytosis in Amoeba proteus. Prusch RD, et al. **Cell Tissue Res** 1989 Mar;255(3):553–7

Direct action of antibiotics and immunomodulating agents on phagocytosis. Fietta A, et al. **Chemioterapia** 1987 Jun; 6(2 Suppl):229–31

Effect of ceftriaxone on bacterial killing by human neutrophils in vitro. Labro M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):234–6

Interaction of cefotaxime versus desacetyl cefotaxime on human neutrophil functions. Labro M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):237–9

In vitro and ex vivo enhancement of nonspecific phagocytosis by cefodizime. Fietta A, et al. **Chemotherapy** 1988; 34(5):430–6

Miokamycin and leukocyte activity in man. Fraschini F, et al. **Chemotherapy** 1989;35(4):289–95

Effect of ciprofloxacin and ofloxacin on human polymorphonuclear leukocyte activity against staphylococci. Pascual A, et al. **Chemotherapy** 1989; 35(1):17–22

Phagocytosis in Tetrahymena thermophila: naloxone-reversible inhibition by opiates. De Jesus S, et al. **Comp Biochem Physiol [C]** 1989;92(1):139–42

Enhanced bactericidal activity of macrophages by exogenous leukotriene B4. Demitsu T, et al. **Dermatologica** 1989;179 Suppl 1:129–30

Phagocytosis of polystyrene latex beads by rat brain microglia cell cultures is increased by treatment with gangliosides. Bocchini V, et al. **Dev Neurosci** 1988; 10(4):270–6

The relevance of in vitro measurements of opsonophagocytosis to the study of antibiotic-PMN-bacterium interactions in vivo. Gemmell CG. **Drugs Exp Clin Res** 1988;14(12):735–40

Phagocytosis and killing of A-protein positive Staphylococcus aureus in the presence of low doses of antibiotics. Mascellino MT, et al. **Drugs Exp Clin Res** 1989; 15(2):63–9

The influence of cefepime on opsonophagocytosis of bacteria. Raponi G, et al. **Drugs Exp Clin Res** 1989;15(4):141–4

Comparative toxicity of ambient air pollutants: some aspects related to lung defense. Schlesinger RB. **Environ Health Perspect** 1989 May;81:123–8

Eicosanoids and phagocytic and bactericidal activity of equine neutrophils. Watson ED. **Equine Vet J** 1988 Sep; 20(5):373–5

Modulatory activity of 9-hydroxy- and 9-hydroperoxy-octadecadienoic acid towards reactive

oxygen species from guinea-pig pulmonary macrophages. Engels F, et al. **Eur J Biochem** 1989 Sep 1;184(1):197–203

Effect of amoxycillin and clavulanic acid, alone and in combination, on human polymorphonuclear leukocyte function against Staphylococcus aureus. Pascual A, et al. **Eur J Clin Microbiol Infect Dis** 1989 Apr;8(4):277–81

Interference of Staphylococcus aureus lipase with human granulocyte function. Rollof J, et al. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):505–10

Effect of therapeutic concentrations of anthracyclines on monocyte phagocytosis of yeast cells. Athlin L, et al. **Eur J Clin Pharmacol** 1989;36(2):155–9

C1q acts synergistically with phorbol dibutyrate to activate CR1-mediated phagocytosis by human mononuclear phagocytes. Bobak DA, et al. **Eur J Immunol** 1988 Dec; 18(12):2001–7

The effect of platelet-derived growth factor on phagocytosis of cultured human trabecular cells. Tamura M, et al. **Exp Eye Res** 1989 Jun;48(6):761–70

Induction of murine macrophage fungal killing by interleukin 3. Bleiberg I, et al. **Exp Hematol** 1989 Sep;17(8):895–7

The stimulatory effect of bilirubin on phagocytic activity. Bilej M, et al. **Folia Microbiol (Praha)** 1989;34(2):136–40

Effect of cyclophosphamide on the candidacidal activity of rabbit peritoneal macrophages. Kotulová D, et al. **Folia Microbiol (Praha)** 1988;33(5):401–6

Effects of acetylsalicylic acid on the phagocytic function of human polymorphonuclear leukocytes in vitro. Rodriguez AB, et al. **Gen Pharmacol** 1989;20(2):151–5

Role of actin polymerization in monocyte phagocytosis of yeast cells effect of cytochalasin B. Athlin L, et al. **Haematologia (Budap)** 1988;21(3):151–8

A cytochemical study on the effects of energy deprivation on autophagocytosis in Ehrlich ascites tumor cells. Reunanen H, et al. **Histochemistry** 1988;90(3):177–84

Characterization of murine macrophage Fc receptor-dependent phagocytosis and antibody-dependent cellular cytotoxicity during in vitro culture with interferons-gamma, alpha/beta and/or fetal bovine serum. Leu RW, et al. **Immunobiology** 1989 Feb;178(4–5):340–50

Effects of IL-4 on macrophage functions: increased uptake and killing of a protozoan parasite (Trypanosoma cruzi). Wirth JJ, et al. **Immunology** 1989 Feb;66(2):296–301

Effect of ketorolac on phagocytosis of Candida albicans by peritoneal macrophages. Fraser-Smith EB, et al. **Immunopharmacology** 1988 Nov-Dec;16(3):151–5

Effect of histamine and serotonin on phagocytic activity of Entamoeba histolytica. Khan MA, et al. **Indian J Exp Biol** 1988 Sep;26(9):730–1

Stimulation of macrophage phagocytic but not bactericidal activity by colony-stimulating factor 1. Cheers C, et al. **Infect Immun** 1989 May;57(5):1512–6

Stimulation by fibronectin of macrophage-mediated phagocytosis of Pseudomonas aeruginosa. Kluftinger JL, et al. **Infect Immun** 1989 Mar;57(3):817–22

Fibronectin increases Trypanosoma cruzi amastigote binding to and uptake by murine macrophages and human monocytes. Noisin EL, et al. **Infect Immun** 1989 Apr; 57(4):1030–4

Inhibition of Leishmania donovani promastigote internalization into murine macrophages by chemically defined parasite glycoconjugate ligands. Palatnik CB, et al. **Infect Immun** 1989 Mar;57(3):754–63

Effect of piroxicam therapy on granulocyte function and granulocyte elastase concentration in peripheral blood and synovial fluid of rheumatoid arthritis patients. Montecucco C, et al. **Inflammation** 1989 Apr;13(2):211–20

Effect of histamine on chemotaxis and phagocytosis of human alveolar macrophages and blood monocytes. Radermecker M, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):197–9

Therapeutic concentrations of melphalan do not affect yeast cell phagocytosis by monocytes. Athlin L, et al. **Int J Immunopharmacol** 1988;10(4):435–8

Suppression of yeast ingestion by dexamethasone in macrophage cultures: evidence for a steroid-induced phagocytosis inhibitory protein. Becker J, et al. **Int J Immunopharmacol** 1988;10(4):325–38

Inhibition of interferon gamma-induced macrophage microbicidal activity against Leishmania major by liposomes: inhibition is dependent upon composition of phospholipid headgroups and fatty acids. Gilbreath MJ, et al. **Int J Immunopharmacol** 1989;11(2):103–10

Increase in the number and the phagocytic function of guinea pig pulmonary and peritoneal macrophages following oral administration of RU 41740, a glycoprotein extract from Klebsiella pneumoniae. Radermecker M, et al. **Int J Immunopharmacol** 1988;10(8):913–7

Effect of iodinated contrast media on the phagocytic activity of human leukocytes. A new toxicity test. Halkola H, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S200–2

Inhibitory effect of antibiotic cerulenin on the respiratory burst in phagocytes. II. Inhibition by cerulenin of intracellular calcium mobilization in human neutrophils. Nakata M, et al. **J Antibiot (Tokyo)** 1989 Jul;42(7):1178–83

Inhibitory effect of antibiotic cerulenin on the respiratory burst in phagocytes. I. Effects of cerulenin on active oxygen-generation and lipid metabolism in phagocytes. Nakata M, et al. **J Antibiot (Tokyo)** 1989 Jul;42(7):1171–7

Stimulatory effect of cefodizime on macrophage-mediated phagocytosis. Oishi K, et al. **J Antibiot (Tokyo)** 1989 Jun; 42(6):989–92

An in-vitro evaluation of the cellular uptake and intraphagocytic bioactivity of clarithromycin (A-56268, TE-031), a new macrolide antimicrobial agent. Anderson R, et al. **J Antimicrob Chemother** 1988 Dec;22(6):923–33

Activity of ciprofloxacin against Escherichia coli phagocytosed by monocytes and macrophages [letter] Burgaleta C, et al. **J Antimicrob Chemother** 1989 Mar; 23(3):460–2

Effect of spiramycin on adhesiveness and phagocytosis of gram-positive cocci. Desnottes JF, et al. **J Antimicrob Chemother** 1988 Jul;22 Suppl B:25–32

Fusidic acid and human phagocyte function [letter] Kharazmi A, et al. **J Antimicrob Chemother** 1988 Aug;22(2):262–3

The influence of cefoperazone, cefotaxime, ceftazidime and aztreonam on phagocytosis by human neutrophils in vitro. Lingaas E, et al. **J Antimicrob Chemother** 1989 May; 23(5):701–10

Effect of antimicrobial and antineoplastic drugs alone and in combination on the phagocytic and candidacidal function of human polymorphonuclear leucocytes. Pallister CJ, et al. **J Antimicrob Chemother** 1989 Jan;23(1):87–94

Enhanced susceptibility of gram-negative bacteria to phagocytic killing by human polymorphonuclear leucocytes after brief exposure to aztreonam. Pruul H, et al. **J Antimicrob Chemother** 1988 Nov;22(5):675–86

The role of glycocalyx in surface phagocytosis of Bacteroides spp., in the presence and absence of clindamycin. Veringa EM, et al. **J Antimicrob Chemother** 1989 May;23(5):711–20

Enhancement of opsonophagocytosis of Bacteroides spp. by clindamycin in subinhibitory concentrations. Veringa EM, et al. **J Antimicrob Chemother** 1989 Apr;23(4):577–87

Gliotoxin induces apoptosis in macrophages unrelated to its antiphagocytic properties. Waring P, et al. **J Biol Chem** 1988 Dec 5;263(34):18493–9

Effect of a new fluorinated quinolone (ofloxacin) on the chemiluminescence of phagocytosing human neutrophils. Aquilini D, et al. **J Biolumin Chemilumin** 1989 Apr-Jun; 3(2):85–7

A novel member of the integrin receptor family mediates Arg-Gly-Asp-stimulated neutrophil phagocytosis. Gresham HD, et al. **J Cell Biol** 1989 May;108(5):1935–43

Biologically active casein peptides implicated in immunomodulation. Migliore-Samour D, et al. **J Dairy Res** 1989;56(3):357–62

Bradykinin sensitization of CSF-1-responsive murine mononuclear phagocyte precursors to prostaglandin E. Duma EM, et al. **J Immunol** 1988 Nov 1;141(9):3186–9

Isolation of a yeast heptaglucoside that inhibits monocyte phagocytosis of zymosan particles. Janusz MJ, et al. **J Immunol** 1989 Feb 1;142(3):959–65

Studies on molecular regulation of phagocytosis in neutrophils. Con A-mediated ingestion and associated respiratory burst independent of phosphoinositide turnover, rise in [Ca2+]i, and arachidonic acid release. Rossi F, et al. **J Immunol** 1989 Mar 1;142(5):1652–60

Activation and deactivation of guinea pig peritoneal eosinophils during chronic polymyxin B stimulation. Davis WB, et al. **J Leukoc Biol** 1989 Feb;45(2):147–54

Stimulation of phagocytic activity of leukocytes and macrophages by traxanox sodium in mice and rats. Hisadome M, et al. **Jpn J Pharmacol** 1989 Feb;49(2):275–84

Latrunculin A is a potent inhibitor of phagocytosis by macrophages. de Oliveira CA, et al. **Life Sci** 1988; 43(22):1825–30

Opsonic effect of fibronectin on staphylococcal phagocytosis by human polymorphonuclear leukocytes: its relative inefficiency in post-phagocytic metabolic activities and in intracellular killing. Yonemasu K, et al. **Microbiol Immunol** 1988;32(8):795–805

Modulation of some human mononuclear cells activities by procaine. Jurjus AR, et al. **Middle East J Anesthesiol** 1988 Jun;9(5):417–28

Effect of amorolfine (Ro 14-4767/002) on in vitro phagocytosis and intracellular killing of Candida albicans by human neutrophils. Richardson MD, et al. **Mycoses** 1989 May;32(5):245–9

Cefodizime: a new cephalosporin with apparent immune-stimulating properties in chronic renal failure. Vanholder R, et al. **Nephrol Dial Transplant** 1988;3(2):221–4

Protein precoating of polylactide microspheres containing a lipophilic immunopotentiator for enhancement of macrophage phagocytosis and activation. Tabata Y, et al. **Pharm Res** 1989 Apr;6(4):296–301

Antimicrobial drugs, microorganisms, and phagocytes. van den Broek PJ. **Rev Infect Dis** 1989 Mar-Apr;11(2):213–45 (387 ref.)

Phagocytic and motile properties of endothelial cells measured magnetometrically: effects of endotoxin. Valberg PA, et al. **Tissue Cell** 1988;20(3):345–54

Effect of ketone bodies on the phagocytic activity of bovine milk macrophages and polymorphonuclear leukocytes. Kluciński W, et al. **Zentralbl Veterinarmed [A]** 1988 Sep; 35(8):632–9

[Anti-inflammatory and immunologic actions of buyang huanwu tang] Duan JY. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Mar;9(3):164–6, 134 (Eng. Abstr.) **(Chi)**

[Effects of Cistanche deserticola on immune function in mice] Zhang HQ, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Dec;8(12):736–7, 710 (Eng. Abstr.) **(Chi)**

[The modification of phagocytosis by different K1 capsule preparations of Escherichia coli] Sokolowska-Köhler W, et al. **J Basic Microbiol** 1989;29(1):49–54 (Eng. Abstr.) **(Ger)**

[Resistance of staphylococci to intracellular killing by macrophages--a new pathophysiologic concept of acute hematogenous osteomyelitis in childhood and its therapeutic consequences] Guggenbichler JP, et al. **Padiatr Padol** 1989;24(1):21–32 (Eng. Abstr.) **(Ger)**

[Immunologic characteristics of a polyvalent vaccine] Gismondo MR, et al. **G Batteriol Virol Immunol** 1987 Jan-Dec;80(1–12):169–76 (Eng. Abstr.) **(Ita)**

[Isolation of macrophage-activating phospholipid from Listeria monocytogenes] Jakoniuk P, et al. **Med Dosw Mikrobiol** 1989;41(1):15–21 (Eng. Abstr.) **(Pol)**

[Effect of verapamil on the granulocyte activity studied by the NBT test in patients with hay fever and non-atopic bronchial asthma] Jankowska R, et al. **Pneumonol Pol** 1988 Aug;56(8):352–5 (Eng. Abstr.) **(Pol)**

[Effect of extradural marcaine analgesia on the phagocytic activity of granulocytes in the NBT test] Gajdosz R, et al. **Wiad Lek** 1988 Aug 1;41(15):1005–9 (Eng. Abstr.) **(Pol)**

[Effect of combinations of immunomodulators on phagocytosis] Medvedev IuA, et al. **Antibiot Khimioter** 1988 Sep;33(9):684–6 (Eng. Abstr.) **(Rus)**

[Effect of the lethal Bacillus anthracis toxin on phagocytosis and the dynamics of the change in the enzyme activity of the antioxidative system of peritoneal mononuclear phagocytes in mice with differing hereditary immunity to anthrax] Abalakin VA, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):288–91 (Eng. Abstr.) **(Rus)**

[Rapid chemiluminescence analysis of the effect of drugs on the functional activity of phagocytosing blood cells] Kalmykov SV, et al. **Farmakol Toksikol** 1989 Mar-Apr; 52(2):97–100 (Eng. Abstr.) **(Rus)**

[Effect of cytostatic and hormonal drugs on the phagocytic activity of neutrophils of leukemia patients] Rozanova OE, et al. **Gematol Transfuziol** 1989 Apr;34(4):15–20 (Eng. Abstr.) **(Rus)**

[Effect of cryoprecipitate on the phagocytic activity of liver cells in peritonitis] Zhadkevich MM, et al. **Sov Med** 1988; (12):3–6 (Eng. Abstr.) **(Rus)**

[A comprehensive assessment of the phagocytic activity of the blood neutrophils in patients with rubromycosis treated with griseofulvin and nizoral] Belukha UK, et al. **Vestn Dermatol Venerol** 1989;(1):50–2 (Eng. Abstr.) **(Rus)**

[Regulation of cell function in the macrophagal phagocytic system with salmozan] Zaĭtseva LG, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Jul;(7):63–8 (Eng. Abstr.) **(Rus)**

[Age-dependent effect of non-steroidal anti-inflammatory agents on the phagocytic activity of leukocytes in mice] Olekšáková T, et al. **Bratisl Lek Listy** 1989 Mar;90(3):180–5 (Eng. Abstr.) **(Slo)**

RADIATION EFFECTS

[Inhibition of granulocyte phagocytosis in relation to ultraviolet irradiation dose and wave-length in vitro] Walther T, et al. **Dermatol Monatsschr** 1988;174(12):766–8 **(Ger)**

[The effect of excessive artificial UV radiation on the measurement of blood parameters and phagocytosis in calves] Brouček J, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 May;96(6):318–20 (Eng. Abstr.) **(Ger)**

[Effect of ultraviolet irradiation of autologous blood on cell volumes, cell adhesion and phagocytosis in normal probands and patients with multiple sclerosis] Mix E, et al. **Folia Haematol (Leipz)** 1988;115(5):669–87 (Eng. Abstr.) **(Ger)**

[Functional changes in the bronchoalveolar macrophages during the development of long-term radiation-induced pulmonary complications] Zherbin EA, et al. **Med Radiol (Mosk)** 1988 Nov;33(11):46–51 (Eng. Abstr.) **(Rus)**

PHAGOLYSOSOMES see **PHAGOSOMES**

PHAGOSOMES

see related
PHAGOCYTOSIS

ANALYSIS

Estimation of pH in individual alveolar macrophage phagolysosomes. Nyberg K, et al. **Exp Lung Res** 1989 Jul; 15(4):499–510

DRUG EFFECTS

Phagolysosomal alterations induced by unleaded gasoline in epithelial cells of the proximal convoluted tubules of male rats: effect of dose and treatment duration. Garg BD, et al. **J Toxicol Environ Health** 1989;26(1):101–18

IMMUNOLOGY

Evaluation of phagolysosome fusion in acridine orange stained macrophages infected with Histoplasma capsulatum. Taylor ML, et al. **Clin Exp Immunol** 1989 Mar; 75(3):466–70

METABOLISM

Neutrophil dysfunction after thermal injury: alteration of phagolysosomal acidification in patients with large burns. Bjerknes R, et al. **Burns** 1989 Apr;15(2):77–81

Intraphagosomal pH in alveolar macrophages studied with fluorescein–labeled amorphous silica particles. Nyberg K, et al. **Exp Lung Res** 1989;15(1):49–62

Prelysosomal acidic vacuoles in Dictyostelium discoideum. Padh H, et al. **J Cell Biol** 1989 Mar;108(3):865–74

Human neutrophil antimicrobial activity. Thomas EL, et al. **Rev Infect Dis** 1988 Jul–Aug;10 Suppl 2:S450–6 (50 ref.)

MICROBIOLOGY

Fusion of lysosomes with phagosomes containing Histoplasma capsulatum: use of fluoresceinated dextran. Eissenberg LG, et al. **Adv Exp Med Biol** 1988;239:53–61 (31 ref.)

PARASITOLOGY

Modification of host cell phagosomes by Toxoplasma gondii involves redistribution of surface proteins and secretion of a 32 kDa protein. Sibley LD, et al. **Eur J Cell Biol** 1988 Oct;47(1):81–7

PHYSIOLOGY

Evidence for phagosome–lysosome fusion in Mycobacterium leprae–infected murine Schwann cells. Steinhoff U, et al. **Infect Immun** 1989 Mar;57(3):1008–10

Lack of lysosomal fusion with phagosomes containing Ehrlichia risticii in P388D1 cells: abrogation of inhibition with oxytetracycline. Wells MY, et al. **Infect Immun** 1988 Dec;56(12):3209–15

Comparison of particle clearance and macrophage phagosomal motion in liver and lungs of rats. Weinstock SB, et al. **J Appl Physiol** 1988 Oct;65(4):1811–20

Phagosome formation in Paramecium: effects of solid particles. Fok AK, et al. **J Cell Sci** 1988 Jul;90 (Pt 3):517–24

ULTRASTRUCTURE

Cellular and subcellular distribution of injected lipopolysaccharide in rat liver and its inactivation by bile salts. Van Bossuyt H, et al. **J Hepatol** 1988 Dec;7(3):325–37

The use of albumin–gold to follow lysosome–phagosome fusion. De Carvalho TU, et al. **J Submicrosc Cytol Pathol** 1988 Oct;20(4):773–6

[The characterization of phagocytotic processes using morphometry] Schlöffel G, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):141–3 (Eng. Abstr.) **(Ger)**

PHALLIC STAGE see under **PSYCHOSEXUAL DEVELOPMENT**

PHALLOIDINE see under **OLIGOPEPTIDES**

PHANTOM LIMB

COMPLICATIONS

An association between phantom limb sensations and stump skin conductance during transcutaneous electrical nerve stimulation (TENS) applied to the contralateral leg: a case study. Katz J, et al. **Pain** 1989 Mar;36(3):367–77

DRUG THERAPY

Thiopental for phantom limb pain during spinal anesthesia. Koyama K, et al. **Anesthesiology** 1988 Oct;69(4):598–600

Relief of persistent postamputation stump and phantom limb pain with intrathecal fentanyl. Jacobson L, et al. **Pain** 1989 Jun;37(3):317–22

ETIOLOGY

A rare cause of stump pain—herniated lumbar disc. A case report. Lipton DE, et al. **Ala Med** 1989 Jan;58(7):39–40

PHYSIOPATHOLOGY

Phantom angina. Mester SW, et al. **Am Heart J** 1988 Dec; 116(6 Pt 1):1627–8

Re: Phantom pain: a lesson in the necessity for careful clinical research on chronic pain problems [letter] Pinzur MS. **J Rehabil Res Dev** 1988 Fall;25(4):83

Stump and phantom limb pain. Sherman RA. **Neurol Clin** 1989 May;7(2):249–64 (26 ref.)

'Duplicate limbs' sensation in acute traumatic quadriplegia. Ohry A, et al. **Paraplegia** 1989 Aug;27(4):257–60

[Investigation of phantom limb phenomena in amputees] Liaw MY, et al. **Chang Keng I Hsueh** 1988 Sep 20; 11(3):167–73 (Eng. Abstr.) **(Chi)**

PREVENTION & CONTROL

[Preoperative epidural blockade and phantom pain after below–knee amputation] Noreng MF, et al. **Ugeskr Laeger** 1988 Dec 12;150(50):3111–3 (Eng. Abstr.) **(Dan)**

PSYCHOLOGY

[The person at the center. Group therapy—7] Geue B. **Fortschr Med** 1988 Nov 10;106(32):23 **(Ger)**

PHARMACEUTIC AIDS

Comparison of preservative–free and preservative–containing ipratropium bromide. Henry RL, et al. **Aust Paediatr J** 1989 Apr;25(2):86–8

The effect of some preservatives used in nasal preparations on mucociliary clearance. Batts AH, et al. **J Pharm Pharmacol** 1989 Mar;41(3):156–9

Preservatives in bronchodilator nebuliser solutions [letter] Summers Q, et al. **Lancet** 1989 Sep 23;2(8665):740–1

Parabens as antimicrobial preservatives in creams. Turakka L, et al. **Pharmazie** 1988 Oct;43(10):701–3

[Function of ointments of various bases] Liu HQ. **Chung Yao Tung Pao** 1988 Aug;13(8):24–6, 62–3 (Eng. Abstr.) **(Chi)**

ADVERSE EFFECTS

Contact sensitivity to diazolidinyl urea (Germall II). Perret CM, et al. **Arch Dermatol Res** 1989;281(1):57–9

Contact allergy to dichlorinated methylisothiazolinone. Bruze M, et al. **Contact Dermatitis** 1989 Mar;20(3):219–20

Risk of sensitization to Kathon CG [letter] de Groot AC, et al. **Contact Dermatitis** 1988 Sep;19(3):210–4

Contact allergy to chloroacetamide. Detmar U, et al. **Contact Dermatitis** 1988 Jul;19(1):66–7

Sensitivity to Kathon CG: findings in 365 consecutive patients. Fransway AF. **Contact Dermatitis** 1988 Nov; 19(5):342–7

Kathon CG as a sensitizer [letter] Massarotti S, et al. **Contact Dermatitis** 1988 Sep;19(3):215–6

Kathon CG reactivity in 1396 consecutively patch tested patients in the Copenhagen area. Menné T, et al. **Contact Dermatitis** 1988 Oct;19(4):260–2

Sensitization potential of Euxyl K 400 [letter] Moss JN. **Contact Dermatitis** 1988 Nov;19(5):392–4

Sensitization to Kathon CG in Geneva and Switzerland. Pasche F, et al. **Contact Dermatitis** 1989 Feb;20(2):115–9

Allergic contact dermatitis from Euxyl K 400. Senff H, et al. **Contact Dermatitis** 1989 May;20(5):381–2

Dose–response sensitization experiments with imidazolidinyl urea. Ziegler V, et al. **Contact Dermatitis** 1988 Sep; 19(3):236–7

Isothiazolinone preservative: cause of a continuing epidemic of cosmetic dermatitis. de Groot AC, et al. **Lancet** 1989 Feb 11;1(8633):314–6

Isothiazolinone sensitivity [letter] Fransway AF. **Lancet** 1989 Apr 22;1(8643):910

Cytotoxicity and mutagenicity of ophthalmic solution preservatives and UVA radiation in L5178Y cells. Withrow TJ, et al. **Photochem Photobiol** 1989 Sep;50(3):385–9

Benzoic acid hazard in cat preparations [letter] Janz R. **Vet Rec** 1989 Jun 3;124(22):595

[Severe complications related to metabisulfites] Maria Y, et al. **Rev Med Interne** 1989 Jan–Feb;10(1):36–40 (Eng. Abstr.) **(Fre)**

[Contact allergy to a new preservative] Senff H, et al. **Derm Beruf Umwelt** 1989 Mar–Apr;37(2):45–6 (Eng. Abstr.) **(Ger)**

ANALYSIS

Kathon CG content in cosmetic products. Rastogi SC. **Contact Dermatitis** 1988 Oct;19(4):263

Simultaneous liquid chromatographic determination of water–soluble vitamins, caffeine, and preservative in oral liquid tonics. Maeda Y, et al. **J Assoc Off Anal Chem** 1989 Mar–Apr;72(2):244–7

Determination of preservatives in cosmetic products. II. High–performance liquid chromatographic identification. De Kruijf N, et al. **J Chromatogr** 1989 May 19;469:317–28

PHARMACOKINETICS

Absorption of topical disodium cromoglycate and its preservatives by soft contact lenses. Iwasaki W, et al. **CLAO J** 1988 Jul–Sep;14(3):155–8

Corneal epithelial permeability after instillation of ophthalmic solutions containing local anaesthetics and preservatives. Ramselaar JA, et al. **Curr Eye Res** 1988 Sep;7(9):947–50

[Biopharmaceutic research on the new ointment base Novadeps U] Verbuță A, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Jul–Sep;92(3):577–9 (Eng. Abstr.) **(Rum)**

[Use of mebendazole in a mixture with sunflower seed oil (pharmacokinetic research)] Lur'e AA, et al. **Med Parazitol (Mosk)** 1988 Sep–Oct;(5):43–6 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Effects of preservative–free heparin on plasma histamine concentration and on hemodynamics in patients undergoing aortocoronary bypass surgery. Adt M, et al. **J Cardiovasc Surg (Torino)** 1989 Mar–Apr;30(2):250–6

Sporicidal activity of local anaesthetics and their binary combinations with preservatives. Abdelaziz AA, et al. **J Clin Pharm Ther** 1988 Aug;13(4):249–56

Resistance of Enterobacteriaceae to preservatives and disinfectants. Russell AD, et al. **Soc Appl Bacteriol Symp Ser** 1988;17:167S–195S (209 ref.)

STANDARDS

Preservative efficacy: compendial and regulatory issues. Cooper MS. **J Parenter Sci Technol** 1989 Jul–Aug; 43(4):187–90

The suitability of some preservatives in chloroquine phosphate syrup. Van Doorne H, et al. **Pharm Weekbl [Sci]** 1988 Aug 19;10(4):170–2

THERAPEUTIC USE

Hemiacidrin: a useful component in the treatment of infectious renal stones. Wall I, et al. **Eur Urol** 1988; 15(1–2):26–30

TOXICITY

Toxic effects of ophthalmic preservatives on cultured rabbit corneal epithelium. Simmons PA, et al. **Am J Optom Physiol Opt** 1988 Nov;65(11):867–73

[Individual sensitivity of cilia. A simple in vitro test method] Wichelhaus A, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Oct;67(10):523–5 (Eng. Abstr.) **(Ger)**

PHARMACEUTICAL SERVICES

Indicators for the selection of ambulatory patients who warrant pharmacist monitoring. Koecheler JA, et al. **Am J Hosp Pharm** 1989 Apr;46(4):729–32

Mail–order pharmacy: a challenge to pharmacy practitioners and educators. Jinks MJ, et al. **Am Pharm** 1989 Aug; NS29(8):22–5

Supplier survives 140 years of change. Souhrada L. **Hospitals** 1989 Sep 20;63(18):94

National survey of student health pharmaceutical services—1985. Hak SH, et al. **J Am Coll Health** 1988 Sep; 37(2):65–70

American Academy of Pediatrics Committee on Practice and Ambulatory Medicine: Office–based medication dispensing in pediatric practice. **Pediatrics** 1989 Jan;83(1):143–4

Office–based medication dispensing: another consideration [letter] Erramousepe J, et al. **Pediatrics** 1989 Aug;84(2):400

[Active against the pharmaceutical inferiority complex] Heinzl S. **Med Monatsschr Pharm** 1988 Oct;11(10):325 **(Ger)**

ECONOMICS

MPA opposes out–of–state prescription drug distribution [letter] Moret PM. **Am Pharm** 1989 Feb;NS29(2):5–6

The cost–effectiveness of a clinical pharmacy service in an outpatient mental health clinic. Lobeck F, et al. **Hosp Community Psychiatry** 1989 Jun;40(6):643–5

LEGISLATION & JURISPRUDENCE

Compliance with Washington state's professional practice regulations: 1974 vs. 1987. Campbell RK, et al. **Am Pharm** 1989 May;NS29(5):42–8

Model regulations for mail–order pharmacy. Only 20 states currently regulate the practice. Martin S. **Am Pharm** 1989 Aug;NS29(8):26–7

Medication dispensing: is it for you? Alexander C. **N C Med J** 1989 Apr;50(4):200–3

PHARMACIES

Establishing a market niche: meeting the competitive challenge. **Am Pharm** 1989 Mar;NS29(3):61–9

How community pharmacy staff manage a patient with possible oral cancer. Scully C, et al. **Br J Oral Maxillofac Surg** 1989 Feb;27(1):16–21

[Vaginal suppositories with specific drugs prepared in the pharmacies of the city of Lublin] Wieluńska Z. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:1–4 (Eng. Abstr.) **(Pol)**

[Concepts of pharmacy employees concerning the management of diarrhea in children] Blanco RA. **Bol Med Hosp Infant Mex** 1989 Jul;46(7):463–9 (Eng. Abstr.) **(Spa)**

[Use of drugs on sale at private pharmacies] Villegas G, et al. **Rev Med Chil** 1987 Oct;115(10):919–24 (Eng. Abstr.) **(Spa)**

ECONOMICS

Boycotting pharmacies that sell tobacco products [letter] Pinsky N. **Can Med Assoc J** 1989 Jul 15;141(2):96

HISTORY

[The university pharmacy and the university pharmacist in history] Friedrich C. **Pharmazie** 1988 Jun;43(6):428–31 (Eng. Abstr.) **(Ger)**

[Jan Wiesław Radwański and the Pharmacy No. 14 in Cracow] Pabis–Braunstein M. **Arch Hist Filoz Med** 1988; 51(2):171–86 (Eng. Abstr.) **(Pol)**

[The work organization of a pharmacy in a division medical aid battalion] Chirkov AI, et al. **Voen Med Zh** 1988 Sep; (9):71–3 **(Rus)**

LEGISLATION & JURISPRUDENCE

[Errors in the wording and dispatching of section 5 prescriptions] Laursen E, et al. **Ugeskr Laeger** 1989 May 1;151(18):1133–6 **(Dan)**

ORGANIZATION & ADMINISTRATION

Sexual harassment in the workplace: an overview of legal issues for pharmacists. Fink JL 3d. **Am Pharm** 1989 Feb; NS29(2):18–9

Opening and positioning a pharmacy for success, Part 1. Tootelian DH. **Am Pharm** 1989 Jan;NS29(1):55–60

STANDARDS

[Veterinary pharmacy and the European Economic Community] Ruijgh C. **Tijdschr Diergeneeskd** 1989 May 15;114(10):595–6 **(Dut)**

STATISTICS & NUMERICAL DATA

An estimation of the prevalence of diabetes mellitus in Norway. A prescription registration study. Staff AC, et al. **Scand J Prim Health Care** 1988 Nov;6(4):233–7

PHARMACISTS

All pharmacists are clinical professionals [letter] Benner DT. **Am J Hosp Pharm** 1989 Jun;46(6):1129–31

Medication error prevention by pharmacists. Blum KV, et al. **Am J Hosp Pharm** 1988 Sep;45(9):1902–3

Pharmacists' attitudes toward and use of cardiopulmonary resuscitation training received in pharmacy school. Bond CA, et al. **Am J Hosp Pharm** 1989 Jul;46(7):1392–4

Pharmacists should not borrow prescription drug products for personal use [letter] Bruner CT. **Am J Hosp Pharm** 1989 Apr;46(4):703

Pharmacist involvement in a chemical-dependency rehabilitation program. Haynes M. **Am J Hosp Pharm** 1988 Oct;45(10):2099–101

Pharmacist has responsibility to warn patients of drug interactions [letter] Jacovino RM. **Am J Hosp Pharm** 1989 Jan;46(1):71

Pharmacist's refusal to dispense diethylstilbestrol for contraceptive use. Lee P, et al. **Am J Hosp Pharm** 1989 Jul;46(7):1413–6

Pharmacist's role in home i.v. therapy. McAllister JC 3d. **Am J Hosp Pharm** 1989 Jul;46(7 Pt 2):S10–4

Certification of pharmacists involved in pain management [letter] McClellan M, et al. **Am J Hosp Pharm** 1988 Nov; 45(11):2325

Impact of pharmacists in two ambulatory-care clinics in a Veterans Administration medical center. Ratliff RW, et al. **Am J Hosp Pharm** 1989 Jul;46(7):1417–9

Pharmacist resignation and the risk of dispensing error [letter] Slack MK, et al. **Am J Hosp Pharm** 1988 Sep;45(9):1862–3

Attitudes of pharmacists and nurses toward their responsibilities in the drug treatment process [letter] Thompson DF, et al. **Am J Hosp Pharm** 1989 Feb; 46(2):257–8

Comparative usefulness of MEDLINE searches performed by a drug information pharmacist and by medical librarians. Wanke LA, et al. **Am J Hosp Pharm** 1988 Dec; 45(12):2507–10

Are tests a threat to the profession? [letter] **Am Pharm** 1989 May;NS29(5):6–7

Why pharmacists join/don't join state professional pharmacy organizations. Berardo DH, et al. **Am Pharm** 1988 Sep; NS28(9):43–6

Pharmacists recovering from alcohol and other drug addictions: an interview study. Bissell L, et al. **Am Pharm** 1989 Jun;NS29(6):19–30

Pharmacists' satisfaction with drug product selection legislation. Charupatanapong N, et al. **Am Pharm** 1988 Oct; NS28(10):27–32

Nurturing the patient/pharmacist relationship [letter] Fix JT. **Am Pharm** 1989 May;NS29(5):6

Pharmacists and immunizations: advocating preventive medicine. Grabenstein JD. **Am Pharm** 1988 Aug; NS28(8):25–33

Utah impaired pharmacist program is best [letter] Hirning F. **Am Pharm** 1988 Oct;NS28(10):8

Pharmacists' participation in professional organizations. Hopkins WA Jr, et al. **Am Pharm** 1989 Aug;NS29(8):12–4

Cancer detection and the community pharmacist. Lum BL, et al. **Am Pharm** 1989 Jul;NS29(7):54–9

The Medicare drug benefit: challenges for pharmacists. Martin S. **Am Pharm** 1989 Jul;NS29(7):22–5

Glaucoma therapy: the pharmacist's role in compliance. O'Dea P. **Am Pharm** 1988 Sep;NS28(9):38–42

Documenting prescribing errors and pharmacist interventions in community pharmacy practice. Rupp MT, et al. **Am Pharm** 1988 Sep;NS28(9):30–7

Rebundling health care. Schlegel JF. **Am Pharm** 1988 Jun; NS28(6):34–9

Patients' understanding of selected pharmacy terms. Shaughnessy AF. **Am Pharm** 1988 Oct;NS28(10):38–42

Lawrence C. Weaver, PhD. Thoughts of the 1989 Remington medalist. Weaver LC. **Am Pharm** 1989 Jul;NS29(7):51–2

Newly approved treatment INDs [editorial] Young FE. **Am Pharm** 1989 May;NS29(5):29–30

The community pharmacist's role in drug and health education. Grew KP. **Aust Fam Physician** 1976 Sep; 5(8):1169–72

How community pharmacy staff manage a patient with possible oral cancer. Scully C, et al. **Br J Oral Maxillofac Surg** 1989 Feb;27(1):16–21

Comment: pharmacist not an advisor [letter] Moss JT, et al. **DICP** 1989 Mar;23(3):260–1

Pharmacist contributions to the IRB [letter] Vlasses PH. **DICP** 1989 May;23(5):431–2

Physicians' review of significant interventions by clinical pharmacists in inpatient care. Hatoum HT, et al. **Drug Intell Clin Pharm** 1988 Dec;22(12):980–2

Evaluation of a patient-completed versus health professional-conducted medication history. Montpetit LM, et al. **Drug Intell Clin Pharm** 1988 Dec;22(12):964–9

What's a pharmacist to do? Resnik DB, et al. **Hastings Cent Rep** 1989 May-Jun;19(3):38–40

Pharmacy/medicine interface. Temple TR. **Iowa Med** 1989 Mar;79(3):104–6

Pharmacist substitution of slow-release theophylline products [letter] Sly RM, et al. **J Allergy Clin Immunol** 1989 Jul; 84(1):131–2

Adverse drug reaction reporting and pharmacists. Fincham JE. **J Clin Pharm Ther** 1989 Apr;14(2):79–81

Women in pharmacy—a view from the U.K. Morley A, et al. **J Clin Pharm Ther** 1988 Oct;13(5):317–20

The role of the pharmacist in antimicrobial agent therapy [letter; comment] Barriere SL, et al. **J Infect Dis** 1989 Mar; 159(3):593–4, **Comment on:** J Infect Dis 1988 May;157(5):869–76

Pharmacists to the fore. Hammarström B, et al. **World Health Forum** 1988;9(4):514–8

[Savings achieved by cooperation with physicians] Nielsen ID. **Ugeskr Laeger** 1989 Aug 7;151(32):2046–7 **(Dan)**

[Home care for terminal cancer patients (letter)] Peeters-Udding LM. **Ned Tijdschr Geneeskd** 1989 May 20; 133(20):1045 **(Dut)**

[A new cause of occupational asthma in a pharmacist (letter)] Breton JL, et al. **Presse Med** 1989 Feb 25;18(8):433 **(Fre)**

[Drug surveillance and the responsibility of the hospital pharmacist] Duneau M. **Therapie** 1988 Aug-Sep; 43(5):373–5 (Eng. Abstr.) **(Fre)**

ECONOMICS

Use of a path model to analyze factors that influence hospital pharmacists' salaries. Shepherd MD, et al. **Am J Hosp Pharm** 1989 Jan;46(1):77–83

State of the profession [letter] Benitz RJ. **Am Pharm** 1989 Jan;NS29(1):8

Changing economic environment: physicians vs. pharmacists. Considine JM, et al. **N J Med** 1988 Jul;85(7):589–91

HISTORY

[Remembering the pharmacist heroes of the 1848/49 Hungarian War of Independence] Hegedüs L, et al. **Orv Hetil** 1988 Oct 30;129(44):2369–70 **(Hun)**

[Academic dissertations of military pharmacists on the history of pharmacy] Markowski W. **Arch Hist Filoz Med** 1988; 51(3):391–400 (Eng. Abstr.) **(Pol)**

PSYCHOLOGY

Establishing a rehabilitation program for impaired pharmacists. Sheffield JW. **Am J Hosp Pharm** 1988 Oct; 45(10):2092–8

Chemical impairment [editorial] Talley CR. **Am J Hosp Pharm** 1988 Oct;45(10):2077

Maslach Burnout Inventory: factor structures and norms for USA pharmacists. Lahoz MR, et al. **Psychol Rep** 1989 Jun; 64(3 Pt 2):1059–63

SUPPLY & DISTRIBUTION

Pharmacy's manpower: is our future in peril? Manasse HR Jr. **Am J Hosp Pharm** 1988 Oct;45(10):2183–91

UTILIZATION

Spurring pharmacists to industry. Lucisano LJ. **Am Pharm** 1988 Sep;NS28(9):22–4

PHARMACISTS' AIDES

Expanded roles for pharmacy technicians [letter] Barichman JP. **Am J Hosp Pharm** 1988 Aug;45(8):1670–1

The pharmacy technician—an occupation in search of consensus. Ryan MR. **Am J Hosp Pharm** 1989 Mar; 46(3):496–507

Technician intervention in use of nonformulary antimicrobial agents in the surgical suite. Underhill AL, et al. **Am J Hosp Pharm** 1989 Feb;46(2):312–3

The need for collective action on technician issues [editorial] Zellmer WA. **Am J Hosp Pharm** 1989 Mar;46(3):489

Time to pregnancy among Danish pharmacy assistants. Schaumburg I, et al. **Scand J Work Environ Health** 1989 Jun;15(3):222–6

ECONOMICS

Some economic aspects of pharmacy manpower. Sorkin AL. **Am J Hosp Pharm** 1989 Mar;46(3):527–33

EDUCATION

Education and training: some long-range solutions. Burelle TN. **Am J Hosp Pharm** 1989 Mar;46(3):539–40

Issues in the education and training of technicians. Ray MD. **Am J Hosp Pharm** 1989 Mar;46(3):533–8

LEGISLATION & JURISPRUDENCE

Issues in the supervision and legal control of pharmacy technicians. Bowles GC Jr. **Am J Hosp Pharm** 1989 Mar; 46(3):541–5

STANDARDS

A board of pharmacy member's viewpoints on the technician issue. Vandel JH. **Am J Hosp Pharm** 1989 Mar;46(3):545–7

TRENDS

Technicians and pharmacy manpower: future directions. Trinca CE. **Am J Hosp Pharm** 1989 Mar;46(3):549–57

UTILIZATION

Pharmacy technicians and the military. Vallone SJ. **Am J Hosp Pharm** 1989 Mar;46(3):522–6

PHARMACOGENETICS

Polymorphic differences in drug metabolism and response. Vetticaden SJ. **Methods Find Exp Clin Pharmacol** 1988 Aug;10(8):531–6 (72 ref.)

Pharmacogenetic perspectives gained from twin and family studies. Vesell ES. **Pharmacol Ther** 1989;41(3):535–52 (123 ref.)

Pharmacogenetics and its clinical implications. Part II. Oxidation polymorphism. Horai Y, et al. **Ration Drug Ther** 1988 Jun;22(6):1–8 (20 ref.)

[Pharmacogenetics of oxidation reactions of drugs] Jacqz-Aigrain E. **Arch Fr Pediatr** 1989 Jan;46(1):59–65 (67 ref.) (Eng. Abstr.) **(Fre)**

PHARMACOGNOSY

see related
PLANTS, MEDICINAL

[Discrimination concerning the modern concept of "bencao"] Hao JD. **Chung Yao Tung Pao** 1988 Nov;13(11):3–5, 61 (Eng. Abstr.) **(Chi)**

EDUCATION

Pharmacognosy training losing ground [letter] Hocking GM. **Am Pharm** 1988 Dec;ns28(12):8

HISTORY

[Textual research on the herb Xixin (Asarum spp.)] Shen BA. **Chung Yao Tung Pao** 1988 Jul;13(7):3–6, 61 (Eng. Abstr.) **(Chi)**

[Pharmacognostic studies of digitalis conducted by William Withering and his role in the development of digitalis preparations] Krysa-Leszczyńska D, et al. **Wiad Lek** 1988 Oct 1;41(19):1325–9 **(Pol)**

TRENDS

Conservation, ethnobotany, and the search for new jungle medicines: pharmacognosy comes of age ... again. Plotkin MJ. **Pharmacotherapy** 1988;8(5):257–62

PHARMACOKINETICS

Pharmacokinetical modelling: clinical applications. Rucquoi M. **Acta Anaesthesiol Belg** 1988;39(3 Suppl 2):223–5

A decade of experience with a clinical pharmacokinetics service. Ambrose PJ, et al. **Am J Hosp Pharm** 1988 Sep; 45(9):1879–86

Human-accuracy factors can influence pharmacokinetic variables [letter] Higashida NT. **Am J Hosp Pharm** 1989 Jan;46(1):71–2

Meta-analysis of research on the effect of clinical pharmacokinetics services on therapeutic drug monitoring. Ried LD, et al. **Am J Hosp Pharm** 1989 May;46(5):945–51

Legal issues associated with pharmacokinetic software. Schwartz JI, et al. **Am J Hosp Pharm** 1989 Jan;46(1):120–4

Semiparametric approach to pharmacokinetic-pharmacodynamic data. Verotta D, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):R1005–10

Maternal-fetal pharmacokinetics and fetal dose-response relationships. Szeto HH. **Ann N Y Acad Sci** 1989;562:42–55 (45 ref.)

Hyperparameter estimation using stochastic approximation with application to population pharmacokinetics. Mentré F, et al. **Biometrics** 1988 Sep;44(3):673–83

Noncompartmental area under the curve determinations for drugs that cycle in the bile. Colburn WA, et al. **Biopharm Drug Dispos** 1988 Sep-Oct;9(5):465–75

A note regarding curve fitting with a sum of exponentials. Herman RA, et al. **Biopharm Drug Dispos** 1988 Nov-Dec; 9(6):579–86

Toward a quantitative approach for the prediction of the fraction of dose absorbed using the absorption potential concept. Macheras PE, et al. **Biopharm Drug Dispos** 1989 Jan-Feb;10(1):43–53

The logical structure and validity of experimental designs in pharmacokinetics and clinical pharmacology. Mason EJ, et al. **Biopharm Drug Dispos** 1989 Jul-Aug;10(4):331–51 (34 ref.)

Nonlinear least-squares regression analysis by a simplex method using differential equations containing Michaelis-Menten type rate constants. Murata K, et al.

Biopharm Drug Dispos 1989 Jan-Feb;10(1):25-34
Estimation problem due to multiple solutions in pharmacokinetic curve fitting to two-compartment model and its avoidance. Murata K, et al.
Biopharm Drug Dispos 1989 Jan-Feb;10(1):15-24
Pharmacokinetic analyses with RUGFIT: an interactive pharmacokinetic computer program. Scaf AH.
Biopharm Drug Dispos 1988 Sep-Oct;9(5):415-46
Mean residence time in non-linear systems? Weiss M.
Biopharm Drug Dispos 1988 Jul-Aug;9(4):411-2
Chromatographic methods and selective detectors in pharmacokinetics. Marzo A. **Boll Chim Farm** 1989 Feb; 128(2):45-53 (113 ref.)
Misuse of the standard error of the mean [letter] Herxheimer A. **Br J Clin Pharmacol** 1988 Aug;26(2):197
Correlation of tissue, blood, and air partition coefficients of volatile organic chemicals. Paterson S, et al.
Br J Ind Med 1989 May;46(5):321-8
Effect of anaesthesia and surgery on pharmacokinetics and pharmacodynamics. Nimmo WS, et al. **Br Med Bull** 1988 Apr;44(2):286-301 (46 ref.)
A nonlinear least squares program, MULTI(FILT), based on fast inverse Laplace transform for microcomputers. Yano Y, et al. **Chem Pharm Bull (Tokyo)** 1989 Apr; 37(4):1035-8
Chirality: pharmacokinetics and pharmacodynamics in 3 dimensions. Williams KM. **Clin Exp Pharmacol Physiol** 1989 Jun;16(6):465-70 (47 ref.)
Derivation of Chiou equation for calculating volume of distribution [letter] Ariano RE, et al. **Clin Pharm** 1989 Jul; 8(7):473
Guide to drug dosage in hepatic disease. Bass NM, et al. **Clin Pharmacokinet** 1988 Dec;15(6):396-420 (166 ref.)
Cardiopulmonary bypass and the pharmacokinetics of drugs. An update. Buylaert WA, et al. **Clin Pharmacokinet** 1989 Jul;17(1):10-26 (67 ref.)
Inhibition of drug metabolism by quinolone antibiotics. Edwards DJ, et al. **Clin Pharmacokinet** 1988 Sep; 15(3):194-204 (48 ref.)
Recent developments in the study of the effects of cigarette smoking on clinical pharmacokinetics and clinical pharmacodynamics. Miller LG. **Clin Pharmacokinet** 1989 Aug;17(2):90-108 (119 ref.)
Pharmacokinetic considerations in the use of newer transdermal formulations. Ridout G, et al.
Clin Pharmacokinet 1988 Aug;15(2):114-31 (91 ref.)
Clinical pharmacokinetics in patients with spinal cord injuries. Segal JL, et al. **Clin Pharmacokinet** 1989 Aug; 17(2):109-29 (69 ref.)
Saturable pharmacokinetics in the renal excretion of drugs. van Ginneken CA, et al. **Clin Pharmacokinet** 1989 Jan; 16(1):38-54 (173 ref.)
Systems dynamics in clinical pharmacokinetics. An introduction. van Rossum JM, et al. **Clin Pharmacokinet** 1989 Jul;17(1):27-44 (64 ref.)
Clinical pharmacokinetics in organ transplant patients. Venkataramanan R, et al. **Clin Pharmacokinet** 1989 Mar; 16(3):134-61 (219 ref.)
Pharmacokinetic drug data. Vožeh S, et al.
Clin Pharmacokinet 1988 Oct;15(4):254-82
Age-related changes in liver size and hepatic blood flow. The influence on drug metabolism in the elderly. Woodhouse KW, et al. **Clin Pharmacokinet** 1988 Nov; 15(5):287-94
Therapeutic drug monitoring [letter] Vozeh S.
Clin Pharmacol Ther 1988 Dec;44(6):713-4
BOOMER, a simulation and modeling program for pharmacokinetic and pharmacodynamic data analysis. Bourne DW. **Comput Methods Programs Biomed** 1989 Jul; 29(3):191-5
Gastrointestinal absorption of drugs. Kararli TT.
Crit Rev Ther Drug Carrier Syst 1989;6(1):39-86 (248 ref.)
Physicochemical, physiological, and mathematical considerations in optimizing percutaneous absorption of drugs. Siddiqui O. **Crit Rev Ther Drug Carrier Syst** 1989; 6(1):1-38 (213 ref.)
Revised pharmacokinetic constants for use under Système International. Peterson RG. **Dev Pharmacol Ther** 1988; 11(6):338-46
Time to steady state following a change in dosing rate. D'Angio RG, et al. **DICP** 1989 Jun;23(6):468-72
Comment: impact of a kinetic service on aminoglycoside patients [letter] McCormack JP. **DICP** 1989 Jul-Aug; 23(7-8):622
Failure of single-dose kinetics to predict steady state [letter] Graves DA. **Drug Intell Clin Pharm** 1988 Nov;22(11):917-8
The influence of diffusional barriers on presystemic gut elimination. Gwilt PR, et al. **Drug Metab Dispos** 1988 Jul-Aug;16(4):521-6
Relevance of genetic polymorphism in drug metabolism in the development of new drugs. Balant LP, et al.
Eur J Clin Pharmacol 1989;36(6):551-4
Gamma variate fits to pharmacokinetic data. Pfeffer M.
Eur J Drug Metab Pharmacokinet 1988 Jul-Sep;13(3):155-9
Effects of human diets on biotransformation enzyme activity and metabolic activation of carcinogens in rat liver. Alink GM, et al. **Food Chem Toxicol** 1988 Nov-Dec; 26(11-12):883-91
Drug disposition and biotransformation in the developing beagle dog. Ecobichon DJ, et al. **Fundam Appl Toxicol** 1988 Jul;11(1):29-37
Aging and determinants of hepatic drug clearance. Vestal RE. **Hepatology** 1989 Feb;9(2):331-4 (45 ref.)
New approaches to the use of pharmacokinetics in toxicology and drug development. Campbell DB, et al.
Hum Toxicol 1988 Sep;7(5):469-79 (35 ref.)
Analytical solution to the three-compartment pharmacokinetic model. Jacobs JR.
IEEE Trans Biomed Eng 1988 Sep;35(9):763-5
Drug sensitivity in older adults: the role of physiologic and pharmacokinetic factors. Cherry KE, et al.
Int J Aging Hum Dev 1989;28(3):159-74 (76 ref.)
A versatile computational method for the determination of areas under the curve and moment curve following multidose drug administration. Yamashita TS, et al.
Int J Biomed Comput 1988 Dec;23(3-4):239-49
Pharmacokinetic and pharmacodynamic principles of drug therapy in old age. Part 2. Tsujimoto G, et al.
Int J Clin Pharmacol Ther Toxicol 1989 Mar;27(3):102-16 (90 ref.)
Skin pharmacokinetics. Schaefer H, et al. **Int J Dermatol** 1988 Jul-Aug;27(6):351-9 (33 ref.)
Pharmacokinetic characteristics of the obese overfed rat. Corcoran GB, et al. **Int J Obes** 1989 Feb;13(1):69-79
Optimal pharmacokinetic delivery of infused drugs: application to the treatment of cardiac arrhythmias. Martin P, et al. **J Biomed Eng** 1988 Jul;10(4):360-4
Controversy III: To model or not to model.
J Clin Pharmacol 1988 Oct;28(10):879-88 (33 ref.)
Physiologic pharmacokinetic modeling. Colburn WA.
J Clin Pharmacol 1988 Aug;28(8):673-7 (22 ref.)
Controversy. IV: Population pharmacokinetics, NONMEM and the pharmacokinetic screen; academic, industrial and regulatory perspectives. Colburn WA. **J Clin Pharmacol** 1989 Jan;29(1):1-6
Combined pharmacokinetic/pharmacodynamic (PK/PD) modeling. Colburn WA. **J Clin Pharmacol** 1988 Sep; 28(9):769-71 (17 ref.)
Enterohepatic circulation of drugs. Dobrinska MR.
J Clin Pharmacol 1989 Jul;29(7):577-80
Development of a computer-based instructional system in pharmacokinetics: efficacy in clinical pharmacology teaching for senior medical students. Feldman RD, et al.
J Clin Pharmacol 1989 Feb;29(2):158-61
Pharmacokinetics of capacity-limited systems. Jusko WJ.
J Clin Pharmacol 1989 Jun;29(6):488-93 (16 ref.)
Disease states and drug pharmacokinetics. Koup JR.
J Clin Pharmacol 1989 Aug;29(8):674-9 (44 ref.)
Population pharmacokinetics. Ludden TM.
J Clin Pharmacol 1988 Dec;28(12):1059-63 (24 ref.)
A method to study the kinetics of oral mucosal drug absorption from solutions. Tucker IG.
J Pharm Pharmacol 1988 Oct;40(10):679-83
Quantitative selected ion monitoring processing system: software and hardware for the automated collection and analysis of selected ion monitoring data acquired for use in pharmacokinetic studies. Barbalas MP, et al.
J Pharm Sci 1988 Aug;77(8):679-87
A new criterion for selection of pharmacokinetic multiexponential equations. Imbimbo BP, et al.
J Pharm Sci 1988 Sep;77(9):784-9
Analysis of consecutive pseudo-first-order reactions. II: Calculation of the rate constants from the co-product or co-reactant data. Kalonia DS, et al. **J Pharm Sci** 1989 Jan; 78(1):78-84
Pharmacokinetic analysis of single- or multiple-dose plasma drug concentration data with a microcomputer using multi-fraction absorption models. Murata K, et al.
J Pharm Sci 1989 Feb;78(2):154-9
Mean apical concentration and duration in the comparative bioavailability of slowly absorbed and eliminated drug preparations. Pollak PT, et al. **J Pharm Sci** 1988 Jun; 77(6):477-80
Commentary on "extended least squares (ELS) for pharmacokinetic models" [letter] Sheiner LB, et al.
J Pharm Sci 1988 Aug;77(8):731-2
Determination of enzyme or binding constants using generalized linear models, with particular reference to Michaelis-Menten models. van Belle G, et al.
J Pharm Sci 1989 May;78(5):413-6
Mean time parameters dealing with the tissue distribution of drugs: limitations and extensions. Veng-Pedersen P.
J Pharm Sci 1989 Mar;78(3):264-6
Relationships between first-order and Michaelis-Menten kinetics. Wagner JG. **J Pharm Sci** 1989 Jun;78(6):521-2
Definition of a physiologic pharmacokinetic model of cutaneous drug distribution using the isolated perfused porcine skin flap. Williams PL, et al. **J Pharm Sci** 1989 Jul;78(7):550-5
Initial slope technique to estimate first- and zero-order drug absorption rate constants. Zhi JG. **J Pharm Sci** 1988 Sep; 77(9):816-7
An alternative two stage method via the EM-algorithm for the estimation of population pharmacokinetic parameters. Amisaki T, et al. **J Pharmacobiodyn** 1988 May;11(5):335-48
Commentary to "Linear and Nonlinear System Approaches in Pharmacokinetics. How much do they have to offer? I. General considerations". Boxenbaum H.
J Pharmacokinet Biopharm 1988 Dec;16(6):672-81
An area function method for calculating the apparent elimination rate constant of a metabolite. Cheng HY, et al. **J Pharmacokinet Biopharm** 1989 Feb;17(1):125-30
Estimation of noncompartmental parameters: a technical note. Dunne A, et al. **J Pharmacokinet Biopharm** 1989 Feb; 17(1):131-7
Commentary to "Linear and Nonlinear System Approaches in Pharmacokinetics. How much do they have to offer? II. The response mapping operator (RMO) approach". Metzler CM. **J Pharmacokinet Biopharm** 1988 Dec; 16(6):682-6
General treatment of mean residence time, clearance, and volume parameters in linear mammillary models with elimination from any compartment. Nakashima E, et al.
J Pharmacokinet Biopharm 1988 Oct;16(5):475-92
Effects of perfusate flow rate on measured blood volume, disse space, intracellular water space, and drug extraction in the perfused rat liver preparation: characterization by the multiple indicator dilution technique. Pang KS, et al.
J Pharmacokinet Biopharm 1988 Dec;16(6):595-632
Primary, secondary, and tertiary metabolite kinetics. St-Pierre MV, et al. **J Pharmacokinet Biopharm** 1988 Oct; 16(5):493-527
The sojourn time and its prospective use in pharmacology. Segre G. **J Pharmacokinet Biopharm** 1988 Dec;16(6):657-66
Commentary to "Linear and Nonlinear System Approaches in Pharmacokinetics. How much do they have to offer? I. General considerations". Siegel RA.
J Pharmacokinet Biopharm 1988 Dec;16(6):667-72
Linear and nonlinear system approaches in pharmacokinetics: how much do they have to offer? I. General considerations. Veng-Pedersen P. **J Pharmacokinet Biopharm** 1988 Aug; 16(4):413-72
Linear and nonlinear system approaches in pharmacokinetics: how much do they have to offer? II. The response mapping operator (RMO) approach. Veng-Pedersen P.
J Pharmacokinet Biopharm 1988 Oct;16(5):543-71
Response to commentaries to "Linear and Nonlinear System Approaches in Pharmacokinetics. How much do they have to offer"? Veng-Pedersen P. **J Pharmacokinet Biopharm** 1988 Dec;16(6):686-94
Computer-assisted learning lessons in drug disposition and pharmacokinetics. Aarons L, et al.
J Pharmacol Methods 1988 Sep;20(2):109-23
New versatile restraining device for use with rats in pharmacokinetic or pharmacological studies involving chronically implanted cannulae or electrodes. Lewis A, et al. **J Pharmacol Methods** 1989 Aug;22(1):59-63
Photodiode array fluorescence technique for measuring drug clearance rates in vivo [news] Pottier RH, et al.
J Photochem Photobiol [B] 1989 Feb;3(1):135-7
Pharmacokinetic estimation for therapeutic dosage regimens (PETDR)--a software program designed to determine intravenous drug dosage regimens for veterinary applications. Riviere JE, et al. **J Vet Pharmacol Ther** 1988 Dec;11(4):390-6
Pharmacologic issues in adolescence. Berger-Roochvarg LR.
Md Med J 1988 Dec;37(12):959-61
The effect of pregnancy on drug pharmacokinetics. Jeffries WS, et al. **Med J Aust** 1988 Dec 5-19;149(11-12):675-7 (54 ref.)
The clinical significance of food-drug interactions: a review. Neuvonen PJ, et al. **Med J Aust** 1989 Jan 2;150(1):36-40 (79 ref.)
Quantitative comparisons of pharmacokinetic drug interactions: a probabilistic approach. Bachmann K, et al.
Methods Find Exp Clin Pharmacol 1988 Nov;10(11):711-6
The area function method for assessing the drug absorption rate in linear systems with zero-order input. Cheng H, et al. **Pharm Res** 1989 Feb;6(2):133-9
An area function method for estimating the apparent absorption rate constant. Cheng H, et al. **Pharm Res** 1988 Jan;5(1):57-60
Mean residence time of drugs showing simultaneous first-order and Michaelis-Menten elimination kinetics. Cheng HY, et al. **Pharm Res** 1989 Mar;6(3):258-61
Mean residence time concepts for pharmacokinetic systems with nonlinear drug elimination described by the Michaelis-Menten equation. Cheng HY, et al.
Pharm Res 1988 Mar;5(3):156-64
Application of moment analysis to nonlinear drug disposition described by the Michaelis-Menten equation. Chow AT, et al. **Pharm Res** 1987 Feb;4(1):59-61
Calculations and application of mean residence times for drugs which demonstrate one-compartment distribution and Michaelis-Menten elimination. Cook JA, et al.
Pharm Res 1988 Mar;5(3):196
The lipoidal permeability barriers of the skin and alimentary tract. Curatolo W. **Pharm Res** 1987 Aug;4(4):271-7 (61 ref.)
Physicochemical aspects of percutaneous penetration and its enhancement. Guy RH, et al. **Pharm Res** 1988 Dec; 5(12):753-8
Limiting solubilities and ionization constants of sparingly soluble compounds: determination from aqueous potentiometric titration data only. IJzerman AP.
Pharm Res 1988 Dec;5(12):772-5
Metabolite formation pharmacokinetics: rate and extent of metabolite formation determined by deconvolution. Karol MD, et al. **Pharm Res** 1988 Jun;5(6):347-51
Targeted drug delivery--some pharmacokinetic considerations. Levy G. **Pharm Res** 1987 Feb;4(1):3-4
Drug release from tablets containing cellulose acetate phthalate as an additive or enteric-coating material. Lin SY, et al. **Pharm Res** 1987 Feb;4(1):70-4
Assessment of variance in bioavailability studies: comments on the article by McNamara et al [letter] Metzler CM. **Pharm Res** 1987 Dec;4(6):536

Potential improvement in shelf life using the prodrug approach. II. A systematic examination of kinetic requirements. Nguyen NA, et al. **Pharm Res** 1988 Oct; 5(10):634–8

ABSPLOTS: a LOTUS 123 spreadsheet for calculating and plotting drug absorption rates. Shumaker RC, et al. **Pharm Res** 1988 Apr;5(4):247–8

Subcellular distribution of basic drugs accumulated in the isolated perfused lung. Yoshida H, et al. **Pharm Res** 1987 Feb;4(1):50–3

Data-reduction problems in biopharmaceutics and pharmacokinetics. Zuidema J, et al. **Pharm Weekbl [Sci]** 1989 Jun 23;11(3):76–82

Italian Pharmacological Society, 2nd inter-regional meeting. Modena, December 15, 1988. Abstracts. **Pharmacol Res** 1989 Jul–Aug;21(4):439–94

An algorithm for the classification of pharmacokinetic data. Bompadre S, et al. **Pharmacol Res Commun** 1988 Jul; 20(7):631–2

Biochemical basis of sex differences in drug metabolism. Skett P. **Pharmacol Ther** 1988;38(3):269–304 (188 ref.)

Chronopharmacology: a new perspective in pharmacology. Lemmer B. **Pol J Pharmacol Pharm** 1987 Sep–Oct; 39(5):435–49 (40 ref.)

Mechanism of nasal absorption of drugs. Hussain AA. **Prog Clin Biol Res** 1989;292:261–72 (12 ref.)

Population density estimation. Katz D. **Prog Food Nutr Sci** 1988;12(3):325–38

Toxicokinetics in the evaluation of toxicity data. Watanabe PG, et al. **Regul Toxicol Pharmacol** 1988 Dec;8(4):408–13

An estimation of pharmacokinetic parameters for each dosing at unequal doses and dosing intervals. Johno I, et al. **Ther Drug Monit** 1988;10(3):296–8

Physiological pharmacokinetic models: some aspects of theory, practice and potential. D'Souza RW, et al. **Toxicol Ind Health** 1988 Jun;4(2):151–71 (77 ref.)

Pharmacokinetic considerations in target-organ directed drug delivery. Daemen MJ, et al. **Trends Pharmacol Sci** 1988 Apr;9(4):138–41 (28 ref.)

Pharmacology in space. Part I. Influence of adaptive changes on pharmacokinetics. Lathers CM, et al. **Trends Pharmacol Sci** 1989 May;10(5):193–200 (21 ref.)

Pharmacokinetic parameter estimation with a hand-held programmable calculator. Ogg GD. **Trends Pharmacol Sci** 1988 Mar;9(3):85

Drug therapy in the geriatric animal: the effect of aging on drug disposition. Aucoin DP. **Vet Clin North Am [Small Anim Pract]** 1989 Jan;19(1):41–7 (13 ref.)

Current models in pharmacokinetics: applications in veterinary pharmacology. Kinabo LD, et al. **Vet Res Commun** 1989;13(2):141–57 (78 ref.)

[MCPKP—a microcomputer program specialized for pharmacokinetic compartment analysis] Xia WJ, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Mar;9(2):188–92 (Eng. Abstr.) **(Chi)**

[Medications in children] Taminiau JA. **Ned Tijdschr Geneeskd** 1989 May 6;133(18):916–9 **(Dut)**

[The effect of cardiac insufficiency on pharmacokinetics] Cheymol G, et al. **Arch Mal Coeur** 1989 Mar;82(3):391–7 (33 ref.) (Eng. Abstr.) **(Fre)**

[Pharmacokinetic and toxicologic aspects of stress] Panagiotis K, et al. **Boll Chim Farm** 1988 Apr;127(4):83–9 (59 ref.) (Eng. Abstr.) **(Fre)**

[Extrapolation of pharmacokinetic results from one species to another] Fehri B, et al. **J Pharm Belg** 1988 Sep–Oct; 43(5):382–9 (10 ref.) (Eng. Abstr.) **(Fre)**

[Pharmacokinetic bases of dosage adaptation of drugs in renal insufficiency] Lesne M. **J Pharm Belg** 1988 May–Jun; 43(3):212–32 (Eng. Abstr.) **(Fre)**

[Nephrotoxicity. Pharmacokinetic aspects] Balant LP. **Therapie** 1988 Aug–Sep;43(5):393–7 (Eng. Abstr.) **(Fre)**

[Pharmacokinetics of drugs in children] Flouvat B. **Therapie** 1989 Mar–Apr;44(2):129–32 (Eng. Abstr.) **(Fre)**

[Abstracts of papers presented at the annual session of the German Pharmaceutical Society. 11–12 March 1989, Blaubeuren. Analytical aspects in pharmacy] **Arch Pharm (Weinheim)** 1989 May;322(5):305–30 **(Ger)**

[Transdermal therapeutic systems (TTS)] Niedner R. **Hautarzt** 1988 Dec;39(12):761–6 (34 ref.) (Eng. Abstr.) **(Ger)**

[Breast milk and drugs] Teller WM. **Padiatr Padol** 1988; 23(4):349–56 (6 ref.) (Eng. Abstr.) **(Ger)**

[Characterization of drug absorption from the gastrointestinal tract with the use of numeric deconvolution] Gröning R, et al. **Pharm Acta Helv** 1989;64(3):71–5 (Eng. Abstr.) **(Ger)**

[Drug transport through artificial lipoid membranes. 22. Amplitude of ultrasonicated liposomes as a model system for investigations of drug transport] Schneider S, et al. **Pharmazie** 1988 Sep;43(9):630–1 (Eng. Abstr.) **(Ger)**

[The significance of chronopharmacology for drug therapy] Lemmer B. **Verh Dtsch Ges Inn Med** 1988;94:420–30 (30 ref.) **(Ger)**

[Pharmacokinetic problems in pregnancy] Piccione E. **Clin Ter** 1987 Jul 31;122(2):139–44 (72 ref.) **(Ita)**

[Topics of drugs. Quality of drugs and therapeutic drug monitoring] Aoyama T. **Fukuoka Igaku Zasshi** 1988 Dec; 79(12):859–61 **(Jpn)**

[Theory and methods of drug targeting] Hashida M. **Nippon Rinsho** 1989 Jun;47(6):1240–8 **(Jpn)**

[Injectable and implantable drug delivery systems] Iga T. **Nippon Rinsho** 1989 Jun;47(6):1261–7 **(Jpn)**

[Progress of drug infusion delivery systems] Miyao K. **Nippon Rinsho** 1989 Jun;47(6):1268–77 **(Jpn)**

[Classification of drug-release control systems and releasing profiles] Miyao K. **Nippon Rinsho** 1989 Jun;47(6):1228–39 **(Jpn)**

[Functional components of DDS: controlled release and targeting] Muranishi S. **Nippon Rinsho** 1989 Jun; 47(6):1223–7 **(Jpn)**

[Theory and practice in design of gastrointestinal DDS] Nakano M. **Nippon Rinsho** 1989 Jun;47(6):1249–54 **(Jpn)**

[Advances in biopharmaceutics and drug delivery system] Sezaki H. **Nippon Rinsho** 1989 Jun;47(6):1213–7 **(Jpn)**

[Drug use in the elderly: pharmacokinetic aspects] Ishizaki T. **Nippon Ronen Igakkai Zasshi** 1988 May;25(3):218–24 (14 ref.) (Eng. Abstr.) **(Jpn)**

[Drug delivery systems by controlled release] Nagai T. **Yakugaku Zasshi** 1988 Jul;108(7):613–24 (54 ref.) (Eng. Abstr.) **(Jpn)**

[Detoxication of xenobiotics by conjugation reactions] Barańczyk-Kuźma A. **Postepy Hig Med Dosw** 1988 Jan–Feb;42(1):29–42 (66 ref.) (Eng. Abstr.) **(Pol)**

[Metabolism of anesthetics in the liver and its significance for anesthesiology] Krakovskiĭ ME, et al. **Anesteziol Reanimatol** 1988 May–Jun;(3):74–9 (79 ref.) **(Rus)**

[Pharmacokinetic characteristics of drug substance in liver denervation] Ashirmetov AKh, et al. **Farmakol Toksikol** 1989 Jan–Feb;52(1):77–80 (Eng. Abstr.) **(Rus)**

[Basic principles and objectives of using chemobiokinetics in toxicology] Filov VA. **Vestn Akad Med Nauk SSSR** 1988;(6):82–9 (32 ref.) **(Rus)**

[Experimental method of the selection of the optimal pharmacophysical treatment of the internal ear] Kriukov AI. **Vestn Otorinolaringol** 1988 Jul–Aug;(4):15–9 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

see related
DRUG THERAPY

XIX Nordic Congress of Physiology and Pharmacology. Oslo, Norway, 13–15 June 1988. Abstracts. **Acta Physiol Scand Suppl** 1988;575:1–139

Interdisciplinary approach to food–drug interactions [letter] Janda SM, et al. **Am J Hosp Pharm** 1988 Dec;45(12):2497–8

Semiparametric approach to pharmacokinetic–pharmacodynamic data. Verotta D, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):R1005–10

Evaluation of biological effects of drugs (Document C, Stage 3, Version 1). Siest G, et al. **Ann Biol Clin (Paris)** 1988; 46(9):751–5 **(Eng, Fre)**

Belgium Society of Physiology and Fundamental and Clinical Pharmacology. Meeting, Louvain-en-Woluwe, November 1987. Abstracts. **Arch Int Physiol Biochim** 1988 Jun; 96(2):P1–32

Société belge de Physiologie et de Pharmacologie Fondamentales et Cliniques. Antwerp, December 1988. Abstracts. **Arch Int Physiol Biochim** 1989 Apr;97(2):P1–33

Société belge de Physiologie et de Pharmacologie fondamentales et cliniques. Liège, February 1988. Abstracts. **Arch Int Physiol Biochim** 1988 Dec;96(5):P33–47

The 1987 Biomedicine & Pharmacotherapy award to E.J Freireich and E.A. Gehan. Rozès S. **Biomed Pharmacother** 1988;42(3):155–6

The logical structure and validity of experimental designs in pharmacokinetics and clinical pharmacology. Mason EJ, et al. **Biopharm Drug Dispos** 1989 Jul–Aug;10(4):331–51 (34 ref.)

Alfred Nobel and the drug hunters [editorial] Rawlins MD. **BMJ** 1988 Dec 24–31;297(6664):1628

Proceedings of the British Pharmacological Society, Clinical Pharmacology Section. 5–7 April 1989, Bristol. Abstracts. **Br J Clin Pharmacol** 1989 Aug;28(2):211P–247P

Proceedings of the British Pharmacological Society. Ireland, 6th–8th July, 1988. Abstracts. **Br J Pharmacol** 1988 Oct; 95 Suppl:475P–714P

Proceedings of the British Pharmacological Society. London, 19th–21st December. Abstracts. **Br J Pharmacol** 1989 Mar; 96 Suppl:1P–368P

Proceedings of the British Pharmacological Society. Nottingham, 7th–9th September 1988. Abstracts. **Br J Pharmacol** 1988 Dec;95 Suppl:715P–910P

Proceedings of the British Pharmacological Society. Leeds, 12th–14th July 1989. Abstracts. **Br J Pharmacol** 1989 Oct; 98 Suppl:606P–773P

Proceedings of the British Pharmacological Society. Bristol, 5–7th April. Abstracts. **Br J Pharmacol** 1989 Jul;97 Suppl:369P–605P

Effect of anaesthesia and surgery on pharmacokinetics and pharmacodynamics. Nimmo WS, et al. **Br Med Bull** 1988 Apr;44(2):286–301 (46 ref.)

Veterinary pharmaceutics in Australia. Chapman C. **Br Vet J** 1989 Mar–Apr;145(2):97–8

Chirality: pharmacokinetics and pharmacodynamics in 3 dimensions. Williams KM. **Clin Exp Pharmacol Physiol** 1989 Jun;16(6):465–70 (47 ref.)

Proceedings of the Australasian Society of Clinical and Experimental Pharmacologists, 1988. 22nd annual scientific meeting. 5–7 December, 1988, Adelaide, South Australia. Abstracts. **Clin Exp Pharmacol Physiol Suppl** 1989;14:218 abstracts

Association of Faculties of Pharmacy of Canada. 1988 annual meeting. Abstracts of research presentations. May 15–18, 1988. **Clin Invest Med** 1988 Dec;11(6):E1–7

American Society for Clinical Pharmacology and Therapeutics. Abstracts of papers. Ninetieth annual meeting. March 8–10, 1989, Nashville, Tennessee. **Clin Pharmacol Ther** 1989 Feb;45(2):121–216

Special issue dedicated to John H. Welsh on the occasion of his 85th birthday. **Comp Biochem Physiol [C]** 1988; 91(1):1–279

Master author and key word indexes to volumes 111–130, 1985–1986. **Eur J Pharmacol** 1988;:1–132

American College of Clinical Pharmacology seventeenth annual meeting. October 31–November 3, 1988, Orlando, Florida. Abstracts. **J Clin Pharmacol** 1988 Oct; 28(10):899–62

Combined pharmacokinetic/pharmacodynamic (PK/PD) modeling. Colburn WA. **J Clin Pharmacol** 1988 Sep; 28(9):769–71 (17 ref.)

A general outlook on ethnopharmacology. de Smet PA, et al. **J Ethnopharmacol** 1989 Apr;25(2):127–38 (33 ref.)

Methods for ethnopharmacological field work. Lipp FJ. **J Ethnopharmacol** 1989 Apr;25(2):139–50 (48 ref.)

British pharmaceutical conference 1988. Science proceedings. 125th meeting, Aberdeen, September 11–17, 1988. Abstracts. **J Pharm Pharmacol** 1988 Dec;40 Suppl:1P–166P

Proceedings of the 19th Symposium on Drug Metabolism and Action. October 27–28, 1988, Osaka. Abstracts. **J Pharmacobiodyn** 1989 Mar;12(3):S39–85

Bioavailability assessment and pharmacologic response: impact of first-pass loss when both drug and metabolites are active. Rowland M. **J Pharmacokinet Biopharm** 1988 Dec;16(6):573–93

Pharmacoepidemiology: the industry's perspective. Tilson HH. **J Rheumatol Suppl** 1988 Oct;17:28–33

Periodicals in veterinary pharmacology and therapeutics [letter] Gibb M. **J Vet Pharmacol Ther** 1988 Jun;11(2):227–9

Pharmacology researchers receive 1988 Nobel Prize [news] Marwick C. **JAMA** 1988 Nov 11;260(18):2625

Proceedings: 62nd general meeting, Japanese Pharmacological Society. March 25–28, 1989, Kyoto, Japan. Abstracts [published erratum appears in Jpn J Pharmacol 1989 May;50(1):following 85] **Jpn J Pharmacol** 1989;49 Suppl:1P–347P

Deutsche Gesellschaft für Pharmakologie und Toxikologie. Abstracts, fall meeting. September 19–22, 1988, Hamburg. **Naunyn Schmiedebergs Arch Pharmacol** 1988;338 Suppl:R1–87

Deutsche Gesellschaft für Pharmakologie und Toxikologie. Abstracts of the 30th spring meeting. 14–17 March 1989, Mainz. **Naunyn Schmiedebergs Arch Pharmacol** 1989;339 Suppl:R1–124

Deutsche Physiologische Gesellschaft, Israel Physiological and Pharmacological Society. Abstracts of the joint meeting (67th meeting). 5–10 March 1989, Jerusalem. **Pflugers Arch** 1989;413 Suppl 1:R1–60

Third annual meeting and exposition. American Association of Pharmaceutical Scientists. October 30–November 3, 1988, Orlando, Florida. Abstracts. **Pharm Res** 1988 Oct; 5(10 Suppl):S5–269

Fourth annual meeting and exposition. American Association of Pharmaceutical Scientists. October 22–26, 1989, Atlanta, Georgia. Abstracts. **Pharm Res** 1989 Sep;6(9 Suppl):S1–254

The influence of drugs on nasal ciliary movement. Hermens WA, et al. **Pharm Res** 1987 Dec;4(6):445–9 (60 ref.)

Pharmacology meeting. Dutch Society of Pharmacology. Utrecht (The Netherlands), 9 November/7 December 1988. Abstracts. **Pharm Weekbl [Sci]** 1988 Oct 14;10(5):226–36

Clinical pharmacological meeting. Utrecht, (The Netherlands), 15 April 1988. Abstracts. **Pharm Weekbl [Sci]** 1988 Aug 19;10(4):178–84

Italian Pharmacological Society, 2nd inter-regional meeting. Modena, December 15, 1988. Abstracts. **Pharmacol Res** 1989 Jul–Aug;21(4):439–94

2nd inter-regional meeting of the Basilicata, Calabria, Campania, Puglia, Sardegna, Sicilia Group of the Italian Pharmacological Society. Cagliari, May 30–31, 1988. Communications. **Pharmacol Res Commun** 1988 Dec; 20(12):1061–128

XXXIV Nordic Meeting of Pharmacology, Toxicology and Clinical Pharmacology. Reykjavik, Iceland, June 26–28th, 1989. Abstracts. **Pharmacol Toxicol** 1989;65 Suppl 1:45 abstracts

Abstracts: 1989 annual meeting of the Beijing, China Section of the Society for Experimental Biology and Medicine. Beijing, China, February 25, 1989. **Proc Soc Exp Biol Med** 1989 Sep;191(4):428–33

Data normalization before statistical analysis: keeping the horse before the cart. Hancock AA, et al. **Trends Pharmacol Sci** 1988 Jan;9(1):29–32

Current models in pharmacokinetics: applications in veterinary pharmacology. Kinabo LD, et al. **Vet Res Commun** 1989;13(2):141–57 (78 ref.)

[Abstracts of papers presented at the 38th Pharmacology Seminar. 23–28 May 1988, Tále] **Cesk Fysiol** 1989; 38(2):131–82 **(Cze, Slo)**

[Annual meeting of the German Pharmaceutical Society. Erlangen, 7–10 September 1988. Abstracts of discussion and poster papers (published erratum appears in Arch Pharm (Weinheim) 1988 Nov;321(11):836)] **Arch Pharm (Weinheim)** 1988 Sep;321(9):573–712 **(Ger)**

[Optimization of the bioactive lead structure. II. Verification

of the system] Mager PP. **Pharm Unserer Zeit** 1988 Sep; 17(5):129–44 (0 ref.) **(Ger)**

[Progress in the field of drug development. 22] Henkler G, et al. **Pharmazie** 1989 Apr;44(4):241–50 (18 ref.) **(Ger)**

[1988 Nobel laureates in medicine] Pécsi T. **Orv Hetil** 1989 Mar 19;130(12):634–5 **(Hun)**

[Action of drugs in relation to the administration route] Di Carlo F. **Minerva Endocrinol** 1989 Jan–Mar;14(1):41–4 (Eng. Abstr.) **(Ita)**

[Proceedings of the 41st regional meeting (Seinan area) of the Japanese Pharmacological Society. November 6, 1988, Kumamoto, Japan. Abstracts] **Nippon Yakurigaku Zasshi** 1989 Jan;93(1):27P–49P **(Jpn)**

[Proceedings of the 79th regional meeting (Kanto area) of the Japanese Pharmacological Society. October 15, 1988, Sagamihara, Japan. Abstracts] **Nippon Yakurigaku Zasshi** 1989 Jan;93(1):1P–25P **(Jpn)**

[Abstracts of the 12th symposium of the National Committee for Pharmacology] **Nippon Yakurigaku Zasshi** 1989 Jan; 93(1):1S–10S **(Jpn)**

[Sociedad de Farmacológia de Chile. 10th annual meeting. 5–6 August 1988, La Dehesa, Santiago. Abstracts] **Arch Biol Med Exp (Santiago)** 1988 Dec;21(3–4):R497–511 **(Spa)**

[Drugs, pharmacological innovations and clinical medicine (published erratum appears in Med Clin (Barc) 1989 Mar 25;92(11):412)] Castillo Pérez P. **Med Clin (Barc)** 1988 Nov 19;91(17):665–70 (29 ref.) **(Spa)**

EDUCATION

[Statistical study of evaluation in pharmacology at the Valladolid University Medical School (1979–86) (letter)] Alonso-Vielba J, et al. **Rev Clin Esp** 1989 Mar;184(5):271 **(Spa)**

HISTORY

Bernard B. Brodie and the rise of chemical pharmacology. Costa E, et al. **Annu Rev Pharmacol Toxicol** 1989;29:1–21 (69 ref.)

[The 50th anniversary of the introduction of sulfonamides] Drygas A. **Arch Hist Filoz Med** 1988;51(3):383–90 (Eng. Abstr.) **(Pol)**

[History of the Department of Pharmacology of Tartu University] Allikmets LKh. **Farmakol Toksikol** 1988 Nov–Dec;51(6):97–102 **(Rus)**

[75th anniversary of the Department of Pharmacology with General Toxicology and a Clinical Pharmacology Course of the Leningrad Health and Hygiene Medical Institute] Denisenko PP, et al. **Farmakol Toksikol** 1988 Jul–Aug; 51(4):109–13 **(Rus)**

[50th anniversary of the journal Farmakologiia i toksikologiia] Mashkovskiĭ MD. **Farmakol Toksikol** 1988 Nov–Dec;51(6):5–16 **(Rus)**

[The Department of Pharmacology of the Tomsk Medical Institute] Saratikov AS. **Farmakol Toksikol** 1989 Mar–Apr; 52(2):110–6 **(Rus)**

INSTRUMENTATION

A central venous catheter for long-term studies on drug effects and pharmacokinetics in Munich minipigs. Schmidt W, et al. **Eur J Drug Metab Pharmacokinet** 1988 Apr–Jun; 13(2):143–7

New versatile restraining device for use with rats in pharmacokinetic or pharmacological studies involving chronically implanted cannulae or electrodes. Lewis A, et al. **J Pharmacol Methods** 1989 Aug;22(1):59–63

METHODS

Read my lips.... Nies AS. **Clin Pharmacol Ther** 1989 May; 45(5):459–60

Strategy to assess the role of (inter)active metabolites in pharmacodynamic studies in-vivo: a model study with heptabarbital. Dingemanse J, et al. **J Pharm Pharmacol** 1988 Aug;40(8):552–7

[Methodology of chronic cardiovascular pharmacological study in the unanesthetized and unrestrained dog] Nonaka K, et al. **Nippon Yakurigaku Zasshi** 1989 May;93(5):283–93 (Eng. Abstr.) **(Jpn)**

TRENDS

Drugs and performance in sports. Way EL. **Annu Rev Pharmacol Toxicol** 1989;29:517–24 (11 ref.)

Immunopharmacology: a new frontier. Pope BL. **Can J Physiol Pharmacol** 1989 Jun;67(6):537–45 (82 ref.)

Drug research in humans: the ethics of nonrandomized access. Veatch RM. **Clin Pharm** 1989 May;8(5):366–70 (12 ref.)

The drug development process [editorial] Somberg JC. **J Clin Pharmacol** 1988 Oct;28(10):865

Drug discovery—today and tomorrow: the role of medicinal chemistry. Freter KR. **Pharm Res** 1988 Jul;5(7):397–400 (7 ref.)

Trends in drug discrimination research analysed with a cross-indexed bibliography, 1984–1987. Stolerman IP, et al. **Psychopharmacology (Berlin)** 1989;98(1):1–19

Immunopharmacologists forge interdisciplinary links. Mašek K. **Trends Pharmacol Sci** 1988 Jul;9(7):225–7 (2 ref.)

[Reminiscences of a pharmacologist] Ebashi S. **Nippon Yakurigaku Zasshi** 1989 Jan;93(1):1–5 (13 ref.) **(Jpn)**

[The dawn of a new era in pharmacology] Hashimoto K. **Nippon Yakurigaku Zasshi** 1989 Jun;93(6):315–20 **(Jpn)**

PHARMACOLOGY, CLINICAL

Société belge de Physiologie et de Pharmacologie fondamentales et cliniques. Liège, February 1988. Abstracts. **Arch Int Physiol Biochim** 1988 Dec;96(5):P33–47

Proceedings of the British Pharmacological Society, Clinical Pharmacology Section. Ireland, 6–8 July, 1988. Abstracts. **Br J Clin Pharmacol** 1988 Nov;26(5):615P–678P

Ethics and law in clinical pharmacology. Laurence DR. **Br J Clin Pharmacol** 1989 Jun;27(6):715–22

Proceedings of the Australasian Society of Clinical and Experimental Pharmacologists, 1988. 22nd annual scientific meeting. 5–7 December, 1988, Adelaide, South Australia. Abstracts. **Clin Exp Pharmacol Physiol Suppl** 1989;14:218 abstracts

Let us now go forward [letter] Ferguson RK. **Clin Pharmacol Ther** 1989 Apr;45(4):453

Reporting results from a clinical pharmacological laboratory using a microcomputer. Cridland JS. **J Med Syst** 1989 Feb; 13(1):25–30

Clinical pharmacology. Reidenberg MM. **JAMA** 1989 May 19;261(19):2831–2

Genes and the pharmaceutical sciences. Sadée W. **Pharm Res** 1988 Apr;5(4):199–200

Clinical pharmacology meeting. Utrecht (The Netherlands), 7 October 1988. Abstracts. **Pharm Weekbl [Sci]** 1988 Dec 9;10(6):291–9

Abstracts of papers. Clinical pharmacological meeting. Utrecht (The Netherlands), 7 April 1989. **Pharm Weekbl [Sci]** 1989 Jun 23;11(3 Suppl H):H1–7

Stereoselectivity: an issue of significant importance in clinical pharmacology. Lam YW. **Pharmacotherapy** 1988; 8(3):147–57 (121 ref.)

The golden age of pharmacology [editorial] Goldowsky SJ. **R I Med J** 1989 Mar;72(3):83

[Functions of a hospital clinical pharmacology service] Azanza JR, et al. **Rev Med Univ Navarra** 1988 Jan–Mar; 32(1):11–3 **(Spa)**

EDUCATION

The drug analysis laboratory: a resource for teaching clinical pharmacology to students and residents. Brass EP, et al. **Clin Pharmacol Ther** 1989 Sep;46(3):245–9

Defining the true therapeutics and clinical pharmacology curriculum in a Canadian medical school: implications for change. Sellers EM, et al. **Clin Pharmacol Ther** 1988 Dec; 44(6):629–33

Issues facing clinical pharmacy education for undergraduate students [editorial] Nahata MC. **DICP** 1989 Mar; 23(3):250–1

Development of a computer-based instructional system in pharmacokinetics: efficacy in clinical pharmacology teaching for senior medical students. Feldman RD, et al. **J Clin Pharmacol** 1989 Feb;29(2):158–61

Instruction in clinical pharmacology: changes in the wind. Ingenito AJ, et al. **J Clin Pharmacol** 1989 Jan;29(1):7–17 (58 ref.)

Teaching clinical pharmacology: coordination with medical pharmacology courses. Lathers CM, et al. **J Clin Pharmacol** 1989 Jul;29(7):581–97 (50 ref.)

Oncology Pharmacy Residency at Walter Reed Army Medical Center. Martin SC. **Milit Med** 1988 Aug; 153(8):413–6

The teaching of clinical pharmacology in Europe and North America. Orme M, et al. **Trends Pharmacol Sci** 1989 Jun; 10(6):224–6

[Continuing education for long-term memory] Heinzl S. **Med Monatsschr Pharm** 1989 Jun;12(6):169 **(Ger)**

[The main principles of the program and system control of the quality of preparing specialists in the study of clinical pharmacology] Revutskiĭ BI, et al. **Ter Arkh** 1989; 61(5):150–3 **(Rus)**

HISTORY

The short happy life of the first pharmacology division of the FDA: 1935–1936. Farrar GE Jr. **Clin Ther** 1989; 11(1):183–4

[75th anniversary of the Department of Pharmacology with General Toxicology and a Clinical Pharmacology Course of the Leningrad Health and Hygiene Medical Institute] Denisenko PP, et al. **Farmakol Toksikol** 1988 Jul–Aug; 51(4):109–13 **(Rus)**

MANPOWER

Profile of clinical pharmacologists in the United States. Wilson JT, et al. **J Clin Pharmacol** 1989 Aug;29(8):695–713

METHODS

Kinetic-effect models and their applications. Grevel J. **Pharm Res** 1987 Apr;4(2):86–91 (18 ref.)

STANDARDS

Standardization of symbols in clinical pharmacology. Aronson JK, et al. **Eur J Clin Pharmacol** 1988;35(1):1–7

TRENDS

The Annals of Pharmacotherapy—more than a face lift [editorial] Whitney HA Jr. **DICP** 1989 Jan;23(1):73, 87

[What does the future hold for clinical pharmacology in Spain?] Moreno González A. **Rev Med Univ Navarra** 1988 Jan–Mar;32(1):19–20 **(Spa)**

PHARMACOPOEIAS

The use of essential drugs. Third report of the WHO Expert Committee. **WHO Tech Rep Ser** 1988;770:1–63

[The GDR pharmacopoeia—present situation and outlook with special consideration of quality control] Wagler M. **Pharmazie** 1989 Jun;44(6):386–9 (20 ref.) (Eng. Abstr.) **(Ger)**

[Riboflavin reference standard (Control 871) of National Institute of Hygienic Sciences] Tokunaga H, et al. **Eisei Shikenjo Hokoku** 1988;(106):139–40 (Eng. Abstr.) **(Jpn)**

[Ascorbic acid reference standard (Control 861) of National Institute of Hygienic Sciences] Tokunaga H, et al. **Eisei Shikenjo Hokoku** 1988;(106):141–2 (Eng. Abstr.) **(Jpn)**

HISTORY

A pharmacopoeia compiled on the order of the Emperor Song Taizong. Wang JX. **J Tradit Chin Med** 1988 Sep; 8(3):232–3

An early colonial pharmacopoeia: a drug list and its materia medica for an Australian convict settlement. Pearn J, et al. **Med J Aust** 1988 Dec 5–19;149(11–12):630–4

STANDARDS

[Instrumentation and evaluation of the pharmacopoeia test of color] Stampf G, et al. **Acta Pharm Hung** 1989 Jan; 59(1):42–7 (Eng. Abstr.) **(Hun)**

PHARMACOPOEIAS, HOMEOPATHIC

Toxicity of homeopathic products. Spoerke DG. **Vet Hum Toxicol** 1989 Jun;31(3):259–60

PHARMACOTHERAPY see **DRUG THERAPY**

PHARMACY

see related
COMMUNITY PHARMACY SERVICES
PHARMACY SERVICE, HOSPITAL
PRESCRIPTIONS, DRUG
TECHNOLOGY, PHARMACEUTICAL

AIDS and pharmacy [editorial] Talley CR. **Am J Hosp Pharm** 1989 Jun;46(6):1138

Policy committee work challenges members [letter] **Am Pharm** 1989 Jan;NS29(1):8

Commitment to the profession of pharmacy: are there sex differences? Fink RJ, et al. **Am Pharm** 1989 Jan; NS29(1):28–34

Satisfaction with board certification in nuclear pharmacy. Ponto JA. **Am Pharm** 1989 Jan;NS29(1):16–18, 20

Practice and science united against AIDS. Schlegel JF. **Am Pharm** 1988 Jun;NS28(6):3

Lawrence C. Weaver, PhD. Thoughts of the 1989 Remington medalist. Weaver LC. **Am Pharm** 1989 Jul;NS29(7):51–2

Commentary. Women and pharmacy—a view from the United States [editorial] Sauer B. **J Clin Pharm Ther** 1989 Jun;14(3):235–8

Should pharmacists evaluate the practices of physicians? [letter; comment] Bodey GP. **JAMA** 1989 Jul 14; 262(2):205–6. **Comment on:** JAMA 1988 Dec 23–30;260(24):3592

Uninsured pharmacists and illegible prescriptions. Brahams D. **Lancet** 1989 Mar 4;1(8636):510

Pharmaceutisch Weekblad Scientific edition and the European Society of Clinical Pharmacy [editorial] Hekster YA, et al. **Pharm Weekbl [Sci]** 1989 Feb 24;11(1):1–2

Financial support for poison control centers: a unique partnership with a chain drug store corporation. Wanke LA, et al. **Vet Hum Toxicol** 1988 Oct;30(5):475–9

[Discrimination concerning the modern concept of "bencao"] Hao JD. **Chung Yao Tung Pao** 1988 Nov;13(11):3–5, 61 (Eng. Abstr.) **(Chi)**

[Pharmaceutical terminology. II. Present status and perspectives] Melichar M, et al. **Cesk Farm** 1989 Mar; 38(2):69–75 **(Cze)**

[Pharmacy in Turkey] Smečka V, et al. **Cesk Farm** 1989 Feb; 38(1):43–5 **(Cze)**

[The relevance of various information systems for pharmaceutical inquiries] Martin U. **Pharmazie** 1988 Dec; 43(12):859–61 (Eng. Abstr.) **(Ger)**

[Pharmacy services in Czechoslovakia—the results of February 1948] Kondel I. **Cesk Zdrav** 1988 Oct; 36(10):434–42 (Eng. Abstr.) **(Slo)**

ECONOMICS

Pharmacoeconomic evaluations in medicine [letter] Froemming SH, et al. **DICP** 1989 May;23(5):431

HISTORY

Hygeia's sisters: a history of women in pharmacy. Ward PS. **Caduceus** 1988 Fall–Winter;4(3–4):1–57

Pages from the past of old apothecaries. Pabis-Braunstein M. **Mater Med Pol** 1988 Jul-Sep;20(3):205-8
The rise and fall of the apothecary: will history repeat itself? Labreche DG. **Pharmacotherapy** 1989;9(2):105-11
[The development of wooden apothecary jars] Infeldová L, et al. **Cesk Farm** 1988 Dec;37(10):461-8 (Eng. Abstr.) **(Cze)**
[The university pharmacy and the university pharmacist in history] Friedrich C. **Pharmazie** 1988 Jun;43(6):428-31 (Eng. Abstr.) **(Ger)**
[Research schools of pharmacy. 4. Heinrich A. Beckurts (1855-1929) and his students. The history of pharmaceutical science: 37] Friedrich C, et al. **Pharmazie** 1989 Apr; 44(4):287-91 (Eng. Abstr.) **(Ger)**
[Research schools in pharmacy. 2. Ernst A. Schmidt (1845-1921) and high area of scholarship; the history of pharmaceutical science. 33] Friedrich C, et al. **Pharmazie** 1988 Sep;43(9):642-7 (Eng. Abstr.) **(Ger)**
[Research schools in pharmacy. 3: Johannes Gadamer (1867-1928) and his students (the history of pharmaceutical sciences: 34)] Friedrich C, et al. **Pharmazie** 1988 Nov; 43(11):788-92 (Eng. Abstr.) **(Ger)**
[The state of Hungarian pharmacy in Trommsdorff's journal, 1795] Kertész B, et al. **Pharmazie** 1988 Dec;43(12):854 **(Ger)**
[Drug safety in old Saxony] Rupprecht J. **Pharmazie** 1989 Jun;44(6):393-6 **(Ger)**
[Hungarian pharmaceutical relations of J. B. Trommsdorff] Zalai K. **Pharmazie** 1988 Dec;43(12):853-4 **(Ger)**
[Academic dissertations of military pharmacists on the history of pharmacy] Markowski W. **Arch Hist Filoz Med** 1988; 51(3):391-400 (Eng. Abstr.) **(Pol)**

MANPOWER

Some economic aspects of pharmacy manpower. Sorkin AL. **Am J Hosp Pharm** 1989 Mar;46(3):527-33

STANDARDS

Board of pharmacy examiners: an overview. **Iowa Med** 1989 Mar;79(3):129-31

TRENDS

Harvey A.K. Whitney lecture. Taking charge of the profession. Hill WT Jr. **Am J Hosp Pharm** 1989 Aug; 46(8):1557-61
Enhancing pharmacy's status as a health profession [editorial] LeMaistre CA. **Am J Hosp Pharm** 1989 May;46(5):1006-7
Leadership in pharmacy [editorial] Maine LL. **Am J Hosp Pharm** 1988 Dec;45(12):2537-41
Medication use in an imperfect world: drug misadventuring as an issue of public policy, Part 2. Manasse HR Jr. **Am J Hosp Pharm** 1989 Jun;46(6):1141-52
Where are the professional and financial rewards in pharmacy? [letter] Maymudes AL. **Am J Hosp Pharm** 1988 Sep;45(9):1865
Leadership in a clinical profession. Smith JE. **Am J Hosp Pharm** 1988 Aug;45(8):1675-81
Technicians and pharmacy manpower: future directions. Trinca CE. **Am J Hosp Pharm** 1989 Mar;46(3):549-57
Media relations specialists would help to erase the stereotype [letter] Tucker PP. **Am J Hosp Pharm** 1988 Oct;45(10):2074
Pharmacy as a partner in improving medication use [editorial] Zellmer WA. **Am J Hosp Pharm** 1989 Jun;46(6):1137
Beyond isolation [editorial] Zellmer WA. **Am J Hosp Pharm** 1989 Feb;46(2):265
Toward understanding [editorial] Zellmer WA. **Am J Hosp Pharm** 1988 Sep;45(9):1877
IPA: vital resource for pharmacy practice [editorial] Zellmer WA. **Am J Hosp Pharm** 1988 Nov;45(11):2327
APhA year in review. **Am Pharm** 1989 Jan;NS29(1):35-49
Nonprescription drug approval: therapeutic strategy or marketing decision? [editorial] McLeod DC. **DICP** 1989 Jul-Aug;23(7-8):606-9
Pharmaceutical education: a ticket to professional survival or extinction? [editorial] Goyan JE. **Drug Intell Clin Pharm** 1988 Oct;22(10):799-800
Comment: pharmacy in India [letter] Guharoy S. **Drug Intell Clin Pharm** 1988 Dec;22(12):1006
Rho Chi lecture. The pharmaceutical sciences as academic disciplines. Lemberger AP. **Drug Intell Clin Pharm** 1988 Oct;22(10):807-12
Clinical pharmacy and clinical research [editorial] Nappi JM, et al. **Drug Intell Clin Pharm** 1988 Oct;22(10):804-6
The more pharmacy changes, the more it remains the same [editorial] Whitney HA Jr. **Drug Intell Clin Pharm** 1988 Oct;22(10):797
Pharmacy/medicine interface. Temple TR. **Iowa Med** 1989 Mar;79(3):104-6
Can we preserve the passion for practice in clinical pharmacy...please? Bussey HI. **Pharmacotherapy** 1989; 9(2):114-7
Who said practice makes perfect? Evans WE. **Pharmacotherapy** 1989;9(2):113-4
On the fringes. Green JA, et al. **Pharmacotherapy** 1989; 9(2):95-8
Pharmacy and research: which side of the door are we on? Scavone JM. **Pharmacotherapy** 1989;9(2):111-2

PHARMACY ADMINISTRATION

see related
FEES, PHARMACEUTICAL
INSURANCE, PHARMACEUTICAL SERVICES

ASHP supplemental standard and learning objectives for residency training in hospital pharmacy administration. **Am J Hosp Pharm** 1988 Sep;45(9):1930-3
Relationship between leadership styles of hospital pharmacists and perceptions of work-unit effectiveness. Bennett CR, et al. **Am J Hosp Pharm** 1988 Aug; 45(8):1691-9
Survey of pharmacy directors' experience with staff vacancies and recruitment. Stubson B, et al. **Am J Hosp Pharm** 1988 Nov;45(11):2354-7
Clinical pharmacy administration. Einarson TR. **Drug Intell Clin Pharm** 1988 Nov;22(11):903-5 (7 ref.)

ECONOMICS

Opening and positioning a pharmacy for success, Part 2. Tootelian DH. **Am Pharm** 1989 Feb;NS29(2):62-8

METHODS

Polygraphs, honesty tests, and drug screening: a threat to the integrity of a proud profession. Fox TR. **Am Pharm** 1989 Feb;NS29(2):60-1

PHARMACY AND THERAPEUTICS COMMITTEE

see related
FORMULARIES, HOSPITAL

Quality control of hospital formularies. Rucker TD. **Pharm Weekbl [Sci]** 1988 Aug 19;10(4):145-50
An adverse drug reaction reporting program in a community hospital. Tse CS, et al. **QRB** 1988 Nov;14(11):336-40
[Drug committees, choice of drugs and drug information] Lundh B. **Lakartidningen** 1988 Nov 2;85(44):3641-3 **(Swe)**

HISTORY

[The German Insulin Committee in its historical development] Dittrich HM. **Z Arztl Fortbild (Jena)** 1989; 83(8):435-7 **(Ger)**

TRENDS

[Future drug committees--institutions for cooperation and information] Odeberg H, et al. **Lakartidningen** 1989 Jan 4;86(1-2):34 **(Swe)**

PHARMACY SERVICE, CLINICAL see **PHARMACY SERVICE, HOSPITAL**

PHARMACY SERVICE, HOSPITAL

Medication error prevention by pharmacists. Blum KV, et al. **Am J Hosp Pharm** 1988 Sep;45(9):1902-3
Cost analysis of a home intravenous antibiotic program. Chamberlain TM, et al. **Am J Hosp Pharm** 1988 Nov; 45(11):2341-5
Continuing-education interests of hospital pharmacists in Kentucky. Coons SJ, et al. **Am J Hosp Pharm** 1989 May; 46(5):992-3
Monitoring system to verify activation of ADD-Vantage system doses [letter] DeRon MS, et al. **Am J Hosp Pharm** 1989 Apr;46(4):702
Pharmacist involvement in a chemical-dependency rehabilitation program. Haynes M. **Am J Hosp Pharm** 1988 Oct;45(10):2099-101
Effect of clinical pharmacy services on appropriateness of serum digoxin concentration monitoring. Klamerus KJ, et al. **Am J Hosp Pharm** 1988 Sep;45(9):1887-93
Screening discharge prescriptions. Morrill GB, et al. **Am J Hosp Pharm** 1988 Sep;45(9):1904-5
Automatic interchange policy for cefotetan and cefoxitin [letter] Suzuki NT, et al. **Am J Hosp Pharm** 1988 Sep; 45(9):1864
Radiopharmacists do more than prepare and dispense products [letter] Wolf W, et al. **Am J Hosp Pharm** 1988 Sep;45(9):1866-7
Expanding clinical services [letter] Sasich LD. **Am Pharm** 1988 Jun;NS28(6):5
Seventeen years' experience of a voluntarily based drug rationalisation programme in hospital. Baker JA, et al. **BMJ** 1988 Aug 13;297(6646):465-9
Hospital pharmacy issues on antibiotics. Proceedings of a symposium. August 4, 1988, Williamsburg, Virginia. **DICP** 1989 Jul-Aug;23(7-8 Suppl):S7-31
Abstracts of papers. 1st European Congress on Hospital Pharmacy. The Hague (The Netherlands), 25-27 May 1989. **Pharm Weekbl [Sci]** 1989 Jun 23;11(3 Suppl E):E1-19
Drug use in the elderly. A position statement of the American College of Clinical Pharmacy. Mann HJ, et al. **Pharmacotherapy** 1988;8(6):355-8
[Drug surveillance and the responsibility of the hospital pharmacist] Duneau M. **Therapie** 1988 Aug-Sep; 43(5):373-5 (Eng. Abstr.) **(Fre)**
[Storage of poisonous and narcotic drugs at the hospital pharmacy] Bazhan SV, et al. **Voen Med Zh** 1988 Aug;(8):57 **(Rus)**

ECONOMICS

Pharmacy intern intervention to reduce costs associated with histamine H2-antagonist therapy. Algozzine GJ, et al. **Am J Hosp Pharm** 1989 Jun;46(6):1183-4
Economic consequences of two drug-use control systems in a teaching hospital. Clapham CE, et al. **Am J Hosp Pharm** 1988 Nov;45(11):2329-40
Cost-effectiveness of repackaging labetalol hydrochloride injection for intraoperative use. Gill DL Jr, et al. **Am J Hosp Pharm** 1988 Dec;45(12):2528-9
Effect of changes in case mix on drug expenditures [letter] Goldstein MS. **Am J Hosp Pharm** 1988 Dec;45(12):2498
Clinical considerations and costs associated with formulary conversion from tobramycin to gentamicin. Green ER, et al. **Am J Hosp Pharm** 1989 Apr;46(4):714-9
Cost savings realized from interchanging ceftizoxime for cefoxitin. Guastella C. **Am J Hosp Pharm** 1988 Nov; 45(11):2376-7
Updating the costs of preparing small-volume injections [letter] Hatoum HT, et al. **Am J Hosp Pharm** 1989 Feb; 46(2):258
Use of a path model to analyze factors that influence hospital pharmacists' salaries. Shepherd MD, et al. **Am J Hosp Pharm** 1989 Jan;46(1):77-83
Comparison of seven methods of preparing and administering small-volume injections. Smith CF, et al. **Am J Hosp Pharm** 1988 Sep;45(9):1896-901
The nonvalue of retrospective peer comparison feedback in containing hospital antibiotic costs. Parrino TA. **Am J Med** 1989 Apr;86(4):442-8
Impact of a clinical pharmacokinetic service on patients treated with aminoglycosides for gram-negative infections. Destache CJ, et al. **DICP** 1989 Jan;23(1):33-8
Comment: inpatient cost reduction [letter] **Drug Intell Clin Pharm** 1988 Sep;22(9):730-2
Cost justification of clinical pharmacy services on a general surgery team: focus on diagnosis-related group cases. Bertch KE, et al. **Drug Intell Clin Pharm** 1988 Nov; 22(11):906-11
Pharmacoeconomic impact of critically ill surgical patients. Dasta JF, et al. **Drug Intell Clin Pharm** 1988 Dec; 22(12):994-8
Pharmacies gain profits... Powills S. **Hospitals** 1988 Dec 20; 62(24):44, 46
An informed M.D can help control drug costs. Souhrada L. **Hospitals** 1989 Jun 20;63(12):78
Prospectus on the economic value of clinical pharmacy services. A position statement of the American College of Clinical Pharmacy. Willett MS, et al. **Pharmacotherapy** 1989;9(1):45-56
[Cost of prescriptions in hospital consultation in dermatology. Role of the parapharmacy and the amount of reimbursement (letter)] Derri C, et al. **Ann Dermatol Venereol** 1989;116(1):43 **(Fre)**

HISTORY

Fifteen "citation classics" from the American Journal of Hospital Pharmacy. Thompson DF. **Am J Hosp Pharm** 1989 Jan;46(1):126-8

LEGISLATION & JURISPRUDENCE

The Prescription Drug Marketing Act of 1987. Greenberg RB. **Am J Hosp Pharm** 1988 Oct;45(10):2118-26
Legal issues associated with formulary product-selection when there are two or more recognized drug therapies. Liang FZ, et al. **Am J Hosp Pharm** 1988 Nov;45(11):2372-5
State regulations for home i.v. therapy [letter] McAllister JC 3d, et al. **Am J Hosp Pharm** 1989 Aug;46(8):1545-6
Pharmacy implications of the revised OSHA Hazard Communication Standard. Myers CE. **Am J Hosp Pharm** 1989 May;46(5):990-1
Legal issues associated with pharmacokinetic software. Schwartz JI, et al. **Am J Hosp Pharm** 1989 Jan;46(1):120-4

MANPOWER

Final report of the ASHP Task Force on Technical Personnel in Pharmacy. **Am J Hosp Pharm** 1989 Jul;46(7):1420-9
Expanded roles for pharmacy technicians [letter] Barichman JP. **Am J Hosp Pharm** 1988 Aug;45(8):1670-1
True reason for pharmacist turnover may not be reported [letter] Best AM. **Am J Hosp Pharm** 1989 Mar;46(3):484, 486
Human resources management for a hospital pharmacy department. Chase PA. **Am J Hosp Pharm** 1989 Jun; 46(6):1162-9
Professional-development and continuing-education programs for pharmacists in large hospitals. Craig SA, et al. **Am J Hosp Pharm** 1988 Dec;45(12):2503-6
Use of professional recruiters [letter] Ferrier DE. **Am J Hosp Pharm** 1988 Oct;45(10):2073
Experience with staffing alternatives in a pediatric teaching institution. King ES. **Am J Hosp Pharm** 1989 Jun; 46(6):1175-8
The pharmacy technician--an occupation in search of consensus. Ryan MR. **Am J Hosp Pharm** 1989 Mar; 46(3):496-507
Criteria for staff pharmacist selection in Ohio. Sheridan DJ, et al. **Am J Hosp Pharm** 1989 Feb;46(2):295-301
Integrating human resources and program-planning strategies. Smith JE. **Am J Hosp Pharm** 1989 Jun;

46(6):1153–61
Hospital pharmacy employment considerations for the chemically dependent health-care professional. Smith RL, et al. **Am J Hosp Pharm** 1988 Oct;45(10):2102–7
Survey of pharmacy directors' experience with staff vacancies and recruitment. Stubson B, et al. **Am J Hosp Pharm** 1988 Nov;45(11):2354–7
Technician intervention in use of nonformulary antimicrobial agents in the surgical suite. Underhill AL, et al. **Am J Hosp Pharm** 1989 Feb;46(2):312–3
The need for collective action on technician issues [editorial] Zellmer WA. **Am J Hosp Pharm** 1989 Mar;46(3):489
Solving pharmacist shortages. Eubanks P. **Hospitals** 1988 Dec 20;62(24):54

ORGANIZATION & ADMINISTRATION

ASHP supplemental standard and learning objectives for residency training in hospital pharmacy administration. **Am J Hosp Pharm** 1988 Sep;45(9):1930–3
A decade of experience with a clinical pharmacokinetics service. Ambrose PJ, et al. **Am J Hosp Pharm** 1988 Sep; 45(9):1879–86
Bar-code technology for documenting administration of large-volume intravenous solutions. Barry GA, et al. **Am J Hosp Pharm** 1989 Feb;46(2):282–7
Relationship between leadership styles of hospital pharmacists and perceptions of work-unit effectiveness. Bennett CR, et al. **Am J Hosp Pharm** 1988 Aug; 45(8):1691–9
Use of the strategic-planning process by hospital pharmacy directors. Birdwell SW, et al. **Am J Hosp Pharm** 1989 Jul; 46(7):1361–6
Impact of HIV infection on pharmaceutical services at Walter Reed Army Medical Center. Bjornson DC, et al. **Am J Hosp Pharm** 1989 Jun;46(6):1170–5
Process-oriented measurement of clinical pharmacy activities in a large Army medical center. Bjornson DC, et al. **Am J Hosp Pharm** 1989 Feb;46(2):308–10
Streamlining antimicrobial therapy through pharmacists' review of order sheets. Briceland LL, et al. **Am J Hosp Pharm** 1989 Jul;46(7):1376–80
Physician and nurse awareness of drug-use-review activities [letter] Bunz D, et al. **Am J Hosp Pharm** 1989 Jun; 46(6):1125–6
Facilitating drug-use evaluation with spreadsheet software. Burnakis TG. **Am J Hosp Pharm** 1989 Jan;46(1):84–8
Effects of bar coding on a pharmacy stock replenishment system. Chester MI, et al. **Am J Hosp Pharm** 1989 Jul; 46(7):1380–5
Investigational drug practices in Michigan hospitals. Cohen IA, et al. **Am J Hosp Pharm** 1989 Jul;46(7):1370–5
Seasonal variation in pharmacy workload: implication for personnel projections. Cooper SL, et al. **Am J Hosp Pharm** 1988 Sep;45(9):1905–6
Effect of automated prescription transmittal on number of unclaimed prescriptions. Craghead RM, et al. **Am J Hosp Pharm** 1989 Feb;46(2):310–2
Use of concurrent monitoring and a preprinted note to modify prescribing of i.v. cimetidine and ranitidine in a teaching hospital. Dannenhoffer MA, et al. **Am J Hosp Pharm** 1989 Aug;46(8):1570–5
Multidisciplinary approach to improving documentation of medications used during surgical procedures. Donnelly AJ. **Am J Hosp Pharm** 1989 Apr;46(4):724–8
Fax fiction [letter] Ellinoy BJ. **Am J Hosp Pharm** 1989 Aug; 46(8):1549–50
Comparison of videocassette and personal instruction methods for training pharmacy personnel in aseptic technique. Ezell JR, et al. **Am J Hosp Pharm** 1988 Oct; 45(10):2112–7
Pharmacy participation in nursing orientation programs [letter] Fink RM, et al. **Am J Hosp Pharm** 1989 Apr; 46(4):701–2
Evaluation of computer-assisted instruction versus traditional new-employee training. Gee MA, et al. **Am J Hosp Pharm** 1988 Oct;45(10):2107–12
Formulary status of intravenous immunoglobulins in selected hospitals. Hatton RC, et al. **Am J Hosp Pharm** 1988 Nov; 45(11):2377–9
Evaluating the use of participative decision making in hospital pharmacy practice. Hughes TE, et al. **Am J Hosp Pharm** 1989 Jan;46(1):136–8
Development and implementation of a strategic-planning process at a university hospital. Hutchinson RA, et al. **Am J Hosp Pharm** 1989 May;46(5):952–7
Ongoing drug-use review through surveillance of serum antimicrobial-drug concentrations. Illsley SS. **Am J Hosp Pharm** 1988 Nov;45(11):2380–1
Manufacturers' recommendations for handling spilled antineoplastic agents. Johnson EG, et al. **Am J Hosp Pharm** 1989 Feb;46(2):318–9
Three simple steps toward clinical services. Lazarus HL. **Am J Hosp Pharm** 1988 Aug;45(8):1701–2
Pharmacy fax [letter] McAllister JC 3d. **Am J Hosp Pharm** 1989 Feb;46(2):255–6
Pharmacy-initiated introduction of patient-controlled analgesia to a 400-bed community hospital. McKenna TR, et al. **Am J Hosp Pharm** 1989 Feb;46(2):291–4
Personal intervention for nonformulary drug orders [letter] Proulx SM, et al. **Am J Hosp Pharm** 1989 Feb;46(2):256
Use of a microcomputer relational database in a long-term-care psychiatric facility. Salek WM. **Am J Hosp Pharm** 1988 Sep;45(9):1907–8
Justification and implementation of a cancer center pharmacy satellite. Sauer KA, et al. **Am J Hosp Pharm** 1989 Jul; 46(7):1389–92
Point-of-service computer system and drug-use evaluation: implications for pharmacy practice in ambulatory care. Sturek JK. **Am J Hosp Pharm** 1989 Jul;46(7 Pt 2):S17–20
Which firms are qualified to review the efficiency of pharmaceutical services? [letter] Suzuki NT, et al. **Am J Hosp Pharm** 1989 Jun;46(6):1127
Pharmacy managers should evaluate the full impact of formulary decisions [letter] Thornton JP, et al. **Am J Hosp Pharm** 1989 Jun;46(6):1131–2
Using desktop publishing to enhance pharmacy publications [letter] Utt JK, et al. **Am J Hosp Pharm** 1988 Sep; 45(9):1863–4
Experience with electronic bulletin boards. Walkley S. **Am J Hosp Pharm** 1989 Feb;46(2):316–8
Medication histories should not be included in measures of comprehensive clinical services [letter] Waller DJ, et al. **Am J Hosp Pharm** 1988 Aug;45(8):1668
Pharmacy public relations at a small rural hospital. Williamson GR. **Am J Hosp Pharm** 1988 Sep;45(9):1893–6
Providing clinical pharmacy services in an AIDS--oncology ambulatory-care clinic. Wong RJ, et al. **Am J Hosp Pharm** 1988 Nov;45(11):2351–4
Justification of an operating-room satellite pharmacy. Ziter CA, et al. **Am J Hosp Pharm** 1989 Jul;46(7):1353–61
The personal growth opportunities that we can create in the VA will help in the recruitment and retention of pharmacists' [interview] Ogden JE. **Am Pharm** 1988 Aug; NS28(8):22–4
Adverse drug reactions: a hospital pharmacy-based reporting scheme. Winstanley PA, et al. **Br J Clin Pharmacol** 1989 Jul;28(1):113–6
Effect of clinical pharmacy services on the quality of family practice physician prescribing and medication costs. Chrischilles EA, et al. **DICP** 1989 May;23(5):417–21
Drug bulletins: effectiveness in modifying prescribing and methods of improving impact. Plumridge RJ, et al. **DICP** 1989 Apr;23(4):330–4
Clinical pharmacy administration. Einarson TR. **Drug Intell Clin Pharm** 1988 Nov;22(11):903–5 (7 ref.)
Medicinal software. Cerne F. **Hospitals** 1988 Dec 20; 62(24):55–6
...as pharmacists gain respect. Oddis JA. **Hospitals** 1988 Dec 20;62(24):45–6
Online support functions of prescription order system and prescription audit in an integrated hospital information system. Ogura H, et al. **Med Inf (Lond)** 1988 Jul–Sep; 13(3):161–9
[Drug utilization at the University Hospital] Ciola L, et al. **Bol Of Sanit Panam** 1989 Jan;106(1):13–21 (Eng. Abstr.) **(Por)**
[Availability of courses in hospital pharmacy administration] **Bol Of Sanit Panam** 1988 Sep;105(3):311–3 **(Spa)**

STANDARDS

Maintaining patient confidentiality in a case of potential substance abuse. McCart GM, et al. **Am J Hosp Pharm** 1989 Jan;46(1):116–9
Patient satisfaction with ambulatory-care pharmaceutical services in a major cancer center. Muller RJ, et al. **Am J Hosp Pharm** 1988 Sep;45(9):1908–10
Leadership in a clinical profession. Smith JE. **Am J Hosp Pharm** 1988 Aug;45(8):1675–81
Hospital pharmacy: what is ethical? Veatch RM. **Am J Hosp Pharm** 1989 Jan;46(1):109–15
Quality control in intravenous additive service. Vermeij P. **Pharm Weekbl [Sci]** 1988 Aug 19;10(4):151–3
Quality control and drug utilization review. Wertheimer AI. **Pharm Weekbl [Sci]** 1988 Aug 19;10(4):154–7
[Non-patient related drugs at homes for the aged] Hunskår S, et al. **Tidsskr Nor Laegeforen** 1988 Nov 30; 108(33):3086–8 (Eng. Abstr.) **(Nor)**

TRENDS

National survey of recent changes in hospital policies on pharmaceutical sales representatives' activities. Thomas J 3d. **Am J Hosp Pharm** 1989 Mar;46(3):565–9
Hospital pharmacy in Japan. Nahata MC. **DICP** 1989 Apr; 23(4):334–5

PHARYNGEAL DISEASES

see related
OTORHINOLARYNGOLOGIC DISEASES
Lateral pharyngeal abscess due to Yersinia enterocolitica. Blinkhorn RJ Jr, et al. **Am J Med** 1988 Dec;85(6):851–2

CHEMICALLY INDUCED

Preparative regimens for marrow transplantation containing busulphan are associated with haemorrhagic cystitis and hepatic veno-occlusive disease but a short duration of leucopenia and little oro-pharyngeal mucositis. Atkinson K, et al. **Bone Marrow Transplant** 1987 Dec;2(4):385–94

COMPLICATIONS

Oral feeding after total laryngectomy. Boyce SE, et al. **Head Neck** 1989 May–Jun;11(3):269–73
Associated carotid body tumour and pharyngeal pouch. Nunez DA, et al. **J Laryngol Otol** 1989 May;103(5):531–2
Acute stridor in childhood; retropharyngeal abscess. Yeo Ting Chuan. **Med J Malaysia** 1988 Mar;43(1):65–73
Tuberculous retropharyngeal abscess producing respiratory obstruction. Carroll N, et al. **Thorax** 1989 Jul;44(7):599–600
[The so-called globus syndrome or "a bolus in the throat"] Seifert K. **Med Monatsschr Pharm** 1989 Jul;12(7):209–11 **(Ger)**

DIAGNOSIS

The hypopharyngeal diverticulum. A simultaneous cineradiographic and manometric examination. Nilsson ME, et al. **Acta Otolaryngol (Stockh)** 1988 Sep–Oct; 106(3–4):314–20
Tonsillar sarcoidosis. Hoover EL, et al. **J Tenn Med Assoc** 1989 Mar;82(3):131–2 (9 ref.)
Recognition and management of invasive pharyngeal candidiasis in acute leukemia. Barrett AP. **Oral Surg Oral Med Oral Pathol** 1989 Mar;67(3):275–8
Pharyngeal gonorrhea screening in adolescents: is it necessary? Brown RT, et al. **Pediatrics** 1989 Oct; 84(4):623–5
[Less common purulent complications in the field of otorhinolaryngology] Veselý J, et al. **Cesk Otolaryngol** 1988 Jul;37(4):213–6 (Eng. Abstr.) **(Cze)**
[Radiologic evaluation of the pharynx] Ekberg O. **Radiologe** 1989 Jun;29(6):285–94 (59 ref.) (Eng. Abstr.) **(Ger)**
[Primary atypical syphilis (bifocal, tonsillar and perianal)] Golumba R, et al. **Rev Chir [Otorinolaringol]** 1988 Jul–Sep; 33(3):213–6 (Eng. Abstr.) **(Rum)**
[Treatment possibilities in rhinopharyngolaryngo-tracheobronchial scleroma] Pop T, et al. **Rev Chir [Otorinolaringol]** 1988 Oct–Dec; 33(4):299–302 (Eng. Abstr.) **(Rum)**

DRUG THERAPY

Severe epinephrine-propranolol interaction. Gandy W. **Ann Emerg Med** 1989 Jan;18(1):98–9
Enoxacin as one day oral treatment of men with anal or pharyngeal gonorrhoea. Bakhtiar M, et al. **Genitourin Med** 1988 Dec;64(6):364–6
Treating genitourinary and pharyngeal gonorrhoea with single dose ceftriaxone. Christophersen J, et al. **Genitourin Med** 1989 Jan;65(1):14–7
Fluconazole versus ketoconazole in oropharyngeal candidiasis in AIDS [letter; comment] **Lancet** 1989 May 20;1(8647):1130–1. **Comment on:** Lancet 1989 Apr 8;1(8641):746–8
Comparison of fluconazole and ketoconazole for oropharyngeal candidiasis in AIDS [see comments] De Wit S, et al. **Lancet** 1989 Apr 8;1(8641):746–8. **Comment in:** Lancet 1989 May 20;1(8647):1130–1
Oral and pharyngeal candidiasis. Topical agents for management and prevention. Epstein JB. **Postgrad Med** 1989 Apr;85(5):257–8, 263–5, 268–9 (29 ref.)
'Little bits of stuff' [letter] Paris JA. **Practitioner** 1988 Apr 22;232(1447):431

ENZYMOLOGY

Wound amylase estimation and the prediction of pharyngocutaneous fistulae. Fielder CP, et al. **Clin Otolaryngol** 1989 Apr;14(2):101–5

ETIOLOGY

Pharyngeal fistulas in postoperative hypothyroid patients. Talmi YP, et al. **Ann Otol Rhinol Laryngol** 1989 Apr;98(4 Pt 1):267–8
Pharyngeal stenosis in Behçet's disease. Hamza M. **Clin Exp Rheumatol** 1988 Apr–Jun;6(2):139–40
Airgun pellet injuries of the neck. Cook JA, et al. **J Laryngol Otol** 1989 Apr;103(4):432–4
Pharyngeal paralysis due to botulinum toxin injection. Koay CE, et al. **J Laryngol Otol** 1989 Jul;103(7):698–9
[Frequency and severity of throat complaints following general anesthesia with the insertion of various endotracheal tubes] Lipp M, et al. **Anaesthesist** 1988 Dec; 37(12):758–66 (Eng. Abstr.) **(Ger)**
[Osteochondroma of the axis bulging into the peripharyngeal space and pharynx] Karnicki C. **Otolaryngol Pol** 1988; 42(5):375–7 (Eng. Abstr.) **(Pol)**

IMMUNOLOGY

[Allergic phenomena in the eyes, ear, nose and throat and the gastro-intestinal system] **Dupin Refulim** 1969 Mar; 28(2–3):179–205 **(Heb)**
[Detection of C. trachomatis antigens in the epipharyngeal biopsy specimen of a case of adult inclusion conjunctivitis accompanied by an epipharyngeal infection] Nakagawa H, et al. **Nippon Ganka Gakkai Zasshi** 1988 May;92(5):811–7 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

Transmission of genital mycoplasmas from mother to neonate in women with prolonged membrane rupture. Dinsmoor MJ, et al. **Pediatr Infect Dis J** 1989 Aug;8(8):483–7

PATHOLOGY

Pathologic quiz case 1. Plasma cell granuloma. Drucker C, et al. **Arch Otolaryngol Head Neck Surg** 1989 Aug; 115(8):998–1000

PHYSIOPATHOLOGY

[Comparative tympanometric study, in normal subjects and in rhino- and oropharynx diseases] Baixauli Besó A. **An Otorrinolaringol Ibero Am** 1988;15(6):595–606 (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

Prediction and prevention of fistulae after major head and neck surgery: a preliminary report. Morton RP, et al. **Aust N Z J Surg** 1988 Dec;58(12):951–3

Protection against streptococcal pharyngeal colonization with a vaccinia: M protein recombinant. Fischetti VA, et al. **Science** 1989 Jun 23;244(4911):1487–90

PSYCHOLOGY

A lump in the throat. **Lancet** 1989 Mar 11;1(8637):534 (19 ref.)

RADIOGRAPHY

The aspirated foreign body—an unusual diagnostic marker. Gibbons CL, et al. **Br Dent J** 1988 Oct 22;165(8):294–5

View from inside radiology in focus. 'Air in the neck'. Phelps PD, et al. **J Laryngol Otol** 1989 Mar;103(3):337

[Diseases of the upper aerodigestive tract and neck—clinical aspects and challenges for the radiologist] Pau HW. **Rontgenblatter** 1989 May;42(5):189–94 (Eng. Abstr.) **(Ger)**

[Diverticula of the pharyngoesophageal area] Cerro P, et al. **Radiol Med (Torino)** 1989 Mar;77(3):195–200 (Eng. Abstr.) **(Ita)**

SURGERY

The role of radiotherapy and musculocutaneous flaps in oropharyngocutaneous fistulas. Brown PF 3d, et al. **Am J Surg** 1988 Oct;156(4):256–60

Hypopharyngeal stenosis and fistulas. Use of the radial forearm flap. Delaere PR, et al. **Arch Otolaryngol Head Neck Surg** 1988 Nov; 114(11):1326–9

Repair of post-laryngectomy pharyngeal fistulae. Rubin JS. **J Laryngol Otol** 1989 Mar;103(3):302–5

Lighting: aid to pharyngeal pouch identification [letter] Wengraf C. **J Laryngol Otol** 1989 Jan;103(1):124

Endoscopic diverticulotomy versus internal diverticulectomy in the treatment of pharyngeal pouch [letter] Wilson JA. **J R Coll Surg Edinb** 1988 Dec;33(6):343

About reconstruction of the pharynx with colon in extensive corrosive strictures. Popovici Z. **Kurume Med J** 1989; 36(1):41–7

The sternocleidomastoid myoperiosteal flap for esophagopharyngeal reconstruction and fistula repair: clinical and experimental study. Friedman M, et al. **Laryngoscope** 1988 Oct;98(10):1084–91

[Role of cricopharyngeal myotomy associated with diverticuloplexy in the treatment of Zenker's diverticulum (15 years' experience)] Hauters P, et al. **Ann Chir** 1988; 42(10):726–30 (Eng. Abstr.) **(Fre)**

[Pharyngo-esophageal diverticula. Treatment and results] Laccourreye H, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(6):423–9 (14 ref.) (Eng. Abstr.) **(Fre)**

[The base of the piriform sinus in the surgical treatment of fistula of the 4th endobranchial pouch. Apropos of 8 cases] Manach Y, et al. **Ann Otolaryngol Chir Cervicofac** 1988; 105(5):391–6 (Eng. Abstr.) **(Fre)**

[Surgical treatment of combined cicatricial stenoses of the pharynx, esophagus and stomach following chemical burns] Mumladze RB. **Klin Khir** 1988;(10):48–50 **(Rus)**

THERAPY

[Laryngopharyngeal cysts: 10 year's clinical therapeutic experience] Corradini C, et al. **Riv Eur Sci Med Farmacol** 1987 Dec;9(4):413–7 (Eng. Abstr.) **(Ita)**

VETERINARY

What is your diagnosis? Retropharyngeal abscess and cellulitis associated with a metallic foreign body. Baker JC, et al. **J Am Vet Med Assoc** 1989 Aug 1;195(3):382–3

Guttural pouch tympany: 15 cases (1977–1986). McCue PM, et al. **J Am Vet Med Assoc** 1989 Jun 15;194(12):1761–3

Squamous-cell carcinoma and oral, pharyngeal and nasal lesions caused by foreign bodies in feed. Cases from a long-term study in rats. Madsen C. **Lab Anim** 1989 Jul; 23(3):241–7

PHARYNGEAL MUSCLES see under **MUSCLES**

PHARYNGEAL NEOPLASMS

Parapharyngeal neurilemmomas. Bradley N, et al. **Br J Oral Maxillofac Surg** 1989 Apr;27(2):139–46

Parapharyngeal tumours: a review of 23 cases. Allison RS, et al. **Clin Otolaryngol** 1989 Jun;14(3):199–203

Retropharyngeal infiltrating lipoma—a case report. Eisele DW, et al. **Head Neck Surg** 1988 Jul–Aug;10(6):416–21

Adult parapharyngeal extracardiac rhabdomyoma. Stringer SP, et al. **Head Neck Surg** 1988 Jul–Aug;10(6):422–6

Pulmonary lymphangitic carcinomatosis from hypopharyngeal adenosquamous carcinoma. Zieske LA, et al. **Head Neck Surg** 1988 Jan–Feb;10(3):195–8

Breast metastasis from a pharyngeal carcinoma. Nunez DA, et al. **J Laryngol Otol** 1989 Feb;103(2):227–8

Carcinoma of the pharyngeal pouch. Stevens DJ. **J Laryngol Otol** 1989 Jul;103(7):695–7

So-called hairy polyp resembling an auricle. Kanzaki S, et al. **Otolaryngol Head Neck Surg** 1988 Oct;99(4):424–6

Squamous cell carcinoma of the upper aero-digestive tract in women. Panis X, et al. **Radiother Oncol** 1988 Nov; 13(3):175–9

[Bronchial cancer associated with upper respiratory and digestive tract cancers] Etienne G, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(4):219–24 (Eng. Abstr.) **(Fre)**

[A case of chromaffin paraganglioma of the hypopharynx] Filippin S, et al. **Acta Otorhinolaryngol Ital** 1989 Jan–Feb; 9(1):95–7 (Eng. Abstr.) **(Ita)**

[Less common tumors of the pharynx] Barta T. **Cesk Otolaryngol** 1988 Jul;37(4):209–12 (Eng. Abstr.) **(Slo)**

COMPLICATIONS

[Survey of the nutritional status of patients with locally advanced laryngo-pharyngeal tumors] Zemplén B, et al. **Orv Hetil** 1989 Jul 23;130(30):1591–5 (33 ref.) (Eng. Abstr.) **(Hun)**

[A new reflex cardiovascular syndrome: recurrent vasodepressive syncope caused by lesions or tumors of the parapharyngeal space. Etiopathogenesis, clinical picture, differential diagnosis with carotid sinus syndrome and glossopharyngeal neuralgia–asystole syndrome. Therapy by intracranial resection of the 9th cranial nerve] Cicogna R, et al. **G Ital Cardiol** 1988 May;18(5):361–8 (Eng. Abstr.) **(Ita)**

[Recurrent subglottic laryngitis in children with angiomas of the head and neck] Perek D, et al. **Pediatr Pol** 1988 Apr;63(4):249–55 **(Pol)**

DIAGNOSIS

Early detection, diagnosis, and management of oral and oropharyngeal cancer. Mashberg A, et al. **CA** 1989 Mar–Apr;39(2):67–88 (49 ref.)

Factors delaying the diagnosis of oral and oropharyngeal carcinomas. Guggenheimer J, et al. **Cancer** 1989 Aug 15; 64(4):932–5

Role of fine needle aspiration in the diagnosis of lesions of the oral cavity, oropharynx, and nasopharynx. Scher RL, et al. **Cancer** 1988 Dec 15;62(12):2602–6

Submucosal hypopharyngeal lipoma. Nash M, et al. **Ear Nose Throat J** 1989 Jun;68(6):465–8

Magnetic resonance for tumours of the skull base and parapharyngeal region: discussion paper. Phelps PD. **J R Soc Med** 1988 Nov;81(11):649–52

The role of leucocyte elastase in malignant tumors of the head and neck. Zöller E. **Laryngoscope** 1989 Sep; 99(9):971–3

Oral and oropharyngeal malignancies: the case for early detection. Hampshire J, et al. **Practitioner** 1988 Jul; 232(1452):766

The secret in a casual parenthesis. Murphy-Greenwood MA. **Wis Med J** 1988 Sep;87(9):13, 15

[Pharyngeal epignathus teratoma. Echographic and prognostic study] Crimail P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(8):1069–74 (Eng. Abstr.) **(Fre)**

[X-ray computed tomography and MRI of tumors of the pharyngolarynx] Piekarski JD. **Pathol Biol (Paris)** 1989 Feb;37(2):106 **(Fre)**

[Precancerous diseases and the early recognition of pharyngeal and laryngeal carcinomas] Hanson J, et al. **Arch Geschwulstforsch** 1989;59(2):99–105 (Eng. Abstr.) **(Ger)**

[Prognostic factors in laryngeal cancer] Kramp B, et al. **Arch Geschwulstforsch** 1989;59(3):183–9 (Eng. Abstr.) **(Ger)**

[Detection and assessment of cervical lymph node metastases in head-neck tumors. A comparison of methods] Heppt W, et al. **Laryngorhinootologie** 1989 Jun;68(6):327–32 (Eng. Abstr.) **(Ger)**

[Radiologic evaluation of the pharynx] Ekberg O. **Radiologe** 1989 Jun;29(6):285–94 (59 ref.) (Eng. Abstr.) **(Ger)**

[Laryngeal and hypopharyngeal carcinoma—the limits and advantages of sonography] Braun U, et al. **ROFO** 1989 Jul;151(1):23–6 (Eng. Abstr.) **(Ger)**

[Magnetic resonance tomography of the oral cavity, the oropharynx and the mouth floor: comparison with computed tomography] Lenz M, et al. **ROFO** 1989 Apr; 150(4):425–33 (Eng. Abstr.) **(Ger)**

[Diagnostic delay in neoplasms of the oral cavity and oropharynx] Squadrelli-Saraceno M, et al. **Acta Otorhinolaryngol Ital** 1988 May-Jun;8(3):281–97 (Eng. Abstr.) **(Ita)**

[Clinico-diagnostic aspects of meningiomas in parapharyngeal locations] Falileev GV, et al. **Vestn Rentgenol Radiol** 1988 Nov-Dec;(6):39–44 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Combined therapy for resectable head and neck cancer. A phase 3 intergroup study. Schuller DE, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar;115(3):364–8

Neoadjuvant chemotherapy in early-stage and locally advanced small bulk squamous cell carcinoma of the oral cavity and oropharynx. Tichler T, et al. **Isr J Med Sci** 1988 Sep-Oct;24(9–10):539–44

[Randomized trial of initial chemotherapy with cisplatin alone or in combination in 241 advanced carcinomas of the upper respiratory and digestive tract] Chauvergne J, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(8):581–9 (Eng. Abstr.) **(Fre)**

[Tumor and lymph node response to chemotherapy. Prognosis in cancer of the pyriform sinus and the lateral laryngeal margin] Janot F, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(6):415–21 (Eng. Abstr.) **(Fre)**

[Advanced carcinoma of the oropharynx: the value of induction chemotherapy before locoregional treatment. A retrospective study of 138 cases] Calais G, et al. **Bull Cancer (Paris)** 1988;75(10):971–8 (Eng. Abstr.) **(Fre)**

[Induction chemotherapy with Cis DDP-5FU in cancers of the upper respiratory and digestive tract after 70 years of age] Demard F, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(2):197–200 (Eng. Abstr.) **(Fre)**

[Pathohistologic studies of serial sections of squamous cell cancer of the oral cavity and oropharynx following cytostatic induction therapy with bleomycin and cisplatin] Bettinger R, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Nov; 67(11):580–5 (Eng. Abstr.) **(Ger)**

[Laser light-induced cytotoxicity of cultivated squamous cell cancer cells of the head and neck following photosensitization] Wustrow TP, et al. **Laryngol Rhinol Otol (Stuttg)** 1989 Jan;68(1):44–50 (Eng. Abstr.) **(Ger)**

[Vincristine-bleomycin-methotrexate in the treatment of recurrence of ORL carcinoma] Airoldi M, et al. **Acta Otorhinolaryngol Ital** 1988 Mar-Apr;8(2):125–31 (Eng. Abstr.) **(Ita)**

[A case of mesopharyngeal carcinoma that showed a complete response to induction chemotherapy] Tsuruta Y, et al. **Gan No Rinsho** 1988 Oct;34(12):1693–8 (Eng. Abstr.) **(Jpn)**

EPIDEMIOLOGY

Time trends in upper alimentary tract cancer rates and alcohol and tobacco consumption in Australia. McMichael AJ, et al. **Community Health Stud** 1988;12(3):289–95

Metastases to and from the upper aerodigestive tract in the population of Rochester, Minnesota, 1935–1984. Bouquot JE, et al. **Head Neck** 1989 May-Jun;11(3):212–8

Squamous cell carcinoma of the oral cavity and oropharynx in young adults. Cusumano RJ, et al. **Head Neck Surg** 1988 Mar-Apr;10(4):229–34

Changing incidence of cancer of the tongue, oral cavity, and pharynx in Denmark. Møller H. **J Oral Pathol Med** 1989 Apr;18(4):224–9

Risk of lung, larynx, pharynx and buccal cavity cancers among carbon electrode manufacturing workers. Moulin JJ, et al. **Scand J Work Environ Health** 1989 Feb;15(1):30–7

[Analysis of cases of cancer of the upper respiratory tract classified as occupational disease in Poland 1971–1986] Sułkowski W, et al. **Pol Tyg Lek** 1988 Jun 27;43(26):839–42 (Eng. Abstr.) **(Pol)**

[Occupational exposure in cancer of the mouth, pharynx and larynx] Oreggia F, et al. **An Otorrinolaringol Ibero Am** 1989;16(4):365–76 (Eng. Abstr.) **(Spa)**

ETIOLOGY

Role of tobacco and alcoholic beverages in the etiology of cancer of the oral cavity/oropharynx in Torino, Italy. Merletti F, et al. **Cancer Res** 1989 Sep 1;49(17):4919–24

Role of alcohol in cancers of the upper alimentary tract: use of models in risk assessment. Notani PN. **J Epidemiol Community Health** 1988 Jun;42(2):187–92

Reflux as an etiological factor of carcinoma of the laryngopharynx [see comments] Ward PH, et al. **Laryngoscope** 1988 Nov;98(11):1195–9. **Comment in:** Laryngoscope 1989 Jun;99(6 Pt 1):666

Black tobacco, wine and mate in oropharyngeal cancer. A case-control study from Uruguay. De Stefani E, et al. **Rev Epidemiol Sante Publique** 1988;36(6):389–94

[Cancerous Zenker's diverticulum. Description of a case and review of the literature] Jadoul M, et al. **Acta Gastroenterol Belg** 1987 Nov-Dec;50(6):680–4 (12 ref.) (Eng. Abstr.) **(Fre)**

[Buccopharyngeal Kaposi's sarcoma in AIDS. Apropos of 51 cases] Gehanno P, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(6):453–7 (Eng. Abstr.) **(Fre)**

GENETICS

Inversion inv(4)(p15q26) in a squamous cell carcinoma of the hypopharynx. Jin Y, et al. **Cancer Genet Cytogenet** 1988 Dec;36(2):233–4

Chromosome sensitivity to bleomycin-induced mutagenesis,

an independent risk factor for upper aerodigestive tract cancers. Spitz MR, et al. **Cancer Res** 1989 Aug 15; 49(16):4626–8

IMMUNOLOGY

Interleukin-2 release from lymphocytes of patients with head and neck cancer. Wustrow TP, et al. **Ann Otol Rhinol Laryngol** 1989 Mar;98(3):179–84

Histocompatibility antigens in primary and metastatic squamous cell carcinoma of the larynx. Esteban F, et al. **Int J Cancer** 1989 Mar 15;43(3):436–42

[Interleukin 2 secretion by lymphocytes of patients with squamous cell cancer of the oropharynx or larynx] Wustrow TP. **Laryngorhinootologie** 1989 Feb;68(2):110–7 (Eng. Abstr.) **(Ger)**

[The value of CEA in post-therapeutic monitoring of head and neck carcinoma] Fiorella R, et al. **Acta Otorhinolaryngol Ital** 1988 Mar–Apr;8(2):133–6 (Eng. Abstr.) **(Ita)**

[Study of various immunologic indicators in patients with laryngopharyngeal cancer before and after administration of T-activin] Nummaev GM, et al. **Vestn Otorinolaringol** 1989 Jan–Feb;(1):67 **(Rus)**

METABOLISM

Cellular retinol-binding protein in mucosa, in benign and malignant non-squamous cell tumours of the head and neck. Wahlberg P, et al. **Acta Otolaryngol (Stockh)** 1989 Mar–Apr;107(3–4):313–20

Alterations in glycoconjugate expression following malignant transformation of human oropharyngeal squamous mucosa. Freije SA, et al. **Laryngoscope** 1989 Feb;99(2):197–203

What energy level is required to avoid nutrient depletion after surgery in oropharyngeal cancer? Zurlo F, et al. **ORL J Otorhinolaryngol Relat Spec** 1988;50(4):236–45

MORTALITY

A multivariate analysis of determinants of survival for patients with squamous cell carcinoma of the head and neck. Ildstad ST, et al. **Ann Surg** 1989 Feb;209(2):237–41

Analysis of survival after induction chemotherapy in pyriform sinus carcinoma. Brasnu D, et al. **Head Neck Surg** 1988 Jul–Aug;10(6):396–401

[Changes in the age of illness onset in cancer of the hypopharynx and larynx since 1960. The epidemiologic context in Austria] Swoboda H, et al. **HNO** 1989 Mar; 37(3):85–91 (Eng. Abstr.) **(Ger)**

[A longitudinal study using the survival table method in carcinoma of the oropharynx] Puxeddu P, et al. **Acta Otorhinolaryngol Ital** 1986 Sep–Oct;6(5):455–72 (Eng. Abstr.) **(Ita)**

PATHOLOGY

Clinical and pathologic prognostic variables in oropharyngeal squamous cell carcinoma. Conte CC, et al. **Am J Surg** 1989 Jun;157(6):582–4

Clinical criteria for identifying early oral and oropharyngeal carcinoma: erythroplasia revisited. Mashberg A, et al. **Am J Surg** 1988 Oct;156(4):273–5

Indirect videolaryngoscopy versus direct endoscopy for larynx and pharynx cancer staging. Toward elimination of preliminary direct laryngoscopy. Bastian RW, et al. **Ann Otol Rhinol Laryngol** 1989 Sep;98(9):693–8

Computed tomography in determining laryngeal involvement of hypopharyngeal carcinoma. Hirano M, et al. **Ann Otol Rhinol Laryngol** 1988 Sep–Oct;97(5 Pt 1):476–82

Pathologic quiz case 2. Malignant lymphoma, diffuse, small, noncleaved cell, Burkitt's type. Laser RH, et al. **Arch Otolaryngol Head Neck Surg** 1989 May;115(5):636–7, 639

T staging of the laryngohypopharyngeal carcinoma. A 7-year multidisciplinary experience. Sulfaro S, et al. **Arch Otolaryngol Head Neck Surg** 1989 May;115(5):613–20

Fibrosarcoma of the neck in an adult female. Hirabayashi H, et al. **Auris Nasus Larynx** 1989;16(1):51–8

Basaloid-squamous carcinoma of the hypopharynx. McKay MJ, et al. **Cancer** 1989 Jun 15;63(12):2528–31 (12 ref.)

Late nervous system disorders in cured malignant lymphoma: a clinical and neuropathological study. Vesterby A, et al. **Clin Neuropathol** 1988 May–Jun;7(3):134–8

Ganglioneuroma in retropharyngeal location. Case report of a sixteen-month-old boy. Papšo S, et al. **Helv Paediatr Acta** 1989 Feb;43(4):303–5

Midline granuloma. Nanavati NJ, et al. **J Assoc Physicians India** 1988 May;36(5):339–41

Postcricoid hemangioma. Tonsakulrungruang K. **J Med Assoc Thai** 1988 Aug;71(8):466–8

Reduction of cytochrome c by oral mucosa of patients with oropharyngeal cancer. Horn W, et al. **Klin Wochenschr** 1988;66 Suppl 11:105–7

Evaluation of histopathologic parameters in predicting cervical lymph node metastasis of oral and oropharyngeal carcinomas. Shingaki S, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec;66(6):683–8

A method for routine approach to laryngeal and hypopharyngeal surgical specimens by whole organ sections in the horizontal plane. Sulfaro S, et al. **Pathol Res Pract** 1989 Feb;184(2):248–54

[CT-guided transthoracic biopsy] Lorentzen T, et al. **Ugeskr Laeger** 1988 Nov 7;150(45):2743–6 (Eng. Abstr.) **(Dan)**

[Mobility of the vocal cord and the arytenoid in cancer of the larynx and the hypopharynx. Anatomo-clinical study] Brasnu D, et al. **Ann Otolaryngol Chir Cervicofac** 1988; 105(6):435–41 (Eng. Abstr.) **(Fre)**

[The immunogold-silver technic in detecting cellular nucleic acids and antigens in squamous epithelial cancers] Henke RP, et al. **Acta Histochem Suppl (Jena)** 1989;37:73–8 **(Ger)**

[Submicroscopic changes in the jejunum in ectopic sites. A scanning and transmission electron microscopy study following free, microvascular jejunum transfer] Vollrath M, et al. **HNO** 1989 Apr;37(4):133–9 (Eng. Abstr.) **(Ger)**

[Differential diagnosis of parapharyngeal tumors—the vagus neurinoma] Kehrl W, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Aug;67(8):389–91 (Eng. Abstr.) **(Ger)**

[Cancer in a hypopharynx diverticulum] Arendt T, et al. **Laryngorhinootologie** 1989 Jul;68(7):413–5 (Eng. Abstr.) **(Ger)**

[The most frequent sites of origin of squamous cell carcinoma of the oral cavity and oropharynx. Interpretative hypothesis] Gandolfo S, et al. **Minerva Stomatol** 1988 Oct; 37(10):751–5 (21 ref.) (Eng. Abstr.) **(Ita)**

[Benign mesenchymoma of the hypopharynx] Ferbo U, et al. **Pathologica** 1988 May–Jun;80(1067):371–7 (Eng. Abstr.) **(Ita)**

[Granular cell myoblastoma of the pharynx] Maj J, et al. **Wiad Lek** 1988 Jul 15;41(14):958–62 (Eng. Abstr.) **(Pol)**

PREVENTION & CONTROL

[Radiation therapy of carcinoma of the hypopharynx and recurrence in the epipharynx and mesopharynx] Itami J, et al. **Gan No Rinsho** 1989 Mar;35(4):445–9 (Eng. Abstr.) **(Jpn)**

PSYCHOLOGY

The psychodynamics of prolonged treatment in a patient with cancer of the hypopharynx. Feldman JE, et al. **Cancer Nurs** 1988 Dec;11(6):362–7

[The significance of psychological factors in the early diagnosis of laryngeal and hypopharyngeal tumors] Vračko-Tuševljak M, et al. **Laryngorhinootologie** 1989 Feb; 68(2):118–21 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

The diagnosis of tumours involving the parapharyngeal space by computed tomography. Whyte AM, et al. **Br J Radiol** 1989 Jun;62(738):526–31

Computed tomographic evaluation of regional lymph node involvement in cancer of the oral cavity and oropharynx. Close LG, et al. **Head Neck** 1989 Jul–Aug;11(4):309–17

Carcinoma in a pharyngeal diverticulum [letter] Jensen BM, et al. **J Clin Gastroenterol** 1989 Feb;11(1):119

Ossifying lipoma. Blanshard JD, et al. **J Laryngol Otol** 1989 Apr;103(4):429–31

Pedunculated squamous papilloma of the laryngopharynx. Desai S, et al. **J Laryngol Otol** 1989 Feb;103(2):209–10

Pathologic assessment of computerized tomography accuracy for the evaluation of the laryngeal cartilaginous framework in laryngopharyngeal carcinomas. Sulfaro S, et al. **Tumori** 1989 Apr 30;75(2):156–62

[Computed tomographic appearance of the recurrent patterns of oropharyngeal and oral cavity squamous cell carcinomas] Sasaki F, et al. **Rinsho Hoshasen** 1988 Oct; 33(10):1071–7 (Eng. Abstr.) **(Jpn)**

RADIOTHERAPY

Selection of patients for re-irradiation with local implants in carcinomas of oropharynx and tongue. Langlois D, et al. **Acta Oncol** 1988;27(5):571–3

An afterloading technique suitable for the oral cavity and oropharynx and capable of adaptation for use with remote afterloading units. Dawes PJ, et al. **Br J Radiol** 1988 Nov; 61(731):1067–9

First interim progress report on the second British Institute of Radiology Fractionation Study: short versus long overall treatment times for radiotherapy of carcinoma of the laryngopharynx. Wiernik G, et al. **Br J Radiol** 1989 May; 62(737):450–6

Dose fractionation and regeneration in radiotherapy for cancer of the oral cavity and oropharynx: tumor dose-response and repopulation. Maciejewski B, et al. **Int J Radiat Oncol Biol Phys** 1989 Mar;16(3):831–43

Misonidazole combined with split-course radiotherapy in the treatment of invasive carcinoma of larynx and pharynx: report from the DAHANCA 2 study. Overgaard J, et al. **Int J Radiat Oncol Biol Phys** 1989 Apr;16(4):1065–8

Radiotherapy alone for oropharyngeal carcinomas: the role of fraction size (2 Gy vs 2.5 Gy) on local control and early and late complications. Thomas F, et al. **Int J Radiat Oncol Biol Phys** 1988 Nov;15(5):1097–102

Misonidazole neuropathy. A prospective study. Melgaard B, et al. **J Neurooncol** 1988 Nov;6(3):227–30

Bacterial tracheitis: an unusual pathogen. Flexon PB, et al. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):619–20

Clinical results of radiotherapy for the oropharyngeal cancer. Zajusz A. **Radiobiol Radiother (Berl)** 1988;29(5):571–5

Definition of iso-effective dosage according to the alpha-beta-model for a squamous carcinoma of the head-and-neck region. Wagner W. **Strahlenther Onkol** 1989 Jul;165(7):518–9

[Radiotherapy of carcinoma of the oropharynx. Results of 10 years' experience at the University Hospital Center, Tours] Calais G, et al. **Rev Stomatol Chir Maxillofac** 1989; 90(1):24–9 (Eng. Abstr.) **(Fre)**

[Odontogenesis and dentition development following irradiation of pediatric tumors of the maxillofacial area] Kahl B. **Fortschr Kieferorthop** 1989 Apr;50(2):127–35 (Eng. Abstr.) **(Ger)**

[Taste variations after radiotherapy of neoplasms of the pharynx and oral cavity] Barbieri M, et al. **Acta Otorhinolaryngol Ital** 1988 Jul–Aug;8(4):397–404 (Eng. Abstr.) **(Ita)**

[Radiation therapy of carcinoma of the hypopharynx and recurrence in the epipharynx and mesopharynx] Itami J, et al. **Gan No Rinsho** 1989 Mar;35(4):445–9 (Eng. Abstr.) **(Jpn)**

[Radiation therapy of hypopharyngeal carcinoma with special reference to nodal control] Teshima T, et al. **Rinsho Hoshasen** 1988 Jun;33(6):651–6 (Eng. Abstr.) **(Jpn)**

[Evaluation of the effectiveness of palliative irradiation with high fractionated doses and planned intervals in patients with advanced cancer of the oral cavity and pharynx] Skołyszewski J, et al. **Nowotwory** 1988 Oct–Dec; 38(4):251–60 (Eng. Abstr.) **(Pol)**

[Thermoradiotherapy of the late stages of cancer of the oral mucosa and oropharynx] Vorob'ev IuI, et al. **Med Radiol (Mosk)** 1989 Feb;34(2):48–52 (Eng. Abstr.) **(Rus)**

[Analysis of plasma fibrinogen in evaluating the effectiveness and prognosis of polyradiomodifying therapy of malignant tumors of the upper respiratory tract] Bykov VL, et al. **Vestn Otorinolaringol** 1989 Mar–Apr;(2):59–62 (Eng. Abstr.) **(Rus)**

SECONDARY

Hypopharyngeal involvement by thyroid cancer. Timon CI, et al. **J Laryngol Otol** 1989 Jun;103(6):629–31

Occult medullary carcinoma of the thyroid presenting as neck and parapharyngeal metastases. Pearlman SJ, et al. **Otolaryngol Head Neck Surg** 1988 Nov;99(5):509–12

SURGERY

Immediate tracheoesophageal puncture for voice restoration in laryngopharyngeal resection. Lau WF, et al. **Am J Surg** 1988 Oct;156(4):269–72

Critical assessment of supraomohyoid neck dissection. Spiro JD, et al. **Am J Surg** 1988 Oct;156(4):286–9

Utility of near-total laryngectomy for supraglottic, pharyngeal, base-of-tongue, and other cancers. DeSanto LW, et al. **Ann Otol Rhinol Laryngol** 1989 Jan;98(1 Pt 1):2–7

Reconstruction of the pharynx after resection for cancer. A comparison of methods. Coleman JJ 3d. **Ann Surg** 1989 May;209(5):554–60; discussion 561

Mandibulotomy in the irradiated patient. Davidson J, et al. **Arch Otolaryngol Head Neck Surg** 1989 Apr;115(4):497–9

Approach to the pterygomaxillary space and posterior part of the tongue by lateral stair-step mandibulotomy. Pinsolle J, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar; 115(3):313–5

Partial laryngopharyngectomy for piriform sinus carcinoma. Technique and preliminary results. Hirano M, et al. **Auris Nasus Larynx** 1988;15(2):129–36

Tracheal tear during laryngopharyngectomy and transhiatal oesophagectomy: a case report. Sung HM, et al. **Can J Anaesth** 1989 May;36(3 Pt 1):333–5

Rigid internal fixation and vascularized bone grafting in mandibular reconstruction. Wenig BL, et al. **Clin Plast Surg** 1989 Jan;16(1):125–31 (71 ref.)

Pharyngeal repair after laryngopharyngectomy: 4-year experience. Rifai M, et al. **Head Neck Surg** 1987 Nov–Dec; 10(2):99–101

Long-term results in treating squamous cell carcinoma of the lip, oral cavity, and oropharynx. Hemprich A, et al. **Int J Oral Maxillofac Surg** 1989 Feb;18(1):39–42

Mandibulotomy and radical radiotherapy: compatible or not? Davidson J, et al. **J Otolaryngol** 1988 Oct;17(6):279–81

Reconstruction of intermediate sized mucosal defects with the pectoralis major myofascial flap. Moloy PJ. **J Otolaryngol** 1989 Feb;18(1):32–5

Tumours of the parapharyngeal space [letter] Seward GR. **J R Coll Surg Edinb** 1989 Apr;34(2):111–2

Transhiatal esophagectomy with gastric transposition for pharyngolaryngeal malignant disease. Goldberg M, et al. **J Thorac Cardiovasc Surg** 1989 Mar;97(3):327–33

Zenker's diverticulum flap. Liston SL, et al. **Laryngoscope** 1989 Jul;99(7 Pt 1):764–5

Advantages of pectoralis musculocutaneous flap pharyngeal reconstruction. Stein DW, et al. **Laryngoscope** 1989 Jul;99(7 Pt 1):691–6

The pleural osteomuscular flap in oropharyngeal reconstruction. Stromberg BV. **Laryngoscope** 1989 Mar; 99(3):339–41

The role of combined composite resection and irradiation in the management of carcinoma of the oral cavity and oropharynx. Wazer DE, et al. **Strahlenther Onkol** 1989 Jan; 165(1):18–22

[Inversion-stripping esophagectomy for treatment of hypopharyngeal, esophageal and cardial carcinomas] Yang JJ, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Jun; 19(2):210-2 (Eng. Abstr.) **(Chi)**

[The free forearm flap in covering defects of the pharynx and oral cavity] Bootz F. **HNO** 1988 Nov;36(11):462-6 (Eng. Abstr.) **(Ger)**

[Submicroscopic changes in the jejunum in ectopic sites. A scanning and transmission electron microscopy study following free, microvascular jejunum transfer] Vollrath M, et al. **HNO** 1989 Apr;37(4):133-9 (Eng. Abstr.) **(Ger)**

[Morphologic changes in the epithelium of myocutaneous pectoralis major islands flaps. A light and electron optic study] Beigel A, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Nov;67(11):586-9 (Eng. Abstr.) **(Ger)**

[Synovial sarcomas of the neck] Abrams J, et al. **Laryngorhinootologie** 1989 Jun;68(6):333-6 (Eng. Abstr.) **(Ger)**

[The temporalis muscle fascia flap for covering defects in the oropharynx. Report of 4 years experiences with 26 cases] Hüttenbrink KB. **Laryngorhinootologie** 1989 May; 68(5):272-7 (Eng. Abstr.) **(Ger)**

[Variable defect coverage and primary reconstruction following resection of T-4 cancer of the oropharynx by free transplanted small intestine] Siedek M, et al. **Zentralbl Chir** 1989;114(10):684-9 **(Ger)**

[Conservative surgery in the treatment of cancer of the pyriform sinus] Pogosov VS, et al. **Vestn Otorinolaringol** 1988 Jul-Aug;(4):52-4 (Eng. Abstr.) **(Rus)**

[Surgical treatment of patients with oropharyngeal cancer] Stadin GI, et al. **Vestn Otorinolaringol** 1988 Sep-Oct; (5):68-9 (Eng. Abstr.) **(Rus)**

[Plastic surgery of postoperative defects in patients with tumors of the maxillofacial area] Stadin GI, et al. **Vopr Onkol** 1989;35(7):853-6 (Eng. Abstr.) **(Rus)**

THERAPY

Percutaneous endoscopic gastrostomy in head and neck cancer patients. Hunter JG, et al. **Ann Surg** 1989 Jul; 210(1):42-6

Response to preoperative concomitant radiochemotherapy with mitomycin C and 5-fluorouracil in advanced head and neck cancer. Dobrowsky W, et al. **Eur J Cancer Clin Oncol** 1989 May;25(5):845-9

Lymphoepithelioma of the oropharynx. Bansberg SF, et al. **Otolaryngol Head Neck Surg** 1989 Apr;100(4):303-7

[Contribution of the combination of radiation and surgery in the treatment of invasive pharyngo-laryngeal carcinoma] Faucher A, et al. **Ann Otolaryngol Chir Cervicofac** 1988; 105(7):539-42 (Eng. Abstr.) **(Fre)**

[Chemotherapy and partial surgery in epithelioma of the pharyngo-larynx] Laccourreye H, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(6):409-14 (Eng. Abstr.) **(Fre)**

[Therapy of carcinoma of the oral cavity and the mesopharynx] Hamann D, et al. **Radiobiol Radiother (Berl)** 1989;30(3):221-6 (Eng. Abstr.) **(Ger)**

[Proposal for the management of epithelial carcinoma of the larynx and hypopharynx] **Orv Hetil** 1989 Apr 30; 130(18):949-50 **(Hun)**

[Clinicopathological study of advanced cancers of the oral cavity and pharynx--evaluation of the effects of chemotherapy and radiotherapy] Koieke S, et al. **Gan No Rinsho** 1989 Jun;35(7):834-9 (Eng. Abstr.) **(Jpn)**

[Investigation on the adequate administration interval with OK-432, using the cytotoxicity test] Tsukuda M, et al. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 1):423-5 **(Jpn)**

[Long-term results of the treatment of carcinoma of the hypopharynx and cervical esophagus] Okamoto M, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Sep;91(9):1375-80 (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

Nucleolar organiser regions in squamous tumours of the pharynx and larynx [letter] Bryan RL, et al. **J Clin Pathol** 1989 Feb;42(2):218

PHARYNGECTOMY

Combined gastric pull-up and microvascular jejunal transfer procedure after pharyngolaryngoesophagectomy. Asamura H, et al. **Ann Thorac Surg** 1989 Sep;48(3):423-5

Pharyngeal repair after laryngopharyngectomy: 4-year experience. Rifai M, et al. **Head Neck Surg** 1987 Nov-Dec; 10(2):99-101

Diverticulopexy and cricopharyngeal myotomy: treatment for the high-risk patient with a pharyngoesophageal (Zenker's) diverticulum. Konowitz PM, et al. **Otolaryngol Head Neck Surg** 1989 Feb;100(2):146-53

[The Chinese flap in reconstructing the posterior pharyngolaryngeal wall, mouth cavity and in reoperation after failure of pedicled digestive transfer] Trotoux J, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(5):354-9 (Eng. Abstr.) **(Fre)**

[Postoperative monitoring of a free jejunum transplant] Bootz F, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Nov;67(11):606 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Tracheal tear during laryngopharyngectomy and transhiatal oesophagectomy: a case report. Sung HM, et al. **Can J Anaesth** 1989 May;36(3 Pt 1):333-5

[Repair of deglutition troubles after partial surgery of the pharyngolarynx with injection of collage. Apropos of 9 cases] Bessède JP, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(5):343-8 (Eng. Abstr.) **(Fre)**

METHODS

Partial laryngopharyngectomy for piriform sinus carcinoma. Technique and preliminary results. Hirano M, et al. **Auris Nasus Larynx** 1988;15(2):129-36

Voice restoration after laryngopharyngoesophagectomy. Wenig BL, et al. **Otolaryngol Head Neck Surg** 1989 Jul; 101(1):11-3

[Hemipharyngolaryngectomies. Functional and carcinologic results] Laccourreye H, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(6):443-7 (Eng. Abstr.) **(Fre)**

REHABILITATION

Tracheoesophageal puncture for voice restoration after extended laryngopharyngectomy. Juarbe C, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar;115(3):356-9

PHARYNGITIS

CHEMICALLY INDUCED

Pharyngitis medicamentosa [letter] Halwell R. **Arch Otolaryngol Head Neck Surg** 1989 Aug;115(8):995

[A case of edematous pharyngolaryngitis in a man occupationally exposed to inhalation of freon gas] Tanturri G, et al. **Med Lav** 1988 May-Jun;79(3):219-22 (Eng. Abstr.) **(Ita)**

[Status of the upper respiratory tract and skin of workers manufacturing artificial mineral wool] Vasil'eva SV. **Gig Tr Prof Zabol** 1989;(4):48-50 **(Rus)**

COMPLICATIONS

Postanginal sepsis. Shapiro J, et al. **Head Neck** 1989 Mar-Apr;11(2):164-9

The Lemierre syndrome: suppurative thrombophlebitis of the internal jugular vein secondary to oropharyngeal infection. Sinave CP, et al. **Medicine (Baltimore)** 1989 Mar; 68(2):85-94 (75 ref.)

Postanginal sepsis. A pain in the neck. Sinnott JT 4th, et al. **Postgrad Med** 1989 Aug;86(2):77-8, 81-2

[Infections of the retropharyngeal space as a complication in pharyngitis] de Marie S, et al. **Ned Tijdschr Geneeskd** 1988 Sep 17;132(38):1748-53 (Eng. Abstr.) **(Dut)**

[A case from practice (127). Patient: Mrs. M. S., born 1952, housewife] Dollmeier T, et al. **Schweiz Rundsch Med Prax** 1989 Jan 17;78(3):46-7 **(Ger)**

DIAGNOSIS

The diagnosis of group A, beta-hemolytic streptococcal pharyngitis in the office setting [letter] Kellogg JA. **Am J Dis Child** 1989 Jul;143(7):761-2

The diagnosis of group A, beta-hemolytic streptococcal pharyngitis in the office setting. Rapid latex test vs throat culture. Taubman B, et al. **Am J Dis Child** 1989 Jan; 143(1):102-4

Group A streptococcal rapid test. Antigen detection after 18-24 hours of penicillin therapy. Beach PS, et al. **Clin Pediatr (Phila)** 1989 Jan;28(1):6-10

Comparison of Visuwell enzyme immunoassay to culture for detection of group A Streptococcus in throat swab specimens. Drulak M, et al. **Diagn Microbiol Infect Dis** 1988 Dec;11(4):181-7

Mucocutaneous lymph node syndrome (Kawasaki syndrome) mimicking a suppurative parapharyngeal space infection. Case report and review of the literature. Ruef C. **Helv Paediatr Acta** 1989 Feb;43(4):307-12 (25 ref.)

Correlation between C-reactive protein and throat culture results in patients with pharyngitis. Singer A, et al. **Isr J Med Sci** 1989 Apr;25(4):235-6

Evaluation of the pacific biotech CARDS STREP A test for detecting group A streptococci from cases of pharyngitis. Manasse RJ. **J Clin Microbiol** 1989 Jul; 27(7):1657-8

Rhinocerebral mucormycosis: MR manifestations. Press GA, et al. **J Comput Assist Tomogr** 1988 Sep-Oct;12(5):744-9

An in vitro comparison of eight rapid streptococcal antigen detection tests. White CB, et al. **J Pediatr** 1988 Oct; 113(4):691-3

New approaches to streptococcal pharyngitis. Nohinek B, et al. **Mo Med** 1986 May;83(5):265-8

Clinical evaluation of a latex agglutination test for streptococcal pharyngitis: performance and impact on treatment rates. Lieu TA, et al. **Pediatr Infect Dis J** 1988 Dec;7(12):847-54

Comparison of two rapid diagnostic tests for group A Streptococcus. Macknin ML, et al. **Pediatr Infect Dis J** 1988 Oct;7(10):735-6

Streptococcal pharyngitis study [letter] Read JS, et al. **Pediatrics** 1989 May;83(5):808-9

Rapid group A streptococcal antigen detection kit: effect on antimicrobial therapy for acute pharyngitis. Redd SC, et al. **Pediatrics** 1988 Oct;82(4):576-81

Lemierre's disease: postanginal bacteremia and pulmonary involvement caused by Fusobacterium necrophorum. Moreno S, et al. **Rev Infect Dis** 1989 Mar-Apr;11(2):319-24 (26 ref.)

Effect of latex agglutination test on prescribing for group A streptococcal throat disease in primary care. Mäkelä M. **Scand J Infect Dis** 1989;21(2):161-7

Streptococcal throat infections: still a complex clinical problem. Lundberg C, et al. **Scand J Infect Dis Suppl** 1988; 57:7-11 (24 ref.)

Clinical assessment of pharyngitis in general practice. Hjortdahl P, et al. **Scand J Prim Health Care** 1988 Nov; 6(4):219-23

[Rapid diagnosis of Streptococcus A angina] Kechrid A, et al. **Tunis Med** 1988 Jan;66(1):31-5 (Eng. Abstr.) **(Fre)**

[Increase of phlegmonous forms of infection following angina] Henke G, et al. **HNO** 1989 Jan;37(1):30-2 (Eng. Abstr.) **(Ger)**

[Pharyngeal diphtheria diagnosed too late, fatal course of the disease] Lange G, et al. **HNO** 1988 Dec;36(12):498-501 (Eng. Abstr.) **(Ger)**

[Rhinosporidiosis of the nasopharynx] Elykomov AA, et al. **Vestn Otorinolaringol** 1989 Jan-Feb;(1):61-3 **(Rus)**

[Rapid diagnosis of pharyngotonsillitis using an ELISA method (Test Pack Strep A): comparison with culture and clinical data. Analysis of 306 cases] Arribas Blanco JM, et al. **Med Clin (Barc)** 1988 Nov 5;91(15):561-4 (Eng. Abstr.) **(Spa)**

[Comparative study of 2 rapid antigenic technics for diagnosing streptococcal pharyngitis (letter)] Betriu Cabecerän C, et al. **Rev Clin Esp** 1989 Apr;184(7):389 **(Spa)**

[A quick test of latex agglutination for diagnosing streptococcal pharyngitis and predictive value of the clinical picture] Diz Dios P, et al. **Rev Clin Esp** 1989 Jun; 185(1):14-8 (23 ref.) (Eng. Abstr.) **(Spa)**

[A rapid test for tonsillitis/pharyngitis as an aid in the diagnostic arsenal] Lind L, et al. **Lakartidningen** 1988 Nov 30;85(48):4209-10 **(Swe)**

[Direct antigen detection for group A streptococcal pharyngitis: comparison of throat cultures and the direct antigen test] Söyletir G, et al. **Mikrobiyol Bul** 1988; 22(4):322-6 (Eng. Abstr.) **(Tur)**

DRUG THERAPY

Failure of once-daily penicillin V therapy for streptococcal pharyngitis. Gerber MA, et al. **Am J Dis Child** 1989 Feb; 143(2):153-5

Twice-daily therapy for strep? [letter] Gill EC. **Am J Dis Child** 1989 Sep;143(9):997

Sultamicillin versus amoxicillin in the treatment of tonsillitis and pharyngitis: a European multicenter study. Federspil P, et al. **APMIS Suppl** 1989;5:45-50

Pharyngitis 1987: a survey of physicians' attitudes and practices in southern Alberta. Berger PC, et al. **Can J Public Health** 1989 Jan-Feb;80(1):38-41

A preliminary study on erythromycin activity in a pediatric population with Chlamydial pharynx infection. Magliano EM, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):431

Josamycin versus erythromycin in the treatment of streptococcal pharyngitis in children. Marchisio P, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):413-4

Activity of erythromycin on chlamydial strains recovered in pharynx: study on a pediatric group. Ottolenghi A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):157

Short-term treatment of streptococcal tonsillitis with ceftriaxone. Pavesio D, et al. **Chemotherapy** 1988;34 Suppl 1:34-8

Clinical comparison of once-daily cefadroxil and thrice-daily cefaclor in the treatment of streptococcal pharyngitis. Randolph MF. **Chemotherapy** 1988;34(6):512-8

Prevention of rheumatic fever. A statement for health professionals by the Committee on Rheumatic Fever, Endocarditis, and Kawasaki Disease of the Council on Cardiovascular Disease in the Young, the American Heart Association. Danjani AS, et al. **Circulation** 1988 Oct; 78(4):1082-6

Clinical commentary. Some thoughts on the treatment of beta hemolytic streptococcal infections. Disney FA. **Clin Pediatr (Phila)** 1989 Jan;28(1):10-1

Sore throat pain in the evaluation of mild analgesics. Schachtel BP, et al. **Clin Pharmacol Ther** 1988 Dec; 44(6):704-11

Cefadroxil versus penicillin in the treatment of streptococcal tonsillopharyngitis. Milatovic D, et al. **Eur J Clin Microbiol Infect Dis** 1989 Apr;8(4):282-8

Antibiotics and the adult sore throat--an unnecessary ceremony. Herz MJ. **Fam Pract** 1988 Sep;5(3):196-9

Prescribing practices in childhood sore throat. Singh S, et al. **Indian Pediatr** 1988 Dec;25(12):1149-54

Comparative efficacy and toxicity of roxithromycin and erythromycin ethylsuccinate in the treatment of streptococcal pharyngitis in adults. Melcher GP, et al. **J Antimicrob Chemother** 1988 Oct;22(4):549-56

Management of pharyngitis [letter] Walker PM. **J Fam Pract** 1988 Oct;27(4):436, 438

Comparison of nimesulide and flurbiprofen in the treatment of non-infectious acute inflammation of the upper

respiratory tract. Cadeddu L, et al. **J Int Med Res** 1988 Nov–Dec;16(6):466–73

Standardized symptomatic treatment versus penicillin as initial therapy for streptococcal pharyngitis. Middleton DB, et al. **J Pediatr** 1988 Dec;113(6):1089–94

Diagnostic labels, treatment and outcome in acute sore throat. Pitts J, et al. **Practitioner** 1988 Mar 22;232(1445):343–6

[Infections of the parapharyngeal area as complication of a laryngitis (letter)] Lindner JG. **Ned Tijdschr Geneeskd** 1988 Dec 10;132(50):2296 **(Dut)**

[Efficacy and tolerance of tiaprofenic acid in pharyngitis in adults. Results of a randomized study vs placebo] Benarrosh C, et al. **Presse Med** 1989 Apr 8;18(14):716–8 (Eng. Abstr.) **(Fre)**

[Rational dosing intervals in streptococcal infections of the pharynx] Rauchegger H, et al. **Wien Klin Wochenschr** 1989 Mar 31;101(7):230–3 (Eng. Abstr.) **(Ger)**

[Usefulness of combined benzathine penicillin in the treatment of streptococcal pharyngotonsillitis] Rodríguez RS, et al. **Bol Med Hosp Infant Mex** 1988 Dec; 45(12):797–802 (Eng. Abstr.) **(Spa)**

[Acute streptococcal pharyngitis: oral or intramuscular treatment? (letter)] Lobos Bejarano JM, et al. **Med Clin (Barc)** 1989 May 6;92(17):677 **(Spa)**

[The frequency of group A beta-hemolytic Streptococcus in acute tonsillopharyngitis and therapy with cefadroxil, clavulanic acid–amoxicillin combination and erythromycin in patients unresponsive to procaine penicillin therapy] Tuncer AM, et al. **Mikrobiyol Bul** 1987 Jul;21(3):172–7 (Eng. Abstr.) **(Tur)**

EPIDEMIOLOGY

Management of streptococcal pharyngitis: the conundrum of acute rheumatic fever. Hutten–Czapski P. **Fam Pract** 1988 Sep;5(3):200–8

Occurrence of mucoid M-18 Streptococcus pyogenes in a central Ohio pediatric population. Marcon MJ, et al. **J Clin Microbiol** 1988 Aug;26(8):1539–42

ETIOLOGY

Oropharyngeal mucositis complicating bone marrow transplantation: prognostic factors and the effect of chlorhexidine mouth rinse. Weisdorf DJ, et al. **Bone Marrow Transplant** 1989 Jan;4(1):89–95

Post-operative sore throat: effect of lignocaine jelly and spray with endotracheal intubation. Klemola UM, et al. **Eur J Anaesthesiol** 1988 Nov;5(6):391–9

The sore throat. Pharyngitis and epiglottitis. Todd JK. **Infect Dis Clin North Am** 1988 Mar;2(1):149–62 (35 ref.)

Another cause of pharyngotonsillitis [letter] Negreira S, et al. **J Pediatr** 1988 Oct;113(4):785–6

Periodic fever associated with aphthous stomatitis, pharyngitis and cervical adenitis. Feder HM Jr, et al. **Pediatr Infect Dis J** 1989 Mar;8(3):186–7

Sore throat following short term endotracheal intubation. Koay CK, et al. **Singapore Med J** 1988 Jun;29(3):296–9

Group C beta-hemolytic streptococci causing pharyngitis and scarlet fever. Corson AP, et al. **South Med J** 1989 Sep;82(9):1119–21

[Food allergies—oropharyngeal reactions] Kremser M. **Wien Med Wochenschr** 1989 Apr 15;139(6–7):135–9 (34 ref.) (Eng. Abstr.) **(Ger)**

[Chlamydia and pharyngotonsillitis in childhood] Ottolenghi A, et al. **Minerva Pediatr** 1989 Apr;41(4):209–14 (27 ref.) (Eng. Abstr.) **(Ita)**

[Chronic pharyngitis of mycotic etiology] Starosvetskiĭ BV. **Vestn Otorinolaringol** 1988 Sep–Oct;(5):27–31 (Eng. Abstr.) **(Rus)**

[Pharyngitis caused by Arcanobacterium haemolyticum] Moreno Montesinos M, et al. **An Esp Pediatr** 1989 Mar; 30(3):209–10 **(Spa)**

[Peptic pharyngitis] Murillas G, et al. **An Otorrinolaringol Ibero Am** 1989;16(4):407–17 (6 ref.) (Eng. Abstr.) **(Spa)**

MICROBIOLOGY

Non-group A streptococci in the pharynx. Pathogens or innocent bystanders? Hayden GF, et al. **Am J Dis Child** 1989 Jul;143(7):794–7

Pharyngitis in adults: the presence and coexistence of viruses and bacterial organisms. Huovinen P, et al. **Ann Intern Med** 1989 Apr 15;110(8):612–6

Chlamydial pharyngitis [letter] Komaroff AL, et al. **Ann Intern Med** 1989 Sep 15;111(6):537–8

Inhibitory substances produced by Streptococcus salivarius and colonization of the upper respiratory tract with group A streptococci. Huskins WC, et al. **Epidemiol Infect** 1989 Jun;102(3):401–12

Association of penicillin-tolerant streptococci with epidemics of streptococcal pharyngitis in closed communities. Dagan R, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jul; 8(7):629–31

Comparison of the Directigen 1-2-3 Group A Strep Test with culture for detection of group A beta-hemolytic streptococci. Huck W, et al. **J Clin Microbiol** 1989 Aug; 27(8):1715–8

High isolation rates of group A streptococci in pharyngeal cultures from a group of Dunedin schoolchildren: what does this signify? [letter] Tagg J, et al. **N Z Med J** 1989 Feb 22;102(862):85–6

Beta-hemolytic group C streptococci and pharyngitis [letter] Rudensky B, et al. **Rev Infect Dis** 1989 Jul–Aug;11(4):668

A year of rapid slide-culture in health centres: novelty wears off. Mäkelä M. **Scand J Prim Health Care** 1988 Nov; 6(4):245–9

[Evaluation of a fast test for direct research on streptococcal group A from pharyngeal samples] Fellah H, et al. **Pathol Biol (Paris)** 1988 Sep;36(7):885–7 (Eng. Abstr.) **(Fre)**

PATHOLOGY

[Observation on imprints of the tongue caused by recurrent oropharyngeal ulcers and its clinical significance] Qiu ZX, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Mar;9(3):150–2, 132–3 (Eng. Abstr.) **(Chi)**

PHYSIOPATHOLOGY

[Preliminary study on the relation of yin deficiency, yang deficiency in chronic pharyngitis and the functioning of vegetative nervous system] Xu SQ, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Sep;8(9):534–5, 517 (Eng. Abstr.) **(Chi)**

PREVENTION & CONTROL

Prevention of sore throat after nasotracheal intubation. Fine J, et al. **J Oral Maxillofac Surg** 1988 Nov;46(11):946–7

Benefits of the pharyngeal pack [letter] Sexton J, et al. **J Oral Maxillofac Surg** 1989 Aug;47(8):891

Secondary prophylaxis of group A beta-hemolytic streptococcal throat infections [letter] Donald PR, et al. **S Afr Med J** 1989 Mar 4;75(5):248–9

SURGERY

Possible role of tonsillectomy and adenoidectomy in children with recurrent fever and tonsillopharyngitis. Abramson JS, et al. **Pediatr Infect Dis J** 1989 Feb;8(2):119–20

VETERINARY

Malignant lymphoma in three horses with ulcerative pharyngitis. Adams R, et al. **J Am Vet Med Assoc** 1988 Sep 15;193(6):674–6

PHARYNGOSTOMY

Pharyngostome closure using the radial forearm free flap. Percival NJ, et al. **Br J Plast Surg** 1989 Jul;42(4):473–7

Endoscopic diverticulotomy versus internal diverticulectomy in the treatment of pharyngeal pouch [letter] Wilson JA. **J R Coll Surg Edinb** 1988 Dec;33(6):343

VETERINARY

A pharyngostomy technique for chronic oral dosing of rabbits. Rogers G, et al. **Lab Anim Sci** 1988 Oct; 38(5):619–20

PHARYNX

Retained nasopharyngeal airway [letter] Smith BL. **Anaesthesia** 1989 May;44(5):447

The aspirated foreign body—an unusual diagnostic marker. Gibbons CL, et al. **Br Dent J** 1988 Oct 22;165(8):294–5

Serious systemic toxicity resulting from use of tetracaine for pharyngeal anesthesia in upper endoscopic procedures. Patel D, et al. **Dig Dis Sci** 1989 Jun;34(6):882–4

Removal of a retropharyngeal foreign body in a horse, with the aid of ultrasonography during surgery. French DA, et al. **J Am Vet Med Assoc** 1989 May 1;194(9):1315–6

Nasopharyngeal oxygen in children [letter; comment] Shann F. **Lancet** 1989 May 13;1(8646):1077–8. **Comment on:** Lancet 1989 Mar 4;1(8636):493–4

The effectiveness of the superiorly based pharyngeal flap in relation to the type of palatal defect and timing of the operation. Seyfer AE, et al. **Plast Reconstr Surg** 1988 Nov; 82(5):760–4

Otolaryngological foreign bodies: a study in Jos, Nigeria. Bhatia PL. **Trop Doct** 1989 Apr;19(2):62–4

[An unusual cause of postoperative pharyngeal obstruction] Abel M. **Anaesthesist** 1988 Sep;37(9):606–7 (Eng. Abstr.) **(Ger)**

[Retropharyngeal tendinitis after chiropractor therapy] Kogstad O, et al. **Tidsskr Nor Laegeforen** 1989 Jun 30; 109(19–21):2001–3 (Eng. Abstr.) **(Nor)**

ABNORMALITIES

Rostral displacement of the palatopharyngeal arch in a seven-month-old Hanoverian colt. Klein HJ, et al. **Equine Vet J** 1989 Sep;21(5):382–3

Persistent buccopharyngeal membrane [letter] Cotton RT. **J Otolaryngol** 1988 Aug;17(5):260

ENT abnormalities associated with Fraser syndrome: case report and literature review. Mina MM, et al. **J Otolaryngol** 1988 Aug;17(5):233–6

[The base of the piriform sinus in the surgical treatment of fistula of the 4th endobranchial pouch. Apropos of 8 cases] Manach Y, et al. **Ann Otolaryngol Chir Cervicofac** 1988; 105(5):391–6 (Eng. Abstr.) **(Fre)**

ANATOMY & HISTOLOGY

Functional anatomy of the upper airway. Morris IR. **Emerg Med Clin North Am** 1988 Nov;6(4):639–69 (17 ref.)

Sites and sizes of fat deposits around the pharynx in obese patients with obstructive sleep apnoea and weight matched controls. Horner RL, et al. **Eur Respir J** 1989 Jul; 2(7):613–22

Reproducibility of measurements of upper airway area by acoustic reflection. Brooks LJ, et al. **J Appl Physiol** 1989 Jun;66(6):2901–5

[Comparative anatomy of the velopharyngeal complex in human and non-human primates (2)] Scheye T, et al. **Bull Assoc Anat (Nancy)** 1987 Mar;71(212):25–9 (Eng. Abstr.) **(Fre)**

[Comparative anatomy of the velopharyngeal complex in mammals—excluding primates (1)] Vergote T, et al. **Bull Assoc Anat (Nancy)** 1987 Mar;71(212):19–24 (Eng. Abstr.) **(Fre)**

[Structural and functional organization of the upper esophageal sphincter] Baltinger VF, et al. **Vestn Otorinolaringol** 1989 May–Jun;(3):68–72 (Eng. Abstr.) **(Rus)**

BLOOD SUPPLY

Aberrant carotid artery. Presentation in the near midline pharynx. Ricciardelli E, et al. **Arch Otolaryngol Head Neck Surg** 1989 Apr;115(4):519–22

Venous bypass for decompression of bleeding varices of the pharynx. Caffee HH. **Head Neck Surg** 1987 Nov–Dec; 10(2):124–8

[A case report of a patient with an arterio-venous malformation in the cisterna magna supplied by bilateral ascending pharyngeal arteries] Tsukada K, et al. **Rinsho Shinkeigaku** 1988 Nov;28(11):1241–5 (Eng. Abstr.) **(Jpn)**

CYTOLOGY

Evidence of inherited susceptibility of increased streptococcal adherence to pharyngeal cells of children with rheumatic fever. Hafez M, et al. **Br J Rheumatol** 1989 Aug;28(4):304–9

ENZYMOLOGY

Human preduodenal lipase is entirely of gastric fundic origin. Moreau H, et al. **Gastroenterology** 1988 Nov;95(5):1221–6

IMMUNOLOGY

[Detection of C. trachomatis antigens in the epipharyngeal biopsy specimen of a case of adult inclusion conjunctivitis accompanied by an epipharyngeal infection] Nakagawa H, et al. **Nippon Ganka Gakkai Zasshi** 1988 May;92(5):811–7 (Eng. Abstr.) **(Jpn)**

INJURIES

Studies on improvement of pharmaceutical preparations prescribed in hospitals. IV. Dibekacin sulfate viscous solution for treatment of mouth and throat wounds. Namiki N, et al. **Drug Des Deliv** 1986 Nov;1(2):157–65

CT diagnosis of pyriform sinus perforation. Schwartz JM, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):869–70

Pharyngeal tear resulting from skiing injury. Satran L, et al. **J Emerg Med** 1988 Nov–Dec;6(6):487–9

Pharyngeal perforation during intubation in a patient with Crohn's disease. Kras JF, et al. **J Oral Maxillofac Surg** 1989 Apr;47(4):405–7

Hazards of nasogastric tube insertion in the newborn infant [letter] Sands T, et al. **Lancet** 1989 Sep 16;2(8664):680

[Our experience with ENT injuries in children] Păunescu C. **Rev Chir [Otorinolaringol]** 1988 Apr–Jun;33(2):119–25 (Eng. Abstr.) **(Rum)**

[Acupuncture analgesia in pathology and the treatment of ENT injuries] Popovici D. **Rev Chir [Otorinolaringol]** 1988 Oct–Dec;33(4):275–82 (Eng. Abstr.) **(Rum)**

INNERVATION

Viscerotopic representation of the upper alimentary tract in the rat: sensory ganglia and nuclei of the solitary and spinal trigeminal tracts. Altschuler SM, et al. **J Comp Neurol** 1989 May 8;283(2):248–68

Avesicular intercellular junctions in the neuropil of ganglia of the subpharyngeal complex and in nerves of the snail. Berezhnaya LA. **Neurosci Behav Physiol** 1989 May–Jun; 19(3):208–11

METABOLISM

Human lung deposition of particles suspended in air or in helium/oxygen mixture. Svartengren M, et al. **Exp Lung Res** 1989 Jul;15(4):575–85

Tendency towards keratinization in the stratified squamous epithelium lining the mouse laryngopharynx near the transitional zone. Nakano T, et al. **Okajimas Folia Anat Jpn** 1988 Dec;65(5):303–13

MICROBIOLOGY

Comparison of Visuwell enzyme immunoassay to culture for detection of group A Streptococcus in throat swab specimens. Drulak M, et al. **Diagn Microbiol Infect Dis** 1988 Dec;11(4):181–7

Modified filter paper strip technique for transportation & rapid isolation of streptococci from throat swabs. Koshi G, et al. **Indian J Med Res** 1988 Oct;88:336–8

Epidemiology of pharyngeal colonization of infants with

aerobic gram-negative rod bacteria. Baltimore RS, et al. **J Clin Microbiol** 1989 Jan;27(1):91-5

Isolation and characterization of Mycoplasma genitalium strains from the human respiratory tract. Baseman JB, et al. **J Clin Microbiol** 1988 Nov;26(11):2266-9

Use of nasal and pharyngeal swabs for rapid detection of respiratory syncytial virus and adenovirus antigens by enzyme-linked immunosorbent assay. Bručková M, et al. **J Clin Microbiol** 1989 Aug;27(8):1867-9

The beta-hemolytic streptococcal pharyngeal carriers in school children. Danchaivijitr S, et al. **J Med Assoc Thai** 1988 Oct;71(10):561-5

Comparison of genital and respiratory carriage of Haemophilus parainfluenzae in men. Houang E, et al. **J Med Microbiol** 1989 Feb;28(2):119-23

The significance of high isolation rates of group A streptococci in pharyngeal cultures of school children [letter] Wallace M. **N Z Med J** 1989 Mar 22;102(864):141

Effect of chlorhexidine rinsing on the oropharyngeal ecology in patients with head and neck cancer who have irradiation mucositis. Spijkervet FK, et al. **Oral Surg Oral Med Oral Pathol** 1989 Feb;67(2):154-61

Evaluation of the throat culture as a follow-up for an initially negative enzyme immunosorbent assay rapid streptococcal antigen detection test. Lewey S, et al. **Pediatr Infect Dis J** 1988 Nov;7(11):765-9

Throat carrier rates of beta-hemolytic streptococci among healthy adults and children. Strömberg A, et al. **Scand J Infect Dis** 1988;20(4):411-7

[The pharyngeal viral flora in dystrophic infants 0 to 1 years of age with acute respiratory diseases] Pârvu C, et al. **Virologie** 1989 Jan-Mar;40(1):19-24 (Eng. Abstr.) **(Fre)**

[Long-term prevalence of group A type T-1 isolated from throat of healthy schoolchildren. Part I. Analysis by detection rate. Streptococcal Disease Study Group] Nakajima K, et al. **Kansenshogaku Zasshi** 1988 Oct; 62(10):886-92 (Eng. Abstr.) **(Jpn)**

[Long-term prevalence of group A type T-1 isolated from throats of healthy schoolchildren. Part II. Analysis by school classroom and sibling. Streptococcal Disease Study Group] Nakajima K, et al. **Kansenshogaku Zasshi** 1988 Oct; 62(10):893-9 (Eng. Abstr.) **(Jpn)**

[Role of normal microflora in the throat in inhibition of adherence of pathogenic bacteria to host cells: in vitro competitive adherence between Corynebacterium pseudodiphtheriticum and Branhamella catarrhalis] Rikitomi N, et al. **Kansenshogaku Zasshi** 1989 Feb; 63(2):118-24 (Eng. Abstr.) **(Jpn)**

[Pharyngeal bacterial flora in newborn infants] Karnicki C, et al. **Wiad Lek** 1988 Jul 15;41(14):934-6 (Eng. Abstr.) **(Pol)**

[Mycoplasma pneumoniae cultured from a healthy population aged 8 to 16] Usluer G, et al. **Mikrobiyol Bul** 1987 Jul; 21(3):206-11 (Eng. Abstr.) **(Tur)**

PATHOLOGY

Measurement of pharyngeal volume by digitized magnetic resonance imaging. Effect of nasal continuous positive airway pressure. Abbey NC, et al. **Am Rev Respir Dis** 1989 Sep;140(3):717-23

Pathologic quiz case 2. Malignant lymphoma, diffuse, small, noncleaved cell, Burkitt's type. Laser RH, et al. **Arch Otolaryngol Head Neck Surg** 1989 May;115(5):636-7, 639

Nocturnal asthma: snoring, small pharynx and nasal CPAP. Guilleminault C, et al. **Eur Respir J** 1988 Dec;1(10):902-7

Cephalometric analysis in patients with obstructive sleep apnoea syndrome: II. Soft tissue morphology. Lyberg T, et al. **J Laryngol Otol** 1989 Mar;103(3):293-7

Idiopathic fibrosis of the upper aero-digestive tract. Violaris NS, et al. **J Laryngol Otol** 1989 Mar;103(3):333-4

Cephalometric airway analysis in obstructive sleep apnea syndrome. Strelzow VV, et al. **Laryngoscope** 1988 Nov; 98(11):1149-58

Changes in pharyngeal properties after uvulopalatopharyngoplasty. Wright S, et al. **Laryngoscope** 1989 Jan;99(1):62-5

MRI of the parapharyngeal space. Cross RR, et al. **Radiol Clin North Am** 1989 Mar;27(2):353-78 (36 ref.)

[A morphologic approach to the mobile oral and pharyngeal structures; a preliminary statistical study of a population of children presenting with a disorder of labiolingual behavior] Doual-Bisser A, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1988 Aug-Dec; 31(3-4):131-40 (Eng. Abstr.) **(Fre)**

[A special case of bolus fatality] Schneider V, et al. **Arch Kriminol** 1988 Sep-Oct;182(3-4):65-74 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Timing of major events of pharyngeal swallowing. McConnel FM, et al. **Arch Otolaryngol Head Neck Surg** 1988 Dec; 114(12):1413-8

Reliability of flexible fiberoptic nasopharyngoscopy for evaluation of velopharyngeal function in a clinical population. D'Antonio LL, et al. **Cleft Palate J** 1989 Jul; 26(3):217-25; discussion 225

The effects of Le Fort I osteotomy with maxillary movement on articulation, resonance, and velopharyngeal function. Kummer AW, et al. **Cleft Palate J** 1989 Jul;26(3):193-9; discussion 199-200

Screening of velopharyngeal inadequacy by differential pressure measurements. Morr KE, et al. **Cleft Palate J** 1989 Jan;26(1):42-5

The role of pressure flow and endoscopic assessment in successful palatal obturator revision. Riski JE, et al. **Cleft Palate J** 1989 Jan;26(1):56-62

Assessment of velopharyngeal competence: a long-term process. Van Demark DR, et al. **Cleft Palate J** 1988 Oct; 25(4):362-73

Effects of clozapine on ketamine-induced linguopharyngeal events in rats. Marco LA, et al. **Eur J Pharmacol** 1989 May 2;164(1):171-3

Activation of masseter muscles with inspiratory resistance loading. Hollowell DE, et al. **J Appl Physiol** 1989 Jul; 67(1):270-5

Pharyngeal fluid clearance and aspiration preventive mechanisms in sleeping infants. Pickens DL, et al. **J Appl Physiol** 1989 Mar;66(3):1164-71

Time of application of negative pressure pulses and upper airway muscle activity. Woodall DL, et al. **J Appl Physiol** 1989 Jul;67(1):366-70

Autonomic nervous reflexes in respiration elicited by mechanical stimulation of the velopharyngeal region in rabbits. Miyaoka Y, et al. **J Auton Nerv Syst** 1989 Mar; 26(2):177-80

Motor unit regulation of mammalian pharyngeal dilator muscle activity. van Lunteren E, et al. **J Clin Invest** 1989 Aug;84(2):577-85

Using simultaneous photodetection and nasometry to monitor velopharyngeal behavior during speech. Dalston RM. **J Speech Hear Res** 1989 Mar;32(1):195-202

Accuracy of pressure-flow estimates of velopharyngeal orifice size in an analog model and human subjects. Guyette TW, et al. **J Speech Hear Res** 1988 Dec;31(4):537-48

A comparison of photodetector and endoscopic evaluations of velopharyngeal function. Karnell MP, et al. **J Speech Hear Res** 1988 Sep;31(3):503-10

An analysis of velopharyngeal timing in normal adult speakers using a microcomputer based photodetector system. Keefe MJ, et al. **J Speech Hear Res** 1989 Mar; 32(1):39-48

The emphatic and pharyngeal sounds in Hebrew and in Arabic. Laufer A, et al. **Lang Speech** 1988 Apr-Jun;31 (Pt 2):181-205

Manofluorographic analysis of swallowing. McConnel FM, et al. **Otolaryngol Clin North Am** 1988 Nov;21(4):625-35

Quantitative assessment of pharyngeal bolus driving forces. Cerenko D, et al. **Otolaryngol Head Neck Surg** 1989 Jan; 100(1):57-63

Speech results of the Zürich approach in the treatment of unilateral cleft lip and palate. Van Demark DR, et al. **Plast Reconstr Surg** 1989 Apr;83(4):605-13

[Structural and functional organization of the upper esophageal sphincter] Baltinger VF, et al. **Vestn Otorinolaringol** 1989 May-Jun;(3):68-72 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Characteristics of upper airway chemoreflex prolonged apnea in human infants. Davies AM, et al. **Am Rev Respir Dis** 1989 Mar;139(3):668-73

Improvement in upper airway function after weight loss in patients with obstructive sleep apnea. Rubinstein I, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1192-5

Perceived articulatory adequacy and velopharyngeal function in dysarthric speakers. Yorkston KM, et al. **Arch Phys Med Rehabil** 1989 Apr;70(4):313-7

Pharyngeal and oesophageal function in patients with diabetes mellitus and swallowing complaints. Borgström PS, et al. **Br J Radiol** 1988 Sep;61(729):817-21

Patterns and location of velopharyngeal valving problems: atypical findings on video nasopharyngoscopy. Witzel MA, et al. **Cleft Palate J** 1989 Jan;26(1):63-7

Lung volume-related changes in the pharyngeal area of obese females with and without obstructive sleep apnoea. Rubinstein I, et al. **Eur Respir J** 1989 Apr;2(4):344-51

RADIOGRAPHY

Evaluation of the upper airway by computerized tomography in patients undergoing uvulopalatopharyngoplasty for obstructive sleep apnea. Shepard JW Jr, et al. **Am Rev Respir Dis** 1989 Sep;140(3):711-6

Radiology of the pharynx and oesophagus in young adults. Borgström PS, et al. **Br J Radiol** 1988 Oct;61(730):909-13

Absorbed doses and energy imparted from radiographic examination of velopharyngeal function during speech. Isberg A, et al. **Cleft Palate J** 1989 Apr;26(2):105-9

What is your diagnosis? Soft tissue mass in the retropharyngeal region. Honnas CM, et al. **J Am Vet Med Assoc** 1989 Jun 15;194(12):1769-70

'Foil tab' aspiration and retropharyngeal abscess in a toddler [letter] Ross MN, et al. **JAMA** 1988 Dec 2;260(21):3130

[Double contrast pharyngography of dysphagia as a leading symptom. Methodology and diagnostic value] Feyerabend T, et al. **Rontgenpraxis** 1989 Jan;42(1):1-7 **(Ger)**

[Radiography of the nasopharynx and pharynx] Tada S, et al. **Rinsho Hoshasen** 1988 Oct;33(11):1433-7 **(Jpn)**

SURGERY

Recent advances in laryngo, pharyngo, esophageal reconstruction. Shumrick DA, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;458:190-3

Immediate tracheoesophageal puncture for voice restoration in laryngopharyngeal resection. Lau WF, et al. **Am J Surg** 1988 Oct;156(4):269-72

Acute airway obstruction after uvulopalatopharyngoplasty for obstructive sleep apnea syndrome. Gabrielczyk MR. **Anesthesiology** 1988 Dec;69(6):941-3

Denervated palmaris longus tendon as a skeletal muscle transplant in circumferential pharyngoplasty. Ramakrishnan KM, et al. **Ann Acad Med Singapore** 1988 Jul;17(3):392-3

Uvulopalatopharyngoplasty: postoperative management and evaluation of results. Macaluso RA, et al. **Ann Otol Rhinol Laryngol** 1989 Jul;98(7 Pt 1):502-7

Reconstruction of the pharynx after resection for cancer. A comparison of methods. Coleman JJ 3d. **Ann Surg** 1989 May;209(5):554-60; discussion 561

Compound pharyngeal myocutaneous flap [letter] Kavanagh KT, et al. **Arch Otolaryngol Head Neck Surg** 1989 May; 115(5):633

Immediate reconstruction of pharyngoesophageal defects. Preference or reference. Lam KH, et al. **Arch Otolaryngol Head Neck Surg** 1989 May;115(5):608-12

The effect of intravelar veloplasty on velopharyngeal competence following pharyngeal flap surgery. Jarvis BL, et al. **Cleft Palate J** 1988 Oct;25(4):389-94

The San Venero Roselli pharyngoplasty: an electromyographic study of the palatopharyngeus muscle. Trigos I, et al. **Cleft Palate J** 1988 Oct;25(4):385-8

The use of videonasopharyngoscopy for biofeedback therapy in adults after pharyngeal flap surgery. Witzel MA, et al. **Cleft Palate J** 1989 Apr;26(2):129-34; discussion 135

Proplast as a pharyngeal wall implant to correct velopharyngeal insufficiency. Wolford LM, et al. **Cleft Palate J** 1989 Apr;26(2):119-26; discussion 126-8

Emergency ear, nose, and throat procedures. Votey S, et al. **Emerg Med Clin North Am** 1989 Feb;7(1):117-54 (69 ref.)

Transoral-transpharyngeal approach to the anterior craniocervical junction. Ten-year experience with 72 patients. Menezes AH, et al. **J Neurosurg** 1988 Dec; 69(6):895-903

About reconstruction of the pharynx with colon in extensive corrosive strictures. Popovici Z. **Kurume Med J** 1989; 36(1):41-7

Pectoralis major myocutaneous flap reconstruction of the laryngopharynx and cervical esophagus. Fabian RL. **Laryngoscope** 1988 Nov;98(11):1227-31

The sternocleidomastoid myoperiosteal flap for esophagopharyngeal reconstruction and fistula repair: clinical and experimental study. Friedman M, et al. **Laryngoscope** 1988 Oct;98(10):1084-91

The predictive efficacy of the Müller maneuver in uvulopalatopharyngoplasty. Katsantonis GP, et al. **Laryngoscope** 1989 Jul;99(7 Pt 1):677-80

Zenker's diverticulum flap. Liston SL, et al. **Laryngoscope** 1989 Jul;99(7 Pt 1):764-5

Advantages of pectoralis musculocutaneous flap pharyngeal reconstruction. Stein DW, et al. **Laryngoscope** 1989 Jul;99(7 Pt 1):691-6

Uvulopalatopharyngoplasty as a treatment for snoring. Saunders NA, et al. **Med J Aust** 1989 Feb 20;150(4):177-82

Microvascular reconstruction of the pharyngoesophagus with free jejunal graft. McDonough JJ, et al. **Microsurgery** 1988; 9(2):116-27

Free bowel autografts in pharyngoesophageal reconstruction: colon revisited. Modica LA, et al. **Otolaryngol Head Neck Surg** 1988 Jul;99(1):73-5

A reliable method for monitoring the microvascular patency of free jejunal transfers in reconstructing the pharynx and cervical esophagus. Bafitis H, et al. **Plast Reconstr Surg** 1989 May;83(5):896-8

Jejunal free autograft: analysis of complications and their resolution. Coleman JJ 3d, et al. **Plast Reconstr Surg** 1989 Oct;84(4):589-95; discussion 596-8

Uvulopalatopharyngoplasty [letter] Finkelstein Y, et al. **Plast Reconstr Surg** 1989 Mar;83(3):577-8

Uvulopalatopharyngoplasty in severe idiopathic obstructive sleep apnoea syndrome. Walker EB, et al. **Thorax** 1989 Mar;44(3):205-8

[Microsurgical esopharyngoplasties using a free digestive graft] Chavoin JP, et al. **Ann Chir Plast Esthet** 1988; 33(4):363-8 (14 ref.) (Eng. Abstr.) **(Fre)**

[Pharyngo-esophageal reconstruction with a free forearm flap] Petoin DS. **Ann Chir Plast Esthet** 1988;33(2):195-8 (Eng. Abstr.) **(Fre)**

[The bicervico-transhyoidal approach. A new combined approach in lesions of the posterior wall of the pharynx] Trotoux J. **Ann Otolaryngol Chir Cervicofac** 1989; 106(3):214-7 **(Fre)**

[Anesthesia problems posed by uvulo-palato-pharyngoplasty (UPPP)] Esteben D, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988;109(3):277-9 **(Fre)**

TRANSPLANTATION

Compound pharyngeal myocutaneous flap. Goldsmith MM, et al. **Arch Otolaryngol Head Neck Surg** 1988 Nov; 114(11):1288-9

ULTRASTRUCTURE

Histological observations on the pharynx of the musk shrew,

Suncus murinus. Nokubi K. **Kaibogaku Zasshi** 1988 Dec; 63(6):489–501

PHASEOLUS see **LEGUMES**

PHASEOLUS VULGARIS LECTINS see **PHYTOHEMAGGLUTININS**

PHENACETIN

The effect of withdrawal of phenacetin–containing analgesics on the incidence of kidney and urothelial cancer and renal failure. McCredie M, et al. **Clin Nephrol** 1989 Jan;31(1):35–9

[Case of phenacetin drug dependence] Denisenko GT, et al. **Vrach Delo** 1988 Jul;(7):75–6 **(Rus)**

ADMINISTRATION & DOSAGE

Micronucleus induction in mouse bone marrow by phenacetin administered intraperitoneally or orally. Hachiya N, et al. **Mutat Res** 1989 Aug;223(4):365–8

ADVERSE EFFECTS

[The diagnosis of analgesic nephropathy] Thieler H, et al. **Z Gesamte Inn Med** 1988 Sep 1;43(17):499–504 **(Eng. Abstr.)** **(Ger)**

ANALYSIS

[Application of dynamic programming for quantitative analysis of qutong tablet and keganmin tablet] Yang JY, et al. **Yao Hsueh Hsueh Pao** 1988;23(10):756–61 **(Eng. Abstr.)** **(Chi)**

CHEMICAL SYNTHESIS

Synthesis of [13C]phenacetin and its application to the breath test for the diagnosis of liver disease. Kurumaya K, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2679–81

HISTORY

[A century of phenacetin] Szállási A. **Orv Hetil** 1989 Mar 5;130(10):522–3 **(Hun)**

METABOLISM

Intestinal first–pass metabolism of phenacetin in rabbits pretreated orally and intraperitoneally with 3,4–benzpyrene. Podder SK, et al. **Biochem Pharmacol** 1989 Mar 15;38(6):1022–5

PHARMACOKINETICS

Combined hepatic arterial–portal venous and hepatic arterial–hepatic venous perfusions to probe the abundance of drug metabolizing activities: perihepatic venous O–deethylation activity for phenacetin and periportal sulfation activity for acetaminophen in the once–through rat liver preparation. Pang KS, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):690–700

PHARMACOLOGY

Study of the ability of phenacetin, acetaminophen, and aspirin to induce cytotoxicity, mutation, and morphological transformation in C3H/10T1/2 clone 8 mouse embryo cells. Patierno SR, et al. **Cancer Res** 1989 Feb 15;49(4):1038–44

The effects of acetaminophen, antipyrine and phenacetin on rat urothelial cell proliferation. Johansson SL, et al. **Carcinogenesis** 1989 Jan;10(1):105–11

TOXICITY

Early cell proliferative and cytotoxic effects of phenacetin on rat nasal mucosa. Bogdanffy MS, et al. **Toxicol Appl Pharmacol** 1989 Mar 15;98(1):100–12

PHENADONE see **METHADONE**

PHENANTHRENES

Molecular mechanics simulations on covalent complexes between polycyclic carcinogens and B–DNA. Rao SN, et al. **Carcinogenesis** 1989 Jan;10(1):27–38

ADMINISTRATION & DOSAGE

[A new antimalarial on the market: halofantrine. Various observations] Picq JJ. **Med Trop (Mars)** 1989 Jan–Mar; 49(1):87–9 **(Eng. Abstr.)** **(Fre)**

ADVERSE EFFECTS

Halofantrine and pruritus [letter] Hallwood PM, et al. **Lancet** 1989 Aug 12;2(8659):397–8

ANALYSIS

Determination of halofantrine and its principal metabolite desbutylhalofantrine in biological fluids by reversed–phase high–performance liquid chromatography. Milton KA, et al. **J Chromatogr** 1988 Dec 9;433:339–44

1H– and 13C–NMR spectroscopic studies of selected quassinoids. Hamburger MO, et al. **Planta Med** 1988 Aug; 54(4):352–5

[The sanitary bacteriologic characteristics of the air in Kharkov subway stations] Kosobutskiĭ LA, et al. **Mikrobiol Zh** 1988 Mar–Apr;50(2):72–7 (Eng. Abstr.) **(Rus)**

[Effect of certain factors on the antimicrobial activity of salvin] Smirnov VV, et al. **Mikrobiol Zh** 1988 May–Jun; 50(3):72–5 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

[Biological properties of staphylococci resistant to salvin] Pavlenko LV, et al. **Mikrobiol Zh** 1987 May–Jun; 49(3):25–30 (Eng. Abstr.) **(Rus)**

BLOOD

Ion–paired liquid chromatographic method for the analysis of blood and plasma for the antimalarial drug halofantrine and its putative mono–debutylated metabolite. Gawienowski M, et al. **J Chromatogr** 1988 Sep 9; 430(2):412–9

CHEMICAL SYNTHESIS

Phenanthrylalkanoic acids, III: Syntheses and biological activities of 4–phenanthryl derivatives. Eirín A, et al. **Arch Pharm (Weinheim)** 1989 May;322(5):281–4

Phenanthrylalkanoic acids, II: Syntheses and antiinflammatory activity of 2–, 3– and 9–phenanthryl– and 9–chloro–3–phenanthrylacetic acids. Fernández F, et al. **Arch Pharm (Weinheim)** 1988 Jun;321(6):331–5

[A novel synthesis of Tanshinone IIA—an active component of Salvia miltiorrhiza bunge] Shen JX, et al. **Yao Hsueh Hsueh Pao** 1988 Jul;23(7):545–8 (Eng. Abstr.) **(Chi)**

ISOLATION & PURIFICATION

Antitumor agents, 104. Isolation of yadanziosides M and P from Brucea antidysenterica and identification of bruceantinoside B as a mixture of yadanzioside P and bruceantinoside C. Okano M, et al. **J Nat Prod** 1989 Mar–Apr;52(2):398–401

[Platelet aggregation inhibitors from Salvia miltiorrhiza Bunge] Luo HW, et al. **Yao Hsueh Hsueh Pao** 1988 Nov; 23(11):830–4 (Eng. Abstr.) **(Chi)**

METABOLISM

Biodegradation of polycyclic hydrocarbons by Phanerochaete chrysosporium. Bumpus JA. **Appl Environ Microbiol** 1989 Jan;55(1):154–8

Urinary and faecal excretion of chrysene and chrysene metabolites by rats after oral, intraperitoneal, intratracheal or intrapulmonary application. Grimmer G, et al. **Arch Toxicol** 1988;62(6):401–5

Interaction of ferriprotoporphyrin IX with the antimalarials amodiaquine and halofantrine. Blauer G. **Biochem Int** 1988 Oct;17(4):729–34

Sulphotransferase–mediated activation of the carcinogen 5–hydroxymethyl–chrysene. Species and sex differences in tissue distribution of the enzyme activity and a possible participation of hydroxysteroid sulphotransferases. Okuda H, et al. **Biochem Pharmacol** 1989 Sep 15;38(18):3003–9

Comparative metabolism of phenanthrene and benzo[f]quinoline by rat liver microsomes. Kandaswami C, et al. **Cancer Lett** 1988 Dec 15;43(3):197–205

Metabolism of the carcinogen [3H]6–nitrochrysene in the preweanling mouse: identification of 6–aminochrysene–1,2–dihydrodiol as the probable proximate carcinogenic metabolite. Delclos KB, et al. **Carcinogenesis** 1988 Oct;9(10):1875–84

Enzyme–mediated phosphorylation of polycyclic hydrocarbon metabolites: detection of non–adduct compounds in the 32P–postlabelling assay. Masento MS, et al. **Carcinogenesis** 1989 Aug;10(8):1557–9

Preferential activation of 6–aminochrysene and 2–aminoanthracene to mutagenic moieties by different forms of cytochrome P450 in hepatic 9000 X g supernatants from the rat. Lubet RA, et al. **Mutat Res** 1989 Jun; 212(2):275–84

PHARMACOKINETICS

Pharmacokinetics of halofantrine in man: effects of food and dose size. Milton KA, et al. **Br J Clin Pharmacol** 1989 Jul; 28(1):71–7

Metabolic activation of 6–nitrochrysene in explants of human bronchus and in isolated rat hepatocytes. Delclos KB, et al. **Cancer Res** 1989 Jun 1;49(11):2909–13

PHARMACOLOGY

Use of microdilution to assess in vitro antiamoebic activities of Brucea javanica fruits, Simarouba amara stem, and a number of quassinoids. Wright CW, et al. **Antimicrob Agents Chemother** 1988 Nov;32(11):1725–9

Effects of aristolochic acid on phospholipase A2 activity and arachidonate metabolism of human neutrophils. Rosenthal MD, et al. **Biochim Biophys Acta** 1989 Jan 23;1001(1):1–8

The effects of bay–region methyl substitution on 6–nitrochrysene mutagenicity in Salmonella typhimurium and tumorigenicity in newborn mice. el–Bayoumy K, et al. **Carcinogenesis** 1989 Sep;10(9):1685–9

An in vivo unscheduled DNA synthesis (UDS) assay in the rat gastric mucosa: preliminary development. Burlinson B. **Carcinogenesis** 1989 Aug;10(8):1425–8

Mutagenicity in Salmonella and sister chromatid exchange in mice for the bay–region syn– and anti–diol epoxides of 1,4–dimethylphenanthrene. Sinsheimer JE, et al. **Carcinogenesis** 1989 Jun;10(6):1123–6

Edema–inducing activity of phospholipase A2 purified from human synovial fluid and inhibition by aristolochic acid. Vishwanath BS, et al. **Inflammation** 1988 Dec;12(6):549–61

Evaluation of the mutagenic and cytostatic potential of aristolochic acid (3,4–methylenedioxy–8–methoxy–10–nitrophenanthrene–1–carboxylic acid) and several of its derivatives. Pezzuto JM, et al. **Mutat Res** 1988 Dec;206(4):447–54

Evaluation of the mutagenic activity of some phenanthroisoquinolines in Salmonella typhimurium. Tanga MJ, et al. **Mutat Res** 1988 Oct;206(2):235–8

[The effect of salvin on the growth and ultrastructure of Staphylococcus aureus 209P] Pavlenko LV, et al. **Mikrobiol Zh** 1989 Mar–Apr;51(2):86–91 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Antitumor activity of novel ailanthone derivatives in vitro and in vivo. Kato T, et al. **Anticancer Res** 1988 Jul–Aug; 8(4):573–9

Halofantrine in the treatment of malaria. **Lancet** 1989 Sep 2;2(8662):537–8 (16 ref.)

[Halofantrine in the treatment of malaria. Clinical trial in a semi–rural zone of Cameroon] Raccurt CP, et al. **Bull Soc Pathol Exot Filiales** 1989;82(3):368–72 (Eng. Abstr.) **(Fre)**

TOXICITY

Tumour induction in mice following exposure to aristolochic acid. Mengs U. **Arch Toxicol** 1988;61(6):504–5

Sublethal effects of phenanthrene, nicotine, and pinane on Daphnia pulex. Savino JF, et al. **Bull Environ Contam Toxicol** 1989 May;42(5):778–84

Synthesis and mutagenicity of 5–alkyl–substituted chrysene–1,2–diol–3,4–epoxides. Amin S, et al. **Carcinogenesis** 1988 Dec;9(12):2305–8

Comparative tumorigenicity of 6–nitrochrysene and its metabolites in newborn mice. el–Bayoumy K, et al. **Carcinogenesis** 1989 Feb;10(2):369–72

Comparative tumor–initiating activity of methylene–bridged and bay–region methylated derivatives of benz[a]anthracene and chrysene. Rice JE, et al. **Carcinogenesis** 1988 Dec;9(12):2275–8

Mutagenicity, metabolism and DNA adduct formation of 6–nitrochrysene in Salmonella typhimurium. el–Bayoumy K, et al. **Mutagenesis** 1989 May;4(3):235–40

Genotoxic effects of aristolochic acid in the mouse micronucleus test. Mengs U, et al. **Planta Med** 1988 Dec; 54(6):502–3

PHENANTHRIDINES

Measurement of S–phase fractions in lymphoid tissue comparing fresh versus paraffin–embedded tissue and 4',6'–diamidino–2 phenylindole dihydrochloride versus propidium iodide staining. Camplejohn RS, et al. **Cytometry** 1989 Jul;10(4):410–6

Differentiation of mitotic melanoma cells from G2 cells and their isolation by use of 5–bromo–2'–deoxyuridine and propidium iodide. Trinkle LS, et al. **Cytometry** 1988 Sep; 9(5):432–5

Ethidium bromide– and propidium iodide–PTA staining of nucleic acids at the electron microscopic level. Biggiogera M, et al. **J Histochem Cytochem** 1989 Jul;37(7):1161–6

ANALYSIS

Development of a radioimmunoassay for isometamidium. Kinabo LD, et al. **Vet Res Commun** 1988;12(4–5):375–82

CHEMICAL SYNTHESIS

[Positive inotropic acting compounds. II. Synthesis 5– and 6–substituted phenanthridines and the mechanism of their positive inotropic action] Heber D, et al. **Arch Pharm (Weinheim)** 1988 Nov;321(11):787–92 (Eng. Abstr.) **(Ger)**

PHARMACOKINETICS

Selective labeling by propidium iodide injected into the lateral cerebral ventricle of the rat. Chen S, et al. **Brain Res** 1989 Apr 3;483(2):379–83

PHARMACOLOGY

Effect of ivermectin and isometamidium chloride on Glossina palpalis palpalis (Diptera: Glossinidae). Van den Abbeele J, et al. **Ann Soc Belg Med Trop** 1988 Mar;68(1):53–9

Effect of Samorin administered to a bovine host on the survival and reproductive performance of female Glossina morsitans centralis. Moloo SK, et al. **Ann Trop Med Parasitol** 1987 Dec;81(6):743–4

Some effects of the trypanocidal drug isometamidium on encapsulation in bovine carrier erythrocytes. DeLoach JR, et al. **Biotechnol Appl Biochem** 1988 Oct;10(5):447–53

Action of lycorine on neuroadrenergic response of a nerve–skin preparation. Quevedo L, et al. **Cell Mol Biol** 1988;34(3):295–302

CY 208–243, a novel dopamine D–1 receptor agonist, fails to modify dopamine release in freely moving rats. Imperato

A, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):155–8
The D–1 dopamine receptor partial agonist, CY 208–243, exhibits antiparkinsonian activity in the MPTP–treated marmoset. Temlett JA, et al. **Eur J Pharmacol** 1988 Nov 1;156(2):197–206
Neuromuscular blocking activity of 6–phenylphenanthridine–3,8–bis–(tri–methylammonium) iodide (compound 76–805). Mukherjee KC, et al. **Indian J Exp Biol** 1988 Jul;26(7):535–7
Dopamine D2 agonist–induced behavioural depression is reversed by dopamine D1 agonists. Jackson DM, et al. **J Neural Transm** 1989;75(3):213–20
The pharmacology of isometamidium. Kinabo LD, et al. **J Vet Pharmacol Ther** 1988 Sep;11(3):233–45 (130 ref.)
Interference between drug–resistant and drug–sensitive stocks of Trypanosoma congolense in goats. Sones KR, et al. **Res Vet Sci** 1989 Jul;47(1):75–7

THERAPEUTIC USE

Antiparkinsonian activity of CY 208–243, a partial D–1 dopamine receptor agonist, in MPTP–treated marmosets and patients with Parkinson's disease. Temlett JA, et al. **Mov Disord** 1989;4(3):261–5
A double–blind, placebo–controlled, dose–ranging study to investigate the safety and efficacy of CY 208–243 in patients with Parkinson's disease. Tsui JK, et al. **Neurology** 1989 Jun;39(6):856–8
Bovine trypanosomiasis in southern Tanzania: investigation into the incidence of infection and duration of chemoprophylaxis. Connor RJ, et al. **Trop Anim Health Prod** 1989 May;21(2):135–40
Notes on the routine intravenous use of isometamidium in the control of bovine trypanosomiasis on the Kenya coast. Dowler ME, et al. **Trop Anim Health Prod** 1989 Feb; 21(1):4–10
Field studies on animal trypanosomiasis in Mozambique. I. Effectiveness of the prophylactic drugs isometamidium chloride and pyrithidium bromide. Takken W, et al. **Trop Anim Health Prod** 1988 Nov;20(4):243–55

TOXICITY

Intraocular pressure, ocular toxicity and neurotoxicity in response to 11–hydroxy–delta 9–tetrahydrocannabinol and 1–nantradol. Colasanti BK. **J Ocul Pharmacol** 1985 Summer;1(2):123–35

PHENANTHROLINES

A systematic evaluation of bathophenanthroline, ferrozine and ferene in an ICSH–based method for the measurement of serum iron. Derman DP, et al. **Ann Clin Biochem** 1989 Mar;26 (Pt 2):144–7
Sequence–targeted cleavage of nucleic acids by oligo–alpha–thymidylate–phenanthroline conjugates: parallel and antiparallel double helices are formed with DNA and RNA, respectively. Sun JS, et al. **Biochemistry** 1988 Aug 9;27(16):6039–45
Sequence specificity of DNA cleavage by bis(1,10–phenanthroline)copper(I): effects of single base pair transitions on the cleavage of preferred pyrimidine–purine–pyrimidine triplets. Veal JM, et al. **Biochemistry** 1989 Apr 18;28(8):3243–50
Sequence–targeted cleavage of single– and double–stranded DNA by oligothymidylates covalently linked to 1,10–phenanthroline. François JC, et al. **J Biol Chem** 1989 Apr 5;264(10):5891–8
New selective medium for Pseudomonas aeruginosa with phenanthroline and 9–chloro–9–[4–(diethylamino)phenyl]–9,10–dihydro–10–phenylacridine hydrochloride (C–390). Campbell ME, et al. **J Clin Microbiol** 1988 Sep;26(9):1910–2
Binding of Ru(bpy)3(2+) and Ru(phen)3(2+) to polynucleotides and DNA: effect to added salts on the absorption and luminescence properties. Görner H, et al. **J Photochem Photobiol –B–** 1988 Jul;2(1):67–89
Scission of RNA by the chemical nuclease of 1,10–phenanthroline–copper ion: preference for single–stranded loops. Murakawa GJ, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5361–75
Specific binding of o–phenanthroline at a DNA structural lesion. Williams LD, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11607–15

ANALYSIS

Chemical studies on Chinese traditional medicine, dangshen. I. Isolation of (Z)–3– and (E)–2–hexenyl beta–D–glucosides. Mizutani K, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2689–90
[Quality evaluation of cultivated Salvia miltiorrhiza Bge. in Chongming, a suburb of Shanghai] Ni XB, et al. **Chung Yao Tung Pao** 1988 Jun;13(6):11–3, 61–2 (Eng. Abstr.) **(Chi)**
[Platelet aggregation inhibitors from Salvia miltiorrhiza Bunge] Luo HW, et al. **Yao Hsueh Hsueh Pao** 1988 Nov; 23(11):830–4 (Eng. Abstr.) **(Chi)**
[Reversed phase HPLC determination of three components in Salvia miltiorrhiza injections] Ni KY, et al. **Yao Hsueh Hsueh Pao** 1988 Apr;23(4):293–7 (Eng. Abstr.) **(Chi)**

CHEMICAL SYNTHESIS

Synthesis and antimicrobial activity of some new benzodifurans and phenanthrolines. Garuti L, et al. **Boll Chim Farm** 1989 Apr;128(4):136–40

DIAGNOSTIC USE

Bleomycin–detectable iron and phenanthroline–detectable copper in the cerebrospinal fluid of patients with neuronal ceroid–lipofuscinoses. Heiskala H, et al. **Am J Med Genet Suppl** 1988;5:193–202
Time–resolved fluoroimmunoassay of cortisol in serum with a europium chelate as label. Diamandis EP, et al. **Clin Biochem** 1988 Oct;21(5):291–6

METABOLISM

The binding of 1,10–phenanthroline to specifically active–site cobalt(II)–substituted horse–liver alcohol dehydrogenase. A probe for the open–enzyme conformation. Sartorius C, et al. **Eur J Biochem** 1988 Nov 15;177(3):493–9
[Artificial nucleases: specific cleavage of the double helix of DNA by oligonucleotides linked to copper–phenanthroline complex] François JC, et al. **C R Acad Sci [III]** 1988;307(20):849–54 (Eng. Abstr.) **(Fre)**

PHARMACOLOGY

Studies on the inhibition of neutral proteases by 1,10–phenanthroline. Feder J, et al. **Biochim Biophys Acta** 1971 May 12;235(2):370–7
o–phenanthroline protects mammalian cells from hydrogen peroxide–induced gene mutation and morphological transformation. Nassi–Calò L, et al. **Carcinogenesis** 1989 Jun;10(6):1055–7
Inactivation of viruses with 1,10–phenanthroline. Lembach KJ, et al. **Curr Stud Hematol Blood Transfus** 1989; (56):97–108
Inhibitors of 2–ketoglutarate–dependent dioxygenases block aspartyl beta–hydroxylation of recombinant human factor IX in several mammalian expression systems. Derian CK, et al. **J Biol Chem** 1989 Apr 25;264(12):6615–8
Kinetic evidence for cooperative binding of two ortho–phenanthroline molecules to astacus protease during metal removal. Wolz RL, et al. **J Inorg Biochem** 1989 Mar; 35(3):157–67
1,10–phenanthroline potentiates cytotoxicity of hydroxyurea in human chronic myeloid leukemia cells. Kamath NS, et al. **Oncology** 1989;46(3):193–7
[A slow spectral shift of cytochrome c oxidase induced by EDTA and o–phenanthroline] Konstantinov AA, et al. **Biokhimiia** 1988 Dec;53(12):2065–7 (Eng. Abstr.) **(Rus)**
[Transmembrane transport of chlorine anions by coordination–unsaturated cobalt (II) complexes with o–phenanthroline] Omel'chenko AM, et al. **Dokl Akad Nauk SSSR** 1988;301(5):1238–41 **(Rus)**

THERAPEUTIC USE

[Prophylactic effects of Salvia miltiorrhizae and ligustrazine on experimental respiratory distress syndrome induced by oleic acid in rats] Feng CS. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Apr;9(4):220–2, 198 (Eng. Abstr.) **(Chi)**
[Clinical and experimental study on the effect of Salvia miltiorrhiza on microcirculation and 2,3 diphosphoglyceric acid in patients with coronary heart disease] Yu GR. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Oct;8(10):596–8, 581 (Eng. Abstr.) **(Chi)**
[Effect of Salvia miltiorrhiza on hyperfibrinogen in patients with malignant lymphoma] Zhang YW, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Oct;8(10):607–8, 582 (Eng. Abstr.) **(Chi)**
[Protective effects of Salviae miltiorrhizae and anisodamine (654–2) against early lung injury in acute hemorrhagic necrotizing pancreatitis in the dog] Zheng SS. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Mar;9(3):158–60, 134 (Eng. Abstr.) **(Chi)**
[Changes in plasma 6–keto–PGF1 alpha, TXB2 lipid peroxides in acute cerebral infarction patients and the effects of Salvia miltiorrhiza on these three indices] Yu NC, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Oct; 27(10):596–9, 651 (Eng. Abstr.) **(Chi)**
[The protective effects of Salvia miltiorrhiza on the warm ischemic kidney: experimental study in animals] Shen YC. **Chung Hua Wai Ko Tsa Chih** 1988 Dec;26(12):759–61, 783 (Eng. Abstr.) **(Chi)**

PHENANTOIN see **PHENYTOIN**

PHENAZINES

The involvement of superoxide anions in the nitro blue tetrazolium chloride reduction mediated by NADH and phenazine methosulfate. Van Noorden CJ, et al. **Anal Biochem** 1989 Jan;176(1):170–4
Preparation and kinetic properties of 5–ethylphenazine–poly(ethylene glycol)–NAD+ conjugate, a unique catalyst having an intramolecular reaction step. Yomo T, et al. **Eur J Biochem** 1989 Feb 1;179(2):299–305
N–(2–hydroxyethyl)phenazinium derivatives of oligonucleotides as effectors of the sequence–specific modification of nucleic acids with reactive oligonucleotide derivatives. Kutyavin IV, et al. **FEBS Lett** 1988 Sep 26; 238(1):35–8
WS–9659 A and B, novel testosterone 5 alpha–reductase inhibitors isolated from a Streptomyces. II. Structural elucidation of WS–9659 A and B. Nakayama O, et al. **J Antibiot (Tokyo)** 1989 Aug;42(8):1230–4
Semiquantitation of bacteria in sputum gram stains. Valenstein PN. **J Clin Microbiol** 1988 Sep;26(9):1791–4
Determination of intracellular pH in the in vitro hippocampal slice preparation by transillumination spectrophotometry of neutral red. Sick TJ, et al. **J Neurosci Methods** 1989 Feb;27(1):25–34
Intracellular pH determination by absorption spectrophotometry of neutral red. LaManna JC. **Metab Brain Dis** 1987 Sep;2(3):167–82 (77 ref.)
[Pneumonia in artificially ventilated patients: the significance of Gram preparation und bronchoscopic specimen collection methods in diagnosis and therapy] Konrad F, et al. **Anasth Intensivther Notfallmed** 1989 Jun;24(3):147–52 (Eng. Abstr.) **(Ger)**

BIOSYNTHESIS

[The physiologic role of pyocyanine synthesized by Pseudomonas aeruginosa] Trutko SM, et al. **Mikrobiologiia** 1988 Nov–Dec;57(6):957–64 (Eng. Abstr.) **(Rus)**

CHEMICAL SYNTHESIS

Synthesis and characterization of 1–substituted 5–alkylphenazine derivatives carrying functional groups. Yomo T, et al. **Eur J Biochem** 1989 Feb 1;179(2):293–8

DIAGNOSTIC USE

Rapid diagnosis of Campylobacter pylori by Gram's stain. Montgomery EA, et al. **Am J Clin Pathol** 1988 Nov; 90(5):606–9
Comparison of acridine orange and Gram stains in bacterial keratitis. Gomez JT, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):735–7
A single and continuous spectrophotometric assay for various lipolytic enzymes, using natural, non–labelled lipid substrates. Rawyler A, et al. **Biochim Biophys Acta** 1989 Aug 22;1004(3):337–44

ISOLATION & PURIFICATION

Metabolites of microorganisms. 247. Phenazines from Streptomyces antibioticus, strain Tü 2706. Geiger A, et al. **J Antibiot (Tokyo)** 1988 Nov;41(11):1542–51
WS–9659 A and B, novel testosterone 5 alpha–reductase inhibitors isolated from a Streptomyces. I. Taxonomy, fermentation, isolation, physico–chemical characteristics. Nakayama O, et al. **J Antibiot (Tokyo)** 1989 Aug; 42(8):1221–9

PHARMACOLOGY

Structure–activity relationships of selected phenazines against Mycobacterium leprae in vitro. Franzblau SG, et al. **Antimicrob Agents Chemother** 1988 Oct;32(10):1583–5
Cytotoxic effect of phenazine methosulphate on the isolated frog heart. Duncan CJ. **Comp Biochem Physiol [A]** 1989; 92(1):133–5
Effect of artificial electron acceptors on the cytotoxicity of mitomycin C and doxorubicin in human lung tumor cells. Keizer HG, et al. **Eur J Cancer Clin Oncol** 1989 Jul; 25(7):1113–8
Synthesis of alkylating oligonucleotide derivatives containing cholesterol or phenazinium residues at their 3'–terminus and their interaction with DNA within mammalian cells. Boutorin AS, et al. **FEBS Lett** 1989 Aug 28;254(1–2):129–32
Effects of pyocyanine, a phenazine dye from Pseudomonas aeruginosa, on oxidative burst and bacterial killing in human neutrophils. Müller PK, et al. **Infect Immun** 1989 Sep;57(9):2591–6
WS–9659 A and B, novel testosterone 5 alpha–reductase inhibitors isolated from a Streptomyces. III. Biological characteristics and pharmacological characteristics. Nakayama O, et al. **J Antibiot (Tokyo)** 1989 Aug; 42(8):1235–40
Investigation of the structural properties of dihydrophenazines which contribute to their pro–oxidative interactions with human phagocytes. Savage JE, et al. **J Antimicrob Chemother** 1989 May;23(5):691–700
Effect of pyocyanin and 1–hydroxyphenazine on in vivo tracheal mucus velocity. Munro NC, et al. **J Appl Physiol** 1989 Jul;67(1):316–23
Neutral red changes arginine–induced glucagon and insulin response in the rat. Poulsen HE, et al. **Pharmacol Toxicol** 1989 Jul;65(1):65–8
Clofazimine and other rimino–compounds: minimal inhibitory and minimal bactericidal concentrations at different pHs for Mycobacterium avium complex. Lindholm–Levy PJ, et al. **Tubercle** 1988 Sep;69(3):179–86
[Electron microscopic and biochemical research on the vacuoles formed in the erythrocytes of frogs as affected by neutral red and novocaine] Veselkina MN, et al. **Tsitologiia** 1988 Jun;30(6):663–71 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

In vivo activity on murine tumors of a novel antitumor

compound, N-beta-dimethylaminoethyl 9-carboxy-5-hydroxy-10-methoxybenzo[a]phenazine-6-carboxamide sodium salt (NC-190). Nakaike S, et al. **Cancer Chemother Pharmacol** 1989;23(3):135-9

TOXICITY

Mutagenicity of nitro- and amino-substituted phenazines in Salmonella typhimurium. Watanabe T, et al. **Mutat Res** 1989 Mar;225(3):75-82

Cytotoxicity of phenazine methosulphate on skeletal muscle. The role of the sarcoplasmic reticulum in initiating myofilament damage. Duncan CJ. **Virchows Arch [B]** 1989; 56(4):271-6

PHENAZOCINE

ANALOGS & DERIVATIVES

Presence of sigma and phencyclidine (PCP)-like receptors in membrane preparations of bovine adrenal medulla. Rogers C, et al. **Biochem Pharmacol** 1989 Aug 1; 38(15):2467-72

Activation of the A10 mesolimbic system by the sigma-receptor agonist (+)SKF 10,047 can be blocked by rimcazole, a novel putative antipsychotic. Ceci A, et al. **Eur J Pharmacol** 1988 Sep 1;154(1):53-7

Substitution and antagonism in rats trained to discriminate (+)-N-allylnormetazocine from saline. Balster RL. **J Pharmacol Exp Ther** 1989 Jun;249(3):749-56

N-allylnormetazocine: hemodynamic actions and inhibition of leucine-enkephalin hemodynamic activity in conscious dogs. Given MB, et al. **J Pharmacol Exp Ther** 1988 Dec; 247(3):850-6

Inhibition of (+)[3H]SKF 10,047 binding to rat brain membranes by FAB fragments from a monoclonal antibody directed against the opioid receptor. Tyler CB, et al. **Neurochem Res** 1988 Aug;13(8):729-35

Oral self-administration of N-allylnormetazocine (SKF-10,047) stereoisomers in rhesus monkeys: substitution during phencyclidine self-administration and withdrawal. Carroll ME. **Pharmacol Biochem Behav** 1988 Jun; 30(2):493-500

Interaction of the discriminative stimulus effects of phencyclidine with those of (+)-N-allylnormetazocine, pentobarbital and d-amphetamine. McMillan DE, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):711-5

[Partial purification of endogenous inhibitors of (+)-[3H] SKF 10047 binding with sigma-opioid receptors of the liver] Nagornaia LV, et al. **Biull Eksp Biol Med** 1988 Sep; 106(9):314-7 (Eng. Abstr.) **(Rus)**

[Embryonic cell aggregation in the loach Misgurnus fossilis L. in vivo and in vitro. The agonist of sigma opiate receptors SKF 10,047 as a regulator of the aggregation] Kaliuzhnyi AE, et al. **Zh Evol Biokhim Fiziol** 1988 Nov-Dec;24(6):808-16 (Eng. Abstr.) **(Rus)**

PHENAZONE see **ANTIPYRINE**

PHENAZOPYRIDINE see under **AMINOPYRIDINES**

PHENBENZORPHAN see **PHENAZOCINE**

PHENCYCLIDINE

The discriminative stimulus effects of N-methyl-D-aspartate antagonists in phencyclidine-trained rats. Willetts J, et al. **Neuropharmacology** 1988 Dec;27(12):1249-56

ADMINISTRATION & DOSAGE

Oral self-administration of N-allylnormetazocine (SKF-10,047) stereoisomers in rhesus monkeys: substitution during phencyclidine self-administration and withdrawal. Carroll ME. **Pharmacol Biochem Behav** 1988 Jun; 30(2):493-500

ADVERSE EFFECTS

Passive inhalation of marijuana, phencyclidine, and freebase cocaine ("crack") by infants. Schwartz RH. **Am J Dis Child** 1989 Jun;143(6):644

ANALOGS & DERIVATIVES

Sidedness and chemical and kinetic properties of the vesamicol receptor of cholinergic synaptic vesicles. Kornreich WD, et al. **Biochemistry** 1988 Jul 12; 27(14):5262-7

Effects of an inhibitor of the synaptic vesicle acetylcholine transport system on quantal neurotransmitter release: an electrophysiological study. Lupa MT. **Brain Res** 1988 Sep 27;461(1):118-26

Neuroprotective effects of MK-801, TCP, PCP and CPP against N-methyl-D-aspartate induced neurotoxicity in an in vivo perinatal rat model. McDonald JW, et al. **Brain Res** 1989 Jun 19;490(1):33-40

Regional changes in [3H]D-aspartate and [3H]TCP binding sites in Alzheimer's disease brains. Simpson MD, et al. **Brain Res** 1988 Oct 11;462(1):76-82

Selective mechanism-based inactivation of the major phenobarbital-inducible P-450 cytochrome from rabbit liver by phencyclidine and its oxidation product, the iminium compound. Osawa Y, et al. **Drug Metab Dispos** 1989 Jan-Feb;17(1):7-13

Anaesthetic properties of phencyclidine (PCP) and analogues may be related to their interaction with Na+ channels. Allaoua H, et al. **Eur J Pharmacol** 1989 Apr 25; 163(2-3):327-35

Acylation of sigma receptors by Metaphit, an isothiocyanate derivative of phencyclidine. Bluth LS, et al. **Eur J Pharmacol** 1989 Feb 28;161(2-3):273-7

Metaphit, an isothiocyanate analog of PCP, induces audiogenic seizures in mice. Debler EA, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):155-9

Equilibrium analysis of [3H]TCP binding: effects of glycine, magnesium and N-methyl-D-aspartate agonists. Johnson KM, et al. **Eur J Pharmacol** 1988 Jul 26;152(1-2):141-6

GC/MS analysis of phencyclidine acid metabolite in human urine. elSohly MA, et al. **J Anal Toxicol** 1988 Jul-Aug; 12(4):180-2

Synthesis, in vitro acetylcholine-storage-blocking activities, and biological properties of derivatives and analogues of trans-2-(4-phenylpiperidino)cyclohexanol (vesamicol). Rogers GA, et al. **J Med Chem** 1989 Jun;32(6):1217-30

AH5183 and cetiedil: two potent inhibitors of acetylcholine uptake into isolated synaptic vesicles from Torpedo marmorata. Diebler MF, et al. **J Neurochem** 1989 Mar; 52(3):813-21

Compared effects of two vesicular acetylcholine uptake blockers, AH5183 and cetiedil, on cholinergic functions in Torpedo synaptosomes: acetylcholine synthesis, choline transport, vesicular uptake, and evoked acetylcholine release. Gaudry-Talarmain YM, et al. **J Neurochem** 1989 Mar;52(3):822-9

Acetylcholine synthesis by a sympathetic ganglion in the presence of 2-(4-phenylpiperidino)cyclohexanol (AH5183) and picrylsulfonic acid. Mykita S, et al. **J Neurochem** 1989 Jun;52(6):1686-93

Regulation of the vesamicol receptor in cholinergic synaptic vesicles by acetylcholine and an endogenous factor. Noremberg K, et al. **J Neurochem** 1989 Mar;52(3):913-20

Structure-activity relationships of arylcyclohexylamines as discriminative stimuli in pigeons. McMillan DE, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1086-92

Effects of 2-(4-phenylpiperidino)cyclohexanol (AH5183) and barium ions on frog neuromuscular transmission. Maeno T, et al. **J Physiol (Lond)** 1988 Jul;401:671-85

Metaphit antagonizes phencyclidine-induced hypothermia in the rat. Pechnick RN, et al. **Life Sci** 1989;45(5):439-45

Fractional vesamicol receptor occupancy and acetylcholine active transport inhibition in synaptic vesicles. Kaufman R, et al. **Mol Pharmacol** 1989 Sep;36(3):452-8

The binding of [3H]thienyl cyclohexylpiperidine ([3H]TCP) to the NMDA-phencyclidine receptor complex. Stirling JM, et al. **Neuropharmacology** 1989 Jan;28(1):1-7

Facilitation of gamma-aminobutyric acid-induced depression by (+)PCMP and dexoxadrol in the cerebellar Purkinje neurons of the rat. Wang Y, et al. **Neuropharmacology** 1989 Apr;28(4):343-50

In vivo labelling of the mouse dopamine uptake complex with the phencyclidine derivative [3H]BTCP. Maurice T, et al. **Neurosci Lett** 1989 Jun 19;101(2):234-8

Non-competitive antagonists of N-methyl-D-aspartate receptors protect cortical and hippocampal cell cultures against glutamate neurotoxicity. Rondouin G, et al. **Neurosci Lett** 1988 Aug 31;91(2):199-203

Discriminative properties of phencyclidine in mice: generalization to ketamine and monohydroxy metabolites. Middaugh LD, et al. **Psychopharmacology (Berlin)** 1988; 96(3):381-4

Discriminable effects of phencyclidine analogs evaluated by multiple drug (PCP versus OTHER) discrimination training. Overton DA, et al. **Psychopharmacology (Berlin)** 1989;97(4):514-20

Phencyclidine and sigma receptors in rat spinal cord: binding characterization and quantitative autoradiography. Aanonsen LM, et al. **Synapse** 1989;4(1):1-10

[3H]vesamicol binding in brain: autoradiographic distribution, pharmacology, and effects of cholinergic lesions. Altar CA, et al. **Synapse** 1988;2(5):486-93

PCP-induced alterations in cerebral glucose utilization in rat brain: blockade by metaphit, a PCP-receptor-acylating agent. Tamminga CA, et al. **Synapse** 1987;1(5):497-504

Long-term blockade of the dopamine uptake complex by metaphit, an isothiocyanate derivative of phencyclidine. Zimányi I, et al. **Synapse** 1989;3(3):239-45

ANTAGONISTS & INHIBITORS

Synthesis, absolute configuration, and molecular modeling study of etoxadrol, a potent phencyclidine-like agonist. Thurkauf A, et al. **J Med Chem** 1988 Dec;31(12):2257-63

CEREBROSPINAL FLUID

[Contents of endogenous phencyclidine-like substances in cerebrospinal fluid of schizophrenic patients] Zhou GZ, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Nov;9(6):515-8 (Eng. Abstr.) **(Chi)**

IMMUNOLOGY

Isolation of monoclonal antibodies to phencyclidine from ascites fluid by preparative isoelectric focusing in the Rotofor. Egen NB, et al. **Anal Biochem** 1988 Aug 1; 172(2):488-94

METABOLISM

Some factors affecting phencyclidine biotransformation by human liver and placenta. Pohorecki R, et al. **Drug Metab Dispos** 1989 May-Jun;17(3):271-4

Distance between the agonist and noncompetitive inhibitor sites on the nicotinic acetylcholine receptor. Herz JM, et al. **J Biol Chem** 1989 Jul 25;264(21):12439-48

Synthesis and characterization of a radiolabelled derivative of the phencyclidine/N-methyl-D-aspartate receptor ligand (+) MK-801 with high specific radioactivity. Keana JF, et al. **Life Sci** 1988;43(12):965-73

A phencyclidine recognition site is associated with N-methyl-D-aspartate inhibition of carbachol-stimulated phosphoinositide hydrolysis in rat cortical slices. Gonzales RA, et al. **Mol Pharmacol** 1989 Jun;35(6):787-94

mRNA from NCB-20 cells encodes the N-methyl-D-aspartate/phencyclidine receptor: a Xenopus oocyte expression study. Lerma J, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1708-11

Biochemical and behavioral effects of sigma and PCP ligands. Contreras PC, et al. **Synapse** 1988;2(3):240-3

PHARMACOKINETICS

Pharmacokinetic and pharmacodynamic evaluation of phencyclidine and its decadeutero variant. Cho AK, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):210-5

Phencyclidine during pregnancy: fetal brain levels and neurobehavioral effects. Fico TA, et al. **Neurotoxicol Teratol** 1988 Jul-Aug;10(4):349-54

Modification of phencyclidine intoxification and biodisposition by charcoal and other treatments. Lyddane JE, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):371-7

PHARMACOLOGY

Effects of diazepam on regional brain homovanillic acid following phencyclidine or delta 9-tetrahydrocannabinol. Bowers MB Jr, et al. **Biochem Pharmacol** 1989 Jul 15; 38(14):2385-7

Effect of central administration of phencyclidine on plasma concentrations of luteinizing hormone. Boggan WO, et al. **Brain Res** 1989 Jan 30;478(2):382-4

Modulation of glutamate receptors by phencyclidine and glycine in the rat cerebellum: cGMP increase in vivo. Danysz W, et al. **Brain Res** 1989 Feb 13;479(2):270-6

Neuroprotective effects of MK-801, TCP, PCP and CPP against N-methyl-D-aspartate induced neurotoxicity in an in vivo perinatal rat model. McDonald JW, et al. **Brain Res** 1989 Jun 19;490(1):33-40

Phencyclidine and MK-801: a behavioral and neurochemical comparison of their interactions with dihydropyridine calcium antagonists. O'Neill SK, et al. **Brain Res Bull** 1989 Apr;22(4):611-6

Anaesthetic properties of phencyclidine (PCP) and analogues may be related to their interaction with Na+ channels. Allaoua H, et al. **Eur J Pharmacol** 1989 Apr 25; 163(2-3):327-35

Phencyclidine blocks histamine H3-receptors in rat brain. Arrang JM, et al. **Eur J Pharmacol** 1988 Nov 15;157(1):31-5

In vivo characterization of phencyclidine/sigma agonist-mediated inhibition of nociception. DeLander GE, et al. **Eur J Pharmacol** 1989 Jan 10;159(2):149-56

N-methyl-D-aspartate receptor-mediated increase in intracellular calcium is reduced by ketamine and phencyclidine. O'Shaughnessy CT, et al. **Eur J Pharmacol** 1988 Aug 24;153(2-3):201-9

Differential regulation of sigma and PCP receptors after chronic administration of haloperidol and phencyclidine in mice. Itzhak Y, et al. **FASEB J** 1989 May;3(7):1868-72

Inhibitory effect of phencyclidine on rat spinal reflexes. Nagano N, et al. **Gen Pharmacol** 1988;19(6):795-8

Phencyclidine-like effects of tetrahydroisoquinolines and related compounds. Gray NM, et al. **J Med Chem** 1989 Jun;32(6):1242-8

Effects of prenatal administration of phencyclidine on the learning and memory processes of rat offspring. Nabeshima T, et al. **J Pharmacobiodyn** 1988 Dec;11(12):816-23

Prevention of phencyclidine-induced depression of the segmental reflex by L-3,4-dihydroxyphenylalanine in the rat spinal cord in vitro. Carp JS, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1048-53

Analgesic effects of phencyclidine-like drugs in rhesus monkeys. France CP, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):197-201

Opioid- and phencyclidine-like discriminative effects of ditolylguanidine, a selective sigma ligand. Holtzman SG. **J Pharmacol Exp Ther** 1989 Mar;248(3):1054-62

The phencyclidine (PCP) analog N-[1-(2-benzo(B)thiophenyl) cyclohexyl]piperidine shares cocaine-like but not other characteristic behavioral effects with PCP, ketamine and MK-801. Koek W, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):1019-27

Presynaptic activation of the spinal serotonergic system in the rat by phencyclidine in vitro. Ohno Y, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):177-83

Characterization of the effects of the acute and chronic administration of phencyclidine on the release of adrenocorticotropin, corticosterone and prolactin in the rat: evidence for the differential development of tolerance. Pechnick RN, et al. **J Pharmacol Exp Ther** 1989 Aug; 250(2):534-40

Characterization of the effects of the acute and chronic

administration of phencyclidine on body temperature in the rat: lack of evidence for the involvement of opiate receptors. Pechnick RN, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):900–6

Effects of phencyclidine-like drugs on punished behavior in rats. Porter JH, et al. **J Pharmacol Exp Ther** 1989 Mar; 248(3):997–1002

Effects of phencyclidine and other N-methyl-D-aspartate antagonists on the schedule-controlled behavior of rats. Sanger DJ, et al. **J Pharmacol Exp Ther** 1989 Mar; 248(3):1215–21

Psychotomimetic sigma-ligands, dexoxadrol and phencyclidine block the same presynaptic potassium channel in rat brain. Bartschat DK, et al. **J Physiol (Lond)** 1988 Sep;403:341–53

Phencyclidine-induced activation of ventral tegmental A10 dopamine neurons is differentially affected by lesions of the nucleus accumbens and medial prefrontal cortex. Ceci A, et al. **Life Sci** 1989;45(7):637–46

Naloxone does not antagonize PCP-induced stimulation of the pituitary-adrenal axis in the rat. Pechnick RN, et al. **Life Sci** 1989;44(2):143–7

Metaphit antagonizes phencyclidine-induced hypothermia in the rat. Pechnick RN, et al. **Life Sci** 1989;45(5):439–45

Phencyclidine (PCP) reduces the intensity of caffeine-induced convulsions in rats. Turgeon SM, et al. **Life Sci** 1989;44(21):1589–92

Effects of the facilitatory compounds catechol, guanidine, noradrenaline and phencyclidine on presynaptic currents of mouse motor nerve terminals. Anderson AJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Aug; 338(2):133–7

Effect of dopaminergic drugs on enhancement of the binding of quinuclidinyl benzilate by phencyclidine in vivo. Boggan WO, et al. **Neuropharmacology** 1989 Jun;28(6):617–24

Phencyclidine suppresses hippocampal long-term potentiation through stereospecific activation of phencyclidine receptors. Bourne GW, et al. **Neuropharmacology** 1989 Jan;28(1):49–56

Effects of acute and chronic administration of phencyclidine on the A10 dopaminergic mesolimbic system: electrophysiological and behavioral correlates. French ED. **Neuropharmacology** 1988 Aug;27(8):791–8

Conditioned taste aversions induced by phencyclidine and other antagonists of N-methyl-D-aspartate. Jackson A, et al. **Neuropharmacology** 1989 May;28(5):459–64

Comparison of the actions of phencyclidine and sigma ligands on CA1 hippocampal pyramidal neurons in the rat. Malouf AT, et al. **Neuropharmacology** 1988 Nov;27(11):1161–70

Comparison of the effects of the acute administration of dexoxadrol, levoxadrol, MK-801 and phencyclidine on body temperature in the rat. Pechnick RN, et al. **Neuropharmacology** 1989 Aug;28(8):829–35

Behavioural and electroencephalographic effects of excitatory amino acid antagonists and sigma opiate/phencyclidine-like compounds in rats. Sagratella S, et al. **Neuropharmacology** 1989 Jan;28(1):57–61

Effects of self-administered phencyclidine on regional uptake of 2-deoxy-D-[1-14C]glucose in brain. Weissman AD, et al. **Neuropharmacology** 1989 Jun;28(6):575–83

Biochemical, behavioral, and electrophysiologic actions of the selective sigma receptor ligand (+)-pentazocine. Steinfels GF, et al. **Neuropsychopharmacology** 1988 Dec; 1(4):321–7

Amphetamine, cocaine, phencyclidine and nomifensine increase extracellular dopamine concentrations preferentially in the nucleus accumbens of freely moving rats. Carboni E, et al. **Neuroscience** 1989;28(3):653–61

Parametric studies on phencyclidine enhancement of 3H quinuclidinyl benzilate accumulation in vivo. Boggan WO, et al. **Pharmacol Biochem Behav** 1988 May;30(1):31–5

Behavioral dependence on caffeine and phencyclidine in rhesus monkeys: interactive effects. Carroll ME, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):927–32

Interaction between phencyclidine and its pyrolysis product, 1-phenylcyclohexene. Chaturvedi AK, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):1035–43

Phencyclidine receptors and N-methyl-D-aspartate antagonism: electrophysiologic data correlates with known behaviours. Martin D, et al. **Pharmacol Biochem Behav** 1988 Oct;31(2):279–86

Conditioned taste aversions as a behavioral baseline for drug discrimination learning: an assessment with phencyclidine. Mastropaolo JP, et al. **Pharmacol Biochem Behav** 1989 Jan; 32(1):1–8

PCP, THC, ethanol, and morphine and consumption of palatable solutions. Milano WC, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):893–7

NMDA-coupled and uncoupled forms of the PCP receptor: preliminary in vivo evidence for PCP receptor subtypes. Wood PL, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3-4):519–23

Is the discriminative stimulus produced by phencyclidine due to an interaction with N-methyl-D-aspartate receptors? Jackson A, et al. **Psychopharmacology (Berlin)** 1988; 96(1):87–92

Effects of fixed ratio size and dose on phencyclidine self-administration by rats. Marquis KL, et al. **Psychopharmacology (Berlin)** 1989;97(2):179–82

Discriminative properties of phencyclidine in mice: generalization to ketamine and monohydroxy metabolites. Middaugh LD, et al. **Psychopharmacology (Berlin)** 1988; 96(3):381–4

Discriminable effects of phencyclidine analogs evaluated by multiple drug (PCP versus OTHER) discrimination training. Overton DA, et al. **Psychopharmacology (Berlin)** 1989;97(4):514–20

Functional evidence for PCP-like effects of the anti-stroke candidate MK-801. Piercey MF, et al. **Psychopharmacology (Berlin)** 1988;96(4):561–2

PCP-induced alterations in cerebral glucose utilization in rat brain: blockade by metaphit, a PCP-receptor-acylating agent. Tamminga CA, et al. **Synapse** 1987;1(5):497–504

Phencyclidine and psychotomimetic sigma opiates: recent insights into their biochemical and physiological sites of action. Sonders MS, et al. **Trends Neurosci** 1988 Jan; 11(1):37–40 (47 ref.)

POISONING

Phencyclidine pharmacokinetics after a massive overdose. Jackson JE. **Ann Intern Med** 1989 Oct 1;111(7):613–5

THERAPEUTIC USE

Pretreatment with phencyclidine, an N-methyl-D-aspartate antagonist, attenuates long-term behavioral deficits in the rat produced by traumatic brain injury. Hayes RL, et al. **J Neurotrauma** 1988;5(4):259–74

Combined pretrauma scopolamine and phencyclidine attenuate posttraumatic increased sensitivity to delayed secondary ischemia. Jenkins LW, et al. **J Neurotrauma** 1988;5(4):275–87

Phencyclidine reduces postischemic neuronal necrosis in rat hippocampus without changing blood flow. Sauer D, et al. **Neurosci Lett** 1988 Sep 12;91(3):327–32

TOXICITY

Phencyclidine during pregnancy: behavioral and neurochemical effects in the offspring. Fico TA, et al. **Ann N Y Acad Sci** 1989;562:319–26

From the Alcohol, Drug Abuse, and Mental Health Administration. Goodwin FK. **JAMA** 1989 Sep 15; 262(11):1439

Effects of thyrotropin-releasing hormone on phencyclidine- and ketamine-induced spinal depression in neonatal rats. Ohno Y, et al. **Neuropharmacology** 1988 Oct;27(10):1013–8

Pathological changes induced in cerebrocortical neurons by phencyclidine and related drugs. Olney JW, et al. **Science** 1989 Jun 16;244(4910):1360–2

URINE

Evaluation of the Keystone Diagnostics Quik Test using previously screened urine specimens. Bogema S, et al. **J Anal Toxicol** 1988 Sep-Oct;12(5):272–3

A discussion of EMIT d.a.u. assays [letter] Gorsky JE. **J Anal Toxicol** 1988 Sep-Oct;12(5):300

PHENCYCLIDINE ABUSE

EPIDEMIOLOGY

A review of PCP abuse trends and perceptions. Thombs DL. **Public Health Rep** 1989 Jul-Aug;104(4):325–8 (17 ref.)

PSYCHOLOGY

The self-reported effects of PCP on human aggression. McCardle L, et al. **Addict Behav** 1989;14(4):465–72

Phencyclidine and violence: clinical and legal issues. Brecher M, et al. **J Clin Psychopharmacol** 1988 Dec;8(6):397–401 (50 ref.)

MMPI subtypes for chronic phencyclidine (PCP) abusers. Herrera JM, et al. **J Subst Abuse Treat** 1988;5(3):187–93

THERAPY

Inpatient treatment of PCP abusers and users. Gorelick DA, et al. **Am J Drug Alcohol Abuse** 1989;15(1):1–12

Modification of phencyclidine intoxification and biodisposition by charcoal and other treatments. Lyddane JE, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):371–7

PHENELZINE

ADMINISTRATION & DOSAGE

Relapse of depressed patients after effective continuation therapy. Georgotas A, et al. **J Affective Disord** 1989 Sep-Oct;17(2):159–64

ADVERSE EFFECTS

Mania associated with high percentage of inhibition of monoamine oxidase [letter] Bowden CL, et al. **Am J Psychiatry** 1989 Jan;146(1):121

MAOI-induced hypersomnia in patients with bulimia [letter] Gray GE. **Am J Psychiatry** 1989 Aug;146(8):1078

Drug-induced catatonia. Herrmann N, et al. **Can J Psychiatry** 1988 Oct;33(7):633–4

Phenelzine-associated inappropriate ADH secretion [letter] Giese AA, et al. **J Clin Psychopharmacol** 1989 Aug; 9(4):309–10

Bees, ginseng and MAOIs revisited [editorial] Shader RI, et al. **J Clin Psychopharmacol** 1988 Aug;8(4):235

Phenelzine toxicity: case report of an electroencephalographically defined biphasic syndrome [letter] Stonnington C, et al. **J Clin Psychopharmacol** 1988 Oct;8(5):382–4

Common side effects associated with monoamine oxidase inhibitors. Remick RA, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3-4):497–504

Bradycardia induced by an interaction between phenelzine and beta blockers. Reggev A, et al. **Psychosomatics** 1989 Winter;30(1):106–8

ANALOGS & DERIVATIVES

Potential prodrugs of phenelzine: N2-acetylphenelzine and N2-ethoxycarbonylphenelzine. Danielson TJ, et al. **J Pharm Sci** 1988 Jun;77(6):498–9

METABOLISM

DNA alterations induced by the carbon-centered radical derived from the oxidation of 2-phenylethylhydrazine. Leite LC, et al. **Arch Biochem Biophys** 1989 May 1; 270(2):560–72

Potential prodrugs of phenelzine: N2-acetylphenelzine and N2-ethoxycarbonylphenelzine. Danielson TJ, et al. **J Pharm Sci** 1988 Jun;77(6):498–9

Metabolic acetylation of phenelzine in rats. Mozayani A, et al. **Res Commun Chem Pathol Pharmacol** 1988 Dec; 62(3):397–406

PHARMACOLOGY

The influence of phenelzine and tranylcypromine on the release of prostaglandins from the rat mesenteric vascular bed. Nassar BA, et al. **Can J Physiol Pharmacol** 1988 Sep; 66(9):1206–9

Monoamine oxidase inhibition by phenelzine and brofaromine in healthy volunteers. Bieck PR, et al. **Clin Pharmacol Ther** 1989 Mar;45(3):260–9

The effect of some tricyclic antidepressants on the inhibition of mouse brain monoamine oxidase in-vivo by phenelzine. Green AL, et al. **J Pharm Pharmacol** 1989 Jan;41(1):50–1

Influence of some monoamine oxidase inhibitors on the sleep-wakefulness cycle of the cat. Oniani TN, et al. **Neurosci Behav Physiol** 1988 Jul-Aug;18(4):301–6

Profiles of the antipanic compounds, triazolobenzodiazepines and phenelzine, in two animal tests of anxiety. Johnston AL, et al. **Psychiatry Res** 1988 Jul;25(1):81–90

THERAPEUTIC USE

A placebo-controlled comparison of nortriptyline and phenelzine in maintenance therapy of elderly depressed patients. Georgotas A, et al. **Arch Gen Psychiatry** 1989 Sep; 46(9):783–6

Phenelzine and imipramine in mood reactive depressives. Further delineation of the syndrome of atypical depression. Quitkin FM, et al. **Arch Gen Psychiatry** 1989 Sep; 46(9):787–93

Imipramine versus phenelzine in melancholias and dysthymic disorders [letter] Campbell MJ. **Br J Psychiatry** 1988 Jun; 152:862–3

Cocaine abuse treated with phenelzine. Golwyn DH. **Int J Addict** 1988 Sep;23(9):897–905

Tolerance to phenelzine and subsequent refractory depression: three cases. Donaldson SR. **J Clin Psychiatry** 1989 Jan;50(1):33–5

Triiodothyronine potentiation of the antidepressant effect of phenelzine. Joffe RT. **J Clin Psychiatry** 1988 Oct; 49(10):409–10

MAOIs in DST nonsuppressors [letter] Liebowitz MR. **J Clin Psychiatry** 1989 Mar;50(3):107

Dexamethasone suppression test and response to MAOI treatment [letter] Rihmer Z, et al. **J Clin Psychiatry** 1989 Mar;50(3):107–8

Tolerance to the therapeutic effect of phenelzine in patients with panic disorder. Wesner RB, et al. **J Clin Psychiatry** 1988 Nov;49(11):450–1

The influence of panic attacks on response to phenelzine and amitriptyline in depressed outpatients. Kayser A, et al. **J Clin Psychopharmacol** 1988 Aug;8(4):246–53

Factors affecting the delay of antidepressant effect in responders to nortriptyline and phenelzine. Georgotas A, et al. **Psychiatry Res** 1989 Apr;28(1):1–9

Effects of imipramine and phenelzine on plasma PEA levels. McGrath PJ, et al. **Psychiatry Res** 1988 Nov;26(2):239

Tyramine sulfate excretion may be a better predictor of antidepressant response than monoamine oxidase activity. Stewart JW, et al. **Psychiatry Res** 1988 Aug;25(2):195–201

Social functioning in chronic depression: effect of 6 weeks of antidepressant treatment. Stewart JW, et al. **Psychiatry Res** 1988 Aug;25(2):213–22

PHENEMAL see **PHENOBARBITAL**

PHENETHANOLAMINE N-METHYLTRANSFERASE

ANALYSIS

Distribution of phenylethanolamine N-methyltransferase cell bodies, axons, and terminals in monkey brainstem: an immunohistochemical mapping study. Carlton SM, et al.

J Comp Neurol 1989 Sep 15;287(3):273–85
Ontogeny of catecholamine–synthesizing enzymes and enkephalins in the sheep adrenal medulla: an immunocytochemical study. McMillen IC, et al. J Endocrinol 1988 Aug;118(2):221–6
A sensitive radioenzymatic assay for epinephrine forming enzymes. Ziegler MG, et al. Life Sci 1988;43(25):2117–22
Is phenylethanolamine–N–methyltransferase (PNMT) contained in rat hypothalamic neurons? Anderson CR, et al. Neurosci Lett 1988 Nov 11;93(2–3):164–9
Phenylethanolamine N–methyltransferase–containing neurons in the limbic system of the young rat. Mezey E. Proc Natl Acad Sci U S A 1989 Jan;86(1):347–51
Immunocytochemical evidence for substance P and serotonin input to medullary bulbospinal adrenergic neurons. Nicholas AP, et al. Synapse 1988;2(6):569–76
Comparative effects of kainic, quisqualic, and ibotenic acids on phenylethanolamine–N–methyltransferase–containing cells of rat retina. Cohen J. Toxicology 1989 Feb; 54(2):177–82

ANTAGONISTS & INHIBITORS

Inhibition of guinea pig lordosis behavior by the phenylethanolamine N–methyltransferase (PNMT) inhibitor SKF–64139: mediation by alpha noradrenergic receptors. Feder HH, et al. Horm Behav 1989 Mar; 23(1):106–17
Tetrahydrothiadiazoloisoquinolines: synthesis and inhibition of phenylethanolamine–N–methyltransferase. Girard GR, et al. J Med Chem 1989 Jul;32(7):1566–71
Conformationally restricted and conformationally defined tyramine analogues as inhibitors of phenylethanolamine N–methyltransferase. Ye QH, et al. J Med Chem 1989 Feb; 32(2):478–86
Conformational and steric aspects of phenylethanolamine and phenylethylamine analogues as substrates or inhibitors of phenylethanolamine N–methyltransferase. Grunewald GL, et al. Mol Pharmacol 1989 Jan;35(1):93–7
Activation in young rats induced by LY134046, an inhibitor of phenylethanolamine N–methyltransferase. Mefford IN, et al. Psychopharmacology (Berlin) 1989;98(2):240–4

BIOSYNTHESIS

Induction of phenylethanolamine N–methyltransferase mRNA expression by glucocorticoids in cultured bovine adrenal chromaffin cells. Wan DC, et al. Eur J Pharmacol 1989 May 11;172(2):107–15
Histamine activates proenkephalin A mRNA but not phenylethanolamine N–methyltransferase mRNA expression in cultured bovine adrenal chromaffin cells. Wan DC, et al. Eur J Pharmacol 1989 May 11;172(2):117–29
Effect of vasopressin on the induction of adrenal tyrosine hydroxylase and phenylethanolamine N–methyltransferase. Regunathan S, et al. Regul Pept 1988 Nov;23(2):217–26

GENETICS

Strain–specific differences in transcription of the gene for the epinephrine–synthesizing enzyme phenylethanolamine N–methyltransferase. Evinger MJ, et al. Brain Res Mol Brain Res 1989 Mar;5(2):141–7
A two allele DNA polymorphism of the human phenylethanolamine N–methyltransferase (hPNMT) gene identified by HGIA I. Hoehe MR, et al. Nucleic Acids Res 1989 Jan 25;17(2):828
BANI detects a biallelic DNA polymorphism of the human phenylethanolamine N–methyltransferase [hPNMT] gene. Hoehe MR, et al. Nucleic Acids Res 1989 Mar 11;17(5):2148
Cloning of the rat adrenal medullary phenylethanolamine–N–methyltransferase. Mezey E. Nucleic Acids Res 1989 Mar 11;17(5):2125
Coexistence and gene expression of phenylethanolamine N–methyltransferase, tyrosine hydroxylase, and neuropeptide tyrosine in the rat and bovine adrenal gland: effects of reserpine. Schalling M, et al. Proc Natl Acad Sci U S A 1988 Nov;85(21):8306–10

METABOLISM

Direct adrenergic inputs to sacral autonomic neurons: using a double–immunostaining method at the light and electron microscopic levels. Kohno J, et al. Brain Res 1988 Sep 27;461(1):158–62
Ultrastructural localization of phenylethanolamine N–methyltransferase–like immunoreactivity in the rat locus coeruleus. Milner TA, et al. Brain Res 1989 Jan 23; 478(1):1–15
PNMT–containing catecholaminergic neurons are not necessarily adrenergic. Sved AF. Brain Res 1989 Feb 27; 481(1):113–8
Extraadrenal adrenaline formation by two separate enzymes. Ziegler MG, et al. Experientia 1989 Aug 15;45(8):718–20
Immunocytochemical localization of L–glutamate decarboxylase and catecholamine–synthesizing enzymes in the retroperitoneal sympathetic tissue of the newborn rat. Ahonen M, et al. J Auton Nerv Syst 1989 Mar;26(2):89–96
Co–localization of RNAs coding for phenylethanolamine N–methyltransferase and proenkephalin A in bovine and ovine adrenals. Wan DC, et al. J Auton Nerv Syst 1989 Apr;26(3):231–40
Distribution of monoamine–synthesizing neurons in the human medulla oblongata. Halliday GM, et al. J Comp Neurol 1988 Jul 15;273(3):301–17
Anatomy of the adrenergic system in the medulla oblongata of the tree shrew: PNMT immunoreactive structures within the nucleus tractus solitarii. Mittendorf A, et al. J Comp Neurol 1988 Aug 8;274(2):178–89
Glucocorticoid–induced PNMT–immunoreactive sympathetic cells in the superior cervical ganglion of the rat. Päivärinta H, et al. J Electron Microsc Tech 1989 Aug; 12(4):389–96
Stereochemical aspects of phenylethanolamine analogues as substrates of phenylethanolamine N–methyltransferase. Grunewald GL, et al. J Med Chem 1988 Oct;31(10):1984–6
Double antigen localization of two catecholamine enzymes and GABA in amacrine cells of the rat retina in semi–thin sections. Simon A, et al. J Neurosci Methods 1989 Apr; 27(3):181–9
Adrenergic neurons in sheep brain demonstrated by immunohistochemistry with antibodies to phenylethanolamine N–methyltransferase (PNMT) and dopamine–beta–hydroxylase (DBH): absence of the C1 cell group in the sheep brain. Tillet Y. Neurosci Lett 1988 Dec 19;95(1–3):107–12
Morphometrical and microdensitometrical studies on phenylethanolamine–N–methyltransferase– and neuropeptide Y–immunoreactive neurons in the rostral medulla oblongata of the adult and old male rat. Agnati LF, et al. Neuroscience 1988 Aug;26(2):461–78
Morphometrical and microdensitometrical studies on phenylethanolamine–N–methyltransferase– and neuropeptide Y–immunoreactive nerve terminals and on glucocorticoid receptor–immunoreactive nerve cell nuclei in the paraventricular hypothalamic nucleus in adult and old male rats. Zoli M, et al. Neuroscience 1988 Aug; 26(2):479–92

PHENETHYL ALCOHOL see under **ALCOHOL, ETHYL**

PHENETHYLAMINES

Lephetamine abuse and dependence: clinical effects and withdrawal syndrome. Janiri L, et al. Br J Addict 1989 Jan;84(1):89–95
An improved method for the preparation of derivatives of reducing oligosaccharide with 2–(4–aminophenyl)ethylamine. Semprevivo LH. Carbohydr Res 1988 Jun 15;177:222–7
2–Phenylethyl ester and 2–phenylethyl amide derivative analogues of the C–terminal hepta– and octapeptide of cholecystokinin. Fulcrand P, et al. Int J Pept Protein Res 1988 Nov;32(5):384–95
beta–Phenylethylamines and the isoquinoline alkaloids. Bentley KW. Nat Prod Rep 1989 Aug;6(4):405–32 (568 ref.)
beta–Phenylethylamines and the isoquinoline alkaloids. Bentley KW. Nat Prod Rep 1988 Jun;5(3):265–92 (541 ref.)

ADMINISTRATION & DOSAGE

The striatal dopamine dependency of life span in male rats. Longevity study with (–)deprenyl. Knoll J. Mech Ageing Dev 1988 Dec;46(1–3):237–62
Long–term efficacy and safety of deprenyl (selegiline) in advanced Parkinson's disease. Golbe LI. Neurology 1989 Aug;39(8):1109–11

ADVERSE EFFECTS

Hypomania in a patient receiving deprenyl (selegiline) after adrenal–striatal implantation for Parkinson's disease. Menza MA, et al. Clin Neuropharmacol 1988 Dec;11(6):549–51
A possible L–deprenyl induced hypertensive reaction [letter] McGrath PJ, et al. J Clin Psychopharmacol 1989 Aug; 9(4):330–1

ANALYSIS

Rapid and sensitive determination of beta–phenylethylamine in animal brains by high performance liquid chromatography with fluorometric detection. Taga C, et al. Biomed Chromatogr 1989 May;3(3):118–20
Determination of beta–phenylethylamine in catfish (Parasilurus asotus) tissues by gas chromatography/mass spectrometry. Kumazawa T, et al. Comp Biochem Physiol [C] 1988;91(2):571–4
Conformational analysis of optically active phenylethylamines and phenylimidazolines. Cardozo MG, et al. Drug Des Deliv 1988 Dec;3(4):323–35

ANTAGONISTS & INHIBITORS

A high dose of MPTP overcomes the protective effect of selegiline against dopaminergic neurotoxicity. Fuller RW, et al. J Pharm Pharmacol 1989 Jul;41(7):492–3

BLOOD

Effects of imipramine and phenelzine on plasma PEA levels. McGrath PJ, et al. Psychiatry Res 1988 Nov;26(2):239

CHEMICAL SYNTHESIS

Amides of beta–(4–chlorophenoxy)–alpha–phenyl–ethylamines are inhibitors of cholesterol biosynthesis in vitro. Rossi S, et al. Farmaco 1989 Mar;44(3):315–21
[Anti–aggregatory and anticoagulant effects of oligoamines. 9. The pharmacokinetics of N,N',N"–tris–4–(3–iodo–4–methoxyphenyl)–butyl–1,3,5–benzene triethanamine] Rehse K, et al. Arch Pharm (Weinheim) 1988 Nov;321(11):813–6 (Eng. Abstr.) (Ger)

DIAGNOSTIC USE

Affinity chromatography with the immobilized agonist N–0434 yields an active and highly purified preparation of the dopamine D–2 receptor from bovine striatum. Bosker FJ, et al. Eur J Pharmacol 1989 Apr 25;163(2–3):319–26

METABOLISM

An investigation of the adrenergic uptake specificity of phenyl–2–aminoethyl sulfides. Pollock SH, et al. Arch Int Pharmacodyn Ther 1988 Nov–Dec;296:76–86
Intracellular localization of the calcium– and calmodulin antagonist fendiline. Weyhenmeyer R, et al. Arzneimittelforschung 1989 Feb;39(2):199–201
Alpha–adrenoceptor occupancy by N,N–dimethyl–2–bromo–2–phenethylamine hydrobromide (DMPEA) in rat vas deferens. Melchiorre C, et al. Eur J Pharmacol 1988 Aug 24;153(2–3):255–61
Hydroxylation of phenylethylamine by rat liver preparations. Inhibition studies. Mosnaim AD, et al. Gen Pharmacol 1989; 20(4):463–7
Astroglial cells in vitro are heterogeneous with respect to expression of the alpha 1–adrenergic receptor. Lerea LS, et al. GLIA 1989;2(3):135–47
Effects of dopamine beta–monooxygenase substrate analogs on ascorbate levels and norepinephrine synthesis in adrenal chromaffin granule ghosts. Wimalasena K, et al. J Biol Chem 1989 Jan 5;264(1):124–30
Stereochemical aspects of phenylethanolamine analogues as substrates of phenylethanolamine N–methyltransferase. Grunewald GL, et al. J Med Chem 1988 Oct;31(10):1984–6
Localization of monoamine oxidase B in human brain by autoradiographical use of 11C–labelled L–deprenyl. Jossan SS, et al. J Neural Transm 1989;77(1):55–64
Prenatal ontogenesis of brain phenolamines and catecholamines in relation to their metabolizing enzymes in Roman avoider strains of rats. Coulon JF, et al. J Neurochem 1989 May;52(5):1418–24
Effects of aging on p– and m–octopamine, catecholamines, and their metabolizing enzymes in the rat. David JC, et al. J Neurochem 1989 Jul;53(1):149–54
Mechanistic positron emission tomography studies: demonstration of a deuterium isotope effect in the monoamine oxidase–catalyzed binding of [11C]L–deprenyl in living baboon brain. Fowler JS, et al. J Neurochem 1988 Nov;51(5):1524–34
Hydroxylation of beta–phenylethylamine in the rat. Boulton AA, et al. Life Sci 1974 Nov 1;15(9):1673–83
Reciprocal changes in striatal dopamine and beta–phenylethylamine induced by reserpine in the presence of monoamine oxidase inhibitors. Juorio AV, et al. Naunyn Schmiedebergs Arch Pharmacol 1988 Dec; 338(6):644–8
The release of 3H–noradrenaline by p– and m–tyramines and –octopamines, and the effect of deuterium substitution in alpha–position. Schönfeld CL, et al. Naunyn Schmiedebergs Arch Pharmacol 1989 Apr; 339(4):433–40
Functional interactions of 2–phenylethylamine and of tryptamine with brain catecholamines: implications for psychotherapeutic drug action. Greenshaw AJ. Prog Neuropsychopharmacol Biol Psychiatry 1989; 13(3–4):431–43 (47 ref.)
In vivo quantification of blood–brain transfer and binding of [125I]HEAT, an alpha 1–adrenoceptor antagonist. Dyve S, et al. Synapse 1989;3(3):205–12

PHARMACOKINETICS

Cerebral and peripheral demethylation of psychotomimetics measured by expired 14CO2. Sargent T 3d, et al. Int J Rad Appl Instrum [B] 1989;16(1):91–9
Biotransformation of aryl alkylamines by Cunninghamella bainieri. Foster BC, et al. Xenobiotica 1989 May;19(5):531–8

PHARMACOLOGY

Apomorphine, deprenyl, and yohimbine fail to increase sexual behavior in rhesus males. Chambers KC, et al. Behav Neurosci 1989 Aug;103(4):816–23
Behavioural responses to the selective D1–dopamine receptor agonist R–SK&F 38393 and the selective D2–agonist RU 24213 in young compared with aged rats. Molloy AG, et al. Br J Pharmacol 1988 Oct;95(2):335–42
Deprenyl as prophylaxis against Parkinson's disease? Sonsalla PK, et al. Clin Neuropharmacol 1988 Dec;11(6):500–11 (78 ref.)
Basic mechanisms underlying prenylamine–induced 'torsade de pointes': differences between prenylamine and fendiline due to basic actions of the isomers. Bayer R, et al. Curr Med Res Opin 1988;11(4):254–72 (60 ref.)
Chronic L–deprenyl–induced up–regulation of the dopamine uptake carrier. Wiener HL, et al. Eur J Pharmacol 1989 Apr 12;163(1):191–4
The most desirable conformation of phenylethylamine (PEA) moiety stimulating noradrenergic neurons: effects of PEA, methamphetamine, phenelzine, methylphenidate, nomifensine and mazindol on rat spinal reflexes. Hasebe

Y, et al. **Gen Pharmacol** 1989;20(3):375–9
Effect of ractopamine on insulin sensitivity and response of isolated rat adipocytes. Hausman DB, et al. **J Anim Sci** 1989 Jun;67(6):1455–64
Effects of dopamine beta-monooxygenase substrate analogs on ascorbate levels and norepinephrine synthesis in adrenal chromaffin granule ghosts. Wimalasena K, et al. **J Biol Chem** 1989 Jan 5;264(1):124–30
Monoamine oxidase-B inhibition: a comparison of in vivo and ex vivo measures of reversible effects. Turkish S, et al. **J Neural Transm** 1988;74(3):141–8
Chronic L-deprenyl does not alter the restoration of striatal dopamine in MPTP-lesioned mice. Wiener HL, et al. **J Neurosci Res** 1989 Jul;23(3):326–9
Possible mechanisms underlying the differential effects of selective inhibitors of type A and type B monoamine oxidase on intraocular pressure in the cat. Colasanti BK. **J Ocul Pharmacol** 1986 Winter;2(1):1–8
Deprenyl antagonizes acute lethality of 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine in mice. Fuller RW, et al. **J Pharmacol Exp Ther** 1988 Nov; 247(2):531–5
Characteristics of antinociception induced by noncatecholic phenylethylamine derivatives: the relation of endogenous norepinephrine to phenylethylamine analog-induced antinociception. Matsuoka Y, et al. **Jpn J Pharmacol** 1988 Oct;48(2):263–72
Striatal dopamine, sexual activity and lifespan. Longevity of rats treated with (–)deprenyl. Knoll J, et al. **Life Sci** 1989; 45(6):525–31
Conformational and steric aspects of phenylethanolamine and phenylethylamine analogues as substrates or inhibitors of phenylethanolamine N-methyltransferase. Grunewald GL, et al. **Mol Pharmacol** 1989 Jan;35(1):93–7
SR33557, an indolizinsulfone blocker of Ca2+ channels: identification of receptor sites and analysis of its mode of action. Schmid A, et al. **Mol Pharmacol** 1989 Jun; 35(6):766–73
Release of 3H-5-hydroxytryptamine by amiflamine and related phenylalkylamines from rat occipital cortex slices. Ask AL, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jun;339(6):684–9
SR 33557, a novel calcium-antagonist: interaction with [3H]-(+/-)-nitrendipine and [3H]-(-)-desmethoxy-verapamil binding sites in cerebral membranes. Nokin P, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):31–6
Effects of beta-phenylethylamine on polyphosphoinositide turnover in rat cerebral cortex. Dyck LE, et al. **Neurochem Res** 1989 Jan;14(1):63–7
Specific D1 and D2 dopamine agonists have synergistic effects in the 6-hydroxydopamine circling model in the rat. Rouillard C, et al. **Neuropharmacology** 1988 Dec; 27(12):1257–64
The role of alpha 1-adrenoceptor-mediated collateral excitation in the regulation of the electrical activity of locus coeruleus neurons. Nakamura S, et al. **Neuroscience** 1988 Dec;27(3):921–9
Discriminative stimulus effects of caffeine and benzphetamine in amphetamine-trained volunteers. Chait LD, et al. **Psychopharmacology (Berlin)** 1988;96(3):302–8
Enhanced pressor sensitivity to oral tyramine challenge following high dose selegiline treatment. Prasad A, et al. **Psychopharmacology (Berlin)** 1988;95(4):540–3
Phenylalkylamines are promiscuous receptor blockers [letter] Insel PA. **Trends Pharmacol Sci** 1988 Jan;9(1):10
[Hypotensive effect of 1-(2,6-dimethylphenoxy)-2-(3,4-dimethoxyphenylethylamino) propane hydrochloride] Ni XP, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jan;9(1):64–8 (Eng. Abstr.) **(Chi)**

POISONING

Adverse effects of the use of unusual phenethylamine compounds sold as illicit amphetamine. Bal TS, et al. **Med Sci Law** 1989 Jul;29(3):186–8

SECRETION

Release of some endogenous trace amines from rat striatal slices in the presence and absence of a monoamine oxidase inhibitor. Dyck LE. **Life Sci** 1989;44(17):1149–56

THERAPEUTIC USE

A controlled study of the antidepressant efficacy and side effects of (-)-deprenyl. A selective monoamine oxidase inhibitor. Mann JJ, et al. **Arch Gen Psychiatry** 1989 Jan; 46(1):45–50
Deprenyl as symptomatic therapy in Parkinson's disease. Golbe LI. **Clin Neuropharmacol** 1988 Oct;11(5):387–400 (72 ref.)
Platelet monoamine oxidase in Parkinson patients: effect of L-deprenyl therapy. Lee DH, et al. **J Neural Transm Park Dis Dement Sect** 1989;1(3):189–94
Pergolide and selegiline for Parkinson's disease. **Med Lett Drugs Ther** 1989 Sep 8;31(800):81–3
A placebo-controlled trial of L-deprenyl in atypical depression. McGrath PJ, et al. **Psychopharmacol Bull** 1989; 25(1):63–7
Big first scored with nerve diseases [news] Lewin R. **Science** 1989 Aug 4;245(4917):467–8
The effect of deprenyl (selegiline) on the natural history of Parkinson's disease. Tetrud JW, et al. **Science** 1989 Aug 4;245(4917):519–22
Norfenefrine in the treatment of female urinary stress incontinence assessed by one-hour pad weighing test. Diernaes E, et al. **Urol Int** 1989;44(1):28–31
Does medical therapy cure female stress incontinence? Lose G, et al. **Urol Int** 1989;44(1):25–7
[The possibility of stimulating the ureters with hexoprenaline following radical abdominal surgery of cervix cancer] Gitsch G, et al. **Zentralbl Gynakol** 1988;110(16):1030–3 (Eng. Abstr.) **(Ger)**
[Treatment of patients with ischemic heart diseases using senzit] Zamotaev IP, et al. **Klin Med (Mosk)** 1988 Aug; 66(8):68–71 **(Rus)**
[Effect of the drug Humex on the development of experimental motion sickness] Bodo G, et al. **Kosm Biol Aviakosm Med** 1989 May-Jun;23(3):84 **(Rus)**

TOXICITY

Behavioural and neurochemical changes produced by lefetamine in two inbred strains of mice. Cagiano R, et al. **Arch Toxicol Suppl** 1989;13:375–7

URINE

Analysis of the pentafluorobenzoyl derivative of phenylethylamine utilizing negative ion chemical ionization and gas chromatography/mass spectrometry. Gashkoff P, et al. **Biomed Environ Mass Spectrom** 1988 Oct; 16(1-12):327–9

PHENETHYLAZOCINE see **PHENAZOCINE**

PHENETIDINE see under **AMINOPHENOLS**

PHENFORMIN

PHARMACOKINETICS

Effect of iron deficiency anaemia and its treatment on the absorption and elimination of phenformin. Kshirsagar NA, et al. **Xenobiotica** 1988 Oct;18(10):1185–89

THERAPEUTIC USE

[Insulin secretion and insulin resistance in patients failing to respond to oral hypoglycemic agents] Caputo S, et al. **Minerva Endocrinol** 1988 Jul-Sep;13(3):167–72 (Eng. Abstr.) **(Ita)**
[New findings on the metabolic effects of biguanides. In vitro and in vivo studies] Marchetti P, et al. **Minerva Endocrinol** 1988 Jul-Sep;13(3):173–80 (Eng. Abstr.) **(Ita)**

PHENIDYLATE see **METHYLPHENIDATE**

PHENINDIONE

ADMINISTRATION & DOSAGE

Long-term oral anticoagulant therapy in elderly patients. Wickramasinghe LS, et al. **Age Ageing** 1988 Nov; 17(6):388–96
[Effect of long-term anticoagulant and antithrombocytic therapy on the size of intracavitary thrombus and the incidence of thromboembolic complications in patients with acute myocardial infarction] Rado Iu, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(1):94 **(Rus)**

PHARMACOLOGY

[Effect of fenilin on the enzyme activity of the monooxygenase system in the rat liver during a change in the feeding] Imambaev SE. **Farmakol Toksikol** 1989 Jan-Feb;52(1):59–61 (Eng. Abstr.) **(Rus)**

PHENIRAMINE

ADMINISTRATION & DOSAGE

A double-blind controlled clinical trial to assess the role of anti-histamines in the treatment of multi-bacillary leprosy. Thomas A, et al. **Indian J Lepr** 1988 Oct;60(4):499–505

PHENOBARBITAL

Permeability of ethylcellulose microcapsules towards phenobarbital. Uno K, et al. **J Microencapsul** 1984 Oct-Dec;1(4):335–41
Comparison of four-drug discriminations in training compartments with four identical levers versus four different responses manipulanda. Overton DA, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):879–88
[Possibilities of modelling of an undesirable phenomenon—non-alcoholic substance abuse in society] Fikr V, et al. **Cesk Zdrav** 1988 Oct;36(10):418–26 (Eng. Abstr.) **(Cze)**

ADMINISTRATION & DOSAGE

Comparison of intraosseous and intravenous routes of anticonvulsant administration in a porcine model. Jaimovich DG, et al. **Ann Emerg Med** 1989 Aug; 18(8):842–6
The effects of dose and duration of administration on the promotion index of phenobarbital in multistage hepatocarcinogenesis in the rat. Rizvi TA, et al. **APMIS Suppl** 1988;2:262–74
Carbamazepine replacement of phenytoin, phenobarbital and primidone in a rehabilitation setting: effects on seizure control. Wroblewski BA, et al. **Brain Inj** 1989 Apr-Jun; 3(2):149–56
The influence of prenatal phenobarbital exposure on the growth of dendrites in the rat hippocampus. Jacobson CD, et al. **Brain Res Dev Brain Res** 1988 Dec 1;44(2):233–9
Use of a pharmacologic indicator to compare compliance with tablets prescribed to be taken once, twice, or three times daily. Pullar T, et al. **Clin Pharmacol Ther** 1988 Nov; 44(5):540–5
Dose-response behavior of the induction of alpha 1-acid glycoprotein by phenobarbital in the dog. Abramson FP. **Drug Metab Dispos** 1988 Jul-Aug;16(4):546–50
Pharmacokinetics and clinical use of parenteral phenytoin, phenobarbital, and paraldehyde. Ramsay RE. **Epilepsia** 1989;30 Suppl 2:S1–3
Normal zinc and iron concentrations in mice after early exposure to phenobarbital. Pick CG, et al. **Int J Dev Neurosci** 1987;5(5-6):391–8
Neuron transplantation reverses phenobarbital-induced behavioral birth defects in mice. Yanai J, et al. **Int J Dev Neurosci** 1988;6(5):409–16
Studies on noradrenergic alterations in relation to early phenobarbital-induced behavioral changes. Yanai J, et al. **Int J Dev Neurosci** 1987;5(4):337–44
Preparation and characterization of agar beads containing phenobarbitone sodium. el-Helw A el R, et al. **J Microencapsul** 1988 Apr-Jun;5(2):159–63
Developmental aspects of phenobarbital dosage requirements in newborn infants with seizures. Nahata MC, et al. **J Perinatol** 1988 Fall;8(4):318–20
[Prognosis of complicated febrile convulsions in therapy with primidone, cathine-phenobarbital and calcium valproinate] Rohmann E, et al. **Kinderarztl Prax** 1988 Oct;56(10):495–8 (Eng. Abstr.) **(Ger)**
[Doppler flow velocities in cerebral arteries in relation to intravenous phenobarbital in premature infants weighing between 500 and 1,500 g] Jorch G, et al. **Monatsschr Kinderheilkd** 1988 Dec;136(12):815–8 (Eng. Abstr.) **(Ger)**
[Protective effect of phenobarbital in toxic liver damage by kerosine hydrocarbons in rats] Kamiński M, et al. **Folia Med Cracov** 1988;29(1-2):87–98 (Eng. Abstr.) **(Pol)**
[Detailed monitoring of valproic acid and phenobarbital in the treatment of epilepsy in children] Sobaniec W, et al. **Neurol Neurochir Pol** 1988 Sep-Oct;22(5):413–20 (Eng. Abstr.) **(Pol)**

ADVERSE EFFECTS

Phenobarbital and respiratory complications in neonates receiving mechanical ventilatory support [letter] Regev M, et al. **Am J Dis Child** 1989 Feb;143(2):138
Massive hepatic necrosis in a child after administration of phenobarbital. Mockli G, et al. **Am J Gastroenterol** 1989 Jul;84(7):820–2 (13 ref.)
Withdrawal of barbiturate anticonvulsant drugs: prospective controlled study. Coulter DL. **Am J Ment Retard** 1988 Nov;93(3):320–7
Phenobarbital rheumatism in patients with brain tumor. Taylor LP, et al. **Ann Neurol** 1989 Jan;25(1):92–4
Primidone/phenobarbital-induced periodic alternating nystagmus. Schwankhaus JD, et al. **Ann Ophthalmol** 1989 Jun;21(6):230–2
Neurooocular side effects of carbamazepine and phenobarbital in epileptic patients as measured by saccadic eye movements analysis. Tedeschi G, et al. **Epilepsia** 1989 Jan-Feb;30(1):62–6
Contraindications [letter] Schoenwetter WF. **Minn Med** 1989 Jun;72(6):331
Phenobarbital-induced Tourette-like symptoms. Sandyk R. **Pediatr Neurol** 1986 Jan-Feb;2(1):54–5
[Cholestatic hepatitis caused by quinidine phenylethylbarbiturate, and sarcoidosis. Apropos of a case (letter)] Alix M, et al. **Therapie** 1989 Jan-Feb;44(1):69 **(Fre)**
[Algoneurodystrophy caused by phenobarbital] Cuchacovich M, et al. **Rev Med Chil** 1987 Sep;115(9):865–7 (Eng. Abstr.) **(Spa)**

ANALOGS & DERIVATIVES

Stability of phenobarbital N-glucosides: identification of hydrolysis products and kinetics of decomposition. Vest FB, et al. **Pharm Res** 1989 Jun;6(6):458–65

ANALYSIS

Simultaneous determination of phenobarbital, phenytoin and methylphenobarbital in tablet formulations by HPLC. Vio L, et al. **Farmaco [Prat]** 1988 May;43(5):157–64
Phenytoin and phenobarbital assayed by the ACCULEVEL method compared with EMIT in an outpatient clinic setting. Morris RG, et al. **Ther Drug Monit** 1988; 10(4):469–73
[Influence of salivary Ph on the correlation between salivary and plasma levels of phenobarbital in the neonatal period] Fabris C, et al. **Minerva Pediatr** 1989 Jan;41(1):45–6 (Eng. Abstr.) **(Ita)**
[Assessment of blood barbiturates in the newborn infants by

the determination of phenobarbital in saliva] Fabris C, et al. **Minerva Pediatr** 1988 Jul;40(7):411–3 (Eng. Abstr.) **(Ita)**

ANTAGONISTS & INHIBITORS

A semipurified diet that suppresses phenobarbital promotion of hepatocarcinogenesis in the rat. Hendrich S, et al. **Nutr Cancer** 1989;12(3):249–58

BLOOD

Evaluation of the Ames Seralyzer for therapeutic drug monitoring of phenobarbital and phenytoin. Brettfeld C, et al. **Clin Chem** 1989 Feb;35(2):324

Cost-effective assays for use in monitoring carbamazepine, phenobarbital, and phenytoin in serum. Moore FM, et al. **Clin Chem** 1989 Aug;35(8):1782–4

EMIT measurement of carbamazepine, phenobarbital, and theophylline in the "Monarch" centrifugal analyzer [letter] Wenham PR, et al. **Clin Chem** 1989 May;35(5):895

Use of a pharmacological indicator to monitor compliance with thyroxine. Penn ND, et al. **Eur J Clin Pharmacol** 1988; 35(3):327–9

Usefulness of serum levels of phenobarbitone in control of epilepsy. Shriyan IC, et al. **Indian J Pediatr** 1988 May–Jun; 55(3):427–30

Application of the Abbott TDx lidocaine, phenytoin, and phenobarbital assays to postmortem blood specimens. Caplan YH, et al. **J Anal Toxicol** 1988 Sep–Oct;12(5):265–7

Immunochromatographic measurement of phenobarbital in whole blood with a non-instrumented assay. Wannamaker B, et al. **Neurology** 1989 Sep;39(9):1215–8

Phenytoin and phenobarbital concentrations in serum: a comparison of Ames Seralyzer with GLC, TDX, and EMIT. Leppik IE, et al. **Ther Drug Monit** 1989;11(1):73–8

[A quick DC method for simultaneous quantitative determination of paracetamol, caffeine, phenobarbital and propyphenazone in plasma] Kosmeas N, et al. **Pharm Acta Helv** 1989;64(1):2–7 (Eng. Abstr.) **(Ger)**

[Influence of salivary Ph on the correlation between salivary and plasma levels of phenobarbital in the neonatal period] Fabris C, et al. **Minerva Pediatr** 1989 Jan;41(1):45–6 (Eng. Abstr.) **(Ita)**

DIAGNOSTIC USE

[Neonatal cholestatic syndrome: use of phenobarbital in the gammagram of the bile ducts] Rivera-Echegoyen M, et al. **Bol Med Hosp Infant Mex** 1988 Oct;45(10):645–52 (Eng. Abstr.) **(Spa)**

METABOLISM

Alteration by perfluorodecalin of hepatic metabolism and excretion of phenobarbital. Huang R, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3761–4

Simultaneous measurement of ethosuximide and phenobarbital in brain tissue, serum and urine by HPLC. Galan-Valiente J, et al. **Biomed Chromatogr** 1989 Mar; 3(2):49–52

Study of isotope effects on protein binding by gas chromatography/mass spectrometry of theophylline-phenobarbitone and 2H, 13C, 15N isotopomers. Cherrah Y, et al. **Biomed Environ Mass Spectrom** 1988 Oct;17(4):245–50

Inductive effects of fenofibrate and metabolism of phenobarbital. Mounié J, et al. **Fundam Clin Pharmacol** 1988;2(4):259–65

Autoinduction of phenobarbital elimination in the dog. Abramson FP. **J Pharm Sci** 1988 Sep;77(9):768–70

Effects of bromocriptine on hepatic cytochrome P-450 monooxygenase system. Moochhala SM, et al. **Jpn J Pharmacol** 1989 Feb;49(2):285–91

The effects of two anticonvulsants on amino acid levels in the developing rat cerebellum. Hannah RS, et al. **Neurochem Res** 1989 May;14(5):427–9

[Methods for detecting barbiturate poisoning in a clinical laboratory] Gruhl H. **J Clin Chem Clin Biochem** 1989 Feb; 27(2):53–6 (Eng. Abstr.) **(Ger)**

PHARMACOKINETICS

Pharmacokinetics of phenobarbital in dogs given multiple doses. Ravis WR, et al. **Am J Vet Res** 1989 Aug; 50(8):1343–7

Disposition of phenytoin and phenobarbitone in the isolated perfused human placenta. Kluck RM, et al. **Clin Exp Pharmacol Physiol** 1988 Nov;15(11):827–36

Relative bioavailability of rectally administered phenobarbital sodium parenteral solution. Graves NM, et al. **DICP** 1989 Jul–Aug;23(7–8):565–8

Free drug levels monitoring as a detector of false metabolic refractory epilepsy. Gianelli M, et al. **Eur Neurol** 1988; 28(6):349–53

Pharmacokinetic equivalence of 5(ethyl(2H)5)- and unlabelled phenobarbitone. Benchekroun Y, et al. **J Clin Pharmacol** 1989 Feb;29(2):168–73

The effect of surfactants on the microencapsulation and release of phenobarbitone from gelatin-acacia complex coacervate microcapsules. Duquemin SJ, et al. **J Microencapsul** 1986 Apr–Jun;3(2):89–93

Pharmacokinetic modeling of the anticonvulsant action of phenobarbital in rats. Dingemanse J, et al. **J Pharmacol Exp Ther** 1989 May;249(2):601–8

Kinetics of drug action in disease states. XXXIV. Effect of experimental thyroid disorders on the pharmacodynamics of phenobarbital, ethanol and pentylenetetrazol. Walker JS, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):6–10

Effect of aminophylline upon the protective activity of common antiepileptic drugs and their plasma levels in mice. Czuczwar SJ, et al. **Neurosci Res** 1989 Jun;6(5):470–4

Phenobarbital stability in different dosage forms: alternatives for elixirs. Dietz NJ, et al. **Pharm Res** 1988 Dec;5(12):803–5

Phenobarbital adsorption from simulated intestinal fluid, U.S.P., and simulated gastric fluid, U.S.P., by two activated charcoals. Wurster DE, et al. **Pharm Res** 1988 Mar; 5(3):183–6

[The serum phenobarbital content of newborn infants in therapeutic and toxic conditions] Meyer FP, et al. **Padiatr Grenzgeb** 1988;27(6):467–71 (Eng. Abstr.) **(Ger)**

[Monitoring of phenobarbital use during the neonatal period by means of urinalysis] Fabris C, et al. **Pediatr Med Chir** 1988 Sep–Oct;10(5):493–4 (Eng. Abstr.) **(Ita)**

[The effects of age and concurrently administered of antiepileptic drugs on the apparent clearance of phenobarbital in epileptic children] Yukawa E, et al. **Yakugaku Zasshi** 1988 Nov;108(11):1081–6 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Hepatic cholesterol metabolism as a function of carbon disulfide concentration and treatment with phenobarbital. Simmons JE, et al. **Am Ind Hyg Assoc J** 1988 Sep; 49(9):427–33

Effects of phenobarbital on hypothalamic-pituitary-thyroid axis in the rat. Theodoropoulos TJ, et al. **Am J Med Sci** 1989 Apr;297(4):224–7

Relative efficacy of phenytoin and phenobarbital for the prevention of theophylline-induced seizures in mice. Blake KV, et al. **Ann Emerg Med** 1988 Oct;17(10):1024–8

Effects of chronic phenobarbital exposure on cultured mouse spinal cord neurons. Serrano EE, et al. **Ann Neurol** 1988 Sep;24(3):429–38

Differential regulation of gamma-aminobutyric acid receptor channels by diazepam and phenobarbital. Twyman RE, et al. **Ann Neurol** 1989 Mar;25(3):213–20

Characterization of a phenobarbital-inducible dog liver cytochrome P450 structurally related to rat and human enzymes of the P450IIIA (steroid-inducible) gene subfamily. Ciaccio PJ, et al. **Arch Biochem Biophys** 1989 Jun;271(2):284–99

Mouse liver phenobarbital-inducible P450 system: purification, characterization, and differential inducibility of four cytochrome P450 isozymes from D2 mouse. Honkakoski P, et al. **Arch Biochem Biophys** 1989 Aug 15; 273(1):42–57

Suppression in the expression of a male-specific cytochrome P450, P450-male: difference in the effect of chemical inducers on P450-male mRNA and protein in rat livers. Shimada M, et al. **Arch Biochem Biophys** 1989 May 1; 270(2):578–87

Phenolsulphonphthalein conjugation and biliary excretion in the rat: influence of phenobarbital and 3-methylcholanthrene. Collado PS, et al. **Arch Int Physiol Biochim** 1988 Mar;96(1):17–23

Natural inhibitors of complement. IV. Systemic toxicity of the complement inhibitor from pokeweed fruits and the effect of antioxidizing enzymes, glutathione and phenobarbital. Popescu C, et al. **Arch Roum Pathol Exp Microbiol** 1988 Jan–Mar; 47(1):37–41

Attenuation of low dose phenobarbital induction of hepatic microsomal aminopyrine N-demethylase activity in rats by cimetidine. Levine M, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1363–9

Phenobarbital decreases hepatocyte EGF receptor expression independent of protein kinase C activation. Meyer SA, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):652–9

Age-related changes in the expression of cytochrome P-450 (b+e) gene in the rat after phenobarbitone administration. Rath PC, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1403–9

Regulation of phenobarbital-inducible cytochrome P-450s in rat and mouse liver following dexamethasone administration and hypophysectomy. Meehan RR, et al. **Biochem J** 1988 Sep 15;254(3):789–97

Differences between induction effects of 1,4-bis[2-(3,5-dichloropyridyloxy)]benzene and phenobarbitone. Heubel F, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1293–300

Induction of cytochrome P450IA1 in mouse hepatoma cells by several chemicals. Phenobarbital and TCDD induce the same form of cytochrome P450. Kärenlampi SO, et al. **Biochem Pharmacol** 1989 May 1;38(9):1517–25

Increased hepatic retinal dehydrogenase activity after phenobarbital and ethanol administration. Leo MA, et al. **Biochem Pharmacol** 1989 Jan 1;38(1):97–103

Additive effect of combined spironolactone and phenobarbital treatment on hepatic bilirubin UDP-glucuronyltransferase. Mottino AD, et al. **Biochem Pharmacol** 1989 Mar 1;38(5):851–3

Mouse hepatic cytochrome P-450 isozyme induction by 1,4-bis[2-(3,5-dichloropyridyloxy)]benzene, pyrazole, and phenobarbital. Raunio H, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4141–7

Dependence of the induction of cytochrome P-450 by phenobarbital in primary cultures of adult rat hepatocytes on the composition of the culture medium. Turner NA, et al. **Biochem Pharmacol** 1989 Jul 15;38(14):2247–51

Effect of phenobarbitone pretreatment upon endothelium-dependent relaxation to acetylcholine in rat superior mesenteric arterial bed. Randall MD, et al. **Br J Pharmacol** 1988 Jul;94(3):977–83

Patterns of convulsive susceptibility in the long-sleep and short-sleep selected mouse lines. McIntyre TD, et al. **Brain Res Bull** 1989 May;22(5):859–65

The effect of cimetidine, phenobarbitone and buthionine sulphoximine on the disposition of N-5-dimethyl-9-[(2-methoxy-4-methyl-sulphonylamino)phenylamino]- 4-acridinecarboxamide (CI-921) in the rabbit. Paxton JW, et al. **Cancer Chemother Pharmacol** 1989;23(5):291–5

Over expression of proto-oncogenes: ki-ras, fos and myc in rat liver cells treated in vitro by two liver tumor promoters: phenobarbital and biliverdin. Lafarge-Frayssinet C, et al. **Cancer Lett** 1989 Mar;44(3):191–8

A mechanism of inhibition of aflatoxin B1-DNA binding in the liver by phenobarbital pretreatment of rats. Lotlikar PD, et al. **Cancer Res** 1989 Feb 15;49(4):951–7

Infrequent activation of K-ras, H-ras, and other oncogenes in hepatocellular neoplasms initiated by methyl(acetoxymethyl)nitrosamine, a methylating agent, and promoted by phenobarbital in F344 rats. Watatani M, et al. **Cancer Res** 1989 Mar 1;49(5):1103–9

Phenobarbital: a non-genotoxic agent which induces the repair of O6-methylguanine from hepatic DNA. O'Connor PJ, et al. **Carcinogenesis** 1988 Nov;9(11):2033–8

The lectin binding characteristics of spontaneous and phenobarbitone induced hepatic lesions in C3H/He mice. Pritchard DJ, et al. **Carcinogenesis** 1989 Sep;10(9):1737–42

Blockade of alpha-1 adrenergic receptor inhibits hepatic DNA synthesis stimulated by tumor promoters. Tsai WH, et al. **Carcinogenesis** 1989 Jan;10(1):73–8

Transformation of cultured fetal rat liver cells by MDAB and phenobarbital. Morphological, biochemical and immunocytochemical characterization of cell lines. Yeoh G, et al. **Carcinogenesis** 1989 Jun;10(6):1015–27

Circadian rhythm of liver parameters (cellular structures, mitotic activity, glycogen and lipids in liver and serum) during three consecutive cycles in phenobarbital-treated rats. Kast A, et al. **Chronobiol Int** 1988;5(4):363–85

Circadian rhythm of the liver of male rats pre-treated with phenobarbital—II. Hexobarbital sleeping time and lipids content in liver and serum. Nishikawa J, et al. **Chronobiol Int** 1987;4(2):175–82

Circadian rhythm of the liver of male rats dosed with phenobarbital—I. Organ weight, cellular structures, glycogen contents and mitotic activity. Nishikawa J, et al. **Chronobiol Int** 1987;4(2):161–73

Further consideration of phenobarbital effects on cytochrome P-450 activity in the killifish, Fundulus heteroclitus. Elskus AA, et al. **Comp Biochem Physiol [C]** 1989;92(2):223–30

Effects of enzyme induction therapy on glucose and drug metabolism in obese mice model of non-insulin dependent diabetes mellitus. Karvonen I, et al. **Diabetes Res** 1989 Feb; 10(2):85–92

Sequence of a chicken phenobarbital-inducible cytochrome P450 cDNA: regulation of two P450 mRNAs transcribed from different genes. Hansen AJ, et al. **DNA** 1989 Apr; 8(3):179–91

Parallel induction of plasma alpha 1-acid glycoprotein concentration and antipyrine clearance by various doses of phenobarbital in the dog. Abramson FP. **Drug Metab Dispos** 1988 Nov–Dec;16(6):890–1

Effects of pretreatment with the retinoid N-(4-hydroxyphenyl)-all-trans-retinamide and phenobarbital on the disposition and metabolism of N-(4-hydroxyphenyl)-all-trans-retinamide in mice. Hultin TA, et al. **Drug Metab Dispos** 1988 Nov–Dec;16(6):783–8

Selective mechanism-based inactivation of the major phenobarbital-inducible P-450 cytochrome from rabbit liver by phencyclidine and its oxidation product, the iminium compound. Osawa Y, et al. **Drug Metab Dispos** 1989 Jan–Feb;17(1):7–13

Urinary excretion of 6 beta-hydroxycortisol and the time course measurement of enzyme induction in man. Ohnhaus EE, et al. **Eur J Clin Pharmacol** 1989;36(1):39–46

The effect of induction with phenobarbital on the kinetics and bioavailability of antipyrine in the dog. Abramson FP. **Eur J Drug Metab Pharmacokinet** 1988 Apr–Jun; 13(2):123–7

Comparison of the anticonvulsant efficacy of primidone and phenobarbital during chronic treatment of amygdala-kindled rats. Löscher W, et al. **Eur J Pharmacol** 1989 Mar 21;162(2):309–22

Mechanisms responsible for long-term survival of adult rat hepatocytes in the presence of phenobarbital in primary culture. Miyazaki M, et al. **Exp Cell Res** 1989 Jun; 182(2):415–24

Relation between renal and hepatic excretion of drugs. XII. Influence of dexamethasone, triiodothyronine, or phenobarbital on the elimination of sulfonamides in rats of different ages. Fleck C, et al. **Exp Pathol** 1989; 36(1):43–52

Effect of phenobarbital on the expression of glutathione S-transferase isoenzymes in cultured rat hepatocytes. Vandenberghe Y, et al. **FEBS Lett** 1989 Jul 17;

251(1-2):59-64
Lectin binding sites in normal and phenobarbitale/halothane treated rat liver. A histochemical study. Witt M, et al. **Histochemistry** 1989;90(5):391-7
Synergistic promoter effect of diethylstilbesterol & phenobarbitone in diethylnitrosamine induced hepatic neoplasia in rats. Arora VK, et al. **Indian J Med Res** 1989 Feb;90:9-16
Synthesis of sex-specific forms of cytochrome P-450 in rat liver is transiently suppressed by hepatic monooxygenase inducers. Emi Y, et al. **J Biochem (Tokyo)** 1988 Jul; 104(1):40-3
Expression of four phenobarbital-inducible cytochrome P-450s in liver, kidney, and lung of rats. Imaoka S, et al. **J Biochem (Tokyo)** 1989 Jun;105(6):939-45
Neonatal phenobarbital imprinting of rat hepatic microsomal testosterone hydroxylations. Haake JM, et al. **J Biochem Toxicol** 1988 Winter;3:309-19
Phenobarbital-inducible aldehyde dehydrogenase in the rat. cDNA sequence and regulation of the mRNA by phenobarbital in responsive rats. Dunn TJ, et al. **J Biol Chem** 1989 Aug 5;264(22):13057-65
Regulation of glycogen content in primary astrocyte culture: effects of glucose analogues, phenobarbital, and methionine sulfoximine. Swanson RA, et al. **J Neurochem** 1989 May; 52(5):1359-65
Phenobarbital lacks promoting activity for neurogenic tumors in F344 rats transplacentally exposed to ethylnitrosourea. Walker VE, et al. **J Neuropathol Exp Neurol** 1989 May; 48(3):263-9
4-Methylpyrazole alters phenobarbitone hypnotic concentrations in rats. Ramzan I. **J Pharm Pharmacol** 1988 Nov;40(11):817-8
Acute cyclosporine pretreatment does not alter onset of loss of righting reflex during intravenous infusion of phenobarbital in rats. Ramzan I. **J Pharm Sci** 1988 Nov; 77(11):996-7
Alpha-1-acid glycoprotein concentrations and protein binding of propranolol in Sprague-Dawley and Dark Agouti rat strains treated by phenobarbital. Chauvelot-Moachon L, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):1103-8
Effects of phenytoin and phenobarbital on schedule-controlled responding and seizure activity in the amygdala-kindled rat. Renfrey G, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):967-73
Inhibitory effect of phenobarbital on peroxisome biogenesis in mouse hepatocytes. Kanamura S, et al. **J Ultrastruct Mol Struct Res** 1988 Sep;100(3):269-77
Potentiating effects of phenobarbitone on the induction of cirrhosis in rats by carbon tetrachloride. Qazi FM, et al. **JPMA** 1988 Nov;38(11):296-9
Acute effect of amitriptyline, phenobarbital or cobaltous chloride on delta-aminolevulinic acid synthetase, heme oxygenase and microsomal heme content and drug metabolism in rat liver. Hoshi K, et al. **Jpn J Pharmacol** 1989 Jul;50(3):289-93
Phenobarbital specifically reduces gap junction protein mRNA level in rat liver. Mesnil M, et al. **Mol Carcinog** 1988;1(2):79-81
Evidence for a PCN-P450 enzyme in chickens and comparison of its development with that of other phenobarbital-inducible forms. Lorr NA, et al. **Mol Pharmacol** 1989 May;35(5):610-6
Sodium phenobarbitone reverses the anxiogenic effects of compounds acting at three different central sites. Johnston AL, et al. **Neuropharmacology** 1989 Jan;28(1):83-8
Evidence for simultaneous anxiolytic and aversive effects several hours after administration of sodium phenobarbitone to the rat. Wilks LJ, et al. **Neuropsychobiology** 1988;19(2):86-9
Hemorrhage, phenobarbital, and fluctuating cerebral blood flow [letter] Perlman JM, et al. **Pediatrics** 1989 Apr;83(4 Pt 2):645-7
Bilirubin, intraventricular hemorrhage, and phenobarbital [letter] Valaes TN. **Pediatrics** 1989 Apr;83(4 Pt 2):648-9
Potentiation of the anticonflict effects of diazepam, but not pentobarbital and phenobarbital, by aminooxyacetic acid (AOAA). McCloskey TC, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):693-8
Interactions of pentobarbital and phenobarbital with GABAergic drugs against chemoconvulsants in rats. Mehta AK, et al. **Pharmacol Biochem Behav** 1988 Aug; 30(4):995-1000
Brain cytochromes P-450 are responsive to phenobarbital and tricyclic amines. Strobel HW, et al. **Pharmacol Res** 1989 Mar-Apr;21(2):169-75
Phenytoin-phenobarbital interaction: importance of free plasma phenytoin monitoring. Cuzzolin L, et al. **Pharmacol Res Commun** 1988 Jul;20(7):627-8
Tissue distribution of inducible aldehyde dehydrogenase activity in the rat after treatment with phenobarbital or methylcholanthrene. Vasiliou V, et al. **Pharmacol Toxicol** 1989 Jan;64(1):39-42
Consequences of chronic phenobarbital blockade of spontaneous motility in chick embryos for the development of central motor output activity. Sedláček J. **Physiol Bohemoslov** 1988;37(2):97-105
Regulation of cytochrome P-450b/e gene expression by a heme- and phenobarbitone-modulated transcription factor. Rangarajan PN, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):3963-7
Enzyme-inducing drugs and rat alpha 1-acid glycoprotein--1--Response of SD and DA rats to the unique administration of phenobarbital. Chauvelot-Moachon L, et al. **Prog Clin Biol Res** 1989; 300:227-30
Enzyme-inducing drugs and rat alpha 1-acid glycoprotein--2--Phenobarbital effects on acute inflammation in DA rats. Levy F, et al. **Prog Clin Biol Res** 1989;300:275-8
Differential effects of prenatal exposure to phenobarbital on the behaviour and neurochemistry of CBA and C57BL/6J mice. Sedowofia SK, et al. **Psychopharmacology (Berlin)** 1989;97(1):123-30
The effects of phenobarbital on serum high density lipoprotein subfractions and apolipoproteins. Luoma PV, et al. **Res Commun Chem Pathol Pharmacol** 1988 Oct; 62(1):125-8
Differences in cytochrome P-450 levels between isolated hepatocytes and hepatic microsomes from phenobarbital treated rats. Muñoz JJ, et al. **Riv Eur Sci Med Farmacol** 1987 Jun;9(2):129-31
The effect of phenobarbital on the metabolism and excretion of thyroxine in rats. McClain RM, et al. **Toxicol Appl Pharmacol** 1989 Jun 15;99(2):216-28
Phenobarbital-induced cytosolic cytoprotective mechanisms that offset increases in NADPH cytochrome P450 reductase activity in menadione-mediated cytotoxicity. Utley WS, et al. **Toxicol Appl Pharmacol** 1989 Jun 15; 99(2):323-33
Purification and properties of cytochrome P-450 from liver microsomes of phenobarbital-treated marmoset monkeys (Callithrix jacchus). Kastner M, et al. **Toxicol Lett** 1989 Feb;45(2-3):261-70
Modifications of hepatic microsomal 9-oxidation of N-2-fluorenylacetamide in response to gonadectomy and treatment of rats with phenobarbital or diethylnitrosamine. Malejka-Giganti D, et al. **Xenobiotica** 1989 Apr; 19(4):431-44
Comparison of covalent binding from halothane metabolism in hepatic microsomes from phenobarbital-induced and hyperthyroid rats. Smith AC, et al. **Xenobiotica** 1988 Aug; 18(8):991-1001
[Effects of phenobarbital and phenytoin on the growth morphology and some ATPase activities of rat brain astrocytes derived from normal newborn cerebrum and C6 glioma cells in culture] Jou TC, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Dec;42(6):425-36 (Eng. Abstr.) **(Chi)**
[Effect of kerosine hydrocarbons and phenobarbital on components of the microsomal electron transport chain in the rat liver] Starek A, et al. **Folia Med Cracov** 1988; 29(1-2):49-57 (Eng. Abstr.) **(Pol)**
[Effect of age on the activity of hepatic mixed function oxidases in female rats after phenobarbital induction] Plewka D, et al. **Med Pr** 1988;39(6):381-90 (Eng. Abstr.) **(Pol)**
[Identification of molecular forms of cytochrome P-450 isolated from liver microsomes of rats induced with phenobarbital and 3-methylcholanthrene] Guliaeva LF, et al. **Biokhimiia** 1989 Mar;54(3):487-94 (Eng. Abstr.) **(Rus)**
[Modification of the effect of fotrin in phenobarbital-induced metabolic system] Zhurkov VS, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):458-60 (Eng. Abstr.) **(Rus)**
[Modification of the mutagenic effect of cyclophosphamide after long-term induction of the microsomal monooxygenase system] Sycheva LP, et al. **Gig Sanit** 1989 Mar;(3):82-4 **(Rus)**
[Highly permeable contacts and electrical characteristics of the tissue of the normal liver and hepatomas. III. Absence of an effect of the tumor promoter phenobarbital on intercellular contacts in the mouse liver] Sharovskaia IuIu, et al. **Tsitologiia** 1988 Jun;30(6):678-84 (Eng. Abstr.) **(Rus)**
[The effect of Hydanphene on reflex activity of the spinal cord] Geber J, et al. **Neurologija** 1987;36(1-4):85-90 (Eng. Abstr.) **(Scr)**

THERAPEUTIC USE

Antenatal phenobarbital and bilirubin metabolism in the very low birth weight infant. Rayburn W, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1491-3
Randomised controlled trials of phenobarbitone and valproate in febrile convulsions. Newton RW. **Arch Dis Child** 1988 Oct;63(10):1189-91
The neurotoxicity of phenobarbital and its effect in preventing pentylenetetrazole-induced maximal seizure in aging mice. Kitani K, et al. **Arch Gerontol Geriatr** 1988 Dec;7(4):261-71
Anticonvulsant potency and neurotoxicity of valproate alone and in combination with carbamazepine or phenobarbital. Bourgeois BF. **Clin Neuropharmacol** 1988 Aug;11(4):348-59
Effects of aminophylline and enprofylline on the protective activity of phenobarbital against amygdala-kindled seizures in rats. Czuczwar SJ, et al. **Epilepsy Res** 1987 Jul;1(4):234-8
Measuring treatment compliance of men with non-gonococcal urethritis receiving oxytetracycline combined with low dose phenobarbitone. Bignell CJ, et al. **Genitourin Med** 1988 Oct;64(5):312-5
Are phenobarbital and phenytoin obsolete in the treatment of epilepsy? [letter] Gourie-Devi M, et al. **J Assoc Physicians India** 1988 Jul;36(7):458
Two double-blind, controlled studies comparing chlorethate, a new sedative-tranquilizer, with meprobamate and with phenobarbital. Beard WJ, et al. **J Clin Pharmacol J New Drugs** 1967 Jan-Feb;7(1):41-5
Sex steroid and gonadotropin changes during phenobarbital therapy in epilepsy [letter] Murialdo G, et al. **J Endocrinol Invest** 1988 Jun;11(6):463-4
The course of hyperbilirubinemia in the very low birth weight infant treated with phenobarbital. Anwar M, et al. **J Perinatol** 1987 Spring;7(2):145-8
Comparison of rifampicin with phenobarbitone for treatment of pruritus in biliary cirrhosis. Bachs L, et al. **Lancet** 1989 Mar 18;1(8638):574-6
Phenobarbital for status [letter] Crawford TO, et al. **Neurology** 1989 Apr;39(4):609
Rapid sequential phenobarbital treatment of neonatal seizures. Gilman JT, et al. **Pediatrics** 1989 May;83(5):674-8
Hemorrhage, phenobarbital, and fluctuating cerebral blood flow velocity in the neonate. Kuban KC, et al. **Pediatrics** 1988 Oct;82(4):548-53
A controlled trial of an oral bronchodilator preparation ('Franol') in asthma. Owen S, et al. **Pharmatherapeutica** 1988;5(4):240-5
Double blind study on the efficacy and safety of tetrabamate and chlordiazepoxide in the treatment of the acute alcohol withdrawal syndrome. Radouco-Thomas S, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(1-2):55-75
Intraventricular hemorrhage of the preterm neonate: prevention studies. Ment LR, et al. **Semin Perinatol** 1988 Oct;12(4):359-72 (126 ref.)
[Sense and nonsense in barbiturate-induced functional paralysis for the protective and therapeutic decrease in cerebral oxygen requirements] Schneider D, et al. **Psychiatr Neurol Med Psychol Beih** 1988;40:36-43 **(Ger)**
[Effectiveness of phenobarbital, ziksorin and cordiamine in the treatment of non-conjugated hyperbilirubinemia] Vasil'ev VS, et al. **Klin Med (Mosk)** 1989 Apr;67(4):52-4 (Eng. Abstr.) **(Rus)**
[Tetrabamate in the treatment of agoraphobia (letter)] Iruela Cuadrado LM, et al. **Med Clin (Barc)** 1988 Nov 26; 91(18):717 **(Spa)**

TOXICITY

Dopaminergic denervation reverses behavioral deficits induced by prenatal exposure to phenobarbital. Yanai J, et al. **Brain Res Dev Brain Res** 1989 Aug 1;48(2):255-61
Induction of hepatic cytochrome P-450 activity in wild cotton rats (Sigmodon hispidus) by phenobarbital and 3-methylcholanthrene. Elangbam CS, et al. **Bull Environ Contam Toxicol** 1989 May;42(5):716-20
Effect of phenobarbital on diethylnitrosamine and dimethylnitrosamine induced hepatocellular tumors in male B6C3F1 mice. Klaunig JE, et al. **Cancer Lett** 1988 Sep-Oct; 42(1-2):133-9
Differences between the promoting activities of the peroxisome proliferator WY-14,643 and phenobarbital in rat liver. Cattley RC, et al. **Cancer Res** 1989 Jun 15; 49(12):3246-51
Promotion of malignant 'embryonal' liver tumors by phenobarbital: increased incidence and shortened latency of hepatoblastomas in (DBA/2 x C57BL/6)F1 mice initiated with N-nitrosodiethylamine. Diwan BA, et al. **Carcinogenesis** 1989 Jul;10(7):1345-8
Promotion by sodium barbital of renal cortical and transitional cell tumors, but not intestinal tumors, in F344 rats given methyl(acetoxymethyl)nitrosamine, and lack of effect of phenobarbital, amobarbital, or barbituric acid on development of either renal or intestinal tumors. Diwan BA, et al. **Carcinogenesis** 1989 Jan;10(1):183-8
The influence of phenobarbital and butylated hydroxytoluene on the ploidy rate in rat hepatocarcinogenesis. Haesen S, et al. **Carcinogenesis** 1988 Oct;9(10):1755-61
Phenobarbital promotion in diethylnitrosamine-initiated infant B6C3F1 mice: influence of gender. Weghorst CM, et al. **Carcinogenesis** 1989 Mar;10(3):609-12
Strain differences in hepatic tumor promotion by phenobarbital in diethylnitrosamine- and dimethylnitrosamine-initiated infant male mice. Weghorst CM, et al. **Carcinogenesis** 1989 Aug;10(8):1409-12
Potentiating effects of verapamil on cardiovascular teratogenicity of phenobarbital in the chick embryos. Nishikawa T, et al. **Dev Pharmacol Ther** 1988;11(6):322-7
Are there circadian and circannual variations in acute toxicity of phenobarbital in mice? Bruguerolle B, et al. **Fundam Clin Pharmacol** 1988;2(4):301-4
Correlated ultrastructural damage between cerebellum cells after early anticonvulsant treatment in mice. Fishman RH, et al. **Int J Dev Neurosci** 1989;7(1):15-26
Neuromorphological changes in mouse olfactory bulb after neonatal exposure to phenobarbital. Rosselli-Austin L, et al. **Neurotoxicol Teratol** 1989 May-Jun;11(3):227-30
Differential toxicity of chronic exposure to phenytoin, phenobarbital, or carbamazepine in cerebral cortical cell cultures. Neale EA, et al. **Pediatr Neurol** 1985 May-Jun; 1(3):143-50
Interactive toxicity of cocaine with phenobarbital, morphine and ethanol in organ cultured human and rat liver slices. Conners S, et al. **Proc West Pharmacol Soc** 1989;32:205-8
Effects of sodium salts of phenobarbital and barbital on development of bladder tumors in male F344/NCr rats

pretreated with either N-[4-(5-nitro-2-furyl)-2-thiazolyl]formamide or N-nitrosobutyl-4-hydroxybutylamine. Diwan BA, et al. **Toxicol Appl Pharmacol** 1989 Apr;98(2):269–77

The chronic hepatic or renal toxicity of di(2-ethylhexyl) phthalate, acetaminophen, sodium barbital, and phenobarbital in male B6C3F1 mice: autoradiographic, immunohistochemical, and biochemical evidence for levels of DNA synthesis not associated with carcinogenesis or tumor promotion. Ward JM, et al. **Toxicol Appl Pharmacol** 1988 Dec;96(3):494–506

Dose-response relationship of diethylnitrosamine-initiated tumors in neonatal balb/c mice: effect of phenobarbital promotion. Klaunig JE, et al. **Toxicol Pathol** 1988; 16(3):381–5

[Effect of phenobarbital on the morphologic, histochemical and ultrastructural picture of the rat liver after chronic administration of CCl4] Chibowski D, et al. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:351–62 (Eng. Abstr.) **(Pol)**

PHENOBARBITONE see **PHENOBARBITAL**

PHENOL SULFOTRANSFERASE see **ARYLSULFOTRANSFERASE**

PHENOLPHTHALEINS

Quantitative analysis of absorption spectra and application to the characterization of ligand binding curves. Duggleby RG, et al. **Experientia** 1989 Jan 15;45(1):87–92

ANALYSIS

Bis(4-hydroxyphenyl)[2-(phenoxysulfonyl)= phenyl]methane: isolation and structure elucidation of a novel estrogen from commercial preparations of phenol red (phenolsulfonphthalein). Bindal RD, et al. **J Med Chem** 1988 Oct;31(10):1978–83

Enhanced membrane permeability to phenol red by medium-chain glycerides: studies on the membrane permeability and microviscosity. Higaki K, et al. **Pharm Res** 1988 May;5(5):309–12

DIAGNOSTIC USE

Complete staining of human spermatozoa and immature germ cells combined with phase contrast microscopy. Michael AY, et al. **Arch Androl** 1987;19(3):217–21

Gadolinium-phthalein complexone as a contrast agent for hepatobiliary MR imaging. Kawamura Y, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):67–70

METABOLISM

[Excretion of phenoltetrachlorophthalein in the bile in rats] Hrnčíř E, et al. **Sb Lek** 1989 Jun;91(6):169–76 (Eng. Abstr.) **(Cze)**

PHARMACOKINETICS

Phenolsulphonphthalein conjugation and biliary excretion in the rat: influence of phenobarbital and 3-methylcholanthrene. Collado PS, et al. **Arch Int Physiol Biochim** 1988 Mar;96(1):17–23

Influence of bile acids on the biliary transport maximum of phenolsulfonphthalein in the rat. Collado PS, et al. **Clin Exp Pharmacol Physiol** 1988 Dec;15(12):893–9

Relation between renal and hepatic excretion in drugs. VIII. Influence of triiodothyronine on maturation of phenol red excretion in rats. Fleck C, et al. **Exp Pathol** 1988; 34(2):89–98

Relation between renal and hepatic excretion of drugs: IX. Acceleration of phenol red excretion via kidney and liver in rats of different ages by dexamethasone treatment. Fleck C, et al. **Exp Pathol** 1988;34(3):161–9

PHARMACOLOGY

Estrogenic effects of phenol red on rat pituitary cell responsiveness to gonadotropin-releasing hormone. Dumesic DA, et al. **Life Sci** 1989;44(6):397–406

PHENOLS

Comparison of propofol induction with thiopentone or methohexitone in short outpatient general anaesthesia. Raeder JC, et al. **Acta Anaesthesiol Scand** 1988 Nov; 32(8):607–13

Anaesthesia for computerised tomography of the brain in children: a comparison of propofol and thiopentone. Valtonen M. **Acta Anaesthesiol Scand** 1989 Feb;33(2):170–3

Porphyria and propofol [letter] **Anaesthesia** 1989 Jul; 44(7):612–3

Propofol for electroconvulsive therapy [letter] Adams CN. **Anaesthesia** 1989 Feb;44(2):168–9

Hypertrophic obstructive cardiomyopathy in combination with a prolapsing mitral valve. Anaesthesia for surgical correction with propofol. Bell MD, et al. **Anaesthesia** 1989 May;44(5):409–11

Propofol in patients susceptible to malignant hyperpyrexia [letter] Cartwright DP. **Anaesthesia** 1989 Feb;44(2):173

Propofol and dreaming [letter] Gunawardene RD. **Anaesthesia** 1989 Mar;44(3):266–7

Opioid supplementation during propofol anaesthesia. The effects of fentanyl or alfentanil on propofol anaesthesia in daycase surgery. Moffat AC, et al. **Anaesthesia** 1989 Aug; 44(8):644–7

Propofol-fentanyl anaesthesia for coronary artery surgery and cardiopulmonary bypass. Russell GN, et al. **Anaesthesia** 1989 Mar;44(3):205–8

Propofol-induced anaesthesia. Double-blind comparison of recovery after anaesthesia induced by propofol or thiopentone. Sanders LD, et al. **Anaesthesia** 1989 Mar; 44(3):200–4

Propofol and fentanyl anaesthesia [letter] Sherry KM, et al. **Anaesthesia** 1989 Aug;44(8):697

The use of propofol for anaesthesia for electroconvulsive therapy [letter] Simpson KH, et al. **Anaesthesia** 1988 Sep; 43(9):812–3

Is propofol a safe agent in porphyria? Weir PM, et al. **Anaesthesia** 1988 Dec;43(12):1022–3

Penetrating craniocerebral airgun injury. Anaesthetic management with propofol infusion and review of recent reports. Wright PJ, et al. **Anaesthesia** 1989 Mar; 44(3):219–21

Does nitrous oxide affect the hemodynamic effects of anesthesia induction with propofol? Carlier S, et al. **Anesth Analg** 1989 Jun;68(6):728–33

Comparison of methohexital and propofol for electroconvulsive therapy: effects on hemodynamic responses and seizure duration. Rampton AJ, et al. **Anesthesiology** 1989 Mar;70(3):412–7

Propofol: a new intravenous anesthetic. Sebel PS, et al. **Anesthesiology** 1989 Aug;71(2):260–77 (159 ref.)

Motor point blocks in children. A technique to relieve spasticity using phenol injections. Morrison JE Jr, et al. **AORN J** 1989 May;49(5):1346–7, 1349–51, 1354 (6 ref.)

Free radical intermediates during peroxidase oxidation of 2-t-butyl-4-methoxyphenol, 2,6-di-t-butyl-4-methylphenol, and related phenol compounds. Valoti M, et al. **Arch Biochem Biophys** 1989 Mar;269(2):423–32

Homolysis of substituted anisoles: substituent effects on phenoxyl radical stabilities. Stein SE, et al. **Basic Life Sci** 1988;49:105–14

Conscious sedation with propofol. Rodrigo MR, et al. **Br Dent J** 1989 Feb 11;166(3):75–80

Use of propofol in a patient with porphyria [letter] McLouglin C. **Br J Anaesth** 1989 Jan;62(1):114

Comparison of propofol and thiamylal for induction and maintenance of anaesthesia for outpatient surgery. Sampson IH, et al. **Br J Anaesth** 1988 Dec;61(6):707–11

Propofol for induction and maintenance of anaesthesia: comparison between younger and older patients. Scheepstra GL, et al. **Br J Anaesth** 1989 Jan;62(1):54–60

Management of refractory detrusor instability by transvesical phenol injection. Cameron-Strange A, et al. **Br J Urol** 1988 Oct;62(4):323–5

Anaesthesia for cardioversion: a comparison of propofol and thiopentone. Valtonen M, et al. **Can J Anaesth** 1988 Sep; 35(5):479–83

Reduction of house dust mites and mite allergens: effects of spraying carpets and blankets with Allersearch DMS, an acaricide combined with an allergen reducing agent. Green WF, et al. **Clin Exp Allergy** 1989 Mar;19(2):203–7

A comparison of propofol and methohexitone as anaesthetic agents for electroconvulsive therapy. Bone ME, et al. **Eur J Anaesthesiol** 1988 Jul;5(4):279–86

Propofol. Dundee JW, *et* al. **Eur J Anaesthesiol** 1989 Jan; 6(1):5–22 (109 ref.)

A comparison of the anaesthetic properties of propofol and methohexitone when used as the sole induction agent for thermocoagulation of the gasserian ganglion. Vercauteren M, et al. **Eur J Anaesthesiol** 1989 Mar;6(2):121–9

The use of pulse oximetry in post-operative hypoxaemia in patients after propofol induction of anaesthesia. Thomson KD, et al. **Int J Clin Monit Comput** 1989 Jan;6(1):7–10

Noninvasive continuous monitoring of solid-phase peptide synthesis by acid-base indicator [letter] Krchňák V, et al. **Int J Pept Protein Res** 1988 Nov;32(5):415–6

Enhanced chemiluminescence in the peroxidase-luminol-H2O2 system: anomalous reactivity of enhancer phenols with enzyme intermediates. Hodgson M, et al. **J Biolumin Chemilumin** 1989 Jan–Mar;3(1):21–5

Effect of substrate condition and substituted phenols and methacrylates on toluene diisocyanate/dentin bond strengths. Stackhouse JA Jr, et al. **J Biomed Mater Res** 1989 Jan;23(1):81–90

Buffered phenol formaldehyde (pH 7.0 and pH 5.5): improved fixation in an enclosed tissue processor. Slidders W, et al. **Med Lab Sci** 1989 Jan;46(1):74–6

Phenolic cyclization of epinephrine, metaproterenol, metaraminol, phenylephrine, and terbutaline with formaldehyde. Chafetz L, et al. **Pharm Res** 1987 Apr; 4(2):158–61

Spectroscopic studies of cutaneous photosensitizing agents—XIII. pH dependence of the photochemistry of photoallergens bithionol and fentichlor: an electron spin resonance study of the free radical photoproducts. Li AS, et al. **Photochem Photobiol** 1989 Jan;49(1):25–32

Induction of anesthesia with propofol in urological outpatient surgery. Katz Y, et al. **Urol Int** 1989;44(1):41–2

Clinical evaluation of propofol as an intravenous anaesthetic agent in cats and dogs. Morgan DW, et al. **Vet Rec** 1989 Jan 14;124(2):31–3

[Studies on a new acid dye-tetraiodophenol sulfonphthalein for the determination of amine drugs] Zhang LM, et al. **Yao Hsueh Hsueh Pao** 1988;23(12):915–20 (Eng. Abstr.) **(Chi)**

[Propofol versus thiopentone as the main anesthetic for brief surgical interventions] Jenstrup M, et al. **Ugeskr Laeger** 1988 Oct 10;150(41):2454–7 (Eng. Abstr.) **(Dan)**

[Comparison of 2 anesthetic protocols in colonoscopy on a series of 100 patients] Germain JL, et al. **Agressologie** 1989 Apr;30(4):171–4 (Eng. Abstr.) **(Fre)**

[Correlation of age-recovery time and the length of procedure-recovery time with propofol (letter)] Gindre B, et al. **Ann Fr Anesth Reanim** 1989;8(1):78 **(Fre)**

[Use of propofol in a patient with acute intermittent porphyria (letter)] Malthe R, et al. **Ann Fr Anesth Reanim** 1989;8(3):297 **(Fre)**

[Continuous propofol infusion versus enflurane in children operated on for strabismus. Comparison of the quality of anesthesia and recovery conditions] Queinnec MC, et al. **Ann Fr Anesth Reanim** 1989;8(1):37–41 (Eng. Abstr.) **(Fre)**

[Use of propofol (Diprivan) in a patient with intermittent porphyria (letter)] Richard T, et al. **Ann Fr Anesth Reanim** 1988;7(5):442 **(Fre)**

[Propofol in emergency anesthesia] Cauhépé C, et al. **Cah Anesthesiol** 1989 Jan–Feb;37(1):45–8 (Eng. Abstr.) **(Fre)**

[A combination of propofol and regional anesthesia in cataract surgery] Debaillon-Vesque P, et al. **Cah Anesthesiol** 1989 Jan–Feb;37(1):55–6 **(Fre)**

[Effects of anesthesia induction with propofol on plasma renin activity and atrial natriuretic factor secretion. A preliminary study] Journois D, et al. **Cah Anesthesiol** 1989 Jan–Feb;37(1):59–62 (Eng. Abstr.) **(Fre)**

[Anesthesia using propofol in cardioversion] Marsepoil T, et al. **Cah Anesthesiol** 1989 Jan–Feb;37(1):51–3 **(Fre)**

[Hemodynamic effects of anesthesia using propofol, fentanyl, nitrous oxide and vecuronium in kidney transplantation in the adult] Nguyên HN, et al. **Cah Anesthesiol** 1989 Jan–Feb; 37(1):17–21 **(Fre)**

[Use of propofol (Diprivan) for anesthesia during the performance of cardioversions] Quere JF, et al. **Cah Anesthesiol** 1989 Jan–Feb;37(1):49–50 **(Fre)**

[Continuous flow propofol during kidney transplantation in the adult] Reiter V, et al. **Cah Anesthesiol** 1989 Jan–Feb; 37(1):23–31 **(Fre)**

[Use of propofol as an induction agent in pediatric anesthesia] Saint-Maurice C, et al. **Cah Anesthesiol** 1989 Jan–Feb; 37(1):39–43 **(Fre)**

[Circulatory and respiratory repercussions to direct suspension laryngoscopy in the adult: value of a propofol-alfentanil combination] Welfringer P, et al. **Cah Anesthesiol** 1989 Jan–Feb;37(1):11–6 (Eng. Abstr.) **(Fre)**

[Multiradicular impairment of the lower limbs after phenol sympathectomy (letter)] Bertrand P, et al. **Presse Med** 1989 Feb 25;18(8):434 **(Fre)**

[A comparison of the course of anesthesia using a bolus application of propofol, methohexital or etomidate as hypnotics and alfentanil analgesia] Ensink FB, et al. **Anaesthesist** 1989 Jul;38(7):333–40 (Eng. Abstr.) **(Ger)**

[Myocardial metabolism as affected by propofol in geriatric patients. A comparison with etomidate] Larsen R, et al. **Anaesthesist** 1988 Aug;37(8):510–6 (Eng. Abstr.) **(Ger)**

[Initial experiences with propofol (Disoprivan) for anesthesia induction in pediatric anesthesia] Motsch J, et al. **Anaesthesist** 1988 Sep;37(9):583–7 (Eng. Abstr.) **(Ger)**

[Visual EEG analysis in controlling intravenous anesthesia using propofol] Suttmann H, et al. **Anaesthesist** 1989 Apr; 38(4):180–8 (Eng. Abstr.) **(Ger)**

[Induction of anesthesia using propofol in comparison with etomidate] Ulsamer B, et al. **Anaesthesist** 1988 Aug; 37(8):517–21 (Eng. Abstr.) **(Ger)**

[Noninvasive hemodynamic (bioimpedance) evaluation during short anesthesia with propofol] Giuliani G, et al. **Minerva Anestesiol** 1989 Jan–Feb;55(1–2):21–3 (Eng. Abstr.) **(Ita)**

[The repellent action of the Mannich bases of phenol methoxy derivatives for Aedes aegypti mosquitoes and Xenopsylla cheopis fleas] Kovalenko LG, et al. **Med Parazitol (Mosk)** 1989 May–Jun;(3):68–71 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

The reduction of pain on injection of propofol: the effect of addition of lignocaine. Helbo-Hansen S, et al. **Acta Anaesthesiol Scand** 1988 Aug;32(6):502–4

The effects of speed of injection on induction with propofol. A comparison with etomidate. Gillies GW, et al. **Anaesthesia** 1989 May;44(5):386–8

Induction dose of propofol in children. Patel DK, et al. **Anaesthesia** 1988 Nov;43(11):949–52

Prolonged sedation with propofol in ICU patients: recovery and blood concentration changes during periodic interruptions in infusion. Beller JP, et al. **Br J Anaesth** 1988 Nov;61(5):583–8

Closed-loop feedback control of propofol anaesthesia by quantitative EEG analysis in humans. Schwilden H, et al. **Br J Anaesth** 1989 Mar;62(3):290–6

Effect of diluting propofol on the incidence of pain on injection and venous sequelae. Stokes DN, et al. **Br J Anaesth** 1989 Feb;62(2):202–3

Computer controlled infusion of propofol. Tackley RM, et

al. **Br J Anaesth** 1989 Jan;62(1):46–53
Transvesical phenol injection of pelvic nerve plexuses in females with refractory urge incontinence. Wall LL, et al. **Br J Urol** 1989 May;63(5):465–8
Continuous infusion of propofol in dystrophia myotonica. White DA, et al. **Can J Anaesth** 1989 Mar;36(2):200–3
Phenol and alcohol chemical matrixectomy. Burzotta JL, et al. **Clin Podiatr Med Surg** 1989 Apr;6(2):453–67 (29 ref.)
Unoccluded Baker–Gordon phenol peels—review and update. Asken S. **J Dermatol Surg Oncol** 1989 Sep; 15(9):998–1008 (27 ref.)
Treatment of pilonidal sinus by phenol injection. Kelly SB, et al. **Ulster Med J** 1989 Apr;58(1):56–9
Propofol: a new intravenous anaesthetic. Moseley H, et al. **West Indian Med J** 1988 Dec;37(4):229–31
[Comparison of propofol and thiopentone in young and elderly patients] Nielsen PA, et al. **Ugeskr Laeger** 1989 Aug 28;151(35):2204–6 (Eng. Abstr.) **(Dan)**
[Comparison of propofol and propanidid administered at a constant rate] Deschodt J, et al. **Ann Fr Anesth Reanim** 1988;7(6):459–63 (Eng. Abstr.) **(Fre)**
[Continuous sedation for regional anesthesia with propofol (Disoprivan) and midazolam (Dormicum). A comparative study] Dertwinkel R, et al. **Reg Anaesth** 1988 Oct; 11(4):84–91 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Experimental photoallergic contact dermatitis to bisphenol A. Maguire HC Jr **Acta Derm Venereol (Stockh)** 1988; 68(5):408–12
Acute effect upon pulmonary function of low level exposure to phenol–formaldehyde–resin–coated wood [letter] Herrick RF. **Am Ind Hyg Assoc J** 1988 Dec;49(12):A780
Acute effect upon pulmonary function of low level exposure to phenol–formaldehyde–resin–coated wood. Imbus HR, et al. **Am Ind Hyg Assoc J** 1988 Sep;49(9):434–7
Propofol and the colour green [letter] Callander CC, et al. **Anaesthesia** 1989 Jan;44(1):82
Delayed allergic response to propofol [letter] Dold M, et al. **Anaesthesia** 1989 Jun;44(6):533
Asystole with convulsion following a subanesthetic dose of propofol plus fentanyl. Dorrington KL. **Anaesthesia** 1989 Aug;44(8):658–9
Pain on injection of propofol [letter] Gamil M. **Anaesthesia** 1988 Nov;43(11):995
A 10-second convulsion during propofol injection? [letter] Herrema IH. **Anaesthesia** 1989 Aug;44(8):700
Propofol, opisthotonus and epilepsy [letter] Jones GW, et al. **Anaesthesia** 1988 Oct;43(10):905
Ocular manifestation of propofol allergy [letter] Kumar CM, et al. **Anaesthesia** 1989 Mar;44(3):266
Propofol in acute porphyria [letter] McNeill MJ, et al. **Anaesthesia** 1989 Jun;44(6):532
Abreaction on recovery from propofol anaesthesia [letter] Robinson DA. **Anaesthesia** 1989 Apr;44(4):364
Seizure duration and propofol [letter] Seymour J. **Anaesthesia** 1988 Nov;43(11):990
A case of convulsion after propofol anaesthesia [letter] Victory RA, et al. **Anaesthesia** 1988 Oct;43(10):904
Painful injection of propofol [letter] Whitlock JE, et al. **Anaesthesia** 1989 Jul;44(7):618
Fits after alfentanil and propofol [letter] Wittenstein U, et al. **Anaesthesia** 1989 Jun;44(6):532–3
Acute bronchospasm complicating intercostal nerve block with phenol. Atkinson GL, et al. **Anesth Analg** 1989 Mar; 68(3):400–1
Atrioventricular Mobitz I block during propofol anesthesia for laparoscopic tubal ligation. Ganansia MF, et al. **Anesth Analg** 1989 Oct;69(4):524–5
Sting Eze keratitis [letter] Blanchard DL. **Arch Ophthalmol** 1989 Jun;107(6):791
Pharyngitis medicamentosa [letter] Halwell R. **Arch Otolaryngol Head Neck Surg** 1989 Aug;115(8):995
Acute epiglottitis and Chloraseptic. Ho SL, et al. **BMJ** 1989 Jun 10;298(6687):1584
Severe bradycardia following propofol–suxamethonium sequence. Baraka A. **Br J Anaesth** 1988 Oct;61(4):482–3
Neurobehavioural effects of propofol on the neonate following elective caesarean section. Celleno D, et al. **Br J Anaesth** 1989 Jun;62(6):649–54
Heart block following propofol: a case report. James MF, et al. **Br J Anaesth** 1989 Feb;62(2):213–5
Effect of propofol on the malignant hyperthermia susceptible pig model. Krivosic–Horber R, et al. **Br J Anaesth** 1989 Jun;62(6):691–3
Propofol reduces seizure duration in patients having anaesthesia for electroconvulsive therapy. Simpson KH, et al. **Br J Anaesth** 1988 Sep;61(3):343–4
Anaphylactoid reactions following propofol–atracurium sequence [letter] Naquib M. **Can J Anaesth** 1989 May;36(3 Pt 1):358–9
Occupational dermatoses in workers exposed to resins based on phenol and formaldehyde. Bruze M, et al. **Contact Dermatitis** 1988 Oct;19(4):272–7
Footwear dermatitis due to bisphenol A. Srinivas CR, et al. **Contact Dermatitis** 1989 Feb;20(2):150–1
Postoperative opisthotonus following the use of propofol. Strowbridge NF. **J R Army Med Corps** 1989 Jun; 135(2):79–80
Reaction to propofol [letter] Thompson RA. **Vet Rec** 1989 Jul 29;125(5):116
[Sexual advances after propofol: a British fantasy or reality? (letter)] Lienhart A. **Ann Fr Anesth Reanim** 1989;8(1):79 **(Fre)**
[Risk conditions caused by formaldehyde and phenols at a plywood factory] Mariotti F, et al. **Med Lav** 1988 Nov–Dec;79(6):468–73 (Eng. Abstr.) **(Ita)**

ANALYSIS

Identification and determination of tert–alkylphenols in carp from the Trenton Channel of the Detroit River, Michigan, USA. Shiraishi H, et al. **Biomed Environ Mass Spectrom** 1989 Jul;18(7):478–83
Phenolic compounds of the mulberry tree and related plants. Nomura T. **Fortschr Chem Org Naturst** 1988;53:87–201 (179 ref.)
Qualitative and quantitative analyses of phenol, phenylglucuronide, and phenylsulfate in urine and plasma by gas chromatography/mass spectrometry. Pierce WM Jr, et al. **J Anal Toxicol** 1988 Nov–Dec;12(6):344–7
Application of analytical standards in method development: selected chlorinated phenols and herbicides. Fast DM, et al. **J Assoc Off Anal Chem** 1989 Mar–Apr;72(2):378–83
Determination of 4–tert.–butylphenol and 4–tert.–butylcatechol in cosmetic products by reversed–phase high–performance liquid chromatography. Gagliardi L, et al. **J Chromatogr** 1989 Apr 19;466:433–7
Determination of simple phenols in faeces and urine by high–performance liquid chromatography. Murray KE, et al. **J Chromatogr** 1988 Sep 23;431(1):143–9
Optimization of mobile phase composition for high–performance liquid chromatographic analysis of eleven priority substituted phenols. Ong CP, et al. **J Chromatogr** 1989 Mar 3;464(2):405–10
Direct plasma injection using internal surface reversed–phase high–performance liquid chromatography: feasibility study using propofol as a model compound. Pullen RH, et al. **J Chromatogr** 1988 Dec 29;434(1):271–7
A method for quantitative analysis of flavor–tainting alkylphenols and aromatic thiols in fish. Heil TP, et al. **J Environ Sci Health [B]** 1988 Oct;23(5):475–88
Effects of heat treatments and germination on trypsin inhibitor activity and polyphenols in jack bean (Canavalia ensiformis L. DC). Babar VS, et al. **Plant Foods Hum Nutr** 1988;38(4):319–24
[Determining the levels of phenols and various pesticides in fish by the colorimetric method] Gantverg AN. **Gig Sanit** 1988 Sep;(9):36–7 **(Rus)**
[Quantitative analysis of phenol in water, model media simulating food products and in the air during sanitary and chemical examination of polymer materials] Kataeva SE, et al. **Gig Sanit** 1988 Sep;(9):37–8 **(Rus)**
[A method of predicting air pollution in coal mines using new synthetic materials] Sukhanov VV, et al. **Gig Tr Prof Zabol** 1988 Aug;(8):16–9 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Estimation of phenolic conjugation by colonic mucosa. Ramakrishna BS, et al. **J Clin Pathol** 1989 Jun;42(6):620–3

BLOOD

Plasma binding of 1–butanol, phenol, nitrobenzene and pentachlorophenol in the rainbow trout and rat: a comparative study. Schmieder PK, et al. **Comp Biochem Physiol [C]** 1988;91(2):413–8
Automated column liquid chromatographic determination of probucol in human serum and lipoprotein fractions. Schöneshöfer M, et al. **J Chromatogr** 1989 May 5; 490(1):230–5
[The course of blood concentrations of propofol administered at a constant rate, combined with fentanyl] Mathieu–Daudé JC, et al. **Ann Fr Anesth Reanim** 1988;7(5):377–82 (Eng. Abstr.) **(Fre)**

CHEMICAL SYNTHESIS

Antiinflammatory 2,6–di–tert–butyl–4–(2–arylethenyl)phenols. Lazer ES, et al. **J Med Chem** 1989 Jan;32(1):100–4
[Synthesis and quantum chemical calculation of 4–heteroaryl–mono/di–aminomethylphenol derivatives] Xia ZN, et al. **Yao Hsueh Hsueh Pao** 1988;23(8):574–83 (Eng. Abstr.) **(Chi)**

IMMUNOLOGY

Patch testing with a mixture of 2 phenol–formaldehyde resins. Bruze M. **Contact Dermatitis** 1988 Aug;19(2):116–9

ISOLATION & PURIFICATION

Formation of direct–acting genotoxic substances in nitrosated smoked fish and meat products: identification of simple phenolic precursors and phenyldiazonium ions as reactive products. Ohshima H, et al. **Food Chem Toxicol** 1989 Mar; 27(3):193–203
Amonabactin, a novel tryptophan– or phenylalanine–containing phenolate siderophore in Aeromonas hydrophila. Barghouthi S, et al. **J Bacteriol** 1989 Apr;171(4):1811–6
Isolation of biologically active plant constituents by liquid chromatography. Marston A, et al. **J Chromatogr** 1988 Oct 19;450(1):3–11
Chromatographic analysis of polyphenols of some Iberian Thymus. Adzet T, et al. **J Ethnopharmacol** 1988 Dec; 24(2–3):147–54
Plant antimutagenic agents, 4. Isolation and structure elucidation of maesol, an inactive constituent of Maesa spp. Wall ME, et al. **J Nat Prod** 1988 Nov–Dec;51(6):1226–31
Identification of phenolic antioxidants in elastomers for pharmaceutical and medical use. Airaudo CB, et al. **Pharm Res** 1987 Jun;4(3):237–9
[Purification of water by eliminating phenols using hydrogen peroxide with iron–containing catalysts] Vasilenko II, et al. **Kosm Biol Aviakosm Med** 1989 Jan–Feb;23(1):76–9 **(Rus)**

METABOLISM

Dehalogenation in marine sediments containing natural sources of halophenols. King GM. **Appl Environ Microbiol** 1988 Dec;54(12):3079–85
Degradation of 2–hydroxybiphenyl and 2,2'–dihydroxybiphenyl by Pseudomonas sp. strain HBP1. Kohler HP, et al. **Appl Environ Microbiol** 1988 Nov; 54(11):2683–8
Role of chemical concentration and second carbon sources in acclimation of microbial communities for biodegradation. Wiggins BA, et al. **Appl Environ Microbiol** 1988 Nov; 54(11):2803–7
Anaerobic transformation of phenol to benzoate via para–carboxylation: use of fluorinated analogues to elucidate the mechanism of transformation. Genthner BR, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):945–51
Role of oxygen during horseradish peroxidase turnover and inactivation. Ma XY, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):160–5
Accumulation of phenols and catechols in isolated mouse hepatocytes in starvation or after pretreatment with acetone. Bánhegyi G, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4157–62
Binding of aromatic donor molecules to lactoperoxidase: proton NMR and optical difference spectroscopic studies. Modi S, et al. **Biochim Biophys Acta** 1989 Jul 6; 996(3):214–25
The plasma concentration and renal elimination of phenols in patients with chronic renal insufficiency. Schück O, et al. **Czech Med** 1989;12(2):117–24
Isolation and characterization of Pseudomonas aeruginosa mutants requiring salicylic acid for pyochelin biosynthesis. Ankenbauer RG, et al. **J Bacteriol** 1988 Nov;170(11):5364–7
Synthesis and biological activity of pyochelin, a siderophore of Pseudomonas aeruginosa. Ankenbauer RG, et al. **J Bacteriol** 1988 Nov;170(11):5344–51
Degradation of phenol and m–toluate in Pseudomonas sp. strain EST1001 and its Pseudomonas putida transconjugants is determined by a multiplasmid system. Kivisaar MA, et al. **J Bacteriol** 1989 Sep;171(9):5111–6
Disappearance of hemicellulosic monosaccharides and alkali–soluble phenolic compounds of normal and brown midrib sorghum x sudangrasses fed to heifers and sheep. Wedig CL, et al. **J Dairy Sci** 1989 Jan;72(1):104–11
Disappearance of hemicellulosic monosaccharides and alkali–soluble phenolic compounds of normal and brown midrib sorghum x sundangrass silages fed to Holstein steers. Wedig CL, et al. **J Dairy Sci** 1989 Jan;72(1):112–22
In vivo generation of R68.45–pPGH1 hybrid plasmids conferring a Phl+ (meta pathway) phenotype. Herrmann H, et al. **Mol Gen Genet** 1988 Sep;214(1):173–6
Examination of the substrate specificity of cloned rat kidney phenol UDP–glucuronyltransferase expressed in COS–7 cells. Jackson MR, et al. **Mol Pharmacol** 1988 Nov; 34(5):638–42
Traditional herbal medicines—the role of polyphenols. Haslam E, et al. **Planta Med** 1989 Feb;55(1):1–8 (10 ref.)
Simultaneous utilization of phenol and other carbon sources during continuous culture of Trichosporon cutaneum. Spånning A, et al. **Yeast** 1989 Apr;5 Spec No:S413–4
[Conjugation of phenolic compounds with monodansylcadaverine—conjugation test using HPLC] Sekine M, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Apr; 98(5):513–9 (Eng. Abstr.) **(Jpn)**

PHARMACOKINETICS

Propofol as an induction agent in children: pain on injection and pharmacokinetics. Valtonen M, et al. **Acta Anaesthesiol Scand** 1989 Feb;33(2):152–5
Pharmacokinetics and protein binding of propofol in patients with cirrhosis. Servin F, et al. **Anesthesiology** 1988 Dec; 69(6):887–91
Laccase–mediated detoxification of phenolic compounds. Bollag JM, et al. **Appl Environ Microbiol** 1988 Dec; 54(12):3086–91
Extended blood collection period required to define distribution and elimination kinetics of propofol. Campbell GA, et al. **Br J Clin Pharmacol** 1988 Aug;26(2):187–90
[The pharmacokinetics of propofol used in cesarean section; a preliminary study in the newborn infant] Cortambert F, et al. **Cah Anesthesiol** 1989 Jan–Feb;37(1):33–7 (Eng. Abstr.) **(Fre)**

PHARMACOLOGY

Modifications in the chemical composition and thermometric behavior of LDL and HDL by probucol in type IIa hyperlipoproteinemia. Dachet C, et al.

Adv Exp Med Biol 1988;243:179–84

Cardiovascular effects of sedative infusions of propofol and midazolam after spinal anaesthesia. Blake DW, et al. **Anaesth Intensive Care** 1988 Aug;16(3):292–8

Propofol during cardiopulmonary bypass in a patient susceptible to malignant hyperpyrexia. Marks LF, et al. **Anaesth Intensive Care** 1988 Nov;16(4):482–5

Hemodynamic and cardiodynamic effects of propofol and etomidate: negative inotropic properties of propofol. Brüssel T, et al. **Anesth Analg** 1989 Jul;69(1):35–40

Effect of various propofol plasma concentrations on regional myocardial contractility and left ventricular afterload. Coetzee A, et al. **Anesth Analg** 1989 Oct;69(4):473–83

The screening of propofol in MHS swine. Raff M, et al. **Anesth Analg** 1989 Jun;68(6):750–1

Preinduction atropine or glycopyrrolate and hemodynamic changes associated with induction and maintenance of anesthesia with propofol and alfentanil. Skues MA, et al. **Anesth Analg** 1989 Sep;69(3):386–90

Effect of phenolic monomers on the growth and beta-glucosidase activity of Bacteroides ruminicola and on the carboxymethylcellulase, beta-glucosidase, and xylanase activities of Bacteroides succinogenes. Martin SA, et al. **Appl Environ Microbiol** 1988 Dec;54(12):3019–22

Effects of phenolic dental medicaments on prostaglandin synthesis by microsomes of bovine tooth pulp and rabbit kidney medulla. Anamura S, et al. **Arch Oral Biol** 1988; 33(8):555–60

Probucol does not affect lipoprotein metabolism in macrophages of Watanabe heritable hyperlipidemic rabbits. Nagano Y, et al. **Arteriosclerosis** 1989 Jul–Aug;9(4):453–61

Influence of probucol administration on lipoprotein cholesterol and apolipoproteins in normolipemic males. Berg A, et al. **Atherosclerosis** 1988 Jul;72(1):49–54

Influence of probucol on early experimental atherogenesis in hypercholesterolemic rats. Shankar R, et al. **Atherosclerosis** 1989 Aug;78(2–3):91–7

Lack of effect of probucol on atheroma formation in cholesterol-fed rabbits kept at comparable plasma cholesterol levels. Stein Y, et al. **Atherosclerosis** 1989 Feb; 75(2–3):145–55

Effect of probucol on the physical properties of low-density lipoproteins oxidized by copper. McLean LR, et al. **Biochemistry** 1989 Jan 10;28(1):321–7

Inhibitory effects of phenol derivatives on bovine platelet aggregation and their effects on Ca2+ mobilization. Kitagawa S, et al. **Biochim Biophys Acta** 1989 Mar 28; 1011(1):52–7

Quantitative analyses of the uncoupling activity of substituted phenols with mitochondria from flight muscles of house flies. Miyoshi H, et al. **Biochim Biophys Acta** 1988 Oct 5;935(3):312–21

Auditory evoked potentials during propofol anaesthesia in man. Chassard D, et al. **Br J Anaesth** 1989 May;62(5):522–6

Cardiovascular effects of propofol in the anaesthetized dog. Goodchild CS, et al. **Br J Anaesth** 1989 Jul;63(1):87–92

Effect of prolonged sedation with propofol on serum triglyceride and cholesterol concentrations. Gottardis M, et al. **Br J Anaesth** 1989 Apr;62(4):393–6

Effects of propofol on pulmonary and systemic arterial pressure-flow relationships in hyperoxic and hypoxic dogs. Naeije R, et al. **Br J Anaesth** 1989 May;62(5):532–9

Median nerve evoked potentials during propofol anaesthesia. Scheepstra GL, et al. **Br J Anaesth** 1989 Jan;62(1):92–4

Effects of the anaesthetic 2,6-diisopropylphenol on synaptic transmission in the rat olfactory cortex slice. Collins GG. **Br J Pharmacol** 1988 Nov;95(3):939–49

Modification of the mutagenicity of aflatoxin B1 and N-methyl-N'-nitro-N-nitrosoguanidine by certain phenolic compounds. Francis AR, et al. **Cancer Lett** 1989 Jun;45(3):177–82

Inhibition of the skin tumorigenicity of (+/-)-7 beta,8 alpha-dihydroxy-9 alpha,10 alpha-epoxy-7,8,9,10-tetrahydrobenzo[a]pyrene by tannic acid, green tea polyphenols and quercetin in Sencar mice. Khan WA, et al. **Cancer Lett** 1988 Sep–Oct;42(1–2):7–12

Protection against polycyclic aromatic hydrocarbon-induced skin tumor initiation in mice by green tea polyphenols. Wang ZY, et al. **Carcinogenesis** 1989 Feb;10(2):411–5

Anti-human immunodeficiency virus phenolics from licorice. Hatano T, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun; 36(6):2286–8

A quantitative structure-activity relationship for antitumor activity of long-chain phenols from Ginkgo biloba L. Itokawa H, et al. **Chem Pharm Bull (Tokyo)** 1989 Jun; 37(6):1619–21

Scintigraphic and electrophysiological evidence of canine myocardial sympathetic denervation and reinnervation produced by myocardial infarction or phenol application. Minardo JD, et al. **Circulation** 1988 Oct;78(4):1008–19

The effect of some of the polyphenolic compounds on sperm motility in vitro: a structure-activity relationship. Kumar P, et al. **Contraception** 1989 May;39(5):531–9

Stimulation of in vitro bioactivation of hydroquinone by phenol in bone marrow cells. Subrahmanyam V, et al. **Drug Metab Dispos** 1989 May–Jun;17(3):348–50

Ventilatory effects of a propofol infusion using a method to rapidly achieve steady-state equilibrium. Allsop P, et al. **Eur J Anaesthesiol** 1988 Sep;5(5):293–303

Structural changes in oxidised low-density lipoproteins and of the effect of the anti-atherosclerotic drug probucol observed by synchrotron X-ray and neutron solution scattering. Bellamy MF, et al. **Eur J Biochem** 1989 Aug 1;183(2):321–9

Loss of plasmid linked antibiotic resistance in Escherichia coli on treatment with some phenolic compounds. Lakshmi VV, et al. **FEMS Microbiol Lett** 1989 Feb;48(3):275–8

1H and 13C NMR studies of the interaction of eugenol, phenol, and triethyleneglycol dimethacrylate with phospholipid liposomes as a model system for odontoblast membranes. Fujisawa S, et al. **J Dent Res** 1988 Nov; 67(11):1438–41

Rat striatal synaptosomes as a model system for studying the inhibition of dihydropteridine reductase activity. Shen RS, et al. **J Enzym Inhib** 1987;1(3):223–9

Two peaks of interleukin 1 expression in human leukocytes cultured with tobacco glycoprotein. Francus T, et al. **J Exp Med** 1989 Jul 1;170(1):327–32

Efficacy of the antiseptic solution 'TCP' against Staphylococcus aureus and Pseudomonas aeruginosa [letter] Acheampong YB, et al. **J Hosp Infect** 1988 Oct; 12(3):235–6

A comparison of hypochlorite and phenolic disinfectants for disinfection of clean and soiled surfaces and blood spillages. Bloomfield SF, et al. **J Hosp Infect** 1989 Apr;13(3):231–9

Studies on hindered phenols and analogues. 1. Hypolipidemic and hypoglycemic agents with ability to inhibit lipid peroxidation. Yoshioka T, et al. **J Med Chem** 1989 Feb; 32(2):421–8

Characterization of the "in vitro pulp chamber" using the cytotoxicity of phenol. Hanks CT, et al. **J Oral Pathol Med** 1989 Feb;18(2):97–107

Effects of p-tert-butylphenyl trans-4-guanidinomethylcyclohexane carboxylate hydrochloride (NCO-650) and its metabolite, p-tert-butylphenol(BP) on drug-metabolizing enzymes and fine structure in rat liver. Nakayama S, et al. **J Toxicol Sci** 1988 May;13(2):71–81

The anti-inflammatory effects of phenolic dental medicaments as determined by mouse ear edema assay. Dohi T, et al. **Jpn J Pharmacol** 1989 Apr;49(4):535–9

Effect of pyochelin on Pseudomonas cepacia respiratory infections. Sokol PA, et al. **Microb Pathog** 1988 Sep; 5(3):197–205

Antimutagenic activity of green tea polyphenols. Wang ZY, et al. **Mutat Res** 1989 Jul;223(3):273–85

Performance of Leghorn type hens fed two levels of energy and a synthetic estrogen during the growing period. Douglas CR, et al. **Poult Sci** 1989 Jun;68(6):825–9

Effect of the application of an anionic detergent combined with FABRY's tincture and its components on human skin resident flora. Part 2: Dermofug solution combined with either salicylic acid tincture or phenol acid tincture. Hartmann AA, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Aug; 186(5–6):536–44

Effect of the application of an anionic detergent combined with FABRY's tincture and its components on human skin resident flora. Part 1: Dermofug solution combined with either FABRY's tincture or 50 v/v% isopropanol. Hartmann AA, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Aug; 186(5–6):526–35

[The antiviral action of a polyphenol complex isolated from the medicinal plant Geranium sanguineum L. VI. Reproduction of the influenza virus pretreated with the polyphenol complex] Serkedzhieva Iu, et al. **Acta Microbiol Bulg** 1988;22:16–21 (Eng. Abstr.) **(Bul)**

[The amount of histamine released in vivo by hypnotics (thiopental, methohexital, propofol) studied by assays of plasma histamine] Widmer S, et al. **Allerg Immunol (Paris)** 1988 Nov;20(9):346–7 (Eng. Abstr.) **(Fre)**

[Psycho-pharmacologic profile of para-hydroxybenzonitrile] Cheav SL, et al. **Ann Pharm Fr** 1988;46(4):251–9 (Eng. Abstr.) **(Fre)**

[Correlation of the rates of singlet oxygen inactivation by phenols and their efficacy in the inhibition of neoplasms induced by benzo(a)pyrene] Bensasson RV, et al. **C R Acad Sci [III]** 1988;307(18):807–10 (Eng. Abstr.) **(Fre)**

[Response of human growth hormone to anesthesia induction with propofol] Gottardis M, et al. **Anaesthesist** 1988 Nov; 37(11):690–3 (Eng. Abstr.) **(Ger)**

[Mechanisms of the regulation of membrane receptor activity by synthetic antioxidants of the screened phenol class] Kokhlov AP. **Biull Eksp Biol Med** 1988 Oct;106(10):440–4 (Eng. Abstr.) **(Rus)**

[Interferonogenic activity of low-molecular compounds of plant origin] Ershov FI, et al. **Vopr Virusol** 1988 Nov–Dec; 33(6):750–2 **(Rus)**

[Effects of treatment with polyvinylpyrrolidone on nutritional quality of sorghum] de Mucciarelli SI, et al. **Arch Latinoam Nutr** 1987 Sep;37(3):547–50 (Eng. Abstr.) **(Spa)**

POISONING

Acute resin phenol-formaldehyde intoxication. A life threatening occupational hazard. Cohen N, et al. **Hum Toxicol** 1989 May;8(3):247–50

Phenol: tissue distribution in a fatality. Lo Dico C, et al. **J Forensic Sci** 1989 Jul;34(4):1013–5

[Various changes in protein metabolism and integral indicators in rats after a single-dose exposure to phenol] Skvortsova RI, et al. **Gig Sanit** 1989 Mar;(3):79 **(Rus)**

RADIATION EFFECTS

Radiation induced decomposition of biological resistant pollutants in water. Getoff N. **Int J Rad Appl Instrum [A]** 1986;37(11):1103–9

The interpretation of the electron spin resonance spectrum obtained by ultraviolet irradiation of the photoallergen bithionol. Delahanty JN, et al. **Photochem Photobiol** 1988 Aug;48(2):223–4

THERAPEUTIC USE

Intravenous infusion of midazolam, propofol and vecuronium in a patient with severe tetanus. Orko R, et al. **Acta Anaesthesiol Scand** 1988 Oct;32(7):590–2

Effects of simvastatin and probucol in hypercholesterolemia (Simvastatin Multicenter Study Group II). Pietro DA, et al. **Am J Cardiol** 1989 Mar 15;63(11):682–6

Propofol infusion for sedation of patients with head injury in intensive care. A preliminary report. Farling PA, et al. **Anaesthesia** 1989 Mar;44(3):222–6

Mechanisms of HDL reduction after probucol. Changes in HDL subfractions and increased reverse cholesteryl ester transfer. Franceschini G, et al. **Arteriosclerosis** 1989 Jul–Aug;9(4):462–9

Comparison of lovastatin and probucol in treatment of familial and non-familial hypercholesterolemia: different effects on lipoprotein profiles. Helve E, et al. **Atherosclerosis** 1988 Aug;72(2–3):189–97

Phenol cauterization for ingrowing toenails: a review of five years' experience. Byrne DS, et al. **Br J Surg** 1989 Jun; 76(6):598–9

Phenol treatment of pilonidal sinuses of the natal cleft. Stansby G, et al. **Br J Surg** 1989 Jul;76(7):729–30

Intensive combination drug therapy of familial hypercholesterolemia with lovastatin, probucol, and colestipol hydrochloride. Witztum JL, et al. **Circulation** 1989 Jan;79(1):16–28

Probucol. A reappraisal of its pharmacological properties and therapeutic use in hypercholesterolaemia. Buckley MM, et al. **Drugs** 1989 Jun;37(6):761–800 (134 ref.)

Local oestrogen for recurrent epistaxis caused by familial telangiectasia [letter] Tombleson PM. **J R Coll Gen Pract** 1988 May;38(310):227

Bithionol (Bitin) treatment in established fascioliasis in Egyptians. Farag HF, et al. **J Trop Med Hyg** 1988 Oct; 91(5):240–4

Early events in ischemic renal failure in the rat: effects of antioxidant therapy. Bird JE, et al. **Kidney Int** 1989 Jun; 35(6):1282–9

Comparison of propofol and midazolam for sedation in critically ill patients. Aitkenhead AR, et al. **Lancet** 1989 Sep 23;2(8665):704–9

Effects of probucol on the high density lipoprotein system in hypercholesterolaemic patients. Franceschini G, et al. **Pharmacol Res** 1989 Jan–Feb;21(1):113–4

Hypercoagulable state in the Watanabe heritable hyperlipidemic rabbit, an animal model for the progression of atherosclerosis. Effect of probucol on coagulation. Mori Y, et al. **Thromb Haemost** 1989 Feb 28;61(1):140–3

Treatment of acute toxaemic fasciolíasis. Farid Z, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):299

[A comparative study of 2 treatment methods for onychocryptosis (ingrown toenail)] Burssens P, et al. **Acta Chir Belg** 1987 Sep–Oct;87(5):294–7 (Eng. Abstr.) **(Dut)**

[Anticarcinogenic and antitumor properties of selenium-containing phenol derivatives] Didzhiapetrene IaK, et al. **Eksp Onkol** 1988;10(6):57–9 (Eng. Abstr.) **(Rus)**

TOXICITY

Effects of phenol exposure on the thermal tolerance ability of the central stoneroller minnow. Chagnon N, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):614–9

Effect of insecticides and phenolics on nitrogen fixation by Nostoc linckia. Megharaj M, et al. **Bull Environ Contam Toxicol** 1988 Aug;41(2):277–81

Structure-activity relationships for di and tri alkyl and/or halogen substituted phenols. Schultz TW, et al. **Bull Environ Contam Toxicol** 1989 Aug;43(2):192–8

Promotion by dihydroxybenzene derivatives of N-methyl-N'-nitro-N-nitrosoguanidine-induced F344 rat forestomach and glandular stomach carcinogenesis. Hirose M, et al. **Cancer Res** 1989 Sep 15;49(18):5143–7

Effect of bromobenzene and O-bromophenol on kidney and liver of English sole (Parophrys vetulus). Casillas E, et al. **Comp Biochem Physiol [C]** 1989;93(1):43–8

Effects of phenols on growth rate and adenosine uptake of CHO cells. Foret M, et al. **Ecotoxicol Environ Safety** 1988 Dec;16(3):303–9

Acute toxicity of cresols, xylenols, and trimethylphenols to Daphnia magna Straus 1820 [published erratum appears in Sci Total Environ 1989 Jan;78:300] Devillers J. **Sci Total Environ** 1988 Sep 15;76(1):79–83

[Mutagenicity testing in the sperm head test/mouse and mutagenic potency of 2 disinfectants on the basis of peracetic acid and phenols, respectively] Koch S, et al. **Zentralbl Hyg Umweltmed** 1989 Aug;188(5):391–403 (Eng. Abstr.) **(Ger)**

[Mutagenicity of benzene metabolites by fluctuation test]

Koike N, et al. **Sangyo Igaku** 1988 Nov;30(6):475–80 (Eng. Abstr.) **(Jpn)**

[Various parameters of cellular immunity in persons exposed to petroleum derivatives] Zeman K, et al. **Pol Tyg Lek** 1988 May 16;43(20):626–30 (Eng. Abstr.) **(Pol)**

[The use of high-performance liquid chromatography for the prediction of toxicity] Kurlianskil BA, et al. **Gig Tr Prof Zabol** 1989;(2):53–4 **(Rus)**

URINE

Assessment of occupational benzene exposure in petrol filling stations at Rangoon. Hein R, et al. **Ann Occup Hyg** 1989; 33(1):133–6

Determination of phenol and its glucurono- and sulfoconjugates in urine by gas chromatography. Buchet JP. **IARC Sci Publ** 1988;(85):281–6

Urinary metabolite levels in workers handling p-tert-butylphenol as an index of personal exposure. Kosaka M, et al. **Int Arch Occup Environ Health** 1989; 61(7):451–5

Urinary phenolics and glucuronides in hexachlorocyclohexane isomers fed rats. Srinivasan K, et al. **J Environ Sci Health [B]** 1989 Feb;24(1):87–95

Identification of the phenolic substances in bovine urine associated with oak leaf poisoning. Shi ZC. **Res Vet Sci** 1988 Sep;45(2):152–5

[Level of urinary phenol and hippuric acid in control subjects and subjects exposed to benzene and toluene] Premel-Cabic A, et al. **Ann Biol Clin (Paris)** 1988;46(8):683–7 (22 ref.) (Eng. Abstr.) **(Fre)**

PHENOLSULFONPHTHALEIN see under **PHENOLPHTHALEINS**

PHENOPERIDINE

ADVERSE EFFECTS

[Cerebral hernia on top of pre-existing intracranial hypertension during anaphylactoid reaction to phenoperidine (letter)] Sellier E, et al. **Ann Fr Anesth Reanim** 1988;7(5):439 **(Fre)**

PHARMACOKINETICS

[Delay in the elimination of thiopental and phenoperidine related to cimetidine] Favre JP, et al. **Cah Anesthesiol** 1988 Jun-Jul;36(4):313–5 **(Fre)**

PHARMACOLOGY

[Phenoperidine: pharmacology and use in pediatric resuscitation] Claris O, et al. **Pediatrie** 1988;43(6):509–13 (Eng. Abstr.) **(Fre)**

PHENOPROMIN see **AMPHETAMINE**

PHENOTHIAZINE TRANQUILIZERS

ADVERSE EFFECTS

Catatonia in a 90-year-old patient after depot pipothiazine injection [letter] Morrison PJ, et al. **Br J Psychiatry** 1988 Jun;152:865–6

Prevalence of obesity in patients receiving depot antipsychotics. Silverstone T, et al. **Br J Psychiatry** 1988 Aug;153:214–7

Hazardous side effects of the phenothiazine drugs. Masłowski J. **Bull Inst Marit Trop Med Gdynia** 1987;38(3–4):220–3 (16 ref.)

Phenothiazine-induced cholestatic jaundice. Regal RE, et al. **Clin Pharm** 1987 Oct;6(10):787–94 (58 ref.)

ANALYSIS

Spectrophotometric determination of some phenothiazine drugs using 3-methylbenzothiazolin-2-one hydrazone. el-Kommos ME, et al. **Analyst** 1988 Aug;113(8):1267–71

BLOOD

Effect of phospholipase A2 and cholesterol oxidase on perazine and promethazine penetration into human erythrocytes and on fluidity of the membrane. Ogiso T, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):2168–75

Monitoring of serum bioactivity levels of perazine and its metabolites by radioreceptor assay. Rao ML. **Pharmacopsychiatry** 1989 May;22(3):104–7

METABOLISM

A molecular modeling study on binding of drugs to calmodulin. Höltje HD, et al. **J Comput Aided Mol Des** 1989 Jun;3(2):101–9

PHARMACOLOGY

[Effects of psychotropic drugs of the phenothiazine series on matrix activity of thymocyte DNA and glucocorticoid receptor interactions] Golikov PP. **Biull Eksp Biol Med** 1989 Jan;107(1):56–8 (Eng. Abstr.) **(Rus)**

POISONING

Marked junctional bradycardia, prolonged QT interval and torsade de pointes in acute phenothiazine intoxication in a schizophrenic patient. A case report. Quek DK, et al. **Med J Malaysia** 1988 Jun;43(2):173–7

THERAPEUTIC USE

Antiemetic treatment of chemotherapy-induced nausea in ovarian carcinoma patients. Sorbe B, et al. **Gynecol Oncol** 1989 Aug;34(2):141–4

Predictors of neuroleptic treatment response in acute schizophrenia: results of a treatment study with perazine. Gaebel W, et al. **Pharmacopsychiatry** 1988 Nov;21(6):384–6

PHENOTHIAZINES

The influence of cationic thiazine dyes on eosin Y-uptake of red blood cells in Romanowsky-Giemsa type stains. Schulte E, et al. **Acta Histochem Suppl (Jena)** 1989; 37:139–47

Investigation of a modified gallocyanin chrome alum staining technique in cytology compared to thionine and haematoxylin as nuclear stains. Schulte E. **Acta Histochem Suppl (Jena)** 1988;36:341–52

The influence of Romanowsky-Giemsa type of stains on the nuclear texture of desoxyribonuclease-treated cytological preparations. Wittekind D, et al. **Acta Histochem Suppl (Jena)** 1989;37:131–7

Standardized thionin-eosin stain in bronchial cytology. A substitute for hematoxylin-eosin Y staining. Schulte E, et al. **Anal Quant Cytol Histol** 1989 Apr;11(2):131–9

Discrimination of benign versus malignant mixed tumors of the salivary gland using digital image analysis. Layfield LJ, et al. **Cytometry** 1989 Mar;10(2):217–21

Understanding microwave-stimulated Romanowsky—Giemsa staining of plastic embedded bone marrow. Horobin RW, et al. **Histochem J** 1988 Jun-Jul; 20(6–7):329–34

Understanding Romanowsky staining. 2. The staining mechanism of suspension-fixed cells, including influences of specimen morphology on the Romanowsky-Giemsa effect. Horobin RW, et al. **Histochemistry** 1989;91(1):77–80

Acid giemsa technique for rapid identification of mitotic cells. Dooley WC, et al. **J Histochem Cytochem** 1989 Oct; 37(10):1553–6

[Model investigations on the structure of the purple dye complex of Giemsa staining] Friedrich K, et al. **Histochemistry** 1989;91(3):257–262 (Eng. Abstr.) **(Ger)**

ADMINISTRATION & DOSAGE

Betamethasone-dixyrazine combination versus high-dose metoclopramide as antiemetic treatment in doxorubicin and cisplatin chemotherapy. Sorbe B, et al. **Radiother Oncol** 1989 Jun;15(2):161–7

[Effectiveness of intravenous infusion of ethmozin in patients with chronic ventricular arrhythmias] Merkulova IN, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(1):25–31 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Prevalence and characteristics of proarrhythmia from moricizine (Ethmozine). Morganroth J, et al. **Am J Cardiol** 1989 Jan 15;63(3):172–6

Acute phenothiazine reaction. Sharma M, et al. **Indian Pediatr** 1988 Jun;25(6):571–2

[Ventricular tachycardia and ventricular fibrillation as complications of intravenous administration of ethacizine] Lukoshiavichiute AI, et al. **Kardiologiia** 1988 Dec; 28(12):117–20 **(Rus)**

[A variant of the pre-fibrillation form of ventricular tachycardia] Zabela PV, et al. **Kardiologiia** 1989 Mar; 29(3):104–6 **(Rus)**

[2 cases of complications after intravenous administration of ethacizine] Grosu AA, et al. **Klin Med (Mosk)** 1989 Apr; 67(4):115–6 **(Rus)**

ANALYSIS

Use of cyclodextrins in isotachophoresis. VII. Resolution of structurally related and chiral phenothiazines. Jelínek I, et al. **J Chromatogr** 1989 Feb 17;464(1):139–47

Convenient oxidation of phenothiazine salts to their sulfoxides with aqueous nitrous acid. Owens ML, et al. **J Pharm Sci** 1989 Apr;78(4):334–6

Synthesis and properties of haptens for the development of radioimmunoassays for thioridazine, mesoridazine, and sulforidazine. Chakraborty BS, et al. **Pharm Res** 1987 Jun; 4(3):207–13

BLOOD

Determination of unlabeled and 13C6-labeled moricizine in human plasma using thermospray liquid chromatography-mass spectrometry. Pieniaszek HJ Jr, et al. **J Chromatogr** 1989 Aug 25;493(1):79–92

Improved column liquid chromatographic method for the determination of moricizine in plasma or serum. Yang JM, et al. **J Chromatogr** 1989 May 30;490(2):458–63

DIAGNOSTIC USE

Comparison of methenamine silver nitrate and Giemsa stain for detection of Pneumocystis carinii in bronchoalveolar lavage specimens from HIV infected patients. Holten-Andersen W, et al. **APMIS** 1989 Aug;97(8):745–7

[Megakaryocyte DNA content by microcytofluorometry with DAPI staining after removal of Wright-Giemsa staining—in ITP patients] Kobayashi Y, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Nov;51(7):1147–51 (Eng. Abstr.) **(Jpn)**

HISTORY

Dyes, antipsychotic drugs, and antimicrobial activity. Fragments of a development, with special reference to the influence of Paul Ehrlich. Kristiansen JE. **Dan Med Bull** 1989 Apr;36(2):178–85

ISOLATION & PURIFICATION

[A rapid method of isolating a phenothiazine derivatives from cadaveric specimens] Salomatin EM. **Sud Med Ekspert** 1989 Jan-Mar;32(1):39–41 (Eng. Abstr.) **(Rus)**

METABOLISM

Vanadium K-edge X-ray-absorption spectroscopy of the functioning and thionine-oxidized forms of the VFe-protein of the vanadium nitrogenase from Azotobacter chroococcum. Arber JM, et al. **Biochem J** 1989 Mar 15;258(3):733–7

Heterogeneity of [3H]neurotensin bindings: studies with dynorphin, L-156,903 and levocabastine. Pettibone DJ, et al. **Brain Res** 1988 Aug 9;457(2):212–8

RNA content and thionin binding capacity of brain--a quantitative approach to determine cellular degradation. Faruqi NA, et al. **Exp Pathol** 1988;34(3):181–4

Mössbauer studies of solid thionin-oxidized MoFe protein of nitrogenase. Lindahl PA, et al. **J Biol Chem** 1988 Dec 25;263(36):19412–8

Ethacizin metabolism in humans. Beloborodov VL, et al. **Xenobiotica** 1989 Jul;19(7):755–67

PHARMACOKINETICS

Pharmacodynamic profile of fenoverine, a novel modulator of smooth muscle motility. De Santis D, et al. **Drugs Exp Clin Res** 1989;15(1):37–42

PHARMACOLOGY

Antagonists of calmodulin delay injury development in the severely ischemic perfused working rat heart. Beręsewicz A. **Acta Physiol Pol** 1988 Jul-Aug;39(4):225–43

Effects of LG 30435 on different platelet activating factor-induced responses. Subissi A, et al. **Agents Actions Suppl** 1988;23:201–6

Inhibition of ICa in single frog cardiac cells by quinidine, flecainide, ethmozin, and ethacizin. Scamps F, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C549–59

Antimicrobial properties of methdilazine and its synergism with antibiotics and some chemotherapeutic agents. Chattopadhyay D, et al. **Arzneimittelforschung** 1988 Jul; 38(7):869–72

Moracizine and ethacizine effects on membrane receptors. Ratner EI, et al. **Arzneimittelforschung** 1989 Jul;39(7):766–9

Phenothiazine-mediated depolarization of the plasma membrane in a renal cell line. Scott JA, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3785–7

Divalent cation dependence of the inhibition by phenothiazines of mediator release from mast cells. Peachell PT, et al. **Br J Pharmacol** 1989 Jun;97(2):547–55

Inhibition of mitosis in PtK2 cells by CAPP1-calmodulin. Keith CH, et al. **Eur J Cell Biol** 1988 Oct;47(1):94–100

Inhibition of macrophage activation by isoquinolinesulfonamides, phenothiazines, and a napthalenesulfonamide. Holian A, et al. **J Cell Physiol** 1988 Oct;137(1):45–54

Class 1B antiarrhythmic drugs: tocainide, mexiletine, and moricizine. Snyder DW. **J La State Med Soc** 1989 May; 141(5):21–5 (20 ref.)

Antihistaminic and anticholinergic activities of mequitazine in comparison with clemizole. Martinez-Mir I, et al. **J Pharm Pharmacol** 1988 Sep;40(9):655–6

Effects of phenothiazine derivatives on the microclimate-pH in the rat jejunum. Iwatsubo T, et al. **J Pharm Sci** 1988 Jul;77(7):586–90

Effects of ethmozin on excitability in sheep Purkinje fibers: the balance among active and passive cellular properties which comprise the electrophysiologic matrix. Arnsdorf MF, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1158–66

Comparative anticholinergic properties of thioridazine, mesoridazine and sulforidazine. Niedzwiecki DM, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):126–33

Comparative antidopaminergic properties of thioridazine, mesoridazine and sulforidazine on the corpus striatum. Niedzwiecki DM, et al. **J Pharmacol Exp Ther** 1989 Jul; 250(1):117–25

Single channel sodium current in rat cardiomyocytes: use-dependent block by ethacizin. Undrovinas AI, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1138–45

Effects of a specific inhibitor of the 5-lipoxygenase pathway on mediator release from human basophils and mast cells. Warner JA, et al. **J Pharmacol Exp Ther** 1988 Oct; 247(1):218–22

Structural features determining activity of phenothiazines and related drugs for inhibition of cell growth and reversal of multidrug resistance. Ford JM, et al. **Mol Pharmacol** 1989 Jan;35(1):105–15

Non-competitive inhibition of GABA currents by

phenothiazines in cultured chick spinal cord and rat hippocampal neurons. Zorumski CF, et al. **Neurosci Lett** 1988 Sep 23;92(1):86–91

Alterations in lipid metabolism and cellular morphology in the liver of female rats treated with ethmozine. Vincent DR, et al. **Toxicol Appl Pharmacol** 1988 Sep 30;95(3):456–63

[The effect of ethmozin on electrical stability of the heart ventricles in dogs in the early stages of ischemia] **Cesk Fysiol** 1986;35(5):474–7 **(Cze)**

[Antimycobacterial properties of phenothiazine type compounds] Meindl W, et al. **Arch Pharm (Weinheim)** 1989 Mar;322(3):133–6 (Eng. Abstr.) **(Ger)**

[Antiallergic effects of mequitazine. 1. In vitro experiments] Kohno S, et al. **Nippon Yakurigaku Zasshi** 1988 Aug; 92(2):145–57 (Eng. Abstr.) **(Jpn)**

[Antiallergic effects of mequitazine. 2. In vivo experiments] Kohno S, et al. **Nippon Yakurigaku Zasshi** 1988 Aug; 92(2):159–65 (Eng. Abstr.) **(Jpn)**

[In vitro antimycotic effect of phenothiazine derivatives] Năstoiu I. **Rev Ig [Bacteriol]** 1988 Oct–Dec;33(4):357–60 **(Rum)**

[Inhibition of UV-induced accumulation of lipid peroxides by melanins and ommochromes] Pustynnikov MG, et al. **Biokhimiia** 1988 Jul;53(7):1117–20 (Eng. Abstr.) **(Rus)**

[Interaction of the calcium salt of heparin with specific antagonists and ethacizine] Ushkalova EA, et al. **Farmakol Toksikol** 1988 Nov–Dec;51(6):53–6 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Betamethasone–dixyrazine versus metoclopramide as antiemetic treatment in cancer chemotherapy. Sorbe B, et al. **Acta Oncol** 1988;27(4):357–60

Long–term phenothiazine administration and the eye in 100 Malaysians. Ngen CC, et al. **Br J Psychiatry** 1988 Feb; 152:278–80

Phenothiazines reduce ischemic damage to the central nervous system. Zivin JA, et al. **Brain Res** 1989 Mar 13; 482(1):189–93

Antiemetic treatment of chemotherapy–induced nausea in ovarian carcinoma patients. Sorbe B, et al. **Gynecol Oncol** 1989 Aug;34(2):141–4

Phenothiazines in murine African trypanosomiasis. Rice H, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):932

[A preliminary report on the antiarrhythmic effect of ethmozine] Fang WH. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Jun; 16(3):154–5 **(Chi)**

[Acute electrophysiologic effects of intravenous ethmozin in patients with paroxysmal supraventricular tachycardia due to WPW syndrome] Pu JL, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Dec; 16(6):329–31, 381–2 (Eng. Abstr.) **(Chi)**

[Use of isometric load for evaluation of the anti–arrhythmia effect of drugs] Gel'gat EB, et al. **Kardiologiia** 1988 Dec; 28(12):66–8 (Eng. Abstr.) **(Rus)**

[Effect of ethacizine on the chronic stimulation threshold] Kostyleva OV, et al. **Kardiologiia** 1989 Jun;29(6):105–7 **(Rus)**

[Anti–arrhythmic effectiveness and hemodynamic effect of ethacizine in middle–aged and elderly patients with ischemic heart disease and extrasystole] Korkushko OV, et al. **Klin Med (Mosk)** 1989 Mar;67(3):74–8 (Eng. Abstr.) **(Rus)**

[The efficacy of ethacizine in tablet form in the treatment of arrhythmias] Lozinskiĭ LG, et al. **Klin Med (Mosk)** 1988 Nov;66(11):50–5 (Eng. Abstr.) **(Rus)**

[Effectiveness and action characteristics of ethmozine in the treatment of children with extrasystole] Galstian AA, et al. **Pediatriia** 1988;(7):49–52 **(Rus)**

[Use of ethacizine and lidocaine to prevent ventricular fibrillation in acute myocardial infarction] Tsyganov OO. **Sov Med** 1988;(11):54–5 **(Rus)**

[Effect of ethacizine on indices of the oxygen regimen and blood perfusion of the skin in psoriasis patients] Kurdina MI, et al. **Ter Arkh** 1988;60(10):75–8 (Eng. Abstr.) **(Rus)**

[Clinical effectiveness of ethacizine in the treatment of supraventricular paroxysmal tachycardia] Lukoshiavichiute AI, et al. **Ter Arkh** 1988;60(8):41–6 (Eng. Abstr.) **(Rus)**

[Study of the comparative anti–arrhythmic effectiveness of allapinin, ethacizine and mexitil in patients with ventricular disorders of cardiac rhythm] Smetnev AS, et al. **Ter Arkh** 1988;60(8):34–8 (Eng. Abstr.) **(Rus)**

[Disorders of oxygenation and skin capillary blood flow rate in psoriasis and correction of them with ethacizine] Kurdina MI, et al. **Vestn Dermatol Venerol** 1989;(2):38–41 (Eng. Abstr.) **(Rus)**

[Ethacizine in the treatment of psoriasis] Potekaev NS, et al. **Vestn Dermatol Venerol** 1989;(5):64–7 (Eng. Abstr.) **(Rus)**

URINE

Identification of phenothiazine antihistamines and their metabolites in urine. Maurer H, et al. **Arch Toxicol** 1988; 62(2–3):185–91

PHENOTYPE

see related
SOMATOTYPES

Acetylation phenotype in abstinent alcoholics. Guthrie SK, et al. **Alcoholism (NY)** 1989 Feb;13(1):66–8

Prolidase deficiency: biochemical classification of alleles. Boright AP, et al. **Am J Hum Genet** 1989 May;44(5):731–40

Inheritance of low–density lipoprotein subclass patterns: results of complex segregation analysis [letter] Hirschhorn K. **Am J Hum Genet** 1989 May;44(5):768

Mild Brachmann–de Lange syndrome: changes of phenotype with age. Greenberg F, et al. **Am J Med Genet** 1989 Jan; 32(1):90–2

Interstitial and terminal deletions of the long arm of chromosome 4: further delineation of phenotypes. Lin AE, et al. **Am J Med Genet** 1988 Nov;31(3):533–48 (37 ref.)

Kabuki make–up (Niikawa–Kuroki) syndrome: a study of 62 patients. Niikawa N, et al. **Am J Med Genet** 1988 Nov; 31(3):565–89 (24 ref.)

Pallister–Killian mosaic syndrome with emphasis on the adult phenotype. Quarrell OW, et al. **Am J Med Genet** 1988 Dec; 31(4):841–4

Partial trisomy 9––further delineation of the phenotype. Smart RD, et al. **Am J Med Genet** 1988 Dec;31(4):947–51

Association of a Plasmodium–refractory phenotype with an esterase locus in Anopheles gambiae. Vernick KD, et al. **Am J Trop Med Hyg** 1989 Jun;40(6):593–7

A general system of resistance to malaria infection in Anopheles gambiae controlled by two main genetic loci. Vernick KD, et al. **Am J Trop Med Hyg** 1989 Jun; 40(6):585–92

Environment and genes. Determinants of behavior. Plomin R. **Am Psychol** 1989 Feb;44(2):105–11 (68 ref.)

Site–specific regulation of osteogenesis: maintenance of discrete levels of phenotypic expression in vitro. McCulloch CA, et al. **Anat Rec** 1989 Jan;223(1):27–34

Phenotypic and genotypic assays for the detection and identification of adhesins from pyelonephritic Escherichia coli. Archambaud M, et al. **Ann Inst Pasteur Microbiol** 1988 Sep–Oct;139(5):557–73

A study of nine anthroposcopic traits among the three tribes of the Bastar District in Madhya Pradesh, India. Datta U, et al. **Anthropol Anz** 1989 Mar;47(1):57–71

Mutation in a locus linked to penB–nmp causes suppression of the Mtr phenotype of Neisseria gonorrhoeae [published erratum appears in Antimicrob Agnets Chemother 1988 Nov;32(11):1746] Shinners EN, et al. **Antimicrob Agents Chemother** 1988 Jul;32(7):971–7

Genetic polymorphism of phosphoglycolate phosphatase (PGP) (E.C.:3.2.3.18) in the Polish population. Halasa J, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(6):695–700

Subtypes of the Gc gene (vitamin D binding protein) in the Polish population. Leśko D, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(6):687–93

Morphological and smooth muscle cell phenotypic changes in fetal rabbit aorta during early development. Cayatte AJ, et al. **Basic Res Cardiol** 1989 May–Jun;84(3):259–67

Inheritance of burrow building in Peromyscus. Dawson WD, et al. **Behav Genet** 1988 May;18(3):371–82

Genetics of factors affecting the life history of Drosophila melanogaster. III. Egg insertion behavior. Gonzalez D. **Behav Genet** 1989 Mar;19(2):301–13

Assortative mating for IQ and personality due to propinquity and personal preference. Mascie–Taylor CG, et al. **Behav Genet** 1988 May;18(3):339–45

Spouse similarity for IQ and personality and convergence. Mascie–Taylor CG. **Behav Genet** 1989 Mar;19(2):223–7

Direct marital assortment for cognitive and personality variables. Phillips K, et al. **Behav Genet** 1988 May; 18(3):347–56

Genetic influences on spatial ability: transmission in an extended kindred. Smalley SL, et al. **Behav Genet** 1989 Mar;19(2):229–40

Retinoid–mediated induction of the fat–storing phenotype in a liver connective tissue cell line (GRX). Margis R, et al. **Biochim Biophys Acta** 1989 Mar 28;1011(1):1–5

Phenotypic analysis of human myeloma cell lines. Duperray C, et al. **Blood** 1989 Feb;73(2):566–72

Phenotypic heterogeneity of spontaneous lymphomas of CWD mice. Thomas CY, et al. **Blood** 1989 Jan;73(1):240–7

Immunophenotype–karyotype associations in human acute lymphoblastic leukemia. Uckun FM, et al. **Blood** 1989 Jan; 73(1):271–80

Routine immunophenotyping of acute leukaemias. Drexler HG, et al. **Blut** 1988 Dec;57(6):327–39 (91 ref.)

Autocatalytic ftz activation and metameric instability induced by ectopic ftz expression. Ish–Horowicz D, et al. **Cell** 1989 Apr 21;57(2):223–32

Phenotypic heterogeneity of vascular endothelial cells in the human kidney. Kinjo T, et al. **Cell Tissue Res** 1989 Apr; 256(1):27–34

Molecular basis of the phenotypic characteristics of mammalian muscle fibres. Pette D, et al. **Ciba Found Symp** 1988;138:22–34 (37 ref.)

Confusion of apolipoprotein E phenotyping by serum amyloid A. Steinmetz A, et al. **Clin Chem** 1989 Apr; 35(4):671–2

Variation in alpha–1–antitrypsin phenotypes associated with penicillamine therapy. Whitehouse DB, et al. **Clin Chim Acta** 1989 Jan 13;179(1):109–15

Mild expression of the Pfeiffer syndrome [letter] Hall JG. **Clin Genet** 1988 Aug;34(2):144

Are the traits for drug acetylation and oxidation co–inherited? [letter] Sardaş S, et al. **Clin Genet** 1988 Aug; 34(2):143–4

The role of T cell phenotypes in decreased lymphoproliferation of the elderly. Matour D, et al. **Clin Immunol Immunopathol** 1989 Jan;50(1 Pt 1):82–99

Ammonium ion sensitivity is a ribosomal phenotype associated with suppressor mutations in the suaC gene of Aspergillus nidulans. Martinelli SD, et al. **Curr Genet** 1988 Nov;14(5):431–6

A substrate of the cell–attachment sequence of fibronectin (Arg–Gly–Asp–Ser) is sufficient to promote transition of arterial smooth muscle cells from a contractile to a synthetic phenotype. Hedin U, et al. **Dev Biol** 1989 Jun; 133(2):489–501

The segment polarity phenotype of Drosophila involves differential tendencies toward transformation and cell death. Klingensmith J, et al. **Dev Biol** 1989 Jul; 134(1):130–45

Expression of the differentiated phenotype by epithelial cells in vitro is regulated by both biochemistry and mechanics of the substratum. Opas M. **Dev Biol** 1989 Feb; 131(2):281–93

Evidence for expression of a common myosin heavy chain phenotype in future fast and slow skeletal muscle during initial stages of avian embryogenesis. Sweeney LJ, et al. **Dev Biol** 1989 Jun;133(2):361–74

Polymorphism of apolipoprotein E influences levels of serum apolipoproteins E and B in the human neonate. Steinmetz A, et al. **Eur J Clin Invest** 1989 Aug;19(4):390–4

Sparteine oxidation polymorphism: phenotyping by measurement of sparteine and its dehydrometabolites in plasma. Paar WD, et al. **Eur J Clin Pharmacol** 1989; 36(6):555–60

Fluorescence crossmatch testing. Pražák J. **Folia Haematol (Leipz)** 1989;116(2):193–8

A resolution of the ascertainment sampling problem: IV. Continuous phenotypes. Ewens WJ, et al. **Genet Epidemiol** 1988;5(6):433–44

Nonrandom sampling in genetic epidemiology: an implementation of the Hanis–Chakraborty method for multifactorial analysis. Rao DC, et al. **Genet Epidemiol** 1989;6(3):461–70

The in vivo and in vitro transmission frequencies of the tw5–haplotype in mice. Garside W, et al. **Genet Res** 1989 Feb;53(1):21–4

Molecular and phenotypic variation of the white locus region in Drosophila melanogaster. Miyashita N, et al. **Genetics** 1988 Sep;120(1):199–212

Zygotic lethals with specific maternal effect phenotypes in Drosophila melanogaster. I. Loci on the X chromosome. Perrimon N, et al. **Genetics** 1989 Feb;121(2):333–52

Multivariate mutation–selection balance with constrained pleiotropic effects. Wagner GP. **Genetics** 1989 May; 122(1):223–34

Rapid determination of the human complement factor B phenotypes. Kramer J, et al. **Haematologia (Budap)** 1989; 22(2):97–100

Spouse and parent–offspring similarities in cardiovascular response to mental arithmetic and isometric hand–grip. Ditto B, et al. **Health Psychol** 1989;8(2):159–73

The popliteal pterygium syndrome: distinct phenotypic variation in two families. Hammer J, et al. **Helv Paediatr Acta** 1989 Jun;43(5–6):507–14

Phenotypic expression of cells of stationary elements in human lymphoid tissues. A histochemical and immunohistochemical study. Hsu SM. **Hematol Pathol** 1987;1(1):45–56

Lymphoma phenotyping in formalin–fixed and paraffin wax–embedded tissues. I. Range of antibodies and staining patterns. Norton AJ, et al. **Histopathology** 1989 May; 14(5):437–46 (0 ref.)

Serial and parent–child changes in components of body fat distribution and fatness in children from the London Longitudinal Growth Study, ages two to eighteen years. Kaplowitz HJ, et al. **Hum Biol** 1988 Oct;60(5):739–58

Formal genetics of esterase D (EC 3.1.1.1): evidence for a sex–phenotype association. Amorim A, et al. **Hum Hered** 1988;38(4):255–7

Recognition of two new phenotypes segregating the E1k allele for plasma cholinesterase. Whittaker M, et al. **Hum Hered** 1988;38(4):233–9

Suppression of transformed phenotypes and c–myc expression in a mouse plasmacytoma line after cell fusion with normal fibroblasts. Oikawa T, et al. **IARC Sci Publ** 1988;(92):32–42

Expression of the human chondrocyte phenotype in vitro. Aulthouse AL, et al. **In Vitro Cell Dev Biol** 1989 Jul; 25(7):659–68

Isoniazid acetylator phenotype [letter] Raghupati Sarma G. **Indian Pediatr** 1989 Feb;26(2):197–8

Hypha formation in the white–opaque transition of Candida albicans. Anderson J, et al. **Infect Immun** 1989 Feb; 57(2):458–67

Metabolic studies on citrate synthase mutants of yeast. A change in phenotype following transformation with an inactive enzyme. Kispal G, et al. **J Biol Chem** 1989 Jul 5;264(19):11204–10

Differential phenotypic expression induced in cultured rat astroblasts by acidic fibroblast growth factor, epidermal growth factor, and thrombin. Loret C, et al. **J Biol Chem** 1989 May 15;264(14):8319–27

A developmental–genetic analysis of aggressive behavior in mice (Mus musculus): III. Behavioral mediation by heightened reactivity or immobility? Gariépy JL, et al.

J Comp Psychol 1988 Dec;102(4):392–9
Norm-of-reaction: definition and misinterpretation of animal research. Platt SA, et al. J Comp Psychol 1988 Sep; 102(3):254–61 (57 ref.)
The generation of antigen-specific, major histocompatibility complex-restricted cytotoxic T lymphocytes of the CD4+ phenotype. Enhancement by the cutaneous administration of interleukin 2. Hancock GE, et al. J Exp Med 1989 Mar 1;169(3):909–19
The MRC OX-22- CD4+ T cells that help B cells in secondary immune responses derive from naive precursors with the MRC OX-22+ CD4+ phenotype. Powrie F, et al. J Exp Med 1989 Mar 1;169(3):653–62
Simultaneous identification of alpha-L-fucosidase and phosphoglucomutase (PGM) subtyping in semen stains. Garg RK, et al. J Forensic Sci 1989 Mar;34(2):336–45
Phenotypic and functional characterization of human T cell clones. Patel SS, et al. J Immunol 1988 Dec 1; 141(11):3726–36
Differential radiosensitivity among B cell subpopulations. Riggs JE, et al. J Immunol 1988 Sep 15;141(6):1799–807
Subtypes of helper cells. Non-inflammatory type 1 helper T cells [published erratum appears in J Immunol 1989 Feb 1;142(3):1060] Wong RL, et al. J Immunol 1988 Nov 15; 141(10):3329–34
Genetic parameters of egg characteristics in Japanese quail. Sato K, et al. Jikken Dobutsu 1989 Jan;38(1):55–9
Non-responsiveness to hepatitis-B vaccination: revaccination and immunogenetic typing. Krämer A, et al. Klin Wochenschr 1988 Aug 1;66(15):670–4
Debrisoquine hydroxylation phenotype, acetylation phenotype, and ABO blood groups as genetic host factors of lung cancer risk. Roots I, et al. Klin Wochenschr 1988; 66 Suppl 11:87–97
Apo E 2 phenotypes in type II diabetics with and without insulin therapy. Vogelberg KH, et al. Klin Wochenschr 1988 Aug 1;66(15):690–3
Influence of nicotine on monocyte phenotype and function. Ziegler-Heitbrock HW, et al. Klin Wochenschr 1988;66 Suppl 11:114–6
Debrisoquine hydroxylation phenotypes in healthy volunteers [letter; comment] Llerena A, et al. Lancet 1989 Jun 17;1(8651):1398. Comment on: Lancet 1989 Mar 11;1(8637):555
Immunological subtypes of acute lymphoblastic leukemia in north India. Bhargava M, et al. Leuk Res 1988;12(8):673–8
Exceptions to the male advantage on a spatial task: family handedness and college major as factors identifying women who excel. Casey MB, et al. Neuropsychologia 1989; 27(5):689–96
Dichotic listening in 126 left-handed children: ear advantages, familial sinistrality and sex differences. Hugdahl K, et al. Neuropsychologia 1989;27(7):999–1006
The CLL2 study: preliminary results of flow cytometry immunophenotyping in the first 500 patients. Geisler C, et al. Nouv Rev Fr Hematol 1988;30(5–6):335–7
Differentiation phenotypes on cells of acute myeloid leukemia studied by My7, My9, My4, Mo1 and Ja monoclonal antibodies. Büchi G, et al. Pathologica 1987 Nov–Dec; 79(1064):699–704
Phenotypic correlates of autosomal recessive (infantile) polycystic disease of kidney and liver: criteria for classification and genetic counseling. Herrin JT. Prog Clin Biol Res 1989;305:45–54
Prevalence, phenotypic heterogeneity and familial aspects of bilateral renal agenesis/dysgenesis. Holmes LB. Prog Clin Biol Res 1989;305:1–11
Nephropathy in hereditary osteo-onycho dysplasia (HOOD): variable expression or genetic heterogeneity? Lommen EJ, et al. Prog Clin Biol Res 1989;305:157–60
Fluctuating dermatoglyphic asymmetry in psychotic twins. Markow TA, et al. Psychiatry Res 1989 Jul;29(1):37–43
Studies on the regulation of malignant phenotype and gene expression in human promyelocytic leukemia cell mutant (HL-60-AR). Xue SP, et al. Sci Sin [B] 1988 Sep; 31(9):1095–108
Morphogenesis of the polarized epithelial cell phenotype. Rodriguez-Boulan E, et al. Science 1989 Aug 18; 245(4919):718–25 (80 ref.)
A case of the A2B3 phenotype. Katsuura Y, et al. Tokushima J Exp Med 1988 Jun;35(1–2):43–7
The Kmod blood group phenotype in a healthy individual. Winkler MM, et al. Transfusion 1989 Sep;29(7):642–5
Blood group phenotypes in Taiwan. Yung CH, et al. Transfusion 1989 Mar–Apr;29(3):233–5
Linear DNA killer plasmids from the yeast Kluyveromyces. Gunge N. Yeast 1986 Sep;2(3):153–62 (90 ref.)
Association of Crohn's disease with HLA phenotype B44, Cw5. Purrmann J, et al. Z Gastroenterol 1988 Oct; 26(10):658–62
Haptoglobin phenotyping by polyacrylamide gel isoelectric focusing and its application to simultaneous typing of serum proteins. Fukuda M, et al. Z Rechtsmed 1988;101(1):37–40
DIA3 phenotyping in human tissues, dental pulps, and hair roots by isoelectric focusing. Kido A, et al. Z Rechtsmed 1988;100(2–3):133–7
Further evidence of a silent plasminogen (PLG) allele in two paternity cases. Weidinger S, et al. Z Rechtsmed 1988; 101(2):99–104
[C7 typing of blood stains using isoelectric focusing and immunoblotting] Oya M, et al. Arch Kriminol 1988 Jul–Aug;182(1–2):52–6 (Eng. Abstr.) (Ger)
[Inherited keratosis palmaris without changes of the sole of the foot and keratosis plantaris without changes of the palm of the hand] Salamon T. Hautarzt 1989 May;40(5):255–8 (30 ref.) (Eng. Abstr.) (Ger)
[Immunofluorescence and immunocytochemical stain methods for simultaneous cytogenetic and phenotypic characterization of mitotic cells] Köller U, et al. Wien Klin Wochenschr 1989 Feb 3;101(3):111–7 (Eng. Abstr.) (Ger)
[Partial hydatidiform mole--phenotype of triploidy] Zahradka M, et al. Zentralbl Gynakol 1988;110(20):1315–7 (Eng. Abstr.) (Ger)
[PMG1(0) gene in a mother-child pair: exclusion of the paternity of 3 men based on subgroups of PMG1 enzyme polymorphism] Kósa F, et al. Morphol Igazsagugyi Orv Sz 1989 Jan;29(1):61–6 (28 ref.) (Hun)
[Correction. Euphenics as a new concept in prevention (letter)] Czeizel E. Orv Hetil 1989 Jun 25;130(26):1405 (Hun)
[Polymorphic changes in cellular phenotype during hyperexpression of the NEU proto-oncogene] Tarakhovskiĭ AM, et al. Dokl Akad Nauk SSSR 1989 May-Jun;306(1):217–21 (Rus)
[The tempo of molecular and phenotypic evolution] Tetushkin EIa. Dokl Akad Nauk SSSR 1989;305(5):1241–5 (Rus)
[Integral evaluation of phenotypic and genotypic variability of morphologic and psychophysiologic human traits] Bulaeva KB, et al. Genetika 1988 Dec;24(12):2208–13 (Eng. Abstr.) (Rus)
[Phenotypic and genetic differentiation of human populations with respect to morphologic and psychophysiological traits] Bulaeva KB, et al. Genetika 1989 Jan;25(1):140–9 (Eng. Abstr.) (Rus)
[Significance of acetylation phenotype and several immunologic parameters of the mother for the health status of the newborn infants] Ivanova VV, et al. Pediatriia 1989; (6):110 (Rus)
[Frequency of phenotypes and genes of the polymorphic blood systems in a population as dependent on the age factor] Mozalevskiĭ AF, et al. Tsitol Genet 1989 May-Jun; 23(3):57–62 (Eng. Abstr.) (Rus)

PHENOXAZOLE see **PEMOLINE**

PHENOXYACETATES see under **GLYCOLATES**

PHENOXYBENZAMINE

ADMINISTRATION & DOSAGE

Treatment of impotence by intrapenile injections of papaverine and phenoxybenzamine: a double blind, controlled trial. Keogh EJ, et al. Aust N Z J Med 1989 Apr;19(2):108–12
[The effect of premedication with neurotropic and myotropic vasodilators on the effect of adrenaline in the isolated liver in rabbits. I. Premedication with phenoxybenzamine and papaverine] Tilšer I, et al. Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl 1987;30(4):503–12 (Eng. Abstr.) (Cze)
[The effect of premedication with neurotropic and myotropic vasodilators on the effect of adrenaline in the isolated liver in rabbits. II. Premedication with phenoxybenzamine, papaverine and Palerol] Tilšer I, et al. Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl 1987;30(4):513–26 (Eng. Abstr.) (Cze)

ADVERSE EFFECTS

Phenoxybenzamine and urinary retention [letter] Confer DJ. Arch Surg 1988 Oct;123(10):1287–8

PHARMACOLOGY

Hemodynamic plasticity during hindquarter compression. Julius S, et al. Acta Physiol Scand Suppl 1988;571:107–16
Adrenergic control of renin during dietary sodium deprivation in conscious dogs. Hisa H, et al. Am J Physiol 1989 Jun;256(6 Pt 1):E863–71
Improved safety of glucagon testing for pheochromocytoma by prior alpha-receptor blockade. A controlled trial in a patient with a mixed ganglioneuroma/pheochromocytoma. Elliott WJ, et al. Arch Intern Med 1989 Jan;149(1):214–6
Effects of phenoxybenzamine on insulin secretion from isolated rat islets of Langerhans. Chan SL, et al. Biosci Rep 1989 Apr;9(2):223–30
An attempt at selective protection from phenoxybenzamine of postjunctional alpha-adrenoceptor subtypes mediating contractions to noradrenaline in the rabbit isolated saphenous vein. Daly CJ, et al. Br J Pharmacol 1988 Oct; 95(2):501–11
Comparison of the effects of phenoxybenzamine and uptake blockade on noradrenaline efflux from rabbit ear arteries evoked by field stimulation and propagated nerve impulses. Rand MJ, et al. J Auton Pharmacol 1988 Dec;8(4):287–95
Systemic phenoxybenzamine but not beta-adrenergic antagonists block noradrenergic inhibition of cerebellar Purkinje and hippocampal pyramidal neurons. Staunton DA, et al. J Neural Transm 1988;73(2):101–13
Adrenergic mechanisms contribute to alterations in regional perfusion during normotensive E. coli bacteremia. Fantini GA, et al. J Trauma 1989 Sep;29(9):1252–7
Loss of selectivity of so-called selective alpha 1-adrenoceptor agonists after phenoxybenzamine. Gonçalves J, et al. Naunyn Schmiedebergs Arch Pharmacol 1988 Sep; 338(3):234–8
Effects of receptor blockers on ACTH-induced changes in extinction of active avoidance reflex in rat. Balázs M, et al. Pharmacol Biochem Behav 1988 Nov;31(3):515–8
Evidence for involvement of prostaglandins in central alpha adrenergic activity and LH release in sheep. Craig GM, et al. Prostaglandins Leukot Essent Fatty Acids 1989 Feb; 35(2):93–104
Differential effects of yohimbine and phenoxybenzamine on norepinephrine metabolites in rat brain. Edwards DJ, et al. Res Commun Chem Pathol Pharmacol 1988 Nov; 62(2):195–206

THERAPEUTIC USE

Infestation in the dog by the paralysis tick, Ixodes holocyclus. 5. Treatment. Ilkiw JE, et al. Aust Vet J 1988 Aug; 65(8):236–8
Urodynamic and clinical effect of alpha-adrenergic blocker (phenoxybenzamine) in patients with benign prostatic hyperplasia. Chen KK, et al. Chung Hua I Hsueh Tsa Chih 1988 Feb;41(2):127–30
Hyperhidrosis: a management dilemma. Manusov EG, et al. J Fam Pract 1989 Apr;28(4):412–5
Phenoxybenzamine in benign prostatic obstruction [letter] Staub WR, et al. JAMA 1988 Oct 21;260(15):2220
Agonal hepatic arterial vasospasm. D'Alessandro AM, et al. Surg Gynecol Obstet 1989 Oct;169(4):324–8
[The potential for a favorable effect in certain forms of neurogenic urination disorders using the preparation dibenziran] Tachev S, et al. Khirurgiia (Sofiia) 1988; 41(4):25–7 (Bul)
[Therapeutic potentials of the preparation dibenziran in patients with prostatic adenoma] Tachev S, et al. Khirurgiia (Sofiia) 1988;41(4):30–2 (Bul)
[Treatment of premature ejaculation with an alpha-blocker (phenoxybenzamine)] Beretta G, et al. Minerva Urol Nefrol 1988 Jan–Mar;40(1):29–32 (Eng. Abstr.) (Ita)
[Role of endogenous norepinephrine and effects of alpha- and beta-blockers in experimental spinal cord compression injury] Uehara H. Nippon Seikeigeka Gakkai Zasshi 1988 Nov;62(11):1011–8 (Eng. Abstr.) (Jpn)

PHENPROCOUMON see under **4-HYDROXYCOUMARINS**

PHENTANYL see **FENTANYL**

PHENTERMINE

The casual user [letter] Cloninger RT. J Am Dent Assoc 1989 Sep;119(3):348, 350

ADVERSE EFFECTS

Acute vasospasm associated with anorexiant use. Kim I, et al. J Okla State Med Assoc 1988 Jul;81(7):395–8

ANALOGS & DERIVATIVES

Effects of chlorphentermine and nitrogen dioxide on murine alveolar macrophages. White SM, et al. Exp Lung Res 1988; 14(5):619–36
Effects of drug-induced pulmonary phospholipidosis on lung mechanics in rats. Camus P, et al. J Appl Physiol 1989 May;66(5):2437–45
Cytochemical demonstration of increased phospholipid content in cell membranes in chlorphentermine-induced phospholipidosis. Coulombe PA, et al. J Histochem Cytochem 1989 Feb;37(2):139–47

PHENTOLAMINE

Is phentolamine stable in solution with papaverine. Benson GS, et al. J Urol 1988 Nov;140(5):970–1
The pH analysis of papaverine-phentolamine and prostaglandin E1 for pharmacologic erection. Seidmon EJ, et al. J Urol 1989 Jun;141(6):1458–9

ADMINISTRATION & DOSAGE

Accidental intra-arterial injection of epinephrine treated with phentolamine [letter] Roberts JR, et al. Ann Emerg Med 1989 Apr;18(4):424–5
Phentolamine for enhanced visualization of distal arteries in lower extremity arteriography. Duprat G Jr, et al. Can Assoc Radiol J 1989 Feb;40(1):32–3
Intracavernous self-injection for impotence: a long-term therapeutic option? Experience in 78 patients. Girdley FM, et al. J Urol 1988 Nov;140(5):972–4
Experience in the management of erectile dysfunction using the intracavernosal self-injection of vasoactive drugs. Watters GR, et al. J Urol 1988 Dec;140(6):1417–9
Injection therapy for impotence. Kursh ED, et al. Urol Clin North Am 1988 Nov;15(4):625–9 (21 ref.)

ADVERSE EFFECTS

How safe is the treatment of impotence with intracavernous

autoinjection? Zentgraf M, et al. **Eur Urol** 1989; 16(3):165–71 (46 ref.)

Side effects of self–administration of intracavernous papaverine and phentolamine for the treatment of impotence. Levine SB, et al. **J Urol** 1989 Jan;141(1):54–7

[Drug–induced priapism—a report of experiences in 101 cases] Porst H, et al. **Urologe [A]** 1989 Mar;28(2):84–7 (Eng. Abstr.) **(Ger)**

ANALOGS & DERIVATIVES

The importance of nervous and humoral mechanisms in the control of cardiac performance in the Atlantic cod Gadus morhua at rest and during non–exhaustive exercise. Axelsson M. **J Exp Biol** 1988 Jul;137:287–301

Evidence for involvement of prostaglandins in central alpha adrenergic activity and LH release in sheep. Craig GM, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Feb; 35(2):93–104

Injections of papaverine and regitine into the corpora cavernosa for erectile dysfunction: clinical results in 60 patients. Nelson RP. **South Med J** 1989 Jan;82(1):26–8

[Experience with chemical prosthesis in impotence: report of 138 cases] Wang ZR. **Chung Hua Wai Ko Tsa Chih** 1988 Apr;26(4):203–5, 253 (Eng. Abstr.) **(Chi)**

[Diagnosis and treatment of impotence with administration of chemical prosthesis using real–time mechanical sector duplex scanner—with special reference to diabetic patients] Nakajima Y, et al. **Hinyokika Kiyo** 1989 Apr;35(4):623–30 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Degradation kinetics of phentolamine hydrochloride in solution. Wang DP, et al. **J Pharm Sci** 1988 Nov; 77(11):972–6

DIAGNOSTIC USE

Phentolamine, a deceptive tool to investigate sympathetic nervous control of insulin release. Schulz A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jun; 337(6):637–43

Intracavernous injections of papaverine and phentolamine: correlation with penile brachial index. Lakin MM, et al. **Urology** 1989 May;33(5):383–6

PHARMACOLOGY

Acidosis–induced glucose intolerance is not prevented by adrenergic blockade. Adrogué HJ, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):E812–23

Nodulus–uvula depressor response: central GABA–mediated inhibition of alpha–adrenergic outflow. Henry RT, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):H1601–8

Response of gut glucagon–like immunoreactivity to hypoglycemia in dogs. Ohneda A, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):E431–8

Alpha 1–adrenoceptor mediation of urinary bicarbonate excretion. Osborn JL, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):F1116–21

Determinants of arterial pressure after chronic spinal transection in rats. Osborn JW, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):R666–73

Central and peripheral adrenoceptors affect glucose, free fatty acids, and insulin in exercising rats. Scheurink AJ, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):R547–56

Influence of phentolamine on platelet aggregation, thromboxane B2 production and release reaction. Anfossi G, et al. **Arch Int Pharmacodyn Ther** 1988 Nov–Dec; 296:144–54

Phentolamine and structurally related compounds selectively antagonize the vascular actions of the K+ channel opener, cromromakalim. McPherson GA, et al. **Br J Pharmacol** 1989 Jul;97(3):941–9

Beneficial effect of amosulalol and phentolamine on post–hypoxic recovery of contractile force and energy metabolism in rabbit hearts. Tanonaka K, et al. **Br J Pharmacol** 1989 Jun;97(2):513–23

Effect of phentolamine on venous return in human erection. Wespes E, et al. **Br J Urol** 1989 Jan;63(1):95–7

Evidence for involvement of an adrenal catecholamine in the beta–adrenergic inhibition of oxytocin release in lactating rats. Song SL, et al. **Brain Res** 1988 Aug 9; 457(2):303–9

The effects of propranolol, phentolamine, and atropine on canine coronary vascular gradients. Klassen GA, et al. **Can J Physiol Pharmacol** 1989 Feb;67(2):140–51

Effect of prazosin on the cardiopulmonary response to dopamine in awake lambs: comparison with phentolamine and tolazoline. Drummond WH, et al. **Dev Pharmacol Ther** 1988;11(5):297–305

Contribution of alpha– and beta–receptors to ketogenic and lipolytic effects of norepinephrine in humans. Keller U, et al. **Diabetes** 1989 Apr;38(4):454–9

Relationship between vascular adrenergic receptors and prostaglandin biosyntheses in canine diabetic coronary arteries. Koltai MZ, et al. **Diabetologia** 1988 Sep; 31(9):681–6

Suppression of mediobasal hypothalamic gonadotropin–releasing hormone and plasma luteinizing hormone pulsatile patterns by phentolamine in ovariectomized rhesus macaques. Pau KY, et al. **Endocrinology** 1989 Feb;124(2):891–8

Effects of atropine, acetylsalicylic acid, FPL 55712, and phentolamine on increased histamine responsiveness of cat lung strips under conditions of airway inflammation. Bánovčin P, et al. **Eur Respir J** 1989 Jun;2(6):517–21 (26 ref.)

Alpha–adrenergic blockade with phentolamine increases the response of the renin–angiotensin–aldosterone system to insulin–induced hypoglycaemia in man. Trovati M, et al. **Horm Metab Res** 1989 May;21(5):290–1

Adrenergic modulation of adrenocorticotropin responses to insulin–induced hypoglycemia and corticotropin–releasing hormone. Tomori N, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):87–93

Protection against the lethal effects of whole body vibration by the alpha–adrenergic system in rat. Inaba R, et al. **Jpn J Exp Med** 1988 Oct;58(5):207–11

Stimulation of sodium transport in frog skin by 2–imidazolines (guanidinbenzimidazole and phentolamine). García–Romeu F. **Life Sci** 1974 Aug 1;15(3):539–42

Desensitization of alpha–1 adrenergic receptor mediated smooth muscle contraction in aorta from endotoxic rats. Wakabayashi I, et al. **Life Sci** 1989;45(6):509–15

Analgesia induced by continuous versus intermittent cold water swim in the rat: differential effects of intrathecal administration of phentolamine and methysergide. Rochford J, et al. **Pharmacol Biochem Behav** 1988 Sep; 31(1):27–31

Pressor response to beta 1– and beta 2–blockers in conscious rats treated with phentolamine. Tabrizchi R, et al. **Pharmacology** 1988;37(6):385–93

Phentolamine stimulates insulin release and glucose clearance and suppresses food ingestion. Barnett CE, et al. **Physiol Behav** 1988;44(4–5):685–9

The effects of the alpha 1–adrenergic antagonists terazosin and phentolamine on prostatic adenoma and urethra in vitro. Alver JE, et al. **Proc West Pharmacol Soc** 1989; 32:317–25

Effect of phentolamine on blood pressure, heart rate and plasma catecholamine levels in conscious, unrestrained morphine dependent rats during naloxone precipitated autonomic withdrawal responses. Dixon WR, et al. **Proc West Pharmacol Soc** 1988;31:117–9

Neuronal effects of controlled superfusion of the spinal cord with monoaminergic receptor antagonists in the cat. Sandkühler J, et al. **Prog Brain Res** 1988;77:321–7

Antagonism of bromobenzene–induced hepatotoxicity by the alpha–adrenoreceptor blocking agents phentolamine and idazoxan: role of hypothermia. Kerger BD, et al. **Toxicol Appl Pharmacol** 1989 Feb;97(2):360–9

[The effect of tolazoline and phentolamine on the survival of skin flap—experimental study] Gao JH. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1985 May;1(2):57–9 **(Chi)**

THERAPEUTIC USE

Increased lung water and ascites after massive cocaine overdosage in mice and improved survival related to beta–adrenergic blockage. Robin ED, et al. **Ann Intern Med** 1989 Feb 1;110(3):202–7

Treatment of peripheral ischemia secondary to lidocaine containing epinephrine. Aycock BG, et al. **Ann Plast Surg** 1989 Jul;23(1):27–30

Penile response to intracavernosal vasoactive intestinal polypeptide alone and in combination with other vasoactive agents. Kiely EA, et al. **Br J Urol** 1989 Aug;64(2):191–4

Therapeutic roles of intracavernosal papaverine. Goldstein I, et al. **Cardiovasc Intervent Radiol** 1988 Aug;11(4):237–9

Effects of intracavernosal pharmacotherapy on self–esteem, performance anxiety and partnership in patients with chronic erectile dysfunction. Bähren W, et al. **Eur Urol** 1989;16(3):175–80

Why do so many people drop out from auto–injection therapy for impotence? Althof SE, et al. **J Sex Marital Ther** 1989 Summer;15(2):121–9

Treatment of impotence by intrapenile injections. A comparison of papaverine versus papaverine and phentolamine: a double–blind, crossover trial. Keogh EJ, et al. **J Urol** 1989 Sep;142(3):726–8

Prostaglandin E1 versus phentolamine/papaverine for the treatment of erectile impotence: a double–blind comparison. Lee LM, et al. **J Urol** 1989 Mar;141(3):549–50

The use of a vacuum constrictor device to augment a partial erection following an intracavernous injection. Marmar JL, et al. **J Urol** 1988 Nov;140(5):975–9

The pH analysis of papaverine–phentolamine and prostaglandin E1 for pharmacologic erection. Seidmon EJ, et al. **J Urol** 1989 Jun;141(6):1458–9

Erectile responses to intracavernous papaverine and phentolamine: comparison of single and combined delivery. Stief CG, et al. **J Urol** 1988 Dec;140(6):1415–6

Urodynamic effect of acute alpha–receptor blockade in patients with bladder neck dysfunction. Poulsen EU, et al. **Scand J Urol Nephrol** 1989;23(1):15–20

PHENYL ETHERS

ANALYSIS

A selected ion monitoring assay for triclosan in medical waste water. Matsushima H. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):255–7

Fate of 14C nitrofen in rice paddy ecosystem. Kale SP, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):544–7

PHARMACOKINETICS

Activity of agricultural chemicals to modify mitomycin C induced growth inhibition of Bacillus subtilis in the rec assay. Yamamoto M, et al. **Tohoku J Exp Med** 1988 Aug; 155(4):385–6

PHARMACOLOGY

Protoporphyrinogen oxidase as a molecular target for diphenyl ether herbicides. Matringe M, et al. **Biochem J** 1989 May 15;260(1):231–5

Low–temperature washing of patients' clothing; effects of detergent with disinfectant and a tunnel drier on bacterial survival. Tompkins DS, et al. **J Hosp Infect** 1988 Jul; 12(1):51–8

A novel non–H1, non–H2 histamine antagonist protects against cysteamine–induced duodenal ulcers in rats. Glavin GB, et al. **Pharmacology** 1988;37(5):277–80

[An experimental clinical study on the bactericidal and bacteriostatic action of a disinfectant soap] Di Gaetano G. **Clin Ter** 1987 Aug 31;122(4):263–9 (Eng. Abstr.) **(Ita)**

THERAPEUTIC USE

Antiulcerogenic and antisecretory effects of a novel diphenylmethane derivative and antiestrogen binding site ligand. Glavin GB, et al. **Can J Physiol Pharmacol** 1988 Sep;66(9):1139–43

Studies on the effect of toothpaste rinses on plaque regrowth. (I). Influence of surfactants on chlorhexidine efficacy. Addy M, et al. **J Clin Periodontol** 1989 Jul;16(6):380–4

Studies on the effect of toothpaste rinses on plaque regrowth. (II). Triclosan with and without zinc citrate formulations. Jenkins S, et al. **J Clin Periodontol** 1989 Jul;16(6):385–7

Comparison of the effect of toothpastes containing enzymes or antimicrobial compounds with a conventional fluoride toothpaste on the development of plaque and gingivitis. Moran J, et al. **J Clin Periodontol** 1989 May;16(5):295–9

A 1–year study on the maintenance of gingival health by a dentifrice containing a zinc salt and non–anionic antimicrobial agent. Svatun B, et al. **J Clin Periodontol** 1989 Feb;16(2):75–80

MIC tests are not suitable for assessing antiseptic handwashes [letter] Harris C. **J Hosp Infect** 1989 Jan;13(1):95

The effect of a dentifrice containing zinc citrate and Triclosan on developing gingivitis. Saxton CA, et al. **J Periodont Res** 1989 Jan;24(1):75–80

One–year study of the efficacy of a dentifrice containing zinc citrate and triclosan to maintain gingival health. Svatun B, et al. **Scand J Dent Res** 1989 Jun;97(3):242–6

TOXICITY

Functional teratogens of the rat kidney. II. Nitrofen and ethylenethiourea. Daston GP, et al. **Fundam Appl Toxicol** 1988 Oct;11(3):401–15

Teratogenic effects of nitrofen on cellular and functional maturation of the rat lung. Lau C, et al. **Toxicol Appl Pharmacol** 1988 Sep 30;95(3):412–22

PHENYL MERCURY COMPOUNDS see **PHENYLMERCURY COMPOUNDS**

PHENYLACETATES

ADMINISTRATION & DOSAGE

Comparison of 0.5% cyclopentolate plus 0.5% tropicamide and 1% cyclopentolate alone for mydriasis of dark irides. Nishizawa AR, et al. **Can J Ophthalmol** 1988 Dec; 23(7):299–300

[Guanfacine in the long–term treatment of arterial hypertension] Knypl K, et al. **Pol Tyg Lek** 1988 Jul 4; 43(27):889–91 **(Pol)**

ANALYSIS

Measurement of phenylacetic acid in cerebrospinal fluid and plasma using combined gas chromatography/electron capture chemical ionization mass spectrometry. Faull KF, et al. **Biomed Environ Mass Spectrom** 1988 Sep;17(3):213–9

Detection and separation of fenpropathrin, flucythrinate, fluvalinate, and PP 321 by thin–layer chromatography. Khazanchi R, et al. **J Assoc Off Anal Chem** 1989 May–Jun; 72(3):512–4

Thin–layer chromatography of flucythrinate residues. Singh PP, et al. **J Chromatogr** 1988 Oct 26;450(3):452–4

Analysis of cat retina for dopamine, dihydroxyphenylacetic acid, 3–methoxytyramine and homovanillic acid. Vaughn DM, et al. **Vet Res Commun** 1989;13(3):173–81

[A rapid radioenzyme method for determining dopamine and 3,4–dihydroxyphenylacetic acid in the basal ganglia of the rat brain] Petrenko SV, et al. **Farmakol Toksikol** 1989 Mar–Apr;52(2):94–7 (Eng. Abstr.) **(Rus)**

BLOOD

Simultaneous determination of ofloxacin, fenbufen and felbinac in rat plasma by high–performance liquid chromatography. Katagiri Y, et al. **J Chromatogr** 1988 Sep 23;431(1):135–42

Simultaneous liquid chromatographic determination of norepinephrine, 3,4–dihydroxyphenylethyleneglycol,

3,4-dihydroxyphenylalanine and 3,4-dihydroxyphenylacetic acid in human plasma. Premel-Cabic A, et al. **J Chromatogr** 1988 Dec 29; 434(1):187-90

CEREBROSPINAL FLUID

Hemiballismus: changes in cerebrospinal fluid. Kostic V, et al. **Acta Neurol Scand** 1988 Aug;78(2):115-7

Analysis of neurotransmitter metabolite concentrations in canine cerebrospinal fluid. Vaughn DM, et al. **Am J Vet Res** 1988 Aug;49(8):1302-6

Evidence for a role of beta-endorphin in activity of nigrostriatal neurons in the rat. Lebrun I, et al. **Braz J Med Biol Res** 1988;21(3):645-7

The ontogeny of 3,4-dihydroxyphenylacetic acid in human cerebrospinal fluid. Anderson GM, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug;51(8):1100-2

CHEMICAL SYNTHESIS

N-succinimidyl methoxyphenylacetic acid ester, an amine-directed chiral derivatizing reagent suitable for enzymatic scale resolutions. Husain PA, et al. **Anal Biochem** 1989 Apr;178(1):177-83

DIAGNOSTIC USE

Growth hormone responses to the alpha 2-adrenoceptor agonist guanfacine and to growth hormone releasing hormone in depressed patients and controls. Eriksson E, et al. **Psychiatry Res** 1988 Oct;26(1):59-67

METABOLISM

Stressful environmental stimuli increase extracellular DOPAC levels in the prefrontal cortex of hypoemotional (Roman high-avoidance) but not hyperemotional (Roman low-avoidance) rats. An in vivo voltammetric study. D'Angio M, et al. **Brain Res** 1988 Jun 7;451(1-2):237-47

NMDA antagonists block restraint-induced increase in extracellular DOPAC in rat nucleus accumbens. Serrano A, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):157-66

Molecular cloning, expression, and analysis of the genes of the homoprotocatechuate catabolic pathway of Escherichia coli C. Jenkins JR, et al. **J Bacteriol** 1988 Nov; 170(11):5317-24

Outflow and overflow of picogram levels of endogenous dopamine and DOPAC from rat striatal slices: improved methodology for studies of stimulus-evoked release and metabolism. Gerhardt GA, et al. **J Neurosci Methods** 1989 Jan;26(3):217-27

Feeding or exposure to food odors increases extracellular DOPAC levels (as measured by in vivo voltammetry) in the prefrontal cortex of food-deprived rats. D'Angio M, et al. **Neurosci Lett** 1989 Jan 16;96(2):223-8

Effect of long-term administration of 1,2,3,4-tetrahydroisoquinoline (TIQ) on striatal dopamine and 3,4-dihydroxyphenylacetic acid (DOPAC) content in mice. Saitoh T, et al. **Neurosci Lett** 1988 Oct 17;92(3):321-4

Changes in striatal dopamine metabolism measured by in vivo voltammetry during transient brain ischemia in rats. Ogura K, et al. **Stroke** 1989 Jun;20(6):783-7

[Evidence for a specific relationship between consciousness status and striatal levels of ascorbic acid: is it an indicator of their functional intermodulation?] Crespi F. **Medicina (Firenze)** 1988 Oct-Dec;8(4):448-51 (Eng. Abstr.) **(Ita)**

[Changes in monoamine metabolites in the nucleus accumbens and locomotor activity by reserpine: an in vivo microdialysis study] Sugita R, et al. **Yakubutsu Seishin Kodo** 1988 Dec;8(4):453-62 (Eng. Abstr.) **(Jpn)**

PHARMACOKINETICS

Systemic absorption of ophthalmic cyclopentolate. Kaila T, et al. **Am J Ophthalmol** 1989 May 15;107(5):562-4

Steady-state plasma levels and pharmacokinetics of guanfacine in patients with renal insufficiency. Carchman SH, et al. **Nephron** 1989;53(1):18-23

[Distribution and binding of positional isomers of 125I-hippuran, 125I-benzoate and 125I-phenylacetate in the blood components of mice] Husáková M, et al. **Cesk Farm** 1989 Feb;38(1):26-8 (Eng. Abstr.) **(Cze)**

PHARMACOLOGY

Status of cyclopentolate as a cycloplegic in children: a comparison with atropine and homatropine. Khurana AK, et al. **Acta Ophthalmol (Copenh)** 1988 Dec;66(6):721-4

The strong contractile effect of the thromboxane receptor agonist U-46619 in isolated human pulmonary arteries and its competitive antagonism by BM-13.505. Sjöberg T, et al. **Acta Physiol Scand** 1989 Jun;136(2):161-5

In vitro cardiac effects and antiarrhythmic properties of guanfacine. Scholtysik G, et al. **Arzneimittelforschung** 1989 Apr;39(4):450-4

Cholesterol metabolism in infant rats, effect of 6-hydroxydopamine and guanfacine. Hahn P, et al. **Biol Neonate** 1989;55(3):180-4

Beneficial effects of a thromboxane receptor antagonist (BM 13.505) on platelet hyperreactivity and thromboxane formation in cholesterol-fed rabbits. Löbel P, et al. **Biomed Biochim Acta** 1988;47(10-11):S86-9

8-OH-DPAT, flesinoxan and guanfacine: systemic and regional haemodynamic effects of centrally acting antihypertensive agents in anaesthetized rabbits. Hof RP, et al. **Br J Pharmacol** 1989 Apr;96(4):864-71

Argiotoxin-636 blocks excitatory synaptic transmission in rat hippocampal CA1 pyramidal neurons. Ashe JH, et al. **Brain Res** 1989 Feb 20;480(1-2):234-41

Single channel studies of non-competitive antagonism of a quisqualate-sensitive glutamate receptor by argiotoxin636--a fraction isolated from orb-web spider venom. Kerry CJ, et al. **Brain Res** 1988 Sep 6;459(2):312-27

Guanfacine treatment of Alzheimer's disease. Schlegel J, et al. **Clin Neuropharmacol** 1989 Apr;12(2):124-8

The thromboxane receptor antagonist, daltroban, protects the myocardium from ischaemic injury resulting in suppression of leukocytosis. Thiemermann C, et al. **Eur J Pharmacol** 1988 Oct 11;155(1-2):57-67

The effect of non-steroidal anti-inflammatory drugs on phytohaemagglutinin stimulated lymphocytes: relevance to possible therapeutic immunosuppression by fenclofenac. Spiers EM, et al. **Int J Immunopharmacol** 1988;10(3):261-9

Reduction of myocardial damage and polymorphonuclear leukocyte accumulation following coronary artery occlusion and reperfusion by the thromboxane receptor antagonist BM 13.505. Smith EF 3d, et al. **J Cardiovasc Pharmacol** 1989 May;13(5):715-22

The alpha-2 adrenergic agonist guanfacine improves memory in aged monkeys without sedative or hypotensive side effects: evidence for alpha-2 receptor subtypes. Arnsten AF, et al. **J Neurosci** 1988 Nov;8(11):4287-98

Analgesic action of amfenac Na, a non-steroidal anti-inflammatory agent. Hiranuma T, et al. **J Pharmacobiodyn** 1988 Sep;11(9):612-9

Effect of thromboxane receptor antagonists on venous thrombosis in rats. Schumacher WA, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1109-15

The effect of mydriasis on the pupillary centration of the human eye. Walsh G. **Ophthalmic Physiol Opt** 1988; 8(2):178-82

[Effects of guanfacine on the levels of cyclic nucleotides in anesthetized rat brain regions] Nakamichi H, et al. **Nippon Yakurigaku Zasshi** 1988 Aug;92(2):97-104 (Eng. Abstr.) **(Jpn)**

[Determination of growth hormone: comparison between a physiologic stimulus (exercise) and pharmacologic stimuli (clonidine/guanfacine)] García Ruiz ML, et al. **An Esp Pediatr** 1989 Mar;30(3):163-5 (Eng. Abstr.) **(Spa)**

POISONING

[Acute psychosis caused by poisoning with cyclopentolate] Kellner U, et al. **Klin Monatsbl Augenheilkd** 1989 Jun; 194(6):458-61 (Eng. Abstr.) **(Ger)**

THERAPEUTIC USE

Protective effect of the specific thromboxane receptor antagonist, BM-13505, in reperfusion injury following acute myocardial ischemia in cats. Bhat AM, et al. **Am Heart J** 1989 Apr;117(4):799-803

Cyclical carotid artery flow reduction in conscious dogs: effect of a new thromboxane receptor antagonist. al-Wathiqui MH, et al. **Am Heart J** 1988 Dec;116(6 Pt 1):1482-7

Comparison of the effect of atropine and cyclopentolate on myopia. Yen MY, et al. **Ann Ophthalmol** 1989 May; 21(5):180-2, 187

Success and failure at inpatient heroin detoxification. San L, et al. **Br J Addict** 1989 Jan;84(1):81-7

A postmarketing evaluation of guanfacine hydrochloride in mild to moderate hypertension. Board AW, et al. **Clin Ther** 1988;10(6):761-75

Examination of the antihypertensive action of long-term estulic (Egis-Sandoz) treatment. Zeher M, et al. **Ther Hung** 1988;36(3):103-8

[A clinical study of guanfacine in the treatment of arterial hypertension] Kheder A, et al. **Tunis Med** 1987 Nov; 65(11):709-12 (Eng. Abstr.) **(Fre)**

[Hypotensive and hemodynamic effects of guanfacine in arterial hypertension] Erina EV, et al. **Biull Vsesoiuznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(1):63-7 (Eng. Abstr.) **(Rus)**

URINE

Atrial natriuretic factor, urinary catechol compounds and electrolyte excretion in rats during normal hydration and isotonic volume expansion. Influence of dopamine receptor blockade. Hansell P, et al. **Acta Physiol Scand** 1988 Nov; 134(3):421-8

Urinary phenylacetic acid excretion in depressive patients. González-Sastre F, et al. **Acta Psychiatr Scand** 1988 Aug; 78(2):208-10

The assessment of the dopaminergic tonus by urinary determinations of homovanillic acid (HVA) and dihydroxyphenylacetic acid (DOPAC) in normal, obese and GH-deficient short children. Popa M, et al. **Endocrinologie** 1988 Jul-Sep;26(3):211-20

Full automation of catecholamine metabolite determination by column switching and high-performance liquid chromatography. Grossi G, et al. **J Chromatogr** 1989 Mar 10;465(1):113-9

Rapid and simple procedure for the determination of urinary phenylacetic acid using derivatization in aqueous medium followed by electron-capture gas chromatography. Wong JT, et al. **J Chromatogr** 1988 Jun 24;428(1):140-6

PHENYLALANINE

Structure of a single amino acid mutant of aspartate carbamoyltransferase at 2.5-A resolution: implications for the cooperative mechanism. Gouaux JE, et al. **Biochemistry** 1989 Feb 21;28(4):1798-803

Effects of conversion of an invariant tryptophan residue to phenylalanine on the function of human dihydrofolate reductase. Huang SM, et al. **Biochemistry** 1989 Jan 24; 28(2):471-8

Tryptophan-191----phenylalanine, a proximal-side mutation in yeast cytochrome c peroxidase that strongly affects the kinetics of ferrocytochrome c oxidation. Mauro JM, et al. **Biochemistry** 1988 Aug 23;27(17):6243-56

Regularly alternating L,D-peptides. III. Hexacyclic peptides from valine or phenylalanine. Pavone V, et al. **Biopolymers** 1989 Jan;28(1):215-23

Determination of the contributions of individual aromatic residues to the CD spectrum of IL-1 beta using site directed mutagenesis. Craig S, et al. **Int J Pept Protein Res** 1989 Apr;33(4):256-62

Removal of Arg1 and Phe22 from CLIP (ACTH18-39) by rodent pituitary and blood peptidases. McDermott JR, et al. **Peptides** 1988 Jul-Aug;9(4):757-61

D-Phe7-substituted peptide bradykinin antagonists are not substrates for kininase II. Togo J, et al. **Peptides** 1989 Jan-Feb;10(1):109-12

[The effect of side radicals on the peptide structure. Surface of potential energy of model alanine and phenylalanine dipeptides] Basharov MA, et al. **Mol Biol (Mosk)** 1988 Sep-Oct;22(5):1217-25 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Maternal phenylketonuria. Brenton DP. **Eur J Clin Nutr** 1989;43 Suppl 1:13-7

Prolactin stimulation by protein is mediated by amino acids in humans. Carlson HE. **J Clin Endocrinol Metab** 1989 Jul; 69(1):7-14

[Experiences in managing a camp for children with phenylketonuria] Bührdel P, et al. **Kinderarztl Prax** 1988 Dec;56(12):615-6 **(Ger)**

[Results, problems and consequences of early treatment of phenylketonuria] Theile H, et al. **Z Gesamte Inn Med** 1989 Jun 1;44(11):317-20 (36 ref.) (Eng. Abstr.) **(Ger)**

[Status of mineral nutrition in children with phenylketonuria treated by low phenylalanine diet. III. Magnesium] Cabalska B, et al. **Pediatr Pol** 1988 Jun;63(6):337-42 (Eng. Abstr.) **(Pol)**

ANALOGS & DERIVATIVES

Molecular imprinting of amino acid derivatives at low temperature (0 degrees C) using photolytic homolysis of azobisnitriles. O'Shannessy DJ, et al. **Anal Biochem** 1989 Feb 15;177(1):144-9

Substrate inhibition of Pseudomonas aeruginosa elastase by 3-(2-furyl)acryloyl-glycyl-L-phenylalanyl-L-phenylalanine. Poncz L. **Arch Biochem Biophys** 1988 Nov 1;266(2):508-15

Dose fractionation in neutron capture therapy for malignant melanoma. Allen BJ, et al. **Basic Life Sci** 1989;50:63-7

Neutron capture therapy for melanoma. Coderre JA, et al. **Basic Life Sci** 1989;50:219-32

Identification of signalling and non-signalling binding contributions to enzyme reactivity. Alternative combinations of binding interactions provide for change in transition-state geometry in reactions of papain. Kowlessur D, et al. **Biochem J** 1989 Mar 15;258(3):755-64

A study of the conformational equilibrium of DL-oligophenylalanines in nonpolar solvents in the presence and absence of lipids by high-performance liquid chromatography. Baño MC, et al. **Biophys Chem** 1988 Aug; 31(1-2):3-9

Two new fluorophore pairs, tyrosine-4'-aminophenylalanine and tyrosine-4'-dimethylaminophenylalanine, in the determination of molecular dimensions in peptides. Jankowski A, et al. **Biophys Chem** 1988 Aug;31(1-2):147-53

Conformations of dehydrophenylalanine containing peptides: nmr studies of an acyclic hexapeptide with two delta Z-Phe residues. Chauhan VS, et al. **Biopolymers** 1989 Mar; 28(3):763-71

Phenylalanine derivatives enhancing intestinal absorption of insulin in mice. Amino Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4426-34

Fungitoxicity of m-fluorophenylalanine-containing peptides towards Pythium ultimum. Young DH, et al. **Experientia** 1989 Apr 15;45(4):325-7

Enzyme inhibition by dipeptides containing 2,3-methanophenylalanine, a sterically constrained amino acid. Ogawa T, et al. **FEBS Lett** 1989 Jul 3;250(2):227-30

Removal of peripheral blood monocytes by phenylalanine methyl ester has no effect on the colony growth of hematopoietic progenitor cells. Law P, et al. **Int J Cell Cloning** 1989 Mar;7(2):100-10

Photolabeling of calmodulin with basic, amphiphilic alpha-helical peptides containing p-benzoylphenylalanine. O'Neil KT, et al. **J Biol Chem** 1989 Aug 25;264(24):14571-8

Topographic probes of angiotensin and receptor: potent angiotensin II agonist containing diphenylalanine and

long-acting antagonists containing biphenylalanine and 2-indan amino acid in position 8. Hsieh KH, et al. **J Med Chem** 1989 Apr;32(4):898-903

Renin inhibitors. Dipeptide analogues of angiotensinogen utilizing a structurally modified phenylalanine residue to impart proteolytic stability. Plattner JJ, et al. **J Med Chem** 1988 Dec;31(12):2277-88

N-(cyclohexylcarbonyl)-D-phenylalanines and related compounds. A new class of oral hypoglycemic agents. 2. Shinkai H, et al. **J Med Chem** 1989 Jul;32(7):1436-41

N-acylphenylalanines and related compounds. A new class of oral hypoglycemic agents. Shinkai H, et al. **J Med Chem** 1988 Nov;31(11):2092-7

Reduction of a benzamidoxime derivative to the corresponding benzamidine in vivo and in vitro. Hauptmann J, et al. **Pharmazie** 1988 Aug;43(8):559-60

In vitro and in vivo studies of boron conjugated melanoma affined biochemicals. Allen BJ, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):163-5

Boronophenylalanine for neutron capture therapy of melanoma. Coderre JA, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):215-7

Improvement of solubility of p-boronophenylalanine by complex formation with monosaccharides. Yoshino K, et al. **Strahlenther Onkol** 1989 Feb-Mar;165(2-3):127-9

Brain tumor imaging with synthesized 18F-fluorophenylalanine and positron emission tomography. Mineura K, et al. **Surg Neurol** 1989 Jun; 31(6):468-9

[Synthetic inhibitors of serine proteinases. 34. The effect of modification of the amidino function of N-alpha-substituted 4-amidinophenylalanine amides on inhibitory activity] Stürzebecher J, et al. **Pharmazie** 1988 Nov;43(11):782-3 (Eng. Abstr.) **(Ger)**

[Metabolic studies of p-iodophenylalanine in the pancreas: a gateway to the development of radioiodinated amino acids for functional diagnosis] Kawai K, et al. **Kaku Igaku** 1988 Nov;25(11):1263-70 (Eng. Abstr.) **(Jpn)**

[Clinical investigation of 18F-fluorophenylalanine for brain tumor imaging--comparison with 11C-methionine] Shishido F, et al. **Kaku Igaku** 1988 Dec;25(12):1431-5 (Eng. Abstr.) **(Jpn)**

[RBEs of thermal neutron capture therapy and 10B(n, alpha)7Li reaction on melanoma bearing hamster] Hiratsuka J, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jun 25; 48(6):759-66 (Eng. Abstr.) **(Jpn)**

[Stimulating action of polyphosphates on peptide formation from glycine and phenylalanine amides under abiogenic conditions] Chetkauskaite AV, et al. **Zh Evol Biokhim Fiziol** 1988 Jul-Aug;24(4):465-70 (Eng. Abstr.) **(Rus)**

ANALYSIS

Highly diastereoselective synthesis of (3R,4R)- and (3R,4S)-beta, gamma-diamino acids from D-phenylalanine. Kano S, et al. **Chem Pharm Bull (Tokyo)** 1988 Sep;36(9):3341-7

Blood clotting factor IX Kashihara: amino acid substitution of valine-182 by phenylalanine. Sakai T, et al. **J Biochem (Tokyo)** 1989 May;105(5):756-9

Determination of phenylalanine in river water by high-performance liquid chromatography. Rennie PJ. **J Chromatogr** 1989 Jan 6;461:277-80

Photochemical crosslinking of bacteriophage T4 single-stranded DNA-binding protein (gp32) to oligo-p(dT)8: identification of phenylalanine-183 as the site of crosslinking. Shamoo Y, et al. **Proteins** 1988;4(1):1-6

BIOSYNTHESIS

Terminal phenylalanine and tyrosine biosynthesis of Microtetraspora glauca. Speth AR, et al. **Biol Chem Hoppe Seyler** 1989 Jun;370(6):591-9

BLOOD

Outcome of the patients detected by newborn screening in Japan. Aoki K, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Aug;30(4):429-34

PKU and NON-PKU hyperphenylalaninemia: differentiation, indication for therapy and therapeutic results. Trefz FK, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Aug;30(4):397-404

HPLC measurement of phenylalanine in plasma. Atherton ND, et al. **Clin Chem** 1988 Nov;34(11):2241-4

HPLC measurement of phenylalanine by direct injection of plasma onto an internal-surface reversed-phase silica support. Atherton ND. **Clin Chem** 1989 Jun;35(6):975-8

Aspartame metabolism in normal adults, phenylketonuric heterozygotes, and diabetic subjects. Filer LJ Jr, et al. **Diabetes Care** 1989 Jan;12(1):67-74

New variant of hyperphenylalaninaemia with excretion of 7-substituted pterins [letter] Blau N, et al. **Eur J Pediatr** 1988 Nov;148(2):176

Blood phenylalanine levels and intelligence of 10-year-old children with PKU in the National Collaborative Study. Michals K, et al. **J Am Diet Assoc** 1988 Oct;88(10):1226-9

Serotonin and noradrenaline concentrations and serotonin uptake in platelets from hyperphenylalaninaemic patients. Giovannini M, et al. **J Inherited Metab Dis** 1988; 11(3):285-90

The role of the blood-brain barrier in the aetiology of permanent brain dysfunction in hyperphenylalaninaemia. Hommes FA. **J Inherited Metab Dis** 1989;12(1):41-6 (32 ref.)

Changes in phenylalanine tolerance while monitoring the dietetic treatment of pregnant women suffering from hyperphenylalaninaemia. Hyánek J, et al. **J Inherited Metab Dis** 1988;11(4):427-8

Biochemical and nutritional status of children with hyperphenylalaninaemia. Nord AM, et al. **J Inherited Metab Dis** 1988;11(4):431-2

Studies on experimentally induced hyperphenylalaninemia. Pueschel SM, et al. **J Ment Defic Res** 1988 Aug;32 (Pt 4):309-19

Oral aspartame and plasma phenylalanine: pharmacokinetic difference between rodents and man, and relevance to CNS effects of phenylalanine. Short note. Fernstrom JD. **J Neural Transm** 1989;75(2):159-64

Hyperphenylalanaemia in parenterally fed newborn infants [letter] Mitton SG, et al. **Lancet** 1988 Dec 24-31; 2(8626-8627):1497-8

Daily profiles of plasma phenylalanine and tyrosine in patients with osteogenic sarcoma during treatment with high-dose methotrexate-citrovorum rescue. Hilton MA, et al. **Med Pediatr Oncol** 1989;17(4):265-70

The development of the muscarinic acetylcholine receptor in normal and hyperphenylalaninemic rat cerebrum. Matsuo K, et al. **Neurochem Res** 1988 Sep;13(9):867-70

Basal ganglion calcification in hyperphenylalaninemia due to deficiency of dihydropteridine reductase. Schmidt H, et al. **Pediatr Radiol** 1988;19(1):54-6

Branched chain amino acids improve complex maze learning in rat offspring prenatally exposed to hyperphenylalaninemia: implications for maternal phenylketonuria. Vorhees CV, et al. **Pediatr Res** 1989 Jun; 25(6):568-72

Phenylketonuria: implications of initial serum phenylalanine levels on cognitive development. Barclay A, et al. **Psychol Rep** 1988 Aug;63(1):135-42

The plasma phenylalanine/large neutral amino acid ratio: a risk factor for tardive dyskinesia. Richardson MA, et al. **Psychopharmacol Bull** 1989;25(1):47-51

[Differential diagnosis of increased phenylalanine blood level in infancy. Results of the German collaborative study on phenylketonuria (PKU)/hyperphenylalaninemia (HPA)] Schmidt H, et al. **Monatsschr Kinderheilkd** 1989 Feb; 137(2):86-92 (Eng. Abstr.) **(Ger)**

[Phenylketonuria from the current viewpoint] Seidlitz G, et al. **Z Arztl Fortbild (Jena)** 1988;82(22):1123-6 **(Ger)**

[Reference levels for phenylalanine and tyrosine in discs impregnated with blood during analysis by HPLC] Cortés Castell E, et al. **An Esp Pediatr** 1988 May;28(5):405-8 (Eng. Abstr.) **(Spa)**

CEREBROSPINAL FLUID

Increased concentrations of tyrosine and phenylalanine in the cerebrospinal fluid as a possible reflection of related changes of the brain tissue in newborns with intra-uterine growth retardation. Ratzmann GW, et al. **Biomed Biochim Acta** 1988;47(12):1037-41

DIAGNOSTIC USE

Aromatic hydroxylation of phenylalanine as an assay for hydroxyl radicals: application to activated human neutrophils and to the heme protein leghemoglobin. Kaur H, et al. **Anal Biochem** 1988 Aug 1;172(2):360-7

[The phenylalanine stress test in the classification of patients with phenylketonuria] Clemens PC, et al. **Klin Padiatr** 1989 May-Jun;201(3):163-6 (Eng. Abstr.) **(Ger)**

ISOLATION & PURIFICATION

Amonabactin, a novel tryptophan- or phenylalanine-containing phenolate siderophore in Aeromonas hydrophila. Barghouthi S, et al. **J Bacteriol** 1989 Apr;171(4):1811-6

METABOLISM

Hyperphenylalaninemia due to inherited deficiencies of tetrahydrobiopterin. Matalon R, et al. **Adv Pediatr** 1989; 36:67-89 (119 ref.)

Rapid measurement of whole body and forearm protein turnover using a [2H5]phenylalanine model. Thompson GN, et al. **Am J Physiol** 1989 May;256(5 Pt 1):E631-9

Mendelian hyperphenylalaninemia. Scriver CR, et al. **Annu Rev Genet** 1988;22:301-21 (150 ref.)

Effect of excretory-secretory products of Giardia lamblia on glucose and phenylalanine transport in the small intestine of Swiss albino mice. Samra HK, et al. **Biochem Int** 1988 Nov;17(5):801-12

Effects of conversion of phenylalanine-31 to leucine on the function of human dihydrofolate reductase. Prendergast NJ, et al. **Biochemistry** 1989 May 30;28(11):4645-50

Studies towards the synthesis of the fluorescent bases of phenylalanine transfer ribonucleic acids: synthesis of 7-methylwye isolated from extremely thermophilic archaebacteria. Itaya T, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb;37(2):284-91

Binding of D-phenylalanine and D-tyrosine to carboxypeptidase A. Christianson DW, et al. **J Biol Chem** 1989 Aug 5;264(22):12849-53

Evidence for inhibition of exodus of small neutral amino acids from non-brain tissues in hyperphenylalaninaemic rats. de Cespedes C, et al. **J Inherited Metab Dis** 1989;12(2):166-80

Metabolic regulation of glycolysis in sea bass (Dicentrarchus labrax L.) muscle. I. Kinetic study and characteristic modulators of pyruvate kinase. Fideu MD, et al. **Rev Esp Fisiol** 1988 Dec;44(4):381-6

Inhibition by cadmium of D-galactose and L-phenylalanine transport by rat intestine in vitro. Lugea A, et al. **Rev Esp Fisiol** 1988 Jun;44(2):121-6

Absorption of L-phenylalanine in human ileal reservoirs exposed to urine. Akerlund S, et al. **Urol Res** 1988; 16(4):321-3

Biosynthesis of cytochalasans. XI. New results on the incorporation of phenylalanine into cytochalasin D by Zygosporium masonii [1]. Hädener A, et al. **Z Naturforsch [C]** 1989 Jan-Feb;44(1-2):19-32

[Changes in phenylalanine tolerance during the monitoring of diet therapy of pregnant women with phenylketonuria] Hyánek J, et al. **Cesk Gynekol** 1988 Nov;53(9):650-3 **(Cze)**

[Plasma-cerebrospinal fluid distribution of phenylalanine and tyrosine in children] Ratzmann GW, et al. **Padiatr Grenzgeb** 1988;27(3):211-20 (39 ref.) (Eng. Abstr.) **(Ger)**

PHARMACOKINETICS

Phenylalanine uptake in neonatal and infant rat brain. McChesney R, et al. **Biol Neonate** 1988;54(5):275-84

Transport of L-phenylalanine and related amino acids at the ovine blood-brain barrier. Brenton DP, et al. **J Physiol (Lond)** 1988 Aug;402:497-514

PHARMACOLOGY

Studies on the enhanced effect of acupuncture analgesia and acupuncture anesthesia by D-phenylalanine (first report)--effect on pain threshold and inhibition by naloxone. Kitade T, et al. **Acupunct Electrother Res** 1988; 13(2-3):87-97

Effects of aspartame and phenylalanine on meal-time food intake of humans. Anderson GH, et al. **Appetite** 1988;11 Suppl 1:48-53 (24 ref.)

Pyruvate kinase during in vitro differentiation of GM-CFC haemopoietic precursor in mice: modulation by L-alanine and L-phenylalanine. Cuenllas E, et al. **Biochimie** 1989 Jun; 71(6):763-6

Phenylalanine derivatives enhancing intestinal absorption of insulin in mice. Amino Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4426-34

EEG mean frequencies are sensitive indices of phenylalanine effects on normal brain. Epstein CM, et al. **Electroencephalogr Clin Neurophysiol** 1989 Feb;72(2):133-9

Lack of effect of aspartame or of L-phenylalanine on photically induced myoclonus in the baboon, Papio papio. Meldrum BS, et al. **Epilepsy Res** 1989 Jul-Aug;4(1):1-7

Mechanisms of phenylalanine-induced pressor effects in conscious rats. Yourick DL, et al. **Eur J Pharmacol** 1989 Jan 31;160(2):219-28

Insulinotropic properties of synthetic human gastric inhibitory polypeptide in man: interactions with glucose, phenylalanine, and cholecystokinin-8. Nauck M, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):654-62

The effects of maternal hyperphenylalaninemia on learning in mature rats. Sadava D, et al. **Life Sci** 1988;43(14):1119-23

The biochemical basis for growth inhibition by L-phenylalanine in Neisseria gonorrhoeae. Bhatnagar RK, et al. **Mol Microbiol** 1989 Mar;3(3):429-35

Phenylalanine administration influences dopamine release in the rat's corpus striatum. During MJ, et al. **Neurosci Lett** 1988 Oct 31;93(1):91-5

RADIATION EFFECTS

Hydroxyl radical induced cross-linking between phenylalanine and 2-deoxyribose. Farahani M, et al. **Biochemistry** 1988 Jun 28;27(13):4695-8

TOXICITY

An evaluation of the possible neurotoxicity of metabolites of phenylalanine. Kaufman S. **J Pediatr** 1989 May; 114(5):895-900 (29 ref.)

Pharmacological effects of phenylalanine on seizure susceptibility: an overview. Sze PY. **Neurochem Res** 1989 Feb;14(2):103-11 (76 ref.)

PHENYLALANINE AMMONIA-LYASE see under **AMMONIA-LYASES**

PHENYLALANINE HYDROXYLASE

ANALYSIS

[Phenylalanine hydroxylase of human embryos: its homology with the enzyme from the liver of adults] Laptev AV, et al. **Ontogenez** 1988 Jul-Aug;19(4):385-9 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Studies on experimentally induced hyperphenylalaninemia. Pueschel SM, et al. **J Ment Defic Res** 1988 Aug;32 (Pt 4):309-19

BIOSYNTHESIS

Effects of experimental diabetes on rat hepatic phenylalanine hydroxylase in vivo. Howard K, et al. **Int J Biochem** 1988; 20(11):1231–4

DEFICIENCY

PKU and NON-PKU hyperphenylalaninemia: differentiation, indication for therapy and therapeutic results. Trefz FK, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Aug;30(4):397–404

Molecular genetics of phenylketonuria in Mediterranean countries: a mutation associated with partial phenylalanine hydroxylase deficiency. Lyonnet S, et al. **Am J Hum Genet** 1989 Apr;44(4):511–7

Clinical and molecular heterogeneity of phenylalanine hydroxylase deficiencies in France. Rey F, et al. **Am J Hum Genet** 1988 Dec;43(6):914–21

GENETICS

Polymorphic DNA haplotypes at the phenylalanine hydroxylase (PAH) locus in European families with phenylketonuria (PKU). Daiger SP, et al. **Am J Hum Genet** 1989 Aug;45(2):310–8

Polymorphic DNA haplotypes at the phenylalanine hydroxylase (PAH) locus in Asian families with phenylketonuria (PKU). Daiger SP, et al. **Am J Hum Genet** 1989 Aug;45(2):319–24

Phenylalanine hydroxylase gene haplotypes in Polynesians: evolutionary origins and absence of alleles associated with severe phenylketonuria. Hertzberg M, et al. **Am J Hum Genet** 1989 Mar;44(3):382–7

Haplotype distribution of the human phenylalanine hydroxylase locus in Scotland and Switzerland. Sullivan SE, et al. **Am J Hum Genet** 1989 May;44(5):652–9

Collation of RFLP haplotypes at the human phenylalanine hydroxylase (PAH) locus [letter] Woo SL. **Am J Hum Genet** 1988 Nov;43(5):781–3

Haplotype analysis of the phenylalanine hydroxylase gene in Turkish phenylketonuria families. Stuhrmann M, et al. **Clin Genet** 1989 Aug;36(2):117–21

Study of restriction fragment length polymorphisms at the human phenylalanine hydroxylase locus and evaluation of its potential application in prenatal diagnosis of phenylketonuria in Chinese. Chen SH, et al. **Hum Genet** 1989 Feb;81(3):226–30

DNA haplotype analysis at the phenylalanine hydroxylase locus in the Turkish population. Lichter-Konecki U, et al. **Hum Genet** 1989 Mar;81(4):373–6

RFLP-discordance within the human phenylalanine hydroxylase locus. Riess O, et al. **Hum Genet** 1989 Sep; 83(2):199–201

RFLPs of the phenylalanine hydroxylase gene in the Italian population. Dianzani I, et al. **J Inherited Metab Dis** 1989; 12(2):162–5

Identification of the haplotype pattern associated with the mutant PKU allele in the Gypsy population of Wales. Tyfield LA, et al. **J Med Genet** 1989 Aug;26(8):499–503

Retroviral-mediated gene transfer and expression of human phenylalanine hydroxylase in primary mouse hepatocytes. Peng H, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(21):8146–50

Access to a messenger RNA sequence or its protein product is not limited by tissue or species specificity. Sarkar G, et al. **Science** 1989 Apr 21;244(4902):331–4

[Genetic diagnosis in classical phenylketonuria] Wulff K, et al. **Z Arztl Fortbild (Jena)** 1988;82(22):1127–31 **(Ger)**

IMMUNOLOGY

A monoclonal antibody to aromatic amino acid hydroxylases. Identification of the epitope. Cotton RG, et al. **Biochem J** 1988 Oct 1;255(1):193–6

ISOLATION & PURIFICATION

Purification of human liver phenylalanine hydroxylase with a monoclonal antibody to it and characterization of the enzyme. Minato S. **Acta Paediatr Jpn Overseas Ed** 1987 Aug;29(4):569–70

METABOLISM

Glucocorticoid stimulation of tetrahydrobiopterin levels and phenylalanine hydroxylase activity in rat hepatoma cells. Parniak MA, et al. **Biochem Cell Biol** 1989 Jun;67(6):293–6

Interaction with a monoclonal antibody alters the expression of co-operativity by phenylalanine hydroxylase from rat liver. Parniak MA, et al. **Biochem J** 1989 Jan 15; 257(2):383–8

Mechanistic studies on phenylalanine hydroxylase from Chromobacterium violaceum. Evidence for the formation of an enzyme-oxygen complex. Pember SO, et al. **Biochemistry** 1989 Mar 7;28(5):2124–30

The effects of some nucleosides and dithiothreitol on the stability and activity of liver phenylalanine hydroxylase. Bublitz C. **Biochim Biophys Acta** 1971 May 12; 235(2):311–21

Covalent coupling of rat liver phenylalanine hydroxylase. Weiss B, et al. **Brain Res Bull** 1978 Jul-Aug;3(4):391–4

The development of phenylalanine hydroxylase in rat liver; in vivo, and in vitro studies utilizing fetal hepatocyte cultures. Yeoh GC, et al. **Differentiation** 1988 Jun; 38(1):42–8

Evidence for the formation of the 4a-carbinolamine during the tyrosine-dependent oxidation of tetrahydrobiopterin by rat liver phenylalanine hydroxylase. Davis MD, et al. **J Biol Chem** 1989 May 25;264(15):8585–96

The tyrosine-dependent oxidation of tetrahydropterins by lysolecithin-activated rat liver phenylalanine hydroxylase. Davis MD, et al. **J Biol Chem** 1988 Nov 25;263(33):17312–6

Distribution of monoamine-synthesizing neurons in the human medulla oblongata. Halliday GM, et al. **J Comp Neurol** 1988 Jul 15;273(3):301–17

PHARMACOLOGY

Effects of maternal phenylalanine or tyrosine hydroxylase inhibition on postnatal maturation of catecholamine and amino acid metabolism in rats. Sato T, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Feb;30(1):56–62

PHENYLALANINE MUSTARD see **MELPHALAN**

PHENYLALANYL T RNA SYNTHETASE see under **AMINO ACYL T RNA SYNTHETASES**

PHENYLAMINES see **ANILINE COMPOUNDS**

PHENYLBARBITAL see **PHENOBARBITAL**

PHENYLBUTAZONE

ANALOGS & DERIVATIVES

The disposition of feprazone and its hydroxylated metabolite in human volunteers. Berry D, et al. **Xenobiotica** 1988 Jul; 18(7):857–68

[Use of nimesulide in inflammations of the upper respiratory tract] Passàli D, et al. **Clin Ter** 1989 Jan 31;128(2):105–11 (Eng. Abstr.) **(Ita)**

ANALYSIS

[The liberation of phenylbutazone from tablets] Miseta M, et al. **Pharmazie** 1988 Oct;43(10):697–8 (Eng. Abstr.) **(Ger)**

BLOOD

[Determination of phenylbutazone in blood using HPLC] Klimeš J, et al. **Cesk Farm** 1988 Nov;37(9):409–11 (Eng. Abstr.) **(Cze)**

PHARMACOKINETICS

[Pharmacokinetic parameters in old rats as a possible cause of side effects of drugs in old age] Sallingová Z, et al. **Cesk Fysiol** 1989;38(3):271–7 **(Slo)**

PHARMACOLOGY

Effects of phenylbutazone on glucose tolerance and on secretion of insulin in healthy geldings. Zicker SC, et al. **Am J Vet Res** 1989 May;50(5):743–6

Differential effects of non-steroidal anti-inflammatory drugs on seizures produced by pilocarpine in rats. Ikonomidou-Turski C, et al. **Brain Res** 1988 Oct 18; 462(2):275–85

Phenylbutazone-hydroxycoumarol interactions. Effects on steady state disposition, hepatocellular distribution, and biliary excretion of (S)-acenocoumarol in rats. Thijssen HH, et al. **Drug Metab Dispos** 1988 Sep-Oct;16(5):744–8

Interactions between chloramphenicol, acepromazine, phenylbutazone, rifampin and thiamylal in the horse [published erratum appears in Equine Vet J 1989 May;21(3):210] Burrows GE, et al. **Equine Vet J** 1989 Jan; 21(1):34–8

RADIATION EFFECTS

One-electron oxidation and reduction of azapropazone and phenylbutazone derivatives in aqueous solution: a pulse radiolysis study. Jones RA, et al. **Photochem Photobiol** 1988 Oct;48(4):401–8

THERAPEUTIC USE

Effects of phenylbutazone and indomethacin on the post-operative course following experimental orthopaedic surgery in dogs. Mbugua SW, et al. **Acta Vet Scand** 1989; 30(1):27–35

Phenylbutazone and flunixin meglumine fail to show beneficial effects on bovine subclinical mastitis. Pyörälä S, et al. **Acta Vet Scand** 1988;29(3–4):501–3

Effect of phenylbutazone on acute hemorrhagic pancreatitis in dogs. Mathur SN, et al. **Indian J Gastroenterol** 1989 Jan; 8(1):37–8

Experimental uses of flunixin meglumine and phenylbutazone in food-producing animals. Kopcha M, et al. **J Am Vet Med Assoc** 1989 Jan 1;194(1):45–9 (36 ref.)

The effect of anti-inflammatory agents on the clinical expression of bovine ephemeral fever. Uren MF, et al. **Vet Microbiol** 1989 Feb;19(2):99–111

TOXICITY

Antigen presentation by monocytes of CGD-patients and by phenylbutazone treated monocytes of normal peripheral blood. Zegers BJ, et al. **Acta Paediatr Hung** 1988–89; 29(1–2):55–7

The protective effects of sucralfate and ranitidine in foals experimentally intoxicated with phenylbutazone. Geor RJ, et al. **Can J Vet Res** 1989 Apr;53(2):231–8

Sex differences in nephrotoxic and gastrointestinal effects of phenylbutazone. Dociu N, et al. **Toxicology** 1989 Feb; 54(2):163–75

PHENYLBUTYRATES

ADVERSE EFFECTS

Haemolytic anaemia associated with fenbufen [letter] Martland T, et al. **BMJ** 1988 Oct 8;297(6653):921

Severe hypersensitivity reaction to fenbufen. Muthiah MM. **BMJ** 1988 Dec 17;297(6663):1614

[A case of convulsion, loss of consciousness and subsequent acute renal failure caused by enoxacin and fenbufen] Morita H, et al. **Nippon Naika Gakkai Zasshi** 1988 May;77(5):744–5 **(Jpn)**

[Adverse drug interactions between pyridonecarboxylic acids and nonsteroidal antiinflammatory drugs: convulsion after oral or intracerebral administration in mice] Hirai S, et al. **Yakugaku Zasshi** 1989 Feb;109(2):119–26 (Eng. Abstr.) **(Jpn)**

BLOOD

Simultaneous determination of ofloxacin, fenbufen and felbinac in rat plasma by high-performance liquid chromatography. Katagiri Y, et al. **J Chromatogr** 1988 Sep 23;431(1):135–42

METABOLISM

Vitamin K (menaquinone) biosynthesis in bacteria: high-performance liquid chromatographic assay of the overall synthesis of o-succinylbenzoic acid and of 2-succinyl-6-hydroxy-2,4-cyclohexadiene-1-carboxylic acid synthase. Popp JL, et al. **Anal Biochem** 1989 May 1; 178(2):306–10

PHARMACOKINETICS

Disposition and metabolism of sodium 4-[(3-(4-acetyl-3-hydroxy-2-propylphenoxy)propyl)= sulfonyl]-gamma -oxobenzenebutanoate in rats and dogs. Tocco DJ, et al. **Drug Metab Dispos** 1988 Sep-Oct; 16(5):690–6

The physiological disposition of aerosolized 4-[(3-(4-acetyl-3-hydroxy-2-propylphenoxy)propyl)= sulfonyl]-gamma -oxobenzenebutanoate (L-648,051) in rats. Tocco DJ, et al. **Drug Metab Dispos** 1988 Sep-Oct; 16(5):697–700

PHARMACOLOGY

L-648,051, a potent and specific aerosol active leukotriene D4 antagonist. Young RN. **Agents Actions Suppl** 1988; 23:113–9

Effect of the anti-inflammatory agent fenbufen on the quinolone-induced inhibition of gamma-aminobutyric acid binding to rat brain membranes in vitro. Tsuji A, et al. **Biochem Pharmacol** 1988 Nov 15;37(22):4408–11

Effect of the cyclo-oxygenase inhibitor fenbufen on muscle and liver protein metabolism, muscle glutamine and plasma insulin in endotoxaemic rats. Jepson MM, et al. **Clin Sci** 1989 Jul;77(1):13–20

Do inhibitors of lipoxygenase and cyclooxygenase block neonatal hypoxic pulmonary vasoconstriction? Cassin S, et al. **J Appl Physiol** 1989 Apr;66(4):1779–84

L-649,923: an antagonist of cardiac and vascular leukotriene D4 receptors. Sirén AL, et al. **J Cardiovasc Pharmacol** 1989 Feb;13(2):210–7

Angiotensin converting enzyme inhibitors: spirapril and related compounds. Smith EM, et al. **J Med Chem** 1989 Jul;32(7):1600–6

Systemic effects resulting from topical ocular administration of SCH 33861, a novel ACE inhibitor ocular hypotensive agent. Watkins RW, et al. **J Ocul Pharmacol** 1988 Summer; 4(2):93–100

Topical ocular hypotensive effects of the novel angiotensin converting enzyme inhibitor SCH 33861 in conscious rabbits. Watkins RW, et al. **J Ocul Pharmacol** 1987 Winter; 3(4):295–307

Effects of leukotriene D4, the antagonist L-649-923, and arachidonic acid on duodenal bicarbonate secretion in the rat in vivo. Knutson L, et al. **Scand J Gastroenterol** 1988 Dec;23(10):1225–31

Specific inhibition of 40 K protein phosphorylation in platelet by a new antithrombotic agent, d-indobufen. Mamiya S, et al. **Thromb Res** 1989 Jun 1;54(5):447–56

Thyroid and liver trophic changes in rats secondary to liver microsomal enzyme induction caused by an experimental leukotriene antagonist (L-649,923). Sanders JE, et al. **Toxicol Appl Pharmacol** 1988 Sep 30;95(3):378–87

[Evaluation of morning platelet aggregation in patients with ischemic cardiopathy after evening administration of indobufen] Craveri A, et al. **Minerva Cardioangiol** 1988 Sep; 36(9):411–8 (Eng. Abstr.) **(Ita)**

THERAPEUTIC USE

The effect of indobufen on the thrombogenic potential of a Dacron prosthesis in an artificial circulation. Sheehan SJ, et al. **Eur J Vasc Surg** 1988 Aug;2(4):223–7

Lederfen-F GP trial [letter] Scott HV, et al. **N Z Med J** 1989 Jun 14;102(869):299-300

[Chronic treatment of vascular diseases with indobufen] Belcaro G, et al. **Minerva Cardioangiol** 1989 May; 37(5):241-50 (Eng. Abstr.) **(Ita)**

[Platelet aggregation inhibitory therapy in chronic arterial occlusive disease of the lower limbs: results of short-term clinico-instrumental study with indobufen] Landini G, et al. **Recenti Prog Med** 1989 Apr;80(4):204-7 (Eng. Abstr.) **(Ita)**

PHENYLCARBAMIDES see **PHENYLUREA COMPOUNDS**

PHENYLENEDIAMINES

Ultrastructural and paraphenylene studies of degeneration in the primate visual system: degenerative remnants persist for much longer than expected. Johnson BM, et al. **J Electron Microsc Tech** 1988 Feb;8(2):179-83

Studies on the oxidation products from 2,4-diaminotoluene by hydrogen peroxide and their mutagenicities. II. Watanabe T, et al. **Mutat Res** 1989 Jan-Feb;225(1-2):15-9

ADVERSE EFFECTS

Occupational dermatoses from colour developing agents. Clinical and histopathological observations. Lidén C, et al. **Acta Derm Venereol (Stockh)** 1988;68(6):514-22

Contact allergy to colour developing agents in the guinea pig. Lidén C, et al. **Contact Dermatitis** 1988 Oct;19(4):290-5

[Allergic contact dermatitis caused by rubber. Evidence of a new group sensitization to p-phenylenediamine derivatives] Beretta E, et al. **Med Lav** 1988 Nov-Dec; 79(6):482-8 (Eng. Abstr.) **(Ita)**

ANALYSIS

A sampling and analytical method for airborne m-phenylenediamine (MPDA) and 4,4'-methylenedianiline (MDA). Gunderson EC, et al. **Am Ind Hyg Assoc J** 1988 Oct;49(10):531-8

Host-guest complexation in capillary isotachophoresis. II. Determination of aminophenol and diaminobenzene isomers in permanent hair colorants by using capillary isotachophoresis. Fanali S. **J Chromatogr** 1989 May 24; 470(1):123-9

DIAGNOSTIC USE

Addition of reducing agents to the peroxidase-o-phenylenediamine buffer reduces background of enzyme immunoassays. Coll JM. **Rev Esp Fisiol** 1989 Mar;45(1):41-6

IMMUNOLOGY

In vitro study of the cross-sensitivity of hair dye using hapten-specific lymphocytes. Shigematsu T, et al. **Contact Dermatitis** 1988 Jul;19(1):30-5

PHARMACOLOGY

Role of active oxygen in paraquat and 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP) cytotoxicity. Sandy MS, et al. **Basic Life Sci** 1988; 49:795-801

Artificial liposomes as a model for studying the lipid peroxidation effect of p-phenylene diamine. Gupta V, et al. **J Microencapsul** 1989 Jul-Sep;6(3):311-8

[Histological and histochemical effects of tribendimidine on Necator americanus] Yang YQ, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 May;9(3):264-7 (Eng. Abstr.) **(Chi)**

POISONING

[Systemic toxicity of paraphenylenediamine. 4 cases] Bourquia A, et al. **Presse Med** 1988 Oct 15;17(35):1798-800 (Eng. Abstr.) **(Fre)**

TOXICITY

Promoting effect of 2,4-diaminoanisole sulfate on rat thyroid carcinogenesis. Kitahori Y, et al. **Cancer Lett** 1989 May; 45(2):115-21

Contact allergy to colour developing agents. Analysis of test preparations, bulk chemicals and tank solutions by high-performance liquid chromatography. Sollenberg J, et al. **Derm Beruf Umwelt** 1989 Mar-Apr;37(2):47-52

Carcinogenicity and toxicity study of m-phenylenediamine administered in the drinking-water to (C57BL/6 x C3H/He)F1 mice. Amo H, et al. **Food Chem Toxicol** 1988 Nov-Dec;26(11-12):893-7

Reproductive toxicity of 2,4-toluenediamine in the rat. 3. Effects on androgen-binding protein levels, selected seminiferous tubule characteristics, and spermatogenesis. Varma SK, et al. **J Toxicol Environ Health** 1988; 25(4):435-51

Lack of modifying effects of 2,2'-[(4-aminophenyl) imino] bisethanol sulfate on induction of preneoplastic gamma-glutamyl transpeptidase-positive foci in a medium-term bioassay system using F344 rats. Hagiwara A, et al. **J Toxicol Sci** 1989 May;14(2):77-86

Pancreatic hepatocytes associated with chronic 2,6-dichloro-p-phenylenediamine administration in Fischer 344 rats. McDonald MM, et al. **Toxicol Pathol** 1989; 17(1 Pt 1):1-6

Long-term feeding study of N,N'-diphenyl-p-phenylenediamine in F344 rats. Hasegawa R, et al. **Toxicology** 1989 Jan;54(1):69-78

Comparative carcinogenicity of two structurally similar phenylenediamine dyes (HC blue no. 1 and HC blue no. 2) in F344/N rats and B6C3F1 mice. Kari FW, et al. **Toxicology** 1989 Jun 1;56(2):155-65

Muscle necrosis by N-methylated p-phenylenediamines in rats: structure-activity relationships and correlation with free-radical production in vitro. Munday R, et al. **Toxicology** 1989 Aug;57(3):303-14

[Toxicity of tribendimidin, a new anti-hookworm drug] Ren HN, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(3):199-201 (Eng. Abstr.) **(Chi)**

[Toxic properties of phenylenediamine] Sheftel' VO. **Gig Sanit** 1988 Jul;(7):62-3 **(Rus)**

PHENYLEPHRINE

Does anesthetic technique make a difference? Augmentation of systolic blood pressure during carotid endarterectomy: effects of phenylephrine versus light anesthesia and of isoflurane versus halothane on the incidence of myocardial ischemia. Smith JS, et al. **Anesthesiology** 1988 Dec; 69(6):846-53

ADMINISTRATION & DOSAGE

Topical nasopharyngeal anaesthesia with vasoconstriction in preeclampsia-eclampsia. Mokriski BK, et al. **Can J Anaesth** 1988 Nov;35(6):641-3

ADVERSE EFFECTS

Ether does not antagonize bronchoconstriction caused by acetylcholine, histamine, or phenylephrine. Neill P, et al. **Anesth Analg** 1989 Aug;69(2):226-8

Phenylephrine and myocardial ischemia in patients undergoing carotid endarterectomy [letter] **Anesthesiology** 1989 Sep;71(3):465-8

Phenylephrine-induced anterior chamber hypoxia. Pakalnis VA, et al. **Ann Ophthalmol** 1988 Jul;20(7):267-70

Another case of allergic contact dermatitis from phenylephrine in eyedrops. Milpied B, et al. **Contact Dermatitis** 1988 Aug;19(2):146-7

Allergic blepharoconjunctivitis due to phenylephrine. Geyer O, et al. **J Ocul Pharmacol** 1988 Summer;4(2):123-6

The inhibitory effects of nifedipine and fentanyl on circulatory response during laryngoscopy and intubation in patients pretreated with neosynephrine eye drops for mydriasis. Ho CT, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun; 26(2):153-60

Prolonged unilateral mydriasis after nasotracheal intubation. Louis F, et al. **Middle East J Anesthesiol** 1988 Jun;9(5):471

Pseudo cerebral herniation due to phenylephrine nasal spray [letter] Roberts JR. **N Engl J Med** 1989 Jun 29;320(26):1757

[Xerosis caused by abuse of vasoconstrictor eye drops: apropos of a case] Díaz C, et al. **Rev Med Univ Navarra** 1987 Jul-Sep;31(3):141-3 (Eng. Abstr.) **(Spa)**

ANALOGS & DERIVATIVES

Ocular absorption and disposition of phenylephrine and phenylephrine oxazolidine. Schoenwald RD, et al. **Biopharm Drug Dispos** 1988 Nov-Dec;9(6):527-38

Formation of a direct mutagen, diazo-N-nitrosoetilefrin, by interaction of etilefrin with nitrite. Kikugawa K, et al. **Chem Pharm Bull (Tokyo)** 1989 Jun;37(6):1600-3

Etilefrine and amezinium reduce uterine blood flow of pregnant guinea pigs. Hohmann M, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Feb;30(2):173-81

In vivo comparison of phenylephrine and phenylephrine oxazolidine instilled in the monkey eye. Schoenwald RD, et al. **J Ocul Pharmacol** 1987 Winter;3(4):333-40

ANALYSIS

Determination of microscopic dissociation constants of 3-hydroxy-alpha-(methylamino)methyl-benzenemethanol by a spectral deconvolution method. Quintero B, et al. **J Pharm Pharmacol** 1989 Jul;41(7):485-8

DIAGNOSTIC USE

The ciliary vasculature and its perturbation with drugs and surgery. Van Buskirk EM. **Trans Am Ophthalmol Soc** 1989; 86:794-841

PHARMACOKINETICS

Ocular absorption and disposition of phenylephrine and phenylephrine oxazolidine. Schoenwald RD, et al. **Biopharm Drug Dispos** 1988 Nov-Dec;9(6):527-38

PHARMACOLOGY

Effect of increased alpha-adrenergic activity on the blood pressure/cardiac output relationship in dogs. Thorvaldson J, et al. **Acta Physiol Scand** 1989 Feb;135(2):113-22

Hemodynamic responses to vasoactive compounds in chronically alcohol treated rats. Rhee HM, et al. **Adv Exp Med Biol** 1989;248:629-39

Vascular catecholamine sensitivity during pregnancy in the ewe. McLaughlin MK, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):47-53

Alpha 1-adrenergic control of contractility and coronary flow in the perfused rat heart. Edwards SJ, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H334-40

Alpha-adrenergic modulation of glutathione metabolism in isolated rat hepatocytes. Estrela JM, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):E801-5

Carotid baroreflex resetting during drug-induced arterial pressure changes in humans. Fritsch JM, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R549-53

Effects of phenylephrine on calcium current and contractility of feline ventricular myocytes. Hartmann HA, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1173-80

Ontogeny of alpha- and beta-adrenergic anorexia in rats. Lora-Vilchis MC, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):R908-13

Central effect of angiotensin II on baroreflex regulation in conscious rabbits. Matsumura Y, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):R694-700

Determinants of arterial pressure after chronic spinal transection in rats. Osborn JW, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):R666-73

Neuropeptide Y augments adrenergic contractions at feline lower esophageal sphincter. Parkman HP, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G589-97

Time course and hemodynamic effects of alpha-1-adrenergic bolus administration in anesthetized patients with myocardial disease. Schwinn DA, et al. **Anesth Analg** 1989 May;68(5):571-8

Phenylephrine increases regional cerebral blood flow following hemorrhage during isoflurane-oxygen anesthesia. Mutch WA, et al. **Anesthesiology** 1989 Feb;70(2):276-9

Response of cerebral blood flow to phenylephrine infusion during hypothermic cardiopulmonary bypass: influence of PaCO2 management. Rogers AT, et al. **Anesthesiology** 1988 Oct;69(4):547-51

Role of calcium in the phenylephrine-induced activation of phosphorylase "A" in isolated liver cells. Saz JM, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):480-5

Activation of rat liver plasma-membrane diacylglycerol kinase by vasopressin and phenylephrine. Rider MH, et al. **Biochem J** 1988 Nov 1;255(3):923-8

Control of gluconeogenesis: role of fatty acids in the alpha-adrenergic response. González-Manchón C, et al. **Biochim Biophys Acta** 1988 Nov 18;972(2):192-9

Stimulation of cardiac alpha receptors increases Na/K pump current and decreases gK via a pertussis toxin-sensitive pathway. Shah A, et al. **Biophys J** 1988 Aug;54(2):219-25

Ocular and systemic effects of topical instillation of different formulations of phenylephrine in rabbits. Cioli V, et al. **Boll Chim Farm** 1988 Apr;127(4):80-2

Seasonal variation in responsiveness of human eccrine sweat glands to phenylephrine. Banjar WM, et al. **Br J Clin Pharmacol** 1989 Feb;27(2):276-8

Effect of cataract extraction on the pupil response to mydriatics. Gibbens MV, et al. **Br J Ophthalmol** 1989 Jul; 73(7):563-5

Responses of erectile tissue from impotent men to pharmacological agents. Creed KE, et al. **Br J Urol** 1989 Apr;63(4):428-31

Effects of perfusion flow rate, prostaglandin F2 alpha, phenylephrine, and serotonin on isolated, perfused brains of spontaneously hypertensive rats. Gong D, et al. **Brain Res** 1989 Mar 13;482(1):122-8

Evidence for involvement of an adrenal catecholamine in the beta-adrenergic inhibition of oxytocin release in lactating rats. Song SL, et al. **Brain Res** 1988 Aug 9; 457(2):303-9

Voltage-dependent Vmax blockade in Na+-dependent action potentials after beta 1- and H2-receptor stimulation in mammalian ventricular myocardium. Gillis AM, et al. **Can J Physiol Pharmacol** 1988 Oct;66(10):1291-6

Pharmacologic characterization of cirazoline-activated inositol phospholipid hydrolysis in rat brain cortical slices. Li PP, et al. **Can J Physiol Pharmacol** 1988 Nov; 66(11):1460-3

Differential responses of rat pineal thyroxine type II 5'-deiodinase and N-acetyltransferase activities to either light exposure, isoproterenol, phenylephrine, or propranolol. Guerrero JM, et al. **Cell Mol Neurobiol** 1988 Dec;8(4):447-58

IMP production by ATP-depleted adult rat heart cells. Effects of glycolysis and alpha 1-adrenergic stimulation. Hohl CM, et al. **Circ Res** 1989 Sep;65(3):754-60

Effects of load alteration and coronary perfusion pressure on regional end-systolic relations. Miller WP, et al. **Circulation** 1988 Nov;78(5 Pt 1):1299-309

Alpha 1-adrenergic stimulation causes Mg2+ release from perfused rat liver. Jakob A, et al. **FEBS Lett** 1989 Mar 27;246(1-2):127-30

Electronic pupillometry in healthy controls. Response to sympathicomimetics. Antonaci F, et al. **Funct Neurol** 1989 Jan-Mar;4(1):91-103

Alteration of hepatic tissue spaces by platelet-activating factor and phenylephrine. Lapointe DS, et al. **Hepatology** 1989 Feb;9(2):278-84

Effect of fructose on phenylephrine-induced glucose output in perfused rat liver. Taylor WM, et al. **Horm Metab Res** 1988 Aug;20(8):528-30

Central modulation of baroreceptor reflex response to

phenylephrine by dihydropyridines in rats. Lacolley P, et al. **Hypertension** 1988 Sep;12(3):279–86
Topical phenylephrine for mydriasis affects rabbit retinal pigment epithelial transport. Frambach DA, et al. **Invest Ophthalmol Vis Sci** 1989 F ;30(2):343–4
The immediate effect of phenylephrine on aqueous flow in man. van Genderen MM, et al. **Invest Ophthalmol Vis Sci** 1988 Oct;29(10):1469–73
Effect of phenylephrine, ergonovine, oxytocin and norepinephrine as an extender ingredient on viability of bovine spermatozoa. Gallagher GR, et al. **J Anim Sci** 1989 Jun;67(6):1573–6
Tracheal mucosal blood flow responses to autonomic agonists. Barker JA, et al. **J Appl Physiol** 1988 Aug; 65(2):829–34
Endurance training in dogs increases vascular responsiveness to an alpha 1-agonist. Evans YM, et al. **J Appl Physiol** 1988 Aug;65(2):625–32
Alpha 1-adrenergic-induced airway obstruction in ponies with recurrent pulmonary disease. Scott JS, et al. **J Appl Physiol** 1988 Aug;65(2):687–92
Effects of atrial natriuretic factor (ANF) on phenylephrine-triggered intra- and extracellular calcium dependent contraction in rat aorta. Delaflotte S, et al. **J Auton Pharmacol** 1989 Jun;9(3):211–8
No evidence for the differential antagonism of the initial fast and secondary slow contractile responses of the rat portal vein to phenylephrine, 5-hydroxytryptamine or methacholine. Doggrell SA. **J Auton Pharmacol** 1988 Jun; 8(2):69–78
Receptor-coupled, permeabilized smooth muscle. Role of the phosphatidylinositol cascade, G-proteins, and modulation of the contractile response to Ca2+. Kitazawa T, et al. **J Biol Chem** 1989 Apr 5;264(10):5339–42
Discrimination between phenylephrine-triggered contractile events by atrial natriuretic factor in rat aorta. Auguet M, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S17–9
Cardiac electrophysiological effects of isoprenaline, phenylephrine, and noradrenaline on normal and mildly "ischaemic" sheep Purkinje fibers. Boachie-Ansah G, et al. **J Cardiovasc Pharmacol** 1989 Feb;13(2):291–8
Responsiveness of superficial hand veins to phenylephrine in essential hypertension. Alpha adrenergic blockade during prazosin therapy. Eichler HG, et al. **J Clin Invest** 1989 Jan;83(1):108–12
Phenylephrine, vasopressin and angiotensin II as determinants of proto-oncogene and heat-shock protein gene expression in adult rat heart and aorta. Moalic JM, et al. **J Hypertens** 1989 Mar;7(3):195–201
Alpha 1-adrenoreceptor-mediated increase in acetylcholine release in brain slices during morphine tolerance. Tanganelli S, et al. **J Neurochem** 1989 Oct;53(4):1072–6
Atypical alpha-adrenoceptor mediates phenylephrine-induced mydriasis in anesthetized cats. Hey JA, et al. **J Ocul Pharmacol** 1988 Winter;4(4):303–10
In vivo comparison of phenylephrine and phenylephrine oxazolidine instilled in the monkey eye. Schoenwald RD, et al. **J Ocul Pharmacol** 1987 Winter;3(4):333–40
Ophthalmic epinephrine, phenylephrine, and pilocarpine affect the systemic absorption of ocularly applied timolol. Urtti A, et al. **J Ocul Pharmacol** 1989 Summer;5(2):127–32
Serotonergic control of phenylephrine-induced cyclic 3,5'-adenosine monophosphate and inositol phosphates formation in rat hippocampus. Consolo S, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1187–92
Role of postsynaptic alpha-adrenergic receptors in the beta-adrenergic stimulation of melatonin production in the Syrian hamster pineal gland in organ culture. Santana C, et al. **J Pineal Res** 1989;7(1):13–22
Linear response of collateral cerebral perfusion pressure during carotid clamping. Archie JP Jr, et al. **J Surg Res** 1989 Mar;46(3):253–5
In vivo voltammetry in the B3 group of serotonin neurons of the rat medulla oblongata after drug-induced modifications of arterial pressure. Aslanian V, et al. **Life Sci** 1988;43(13):1031–8
Effects of streptozotocin-induced hyperglycemia on agonist-stimulated phosphatidylinositol turnover in rat aorta. Legan E. **Life Sci** 1989;45(5):371–8
Desensitization of alpha-1 adrenergic receptor mediated smooth muscle contraction in aorta from endotoxic rats. Wakabayashi I, et al. **Life Sci** 1989;45(6):509–15
Alpha-adrenoceptor-mediated chronotropic response: influence of temperature and basal spontaneous rate. Camilion de Hurtado MC, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Mar; 339(3):315–9
Preponderance of beta- over alpha-adrenoceptors in mediating the positive inotropic effect of phenylephrine in the ferret ventricular myocardium. Endoh M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Mar; 339(3):362–6
Alpha-adrenergic activation of the muscarinic K+ channel is mediated by arachidonic acid metabolites. Kurachi Y, et al. **Pflugers Arch** 1989 May;414(1):102–4
Effect of endothelium on phenylephrine-induced contraction in the rat isolated aortic strips. Demirel E, et al. **Pharmacology** 1989;38(1):34–9
Altered responsiveness of diabetic dog renal arteries to acetylcholine and phenylephrine: role of endothelium. Gebremedhin D, et al. **Pharmacology** 1989;38(3):177–84
Comparison of the effect of common decongestant agents and amphetamine on fighting behavior and weight change. Barker E, et al. **Proc West Pharmacol Soc** 1988;31:281–3
Functional sympatholysis in the microcirculation of the cat sartorius muscle. Dodd LR, et al. **Proc West Pharmacol Soc** 1988;31:121–3
Tracheal gland mucous cells stimulated in vitro with adrenergic and cholinergic drugs. Gashi AA, et al. **Tissue Cell** 1989;21(1):59–67
[Effects of phenylephrine on atrial natriuretic factor and the renin-aldosterone axis in normal patients and essential hypertensive patients] Closas J, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:75–8 (Eng. Abstr.) **(Fre)**
[Central control of the baroreflex response to phenylephrine by dihydropyridines in the anesthetized rat] Lacolley P, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:119–23 (Eng. Abstr.) **(Fre)**
[Analysis of membrane current system involved in the inotropic effects mediated by alpha-adrenoceptors in the heart] Tohse N. **Hokkaido Igaku Zasshi** 1988 Sep; 63(5):754–71 (Eng. Abstr.) **(Jpn)**
[Regularities of the alpha-agonists inhibitory effect on the magnitude of maximum adrenergic response of the rat vas deferens] Berdysheva LV, et al. **Fiziol Zh SSSR** 1989 Jan; 75(1):19–27 (Eng. Abstr.) **(Rus)**
[Age-related characteristics of a change in cardiac systolic and diastolic functions under the influence of the adrenergic stimulants isadrin and mezaton (based on data from a computer analysis of the echocardiogram)] Korkushko OV, et al. **Kardiologiia** 1988 Aug;28(8):97–9 **(Rus)**
[Age-related characteristics of adrenergic regulation of the contractile function of the heart in hypoxia] Lobanok LM, et al. **Kosm Biol Aviakosm Med** 1988 Sep-Oct;22(5):64–8 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Activators of protein kinase C and phenylephrine depolarize the astrocyte membrane by reducing the K+ permeability. Akerman KE, et al. **Neurosci Lett** 1988 Oct 17;92(3):265–9

POISONING

Adverse effect of intraoperative phenylephrine 10%: case report. Lai YK. **Br J Ophthalmol** 1989 Jun;73(6):468–9

THERAPEUTIC USE

Reducing cocaine solution use by promoting the use of a lidocaine-phenylephrine solution. Goodell JA, et al. **Am J Hosp Pharm** 1988 Dec;45(12):2510–3
Organ blood flow and somatosensory-evoked potentials during and after cardiopulmonary resuscitation with epinephrine or phenylephrine. Schleien CL, et al. **Circulation** 1989 Jun;79(6):1332–42
Transcutaneous and liver surface PO2 during hemorrhagic hypotension and treatment with phenylephrine. Tremper KK, et al. **Crit Care Med** 1989 Jun;17(6):537–40
Continuous intravenous phenylephrine infusion for treatment of hypoxemic spells in tetralogy of Fallot. Shaddy RE, et al. **J Pediatr** 1989 Mar;114(3):468–70
Effect of hetastarch, mannitol, and phenylephrine on spinal cord blood flow following experimental spinal injury. Dyste GN, et al. **Neurosurgery** 1989 Feb;24(2):228–35
[The changes in systemic and hepatic hemodynamics with phenylephrine during the epidural block in dog] Zhuang XL. **Chung Hua Wai Ko Tsa Chih** 1988 Jun;26(6):326–8, 381 (Eng. Abstr.) **(Chi)**

TOXICITY

Toxicity and carcinogenicity studies of phenylephrine hydrochloride in F344/N rats and B6C3F1 mice. Bucher JR, et al. **Drug Chem Toxicol** 1988;11(4):355–70

PHENYLETHANOLAMINE N-METHYLTRANSFERASE see **PHENETHANOLAMINE N-METHYLTRANSFERASE**

PHENYLETHYLAMINES see **PHENETHYLAMINES**

PHENYLETHYLMALONAMIDE see under **MALONATES**

PHENYLGLYOXAL see under **ALDEHYDES**

PHENYLHYDRAZINES

2,4-Dinitrophenylhydrazides of polysialogangliosides. Tanaka T, et al. **Chem Phys Lipids** 1988 Oct;48(3-4):261–6
Evidence for the appearance of a reticulocyte population low in lipoxygenase mRNA during the recovery from a phenylhydrazine-induced anemia in rabbits. Minich WB, et al. **FEBS Lett** 1989 Mar 13;245(1-2):127–30
[Determination of serum and plasma erythropoietin in mice with phenylhydrazine-induced anemia] Manakova TE, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):21–4 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Effects of treatment of donor mice with phenylhydrazine and 5-fluorouracil on thymidylate synthase activity and growth of bone marrow grafts in spleens of irradiated recipients. Panfil B, et al. **Acta Pol Pharm** 1988;45(3):266–70
Effect of oxidative stress on membrane phospholipid and protein organization in human erythrocytes. Arduini A, et al. **Arch Biochem Biophys** 1989 Aug 15;273(1):112–20
The distribution and aggregatability of intramembrane particles in phenylhydrazine-treated human erythrocytes. Lelkes G, et al. **Biochim Biophys Acta** 1988 Nov 3; 945(1):105–10
Effect of phenylhydrazine-induced structural alterations of human erythrocytes on basic drug penetration. Ogiso T, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb;37(2):430–4
In vivo rat hemoglobin thiyl free radical formation following administration of phenylhydrazine and hydrazine-based drugs. Maples KR, et al. **Drug Metab Dispos** 1988 Nov-Dec;16(6):799–803
Differential location of hemopoietic colonies within liver acini of postnatal and phenylhydrazine-treated adult mice. Barberá-Guillem E, et al. **Hepatology** 1989 Jan;9(1):29–36
Age-related and phenylhydrazine-induced activation of the membrane-associated cathepsin E in human erythrocytes. Yamamoto K, et al. **J Biochem (Tokyo)** 1989 Jan; 105(1):114–9
[Phenylhydrazine as mitoticostimulant] Cucchi C, et al. **Boll Soc Ital Biol Sper** 1988 May;64(5):419–23 (Eng. Abstr.) **(Ita)**

POISONING

[Comparative study of the effect of vitamin B12 coenzymes on monooxygenase system and lipid peroxidation in the liver of rabbits poisoned with phenylhydrazine] Korsova TL, et al. **Vopr Med Khim** 1989 Mar-Apr;35(2):97–102 (Eng. Abstr.) **(Rus)**

TOXICITY

Mechanism of spectrin degradation induced by phenylhydrazine in intact human erythrocytes. Arduini A, et al. **Biochim Biophys Acta** 1989 Feb 13;979(1):1–6
Active role of plasma in blood hypercoagulability induced by phenylhydrazine. Cazaña FJ, et al. **Thromb Res** 1989 Jan 15;53(2):215–20
The ability of the murine erythron to respond to hemolytic doses of phenylhydrazine is significantly impaired by exposures to 10 ppm benzene. Dempster AM, et al. **Toxicol Lett** 1989 Sep;48(3):249–57
[Effect of methylcobalamin and adenosylcobalamin on the process of hematopoiesis and vitamin B12 exchange in experimental phenylhydrazine-induced anemia in rabbits] Tsukerman ES, et al. **Vopr Med Khim** 1989 Jan-Feb; 35(1):106–11 (Eng. Abstr.) **(Rus)**

URINE

Recovery of malondialdehyde in urine as a 2,4-dinitrophenylhydrazine derivative after exposure to chloroform or hydroquinone. Ekström T, et al. **Chem Biol Interact** 1988;67(1-2):25–31

PHENYLISOHYDANTOIN see **PEMOLINE**

PHENYLISOPROPYLADENOSINE see under **ADENOSINE**

PHENYLKETONURIA

Maternal phenylketonuria. Brenton DP. **Eur J Clin Nutr** 1989;43 Suppl 1:13–7
[The newborn infant of a mother with phenylketonuria. A new challenge] Farriaux JP. **Arch Fr Pediatr** 1989 Mar; 46(3):163–5 **(Fre)**

BLOOD

Aspartame metabolism in normal adults, phenylketonuric heterozygotes, and diabetic subjects. Filer LJ Jr, et al. **Diabetes Care** 1989 Jan;12(1):67–74
Phenylketonuria: implications of initial serum phenylalanine levels on cognitive development. Barclay A, et al. **Psychol Rep** 1988 Aug;63(1):135–42

CHEMICALLY INDUCED

Studies on experimentally induced hyperphenylalaninemia. Pueschel SM, et al. **J Ment Defic Res** 1988 Aug;32 (Pt 4):309–19

CLASSIFICATION

[The phenylalanine stress test in the classification of patients with phenylketonuria] Clemens PC, et al. **Klin Padiatr** 1989 May-Jun;201(3):163–6 (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Branched chain amino acids improve complex maze learning in rat offspring prenatally exposed to hyperphenylalaninemia: implications for maternal phenylketonuria. Vorhees CV, et al. **Pediatr Res** 1989 Jun; 25(6):568–72
Maternal phenylketonuria. Levy HL. **Prog Clin Biol Res** 1988;281:227–42 (29 ref.)
[A case of atopic bronchial asthma associated with phenylketonuria] Tolokh OS, et al. **Ter Arkh** 1989; 61(2):127–8 **(Rus)**

DIAGNOSIS

Phenylketonuria screening: avoiding a source of error by simplifying the procedure [letter] Clemens PC, et al.

Am J Clin Pathol 1989 Jun;91(6):747

Study of restriction fragment length polymorphisms at the human phenylalanine hydroxylase locus and evaluation of its potential application in prenatal diagnosis of phenylketonuria in Chinese. Chen SH, et al. **Hum Genet** 1989 Feb;81(3):226–30

Genetic counseling for phenylketonuria [letter] **J Pediatr** 1989 Apr;114(4 Pt 1):683–5

Citing sources on PKU [letter] Lee N. **MCN** 1988 Sep–Oct; 13(5):324

Prenatal diagnosis of phenylketonuria by haplotype analysis. Wulff K, et al. **Prenat Diagn** 1989 Jun;9(6):421–5

[DNA diagnosis of monogene hereditary diseases exemplified by phenylketonuria and mucoviscidosis] Trefz FK, et al. **Monatsschr Kinderheilkd** 1989 Apr;137(4):201–7 (25 ref.) (Eng. Abstr.) **(Ger)**

[Carrier detection and prenatal diagnosis in phenylketonuria, cystic fibrosis and adrenal hyperplasia use of molecular biology techniques] Orgad S, et al. **Harefuah** 1989 Mar 15;116(6):297–300 (Eng. Abstr.) **(Heb)**

[Neonatal detection of phenylketonuria and hypothyroidism. Realities and perspectives] Farriaux JP. **An Esp Pediatr** 1988 Sep;29 Suppl 32:272–9 **(Spa)**

[Diagnosis of phenylketonuria in Chile] Colombo M, et al. **Rev Chil Pediatr** 1988 Jul–Aug;59(4):235–9 (Eng. Abstr.) **(Spa)**

[Early diagnosis of phenylketonuria and congenital hypothyroidism. Prevention of mental retardation] de Pediatria SC, et al. **Rev Chil Pediatr** 1988 May–Jun; 59(3):200–3 **(Spa)**

DIET THERAPY

Treatment outcome of maternal phenylketonuria. Koch R, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Aug;30(4):410–6

Dietary treatment of PKU using a low-phenylalanine peptide milk. Owada M, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Aug;30(4):405–9

Continuation vs discontinuation of diet in phenylketonuria. Naughten ER. **Eur J Clin Nutr** 1989;43 Suppl 1:7–12

Maternal phenylketonuria: successful outcome in four pregnancies treated prior to conception. Lynch BC, et al. **Eur J Pediatr** 1988 Oct;148(1):72–5

Blood phenylalanine levels and intelligence of 10-year-old children with PKU in the National Collaborative Study. Michals K, et al. **J Am Diet Assoc** 1988 Oct;88(10):1226–9

Parental problem-solving skills, stress, and dietary compliance in phenylketonuria. Fehrenbach AM, et al. **J Consult Clin Psychol** 1989 Apr;57(2):237–41

Changes in phenylalanine tolerance while monitoring the dietetic treatment of pregnant women suffering from hyperphenylalaninaemia. Hyánek J, et al. **J Inherited Metab Dis** 1988;11(4):427–8

Biochemical and nutritional status of children with hyperphenylalaninaemia. Nord AM, et al. **J Inherited Metab Dis** 1988;11(4):431–2

Successful treatment of maternal phenylketonuria with a formula consisting of low phenylalanine peptide as a protein source. Owada M, et al. **J Inherited Metab Dis** 1988;11(3):341–4

[Changes in phenylalanine tolerance during the monitoring of diet therapy of pregnant women with phenylketonuria] Hyánek J, et al. **Cesk Gynekol** 1988 Nov;53(9):650–3 **(Cze)**

[Experiences in managing a camp for children with phenylketonuria] Bührdel P, et al. **Kinderarztl Prax** 1988 Dec;56(12):615–6 **(Ger)**

[Results, problems and consequences of early treatment of phenylketonuria] Theile H, et al. **Z Gesamte Inn Med** 1989 Jun 1;44(11):317–20 (36 ref.) (Eng. Abstr.) **(Ger)**

[Phenylketonuria—physical and mental development of phenylketonuric children subjected to early treatment] Cabral A, et al. **Acta Med Port** 1989 Jan–Feb;2(1):1–5 (Eng. Abstr.) **(Por)**

DRUG THERAPY

Effects of oral administration of artificial cells immobilized phenylalanine ammonia-lyase on intestinal amino acids of phenylketonuric rats. Bourget L, et al. **Biomater Artif Cells Artif Organs** 1989;17(2):161–81

ENZYMOLOGY

Blood selenium concentrations and glutathione peroxidase activity. Lloyd B, et al. **Arch Dis Child** 1989 Mar; 64(3):352–6

[Phenylketonuria: current status of the problem] Vis HL, et al. **Bull Mem Acad R Med Belg** 1988;143(3–4):231–47 (21 ref.) (Eng. Abstr.) **(Fre)**

GENETICS

Effects of maternal phenylalanine or tyrosine hydroxylase inhibition on postnatal maturation of catecholamine and amino acid metabolism in rats. Sato T, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Feb;30(1):56–62

Polymorphic DNA haplotypes at the phenylalanine hydroxylase (PAH) locus in Asian families with phenylketonuria (PKU). Daiger SP, et al. **Am J Hum Genet** 1989 Aug;45(2):319–24

Polymorphic DNA haplotypes at the phenylalanine hydroxylase (PAH) locus in European families with phenylketonuria (PKU). Daiger SP, et al. **Am J Hum Genet** 1989 Aug;45(2):310–8

Phenylalanine hydroxylase gene haplotypes in Polynesians: evolutionary origins and absence of alleles associated with severe phenylketonuria. Hertzberg M, et al. **Am J Hum Genet** 1989 Mar;44(3):382–7

Molecular genetics of phenylketonuria in Mediterranean countries: a mutation associated with partial phenylalanine hydroxylase deficiency. Lyonnet S, et al. **Am J Hum Genet** 1989 Apr;44(4):511–7

Clinical and molecular heterogeneity of phenylalanine hydroxylase deficiencies in France. Rey F, et al. **Am J Hum Genet** 1988 Dec;43(6):914–21

Haplotype distribution of the human phenylalanine hydroxylase locus in Scotland and Switzerland. Sullivan SE, et al. **Am J Hum Genet** 1989 May;44(5):652–9

Collation of RFLP haplotypes at the human phenylalanine hydroxylase (PAH) locus [letter] Woo SL. **Am J Hum Genet** 1988 Nov;43(5):781–3

Haplotype analysis of classical and mild phenotype of phenylketonuria in the German Democratic Republic. Herrmann FH, et al. **Clin Genet** 1988 Sep;34(3):176–80

Haplotype analysis of the phenylalanine hydroxylase gene in Turkish phenylketonuria families. Stuhrmann M, et al. **Clin Genet** 1989 Aug;36(2):117–21

DNA haplotype analysis at the phenylalanine hydroxylase locus in the Turkish population. Lichter-Konecki U, et al. **Hum Genet** 1989 Mar;81(4):373–6

RFLPs of the phenylalanine hydroxylase gene in the Italian population. Dianzani I, et al. **J Inherited Metab Dis** 1989; 12(2):162–5

Identification of the haplotype pattern associated with the mutant PKU allele in the Gypsy population of Wales. Tyfield LA, et al. **J Med Genet** 1989 Aug;26(8):499–503

Progress in the identification of the heterozygote in phenylketonuria. Lehmann WD. **J Pediatr** 1989 Jun; 114(6):915–24 (47 ref.)

Repeated ingestion of aspartame-sweetened beverage: effect on plasma amino acid concentrations in individuals heterozygous for phenylketonuria. Stegink LD, et al. **Metabolism** 1989 Jan;38(1):78–84

A study on Chinese phenylalanine hydroxylase gene restriction site polymorphism. Zeng YT, et al. **Sci Sin [B]** 1988 Dec;31(12):1447–53

[Genetic diagnosis in classical phenylketonuria] Wulff K, et al. **Z Arztl Fortbild (Jena)** 1988;82(22):1127–31 **(Ger)**

METABOLISM

Biochemical and developmental features of experimental phenylketonuria induced by L-ethionine in suckling rats. Gehrmann J, et al. **Biochem Med Metab Biol** 1989 Jun; 41(3):201–11

Molecular basis and population genetics of phenylketonuria. Woo SL. **Biochemistry** 1989 Jan 10;28(1):1–7 (59 ref.)

Increased neurotransmitter biosynthesis in phenylketonuria induced by phenylalanine restriction or by supplementation of unrestricted diet with large amounts of tyrosine. Lykkelund C, et al. **Eur J Pediatr** 1988 Dec;148(3):238–45

Excretion of phenylpyruvic, 4-hydroxyphenylpyruvic and indolyl-3-acetic acids by the skin fibroblasts from a phenylketonuric child. Antoshechkin AG, et al. **J Inherited Metab Dis** 1988;11(3):299–301

Evidence for inhibition of exodus of small neutral amino acids from non-brain tissues in hyperphenylalaninaemic rats. de Cespedes C, et al. **J Inherited Metab Dis** 1989;12(2):166–80

In vitro localization of the protein synthesis defect associated with experimental phenylketonuria. Elsliger MA, et al. **Neurochem Res** 1989 Jan;14(1):81–4

[Status of mineral nutrition in children with phenylketonuria treated by low phenylalanine diet. III. Magnesium] Cabalska B, et al. **Pediatr Pol** 1988 Jun;63(6):337–42 (Eng. Abstr.) **(Pol)**

[Hydroxyproline indicators in the evaluation of nutritional status of children with various metabolic diseases] Goncerzewicz M, et al. **Pediatr Pol** 1974 Feb;49(2):157–64 (Eng. Abstr.) **(Pol)**

PHYSIOPATHOLOGY

Pattern reversal visual evoked potentials in phenylketonuria. Giovannini M, et al. **J Inherited Metab Dis** 1988; 11(4):416–21

Evoked potentials and electroencephalography in adolescents with phenylketonuria. Korinthenberg R, et al. **Neuropediatrics** 1988 Nov;19(4):175–8

PREVENTION & CONTROL

Avoiding sources of error in PKU screening [letter] Kremensky I, et al. **Am J Clin Pathol** 1989 Sep;92(3):396–7

Eliminating some possible errors in phenylketonuria screening [letter] Wilcken B, et al. **Am J Clin Pathol** 1989 Sep;92(3):396

Group work with adolescent PKU girls and their mothers. Cohen BE, et al. **J Inherited Metab Dis** 1988;11(2):199–206

Phenylketonuria in Greece: 12 years' experience. Missiou-Tsagaraki S, et al. **J Ment Defic Res** 1988 Aug; 32 (Pt 4):271–87

[Neonatal screening for phenylketonuria and hypothyroidism in France. A 12-year experience] Briard ML. **Ann Biol Clin (Paris)** 1988;46(6):387–92 (Eng. Abstr.) **(Fre)**

[Value of follow-up of neonatal screening by the delivery number. VEDETT system of control of the efficacy of the screening and treatment of the coverage rate (letter)] Reviron D, et al. **Presse Med** 1989 Mar 25;18(12):638 **(Fre)**

[Differential diagnosis of increased phenylalanine blood level in infancy. Results of the German collaborative study on phenylketonuria (PKU)/hyperphenylalaninemia (HPA)] Schmidt H, et al. **Monatsschr Kinderheilkd** 1989 Feb; 137(2):86–92 (Eng. Abstr.) **(Ger)**

[Phenylketonuria from the current viewpoint] Seidlitz G, et al. **Z Arztl Fortbild (Jena)** 1988;82(22):1123–6 **(Ger)**

PSYCHOLOGY

Intelligence and behaviour in children with early treated phenylketonuria. A report from the MRC/DHSS phenylketonuria register. Smith I, et al. **Eur J Clin Nutr** 1989;43 Suppl 1:1–5

Structural and qualitative aspects of social networks in families with young chronically ill children. Kazak AE, et al. **J Pediatr Psychol** 1988 Jun;13(2):171–82

[Socio-psychological aspects of the family with a chronically ill child with phenylketonuria] Mašát V, et al. **Cesk Zdrav** 1988 Jul;36(6-7):261–8 (Eng. Abstr.) **(Cze)**

THERAPY

PKU and NON-PKU hyperphenylalaninemia: differentiation, indication for therapy and therapeutic results. Trefz FK, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Aug;30(4):397–404

Medical applications of artificial cells in transfusion, phenylketonuria, essential amino acid production, and liver support. Chang TM. **Ann N Y Acad Sci** 1988;542:507–14

URINE

Discovery of methoxyacetylcarbamide in the urine of normal adults and phenylketonuric children. Antoshechkin AG, et al. **Clin Chim Acta** 1988 Oct 31;177(3):239–44

PHENYLMERCURIALS see **PHENYLMERCURY COMPOUNDS**

PHENYLMERCURIC ACETATE see under **PHENYLMERCURY COMPOUNDS**

PHENYLMERCURY COMPOUNDS

The use of surgilube for inserting the polyurethane-covered gel-filled mammary implant [letter] Schlesinger SL. **Plast Reconstr Surg** 1989 Oct;84(4):703

ADMINISTRATION & DOSAGE

Influence of 2,3-dimercaptopropane-1-sulfonate and dimercaptosuccinic acid on the mobilization of mercury from tissues of rats pretreated with mercuric chloride, phenylmercury acetate or mercury vapors. Buchet JP, et al. **Toxicology** 1989 Mar;54(3):323–33

ADVERSE EFFECTS

[Sister chromatid exchange and accidental exposure to phenyl-mercury acetate] Mudry de Pargament MD, et al. **Bol Estud Med Biol** 1987 Jul–Dec;35(3–4):207–11 (Eng. Abstr.) **(Fre)**

ANALYSIS

[Prevention of occupational and community health problems using Falisan Universal liquid caustic] Schinkel W, et al. **Z Gesamte Hyg** 1989 Jan;35(1):35–8 (Eng. Abstr.) **(Ger)**

DIAGNOSTIC USE

A flow cytometric assay for intracellular nonprotein thiols using mercury orange. O'Connor JE, et al. **Cytometry** 1988 Nov;9(6):529–32

PHARMACOLOGY

Mercurial reagents inhibit flow through ADH-induced water channels in toad bladder. Hoch BS, et al. **Am J Physiol** 1989 May;256(5 Pt 2):F948–53

The effect of ferricyanide with iodoacetate in calcium-free solution on passive cation permeability in human red blood cells: comparison with the Gardos-effect and with the influence of PCMBS on passive cation permeability. Fuhrmann GF, et al. **Biochim Biophys Acta** 1989 Aug 7; 983(2):179–85

Creatine kinase is modified by 2-chloromercuri-4-nitrophenol at the active site thiols with complete inactivation. Wu H, et al. **Biochim Biophys Acta** 1989 Jul 27;997(1–2):78–82

p-chloro-mercuriphenyl sulphonate activates a quinine-sensitive potassium conductance in frog lens. Duncan G, et al. **J Physiol (Lond)** 1988 Oct;404:637–48

TOXICITY

Quantitative analysis of rat activity in the home cage by infrared monitoring. Application to the acute toxicity testing of acetanilide and phenylmercuric acetate. Tamborini P, et al. **Arch Toxicol** 1989;63(2):85–96

PHENYLMETHYLAMINE see **BENZYLAMINES**

PHENYLMETHYLSULFONYL FLUORIDE see under SULFONES

PHENYLPROPANOLAMINE

Double dose of phenylpropanolamine as cause of transient hypertension [letter] Duvernoy WF. **Am J Med** 1988 Dec; 85(6):896

ADMINISTRATION & DOSAGE

Microencapsulation of phenylpropanolamine to achieve sustained release. Prapaitrakul W, et al. **J Microencapsul** 1989 Apr-Jun;6(2):213-8

Pancreatic duct occlusion in the management of acute necrotizing pancreatitis in a canine model. Torino F, et al. **Mt Sinai J Med** 1989 Mar;56(2):79-82

Hollow fibers as an oral sustained-release delivery system. Hussain MA, et al. **Pharm Res** 1989 Jan;6(1):49-52

[Prognosis of complicated febrile convulsions in therapy with primidone, cathine-phenobarbital and calcium valproinate] Rohmann E, et al. **Kinderarztl Prax** 1988 Oct;56(10):495-8 (Eng. Abstr.) (Ger)

ADVERSE EFFECTS

Complications of phenylpropanolamine. Dilsaver SC, et al. **Am Fam Physician** 1989 Apr;39(4):201-6 (31 ref.)

Transient hypertension after two phenylpropanolamine diet aids and the effects of caffeine: a placebo-controlled follow-up study. Lake CR, et al. **Am J Med** 1989 Apr; 86(4):427-32

Drug-induced acute urinary retention [letter] Napolez A, et al. **Ann Emerg Med** 1988 Dec;17(12):1367

A comparison of the relative safety of phenylpropanolamine, acetaminophen, ibuprofen and aspirin as measured by three compendia. Winick C.
Int J Clin Pharmacol Ther Toxicol 1989 Jun;27(6):267-72 (27 ref.)

Manic psychosis associated with appetite suppressant medication, phenylpropanolamine [letter] Boffi BV, et al. **J Clin Psychopharmacol** 1989 Aug;9(4):308-9

Phenylpropanolamine and hypertension [letter] Teh AY. **Med J Aust** 1979 Oct 20;2(8):425-6

Psychiatric side effects attributed to phenylpropanolamine. Lake CR, et al. **Pharmacopsychiatry** 1988 Jul;21(4):171-81 (33 ref.)

ANALOGS & DERIVATIVES

P-hydroxy-norephedrine as a possible mediator causing the reduction of oral intake of D-amphetamine in rats. Jänicke B, et al. **Drug Alcohol Depend** 1989 Jun;23(3):247-53

ANALYSIS

Australian proprietary preparations containing phenylpropanolamine [letter] Kailis SG, et al. **Med J Aust** 1979 Oct 20;2(8):426

IMMUNOLOGY

Immunocrossreactivity of antisera against grain prolamines of wheat, rye, barley and oats. van Twist-de Graaf MJ, et al. **Z Lebensm Unters Forsch** 1989 Jun;188(6):535-9

PHARMACOKINETICS

Correlation of phenylpropanolamine bioavailability with gastrointestinal transit by scintigraphic monitoring of 111In-labeled hydroxypropylmethylcellulose matrices. Feely LC, et al. **Pharm Res** 1989 Apr;6(4):274-8

PHARMACOLOGY

Individual variability in the blood pressure response to intravenous phenylpropanolamine: a pharmacokinetic and pharmacodynamic investigation. O'Connell MB, et al. **Clin Pharmacol Ther** 1989 Mar;45(3):252-9

Phenylpropanolamine: a controversy unresolved. Miller LG. **J Clin Psychopharmacol** 1989 Feb;9(1):1-3

Subjective profile of phenylpropanolamine: absence of stimulant or euphorigenic effects at recommended dose levels [published erratum appears in J Clin Psychopharmacol 1989 Jun;9(3):preceding 161] Morgan JP, et al. **J Clin Psychopharmacol** 1989 Feb;9(1):33-8

Beta 2-adrenoceptor influences on the alpha 1- and alpha 2-mediated vasoconstriction induced by phenylpropanolamine and its two component enantiomers in the pithed rat. Moya-Huff FA, et al.
J Pharm Pharmacol 1988 Dec;40(12):876-8

Determinants of the pressor effect of phenylpropanolamine in healthy subjects. Blackburn GL, et al. **JAMA** 1989 Jun 9;261(22):3267-72

Caffeine-phenylethylamine combinations mimic the cocaine discriminative cue. Gauvin DV, et al. **Life Sci** 1989; 44(1):67-73

The effects of phenylpropanolamine on human sympathetic nervous system function. Lake CR, et al.
Neuropsychopharmacology 1988 May;1(2):163-8

Effect of phenylpropanolamine on diet selection in rats. Schwartz DH, et al. **Pharmacol Biochem Behav** 1988 Nov; 31(3):721-3

Effects of amphetamine and phenylpropanolamine on latency to feed and cumulative liquid diet intake in rats. Wellman PJ, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):147-50

Comparison of the effect of common decongestant agents and amphetamine on fighting behavior and weight change. Barker E, et al. **Proc West Pharmacol Soc** 1988;31:281-3

Phenylpropanolamine: reinforcing and subjective effects in normal human volunteers. Chait LD, et al.
Psychopharmacology (Berlin) 1988;96(2):212-7

Similarities between the stimulus properties of phenylpropanolamine and amphetamine. Lee F, et al.
Psychopharmacology (Berlin) 1989;97(3):410-2

POISONING

Cerebral infarction after excessive use of nasal decongestants [letter] Montalbán J, et al.
J Neurol Neurosurg Psychiatry 1989 Apr;52(4):541-3

Cerebral vasculitis and hemorrhage in an adolescent taking diet pills containing phenylpropanolamine: case report and review of literature. Forman HP, et al. **Pediatrics** 1989 May; 83(5):737-41 (36 ref.)

THERAPEUTIC USE

Lack of effect of cholinergic blocking and alpha-adrenergic stimulation on nocturnal incontinence after ileocaecal bladder replacement. A controlled randomised study. Jakobsen H, et al. **Br J Urol** 1989 Apr;63(4):379-83

URINE

Ranitidine and high concentrations of phenylpropanolamine cross react in the EMIT monoclonal amphetamine/methamphetamine assay. Grinstead GF.
Clin Chem 1989 Sep;35(9):1998-9

The effect of urinary pH modification on the disposition of phenylpropanolamine. Zimmerman CL. **Pharm Res** 1988 Feb;5(2):120-2

PHENYLPROPIONATES

Nonsteroidal antiinflammatory agents. XVIII - Stereomeric optically active halogenophenyl-biphenylyl-hydroxypropionic acids. Varoli L, et al. **Farmaco [Sci]** 1988 Nov;43(11):909-19

Molecular mechanism of drug photosensitization--II. Photohemolysis sensitized by ketoprofen. Costanzo LL, et al. **Photochem Photobiol** 1989 Sep;50(3):359-65

[Analgesic effect of the central administration of ketoprofen in rats] Rampin O, et al. **Rev Rhum Mal Osteoartic** 1988 Oct;55(10):779-80 (Fre)

ADMINISTRATION & DOSAGE

Eudragit RS and RL (acrylic resins) microcapsules as pH insensitive and sustained release preparations of ketoprofen. Goto S, et al. **J Microencapsul** 1986 Oct-Dec;3(4):293-304

Evaluation of the sustained release properties of Eudragit RS, RL and S (acrylic resins) microcapsules containing ketoprofen in beagle dogs. Goto S, et al.
J Microencapsul 1988 Oct-Dec;5(4):343-60

Eudragit E, L and S (acrylic resins) microcapsules as pH sensitive release preparations of ketoprofen. Goto S, et al.
J Microencapsul 1986 Oct-Dec;3(4):305-16

ADVERSE EFFECTS

Subclinical contact dermatitis from ketoprofen. Romaguera C, et al. **Contact Dermatitis** 1989 Apr;20(4):310-1

Fenoprofen-induced membranous glomerulonephritis [letter] Cahen R, et al. **Nephrol Dial Transplant** 1988;3(5):705-6

Ketoprofen-induced irreversible renal failure [letter] Pazmiño PA, et al. **Nephron** 1988;50(1):70-1

Immune hemolytic anemia associated with tolmetin and suprofen. van Dijk BA, et al. **Transfusion** 1989 Sep; 29(7):638-41

[A case of acute colitis caused by pirprofen (letter)] Badetti JL, et al. **Gastroenterol Clin Biol** 1989 Mar;13(3):313-4 (Fre)

[Anaphylactic shock induced by ketoprofen? (letter)] Tardy B, et al. **Therapie** 1989 Jan-Feb;44(1):68 (Fre)

ANALYSIS

The properties of solid dispersions of indomethacin, ketoprofen and flurbiprofen in phosphatidylcholine. Fujii M, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):2186-92

Liquid chromatographic separation of positional isomers of suprofen on a cyclodextrin-bonded phase. Marziani FC, et al. **J Chromatogr** 1989 Mar 31;465(2):422-8

Application of NIRS to the quantity control of pharmaceuticals ketoprofen assay in different pharmaceutical formulae. Corti P, et al.
Pharm Acta Helv 1989;64(5-6):140-5

Stereospecific high-performance liquid chromatographic (HPLC) assay of fenoprofen enantiomers in plasma and urine. Mehvar R, et al. **Pharm Res** 1988 Jan;5(1):53-6

Densitometric determination of ketoprofen in synovial fluid. Glišović L, et al. **Pharmazie** 1989 Apr;44(4):298-9

BLOOD

High-performance liquid chromatographic determination of ketoprofen and naproxen in rat plasma. Satterwhite JH, et al. **J Chromatogr** 1988 Oct 14;431(2):444-9

[Binding of racemic indoprofen and its enantiomers to human serum albumin] Siebler D, et al. **Arzneimittelforschung** 1989 Jun;39(6):659-60 (Eng. Abstr.) (Ger)

CEREBROSPINAL FLUID

The diffusion of pirprofen into the cerebrospinal fluid in man. Zecca L, et al. **Eur J Clin Pharmacol** 1988;35(1):81-3

DIAGNOSTIC USE

The use of phenylpropionic acid as a loading test for medium-chain acyl-CoA dehydrogenase deficiency. Seakins JW, et al. **J Inherited Metab Dis** 1988;11 Suppl 2:221-4

ISOLATION & PURIFICATION

Metabolic products of microorganisms. 246. 2880-II, a metabolite related to ferulic acid from Streptomyces griseoflavus. Grote R, et al. **J Antibiot (Tokyo)** 1988 Sep; 41(9):1275-6

METABOLISM

Studies on hypocholesterolemic activity of rice bran oil. Seetharamaiah GS, et al. **Atherosclerosis** 1989 Aug; 78(2-3):219-23

Enantiospecific formation of fenoprofen coenzyme A thioester in vitro. Knights KM, et al.
Biochem Pharmacol 1988 Oct 1;37(19):3539-42

Binding of pirprofen to human serum albumin studied by dialysis and spectroscopy techniques. Otagiri M, et al.
Biochem Pharmacol 1989 Jan 1;38(1):1-7

Selection and characterization of a mutant of the cloned gene for mandelate racemase that confers resistance to an affinity label by greatly enhanced production of enzyme. Tsou AY, et al. **Biochemistry** 1989 Feb 7;28(3):969-75

Comparative study on the production and accumulation of unusual phenylpropanoids in plants and in vitro cultures of Coreopsis tinctoria and C. lanceolata. Reichling J, et al. **Pharm Weekbl [Sci]** 1989 Jun 23;11(3):83-6

[Specific binding of phenol-containing antioxidant with plasma membranes of cells and its inhibition by various biologically active substances] Khokhlov AP.
Dokl Akad Nauk SSSR 1988;300(2):494-7 (Rus)

PHARMACOKINETICS

Effects of food and sucralfate on the pharmacokinetics of naproxen and ketoprofen in humans. Caillé G, et al.
Am J Med 1989 Jun 9;86(6A):38-44

Pharmacokinetics of ketoprofen in man after repeated percutaneous administration. Flouvat B, et al.
Arzneimittelforschung 1989 Jul;39(7):812-5

The disposition of ketoprofen enantiomers in man. Sallustio BC, et al. **Br J Clin Pharmacol** 1988 Dec;26(6):765-70

Effect of cyclohexanone derivatives on percutaneous absorption of ketoprofen and indomethacin. Akitoshi Y, et al. **Drug Des Deliv** 1988 Feb;2(3):239-45

Stereoselective pharmacokinetics of ketoprofen in the rat. Influence of route of administration. Foster RT, et al.
Drug Metab Dispos 1988 Jul-Aug;16(4):623-6

Pharmacokinetics of pirprofen and its pyrrol metabolite in elderly patients. Rossi FA, et al. **Eur J Clin Pharmacol** 1988;35(4):379-83

Single and multiple dose pharmacokinetics of enteric coated ketoprofen: effect of cimetidine. Verbeeck RK, et al.
Eur J Clin Pharmacol 1988;35(5):521-7

Transsynovial kinetics of indoprofen in patients with rheumatoid arthritis and cyclooxygenase-inhibition in vitro. Kurowski M, et al. **Int J Clin Pharmacol Res** 1988; 8(4):287-93

Comparative bioavailability of suprofen after coadministration with food or milk. Chaikin P, et al.
J Clin Pharmacol 1988 Dec;28(12):1132-5

[Pharmacokinetics of intravenous ketoprofen. Therapeutic value in renal colic] Hurault de Ligny B, et al.
Nephrologie 1989;10(1):23-6 (Eng. Abstr.) (Fre)

PHARMACOLOGY

Evidence of a central component in the analgesic effect of indoprofene. Paeile C, et al. **Gen Pharmacol** 1989; 20(4):519-24

The clinical pharmacology of ketoprofen. Williams RL, et al. **J Clin Pharmacol** 1988 Dec;28(12 Suppl):S13-22 (56 ref.)

Binary antidotes for organophosphate poisoning: aprophen analogues that are both antimuscarinics and carbamates. Leader H, et al. **J Med Chem** 1989 Jul;32(7):1522-8

Effects of ketoprofen and indomethacin on leukocyte migration in two models of pleurisy induced by carrageenan or zymosan-activated serum in rats. Vannier E, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):286-91

Ketoprofen in dentistry: a pharmacologic review. Cailleteau JG. **Oral Surg Oral Med Oral Pathol** 1988 Nov;66(5):620-4 (27 ref.)

Effects of atropine and azaprophen on matching and detection in rhesus monkeys. Genovese RF, et al.
Pharmacol Biochem Behav 1989 Feb;32(2):495-8

[The phenylpropionate loading test and medium-chain acyl CoA dehydrogenase deficiency] De Parscau L, et al.
Arch Fr Pediatr 1989 Apr;46(4):285-6 (Fre)

[Behavior of plasma beta-endorphin and treatment with non-steroidal anti-inflammatory agents (NSAID)] Milletti M, et al. **G Clin Med** 1988 Jun-Jul;69(6-7):433-5, 437 (Eng. Abstr.) (Ita)

[Effect of the nonsteroidal anti-inflammatory drug 480156-S on hepatic drug-metabolizing activity and pharmacological action of diazepam and pentobarbital in rats] Matsubara

T, et al. **Nippon Yakurigaku Zasshi** 1988 Oct;92(4):201–13 (Eng. Abstr.) **(Jpn)**

[Effect of phenozan on nitrosodimethylamine–induced carcinogenesis in rat kidneys] Kirillov VN. **Eksp Onkol** 1988;10(5):23–6 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

A long–term follow–up of hospital patients. Hicklin JA. **Br J Clin Pract Symp Suppl** 1988 Feb;58:25–32

NSAID therapy in British general practice. Pearlgood M. **Br J Clin Pract Symp Suppl** 1988 Feb;58:19–24

Placebo–controlled double–blind trial of pirprofen and an ergotamine tartrate compound in migraine attacks. Kinnunen E, et al. **Cephalalgia** 1988 Sep;8(3):175–9

Effect of oryzanol on fructose induced hypertriglyceridaemia in rats. Seetharamaiah GS, et al. **Indian J Med Res** 1988 Sep;88:278–81

Ketoprofen (Orudis): U.S. and European experience in arthritis and pain. **J Clin Pharmacol** 1988 Dec;28(12 Suppl):S1–54

Ketoprofen: the European experience. Avouac B, et al. **J Clin Pharmacol** 1988 Dec;28(12 Suppl):S2–7 (40 ref.)

Ketoprofen: a new nonsteroidal anti–inflammatory analgesic. Beaver WT. **J Clin Pharmacol** 1988 Dec;28(12 Suppl):S1

Ketoprofen in oral surgery pain: a review. Cooper SA. **J Clin Pharmacol** 1988 Dec;28(12 Suppl):S40–6 (12 ref.)

Ketoprofen, ibuprofen, and placebo in the treatment of primary dysmenorrhea: a double–blind crossover comparison. Mehlisch DR. **J Clin Pharmacol** 1988 Dec; 28(12 Suppl):S29–33

A double–blind parallel evaluation of the efficacy and safety of a single dose of ketoprofen in cancer pain. Stambaugh J, et al. **J Clin Pharmacol** 1988 Dec;28(12 Suppl):S34–9

Analgesic efficacy of ketoprofen in postpartum, general surgery, and chronic cancer pain. Sunshine A, et al. **J Clin Pharmacol** 1988 Dec;28(12 Suppl):S47–54 (11 ref.)

Double–blind parallel comparison of ketoprofen (Orudis), acetaminophen plus codeine, and placebo in postoperative pain. Turek MD, et al. **J Clin Pharmacol** 1988 Dec;28(12 Suppl):S23–8

Pirprofen in the treatment of migraine and episodic headache attacks: a placebo–controlled crossover clinical trial. Guidotti M, et al. **J Int Med Res** 1989 Jan–Feb;17(1):48–54

Ketoprofen versus indomethacin in patients with acute gouty arthritis: a multicenter, double blind comparative study. Altman RD, et al. **J Rheumatol** 1988 Sep;15(9):1422–6

Ketoprofen versus indomethacin in patients with rheumatoid arthritis: a multicenter double blind comparative study. Caldwell JR, et al. **J Rheumatol** 1988 Oct;15(10):1476–9

Pirprofen in treatment of non–articular rheumatism in Pakistani outpatients, a multicentre study. Jaffer NA. **JPMA** 1988 Oct;38(10):265–8

Clinical experience with ketoprofen in the management of osteoarthritis and rheumatoid arthritis. Fine IT. **Md Med J** 1989 Jun;38(6):485–8

Hindering of tumor lung metastasizing with alpha–(4–cyclohexylphenyl)propionic acid in mice. Mamytbeková A, et al. **Neoplasma** 1989;36(3):327–32

Suprofen treatment of contact lens–associated giant papillary conjunctivitis. Wood TS, et al. **Ophthalmology** 1988 Jun; 95(6):822–6

Dynamics and significance of placebo response in primary dysmenorrhea. Fedele L, et al. **Pain** 1989 Jan;36(1):43–7

Central analgesic effect of ketoprofen in humans: electrophysiological evidence for a supraspinal mechanism in a double–blind and cross–over study. Willer JC, et al. **Pain** 1989 Jul;38(1):1–7

Comparison of efficacy of and tolerance to ketoprofen and diclofenac sodium in the treatment of rheumatoid arthritis. Boey ML, et al. **Singapore Med J** 1988 Jun;29(3):240–5

[Use of aprophen in the preparation for and induction of labor] Grudev D, et al. **Akush Ginekol (Sofiia)** 1988; 27(4):39–43 (Eng. Abstr.) **(Bul)**

[The results of inducing labor with aprofen] Khadzhiev A, et al. **Akush Ginekol (Sofiia)** 1988;27(6):38–41 (Eng. Abstr.) **(Bul)**

[Experience with analgesic therapy with pirprofen in oncology patients] Klener P, et al. **Cas Lek Cesk** 1988 Aug 19;127(34):1080–2 (Eng. Abstr.) **(Cze)**

[Comparative study of sodium valproate and ketoprofen in the treatment of postoperative pain] Martin C, et al. **Ann Fr Anesth Reanim** 1988;7(5):387–92 (Eng. Abstr.) **(Fre)**

[Value of ketoprofen in obstetrical surgery (letter)] Schillinger D, et al. **Presse Med** 1988 Sep 24;17(32):1651–2 **(Fre)**

[Clinical evaluation of pain. Value of a 2–dimensional index of pain] Harrewyn JM. **Rev Rhum Mal Osteoartic** 1989 Jan;56(1):75–8 **(Fre)**

[Ketoprofen lysine treatment of painful manifestations of spinal osteoarthrosis] Memeo A, et al. **Clin Ter** 1988 Jul 31;126(2):119–22 (Eng. Abstr.) **(Ita)**

[Telethermographic evaluation of pirprofen in rheumatic pathology] Pappalardo A, et al. **Clin Ter** 1987 Oct 15; 123(1):7–13 (Eng. Abstr.) **(Ita)**

[Naproxen sodium compared with ketoprofen lysine and lysine acetylsalicylate in the management of postoperative pain in gynecologic surgery] Rossi S, et al. **Minerva Ginecol** 1988 May;40(5):329–35 (32 ref.) (Eng. Abstr.) **(Ita)**

[Effect of the antioxidant fenozan on the physicochemical properties of the kidney cell membranes of rats during nitrosodimethylamine–induced carcinogenesis] Khokhlov AP, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):557–9 (Eng. Abstr.) **(Rus)**

[Anti–arrhythmic and vasodilator actions of the antioxidant fenozan in acute ischemia and reperfusion] Vasilets LA, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):554–7 (Eng. Abstr.) **(Rus)**

PHENYLPYRUVIC ACIDS

URINE

Excretion of phenylpyruvic, 4–hydroxyphenylpyruvic and indolyl–3–acetic acids by the skin fibroblasts from a phenylketonuric child. Antoshechkin AG, et al. **J Inherited Metab Dis** 1988;11(3):299–301

PHENYLSULFAPYRAZOLE see **SULFAPHENAZOLE**

PHENYLTHIAZOLYLTHIOUREA see under **PHENYLTHIOUREA**

PHENYLTHIOCARBAMIDE see **PHENYLTHIOUREA**

PHENYLTHIOHYDANTOIN see under **HYDANTOINS**

PHENYLTHIOUREA

Male and female correlations for taster (P.T.C.) phenotypes and rate of adolescent development. Whissell–Buechy D, et al. **Ann Hum Biol** 1989 Mar–Apr;16(2):131–46

Genes for salivary proline–rich proteins and taste for phenylthiourea are not closely linked in humans. O'Hanlon K, et al. **Cytogenet Cell Genet** 1988;49(4):315–7

Alternative genetic models for the inheritance of the phenylthiocarbamide taste deficiency. Olson JM, et al. **Genet Epidemiol** 1989;6(3):423–34

Phenylthiocarbamide taste sensitivity revisited: complete sorting test supports residual family resemblance. Reddy BM, et al. **Genet Epidemiol** 1989;6(3):413–21

ANALOGS & DERIVATIVES

Evaluation of phenylthiourea derivatives as inhibitors of transglutaminase–catalyzed reaction in Chinese hamster ovary cells. Lee KN, et al. **Biochim Biophys Acta** 1988 Nov 18;972(2):120–30

PHARMACOLOGY

Bitter taste responses to phenylthiocarbamide are not related to dietary goitrogen intake in human beings. Mattes R, et al. **J Am Diet Assoc** 1989 May;89(5):692–4

PHENYLUREA COMPOUNDS

Laboratory toxicity of a new benzoylphenylurea insect growth regulator (UC–84572) against mosquitoes and chironomid midges. Ali A, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):309–11

CHEMICAL SYNTHESIS

Synthesis and hydrolytic behavior of the sulfate conjugate of 2'–hydroxy–3,4,4'–trichlorocarbanilide. Craig JC, et al. **Drug Metab Dispos** 1989 May–Jun;17(3):345–7

PHARMACOKINETICS

Recainam dose titration and pharmacokinetics in patients with resistant arrhythmias. Davies RF, et al. **Clin Pharmacol Ther** 1989 Sep;46(3):324–34

PHARMACOLOGY

In vitro and in vivo activity of 1–aryl–3–(2–chloroethyl) urea derivatives as new antineoplastic agents. Lacroix J, et al. **Anticancer Res** 1988 Jul–Aug;8(4):595–8

Induction of superoxide dismutase activity by paraquat or EDU in human gingival fibroblasts. Kerr JS, et al. **Basic Life Sci** 1988;49:695–8

Frequency– and voltage–dependent effects of recainam on the upstroke velocity of action potential in rabbit ventricular muscle. Kamiya K, et al. **J Cardiovasc Pharmacol** 1989 Apr;13(4):630–7

Vacor inhibits insulin release from islets in vitro. Taniguchi H, et al. **J Endocrinol Invest** 1989 Apr;12(4):273–5

CL 277,082: a novel inhibitor of ACAT–catalyzed cholesterol esterification and cholesterol absorption. Largis EE, et al. **J Lipid Res** 1989 May;30(5):681–90

Pretreatment with EDU decreases rat lung cellular responses to ozone. Bassett DJ, et al. **Toxicol Appl Pharmacol** 1989 Aug;100(1):32–40

Induction of antioxidant enzyme activities by a phenylurea derivative, EDU. Stevens TM, et al. **Toxicol Appl Pharmacol** 1988 Oct;96(1):33–42

THERAPEUTIC USE

Electrophysiologic effects and efficacy of recainam for sustained ventricular tachycardia. de Buitleir M, et al. **Am J Cardiol** 1989 Jan 1;63(1):116–8

TOXICITY

Field studies on the impact of a new benzoylphenylurea insect growth regulator (UC–84572) on selected aquatic nontarget invertebrates. Ali A, et al. **Bull Environ Contam Toxicol** 1989 Jan;42(1):134–41

Quantitative evaluation of chlortoluran–induced splenic hemosiderosis by means of an image analyzer. Nyska A, et al. **Vet Hum Toxicol** 1989 Jun;31(3):218–21

PHENYTOIN

Phenytoin should be considered a critical drug [letter] Steinhauser KJ. **Am J Hosp Pharm** 1988 Aug;45(8):1667–8

Extravasation of phenytoin in the hand. Hagan HJ 3d, et al. **J Hand Surg [Am]** 1988 Nov;13(6):942–3

Role of adrenoceptors in diphenylhydantoin–stimulated renin release. Cadnapaphornchai P, et al. **Proc Soc Exp Biol Med** 1989 Apr;190(4):344–8

Phenytoin–induced stress protein synthesis in mouse embryonic tissue. Hansen DK, et al. **Proc Soc Exp Biol Med** 1988 Oct;189(1):136–40

[Study of crystalline drugs by means of polarizing microscope. X. Analysis of the particle size distribution of phenytoin] Watanabe A, et al. **Yakugaku Zasshi** 1988 Jul;108(7):659–64 (Eng. Abstr.) **(Jpn)**

ADMINISTRATION & DOSAGE

The effect of acutely administered phenytoin on vecuronium–induced neuromuscular blockade. Gray HS, et al. **Anaesthesia** 1989 May;44(5):379–81

Comparison of intraosseous and intravenous routes of anticonvulsant administration in a porcine model. Jaimovich DG, et al. **Ann Emerg Med** 1989 Aug; 18(8):842–6

Intravenous phenytoin: a loading scheme for desired concentrations. Blaser KU, et al. **Ann Intern Med** 1989 Jun 15;110(12):1029–31

Carbamazepine replacement of phenytoin, phenobarbital and primidone in a rehabilitation setting: effects on seizure control. Wroblewski BA, et al. **Brain Inj** 1989 Apr–Jun; 3(2):149–56

Effect of source of population data on phenytoin dosage predictions in black patients. Miller R, et al. **Clin Pharm** 1989 Jan;8(1):56–9

Phenytoin dosage predictions in paediatric patients. Yuen GJ, et al. **Clin Pharmacokinet** 1989 Apr;16(4):254–60

Phenytoin dosing in obese patients: two case reports. de Oca GM, et al. **Drug Intell Clin Pharm** 1988 Sep;22(9):708–10

Treatment of refractory generalized tonic–clonic status epilepticus with pentobarbital anesthesia after high–dose phenytoin. Osorio I, et al. **Epilepsia** 1989 Jul–Aug; 30(4):464–71

Pharmacokinetics and clinical use of parenteral phenytoin, phenobarbital, and paraldehyde. Ramsay RE. **Epilepsia** 1989;30 Suppl 2:S1–3

Comparison of single–point phenytoin dosage prediction techniques. Yukawa E, et al. **J Clin Pharm Ther** 1988 Aug; 13(4):293–305

Phenytoin and fasting [letter] Bakheit AM. **Lancet** 1989 May 27;1(8648):1210

Preliminary experience with topical phenytoin in wound healing in a war zone. el Zayat SG. **Milit Med** 1989 Apr; 154(4):178–80

The effects of storage and shaking on the settling properties of phenytoin suspension. Sarkar MA, et al. **Neurology** 1989 Feb;39(2 Pt 1):207–9

Evaluation of a phenytoin dosage regimen design and adjustment computer program. Ritschel WA, et al. **Ther Drug Monit** 1989;11(4):437–49

ADVERSE EFFECTS

Phenytoin–induced acute respiratory failure with pulmonary eosinophilia. Mahatma M, et al. **Am J Med** 1989 Jul; 87(1):93–4

Phenytoin–induced resistance to vecuronium [letter] Gough JD, et al. **Anaesthesia** 1989 Jun;44(6):520

Phenytoin–induced resistance to vecuronium [letter] Kumar CM, et al. **Anaesthesia** 1989 Mar;44(3):263–4

Phenytoin hepatotoxicity masked by corticosteroids. Lisker–Melman M, et al. **Arch Intern Med** 1989 May; 149(5):1196–7

Reversible common variable immunodeficiency syndrome induced by phenytoin. Travin M, et al. **Arch Intern Med** 1989 Jun;149(6):1421–2

Severe soft–tissue injury following intravenous infusion of phenytoin [letter] Weinstein M. **Arch Intern Med** 1989 Aug; 149(8):1905

Fluconazole and phenytoin: a predictable interaction [published erratum appears in BMJ 1989 Jul 29;299(6694):326] Mitchell AS, et al. **BMJ** 1989 May 13; 298(6683):1315

Tooth root resorption induced in rats by diphenylhydantoin and parathyroidectomy. Robinson PB, et al. **Br J Exp Pathol** 1989 Feb;70(1):65–72

Long–lasting movement disorder induced by intravenous phenytoin administration for status epilepticus. A case report. Kurata K, et al. **Clin Neuropharmacol** 1988 Oct; 11(5):467–71

Phenytoin–induced hepatitis, rhabdomyolysis, and renal dysfunction. Korman LB, et al. **Clin Pharm** 1989 Jul; 8(7):514–5

Phenytoin–carbamazepine cross–sensitivity. Reents SB, et al. **DICP** 1989 Mar;23(3):235–6

Phenytoin hepatotoxicity: a review of the literature. Smythe

MA, et al. **DICP** 1989 Jan;23(1):13–8 (41 ref.)

Possible interaction of ranitidine with phenytoin. Bramhall D, et al. **Drug Intell Clin Pharm** 1988 Dec;22(12):979–80

Soft-tissue damage and intravenous phenytoin [letter] Grinder D, et al. **Drug Intell Clin Pharm** 1988 Sep; 22(9):725–6

Phenytoin chronic toxicity and associated psychosis [letter] Miller WI. **Drug Intell Clin Pharm** 1988 Dec;22(12):1003–4

Motor speed is a contaminating factor in evaluating the "cognitive" effects of phenytoin. Dodrill CB, et al. **Epilepsia** 1989 Jul–Aug;30(4):453–7

Phenytoin-induced seizures: a paradoxical effect at toxic concentrations in epileptic patients. Osorio I, et al. **Epilepsia** 1989 Mar–Apr;30(2):230–4

Lack of sister chromatid exchange induction in phenytoin-treated patients with epilepsy. Schaumann BA, et al. **Epilepsia** 1989 Mar–Apr;30(2):240–5

The influence of long-term anticonvulsant therapy with diphenylhydantoin and carbamazepine on serum gamma-glutamyltransferase, aspartate aminotransferase, alanine aminotransferase and alkaline phosphatase. Aldenhövel HG. **Eur Arch Psychiatry Neurol Sci** 1988; 237(5):312–6

Drug-induced toxic epidermal necrolysis treated with cyclosporin. Renfro L, et al. **Int J Dermatol** 1989 Sep; 28(7):441–4

Immune function in patients treated with phenytoin. Burks AW, et al. **J Child Neurol** 1989 Jan;4(1):25–9

Increased sharing of maternal HLA haplotypes among children exposed to diphenylhydantoin during pregnancy. Hodge SE, et al. **J Med Genet** 1988 Oct;25(10):698–702

Withdrawal symptoms from phenytoin, carbamazepine and sodium valproate. Duncan JS, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):924–8

Intelligence of children of epileptic mothers. Gaily E, et al. **J Pediatr** 1988 Oct;113(4):677–84

Pulmonary function loss in patients on long-term anticonvulsive therapy. Rush EA. **J Tenn Med Assoc** 1988 Nov;81(11):677–81

Effects of phenytoin on cognitive function [letter] Whyte J, et al. **N Engl J Med** 1989 Jul 6;321(1):53–4

Gingival hyperplasia of an edentulous alveolar ridge in an epileptic—a case report. Darling MR, et al. **N Z Dent J** 1988 Oct;84(378):114–6

Phenytoin-induced nephrotic syndrome [letter] Orlandini G, et al. **Nephron** 1989;52(1):109

Phenytoin withdrawal and seizure frequency. Bromfield EB, et al. **Neurology** 1989 Jul;39(7):905–9

Preliminary findings of a reduction of otoconia in the inner ear of adult rats prenatally exposed to phenytoin. Minck DR, et al. **Neurotoxicol Teratol** 1989 May–Jun;11(3):307–11

Long-term effects of prenatal phenytoin exposure on offspring behavior in rats. Vorhees CV, et al. **Neurotoxicol Teratol** 1989 May–Jun;11(3):295–305

Fetal hydantoin syndrome? [letter] Nanda A, et al. **Pediatr Dermatol** 1989 Mar;6(1):66

Fetal hydantoin syndrome: a case report. Nanda A, et al. **Pediatr Dermatol** 1989 Jun;6(2):130–3

Phenytoin-induced thrombocytopenia. Brown JJ, et al. **Pediatr Neurol** 1986 Mar–Apr;2(2):99–101

Folate treatment of diphenylhydantoin-induced gingival hyperplasia. Bäckman N, et al. **Scand J Dent Res** 1989 Jun; 97(3):222–32

Gingival hyperplasia: an intra-oral side effect of phenytoin, nifedipine and cyclosporine therapies. Yusof WZ. **Singapore Med J** 1988 Oct;29(5):498–503

Neuroblastoma after prenatal exposure to phenytoin: cause and effect? Koren G, et al. **Teratology** 1989 Aug; 40(2):157–62 (15 ref.)

[The fetal hydantoin syndrome] Egense BM, et al. **Ugeskr Laeger** 1989 Feb 27;151(9):575–6 (Eng. Abstr.) **(Dan)**

[Altered gamma-glutamyltransferase, aspartate aminotransferase, alanine aminotransferase and alkaline phosphatase serum activities in long-term anticonvulsive therapy—comparison of diphenylhydantoin and carbamazepine] Aldenhövel HG. **Wien Klin Wochenschr** 1988 Oct 21;100(20):680–3 (Eng. Abstr.) **(Ger)**

[Gingival hypertrophy induced by diphenylhydantoin] Capozi G, et al. **Clin Ter** 1989 Mar 31;128(6):423–7 (55 ref.) (Eng. Abstr.) **(Ita)**

[Possible adverse effects of phenytoin given transplacentally on the fetal growth. II. Possible adverse effects on the fetal growth] Tanaka K, et al. **No To Hattatsu** 1988;20(5):368–72 (Eng. Abstr.) **(Jpn)**

[Possible adverse effects of phenytoin given transplacentally on the fetal growth. III. Effects of phenytoin on postnatal brain development] Tanaka K, et al. **No To Hattatsu** 1988; 20(5):373–8 (Eng. Abstr.) **(Jpn)**

ANALOGS & DERIVATIVES

Bioavailability of ACC-9653 (phenytoin prodrug). Browne TR, et al. **Epilepsia** 1989;30 Suppl 2:S27–32

Phenytoin prodrug: preclinical and clinical studies. Leppik IE, et al. **Epilepsia** 1989;30 Suppl 2:S22–6

Quantitative estimation of catechol/methylcatechol pathways in human phenytoin metabolism. Maguire JH. **Epilepsia** 1988 Nov–Dec;29(6):753–9

Pharmacology of ACC-9653 (phenytoin prodrug). Smith RD, et al. **Epilepsia** 1989;30 Suppl 2:S15–21

Safety, tolerance and pharmacokinetics of intravenous doses of the phosphate ester of 3-hydroxymethyl-5,5-diphenylhydantoin: a new prodrug of phenytoin. Gerber N, et al. **J Clin Pharmacol** 1988 Nov; 28(11):1023–32

Improved anticonvulsant activity of phenytoin by a redox brain delivery system I: Synthesis and some properties of the dihydropyridine derivatives. Pop E, et al. **J Pharm Sci** 1989 Aug;78(8):609–16

ANALYSIS

Stability of phenytoin in three enteral nutrient formulas. Miller SW, et al. **Am J Hosp Pharm** 1988 Dec; 45(12):2529–32

Simultaneous determination of phenobarbital, phenytoin and methylphenobarbital in tablet formulations by HPLC. Vio L, et al. **Farmaco [Prat]** 1988 May;43(5):157–64

Direct analysis of anticonvulsant drugs in vitreous humour by HPLC using a column switching technique. Logan BK, et al. **Forensic Sci Int** 1989 Apr–May;41(1–2):125–34

Studies of the effect of pH, temperature and ring size on the complexation of phenytoin with cyclodextrins. Menard FA, et al. **Pharm Acta Helv** 1988;63(11):303–8

Cosolvency and cosolvent polarity. Rubino JT, et al. **Pharm Res** 1987 Jun;4(3):220–30

Cosolvency and deviations from log-linear solubilization. Rubino JT, et al. **Pharm Res** 1987 Jun;4(3):231–6

Phenytoin and phenobarbital assayed by the ACCULEVEL method compared with EMIT in an outpatient clinic setting. Morris RG, et al. **Ther Drug Monit** 1988; 10(4):469–73

Isocratic separation of phenytoin metabolites by high-performance liquid chromatography from human and animal microsomes and urine. Roy D, et al. **Ther Drug Monit** 1989;11(1):57–62

ANTAGONISTS & INHIBITORS

Reduction of the teratogenic effects of phenytoin by folic acid and a mixture of folic acid, vitamins, and amino acids: a preliminary trial. Zhu MX, et al. **Epilepsia** 1989 Mar–Apr; 30(2):246–51

BLOOD

The effect of renal transplantation on a major endogenous ligand retained in uremic serum. Mabuchi H, et al. **Am J Kidney Dis** 1989 Jan;13(1):49–54

Effect of protein binding on the high-performance liquid chromatography of phenytoin and imirestat in human serum by direct injection onto internal surface reversed-phase columns. Pinkerton TC, et al. **Anal Chem** 1989 May 15;61(10):1171–4

Variability of serum phenytoin concentrations in nursing home patients. Mooradian AD, et al. **Arch Intern Med** 1989 Apr;149(4):890–2

Unbound phenytoin plasma concentrations in patients comedicated with sodium valproate—the predictive value of plasma albumin concentration. Johnson GJ, et al. **Br J Clin Pharmacol** 1989 Jun;27(6):843–9

Bayesian prediction of serum phenytoin concentration in a simulation study. Higuchi S, et al. **Chem Pharm Bull (Tokyo)** 1988 May;36(5):1914–8

Evaluation of the Ames Seralyzer for therapeutic drug monitoring of phenobarbital and phenytoin. Brettfeld C, et al. **Clin Chem** 1989 Feb;35(2):324

Four fluorescence polarization immunoassays for therapeutic drug monitoring evaluated. Haver VM, et al. **Clin Chem** 1989 Jan;35(1):138–40

Cost-effective assays for use in monitoring carbamazepine, phenobarbital, and phenytoin in serum. Moore FM, et al. **Clin Chem** 1989 Aug;35(8):1782–4

Measurement of plasma phenytoin by EMIT in the Monarch centrifugal analyzer: studies on the elimination of within-rotor drift. Wenham PR, et al. **Clin Chem** 1988 Oct; 34(10):2080–3

Predictability of unbound antiepileptic drug concentrations in children treated with valproic acid and phenytoin. Miles MV, et al. **Clin Pharm** 1988 Sep;7(9):688–93

Effect of influenza vaccine on serum concentrations of total and free phenytoin. Smith CD, et al. **Clin Pharm** 1988 Nov; 7(11):828–32

Comparative determination of phenytoin in plasma by fluorescence polarization immunoassay and high performance liquid chromatography. Othman S, et al. **Drug Des Deliv** 1987 Sep;2(1):41–7

Effect of felbamate on phenytoin and carbamazepine serum concentrations. Graves NM, et al. **Epilepsia** 1989 Mar–Apr; 30(2):225–9

Compliant populations: variability in serum concentrations. Graves NM, et al. **Epilepsy Res Suppl** 1988;1:91–9

Variability of phenytoin, carbamazepine and valproate concentrations in a clinic population. Leppik IE. **Epilepsy Res Suppl** 1988;1:85–90

Interaction of nasogastric phenytoin and enteral feeding solution [letter] Weinryb J, et al. **J Am Geriatr Soc** 1989 Feb;37(2):195–6

Application of the Abbott TDx lidocaine, phenytoin, and phenobarbital assays to postmortem blood specimens. Caplan YH, et al. **J Anal Toxicol** 1988 Sep–Oct;12(5):265–7

The protein binding of phenytoin, propranolol, diazepam, and AL01576 (an aldose reductase inhibitor) in human and rat diabetic serum. McNamara PJ, et al. **Pharm Res** 1988 May;5(5):261–5

Phenytoin–phenobarbital interaction: importance of free plasma phenytoin monitoring. Cuzzolin L, et al. **Pharmacol Res Commun** 1988 Jul;20(7):627–8

Temperature dependence of phenytoin–protein binding in serum: effects of uremia and hypoalbuminemia. Allison TB, et al. **Ther Drug Monit** 1988;10(4):376–81

Distribution of drugs over whole blood: II. The transport function of whole blood for phenytoin. Driessen O, et al. **Ther Drug Monit** 1989;11(4):390–400

Derivation and evaluation of an equation for prediction of free phenytoin concentration in patients co-medicated with valproic acid. Haidukewych D, et al. **Ther Drug Monit** 1989;11(2):134–9

Bayesian regression analysis of non-steady-state phenytoin concentrations: evaluation of predictive performance. Killilea T, et al. **Ther Drug Monit** 1989;11(4):455–62

Phenytoin and phenobarbital concentrations in serum: a comparison of Ames Seralyzer with GLC, TDX, and EMIT. Leppik IE, et al. **Ther Drug Monit** 1989;11(1):73–8

The impact of a therapeutic drug monitoring program for phenytoin. Wing DS, et al. **Ther Drug Monit** 1989; 11(1):32–7

[Some experience in antiepileptic treatment drugs monitoring in clinic] Li J. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Jun; 21(3):145–8, 188–9 (Eng. Abstr.) **(Chi)**

METABOLISM

An in vitro study of the microsomal metabolism and cellular toxicity of phenytoin, sorbinil and mianserin. Riley RJ, et al. **Br J Clin Pharmacol** 1988 Nov;26(5):577–88

Inheritance of poor phenytoin parahydroxylation capacity in a Dutch family. Vermeij P, et al. **Clin Pharmacol Ther** 1988 Nov;44(5):588–93

Quantitative estimation of catechol/methylcatechol pathways in human phenytoin metabolism. Maguire JH. **Epilepsia** 1988 Nov–Dec;29(6):753–9

Enhancement of phenytoin binding to tissues in rats by heat treatment. Kato Y, et al. **J Pharm Pharmacol** 1989 Feb; 41(2):125–6

Factors causing age-dependent changes in phenytoin tissue and serum binding in rats. Kato Y, et al. **J Pharmacobiodyn** 1988 Jun;11(6):402–10

In vitro bioactivation of phenytoin to a reactive free radical intermediate by prostaglandin synthetase, horseradish peroxidase, and thyroid peroxidase. Kubow S, et al. **Mol Pharmacol** 1989 Apr;35(4):504–11

PHARMACOKINETICS

Multiple-dose activated charcoal: an ever-expanding role [letter] Krenzelok EP, et al. **Ann Emerg Med** 1988 Oct; 17(10):1134–5

The effect of pregnancy in humans on the pharmacokinetics of stable isotope labelled phenytoin. Dickinson RG, et al. **Br J Clin Pharmacol** 1989 Jul;28(1):17–27

Lack of effect of erythromycin on the pharmacokinetics of single oral doses of phenytoin. Milne RW, et al. **Br J Clin Pharmacol** 1988 Sep;26(3):330–3

Interaction between vigabatrin and phenytoin. Rimmer EM, et al. **Br J Clin Pharmacol** 1989;27 Suppl 1:27S–33S

A comparison of the influence of famotidine and cimetidine on phenytoin elimination and hepatic blood flow. Sambol NC, et al. **Br J Clin Pharmacol** 1989 Jan;27(1):83–7

A comparative bioavailability of 2 oral solid phenytoin dosage forms. Morton DJ, et al. **Cent Afr J Med** 1988 Jun; 34(6):128–33

Dissolution and bioavailability of phenytoin in solid dispersion with phosphatidylcholine. Fujii M, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec;36(12):4908–13

Disposition of phenytoin and phenobarbitone in the isolated perfused human placenta. Kluck RM, et al. **Clin Exp Pharmacol Physiol** 1988 Nov;15(11):827–36

Phenytoin pharmacokinetics in critically ill trauma patients. Boucher BA, et al. **Clin Pharmacol Ther** 1988 Dec; 44(6):675–83

Pharmacokinetic interaction between intravenous phenytoin and amiodarone in healthy volunteers. Nolan PE Jr, et al. **Clin Pharmacol Ther** 1989 Jul;46(1):43–50

Accuracy of two equations in determining normalized phenytoin concentrations. Mauro LS, et al. **DICP** 1989 Jan; 23(1):64–8

Comment: phenytoin equation accuracy [letter] Parish RC. **DICP** 1989 Jul–Aug;23(7–8):621–2

Comment: phenytoin and enteral feedings [letter] Fitzsimmons WE, et al. **Drug Intell Clin Pharm** 1988 Nov; 22(11):920

Phenytoin prodrug: preclinical and clinical studies. Leppik IE, et al. **Epilepsia** 1989;30 Suppl 2:S22–6

Brain interstitial fluid and intracellular distribution of phenytoin. Sechi GP, et al. **Epilepsia** 1989 Mar–Apr; 30(2):235–9

Human brain phenytoin: correlation with unbound and total serum concentrations. Friel PN, et al. **Epilepsy Res** 1989 Jan–Feb;3(1):82–5

Distribution of diphenylhydantoin in the brain during experimental status epilepticus of the cat. Sechi GP, et al. **Epilepsy Res** 1987 May;1(3):173–7

Absorption and safety of rectally administered phenytoin. Fuerst RH, et al. **Eur J Drug Metab Pharmacokinet** 1988 Oct–Dec;13(4):257–60

Phenytoin Michaelis-Menten pharmacokinetics in Saudi patients. el-Sayed YM, et al.

Int J Clin Pharmacol Ther Toxicol 1989 Apr;27(4):173–8

Population pharmacokinetics of phenytoin from routine clinical data in Japan. Yukawa E, et al. **J Clin Pharm Ther** 1989 Feb;14(1):71–7

Lack of effect of cholestyramine on phenytoin bioavailability. Barzaghi N, et al. **J Clin Pharmacol** 1988 Dec;28(12):1112–4

Safety, tolerance and pharmacokinetics of intravenous doses of the phosphate ester of 3-hydroxymethyl-5,5-diphenylhydantoin: a new prodrug of phenytoin. Gerber N, et al. **J Clin Pharmacol** 1988 Nov; 28(11):1023–32

Determination of enzyme or binding constants using generalized linear models, with particular reference to Michaelis–Menten models. van Belle G, et al. **J Pharm Sci** 1989 May;78(5):413–6

Kinetic analysis of phenytoin disposition in rats with experimental renal and hepatic diseases. Itoh T, et al. **J Pharmacobiodyn** 1988 May;11(5):289–308

Effect of aminophylline upon the protective activity of common antiepileptic drugs and their plasma levels in mice. Czuczwar SJ, et al. **Neurosci Res** 1989 Jun;6(5):470–4

Nutrient influences on rat intestinal phenytoin uptake. Fleisher D, et al. **Pharm Res** 1989 Apr;6(4):332–7

Pharmacokinetics of three formulations of diphenylhydantoin in the dog. Overduin LM, et al. **Res Vet Sci** 1989 Mar; 46(2):271–3

Phenytoin auto-induction? Case reports. Miller R, et al. **S Afr Med J** 1989 Apr 1;75(7):332–3

Phenytoin monitoring: clinical or scientific? Fulton JD, et al. **Scott Med J** 1988 Jun;33(3):267–8

Intrasubject reproducibility of oral phenytoin pharmacokinetics. Lai ML, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Nov;87(11):1086–92

Clinical utility of a Bayesian dosing program for phenytoin. Privitera MD, et al. **Ther Drug Monit** 1989;11(3):285–94

Phenytoin absorption in volunteers receiving selected enteral feedings. Guidry JR, et al. **West J Med** 1989 Jun; 150(6):659–61

[Possible adverse effects of phenytoin given transplacentally on the fetal growth. I. Transplacental transmission of phenytoin] Tanaka K, et al. **No To Hattatsu** 1988; 20(5):363–7 (Eng. Abstr.) **(Jpn)**

[Effect of saikokeishi-to on the pharmacokinetics of phenytoin in rabbit] Kanamoto I, et al. **Yakugaku Zasshi** 1988 Aug;108(8):772–6 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Phenytoin-induced resistance to pancuronium. Use of atracurium infusion in management of a neurosurgical patient. Hickey DR, et al. **Anaesthesia** 1988 Sep;43(9):757–9

Relative efficacy of phenytoin and phenobarbital for the prevention of theophylline-induced seizures in mice. Blake KV, et al. **Ann Emerg Med** 1988 Oct;17(10):1024–8

The use of human gingival fibroblasts in culture for studying the effects of phenytoin on testosterone metabolism. Sooriyamoorthy M, et al. **Arch Oral Biol** 1988;33(5):353–9

Phenytoin interaction with rifampicin. Abajo FJ. **BMJ** 1988 Oct 22;297(6655):1048

Central effect of agents which alter sodium transport on water drinking in the rat. Viva L, et al. **Brain Res Bull** 1989 Feb;22(2):201–6

The effect of diphenylhydantoin on spreading depression. Chebabo SR, et al. **Braz J Med Biol Res** 1988;21(3):603–5

Effect of phenytoin on the pharmacokinetics of doxorubicin and doxorubicinol in the rabbit. Cusack BJ, et al. **Cancer Chemother Pharmacol** 1988;22(4):294–8

Long-term use of phenytoin: effect on haematological parameters in Nigerian epileptics. Akinsete I, et al. **Cent Afr J Med** 1988 Feb;34(2):28–31

Interaction between phenytoin and theophylline in healthy volunteers. Adebayo GI. **Clin Exp Pharmacol Physiol** 1988 Nov;15(11):883–7

The pharmacology of trigeminal neuralgia. Fromm GH. **Clin Neuropharmacol** 1989 Jun;12(3):185–94 (46 ref.)

The prophylactic effect of diphenylhidantoin in the kindling effect on reptiles (Gallotia galloti). Gomez T, et al. **Comp Biochem Physiol [C]** 1988;90(1):203–5

Uptake of 3,5,3'-triiodothyronine by cultured rat hepatoma cells is inhibitable by nonbile acid cholephils, diphenylhydantoin, and nonsteroidal antiinflammatory drugs. Topliss DJ, et al. **Endocrinology** 1989 Feb; 124(2):980–6

Phenytoin and carbamazepine: potential- and frequency-dependent block of Na currents in mammalian myelinated nerve fibers. Schwarz JR, et al. **Epilepsia** 1989 May–Jun;30(3):286–94

Effect of phenytoin, carbamazepine, and valproic acid on caffeine metabolism. Wietholtz H, et al. **Eur J Clin Pharmacol** 1989;36(4):401–6

Changes in the activity of some liver drug-metabolizing enzymes during and after prolonged application of diphenylhydantoin. Kantarev N, et al. **Folia Med (Plovdiv)** 1987;29(4):24–9

Pancuronium-phenytoin interaction: a case of decreased duration of neuromuscular blockade. Liberman BA, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Aug;26(8):371–4

Analysis of the time distribution and time sequence of behavioral acts. Kernan WJ Jr, et al. **Int J Neurosci** 1988 Nov;43(1–2):35–51

Extension of the analysis of the time structure of behavioral acts. Mullenix PJ, et al. **Int J Neurosci** 1989 Feb; 44(3–4):251–62

Inhibition by phenytoin of in vitro secretion of calcitonin from rat thyroid glands and cultured rat C cells. Cooper CW, et al. **J Bone Miner Res** 1988 Apr;3(2):219–23

The effects of phenytoin on calcium uptake in osteoblastic cells. Dziak R, et al. **J Bone Miner Res** 1988 Aug; 3(4):415–20

Sodium channels from human brain RNA expressed in Xenopus oocytes. Basic electrophysiologic characteristics and their modification by diphenylhydantoin. Tomaselli GF, et al. **J Clin Invest** 1989 May;83(5):1724–32

Improved anticonvulsant activity of phenytoin by a redox brain delivery system I: Synthesis and some properties of the dihydropyridine derivatives. Pop E, et al. **J Pharm Sci** 1989 Aug;78(8):609–16

Relationship between concentration and anticonvulsant effect of phenytoin against electroshock-induced seizures in rats: comparison of sampling sites for concentration determinations. Ramzan I, et al. **J Pharm Sci** 1989 Jun; 78(6):448–51

Effects of phenytoin and phenobarbital on schedule-controlled responding and seizure activity in the amygdala-kindled rat. Renfrey G, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):967–73

N-demethylation of methyl and dimethyl derivatives of phenytoin and their anticonvulsant activities in mice. Wong PT, et al. **Jpn J Pharmacol** 1988 Dec;48(4):473–8

Antiepileptic drug phenytoin potentiates GABA in the rat cuneate nucleus. Kaneko S, et al. **Jpn J Psychiatry Neurol** 1988 Sep;42(3):643–5

Phenytoin induces interleukin-1 production in vitro. Modéer T, et al. **Life Sci** 1989;44(1):35–40

Modification of slow inactivation of single sodium channels by phenytoin in neuroblastoma cells. Quandt FN. **Mol Pharmacol** 1988 Oct;34(4):557–65

Effects of phenytoin and flunarizine on the rise in extracellular potassium induced by repetitive stimulation of rat cerebral cortex. Reid KH, et al. **Physiol Bohemoslov** 1988;37(3):193–202

Potentiation of fibroblast DNA synthesis by a phenytoin-induced mononuclear cell derived factor in vitro. Modéer T, et al. **Scand J Dent Res** 1989 Apr; 97(2):186–7

Alterations in maternal plasma corticosterone levels following treatment with phenytoin. Hansen DK, et al. **Toxicol Appl Pharmacol** 1988 Oct;96(1):24–32

[Effects of phenobarbital and phenytoin on the growth morphology and some ATPase activities of rat brain astrocytes derived from normal newborn cerebrum and C6 glioma cells in culture] Jou TC, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Dec;42(6):425–36 (Eng. Abstr.) **(Chi)**

[Membrane currents and action potentials of myelinated nerve fibers and their modification by diphenylhydantoin and tocainide] Schwarz JR. **EEG EMG** 1988 Sep; 19(3):115–22 (Eng. Abstr.) **(Ger)**

[Protective effect of various agents against ischemic neuronal damage in guinea pig hippocampal neurons studied in vitro] Amagasa M, et al. **No Shinkei Geka** 1988 Nov; 16(12):1363–71 (Eng. Abstr.) **(Jpn)**

[A study on the protective mechanism of phenytoin in transient global ischemia] Kurosawa K, et al. **No Shinkei Geka** 1989 May;17(5):427–34 (Eng. Abstr.) **(Jpn)**

[The effect of phenytoin on free fatty acid liberation and mononucleotide metabolism in transient ischemia] Kinouchi H, et al. **No To Shinkei** 1988 Nov;40(11):1059–65 (Eng. Abstr.) **(Jpn)**

[Physiologic bases of the effect of dilantin on psychoemotional and autonomic disorders in resistant pathologic states of the nervous system] Bekhtereva HP, et al. **Fiziol Cheloveka** 1989 Jan–Feb;15(1):34–46 **(Rus)**

[The effect of Hydanphene on reflex activity of the spinal cord] Geber J, et al. **Neurologija** 1987;36(1–4):85–90 (Eng. Abstr.) **(Scr)**

POISONING

Cerebellar injury due to phenytoin. Identification and evolution of Purkinje cell axonal swellings in deep cerebellar nuclei of mice. Kiefer R, et al. **Acta Neuropathol (Berl)** 1989;77(3):289–98

Presentations of acute phenytoin overdose. Mellick LB, et al. **Am J Emerg Med** 1989 Jan;7(1):61–7 (52 ref.)

Phenytoin toxicity produced by tolbutamide. Beech E, et al. **BMJ** 1988 Dec 17;297(6663):1613–4

Phenytoin toxicity in a critically ill, hypoalbuminemic patient with normal serum drug concentrations. Driscoll DF, et al. **Crit Care Med** 1988 Dec;16(12):1248–9

Clinical features and management of poisoning due to phenytoin. Larsen JR, et al. **Med Toxicol Adverse Drug Exp** 1989 Jul–Aug;4(4):229–45 (145 ref.)

Cerebellar atrophy following acute intoxication with phenytoin. Masur H, et al. **Neurology** 1989 Mar;39(3):432–3

Phenytoin toxicity: predictors of clinical course. Curtis DL, et al. **Vet Hum Toxicol** 1989 Apr;31(2):162–3

Phenytoin toxicity: a review of 94 cases. Curtis DL, et al. **Vet Hum Toxicol** 1989 Apr;31(2):164–5

THERAPEUTIC USE

Effect of phenytoin on the clinical signs and in vitro muscle twitch characteristics in horses with chronic intermittent rhabdomyolysis and myotonia [published erratum appears in Am J Vet Res 1989 Mar;50(3):432] Beech J, et al. **Am J Vet Res** 1988 Dec;49(12):2130–3

Phenytoin-induced improvement in muscle cramping and insulin action in three patients with the syndrome of insulin resistance, acanthosis nigricans, and acral hypertrophy. Minaker KL, et al. **Arch Neurol** 1989 Sep;46(9):981–5

Drug interaction between cyclosporin and phenytoin in allogeneic bone marrow transplantation [letter] Schmidt H, et al. **Bone Marrow Transplant** 1989 Mar;4(2):212–3

Phenytoin protects against ischemia-produced neuronal cell death. Taft WC, et al. **Brain Res** 1989 Mar 27;483(1):143–8

Antiepileptic drugs used in the emergency management of seizures and introduction of phenytoin prodrug. Proceedings of a symposium held in conjunction with the 1988 American Epilepsy Society meeting. San Francisco, California, October 15, 1988. **Epilepsia** 1989;30 Suppl 2:S1–37

Cytogenetic effects of phenytoin and/or carbamazepine on human peripheral leukocytes. Flejter WL, et al. **Epilepsia** 1989 May–Jun;30(3):374–9

Antiepileptic drugs reduce serum uric acid. Krause KH, et al. **Epilepsy Res** 1987 Sep;1(5):306–7

Predictive performance of pharmacokinetic methods for phenytoin dosing: a multi-center evaluation in 282 patients with epilepsy. Zaccara G, et al. **Epilepsy Res** 1989 May–Jun;3(3):253–61

Use of phenytoin in healing of war and non-war wounds. A pilot study of 25 cases. Modaghegh S, et al. **Int J Dermatol** 1989 Jun;28(5):347–50

Are phenobarbital and phenytoin obsolete in the treatment of epilepsy? [letter] Gourie-Devi M, et al. **J Assoc Physicians India** 1988 Jul;36(7):458

Pregnancy and epilepsy. Bag S, et al. **J Neurol** 1989 Jul; 236(5):311–3

IgG subclasses in epileptic patients treated with phenytoin. Gilhus NE, et al. **J Neurol** 1989 Mar;236(3):149–52

Evaluation of single-point phenytoin dosage prediction methods in pediatric patients. Yukawa E, et al. **J Pharmacobiodyn** 1988 Nov;11(11):736–43

Phenytoin in pre-eclampsia [letter] Tuffnell D, et al. **Lancet** 1989 Jul 29;2(8657):273–4

Anticonvulsive and convulsive effects of lidocaine: comparison with those of phenytoin, and implications for mechanism of action concepts. Stone WE, et al. **Neurol Res** 1988 Sep;10(3):161–8

Phenytoin in reflex sympathetic dystrophy. Chaturvedi SK. **Pain** 1989 Mar;36(3):379–80

Prophylactic anticonvulsants for prevention of immediate and early postcraniotomy seizures. Lee ST, et al. **Surg Neurol** 1989 May;31(5):361–4

[Effects of combination of diphenylhydantoin and prostaglandin E2 on ouabain-induced arrhythmias] Xie H, et al. **Yao Hsueh Hsueh Pao** 1988;23(12):953–5 (Eng. Abstr.) **(Chi)**

[The effect of diphenylhydantoin on IgA nephropathy] Adámková V, et al. **Cas Lek Cesk** 1989 Apr 21; 128(17):524–6 (Eng. Abstr.) **(Cze)**

[Phenytoin: a new look at its anti-epileptic mechanism and adverse effects] Szkilnik R, et al. **Neurol Neurochir Pol** 1988 May–Jun;22(3):246–51 (30 ref.) **(Pol)**

[Clinical treatment of resistant epilepsy] Damasceno BP, et al. **Arq Neuropsiquiatr** 1988 Dec;46(4):351–8 (Eng. Abstr.) **(Por)**

[Phenytoin in the treatment of ear noises] Wertzberger P. **Rev Chir [Otorinolaringol]** 1988 Apr–Jun;33(2):127–34 (Eng. Abstr.) **(Rum)**

TOXICITY

Teratogenicity screening in standardized chick embryo culture: effects of dexamethasone and diphenylhydantoin. Kučera P, et al. **Experientia** 1988 Oct 15;44(10):827–33

Correlated ultrastructural damage between cerebellum cells after early anticonvulsant treatment in mice. Fishman RH, et al. **Int J Dev Neurosci** 1989;7(1):15–26

Arachidonic acid reversal of phenytoin-induced neural tube and craniofacial defects in vitro in mice. Kay ED, et al. **J Craniofac Genet Dev Biol** 1988;8(2):179–86

Modulation of embryonic glutathione reductase and phenytoin teratogenicity by 1,3-bis(2-chloroethyl)-1-nitrosourea (BCNU). Wong M, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):336–42

Differential toxicity of chronic exposure to phenytoin, phenobarbital, or carbamazepine in cerebral cortical cell cultures. Neale EA, et al. **Pediatr Neurol** 1985 May–Jun; 1(3):143–50

Enhancement of murine phenytoin teratogenicity by the gamma-glutamylcysteine synthetase inhibitor L-buthionine-(S,R)-sulfoximine and by the glutathione depletor diethyl maleate. Wong M, et al. **Teratology** 1989 Aug;40(2):127–41

Modulation of phenytoin teratogenicity and embryonic covalent binding by acetylsalicylic acid, caffeic acid, and alpha-phenyl-N-t-butylnitrone: implications for bioactivation by prostaglandin synthetase. Wells PG, et al. **Toxicol Appl Pharmacol** 1989 Feb;97(2):192–202

PHEOCHROMOCYTOMA

Intracellular localization of nerve growth factor in PC12 cells. An immuno-gold electron microscopic approach.

Corvaja N, et al. **Arch Ital Biol** 1988 Jun;126(3):165–78
Galanin inhibits dopamine secretion and activates a potassium channel in pheochromocytoma cells. de Weille JR, et al. **Brain Res** 1989 Apr 17;485(1):199–203
Specific adhesion between pheochromocytoma (PC12) cells and adrenal medullary endothelial cells in co-culture. Mizrachi Y, et al. **Cell Tissue Res** 1989;256(2):365–72
Malignant pheochromocytoma: diagnosis and treatment in fifteen cases. Guo JZ, et al. **J Hypertens** 1989 Apr; 7(4):261–6
Nerve growth factor rapidly stimulates arachidonate metabolism in PC12 cells: potential involvement in nerve fiber growth. DeGeorge JJ, et al. **J Neurosci Res** 1988 Oct–Dec;21(2–4):323–32
Isolation, characterization, and application of monoclonal antibodies to rat tyrosine hydroxylase. Kwan SW, et al. **J Neurosci Res** 1989 Jul;23(3):316–25
Pheochromocytoma of the prostate: an unusual location. Dennis PJ, et al. **J Urol** 1989 Jan;141(1):130–2
Subcarinal pheochromocytoma—a case report. Peng PC, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun;26(2):233–8
Reduction of aromatic L-amino acid decarboxylase activity in clonal pheochromocytoma PC12h cells by culture in the presence of N-methyl-4-phenylpyridinium ion (MPP+). Naoi M, et al. **Neurosci Lett** 1988 Dec 19; 95(1–3):229–35
Phosphorylation of tyrosine hydroxylase in protein kinase C-deficient PC12 cells. Cahill AL, et al. **Neuroscience** 1989; 30(3):811–8
Phaeochromocytoma in pregnancy. A report of 3 cases. van Rensburg LC, et al. **S Afr Med J** 1989 Apr 15;75(8):389–90
New perspectives in pheochromocytoma. Greene JP, et al. **Urol Clin North Am** 1989 Aug;16(3):487–503 (131 ref.)
Pheochromocytoma—recent advances in diagnosis and treatment [clinical conference] Benowitz NL. **West J Med** 1988 May;148(5):561–7
[A case of chromaffin paraganglioma of the hypopharynx] Filippin S, et al. **Acta Otorhinolaryngol Ital** 1989 Jan–Feb; 9(1):95–7 (Eng. Abstr.) **(Ita)**
[Tumor of the adrenal gland] Minowada S, et al. **Gan No Rinsho** 1989 Jan;Spec No:468–74 **(Jpn)**

ANALYSIS

Cholecystokinin, gastrin and their precursors in pheochromocytomas. Bardram L, et al. **Acta Endocrinol (Copenh)** 1989 Apr;120(4):479–84
Localization of pp60c-src in growth cone of PC12 cell. Sobue K, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1383–9
A highly sensitive Northern blot assay detects multiple proenkephalin A-like mRNAs in human caudate nucleus and pheochromocytoma. Monstein HJ, et al. **Biosci Rep** 1988 Jun;8(3):255–61
Increased circulating concentration of atrial natriuretic factor in persons with pheochromocytomas. Vesely DL, et al. **Clin Exp Hypertens [A]** 1989;11(3):353–69
Peptides related to the N-terminus of pro-opiomelanocortin in the human adrenal medulla. Gaspar L, et al. **Clin Invest Med** 1989 Apr;12(2):90–8
Tubulin isotype usage in vivo: a unique spatial distribution of the minor neuronal-specific beta-tubulin isotype in pheochromocytoma cells. Asai DJ, et al. **Dev Biol** 1989 Apr;132(2):398–409
Fractionation of synaptophysin-containing vesicles from rat brain and cultured PC12 pheochromocytoma cells. Wiedenmann B, et al. **FEBS Lett** 1988 Nov 21; 240(1–2):71–7
Characterization of a glucose polymer from PC12 cells and neuronal cells of rat embryo. Rasilo ML, et al. **J Biochem (Tokyo)** 1988 Nov;104(5):742–54
Nerve growth factor-induced changes in the intracellular localization of the protein kinase C substrate B-50 in pheochromocytoma PC12 cells. Van Hooff CO, et al. **J Cell Biol** 1989 Mar;108(3):1115–25
The catecholamine content of a cystic phaeochromocytoma. Feldman MA, et al. **J Hum Hypertens** 1989 Feb;3(1):67–8
Glycosaminoglycan composition of PC12 pheochromocytoma cells: a comparison with PC12D cells, a new subline of PC12 cells. Katoh-Semba R, et al. **J Neurochem** 1989 Mar;52(3):889–95
Neurokinin B in a human pheochromocytoma measured with a specific radioimmunoassay. Kage R, et al. **Peptides** 1989 May–Jun;10(3):713–6
Calcitonin gene-related peptide-like immunoreactivities in pheochromocytomas. Mouri T, et al. **Peptides** 1989 Jan–Feb;10(1):201–4

BLOOD

Plasma potassium in phaeochromocytoma [letter] Thomas DJ. **Br J Hosp Med** 1989 Mar;41(3):299
Vasoactive hormones in familial pheochromocytoma with predominant norepinephrine secretion. Tulassay T, et al. **Child Nephrol Urol** 1988–89;9(4):228–31
Platelet alpha 2- and leucocyte beta 2-adrenoceptors in phaeochromocytoma: effect of tumour removal. Valet P, et al. **Eur J Clin Invest** 1988 Oct;18(5):481–5
Serum parathyroid hormone in patients with pheochromocytoma. Broulik PD, et al. **Exp Clin Endocrinol** 1988 Mar;92(3):369–72
Plasma neuropeptide Y concentrations in patients with neuroendocrine tumors. Grouzmann E, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):808–13
Plasma renin activity in phaeochromocytoma: effects of beta-blockade and converting enzyme inhibition. Plouin PF, et al. **J Hypertens** 1988 Jul;6(7):579–85
Plasma catecholamine changes during excision of pheochromocytoma. Newell KA, et al. **Surgery** 1988 Dec; 104(6):1064–73
[Platelet hyperaggregability in a patient with pheochromocytoma] Oka T, et al. **Masui** 1988 Aug; 37(8):993–6 (Eng. Abstr.) **(Jpn)**
[Beta-endorphin in the blood of patients with pheochromocytoma] Lazęcki D, et al. **Kardiol Pol** 1988;31 Suppl 1:2–7 (Eng. Abstr.) **(Pol)**

CHEMICALLY INDUCED

Transplacental induction of peripheral nervous tumor in the Syrian golden hamster by N-nitroso-N-ethylurea. A new animal model for von Recklinghausen's neurofibromatosis. Nakamura T, et al. **Am J Pathol** 1989 Aug;135(2):251–9

COMPLICATIONS

Catecholamine cardiotoxicity in pheochromocytoma [letter] Ganguly PK, et al. **Am Heart J** 1989 Jun;117(6):1399–400
Pheochromocytoma: catecholamine-mediated electrocardiographic changes mimicking ischemia. Haas GJ, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1363–5
Phaeochromocytoma and mitral valve replacement. Fenje N, et al. **Can J Anaesth** 1989 Mar;36(2):198–9
Pheochromocytoma. Ram CV. **Cardiol Clin** 1988 Nov; 6(4):517–35 (70 ref.)
Catecholamine heart muscle disease in pheochromocytoma. Balažovjech I, et al. **Exp Clin Endocrinol** 1989 Apr; 93(1):29–36
Bilateral pheochromocytoma with papilloedema. Pushpakumari P, et al. **J Assoc Physicians India** 1988 Dec; 36(12):738–9
Presentation of undiagnosed pheochromocytoma during coronary artery bypass surgery. Dunn EJ, et al. **J Cardiovasc Surg (Torino)** 1989 Mar–Apr;30(2):284–7 (18 ref.)
Pheochromocytoma and sudden death as a result of cerebral infarction in Turner's syndrome: report of a case. Knisely AS, et al. **J Forensic Sci** 1988 Nov;33(6):1497–502
Phaeochromocytoma presenting with cardiogenic shock and acute renal failure. Raman GV. **J Hum Hypertens** 1987 Dec;1(3):237–8
Mental symptoms presenting in phaeochromocytoma: a case report and review. Medvei VC, et al. **J R Soc Med** 1988 Sep;81(9):550–1 (14 ref.)
Pheochromocytoma and ischemic enterocolitis. Zacher LL, et al. **S D J Med** 1989 Mar;42(3):11–4
Pheochromocytoma presenting as shock and followed by spontaneous remission. Terai A, et al. **Urol Int** 1989; 44(1):58–60
[Spontaneous retroperitoneal hemorrhagic rupture of pheochromocytoma. A rapidly lethal case (letter)] Vermeulen C, et al. **Ann Med Interne (Paris)** 1989; 140(4):327–30 (36 ref.) **(Fre)**
[Hypertrophic cardiomyopathy secondary to pheochromocytoma and surgical indications] Malingue S, et al. **Can Anesthesiol** 1988 Dec;36(8):651–3 **(Fre)**
[Cardiogenic shock caused by pheochromocytoma (letter)] Fosse JP, et al. **Presse Med** 1989 Jan 28;18(3):130–1 **(Fre)**
[Apropos of pheochromocytoma and pulmonary edema (letter)] Weber M, et al. **Presse Med** 1989 Jul 1; 18(26):1299–300 **(Fre)**
[A marked Hegglin syndrome in pheochromocytoma] Nakamura T, et al. **Kokyu To Junkan** 1989 Mar; 37(3):347–50 (Eng. Abstr.) **(Jpn)**
[Pheochromocytoma complicated by hypercalcemia and hyperreninemia in a patient with von Recklinghausen neurofibromatosis developed hypertensive crisis in the third trimester of pregnancy] Monno S. **Nippon Naika Gakkai Zasshi** 1988 Dec;77(12):1879–83 **(Jpn)**
[Cardiac rhythm disorders in patients with pheochromocytoma] Dąbrowska B, et al. **Kardiol Pol** 1988; 31 Suppl 2:12–20 (Eng. Abstr.) **(Pol)**
[Endocrine arterial hypertension. Pheochromocytoma] Telles EC, et al. **Acta Med Port** 1989 Jan–Feb;2(1):41–5 (14 ref.) (Eng. Abstr.) **(Por)**
[A syndrome of arterial hypertension caused by a combination of 2 adrenal gland tumors] Komissarenko IV, et al. **Klin Khir** 1988;(12):55–6 **(Rus)**
[A case of an unusual course of catecholamine crisis in a female patient with a pheochromocytoma] Medvedev VM, et al. **Ter Arkh** 1988;60(11):131–2 **(Rus)**
[Pheochromocytoma in neuropsychiatric practice] Knežević A, et al. **Med Pregl** 1988;41(9–10):391–2 (Eng. Abstr.) **(Scr)**
[Asymmetric septal myocardial hypertrophy associated with pheochromocytoma: reversibility of cardiopathy after extirpation of chromaffin tumor] Miranda Carús ME, et al. **Med Clin (Barc)** 1989 May 13;92(18):701–4 (Eng. Abstr.) **(Spa)**
[18-year-old woman with dilated cardiomyopathy (clinical conference)] Sagristà J, et al. **Med Clin (Barc)** 1989 Mar 18;92(10):388–93 **(Spa)**

DIAGNOSIS

Nine pheochromocytomas in the same patient. Final mapping with ultrasound and angiography. Nolsøe CP, et al. **Acta Radiol** 1988 Sep–Oct;29(5):515–8
Pheochromocytoma. Girard M, et al. **Am Fam Physician** 1989 May;39(5):139–42
Pitfalls in the diagnosis of pheochromocytoma. Connor CS, et al. **Am Surg** 1988 Oct;54(10):634–6
Improved safety of glucagon testing for pheochromocytoma by prior alpha-receptor blockade. A controlled trial in a patient with a mixed ganglioneuroma/pheochromocytoma. Elliott WJ, et al. **Arch Intern Med** 1989 Jan;149(1):214–6
Extra-adrenal phaeochromocytoma: report of three interesting cases. Frewin DB, et al. **Aust N Z J Surg** 1989 Sep;59(9):691–5
Phaeochromocytoma diagnosed during percutaneous nephrolithotripsy. Wedman L, et al. **Br J Urol** 1988 Nov; 62(5):485–6
Coexisting pheochromocytomas and adrenocortical tumour discovered incidentally. Ooi TC, et al. **Can Med Assoc J** 1988 Nov 1;139(9):869–71
Diagnosis, localization, and management of pheochromocytoma. Pitfalls and follow-up in 41 patients. Samaan NA, et al. **Cancer** 1988 Dec 1;62(11):2451–60
Cystic pheochromocytoma—a diagnostic pitfall. Chen WC, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Dec;42(6):487–90
Phaeochromocytomas secreting adrenaline but not noradrenaline do not cause hypertension and require precise adrenaline measurement for diagnosis. Bachmann AW, et al. **Clin Exp Pharmacol Physiol** 1989 Apr; 16(4):275–9
Inadvertent diagnosis of pheochromocytoma after endoscopic premedication. Barancik M. **Dig Dis Sci** 1989 Jan;34(1):136–8
Ultrasound in the detection of adrenal tumours. Päivänsalo M, et al. **Eur J Radiol** 1988 Aug;8(3):183–7
Diagnosis and management of pheochromocytoma. Feldman JM. **Hosp Pract [Off]** 1989 Jan 15;24(1):175–9, 182, 187–9 passim
Iron pyrite and diagnostic confirmation. Kassirer JP, et al. **Hosp Pract [Off]** 1989 May 15;24(5):19, 22, 25
Clonidine suppression test—an evaluation of its diagnostic significance in hypertensive patients. Choudhury R, et al. **Indian Heart J** 1989 May–Jun;41(3):162–7
Pheochromocytoma during pregnancy. Armaroli R, et al. **Ital J Surg Sci** 1989;19(1):75–8
Bladder pheochromocytoma with MR correlation. Warshawsky R, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):714–6
Excessive sweating: a misinterpreted sign of pheochromocytoma [letter] Cignarelli M, et al. **J Endocrinol Invest** 1989 Jan;12(1):75–6
Pentagastrin stimulation of calcitonin in pheochromocytoma does not always indicate multiple endocrine neoplasia type II. Hein MD, et al. **J Endocrinol Invest** 1989 Apr; 12(4):265–7
Biochemical tests for pheochromocytoma: strategies in hypertensive patients. Young MJ, et al. **J Gen Intern Med** 1989 Jul–Aug;4(4):273–6
Localization of pheochromocytoma: MIGB, CT, and MRI correlation. Velchik MG, et al. **J Nucl Med** 1989 Mar; 30(3):328–36
Spontaneous rupture of phaeochromocytoma mimicking leaking aortic aneurysm. Sue-Ling HM, et al. **J R Soc Med** 1989 Jan;82(1):53–4
Bladder pheochromocytoma: evaluation with magnetic resonance imaging. Heyman J, et al. **J Urol** 1989 Jun; 141(6):1424–6
Evaluation of the clonidine-suppression test in the diagnosis of pheochromocytoma. Plewe G, et al. **Klin Wochenschr** 1988 Sep 1;66(17):764–7
Cerebellar tumor causing hypertensive crisis and simulating pheochromocytoma and Cushing's syndrome. Yagil Y, et al. **Mt Sinai J Med (NY)** 1989 Jan;56(1):56–8
Diagnosis of pheochromocytoma [letter] **N Engl J Med** 1988 Nov 24;319(21):1417–8
131-I-meta-iodobenzylguanidine for the diagnosis and treatment of pheochromocytoma. Limone P, et al. **Panminerva Med** 1988 Jul–Sep;30(3):169–72
Preoperative diagnosis and management of pheochromocytoma. Wang LL, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1989; 4(1):48–51
[A clinically unexpected pheochromocytoma] Andrup H. **Ugeskr Laeger** 1988 Oct 17;150(42):2533–4 (Eng. Abstr.) **(Dan)**
[A clinically unexpected pheochromocytoma (letter)] Thorborg JV. **Ugeskr Laeger** 1989 Apr 17;151(16):1003 **(Dan)**
[Cardiac pheochromocytoma. Failure of classic non-invasive diagnostic methods] Haouzi A, et al. **Arch Mal Coeur** 1989 Jan;82(1):97–100 (11 ref.) (Eng. Abstr.) **(Fre)**
[Preoperative diagnosis of suspected pheochromocytoma—retrospective assessment of diagnostic criteria] Schürmeyer T, et al. **Acta Med Austriaca** 1988;15(4):106–8 (Eng. Abstr.) **(Ger)**
[Diagnosis of pheochromocytoma today] Schofer J. **Med Klin** 1988 Dec 9;83(24):841–3, 854 (14 ref.) **(Ger)**
[Type 2b multiple endocrine adenomatosis] Lehnert H, et al. **Schweiz Rundsch Med Prax** 1989 Jun 27;78(26):741–4 (Eng. Abstr.) **(Ger)**

[Pheochromocytoma—a review] Schambach H. **Z Arztl Fortbild (Jena)** 1989;83(10):495–9 (30 ref.) **(Ger)**

[Diagnostic imaging in the evaluation of adrenal masses] Gualdi GF, et al. **Clin Ter** 1988 Feb 15;124(3):233–8 **(Ita)**

[Adrenal tumors discovered incidentally on ultrasonography: three case reports] Honda M, et al. **Hinyokika Kiyo** 1989 Apr;35(4):631–5 (Eng. Abstr.) **(Jpn)**

[Biochemical diagnosis of pheochromocytoma by determining normetanephrine and metanephrine concentrations in single voided urine] Jibiki K, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Aug 20;64(8):707–16 (Eng. Abstr.) **(Jpn)**

[Usefulness of MR imaging and I–131 MIBG scintigraphy for the localization of extra–adrenal pheochromocytoma; a case report] Takada I, et al. **Rinsho Hoshasen** 1988 Sep; 33(9):1051–4 (Eng. Abstr.) **(Jpn)**

[Difficulties in the diagnosis of adrenal pheochromocytoma] Grys I, et al. **Wiad Lek** 1988 Sep 1;41(17):1167–70 (Eng. Abstr.) **(Pol)**

[A case of an atypical course of malignant pheochromocytoma of the adrenal glands] Boldueva SA, et al. **Klin Med (Mosk)** 1989 Mar;67(3):125–7 **(Rus)**

[The adrenomedullary syndrome and its clinical variants] Khavin IB. **Klin Med (Mosk)** 1988 Nov;66(11):35–9 (11 ref.) **(Rus)**

[Malignant pheochromocytoma with multiple thromboembolic manifestations] Bondar' IuS, et al. **Probl Endokrinol (Mosk)** 1988 Sep–Oct;34(5):43–5 **(Rus)**

[The multiple endocrine neoplasm type–IIb syndrome] Kazeev KN, et al. **Probl Endokrinol (Mosk)** 1988 Nov–Dec; 34(6):45–7 **(Rus)**

[Diagnosis and treatment of bladder pheochromocytoma] Pereverzev AS, et al. **Probl Endokrinol (Mosk)** 1989 Jan–Feb;35(1):41–4 **(Rus)**

[Difficulties in the diagnosis of pheochromocytoma in the internal medicine practice] Podzolkov VI, et al. **Ter Arkh** 1988;60(7):133–5 **(Rus)**

[Vesical pheochromocytoma. Report of a new case] Martín–Laborada y Bergasa F, et al. **Actas Urol Esp** 1988 May–Jun;12(3):293–7 (Eng. Abstr.) **(Spa)**

[Type IIa multiple endocrine neoplasia with asymptomatic pheochromocytoma (published erratum appears in Rev Esp Anestesiol Reanim 1989 Mar–Apr;36(2):76)] García Ferrando V, et al. **Rev Esp Anestesiol Reanim** 1988 Nov–Dec;35(6):323–5 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Non–resectable phaeochromocytoma: long term follow–up. Pelegrí A, et al. **J Hum Hypertens** 1989 Apr;3(2):145–7

Antihypertensive efficacy and safety of urapidil, alone or in combination with beta–blockers, in patients with phaeochromocytoma. Miura Y, et al. **J Hypertens Suppl** 1988 Dec;6(2):S59–62

131–I–meta–iodobenzylguanidine for the diagnosis and treatment of pheochromocytoma. Limone P, et al. **Panminerva Med** 1988 Jul–Sep;30(3):169–72

ENZYMOLOGY

Selective effect of nerve growth factor on some Golgi and lysosomal enzyme activities of rat pheochromocytoma (PC12) cells. Rhodes CH, et al. **Arch Biochem Biophys** 1989 Jul;272(1):175–84

The influence of nerve growth factor on the activities of adenylate cyclase and high–affinity GTPase in pheochromocytoma PC12 cell. Golubeva EE, et al. **FEBS Lett** 1989 Apr 24;247(2):232–4

Regulation of protein kinase C by nerve growth factor, epidermal growth factor, and phorbol esters in PC12 pheochromocytoma cells. Heasley LE, et al. **J Biol Chem** 1989 May 25;264(15):8646–52

Identification of a novel proline–directed serine/threonine protein kinase in rat pheochromocytoma. Vulliet PR, et al. **J Biol Chem** 1989 Sep 25;264(27):16292–8

Selective inhibition of nerve growth factor–stimulated protein kinases by K–252a and 5'–S–methyladenosine in PC12 cells. Smith DS, et al. **J Neurochem** 1989 Sep; 53(3):800–6

Detection of nerve growth factor and epidermal growth factor–regulated protein kinases in PC12 cells with synthetic peptide substrates. Heasley LE, et al. **Mol Pharmacol** 1989 Mar;35(3):331–8

EPIDEMIOLOGY

The incidence rate of phaeochromocytoma and Conn's syndrome in Denmark, 1977–1981. Andersen GS, et al. **J Hum Hypertens** 1988 Oct;2(3):187–9

GENETICS

Cytogenetic studies on three pheochromocytomas derived from patients with von Hippel–Lindau syndrome. Kiechle–Schwarz M, et al. **Hum Genet** 1989 May; 82(2):127–30

Loss of heterozygosity on chromosomes 1p and 11p in sporadic pheochromocytoma. Tsutsumi M, et al. **J Natl Cancer Inst** 1989 Mar 1;81(5):367–70

IMMUNOLOGY

Monoclonal antibodies against the P2 protein of peripheral myelin and d18 protein of PC 12 cells bind to antigen–presenting cells and inhibit T–cell activation. Dwyer DS, et al. **Ann N Y Acad Sci** 1988;540:452–4

METABOLISM

Voltage–operated calcium–channel subtypes in human neuroblastoma and rat pheochromocytoma cells. Sher E, et al. **Ann N Y Acad Sci** 1989;560:249–50 (7 ref.)

The glucose polymer of PC12 cells is susceptible to trypsinization. Rasilo ML, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):1–6

Inhibitors of membrane transport system for organic anions block fura–2 excretion from PC12 and N2A cells. Di Virgilio F, et al. **Biochem J** 1988 Dec 15;256(3):959–63

Accumulation of a globo–series glycolipid having Gal alpha 1–3Gal in PC12h pheochromocytoma cells. Ariga T, et al. **Biochemistry** 1988 Jul 12;27(14):5335–40

Phaeochromocytoma with associated somatostatin production. Morice AH, et al. **BMJ** 1989 May 20; 298(6684):1358–9

Phaeochromocytomas and somatostatin production [letter] Weinkove C. **BMJ** 1989 Jun 17;298(6688):1645

PC12 phaeochromocytoma cells contain an atypical muscarinic receptor binding site. Michel AD, et al. **Br J Pharmacol** 1989 Jul;97(3):914–20

Interaction of noradrenaline and dopamine in patients with essential hypertension or with pheochromocytoma. Yoshimura M, et al. **Clin Exp Hypertens [A]** 1989;11 Suppl 1:397–402

Expression of (+)–3–PPP binding sites in the PC12 pheochromocytoma cell line. Yang ZW, et al. **Eur J Pharmacol** 1989 May 30;164(3):607–10

Adenosine binding sites of rat pheochromocytoma PC 12 cell membranes: partial characterization and solubilization. Nakata H, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):457–60

Accumulation of unique globo–series glycolipids in PC 12h pheochromocytoma cells. Ariga T, et al. **J Biol Chem** 1989 Jan 25;264(3):1516–21

Chondroitin sulfate and heparan sulfate proteoglycans of PC12 pheochromocytoma cells. Gowda DC, et al. **J Biol Chem** 1989 Jul 5;264(19):11436–43

Functional atrial natriuretic peptide receptor in human adrenal tumor. Shionoiri H, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 6:S9–12

Pro–opiomelanocortin gene expression in human phaeochromocytomas. de Keyzer Y, et al. **J Mol Endocrinol** 1989 May;2(3):175–81

Characterization of insulin–like growth factor–I receptors in PC12 pheochromocytoma cells and bovine adrenal medulla. Dahmer MK, et al. **J Neurochem** 1989 Oct; 53(4):1036–42

Periodate–modified gangliosides enhance surface binding of tetanus toxin to PC12 pheochromocytoma cells. Nathan A, et al. **J Neurochem** 1989 Jul;53(1):88–94

Nerve growth factor potentiates the hormone–stimulated intracellular accumulation of inositol phosphates and Ca2+ in rat PC12 pheochromocytoma cells: comparison with the effect of epidermal growth factor. van Calker D, et al. **J Neurochem** 1989 Jan;52(1):38–45

Effect of nerve growth factor on the synthesis of amino acids in PC12 cells. Zielke HR, et al. **J Neurosci Res** 1989 Apr; 22(4):418–24

Labetalol reduces iodine–131 MIBG uptake by pheochromocytoma and normal tissues. Khafagi FA, et al. **J Nucl Med** 1989 Apr;30(4):481–9

Catecholamine metabolism in pheochromocytoma and normal adrenal medullae. Nakada T, et al. **J Urol** 1988 Dec;140(6):1348–51

Inhibition of biopterin synthesis and DOPA production in PC–12 pheochromocytoma cells induced by 6–aminonicotinamide. Jung W, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Apr; 339(4):424–32

Identification of 3H–bradykinin binding sites in PC–12 cells and brain. Kozlowski MR, et al. **Neuropeptides** 1988 Nov–Dec;12(4):207–11

Uptake of heterocyclic amines, Trp–P–1 and Trp–P–2, into clonal rat pheochromocytoma PC12h cells by dopamine uptake system. Naoi M, et al. **Neurosci Lett** 1989 May 8; 99(3):317–22

Synthesis of alpha– and beta–calcitonin gene–related peptide by a human pheochromocytoma. Conlon JM, et al. **Peptides** 1989 Mar–Apr;10(2):327–31

Nerve growth factor stimulates the hydrolysis of glycosylphosphatidylinositol in PC–12 cells: a mechanism of protein kinase C regulation. Chan BL, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1756–60

A novel growth factor sensitive protein kinase in pheochromocytoma. Vulliet PR, et al. **Proc West Pharmacol Soc** 1988;31:255–8

[Value of the study of circulating adrenergic receptors in the diagnosis and surveillance after surgery of pheochromocytoma] Valet P, et al. **Arch Mal Coeur** 1988 Jun;81 Spec No:109–12 (Eng. Abstr.) **(Fre)**

[Nerve growth factor induces rapid redistribution of f–actin in pheochromocytoma PC12 cells] Paves KhKh, et al. **Dokl Akad Nauk SSSR** 1988;303(5):1265–7 **(Rus)**

PATHOLOGY

Clinicopathological analysis of phaeochromocytoma. Ihász M, et al. **Acta Chir Hung** 1988;29(3):273–86

Morphology of the adrenal medulla indicating multiple neuroectodermal abnormalities in pheochromocytoma patients. Jansson S, et al. **Acta Med Austriaca** 1988; 15(4):99–100

Coexistence of bilateral adrenocortical adenomas and right sided adrenal pheochromocytoma. Koršić M, et al. **Acta Med Iugosl** 1988;42(5):407–18

Malignant paraganglioma of the organ of Zuckerkandl. Initially diagnosed as renal cell carcinoma by biopsy of a right humeral fracture lesion. Hasegawa G, et al. **Acta Pathol Jpn** 1989 Apr;39(4):274–80

Regulation of differentiation of PC12 cells by nerve growth factor. Severin ES, et al. **Adv Enzyme Regul** 1988;27:357–70

Cardiomyopathy in a rat model of pheochromocytoma. Morphological and functional alterations. Rosenbaum JS, et al. **Am J Cardiovasc Pathol** 1988;1(3):389–99

Eosinophilic globules in pheochromocytoma of the adrenal medulla. A histochemical, immunohistochemical and ultrastructural study. Kawai K, et al. **APMIS** 1988 Oct; 96(10):911–6

Invasion of the inferior vena cava in malignant phaeochromocytoma. Fisher EW, et al. **Br J Urol** 1988 Sep;62(3):272–3

Concomitant occurrence of an adrenal ganglioneuroma and a contralateral pheochromocytoma in a patient with von Recklinghausen's neurofibromatosis. An immunocytochemical study. Jansson S, et al. **Cancer** 1989 Jan 15;63(2):324–9

Pheochromocytoma of the urinary bladder—a case report. Liu SM, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Dec; 42(6):491–4

Fine–needle aspiration cytology of pheochromocytoma–ganglioneuroma of the organ of Zuckerkandl. Tanaka T, et al. **Diagn Cytopathol** 1989; 5(1):64–8

Modulation of growth factor induced fiber outgrowth in rat pheochromocytoma (PC12) cells by a fibronectin receptor antibody. Schwarz MA, et al. **J Cell Physiol** 1989 Jan; 138(1):121–8

Extra–adrenal pheochromocytoma: an unusual location. Hartman GE, et al. **J Pediatr Surg** 1988 Nov;23(11):1045–7

A forme fruste of von Hippel–Lindau disease: a combination of adrenal pheochromocytoma and ipsilateral renal cell carcinoma—a case report. Horbach JM, et al. **Surgery** 1989 Mar;105(3):436–41 (27 ref.)

An extra–adrenal pheochromocytoma with spontaneous remission and recurrence: report of a case. Chang JT, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Dec;87(12):1224–8

Pheochromocytoma combined with malignant schwannoma: unusual neoplasm of the adrenal medulla. Miettinen M, et al. **Ultrastruct Pathol** 1988 Sep–Oct;12(5):513–27

[Malignant pheochromocytoma of both adrenals combined with sympathetic nervous system tumors of the small intestine] Iakimov A, et al. **Khirurgiia (Sofiia)** 1988; 41(6):49–53 (Eng. Abstr.) **(Bul)**

[A case of an atypical course in pheochromocytoma] Panaiotov B, et al. **Vutr Boles** 1988;27(5):85–7 (Eng. Abstr.) **(Bul)**

[Pheochromocytoma and adrenal gland hyperplasia in a remaining atrophic kidney] Winter P, et al. **Urologe [A]** 1989 Jan;28(1):54–7 (Eng. Abstr.) **(Ger)**

[A case of cystic pheochromocytoma] Kojima Y, et al. **Hinyokika Kiyo** 1988 Jul;34(7):1201–5 (20 ref.) (Eng. Abstr.) **(Jpn)**

[Aspiration puncture biopsy in the preoperative diagnosis of adrenal tumors] Smol'aninova NV, et al. **Khirurgiia (Mosk)** 1989 May;(5):94–7 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

QRS amplitudes, QTc intervals and ECG abnormalities in pheochromocytoma patients before, during and after treatment. Stenström G, et al. **Acta Med Scand** 1988; 224(3):231–5

Doxazosin: a newly developed, selective alpha 1–inhibitor in the management of patients with pheochromocytoma. Miura Y, et al. **Am Heart J** 1988 Dec;116(6 Pt 2):1785–9

Pheochromocytoma presenting as shock. Bergland BE. **Am J Emerg Med** 1989 Jan;7(1):44–8 (72 ref.)

Are undifferentiated PC12 rat pheochromocytoma cells electrically excitable? Janigro D, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):810–4

Relations between cell volume control, microfilaments and microtubules networks in T2 and PC12 cultured cells. Cornet M, et al. **J Physiol (Paris)** 1988;83(1):43–9

Periodic fluctuation of blood pressure and its management in a patient with pheochromocytoma. Case report and review of the literature. Oishi S, et al. **Jpn Heart J** 1988 May;29(3):389–99 (20 ref.)

Hemodynamic observations during paroxysmal hypertension in a pregnancy with pheochromocytoma. Combs CA, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):439–41

[Effect of the hormonal activity of pheochromocytoma on ECG changes during ventricular repolarization] Dąbrowska B, et al. **Kardiol Pol** 1988;31 Suppl 2:21–8 (Eng. Abstr.) **(Pol)**

[Review of morphologic changes in electrocardiograms of 70 patients with pheochromocytoma] Dąbrowska B, et al. **Kardiol Pol** 1988;31 Suppl 2:1–11 (Eng. Abstr.) **(Pol)**

PSYCHOLOGY

Mental symptoms presenting in pheochrompcytoma [letter] Esman AH. **J R Soc Med** 1989 Feb;82(2):124

RADIOGRAPHY

CT of adrenal tumors: frequency and clinical significance of low-attenuation lesions. Miyake H, et al. **AJR Am J Roentgenol** 1989 May;152(5):1005-7

Radiological seminar CCXLXII: CT of adrenal gland pheochromocytoma. Morano JU, et al. **J Miss State Med Assoc** 1989 Jul;30(7):211-3

[Pheochromocytomas with extra-adrenal location] Pacho R, et al. **Pol Przegl Radiol (Warszawa)** 1987 Sep-Oct; 51(5):241-4 (Eng. Abstr.) **(Pol)**

RADIONUCLIDE IMAGING

Gastrointestinal iodine-131-meta-iodobenzylguanidine activity. Geatti O, et al. **Am J Physiol Imaging** 1988; 3(4):188-91

Imaging of adrenal medulla with I-131-mIBG. Clinical experience in 208 cases. Zhu RS, et al. **Chin Med J [Engl]** 1988 Jul;101(7):513-6

A false positive I-131 MIBG due to dilated renal pelvis: a case report. Bahar RH, et al. **Clin Nucl Med** 1988 Dec; 13(12):900-2

Pheochromocytoma in the organ of Zukerkandl: I-131 MIBG scintigraphic localization. el-Desouki M, et al. **Clin Nucl Med** 1989 Jun;14(6):446-8

Methodology and dosimetry in adrenal medullary imaging with iodine-131 MIBG. Lindberg S, et al. **J Nucl Med** 1988 Oct;29(10):1638-43

Alterations of iodine-131 MIBG biodistribution in an anephric patient: comparison to normal and impaired renal function. Tobes MC, et al. **J Nucl Med** 1989 Sep; 30(9):1476-82

Role of 131I-metaiodobenzylguanidine in the localization of suspected phaeochromocytomas. Khafagi FA, et al. **Med J Aust** 1989 Jun 5;150(11):639-44

[Intraoperative measurement of radiation dosage following 123-iodine meta-iodobenzylguanidine scintigraphy in surgical therapy of metastatic pheochromocytoma] von Bülow M, et al. **Acta Med Austriaca** 1988;15(4):115-6 (Eng. Abstr.) **(Ger)**

[Scintigraphy of the adrenergic nervous system] Dabasi G, et al. **Orv Hetil** 1989 Feb 12;130(7):327-31 (Eng. Abstr.) **(Hun)**

[A comparison of scintigraphy with radioiodinated MIBG and CT in localizing pheochromocytomas] Rufini V, et al. **Radiol Med (Torino)** 1988 Nov;76(5):466-70 (Eng. Abstr.) **(Ita)**

[Gammagraphy with 123I-meta-iodobenzylguanidine in the diagnosis of pheochromocytoma] Caballero O, et al. **Med Clin (Barc)** 1989 Apr 15;92(14):526-9 (Eng. Abstr.) **(Spa)**

RADIOTHERAPY

Radionuclide therapy of pheochromocytomas and neuroblastomas using iodine-131 metaiodobenzylguanidine (MIBG). Brendel AJ, et al. **Clin Nucl Med** 1989 Jan; 14(1):19-21

Modification by nifedipine of 131I-meta-iodobenzylguanidine kinetics in malignant phaeochromocytoma. Blake GM, et al. **Eur J Nucl Med** 1988;14(7-8):345-8

Calculating radiation absorbed dose for pheochromocytoma tumors in 131-I MIBG therapy. Koral KF, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):211-8

SECONDARY

Computed tomography in primary and secondary adrenal tumours. Päivänsalo M, et al. **Acta Radiol** 1988 Sep-Oct; 29(5):519-22

SECRETION

Effect of atrial natriuretic peptide on catecholamine release from human pheochromocytoma. Nakamaru M, et al. **Acta Endocrinol (Copenh)** 1989 Jan;120(1):107-12

Adrenal pheochromocytoma-ganglioneuroma producing catecholamines and various neuropeptides. Salmi J, et al. **Acta Med Scand** 1988;224(4):403-8

PC12 pheochromocytoma and sympathetic nervous system derived trophic factors augment growth of neuroblastoma. Chelmicka-Schorr E, et al. **Eur J Cancer Clin Oncol** 1989 Jul;25(7):1057-9

Cyclic guanosine 3',5' monophosphate mediates the inhibitory effect of atrial natriuretic factor in adrenergic, neuronal pheochromocytoma cells. Drewett JG, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):428-32

Cushing's syndrome due to ectopic ACTH secretion by bilateral pheochromocytomas in multiple endocrine neoplasia type 2A [letter] Mendonça BB, et al. **N Engl J Med** 1988 Dec 15;319(24):1610-1

SURGERY

Phaeochromocytoma with asthma. Hargreaves DM. **Anaesth Intensive Care** 1989 Feb;17(1):90-3

Nifedipine and surgical removal of phaeochromocytoma. Chari P, et al. **Anaesthesia** 1988 Sep;43(9):791-4

Angiotensin II in the management of excision of phaeochromocytoma. Sommerville KJ, et al. **Anaesthesia** 1989 Feb;44(2):128-9

Atracurium and pheochromocytoma: a report of three cases. Amaranath L, et al. **Anesth Analg** 1988 Nov;67(11):1127-30

Use of esmolol in the intraoperative management of pheochromocytoma. Nicholas E, et al. **Anesth Analg** 1988 Nov;67(11):1114-7

Sevoflurane anesthesia with adenosine triphosphate for resection of pheochromocytoma. Doi M, et al. **Anesthesiology** 1989 Feb;70(2):360-3

Esmolol use during resection of pheochromocytoma: report of three cases. Zakowski M, et al. **Anesthesiology** 1989 May; 70(5):875-7

Pheochromocytoma. Lateral versus anterior operative approach. Irvin GL 3d, et al. **Ann Surg** 1989 Jun; 209(6):774-8

Total scapulectomy for metastatic pheochromocytoma of the scapula. Case report. Momose T, et al. **Arch Orthop Trauma Surg** 1988;107(6):381-4

Phaeochromocytoma. Gough IR, et al. **Aust N Z J Surg** 1988 May;58(5):365-8

Caesarean section at 27 weeks gestation with removal of phaeochromocytoma. Hopkins PM, et al. **Br J Anaesth** 1989 Jul;63(1):121-4

Natural killer cell activity in a patient undergoing resection of phaeochromocytoma. Tønnesen E, et al. **Br J Anaesth** 1989 Mar;62(3):327-30

Phaeochromocytoma [letter] Lang SA, et al. **Can J Anaesth** 1989 Mar;36(2):246-7

Anaesthesia for phaeochromocytoma. Pullerits J, et al. **Can J Anaesth** 1988 Sep;35(5):526-34 (21 ref.)

Cardiomyopathy in phaeochromocytoma: a case report. Villani A, et al. **Eur J Anaesthesiol** 1989 May;6(3):233-6

Recent advances in the surgical management of pheochromocytoma. Hoover EL, et al. **J Natl Med Assoc** 1989 Jul;81(7):777-9 (9 ref.)

Ruptured phaeochromocytoma: a case report. Forty J, et al. **J R Coll Surg Edinb** 1989 Apr;34(2):109-10

Surgery in patients with unsuspected pheochromocytomas. Feldman JM. **J Surg Oncol** 1989 May;41(1):65-9

Simultaneous C-section and removal of pheochromocytoma at term under general anesthesia. Khan AK, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun;26(2):223-6

Anesthesia in adrenal surgery. Jovenich JJ. **Urol Clin North Am** 1989 Aug;16(3):583-7 (55 ref.)

Preoperative and surgical management of pheochromocytoma. Malone MJ, et al. **Urol Clin North Am** 1989 Aug;16(3):567-82 (38 ref.)

Adenosine: a new antihypertensive agent during pheochromocytoma removal. Gröndal S, et al. **World J Surg** 1988 Oct;12(5):581-5

Multiple neuroectodermal abnormalities in pheochromocytoma patients. Jansson S, et al. **World J Surg** 1988 Oct;12(5):710-7

[Anesthesia for resection of pheochromocytoma] Nielsen HK, et al. **Ugeskr Laeger** 1988 Oct 10;150(41):2447-51 (Eng. Abstr.) **(Dan)**

[Anesthesia and resuscitation in surgery of pheochromocytoma] Cousin MT. **Cah Anesthesiol** 1989 May;37(3):213-20 (45 ref.) **(Fre)**

[Surgical therapy of sporadic and familial pheochromocytoma] Dralle H, et al. **Acta Med Austriaca** 1988;15(4):108-10 (Eng. Abstr.) **(Ger)**

[Treatment of pheochromocytoma: changes in diagnosis and therapy] Hauss J, et al. **Acta Med Austriaca** 1988;15(4):95-8 (Eng. Abstr.) **(Ger)**

[Behavior of hemodynamics and catecholamines in patients undergoing excision of pheochromocytoma] Huemer G, et al. **Acta Med Austriaca** 1988;15(4):101-3 (Eng. Abstr.) **(Ger)**

[Falipamil for decreasing intraoperative heart rate in pheochromocytoma] Huemer G, et al. **Acta Med Austriaca** 1988;15(4):103-5 (Eng. Abstr.) **(Ger)**

[Problems and results of reinterventions on the adrenal gland] Menzel J, et al. **Acta Med Austriaca** 1988;15(4):112-5 (Eng. Abstr.) **(Ger)**

[Subtotal adrenalectomy versus autotransplantation of the adrenal cortex--an alternative procedure in bilateral adrenalectomy in MEN II?] Klempa I, et al. **Chirurg** 1989 Apr;60(4):266-71; discussion 271-2 (Eng. Abstr.) **(Ger)**

[Surgery of retroperitoneal pheochromocytoma] Duff C, et al. **Helv Chir Acta** 1989 Jun;56(1-2):151-3 (Eng. Abstr.) **(Ger)**

[Standard diagnosis and therapy of pheochromocytoma in children] Meier H, et al. **Z Kinderchir** 1989 Jun; 44(3):148-52 (Eng. Abstr.) **(Ger)**

[Anesthesia in pheochromocytoma] Enoksen A, et al. **Tidsskr Nor Laegeforen** 1989 Apr 30;109(12):1301-2 (Eng. Abstr.) **(Nor)**

[Successful treatment of pheochromocytoma] Chochua TI, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):136-7 **(Rus)**

[A case of pheochromocytoma in a child] Paniushkin AP, et al. **Klin Khir** 1988;(6):72 **(Rus)**

THERAPY

Use of magnesium sulphate in the anaesthetic management of phaeochromocytoma: a review of 17 anaesthetics. James MF. **Br J Anaesth** 1989 Jun;62(6):616-23

Phaeochromocytoma in pregnancy. Five cases and a review of the literature. Harper MA, et al. **Br J Obstet Gynaecol** 1989 May;96(5):594-606 (55 ref.)

Management of pheochromocytoma. Shapiro B, et al. **Endocrinol Metab Clin North Am** 1989 Jun;18(2):443-81 (192 ref.)

Metastatic pheochromocytoma of the cervical spine. Olson JJ, et al. **Spine** 1989 Mar;14(3):349-51

[Treatment of malignant pheochromocytoma by 131-I-metaiodobenzylguanidine] Charbonnel B, et al. **Ann Endocrinol (Paris)** 1988;49(4-5):344-7 (Eng. Abstr.) **(Fre)**

ULTRASTRUCTURE

Pheochromocytoma of the urinary bladder. Report of 2 cases with ultrastructural and immunohistochemical analyses. Salo JO, et al. **Eur Urol** 1989;16(3):237-9

Mixed pheochromocytoma and ganglioneuroma of the adrenal medulla: a case report with electron microscopic examination. Balázs M. **Hum Pathol** 1988 Nov; 19(11):1352-5

URINE

Disparate urinary catecholamine patterns in secondary hypertension due to unique sequential development of pheochromocytoma and neuroblastoma. Amodeo C, et al. **Arch Pathol Lab Med** 1989 Jul;113(7):800-2

VETERINARY

What is your diagnosis? Hepatomegaly and a retroperitoneal mass adjacent to or involving the left kidney. Carpenter JL, et al. **J Am Vet Med Assoc** 1988 Dec 15;193(12):1571-2

PHEOPHYTINS see under **CHLOROPHYLL**

PHERESIS see **BLOOD COMPONENT REMOVAL**

PHEROMONES

Biologically significant conformation of the Saccharomyces cerevisiae alpha-factor. Naider F, et al. **Biopolymers** 1989 Jan;28(1):487-97

Structure of Saccharomyces cerevisiae mating hormone a-factor. Identification of S-farnesyl cysteine as a structural component. Anderegg RJ, et al. **J Biol Chem** 1988 Dec 5;263(34):18236-40

Primary structure of the mating pheromone Er-1 of the ciliate Euplotes raikovi. Raffioni S, et al. **J Biol Chem** 1988 Dec 5;263(34):18152-9

Effect of cyproterone acetate on the pregnancy-blocking ability of male mice and the possible chemical nature of the pheromone [published erratum appears in J Reprod Fertil 1989 Jul;86(2):inside front cover] Rajendren G, et al. **J Reprod Fertil** 1988 Sep;84(1):387-92

[Incidence of dominant lethals in the progeny of young male house mice (Mus musculus L.) after exposure to excretory products of mature males of the same species] Daev EV, et al. **Genetika** 1988 Nov;24(11):2015-21 (Eng. Abstr.) **(Rus)**

ANALYSIS

Aggregation pheromones of the bont tick Amblyomma hebraeum: identification of candidates for bioassay. Apps PJ, et al. **Onderstepoort J Vet Res** 1988 Sep;55(3):135-7

Mammalian pheromone studies, VII. Identification of thiazole derivatives in the preorbital gland secretions of the grey duiker, Sylvicapra grimmia, and the red duiker, Cephalophus natalensis. Burger BV, et al. **Z Naturforsch [C]** 1988 Sep-Oct;43(9-10):731-6

[Improving the method of selection and analysis of air samples to determine levels of denacyl and acenol] L'gova IP, et al. **Gig Tr Prof Zabol** 1988 Sep;(9):43-4 **(Rus)**

BIOSYNTHESIS

Effects of the posterior hypophysis and ovary on pheromonal production in normal females and in the reproductive behavior of male rats treated with D,L-propranolol. Zipper J, et al. **Int J Fertil** 1988 Nov-Dec;33(6):426-31

The yeast STE12 protein binds to the DNA sequence mediating pheromone induction. Dolan JW, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5703-7

CHEMICAL SYNTHESIS

Total synthesis of the lipopeptide a-mating factor of Saccharomyces cerevisiae. Xue CB, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):253-7

Synthetic peptide analogs to barnacle settlement pheromone. Tegtmeyer K, et al. **Peptides** 1988 Nov-Dec;9(6):1403-6

GENETICS

Constitutive mutants in the yeast pheromone response: ordered function of the gene products. Blinder D, et al. **Cell** 1989 Feb 10;56(3):479-86

A putative protein kinase overcomes pheromone-induced arrest of cell cycling in S. cerevisiae. Courchesne WE, et al. **Cell** 1989 Sep 22;58(6):1107-19

Isolation and characterization of two genes encoding yeast mating pheromone signaling elements: CDC72 and CDC73. Reed SI, et al. **Cold Spring Harb Symp Quant Biol** 1988; 53 Pt 2:621-7

An alpha-specific gene, SAG1 is required for sexual agglutination in Saccharomyces cerevisiae. Doi S, et al. **Curr Genet** 1989 Jun;15(6):393-8

Structure and expression of a Drosophila male accessory gland gene whose product resembles a peptide pheromone precursor. Monsma SA, et al. **Genes Dev** 1988 Sep;

2(9):1063–73
Pheromones and pheromone receptors are the primary determinants of mating specificity in the yeast Saccharomyces cerevisiae. Bender A, et al. **Genetics** 1989 Mar;121(3):463–76
Cloning and expression of genes encoding pheromone-inducible antigens of Enterococcus (Streptococcus) faecalis. Christie PJ, et al. **J Bacteriol** 1988 Nov;170(11):5161–8
Structure of cCF10, a peptide sex pheromone which induces conjugative transfer of the Streptococcus faecalis tetracycline resistance plasmid, pCF10. Mori M, et al. **J Biol Chem** 1988 Oct 5;263(28):14574–8
Yeast pheromone response pathway: characterization of a suppressor that restores mating to receptorless mutants. Clark KL, et al. **Mol Cell Biol** 1989 Jun;9(6):2682–94
Self from nonself discrimination in single-celled eukaryotes. Luporini P, et al. **Parassitologia** 1986 Aug–Dec; 28(2–3):123–30
Sex pheromones and plasmid transfer in Enterococcus faecalis. Clewell DB, et al. **Plasmid** 1989 May;21(3):175–84 (54 ref.)

ISOLATION & PURIFICATION

Purification, characterization, and amino acid sequence of the mating pheromone Er-10 of the ciliate Euplotes raikovi. Raffioni S, et al. **Biochemistry** 1989 Jun 13;28(12):5250–6
Caudoxirene, the spermatozoid-releasing and attracting factor in the marine brown alga Perithalia caudata (Phaeophyceae, Sporochnales). Müller DG, et al. **Biol Chem Hoppe Seyler** 1988 Aug;369(8):655–9
Sex pheromones in snakes. Mason RT, et al. **Science** 1989 Jul 21;245(4915):290–3

METABOLISM

Identification of aggregation substances of Enterococcus faecalis cells after induction by sex pheromones. An immunological and ultrastructural investigation. Galli D, et al. **Arch Microbiol** 1989;151(6):486–90
Localization of aggregation substances of Enterococcus faecalis after induction by sex pheromones. An ultrastructural comparison using immuno labelling, transmission and high resolution scanning electron microscopic techniques. Wanner G, et al. **Arch Microbiol** 1989;151(6):491–7
Interaction of the Saccharomyces cerevisiae alpha-factor with phospholipid vesicles as revealed by proton and phosphorus NMR. Jelicks LA, et al. **Biochemistry** 1989 May 16;28(10):4233–40
Peptide analogues compete with the binding of alpha-factor to its receptor in Saccharomyces cerevisiae. Raths SK, et al. **J Biol Chem** 1988 Nov 25;263(33):17333–41
A pheromone-degrading aldehyde oxidase in the antennae of the moth Manduca sexta. Rybczynski R, et al. **J Neurosci** 1989 Apr;9(4):1341–53
Cyclic AMP mediation of the hormonal stimulation of 14C-acetate incorporation by Heliothis armigera pheromone glands in vitro. Rafaeli A, et al. **Mol Cell Endocrinol** 1989 Aug;65(1–2):43–8

PHARMACOLOGY

Characterization of the human neutrophil response to sex pheromones from Streptococcus faecalis. Ember JA, et al. **Am J Pathol** 1989 Apr;134(4):797–805
Inhibition of cyclic AMP efflux by insect pheromones and fatty acids. Kanter JR, et al. **FEBS Lett** 1989 Feb 13; 244(1):149–53
Physiology and morphology of projection neurons in the antennal lobe of the male moth Manduca sexta. Kanzaki R, et al. **J Comp Physiol [A]** 1989 Aug;165(4):427–53
Adaptation of antennal neurons in moths is associated with cessation of pheromone-mediated upwind flight. Baker TC, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9826–30
[Corticosteroid response and indolamine content of the mouse brain under the action of a pheromone, disrupting spermatogenesis] Pavlova MB, et al. **Fiziol Zh SSSR** 1989 Jan;75(1):138–42 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

The design of an olfactometer and a method for quantitative stud on the effect of odours on insect behaviour. Lux S. **Acta Physiol Pol** 1988 Sep–Dec;39(5–6):504–12
The design of a phonoactograph suitable for study on the influence of pheromones on insect mobility. Lux S. **Acta Physiol Pol** 1988 Sep–Dec;39(5–6):513–6
Male-related chemical cues promote sexual receptivity in the female musk shrew. Rissman EF. **Behav Neural Biol** 1989 Jan;51(1):114–20
Biological correlates of behavioral development in the ant, Novomessor albisetosus (Mayr). McDonald P, et al. **Behav Neurosci** 1988 Dec;102(6):986–91
F prostaglandins function as potent olfactory stimulants that comprise the postovulatory female sex pheromone in goldfish. Sorensen PW, et al. **Biol Reprod** 1988 Dec; 39(5):1039–50
Recovery from pheromone-induced arrest of the yeast cell cycle: alpha-factor binding and mutants that show pheromone-independent arrest of cell division. Blinder D, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:605–10
Response of yeast alpha cells to a-factor pheromone: topology of the receptor and identification of a component of the response pathway. Clark KL, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:611–20
Hormone-induced expression of the CHS1 gene from Saccharomyces cerevisiae. Appeltauer U, et al. **Eur J Biochem** 1989 Apr 15;181(1):243–7
Direct evidence that 17 alpha,20 beta-dihydroxy-4-pregnen-3-one functions as a goldfish primer pheromone: preovulatory release is closely associated with male endocrine responses. Stacey NE, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):62–70
Effect of axenic larvae on the oviposition site selection by Aedes atropalpus. Maire A. **J Am Mosq Control Assoc** 1985 Sep;1(3):320–3
The contribution of olfactory receptor neurons to the perception of pheromone component ratios in male redbanded leafroller moths. Akers RP, et al. **J Comp Physiol [A]** 1988;163(5):641–50
Neonate plains garter snakes (Thamnophis radix) are attracted to conspecific skin extracts. Graves BM, et al. **J Comp Psychol** 1988 Sep;102(3):251–3
Measured behavioural latency in response to sex-pheromone loss in the large silk moth Antheraea polyphemus. Baker TC, et al. **J Exp Biol** 1988 Jul;137:29–38
Non-involvement of the accessory olfactory system in the LH response of anoestrous ewes to male odour. Cohen-Tannoudji J, et al. **J Reprod Fertil** 1989 May; 86(1):135–44
Possible role of pheromones in modifying drug response in the mouse. Stoll RE, et al. **Life Sci** 1974 Aug 1;15(3):543–9
The yeast G-protein homolog is involved in the mating pheromone signal transduction system. Fujimura HA. **Mol Cell Biol** 1989 Jan;9(1):152–8
Are pheromones their own reward? Coppola DM, et al. **Physiol Behav** 1988;44(6):811–6
Vaginal bacterial flora partially determines sexual attractivity of female rats. Merkx J, et al. **Physiol Behav** 1988; 44(1):147–9
Pheromone-mediation of host-selection in bont ticks (Amblyomma hebraeum koch). Norval RA, et al. **Science** 1989 Jan 20;243(4889):364–5
[Activation of pheromonal promoters of aggression in laboratory mice of the C57BL/6 line upon the action of diazepam] Ryzhova LIu, et al. **Dokl Akad Nauk SSSR** 1989; 306(4):1005–7 **(Rus)**

SECRETION

Amino acid sequence of pheromone-biosynthesis-activating neuropeptide (PBAN) of the silkworm, Bombyx mori. Kitamura A, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):520–6
Qualitative and quantitative determination of pheromone secretion in female gametes of Ectocarpus siliculosus (Phaeophyceae). Müller DG, et al. **Biol Chem Hoppe Seyler** 1988 Aug;369(8):647–53
Periovulatory female goldfish release three potential pheromones: 17 alpha,20 beta-dihydroxyprogesterone, 17 alpha,20 beta-dihydroxyprogesterone glucuronide, and 17 alpha-hydroxyprogesterone. Van der Kraak G, et al. **Gen Comp Endocrinol** 1989 Mar;73(3):452–7

TOXICITY

[Toxicologic and hygienic characteristics of prospective pheromones in the air of the work area] L'gova IP. **Gig Tr Prof Zabol** 1988 Oct;(10):55–6 **(Rus)**

URINE

Modulation of male mouse genital sniff, attack, and mount behaviors by urogenital substances from estrous females. Weinhold LL, et al. **Behav Neural Biol** 1988 Sep; 50(2):207–28
Acceleration and delay of sexual maturation in female house mice (Mus domesticus) by urinary chemosignals: mixing urine sources in unequal proportions. Drickamer LC. **J Comp Psychol** 1988 Sep;102(3):215–21
Identification of puberty-accelerating pheromones in male mouse urine. Nishimura K, et al. **J Exp Zool** 1989 Sep; 251(3):300–5
Facilitory effects of olfactory cues emitted by estrous females on mounting behavior in the female rat. Boehm N, et al. **Physiol Behav** 1988;43(5):669–71
Individual odors of rats are discriminable independently of changes in gonadal hormone levels. Brown RE. **Physiol Behav** 1988;43(3):359–63
Male odors that influence the preference of female mice: roles of urinary and preputial factors. Ninomiya K, et al. **Physiol Behav** 1988;44(6):791–5
[The role of beta-glucuronidase in the activation of pheromone disrupting spermatogenesis in laboratory mice: evolution of the chemical signaling system in vertebrates] Novikov SN, et al. **Dokl Akad Nauk SSSR** 1988; 302(2):470–2 **(Rus)**

PHI PEPTIDE see **PEPTIDE PHI**

PHI X 174 see **PHAGE PHI X 174**

PHIALOPHORA

ENZYMOLOGY

Lipases of Fonsecaea pedrosoi and Phialophora verrucosa. Okeke CN, et al. **Antonie Van Leeuwenhoek** 1989; 55(4):313–24

ISOLATION & PURIFICATION

Phialophora repens, an emerging agent of subcutaneous phaeohyphomycosis in humans. Hironaga M, et al. **J Clin Microbiol** 1989 Mar;27(3):394–9
Subcutaneous granuloma caused by Phialophora richardsiae: case report and review of the literature. Guého E, et al. **Mycoses** 1989 May;32(5):219–23 (18 ref.)
Phialophora richardsiae infection in humans. Pitrak DL, et al. **Rev Infect Dis** 1988 Nov–Dec;10(6):1195–203 (21 ref.)

PHILADELPHIA CHROMOSOME

Lymphoid blast crisis in a patient with Philadelphia-chromosome-negative chronic myelocytic leukemia. Takahira H, et al. **Acta Haematol (Basel)** 1989; 81(3):155–9
Molecular implications of Ph (+) myelodysplastic syndrome. Toyama K, et al. **Adv Exp Med Biol** 1988;241:67–71
Philadelphia chromosome in essential thrombocythemia? [letter] Sarode R, et al. **Am J Hematol** 1989 Jan;30(1):45–6
Significance and correlations of molecular analysis results in patients with Philadelphia chromosome-negative chronic myelogenous leukemia and chronic myelomonocytic leukemia. Kantarjian HM, et al. **Am J Med** 1988 Nov;85(5):639–44
A new case of chronic myelogenous leukemia with 14q+ marker and review of the literature. Palka G, et al. **Ann Genet (Paris)** 1988;31(3):190–2 (23 ref.)
Two methods for measuring the non-randomness of chromosome abnormalities. De Braekeleer M, et al. **Ann Hum Genet** 1988 Jan;52 (Pt 1):63–7
Molecular pathogenesis of Ph-positive leukemias. Clark SS, et al. **Annu Rev Med** 1989;40:113–22 (49 ref.)
The Philadelphia chromosome: a brief review. Beard ME, et al. **Aust N Z J Med** 1988 Jun;18(4):617–23 (76 ref.)
The BCR/ABL hybrid gene. Groffen J, et al. **Baillieres Clin Haematol** 1987 Dec;1(4):983–99 (77 ref.)
Rare occurrence of N-ras point mutations in Philadelphia chromosome positive chronic myeloid leukemia. Collins SJ, et al. **Blood** 1989 Mar;73(4):1028–32
Detection of the molecular abnormality in chronic myeloid leukemia by use of the polymerase chain reaction. Dobrovic A, et al. **Blood** 1988 Dec;72(6):2063–5
The bcr gene in Philadelphia chromosome positive acute lymphoblastic leukemia. Heisterkamp N, et al. **Blood** 1989 Apr;73(5):1307–11
Detection of the Philadelphia chromosome in acute lymphoblastic leukemia by pulsed-field gel electrophoresis. Hooberman AL, et al. **Blood** 1989 Aug 15;74(3):1101–7
The site of the breakpoint within the bcr is a prognostic factor in Philadelphia-positive CML patients. Mills KI, et al. **Blood** 1988 Oct;72(4):1237–41
Variability of the molecular defects corresponding to the presence of a Philadelphia chromosome in human hematologic malignancies. Saglio G, et al. **Blood** 1988 Oct; 72(4):1203–8
Spontaneous remission in a patient with chronic myeloid leukaemia [letter] Fegan C, et al. **Br J Haematol** 1989 Aug; 72(4):594–5
Cytogenetic studies of haemopoietic colonies from patients with an initial diagnosis of acute lymphoblastic leukaemia. Kalousek DK, et al. **Br J Haematol** 1988 Sep;70(1):5–11
Difference of cell lineage expression of haematopoietic progenitor cells in Philadelphia-positive acute lymphoblastic leukaemia and chronic myelogenous leukaemia. Kitano K, et al. **Br J Haematol** 1988 Sep; 70(1):21–6
Essential thrombocythaemia and the Philadelphia chromosome. Morris CM, et al. **Br J Haematol** 1988 Sep; 70(1):13–9
Chromosome 22 breakpoints in variant Philadelphia translocations and Philadelphia-negative chronic myeloid leukemia. Browett PJ, et al. **Cancer Genet Cytogenet** 1989 Feb;37(2):169–77
A cytogenetic and molecular analysis of five variant Philadelphia translocations in chronic myeloid leukemia. Morris CM, et al. **Cancer Genet Cytogenet** 1988 Oct 15; 35(2):179–97
Myelodysplastic syndrome with Philadelphia-like chromosome without bcr rearrangement. Ohyashiki JH, et al. **Cancer Genet Cytogenet** 1988 Oct 15;35(2):151–8
Philadelphia-positive thrombocythemia with a complex translocation involving chromosomes 9, 15, and 22. Palumbo AP, et al. **Cancer Genet Cytogenet** 1989 May; 39(1):77–80
Cytogenetics might elucidate the etiology of acute transformation of chronic myeloproliferative syndromes without a Philadelphia chromosome. A brief report from a multicenter study by the Group Français de Cytogénétique Hématologique [letter] **Eur J Haematol** 1989 Jul;43(1):86–7
Molecular analysis of the bcr rearrangement in a case of Ph'-negative blastic crisis of Ph'-positive chronic myelogenous leukemia. Melani C, et al.

Eur J Haematol 1989 Jan;42(1):32–7

Philadelphia chromosome without breakpoint cluster region rearrangement in a case of Lennert's lymphoma of suppressor phenotype. Terjanian T, et al. **Hematol Oncol** 1989 May–Jun;7(3):189–94

Lack of breakpoint cluster region rearrangement in marrow fibroblasts of patients with Philadelphia chromosome–positive chronic myelogenous leukemia. O'Brien S, et al. **Hematol Pathol** 1988;2(1):25–9

Rejoining between 9q+ and Philadelphia chromosomes results in normal-looking chromosomes 9 and 22 in Ph1–negative chronic myelocytic leukemia. Inazawa J, et al. **Hum Genet** 1989 Sep;83(2):115–8

The Philadelphia chromosome in two children with chronic myeloid leukemia. Wahrman J, et al. **Isr J Med Sci** 1967 May–Jun;3(3):380–91

Philadelphia–negative chronic myelogenous leukemia with breakpoint cluster region rearrangement: molecular analysis, clinical characteristics, and response to therapy. Shtalrid M, et al. **J Clin Oncol** 1988 Oct;6(10):1569–75

Antibody recognition of the tumor–specific bcr–abl joining region in chronic myeloid leukemia. van Denderen J, et al. **J Exp Med** 1989 Jan 1;169(1):87–98

Clinical evaluation of a DNA probe assay for the Philadelphia (Ph1) translocation in chronic myelogenous leukemia. Blennerhassett GT, et al. **Leukemia** 1988 Oct; 2(10):648–57

Molecular cloning of a 5' segment of the genomic phl gene defines a new breakpoint cluster region (bcr2) in Philadelphia–positive acute leukemias. Chen SJ, et al. **Leukemia** 1988 Oct;2(10):634–41

Acute myeloblastic leukemia with t(8;21) following Philadelphia positive acute lymphoblastic leukemia. De Cuia MR, et al. **Leukemia** 1989 Apr;3(4):310–3

The location of breakpoints within the breakpoint cluster region (bcr) of chromosome 22 in chronic myeloid leukemia. Eisenberg A, et al. **Leukemia** 1988 Oct; 2(10):642–7

bcr–abl oncogene activation in Philadelphia chromosome–positive acute lymphoblastic leukemia. Hermans A, et al. **Leukemia** 1988 Oct;2(10):628–33

Molecular analysis of Philadelphia positive essential thrombocythemia. Martiat P, et al. **Leukemia** 1989 Aug; 3(8):563–5

Cytogenetic and molecular studies of the Philadelphia translocation t(9;22) observed in a patient with myelodysplastic syndrome. Smadja N, et al. **Leukemia** 1989 Mar;3(3):236–8

Selective transformation of primitive lymphoid cells by the BCR/ABL oncogene expressed in long–term lymphoid or myeloid cultures. Young JC, et al. **Mol Cell Biol** 1988 Oct; 8(10):4079–87

Ph1+malignant histiocytosis—a case report. Tamura K, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Sep;51(6):1063–8

The first BCR gene intron contains breakpoints in Philadelphia chromosome positive leukemia. Heisterkamp N, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10069–81

Nucleotide sequence of both reciprocal translocation junction regions in a patient with Ph positive acute lymphoblastic leukaemia, with a breakpoint within the first intron of the BCR gene. van der Feltz MJ, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):1–10

Ph1+bcr– acute leukemias: implication of Alu sequences in a chromosomal translocation occurring in the new cluster region within the BCR gene. Chen SJ, et al. **Oncogene** 1989 Feb;4(2):195–202

Finding order in chaos. Rowley JD. **Perspect Biol Med** 1989 Spring;32(3):371–84

Localization of preferential sites of rearrangement within the BCR gene in Philadelphia chromosome–positive acute lymphoblastic leukemia. Denny CT, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4254–8

Unexpected heterogeneity of BCR–ABL fusion mRNA detected by polymerase chain reaction in Philadelphia chromosome–positive acute lymphoblastic leukemia. Hooberman AL, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4259–63

[Triploid clone observed at blastic crisis in chronic myelogenous leukemia with complex Ph1 translocation (9; 22; 12)] Ito K, et al. **Rinsho Ketsueki** 1989 Apr;30(4):558–62 (Eng. Abstr.) **(Jpn)**

[Philadelphia chromosome positive acute myelomonocytic leukemia] Tsuda T, et al. **Rinsho Ketsueki** 1988 Dec; 29(12):2352–7 (Eng. Abstr.) **(Jpn)**

[Essential thrombocythemia with Philadelphia chromosome] Yoshimura Y, et al. **Rinsho Ketsueki** 1989 Mar;30(3):332–7 (Eng. Abstr.) **(Jpn)**

[Positive Philadelphia chromosome in childhood ALL] Gil C, et al. **An Esp Pediatr** 1988 Oct;29 Suppl 34:145–7 **(Spa)**

PHILATELY

Medical Nobels—stamp of genius. Dunlop JM. **BMJ** 1988 Dec 24–31;297(6664):1674–7

Viewing ophthalmology through postage stamps. Blodi FC. **Caduceus** 1989 Spring;5(1):24–51

"Traditional heritage" [letter] Jones A. **Ear Nose Throat J** 1989 Mar;68(3):265–6

Dentistry on stamps (F.J. Talma). Loevy HT, et al. **J Am Dent Assoc** 1989 Mar;118(3):331

Dentistry on stamps. Loevy HT, et al. **J Am Dent Assoc** 1989 May;118(5):577

Dentistry on stamps. Loevy HT, et al. **J Am Dent Assoc** 1988 Oct;117(5):594

Dentistry on stamps. Loevy HT, et al. **J Am Dent Assoc** 1989 May;118(5):593

Dentistry on Stamps (Charles Robert Darwin). Loevy HT. **J Am Dent Assoc** 1988 Oct;117(5):614

Dentistry on stamps. Loevy HT, et al. **J Am Dent Assoc** 1989 May;118(5):609

Dentistry on stamps (P. Camper). Loevy HT, et al. **J Am Dent Assoc** 1989 Feb;118(2):191

Dentistry on stamps. Loevy HT, et al. **J Am Dent Assoc** 1989 Feb;118(2):208

A youthful centenarian [editorial] **Lancet** 1989 Jun 17; 1(8651):1366

Viktor Franz Hess—discoverer of cosmic radiation. Kyle RA, et al. **Mayo Clin Proc** 1989 Jul;64(7):881

Henrietta Szold—founder of Hadassah Medical Organization. Kyle RA, et al. **Mayo Clin Proc** 1988 Dec;63(12):1268

Wolfgang Ernst Pauli—leading theoretical physicist. Kyle RA, et al. **Mayo Clin Proc** 1989 May;64(5):544

Nicolas–Louis Vauquelin—discoverer of chromium. Kyle RA, et al. **Mayo Clin Proc** 1989 Jun;64(6):643

Arvo Ylppö, Finnish pediatrician. Logan GB, et al. **Mayo Clin Proc** 1989 Mar;64(3):339

Belgian Nobel Laureate Corneille–Jean–François Heymans. Shampo MA, et al. **Mayo Clin Proc** 1989 Apr;64(4):482

Nei Ching—oldest known medical book. Shampo MA, et al. **Mayo Clin Proc** 1989 Jan;64(1):134

Paul Dudley White: pioneer American cardiologist. Shampo MA, et al. **Mayo Clin Proc** 1988 Oct;63(10):1060

Moritz Kaposi: noted dermatologist. Shampo MA, et al. **Mayo Clin Proc** 1989 Feb;64(2):268

Antonio Prudente: Brazilian physician. Taufic M, et al. **Mayo Clin Proc** 1988 Nov;63(11):1122

Radiology on postage stamps. Part 3. Praestholm J, et al. **Radiographics** 1989 Mar;9(2):341–52

Radiology on postage stamps. Praestholm J, et al. **Radiographics** 1988 Sep;8(5):981–6

Radiology on postage stamps. Part 2. Praestholm J, et al. **Radiographics** 1988 Nov;8(6):1203–13

Health messages on everybody's mail. Madsen OA. **World Health Forum** 1988;9(1):24–8

[Ophthalmologists on postage stamps. A contribution to the history of medicine] Dietrich HH. **Klin Monatsbl Augenheilkd** 1989 Feb;194(2):133–8 (Eng. Abstr.) **(Ger)**

PHILOSOPHY

The concept of "persona": substance or relation. Hottois G. **Acta Neurochir Suppl (Wien)** 1988;44:39–43

The dynamics of personality. An East European view. Kelemen J. **Acta Neurochir Suppl (Wien)** 1988;44:33–8

The problem of mind in Eastern philosophy. Nakamura H. **Acta Neurochir Suppl (Wien)** 1988;44:19–32

Aristotle's remarks on old men. Howell TH. **Age Ageing** 1988 Sep;17(5):352–3

The Chinese representation of cosmic elements as graphic symbols. Mahdihassan S. **Am J Chin Med** 1988;16(1–2):1–9

Chinese cosmology incorporates its humorology: dual sense ascribed to the elements wood, earth and metal. A short communication in reply to the criticism of a Chinese colleague. Mahdihassan S. **Am J Chin Med** 1988;16(1–2):10

The empirical jurisprudence of the United States Supreme Court. Appelbaum PS. **Am J Law Med** 1987;13(2–3):335–49

Hedge against extinction. LaCombe MA. **Am J Med** 1989 Jan;86(1):91–2

Media education based on the philosophy of pragmatism. Breines EB. **Am J Occup Ther** 1989 Jul;43(7):461–4

The phenomenology of psychotherapy. Varghese FT. **Am J Psychother** 1988 Jul;42(3):389–403

The necessity for and evolution of multiple paradigms for nursing research: a poststructuralist perspective. Dzurec LC. **ANS** 1989 Jul;11(4):69–77 (19 ref.)

A Heideggerian phenomenologic perspective on the concept of the person. Leonard VW. **ANS** 1989 Jul;11(4):40–55 (23 ref.)

Political theory and individualistic health promotion. Williams DM. **ANS** 1989 Oct;12(1):14–25 (39 ref.)

The mind–body problem [letter] Simpson J. **Br J Psychiatry** 1988 Dec;153:846–7

Harper's Fifth Reader: common ground. Massey RU. **Conn Med** 1989 Aug;53(8):495

Zen and the art of brain maintenance. Severinghaus JW. **Crit Care Med** 1988 Oct;16(10):1019–21

Mercy, murder, & morality: perspectives on euthanasia. The theological ethics of euthanasia. Vaux KL. **Hastings Cent Rep** 1989 Jan–Feb;19(1):suppl 19–22

Of Pasteur, Spallanzani, and spontaneous generation [letter] Hirsch BH. **Hosp Pract [Off]** 1989 Sep 15;24(9):13

Psychoanalysis without shame. Laor N. **Isr J Psychiatry Relat Sci** 1987;24(4):257–64 (12 ref.)

Concepts, analysis and the development of nursing knowledge: the evolutionary cycle. Rodgers BL. **J Adv Nurs** 1989 Apr;14(4):330–5 (22 ref.)

Philosophy and health. Woods S, et al. **J Adv Nurs** 1989 Aug;14(8):661–4

Interpretation, psychoanalysis, and the philosophy of mind. Cavell M. **J Am Psychoanal Assoc** 1988;36(4):859–79

The contributions of self–defeating philosophies, perceived helplessness, and repression to anxiety among psychiatric patients. Watson CG, et al. **J Clin Psychol** 1989 Jul; 45(4):513–20

The chiropractic wars [letter] Donahue J. **J Manipulative Physiol Ther** 1988 Oct;11(5):456–7

Voluntarism and realism in medieval ethics. Haldane J. **J Med Ethics** 1989 Mar;15(1):39–44

Foundations, persons, and the battle for the millennium. Engelhardt HT Jr. **J Med Philos** 1988 Nov;13(4):387–91

Integrating philosophy into the doctoral preparation for nurse–midwives. Rhodes JM. **J Nurse Midwifery** 1988 Nov–Dec;33(6):283–4

Personality as the basis for theoretical predilections. Johnson JA, et al. **J Pers Soc Psychol** 1988 Nov;55(5):824–35

AIDS: the duty to treat. A philosopher's perspective. Preus A. **Mt Sinai J Med** 1989 May;56(3):254–8

Questions of quanta and qualia: does sensation make sense of matter—or does matter make sense of sensation? Part 1. Gregory RL. **Perception** 1988;17(6):699–702

Implications of perturbation strategies: a philosopher of science's perspective. Dilsaver SC. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(5):613–22

Prolegomena to the study of Paul Ricoeur's Freud and philosophy. Chessick RD. **Psychoanal Rev** 1988 Summer; 75(2):299–318 (27 ref.)

Philosophy and evolution. Comments on Michael Ruse: Karl Popper's philosophy of biology. Løvtrup S. **Riv Biol** 1988; 81(2):287–308 **(Eng, Ita)**

Allostery, information and reductionism [letter] Davis BD. **Trends Biochem Sci** 1988 Oct;13(10):377–8

Thoughts on organization [letter] Friedberg F. **Trends Biochem Sci** 1988 Oct;13(10):377–8

On reductionism [letter] Rakitzis ET. **Trends Biochem Sci** 1988 Oct;13(10):379–80

Is biochemistry irreducible to chemistry? [letter] Slater EC. **Trends Biochem Sci** 1988 Oct;13(10):378

The significance of neuroscience for philosophy. Churchland PS. **Trends Neurosci** 1988 Jul;11(7):304–7 (30 ref.)

[Topology and psychiatry. From reductionism to the restructuring of knowledge] Marchais P. **Ann Med Psychol (Paris)** 1988 Jul–Aug;146(8):740–7 **(Fre)**

[Heinrich Düker, research scientist on the conflict between philosophical and experimental theory of will and action] Fuchs R. **Arch Psychol (Frankf)** 1988;140(3):159–67 (Eng. Abstr.) **(Ger)**

[Basic problems in psychiatry] Degkwitz R. **Fortschr Neurol Psychiatr** 1988 Jul;56(7):205–15 (84 ref.) (Eng. Abstr.) **(Ger)**

[Causality of action and circular thinking—systems therapy versus psychoanalysis] Fischer G, et al. **Psyche (Stuttg)** 1989 Apr;43(4):339–58 (Eng. Abstr.) **(Ger)**

[Symbolic interactionism and psychoanalysis. On the history and significance of a theoretical relation] Weiss E. **Psyche (Stuttg)** 1988 Sep;42(9):795–830 (150 ref.) (Eng. Abstr.) **(Ger)**

[On the way to a pre–oedipal society] Speidel H. **Psychother Psychosom Med Psychol** 1989 Feb;39(2):58–63 (Eng. Abstr.) **(Ger)**

[Life and freedom as a compulsion? Considerations of the relation of the phenomenology of life and analysis of existence] Kühn R. **Z Klin Psychol Psychopathol Psychother** 1988;36(4):361–7 (Eng. Abstr.) **(Ger)**

[Biography and transcendence within the human psychotherapy image] Kühn R. **Z Klin Psychol Psychopathol Psychother** 1989;37(2):228–32 (Eng. Abstr.) **(Ger)**

[Once again: is psychoanalysis a science? Fundamentalism and coherentism as "scientific theories of psychoanalysis"] Kurthen M. **Z Psychosom Med Psychoanal** 1989; 35(3):241–55 (27 ref.) (Eng. Abstr.) **(Ger)**

[From society to man: the paradox of social medicine] Visioli O. **Cardiologia** 1989 Apr;34(4):283–91 **(Ita)**

[Comments on the essence of man] Stratone N, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Apr–Jun;92(2):406–8 **(Rum)**

[The significance of theoretical disciplines in the training of a physician] Erokhin VG. **Vestn Akad Med Nauk SSSR** 1989;(4):21–6 **(Rus)**

[Reflections on the biomolecular level of the organization of matter] Shingarov GKh, et al. **Vestn Akad Med Nauk SSSR** 1989;(4):36–45 **(Rus)**

HISTORY

Seneca and his asthma: the illnesses, life, and death of a Roman stoic philosopher. Panzani RC. **J Asthma** 1988; 25(3):163–74

[Psychoanalysis, romantic nature philosophy and German idealistic thinking] Bohleber W. **Psyche (Stuttg)** 1989 Jun; 43(6):506–21 (Eng. Abstr.) **(Ger)**

[Goethe, Kant, Locke, Villaume knew our technic of individual therapy] Leonhard K. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Feb;41(2):105–8 (Eng. Abstr.) **(Ger)**

[Two translations of a quote from Seneca (letter)] Laki A. **Orv Hetil** 1989 May 7;130(19):1023 **(Hun)**

PHILOSOPHY, DENTAL

Patient response to variations in denture technique. Part VII: Twenty–year patient status. Ellinger CW, et al.

J Prosthet Dent 1989 Jul;62(1):45–8

PHILOSOPHY, MEDICAL

Why the Hippocratic tradition? Conner SL. Ala Med 1988 Sep;58(3):5–6
The quiet man. McDonald WH. Ala Med 1989 Apr; 58(10):9–10, 12–4
Observations on spiraling empiricism: its causes, allure, and perils, with particular reference to antibiotic therapy. Kim JH, et al. Am J Med 1989 Aug;87(2):201–6 (25 ref.)
Beliefs and theoretical constructs in psychiatry [letter] Am J Psychiatry 1988 Nov;145(11):1490–2
In reluctant defense of dualism in psychiatry [letter] Benjamin J. Am J Psychiatry 1989 Jan;146(1):126
Pitfalls of inductivism [letter] Wallace ER 4th. Am J Psychiatry 1989 Jan;146(1):132
Arthur E. Mills memorial oration. McCaughey JD. Aust N Z J Med 1988 Oct;18(6):824–9
Psychiatry: the philosophical link between medical sciences and the sociopolitical human condition. Kapkin IA. Can J Psychiatry 1988 Nov;33(8):681–5
Reflections on the epistemology of psychiatry. Yonge KA. Can J Psychiatry 1988 Nov;33(8):686–90
Potential danger [letter] Can Med Assoc J 1989 Jan 15; 140(2):105–6
Philosophers in bioethics [letter] Hurteau G, et al. Can Med Assoc J 1989 Aug 1;141(3):193
Pray tell us, Dr. Rapp [letter] Lafrance WA. Can Med Assoc J 1988 Nov 1;139(9):824
Philosophy of care, decision making, and ethical considerations. Ewer MS. Crit Care Clin 1989 Jul; 5(3):679–95 (11 ref.)
Quest for the philosopher's stone [editorial] Carlon GC. Crit Care Med 1989 May;17(5):477–8
General surgeon: philosopher or technician? Rhea WG Jr. Curr Surg 1988 Nov–Dec;45(6):451–3
The resurgence of the biomedical model [editorial] Glenn ML. Fam Med 1988 Sep–Oct;20(5):324–5
A philosopher examines theories of human behavior. Stephens GL. Fam Med 1985 Sep–Oct;17(5):215–8
Craftsmanship. Caplan RM. Iowa Med 1989 Jun;79(6):292
Bioethics: secular philosophy, Jewish law and modern medicine. Steinberg A. Isr J Med Sci 1989 Jul;25(7):404–9
Reconsecratio medici [editorial] Pisacano NJ. J Am Board Fam Pract 1989 Apr–Jun;2(2):78–80
Seeing over one's shoulder and out of the corner of one's eye. Stephens GG. J Am Board Fam Pract 1989 Jan–Mar; 2(1):64–7
Osler's "the fixed period" [letter] Hogan DB. J Am Geriatr Soc 1989 Sep;37(9):917
Problems with the Popperian approach: a response to Pearce and Crawford-Brown. Buck C. J Clin Epidemiol 1989; 42(3):185–7
Hectic families. Herman J. J Clin Epidemiol 1989;42(1):85–6
On hunting. Lee RV. J Clin Epidemiol 1988;41(11):1135–8
Critical discussion in epidemiology: problems with the Popperian approach. Pearce N, et al. J Clin Epidemiol 1989; 42(3):177–84
Structure and ideology in medical education: an analysis of resistance to change. Bloom SW. J Health Soc Behav 1988 Dec;29(4):294–306
Foundations of decision-making: the necessity for philosophical considerations in the physician-patient relationship. Meyers S. J La State Med Soc 1988 Oct; 140(10):3–5
Which philosophy of chiropractic? Keating JC Jr, et al. J Manipulative Physiol Ther 1988 Aug;11(4):325–8
Philosophy, medicine and its technologies. Almond B. J Med Ethics 1988 Dec;14(4):173–8
The moral philosophy of Maimonides. Broadie A. J Med Ethics 1988 Dec;14(4):200–3
Health and disease: what can medicine do for philosophy? Scadding JG. J Med Ethics 1988 Sep;14(3):118–24
Brain life and brain death—the anencephalic as an explanatory example. A contribution to transplantation. Beller FK, et al. J Med Philos 1989 Feb;14(1):5–23 (40 ref.)
Health science, natural science, and clinical knowledge. Bench RJ. J Med Philos 1989 Apr;14(2):147–64
The President's Commission: the need to be more philosophical. Brody BA. J Med Philos 1989 Aug; 14(4):369–83
The use of fetal and anencephalic tissue for transplantation. Cefalo RC, et al. J Med Philos 1989 Feb;14(1):25–43
Foundations of a misunderstanding of the ultrastructural basis of myocardial failure: a reciprocation network of oversimplifications. Coulson RL, et al. J Med Philos 1989 Apr;14(2):109–46
Moral pluralism and the use of anencephalic tissue and organs. Cutter MA. J Med Philos 1989 Feb;14(1):89–95
Brain life, brain death, fetal parts. Engelhardt HT Jr. J Med Philos 1989 Feb;14(1):1–3
Studies in the explanation of issues in biomedical ethics: the example of abortion. Erde EL. J Med Philos 1988 Nov; 13(4):329–47
The challenge to biomedicine: a foundations perspective. Foss L. J Med Philos 1989 Apr;14(2):165–91
A science of individuals: medicine and casuistry. Hunter KM. J Med Philos 1989 Apr;14(2):193–212
Anencephalic organ donation: a Japanese case. Kimura R. J Med Philos 1989 Feb;14(1):97–102
Ethics by committee: the moral authority of consensus. Moreno JD. J Med Philos 1988 Nov;13(4):411–32
Brain life and brain death: a proposal for a normative agreement. Sass HM. J Med Philos 1989 Feb;14(1):45–59 (27 ref.)
Anencephalic infants as organ donors and the brain death standard. Walters JW, et al. J Med Philos 1989 Feb; 14(1):79–87
Commissions and biomedical ethics: the Canadian experience. Williams JR. J Med Philos 1989 Aug;14(4):425–44
Anencephalics as organ donors. Zaner RM. J Med Philos 1989 Feb;14(1):61–78 (33 ref.)
The caduceus revised. Cook DE. J Miss State Med Assoc 1989 Apr;30(4):128–9
Sempere plangere. Stern L. J Perinatol 1987 Spring; 7(2):135–7
The essential healer. Sasser CG. J S C Med Assoc 1989 Aug; 85(8):389–92
Medical education [letter] Greep JM, et al. Lancet 1988 Nov 12;2(8620):1140
Thoughts and ethics [letter] Richards G. Lancet 1989 Sep 30;2(8666):807
The metastatic theory of pathogenesis and the professional interests of the eighteenth-century physician. Nicolson M. Med Hist 1988 Jul;32(3):277–300
Reflections on modern doctoring. Stoeckle JD. Milbank Q 1988;66 Suppl 2:76–91
Life after Cartwright. Hopkins J. N Z Med J 1989 Feb 22; 102(862):71
Evolutionary imperatives, quiet revolutions: changing working conditions and supervision of house officers. Bell BM. Pharos 1989 Spring;52(2):16–9
Age, illness, and psychosocial integrity. Creditor MC. Pharos 1989 Spring;52(2):20–4
In the charnel house. Hansen P. Pharos 1989 Spring; 52(2):8–11
Faith, hope, and love in medicine. John CC. Pharos 1988 Fall;51(4):12–7
Pre- and post-persons [editorial] Thomasma DC. Pharos 1989 Summer;52(3):37
Modern medicine and old dilemmas. van Eys J. Pharos 1988 Fall;51(4):29–32
Medicine and miracles: implications for patient care. Viamontes GI. Pharos 1989 Spring;52(2):2–7
Cartesian dualism and psychosomatics. Brown TM. Psychosomatics 1989 Summer;30(3):322–31 (34 ref.)
The modern synthesis and Lewontin's critique of sociobiology. Holcomb HR 3d. Pubbl Stn Zool Napoli [II] 1988;10(2):315–41
South African medicine. Crawshaw R. S Afr Med J 1989 May 20;75(10):463–4
Differences between Kallawaya-Andean and Greek-European humoral theory. Bastien JW. Soc Sci Med 1989;28(1):45–51
"I swear by Apollo the physician..." [letter] Baldwin MA. South Med J 1988 Dec;81(12):1598–9
Doctoring: the philosophic milieu. Bessinger CD Jr. South Med J 1988 Dec;81(12):1558–62 (41 ref.)
Radiobiological philosophy of current U.S. neutron trials. Withers HR. Strahlenther Onkol 1989 Apr;165(4):294–7 (30 ref.)
Just health care (I): Is beneficence enough? Fleck LM. Theor Med 1989 Jun;10(2):167–82 (14 ref.)
Complex genetic causation of human disease: critiques of and rationales for heritability and path analysis. Gifford F. Theor Med 1989 Jun;10(2):107–22 (26 ref.)
Patterns of reasoning in medical genetics: an introduction. Juengst ET. Theor Med 1989 Jun;10(2):101–5 (15 ref.)
The role of beneficence in clinical genetics: non-directive counseling reconsidered. Yarborough M, et al. Theor Med 1989 Jun;10(2):139–49
Serving two masters. Love AH. Ulster Med J 1989 Apr; 58(1):13–28 (16 ref.)
Some thoughts on medical education. Cruickshank EK. West Indian Med J 1989 Mar;38(1):4–8
[Medicine and language; separate and equal] Balk-Smit Duyzentkunst F. Ned Tijdschr Geneeskd 1989 Jun 17; 133(24):1205–6 (Dut)
[The cell in the living organism; on life and death (letter)] Van Zuiden M. Ned Tijdschr Geneeskd 1989 Apr 1; 133(13):694 (Dut)
[Birth and vicissitudes of the mental disease concept] Pichot P. Acta Psychiatr Belg 1988 May-Jun;88(3):206–21 (Eng. Abstr.) (Fre)
[Scientific medicine and parallel practice] Lecomte J. Rev Med Liege 1988 Aug 1–15;43(15–16):513–20 (Fre)
[Diderot and holistic medicine. Apropos of "Elements de Physiologie" (1775–1783)] Lecomte J. Rev Med Liege 1988 Sep 15;43(18):600–3 (Fre)
[The body, the soul, the physician] Fadda S. Rev Med Suisse Romande 1988 Oct;108(10):815–8 (Fre)
[The health teachings of Maimonides. Medical and religious philosophical aspects] Ackermann H. Clio Med 1985–86; 20(1–4):59–78 (Ger)
[Medicine must become more than a natural science] Begemann H. Med Klin 1989 Mar 15;84(3):166–9 (Ger)
[Psychological, somatic and psychosomatic forms of medicine: consequences of erroneous Western thinking] Degkwitz R. Med Klin 1988 Oct 14;83(20):687–9 (27 ref.) (Ger)
[Empirical methods in clinical medicine] Hartmann F. Med Klin 1989 Apr 15;84(4):219–23 (Ger)
[The environment, knowledge and preventive medicine. 3. The radical approach of conservative medicine—preventive environmental medicine as the physician's responsibility] Mersch-Sundermann V. Off Gesundheitswes 1989 Apr;51(4):174–7 (Eng. Abstr.) (Ger)
[The environment, knowledge and preventive medicine. 2. Reductionism and holism—a dichotomy in thinking] Mersch-Sundermann V. Off Gesundheitswes 1989 Mar; 51(3):128–31 (Eng. Abstr.) (Ger)
[Natural and unnatural health] Goldschmidt HL. Schweiz Rundsch Med Prax 1989 Apr 18;78(16):453–5 (Eng. Abstr.) (Ger)
[From medical technic to medical science] Schipperges H. Schweiz Rundsch Med Prax 1988 Sep 20;77(38):1000–5 (Eng. Abstr.) (Ger)
[Use of the materialistic-dialectic method in original work exemplified by the relation of primary medical care and specialized management] Kober R. Z Arztl Fortbild (Jena) 1989;83(6):327–9 (8 ref.) (Ger)
[Philosophy and medicine] Stange W, et al. Z Arztl Fortbild (Jena) 1989;83(7):387–90 (14 ref.) (Ger)
[Interdisciplinary exchange of ideas on the problems of managing elderly and demented patients—medical, legal and philosophical approaches] Hacker H, et al. Z Gerontol 1988 Sep–Oct;21(5):299–301 (Ger)
[Internal medicine and psychosomatic medicine between dualism and monism] Guzzo R, et al. Minerva Med 1989 Mar;80(3):285–7 (Eng. Abstr.) (Ita)
[Some everyday philosophy about general medicine] Jørgensen J, et al. Tidsskr Nor Laegeforen 1988 Oct 25; 108(29B):2635–9 (Nor)
[Private practice—a philosophy and a way of life. A plea for social support] Løken A. Tidsskr Nor Laegeforen 1988 Oct 25;108(29B):2595–7 (Nor)
[Medicine and the psychophysical problem (the history of relations between medicine and philosophy in the modern era)] Kulczycki J. Arch Hist Filoz Med 1988;51(3):301–17 (Eng. Abstr.) (Pol)
[Controversy on the termination of pregnancy] Szawarski Z. Ginekol Pol 1988 Mar;59(3):121–32 (Pol)
[Problems of science and humanism in medicine] Kapuściński WJ. Klin Oczna 1988 Apr–May;90(4–5):124–6 (Pol)
[Thoughts on medicine and the physician's duties in the works of V.Kh. Vasilenko] Tsimmerman IaS. Klin Med (Mosk) 1989 Jun;67(6):147–50 (Rus)
[Problems of health and disease in Aristotle's "Metaphysics"] Lapin IuE. Sov Zdravookhr 1988;(6):75–8 (Rus)
[John Brown—the reformer of the 18th century medicine (on the 200th anniversary of his death)] Aksamentov GV. Ter Arkh 1989;61(2):153–5 (Rus)
[Medicine and society] Tsaregorodtsev GI. Ter Arkh 1989; 61(1):110–6 (Rus)
[An unfinished discussion 15 years later (1973–1988)] Knežević S. Lijec Vjesn 1988 Jun–Jul;110(6–7):224–6 (Ser)
[Inert and live materials] Bru Villaseca L. An R Acad Nac Med (Madr) 1988;105(3):251–62 (Spa)
[Epistemology in cardiology] de Micheli A. Arch Inst Cardiol Mex 1988 May–Jun;58(3):247–56 (Eng. Abstr.) (Spa)
[Medical knowledge] Goic AR. Rev Med Chil 1989 Jun; 116(6):566–8 (Eng. Abstr.) (Spa)

HISTORY

Body and mind in nineteenth-century medicine: some clinical origins of the neurosis construct. Rosenberg CE. Bull Hist Med 1989 Summer;63(2):185–97
Brunonianism in Britain and Europe. Med Hist Suppl 1988; 8:1–104
Cullen, Brown and the poverty of essentialism. Lawrence C. Med Hist Suppl 1988;8:1–21
Relativism and the case of the Princess Louise von Coburg. Keasberry H. Med Law 1988;7(2):109–19
[Main currents of medical scientific theory in Germany after 1945] Neumann JN. Sudhoffs Arch 1988;72(2):133–53 (Eng. Abstr.) (Ger)
[Organic life as circle movement: on the significance of the circle metaphor in F. W. J. Schelling's natural philosophy] Schubert C. Sudhoffs Arch 1988;72(2):154–9 (Eng. Abstr.) (Ger)
[The philosophy of sex and human health] Imieliński K. Wiad Lek 1988 Sep 1;41(17):1121–8 (Eng. Abstr.) (Pol)

PHILOSOPHY, NURSING

Dear graduate nurse. Foyt MM. Am J Nurs 1989 Jun; 89(6):816–7
Putting your patient-care philosophy to the test [editorial] Mallison M. Am J Nurs 1989 Aug;89(8):1021
Reflections on the philosophy of caring in mental health. Barker P. Int J Nurs Stud 1989;26(2):131–41 (66 ref.)
Nursing care as a moral, practical, communicative and creative activity. Sarvimäki A. J Adv Nurs 1988 Jul; 13(4):462–7
Presidential address. Sills FW. J Neurosci Nurs 1989 Apr; 21(2):76–8
Identifying the components of a nursing service philosophy. Poteet GW, et al. J Nurs Adm 1988 Oct;18(10):29–33
Some reflections on learning and teaching [editorial] Benoliel JQ. J Nurs Educ 1988 Oct;27(8):340–1
Connectedness through liberal education. Boyer EL.

J Prof Nurs 1989 Mar–Apr;5(2):102–7 (1 ref.)
Professional practice. One step forward, one step back. Carter MA. J Prof Nurs 1988 Nov–Dec;4(6):396
My first patient. Deal T. N C Med J 1989 Aug;50(8):441–2
Pushing the outside of the envelope. Masson V. Nurs Outlook 1989 Mar–Apr;37(2):64
A philosophy of nursing [editorial] Brink PJ. West J Nurs Res 1989 Aug;11(4):391–2

PHIMOSIS

ETIOLOGY

Jogger's phimosis. Myhre U, et al. Br J Urol 1989 May; 63(5):549

PATHOLOGY

The histologic spectrum of prepuces from patients with phimosis. Clemmensen OJ, et al. Am J Dermatopathol 1988 Apr;10(2):104–8

PHLEBITIS

CHEMICALLY INDUCED

Retinal periphlebitis after hormonal treatment. Rock T, et al. Ann Ophthalmol 1989 Feb;21(2):75–6
Phlebitis associated with vancomycin therapy [letter] Garrelts JC, et al. Clin Pharm 1988 Oct;7(10):720–1

COMPLICATIONS

Aggressive ulcerative necrobiosis lipoidica associated with venous insufficiency, giant-cell phlebitis and arteritis. Markey AC, et al. Clin Exp Dermatol 1988 May;13(3):183–6
Anterior interosseous nerve syndrome secondary to forearm thrombo-phlebitis [letter] Pavesi G, et al. Ital J Neurol Sci 1989 Apr;10(2):221

DIAGNOSIS

Computed tomographic, ultrasound, and plain film appearance of phleboliths in varicoceles. Gottlieb RH, et al. J Ultrasound Med 1989 Jun;8(6):329–31
Complicated appendiceal inflammatory disease in children: pylephlebitis and liver abscess. Slovis TL, et al. Radiology 1989 Jun;171(3):823–5
[Non-invasive methods of diagnosis of chronic venous pathology of the lower extremities] Konstantinova GD, et al. Kardiologiia 1988 Jun;28(6):76–80 (Eng. Abstr.) (Rus)
[Ultrasonic examination in the diagnosis of pylephlebitis] Kan VI, et al. Sov Med 1989;(4):100–3 (Rus)

DRUG THERAPY

Antithrombotic treatment during acute inflammatory complications of patients affected by postphlebitic syndrome: LMW-heparin versus standard heparin. Verardi S, et al. Int Angiol 1988 Jul–Sep;7(3 Suppl):33–40
[Treatment of blue phlebitis by in situ thrombolysis with a plasminogen activator (letter)] Marcon JL, et al. Presse Med 1989 Jun 17;18(24):1209–10 (Fre)

ETIOLOGY

Heterotopic ossification pseudophlebitis. Yarkony GM, et al. Am J Med 1989 Sep;87(3):342–4
Postinfusion phlebitis after intravenous push versus intravenous piggyback administration of antimicrobial agents. Garrelts JC, et al. Clin Pharm 1988 Oct;7(10):760–5
Posttraumatic phlegmasia cerulea dolens: an indication for the Greenfield filter. Wilson B, et al. South Med J 1989 Jun;82(6):780–2
[Deep phlebitis of the legs in young patients] Allal J, et al. Ann Cardiol Angeiol (Paris) 1989 Apr;38(4):203–7 (Eng. Abstr.) (Fre)
[Stress phlebitis of the upper extremity. Medico-legal aspect] Hodara M. Phlebologie 1989 Apr–Jun;42(2):293–8 (Eng. Abstr.) (Fre)
[Vascular trauma—sequelae] Jantet G. Phlebologie 1989 Apr–Jun;42(2):307–11 (Fre)
[Infections related to intravenous catheters] Pittet D, et al. Rev Med Suisse Romande 1988 Aug;108(8):703–9 (Fre)
[Is the infusion filter a hygienic necessity? (letter)] Kappstein I, et al. Anaesthesist 1989 Jan;38(1):47 (Ger)
[Eales disease and multiple sclerosis. Case report] Opala G, et al. Neurol Neurochir Pol 1988 Jul–Aug;22(4):340–2 (Eng. Abstr.) (Pol)
[Acute appendicitis complicated by pylephlebitis] Driazhenkov GI, et al. Khirurgiia (Mosk) 1988 Dec; (12):124–5 (Rus)
[Retinal periphlebitis in multiple sclerosis] Krstić L, et al. Vojnosanit Pregl 1988 Sep–Oct;45(5):340–2 (Eng. Abstr.) (Scr)

PATHOLOGY

Railway track-like dermatitis: an atypical Mondor's disease? Aloi FG, et al. J Am Acad Dermatol 1989 May;20(5 Pt 2):920–3
[Mondor's disease] Savchak VI. Vestn Dermatol Venerol 1989;(5):73–4 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

Daily change of an antiseptic dressing does not prevent infusion phlebitis: a controlled trial. Leibovici L. Am J Infect Control 1989 Feb;17(1):23–5
Effect of transdermal glyceryl trinitrate on the survival of peripheral intravenous infusions: a double-blind prospective clinical study. Khawaja HT, et al. Br J Surg 1988 Dec;75(12):1212–5
Doppler C.W. study of the lower limb venous hemodynamics during pregnancy and prevention of thrombotic complications. Irace L, et al. Ital J Surg Sci 1988; 18(2):167–9

RADIOGRAPHY

[Pseudophlebitis without popliteal cyst. Apropos of 7 case reports] Fournié B, et al. Rev Rhum Mal Osteoartic 1988 Dec;55(12):1019–21 (Fre)

SURGERY

[A case of Mondor's disease of the penis] Doi Y, et al. Hinyokika Kiyo 1988 Jul;34(7):1245–8 (18 ref.) (Eng. Abstr.) (Jpn)

THERAPY

[Patients' rights, being the fourth third of phlebology therapy. Tribute to Glauco Bassi] Tessari L. Phlebologie 1989 Apr–Jun;42(2):201–9 (Eng. Abstr.) (Fre)

VETERINARY

Omphalophlebitis and osteomyelitis associated with Klebsiella septicemia in a premature foal. Vaala WE, et al. J Am Vet Med Assoc 1988 Nov 15;193(10):1273–7

PHLEBOGRAPHY

Digital venography of the lower extremity. Lee KR, et al. AJR Am J Roentgenol 1989 Aug;153(2):413–7
Real-time ultrasound for diagnosis of symptomatic venous thrombosis and for screening of patients at risk: correlation with ascending conventional venography. Monreal M, et al. Angiology 1989 Jun;40(6):527–33
Recurrent varicose veins—is there a role for varicography? Savolainen H, et al. Ann Chir Gynaecol 1988;77(2):70–3
Angioarchitectural classification of esophageal varices and paraesophageal veins in selective left gastric venography. Hashizume M, et al. Arch Surg 1989 Aug;124(8):961–6
Ascending lower limb phlebography: comparison of ioversol and iothalamate meglumine. Wilson AJ, et al. Can Assoc Radiol J 1989 Jun;40(3):142–4
Free-floating thrombi. Effects of venography on choice of therapy for recurrent pulmonary embolism [letter] Foresti V, et al. Chest 1989 Aug;96(2):444
Digital subtraction venography for assessment of deep venous thrombosis in the arms following pacemaker implantation. Sharma S, et al. Int J Cardiol 1989 Apr;23(1):135–6
Preoperative lower limb venography in patients undergoing total hip arthroplasty. Chumas P, et al. J Arthroplasty 1988; 3(3):225–8
Perioperative asymptomatic venous thrombosis: role of duplex scanning versus venography. Barnes RW, et al. J Vasc Surg 1989 Feb;9(2):251–60
Patency of femorofemoral venous crossover grafts assessed by duplex scanning and phlebography. Harris JP, et al. J Vasc Surg 1988 Dec;8(6):679–82
[Pitfalls in phlebography] Foucart H, et al. J Mal Vasc 1989; 14 Suppl B:61–7 (Eng. Abstr.) (Fre)
[Clinical and paraclinical identification by various imaging technics of congenital anomalies of the inferior vena cava (apropos of 4 cases)] Rettori R, et al. J Mal Vasc 1989; 14(3):191–201 (Eng. Abstr.) (Fre)
[Phlebographic data of the lower extremities in the obese] Picard JD. Phlebologie 1988 Jul–Oct;41(3):539–41 (Fre)
[Phlebography of the upper extremity—examination technic, indications and results] Harder T, et al. Rontgenblatter 1988 Jul;41(7):273–9 (Eng. Abstr.) (Ger)
[Venous diseases of the extremities—surgery and demands on radiology] Imig H. Rontgenblatter 1988 Jul;41(7):267–9 (Eng. Abstr.) (Ger)
[Venous diseases of the lower extremities—methods and results of phlebography of the lower extremity—the superficial and deep systems] Roth FJ, et al. Rontgenblatter 1988 Jul;41(7):270–2 (Eng. Abstr.) (Ger)
[Clinical aspects of venous diseases and diagnostic demands on radiology] Wienert V. Rontgenblatter 1988 Jul; 41(7):265–6 (Eng. Abstr.) (Ger)
[Aneurysmic transformation of the venous system in venous angiodysplasias of the limbs] Vollmar JF, et al. Vasa 1989; 18(2):96–111 (Eng. Abstr.) (Ger)
[Assessing the age of the thrombus in venous thrombosis using sonographic and phlebographic criteria] De la Hammette D, et al. Vasa Suppl 1988;26:123–6 (Ger)
[Validation of the treatment of fresh pelvic-leg venous thromboses with ultra-high dose streptokinase based on a new phlebographic score] Heinrich F, et al. Vasa Suppl 1988;23:87–90 (Ger)
[Roentgen phlebography diagnosis of varicose changes of the ovarian veins] Botschorischwili GG, et al. Z Urol Nephrol 1989 Mar;82(3):135–8 (Eng. Abstr.) (Ger)
[Technics and indications of phlebography in the study of essential varices of the lower limbs] Vigo M, et al. Minerva Chir 1988 Sep 15;43(17):1367–70 (Eng. Abstr.) (Ita)
[Intraoperative anterograde spermatic phlebography: its usefulness in the treatment of varicocele] Gibba A, et al. Minerva Urol Nefrol 1989 Jan–Mar;41(1):1–4 (Eng. Abstr.) (Ita)
[Importance of lateral inspection of the scrotum and value of intraoperative spermatic phlebography in varicocele] Tomoyoshi T, et al. Hinyokika Kiyo 1988 Nov; 34(11):1935–7 (Eng. Abstr.) (Jpn)
[Retrograde gonadal venography in patient with bilateral varicocele; a rare venous return via Santorini's plexus] Yasumoto R, et al. Rinsho Hoshasen 1989 Mar;34(3):387–9 (Eng. Abstr.) (Jpn)

INSTRUMENTATION

[The combination of phlebography and invasive measurement of venous pressure] Weber J. Rontgenblatter 1988 Jul; 41(7):280–7 (Eng. Abstr.) (Ger)

METHODS

Intraarterial digital subtraction venography (i.a.-DSV) of abdominal vessels. Dawson P, et al. Acta Radiol 1989 Jan–Feb;30(1):109–11
Diagnosis of deep venous thrombosis. A prospective study comparing duplex scanning to contrast venography. Killewich LA, et al. Circulation 1989 Apr;79(4):810–4
Impedence phlebography. Ahmed ZM. Radiography 1988 Jul–Aug;54(616):143–6
A comparative trial of the tolerance and diagnostic quality of iopromide and iopamidol when used for leg phlebography. Thomas ML, et al. Vasa 1988;17(4):273–4
[Study of the veins of the foot by counter-current phlebography] Lengua F, et al. J Mal Vasc 1988; 13(4):344–50 (Eng. Abstr.) (Fre)
[Dynamic selective phlebography of veins in the calf] van der Stricht J, et al. Phlebologie 1988 Nov–Dec;41(4):740–5 (Eng. Abstr.) (Fre)
[Sonography versus phlebography. New variants of the color-coded duplex ultrasound technic—controversy: diagnostic accuracy] Schwing C. Fortschr Med 1989 Jun 30;107(19):63–4 (Ger)
[Value of trans-scrotal phlebography. Considerations and results in 10 years of experience] Ialongo A, et al. Ann Ital Chir 1987;59(1–6):127–34 (Ita)
[Role of intraoperative phlebography in the therapeutic approach of varicocele] Latteri M, et al. Minerva Chir 1989 May 15;44(9):1349–51 (Eng. Abstr.) (Ita)
[The side effects of phlebography of the lower extremities using iohexol. A prospective study] Vigo M, et al. Radiol Med (Torino) 1989 Jul–Aug;78(1–2):53–6 (Eng. Abstr.) (Ita)
[Lumbar epidural venography] Fujikawa M, et al. Rinsho Hoshasen 1988 Oct;33(11):1377–82 (Jpn)
[Thyroid arteriography and phlebography] Morita Y. Rinsho Hoshasen 1988 Oct;33(11):1247–53 (Jpn)
[Videomagnetic recording during phleboscopy of the lower extremities (videophlebography) and its diagnostic value in varicose disease] Khachkuruzov SG, et al. Vestn Rentgenol Radiol 1988 Jul–Aug;(4):27–9 (Eng. Abstr.) (Rus)
[Regional phlebography in patients with recurrences of varicocele] Pereverzev AS, et al. Vestn Rentgenol Radiol 1989 Jan–Feb;(1):39–44 (Eng. Abstr.) (Rus)
[The diagnostic value of transvaginal pelvic phlebography in gynecologic oncology] Sidorenko IuS, et al. Vopr Onkol 1989;35(4):465–73 (Eng. Abstr.) (Rus)

STANDARDS

[Conditions for good phlebographic interpretation or several primary facts on phlebography in venous thromboses of the legs] Picard JD. J Mal Vasc 1989;14 Suppl B:68 (0 ref.) (Fre)

UTILIZATION

How do we know who has had deep vein thrombosis? Sandler DA, et al. Postgrad Med J 1989 Jan;65(759):16–9

PHLEBOTOMUS

Phlebotomid sandflies (Diptera: Phlebotominae) in Delhi and environs. Kumar K, et al. J Commun Dis 1988 Mar; 20(1):44–51
Sandflies from a kala-azar outbreak area of district Darbhanga (Bihar), India. Saxena VK. J Commun Dis 1987 Dec;19(4):405–7

ANATOMY & HISTOLOGY

Breeding places of Phlebotomus ariasi in the cevennes focus of leishmaniasis in the south of France. Killick-Kendrick R. Parassitologia 1987 May–Dec;29(2–3):181–91

GROWTH & DEVELOPMENT

[Cultivation of sandflies of the genus Phlebotomus] Valevich TA. Med Parazitol (Mosk) 1988 May–Jun;(3):76–83 (54 ref.) (Rus)

ISOLATION & PURIFICATION

On Phlebotomus langeroni in the North Coastal Zone [letter] Morsy TA, et al. **J Egypt Soc Parasitol** 1989 Dec; 19(2):759–61

[The phlebotomus (Diptera, Psychodidae) from the Cuvette (People's Republic of Congo)] Trouillet J, et al. **Ann Parasitol Hum Comp** 1988;63(4):303–10 (Eng. Abstr.) **(Fre)**

METABOLISM

Detection of fructose in wild-caught Phlebotomus argentipes and P. papatasi in Bihar, India. Dhiman RC. **Trans R Soc Trop Med Hyg** 1988;82(2):344

MICROBIOLOGY

Experimental studies on the maintenance of Toscana and Arbia viruses (Bunyaviridae: Phlebovirus). Ciufolini MG, et al. **Am J Trop Med Hyg** 1989 Jun;40(6):669–75

Experimental infection of Phlebotomus papatasi with sand fly fever Sicilian virus. Watts DM, et al. **Am J Trop Med Hyg** 1988 Dec;39(6):611–6

PARASITOLOGY

Experimental infection of Old and New World phlebotomine sand flies (Diptera: Psychodidae) with Ascogregarina chagasi (Eugregarinorida: Lecudinidae). Wu WK, et al. **J Med Entomol** 1989 Jul;26(4):237–42

The ultrastructure of Leishmania major in the foregut and proboscis of Phlebotomus papatasi. Killick-Kendrick R, et al. **Parasitol Res** 1988;74(6):586–90

Isolation and typing of Leishmania infantum from Phlebotomus neglectus on the island of Corfu, Greece. Léger N, et al. **Trans R Soc Trop Med Hyg** 1988; 82(3):419–20

Natural infections of phlebotomine sandflies with Trypanosomatidae in central and south Italy. Maroli M, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):227–8

Isolation of Leishmania donovani from Phlebotomus martini in Baringo district, Kenya. Perkins PV, et al. **Trans R Soc Trop Med Hyg** 1988;82(5):695–700

Phlebotomus sergenti, a vector of Leishmania tropica in Saudi Arabia. al-Zahrani MA, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):416

PHYSIOLOGY

Bait preference of Phlebotomus argentipes (Ann. & Brunn.). Palit A, et al. **Indian J Public Health** 1988 Jan-Mar; 32(1):41–2

Host preference of phlebotomine sandflies in and around Delhi. Mukhopadhyay AK, et al. **J Commun Dis** 1987 Dec; 19(4):408–11

Some aspects of sandflies of the genus Phlebotomus in El Agamy, Alexandria. el Okbi LM, et al. **J Egypt Soc Parasitol** 1989 Dec;19(2):437–46

Are nulliparous sandflies light-shy? Gibb PA, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):342–3

[Ecologic aspects of American tegumentary leishmaniasis. 5. Stratification of the spatial and seasonal activities of Phlebotominae (Diptera, Psychodidae) in areas of agricultural culture of the Vale do Ribeira region, State of São Paulo, Brazil] Gomes A de C, et al. **Mem Inst Oswaldo Cruz** 1987 Oct-Dec;82(4):467–73 (Eng. Abstr.) **(Por)**

[Effect of the irrigation and reclamation transformation of the Karshi Steppe on burrow sandflies of the genus Phlebotomus—vectors of the causative agent of zoonotic cutaneous leishmaniasis] Zherikhina II, et al. **Med Parazitol (Mosk)** 1989 May-Jun;(3):27–33 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

The peritrophic membrane of the female sandfly Phlebotomus papatasi. Blackburn K, et al. **Ann Trop Med Parasitol** 1988 Dec;82(6):613–9

PHLEBOTOMUS FEVER see **PAPPATACI FEVER**

PHLEBOTOMY see **BLOODLETTING**

PHLEGMASIA ALBA DOLENS see **THROMBOPHLEBITIS**

PHLEGMON see **CELLULITIS**

PHLEOMYCINS see under **BLEOMYCINS**

PHLORETIN

The effect of polyphloretin phosphate (PPP) on oral infiltration anaesthesia. An experimental investigation. Nordenram A, et al. **Swed Dent J** 1988;12(6):217–20

ANALOGS & DERIVATIVES

Influence of polyphloretin phosphate on cholesterol esterifying activity in subcellular fractions from aorta, adrenal and testes of cholesterol-fed rabbits. Morin RJ, et al. **Life Sci** 1974 Oct 1;15(7):1267–75

PHARMACOLOGY

Inhibitory effect of phloretin on histamine release from isolated rat mast cells. Grosman N. **Agents Actions** 1988 Dec;25(3-4):284–90

Inhibition of urea transport in inner medullary collecting duct by phloretin and urea analogues. Chou CL, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):F359–65

Effects of five anion channel blockers on thrombin- and ionomycin-activated platelet functions. Ozaki Y, et al. **Biochem Pharmacol** 1989 Jul 1;38(13):2147–52

Phloretin inhibits cellular uptake and nuclear receptor binding of triiodothyronine in human hep G2 hepatocarcinoma cells. Movius EG, et al. **Endocrinology** 1989 Apr;124(4):1988–97

The inhibitory effect of phlorhizin and phloretin on hexose transport in the liver. Ibu JO, et al. **Scand J Gastroenterol Suppl** 1986;124:75–81

[The action of inhibitors of sugar transport phlorizin, phloretin and cytochalasin B in model systems] Vasianin SI. **Tsitologiia** 1989 Jan;31(1):57–65 (Eng. Abstr.) **(Rus)**

PHLORETIN GLUCOSIDASE see under **GLUCOSIDASES**

PHLORHIZIN

ANALOGS & DERIVATIVES

Electron spin resonance investigation of the interaction of the anion and glucose transport inhibitor, p-azidobenzylphlorizin, with the human red cell membrane. Wyse JW, et al. **Biochim Biophys Acta** 1989 Feb 13;979(1):127–31

METABOLISM

Changes in glucose uptake by and phlorizin binding to brush-border membrane vesicles of small intestine from streptozotocin-induced diabetic rats. Tsuji Y, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Jun;34(3):327–34

PHARMACOLOGY

Phlorizin-induced normoglycemia partially restores glucoregulation in diabetic dogs. Hetenyi G Jr, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):E277–83

Effects of phlorizin and ouabain on the polarity of mouse 4-cell/16-cell stage blastomere heterokaryons. Wiley LM, et al. **Dev Biol** 1989 Jun;133(2):375–84

Correction of chronic hyperglycemia with vanadate, but not with phlorizin, normalizes in vivo glycogen repletion and in vitro glycogen synthase activity in diabetic skeletal muscle. Rossetti L, et al. **J Clin Invest** 1989 Sep;84(3):892–9

Kinetics of metabolism of glucose, propionate and CO2 in steers as affected by injecting phlorizin and feeding propionate [published erratum appears in J Nutr 1989 Feb;119(2):331] Veenhuizen JJ, et al. **J Nutr** 1988 Nov; 118(11):1366–75

The inhibitory effect of phlorhizin and phloretin on hexose transport in the liver. Ibu JO, et al. **Scand J Gastroenterol Suppl** 1986;124:75–81

[The action of inhibitors of sugar transport phlorizin, phloretin and cytochalasin B in model systems] Vasianin SI. **Tsitologiia** 1989 Jan;31(1):57–65 (Eng. Abstr.) **(Rus)**

PHLOROGLUCINOL

ANALOGS & DERIVATIVES

[Use of substances of microbial origin as components of detergent-disinfectant agents] Garagulia AD, et al. **Mikrobiol Zh** 1987 Jan-Feb;49(1):91–3 (Eng. Abstr.) **(Rus)**

PHLOXINE B see under **FLUORESCEINS**

PHOBIA, SCHOOL see **PHOBIC DISORDERS**

PHOBIA, SOCIAL see **PHOBIC DISORDERS**

PHOBIAS see **PHOBIC DISORDERS**

PHOBIC DISORDERS

Three cases of panic disorder with agoraphobia in children. Ballenger JC, et al. **Am J Psychiatry** 1989 Jul;146(7):922–4

Blood-injury phobia [letter] Fava GA, et al. **Am J Psychiatry** 1989 Jul;146(7):948–9

Late-life onset of panic disorder with agoraphobia in three patients. Luchins DJ, et al. **Am J Psychiatry** 1989 Jul; 146(7):920–1

AIDSphobia. **Compr Ther** 1988 Dec;14(12):71

Dental phobia and anxiety. **Dent Clin North Am** 1988 Oct; 32(4):647–840

Integrating the dental phobic into the general dental practice. Kaplan AS, et al. **Dent Clin North Am** 1988 Oct;32(4):771–7 (21 ref.)

Anxiety disorders, panic attacks and phobias. Proceedings of the Key Biscayne Research Conference. Key Biscayne, Florida, 9–11 December 1982. **J Psychiatr Res** 1988;22 Suppl 1:1–114

Panic disorder and agoraphobia. An update for primary care physicians. Anixter WL. **N C Med J** 1988 Oct; 49(10):507–11 (7 ref.)

School phobia. Sometimes a child or teenager has a good reason. Leung AK. **Postgrad Med** 1989 Jan;85(1):281–2, 287–9

[The substance of the concept of "phobia"] Poliakov SE. **Zh Nevropatol Psikhiatr** 1988;88(11):64–7 (Eng. Abstr.) **(Rus)**

BLOOD

Plasma lipid levels in patients with panic disorder or agoraphobia. Hayward C, et al. **Am J Psychiatry** 1989 Jul; 146(7):917–9

Blunted growth hormone response to peripheral infusion of human growth hormone-releasing factor in patients with panic disorder. Rapaport MH, et al. **Am J Psychiatry** 1989 Jan;146(1):92–5

Plasma beta-endorphin response to lactate infusion. Dager SR, et al. **Biol Psychiatry** 1989 Jan 15;25(2):243–5

Basal adrenocortical activity and DST in electrodermally differentiated subgroups of panic patients. Kopp MS, et al. **Int J Psychophysiol** 1989 Mar;7(1):77–83

Platelet serotonin uptake and 3H-imipramine binding in panic disorder. Norman TR, et al. **J Affective Disord** 1989 Jul-Aug;17(1):77–81

Dehydroepiandrosterone-sulfate/cortisol ratio in panic disorder. Fava M, et al. **Psychiatry Res** 1989 Jun; 28(3):345–50

CEREBROSPINAL FLUID

CSF prostaglandin-E in agoraphobia with panic attacks. Anton RF, et al. **Biol Psychiatry** 1989 Jul;26(3):257–64

COMPLICATIONS

Agoraphobia and hyperthyroidism. Emanuele MA, et al. **Am J Med** 1989 Apr;86(4):484–6

Thyroid disorders in female psychiatric patients with panic disorder or agoraphobia. Orenstein H, et al. **Am J Psychiatry** 1988 Nov;145(11):1428–30

The hyperventilation syndrome in panic disorder, agoraphobia and generalized anxiety disorder. de Ruiter C, et al. **Behav Res Ther** 1989;27(4):447–52

Mitral valve prolapse and social phobia. Chaleby K, et al. **Br J Psychiatry** 1988 Feb;152:280–1

Early separation anxiety and adult agoraphobia. Zitrin CM, et al. **J Nerv Ment Dis** 1988 Oct;176(10):621–5

DIAGNOSIS

Social phobic symptoms in patients with panic disorder: practical and theoretical implications. Stein MB, et al. **Am J Psychiatry** 1989 Feb;146(2):235–8

Phobic disorders and anxiety states: how do they differ? Oei TP, et al. **Aust N Z J Psychiatry** 1989 Mar;23(1):81–8 (26 ref.)

The validity of the Social Avoidance and distress Scale and the Fear of Negative Evaluation Scale with social phobic patients. Heimberg RG, et al. **Behav Res Ther** 1988; 26(5):407–13 (18 ref.)

Some further comments on the measurement of social phobia. Turner SM, et al. **Behav Res Ther** 1988;26(5):411–3

School refusal: a 15–20-year follow-up study of 35 Swedish urban children. Flakierska N, et al. **Br J Psychiatry** 1988 Jun;152:834–7

Pseudo-AIDS, AIDS panic or AIDS phobia? [letter] Riccio M, et al. **Br J Psychiatry** 1987 Dec;151:863

Correlates of DSM-III personality disorder in panic disorder and agoraphobia. Mavissakalian M, et al. **Compr Psychiatry** 1988 Nov-Dec;29(6):535–44

Differentiating anxiety-panic disorders from psychologic dental anxiety. Weiner AA, et al. **Dent Clin North Am** 1988 Oct;32(4):823–40 (48 ref.)

Serotonin uptake in panic disorder and agoraphobia. Pecknold JC, et al. **Neuropsychopharmacology** 1988 May; 1(2):173–6

Response to sodium lactate in panic disorder: relationship to presenting clinical variables. Cowley DS, et al. **Psychiatry Res** 1988 Sep;25(3):253–9

Simple phobia: evidence for heterogeneity. Himle JA, et al. **Psychiatry Res** 1989 Apr;28(1):25–30

Panic disorder: fact or fiction? Gelder MG. **Psychol Med** 1989 May;19(2):277–83 (67 ref.)

Further evidence of construct validity for the Agoraphobic Cognitions Questionnaire and the Body Sensations Questionnaire. Zgourides GD, et al. **Psychol Rep** 1989 Apr; 64(2):590

[Phobias] Bermejo E, et al. **Rev Med Suisse Romande** 1989 Feb;109(2):125–9 **(Fre)**

[Psychosomatic correlations in neurotic cardiophobias] Gubachev IuM, et al. **Zh Nevropatol Psikhiatr** 1988; 88(11):60–3 (Eng. Abstr.) **(Rus)**

[Clinical aspects of the development of the cardiophobic syndrome] Semke VIa, et al. **Zh Nevropatol Psikhiatr** 1988; 88(11):55–9 (Eng. Abstr.) **(Rus)**

[Slowly-progressing schizophrenia and cyclothymic disorder with phobic manifestations in patients under a general practitioner's care] Vorontsova EA. **Zh Nevropatol Psikhiatr** 1989;89(5):76–81 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Imipramine dose-response relationship in panic disorder with agoraphobia. Preliminary findings. Mavissakalian MR, et

al. **Arch Gen Psychiatry** 1989 Feb;46(2):127-31
Platelet serotonin uptake in panic disorder: comparison with normal controls and the effect of treatment. Norman TR, et al. **Aust N Z J Psychiatry** 1988 Dec;22(4):390-5
HPA axis disturbance and treatment outcome in panic disorder. Coryell W, et al. **Biol Psychiatry** 1988 Nov; 24(7):762-6
Treatment-emergent depression with antidepressants in panic disorder. Aronson TA. **Compr Psychiatry** 1989 May-Jun; 30(3):267-71
Pharmacologic modalities in the management and treatment of dental anxiety. Moore PA, et al. **Dent Clin North Am** 1988 Oct;32(4):803-16 (23 ref.)
Secondary depression in panic disorder and agoraphobia. II. Dimensions of depressive symptomatology and their response to treatment. Lesser IM, et al. **J Affective Disord** 1989 Jan-Feb;16(1):49-58
Follow-up study of patients with panic disorder and agoraphobia with panic attacks treated with tricyclic antidepressants. Noyes R Jr, et al. **J Affective Disord** 1989 Mar-Jun;16(2-3):249-57
Problems with tricyclic antidepressant use in patients with panic disorder or agoraphobia: results of a naturalistic follow-up study. Noyes R Jr, et al. **J Clin Psychiatry** 1989 May;50(5):163-9
Alprazolam treatment of avoidant personality traits in social phobic patients. Reich J, et al. **J Clin Psychiatry** 1989 Mar; 50(3):91-5
Fluoxetine in panic disorder patients with imipramine-associated weight gain [letter] Brady K, et al. **J Clin Psychopharmacol** 1989 Feb;9(1):66-7
The treatment of patients with panic disorder and agoraphobia with tricyclic antidepressants [letter] Ciccone PE. **J Clin Psychopharmacol** 1988 Aug;8(4):297-9
Panic attacks and agoraphobia: low dose clomipramine treatment. Gloger S, et al. **J Clin Psychopharmacol** 1989 Feb;9(1):28-32
Alprazolam, propranolol, and placebo in the treatment of panic disorder and agoraphobia with panic attacks. Munjack DJ, et al. **J Clin Psychopharmacol** 1989 Feb; 9(1):22-7
Double-blind comparison of alprazolam and adinazolam for panic and phobic disorders. Pyke RE, et al. **J Clin Psychopharmacol** 1989 Feb;9(1):15-21
Tranylcypromine in social phobia. Versiani M, et al. **J Clin Psychopharmacol** 1988 Aug;8(4):279-83
Agoraphobia. **Lancet** 1988 Oct 15;2(8616):881-2 (22 ref.)
Serotonergic anxiolytics in the treatment of panic disorder: a controlled study with buspirone. Pohl R, et al. **Psychopathology** 1989;22 Suppl 1:60-7
Serotonin-influencing drugs in the treatment of panic disorder. Westenberg HG, et al. **Psychopathology** 1989;22 Suppl 1:68-77
[Tetrabamate in the treatment of agoraphobia (letter)] Iruela Cuadrado LM, et al. **Med Clin (Barc)** 1988 Nov 26; 91(18):717 **(Spa)**

ENZYMOLOGY

A kinetic analysis of platelet monoamine oxidase activity in patients with panic attacks. Norman TR, et al. **J Affective Disord** 1988 Sep-Oct;15(2):127-30

EPIDEMIOLOGY

Epidemiology of anxiety disorders in Florence. Faravelli C, et al. **Acta Psychiatr Scand** 1989 Apr;79(4):308-12
Frequency of panic disorder in summer [letter] Cameron OG. **Am J Psychiatry** 1989 Jan;146(1):123
Prevalence of agoraphobia without panic in clinical settings [letter] Pollard CA, et al. **Am J Psychiatry** 1989 Apr; 146(4):559
The prevalence of fears, phobias and anxiety disorders and their relationship with depression in women attending family physicians. Costello CG, et al. **Behav Res Ther** 1988; 26(4):311-20
The epidemiology of panic symptomatology and agoraphobic avoidance. Joyce PR, et al. **Compr Psychiatry** 1989 Jul-Aug;30(4):303-12
Relationship and chronology of depression, agoraphobia, and panic disorder in the general population. Thompson AH, et al. **J Nerv Ment Dis** 1989 Aug;177(8):456-63
[Panic disorder in general medicine. Epidemiological data and treatment with clomipramine] Rouillon F. **Encephale** 1988 Sep-Oct;14(5):371-8 (Eng. Abstr.) **(Fre)**

ETHNOLOGY

Social phobia syndrome in Japan [published erratum appears in 1989 May-Jun;30(3):274] Takahashi T. **Compr Psychiatry** 1989 Jan-Feb;30(1):45-52 (20 ref.)

ETIOLOGY

MR imaging as a trigger for persistent claustrophobia [letter] Fishbain D, et al. **AJR** 1989 Mar;152(3):653
Blood-injury phobia [letter] **Am J Psychiatry** 1989 Apr; 146(4):564-5
Role of cognitive appraisal in panic-related avoidance. Telch MJ, et al. **Behav Res Ther** 1989;27(4):373-83
Koro secondary to a tumour of the corpus callosum [letter] Kumar HV, et al. **Br J Psychiatry** 1988 Nov;153:711-2
Panic-agoraphobia [letter] Gulledge AD. **J Am Board Fam Pract** 1989 Jul-Sep;2(3):216-7
Anxiety, panic and phobic disorders: an overview. Roth M, et al. **J Psychiatr Res** 1988;22 Suppl 1:33-54 (92 ref.)
Panic disorder with agoraphobia. Mathis JL. **N C Med J** 1988 Oct;49(10):521-2

GENETICS

HLA system and panic attacks. Cottraux J, et al. **Biol Psychiatry** 1989 Feb 15;25(4):505-8
Familial analysis of panic disorder and agoraphobia. Gruppo Italiano Disturbi d'Ansia. **J Affective Disord** 1989 Jul-Aug; 17(1):1-8

IMMUNOLOGY

Phobic disorders and immunity [letter] Covelli V, et al. **Acta Neurol (Napoli)** 1988 Feb;10(1):83-4

PHYSIOPATHOLOGY

Sensitivity to gravitational changes [letter] Berg JM. **Am J Psychiatry** 1989 Oct;146(10):1362
Positron emission tomographic evaluation of cerebral blood flow during state anxiety in simple phobia. Mountz JM, et al. **Arch Gen Psychiatry** 1989 Jun;46(6):501-4
Psychophysiological and subjective reactions of social phobics and normals to facial stimuli. Merckelbach H, et al. **Behav Res Ther** 1989;27(3):289-94
The significance of HPA axis disturbance in panic disorder. Coryell W, et al. **Biol Psychiatry** 1989 Apr 15; 25(8):989-1002
The utility of the panic disorder concept. Klein DF, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(5-6):268-79 (108 ref.)
The cerebellar-vestibular predisposition to anxiety disorders. Levinson HN. **Percept Mot Skills** 1989 Feb;68(1):323-38
A cerebellar-vestibular explanation for fears/phobias: hypothesis and study. Levinson HN. **Percept Mot Skills** 1989 Feb;68(1):67-84
Panic disorder, the ventilatory response to carbon dioxide and respiratory variables. Pain MC, et al. **Psychosom Med** 1988 Sep-Oct;50(5):541-8
Sleep in patients with spontaneous panic attacks. Hauri PJ, et al. **Sleep** 1989 Aug;12(4):323-37
[Relationship between depressive and obsessive manifestations] Brogna P, et al. **Minerva Psichiatr** 1988 Oct-Dec;29(4):195-8 (Eng. Abstr.) **(Ita)**

PREVENTION & CONTROL

Treatment of the geriatric dentally phobic patient. Epstein S. **Dent Clin North Am** 1988 Oct;32(4):715-21 (8 ref.)

PSYCHOLOGY

History of separation anxiety in patients with panic disorder and depression and normal controls. Yeragani VK, et al. **Acta Psychiatr Scand** 1989 Jun;79(6):550-6
Prodromal symptoms in panic disorder with agoraphobia [see comments] Fava GA, et al. **Am J Psychiatry** 1988 Dec; 145(12):1564-7. **Comment in:** Am J Psychiatry 1989 Jun;146(6):812-4
Prodromal symptoms in agoraphobia and panic disorder [letter; comment] Klein DF. **Am J Psychiatry** 1989 Jun; 146(6):812-4. **Comment on:** Am J Psychiatry 1988 Dec;145(12):1564-7
'Fear of panic': an investigation of its role in panic occurrence, phobic avoidance, and treatment outcome. Adler CM, et al. **Behav Res Ther** 1989;27(4):391-6
Dental phobias and anxieties: evidence for conditioning processes in the acquisition and modulation of a learned fear. Davey GC. **Behav Res Ther** 1989;27(1):51-8
Hyperventilation and anxiety in panic disorder, social phobia, GAD and normal controls. Holt PE, et al. **Behav Res Ther** 1989;27(4):453-60
Accuracy of fear inventories and self-efficacy scales in predicting agoraphobic behavior. Kinney PJ, et al. **Behav Res Ther** 1988;26(6):513-8
Specificity and psychosocial correlates of blood/injury fear and fainting. Kleinknecht RA. **Behav Res Ther** 1988; 26(4):303-9
Social phobia: individual response patterns and the effects of behavioral and cognitive interventions. Mersch PP, et al. **Behav Res Ther** 1989;27(4):421-34
Mood and habituation to phobic stimuli. Mills I, et al. **Behav Res Ther** 1988;26(5):435-9
Effects of rearing and exposure condition upon the acquisition of phobic behaviour in cynomolgus monkeys. Röder EL, et al. **Behav Res Ther** 1989;27(3):221-31
Sensations, cognitions and the perception of cues associated with expected and unexpected panic attacks. Street LL, et al. **Behav Res Ther** 1989;27(2):189-98
Cognitive bias and irrational belief as predictors of avoidance. Warren R, et al. **Behav Res Ther** 1989;27(2):181-8
Panic disorder: a product of classical conditioning. Wolpe J, et al. **Behav Res Ther** 1988;26(6):441-50 (55 ref.)
Bio-informational processing in agoraphobia. Zander JR, et al. **Behav Res Ther** 1988;26(5):421-9
Avoidance learning, Pavlovian conditioning, and the development of phobias. Siddle DA, et al. **Biol Psychol** 1988 Oct;27(2):167-83 (75 ref.)
Failure to replicate evidence for phobic schemata in agoraphobic patients. Pickles AJ, et al. **Br J Clin Psychol** 1988 Sep;27 (Pt 3):271-2
Dysmorphophobia--a centenary discussion. Birtchnell SA. **Br J Psychiatry** 1988 Jul;153 Suppl 2:41-3 (35 ref.)
The fear questionnaire. Some data on validity, reliability and layout. Van Zuuren FJ. **Br J Psychiatry** 1988 Nov; 153:659-62
Derealization and panic attacks: a clinical evaluation on 150 patients with panic disorder/agoraphobia. Cassano GB, et al. **Compr Psychiatry** 1989 Jan-Feb;30(1):5-12
Achievement inhibition in contemporary women: developmental considerations. Krueger DW. **Hillside J Clin Psychiatry** 1988;10(2):232-43
Phobias and hypnotizability: a reexamination. Owens ME, et al. **Int J Clin Exp Hypn** 1989 Jul;37(3):207-16
A previously-untranslated report by Freud of a lecture on the mechanism of obsessional ideas and phobias. Solms M. **Int J Psychoanal** 1989;70 (Pt 1):91-4
Panic onset and major events in the lives of agoraphobics: a test of contiguity. Pollard CA, et al. **J Abnorm Psychol** 1989 Aug;98(3):318-21
Self-discrepancies in clinical depression and social phobia: cognitive structures that underlie emotional disorders? Strauman TJ. **J Abnorm Psychol** 1989 Feb;98(1):14-22
Changing the school system [letter] Masters KJ. **J Am Acad Child Adolesc Psychiatry** 1989 May;28(3):458
Panic and nausea instead of grief in an adolescent [clinical conference] Smith GR Jr, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Jul;27(4):509-13
Factors in the panic-agoraphobia transition. Katerndahl DA. **J Am Board Fam Pract** 1989 Jan-Mar;2(1):10-6
Agoraphobics' understanding of the development and maintenance of their symptoms. Liddell A, et al. **J Behav Ther Exp Psychiatry** 1988 Dec;19(4):261-6
AIDS-phobia, contact with AIDS, and AIDS-related job stress in hospital workers. Pleck JH, et al. **J Homosex** 1988; 15(3-4):41-54
Cancerphobia: an emerging theory of compensable damages. Maskin A. **J Occup Med** 1989 May;31(5):427-31
Public and private self-consciousness and social phobia. Hope DA, et al. **J Pers Assess** 1988 Winter;52(4):626-39
Psychophysiological aspects of phobic fears: an evaluative review. Hugdahl K. **Neuropsychobiology** 1988; 20(4):194-204 (84 ref.)
School refusal. Schmitt BD. **Pediatr Rev** 1986 Oct; 8(4):99-105 (9 ref.)
Tonic arousal and activity: relationships to personality and personality disorder traits in panic patients. King RJ, et al. **Psychiatry Res** 1988 Jul;25(1):65-72
Agoraphobia with and without current panic attacks. Brown R, et al. **Psychol Rep** 1989 Apr;64(2):503-6
Homophobia and attitudes about AIDS [published erratum appears in Psychol Rep 1989 Jun;64(3 Pt 1):preceding 683] Dupras A, et al. **Psychol Rep** 1989 Feb;64(1):236-8
Biological model of agoraphobia: a comment. Goldberg C. **Psychol Rep** 1988 Oct;63(2):571-8
On "stress-induced recovery of fears and phobias". McNally RJ. **Psychol Rev** 1989 Jan;96(1):180-1
Panic attacks with and without agoraphobia: a comparison. Faravelli C, et al. **Psychopathology** 1988;21(1):51-6
AIDS phobia: report of 4 cases. Ross MW. **Psychopathology** 1988;21(1):26-30
[AIDS: phobia and real anxiety—case reports from AIDS counseling in the public health office] Filipp N, et al. **Off Gesundheitswes** 1989 May;51(5):242-4 (Eng. Abstr.) **(Ger)**
[Phobia in childhood and adolescence] Blanz B, et al. **Prax Kinderpsychol Kinderpsychiatr** 1988 Dec;37(10):362-6 (Eng. Abstr.) **(Ger)**
[AIDS in psychiatry and psychotherapy: special psychodynamic and psychopathologic aspects based on a case with "AIDS phobia"] Vollmoeller W. **Z Psychosom Med Psychoanal** 1988;34(4):351-60 (Eng. Abstr.) **(Ger)**

THERAPY

Utilization approaches and psychodynamic psychotherapy in a case of hospital phobia: an integrated approach. Handler L. **Am J Clin Hypn** 1989 Apr;31(4):257-63
Behavioral treatment of panic-related disorders: a review. Laraia MT, et al. **Arch Psychiatr Nurs** 1989 Jun;3(3):125-33 (40 ref.)
School refusal: graduated and rapid behavioural treatment strategies. King NJ, et al. **Aust N Z J Psychiatry** 1989 Jun; 23(2):213-23 (77 ref.)
A 6-year follow-up of the effectiveness of respiratory retraining, in-situ isometric relaxation, and cognitive modification in the treatment of agoraphobia. Franklin JA. **Behav Modif** 1989 Apr;13(2):139-67
Behavioral assessment and treatment of childhood phobias. Ollendick TH, et al. **Behav Modif** 1988 Apr;12(2):165-204 (120 ref.)
The structure of assertiveness: a confirmatory approach. Arrindell WA, et al. **Behav Res Ther** 1988;26(4):337-9
Veterinary use of exposure techniques in the treatment of phobic domestic animals. Baum M. **Behav Res Ther** 1989; 27(3):307-8
Relationships among measures of communication, marital satisfaction and exposure during couples treatment of agoraphobia. Craske MG, et al. **Behav Res Ther** 1989; 27(2):131-40
Cognitive factors in social anxiety and its treatment. Lucock MP, et al. **Behav Res Ther** 1988;26(4):297-302
One-session treatment for specific phobias. Ost LG. **Behav Res Ther** 1989;27(1):1-7

Applied tension, applied relaxation, and the combination in the treatment of blood phobia. Ost LG, et al. **Behav Res Ther** 1989;27(2):109–21

Safety-signal therapy in agoraphobics: a preliminary test. Sartory G, et al. **Behav Res Ther** 1989;27(2):205–9

Guided mastery and stimulus exposure treatments for severe performance anxiety in agoraphobics. Williams SL, et al. **Behav Res Ther** 1989;27(3):237–45

Management of patients with severe fear of AIDS (AIDS phobia) [letter] Hall P, et al. **Br J Hosp Med** 1989 Jun; 41(6):589

Therapist contact and outcome of self-exposure treatment for phobias. A controlled study. Ghosh A, et al. **Br J Psychiatry** 1988 Feb;152:234–8

Respiratory control: its contribution to the treatment of panic attacks. A controlled study. Hibbert GA, et al. **Br J Psychiatry** 1989 Feb;154:232–6

Psychotherapy and dysmorphophobia [letter] Holmes J. **Br J Psychiatry** 1988 Jun;152:858–9

Drugs and psychological treatments for agoraphobia/panic and obsessive-compulsive disorders: a review. Marks I, et al. **Br J Psychiatry** 1988 Nov;153:650–8 (71 ref.)

Dysmorphophobic avoidance with disturbed bodily perception. A pilot study of exposure therapy. Marks I, et al. **Br J Psychiatry** 1988 May;152:674–8

Behavioural treatment of illness phobia and hypochondriasis. A pilot study of 17 cases. Warwick HM, et al. **Br J Psychiatry** 1988 Feb;152:239–41

Biofeedback therapy in the treatment of dental anxiety and dental phobia. Elmore AM. **Dent Clin North Am** 1988 Oct; 32(4):735–44 (17 ref.)

Treatment of the agoraphobic dental patient. Filewich RJ. **Dent Clin North Am** 1988 Oct;32(4):723–33 (19 ref.)

Hypnosis in the treatment of dental fear and phobia. Forgione AG. **Dent Clin North Am** 1988 Oct;32(4):745–61 (83 ref.)

The challenge of fearful and phobic children. Weinstein P, et al. **Dent Clin North Am** 1988 Oct;32(4):667–92 (62 ref.)

Obsessions/counter-obsessions: a construction/reconstruction of meaning. Sheinberg M. **Fam Process** 1988 Sep;27(3):305–16

Different rates of improvement of different symptoms in combined pharmacological and behavioral treatment of agoraphobia. Cox DJ, et al. **J Behav Ther Exp Psychiatry** 1988 Jun;19(2):119–26

Synchrony and desynchrony in high and low arousal subjects undergoing therapeutic exposure. Gerew AB, et al. **J Behav Ther Exp Psychiatry** 1989 Mar;20(1):41–8

A multifaceted behavioral intervention for pill-taking avoidance associated with Tylenol poisoning. Pbert LA, et al. **J Behav Ther Exp Psychiatry** 1988 Dec;19(4):311–5

Guided imaginal coping: an integrative treatment for panic disorder. Watkins PL, et al. **J Behav Ther Exp Psychiatry** 1988 Jun;19(2):147–55

Marital therapy and spouse involvement in the treatment of depression, agoraphobia, and alcoholism. Jacobson NS, et al. **J Consult Clin Psychol** 1989 Feb;57(1):5–10 (36 ref.)

Generalization of therapeutic changes in agoraphobia: the role of perceived self-efficacy. Williams SL, et al. **J Consult Clin Psychol** 1989 Jun;57(3):436–42

Treatment of acrophobia of an institutionalized adult with mental retardation. Spencer CR, et al. **Ment Retard** 1989 Feb;27(1):1–4

Cognitive correlates and outcome of cognitive, behavioral and physiological treatments of agoraphobia. Michelson L, et al. **Psychol Rep** 1988 Dec;63(3):999–1004

Differential effects of imipramine and behavior therapy on panic disorder with agoraphobia. Mavissakalian M. **Psychopharmacol Bull** 1989;25(1):27–9 (19 ref.)

[Dysmorphophobia—a cooperative field between dermatology and psychotherapy] Haustein UF, et al. **Dermatol Monatsschr** 1988;174(6):345–8 (Eng. Abstr.) (Ger)

[Exposure therapy of phobic and compulsive disorders] Bergem M, et al. **Tidsskr Nor Laegeforen** 1989 Mar 30; 109(9):953–6, 967 (Eng. Abstr.) (Nor)

[Treatment of phobias and compulsive disorders] Holm HJ. **Tidsskr Nor Laegeforen** 1989 Mar 30;109(9):940–1 (Nor)

URINE

Direct comparison of urinary free cortisol excretion in patients with depression and panic disorder. Kathol RG, et al. **Biol Psychiatry** 1989 Apr 1;25(7):873–8

PHOBIC NEUROSES see **PHOBIC DISORDERS**

PHOCOMELIA see **ECTROMELIA**

PHODOPUS see **HAMSTERS**

PHONATION see under **VOICE**

PHONATION DISORDERS see **VOICE DISORDERS**

PHONETICS

Visual letter-matching and the time course of visual and acoustic codes. Carrasco M, et al. **Acta Psychol (Amst)** 1988 Oct;69(1):1–17

Increasing oral reading proficiency through overcorrection and phonic analysis. Singh NN, et al. **Am J Ment Retard** 1988 Nov;93(3):312–9

Phoneme perception via hearing aids with and without compression and the role of temporal resolution. Dreschler WA. **Audiology** 1989;28(1):49–60

Material for Cantonese speech audiometry constructed by appropriate phonetic principles. Lau CC, et al. **Br J Audiol** 1988 Nov;22(4):297–304

Computer-generated phonemic cues: an effective aid for naming in aphasia. Bruce C, et al. **Br J Disord Commun** 1987 Dec;22(3):191–201

What shall we do with 'medial' sounds? French A. **Br J Disord Commun** 1988 Apr;23(1):41–50

Accurate non-word spelling despite congenital inability to speak: phoneme-grapheme conversion does not require subvocal articulation. Bishop DV, et al. **Br J Psychol** 1989 Feb;80 (Pt 1):1–13

Stimulus intensity, attentional instructions, and the ear advantage during dichotic listening. Bloch MI, et al. **Brain Cogn** 1989 Jan;9(1):136–48

Recognition of affective and noncanonical linguistic facial expressions in hearing and deaf subjects. Corina DP. **Brain Cogn** 1989 Mar;9(2):227–37

On the independence of physical and nominal codes: a correlational analysis. Freides D, et al. **Brain Cogn** 1988 Dec;8(3):409–20

Word recognition and orthographic context effects in a letter-by-letter reader. Bub DN, et al. **Brain Lang** 1989 Apr;36(3):357–76

Hemispheric differences for orthographic and phonological processing. Crossman DL, et al. **Brain Lang** 1988 Nov; 35(2):301–12

Intraoral pressure and its relationship to velopharyngeal inadequacy. Dalston RM, et al. **Cleft Palate J** 1988 Jul; 25(3):210–9

An objective method of assessing nasality: a possible aid in the selection of patients for adenoidectomy. Parker AJ, et al. **Clin Otolaryngol** 1989 Apr;14(2):161–6

Identification of synthetic vowels by patients using the Symbion multichannel cochlear implant. Dorman MF, et al. **Ear Hear** 1989 Feb;10(1):40–3

Intraoral pressure differences in various degrees of breathiness. Klich RJ, et al. **Folia Phoniatr (Basel)** 1988; 40(6):265–9

Electromyographic study of emphatic consonants in standard Jordanian Arabic. Kuriyagawa F, et al. **Folia Phoniatr (Basel)** 1988;40(3):117–22

Evidence of coarticulation in Arabic. Stromsta C, et al. **Folia Phoniatr (Basel)** 1988;40(4):183–9

Cues for intervocalic /t/ and /d/ in children and adults. Allen GD, et al. **J Acoust Soc Am** 1988 Sep;84(3):868–75

Modeling the perception of concurrent vowels: vowels with the same fundamental frequency. Assmann PF, et al. **J Acoust Soc Am** 1989 Jan;85(1):327–38

On the role of the amplitude of the fricative noise in the perception of place of articulation in voiceless fricative consonants. Behrens S, et al. **J Acoust Soc Am** 1988 Sep; 84(3):861–7

Interactive factors in consonant confusion patterns. Bell TS, et al. **J Acoust Soc Am** 1989 Jan;85(1):339–46

Acoustic-phonetic characteristics of speech produced in noise and while wearing an oxygen mask. Bond ZS, et al. **J Acoust Soc Am** 1989 Feb;85(2):907–12

Data labeling and sampling effects in harmonics-to-noise ratios. Cox NB, et al. **J Acoust Soc Am** 1989 May; 85(5):2165–78

An auditory basis for the stimulus-length effect in the perception of stops and glides. Diehl RL, et al. **J Acoust Soc Am** 1989 May;85(5):2154–64

Auditory/phonetic categorization with the Symbion multichannel cochlear implant. Dorman MF, et al. **J Acoust Soc Am** 1988 Aug;84(2):501–10

Auditory filter characteristics and consonant recognition for hearing-impaired listeners. Dubno JR, et al. **J Acoust Soc Am** 1989 Apr;85(4):1666–75

The development of skill in producing word-final English stops: kinematic parameters [published erratum appears in J Acoust Soc Am 1989 Jul;86(1):431] Flege JE. **J Acoust Soc Am** 1988 Nov;84(5):1639–52

Effects of speaking rate on tongue position and velocity of movement in vowel production. Flege JE. **J Acoust Soc Am** 1988 Sep;84(3):901–16

Responses of "high-spontaneous" auditory-nerve fibers to consonant-vowel syllables in noise. Geisler CD, et al. **J Acoust Soc Am** 1989 Apr;85(4):1639–52

Duration of frication noise required for identification of English fricatives. Jongman A. **J Acoust Soc Am** 1989 Apr; 85(4):1718–25

Could temporal order differences underlie 2-month-olds' discrimination of English voicing contrasts? Jusczyk PW, et al. **J Acoust Soc Am** 1989 Apr;85(4):1741–9

Perceptual differences between vowels located in a limited phonetic space. Kewley-Port D, et al. **J Acoust Soc Am** 1989 Apr;85(4):1726–40

A note on "Information conveyed by vowels". Ladefoged P. **J Acoust Soc Am** 1989 May;85(5):2223–4

The cricothyroid muscle in voicing control. Löfqvist A, et al. **J Acoust Soc Am** 1989 Mar;85(3):1314–21

Auditory-perceptual interpretation of the vowel. Miller JD. **J Acoust Soc Am** 1989 May;85(5):2114–34 (84 ref.)

Static, dynamic, and relational properties in vowel perception. Nearey TM. **J Acoust Soc Am** 1989 May; 85(5):2088–113 (115 ref.)

Patterns of interarticulator phasing and their relation to linguistic structure [published erratum appears in J Acoust Soc Am 1989 Apr;85(4):1788] Nittrouer S, et al. **J Acoust Soc Am** 1988 Nov;84(5):1653–61

Revisiting stop-consonant perception for two-formant stimuli. Ohde RN. **J Acoust Soc Am** 1988 Oct;84(4):1551–5

Acoustic properties and perception of stop consonant release transients. Repp BH, et al. **J Acoust Soc Am** 1989 Jan; 85(1):379–96

Synchronized discharge rate representation of voice-onset time in the chinchilla auditory nerve. Sinex DG, et al. **J Acoust Soc Am** 1989 May;85(5):1995–2004

Detection and discrimination of synthetic English vowels by Old World monkeys (Cercopithecus, Macaca) and humans. Sinnott JM. **J Acoust Soc Am** 1989 Aug;86(2):557–65

Evolving theories of vowel perception. Strange W. **J Acoust Soc Am** 1989 May;85(5):2081–7 (54 ref.)

Dynamic specification of coarticulated vowels spoken in sentence context. Strange W. **J Acoust Soc Am** 1989 May; 85(5):2135–53

Synthetic vowel studies on cochlear implant patients. Tong YC, et al. **J Acoust Soc Am** 1988 Sep;84(3):876–87

F1 structure provides information for final-consonant voicing. Van Summers W. **J Acoust Soc Am** 1988 Aug; 84(2):485–92

Effect of simulated hearing loss on speech sounds perception. Schear JM, et al. **J Clin Exp Neuropsychol** 1988 Oct; 10(5):597–602

The relationship between cluster and liquid simplification and sentence length, age, and IQ in Down's syndrome children. Crosley PA, et al. **J Commun Disord** 1989 Jun;22(3):151–68

Presentation level determination for CV tokens using a computer-controlled adaptive procedure. Wall LG, et al. **J Commun Disord** 1989 Jun;22(3):193–207

Articulatory adequacy in dysarthric speakers: a comparison of judging formats. Yorkston KM, et al. **J Commun Disord** 1988 Aug;21(4):351–61

Is dependence on phonological information in children's reading a product of instructional approach? Johnston RS, et al. **J Exp Child Psychol** 1989 Aug;48(1):131–45

Developmental and individual differences in performance on phonological synthesis tasks. Torgesen JK, et al. **J Exp Child Psychol** 1989 Jun;47(3):491–505

Examination of perceptual reorganization for nonnative speech contrasts: Zulu click discrimination by English-speaking adults and infants. Best CT, et al. **J Exp Psychol [Hum Percept]** 1988 Aug;14(3):345–60

Lexical effects on the phonetic categorization of speech: the role of acoustic structure. Burton MW, et al. **J Exp Psychol [Hum Percept]** 1989 Aug;15(3):567–75

Stress in time. Kelly MH, et al. **J Exp Psychol [Hum Percept]** 1988 Aug;14(3):389–403

Context effects in two-month-old infants' perception of labiodental/interdental fricative contrasts. Levitt A, et al. **J Exp Psychol [Hum Percept]** 1988 Aug;14(3):361–8

Effects of speaking rate and lexical status on phonetic perception. Miller JL, et al. **J Exp Psychol [Hum Percept]** 1988 Aug;14(3):369–78

Central and peripheral representation of whispered and voiced speech. Samuel AG. **J Exp Psychol [Hum Percept]** 1988 Aug;14(3):379–88

Orthography and phonology in lexical decision: evidence from repetition effects at different lags. Bentin S. **J Exp Psychol [Learn Mem Cogn]** 1989 Jan;15(1):61–72

Context and lexical access: implications of nonword interference for lexical ambiguity resolution. Burgess C, et al. **J Exp Psychol [Learn Mem Cogn]** 1989 Jul; 15(4):620–32

Perception of stop consonants produced by esophageal and tracheoesophageal speakers. Gomyo Y, et al. **J Otolaryngol** 1989 Jun;18(4):184–8

Phonological transformations in Spanish-speaking aphasics. Ardila A, et al. **J Psycholinguist Res** 1989 Mar;18(2):163–80

Speech production deficits in developmental dyslexia. Catts HW. **J Speech Hear Disord** 1989 Aug;54(3):422–8

Perception of voiceless fricatives by children with a functional articulation disorder. Rvachew S, et al. **J Speech Hear Disord** 1989 May;54(2):193–208

Acoustic phonetic effects of two types of verbal feedback in dysarthric subjects. Till JA, et al. **J Speech Hear Disord** 1988 Nov;53(4):449–58

A response to Gierut, Elbert, and Dinnsen (1987), "A Functional Analysis of Phonological Knowledge and Generalization Learning in Misarticulating Children" [published erratum appears in J Speech Hear Res 1989 Jun;32(2):462] Diedrich WM. **J Speech Hear Res** 1989 Mar; 32(1):219–22

Conflicting and cooperating cues: perception of cues to final consonant voicing by infants and adults. Eilers R, et al. **J Speech Hear Res** 1989 Jun;32(2):307–16

The importance of consonant-vowel intensity ratio in the intelligibility of voiceless consonants. Freyman RL, et al. **J Speech Hear Res** 1989 Sep;32(3):524–35

Rhyme generation by deaf adults. Hanson VL, et al. **J Speech Hear Res** 1989 Mar;32(1):2–11

Unusual phonological behavior and the avoidance of homonymy in children. Leonard LB, et al. **J Speech Hear Res** 1989 Sep;32(3):583–900

Evaluation of two speech enhancement techniques to improve intelligibility for hearing-impaired adults. Montgomery AA, et al. **J Speech Hear Res** 1988 Sep; 31(3):386–93

Evaluation of a technique for training new speech contrasts: generalization across voices, but not word-position or task.

Morosan DE, et al. **J Speech Hear Res** 1989 Sep; 32(3):501–11

Effects of decision variables on stimulus dominance in dichotic listening. Niccum N, et al. **J Speech Hear Res** 1989 Mar;32(1):184–8

The emergence of phonetic segments: evidence from the spectral structure of fricative-vowel syllables spoken by children and adults. Nittrouer S, et al. **J Speech Hear Res** 1989 Mar;32(1):120–32

Comparison of period-by-period fundamental frequency of stutterers and nonstutterers over repeated utterances. Sacco PR, et al. **J Speech Hear Res** 1989 Jun;32(2):439–44

Effects of transition length on the perception of stop consonants by children and adults. Sussman JE, et al. **J Speech Hear Res** 1989 Mar;32(1):151–60

Children's categorization of consonants by manner and place characteristics. Tomes L, et al. **J Speech Hear Res** 1989 Jun;32(2):432–8

Difference in second-formant transitions between aspirated and unaspirated stop consonants preceding [a] Repp BH, et al. **Lang Speech** 1987 Apr–Jun;30 (Pt 2):115–29

Stop consonant production in isolated and repeated syllables in Parkinson's disease. Connor NP, et al. **Neuropsychologia** 1989;27(6):829–38

Perception of time-altered monosyllables in a specific group of phonologically disordered children. DeMarco S, et al. **Neuropsychologia** 1989;27(5):753–7

Lexicalization in an anomic patient. Henaff Gonon MA, et al. **Neuropsychologia** 1989;27(4):391–407

Frequency analysis of electromyographically measured covert speech behavior. Dollins AB, et al. **Pavlov J Biol Sci** 1989 Jan–Mar;24(1):27–30

Patterns of covert speech behavior and phonetic coding. McGuigan FJ, et al. **Pavlov J Biol Sci** 1989 Jan–Mar; 24(1):19–26

Formant frequencies (F1, F2) of jaw-free versus jaw-fixed vowels in normal and articulatory disordered children. DeJarnette G. **Percept Mot Skills** 1988 Dec;67(3):963–71

Acoustic evidence of aberrant velocities in stutterers' fluent speech. Pindzola RH. **Percept Mot Skills** 1986 Apr; 62(2):399–405

Speech Sounds Perception Test: nonrandom response locations form a logical fallacy in structure. Reddon JR, et al. **Percept Mot Skills** 1989 Aug;69(1):235–40

Stressed vowel perception in word recognition. Small LH, et al. **Percept Mot Skills** 1989 Feb;68(1):179–85

Articulatory organization: from phonology to speech signals. **Phonetica** 1988;45(2–4):77–198

Influences of contextual and local temporal information on perception of a stop consonant after [s]. Bailey PJ. **Phonetica** 1988;45(1):56–69

Some notes on syllable structure in articulatory phonology. Browman CP, et al. **Phonetica** 1988;45(2–4):140–55

Classification of basic fundamental frequency patterns using discriminant functions. Demenko G, et al. **Phonetica** 1987; 44(4):246–57

Palatoglossus activity during nasal/nonnasal vowels of Hindi. Dixit RP, et al. **Phonetica** 1987;44(4):210–26

'Metrical' factors in the scaling of sentence-initial accent peaks. Ladd DR, et al. **Phonetica** 1987;44(4):238–45

Kinematic characteristics of postvocalic labial stop consonants produced by children and adults. Smith BL, et al. **Phonetica** 1987;44(4):227–37

Paralinguistic variation and invariance in the characteristic frequencies of vowels. Traunmüller H. **Phonetica** 1988; 45(1):1–29

Perception of Indonesian vowels spoken in context. van Zanten E. **Phonetica** 1988;45(1):43–55

Impairment in processing meaningless verbal material in several modalities: the relationship between short-term memory and phonological skills. Bisiacchi PS, et al. **Q J Exp Psychol [A]** 1989 May;41(2):293–319

Modality effects: do they fall on deaf ears? Engle RW, et al. **Q J Exp Psychol [A]** 1989 May;41(2):273–92

A specialization for speech perception [see comments] Liberman AM, et al. **Science** 1989 Jan 27;243(4890):489–94 (31 ref.). **Comment in:** Science 1989 Jun 30;244(4912):1530

[Graphophonologic encoding in the process of identifying visual stimuli] Rossi JP, et al. **Can J Psychol** 1986 Dec; 40(4):463–72 (Eng. Abstr.) **(Fre)**

[Speech processing in pathologic hearing. On the status of research] Sendlmeier WF. **Folia Phoniatr (Basel)** 1988; 40(5):218–43 (56 ref.) (Eng. Abstr.) **(Ger)**

[Visible speech. Studies of various possibilities of graphic presentation] Ruoss M, et al. **Z Exp Angew Psychol** 1988; 35(4):628–56 **(Ger)**

[Do phonological and semantic processings of Kanji finish at the same time.] Wang JM. **Shinrigaku Kenkyu** 1988 Oct; 59(4):252–5 (Eng. Abstr.) **(Jpn)**

PHONOCARDIOGRAPHY

Echophonocardiography in patients undergoing percutaneous mitral balloon valvotomy (PMV): the learning curve of PMV. Brandi-Pifano S, et al. **Am Heart J** 1989 Jan;117(1):25–31

Doppler study of precordial musical murmurs. Pennestri F, et al. **Am J Cardiol** 1989 Jun 1;63(18):1390–4

Phonocardiography as a monitor of cardiac performance during anesthesia. Hansen PB, et al. **Anesth Analg** 1989 Mar;68(3):385–7

[Echo-apex-ECG-phonocardiographic control of left ventricular diastolic function in patients with unstable angina pectoris and other forms of ischemic heart disease] Penkov N, et al. **Vutr Boles** 1989;28(1):15–21 (76 ref.) **(Bul)**

[Time analysis of mitral regurgitation in patients with mitral valve prolapse: a study by phonocardiography and Doppler techniques] Akasaka T, et al. **J Cardiol** 1988 Mar; 18(1):145–61 (Eng. Abstr.) **(Jpn)**

[Phonocardiographic and two-dimensional and pulsed Doppler echocardiographic studies of Still's murmurs] Suzuki J, et al. **J Cardiol** 1988 Jun;18(2):415–23 (Eng. Abstr.) **(Jpn)**

[Phonomechanocardiographic aspects during effort in patients with angina pectoris] Marcu C, et al. **Rev Med Interna [Med Interna]** 1988 Mar–Apr;40(2):167–75 (Eng. Abstr.) **(Rum)**

[Echocardiographic, phonomechanocardiographic and electrocardiographic abnormalities in patients with ankylosing spondylitis] Turkulin K, et al. **Reumatizam** 1987; 34(1–6):5–9 (Eng. Abstr.) **(Scr)**

INSTRUMENTATION

Comparison of the frequency response characteristics of catheter-mounted piezoelectric and micromanometric phonotransducers. Garcia JC, et al. **Cathet Cardiovasc Diagn** 1989 May;17(1):48–55

PHORATE see under **INSECTICIDES, ORGANOTHIOPHOSPHATE**

PHORBOL 12,13-DIBUTYRATE

Mitogenic stimulation of human B lymphocytes via the inositol phospholipid 'dual pathway' of signalling requires persistent activation of both second messenger arms. Gordon J, et al. **Immunology** 1988 Nov;65(3):493–4

Interactive effects of pertussis toxin and the phorbol ester tumour promotor, phorbol dibutyrate, on T-lymphocyte mitogenesis and the expression of phenotypic determinants. Strnad CF, et al. **Immunology** 1989 Apr;66(4):539–45

ADMINISTRATION & DOSAGE

Phorbol 12,13-dibutyrate potentiates alpha 2-adrenoceptor-mediated contraction in the rat saphenous vein. Cheung DW. **Eur J Pharmacol** 1988 Dec 6; 158(1–2):145–8

METABOLISM

Chronic alcohol intake modifies phorbol ester binding in selected rat brain areas. Battaini F, et al. **Alcohol** 1989 Mar–Apr;6(2):169–72

Protein kinase C activities and bindings of a phorbol ester tumor promoter in 41 cell lines. Chida K, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):1–8

Ca2+-independent binding of [3H]phorbol dibutyrate to protein kinase C is supported by protamine and other polycations. Thompson NT, et al. **Biochem J** 1988 Oct 15; 255(2):417–22

Properties of the protein kinase C–phorbol ester interaction. Bazzi MD, et al. **Biochemistry** 1989 Apr 18;28(8):3577–85

Development of phorbol ester (protein kinase C) binding sites in cat visual cortex. Needler MC, et al. **Brain Res** 1988 Aug 1;470(2):217–27

Induction of protein kinase C in mouse melanoma cells by retinoic acid. Niles RM, et al. **Cancer Res** 1989 Aug 15; 49(16):4483–7

Phospholipid functional groups involved in protein kinase C activation, phorbol ester binding, and binding to mixed micelles. Lee MH, et al. **J Biol Chem** 1989 Sep 5; 264(25):14797–805

Increases in intracellular Ca2+ regulate the binding of [3H]phorbol 12,13-dibutyrate to intact 1321N1 astrocytoma cells. Trilivas I, et al. **J Biol Chem** 1989 Feb 25;264(6):3102–7

Use of protein kinase C-depleted cells for investigation of the role of protein kinase C in stimulus-response coupling in the pituitary. McArdle CA, et al. **Methods Enzymol** 1989; 168:287–301

The effect of acute and chronic electroconvulsive shock on [3H]phorbol-dibutyrate binding to rat brain membranes. Gleiter CH, et al. **Neurochem Res** 1988 Nov;13(11):1023–6

Binding of [3H]inositoltrisphosphate and [3H]phorbol 12,13-dibutyrate in rat hippocampus following transient global ischemia: a quantitative autoradiographic study. Jørgensen MB, et al. **Neurosci Lett** 1989 Aug 28; 103(2):219–24

Phorbol ester binding to protein kinase C requires a cysteine-rich zinc-finger-like sequence. Ono Y, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4868–71

Phorbol-ester is bound specifically to renal luminal membranes and stimulates the Na-H antiporter. Talor Z, et al. **Res Commun Chem Pathol Pharmacol** 1988 Sep; 61(3):335–43

PHARMACOLOGY

Differential effects of phorbol esters on PGE2 and bradykinin-induced elevation of [Cai2+] in MDCK cells. Aboolian A, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):F1135–43

Cytosolic free calcium in normal somatotropes: effects of forskolin and phorbol ester. Holl RW, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):E375–9

[Ca2+]-dependent myosin phosphorylation in phorbol diester stimulated smooth muscle contraction. Rembold CM, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C719–23

Two types of protein kinase C with different functions in cultured rabbit aortic smooth muscle cells. Kariya K, et al. **Biochem Biophys Res Commun** 1989 Jun 30; 161(3):1020–7

Protein kinase C-dependent and -independent mechanisms regulating the parotid substance P receptor as revealed by differential effects of protein kinase C inhibitors. Sugiya H, et al. **Biochem J** 1988 Dec 1;256(2):677–80

The effect of relaxants working through different transduction mechanisms on the tonic contraction produced in rat aorta by 4 beta-phorbol dibutyrate. Obianime AW, et al. **Br J Pharmacol** 1989 Jul;97(3):647–56

Phorbol 12,13-dibutyrate regulates muscarinic receptors in rat cerebral cortical slices by activating protein kinase C. Jia WG, et al. **Brain Res Mol Brain Res** 1989 Jun;5(4):311–5

Mimicry of bryostatin 1 induced phosphorylation patterns in HL-60 cells by high-phorbol ester concentrations. Warren BS, et al. **Cancer Res** 1988 Nov 1;48(21):5984–8

Evidence that phorbol diester-sensitive protein kinase-C(s) may not be directly involved in secretagogue-stimulated prolactin release and arachidonate liberation. Judd AM, et al. **Endocrinology** 1989 Sep;125(3):1134–41

C1q acts synergistically with phorbol dibutyrate to activate CR1-mediated phagocytosis by human mononuclear phagocytes. Bobak DA, et al. **Eur J Immunol** 1988 Dec; 18(12):2001–7

Phorbol ester-mediated enhancement of hippocampal noradrenaline release: which ion channels are involved? Huang HY, et al. **Eur J Pharmacol** 1988 Aug 24; 153(2–3):175–84

Phorbol ester-induced activation of protein kinase C leads to increased formation of diacylglycerol in human neutrophils. Fällman M, et al. **Exp Cell Res** 1989 Mar; 181(1):217–25

Evidence for a protein kinase C-directed mechanism in the phorbol diester-induced phospholipase D pathway of diacylglycerol generation from phosphatidylcholine. Cabot MC, et al. **FEBS Lett** 1989 Mar 13;245(1–2):85–90

Adenosine 3',5'-cyclic monophosphate (cAMP) inhibits phorbol ester-induced growth of an IL-2-dependent T cell line. Goto Y, et al. **FEBS Lett** 1988 Nov 7;239(2):165–8

Inhibition of the CD3-mediated calcium signal by protein kinase C activators in human T (Jurkat) lymphoblastoid cells. Tordai A, et al. **Immunol Lett** 1989 Jan 15;20(1):47–52

Phorbol ester and calcium ionophore are sufficient to promote cell replication in cultures of quiescent human B lymphocytes. Flores-Romo L, et al. **Immunology** 1989 Feb;66(2):228–32

Comparison of the effect of tautomycin and phorbol ester on protein kinase C in a cell-free system. Magae J, et al. **J Antibiot (Tokyo)** 1989 Aug;42(8):1290–3

Tumor-promoting phorbol esters inhibit monocyte adherence to endothelial cells. Kamp DW, et al. **J Appl Physiol** 1989 Jan;66(1):437–42

Phorbol ester-mediated down-regulation of an interferon-inducible gene. Akai H, et al. **J Biol Chem** 1989 Feb 25;264(6):3252–5

Regulation of phospholipase D in HL-60 granulocytes. Activation by phorbol esters, diglyceride, and calcium ionophore via protein kinase- independent mechanisms. Billah MM, et al. **J Biol Chem** 1989 May 25;264(15):9069–76

The interaction of small oligomers of complement 3B (C3B) with phagocytes. High affinity binding and phorbol ester-induced internalization by polymorphonuclear leukocytes. Brown EJ. **J Biol Chem** 1989 Apr 15; 264(11):6196–201

Activators of protein kinase C up-regulate the cell surface expression of CD2 and CD5 T cell glycoproteins. Carrera AC, et al. **J Biol Chem** 1989 Sep 15;264(26):15650–5

Inhibition of DNA fragmentation in thymocytes and isolated thymocyte nuclei by agents that stimulate protein kinase C. McConkey DJ, et al. **J Biol Chem** 1989 Aug 15; 264(23):13399–402

Coordination and reversibility of signals for proliferative activation and interleukin-2 mRNA production in resting human T lymphocytes by phorbol ester and calcium ionophore. McCrady CW, et al. **J Biol Chem** 1988 Dec 5;263(34):18537–44

Induction of megakaryocytic characteristics in human leukemic cell line K562: polyploidy, inducers, and secretion of mitogenic activity. Leary JF, et al. **J Biol Regul Homeost Agents** 1987 Apr–Jun;1(2):73–80

Induction of competence and progression signals in human T lymphocytes by phorbol esters and calcium ionophores. Kumagai N, et al. **J Cell Physiol** 1988 Nov;137(2):329–36

Transcriptional regulation of transferrin receptor expression by cultured lymphoblastoid T cells treated with phorbol diesters. Alcantara O, et al. **J Immunol** 1989 Mar 1; 142(5):1719–26

Cyclosporin A inhibits initiation but not progression of human T cell proliferation triggered by phorbol esters and calcium ionophores. Kumagai N, et al. **J Immunol** 1988 Dec 1;141(11):3747–52

Translocation and activation of protein kinase C in striatal neurons in primary culture: relationship to phorbol dibutyrate actions on the inositol phosphate generating system and neurotransmitter release. Weiss S, et al. **J Neurochem** 1989 Feb;52(2):530–6

Activators of protein kinase C selectively enhance inactivation of a calcium current component of cultured sensory neurons in a pertussis toxin-sensitive manner. Gross RA, et al. **J Neurophysiol** 1989 Jun;61(6):1259–69

Phorbol ester–induced modulation of agonist binding to alpha–1 adrenergic receptors in bovine aortic membranes. Jagadeesh G, et al. **J Pharmacol Exp Ther** 1988 Oct; 247(1):196–202

Interactions between phorbol esters and agents which increase cytosolic calcium in the guinea pig parenchymal strip: direct and indirect effects on the contractile response. Obianime AW, et al. **J Pharmacol Exp Ther** 1988 Oct; 247(1):262–70

Phorbol dibutyrate inhibits release and action of endothelium–derived relaxing factor(s) in canine blood vessels. Rubanyi GM, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):858–63

Phorbol 12,13–dibutyrate, an activator of protein kinase C, stimulates both contraction and Ca2+ fluxes in dog saphenous vein. Chiu PJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Aug; 338(2):114–20

Phorbol ester and dibutyryl cyclic AMP reduce content and efflux of taurine in primary cerebellar astrocytes in culture. Philibert RA, et al. **Neurosci Lett** 1988 Dec 19; 95(1–3):323–8

Phorbol esters potentiate the induction of class I HLA expression by interferon alpha. Erusalimsky JD, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1973–6

Phosphorylation at threonine–654 is not required for negative regulation of the epidermal growth factor receptor by non–phorbol tumor promoters. Friedman BA, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):812–6

Effects of phorbol esters on B–cell gene expression. Högbom E, et al. **Scand J Immunol** 1988 Oct;28(4):481–6

Phorbol–12,13–dibutyrate antagonizes while forskolin potentiates the presynaptic autoreceptor–mediated inhibition of [3H]–5–hydroxytryptamine release in rat hypothalamic slices. Ramdine R, et al. **Synapse** 1989; 3(3):173–81

PHORBOL ESTERS

The conformations and electrostatic potential maps of phorbol esters, teleocidins and ingenols. Thomson C, et al. **Carcinogenesis** 1989 Mar;10(3):531–40

ADMINISTRATION & DOSAGE

Influence of short–term topical exposure to phorbol ester tumor promoters on subcutaneously induced skin tumorigenesis in S/RVCri mice. Ramchandani AG, et al. **Neoplasma** 1989;36(3):281–6

ANALYSIS

Phosphatidylinositol 4,5–bisphosphate competitively inhibits phorbol ester binding to protein kinase C. Chauhan A, et al. **Biochemistry** 1989 Jun 13;28(12):4952–6

ANTAGONISTS & INHIBITORS

Staurosporine counteracts the phorbol ester–induced enhancement of neurotransmitter release in hippocampus. Daschmann B, et al. **Arch Int Pharmacodyn Ther** 1988 Nov–Dec;296:232–45

ISOLATION & PURIFICATION

A new tumor promoter from the seed oil of Jatropha curcas L., an intramolecular diester of 12–deoxy–16–hydroxyphorbol. Hirota M, et al. **Cancer Res** 1988 Oct 15;48(20):5800–4

METABOLISM

Membrane–phorbol ester interactions monitored by circular dichroism. Frézard F, et al. **Biochim Biophys Acta** 1989 Mar 13;979(3):316–20

Phorbol ester binding to oral epithelial cells in the presence of retinoic acid or N–nitrosonornicotine. Schuster GS, et al. **Cytobios** 1988;54(216):53–60

Protein kinase C activity and phorbol ester binding to rat myogenic cells during growth and differentiation. Martelly I, et al. **Exp Cell Res** 1989 Jul;183(1):92–100

Metabolism of polycyclic aromatic hydrocarbons and phorbol esters by mouse skin: relevance to mechanism of action and trans–species/strain carcinogenesis. DiGiovanni J. **Prog Clin Biol Res** 1989;298:167–99 (174 ref.)

[Dual center binding of cocarcinogens of the phorbol series with a receptor] Kozhemiakina OV, et al. **Biokhimiia** 1989 Jan;54(1):95–102 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Phorbol esters that activate protein kinase C induce long–term changes of membrane excitability and postsynaptic currents in neocortical neurons. Baranyi A, et al. **Acta Biol Hung** 1987;38(3–4):315–32

Modulation of PAF biosynthesis in human polymorphonuclear leukocytes. The role of phorbol esters and protein kinases. Sanchez Crespo M, et al. **Agents Actions** 1989 Jan;26(1–2):111–2

Phorbol esters and arginine vasopressin in vascular smooth muscle cell activation. Caramelo C, et al. **Am J Physiol** 1989 May;256(5 Pt 2):F875–81

Sodium and calcium influx induced by phorbol esters in airway smooth muscle cells. Souhrada M, et al. **Am Rev Respir Dis** 1989 Apr;139(4):927–32

Tumor–promoting phorbol esters stimulate bovine cerebral cortex capillary endothelial cell growth in vitro. Daviet I, et al. **Biochem Biophys Res Commun** 1989 Jan 31; 158(2):584–9

Diacylglycerols, unlike phorbol esters, do not induce homologous desensitization or down–regulation of protein kinase C in Swiss 3T3 cells. Issandou M, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):201–8

Platelet–derived growth factor (PDGF)–induced phospholipase C–mediated hydrolysis of phosphoinositides in vascular smooth muscle cells—different sensitivity of PDGF– and angiotensin II–induced phospholipase C reactions to protein kinase C–activating phorbol esters. Kawahara Y, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):846–54

Agonist but not phorbol ester induced desensitization of human lymphocyte prostaglandin receptor is dependent on tubulin polymerization. Nordstedt C, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1046–50

Inhibitory action of tumor–promoting phorbol esters upon beta–adrenergic agonist stimulation of cyclic AMP accumulation in rat prostatic epithelial cells. Carmena MJ, et al. **Biochem Int** 1988 Sep;17(3):427–32

Phosphatidylcholine synthesis in platelets is stimulated by diacylglycerol but not by phorbol ester. Muir JG, et al. **Biochem Int** 1988 Jun;16(6):1145–51

Activation of distinct protein kinase C isozymes by phorbol esters: correlation with induction of interleukin 1 beta gene expression. Strulovici B, et al. **Biochemistry** 1989 Apr 18; 28(8):3569–76

Phorbol esters inhibit the synthesis of acetylcholine receptors in cultured muscle cells. Bursztajn S, et al. **Biol Cell** 1988; 63(1):57–65

Attenuation of hen granulosa cell steroidogenesis by a phorbol ester and 1–oleoyl–2–acetylglycerol. Tilly JL, et al. **Biol Reprod** 1988 Aug;39(1):1–8

Phorbol esters stimulate cyclic adenosine 3',5'–monophosphate accumulation in hamster spermatozoa during in vitro capacitation. Visconti PE, et al. **Biol Reprod** 1989 Feb;40(2):223–31

Effect of phorbol ester and pertussis toxin on the enhancement of noradrenaline release by angiotensin II in mouse atria. Musgrave IF, et al. **Br J Pharmacol** 1989 Mar; 96(3):609–16

Effect of phorbol esters on noradrenaline release from cerebral arteries. Balfagon G, et al. **Brain Res** 1989 Jan 16;477(1–2):196–201

Augmentation of neurotransmitter receptor–stimulated cyclic AMP accumulation in rat brain: differentiation between the effects of baclofen and phorbol esters. Scherer RW, et al. **Brain Res** 1988 Jun 7;451(1–2):361–5

Relationship between the uptake of calcium or phosphorus and alkaline phosphatase activity induced by certain modulators in rat organs. Nagata A, et al. **Calcif Tissue Int** 1989 Sep;45(3):173–81

Phorbol ester inhibits luteinizing hormone–, forskolin–, and dibutyryl cyclic AMP–induced progesterone production in chicken granulosa cells. Asem EK, et al. **Can J Physiol Pharmacol** 1989 Feb;67(2):122–5

Control of the expression of c–sis mRNA in human glioblastoma cells by phorbol ester and transforming growth factor beta 1. Press RD, et al. **Cancer Res** 1989 Jun 1;49(11):2914–20

Alteration of fibronectin receptors (integrins) in phorbol ester–treated human promonocytic leukemia cells. Van de Water L, et al. **Cancer Res** 1988 Oct 15;48(20):5730–7

Effect of retinoic acid on phorbol ester–stimulated differentiation and protein kinase C–dependent phosphorylation in the U937 human monoblastoid cell. Ways DK, et al. **Cancer Res** 1988 Oct 15;48(20):5779–87

Tumour–promoting and hyperplastic effects of phorbol and daphnane esters in CD–1 mouse skin and a synergistic effect of calcium ionophore with the non–promoting activator of protein kinase C, sapintoxin A. Brooks G, et al. **Carcinogenesis** 1989 Feb;10(2):283–8

Epidermal cell proliferation and modulation of the protective potency of dexamethasone against phorbol ester–induced ornithine decarboxylase activity. Nguyen–Ba G, et al. **Carcinogenesis** 1989 Apr;10(4):793–6

Tumor promoters differ in their ability to stimulate superoxide anion radical production by murine peritoneal exudate cells following in vivo administration. Witz G, et al. **Carcinogenesis** 1989 May;10(5):807–11

High–frequency 1H NMR studies of the effects of growth factors and phorbol esters on normal Syrian hamster diploid fibroblast cells. Boal JH, et al. **Cell Biophys** 1989 Jun; 14(3):245–56

Stimulation of the phosphorylation of cytoskeletal 350–kDa and 300–kDa proteins by insulin–like growth factor–I, platelet–derived growth factor and phorbol ester in rat 3Y1 cells. Nishida E, et al. **Cell Struct Funct** 1988 Oct; 13(5):417–23

Opposing effects of calcium entry and phorbol esters on fusion of chick muscle cells. Rapuano M, et al. **Dev Biol** 1989 Aug;134(2):271–8

76 and 14 kDa polypeptides, two major components released from amphibian urinary bladder epithelium. Purification and characterization. Dassouli A, et al. **Eur J Cell Biol** 1989 Jun;49(1):180–8

Regulation of immunoglobulin gene expression in trans by phorbol esters. Mårtensson IL, et al. **Eur J Immunol** 1989 Aug;19(8):1497–500

Intrasynaptosomal free calcium concentration is increased by phorbol esters via a 1,4–dihydropyridine–sensitive (L–type) Ca2+ channel. Adamson P, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):59–66

Phorbol ester impairs melanotropin receptor function and stimulates growth of cultured M2R melanoma cells. Gerst JE, et al. **Eur J Pharmacol** 1989 Mar 7;172(1):29–39

Phorbol esters enhance attachment of NIH/3T3 cells to laminin and type IV collagen substrates. Kato S, et al. **Exp Cell Res** 1988 Nov;179(1):31–41

Additive feature of long–term potentiation and phorbol ester–induced synaptic enhancement in the mossy fiber–CA3 synapse. Kamiya H, et al. **Exp Neurol** 1988 Dec; 102(3):314–7

Protein synthesis in rat cardiac myocytes is stimulated at the level of translation by phorbol esters. Fuller SJ, et al. **FEBS Lett** 1989 Apr 24;247(2):209–12

Protein kinase C activators inhibit the antigen receptor–coupled polyphosphoinositide phosphodiesterase in murine B lymphocytes. Harnett MM, et al. **FEBS Lett** 1988 Nov 7;239(2):281–4

Effect of phorbol esters on rat lacrimal gland protein secretion. Dartt DA, et al. **Invest Ophthalmol Vis Sci** 1988 Nov;29(11):1726–31

Inhibition of DNA synthesis by protein kinase C–activating phorbol esters in NIH/3T3 cells. Yamamoto T, et al. **J Biochem (Tokyo)** 1988 Jul;104(1):53–6

Cyclic AMP and phorbol esters interact synergistically to regulate expression of the chorionic gonadotropin genes. Andersen B, et al. **J Biol Chem** 1988 Oct 25; 263(30):15578–83

Bombesin, diacylglycerols, and phorbol esters rapidly stimulate the phosphorylation of an Mr = 80,000 protein kinase C substrate in permeabilized 3T3 cells. Effect of guanine nucleotides. Erusalimsky JD, et al. **J Biol Chem** 1988 Dec 15;263(35):19188–94

Regulation of Na+/K+/Cl– cotransport and [3H]bumetanide binding site density by phorbol esters in HT29 cells. Franklin CC, et al. **J Biol Chem** 1989 Apr 25;264(12):6667–73

Phorbol ester stimulates the hydrolysis of phosphatidylethanolamine in leukemic HL–60, NIH 3T3, and baby hamster kidney cells. Kiss Z, et al. **J Biol Chem** 1989 Jan 25;264(3):1483–7

Thyrotropin–releasing hormone and phorbol esters stimulate sphingomyelin synthesis in GH3 pituitary cells. Evidence for involvement of protein kinase C. Kolesnick RN. **J Biol Chem** 1989 Jul 15;264(20):11688–92

Plasminogen activator inhibitor type–1 protein, mRNA and gene transcription are increased by phorbol esters in human rhabdomyosarcoma cells. Mayer M, et al. **J Biol Chem** 1988 Oct 25;263(30):15688–93

Induction of transforming growth factor–alpha expression in human keratinocytes by phorbol esters. Pittelkow MR, et al. **J Biol Chem** 1989 Mar 25;264(9):5164–71

Cyclic AMP potentiates phorbol ester stimulation of tissue plasminogen activator release and inhibits secretion of plasminogen activator inhibitor–1 from human endothelial cells. Santell L, et al. **J Biol Chem** 1988 Nov 15; 263(32):16802–8

Prolonged incubation with phorbol esters enhanced vasopressin–induced calcium mobilization and polyphosphatidylinositol hydrolysis of vascular smooth muscle cells. Stassen FL, et al. **J Biol Chem** 1989 Mar 25; 264(9):4916–23

Mechanisms of secretory responses to gonadotropin–releasing hormone and phorbol esters in cultured pituitary cells. Participation of protein kinase C and extracellular calcium mobilization. Stojilković SS, et al. **J Biol Chem** 1988 Nov 25;263(33):17301–6

Regulation of apolipoprotein E biosynthesis by cAMP and phorbol ester in rat ovarian granulosa cells. Wyne KL, et al. **J Biol Chem** 1989 Jan 15;264(2):981–9

Induction of megakaryocytic characteristics in human leukemic cell line K562: polyploidy, inducers, and secretion of mitogenic activity. Leary JF, et al. **J Biol Regul Homeost Agents** 1987 Apr–Jun;1(2):73–80

Phorbol esters stimulate bone resorption in fetal rat long–bone cultures by mechanisms independent of prostaglandin synthesis. Lorenzo JA, et al. **J Bone Miner Res** 1988 Feb;3(1):63–7

Induction of Epstein–Barr virus early antigens by tumor promoters of the diterpene ester type in Raji cells and specific (receptor) binding as compared to irritant and promoting activities. Kloz U, et al. **J Cancer Res Clin Oncol** 1989;115(2):148–56

Type 3 protein kinase C localization to the nuclear envelope of phorbol ester–treated NIH 3T3 cells. Leach KL, et al. **J Cell Biol** 1989 Aug;109(2):685–95

Simultaneous stimulation of urokinase and tissue–type plasminogen activators by phorbol esters in human ovarian carcinoma cells. Band V, et al. **J Cell Physiol** 1989 Jan; 138(1):106–14

Tumor–promoting phorbol esters stimulate the proliferation of interleukin–3 dependent cells. Hogans BB, et al. **J Cell Physiol** 1988 Nov;137(2):346–52

Effects of phorbol esters on shape and locomotion of human blood lymphocytes. Wilkinson PC, et al. **J Cell Sci** 1988 Aug;90 (Pt 4):645–55

Phorbol ester decreases cytosolic retinoic acid binding protein (CRABP) capacity in normal but not psoriatic epidermis. Junquero D, et al. **J Dermatol (Tokyo)** 1988 Oct; 15(5):373–8

Studies on bioactive compounds. 13. Synthesis and lack of growth-inhibitory properties of cyclohexane-1,2,4-triol 1,2-diesters, which resemble ring C of the phorbol ester molecule. Laughton CA, et al. **J Med Chem** 1989 Feb; 32(2):428–33

Forskolin and phorbol esters decrease the same K+ conductance in cultured oligodendrocytes. Soliven B, et al. **J Membr Biol** 1988 Oct;105(2):177–86

Effects of phorbol esters and forskolin on basal and histamine-induced accumulation of inositol phosphates in cultured bovine adrenal chromaffin cells. Wan DC, et al. **J Neurochem** 1989 Oct;53(4):1219–27

Protein kinase inhibitors selectively block phorbol ester- or forskolin-induced changes in excitability of Aplysia neurons. Conn PJ, et al. **J Neurosci** 1989 Feb;9(2):473–9

Protein kinase C activators block specific calcium and potassium current components in isolated hippocampal neurons. Doerner D, et al. **J Neurosci** 1988 Nov; 8(11):4069–78

Phorbol esters of different biological activities may preferentially act as mitogens of human suppressor T-cells and are equi-effective mitogens of IL-2 dependent cells. Edwards MC, et al. **J Pharm Pharmacol** 1989 Mar; 41(3):164–7

Effects of phorbol ester on Leishmania mexicana amazonensis: an ultrastructural and cytochemical study. Vannier-Santos MA, et al. **J Submicrosc Cytol Pathol** 1988 Jul;20(3):583–93

Inhibition of stimulated cell responses by phorbol esters and other activators of protein kinase C: sites of action. Shafi RI, et al. **Membr Biochem** 1987–88;7(3):143–52 (50 ref.)

An AP-2 element acts synergistically with the cyclic AMP- and phorbol ester-inducible enhancer of the human proenkephalin gene. Hyman SE, et al. **Mol Cell Biol** 1989 Jan;9(1):321–4

Effect of lipoxygenase products on choriogonadotropin secretion by cultured human choriocarcinoma JEG-3 cells pre- and post-stimulation with epidermal growth factor and a phorbol ester. Ilekis J, et al. **Mol Cell Endocrinol** 1989 May;63(1–2):155–8

Regulation of growth hormone secretion and cyclic AMP metabolism in ovine pituitary cells: interactions involved in activation induced by growth hormone-releasing hormone and phorbol esters. Ray KP, et al. **Mol Cell Endocrinol** 1988 Aug;58(2–3):243–52

Modulation of steroidogenesis in choriocarcinoma cells by cholera toxin, phorbol ester, epidermal growth factor and insulin-like growth factor I. Ritvos O. **Mol Cell Endocrinol** 1988 Sep;59(1–2):125–33

Regulation of multiple basic fibroblast growth factor messenger ribonucleic acid transcripts by protein kinase C activators. Murphy PR, et al. **Mol Endocrinol** 1988 Dec; 2(12):1196–201

Effect of phorbol esters and polymyxin B on modulation of noradrenaline release in mouse atria. Musgrave IF, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan–Feb; 339(1–2):48–53

Effects of phorbol esters and a calcium ionophore on angiotensin II binding in rat brain synaptosomes. Myers LM, et al. **Neurochem Res** 1989 Jan;14(1):25–30

Influence of alpha 1-adrenergic receptor stimulation and phorbol esters on hepatic Na+/K+-ATPase activity. Smart JL, et al. **Pharmacology** 1988;37(2):94–104

Cyclic AMP and phorbol ester-stimulated transcription mediated by similar DNA elements that bind distinct proteins. Deutsch PJ, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):7922–6

Muscarinic agonists and phorbol esters increase tyrosine phosphorylation of a 40-kilodalton protein in hippocampal slices. Stratton KR, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2498–501

Modulation of cyclic AMP accumulation by phorbol ester in rat papillary collecting duct (PCD) cells in culture. Jackson BA. **Prog Clin Biol Res** 1989;292:461–9

Mutations in a protein kinase C homolog confer phorbol ester resistance on Caenorhabditis elegans. Tabuse Y, et al. **Science** 1989 Mar 31;243(4899):1713–6

Norepinephrine stimulation of adenylate cyclase potentiates protein kinase C action: electrophysiological studies in the dentate gyrus. Stratton KR, et al. **Synapse** 1988;2(6):614–8

[Effect of phorbol ester on the oligodendrocyte in culture] Sekiguchi S, et al. **No To Hattatsu** 1989 May;21(3):296–8 **(Jpn)**

[ATP-dependent transport of Ca2+ in myocardium sarcolemma vesicles and its activation by phorbol esters] Kurskii MD, et al. **Biokhimiia** 1988 Jun;53(6):960–4 (Eng. Abstr.) **(Rus)**

TOXICITY

Translocation of diacylglycerol kinase from the cytosol to the membrane in phorbol ester-treated Swiss 3T3 fibroblasts. Maroney AC, et al. **J Cell Biochem** 1989 Jun; 40(2):165–72

Vacuum liquid chromatography and quantitative 1H NMR spectroscopy of tumor-promoting diterpene esters. Pieters LA, et al. **J Nat Prod** 1989 Jan–Feb;52(1):186–90

Tumorigenic and molecular characterization of novel phorbol ester-resistant and -sensitive lines of mice. Cope FO, et al. **Mol Carcinog** 1988;1(2):116–24

PHORBOL MYRISTATE ACETATE see **TETRADECANOYLPHORBOL ACETATE**

PHORBOLS

PHARMACOLOGY

Tumor-promoting phorbol esters inhibit monocyte adherence to endothelial cells. Kamp DW, et al. **J Appl Physiol** 1989 Jan;66(1):437–42

Phorbol ester and neomycin dissociate bradykinin receptor-mediated arachidonic acid release and polyphosphoinositide hydrolysis in Madin-Darby canine kidney cells. Evidence that bradykinin mediates noninterdependent activation of phospholipases A2 and C. Slivka SR, et al. **J Biol Chem** 1988 Oct 15;263(29):14640–7

Induction of megakaryocytic characteristics in human leukemic cell line K562: polyploidy, inducers, and secretion of mitogenic activity. Leary JF, et al. **J Biol Regul Homeost Agents** 1987 Apr–Jun;1(2):73–80

PHORIAS see **STRABISMUS**

PHOSGENE

Poisoning from smoke grenades is not due to phosgene [letter] Karlsson N. **Eur Respir J** 1988 Jun;1(6):575

ADVERSE EFFECTS

Phosgene (2,5-dichlorophenyl)hydrazone, a new strong sensitizer. Kojima S, et al. **Contact Dermatitis** 1989 Mar; 20(3):235–6

TOXICITY

Changes in lung ATP concentration in the rat after low-level phosgene exposure. Currie WD, et al. **J Biochem Toxicol** 1987 Summer;2:105–14

PHOSMET see under **INSECTICIDES, ORGANOTHIOPHOSPHATE**

PHOSPHAMIDE see **DIMETHOATE**

PHOSPHAMIDON see under **INSECTICIDES, ORGANOPHOSPHATE**

PHOSPHATASES

The structure and properties of horse muscle acylphosphatase in solution. Mobility of antigenic and active site regions. Saudek V, et al. **FEBS Lett** 1989 Jan 2;242(2):225–32

5' end labeling of RNA with capping and methylating enzymes. Moss B. **Gene Amplif Anal** 1981;2:253–66 (74 ref.)

Identification and description of alpha-helical regions in horse muscle acylphosphatase by 1H nuclear magnetic resonance spectroscopy. Saudek V, et al. **J Mol Biol** 1989 Jan 5;205(1):229–39

Identification and description of beta-structure in horse muscle acylphosphatase by nuclear magnetic resonance spectroscopy. Saudek V, et al. **J Mol Biol** 1989 May 20; 207(2):405–15

Guinea pig acylphosphatase: the amino acid sequence. Manao G, et al. **J Protein Chem** 1988 Aug;7(4):417–26

ANALYSIS

Endogenous phosphatase activity in tumor cells in a liver aspirate. A potential problem for immunocytodiagnosis using immunoalkaline phosphatase methods. Yam LT. **Acta Cytol** 1989 Jul–Aug;33(4):505–10

Cytoskeletal protein and GTP-ase profiles differ depending on the degree of transformation of fibroblasts. Girao LA, et al. **Anticancer Res** 1989 May–Jun;9(3):643–5

A lead conversion method for staining thiamine pyrophosphatase and other phosphatases in rat brain after thin layer polyacrylamide gel isoelectric focusing. Mazzarello P, et al. **Basic Appl Histochem** 1988; 32(4):495–500

The sequence-specific assignment of the 1H-NMR spectrum of an enzyme, horse-muscle acylphosphatase. Saudek V, et al. **Eur J Biochem** 1989 Jun 1;182(1):85–93

Evaluation of APHA and AOAC methods for phosphatase in cheese. Murthy GK, et al. **J Assoc Off Anal Chem** 1988 Nov–Dec;71(6):1195–9

Thiamine pyrophosphatase (nucleoside diphosphatase) in the Golgi apparatus is distinct from microsomal nucleoside diphosphatase. Sano S, et al. **J Biochem (Tokyo)** 1988 Apr; 103(4):678–81

A novel brain-specific antigen: a glycoprotein electrophoretically similar to but immunochemically different from type B nucleoside diphosphatase. Sano S, et al. **J Biochem (Tokyo)** 1989 Mar;105(3):457–60

Phosphatase activity is a constant feature of all isolates of all major species of the family Enterobacteriaceae. Satta G, et al. **J Clin Microbiol** 1988 Dec;26(12):2637–41

Phosphatases activities in rabbit infected with Listeria monocytogenes. De Magliola Mundet LD, et al. **Pathologica** 1987 Sep–Oct;79(1063):617–23

Alkaline and acid phosphatase demonstration in human bone and cartilage: effects of fixation interval and methacrylate embedments. Gruber HE, et al. **Stain Technol** 1988 Sep; 63(5):299–306

ANTAGONISTS & INHIBITORS

Inhibition of phosphatase by open-chain nucleoside analogues in insects. Němec V, et al. **Experientia** 1989 Feb 15;45(2):148–50

Mechanism of inhibition of transducin guanosine triphosphatase activity by vanadate. Kanaho Y, et al. **J Biol Chem** 1988 Nov 25;263(33):17584–9

Inhibition of transducin activation and guanosine triphosphatase activity by aluminum ion. Miller JL, et al. **J Biol Chem** 1989 Jan 5;264(1):243–50

Selective inactivation by endogenous protein kinase C of human platelet high-affinity GTPase coupled with PAF receptors. Avdonin PV, et al. **J Mol Cell Cardiol** 1989 Feb; 21 Suppl 1:139–43

GTPase inhibiting mutations activate the alpha chain of Gs and stimulate adenylyl cyclase in human pituitary tumours. Landis CA, et al. **Nature** 1989 Aug 31;340(6236):692–6

Okadaic acid, a phosphatase inhibitor, produces a Ca2+ and calmodulin-independent contraction of smooth muscle. Obara K, et al. **Pflugers Arch** 1989 Jun;414(2):134–8

BIOSYNTHESIS

Ontogenic expression of the two isozymes, Ch1 and Ch2, of chicken muscle acylphosphatase. Ohba Y, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):173–7

BLOOD

Effect of Triton X-100 on precipitation of biliary phosphatase by wheat-germ lectin [letter] Rosalki SB, et al. **Clin Chem** 1989 Mar;35(3):513

Discriminative value of serum phosphatases in patients with prostatic carcinoma. Lämmel A, et al. **Urology** 1988 Oct; 32(4):293–300

DEFICIENCY

Inositol 1,4,5-trisphosphate phosphatase deficiency and malignant hyperpyrexia in swine. Foster PS, et al. **Lancet** 1989 Jul 15;2(8655):124–7

GENETICS

ras GTPase activating protein: signal transmitter and signal terminator. McCormick F. **Cell** 1989 Jan 13;56(1):5–8 (0 ref.)

Synthesis in Escherichia coli of GTPase-deficient mutants of Gs alpha. Graziano MP, et al. **J Biol Chem** 1989 Sep 15;264(26):15475–82

Characterization of the spoT gene of Escherichia coli. Sarubbi E, et al. **J Biol Chem** 1989 Sep 5;264(25):15074–82

Site-directed mutagenesis of Escherichia coli 23 S ribosomal RNA at position 1067 within the GTP hydrolysis centre. Thompson J, et al. **J Mol Biol** 1988 Sep 20;203(2):457–65

ISOLATION & PURIFICATION

Glycogen-bound type-1 phosphatase: isolation and dissociation of a complex containing undegraded G-subunit. Villa-Moruzzi E, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1465–71

Structure-activity relationships in the hydrolysis of substrates by the phosphotriesterase from Pseudomonas diminuta. Donarski WJ, et al. **Biochemistry** 1989 May 30; 28(11):4650–5

Purification of ATP diphosphohydrolase from bovine aorta microsomes. Yagi K, et al. **Eur J Biochem** 1989 Apr 1; 180(3):509–13

Purification of the 56-kDa component of the bacteriophage T7 primase/helicase and characterization of its nucleoside 5'-triphosphatase activity. Bernstein JA, et al. **J Biol Chem** 1988 Oct 15;263(29):14891–9

Characterization of an epidermal phosphatase specific for filaggrin phosphorylated by casein kinase II. Haugen-Scofield J, et al. **J Invest Dermatol** 1988 Dec; 91(6):553–9

METABOLISM

Histological and enzyme histochemical study on the injured knee meniscus in human. Järvinen M, et al. **Acta Histochem (Jena)** 1989;85(1):9–14

Enzymatic hydrolysis of S-phosphocysteamine. Orzeszko G, et al. **Acta Pol Pharm** 1988;45(2):171–5

Modifications of ornithine decarboxylase induced by phosphatases. Mitchell JL, et al. **Adv Exp Med Biol** 1988; 250:55–70 (59 ref.)

GTPase activating proteins for the smg-21 GTP-binding protein having the same effector domain as the ras proteins in human platelets. Ueda T, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1411–9

D-myo-inositol 1,4,5-trisphosphate phosphatase in skeletal muscle. Milani D, et al. **Biochem J** 1988 Sep 1;254(2):525–9

Identification and partial characterization of an adenosine(5')tetraphospho(5')adenosine hydrolase on intact bovine aortic endothelial cells. Ogilvie A, et al. **Biochem J** 1989 Apr 1;259(1):97–103

Characterization of the bis(5'-nucleosidyl) tetraphosphate pyrophosphohydrolase from encysted embryos of the brine shrimp Artemia. Prescott M, et al. **Biochem J** 1989 May 1;259(3):831–8

1D-myo-inositol 1,4,5-trisphosphate dephosphorylation by rat enterocytes involves an intracellular 5-phosphatase and non-specific phosphatase activity at the cell surface. Rubiera C, et al. **Biochem J** 1988 Oct 1;255(1):131-7

Preferential localization of rat liver D-myo-inositol 1,4,5-trisphosphate/1,3,4,5-tetrakisphosphate 5-phosphatase in bile-canalicular plasma membrane and 'late' endosomal vesicles. Shears SB, et al. **Biochem J** 1988 Dec 1;256(2):363-9

Contribution of the guanosinetriphosphatase activity of G-protein to termination of light-activated guanosine cyclic 3',5'-phosphate hydrolysis in retinal rod outer segments. Sitaramayya A, et al. **Biochemistry** 1988 Jun 28; 27(13):4880-7

tRNA and the guanosinetriphosphatase activity of elongation factor Tu. Swart GW, et al. **Biochemistry** 1989 Jan 10; 28(1):327-32

The elongation factor Tu.GTPase reaction: effect of 2'(3')-O-aminoacyl oligoribonucleotides. Tezuka M, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):463-5

Identification of point of specific enzymic cleavage of P1,P4-bis(5'-adenosyl) tetraphosphate by negative ion FAB mass spectrometry. McLennan AG, et al. **Biomed Environ Mass Spectrom** 1989 Jun;18(6):450-2

Mu-type opioid receptors in rat periaqueductal gray-enriched P2 membrane are coupled to guanine nucleotide binding proteins. Fedynyshyn JP, et al. **Brain Res** 1989 Jan 2;476(1):102-9

Rat peritoneal mast cell regranulation and acid phosphatase and trimetaphosphatase activity induced after stimulation by 48/80. A fluorescence, ultrastructural, and cytochemical study. Jamur MC, et al. **Cell Mol Biol** 1988;34(3):231-7

Immature rat epididymal epithelial cells grown in static primary monolayer culture on permeable supports. II. Histochemistry and ultrastructure. Yeung CH, et al. **Cell Tissue Res** 1989 Jun;256(3):573-80

A C-terminal domain of GAP is sufficient to stimulate ras p21 GTPase activity. Marshall MS, et al. **EMBO J** 1989 Apr;8(4):1105-10

Interaction of the beta-adrenergic receptor with Gs following delipidation. Specific lipid requirements for Gs activation and GTPase function. Ben-Arie N, et al. **Eur J Biochem** 1988 Oct 1;176(3):649-54

Characterization of the ribosomal properties required for formation of a GTPase active complex with the eukaryotic elongation factor 2. Nygård O, et al. **Eur J Biochem** 1989 Feb 15;179(3):603-8

Secretion-stimulating and secretion-inhibiting hormones stimulate high-affinity pertussis-toxin-sensitive GTPases in membranes of a pituitary cell line. Offermanns S, et al. **Eur J Biochem** 1989 Mar 15;180(2):283-7

Phosphatases and phosphodiesterases interfere with 1,3-beta-D-glucan synthase activity in pea epicotyl membrane preparations. Saugy M, et al. **Eur J Biochem** 1988 Oct 15;177(1):135-8

Myo-inositol(1,4,5)trisphosphorothioate binds to specific [3H]inositol(1,4,5)trisphosphate sites in rat cerebellum and is resistant to 5-phosphatase. Willcocks AL, et al. **Eur J Pharmacol** 1988 Oct 11;155(1-2):181-3

Transducin GTPase provides for rapid quenching of the cGMP cascade in rod outer segments. Arshavsky VYu, et al. **FEBS Lett** 1989 Jul 3;250(2):353-6

The influence of nerve growth factor on the activities of adenylate cyclase and high-affinity GTPase in pheochromocytoma PC12 cell. Golubeva EE, et al. **FEBS Lett** 1989 Apr 24;247(2):232-4

A G-protein of sarcoplasmic reticulum of skeletal muscle is activated by caffeine or inositol trisphosphate. Hasegawa T, et al. **FEBS Lett** 1989 Feb 27;244(2):283-6

Soman-hydrolyzing and -detoxifying properties of an enzyme from a thermophilic bacterium. Chettur G, et al. **Fundam Appl Toxicol** 1988 Oct;11(3):373-80

The cerium perhydroxide-diaminobenzidine (Ce-H2O2-DAB) procedure. New methods for light microscopic phosphatase histochemistry and immunohistochemistry. Halbhuber KJ, et al. **Histochemistry** 1988;90(4):289-97

Light microscopical visualization of phosphatase activities demonstrated with the cerium method in resin sections of the kidney with the microwave oven. Kalicharan D, et al. **Histochemistry** 1989;90(6):485-7

GTPase activity during maturation of rat reticulocytes. Murakami T, et al. **Horm Metab Res** 1988 Jul;20(7):460-1

Ascorbate inhibits specific binding of etorphine and low Km GTPase in NG108-15 hybrid cells. Bhatia M, et al. **Indian J Biochem Biophys** 1988 Dec;25(6):699-702

Cytochemical localization of beta-NADPase and TMPase in B cells of pancreas. Beaudoin AR, et al. **Int J Pancreatol** 1989 Mar;4(2):199-205

Modulation of enzymatic activities during spontaneous and induced differentiation in a human pancreatic adenocarcinoma cell line CAPAN-1. Bensaadi N, et al. **Int J Pancreatol** 1989 May;4(4):391-406

Synthesis of (Rp,Rp)-P1,P4-Bis(5'-adenosyl)-1[17O,18O2],4[17O,18O2] tetraphosphate from (Sp,Sp)-P1,P4-Bis(5'-adenosyl)-1[thio-18O2], 4[thio-18O2]tetraphosphate with retention at phosphorus and the stereochemical course of hydrolysis by the unsymmetrical Ap4A phosphodiesterase from lupin seeds. Dixon RM, et al. **J Biol Chem** 1989 Feb 5;264(4):2069-74

The mechanism of guanosine nucleotide hydrolysis by p21 c-Ha-ras. The stereochemical course of the GTPase reaction. Feuerstein J, et al. **J Biol Chem** 1989 Apr 15; 264(11):6188-90

Purification and characterization from bovine brain cytosol of two GTPase-activating proteins specific for smg p21, a GTP-binding protein having the same effector domain as c-ras p21s. Kikuchi A, et al. **J Biol Chem** 1989 Jun 5; 264(16):9133-6

Kinetic analysis of the hydrolysis of GTP by p21N-ras. The basal GTPase mechanism. Neal SE, et al. **J Biol Chem** 1988 Dec 25;263(36):19718-22

Chemoattractant-stimulated GTPase activity is decreased on membranes from polymorphonuclear leukocytes incubated in chemoattractant. Wilde MW, et al. **J Biol Chem** 1989 Jan 5;264(1):190-6

Evidence for multiple, ras-like, guanine nucleotide-binding proteins in Swiss 3T3 plasma membranes. Stimulation of GTPase activity by cytosolic factors. Wolfman A, et al. **J Biol Chem** 1989 Jun 25;264(18):10820-7

Characterization of the membrane-associated GTPase activity: effects of chemotactic factors and toxins. Pelz C, et al. **J Cell Biochem** 1989 Feb;39(2):197-206

Comparison of methods for determining DNase and phosphatase activities of staphylococci. Langlois BE, et al. **J Clin Microbiol** 1989 May;27(5):1127-9

Enzyme-histochemical demonstration of microglial cells in the adult and postnatal rabbit retina. Schnitzer J. **J Comp Neurol** 1989 Apr 8;282(2):249-63

Thiamine triphosphatase in the membranes of the main electric organ of Electrophorus electricus: substrate-enzyme interactions. Bettendorff L, et al. **J Neurochem** 1989 Sep;53(3):738-46

Relationship between opioid-receptor occupancy and stimulation of low-Km GTPase in brain membranes. Clark MJ, et al. **J Neurochem** 1989 Apr;52(4):1162-9

Phosphorylation of mu-opioid receptors--a putative mechanism of selective uncoupling of receptor--Gi interaction, measured with low-Km GTPase and nucleotide-sensitive agonist binding. Harada H, et al. **Neurosci Lett** 1989 May 22;100(1-3):221-6

Transducin activation by molecular species of rhodopsin other than metarhodopsin II. Okada D, et al. **Photochem Photobiol** 1989 Feb;49(2):197-203

Regional distribution of calcium/calmodulin-dependent phosphatase activity of calcineurin in rat brain. Chung E, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jun; 64(3):357-71

The activities of phosphatases and aminotransferases in the epithelium of the small intestine and caecum of white rock cockerels during starvation. Majumdar S, et al. **Zentralbl Veterinarmed [A]** 1989 May;36(5):348-53

[The influence of coal ashes and soil dust on the activity of two selected hydrolytic enzymes in the liver of laboratory animals] Krolikowska-Prasał I, et al. **Gegenbaurs Morphol Jahrb** 1988;134(5):763-72 (Eng. Abstr.) (Ger)

PHARMACOLOGY

Acylphosphatase increases the rate of ethanol production from glucose in cell-free extracts of Saccharomyces cerevisiae. Ramponi G, et al. **Biotechnol Appl Biochem** 1988 Oct;10(5):408-13

Evidence for the dependence of arterial haemostasis on ADP. McClure MO, et al. **Proc R Soc Lond [Biol]** 1988 Aug 23;234(1276):255-62

Calcium channel regulation by calcineurin, a Ca2+-activated phosphatase in mammalian brain. Armstrong DL. **Trends Neurosci** 1989 Mar;12(3):117-22 (40 ref.)

PHYSIOLOGY

Placental estrogen synthetase (aromatase): evidence for phosphatase-dependent inactivation. Bellino FL, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):498-504

Functional domains of vaccinia virus mRNA capping enzyme. Analysis by limited tryptic digestion. Shuman S. **J Biol Chem** 1989 Jun 5;264(16):9690-5

The kyotorphin (tyrosine-arginine) receptor and a selective reconstitution with purified Gi, measured with GTPase and phospholipase C assays. Ueda H, et al. **J Biol Chem** 1989 Mar 5;264(7):3732-41

Granulocyte-macrophage colony-stimulating factor and human neutrophils: role of guanine nucleotide regulatory proteins. Gomez-Cambronero J, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3569-73

PHOSPHATE ACETYLTRANSFERASE see under **ACETYLTRANSFERASES**

PHOSPHATE DIABETES see **HYPOPHOSPHATEMIA, FAMILIAL**

PHOSPHATES

see related
SUGAR PHOSPHATES

Kinetics of dissolution and growth of calcium fluoride and effects of phosphate. Christoffersen J, et al. **Acta Odontol Scand** 1988 Dec;46(6):325-36

Alkali solubility of calcium fluoride pre-exposed to inorganic orthophosphate at pH 6.8. Saxegaard E. **Acta Odontol Scand** 1988 Dec;46(6):361-3

Lung functions in phosphate miners in Jordan: a pilot study. Samara N, et al. **Am J Ind Med** 1989;16(3):297-304

Infection-induced struvite urolithiasis in rats. Olson ME, et al. **Am J Pathol** 1989 Sep;135(3):581-3

Pyrophosphate formation from acetyl phosphate and orthophosphate: evidence for heterogeneous catalysis. Meyer-Fernandes JR, et al. **Arch Biochem Biophys** 1988 Oct;266(1):132-41

Assignments of 31P NMR resonances in oligodeoxyribonucleotides: origin of sequence-specific variations in the deoxyribose phosphate backbone conformation and the 31P chemical shifts of double-helical nucleic acids. Gorenstein DG, et al. **Biochemistry** 1988 Sep 20;27(19):7223-37

In vivo regeneration of red cell 2,3-diphosphoglycerate following transfusion of DPG-depleted AS-1, AS-3 and CPDA-1 red cells. Heaton A, et al. **Br J Haematol** 1989 Jan;71(1):131-6

Cancer morbidity and mortality in phosphate workers. Block G, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7298-303

Extent of removal of sulfate and phosphate during the extraction step in the sigma enzymatic method for oxalate assay, as determined by ion chromatography [letter] Singh RP. **Clin Chem** 1988 Nov;34(11):2390

Effect of phosphate-buffered sucrose flush solution upon the initial phase of ischaemic acute renal failure in the rat. Ferwana OS, et al. **Clin Sci** 1989 Jul;77(1):77-84

Synthesis, characterization, and ion exchange behavior of antimony(V) phosphate: selective adsorption of cadmium and mercury on its column. Varshney KG, et al. **Ecotoxicol Environ Safety** 1989 Aug;18(1):1-10

Oxygen toxicity. The influence of adenine-nucleotides and phosphate on Fe2+ autoxidation. Tadolini B. **Free Radic Res Commun** 1989;5(4-5):237-43

Iron oxidation in Mops buffer. Effect of phosphorus containing compounds. Tadolini B, et al. **Free Radic Res Commun** 1987;4(3):161-72

A 28-bp segment of the Saccharomyces cerevisiae PHO5 upstream activator sequence confers phosphate control to the CYC1-lacZ gene fusion. Sengstag C, et al. **Gene** 1988 Jul 30;67(2):223-8

Temperature-absorption transition spectroscopy: a technique for estimating the relative charge densities on thiolated phosphate groups in nucleic acid analogues. Das MC. **Indian J Biochem Biophys** 1989 Feb;26(1):9-13

Magnetization and electron paramagnetic resonance studies of reduced uteroferrin and its "EPR-silent" phosphate complex. Day EP, et al. **J Biol Chem** 1988 Oct 25; 263(30):15561-7

Enzymic dephosphorylation of bovine casein to improve acid clotting properties and digestibility for infant formula. Li-Chan E, et al. **J Dairy Res** 1989;56(3):381-90

Regulation of the phosphate regulon of Escherichia coli. Activation of pstS transcription by PhoB protein in vitro. Makino K, et al. **J Mol Biol** 1988 Sep 5;203(1):85-95

The anticoagulant CPDA-1 [letter] Carlin S. **J Vet Intern Med** 1988 Oct-Dec;2(4):212

Posttransfusion survival of red cells frozen for 8 weeks after 42-day liquid storage in AS-3. Rathbun EJ, et al. **Transfusion** 1989 Mar-Apr;29(3):213-7

The effect of additives on red cell 2,3 diphosphoglycerate levels in CPDA preservatives. Vora S, et al. **Transfusion** 1989 Mar-Apr;29(3):226-9

[The preservation of the whole blood of dogs for transfusion purposes in CPDA-1 stabilizer-prepared PVC bags--the effect of storage on the count, the volume distribution and the ultrastructure of thrombocytes] Nolte I, et al. **Berl Munch Tierarztl Wochenschr** 1988 Nov 1; 101(11):365-73 (Ger)

[Effect of o-phosphate on the myoglobin spectrum] Bauer F, et al. **Z Lebensm Unters Forsch** 1988 Aug;187(2):125-6 (Eng. Abstr.) (Ger)

ADMINISTRATION & DOSAGE

Renal response to low and high phosphate intake in weanling, adolescent and adult rats. Karlén J. **Acta Physiol Scand** 1989 Mar;135(3):317-22

Fluoride bioavailability from disodium monofluorophosphate fluoridated milk in children and rats. Villa A, et al. **Caries Res** 1989;23(3):179-83

A 3-year oral health dose-response study of sodium monofluorophosphate dentifrices with and without zinc citrate: anti-caries results. Stephen KW, et al. **Community Dent Oral Epidemiol** 1988 Dec;16(6):321-5

Intraperitoneal chromic phosphate in ovarian cancer: risks and benefits. Potter ME, et al. **Gynecol Oncol** 1989 Mar; 32(3):314-8

Alterations in the distribution of cholinesterase molecular forms in maternal and fetal brain following diisopropyl fluorophosphate treatment of pregnant rats. Meneguz A, et al. **Neurochem Res** 1989 Mar;14(3):285-91

[Results of the compensatory treatment of disorders of magnesium and calcium metabolism in mitral valve prolapse syndrome] Kloś J, et al. **Pol Tyg Lek** 1988 Oct 10;43(41):1330-3 (Eng. Abstr.) (Pol)

ADVERSE EFFECTS

Severe hyperphosphatemia, hypocalcemia, acidosis, and shock in a 5-month-old child following the administration of an adult Fleet enema. Wason S, et al. **Ann Emerg Med** 1989 Jun;18(6):696-700

Estimation of occupational hazards of the employees of a

phosphate fertilizers plant. Renke W, et al. **Bull Inst Marit Trop Med Gdynia** 1987;38(1–2):5–16
Treating constipation with phosphate enema: an unnecessary risk. Spinrad S, et al. **Isr J Med Sci** 1989 Apr;25(4):237–8

ANALYSIS

Iron fortification of flour with a complex ferric orthophosphate. Hallberg L, et al. **Am J Clin Nutr** 1989 Jul;50(1):129–35
Calcium and phosphate solubility in neonatal parenteral nutrient solutions containing Aminosyn-PF or TrophAmine. Lenz GT, et al. **Am J Hosp Pharm** 1988 Nov; 45(11):2367–71
A simple colorimetric assay method for pyrophosphate in the presence of a 1000-fold excess of orthophosphate: application of the method to the study of pyrophosphate metabolism in mitochondria. Mansurova SE, et al. **Anal Biochem** 1989 Feb 1;176(2):390–4
Phosphate-selective polymer membrane electrode. Glazier SA, et al. **Anal Chem** 1988 Nov 15;60(22):2540–2
Determination of phosphate ions with an enzyme sensor system. Watanabe E, et al. **Biosensors** 1987–88;3(5):297–306
Isolation and structural studies of phosphate-containing oligosaccharides from alkaline and acid hydrolysates of Streptococcus pneumoniae type 6B capsular polysaccharide. van Dam JE, et al. **Carbohydr Res** 1989 Apr 15;187(2):267–86
Study on influence of inactivation enzyme techniques and extraction procedures on cerebral phosphorylated metabolite levels by 31P NMR spectroscopy. Miccheli A, et al. **Cell Mol Biol** 1988;34(6):591–603
Rapid, reliable in vivo assays of human phosphate metabolites by nuclear magnetic resonance. Bottomley PA, et al. **Clin Chem** 1989 Mar;35(3):392–5
First observation of hopeite and parascholzite in fibrous capsules surrounding silicone breast implants. Rolland C, et al. **Int J Artif Organs** 1989 Mar;12(3):180–8
Serum and peritoneal fluid phosphate concentrations as predictors of major intestinal injury associated with equine colic. Arden WA, et al. **J Am Vet Med Assoc** 1988 Oct 15;193(8):927–31
Gravimetric determination of ash in foods: NMKL collaborative study. Mortensen AB, et al. **J Assoc Off Anal Chem** 1989 May-Jun;72(3):481–3
Determination of the inorganic pyrophosphate level and its subcellular localization in Chara corallina. Takeshige K, et al. **J Biol Chem** 1989 Feb 25;264(6):3262–6
The isolation and chemical characterization of phosphorylated enkephalin-containing peptides from bovine adrenal medulla. Watkinson A, et al. **J Biol Chem** 1989 Feb 25;264(6):3061–5
Bone status of senescent female rats: chemical, morphometric, and biomechanical analyses. Kiebzak GM, et al. **J Bone Miner Res** 1988 Aug;3(4):439–46
Adsorbability to and desorbability from Sephadex G-15 of sodium and phosphate ions. Okada T, et al. **J Chromatogr** 1989 Jul 28;475:412–5
Chemical reactivity of aluminium-based pharmaceutical compounds used as phosphate-binders. Cargill RW, et al. **J Pharm Pharmacol** 1989 Jan;41(1):11–6
1H and 31P NMR measurement of cerebral lactate, high-energy phosphate levels, and pH in humans during voluntary hyperventilation: associated EEG, capnographic, and Doppler findings. van Rijen PC, et al. **Magn Reson Med** 1989 May;10(2):182–93
Prediction by 31P-NMR of the irreversibility of ischemic injury in rat skeletal muscle after ligation of the femoral artery. Authier B, et al. **Muscle Nerve** 1989 Jan;12(1):20–5
Covalently bound phosphate residues in bovine milk xanthine oxidase and in glucose oxidase from Aspergillus niger: a reevaluation. Johnson JL, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6493–7
31P nuclear magnetic resonance of rat pancreatic grafts. Morris GE, et al. **Transplantation** 1989 May;47(5):779–84

ANTAGONISTS & INHIBITORS

Inhibition by phenylglyoxal of the sodium-coupled fluxes of glucose and phosphate in renal brush-border membranes. Béliveau R, et al. **Biochem Cell Biol** 1988 Sep;66(9):1005–12

BLOOD

Calcium, magnesium and phosphate during and after hypothermic cardiopulmonary bypass without temperature correction of acid base status. Kancir CB, et al. **Acta Anaesthesiol Scand** 1988 Nov;32(8):676–80
Postoperative and glucose-induced hypophosphatemia in relation to adenosine triphosphate and 2,3-diphosphoglycerate in erythrocytes. Rasmussen A, et al. **Acta Chir Scand** 1989 Feb;155(2):81–7
Severity of postoperative hypophosphatemia in relation to glucose administration and renal handling of phosphate. Rasmussen A, et al. **Acta Chir Scand** 1988 Nov-Dec; 154(11–12):617–21
Plasma ionized calcium, phosphate and magnesium in preterm and small for gestational age infants. Nelson N, et al. **Acta Paediatr Scand** 1989 May;78(3):351–7
Hypophosphatemia induced by dietary aluminium hydroxide supplementation in pigs: effects on growth, blood variables, organ weights and renal morphology. Håglin L, et al. **Acta Vet Scand** 1988;29(1):91–9
The enthesopathic changes of hypophosphatemic osteomalacia in adults: radiologic findings. Burnstein MI, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):785–90
Decreased serum phosphate in essential hypertension. Related to increased sympathetic tone. Kjeldsen SE, et al. **Am J Hypertens** 1988 Oct;1(4 Pt 1):403–9
Hypokalaemic, hypophosphatemic thyrotoxic periodic paralysis. Nora NA, et al. **Am J Kidney Dis** 1989 Mar; 13(3):247–9 (12 ref.)
Phosphate-binding effects of sucralfate in patients with chronic renal failure. Roxe DM, et al. **Am J Kidney Dis** 1989 Mar;13(3):194–9
Hypophosphatemia and respiratory failure: prolonged abnormal energy metabolism demonstrated by nuclear magnetic resonance spectroscopy. Lewis JF, et al. **Am J Med** 1987 Dec;83(6):1139–43
Treatment of uremic hyperphosphatemia—is there still a need for aluminum salts? Schaefer K, et al. **Am J Nephrol** 1988; 8(3):173–8 (33 ref.)
Hemolytic anemia and red blood cell metabolic disorder attributable to low phosphorus intake in cows. Ogawa E, et al. **Am J Vet Res** 1989 Mar;50(3):388–92
Use of actin-bound adenosine 5'-diphosphate as a method to determine the specific 32P-radioactivity of the gamma-phosphoryl group of adenosine 5'-triphosphate in a highly compartmentalized cell, the platelet. Verhoeven AJ, et al. **Anal Biochem** 1988 Nov 1;174(2):672–8
Lack of effect of overnight storage of heparinised blood at 4 degrees C on plasma phosphate concentration. Bosomworth MP, et al. **Ann Clin Biochem** 1989 May;26 (Pt 3):300–1
Severe hyperphosphatemia, hypocalcemia, acidosis, and shock in a 5-month-old child following the administration of an adult Fleet enema. Wason S, et al. **Ann Emerg Med** 1989 Jun;18(6):696–700
Vitamin D3 and calcitonin-induced regulation of calcium and phosphate in rat lens—its significance in cataract formation. Srivastava VK, et al. **Ann Ophthalmol** 1989 Apr; 21(4):149–52
Large phosphate shifts with treatment for hyperglycemia. Bohannon NJ. **Arch Intern Med** 1989 Jun;149(6):1423–5
Inhibition of inorganic anion transport across the human red blood cell membrane by chloride-dependent association of dipyridamole with a stilbene disulfonate binding site on the band 3 protein. Legrum B, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):193–207
Hypophosphatemic rickets after ifosfamide treatment [letter] Newbury-Ecob RA, et al. **BMJ** 1989 Jul 22;299(6693):258
Hypophosphataemic rickets after ifosfamide treatment in children. Skinner R, et al. **BMJ** 1989 Jun 10; 298(6687):1560–1
Acquired hypophosphataemic vitamin D resistant rickets in black children. Pettifor JM, et al. **Bone Miner** 1986 Sep; 1(4):307–19
Hyperphosphatemia as a detectable laboratory manifestation of glucocorticoid withdrawal syndrome. Suzuki K, et al. **Bone Miner** 1986 Feb;1(1):51–8
Benign transient hyperphosphatasemia in an adult with malignant lymphoma [letter] Maekawa M, et al. **Clin Chem** 1989 May;35(5):897
The beneficial effect of ketoacids on serum phosphate and parathyroid hormone in patients with chronic uremia. Schaefer K, et al. **Clin Nephrol** 1988 Aug;30(2):93–6
Extensive extraosseous localization of bone imaging agent in a patient with renal failure and rhabdomyolysis accompanied by combined hypercalcemia and hyperphosphatemia. Shih WJ, et al. **Clin Nucl Med** 1989 Mar;14(3):163–7
Change of serum inorganic phosphate complexes in diabetic ketoacidosis. Szabo A, et al. **Clin Physiol Biochem** 1989; 7(2):93–6
Hypophosphataemic rickets and melorheostosis. Lee SH, et al. **Clin Radiol** 1989 Mar;40(2):209–11
Guanosine triphosphate (GTP): the major organic phosphate in the erythrocytes of the elasmobranch Mustelus canis (smooth dogfish). Borgese TA, et al. **Comp Biochem Physiol [B]** 1978;60(3):317–21
Effects of acid base disturbance, septic shock, and calcium and phosphorous abnormalities on cardiovascular function. Mehta PM, et al. **Crit Care Clin** 1987 Oct;3(4):747–58 (120 ref.)
Influence of calcitonin administration of serum calcium and inorganic phosphate level of the frog, Rana tigrina. Srivastav AK, et al. **Gen Comp Endocrinol** 1989 Apr; 74(1):14–7
Does hypophosphatemia play a role in acute liver failure? Knochel JP. **Hepatology** 1989 Mar;9(3):504–5
Sodium-phosphate cotransport in human red blood cells. Kinetics and role in membrane metabolism. Shoemaker DG, et al. **J Gen Physiol** 1988 Oct;92(4):449–74
Changes in serum phosphate during beta-blockade in healthy men are not due to changes in the renal handling of phosphate. Kayser L, et al. **J Intern Med** 1989 Mar; 225(3):197–200
Hyperphosphatemia associated with cortical hyperostosis and tumoral calcinosis. Wilson MP, et al. **J Pediatr** 1989 Jun; 114(6):1010–3
Hypophosphatemia. Causes and clinical consequences. Forrester SD, et al. **J Vet Intern Med** 1989 Jul-Sep; 3(3):149–59 (58 ref.)
Hypophosphataemia and phosphaturia in paracetamol poisoning. Jones AF, et al. **Lancet** 1989 Sep 9;2(8663):608–9
Analysis of the PO4—body pool in the uraemics. Mastrangelo F, et al. **Life Support Syst** 1983;1 Suppl 1:215–8
Erythrocyte phosphate metabolism and pH in vitro: a model for clinical phosphate disorders in acidosis and alkalosis. Kemp GJ, et al. **Miner Electrolyte Metab** 1988;14(5):266–70
Spurious hyperphosphatemia in patients with dysglobulinemia. Weinberg J, et al. **Miner Electrolyte Metab** 1989;15(4):185–6
Can low-dosage aluminium hydroxide control the plasma phosphate without bone toxicity? Jenkins DA, et al. **Nephrol Dial Transplant** 1989;4(1):51–6
High-dose calcium carbonate with stepwise reduction in dialysate calcium concentration: effective phosphate control and aluminium avoidance in haemodialysis patients. Sawyer N, et al. **Nephrol Dial Transplant** 1989;4(2):105–9
Hypophosphataemia and reversible neurological dysfunction in a patient subjected to combined renal and pancreatic transplantation. Tydén G, et al. **Nephrol Dial Transplant** 1988;3(6):823–5
Management of hyperphosphatemia with calcium citrate in hemodialysis patients [letter] Saupe J, et al. **Nephron** 1989; 52(1):93–4
Postoperative hypophosphatemia: a multifactorial problem. **Nutr Rev** 1989 Apr;47(4):111–6 (14 ref.)
Tumoral calcinosis. Case report with treatment failure. Walentynowicz JE, et al. **Orthop Rev** 1989 Jun;18(6):687–90 (16 ref.)
Hypercalciuric hypophosphatemic rickets, mineral balance, bone histomorphometry, and therapeutic implications of hypercalciuria. Chen C, et al. **Pediatrics** 1989 Aug; 84(2):276–80
Serum calcium and phosphate levels in normal gravid black women [letter] Desai RK, et al. **S Afr Med J** 1988 Oct 15;74(8):428
Generation of hypophosphatemia in rats by continuous oral administration of cadmium. Ando M, et al. **Toxicology** 1988 Dec 16;53(1):1–10
Hypophosphatemic oncogenic osteomalacia: report of three new cases. Papotti M, et al. **Tumori** 1988 Oct 31; 74(5):599–607
[Respiratory diseases and hypophosphatemia] Hou J. **Chung Hua Nei Ko Tsa Chih** 1988 Jun;27(6):333–6, 388 (Eng. Abstr.) **(Chi)**
[Postoperative hypophosphatemia] Lobera A, et al. **Ann Chir** 1988;42(9):671–9 (Eng. Abstr.) **(Fre)**
[Hyperphosphatemia and transient renal insufficiency following chemotherapy of acute lymphoblastic leukemia] Aubert JD, et al. **Schweiz Med Wochenschr** 1988 Dec 24; 118(51):1953–6 (Eng. Abstr.) **(Fre)**
[The equilibrium of nitrogen, potassium and phosphate and renal excretion of creatinine and creatinine over the course of 3 weeks following severe trauma] Finsterer U, et al. **Anasth Intensivther Notfallmed** 1988 Dec;23(6):316–24 (Eng. Abstr.) **(Ger)**
[Hypophosphatemic osteomalacia in adults] Löhr-Schwaab S, et al. **Dtsch Med Wochenschr** 1989 Apr 7;114(14):538–42 (Eng. Abstr.) **(Ger)**
[Oncogenic hypophosphatemic osteomalacia] Schultze G, et al. **Dtsch Med Wochenschr** 1989 Jul 7;114(27):1073–8 (Eng. Abstr.) **(Ger)**
[Replacement of aluminum-containing phosphate binders by calcium and magnesium carbonates in long-term hemodialysis] Zellweger U, et al. **Dtsch Med Wochenschr** 1989 Apr 28;114(17):659–64 (Eng. Abstr.) **(Ger)**
[Extreme hyperphosphatemia with hypocalcemia within the scope of cell lysis syndrome in a child with T-ALL] Kabisch H, et al. **Onkologie** 1989 Apr;12(2):64–8 (Eng. Abstr.) **(Ger)**
[A dye-binding method for determination of inorganic phosphate in serum using guinea green B (GGB)] Maehata E, et al. **Rinsho Byori** 1988 Aug;36(8):923–7 **(Jpn)**
[Various indicators of phosphorus and calcium metabolism in normal pregnancy and pregnancy complicated by gestosis] Bystritskaia TS, et al. **Akush Ginekol (Mosk)** 1988 Jun;(6):20–2 (Eng. Abstr.) **(Rus)**
[Enterobacter cloacae infection and marked hypophosphatemia in a patient on hemodialysis (letter)] Almirall J, et al. **Med Clin (Barc)** 1989 Feb 4;92(4):158–9 **(Spa)**
[Usefulness of determining blood phosphorus in acute experimental intestinal ischemia] Suso Alea FJ, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 2):415–7 (Eng. Abstr.) **(Spa)**

CHEMICAL SYNTHESIS

Preparation and investigation of dry aluminum phosphate gels with antacid properties. Misheva E. **Arch Pharm (Weinheim)** 1988 Nov;321(11):793–4

DEFICIENCY

Hypocalcemia and hypophosphatemia in acutely ill patients. Desai TK, et al. **Crit Care Clin** 1987 Oct;3(4):927–41 (85 ref.)
Increase in phosphoribosyl pyrophosphate induced by ATP and Pi depletion in hepatocytes. Vincent MF, et al. **FASEB J** 1989 May;3(7):1862–7

DIAGNOSTIC USE

Improvement of chemical analysis of antibiotics. XV. Isocratic high-performance liquid chromatographic methods for the analysis and preparative separation of the

components of bacitracin. Oka H, et al. **J Chromatogr** 1989 Jan 13;462:315–22

METABOLISM

The effect of dobutamine on myocardial performance and high-energy phosphate metabolism at different stages of heart failure in cardiomyopathic hamsters: a 31P MRS study. Buser PT, et al. **Am Heart J** 1989 Jul;118(1):86–91

Adaptation to Pi deprivation of cell Na-dependent Pi uptake: a widespread process. Escoubet B, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C322–8

Control of phosphate transport in flounder renal proximal tubule primary cultures. Gupta A, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):R850–7

Relation between phosphate metabolites and oxygen consumption of heart in vivo. Katz LA, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):H265–74

Antagonist to GH-releasing factor inhibits growth and renal Pi reabsorption in immature rats. Mulroney SE, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):F29–34

Renal reabsorption of phosphate during development: transport kinetics in BBMV. Neiberger RE, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):F268–74

Effect of synthetic tumoral PTH-related peptide on cAMP production and Na-dependent Pi transport. Pizurki L, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):F957–61

Renal phosphate transport in humoral hypercalcemia of malignancy. Sartori L, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):F1078–84

Regulation of Na-dependent Pi transport by parathyroid hormone in osteoblast-like cells. Selz T, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E93–100

Cellular K+ loss and anion efflux during myocardial ischemia and metabolic inhibition. Weiss JN, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1165–75

NMR studies of renal phosphate metabolites in vivo: effects of hydration and dehydration. Wolff SD, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):F581–9

Effect of high-dose inhaled budesonide on calcium and phosphate metabolism and the risk of osteoporosis. Toogood JH, et al. **Am Rev Respir Dis** 1988 Jul; 138(1):57–61

Consequences of phosphate imbalance. Berner YN, et al. **Annu Rev Nutr** 1988;8:121–48 (201 ref.)

Inhibition of Na+-dependent phosphate transport by group-specific covalent reagents in rat kidney brush border membrane vesicles. Evidence for the involvement of tyrosine and sulfhydryl groups on the interior of the membrane. Pratt RD, et al. **Arch Biochem Biophys** 1989 Jan;268(1):9–19

Alkaline phosphatase activities in normal and denervated, slow and fast rat muscles. Bearing on the possible participation of the enzyme in the transmembrane transport of phosphate ions. Dictus-Vermeulen C, et al. **Arch Int Physiol Biochim** 1989 Feb;97(1):13–23

Urea, creatinine, uric acid, and phosphate spaces and their relationship to total body water during chronic hemodialysis. Ericsson F, et al. **ASAIO Trans** 1988 Jul–Sep; 34(3):346–50

Superphosphate and its effect on bone fluoride concentrations in sheep. Mason RW, et al. **Aust Vet J** 1989 Apr;66(4):120–1

In vivo 31P NMR spectroscopy of energy rich phosphates in the brain of the hyperammonemic rat. Friolet R, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):815–20

Two pathways for phosphate/water oxygen exchange by yeast inorganic pyrophosphatase. Kasho VN, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):475–80

Detection of essential arginine in bacterial peptidyl dipeptidase-4: arginine is not the anion binding site. Lanzillo JJ, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):243–9

Metabolite transport in rat kidney mitochondria: ornithine/phosphate translocator. Passarella S, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):870–9

Parathyroid hormone inhibition of Na+/phosphate cotransport in OK cells: generation of second messengers in the regulatory cascade. Quamme G, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):951–7

Inhibition of the mitochondrial phosphate carrier by a reaction with a carboxyl group reagent. Wolf G, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):212–6

The nature of the phosphate complex of sulphite oxidase from electron-paramagnetic-resonance studies. George GN, et al. **Biochem J** 1988 Nov 15;256(1):307–9

Platelet-derived-growth-factor-stimulated heterogeneous polyphosphoinositide metabolism and phosphate uptake in C3H fibroblasts. Holmsen H, et al. **Biochem J** 1989 Jun 1;260(2):589–92

AlF4- reversibly inhibits 'P'-type cation-transport ATPases, possibly by interacting with the phosphate-binding site of the ATPase. Missiaen L, et al. **Biochem J** 1988 Aug 1; 253(3):827–33

Inhibition by volume expansion of phosphate uptake by the renal proximal tubule brush border membrane. Liput J, et al. **Biochem Pharmacol** 1989 Jan 15;38(2):321–5

Na+ and pH dependent transport of foscarnet via the phosphate carrier system across intestinal brush-border membrane. Tsuji A, et al. **Biochem Pharmacol** 1989 Mar 15;38(6):1019–22

Effect of atrial natriuretic factor on brush border membrane transport of phosphate in phosphate-deprived rats. Yusufi AN, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):4027–9

Dihydrofolate synthetase and folylpolyglutamate synthetase: direct evidence for intervention of acyl phosphate intermediates. Banerjee RV, et al. **Biochemistry** 1988 Dec 13;27(25):9062–70

Demembranated muscle fibers catalyze a more rapid exchange between phosphate and adenosine triphosphate than actomyosin subfragment 1. Bowater R, et al. **Biochemistry** 1988 Jul 12;27(14):5314–23

31P NMR magnetization-transfer measurements of flux between inorganic phosphate and adenosine 5'-triphosphate in yeast cells genetically modified to overproduce phosphoglycerate kinase. Brindle KM. **Biochemistry** 1988 Aug 9;27(16):6187–96

Mechanism of GTP hydrolysis in tubulin polymerization: characterization of the kinetic intermediate microtubule-GDP-Pi using phosphate analogues. Carlier MF, et al. **Biochemistry** 1989 Feb 21;28(4):1783–91

Bacterial phosphoenolpyruvate-dependent phosphotransferase system: mannitol-specific EII contains two phosphoryl binding sites per monomer and one high-affinity mannitol binding site per dimer. Pas HH, et al. **Biochemistry** 1988 Jul 26;27(15):5520–5

Comparison of rate constants for (PO3-) transfer by the Mg(II), Cd(II), and Li(I) forms of phosphoglucomutase. Ray WJ Jr, et al. **Biochemistry** 1989 Jan 24;28(2):559–69

Linkage of organic phosphates to oxygen binding in human hemoglobin at high concentrations. Robert CH, et al. **Biochemistry** 1988 Sep 6;27(18):6835–43

Phorbol myristate acetate activates protein kinase C, stimulates the phosphorylation of endogenous proteins and inhibits phosphate transport in mouse renal tubules. Boneh A, et al. **Biochim Biophys Acta** 1989 Aug 15;1012(3):308–16

Role of water in the energy of hydrolysis of phosphate compounds--energy transduction in biological membranes. de Meis L. **Biochim Biophys Acta** 1989 Feb 28; 973(2):333–49 (140 ref.)

Interaction of phenylisothiocyanates with the mitochondrial phosphate carrier. I. Covalent modification and inhibition of phosphate transport. Genchi G, et al. **Biochim Biophys Acta** 1988 Dec 7;936(3):413–20

Regulation of hepatic inorganic phosphate and ATP in response to fructose loading: an in vivo 31P-NMR study. Karczmar GS, et al. **Biochim Biophys Acta** 1989 Jul 11; 1012(2):121–7

Cholera toxin action on rabbit renal brush-border membranes inhibits phosphate transport. Al-Mahrouq HA, et al. **Biochim Biophys Acta** 1989 Jun 6;981(2):200–6

Measurement of microsomal ATPase activities: a comparison between the inorganic phosphate-release assay and the NADH-coupled enzyme assay. Missiaen L, et al. **Biochim Biophys Acta** 1989 Jan 27;990(1):40–4

31P-NMR evidence for cytoplasmic acidification and phosphate extrusion in syringomycin-treated cells of Rhodotorula pilimanae. Reidl HH, et al. **Biochim Biophys Acta** 1989 Mar 6;1010(3):325–9

Solvent effects on substrate and phosphate interactions with the (Na+ + K+)-ATPase. Robinson JD. **Biochim Biophys Acta** 1989 Feb 2;994(2):95–103

Effect of phosphonoformic acid, dietary phosphate and the Hyp mutation on kinetically distinct phosphate transport processes in mouse kidney. Tenenhouse HS, et al. **Biochim Biophys Acta** 1989 Sep 4;984(2):207–13

Evidence for the incorporation of [32P]orthophosphate into leaf inositol phospholipids. Wagh SS, et al. **Biochim Biophys Acta** 1988 Sep 23;962(2):178–85

The Na+/Pi-cotransporter of OK cells: reaction and tentative identification with N-acetylimidazole. Wuarin F, et al. **Biochim Biophys Acta** 1989 Jun 6;981(2):185–92

Transport mechanism for calcium and phosphate in ram spermatozoa. Zarca A, et al. **Biochim Biophys Acta** 1988 Oct 20;944(3):351–8

Flux control coefficients for Pi- and adenine nucleotide translocator in rat liver mitochondria after Fe2+/ascorbate induced oxidative stress. Trümper L, et al. **Biomed Biochim Acta** 1989;48(2-3):S44–7

Intestinal calcium and phosphate transport and intestinal alkaline phosphatase. Yeh JK, et al. **Bone Miner** 1986 Sep; 1(4):297–306

Role of calcitriol in phosphate regulation by the chick embryo. Rad JS, et al. **Calcif Tissue Int** 1989 Apr; 44(4):278–85

Magnetic resonance spectroscopy of the heart. Schaefer S, et al. **Cardiol Clin** 1989 Aug;7(3):697–712 (117 ref.)

Phosphate transport across the basolateral membrane of chick kidney proximal tubule cells. Myint S, et al. **Cell Biochem Funct** 1989 Jan;7(1):43–9

Response of myocardial metabolites to graded regional ischemia: 31P NMR spectroscopy of porcine myocardium in vivo. Schaefer S, et al. **Circ Res** 1989 May;64(5):968–76

Biochemical kinetics of porcine cardiac subfragment-1. II. Pre-steady-state studies of the initial phosphate burst. Stein LA, et al. **Circ Res** 1989 Aug;65(2):515–25

Transport of sulfate and phosphate in small intestine and renal proximal tubule: methods and basic properties. Murer H. **Comp Biochem Physiol [A]** 1988;90(4):749–55 (56 ref.)

A comparison of the effects of prior cold incubation on cerebral cortex function in a hibernator (Cricetus auratus) and a non-hibernator (Cavia porcellus)--II. High energy phosphate levels in cerebral cortex slices after in vitro cold incubation. Murphy S. **Comp Biochem Physiol [B]** 1977; 57(4):299–302

Renal handling of phosphate in term and preterm infants. Scholz K, et al. **Contrib Nephrol** 1988;67:160–5

Egg jelly induces the phosphorylation of histone H3 in spermatozoa of the sea urchin Arbacia punctulata. Vacquier VD, et al. **Dev Biol** 1989 May;133(1):111–8

Calcitonin-induced increase in phosphate accumulation in LLC-PK1 cells probably through protein kinase C activation. Kinoshita Y, et al. **Endocrinol Jpn** 1988 Apr; 35(2):217–23

Protein kinase-A and the effects of parathyroid hormone on phosphate uptake in opossum kidney cells. Martin KJ, et al. **Endocrinology** 1989 Jul;125(1):295–301

D-xylulose-induced depletion of ATP and Pi in isolated rat hepatocytes. Vincent MF, et al. **FASEB J** 1989 May; 3(7):1855–61

Inhibition of glucose phosphorylation by fatty acids in the perfused rat heart. Chatham J, et al. **FEBS Lett** 1988 Oct 10;238(2):445–9

Chloride mediated inhibition of the phosphate and the sulfate transport by dipyridamole in human erythrocyte ghosts. Renner M, et al. **FEBS Lett** 1988 Sep 26;238(1):77–81

Pyrophosphate analogues in pyrophosphorolysis reaction catalyzed by DNA polymerases. Rozovskaya T, et al. **FEBS Lett** 1989 Apr 24;247(2):289–92

Vanadate-stimulated NADH oxidation requires polymeric vanadate, phosphate and superoxide. Patole MS, et al. **Free Radic Res Commun** 1988;4(4):201–7

Noninvasive metabolic analysis of eye bank corneas: a magnetic resonance spectroscopic study. Greiner JV, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(3):295–9

Parathyroid induced regulation of calcium and phosphate in rat lens. Srivastava VK, et al. **Indian J Exp Biol** 1988 Sep;26(9):728–9

Alterations in phosphate metabolism during cellular recovery of radiation damage in yeast. Holahan PK, et al. **Int J Radiat Biol** 1988 Oct;54(4):545–62

Effects of hypercapnia on brain pHi and phosphate metabolite regulation by 31P-NMR. Nishimura M, et al. **J Appl Physiol** 1989 May;66(5):2181–8

Purification and characterization of a 400-kDa nonhistone chromatin protein that serves as an effective phosphate acceptor for casein kinase II from Ehrlich ascites tumor cells. Koike T, et al. **J Biochem (Tokyo)** 1988 Jun; 103(6):928–37

Probing the mechanism of ATP hydrolysis on F-actin using vanadate and the structural analogs of phosphate BeF-3 and AlF-4. Combeau C, et al. **J Biol Chem** 1988 Nov 25; 263(33):17429–36

Characterization of Na+-dependent phosphate transport in cardiac sarcolemmal vesicles. Jack MG, et al. **J Biol Chem** 1989 Mar 5;264(7):3904–8

Kinetic studies of the gastric H,K-ATPase. Evidence for simultaneous binding of ATP and inorganic phosphate. Reenstra WW, et al. **J Biol Chem** 1988 Dec 25; 263(36):19618–25

Role of water in the energy of hydrolysis of phosphoanhydride and phosphoester bonds. Romero PJ, et al. **J Biol Chem** 1989 May 15;264(14):7869–73

Regulation of mitochondrial matrix pH and adenosine 5'-triphosphatase activity during ischemia in slow heart-rate hearts. Role of Pi/H+ symport. Rouslin W, et al. **J Biol Chem** 1989 Sep 15;264(26):15224–9

A possible role of inorganic phosphate as a regulator of oxidative phosphorylation in combined urea synthesis and gluconeogenesis in perfused rat liver. A phosphorus magnetic resonance spectroscopy study. Tanaka A, et al. **J Biol Chem** 1989 Jun 15;264(17):10034–40

Effects of oxidation of human parathyroid hormone on its biological activity in continuously infused, thyroparathyroidectomized rats. Horiuchi N. **J Bone Miner Res** 1988 Jun;3(3):353–8

Factor derived from human lung carcinoma associated with hypercalcemia mimics the effects of parathyroid hormone on phosphate transport in cultured renal epithelia. Pizurki L, et al. **J Bone Miner Res** 1988 Apr;3(2):233–9

Stimulation by thyroid hormone of phosphate transport in primary cultured renal cells. Noronha-Blob L, et al. **J Cell Physiol** 1988 Oct;137(1):95–101

Adenosine triphosphate turnover in humans. Decreased degradation during relative hyperphosphatemia. Johnson MA, et al. **J Clin Invest** 1989 Sep;84(3):990–5

Developmental changes in the relation between phosphate metabolites and oxygen consumption in the sheep heart in vivo. Portman MA, et al. **J Clin Invest** 1989 Feb; 83(2):456–64

Fluoride in plaque following use of dentifrices containing sodium monofluorophosphate. Duckworth RM, et al. **J Dent Res** 1989 Feb;68(2):130–3

Influence of milk and food on fluoride bioavailability from NaF and Na2FPO3 in man. Trautner K, et al. **J Dent Res** 1989 Jan;68(1).72–7

Salt, phosphate and the Bohr effect at the hemoglobin beta chain C terminus studied by hydrogen exchange. Louie G, et al. **J Mol Biol** 1988 Jun 20;201(4):765–72

Effect of ATP removal and inorganic phosphate on length redistribution of sheared actin filament populations. Evidence for a mechanism of end-to-end annealing. Rickard JE, et al. **J Mol Biol** 1988 Jun 20;201(4):675–81

In vivo phosphorus nuclear magnetic resonance (31P-NMR) study of dystrophic hamster muscle. Argov Z, et al. **J Neurol Sci** 1988 Sep;86(2-3):185–93

Calcium and inorganic phosphate transport in embryonic chick intestine: triiodothyronine enhances the genomic

action of 1,25-dihydroxycholecalciferol. Cross HS, et al. **J Nutr** 1988 Dec;118(12):1529-34

Effects of antiglaucoma drugs on [32P]orthophosphate incorporation into phospholipids of cat iris and ciliary process. Yorio T, et al. **J Ocul Pharmacol** 1985 Fall; 1(3):245-54

Inhibitory effect of KW-3049, a new 1,4-dihydropyridine calcium antagonist, on the reduction of myocardial creatine kinase activity and high-energy phosphate content in rats subjected to coronary artery ligation. Karasawa A, et al. **J Pharmacobiodyn** 1988 Nov;11(11):722-9

Changes in orthophosphate, pyrophosphate and long-chain polyphosphate levels in Leishmania major promastigotes incubated with and without glucose. Blum JJ. **J Protozool** 1989 May-Jun;36(3):254-7

Enhanced high energy phosphate recovery with ribose infusion after global myocardial ischemia in a canine model. St. Cyr JA, et al. **J Surg Res** 1989 Feb;46(2):157-62

Theoretical interpretation of isotope labelling experiments in cells in which the label is chemically incorporated: the example of orthophosphate. Kemp GJ, et al. **J Theor Biol** 1988 Oct 7;134(3):351-64

Chelation of intestinal phosphate absorption and experimental glomerulosclerosis. Shimamura T, et al. **Jpn J Exp Med** 1988 Jun;58(3):163-7

Renal phosphate threshold and response to pamidronate in humoral hypercalcaemia of malignancy. Gurney H, et al. **Lancet** 1989 Jul 29;2(8657):241-4

Effects of neurotransmitters and other pharmacological agents on 32Pi incorporation into phospholipids of the iris muscle of the rabbit. Abdel-Latif AA. **Life Sci** 1974 Sep 1;15(5):961-73

Human in vivo phosphate metabolite imaging with 31P NMR. Bottomley PA, et al. **Magn Reson Med** 1988 Jul; 7(3):319-36

Concurrent measurements of cerebral blood flow, sodium, lactate, and high-energy phosphate metabolism using 19F, 23Na, 1H, and 31P nuclear magnetic resonance spectroscopy. Eleff SM, et al. **Magn Reson Med** 1988 Aug; 7(4):412-24

31P FLASH NMR imaging. Haase A, et al. **Magn Reson Med** 1988 Jul;7(3):358-63

Metabolic alterations in fiber layers of the CA 1 region of the gerbil hippocampus following short-term ischemia: high-energy phosphates, glucose-related metabolites, and amino acids. Yasumoto Y, et al. **Metab Brain Dis** 1988 Jun; 3(2):133-49

Evidence that fluoride-stimulated 3[H]-thymidine incorporation in embryonic chick calvarial cell cultures is dependent on the presence of a bone cell mitogen, sensitive to changes in the phosphate concentration, and modulated by systemic skeletal effectors. Farley JR, et al. **Metabolism** 1988 Oct;37(10):988-95

Effects of theophylline and salbutamol on phosphate and calcium metabolism in normal subjects. Prince RL, et al. **Miner Electrolyte Metab** 1988;14(5):262-5

Regulation of the phosphate regulon of Escherichia coli: characterization of the promoter of the pstS gene. Kimura S, et al. **Mol Gen Genet** 1989 Feb;215(3):374-80

Time of administration of calcium acetate and phosphate binding [letter] Diskin CJ, et al. **N Engl J Med** 1989 Sep 28;321(13):904-5

Histidine phosphorylation and phosphoryl group transfer in bacterial chemotaxis. Hess JF, et al. **Nature** 1988 Nov 10; 336(6195):139-43

Does gastric acid secretion affect phosphate binding by aluminium phosphate binding gels in chronic renal failure? [letter] Cassidy M, et al. **Nephrol Dial Transplant** 1988; 3(3):358

Aluminium hydroxide prevents progression in experimental focal glomerular sclerosis. Motomura K, et al. **Nephrol Dial Transplant** 1988;3(3):263-8

Parameters of evaluation and correlation of renal phosphate handling and of parathyroid function in children. Stark H, et al. **Nephron** 1989;51(4):478-81

Changes in content of adenine nucleotides and inorganic phosphate of the human hydronephrotic kidney. Kondo F, et al. **Nippon Jinzo Gakkai Shi** 1988 Mar;30(3):273-8

Regiospecific inhibition of DNA duplication by antisense phosphate-methylated oligodeoxynucleotides. Moody HM, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4769-82

Dietary aluminum [letter] Caster WO. **Nutr Rev** 1987 Nov; 45(11):352

Effect of parathyroid hormone on PO4 transport through the human placenta microvilli. Brunette MG, et al. **Pediatr Res** 1989 Jan;25(1):15-8

Rat atrial natriuretic factor (ANP-III) inhibits phosphate transport in brush border membrane from superficial and juxtamedullary cortex. Yusufi AN, et al. **Proc Soc Exp Biol Med** 1989 Jan;190(1):87-90

Effects of diuretics on calcium and phosphate transport. Kelepouris E, et al. **Semin Nephrol** 1988 Sep;8(3):273-81 (74 ref.)

Stabilization of actin filaments by ATP and inorganic phosphate. Dancker P, et al. **Z Naturforsch [C]** 1989 Jul-Aug;44(7-8):698-704

Effect of non-solubilizing SDS concentrations on high affinity Ca2+ binding and steady state phosphorylation by inorganic phosphate of the sarcoplasmic reticulum ATPase. Fassold E, et al. **Z Naturforsch [C]** 1989 Jan-Feb; 44(1-2):139-52

Flux of inorganic phosphate and calcium across the isolated mucosa of the sheep omasum. Höller H, et al. **Zentralbl Veterinarmed [A]** 1988 Nov;35(9):709-16

[Changes in the renal excretion of phosphates in aging] Schück O, et al. **Vnitr Lek** 1988 Jul;34(7):688-93 (Eng. Abstr.) **(Cze)**

[31-phosphorus magnetic resonance spectroscopy—a new research instrument in urology. Determination of current status and outlook for clinical use] Pomer S. **Urologe [A]** 1989 Jul;28(4):223-30 (44 ref.) (Eng. Abstr.) **(Ger)**

[Visualizing muscular phosphorus metabolites in peripheral arterial occlusive disease] Rexroth W, et al. **Vasa Suppl** 1988;23:115-20 **(Ger)**

[Uptake of radioactive orthophosphate (32PO4) by Streptococcus mutans OMZ 176] Stösser L, et al. **Zahn Mund Kieferheilkd** 1988;76(6):609-10 **(Ger)**

[Transport system of renal brush border membrane in spontaneously hypertensive rats] Hirano K. **Nippon Jinzo Gakkai Shi** 1988 Jun;30(6):767-75 (Eng. Abstr.) **(Jpn)**

[Calcium, phosphate and magnesium metabolism disorders associated with alcoholism] Yoshimoto Y. **Nippon Rinsho** 1988 Aug;46(8):1755-8 **(Jpn)**

[P-chiral phosphates--the tools for studying the stereochemistry of enzymatic reactions of the transfer of phosphate or nucleotidyl groups] Niewiarowski W. **Postepy Biochem** 1988;34(1-2):81-114 (75 ref.) **(Pol)**

[Effect of long-term irradiation of the skin on calcium-phosphate metabolism and the 25-OH-D level in patients with chronic diseases of the digestive system] Marcinowska-Suchowierska E, et al. **Przegl Lek** 1988; 45(8):614-9 (Eng. Abstr.) **(Pol)**

[Effect of the beta-blocker propranolol (obzidan) on the content of macroergic phosphates and the development of the size of necrotic areas in the myocardium in experimental acute coronary occlusion] Irgashev ShB, et al. **Kardiologiia** 1988 Aug;28(8):86-90 (Eng. Abstr.) **(Rus)**

[Effect of innervation disorders on sulfate and phosphate incorporation into the mineralized tissues of the teeth and jaw bones] Varava GN, et al. **Stomatologiia (Mosk)** 1988 Sep-Oct;67(5):6-8 (Eng. Abstr.) **(Rus)**

[Acid-base balance of the blood and possible renal mechanisms of its imbalance in children with oxalate-phosphate stones of the urinary tract] Gontmakher VM, et al. **Urol Nefrol (Mosk)** 1989 May-Jun;(3):33-6 (Eng. Abstr.) **(Rus)**

[Disorders of calcium and phosphate metabolism regulation in an experimental model of acute uremia] Ivić M, et al. **Srp Arh Celok Lek** 1988 Apr;116(4):371-82 (Eng. Abstr.) **(Scc)**

PHARMACOKINETICS

Role of BBM lipid composition and fluidity in impaired renal Pi transport in aged rat. Levi M, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):F85-94

Human plasma fluoride levels following intake of dentifrices containing aminefluoride or monofluorophosphate. Trautner K, et al. **Arch Oral Biol** 1988;33(8):543-6

Effect of glucocorticoids on the passive transport of phosphate in different segments of the intestine in the rat. Yeh JK, et al. **Bone Miner** 1987 Feb;2(1):11-9

Malabsorption of phosphate by the intestines of young X-linked hypophosphatemic mice. Brault BA, et al. **Calcif Tissue Int** 1988 Nov;43(5):289-93

Characteristics of phosphate transport in osteoblastlike cells. Caverzasio J, et al. **Calcif Tissue Int** 1988 Aug;43(2):83-7

Phosphate absorption from fleet enemas in adults. Schuchmann GD, et al. **Curr Surg** 1989 Mar-Apr; 46(2):120-2

Phosphate transport in human jejunal brush-border membrane vesicles. Borowitz SM, et al. **Gastroenterology** 1989 Jan;96(1):4-10

Influence of food on relative bioavailability of fluoride in man from Na2FPO3-containing tablets for the treatment of osteoporosis. Trautner K. **Int J Clin Pharmacol Ther Toxicol** 1989 May;27(5):242-9

Phosphate transport in the in vitro cultured rabbit proximal convoluted and straight tubules. Suzuki M, et al. **Kidney Int** 1988 Aug;34(2):268-72

Influence of insulin on phosphate uptake by brush border membranes from human placenta. Brunette MG, et al. **Mol Cell Endocrinol** 1989 May;63(1-2):57-65

Intestinal maturation: characterization of mitochondrial phosphate transport in the rat and its regulation by 1,25-(OH)2 vitamin D3. Kikuchi T, et al. **Pediatr Res** 1989 Jun;25(6):605-11

Relation between intestinal alkaline phosphatase activity and brush border membrane transport of inorganic phosphate, D-glucose, and D-glucose-6-phosphate. Roubaty C, et al. **Pflugers Arch** 1988 Oct;412(5):482-90

Glutathione-dependent inactivation of sodium-dependent phosphate transport across rat renal brush-border membrane. Suzuki M, et al. **Pflugers Arch** 1989 Feb; 413(4):329-35

Effect of phosphate on water and glucose transport in mouse everted gut sacs. Mary PL, et al. **Q J Exp Physiol** 1989 May;74(3):363-5

PHARMACOLOGY

Glycerol, sodium phosphate, and sodium chloride permit the solubilization and partial purification of rat hepatic alpha 1-receptors by 3-(3-cholamidylpropyl)-dimethylammonio-1-propanesulfonate. Parini A, et al. **Anal Biochem** 1989 Feb 1;176(2):375-81

Active Ca2+ accumulation in the endoplasmic reticulum of different hepatomas: stimulation by phosphates and Ca2+-releasing effect of IP3. Romani A, et al. **Ann N Y Acad Sci** 1988;551:249-52

A kinetic study of the effects of phosphate and organic phosphates on the activity of phosphoenolpyruvate carboxylase from Crassula argentea. Meyer CR, et al. **Arch Biochem Biophys** 1989 May 15;271(1):84-97

Monovalent cations and inorganic phosphate alter branched-chain alpha-ketoacid dehydrogenase-kinase activity and inhibitor sensitivity. Shimomura Y, et al. **Arch Biochem Biophys** 1988 Oct;266(1):210-8

Vanadate-mediated oxidation of NADH: description of an in vitro system requiring ascorbate and phosphate. Yoshino S, et al. **Arch Biochem Biophys** 1989 Jul;272(1):76-80

Protein-phosphate complexes as an inhibitor of iron-induced lipid peroxidation. Dawra RK, et al. **Biochem Int** 1989 Mar; 18(3):537-44

Physical basis of the effect of hemoglobin on the 31P NMR chemical shifts of various phosphoryl compounds. Kirk K, et al. **Biochemistry** 1988 Nov 29;27(24):8803-10

Two-cell block to development of cultured hamster embryos is caused by phosphate and glucose. Schini SA, et al. **Biol Reprod** 1988 Dec;39(5):1183-92

Phosphate is required for inhibition by glucose of development of hamster 8-cell embryos in vitro [published erratum appears in Biol Reprod 1989 May;40(5):following 1130] Seshagiri PB, et al. **Biol Reprod** 1989 Mar; 40(3):607-14

Calcium supplements: anion effects. Heaney RP, et al. **Bone Miner** 1987 Sep;2(6):433-9

Transformation of human neonatal prostate epithelial cells by strontium phosphate transfection with a plasmid containing SV40 early region genes. Kaighn ME, et al. **Cancer Res** 1989 Jun 1;49(11):3050-6

Effect of orthophosphates and citrates in fluoride toothpastes on plaque pH. Duke SA, et al. **Caries Res** 1988;22(6):350-2

Comparative studies on muscle AMP-deaminase--II. Regulation by monovalent cations, ATP and orthophosphate of the enzyme from hen, frog and pikeperch muscle. Stankiewicz A, et al. **Comp Biochem Physiol [B]** 1979;62(4):371-4

Interrelated effects of calcium and sulfhydryl reagents on renal phosphate-activated glutaminase. Kvamme E, et al. **Contrib Nephrol** 1988;63:156-60

The influence of high dietary calcium and phosphate on lead uptake and release. Quarterman J, et al. **Environ Res** 1978 Aug;17(1):60-7

Kinetic evidence for a heart mitochondrial pore activated by Ca2+, inorganic phosphate and oxidative stress. A potential mechanism for mitochondrial dysfunction during cellular Ca2+ overload. Crompton M, et al. **Eur J Biochem** 1988 Dec 15;178(2):489-501

On the regulatory significance of inhibitors acting on non-equilibrium enzymes in the Calvin photosynthesis cycle. Pettersson G, et al. **Eur J Biochem** 1989 Jun 15; 182(2):373-7

Spectral and kinetic studies of phosphate and magnesium ion binding to yeast inorganic pyrophosphatase. Smirnova IN, et al. **Eur J Biochem** 1989 Jun 15;182(2):451-6

Functional and metabolic responses of the isolated rat heart to changes in circulating inorganic phosphate concentration. Humphrey SM, et al. **Heart Vessels** 1988; 4(4):207-14

Stimulatory effect of phosphate, ATP and ADP on iron transfer from Fe(III)-bleomycin to apotransferrin. Løvstad RA. **Int J Biochem** 1989;21(5):555-9

Phosphate supplementation, cardiovascular function, and exercise performance in humans. Bredle DL, et al. **J Appl Physiol** 1988 Oct;65(4):1821-6

Influence of 8-azido-ATP and other anions on the activity of cytochrome c oxidase. Hüther FJ, et al. **J Bioenerg Biomembr** 1988 Aug;20(4):503-16

Inhibition of the phosphate-stimulated cytochrome c oxidase activity by thiophosphate. Manon S, et al. **J Bioenerg Biomembr** 1989 Jun;21(3):387-401

Response of rat liver glutaminase to pH. Mediation by phosphate and ammonium ions. Szweda LI, et al. **J Biol Chem** 1989 Sep 15;264(26):15357-60

The effect of oral phosphate administration on major indices of skeletal metabolism in normal subjects. Silverberg SJ, et al. **J Bone Miner Res** 1986 Aug;1(4):383-8

The effect of potassium phosphate, magnesium chloride and T6 as blocking reagents on tissue valve calcification. Neethling WM, et al. **J Cardiovasc Surg (Torino)** 1989 May-Jun;30(3):317-21

Pressure sensitivity of active tension in glycerinated rabbit psoas muscle fibres: effects of ADP and phosphate. Fortune NS, et al. **J Muscle Res Cell Motil** 1989 Apr;10(2):113-23

Direct regulation of bone resorption of chick embryonic femur in organ culture by the change of calcium or phosphate ion concentration in the medium. Kawashima K, et al. **J Pharmacobiodyn** 1988 Nov;11(11):763-6

Inorganic phosphate accelerates hemoglobin A1c synthesis. Kunika K, et al. **Life Sci** 1989;45(7):623-30

Addition of phosphate to active muscle fibers probes actomyosin states within the powerstroke. Pate E, et al. **Pflugers Arch** 1989 May;414(1):73-81

Precipitated bone phosphate in broiler chick diets. Damron BL, et al. **Poult Sci** 1988 Sep;67(9):1302–5

A rapid phosphate-induced depression of heart subsarcolemmal mitochondrial oxidative phosphorylation. Duan J, et al. **Res Commun Chem Pathol Pharmacol** 1989 Mar;63(3):361–72

Effect of inorganic phosphate and Ca2+ and Mg2+ on the in vitro lysis of bovine erythrocytes. Sellei J. **Res Vet Sci** 1989 May;46(3):297–300

[Effects of phosphoramidothiolate pesticides on rat erythrocyte membrane acetylcholinesterase] Ding ZM, et al. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Mar; 22(2):82–4 (Eng. Abstr.) **(Chi)**

[Phosphate control to rifamycin SV biosynthesis] Ni LY, et al. **Wei Sheng Wu Hsueh Pao** 1988 Dec;28(4):340–5 (Eng. Abstr.) **(Chi)**

[Oxygen transport function of erythrocyte concentrates: a comparison of erythrocytes stored in CPDA–1 and PAGGS–sorbit] Hasibeder W, et al. **Beitr Infusionther** 1988;21:49–52 **(Ger)**

[Rejuvenation of erythrocytes exposed to warm temperatures with PIGPA–L solution] Heuft HG, et al. **Beitr Infusionther** 1988;21:64–7 **(Ger)**

PHYSIOLOGY

Cloning and characterization of a phosphate-regulated promoter involved in phosphate control of candicidin biosynthesis. Rebollo A, et al. **Gene** 1989 Jun 30;79(1):47–58

Inhibition of the phosphate-stimulated cytochrome c oxidase activity by thiophosphate. Manon S, et al. **J Bioenerg Biomembr** 1989 Jun;21(3):387–401

A model of crossbridge action: the effects of ATP, ADP and Pi. Pate E, et al. **J Muscle Res Cell Motil** 1989 Jun; 10(3):181–96

Role of cyclic AMP and inorganic phosphate in the regulation of muscle glycogenolysis during exercise. Chasiotis D. **Med Sci Sports Exerc** 1988 Dec;20(6):545–50

POISONING

[Health conditions and the development of mandibular injuries in workers at a yellow phosphorus factory] Teng HQ. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Jul; 23(4):242–3 **(Chi)**

THERAPEUTIC USE

Five and ten year estimated survival and disease-free rates after intraperitoneal chromic phosphate; stage I ovarian adenocarcinoma. Piver MS, et al. **Am J Clin Oncol** 1988 Oct;11(5):515–9

The comparative clinical cariostatic efficacy of sodium fluoride and sodium monofluorophosphate dentifrices: a review of trials. Beiswanger BB, et al. **ASDC J Dent Child** 1989 Sep–Oct;56(5):337–47

A clinical evaluation of the relative cariostatic effect of dentifrices containing sodium fluoride or sodium monofluorophosphate. Beiswanger BB, et al. **ASDC J Dent Child** 1989 Jul–Aug;56(4):270–60 (28 ref.)

Effects of cyclical therapy for osteoporosis using an oral regimen of inorganic phosphate and sodium etidronate: a clinical and bone histomorphometric study. Hodsman AB. **Bone Miner** 1989 Jan;5(2):201–12

A double-blind clinical trial of an anticalculus toothpaste containing pyrophosphate and sodium monofluorophosphate. Rugg-Gunn AJ. **Br Dent J** 1988 Aug 20;165(4):133–6

Familial hypophosphatemic rickets: bone mass measurements in children following therapy with calcitriol and supplemental phosphate. Block JE, et al. **Calcif Tissue Int** 1989 Feb;44(2):86–92

Cyclic therapy of osteoporosis with neutral phosphate and brief, high-dose pulses of etidronate. Mallette LE, et al. **J Bone Miner Res** 1989 Apr;4(2):143–8

Trichlormethiazide and oral phosphate therapy in patients with absorptive hypercalciuria. Insogna KL, et al. **J Urol** 1989 Feb;141(2):269–74

Nilacid tablet a new type antacid. Rácz I, et al. **Ther Hung** 1988;36(3):115–8 (17 ref.)

URINE

Beta-receptors in resistance to phosphaturic effect of PTH in respiratory alkalosis. Hoppe A, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):R557–62

Endogenous ANP augments fractional excretion of Pi, Ca, and Na in rats with reduced renal mass. Ortola FV, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):F1091–7

Mechanism of phosphaturia elicited by administration of phosphonoformate in vivo. VanScoy M, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):F984–94

Effect of an Ayurvedic compound preparation on the ability of rat urine to influence mineral phase formation. Mago N, et al. **Indian J Med Res** 1989 Feb;90:77–81

Determination of phosphate, sulfate and oxalate in urine by ion chromatography. Singh RP, et al. **J Chromatogr** 1988 Dec 9;433:373–6

The effects of dietary phosphorus and parathyroid hormone (PTH) infusion rates on the avian phosphaturic response to PTH. Stanton TS, et al. **J Exp Biol** 1989 Jul;144:521–33

Cycloheximide blocks nicotinamide action on phosphate excretion in thyroparathyroidectomized rats. Wu KI, et al. **Miner Electrolyte Metab** 1988;14(5):271–6

Restoration of a phosphaturic response to parathyroid hormone in the immature rat. Corn PG, et al. **Pediatr Res** 1989 Jul;26(1):54–7

The relation between orthophosphate and pyrophosphate in normal subjects and in patients with urolithiasis. Conte A, et al. **Urol Res** 1989;17(3):173–5

[Urinary levels of ammonium-magnesium phosphate and calcium phosphate in patients with infected urinary calculi] Pupek-Musialik D, et al. **Pol Tyg Lek** 1988 Aug 1–8; 43(31–32):1001–4 (Eng. Abstr.) **(Pol)**

PHOSPHATES, INORGANIC see **PHOSPHATES**

PHOSPHATES, ORGANIC see **ORGANOPHOSPHORUS COMPOUNDS**

PHOSPHATIDAL COMPOUNDS see **PLASMALOGENS**

PHOSPHATIDATE PHOSPHATASE see under **PHOSPHOMONOESTERASES**

PHOSPHATIDES see **PHOSPHOLIPIDS**

PHOSPHATIDIC ACIDS

Transmembrane calcium movements mediated by ionomycin and phosphatidate in liposomes with Fura 2 entrapped. Blau L, et al. **Biochemistry** 1988 Jul 26;27(15):5661–6

Study of the effect of poly(L-lysine) on phosphatidic acid and phosphatidylcholine/phosphatidic acid bilayers by raman spectroscopy. Laroche G, et al. **Biochemistry** 1988 Aug 23;27(17):6220–8

The effect of gentamicin on the biophysical properties of phosphatidic acid liposomes is influenced by the O–C = O group of the lipid. Ramsammy LS, et al. **Biochemistry** 1988 Oct 18;27(21):8249–54

Interaction of hemoglobin derivatives with liposomes. Membrane cholesterol protects against the changes of hemoglobin. Szebeni J, et al. **Biochemistry** 1988 Aug 23; 27(17):6425–34

Lipid bilayer permeation by neutral aluminum citrate and by three alpha-hydroxy carboxylic acids. Akeson MA, et al. **Biochim Biophys Acta** 1989 Sep 4;984(2):200–6

Thermotropic properties of mixtures of negatively charged phospholipids with cholesterol in the presence and absence of Li+ or Ca2+ ions. Bach D, et al. **Biochim Biophys Acta** 1989 Feb 13;979(1):11–9

Development of equilibrium domain shapes in phospholipid monolayers. Flörsheimer M, et al. **Chem Phys Lipids** 1989 Mar;49(4):231–41

Analysis of superhelical structures of nucleic acid–lipid conjugates by image processing. Yanagawa H, et al. **Nucleic Acids Symp Ser** 1988;(19):189–92

Mechanism of spontaneous vesiculation. Hauser H. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5351–5

ANALYSIS

Interaction of surfactants with bilayer of negatively charged lipid: effect on gel-to-liquid-crystalline phase transition of dilauroylphosphatidic acid vesicle membrane. Inoue T, et al. **Chem Phys Lipids** 1988 Oct;48(3–4):189–96

Fatty acid changes in liver choline and ethanolamine glycerophospholipids in aspirin-treated rats fed linoleate, gamma-linolenate and fish oil. Huang YS, et al. **Clin Physiol Biochem** 1989;7(2):79–86

Thiophosphoester analogs of phosphatidic acids: spectrophotometric substrates for phosphomonoesterases. Nyquist DA. **Lipids** 1988 Oct;23(10):989–92

[Diagnosis of pulmonary maturity in the fetus] Massobrio M, et al. **Ann Osp Maria Vittoria Torino** 1987–88;30(1):9–18 (Eng. Abstr.) **(Ita)**

BIOSYNTHESIS

Phosphatidylethanol formation in human platelets: evidence for thrombin-induced activation of phospholipase D. Rubin R. **Biochem Biophys Res Commun** 1988 Nov 15; 156(3):1090–6

The species of acyl–CoA in subcellular fractions of type II cells isolated from adult rat lung and their incorporation into phosphatidic acid. den Breejen JN, et al. **Biochim Biophys Acta** 1989 Apr 26;1002(3):277–82

Species pattern of phosphatidic acid, diacylglycerol, CDP-diacylglycerol and phosphatidylglycerol synthesized de novo in rat liver mitochondria. Rüstow B, et al. **Biochim Biophys Acta** 1989 Apr 3;1002(2):261–3

Compartmentation of hepatic fatty-acid-binding protein in liver cells and its effect on microsomal phosphatidic acid biosynthesis. Bordewick U, et al. **Biol Chem Hoppe Seyler** 1989 Mar;370(3):229–38

Phosphatidylethanol biosynthesis in ethanol-exposed NG108–15 neuroblastoma X glioma hybrid cells. Evidence for activation of a phospholipase D phosphatidyl transferase activity by protein kinase C. Liscovitch M. **J Biol Chem** 1989 Jan 25;264(3):1450–6

Species differences in the effects of prostaglandins on inositol trisphosphate accumulation, phosphatidic acid formation, myosin light chain phosphorylation and contraction in iris sphincter of the mammalian eye: interaction with the cyclic AMP system. Yousufzai SY, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1064–72

Synthesis of phosphatidylethanol—a potential marker for adult males at risk for alcoholism. Mueller GC, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9778–82

BLOOD

Mass determination of receptor-mediated accumulation of phosphatidate and diglycerides in human neutrophils measured by Coomassie blue staining and densitometry. Agwu DE, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):79–86

Cytosolic alkalinization alone is not sufficient for Ca2+ mobilization, phosphatidic acid formation, and protein phosphorylation in human platelets. Siffert W, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1007–12

Choline-linked phosphoglycerides. A source of phosphatidic acid and diglycerides in stimulated neutrophils. Agwu DE, et al. **J Biol Chem** 1989 Jan 25;264(3):1405–13

Second messenger function of phosphatidic acid in platelet activation. Kroll MH, et al. **J Cell Physiol** 1989 Jun; 139(3):558–64

Effect of a fish oil diet on the composition of rat neutrophil lipids and the molecular species of choline and ethanolamine glycerophospholipids. Careaga-Houck M, et al. **J Lipid Res** 1989 Jan;30(1):77–87

Endogenous phosphatidylinositol 4,5-bisphosphate, phosphatidylinositol, and phosphatidic acid in stimulated human platelets. Broekman MJ. **Methods Enzymol** 1989; 169:415–30

ISOLATION & PURIFICATION

Amniotic fluid phospholipids. Study of the cold acetone precipitation effect. Budria RJ, et al. **Clin Chim Acta** 1989 Feb 28;180(2):141–6

Ca2+-induced lateral phase separation in ternary mixtures of phosphatidic acid, phosphatidylcholine, and phosphatidylethanolamine inferred by calorimetry. Ohki K. **J Biochem (Tokyo)** 1988 Jul;104(1):14–7

METABOLISM

Effects of chronic ethanol exposure on fatty acids of rat brain glycerophospholipids. Gustavsson L, et al. **Alcohol** 1989 Mar–Apr;6(2):139–46

Transfer of phosphatidic acid from liposomes to cells is collision dependent. Longmuir KJ, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C522–31

Receptor regulation of choline phospholipid hydrolysis. A novel source of diacylglycerol and phosphatidic acid. Löffelholz K. **Biochem Pharmacol** 1989 May 15; 38(10):1543–9 (72 ref.)

Interrelationship between Ca2+-dependent phospholipid base-exchange reaction and phospholipase D-like activity in bovine retina. Mori H, et al. **Biochim Biophys Acta** 1989 May 15;1003(1):98–107

PHARMACOLOGY

Stimulation of phosphatidylinositol 4,5-bisphosphate phospholipase C activity by phosphatidic acid. Jackowski S, et al. **Arch Biochem Biophys** 1989 Feb 1;268(2):516–24

Inositol lipids and phosphatidic acid inhibit cell-free activation of neutrophil NADPH oxidase. Aviram I, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):712–9

The influence of phosphatidate bilayers on pig heart AMP deaminase. Crucial role of pH-dependent lipid–phase transition. Woźniak M, et al. **Biochem J** 1988 Nov 1; 255(3):977–81

Phospholipids can influence the interconversion of flat epithelial-like and stellate process-bearing astroglial cells in culture: relationships between molecular structure and biological activity. Skaper SD, et al. **Brain Res Dev Brain Res** 1989 Feb 1;45(2):265–74

Effects of phosphatidic acid on islet cell phosphoinositide hydrolysis, Ca2+, and adenylate cyclase. Dunlop ME, et al. **Diabetes** 1989 Sep;38(9):1187–92

Phosphatidic acid–induced calcium mobilization in osteoblasts. Kawase T, et al. **J Biochem (Tokyo)** 1988 Apr; 103(4):581–2

Darmstoff analogues. 3. Actions of choline esters of acetal phosphatidic acids on visceral smooth muscle. Marx MH, et al. **J Med Chem** 1989 Jun;32(6):1319–22

PHOSPHATIDYLCHOLINES

Stereoselective recognition in phospholipid monolayers. Arnett EM, et al. **Adv Exp Med Biol** 1988;238:21–36

Stabilization of small, unilamellar phospholipid vesicles by sucrose during freezing and dehydration. Hauser H, et al. **Adv Exp Med Biol** 1988;238:71–80

Technological development of lipid based tubule microstructures. Rudolph AS, et al. **Adv Exp Med Biol** 1988;238:305–20 (35 ref.)

Immobilized artificial membrane chromatography: supports composed of membrane lipids. Pidgeon C, et al. **Anal Biochem** 1989 Jan;176(1):36–47

The mechanism of quinone formation from carcinogenic benzo[a]pyrene mediated by lipid peroxidation in liposomal suspension. Terao J, et al. **Basic Life Sci** 1988;49:769–72

Permeability of oxidized phosphatidylcholine liposomes. Tanfani F, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):241–6

Fusion of phosphatidylcholine liposomes induced by polyethylene glycol. Mishra RK, et al. **Biochem Int** 1988 Jun;16(6):1137–44

The occurrence of polyenoic very long chain fatty acids with greater than 32 carbon atoms in molecular species of phosphatidylcholine in normal and peroxisome-deficient (Zellweger's syndrome) brain. Poulos A, et al. **Biochem J** 1988 Aug 1;253(3):645–50

Binary mixtures of saturated and unsaturated mixed-chain phosphatidylcholine. A differential scanning calorimetry study. Ali S, et al. **Biochemistry** 1989 Jan 24;28(2):522–8

Functional reconstitution of the olfactory membrane: incorporation of the olfactory adenylate cyclase in liposomes. Anholt RR. **Biochemistry** 1988 Aug 23; 27(17):6464–8

Enzymatic and physical characterization of diacylglycerol-phosphatidylcholine interactions in bilayers and monolayers. Cunningham BA, et al. **Biochemistry** 1989 Jan 10;28(1):32–40

Membrane solubilization by detergent: use of brominated phospholipids to evaluate the detergent-induced changes in Ca2+-ATPase/lipid interaction. de Foresta B, et al. **Biochemistry** 1989 Mar 21;28(6):2558–67

Rotational motion of yeast cytochrome oxidase in phosphatidylcholine complexes studied by saturation-transfer electron spin resonance. Fajer P, et al. **Biochemistry** 1989 Jun 27;28(13):5634–43

The acid-triggered entry pathway of Pseudomonas exotoxin A. Farahbakhsh ZT, et al. **Biochemistry** 1989 Jan 24; 28(2):580–5

Calcium ion binding between lipid bilayers: the four-component system of phosphatidylserine, phosphatidylcholine, calcium chloride, and water. Feigenson GW. **Biochemistry** 1989 Feb 7;28(3):1270–8

Interactions of colicin A domains with phospholipid monolayers and liposomes: relevance to the mechanism of action. Frenette M, et al. **Biochemistry** 1989 Mar 21; 28(6):2509–14

31P and 2H NMR studies of structure and motion in bilayers of phosphatidylcholine and phosphatidylethanolamine. Ghosh R. **Biochemistry** 1988 Oct 4;27(20):7750–8

Dynamics of proton diffusion within the hydration layer of phospholipid membrane. Gutman M, et al. **Biochemistry** 1989 Apr 4;28(7):2936–40

Interactions of triglycerides with phospholipids: incorporation into the bilayer structure and formation of emulsions. Hamilton JA. **Biochemistry** 1989 Mar 21; 28(6):2514–20

Spontaneous phosphatidylcholine transfer by collision between vesicles at high lipid concentration. Jones JD, et al. **Biochemistry** 1989 Jan 10;28(1):129–34

The membrane as an environment of minimal interconversion. A circular dichroism study on the solvent dependence of the conformational behavior of gramicidin in diacylphosphatidylcholine model membranes. Killian JA, et al. **Biochemistry** 1988 Jun 28;27(13):4848–55

Fluorescence indicates a calcium-dependent interaction between the lipopeptide antibiotic LY146032 and phospholipid membranes. Lakey JH, et al. **Biochemistry** 1988 Jun 28;27(13):4639–45

Cholesterol modifies the short-range repulsive interactions between phosphatidylcholine membranes. McIntosh TJ, et al. **Biochemistry** 1989 Jan 10;28(1):17–25

Spontaneous vesiculation of large multilamellar vesicles composed of saturated phosphatidylcholine and phosphatidylglycerol mixtures. Madden TD, et al. **Biochemistry** 1988 Nov 29;27(24):8724–30

Mixing behavior of symmetric chain length and mixed chain length phosphatidylcholines in two-component multilamellar bilayers: evidence for gel and liquid-crystalline phase immiscibility. Mason JT. **Biochemistry** 1988 Jun 14;27(12):4421–9

Studies of the ethanol-induced interdigitated gel phase in phosphatidylcholines using the fluorophore 1,6-diphenyl-1,3,5-hexatriene. Nambi P, et al. **Biochemistry** 1988 Dec 27;27(26):9175–82

Lymphoma-vesicle interactions: vesicle adsorption, membrane fragmentation, and intermembrane protein transfer [published erratum appears in Biochemistry 1988 Dec 27;27(26):9226] Newton AC, et al. **Biochemistry** 1988 Jun 28;27(13):4645–55

Interaction of diacylglycerols with phosphatidylcholine vesicles as studied by differential scanning calorimetry and fluorescence probe depolarization. Ortiz A, et al. **Biochemistry** 1988 Dec 13;27(25):9030–6

Interaction of sphingomyelins and phosphatidylcholines with fluorescent dehydroergosterol. Schroeder F, et al. **Biochemistry** 1989 Jul 11;28(14):5992–6000

Lipid chains and cholesterol in model membranes: a Monte Carlo Study. Scott HL, et al. **Biochemistry** 1989 May 2; 28(9):3687–91

Binding of a neuropeptide, substance P, to neutral and negatively charged lipids. Seelig A, et al. **Biochemistry** 1989 Mar 21;28(6):2490–6

Reversed hexagonal phase formation in lecithin-alkane-water systems with different acyl chain unsaturation and alkane length. Sjölund M, et al. **Biochemistry** 1989 Feb 7;28(3):1323–9

Interaction of hemoglobin derivatives with liposomes. Membrane cholesterol protects against the changes of hemoglobin. Szebeni J, et al. **Biochemistry** 1988 Aug 23; 27(17):6425–34

Partition behavior of a nonionic detergent, octyl glucoside, between membrane and water phases, and its effect on membrane permeability. Ueno M. **Biochemistry** 1989 Jun 27;28(13):5631–4

Properties influencing fluorophore lifetime distributions in lipid bilayers. Williams BW, et al. **Biochemistry** 1988 Oct 18;27(21):7994–9

Structural aspects of pressure effects on infrared spectra of mixed-chain phosphatidylcholine assemblies in D2O. Wong PT, et al. **Biochemistry** 1989 Feb 7;28(3):1259–63

Osmoelastic coupling in biological structures: decrease in membrane fluidity and osmophobic association of phospholipid vesicles in response to osmotic stress. Yamazaki M, et al. **Biochemistry** 1989 May 2;28(9):3710–5

Lipid bilayer permeation by neutral aluminum citrate and by three alpha-hydroxy carboxylic acids. Akeson MA, et al. **Biochim Biophys Acta** 1989 Sep 4;984(2):200–6

Effect of the asymmetric Ca2+ distribution on the bilayer properties of phosphatidylcholine-sonicated vesicles. Bakás LS, et al. **Biochim Biophys Acta** 1989 Mar 13;979(3):352–60

Spontaneous transfer between phospholipid bilayers of dehydroergosterol, a fluorescent cholesterol analog. Bar LK, et al. **Biochim Biophys Acta** 1989 Jul 24;983(1):109–12

Interaction of electrically charged drug molecules with phospholipid membranes. Barthel D, et al. **Biochim Biophys Acta** 1988 Nov 22;945(2):361–6

A hydroxide ion carrier in planar phospholipid bilayer membranes: (C6F5)2Hg (dipentafluorophenylmercury). Blaustein RO, et al. **Biochim Biophys Acta** 1988 Dec 22; 946(2):221–6

Interaction of the plant hormone, indole-3-acetic acid, with phosphatidylcholine model membranes: effects of acyl chain length. Jones GP, et al. **Biochim Biophys Acta** 1988 Nov 22;945(2):175–84

Phosphatidylcholine-cholesterol interactions: bilayers of heteroacid lipids containing linoleate lose calorimetric transitions at low cholesterol concentration. Keough KM, et al. **Biochim Biophys Acta** 1989 Jul 24;983(1):51–5

Eutectic phase behavior of 1-stearoyl-2-caprylphosphatidylcholine and dimyristoylphosphatidylcholine mixtures. Lin H, et al. **Biochim Biophys Acta** 1988 Dec 8;946(1):178–84

Phase behaviour of mixtures of lipid X with phosphatidylcholine and phosphatidylethanolamine [published erratum appears in Biochim Biophys Acta 1989 Mar 13;979(3):379] Lipka G, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):239–50

An infrared spectroscopic study of the thermotropic phase behavior of phosphatidylcholines containing omega-cyclohexyl fatty acyl chains. Mantsch HH, et al. **Biochim Biophys Acta** 1989 Mar 27;980(1):42–9

Effects of antineoplastic ether lipids on model and biological membranes. Noseda A, et al. **Biochim Biophys Acta** 1988 Nov 3;945(1):92–100

Chain-length dependence of n-alkane solubility in phosphatidylcholine bilayers: a 2H-NMR study. Pope JM, et al. **Biochim Biophys Acta** 1989 Mar 27;980(1):69–76

Surface charge effects upon membrane transport processes: the effects of surface charge on the monensin-mediated transport of lithium ions through phospholipid bilayers studied by 7Li-NMR spectroscopy. Riddell FG, et al. **Biochim Biophys Acta** 1988 Nov 3;945(1):65–72

A synthetic peptide corresponding to the hydrophobic amino terminal region of pardaxin can perturb model membranes of phosphatidyl choline and serine. Saberwal G, et al. **Biochim Biophys Acta** 1989 Sep 18;984(3):360–4

Amphotericin B-sterol complex formation and competition with egg phosphatidylcholine: a monolayer study. Saint-Pierre-Chazalet M, et al. **Biochim Biophys Acta** 1988 Oct 20;944(3):477–86

Thermodynamic and kinetic studies on the association of melittin with a phospholipid bilayer. Schwarz G, et al. **Biochim Biophys Acta** 1989 Feb 13;979(1):82–90

Comparison of phosphatidylethanolamine and phosphatidylcholine vesicles produced by treating cholate-phospholipid micelles with cholestyramine. Shi SP, et al. **Biochim Biophys Acta** 1989 Jul 10;982(2):187–95

Liposomes prepared dynamically by interactions between bile salt and phospholipid molecules. Son K, et al. **Biochim Biophys Acta** 1989 Jun 6;981(2):288–94

High-pressure small-angle neutron scattering (SANS) study of 1,2-dielaidoyl-sn-glycero-3-phosphocholine bilayers. Winter R, et al. **Biochim Biophys Acta** 1989 Jun 26; 982(1):85–8

Synergistic effects in PR3+ transport mediated by ionophores across phosphatidylcholine vesicles. Grandjean J, et al. **Biochimie** 1989 Jan;71(1):183–6

Influence of PAF-acether on lecithin-oriented multibilayers monitored by ESR: interaction of PAF-acether with cholesterol. Olivier JL, et al. **Biochimie** 1989 Jan; 71(1):105–9

Enhancement of cardioplegic protection with a lecithin-based perfluoroadamantane emulsion. Menasch P, et al. **Biomater Artif Cells Artif Organs** 1988;16(1-3):607–16

A study of the conformational equilibrium of DL-oligophenylalanines in nonpolar solvents in the presence and absence of lipids by high-performance liquid chromatography. Baño MC, et al. **Biophys Chem** 1988 Aug; 31(1-2):3–9

A laser-induced europium (III) ion luminescence study of the interaction of this ion with phospholipid bilayer vesicles above and below the gel to liquid-crystalline phase transition temperature. Cader BM, et al. **Biophys Chem** 1988 Oct;32(1):97–109

Conformational change of poly(L-lysine) induced by lipid vesicles of dilauroylphosphatidic acid. Fukushima K, et al. **Biophys Chem** 1988 Jul 15;30(3):237–44

High-frequency ultrasonic absorption spectroscopy on aqueous suspensions of phospholipid bilayer vesicles. Kaatze U, et al. **Biophys Chem** 1988 Dec;32(2-3):153–60

Micropolarities of lipid bilayers and micelles. 5. Localization of pyrene in small unilamellar phosphatidylcholine vesicles. L'Heureux GP, et al. **Biophys Chem** 1988 Jul 15; 30(3):293–301

Fluorescence properties of cholestatrienol in phosphatidylcholine bilayer vesicles. Schroeder F, et al. **Biophys Chem** 1988 Oct;32(1):57–72

Determination of bilayer membrane bending stiffness by tether formation from giant, thin-walled vesicles. Bo L, et al. **Biophys J** 1989 Mar;55(3):509–17

Calorimetric studies of the effects of cholesterol on the phase transition of C(18):C(10) phosphatidylcholine. Chong PL, et al. **Biophys J** 1989 Mar;55(3):551–6

Continuous fluorescence microphotolysis of anthracene-labeled phospholipids in membranes. Theoretical approach of the simultaneous determination of their photodimerization and lateral diffusion rates. Ferrières X, et al. **Biophys J** 1989 Jun;55(6):1081–91

Comparison of forces measured between phosphatidylcholine bilayers [letter] Horn RG, et al. **Biophys J** 1988 Dec; 54(6):1185–6

Lysophosphatidylcholine stabilizes small unilamellar phosphatidylcholine vesicles. Phosphorus-31 NMR evidence for the "wedge" effect. Kumar VV, et al. **Biophys J** 1989 Apr;55(4):789–92

Quenching of fluorescence of pyrene-substituted lecithin by tetracyanoquinodimethane in liposomes. Lemmetyinen H, et al. **Biophys J** 1989 May;55(5):885–95

Thermotropic phase behavior of phosphatidylcholines with omega-tertiary-butyl fatty acyl chains. Lewis RN, et al. **Biophys J** 1989 Jul;56(1):183–93

Stability of mixed micellar bile models supersaturated with cholesterol. Lichtenberg D, et al. **Biophys J** 1988 Dec; 54(6):1013–25

Interaction of tetanus toxin with lipid vesicles. Effects of pH, surface charge, and transmembrane potential on the kinetics of channel formation. Menestrina G, et al. **Biophys J** 1989 Mar;55(3):393–405

Electro-mechanical permeabilization of lipid vesicles. Role of membrane tension and compressibility. Needham D, et al. **Biophys J** 1989 May;55(5):1001–9

Proton flux in large unilamellar vesicles in response to membrane potentials and pH gradients. Redelmeier TE, et al. **Biophys J** 1989 Aug;56(2):385–93

Critical density fluctuations in lipid bilayers detected by fluorescence lifetime heterogeneity. Ruggiero A, et al. **Biophys J** 1989 Jun;55(6):1111–24

Analysis of the anisotropy decay of trans-parinaric acid in lipid bilayers. Ruggiero A, et al. **Biophys J** 1989 Jun; 55(6):1125–35

The effects of viscosity on gramicidin tryptophan rotational motion. Scarlata SF. **Biophys J** 1988 Dec;54(6):1149–57

Evaluation of the thermal coefficient of the resistance to fluorophore rotation in model membranes. Scarlata SF. **Biophys J** 1989 Jun;55(6):1215–23

Dynamic imaging of lateral diffusion by electron spin resonance and study of rotational dynamics in model membranes. Effect of cholesterol. Shin YK, et al. **Biophys J** 1989 Mar;55(3):537–50

Intermediates in membrane fusion and bilayer/nonbilayer phase transitions imaged by time-resolved cryo-transmission electron microscopy. Siegel DP, et al. **Biophys J** 1989 Jul;56(1):161–9

Mixed monolayers of linear gramicidins and phospholipid. Surface pressure and surface potential studies. Van Mau N, et al. **Biophys J** 1988 Sep;54(3):563–7

Role of channels in the fusion of vesicles with a planar bilayer. Woodbury DJ, et al. **Biophys J** 1988 Dec; 54(6):1053–63

Effect of the mitogenic lectin concanavalin A on the thermotropic behavior of glycosyl-free cationic lipids and their mixtures with zwitterionic lipids. Lüscher-Mattli M. **Biopolymers** 1989 Apr;28(4):799–817

A lipid vesicle system for probing voltage-dependent peptide-lipid interactions: application to alamethicin channel formation. Woolley GA, et al. **Biopolymers** 1989 Jan;28(1):267–72

Lipid-coated particles--a new approach to fix membrane-bound enzymes onto carrier surfaces. Rothe U, et al. **Biotechnol Appl Biochem** 1989 Feb;11(1):18–30

Pentachlorophenol-induced change of zeta-potential and gel-to-fluid transition temperature in model lecithin membranes. Smejtek P, et al. **Chem Biol Interact** 1989; 71(1):37–61

The effect of n-alcohols on vesicular permeability induced at the lipid phase transition temperature: a 1H-NMR study. Hunt GR, et al. **Chem Phys Lipids** 1989 Jul;51(1):55–65

Infrared study of phospholipid hydration. New thermodynamic data about the main phase transition of saturated phosphatidylcholine water multidispersions. Mellier A. **Chem Phys Lipids** 1989 Jul;51(1):23–9

Steady-state fluorescence anisotropy and multifrequency phase fluorometry on oxidized phosphatidylcholine vesicles. Tanfani F, et al. **Chem Phys Lipids** 1989 Apr; 50(1):1–9

Minor effects of bulk viscosity on lipid translational diffusion measured by the excimer formation technique. Ollmann

M, et al. **Eur Biophys J** 1988;16(2):109–12
Curvature–electric effects in artificial and natural membranes studied using patch–clamp techniques. Petrov AG, et al. **Eur Biophys J** 1989;17(1):13–7
The fidelity of response by 1–[4–(trimethylammonio)phenyl]–6–phenyl–1,3,5–hexatriene in time–resolved fluorescence anisotropy measurements on lipid vesicles. Effects of unsaturation, headgroup and cholesterol on orientational order and reorientational dynamics. van Langen H, et al. **Eur Biophys J** 1989;17(1):37–48
HPLC study on the 'history' dependence of gramicidin A conformation in phospholipid model membranes. Bañó MC, et al. **FEBS Lett** 1989 Jun 19;250(1):67–71
Ricin A–chain induces fusion of small unilamellar vesicles at neutral pH. Utsumi T, et al. **FEBS Lett** 1989 Jan 2; 242(2):255–8
Lipid peroxidation. Definition of experimental conditions for selective study of the propagation and termination phases. Tadolini B, et al. **Free Radic Res Commun** 1989; 5(4–5):245–52
The effect of rimantadine on the structure of model and biological membranes. Cherny VV, et al. **Gen Physiol Biophys** 1989 Feb;8(1):23–37
Effects of insulin and glucagon on elasticity of lipid bilayers modified by rat liver plasma membrane fragments. Kavečanský J, et al. **Gen Physiol Biophys** 1988 Oct; 7(5):537–41
The structure of Staphylococcus aureus alpha–toxin–induced ionic channel. Krasilnikov OV, et al. **Gen Physiol Biophys** 1988 Oct;7(5):467–73
ESR study of proton transport across phospholipid vesicle membranes. Khramtsov VV, et al. **J Biochem Biophys Methods** 1989 May;18(3):237–46
The cooperative antioxidant role of glutathione with a lipid–soluble and a water–soluble antioxidant during peroxidation of liposomes initiated in the aqueous phase and in the lipid phase. Barclay LR. **J Biol Chem** 1988 Nov 5;263(31):16138–42
Tocopheroxyl radical persistence and tocopherol consumption in liposomes and in vitamin E–enriched rat liver mitochondria and microsomes. Mehlhorn RJ, et al. **J Biol Chem** 1989 Aug 15;264(23):13448–52
Reconstitution of membrane proteins. Spontaneous incorporation of integral membrane proteins into preformed bilayers of pure phospholipid. Scotto AW, et al. **J Biol Chem** 1988 Dec 5;263(34):18500–6
Artificial liposomes as a model for studying the lipid peroxidation effect of p–phenylene diamine. Gupta V, et al. **J Microencapsul** 1989 Jul–Sep;6(3):311–8
Application of 1H–n.m.r. to the design of liposomes for oral use. Synergistic activity of bile salts and pancreatic phospholipase A2 in the induced permeability of small unilamellar phospholipid vesicles. Hunt GR, et al. **J Microencapsul** 1984 Apr–Jun;1(2):113–22
Dual effect of tannic acid on the preservation and ultrastructure of phosphatidyl choline vesicles. Schrijvers AH, et al. **Mol Cell Biochem** 1989 Jun 27–Jul 24; 88(1–2):91–6
The effect of zinc on iron–induced lipid peroxidation in different lipid systems including liposomes and micelles. Szebeni J, et al. **Physiol Chem Phys Med NMR** 1988; 20(3):205–11
Anthrax toxin: channel–forming activity of protective antigen in planar phospholipid bilayers. Blaustein RO, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2209–13
Actin polymerization induces a shape change in actin–containing vesicles. Cortese JD, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5773–7
Photogating of ionic currents across a lipid bilayer. Drain CM, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(18):6959–62
Mechanism of spontaneous vesiculation. Hauser H. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5351–5
Oxygen permeability of phosphatidylcholine—cholesterol membranes. Subczynski WK, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4474–8
Material thrombelastography: an assessment of phosphorylcholine compounds as models for biomaterials. Bird RR, et al. **Thromb Res** 1988 Sep 1;51(5):471–83
[Interactions of detergents with phospholipid bilayers at sublytic concentrations—partition or binding?] Koelsch R, et al. **Biomed Biochim Acta** 1989;48(1):13–7 (Eng. Abstr.) **(Ger)**
[Neutralization of bactericidal effect of chlorhexidine digluconate by lecithin] Yoshihara N, et al. **Rinsho Byori** 1988 Jul;36(7):842–6 **(Jpn)**
[Thermotropic behavior of liposomes from egg yolk lecithin, hydrogenized egg yolk lecithin and their mixtures] Makarova TB, et al. **Biofizika** 1988 Sep–Oct;33(5):787–93 (Eng. Abstr.) **(Rus)**
[Ca 2+–dependent capture of small negatively charged liposomes by large unilamellar liposomes from phosphatidylcholine] Budker VG, et al. **Dokl Akad Nauk SSSR** 1989;305(6):1495–8 **(Rus)**
[Effect of pH on the potential–dependent functioning of staphylococcal toxin channels in phosphatidylcholine bilayer] Krasil'nikov OV, et al. **Ukr Biokhim Zh** 1988 Nov–Dec;60(6):60–6 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Effects of long–term dietary choline and phosphatidylcholine administration on muscarinic receptors in aged mouse brain. Muma NA, et al. **Neurol Res** 1988 Sep;10(3):130–5
[Polyunsaturated phosphatidylcholine + vitamin B complex in the therapy of alcoholic hepatopathies. A controlled study versus standard therapy] Hazuka V, et al. **Clin Ter** 1987 Dec 15;123(5):369–75 (Eng. Abstr.) **(Ita)**
[Polyunsaturated phosphatidylcholine combined with vitamin B complex in the treatment of chronic active hepatitis with cirrhosis] Ilic V, et al. **Clin Ter** 1988 Jan 15;124(1):39–46 (Eng. Abstr.) **(Ita)**
[A case of hepatoma treated successfully with a percutaneous intratumoral injection of CDDP–PC–lipiodol suspension] Aikawa H, et al. **Gan No Rinsho** 1989 Apr;35(5):620–4 (Eng. Abstr.) **(Jpn)**
[Chemotherapy with Cisplatin–Phosphatidyl–choline–Lipiodol (CPL) suspension in unresectable hepatocellular carcinoma] Aoki Y, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):3066–9 (Eng. Abstr.) **(Jpn)**
[Antioxidant therapy in the complex treatment of late pregnancy toxemia] Shalina RI, et al. **Akush Ginekol (Mosk)** 1989 May;(5):37–41 (Eng. Abstr.) **(Rus)**

ANALYSIS

Aortic intimal lipid content and serum lipoproteins in patients undergoing coronary by–pass surgery as related to clinical prognosis. Bondjers G, et al. **Atherosclerosis** 1988 Aug; 72(2–3):231–9
Composition of phospholipid molecular species from mammary tumors. Ishinaga M, et al. **Biochem Cell Biol** 1988 Nov;66(11):1163–8
Rotational diffusion of a steroid molecule in phosphatidylcholine membranes: effects of alkyl chain length, unsaturation, and cholesterol as studied by a spin–label method. Kusumi A, et al. **Biochemistry** 1988 Jun 14;27(12):4407–15
The properties of solid dispersions of indomethacin, ketoprofen and flurbiprofen in phosphatidylcholine. Fujii M, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):2186–92
Dissolution and bioavailability of phenytoin in solid dispersion with phosphatidylcholine. Fujii M, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec;36(12):4908–13
Differential scanning calorimetric study of the thermotropic phase behavior of a polymerizable, tubule–forming lipid. Burke TG, et al. **Chem Phys Lipids** 1988 Oct;48(3–4):215–30
X–ray diffraction studies of lipid phase transitions in hydrated mixtures of cholesterol and diacylphosphatidylcholines and their relevance to the structure of biological membranes. Finean JB. **Chem Phys Lipids** 1989 Mar;49(4):265–9
Comparison of steady–state fluorescence polarization and urea permeability of phosphatidylcholine and phosphatidylsulfocholine liposomes as a function of sterol structure. Pugh EL, et al. **Chem Phys Lipids** 1989 Apr; 50(1):43–50
Structure of polymerizable lipid bilayers. I—1,2–bis(10,12–tricosadiynoyl)–sn–glycero–3–phosphocholine, a tubule–forming phosphatidylcholine. Rhodes DG, et al. **Chem Phys Lipids** 1988 Nov; 49(1–2):39–47
Usefulness of the lecithin/sphingomyelin ratio and uselessness of phosphatidylglycerol determinations in tracheal aspirates of preterm infants [letter] Wijnands JB, et al. **Clin Chem** 1989 Apr;35(4):706
The influence of copper intrauterine device on fatty acid composition of cervical mucus lecithin. Pschera H, et al. **Contraception** 1988 Sep;38(3):341–8
Decreased lung surfactant disaturated phosphatidylcholine in sudden infant death syndrome. Gibson RA, et al. **Early Hum Dev** 1988 Aug–Sep;17(2–3):145–55
Studies on amniotic prolactin: chromatographic pattern and correlation with the lecithin content. Pansini F, et al. **Gynecol Obstet Invest** 1989;27(3):126–8
Effect of fetal sex and race on amniotic fluid lecithin concentration. Fadel HE, et al. **Int J Gynaecol Obstet** 1989 Jun;29(2):125–9
Phospholipids in amniotic fluid with special reference to the lecithin/sphingomyelin ratio. Touchstone JC, et al. **J Chromatogr** 1988 Jul 29;429:359–71 (37 ref.)
Fatty acids of pulmonary surfactant phosphatidylcholine from fetal rabbit lung tissue in culture. Biosynthesis of n–10 monoenoic fatty acids. Longmuir KJ, et al. **J Lipid Res** 1988 Aug;29(8):1065–77
Determination of phosphatidylcholine and disaturated phosphatidylcholine content in lung surfactant by high performance liquid chromatography. Scarim J, et al. **J Lipid Res** 1989 Apr;30(4):607–11
Lecithin:sphingomyelin ratio in the amniotic fluid of male and female fetuses. Zachman RD, et al. **J Reprod Med** 1989 Mar;34(3):203–6
Elevated phosphocholine concentration in ras–transformed NIH 3T3 cells arises from increased choline kinase activity, not from phosphatidylcholine breakdown. Macara IG. **Mol Cell Biol** 1989 Jan;9(1):325–8
Prenatal relationship of surfactant lipid and protein constituents in infants with respiratory distress syndrome: a preliminary communication. Wilbur DB, et al. **Pediatr Pulmonol** 1989;6(2):109–12
Effect of oxygen exposure on ATP content of rat bronchoalveolar lavage. Rice WR, et al. **Pediatr Res** 1989 Apr;25(4):396–8
The role of calcium ions and bile salts on the pancreatic lipase–catalyzed hydrolysis of triglyceride emulsions stabilized with lecithin. Alvarez FJ, et al. **Pharm Res** 1989 Jun;6(6):449–57
Levels of dihomo–gamma–linolenate are depressed in heart phosphatidylcholine and phosphatidylethanolamine in the biotin–deficient chick. Watkins BA. **Poult Sci** 1989 May; 68(5):698–705
Amniotic fluid lecithin/sphingomyelin ratio in high risk pregnancy. Ng HT, et al. **Proc Natl Sci Counc Repub China [B]** 1988 Oct;12(4):247–51
Effects of age and smoking on the disaturated phosphatidylcholine content of bronchoalveolar lavage fluid. Yasuoka S, et al. **Tokushima J Exp Med** 1988 Jun; 35(1–2):5–12
[Critical evaluation of various methods of determining markers of fetal maturity in amniotic fluid] Möller U, et al. **Zentralbl Gynakol** 1988;110(24):1574–82 (Eng. Abstr.) **(Ger)**

ANTAGONISTS & INHIBITORS

Müllerian inhibiting substance depresses accumulation in vitro of disaturated phosphatidylcholine in fetal rat lung. Catlin EA, et al. **Am J Obstet Gynecol** 1988 Nov; 159(5):1299–303

BIOSYNTHESIS

The effect of calcium ions and the calcium ionophore A23187 on choline uptake and phosphatidylcholine biosynthesis in chick embryo hearts. Rabkin SW. **Basic Res Cardiol** 1988 Nov–Dec;83(6):664–71
Phosphatidylcholine synthesis in platelets is stimulated by diacylglycerol but not by phorbol ester. Muir JG, et al. **Biochem Int** 1988 Jun;16(6):1145–51
Fatty acids stimulate phosphatidylcholine synthesis and CTP:choline–phosphate cytidylyltransferase in type II pneumocytes isolated from adult rat lung. Burkhardt R, et al. **Biochem J** 1988 Sep 1;254(2):495–500
A comparison of the specificity of phosphatidylcholine synthesis by human fetal lung maintained in either organ or organotypic culture. Caesar PA, et al. **Biochem J** 1988 Jul 15;253(2):451–7
Hormonal regulation of phosphatidylcholine synthesis by reversible modulation of cytidylyltransferase. Kelly KL, et al. **Biochem J** 1988 Oct 15;255(2):693–8
Rat and human mammary tissue can synthesize choline moiety via the methylation of phosphatidylethanolamine. Yang EK, et al. **Biochem J** 1988 Dec 15;256(3):821–8
Effects of chlorpromazine and trifluoperazine on choline metabolism and phosphatidylcholine biosynthesis in cultured chick heart cells under normoxic and anoxic conditions. Rabkin SW. **Biochem Pharmacol** 1989 Jul 15; 38(14):2349–55
Regulation of phosphatidylcholine biosynthesis in Plasmodium–infected erythrocytes. Ancelin ML, et al. **Biochim Biophys Acta** 1989 Jan 23;1001(1):82–9
Phosphatidylcholine biosynthesis in cultured glioma cells: evidence for channeling of intermediates. George TP, et al. **Biochim Biophys Acta** 1989 Aug 22;1004(3):283–91
Co–ordinate control of CDP–choline and phosphatidylethanolamine methyltransferase pathways for phosphatidylcholine biosynthesis occurs in response to change in diet fat. Hargreaves KM, et al. **Biochim Biophys Acta** 1989 Feb 20;1001(3):262–7
Carbon tetrachloride inhibits synthesis of pulmonary surfactant disaturated phosphatidylcholines and ATP production in alveolar type II cells. Ma JY, et al. **Biochim Biophys Acta** 1989 Jun 8;1003(2):136–44
Stimulation of CTP: phosphocholine cytidylyltransferase and phosphatidylcholine synthesis by calcium in rat hepatocytes. Sanghera JS, et al. **Biochim Biophys Acta** 1989 Jun 28;1003(3):284–92
Regulation of the biosynthesis of triacylglycerol, phosphatidylcholine and phosphatidylethanolamine in the liver. Tijburg LB, et al. **Biochim Biophys Acta** 1989 Jul 17;1004(1):1–19 (228 ref.)
Examination of the potential role of the glycerophosphorylcholine (GPC) pathway in the biosynthesis of phosphatidylcholine by liver and lung. Veldhuizen RA, et al. **Biochim Biophys Acta** 1989 Sep 25; 1005(2):157–61
Choline turnover in phosphatidylcholine of pancreatic islets. Implications for CDP–choline pathway. Hoffman JM, et al. **Diabetes** 1988 Nov;37(11):1489–98
Head group specificity in the requirement of phosphatidylcholine biosynthesis for very low density lipoprotein secretion from cultured hepatocytes. Yao ZM, et al. **J Biol Chem** 1989 Jul 5;264(19):11373–80
Phosphatidylcholine biosynthesis in myocardial ischaemia. Lochner A, et al. **J Mol Cell Cardiol** 1989 Feb;21(2):151–63
Effect of dietary lipid composition on rat liver microsomal phosphatidylcholine synthesis. Hargreaves KM, et al. **J Nutr** 1989 Mar;119(3):344–8
Synthesis of phosphatidylcholine and phosphatidylglycerol in rat lung mitochondria. Schlame M, et al. **Mol Cell Biochem** 1989 Feb 21;85(2):115–22
Initiation of fetal rat lung phospholipid and surfactant–associated protein A mRNA synthesis. Gross I, et al. **Pediatr Res** 1989 Mar;25(3):239–44
Phosphatidylcholine synthesis; which route is taken? [letter] Tsao FH. **Trends Biochem Sci** 1988 Jan;13(1):8–9

BLOOD

Plasma pattern of growth hormone regulates sexual differentiation of phosphatidylcholine in rat plasma. Oscarsson J, et al. **Acta Physiol Scand** 1988 Jun; 133(2):257–65

Chemiluminescence–high performance liquid chromatography of phosphatidylcholine hydroperoxide in human blood plasma. Miyazawa T, et al. **Basic Life Sci** 1988;49:191–4

Arachidonate cannot be released directly from diacyl–sn–glycero–3–phosphocholine in thrombin–stimulated platelets. Colard O, et al. **Biochem J** 1989 Apr 15;259(2):333–9

Studies on the incorporation and transacylation of various fatty acids in choline and ethanolamine–containing phosphoacylglycerol subclasses in human neutrophils. MacDonald JI, et al. **Biochim Biophys Acta** 1989 Aug 8; 1004(2):151–7

Substrate specificity of human plasma lecithin–cholesterol acyltransferase towards molecular species of phosphatidylcholine in native plasma. Subbaiah PV, et al. **Biochim Biophys Acta** 1988 Dec 16;963(3):445–55

One–carbon cycle metabolism in obsessive–compulsive disorder [letter] Alarcon RD, et al. **Biol Psychiatry** 1988 Oct;24(6):721–3

Changes in the plasma free fatty acid composition during VLDL lipolysis induced by heparin: their effect on platelet phosphatidylcholine biosynthesis. Tavella JM, et al. **Biomed Biochim Acta** 1988;47(8):725–30

Presence of phosphatidylcholine hydroperoxide in human plasma. Miyazawa T, et al. **J Biochem (Tokyo)** 1988 May; 103(5):744–6

Interaction between erythrocytes from various animals and emulsions stabilized with various lecithins. Ishii F, et al. **J Pharm Sci** 1989 Apr;78(4):303–6

Transbilayer mobility of phosphatidylcholine in the red blood cell. Op den Kamp JA, et al. **Methods Enzymol** 1989; 173:223–31

Fatty acid composition in plasma and platelet phospholipid in hypothyroid patients before and after 1–thyroxine substitution. Valdemarsson S, et al. **Scand J Clin Lab Invest** 1988 Feb;48(1):21–5

CHEMICAL SYNTHESIS

Mixed–chain phosphatidylcholine analogues modified in the choline moiety: preparation of isomerically pure phospholipids with bulky head groups and one acyl chain twice as long as the other. Ali S, et al. **Chem Phys Lipids** 1989 Apr;50(1):11–21

Analogs of unusual sponge phospholipids. Synthesis and thermotropic properties of 1,2–di–(6Z,9Z)–6,9–hexacosadienoyl phosphatidylcholine and phosphatidylethanolamine. Li H, et al. **Chem Phys Lipids** 1988 Sep;48(1–2):109–17

Cyclopentanoid analogs of phosphatidylcholine: susceptibility to phospholipase A2. Lister MD, et al. **J Lipid Res** 1988 Oct;29(10):1297–308

[New types of polymerizable phosphatidylcholines, synthesis and properties] Molotkovskiĭ IuG, et al. **Bioorg Khim** 1988 Nov;14(11):1557–64 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

Molecular species of phosphatidylcholine in familial lecithin–cholesterol acyltransferase deficiency: effect of enzyme supplementation. Subbaiah PV, et al. **Biochim Biophys Acta** 1989 Jun 8;1003(2):145–50

DEFICIENCY

[Changes in phospholipid composition of high density lipoproteins in children as a possible precursor of the development of ischemic heart disease] Gerasimova EN, et al. **Kardiologiia** 1988 Sep;28(9):61–6 (Eng. Abstr.) **(Rus)**

DIAGNOSTIC USE

Parinaroyl and pyrenyl phospholipids as probes for the lipid surface layer of human low density lipoproteins. Vauhkonen M, et al. **Biochim Biophys Acta** 1989 Aug 21; 984(1):81–7

IMMUNOLOGY

Restricted immunoglobulin variable region gene usage by normal Ly–1 (CD5+) B cells that recognize phosphatidyl choline. Mercolino TJ, et al. **J Exp Med** 1989 Jun 1; 169(6):1869–77

ISOLATION & PURIFICATION

Novel molecular analogues of phosphatidylcholines in a lipid extract from bovine brain: 1–long–chain acyl–2–short–chain acyl–sn–glycero–3–phosphocholines. Tokumura A, et al. **J Lipid Res** 1989 Feb;30(2):219–24

METABOLISM

Effect of PAF acether on oriented egg phosphatidylcholine multibilayers; interaction with cholesterol; comparison to lyso–PC and lyso–PAF. Oliver JL, et al. **Agents Actions** 1989 Jan;26(1–2):121–2

Time course of thermal adaptation in plasma membranes of trout kidney. II. Molecular species composition. Hazel JR, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):R.628–34

Relationship between alveolar saturated phosphatidylcholine pool sizes and compliance of preterm rabbit lungs. The effect of maternal corticosteroid treatment. Ikegami M, et al. **Am Rev Respir Dis** 1989 Feb;139(2):367–9

Surfactant phosphatidylcholine metabolism and surfactant function in preterm, ventilated lambs. Jobe AH, et al. **Am Rev Respir Dis** 1989 Feb;139(2):352–9

Clearance of phosphatidylcholine and cholesterol from liposomes, liposomes loaded with metaproterenol, and rabbit surfactant from adult rabbit lungs. Pettenazzo A, et al. **Am Rev Respir Dis** 1989 Mar;139(3):752–8

Liposomes of enviroxime and phosphatidylcholine: definition of the drug–phospholipid interactions. Garcon NM, et al. **Antiviral Res** 1989 Mar;11(2):89–98

Synergistic inhibition of oxidation in dispersed phosphatidylcholine liposomes by a combination of vitamin E and cysteine. Motoyama T, et al. **Arch Biochem Biophys** 1989 May 1;270(2):655–61

Immature alveolar/blood barrier and low disaturated phosphatidylcholine in fetal lung after intrauterine exposure to O,O,S–trimethylphosphorothioate. Koizumi A, et al. **Arch Toxicol** 1989;63(4):331–5

Bradykinin stimulates phosphodiesteratic cleavage of phosphatidylcholine in cultured endothelial cells. Martin TW, et al. **Biochem Biophys Res Commun** 1988 Dec 30; 157(3):1271–9

Regulation of phosphatidylcholine metabolism in mammalian hearts. Hatch GM, et al. **Biochem Cell Biol** 1989 Feb–Mar; 67(2–3):67–77 (104 ref.)

Increased catabolism of phosphatidylcholine to betaine regulates the liver phosphatidylcholine content in rats fed orotic acid. Tokmakjian SD, et al. **Biochem Int** 1989 Apr; 18(4):751–7

Resynthesis of sphingomyelin from plasma–membrane phosphatidylcholine in BHK cells treated with Staphylococcus aureus sphingomyelinase. Allan D, et al. **Biochem J** 1988 Sep 15;254(3):765–71

Lysophospholipase A2 activity in guinea–pig heart microsomal fractions displaying high activities with 2–acylglycerophosphocholines with linoleic and arachidonic acids. Arthur G. **Biochem J** 1989 Jul 15; 261(2):581–6

Factors regulating the secretion of lysophosphatidylcholine by rat hepatocytes compared with the synthesis and secretion of phosphatidylcholine and triacylglycerol. Effects of albumin, cycloheximide, verapamil, EGTA and chlorpromazine. Graham A, et al. **Biochem J** 1988 Aug 1;253(3):687–92

On the mechanism of muscarinic hydrolysis of choline phospholipids in the heart. Lindmar R, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4689–95

Receptor regulation of choline phospholipid hydrolysis. A novel source of diacylglycerol and phosphatidic acid. Löffelholz K. **Biochem Pharmacol** 1989 May 15; 38(10):1543–9 (72 ref.)

Interaction of ApoA–1 and ApoE–3 with triglyceride–phospholipid emulsions containing increasing cholesterol concentrations. Model of triglyceride–rich nascent and remnant lipoproteins. Derksen A, et al. **Biochemistry** 1989 Jan 24;28(2):900–6

Interaction of melittin with phosphatidylcholine membranes. Binding isotherm and lipid head–group conformation. Kuchinka E, et al. **Biochemistry** 1989 May 16; 28(10):4216–21

Docosahexaenoate–containing molecular species of glycerophospholipids from frog retinal rod outer segments show different rates of biosynthesis and turnover. Louie K, et al. **Biochemistry** 1988 Dec 13;27(25):9014–20

Lysophosphatidylcholine metabolism to 1,2–diacylglycerol in lymphoblasts: involvement of a phosphatidylcholine–hydrolyzing phospholipase C. Nishijima J, et al. **Biochemistry** 1989 Apr 4;28(7):2902–9

Coenzyme binding by 3–hydroxybutyrate dehydrogenase, a lipid–requiring enzyme: lecithin acts as an allosteric modulator to enhance the affinity for coenzyme. Rudy B, et al. **Biochemistry** 1989 Jun 27;28(13):5354–66

18O isotope exchange experiments on phospholipase A2 determined by 13C–NMR: monomeric phosphatidylcholine and micellar phosphatidylethanolamine substrates. Fanni T, et al. **Biochim Biophys Acta** 1989 Jul 17;1004(1):134–8

A mismatch between the length of gramicidin and the lipid acyl chains is a prerequisite for HII phase formation in phosphatidylcholine model membranes. Killian JA, et al. **Biochim Biophys Acta** 1989 Jan 30;978(2):341–5

Formation of diacylglycerol by a phospholipase D–phosphatidate phosphatase pathway specific for phosphatidylcholine in endothelial cells. Martin TW. **Biochim Biophys Acta** 1988 Oct 14;962(3):282–96

Selective acyl transfer in the reacylation of brain glycerophospholipids. Comparison of three acylation systems for 1–alk–1'–enylglycero–3–phosphoethanolamine, 1–acylglycero–3–phosphoethanolamine and 1–acylglycero–3–phosphocholine in rat brain microsomes. Masuzawa Y, et al. **Biochim Biophys Acta** 1989 Sep 11; 1005(1):1–12

Lysophosphatidylcholine as an intermediate in phosphatidylcholine metabolism and glycerophosphocholine synthesis in cultured cells: an evaluation of the roles of 1–acyl– and 2–acyl–lysophosphatidylcholine. Morash SC, et al. **Biochim Biophys Acta** 1989 Aug 8;1004(2):221–9

Lipid peroxidation of phosphatidylcholine liposomes depressed by the calcium channel blockers nifedipine and verapamil and by the antiarrhythmic–antihypoxic drug stobadine. Ondriaš K, et al. **Biochim Biophys Acta** 1989 Jun 28;1003(3):238–45

Interaction of clathrin coat proteins with unilamellar and multilamellar vesicles of phosphatidylcholine. Privat JP, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):257–67

Phosphatidylcholine and triacylglycerol hydrolysis in HDL as induced by hepatic lipase: modulation of the phospholipase activity by changes in the particle surface or in the lipid core. Simard G, et al. **Biochim Biophys Acta** 1989 Feb 6;1001(2):225–33

Hydrogen bonding between anhydrous cholesterol and phosphatidylcholines: an infrared spectroscopic study. Wong PT, et al. **Biochim Biophys Acta** 1989 Mar 27; 980(1):37–41

Phospholipid metabolism in rat submandibular gland. Positional distribution of fatty acids in phosphatidylcholine and microsomal lysophospholipid acyltransferase systems concerning proliferation. Yashiro K, et al. **Biochim Biophys Acta** 1989 Sep 11;1005(1):56–64

Phosphatidylcholine storage in mucolipidosis IV. Bargal R, et al. **Clin Chim Acta** 1989 May 15;181(2):167–74

Alterations of acidic phospholipids in bronchoalveolar lavage fluids of patients with pulmonary alveolar proteinosis. Honda Y, et al. **Clin Chim Acta** 1989 Apr 28;181(1):11–8

Effects of exogenous fatty acids and inhibition of de novo fatty acid synthesis on disaturated phosphatidylcholine production by fetal lung cells and adult type II cells. Maniscalco WM, et al. **Exp Lung Res** 1989 May; 15(3):473–89

Evidence for a protein kinase C–directed mechanism in the phorbol diester–induced phospholipase D pathway of diacylglycerol generation from phosphatidylcholine. Cabot MC, et al. **FEBS Lett** 1989 Mar 13;245(1–2):85–90

Differential activation by fMet–Leu–Phe and phorbol ester of a plasma membrane phosphatidylcholine–specific phospholipase D in human neutrophil. Gelas P, et al. **FEBS Lett** 1989 Jul 17;251(1–2):213–8

Dilauroylphosphatidylcholine liposome effects on the acrosome reaction and in vitro penetration of zona–free hamster eggs by bull sperm: I. A fertility assay for fresh semen. Graham JK, et al. **Gamete Res** 1987 Feb; 16(2):133–45

Phosphatidylcholine and phosphatidylethanolamine derivatives, membrane fluidity and changes in the lipolytic activity of ram spermatozoa plasma membranes during cryoconservation. Hinkovska–Galcheva V, et al. **Int J Biochem** 1988;20(8):867–71

Surfactant metabolism in surfactant–treated preterm ventilated lambs. Ikegami M, et al. **J Appl Physiol** 1989 Jul;67(1):429–37

Clearance of surfactant phosphatidylcholine via the upper airways in rabbits. Pettenazzo A, et al. **J Appl Physiol** 1988 Nov;65(5):2151–5

Mechanism of vitamin A movement between rod outer segments, interphotoreceptor retinoid–binding protein, and liposomes. Ho MT, et al. **J Biol Chem** 1989 Jan 15; 264(2):928–35

Trifluoperazine stimulates the coordinate degradation of sphingomyelin and phosphatidylcholine in GH3 pituitary cells. Kolesnick RN, et al. **J Biol Chem** 1989 Aug 25; 264(24):14057–61

P2–purinergic agonists stimulate phosphodiesteratic cleavage of phosphatidylcholine in endothelial cells. Evidence for activation of phospholipase D. Martin TW, et al. **J Biol Chem** 1989 May 25;264(15):8847–56

Muscarinic receptor activation of phosphatidylcholine hydrolysis. Relationship to phosphoinositide hydrolysis and diacylglycerol metabolism. Martinson EA, et al. **J Biol Chem** 1989 Sep 5;264(25):14748–54

Multiple sources of 1,2–diacylglycerol in isolated rat pancreatic acini stimulated by cholecystokinin. Involvement of phosphatidylinositol bisphosphate and phosphatidylcholine hydrolysis. Matozaki T, et al. **J Biol Chem** 1989 Sep 5;264(25):14729–34

Stimulation of phosphatidylcholine hydrolysis, diacylglycerol release, and arachidonic acid production by oncogenic ras is a consequence of protein kinase C activation. Price BD, et al. **J Biol Chem** 1989 Oct 5;264(28):16638–43

An oxidized derivative of phosphatidylcholine is a substrate for the platelet–activating factor acetylhydrolase from human plasma. Stremler KE, et al. **J Biol Chem** 1989 Apr 5;264(10):5331–4

Normal phosphatidylcholine composition of lung surfactant 24 hours after inhalation injury. Prien T, et al. **J Burn Care Rehabil** 1989 Jan–Feb;10(1):38–44

Transport of fluorescent phospholipid analogues from the erythrocyte membrane to the parasite in Plasmodium falciparum–infected cells. Haldar K, et al. **J Cell Biol** 1989 Jun;108(6):2183–92

Ultraviolet radiation alters choline phospholipid metabolism in human keratinocytes. DeLeo V, et al. **J Invest Dermatol** 1988 Oct;91(4):303–8

Interaction of the high density lipoprotein conversion factor with recombinant discoidal complexes of egg phosphatidylcholine, free cholesterol, and apolipoprotein A–I. Rye KA. **J Lipid Res** 1989 Mar;30(3):335–46

Hydrolysis of phosphatidylcholine during LDL oxidation is mediated by platelet–activating factor acetylhydrolase. Steinbrecher UP, et al. **J Lipid Res** 1989 Mar;30(3):305–15

Lipids of the developing human retina: I. Total fatty acids, plasmalogens, and fatty acid composition of ethanolamine and choline phosphoglycerides. Martinez M, et al. **J Neurosci Res** 1988 Aug;20(4):484–90

Uptake and hormonally induced hydrolysis of [3H]phosphatidyl choline in the isolated rabbit heart. Weis MT, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):614–20

Deposition of a photosensitive complex within a lecithin bilayer lipid membrane. Salamon Z, et al. **J Photochem Photobiol [B]** 1989 Jun;3(3):351–7

Conformational study of the acetyl group and cyclohexenone in progesterone interacting with phosphatidyllipid by means of circular dichroism. Watanabe S, et al. **J Steroid Biochem** 1988 Nov;31(5):853–60

Influence of a beta-adrenergic agonist on septic shock-induced alterations of phosphatidylcholine metabolism in rat lung. von Wichert P, et al. **Lung** 1988; 166(5):257–67

Dideoxycytidine, an anti-HIV drug, selectively inhibits growth but not phosphatidylcholine metabolism in neuroblastoma and glioma cells. Cook HW, et al. **Neurochem Res** 1989 Mar;14(3):279–84

1H-NMR relaxation study of the liposome--nuclei interaction. Boicelli A, et al. **Physiol Chem Phys Med NMR** 1988;20(4):273–9

Medium-chain fatty acid binding to albumin and transfer to phospholipid bilayers. Hamilton JA. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2663–7

Kinetics of pulmonary surfactant phosphatidylcholine metabolism in the lungs of silica-treated rats. Dethloff LA, et al. **Toxicol Appl Pharmacol** 1989 Mar 15;98(1):1–11

[Incorporation of labeled phospholipids in Eustachian tube surfactant] Tacconi MT, et al. **Acta Otorhinolaryngol Ital** 1987;7 Suppl 16:39–44 (Eng. Abstr.) **(Ita)**

[Complexing of bovine serum albumin with phosphatidyl choline liposomes] Lebed' OI, et al. **Ukr Biokhim Zh** 1989 May-Jun;61(3):101–6 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Compartmentalization of phospholipids for lipoprotein assembly on the basis of molecular species and biosynthetic origin. Vance JE. **Biochim Biophys Acta** 1988 Nov 4; 963(1):70–81

Penetration of lecithin from hydrocortisone-containing liposomes into human skin. Wohlrab W, et al. **Dermatol Monatsschr** 1989;175(6):344–7

Recovery of treatment doses of surfactants from the lungs and vascular compartments of mechanically ventilated premature rabbits. Seidner SR, et al. **Pediatr Res** 1989 Apr; 25(4):423–8

PHARMACOLOGY

Lecithin intake and serum cholesterol. Knuiman JT, et al. **Am J Clin Nutr** 1989 Feb;49(2):266–8

Intraenterocyte distribution of absorbed lipid and effects of phosphatidylcholine. Parlier RD, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):G349–55

Synthetic branched-chain analogues of distearoylphosphatidylcholine: structure-activity relationship in inhibiting and activating protein kinase C. Charp PA, et al. **Biochemistry** 1988 Jun 28;27(13):4607–12

Cooperativity in lipid activation of 3-hydroxybutyrate dehydrogenase: role of lecithin as an essential allosteric activator. Cortese JD, et al. **Biochemistry** 1989 Apr 4; 28(7):3000–8

Purple-to-blue transition of bacteriorhodopsin in a neutral lipid environment. Szundi I, et al. **Biophys J** 1988 Aug; 54(2):227–32

Enhancement of oral bioavailability of d-alpha-tocopherol acetate by lecithin-dispersed aqueous preparation containing medium-chain triglycerides in rats. Kimura T, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb;37(2):439–41

On the role of phospholipids in the reconstituted cytochrome P-450 system. A model study using dilauroyl and distearoyl glycerophosphocholine. Rietjens IM, et al. **Eur J Biochem** 1989 May 1;181(2):309–16

Dilauroylphosphatidylcholine liposome effects on the acrosome reaction and in vitro penetration of zona-free hamster eggs by bull sperm: II. A fertility assay for frozen-thawed semen. Graham JK, et al. **Gamete Res** 1987 Feb;16(2):147–58

Susceptibility of epididymal boar sperm to cold shock and protective action of phosphatidylcholine. Simpson AM, et al. **Gamete Res** 1987 Aug;17(4):355–73

Preparation of clear solutions of reconstituted acetylcholinesterase. Effect of ionic strength and lipid/protein ratio. Gan L, et al. **Int J Pept Protein Res** 1989 Apr;33(4):268–72

Influence of level and source of dietary fat on its comparative feeding value in finishing diets for feedlot steers: metabolism. Zinn RA. **J Anim Sci** 1989 Apr;67(4):1038–49

Regulation of UDP-glucuronosyltransferase by lipid-protein interactions. Comparison of the thermotropic properties of pure reconstituted enzyme with microsomal enzyme. Dannenberg A, et al. **J Biol Chem** 1989 Jan 5;264(1):238–42

Lipid binding by Escherichia coli pyruvate oxidase is disrupted by small alterations of the carboxyl-terminal region. Grabau C, et al. **J Biol Chem** 1989 Jul 25; 264(21):12510–9

Human plasma lecithin-cholesterol acyltransferase. Inhibition of the phospholipase A2-like activity by sn-2-difluoroketone phosphatidylcholine analogues. Jauhiainen M, et al. **J Biol Chem** 1989 Feb 5;264(4):1963–7

Structural stability of the erythrocyte anion transporter, band 3, in different lipid environments. A differential scanning calorimetric study. Maneri LR, et al. **J Biol Chem** 1988 Nov 5;263(31):16170–8

Cerebral enzyme antioxidant system. Influence of aging and phosphatidylcholine. Benzi G, et al. **J Cereb Blood Flow Metab** 1989 Jun;9(3):373–80

Is AL721 really a lipid fluidity modulating agent? [letter] Offner FA, et al. **J Invest Dermatol** 1988 Dec;91(6):607–8

Effect of different molecular species of phosphatidylcholine on the clearance of emulsion particle lipids. Robins SJ, et al. **J Lipid Res** 1988 Sep;29(9):1195–203

Liposomes as cyclosporin A carriers: positively charged lecithin-cholesterol liposomes associated with cyclosporin A do not inhibit biosynthesis of mitochondrial polyglycerophosphatides and microsomal phosphatidylinositol. Stuhne-Sekalec L, et al. **J Microencapsul** 1989 Apr-Jun;6(2):177–82

Cholesterol levels and eicosanoid production in rats fed phosphatidylinositol or soybean lecithin. Ishida T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Apr;34(2):237–44

Effects of phosphatidylcholine on the topical bioavailability of corticosteroids assessed by the human skin blanching assay. Jacobs M, et al. **J Pharm Pharmacol** 1988 Dec; 40(12):829–33

Enhancing effect of medium-chain triglycerides on intestinal absorption of d-alpha-tocopherol acetate from lecithin-dispersed preparations in the rat. Fukui E, et al. **J Pharmacobiodyn** 1989 Feb;12(2):80–6

Effects of polyunsaturated fatty acids and/or lecithin on the plasma concentrations of very low density lipoprotein-tryglyceride (VLDL) and ketone bodies in humans. Kurinami S, et al. **Kurume Med J** 1988;35(2):71–6

Sialylation of lacto-N-neotetraosyl ceramide by a solubilized sialyltransferase(s) from chicken skeletal muscle: effect of phosphatidylcholine and sphingomyelin. Dasgupta S, et al. **Lipids** 1989 Jun;24(6):550–4

Effect of phosphatidylcholine on peritoneal transport and lymphatic absorption in a CAPD patient with sclerosing peritonitis. Struijk DG, et al. **Nephron** 1989;51(4):577–8

Effects of intralipid and hydrocortisone upon human fetal lung cell cultures. Kunkelmann H, et al. **Res Exp Med (Berl)** 1988;188(6):411–23

Potassium channels in cardiac cells activated by arachidonic acid and phospholipids. Kim D, et al. **Science** 1989 Jun 9;244(4909):1174–6

AL 721: a potent membrane modulating agent of human T-lymphocytes? Offner FA, et al. **Wien Klin Wochenschr** 1988 Sep 9;100(17):597–9

[Effects of polyene phosphatidyl choline on hepatocytotoxic activity in cultured supernatant of activated liver adherent cells] Kodama C, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec; 85(12):2596–600 (Eng. Abstr.) **(Jpn)**

[Influence of phosphatidylcholine on the threshold dose of pentylenetetrazol for inducing seizure] Noda K, et al. **Yakubutsu Seishin Kodo** 1988 Sep;8(3):417–20 (Eng. Abstr.) **(Jpn)**

[Research on high-temperature transition in liposomes made from egg yolk lecithin] Makarov TB, et al. **Biol Nauki** 1988; (5):23–31 (Eng. Abstr.) **(Rus)**

[Possible approaches to creating phospholipid preparations--acceptors of membrane cholesterol] Khalilov EM, et al. **Biull Eksp Biol Med** 1989 Apr; 107(4):451–3 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Influence of phosphatidylcholine molecular species composition on stability of the erythrocyte membrane. Roelofsen B, et al. **Biochem Soc Trans** 1989 Apr;17(2):284–6

Glucose-6-phosphate phosphohydrolase activity in guinea pig liver microsomes is influenced by phosphatidylcholine. Interaction with cholesterol-enriched membranes. Gumbhir K, et al. **Biochim Biophys Acta** 1989 May 19; 981(1):77–84

Effect of cholesterol and phosphatidylcholine of different chain length on acrosome breakdown and fertilizing capacity of amphibian spermatozoa. Diaz Fontdevila MF, et al. **Gamete Res** 1988 Sep;21(1):59–70

Regulation of gallbladder ion transport: role of biliary lipids. Roslyn JJ, et al. **Surgery** 1989 Feb;105(2 Pt 1):207–12

THERAPEUTIC USE

Canadian collaborative study of tetrahydroaminoacridine (THA) and lecithin treatment of Alzheimer's disease: effect on mood. Vida S, et al. **Can J Psychiatry** 1989 Apr; 34(3):165–70

Reduction of hyperlipidemia with 3-sn-polyenyl-phosphatidylcholine in dialysis patients. Kirsten R, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Mar;27(3):129–34

Effect of polyenoic phospholipid therapy on lecithin cholesterol acyltransferase activity in the human serum. Dobiášová M, et al. **Physiol Bohemoslov** 1988;37(2):165–72

[Evaluation of the therapeutic effect of a phlebotropic drug with a new noninvasive method: rheography by reflected light] Tumino G, et al. **Clin Ter** 1987 Aug 15;122(3):189–94 (Eng. Abstr.) **(Ita)**

[Evaluation of the efficacy of a phlebotropic drug by the Doppler method] Severin E, et al. **Minerva Cardioangiol** 1988 Jul-Aug;36(7–8):375–6 (Eng. Abstr.) **(Ita)**

[Effectiveness of hepatoprotective agents in experimental allyl alcohol poisoning] Vengerovskiĭ AI, et al. **Gig Tr Prof Zabol** 1989;(5):46–7 **(Rus)**

[Effect of essential phospholipids on the lipid spectrum of blood plasma and the aggregative capacity of thrombocytes in patients with ischemic heart disease] Botolova EN, et al. **Kardiologiia** 1988 Sep;28(9):57–61 (Eng. Abstr.) **(Rus)**

PHOSPHATIDYLETHANOLAMINES

Penetration and fusion of phospholipid vesicles by lysozyme. Kim J, et al. **Arch Biochem Biophys** 1989 Oct;274(1):100–8

Characterization of plasma-stabilized liposomes composed of dioleoylphosphatidylethanolamine and oleic acid. Liu DX, et al. **Biochem Biophys Res Commun** 1989 Jul 14; 162(1):326–33

Xanthene-dye-labelled phosphatidylethanolamines as probes of interfacial pH. Studies in phospholipid vesicles. Knight CG, et al. **Biochem J** 1989 Mar 15;258(3):683–9

Improved procedure for the construction of neoglycolipids having antigenic and lectin-binding activities, from reducing oligosaccharides. Stoll MS, et al. **Biochem J** 1988 Dec 1;256(2):661–4

Conformations and orientations of a signal peptide interacting with phospholipid monolayers. Cornell DG, et al. **Biochemistry** 1989 Apr 4;28(7):2789–97

Modulation of the bilayer to hexagonal phase transition and solvation of phosphatidylethanolamines in aqueous salt solutions. Epand RM, et al. **Biochemistry** 1988 Nov 29; 27(24):8776–9

Interactions of colicin A domains with phospholipid monolayers and liposomes: relevance to the mechanism of action. Frenette M, et al. **Biochemistry** 1989 Mar 21; 28(6):2509–14

31P and 2H NMR studies of structure and motion in bilayers of phosphatidylcholine and phosphatidylethanolamine. Ghosh R. **Biochemistry** 1988 Oct 4;27(20):7750–8

Effect of fatty acyl chain length and structure on the lamellar gel to liquid-crystalline and lamellar to reversed hexagonal phase transitions of aqueous phosphatidylethanolamine dispersions. Lewis RN, et al. **Biochemistry** 1989 Jan 24; 28(2):541–8

Temperature dependence of the structural dimensions of the inverted hexagonal (HII) phase of phosphatidylethanolamine-containing membranes. Tate MW, et al. **Biochemistry** 1989 May 16;28(10):4245–53

Modulation of the bilayer to hexagonal phase transition of phosphatidylethanolamines by acylglycerols. Epand RM, et al. **Biochim Biophys Acta** 1988 Nov 22;945(2):161–6

Determination of the phase behaviour of phosphatidylethanolamine admixed with other lipids and the effects of calcium chloride: implications for protein kinase C regulation. Epand RM, et al. **Biochim Biophys Acta** 1988 Oct 6;944(2):144–54

Bilayer-stabilizing properties of myelin basic protein in dioleoylphosphatidylethanolamine systems. Fraser PE, et al. **Biochim Biophys Acta** 1989 Jul 24;983(1):23–9

Interaction of alpha-lactalbumin with phospholipid vesicles as studied by photoactivated hydrophobic labeling. Kim J, et al. **Biochim Biophys Acta** 1989 Jul 24;983(1):1–8

Phase behaviour of mixtures of lipid X with phosphatidylcholine and phosphatidylethanolamine [published erratum appears in Biochim Biophys Acta 1989 Mar 13;979(3):379] Lipka G, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):239–50

Effects of antineoplastic ether lipids on model and biological membranes. Noseda A, et al. **Biochim Biophys Acta** 1988 Nov 3;945(1):92–100

Comparison of phosphatidylethanolamine and phosphatidylcholine vesicles produced by treating cholate-phospholipid micelles with cholestyramine. Shi SP, et al. **Biochim Biophys Acta** 1989 Jul 10;982(2):187–95

The polymorphic phase behavior of dielaidoylphosphatidylethanolamine. Effect of n-alkanols. Veiro JA, et al. **Biochim Biophys Acta** 1989 Feb 27; 979(2):251–6

High-frequency ultrasonic absorption spectroscopy on aqueous suspensions of phospholipid bilayer vesicles. Kaatze U, et al. **Biophys Chem** 1988 Dec;32(2–3):153–60

Fluorescence depolarization study of lamellar liquid crystalline to inverted cylindrical micellar phase transition of phosphatidylethanolamine. Cheng KH. **Biophys J** 1989 Jun;55(6):1025–31

Fusion of synaptic vesicle membranes with planar bilayer membranes. Perin MS, et al. **Biophys J** 1989 May; 55(5):973–86

Evaluation of the thermal coefficient of the resistance to fluorophore rotation in model membranes. Scarlata SF. **Biophys J** 1989 Jun;55(6):1215–23

Intermediates in membrane fusion and bilayer/nonbilayer phase transitions imaged by time-resolved cryo-transmission electron microscopy. Siegel DP, et al. **Biophys J** 1989 Jul;56(1):161–9

Anisotropic 2H-nuclear magnetic resonance spin-lattice relaxation in cerebroside- and phospholipid-cholesterol bilayer membranes. Siminovitch DJ, et al. **Biophys J** 1988 Sep;54(3):373–81

Acyl chain orientational order in the hexagonal HII phase of phospholipid-water dispersions. Sternin E, et al.

Biophys J 1988 Oct;54(4):689–94
Order and dynamics in the lamellar L alpha and in the hexagonal HII phase. Dioleoylphosphatidylethanolamine studied with angle-resolved fluorescence depolarization. van Langen H, et al. **Biophys J** 1989 May;55(5):937–47
Lipid-coated particles--a new approach to fix membrane-bound enzymes onto carrier surfaces. Rothe U, et al. **Biotechnol Appl Biochem** 1989 Feb;11(1):18–30
Analysis of dimeric species derived from the reaction of phosphatidylethanolamine with dimethylsuberimidate. Roth MR, et al. **Chem Phys Lipids** 1989 Jul;51(1):39–46
A cytolytic delta-endotoxin from Bacillus thuringiensis var. israelensis forms cation-selective channels in planar lipid bilayers. Knowles BH, et al. **FEBS Lett** 1989 Feb 27; 244(2):259–62
Phospholamban forms Ca2+-selective channels in lipid bilayers. Kovacs RJ, et al. **J Biol Chem** 1988 Dec 5; 263(34):18364–8
Controlled release from a large capsule membrane corked with phosphatidylethanolamine bilayers: effect of temperature, pH and concentration of Ca2+ ions. Seki T, et al. **J Microencapsul** 1985 Jan-Mar;2(1):13–22
Efficient gene transfer into mammalian primary endocrine cells with lipopolyamine-coated DNA. Behr JP, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6982–6
Actin polymerization induces a shape change in actin-containing vesicles. Cortese JD, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5773–7
Cationic liposome-mediated RNA transfection. Malone RW, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6077–81
X-ray studies on phospholipid bilayers. VIII. Interactions with chlorpromazine.HCl. Suwalsky M, et al. **Z Naturforsch [C]** 1988 Sep-Oct;43(9–10):742–8

ADMINISTRATION & DOSAGE

Activation of tumoricidal properties in monocytes from cancer patients following intravenous administration of liposomes containing muramyl tripeptide phosphatidylethanolamine. Kleinerman ES, et al. **Cancer Res** 1989 Aug 15;49(16):4665–70
Potent in situ activation of murine lung macrophages and therapy of melanoma metastases by systemic administration of liposomes containing muramyltripeptide phosphatidylethanolamine and interferon gamma. Fidler IJ, et al. **Invasion Metastasis** 1989;9(2):75–88
Therapy for osteosarcoma in dogs with intravenous injection of liposome-encapsulated muramyl tripeptide. MacEwen EG, et al. **J Natl Cancer Inst** 1989 Jun 21;81(12):935–8
Antigen-presenting liposomes are effective in treatment of recurrent herpes simplex virus genitalis in guinea pigs. Ho RJ, et al. **J Virol** 1989 Jul;63(7):2951–8

ANALYSIS

Nascent very low density lipoproteins from rat hepatocytic Golgi fractions are enriched in phosphatidylethanolamine. Hamilton RL, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):162–73
Composition of phospholipid molecular species from mammary tumors. Ishinaga M, et al. **Biochem Cell Biol** 1988 Nov;66(11):1163–8
Stability and fusion of lipid vesicles containing headgroup-modified analogues of phosphatidylethanolamine. Brown PM, et al. **Biochim Biophys Acta** 1989 Apr 14;980(2):181–90
Curvature and composition-dependent lipid asymmetry in phosphatidylcholine vesicles containing phosphatidylethanolamine and gangliosides. Thomas PD, et al. **Biochim Biophys Acta** 1989 Jan 16;978(1):85–90
A 2H-NMR study on the glycerol backbone of phospholipids extracted from Escherichia coli grown under high osmotic pressure: evidence for multiconformations of phosphatidylethanolamine. Yoshikawa W, et al. **Biochim Biophys Acta** 1988 Oct 20;944(3):321–8
Phase diagrams of pseudo-binary phospholipid systems. I. Influence of the chain length differences on the miscibility properties of cephaline/cephaline/water systems. Dörfler HD, et al. **Chem Phys Lipids** 1988 Oct;48(3–4):245–54
Essential fatty acid pattern of glycerolipids in rat hepatocytes in primary culture and in coculture with rat liver epithelial cells. Pepin D, et al. **Lipids** 1988 Aug;23(8):784–90
Levels of dihomo-gamma-linolenate are depressed in heart phosphatidylcholine and phosphatidylethanolamine in the biotin-deficient chick. Watkins BA. **Poult Sci** 1989 May; 68(5):698–705
[Identification and determination using HPLC of phospholipids present in the lavage fluid of the Eustachian tube of rabbits] Gandini C, et al. **Acta Otorhinolaryngol Ital** 1987;7 Suppl 16:21–8 (Eng. Abstr.) **(Ita)**
[Detection of N-acylethanolamine phospholipids in neuroblastoma C1300 cells] Gulaia NM, et al. **Ukr Biokhim Zh** 1988 Sep-Oct;60(5):58–63 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Biosynthesis of phosphatidylethanolamine via the CDP-ethanolamine route is an important pathway in isolated rat hepatocytes. Tijburg LB, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1275–80
Inhibition of phosphatidylethanolamine synthesis by glucagon in isolated rat hepatocytes. Tijburg LB, et al. **Biochem J** 1989 Feb 1;257(3):645–50
Regulation of the biosynthesis of triacylglycerol, phosphatidylcholine and phosphatidylethanolamine in the liver. Tijburg LB, et al. **Biochim Biophys Acta** 1989 Jul 17;1004(1):1–19 (228 ref.)
Mutation of Bacillus firmus OF4 to duramycin resistance results in substantial replacement of membrane lipid phosphatidylethanolamine by its plasmalogen form. Clejan S, et al. **J Bacteriol** 1989 Mar;171(3):1744–6

BLOOD

Studies on the incorporation and transacylation of various fatty acids in choline and ethanolamine-containing phosphoacylglycerol subclasses in human neutrophils. MacDonald JI, et al. **Biochim Biophys Acta** 1989 Aug 8; 1004(2):151–7
Stabilization of phosphatidylethanolamine hydroperoxides in human plasma. Terao J. **Biochim Biophys Acta** 1989 Jun 8;1003(2):221–4
Effect of dietary supplementation with a fish oil concentrate on the alkenylacyl class of ethanolamine phospholipid in human platelets. Aukema HM, et al. **J Lipid Res** 1989 Jan; 30(1):59–64
Molecular species of glycerophospholipids and sphingomyelins of human erythrocytes: improved method of analysis. Myher JJ, et al. **Lipids** 1989 May;24(5):396–407

CHEMICAL SYNTHESIS

Analogs of unusual sponge phospholipids. Synthesis and thermotropic properties of 1,2-di-(6Z,9Z)-6,9-hexacosadienoyl phosphatidylcholine and phosphatidylethanolamine. Li H, et al. **Chem Phys Lipids** 1988 Sep;48(1–2):109–17

DIAGNOSTIC USE

A liposomal MRI contrast agent: phosphatidylethanolamine-DTPA. Grant CW, et al. **Magn Reson Med** 1989 Aug;11(2):236–43

IMMUNOLOGY

Antibody to phosphatidylethanolamine in a patient with lupus anticoagulant and thrombosis. Staub HL, et al. **Ann Rheum Dis** 1989 Feb;48(2):166–9

ISOLATION & PURIFICATION

Ca2+-induced lateral phase separation in ternary mixtures of phosphatidic acid, phosphatidylcholine, and phosphatidylethanolamine inferred by calorimetry. Ohki K. **J Biochem (Tokyo)** 1988 Jul;104(1):14–7
Separation of the molecular species of diacyl and alkenylacyl subclasses of the methyl ester of dinitrophenylethanolamine glycerophospholipid by high-performance liquid chromatography. Nakagawa Y, et al. **J Chromatogr** 1989 Feb 24;487(2):239–45

METABOLISM

Fusion of phospholipid vesicles mediated by cytochrome c. Lee S, et al. **Arch Biochem Biophys** 1989 May 15; 271(1):188–99
Rat and human mammary tissue can synthesize choline moiety via the methylation of phosphatidylethanolamine. Yang EK, et al. **Biochem J** 1988 Dec 15;256(3):821–8
Docosahexaenoate-containing molecular species of glycerophospholipids from frog retinal rod outer segments show different rates of biosynthesis and turnover. Louie K, et al. **Biochemistry** 1988 Dec 13;27(25):9014–20
Differential methylation patterns in molecular species of phosphatidylethanolamine derivatives in rat liver membranes. Audubert F, et al. **Biochim Biophys Acta** 1989 Mar 14;1002(1):62–8
18O isotope exchange experiments on phospholipase A2 determined by 13C-NMR: monomeric phosphatidylcholine and micellar phosphatidylethanolamine substrates. Fanni T, et al. **Biochim Biophys Acta** 1989 Jul 17;1004(1):134–8
Preferential hydrolysis of oxidized phospholipids by peritoneal fluid of rats treated with casein. Itabe H, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):192–200
Selective acyl transfer in the reacylation of brain glycerophospholipids. Comparison of three acylation systems for 1-alk-1'-enylglycero-3-phosphoethanolamine, 1-acylglycero-3-phosphoethanolamine and 1-acylglycero-3-phosphocholine in rat brain microsomes. Masuzawa Y, et al. **Biochim Biophys Acta** 1989 Sep 11; 1005(1):1–12
Aminophospholipid translocase in the plasma membrane of Friend erythroleukemic cells can induce an asymmetric topology for phosphatidylserine but not for phosphatidylethanolamine. Middelkoop E, et al. **Biochim Biophys Acta** 1989 Jan 30;978(2):241–8
Diacylglycerol-phosphatidylethanolamine exchange in Escherichia coli. Proulx P, et al. **Biochim Biophys Acta** 1989 Jun 8;1003(2):217–20
Phosphatidylcholine and phosphatidylethanolamine derivatives, membrane fluidity and changes in the lipolytic activity of ram spermatozoa plasma membranes during cryoconservation. Hinkovska-Galcheva V, et al. **Int J Biochem** 1988;20(8):867–71
Mechanism of vitamin A movement between rod outer segments, interphotoreceptor retinoid-binding protein, and liposomes. Ho MT, et al. **J Biol Chem** 1989 Jan 15; 264(2):928–35
Phorbol ester stimulates the hydrolysis of phosphatidylethanolamine in leukemic HL-60, NIH 3T3, and baby hamster kidney cells. Kiss Z, et al. **J Biol Chem** 1989 Jan 25;264(3):1483–7
Phosphatidylethanolamine levels and regulation of phosphatidylethanolamine N-methyltransferase. Ridgway ND, et al. **J Biol Chem** 1989 Jan 15;264(2):1203–7
Specificity of rat hepatic phosphatidylethanolamine N-methyltransferase for molecular species of diacyl phosphatidylethanolamine. Ridgway ND, et al. **J Biol Chem** 1988 Nov 15;263(32):16856–63
Transport of fluorescent phospholipid analogues from the erythrocyte membrane to the parasite in Plasmodium falciparum-infected cells. Haldar K, et al. **J Cell Biol** 1989 Jun;108(6):2183–92
Lipids of the developing human retina: I. Total fatty acids, plasmalogens, and fatty acid composition of ethanolamine and choline phosphoglycerides. Martinez M, et al. **J Neurosci Res** 1988 Aug;20(4):484–90
The methylation of phosphatidylethanolamine. Vance DE, et al. **Prog Lipid Res** 1988;27(1):61–79 (123 ref.)
[Lipopolysaccharide-induced hydrolysis of plasmalogenic phosphatidylethanolamine in human platelets] Viktorov AV, et al. **Biokhimiia** 1988 May;53(5):842–7 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Compartmentalization of phospholipids for lipoprotein assembly on the basis of molecular species and biosynthetic origin. Vance JE. **Biochim Biophys Acta** 1988 Nov 4; 963(1):70–81

PHARMACOLOGY

The binding activities of proteins that bind Ap4A, an alarmone, are stimulated in the presence of ethanol or phosphatidylethanolamine. Kobayashi Y, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1379–86
MTP-PE: induction of tumoricidal leukocytes in the lungs of rats. Brownbill AF, et al. **Cancer Detect Prev** 1988; 12(1–6):161–8
Modulation of interferon-gamma-induced major histocompatibility (MHC) and CD14 antigen changes by lipophilic muramyltripeptide MTP-PE in human monocytes. Landmann R, et al. **Cell Immunol** 1988 Nov; 117(1):45–55
Is AL721 really a lipid fluidity modulating agent? [letter] Offner FA, et al. **J Invest Dermatol** 1988 Dec;91(6):607–8
AL 721: a potent membrane modulating agent of human T-lymphocytes? Offner FA, et al. **Wien Klin Wochenschr** 1988 Sep 9;100(17):597–9

THERAPEUTIC USE

Biological response modifiers in cancer therapeutics: potentialities and limitations. Mihich E. **Cancer Detect Prev** 1988;12(1–6):531–5 (13 ref.)

TOXICITY

Toxic factors in the red blood cell membrane. Feola M, et al. **J Trauma** 1989 Aug;29(8):1065–75

PHOSPHATIDYLGLYCEROLS

Conformations and orientations of a signal peptide interacting with phospholipid monolayers. Cornell DG, et al. **Biochemistry** 1989 Apr 4;28(7):2789–97
Interactions of colicin A domains with phospholipid monolayers and liposomes: relevance to the mechanism of action. Frenette M, et al. **Biochemistry** 1989 Mar 21; 28(6):2509–14
Fourier transform infrared study of fully hydrated dimyristoylphosphatidylglycerol. Effects of Na+ on the sn-1' and sn-3' headgroup stereoisomers. Lotta TI, et al. **Biochemistry** 1988 Oct 18;27(21):8158–69
Spontaneous vesiculation of large multilamellar vesicles composed of saturated phosphatidylcholine and phosphatidylglycerol mixtures. Madden TD, et al. **Biochemistry** 1988 Nov 29;27(24):8724–30
Comparison of the effects of NaCl on the thermotropic behaviour of sn-1' and sn-3' stereoisomers of 1,2-dimyristoyl-sn-glycero-3-phosphatidylglycerol [published erratum appears in Biochim Biophys Acta 1989 Sep 18;984(3):391] Salonen IS, et al. **Biochim Biophys Acta** 1989 Jul 10;982(2):205–15
Effects of random copolymers of lysine on the thermotropic behaviour of dipalmitoylphosphatidylglycerol vesicles. A fluorescence anisotropy study. Houbre D, et al. **Biophys Chem** 1988 Jul 15;30(3):245–55
Electro-mechanical permeabilization of lipid vesicles. Role of membrane tension and compressibility. Needham D, et al. **Biophys J** 1989 May;55(5):1001–9
Effect of propylgallate on a dipalmitoylphosphatidylglycerol and calcium mixture. Mukai K, et al. **Chem Phys Lipids** 1989 Mar;49(4):225–30

ANALYSIS

Phosphatidylglycerol in amniotic fluid. Comparison of an "ultrasensitive" immunologic assay with TLC and enzymatic assay. Eisenbrey AB, et al. **Am J Clin Pathol** 1989 Mar;91(3):293–7

Evaluation of the new amniostat-FLM test for the detection of phosphatidylglycerol in contaminated fluids. Towers CV, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):298–303

Detection frequency by thin-layer chromatography of phosphatidylglycerol in amniotic fluid with clinically functional pulmonary surfactant. Spillman T, et al. **Clin Chem** 1988 Oct;34(10):1976–82

Usefulness of the lecithin/sphingomyelin ratio and uselessness of phosphatidylglycerol determinations in tracheal aspirates of preterm infants [letter] Wijnands JB, et al. **Clin Chem** 1989 Apr;35(4):706

The effect of storage conditions on amniotic fluid phosphatidylglycerol concentration. Douvas SG, et al. **J Perinatol** 1988 Fall;8(4):356–7

The amniostat immunologic slide test for phosphatidylglycerol: a comparison of efficacy among screening tests for fetal lung maturity. Nguyen H, et al. **J Perinatol** 1987 Winter;7(1):16–20

A phosphatidylglycerol analogue: effect on phospholipid packing using polarized fluorescence spectroscopy. Glazman M, et al. **Prog Clin Biol Res** 1989;292:107–15

[The use of an enzyme method for determining phosphatidylglycerol in the amniotic fluid and an assessment of its reliability for predicting fetal lung maturity] Lalchev Z, et al. **Akush Ginekol (Sofiia)** 1988; 27(6):26–30 (Eng. Abstr.) **(Bul)**

[A sensitive enzymatic method for the determination of phosphatidylglycerol in amniotic fluid] Higuchi M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Apr;41(4):495–6 **(Jpn)**

BIOSYNTHESIS

Species pattern of phosphatidylinositol from lung surfactant and a comparison of the species pattern of phosphatidylinositol and phosphatidylglycerol synthesized de novo in lung microsomal fractions. Rüstow B, et al. **Biochem J** 1988 Aug 15;254(1):67–71

Species pattern of phosphatidic acid, diacylglycerol, CDP-diacylglycerol and phosphatidylglycerol synthesized de novo in rat liver mitochondria. Rüstow B, et al. **Biochim Biophys Acta** 1989 Apr 3;1002(2):261–3

Liposomes as cyclosporin A carriers: positively charged lecithin–cholesterol liposomes associated with cyclosporin A do not inhibit biosynthesis of mitochondrial polyglycerophosphatides and microsomal phosphatidylinositol. Stuhne-Sekalec L, et al. **J Microencapsul** 1989 Apr-Jun;6(2):177–82

Synthesis of phosphatidylcholine and phosphatidylglycerol in rat lung mitochondria. Schlame M, et al. **Mol Cell Biochem** 1989 Feb 21;85(2):115–22

HISTORY

Plant phospholipids. I. Identification of the phosphatidyl glycerols. 1958 [classical article] Benson AA, et al. **Biochim Biophys Acta** 1989;1000:452–8

A 'nova' in phosphate metabolism, GPG, and discovery of phosphatidylglycerol: a commentary on 'Plant Phospholipids. I. Identification of the Phosphatidyl Glycerols'. Benson AA, et al. **Biochim Biophys Acta** 1989; 1000:447–51

METABOLISM

Surface characteristics of phosphatidylglycerol phosphate from the extreme halophile Halobacterium cutirubrum compared with those of its deoxy analogue, at the air/water interface. Quinn PJ, et al. **Biochem J** 1989 Jul 15; 261(2):377–81

The kinetic mechanism of cation-catalyzed phosphatidylglycerol transbilayer migration implies close contact between vesicles as an intermediate state. Lentz BR, et al. **Biochemistry** 1989 May 30;28(11):4575–80

In vivo studies on stereospecificity of the monoglyceride kinase, lysophosphatidic acid acyltransferase, phosphatidic acid phosphatase and CDP-diglyceride synthase of Streptococcus mutans BHT using the stereoisomers of the ether lipid, dodecylglycerol. Cabacungan EA, et al. **Biochim Biophys Acta** 1988 Sep 23;962(2):241–7

Adsorption of the cationic antitumoral drug celiptium to phosphatidylglycerol in membrane model systems. Effect on membrane electrical properties. Sautereau AM, et al. **Biochim Biophys Acta** 1989 Jan 30;978(2):276–82

Changes in phosphatidylglycerol in bronchoalveolar lavage fluids from patients with cryptogenic fibrosing alveolitis. Hughes DA, et al. **Chest** 1989 Jan;95(1):82–9

Alterations of acidic phospholipids in bronchoalveolar lavage fluids of patients with pulmonary alveolar proteinosis. Honda Y, et al. **Clin Chim Acta** 1989 Apr 28;181(1):11–8

Phosphoglycerol substituents present on the cyclic beta-1,2-glucans of Rhizobium meliloti 1021 are derived from phosphatidylglycerol. Miller KJ, et al. **J Bacteriol** 1988 Oct;170(10):4569–75

PHARMACOKINETICS

Reutilization of surfactant phosphatidylglycerol and lysophosphatidylcholine by adult rabbits. Jacobs HC, et al. **Biochim Biophys Acta** 1988 Sep 23;962(2):227–33

THERAPEUTIC USE

Randomized trial of artificial surfactant (ALEC) given at birth to babies from 23 to 34 weeks gestation. Morley CJ, et al. **Early Hum Dev** 1988 May;17(1):41–54

The use of artificial surfactant (ALEC) in the prophylaxis of neonatal respiratory distress syndrome. Morley CJ. **Eur Respir J [Suppl]** 1989 Mar;2(3):81s–86s

PHOSPHATIDYLINOSITOL PHOSPHATES see **PHOSPHOINOSITIDES**

PHOSPHATIDYLINOSITOLS

The major maturation glycoprotein found on rat cauda epididymal sperm surface is linked to the membrane via phosphatidylinositol. Moore A, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):460–8

Solution structure of the glycosylphosphatidylinositol membrane anchor glycan of Trypanosoma brucei variant surface glycoprotein. Homans SW, et al. **Biochemistry** 1989 Apr 4;28(7):2881–7

Neutron and X-ray diffraction structural analysis of phosphatidylinositol bilayers. McDaniel RV, et al. **Biochim Biophys Acta** 1989 Aug 7;983(2):241–6

A fluorometric study of the interaction of bradykinin with lipids. Rao AG, et al. **Biochim Biophys Acta** 1989 Aug 31; 997(3):278–83

Interaction of tetanus toxin with lipid vesicles. Effects of pH, surface charge, and transmembrane potential on the kinetics of channel formation. Menestrina G, et al. **Biophys J** 1989 Mar;55(3):393–405

A physicochemical study of the interaction of phosphatidylinositol with buprenorphine and naloxone. Reig F, et al. **J Bioenerg Biomembr** 1988 Aug;20(4):533–49

Prolonged incubation with phorbol esters enhanced vasopressin-induced calcium mobilization and polyphosphatidylinositol hydrolysis of vascular smooth muscle cells. Stassen FL, et al. **J Biol Chem** 1989 Mar 25; 264(9):4916–23

An H-2Ld hybrid molecule with a Qa-2 alpha-3 domain and phosphatidyl-inositol anchor is not recognized by H-2Ld-specific cytotoxic T lymphocytes. Mann DW, et al. **J Immunol** 1989 Jan 1;142(1):318–22

Three major surface antigens of Schistosoma mansoni are linked to the membrane by glycosylphosphatidylinositol. Pearce EJ, et al. **J Immunol** 1989 Feb 1;142(3):979–84

Evidence that the effect of soya bean phosphatidylinositol–cholesterol–cyclosporin liposomes on the biosynthesis of acidic phospholipids in isolated subcellular membranes from rat liver and heart is attributable to the soya bean phosphatidylinositol–cholesterol liposomes. Stuhne-Sekalec L, et al. **J Microencapsul** 1989 Jan-Mar; 6(1):71–86

Polarized apical distribution of glycosyl-phosphatidylinositol-anchored proteins in a renal epithelial cell line. Lisanti MP, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9557–61

ADMINISTRATION & DOSAGE

Effect of treatment of isolated mitochondrial membranes with phosphatidylinositol–cholesterol liposomes on the biosynthesis and composition of polyglycerophosphatides. Stuhne-Sekalec L, et al. **J Microencapsul** 1988 Jan-Mar; 5(1):47–57

ANALYSIS

Di-O-alkylglycerol, mono-O-alkylglycerol and ceramide inositol phosphates of Leishmania mexicana mexicana promastigotes. Singh BN, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1239–46

Evidence for a phosphatidylinositol anchor in glycolipid antigens of Leishmania major. Sevlever D, et al. **Biochem Int** 1989 Jul;19(1):59–66

The glycosylphosphatidylinositol membrane anchor of Trypanosoma brucei variant surface glycoprotein. Ferguson MA, et al. **Biochem Soc Trans** 1988 Jun; 16(3):265–8

Glycosylphosphatidylinositol: an anchor for eukaryotic membrane proteins. Low MG. **Biochem Soc Trans** 1988 Jun;16(3):271–2

Characterization of the cross-reacting determinant (CRD) of the glycosyl-phosphatidylinositol membrane anchor of Trypanosoma brucei variant surface glycoprotein. Zamze SE, et al. **Eur J Biochem** 1988 Oct 1;176(3):527–34

Lipid analysis of the glycoinositol phospholipid membrane anchor of human erythrocyte acetylcholinesterase. Palmitoylation of inositol results in resistance to phosphatidylinositol-specific phospholipase C. Roberts WL, et al. **J Biol Chem** 1988 Dec 15;263(35):18766–75

Complementary DNA for the folate binding protein correctly predicts anchoring to the membrane by glycosyl-phosphatidylinositol. Lacey SW, et al. **J Clin Invest** 1989 Aug;84(2):715–20

Blast-1 possesses a glycosyl-phosphatidylinositol (GPI) membrane anchor, is related to LFA-3 and OX-45, and maps to chromosome 1q21-23. Staunton DE, et al. **J Exp Med** 1989 Mar 1;169(3):1087–99

The inositol lipids of Paramecium tetraurelia and preliminary characterizations of phosphoinositide kinase activity in the ciliary membrane. Suchard SJ, et al. **J Protozool** 1989 Mar-Apr;36(2):185–90

A Thy-1 negative lymphoma cell variant defective in the formation of glycosyl-phosphatidylinositol membrane protein anchors. Teng MH, et al. **Mol Immunol** 1989 Apr; 26(4):391–402

BIOSYNTHESIS

Inositol lipid turnover and compartmentation in canine trachealis smooth muscle. Baron CB, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C375–83

The de novo synthesis of molecular species of phosphatidylinositol from endogenously labeled CDP diacylglycerol in alveolar macrophage microsomes. Nakagawa Y, et al. **Arch Biochem Biophys** 1989 Feb 1; 268(2):559–66

Insulin provokes co-ordinated increases in the synthesis of phosphatidylinositol, phosphatidylinositol phosphates and the phosphatidylinositol-glycan in BC3H-1 myocytes. Farese RV, et al. **Biochem J** 1988 Nov 15;256(1):185–8

Species pattern of phosphatidylinositol from lung surfactant and a comparison of the species pattern of phosphatidylinositol and phosphatidylglycerol synthesized de novo in lung microsomal fractions. Rüstow B, et al. **Biochem J** 1988 Aug 15;254(1):67–71

Expression of the Saccharomyces cerevisiae PIS gene and synthesis of phosphatidylinositol in Escherichia coli. Nikawa J, et al. **J Bacteriol** 1988 Oct;170(10):4727–31

Biosynthesis of the glycosyl phosphatidylinositol membrane anchor of the trypanosome variant surface glycoprotein. Origin of the non-acetylated glucosamine. Doering TL, et al. **J Biol Chem** 1989 Jul 5;264(19):11168–73

Enhancement of inositol phospholipid metabolism and activation of protein kinase C in ras-transformed rat fibroblasts. Huang M, et al. **J Biol Chem** 1988 Dec 5; 263(34):17975–80

Liposomes as cyclosporin A carriers: positively charged lecithin–cholesterol liposomes associated with cyclosporin A do not inhibit biosynthesis of mitochondrial polyglycerophosphatides and microsomal phosphatidylinositol. Stuhne-Sekalec L, et al. **J Microencapsul** 1989 Apr-Jun;6(2):177–82

Subcellular distribution of the PI effect in the pancreas of the guinea pig. De Camilli P, et al. **Life Sci** 1974 Aug 15; 15(4):711–21

Stage-specific surface antigens during the morphogenesis of Trypanosoma cruzi: developmentally regulated expression of a glycosyl-phosphatidylinositol anchored glycoprotein of amastigotes. Andrews NW, et al. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:561–2

Growth hormone stimulates c-fos gene expression by means of protein kinase C without increasing inositol lipid turnover. Doglio A, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1148–52

Modulation of resynthesis of 1-alkyl-2-arachidonyl-glycero-3-phosphocholine and phosphatidylinositols for interception in vivo of free arachidonic acid, lyso-PAF, diacyl-glycerols, and phosphoinositides. Bauer JA, et al. **Prog Clin Biol Res** 1989; 308:455–62

BLOOD

Phosphatidylinositol (PI) and PI-associated arachidonate are elevated in platelet total membranes of type IIa hypercholesterolemic subjects. Mosconi C, et al. **Atherosclerosis** 1988 Aug;72(2-3):129–34

Synergism between thrombin and adrenaline (epinephrine) in human platelets. Marked potentiation of inositol phospholipid metabolism. Steen VM, et al. **Biochem J** 1988 Jul 15;253(2):581–6

Age related impairment in phosphatidylinositol breakdown of polymorphonuclear granulocytes. Fülöp T Jr, et al. **FEBS Lett** 1989 Mar 13;245(1-2):249–52

Phosphatidylinositol turnover in human monocyte-derived macrophages by native and acetyl LDL. Ishikawa Y, et al. **FEBS Lett** 1989 Mar 27;246(1-2):35–8

Endogenous phosphatidylinositol 4,5-bisphosphate, phosphatidylinositol, and phosphatidic acid in stimulated human platelets. Broekman MJ. **Methods Enzymol** 1989; 169:415–30

CHEMICAL SYNTHESIS

Synthesis and biological evaluation of ether-linked derivatives of phosphatidylinositol. Ishaq KS, et al. **Pharm Res** 1989 Mar;6(3):216–24

DEFICIENCY

Biosynthesis and function of LFA-3 in human mutant cells deficient in phosphatidylinositol-anchored proteins. Hollander N, et al. **J Immunol** 1988 Dec 15;141(12):4283–90

IMMUNOLOGY

Phosphatidylinositol-anchored membrane proteins and lymphocyte activation. Robinson PJ, et al. **Immunol Lett** 1988 Oct;19(2):85–93 (75 ref.)

Rat mesangial cells actively produce phosphatidylinositol-anchored Thy-1. Miyata T, et al. **Immunology** 1989 Aug;67(4):531–3

Antibodies to 5'-nucleotidase (CD73), a glycosyl-phosphatidylinositol-anchored protein, cause human peripheral blood T cells to proliferate. Thompson LF, et al. **J Immunol** 1989 Sep 15;143(6):1815–21

Comparative evaluation of the diagnostic significance of circulating immune complexes and antibodies to

phosphatidylinositomannosides in pulmonary tuberculosis by enzyme-linked immunosorbent assay. Mehta PK, et al. **Med Microbiol Immunol (Berl)** 1989;178(4):229–33

A human immunoglobulin G receptor exists in both polypeptide-anchored and phosphatidylinositol-glycan-anchored forms. Scallon BJ, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5079–83

ISOLATION & PURIFICATION

A family of glycoinositol phospholipids from Leishmania major. Isolation, characterization, and antigenicity. McConville MJ, et al. **J Biol Chem** 1989 Jan 15; 264(2):757–66

Structural characterization of the glycoinositol phospholipid membrane anchor of human erythrocyte acetylcholinesterase by fast atom bombardment mass spectrometry. Roberts WL, et al. **J Biol Chem** 1988 Dec 15;263(35):18776–84

Structural analysis of glycosyl-phosphatidylinositol antigens of Leishmania major. Rosen G, et al. **J Biol Chem** 1989 Jun 25;264(18):10457–63

Separation of phosphatidylinositols and other phospholipids by two-step one-dimensional thin-layer chromatography. Medh JD, et al. **J Lipid Res** 1989 May;30(5):761–4

METABOLISM

Muscarinic activation of phosphatidylinositol breakdown in neuroblastoma cells. Ponte-Sucre A. **Acta Cient Venez** 1987;38(3):356–61

Effect of Ha-ras on phosphatidylinositol metabolism, Na+/H+-antiporter and mobilization of intracellular calcium. Maly K, et al. **Adv Enzyme Regul** 1988;27:121–31

Indirect evidence for a role of phosphatidylinositol turnover in the cardiac response to H1-receptor stimulation. Mantelli L, et al. **Agents Actions** 1988 Jul;24(3–4):232–6

Increase in synaptosomal acidic phospholipids after intermittent but not continuous ethanol exposure. Gustavsson L, et al. **Alcohol Alcohol** 1989;24(3):193–6

Mitogenesis by serum and PDGF is independent of PI degradation and PKC in VSMC. Kihara M, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):C886–92

Oxidants and conductance of cultured epithelial cell monolayers: inositol phospholipid hydrolysis. Shasby DM, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C781–8

Changes in nuclear inositol phospholipids induced in intact cells by insulin-like growth factor I. Cocco L, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):720–5

ACTH stimulates turnover of the phosphatidylinositol-glycan. Cozza EN, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):585–9

Epidermal growth factor and insulin-like growth factor I stimulate the hydrolysis of the insulin-sensitive phosphatidylinositol-glycan in BC3H-1 myocytes. Farese RV, et al. **Biochem Biophys Res Commun** 1988 Nov 15; 156(3):1346–52

Short-term desensitization of phosphatidylinositol turnover via muscarinic acetylcholine receptors and histamine H1-receptors in smooth muscle. Hishinuma S, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):733–9

Cyclic and noncyclic inositol phosphates are formed at different ratios by phospholipase C isozymes. Kim JW, et al. **Biochem Biophys Res Commun** 1989 Aug 30; 163(1):177–82

Expression of an NCA cDNA in NIH/3T3 cells yields a 110K glycoprotein, which is anchored into the membrane via glycosyl-phosphatidylinositol. Kolbinger F, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1126–34

Retinoic acid inhibits phosphatidylinositol turnover only in RA-sensitive while not in RA-resistant human neuroblastoma cells. Lanciotti M, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):284–9

A23187 and protein kinase C activators stimulate phosphatidylinositol metabolism and prostaglandin synthesis in a human lung cancer cell line. Rapuano BE, et al. **Biochem Biophys Res Commun** 1988 Oct 31; 156(2):644–52

Inositol lipid metabolism in vasopressin stimulated hepatocytes from rats infused with tumor necrosis factor. Spitzer JA, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):197–203

Endothelin action: Inhibition by a protein kinase C inhibitor and involvement of phosphoinositols. Sugiura M, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):170–6

Thyrotropin-releasing hormone effects on phosphatidylinositol metabolism and binding in rat pituitary and retina. Naseem SM. **Biochem Int** 1989 Jan;18(1):203–10

Glycosylphosphatidylinositol is involved in the membrane attachment of proteins in granules of chromaffin cells. Fouchier F, et al. **Biochem J** 1988 Nov 15;256(1):103–8

The effect of cholera toxin on the inhibition of vasopressin-stimulated inositol phospholipid hydrolysis is a cyclic AMP-mediated event at the level of receptor binding. Gardner SD, et al. **Biochem J** 1989 May 1; 259(3):679–84

Phosphatidylinositol-specific phospholipase C of Bacillus thuringiensis as a probe for the distribution of phosphatidylinositol in hepatocyte membranes. Higgins JA, et al. **Biochem J** 1989 May 1;259(3):913–6

Modulation of bombesin-induced phosphatidylinositol hydrolysis in a small-cell lung-cancer cell line. Trepel JB, et al. **Biochem J** 1988 Oct 15;255(2):403–10

Cyclic GMP-dependent protein kinase stimulates the plasmalemmal Ca2+ pump of smooth muscle via phosphorylation of phosphatidylinositol. Vrolix M, et al. **Biochem J** 1988 Nov 1;255(3):855–63

Effect of monoamine uptake inhibitors on norepinephrine-stimulated phosphatidylinositol hydrolysis in rat cortex. Mosaddeghi M, et al. **Biochem Pharmacol** 1989 Jan 15;38(2):257–62

Ethanol potentiates serotonin stimulated inositol lipid metabolism in primary astroglial cell cultures. Simonsson P, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2801–5

Increase of phosphatidylinositol arachidonic acid incorporation induced by mepacrine. Sterin-Speziale NB, et al. **Biochem Pharmacol** 1989 Mar 1;38(5):725–8

Drosophila acetylcholinesterase: demonstration of a glycoinositol phospholipid anchor and an endogenous proteolytic cleavage. Haas R, et al. **Biochemistry** 1988 Aug 23;27(17):6453–7

Properties of the binding sites for the sn-1 and sn-2 acyl chains on the phosphatidylinositol transfer protein from bovine brain. van Paridon PA, et al. **Biochemistry** 1988 Aug 23;27(17):6208–14

Phospholipase A2 in macrophage plasma membrane releases arachidonic acid from phosphatidylinositol. Shibata Y, et al. **Biochim Biophys Acta** 1988 Sep 16;971(2):121–6

Mature rat testis contains a high molecular weight species of phosphatidylinositol transfer protein. Thomas PJ, et al. **Biochim Biophys Acta** 1989 Jun 26;982(1):24–30

The role of inositol lipid metabolism in the ovary. Leung PC, et al. **Biol Reprod** 1989 Apr;40(4):703–8 (48 ref.)

Effects of substance P (SP) and the N-terminal SP-analogue SP (1–4) on inositol phospholipids in rat adrenal medulla slices. Minenko A, et al. **Biomed Biochim Acta** 1988; 47(9):871–9

Repeated calcitonin treatment reduces the stimulation of inositol phospholipid by norepinephrine and serotonin in rat hippocampus and cerebral cortex. Clementi G, et al. **Brain Res** 1989 Jan 23;478(1):138–42

Adrenergic mediated phosphatidylinositol metabolism is modulated by epileptic discharges in human neocortex. Dubeau F, et al. **Brain Res** 1989 Feb 27;481(1):200–3

Enhanced phosphoinositol hydrolysis in response to vasopressin in the septum of the homozygous Brattleboro rat. Shewey LM, et al. **Brain Res** 1989 Jan 23;478(1):95–102

Pharmacologic characterization of cirazoline-activated inositol phospholipid hydrolysis in rat brain cortical slices. Li PP, et al. **Can J Physiol Pharmacol** 1988 Nov; 66(11):1460–3

Functionally distinct G proteins selectively couple different receptors to PI hydrolysis in the same cell. Ashkenazi A, et al. **Cell** 1989 Feb 10;56(3):487–93

A novel pathway for glycan assembly: biosynthesis of the glycosyl-phosphatidylinositol anchor of the trypanosome variant surface glycoprotein. Masterson WJ, et al. **Cell** 1989 Mar 10;56(5):793–800

Myocardial stretch stimulates phosphatidylinositol turnover. von Harsdorf R, et al. **Circ Res** 1989 Aug;65(2):494–501

Impairments in vasopressin-stimulated inositol lipid metabolism in hepatocytes of septic rats. Rodriguez de Turco EB, et al. **Circ Shock** 1988 Aug;25(4):299–307

Dilatation of the right atrium stimulates phosphatidylinositol turnover. von Harsdorf R, et al. **Clin Exp Pharmacol Physiol** 1989 Apr;16(4):341–4

Influence of p21ras on phosphatidylinositol turnover. Downward J, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:883–92

Complete sequence and in vitro expression of a tissue-specific phosphatidylinositol-linked N-CAM isoform from skeletal muscle. Barton CH, et al. **Development** 1988 Sep; 104(1):165–73

Cholinesterases from flounder muscle. Purification and characterization of glycosyl-phosphatidylinositol-anchored and collagen-tailed forms differing in substrate specificity. Stieger S, et al. **Eur J Biochem** 1989 May 15;181(3):633–42

Heterologous desensitization of bradykinin-induced phosphatidylinositol response and Ca2+ mobilization by neurotensin in NG108-15 cells. Imaizumi T, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):203–8

Calcium mobilization and phosphatidylinositol turnover in vas deferens smooth muscle of diabetic rats. Sakai Y, et al. **Eur J Pharmacol** 1989 Mar 29;162(3):475–81

Platelet-activating factor stimulates phosphatidylinositol hydrolysis in the rat myometrium. Varol FG, et al. **Eur J Pharmacol** 1989 Jan 2;159(1):97–8

Activation of the phosphatidylinositol cycle in spreading cells. Breuer D, et al. **Exp Cell Res** 1989 Jun;182(2):659–63

Growth factor requirements of normal and polyomavirus middle T gene transformed REF52 cells in serum-free medium: indications of a reduced vasopressin requirement and its relationship to the control of phosphatidylinositol metabolism. Li L, et al. **Exp Cell Res** 1989 Jul;183(1):229–38

Effect of repeated versus single electroconvulsive seizures on adrenergic-mediated phosphatidylinositol hydrolysis in rat neocortex. Dubeau F, et al. **Exp Neurol** 1989 Aug; 105(2):206–10

Phosphatidylinositol turnover is not a general regulator of neuroblastoma cell differentiation: comparison between two differentiating agents, retinoic acid and gamma-interferon. Lanciotti M, et al. **FEBS Lett** 1989 Jan 30;243(2):285–8

Guanine nucleotides stimulate hydrolysis of phosphatidylinositol and polyphosphoinositides in permeabilized Swiss 3T3 cells. Taylor CW, et al. **FEBS Lett** 1988 Sep 12;237(1–2):163–7

The inotropic effect of endothelin-1 on rat atria involves hydrolysis of phosphatidylinositol. Vigne P, et al. **FEBS Lett** 1989 Jun 5;249(2):143–6

The effect of diabetes on phosphatidylinositol turnover and calcium influx in myocardium. Bergh CH, et al. **Horm Metab Res** 1988 Jul;20(7):381–6

Phosphatidylinositol metabolism and protein kinase C activation in leukocytes by lipopeptides. Hauschildt S, et al. **Immunobiology** 1988 Jul;177(3):267–77

Legionella micdadei protein kinase catalyzes phosphorylation of tubulin and phosphatidylinositol. Saha AK, et al. **J Bacteriol** 1989 Sep;171(9):5103–10

Calcium-requirement and its pH dependency of lysophosphoinositide-specific phospholipase C in porcine platelet membranes. Murase S, et al. **J Biochem (Tokyo)** 1988 Aug;104(2):270–5

Granulocyte-macrophage colony-stimulating factor primes neutrophils by activating a pertussis toxin-sensitive G protein not associated with phosphatidylinositol turnover. Corey SJ, et al. **J Biol Chem** 1989 Aug 25;264(24):14165–71

Treatment of A431 cells with epidermal growth factor (EGF) induces desensitization of EGF-stimulated phosphatidylinositol turnover. Cunningham TW, et al. **J Biol Chem** 1989 Sep 15;264(26):15351–6

Kinetic analysis of the formation of inositol 1:2-cyclic phosphate in carbachol-stimulated pancreatic minilobules. Half is formed by direct phosphodiesteratic cleavage of phosphatidylinositol. Dixon JF, et al. **J Biol Chem** 1989 Jul 15;264(20):11721–4

Dopamine-1-mediated stimulation of phospholipase C activity in rat renal cortical membranes. Felder CC, et al. **J Biol Chem** 1989 May 25;264(15):8739–45

Transforming growth factor beta and epidermal growth factor alter calcium influx and phosphatidylinositol turnover in rat-1 fibroblasts. Muldoon LL, et al. **J Biol Chem** 1988 Dec 15;263(35):18834–41

Stimulation of phosphatidylinositol hydrolysis, diacylglycerol release, and gene expression in response to endothelin, a potent new agonist for fibroblasts and smooth muscle cells. Muldoon LL, et al. **J Biol Chem** 1989 May 25; 264(15):8529–36

Phosphatidylinositol linkage of a truncated form of the platelet-derived growth factor receptor. Orchansky PL, et al. **J Biol Chem** 1988 Oct 15;263(29):15159–65

Role of phosphatidylinositol in cardiac sarcolemmal membrane sodium-calcium exchange. Pierce GN, et al. **J Biol Chem** 1989 Sep 15;264(26):15344–50

Hamster fibroblasts defective in thrombin-induced mitogenesis. A selection for mutants in phosphatidylinositol metabolism and other functions. Rath HM, et al. **J Biol Chem** 1989 Aug 15;264(23):13387–90

Effect of insulin and insulin-like growth factors I and II on phosphatidylinositol and phosphatidylinositol 4,5-bisphosphate breakdown in liver from humans with and without type II diabetes. Thakker JK, et al. **J Biol Chem** 1989 May 5;264(13):7169–75

Rapid action of 1,25-dihydroxyvitamin D3 on hepatocyte phospholipids. Baran DT, et al. **J Bone Miner Res** 1988 Dec;3(6):593–600

Endothelin-1 stimulates phosphatidylinositol hydrolysis and calcium uptake in isolated canine coronary arteries. Pang DC, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S75–9; discussion S84

Phosphatidylinositol-specific phospholipase C from Bacillus cereus: improved purification, amino acid composition, and amino-terminal sequence. Volwerk JJ, et al. **J Cell Biochem** 1989 Mar;39(3):315–25

Membrane anchoring of heparan sulfate proteoglycans by phosphatidylinositol and kinetics of synthesis of peripheral and detergent-solubilized proteoglycans in Schwann cells. Carey DJ, et al. **J Cell Biol** 1989 May;108(5):1891–7

The use of cells doubly labelled with [14C]inositol and [3H]inositol to search for a hormone-sensitive inositol lipid pool with atypically rapid metabolic turnover. Maccallum SH, et al. **J Endocrinol** 1989 Jul;122(1):379–89

Impaired phospholipase C activity is involved in the hyperreactivity of platelets in primary hypertension. Koutouzov S, et al. **J Hypertens Suppl** 1988 Dec; 6(4):S372–4

Hydrolysis of inositol phospholipids induced by stimulation of the T cell antigen receptor complex in antigen-specific, murine helper T cell clones. Requirement for exogenous calcium. Bonvini E, et al. **J Immunol** 1989 Jul 15; 143(2):587–95

Lectin-induced phosphatidylinositol metabolism in lymphocytes is potentiated by macrophages. Grier CE 3d, et al. **J Immunol** 1988 Oct 15;141(8):2585–92

Cell-specific heterogeneity in sensitivity of phosphatidylinositol-anchored membrane antigens to release by phospholipase C. Low MG, et al. **J Immunol Methods** 1988 Oct 4;113(1):101–11

Phosphatidylinositol metabolism during in vitro hypoxia. Huang HM, et al. **J Neurochem** 1989 Mar;52(3):830–5

Enhancement of phosphatidylinositol turnover and cyclic nucleotide accumulation by chronic anethole trithione treatment in rat submaxillary glands. Ukai Y, et al. **J Pharm Pharmacol** 1989 Apr;41(4):247–52

Antagonism of 5-hydroxytryptamine2 receptor-mediated phosphatidylinositol turnover by d-lysergic acid

diethylamide. Pierce PA, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):918–25

Gentamicin inhibits agonist stimulation of the phosphatidylinositol cascade in primary cultures of rabbit proximal tubular cells and in rat renal cortex. Ramsammy LS, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):989–96

Modification of cellular membrane functions by pendolmycin. Umezawa K, et al. **Jpn J Cancer Res** 1989 Jan;80(1):15–8

Effect of progesterone on the stimulation of phosphatidylinositol turnover by epinephrine in guinea pig ductus deferens. Morishita S, et al. **Jpn J Pharmacol** 1989 Jan;49(1):95–9

Glyceryl trinitrate inhibits phosphatidylinositol hydrolysis and protein kinase C activity in bovine mesenteric artery. Ahlner J, et al. **Life Sci** 1988;43(15):1241–8

Effects of streptozotocin-induced hyperglycemia on agonist-stimulated phosphatidylinositol turnover in rat aorta. Legan E. **Life Sci** 1989;45(5):371–8

Effects of omega-3 fatty acids on vascular smooth muscle cells: reduction in arachidonic acid incorporation into inositol phospholipids. Yerram NR, et al. **Lipids** 1989 Jul; 24(7):594–602

Sequence and expression of the glycosyl-phosphatidylinositol-specific phospholipase C of Trypanosoma brucei. Carrington M, et al. **Mol Biochem Parasitol** 1989 Mar 15;33(3):289–96

Role of proteinkinase C and phosphatidylinositol metabolism in lipopeptide-induced leukocyte activation as signal transducing mechanism. Hauschildt S, et al. **Mol Immunol** 1988 Nov;25(11):1081–6

Characterization of a broadly expressed human leucocyte surface antigen MEM-43 anchored in membrane through phosphatidylinositol. Stefanová I, et al. **Mol Immunol** 1989 Feb;26(2):153–61

Gastrin-releasing peptide receptor in rat brain membranes: specific binding and stimulation of phosphoinositide breakdown. Hollingsworth EB. **Mol Pharmacol** 1989 May; 35(5):689–94

The activation of phosphatidylinositol turnover is not directly involved in the modulation of neurotransmitter release mediated by presynaptic muscarinic receptors. Marchi M, et al. **Neurochem Res** 1988 Sep;13(9):903–7

Effects of angiotensin II on cultured, bovine adrenal medullary cells. Bunn SJ, et al. **Neuropeptides** 1989 Feb-Mar;13(2):121–32

Importance of the presence of the N-terminal tripeptide of substance P for the stimulation of phosphatidylinositol metabolism in rat parotid gland: a possible activation of phospholipases C and D. Rollandy I, et al. **Neuropeptides** 1989 Apr;13(3):175–85

Bombesin-like peptides stimulate phosphatidylinositol turnover in rat brain slices. Hari Prasad VN, et al. **Peptides** 1988 Nov-Dec;9(6):1345–9

Inositol lipids: receptor-stimulated hydrolysis and cellular lipid pools. Michell RH, et al. **Philos Trans R Soc Lond [Biol]** 1988 Jul 26; 320(1199):239–46 (27 ref.)

Nerve growth factor stimulates the hydrolysis of glycosylphosphatidylinositol in PC-12 cells: a mechanism of protein kinase C regulation. Chan BL, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1756–60

In vitro attachment of glycosyl-inositolphospholipid anchor structures to mouse Thy-1 antigen and human decay-accelerating factor. Fasel N, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6858–62

Release of PI-anchoring enzymes and other effects of phosphatidylinositol-specific phospholipase C from Bacillus thuringiensis on TN-368 cells from a moth ovary. Ikezawa H, et al. **Toxicon** 1989;27(6):637–45

Increase in cyclic AMP content with enhanced phosphatidylinositol turnover in the cells of Candida tropicalis during mycelial growth caused by ethanol. Kamihara T, et al. **Yeast** 1989 Apr;5 Spec No:S437–9

[Effect of insulin on inositol-phospholipid metabolism in isolated rat fat cells] Kuroda Y. **Hokkaido Igaku Zasshi** 1989 Mar;64(2):195–203 (Eng. Abstr.) **(Jpn)**

[Membrane receptors and the metabolism of phosphatidylinositols: inositol triphosphate and diacylglycerol as secondary transmitters of information] Nowak JZ. **Acta Physiol Pol** 1988;39 Suppl 32:1–52 **(Pol)**

PHARMACOLOGY

Phosphatidylinositol modulates the response of calmodulin-dependent phosphatase to calmodulin. Huang SL, et al. **Arch Biochem Biophys** 1989 Apr;270(1):42–9

Inhibitory effects on protein kinase C activity by lipophosphoglycan fragments and glycosylphosphatidylinositol antigens of the protozoan parasite Leishmania. McNeely TB, et al. **Biochem J** 1989 Apr 15;259(2):601–4

Cholesterol levels and eicosanoid production in rats fed phosphatidylinositol or soybean lecithin. Ishida T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Apr;34(2):237–44

PHYSIOLOGY

Stimulus-secretion coupling: second messenger-regulated exocytosis. Harper JF. **Adv Second Messenger Phosphoprotein Res** 1988;22:193–318 (784 ref.)

Cell-surface anchoring of proteins via glycosyl-phosphatidylinositol structures. Ferguson MA, et al. **Annu Rev Biochem** 1988;57:285–320 (194 ref.)

Neural cell recognition molecule F11: membrane interaction by covalently attached phosphatidylinositol. Wolff JM, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):931–8

Analysis of mammalian ras effector function. Hall A, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:855–62

Activation of the phosphatidylinositol metabolic pathway by low molecular weight B cell growth factor. Renard D, et al. **Eur J Immunol** 1988 Nov;18(11):1705–11

Influence of ethanol on calcium, inositol phospholipids and intracellular signalling mechanisms. Gandhi CR, et al. **Experientia** 1989 May 15;45(5):407–13 (65 ref.)

Glycosyl-phosphatidylinositol: a versatile anchor for cell surface proteins. Low MG. **FASEB J** 1989 Mar;3(5):1600–8 (40 ref.)

Prostaglandin H synthetase activates xenobiotics into free radicals: histamine release and biochemical characteristics. Masini E, et al. **Int Arch Allergy Appl Immunol** 1989; 88(1-2):134–5

Receptor-coupled, permeabilized smooth muscle. Role of the phosphatidylinositol cascade, G-proteins, and modulation of the contractile response to Ca2+. Kitazawa T, et al. **J Biol Chem** 1989 Apr 5;264(10):5339–42

Phosphatidylinositol system's role in serotonin-induced facilitation at the crayfish neuromuscular junction. Dixon D, et al. **J Neurophysiol** 1989 Jul;62(1):239–46

Roles for the phosphatidylinositol cycle in early development. Busa WB. **Philos Trans R Soc Lond [Biol]** 1988 Jul 26; 320(1199):415–26 (51 ref.)

Mechanism of membrane anchoring affects polarized expression of two proteins in MDCK cells. Brown DA, et al. **Science** 1989 Sep 29;245(4925):1499–501

The role of phosphatidylinositides in stimulus-secretion coupling in the exocrine pancreas. Schulz I, et al. **Soc Gen Physiol Ser** 1987;42:117–31 (47 ref.)

PHOSPHATIDYLSERINE SYNTHETASE see under **PHOSPHOTRANSFERASES**

PHOSPHATIDYLSERINES

Penetration and fusion of phospholipid vesicles by lysozyme. Kim J, et al. **Arch Biochem Biophys** 1989 Oct;274(1):100–8

Calcium ion binding between lipid bilayers: the four-component system of phosphatidylserine, phosphatidylcholine, calcium chloride, and water. Feigenson GW. **Biochemistry** 1989 Feb 7;28(3):1270–8

Interactions of metal ions with phosphatidylserine bilayer membranes: effect of hydrocarbon chain unsaturation. Mattai J, et al. **Biochemistry** 1989 Mar 7;28(5):2322–30

Conformational changes of phospholipid headgroups induced by a cationic integral membrane peptide as seen by deuterium magnetic resonance. Roux M, et al. **Biochemistry** 1989 Mar 7;28(5):2313–21

Interaction of hemoglobin derivatives with liposomes. Membrane cholesterol protects against the changes of hemoglobin. Szebeni J, et al. **Biochemistry** 1988 Aug 23; 27(17):6425–34

Thermotropic properties of mixtures of negatively charged phospholipids with cholesterol in the presence and absence of Li+ or Ca2+ ions. Bach D, et al. **Biochim Biophys Acta** 1989 Feb 13;979(1):11–9

Infrared and 31P-NMR studies of the interaction of Mg2+ with phosphatidylserines: effect of hydrocarbon chain unsaturation. Casal HL, et al. **Biochim Biophys Acta** 1989 Jul 10;982(2):228–36

Monolayer coupling in phosphatidylserine bilayers: distinct phase transitions induced by magnesium interacting with one or both monolayers. Düzgüneş N, et al. **Biochim Biophys Acta** 1988 Oct 20;944(3):391–8

Interaction of alpha-lactalbumin with phospholipid vesicles as studied by photoactivated hydrophobic labeling. Kim J, et al. **Biochim Biophys Acta** 1989 Jul 24;983(1):1–8

Surface charge effects upon membrane transport processes: the effects of surface charge on the monensin-mediated transport of lithium ions through phospholipid bilayers studied by 7Li-NMR spectroscopy. Riddell FG, et al. **Biochim Biophys Acta** 1988 Nov 3;945(1):65–72

A synthetic peptide corresponding to the hydrophobic amino terminal region of pardaxin can perturb model membranes of phosphatidyl choline and serine. Saberwal G, et al. **Biochim Biophys Acta** 1989 Sep 18;984(3):360–4

delta pH-induced fluorescence quenching of 9-aminoacridine in lipid vesicles is due to excimer formation at the membrane. Grzesiek S, et al. **Biophys J** 1989 Jun; 55(6):1101–9

Interaction of tetanus toxin with lipid vesicles. Effects of pH, surface charge, and transmembrane potential on the kinetics of channel formation. Menestrina G, et al. **Biophys J** 1989 Mar;55(3):393–405

Fusion of synaptic vesicle membranes with planar bilayer membranes. Perin MS, et al. **Biophys J** 1989 May; 55(5):973–86

On the coordination of La3+ by phosphatidylserine. Petersheim M, et al. **Biophys J** 1989 Apr;55(4):631–6

2H and 31P NMR study of pentalysine interaction with headgroup deuterated phosphatidylcholine and phosphatidylserine. Roux M, et al. **Eur Biophys J** 1988; 16(5):267–73

The structure of Staphylococcus aureus alpha-toxin-induced ionic channel. Krasilnikov OV, et al. **Gen Physiol Biophys** 1988 Oct;7(5):467–73

Phospholamban forms Ca2+-selective channels in lipid bilayers. Kovacs RJ, et al. **J Biol Chem** 1988 Dec 5; 263(34):18364–8

ANALYSIS

Interaction of polyamines with phospholipids: spermine and Ca2+ competition for phosphatidylserine containing liposomes. Tadolini B, et al. **Adv Exp Med Biol** 1988; 250:481–90

Phosphatidylserine as a determinant of reticuloendothelial recognition of liposome models of the erythrocyte surface. Allen TM, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(21):8067–71

BIOSYNTHESIS

IL-1 signaling for IL-2 production in T cells involves a rise in phosphatidylserine synthesis. Didier M, et al. **J Immunol** 1988 Nov 1;141(9):3078–80

BLOOD

Exposure of endogenous phosphatidylserine at the outer surface of stimulated platelets is reversed by restoration of aminophospholipid translocase activity. Bevers EM, et al. **Biochemistry** 1989 Mar 21;28(6):2382–7

Regulation and function of transbilayer movement of phosphatidylserine in activated blood platelets and sickle cells. Zwaal RF, et al. **Prog Clin Biol Res** 1988;282:181–92 (21 ref.)

IMMUNOLOGY

Detection of anti-phospholipid (cardiolipin, phosphatidylserine) antibodies in the serum of patients with non insulin-dependent (type 2) diabetes mellitus and macroangiopathy. Coexistence of anti-platelet reactivity. Triolo G, et al. **Diabetes Res** 1989 Feb;10(2):63–7

Effective production of monoclonal antibodies against phosphatidylserine: stereo-specific recognition of phosphatidylserine by monoclonal antibody. Umeda M, et al. **J Immunol** 1989 Oct 1;143(7):2273–9

[A case of anti-phospholipid antibody syndrome presenting chorea as an initial manifestation] Nogawa S, et al. **Ryumachi** 1989 Apr;29(2):134–42 (Eng. Abstr.) **(Jpn)**

METABOLISM

Increase in synaptosomal acidic phospholipids after intermittent but not continuous ethanol exposure. Gustavsson L, et al. **Alcohol Alcohol** 1989;24(3):193–6

Fusion of phospholipid vesicles mediated by cytochrome c. Lee S, et al. **Arch Biochem Biophys** 1989 May 15; 271(1):188–99

Docosahexaenoate-containing molecular species of glycerophospholipids from frog retinal rod outer segments show different rates of biosynthesis and turnover. Louie K, et al. **Biochemistry** 1988 Dec 13;27(25):9014–20

Interaction between phosphatidylserine and the isolated cytoskeleton of human blood platelets. Comfurius P, et al. **Biochim Biophys Acta** 1989 Aug 7;983(2):212–6

Aminophospholipid translocase in the plasma membrane of Friend erythroleukemic cells can induce an asymmetric topology for phosphatidylserine but not for phosphatidylethanolamine. Middelkoop E, et al. **Biochim Biophys Acta** 1989 Jan 30;978(2):241–8

Weak interaction of spectrin with phosphatidylcholine-phosphatidylserine multilayers: a 2H and 31P NMR study. Bitbol M, et al. **FEBS Lett** 1989 Feb 13;244(1):217–22

High cooperativity, specificity, and multiplicity in the protein kinase C-lipid interaction. Newton AC, et al. **J Biol Chem** 1989 Sep 5;264(25):14909–15

Reconstitution of phosphatidylserine import into rat liver mitochondria. Voelker DR. **J Biol Chem** 1989 May 15; 264(14):8019–25

Uptake of exogenous phosphatidylserine by human neuroblastoma cells stimulates the incorporation of [methyl-14C]choline into phosphatidylcholine. Slack BE, et al. **J Neurochem** 1989 Aug;53(2):472–81

Serine incorporation into phospholipids in vivo and serine phosphoglyceride metabolic transformations in cerebral areas from adult and aged rats. Gatti C, et al. **Neurobiol Aging** 1989 May-Jun;10(3):241–5 (31 ref.)

Differentiation-dependent expression of phosphatidylserine in mammalian plasma membranes: quantitative assessment of outer-leaflet lipid by prothrombinase complex formation. Connor J, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(9):3184–8

Phosphatidylserine translocation in animal cells. Voelker DR. **Prog Clin Biol Res** 1988;282:153–64

PHARMACOLOGY

Cognitive deficits and cholinergic mechanisms in aging brain: investigations on potentially useful drugs. Pepeu G, et al. **Ann Ist Super Sanita** 1988;24(3):411–6

Phosphatidylserine modulates calf intestine alkaline phosphatase activity towards low and high molecular weight substrate. Gmeiner BM, et al. **Biochem Int** 1989 Apr;18(4):767–73

A study to see whether phosphatidylserine, partial proteolysis

and EGTA substitute for calmodulin during activation of the Ca2+-ATPase from red cell membranes by ATP. Rossi JP, et al. **Biochim Biophys Acta** 1989 Jul 6; 996(3):153–9

In vivo and in vitro modulation of central type benzodiazepine receptors by phosphatidylserine. Levi de Stein M, et al. **Brain Res Mol Brain Res** 1989 Jan;5(1):9–15

In vivo action of phosphatidylserine, amitriptyline and stress on the binding of [3H]imipramine to membranes of the rat cerebral cortex. Stockert M, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):11–6

The superoxide-generating respiratory burst oxidase of human neutrophil plasma membrane. Phosphatidylserine as an effector of the activated enzyme. Tamura M, et al. **J Biol Chem** 1988 Nov 25;263(33):17621–6

Phosphatidylserine administration during postnatal development improves memory in adult mice. Fagioli S, et al. **Neurosci Lett** 1989 Jun 19;101(2):229–33

Ca2+- and phospholipid-independent activation of protein kinase C by selective oxidative modification of the regulatory domain. Gopalakrishna R, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6758–62

Phosphatidylserine activity on prolactin brain receptors of aged rabbits. Di Carlo R, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(6):915–26

PHYSIOLOGY

Effect of monovalent cations on polyvalent cation-induced fusion of phosphatidylserine small unilamellar vesicles. Sukumaran DK, et al. **Chem Phys Lipids** 1988 Nov; 49(1–2):9–14

Role of phosphatidylserine in the cellular and subcellular lung distribution of quinidine in rats. Nishiura A, et al. **Pharm Res** 1988 Apr;5(4):209–13

THERAPEUTIC USE

Preliminary evaluation of the effect of GABA and phosphatidylserine in epileptic patients. Loeb C, et al. **Epilepsy Res** 1987 May;1(3):209–12

[Clinical results of phosphatidylserine in 40 climacteric and elderly women with psycho-organic disorders] Manfredi M, et al. **Clin Ter** 1987 Jan 15;120(1):33–6 (Eng. Abstr.) **(Ita)**

[Experience with phosphatidylserine treatment of patients with cognitive and behavioral decline] Marcon GM, et al. **Clin Ter** 1988 Aug 31;126(4):243–8 (Eng. Abstr.) **(Ita)**

[Pharmacological treatment with phosphatidyl serine of 40 ambulatory patients with senile dementia syndrome] Lombardi GF. **Minerva Med** 1989 Jun;80(6):599–602 (Eng. Abstr.) **(Ita)**

TOXICITY

Toxic factors in the red blood cell membrane. Feola M, et al. **J Trauma** 1989 Aug;29(8):1065–75

PHOSPHENES see under **VISION**

PHOSPHINES

Mitigation of poison shyness in desert gerbil by adding conspecific sebum of ventral scent marking gland and urine in poison baits. Soni GR, et al. **Indian J Exp Biol** 1988 Jun;26(6):476–8

ADVERSE EFFECTS

[Severe involvement of the brachial plexus after intra-arterial chemotherapy (letter)] Chaine P, et al. **Presse Med** 1989 Apr 22;18(16):842 **(Fre)**

ANALYSIS

[A rapid method of identification and quantitative determination of zinc phosphide in cadaveric material] Fartushnyl AF, et al. **Sud Med Ekspert** 1989 Apr-Jun; 32(2):31–2 **(Rus)**

DIAGNOSTIC USE

99mTc-labelling of leucocytes with 99mTc-DPO: a complex developed for myocardial imaging. Endert G, et al. **Eur J Nucl Med** 1989;15(5):262–4

PHARMACOKINETICS

The Noah's Ark experiment: species dependent biodistributions of cationic 99mTc complexes. Deutsch E, et al. **Int J Rad Appl Instrum [B]** 1989;16(3):191–232 (31 ref.)

PHARMACOLOGY

Physical basis of the effect of hemoglobin on the 31P NMR chemical shifts of various phosphoryl compounds. Kirk K, et al. **Biochemistry** 1988 Nov 29;27(24):8803–10

Effects of anti-inflammatory drugs on interleukin 1-induced cartilage proteoglycan resorption in-vitro: inhibition by aurothiophosphines but no influence from perturbed eicosanoid metabolism. Rainsford KD. **J Pharm Pharmacol** 1989 Feb;41(2):112–7

POISONING

Spot diagnosis of aluminium phosphide ingestion: an application of a simple test. Chugh SN, et al. **J Assoc Physicians India** 1989 Mar;37(3):219–20

Muscle involvement in aluminium phosphide poisoning. Khosla SN, et al. **J Assoc Physicians India** 1988 Apr; 36(4):289–90

Acute aluminum phosphide poisoning--an epidemiological, clinical and histo-pathological study. Siwach SB, et al. **J Assoc Physicians India** 1988 Oct;36(10):594–6

A hard day's knight. Zinc phosphide poisoning. Mack RB. **N C Med J** 1989 Jan;50(1):17–8

TOXICITY

Occupational phosphine exposure in Indian workers. Misra UK, et al. **Toxicol Lett** 1988 Sep;42(3):257–63

[Treatment of poisoning by aluminum phosphide ingestion: experimental approach] Bouzoubaa A, et al. **J Toxicol Clin Exp** 1988 May-Jun;8(3):193–9 (Eng. Abstr.) **(Fre)**

PHOSPHINIC ACIDS

ADVERSE EFFECTS

Occupational dermatitis due to sodium hypophosphite. Costa C, et al. **Contact Dermatitis** 1988 Oct;19(4):313–4

Effect of sodium hypophosphite feeding on adenosine triphosphatase activity in ageing Zaprionus paravittiger (Diptera). Wadhwa R, et al. **Gerontology** 1989;35(1):14–8

PHARMACOLOGY

An antioxidant induced alterations in peroxidase activity in ageing Zaprionus paravittiger (Diptera). Wadhwa R, et al. **Mech Ageing Dev** 1988 Nov 30;45(3):277–83

PHOSPHOADENOSINE PHOSPHOSULFATE see under **ADENINE NUCLEOTIDES**

PHOSPHOCREATINE

ANALOGS & DERIVATIVES

[Study of the nonspecific effect of phosphocreatine disodium salt on the process of excitation conduction in acute myocardial ischemia] Rozenshtraukh LV, et al. **Kardiologiia** 1988 Jun;28(6):95–100 (Eng. Abstr.) **(Rus)**

ANALYSIS

Simultaneous determination of myocardial creatine phosphate and adenine nucleotides by reversed-phase HPLC. Sanduja R, et al. **Biomed Chromatogr** 1987;2(4):156–8

Creatine phosphate: comparative evaluation of three methods for quantitative determination. Carazzone M, et al. **Boll Chim Farm** 1988 Jan;127(1):20–2

Nuclear magnetic resonance imaging-guided phosphorus-31 spectroscopy of the human heart. Schaefer S, et al. **J Am Coll Cardiol** 1988 Dec;12(6):1449–55

Creatine phosphate in fiber types of skeletal muscle before and after exhaustive exercise. Tesch PA, et al. **J Appl Physiol** 1989 Apr;66(4):1756–9

Novel dual-wavelength monitoring approach for the improved rapid separation and estimation of adenine nucleotides and creatine phosphate by high-performance liquid chromatography. Cordis GA, et al. **J Chromatogr** 1988 Dec 28;459:229–36

Method for simultaneous determination of creatine phosphate and adenine nucleotides in the intestinal smooth muscle of guinea-pig taenia caeci using high-performance liquid chromatography. Endo I, et al. **Nippon Heikatsukin Gakkai Zasshi** 1988 May;24(2):127–30

Phosphocreatine, an intracellular high-energy compound, is found in the extracellular fluid of the seminal vesicles in mice and rats. Lee HJ, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7265–9

31P nuclear magnetic resonance of rat pancreatic grafts. Morris GE, et al. **Transplantation** 1989 May;47(5):779–84

[Measurement of creatine and phosphocreatine in muscle tissue using HPLC] Haruki K, et al. **Rinsho Byori** 1989 Apr;37(4):447–9 **(Jpn)**

DEFICIENCY

The cardiac contractile failure induced by chronic creatine and phosphocreatine deficiency. Kapelko VI, et al. **J Mol Cell Cardiol** 1988 Jun;20(6):465–79

METABOLISM

Contractile and metabolic characteristics of creatine-depleted vascular smooth muscle of the rat portal vein. Ekmehag BL, et al. **Acta Physiol Scand** 1988 Aug;133(4):525–33

How phosphocreatine buffers cyclic changes in ATP demand in working muscle. Funk C, et al. **Adv Exp Med Biol** 1989; 248:687–92

Phosphocreatine and oxidative metabolism-contraction coupling in rabbit aorta. Scott DP, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H597–602

Heart mitochondrial creatine kinase revisited: the outer mitochondrial membrane is not important for coupling of phosphocreatine production to oxidative phosphorylation. Kuznetsov AV, et al. **Arch Biochem Biophys** 1989 Jan; 268(1):176–90

Changes of glycogen metabolism in phosphorylcreatine-depleted muscles taken from rats fed with beta-guanidine propionate. De Tata V, et al. **Arch Int Physiol Biochim** 1989 Feb;97(1):123–32

Effects of ischaemia, blood loss and reperfusion on rat muscle protein synthesis, metabolite concentrations and polyribosome profiles in vivo. MacLennan PA, et al. **Biochem J** 1989 May 15;260(1):195–200

The polysome as a terminal for the creatine phosphate energy shuttle. Savabi F, et al. **Biochem Med Metab Biol** 1988 Dec;40(3):291–8

PGE1 and iloprost affect the high energy phosphates in the global ischemic and reperfused rat heart: a 31P-NMR study. Pissarek M, et al. **Biomed Biochim Acta** 1989; 48(1):43–50

Brain creatine phosphate and creatine kinase in mice fed an analogue of creatine. Holtzman D, et al. **Brain Res** 1989 Mar 27;483(1):68–77

Magnetic resonance spectroscopy and ambulatory cardiovascular monitoring noninvasively gauge timing of phosphate metabolism and circulation. Halberg E, et al. **Chronobiologia** 1989 Jan-Mar;16(1):1–8

Metabolite changes in the loaded hypoperfused and failing diaphragm. Lockhat D, et al. **J Appl Physiol** 1988 Oct; 65(4):1563–71

Effects of hypercapnia on brain pHi and phosphate metabolite regulation by 31P-NMR. Nishimura M, et al. **J Appl Physiol** 1989 May;66(5):2181–8

Phosphocreatine represents a thermodynamic and functional improvement over other muscle phosphagens. Ellington WR. **J Exp Biol** 1989 May;143:177–94

In vivo phosphorus nuclear magnetic resonance (31P-NMR) study of dystrophic hamster muscle. Argov Z, et al. **J Neurol Sci** 1988 Sep;86(2–3):185–93

Effect of triiodothyronine (T3) on myocardial high energy phosphates and lactate after ischemia and cardiopulmonary bypass. An experimental study in baboons. Novitzky D, et al. **J Thorac Cardiovasc Surg** 1988 Oct;96(4):600–7

Right and left ventricular metabolites. Teoh KH, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):725–9

Intramitochondrial inclusions caused by depletion of creatine in rat skeletal muscles. Ohira Y, et al. **Jpn J Physiol** 1988; 38(2):159–66

In vivo measurements of T1 relaxation times of 31P-metabolites in human skeletal muscle. Thomsen C, et al. **Magn Reson Imaging** 1989 Mar-Apr;7(2):231–4

Regional depletion of adenosine triphosphate, phosphocreatine, and glucose in ischemic hippocampus. Pettigrew LC, et al. **Metab Brain Dis** 1988 Sep;3(3):185–99

Effects of anoxia and recovery on the neurotransmission and level of high-energy phosphates in thin hippocampal slices from the guinea-pig. Yoneda K, et al. **Neuroscience** 1989; 28(2):401–7

High energy phosphate utilization for work production and tension maintenance in frog muscle. Cerretelli P, et al. **Pflugers Arch** 1988 Aug;412(3):270–6

Free creatine available to the creatine phosphate energy shuttle in isolated rat atria. Savabi F. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7476–80

PHARMACOLOGY

Some mechanisms of nonspecific antiarrhythmic action of phosphocreatine in acute myocardial ischemia. Rosenshtraukh LV, et al. **Biochem Med Metab Biol** 1988 Dec;40(3):225–36

Apparent inhibition of pyruvate kinase by phosphocreatine and phosphoarginine. Wu SW, et al. **Comp Biochem Physiol [B]** 1979;63(1):29–34

Protection of isolated rat heart from oxidative stress by exogenous creatine phosphate. Zucchi R, et al. **J Mol Cell Cardiol** 1989 Jan;21(1):67–73

PHYSIOLOGY

A possible role of the creatine phosphate-creatine pool in the regulation of the adenylate pool. Pezzini A, et al. **Int J Tissue React** 1988;10(2):107–10

[Role of the creatine phosphate mechanism in the energy supply of intensive physical load] Lenkova RI, et al. **Fiziol Cheloveka** 1988 Nov-Dec;14(6):943–7 **(Rus)**

THERAPEUTIC USE

[Phosphocreatine in ischemic cardiopathy] Caporicci D, et al. **Clin Ter** 1987 Aug 31;122(4):257–62 (Eng. Abstr.) **(Ita)**

[High specificity in the molecular mechanism of the protective action of phosphocreatine on the myocardium in ischemia] Saks VA, et al. **Biull Vsesoluznogo Kardiol Nauchn Tsentra AMN SSSR** 1988;11(2):42–50 (Eng. Abstr.) **(Rus)**

[Effect of phosphocreatine on the blood supply of the ischemic myocardium] Kryzhanovskiĭ SA, et al. **Fiziol Zh** 1988 Jul-Aug;34(4):84–6 (Eng. Abstr.) **(Rus)**

[Characteristics of the anti-arrhythmia effect of phosphocreatine in the acute stage of experimental myocardial infarction] Kryzhanovskiĭ SA, et al. **Kardiologiia** 1988 Nov;28(11):100–3 (Eng. Abstr.) **(Rus)**

[Effect of exogenous phosphocreatine on the size of experimental myocardial infarction] Kryzhanovskiĭ SA, et al. **Kardiologiia** 1988 Dec;28(12):88–91 (Eng. Abstr.) **(Rus)**

PHOSPHODIESTERASE ANTAGONISTS see **PHOSPHODIESTERASE INHIBITORS**

PHOSPHODIESTERASE INHIBITORS

Inhibition of cardiac phosphodiesterase III by the novel cardiotonic agent 6-[4-(4'-pyridyl)aminophenyl]-4,5-dihydro-3(2H)-pyridazinone hydrochloride. Sellin LC, et al. **Arzneimittelforschung** 1988 Dec;38(12):1787-9

Protein kinase C activators inhibit the antigen receptor-coupled polyphosphoinositide phosphodiesterase in murine B lymphocytes. Harnett MM, et al. **FEBS Lett** 1988 Nov 7;239(2):281-4

Lipocortin I and lipocortin II inhibit phosphoinositide- and polyphosphoinositide-specific phospholipase C. The effect results from interaction with the substrates. Machoczek K, et al. **FEBS Lett** 1989 Jul 17;251(1-2):207-12

Strategic approaches to drug design. II. Modelling studies on phosphodiesterase substrates and inhibitors. Davis A, et al. **J Comput Aided Mol Des** 1987 Jul;1(2):97-119

Inhibition of cyclic adenosine-3',5'-monophosphate phosphodiesterase from vascular smooth muscle by rolipram analogues. Marivet MC, et al. **J Med Chem** 1989 Jul;32(7):1450-7

Calmodulin antagonist W-7 inhibits lysosomal sphingomyelinase activity in C6 glioma cells. Masson M, et al. **J Neurochem** 1989 May;52(5):1645-7

ADMINISTRATION & DOSAGE

Observations on the intracoronary administration of milrinone and dobutamine to patients with congestive heart failure. Colucci WS. **Am J Cardiol** 1989 Jan 3; 63(2):17A-22A

Sustained release of isomazole from matrix tablets administered to dogs. Wilson HC, et al. **J Pharm Sci** 1989 Jul;78(7):582-4

CHEMICAL SYNTHESIS

Synthesis of peptide fragments of neuropeptide Y: potent inhibitors of calmodulin-stimulated phosphodiesterase. Ishiguro T, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul; 36(7):2720-3

Studies on griseolic acid derivatives. VII. Synthesis and phosphodiesterase inhibitory activity of the C4'-C5' hydrogenated products of griseolic acid and their base-exchanged derivatives. Murofushi Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Oct;36(10):3760-9

METABOLISM

Studies on the inhibition by alpha-amanitin of single-step addition reactions and productive RNA synthesis catalysed by wheat-germ RNA polymerase II. de Mercoyrol L, et al. **Biochem J** 1989 Feb 15;258(1):165-9

Characterization and pharmacological relevance of high affinity binding sites for [3H]LY186126, a cardiotonic phosphodiesterase inhibitor, in canine cardiac membranes. Kauffman RF, et al. **Circ Res** 1989 Jul;65(1):154-63

Synthesis of a tritium-labeled indolidan analogue and its use as a radioligand for phosphodiesterase-inhibitor cardiotonic binding sites. Robertson DW, et al. **J Med Chem** 1989 Jul; 32(7):1476-80

Analysis of the binding sites for the cardiotonic phosphodiesterase inhibitor [3H]LY186126 in ventricular myocardium. Artman M, et al. **Mol Pharmacol** 1989 Aug; 36(2):302-11

PHARMACOKINETICS

Influence of electrical current on transdermal flux of rolipram. Täuber U, et al. **Methods Find Exp Clin Pharmacol** 1989 Mar;11(3):227-9

PHARMACOLOGY

Hemodynamic, antiischemic, and neurohumoral effects of enoximone in patients with coronary artery disease. Mitrovic V, et al. **Am Heart J** 1989 Jan;117(1):106-11

Effect of phosphodiesterase inhibition on myocardial oxygen consumption and coronary blood flow. Baim DS. **Am J Cardiol** 1989 Jan 3;63(2):23A-26A

Renal and hormonal effects of phosphodiesterase III inhibition in congestive heart failure. Cody RJ. **Am J Cardiol** 1989 Jan 3;63(2):31A-34A

Overview of cardiovascular physiologic and pharmacologic aspects of selective phosphodiesterase peak III inhibitors. Evans DB. **Am J Cardiol** 1989 Jan 3;63(2):9A-11A (34 ref.)

Effects of phosphodiesterase inhibition on skeletal muscle vasculature. LeJemtel TH, et al. **Am J Cardiol** 1989 Jan 3;63(2):27A-30A

Electrophysiology of phosphodiesterase inhibitors. Naccarelli GV, et al. **Am J Cardiol** 1989 Jan 3;63(2):35A-40A

Pharmacological properties of the positive inotropic and alpha 1-adrenoceptor blocking agent saterinone. Armah BI, et al. **Arzneimittelforschung** 1988 Sep;38(9):1287-92

Selective inhibition of cAMP phosphodiesterase III activity by the cardiotonic agent saterinone in guinea pig myocardium. Brunkhorst D, et al. **Arzneimittelforschung** 1988 Sep;38(9):1293-8

Electrophysiologic effects of saterinone and milrinone in the isolated guinea pig myocardium. Iven H, et al. **Arzneimittelforschung** 1988 Sep;38(9):1298-302

Inhibition of uterine contractions by rolipram in vitro. Loge O. **Arzneimittelforschung** 1988 Dec;38(12):1808-10

Comparison of cyclic nucleotide phosphodiesterase isoforms from rat heart and bovine aorta. Separation and inhibition by selective reference phosphodiesterase inhibitors. Prigent AF, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3671-81

Delayed stimulation of bone resorption in vitro by phosphodiesterase inhibitors requires the presence of adenylate cyclase stimulation. Ransjö M, et al. **Bone Miner** 1988 Jan;3(3):225-34

Studies on vasoactive heterocyclic compounds. Preparation and evaluation of the hypotensive and antiaggregating activities of phthalazinol nitrates. Ito S, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2669-72

Inotropic responses to isoproterenol and phosphodiesterase inhibitors in intact guinea pig hearts: comparison of cyclic AMP levels and phosphorylation of sarcoplasmic reticulum and myofibrillar proteins. Rapundalo ST, et al. **Circ Res** 1989 Jan;64(1):104-11

Inhibition of alpha-tocopherol and calcium calmodulin-stimulated phosphodiesterase activity in vitro by anthracyclines. Nwankwoala RN, et al. **Clin Exp Pharmacol Physiol** 1988 Nov;15(11):805-14

Non-receptor-mediated inotropic drugs. Storstein L. **Eur Heart J** 1988 Jun;9 Suppl H:91-3 (0 ref.)

Attenuation of endotoxin-induced cytotoxicity and prostacyclin production in cultured bovine pulmonary artery endothelial cells by phosphodiesterase inhibition. Hussein A, et al. **Exp Lung Res** 1988;14(5):637-54

Interactions of formylmethionyl-leucyl-phenylalanine, adenosine, and phosphodiesterase inhibitors in human monocytes. Effects on superoxide release, inositol phosphates and cAMP. Elliott KR, et al. **FEBS Lett** 1989 Aug 28;254(1-2):94-8

Anti-allergic effects of milrinone and sulmazole in isolated rat lungs in comparison with theophylline. Post MJ, et al. **Int Arch Allergy Appl Immunol** 1989;89(1):1-5

Comparison of the anti-anaphylactic effects of milrinone, sulmazole and theophylline in the rat. Post MJ, et al. **Int Arch Allergy Appl Immunol** 1989;89(1):6-10

Comparison of the effects of captopril and enoximone in patients with severe heart failure: a placebo controlled double-blind study. Cowley AJ, et al. **Int J Cardiol** 1989 Sep;24(3):311-6

Phosphodiesterase isozyme inhibition, activation of the cAMP system, and positive inotropy mediated by milrinone in isolated guinea pig cardiac muscle. Silver PJ, et al. **J Cardiovasc Pharmacol** 1989 Apr;13(4):530-40

A dihydropyridine calcium channel blocker with phosphodiesterase inhibitory activity: effects on cultured vascular smooth muscle and cultured heart cells. Marsh JD, et al. **J Mol Cell Cardiol** 1988 Dec;20(12):1141-50

Effects of DN-9693, a synthesized phosphodiesterase inhibitor, on pancreatic exocrine secretion in dogs. Iwatsuki K, et al. **Jpn J Pharmacol** 1989 Jan;49(1):77-82

The effect of a selective phosphodiesterase inhibitor, rolipram, on muricide in olfactory bulbectomized rats. Mizokawa T, et al. **Jpn J Pharmacol** 1988 Nov;48(3):357-64

Relation of positive inotropic and chronotropic effects of pimobendan, UD-CG 212 Cl, milrinone and other phosphodiesterase inhibitors to phosphodiesterase III inhibition in guinea-pig heart. Brunkhorst D, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):575-83

Atrial natriuretic peptide (ANP) acts via specific binding sites on cGMP system of rat pancreatic islets without affecting insulin release. Verspohl EJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Mar; 339(3):348-53

New positive inotropic agents acting by phosphodiesterase inhibition or alpha 1-adrenergic stimulation. von der Leyen H, et al. **Pharmacol Res** 1989 Jul-Aug;21(4):329-37 (89 ref.)

Antiviral effects of phosphonoformate (PFA, foscarnet sodium). Oberg B. **Pharmacol Ther** 1989;40(2):213-85 (245 ref.)

Relaxant effects of the selective phosphodiesterase inhibitors milrinone and OPC 3911 on isolated human mesenteric vessels. Lindgren S, et al. **Pharmacol Toxicol** 1989 May; 64(5):440-5

DN 9693: a phosphodiesterase inhibitor with a platelet membrane effect. Jackson C, et al. **Thromb Haemost** 1989 Apr 25;61(2):266-9

[Hemodynamic effects of the new phosphodiesterase inhibitor enoximone in heart surgery patients] Boldt J, et al. **Anaesthesist** 1989 May;38(5):238-44 (Eng. Abstr.) **(Ger)**

[Enoximone, a new phosphodiesterase inhibitor: the spectrum of applications during heart surgery--a comparison with dobutamine] Boldt J, et al. **Herz** 1988 Oct;13(5):335-42 (Eng. Abstr.) **(Ger)**

[The mode of action and clinical applications of phosphodiesterase inhibitors as anti-platelet drugs] Murohara Y, et al. **Nippon Rinsho** 1989 Apr;47(4):935-9 **(Jpn)**

PHYSIOLOGY

Effects of milrinone and salbutamol on antigen induced arachidonic acid metabolism in the isolated rat lung. Post MJ, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2573-4

THERAPEUTIC USE

In vivo anaphylaxis in the rat: effects of phosphodiesterase inhibitors. Post MJ, et al. **Agents Actions** 1989 Jan; 26(1-2):79-81

CI-930, a new cardiotonic and vasodilating agent: hemodynamic comparison to dobutamine and long-term clinical effects. Mancini D, et al. **Am Heart J** 1988 Oct; 116(4):1008-16

A symposium: The role of phosphodiesterase III inhibitors in contemporary cardiovascular medicine. April 9, 1988, New York, New York. **Am J Cardiol** 1989 Jan 3; 63(2):1A-53A

Controlled and uncontrolled studies of phosphodiesterase III inhibitors in contemporary cardiovascular medicine. Hood WB Jr. **Am J Cardiol** 1989 Jan 3;63(2):46A-53A (84 ref.)

Effect of phosphodiesterase inhibitors on survival of patients with chronic congestive heart failure. Packer M. **Am J Cardiol** 1989 Jan 3;63(2):41A-45A

Acute hemodynamic effects of adibendan, a new phosphodiesterase inhibitor, for severe congestive heart failure. Voelker W, et al. **Am J Cardiol** 1989 Aug 1; 64(5):390-2

Long-term oral therapy of congestive heart failure with phosphodiesterase inhibitors. Wood MA, et al. **Am J Med Sci** 1989 Feb;297(2):105-13 (66 ref.)

Selective pulmonary vasodilatory effect of ZSY-27 in dogs with pulmonary hypertension due to pulmonary embolism. Tajimi K, et al. **Crit Care Med** 1989 Feb;17(2):163-5

Is phosphodiesterase inhibition a new mechanism of antidepressant action? A double blind double-dummy study between rolipram and desipramine in hospitalized major and/or endogenous depressives. Bobon D, et al. **Eur Arch Psychiatry Neurol Sci** 1988;238(1):2-6

The pyrimido-pyrimidine derivatives RA233 and RX-RA85 affect cell cycle distribution of two murine tumour cell lines. Lichtner RB, et al. **Eur J Cancer Clin Oncol** 1989 Jun;25(6):945-51

Augmentation of diastolic function with phosphodiesterase inhibition in congestive heart failure. Binkley PF, et al. **J Lab Clin Med** 1989 Sep;114(3):266-71

Phosphodiesterase inhibition by new cardiotonic agents: mechanism of action and possible clinical relevance in the therapy of congestive heart failure. von der Leyen H. **Klin Wochenschr** 1989 Jun 15;67(12):605-15 (131 ref.)

Clinical and biochemical effects of the selective phosphodiesterase inhibitor rolipram in depressed inpatients controlled by determination of plasma level. Laux G, et al. **Pharmacopsychiatry** 1988 Nov;21(6):378-9

[Treatment of acute cardiovascular failure with a new inhibitor of phosphodiesterase III (letter)] Duffet JP, et al. **Presse Med** 1989 Mar 25;18(12):638 **(Fre)**

[Phosphodiesterase inhibitors--a new therapeutic principle in heart failure] Erhardt L. **Lakartidningen** 1988 Nov 2; 85(44):3662-3 **(Swe)**

TOXICITY

Coronary vascular lesions in dogs treated with phosphodiesterase III inhibitors. Isaacs KR, et al. **Toxicol Pathol** 1989;17(1 Pt 2):153-63

PHOSPHODIESTERASES

Conversion of human erythrocyte acetylcholinesterase from an amphiphilic to a hydrophilic form by phosphatidylinositol-specific phospholipase C and serum phospholipase D. Toutant JP, et al. **Eur J Biochem** 1989 Apr 1;180(3):503-8

Dissection of chromatin structure with nucleases. Simpson RT. **Gene Amplif Anal** 1981;2:347-68 (89 ref.)

ANALYSIS

Stability of enterocytes and certain enzymatic activities in suspensions of cells from the villous tip to the crypt of Lieberkühn of the mouse small intestine. Whitt DD, et al. **Appl Environ Microbiol** 1988 Oct;54(10):2398-404

Synthesis of pyrenesulfonylamido-sphingomyelin and its use as substrate for determining sphingomyelinase activity and diagnosing Niemann-Pick disease. Klar R, et al. **Clin Chim Acta** 1988 Sep 15;176(3):259-67

Sphingomyelinase activity in the bovine and human eyes. Noda S, et al. **Ophthalmic Res** 1989;21(3):200-5

[Omega-exonuclease: an enzymatic marker for basophilic leukocytes and mast cells] Woessner S, et al. **Sangre (Barc)** 1989 Apr;34(2):151-2 (Eng. Abstr.) **(Spa)**

BIOSYNTHESIS

Selective expression of phosphodiesterase II during ovarian development in Aedes aegypti. Smith TJ, et al. **Cell Biol Int Rep** 1989 Feb;13(2):225

BLOOD

Endogenous calcium in sickle cells does not activate polyphosphoinositide phospholipase C. Rhoda MD, et al. **Biochem J** 1988 Aug 15;254(1):161-9

Levels of 5'-nucleotide phosphodiesterase isoenzymes in normal and pathological sera. Lüthje J, et al. **Clin Chim Acta** 1988 Oct 14;177(2):131-9

A new Zn2+-stimulated sphingomyelinase in fetal bovine serum. Spence MW, et al. **J Biol Chem** 1989 Apr 5; 264(10):5358-63

Receptor and G-protein-dependent regulation of turkey erythrocyte phosphoinositidase C. Downes CP, et al. **Philos Trans R Soc Lond [Biol]** 1988 Jul 26;

320(1199):267–80 (44 ref.)

DEFICIENCY

Partial sphingomyelinase deficiency with sea-blue histiocytosis and neurovisceral dysfunction. Konagaya M, et al. **Jpn J Med** 1989 Jan-Feb;28(1):85–8

[Importance of fluorescent lipid substrates for the study of hereditary lysosomal lipidoses. Application to the diagnosis of Niemann-Pick disease] Douste-Blazy L, et al. **Bull Acad Natl Med (Paris)** 1988 Jun;172(6):807–13 (Eng. Abstr.) (Fre)

DIAGNOSTIC USE

Differences in the release of 5'-nucleotidase and alkaline phosphatase from plasma membrane of several cell types by PI-PLC. Zekri M, et al. **Comp Biochem Physiol [B]** 1989;93(3):673–9

GENETICS

A Bacillus cereus cytolytic determinant, cereolysin AB, which comprises the phospholipase C and sphingomyelinase genes: nucleotide sequence and genetic linkage. Gilmore MS, et al. **J Bacteriol** 1989 Feb; 171(2):744–53

Molecular characterization and sequence of phosphatidylinositol-specific phospholipase C of Bacillus thuringiensis. Lechner M, et al. **Mol Microbiol** 1989 May; 3(5):621–6

Bacillus cereus strain SE-1: nucleotide sequence of the sphingomyelinase C gene. Johansen T, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10370

Nucleotide sequence of the ugpQ gene encoding glycerophosphoryl diester phosphodiesterase of Escherichia coli K-12. Kasahara M, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2854

IMMUNOLOGY

Recognition by cytotoxic T lymphocytes of Qa-2 antigens. Sensitivity of Qa-2 molecules to phosphatidylinositol-specific phospholipase C. Mann D, et al. **J Immunol** 1988 Sep 15;141(6):1813–8

ISOLATION & PURIFICATION

Purification of two distinct types of phosphoinositide-specific phospholipase C from rat liver. Enzymological and structural studies. Nakanishi O, et al. **Biochem J** 1988 Dec 1;256(2):453–9

The urine from patients with peritonitis as a rich source for purifying human acid sphingomyelinase and other lysosomal enzymes. Quintern LE, et al. **Biochim Biophys Acta** 1989 Jun 8;1003(2):121–4

Purification to homogeneity of human placental acid sphingomyelinase. Zou L, et al. **Biotechnol Appl Biochem** 1989 Apr;11(2):217–25

A soluble form of bovine rod photoreceptor phosphodiesterase has a novel 15-kDa subunit. Gillespie PG, et al. **J Biol Chem** 1989 Jul 25;264(21):12187–93

Purification and characterization of neutral and acid sphingomyelinases from rat brain. Maruyama EN, et al. **J Neurochem** 1989 Feb;52(2):611–8

METABOLISM

Therapeutic effects of dipolar aprotic substances on Niemann-Pick cells. Sakuragawa N, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Jun;29(3):433–40

Influence of indigenous microbiota on activities of alkaline phosphatase, phosphodiesterase I, and thymidine kinase in mouse enterocytes. Whitt DD, et al. **Appl Environ Microbiol** 1988 Oct;54(10):2405–10

Bradykinin stimulates phosphodiesteratic cleavage of phosphatidylcholine in cultured endothelial cells. Martin TW, et al. **Biochem Biophys Res Commun** 1988 Dec 30; 157(3):1271–9

Saposin D: a sphingomyelinase activator. Morimoto S, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):403–10

Solubilization of rat liver vasopressin receptors as a complex with a guanine-nucleotide-binding protein and phosphoinositide-specific phospholipase C. Aiyar N, et al. **Biochem J** 1989 Jul 1;261(1):63–70

Effect of pertussis toxin and neomycin on G-protein-regulated polyphosphoinositide phosphodiesterase. A comparison between HL60 membranes and permeabilized HL60 cells. Cockcroft S, et al. **Biochem J** 1988 Dec 1;256(2):343–50

Ca2+-induced changes in the secondary structure of a 60 kDa phosphoinositide-specific phospholipase C from bovine brain cytosol. Herrero C, et al. **Biochem J** 1988 Nov 1;255(3):807–12

Phosphatidylinositol-specific phospholipase C of Bacillus thuringiensis as a probe for the distribution of phosphatidylinositol in hepatocyte membranes. Higgins JA, et al. **Biochem J** 1989 May 1;259(3):913–6

Recognition of beta beta'-substituted and alpha beta,alpha beta'-disubstituted phosphonate analogues of bis(5'-adenosyl) tetraphosphate by the bis(5'-nucleosidyl)-tetraphosphate pyrophosphohydrolases from Artemia embryos and Escherichia coli. McLennan AG, et al. **Biochemistry** 1989 May 2;28(9):3868–75

Binding interactions between yeast tRNA ligase and a precursor transfer ribonucleic acid containing two photoreactive uridine analogues. Tanner NK, et al. **Biochemistry** 1988 Nov 29;27(24):8852–61

Regional and developmental estimations of glycerophosphorylcholine phosphodiesterase activities in rat brain. Kanfer JN, et al. **Dev Neurosci** 1989;11(1):26–9

DNA deoxyribophosphodiesterase. Franklin WA, et al. **EMBO J** 1988 Nov;7(11):3617–22

Phosphatases and phosphodiesterases interfere with 1,3-beta-D-glucan synthase activity in pea epicotyl membrane preparations. Saugy M, et al. **Eur J Biochem** 1988 Oct 15;177(1):135–8

An enzyme which specifically splits a covalent bond between picornaviral RNA and VPg. Drygin YuF, et al. **FEBS Lett** 1988 Nov 7;239(2):343–6

Glycerylphosphorylcholine diesterase activity of uterine fluid in conditions inducing secondary sex ratio change in the rat. Mitra J, et al. **Gamete Res** 1989 Aug;23(4):415–20

Kinetic analysis of the formation of inositol 1:2-cyclic phosphate in carbachol-stimulated pancreatic minilobules. Half is formed by direct phosphodiesteratic cleavage of phosphatidylinositol. Dixon JF, et al. **J Biol Chem** 1989 Jul 15;264(20):11721–4

Biochemical events associated with activation of smooth muscle contraction. Miller-Hance WC, et al. **J Biol Chem** 1988 Oct 5;263(28):13979–82

Interaction of the gamma-subunit of retinal rod outer segment phosphodiesterase with transducin. Use of synthetic peptides as functional probes. Morrison DF, et al. **J Biol Chem** 1989 Jul 15;264(20):11671–81

Strategic approaches to drug design. II. Modelling studies on phosphodiesterase substrates and inhibitors. Davis A, et al. **J Comput Aided Mol Des** 1987 Jul;1(2):97–119

Calcium dependence of the activation and inactivation kinetics of the light-activated phosphodiesterase of retinal rods. Barkdoll AE 3d, et al. **J Gen Physiol** 1989 Jun; 93(6):1091–108

Correction of sphingomyelinase deficiency in Niemann-Pick type C fibroblasts by removal of lipoprotein fraction from culture media. Thomas GH, et al. **J Inherited Metab Dis** 1989;12(2):139–51

Purification and crystallization of a dimeric form of acetylcholinesterase from Torpedo californica subsequent to solubilization with phosphatidylinositol-specific phospholipase C. Sussman JL, et al. **J Mol Biol** 1988 Oct 5;203(3):821–3

Purified rat brain microvessels exhibit both acid and neutral sphingomyelinase activities. Carré JB, et al. **J Neurochem** 1989 Apr;52(4):1294–9

Expression of calmodulin-dependent phosphodiesterase, calmodulin-dependent protein phosphatase, and other calmodulin-binding proteins in human SMS-KCNR neuroblastoma cells. Pennypacker KR, et al. **J Neurochem** 1989 May;52(5):1438–48

Phosphatidylinositol 4,5-bisphosphate phospholipase C activity in particulate preparations from rat brain. Bergers M, et al. **Lipids** 1989 Jan;24(1):13–6

Prolactin inhibits hCG-stimulated steroidogenesis and cAMP accumulation, possibly by increasing phosphodiesterase activity, in rat granulosa cell cultures. Gitay-Goren H, et al. **Mol Cell Endocrinol** 1989 Jan;61(1):69–76

Developmental changes in phosphodiesterase activity and hormonal response in the prothoracic glands of Manduca sexta. Smith WA, et al. **Mol Cell Endocrinol** 1989 May; 63(1-2):239–46

Developmental and regional quantitation of glycerophosphorylcholine phosphodiesterase activities in rat brain. Kanfer JN, et al. **Neurochem Res** 1988 Sep; 13(9):803–6

In vivo protein binding sites and nuclease hypersensitivity in the promoter region of a cell cycle regulated human H3 histone gene. Pauli U, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2333–50

Effects of medroxyprogesterone acetate (MPA) on phosphodiesterase (PDE) activity in DMBA-induced rat mammary tumours. Racca S, et al. **Pharmacol Res** 1989 Jan-Feb;21(1):101–2

G-proteins, the inositol lipid signalling pathway, and secretion. Cockcroft S, et al. **Philos Trans R Soc Lond [Biol]** 1988 Jul 26; 320(1199):247–65 (120 ref.)

The leukocyte common antigen (CD45): a putative receptor-linked protein tyrosine phosphatase. Charbonneau H, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7182–6

Somatostatin analogues inhibit growth of pancreatic cancer by stimulating tyrosine phosphatase. Liebow C, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2003–7

Somatostatin stimulates phosphodiesterase in rat anterior pituitary and brain, and GH4C1 cells. Rendón MC, et al. **Second Messengers Phosphoproteins** 1988;12(2-3):75–81

[Sphingomyelinase activity in a patient with Niemann-Pick disease] Sengers RC, et al. **Tijdschr Kindergeneeskd** 1989 Apr;57(2):70–3 (Eng. Abstr.) (Dut)

[P-chiral phosphates--the tools for studying the stereochemistry of enzymatic reactions of the transfer of phosphate or nucleotidyl groups] Niewiarowski W. **Postepy Biochem** 1988;34(1-2):81–114 (75 ref.) (Pol)

[Regulation of cellular metabolism by calmodulin-dependent enzymes] Dąbrowska A. **Postepy Hig Med Dosw** 1988 Sep-Oct;42(5):560–73 (63 ref.) (Eng. Abstr.) (Pol)

[An enzyme hydrolyzing the covalent bond between RNA and VPg of picornaviruses. Substrates and methods of analysis of activity] Drygin IuF, et al. **Biokhimiia** 1988 Aug; 53(8):1371–9 (Eng. Abstr.) (Rus)

[Change in the activity of sphingomyelinase and the level of expression of nuclear oncogenes in reversible inhibition of protein synthesis by cycloheximide] Alesenko AV, et al. **Dokl Akad Nauk SSSR** 1989;306(2):486–8 (Rus)

[Directed synthesis of 2',5'-oligoadenylates with increased stability towards phosphodiesterases] Itkes AV, et al. **Mol Biol (Mosk)** 1988 Sep-Oct;22(5):1393–8 (Eng. Abstr.) (Rus)

PHARMACOLOGY

Resynthesis of sphingomyelin from plasma-membrane phosphatidylcholine in BHK cells treated with Staphylococcus aureus sphingomyelinase. Allan D, et al. **Biochem J** 1988 Sep 15;254(3):765–71

Treatment of mouse thymus cells with phosphatidylinositol-specific phospholipase C preferentially abrogates their reactivity with autoantibodies to the Thy-1 antigen. Schlesinger M, et al. **Cell Immunol** 1989 Mar;119(1):22–9

Sphingomyelinase action inhibits phorbol ester-induced differentiation of human promyelocytic leukemic (HL-60) cells. Kolesnick RN. **J Biol Chem** 1989 May 5; 264(13):7617–23

Cell-specific heterogeneity in sensitivity of phosphatidylinositol-anchored membrane antigens to release by phospholipase C. Low MG, et al. **J Immunol Methods** 1988 Oct 4;113(1):101–11

Decreased natural killer (NK) susceptibility of human NK target cells after phosphatidylinositol-specific phospholipase C treatment. Uggla C, et al. **Scand J Immunol** 1989 Jan;29(1):83–9

URINE

Neutral sphingomyelinase from human urine. Purification and preparation of monospecific antibodies. Chatterjee S, et al. **J Biol Chem** 1989 Jul 25;264(21):12554–61

PHOSPHOENOLPYRUVATE

ANALOGS & DERIVATIVES

Stereoselective ligand interactions of chicken liver phosphoenolpyruvate carboxykinase with fluorophosphoenolpyruvate. Hwang SH, et al. **Arch Biochem Biophys** 1989 Mar;269(2):646–63

ANALYSIS

Determination of glycolytic intermediates in a flow injection system using immobilized enzymes. Simon LM, et al. **Acta Biochim Biophys Hung** 1988;23(3-4):247–54

Variation in apparent enzyme activity in two-enzyme assay systems: phosphoenolpyruvate carboxylase and malate dehydrogenase. Hatley RH, et al. **Biotechnol Appl Biochem** 1989 Aug;11(4):367–70

ISOLATION & PURIFICATION

Studies on the biosynthesis of bialaphos (SF-1293). 9. Biochemical mechanism of C-P bond formation in bialaphos: discovery of phosphoenolpyruvate phosphomutase which catalyzes the formation of phosphonopyruvate from phosphoenolpyruvate. Hidaka T, et al. **J Antibiot (Tokyo)** 1989 Mar;42(3):491–4

METABOLISM

3-Deoxy-D-manno-octulosonate-8-phosphate synthase catalyzes the C-O bond cleavage of phosphoenolpyruvate. Hedstrom L, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):816–20

Activity of phosphoenolpyruvate carboxylase of an anthracycline-producing streptomycete. Dekleva ML, et al. **Can J Microbiol** 1988 Nov;34(11):1241–6

Studies on the biosynthesis of bialaphos (SF-1293). 9. Biochemical mechanism of C-P bond formation in bialaphos: discovery of phosphoenolpyruvate phosphomutase which catalyzes the formation of phosphonopyruvate from phosphoenolpyruvate. Hidaka T, et al. **J Antibiot (Tokyo)** 1989 Mar;42(3):491–4

Identification of substrate and effector binding sites of phosphoenolpyruvate carboxylase from Crassula argentea. A possible role of phosphoenolpyruvate as substrate and activator. Rustin P, et al. **J Biol Chem** 1988 Nov 25; 263(33):17611–4

Metabolic regulation of glycolysis in sea bass (Dicentrarchus labrax L.) muscle. I. Kinetic study and characteristic modulators of pyruvate kinase. Fideu MD, et al. **Rev Esp Fisiol** 1988 Dec;44(4):381–6

PHARMACOKINETICS

[Transport of inorganic phosphoric acid and phosphoenolpyruvic acid through the erythrocyte membrane: protein chemistry of the transport activities] Hamasaki N. **Rinsho Byori** 1987 Nov;Spec No 74:47–55 (33 ref.) (Jpn)

PHARMACOLOGY

Phosphoenolpyruvate-dependent flavinylation of 6-hydroxy-D-nicotine oxidase. Nagursky H, et al. **Eur J Biochem** 1988 Nov 1;177(2):319–25

Effect of phosphoenolpyruvate and adenosine triphosphate on rabbit skeletal muscle after ischaemia: preliminary biochemical study. Khazanchi RK, et al. **Microsurgery** 1989;10(1):8–14

Phosphoenolpyruvate in the rejuvenation of stored red cells in SAGM medium: optimal conditions and the indirect effect of methemoglobin formation. Matsuyama H, et al. **Transfusion** 1989 Sep;29(7):614–9

PHOSPHOENOLPYRUVATE CARBOXYKINASES

Trypanosome glycosomal protein P60 is homologous to phosphoenolpyruvate carboxykinase (ATP). Parsons M, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6411

ANTAGONISTS & INHIBITORS

Arginine residues at the active site of avian liver phosphoenolpyruvate carboxykinase. Cheng KC, et al. **J Biol Chem** 1989 Feb 25;264(6):3317–24

BIOSYNTHESIS

Failure of glucagon to induce hepatic phosphoenolpyruvate carboxykinase in endotoxic shock. Stith RD, et al. **Circ Shock** 1988 Nov;26(3):267–72

GENETICS

Induction of renal phosphoenolpyruvate carboxykinase mRNA: suppressive effect of glucose. Pollock AS. **Am J Physiol** 1989 Jul;257(1 Pt 2):F145–51

Effects of deletions in mouse chromosome 7 on expression of genes encoding the urea-cycle enzymes and phosphoenolpyruvate carboxykinase (GTP) in liver, kidney, and intestine. Morris SM Jr, et al. **Biochem Genet** 1988 Dec;26(11–12):769–81

Acid–base regulation of renal gene expression: a role for cAMP? Mapes RE, et al. **Contrib Nephrol** 1988;63:147–55

Regulation of the expression of the phosphoenolpyruvate carboxykinase gene in cultured rat hepatocytes by glucagon and insulin. Christ B, et al. **Eur J Biochem** 1988 Dec 15; 178(2):373–9

Accumulation of carbamoylphosphate-synthetase and phosphoenolpyruvate-carboxykinase mRNA in embryonic rat hepatocytes. Evidence for translational control during the initial phases of hepatocyte-specific gene expression in vitro. van Roon MA, et al. **Eur J Biochem** 1988 Dec 1;178(1):191–6

Predominant localization of phosphoenolpyruvate carboxykinase mRNA in the periportal zone of rat liver parenchyma demonstrated by in situ hybridization. Bartels H, et al. **FEBS Lett** 1989 May 8;248(1–2):188–94

Effects of metabolic acidosis and diabetes on the abundance of specific renal mRNAs. Mapes RE, et al. **Int J Biochem** 1989;21(3):297–305

Characterization of the cAMP responsive elements from the genes for the alpha-subunit of glycoprotein hormones and phosphoenolpyruvate carboxykinase (GTP). Conserved features of nuclear protein binding between tissues and species. Bokar JA, et al. **J Biol Chem** 1988 Dec 25; 263(36):19740–7

Hormonal regulation of chimeric genes containing the phosphoenolpyruvate carboxykinase promoter regulatory region in hepatoma cells infected by murine retroviruses. Hatzoglou M, et al. **J Biol Chem** 1988 Nov 25; 263(33):17798–808

Identification of multiple protein binding domains in the promoter-regulatory region of the phosphoenolpyruvate carboxykinase (GTP) gene. Roesler WJ, et al. **J Biol Chem** 1989 Jun 5;264(16):9657–64

Hormonal and nutritional regulation of phosphoenolpyruvate carboxykinase mRNA levels in chicken kidney. Watford M. **J Nutr** 1989 Feb;119(2):319–22

Hormonal regulation of phosphoenolpyruvate carboxykinase gene expression is mediated through modulation of an already disrupted chromatin structure. Ip YT, et al. **Mol Cell Biol** 1989 Mar;9(3):1289–97

Identification of basal and cyclic AMP regulatory elements in the promoter of the phosphoenolpyruvate carboxykinase gene. Quinn PG, et al. **Mol Cell Biol** 1988 Aug;8(8):3467–75

Hormonal regulation of TSE1-repressed genes: evidence for multiple genetic controls in extinction. Thayer MJ, et al. **Mol Cell Biol** 1989 Jul;9(7):2837–46

Acute and chronic regulation of phosphoenolpyruvate carboxykinase mRNA by insulin and glucose. Kahn CR, et al. **Mol Endocrinol** 1989 May;3(5):840–5

Nucleotide sequence of the phosphoenolpyruvate carboxykinase gene from Saccharomyces cerevisiae. Stucka R, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10926

Separate cis-regulatory elements confer expression of phosphoenolpyruvate carboxykinase (GTP) gene in different cell lines. Benvenisty N, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1118–22

Coordinate regulation of two genes encoding gluconeogenic enzymes by the trans-dominant locus Tse-1. Lem J, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7302–6

[Regulation of the expression of the hepatic phosphoenolpyruvate carboxykinase gene during development and nutrition transitions] Girard J. **Journ Annu Diabetol Hotel Dieu** 1989;:161–73 (72 ref.) **(Fre)**

ISOLATION & PURIFICATION

Affinity labeling of Saccharomyces cerevisiae phosphoenolpyruvate carboxykinase with the 2',3'-dialdehyde derivative of ATP. Saavedra C, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):38–45

Phosphoenolpyruvate carboxykinase from the moderate halophile Vibrio costicola. Purification, physicochemical properties and the effect of univalent-cation salts. Salvarrey MS, et al. **Biochem J** 1989 May 15;260(1):221–30

METABOLISM

Ochratoxin A decreases the activity of phosphoenolpyruvate carboxykinase and its mRNA content in primary cultures of rat kidney proximal convoluted tubule cells. Thekkumkara TJ, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):916–20

The effect of sex hormones on the acinar distribution pattern of phosphoenolpyruvate carboxykinase activity in rat liver. Wimmer M. **Biol Chem Hoppe Seyler** 1989 Jul; 370(7):683–90

Sequential development of enzymes of gluconeogenesis and glucose synthesis in fetal goat liver. Dhanotiya RS, et al. **Biomed Biochim Acta** 1988;47(8):805–8

Sex differences of the influence of T3 on the topical distribution of phosphoenolpyruvate carboxykinase activity in the liver acinus. Wimmer M. **Histochemistry** 1989; 92(2):109–13

Cysteine 288: an essential hyperreactive thiol of cytosolic phosphoenolpyruvate carboxykinase (GTP). Lewis CT, et al. **J Biol Chem** 1989 Jan 5;264(1):27–33

A reactive cysteine in avian liver phosphoenolpyruvate carboxykinase. Makinen AL, et al. **J Biol Chem** 1989 Jul 25;264(21):12148–57

Phosphoenolpyruvate carboxykinase of rat small intestine: distribution and regulation of activity and mRNA levels. Watford M, et al. **J Nutr** 1989 Feb;119(2):268–72

Metabolic adaptation of the renal carbohydrate metabolism. I. Effects of starvation on the gluconeogenic and glycolytic fluxes in the proximal and distal renal tubules. Garcia-Salguero L, et al. **Mol Cell Biochem** 1988 Oct; 83(2):167–78

[Hormonal control of the development of hepatic gluconeogenesis in the neonate] Girard J. **Ann Endocrinol (Paris)** 1988;49(4–5):287–93 (43 ref.) (Eng. Abstr.) **(Fre)**

PHOSPHOENOLPYRUVATE CARBOXYLASE see under **CARBOXY-LYASES**

PHOSPHOENOLPYRUVATE HEXOSE PHOSPHOTRANSFERASES see **PHOSPHOENOLPYRUVATE SUGAR PHOSPHOTRANSFERASE SYSTEM**

PHOSPHOENOLPYRUVATE SUGAR PHOSPHOTRANSFERASE SYSTEM

Sequence of cloned enzyme IIN-acetylglucosamine of the phosphoenolpyruvate:N-acetylglucosamine phosphotransferase system of Escherichia coli. Peri KG, et al. **Biochemistry** 1988 Aug 9;27(16):6054–61

ANALYSIS

Bacterial proteins with N-terminal leader sequences resembling mitochondrial targeting sequences of eukaryotes. Saier MH Jr, et al. **Biochimie** 1988 Dec; 70(12):1743–8

Localization to the inner surface of the cytoplasmic membrane by immunoelectron microscopy of enzyme I of the phosphoenolpyruvate:sugar phosphotransferase system of Escherichia coli. Ghosh BK, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):849–53

BIOSYNTHESIS

Membrane incorporation and induction of secondary structure of synthetic peptides corresponding to the N-terminal signal sequences of the glucitol and mannitol permeases of Escherichia coli. Tamm LK, et al. **J Biol Chem** 1989 Feb 15;264(5):2587–92

GENETICS

Two subunits of mannose permease, II-PMan and II-MMan, of Escherichia coli mediate coliphage N4 infection. Kim K, et al. **Biochem Int** 1989 Mar;18(3):545–9

Deletion mutants of the Escherichia coli K-12 mannitol permease: dissection of transport-phosphorylation, phospho-exchange, and mannitol-binding activities. Grisafi PL, et al. **J Bacteriol** 1989 May;171(5):2719–27

Lactose transport system of Streptococcus thermophilus: a hybrid protein with homology to the melibiose carrier and enzyme III of phosphoenolpyruvate-dependent phosphotransferase systems. Poolman B, et al. **J Bacteriol** 1989 Jan;171(1):244–53

Characterization and sequence analysis of the scrA gene encoding enzyme IIScr of the Streptococcus mutans phosphoenolpyruvate-dependent sucrose phosphotransferase system. Sato Y, et al. **J Bacteriol** 1989 Jan;171(1):263–71

Nucleotide sequence of fruA, the gene specifying enzyme IIfru of the phosphoenolpyruvate-dependent sugar phosphotransferase system in Escherichia coli K12. Prior TI, et al. **J Gen Microbiol** 1988 Oct;134 (Pt 10):2757–68

The PEP: fructose phosphotransferase system in Salmonella typhimurium: FPr combines enzyme IIIFru and pseudo-HPr activities. Geerse RH, et al. **Mol Gen Genet** 1989 Apr;216(2–3):517–25

The repressor of the PEP:fructose phosphotransferase system is required for the transcription of the pps gene of Escherichia coli. Geerse RH, et al. **Mol Gen Genet** 1989 Aug;218(2):348–52

Complementation of a truncated membrane-bound Enzyme IINag from Klebsiella pneumoniae with a soluble Enzyme III in Escherichia coli K12. Vogler AP, et al. **Mol Gen Genet** 1988 Jul;213(1):175–8

Phosphoenolpyruvate:sugar phosphotransferase system of Bacillus subtilis: nucleotide sequence of ptsX, ptsH and the 5'-end of ptsI and evidence for a ptsHI operon. Gonzy-Tréboul G, et al. **Mol Microbiol** 1989 Jan; 3(1):103–12

Partial nucleotide sequence of the pts operon in Salmonella typhimurium: comparative analyses in five bacterial genera. Schnierow BJ, et al. **Mol Microbiol** 1989 Jan;3(1):113–8

Site-directed mutagenesis of the phosphocarrier protein. IIIGlc, a major signal-transducing protein in Escherichia coli. Presper KA, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4052–5

ISOLATION & PURIFICATION

Staphylococcal phosphoenolpyruvate-dependent phosphotransferase system: purification and characterization of the mannitol-specific enzyme IIImtl of Staphylococcus aureus and Staphylococcus carnosus and homology with the enzyme IImtl of Escherichia coli. Reiche B, et al. **Biochemistry** 1988 Aug 23;27(17):6512–6

METABOLISM

Bacterial phosphoenolpyruvate-dependent phosphotransferase system: mannitol-specific EII contains two phosphoryl binding sites per monomer and one high-affinity mannitol binding site per dimer. Pas HH, et al. **Biochemistry** 1988 Jul 26;27(15):5520–5

S-phosphocysteine and phosphohistidine are intermediates in the phosphoenolpyruvate-dependent mannitol transport catalyzed by Escherichia coli EIIMtl. Pas HH, et al. **Biochemistry** 1988 Aug 9;27(16):5835–9

Enzyme IIMtl of the Escherichia coli phosphoenolpyruvate-dependent phosphotransferase system: identification of the activity-linked cysteine on the mannitol carrier. Pas HH, et al. **Biochemistry** 1988 Jul 26; 27(15):5515–9

The phosphoenolpyruvate:sugar phosphotransferase system in gram-positive bacteria: properties, mechanism, and regulation. Reizer J, et al. **CRC Crit Rev Microbiol** 1988; 15(4):297–338 (250 ref.)

Correlation between depression of catabolite control of xylose metabolism and a defect in the phosphoenolpyruvate:mannose phosphotransferase system in Pediococcus halophilus. Abe K, et al. **J Bacteriol** 1989 Apr;171(4):1793–800

Concentration-dependent repression of the soluble and membrane components of the Streptococcus mutans phosphoenolpyruvate: sugar phosphotransferase system by glucose. Hamilton IR, et al. **J Bacteriol** 1989 Jun; 171(6):2942–8

Evidence for two distinct conformations of the Escherichia coli mannitol permease that are important for its transport and phosphorylation functions. Khandekar SS, et al. **J Cell Biochem** 1989 Feb;39(2):207–16

Protein phosphorylation and allosteric control of inducer exclusion and catabolite repression by the bacterial phosphoenolpyruvate: sugar phosphotransferase system. Saier MH Jr. **Microbiol Rev** 1989 Mar;53(1):109–20 (91 ref.)

The redox state and the phosphorylation state of the mannitol-specific carrier of the E. coli phosphoenolpyruvate-dependent phosphotransferase system. Robillard GT, et al. **Mol Cell Biochem** 1988 Jul-Aug;82(1–2):113–8 (19 ref.)

Suppression of IIIGlc-defects by enzymes IINag and IIBgl of the PEP:carbohydrate phosphotransferase system. Vogler AP, et al. **Mol Microbiol** 1988 Nov;2(6):719–26

PHYSIOLOGY

Enzymes II of the phosphoenolpyruvate-dependent sugar transport systems: a review of their structure and mechanism of sugar transport. Robillard GT, et al. **Biochim Biophys Acta** 1988 Oct 11;947(3):493–519 (163 ref.)

PHOSPHOFRUCTOKINASE

An infrared spectroscopic study of the interactions of carbohydrates with dried proteins. Carpenter JF, et al. **Biochemistry** 1989 May 2;28(9):3916–22

Reactivity of the thiol groups of Escherichia coli phosphofructo-1-kinase. Banas T, et al. **Biochim Biophys Acta** 1988 Nov 23;957(2):178–84

Crystal structure of unliganded phosphofructokinase from Escherichia coli. Rypniewski WR, et al. **J Mol Biol** 1989 Jun 20;207(4):805–21

ANTAGONISTS & INHIBITORS

Aurintricarboxylic acid is a potent inhibitor of

phosphofructokinase. McCune SA, et al. **Biochem J** 1989 May 1;259(3):925–7
Ordered disruption of subunit interfaces during the stepwise reversible dissociation of Escherichia coli phosphofructokinase with KSCN. Deville-Bonne D, et al. **Biochemistry** 1989 Feb 21;28(4):1917–22
Extra-pancreatic action of glibenclamide in man: reduction in vitro of the inhibitory effect of glucagon and epinephrine on the hepatic key glycolytic enzymes phosphofructokinase (PFK) and pyruvate kinase (PK). Belfiore F, et al. **Eur J Clin Invest** 1989 Aug;19(4):367–71
Phosphofructokinase in rabbit dental pulp is less sensitive to ATP inhibition. Yamazaki T, et al. **J Nihon Univ Sch Dent** 1989 Mar;31(1):366–71

BIOSYNTHESIS

Induction of rat liver 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase mRNA by refeeding and insulin. Colosia AD, et al. **J Biol Chem** 1988 Dec 15;263(35):18669–77

BLOOD

Decrease of serum buffering capacity associated with malignant neoplasms. Nakamura K, et al. **Cancer Detect Prev** 1988;13(3–4):175–87
Erythrocyte phosphofructokinase and glucose-6-phosphate dehydrogenase in thyroid disorders. Kwiatkowska D, et al. **Endokrynol Pol** 1987;38(6):449–55

DEFICIENCY

Biochemical studies of canine muscle phosphofructokinase deficiency. Giger U, et al. **Enzyme** 1988;40(1):25–9
Metabolic myopathy in canine muscle-type phosphofructokinase deficiency. Giger U, et al. **Muscle Nerve** 1988 Dec;11(12):1260–5

GENETICS

Site-directed mutagenesis at the regulatory site of fructose 6-phosphate-1-kinase from Bacillus stearothermophilus. Valdez BC, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):537–42
Characterization of distinct mRNAs coding for putative isozymes of 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase. Crepin KM, et al. **Eur J Biochem** 1989 Aug 1;183(2):433–40
The phosphofructokinase genes of yeast evolved from two duplication events. Heinisch J, et al. **Gene** 1989 May 30; 78(2):309–21
Cloning and expression of a human muscle phosphofructokinase cDNA. Sharma PM, et al. **Gene** 1989 Apr 15;77(1):177–83
Human 6-phosphofructo-1-kinase gene has an additional intron upstream of start codon. Valdez BC, et al. **Gene** 1989 Mar 15;76(1):167–9
Glucocorticoid regulation of hepatic 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase gene expression. Marker AJ, et al. **J Biol Chem** 1989 Apr 25;264(12):7000–4
A DNA polymorphism with KpnI of the human liver-type phosphofructokinase (PFKL) gene. Warren AC, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9060

ISOLATION & PURIFICATION

Molecular characterization of four forms of phosphofructokinase purified from potato tuber. Kruger NJ, et al. **Arch Biochem Biophys** 1988 Dec;267(2):690–700
Phosphofructokinase in alveolar type II cells isolated from fetal and adult rat lung. Heesbeen EC, et al. **Biochim Biophys Acta** 1989 Apr 26;1002(3):388–94
The use of separated subunits of yeast phosphofructokinase for the isolation of subunit-specific antibodies from polyclonal antisera. Kriegel T, et al. **Biomed Biochim Acta** 1988;47(7):705–11
Purification of phosphofructokinase using transition-state analogue affinity chromatography. Brooks SP, et al. **J Chromatogr** 1988 Nov 25;455:291–6

METABOLISM

Regulation of glycolytic enzymes during anoxia in the turtle Pseudemys scripta. Brooks SP, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R278–83
Glucose uptake and flux through phosphofructokinase in wounded rat skeletal muscle. Forster J, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):E788–97
In vivo regulation of phosphorylation level and activity of phosphofructokinase by serotonin in Fasciola hepatica. Kamemoto ES, et al. **Arch Biochem Biophys** 1989 Jun; 271(2):553–9
Changes in the modulations of kinetics and allosteric properties of muscle phosphofructokinase of young and old rats. Trigun SK, et al. **Arch Gerontol Geriatr** 1988 Dec; 7(4):239–47
Activation of muscle phosphofructokinase by alpha-glucose 1,6-bisphosphate and fructose 2,6-bisphosphate is differently affected by other allosteric effectors and by pH. Andrés V, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):664–9
Inositol 1,4-bisphosphate is an allosteric activator of muscle-type 6-phosphofructo-1-kinase. Mayr GW. **Biochem J** 1989 Apr 15;259(2):463–70
pH dependence of the kinetic parameters for the pyrophosphate-dependent phosphofructokinase reaction supports a proton-shuttle mechanism. Cho YK, et al. **Biochemistry** 1989 May 16;28(10):4155–60
Intermediates on the reassociation pathway of phosphofructokinase I from Escherichia coli. Teschner W, et al. **Biochemistry** 1989 Feb 21;28(4):1912–6
The sites of phosphorylation of rabbit brain phosphofructo-1-kinase by cyclic AMP-dependent protein kinase. Valaitis AP, et al. **Biochim Biophys Acta** 1989 Apr 6,995(2):187–94
Identification of the AMP binding sites of rabbit phosphofructo-1-kinase isozymes B and C. Valaitis AP, et al. **Biochim Biophys Acta** 1988 Oct 12;956(3):232–42
Effects of starvation and streptozotocin-induced diabetes on the activity of phosphofructokinase in the epithelial cells of rat colon. Khoja SM, et al. **Biochimie** 1988 Jun; 70(6):721–5
Studies on the fast reacting thiol groups in phosphofructokinase from baker's yeast. Bär J, et al. **Biomed Biochim Acta** 1988;47(8):731–6
Binding of fructose 2,6-bisphosphate to yeast phosphofructokinase. Kessler R, et al. **Biomed Biochim Acta** 1988;47(3):221–5
Physiological implications of the alteration of 6-phosphofructo-1-kinase isozyme pools during brain development and aging. Dunaway GA, et al. **Brain Res** 1988 Jul 26;456(2):310–6
Characterization of two similar differential tumor markers based on phosphofructokinase activity arising from the influence of cancer patient serum. Nakamura K, et al. **Cancer Detect Prev** 1988;13(3–4):239–50
Biochemical correlates of the structural allometry and site-specific properties of mammalian adipose tissue. Pond CM, et al. **Comp Biochem Physiol [A]** 1989;92(3):455–63
Phosphofructokinase from porcine heart, liver and erythrocytes. Koyama T, et al. **Comp Biochem Physiol [B]** 1989;93(3):517–21
Control of glucose metabolism in pancreatic beta-cells by glucokinase, hexokinase, and phosphofructokinase. Model study with cell lines derived from beta-cells. Shimizu T, et al. **Diabetes** 1988 Nov;37(11):1524–30
Stimulation by insulin of glycolysis in cultured hepatocytes is attenuated by extracellular ATP and puromycin through purine-dependent inhibition of phosphofructokinase 2 activation. Probst I, et al. **Eur J Biochem** 1989 Jun 15; 182(2):387–93
Activities of glycolytic enzymes in rapidly proliferating and differentiated C6 glioma cells. Dastidar SG, et al. **Exp Cell Biol** 1989;57(3):159–64
Alterations in lactate dehydrogenase isoenzymes and phosphofructokinase activity in the hormonally induced G-XII cell line. Malik AK, et al. **Exp Cell Biol** 1988; 56(5):264–9
Conformational modification of muscle phosphofructokinase from Jaculus orientalis upon ligand binding. Tijane M, et al. **FEBS Lett** 1989 Mar 13;245(1–2):30–4
The regulation of 6-phosphofructo-1-kinase by insulin and glucagon in isolated hepatocytes of the American eel. Foster GD, et al. **Gen Comp Endocrinol** 1989 Mar; 73(3):382–9
Glycolytic activity in embryos of Pisum sativum and of non-dormant or dormant seeds of Avena sativa L. expressed through activities of PFK and PPi-PFK. Corbineau F, et al. **Histochemistry** 1989;90(5):359–64
Influence of age on conformation of rat muscle phosphofructokinase: analysis of pH dependent kinetics and limited proteolysis of enzyme. Trigun SK, et al. **Indian J Exp Biol** 1988 Jul;26(7):532–4
Fructose-2,6-bisphosphate in rat mesenteric lymph nodes. Abuelgassim AO, et al. **Int J Biochem** 1988;20(10):1185–8
NADH shuttle enzymes and cytochrome b5 reductase in human skeletal muscle: effect of strength training. Schantz PG, et al. **J Appl Physiol** 1989 Jul;67(1):123–7
Phosphofructokinase isozyme expression during myoblast differentiation. Gekakis N, et al. **J Biol Chem** 1989 Mar 5;264(7):3658–61
The stereochemical course of phospho group transfer catalyzed by rat liver 6-phosphofructo-2-kinase. Kountz PD, et al. **J Biol Chem** 1988 Nov 5;263(31):16069–72
Phosphofructokinase from bumblebee flight muscle. Molecular and catalytic properties and role of the enzyme in regulation of the fructose 6-phosphate/fructose 1,6-bisphosphate cycle. Leite A, et al. **J Biol Chem** 1988 Nov 25;263(33):17527–33
Site-directed mutagenesis in Bacillus stearothermophilus fructose-6-phosphate 1-kinase. Mutation at the substrate-binding site affects allosteric behavior. Valdez BC, et al. **J Biol Chem** 1989 Jan 5;264(1):131–5
Regulation of binding of phosphofructokinase to myofibrils in the red and white muscle of the barred sand bass, Paralabrax nebulifer (Serranidae). Roberts SJ, et al. **J Exp Biol** 1988 Jul;137:13–27
Crystal structure of the complex of phosphofructokinase from Escherichia coli with its reaction products. Shirakihara Y, et al. **J Mol Biol** 1988 Dec 20;204(4):973–94
Phosphofructokinase in the rat nervous system: regional differences in activity and characteristics of axonal transport. Oblinger MM, et al. **J Neurosci Res** 1988 Sep; 21(1):25–34
Enzyme studies in human transitional cell carcinoma of the urinary bladder. Mitchell I, et al. **J Urol** 1989 May; 141(5):1234–7
Enzymes of glucose metabolism in cultured human gliomas: neoplasia is accompanied by altered hexokinase, phosphofructokinase, and glucose-6-phosphate dehydrogenase levels. Dominguez JE, et al. **Metab Brain Dis** 1987 Mar;2(1):17–30
Phosphofructokinase activity in fibroblasts from patients with Alzheimer's disease and age- and sex-matched controls. Sims NR, et al. **Metab Brain Dis** 1986 Mar;1(1):83–90
Metabolic adaptation of the renal carbohydrate metabolism. I. Effects of starvation on the gluconeogenic and glycolytic fluxes in the proximal and distal renal tubules. García-Salguero L, et al. **Mol Cell Biochem** 1988 Oct; 83(2):167–78
Effect of exercise on glycolytic enzymes of Zucker fatty rats. Hanissian SH, et al. **Mol Cell Biochem** 1988 Jun; 81(2):177–86
Axonal transport of choline acetyltransferase and 6-phosphofructokinase activities in genetically diabetic mice. Calcutt NA, et al. **Muscle Nerve** 1988 Dec; 11(12):1206–10 (22 ref.)
Role of coupling entropy in establishing the nature and magnitude of allosteric response. Reinhart GD, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4032–6
Regulation of glycolysis in sea bass liver: phosphofructokinase isozymes. Fideu MD, et al. **Rev Esp Fisiol** 1989 Jun;45(2):179–86
Is the phosphofructokinase-reaction obligatory for glucose fermentation by Saccharomyces cerevisiae? Heinisch J, et al. **Yeast** 1985 Dec;1(2):173–5 (26 ref.)
[Kinetic model of the action of oligomeric enzymes using phosphofructokinase as an example. II. General formulation of the hierarchical model] Cherepanov DA. **Mol Biol (Mosk)** 1988 May-Jun;22(3):822–9 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Properties of the interaction between phosphofructokinase and actin. Roberts SJ, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):284–94
Modulation of phosphofructokinase action by macromolecular interactions. Quantitative analysis of the phosphofructokinase-aldolase-calmodulin system. Orosz F, et al. **Biochim Biophys Acta** 1988 Nov 23;957(2):293–300

PHOSPHOGLUCOMUTASE

ANALYSIS

Distribution of red cell phosphoglucomutase-1 subtypes in several Mongoloid populations of East Asia. Saha N. **Am J Phys Anthropol** 1988 Sep;77(1):91–6
Isoenzyme patterns of cultured Trypanosoma cruzi: changes after prolonged subculture. Romanha AJ, et al. **Comp Biochem Physiol [B]** 1979;62(2):139–42
[Analysis of parasitic zymodemes] Myjak P. **Wiad Parazytol** 1988;34(4–6):672–8 **(Pol)**

ANTAGONISTS & INHIBITORS

Mechanism-based inactivation of rabbit muscle phosphoglucomutase by nojirimycin 6-phosphate. Kim SC, et al. **Biochemistry** 1988 Sep 20;27(19):7328–32

BLOOD

Subtyping of erythrocyte phosphoglucomutase-1 as a genetic marker for bone-marrow engraftment and hematopoietic chimerism after allogeneic bone-marrow transplantation in a patient with acute lymphoblastic leukemia. Grahovac B, et al. **Clin Chem** 1988 Dec;34(12):2586–8
Non-equilibrium pH gradient electrophoresis (NEPHGE) on ultrathin polyacrylamide gels containing separators: improved erythrocyte phosphoglucomutase (PGM) and esterase D (EsD) diagnosis in red cell lysates and bloodstains. Destro-Bisol G, et al. **Forensic Sci Int** 1989 Jul;42(1–2):43–50

GENETICS

Some red cell enzymes and haptoglobin gene frequencies in two Basque regions and León. de Pancorbo MM, et al. **Ann Hum Biol** 1989 Mar-Apr;16(2):147–54
Gene frequencies of Gc and PGM subtypes. White I, et al. **Ann Hum Biol** 1989 Mar-Apr;16(2):169–72
Subtyping of phosphoglucomutase 1 (PGM1) in microstains of different biological materials with subsequent species differentiation without further stain material consumption. Pflug W. **Electrophoresis** 1988 Aug;9(8):438–43
Phenotyping of phosphoglucomutase (PGM1) isoenzymes--a new method for the follow-up of chimerism after bone marrow transplantation. Follow-up of chimerism after bone marrow transplantation by phenotyping of phosphoglucomutase (PGM1) isoenzymes. Grahovac B, et al. **Enzyme** 1988;40(1):37–9
Immunological detection of human phosphoglucomutase (PGM 1) subtypes. Whitehouse DB, et al. **Forensic Sci Int** 1989 Apr-May;41(1–2):25–34
Red cell polymorphisms in Sardinia. Rickards O, et al. **Hum Hered** 1988;38(6):332–6
A PGM1*1A variant with a reduced activity. Suzuki K, et al. **Hum Hered** 1988;38(5):326–8
Inheritance of orange pupa and phosphoglucomutase in the mosquito Armigeres subalbatus. Tadano T, et al.

J Am Mosq Control Assoc 1987 Dec;3(4):642–3
Identification of a phosphoglucomutase 1 (PGM 1) variant in a case of murder/suicide. Franco MA, et al. J Forensic Sci 1988 Jul;33(4):1050–1
Simultaneous identification of alpha–L–fucosidase and phosphoglucomutase (PGM) subtyping in semen stains. Garg RK, et al. J Forensic Sci 1989 Mar;34(2):336–45
Phosphoglucomutase and haptoglobin phenotypes among Australian Caucasians [published erratum appears in J Forensic Sci Soc 1988 Jul–Aug;28(4):286] Lai LY, et al. J Forensic Sci Soc 1988 May–Jun;28(3):191–7
The simultaneous phenotyping of erythrocyte acid phosphatase, esterase D, phosphoglucomutase and adenosine deaminase by isoelectric focusing. Zamir A. J Forensic Sci Soc 1988 Jul–Aug;28(4):219–25
Determination of phosphoglucomutase (PGM1), acid phosphatase (ACP), and esterase D (ESD) in human bloodstains by hybrid isoelectric focusing (HIEF). Muñoz–Barús I, et al. Z Rechtsmed 1989;102(4):271–5
[Possibilities for simultaneous determination of ABO, PGM1 and Gc polymorphisms in typing of blood stains] Berghaus G, et al. Beitr Gerichtl Med 1988;46:213–7 (Eng. Abstr.) (Ger)
[PMG1(0) gene in a mother–child pair: exclusion of the paternity of 3 men based on subgroups of PMG1 enzyme polymorphism] Kósa F, et al. Morphol Igazsagugyi Orv Sz 1989 Jan;29(1):61–6 (28 ref.) (Hun)

METABOLISM

Time–dependent 31P saturation transfer in the phosphoglucomutase reaction. Characterization of the spin system for the Cd(II) enzyme and evaluation of rate constants for the transfer process. Post CB, et al. Biochemistry 1989 Jan 24;28(2):548–58
Comparison of rate constants for (PO3–) transfer by the Mg(II), Cd(II), and Li(I) forms of phosphoglucomutase. Ray WJ Jr, et al. Biochemistry 1989 Jan 24;28(2):559–69

PHOSPHOGLUCONATE DEHYDROGENASE

ANTAGONISTS & INHIBITORS

Bass liver 6–phosphogluconate dehydrogenase: inhibition by nucleoside phosphates and by fructose 1,6 bisphosphate. Medina Puerta MM, et al. Biochem Int 1988 Sep; 17(3):479–87

BLOOD

Dehydrogenase activities of the pentose phosphate pathway in erythrocytes of healthy non iron–deficient subjects. Galan P, et al. Int J Vitam Nutr Res 1989;59(1):101
Purification of human 6–phosphogluconate dehydrogenase from human haemolysate with chromatography on an immobilized dye as the essential step and use of automation. Simultaneous purification of lactate dehydrogenase. Kroviarski Y, et al. J Chromatogr 1988 Oct 7;449(2):413–22

GENETICS

Polymorphism and genetic control of erythrocyte 6–phosphogluconate dehydrogenase in the genus Cervus. Herzog S. Anim Genet 1988;19(3):291–4
Some red cell enzymes and haptoglobin gene frequencies in two Basque regions and León. de Pancorbo MM, et al. Ann Hum Biol 1989 Mar–Apr;16(2):147–54
Cloning and dosage compensation of the 6–phosphogluconate dehydrogenase gene (Pgd+) of Drosophila melanogaster. Gutierrez AG, et al. Dev Genet 1989;10(3):155–61
Inheritance of phosphogluconate and xanthine dehydrogenases in Aedes (Finlaya) togoi. Tadano T. J Am Mosq Control Assoc 1988 Dec;4(4):466–9
Fitness effects of a deletion mutation increasing transcription of the 6–phosphogluconate dehydrogenase gene in Escherichia coli. Miller RD, et al. Mol Biol Evol 1988 Nov; 5(6):691–703
Cloning and nucleotide sequence of the Salmonella typhimurium LT2 gnd gene and its homology with the corresponding sequence of Escherichia coli K12. Reeves P, et al. Mol Gen Genet 1989 May;217(1):182–4
Growth–rate–dependent regulation of 6–phosphogluconate dehydrogenase level mediated by an anti–Shine–Dalgarno sequence located within the Escherichia coli gnd structural gene. Carter–Muenchau P, et al. Proc Natl Acad Sci U S A 1989 Feb;86(4):1138–42

METABOLISM

Kinetic studies of Haemophilus influenzae 6–phosphogluconate dehydrogenase. Yoon H, et al. Biochim Biophys Acta 1989 Jan 19;994(1):75–80
Schistosoma mansoni and Schistosoma japonicum: comparison of glucose–6–phosphate dehydrogenase and 6–phosphogluconate dehydrogenase activities in adults. Smith TM, et al. Comp Biochem Physiol [B] 1977; 56(3):351–2
Dehydrogenases of the pentose phosphate pathway in rat liver peroxisomes. Antonenkov VD. Eur J Biochem 1989 Jul 15;183(1):75–82
Regulation of the pentose phosphate cycle in bass (Dicentrarchus labrax L.) liver. Medina–Puerta MM, et al. Rev Esp Fisiol 1988 Dec;44(4):433–9
[Role of disorders of pentosephosphate pathway of glucose oxidation in the pathogenesis of the arrest of fetal development in miscarriage] Kuznetsova VA, et al. Akush Ginekol (Mosk) 1989 Jun;(6):36–8 (Eng. Abstr.) (Rus)

PHOSPHOGLUCOSE ISOMERASE see **GLUCOSEPHOSPHATE ISOMERASE**

PHOSPHOGLYCERALDEHYDE DEHYDROGENASE see **GLYCERALDEHYDEPHOSPHATE DEHYDROGENASE**

PHOSPHOGLYCERATE KINASE

31P NMR studies of enzyme–bound substrate complexes of yeast 3–phosphoglycerate kinase. 2. Structure measurements using paramagnetic relaxation effects of Mn(II) and Co(II). Ray BD, et al. Biochemistry 1988 Jul 26;27(15):5579–85

ANALYSIS

NMR analysis of site–specific mutants of yeast phosphoglycerate kinase. An investigation of the triose–binding site. Fairbrother WJ, et al. Eur J Biochem 1989 Jul 15;183(1):57–67
A new cell line of murine myeloid leukemia with A–type phosphoglycerate kinase as marker isoenzyme. Kawai N, et al. Leuk Res 1988;12(11–12):911–6

DEFICIENCY

Recurrent myoglobinuria in a child with mental retardation: phosphoglycerate kinase deficiency. Sugie H, et al. J Child Neurol 1989 Apr;4(2):95–9

GENETICS

Nucleotide sequence of the phosphoglycerate kinase gene from the extreme thermophile Thermus thermophilus. Comparison of the deduced amino acid sequence with that of the mesophilic yeast phosphoglycerate kinase. Bowen D, et al. Biochem J 1988 Sep 1;254(2):509–17
Fast and easy detection of mouse sex chimeras using electrophoretic polymorphism of phosphoglycerate kinase–1, an X chromosome–linked enzyme. Nakayama H, et al. Biol Reprod 1988 Nov;39(4):923–7
Development of murine skin neoplasia studied with enzymes used as cell markers. Reddy AL, et al. Carcinog Compr Surv 1989;11:213–26 (27 ref.)
Analysis of the expression of two phosphoglycerate kinase genes in a mouse cultured cell line during activation and inactivation of the c–myc gene. Koikeda S, et al. Chem Pharm Bull (Tokyo) 1989 Apr;37(4):1103–5
Isolation and characterization of the 3–phosphoglycerate kinase gene (pgk) from the filamentous fungus Trichoderma reesei. Vanhanen S, et al. Curr Genet 1989 Mar;15(3):181–6
Site–directed mutagenesis of yeast phosphoglycerate kinase. The 'basic–patch' residue arginine 168. Walker PA, et al. Eur J Biochem 1989 Jul 15;183(1):49–55
Cloning and characterization of the Escherichia coli phosphoglycerate kinase (pgk) gene. Nellemann LJ, et al. Gene 1989 Apr 15;77(1):185–91
Molecular cloning and sequencing of a murine pgk–1 pseudogene family. Potten H, et al. Gene 1988 Nov 30; 71(2):461–71
Effect of deletions in the 5'–noncoding region on the translational efficiency of phosphoglycerate kinase mRNA in yeast. van den Heuvel JJ, et al. Gene 1989 Jun 30; 79(1):83–95
The gene for X–linked progressive mixed deafness with perilymphatic gusher during stapes surgery (DFN3) is linked to PGK. Brunner HG, et al. Hum Genet 1988 Dec; 80(4):337–40
Elevated phosphoglycerate kinase mRNA but not protein in monomorphic Trypanosoma brucei: implications for stage–regulation and post–transcriptional control. Parsons M, et al. Mol Biochem Parasitol 1989 Mar 15;33(3):215–27
Demethylation of specific sites in the 5' region of the inactive X–linked human phosphoglycerate kinase gene correlates with the appearance of nuclease sensitivity and gene expression. Hansen RS, et al. Mol Cell Biol 1988 Nov; 8(11):4692–9
Identification, molecular cloning and sequence analysis of a gene cluster encoding the class II fructose 1,6–bisphosphate aldolase, 3–phosphoglycerate kinase and a putative second glyceraldehyde 3–phosphate dehydrogenase of Escherichia coli. Alefounder PR, et al. Mol Microbiol 1989 Jun;3(6):723–32
Wheat phosphoglycerate kinase: evidence for recombination between the genes for the chloroplastic and cytosolic enzymes. Longstaff M, et al. Nucleic Acids Res 1989 Aug 25;17(16):6569–80
Sequence of the Penicillium chrysogenum phosphoglycerate kinase gene. van Solingen P, et al. Nucleic Acids Res 1988 Dec 23;16(24):11823
DNA binding factors for the CpG–rich island containing the promoter of the human X–linked PGK gene. Yang TP, et al. Somat Cell Mol Genet 1988 Sep;14(5):461–72
[The distribution of 4 genes (alpha GAL, PGK–1, HPRT and G6PD) on the X chromosome of the American mink (Mustela vison)] Zhdanova NS, et al. Genetika 1988 Aug; 24(8):1448–55 (Eng. Abstr.) (Rus)

HISTORY

Commentary on 'Uber ein phosphatübertragendes Gärungsferment'. Bücher T. Biochim Biophys Acta 1989; 1000:223–7
[A phosphate–transferring fermentation enzyme. 1948 (classical article)] Bücher T. Biochim Biophys Acta 1989; 1000:228–50 (Eng. Abstr.) (Ger)

METABOLISM

Effects of anions on the fluorescence emission of the 1–anilino–8–naphthalenesulfonate–phosphoglycerate kinase complex. Khamis MM, et al. Acta Chem Scand [B] 1988 Oct;42(9):635–9
Interaction between D–glyceraldehyde–3–phosphate dehydrogenase and 3–phosphoglycerate kinase labeled by fluorescein–5'–isothiocyanate: evidence that the dye participates in the interaction. Sukhodolets MV, et al. Biochem Biophys Res Commun 1989 May 30;161(1):187–96
Detection of intermediates in the unfolding transition of phosphoglycerate kinase using limited proteolysis. Betton JM, et al. Biochemistry 1989 Jun 27;28(13):5421–8
31P NMR magnetization–transfer measurements of flux between inorganic phosphate and adenosine 5'–triphosphate in yeast cells genetically modified to overproduce phosphoglycerate kinase. Brindle KM. Biochemistry 1988 Aug 9;27(16):6187–96
A differential scanning calorimetric study of the binding of sulfate ion and of Cibacron blue F3GA to yeast phosphoglycerate kinase. Hu CQ, et al. Biochemistry 1989 Jan 24;28(2):813–8
31P NMR studies of enzyme–bound substrate complexes of yeast 3–phosphoglycerate kinase. 1. Effects of sulfate and pH. Mg(II) affinity at the two ATP sites. Ray BD, et al. Biochemistry 1988 Jul 26;27(15):5574–8
Assignment of the heterogeneous static and time–resolved tryptophan fluorescence of 3–phosphoglycerate kinase. Dryden DT, et al. Biochim Biophys Acta 1989 Aug 31; 997(3):313–21
Correlation between enzyme activity and hinge–bending domain displacement in 3–phosphoglycerate kinase. Sinev MA, et al. Eur J Biochem 1989 Mar 1;180(1):61–6
Heat and cold denaturation of phosphoglycerate kinase (interaction of domains). Griko YuV, et al. FEBS Lett 1989 Feb 27;244(2):276–8
Association of rabbit muscle glyceraldehyde–3–phosphate dehydrogenase and 3–phosphoglycerate kinase. The biochemical and electron–microscopic evidence. Sukhodolets MV, et al. FEBS Lett 1988 Sep 26; 238(1):161–6
Protection of phosphoglycerate kinase against in vitro aging by selective cysteine methylation. Cook LL, et al. J Biol Chem 1988 Oct 5;263(28):13991–3

PHYSIOLOGY

Structure–function relationships in 3–phosphoglycerate kinase: role of the carboxy–terminal peptide. Mas MT, et al. Proteins 1988;4(1):56–62

PHOSPHOGLYCERIDES see **GLYCEROPHOSPHATES**

PHOSPHOGLYCEROMUTASE see under **PHOSPHOTRANSFERASES**

PHOSPHOHEXOSE ISOMERASE see **GLUCOSEPHOSPHATE ISOMERASE**

PHOSPHOHYDROLASES see **PHOSPHATASES**

PHOSPHOINOSITIDES

Binding of neomycin to phosphatidylinositol 4,5–bisphosphate (PIP2). Gabev E, et al. Biochim Biophys Acta 1989 Feb 13;979(1):105–12

ANALYSIS

A high–performance liquid chromatographic method for the determination of polyphosphoinositides in brain. Nakamura T, et al. Anal Biochem 1989 May 15;179(1):127–30
Metabolic and structural evidence for the existence of a third species of polyphosphoinositide in cells: D–phosphatidyl–myo–inositol 3–phosphate. Stephens L, et al. Biochem J 1989 Apr 1;259(1):267–76
Lipid analysis of the glycoinositol phospholipid membrane anchor of human erythrocyte acetylcholinesterase. Palmitoylation of inositol results in resistance to phosphatidylinositol–specific phospholipase C. Roberts WL, et al. J Biol Chem 1988 Dec 15;263(35):18766–75
Separation of liposome populations differing in phosphoinositide content by chromatography on immobilized neomycin. Riaz M, et al. J Pharm Sci 1989 Feb;78(2):172–5

ANTAGONISTS & INHIBITORS

Differential inhibitory effects of forskolin, isoproterenol, and dibutyryl cyclic adenosine monophosphate on phosphoinositide hydrolysis in canine tracheal smooth muscle. Madison JM, et al. J Clin Invest 1988 Oct; 82(4):1462–5

BIOSYNTHESIS

Lipid mediated signal transduction in the cell nucleus. Manzoli FA, et al. **Adv Enzyme Regul** 1988;27:83–91

Analysis of the regulation of phosphatidylinositol-4,5-bisphosphate synthesis by arachidonic acid in exocrine pancreas. Chaudhry A, et al. **Arch Biochem Biophys** 1989 Aug 1;272(2):488–95

Regulation of polyphosphoinositide synthesis in cardiac membranes. Quist E, et al. **Arch Biochem Biophys** 1989 May 15;271(1):21–32

Scrape-loaded p21ras down-regulates agonist-stimulated inositol phosphate production by a mechanism involving protein kinase C. Price BD, et al. **Biochem J** 1989 May 15;260(1):157–61

Evidence for the presence of phosphoinositide cycle and its involvement in cellular signal transduction in the rabbit lens. Vivekanandan S, et al. **Curr Eye Res** 1989 Jan; 8(1):101–11

Lipid phosphorylation in isolated rat liver nuclei. Synthesis of polyphosphoinositides at subnuclear level. Capitani S, et al. **FEBS Lett** 1989 Aug 28;254(1–2):194–8

Changes in the concentration and fatty acid composition of phosphoinositides induced by hormones in hepatocytes. Augert G, et al. **J Biol Chem** 1989 Feb 15;264(5):2574–80

Modulation of mitogenic stimuli by angiogenin correlates with in vitro phosphatidylinositol bisphosphate synthesis. Heath WF Jr, et al. **Proc Natl Acad Sci U S A** 1989 Apr; 86(8):2718–22

[Effect of phorbol myristate acetate (PMA) on diphosphoinositide (DPI) synthesis in rat mast cell granules] Okayama Y, et al. **Arerugi** 1989 Feb;38(2):80–5 (Eng. Abstr.) **(Jpn)**

[Effect of insulin on inositol-phospholipid metabolism in isolated rat fat cells] Kuroda Y. **Hokkaido Igaku Zasshi** 1989 Mar;64(2):195–203 (Eng. Abstr.) **(Jpn)**

BLOOD

Diacylglycerol generation and phosphoinositide turnover in human neutrophils: effects of particulate versus soluble stimuli. Burnham DN, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):345–53

Determination of the steady-state turnover rates of the metabolically active pools of phosphatidylinositol 4-phosphate and phosphatidylinositol 4,5-bisphosphate in human erythrocytes. King CE, et al. **Biochem J** 1989 May 1;259(3):893–6

Modulation of inositol phospholipid metabolism by polyamines. Smith CD, et al. **Biochem J** 1988 Nov 15; 256(1):125–30

Increased phosphoinositide breakdown by phospholipase C in erythrocyte membranes from patients with cystic fibrosis. Doughney C, et al. **Clin Chim Acta** 1989 Apr 28; 181(1):55–63

Decreased platelet phosphoinositide turnover and enhanced platelet activation in IDDM. Bastyr EJ 3d, et al. **Diabetes** 1989 Sep;38(9):1097–102

Neomycin inhibits platelet functions and inositol phospholipid metabolism upon stimulation with thrombin, but not with ionomycin or 12-O-tetradecanoyl-phorbol 13-acetate. Tysnes OB, et al. **Eur J Biochem** 1988 Oct 15; 177(1):219–23

High incorporation of [3H]inositol into phosphoinositides of human platelets during reversible electropermeabilisation. Authi KS, et al. **FEBS Lett** 1989 Aug 28;254(1–2):52–8

Increased breakdown of phosphatidylinositol 4,5-bisphosphate is not an initiating factor for actin assembly in human neutrophils. Bengtsson T, et al. **J Biol Chem** 1988 Nov 25;263(33):17385–9

Transient increase in phosphatidylinositol 3,4-bisphosphate and phosphatidylinositol trisphosphate during activation of human neutrophils. Traynor-Kaplan AE, et al. **J Biol Chem** 1989 Sep 15;264(26):15668–73

Relationship between enhanced phosphoinositide turnover and cellular responses in platelets from spontaneously hypertensive rats. Koutouzov S, et al. **J Cardiovasc Pharmacol** 1988;11 Suppl 1:S6–9

Endogenous phosphatidylinositol 4,5-bisphosphate, phosphatidylinositol, and phosphatidic acid in stimulated human platelets. Broekman MJ. **Methods Enzymol** 1989; 169:415–30

Phosphatidylinositol 4,5-bisphosphate hydrolysis in turkey erythrocytes is regulated by P2y purinoceptors. Berrie CP, et al. **Mol Pharmacol** 1989 Apr;35(4):526–32

Response to platelet-activating factor in human platelets stored and aged in plasma. Decrease in aggregation, phosphoinositide turnover, and receptor affinity. Shukla SD, et al. **Transfusion** 1989 Jul–Aug;29(6):528–33

IMMUNOLOGY

Serum monoclonal antibodies derived from patients with multiple myeloma react with mycobacterial phosphoinositides and nuclear antigens. Buskila D, et al. **Clin Exp Immunol** 1989 Jun;76(3):378–83

Changes in immunoreactivity in S-antigen-induced pinealitis. Das ND, et al. **J Pineal Res** 1989;6(1):9–16

Serodiagnostic potentialities of enzyme-linked immunosorbent assay (ELISA) using mannophosphoinositides of Mycobacterium tuberculosis H37Rv. Mehta PK, et al. **Med Microbiol Immunol (Berl)** 1988;177(5):285–92

Production and characterization of monoclonal antibodies that bind to phosphatidylinositol 4,5-bisphosphate. Miyazawa A, et al. **Mol Immunol** 1988 Oct;25(10):1025–31

Cross-reactions of nucleic acids with monoclonal antibodies to phosphatidylinositol phosphate and cholesterol. Stollar BD, et al. **Mol Immunol** 1989 Jan;26(1):73–9

ISOLATION & PURIFICATION

The identification of a novel inositol lipid, phosphatidylinositol trisphosphate (PIP3), in rat cerebrum using in vivo techniques. Vadnal RE, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):995–1001

Structural characterization of the glycoinositol phospholipid membrane anchor of human erythrocyte acetylcholinesterase by fast atom bombardment mass spectrometry. Roberts WL, et al. **J Biol Chem** 1988 Dec 15;263(35):18776–84

Phosphoinositides from human foetal brain during development. Banerjee J, et al. **J Indian Med Assoc** 1989 Jan;87(1):6–8

METABOLISM

The phosphoinositide-linked CNS muscarinic receptor. Agranoff BW, et al. **Adv Exp Med Biol** 1988;236:195–215 (53 ref.)

Regulation of phosphoinositide hydrolysis by GTP-binding proteins, phorbol esters and botulinum toxin type D. Brown JH, et al. **Adv Exp Med Biol** 1988;236:229–37

Enhancement of catecholamine release may be mediated by prostaglandin E receptor-stimulated phosphoinositide metabolism. Ito S, et al. **Adv Prostagiandin Thromboxane Leukotriene Res** 1989; 19:176–9

Bradykinin-induced activation of phospholipase A2 is independent of the activation of polyphosphoinositide-hydrolyzing phospholipase C. Kaya H, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:580–3

Histamine H1-receptors mediate phosphoinositide and calcium response in cultured smooth muscle cells--interaction with cicletanine (CIC). Lonchampt MO, et al. **Agents Actions** 1988 Jul;24(3–4):255–60

Agonist-induced calcium flux, phosphoinositide metabolism, aggregation and enzyme secretion in human neutrophils. Rossi AG, et al. **Agents Actions** 1988 Jul;24(3–4):272–82

Reduction of norepinephrine-induced tonic contraction and phosphoinositide turnover in arteries of spontaneously hypertensive rats. A possible role for protein kinase C [published erratum appears in Am J Hypertens 1989 Apr;2(4):following Table of Contents] Ek TP, et al. **Am J Hypertens** 1989 Jan;2(1):40–5

A role for phosphoinositide hydrolysis in human uterine smooth muscle during parturition. Schrey MP, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):964–70

Adenosine-sensitive phosphoinositide turnover in a newly established renal cell line. Arend LJ, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):F1067–74

Phosphoinositide metabolism and metabolism-contraction coupling in rabbit aorta. Coburn RF, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1476–83

Vasopressin stimulates phosphoinositide hydrolysis in LLC-PK1 cells. Garg LC, et al. **Am J Physiol** 1988 Oct; 255(4 Pt 1):C502–7

G protein in stimulation of PI hydrolysis by CCK in isolated rat pancreatic acinar cells. Matozaki T, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):E652–9

Interleukin 1 is a potent stimulator of islet insulin secretion and phosphoinositide hydrolysis. Zawalich WS, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E19–24

Second messenger systems and psychoactive drug action: focus on the phosphoinositide system and lithium. Baraban JM, et al. **Am J Psychiatry** 1989 Oct;146(10):1251–60 (80 ref.)

Effects of transformation by p21N-ras upon the inositol phospholipid and adenylate cyclase signaling pathways in NIH 3T3 cells. Davies SA, et al. **Ann N Y Acad Sci** 1988; 551:354–7

Activation of the inositol phospholipid signaling system by receptors for extracellular ATP in human neutrophils, monocytes, and neutrophil/monocyte progenitor cells. Dubyak GR, et al. **Ann N Y Acad Sci** 1988;551:218–37; discussion 237–8

Bidirectional cross-talk of intracellular signaling systems in splenocytes from athymic nude mice. Wiener E, et al. **Ann N Y Acad Sci** 1988;551:264–6

Phosphoinositide metabolism and hormone action. Catt KJ, et al. **Annu Rev Med** 1989;40:487–509 (78 ref.)

Neurotransmitter receptors and phosphoinositide turnover. Chuang DM. **Annu Rev Pharmacol Toxicol** 1989;29:71–110 (236 ref.)

Characterization of phospholipase C-mediated polyphosphoinositide hydrolysis in rat heart ventricles. Schwertz DW, et al. **Arch Biochem Biophys** 1989 Feb 15; 269(1):137–47

Hydrolysis of inositol lipids: an early signal of human cytomegalovirus infection. Valyi-Nagy T, et al. **Arch Virol** 1988;101(3–4):199–207

Stimulation of phospholipase C-mediated hydrolysis of phosphoinositides by endothelin in cultured rabbit aortic smooth muscle cells. Araki S, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1072–9

Guanine nucleotides stimulate hydrolysis of phosphatidyl inositol bis phosphate in human myelin membranes. Boulias C, et al. **Biochem Biophys Res Commun** 1989 Jul 14; 162(1):282–7

Differential activation of human skin cells by platelet activating factor: stimulation of phosphoinositide turnover and arachidonic acid mobilization in keratinocytes but not in fibroblasts. Fisher GJ, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1344–50

Platelet-derived growth factor (PDGF)-induced phospholipase C-mediated hydrolysis of phosphoinositides in vascular smooth muscle cells--different sensitivity of PDGF- and angiotensin II-induced phospholipase C reactions to protein kinase C-activating phorbol esters. Kawahara Y, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):846–54

Cyclic and noncyclic inositol phosphates are formed at different ratios by phospholipase C isozymes. Kim JW, et al. **Biochem Biophys Res Commun** 1989 Aug 30; 163(1):177–82

Ca2+ influx stimulated by vasopressin is mediated by phosphoinositide hydrolysis in rat smooth muscle cells. Kondo K, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):677–82

A cytosolic protein activator of cardiac sarcolemmal phosphoinositide phospholipase C. Quist EE, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):567–73

Phorbol ester dissociates endothelin-stimulated phosphoinositide hydrolysis and arachidonic acid release in vascular smooth muscle cells. Reynolds EE, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):868–73

First pharmacological characterization of TRH receptors linked to phosphoinositide hydrolysis in GH3 pituitary cells using agonist specificity of eight TRH analogs. Sharif NA, et al. **Biochem Biophys Res Commun** 1989 Jun 30; 161(3):1306–11

G-protein involvement in central-nervous-system muscarinic-receptor-coupled polyphosphoinositide hydrolysis. Chiu AS, et al. **Biochem J** 1988 Dec 15; 256(3):995–9

Carbachol and histamine stimulation of guanine-nucleotide-dependent phosphoinositide hydrolysis in rat brain cortical membranes. Claro E, et al. **Biochem J** 1989 Jul 1;261(1):29–35

Platelet-derived-growth-factor-stimulated heterogeneous polyphosphoinositide metabolism and phosphate uptake in C3H fibroblasts. Holmsen H, et al. **Biochem J** 1989 Jun 1;260(2):589–92

Herpes simplex virus-1-specific proteins are involved in alteration of polyphosphoinositide metabolism in baby-hamster kidney cells. Langeland N, et al. **Biochem J** 1989 Jul 15;261(2):683–6

Prostaglandin E2 inhibits phosphoinositide metabolism in isolated pancreatic islets. Laychock SG. **Biochem J** 1989 May 15;260(1):291–4

Transmembrane signalling at epidermal growth factor receptors overexpressed in NIH 3T3 cells. Phosphoinositide hydrolysis, cytosolic Ca2+ increase and alkalinization correlate with epidermal-growth-factor-induced cell proliferation. Pandiella A, et al. **Biochem J** 1988 Aug 15;254(1):223–8

Polyphosphoinositide breakdown and subsequent exocytosis in the Ca2+/ionophore-induced acrosome reaction of mammalian spermatozoa. Roldan ER, et al. **Biochem J** 1989 Apr 15;259(2):397–406

Polyamines inhibit phospholipase C-catalysed polyphosphoinositide hydrolysis. Studies with permeabilized GH3 cells. Wojcikiewicz RJ, et al. **Biochem J** 1988 Nov 1;255(3):1015–21

Inhibition of prostaglandin E2-induced phosphoinositide metabolism by phorbol ester in bovine adrenal chromaffin cells. Yokohama H, et al. **Biochem J** 1988 Nov 1; 255(3):957–62

Pharmacological differences between muscarinic receptors coupled to phosphoinositide turnover and those coupled to adenylate cyclase inhibition. Baumgold J, et al. **Biochem Pharmacol** 1989 May 15;38(10):1605–16

Nicotine antagonists: phosphoinositide turnover and receptor binding to determine muscarinic properties. Benerjee S, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2933–5

Muscarinic receptor coupling to inositol phospholipid metabolism in guinea-pig cerebral cortex, parotid gland and ileal smooth muscle. Ek B, et al. **Biochem Pharmacol** 1988 Dec 1;37(23):4461–7

Inhibition of inositol phospholipid synthesis and norepinephrine-stimulated hydrolysis in rat brain slices by excitatory amino acids. Jope RS, et al. **Biochem Pharmacol** 1989 Feb 15;38(4):589–96

Changes in polyphosphoinositide metabolism during mediator release from stimulated rat mast cells. Kurosawa M, et al. **Biochem Pharmacol** 1989 Feb 1;38(3):431–7

Inhibition of receptor-coupled phosphoinositide hydrolysis by sulfur-containing amino acids in rat brain slices. Li XH, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2781–7

Selective inhibition of excitatory amino acid-stimulated phosphoinositide hydrolysis in the rat hippocampus by activation of protein kinase C. Schoepp DD, et al. **Biochem Pharmacol** 1988 Nov 15;37(22):4299–305

Elevated polyphosphoinositide responsiveness and increased ornithine decarboxylase activity in the cerebral cortex induced by cholinergic denervation. Reed LJ, et al. **Biochem Soc Trans** 1988 Aug;16(4):467–8

Adsorption of cations to phosphatidylinositol 4,5-bisphosphate. Toner M, et al. **Biochemistry** 1988 Sep 20;27(19):7435-43

Differences in the metabolism of inositol and phosphoinositides by cultured cells of neuronal and glial origin. Glanville NT, et al. **Biochim Biophys Acta** 1989 Aug 8;1004(2):169-79

Stimulatory effects of atrial natriuretic factor on phosphoinositide hydrolysis in cultured bovine aortic smooth muscle cells. Hirata M, et al. **Biochim Biophys Acta** 1989 Mar 6;1010(3):346-51

Fish oil affects phosphoinositide turnover and thromboxane A metabolism in cultured vascular muscle cells. Locher R, et al. **Biochim Biophys Acta** 1989 Aug 15;1012(3):279-83

Evidence for the incorporation of [32P]orthophosphate into leaf inositol phospholipids. Wagh SS, et al. **Biochim Biophys Acta** 1988 Sep 23;962(2):178-85

Phosphoinositide metabolism and the control of cell proliferation. Whitman M, et al. **Biochim Biophys Acta** 1989 Feb;948(3):327-44 (160 ref.)

Influence of follicular maturation on luteinizing hormone and guanosine 5'-O-thiotriphosphate-promoted breakdown of phosphoinositides and calcium mobilization in chicken granulosa cells. Hertelendy F, et al. **Biol Reprod** 1989 Jun; 40(6):1144-51

Respiratory burst oxidase activation can be dissociated from phosphatidylinositol bisphosphate degradation in a cell-free system from human neutrophils. Traynor AE, et al. **Blood** 1989 Jan;73(1):296-300

Beta-adrenoceptor stimulation inhibits histamine-stimulated inositol phospholipid hydrolysis in bovine tracheal smooth muscle. Hall IP, et al. **Br J Pharmacol** 1988 Dec; 95(4):1204-12

Lasting increase in excitatory amino acid receptor-mediated polyphosphoinositide hydrolysis in the amygdala/pyriform cortex of amygdala-kindled rats. Akiyama K, et al. **Brain Res** 1989 Apr 17;485(1):95-101

Chronic septal lesions cause upregulation of cholinergic but not noradrenergic hippocampal phosphoinositide hydrolysis. Connor DJ, et al. **Brain Res** 1989 May 29; 488(1-2):387-9

Diacylglycerol modulates action potential frequency in GH3 pituitary cells: correlative biochemical and electrophysiological studies. Gammon CM, et al. **Brain Res** 1989 Feb 13;479(2):217-24

Cerebral phosphoinositide, triacylglycerol and energy metabolism during severe hypoxia and recovery. Ikeda M, et al. **Brain Res** 1988 Sep 6;459(2):344-50

Effect of in vivo exposure to hypoxia on muscarinic cholinergic receptor-coupled phosphoinositide turnover in the rat brain. Ninomiya H, et al. **Brain Res** 1989 Mar 13; 482(1):109-21

Glutamate receptors and phosphoinositide metabolism: stimulation via quisqualate receptors is inhibited by N-methyl-D-aspartate receptor activation. Palmer E, et al. **Brain Res** 1988 Sep;464(2):161-5

Colchicine-induced alterations in receptor-stimulated phosphoinositide hydrolysis in the rat hippocampus. Tandon P, et al. **Brain Res** 1989 Jan 16;477(1-2):308-13

Hippocampal kindling enhances excitatory amino acid receptor-mediated polyphosphoinositide hydrolysis in the hippocampus and amygdala/pyriform cortex. Yamada N, et al. **Brain Res** 1989 Jun 19;490(1):126-32

Postnatal changes in glutamate stimulated phosphoinositide turnover in rat neocortical synaptoneurosomes. Dudek SM, et al. **Brain Res Dev Brain Res** 1989 May 1;47(1):123-8

Serotonin as a major serum factor inducing the phospholipase C-mediated hydrolysis of phosphoinositides in normal rat kidney cells. Hamamori Y, et al. **Cancer Res** 1988 Dec 1; 48(23):6697-702

PDGF-dependent tyrosine phosphorylation stimulates production of novel polyphosphoinositides in intact cells. Auger KR, et al. **Cell** 1989 Apr 7;57(1):167-75

Mammalian phosphoinositide-specific phospholipase C isoenzymes. Crooke ST, et al. **Cell Calcium** 1989 Jul; 10(5):309-23 (75 ref.)

Enhanced phosphodiesteratic breakdown and turnover of phosphoinositides during reperfusion of ischemic rat heart. Otani H, et al. **Circ Res** 1988 Nov;63(5):930-6

Alterations in rat aortic alpha 1-adrenoceptors and alpha 1-adrenergic stimulated phosphoinositide hydrolysis in intraperitoneal sepsis. Carcillo JA, et al. **Circ Shock** 1988 Nov;26(3):331-9

Monocyte-derived interleukin 1: effects on norepinephrine-stimulated aortic contraction and phosphoinositide turnover. McKenna TM, et al. **Circ Shock** 1989 Jun;28(2):131-47

Lithium-induced teratogenesis in frog embryos prevented by a polyphosphoinositide cycle intermediate or a diacylglycerol analog. Busa WB, et al. **Dev Biol** 1989 Apr; 132(2):315-24

Effects of phosphatidic acid on islet cell phosphoinositide hydrolysis, Ca2+, and adenylate cyclase. Dunlop ME, et al. **Diabetes** 1989 Sep;38(9):1187-92

Cloned M1 muscarinic receptors mediate both adenylate cyclase inhibition and phosphoinositide turnover. Stein R, et al. **EMBO J** 1988 Oct;7(10):3031-5

Antagonism of contractants and relaxants at the level of intracellular calcium and phosphoinositide turnover in the rat uterus. Anwer K, et al. **Endocrinology** 1989 Jun; 124(6):2995-3002

Dual mechanism involved in the hydrolysis of polyphosphoinositides in rat pancreatic islets. Yamaguchi T, et al. **Endocrinology** 1989 Apr;124(4):1870-4

Interleukin-1 induces time-dependent potentiation in isolated rat islets: possible involvement of phosphoinositide hydrolysis. Zawalich WS, et al. **Endocrinology** 1989 Feb; 124(2):720-6

Interleukin-1 alpha exerts glucose-dependent stimulatory and inhibitory effects on islet cell phosphoinositide hydrolysis and insulin secretion. Zawalich WS, et al. **Endocrinology** 1989 May;124(5):2350-7

Phosphoinositide hydrolysis and insulin secretion in response to glucose stimulation are impaired in isolated rat islets by prolonged exposure to the sulfonylurea tolbutamide. Zawalich WS. **Endocrinology** 1989 Jul;125(1):281-6

Intracellular localization of inositol-phospholipid-metabolizing enzymes in rabbit fast-twitch skeletal muscle. Can D-myo-inositol 1,4,5-trisphosphate play a role in excitation-contraction coupling? Varsányi M, et al. **Eur J Biochem** 1989 Feb 1; 179(2):473-9

Differential effect on inositol-phospholipid hydrolysis, cytosolic-free Ca2+ concentration, protein kinase C activity and protein phosphorylation of 1-oleoyl-2-acetyl-sn-glycerol growth-stimulated ascites tumor cells. Seibicke S, et al. **Eur J Cell Biol** 1988 Aug; 46(3):403-10

Electroconvulsive shock and reserpine increase alpha 1-adrenoceptor binding sites but not norepinephrine-stimulated phosphoinositide hydrolysis in rat brain. Blendy JA, et al. **Eur J Pharmacol** 1988 Nov 1;156(2):267-70

Imipramine and tetrabenazine: effects on monoamine receptor binding sites and phosphoinositide hydrolysis. Butler PD, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):93-100

Lack of alterations in muscarinic receptor subtypes and phosphoinositide hydrolysis upon acute DFP treatment. Cioffi CL, et al. **Eur J Pharmacol** 1988 Oct 26;156(1):35-45

Physostigmine stimulates phosphoinositide breakdown in the rat neostriatum. Góngora JL, et al. **Eur J Pharmacol** 1988 Oct 11;155(1-2):49-55

Cholinergic stimulation of phosphoinositide hydrolysis in the rat pineal gland. Laitinen JT, et al. **Eur J Pharmacol** 1989 Feb 28;161(2-3):237-40

Evidence for a direct relationship between phosphoinositide metabolism and airway smooth muscle contraction induced by muscarinic agonists. Meurs H, et al. **Eur J Pharmacol** 1988 Nov 1;156(2):271-4

Muscarinic receptors in human airway smooth muscle are coupled to phosphoinositide metabolism. Meurs H, et al. **Eur J Pharmacol** 1989 May 19;164(2):369-71

Receptor-mediated stimulation of inositol phospholipid hydrolysis in human brain. Nicoletti F, et al. **Eur J Pharmacol** 1989 Jan 31;160(2):299-301

Selective agents for muscarinic receptors linked to phosphoinositide breakdown. Noronha-Blob L, et al. **Eur J Pharmacol** 1988 Sep 13;154(2):161-7

Increases in vascular alpha 1-adrenoceptor affinity and PI turnover in DOCA-salt hypertensive rats. Takata Y, et al. **Eur J Pharmacol** 1989 May 19;164(2):365-8

Role of phosphoinositide metabolism in functional antagonism of airway smooth muscle contraction by beta-adrenoceptor agonists. Van Amsterdam RG, et al. **Eur J Pharmacol** 1989 May 11;172(2):175-83

Angiotensin II stimulates phosphoinositide turnover in the rat myometrium. Varol FG, et al. **Eur J Pharmacol** 1989 Mar 14;162(1):37-41

GABA pretreatment enhances glutamate mediated phosphoinositide hydrolysis in neurons. Yu O, et al. **Eur J Pharmacol** 1988 Dec 6;158(1-2):179-80

Attenuation of phosphoinositidase activity and phosphatidylinositol bisphosphate level of bovine retinal capillary pericytes in high glucose. Li WY, et al. **Exp Eye Res** 1989 Jan;48(1):99-106

Guanine nucleotide-dependent, pertussis toxin-insensitive regulation of phosphoinositide turnover by bradykinin in bovine pulmonary artery endothelial cells. Voyno-Yasenetskaya TA, et al. **FASEB J** 1989 Jan; 3(1):44-51

Stimulation of polyphosphoinositide hydrolysis in Swiss 3T3 cells by recombinant fibroblast growth factors. Brown KD, et al. **FEBS Lett** 1989 Apr 24;247(2):227-31

Stimulation of phosphoinositide hydrolysis via class I antigen-specific recognition in murine cardiac tissue. Cremaschi GA, et al. **FEBS Lett** 1989 Jun 5;249(2):302-6

Phosphoinositide breakdown and superoxide anion release in formyl-peptide-stimulated human alveolar macrophages. Comparison between quiescent and activated cells. Damon M, et al. **FEBS Lett** 1988 Nov 7;239(2):169-73

Maitotoxin, a potent, general activator of phosphoinositide breakdown. Gusovsky F, et al. **FEBS Lett** 1989 Jan 30; 243(2):307-12

Sarafotoxin receptors mediate phosphoinositide hydrolysis in various rat brain regions. Kloog Y, et al. **FEBS Lett** 1989 Jan 2;242(2):387-90

Generation of phosphatidylinositol 4,5-bisphosphate proceeds through an intracellular route in rat hepatocytes. Lundberg GA, et al. **FEBS Lett** 1988 Nov 21; 240(1-2):171-6

The [Ca2+]i increase induced in murine thymocytes by extracellular ATP does not involve ATP hydrolysis and is not related to phosphoinositide metabolism. el-Moatassim C, et al. **FEBS Lett** 1989 Jan 2;242(2):391-6

Cloned rat M3 muscarinic receptors mediate phosphoinositide hydrolysis but not adenylate cyclase inhibition. Pinkas-Kramarski R, et al. **FEBS Lett** 1988 Nov 7;239(2):174-8

Guanine nucleotides stimulate hydrolysis of phosphatidylinositol and polyphosphoinositides in permeabilized Swiss 3T3 cells. Taylor CW, et al. **FEBS Lett** 1988 Sep 12;237(1-2):163-7

Coupling of viral membrane proteins to phosphatidylinositide signalling system. Weinmann-Dorsch C, et al. **FEBS Lett** 1989 Apr 24;247(2):185-8

Phosphoinositide hydrolysis in permeabilized SH-SY5Y human neuroblastoma cells is inhibited by mastoparan. Wojcikiewicz RJ, et al. **FEBS Lett** 1989 Apr 24; 247(2):341-4

Agonist-induced polyphosphoinositide breakdown in cultured human endothelial and vascular smooth muscle cells. Shirinsky VP, et al. **Health Psychol** 1988;7 Suppl:61-74

An assessment of phosphoinositide hydrolysis in antigenic signal transduction in lymphocytes. King SL. **Immunology** 1988 Sep;65(1):1-7 (76 ref.)

Stimulation of inositol phospholipid breakdown in pig brain miniprisms by carbachol and monoamines: effect of K+. Tiger G, et al. **Int J Biochem** 1989;21(2):157-63

Studies of blocking mechanisms of carbachol-induced polyphosphoinositide turnover in rat cortical synaptosomes by neuroactive drugs. Wei JW, et al. **Int J Biochem** 1989; 21(1):59-65

Long-lasting signals in mitogenesis and transformation [letter] Chiarugi V. **Int J Cancer** 1989 Sep 15;44(3):565-6

Receptor-mediated phosphoinositide hydrolysis in human ocular ciliary epithelial cells. Wax MB, et al. **Invest Ophthalmol Vis Sci** 1989 Jul;30(7):1675-9

Activation of inositol phospholipid breakdown in HL60 cells by P2-purinergic receptors for extracellular ATP. Evidence for mediation by both pertussis toxin-sensitive and pertussis toxin-insensitive mechanisms. Dubyak GR, et al. **J Biol Chem** 1988 Dec 5;263(34):18108-17

Quantitative changes in polyphosphoinositides 1,2-diacylglycerol and inositol 1,4,5-trisphosphate by platelet-derived growth factor and prostaglandin F2 alpha. Fukami K, et al. **J Biol Chem** 1989 Sep 5;264(25):14985-9

Purification of a phospholipase C from rat liver cytosol that acts on phosphatidylinositol 4,5-bisphosphate and phosphatidylinositol 4-phosphate. Fukui T, et al. **J Biol Chem** 1988 Nov 25;263(33):17730-7

Protein kinase C-mediated gonadotropin-releasing hormone receptor sequestration is associated with uncoupling of phosphoinositide hydrolysis. Huckle WR, et al. **J Biol Chem** 1989 May 25;264(15):8619-26

Bradykinin-induced activation of phospholipase A2 is independent of the activation of polyphosphoinositide-hydrolyzing phospholipase C. Kaya H, et al. **J Biol Chem** 1989 Mar 25;264(9):4972-7

Calcitonin gene-related peptide and cyclic AMP stimulate phosphoinositide turnover in skeletal muscle cells. Interaction between two second messenger systems. Laufer R, et al. **J Biol Chem** 1989 Feb 15;264(5):2683-9

Phosphatidylinositol 3-phosphate is present in normal and transformed fibroblasts and is resistant to hydrolysis by bovine brain phospholipase C II. Lips DL, et al. **J Biol Chem** 1989 May 25;264(15):8759-63

Muscarinic receptor activation of phosphatidylcholine hydrolysis. Relationship to phosphoinositide hydrolysis and diacylglycerol metabolism. Martinson EA, et al. **J Biol Chem** 1989 Sep 5;264(25):14748-54

Multiple sources of 1,2-diacylglycerol in isolated rat pancreatic acini stimulated by cholecystokinin. Involvement of phosphatidylinositol bisphosphate and phosphatidylcholine hydrolysis. Matozaki T, et al. **J Biol Chem** 1989 Sep 5;264(25):14729-34

The calcium signal for Balb/MK keratinocyte terminal differentiation induces sustained alterations in phosphoinositide metabolism without detectable protein kinase C activation. Moscat J, et al. **J Biol Chem** 1989 Jul 5;264(19):11228-35

Prostaglandin E receptors in bovine adrenal medulla are coupled to adenylate cyclase via Gi and to phosphoinositide metabolism in a pertussis toxin-insensitive manner. Negishi M, et al. **J Biol Chem** 1989 Mar 5; 264(7):3916-23

A permissive role of pertussis toxin substrate G-protein in P2-purinergic stimulation of phosphoinositide turnover and arachidonate release in FRTL-5 thyroid cells. Cooperative mechanism of signal transduction systems. Okajima F, et al. **J Biol Chem** 1989 Aug 5;264(22):13029-37

Two different G-proteins mediate neuropeptide Y and bradykinin-stimulated phospholipid breakdown in cultured rat sensory neurons. Penney TM, et al. **J Biol Chem** 1989 May 5;264(13):7317-27

Short chain alcohols activate guanine nucleotide-dependent phosphoinositidase C in turkey erythrocyte membranes. Rooney TA, et al. **J Biol Chem** 1989 Apr 25; 264(12):6817-22

Phorbol ester and neomycin dissociate bradykinin receptor-mediated arachidonic acid release and polyphosphoinositide hydrolysis in Madin-Darby canine kidney cells. Evidence that bradykinin mediates noninterdependent activation of phospholipases A2 and C. Slivka SR, et al. **J Biol Chem** 1988 Oct 15;263(29):14640-7

Muscarinic-stimulated norepinephrine release and

phosphoinositide hydrolysis in PC12 cells are independent events. Takashima A, et al. **J Biol Chem** 1989 Jun 25; 264(18):10654–9

Effect of insulin and insulin-like growth factors I and II on phosphatidylinositol and phosphatidylinositol 4,5-bisphosphate breakdown in liver from humans with and without type II diabetes. Thakker JK, et al. **J Biol Chem** 1989 May 5;264(13):7169–75

Endothelin-1 activates the phosphoinositide cascade in cultured glomerular mesangial cells. Simonson MS, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S80–3; discussion S84

The human preproendothelin-1 gene: possible regulation by endothelial phosphoinositide turnover signaling. Yanagisawa M, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S13–7; discussion S18

Evidence of an auxin-mediated phosphoinositide turnover and an inositol (1,4,5)trisphosphate effect on isolated membranes of Daucus carota L. Zbell BA, et al. **J Cell Biochem** 1989 Jul;40(3):331–40

Effects of thyrotropin-releasing hormone and gonadotropin-releasing hormone on inositol phospholipid turnover in endocrinologically inactive pituitary adenomas and prolactinomas. Levy A, et al. **J Clin Endocrinol Metab** 1989 Jul;69(1):122–6

Effect of sodium intake on phosphoinositides and inositol trisphosphate response to angiotensin II, K+ and ACTH in rat glomerulosa cells. Underwood RH, et al. **J Endocrinol** 1989 Jul;122(1):371–7

The role of phosphoinositide metabolism in signal transduction in secretory cells. Putney JW Jr. **J Exp Biol** 1988 Sep;139:135–50 (73 ref.)

The effects of coarctation hypertension upon vascular inositol phospholipid hydrolysis in Wistar rats. Ollerenshaw JD, et al. **J Hypertens** 1988 Sep;6(9):733–8

The phosphoinositide turnover of vascular smooth muscle cells is influenced by fish oil. Locher R, et al. **J Hypertens Suppl** 1988 Dec;6(4):S222–4

Stimulation of PIP2 hydrolysis by aluminum fluoride in resting T cell subsets of normal and autoimmune-prone lpr mice. Coggeshall KM, et al. **J Immunol** 1989 Aug 1; 143(3):780–6

IgE receptor-mediated hydrolysis of phosphoinositides by cytoplasts from rat basophilic leukemia cells. Dreskin SC, et al. **J Immunol** 1989 Jun 15;142(12):4407–15

Studies on molecular regulation of phagocytosis in neutrophils. Con A-mediated ingestion and associated respiratory burst independent of phosphoinositide turnover, rise in [Ca2+]i, and arachidonic acid release. Rossi F, et al. **J Immunol** 1989 Mar 1;142(5):1652–60

Arachidonic acid mobilization and phosphoinositide turnover by the terminal complement complex, C5b-9, in rat oligodendrocyte x C6 glioma cell hybrids. Shirazi Y, et al. **J Immunol** 1989 Jun 15;142(12):4385–91

GTP-dependent hydrolysis of phosphatidylinositol-4,5-bisphosphate by soluble phospholipase C from adult human epidermis. Fisher GJ, et al. **J Invest Dermatol** 1989 Jun;92(6):831–6

Agonist-induced hydrolysis of phosphoinositides and formation of 1,2-diacylglycerol in adult human keratinocytes. Talwar HS, et al. **J Invest Dermatol** 1989 Aug;93(2):241–5

Regulatory role of retinoic acid on cultured mouse keratinocyte inositol phospholipid metabolism: dose-dependent release of inositol triphosphate. Tang W, et al. **J Invest Dermatol** 1989 Jan;92(1):72–7

Characterization of avian angiotensin II cardiac receptors: coupling to mechanical activity and phosphoinositide metabolism. Baker KM, et al. **J Mol Cell Cardiol** 1989 Apr; 21(4):375–82

Regulation of phosphoinositide turnover in endothelium from human pulmonary artery, aorta and umbilical vein. Antagonistic action on the beta-adrenoceptor coupled adenylate cyclase system. Grigorian GY, et al. **J Mol Cell Cardiol** 1989 Feb;21 Suppl 1:119–23

Synergistic potentiation of polyphosphoinositide breakdown by adenylate cyclase coupled receptors in human endothelial cells. Voino-Yasenetskaya TA, et al. **J Mol Cell Cardiol** 1989 Feb;21 Suppl 1:145–9

Effect of angiotensin II and arginine vasopressin on aldosterone production and phosphoinositide turnover in rat adrenal glomerulosa cells: a comparative study. Enyedi P, et al. **J Mol Endocrinol** 1988 Sep;1(2):117–24

Bradykinin stimulates phosphoinositide metabolism and prolactin secretion in rat anterior pituitary cells. Jones TH, et al. **J Mol Endocrinol** 1989 Jan;2(1):47–53

Norepinephrine-stimulated inositol phospholipid breakdown in the rat cerebral cortex following serotoninergic lesion. Fowler CJ, et al. **J Neural Transm** 1988;73(3):205–15

Muscarinic and quisqualate receptor-induced phosphoinositide hydrolysis in primary cultures of striatal and hippocampal neurons. Evidence for differential mechanisms of activation. Ambrosini A, et al. **J Neurochem** 1989 Sep;53(3):825–33

Kinetic analysis of A23187-mediated polyphosphoinositide breakdown in rat cortical synaptosomes suggests that inositol bisphosphate does not arise primarily by degradation of inositol trisphosphate. Brammer M, et al. **J Neurochem** 1989 Aug;53(2):399–407

Bradykinin stimulates phosphoinositide hydrolysis and mobilization of arachidonic acid in dorsal root ganglion neurons. Gammon CM, et al. **J Neurochem** 1989 Jul; 53(1):95–101

In vivo determination of 5-hydroxytryptamine receptor-stimulated phosphoinositide turnover in rat brain. Hide I, et al. **J Neurochem** 1989 Aug;53(2):556–60

Chronically administered lithium alters neither myo-inositol monophosphatase activity nor phosphoinositide levels in rat brain. Honchar MP, et al. **J Neurochem** 1989 Aug; 53(2):590–4

Muscarinic receptor stimulation increases inositol-phospholipid metabolism and inhibits cyclic AMP accumulation in PC12 cells. Horwitz J. **J Neurochem** 1989 Jul;53(1):197–204

Modulation of phosphoinositide hydrolysis by NaF and aluminum in rat cortical slices. Jope RS. **J Neurochem** 1988 Dec;51(6):1731–6

Relationship of ATP turnover, polyphosphoinositide metabolism, and protein phosphorylation in sciatic nerve and derived peripheral myelin subfractions from normal and streptozotocin diabetic rats. Lowery JM, et al. **J Neurochem** 1989 Mar;52(3):921–32

Effects of oxygen depletion on norepinephrine- and carbachol-stimulated phosphoinositide turnover in rat brain slices. Ninomiya H, et al. **J Neurochem** 1989 Jul; 53(1):183–90

Comparison of excitatory amino acid-stimulated phosphoinositide hydrolysis and N-[3H]acetylaspartylglutamate binding in rat brain: selective inhibition of phosphoinositide hydrolysis by 2-amino-3-phosphonopropionate. Schoepp DD, et al. **J Neurochem** 1989 Jul;53(1):273–8

Inositol lipid metabolism in rat hippocampal formation slices: basal metabolism and effects of cholinergic agonists. Stephens LR, et al. **J Neurochem** 1989 Jan;52(1):179–86

Characterization of receptor-coupled phosphoinositide hydrolysis in the rat hippocampus after intradentate colchicine. Tandon P, et al. **J Neurochem** 1989 Oct; 53(4):1117–25

Enhancement by potassium of carbachol-stimulated inositol phospholipid breakdown in rat cerebral cortical miniprisms: comparison with other depolarising agents. Tiger G, et al. **J Neurochem** 1989 Jun;52(6):1843–53

Effects of lithium on inositol phospholipid hydrolysis and inhibition of dopamine D1 receptor-mediated cyclic AMP formation by carbachol in rat brain slices. Whitworth P, et al. **J Neurochem** 1989 Aug;53(2):536–41

Effects of ethanol on muscarinic receptor-stimulated phosphoinositide metabolism during brain development. Balduini W, et al. **J Pharmacol Exp Ther** 1989 Aug; 250(2):541–7

Platelet-activating factor-induced phosphoinositide metabolism in differentiated U-937 cells in culture. Barzaghi G, et al. **J Pharmacol Exp Ther** 1989 Feb; 248(2):559–66

Pharmacological characterization of serotonin-stimulated phosphoinositide turnover in brain regions of the immature rat. Claustre Y, et al. **J Pharmacol Exp Ther** 1988 Mar; 244(3):1051–6

Pseudo-noncompetitive antagonism of muscarinic receptor-mediated cyclic GMP formation and phosphoinositide hydrolysis by pirenzepine. el-Fakahany EE, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):934–40

Effects of osmolality on phosphoinositide hydrolysis in renal medulla. Garg LC, et al. **J Pharmacol Exp Ther** 1988 Nov; 247(2):495–501

Cholinergic stimulation of phosphoinositide hydrolysis in renal medullary collecting duct cells. McArdle S, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):682–6

Antagonism of platelet activating factor receptor binding and stimulated phosphoinositide-specific phospholipase C in rabbit platelets. Morrison WJ, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):831–5

Muscarinic receptors: relationships among phosphoinositide breakdown, adenylate cyclase inhibition, in vitro detrusor muscle contractions and in vivo cystometrogram studies in guinea pig bladder. Noronha-Blob L, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):843–51

Positive inotropic effect and phosphoinositide breakdown mediated by arachidonic acid and prostaglandin F2 alpha. Otani H, et al. **J Pharmacol Exp Ther** 1988 Mar; 244(3):844–51

Positive inotropic effect of histamine on guinea pig left atrium: H1-receptor-induced stimulation of phosphoinositide turnover. Sakuma I, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):466–72

Pharmacological characterization of the muscarinic receptors mediating phosphoinositide hydrolysis in rat myometrium. Varol FG, et al. **J Pharmacol Exp Ther** 1989 Apr; 249(1):11–5

Stimulation of phospholipase C-mediated hydrolysis of phosphoinositides by adenosine 5'-triphosphate via P2-purinoceptors in cultured rat aortic vascular smooth muscle cells. Tsuda T, et al. **Jpn Circ J** 1988 Jun;52(6):570–9

The DNA synthesis of leukemic (L2C) guinea pig B lymphocytes involves a permanent activation of protein kinase C without corresponding phosphoinositide hydrolysis. Vial HJ, et al. **Leuk Res** 1989;13(7):583–94

Calcium-mobilizing receptors, polyphosphoinositides, generation of second messengers and contraction in the mammalian iris smooth muscle: historical perspectives and current status. Abdel-Latif AA. **Life Sci** 1989;45(9):757–86 (91 ref.)

Increased vascular contractile sensitivity to serotonin in spontaneously hypertensive rats is linked with increased turnover of phosphoinositide. Huzoor-Akbar, et al. **Life Sci** 1989;45(7):577–83

Time course for labeling of brain membrane phosphoinositides and other phospholipids after intracerebral injection of [32P]-ATP. Evaluation by an improved HPTLC procedure. Sun GY, et al. **Life Sci** 1989; 44(10):689–96

Phosphatidylinositol 4,5-bisphosphate phospholipase C activity in particulate preparations from rat brain. Bergers M, et al. **Lipids** 1989 Jan;24(1):13–6

Ca2+ fluxes and phosphoinositides in hepatocytes. Blackmore PF, et al. **Methods Enzymol** 1989;173:534–45

Measurement of phosphoinositide hydrolysis in isolated cell membrane preparations. Chien MM, et al. **Methods Enzymol** 1989;168:338–47

Is there evidence of a role of the phosphoinositol-cycle in the myocardium? de Chaffoy de Courcelles D. **Mol Cell Biochem** 1989 Jun 27-Jul 24;88(1-2):65–72 (87 ref.)

Alpha-1-adrenergic stimulation of phosphoinositide breakdown in cultured neonatal rat ventricular myocytes. Meij JT, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24; 88(1-2):73–5

Acute effects of prostaglandin F2 alpha on inositol phospholipid hydrolysis in the large and small cells of the bovine corpus luteum. Davis JS, et al. **Mol Cell Endocrinol** 1988 Jul;58(1):43–50

Vasopressin induces breakdown of phosphoinositides in adrenal tumor Y-1 cells without a steroidogenic effect. Langlois D, et al. **Mol Cell Endocrinol** 1988 Aug; 58(2-3):199–205

Arginine vasopressin stimulates phosphoinositide turnover in an enriched rat Leydig cell preparation. Nielsen JR, et al. **Mol Cell Endocrinol** 1989 Feb;61(2):181–8

An analogue of creatine increases TRH-stimulated prolactin secretion and phosphoinositide hydrolysis in rat pituitary tumor cells. Prysor-Jones RA, et al. **Mol Cell Endocrinol** 1988 Aug;58(2-3):175–81

Epidermal growth factor activates phosphoinositide turnover and protein kinase C in BALB/MK keratinocytes. Moscat J, et al. **Mol Endocrinol** 1988 Sep;2(9):799–805

Relationship between delta-9-tetrahydrocannabinol-induced arachidonic acid release and secretagogue-evoked phosphoinositide breakdown and Ca2+ mobilization of exocrine pancreas. Chaudhry A, et al. **Mol Pharmacol** 1988 Oct;34(4):543–8

A phencyclidine recognition site is associated with N-methyl-D-aspartate inhibition of carbachol-stimulated phosphoinositide hydrolysis in rat cortical slices. Gonzales RA, et al. **Mol Pharmacol** 1989 Jun;35(6):787–94

Calcium-dependent effects of maitotoxin on phosphoinositide breakdown and on cyclic AMP accumulation in PC12 and NCB-20 cells. Gusovsky F, et al. **Mol Pharmacol** 1989 Jul; 36(1):44–53

Thrombin and trypsin act at the same site to stimulate phosphoinositide hydrolysis and calcium mobilization. Jones LG, et al. **Mol Pharmacol** 1989 Jul;36(1):142–9

Local anesthetics: comparison of effects on batrachotoxin-elicited sodium flux and phosphoinositide breakdown in guinea pig cerebral cortical synaptoneurosomes. Nishizawa Y, et al. **Mol Pharmacol** 1988 Nov;34(5):707–13

Effects of nBM lesions on muscarinic-stimulation of phosphoinositide hydrolysis. Raulli RE, et al. **Neurobiol Aging** 1989 Mar-Apr;10(2):191–7

Phosphoinositide turnover and calcium ion mobilization in receptor activation. Nozawa Y. **Neurochem Pathol** 1988 Jul-Dec;9:89–108

Effects of beta-phenylethylamine on polyphosphoinositide turnover in rat cerebral cortex. Dyck LE, et al. **Neurochem Res** 1989 Jan;14(1):63–7

Gonadotropin-releasing hormone-stimulated phosphoinositide hydrolysis in the anterior pituitary. Modulation by protein kinase C but not by cyclic nucleotides. Sortino MA, et al. **Neuroendocrinology** 1988 Nov;48(5):544–50

Substance P induced hydrolysis of inositol phospholipids in rat skin in an in vivo model of inflammation. Thomas KL, et al. **Neuropeptides** 1989 Apr;13(3):191–6

Phosphoinositide hydrolysis induced by depolarization and sodium channel activation in mouse cerebrocortical slices. Benuck M, et al. **Neuropharmacology** 1989 Aug; 28(8):847–54

Sodium nitroprusside and guanosine 3',5'-monophosphate (cyclic GMP) inhibit stimulated phosphoinositide hydrolysis in rat cerebral cortical slices. Ormandy GC, et al. **Neurosci Lett** 1989 May 22;100(1-3):287–91

In vivo stimulation of phosphoinositide metabolism in the brainstem of rats following osmotic stress. Moratalla R, et al. **Neuroscience** 1989;29(2):391–400

Scrape-loading of Swiss 3T3 cells with ras protein rapidly activates protein kinase C in the absence of phosphoinositide hydrolysis. Morris JD, et al. **Oncogene** 1989 Jan;4(1):27–31

NIH3T3 fibroblasts transformed by the dbl oncogene show altered expression of bradykinin receptors: effect on inositol lipid turnover. Ruggiero M, et al. **Oncogene** 1989 Jun; 4(6):767–71

The role of receptor-stimulated inositol phospholipid hydrolysis in the autonomic nervous system. Watson SP, et al. **Pharmacol Ther** 1988;38(3):387–417 (290 ref.)

Cholera toxin potentiates IgE-coupled inositol phospholipid hydrolysis and mediator secretion by RBL-2H3 cells. McCloskey MA. **Proc Natl Acad Sci U S A** 1988 Oct; 85(19):7260–4

Membrane phosphoinositide-activated signals in mast cells and basophils. Beaven MA, et al. **Prog Allergy** 1988; 42:123–84 (274 ref.)

Localization of phosphatidylinositol 4,5-diphosphate on the stereocilia of cochlear hair cells. Yanagisawa K, et al. **Prog Brain Res** 1988;74:313–7

Bradykinin and bradykinin antagonists effects on endothelial cell phosphoinositide metabolism; implications for septic shock. Nielsen TB, et al. **Prog Clin Biol Res** 1989;286:101–8

The roles of calcium and phosphoinositides in the mechanisms of alpha 1-adrenergic and other agonists. Exton JH. **Rev Physiol Biochem Pharmacol** 1988; 111:117–224 (790 ref.)

Sarafotoxin, a novel vasoconstrictor peptide: phosphoinositide hydrolysis in rat heart and brain. Kloog Y, et al. **Science** 1988 Oct 14;242(4876):268–70

T cell CD3-zeta eta heterodimer expression and coupling to phosphoinositide hydrolysis. Mercep M, et al. **Science** 1988 Oct 28;242(4878):571–4

Studies of inositol phospholipid-specific phospholipase C. Rhee SG, et al. **Science** 1989 May 5;244(4904):546–50 (45 ref.)

Human alpha-thrombin induces phosphoinositide turnover and Ca2+ movements in cultured human umbilical vein endothelial cells. Lampugnani MG, et al. **Thromb Res** 1989 Apr 1;54(1):75–87

Soman-induced convulsions affect the inositol lipid signaling system: potentiation by lithium; attenuation by atropine and diazepam. Savolainen KM, et al. **Toxicol Appl Pharmacol** 1988 Nov;96(2):305–14

Effect of a novel immunosuppressive agent, FK506, on mitogen-induced inositol phospholipid degradation in rat thymocytes. Fujii Y, et al. **Transplantation** 1989 Jun; 47(6):1081–3

A new mechanism for glutamate receptor action: phosphoinositide hydrolysis. Sladeczek F, et al. **Trends Neurosci** 1988 Dec;11(12):545–9 (46 ref.)

[Sorbitol, phosphoinositides and Na K-ATPase in the pathogenesis of diabetic complications] Greene DA, et al. **Journ Annu Diabetol Hotel Dieu** 1988;:105–17 (60 ref.) **(Fre)**

[Transduction of mitogen signal induced by the product of c-sis proto-oncogene] Ruggiero M, et al. **Medicina (Firenze)** 1988 Oct–Dec;8(4):429–31 (Eng. Abstr.) **(Ita)**

[Phosphoinositide turnover and Ca2+ mobilization during phagocytosis in cultured chick retinal pigment epithelial cells] Nakashima S, et al. **Nippon Ganka Gakkai Zasshi** 1989 Jan;93(1):149–54 (Eng. Abstr.) **(Jpn)**

[Polyphosphoinositide metabolism in temporary cerebral ischemia—the reversibility after recirculation] Kinouchi H, et al. **No To Shinkei** 1988 Dec;40(12):1173–8 (Eng. Abstr.) **(Jpn)**

[Stimulation of phosphoinositide turnover is an important but not a sole condition for activation of human T-lymphocyte proliferation by phytohemagglutinin and interleukin 2] Korichneva IL, et al. **Dokl Akad Nauk SSSR** 1989 Jan–Feb; 304(1):221–4 **(Rus)**

PHARMACOKINETICS

[Effects of pentoxifylline and propentofylline on the turnover of polyphosphoinositides of the erythrocyte membrane and on the metabolism of arachidonic acid in platelets] Rossignol L, et al. **Pathol Biol (Paris)** 1988 Oct;36(8 Pt 2):1073–5 (Eng. Abstr.) **(Fre)**

PHARMACOLOGY

Inositol lipids and phosphatidic acid inhibit cell-free activation of neutrophil NADPH oxidase. Aviram I, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):712–9

Phosphatidylinositol 4,5-bisphosphate enhances calcium release from sarcoplasmic reticulum of skeletal muscle. Kobayashi M, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1487–91

Inositol phospholipids activate plasma membrane ATPase in plants. Memon AR, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1295–301

Interaction of cerebral-cortical membranes with exogenously added phosphatidylinositol 4,5-bisphosphate. Effects on measured phospholipase C activity. Litosch I. **Biochem J** 1989 Jul 15;261(2):325–31

Phosphatidylinositol 4,5-bisphosphate competitively inhibits phorbol ester binding to protein kinase C. Chauhan A, et al. **Biochemistry** 1989 Jun 13;28(12):4952–6

Effects of phosphoinositides on calcium movements in human platelet membrane vesicles. Magócsi M, et al. **Biochim Biophys Acta** 1988 Oct 6;944(2):202–12

A novel phospholipase A2 associated with nuclear matrix: stimulation of the activity and modulation of the Ca2+ dependency by polyphosphoinositides. Tamiya-Koizumi K, et al. **Biochim Biophys Acta** 1989 Apr 3;1002(2):182–8

Inositolphospholipid-accelerated activation of prekallikrein by activated factor XII and its inhibition by beta 2-glycoprotein I. Schousboe I. **Eur J Biochem** 1988 Oct 1;176(3):629–36

Interaction of phosphatidylinositol-4-monophosphate with a low activity form of DNA polymerase alpha: a potential mechanism for enzyme activation. Sylvia VL, et al. **Int J Biochem** 1989;21(4):347–53

Gelsolin-polyphosphoinositide interaction. Full expression of gelsolin-inhibiting function by polyphosphoinositides in vesicular form and inactivation by dilution, aggregation, or masking of the inositol head group. Janmey PA, et al. **J Biol Chem** 1989 Mar 25;264(9):4825–31

Functional comparison of villin and gelsolin. Effects of Ca2+, KCl, and polyphosphoinositides. Janmey PA, et al. **J Biol Chem** 1988 Nov 15;263(32):16738–43

Functional domains of the in situ red cell membrane calcium pump revealed by proteolysis and monoclonal antibodies. Possible sites for regulation by calpain and acidic lipids. Papp B, et al. **J Biol Chem** 1989 Mar 15;264(8):4577–82

A synaptosomal protein kinase is regulated by phosphatidylinositol 4-phosphate and Mg2+. Sahyoun NE, et al. **J Biol Chem** 1989 Jan 15;264(2):1062–7

PHYSIOLOGY

Endothelin-1 induces vasoconstriction through two functionally distinct pathways in porcine coronary artery: contribution of phosphoinositide turnover. Kasuya Y, et al. **Biochem Biophys Res Commun** 1989 Jun 30; 161(3):1049–55

Stimulation of phosphoinositide signaling pathway in murine B lymphocytes by a novel guanosine analog, 7-thia-8-oxoguanosine. Parandoosh Z, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1306–11

Differential sensitivity of phosphoinositide and cyclic GMP responses to short-term regulation by a muscarinic agonist in mouse neuroblastoma cells. Correlation with down-regulation of cell surface receptors. Cioffi CL, et al. **Biochem Pharmacol** 1989 Jun 1;38(11):1827–34

Fifth Morton lecture. Phosphoinositides and metabolic control: how many messengers? Hawthorne JN. **Biochem Soc Trans** 1988 Oct;16(5):657–60 (52 ref.)

Role of G-protein-coupled phosphatidylinositide system in signal transduction in vertebrate neurons: experiments on neuroblastoma hybrid cells and ganglion cells. Brown DA, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:375–84

Role of glycosyl phosphoinositides in insulin action. Saltiel AR, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:955–63

Time-dependent potentiation of insulin release induced by alpha-ketoisocaproate and leucine in rats: possible involvement of phosphoinositide hydrolysis. Zawalich WS. **Diabetologia** 1988 Jul;31(7):435–42

Cyclic AMP-mediated alteration of the CD2 activation process in human T lymphocytes. Preferential inhibition of the phosphoinositide cycle-related transduction pathway. Bismuth G, et al. **Eur J Immunol** 1988 Sep; 18(9):1351–7

Interleukin 4 and soluble CD23 as progression factors for human B lymphocytes: analysis of their interactions with agonists of the phosphoinositide "dual pathway" of signalling. Gordon J, et al. **Eur J Immunol** 1988 Oct; 18(10):1561–5

Different tachykinin receptor subtypes are coupled to the phosphoinositide or cyclic AMP signal transduction pathways in rat submandibular cells. Laniyonu A, et al. **FEBS Lett** 1988 Nov 21;240(1-2):186–90

Fc gamma R(CD16) interaction with ligand induces Ca2+ mobilization and phosphoinositide turnover in human natural killer cells. Role of Ca2+ in Fc gamma R(CD16)-induced transcription and expression of lymphokine genes. Cassatella MA, et al. **J Exp Med** 1989 Feb 1;169(2):549–67

Stimulation of the phosphoinositide signalling system as a possible mechanism for glucocorticoid action in blood pressure control. Steiner A, et al. **J Hypertens Suppl** 1988 Dec;6(4):S366–8

Polyphosphoinositides, generation of second messengers, myosin light chain phosphorylation and contraction in rabbit iris sphincter smooth muscle. Abdel-Latif AA. **Mol Cell Biochem** 1988 Jul–Aug;82(1-2):125–30

Type-A cholecystokinin receptors in CHP212 neuroblastoma cells: evidence for association with G protein and activation of phosphoinositide hydrolysis. Barrett RW, et al. **Mol Pharmacol** 1989 Apr;35(4):394–400

An agonist that is selective for adenylate cyclase-coupled muscarinic receptors. Baumgold J, et al. **Mol Pharmacol** 1989 Sep;36(3):465–70

Inositol phosphates and cell signalling. Berridge MJ, et al. **Nature** 1989 Sep 21;341(6239):197–205 (125 ref.)

Phosphoinositides and GTP binding proteins involved in muscarinic generation of hippocampal rhythmic slow activity. Tse FW, et al. **Neurosci Lett** 1989 Jul 17; 102(1):58–63

G-proteins, the inositol lipid signalling pathway, and secretion. Cockcroft S, et al. **Philos Trans R Soc Lond [Biol]** 1988 Jul 26; 320(1199):247–65 (120 ref.)

The function of glycosyl phosphoinositides in hormone action. Saltiel AR, et al. **Philos Trans R Soc Lond [Biol]** 1988 Jul 26; 320(1199):345–58 (88 ref.)

Antibody to phosphatidylinositol 4,5-bisphosphate inhibits oncogene-induced mitogenesis. Fukami K, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9057–61

Role of inositol lipid second messengers in regulation of secretion: studies of thyrotropin-releasing hormone action in pituitary cells. Gershengorn MC. **Soc Gen Physiol Ser** 1989;44:1–15

[Phosphoinositides as a second cellular messenger] Lukaszek B, et al. **Postepy Hig Med Dosw** 1988 May–Jun;42(3):339–51 (46 ref.) (Eng. Abstr.) **(Pol)**

RADIATION EFFECTS

Light-induced phosphoinositide degradation and light-induced structural alterations in the rat retina are enhanced after chronic lithium treatment. Pfeilschifter J, et al. **Biochem Biophys Res Commun** 1988 Nov 15; 156(3):1111–9

[The action of laser radiation on the phosphoinositide cycle and calcium absorption in the squid neural trunk] Trofimov VA, et al. **Biol Nauki** 1988;(9):26–8 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Protective immunity to experimental tuberculosis by mannophosphoinositides of mycobacteria. Mehta PK, et al. **Med Microbiol Immunol (Berl)** 1988;177(5):265–84

PHOSPHO-2-KETO-3-DEOXY-HEPTONATE ALDOLASE see under **ALDEHYDE-LYASES**

PHOSPHOLINE IODIDE see **ECHOTHIOPHATE IODIDE**

PHOSPHOLIPASE C

High-resolution (1.5 A) crystal structure of phospholipase C from Bacillus cereus. Hough E, et al. **Nature** 1989 Mar 23;338(6213):357–60

Phospholipase C sensitive FVII activity and FVII antigen in hypertriglyceridemia. Carvalho de Sousa J, et al. **Nouv Rev Fr Hematol** 1989;31(1):13–5

ANALYSIS

Phospholipase C. Little C. **Biochem Soc Trans** 1989 Apr; 17(2):271–3

The dopamine-1 agonist, SKF 82526, stimulates phospholipase-C activity independent of adenylate cyclase. Felder CC, et al. **J Pharmacol Exp Ther** 1989 Jan; 248(1):171–5

Assay methods for alpha toxin from Clostridium perfringens: phospholipase C. Jolivet-Reynaud C, et al. **Methods Enzymol** 1988;165:293–7

Muscarinic receptor regulation of cytoplasmic Ca2+ concentrations in human SK-N-SH neuroblastoma cells: Ca2+ requirements for phospholipase C activation. Fisher SK, et al. **Mol Pharmacol** 1989 Feb;35(2):195–204

ANTAGONISTS & INHIBITORS

Inhibition of phospholipase C dependent processes by U-73, 122. Bleasdale JE, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:590–3

Interruption of TPA-induced signals by an antiviral and antitumoral xanthate compound: inhibition of a phospholipase C-type reaction. Müller-Decker K. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):198–205

Polyamines inhibit phospholipase C-catalysed polyphosphoinositide hydrolysis. Studies with permeabilized GH3 cells. Wojcikiewicz RJ, et al. **Biochem J** 1988 Nov 1;255(3):1015–21

Antagonism of platelet activating factor receptor binding and stimulated phosphoinositide-specific phospholipase C in rabbit platelets. Morrison WJ, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):831–5

[Indirect action of nonsteroidal anti-inflammatory agents by inhibition of phospholipase C] Hirschelmann R, et al. **Pharmazie** 1989 Jan;44(1):71–2 **(Ger)**

BIOSYNTHESIS

Alcohol-induced stimulation of phospholipase C in human platelets requires G-protein activation. Rubin R, et al. **Biochem J** 1988 Aug 15;254(1):147–53

Choline and betaine as inducer agents of Pseudomonas aeruginosa phospholipase C activity in high phosphate medium. Lucchesi GI, et al. **FEMS Microbiol Lett** 1989 Feb;48(3):335–8

Synthesis and secretion of phospholipase C by oral spirochetes. Siboo R, et al. **J Clin Microbiol** 1989 Mar; 27(3):568–70

BLOOD

Relationship of inositol phospholipid metabolism to phospholipase A2. Lapetina EG, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:568–73

Role of GTP-binding proteins in phospholipase C activation in human platelet membranes. Nozawa Y, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:564–7

Plasma membrane associated phospholipase C from human platelets: synergistic stimulation of phosphatidylinositol 4,5-bisphosphate hydrolysis by thrombin and guanosine 5'-O-(3-thiotriphosphate). Baldassare JJ, et al. **Biochemistry** 1989 Jan 10;28(1):56–60

Isolation and characterization of one soluble and two

membrane-associated forms of phosphoinositide-specific phospholipase C from human platelets. Baldassare JJ, et al. **Biochemistry** 1989 Jul 11;28(14):6010-6

Increased phosphoinositide breakdown by phospholipase C in erythrocyte membranes from patients with cystic fibrosis. Doughney C, et al. **Clin Chim Acta** 1989 Apr 28; 181(1):55-63

Subcellular localization and kinetic properties of phosphatidylinositol 4,5-bisphosphate phospholipase C and inositol phosphate enzymes from human peripheral blood mononuclear cells. Graber R, et al. **Enzyme** 1989; 41(1):17-26

Elevated phospholipase C and Na+-H+ exchange activity in spontaneously hypertensive rats [letter] Ek TP, et al. **Hypertension** 1988 Sep;12(3):331-2

Calcium-requirement and its pH dependency of lysophosphoinositide-specific phospholipase C in porcine platelet membranes. Murase S, et al. **J Biochem (Tokyo)** 1988 Aug;104(2):270-5

Modification of AlF-4- and receptor-stimulated phospholipase C activity by G-protein beta gamma subunits. Boyer JL, et al. **J Biol Chem** 1989 Aug 15; 264(23):13917-22

Kinetics of activation of phospholipase C by P2Y purinergic receptor agonists and guanine nucleotides. Boyer JL, et al. **J Biol Chem** 1989 Jan 15;264(2):884-90

Staurosporine potentiates platelet activating factor stimulated phospholipase C activity in rabbit platelets but does not block desensitization by platelet activating factor. Morrison WJ, et al. **Life Sci** 1989;45(4):333-9

Desensitization of platelet-activating factor-stimulated protein phosphorylation in platelets. Shukla SD, et al. **Mol Pharmacol** 1989 Apr;35(4):409-13

Regulation of platelet phospholipase C. Rittenhouse SE, et al. **Philos Trans R Soc Lond [Biol]** 1988 Jul 26; 320(1199):299-311 (47 ref.)

Platelet activating factor receptor occupancy in relation to activation and desensitization of phosphoinositide specific phospholipase C. Shukla SD, et al. **Prog Clin Biol Res** 1988; 283:341-4

Characterization of GTP-gamma-S binding to isolated human platelet plasma membranes and its relationship with the stimulation of a phospholipase C activity. Apitz-Castro R, et al. **Thromb Res** 1989 Sep 15;55(6):747-56

CLASSIFICATION

[Heterogeneity of phosphoinositide-specific phospholipase C] Homma Y. **Seikagaku** 1988 Nov;60(11):1284-90 **(Jpn)**

GENETICS

Mitogenic signals for thrombin in mesangial cells: regulation of phospholipase C and PDGF genes. Shultz PJ, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):F366-74

Cloning and sequencing of a phospholipase C gene of Clostridium perfringens. Okabe A, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):33-9

Phospholipase C-148: chromosomal location and deletion mapping of functional domains. Bristol A, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:915-20

Characterization of p47gag-crk, a novel oncogene product with sequence similarity to a putative modulatory domain of protein-tyrosine kinases and phospholipase C. Mayer BJ, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:907-14

Complete cDNA encoding a putative phospholipase C from transformed human lymphocytes. Ohta S, et al. **FEBS Lett** 1988 Dec 19;242(1):31-5

Mutations in the hemolytic-phospholipase C operon result in decreased virulence of Pseudomonas aeruginosa PAO1 grown under phosphate-limiting conditions. Ostroff RM, et al. **Infect Immun** 1989 May;57(5):1369-73

Molecular cloning and nucleotide sequence of the alpha-toxin (phospholipase C) of Clostridium perfringens. Titball RW, et al. **Infect Immun** 1989 Feb;57(2):367-76

Cloning and expression of the phospholipase C gene from Clostridium perfringens and Clostridium bifermentans. Tso JY, et al. **Infect Immun** 1989 Feb;57(2):468-76

A Bacillus cereus cytolytic determinant, cereolysin AB, which comprises the phospholipase C and sphingomyelinase genes: nucleotide sequence and genetic linkage. Gilmore MS, et al. **J Bacteriol** 1989 Feb; 171(2):744-53

Sequence and expression of the glycosyl-phosphatidylinositol-specific phospholipase C of Trypanosoma brucei. Carrington M, et al. **Mol Biochem Parasitol** 1989 Mar 15;33(3):289-96

Similarity between phospholipase C and the regulatory domain of protein kinase C. Baker ME. **Mol Cell Endocrinol** 1989 Jan;61(1):129-31

Phospholipase C and haemolytic activities of Clostridium perfringens alpha-toxin cloned in Escherichia coli: sequence and homology with a Bacillus cereus phospholipase C. Leslie D, et al. **Mol Microbiol** 1989 Mar; 3(3):383-92

Sequence of the Bacillus thuringiensis phosphatidylinositol specific phospholipase C. Henner DJ, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10383

cDNA encoding the glycosyl-phosphatidylinositol-specific phospholipase C of Trypanosoma brucei. Hereld D, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):8914-8

Brain phospholipase C isozymes: differential mRNA localizations by in situ hybridization. Ross CA, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2923-7

IMMUNOLOGY

Monoclonal antibodies to three phospholipase C isozymes from bovine brain. Suh PG, et al. **J Biol Chem** 1988 Oct 5;263(28):14497-504

ISOLATION & PURIFICATION

Primary structure of PLC-154. Katan M, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:921-6

A novel inositol-phospholipid-specific phospholipase C. Rapid purification and characterization. Meldrum E, et al. **Eur J Biochem** 1989 Jul 1;182(3):673-7

Partial purification and characterization of phospholipase C from Yersinia enterocolitica. Toora S, et al. **J Appl Bacteriol** 1989 Apr;66(4):303-9

Purification and partial amino acid sequences of a phospholipase C-associated GTP-binding protein from calf thymocytes. Wang P, et al. **J Biochem (Tokyo)** 1989 Mar; 105(3):461-6

Purification of a phospholipase C from rat liver cytosol that acts on phosphatidylinositol 4,5-bisphosphate and phosphatidylinositol 4-phosphate. Fukui T, et al. **J Biol Chem** 1988 Nov 25;263(33):17730-7

Phosphatidylinositol-specific phospholipase C from Bacillus cereus: improved purification, amino acid composition, and amino-terminal sequence. Volwerk JJ, et al. **J Cell Biochem** 1989 Mar;39(3):315-25

A phospholipase C from the Dallas 1E strain of Legionella pneumophila serogroup 5: purification and characterization of conditions for optimal activity with an artificial substrate. Baine WB. **J Gen Microbiol** 1988 Feb;134 (Pt 2):489-98

Biological properties of phospholipase C purified from a fleecerot isolate of Pseudomonas aeruginosa. Chin JC, et al. **J Gen Microbiol** 1988 Sep;134 (Pt 9):2567-75

Purification of alpha toxin from Clostridium perfringens: phospholipase C. Jolivet-Reynaud C, et al. **Methods Enzymol** 1988;165:91-4

[Isolation and purification of phospholipase C from Clostridium perfringens and antibodies against it using polymeric biospecific adsorbents] Shemanova GF, et al. **Prikl Biokhim Mikrobiol** 1988 May-Jun;24(3):305-9 (Eng. Abstr.) **(Rus)**

METABOLISM

Ras oncogenes and phospholipase C. Gorman RR, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:407-10

Bradykinin-induced activation of phospholipase A2 is independent of the activation of polyphosphoinositide-hydrolyzing phospholipase C. Kaya H, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:580-3

Characterization of phospholipase C activity of the plasma membrane and cytosol of an osteoblast-like cell line. Suzuki Y, et al. **Am J Med Sci** 1989 Mar;297(3):135-44

GTP gamma S loading of endothelial cells stimulates phospholipase C and uncouples ATP receptors. Brock TA, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):C667-73

Phospholipase C activation by prostaglandins and thromboxane A2 in cultured mesangial cells. Mené P, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):F1059-69

Relationship of GTP-binding proteins, phospholipase C, and PGE2 synthesis in rat glomerular mesangial cells. Schlondorff D, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):F171-8

Oxidants and conductance of cultured epithelial cell monolayers: inositol phospholipid hydrolysis. Shasby DM, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C781-8

Regulation of phospholipase A2 and phospholipase C in rod outer segments of bovine retina involves a common GTP-binding protein but different mechanisms of action. Jelsema CL. **Ann N Y Acad Sci** 1989;559:158-77

The relationship between phospholipases A2 and C in signal transduction. Lapetina EG, et al. **Ann N Y Acad Sci** 1989; 559:153-7 (17 ref.)

Stimulation of phosphatidylinositol 4,5-bisphosphate phosphodiesterase C activity by phosphatidic acid. Jackowski S, et al. **Arch Biochem Biophys** 1989 Feb 1;268(2):516-24

Degradation of arachidonyl phospholipids catalyzed by two phospholipases A2 and phospholipase C in a lipopolysaccharide-treated macrophage cell line RAW264.7. Tanaka Y, et al. **Arch Biochem Biophys** 1989 Jul;272(1):210-8

Phospholipase C activity in human placental membrane. Matsuda T, et al. **Arch Gynecol Obstet** 1989;246(1):27-33

Stimulation of phospholipase C-mediated hydrolysis of phosphoinositides by endothelin in cultured rabbit aortic smooth muscle cells. Araki S, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1072-9

Atrial natriuretic factor inhibits angiotensin-induced aldosterone secretion: not through cGMP or interference with phospholipase C. Ganguly A, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):148-54

Platelet-derived growth factor (PDGF)-induced phospholipase C-mediated hydrolysis of phosphoinositides in vascular smooth muscle cells--different sensitivity of PDGF- and angiotensin II-induced phospholipase C reactions to protein kinase C-activating phorbol esters. Kawahara Y, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):846-54

Cyclic and noncyclic inositol phosphates are formed at different ratios by phospholipase C isozymes. Kim JW, et al. **Biochem Biophys Res Commun** 1989 Aug 30; 163(1):177-82

Activation of platelet phospholipase C by fluoride is inhibited by elevation of cyclic AMP. Lazarowski ER, et al. **Biochem Biophys Res Commun** 1989 Jan 31;158(2):440-4

Effect of guanine nucleotides on phospholipase C activity in permeabilized pituitary cells: possible involvement of an inhibitory GTP-binding protein. Limor R, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):209-15

A cytosolic protein activator of cardiac sarcolemmal phosphoinositide phospholipase C. Quist EE, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):567-73

Endothelin stimulates phospholipase C in cultured vascular smooth muscle cells. Resink TJ, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1360-8

Transfection of insulin-producing cells with a transforming c-Ha-ras oncogene stimulates phospholipase C activity. Berggren PO, et al. **Biochem J** 1989 May 1;259(3):701-7

Guanine nucleotides mediate stimulatory and inhibitory effects on cerebral-cortical membrane phospholipase C activity. Litosch I. **Biochem J** 1989 Jul 1;261(1):245-51

Interaction of cerebral-cortical membranes with exogenously added phosphatidylinositol 4,5-bisphosphate. Effects on measured phospholipase C activity. Litosch I. **Biochem J** 1989 Jul 15;261(2):325-31

Two modes of regulation of the phospholipase C-linked substance-P receptor in rat parotid acinar cells. Sugiya H, et al. **Biochem J** 1988 Jul 15;253(2):459-66

Phospholipase-induced modulation of dolichyl-phosphomannose synthase activity. Jensen JW, et al. **Biochemistry** 1989 Jan 24;28(2):851-5

Lysophosphatidylcholine metabolism to 1,2-diacylglycerol in lymphoblasts: involvement of a phosphatidylcholine-hydrolyzing phospholipase C. Nishijima J, et al. **Biochemistry** 1989 Apr 4;28(7):2902-9

Phospholipase C in rabbit thymocytes: subcellular distribution and influences of calcium and GTP gamma S on the substrate dependence of cytosolic and plasma membrane-associated phospholipase C. Behl B, et al. **Biochim Biophys Acta** 1988 Sep 16;971(2):179-88

Vasopressin transiently stimulates phospholipase C activity in cultured rat hepatocytes. Pittner RA, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):227-32

Phospholipases A2 and C of human lung; subcellular distribution and substrate selectivity. Yeats DA, et al. **Biochim Biophys Acta** 1989 Jun 8;1003(2):189-95

Serotonin as a major serum factor inducing the phospholipase C-mediated hydrolysis of phosphoinositides in normal rat kidney cells. Hamamori Y, et al. **Cancer Res** 1988 Dec 1; 48(23):6697-702

EGF induces tyrosine phosphorylation of phospholipase C-II: a potential mechanism for EGF receptor signaling. Margolis B, et al. **Cell** 1989 Jun 30;57(7):1101-7

Phospholipase C-gamma is a substrate for the PDGF and EGF receptor protein-tyrosine kinases in vivo and in vitro. Meisenhelder J, et al. **Cell** 1989 Jun 30;57(7):1109-22

Mammalian phosphoinositide-specific phospholipase C isoenzymes. Crooke ST, et al. **Cell Calcium** 1989 Jul; 10(5):309-23 (75 ref.)

Adenosine triphosphate activates the phospholipase-C cascade system in human amnion cells without increasing prostaglandin production. Vander Kooy D, et al. **Endocrinology** 1989 Apr;124(4):2005-12

Thromboxane A2 activates phospholipase C in astrocytoma cells via pertussis toxin-insensitive G-protein. Nakahata N, et al. **Eur J Pharmacol** 1989 Mar 29;162(3):407-17

ATP stimulates secretion in human neutrophils and HL60 cells via a pertussis toxin-sensitive guanine nucleotide-binding protein coupled to phospholipase C. Cockcroft S, et al. **FEBS Lett** 1989 Mar 13;245(1-2):25-9

Stimulation of adenosine receptor enhances alpha 1-adrenergic receptor-mediated activation of phospholipase C and Ca2+ mobilization in a pertussis toxin-sensitive manner in FRTL-5 thyroid cells. Okajima F, et al. **FEBS Lett** 1989 May 8;248(1-2):145-9

P2-purinergic agonists activate phospholipase C in a guanine nucleotide- and Ca2+-dependent manner in FRTL-5 thyroid cell membranes. Okajima F, et al. **FEBS Lett** 1989 Aug 14;253(1-2):132-6

Phospholipase C and phospholipase A2 are involved in the antiviral activity of human interferon-alpha. Premecz G, et al. **FEBS Lett** 1989 Jun 5;249(2):257-60

Extracellular adenosine triphosphate activates phospholipase C and mobilizes intracellular calcium in primary cultures of sheep anterior pituitary cells. van der Merwe PA, et al. **FEBS Lett** 1989 Jan 30;243(2):333-6

Phosphoinositide hydrolysis in permeabilized SH-SY5Y human neuroblastoma cells is inhibited by mastoparan. Wojcikiewicz RJ, et al. **FEBS Lett** 1989 Apr 24; 247(2):341-4

Inhibition by cyclic AMP of guanine nucleotide-induced activation of phosphoinositide-specific phospholipase C in human platelets. Yada Y, et al. **FEBS Lett** 1989 Jan 2; 242(2):368-72

Stimulation of phospholipase C activity by 4-hydroxynonenal; influence of GTP and calcium concentration. Rossi MA, et al. **Int J Tissue React** 1988;

10(5):321–5
Guanine nucleotides activate cytosolic phospholipase C of ascites tumour cells stimulated by 1–oleoyl–2–acetyl–sn–glycerol. Strosznajder J, et al. **Int J Tissue React** 1988;10(5):291–6
Dopamine–1–mediated stimulation of phospholipase C activity in rat renal cortical membranes. Felder CC, et al. **J Biol Chem** 1989 May 25;264(15):8739–45
Guanosine 5'–O–(3–thiotrisphosphate) potentiates both thrombin– and platelet–derived growth factor–induced inositol phosphate release in permeabilized vascular smooth muscle cells. Signaling mechanisms distinguished by sensitivity to pertussis toxin and phorbol esters. Huang CL, et al. **J Biol Chem** 1989 Mar 15;264(8):4391–7
Bradykinin–induced activation of phospholipase A2 is independent of the activation of polyphosphoinositide–hydrolyzing phospholipase C. Kaya H, et al. **J Biol Chem** 1989 Mar 25;264(9):4972–7
Phosphatidylinositol 3–phosphate is present in normal and transformed fibroblasts and is resistant to hydrolysis by bovine brain phospholipase C II. Lips DL, et al. **J Biol Chem** 1989 May 25;264(15):8759–63
Coupling of exogenous receptors to phospholipase C in Xenopus oocytes through pertussis toxin–sensitive and –insensitive pathways. Cross–talk through heterotrimeric G–proteins. Moriarty TM, et al. **J Biol Chem** 1989 Aug 15;264(23):13524–30
Deregulation of alternative splicing of fibronectin pre–mRNA in malignant human liver tumors. Oyama F, et al. **J Biol Chem** 1989 Jun 25;264(18):10331–4
Molecular species analysis of 1,2–diglycerides stimulated by alpha–thrombin in cultured fibroblasts. Pessin MS, et al. **J Biol Chem** 1989 May 25;264(15):8729–38
Lipid analysis of the glycoinositol phospholipid membrane anchor of human erythrocyte acetylcholinesterase. Palmitoylation of inositol results in resistance to phosphatidylinositol–specific phospholipase C. Roberts WL, et al. **J Biol Chem** 1988 Dec 15;263(35):18766–75
Short chain alcohols activate guanine nucleotide–dependent phosphoinositidase C in turkey erythrocyte membranes. Rooney TA, et al. **J Biol Chem** 1989 Apr 25; 264(12):6817–22
Phorbol ester and neomycin dissociate bradykinin receptor–mediated arachidonic acid release and polyphosphoinositide hydrolysis in Madin–Darby canine kidney cells. Evidence that bradykinin mediates noninterdependent activation of phospholipases A2 and C. Slivka SR, et al. **J Biol Chem** 1988 Oct 15;263(29):14640–7
Effects of nucleotides on the activity of phospholipase C in rabbit thymus lymphocytes. Differences in assays using endogenous [3H]inositol–prelabeled membranes or exogenous [3H]phosphatidylinositol 4,5–bisphosphate as substrate. Sommermeyer H, et al. **J Biol Chem** 1989 Jan [illegible]'(2):906–9
Effect of insulin and insulin–like growth factors I and II on phosphatidylinositol and phosphatidylinositol 4,5–bisphosphate breakdown in liver from humans with and without type II diabetes. Thakker JK, et al. **J Biol Chem** 1989 May 5;264(13):7169–75
Coupling of bradykinin receptors to phospholipase C in cultured fibroblasts is mediated by a G–protein. Etscheid BG, et al. **J Cell Physiol** 1989 Aug;140(2):264–71
Endothelin stimulates phospholipase C, Na+/H+ exchange, c–fos expression, and mitogenesis in rat mesangial cells. Simonson MS, et al. **J Clin Invest** 1989 Feb;83(2):708–12
Impaired phospholipase C activity is involved in the hyperreactivity of platelets in primary hypertension. Koutouzov S, et al. **J Hypertens Suppl** 1988 Dec; 6(4):S372–4
Growth rate and phospholipase C activity in cardiac and aortic spontaneously hypertensive rat cells. Millanvoye E, et al. **J Hypertens Suppl** 1988 Dec;6(4):S369–71
Alterations to the vascular vasodepressor prostaglandin system in DOCA–salt hypertensive rats and their enzymatic analysis. Uehara Y, et al. **J Hypertens Suppl** 1988 Dec; 6(4):S392–4
Effect of nonhydrolyzable guanosine phosphate on IgE–mediated activation of phospholipase C and histamine release from rodent mast cells. Saito H, et al. **J Immunol** 1989 Jul 1;143(1):250–8
GTP–dependent hydrolysis of phosphatidylinositol–4,5–bisphosphate by soluble phospholipase C from adult human epidermis. Fisher GJ, et al. **J Invest Dermatol** 1989 Jun;92(6):831–6
Homologous desensitization of muscarinic cholinergic, histaminergic, adrenergic, and serotonergic receptors coupled to phospholipase C in cerebellar granule cells. Dillon–Carter O, et al. **J Neurochem** 1989 Feb; 52(2):598–603
Pharmacological and functional heterogeneity of astrocytes: regional differences in phospholipase C stimulation by neuromediators. el–Etr M, et al. **J Neurochem** 1989 Mar; 52(3):981–4
Tachykinin receptors of the NK1 type (substance P) coupled positively to phospholipase C on cortical astrocytes from the newborn mouse in primary culture. Torrens Y, et al. **J Neurochem** 1989 Jun;52(6):1913–8
A neuroglial cooperativity is required for the potentiation by 2–chloroadenosine of the muscarinic–sensitive phospholipase C in the striatum. el–Etr M, et al. **J Neurosci** 1989 May;9(5):1473–80
Permissive role of calcium in alpha 1–adrenergic stimulation of pineal phosphatidylinositol phosphodiesterase (phospholipase C) activity. Ho AK, et al. **J Pineal Res** 1988;5(6):553–64
The projection structure of alpha–toxin from Staphylococcus aureus in human platelet membranes as analyzed by electron microscopy and image processing. Olofsson A, et al. **J Ultrastruct Mol Struct Res** 1988 Aug;100(2):194–200
Phosphatidylinositol 4,5–bisphosphate phospholipase C activity in particulate preparations from rat brain. Bergers M, et al. **Lipids** 1989 Jan;24(1):13–6
Possible role of phospholipase C in the regulation of cell division in normal and neoplastic cells. Rillema JA. **Med Hypotheses** 1989 May;29(1):1–4 (31 ref.)
Platelet–derived growth factor induces rapid and sustained tyrosine phosphorylation of phospholipase C–gamma in quiescent BALB/c 3T3 cells. Wahl MI, et al. **Mol Cell Biol** 1989 Jul;9(7):2934–43
Beta gamma subunits of GTP–binding proteins inhibit muscarinic receptor stimulation of phospholipase C. Moriarty TM, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):8865–9
Growth hormone activates phospholipase C in proximal tubular basolateral membranes from canine kidney. Rogers SA, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6363–6
Epidermal growth factor stimulates tyrosine phosphorylation of phospholipase C–II independently of receptor internalization and extracellular calcium. Wahl MI, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1568–72
Alterations in hepatic and aortic phospholipase–C coupled receptors and signal transduction in rat intraperitoneal sepsis. Roth BL, et al. **Prog Clin Biol Res** 1989;286:41–59
Role of phospholipase C in mediating oxytocin–induced release of prostaglandin F2 alpha from ovine endometrial tissue. Silvia WJ, et al. **Prostaglandins** 1988 Apr; 35(4):535–48
Studies of inositol phospholipid–specific phospholipase C. Rhee SG, et al. **Science** 1989 May 5;244(4904):546–50 (45 ref.)
Intracellular Ca2+ activates phospholipase C. Eberhard DA, et al. **Trends Neurosci** 1988 Dec;11(12):517–20
[Activation of hepatic phospholipase C induced by 4–hydroxynonenal] Garramone A, et al. **Boll Soc Ital Biol Sper** 1988 Sep;64(9):809–16 (Eng. Abstr.) **(Ita)**

PHARMACOLOGY

Does phospholipase C inhibit fusion between hamster sperm and zona–free eggs? Clark JM, et al. **Gamete Res** 1988 Apr; 19(4):339–48
Neutrophil oxidative metabolism after exposure to bacterial phospholipase C. Styrt B, et al. **J Lab Clin Med** 1989 Jul; 114(1):51–7
Phospholipase C–evoked glycerol release in energy depleted rat myocardial cells. Myrmel T, et al. **Mol Cell Biochem** 1989 Jun 27–Jul 24;88(1–2):107–11
Glucose dose–related influence of phospholipase C and melittin on insulin release from perifused rat islets. Pace CS. **Res Commun Chem Pathol Pharmacol** 1988 Nov; 62(2):295–308
Platelet aggregation by a phospholipase C from Pseudomonas aeruginosa. Coutinho IR, et al. **Thromb Res** 1988 Sep 1; 51(5):495–505
[Regulation mechanisms of receptors mediated activation of phospholipase c and inositol–1,4,5–triphosphate sensitive Ca2+ release and Ca2+ uptake in exocrine glandular cells] Schulz I, et al. **Arzneimittelforschung** 1989 Jan; 39(1A):168–73 (13 ref.) (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Membrane phospholipid turnover as an intermediary step in insulin secretion. Putative roles of phospholipases in cell signaling. Metz SA. **Am J Med** 1988 Nov 28;85(5A):9–21 (84 ref.)
Characterization of phospholipase C–mediated polyphosphoinositide hydrolysis in rat heart ventricles. Schwertz DW, et al. **Arch Biochem Biophys** 1989 Feb 15; 269(1):137–47
Phospholipases modulate the rat testicular androgen biosynthetic pathway in vitro. Cooke GM, et al. **Biol Reprod** 1988 Sep;39(2):329–39
Guanine nucleotide–sensitive interaction of a radiolabeled agonist with a phospholipase C–linked P2y–purinergic receptor. Cooper CL, et al. **J Biol Chem** 1989 Apr 15; 264(11):6202–6
Prostaglandin E receptors in bovine adrenal medulla are coupled to adenylate cyclase via Gi and to phosphoinositide metabolism in a pertussis toxin–insensitive manner. Negishi M, et al. **J Biol Chem** 1989 Mar 5; 264(7):3916–23
The kyotorphin (tyrosine–arginine) receptor and a selective reconstitution with purified Gi, measured with GTPase and phospholipase C assays. Ueda H, et al. **J Biol Chem** 1989 Mar 5;264(7):3732–41
Stimulation of phospholipase C–mediated hydrolysis of phosphoinositides by adenosine 5'–triphosphate via P2–purinoceptors in cultured rat aortic vascular smooth muscle cells. Tsuda T, et al. **Jpn Circ J** 1988 Jun;52(6):570–9
Angiotensin II–stimulated cortisol secretion is mediated by a hormone–sensitive phospholipase C in bovine adrenal fasciculata/reticularis cells. Bird IM, et al. **Mol Cell Endocrinol** 1989 Jun;64(1):45–53
S–phase induction and transformation of quiescent NIH 3T3 cells by microinjection of phospholipase C. Smith MR, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3659–63
Inositol phospholipids and phospholipase C in platelet receptor transduction. Lapetina EG. **Prog Clin Biol Res** 1988;283:499–511 (35 ref.)
Phospholipases C and A2 in malignant cell proliferation. Wickremasinghe RG, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jun; 36(4):199–201 (19 ref.)

POISONING

Effect of a high affinity aluminosilicate sorbent on prevention of aflatoxicosis in growing pigs. Colvin BM, et al. **Vet Hum Toxicol** 1989 Feb;31(1):46–8

TOXICITY

Release of PI–anchoring enzymes and other effects of phosphatidylinositol–specific phospholipase C from Bacillus thuringiensis on TN–368 cells from a moth ovary. Ikezawa H, et al. **Toxicon** 1989;27(6):637–45

PHOSPHOLIPASE D see under **PHOSPHOLIPASES**

PHOSPHOLIPASES

1H NMR studies of bovine and porcine phospholipase A2: assignment of aromatic resonances and evidence for a conformational equilibrium in solution. Fisher J, et al. **Biochemistry** 1989 Jul 11;28(14):5939–46
Raman and infrared studies on the conformation of porcine pancreatic and Crotalus durissus terrificus phospholipases A2. Arêas EP, et al. **Biochim Biophys Acta** 1989 Jul 27; 997(1–2):15–26
The complete amino–acid sequence of a basic phospholipase A2 in the venom of Bungarus fasciatus. Liu CS, et al. **Biol Chem Hoppe Seyler** 1988 Nov;369(11):1227–33
Padé–Laplace method for analysis of fluorescence intensity decay. Bajzer Z, et al. **Biophys J** 1989 Jul;56(1):79–93
Mild pressure induces resistance of erythrocytes to hemolysis by snake venom phospholipase A2. Halle D, et al. **Biophys J** 1988 Sep;54(3):393–6
Conversion of human erythrocyte acetylcholinesterase from an amphiphilic to a hydrophilic form by phosphatidylinositol–specific phospholipase C and serum phospholipase D. Toutant JP, et al. **Eur J Biochem** 1989 Apr 1;180(3):503–8
Revised amino acid sequence, crystallization, and preliminary x–ray diffraction analysis of acidic phospholipase A2 from the venom of Agkistrodon halys blomhoffii. Tomoo K, et al. **J Biol Chem** 1989 Feb 25;264(6):3636–8
Crystallographic characterization of human eosinophil Charcot–Leyden crystals [letter] Sieker LC, et al. **J Mol Biol** 1988 Nov 20;204(2):489–91
Phospholipase A: recent developments in methodology, pathophysiology and clinical application. Papers from a workshop. June 1988, Ulm, Federal Republic of Germany. **Klin Wochenschr** 1989 Feb 1;67(3):101–224
Correction of amino acid sequence of phospholipase A2 I from the venom of Laticauda semifasciata (Erabu sea snake). Takasaki C, et al. **Toxicon** 1988;26(8):747–9
Role of the N–terminal region in phospholipases A2 from Naja naja atra (Taiwan cobra) and Naja nigricollis (spitting cobra) venoms. Yang CC, et al. **Toxicon** 1988;26(8):721–31

ADMINISTRATION & DOSAGE

Regulation of the immune response to allergens by immunosuppressive allergenic fragments. 1. Peptic fragments of honey bee venom phospholipase A2. Litwin A, et al. **Int Arch Allergy Appl Immunol** 1988;87(4):361–6

ANALYSIS

Spin–label assay for phospholipase A2. Lai CS, et al. **Anal Biochem** 1988 Aug 1;172(2):397–402
A sensitive and continuous fluorometric assay for phospholipase A2 using pyrene–labeled phospholipids in the presence of serum albumin. Radvanyi F, et al. **Anal Biochem** 1989 Feb 15;177(1):103–9
Presence of pancreatic–type phospholipase A2 mRNA in rat gastric mucosa and lung. Sakata T, et al. **Biochim Biophys Acta** 1989 Jan 23;1007(1):124–6
Comparison of phospholipase activity with direct and indirect lytic effects of animal venoms upon human red cells. Sosa BP, et al. **Comp Biochem Physiol [B]** 1979; 64(2):231–4
Action of iturin A on membrane vesicles from Saccharomyces cerevisiae: activation of phospholipases A and B activities by picomolar amounts of iturin A. Latoud C, et al. **J Antibiot (Tokyo)** 1988 Nov;41(11):1699–700
Amino acid composition and NH2–terminal amino acid sequence of human phospholipase A2 purified from rheumatoid synovial fluid. Hara S, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):326–8
Multiple forms of phospholipase A2 in arthritic synovial fluid. Seilhamer JJ, et al. **J Biochem (Tokyo)** 1989 Jul; 106(1):38–42
Immunocytochemical evidence of phospholipase A2 in pancreatic tumors—diagnostic values. Stömmer P. **Klin Wochenschr** 1989 Feb 1;67(3):136–40
Ultrastructural localization of the Charcot–Leyden crystal protein (lysophospholipase) to granules and intragranular

crystals in mature human basophils. Dvorak AM, et al. **Lab Invest** 1989 Apr;60(4):557–67

Association of the intestinal brush-border membrane phospholipase A2 and lysophospholipase activities (phospholipase B) with a stalked membrane protein. Pind S, et al. **Lipids** 1989 May;24(5):357–62

Phospholipase activity of bacterial toxins. Daniel LW, et al. **Methods Enzymol** 1988;165:298–301

Comparison of enzymatic and pharmacological activities of lysine-49 and aspartate-49 phospholipases A2 from Agkistrodon piscivorus piscivorus snake venom. A reconsideration [letter] Condrea E. **Toxicon** 1989; 27(7):705–6

Phospholipases B from Japanese yellow hornet (Vespa xanthoptera) venom. Takasaki C, et al. **Toxicon** 1989; 27(4):449–58

ANTAGONISTS & INHIBITORS

Inhibition of human non-pancreatic phospholipases A2 by retinoids and flavonoids. Mechanism of action. Fawzy AA, et al. **Agents Actions** 1988 Dec;25(3–4):394–400

Purification and characterization of a uterine phospholipase inhibitor that loses activity after labor onset in women. Wilson T, et al. **Am J Obstet Gynecol** 1989 Mar; 160(3):602–6

Effects of phospholipase inhibitors and calcium antagonists on the changes in myocardial phospholipids induced by isoproterenol. Takasu N, et al. **Basic Res Cardiol** 1988 Sep–Oct;83(5):567–75

Phospholipase A2 inhibitory activity in thymocytes of dexamethasone-treated mice—possible implication of lipocortins. Errasfa M, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):53–60

Inhibition of liver lysosomal acid phospholipase A1 by blood serum proteins. Löffler BM, et al. **Biochem Int** 1988 Nov; 17(5):965–71

Lipocortin-independent effect of dexamethasone on phospholipase activity in a thymic epithelial cell line. Piltch A, et al. **Biochem J** 1989 Jul 15;261(2):395–400

Inactivation of phospholipase A2 by manoalide. Localization of the manoalide binding site on bee venom phospholipase A2. Glaser KB, et al. **Biochem Pharmacol** 1988 Oct 1; 37(19):3639–46

Ultrastructural, physico-chemical and conformational study of the interactions of gentamicin and bis(beta-diethylaminoethylether) hexestrol with negatively-charged phospholipid layers. Mingeot-Leclercq MP, et al. **Biochem Pharmacol** 1989 Mar 1;38(5):729–41

Phospholipase A2 inhibitors: monoacyl, monoacylamino-glycero-phosphocholines. De Haas GH, et al. **Biochem Soc Trans** 1989 Apr;17(2):274–6

Lipocortin. Flower R. **Biochem Soc Trans** 1989 Apr; 17(2):276–8

Competitive inhibition of phospholipase A2 in vesicles. Jain MK, et al. **Biochemistry** 1989 May 16;28(10):4135–9

In vitro protein kinase C phosphorylation sites of placental lipocortin. Schlaepfer DD, et al. **Biochemistry** 1988 Jun 14;27(12):4253–8

Placental anticoagulant proteins: isolation and comparative characterization four members of the lipocortin family. Tait JF, et al. **Biochemistry** 1988 Aug 23;27(17):6268–76

Inhibition of eicosanoid and PAF formation by dexamethasone in rat inflammatory polymorphonuclear neutrophils may implicate lipocortin 's'. Fradin A, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):248–57

1H-NMR and protection studies of interactions between ligands and bovine pancreatic phospholipase A2. Williamson MP, et al. **Biochim Biophys Acta** 1989 Jul 27; 997(1–2):9–14

Inhibition of normal and psoriatic epidermal phospholipase A2 by picomolar concentrations of recombinant human lipocortin I. Cartwright PH, et al. **Br J Dermatol** 1989 Aug; 121(2):155–60

Eleventh Gaddum memorial lecture. Lipocortin and the mechanism of action of the glucocorticoids. Flower RJ. **Br J Pharmacol** 1988 Aug;94(4):987–1015 (88 ref.)

A prostaglandin oligomeric derivative inhibits activities of phospholipase and protease: a possible mechanism of membrane protection during ischemia. Ohnishi ST, et al. **Cell Biochem Funct** 1989 Jan;7(1):51–5

Inhibition of human platelet phospholipase A2 by mono(2-ethylhexyl)phthalate. Labow RS, et al. **Environ Health Perspect** 1988 Jun;78:179–83

Inhibitors of liver lysosomal acid phospholipase A1. Kunze H, et al. **Eur J Biochem** 1988 Nov 15;177(3):591–5

Evidence that the anti-coagulant and lethal properties of a basic phospholipase A2 from snake venom are unrelated. Chwetzoff S, et al. **FEBS Lett** 1989 May 8;248(1–2):1–4

Synthetic peptide from lipocortin I has no phospholipase A2 inhibitory activity. van Binsbergen J, et al. **FEBS Lett** 1989 Apr 24;247(2):293–7

Ca2+-antagonistic properties of phospholipase A2 inhibitors, mepacrine and chloroquine. Filippov A, et al. **Gen Physiol Biophys** 1989 Apr;8(2):113–8

Lipocortin-1 immunoreactivity in central and peripheral nervous system glial tumors. Johnson MD, et al. **Hum Pathol** 1989 Aug;20(8):772–6

The effects of phospholipase A2 inhibition on experimental infarct size, left ventricular hemodynamics and regional myocardial blood flow. Zalewski A, et al. **Int J Cardiol** 1988 Dec;21(3):247–57

Sedimentation equilibrium analysis of five lipocortin-related phospholipase A2 inhibitors from human placenta. Evidence against a mechanistically relevant association between enzyme and inhibitor. Ahn NG, et al. **J Biol Chem** 1988 Dec 15;263(35):18657–63

Inhibition studies on the membrane-associated phospholipase A2 in vitro and prostaglandin E2 production in vivo of the macrophage-like P388D1 cell. Effects of manoalide, 7,7-dimethyl-5,8-eicosadienoic acid, and p-bromophenacyl bromide. Lister MD, et al. **J Biol Chem** 1989 May 25;264(15):8520–8

Further characterization of four lipocortins from human peripheral blood mononuclear cells. Coméra C, et al. **J Cell Biochem** 1989 Jul;40(3):361–70

Differential effect of dexamethasone on the regulation of phospholipase A2 and prostanoid synthesis in undifferentiated and phorbolester-differentiated U937 cells. Koehler L, et al. **J Cell Biochem** 1989 Jul;40(3):397–406

Design and synthesis of conformationally restricted phospholipids as phospholipase A2 inhibitors. Magolda RL, et al. **J Cell Biochem** 1989 Jul;40(3):371–86

Molecular modeling in the design of phospholipase A2 inhibitors. Ripka WC, et al. **J Cell Biochem** 1989 Jul; 40(3):279–86

Evaluation of the antiinflammatory and phospholipase-inhibitory activity of calpactin II/lipocortin I. Northup JK, et al. **J Clin Invest** 1988 Oct;82(4):1347–52

Inhibition of phospholipase A2 isoenzymes in human endometrium by mefenamic acid and indomethacin: modulation by calcium ions. Bonney RC, et al. **J Endocrinol** 1988 Oct;119(1):141–5

Fc gamma 2b receptor-mediated phagocytosis by a murine macrophage-like cell line (P388D1) and peritoneal resident macrophages. Up-regulation by the inhibitors of phospholipase A2 and cyclooxygenase. Yamada A, et al. **J Immunol** 1989 Apr 1;142(7):2457–63

Binding of crotoxin, a presynaptic phospholipase A2 neurotoxin, to negatively charged phospholipid vesicles. Radvanyi F, et al. **J Neurochem** 1989 Oct;53(4):1252–60

Regulation of eicosanoid biosynthesis in vitro and in vivo by the marine natural product manoalide: a potent inactivator of venom phospholipases. Mayer AM, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):871–8

In vitro inhibition of phospholipase A2 by gabexate mesilate, camostate, and aprotinine. Freise J, et al. **Klin Wochenschr** 1989 Feb 1;67(3):149–52

Lysolecithin concentration in pancreatic tissue during therapy with phospholipase A2-inhibitors in acute necrotizing pancreatitis. Kahle M, et al. **Klin Wochenschr** 1989 Feb 1;67(3):177–9

Are phospholipid-binding proteins in vivo phospholipase inhibitors? Poensgen J. **Klin Wochenschr** 1989 Feb 1; 67(3):163–5

Inhibition of porcine pancreas phospholipase A2 activation by gabexate mesilate. Schädlich HR, et al. **Klin Wochenschr** 1989 Feb 1;67(3):160–2

Phospholipase A2--regulation and inhibition. Scheuer W. **Klin Wochenschr** 1989 Feb 1;67(3):153–9

Phospholipase A2 and lipocortins, antiphospholipase proteins. Di Rosa M, et al. **Methods Enzymol** 1988; 163:23–31

Fatty acid oxidation and myocardial phospholipase A2 activity. Franson RC, et al. **Mol Cell Biochem** 1989 Jun 27–Jul 24;88(1–2):155–9

Role of phospholipases in myocardial ischemia: effect of cardioprotective agents on the phospholipases A of heart cytosol and sarcoplasmic reticulum in vitro. Hostetler KY, et al. **Mol Cell Biochem** 1989 Jun 27–Jul 24;88(1–2):77–82

Detection of a uteroglobin-like phospholipase A2 inhibitory protein in the circulation of rabbits. Kikukawa T, et al. **Mol Cell Endocrinol** 1989 Apr;62(2):177–87

Novel anti-inflammatory peptides from the region of highest similarity between uteroglobin and lipocortin I. Miele L, et al. **Nature** 1988 Oct 20;335(6192):726–30

BIOSYNTHESIS

Tumor necrosis factor stimulates human neutrophils to release leukotriene B4 and platelet-activating factor. Induction of phospholipase A2 and acetyl-CoA:1-alkyl-sn-glycero-3-phosphocholine O2-acetyltransferase activity and inhibition by antiproteinase. Camussi G, et al. **Eur J Biochem** 1989 Jul 1;182(3):661–6

The importance of phospholipase A2 in the early induction by crotoxin of biphasic changes in endplate potentials at the frog neuromuscular junction. Hawgood BJ, et al. **Toxicon** 1989;27(2):272–6

BLOOD

Substrate-specific forms of phospholipase A2 in human platelets. Cheung WY, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:584–9

Relationship of inositol phospholipid metabolism to phospholipase A2. Lapetina EG, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:568–73

Pertussis toxin-sensitive GTP-binding proteins may regulate phospholipase A2 in response to thrombin in rabbit platelets. Kajiyama Y, et al. **Arch Biochem Biophys** 1989 Oct;274(1):200–8

Phorbol ester activation of phospholipase D in human monocytes but not peripheral blood lymphocytes. Kinsky SC, et al. **Biochem Biophys Res Commun** 1989 Jul 31; 162(2):788–93

Phosphatidylethanol formation in human platelets: evidence for thrombin-induced activation of phospholipase D. Rubin R. **Biochem Biophys Res Commun** 1988 Nov 15; 156(3):1090–6

Ca2+ effect on ATP-independent lysophospholipid transacylases is indissociable from Ca2+ effect on phospholipase A2 activity in rat platelet sonicates. Breton M, et al. **Biochim Biophys Acta** 1988 Nov 4;963(1):127–30

Effects of aristolochic acid on phospholipase A2 activity and arachidonate metabolism of human neutrophils. Rosenthal MD, et al. **Biochim Biophys Acta** 1989 Jan 23;1001(1):1–8

Serum phospholipase A2 activity in acute pancreatitis: an early guide to severity. Bird NC, et al. **Br J Surg** 1989 Jul;76(7):731–2

Serum phospholipase A in hospitalized patients. Hoffmann GE, et al. **Clin Chim Acta** 1989 Jul 31;183(1):59–64

Phospholipase A2 activity in taurocholate-induced acute pancreatitis in the rat model. Bird NC, et al. **Int J Pancreatol** 1989 Feb;4(1):3–11

The primary structure of rat platelet phospholipase A2. Hayakawa M, et al. **J Biochem (Tokyo)** 1988 Nov; 104(5):767–72

Detection in human platelets of phospholipase A2 activity which preferentially hydrolyzes an arachidonoyl residue. Kim DK, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):492–4

Phospholipase A2 activation in human neutrophils. Differential actions of diacylglycerols and alkylacylglycerols in priming cells for stimulation by N-formyl-Met-Leu-Phe. Bauldry SA, et al. **J Biol Chem** 1988 Nov 15;263(32):16787–95

Purification of a glycosyl-phosphatidylinositol-specific phospholipase D from human plasma. Davitz MA, et al. **J Biol Chem** 1989 Aug 15;264(23):13760–4

Human plasma lecithin-cholesterol acyltransferase. Inhibition of the phospholipase A2-like activity by sn-2-difluoroketone phosphatidylcholine analogues. Jauhiainen M, et al. **J Biol Chem** 1989 Feb 5;264(4):1963–7

Possible involvement of cytoskeleton in collagen-stimulated activation of phospholipases in human platelets. Nakano T, et al. **J Biol Chem** 1989 Apr 5;264(10):5400–6

An oxidized derivative of phosphatidylcholine is a substrate for the platelet-activating factor acetylhydrolase from human plasma. Stremler KE, et al. **J Biol Chem** 1989 Apr 5;264(10):5331–4

Characterization of serum platelet-activating factor (PAF) acetylhydrolase. Correlation between deficiency of serum PAF acetylhydrolase and respiratory symptoms in asthmatic children. Miwa M, et al. **J Clin Invest** 1988 Dec; 82(6):1983–91

Serum phospholipase A2 correlates with disease activity in rheumatoid arthritis. Pruzanski W, et al. **J Rheumatol** 1988 Sep;15(9):1351–5

Prognostic value of serum phospholipase A in acute pancreatitis. Büchler M, et al. **Klin Wochenschr** 1989 Feb 1;67(3):186–9

Serum phospholipase A2 in intensive care patients with peritonitis, multiple injury, and necrotizing pancreatitis. Büchler M, et al. **Klin Wochenschr** 1989 Feb 1;67(3):217–21

Serum phospholipase A in hematological diseases. Hiefinger RT, et al. **Klin Wochenschr** 1989 Feb 1;67(3):222–4

Serum phospholipase--regulatory and pathophysiological aspects. Hoffmann GE, et al. **Klin Wochenschr** 1989 Feb 1;67(3):144–8 (70 ref.)

Modified photometric method for the determination of phospholipase A activities. Hoffmann GE, et al. **Klin Wochenschr** 1989 Feb 1;67(3):106–9

Phospholipase A in acute lung injury after trauma and sepsis: its relation to the inflammatory mediators PMN-elastase, C3a, and neopterin. Kellermann W, et al. **Klin Wochenschr** 1989 Feb 1;67(3):190–5

Serum activities of phospholipase A in acute posttraumatic pulmonary insufficiency. Koeniger R, et al. **Klin Wochenschr** 1989 Feb 1;67(3):212–6

Diagnostic value of immunoreactive phospholipase A2 in acute pancreatitis. Malfertheiner P, et al. **Klin Wochenschr** 1989 Feb 1;67(3):183–5

A rapid phospholipase A2 bioassay using 14C-oleate-labelled E. coli bacterias. Meyer T, et al. **Klin Wochenschr** 1989 Feb 1;67(3):113–8

Time-resolved fluoroimmunoassay of pancreatic phospholipase A2. Nevalainen TJ, et al. **Klin Wochenschr** 1989 Feb 1;67(3):103–5

A radiochemical test for phospholipase A2 catalytic activity. Schädlich HR, et al. **Klin Wochenschr** 1989 Feb 1; 67(3):110–2

Phospholipase A--a parameter of sepsis? A comparison of PLA and Stevens' Sepsis Severity Score. Schild A, et al. **Klin Wochenschr** 1989 Feb 1;67(3):207–11

Prognostic value of serum phospholipase A in the multitraumatized patient. Waydhas C, et al. **Klin Wochenschr** 1989 Feb 1;67(3):203–6

Human Eosinophil lysophospholipase. Weller PF. **Methods Enzymol** 1988;163:31–43

A radioenzymatic assay for the determination of phospholipase A2 in serum suitable for psychiatric and non-psychiatric patients. Schulze RM, et al. **Pharmacopsychiatry** 1988 Nov;21(6):348–9

Lipoproteins alter the catalytic behavior of the platelet-activating factor acetylhydrolase in human plasma.

Stafforini DM, et al. **Proc Natl Acad Sci U S A** 1989 Apr; 86(7):2393–7

Phospholipase A in severely ill patients. Schaefer RM, et al. **Prog Clin Biol Res** 1989;308:757–62

The clinical significance of serum phospholipase A in patients with multiple trauma. Waydhas C, et al. **Prog Clin Biol Res** 1989;308:763–8

[The effect of the protease inhibitor FUT-175 on phospholipase A2, complement, prostaglandins and prekallikrein during endotoxin shock] Okuda Y, et al. **Masui** 1989 Mar;38(3):334–42 (Eng. Abstr.) **(Jpn)**

[Radioimmunoassay of pancreatic phospholipase A2 in human serum] Ueda A, et al. **Rinsho Byori** 1989 May; 37(5):561–5 **(Jpn)**

DIAGNOSTIC USE

[The use of an enzyme method for determining phosphatidylglycerol in the amniotic fluid and an assessment of its reliability for predicting fetal lung maturity] Lalchev Z, et al. **Akush Ginekol (Sofiia)** 1988; 27(6):26–30 (Eng. Abstr.) **(Bul)**

GENETICS

cDNA cloning and sequence determination of rat membrane-associated phospholipase A2. Ishizaki J, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1030–6

Analysis of the cDNA for phospholipase A2 from honeybee venom glands. The deduced amino acid sequence reveals homology to the corresponding vertebrate enzymes. Kuchler K, et al. **Eur J Biochem** 1989 Sep 1;184(1):249–54

Cloning and expression in Escherichia coli of the gene for extracellular phospholipase A1 from Serratia liquefaciens. Givskov M, et al. **J Bacteriol** 1988 Dec;170(12):5855–62

Structure and properties of a human non-pancreatic phospholipase A2. Kramer RM, et al. **J Biol Chem** 1989 Apr 5;264(10):5768–75

Cloning and recombinant expression of phospholipase A2 present in rheumatoid arthritic synovial fluid. Seilhamer JJ, et al. **J Biol Chem** 1989 Apr 5;264(10):5335–8

Phospholipase A2 engineering: design, synthesis, and expression of a gene for bovine (pro)phospholipase A2. Noel JP, et al. **J Cell Biochem** 1989 Jul;40(3):309–20

Novel gene exon homologous to pancreatic phospholipase A2: sequence and chromosomal mapping of both human genes. Seilhamer JJ, et al. **J Cell Biochem** 1989 Mar; 39(3):327–37

Sequence analysis of a cDNA encoding a PLA2 from the sea-snake Aipysurus laevis. Ducancel F, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9048

Complete amino acid sequence of a PLA2 from the tiger snake Notechis scutatus scutatus as deduced from a complementary DNA. Ducancel F, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9049

EcoRI and NsiI RFLPs at a human PLA2 gene on chromosome 1. Masharani U, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9073

IMMUNOLOGY

Neutralization of lethal potency and inhibition of enzymatic activity of a phospholipase A2 neurotoxin, crotoxin, by non-precipitating antibodies (Fab). Choumet V, et al. **FEBS Lett** 1989 Feb 13;244(1):167–73

Serial studies on the functional affinity and heterogeneity of antibodies of different IgG subclasses to phospholipase A2 produced in response to bee-venom immunotherapy. Devey ME, et al. **J Allergy Clin Immunol** 1989 Sep; 84(3):326–30

Monoclonal antibodies against rat platelet phospholipase A2. Murakami M, et al. **J Biochem (Tokyo)** 1988 Dec; 104(6):884–8

Quantification of IgG and IgG4 antibodies to bee venom phospholipase A2 by competitive inhibition in ELISA. Rieben R, et al. **J Immunol Methods** 1989 Apr 21;119(1):1–8

Production of human antibodies to bee venom phospholipase A2 in vitro. Held W, et al. **Scand J Immunol** 1989 Feb; 29(2):203–9

ISOLATION & PURIFICATION

Purification of the phospholipase D of Corynebacterium pseudotuberculosis by recycling isoelectric focusing. Egen NB, et al. **Am J Vet Res** 1989 Aug;50(8):1319–22

A preparation of melittin depleted of phospholipase A2 by ion exchange chromatography in denaturing solvents. Wille B. **Anal Biochem** 1989 Apr;178(1):118–20

The primary structure of a membrane-associated phospholipase A2 from human spleen. Kanda A, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):42–8

Phospholipase A2 from human synovial fluid: purification and structural homology to the placental enzyme. Lai CY, et al. **Biochem Biophys Res Commun** 1988 Dec 15; 157(2):488–93

An improved purification procedure for rat liver lysosomal phospholipase A1. Löffler BM, et al. **Biochem Int** 1989 Jan;18(1):129–39

Isolation and characterization of an acidic lethal phospholipase Az from Malayan cobra (Naja naja sputatrix) venom. Tan NH, et al. **Biochem Int** 1989 Apr;18(4):785–92

Purification and characterization of a lethal protein with phospholipase A1 activity from the hornet (Vespa basalis) venom. Ho CL, et al. **Biochim Biophys Acta** 1988 Dec 16; 963(3):414–22

Purification of pancreatic phospholipase A2 from human duodenal juice. Kozumplik V, et al. **Biochim Biophys Acta** 1989 Apr 26;1002(3):395–7

Properties and purification of an arachidonoyl-hydrolyzing phospholipase A2 from a macrophage cell line, RAW 264.7. Leslie CC, et al. **Biochim Biophys Acta** 1988 Dec 16; 963(3):476–92

Biospecific dye-binding and hydrophobic interaction chromatography as tools for high yield preparation of purified phospholipase A1 from rat liver. Löffler BM, et al. **Biochim Biophys Acta** 1989 Jun 28;1003(3):225–31

Solubilization and partial characterization of phospholipase A from rat heart sarcoplasmic reticulum. Trotz M, et al. **Biochim Biophys Acta** 1988 Sep 23;962(2):248–57

A basic phospholipase A from the venom of the Australian king brown snake (Pseudechis australis) showing diverse activities against membranes. Sharp PJ, et al. **Comp Biochem Physiol [B]** 1989;92(3):501–8

Purification and properties of phospholipase A2 of Acanthamoeba culbertsoni. Mishra SK, et al. **Indian J Biochem Biophys** 1985 Dec;22(6):344–9

Purification and characterization of extracellular phospholipase A2 from human synovial fluid in rheumatoid arthritis. Hara S, et al. **J Biochem (Tokyo)** 1989 Mar; 105(3):395–9

Purification and some properties of membrane-bound phospholipase B from Torulaspora delbrueckii. Kuwabara Y, et al. **J Biochem (Tokyo)** 1988 Aug;104(2):236–41

Purification of rabbit platelet secretory phospholipase A2 and its characteristics. Mizushima H, et al. **J Biochem (Tokyo)** 1989 Apr;105(4):520–5

Immunoaffinity purification, partial sequence, and subcellular localization of rat liver phospholipase A2. Aarsman AJ, et al. **J Biol Chem** 1989 Jun 15;264(17):10008–14

Nigexine, a phospholipase A2 from cobra venom with cytotoxic properties not related to esterase activity. Purification, amino acid sequence, and biological properties. Chwetzoff S, et al. **J Biol Chem** 1989 Aug 5; 264(22):13289–97

Purification of a new, calcium-independent, high molecular weight phospholipase A2/lysophospholipase (phospholipase B) from guinea pig intestinal brush-border membrane. Gassama-Diagne A, et al. **J Biol Chem** 1989 Jun 5;264(16):9470–5

Amino acid sequence of ammodytoxin C as deduced from cDNA. Pungerčar J, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4367

Purification and characterization of a myotoxic phospholipase A2 from Indian cobra (Naja naja naja) venom. Bhat MK, et al. **Toxicon** 1989;27(8):861–73

Purification and characterization of a major phospholipase A2 from Russell's viper (Vipera russelli) venom. Kasturi S, et al. **Toxicon** 1989;27(2):229–37

Purification, sequencing and characterization of pseudexin phospholipases A2 from Pseudechis porphyriacus (Australian red-bellied black snake). Schmidt JJ, et al. **Toxicon** 1989;27(7):805–18

Purification and partial biochemical characterization of an edema inducing phospholipase A2 from Vipera russelli (Russell's viper) snake venom. Vishwanath BS, et al. **Toxicon** 1988;26(8):713–20

[Identification of toxic components from the venom of Cerastes cerastes and Vipera lebetina vipers; purification of phospholipases] Gasmi A, et al. **Arch Inst Pasteur Tunis** 1988 Jan-Apr;65(1–2):43–52 (Eng. Abstr.) **(Fre)**

[Purification and properties of lysophospholipase from the venom of the giant hornet Vespa orientalis] Iakubov IT, et al. **Biokhimiia** 1988 Jul;53(7):1093–102 (Eng. Abstr.) **(Rus)**

[Properties of phospholipase A2 from inner and outer mitochondrial membranes] Rakhimov MM, et al. **Biokhimiia** 1988 Sep;53(9):1486–95 (Eng. Abstr.) **(Rus)**

[Immobilization of phospholipase A2 from Central Asian cobra venom on polyamide sorbents] Akhmedzhanov RA, et al. **Prikl Biokhim Mikrobiol** 1988 Sep-Oct;24(5):607–13 (Eng. Abstr.) **(Rus)**

METABOLISM

The role of calcium and phospholipase A2 in glucagon-induced enhancement of mitochondrial calcium retention. Hoek JB, et al. **Adv Exp Med Biol** 1988;232:25–36

Bradykinin-induced activation of phospholipase A2 is independent of the activation of polyphosphoinositide-hydrolyzing phospholipase C. Kaya H, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:580–3

Enhancement of the phospholipase A2 activity in fMLP-treated guinea-pig alveolar macrophages. Masliah J, et al. **Agents Actions** 1989 Jan;26(1–2):256–7

Quinacrine prevention of intestinal ischaemic mucosal damage is partly mediated through inhibition of intraluminal phospholipase A2. Otamiri T. **Agents Actions** 1988 Dec;25(3–4):378–84

Role of phospholipase A2 and oxygenated free radicals in mucosal damage after small intestinal ischemia and reperfusion. Otamiri T, et al. **Am J Surg** 1989 Jun; 157(6):562–5; discussion 566

Continuous spectrophotometric assay of phospholipase A2 activity hydrolyzing plasmalogens using coupling enzymes. Hirashima Y, et al. **Anal Biochem** 1989 Jan;176(1):180–4

Phospholipase A2 activity in cultured glial cells. Correlation with appearance of myelin markers and effects of steroid hormones. Brenner T, et al. **Ann N Y Acad Sci** 1988; 540:403–4

Regulation of phospholipase A2 and phospholipase C in rod outer segments of bovine retina involves a common GTP-binding protein but different mechanisms of action. Jelsema CL. **Ann N Y Acad Sci** 1989;559:158–77

The relationship between phospholipases A2 and C in signal transduction. Lapetina EG, et al. **Ann N Y Acad Sci** 1989; 559:153–7 (17 ref.)

Characterisation of soluble and cell associated phospholipase A2 from rheumatoid synovial fluid. Gonzalez-Buritica H, et al. **Ann Rheum Dis** 1989 Jul;48(7):557–64

Synovial fluid phospholipase A2s and inflammation. Gonzalez-Buritica H, et al. **Ann Rheum Dis** 1989 Apr; 48(4):267–9 (34 ref.)

Degradation of arachidonyl phospholipids catalyzed by two phospholipases A2 and phospholipase C in a lipopolysaccharide-treated macrophage cell line RAW264.7. Tanaka Y, et al. **Arch Biochem Biophys** 1989 Jul;272(1):210–8

Effects of nucleotides and divalent cations on phospholipase activity in Saccharomyces cerevisiae. Witt W, et al. **Arch Microbiol** 1989;151(2):154–8

Interleukin-1 stimulation of phospholipase activity in rat synovial fibroblasts. Possible regulation by cyclooxygenase products. Godfrey RW, et al. **Arthritis Rheum** 1988 Nov; 31(11):1421–8

Phospholipase D in homogenates from HL-60 granulocytes: implications of calcium and G protein control. Anthes JC, et al. **Biochem Biophys Res Commun** 1989 Aug 30; 163(1):657–64

The role of phospholipase A2 in microsomal lipid peroxidation induced with t-butyl hydroperoxide. Borowitz SM, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):1021–8

A phospholipase D-like mechanism in pancreatic islet cells: stimulation by calcium ionophore, phorbol ester and sodium fluoride. Dunlop M, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):922–8

Interleukin 1 and tumor necrosis factor synergistically stimulate prostaglandin synthesis and phospholipase A2 release from rat renal mesangial cells. Pfeilschifter J, et al. **Biochem Biophys Res Commun** 1989 Mar 15; 159(2):385–94

Activation of phospholipase A2 by endothelin in cultured vascular smooth muscle cells. Resink TJ, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):279–86

A rapid response to a plant hormone: auxin stimulates phospholipase A2 in vivo and in vitro. Scherer GF, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):111–7

Subcellular distribution of lysophospholipase of rat intestinal mucosa. Charbonnier M, et al. **Biochem Cell Biol** 1988 Aug; 66(8):813–20

Lysophospholipase A2 activity in guinea-pig heart microsomal fractions displaying high activities with 2-acylglycerophosphocholines with linoleic and arachidonic acids. Arthur G. **Biochem J** 1989 Jul 15; 261(2):581–6

Modulation of phospholipase A2 activity by neutral and anionic glycosphingolipids in monolayers. Bianco ID, et al. **Biochem J** 1989 Feb 15;258(1):95–9

Epidermal growth factor stimulates phospholipase A2 in vasopressin-treated rat glomerular mesangial cells. Margolis BL, et al. **Biochem J** 1988 Dec 1;256(2):469–74

Isolation, properties and amino acid sequences of a phospholipase A2 and its homologue without activity from the venom of a sea snake, Laticauda colubrina, from the Solomon Islands. Takasaki C, et al. **Biochem J** 1988 Aug 1;253(3):869–75

Apparent involvement of phospholipase A2, but not protein kinase C, in the pro-oxidative interactions of clofazimine with human phagocytes. Anderson R, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4635–41

On the mechanism of muscarinic hydrolysis of choline phospholipids in the heart. Lindmar R, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4689–95

Dual effects of cyclosporine A on arachidonate metabolism by peritoneal macrophages. Phospholipase activation and partial thromboxane-synthase blockage. Sraer J, et al. **Biochem Pharmacol** 1989 Jun 15;38(12):1947–54

Involvement of phospholipase A2 in the regulation of [3H]hemicholinium-3 binding. Yamada K, et al. **Biochem Pharmacol** 1988 Nov 15;37(22):4367–73

Stimulation of phospholipase A2 of synaptosomes of guinea-pig brain by noradrenaline and other amines [Retracted by Rowe CE. In: Biochem J 1977 Apr 15;164(1);287–8] Gullis RJ, et al. **Biochem Soc Trans** 1973 Jul;1(4):849

Glycosylphosphatidylinositol: an anchor for eukaryotic membrane proteins. Low MG. **Biochem Soc Trans** 1988 Jun;16(3):271–2

Kinetic characterization of Escherichia coli outer membrane phospholipase A using mixed detergent-lipid micelles. Horrevoets AJ, et al. **Biochemistry** 1989 Feb 7; 28(3):1139–47

Rotational dynamics of the single tryptophan of porcine pancreatic phospholipase A2, its zymogen, and an enzyme/micelle complex. A steady-state and time-resolved anisotropy study. Ludescher RD, et al. **Biochemistry** 1988

Aug 23;27(17):6618–28
Mechanism for the inhibitory and stimulatory actions of proteins on the activity of phospholipase A2. Conricode KM, et al. **Biochim Biophys Acta** 1989 May 15; 1003(1):36–43
18O isotope exchange experiments on phospholipase A2 determined by 13C-NMR: monomeric phosphatidylcholine and micellar phosphatidylethanolamine substrates. Fanni T, et al. **Biochim Biophys Acta** 1989 Jul 17;1004(1):134–8
Effect of catalytic hydrogenation of Tetrahymena ciliary phospholipid fatty acids on ciliary phospholipase A activity. Horváth I, et al. **Biochim Biophys Acta** 1989 Apr 26;1002(3):409–12
Formation of bis(monoacylglycero)phosphate by a macrophage transacylase. Huterer SJ, et al. **Biochim Biophys Acta** 1989 Jan 23;1001(1):68–75
The kinetics of interfacial catalysis by phospholipase A2 and regulation of interfacial activation: hopping versus scooting. Jain MK, et al. **Biochim Biophys Acta** 1989 Apr 3;1002(2):127–56 (143 ref.)
Substrate specificity for interfacial catalysis by phospholipase A2 in the scooting mode. Jain MK, et al. **Biochim Biophys Acta** 1989 May 15;1003(1):91–7
Binding of phospholipase A2 to zwitterionic bilayers is promoted by lateral segregation of anionic amphiphiles. Jain MK, et al. **Biochim Biophys Acta** 1989 Mar 27; 980(1):23–32
Regulation of transmembrane ion transport by reaction products of phospholipase A2. I. Effects of lysophospholipids on mitochondrial Ca2+ transport. Lenzen S, et al. **Biochim Biophys Acta** 1989 Jun 26; 982(1):140–6
Formation of diacylglycerol by a phospholipase D-phosphatidate phosphatase pathway specific for phosphatidylcholine in endothelial cells. Martin TW. **Biochim Biophys Acta** 1988 Oct 14;962(3):282–96
Interrelationship between Ca2+-dependent phospholipid base-exchange reaction and phospholipase D-like activity in bovine retina. Mori H, et al. **Biochim Biophys Acta** 1989 May 15;1003(1):98–107
Regulation of transmembrane ion transport by reaction products of phospholipase A2. II. Effects of arachidonic acid and other fatty acids on mitochondrial Ca2+ transport. Rustenbeck I, et al. **Biochim Biophys Acta** 1989 Jun 26;982(1):147–55
Phospholipase A2 in macrophage plasma membrane releases arachidonic acid from phosphatidylinositol. Shibata Y, et al. **Biochim Biophys Acta** 1988 Sep 16;971(2):121–6
Phosphatidylcholine and triacylglycerol hydrolysis in HDL as induced by hepatic lipase: modulation of the phospholipase activity by changes in the particle surface or in the lipid core. Simard G, et al. **Biochim Biophys Acta** 1989 Feb 6;1001(2):225–33
A novel phospholipase A2 associated with nuclear matrix: stimulation of the activity and modulation of the Ca2+ dependency by polyphosphoinositides. Tamiya-Koizumi K, et al. **Biochim Biophys Acta** 1989 Apr 3;1002(2):182–8
Involvement of a pertussis toxin-sensitive G-protein-coupled phospholipase A2 in lipopolysaccharide-stimulated prostaglandin E2 synthesis in cultured rat mesangial cells. Wang J, et al. **Biochim Biophys Acta** 1988 Dec 16; 963(3):429–35
Phospholipases A2 and C of human lung; subcellular distribution and substrate selectivity. Yeats DA, et al. **Biochim Biophys Acta** 1989 Jun 8;1003(2):189–95
Effect of selective chemical modification and CNBr-cleavage at methionine20 in catalytic activity and substrate binding properties of porcine pancreatic phospholipase A2. van der Wiele FC, et al. **Biochimie** 1988 Sep;70(9):1215–22
Modulation of phospholipase A2 activity in human fibroblasts. Solito E, et al. **Br J Pharmacol** 1989 Mar; 96(3):656–60
Biochemical and pharmacological screening of snake (Bothrops) venoms: characterization of components acting on blood coagulation and platelet aggregation. Zingali RB, et al. **Braz J Med Biol Res** 1988;21(4):763–5
Phospholipase A2 activation by melittin causes amylase release from exocrine pancreas. Heisler S. **Can J Physiol Pharmacol** 1989 May;67(5):411–6
Human pancreatic phospholipase A2 in acute necrotizing pancreatitis. Nordback I, et al. **Digestion** 1989;42(3):128–34
Increased phospholipase A2 activity of Ileal mucosa in Crohn's disease. Olaison G, et al. **Digestion** 1988; 41(3):136–41
Direct effects of 1,25-dihydroxyvitamin D3 and 24,25-dihydroxyvitamin D3 on growth zone and resting zone chondrocyte membrane alkaline phosphatase and phospholipase-A2 specific activities. Schwartz Z, et al. **Endocrinology** 1988 Dec;123(6):2878–84
The effect of thyroid hormones on lipid composition and activities of lipid-synthesizing enzymes in the rat heart sarcolemma. Szymański PT, et al. **Endokrynol Pol** 1989; 40(1):43–9
Release of phospholipase A2 activity from rat vascular smooth muscle cells mediated by cAMP. Pfeilschifter J, et al. **Eur J Biochem** 1989 Apr 15;181(1):237–42
Glutamic acid 71 and aspartic acid 66 control the binding of the second calcium ion in porcine pancreatic phospholipase A2. van den Bergh CJ, et al. **Eur J Biochem** 1989 Jun 15;182(2):307–13
Lysophospholipase and the metabolism of lysophosphatidylcholine in isolated bovine rod outer segments. Zimmerman WF, et al. **Exp Eye Res** 1989 Jan; 48(1):69–76
Possible involvement of phospholipase activation in erythroid progenitor cell proliferation. Beckman BS, et al. **Exp Hematol** 1989 Mar;17(3):309–12
Evidence for a protein kinase C-directed mechanism in the phorbol diester-induced phospholipase D pathway of diacylglycerol generation from phosphatidylcholine. Cabot MC, et al. **FEBS Lett** 1989 Mar 13;245(1-2):85–90
Differential activation by fMet-Leu-Phe and phorbol ester of a plasma membrane phosphatidylcholine-specific phospholipase D in human neutrophil. Gelas P, et al. **FEBS Lett** 1989 Jul 17;251(1-2):213–8
Phospholipase C and phospholipase A2 are involved in the antiviral activity of human interferon-alpha. Premecz G, et al. **FEBS Lett** 1989 Jun 5;249(2):257–60
A phospholipase A2 hydrolyzing arachidonoyl-phospholipids in mouse peritoneal macrophages. Wijkander J, et al. **FEBS Lett** 1989 Feb 13; 244(1):51–6
Evidence for two forms of phospholipase A2 in human semen. Antaki P, et al. **Gamete Res** 1988 Mar;19(3):305–14
Activation of phospholipase A2 of human spermatozoa by proteases. Guérette P, et al. **Gamete Res** 1988 Feb; 19(2):203–14
The activity of calcium dependent and calcium independent phospholipase A2 in normal endometrium and in endometrium from women suffering from menorrhagia and polycystic ovary syndrome. Bonney RC, et al. **Gynecol Endocrinol** 1988 Jun;2(2):131–8
Phospholipase activity in human bile. Nakano T, et al. **Hepatology** 1988 Nov-Dec;8(6):1560–4
Phospholipase A activity associated with the growth of Rickettsia prowazekii in L929 cells. Winkler HH, et al. **Infect Immun** 1989 Jan;57(1):36–40
Modulation of phospholipase A2 lytic activity by actin and myosin. Dubose DA, et al. **Inflammation** 1989 Feb; 13(1):15–29
Calcium-dependent regulation of phospholipase A2 and its inhibitors, including tetracaine, for acetylcholine receptor cluster formation in mouse myotubes co-cultured with spinal cord explant. Kimura M, et al. **Int J Dev Neurosci** 1987;5(2):127–33
Phospholipase and prostaglandins. Figarella C. **Int J Pancreatol** 1988;3 Suppl 1:S87–93 (5 ref.)
pH dependence of the reaction rate of His 48 with p-bromophenacyl bromide and of the binding constant to Ca2+ of the monomeric forms of intact and alpha-NH2 modified phospholipases A2 from Trimeresurus flavoviridis. Miyake T, et al. **J Biochem (Tokyo)** 1989 Apr; 105(4):565–72
Interactions of monodispersed and micellar substrates with a phospholipase A2 from Trimeresurus flavoviridis. Teshima K, et al. **J Biochem (Tokyo)** 1989 Jun; 105(6):1044–51
Hydrolysis of platelet activating factor and its methylated analogs by acetylhydrolases. Yanoshita R, et al. **J Biochem (Tokyo)** 1988 May;103(5):815–9
Morphological and biochemical effects of gentamicin and cyclosporin-A on urinary cell phospholipids and phospholipases in man. Chatterjee S, et al. **J Biochem Toxicol** 1988 Spring;3:47–57
Thermodynamic and kinetic studies of the interaction of vesicular dipalmitoylphosphatidylcholine with Agkistrodon piscivorus piscivorus phospholipase A2. Bell JD, et al. **J Biol Chem** 1989 Jan 5;264(1):225–30
The temporal sequence of events in the activation of phospholipase A2 by lipid vesicles. Studies with the monomeric enzyme from Agkistrodon piscivorus piscivorus. Bell JD, et al. **J Biol Chem** 1989 Jul 25; 264(21):12194–200
Regulation of phospholipase D in HL-60 granulocytes. Activation by phorbol esters, diglyceride, and calcium ionophore via protein kinase- independent mechanisms. Billah MM, et al. **J Biol Chem** 1989 May 25;264(15):9069–76
Platelet-activating factor acetylhydrolase increases during macrophage differentiation. A novel mechanism that regulates accumulation of platelet-activating factor. Elstad MR, et al. **J Biol Chem** 1989 May 25;264(15):8467–70
Identification and characterization of a hormonally regulated form of phospholipase A2 in rat renal mesangial cells. Gronich JH, et al. **J Biol Chem** 1988 Nov 15; 263(32):16645–51
Bradykinin-induced activation of phospholipase A2 is independent of the activation of polyphosphoinositide-hydrolyzing phospholipase C. Kaya H, et al. **J Biol Chem** 1989 Mar 25;264(9):4972–7
Identification and properties of very high affinity brain membrane-binding sites for a neurotoxic phospholipase from the taipan venom. Lambeau G, et al. **J Biol Chem** 1989 Jul 5;264(19):11503–10
Phosphatidylethanol biosynthesis in ethanol-exposed NG108-15 neuroblastoma X glioma hybrid cells. Evidence for activation of a phospholipase D phosphatidyl transferase activity by protein kinase C. Liscovitch M. **J Biol Chem** 1989 Jan 25;264(3):1450–6
Gonadotropin-releasing hormone activates phospholipase D in ovarian granulosa cells. Possible role in signal transduction. Liscovitch M, et al. **J Biol Chem** 1989 Jul 15;264(20):11762–7
P2-purinergic agonists stimulate phosphodiesteratic cleavage of phosphatidylcholine in endothelial cells. Evidence for activation of phospholipase D. Martin TW, et al. **J Biol Chem** 1989 May 25;264(15):8847–56
Phorbol ester and neomycin dissociate bradykinin receptor-mediated arachidonic acid release and polyphosphoinositide hydrolysis in Madin-Darby canine kidney cells. Evidence that bradykinin mediates noninterdependent activation of phospholipases A2 and C. Slivka SR, et al. **J Biol Chem** 1988 Oct 15;263(29):14640–7
Dimerization and activation of porcine pancreatic phospholipase A2 via substrate level acylation of lysine 56. Tomasselli AG, et al. **J Biol Chem** 1989 Jun 15; 264(17):10041–7
Rapid action of 1,25-dihydroxyvitamin D3 on hepatocyte phospholipids. Baran DT, et al. **J Bone Miner Res** 1988 Dec;3(6):593–600
The role of Asp-49 and other conserved amino acids in phospholipases A2 and their importance for enzymatic activity. van den Bergh CJ, et al. **J Cell Biochem** 1989 Apr;39(4):379–90
Alterations to the vascular vasodepressor prostaglandin system in DOCA-salt hypertensive rats and their enzymatic analysis. Uehara Y, et al. **J Hypertens Suppl** 1988 Dec; 6(4):S392–4
A phospholipase A2-activating protein (PLAP) stimulates human neutrophil aggregation and release of lysosomal enzymes, superoxide, and eicosanoids. Bomalaski JS, et al. **J Immunol** 1989 Jun 1;142(11):3957–62
Membrane structural alterations in murine stratum corneum: relationship to the localization of polar lipids and phospholipases [letter] Wertz PW, et al. **J Invest Dermatol** 1989 Feb;92(2):305–6
Cyclopentanoid analogs of phosphatidylcholine: susceptibility to phospholipase A2. Lister MD, et al. **J Lipid Res** 1988 Oct;29(10):1297–308
Hydrolysis of phosphatidylcholine during LDL oxidation is mediated by platelet-activating factor acetylhydrolase. Steinbrecher UP, et al. **J Lipid Res** 1989 Mar;30(3):305–15
A facile enzymatic synthesis of sphingosine-1-phosphate and dihydrosphingosine-1-phosphate. Van Veldhoven PP, et al. **J Lipid Res** 1989 Apr;30(4):611–6
Application of 1H-n.m.r. to the design of liposomes for oral use. Synergistic activity of bile salts and pancreatic phospholipase A2 in the induced permeability of small unilamellar phospholipid vesicles. Hunt GR, et al. **J Microencapsul** 1984 Apr-Jun;1(2):113–22
Purified rat brain myelin contains measurable acyl-CoA:lysophospholipid acyltransferase(s) but little, if any, glycerol-3-phosphate acyltransferase. Vaswani KK, et al. **J Neurochem** 1989 Jan;52(1):69–74
Alterations in Ascaris suum larval burdens, eosinophil numbers, and lysophospholipase activity associated with low levels of dietary iron. Laubach HE. **J Parasitol** 1989 Apr;75(2):317–20
Specificity of the activation of [3H]hemicholinium-3 binding by phospholipase A2. Yamada K, et al. **J Pharmacol Exp Ther** 1989 Jun;249(3):836–42
Phospholipase A2 activity associated with synovial fluid cells. Pruzanski W, et al. **J Rheumatol** 1988;15(5):791–4
Secretory synovial fluid phospholipase A2 and its role in the pathogenesis of inflammation in arthritis. Pruzanski W, et al. **J Rheumatol** 1988 Nov;15(11):1601–3 (31 ref.)
Activation of phospholipases A1 and A2 in heart, liver, and blood during endotoxin shock. Liu MS, et al. **J Surg Res** 1988 Nov;45(5):472–80
Phospholipases and acyltransferases in macrophages. Flesch I, et al. **Klin Wochenschr** 1989 Feb 1;67(3):119–22 (16 ref.)
Characterization of phospholipase A2 activity in aspirates of human pancreatic pseudocysts after isolation by reversed-phase high performance liquid chromatography. Göke B, et al. **Klin Wochenschr** 1989 Feb 1;67(3):131–5
Acid phospholipase A1 in liver—a brief survey. Kunze H, et al. **Klin Wochenschr** 1989 Feb 1;67(3):126–30 (35 ref.)
Phospholipase A activities in ascites, serum, lymph, and urine in acute pancreatitis following pancreas stimulation with secretin-ceruletid. Zirngibl H, et al. **Klin Wochenschr** 1989 Feb 1;67(3):141–3
Hydrolysis of a fluorescent substance formed from an oxidized phospholipid and an amino compound by phospholipase A2. Iio T, et al. **Lipids** 1988 Oct; 23(10):937–41
Activities of enzymes metabolizing phospholipids in rat cerebral ischemia. Hirashima Y, et al. **Mol Chem Neuropathol** 1989 Apr;10(2):87–100
Effects of lysophosphatidylcholine and arachidonic acid on the regulation of intracellular Ca2+ transport. Rustenbeck I, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb;339(1-2):37–41
Developmental changes and regional distribution of phospholipase D and base exchange enzyme activities in rat brain. Kobayashi M, et al. **Neurochem Res** 1988 Aug; 13(8):771–6
Kinetics of mast cells, eosinophils and phospholipase B activity in the spontaneous-cure response of two strains of mice (rapid and slow responder) to the cestode Hymenolepis nana. Bortoletti G, et al. **Parasitol Res** 1989; 75(6):465–9
Influence of PLA2-PG system on purine release and cAMP content in dissociated primary glial cultures from rat striatum. Caciagli F, et al. **Pharmacol Res** 1989 May-Jun; 21(3):271–84
Modifications of quiescence and functional activity of glial cultured cells by phospholipase A2-prostaglandin system

inhibition. Ciccarelli R, et al. **Pharmacol Res Commun** 1988 Dec;20(12):1069–70

Angiogenin stimulates endothelial cell prostacyclin secretion by activation of phospholipase A2. Bicknell R, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1573–7

Cellular responses to Pyrularia thionin are mediated by Ca2+ influx and phospholipase A2 activation and are inhibited by thionin tyrosine iodination. Evans J, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5849–53

Increased activity of the platelet-activating factor acetylhydrolase in plasma low density lipoprotein from patients with essential hypertension. Satoh K, et al. **Prostaglandins** 1989 Jun;37(6):673–82

The measurement of phospholipase A2 activity in human myometrium: physiological and pathological implications. Bonney RC, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Oct; 34(1):1–8

Characterization of a phospholipase A2 in hamster lung and in vitro and in vivo effects of bleomycin on this enzyme. Wang Q, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 May; 36(2):85–92

Evidence for the involvement of tyrosine-69 in the control of stereospecificity of porcine pancreatic phospholipase A2. Kuipers OP, et al. **Protein Eng** 1989 Mar;2(6):467–71

Stimulation of phospholipase A2 and vascular permeability by an extract of granuloma induced in the rat by carrageenin. Nakamae J, et al. **Res Commun Chem Pathol Pharmacol** 1988 Oct;62(1):67–78

In vitro lecithinase activity and sensitivity to 22 antimicrobial agents of Clostridium perfringens isolated from necrotic enteritis of broiler chickens. Kondo F. **Res Vet Sci** 1988 Nov;45(3):337–40

Phospholipase activation and arachidonic acid release in cultured intestinal epithelial cells (INT 407). Gustafson C, et al. **Scand J Gastroenterol** 1989 May;24(4):475–84

Enhanced activity and altered specificity of phospholipase A2 by deletion of a surface loop. Kuipers OP, et al. **Science** 1989 Apr 7;244(4900):82–5

Effects of tiaprofenic acid on interleukin 1, phospholipase A2 activity, prostaglandins, neutral protease, and collagenase activity in rheumatoid synovial fluid. Vignon E, et al. **Semin Arthritis Rheum** 1989 Feb;18(3 Suppl 1):11–5

[High phospholipase A-activity of Candida albicans isolated from the intestines of psoriatic patients] Hänel H, et al. **Mycoses** 1988 Sep;31(9):451–3 (Eng. Abstr.) **(Ger)**

[Study of phospholipase A2 in serum, ascitic exudate and pancreatic tissue in acute pancreatitis in rats] Onoyama H, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Jan;86(1):60–9 (Eng. Abstr.) **(Jpn)**

[Study of phospholipase A2 specificity in substrate-containing structures having different supramolecular organization] Akhrem AM, et al. **Biokhimiia** 1989 Apr;54(4):687–93 (Eng. Abstr.) **(Rus)**

[The interrelationship of the processes of lipid peroxidation and lipid phospholipase hydrolysis in the synaptosomes] Nikushkin EV, et al. **Biull Eksp Biol Med** 1989 Feb; 107(2):174–7 (Eng. Abstr.) **(Rus)**

[Lysophospholipase activity in mitochondrial membranes of the rat liver] Gorbataia ON, et al. **Ukr Biokhim Zh** 1988 Nov–Dec;60(6):23–8 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Phospholipase A2 (PLA2) release leukotrienes and other lipoxygenase products from endogenous sources. Lam BK, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989;19:598–601

The proinflammatory effect of intra-articular injection of soluble human and venom phospholipase A2. Vadas P, et al. **Am J Pathol** 1989 Apr;134(4):807–11

Effects of phospholipase A2 and its hydrolytic products on alveolar epithelial permeability and elastase-induced emphysema. Rice KL, et al. **Am Rev Respir Dis** 1988 Nov; 138(5):1196–200

Preterm labor and bacterial intra-amniotic infection: arachidonic acid liberation by the action of phospholipase A2. Takahashi K, et al. **Arch Gynecol Obstet** 1988; 244(1):1–6

Effects of exogenous phospholipase enzymes, arachidonic acid and 1-oleoyl-2-acetyl-sn-glycerol on ketogenesis in isolated rat hepatocytes. Chihara M, et al. **Biochim Biophys Acta** 1989 Jun 15;1012(1):5–9

Calcium-independent phospholipase A2 in rat tissue cytosols. Pierik AJ, et al. **Biochim Biophys Acta** 1988 Oct 14; 962(3):345–53

Effect of phospholipase A2 and free fatty acids on lipid-protein interactions in long- and very-long-chain fatty acyl-CoA elongation enzyme systems of brain microsomes. Yoshida S, et al. **Biochim Biophys Acta** 1989 Aug 8;1004(2):239–44

Behavioral and biochemical effects of intranigral injection of phospholipase-A2. Cadet JL, et al. **Biol Psychiatry** 1989 May;26(1):106–10

Enzymatic alteration of the ability of mouse egg plasma membrane to interact with sperm. Boldt J, et al. **Biol Reprod** 1988 Aug;39(1):19–27

Fluidity and osmotic sensitivity changes of phospholipase A2-treated liposomes. Kinjo M, et al. **Biorheology** 1988; 25(3):517–25

Phospholipase A2 induced airway hyperreactivity to cooling and acetylcholine in rat trachea: pharmacological modulation. Chand N, et al. **Br J Pharmacol** 1988 Aug; 94(4):1057–62

Effect of phospholipase A2 and cholesterol oxidase on perazine and promethazine penetration into human erythrocytes and on fluidity of the membrane. Ogiso T, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):2168–75

Analysis of relaxin release by cultured porcine luteal cells using a reverse hemolytic plaque assay: effects of arachidonic acid, cyclo- and lipooxygenase blockers, phospholipase A2, and melittin. Taylor MJ, et al. **Endocrinology** 1989 Sep;125(3):1389–97

Inhibitory mechanism of opioid binding to receptor by phospholipase A2. Makimura M, et al. **Gen Pharmacol** 1988; 19(5):707–12

A comparison of pancreatitis induced by high or low pressure injections of enzymes into the canine pancreatic duct. Schiller WR, et al. **Int J Pancreatol** 1989 Apr;4(3):281–90

Induction of alveolar epithelial injury by phospholipase A2. Niewoehner DE, et al. **J Appl Physiol** 1989 Jan;66(1):261–7

Lipolysis of LDL with phospholipase A2 alters the expression of selected apoB-100 epitopes and the interaction of LDL with cells. Kleinman Y, et al. **J Lipid Res** 1988 Jun;29(6):729–43

Enzymatic modification of low density lipoprotein by purified lipoxygenase plus phospholipase A2 mimics cell-mediated oxidative modification. Sparrow CP, et al. **J Lipid Res** 1988 Jun;29(6):745–53

Different sensitivity of ATP + Mg + Na (I) and Pi + Mg (II) dependent types of ouabain binding to phospholipase A2. Svoboda P, et al. **J Membr Biol** 1988 Sep;104(3):211–21

Inhibition of Na+,K+-ATPase activity by phospholipase A2 and several lysophospholipids: possible role of phospholipase A2 in noradrenaline release from cerebral cortical synaptosomes. Nishikawa T, et al. **J Pharm Pharmacol** 1989 Jul;41(7):450–8

Effect of treatment with phospholipase A2, colchicine, and beta-galactosidase on agglutination of rat hepatocytes. Bikhazi AB, et al. **J Pharm Sci** 1989 Jul;78(7):547–9

Simultaneous presence of platelet activating factor, leukotriene B4, prostaglandin F1 alpha and F2 alpha in the supernatant of human neutrophils treated with phospholipase A2 of human monocytes. Sipka S, et al. **Klin Wochenschr** 1989 Feb 1;67(3):123–5

Phospholipase A2 induced diffuse alveolar damage--effect of indomethacin and dexamethasone upon morphology and plasma-histamine level. Stömmer P, et al. **Klin Wochenschr** 1989 Feb 1;67(3):171–6

Pharmacological action of the phospholipase A2 from the venom of Trimeresurus flavoviridis on the smooth muscle of the rat stomach. Kamata K, et al. **Life Sci** 1989; 44(2):137–42

Effects of phospholipases on Cl-ATPase in the rat brain. Kunugi Y, et al. **Neurosci Lett** 1988 Oct 17;92(3):315–20

Correlation between the enzymatic activity, anticoagulant and antiplatelet effects of phospholipase A2 isoenzymes from Naja nigricollis venom. Kini RM, et al. **Thromb Haemost** 1988 Oct 31;60(2):170–3

Influence of phospholipase A2 on human blood platelet alpha adrenergic receptor function. Rao GH, et al. **Thromb Res** 1989 Mar 1;53(5):427–34

[Effects of phospholipase A2 and alpha-tocopherol on the activity of adenylate cyclase of rat brain synaptosomes] Gorbunov NV, et al. **Biull Eksp Biol Med** 1988 Oct; 106(10):438–40 (Eng. Abstr.) **(Rus)**

[The action of ionizing radiation on neuronal function in the edible snail. Phospholipase A2 and the Na+ and K+ transport systems] Dvoretskiĭ AI, et al. **Radiobiologiia** 1989 May–Jun;29(3):413–5 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Phospholipase A2 of human monocytes with molecular weight of 73 kD induces the production of prostaglandin derivatives and leukotriene B4 in the suspension of human neutrophil granulocytes. Sipka S, et al. **Acta Paediatr Hung** 1988–89;29(1–2):51–3

Lipocortins. Rothhut B, et al. **Adv Exp Med Biol** 1988; 245:209–15 (18 ref.)

Proinflammatory effects of phospholipase A2 (PLA2) in several in vitro and in vivo systems. Chang J, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:594–7

Extracellular phospholipase A2: causative agent in circulatory collapse of septic shock? Vadas P, et al. **Agents Actions** 1988 Jul;24(3–4):320–5

Membrane phospholipid turnover as an intermediary step in insulin secretion. Putative roles of phospholipases in cell signaling. Metz SA. **Am J Med** 1988 Nov 28;85(5A):9–21 (84 ref.)

Phospholipases in the control of human parturition. Liggins GC, et al. **Am J Perinatol** 1989 Apr;6(2):153–8 (65 ref.)

The role of phospholipase in host cell penetration by Toxoplasma gondii. Saffer LD, et al. **Am J Trop Med Hyg** 1989 Feb;40(2):145–9

The role of phospholipase in plasmocid-induced mitochondrial dysfunction in rat hearts. Hieda N, et al. **Arch Toxicol** 1988 Aug;62(1):45–8

Biosynthesis of paf-acether. XIV. Paf-acether output in murine peritoneal macrophages is regulated by the level of acetylhydrolase. Palmantier R, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):475–82

Selective hydrolysis of ether-containing glycerophospholipids by phospholipase A2 in rabbit lung [published erratum appears in Biochim Biophys Acta 1989 Aug 8;1004(2):279] Angle MJ, et al. **Biochim Biophys Acta** 1988 Sep 23;962(2):234–40

4-Bromophenacyl bromide inhibits prostaglandin D2 synthesis from arachidonic acid rather than phospholipase A2 activity in liver macrophages. Dieter P, et al. **Biol Chem Hoppe Seyler** 1989 Jun;370(6):543–7

Are disturbances in lipid-protein interactions by phospholipase-A2 a predisposing factor in affective illness? Hibbeln JR, et al. **Biol Psychiatry** 1989 Apr 1;25(7):945–61 (145 ref.)

Phospholipases modulate the rat testicular androgen biosynthetic pathway in vitro. Cooke GM, et al. **Biol Reprod** 1988 Sep;39(2):329–39

Depolarization-induced [3H]arachidonic acid accumulation: effects of external Ca2+ and phospholipase inhibitors. Dorman RV, et al. **Brain Res Bull** 1988 Sep;21(3):445–50

Is there a role for phospholipases in the anti-cardiolipin syndrome? Gonzalez-Buritica H, et al. **Clin Exp Rheumatol** 1988 Oct–Dec;6(4):341–2

Early changes of surface morphology in monolayer cultures of neural retina cells. The effect of p-bromophenacyl bromide. Suburo AM, et al. **Int J Dev Neurosci** 1987; 5(5–6):407–15

Phospholipase A2-mediated release of arachidonic acid in stimulated guinea pig alveolar macrophages: interaction with lipid mediators and cyclic AMP. Kadiri C, et al. **J Cell Biochem** 1989 Jun;40(2):157–64

No role for phospholipase A2 and protein kinase C in the potentiation by alpha-adrenoceptors of beta-adrenoceptor-mediated cyclic AMP formation in rat brain. Robinson JP, et al. **J Neurochem** 1989 Aug; 53(2):542–50

John Lattimer lecture. Lipokinins: novel phospholipase A2 activators mediate testosterone effects on embryonic genitalia. Goldman AS, et al. **J Urol** 1988 Nov;140(5 Pt 2):1184–8

Role of phospholipase A in multiorgan failure with special reference to ARDS and acute renal failure (ARF). Baur M, et al. **Klin Wochenschr** 1989 Feb 1;67(3):196–202

The role of phospholipase A2 in human acute pancreatitis. Nevalainen TJ. **Klin Wochenschr** 1989 Feb 1;67(3):180–2 (28 ref.)

Involvement of oxygen radicals and phospholipase A2 in acute pancreatitis of the rat. Schoenberg MH, et al. **Klin Wochenschr** 1989 Feb 1;67(3):166–70

G-protein beta gamma-subunits activate the cardiac muscarinic K+-channel via phospholipase A2. Kim D, et al. **Nature** 1989 Feb 9;337(6207):557–60

Differential effects of phospholipase inhibitors in long-term potentiation in the rat hippocampal mossy fiber synapses and Schaffer/commissural synapses. Okada D, et al. **Neurosci Lett** 1989 May 22;100(1–3):141–6

Phospholipases C and A2 in malignant cell proliferation. Wickremasinghe RG, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jun; 36(4):199–201 (19 ref.)

Receptor-mediated activation of phospholipase A2 via GTP-binding proteins: arachidonic acid and its metabolites as second messengers. Axelrod J, et al. **Trends Neurosci** 1988 Mar;11(3):117–23 (58 ref.)

SECRETION

Characteristic and pathophysiological roles of extracellular phospholipase A2 in inflamed sites. Kudo I, et al. **Dermatologica** 1989;179 Suppl 1:72–6

Extracellular secretion of cloned aerolysin and phospholipase by Aeromonas salmonicida. Wong KR, et al. **J Bacteriol** 1989 May;171(5):2523–7

TOXICITY

Edema-inducing activity of phospholipase A2 purified from human synovial fluid and inhibition by aristolochic acid. Vishwanath BS, et al. **Inflammation** 1988 Dec;12(6):549–61

Preliminary studies on phospholipase A2-induced mouse paw edema as a model to evaluate antiinflammatory agents. Marshall LA, et al. **J Cell Biochem** 1989 Jun;40(2):147–55

Isolation of an acidic phospholipase A2 from the venom of Agkistrodon acutus (five pace snake) and its effect on platelet aggregation. Chen RH, et al. **Toxicon** 1989; 27(6):675–82

Edema formation and degranulation of mast cells by a basic phospholipase A2 purified from Trimeresurus mucrosquamatus snake venom. Chiu HF, et al. **Toxicon** 1989;27(1):115–25

Dissociation of catalytic activity and neurotoxicity of a basic phospholipase A2 from Russell's viper (Vipera russelli) venom. Jayanthi GP, et al. **Toxicon** 1989;27(8):875–85

Factors influencing the hemolysis of human erythrocytes by cardiotoxins from Naja naja kaouthia and Naja naja atra venoms and a phospholipase A2 with cardiotoxin-like activities from Bungarus fasciatus venom. Jiang MS, et al. **Toxicon** 1989;27(2):247–57

A model to explain the pharmacological effects of snake venom phospholipases A2. Kini RM, et al. **Toxicon** 1989; 27(6):613–35 (143 ref.)

Effect of chemical modification with p-bromophenacyl bromide on the enzymatic and lethal properties of phospholipase A2 from Bothrops alternatus (Víbora de la Cruz) venom. Nisenbom HE, et al. **Toxicon** 1988; 26(12):1137–44

Neuromuscular effects of a toxic phospholipase A2 and its nontoxic homologue from the venom of the sea snake, Laticauda colubrina. Rowan EG, et al. **Toxicon** 1989; 27(5):587–91

Neuromuscular effects of three phospholipases A2 from the venom of the Australian king brown snake Pseudechis australis. Rowan EG, et al. **Toxicon** 1989;27(5):551–60

PHOSPHOLIPASES A see under **PHOSPHOLIPASES**

PHOSPHOLIPID ETHERS

Carbamyl phosphatidylcholine—cholesterol interactions in unilamellar vesicles. Bhakuni V, et al. **Biochim Biophys Acta** 1989 Jul 10;982(2):216–22

ANALYSIS

Correlation of ether lipid content of human leukemia cell lines and their susceptibility to 1-O-octadecyl-2-O-methyl-rac-glycero-3-phosphocholine. Chabot MC, et al. **Cancer Res** 1989 Aug 15;49(16):4441–5

Evidence that the endogenous heat-stable glucocorticoid receptor stabilizing factor is a metal component of the untransformed receptor complex. Meshinchi S, et al. **J Biol Chem** 1988 Nov 15;263(32):16809–17

BLOOD

Determination of the alkyl lysophospholipid derivative ET-18-OCH3, a new antineoplastic drug, in plasma. Schaefer HG, et al. **Clin Chem** 1989 May;35(5):821–3

CHEMICAL SYNTHESIS

Conversion of methylallyl alcohol into C2-methyl-1,2-di-O-hexadecylglycerophosphocholine, a conformationally restricted phospholipid. Bittman R, et al. **Chem Phys Lipids** 1989 May;50(2):99–103

Potential tumor or organ-imaging agents. 30. Radioiodinated phospholipid ethers. Meyer KL, et al. **J Med Chem** 1989 Sep;32(9):2142–7

METABOLISM

Molecular dynamics of antitumor ether-linked phospholipids in model membranes: a spin-label study. Lai CS, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1189–95

Characteristics of ether-linked glycerophospholipids in Friend erythroleukaemia cells differentiated by dimethyl sulphoxide or hexamethylenebisacetamide and in non-inducible clones treated with the inducers. Fallani A, et al. **Biochem J** 1988 Oct 15;255(2):731–5

Selective hydrolysis of ether-containing glycerophospholipids by phospholipase A2 in rabbit lung [published erratum appears in Biochim Biophys Acta 1989 Aug 8;1004(2):279] Angle MJ, et al. **Biochim Biophys Acta** 1988 Sep 23;962(2):234–40

Correlation of ether lipid content of human leukemia cell lines and their susceptibility to 1-O-octadecyl-2-O-methyl-rac-glycero-3-phosphocholine. Chabot MC, et al. **Cancer Res** 1989 Aug 15;49(16):4441–5

An oxidized derivative of phosphatidylcholine is a substrate for the platelet-activating factor acetylhydrolase from human plasma. Stremler KE, et al. **J Biol Chem** 1989 Apr 5;264(10):5331–4

Metabolism of platelet activating factor and related ether lipids: enzymatic pathways, subcellular sites, regulation, and membrane processing. Snyder F. **Prog Clin Biol Res** 1988;282:57–72 (79 ref.)

PHARMACOLOGY

Effects of PAF and PAF antagonists on the shape of venous endothelial cells in vitro. Northover AM. **Agents Actions** 1989 Aug;28(1–2):142–8

Inhibition of Na,K-ATPase and sodium pump by anticancer ether lipids and protein kinase C inhibitors ET-18-OCH3 and BM 41.440. Oishi K, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1000–6

HL-60 cells become resistant towards antitumor ether-linked phospholipids following differentiation into a granulocytic form. Vallari DS, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):1–8

An antagonist to platelet activating factor counteracts the tumoricidal action of alkyl lysophospholipids. Bazill GW, et al. **Biochem Pharmacol** 1989 Jan 15;38(2):374–7

Effects of antineoplastic ether lipids on model and biological membranes. Noseda A, et al. **Biochim Biophys Acta** 1988 Nov 3;945(1):92–100

Effect of ether lipids on mouse granulocyte-macrophage progenitor cells. Vehmeyer K, et al. **Cancer Chemother Pharmacol** 1989;24(1):58–60

Reduction of epidermal growth factor binding in human breast cancer cell lines by an alkyl-lysophospholipid. Kosano H, et al. **Cancer Res** 1988 Nov 1;48(21):6033–6

Inhibition by an alkyl-lysophospholipid of the uptake of epidermal growth factor in human breast cancer cell lines in relation to epidermal growth factor internalization. Kosano H, et al. **Cancer Res** 1989 Jun 1;49(11):2868–70

Effects of thioether phospholipid BM 41.440 on protein kinase C and phorbol ester-induced differentiation of human leukemia HL60 and KG-1 cells. Shoji M, et al. **Cancer Res** 1988 Dec 1;48(23):6669–73

Ether lipids and analogues. Fleer EA. **J Cancer Res Clin Oncol** 1988;114(6):655–6

Synergistic enhancement of the antiproliferative activity of cis-diamminedichloroplatinum(II) by the ether lipid analogue BM41440, an inhibitor of protein kinase C. Hofmann J, et al. **Lipids** 1989 Apr;24(4):312–7

Effect of the PAF antagonists, CV-3988 and L-652,731 on the pulmonary and hematological responses to guinea pig anaphylaxis. Danko G, et al. **Pharmacol Res Commun** 1988 Sep;20(9):785–98

[The effect of ET-18-OCH3/cholesterol-liposomes on the membrane potentials of isolated endothelial cells] Mende S, et al. **Pharmazie** 1989 Feb;44(2):164 **(Ger)**

[Effects of a platelet activating factor (PAF) antagonist CV-3988 on acute gastric erosions in rats by water immersion and restrained stress, and by ethanol] Nogami M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Oct; 85(10):2149–54 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Purging of acute myeloid leukemic cells by ether lipids and hyperthermia. Okamoto S, et al. **Blood** 1988 Nov; 72(5):1777–83

PHOSPHOLIPIDS

Micellization and solubilization of phospholipids by surfactants. Dennis EA. **Adv Colloid Interface Sci** 1986 Nov;26(2–4):155–75 (35 ref.)

Electrical phenomena at the surface of phospholipid membranes relevant to the sorption of ionic compounds. Matsumura H, et al. **Adv Colloid Interface Sci** 1989 Jul; 30(1–2):71–109 (55 ref.)

Molecular modeling of the phospholipid bilayer. Gaber BP, et al. **Adv Exp Med Biol** 1988;238:1–11

Juvenile asteroid hyalosis and pre-Descemet's dystrophy. Dodwell DG, et al. **Am J Ophthalmol** 1988 Oct 15; 106(4):504–5

Standard abbreviations for antiphospholipid antibodies [letter] Asherson RA. **Arthritis Rheum** 1989 Mar; 32(3):359–60

Iron redox reactions and lipid peroxidation. Aust SD. **Basic Life Sci** 1988;49:137–44

Phospholipid bilayers enhance the stability of leukotriene A4 and epoxytetraenes: stabilization of eicosanoids by liposomes. Fiore S, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):477–81

Fluorimetric studies of protein kinase C interactions with phospholipids. Rodriguez-Paris JM, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):495–500

Enterotoxin of Clostridium perfringens type A forms ion-permeable channels in a lipid bilayer membrane. Sugimoto N, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):551–6

Fourier transform infrared spectroscopy of 13C = O-labeled phospholipids hydrogen bonding to carbonyl groups. Blume A, et al. **Biochemistry** 1988 Oct 18;27(21):8239–49

Membrane fusion and inverted phases. Ellens H, et al. **Biochemistry** 1989 May 2;28(9):3692–703

Partitioning of exchangeable fluorescent phospholipids and sphingolipids between different lipid bilayer environments. Gardam MA, et al. **Biochemistry** 1989 Jan 24;28(2):884–93

Thermodynamics of phospholipid bilayer assembly. Gershfeld NL. **Biochemistry** 1989 May 16;28(10):4229–32

Preferred conformation and dynamics of the glycerol backbone in phospholipids. An NMR and X-ray single-crystal analysis. Hauser H, et al. **Biochemistry** 1988 Dec 27;27(26):9166–74

Phospholipid asymmetry in large unilamellar vesicles induced by transmembrane pH gradients. Hope MJ, et al. **Biochemistry** 1989 May 16;28(10):4181–7

Osmoelastic coupling in biological structures: a comprehensive thermodynamic analysis of the osmotic response of phospholipid vesicles and a reevaluation of the "dehydration force" theory. Ito T, et al. **Biochemistry** 1989 Jun 27;28(13):5626–30

Influence of head-group interactions on the miscibility of synthetic, stereochemically pure glycolipids and phospholipids [published erratum appears in Biochemistry 1988 Nov 15;27(23):8694] Koynova RD, et al. **Biochemistry** 1988 Jun 28;27(13):4612–9

Variation in hydration forces between neutral phospholipid bilayers: evidence for hydration attraction. Rand RP, et al. **Biochemistry** 1988 Oct 4;27(20):7711–22

Physiological levels of diacylglycerols in phospholipid membranes induce membrane fusion and stabilize inverted phases. Siegel DP, et al. **Biochemistry** 1989 May 2; 28(9):3703–9

Quantitative fluorescence measurement of chloride transport mechanisms in phospholipid vesicles. Verkman AS, et al. **Biochemistry** 1989 May 16;28(10):4240–4

Mechanisms of interaction of amino acids with phospholipid bilayers during freezing. Anchordoguy T, et al. **Biochim Biophys Acta** 1988 Dec 22;946(2):299–306

Surface potentials and electric dipole moments of ganglioside and phospholipid bilayers: contribution of the polar headgroup at the water/lipid interface. Beitinger H, et al. **Biochim Biophys Acta** 1989 Sep 18;984(3):293–300

A fluorescence study examining how 14-valerate side chain substitution modulates anthracycline binding to small unilamellar phospholipid vesicles. Burke TG, et al. **Biochim Biophys Acta** 1989 Jun 26;982(1):123–30

NMR study of the interaction of retinoids with phospholipid bilayers. De Boeck H, et al. **Biochim Biophys Acta** 1988 Dec 22;946(2):244–52

Minimal surface tension, squeeze-out and transition temperatures of binary mixtures of dipalmitoylphosphatidylcholine and unsaturated phospholipids. Egberts J, et al. **Biochim Biophys Acta** 1989 Mar 14;1002(1):109–13

Intermediary structures during membrane fusion as observed by cryo-electron microscopy. Frederik PM, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):275–8

Intermixing of dipalmitoylphosphatidylcholine with phospho- and sphingolipids bearing highly asymmetric hydrocarbon chains. Gardam M, et al. **Biochim Biophys Acta** 1989 Apr 28;980(3):319–25

Interaction between a growth-hormone releasing hexapeptide and phospholipids spread as monolayers at the air/water interface. Issaurat B, et al. **Biochim Biophys Acta** 1988 Oct 20;944(3):516–20

Perturbation of binary phospholipid mixtures by melittin: a fluorescence and raman spectroscopy study. Lafleur M, et al. **Biochim Biophys Acta** 1989 Mar 27;980(1):85–92

Cholesterol affects divalent cation-induced fusion and isothermal phase transitions of phospholipid membranes. Shavnin SA, et al. **Biochim Biophys Acta** 1988 Dec 22; 946(2):405–16

Aqueous two-phase polymer partitioning of lipid vesicles of defined size and composition. Tilcock C, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):208–14

Entrapment of lipid vesicles and membrane protein-lipid vesicles in gel bead pores. Wallstén M, et al. **Biochim Biophys Acta** 1989 Jun 26;982(1):47–52

Secondary structure changes of diphtheria toxin interacting with asolectin liposomes: an infrared spectroscopy study. Cabiaux V, et al. **Biochimie** 1989 Jan;71(1):153–8

Lateral proton conduction along a lipid-water interface layer: a molecular mechanism for the role of hydration water molecules. Prats M, et al. **Biochimie** 1989 Jan;71(1):33–6

Water adsorption isotherms and hydration forces for lysolipids and diacyl phospholipids. Marsh D. **Biophys J** 1989 Jun;55(6):1093–100

Inhomogeneous translational diffusion of monoclonal antibodies on phospholipid Langmuir-Blodgett films. Wright LL, et al. **Biophys J** 1988 Sep;54(3):463–70

A model for gramicidin A'-phospholipid interactions in bilayers. Cornell BA, et al. **Eur Biophys J** 1988; 16(5):299–306

Membrane bending energy and shape determination of phospholipid vesicles and red blood cells. Svetina S, et al. **Eur Biophys J** 1989;17(2):101–11

The effect of rimantadine on the structure of model and biological membranes. Cherny VV, et al. **Gen Physiol Biophys** 1989 Feb;8(1):23–37

Tocopheroxyl radical persistence and tocopherol consumption in liposomes and in vitamin E-enriched rat liver mitochondria and microsomes. Mehlhorn RJ, et al. **J Biol Chem** 1989 Aug 15;264(23):13448–52

The isolation, characterization, and lipid-aggregating properties of a citrulline containing myelin basic protein. Wood DD, et al. **J Biol Chem** 1989 Mar 25;264(9):5121–7

Inhibition of platelet adhesion to glow discharge modified surfaces. Sharma CP, et al. **J Biomater Appl** 1987 Apr; 1(4):533–52

Electron diffraction structure analysis of phospholipids. Dorset DL. **J Electron Microsc Tech** 1987 Sep;7(1):35–46

Fusion of phospholipid vesicles with a planar membrane depends on the membrane permeability of the solute used to create the osmotic pressure. Cohen FS, et al. **J Gen Physiol** 1989 Feb;93(2):201–10

Hydrostatic pressures developed by osmotically swelling vesicles bound to planar membranes. Niles WD, et al. **J Gen Physiol** 1989 Feb;93(2):211–44

Crystallization of porin using short chain phospholipids. Eiselé JL, et al. **J Mol Biol** 1989 Mar 5;206(1):209–12

Crystallization of p68 on lipid monolayers and as three-dimensional single crystals. Newman R, et al. **J Mol Biol** 1989 Mar 5;206(1):213–9

In vivo stability of ester- and ether-linked phospholipid-containing liposomes as measured by perturbed angular correlation spectroscopy. Derksen JT, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9768–72

QSAR and multivariate data analysis of the interaction of amphiphilic drugs with phospholipids. Seydel JK, et al. **Prog Clin Biol Res** 1989;291:117–22

Parameters for preparation of celite-inositin surfaces for APTT based FVIII:C assay using soybean inositin and commercial celite. Beck SM, et al. **Thromb Res** 1988 Oct 15;52(2):179–82

[Comparative study, with photoelectron spectroscopy of the adsorption of phospholipids by 3 fibrous silicate minerals (chrysotile, crocidolite, attapulgite)] Baillif P, et al. **C R Acad Sci [III]** 1988;307(3):83–7 (Eng. Abstr.) **(Fre)**

[Reconstruction of single calcium channels of synaptic membranes on artificial phospholipid membranes] Sokolov IuV. **Dokl Akad Nauk SSSR** 1988;300(2):469–71 **(Rus)**

ADMINISTRATION & DOSAGE

A combination of hypothalamic phospholipid liposomes with trazodone for treatment of depression. An open controlled study. Giannelli A, et al. **Acta Psychiatr Scand** 1989 Jan; 79(1):52–8

ANALYSIS

Fatty acid composition of platelet phospholipids and plasma total lipids in Kawasaki disease. Hidaka T, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Jun;30(3):294–8

Kinetics of phospholipid extraction from Coxiella burnetii. Lukáčová M, et al. **Acta Virol (Praha)** 1988 Sep;32(5):461–3

A new technique for lipid analysis using liquid chromatography/mass spectrometry. Kim HY, et al. **Adv Alcohol Subst Abuse** 1988;7(3–4):241–7

Interaction of polyamines with phospholipids: spermine and Ca2+ competition for phosphatidylserine containing liposomes. Tadolini B, et al. **Adv Exp Med Biol** 1988; 250:481–90

Fatty acid and phospholipid species composition of rat tissues after a fish oil diet. Salem N Jr, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:618–22

The prevalence and biologic significance of lupus anticoagulant and anticardiolipin antibodies in a general obstetric population. Lockwood CJ, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):369–73

Calcium–acidic phospholipid–phosphate complexes in human hydroxyapatite-containing pathologic deposits. Boskey AL, et al. **Am J Pathol** 1988 Oct;133(1):22–9

Constant neutral loss scanning for the characterization of bacterial phospholipids desorbed by fast atom bombardment. Heller DN, et al. **Anal Chem** 1988 Dec 15; 60(24):2787–91

Susceptibility to hydrophobic molecules and phospholipid composition in Pasteurella multocida and Actinobacillus lignieresii. Hart ME, et al. **Antimicrob Agents Chemother** 1988 Sep;32(9):1354–9

Study of the effects of liposomal amphotericin B on Candida albicans, Cryptococcus neoformans, and erythrocytes by using small unilamellar vesicles prepared from saturated phospholipids. Jullien S, et al. **Antimicrob Agents Chemother** 1989 Mar;33(3):345–9

Fusion of phospholipid vesicles mediated by cytochrome c. Lee S, et al. **Arch Biochem Biophys** 1989 May 15; 271(1):188–99

Comparison of pharyngeal aspiration and amniotic fluid surfactant phospholipids for prediction of RDS. Dhall K, et al. **Asia Oceania J Obstet Gynaecol** 1988 Sep; 14(3):347–54

Transverse and lateral distribution of phospholipids and glycolipids in the membrane of the bacterium Micrococcus luteus. de Bony J, et al. **Biochemistry** 1989 May 2; 28(9):3728–37

Human prostasome membranes exhibit very high cholesterol/phospholipid ratios yielding high molecular ordering. Arvidson G, et al. **Biochim Biophys Acta** 1989 Sep 4;984(2):167–73

The alpha-tocopherol and phospholipid fatty acid content of rat liver subcellular membranes in vitamin E and selenium deficiency. Buttriss JL, et al. **Biochim Biophys Acta** 1988 Nov 4;963(1):61–9

Modelling the phase equilibria in two-component membranes of phospholipids with different acyl-chain lengths. Ipsen JH, et al. **Biochim Biophys Acta** 1988 Oct 6;944(2):121–34

Analytical characterization of cytochrome oxidase preparations with regard to metal and phospholipid contents, peptide composition and catalytic activity. Oblad M, et al. **Biochim Biophys Acta** 1989 Jul 13;975(2):267–70

Quantitation of phospholipid vesicles and their cholesterol content in human bile by quasi-elastic light scattering. Sömjen GJ, et al. **Biochim Biophys Acta** 1988 Nov 25; 963(2):265–70

Endosomes differ from plasma membranes in the phospholipid molecular species composition. Urade R, et al. **Biochim Biophys Acta** 1988 Dec 8;946(1):151–63

Segregation of anionic lipophiles in bilayers monitored by binding of cationic dye NK-529. Yu BZ, et al. **Biochim Biophys Acta** 1989 Mar 27;980(1):15–22

Heterogeneous distribution of phospholipids in membranes along the secretory pathway in pancreatic B-cells. Coulombe PA, et al. **Biol Cell** 1989;65(1):83–6

The effect of thyroid hormones on the lipid composition of rat plasma and erythrocyte membranes. Digiorgio VM, et al. **Boll Soc Ital Biol Sper** 1988 Nov;64(11):979–84

The effect of short-term treatment with vitamin D metabolites on bone lipid and mineral composition in healing vitamin D-deficient rats. Boskey AL, et al. **Bone** 1988;9(5):309–18

Human amniotic fluid urogastrone (epidermal growth factor) and fetal lung phospholipids. Haigh R, et al. **Br J Obstet Gynaecol** 1989 Feb;96(2):171–8

Regional differences in lipid composition and incorporation of saturated and unsaturated fatty acids into microsomal membranes of rat small intestine. Garg ML, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):794–800

Fatty acid composition of phospholipids in mitochondria and microsomes during diethylnitrosamine carcinogenesis in rat liver. Canuto RA, et al. **Cell Biochem Funct** 1989 Jan; 7(1):11–9

Evidence of chemical instability of phospholipids in liposomes. Piraube C, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4600–2

Differential scanning calorimetric study of the thermotropic phase behavior of a polymerizable, tubule-forming lipid. Burke TG, et al. **Chem Phys Lipids** 1988 Oct;48(3–4):215–30

Phospholipid surface tension: the diagnostic utility of amniotic fluid and its lipid extract, an analysis of the value of precipitation with cold acetone. Ruiz Budría J, et al. **Clin Chem** 1989 May;35(5):800–3

Improved staining method for thin-layer chromatograms of amniotic fluid phospholipids. Tamagno B, et al. **Clin Chem** 1989 Jul;35(7):1539–40

Determination of phospholipids in biological samples by an improved densitometric method on thin-layer chromatograms. Masella R, et al. **Clin Chim Acta** 1988 Aug 15;176(1):63–70

Phospholipid composition of hibernating ground squirrel (Citellus lateralis) kidney and low-temperature membrane function. Aloia RC. **Comp Biochem Physiol [B]** 1978; 60(1):19–26

Fatty chain composition of phospholipids in sea urchin spermatozoa. Mita M, et al. **Comp Biochem Physiol [B]** 1989;92(2):319–22

Changes in the phospholipid composition and phospholipid asymmetry of ram sperm plasma membranes after cryopreservation. Hinkovska-Galcheva V, et al. **Cryobiology** 1989 Feb;26(1):70–5

Conformational transmission in condensed lipid model compounds. Chain packing modification by head-group-induced conformational changes in the glyceryl backbone. Meulendijks GH, et al. **Eur J Biochem** 1989 Jul 1;182(3):531–8

A further insight into the binding of blood clotting factors to membranes. Prigent-Dachary J, et al. **Eur J Biochem** 1989 May 15;181(3):675–80

Introduction of a high-resolution cytochemical method for studying the distribution of phospholipids in biological tissues. Coulombe PA, et al. **Eur J Cell Biol** 1988 Aug; 46(3):564–76

The jelly layers and cortex of the unfertilized Xenopus laevis egg: carbohydrate, phospholipid and protein analysis. Tilley L, et al. **Eur J Cell Biol** 1988 Oct;47(1):47–52

Effects of in utero and in vitro incubation on the lipid-bound fatty acids and sterols of porcine spermatozoa. Evans RW, et al. **Gamete Res** 1987 Oct;18(2):153–62

Role of biliary phospholipids in cholesterol gallstone formation [editorial] Grundy SM. **Gastroenterology** 1989 Mar;96(3):942–3

The characterization of phospholipids associated with microtubules, purified tubulin and microtubule associated proteins in vitro. Hargreaves AJ, et al. **Int J Biochem** 1988; 20(10):1133–8

Inhibition of interferon gamma-induced macrophage microbicidal activity against Leishmania major by liposomes: inhibition is dependent upon composition of phospholipid headgroups and fatty acids. Gilbreath MJ, et al. **Int J Immunopharmacol** 1989;11(2):103–10

Changes in forebrain, cerebellum and brain stem phospholipid patterns from mothers and newborn rats after chronic pentazocine treatment during the gestation period. Andres R, et al. **Ital J Biochem** 1988 Sep–Oct;37(5):275–83

Effect of dietary fish oil on lung lipid profile and hypoxic pulmonary hypertension. Archer SL, et al. **J Appl Physiol** 1989 Apr;66(4):1662–73

Development of O2 tolerance in rabbits with no increase in antioxidant enzymes. Baker RR, et al. **J Appl Physiol** 1989 Apr;66(4):1679–84

Studies on furan fatty acids of salmon roe phospholipids. Ishii K, et al. **J Biochem (Tokyo)** 1988 May;103(5):836–9

Ovalbumin-induced fusion of acidic phospholipid vesicles at low pH. Yun CH, et al. **J Biochem (Tokyo)** 1989 Mar; 105(3):406–11

Phospholipid storage in the secretory granule of the mast cell. Chock SP, et al. **J Biol Chem** 1989 Feb 15; 264(5):2862–8

Plasma membranes contain half the phospholipid and 90% of the cholesterol and sphingomyelin in cultured human fibroblasts. Lange Y, et al. **J Biol Chem** 1989 Mar 5; 264(7):3786–93

Two-dimensional thin-layer chromatographic separation of phospholipid molecular species using plates with both reversed-phase and argentation zones. Kennerly DA. **J Chromatogr** 1988 Nov 11;454:425–31

Highly sensitive determination and characterization of intact cellular ester-linked phospholipids using liquid chromatography-plasma spray mass spectrometry. Odham G, et al. **J Chromatogr** 1988 Dec 29;434(1):31–41

Phospholipids in amniotic fluid with special reference to the lecithin/sphingomyelin ratio. Touchstone JC, et al. **J Chromatogr** 1988 Jul 29;429:359–71 (37 ref.)

Use of lead aspartate block staining in quantitative EM autoradiography of phospholipids: application to myelinating peripheral nerve. Gould RM, et al. **J Histochem Cytochem** 1989 Sep;37(9):1393–9

Fatty acid composition of serum lipids in patients with a coronary bypass operation. Marniemi J, et al. **J Intern Med** 1989 May;225(5):343–7

Dynamics of n-3 and n-6 fatty acids in phospholipids of heart muscle. Gudbjarnason S. **J Intern Med Suppl** 1989; 225(731):117–28 (24 ref.)

Reversible alterations in fatty acid composition of heart muscle membrane phospholipids induced by epinephrine in rats fed different fats. Benediktsdottir VE, et al. **J Lipid Res** 1988 Jun;29(6):765–72

31P NMR of tissue phospholipids: a comparison of three tissue pre-treatment procedures. Meneses P, et al. **J Lipid Res** 1989 Mar;30(3):458–61

An investigation of the fixation and staining of lipids by a combination of malachite green or other triphenylmethane dyes with glutaraldehyde. Lawton JR. **J Microsc** 1989 Apr; 154 (Pt 1):83–92

Modification of the n-6/n-3 fatty acid ratio in the phospholipids of rat ventricular myocytes in culture by the use of synthetic media: functional and biochemical consequences in normoxic and hypoxic conditions. Grynberg A, et al. **J Mol Cell Cardiol** 1988 Oct; 20(10):863–74

Changes in phospholipid and cholesterol concentrations of the rat microvillus membrane during maturation. Engelhardt EL, et al. **J Pediatr Gastroenterol Nutr** 1989 Jul;9(1):89–93

Interactions of antiarrhythmics with artificial phospholipid membranes. Voigt W, et al. **J Pharm Sci** 1988 Dec; 77(12):1018–20

Influence of dietary fats on pancreatic phospholipids of chronically ethanol-treated rats. Cronholm T, et al. **Lipids** 1988 Sep;23(9):841–6

Phospholipid analysis of human eosinophils: high levels of alkylacylglycerophosphocholine (PAF precursor). Ojima-Uchiyama A, et al. **Lipids** 1988 Aug;23(8):815–7

Rapid separation and quantitation of major phospholipids in biological samples by combined high-performance liquid chromatography and automated phosphorus analyzer. Islam A, et al. **Miner Electrolyte Metab** 1989;15(4):209–13

Analysis of a soluble lipid-protein complex carrying endogenous 11-cis retinaldehyde from bovine retinal pigment epithelium. Livrea MA, et al. **Mol Cell Biochem** 1989 Feb 21;85(2):181–9

Lipid composition of myelin and protein—lipid complex in a neurological rabbit mutant. Wikel H, et al. **Neurochem Pathol** 1988 Apr;8(2):109–19

Cerebral microvascular and parenchymal phospholipid composition in the mouse. Williams WM, et al. **Neurochem Res** 1988 Aug;13(8):743–7

Presence of phospholipidic lamellar bodies on the mucosa of rabbit eustachian tube. Ultrastructural aspects. Mira E, et al. **ORL J Otorhinolaryngol Relat Spec** 1988;50(4):251–6

Interactions between aminoglycosides and phospholipids using liposomes: a possible mechanism of nephrotoxicity. Aramaki Y, et al. **Pharm Res** 1989 May;6(5):362–6

Effect of chronic ethanol treatment and subsequent ischaemia on phospholipids and cholesterol in the rabbit spinal cord. Halát G, et al. **Physiol Bohemoslov** 1988;37(4):313–23

Alterations in phospholipid composition of egg yolks from laying hens fed choline and methionine-supplemented diets. Tsiagbe VK, et al. **Poult Sci** 1988 Dec;67(12):1717–24

A phosphatidylglycerol analogue: effect on phospholipid packing using polarized fluorescence spectroscopy. Glazman M, et al. **Prog Clin Biol Res** 1989;292:107–15

Optical, infrared and NMR studies of cation–phospholipid interactions. Petersheim M, et al. **Prog Clin Biol Res** 1989; 292:87–96 (16 ref.)

Membrane stabilization by vitamin E: magnetic resonance studies of the interaction of alpha-tocopherol with fatty acid acyl chains in phospholipid model membranes. Wassall SR, et al. **Prog Clin Biol Res** 1989;292:435–44

Structure and thermal stability of monomeric bacteriorhodopsin in mixed phospholipid/detergent micelles. Brouillette CG, et al. **Proteins** 1989;5(1):38–46

Biochemical analysis of vitellogenin from rainbow trout (Salmo gairdneri): fatty acid composition of phospholipids. Fremont L, et al. **Reprod Nutr Dev** 1988;28(4A):939–52

A comparison of the surfactant associated lipids derived from reptilian and mammalian lungs. Daniels CB, et al. **Respir Physiol** 1989 Mar;75(3):335–47

Phospholipids and their fatty acid composition in the muscle of trout fed on diets supplemented with olive oil bagasse or technical rendered fat. de la Hoz L, et al. **Rev Esp Fisiol** 1989 Jun;45(2):187–93

Effects of certain electron-microscope stains on phospholipid monolayers [letter] Gorwyn D, et al. **Ultramicroscopy** 1989 Jan–Feb;27(1):113–4

Determination of the phospholipid content of human milk, cow's milk and various infant formulas. Kynast G, et al. **Z Ernahrungswiss** 1988 Dec;27(4):252–65

Changes in the relative concentrations of surfactant phospholipids in young pigs with experimental pneumonia. Sachse K. **Zentralbl Veterinarmed [B]** 1989 Jul;36(5):385–90

[Mycolic acids and phospholipids analysis of nocardioform actinomycetes and related taxa] Liu ZH, et al. **Wei Sheng Wu Hsueh Pao** 1988 Sep;28(3):206–10 (Eng. Abstr.) **(Chi)**

[Comparative study of the lipid composition of seminal fluid and ovulatory peritoneal fluid in humans] Vignon F, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(4):459–62 (Eng. Abstr.) **(Fre)**

[Phospholipid content of subcellular structures in skeletal muscles after halothane loading in Landrace swine in relation to mating variants and genotype] Adam H, et al. **Arch Exp Veterinarmed** 1989 Mar;43(2):293–9 (Eng. Abstr.) **(Ger)**

[Presence of phospholipid material in the eustachian tube epithelium of rabbits] Benazzo M, et al. **Acta Otorhinolaryngol Ital** 1987;7 Suppl 16:13–20 (Eng. Abstr.) **(Ita)**

[Surfactant in the upper airways: a preliminary plan of study] Passàli D, et al. **Acta Otorhinolaryngol Ital** 1987;7 Suppl 16:61–5 (Eng. Abstr.) **(Ita)**

[Chemico-experimental data on the principal bile constituents in patients with obstructive jaundice] Angelini G, et al. **Clin Ter** 1989 Jun 15;129(5):359–64 (Eng. Abstr.) **(Ita)**

[Diagnostic value of the hydrolytic method of determining the degree of fetal lung maturity] Torkhovskaia TI, et al. **Akush Ginekol (Mosk)** 1988 Jul;(7):28–31 (Eng. Abstr.) **(Rus)**

[Change in the composition of phospholipids and antioxidative activity of lipids of mouse organs after administration of adriamycin] Palʹmina NP, et al. **Biokhimiia** 1988 Nov;53(11):1888–94 (Eng. Abstr.) **(Rus)**

[High performance liquid chromatography of phospholipids on modified silica gel] Voronin MV, et al. **Bioorg Khim** 1989 Mar;15(3):423–4 (Eng. Abstr.) **(Rus)**

[Determination of phospholipids using thin-layer chromatography with subsequent densitometry] Dzhavadov AK. **Lab Delo** 1989;(2):28–9 (Eng. Abstr.) **(Rus)**

[Lipid composition of the erythrocyte membranes in rheumatoid arthritis] Noskov SM, et al. **Lab Delo** 1988;(5):73–4 **(Rus)**

[Phospholipids of bacteria of Brucella genus] Kulikov VI, et al. **Mol Gen Mikrobiol Virusol** 1988 Sep;(9):17–21 (Eng. Abstr.) **(Rus)**

[Qualitative and quantitative changes in the phospholipid composition in experimental brain edema and during treatment with antiedema preparations] Samvelian VM, et al. **Patol Fiziol Eksp Ter** 1988 May-Jun;(3):21–4 (Eng. Abstr.) **(Rus)**

[Characteristics of the fatty acid composition of surfactant phospholipids in the condensate of the expired breath of patient with pulmonary tuberculosis] Protsiuk RG, et al. **Vrach Delo** 1988 Sep;(9):77–9 (Eng. Abstr.) **(Rus)**

[Changes in the content of various types of cholesterol and phospholipids in rat tissues during cold acclimation] Ternovoĭ VA, et al. **Zh Evol Biokhim Fiziol** 1989 Jan–Feb; 25(1):15–9 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Inhibition of phospholipid and platelet-dependent prothrombinase activity in the plasma of patients with lupus anticoagulants. Galli M, et al. **Br J Haematol** 1989 Aug; 72(4):549–55

Adriamycin, a drug interacting with acidic phospholipids, blocks import of precursor proteins by isolated yeast mitochondria. Eilers M, et al. **J Biol Chem** 1989 Feb 15; 264(5):2945–50

BIOSYNTHESIS

Inositol lipid turnover and compartmentation in canine trachealis smooth muscle. Baron CB, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C375–83

Modulation of arachidonate turnover in cerebral phospholipids. Barkai AI, et al. **Ann N Y Acad Sci** 1989; 559:56–73

Phospholipid biosynthesis in yeast. Carman GM, et al. **Annu Rev Biochem** 1989;58:635–69 (94 ref.)

Retrograde intrabiliary injection of amphipathic materials causes phospholipid secretion into bile. Taurocholate causes phosphatidylcholine secretion, 3-[(3-cholamidopropyl)dimethylammonio]-propane-1-sulphonate (CHAPS) causes mixed phospholipid secretion. Coleman R, et al. **Biochem J** 1989 Feb 15;258(1):17–22

Insulin-like growth factor I stimulates phospholipid synthesis in renal cortical slices without production of inositol phosphate. Crljen V, et al. **Biochim Biophys Acta** 1989 Jun 15;1012(1):24–8

Activities of enzymes of phospholipid and fatty acid synthesis in fetal and adult rat type II pneumocytes. Kresch MJ, et al. **Biochim Biophys Acta** 1988 Sep 23;962(2):173–7

A possible mechanism whereby parathyroid hormone stimulates phospholipid synthesis in canine renal tubules. Esbrit P, et al. **Bone Miner** 1988 Apr;4(1):7–16

In vitro study of adrenergic stimulation of 32P incorporation into phospholipids of brown adipose tissue of control and cold-acclimated rats. Senault C, et al. **Comp Biochem Physiol [A]** 1988;91(1):141–6

Subcellular distribution of newly synthesized glycerolipids in intact and homogenized rat adipocytes. Giacobino JP. **Comp Biochem Physiol [B]** 1979;63(4):521–3

Palmitate dependence of insulin secretion, "de novo" phospholipid synthesis and 45Ca2+-turnover in glucose stimulated rat islets. Vara E, et al. **Diabetologia** 1988 Sep; 31(9):687–93

Biochemical characterization of retinal protein and phospholipid synthesis in mice exposed transplacentally to N-methyl-N-nitrosourea. Smith SB, et al. **Exp Eye Res** 1988 Nov;47(5):713–25

Cell-cycle-dependent polar morphogenesis in Caulobacter crescentus: roles of phospholipid, DNA, and protein syntheses. O'Neill EA, et al. **J Bacteriol** 1989 Sep; 171(9):4814–20

Regulation of phospholipid biosynthesis in Saccharomyces cerevisiae by inositol. Inositol is an inhibitor of phosphatidylserine synthase activity. Kelley MJ, et al. **J Biol Chem** 1988 Dec 5;263(34):18078–85

Evidence that the effect of soya bean phosphatidylinositol-cholesterol-cyclosporin liposomes on the biosynthesis of acidic phospholipids in isolated subcellular membranes from rat liver and heart is attributable to the soya bean phosphatidylinositol-cholesterol liposomes. Stuhne-Sekalec L, et al. **J Microencapsul** 1989 Jan–Mar; 6(1):71–86

Effects of neurotransmitters and other pharmacological agents on 32Pi incorporation into phospholipids of the iris muscle of the rabbit. Abdel-Latif AA. **Life Sci** 1974 Sep 1;15(5):961–73

Serine incorporation into phospholipids in vivo and serine phosphoglyceride metabolic transformations in cerebral areas from adult and aged rats. Gatti C, et al. **Neurobiol Aging** 1989 May-Jun;10(3):241–5 (31 ref.)

Age-related changes of RNA and lipid synthesis in vitro by retina and optic nerve of the rat. Alberghina M, et al. **Neurochem Pathol** 1988 Apr;8(2):131–48

Phospholipid metabolism in Plasmodium-infected erythrocytes: guidelines for further studies using radioactive precursor incorporation. Vial HJ, et al. **Parasitology** 1989 Jun;98 Pt 3:351–7

Sterol control of phospholipid biosynthesis in yeast. Bloch K. **Prog Clin Biol Res** 1988;282:3–9 (18 ref.)

[Effect of intrauterine exposure to ethanol on synthesis of various phospholipids in the rat brain during the postnatal period] Zhulin VV. **Biull Eksp Biol Med** 1988 Sep; 106(9):317–9 (Eng. Abstr.) **(Rus)**

BLOOD

Hypoprotein nutrition, phospholipid content and the phagocytic ability of rat peripheral blood granulocytes. Study II. Todorović V, et al. **Acta Med Iugosl** 1988; 42(5):363–72

The profile of long-chain fatty acids in serum phospholipids: a possible indicator of copper status in humans. Cunnane SC. **Am J Clin Nutr** 1988 Dec;48(6):1475–8

Habitual fish consumption, fatty acids of serum phospholipids and platelet function. van Houwelingen AC, et al. **Atherosclerosis** 1989 Feb;75(2–3):157–65

Fatty acid composition of lipids which coprurify with band 3. Maneri LR, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1012–9

Asymmetric distribution of phospholipids in spectrin-poor erythrocyte vesicles. Calvez JY, et al. **Biochemistry** 1988 Jul 26;27(15):5666–70

Relationship between the transverse distribution of phospholipids in plasma membrane and shape change of human platelets. Sune A, et al. **Biochemistry** 1988 Sep 6; 27(18):6794–800

Phosphorus nuclear magnetic resonance studies of lipid-protein interactions: human erythrocyte glycophorin and phospholipids. Yeagle PL, et al. **Biochemistry** 1989 Mar 7;28(5):2210–5

Interaction of adriamycin with human erythrocyte membranes. Role of the negatively charged phospholipids. Garnier-Suillerot A, et al. **Biochim Biophys Acta** 1988 Oct 26;936(1):50–60

Involvement of ATP-dependent aminophospholipid translocation in maintaining phospholipid asymmetry in diamide-treated human erythrocytes. Middlekoop E, et al. **Biochim Biophys Acta** 1989 May 19;981(1):151–60

Evidence for bidirectional transverse diffusion of spin-labeled phospholipids in the plasma membrane of guinea pig blood cells. Sune A, et al. **Biochim Biophys Acta** 1988 Dec 22; 946(2):315–27

Photooxidation of cell membranes in the presence of hematoporphyrin derivative: reactivity of phospholipid and cholesterol hydroperoxides with glutathione peroxidase. Thomas JP, et al. **Biochim Biophys Acta** 1988 Oct 14; 962(3):297–307

Essential fatty acids in plasma phospholipids in schizophrenics. Horrobin DF, et al. **Biol Psychiatry** 1989 Mar 1;25(5):562–8

Relationship between fatty acid pattern and platelet aggregation in long-term insulin-dependent type I diabetics. Schimke E, et al. **Biomed Biochim Acta** 1988; 47(10–11):S274–7

Piperidine ester derivatives in mass spectrometric analysis of fatty acids from human serum phospholipids and cholesteryl esters. Marnela KM, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):443–6

Nonheme iron in sickle erythrocyte membranes: association with phospholipids and potential role in lipid peroxidation. Kuross SA, et al. **Blood** 1988 Oct;72(4):1278–85

The effect of a low-fat diet on luteal-phase prolactin and oestradiol concentrations and erythrocyte phospholipids in normal premenopausal women. Williams CM, et al. **Br J Nutr** 1989 May;61(3):651–61

Kinetic parameters of lysophospholipid acyltransferase systems in diet-induced modifications of platelet phospholipid acyl chains. Murase S, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):2109–17

Insulin binding to erythrocytes and fatty acid composition of erythrocyte membrane phospholipids in healthy men. Pelikánová T, et al. **Clin Chim Acta** 1989 Feb 15; 179(2):197–200

The phospholipid and fatty acid compositions of seal platelets: a comparison with human platelets. Ahmed AA, et al. **Comp Biochem Physiol [B]** 1989;93(1):119–23

Effect of high/low dietary linoleic acid levels on the function and fatty acid composition of T-lymphocytes of normal and diabetic rats. Singh B, et al. **Diabetes Res** 1988 Jul; 8(3):129–34

Influence of fast, body weight and diet on serum cholesterol, triglycerides, and phospholipids concentrations in the aging rat. Boudet J, et al. **Horm Metab Res** 1988 Dec;20(12):734–7

Erythrocyte lipids in alcohol dependence. Jain S, et al. **Indian J Med Res** 1988 Dec;88:530–5

Effect of raw deseeded fruit powder of Trichosanthes dioica (Roxb) on blood sugar, serum cholesterol, high density lipo-protein, phospholipid and triglyceride levels in the normal albino rabbits. Sharma G, et al. **Indian J Physiol Pharmacol** 1988 Apr-Jun;32(2):161–3

Heparin-released plasma lipase activities, lipoprotein and apoprotein levels in young adult cyclists and sedentary men. Giada F, et al. **Int J Sports Med** 1988 Aug;9(4):270–4

Ether phospholipid molecular species in human platelets. Takamura H, et al. **J Biochem (Tokyo)** 1989 Feb; 105(2):168–72

The reactivity of plasma phospholipids with lecithin:cholesterol acyltransferase is decreased in fish oil-fed monkeys. Parks JS, et al. **J Biol Chem** 1989 Feb 15;264(5):2545–51

Human pulmonary surfactant protein (SP-A), a protein structurally homologous to C1q, can enhance FcR- and CR1-mediated phagocytosis. Tenner AJ, et al. **J Biol Chem** 1989 Aug 15;264(23):13923–8

Dietary changes in membrane lipids and leucocyte calcium. Bing RF, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 3:S110–3

Erythrocytes attached to a wheat germ agglutinin coated surface display an altered phospholipid metabolism. Dale GL, et al. **J Cell Biochem** 1988 Sep;38(1):1–11

Erythrocyte morphology reflects the transbilayer distribution of incorporated phospholipids. Daleke DL, et al. **J Cell Biol** 1989 Apr;108(4):1375–85

Erythrocyte phospholipid organization and vesiculation in hereditary high red cell membrane phosphatidylcholine hemolytic anemia. Butikofer P, et al. **J Lab Clin Med** 1989 Mar;113(3):278–84

Behavior of human apolipoprotein A-I: phospholipid and apoHDL:phospholipid complexes in vitro and after injection into rabbits. Koizumi J, et al. **J Lipid Res** 1988 Nov;29(11):1405–15

Isolation and characterization of a phospholipid transfer protein (LTP-II) from human plasma. Tollefson JH, et al. **J Lipid Res** 1988 Dec;29(12):1593–602

Deterioration of membrane morphology, phospholipids, and cytoskeletal protein in rat erythrocytes exposed to tert-butyl hydroperoxide: protection by exogenous glutathione fails in selenium deficiency. Suzuki T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Oct;34(5):491–506

Changes in the fatty acids pattern of red blood cell phospholipids induced by type of milk, dietary nucleotide supplementation, and postnatal age in preterm infants. Pita ML, et al. **J Pediatr Gastroenterol Nutr** 1988 Sep-Oct; 7(5):740–7

The effect of a fish oil diet on the fatty acid composition of individual phospholipids and eicosanoid production by rat platelets. Careaga-Houck M, et al. **Lipids** 1989 Jun; 24(6):477–81

The composition of red cell membrane phospholipids in Canadian Inuit consuming a diet high in marine mammals. Innis SM, et al. **Lipids** 1988 Nov;23(11):1064–8

Molecular species of glycerophospholipids and sphingomyelins of human erythrocytes: improved method of analysis. Myher JJ, et al. **Lipids** 1989 May;24(5):396–407

A simplified approach to the analysis of subclasses of phospholipids: application to human platelets. Vishnubhatla I, et al. **Lipids** 1988 Jun;23(6):609–14

Effect of dextran 40,000 on the contents of inorganic phosphorus and phospholipids in the blood of patients with cerebral infarction at the very beginning of illness. Kawiak W, et al. **Mater Med Pol** 1988 Apr-Jun;20(2):95–7

Phospholipid and fatty acid composition of erythrocytes in type I and type II diabetes. Freyburger G, et al. **Metabolism** 1989 Jul;38(7):673–8

Insulin secretion and insulin action related to the serum phospholipid fatty acid pattern in healthy men. Pelikánová T, et al. **Metabolism** 1989 Feb;38(2):188–92

Reconstitution of red blood cells: cytoskeletons coated with phospholipid membrane. Jung CY, et al. **Methods Enzymol** 1989;173:392–401

Changes of serum lipids during estrous cycle in the beagle. Tarumi C, et al. **Nippon Juigaku Zasshi** 1988 Aug; 50(4):874–8

Enzymatic determination of high density lipoprotein phospholipid using a sensitive reagent and a Cobas Bio Centrifugal Analyzer. Moshides JS. **Scand J Clin Lab Invest** 1988 Feb;48(1):59–64

An evaluation of serum high density lipoproteins-phospholipids. Ide H, et al. **Tohoku J Exp Med** 1988 Jul;155(3):261–70

Plasma fatty acid composition of breast-feeding Sudanese women. el-Amin EO, et al. **Trop Med Parasitol** 1988 Sep; 39(3):199–202

[Practical experiences with comparative phospholipid determination in proving death by hanging] Haffner HT, et al. **Beitr Gerichtl Med** 1988;46:277–81 (Eng. Abstr.) **(Ger)**

[Value of polyacrylamide gel electrophoresis of non-concentrated cerebrospinal fluid in the diagnosis of multiple sclerosis] Grzybowski G, et al. **Neurol Neurochir Pol** 1988 Jul-Aug;22(4):273–80 (Eng. Abstr.) **(Pol)**

[Effect of long-term administration of low-molecular dextran (40,000) on the blood levels of inorganic phosphorus and lipid-bound phosphorus in patients with cerebral infarction] Kawiak W, et al. **Neurol Neurochir Pol** 1988 Jul-Aug;22(4):281–6 (Eng. Abstr.) **(Pol)**

[Phospholipids in the blood serum of patients with ischemic heart disease at the stage of early rehabilitation at a sanatorium] Novgorodtseva TP, et al. **Lab Delo** 1989; (1):15–8 (Eng. Abstr.) **(Rus)**

[Changes of blood phospholipids in food poisoning] Kozhevnikova GM, et al. **Sov Med** 1989;(1):13–5 **(Rus)**

[The phospholipid spectrum of the blood serum in patients with chronic non-specific pulmonary diseases during rehabilitation treatment] Ivanov EM, et al. **Ter Arkh** 1989; 61(3):94–7 (Eng. Abstr.) **(Rus)**

[Various aspects of the interrelations between blood phospholipids, blood coagulation and microcirculation in chronic bronchitis] Iuldashev KIu, et al. **Vestn Akad Med Nauk SSSR** 1989;(2):33–8 (Eng. Abstr.) **(Rus)**

[Effect of dietary linoleic acid on the platelet aggregation, fatty acid composition of platelet phospholipids and synthesis of platelet prostaglandins in rats] Markov KhM, et al. **Vopr Med Khim** 1988 Jul–Aug;34(4):37–41 (Eng. Abstr.) **(Rus)**

[Characteristics of phospholipid–glycerol metabolism in erythrocyte membranes during acoustic stress] Melkonian MM, et al. **Vopr Med Khim** 1989 Mar–Apr;35(2):68–71 (Eng. Abstr.) **(Rus)**

[Measurement of phospholipids in erythrocytes, plasma and platelets in a patient with hereditary spherocytosis] César JM, et al. **Sangre (Barc)** 1989 Aug;34(4):300–2 (Eng. Abstr.) **(Spa)**

CHEMICAL SYNTHESIS

Mixed-chain phosphatidylcholine analogues modified in the choline moiety: preparation of isomerically pure phospholipids with bulky head groups and one acyl chain twice as long as the other. Ali S, et al. **Chem Phys Lipids** 1989 Apr;50(1):11–21

Conversion of methylallyl alcohol into C2-methyl-1,2-di-O-hexadecylglycerophosphocholine, a conformationally restricted phospholipid. Bittman R, et al. **Chem Phys Lipids** 1989 May;50(2):99–103

Analogs of unusual sponge phospholipids. Synthesis and thermotropic properties of 1,2-di-(6Z,9Z)-6,9-hexacosadienoyl phosphatidylcholine and phosphatidylethanolamine. Li H, et al. **Chem Phys Lipids** 1988 Sep;48(1–2):109–17

Syntheses and properties of circular dichroism active phospholipids. Nishiya T, et al. **Chem Phys Lipids** 1988 Nov;49(1–2):69–79

Design and synthesis of conformationally restricted phospholipids as phospholipase A2 inhibitors. Magolda RL, et al. **J Cell Biochem** 1989 Jul;40(3):371–86

Synthesis of a spin-labeled phospholipid for studying membrane dynamics in intact mammalian cells. Joseph J, et al. **J Lipid Res** 1988 Aug;29(8):1101–4

Photoreactive lipids for the study of membrane-penetrating toxins. Montecucco C. **Methods Enzymol** 1988;165:347–57

DIAGNOSTIC USE

A sensitive and continuous fluorometric assay for phospholipase A2 using pyrene-labeled phospholipids in the presence of serum albumin. Radvanyi F, et al. **Anal Biochem** 1989 Feb 15;177(1):103–9

HISTORY

Effects of acetylcholine on the turnover of phosphoryl units in individual phospholipids of pancreas slices and brain cortex slices. 1955 [classical article] Hokin L, et al. **Biochim Biophys Acta** 1989;1000:470–8

Commentary on 'Effects of Acetylcholine on the Turnover of Phosphoryl Units in Individual Phospholipids of Pancreas Slices and Brain Cortex Slices'. Hokin LE, et al. **Biochim Biophys Acta** 1989;1000:465–9

IMMUNOLOGY

Cerebrovascular disease and antiphospholipid antibodies in systemic lupus erythematosus, lupus-like disease, and the primary antiphospholipid syndrome. Asherson RA, et al. **Am J Med** 1989 Apr;86(4):391–9

Aortic insufficiency and mitral regurgitation in patients with systemic lupus erythematosus and the antiphospholipid syndrome. Chartash EK, et al. **Am J Med** 1989 Apr; 86(4):407–12

Solid-phase anti-cardiolipin test revisited. Harris EN. **Am J Med** 1988 Nov;85(5):599–601

Antiphospholipid antibody syndrome with right atrial thrombosis mimicking an atrial myxoma. Leventhal LJ, et al. **Am J Med** 1989 Jul;87(1):111–3

Prednisone does not prevent recurrent fetal death in women with antiphospholipid antibody. Lockshin MD, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):439–43

Intravenous immunoglobulin treatment of pregnant patients with recurrent pregnancy loss caused by antiphospholipid antibodies and Rh immunization. Scott JR, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1055–6

Intravenous gamma-globulin, antiphospholipid antibodies, and pregnancy [letter] Parke A, et al. **Ann Intern Med** 1989 Mar 15;110(6):495–6

Lupus, thrombotic thrombocytopenic purpura, and antiphospholipid antibodies [letter] Asherson RA, et al. **Ann Neurol** 1989 Mar;25(3):312–3

Diagnostic and therapeutic problems in two patients with antiphospholipid antibodies, heart valve lesions, and transient ischaemic attacks. Asherson RA, et al. **Ann Rheum Dis** 1988 Nov;47(11):947–53

Antiphospholipid antibodies: a risk factor for occlusive ocular vascular disease in systemic lupus erythematosus and the 'primary' antiphospholipid syndrome. Asherson RA, et al. **Ann Rheum Dis** 1989 May;48(5):358–61

Antiphospholipid syndrome: linking many specialties. Hughes GR, et al. **Ann Rheum Dis** 1989 May;48(5):355–6 (20 ref.)

Primary antiphospholipid syndrome: features of patients with raised anticardiolipin antibodies and no other disorder. Mackworth-Young CG, et al. **Ann Rheum Dis** 1989 May; 48(5):362–7

Vascular disease, thrombosis, and recurrent abortion. Hughes GR. **BMJ** 1988 Sep 17;297(6650):700–1 (25 ref.)

Polyspecific human and murine antibodies to diphtheria and tetanus toxoids and phospholipids. Sutjita M, et al. **Clin Exp Immunol** 1988 Aug;73(2):191–7

A common anti-cardiolipin antibody idiotype in autoimmune disease: identification using a mouse monoclonal antibody directed against a naturally-occurring anti-phospholipid antibody. Sutjita M, et al. **Clin Exp Immunol** 1989 Feb; 75(2):211–6

IIIrd International Symposium on Anti-Phospholipid Antibodies. Kingston, Jamaica, January 5–8, 1988. Abstracts. **Clin Exp Rheumatol** 1988 Apr–Jun;6(2):187–215

The expanding spectrum of Libman Sacks endocarditis: the role of antiphospholipid antibodies. Asherson RA, et al. **Clin Exp Rheumatol** 1989 May–Jun;7(3):225–8 (70 ref.)

Successful removal of antiphospholipid antibodies using repeated plasma exchanges and prednisone [letter] Ferro D, et al. **Clin Exp Rheumatol** 1989 Jan–Feb;7(1):103–4

Transient global amnesia and antiphospholipid antibodies. Montalbán J, et al. **Clin Exp Rheumatol** 1989 Jan–Feb; 7(1):85–7

Antiphospholipid antibodies, lupus-like disease and the "primary" antiphospholipid syndrome [letter] Asherson RA, et al. **Clin Rheumatol** 1989 Mar;8(1):115–7

Migraine and anti-phospholipid antibodies. Shuaib A, et al. **Headache** 1989 Jan;29(1):42–5

Familial occurrence of the antiphospholipid syndrome. Matthey F, et al. **J Clin Pathol** 1989 May;42(5):495–7

Antibodies to phospholipids in thrombotic disease. Hamsten A, et al. **J Intern Med** 1989 Jun;225(6):363–5

Antiphospholipid arterial vasculopathy. Alarcón-Segovia D, et al. **J Rheumatol** 1989 Jun;16(6):762–7

Primary antiphospholipid syndrome [published erratum appears in J Rheumatol 1989 Jul;16(7):1014] Alarcón-Segovia D, et al. **J Rheumatol** 1989 Apr; 16(4):482–8

Hemocytopenia in systemic lupus erythematosus. Relationship to antiphospholipid antibodies. Delezé M, et al. **J Rheumatol** 1989 Jul;16(7):926–30

Relationship between antiphospholipid antibodies and recurrent fetal loss in patients with systemic lupus erythematosus and apparently healthy women. Deleze M, et al. **J Rheumatol** 1989 Jun;16(6):768–72

Fall in antiphospholipid antibody at time of thromboocclusive episodes in systemic lupus erythematosus. Drenkard C, et al. **J Rheumatol** 1989 May;16(5):614–7

Vasculopathy in the antiphospholipid syndrome: thrombosis or vasculitis, or both? [editorial] Lie JT. **J Rheumatol** 1989 Jun;16(6):713–5

Renal infarction associated with anti-phospholipid antibodies in systemic lupus erythematosus and "lupus-like" disease [letter] Asherson RA, et al. **J Urol** 1988 Nov;140(5):1028

Sneddon's syndrome [letter] Asherson RA, et al. **Neurology** 1989 Aug;39(8):1138–9

Antiphospholipid antibody syndromes. Parke AL. **Rheum Dis Clin North Am** 1989 May;15(2):275–86 (72 ref.)

IGM-containing immune complexes and antiphospholipid antibodies in patients with Sneddon's syndrome. Schulze-Lohoff E, et al. **Rheumatol Int** 1989;9(1):4?–8

Detection of antiphospholipid antibodies by ELISA-method with bovine thromboplastin as antigen. López-Soto A, et al. **Thromb Res** 1989 Mar 15;53(6):623–8

Purification of antiphospholipid antibodies using a new affinity method. McNeil HP, et al. **Thromb Res** 1988 Dec 15;52(6):641–8

Evaluation of lupus anticoagulants: antiphospholipid antibodies, endothelium associated immunoglobulin, endothelial prostacyclin secretion, and antigenic protein S levels. Walker TS, et al. **Thromb Res** 1988 Aug 1; 51(3):267–81

[Acquired anticoagulants in children. Apropos of a series of 35 cases] Munzer M, et al. **Arch Fr Pediatr** 1988 Nov; 45(9):629–33 (25 ref.) (Eng. Abstr.) **(Fre)**

[Livido racemosa in detection of anti-phospholipid antibodies] Degitz K, et al. **Hautarzt** 1989 Jul;40(7):437–40 (Eng. Abstr.) **(Ger)**

[Anti-phospholipid antibody with recurrent venous thromboembolism and severe autoimmune thrombocytopenia] Kienast J, et al. **Klin Wochenschr** 1989 Jul 3;67(13):691–5 (Eng. Abstr.) **(Ger)**

[Antiphospholipid antibody syndrome] Kaburaki J. **Ryumachi** 1988 Oct;28(5):379–88 (110 ref.) **(Jpn)**

[The antiphospholipid syndrome: clinical and immunological aspects] Nasonov EL. **Klin Med (Mosk)** 1989 Jan;67(1):5–13 (50 ref.) **(Rus)**

[The role of anti-phospholipid antibodies in the development of thrombotic complications and in obstetrical pathology] Prudnikova LZ, et al. **Klin Med (Mosk)** 1989 Jun; 67(6):59–64 (Eng. Abstr.) **(Rus)**

[The antiphospholipid antibody syndrome: a new clinical and therapeutic viewpoint in systemic lupus erythematosus] Bravo-Vargas G, et al. **Gac Med Mex** 1988 Jan–Feb; 124(1–2):39–42 **(Spa)**

[Focal neurologic deficit associated with antiphospholipid antibodies (letter)] **Med Clin (Barc)** 1988 Oct 22; 91(13):515–6 **(Spa)**

[Myocardial infarction and antiphospholipid antibodies (letter)] Barquinero J, et al. **Med Clin (Barc)** 1989 Feb 11; 92(5):198–9 **(Spa)**

[Primary antiphospholipid syndrome: a new entity? (editorial)] Font J, et al. **Med Clin (Barc)** 1988 Dec 3; 91(19):736–8 **(Spa)**

[Role of platelet phospholipases in the antiphospholipid antibody syndrome (letter)] González-Buriticá H, et al. **Med Clin (Barc)** 1988 Nov 5;91(15):596–7 **(Spa)**

[Sneddon syndrome and antiphospholipid antibodies (letter)] Khamashta MA, et al. **Med Clin (Barc)** 1988 Oct 22; 91(13):514–5 **(Spa)**

[Sneddon syndrome and antiphospholipid antibodies (letter)] Montalbán J. **Med Clin (Barc)** 1988 Sep 10;91(7):277 **(Spa)**

[Antiphospholipid antibodies in systemic lupus erythematosus: incidence, significance and relation to lupus nephritis] Zea Mendoza A, et al. **Med Clin (Barc)** 1989 May 20;92(19):724–8 (Eng. Abstr.) **(Spa)**

[Antiphospholipid syndrome in a patient with T-cell skin lymphoma] Allegue F, et al. **Med Cutan Ibero Lat Am** 1989; 17(1):49–51 (19 ref.) (Eng. Abstr.) **(Spa)**

[Anti-phospholipid antibodies] Monereo A, et al. **Rev Clin Esp** 1988 Dec;183(9):478–84 (118 ref.) (Eng. Abstr.) **(Spa)**

ISOLATION & PURIFICATION

Effects of phospholipase inhibitors and calcium antagonists on the changes in myocardial phospholipids induced by isoproterenol. Takasu N, et al. **Basic Res Cardiol** 1988 Sep–Oct;83(5):567–75

Phospholipids from the hepatopancreas of Indian horseshoe crab Carcinoscropius rotundicauda. Bandyopadhyay R, et al. **Biochimie** 1988 Dec;70(12):1841–7

Monocyte antigen CD14 is a phospholipid anchored membrane protein. Simmons DL, et al. **Blood** 1989 Jan; 73(1):284–9

Changes in phospholipid fatty acid composition and triacylglycerol content in mouse tissues after infection with bacille Calmette-Guérin. Jackson SK, et al. **Br J Exp Pathol** 1989 Aug;70(4):435–41

Separation of major phospholipid classes by high-performance liquid chromatography and subsequent analysis of phospholipid-bound fatty acids using gas chromatography. Seewald M, et al. **J Chromatogr** 1989 May 19;469:271–80

Separation of phospholipids and phosphonolipids of Tetrahymena by high-performance liquid chromatography. Smith JD, et al. **J Chromatogr** 1988 Oct 14;431(2):395–9

Separation of phosphatidylinositols and other phospholipids by two-step one-dimensional thin-layer chromatography. Medh JD, et al. **J Lipid Res** 1989 May;30(5):761–4

New phospholipid fatty acids from the Caribbean sponge Ectyoplasia ferox. Carballeira NM, et al. **Lipids** 1989 May; 24(5):371–4

2-Hydroxy fatty acids from marine sponges. 2. The phospholipid fatty acids of the Caribbean sponges Verongula gigantea and Aplysina archeri. Carballeira NM, et al. **Lipids** 1989 Mar;24(3):229–32

Separation of neutral lipid, free fatty acid and phospholipid classes by normal phase HPLC. Hamilton JG, et al. **Lipids** 1988 Dec;23(12):1150–3

High-performance liquid chromatography of membrane lipids: glycosphingolipids and phospholipids. McCluer RH, et al. **Methods Enzymol** 1989;172:538–75

[Separation and analysis of phospholipids in liposomes of pulmonary surfactant by high pressure liquid chromatography] Lize JM, et al. **Pharm Acta Helv** 1988; 63(8):239–40 (Eng. Abstr.) **(Fre)**

[Isolation of macrophage-activating phospholipid from Listeria monocytogenes] Jakoniuk P, et al. **Med Dosw Mikrobiol** 1989;41(1):15–21 (Eng. Abstr.) **(Pol)**

METABOLISM

Proteolysis of spectrin by trypsin and pronase in the presence of phospholipid suspensions. Sikorski AF, et al. **Acta Biochim Pol** 1988;35(2):71–81

The effect of long-term low protein intake on liver and serum phospholipids in rats. Ristić V, et al. **Acta Med Iugosl** 1988; 42(3):183–6

Phospholipid methylation participates in H2-receptor mediated stimulation of adenylate cyclase in rat brain. Segawa T, et al. **Adv Exp Med Biol** 1988;236:329–41

Effect of beta-adrenoceptor blocking drugs on 32P incorporation into and arachidonic acid liberation from phospholipids in stimulated rat mast cells. Pečivová J, et al. **Agents Actions** 1989 Apr;27(1–2):29–32

Phospholipid signaling systems in insulin action. Farese RV. **Am J Med** 1988 Nov 28;85(5A):36–43 (76 ref.)

Arachidonic acid incorporation into lipids of term human amnion. Olson DM, et al. **Am J Obstet Gynecol** 1988 Oct;

159(4):995–1001
Effect of chronic renal failure and parathyroid hormone on phospholipid content of brain synaptosomes. Islam A, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):F705–10
Mechanism of membrane phospholipid degradation in ischemic-reperfused rat hearts. Otani H, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H252–8
Effect of gentamicin on phospholipid metabolism in cultured rabbit proximal tubular cells. Ramsammy LS, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):C204–13
Modulation of rat testes lipid composition by hormones: effect of PRL and hCG. Sebokova E, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):E442–8
Alveolar type II cells, surfactant protein A (SP-A), and the phospholipid components of surfactant in acute silicosis in the rat. Kawada H, et al. **Am Rev Respir Dis** 1989 Aug; 140(2):460–70
Sources for brain arachidonic acid uptake and turnover in glycerophospholipids. Horrocks LA. **Ann N Y Acad Sci** 1989;559:17–24 (26 ref.)
Lipid alterations and cellular properties of sickle red cells. Lubin B, et al. **Ann N Y Acad Sci** 1989;565:86–95 (37 ref.)
Deacylation-reacylation of arachidonoyl groups in cerebral phospholipids. Sun GY, et al. **Ann N Y Acad Sci** 1989; 559:37–55 (74 ref.)
Effect of oxidative stress on membrane phospholipid and protein organization in human erythrocytes. Arduini A, et al. **Arch Biochem Biophys** 1989 Aug 15;273(1):112–20
Effects of eicosapentaenoic and docosahexaenoic acid supplements on phospholipid composition and plasmalogen biosynthesis in P388D1 cells. Blank ML, et al. **Arch Biochem Biophys** 1989 Mar;269(2):603–11
Decreased activity of the pyruvate translocator and changes in the lipid composition in heart mitochondria from hypothyroid rats. Paradies G, et al. **Arch Biochem Biophys** 1989 Mar;269(2):595–602
Degradation of arachidonyl phospholipids catalyzed by two phospholipases A2 and phospholipase C in a lipopolysaccharide-treated macrophage cell line RAW264.7. Tanaka Y, et al. **Arch Biochem Biophys** 1989 Jul;272(1):210–8
General kinetic model for protein-mediated phospholipid transfer between membranes. Yoshimura T, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):299–312
Pulmonary phospholipid accumulation distal to an obstructed bronchus. A morphologic study. Verbeken EK, et al. **Arch Pathol Lab Med** 1989 Aug;113(8):886–90
Specific detection of lipid hydroperoxides using HPLC-EC method. Matsushita S, et al. **Basic Life Sci** 1988;49:163–74
Identification and partial separation of three distinct 32-kDa calcium/phospholipid-regulated proteins from bovine spleen. Kobayashi R, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):15–23
Interaction of rat brain cytidylate cyclase with phospholipids. Mori S, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1502–7
Deoxycytidine is salvaged not only into DNA but also into phospholipid precursors. II. Ara-C does not inhibit the later process in lymphoid cells. Sasvári-Székely M, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):1158–67
Iron binding to alpha-tocopherol-containing phospholipid liposomes. Stoyanovsky DA, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):834–8
Changes in phospholipid metabolism dependent on calcium-regulated myoblast fusion. Sauro VS, et al. **Biochem Cell Biol** 1988 Oct;66(10):1110–8
Plasma from uninephrectomized rats stimulates phospholipid methylation and arachidonic acid release in renal-cortical slices. Banfić H, et al. **Biochem J** 1989 Jun 1;260(2):365–9
The influence of fatty acid unsaturation and physical properties of microsomal membrane phospholipids on UDP-glucuronyltransferase activity. Castuma CE, et al. **Biochem J** 1989 Mar 15;258(3):723–31
Potential phospholipid source(s) of arachidonate used for the synthesis of leukotrienes by the human neutrophil. Chilton FH. **Biochem J** 1989 Mar 1;258(2):327–33
Activation of human protein C by blood coagulation factor Xa in the presence of anionic phospholipids. Enhancement by sulphated polysaccharides. Freyssinet JM, et al. **Biochem J** 1989 Jul 15;261(2):341–8
Study of the interaction between the antitumour protein alpha-sarcin and phospholipid vesicles. Gasset M, et al. **Biochem J** 1989 Mar 1;258(2):569–75
Reconstitution of cytochrome c oxidase in phospholipid vesicles containing polyvinylic polymers. Sarti P, et al. **Biochem J** 1989 Feb 1;257(3):783–7
Use of 3-aminopropanol as an ethanolamine analogue in the study of phospholipid metabolism in Tetrahymena. Smith JD, et al. **Biochem J** 1988 Aug 15;254(1):301–2
Turnover of eicosanoid precursor fatty acids among phospholipid classes and subclasses of cultured human umbilical vein endothelial cells. Takayama H, et al. **Biochem J** 1989 Mar 1;258(2):427–34
Protection of cardiac membrane phospholipid against oxidative injury by calcium antagonists. Janero DR, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4197–203
Ultrastructural, physico-chemical and conformational study of the interactions of gentamicin and bis(beta-diethylaminoethylether) hexestrol with negatively-charged phospholipid layers. Mingeot-Leclercq MP, et al. **Biochem Pharmacol** 1989 Mar 1;38(5):729–41
Effects of 15(S)-15-methyl prostaglandin E2 methyl ester on phospholipid metabolism in rat gastric mucosa. Nishizawa Y, et al. **Biochem Pharmacol** 1989 Mar 15; 38(6):955–60
Lipid molecular species retailoring and membrane fluidity. Thompson GA Jr. **Biochem Soc Trans** 1989 Apr;17(2):286–9
Association of protein kinase C with phospholipid monolayers: two-stage irreversible binding. Bazzi MD, et al. **Biochemistry** 1988 Sep 6;27(18):6776–83
Interaction of phospholipids with the detergent-solubilized ADP/ATP carrier protein as studied by spin-label electron spin resonance. Drees M, et al. **Biochemistry** 1988 Nov 15;27(23):8584–91
Influence of lipid headgroup on the specificity and exchange dynamics in lipid-protein interactions. A spin-label study of myelin proteolipid apoprotein-phospholipid complexes. Horváth LI, et al. **Biochemistry** 1988 Jul 12;27(14):5296–304
Molecular packing of high-density and low-density lipoprotein surface lipids and apolipoprotein A-I binding. Ibdah JA, et al. **Biochemistry** 1989 Feb 7;28(3):1126–33
Interaction of the Saccharomyces cerevisiae alpha-factor with phospholipid vesicles as revealed by proton and phosphorus NMR. Jelicks LA, et al. **Biochemistry** 1989 May 16;28(10):4233–40
Ca2+-dependent phospholipid- (and membrane-) binding proteins. Klee CB. **Biochemistry** 1988 Sep 6;27(18):6645–53 (82 ref.)
Phospholipid and guanine nucleotides sensitive properties of the smooth muscle adenylate cyclase catalytic unit. Krall JF, et al. **Biochemistry** 1988 Jul 12;27(14):5323–8
Lipolysis of phospholipids in model cholesteryl ester rich lipoproteins and related systems: effect of core and surface lipid phase state. Mims MP, et al. **Biochemistry** 1988 Jul 12;27(14):5290–5
Normal cellular Ha ras p21 protein causes local disruption of bilayer phospholipid. Montgomery GW, et al. **Biochemistry** 1988 Jun 14;27(12):4391–5
Effect of phospholipid:protein ratio on the state of aggregation of the (Ca2+-Mg2+)-ATPase. Munkonge F, et al. **Biochemistry** 1988 Sep 6;27(18):6800–5
Covalent modification of serum transferrin with phospholipid and incorporation into liposomal membranes. Afzelius P, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):231–8
Synergistic enhancement of histamine release from rat peritoneal mast cells by the phorbol ester 12-O-tetradecanoylphorbol 13-acetate is not reflected by corresponding changes in phospholipid turnover. Boam DS, et al. **Biochim Biophys Acta** 1988 Sep 16;971(2):215–22
Mechanism of action of Bacillus thuringiensis insecticidal delta-endotoxin: interaction with phospholipid vesicles. Haider MZ, et al. **Biochim Biophys Acta** 1989 Jan 30; 978(2):216–22
Effect of catalytic hydrogenation of Tetrahymena ciliary phospholipid fatty acids on ciliary phospholipase A activity. Horváth I, et al. **Biochim Biophys Acta** 1989 Apr 26;1002(3):409–12
Effects of corn oil- and fish oil-supplemented diets on phospholipid fatty acid composition of rat liver nuclei. Iritani N, et al. **Biochim Biophys Acta** 1988 Nov 25; 963(2):224–30
Binding of phospholipase A2 to zwitterionic bilayers is promoted by lateral segregation of anionic amphiphiles. Jain MK, et al. **Biochim Biophys Acta** 1989 Mar 27; 980(1):23–32
Transfer of phospholipids by a protein fraction obtained from canine pulmonary lavage. Lumb RH, et al. **Biochim Biophys Acta** 1988 Dec 16;963(3):549–52
Effects of dietary butter enrichment on the fatty acid distribution of phospholipid fractions isolated from rat platelets and aortae. Naughton JM, et al. **Biochim Biophys Acta** 1988 Sep 23;962(2):166–72
Lipid modification during cytodifferentiation of Tetrahymena vorax. Whole cell phospholipids and triacylglycerols of microstomal and macrostomal phenotypes. Ryals PE, et al. **Biochim Biophys Acta** 1989 Jun 27;991(3):438–44
Relationship between gramicidin conformation dependent induction of phospholipid transbilayer movement and hexagonal HII phase formation in erythrocyte membranes. Tournois H, et al. **Biochim Biophys Acta** 1988 Dec 8; 946(1):173–7
Effect of vitamin E enrichment on arachidonic acid release and cellular phospholipids in cultured human endothelial cells. Tran K, et al. **Biochim Biophys Acta** 1988 Dec 16; 963(3):468–75
Compartmentalization and differential labeling of phospholipids of rat liver subcellular membranes. Vance JE. **Biochim Biophys Acta** 1988 Nov 4;963(1):10–20
Ca2+- and phospholipid-binding properties of Torpedo electric organ calelectrin. von Kieckebusch A, et al. **Biochim Biophys Acta** 1988 Nov 2;957(1):131–7
Phospholipid metabolism in rat submandibular gland. Positional distribution of fatty acids in phosphatidylcholine and microsomal lysophospholipid acyltransferase systems concerning proliferation. Yashiro K, et al. **Biochim Biophys Acta** 1989 Sep 11;1005(1):56–64
Effect of phospholipase A2 and free fatty acids on lipid-protein interactions in long- and very-long-chain fatty acyl-CoA elongation enzyme systems of brain microsomes. Yoshida S, et al. **Biochim Biophys Acta** 1989 Aug 8;1004(2):239–44
Interaction of human gamma-carboxyglutamic acid domainless prothrombin with phospholipids. Lecompte MF, et al. **Biochimie** 1989 Jan;71(1):175–81
Effect of noradrenaline chronic administration on brown fat phospholipids. Mory G, et al. **Biosci Rep** 1988 Oct; 8(5):465–9
Changes in extracellular matrix vesicles during healing of rat tibial bone: a morphometric and biochemical study. Schwartz Z, et al. **Bone** 1989;10(1):53–60
Influence of vitamin D status on the content of complexed acidic phospholipids in chick diaphyseal bone. Boskey AL, et al. **Bone Miner** 1988 Sep;4(4):365–71
Repeated calcitonin treatment reduces the stimulation of inositol phospholipid by norepinephrine and serotonin in rat hippocampus and cerebral cortex. Clementi G, et al. **Brain Res** 1989 Jan 23;478(1):138–42
Increases in muscarinic stimulated hydrolysis of inositol phospholipids in rat hippocampus following cholinergic deafferentation are not parallelled by alterations in cholinergic receptor density. Smith CJ, et al. **Brain Res** 1989 Apr 24;485(2):317–24
Modulation of phospholipid methylation in rat striatum by the corticostriatal pathway. Tacconi MT, et al. **Brain Res** 1988 Sep 27;461(1):194–8
Choline increases acetylcholine release and protects against the stimulation-induced decrease in phosphatide levels within membranes of rat corpus striatum. Ulus IH, et al. **Brain Res** 1989 Apr 10;484(1-2):217–27
Phospholipids can influence the interconversion of flat epithelial-like and stellate process-bearing astroglial cells in culture: relationships between molecular structure and biological activity. Skaper SD, et al. **Brain Res Dev Brain Res** 1989 Feb 1;45(2):265–74
Interactions of parvalbumins with model phospholipid vesicles. Permyakov EA, et al. **Cell Calcium** 1989 Feb-Mar; 10(2):71–9
Arachidonic acid metabolism in polymorphonuclear cells in headaches. A methodologic study. Fragoso YD, et al. **Cephalalgia** 1988 Sep;8(3):149–55
Deuterium nuclear magnetic resonance study of the interaction of branched chain compounds (phytanic acid, phytol) with a phospholipid model membrane. Yue J, et al. **Chem Phys Lipids** 1988 Dec;49(3):205–13
Patterns of phospholipids in renal cortex and urine of gentamicin-treated rats. Ibrahim S, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):330–1
Bronchoalveolar lavage lipids in idiopathic pulmonary fibrosis. Low RB. **Chest** 1989 Jan;95(1):3–5
The influence of polyunsaturated fatty acids on spermine inhibition of lipoperoxidation. Studies on liposomes prepared with microsomal and mitochondrial phospholipids of sea bass (Dicentrarchus labrax L.) and rat liver. Cabrini L, et al. **Comp Biochem Physiol [B]** 1989;93(3):647–51
The effect of isoprenaline on the phospholipid content of the compact and spongious musculature of the carp ventricular myocardium. Drnková J, et al. **Comp Biochem Physiol [C]** 1988;90(1):257–61
Metabolic regulation during early frog development: flow of glycolytic carbon into phospholipids in Xenopus oocytes and fertilized eggs. Dworkin MB, et al. **Dev Biol** 1989 Apr; 132(2):524–8
Phospholipid metabolism and protein phosphorylation in sciatic nerve from genetically diabetic (db/db) mouse. Berti-Mattera LN, et al. **Diabetes** 1988 Dec;37(12):1703–7
The contact site A glycoprotein of Dictyostelium discoideum carries a phospholipid anchor of a novel type. Stadler J, et al. **EMBO J** 1989 Feb;8(2):371–7
Effect of iodide on glucose oxidation and 32P incorporation into phospholipids stimulated by different agents in dog thyroid slices. Tseng FY, et al. **Endocrinology** 1989 Mar; 124(3):1450–5
Lysosomal accumulation of phospholipids in mucolipidosis IV cultured fibroblasts. Bach G, et al. **Enzyme** 1988; 40(1):40–4
Interaction of staphylococcal delta-toxin and synthetic analogues with erythrocytes and phospholipid vesicles. Biological and physical properties of the amphipathic peptides. Alouf JE, et al. **Eur J Biochem** 1989 Aug 1; 183(2):381–90
Interaction of the beta-adrenergic receptor with Gs following delipidation. Specific lipid requirements for Gs activation and GTPase function. Ben-Arie N, et al. **Eur J Biochem** 1988 Oct 1;176(3):649–54
A novel inositol-phospholipid-specific phospholipase C. Rapid purification and characterization. Meldrum E, et al. **Eur J Biochem** 1989 Jul 1;182(3):673–7
GABAB receptor activation inhibits 5-hydroxytryptamine-stimulated inositol phospholipid turnover in mouse cerebral cortex. Godfrey PP, et al. **Eur J Pharmacol** 1988 Jul 26;152(1-2):185–8
The alveolar type II cells as a model for investigating the metabolism of surfactant phospholipids. Anceschi MM. **Eur Respir J [Suppl]** 1989 Mar;2(3):10s–12s
Increased phospholipid methylation and glycogen phosphorylase activation after a single dose of dexamethasone in mouse liver. Marino A, et al. **Exp Clin Endocrinol** 1988 Mar;92(3):314–22
Metabolic labeling of normal canine rod outer segment phospholipids in vivo and in vitro. Wetzel MG, et al. **Exp Eye Res** 1989 Jan;48(1):149–60
Membrane phospholipid methylation is associated with surfactant secretion in rabbit type II alveolar epithelial cells. Hendricks-Muñoz KD, et al. **Exp Lung Res** 1989; 15(1):63–76
Properties of isolated nonciliated bronchiolar cells from

mouse lung. Walker SR, et al. **Exp Lung Res** 1989 Jul; 15(4):553–73

Schistosoma mansoni: synthesis and release of phospholipids, lysophospholipids, and neutral lipids by schistosomula. Furlong ST, et al. **Exp Parasitol** 1989 Jul;69(1):65–77

Two components of type III protein kinase C with different substrate specificities and a phospholipid–dependent but Ca2+–inhibited protein kinase in rat brain. Buday L, et al. **FEBS Lett** 1989 Jun 5;249(2):324–8

Conformational changes of a mitochondrial precursor protein on binding to phospholipid vesicles and SDS micelles. A circular dichroism and fluorescence spectroscopy study. Endo T, et al. **FEBS Lett** 1989 Jun 5;249(2):173–7

Regulation of the choline, ethanolamine and serine base exchange enzyme activities of rat brain microsomes by phosphorylation and dephosphorylation. Kanfer JN, et al. **FEBS Lett** 1988 Nov 21;240(1–2):101–4

Direct activation of a protein kinase activity from rat lacrimal gland by PMA in a phospholipid–free system. Mauduit P, et al. **FEBS Lett** 1989 Jul 31;252(1–2):5–11

Translational inhibition by eIF–2–phospholipid complex in mammalian cell–free systems. Pelaez F, et al. **FEBS Lett** 1989 Jul 3;250(2):523–8

Retinoic acid inhibits phospholipid turnover and protein kinase C activity in RA–sensitive but not in RA–resistant cells. Vanier MC, et al. **FEBS Lett** 1988 Dec 5; 241(1–2):154–8

A phospholipase A2 hydrolyzing arachidonoyl–phospholipids in mouse peritoneal macrophages. Wijkander J, et al. **FEBS Lett** 1989 Feb 13; 244(1):51–6

Peroxidation of phospholipids promoted by myeloperoxidase. Carlin G, et al. **Free Radic Res Commun** 1988;4(4):251–7

Non–enzymic lipid peroxidation in microsomes and microsomal phospholipids induced by anthracyclines. Sterrenberg L, et al. **Free Radic Res Commun** 1986; 1(6):369–78

Phospholipid composition of isolated guinea pig sperm outer acrosomal membrane and plasma membrane during capacitation in vitro. Stojanoff A, et al. **Gamete Res** 1988 Nov;21(3):297–311

Modulation of hepatic ferrochelatase activity by dietary manipulation of mitochondrial phospholipid fatty acyl groups. Kools AM, et al. **Hepatology** 1989 Apr;9(4):557–61

Association between cholesterol–phospholipid vesicles and cholesterol crystals in human gallbladder bile. Schriever CE, et al. **Hepatology** 1989 Apr;9(4):541–6

Interaction of the bisbiguanides chlorhexidine and alexidine with phospholipid vesicles: evidence for separate modes of action. Chawner JA, et al. **J Appl Bacteriol** 1989 Mar; 66(3):253–8

Effect of internally loaded iodide, thiocyanate, and perchlorate on sodium–dependent iodide uptake by phospholipid vesicles reconstituted with thyroid plasma membranes: iodide counterflow mediated by the iodide transport carrier. Saito K, et al. **J Biochem (Tokyo)** 1989 May;105(5):790–3

Inhibitory effects of GMCHA–OPhBut on phospholipid methylation and histamine release in mast cells activated by concanavalin A, anti–IgE, and antigen. Takei M, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):219–25

Morphological and biochemical effects of gentamicin and cyclosporin–A on urinary cell phospholipids and phospholipases in man. Chatterjee S, et al. **J Biochem Toxicol** 1988 Spring;3:47–57

Gentamicin–induced alterations in phospholipid metabolism in cultured human proximal tubular cells. Chatterjee S. **J Biochem Toxicol** 1987 Fall–Winter;2:181–201

Enhancement of calcium sensitivity of lipocortin I in phospholipid binding induced by limited proteolysis and phosphorylation at the amino terminus as analyzed by phospholipid affinity column chromatography. Ando Y, et al. **J Biol Chem** 1989 Apr 25;264(12):6948–55

Effects of apolipoproteins A–IV and A–I on the uptake of phospholipid liposomes by hepatocytes. Bisgaier CL, et al. **J Biol Chem** 1989 Jan 15;264(2):862–6

Alterations of phospholipid metabolism by phorbol esters and fatty acids occur by different intracellular mechanisms in cultured glioma, neuroblastoma, and hybrid cells. Cook HW, et al. **J Biol Chem** 1989 Feb 15;264(5):2746–52

Phorbol ester, 1,2–diacylglycerol, and collagen induce inhibition of arachidonic acid incorporation into phospholipids in human platelets. Fuse I, et al. **J Biol Chem** 1989 Mar 5;264(7):3890–5

The interaction of bone Gla protein (osteocalcin) with phospholipid vesicles. Gendreau MA, et al. **J Biol Chem** 1989 Apr 25;264(12):6972–8

Alteration of the phospholipid composition of Escherichia coli through genetic manipulation. Heacock PN, et al. **J Biol Chem** 1989 Sep 5;264(25):14972–7

Differential tissue expression of three 35–kDa annexin calcium–dependent phospholipid–binding proteins. Kaetzel MA, et al. **J Biol Chem** 1989 Aug 25;264(24):14463–70

Phospholipid binding properties of bovine prothrombin peptide residues 1–45. Pollock JS, et al. **J Biol Chem** 1988 Oct 5;263(28):14216–23

Estrogen treatment increases phospholipid transfer activities in chicken liver. Rusiñol AE, et al. **J Biol Chem** 1989 Apr 25;264(12):6612–4

Phospholipid binding properties of human placental anticoagulant protein–I, a member of the lipocortin family. Tait JF, et al. **J Biol Chem** 1989 May 15;264(14):7944–9

Conversion of soluble dopamine beta–hydroxylase to a membrane binding form. Taylor CS, et al. **J Biol Chem** 1989 Sep 15;264(26):15242–6

Factor IX San Dimas. Substitution of glutamine for Arg–4 in the propeptide leads to incomplete gamma–carboxylation and altered phospholipid binding properties. Ware J, et al. **J Biol Chem** 1989 Jul 5;264(19):11401–6

Parathyroid hormone and calcitonin modify inositol phospholipid metabolism in fetal rat limb bones. Rappaport MS, et al. **J Bone Miner Res** 1986 Apr;1(2):173–9

Subcellular localization of phospholipids and enzymes involved in PAF–acether metabolism. Record M, et al. **J Cell Biochem** 1989 Jul;40(3):353–9

Interactions of synapsin I with small synaptic vesicles: distinct sites in synapsin I bind to vesicle phospholipids and vesicle proteins. Benfenati F, et al. **J Cell Biol** 1989 May; 108(5):1863–72

Electrostatic and hydrophobic interactions of synapsin I and synapsin I fragments with phospholipid bilayers. Benfenati F, et al. **J Cell Biol** 1989 May;108(5):1851–62

Analysis of the signal for attachment of a glycophospholipid membrane anchor. Caras IW, et al. **J Cell Biol** 1989 Apr; 108(4):1387–96

Asymmetric distribution of phospholipids in the membrane of vesicles released during in vitro maturation of guinea pig reticulocytes: evidence precluding a role for "aminophospholipid translocase". Vidal M, et al. **J Cell Physiol** 1989 Sep;140(3):455–62

Molecular basis of factor VIII inhibition by human antibodies. Antibodies that bind to the factor VIII light chain prevent the interaction of factor VIII with phospholipid. Arai M, et al. **J Clin Invest** 1989 Jun; 83(6):1978–84

Interleukin–1 generates transmembrane signals from phospholipids through novel pathways in cultured rat mesangial cells. Kester M, et al. **J Clin Invest** 1989 Feb; 83(2):718–23

The effect of human urogastrone on lung phospholipids in fetal rabbits. Haigh RM, et al. **J Dev Physiol** 1988 Oct; 10(5):433–43

Cytochemical demonstration of increased phospholipid content in cell membranes in chlorphentermine–induced phospholipidosis. Coulombe PA, et al. **J Histochem Cytochem** 1989 Feb;37(2):139–47

Phospholipids accumulation in mucolipidosis IV cultured fibroblasts. Bargal R, et al. **J Inherited Metab Dis** 1988; 11(2):144–50

Incorporation of deuterium–labeled fatty acids into human milk, plasma, and lipoprotein phospholipids and cholesteryl esters. Emken EA, et al. **J Lipid Res** 1989 Mar; 30(3):395–402

The myocardial content of fatty acids and phospholipids during the calcium paradox. van der Vusse GJ, et al. **J Mol Cell Cardiol** 1988 Jul;20(7):617–23

Lipid hydroperoxides inhibit reacylation of phospholipids in neuronal membranes. Zaleska MM, et al. **J Neurochem** 1989 Jan;52(1):255–60

Fatty acid composition of lipids in tongue and hindleg muscles of muscular dystrophic mice. Futo T, et al. **J Neurol Sci** 1989 Jul;91(3):337–44

Changes in free fatty acids, phospholipids, and cholesterol following impact injury to the rat spinal cord. Demediuk P, et al. **J Neurosci Res** 1989 May;23(1):95–106

Developing rod photoreceptors from normal and mutant Rd mouse retinas: altered fatty acid composition early in development of the mutant. Scott BL, et al. **J Neurosci Res** 1988;20(2):202–11

Interaction of bile acids, phospholipids, cholesterol and triglyceride with dietary fibers in the small intestine of rats. Ebihara K, et al. **J Nutr** 1989 Aug;119(8):1100–6

Effects of alpha–tocopherol–nicotinate administration on the microdynamics of phospholipids of erythrocyte membranes in human subjects. Koyama T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Oct;34(5):449–57

Effects of antiglaucoma drugs on [32P]orthophosphate incorporation into phospholipids of cat iris and ciliary process. Yorio T, et al. **J Ocul Pharmacol** 1985 Fall; 1(3):245–54

Changes in phospholipids, cholesterol and protein content of oviduct fluid of cows during the oestrous cycle. Killian GJ, et al. **J Reprod Fertil** 1989 Jul;86(2):419–26

Influence of high–protein diets on brain phospholipid, ganglioside and monogalactosyl glycolipid content previously altered by long–term low–protein and ethanol administration. Vrbaški SR, et al. **J Stud Alcohol** 1988 Jul; 49(4):369–74

Modulation of Kupffer cell membrane phospholipid function by n–3 polyunsaturated fatty acids. Bankey PE, et al. **J Surg Res** 1989 May;46(5):439–44

Characterization and localization of in vivo phospholipid methylation in the hamster testis. Schlegel PN, et al. **J Urol** 1989 Jun;141(6):1483–7

Time course for labeling of brain membrane phosphoinositides and other phospholipids after intracerebral injection of [32P]–ATP. Evaluation by an improved HPTLC procedure. Sun GY, et al. **Life Sci** 1989; 44(10):689–96

Changes in phospholipid composition of the mitochondrial membrane after orthotopic liver transplantation. Tatsumi Y, et al. **Life Sci** 1989;44(15):1053–8

Dietary manipulation of macrophage phospholipid classes: selective increase of dihomogammalinolenic acid. Chapkin RS, et al. **Lipids** 1988 Aug;23(8):766–70

Effects of dietary n–3 polyunsaturated fatty acids on phospholipid composition and calcium transport in mouse cardiac sarcoplasmic reticulum. Croset M, et al. **Lipids** 1989 Apr;24(4):278–85

Effect of essential fatty acid depletion on tissue phospholipid fatty acids in spontaneously hypertensive and normotensive rats. Huang YS, et al. **Lipids** 1989 Jul;24(7):565–71

Hydrolysis of a fluorescent substance formed from an oxidized phospholipid and an amino compound by phospholipase A2. Iio T, et al. **Lipids** 1988 Oct; 23(10):937–41

Effect of pH on the affinity of phospholipids for cholesterol. Jacobsohn MK, et al. **Lipids** 1989 May;24(5):375–82

Fatty acid pattern of tissue phospholipids in copper and iron deficiencies. Johnson SB, et al. **Lipids** 1989 Feb;24(2):141–5

Accumulation of (n–9)–eicosatrienoic and docosatrienoic acids in human fibroblast phospholipids. Karmiol S, et al. **Lipids** 1988 Sep;23(9):891–8

Arachidonic acid uptake by phospholipids and triacylglycerols of rat brain subcellular membranes. Lin TN, et al. **Lipids** 1988 Oct;23(10):942–7

Interaction of rabbit lipoproteins and red blood cells with liposomes of egg yolk phospholipids. Mendez AJ, et al. **Lipids** 1988 Oct;23(10):961–7

Bradykinin–increased phospholipid deacylation–reacylation in rat renal medulla is inhibited by dBc AMP. Sterin–Speziale N, et al. **Lipids** 1989 Feb;24(2):146–50

The effect of dietary n–6 and n–3 polyunsaturated fatty acids on blood pressure and tissue fatty acid composition in spontaneously hypertensive rats. Watanabe Y, et al. **Lipids** 1989 Jul;24(7):638–44

Effect of aluminum inhalation on alveolar phospholipid profiles in experimental silicosis. Bégin R, et al. **Lung** 1989; 167(2):107–15

Changes in phospholipids in bronchoalveolar lavage fluid of patients with interstitial lung diseases. Honda Y, et al. **Lung** 1988;166(5):293–301

Phospholipid and energy metabolism of cancer cells monitored by 31P magnetic resonance spectroscopy: possible clinical significance. Cohen JS. **Mayo Clin Proc** 1988 Dec;63(12):1199–207 (24 ref.)

Dietary supplementation of undernourished rats with soy or safflower oil: effects on myelin polyunsaturated fatty acids. Divakaran P, et al. **Metab Brain Dis** 1986 Jun;1(2):157–64

Neurochemical aspects of Alzheimer's disease: involvement of membrane phospholipids. Farooqui AA, et al. **Metab Brain Dis** 1988 Mar;3(1):19–35 (111 ref.)

Glycerol as an indicator of lipid degradation in bicuculline–induced seizures and experimental cerebral ischemia. Paschen W, et al. **Metab Brain Dis** 1986 Mar; 1(1):37–44

Reconstitution of skeletal muscle sarcoplasmic reticulum membranes: strategies for varying the lipid/protein ratio. Hymel L, et al. **Methods Enzymol** 1988;157:302–14

Modification of phospholipid environment in sarcoplasmic reticulum using nonspecific phospholipid transfer protein. Lunardi J, et al. **Methods Enzymol** 1988;157:369–77, 693

Compensatory changes in calcium uptake and phospholipid composition in rat renal brush border membranes after unilateral nephrectomy. Ferrari C, et al. **Miner Electrolyte Metab** 1988;14(5):297–301

Effects of thiastearic acids on growth and on dihydrosterculic acid and other phospholipid fatty acyl groups of Leishmania promastigotes. Beach DH, et al. **Mol Biochem Parasitol** 1989 Jun 1;35(1):57–66

Intracellular transport of lipids. Glatz JF, et al. **Mol Cell Biochem** 1989 Jun 27–Jul 24;88(1–2):37–44 (38 ref.)

Degradation of phospholipids and triacylglycerol, and accumulation of fatty acids in anoxic myocardial tissue, disrupted by freeze–thawing. van der Vusse GJ, et al. **Mol Cell Biochem** 1989 Jun 27–Jul 24;88(1–2):83–90

Intracellular transport and neuronal activation of phospholipid and glycoprotein synthesis during axonal regeneration of cranio–spinal nerves. Alberghina M, et al. **Mol Chem Neuropathol** 1989 Jun;10(3):137–55

Activities of enzymes metabolizing phospholipids in rat cerebral ischemia. Hirashima Y, et al. **Mol Chem Neuropathol** 1989 Apr;10(2):87–100

Peculiarities of hormonal regulation of adenylate cyclase and lipid composition in colonic and rectal tumors. Berstein LM, et al. **Neoplasma** 1989;36(4):465–71

The incorporation of intracranially injected glycerol into brain glycerides of young rats born to normal and alcohol–fed mothers. Pistolesi R, et al. **Neurochem Res** 1988 Sep;13(9):817–21

Changes in lipid composition of neuroblastoma C1300 N18 cell during differentiation. Gulaya NM, et al. **Neuroscience** 1989;30(1):153–64

The effect of a saturated fat diet on pentobarbital induced sleeping time and phospholipid composition of mouse brain and liver. Aloia RC, et al. **Pharmazie** 1988 Jul;43(7):496–8

Early estrogen–induced metabolic changes and their inhibition by actinomycin D and cycloheximide in human breast cancer cells: 31P and 13C NMR studies. Neeman M, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5585–9

Phospholipid changes during adaptation to acidosis in urinary bladder of Bufo marinus. Frazier LW, et al. **Proc Soc Exp Biol Med** 1989 Apr;190(4):339–43

The release of arachidonic acid from cellular lipids. Hong SL. **Prog Allergy** 1988;44:99–139 (186 ref.)

Membrane phospholipid modification by dietary n-3 fatty acids: effects on eicosanoid formation and cell function. Weber PC. **Prog Clin Biol Res** 1988;282:263-74 (31 ref.)

Prevention of oxidative injury to cardiac phospholipid by membrane-active "stabilizing agents". Janero DR, et al. **Res Commun Chem Pathol Pharmacol** 1989 Feb; 63(2):163-73

Alveolar phospholipids, hyperventilation and temperature of conservation of rat lungs. Brondel L, et al. **Respir Physiol** 1989 Apr;76(1):119-28

Postnatal changes in lung phospholipids and alveolar macrophages in term newborn monkeys. Jackson JC, et al. **Respir Physiol** 1988 Sep;73(3):289-300

Amniotic fluid phospholipids and foetal lung maturation. Zapata A, et al. **Scand J Clin Lab Invest** 1988 Feb; 48(1):39-43

Signal peptide for protein secretion directing glycophospholipid membrane anchor attachment. Caras IW, et al. **Science** 1989 Mar 3;243(4895):1196-8

Factor VIII procoagulant protein interacts with phospholipid vesicles via its 80 kDa light chain. Kemball-Cook G, et al. **Thromb Haemost** 1988 Dec 22;60(3):442-6

The interactions of factors X and IX with phospholipid. Bloom JW. **Thromb Res** 1989 May 15;54(4):261-8

Amiodarone-induced pulmonary toxicity in rats: biochemical and pharmacological characteristics. Reasor MJ, et al. **Toxicol Appl Pharmacol** 1989 Jan;97(1):124-33

beta-Bungarotoxin-induced phospholipid hydrolysis in rat brain synaptosomes: effect of replacement of calcium by strontium. Ghassemi A, et al. **Toxicon** 1988;26(5):509-14

[Fluorescence polarization studies of rat gastric surfactant: effects of aspirin] Bommelaer G, et al. **C R Acad Sci [III]** 1988;307(8):475-8 (Eng. Abstr.) **(Fre)**

[Insulin-phospholipid interactions. A study in monolayers by measuring surface potential] Weingarten C, et al. **C R Acad Sci [III]** 1989;309(5):157-63 (Eng. Abstr.) **(Fre)**

[Early modification of the fatty acid composition of cardiolipins and other phospholipids in rat liver mitochondria during dietary deficiency of essential fatty acids followed by repletion (published erratum appears in Reprod Nutr Dev 1988;28 Suppl 1:199)] Wolff RL. **Reprod Nutr Dev** 1988;28(6A):1489-507 (Eng. Abstr.) **(Fre)**

[Changes in phospholipid metabolism in the skeletal muscle cell in induced malignant hyperthermia in the domestic pig] Adam H, et al. **Anaesthesiol Reanim** 1988;13(3):149-55 (Eng. Abstr.) **(Ger)**

[Bronchial hyperreactivity: state and perspective of drug intervention] Slapke J. **Z Erkr Atmungsorgane** 1988; 171(1):40-4 (12 ref.) (Eng. Abstr.) **(Ger)**

[Lipid alterations in renal membrane of stroke-prone spontaneously hypertensive rats (SHRSP)] Okamoto H. **Hokkaido Igaku Zasshi** 1988 Sep;63(5):796-804 (Eng. Abstr.) **(Jpn)**

[Enhancement of membrane phospholipid breakdown and synthesis during phagocytosis in cultured chick retinal pigment epithelial cells] Nakashima S, et al. **Nippon Ganka Gakkai Zasshi** 1989 Jan;93(1):142-8 (Eng. Abstr.) **(Jpn)**

[Pneumonitis due to amiodarone: fibrosis and/or phospholipidosis. Report of 2 cases] De Carvalho CR, et al. **Arq Bras Cardiol** 1988 Apr;50(4):275-8 (Eng. Abstr.) **(Por)**

[Ion conductance channels of bilayer from sarcoma-45 phospholipids] Mirkhodzhaev UZ, et al. **Biofizika** 1989 Mar-Apr;34(2):235-40 (Eng. Abstr.) **(Rus)**

[Penetration of ascorbic acid into bilayer phospholipid membranes] Krainev AG, et al. **Biokhimiia** 1988 Dec; 53(12):1987-95 (Eng. Abstr.) **(Rus)**

[Localization of segments, phosphorylated by Ca-phospolipid-dependent protein kinase in smooth muscle caldesmon] Vorotnikov AV, et al. **Biokhimiia** 1989 Jan; 54(1):157-62 (Eng. Abstr.) **(Rus)**

[Selective incorporation of polyunsaturated fatty acids of the omega-3 family in the diet into the cerebellar phospholipids of rats] Medvedev FA, et al. **Biull Eksp Biol Med** 1988 Dec;106(12):683-6 (Eng. Abstr.) **(Rus)**

[Phospholipid transport into the intestinal lymph and portal blood of calves in relation to the physical form of the feed ration] Aliev AA, et al. **Fiziol Zh SSSR** 1988 Jul; 74(7):995-1000 (Eng. Abstr.) **(Rus)**

[Negative inotropic and vasoconstrictor effects of oxidized phospholipids] Bilenko MV, et al. **Kardiologiia** 1989 Jun; 29(6):88-94 (Eng. Abstr.) **(Rus)**

[Effect of anti-angina therapy on phospholipid levels of the myocardium in ischemic lesions] Dzhanpoladian EG, et al. **Kardiologiia** 1988 Oct;28(10):88-90 (Eng. Abstr.) **(Rus)**

[Changes in the content and composition of phospholipids in various portions of the spinal cord in patients with tuberculosis of the spine] Kruglova EE, et al. **Probl Tuberk** 1989;(6):55-9 (Eng. Abstr.) **(Rus)**

[Changes in lipid metabolism in rats with radiation sickness and a pronounced intestinal syndrome following local irradiation of the abdominal region. Fatty acid composition of the blood and tissue phospholipids] Stepanov SA, et al. **Radiobiologiia** 1989 Jan-Feb;29(1):60-4 (Eng. Abstr.) **(Rus)**

[Age-related features of the metabolism of fatty acid components of phospholipids of the cell nuclei of rat liver under the effect of dietetic factors] Babenko NA. **Ukr Biokhim Zh** 1989 May-Jun;61(3):85-90 (Eng. Abstr.) **(Rus)**

[Lysophospholipase activity in mitochondrial membranes of the rat liver] Gorbataia ON, et al. **Ukr Biokhim Zh** 1988 Nov-Dec;60(6):23-8 (Eng. Abstr.) **(Rus)**

[The significance of studying phospholipids in the diagnosis of hypothyroidism] Zelinskaia NB. **Vrach Delo** 1989 May; (5):79-81 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

[Intraindividual comparison of the elimination kinetics of Lipofundin S and Intralipid in consecutive lipid tolerance tests] Leonhardt W, et al. **Infusionstherapie** 1988 Aug; 15(4):159-62 (Eng. Abstr.) **(Ger)**

PHARMACOLOGY

Modulation of mitochondrial F0F1 catalysis by boundary and bulk phase phospholipids. Dabbeni-Sala F, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):1013-20

A phospholipid-stimulated protein kinase from Dictyostelium discoideum. Jiménez B, et al. **Biochem J** 1989 Jun 1; 260(2):557-61

The role of hydrophobic interactions in the phospholipid-dependent activation of protein kinase C. Snoek GT, et al. **Biochem J** 1988 Oct 15;255(2):629-37

Conformation change of the intestinal calcium-binding protein induced by phospholipids in the presence and absence of Ca2+. Chiba K, et al. **Biochemistry** 1989 Apr 4;28(7):2995-9

Cooperativity in lipid activation of 3-hydroxybutyrate dehydrogenase: role of lecithin as an essential allosteric activator. Cortese JD, et al. **Biochemistry** 1989 Apr 4; 28(7):3000-8

Modulation of dolichyl-phosphomannose synthase activity by changes in the lipid environment of the enzyme. Jensen JW, et al. **Biochemistry** 1988 Aug 23;27(17):6315-20

Phospholipase-induced modulation of dolichyl-phosphomannose synthase activity. Jensen JW, et al. **Biochemistry** 1989 Jan 24;28(2):851-5

Lipid-protein interactions mediate the photochemical function of rhodopsin. Wiedmann TS, et al. **Biochemistry** 1988 Aug 23;27(17):6469-74

The different influences of ether and ester phospholipids on the conformation of gramicidin A. A molecular modelling study. Meulendijks GH, et al. **Biochim Biophys Acta** 1989 Mar 13;979(3):321-30

The interaction of bovine milk galactosyltransferase with lipid and alpha-lactalbumin. Mitranic MM, et al. **Biochim Biophys Acta** 1988 Oct 12;956(3):277-84

Effects of phospholipids on hydrolysis of trioleoylglycerol by human serum carboxylesterase. Shirai K, et al. **Biochim Biophys Acta** 1988 Oct 14;962(3):377-83

Interaction of lucensomycin with membranes: the role of non-steroidal components. Salerno C, et al. **Biochimie** 1989 Jan;71(1):63-6

Effect of specific antagonists on PAF-induced platelet aggregation and release of plasminogen activator. Hofmann B, et al. **Biomed Biochim Acta** 1988;47(10-11):S157-60

Immunoregulatory properties of pulmonary surfactant: influence of variations in the phospholipid profile. Wilsher ML, et al. **Clin Exp Immunol** 1988 Jul;73(1):117-22

Effect of phospholipids on estrogen receptor of rat uterine cytosol. Mitsuhashi N, et al. **Endocrinol Jpn** 1988 Oct; 35(5):759-62

The effect of biopreparation cACPL on the proliferative activity of haemopoietic and tumour cells. Jurášková V. **Folia Biol (Praha)** 1988;34(3):192-201

Influence of phospholipids on ruminal fermentation in vitro and on nutrient digestion and serum lipids in sheep. Jenkins TC, et al. **J Anim Sci** 1989 Feb;67(2):529-37

Effect of phospholipids on thyroid oligosaccharyltransferase activity and orientation. Evaluation of structural determinants for stimulation of N-glycosylation. Chalifour RJ, et al. **J Biol Chem** 1988 Oct 25;263(30):15673-80

The superoxide-generating respiratory burst oxidase of human neutrophil plasma membrane. Phosphatidylserine as an effector of the activated enzyme. Tamura M, et al. **J Biol Chem** 1988 Nov 25;263(33):17621-6

Influence of sterols and phospholipids on sarcolemmal and sarcoplasmic reticular cation transporters. Vemuri R, et al. **J Biol Chem** 1989 May 25;264(15):8680-5

Growth of rat osteoblast-like cells in a lipid-enriched culture medium and regulation of function by parathyroid hormone and 1,25-dihydroxyvitamin D. Catherwood BD, et al. **J Bone Miner Res** 1988 Aug;3(4):431-8

Effect of membrane phospholipids on activation of the alternative complement pathway. Mold C. **J Immunol** 1989 Sep 1;143(5):1663-8

Neutral lipid accumulation in macrophages during lipid-induced macrophage growth. Yui S, et al. **J Leukoc Biol** 1989 Mar;45(3):189-97

Modulation of tryptophan hydroxylase activity by phospholipids: stimulation followed by inactivation. Imai Y, et al. **J Neurochem** 1989 Oct;53(4):1293-9

Protective effect of surface-active phospholipids against the acid-inducing inhibition of the tracheal mucociliary transport. Kai H, et al. **Jpn J Pharmacol** 1989 Mar; 49(3):375-80

Effect of phospholipids on the activity of sialosyl lactosylceramide (GM3): N-acetylgalactosaminyl transferase from chick embryo brain. Cortassa S, et al. **Mol Cell Biochem** 1989 Jan 23;85(1):9-17

In vitro alterations of L-asparaginase activity of Tetrahymena pyriformis by lipids. Tsirka SA, et al. **Mol Cell Biochem** 1988 Oct;83(2):147-55

Effects of phospholipids on the conformation of chicken high density lipoprotein. Brown EM. **Poult Sci** 1989 Mar; 68(3):399-407

Phospholipids containing polyunsaturated fatty acyl groups are mitogenic for normal mouse mammary epithelial cells in serum-free primary cell culture. Imagawa W, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4122-6

The effect of GTPase activating protein upon ras is inhibited by mitogenically responsive lipids. Tsai MH, et al. **Science** 1989 Jan 27;243(4890):522-6

Modulation of neurotoxic esterase activity in vitro by phospholipids. Pope CN, et al. **Toxicol Appl Pharmacol** 1989 Feb;97(2):272-8

[Effects of synthetic bioactive lipids on the activity of D-beta-hydroxybutyrate dehydrogenase, a membrane enzyme] Nasser B, et al. **C R Soc Biol (Paris)** 1988; 182(6):565-71 (Eng. Abstr.) **(Fre)**

[Calpain II of rabbit skeletal muscle. Regulation of enzymatic activity: influence of the presence of membrane phospholipids on enzymatic autolysis in the presence or not of substrate] Cottin P, et al. **Reprod Nutr Dev** 1988; 28(3B):831-7 (Eng. Abstr.) **(Fre)**

[Effect of a fat emulsion on cellular immunity in experimental parenteral feeding] Kachorovskiĭ BV, et al. **Vopr Pitan** 1988 Sep-Oct;(5):51-4 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Glucocorticoid inhibition of Ca2+ and phospholipid-dependent enzymes regulating leukotriene C4 formation and action in allergic and inflammatory responses. Zor U, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:519-23

Calcium as an intracellular mediator of hormone action: intracellular phospholipid signaling systems. Farese RV. **Am J Med Sci** 1988 Oct;296(4):223-30 (64 ref.)

Phospholipids in signal transduction of mesangial cells. Mené P, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):F375-86 (93 ref.)

Nutrition requirements for mammalian cells and hematopoietic growth factor production. Armstrong MJ, et al. **Ann N Y Acad Sci** 1989;554:66-74 (24 ref.)

Assembly of phospholipids into cellular membranes: biosynthesis, transmembrane movement and intracellular translocation. Bishop WR, et al. **Annu Rev Cell Biol** 1988; 4:579-610 (151 ref.)

Myosin light chain and heavy chain phosphorylation in smooth muscle: potential regulatory roles for calcium, phospholipids and cyclic nucleotides. Hathaway DR, et al. **Biochem Soc Trans** 1988 Aug;16(4):499-501

A comparison of phospholipid and platelets in the activation of human factor VIII by thrombin and factor Xa, and in the activation of factor X. Neuenschwander P, et al. **Blood** 1988 Nov;72(5):1761-70

Molecular mechanisms of phospholipid signaling pathways in mammalian nerve cells. Hanley MR, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:435-45 (62 ref.)

Potential role of phospholipid-signaling systems in insulin action and states of clinical insulin resistance. Farese RV, et al. **Diabetes Metab Rev** 1989 Aug;5(5):455-74 (98 ref.)

Inhibition of PhoE translocation across Escherichia coli inner-membrane vesicles by synthetic signal peptides suggests an important role of acidic phospholipids in protein translocation. De Vrije T, et al. **Eur J Biochem** 1989 Mar 15;180(2):385-92

Effects of drug-induced pulmonary phospholipidosis on lung mechanics in rats. Camus P, et al. **J Appl Physiol** 1989 May;66(5):2437-45

Reassessment of the role of phospholipids in sexual reproduction by sterol-auxotrophic fungi. Kerwin JL, et al. **J Bacteriol** 1989 Jul;171(7):3831-9

Phospholipid modulates in vitro replication of autonomous replicating sequence from human cells. Umekawa H, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):333-6

Differential interactions of apo- and holocytochrome c with acidic membrane lipids in model systems and the implications for their import into mitochondria. Demel RA, et al. **J Biol Chem** 1989 Mar 5;264(7):3988-97

Stimulation in vitro of rabbit erythrocyte cytosol phospholipid-dependent protein kinase activity. A novel action of thyroid hormone. Lawrence WD, et al. **J Biol Chem** 1989 Mar 25;264(9):4766-8

Phospholipid functional groups involved in protein kinase C activation, phorbol ester binding, and binding to mixed micelles. Lee MH, et al. **J Biol Chem** 1989 Sep 5; 264(25):14797-805

Phospholipid dependence of homogeneous, reconstituted sn-glycerol-3-phosphate acyltransferase of Escherichia coli. Scheideler MA, et al. **J Biol Chem** 1989 Jul 25; 264(21):12455-61

Activation of the superoxide forming NADPH oxidase in a cell-free system by sodium dodecyl sulfate. Absolute lipid dependence of the solubilized enzyme. Shpungin S, et al. **J Biol Chem** 1989 Jun 5;264(16):9195-203

Uptake of chylomicron remnants by the liver: further evidence for the modulating role of phospholipids.

Borensztajn J, et al. **J Lipid Res** 1988 Aug;29(8):1087–96
Membrane phospholipid polar heads influence the coupling of M2 muscarinic receptors to G proteins. Gies JP, et al. **Neurochem Res** 1988 Aug;13(8):737–42
Enhanced membrane phospholipid metabolism in human pancreatic adenocarcinoma cell lines detected by low-resolution 1H nuclear magnetic resonance spectroscopy. Murat C, et al. **Pancreas** 1989;4(2):145–52
Autacoids from membrane phospholipids. Bruni A. **Pharmacol Res Commun** 1988 Jul;20(7):529–44 (544 ref.)
Specialization in membrane structure and metabolism with respect to polyunsaturated lipids. Salem N Jr, et al. **Prog Clin Biol Res** 1988;282:319–33 (28 ref.)
Metabolic correction of defects in the lipid anchoring of Thy-1 in lymphoma mutants. Gupta D, et al. **Science** 1988 Dec 9;242(4884):1446–8
Lipids in prothrombin conversion. Esnouf MP, et al. **Thromb Diath Haemorrh Suppl** 1965;17:103–10
[Effect of lipids on thrombocyte aggregation in patients with ischemic heart disease] Bornikov VT, et al. **Kardiologiia** 1989 Jun;29(6):22–4 (Eng. Abstr.) **(Rus)**
[Role of bile acids and phospholipids in the stabilization of cholesterol in the gallbladder bile] Fedorova VM. **Vopr Med Khim** 1971 Jul–Aug;17(4):382–4 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

[Post-irradiation changes in the in vitro incorporation of 32P into phospholipids in blood platelets] Zitko M, et al. **Cas Lek Cesk** 1987 Jun 12;126(24):744–7 (Eng. Abstr.) **(Cze)**
[The content of phospholipids and free fatty acids in the sarcoplasmic reticulum membranes in the early stage of an x-ray radiation lesion] Voĭtsitskiĭ VM, et al. **Radiobiologiia** 1989 Mar–Apr;29(2):151–3 (Eng. Abstr.) **(Rus)**

SECRETION

Reactive blue 2 selectively inhibits P2y-purinoceptor-stimulated surfactant phospholipid secretion from rat isolated alveolar type II cells. Rice WR, et al. **Br J Pharmacol** 1989 May;97(1):158–62
The effect of bilirubin on biliary lipid secretion: analysis by horseradish peroxidase associated intrahepatic vesicular transport system. Aoyama N, et al. **Gastroenterol Jpn** 1988 Dec;23(6):652–7
Inhibition by colchicine of phospholipid secretion induced by lung distension. Corbet AJ, et al. **J Appl Physiol** 1988 Oct;65(4):1710–5
Chemical modification of surfactant protein A alters high affinity binding to rat alveolar type II cells and regulation of phospholipid secretion. Kuroki Y, et al. **J Biol Chem** 1988 Nov 25;263(33):17596–602

THERAPEUTIC USE

[Effectiveness of hepatoprotective agents in experimental allyl alcohol poisoning] Vengerovskiĭ AI, et al. **Gig Tr Prof Zabol** 1989;(5):46–7 **(Rus)**

TOXICITY

Production and metabolism of cytotoxic phospholipids generated during incubation of liposomes with oxyhemoglobin. Inoue K, et al. **Basic Life Sci** 1988; 49:291–300

URINE

Effect of netilmicin and amikacin on urinary phospholipids excretion in humans. Ibrahim S, et al. **Arch Toxicol Suppl** 1989;13:413–6

PHOSPHOMONOESTERASES

ANALYSIS

Ontogenesis of two genuine marker enzymes of primary sensory neurons in the rat. Gyulai F. **Z Mikrosk Anat Forsch** 1988;102(3):423–31

ANTAGONISTS & INHIBITORS

On the regulatory significance of inhibitors acting on non-equilibrium enzymes in the Calvin photosynthesis cycle. Pettersson G, et al. **Eur J Biochem** 1989 Jun 15; 182(2):373–7
myo-inositol 1,4,5-trisphosphorothioate is a potent competitive inhibitor of human erythrocyte 5-phosphatase [published erratum appears in FEBS Lett 1989 Feb 27;244(2):510] Cooke AM, et al. **FEBS Lett** 1989 Jan 2; 242(2):373–7
(Na+-K+)-ATPase interaction with L-ascorbic acid. Effect on p-nitrohenylphosphatase partial reaction. Miggiano GA, et al. **Ital J Biochem** 1988 Sep–Oct; 37(5):284–92
Inhibition of apolipoprotein secretion and phosphatidate phosphohydrolase activity by eicosapentaenoic and docosahexaenoic acids in the perfused rat liver. Wong SH, et al. **Metabolism** 1988 Dec;37(12):1177–81
Inositol-1-phosphatase of human erythrocytes is inhibited by therapeutic lithium concentrations. Agam G, et al. **Psychiatry Res** 1989 Feb;27(2):217–24

BIOSYNTHESIS

Induction of rat liver 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase mRNA by refeeding and insulin. Colosia AD, et al. **J Biol Chem** 1988 Dec 15;263(35):18669–77

BLOOD

A K+-activated, ethacrynic acid-sensitive p-nitrophenylphosphatase from normal human white cells. Rao GJ, et al. **Biochim Biophys Acta** 1971 Jun 16; 235(3):454–7
Subcellular localization and kinetic properties of phosphatidylinositol 4,5-bisphosphate phospholipase C and inositol phosphate enzymes from human peripheral blood mononuclear cells. Graber R, et al. **Enzyme** 1989; 41(1):17–26
Allosteric transition of erythrocyte alkaline phosphatase from Duchenne muscular dystrophy (DMD) patients and Duchenne muscular dystrophy carriers (Homo sapiens). Goldemberg AL, et al. **Int J Biochem** 1988;20(7):703–6
Identification and isolation of a 75-kDa inositol polyphosphate-5-phosphatase from human platelets. Mitchell CA, et al. **J Biol Chem** 1989 May 25; 264(15):8873–7
[Characterization of changes in the activity of K+-n-nitrophenylphosphatase of erythrocyte ghosts under the influence of ouabain] Gulidova GP, et al. **Ukr Biokhim Zh** 1989 Jan–Feb;61(1):82–5 (Eng. Abstr.) **(Rus)**

GENETICS

Gene dosage studies regionally assign the phosphoserine phosphatase gene to 7p15.1 or 2. Novelli G, et al. **Ann Genet (Paris)** 1988;31(3):195–6
Genetic polymorphism of phosphoglycolate phosphatase (PGP) (E.C.:3.2.3.18) in the Polish population. Halasa J, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(6):695–700
Sequence of the 5'-flanking region of the rat 6-phosphofructo-2-kinase/fructose 2,6-bisphosphatase gene: regulation by glucocorticoids. Lange AJ, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):753–60
Characterization of distinct mRNAs coding for putative isozymes of 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase. Crepin KM, et al. **Eur J Biochem** 1989 Aug 1;183(2):433–40
Membrane-bound phosphatases in Escherichia coli: sequence of the pgpA gene. Icho T. **J Bacteriol** 1988 Nov; 170(11):5110–6
Membrane-bound phosphatases in Escherichia coli: sequence of the pgpB gene and dual subcellular localization of the pgpB product. Icho T. **J Bacteriol** 1988 Nov; 170(11):5117–24
Nostoc commune UTEX 584 gene expressing indole phosphate hydrolase activity in Escherichia coli. Xie WQ, et al. **J Bacteriol** 1989 Feb;171(2):708–13
Glucocorticoid regulation of hepatic 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase gene expression. Marker AJ, et al. **J Biol Chem** 1989 Apr 25;264(12):7000–4
5' flanking sequence and structure of a gene encoding rat 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase. Darville MI, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(17):6543–7
[Phosphoglycolate phosphatase (PGP. E. C. 3..3.18) polymorphism in Magadan inhabitants] Solovenchuk LL. **Genetika** 1989 Jan;25(1):150–3 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Purification and characterization of three parathion hydrolases from gram-negative bacterial strains. Mulbry WW, et al. **Appl Environ Microbiol** 1989 Feb;55(2):289–93
Rapid purification of inositol monophosphate phosphatase from beef brain. Meek JL, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):143–8
Purification and properties of myo-inositol-1-phosphatase from bovine brain. Attwood PV, et al. **Biochem J** 1988 Jul 15;253(2):387–94
Purification and properties of inositol-1,4-bisphosphatase from bovine brain. Gee NS, et al. **Biochem J** 1988 Aug 1;253(3):777–82
Partial purification of inositol polyphosphate 1-phosphomonoesterase with characterization of its substrates and products by nuclear magnetic resonance spectroscopy. Hansen CA, et al. **Biochim Biophys Acta** 1989 Feb 6;1001(2):134–44
Soluble and particulate Ins(1,4,5)P3/Ins(1,3,4,5)P4 5-phosphatase in bovine brain. Erneux C, et al. **Eur J Biochem** 1989 May 1;181(2):317–22
Evidence for at least four different inositol bisphosphatases in bovine brain. Howell S, et al. **Eur J Biochem** 1989 Jul 15;183(1):169–72
Characterization of trehalose-6-phosphate synthase and trehalose-6-phosphate phosphatase of Saccharomyces cerevisiae. Vandercammen A, et al. **Eur J Biochem** 1989 Jul 1;182(3):613–20
Identification of the bovine brain Ins(1,4,5)P3 5-phosphatase after SDS-polyacrylamide gel electrophoresis. Lemos M, et al. **FEBS Lett** 1989 Jun 5;249(2):321–3
Purification and characterization of rat skeletal muscle fructose-6-phosphate,2-kinase:fructose-2,6-bisphosphatase. Kitamura K, et al. **J Biol Chem** 1989 Jun 15;264(17):9799–806
Purification and characterization of phosphatidate phosphatase from Saccharomyces cerevisiae. Lin YP, et al. **J Biol Chem** 1989 May 25;264(15):8641–5
Purification and characterization of fructose-2,6-bisphosphatase, a substrate-specific cytosolic enzyme from leaves. Macdonald FD, et al. **J Biol Chem** 1989 Apr 5;264(10):5540–4

METABOLISM

Enzymatic hydrolysis of S-phosphocysteamine. Orzeszko G, et al. **Acta Pol Pharm** 1988;45(2):171–5
Some properties of acid and alkaline phosphomonoesterases of chicken spermatozoa. Mohan J, et al. **Andrologia** 1989 Jan–Feb;21(1):29–34
Rapid hydrolysis of diacylglycerol formed during phosphatidate phosphatase assay by lipase activities in rat liver cytosol and microsomes. Ide H, et al. **Arch Biochem Biophys** 1989 May 15;271(1):177–87
Isozymes of fructose 6-phosphate,2-kinase:fructose-2,6-bisphosphatase in rat and bovine heart, liver, and skeletal muscle. Taniyama M, et al. **Biochem Biophys Res Commun** 1988 Dec 30; 157(3):949–54
Fructose 2,6-bisphosphate and its phosphorothioate analogue. Comparison of their hydrolysis and action on glycolytic and gluconeogenic enzymes. Rider MH, et al. **Biochem J** 1988 Jul 15;253(2):597–601
Preferential localization of rat liver D-myo-inositol 1,4,5-trisphosphate/1,3,4,5-tetrakisphosphate 5-phosphatase in bile-canalicular plasma membrane and 'late' endosomal vesicles. Shears SB, et al. **Biochem J** 1988 Dec 1;256(2):363–9
The effects of Triton X-100 and chlorpromazine on the Mg2+-dependent and Mg2+-independent phosphatidate phosphohydrolase activities of rat lung. Walton PA, et al. **Biochem J** 1989 Jul 15;261(2):673–8
Activation of rat liver cytosolic phosphatidic acid phosphatase by nucleoside diphosphates. Berglund L, et al. **Biochim Biophys Acta** 1989 Apr 26;1002(3):382–7
Age-related changes in the translocation of phosphatidate phosphohydrolase from the cytosol to microsomal membranes in rat liver. Cascales C, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):384–8
Formation of diacylglycerol by a phospholipase D-phosphatidate phosphatase pathway specific for phosphatidylcholine in endothelial cells. Martin TW. **Biochim Biophys Acta** 1988 Oct 14;962(3):282–96
Occurrence and characterization of fructose 6-phosphate, 2-kinase and fructose 2,6-bisphosphatase in Euglena gracilis. Enomoto T, et al. **Comp Biochem Physiol [B]** 1989; 92(3):477–80
Tubulin and MAP2 regulate the PCSL phosphatase activity. A possible new role for microtubular proteins. Jessus C, et al. **Eur J Biochem** 1989 Mar 1;180(1):15–22
Characterization of yeast fructose-2,6-bisphosphate 6-phosphatase. Plankert U, et al. **FEBS Lett** 1988 Oct 24; 239(1):69–72
Inositol trisphosphatase and bisphosphatase activities in the retina of crab. Trowell SC. **FEBS Lett** 1988 Oct 10; 238(2):281–4
Temporal changes in phosphoamino acid phosphatase activities in murine erythroleukaemic cells. Hammond KD, et al. **Int J Biochem** 1989;21(2):197–201
Properties of inositol polyphosphate 1-phosphatase. Inhorn RC, et al. **J Biol Chem** 1988 Oct 5;263(28):14559–65
Catalytic site of rat liver and bovine heart fructose-6-phosphate,2-kinase:fructose-2,6-bisphosphatase. Identification of fructose 6-phosphate binding site. Kitamura K, et al. **J Biol Chem** 1989 Apr 15;264(11):6344–8
Phosphorylation of myocardial fructose-6-phosphate,2-kinase: fructose-2,6-bisphosphatase by cAMP-dependent protein kinase and protein kinase C. Activation by phosphorylation and amino acid sequences of the phosphorylation sites. Kitamura K, et al. **J Biol Chem** 1988 Nov 15; 263(32):16796–801
Chronically administered lithium alters neither myo-inositol monophosphatase activity nor phosphoinositide levels in rat brain. Honchar MP, et al. **J Neurochem** 1989 Aug; 53(2):590–4
Enzyme translocation in the course of regeneration of central primary afferent terminals in the substantia gelatinosa of the adult rodent spinal cord. Knyihár-Csillik E, et al. **J Neurosci Res** 1989 Jan;22(1):74–82
Phosphatidic acid phosphatase in neonatal rat lung: effects of prenatal dexamethasone or terbutaline treatment on basal activity and on responsiveness to beta adrenergic stimulation. Kudlacz EM, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):236–40
Thiophosphoester analogs of phosphatidic acids: spectrophotometric substrates for phosphomonoesterases. Nyquist DA. **Lipids** 1988 Oct;23(10):989–92
Phosphomonoesterase activity of the cyanobacterium (blue-green alga) Calothrix parietina. Grainger SL, et al. **Microbios** 1989;59(238):7–17
Topography of glycosylation in yeast: characterization of GDPmannose transport and lumenal guanosine diphosphatase activities in Golgi-like vesicles. Abeijon C, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6935–9

Analysis of glucose-6-phosphate translocase and hexose-6-phosphate phosphohydrolase, the two obligatory components of microsomal glucose-6-phosphatase system, in rat liver. Hata K, et al. **Tohoku J Exp Med** 1988 Jun; 155(2):173–81

Translocation of phosphatidate phosphohydrolase from the cytosol to microsomal membranes in thioacetamide-induced liver tumours in rats. Cascales C, et al. **Toxicol Lett** 1989 Apr;47(1):9–16

PHOSPHONIC ACIDS

CHEMICAL SYNTHESIS

Development of phosphonate derivatives of gadolinium chelates for NMR imaging of calcified soft tissues. Adzamli IK, et al. **J Med Chem** 1989 Jan;32(1):139–44

(3-Amino-2-oxoalkyl)phosphonic acids and their analogues as novel inhibitors of D-alanine:D-alanine ligase. Chakravarty PK, et al. **J Med Chem** 1989 Aug; 32(8):1886–90

METABOLISM

Recognition of beta beta'-substituted and alpha beta,alpha'beta'-disubstituted phosphonate analogues of bis(5'-adenosyl) tetraphosphate by the bis(5'-nucleosidyl)-tetraphosphate pyrophosphohydrolases from Artemia embryos and Escherichia coli. McLennan AG, et al. **Biochemistry** 1989 May 2;28(9):3868–75

Comparative mechanisms of vitamin B6-catalyzed beta-decarboxylation and beta-dephosphonylation in model systems. Szpoganicz B, et al. **Biochimie** 1989 Apr; 71(4):591–7 (16 ref.)

A microbial carbon-phosphorus bond cleavage enzyme requires two protein components for activity. Murata K, et al. **J Bacteriol** 1989 Aug;171(8):4504–6

PHARMACOLOGY

Physical basis of the effect of hemoglobin on the 31P NMR chemical shifts of various phosphoryl compounds. Kirk K, et al. **Biochemistry** 1988 Nov 29;27(24):8803–10

PHOSPHONOACETIC ACID see under **ORGANOPHOSPHORUS COMPOUNDS**

PHOSPHONOMYCIN see **FOSFOMYCIN**

PHOSPHOPEPTIDES

Synthesis of a substrate of protein kinase C and its corresponding phosphopeptide. de Bont HB, et al. **Int J Pept Protein Res** 1989 Feb;33(2):115–23

ANALYSIS

A tandem chromatographic column method for assaying cAMP-dependent protein kinase and protein kinase C with synthetic peptide substrates. Egan JJ, et al. **Anal Biochem** 1988 Dec;175(2):552–61

Identification of phosphorylation sites in peptides using a gas-phase sequencer. Wang YH, et al. **Anal Biochem** 1988 Nov 1;174(2):537–47

Characterization of phosphopeptides released during dialysis of EDTA-reacted highly purified DNA prepared from calf thymus nuclei. Welsh RS. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):1135–42

Analysis of insulin-receptor phosphorylation sites in intact cells by two-dimensional phosphopeptide mapping. Tavaré JM, et al. **Biochem J** 1988 Aug 1;253(3):783–8

Tryptic phosphopeptides from whole casein. II. Physicochemical properties related to the solubilization of calcium. Berrocal R, et al. **J Dairy Res** 1989;56(3):335–41

Mapping of a small phosphopeptide at the carboxyterminus of the viral myb protein by monoclonal antibodies. Bading H, et al. **Oncogene** 1989 Jan;4(1):33–8

BIOSYNTHESIS

Chemical characterization of bioactive peptides from in vivo digests of casein. Meisel H, et al. **J Dairy Res** 1989; 56(3):343–9

CHEMICAL SYNTHESIS

Synthesis of phosphopeptides containing O-phosphoserine or O-phosphothreonine. Arendt A, et al. **Int J Pept Protein Res** 1989 Jun;33(6):468–76

Synthesis of derivatives of phosphonic glutathione analogs. Witkowska HE, et al. **Int J Pept Protein Res** 1989 Feb; 33(2):154–61

ISOLATION & PURIFICATION

Chemical characterization of a caseinophosphopeptide isolated from in vivo digests of a casein diet. Meisel H, et al. **Biol Chem Hoppe Seyler** 1988 Dec;369(12):1275–9

Isolation and characterization of small phosphorylated peptides controlling transcription "in vitro" from trout testis chromatin DNA. Coderoni S, et al. **Physiol Chem Phys Med NMR** 1988;20(2):91–108

METABOLISM

Partially dephosphorylated phosphopeptide AcSer(P)-Ser(P)-Ser(P) is an excellent substrate for casein kinase-2. Meggio F, et al. **FEBS Lett** 1988 Sep 12; 237(1–2):225–8

Protein phosphorylation in Bacillus thuringiensis during growth and delta-endotoxin production. Watson GM, et al. **J Gen Microbiol** 1988 Sep;134 (Pt 9):2559–65

PHOSPHOPROTEIN PHOSPHATASES

The structure and regulation of protein phosphatases. Cohen P. **Annu Rev Biochem** 1989;58:453–508 (340 ref.)

ANALYSIS

Histochemically demonstrable phosphotyrosyl-protein phosphatase in normal human breast, in benign breast diseases and in breast cancer. Partanen S, et al. **Anticancer Res** 1989 May-Jun;9(3):667–71

Phosphoserine as a recognition determinant for glycogen synthase kinase-3: phosphorylation of a synthetic peptide based on the G-component of protein phosphatase-1. Fiol CJ, et al. **Arch Biochem Biophys** 1988 Dec;267(2):797–802

An improved procedure for identifying and quantitating protein phosphatases in mammalian tissues. Cohen P, et al. **FEBS Lett** 1989 Jul 3;250(2):596–600

Multisite phosphorylation of the glycogen-binding subunit of protein phosphatase-1G by cyclic AMP-dependent protein kinase and glycogen synthase kinase-3. Dent P, et al. **FEBS Lett** 1989 May 8;248(1–2):67–72

ANTAGONISTS & INHIBITORS

Calyculin A and okadaic acid: inhibitors of protein phosphatase activity. Ishihara H, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):871–7

Inhibitory effect of a marine-sponge toxin, okadaic acid, on protein phosphatases. Specificity and kinetics. Bialojan C, et al. **Biochem J** 1988 Nov 15;256(1):283–90

Fluorine compounds inhibit the conversion of active type-1 protein phosphatases into the ATPMg-dependent form. Bollen M, et al. **Biochem J** 1988 Oct 1;255(1):327–33

The importance of nucleoside triphosphate inhibition of liver glycogen synthase phosphatase activity. Gilboe DP, et al. **Biochim Biophys Acta** 1989 May 31;991(2):340–6

Immobilized inhibitor-1 binds and inhibits protein phosphatase 1. Ingebritsen VM, et al. **Biochim Biophys Acta** 1989 Jun 15;1012(1):1–4

Inhibition of cyclic nucleotide phosphodiesterase and calcineurin by spermine, a calcium-independent calmodulin antagonist. Walters JD, et al. **Biochim Biophys Acta** 1988 Nov 2;957(1):138–42

Inhibitors of protein phosphatase-1. Inhibitor-1 of bovine adipose tissue and a dopamine- and cAMP-regulated phosphoprotein of bovine brain are identical. Strålfors P, et al. **Eur J Biochem** 1989 Mar 1;180(1):143–8

Okadaic acid, a specific protein phosphatase inhibitor, induces maturation and MPF formation in Xenopus laevis oocytes. Goris J, et al. **FEBS Lett** 1989 Mar 13; 245(1–2):91–4

Autonomic regulation of type 1 protein phosphatase in cardiac muscle. Ahmad Z, et al. **J Biol Chem** 1989 Mar 5;264(7):3859–63

Phosphotyrosyl-protein phosphatases. II. Identification and characterization of two heat-stable protein inhibitors. Ingebritsen TS. **J Biol Chem** 1989 May 5;264(13):7754–9

Purification and properties of a protein inhibitor that inhibits phosphatase 2A activity when hydroxymethylglutaryl coenzyme A reductase is the substrate. Serra D, et al. **J Biol Chem** 1989 Sep 5;264(25):14681–5

Effects of a protein phosphatase inhibitor, okadaic acid, on membrane currents of isolated guinea-pig cardiac myocytes. Hescheler J, et al. **Pflugers Arch** 1988 Aug; 412(3):248–52

BIOSYNTHESIS

Isolation of an active form of the ATP + Mg2+-dependent protein phosphatase stimulated by the deinhibitor protein and by p-nitrophenyl phosphate. Goris J, et al. **Biochem J** 1988 Sep 1;254(2):501–7

BLOOD

Isolation and partial characterization of an Mr 60,000 subunit of a type 2A phosphatase from rabbit reticulocytes. Chen SC, et al. **J Biol Chem** 1989 May 5;264(13):7267–75

GENETICS

The complete primary structure of calcineurin A, a calmodulin binding protein homologous with protein phosphatases 1 and 2A. Ito A, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1492–7

Molecular cloning of rat phosphoprotein phosphatase 2A beta cDNA and increased expressions of phosphatase 2A alpha and 2A beta in rat liver tumors. Kitagawa Y, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):821–7

Expression of rat protein phosphatase 2C (IA) in Escherichia coli. Tamura S, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):131–6

Immunoprecipitation of the in vitro translation product of rabbit muscle protein phosphatase C-I mRNA. Zheng SY, et al. **Biochem Biophys Res Commun** 1988 Nov 15; 156(3):1398–402

Discovery of a protein phosphatase activity encoded in the genome of bacteriophage lambda. Probable identity with open reading frame 221. Cohen PT, et al. **Biochem J** 1989 Jun 15;260(3):931–4

The major type-1 protein phosphatase catalytic subunits are the same gene products in rabbit skeletal muscle and rabbit liver. Cohen PT, et al. **Biochim Biophys Acta** 1989 Jun 1;1008(1):125–8

Molecular cloning of cDNA for the catalytic subunit of rat liver type 2A protein phosphatase, and detection of high levels of expression of the gene in normal and cancer cells. Kitagawa Y, et al. **Biochim Biophys Acta** 1988 Nov 10; 951(1):123–9

A suppressor of a HIS4 transcriptional defect encodes a protein with homology to the catalytic subunit of protein phosphatases. Arndt KT, et al. **Cell** 1989 Feb 24; 56(4):527–37

Involvement of a type 1 protein phosphatase encoded by bws1+ in fission yeast mitotic control. Booher R, et al. **Cell** 1989 Jun 16;57(6):1009–16

The bimG gene of Aspergillus nidulans, required for completion of anaphase, encodes a homolog of mammalian phosphoprotein phosphatase 1. Doonan JH, et al. **Cell** 1989 Jun 16;57(6):987–96

The fission yeast dis2+ gene required for chromosome disjoining encodes one of two putative type 1 protein phosphatases. Ohkura H, et al. **Cell** 1989 Jun 16; 57(6):997–1007

Cloning and chromosomal localization of Drosophila cDNA encoding the catalytic subunit of protein phosphatase 1 alpha. High conservation between mammalian and insect sequences. Dombrádi V, et al. **Eur J Biochem** 1989 Aug 15;183(3):603–10

Molecular cloning of a cDNA for the catalytic subunit of rabbit muscle phosphorylase phosphatase. Bai G, et al. **FASEB J** 1988 Nov;2(14):3010–6

Identification of a novel protein phosphatase catalytic subunit by cDNA cloning. da Cruz e Silva OB, et al. **FEBS Lett** 1988 Dec 19;242(1):106–10

Molecular cloning and chromosomal localization of a novel Drosophila protein phosphatase. Dombrádi V, et al. **FEBS Lett** 1989 Apr 24;247(2):391–5

Tissue-specific expression of mRNAs encoding alpha- and beta-catalytic subunits of protein phosphatase 2A. Khew-Goodall Y, et al. **FEBS Lett** 1988 Oct 10; 238(2):265–8

Segments of bacteriophage lambda (orf 221) and phi 80 are homologous to genes coding for mammalian protein phosphatases. Cohen PT, et al. **Gene** 1988 Sep 15; 69(1):131–4

The nucleotide sequence of the cDNA encoding the human lung protein phosphatase 2A beta catalytic subunit. Hemmings BA, et al. **Nucleic Acids Res** 1988 Dec 9; 16(23):11366

The nucleotide sequence of the cDNA encoding the human lung protein phosphatase 2A alpha catalytic subunit. Stone SR, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11365

Human placenta protein-tyrosine-phosphatase: amino acid sequence and relationship to a family of receptor-like proteins. Charbonneau H, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5252–6

cDNA isolated from a human T-cell library encodes a member of the protein-tyrosine-phosphatase family. Cool DE, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(14):5257–61

Characterization of a cDNA clone encoding the calmodulin-binding domain of mouse brain calcineurin. Kincaid RL, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):8983–7

Molecular cloning of rat type 2C (IA) protein phosphatase mRNA. Tamura S, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1796–800

Isolation and characterization of a phosphoprotein phosphatase-deficient mutant in yeast. Matsumoto K, et al. **Yeast** 1985 Sep;1(1):25–38

IMMUNOLOGY

Calcineurin immunoreactivity in striatonigral degeneration. Goto S, et al. **Acta Neuropathol (Berl)** 1989;78(1):65–71

Polyclonal antibodies to rabbit skeletal muscle protein phosphatases C-I and C-II. Wei Q, et al. **Arch Biochem Biophys** 1989 Jul;272(1):69–75

Characterization of polyclonal antibodies to brain protein phosphatase 2A and immunohistochemical localization of the enzyme in rat brain. Saitoh Y, et al. **Brain Res** 1989 Jun 12;489(2):291–301

ISOLATION & PURIFICATION

Purification of a phosphotyrosine phosphatase that dephosphorylates the epidermal growth factor receptor autophosphorylation sites. Pallen CJ, et al. **Ann N Y Acad Sci** 1988;551:299–308

Purification and properties of an acid phosphoprotein phosphatase from Tetrahymena pyriformis. Lougovoi CP, et al. **Biochem Int** 1988 Nov;17(5):847–54

Identification of the ATP + Mg-dependent and polycation-stimulated protein phosphatases in the germinal vesicle of the Xenopus oocyte. Jessus C, et al. **Biochem J** 1989 May 15;260(1):45–51

Protein phosphotyrosine phosphatase purified from the particulate fraction of human placenta dephosphorylates insulin and growth-factor receptors. Roome J, et al.

Biochem J 1988 Dec 1;256(2):493–500

Demonstration that the leukocyte common antigen CD45 is a protein tyrosine phosphatase. Tonks NK, et al. **Biochemistry** 1988 Nov 29;27(24):8695–701

Purification and characterization of placental membrane phosphotyrosine phosphatases. Pallen CJ, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:447–54

Purification and characterization of a novel protein phosphatase highly specific for ribosomal protein S6. Andres JL, et al. **J Biol Chem** 1989 Jan 5;264(1):151–6

Phosphotyrosyl-protein phosphatases. I. Separation of multiple forms from bovine brain and purification of the major form to near homogeneity. Jones SW, et al. **J Biol Chem** 1989 May 5;264(13):7747–53

Purification and characterization of phospholamban phosphatase from cardiac muscle. Kranias EG, et al. **J Biol Chem** 1988 Oct 25;263(30):15681–7

Calcineurin immunoprecipitated from bovine brain extract contains no detectable Ni2+ or Mn2+. Rao J, et al. **J Biol Chem** 1989 Jan 15;264(2):1058–61

Identification and partial characterization of a latent ATP, Mg-dependent protein phosphatase in rabbit skeletal muscle cytosol. Vandenheede JR, et al. **Mol Cell Biochem** 1989 May 4;87(1):31–9

Isolation and characterisation of calcineurin from adrenal cell cytoskeleton: identification of substrates for Ca2+-calmodulin-dependent phosphatase activity. Papadopoulos V, et al. **Mol Cell Endocrinol** 1989 May; 63(1–2):23–38

METABOLISM

Activation/dephosphorylation of rabbit muscle glycogen synthase by the catalytic subunits of protein phosphatase-1 and 2A. Farkas I, et al. **Acta Biochim Biophys Hung** 1988; 23(3–4):231–46

An immunohistochemical investigation of the human neostriatum in Huntington's disease. Goto S, et al. **Ann Neurol** 1989 Mar;25(3):298–304

Phosphatidylinositol modulates the response of calmodulin-dependent phosphatase to calmodulin. Huang SL, et al. **Arch Biochem Biophys** 1989 Apr;270(1):42–9

The dephosphorylation of lens alpha-crystallin A chain. Chiesa R, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1494–501

Evidence for a latent form of protein phosphatase 1 associated with cardiac myofibrils. Schlender KK, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):72–8

Insulin induces activation of kinase FA in membranes and thereby promotes activation of ATP.Mg-dependent phosphatase in adipocytes. Yang SD, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):762–8

Properties and developmental regulation of the protein phosphatases in Dictyostelium discoideum. Pamula F, et al. **Biochem Int** 1988 Sep;17(3):535–43

Salt stimulation of the activation of latent protein phosphatase, Fc.M, by Mn++ and by Mn/trypsin. Schuchard MD, et al. **Biochem Int** 1989 Apr;18(4):845–9

The association of type 1, type 2A and type 2B phosphatases with the human T lymphocyte plasma membrane. Alexander DR, et al. **Biochem J** 1988 Dec 15;256(3):885–92

Conversion of a phosphoseryl/threonyl phosphatase into a phosphotyrosyl phosphatase. Goris J, et al. **Biochem J** 1988 Dec 15;256(3):1029–34

Contraction-mediated inactivation of glycogen synthase is accompanied by inactivation of glycogen synthase phosphatase in human skeletal muscle. Kida Y, et al. **Biochem J** 1989 May 1;259(3):901–4

Insulin-receptor phosphotyrosyl-protein phosphatases. King MJ, et al. **Biochem J** 1988 Dec 15;256(3):893–902

Phosphotyrosyl protein phosphatases. Lau KH, et al. **Biochem J** 1989 Jan 1;257(1):23–36 (134 ref.)

Functional domain structure of calcineurin A: mapping by limited proteolysis. Hubbard MJ, et al. **Biochemistry** 1989 Feb 21;28(4):1868–74

The catalytic subunit of phosphatase 2A dephosphorylates phosphoopsin. Palczewski K, et al. **Biochemistry** 1989 Jan 24;28(2):415–9

Purification and physicochemical characterization of a human placental acid phosphatase possessing phosphotyrosyl protein phosphatase activity. Waheed A, et al. **Biochemistry** 1988 Jun 14;27(12):4265–73

The myosin-bound form of protein phosphatase 1 (PP-1M) is the enzyme that dephosphorylates native myosin in skeletal and cardiac muscles. Chisholm AA, et al. **Biochim Biophys Acta** 1988 Sep 16;971(2):163–9

Dephosphorylation of distinct sites in myosin light chain by two types of phosphatase in aortic smooth muscle. Erdödi F, et al. **Biochim Biophys Acta** 1989 Mar 28;1011(1):67–74

Histone H1 phosphorylated by protein kinase C is a selective substrate for the assay of protein phosphatase 2A in the presence of phosphatase 1. Jakes S, et al. **Biochim Biophys Acta** 1988 Oct 13;967(1):11–6

Distinct type-1 protein phosphatases are associated with hepatic glycogen and microsomes. Schelling D, et al. **Biochim Biophys Acta** 1988 Nov 18;972(2):221–31

Cell-specific localization of the alpha-subunit of calcium/calmodulin-dependent protein kinase II in Purkinje cells in rodent cerebellum. Walaas SI, et al. **Brain Res** 1988 Nov;464(3):233–42

Protein-tyrosine phosphatases: the other side of the coin. Hunter T. **Cell** 1989 Sep 22;58(6):1013–6 (21 ref.)

Differences in liver glycogen-synthase phosphatase activity in rodents with spontaneous insulin-dependent and non-insulin-dependent diabetes. Bollen M, et al. **Diabetologia** 1988 Sep;31(9):711–3

The glycogen-binding subunit of protein phosphatase-1G from rabbit skeletal muscle. Further characterisation of its structure and glycogen-binding properties. Hubbard MJ, et al. **Eur J Biochem** 1989 Mar 15;180(2):457–65

Specific dephosphorylation by phosphatases 1 and 2A of a nuclear protein structurally and immunologically related to nucleolin. Possible influence on the regulation of rRNA synthesis. Schneider HR, et al. **Eur J Biochem** 1989 Mar 15;180(2):449–55

Remarkable similarities between yeast and mammalian protein phosphatases. Cohen P, et al. **FEBS Lett** 1989 Jul 3;250(2):601–6

Identification of protein phosphatase 2A as the major tyrosine hydroxylase phosphatase in adrenal medulla and corpus striatum: evidence from the effects of okadaic acid. Haavik J, et al. **FEBS Lett** 1989 Jul 17;251(1–2):36–42

Domain II of calmodulin is involved in activation of calcineurin. Hurwitz MY, et al. **FEBS Lett** 1988 Sep 26; 238(1):82–6

Assay of phosphotyrosyl protein phosphatase using synthetic peptide 1142–1153 of the insulin receptor. King MJ, et al. **FEBS Lett** 1988 Sep 12;237(1–2):137–40

Temporal changes in phosphoamino acid phosphatase activities in murine erythroleukaemic cells. Hammond KD, et al. **Int J Biochem** 1989;21(2):197–201

Calmodulin-dependent phosphatase preferentially dephosphorylates a 28 kDa protein in human platelets. Pezzi L, et al. **Int J Biochem** 1989;21(7):791–8

Autonomic regulation of type 1 protein phosphatase in cardiac muscle. Ahmad Z, et al. **J Biol Chem** 1989 Mar 5;264(7):3859–63

Effects of modifying individual amino or carboxyl groups on the affinity of calmodulin for calcineurin. Chin D, et al. **J Biol Chem** 1989 Sep 15;264(26):15367–75

Regulation of calcineurin by phosphorylation. Identification of the regulatory site phosphorylated by Ca2+/calmodulin-dependent protein kinase II and protein kinase C. Hashimoto Y, et al. **J Biol Chem** 1989 Oct 5; 264(28):16524–9

Regulation of rhodopsin dephosphorylation by arrestin. Palczewski K, et al. **J Biol Chem** 1989 Sep 25; 264(27):15770–3

Mutation of the predicted ATP binding site inactivates both activities of isocitrate dehydrogenase kinase/phosphatase. Stueland CS, et al. **J Biol Chem** 1989 Aug 15; 264(23):13775–9

Purification and characterization of a protein-phosphotyrosine phosphatase from rat spleen which dephosphorylates and inactivates a tyrosine-specific protein kinase. Swarup G, et al. **J Biol Chem** 1989 May 15;264(14):7801–8

A type 1 phosphoprotein phosphatase active with phosphorylated Mr = 68,000 initiation factor 2 kinase. Szyszka R, et al. **J Biol Chem** 1989 Mar 5;264(7):3827–31

Acute regulation of hepatic protein phosphatases by glucagon, insulin, and glucose. Tóth B, et al. **J Biol Chem** 1988 Oct 5;263(28):14061–6

Effects of interaction with calcineurin on the reactivities of calmodulin lysines. Wei Q, et al. **J Biol Chem** 1988 Dec 25;263(36):19541–4

Epidermal growth factor induces activation of protein kinase FA and ATP.Mg-dependent protein phosphatase in A431 cells. Yang SD, et al. **J Biol Chem** 1989 Apr 5; 264(10):5407–11

Phosphorylation of vimentin in mitotically selected cells. In vitro cyclic AMP-independent kinase and calcium-stimulated phosphatase activities. Evans RM. **J Cell Biol** 1989 Jan;108(1):67–78

Impaired insulin-stimulated muscle glycogen synthase activation in vivo in man is related to low fasting glycogen synthase phosphatase activity. Freymond D, et al. **J Clin Invest** 1988 Nov;82(5):1503–9

Hepatic phosphotyrosine phosphatase activity and its alterations in diabetic rats. Meyerovitch J, et al. **J Clin Invest** 1989 Sep;84(3):976–83

Effect of maternal hypothyroxinaemia during fetal life on the calmodulin-regulated phosphatase activity in the brain of the adult progeny in the rat. Ruiz de Elvira MC, et al. **J Endocrinol** 1989 May;121(2):331–5

Immuno- and enzyme-histochemical detection of phosphoprotein phosphatase in rat epidermis. Ohno J, et al. **J Histochem Cytochem** 1989 May;37(5):629–34

Identification of a phosphotyrosyl-protein phosphatase in mouse epidermis. Stoscheck CM, et al. **J Invest Dermatol** 1989 Mar;92(3):379–84

Okadaic acid. Protein phosphatase inhibition and muscle contractile effects. Takai A. **J Muscle Res Cell Motil** 1988 Dec;9(6):563–5

Expression of calmodulin-dependent phosphodiesterase, calmodulin-dependent protein phosphatase, and other calmodulin-binding proteins in human SMS-KCNR neuroblastoma cells. Pennypacker KR, et al. **J Neurochem** 1989 May;52(5):1438–48

Phosphotyrosine phosphatase activity prevents the detection of P210bcr/abl protein in mature cells in chronic myelogenous leukemia even by an immunoblotting technique. Shibata K, et al. **Leukemia** 1989 Sep;3(9):615–9

Glucose-6-phosphate stimulation of human muscle glycogen synthase phosphatase. Okubo M, et al. **Metabolism** 1988 Dec;37(12):1171–6

The epidermal growth factor receptor from prostate cells is dephosphorylated by a prostate-specific phosphotyrosyl phosphatase. Lin MF, et al. **Mol Cell Biol** 1988 Dec; 8(12):5477–85

Rapid activation of the T-cell tyrosine protein kinase pp56lck by the CD45 phosphotyrosine phosphatase. Mustelin T, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6302–6

Regional distribution of calcium/calmodulin-dependent phosphatase activity of calcineurin in rat brain. Chung E, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jun; 64(3):357–71

Substrate specificity of the phosphorylated fructose-1,6-bisphosphatase dephosphorylating protein phosphatase from Saccharomyces cerevisiae. Manhart A, et al. **Yeast** 1988 Sep;4(3):227–32

[Phosphoprotein phosphatase nonspecifically hydrolyzes CoA] Reziapkin VI, et al. **Ukr Biokhim Zh** 1988 Sep–Oct; 60(5):74–7 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Calcium channel regulation by calcineurin, a Ca2+-activated phosphatase in mammalian brain. Armstrong DL. **Trends Neurosci** 1989 Mar;12(3):117–22 (40 ref.)

PHYSIOLOGY

Putting it on and taking it off: phosphoprotein phosphatase involvement in cell cycle regulation. Cyert MS, et al. **Cell** 1989 Jun 16;57(6):891–3 (24 ref.)

Dephosphorylation of neuromodulin by calcineurin. Liu YC, et al. **J Biol Chem** 1989 Aug 5;264(22):12800–4

The role of protein kinases and protein phosphatases in the regulation of cardiac sarcoplasmic reticulum function. Kranias EG, et al. **Mol Cell Biochem** 1988 Jul–Aug; 82(1–2):37–44

PHOSPHOPROTEIN PHOSPHOHYDROLASES see **PHOSPHOPROTEIN PHOSPHATASES**

PHOSPHOPROTEINS

Phosphoamino acid analysis of protein immobilized on polyvinylidene difluoride membrane. Hildebrandt E, et al. **Anal Biochem** 1989 Mar;177(2):407–12

The primary structures of six human salivary acidic proline-rich proteins (PRP-1, PRP-2, PRP-3, PRP-4, PIF-s and PIF-f). Hay DI, et al. **Biochem J** 1988 Oct 1; 255(1):15–21

On the problem of covalent linkages between phosphoproteins and collagen in bovine dentin and bone. Glimcher MJ, et al. **J Bone Miner Res** 1986 Dec; 1(6):509–22

ANALYSIS

Immunological localization of an 80-kDa phosphoprotein to the apical membrane of gastric parietal cells. Hanzel DK, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):G1082–9

Identification of the clathrin assembly protein AP180 in crude calf brain extracts by two-dimensional sodium dodecyl sulfate-polyacrylamide gel electrophoresis. Ungewickell E, et al. **Anal Biochem** 1989 Jun;179(2):352–6

Antibodies for phosphotyrosine: analytical and preparative tool for tyrosyl-phosphorylated proteins. Wang JY. **Anal Biochem** 1988 Jul;172(1):1–7 (46 ref.)

In the absence of antibody IgGsorb precipitates human placenta phosphotyrosine-containing proteins. Goren HJ, et al. **Biochem Biophys Res Commun** 1989 Feb 28; 159(1):332–6

Localization of the 47 kDa phosphoprotein involved in the respiratory-burst NADPH oxidase of phagocytic cells. Heyworth PG, et al. **Biochem J** 1989 May 15;260(1):243–8

Purification of a human milk protein closely similar to tumor-secreted phosphoproteins and osteopontin. Senger DR, et al. **Biochim Biophys Acta** 1989 Jun 13;996(1–2):43–8

Immunohistochemical study of cytoplasmic oestradiol receptor in normal, dysplastic and malignant cervical tissue. Henry RJ, et al. **Br J Obstet Gynaecol** 1988 Sep; 95(9):927–32

The growth-associated neuronal phosphoprotein B-50: improved purification, partial primary structure, and characterization and localization of proteolysis products. McMaster D, et al. **Brain Res Bull** 1988 Aug;21(2):265–76

Localization of ARPP-90, a major 90 kiloDalton basal ganglion-enriched substrate for cyclic AMP-dependent protein kinase, in striatonigral neurons in the rat brain. Walaas SI, et al. **Brain Res Mol Brain Res** 1989 Mar; 5(2):149–57

Soluble glycosylated phosphoproteins of cementum. Glimcher MJ, et al. **Calcif Tissue Int** 1989 Sep;45(3):165–72

Production of hepatocellular carcinoma by oval cells: cell cycle expression of c-myc and p53 at different stages of oval cell transformation. Braun L, et al. **Cancer Res** 1989 Mar 15;49(6):1554–61

Phosphoproteins from teeth and bone. Veis A. **Ciba Found Symp** 1988;136:161–77 (26 ref.)

Increase of dentin phosphophoryn with dentin formation. Fujisawa R, et al. **Connect Tissue Res** 1988;17(4):231–8

Protein database development: identification of glycosylated and phosphorylated proteins in unfractionated rat fibroblast lysates. Krauss MR, et al. **Electrophoresis** 1989 Feb; 10(2):158–63

Antibodies directed against phosphothreonine residues as potent tools for studying protein phosphorylation. Heffetz D, et al. **Eur J Biochem** 1989 Jun 15;182(2):343–8
Characterization of a 48–kDa nucleic–acid–binding fragment of nucleolin. Sapp M, et al. **Eur J Biochem** 1989 Feb 15; 179(3):541–8
Characterization and partial purification of a high–molecular–mass, calmodulin–binding, tyrosyl–phosphorylated protein from lymphocyte plasma membranes. Kostka G. **Exp Cell Res** 1989 Mar;181(1):85–93
The photoreceptor–specific 33 kDa phosphoprotein of mammalian retina: generation of monospecific antibodies and localization by immunocytochemistry. Lee RH, et al. **Exp Eye Res** 1988 Jun;46(6):829–40
The cysteine proteinase inhibitor chicken cystatin is a phosphoprotein. Laber B, et al. **FEBS Lett** 1989 May 8; 248(1–2):162–8
Phosphorylation state of protamines 1 and 2 in human spermatids and spermatozoa. Pruslin FH, et al. **Gamete Res** 1987 Oct;18(2):179–90
Immunoradiometric studies with a monoclonal antibody against an estrogen–receptor–related protein in human breast cancer. Cano A, et al. **Gynecol Obstet Invest** 1988; 26(2):166–70
Ultrastructural localization of dentine phosphoprotein in rat tooth germs by immunogold staining. Gorter de Vries I, et al. **Histochemistry** 1989;91(1):69–75
Correlation of an estrogen receptor–related phosphoprotein with histopathological features in breast cancer. Tomasino RM, et al. **Int J Biol Markers** 1989 Apr–Jun;4(2):95–102
Phosphotryptic peptide analysis of human progesterone receptor. New phosphorylated sites formed in nuclei after hormone treatment. Sheridan PL, et al. **J Biol Chem** 1989 Apr 15;264(11):6520–8
Electron spectroscopic imaging of the centrosome in cells of the Indian muntjac. Rattner JB, et al. **J Cell Sci** 1988 Sep;91 (Pt 1):5–11
Autoantibodies to the insulin receptor (B–10) can stimulate tyrosine phosphorylation of the beta–subunit of the insulin receptor and a 185,000 molecular weight protein in rat hepatoma cells. Takayama–Hasumi S, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):787–95
Distribution of an estrogen receptor–related protein (P29) in normal skin and in cultured human keratinocytes. Viac J, et al. **J Dermatol** 1989 Apr;16(2):98–102
The human B lymphocyte and carcinoma antigen, CDw40, is a phosphoprotein involved in growth signal transduction. Paulie S, et al. **J Immunol** 1989 Jan 15;142(2):590–5
The mapping of interferon–induced proteins and phosphoproteins from HeLa S3 cells. Higgins DJ, et al. **J Interferon Res** 1989 Feb;9(1):53–66
Characterization of p29, an estrogen–receptor associated tumor marker. Coffer AI, et al. **J Steroid Biochem** 1988 Nov;31(5):745–50
Rotavirus SA11 genome segment 11 protein is a nonstructural phosphoprotein. Welch SK, et al. **J Virol** 1989 Sep; 63(9):3974–82
Phosphotyrosine phosphatase activity prevents the detection of P210bcr/abl protein in mature cells in chronic myelogenous leukemia even by an immunoblotting technique. Shibata K, et al. **Leukemia** 1989 Sep;3(9):615–9
The human dbl–proto–oncogene product is a cytoplasmic phosphoprotein which is associated with the cytoskeletal matrix. Graziani G, et al. **Oncogene** 1989 Jul;4(7):823–9
p53 is associated with a 35 kD protein in cells transformed by simian virus 40. Milner J, et al. **Oncogene** 1989 May; 4(5):665–8
Modulation of the c–myb, c–myc and p53 mRNA and protein levels during induced murine erythroleukemia cell differentiation. Richon VM, et al. **Oncogene** 1989 Feb; 4(2):165–73
NH2–terminal acidic region of the phosphoprotein of vesicular stomatitis virus can be functionally replaced by tubulin. Chattopadhyay D, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):7977–81
Striatal phosphoproteins in Parkinson disease and progressive supranuclear palsy. Girault JA, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2493–7
Dynamic properties of the Ca2+/calmodulin–dependent protein kinase in Drosophila: identification of a synapsin I–like protein. Mitschulat H. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5988–92
p29 protein in breast cancer: relation between estrogen and progesterone receptors. Artero Morà A, et al. **Tumori** 1989 Apr 30;75(2):113–6

BIOSYNTHESIS

Phosphoprotein synthesis and secretion by odontoblasts in rat incisors as revealed by electron microscopic radioautography. Inage T, et al. **Am J Anat** 1988 Aug; 182(4):369–80
Characterization of pp64, a nuclear phosphoprotein induced by platelet–derived growth factor. Shawver LK, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1118–25
Phosphorylation of a group of proteins related to the physiological, multihormonal regulations of the various cell types in the anterior pituitary gland. Beretta L, et al. **Endocrinology** 1989 Sep;125(3):1358–64
Insulin–stimulated phosphorylation of a 195K protein from muscle and liver in the presence of poly–L–lysine. Komori K, et al. **Endocrinology** 1989 Sep;125(3):1438–50
Protein phosphorylation during 1–methyladenine–induced maturation of Asterias oocytes. Haneji T, et al. **Exp Cell Res** 1989 Jun;182(2):664–7
Human peripheral lymphocyte growth regulation and response to phorbol esters is linked to synthesis and phosphorylation of the cytosolic protein, prosolin. Cooper HL, et al. **J Immunol** 1989 Aug 1;143(3):956–63
Cellular gene expression in papillomas of the choroid plexus from transgenic mice that express the simian virus 40 large T antigen. Marks JR, et al. **J Virol** 1989 Feb;63(2):790–7
MESA is a Plasmodium falciparum phosphoprotein associated with the erythrocyte membrane skeleton. Coppel RL, et al. **Mol Biochem Parasitol** 1988 Dec;31(3):223–31
Evidence that a phosphotyrosine–containing 120,000 Da protein from Rous sarcoma virus–infected cells is phosphorylated by pp60v–src. Lau AF. **Oncogene Res** 1989; 4(3):185–94
Overexpression of normal human p53 in established fibroblasts leads to their tumorigenic conversion. Tuck SP, et al. **Oncogene Res** 1989;4(2):81–96

BLOOD

Tyrosine phosphorylation in human neutrophil. Gomez–Cambronero J, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1478–85
Serine and tyrosine phosphorylation of 28– and 35–kDa proteins of human T lymphocytes stimulated by streptococcal M protein. Kotb M, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):803–10
Erythrocyte membrane skeleton phosphoproteins: identification of two unrelated phosphoproteins in band 4.9. Horne WC, et al. **Biochim Biophys Acta** 1988 Oct 6; 944(2):135–43
Calmodulin–dependent phosphatase preferentially dephosphorylates a 28 kDa protein in human platelets. Pezzi L, et al. **Int J Biochem** 1989;21(7):791–8
Collagen–induced binding to human platelets of platelet–derived growth factor leading to inhibition of P43 and P20 phosphorylation. Bryckaert MC, et al. **J Biol Chem** 1989 Mar 15;264(8):4336–41
Thrombin and collagen induce rapid phosphorylation of a common set of cellular proteins on tyrosine in human platelets. Nakamura S, et al. **J Biol Chem** 1989 May 5; 264(13):7089–91
A phosphoprotein of Mr 47,000, defective in autosomal chronic granulomatous disease, copurifies with one of two soluble components required for NADPH:O2 oxidoreductase activity in human neutrophils. Bolscher BG, et al. **J Clin Invest** 1989 Mar;83(3):757–63
Desensitization of platelet–activating factor–stimulated protein phosphorylation in platelets. Shukla SD, et al. **Mol Pharmacol** 1989 Apr;35(4):409–13
Epinephrine induces changes in the subcellular distribution of the inhibitory GTP–binding protein Gi alpha–2 and a 38–kDa phosphorylated protein in the human platelet. Crouch MF, et al. **Proc Natl Acad Sci U S A** 1989 Mar; 86(6):1776–80
Specific inhibition of 40 K protein phosphorylation in platelet by a new antithrombotic agent, d–indobufen. Mamiya S, et al. **Thromb Res** 1989 Jun 1;54(5):447–56

GENETICS

Multiple forms of human interleukin–6. Phosphoglycoproteins secreted by many different tissues. May LT, et al. **Ann N Y Acad Sci** 1989;557:114–9; discussion 119–21 (42 ref.)
The phosphoprotein p53 is down–regulated post–transcriptionally during embryogenesis in vertebrates. Louis JM, et al. **Biochim Biophys Acta** 1988 Sep 7; 950(3):395–402
Characterization of a natural inhibitor of the insulin receptor tyrosine kinase: cDNA cloning, purification, and anti–mitogenic activity. Auberger P, et al. **Cell** 1989 Aug 25;58(4):631–40
Major nucleolar proteins shuttle between nucleus and cytoplasm. Borer RA, et al. **Cell** 1989 Feb 10;56(3):379–90
Transformation by activated ras or fos prevents myogenesis by inhibiting expression of MyoD1. Lassar AB, et al. **Cell** 1989 Aug 25;58(4):659–67
Regulation of p34cdc2 protein kinase during mitosis. Moreno S, et al. **Cell** 1989 Jul 28;58(2):361–72
Multiple phosphorylated forms of the product of the fission yeast cell division cycle gene cdc2+. Potashkin JA, et al. **Curr Genet** 1988 Sep;14(3):235–40
Homology between the cDNAs encoding phosphoprotein p19 and SCG10 reveals a novel mammalian gene family preferentially expressed in developing brain. Schubart UK, et al. **DNA** 1989 Jul–Aug;8(6):389–98
Molecular cloning and complete amino acid sequence of AP50, an assembly protein associated with clathrin–coated vesicles. Thurieau C, et al. **DNA** 1988 Dec;7(10):663–9
Biological activities of EGF–receptor mutants with individually altered autophosphorylation sites. Honegger A, et al. **EMBO J** 1988 Oct;7(10):3045–52
Basic proline–rich proteins of murine parotid glands. Induction of mRNA by isoprenaline and post–secretion processing. Bannister AJ, et al. **Eur J Biochem** 1989 May 1;181(2):371–9
The complete sequence of a chicken–muscle cDNA encoding the acidic ribosomal protein P1. Ferro JA, et al. **Eur J Biochem** 1988 Nov 15;177(3):513–6
Evidence for a homolog of the yeast cell cycle regulatory gene product of cdc2+ in Physarum polycephalum. Shipley GL, et al. **Eur J Cell Biol** 1989 Feb;48(1):95–103
Cloning and sequencing of the human nucleolin cDNA. Srivastava M, et al. **FEBS Lett** 1989 Jun 19;250(1):99–105
Sequence and structure of the nucleolin promoter in rodents: characterization of a strikingly conserved CpG island. Bourbon HM, et al. **Gene** 1988 Aug 15;68(1):73–84
A variation in the structure of the protein–coding region of the human p53 gene. Buchman VL, et al. **Gene** 1988 Oct 30;70(2):245–52
Nucleolin from Xenopus laevis: cDNA cloning and expression during development. Caizergues–Ferrer M, et al. **Genes Dev** 1989 Mar;3(3):324–33
A gene with homology to the myc similarity region of MyoD1 is expressed during myogenesis and is sufficient to activate the muscle differentiation program. Edmondson DG, et al. **Genes Dev** 1989 May;3(5):628–40
The Hox–1.3 homeo box protein is a sequence–specific DNA–binding phosphoprotein. Odenwald WF, et al. **Genes Dev** 1989 Feb;3(2):158–72
cdc2 and the regulation of mitosis: six interacting mcs genes. Molz L, et al. **Genetics** 1989 Aug;122(4):773–82
Lack of rearrangements of p53 tumor antigen gene locus in human hematological malignancies. Venturelli D, et al. **Haematologica (Pavia)** 1988 Jul–Aug;73(4):259–64
A single cDNA encodes two isoforms of stathmin, a developmentally regulated neuron–enriched phosphoprotein. Doye V, et al. **J Biol Chem** 1989 Jul 25; 264(21):12134–7
Dual regulation of GAP–43 gene expression by nerve growth factor and glucocorticoids. Federoff HJ, et al. **J Biol Chem** 1988 Dec 25;263(36):19290–5
Induction of the metastatic phenotype by transfection of the nuclear oncogene p53: increases in cytoplasmic diacylglycerol levels and reduction in class I major histocompatibility antigen expression are not sufficient to explain the changes in metastatic capacities. Pohl J, et al. **J Cancer Res Clin Oncol** 1989;115(2):145–7
ZO–1 mRNA and protein expression during tight junction assembly in Caco–2 cells. Anderson JM, et al. **J Cell Biol** 1989 Sep;109(3):1047–56
Mitotic control by metaphase–promoting factor and cdc proteins. Lohka MJ. **J Cell Sci** 1989 Feb;92 (Pt 2):131–5 (50 ref.)
Expression of bicistronic measles virus P/C mRNA by using hybrid adenoviruses: levels of C protein synthesized in vivo are unaffected by the presence or absence of the upstream P initiator codon. Alkhatib G, et al. **J Virol** 1988 Nov; 62(11):4059–69
Regulated expression of the human cytomegalovirus pp65 gene: octamer sequence in the promoter is required for activation by viral gene products. Depto AS, et al. **J Virol** 1989 Mar;63(3):1232–8
Integration of Friend murine leukemia virus into both alleles of the p53 oncogene in an erythroleukemic cell line. Hicks GG, et al. **J Virol** 1988 Dec;62(12):4752–5
Mutation is required to activate the p53 gene for cooperation with the ras oncogene and transformation. Hinds P, et al. **J Virol** 1989 Feb;63(2):739–46
Posttranscriptional regulation of a class of human cytomegalovirus phosphoproteins encoded by an early transcription unit. Wright DA, et al. **J Virol** 1989 Jul; 63(7):3117–27
The human L–myc gene encodes multiple nuclear phosphoproteins from alternatively processed mRNAs. De Greve J, et al. **Mol Cell Biol** 1988 Oct;8(10):4381–8
Characterization of mutant p53–hsp72/73 protein–protein complexes by transient expression in monkey COS cells. Stürzbecher HW, et al. **Mol Cell Biol** 1988 Sep;8(9):3740–7
Characterization of the human p53 gene promoter. Tuck SP, et al. **Mol Cell Biol** 1989 May;9(5):2163–72
Molecular cloning and sequence analysis of mutant alleles of the fission yeast cdc2 protein kinase gene: implications for cdc2+ protein structure and function. Carr AM, et al. **Mol Gen Genet** 1989 Jul;218(1):41–9
The mouse homologue of the human acidic ribosomal phosphoprotein PO: a highly conserved polypeptide that is under translational control. Krowczynska AM, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6408
Nucleotide sequence of a cDNA encoding the chicken p53 nuclear oncoprotein. Soussi T, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11383
Nucleotide sequence of a cDNA encoding the rat p53 nuclear oncoprotein. Soussi T, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11384
Meth A fibrosarcoma cells express two transforming mutant p53 species. Eliyahu D, et al. **Oncogene** 1988 Sep; 3(3):313–21
Expression, methylation and chromatin structure of the p53 gene in untransformed and human T–cell leukemia virus type I–transformed human T–lymphocytes. Lübbert M, et al. **Oncogene** 1989 May;4(5):643–51
Two promoters that map to 5'-sequences of the human p53 gene are differentially regulated during terminal differentiation of human myeloid leukemic cells. Reisman D, et al. **Oncogene** 1989 Aug;4(8):945–53
Structural characterization of the BCR gene product. Timmons MS, et al. **Oncogene** 1989 May;4(5):559–67
Structure and expression of the murine retinoblastoma gene and characterization of its encoded protein. Bernards R, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6474–8
Structural and functional division into two domains of the

large (100- to 115-kDa) chains of the clathrin-associated protein complex AP-2. Kirchhausen T, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2612–6

Chromosome 17 deletions and p53 gene mutations in colorectal carcinomas. Baker SJ, et al. **Science** 1989 Apr 14;244(4901):217–21

Point mutational inactivation of the retinoblastoma antioncogene. Horowitz JM, et al. **Science** 1989 Feb 17; 243(4893):937–40

Recombinant 47-kilodalton cytosol factor restores NADPH oxidase in chronic granulomatous disease. Lomax KJ, et al. **Science** 1989 Jul 28;245(4916):409–12

Synapsins: mosaics of shared and individual domains in a family of synaptic vesicle phosphoproteins. Südhof TC, et al. **Science** 1989 Sep 29;245(4925):1474–80 (39 ref.)

MyoD1: a nuclear phosphoprotein requiring a Myc homology region to convert fibroblasts to myoblasts. Tapscott SJ, et al. **Science** 1988 Oct 21;242(4877):405–11

Cell cycle control genes in fission yeast and mammalian cells. Lee M, et al. **Trends Genet** 1988 Oct;4(10):287–90 (29 ref.)

Sequence analysis of the mumps virus mRNA encoding the P protein. Elango N, et al. **Virology** 1989 Mar;169(1):62–7

Evidence for phosphorylation of trans-activator p40x of human T-cell leukemia virus type I produced in insect cells with a baculovirus expression vector. Nyunoya H, et al. **Virology** 1988 Dec;167(2):538–44

Carboxyl-terminal region of Sendai virus P protein is required for binding to viral nucleocapsids [published erratum appears in Virology 1989 Apr;169(2):489] Ryan KW, et al. **Virology** 1988 Nov;167(1):106–12

Multiplicity dependent expression of the predominant phosphoprotein pp65 of human cytomegalovirus. Klages S, et al. **Virus Res** 1989 Feb;12(2):159–68

[Bacterial expression of human oncogene p53 in the form of a fused protein] Maĭmets TO. **Dokl Akad Nauk SSSR** 1988;302(6):1501–3 **(Rus)**

[Two allelic genes of human p53 code for proteins differing with respect to amino acid sequence] Bukhman VL, et al. **Genetika** 1988 Dec;24(12):2101–9 (Eng. Abstr.) **(Rus)**

[Exon-intron structure and organization of the 5'-terminal region of the human p53 gene] Bukhman VL, et al. **Genetika** 1988 Nov;24(11):1909–17 (Eng. Abstr.) **(Rus)**

[Antisense RNA p53 inhibits proliferation of normal and transformed cells] Prasolov VS, et al. **Mol Biol (Mosk)** 1988 Sep-Oct;22(5):1371–80 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

A monoclonal antibody against dentin phosphophoryn recognizes a bone protein(s) appearing at the beginning of ossification. Nakama T, et al. **Calcif Tissue Int** 1988 Oct; 43(4):263–7

Preparation of monoclonal antibodies to chicken bone phosphoproteins. Yamazaki K, et al. **Calcif Tissue Int** 1988 Jul;43(1):41–3

Quantification of lupus anti-ribosome P antibodies using a recombinant P2 fusion protein and determination of the predicted amino acid sequence of the autoantigen in patients' mononuclear cells. Magsaam J, et al. **Clin Exp Immunol** 1989 May;76(2):165–71

Immunological evidence for the role of phosphoprotein p68/pI = 7.3 in premessenger RNA splicing. Liew CC, et al. **FEBS Lett** 1989 May 8;248(1–2):101–4

CD15 monoclonal antibodies react with a phosphotyrosine-containing protein on the surface of human neutrophils. Skubitz KM, et al. **J Immunol** 1988 Dec 15;141(12):4318–23

ISOLATION & PURIFICATION

Acid and base hydrolysis of phosphoproteins bound to immobilon facilitates analysis of phosphoamino acids in gel-fractionated proteins. Kamps MP, et al. **Anal Biochem** 1989 Jan;176(1):22–7

Identification of a retina-specific MEKA protein as a 33 K protein. Kuo CH, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1063–8

Binding to GDP-agarose identifies a novel 60kDa substrate for the insulin receptor tyrosyl kinase in mouse NIH-3T3 cells expressing high concentrations of the human insulin receptor. O'Brien R, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):743–8

Molecular characterization of the AP180 coated vesicle assembly protein. Prasad K, et al. **Biochemistry** 1988 Aug 9;27(16):6098–104

Studies in pig heart tissue on various 60,000 Da phosphoproteins. Guesdon F, et al. **Biochimie** 1989 Mar; 71(3):351–61

Purification of MPF from starfish: identification as the H1 histone kinase p34cdc2 and a possible mechanism for its periodic activation. Labbe JC, et al. **Cell** 1989 Apr 21; 57(2):253–63

Differentiation-dependent phosphorylation of a 175,000 molecular weight protein in response to insulin and insulin-like growth factor-I in L6 skeletal muscle cells. Beguinot F, et al. **Endocrinology** 1989 Sep;125(3):1599–605

Inhibitors of protein phosphatase-1. Inhibitor-1 of bovine adipose tissue and a dopamine- and cAMP-regulated phosphoprotein of bovine brain are identical. Strålfors P, et al. **Eur J Biochem** 1989 Mar 1;180(1):143–8

Interleukin 1 and tumour necrosis factor increase phosphorylation of fibroblast proteins. Kaur P, et al. **FEBS Lett** 1988 Dec 5;241(1–2):6–10

Purification of a p47 phosphoprotein from Xenopus laevis oocytes and identification as an in vivo and in vitro p34cdc2 substrate. Mulner-Lorillon O, et al. **FEBS Lett** 1989 Jul 17;251(1–2):219–24

The major component of the rat sperm fibrous sheath is a phosphoprotein. Brito M, et al. **Gamete Res** 1989 Feb; 22(2):205–17

Identification of two distinct isoforms of stathmin and characterization of their respective phosphorylated forms. Beretta L, et al. **J Biol Chem** 1989 Jun 15;264(17):9932–8

Osteopontin, a transformation-associated cell adhesion phosphoprotein, is induced by 12-O-tetradecanoylphorbol 13-acetate in mouse epidermis. Craig AM, et al. **J Biol Chem** 1989 Jun 5;264(16):9682–9

Isolation of new phosphorylated glycoprotein from mineralized phase of bone that exhibits limited homology to adhesive protein osteopontin. Gorski JP, et al. **J Biol Chem** 1988 Nov 5;263(31):15938–45

Differences between enamel-related and cementum-related dentin in the rat incisor with special emphasis on the phosphoproteins. Steinfort J, et al. **J Biol Chem** 1989 Feb 15;264(5):2840–5

Differential phosphorylation of the nucleoprotein of influenza A viruses. Kistner O, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2421–31

An 80 to 85 kilodalton human phosphoglycoprotein associated with cell activation. Omary MB, et al. **J Immunol** 1988 Nov 15;141(10):3492–7

Immunoaffinity purification of tyrosine-phosphorylated cellular proteins. Kanner SB, et al. **J Immunol Methods** 1989 Jun 2;120(1):115–24

ARPP-21, a cyclic AMP-regulated phosphoprotein enriched in dopamine-innervated brain regions. I. Purification and characterization of the protein from bovine caudate nucleus. Hemmings HC Jr, et al. **J Neurosci** 1989 Mar; 9(3):851–64

Extraction of major acidic Ca2+ dependent phosphoproteins from synaptic membranes. Perrone-Bizzozero NI, et al. **J Neurosci Res** 1988 Jul;20(3):346–50

Phosphorylation at serine 89 induces a shift in gel mobility but has little effect on the function of adenovirus type 5 E1A proteins. Dumont DJ, et al. **J Virol** 1989 Feb; 63(2):987–91

Species distribution of a phosphoprotein (parafusin) involved in exocytosis. Satir BH, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):930–2

A rapid separation procedure to analyse phosphorylation of two putative protein kinase C substrates in intact lymphocytes. Brattsand G, et al. **Scand J Immunol** 1989 Aug;30(2):233–40

METABOLISM

Chromatolytic neurons in Werdnig-Hoffmann disease contain phosphorylated neurofilaments. Lippa CF, et al. **Acta Neuropathol (Berl)** 1988;77(1):91–4

DARPP-32 as a marker for D-1 dopaminoceptive cells in the rat brain: prenatal development and presence in glial elements (tanycytes) in the basal hypothalamus. Hökfelt T, et al. **Adv Exp Med Biol** 1988;235:65–82 (38 ref.)

Hepatic immunohistochemical localization of the tight junction protein ZO-1 in rat models of cholestasis. Anderson JM, et al. **Am J Pathol** 1989 May;134(5):1055–62

Carbachol-induced protein phosphorylation in parietal cells: regulation by [Ca2+]i. Brown MR, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):G99–110

Secretagogue-induced protein phosphorylation and chloride transport in Caco-2 cells. Burnham DB, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):G808–16

Dependence of stress on cross-bridge phosphorylation in vascular smooth muscle. Ratz PH, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):C96–100

Mechanism of calcification: role of collagen fibrils and collagen-phosphoprotein complexes in vitro and in vivo. Glimcher MJ. **Anat Rec** 1989 Jun;224(2):139–53 (85 ref.)

Dentin matrix proteins: composition and possible functions in calcification. Linde A. **Anat Rec** 1989 Jun;224(2):154–66 (119 ref.)

Substrate phosphorylation can inhibit proteolysis by trypsin-like enzymes. Benore-Parsons M, et al. **Arch Biochem Biophys** 1989 Aug 1;272(2):274–80

Induction and inhibition of hydroxyapatite formation by rat dentine phosphoprotein in vitro. Lussi A, et al. **Arch Oral Biol** 1988;33(9):685–91

Phosphorylation of both 47 and 49kDa proteins accompanies superoxide release by neutrophils. Badwey JA, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):1029–35

DNA-stimulated protein phosphorylation in HeLa whole cell and nuclear extracts. Carter TH, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):535–40

Identification of the major phosphoprotein secreted by many rodent cell lines as 2ar/osteopontin: enhanced expression in H-ras-transformed 3T3 cells. Craig AM, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):166–73

Identification of the clathrin-binding domain of assembly protein AP-2. Keen JH, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):17–23

Multiple forms of SppI (secreted phosphoprotein, osteopontin) synthesized by normal and transformed rat bone cell populations: regulation by TGF-beta. Kubota T, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1453–9

Enhanced protein phosphorylation, IL-2 receptor expression, and IL-2 production precede cellular proliferation in lymphocytes oxidized by periodic acid. Malinin GI, et al. **Biochem Biophys Res Commun** 1989 Jan 31;158(2):590–4

Gonadotropin stimulated protein phosphorylation in porcine granulosa cells. Myers LM, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):442–7

Inhibitory effect of glycyrrhizin on polypeptide phosphorylation by polypeptide-dependent protein kinase (kinase P) in vitro. Ohtsuki K, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):597–604

Effect of poly-basic amino acids on the phosphorylation of various substrate proteins by cytosolic protein-tyrosine kinase from porcine spleen. Sakai K, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):1043–9

Nucleolin (C23), a physiological substrate for casein kinase II. Schneider HR, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1390–7

Protein phosphorylation and the two stages of pigment organelle dispersion in permeabilized xanthophores: organelle protein phosphorylation alone supports only the first stage. Yu FX, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):626–32

Age-dependent changes in the level of a 22 KDa plasma membrane phosphoprotein in developing chick embryo brain. David E, et al. **Biochem Int** 1988 Dec;17(6):1039–47

Identification and isolation of the phosphorylated intermediate of the calcium pump in rat intestinal basolateral membranes. Wajsman R, et al. **Biochem J** 1988 Dec 1;256(2):593–8

Self-association of calcium and magnesium complexes of dentin phosphophoryn. Marsh ME. **Biochemistry** 1989 Jan 10;28(1):339–45

Binding of calcium and phosphate ions to dentin phosphophoryn. Marsh ME. **Biochemistry** 1989 Jan 10; 28(1):346–52

The catalytic subunit of phosphatase 2A dephosphorylates phosphoopsin. Palczewski K, et al. **Biochemistry** 1989 Jan 24;28(2):415–9

Phorbol myristate acetate activates protein kinase C, stimulates the phosphorylation of endogenous proteins and inhibits phosphate transport in mouse renal tubules. Boneh A, et al. **Biochim Biophys Acta** 1989 Aug 15;1012(3):308–16

The 47-kDa protein involved in the NADPH:O2 oxidoreductase activity of human neutrophils is phosphorylated by cyclic AMP-dependent protein kinase without induction of a respiratory burst. Kramer IM, et al. **Biochim Biophys Acta** 1988 Sep 16;971(2):189–96

Gastric H+ secretion: histamine (cAMP-mediated) activation of protein phosphorylation. Malinowska DH, et al. **Biochim Biophys Acta** 1988 Oct 28;972(1):95–109

Interaction of clathrin coat proteins with unilamellar and multilamellar vesicles of phosphatidylcholine. Privat JP, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):257–67

Phosphorylation of the elongation factor 2: the fifth Ca2+/calmodulin-dependent system of protein phosphorylation. Ryazanov AG, et al. **Biochimie** 1988 May; 70(5):619–26

Phosphorylation of African swine fever virus proteins in vitro and in vivo. Salas ML, et al. **Biochimie** 1988 May; 70(5):627–35

Dependence of GAP43 (B50, F1) transport on axonal regeneration in rat dorsal root ganglion neurons. Bisby MA. **Brain Res** 1988 Aug 16;458(1):157–61

NMDA receptor blockade prevents the increase in protein kinase C substrate (protein F1) phosphorylation produced by long-term potentiation. Linden DJ, et al. **Brain Res** 1988 Aug 16;458(1):142–6

Cross-linkage of nucleophosmin in tumor cells by nitrogen mustard. Chan PK. **Cancer Res** 1989 Jun 15;49(12):3271–5

The retinoblastoma protein is phosphorylated during specific phases of the cell cycle. Buchkovich K, et al. **Cell** 1989 Sep 22;58(6):1097–105

Phosphorylation of the retinoblastoma gene product is modulated during the cell cycle and cellular differentiation. Chen PL, et al. **Cell** 1989 Sep 22;58(6):1193–8

An N-terminal transformation-governing sequence of SV40 large T antigen contributes to the binding of both p110Rb and a second cellular protein, p120. Ewen ME, et al. **Cell** 1989 Jul 28;58(2):257–67

A 60 kd cdc2-associated polypeptide complexes with the E1A proteins in adenovirus-infected cells. Giordano A, et al. **Cell** 1989 Sep 8;58(5):981–90

95 kd sperm proteins bind ZP3 and serve as tyrosine kinase substrates in response to zona binding. Leyton L, et al. **Cell** 1989 Jun 30;57(7):1123–30

SV40 large T antigen binds preferentially to an underphosphorylated member of the retinoblastoma susceptibility gene product family. Ludlow JW, et al. **Cell** 1989 Jan 13;56(1):57–65

Mitosis-specific phosphorylation of p60c-src by p34cdc2-associated protein kinase. Morgan DO, et al. **Cell** 1989 Jun 2;57(5):775–86

225-Kilodalton phosphoprotein associated with mitotic centrosomes in sea urchin eggs. Kuriyama R. **Cell Motil Cytoskeleton** 1989;12(2):90–103

Norepinephrine-induced phosphorylation of a 25 kd phosphoprotein in rat aorta is altered in intraperitoneal sepsis. Carcillo JA, et al. **Circ Shock** 1989 Jul;28(3):257–65

Regulation of the vertebrate cell cycle by the cdc2 protein kinase. Draetta G, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:195–201

Flow cytofluorimetric determination of protein distribution

throughout the cell cycle. Khochbin S, et al. **Cytometry** 1989 Jul;10(4):484–9
Correlation of DNA content, p53, T antigen, and V antigen in simian virus 40-infected human diploid cells. Laffin J, et al. **Cytometry** 1989 Mar;10(2):205–13
Somatic cell–oocyte interactions in mouse oogenesis: stage-specific regulation of mouse oocyte protein phosphorylation by granulosa cells. Colonna R, et al. **Dev Biol** 1989 May;133(1):305–8
A requirement for protein phosphorylation in regulating the meiotic and mitotic cell cycles in echinoderms. Néant I, et al. **Dev Biol** 1989 Apr;132(2):304–14
Intracellular localisation and expression of mammalian CDC2 protein during myogenic differentiation. Akhurst RJ, et al. **Differentiation** 1989 Mar;40(1):36–41
Kinetic parameters of the protein tyrosine kinase activity of EGF-receptor mutants with individually altered autophosphorylation sites. Honegger A, et al. **EMBO J** 1988 Oct;7(10):3053–60
Two distinct cellular phosphoproteins bind to the c-fos serum response element. Ryan WA Jr, et al. **EMBO J** 1989 Jun; 8(6):1785–92
Prostaglandin F2 alpha administered in vivo induces Ca2+-dependent protein phosphorylation in rat luteal tissue. Baum MS. **Endocrinology** 1989 Jan;124(1):555–7
The insulin-like effect of vanadate on lipolysis in rat adipocytes is not accompanied by an insulin-like effect on tyrosine phosphorylation. Mooney RA, et al. **Endocrinology** 1989 Jan;124(1):422–9
Effects of dibutyryl adenosine 3',5'-monophosphate, angiotensin II, and atrial natriuretic factor on phosphorylation of a 17,600-dalton protein in adrenal glomerulosa cells. Takagi M, et al. **Endocrinology** 1988 Nov;123(5):2419–23
Effects of the cellular p53 protein on Simian-virus-40-T-antigen-catalyzed DNA unwinding in vitro. Kienzle H, et al. **Eur J Biochem** 1989 Sep 1; 184(1):181–6
Specific dephosphorylation by phosphatases 1 and 2A of a nuclear protein structurally and immunologically related to nucleolin. Possible influence on the regulation of rRNA synthesis. Schneider HR, et al. **Eur J Biochem** 1989 Mar 15;180(2):449–55
Protein kinase C phosphorylates the sponge aggregation receptor after its binding to the homologous aggregation factor. Schröder HC, et al. **Eur J Cell Biol** 1989 Feb; 48(1):142–9
Early events in murine erythroleukemia cells induced to differentiate: variation of the cell cycle parameters in relation to p53 accumulation. Khochbin S, et al. **Exp Cell Res** 1988 Dec;179(2):565–74
Evidence that precursor cells of monocytes and B-lymphocytes are closely related. Wong AK, et al. **Exp Hematol** 1989 Oct;17(9):968–73
Serotonin-stimulated protein phosphorylation in aortic smooth muscle cells. Nakaki T, et al. **Experientia** 1989 Sep 15;45(9):879–81
Stimulation of sodium current by cyclic AMP is mediated through protein phosphorylation in Euhadra neurons. Onozuka M, et al. **Experientia** 1988 Dec 1;44(11–12):996–8
Interleukin 3 and phorbol ester stimulate tyrosine phosphorylation of overlapping substrate proteins. Ferris DK, et al. **FEBS Lett** 1989 Mar 27;246(1–2):153–8
Cellular distribution of cholesterogenesis-linked, phosphoisoprenylated proteins in proliferating cells. Sepp-Lorenzino L, et al. **FEBS Lett** 1989 Mar 13; 245(1–2):110–6
Studies of in vivo phosphorylated proteins in BC3H-1 myocytes suggest that protein kinase C is involved in insulin action. Vila MC, et al. **FEBS Lett** 1989 Feb 13; 244(1):177–80
Protein phosphorylation in monkey brain basal ganglia: Ca2+/Mg2+-independent phosphorylation of a 45 kilodalton protein. Ramamoorthy S, et al. **Indian J Biochem Biophys** 1985 Dec;22(6):321–6
Protein phosphorylation in Bradyrhizobium japonicum bacteroids and cultures. Karr DB, et al. **J Bacteriol** 1989 Jun;171(6):3420–6
Mitochondrial localization of a phosphoprotein that rapidly accumulates in adrenal cortex cells exposed to adrenocorticotropic hormone or to cAMP. Alberta JA, et al. **J Biol Chem** 1989 Feb 5;264(4):2368–72
ARPP-21, a cyclic AMP-regulated phosphoprotein (Mr = 21,000) enriched in dopamine-innervated brain regions. Amino acid sequence of the site phosphorylated by cyclic AMP in intact cells and kinetic studies of its phosphorylation in vitro. Hemmings HC Jr, et al. **J Biol Chem** 1989 May 5;264(13):7726–33
Protein phosphorylation associated with synergistic stimulation of neutrophils. Heyworth PG, et al. **J Biol Chem** 1989 Sep 5;264(25):14935–9
Rapid dephosphorylation of protein kinase C substrates by protein kinase A activators results from inhibition of diacylglycerol release. McAtee P, et al. **J Biol Chem** 1989 Jul 5;264(19):11193–9
Modulation of T cell activation by differential regulation of the phosphorylation of two cytosolic proteins. Implication of both Ca2+ and cyclic AMP-dependent protein kinases. Mary D, et al. **J Biol Chem** 1989 Aug 25;264(24):14498–502
Bovine mitochondrial rhodanese is a phosphoprotein. Ogata K, et al. **J Biol Chem** 1989 Feb 15;264(5):2718–25
Tumor necrosis factor signal transduction. Tissue-specific serine phosphorylation of a 26-kDa cytosolic protein. Schütze S, et al. **J Biol Chem** 1989 Feb 25;264(6):3562–7
Tyrosine phosphorylation of pp185 by insulin receptor kinase in a cell-free system. Tashiro-Hashimoto Y, et al. **J Biol Chem** 1989 Apr 25;264(12):6879–85
Characterization of synapsin I fragments produced by cysteine-specific cleavage: a study of their interactions with F-actin. Bähler M, et al. **J Cell Biol** 1989 May; 108(5):1841–9
Electrostatic and hydrophobic interactions of synapsin I and synapsin I fragments with phospholipid bilayers. Benfenati F, et al. **J Cell Biol** 1989 May;108(5):1851–62
Interactions of synapsin I with small synaptic vesicles: distinct sites in synapsin I bind to vesicle phospholipids and vesicle proteins. Benfenati F, et al. **J Cell Biol** 1989 May; 108(5):1863–72
Rapid phosphorylation and reorganization of ezrin and spectrin accompany morphological changes induced in A-431 cells by epidermal growth factor. Bretscher A. **J Cell Biol** 1989 Mar;108(3):921–30
Development of tight junctions de novo in the mouse early embryo: control of assembly of the tight junction-specific protein, ZO-1. Fleming TP, et al. **J Cell Biol** 1989 Apr; 108(4):1407–18
Novel tyrosine kinase substrates from Rous sarcoma virus-transformed cells are present in the membrane skeleton. Glenney JR Jr, et al. **J Cell Biol** 1989 Jun; 108(6):2401–8
K-252a, a potent protein kinase inhibitor, blocks nerve growth factor-induced neurite outgrowth and changes in the phosphorylation of proteins in PC12h cells. Hashimoto S. **J Cell Biol** 1988 Oct;107(4):1531–9
Heat shock induces protein tyrosine phosphorylation in cultured cells. Maher PA, et al. **J Cell Biol** 1989 Jun; 108(6):2029–35
Effects of epidermal growth factor and phorbol 12-myristate 13-acetate on protein phosphorylation in mouse embryo palate mesenchyme cells in vitro. Chepenik KP, et al. **J Craniofac Genet Dev Biol** 1988;8(2):147–53
Identification of a 31 kDa protein in Saccharomyces cerevisiae whose phosphorylation is controlled negatively by the CDC25 gene product. Tripp ML, et al. **J Gen Microbiol** 1988 Sep;134 (Pt 9):2481–91
Simultaneous immunoelectron microscopic visualization of protein B23 and C23 distribution in the HeLa cell nucleolus. Biggiogera M, et al. **J Histochem Cytochem** 1989 Sep;37(9):1371–4
Calcium uptake and protein phosphorylation in myenteric neurons, like the release of vasoactive intestinal polypeptide and acetylcholine, are frequency dependent. Agoston DV, et al. **J Neurochem** 1989 May;52(5):1637–40
Stathmin is a major phosphoprotein and cyclic AMP-dependent protein kinase substrate in mouse brain neurons but not in astrocytes in culture: regulation during ontogenesis. Chneiweiss H, et al. **J Neurochem** 1989 Sep; 53(3):856–63
Polyamines differentially inhibit cyclic AMP-dependent protein kinase-mediated phosphorylation in the brain of the tobacco hornworm, Manduca sexta. Combest WL, et al. **J Neurochem** 1988 Nov;51(5):1581–91
Determination of changes in the phosphorylation state of the neuron-specific protein kinase C substrate B-50 (GAP43) by quantitative immunoprecipitation. De Graan PN, et al. **J Neurochem** 1989 Jan;52(1):17–23
Phosphorylation of B-50 (GAP43) is correlated with neurotransmitter release in rat hippocampal slices. Dekker LV, et al. **J Neurochem** 1989 Jan;52(1):24–30
Effects of cyclic nucleotides and calcium/calmodulin on protein phosphorylation in the CNS of Hirudo medicinalis. Garcia-Gil M, et al. **J Neurochem** 1989 Mar;52(3):699–704
Cyclic AMP-dependent protein phosphorylation in isolated neuronal growth cones from developing rat forebrain. Lockerbie RO, et al. **J Neurochem** 1989 Mar;52(3):786–96
Relationship of ATP turnover, polyphosphoinositide metabolism, and protein phosphorylation in sciatic nerve and derived peripheral myelin subfractions from normal and streptozotocin diabetic rats. Lowery JM, et al. **J Neurochem** 1989 Mar;52(3):921–32
Reduction of K+-stimulated 45Ca2+ influx in synaptosomes with age involves inactivating and noninactivating calcium channels and is correlated with temporal modifications in protein dephosphorylation. Martínez-Serrano A, et al. **J Neurochem** 1989 Feb;52(2):576–84
The two major phosphoproteins in growth cones are probably identical to two protein kinase C substrates correlated with persistence of long-term potentiation. Nelson RB, et al. **J Neurosci** 1989 Feb;9(2):381–9
ARPP-21, a cyclic AMP-regulated phosphoprotein enriched in dopamine-innervated brain regions. II. Immunocytochemical localization in rat brain. Ouimet CC, et al. **J Neurosci** 1989 Mar;9(3):865–75
Oligomerization of oncoprotein p53. Kraiss S, et al. **J Virol** 1988 Dec;62(12):4737–44
Evolutionary conservation of the biochemical properties of p53: specific interaction of Xenopus laevis p53 with simian virus 40 large T antigen and mammalian heat shock proteins 70. Soussi T, et al. **J Virol** 1989 Sep;63(9):3894–901
Properties of a simian virus 40 mutant T antigen substituted in the hydrophobic region: defective ATPase and oligomerization activities and altered phosphorylation accompany an inability to complex with cellular p53. Tack LC, et al. **J Virol** 1989 Aug;63(8):3362–7
Phosphorylation of Plasmodium berghei derived phosphoproteins associated with the host erythrocyte membrane by the spectrin kinase. Wiser MF. **Mol Cell Biochem** 1988 Nov;84(1):51–7
Related proteins are phosphorylated at tyrosine in response to mitogenic stimuli and at meiosis. Cooper JA. **Mol Cell Biol** 1989 Jul;9(7):3143–7
Increased amount of a 25-kilodalton phosphoprotein after v-mos transfection of CHO cells. Mayo JK, et al. **Mol Cell Biol** 1988 Nov;8(11):4685–91
Transformation-specific tyrosine phosphorylation of a novel cellular protein in chicken cells expressing oncogenic variants of the avian cellular src gene. Reynolds AB, et al. **Mol Cell Biol** 1989 Feb;9(2):629–38
Stable association of activated pp60src with two tyrosine-phosphorylated cellular proteins. Reynolds AB, et al. **Mol Cell Biol** 1989 Sep;9(9):3951–8
The C proteins of heterogeneous nuclear ribonucleoprotein complexes interact with RNA sequences downstream of polyadenylation cleavage sites. Wilusz J, et al. **Mol Cell Biol** 1988 Oct;8(10):4477–83
Phosphorylation of proteins in rat ovarian plasma membranes by [gamma-32P]GTP: evidence for the formation of a high energy phosphoprotein. Amir-Zaltsman Y, et al. **Mol Cell Endocrinol** 1989 May;63(1–2):175–87
Phosphorylation of a C-SRC-related protein in macrophages activated in vitro with lymphokine. Soong MM, et al. **Mol Immunol** 1988 Dec;25(12):1251–60
Phosphorylation of RNA polymerase by the murine homologue of the cell-cycle control protein cdc2. Cisek LJ, et al. **Nature** 1989 Jun 29;339(6227):679–84
Human cdc2 protein kinase is a major cell-cycle regulated tyrosine kinase substrate. Draetta G, et al. **Nature** 1988 Dec 22–29;336(6201):738–44
Persistent and transcriptionally-dependent increase in protein phosphorylation in long-term facilitation of Aplysia sensory neurons. Sweatt JD, et al. **Nature** 1989 May 4; 339(6219):51–4
Selective decline in protein F1 phosphorylation in hippocampus of senescent rats. Barnes CA, et al. **Neurobiol Aging** 1988 Jul-Aug;9(4):393–8
Translocation of a photoreceptor-specific MEKA protein by light. Kuo CH, et al. **Neurosci Lett** 1989 Aug 14;103(1):8–10
Microwave radiation, in the absence of hyperthermia, has no detectable effect on synapsin I levels or phosphorylation. Browning MD, et al. **Neurotoxicol Teratol** 1988 Sep-Oct;10(5):461–4
Cooperation of SV40 large T antigen and the cellular protein p53 in maintenance of cell transformation. Deppert W, et al. **Oncogene** 1989 Sep;4(9):1103–10
Binding of the Rb1 protein to E1A products is required for adenovirus transformation. Egan C, et al. **Oncogene** 1989 Mar;4(3):383–8
Analysis of the activity and phosphorylation of the lck protein in lymphoid cells. Hurley TR, et al. **Oncogene** 1989 Mar;4(3):265–72
Novel tyrosine phosphorylations accompany the activation of pp60c-src during chemical carcinogenesis. Kanner SB, et al. **Oncogene** 1989 Mar;4(3):295–300
2-Aminopurine abolishes epidermal growth factor-stimulated phosphorylation of complexed and chromatin-associated forms of a 33 kDa phosphoprotein. Mahadevan LC, et al. **Oncogene** 1989 Jun;4(6):699–706
Two different protein-protein interactions in oligomeric complexes of SV40 large T antigen with the cellular oncoprotein p53. Montenarh M, et al. **Oncogene** 1989 Mar; 4(3):379–82
P150c-abl is detected in mouse male germ cells by an in vitro kinase assay and is associated with stage-specific phosphoproteins in haploid cells. Ponzetto C, et al. **Oncogene** 1989 Jun;4(6):685–90
Integrins isolated from Rous sarcoma virus-transformed chicken embryo fibroblasts. Tapley P, et al. **Oncogene** 1989 Mar;4(3):325–33
Viral growth, origin binding, and p53 binding properties of simian virus 40 large T antigen transformation and replication mutants. Rutila JE, et al. **Oncogene Res** 1989; 4(4):303–10
Antibodies detecting abnormalities of the retinoblastoma susceptibility gene product (pp110RB) in osteosarcomas and synovial sarcomas. Shew JY, et al. **Oncogene Res** 1989; 4(3):205–14
GDP stimulates the phosphorylation of a 36-kDa membrane protein in Dictyostelium discoideum. Anschutz A, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3665–8
Activation of human CDC2 protein as a histone H1 kinase is associated with complex formation with the p62 subunit. Brizuela L, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(12):4362–6
Basic fibroblast growth factor is a substrate for protein phosphorylation and is phosphorylated by capillary endothelial cells in culture. Feige JJ, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3174–8
Regulation by cAMP and vasoactive intestinal peptide of phosphorylation of specific proteins in striatal cells in culture. Girault JA, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7790–4
Decreased susceptibility of a 70-kDa protein to cathepsin L after phosphorylation by protein kinase C. Laumas S, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3021–5
Immunohistochemical evidence for the existence of a dopamine- and cyclic AMP-regulated phosphoprotein

(DARPP-32) in brown adipose tissue of pigs. Meister B, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8713-6

The human papilloma virus-16 E7 oncoprotein is able to bind to the retinoblastoma gene product. Dyson N, et al. **Science** 1989 Feb 17;243(4893):934-7

The EGF receptor kinase substrate p35 in the floor plate of the embryonic rat CNS. McKanna JA, et al. **Science** 1989 Mar 17;243(4897):1477-9

Nuclear protein kinase substrates in AtT-20 cells: translocation of a 14 kDa phosphoprotein. Bishop JF, et al. **Synapse** 1988;2(3):244-53

Phosphorylation of the human papillomavirus type 1 E4 proteins in vivo and in vitro. Grand RJ, et al. **Virology** 1989 May;170(1):201-13

Mutants with changes within or near a hydrophobic region of simian virus 40 large tumor antigen are defective for binding cellular protein p53. Peden KW, et al. **Virology** 1989 Jan;168(1):13-21

PHARMACOLOGY

The murine p53 protein blocks replication of SV40 DNA in vitro by inhibiting the initiation functions of SV40 large T antigen. Wang EH, et al. **Cell** 1989 May 5;57(3):379-92

Cell attachment activity of the 44 kilodalton bone phosphoprotein is not restricted to bone cells. Somerman MJ, et al. **Matrix** 1989 Jan;9(1):49-54

PHYSIOLOGY

Characterization of an 80-kDa phosphoprotein involved in parietal cell stimulation. Urushidani T, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):G1070-81

Involvement of the 60 kDa phosphoprotein in the regulation of Ca2+ release from sarcoplasmic reticulum of normal and malignant hyperthermia susceptible pig muscles. Kim DH, et al. **Biochim Biophys Acta** 1988 Nov 22; 945(2):246-52

Control of the higher eukaryote cell cycle by p34cdc2 homologues. Norbury CJ, et al. **Biochim Biophys Acta** 1989 Jul 28;989(1):85-95 (101 ref.)

Putting it on and taking it off: phosphoprotein phosphatase involvement in cell cycle regulation. Cyert MS, et al. **Cell** 1989 Jun 16;57(6):891-3 (24 ref.)

The product of the retinoblastoma susceptibility gene has properties of a cell cycle regulatory element. DeCaprio JA, et al. **Cell** 1989 Sep 22;58(6):1085-95

Cdc2 protein kinase is complexed with both cyclin A and B: evidence for proteolytic inactivation of MPF. Draetta G, et al. **Cell** 1989 Mar 10;56(5):829-38

Fission yeast p13 blocks mitotic activation and tyrosine dephosphorylation of the Xenopus cdc2 protein kinase. Dunphy WG, et al. **Cell** 1989 Jul 14;58(1):181-91

The p53 proto-oncogene can act as a suppressor of transformation. Finlay CA, et al. **Cell** 1989 Jun 30; 57(7):1083-93

Reversible tyrosine phosphorylation of cdc2: dephosphorylation accompanies activation during entry into mitosis. Morla AO, et al. **Cell** 1989 Jul 14;58(1):193-203

The cdc2 kinase is a nuclear protein that is essential for mitosis in mammalian cells. Riabowol K, et al. **Cell** 1989 May 5;57(3):393-401

Phosphoproteins involved in bacterial signal transduction. Stock AM, et al. **Cold Spring Harb Symp Quant Biol** 1988; 53 Pt 1:49-57

Effects of anti-C23 (nucleolin) antibody on transcription of ribosomal DNA in Chironomus salivary gland cells. Egyhazi E, et al. **Exp Cell Res** 1988 Oct;178(2):264-72

Role of protein phosphorylation in neuronal signal transduction. Hemmings HC Jr, et al. **FASEB J** 1989 Mar; 3(5):1583-92 (39 ref.)

Protein phosphorylation in chemotaxis and two-component regulatory systems of bacteria. Bourret RB, et al. **J Biol Chem** 1989 May 5;264(13):7085-8 (67 ref.)

Intracellular substrates for extracellular signaling. Characterization of a ubiquitous, neuron-enriched phosphoprotein (stathmin). Sobel A, et al. **J Biol Chem** 1989 Mar 5;264(7):3765-72

Induction of in vitro differentiation of mouse embryonal carcinoma (F9) and erythroleukemia (MEL) cells by herbimycin A, an inhibitor of protein phosphorylation. Kondo K, et al. **J Cell Biol** 1989 Jul;109(1):285-93

Localization of the tight junction protein, ZO-1, is modulated by extracellular calcium and cell-cell contact in Madin-Darby canine kidney epithelial cells. Siliciano JD, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2389-99

Tight junction structure and ZO-1 content are identical in two strains of Madin-Darby canine kidney cells which differ in transepithelial resistance. Stevenson BR, et al. **J Cell Biol** 1988 Dec;107(6 Pt 1):2401-8

Ability of p53 and the adenovirus E1b 58-kilodalton protein to form a complex is determined by p53. Braithwaite AW, et al. **J Virol** 1989 Apr;63(4):1792-9

The p53 complex from monkey cells modulates the biochemical activities of simian virus 40 large T antigen. Tack LC, et al. **J Virol** 1989 Mar;63(3):1310-7

The multiple membrane-spanning segments of the BNLF-1 oncogene from Epstein-Barr virus are required for transformation. Baichwal VR, et al. **Oncogene** 1989 Jan; 4(1):67-74

Abrogation of the requirements for added growth factors in 3T3 cells constitutively expressing the p53 and IGF-1 genes. Gai XX, et al. **Oncogene Res** 1988;3(4):377-86

Involvement of vimentin in the reverse transformation reaction. Chan D, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2747-51

The cell cycle coming under control [news] Marx JL. **Science** 1989 Jul 21;245(4915):252-5

Intersecting cell cycles. Fantes P. **Trends Genet** 1988 Oct; 4(10):275-6 (23 ref.)

The human immunodeficiency virus rev protein is a nuclear phosphoprotein. Cochrane A, et al. **Virology** 1989 Jul; 171(1):264-6

The functional domains of the phosphoprotein (NS) of vesicular stomatitis virus (Indiana serotype). Paul PR, et al. **Virology** 1988 Oct;166(2):350-7

Monoclonal antibodies to the NS protein of vesicular stomatitis virus inhibit initiation of transcripts in vitro and dissociate leader RNA from mRNA synthesis. Williams PM, et al. **Virology** 1988 Dec;167(2):342-8

SECRETION

Secreted phosphoproteins associated with neoplastic transformation: close homology with plasma proteins cleaved during blood coagulation. Senger DR, et al. **Cancer Res** 1988 Oct 15;48(20):5770-4

PHOSPHOPYRUVATE HYDRATASE

The structure of yeast enolase at 2.25-A resolution. An 8-fold beta + alpha-barrel with a novel beta beta alpha alpha (beta alpha)6 topology. Lebioda L, et al. **J Biol Chem** 1989 Mar 5;264(7):3685-93

ANALYSIS

Neuron-specific enolase (NSE) as a neuroendocrine cell marker in the human fetal pancreas. von Dorsche HH, et al. **Acta Histochem (Jena)** 1989;85(2):227-8

In situ distribution of enolase isozymes in chronic liver disease. Fukuda Y, et al. **Am J Gastroenterol** 1989 Jun; 84(6):601-5

Neural crest origin of human trabecular meshwork and its implications for the pathogenesis of glaucoma. Tripathi BJ, et al. **Am J Ophthalmol** 1989 Jun 15;107(6):583-90

An immunohistochemical demonstration of neuron-specific enolase in the Merkel cells of the frog taste organ. Toyoshima K, et al. **Arch Histol Cytol** 1988 Jul;51(3):295-7

Expression of pan-neuroendocrine proteins in 53 neuroblastic tumors. An immunohistochemical study with neuron-specific enolase, chromogranin, and synaptophysin. Hachitanda Y, et al. **Arch Pathol Lab Med** 1989 Apr; 113(4):381-4

Characterization of the enolase isozymes of rabbit brain: kinetic differences between mammalian and yeast enolases. Kornblatt MJ, et al. **Biochem Cell Biol** 1989 Feb-Mar; 67(2-3):103-7

Immunohistochemical expression of neuron-specific enolase and Leu 7 in Ewing's sarcoma of bone. Pinto A, et al. **Cancer** 1989 Sep 15;64(6):1266-73

Serum neuron-specific/nonneuronal enolase ratio in the diagnosis of neuroblastomas. Viallard JL, et al. **Cancer** 1988 Dec 15;62(12):2546-53

Pleural fluid neuron-specific enolase. A useful diagnostic marker for small cell lung cancer pleurisy. Shimokata K, et al. **Chest** 1989 Mar;95(3):602-3

Neuron-specific enolase in medullary thyroid carcinoma. Touitou Y, et al. **Clin Chem** 1988 Nov;34(11):2375-6

Enolase isozymes in Coho salmon. Landrey SR, et al. **Comp Biochem Physiol [B]** 1978;60(4):383-8

Neuron-specific enolase in the diagnosis of small-cell lung cancer with pleural effusion: a negative report. Pettersson T, et al. **Eur Respir J** 1988 Aug;1(8):698-700

Rat endomyocardial disease: a neural origin? Landes C, et al. **Exp Pathol** 1988;34(2):65-9

Organization of the guinea-pig uterine innervation. Distribution of immunoreactivities for different neuronal markers. Effects of chemical- and pregnancy-induced sympathectomy. Alm P, et al. **Histochem J** 1988 May; 20(5):290-300

Neuron-specific enolase during the development of the organ of Corti. Whitlon DS, et al. **Int J Dev Neurosci** 1988; 6(1):77-87

The use of neuroendocrine immunoperoxidase markers to predict chemotherapy response in patients with non-small-cell lung cancer. Graziano SL, et al. **J Clin Oncol** 1989 Oct;7(10):1398-406

Expression of neuron-specific enolase, Leu-7, and neuropeptides in human fetal salivary gland epithelium. Hayashi Y, et al. **J Histochem Cytochem** 1989 Jul; 37(7):1147-52

Co-localization of neuron-specific enolase-like and kallikrein-like immunoreactivity in ductal and tubular epithelium of sheep salivary gland and kidney. Trahair JF, et al. **J Histochem Cytochem** 1989 Mar;37(3):309-14

Expression of enolases in B cell tumors. Oka K, et al. **Lab Invest** 1989 Jan;60(1):38-44

Intraepidermal neuron-specific enolase (NSE)-immunoreactive nerve fibres: evidence for sprouting in uremic patients on maintenance hemodialysis. Johansson O, et al. **Neurosci Lett** 1989 May 8;99(3):281-6

Immunocytochemical studies on a fetal brain of tuberous sclerosis. Nishimura M, et al. **Pediatr Neurol** 1985 Jul-Aug; 1(4):245-8

Neuron-specific enolase and retinoblastoma. Clinicopathologic correlations. Abramson DH, et al. **Retina** 1989;9(2):148-52

Enolase isoenzymes in human cerebral metastasis. van den Doel EM, et al. **Tumour Biol** 1989;10(3):164-72

[Composite carcinoma of the prostate combining a small cell carcinoma and an adenocarcinoma. Apropos of a case] Kantelip B, et al. **Ann Pathol** 1989;9(2):121-5 (Eng. Abstr.) **(Fre)**

[Synaptophysin, chromogranin A and neuron-specific enolase as tumor markers in neuroendocrine tumors of the gastrointestinal tract and lung. An immunohistochemical study] Eberlein-Gonska M, et al. **Pathologe** 1989 Jul; 10(4):228-33 **(Ger)**

[Monitoring of neuron specific enolase (NSE) in patients with a diagnosis of pulmonary microcytoma. Preliminary results] Bonardi G, et al. **G Ital Oncol** 1987 Oct-Dec;7(4):163-7 (Eng. Abstr.) **(Ita)**

[Immunohistochemical study of renal cell carcinoma by anti neuron specific enolase (NSE) antibody] Senga Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Nov;79(11):1818-23 (Eng. Abstr.) **(Jpn)**

[A clinical evaluation of the versatility of various tumor markers in diagnosing the primary carcinoma of the lung] Shimabukuro Z. **Nippon Ika Daigaku Zasshi** 1989 Jun; 56(3):281-93 (Eng. Abstr.) **(Jpn)**

[Diagnostic value of pleural effusion carcinoembryonic antigen, squamous cell carcinoma related antigen and neuron-specific-enolase in patients with lung cancer] Fujii M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 May; 26(5):519-23 (Eng. Abstr.) **(Jpn)**

[Evaluation of usefulness of tumor markers in the management of lung cancer] Ariyoshi Y. **Rinsho Byori** 1989 Feb;37(2):113-7 **(Jpn)**

[Neuron specific enolase (ESA) as a marker of medullary carcinoma of the thyroid gland] Dasović-Knežević M, et al. **Med Pregl** 1988;41(5-6):212-4 (Eng. Abstr.) **(Scr)**

ANTAGONISTS & INHIBITORS

Enzymatic synthesis and inhibitory characteristics of tartronate semialdehyde phosphate. Weiss PM, et al. **Biochemistry** 1989 Feb 21;28(4):1634-41

BIOSYNTHESIS

N-myc amplification and neuron-specific enolase production of a neuroblastoma cell line and germ cell tumor cell lines. Ishiwata I, et al. **Gynecol Oncol** 1989 Jun;33(3):356-9

BLOOD

Maternal serum neurone specific enolase in the diagnosis of anencephaly and other neural tube defects. Spencer K, et al. **Ann Clin Biochem** 1988 Nov;25 (Pt 6):668-9

Serum levels of CA-50, CA-19.9, CA-125, CA-15.3, enolase and carcino-embryonic antigen in non neoplastic diseases of the lung. Marechal F, et al. **Anticancer Res** 1988 Jul-Aug;8(4):677-80

The prognostic influence of serum neuron specific enolase in small cell lung cancer. Jørgensen LG, et al. **Br J Cancer** 1988 Dec;58(6):805-7

Neuron-specific enolase and thymidine kinase as an aid to the diagnosis and treatment monitoring of small cell lung cancer. Fischbach W, et al. **Cancer** 1989 Mar 15; 63(6):1143-9

Neuron-specific enolase: how useful as a cancer marker? Carney DN, et al. **Eur J Cancer Clin Oncol** 1988 May; 24(5):825-8 (14 ref.)

Neuron-specific enolase as a serum marker for immature teratoma and dysgerminoma. Kawata M, et al. **Gynecol Oncol** 1989 Feb;32(2):191-7

Levels of neuron-specific enolase after chemotherapy do not predict a response in small cell lung cancer. Splinter TA, et al. **J Cancer Res Clin Oncol** 1988;114(6):641-3

Neuron-specific enolase can be used as the sole guide to treat small-cell lung cancer patients in common clinical practice. Splinter TA, et al. **J Cancer Res Clin Oncol** 1989; 115(4):400-1

Evaluation of gamma-enolase as a tumor marker for renal cell carcinoma. Takashi M, et al. **J Urol** 1989 Apr; 141(4):830-4

Clinical value of an amplified electrophoretic determination of enolase isoenzymes in small cell lung carcinoma patients. Batandier C, et al. **Scand J Clin Lab Invest** 1989 Feb; 49(1):33-42

Establishment and evaluation of a radioimmunoassay for neuron-specific enolase. A marker for small cell lung cancer. Paus E, et al. **Tumour Biol** 1989;10(1):23-30

[Relation between serum neuron-specific enolase and CEA levels in the patients with lung cancer] Hou LP. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Aug; 11(4):219-21, 255 (Eng. Abstr.) **(Chi)**

[Neuron specific enolase in small cell lung cancer] Lee HJ, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Apr;87(4):465-71 (Eng. Abstr.) **(Chi)**

[Blood levels of CA-50, CA-19.9, CA-125, enolase, CA-15.3 and carcinoembryonic antigen in non-cancerous bronchopulmonary pathology] Berthiot G, et al. **Rev Mal Respir** 1988;5(6):573-6 (Eng. Abstr.) **(Fre)**

[Neuron-specific enolase as a tumor marker in small cell bronchial carcinoma] Gasser RW, et al. **Dtsch Med Wochenschr** 1988 Nov 4;113(44):1708-13 (Eng. Abstr.) **(Ger)**

[Determination of serum neuron-specific enolase in bronchial

tumors of neuroendocrine origin] Rapellino M, et al. **Minerva Med** 1988 Dec;79(12):1051–2 (Eng. Abstr.) **(Ita)**

[Serum gamma-enolase as a marker for renal cell carcinoma] Takashi M, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Feb;79(2):220–6 (Eng. Abstr.) **(Jpn)**

CEREBROSPINAL FLUID

The neuron-specific enolase as a marker of brain destruction in a case of Reye's syndrome: related to the treatment of brain edema. Nara T, et al. **Acta Paediatr Scand** 1988 Nov; 77(6):912–3

Neurological outcome after out-of-hospital cardiac arrest. Prediction by cerebrospinal fluid enzyme analysis. Roine RO, et al. **Arch Neurol** 1989 Jul;46(7):753–6

Clinical relevance of increased neuron-specific enolase concentration in cerebrospinal fluid. Jacobi C, et al. **Clin Chim Acta** 1988 Sep 30;177(1):49–54

An immunobioluminescence assay for gamma-gamma enolase activity in human serum and cerebrospinal fluid. Wevers RA, et al. **Clin Chim Acta** 1988 Dec 15; 178(2):141–50

[Value and limitations of the study of gamma-enolase in cerebrospinal fluid as evidence of neuronal degeneration] van den Doel EM, et al. **Rev Neurol (Paris)** 1988; 144(6–7):452–5 (Eng. Abstr.) **(Fre)**

[Neuron-specific enolase activity in rubella encephalitis] Nozaki H, et al. **No To Hattatsu** 1988;20(5):392–7 (Eng. Abstr.) **(Jpn)**

[Changes in cerebrospinal fluid neuron-specific enolase (NSE), S 100 protein and creatine kinase BB (CK-BB) levels in newborn infants with post hemorrhagic hydrocephalus] Sobajima H, et al. **No To Hattatsu** 1989 Jan;21(1):76–8 **(Jpn)**

[Two cases of Creutzfeldt-Jakob disease with high neuron-specific enolase level in cerebrospinal fluid] Jimi T, et al. **Rinsho Shinkeigaku** 1989 Jan;29(1):118–21 (Eng. Abstr.) **(Jpn)**

GENETICS

Primary structure of Bacillus subtilis enolase gene deduced from c-DNA sequence. Verma M. **Biochem Int** 1989 Mar; 18(3):667–72

Molecular analysis of two general markers of neurons and the diffuse neuroendocrine system: neuron-specific enolase and PGP9.5. Day IN. **Biochem Soc Trans** 1988 Aug; 16(4):454–7

Complete amino acid sequence of the neurone-specific gamma isozyme of enolase (NSE) from human brain and comparison with the non-neuronal alpha form (NNE). McAleese SM, et al. **Eur J Biochem** 1988 Dec 15; 178(2):413–7

cDNA cloning and nucleotide sequence of rat muscle-specific enolase (beta beta enolase). Ohshima Y, et al. **FEBS Lett** 1989 Jan 2;242(2):425–30

Tau-crystallin/alpha-enolase: one gene encodes both an enzyme and a lens structural protein. Wistow GJ, et al. **J Cell Biol** 1988 Dec;107(6 Pt 2):2729–36

Genes expressed in cortical neurons—chromatin conformation and DNase I hypersensitive sites. Ivanov TR, et al. **Neurochem Res** 1989 Feb;14(2):129–37

Murine muscle-specific enolase: cDNA cloning, sequence, and developmental expression. Lamandé N, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4445–9

IMMUNOLOGY

S-100 protein and neuron specific enolase immunoreactivity of normal, hyperplastic and neoplastic chondrocytes in relation to the composition of the extracellular matrix. Karabela-Bouropoulou V, et al. **Pathol Res Pract** 1988 Nov;183(6):761–6

Enolase activity associated with a C. albicans cytoplasmic antigen. Mason AB, et al. **Yeast** 1989 Apr;5 Spec No:S231–9

[Effect of an antiserum to brain gamma gamma-enolase (protein 14–3–2) on ethanol consumption by rats] Usatenko MS, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):196–9 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Separation and purification of creatine kinase BB isoenzyme and neuron-specific enolase on DEAE-Sephadex A-50 chromatography [letter] Geng JG, et al. **Clin Chim Acta** 1988 Aug 31;176(2):233–5

METABOLISM

Blood cell superoxide dismutase and enolase activities as markers of alcoholic and nonalcoholic liver diseases. Ledig M, et al. **Alcohol** 1988 Sep-Oct;5(5):387–91

Immunohistochemical analysis of the olfactory mucosa by use of antibodies to brain proteins and cytokeratin. Yamagishi M, et al. **Ann Otol Rhinol Laryngol** 1989 May; 98(5 Pt 1):384–8

Neuroendocrine activity in metastatic breast carcinomas. Nesland JM, et al. **APMIS Suppl** 1988;2:204–14

The development of laminar staining for neuron-specific enolase in the rat somatosensory cortex. Hamre KM, et al. **Brain Res Dev Brain Res** 1989 Apr 1;46(2):213–20

Neuron-specific enolase and S-100 protein immunohistochemistry for defining the structure and topographical relationship of the different enteric nerve plexuses in the small intestine of the pig. Scheuermann DW, et al. **Cell Tissue Res** 1989 Apr;256(1):65–75

Clinical biochemistry of neuron specific enolase. Kaiser E, et al. **Clin Chim Acta** 1989 Jul 31;183(1):13–31 (162 ref.)

Creatine kinase BB and neuron-specific gamma-enolase are enhanced in leiomyosarcoma [letter] Usui A, et al. **Clin Chim Acta** 1988 Jun 30;175(1):109–11

31P magnetization transfer in the phosphoglyceromutase-enolase coupled enzyme system. Chapman BE, et al. **Eur Biophys J** 1988;16(3):187–91

Clinical significance of gene amplification studied in human neuroblastoma xenografts: relationship with tumor growth rate, chemotherapeutic sensitivities and levels of neuron-specific enolase. Tsuchida Y, et al. **Exp Cell Biol** 1988;56(5):277–84

Myoepitheliomas and myoepithelial adenomas of salivary gland origin. Immunohistochemical evaluation of filament proteins, S-100 alpha and beta, glial fibrillary acidic proteins, neuron-specific enolase, and lactoferrin. Mori M, et al. **Pathol Res Pract** 1989 Feb;184(2):168–78

[Immunohistologic findings in paragangliomas in the area of the head and neck] Milewski C, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Aug;67(8):385–8 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

[Effect of antisera against enolase isoenzymes on ethanol consumption during stress in rats] Nikolaev IuV. **Dokl Akad Nauk SSSR** 1988;302(2):488–91 **(Rus)**

PHOSPHORAMIDE MUSTARDS

Basis and new developments in the field of oxazaphosphorines. Brock N, et al. **Cancer Invest** 1988; 6(5):513–32 (138 ref.)

Thermodynamic analysis of the reaction of phosphoramide mustard with protector thiols. Seitz DE, et al. **Cancer Res** 1989 Jul 1;49(13):3525–8

METABOLISM

Formation of a phosphoramide mustard-nucleotide adduct that is not by alkylation at the N7 position of guanine. Maccubbin AE, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):843–50

Proton-mediated liberation of aldophosphamide from a nontoxic prodrug: a strategy for tumor-selective activation of cytocidal drugs. Tietze LF, et al. **Cancer Res** 1989 Aug 1;49(15):4179–84

PHARMACOLOGY

31P NMR studies of the kinetics of bisalkylation by isophosphoramide mustard: comparisons with phosphoramide mustard. Boal JH, et al. **J Med Chem** 1989 Aug;32(8):1768–73

TOXICITY

A comparison of sister-chromatid exchange in mouse peripheral blood lymphocytes exposed in vitro and in vivo to phosphoramide mustard and 4-hydroxycyclophosphamide. Bryant MF, et al. **Mutat Res** 1989 Mar;222(3):271–7

Effects of phosphoramide mustard and acrolein, cytotoxic metabolites of cyclophosphamide, on mouse limb development in vitro. Hales BF. **Teratology** 1989 Jul; 40(1):11–20

Cell cycle analysis in the cardiac and neuroepithelial tissues of day 10 rat embryos and the effects of phosphoramide mustard, the major teratogenic metabolite of cyclophosphamide. Mirkes PE, et al. **Teratology** 1989 Feb; 39(2):115–20

PHOSPHORANES

Cyclic oxyphosphoranes as model intermediates during splicing and cleavage of RNA: ab initio molecular orbital calculations on the conformational analysis. Taira K, et al. **Nucleic Acids Res** 1989 May 25;17(10):3699–708

PHOSPHORESCENCE see **LUMINESCENCE**

PHOSPHORIBOSYL PYROPHOSPHATE see under **PENTOSEPHOSPHATES**

PHOSPHORIC ACID ESTERS see under **ORGANOPHOSPHORUS COMPOUNDS**

PHOSPHORIC ACIDS

Formic acid as a milder alternative to trifluoroacetic acid and phosphoric acid in two-dimensional peptide mapping. Poll DJ, et al. **J Chromatogr** 1989 May 19;469:231–9

The effect of enamel etchant on the solubility of three calcium hydroxide bases. Titus HW, et al. **J Prosthet Dent** 1988 Aug;60(2):178–80

Studies on the role of tetrazole in the activation of phosphoramidites. Berner S, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):853–64

Synthesis and selective cleavage of oligodeoxyribonucleotides containing non-chiral internucleotide phosphoramidate linkages. Mag M, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):5973–88

ADMINISTRATION & DOSAGE

The efficacy of liquid and gel acid etchants. Baharav H, et al. **J Prosthet Dent** 1988 Nov;60(5):545–7

ANTAGONISTS & INHIBITORS

Neutralizing phosphoric acid in the acid etch resin technique. Kellar M, et al. **J Oral Rehabil** 1988 Nov;15(6):625–30

PHARMACOKINETICS

Autoradiographic determination of penetration of phosphoric acid during cementation in vitro. Kedici PS, et al. **J Dent** 1988 Oct;16(5):242–3

[Transport of inorganic phosphoric acid and phosphoenolpyruvic acid through the erythrocyte membrane: protein chemistry of the transport activities] Hamasaki N. **Rinsho Byori** 1987 Nov;Spec No 74:47–55 (33 ref.) **(Jpn)**

PHARMACOLOGY

Improvement of the caries resistance of human dental roots by a two-step conversion of the root mineral into fluoridated hydroxylapatite. Hoppenbrouwers PM, et al. **J Dent Res** 1988 Oct;67(10):1254–6

The absence of an age effect on enamel solubility in phosphoric acid. Shay K, et al. **J Prosthet Dent** 1988 Nov; 60(5):531–40

Absence of mutagenic activity of acidity regulators in the Ames Salmonella/microsome test. Al-Ani FY, et al. **Mutat Res** 1988 Dec;206(4):467–70

THERAPEUTIC USE

Effect of subgingival irrigation [letter] **J Periodontol** 1989 Jul;60(7):413–5

Effect of subgingival irrigation with tetrapotassium peroxydiphosphate on scaled and untreated periodontal pockets. Listgarten MA, et al. **J Periodontol** 1989 Jan; 60(1):4–11

PHOSPHORIC MONOESTER HYDROLASES see **PHOSPHOMONOESTERASES**

PHOSPHOROUS ACIDS

TOXICITY

In vitro evaluation of the cytotoxic potential of a novel man-made fiber, calcium sodium metaphosphate fiber (Phosphate Fiber). Li AP, et al. **Fundam Appl Toxicol** 1988 Jul;11(1):21–8

PHOSPHORUS

see related
ORGANOPHOSPHORUS COMPOUNDS
ORGANOTHIOPHOSPHORUS COMPOUNDS

Electrical properties of ALCAP and ZCAP ceramics. Allaire MJ, et al. **Biomed Sci Instrum** 1989;25:163–8

Regulation of blood glucose by sustained delivery of insulin via ALCAP ceramics in rats. Muzina DJ, et al. **Biomed Sci Instrum** 1989;25:191–202

Sustained delivery of aspirin by means of ALCAP ceramics. Snow KR, et al. **Biomed Sci Instrum** 1989;25:203–11

[Efficacy of calcium carbonate as a phosphorus-chelating agent in hemodialysis patients] Almirall J, et al. **Med Clin (Barc)** 1988 Oct 8;91(11):409–12 (Eng. Abstr.) **(Spa)**

ADMINISTRATION & DOSAGE

Phosphorus supplementation of cattle. Jubb TF, et al. **Aust Vet J** 1988 Sep;65(9):264–7

Effects of high dietary contents of calcium and phosphorus on mineral metabolism and growth of vitamin D-deficient suckling and weaned rats. Clark SA, et al. **Bone Miner** 1987 Jul;2(4):257–70

Low phosphorus intakes by beef suckler cows in late pregnancy and early lactation. Fishwick G, et al. **Br Vet J** 1989 Mar-Apr;145(2):141–7

ADFR therapy in the prevention of bone loss after menopause. Pérez Cano R, et al. **Clin Rheumatol** 1989 Jun; 8 Suppl 2:56–60

Metabolic effects of a very-low-protein, low-phosphorus diet supplemented with essential amino acids and keto analogues in end-stage renal diseases. Ciardella F, et al. **Contrib Nephrol** 1988;65:72–80

Effects of dietary energy and phosphorus content on blood chemistry and development of growing horses. Cymbaluk NF, et al. **J Anim Sci** 1989 Apr;67(4):951–8

Influence of dietary calcium:phosphorus ratio on mineral excretion and nephrocalcinosis in female rats. Hoek AC, et al. **J Nutr** 1988 Oct;118(10):1210–6

Simultaneous infusion of calcium and phosphorus in parenteral nutrition for premature infants: use of physiologic calcium/phosphorus ratio. Pelegano JF, et al. **J Pediatr** 1989 Jan;114(1):115–9

Minimal vitamin D and high calcium and phosphorus needs of preterm infants receiving parenteral nutrition. Koo WW, et al. **J Pediatr Gastroenterol Nutr** 1989 Feb;8(2):225–33

The modification of diet in renal disease study. Klahr S.

N Engl J Med 1989 Mar 30;320(13):864–6

Effect of supplementary dietary phosphorus on the reproductive capacity and bone integrity of broiler breeder males fed a corn- soybean diet. Bootwalla SM, et al. **Poult Sci** 1989 Aug;68(8):1153–5

Effect of dietary phosphorus levels on performance of turkey breeder hens. Slaugh BT, et al. **Poult Sci** 1989 Feb; 68(2):319–22

[The effect of various Ca and P supplies on the metabolic parameters of wethers and bulls and on the fattening performance of bulls with vitamin D deficiency] Richter GH, et al. **Arch Tierernahr** 1989 Mar;39(3):345–59 (Eng. Abstr.) **(Ger)**

[Consequences of the composition of breast milk for the nutrition of underweight newborn infants. I. Calcium and phosphorus] Boehm G, et al. **Kinderarztl Prax** 1988 Sep; 56(9):429–35 (Eng. Abstr.) **(Ger)**

[Separate and combined effects of an ACE-inhibitor and low-protein low-phosphorus diet in chronic proteinuric glomerular nephropathies] Cusaro C, et al. **Minerva Urol Nefrol** 1988 Oct-Dec;40(4):295–9 (Eng. Abstr.) **(Ita)**

ADVERSE EFFECTS

Phosphorus burns: a practical approach to local treatment. Kaufman T, et al. **J Burn Care Rehabil** 1988 Sep–Oct; 9(5):474–5

ANALYSIS

Aberrant elemental composition of otoconia in the dancer mouse mutant with a semidominant gene causing a morphogenetic type of inner ear defect. Anniko M, et al. **Acta Otolaryngol (Stockh)** 1988 Sep–Oct;106(3–4):208–12

Effect of eating cheese on Ca and P concentrations of whole mouth saliva and plaque. Jenkins GN, et al. **Caries Res** 1989;23(3):159–64

Mineral and protein concentrations in enamel of the developing permanent porcine dentition. Robinson C, et al. **Caries Res** 1988;22(6):321–6

Southeast Asian renal exchange list: correction in table heading [letter] Ziegler VS. **J Am Diet Assoc** 1989 May; 89(5):622

Bone status of senescent male rats: chemical, morphometric, and mechanical analysis. Kiebzak GM, et al. **J Bone Miner Res** 1988 Feb;3(1):37–45

Combined 1H-MR imaging and localized 31P-spectroscopy of intracranial tumors in 43 patients. Heindel W, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):907–16

Experiments on the heat-induced salt balance changes in cow's milk. Pouliot Y, et al. **J Dairy Res** 1989;56(3):513–9

The Ca, Pi, F, and proline content of developing bovine enamel under GBHA-stained and unstained bands. Bawden JW, et al. **J Dent Res** 1988 Jun;67(6):938–41

Visualization of polyribosomes in the postsynaptic area of the squid giant synapse by electron spectroscopic imaging. Martin R, et al. **J Neurocytol** 1989 Feb;18(1):11–8

In vitro solubility of calcium glycerophosphate versus conventional mineral salts in pediatric parenteral nutrition solutions. Hanning RM, et al. **J Pediatr Gastroenterol Nutr** 1989 Jul;9(1):67–72

Low breast milk phosphorus concentration in familial hypophosphatemia. Jonas AJ, et al. **J Pediatr Gastroenterol Nutr** 1989 May;8(4):541–3

Rapid separation and quantitation of major phospholipids in biological samples by combined high-performance liquid chromatography and automated phosphorus analyzer. Islam A, et al. **Miner Electrolyte Metab** 1989;15(4):209–13

Measurement of element content in isolated papillary collecting duct cells by electron probe microanalysis. Pavenstädt-Grupp I, et al. **Pflugers Arch** 1989 Feb; 413(4):378–84

Effect of applications of sewage sludge on N, P, K, Ca, Mg and trace element contents of plant tissues. Couillard D, et al. **Sci Total Environ** 1989 May 15;80(2–3):113–25

Detection of adulteration of pasteurised milk with whey by determination of the casein-bound phosphorus and protein nitrogen content. Wolfschoon-Pombo AF, et al. **Z Lebensm Unters Forsch** 1989 Jan;188(1):16–21

[Cutaneous divalent ions and uremic pruritus] Bencini PL, et al. **G Ital Dermatol Venereol** 1988 Apr;123(4):143–5 (Eng. Abstr.) **(Ita)**

[The Ca and P content of various layers of human dental enamel in differing manifestations of fluorosis] Nikolishin AK, et al. **Stomatologiia (Mosk)** 1989 Jan–Feb;68(1):21–4 (Eng. Abstr.) **(Rus)**

BLOOD

Postpartum reproductive performance in dairy cows in relation to phosphorus status. Ropstad E, et al. **Acta Vet Scand** 1988;29(3–4):347–56

Urinary and blood levels of adenosine 3',5'-monophosphate, phosphorus and calcium in infants. Weintraub Z, et al. **Biol Neonate** 1989;55(4–5):233–7

Calcium and phosphorus homeostasis in very-low-birth-weight infants appropriate for gestational age fed human milk. Boehm G, et al. **Biomed Biochim Acta** 1988;47(6):529–36

Nickel chloride and diabetes. II. Calcium, zinc, phosphorus and iron determinations in alloxan diabetic and in rats treated by nickel chloride injections. Novelli EL, et al. **Bol Estud Med Biol** 1987 Jul-Dec;35(3–4):221–30

Surgically curable hypophosphatemic rickets. Diagnosis and management. Hanukoglu A, et al. **Clin Pediatr (Phila)** 1989 Jul;28(7):321–5

Relationship of serum sodium, potassium, calcium, and phosphorus with blood pressure. Belgian Interuniversity Research on Nutrition and Health. Kesteloot H, et al. **Hypertension** 1988 Dec;12(6):589–93

The effects of muscle-building exercise on vitamin D and mineral metabolism. Bell NH, et al. **J Bone Miner Res** 1988 Aug;3(4):369–73

Interactions of dietary cation-anion balance and phosphorus: effects on growth and serum inorganic phosphorus in dairy calves. Beighle DE, et al. **J Dairy Sci** 1988 Dec; 71(12):3362–8

Breed differences in plasma calcium, phosphorus and magnesium concentrations of Merino, Dohne Merino and S.A. Mutton Merino sheep with relation to the bent-leg syndrome. Van Niekerk FE, et al. **J S Afr Vet Assoc** 1989 Mar;60(1):36–41

Study of 25 OH calcium and phosphorus in normal subjects and patients with renal calculi [letter] Talati J. **JPMA** 1988 Oct;38(10):281

Effect of dextran 40,000 on the contents of inorganic phosphorus and phospholipids in the blood of patients with cerebral infarction at the very beginning of illness. Kawiak W, et al. **Mater Med Pol** 1988 Apr–Jun;20(2):95–7

Control of serum phosphorus in uremia [editorial] Coburn JW, et al. **N Engl J Med** 1989 Apr 27;320(17):1140–2

Effect of dietary calcium and phosphorus levels on ultra-filterable calcium and dialyzable phosphorus in the laying hen. Soonchareryning S, et al. **Poult Sci** 1989 May; 68(5):719–23

[False hyperphosphoremia in multiple myeloma (letter)] Puechal X, et al. **Presse Med** 1989 Mar 4;18(9):494 **(Fre)**

[Calcium and phosphorus homeostasis of hypotrophic newborn infants fed breast milk] Boehm G, et al. **Padiatr Padol** 1988;23(4):285–92 (Eng. Abstr.) **(Ger)**

[Environmental exposure to cadmium and effects on human health. Part 2. Bone and mineral metabolism in inhabitants of the cadmium-polluted Jinzu River basin in Toyama Prefecture] Aoshima K, et al. **Nippon Eiseigaku Zasshi** 1988 Oct;43(4):864–71 (Eng. Abstr.) **(Jpn)**

[Effect of long-term administration of low-molecular dextran (40,000) on the blood levels of inorganic phosphorus and lipid-bound phosphorus in patients with cerebral infarction] Kawiak W, et al. **Neurol Neurochir Pol** 1988 Jul-Aug;22(4):281–6 (Eng. Abstr.) **(Pol)**

[Effect of fetal anoxia and asphyxia neonatorum on the main indicators of phosphorus-calcium metabolism] Mikhailenko ET, et al. **Akush Ginekol (Mosk)** 1988 Jul;(7):20–2 (Eng. Abstr.) **(Rus)**

[Phosphorus-calcium metabolism in patients with malabsorption syndrome on diets with various ratios of calcium and phosphorus] Shvedova EB, et al. **Vopr Pitan** 1988 Nov–Dec;(6):12–4 (Eng. Abstr.) **(Rus)**

DEFICIENCY

Lack of hypophosphatemic effect on glucose uptake, lactate and pyruvate release by the normal rat perfused hind-limb. De Venanzi F, et al. **Acta Cient Venez** 1988;39(1):60–3

Clinical signs and bone changes associated with phosphorus deficiency in beef cattle. Shupe JL, et al. **Am J Vet Res** 1988 Sep;49(9):1629–36

Influence of dietary phosphorus restriction on calcium and phosphorus metabolism in rats. Schoenmakers AC, et al. **Int J Vitam Nutr Res** 1989;59(2):200–6

Renal adaptation to phosphorus deprivation: characterization of early events. Levine BS, et al. **J Bone Miner Res** 1986 Feb;1(1):33–40

Optimal mineral intakes by very-low-birth-weight infants. **Nutr Rev** 1989 Mar;47(3):73–5

[Phosphorous in the rations of modern man and possible consequences of its consumption with a calcium imbalance] Spirichev VB, et al. **Vopr Pitan** 1989 Jan–Feb;(1):4–9 (62 ref.) **(Rus)**

DIAGNOSTIC USE

In vivo phosphorus 31 magnetic resonance spectroscopy of rat hind limb skeletal muscle during sepsis. Jacobs DO, et al. **Arch Surg** 1988 Nov;123(11):1425–8

Preliminary results on phosphorus-31 nuclear magnetic resonance evaluation of human uveal melanoma in enucleated eyes. Kolodny NH, et al. **Ophthalmology** 1988 May;95(5):666–73

METABOLISM

Effect of calcium supplementation on calcium and phosphorus balance and renal net acid excretion in preterm infants fed a standard formula. Manz F, et al. **Acta Paediatr Scand** 1989 Jul;78(4):525–31

Calcium, magnesium, and phosphorus metabolism in dogs given intravenous triacetin. Bailey JW, et al. **Am J Clin Nutr** 1989 Feb;49(2):385–8

Heritable syndrome of pseudoxanthoma elasticum with abnormal phosphorus and vitamin D metabolism. Mallette LE, et al. **Am J Med** 1987 Dec;83(6):1157–62 (29 ref.)

Effect of physical activity on calcium and phosphorus metabolism in the rat. Yeh JK, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E1–6

Influence of dietary source of phosphorus on fecal and urinary excretion of phosphorus and other minerals by male cats. Finco DR, et al. **Am J Vet Res** 1989 Feb;50(2):263–6

The effect of ruminal phosphate concentration on the absorption of calcium, phosphorus and magnesium from the reticulo-rumen of the sheep. Beardsworth LJ, et al. **Br J Nutr** 1989 May;61(3):715–23

Localization of calcium and phosphorus in early predentin-matrix components by electron spectroscopic imaging (ESI)-analysis in rat molars. Blottner D, et al. **Cell Tissue Res** 1989 Mar;255(3):611–7

Calcium- and phosphate provision of renal patients: nutrition--metabolism--drugs. Workshop. Freiberg, March 3–4, 1988. Abstracts. **Clin Nephrol** 1988 Nov; 30(5):288–92

The effect of bovine parathormone on ultimobranchial body, parathyroid gland and paravertebral lime sacs as correlated with serum calcium and inorganic phosphorus levels in Bufo melanostictus Schneider. Pandey AK. **Folia Biol (Krakow)** 1988;36(3–4):275–9

Nutrient utilization by limit- and ad libitum-fed growing horses. Cymbaluk NF, et al. **J Anim Sci** 1989 Feb; 67(2):414–25

Use of phosphorus-31 MR spectroscopy to monitor response to chemotherapy in non-Hodgkin lymphoma. Bryant DJ, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):770–4

Metabolic response of glioblastoma to adoptive immunotherapy: detection by phosphorus MR spectroscopy. Ross BD, et al. **J Comput Assist Tomogr** 1989 Mar-Apr;13(2):189–93

Interactions of dietary cation-anion balance and phosphorus: effects on growth and serum inorganic phosphorus in dairy calves. Beighle DE, et al. **J Dairy Sci** 1988 Dec; 71(12):3362–8

The calcium-phosphorus metabolism expert system module: a program developed in the ALEX Smalltalk/V shell. Kinney EL, et al. **J Med Syst** 1989 Apr;13(2):49–53

Different sensitivity of ATP + Mg + Na (I) and Pi + Mg (II) dependent types of ouabain binding to phospholipase A2. Svoboda P, et al. **J Membr Biol** 1988 Sep;104(3):211–21

Measurement of calcium and phosphorus fluxes during lactation in the rat. Brommage R. **J Nutr** 1989 Mar; 119(3):428–38

Effect of protein intake on mineral (calcium, magnesium, and phosphorus) balance in Japanese males. Kitano T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Aug;34(4):387–98

Calcium, phosphorus, and vitamin D requirements of infants receiving parenteral nutrition. Koo WW. **J Perinatol** 1988 Summer;8(3):263–8 (33 ref.)

Phosphorous compounds studied by 31P nuclear magnetic resonance spectroscopy in the taenia of guinea-pig caecum. Nakayama S, et al. **J Physiol (Lond)** 1988 Aug;402:565–78

Compartment syndrome: a quantitative study of high-energy phosphorus compounds using 31P-magnetic resonance spectroscopy. Heppenstall RB, et al. **J Trauma** 1989 Aug; 29(8):1113–9

Hypophosphatemia. Causes and clinical consequences. Forrester SD, et al. **J Vet Intern Med** 1989 Jul–Sep; 3(3):149–59 (58 ref.)

Effect of hypocalcemia on renal phosphorus handling in the rat: interaction with dietary phosphorus and PTH. Guntupalli J, et al. **Miner Electrolyte Metab** 1989; 15(4):201–8

31P-NMR spectroscopy: the metabolic profile of malignant hyperpyrexic porcine skeletal muscle. Foster PS, et al. **Muscle Nerve** 1989 May;12(5):390–6

Effect of the time of administration of calcium acetate on phosphorus binding. Schiller LR, et al. **N Engl J Med** 1989 Apr 27;320(17):1110–3

Phosphorus metabolites and intracellular pH in the brains of normal and small for gestational age infants investigated by magnetic resonance spectroscopy. Azzopardi D, et al. **Pediatr Res** 1989 May;25(5):440–4

Prognosis of newborn infants with hypoxic-ischemic brain injury assessed by phosphorus magnetic resonance spectroscopy. Azzopardi D, et al. **Pediatr Res** 1989 May; 25(5):445–51

Effect of dietary calcium, phosphorus, chloride, and zeolite on the development of tibial dyschondroplasia. Edwards HM Jr. **Poult Sci** 1988 Oct;67(10):1436–46

Effect of dietary aluminum on calcium and phosphorus metabolism and performance of laying hens. Hussein AS, et al. **Poult Sci** 1989 May;68(5):706–14

Calcium, phosphorus, and magnesium homeostasis in ruminants. Reinhardt TA, et al. **Vet Clin North Am [Food Anim Pract]** 1988 Jul;4(2):331–50 (78 ref.)

[Post-irradiation changes in the in vitro incorporation of 32P into phospholipids in blood platelets] Zitko M, et al. **Cas Lek Cesk** 1987 Jun 12;126(24):744–7 (Eng. Abstr.) **(Cze)**

[Postmortem formation of inorganic phosphorus in the skeletal muscles of pigs in relation to the detection of PSE in meat] Novotná B, et al. **Vet Med (Praha)** 1988 Oct; 33(10):617–23 **(Cze)**

[Effects of keto-analogs of essential amino acids with or without associated protein restriction on the phospho-calcium metabolism of hemodialysed patients: a randomized prospective crossover study] Mahmoud MD, et al. **Nephrologie** 1988;9(2):83–7 (Eng. Abstr.) **(Fre)**

[Osteocalcin and other biological parameters of phosphocalcium metabolism in Basedow's disease] Fouquet B, et al. **Rev Rhum Mal Osteoartic** 1989 May;56(6):459–62

(Fre)
[The phosphorus supply of pigs in the body weight category of 11–38 kg. I. The effect of the phosphorus supply on the performance, nutrient digestibility, protein and fat content in soft tissue and skeleton and protein and fat deposits] Lüdke H, et al. **Arch Tierernahr** 1989 Jan–Feb; 39(1–2):61–71 (Eng. Abstr.) (Ger)
[The role of the bone cell in the regulation of phosphorus and calcium homeostasis] Marotti G. **G Clin Med** 1988 Apr; 69(4):243–61 (64 ref.) (Ita)
[Abnormal mineral metabolism in obesity] Kono S, et al. **Nippon Rinsho** 1988 Nov;46(11):2423–8 (Jpn)
[Changes in selected parameters of calcium–phosphorus metabolism, the metacarpal index and results of the calcitonic test in patients with diabetes mellitus type 1] Gasińska T, et al. **Endokrynol Pol** 1988;39(3):155–63 (Eng. Abstr.) (Pol)
[Calcium–phosphorus–magnesium homeostasis in pregnancy] Sawicki A. **Ginekol Pol** 1988 Sep;59(9):557–61 (20 ref.) (Eng. Abstr.) (Pol)
[Parathyroid diseases and disorders of calcium–phosphorus–magnesium metabolism in pregnancy] Sawicki A. **Ginekol Pol** 1988 Sep;59(9):562–6 (20 ref.) (Eng. Abstr.) (Pol)
[Studies of interactions between the active enzyme center and substrate by the stereochemical method] Niewiarowski W. **Postepy Biochem** 1988;34(1–2):59–79 (103 ref.) (Pol)
[Phosphorus–containing metabolites in the cells of anthracycline–resistant strains of leukemia P388] Shiriaeva OA, et al. **Eksp Onkol** 1989;11(4):70–3 (Eng. Abstr.) (Rus)
[Blood levels of hormones regulating calcium–phosphorus metabolism in men exposed to a 120–day period of hypokinesia] Morukov BV, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):26–8 (Eng. Abstr.) (Rus)
[Phosphorus–calcium metabolism in urate nephropathies in childhood] Ketova TG. **Pediatriia** 1988;(5):33–8 (Eng. Abstr.) (Rus)
[Vitamin D and its role in the regulation of phosphorus–calcium metabolism] Balabolkin MI, et al. **Sov Med** 1988;(9):42–6 (48 ref.) (Rus)
[Immunocorrecting properties and effect on the phosphorus–calcium metabolism of oxidevit (1 alpha–hydroxyvitamin D3)] Babarykin DA, et al. **Vopr Med Khim** 1988 Jul–Aug;34(4):104–9 (Eng. Abstr.) (Rus)
[The effect of verapamil on the dynamics of decrease in the brain levels of phosphorus macroergs during ischemia studied by 31P–NMR in vivo] Likhodil SS, et al. **Vopr Med Khim** 1988 Nov–Dec;34(6):109–13 (Eng. Abstr.) (Rus)

PHARMACOKINETICS

Relationship between the uptake of calcium or phosphorus and alkaline phosphatase activity induced by certain modulators in rat organs. Nagata A, et al. **Calcif Tissue Int** 1989 Sep;45(3):173–81
Elevated calcium, phosphorus, and magnesium retention in pregnant rats prior to the onset of fetal skeletal mineralization. Brommage R, et al. **J Bone Miner Res** 1988 Dec;3(6):667–72
Reduction of dietary phosphorus absorption by phosphorus binders. A theoretical, in vitro, and in vivo study. Sheikh MS, et al. **J Clin Invest** 1989 Jan;83(1):66–73

PHARMACOLOGY

Elevated Ca2+ does not inhibit the 1,25(OH)2D3 response to phosphorus restriction. Bushinsky DA, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):F285–9
Characterization of transmembrane chemical shift differences in the 31P NMR spectra of various phosphoryl compounds added to erythrocyte suspensions. Kirk K, et al. **Biochemistry** 1988 Nov 29;27(24):8795–802
Physical basis of the effect of hemoglobin on the 31P NMR chemical shifts of various phosphoryl compounds. Kirk K, et al. **Biochemistry** 1988 Nov 29;27(24):8803–10
Effect of phosphorus supplementation on bone formation induced by osteosarcoma–derived bone–inducing substance in X–linked hypophosphatemic mice. Tanaka H, et al. **Bone Miner** 1988 Jul;4(3):237–46
The effects of dietary phosphorus and parathyroid hormone (PTH) infusion rates on the avian phosphaturic response to PTH. Stanton TS, et al. **J Exp Biol** 1989 Jul;144:521–33

PHYSIOLOGY

Physiologic regulation of the serum concentration of 1,25–dihydroxyvitamin D by phosphorus in normal men. Portale AA, et al. **J Clin Invest** 1989 May;83(5):1494–9

POISONING

[The role of free radicals in the pathogenesis of chronic poisoning with phosphorus compounds] Ormanov NZh. **Gig Tr Prof Zabol** 1988 Sep;(9):15–8 (Eng. Abstr.) (Rus)
[Effect of hyperbaric oxygenation on tissue respiratory function and lipid peroxidation in experimental chronic phosphorus poisoning] Orynbaev TO, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):57–9 (Rus)

THERAPEUTIC USE

[Erythrocyte 2,3–diphosphoglycerate changes and the effect of phosphate supplement in diabetics] Zhou ZG, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Mar;27(3):147–9, 196 (Eng. Abstr.) (Chi)

TOXICITY

Effects of inhalation of red phosphorus/butyl rubber combustion products on aveolar macrophage responses in rats. Aranyi C, et al. **J Appl Toxicol** 1988 Dec;8(6):393–8
[Hygienic substantiation of the maximum permissible level of phosphorus thiotrichloride in reservoir water] Tomkiv VM. **Gig Sanit** 1988 Nov;(11):68–70 (Rus)

URINE

Renal responses to phosphorus deprivation in young rabbits. DePalo D, et al. **Miner Electrolyte Metab** 1988;14(6):313–20
[Can the phospho–calcium analysis be simplified?] Zakraoui L, et al. **Tunis Med** 1987 Feb;65(2):87–9 (Eng. Abstr.) (Fre)
[Usefulness of changes in urinary P/Cr ratio as a diagnostic parameter in primary hyperparathyroidism] Kitamura T, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Jun; 79(6):1085–9 (Eng. Abstr.) (Jpn)
[Urinary calcium and phosphorus excretion and their relationship in calcium–containing urinary stone formers] Kitamura T, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Feb;80(2):197–203 (Eng. Abstr.) (Jpn)

PHOSPHORUS ISOTOPES

ANALYSIS

Processing of secondary ion microscope images: an example of application to the thyroid. Cavellier JF, et al. **J Microsc** 1989 Apr;154 (Pt 1):31–8

PHOSPHORUS METABOLISM DISORDERS

Phosphorus deficiency syndrome in two very low birthweight infants. Tsukahara H, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Aug;30(4):520–5

COMPLICATIONS

[Hypophosphoremia: a possible cause of central pontine myelinolysis (letter)] De Broucker T, et al. **Presse Med** 1989 Jun 10;18(23):1166 (Fre)
[The systemic environment and dental development. From the clinical to the molecular approach] Berdal A, et al. **Rev Stomatol Chir Maxillofac** 1989;90(2):111–4 (24 ref.) (Eng. Abstr.) (Fre)

DIET THERAPY

Tumoral calcinosis. Case report with treatment failure. Walentynowicz JE, et al. **Orthop Rev** 1989 Jun;18(6):687–90 (16 ref.)

ETIOLOGY

Hypophosphatemia in the nutritional recovery syndrome. Mezoff AG, et al. **Am J Dis Child** 1989 Sep;143(9):1111–2

VETERINARY

Hypophosphatemia. Causes and clinical consequences. Forrester SD, et al. **J Vet Intern Med** 1989 Jul–Sep; 3(3):149–59 (58 ref.)

PHOSPHORUS RADIOISOTOPES

ADMINISTRATION & DOSAGE

Intraperitoneal P–32 after negative second–look laparotomy in ovarian carcinoma. Spencer TR Jr, et al. **Cancer** 1989 Jun 15;63(12):2434–7
Intraperitoneal chromic phosphate in ovarian cancer: risks and benefits. Potter ME, et al. **Gynecol Oncol** 1989 Mar; 32(3):314–8

DIAGNOSTIC USE

High–performance liquid chromatographic analysis of 32P–postlabeled DNA–aromatic carcinogen adducts. Levy GN, et al. **Anal Biochem** 1988 Nov 1;174(2):381–92
Comparison of different X–ray films for 32P–autoradiography using various intensifying screens at –20 degrees C and –70 degrees C. Henke J, et al. **J Clin Chem Clin Biochem** 1988 Jul;26(7):467–8
Theoretical interpretation of isotope labelling experiments in cells in which the label is chemically incorporated: the example of orthophosphate. Kemp GJ, et al. **J Theor Biol** 1988 Oct 7;134(3):351–64
Preservation of high–energy phosphates in human myocardium. A phosphorus 31–nuclear magnetic resonance study of the effect of temperature on atrial appendages. Deslauriers R, et al. **J Thorac Cardiovasc Surg** 1989 Sep; 98(3):402–12
In–vivo 31P magnetic resonance spectroscopy for monitoring treatment response in breast cancer [letter] Glaholm J, et al. **Lancet** 1989 Jun 10;1(8650):1326–7
32P–postlabeling assay for carcinogen–DNA adducts and other dna modifications. Randerath K, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:368–86 (31 ref.)
[Results of intraoperative localization of hyperactive parathyroid tissue using semiconductor probes in primary hyperparathyroidism] Geipel D, et al. **Zentralbl Chir** 1989; 114(9):606–13 (Ger)

METABOLISM

The relation of radionuclide uptake by bone to the rate of calcium mineralization. I: Experimental studies using 45Ca, 32P and 99Tcm–MDP. Budd RS, et al. **Br J Radiol** 1989 Apr;62(736):314–7

THERAPEUTIC USE

Five and ten year estimated survival and disease–free rates after intraperitoneal chromic phosphate; stage I ovarian adenocarcinoma. Piver MS, et al. **Am J Clin Oncol** 1988 Oct;11(5):515–9
The treatment of essential thrombocythaemia with radioactive phosphorus. Wagner S, et al. **Clin Radiol** 1989 Mar;40(2):190–2
Peritoneal fluid cytology in endometrial cancer: its significance and the role of chromic phosphate (32P) therapy. Heath R, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):815–22
Radiophosphorus (32P) treatment of bone marrow disorders in dogs: 11 cases (1970–1987). Smith M, et al. **J Am Vet Med Assoc** 1989 Jan 1;194(1):98–102
Phosphorus–32, an unexpected treatment for rheumatoid arthritis [letter] Plouvier B, et al. **Lancet** 1988 Dec 24–31; 2(8626–8627):1497
Procedure for intraperitoneal P–32 administration. Sharma SC. **Med Dosim** 1988;13(2):83–6
[Palliative radiophosphorus therapy for analgesia in bone metastases] Grossmann J, et al. **Radiobiol Radiother (Berl)** 1988;29(6):735–6 (Ger)
[Radioactive P–32 labeled microspheres in the treatment of neoplasms of the parenchymatous organs] Kasprzyk M, et al. **Pol Przegl Radiol (Warszawa)** 1987 Nov–Dec; 51(6):300–5 (Eng. Abstr.) (Pol)

PHOSPHORYLASE A see under **GLYCOGEN PHOSPHORYLASE**

PHOSPHORYLASE B see under **GLYCOGEN PHOSPHORYLASE**

PHOSPHORYLASE KINASE

ANALYSIS

Electron microscopical examination of different aggregation and decomposition states of phosphorylase kinase. Identification and computer averaging of the alpha gamma delta fragment. Hinrichsen A, et al. **Biol Chem Hoppe Seyler** 1989 Feb;370(2):125–33
Reaction of fluorescein isothiocyanate with an ATP–binding site on the phosphorylase kinase alpha subunit. Zaman N, et al. **Eur J Biochem** 1989 Jul 1;182(3):577–84

ANTAGONISTS & INHIBITORS

Modulation of phosphorylase kinase activity by sphingolipids. Baltas LG, et al. **Biochem Int** 1989 Jul;19(1):99–106

BLOOD

Ca2+– and Mg2+–dependent association of phosphorylase kinase with human erythrocyte membranes. Kyriakidis SM, et al. **Biochim Biophys Acta** 1988 Dec 9;972(3):347–52

DEFICIENCY

Enzymatic analysis in lymphocytes and erythrocytes from six patients with different phenotypes of phosphorylase kinase deficiency. Kikuchi M, et al. **J Inherited Metab Dis** 1988;11(3):315–8
Partial correction of an inherited biochemical defect of skeletal muscle by grafts of normal muscle precursor cells. Morgan JE, et al. **J Neurol Sci** 1988 Sep;86(2–3):137–47
Hepatic phosphorylase b kinase deficiency with normal enzyme activity in leukocytes. Alvarado LJ, et al. **J Pediatr** 1988 Nov;113(5):865–7

GENETICS

Assignment of human genes for phosphorylase kinase subunits alpha (PHKA) to Xq12–q13 and beta (PHKB) to 16q12–q13. Francke U, et al. **Am J Hum Genet** 1989 Aug; 45(2):276–82
Expression and characterization of the tau subunit of phosphorylase kinase. Chen LR, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):746–53
Messenger ribonucleic acid encoding an apparent isoform of phosphorylase kinase catalytic subunit is abundant in the adult testis. Hanks SK. **Mol Endocrinol** 1989 Jan; 3(1):110–6
The alpha and beta subunits of phosphorylase kinase are homologous: cDNA cloning and primary structure of the beta subunit. Kilimann MW, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9381–5

ISOLATION & PURIFICATION

[Purification, quaternary structure and regulatory properties of phosphorylase kinase from pigeon skeletal muscle] Morozov VE, et al. **Biokhimiia** 1989 Mar;54(3):448–55 (Eng. Abstr.) **(Rus)**

METABOLISM

The substrate and sequence specificity of the AMP-activated protein kinase. Phosphorylation of glycogen synthase and phosphorylase kinase. Carling D, et al. **Biochim Biophys Acta** 1989 Jun 15;1012(1):81–6

Multiple ubiquitination of vertebrate calmodulin by reticulocyte lysate and inhibition of calmodulin conjugation by phosphorylase kinase. Ziegenhagen R, et al. **Biol Chem Hoppe Seyler** 1988 Dec;369(12):1317–24

Elucidation of conservative elements of calmodulin-dependent enzymes with the use of monoclonal antibodies. Alakhov VYu, et al. **Biotechnol Appl Biochem** 1988 Aug;10(4):319–25

Phosphorylase kinase activities in damaged mouse skeletal muscles. Morgan JE. **J Neurol Sci** 1988 Sep;86(2–3):149–58

[Regulation of the activity of rabbit skeletal muscle phosphorylase kinase by glycogen] Zemskova MA, et al. **Biokhimiia** 1989 Apr;54(4):662–8 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

[Molecular mechanisms of the regulation of phosphorylase kinase from skeletal muscles of mammals and birds] Livanova NB, et al. **Biokhimiia** 1989 May;54(5):730–3 (Eng. Abstr.) **(Rus)**

PHOSPHORYLASE PHOSPHATASE see under **PHOSPHOPROTEIN PHOSPHATASES**

PHOSPHORYLATION see under **CHEMISTRY, ORGANIC**

PHOSPHORYLCHOLINE see under **CHOLINE**

PHOSPHOSERINE see under **SERINE**

PHOSPHOTHREONINE see under **THREONINE**

PHOSPHOTRANSFERASES

ANALYSIS

Characterization and localization of phosphatidylglycerophosphate and phosphatidylserine synthases in Rhodobacter sphaeroides. Radcliffe CW, et al. **Arch Microbiol** 1989;152(2):132–7

Sequence of the human erythrocyte phosphoglycerate mutase by microsequencer and mass spectrometry. Blouquit Y, et al. **J Biol Chem** 1988 Nov 15;263(32):16906–10

ANTAGONISTS & INHIBITORS

Inactivation of type MM phosphoglycerate mutase by sulfhydryl group reagents during facial embryogenesis. Granström G, et al. **Acta Odontol Scand** 1988 Oct; 46(5):273–9

BLOOD

Processing enzymes acting on carbohydrate moiety of lysosomal hydrolases in leukemic cells: elevated activity of N-acetylglucosamine-1-phosphotransferase. Uehara Y, et al. **Blood** 1989 May 15;73(7):1957–62

DEFICIENCY

Biochemical studies on lymphoblastoid cells with inherited N-acetyl-glucosamine 1-phosphotransferase deficiency (I-cell disease). Okada S, et al. **Biochem Int** 1988 Aug; 17(2):375–83

GENETICS

Isolation, characterization, and cloning of a plasmid-borne gene encoding a phosphotransferase that confers high-level amikacin resistance in enteric bacilli. Gaynes R, et al. **Antimicrob Agents Chemother** 1988 Sep;32(9):1379–84

Molecular cloning and nucleotide sequence of murine 2,3-bisphosphoglycerate mutase cDNA. Le Boulch P, et al. **Biochem Biophys Res Commun** 1988 Oct 31; 156(2):874–81

Evidence of gene amplification in tunicamycin-resistant Chinese hamster ovary cells. Scocca JR, et al. **Biochem Biophys Res Commun** 1988 Nov 15;156(3):1063–9

Expression of the Saccharomyces cerevisiae PIS gene and synthesis of phosphatidylinositol in Escherichia coli. Nikawa J, et al. **J Bacteriol** 1988 Oct;170(10):4727–31

Disruption of the CHO1 gene encoding phosphatidylserine synthase in Saccharomyces cerevisiae. Hikiji T, et al. **J Biochem (Tokyo)** 1988 Dec;104(6):894–900

Mutated forms of phosphoglycerate mutase in yeast affect reversal of metabolic flux. Effect of reversible and irreversible function of an enzyme on pathway reversal. Gautan N. **J Biol Chem** 1988 Oct 25;263(30):15400–6

The sn-1,2-diacylglycerol ethanolaminephosphotransferase activity of Saccharomyces cerevisiae. Isolation of mutants and cloning of the EPT1 gene. Hjelmstad RH, et al. **J Biol Chem** 1988 Dec 25;263(36):19748–57

Isolation and characterization of the human 2,3-bisphosphoglycerate mutase gene. Joulin V, et al. **J Biol Chem** 1988 Oct 25;263(30):15785–90

Amplification and molecular cloning of the hamster tunicamycin-sensitive N-acetylglucosamine-1-phosphate transferase gene. The hamster and yeast enzymes share a common peptide sequence. Lehrman MA, et al. **J Biol Chem** 1988 Dec 25;263(36):19796–803

Isolation of a cDNA encoding the B isozyme of human phosphoglycerate mutase (PGAM) and characterization of the PGAM gene family. Sakoda S, et al. **J Biol Chem** 1988 Nov 15;263(32):16899–905

Structure of the gene encoding the muscle-specific subunit of human phosphoglycerate mutase. Tsujino S, et al. **J Biol Chem** 1989 Sep 15;264(26):15334–7

Inositol regulates phosphatidylglycerolphosphate synthase expression in Saccharomyces cerevisiae. Greenberg ML, et al. **Mol Cell Biol** 1988 Nov;8(11):4773–9

Nucleotide sequence of a novel kanamycin resistance gene, aphA-7, from Campylobacter jejuni and comparison to other kanamycin phosphotransferase genes. Tenover FC, et al. **Plasmid** 1989 Jul;22(1):52–8

IMMUNOLOGY

Immunological properties of rat phosphoglycerate mutase isozymes. Castellá J, et al. **Biochim Biophys Acta** 1988 Sep 21;956(2):97–102

ISOLATION & PURIFICATION

Characterization of a salt-extractable phosphatidylinositol synthase from rat pituitary-tumour membranes. Cubitt AB, et al. **Biochem J** 1989 Feb 1;257(3):639–44

An improved procedure for the purification of ethanolaminephosphotransferase. Reconstitution of the purified enzyme with lipids. Roberti R, et al. **Biochim Biophys Acta** 1989 Jul 17;1004(1):80–8

Isolation, characterization, and structure of a mutant 89 Arg——Cys bisphosphoglycerate mutase. Implication of the active site in the mutation. Rosa R, et al. **J Biol Chem** 1989 May 15;264(14):7837–43

Purification and characterization of UDP-N-acetyl-D-glucosamine:dolichol phosphate N-acetyl-D-glucosamine-1-phosphate transferase involved in the biosynthesis of asparagine-linked glycoproteins in the mammary gland. Shailubhai K, et al. **J Biol Chem** 1988 Nov 5;263(31):15964–72

Purification of human muscle phosphoglycerate mutase by fast protein liquid chromatography based on hydrophobic interactions. Edwards RJ, et al. **J Chromatogr** 1989 May 30;490(2):424–31

METABOLISM

The phosphoglycerate mutases. Fothergill-Gilmore LA, et al. **Adv Enzymol** 1989;62:227–313 (225 ref.)

Effect of hypercholesterolemia on cholinephosphotransferase activity in rabbit and rat vessel walls. Sasaki N, et al. **Atherosclerosis** 1988 Dec;74(3):241–6

Long-lived tryptophan fluorescence in phosphoglycerate mutase. Schauerte JA, et al. **Biochemistry** 1989 May 2; 28(9):3948–54

Morphology and immunocytochemistry of two endocrine cell types in the guinea-pig esophageal epithelium. Heym C, et al. **Cell Tissue Res** 1989 Jun;256(3):635–43

Metabolism of glucose 1,6-P2—III. Partial purification and characterization of glucose 1,6-P2 synthase from pig skeletal muscle. Carreras M, et al. **Comp Biochem Physiol [B]** 1988;90(4):739–44

Levels of true thymidine kinase and nucleoside phosphotransferase in two strains of Tetrahymena pyriformis under different growth conditions. Yuyama S, et al. **Comp Biochem Physiol [B]** 1979;62(4):325–8

In vitro and in vivo phosphorylation of chicken beta B3-crystallin. Voorter CE, et al. **Curr Eye Res** 1989 May; 8(5):459–65

31P magnetization transfer in the phosphoglyceromutase-enolase coupled enzyme system. Chapman BE, et al. **Eur Biophys J** 1988;16(3):187–91

Effects of centrophenoxine on cholinephosphotransferase activity in maternal and fetal guinea pig lung. Stith IE, et al. **Exp Lung Res** 1989 Jul;15(4):587–96

Glycolytic activity in embryos of Pisum sativum and of non-dormant or dormant seeds of Avena sativa L. expressed through activities of PFK and PPi-PFK. Corbineau F, et al. **Histochemistry** 1989;90(5):359–64

2-Acylglycerolphosphoethanolamine acyltransferase/acyl-acyl carrier protein synthetase is a membrane-associated acyl carrier protein binding protein. Cooper CL, et al. **J Biol Chem** 1989 May 5;264(13):7384–9

Regulation of phospholipid biosynthesis in Saccharomyces cerevisiae by inositol. Inositol is an inhibitor of phosphatidylserine synthase activity. Kelley MJ, et al. **J Biol Chem** 1988 Dec 5;263(34):18078–85

Localization of the glucose phosphotransferase to a cytoplasmically accessible site on intracellular membranes. Srisomsap C, et al. **J Biol Chem** 1988 Nov 25; 263(33):17792–7

Phosphocreatine represents a thermodynamic and functional improvement over other muscle phosphagens. Ellington WR. **J Exp Biol** 1989 May;143:177–94

Physiological relevance of the changing subunit composition and regulatory properties of the 6-phosphofructo-1-kinase isozyme pools during heart and muscle development. Dunaway GA, et al. **Mol Cell Biochem** 1989 May 4; 87(1):71–7

Dictyostelium discoideum myosin: isolation and characterization of cDNAs encoding the regulatory light chain. Tafuri SR, et al. **Mol Cell Biol** 1989 Jul;9(7):3073–80

In vitro and ex vivo effects of antidepressants on rat brain membrane-bound phosphatidylinositol synthetase activity. Li PP, et al. **Neurochem Res** 1988 Aug;13(8):789–95

Phosphorylation of yeast phosphatidylserine synthase in vivo and in vitro by cyclic AMP-dependent protein kinase. Kinney AJ, et al. **Proc Natl Acad Sci U S A** 1988 Nov; 85(21):7962–6

Analysis of glucose-6-phosphate translocase and hexose-6-phosphate phosphohydrolase, the two obligatory components of microsomal glucose-6-phosphatase system, in rat liver. Hata K, et al. **Tohoku J Exp Med** 1988 Jun; 155(2):173–81

Nucleotide phosphotransferase, nucleotide kinase and inorganic pyrophosphatase activities of killer virions of yeast. Georgopoulos DE, et al. **Yeast** 1987 Jun;3(2):117–29

[An increase of CDP-choline: diglyceride phosphocholine transferase reaction in microsome fraction and its decrease in nuclear membranes of the rat liver after treatment with hydrocortisone] Gevorkian ES, et al. **Ukr Biokhim Zh** 1988 Jul-Aug;60(4):81–3 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Activation of 5-lipoxygenase by guanosine 5'-O-(3-thiotriphosphate) and other nucleoside phosphorothioates: redox properties of thionucleotide analogs. Denis D, et al. **Arch Biochem Biophys** 1989 Sep; 273(2):592–6

PHOSPHOTRANSFERASES, ATP

Similarity between human retinoic acid receptor and Escherichia coli homoserine kinase [letter] Baker ME. **Biochem J** 1988 Oct 15;255(2):748–9

Two-dimensional NMR studies of the porcine muscle adenylate kinase. Klaus W, et al. **Biochemistry** 1988 Jul 26;27(15):5407–11

Nucleotide and AP5A complexes of porcine adenylate kinase: A 1H and 19F NMR study. Rösch P, et al. **Biochemistry** 1989 May 16;28(10):4318–25

Crystallization and preliminary X-ray studies of pyridoxal kinase from sheep brain. Arnone A, et al. **J Biol Chem** 1989 Mar 15;264(8):4322–3

The switch between two conformations of adenylate kinase. Dreusicke D, et al. **J Mol Biol** 1988 Oct 20;203(4):1021–8

Crystallization and preliminary X-ray studies of Escherichia coli glycerol kinase. Faber HR, et al. **J Mol Biol** 1989 Jun 5;207(3):637–9

Synthetic genes for human muscle-type adenylate kinase in Escherichia coli. Kim HJ, et al. **Protein Eng** 1989 Jan; 2(5):379–86

Amino acid sequence and three-dimensional structure of cytosolic adenylate kinase from carp muscle. Reuner C, et al. **Protein Seq Data Anal** 1988;1(5):335–43

ANALYSIS

The H+ -ATP synthase of mitochondria in tissue regeneration and neoplasia. Papa S, et al. **Ann N Y Acad Sci** 1988;551:168–77; discussion 177–8

Membrane-associated phosphatidylinositol kinase of R3230AC mammary tumors and normal mammary glands and effects of insulin on tumor enzyme activity. Narayanan U, et al. **Cancer Res** 1988 Dec 1;48(23):6727–32

Characterization of mevalonate-activating enzymes in the neonatal chick liver. Garcia-Martinez J, et al. **Comp Biochem Physiol [B]** 1978;61(2):275–9

Immunoquantitation of 80 kDa diacylglycerol kinase in pig and human lymphocytes and several other cells. Yamada K, et al. **FEBS Lett** 1989 Feb 27;244(2):402–6

A sensitive and simple assay for neomycin phosphotransferase II activity in transgenic tissue. Cabanes-Bastos E, et al. **Gene** 1989 Apr 15;77(1):169–76

A new neomycin phosphotransferase II solid phase assay in combination with polyacrylamide sodium dodecylsulphate gel electrophoresis. Merkel D, et al. **J Biochem Biophys Methods** 1989 Jun;18(4):277–85

Localization of the NADH kinase in the inner membrane of yeast mitochondria. Iwahashi Y, et al. **J Biochem (Tokyo)** 1989 Jun;105(6):916–21

Orientation and reactivity of NADH kinase in proteoliposomes. Iwahashi Y, et al. **J Biochem (Tokyo)** 1989 Jun;105(6):922–6

Rat liver phosphoribosyl pyrophosphate synthetase: existence of the purified enzyme as heterogeneous aggregates and identification of the catalytic subunit. Kita K, et al. **J Biochem (Tokyo)** 1989 May;105(5):736–41

Site-directed mutagenesis of Gly-15 and Gly-20 in the glycine-rich region of adenylate kinase. Yoneya T, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):158–60

Resolution and purification of a neurofilament-specific kinase. Wible BA, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):720–4

Aminoglycoside-O-phosphotransferase (APH (3'')) activity in a clinical isolate of Acinetobacter calcoaceticus. Elisha BG, et al. **S Afr Med J** 1989 Mar 4;75(5):220–2

[SH-groups of NAD kinase from the rabbit liver] Bulygina

ER, et al. **Biokhimiia** 1988 Sep;53(9):1557–62 (Eng. Abstr.) **(Rus)**

[Approaches to the comparative analysis of phosphagen kinases: the matrix for the Metzger coefficient of correlation] Stefanov VE, et al. **Zh Evol Biokhim Fiziol** 1988 Sep–Oct;24(5):758–64 (29 ref.) **(Rus)**

ANTAGONISTS & INHIBITORS

Inhibition of adenylate kinase by P1,P5-di(adenosine 5') pentaphosphate in assays of erythrocyte enzyme activities requiring adenine nucleotides. Valentine WN, et al. **Am J Hematol** 1989 Oct;32(2):143–5

Diacylglycerol kinase inhibitor R59022 and stimulated neutrophil responses. Mege JL, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):C589–94

Synthesis and properties of a nonhydrolyzable adenosine phosphosulfate analog. Callahan L, et al. **Anal Biochem** 1989 Feb 15;177(1):67–71

Analogs of 5-methylthioribose, a novel class of antiprotozoal agents. Riscoe MK, et al. **Antimicrob Agents Chemother** 1988 Dec;32(12):1904–6

Sensitivity of yeast glycolytic enzymes to chloroquine [published erratum appears in Arch Microbiol 1989;151(1):90] Manhart A, et al. **Arch Microbiol** 1988; 150(3):309–12

Diacylglycerol kinase inhibitors R59022 and dioctanoylethylene glycol potentiate the respiratory burst of neutrophils by raising cytosolic Ca2+. Nasmith P, et al. **Biochem Biophys Res Commun** 1989 May 30; 161(1):95–100

Regulation of purine deoxynucleoside phosphorylation by deoxycytidine kinase from human leukemic blast cells. Sarup JC, et al. **Biochem Pharmacol** 1989 Aug 15; 38(16):2601–7

Kinetic studies of the pyridoxal kinase from pig liver: slow-binding inhibition by adenosine tetraphosphopyridoxal. Tagaya M, et al. **Biochemistry** 1989 May 30;28(11):4670–5

Inactivation of Acinetobacter calcoaceticus acetate kinase by diethylpyrocarbonate. Kim YS, et al. **Biochim Biophys Acta** 1988 Sep 21;956(2):103–9

On the regulatory significance of inhibitors acting on non-equilibrium enzymes in the Calvin photosynthesis cycle. Pettersson G, et al. **Eur J Biochem** 1989 Jun 15; 182(2):373–7

The diacylglycerol kinase inhibitor, R 59022, suppresses contractility of intestinal smooth muscle. Lippe IT, et al. **Eur J Pharmacol** 1989 Jan 2;159(1):1–8

Inhibitors of 1,2-diacylglycerol kinase potentiate the TRH-induced stimulation of Ca2+-activated K+ current. Mollard P, et al. **Eur J Pharmacol** 1989 Mar 7;172(1):71–9

Increased protein synthesis response to insulin in fibroblasts treated with the diacylglycerol kinase inhibitor R59022. Hesketh JE, et al. **FEBS Lett** 1988 Dec 5;241(1–2):115–8

Screening of phosphatidylinositol kinase inhibitors from Streptomyces. Nishioka H, et al. **J Antibiot (Tokyo)** 1989 May;42(5):823–5

The role of endogenously formed diacylglycerol in the propagation and termination of platelet activation. A biochemical and functional analysis using the novel diacylglycerol kinase inhibitor, R 59 949. de Chaffoy de Courcelles D, et al. **J Biol Chem** 1989 Feb 25; 264(6):3274–85

Sphingosine inhibits calmodulin-dependent enzymes. Jefferson AB, et al. **J Biol Chem** 1988 Oct 25; 263(30):15241–4

In vivo studies on the effect of some insecticides on the hepatic activities of L-tryptophan 2,3-dioxygenase and pyridoxal phosphokinase of male mice. el-Toukhy MA, et al. **J Environ Sci Health [B]** 1989 Jun;24(3):265–76

Inhibition and inactivation of pyruvate phosphate dikinase with Cr(III) complexes of adenosine 5'-triphosphate and inorganic pyrophosphate. Ciskanik L, et al. **J Enzym Inhib** 1986;1(2):113–25

Evidence of a theophylline-induced vitamin B6 deficiency caused by noncompetitive inhibition of pyridoxal kinase. Ubbink JB, et al. **J Lab Clin Med** 1989 Jan;113(1):15–22

Structure of the complex of adenylate kinase from Escherichia coli with the inhibitor P1,P5-di(adenosine-5'-)pentaphosphate. Müller CW, et al. **J Mol Biol** 1988 Aug 20;202(4):909–12

[Restoration of pantothenate kinase activity by low-molecular weight disulfides] Moiseenok AG, et al. **Dokl Akad Nauk SSSR** 1988;300(2):485–7 **(Rus)**

BIOSYNTHESIS

The effect of polycyclic aromatic hydrocarbons on choline kinase activity in mouse hepatoma cells. Paulson BK, et al. **Biochim Biophys Acta** 1989 Aug 8;1004(2):274–7

Deoxycytidine kinase is constitutively expressed in human lymphocytes: consequences for compartmentation effects, unscheduled DNA synthesis, and viral replication in resting cells. Arnér ES, et al. **Exp Cell Res** 1988 Oct;178(2):335–42

BLOOD

Affinity purification of human deoxycytidine kinase: avoidance of structural and kinetic artifacts arising from limited proteolysis. Kim MY, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):92–8

Calcium modulates the generation of inositol 1,3,4-trisphosphate in human platelets by the activation of inositol 1,4,5-trisphosphate 3-kinase. Daniel JL, et al. **Biochem J** 1988 Aug 1;253(3):789–94

Pyrimidine nucleotides impair phosphoribosylpyrophosphate (PRPP) synthetase subunit aggregation by sequestering magnesium. A mechanism for the decreased PRPP synthetase activity in hereditary erythrocyte pyrimidine 5'-nucleotidase deficiency. Lachant NA, et al. **Biochim Biophys Acta** 1989 Jan 19;994(1):81–8

Depressed activities of purine enzymes in lymphocytes of patients infected with human immunodeficiency virus. Renouf JA, et al. **Clin Chem** 1989 Jul;35(7):1478–81

Red cell uridine monophosphate kinase: a comparative study in various vertebrate species. Gallango ML, et al. **Comp Biochem Physiol [B]** 1979;63(4):507–9

Association of phosphatidylinositol kinase and phosphatidylinositol 4-phosphate kinase activities with the cytoskeleton in human platelets. Nahas N, et al. **FEBS Lett** 1989 Mar 27;246(1–2):30–4

Decreased erythrocyte phosphoribosylpyrophosphate synthetase activity and impaired formation in thalassemia minor: a mechanism for decreased adenine nucleotide content. Zerez CR, et al. **J Lab Clin Med** 1989 Jul; 114(1):43–50

CEREBROSPINAL FLUID

Adenylate kinase activity in the cerebrospinal fluid of hypoxic newborns. Vreča I, et al. **Clin Biochem** 1989 Apr; 22(2):135–9

DEFICIENCY

A case with the infantile type of glycerol kinase deficiency. Kakinuma H, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Jun;29(3):465–8

Gonadotropin deficiency as a significant association of complex glycerol kinase deficiency: a case report with cytogenetic and molecular-genetic studies. Yoshimoto M, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Oct;30(5):615–20

Complex glycerol kinase deficiency: molecular-genetic, cytogenetic, and clinical studies of five Japanese patients. Matsumoto T, et al. **Am J Med Genet** 1988 Nov; 31(3):603–16 (30 ref.)

Mevalonate kinase deficiency in a child with cerebellar ataxia, hypotonia and mevalonic aciduria. Gibson KM, et al. **Eur J Pediatr** 1988 Dec;148(3):250–2

D-glycerate kinase deficiency as a cause of D-glyceric aciduria. Van Schaftingen E. **FEBS Lett** 1989 Jan 30; 243(2):127–31

Characterization of patients with glycerol kinase deficiency utilizing cDNA probes for the Duchenne muscular dystrophy locus. Towbin JA, et al. **Hum Genet** 1989 Sep; 83(2):122–6

Human adenylate kinase deficiency associated with hemolytic anemia. A single base substitution affecting solubility and catalytic activity of the cytosolic adenylate kinase. Matsuura S, et al. **J Biol Chem** 1989 Jun 15; 264(17):10148–55

Complementary DNA probes for the Duchenne muscular dystrophy locus demonstrate a previously undetectable deletion in a patient with dystrophic myopathy, glycerol kinase deficiency, and congenital adrenal hypoplasia. McCabe ER, et al. **J Clin Invest** 1989 Jan;83(1):95–9

Mevalonic aciduria: pathobiochemical effects of mevalonate kinase deficiency on cholesterol metabolism in intact fibroblasts. Hoffmann G, et al. **J Inherited Metab Dis** 1988; 11 Suppl 2:229–32

Glyceroluria with adrenocortical insufficiency, developmental delay and early death. Søvik O, et al. **J Inherited Metab Dis** 1988;11(3):304–5

Muscle glycerol kinase in Duchenne dystrophy and glycerol kinase deficiency. Seltzer WK, et al. **Muscle Nerve** 1989 Apr;12(4):307–13

[Prenatal diagnosis of X-linked adrenal hypoplasia associated with glycerol kinase deficiency] Malpuech G, et al. **J Genet Hum** 1989 Jun;37(2):155–62 (Eng. Abstr.) **(Fre)**

GENETICS

Sequence of the 5'-flanking region of the rat 6-phosphofructo-2-kinase/fructose 2,6-bisphosphatase gene: regulation by glucocorticoids. Lange AJ, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):753–60

New isozyme systems for maize (Zea mays L.): aconitate hydratase, adenylate kinase, NADH dehydrogenase, and shikimate dehydrogenase. Wendel JF, et al. **Biochem Genet** 1988 Jun;26(5–6):421–45

DNA sequences of a bovine gene and of two related pseudogenes for the proteolipid subunit of mitochondrial ATP synthase. Dyer MR, et al. **Biochem J** 1989 May 15; 260(1):249–58

Mutations in the nucleotide binding loop of adenylate kinase of Escherichia coli. Reinstein J, et al. **Biochemistry** 1988 Jun 28;27(13):4712–20

Inhibition of rat growth hormone promoter activity by site-specific DNA methylation. Gaido ML, et al. **Biochim Biophys Acta** 1989 Jul 7;1008(2):234–42

Tissue-differential expression of two distinct genes for phosphoribosyl pyrophosphate synthetase and existence of the testis-specific transcript. Taira M, et al. **Biochim Biophys Acta** 1989 Mar 1;1007(2):203–8

Molecular Xp deletion in a male: suggestion of a locus for hypogonadotropic hypogonadism distal to the glycerol kinase and adrenal hypoplasia loci. Goonewardena P, et al. **Clin Genet** 1989 Jan;35(1):5–12

Sequence analysis and expression of the arginine-deiminase and carbamate-kinase genes of Pseudomonas aeruginosa. Baur H, et al. **Eur J Biochem** 1989 Jan 15;179(1):53–60

Protection of uninfected human bone marrow cells in long-term culture from G418 toxicity after retroviral-mediated transfer of the NEOr gene. Bayever E, et al. **Exp Cell Res** 1988 Nov;179(1):168–80

The Saccharomyces cerevisiae ARO1 gene. An example of the co-ordinate regulation of five enzymes on a single biosynthetic pathway. Duncan K, et al. **FEBS Lett** 1988 Dec 5;241(1–2):83–8

Molecular cloning and sequencing of human cDNA for phosphoribosyl pyrophosphate synthetase subunit II. Iizasa T, et al. **FEBS Lett** 1989 Feb 13;244(1):47–50

Yeast adenylate kinase is transcribed constitutively from a promoter in the short intergenic region to the histone H2A-1 gene. Oechsner U, et al. **FEBS Lett** 1988 Dec 19; 242(1):187–93

Cloning of the glycerol kinase gene of Bacillus subtilis. Holmberg C, et al. **FEMS Microbiol Lett** 1989 Apr; 49(2–3):151–5

A gene fusion system using the aminoglycoside 3'-phosphotransferase gene of the kanamycin-resistance transposon Tn903: use in the yeast Kluyveromyces lactis and Saccharomyces cerevisiae. Chen XJ, et al. **Gene** 1988 Sep 30;69(2):181–92

Nucleotide sequence of the ribostamycin phosphotransferase gene and of its control region in Streptomyces ribosidificus. Hoshiko S, et al. **Gene** 1988 Sep 7;68(2):285–96

Nucleotide sequence of Escherichia coli argB and argC genes: comparison of N-acetylglutamate kinase and N-acetylglutamate-gamma-semialdehyde dehydrogenase with homologous and analogous enzymes. Parsot C, et al. **Gene** 1988 Sep 7;68(2):275–83

Unusual transcriptional and translational features of the aminoglycoside phosphotransferase gene (aph) from Streptomyces fradiae. Janssen GR, et al. **Genes Dev** 1989 Mar;3(3):415–29

Regional assignment of the loci for adenylate kinase to 9q32 and for alpha 1-acid glycoprotein to 9q31-q32. A locus for Goltz syndrome in region 9q32-qter? Zuffardi O, et al. **Hum Genet** 1989 Apr;82(1):17–9

Cloning and expression of Clostridium acetobutylicum phosphotransbutyrylase and butyrate kinase genes in Escherichia coli. Cary JW, et al. **J Bacteriol** 1988 Oct; 170(10):4613–8

Effect of mutations causing gluconate kinase or gluconate permease deficiency on expression of the Bacillus subtilis gnt operon. Fujita Y, et al. **J Bacteriol** 1989 Mar; 171(3):1751–4

Cloning, expression, and nucleotide sequence of the Escherichia coli K-12 ackA gene. Matsuyama A, et al. **J Bacteriol** 1989 Jan;171(1):577–80

Biochemical characterization of two cloned resistance determinants encoding a paromomycin acetyltransferase and a paromomycin phosphotransferase from Streptomyces rimosus forma paromomycinus. Pérez-González JA, et al. **J Bacteriol** 1989 Jan;171(1):329–34

Structure and complete nucleotide sequence of the gene encoding chicken cytosolic adenylate kinase. Suminami Y, et al. **J Biochem (Tokyo)** 1988 Apr;103(4):611–7

Cloning and characterization of the yeast CKI gene encoding choline kinase and its expression in Escherichia coli. Hosaka K, et al. **J Biol Chem** 1989 Feb 5;264(4):2053–9

Human deoxycytidine kinase. Sequence of cDNA clones and analysis of expression in cell lines with and without enzyme activity. Huang SH, et al. **J Biol Chem** 1989 Sep 5; 264(25):14762–8

Diacylglycerol kinase defect in a Drosophila retinal degeneration mutant rdgA. Inoue H, et al. **J Biol Chem** 1989 Apr 5;264(10):5996–6000

Analysis and in vivo disruption of the gene coding for adenylate kinase (ADK1) in the yeast Saccharomyces cerevisiae. Konrad M. **J Biol Chem** 1988 Dec 25; 263(36):19468–74

Site-directed mutagenesis of Pro-17 located in the glycine-rich region of adenylate kinase. Tagaya M, et al. **J Biol Chem** 1989 Jan 15;264(2):990–4

cDNA sequence and predicted primary structure of the gamma subunit from the ATP synthase from Chlamydomonas reinhardtii. Yu LM, et al. **J Biol Chem** 1988 Dec 25;263(36):19342–5

Molecular analysis of the pyrimidine deoxyribonucleoside kinase gene of wild-type and acyclovir-resistant strains of varicella-zoster virus. Sawyer MH, et al. **J Gen Virol** 1988 Oct;69 (Pt 10):2585–93

Adenylate kinases from thermosensitive Escherichia coli strains. Haase GH, et al. **J Mol Biol** 1989 May 5; 207(1):151–62

Muscle genetic variants and relationship with performance and trainability. Bouchard C, et al. **Med Sci Sports Exerc** 1989 Feb;21(1):71–7

Improved expression of streptomycin resistance in plants due to a deletion in the streptomycin phosphotransferase coding sequence. Maliga P, et al. **Mol Gen Genet** 1988 Nov; 214(3):456–9

Nucleotide sequence of Acinetobacter baumannii aphA-6 gene: evolutionary and functional implications of sequence homologies with nucleotide-binding proteins, kinases and other aminoglycoside-modifying enzymes. Martin P, et al. **Mol Microbiol** 1988 Sep;2(5):615–25

TaqI RFLP in human adenylate kinase-1 (AK1) gene region on chromosome 9. Bech-Hansen NT, et al. **Nucleic Acids Res** 1989 May 25;17(10):4004

Nucleotide sequence of an Erwinia chrysanthemi gene encoding shikimate kinase. Minton NP, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1769

Nucleotide sequence of the region encompassing the glpKF operon and its upstream region containing a bent DNA sequence of Escherichia coli. Muramatsu S, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4378

Evolution of the herpes thymidine kinase: identification and comparison of the equine herpesvirus 1 thymidine kinase gene reveals similarity to a cell-encoded thymidylate kinase. Robertson GR, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11303-17

A novel xylB-based positive selection vector. Stevis PE, et al. **Plasmid** 1988 Jul;20(1):92-5

5' flanking sequence and structure of a gene encoding rat 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase. Darville MI, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(17):6543-7

Human endomembrane H+ pump strongly resembles the ATP-synthetase of Archaebacteria. Südhof TC, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6067-71

Selection for precise chromosomal targeting of a dominant marker by homologous recombination. Dorin JR, et al. **Science** 1989 Mar 10;243(4896):1357-60

Localization of human phosphoribosylpyrophosphate synthetase subunit I and II genes (PRPS1 and PRPS2) to different regions of the X chromosome and assignment of two PRPS1-related genes to autosomes. Taira M, et al. **Somat Cell Mol Genet** 1989 Jan;15(1):29-37

Eukaryote membrane genetics: the Fo sector of mitochondrial ATP synthase. Nagley P. **Trends Genet** 1988 Feb;4(2):46-51 (35 ref.)

[Aminoglycoside 3'-phosphotransferase gene: its cloning, characteristics and use as a molecular probe] Vakulenko SB, et al. **Antibiot Khimioter** 1988 Dec;33(12):913-7 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Occurrence of immunoreactive 80 kDa and non-immunoreactive diacylglycerol kinases in different pig tissues. Yamada K, et al. **Biochem J** 1988 Oct 15; 255(2):601-8

Effect of reduction and carboxamidomethylation on immunogenicity of mitochondrial adenylate kinase (AK2). Watanabe K, et al. **Nippon Juigaku Zasshi** 1988 Jun; 50(3):791-6

ISOLATION & PURIFICATION

Studies on adenylate kinase (ATP:AMP phosphotransferase) of Mycobacterium marinum (ATCC 927). Batra PP, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:25-9

Properties of a highly purified mitochondrial deoxyguanosine kinase. Park I, et al. **Arch Biochem Biophys** 1988 Oct; 266(1):51-60

Affinity purification of human deoxycytidine kinase: avoidance of structural and kinetic artifacts arising from limited proteolysis. Kim MY, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):92-8

Separation and identification of two phosphatidylinositol 4-kinase activities in bovine uterus. Li YS, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):202-9

The purification and properties of monoacylglycerol kinase from bovine brain. Shim YH, et al. **Biochem Cell Biol** 1989 Apr-May;67(4-5):233-41

Purification of bovine brain inositol 1,4,5-trisphosphate 3-kinase. Identification of the enzyme by sodium dodecyl sulphate/polyacrylamide-gel electrophoresis. Takazawa K, et al. **Biochem J** 1989 Jul 15;261(2):483-8

Deoxycytidine kinase from human leukemic spleen: preparation and characteristics of homogeneous enzyme. Bohman C, et al. **Biochemistry** 1988 Jun 14;27(12):4258-65

Human T-lymphoblast deoxycytidine kinase: purification and properties. Datta NS, et al. **Biochemistry** 1989 Jan 10; 28(1):114-23

Amino-terminal nucleotide-binding sequences of a Lactobacillus deoxynucleoside kinase complex isolated by novel affinity chromatography. Ikeda S, et al. **Biochemistry** 1988 Nov 15;27(23):8648-52

Purification and characterization of a phosphatidylinositol kinase from A431 cells. Walker DH, et al. **Biochemistry** 1988 Aug 23;27(17):6504-11

Separation of the protein-tyrosine kinase and phosphatidylinositol kinase activities of the human placental insulin receptor. Carroscosa JM, et al. **Biochim Biophys Acta** 1988 Sep 16;971(2):170-8

Purification and kinetic properties of a soluble phosphatidylinositol-4-phosphate kinase of the bovine adrenal medulla with emphasis on its inhibition by calcium ions. Husebye ES, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):250-7

Purification and properties of hydroxymethylpyrimidine kinase from Escherichia coli. Mizote T, et al. **Biochim Biophys Acta** 1989 Apr 25;991(1):109-13

Co-purification of thymidylate kinase and cytosolic thymidine kinase from human term placenta by affinity chromatography. Tamiya N, et al. **Biochim Biophys Acta** 1989 Mar 16;995(1):28-35

The amino acid sequence of adenylate kinase from Paracoccus denitrificans and its relationship to mitochondrial and microbial adenylate kinases. Spürgin P, et al. **Eur J Biochem** 1989 Feb 15;179(3):621-8

Tritrichomonas foetus: purification and characterization of hydrogenosomal ATP:AMP phosphotransferase (adenylate kinase). Dinbergs ID, et al. **Exp Parasitol** 1989 Aug; 69(2):150-6

Alpha 3 beta 3 complex of thermophilic ATP synthase. Catalysis without the gamma-subunit. Kagawa Y, et al. **FEBS Lett** 1989 May 22;249(1):67-9

Nucleoside diphosphate kinase from human erythrocytes: purification, molecular mass and subunit structure. Presecan E, et al. **FEBS Lett** 1989 Jul 3;250(2):629-32

Glycogen-bound polyphosphate kinase from the archaebacterium Sulfolobus acidocaldarius. Skórko R, et al. **J Bacteriol** 1989 Sep;171(9):5162-4

Purification and characterization of acetate kinase from acetate-grown Methanosarcina thermophila. Evidence for regulation of synthesis. Aceti DJ, et al. **J Biol Chem** 1988 Oct 25;263(30):15444-8

Purification and characterization of phosphatidylinositol kinase from Saccharomyces cerevisiae. Belunis CJ, et al. **J Biol Chem** 1988 Dec 15;263(35):18897-903

Purification and characterization of rat skeletal muscle fructose-6-phosphate,2-kinase:fructose-2,6-bisphosphatase. Kitamura K, et al. **J Biol Chem** 1989 Jun 15;264(17):9799-806

Characterization and purification of membrane-associated phosphatidylinositol-4-phosphate kinase from human red blood cells. Ling LE, et al. **J Biol Chem** 1989 Mar 25; 264(9):5080-8

Myosin heavy chain kinase from developed Dictyostelium cells. Purification and characterization. Ravid S, et al. **J Biol Chem** 1989 Sep 5;264(25):15144-50

Adenosine-5'-phosphosulfate kinase from Escherichia coli K12. Purification, characterization, and identification of a phosphorylated enzyme intermediate. Satishchandran C, et al. **J Biol Chem** 1989 Sep 5;264(25):15012-21

Purification and characterization of membrane-bound phosphatidylinositol kinase from rat brain. Yamakawa A, et al. **J Biol Chem** 1988 Nov 25;263(33):17555-60

Improved methods for purification and assay of glycerol kinase from Escherichia coli. Kee Y, et al. **J Chromatogr** 1988 Jul 15;428(2):345-51

Purification and kinetics of mouse liver fructose 6-phosphate, 2-kinase. Li L, et al. **Sci Sin [B]** 1988 Nov;31(11):1307-14

[Isolation and various properties of nucleoside monophosphate kinases from Escherichia coli] Rikhter VA, et al. **Prikl Biokhim Mikrobiol** 1988 May-Jun;24(3):310-8 (Eng. Abstr.) **(Rus)**

[Preparation and properties of immobilized riboflavin kinase from Pichia guilliermondii] Kashchenko VE, et al. **Ukr Biokhim Zh** 1989 Jan-Feb;61(1):32-6 (Eng. Abstr.) **(Rus)**

METABOLISM

Adenylate kinase enzyme activity in cases of brain infarction. Bollensen E, et al. **Acta Neurol Scand** 1989 Jan;79(1):53-8

Exploitation of methylthioribose kinase in the development of antiprotozoal drugs. Fitchen JH, et al. **Adv Exp Med Biol** 1988;250:199-210

Diacylglycerol metabolism in isolated aortic smooth muscle cells. Severson DL, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):C11-7

Application of nonionic polyoxyethylene detergents in studies of phosphatidylinositol kinase. Ganong BR, et al. **Anal Biochem** 1989 May 15;179(1):66-71

Does glyceraldehyde enter pancreatic islet metabolism via both the triokinase and the glyceraldehyde phosphate dehydrogenase reactions? A study of these enzymes in islets. MacDonald MJ. **Arch Biochem Biophys** 1989 Apr; 270(1):15-22

Regulation of polyphosphoinositide synthesis in cardiac membranes. Quist E, et al. **Arch Biochem Biophys** 1989 May 15;271(1):21-32

CTP-dependent lipid kinases of yeast. Szkopińska A, et al. **Arch Biochem Biophys** 1988 Oct;266(1):124-31

Isozymes of fructose 6-phosphate,2-kinase:fructose-2,6-bisphosphatase in rat and bovine heart, liver, and skeletal muscle. Taniyama M, et al. **Biochem Biophys Res Commun** 1988 Dec 30; 157(3):949-54

8-azaguanosine-5'-monophosphate synthesis via nucleoside kinase in cultured Chinese hamster lung fibroblasts. Tozzi MG, et al. **Biochem Biophys Res Commun** 1989 Mar 15; 159(2):854-61

Synthesis and hydrolysis of ATP by the mitochondrial ATP synthase. Tuena Gómez-Puyou MT, et al. **Biochem Cell Biol** 1988 Jul;66(7):677-82 (54 ref.)

Polylysine and polyamine stimulation of the phosphatidylinositol kinases of amphibian oocyte membranes. Carrasco D, et al. **Biochem Int** 1988 Aug; 17(2):319-27

Modulation of the catalytic activity of pyridoxal kinase by metallothionein. Churchich JE, et al. **Biochem Int** 1988 Sep; 17(3):395-403

Aspartokinase III repression in a thialysine-resistant mutant of E. coli. Di Girolamo M, et al. **Biochem Int** 1988 Sep; 17(3):545-54

ADP effects on bleomycin-induced DNA repair synthesis and adenylate kinase activity in permeable mouse sarcoma cells. Seki S, et al. **Biochem Int** 1989 Jan;18(1):235-42

Cytosolic adenylate kinase catalyzes the synthesis of thiamin triphosphate from thiamin diphosphate. Shikata H, et al. **Biochem Int** 1989 May;18(5):933-41

Properties of the thiamin triphosphate-synthesizing activity catalyzed by adenylate kinase (isoenzyme 1). Shikata H, et al. **Biochem Int** 1989 May;18(5):943-9

Stimulation of hepatic inositol 1,4,5-trisphosphate kinase activity by Ca2+-dependent and -independent mechanisms. Biden TJ, et al. **Biochem J** 1988 Dec 15; 256(3):697-701

Phosphorylation of diacylglycerol kinase in vitro by protein kinase C. Kanoh H, et al. **Biochem J** 1989 Mar 1; 258(2):455-62

Mode of activation of bovine brain inositol 1,4,5-trisphosphate 3-kinase by calmodulin and calcium. Li G, et al. **Biochem J** 1989 Jun 15;260(3):771-5

Glucagon-induced changes in fructose 2,6-bisphosphate and 6-phosphofructo-2-kinase in cultured rat foetal hepatocytes. Martin-Sanz P, et al. **Biochem J** 1989 Feb 1;257(3):795-9

Changes in the activities of adenosine-metabolizing enzymes in six regions of the rat brain on chemical induction of hypothyroidism. Mazurkiewicz D, et al. **Biochem J** 1989 Jul 15;261(2):667-72

Activation of rat liver plasma-membrane diacylglycerol kinase by vasopressin and phenylephrine. Rider MH, et al. **Biochem J** 1988 Nov 1;255(3):923-8

Inhibition of orotidylate decarboxylase by 4(5H)-oxo-1-beta-D-ribofuranosylpyrazolo[3,4-d] pyrimidine-3-thiocarboxamide (APR-TC) in B lymphoblasts. Activation by adenosine kinase. Dee Nord L, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4697-705

Phosphatidylinositol kinase of bovine adrenal chromaffin granules. Modulation by hydrophilic and amphiphilic cations. Husebye ES, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4149-56

Thiol and amino analogues as alternate substrates for glycerokinase from Candida mycoderma. Knight WB, et al. **Biochemistry** 1989 Jul 11;28(14):5728-34

Coordination of manganous ion at the active site of pyruvate, phosphate dikinase: the complex of oxalate with the phosphorylated enzyme. Kofron JL, et al. **Biochemistry** 1988 Jun 28;27(13):4781-7

31P NMR studies of the structure of cation-nucleotide complexes bound to porcine muscle adenylate kinase. Ray BD, et al. **Biochemistry** 1988 Nov 15;27(23):8669-76

Binding interactions between yeast tRNA ligase and a precursor transfer ribonucleic acid containing two photoreactive uridine analogues. Tanner NK, et al. **Biochemistry** 1988 Nov 29;27(24):8852-61

Mechanism of adenylate kinase. Histidine-36 is not directly involved in catalysis, but protects cysteine-25 and stabilizes the tertiary structure. Tian GC, et al. **Biochemistry** 1988 Jul 26;27(15):5544-52

Further characterization of contact sites from mitochondria of different tissues: topology of peripheral kinases. Adams V, et al. **Biochim Biophys Acta** 1989 Jun 6;981(2):213-25

Activation of pyridoxal kinase by metallothionein. Churchich JE, et al. **Biochim Biophys Acta** 1989 Jul 6;996(3):181-6

Kinetic properties of phosphoribosyladenosine triphosphate synthetase. Inhibition by aggregation at high enzyme concentrations. Kryvi H, et al. **Biochim Biophys Acta** 1971 Jun 16;235(3):429-34

Evidence for a cholera-toxin-sensitive G-protein involved in the regulation of phosphatidylinositol 4-phosphate kinase of rat liver membranes. Urumow T, et al. **Biochim Biophys Acta** 1988 Nov 18;972(2):232-8

Proteolytic cleavage of pyridoxal kinase into two structural domains. Dominici P, et al. **Biochimie** 1989 Apr; 71(4):585-90

Vascular placental insufficiency in the rabbit. Changes in creatine kinase and adenylate kinase activities in fetal tissues. Harel S, et al. **Biol Neonate** 1988;54(2):116-20

Control of the fructose 6-phosphate/fructose 2,6-bisphosphate cycle by sn-glycerol 3-phosphate. Frenzel J, et al. **Biomed Biochim Acta** 1988;47(6):461-70

Effects of intraperitoneally applied D-galactosamine on uridine and cytidine plasma content and brain activity of uridine kinase in the rat. Staak S, et al. **Biomed Biochim Acta** 1989;48(4):325-31

Ring-opened 7-methylguanine nucleotides are resistant to nuclease P1 digestion and good substrates to polynucleotide kinase. Hemminki K. **Carcinogenesis** 1989 Sep;10(9):1761-3

Autophosphorylation of the PDGF receptor in the kinase insert region regulates interactions with cell proteins. Kazlauskas A, et al. **Cell** 1989 Sep 22;58(6):1121-33

Red cell membrane phosphatidylinositol kinase activity in hemolytic anemias and myeloproliferative diseases. Boivin P, et al. **Clin Chim Acta** 1989 Jun 30;182(2):165-72

Interactions between the middle T antigen of polyomavirus and host cell proteins. Courtneidge SA, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:153-60

Factors that regulate the activity of the phosphatidylinositol kinase present in oocyte membranes of Xenopus laevis. Carrasco D, et al. **Comp Biochem Physiol [B]** 1989; 92(3):487-91

Occurrence and characterization of fructose 6-phosphate, 2-kinase and fructose 2,6-bisphosphatase in Euglena gracilis. Enomoto T, et al. **Comp Biochem Physiol [B]** 1989; 92(3):477-80

Ca2+ dependence of inositol 1,4,5-trisphosphate 3-kinase activity in the cytosol fraction of pig coronary artery.

Yamaguchi K, et al. **Comp Biochem Physiol [C]** 1989; 92(1):163–6

The localization of PI and PIP kinase activities in the sea urchin egg and their modulation following fertilization. Oberdorf J, et al. **Dev Biol** 1989 Jan;131(1):236–42

Attenuation of anterior pituitary phosphoinositide phosphorylase activity by the D2 dopamine receptor. Jarvis WD, et al. **Endocrinology** 1988 Dec;123(6):2793–9

Acute stimulation of thyroidal NAD+ kinase, NADPH reoxidation, and peroxidase activities by physiological concentrations of thyroid stimulating hormone acting in vitro: a quantitative cytochemical study. Perrild H, et al. **Endocrinology** 1988 Nov;123(5):2499–505

Mevalonate kinase in lysates of cultured human fibroblasts and lymphoblasts: kinetic properties, assay conditions, carrier detection and measurement of residual activity in a patient with mevalonic aciduria. Gibson KM, et al. **Enzyme** 1989;41(1):47–55

Effect of low-iodine diet and propylthiouracil on glycolytic enzymes in brain areas of adult rats. Sabell I, et al. **Enzyme** 1989;41(2):68–74

Yeast adenylate kinase is active simultaneously in mitochondria and cytoplasm and is required for non-fermentative growth. Bandlow W, et al. **Eur J Biochem** 1988 Dec 15;178(2):451–7

Attenuation of phosphoinositidase activity and phosphatidylinositol bisphosphate level of bovine retinal capillary pericytes in high glucose. Li WY, et al. **Exp Eye Res** 1989 Jan;48(1):99–106

Ethanolamine base exchange enzymatic activities in spontaneous transformed glial cell lines. Effect of dibutyryl cyclic AMP treatment. el-Achkar P, et al. **FEBS Lett** 1988 Nov 7;239(2):276–80

Amino acid substitutions in mitochondrial ATP synthase subunit 9 of Saccharomyces cerevisiae leading to venturicidin or ossamycin resistance. Galanis M, et al. **FEBS Lett** 1989 Jun 5;249(2):333–6

Defect in phorbol acetate-induced translocation of diacylglycerol kinase in erbB-transformed fibroblast cells. Kato M, et al. **FEBS Lett** 1989 Apr 24;247(2):247–50

The detection of natural opal suppressor seryl-tRNA in Escherichia coli by the dot blot hybridization and its phosphorylation by a tRNA kinase. Mizutani T, et al. **FEBS Lett** 1989 Apr 24;247(2):345–8

Phage T4 polynucleotide kinase. Folk WR. **Gene Amplif Anal** 1981;2:299–311 (42 ref.)

A diphosphoinositide kinase in rat mast cell granules. Kurosawa M, et al. **J Allergy Clin Immunol** 1989 Jul; 84(1):118–28

Enzyme activities of FT and ST muscle fibers in heavy-resistance trained athletes. Tesch PA, et al. **J Appl Physiol** 1989 Jul;67(1):83–7

The thiM locus and its relation to phosphorylation of hydroxyethylthiazole in Escherichia coli. Mizote T, et al. **J Bacteriol** 1989 Jun;171(6):3228–32

Characterization of NADH kinase from Saccharomyces cerevisiae. Iwahashi Y, et al. **J Biochem (Tokyo)** 1989 Apr; 105(4):588–93

Increases in hepatic fructose-2,6-bisphosphate level and fructose-6-phosphate,2-kinase activity in rats with ventromedial lesions of the hypothalamus. Yamada Y, et al. **J Biochem (Tokyo)** 1988 Oct;104(4):576–9

Synaptic vesicle ceramide kinase. A calcium-stimulated lipid kinase that co-purifies with brain synaptic vesicles. Bajjalieh SM, et al. **J Biol Chem** 1989 Aug 25; 264(24):14354–60

Immunochemical and catalytic characteristics of adenosine kinase from Leishmania donovani. Bhaumik D, et al. **J Biol Chem** 1989 Mar 15;264(8):4356–61

Characterization of the Escherichia coli prsA1-encoded mutant phosphoribosylpyrophosphate synthetase identifies a divalent cation-nucleotide binding site. Bower SG, et al. **J Biol Chem** 1989 Jun 15;264(17):10287–91

8-Azido-2'-O-dansyl-ATP. A fluorescent photoaffinity reagent for ATP-binding proteins and its application to adenylate kinase. Chuan H, et al. **J Biol Chem** 1989 May 15;264(14):7981–8

Kinetic properties and inhibition of human T lymphoblast deoxycytidine kinase. Datta NS, et al. **J Biol Chem** 1989 Jun 5;264(16):9359–64

Affinity labeling of pyridoxal kinase with adenosine polyphosphopyridoxal. Dominici P, et al. **J Biol Chem** 1988 Oct 15;263(29):14712–6

Formation and metabolism of [3H]inositol phosphates in AR42J pancreatoma cells. Substance P-induced Ca2+ mobilization in the apparent absence of inositol 1,4,5-trisphosphate 3-kinase activity. Horstman DA, et al. **J Biol Chem** 1988 Oct 25;263(30):15297–303

Metabolic interconnection between the human malarial parasite Plasmodium falciparum and its host erythrocyte. Regulation of ATP levels by means of an adenylate translocator and adenylate kinase. Kanaani J, et al. **J Biol Chem** 1989 Feb 25;264(6):3194–9

Activation of phosphatidylinositol kinase and phosphatidylinositol-4-phosphate kinase by cAMP in Saccharomyces cerevisiae. Kato H, et al. **J Biol Chem** 1989 Feb 25;264(6):3116–21

Catalytic site of rat liver and bovine heart fructose-6-phosphate,2-kinase:fructose-2,6-bisphosphatase. Identification of fructose 6-phosphate binding site. Kitamura K, et al. **J Biol Chem** 1989 Apr 15;264(11):6344–8

Phorbol ester-induced translocation of diacylglycerol kinase from the cytosol to the membrane in Swiss 3T3 fibroblasts. Maroney AC, et al. **J Biol Chem** 1989 Feb 15; 264(5):2537–44

Conversion of 5-S-ethyl-5-thio-D-ribose to ethionine in Klebsiella pneumoniae. Basis for the selective toxicity of 5-S-ethyl-5-thio-D-ribose. Myers RW, et al. **J Biol Chem** 1989 Jun 25;264(18):10547–51

Catalytic nonessentiality of an active-site cysteinyl residue of phosphoribulokinase. Porter MA, et al. **J Biol Chem** 1988 Oct 15;263(29):14846–9

Structural and catalytic role of arginine 88 in Escherichia coli adenylate kinase as evidenced by chemical modification and site-directed mutagenesis. Reinstein J, et al. **J Biol Chem** 1989 May 15;264(14):8107–12

Sulfate-activating enzymes of Penicillium chrysogenum. The ATP sulfurylase.adenosine 5'-phosphosulfate complex does not serve as a substrate for adenosine 5'-phosphosulfate kinase. Renosto F, et al. **J Biol Chem** 1989 Jun 5; 264(16):9433–7

Adenylate kinase activity in ejaculated bovine sperm flagella [published erratum appears in J Biol Chem 1989 Jul 15;264(20):12113] Schoff PK, et al. **J Biol Chem** 1989 Apr 15;264(11):6086–91

Brain pyridoxal kinase: photoaffinity labeling of the substrate-binding site. Scholz G, et al. **J Biol Chem** 1989 Mar 15;264(8):4318–21

Activation of glutamate by gamma-glutamate kinase: formation of gamma-cis-cycloglutamyl phosphate, an analog of gamma-glutamyl phosphate. Seddon AP, et al. **J Biol Chem** 1989 Jul 5;264(19):11326–35

Regulation of brain phosphatidylinositol-4-phosphate kinase by GTP analogues. A potential role for guanine nucleotide regulatory proteins. Smith CD, et al. **J Biol Chem** 1989 Feb 25;264(6):3206–10

Signal transmission in exocrine cells is associated with rapid activity changes of acyltransferases and diacylglycerol kinase due to reversible protein phosphorylation. Söling HD, et al. **J Biol Chem** 1989 Jun 25;264(18):10643–8

Enzymatic analysis of isomeric trithymidylates containing ultraviolet light-induced cyclobutane pyrimidine dimers. II. Phosphorylation by phage T4 polynucleotide kinase. Weinfeld M, et al. **J Biol Chem** 1989 Apr 15; 264(11):6364–70

Translocation of diacylglycerol kinase from the cytosol to the membrane in phorbol ester-treated Swiss 3T3 fibroblasts. Maroney AC, et al. **J Cell Biochem** 1989 Jun; 40(2):165–72

High-performance liquid chromatographic assay for nicotinamide-adenine dinucleotide kinase. Pace M, et al. **J Chromatogr** 1989 Aug 4;476:487–90

Energy transport and cell polarity: relationship of phosphagen kinase activity to sperm function. Tombes RM, et al. **J Exp Zool** 1989 Jul;251(1):82–90

Increased phosphatidylinositol kinase activity in psoriatic epidermis. Pike MC, et al. **J Invest Dermatol** 1989 Jun; 92(6):791–7

Rat brain synaptosomal ATP:AMP-phosphotransferase activity. Nagy AK, et al. **J Neurochem** 1989 Oct; 53(4):1166–72

Effects of free fatty acids and acyl-coenzyme A on diacylglycerol kinase in rat brain. Kelleher JA, et al. **J Neurosci Res** 1989 May;23(1):87–94

The inositol lipids of Paramecium tetraurelia and preliminary characterizations of phosphoinositide kinase activity in the ciliary membrane. Suchard SJ, et al. **J Protozool** 1989 Mar-Apr;36(2):185–90

Bistability and control for ATP synthase and adenylate cyclase is obtained by the removal of substrate inhibition. Schiffmann Y. **Mol Cell Biochem** 1989 Mar 16;86(1):19–40 (102 ref.)

Phosphatidylinositol kinase activity associates with viral p60src protein. Fukui Y, et al. **Mol Cell Biol** 1989 Apr; 9(4):1651–8

Elevated phosphocholine concentration in ras-transformed NIH 3T3 cells arises from increased choline kinase activity, not from phosphatidylcholine breakdown. Macara IG. **Mol Cell Biol** 1989 Jan;9(1):325–8

Regulation of adenosine kinase by adenosine analogs. Lin BB, et al. **Mol Pharmacol** 1988 Oct;34(4):501–5

Evidence for the presence of diacylglycerol kinase in rat brain myelin. Kahn DW, et al. **Neurochem Res** 1989 Jun; 14(6):541–6

Phosphatidylinositol kinase type I activity associates with various oncogene products. Fukui Y, et al. **Oncogene Res** 1989;4(4):283–92

Adenylate kinase bound to the chromatophore membranes of Rhodobactor spheroides G1C. Koyama Y, et al. **Photochem Photobiol** 1989 Apr;49(4):501–8

Role of phosphatidylinositol kinase in PDGF receptor signal transduction. Coughlin SR, et al. **Science** 1989 Mar 3; 243(4895):1191–4

Imbalance of purine nucleotides in alanosine-resistant baby hamster kidney cells. Pang JC, et al. **Somat Cell Mol Genet** 1989 Mar;15(2):101–11

Low levels of herpes simplex virus thymidine- thymidylate kinase are not limiting for sensitivity to certain antiviral drugs or for latency in a mouse model. Coen DM, et al. **Virology** 1989 Feb;168(2):221–31

Nucleotide phosphotransferase, nucleotide kinase and inorganic pyrophosphatase activities of killer virions of yeast. Georgopoulos DE, et al. **Yeast** 1987 Jun;3(2):117–29

[Effect of qifen drugs on energy charge in rat liver cells] Zhang JJ, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Aug; 8(8):477–8, 454 (Eng. Abstr.) **(Chi)**

[Intracellular enzymes of glucose metabolism in obesity and diabetes] Bonora E, et al. **Minerva Endocrinol** 1988 Oct-Dec;13(4):275–8 (Eng. Abstr.) **(Ita)**

[Enzymes involved in the metabolism of flavin nucleotides in Streptomyces olivaceus] Bilinskaia IS, et al. **Mikrobiologiia** 1989 Jan-Feb;58(1):5–8 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Effects of H-7 are not exclusively mediated through protein kinase C or the cyclic nucleotide-dependent kinases. Love JT Jr, et al. **Biochem Biophys Res Commun** 1989 Jul 14; 162(1):138–43

The cdc2 kinase is a nuclear protein that is essential for mitosis in mammalian cells. Riabowol K, et al. **Cell** 1989 May 5;57(3):393–401

[Adenylate kinase--structure and functions] Hamada M, et al. **Tanpakushitsu Kakusan Koso** 1988 Aug;33(10):1708–27 (108 ref.) **(Jpn)**

[Various debated questions of the functional designation of phosphagene kinase] Lyzlova SN, et al. **Zh Evol Biokhim Fiziol** 1989 Mar-Apr;25(2):182–8 (36 ref.) **(Rus)**

PHOSPHOTUNGSTIC ACID

Ethidium bromide- and propidium iodide-PTA staining of nucleic acids at the electron microscopic level. Biggiogera M, et al. **J Histochem Cytochem** 1989 Jul;37(7):1161–6

Effects of certain electron-microscope stains on phospholipid monolayers [letter] Gorwyn D, et al. **Ultramicroscopy** 1989 Jan-Feb;27(1):113–4

A postembedding staining method of intensifying alcian blue reactions of acidic glycoconjugates with phosphotungstic acid in electron microscopy. Hirabayashi Y, et al. **Z Mikrosk Anat Forsch** 1989;103(1):90–101

PHARMACOLOGY

Phosphotungstate shows a heparin-like anticoagulant effect but inhibits heparin. Tajima Y, et al. **Thromb Res** 1989 Aug 1;55(3):329–39

PHOSVEL see under **INSECTICIDES, ORGANOTHIOPHOSPHATE**

PHOSVITIN see under **EGG PROTEINS**

PHOTIC STIMULATION

Primary generalized epilepsy with photosensitivity and seizures on awakening. Report of a family. Natale S, et al. **Acta Neurol (Napoli)** 1988 Aug-Oct;10(4-5):262–8

Effect of blindfolding one eye on vestibular compensation in guinea pigs. Ishikawa K, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;447:55–60

Abnormal visual adaptation to flicker in multiple sclerosis. Raymond JE. **Can J Neurol Sci** 1988 Aug;15(3):286–91

Ictus emeticus induced by photic stimulation. Jacome DE, et al. **Clin Electroencephalogr** 1988 Oct;19(4):214–8

Effects of localized, chronic GABA infusions into different cortical areas of the photosensitive baboon, Papio papio. Brailowsky S, et al. **Electroencephalogr Clin Neurophysiol** 1989 Feb; 72(2):147–56

Light-induced losses and dark recovery rates of guanosine 3',5'-cyclic monophosphate in rod outer segments of intact amphibian photoreceptors. Cohen AI, et al. **J Gen Physiol** 1988 Dec;92(6):731–46

Duration of fertility of turkeys inseminated at different times after the onset of photostimulation. Bakst MR. **J Reprod Fertil** 1988 Nov;84(2):531–7

Acute effects of sodium valproate on epileptic photosensitivity in the lateral geniculate-kindled cat. Wada Y, et al. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):351–6

Involuntary grasping and groping responses to space-related visual stimuli. Magnani G, et al. **Mov Disord** 1987;2(1):9–23

The EEG response to diffuse and patterned photic stimulation during acute untreated alcohol withdrawal. Fisch BJ, et al. **Neurology** 1989 Mar;39(3):434–6

'Photo-degeneration' of neurones after extracellular dye application. Picaud S, et al. **Neurosci Lett** 1988 Dec 19; 95(1-3):24–30

One millisecond of light suffices to suppress nighttime pineal melatonin synthesis in rats. Vollrath L, et al. **Neurosci Lett** 1989 Apr 10;98(3):297–8

Complex formation between metronidazole and sodium urate: effect on photodegradation of metronidazole. Habib MJ, et al. **Pharm Res** 1989 Jan;6(1):58–61

The effect of isoluminant and isochromatic stimuli on latency and amplitude of saccades. van Asten WN, et al. **Vision Res** 1988;28(7):827–40

[Value of the visual stimulation test (VST) as initial paraclinical test in the study of erectile impotence. Classification of psychogenic impotence using computerized rigidimetry. The value of thymoxamine] Schouman M, et al. **Acta Urol Belg** 1989;57(1):127–36 (Eng. Abstr.) **(Fre)**

[What do we know about the molecular mechanism of visual excitation?] Stieve H. **Naturwissenschaften** 1988 Jun;

75(6):288–96 (Eng. Abstr.) (Ger)
[Is vision important for the maturation of ocular movement?] Bon L, et al. **Boll Soc Ital Biol Sper** 1988 Dec;64(12):1151–7 (Eng. Abstr.) (Ita)
[Selectivity of neurons in squirrel striatal cortex (frontal visual field) to contrast polarity and direction of movement of visual stimuli] Polkoshnikov EV, et al. **Dokl Akad Nauk SSSR** 1989 Jan–Feb;304(1):238–41 (Rus)
[Resonance phenomena in EEG during photostimulation with variable frequency bursts. I. Analysis of the effects of photostimulation] Bondar' AT, et al. **Fiziol Cheloveka** 1989 Jan–Feb;15(1):3–12 (Rus)
[Electroretinograms of the dogfish eye during local photostimulation] Bulychev AA, et al. **Neirofiziologiia** 1988;20(5):709–11 (Eng. Abstr.) (Rus)
[Various responses of neurons of the caudate nucleus in alert cats to visual stimulation] Zelenskaia VS, et al. **Neirofiziologiia** 1989;21(3):372–8 (Eng. Abstr.) (Rus)
[Topography and reactivity of the visual evoked potential] Etcheberrigaray R, et al. **Arq Neuropsiquiatr** 1988 Sep; 46(3):258–63 (Eng. Abstr.) (Spa)

ADVERSE EFFECTS

Panic attacks triggered by photic stimulation [letter] Rosenblat H. **Am J Psychiatry** 1989 Jun;146(6):801–2
Visual display lowers detection threshold of angular, but not linear, whole-body motion stimuli. Benson AJ, et al. **Aviat Space Environ Med** 1989 Jul;60(7):629–33
High blood pressure induced by audiovisual stimulation in young rats: effect of antihypertensive agents. Florentino A, et al. **Clin Exp Hypertens [A]** 1988;10(5):873–85

INSTRUMENTATION

Pattern reversal electroretinograms: TV or projector system? Yoshii M. **Fortschr Ophthalmol** 1988;85(3):304–7
[Improved objective visual assessment with visual evoked cortical potentials by rapid pattern stimuli sequences of different spatial frequency] Hajek A, et al. **Fortschr Ophthalmol** 1988;85(5):550–4 (Eng. Abstr.) (Ger)

METHODS

Quantitative photorefraction using an off-center flash source. Bobier WR. **Am J Optom Physiol Opt** 1988 Dec; 65(12):962–71
Noncongruent stimuli and tonic adaptation. Kran BS, et al. **Am J Optom Physiol Opt** 1988 Sep;65(9):703–9
Simple reaction times to lateralized light flashes. Varieties of interhemispheric communication routes. Clarke JM, et al. **Brain** 1989 Aug;112 (Pt 4):849–70
Check-size specific changes of pattern electroretinogram in patients with early open-angle glaucoma. Bach M, et al. **Doc Ophthalmol** 1988 Jul;69(3):315–22
Stimulus configuration and the format of the normal sensitivity gradient. Flanagan JG, et al. **Doc Ophthalmol** 1988 Aug;69(4):371–83
Pattern ERG: effects of reference electrode site, stimulus mode and check size. Tan CB, et al. **Electroencephalogr Clin Neurophysiol** 1989 Jan–Feb; 74(1):11–8
The treatment of migraine with variable frequency photo-stimulation. Anderson DJ. **Headache** 1989 Mar; 29(3):154–5
Microcomputer programs for video stimulation of eye movements. Huygen PL, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(2):130–4
[Optokinetic nystagmus and stimulated visual field. Neuro-otological significance] Samain P, et al. **Acta Otorhinolaryngol Belg** 1988;42(4):483–93 (Eng. Abstr.) (Fre)
[Visual evoked potentials as affected by different modes of stimulation] Zeitlhofer J, et al. **EEG EMG** 1988 Sep; 19(3):128–32 (Eng. Abstr.) (Ger)
[The effect of various stimulation conditions on the P2 latency of the visual evoked potential] Cammann R, et al. **Psychiatr Neurol Med Psychol Beih** 1988;39:66–9 (25 ref.) (Ger)

VETERINARY

Recording of visual-evoked potentials in dogs with scalp electrodes. Bichsel P, et al. **J Vet Intern Med** 1988 Jul–Sep; 2(3):145–9

PHOTOALLERGY see **PHOTOSENSITIVITY DISORDERS**

PHOTOBACTERIUM

DRUG EFFECTS

Covalent reaction of cerulenin at the active site of acyl-CoA reductase of Photobacterium phosphoreum. Wall L, et al. **Biochem Cell Biol** 1989 Feb–Mar;67(2–3):163–7
Evaluation of ATP photometer for toxicity testing using Microtox luminescent bacterial reagent. Awong J, et al. **Bull Environ Contam Toxicol** 1989 Jul;43(1):118–22
Detection of genotoxicity of metallic compounds by the bacterial bioluminescence test. Ulitzur S, et al. **J Biolumin Chemilumin** 1988 Apr–Jun;2(2):95–9

ENZYMOLOGY

Interaction between luciferases from various species of bioluminescent bacteria and the yellow fluorescent protein of Vibrio fischeri strain Y-1. Daubner SC, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1191–8

GENETICS

Highly repetitive tRNA(Pro)-tRNA(His) gene cluster from Photobacterium phosphoreum. Giroux SC, et al. **J Bacteriol** 1988 Dec;170(12):5601–6
Cloning and expression of the Photobacterium phosphoreum luminescence system demonstrates a unique lux gene organization. Mancini JA, et al. **J Biol Chem** 1988 Oct 5; 263(28):14308–14
The transcription of bacterial luminescence is regulated by sigma 32. Ulitzur S, et al. **J Biolumin Chemilumin** 1988 Apr–Jun;2(2):81–93
Nucleotide sequence of part of Photobacterium leiognathi lux region. Illarionov BA, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9855
Tandemly repeated tRNA pseudogenes in photobacterium. Giroux S, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):9101–5
[Cloning and insertion mutagenesis of DNA fragment coding for the luminescent system of Photobacterium leiognathi] Ptitsyn LR, et al. **Mol Gen Mikrobiol Virusol** 1988 Oct; (10):17–9 (Eng. Abstr.) (Rus)

ISOLATION & PURIFICATION

Response of enteric luminous bacteria to environmental conditions in the gut of the fish. Ramesh A, et al. **J Appl Bacteriol** 1989 Jun;66(6):529–33

PHYSIOLOGY

Long-term preservation of active luminous bacteria by lyophilization. Janda I, et al. **J Biolumin Chemilumin** 1989 Jan–Mar;3(1):27–9

PHOTOCHEMISTRY

Properties and uses of photoreactive caged compounds. McCray JA, et al. **Annu Rev Biophys Biophys Chem** 1989; 18:239–70 (158 ref.)
Photodecomposition of o-chloroaniline in aqueous solution with low pressure mercury lamp. Ishikawa S, et al. **Bull Environ Contam Toxicol** 1989 Jan;42(1):65–70
Singlet oxygen production by biological systems. Kanofsky JR. **Chem Biol Interact** 1989;70(1–2):1–28 (197 ref.)
Khellin, a naturally occurring furochromone, used for the photochemotherapy of skin diseases: mechanism of action. Vedaldi D, et al. **Farmaco [Sci]** 1988 Apr;43(4):333–46
Problems associated with distinguishing between singlet oxygen and electron transfer photooxygenation reactions. Davidson RS, et al. **Free Radic Res Commun** 1987; 2(4–6):313–20 (40 ref.)
Mechanism of phototherapy--newer concepts. Govil YC, et al. **Indian Pediatr** 1988 Nov;25(11):1078–84 (30 ref.)
Ubiquitin-phytochrome conjugates. Pool dynamics during in vivo phytochrome degradation. Jabben M, et al. **J Biol Chem** 1989 Mar 25;264(9):4998–5005
Selected terms and symbols in photochemistry. IUPAC Commission of Photochemistry. Braslavsky SE. **J Photochem Photobiol [B]** 1987 Dec;1(2):261–70
A new class of psoralen photoadducts to DNA components: isolation and characterization of 8-MOP adducts to the osidic moiety of 2'-deoxyadenosine. Cadet J, et al. **J Photochem Photobiol -B-** 1988 Nov;2(3):321–39
The excited states of covalently linked dimeric porphyrins. I: The excited singlet states. Chow YF, et al. **J Photochem Photobiol [B]** 1988 Sep;2(2):253–63
Photoexchange products of cytosine and 5-methylcytosine with N alpha-acetyl-L-lysine and L-lysine. Dorwin EL, et al. **J Photochem Photobiol [B]** 1988 Sep;2(2):265–78
Photoexcitation of the methionine-iron bond in iron(III) cytochrome c: bimolecular reaction with NADH. Ferri A, et al. **J Photochem Photobiol -B-** 1988 Nov;2(3):341–53
6,4,4'-trimethylangelicin photoadduct formation in DNA: production and characterization of a specific monoclonal antibody. Miolo G, et al. **J Photochem Photobiol [B]** 1989 Feb;3(1):101–12
Light-induced transformations of hematoporphyrin diacetate and hematoporphyrin. Rotomskienė J, et al. **J Photochem Photobiol -B-** 1988 Nov;2(3):373–9
Time-resolved fluorescence in photobiology. Schneckenburger H, et al. **J Photochem Photobiol -B-** 1988 Jul;2(1):1–19 (64 ref.)
Light dosimetry: status and prospects. Star WM, et al. **J Photochem Photobiol [B]** 1987 Dec;1(2):149–67 (45 ref.)
Photodynamic assay of light distributions in tissue phantoms. Mason LW, et al. **Lasers Surg Med** 1988;8(5):521–6
Monoadduct forming photochemical reagents for labeling nucleic acids for hybridization. Albarella JP, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4293–308
Design, implementation and pitfalls of photoaffinity labelling experiments in in vitro preparations. General principles. Guillory RJ. **Pharmacol Ther** 1989;41(1–2):1–25 (73 ref.)
17th annual meeting of the American Society for Photobiology. Abstracts of papers. Boston, Massachusetts, 2–6 July 1989. **Photochem Photobiol** 1989 Apr;49 Suppl:1S–123S
Photochemistry and photobiology without light. Cilento G, et al. **Photochem Photobiol** 1988 Sep;48(3):361–8 (64 ref.)
Photointeraction of benzophenone triplet with lysozyme. Encinas MV, et al. **Photochem Photobiol** 1989 May; 49(5):557–63
Photoinduced electron transfer across lipid bilayers containing magnesium octaethylporphyrin. Ilani A, et al. **Photochem Photobiol** 1989 May;49(5):673–9
Photochemically induced binding of Rh(phen)2Cl2+ to DNA. Mahnken RE, et al. **Photochem Photobiol** 1989 Apr; 49(4):519–22
Electron-transfer organic and bioorganic photochemistry. Pac C, et al. **Photochem Photobiol** 1988 Dec;48(6):767–85 (239 ref.)
Photo-CIDNP of the amino acids. Stob S, et al. **Photochem Photobiol** 1989 May;49(5):565–77
Acrylamide quenching of tryptophan photochemistry and photophysics. Tallmadge DH, et al. **Photochem Photobiol** 1989 Apr;49(4):381–6
A study of some polypyridylruthenium(II) complexes as DNA binders and photocleavage reagents. Tossi AB, et al. **Photochem Photobiol** 1989 May;49(5):545–56
Photosynthetic antenna proteins: 100 ps before photochemistry starts. Hunter CN, et al. **Trends Biochem Sci** 1989 Feb;14(2):72–6 (32 ref.)
Fluorescence measurement and photochemical manipulation of cytosolic free calcium. Tsien RY. **Trends Neurosci** 1988 Oct;11(10):419–24 (29 ref.)
[The use of triplet-sensitized photochromism phenomenon for the study of dynamic interaction of membrane proteins] Mekler VM, et al. **Biofizika** 1988 Jul–Aug;33(4):720–2 (Eng. Abstr.) (Rus)

INSTRUMENTATION

Using caged neurotransmitters. Marque JJ. **Nature** 1989 Feb 9;337(6207):583–4

PHOTOCHEMOTHERAPY

Lasersurgery and photodynamic therapy. Löfgren L. **Acta Otolaryngol Suppl (Stockh)** 1988;449:51–2
Photodynamic therapy improves Kaposi's sarcoma in AIDS patients. Schweitzer VG. **Am Fam Physician** 1988 Nov; 38(5):260
Bronchoscopic phototherapy at comparable dose rates: early results. Pass HI, et al. **Ann Thorac Surg** 1989 May; 47(5):693–9
Photodynamic therapy with haematoporphyrin derivative on mice with solid Ehrlich carcinomas. König K, et al. **Arch Geschwulstforsch** 1989;59(1):1–6
Photodynamic therapy for experimental intraocular melanoma using chloroaluminum sulfonated phthalocyanine. Panagopoulos JA, et al. **Arch Ophthalmol** 1989 Jun;107(6):886–90
Biodistribution of indium 111-labeled dihematoporphyrin ether in papillomas and body tissues. Relevance to photodynamic therapy. Shikowitz MJ, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jul;115(7):845–7
Photodynamic therapy for esophageal tumors. McCaughan JS Jr, et al. **Arch Surg** 1989 Jan;124(1):74–80
Photodynamic therapy for cutaneous and subcutaneous malignant neoplasms. McCaughan JS Jr, et al. **Arch Surg** 1989 Feb;124(2):211–6
Enhancement of transbilayer mobility of a membrane lipid probe accompanies formation of membrane leaks during photodynamic treatment of erythrocytes. Deuticke B, et al. **Biochim Biophys Acta** 1989 Jun 26;982(1):53–61
Influence of hematoporphyrin derivative concentration, incubation time, temperature during incubation and laser dose fractionation on photosensitivity of normal hemopoietic progenitors or leukemic cells. Foultier MT, et al. **Biochimie** 1989 Jul;71(7):819–25
Photodynamic therapy--achievements and prospects. Ash D, et al. **Br J Cancer** 1989 Aug;60(2):151–2 (8 ref.)
Modification by vasoactive drugs of tumour destruction by photodynamic therapy with haematoporphyrin derivative. Cowled PA, et al. **Br J Cancer** 1989 Jun;59(6):904–9
Relationship between changes in antigen expression and protein synthesis in human melanoma cells after hyperthermia and photodynamic treatment. Davies CL, et al. **Br J Cancer** 1988 Sep;58(3):306–13
In vivo magnetic resonance imaging of the effects of photodynamic therapy. Dodd NJ, et al. **Br J Cancer** 1989 Aug;60(2):164–7
Therapeutic ratio of photodynamic therapy in the treatment of superficial tumours of skin and subcutaneous tissues in man. Gilson D, et al. **Br J Cancer** 1988 Nov;58(5):665–7
Specific targeting and toxicity of sulphonated aluminium phthalocyanine photosensitised liposomes directed to cells by monoclonal antibody in vitro. Morgan J, et al. **Br J Cancer** 1989 Mar;59(3):366–70
Size-dependent resistance of human tumour spheroids to photodynamic treatment. West CM. **Br J Cancer** 1989 Apr; 59(4):510–4
Photodynamic therapy effect in an intraocular retinoblastoma-like tumour assessed by an in vivo to in vitro colony forming assay. Winther J. **Br J Cancer** 1989 Jun;59(6):869–72
Evaluation of sulfonated aluminum phthalocyanines for use in photochemotherapy. Cellular uptake studies [published erratum appears in Cancer Lett 1989 Apr;45(1):81] Berg K, et al. **Cancer Lett** 1989 Jan;44(1):7–15
Effect of tumour location on selective uptake and retention

of phthalocyanines. Chan WS, et al. **Cancer Lett** 1989 Jan; 44(1):73–7

Tetra–n–propylporphycene as a tumour localizer: pharmacokinetic and phototherapeutic studies in mice. Guardiano M, et al. **Cancer Lett** 1989 Jan;44(1):1–6

Photodynamic effect in an experimental bladder tumor treated with intratumor injection of hematoporphyrin derivative. Lin CW, et al. **Cancer Res** 1988 Nov 1; 48(21):6115–20

In vitro photodynamic therapy of human lung cancer: investigation of dose–rate effects. Matthews W, et al. **Cancer Res** 1989 Apr 1;49(7):1718–21

Syntheses and photosensitizing activity of porphyrins joined with ester linkages. Pandey RK, et al. **Cancer Res** 1989 Apr 15;49(8):2042–7

Rhodamine dyes as potential agents for photochemotherapy of cancer in human bladder carcinoma cells. Shea CR, et al. **Cancer Res** 1989 Jul 15;49(14):3961–5

Role of lipid peroxidation in hematoporphyrin derivative–sensitized photokilling of tumor cells: protective effects of glutathione peroxidase. Thomas JP, et al. **Cancer Res** 1989 Apr 1;49(7):1682–6

Phototoxicity mechanism of a kryptocyanine dye in human red cell membranes and isolated murine mitochondria. Valdes–Aguilera O, et al. **Cancer Res** 1988 Dec 1; 48(23):6794–8

Phototherapy and photochemotherapy in dermatologic diseases. Rajatanavin N, et al. **Compr Ther** 1988 Oct; 14(10):11–8 (19 ref.)

Novel technology in microsurgery. Parel JM. **Dev Ophthalmol** 1989;18:1–6 (22 ref.)

Primate cardiac allo–and xenotransplantation: modulation of the immune response with photochemotherapy. Pepino P, et al. **Eur Surg Res** 1989;21(2):105–13

Synthesis and photobiological activity of new N,N–disubstituted 4–amino–3–chloroangelicins. Mosti L, et al. **Farmaco [Sci]** 1988 Oct;43(10):775–92

Some photochemical and photobiological properties of 8,8–desmethylxanthyletine (homopsoralen), a potential photochemotherapeutic agent. Vedaldi D, et al. **Farmaco [Sci]** 1988 May;43(5):395–407

Photodynamic therapy of rabbit endometrial transplants: a model for treatment of endometriosis. Manyak MJ, et al. **Fertil Steril** 1989 Jul;52(1):140–5

Photodynamic therapy of human choriocarcinoma transplanted to the hamster cheek pouch. II. Intra–lesional photosensitization. Brand E, et al. **Gynecol Oncol** 1989 Sep; 34(3):289–93

Photodynamic therapy in gynecologic malignancies. Lele SB, et al. **Gynecol Oncol** 1989 Sep;34(3):350–2

Photodynamic therapy for colorectal disease. Barr H, et al. **Int J Color Dis** 1989;4(1):15–9 (25 ref.)

Commentary: what role do lasers play in the management of colorectal disease. Bown SG. **Int J Color Dis** 1989; 4(1):26–9

Laser therapy in the management of benign and malignant tumours in the colon and rectum. Krasner N. **Int J Color Dis** 1989;4(1):2–5

Cell survival characteristics of a human colon adenocarcinoma cell line after photodynamic treatment: a comparison of Photofrin II and TPPS. West CM, et al. **Int J Radiat Biol** 1988 Oct;54(4):621–34

Extracorporeal photochemotherapy: a theoretic consideration as a treatment modality for severe erythrodermic and pustular psoriasis [letter] Cohen PR, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 1):326

Effect of photofrin II and light energy on retinoblastoma–like cells in vitro. Dose–response relationships, effect of light dose rate and recovery ratio. Winther J. **J Cancer Res Clin Oncol** 1989;115(1):73–8

Comparison of the relative therapeutic efficacy of 7–methyl pyridopsoralen and 8–methoxypsoralen in photochemotherapy in psoriasis treatment. Takashima A, et al. **J Dermatol (Tokyo)** 1988 Jun;15(3):195–201

Albumin microspheres as delivery systems for photodynamic drugs: physico–chemical studies and their implications for in vivo situations. Margalit R, et al. **J Microencapsul** 1985 Jul–Sep;2(3):183–96

Photodynamic therapy—lots of questions but presently few answers [editorial] Glatstein E. **J Natl Cancer Inst** 1988 Dec 21;80(20):1584–5

Mechanism of tumor destruction following photodynamic therapy with hematoporphyrin derivative, chlorin, and phthalocyanine. Nelson JS, et al. **J Natl Cancer Inst** 1988 Dec 21;80(20):1599–605

Recovery of Chinese hamster cells following photosensitization by zinc tetrahydroxyphthalocyanine. Ben–Hur E, et al. **J Photochem Photobiol [B]** 1988 Sep; 2(2):243–52

Photodynamic tumour therapy and cancer multistep therapy. Berg H. **J Photochem Photobiol –B–** 1988 Nov;2(3):404–6

Effect of hypocrellin A sensitization on the lateral mobility of cell membrane proteins. Cheng LS, et al. **J Photochem Photobiol –B–** 1988 Nov;2(3):395–8

What makes a good photosensitizer for photodynamic therapy? [news] Gomer CJ. **J Photochem Photobiol –B–** 1988 Mar;1(3):376–8

The accumulation of porphyrins in atheroma: potential for diagnosis and treatment? Michaels JA. **J Photochem Photobiol –B–** 1988 Jul;2(1):134–7

Intracellular distribution of photosensitizing porphyrins measured by video–enhanced fluorescence microscopy. Schneckenburger H, et al. **J Photochem Photobiol –B–** 1988 Nov;2(3):355–63

Influence of medium polarity on the photosensitizing properties of hematoporphyrin and hematoporphyrin derivative (Photofrin II). Shopova M, et al. **J Photochem Photobiol –B–** 1988 Nov;2(3):365–71

Homogeneous light application and monitoring of the applied power density during PDT. Sroka R, et al. **J Photochem Photobiol [B]** 1989 Jun;3(3):456–8

Light dosimetry: status and prospects. Star WM, et al. **J Photochem Photobiol [B]** 1987 Dec;1(2):149–67 (45 ref.)

Radiolabelled photosensitizers for tumour imaging and photodynamic therapy. Wilson BC, et al. **J Photochem Photobiol [B]** 1989 Jun;3(3):459–63

Mechanisms of tumor necrosis induced by photodynamic therapy. Zhou CN. **J Photochem Photobiol [B]** 1989 Jun; 3(3):299–318 (148 ref.)

Colonic mucosectomy using laser photodynamic therapy. Fisher DG, et al. **J Surg Res** 1989 Jun;46(6):579–83

In vitro photodynamic therapy of human lung cancer. Matthews W, et al. **J Surg Res** 1989 Sep;47(3):276–81

Synergistic enhancement of the efficacy of the bioreductively activated alkylating agent RSU–1164 in the treatment of prostatic cancer by photodynamic therapy. Henry JM, et al. **J Urol** 1989 Jul;142(1):165–70

The response of the rat urinary bladder microcirculation to photodynamic therapy. Reed MW, et al. **J Urol** 1989 Sep; 142(3):865–8

Photodynamic therapy. **Lancet** 1989 Jul 8;2(8654):81–2 (18 ref.)

Making light work of Bowen's disease [editorial] **Lancet** 1989 Jan 7;1(8628):24–5

Combined effects of hematoporphyrin derivative phototherapy and adriamycin in a murine tumor model. Edell ES, et al. **Lasers Surg Med** 1988;8(4):413–7

In vitro photosensitization I. Cellular uptake and subcellular localization of mono–L–aspartyl chlorin e6, chloro–aluminum sulfonated phthalocyanine, and photofrin II. Roberts WG, et al. **Lasers Surg Med** 1989;9(2):90–101

In vitro photosensitization II. An electron microscopy study of cellular destruction with mono–L–aspartyl chlorin e6 and photofrin II. Roberts WG, et al. **Lasers Surg Med** 1989; 9(2):102–8

Dynamic aspects of rhodamine dye photosensitization in vitro with an argon–ion laser. Shea CR, et al. **Lasers Surg Med** 1989;9(2):83–9

Spatial light distribution in tumors: phantom measurements. Lenz P. **Med Phys** 1989 May–Jun;16(3):326–32

Kinetics of herpes simplex virus photoinhibition by haematoporphyrin in both diploid and heteroploid cells. Pompei R, et al. **Microbios** 1989;58(235):101–11

Photodynamic therapy for tumors of the gastrointestinal tract. Zera RT. **Minn Med** 1988 Oct;71(10):599–601

Photodynamic therapy for bladder cancer: ethics of a collaborative trial in China [letter] Glass AT. **N Engl J Med** 1988 Oct 20;319(16):1096–7

Photodynamic therapy of brain tumors [letter] Taxdal DR. **Neurosurgery** 1989 Mar;24(3):474

Induction of conjunctival transdifferentiation on vascularized corneas by photothrombotic occlusion of corneal neovascularization. Huang AJ, et al. **Ophthalmology** 1988 Feb;95(2):228–35

In vitro photosensitization of human head and neck squamous cancer cells by dihematoporphyrin–ether. Sprik SA, et al. **Otolaryngol Head Neck Surg** 1988 Jul;99(1):28–37

Evaluation of sulfonated aluminum phthalocyanines for use in photochemotherapy. A study on the relative efficiencies of photoinactivation. Berg K, et al. **Photochem Photobiol** 1989 May;49(5):587–94

Time–gated fluorescence spectroscopy of the tumor localizing fraction of HpD in the presence of cationic surfactant. Cubeddu R, et al. **Photochem Photobiol** 1989 Aug;50(2):157–63

Picosecond fluorescence of RJ230AC mammary carcinoma mitochondria after treatment with hematoporphyrin derivative and Photofrin II in vivo. Hanzlik CA, et al. **Photochem Photobiol** 1989 Jul;50(1):45–53

The late phase of hematoporphyrin derivative–induced phototoxicity in mice: release of histamine and histologic changes. He D, et al. **Photochem Photobiol** 1989 Jul; 50(1):91–5

Oxygen limitation of direct tumor cell kill during photodynamic treatment of a murine tumor model. Henderson BW, et al. **Photochem Photobiol** 1989 Mar; 49(3):299–304

In vitro photosensitization with a benzoporphyrin derivative. Kessel D. **Photochem Photobiol** 1989 May;49(5):579–82

Determinants of photosensitization by mono–L–aspartyl chlorin e6. Kessel D. **Photochem Photobiol** 1989 Apr; 49(4):447–52

Effect of photodynamic therapy on anti–tumor immune defenses: comparison of the photosensitizers hematoporphyrin derivative and chloro–aluminum sulfonated phthalocyanine. Marshall JF, et al. **Photochem Photobiol** 1989 May;49(5):627–32

Urocanic acid analogues and the suppression of the delayed type hypersensitivity response to Herpes simplex virus. Norval M, et al. **Photochem Photobiol** 1989 May; 49(5):633–9

Synthesis and photosensitizing activity of a di–porphyrin ether. Pandey RK, et al. **Photochem Photobiol** 1988 Jun; 47(6):769–77

DNA lesions and DNA degradation in mouse lymphoma L5178Y cells after photodynamic treatment sensitized by chloroaluminum phthalocyanine. Ramakrishnan N, et al. **Photochem Photobiol** 1989 Sep;50(3):373–8

The microvascular effects of photodynamic therapy: evidence for a possible role of cyclooxygenase products. Reed MW, et al. **Photochem Photobiol** 1989 Sep; 50(3):419–23

Photosensitization tissue model. Schifano MJ, et al. **Photochem Photobiol** 1989 Apr;49(4):401–5

Photodynamic therapy induced ultrastructural alterations in microvasculature of the rat cremaster muscle. Tseng MT, et al. **Photochem Photobiol** 1988 Nov;48(5):675–81

An ultrastructural comparative evaluation of tumors photosensitized by porphyrins administered in aqueous solution, bound to liposomes or to lipoproteins. Zhou CN, et al. **Photochem Photobiol** 1988 Oct;48(4):487–92

Photodynamic therapy for multiple skin cancers. Pennington DG, et al. **Plast Reconstr Surg** 1988 Dec;82(6):1067–71

Laser–induced selective cytotoxicity using monoclonal antibody–chromophore conjugates. Hasan T, et al. **Prog Clin Biol Res** 1989;288:471–7

Photodynamic therapy Tis and T1 transitional carcinoma of the bladder. Javadpour N. **Prog Clin Biol Res** 1989; 303:471–8

Photodynamic therapy of malignant tumors. McCaughan JS Jr. **Prog Clin Biol Res** 1988;278:163–9

The effect of bromodeoxyuridine and ultraviolet light on 9L rat brain tumor cells. Raffel C, et al. **Radiat Res** 1989 Jun; 118(3):409–19

A comparison of the effects of photodynamic therapy on normal and tumor blood vessels in the rat microcirculation. Reed MW, et al. **Radiat Res** 1989 Sep;119(3):542–52

The effect of photodynamic therapy (PDT) on glucose levels within the SMT–F mouse tumor. Musser DA. **Res Commun Chem Pathol Pharmacol** 1988 Jun;60(3):361–9

Photodynamic therapy in the treatment of malignancies. Gomer CJ. **Semin Hematol** 1989 Jan;26(1):27–34 (66 ref.)

Modified porphyrins, chlorins, phthalocyanines, and purpurins: second–generation photosensitizers for photodynamic therapy. Kreimer–Birnbaum M. **Semin Hematol** 1989 Apr;26(2):157–73 (114 ref.)

Photodynamic therapy and bone marrow transplantation. Sieber F, et al. **Semin Hematol** 1989 Jan;26(1):35–9 (33 ref.)

Photodynamic therapy—new approaches. Dougherty TJ. **Semin Surg Oncol** 1989;5(1):6–16 (78 ref.)

The effect of photodynamic therapy on tumor oxygenation. Reed MW, et al. **Surgery** 1989 Jul;106(1):94–9

Experimental study of argon–dye laser photoradiation therapy on tumor–bearing mice. Jeng YS, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Jun;87(6):589–94

Immunomanipulation of the response to cardiac allo and xenoreactive leukocytes. Fuzesi L, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):537–9

Modulation of hematoporphyrin derivative–sensitized phototherapy with corynebacterium parvum in murine transitional cell carcinoma. Myers RC, et al. **Urology** 1989 Mar;33(3):230–5

[Fiberoptic bronchoscopy–gold vapor laser treatment of bronchogenic carcinoma] Deng WW. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Feb; 11(1):25–6, 63 (Eng. Abstr.) **(Chi)**

[Mechanism of cell damage by hematoporphyrin derivative (HPD) plus light. III. Effect of HPD plus light on lysosomes of liver and hepatoma cell] Chen YQ. **Chung Hua Chung Liu Tsa Chih** 1989 Jan;11(1):22–4 (Eng. Abstr.) **(Chi)**

[Pathologic study on the treatment–effect of hematoporphyrin derivative in carcinoma of the gastric cardia] Hu C, et al. **Chung Hua Chung Liu Tsa Chih** 1988 May;10(3):197–9 (Eng. Abstr.) **(Chi)**

[Photodynamic effect of hematoporphyrin derivative (HpD) plus hyperthermia on human tumor cell lines in culture] Wang RZ. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Jun; 10(3):162–5 (Eng. Abstr.) **(Chi)**

[Electron microscopic observation on human bladder cancer tissue after photodynamic therapy] Zhou CN. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Jun; 10(3):176–8 (Eng. Abstr.) **(Chi)**

[Cytotoxic effect of carcinophotorin plus red light on human liver cancer cells in vitro] Peng Q, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jan;9(1):93–6 (Eng. Abstr.) **(Chi)**

[Histocytochemical studies on hematoporphyrin photoradiation effect on two enzymes of human liver cancer cells in nude mice] Peng Q, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 May;9(3):272–5 (Eng. Abstr.) **(Chi)**

[DNA single–strand breakage and its rejoining in HeLa cells caused by hypocrellin A photosensitization] Cao EH, et al. **Shih Yen Sheng Wu Hsueh Pao** 1988 Mar;21(1):79–85 (Eng. Abstr.) **(Chi)**

[The relationship between transport site of HPD and photodamage region of human gastric cancer cells in the cell cycle] Wang DS, et al. **Shih Yen Sheng Wu Hsueh Pao** 1988 Mar;21(1):35–45 (Eng. Abstr.) **(Chi)**

[Phototherapy and photodiagnosis of malignant tumors] Jirsa M. **Cas Lek Cesk** 1988 Dec 2;127(49):1505–7 (Eng. Abstr.) **(Cze)**

[Photodynamic therapy] Puolakkainen P, et al. **Duodecim**

1988;104(10):762–7 (29 ref.) (Fin)
[Photochemotherapy in vitro--direct effect on epidermal lectin-binding of psoriatic and normal skin] Wollina U, et al. **Dermatol Monatsschr** 1988;174(6):312–8 (Eng. Abstr.) (Ger)
[Photodynamic destruction of in vitro cultivated squamous cell carcinoma cells of the head and neck area] Wustrow TP, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Oct; 67(10):532–8 (Eng. Abstr.) (Ger)
[Combined treatment of endoscopic laser irradiation and radiotherapy in lung cancer] Ono R, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–2):1418–24 (Eng. Abstr.) (Jpn)
[Effects of photodynamic therapy on cell kinetics of cultured human cancer cells in reference to its cytocidal effects] Tsuji T, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 May 20;24(5):1034–44 (Eng. Abstr.) (Jpn)
[Photodynamic therapy of urologic cancer] Hisazumi H. **Nippon Hinyokika Gakkai Zasshi** 1987 Dec;78(13):2266–7 (0 ref.) (Jpn)
[Photochemotherapy of psoriasis in the light of the case material from the dermatologic clinic of the Military Medical Academy] Ruszczak Z, et al. **Przegl Dermatol** 1988 Mar–Apr;75(2):94–8 (Eng. Abstr.) (Pol)
[Molecular biological mechanisms of photodynamic therapy] Kirvialene VA, et al. **Biol Nauki** 1989;(5):5–14 (79 ref.) (Eng. Abstr.) (Rus)
[Photodynamic therapy of cancer patients] Nasedkin AN. **Sov Med** 1988;(8):37–9 (34 ref.) (Rus)
[Functional state of the urination system in patients with psoriasis treated with photochemotherapy] Iakubovich AI. **Vestn Dermatol Venerol** 1988;(12):33–7 (Eng. Abstr.) (Rus)
[The immune status of ichthyosis patients during photochemotherapy with aevit] Kriazheva SS, et al. **Vestn Dermatol Venerol** 1988;(6):9–12 (Eng. Abstr.) (Rus)
[Use of photosensitizing preparations in the treatment of cancer of the ORL organs] Zharkova NN, et al. **Vestn Otorinolaringol** 1988 Sep–Oct;(5):90–3 (23 ref.) (Rus)

ADVERSE EFFECTS

Prevention of cutaneous phototoxicity in photodynamic therapy. McLear PW, et al. **Am J Otolaryngol** 1989 Mar–Apr;10(2):92–8
Quantitative histological changes in murine tail skin following photodynamic therapy. Benstead K, et al. **Br J Cancer** 1989 Apr;59(4):503–9
Facing hypoxia: a must for photodynamic therapy. Freitas I. **J Photochem Photobiol [B]** 1988 Sep;2(2):281–2
Complications of whole bladder dihematoporphyrin ether photodynamic therapy. Harty JI, et al. **J Urol** 1989 Jun; 141(6):1341–6
Systemic immunosuppression induced by photodynamic therapy (PDT) is adoptively transferred by macrophages. Lynch DH, et al. **Photochem Photobiol** 1989 Apr; 49(4):453–8
Skin photosensitivity and photodestruction of several potential photodynamic sensitizers. Roberts WG, et al. **Photochem Photobiol** 1989 Apr;49(4):431–8
Pseudoallergic reaction from Khellin in photochemotherapy of vitiligo: a case report. Jung EG, et al. **Photodermatol** 1988 Oct;5(5):235–6
[Damages to normal rabbit retina by hematoporphyrin derivative-photodynamic therapy] Liu DY. **Chung Hua Yen Ko Tsa Chih** 1988 Nov;24(6):358–61 (Eng. Abstr.) (Chi)
[Anti-psoriasis and phototoxic effect of a hematoporphyrin derivative following topical administration and irradiation with visible light] Meffert H, et al. **Dermatol Monatsschr** 1989;175(1):28–34 (Eng. Abstr.) (Ger)

HISTORY

Oral methoxsalen photochemotherapy for the treatment of psoriasis: a cooperative clinical trial. 1977 [classical article] Melski JW, et al. **J Invest Dermatol** 1989 Apr;92(4 Suppl):153S; discussion 154S–156S

INSTRUMENTATION

Modified Holter Rickham reservoir: a device percutaneous photodynamic treatment of cystic malignant brain tumors. Perria C. **J Neurosurg Sci** 1988 Jul–Sep;32(3):99–101
Optical dosimetry for interstitial photodynamic therapy. Arnfield MR, et al. **Med Phys** 1989 Jul–Aug;16(4):602–8
[Application of irradiation and monitoring of the light dose in photodynamic laser therapy] Sroka R, et al. **Biomed Tech (Berlin)** 1988 Oct;33(10):236–9 (Eng. Abstr.) (Ger)
[Laser light-induced cytotoxicity of cultivated squamous cell cancer cells of the head and neck following photosensitization] Wustrow TP, et al. **Laryngol Rhinol Otol (Stuttg)** 1989 Jan;68(1):44–50 (Eng. Abstr.) (Ger)

METHODS

Photodynamic therapy of experimental intraocular retinoblastomas--dose-response relationships to light energy and photofrin II. Winther J, et al. **Acta Ophthalmol (Copenh)** 1989 Feb;67(1):44–50
Photodynamic laser therapy to alleviate complete bronchial obstruction: comparison of CT and bronchoscopy to predict outcome. Zwirewich CV, et al. **AJR** 1988 Nov; 151(5):897–901
A review of photoradiation therapy in the management of central nervous system tumours. Kaye AH, et al. **Aust N Z J Surg** 1988 Oct;58(10):767–80 (138 ref.)
The effect of fractionation of light treatment on necrosis and vascular function of normal skin following photodynamic therapy. Benstead K, et al. **Br J Cancer** 1988 Sep; 58(3):301–5
Psoralen therapy in vitiligo. Ortonne JP. **Clin Dermatol** 1989 Apr–Jun;7(2):120–35 (78 ref.)
Psoriasis treatment at the Dead Sea: Second International Study Tour [letter] Abel EA, et al. **J Am Acad Dermatol** 1988 Aug;19(2 Pt 1):362–4
Potentiation of phototherapy cytotoxicity with light scattering media. Perry RR, et al. **J Surg Res** 1989 Apr; 46(4):386–90
Bioinhibition of human fibroblast cultures sensitized to Q-switch II dye and treated with the Nd: YAG laser: a new technique of photodynamic therapy with lasers. Castro DJ, et al. **Laryagoscope** 1989 Apr;99(4):421–8
Photodynamic assay of light distributions in tissue phantoms. Mason LW, et al. **Lasers Surg Med** 1988;8(5):521–6
New method of photosensitizer accumulation for photodynamic therapy in an experimental liver tumor. Nishiwaki Y, et al. **Lasers Surg Med** 1989;9(3):254–63
Photodynamic therapy of superficial bladder cancer. Javadpour N. **Md Med J** 1989 Jun;38(6):461
Chemiluminescence and hematoporphyrin derivative: a novel therapy for mammary adenocarcinomas in mice. Phillip MJ, et al. **Oncology** 1989;46(4):266–72 (38 ref.)
Photoproperties of alkoxy-substituted phthalocyanines with deep-red optical absorbance. Ford WE, et al. **Photochem Photobiol** 1989 Sep;50(3):277–82
Critical importance of the triplet lifetime of photosensitizer in photodynamic therapy of tumor. Takemura T, et al. **Photochem Photobiol** 1989 Sep;50(3):339–44
Preliminary experience with interstitial radiation, interstitial hyperthermia and interstitial photodynamic therapy in a simple animal model. Levendag PC, et al. **Strahlenther Onkol** 1989 Jan;165(1):56–60
[Interstitial photodynamic therapy of oral squamous cancers] Wang KH. **Chung Hua Chung Liu Tsa Chih** 1988 Nov; 10(6):473–5 (Eng. Abstr.) (Chi)
[Topical administration of hematoporphyrin derivative and red light irradiation. A therapeutic approach in psoriasis] Monfrecola G, et al. **G Ital Dermatol Venereol** 1988 Dec; 123(12):671–4 (Eng. Abstr.) (Ita)
[An experimental study of whole bladder wall photodynamic therapy using a light-scattering medium. A preliminary report] Uchibayashi T, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 May;79(5):807–13 (Eng. Abstr.) (Jpn)
[Evaluation of the results of the treatment of psoriasis by the modified "minute therapy" in comparison with the Ingram method] Broniarczyk-Dyła G, et al. **Przegl Dermatol** 1986 Jul–Aug;73(4):312–6 (Eng. Abstr.) (Pol)
[Various problems of the methodology of autologous transfusion of photomodified blood] Krylenkov VA, et al. **Vestn Khir** 1989 Feb;142(2):129–32 (35 ref.) (Rus)

TRENDS

Molecular, cellular, and tissue responses following photodynamic therapy. Gomer CJ, et al. **Lasers Surg Med** 1988;8(5):450–63 (74 ref.)

PHOTOCOAGULATION see **LIGHT COAGULATION**

PHOTODERMATITIS see **PHOTOSENSITIVITY DISORDERS**

PHOTODYNAMIC THERAPY see **PHOTOCHEMOTHERAPY**

PHOTOFLUOROGRAPHY

Preliminary investigations in dual-potential digital fluorography of the thorax. Cowen AR, et al. **Br J Radiol** 1988 Oct;61(730):969–72

PHOTOGRAMMETRY

Surface stereophotogrammetry of thoracic kyphosis. Carr AJ, et al. **Acta Orthop Scand** 1989 Apr;60(2):177–80
Chronic lateral instability of the ankle. Roentgen stereophotogrammetry of talar position. Löfvenberg R, et al. **Acta Orthop Scand** 1989 Feb;60(1):34–9
Stability of femoral neck fractures. A postoperative roentgen stereophotogrammetric analysis. Ragnarsson JI, et al. **Acta Orthop Scand** 1989 Jun;60(3):283–7
Subsidence of the femoral component in the noncemented total hip. A roentgen stereophotogrammetric analysis. Wykman A, et al. **Acta Orthop Scand** 1988 Dec;59(6):635–7
Chronic anterolateral instability of the knee. A roentgen stereophotogrammetric evaluation. Kärrholm J, et al. **Am J Sports Med** 1989 Jul–Aug;17(4):555–63
Breast volume measurement of 598 women using biostereometric analysis. Loughry CW, et al. **Ann Plast Surg** 1989 May;22(5):380–5
Three-dimensional instability of the anterior cruciate deficient knee. Kärrholm J, et al. **J Bone Joint Surg [Br]** 1988 Nov;70(5):777–83
A review of photogrammetry with applications to implant film calibration and seed matching. Renner WD, et al. **Med Dosim** 1989;14(2):103–8
Photogrammetric measurement of nerve fiber layer thickness. Takamoto T, et al. **Ophthalmology** 1989 Sep;96(9):1315–9
Automated registration of multimodality images [editorial] Vannier MW, et al. **Radiology** 1988 Dec;169(3):860–1
Movements of the sacroiliac joints. A roentgen stereophotogrammetric analysis. Sturesson B, et al. **Spine** 1989 Feb;14(2):162–5
[Stereoscopic photography in medicine] Toporov GN, et al. **Klin Khir** 1988;(12):60 (Rus)

METHODS

Photogrammetry of the muscles of facial expression. Balogh B, et al. **Acta Anat (Basel)** 1988;133(3):183–7
A new technique for optic disk analysis in patients with glaucoma. Dobrogowski MJ. **Am J Ophthalmol** 1989 Aug 15;108(2):192–3
Medical applications of photogrammetry. Bujakiewicz A. **Cent Afr J Med** 1988 Mar;34(3):50–9 (11 ref.)
Ankle fractures. A clinical and roentgenographic stereophotogrammetric study. Ahl T, et al. **Clin Orthop** 1989 Aug;(245):246–55
A stereophotogrammetric technique for the quantification of tissue expansion procedures in plastic surgery. Fleming CM. **J Audiov Media Med** 1988 Oct;11(4):125–7
Estimation of chronological age from different body segments in boys and girls aged 4–19 years, using anthropometric and photogrammetric techniques. Attallah NL, et al. **Med Sci Law** 1989 Apr;29(2):147–55
Correction of body height in scoliotic patients using ISIS scanning. Carr AJ, et al. **Spine** 1989 Feb;14(2):220–2
[Use of holographic interferometry and the moiré method in fields of medicine] Vejbor P, et al. **Acta Univ Palacki Olomuc Fac Med** 1987;117:281–300 (Eng. Abstr.) (Rus)
[Stereocephalometric diagnosis of penetrating unilateral cleft palate] Istomina AV. **Stomatologiia (Mosk)** 1989 Mar–Apr; 68(2):58–61 (Eng. Abstr.) (Rus)

PHOTOGRAPHY

see related
MICROFILMING
MOTION PICTURES

Occupational dermatoses from colour developing agents. Clinical and histopathological observations. Lidén C, et al. **Acta Derm Venereol (Stockh)** 1988;68(6):514–22
The use of a visual analogue scale in observer assessment of postoperative swelling subsequent to third-molar surgery. Berge TI. **Acta Odontol Scand** 1989 Jun; 47(3):167–74
The exfoliation in the Scheimpflug photography. Goder GJ, et al. **Acta Ophthalmol Suppl (Copenh)** 1988;184:44–7
Semiautomated slide identification by using a personal computer and printer [letter] Hunter TB. **AJR Am J Roentgenol** 1989 Sep;153(3):656–7
Photographic simulation of image quality through bifocal intraocular lenses. Zisser HC, et al. **Am J Ophthalmol** 1989 Sep 15;108(3):324–6
A table-top fluorescein angiogram viewer. Abraham FA. **Ann Ophthalmol** 1989 Apr;21(4):156–7
The size of lesions, or point counting as a step toward the solution of the PASI problem [letter] Bahmer F. **Arch Dermatol** 1989 Sep;125(9):1282–3
Is photography necessary in following up patients with dysplastic nevi? [letter] Zemtsov A, et al. **Arch Dermatol** 1989 Apr;125(4):563–5
Producing still images in arthroscopy. Brown CH Jr. **Arthroscopy** 1989;5(2):87–92
An air photo analysis of an airplane crash. Rinker JN, et al. **Aviat Space Environ Med** 1989 Jul;60(7 Pt 2):A6–15
A photographically recorded assessment of enamel hypoplasia in fluoridated and non-fluoridated areas in England. Levine RS, et al. **Br Dent J** 1989 Apr 8; 166(7):249–52
Medical forensic photography of the sexually abused child. Ricci LR. **Child Abuse Negl** 1988;12(3):305–10
Occupational dermatoses at a film laboratory. Follow-up after modernization. Lidén C. **Contact Dermatitis** 1989 Mar; 20(3):191–200
Aesthetic preference and picture asymmetries. Banich MT, et al. **Cortex** 1989 Jun;25(2):187–95
Contact allergy to colour developing agents. Analysis of test preparations, bulk chemicals and tank solutions by high-performance liquid chromatography. Sollenberg J, et al. **Derm Beruf Umwelt** 1989 Mar–Apr;37(2):47–52
Measurement error in assessing the size of posterior subcapsular cataracts from retroillumination photographs. Datiles MB, et al. **Invest Ophthalmol Vis Sci** 1989 Aug; 30(8):1848–54
Photographs for Clark's "dysplastic" nevi? Rapini RP. **J Am Acad Dermatol** 1988 Dec;19(6):1130–4
Instrument accommodation compensation of single lens reflex camera viewfinders. Long WF. **J Am Optom Assoc** 1989 Apr;60(4):290–2
Reproduction of radiographs for 2 X 2 transparencies.

Creasey MG, et al. **J Audiov Media Med** 1987 Oct; 10(4):138–41
Louis Schmidt award presented to Ralph J. Marshall at Rochester, New York. **J Biol Photogr** 1988 Oct;56(4):123
Managing the copyright confusion, one solution. Bader SA, et al. **J Biol Photogr** 1988 Oct;56(4):135–40
Architectural photography for the biophotographer. Part I: Exteriors. DuBois WW. **J Biol Photogr** 1989 Apr; 57(2):35–9
A medical photographer's role on a perinatal bereavement team. Griesbach SJ. **J Biol Photogr** 1988 Oct;56(4):149–53
Team building. Mattingly S. **J Biol Photogr** 1989 Jan; 57(1):15–8
A scientific photographic laboratory for the International Rice Research—the Philippines. Ogrodnick JM. **J Biol Photogr** 1988 Jul;56(3):81–4
Why should the physician use your services? Schosser RH. **J Biol Photogr** 1989 Jan;57(1):11–3
The ethics of veterinary biophotography. Shaffer CA. **J Biol Photogr** 1989 Apr;57(2):31–3
Photographing animals. An annotated bibliography. Stambaugh D. **J Biol Photogr** 1989 Apr;57(2):51–2
Mothers' and fathers' recognition of their newborns' photographs during the postpartum period. Kaitz M, et al. **J Dev Behav Pediatr** 1988 Aug;9(4):223–6
Technique for superimposing a color slide onto a facial cast to sculpt a facial prosthesis. Shimodaira K, et al. **J Prosthet Dent** 1989 Aug;62(2):212–3
Five million slides [letter] Morley D, et al. **Lancet** 1988 Oct 29;2(8618):1026–7
How to produce visual material for multiple choice examinations. Buzzard AJ, et al. **Med Teach** 1987;9(4):451–6
Unmasking the lone ranger. Slue WE Jr. **N Engl J Med** 1989 Aug 24;321(8):550–1
Projector adaptor for fluorescein angiograms [letter] Wessels IF. **Ophthalmic Surg** 1989 Apr;20(4):298
Calibration of Hirschberg test photographs under clinical conditions. DeRespinis PA, et al. **Ophthalmology** 1989 Jul; 96(7):944–9
Detection of diabetic macular edema. Ophthalmoscopy versus photography—Early Treatment Diabetic Retinopathy Study Report Number 5. The ETDRS Research Group. Kinyoun J, et al. **Ophthalmology** 1989 Jun;96(6):746–50; discussion 750–1
A simple technique for preoperative teaching and planning [letter] Shatkin S Jr, et al. **Plast Reconstr Surg** 1989 Feb; 83(2):394–5
Photographic comparison of pupillary and corneal diameters when one eye is deviated. Wirtschafter JD, et al. **Surv Ophthalmol** 1972 Mar–Apr;16(5):312–5
[Cervicography: a new approach to the early diagnosis of carcinoma of the cervix uteri] Reda R. **Ann Ostet Ginecol Med Perinat** 1988 May–Jun; 109(3):129–31 (Eng. Abstr.) **(Ita)**
[Occupational diseases among personnel at a radiology department] Bakke JV, et al. **Tidsskr Nor Laegeforen** 1989 Jan 30;109(3):345–9 (Eng. Abstr.) **(Nor)**
[Photochemicals and their effects on health] Bakke JV. **Tidsskr Nor Laegeforen** 1989 Jan 30;109(3):361–2 (Eng. Abstr.) **(Nor)**
[Microcomputer-assisted system for photographing the movements of biological valve prostheses] Vršanský D, et al. **Bratisl Lek Listy** 1989 May;90(5):336–8 (Eng. Abstr.) **(Slo)**
[Photographs of infants dying perinatally help the parents' grief] Larson A. **Lakartidningen** 1989 May 24;86(21):2020 **(Swe)**

ECONOMICS

Total-body photographs of dysplastic nevi: who pays? [letter] Coverman MH. **Arch Dermatol** 1989 Apr;125(4):565–6

EDUCATION

R.I.T. internships: expectations vs. realities. Friend AS. **J Biol Photogr** 1989 Apr;57(2):57–9
A guide to photography in educational and counseling settings. Hubbard JT, et al. **Perspect Psychiatr Care** 1987; 24(1):20–4

HISTORY

Check your references or Rediscovering the wheel. Hansell P. **J Biol Photogr** 1989 Jan;57(1):26–7
Check your references or rediscovering the wheel. Hansell P. **J Biol Photogr** 1989 Apr;57(2):45–7
Biological photographic collections: the picture archives of the New York Academy of Medicine, New York City. Stool SE. **J Biol Photogr** 1988 Oct;56(4):131–3
An evaluation of the photographs of William H. Crisp, MD. Sims CN. **Ophthalmology** 1988 May;95(5):699–706

INSTRUMENTATION

Cure for the AA battery blues. Six-volt battery pack from previously discarded Polaroid batteries. Cumberland GD, et al. **Am J Forensic Med Pathol** 1988 Sep;9(3):265–6
Universal 35-mm camera mount for ophthalmic ultrasound units. Whitacre MM, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):763–4
Automated three dimensional movement analysis using the CODA-3 system. Mitchelson DL. **Biomed Tech (Berlin)** 1988 Jul–Aug;33(7–8):179–82
A new photoelectric device for contact-free recording of diameters of short blood vessel segments in vitro. Tutschke U. **Biomed Tech (Berlin)** 1988 Jul–Aug;33(7–8):166–72
Evaluation of a non-mydriatic camera in Indian and European diabetic patients. Mohan R, et al. **Br J Ophthalmol** 1988 Nov;72(11):841–5
Reproducibility study on the Scheimpflug Cataract Video Camera. Edwards PA, et al. **Curr Eye Res** 1988 Oct; 7(10):955–60
The Oxford retro-illumination cataract recording camera—a new instrument. Brown NA. **J Audiov Media Med** 1988 Apr;11(2):58–60
In-house colour printing and processing—the first 10 years. Creasey MG. **J Audiov Media Med** 1988 Jan;11(1):17–20
Film and electronics—a marriage of convenience. Jeffreys RA. **J Audiov Media Med** 1988 Apr;11(2):49–51
Portable and inexpensive systems for ophthalmic photography based on the 35 mm SLR camera and standard 50 mm f1–8 lens. Khaw PT. **J Audiov Media Med** 1988 Jul;11(3):81–3
Practical image stability tests of Polaroid PolaBlue slide material. Nicotera DJ. **J Biol Photogr** 1989 Jan;57(1):21–5
An all-purpose photo utility belt. Thomas RJ. **J Biol Photogr** 1989 Apr;57(2):50
Improved resolution of specular micrographs. Merin LM, et al. **Ophthalmic Surg** 1989 Jun;20(6):427–9
Photographic method for Brückner and Hirschberg testing. Griffin JR, et al. **Optom Vis Sci** 1989 Jul;66(7):474–9
A pointer on pointers [letter] Hoehn JG. **Plast Reconstr Surg** 1989 Aug;84(2):364
[Analysis of gait using motography in healthy children and patients with neurologic disorders. I: Qualitative analysis] Funke R, et al. **Klin Padiatr** 1988 Nov–Dec;200(6):434–7 (Eng. Abstr.) **(Ger)**
[Analysis of gait using motography in healthy children and patients with neurologic disorders. II: Quantitative analysis] Funke R, et al. **Klin Padiatr** 1988 Nov–Dec;200(6):438–43 (Eng. Abstr.) **(Ger)**
[A high- resolution video-graphic printer for the documentation of surgical specimens] Komminoth P, et al. **Pathologe** 1989 Mar;10(2):131–2 **(Ger)**

METHODS

A radiographic technique of interest to physical anthropologists. Fairgrieve SI, et al. **Am J Phys Anthropol** 1988 Sep;77(1):23–6
Total body photographs of dysplastic nevi [letter] Schosser RH, et al. **Arch Dermatol** 1989 Apr;125(4):566–7
Photographic cures for dermatologic disorders. Slue WE Jr. **Arch Dermatol** 1989 Jul;125(7):960–2
Use of cross-polarized light in anterior segment photography. Fariza E, et al. **Arch Ophthalmol** 1989 Apr;107(4):608–10
A photographic method for evaluation of oculoplastic surgery [letter] Patel BC, et al. **Arch Ophthalmol** 1988 Oct; 106(10):1346–7
Validation of a photographic method of measuring corneal diameter. Robinson J, et al. **Br J Ophthalmol** 1989 Jul; 73(7):570–3
Kinematic measurement from panned cinematography. Gervais P, et al. **Can J Sport Sci** 1989 Jun;14(2):107–11
Position of shoulder arthrodesis measured with Moiré photography. Jonsson E, et al. **Clin Orthop** 1989 Jan; (238):117–21
The positioning and magnification of faces and skulls for photographic superimposition. Maat GJ. **Forensic Sci Int** 1989 Jun;41(3):225–35
A further note on the photography of cataracts. Weale RA. **Graefes Arch Clin Exp Ophthalmol** 1988;226(5):468–70
Reliable measurements from fundus photographs in the presence of focusing errors. Heier H, et al. **Invest Ophthalmol Vis Sci** 1989 Apr;30(4):674–7
Are seven standard photographic fields necessary for classification of diabetic retinopathy? Moss SE, et al. **Invest Ophthalmol Vis Sci** 1989 May;30(5):823–8
A method for improved biometry of the anterior chamber with a Scheimpflug technique. Richards DW, et al. **Invest Ophthalmol Vis Sci** 1988 Dec;29(12):1826–35
Use of aerial color infrared photography as a survey technique for Psorophora columbiae oviposition habitats in Texas ricelands. Welch JB, et al. **J Am Mosq Control Assoc** 1989 Jun;5(2):147–60
A photographic method to measure abnormal head posture. Cowper G. **J Audiov Media Med** 1988 Jul;11(3):84–6
Composite photographs in leg lengthening. Nicholls MJ, et al. **J Audiov Media Med** 1988 Jul;11(3):96–9
Kirlian photography—a tool in the diagnosing of psychopathology. Adamenko VM, et al. **J Biol Photogr** 1988 Jul;56(3):85–8
Understanding accommodative response. Enkerud D. **J Biol Photogr** 1989 Apr;57(2):53–5
Check your references or rediscovering the wheel. Hansell P. **J Biol Photogr** 1988 Oct;56(4):154–5
Portraiture, a simplified approach. Parrish LE. **J Biol Photogr** 1989 Apr;57(2):61–3
Black and white photography of preserved fish specimens. Strange A. **J Biol Photogr** 1988 Oct;56(4):145–8
The detection of in vitro produced periodontal bone lesions by conventional radiography and photographic subtraction radiography using observers and quantitative digital subtraction radiography. Janssen PT, et al. **J Clin Periodontol** 1989 Jul;16(6):335–41
A photographic technique for the restoration of damaged radiographs. Dailey JC, et al. **J Forensic Sci** 1988 Sep; 33(5):1273–7
Reliability of assessing the cup/disc ratio using a 90 D lens photograph. Houston G 4th, et al. **Optom Vis Sci** 1989 Feb;66(2):78–81
Visual assessment of facial elastosis using photographs as a measure of cumulative ultraviolet exposure. Cameron LL, et al. **Photodermatol** 1988 Dec;5(6):277–82
[Clinical use of simultaneous photography of the corneal and the fundus reflexes] Wang GJ. **Chung Hua Yen Ko Tsa Chih** 1988 May;24(3):150–4 (Eng. Abstr.) **(Chi)**
[The tractiophototrichogram, an objective method for evaluating hair loss] Bouhanna P. **Ann Dermatol Venereol** 1988;115(6–7):759–64 (13 ref.) **(Fre)**
[Photography of the eye in current practice] Delbosc B, et al. **Annee Ther Clin Ophtalmol** 1987;38:9–19 **(Fre)**
[Photography of the fundus oculi in current practice] Turut P, et al. **Annee Ther Clin Ophtalmol** 1987;38:21–8 **(Fre)**
[Study of retinal nerve fibers by retinography in blue light] Koenig F, et al. **Ophtalmologie** 1988 Jul–Sep;2(3):247–8 (Eng. Abstr.) **(Fre)**

STATISTICS & NUMERICAL DATA

Survey on ophthalmic photography in Great Britain. Hancock R, et al. **J Audiov Media Med** 1988 Jul;11(3):87–90

PHOTOLYSIS

Properties and uses of photoreactive caged compounds. McCray JA, et al. **Annu Rev Biophys Biophys Chem** 1989; 18:239–70 (158 ref.)
Photoaffinity labelling of isopenicillin N synthetase by laser-flash photolysis. Baldwin JE, et al. **Biochem J** 1989 Jul 1;261(1):197–204
Solution-state structure of the Dewar pyrimidinone photoproduct of thymidylyl-(3'——5')-thymidine. Taylor JS, et al. **Biochemistry** 1988 Sep 20;27(19):7206–15
Effects of buffer salt on the geminate recombination of photodissociated carboxyhemoglobin and its isolated subunits. Fontaine MP, et al. **Biochimie** 1988 Dec; 70(12):1781–4
Photolysis of unsaturated fatty acid hydroperoxides. 4. Fatty acid products from the aerobic decomposition of methyl 13(S)-hydroperoxy-9(Z),11(E)-octadecadienoate dissolved in cyclohexane. Schieberle P, et al. **Chem Phys Lipids** 1988 Oct;48(3–4):281–8
Electron paramagnetic resonance studies of the low temperature photolytic behavior of oxidized hydrogenase I from Clostridium pasteurianum. Kowal AT, et al. **J Biol Chem** 1989 Mar 15;264(8):4342–8
Molecular mechanism of naproxen photosensitization in red blood cells. Costanzo LL, et al. **J Photochem Photobiol [B]** 1989 Apr;3(2):223–35
Sonolysis, radiolysis, and hydrogen peroxide photolysis of pyrimidine derivatives in aqueous solutions: a spin-trapping study. Kondo T, et al. **Radiat Res** 1988 Oct;116(1):56–73
Flash photolysis of caged compounds: new tools for cellular physiology [published erratum appears in Trends Neurosci 1989 Apr;12(4):158] Kaplan JH, et al. **Trends Neurosci** 1989 Feb;12(2):54–9 (55 ref.)
[Decomposition and stabilization of drugs. XXI. Photodecomposition and stabilization of sodium guaiazulene sulfonate] Shimizu H, et al. **Yakugaku Zasshi** 1988 Dec;108(12):1203–8 (Eng. Abstr.) **(Jpn)**
[Photohemolysis sensitized by psoralen. Paradoxical dependence on light intensity] Potapenko AIa, et al. **Dokl Akad Nauk SSSR** 1988;302(5):1258–60 **(Rus)**
[Photolysis of aflatoxin B1 in the presence of pyridine N-oxide] Sergeev BL, et al. **Eksp Onkol** 1989;11(3):76–8 (Eng. Abstr.) **(Rus)**

PHOTOMETRY

Posterior vitreous fluorophotometry. I. Description of a new analysis procedure and results in normal subjects. Bungay PM, et al. **Arch Ophthalmol** 1989 Sep;107(9):1321–7
Posterior vitreous fluorophotometry. II. Comparison of diabetic patients and controls with the use of a new analysis procedure. Roy MS, et al. **Arch Ophthalmol** 1989 Sep; 107(9):1328–33
Fluorophotometric evaluation of the blood-ocular barrier function following cataract surgery and intraocular lens implantation. Miyake K. **J Cataract Refract Surg** 1988 Sep; 14(5):560–8 (34 ref.)

INSTRUMENTATION

Evaluation of an aerosol photometer for monitoring welding fume levels in a shipyard. Glinsmann PW, et al. **Am Ind Hyg Assoc J** 1985 Jul;46(7):391–5
A reflectance photometer with a square photodiode array detector for use on multilayer dry-film slides. Neeley WE. **Clin Chem** 1988 Nov;34(11):2367–70
An evaluation of the performance of ten commercial luminometers. Jago PH, et al. **J Biolumin Chemilumin** 1989 Jul–Sep;3(3):131–45
External quality assessment of absorbance measurements on spectral and spectral-line photometers. Röhle G, et al. **J Clin Chem Clin Biochem** 1989 May;27(5):323–9
Performance characteristics of a blood cholesterol measuring

instrument used in screening programs. Lefebvre RC, et al. **Public Health Rep** 1989 May–Jun;104(3):266–70

[Equipment for lyoluminescent dosimetry] Bouček J, et al. **Sb Lek** 1989 Jan;91(1):21–6 (Eng. Abstr.) **(Cze)**

[The haplophotometer—a new kind of instrument for measuring slight disorders of visual afference—instrument description and examples of its use] Schiefer U, et al. **Fortschr Ophthalmol** 1988;85(6):766–71 (Eng. Abstr.) **(Ger)**

[Clinical assessment of a new glucose reflectance meter (Glucoscot II) for the detection of neonatal hypoglycemias] Leibundgut KE, et al. **Monatsschr Kinderheilkd** 1989 Jun; 137(6):330–2 (Eng. Abstr.) **(Ger)**

METHODS

Velocity profiles of blood flow in microvessels measured by ten channels' dual–sensor method. Sato M, et al. **Biorheology** 1988;25(1–2):279–88

Quantitative description of classic and variant small cell lung cancer cell lines by nuclear image cytometry. Broers JL, et al. **Cytometry** 1988 Sep;9(5):426–31

A "two–objective, one–area" procedure in absorption microphotometry and its application using an inverted microscope. Chaubal KA. **Gen Physiol Biophys** 1988 Aug; 7(4):413–26

A lateral cephalometric analysis of nasal morphology following Le Fort I osteotomy applying photometric analysis techniques. Gassmann CJ, et al. **J Oral Maxillofac Surg** 1989 Sep;47(9):926–30

Modified photometric method for the determination of phospholipase A activities. Hoffmann GE, et al. **Klin Wochenschr** 1989 Feb 1;67(3):106–9

[Empirical modeling of interference effects with flame photometric potassium and sodium determination in water analysis] Einax J, et al. **Z Gesamte Hyg** 1989 Apr; 35(4):211–4 (Eng. Abstr.) **(Ger)**

[Use of vertical photometry in clinical chemistry] Neef B, et al. **Z Med Lab Diagn** 1989;30(5):289–91 **(Ger)**

[A comparative evaluation of photometric methods for determining 2,4–toluene diisocyanate in the air] Putilina ON, et al. **Gig Tr Prof Zabol** 1989;(2):47–8 **(Rus)**

[Organizational and methodologic aspects of the results of Soviet–Finland cooperation in developing methods and materials for photometric microanalysis] Men'shikov VV, et al. **Lab Delo** 1989;(2):67–70 **(Rus)**

[The photometric determination of total bile protein] Miroshnichenko VP, et al. **Lab Delo** 1989;(1):18–20 (Eng. Abstr.) **(Rus)**

PHOTOMICROGRAPHY

Photomicrography: a translation into the vernacular. Part IV: Producing high quality photomicrographs. Vetter JP. **J Biol Photogr** 1988 Jul;56(3):89–108

METHODS

Computer tracking of endothelial activation responses. Ryan US, et al. **Adv Exp Med Biol** 1988;242:185–93

The use of specular microscopy to investigate unusual findings in the corneal endothelium and its adjacent structures. Brooks AM, et al. **Aust N Z J Ophthalmol** 1988 Aug;16(3):235–43

Photomicrographic mapping. Zagorski DA. **J Biol Photogr** 1988 Oct;56(4):125–30

Montaging electron micrographs. Crang RE. **J Electron Microsc Tech** 1987 Sep;7(1):53–60

Application of two–bath development processing to transmission electron films and plates. Morse DF. **J Electron Microsc Tech** 1987 Sep;7(1):47–52

PHOTONS see **RADIATION**

PHOTOPHOSPHORYLATION

Reflections on the early studies of the mechanism of photophosphorylation in isolated chloroplasts: a commentary on 'The Relation of Photosynthetic Phosphorylation to the Hill Reaction'. Avron M. **Biochim Biophys Acta** 1989;1000:381–3

The relation of photosynthetic phosphorylation to the Hill reaction. 1958 [classical article] Avron M, et al. **Biochim Biophys Acta** 1989;1000:384–93

Chloroplast ATP synthase contains one single copy of subunit delta that is indispensable for photophosphorylation. Engelbrecht S, et al. **Eur J Biochem** 1989 Jan 15;179(1):117–22

The chloroplast ATP synthase in Chlamydomonas reinhardtii. II. Biochemical studies on its biogenesis using mutants defective in photophosphorylation. Lemaire C, et al. **J Biol Chem** 1989 Jun 15;264(17):10235–42

Textbooks ignore photosystem II–dependent ATP formation: is the Z scheme to blame? Ort DR, et al. **Trends Biochem Sci** 1988 Dec;13(12):467–9 (26 ref.)

PHOTOPROTEINS see **LUMINESCENT PROTEINS**

PHOTORADIATION see **LIGHT**

PHOTORADIATION THERAPY see **PHOTOTHERAPY**

PHOTORECEPTORS

Photoreceptor pigments for photomovement of microorganisms: some spectroscopic and related studies. Lenci F, et al. **J Photochem Photobiol [B]** 1989 Feb; 3(1):1–16 (74 ref.)

[Response pattern and visual pigments of photosensory pineal organ] Morita Y, et al. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):622–30 **(Jpn)**

ANALYSIS

The mosaic of colour–specific photoreceptors in the mammalian retina as defined by immunocytochemistry. Szél A, et al. **Acta Morphol Hung** 1988;36(3–4):191–202

Immunogold localization of actin in developing photoreceptor cilia of normal and rds mutant mice. Chaitin MH, et al. **Exp Eye Res** 1988 Sep;47(3):437–46

[Microspectrophotometric study of the absorption spectra of Rana temporaria photoreceptors] Novitskiĭ IIu, et al. **Biol Nauki** 1989;(1):44–8 **(Rus)**

CYTOLOGY

Cell–cell interaction in the Drosophila retina: the bride of sevenless gene is required in photoreceptor cell R8 for R7 cell development. Reinke R, et al. **Cell** 1988 Oct 21; 55(2):321–30

Isolation and characterization of two new drosophila protein kinase C genes, including one specifically expressed in photoreceptor cells. Schaeffer E, et al. **Cell** 1989 May 5; 57(3):403–12

Phenotypic expression of photoreceptor and endocrine cell properties by cultured pineal cells of the newborn rat. Araki M, et al. **Cell Differ Dev** 1988 Nov;25(2):155–63

Morphology and distribution of neurons in the retina of the American garter snake Thamnophis sirtalis. Wong RO. **J Comp Neurol** 1989 May 22;283(4):587–601

The photoreceptors of the chameleon retina (Chamaleo chamaleo). A Golgi study. Armengol JA, et al. **J Hirnforsch** 1988;29(4):403–9

[Studies on the differentiation of the retina receptor cell of toad (Bufo raddei Strauch)] Gu SM, et al. **Shih Yen Sheng Wu Hsueh Pao** 1989 Mar;22(1):27–41 (Eng. Abstr.) **(Chi)**

DRUG EFFECTS

Two functionally distinct forms of guanosine cyclic 3',5'–phosphate stimulated cation channels in a bovine rod photoreceptor disk preparation. Pearce LB, et al. **Biochemistry** 1988 Jun 14;27(12):4396–406

The effects of beta–adrenergic agonists on cone systems in the cat eye. Uji Y, et al. **Doc Ophthalmol** 1988 Sep; 70(1):77–87

[Voltage dependence of the cobalt–induced blockage of synaptic transmission between the photoreceptors and horizontal cells of the retina] Byzov AL. **Neirofiziologiia** 1988;20(3):374–83 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Pineal and retinal photoreceptors in embryonic Rivulus marmoratus poey. Ali MA, et al. **Anat Anz** 1988; 167(5):359–69

Outer segment growth and periciliary vesicle turnover in developing photoreceptors of Xenopus laevis. Eckmiller MS. **Cell Tissue Res** 1989 Feb;255(2):283–92

Photoreceptor cell development in vitro: influence of pigment epithelium conditioned medium on outer segment differentiation. Spoerri PE, et al. **Eur J Cell Biol** 1988 Jun; 46(2):362–7

IMMUNOLOGY

Opsin– and S–antigen–like immunoreactions in photoreceptors of the tree shrew retina. Müller B, et al. **Invest Ophthalmol Vis Sci** 1989 Mar;30(3):530–5

METABOLISM

Synthesis of melatonin by the pineal modified photoreceptors of birds immunocytochemical localization of hydroxyindole–O–methyltransferase. Guerlotte J, et al. **Biol Cell** 1988;64(1):93–6

Isolation of a novel retina–specific clone (MEKA cDNA) encoding a photoreceptor soluble protein. Kuo CH, et al. **Brain Res Mol Brain Res** 1989 Jul;6(1):1–10

Demonstration by lectin cytochemistry of rod and cone photoreceptors in the lamprey retina. Ishikawa M, et al. **Cell Tissue Res** 1989;256(2):227–32

Localization of actin and tubulin in developing and adult mammalian photoreceptors. Woodford BJ, et al. **Cell Tissue Res** 1989 Jun;256(3):495–505

Immunogold localization of chondroitin 6–sulfate in the interphotoreceptor matrix of normal and RCS rats. Porrello K, et al. **Invest Ophthalmol Vis Sci** 1989 Apr;30(4):638–51

Interphotoreceptor retinoid–binding protein. Gene characterization, protein repeat structure, and its evolution. Borst DE, et al. **J Biol Chem** 1989 Jan 15;264(2):1115–23

Mechanism of vitamin A movement between rod outer segments, interphotoreceptor retinoid–binding protein, and liposomes. Ho MT, et al. **J Biol Chem** 1989 Jan 15; 264(2):928–35

Inositol trisphosphate production in squid photoreceptors. Activation by light, aluminum fluoride, and guanine nucleotides. Wood SF, et al. **J Biol Chem** 1989 Aug 5; 264(22):12970–6

GABA as a potential transmitter in lizard photoreceptors: immunocytochemical and biochemical evidence. Engbretson GA, et al. **J Comp Neurol** 1988 Dec 15; 278(3):461–71

Crocodiles don't focus underwater. Fleishman LJ, et al. **J Comp Physiol [A]** 1988 Aug;163(4):441–3

A comparison of some photoreceptor characteristics in the pineal and retina. II. The Djungarian hamster (Phodopus sungorus). Foster RG, et al. **J Comp Physiol [A]** 1989 Aug; 165(4):565–72

Evidence for electrogenic Na+/Ca2+ exchange in Limulus ventral photoreceptors. O'Day PM, et al. **J Gen Physiol** 1989 Mar;93(3):473–94

Silver ions induce a rapid Ca2+ release from isolated intact bovine rod outer segments by a cooperative mechanism. Schnetkamp PP, et al. **J Membr Biol** 1989 Apr; 108(1):91–102

Rhabdomere turnover and rhodopsin cycle: maintenance of retinula cells in Drosophila melanogaster [published erratum appears in J Neurocytol 1989 May;5(2):159] Stark WS, et al. **J Neurocytol** 1988 Aug;17(4):499–509

Developing rod photoreceptors from normal and mutant Rd mouse retinas: altered fatty acid composition early in development of the mutant. Scott BL, et al. **J Neurosci Res** 1988;20(2):202–11

Light–dependent subcellular movement of photoreceptor proteins. Whelan JP, et al. **J Neurosci Res** 1988; 20(2):263–70

Effects of the molecular environment on some spectroscopic properties of Blepharisma photoreceptor pigment. Lenci F, et al. **J Photochem Photobiol [B]** 1989 Jun;3(3):449–53

The supply of metabolic substrate from glia to photoreceptors in the retina of the honeybee drone. Tsacopoulos M, et al. **J Physiol (Paris)** 1987;82(4):279–87

Development of lipofuscin–like fluorescence in the retinal pigment epithelium in response to protease inhibitor treatment. Katz ML, et al. **Mech Ageing Dev** 1989 Jul; 49(1):23–40

Circadian rhythm and light regulate opsin mRNA in rod photoreceptors. Korenbrot JI, et al. **Nature** 1989 Feb 2; 337(6206):454–7

Translocation of a photoreceptor–specific MEKA protein by light. Kuo CH, et al. **Neurosci Lett** 1989 Aug 14;103(1):8–10

Immunohistochemical and electrophysiological evidence that locust ocellar photoreceptors contain and release histamine. Schlemermeyer E, et al. **Neurosci Lett** 1989 Apr 24; 99(1–2):73–8

[Purification and reconstitution of cGMP dependent cation channel from vertebrate photoreceptor] Sokabe M, et al. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):587–94 **(Jpn)**

PATHOLOGY

Retinal reattachment of the primate macula. Photoreceptor recovery after short–term detachment. Guérin CJ, et al. **Invest Ophthalmol Vis Sci** 1989 Aug;30(8):1708–25

PHYSIOLOGY

Temperature–dependence of rod photoresponses from the aspartate–treated retina of the frog (Rana temporaria). Donner K, et al. **Acta Physiol Scand** 1988 Dec; 134(4):535–41

Non–linearities in response properties of insect visual cells: an analysis in time and frequency domain. Weckström M, et al. **Acta Physiol Scand** 1988 Jan;132(1):103–13

GABA–activated chloride channels in the retinal neurons and their role in the visual function. Kaneko A, et al. **Adv Exp Med Biol** 1988;236:47–60

Cyclic GMP–activated conductance of retinal photoreceptor cells. Yau KW, et al. **Annu Rev Neurosci** 1989;12:289–327 (197 ref.)

Photoreceptor channel activation by nucleotide derivatives. Tanaka JC, et al. **Biochemistry** 1989 Apr 4;28(7):2776–84

Can quantum–bumps in photoreceptors be reconstructed from noise–data? Schnakenberg J. **Biol Cybern** 1988; 59(2):81–90

Amplification and latency in photoreceptors: integrated or separated phenomena? Schnakenberg J. **Biol Cybern** 1989; 60(6):421–30

Sequential modification of membrane currents with classical conditioning. Collin C, et al. **Biophys J** 1988 Nov; 54(5):955–60

Photoresponses of an extraocular photoreceptor associated with a decrease in membrane conductance in an opisthobranch mollusc. Gotow T. **Brain Res** 1989 Feb 6; 479(1):120–9

A light–induced decrease of cyclic GMP is involved in the photoresponse of molluscan extraocular photoreceptors. Nishi T, et al. **Brain Res** 1989 Apr 17;485(1):185–8

Serotonin modulation of Hermissenda type B photoreceptor light responses and ionic currents: implications for mechanisms underlying associative learning. Farley J, et al. **Brain Res Bull** 1989 Feb;22(2):335–51

Serotonin involvement during in vitro conditioning of Hermissenda. Grover LM, et al. **Brain Res Bull** 1989 Feb; 22(2):363–72

Visual transduction in vertebrate photoreceptors. Light activation of guanylate cyclase. Pepe IM, et al. **Cell Biophys** 1989 Apr;14(2):129–37

Electrical and biochemical properties of the cGMP-gated cation channel from rod photoreceptors. Kaupp UB, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:407–15 (37 ref.)

Sevenless, a gene encoding a putative receptor for positional information. Rubin GM. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:417–24

Properties of barnacle photoreceptor cells in culture. Krauthamer V. **Comp Biochem Physiol [A]** 1989; 92(3):429–34

Photobehavior of marine invertebrates: extraocular photoreception. Wolken JJ. **Comp Biochem Physiol [C]** 1988;91(1):145–9 (61 ref.)

Increased levels of leukotriene C4 in retinal pigment epithelium are correlated with early events in photoreceptor shedding in Xenopus laevis. Birkle DL, et al. **Curr Eye Res** 1989 Jun;8(6):557–61

Membrane resistance properties of pineal photoreceptors in the trout. Kusmic C, et al. **Exp Biol** 1989;48(4):183–6

Involvement of retinal and extraretinal photoreceptors in the mediation of nocturnal locomotor activity rhythms in the catfish, Silurus asotus. Tabata M, et al. **Exp Biol** 1988; 47(4):219–25

H1 horizontal cells of carp retina have different postsynaptic mechanisms to mediate short- versus long-wavelength visual signals. Yasui S, et al. **Exp Brain Res** 1989; 74(2):256–62

Photoreceptor physiology in the rat is governed by the light environment. Penn JS, et al. **Exp Eye Res** 1989 Aug; 49(2):205–15

Functional and structural characteristics of photoreceptor cells rescued in RPE-cell grafted retinas of RCS dystrophic rats. Sheedlo HJ, et al. **Exp Eye Res** 1989 Jun;48(6):841–54

Cone monochromacy and a reversed Purkinje shift in the gerbil. Jacobs GH, et al. **Experientia** 1989 Apr 15; 45(4):317–9

A possible role for the eyes in the photoperiodic response of quail. Konishi H, et al. **Gen Comp Endocrinol** 1988 Dec; 72(3):461–6

Aspartate separation of the scotopic threshold response (STR) from the photoreceptor a-wave of the cat and monkey ERG. Wakabayashi K, et al. **Invest Ophthalmol Vis Sci** 1988 Nov;29(11):1615–22

Biosynthesis of the two halobacterial light sensors P480 and sensory rhodopsin and variation in gain of their signal transduction chains. Otomo J, et al. **J Bacteriol** 1989 Apr; 171(4):2155–9

Cyclic GMP levels and membrane current during onset, recovery, and light adaptation of the photoresponse of detached frog photoreceptors. Cote RH, et al. **J Biol Chem** 1989 Sep 15;264(26):15384–91

Light-induced colour changes by the iridophores of the Neon tetra, Paracheirodon innesi. Clothier J, et al. **J Cell Sci** 1987 Dec;88 (Pt 5):663–8

Comparative study of temporal summation and response form in hymenopteran photoreceptors. de Souza JM, et al. **J Comp Physiol [A]** 1989;165(2):237–45

Efferent neurotransmission of circadian rhythms in Limulus lateral eye. II. Intracellular recordings in vitro. Kass L, et al. **J Comp Physiol [A]** 1988 Nov;164(1):95–105

Interspecific variation in the visual pigments of deep-sea fishes. Partridge JC, et al. **J Comp Physiol [A]** 1989 Jan; 164(4):513–29

Spectral and polarized light sensitivity of photoreceptors in the compound eye of the cricket (Gryllus bimaculatus). Zufall F, et al. **J Comp Physiol [A]** 1989 Feb;164(5):597–608

Light reduces the excitation efficiency in the nss mutant of the sheep blowfly Lucilia. Barash S, et al. **J Gen Physiol** 1988 Sep;92(3):307–30

Sensitivity of ocellar interneurons of the honeybee to constant and temporally modulated light. Baader A. **J Neurobiol** 1989 Sep;20(6):519–29

Fly photoreceptor synapses: their development, evolution, and plasticity. Meinertzhagen IA. **J Neurobiol** 1989 Jul; 20(5):276–94 (68 ref.)

Involvement of the Golgi apparatus in sorting of materials to opposite ends of frog rod retinal photoreceptors. Schmied R, et al. **J Neurobiol** 1989 Apr;20(3):115–38

Morphological defects in oraJK84 photoreceptors caused by mutation in R1–6 opsin gene of Drosophila. O'Tousa JE, et al. **J Neurogenet** 1989 Sep;6(1):41–52

Photoreceptor maintenance and degeneration in the norpA (no receptor potential-A) mutant of Drosophila melanogaster. Stark WS, et al. **J Neurogenet** 1989 Jan; 5(1):49–59

Microtubule polarity and distribution in teleost photoreceptors. Troutt LL, et al. **J Neurosci** 1988 Jul; 8(7):2371–80

Regional distribution of cGMP-activated ion channels in the plasma membrane of the rod photoreceptor. Watanabe S, et al. **J Neurosci** 1988 Jul;8(7):2334–7

An eyecup slice preparation for intracellular recording in vertebrate retinas. Burkhardt DA, et al. **J Neurosci Methods** 1989 Jun;28(3):179–87

On the interpretation of voltage noise in small cells. Stephenson RS. **J Neurosci Methods** 1988 Dec;26(2):141–9

Optical and photoreceptor immaturities limit the spatial and chromatic vision of human neonates. Banks MS, et al. **J Opt Soc Am [A]** 1988 Dec;5(12):2059–79 (86 ref.)

Preliminary evidence for pineal-mediated extraretinal photoreception in relation to tail regeneration in the Gekkonid lizard, Hemidactylus flaviviridis. Ramachandran AV, et al. **J Pineal Res** 1989;6(2):121–34

Biological light guides [letter] Enoch JM, et al. **Nature** 1989 Jul 20;340(6230):194

A histamine-activated chloride channel involved in neurotransmission at a photoreceptor synapse. Hardie RC. **Nature** 1989 Jun 29;339(6227):704–6

The glass gene encodes a zinc-finger protein required by Drosophila photoreceptor cells. Moses K, et al. **Nature** 1989 Aug 17;340(6234):531–6

'Photo-degeneration' of neurones after extracellular dye application. Picaud S, et al. **Neurosci Lett** 1988 Dec 19; 95(1–3):24–30

Reduced light responsiveness of the cone pathway during prolonged darkness does not result from an increase of dopaminergic activity in the fish retina. Weiler R, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):214–8

A model for open-close control of cation channels in the plasma membrane of retinal rod outer segments. Ichikawa K. **Neurosci Res** 1989 Jun;6(5):377–96

Ultra-violet-sensitive cones in the color-coding systems of cyprinid retinas. Hashimoto Y, et al. **Neurosci Res Suppl** 1988;8:S81–95

Adaptational change in cone-mediated electroretinogram in human and carp. Miyake Y, et al. **Neurosci Res Suppl** 1988; 8:S1–13

The localization of calcium release by inositol trisphosphate in Limulus photoreceptors and its control by negative feedback. Payne R, et al. **Philos Trans R Soc Lond [Biol]** 1988 Jul 26; 320(1199):359–79 (99 ref.)

Glutamate-induced K+ flux in the photoreceptor layer of isolated retina of cyprinid fish: possible consequences for second-order neurones. Djamgoz MB. **Physiol Bohemoslov** 1988;37(3):235–9

The time course of the light-induced extracellular potassium change around receptors and at the vitreal surface compared with the time course of slow PIII wave in the isolated rabbit retina. Hanitzsch R. **Physiol Bohemoslov** 1988;37(3):227–33

An estimate of the number of G regulator proteins activated per excited rhodopsin in living Limulus ventral photoreceptors. Kirkwood A, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3872–6

Why are blue visual pigments blue? A resonance Raman microprobe study. Loppnow GR, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1515–8

The effect of photoreceptor coupling and synapse nonlinearity on signal:noise ratio in early visual processing. Tessier-Lavigne M, et al. **Proc R Soc Lond [Biol]** 1988 Jul 22;234(1275):171–97

The genes for color vision. Nathans J. **Sci Am** 1989 Feb; 260(2):42–9 (4 ref.)

Human rods are acting in the light and cones are inhibited in the dark. Sugita Y, et al. **Tohoku J Exp Med** 1989 Apr; 157(4):365–72

Application of an invariant spectral form to the visual pigments of crustaceans: implications regarding the binding of the chromophore. Lipetz LE, et al. **Vision Res** 1988; 28(10):1083–93

[What do we know about the molecular mechanism of visual excitation?] Stieve H. **Naturwissenschaften** 1988 Jun; 75(6):288–96 (Eng. Abstr.) **(Ger)**

[Sensitivity of Argas (Persicargas) walkerae to optic irradiation and localization and organization of light perceiving or permeability areas of the integument] Gothe R, et al. **Zentralbl Veterinarmed [B]** 1989 Jun;36(4):303–13 (Eng. Abstr.) **(Ger)**

[Diversity of third order neurons and their functions in mammalian retina] Fukuda Y. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):663–73 **(Jpn)**

[Ultraviolet-sensitive photoreceptor in cyprinid fishes] Hashimoto Y. **Tanpakushitsu Kakusan Koso** 1989 May; 34(5):614–21 **(Jpn)**

[Involvement of inositol triphosphate in transmembrane signaling of photoreceptor cells] Inoue H, et al. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):566–73 **(Jpn)**

[Color information processing: conversion from trichromatic process to opponent process] Kaneko A. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):652–62 **(Jpn)**

[Synaptic transmission from photoreceptors to horizontal and bipolar cells in the vertebrate retina] Tachibana M. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):642–51 **(Jpn)**

[Photoreceptors of phototaxis of halobacteria; sensoryrhodopsin and phoborhodopsin] Takahashi T, et al. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):452–61 **(Jpn)**

[The electroretinographic glare test in studies on isolated frog retina] Czepita D, et al. **Klin Oczna** 1988 Jun;90(6):205–6 (Eng. Abstr.) **(Pol)**

[Functional blocks of the signal transmission system in retinal photoreceptors: evolutionary aspects] Etingof RN, et al. **Zh Evol Biokhim Fiziol** 1989 Mar–Apr;25(2):195–214 (64 ref.) **(Rus)**

[Control of chlorophyll a synthesis by phytochrome and cryptochrome in the red alga Corallina elongata Ellis et Soland] López-Figueroa F, et al. **Rev Esp Fisiol** 1988 Sep; 44(3):287–94 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Identification of a photoreceptor-specific mRNA encoded by the gene responsible for retinal degeneration slow (rds). Travis GH, et al. **Nature** 1989 Mar 2;338(6210):70–3

[Function of the photoreceptor mechanisms in patients with complete achromasia] Novokhatskiĭ AS, et al. **Oftalmol Zh** 1988;(5):285–7 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Circadian rhythms in adaptation to light of Limulus photoreception. Kass L, et al. **Comp Biochem Physiol [C]** 1988;91(1):229–39

SECRETION

Regulation of melatonin secretion in a photoreceptive pineal organ: an in vitro study in the pike. Falcón J, et al. **J Neurosci** 1989 Jun;9(6):1943–50

TRANSPLANTATION

Transplantation of photoreceptors to light-damaged retina. Silverman MS, et al. **Invest Ophthalmol Vis Sci** 1989 Aug; 30(8):1684–90

ULTRASTRUCTURE

Retinal fine structure in the European eel Anguilla anguilla. VI. Photoreceptors of the sexually immature silver eel stage. Braekevelt CR. **Anat Anz** 1988;166(1–5):23–31

Retinal fine structure in the European eel Anguilla anguilla. VIII. Photoreceptors of the sexually mature silver eel stage. Braekevelt CR. **Anat Anz** 1988;167(1):1–10

Interphotoreceptor contacts at the inner segment level in primate retinas. Cohen AI. **Brain Res** 1989 Jun 19; 490(1):200–3

Histamine-like immunoreactivity in photoreceptors of the compound eyes and ocelli of the flies Calliphora erythrocephala and Musca domestica. Nässel DR, et al. **Cell Tissue Res** 1988 Sep;253(3):639–46

Direct connections between the R7/8 and R1–6 photoreceptor subsystems in the dipteran visual system. Shaw SR, et al. **Cell Tissue Res** 1989 Aug;257(2):295–302

Opposing microtubule- and actin-dependent forces in the development and maintenance of structural polarity in retinal photoreceptors. Madreperla SA, et al. **Dev Biol** 1989 Jan;131(1):149–60

Proteoglycans in the mouse interphotoreceptor matrix. II. Origin and development of proteoglycans. Tawara A, et al. **Exp Eye Res** 1989 Jun;48(6):815–39

Chemical and electrical synapses between photoreceptors in the retina of the turtle, Chelydra serpentina. Owen WG. **J Comp Neurol** 1985 Oct 22;240(4):423–33

Structure of the subrhabdomeric cisternae in the photoreceptor cells of Drosophila melanogaster. Matsumoto-Suzuki E, et al. **J Neurocytol** 1989 Feb; 18(1):87–93

Ribbon synapses of the mammalian retina contain two types of synaptic bodies—ribbons and spheres. Vollrath L, et al. **J Neurocytol** 1989 Feb;18(1):115–20

Cytodifferentiation of the chick pineal gland, with special reference to the photosensory and secretory elements. Ohshima K, et al. **J Pineal Res** 1988;5(4):397–410

The surface structure of photoreceptor outer segment disks. Sjöstrand FS, et al. **J Ultrastruct Mol Struct Res** 1988 Oct; 101(1):40–50

Photoreceptor disk membranes of Lampetra japonica. Tonosaki A, et al. **Neurosci Res** 1989 Apr;6(4):340–9

[Important concepts and technology in the study of vision: fine structures of photoreceptor cells revealed by recent techniques in electron microscopy] Usukura J. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):715–23 **(Jpn)**

PHOTOSENSITIVITY DISORDERS

Photodermatosis in infants and children. Poh-Fitzpatrick MB, et al. **Pediatr Dermatol** 1988 Aug;5(3):189–200

CHEMICALLY INDUCED

Experimental photoallergic contact dermatitis to bisphenol A. Maguire HC Jr. **Acta Derm Venereol (Stockh)** 1988; 68(5):408–12

Spontaneous disappearance of blue-gray facial pigmentation during amiodarone therapy (out of the blue). Beukema WP, et al. **Am J Cardiol** 1988 Nov 15;62(16):1146–7

Ultrastructure and dynamics of selective mitochondrial injury in carcinoma cells after doxycycline photosensitization in vitro. Shea CR, et al. **Am J Pathol** 1988 Nov;133(2):381–8

Clomipramine-induced pseudocyanotic pigmentation [letter] Tunca Z, et al. **Am J Psychiatry** 1989 Apr;146(4):552–3

Photoallergy to benzophenone. Knobler E, et al. **Arch Dermatol** 1989 Jun;125(6):801–4

Phototoxicity of nonsteroidal inflammatory drugs. Coincidence or specific mechanism? [editorial] Kocheva IE. **Arch Dermatol** 1989 Jun;125(6):824–6

An unusual photoactivated skin eruption. Quinidine-induced livedo reticularis. Manzi S, et al. **Arch Dermatol** 1989 Mar; 125(3):417–8, 421–2

Topical phototoxicity from oral methoxsalen capsules [letter] Morison WL. **Arch Dermatol** 1989 Mar;125(3):433

Drug-induced photosensitivity reaction [letter] Nedorost ST, et al. **Arch Dermatol** 1989 Mar;125(3):433–4

Photosensitivity to desoximetasone emollient cream [letter] Stierstorfer MB, et al. **Arch Dermatol** 1988 Dec; 124(12):1870–1

The UV erythema action spectra of three coal tar preparations. Berne B, et al. **Clin Exp Dermatol** 1987 Nov; 12(6):400–2

In vitro and in vivo phototoxicity of furocoumarin-containing plants. Knudson EA, et al. **Clin Exp Dermatol** 1988 Mar;13(2):92–6

Severe photodermatitis during ketoconazole therapy [letter] Mohamed KN. **Clin Exp Dermatol** 1988 Jan;13(1):54

Photodermatitis from benzydamine cream. Motley RJ, et al. **Contact Dermatitis** 1988 Jul;19(1):66

An unusual combination of phototoxicity and Stevens-Johnson syndrome due to antimalarial therapy. Ortel B, et al. **Dermatologica** 1989;178(1):39–42

Radicals involved in photoallergen/protein interactions. Delahanty JN, et al. **Free Radic Biol Med** 1989;7(3):231–6

Photosensitivity to nonsteroidal anti-inflammatory drugs [letter] Figueinedo A, et al. **Int J Dermatol** 1989 Mar; 28(2):139–40

Mechanism of photosensitive reactions induced by piroxicam [letter] Cirne de Castro JL, et al. **J Am Acad Dermatol** 1989 Apr;20(4):706–7

Lichenoid photoreactive epidermal necrosis with diflunisal. Street ML, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 1):850–1

Phototoxic index of drug determined by Candida growth inhibition. Horikawa E, et al. **J Dermatol (Tokyo)** 1988 Dec; 15(6):523–6

Photosensitivity and hyperpigmentation in amiodarone-treated patients: incidence, time course, and recovery. Rappersberger K, et al. **J Invest Dermatol** 1989 Aug;93(2):201–9

Acute radiation skin reaction and persistent photosensitivity after benoxaprofen [letter] Ramakrishnan S, et al. **Lancet** 1988 Oct 15;2(8616):913

DDS-induced photosensitivity with reference to six case reports. Dhanapaul S. **Lepr Rev** 1989 Jun;60(2):147–50

Naproxen-induced bullous photodermatitis. Rivers JK, et al. **Med J Aust** 1989 Aug 7;151(3):167–8

Prediction of phototoxic potential using human A431 cells and mouse 3T3 cells. Duffy PA, et al. **Mol Toxicol** 1987–88 Fall;1(4):579–87

Retinoid associated phototoxicity and photosensitivity. Ferguson J, et al. **Pharmacol Ther** 1989;40(1):123–35 (49 ref.)

Cutaneous drug eruption caused by 8-methoxypsoralen. Cox NH, et al. **Photodermatol** 1989 Apr;6(2):96–7

Photoallergic reaction caused by enoxacin. Kawabe Y, et al. **Photodermatol** 1989 Feb;6(1):57–9

Photosensitivity induced by griseofulvin. Kawabe Y, et al. **Photodermatol** 1988 Dec;5(6):272–4

Connubial photosensitivity to musk ambrette. Leroy D, et al. **Photodermatol** 1989 Jun;6(3):137–9

Different clinical presentations in photosensitivity to musk ambrette. Sánchez-Pedreño P, et al. **Photodermatol** 1989 Apr;6(2):103–5

Dacarbazine-induced photosensitivity. Serrano G, et al. **Photodermatol** 1989 Jun;6(3):140–1

Photoallergy to systemic quinidine in the mouse: dose-response studies. Wirestrand LE, et al. **Photodermatol** 1988 Oct;5(5):201–5

Photosensitive lichenoid reaction accompanied by nonphotosensitive subacute prurigo caused by carbamazepine. Yasuda S, et al. **Photodermatol** 1988 Oct; 5(5):206–10

[Mechanisms of cutaneous accidents related to non-steroidal anti-inflammatory agents] Abensour M, et al. **Therapie** 1988 Oct-Dec;43(6):469–73 (Eng. Abstr.) **(Fre)**

[Drug-induced cutaneous photosensitivity. Results of a consensus meeting] Roujeau JC, et al. **Therapie** 1989 May-Jun;44(3):223–7 (13 ref.) (Eng. Abstr.) **(Fre)**

[Anti-psoriasis and phototoxic effect of a hematoporphyrin derivative following topical administration and irradiation with visible light] Meffert H, et al. **Dermatol Monatsschr** 1989;175(1):28–34 (Eng. Abstr.) **(Ger)**

[Photoallergic and allergic contact eczema caused by dibenzoylmethane compounds and other sunscreening agents] Schauder S, et al. **Hautarzt** 1988 Jul;39(7):435–40 (Eng. Abstr.) **(Ger)**

CLASSIFICATION

Polymorphic light eruption sine eruptione and brachioradial pruritus [letter] Commens C. **Br J Dermatol** 1988 Oct; 119(4):554

[A new classification of photodermatoses] Azulay RD, et al. **Med Cutan Ibero Lat Am** 1989;17(1):22–7 (23 ref.) (Eng. Abstr.) **(Por)**

COMPLICATIONS

Vitiligo and photosensitivity [letter] Ackroyd J. **BMJ** 1988 Oct 29;297(6656):1126

Hypertrophic lichen planus and light sensitivity in an HIV-positive patient. Pardo RJ, et al. **Int J Dermatol** 1988 Nov;27(9):642–4

Reticular erythematous mucinosis and photosensitivity: a case study. McFadden N, et al. **Photodermatol** 1988 Dec; 5(6):270–2

DIAGNOSIS

Contact photoallergy testing of sunscreens in guinea pigs. Gerberick GF, et al. **Contact Dermatitis** 1989 Apr; 20(4):251–9

Phototests in patients with various forms of lupus erythematosus. Wolska H, et al. **Int J Dermatol** 1989 Mar; 28(2):98–103

Photopatch testing: a three-year experience [letter] Guarrera M. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 1):589–91

Contact and photocontact allergy to glyceryl para-aminobenzoate. Bruze M, et al. **Photodermatol** 1988 Aug;5(4):162–5

The Scandinavian multicenter photopatch study 1980–1985: final report. Thune P, et al. **Photodermatol** 1988 Dec; 5(6):261–9

[Results of skin phototests in photosensitive patients and controls tested at the skin clinic in Hradci Kraálové] Ettler K. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(2):135–42 (Eng. Abstr.) **(Cze)**

[Which patients with seasonal photodermatitis should be tested?] Jeanmougin M. **Ann Dermatol Venereol** 1989; 116(2):141–4 (9 ref.) **(Fre)**

[Polymorphous photodermatosis—photobiologic diagnosis and therapy] Hönigsmann H, et al. **Z Hautkr** 1988 Aug 15;63(8):676–8 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

Treatment of actinic prurigo with PUVA: mechanism of action. Farr PM, et al. **Br J Dermatol** 1989 Mar; 120(3):411–8

Topical tretinoin and photoaged skin. Goldfarb MT, et al. **Cutis** 1989 May;43(5):476–82

Development of cutaneous pseudolymphoma following ciclosporin therapy of actinic reticuloid. Thestrup-Pedersen K, et al. **Dermatologica** 1988; 177(6):376–81

Effect of indomethacin on UVB- and UVA-induced erythema in polymorphic light eruption. Farr PM, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 1):230–6

Actinic reticuloid: response to cyclosporine. Norris PG, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 1):307–9

Antidepressant medication reverses increased sensitivity to light in depression: preliminary report. Seggie J, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3–4):537–41

Effect of chronic lithium on sensitivity to light in male and female bipolar patients. Seggie J, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(3–4):543–9

[Treatment of solar urticaria: advantage of terfenadine] Jeanmougin M, et al. **Allerg Immunol (Paris)** 1989 May; 21(5):205–7 (Eng. Abstr.) **(Fre)**

[Canthaxanthin retinopathy] Nijman NM, et al. **Klin Monatsbl Augenheilkd** 1989 Jan;194(1):48–51 (Eng. Abstr.) **(Ger)**

ETHNOLOGY

Photosensitivity reactions in black skin. Willis I. **Dermatol Clin** 1988 Jul;6(3):369–75 (24 ref.)

ETIOLOGY

Phytophotodermatitis. Held JL. **Am Fam Physician** 1989 Apr; 39(4):143–6 (10 ref.)

Prevalence and expression of photosensitivity in systemic lupus erythematosus. Wysenbeek AJ, et al. **Ann Rheum Dis** 1989 Jun;48(6):461–3

Photosensitizing potential of certain nonsteroidal anti-inflammatory agents. Kaidbey KH, et al. **Arch Dermatol** 1989 Jun;125(6):783–6

Induction of contact photosensitivity to TCSA using photohapten-modified syngeneic spleen cells. Tokura Y, et al. **Arch Dermatol Res** 1988;280(4):207–13

Photosensitivity and anti-Ro (SS-A) antibodies in black patients with systemic lupus erythematosus (SLE). Sutej PG, et al. **Br J Rheumatol** 1989 Aug;28(4):321–4

Porphyrin-sensitized cutaneous photosensitivity: pathogenesis and treatment. Poh-Fitzpatrick MB. **Clin Dermatol** 1985 Apr-Jun;3(2):41–82 (201 ref.)

Phytophotodermatitis from a Cachrys species. Ena P, et al. **Contact Dermatitis** 1989 Feb;20(2):144–5

Contact dermatitis from Eusolex 8021 elucidated by chemical analysis. Foussereau J, et al. **Contact Dermatitis** 1989 Apr; 20(4):311–2

Tiaprofenic acid induced photosensitivity. Neumann RA, et al. **Contact Dermatitis** 1989 Apr;20(4):270–3

Photoallergic contact dermatitis due to mineral oil. Sakakibara S, et al. **Contact Dermatitis** 1989 Apr; 20(4):291–4

Eczematous drug eruption from carbamazepine: coexistence of contact and photocontact sensitivity. Terui T, et al. **Contact Dermatitis** 1989 Apr;20(4):260–4

The treatment of photoaged human skin by topical tretinoin. Kligman AM. **Drugs** 1989 Jul;38(1):1–8

Skin cosmetics. Banerjee PK. **Indian J Dermatol** 1988 Jan; 33(1):9–12

Complications of whole bladder dihematoporphyrin ether photodynamic therapy. Harty JI, et al. **J Urol** 1989 Jun; 141(6):1341–6

Skin photosensitivity and photodestruction of several potential photodynamic sensitizers. Roberts WG, et al. **Photochem Photobiol** 1989 Apr;49(4):431–8

Haemodialysis photosensitivity. Anderson CD. **Photodermatol** 1989 Jun;6(3):107–9

Polymorphic light eruption induced by oral contraceptives and pregnancy? Boonstra H, et al. **Photodermatol** 1989 Feb; 6(1):55–6

Allergic contact dermatitis to Bryozoa and photosensitivity. Leroy D, et al. **Photodermatol** 1988 Oct;5(5):227–9

[Photo-aggravated Parthenium hysterophorus contact eczema] Jeanmougin M, et al. **Ann Dermatol Venereol** 1988; 115(11):1238–40 **(Fre)**

[Occupationally-induced allergic and photoallergic reactions to epoxide resins in railroad employees] Bachurzewska B, et al. **Derm Beruf Umwelt** 1988 Jul-Aug;36(4):125–7 (Eng. Abstr.) **(Ger)**

[Characteristics of polymorphous light dermatosis—results of a prospective survey and study of 302 affected patients] Diepgen TL, et al. **Z Hautkr** 1989 Apr 15;64(4):279–80, 283–5 (Eng. Abstr.) **(Ger)**

[Generation of active oxygen by environmental factors; pheophorbide] Kimura S. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2803–10 **(Jpn)**

[Phytophotodermatitis. Some photobiological aspects of psoralens] Corrales Padilla H. **Med Cutan Ibero Lat Am** 1988;16(3):267–72 (Eng. Abstr.) **(Spa)**

GENETICS

Familial keratoses of actinic distribution associated with internal malignancy and cellular hypersensitivity to UVA. Atherton DJ, et al. **Br J Dermatol** 1989 May;120(5):671–81

IMMUNOLOGY

Correlation of anti-Ro antibody with photosensitivity rash in systemic lupus erythematosus patients. Mond CB, et al. **Arthritis Rheum** 1989 Feb;32(2):202–4

Polymorphic light eruption: an immunopathological study of evolving lesions. Norris PG, et al. **Br J Dermatol** 1989 Feb;120(2):173–83

Ultraviolet-induced suppressor T cells and factor(s) in murine contact photosensitivity. II. Igh-V restriction of T-cell-suppressor factor. Tokura Y, et al. **Clin Immunol Immunopathol** 1989 Apr;51(1):83–90

[The significance of epidermal cytokines in UV-induced immune suppression] Schwarz T. **Hautarzt** 1988 Oct; 39(10):642–6 (0 ref.) (Eng. Abstr.) **(Ger)**

[Detection of SSA/Ro antibody in patients with systemic lupus erythematosus, discoid lupus erythematosus and cutaneous photosensitivity. A comparative study] Carazzai AM, et al. **Rev Paul Med** 1988 Mar-Apr;106(2):71–4 (Eng. Abstr.) **(Por)**

[Polymorphous light eruption. Study of the infiltrate with monoclonal antibodies] Lecha M, et al. **Med Cutan Ibero Lat Am** 1988;16(6):451–4 (Eng. Abstr.) **(Spa)**

METABOLISM

A novel mechanism for the generation of superoxide anions in hematoporphyrin derivative-mediated cutaneous photosensitization. Activation of the xanthine oxidase pathway. Athar M, et al. **J Clin Invest** 1989 Apr; 83(4):1137–43

PATHOLOGY

Springtime papules, plaques, and cheilitis. Polymorphous light eruption (PMLE). Byrd LN, et al. **Arch Dermatol** 1989 Aug;125(8):1129, 1132

Actinic reticuloid: immunohistochemical analysis of the cutaneous infiltrate in 13 patients. Toonstra J, et al. **Br J Dermatol** 1989 Jun;120(6):779–86

Actinic reticuloid. A clinical photobiologic, histopathologic, and follow-u study of 16 patients. Toonstra J, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 1):205–14

Studies on photodynamic action of chlorophyl derivatives—phototoxicity of pheophorbide-A on rats. Matsuura E, et al. **Kitasato Arch Exp Med** 1988 Dec; 61(4):201–13

Solar urticaria induced by visible light and inhibited by UVA. Leenutaphong V, et al. **Photodermatol** 1988 Aug;5(4):170–4

Polymorphous light eruption: successful reproduction of skin lesions, including papulovesicular light eruption, with ultraviolet B. Miyamoto C. **Photodermatol** 1989 Apr; 6(2):69–79

[Disseminated superficial actinic porokeratosis. A case report] Schulze R, et al. **Dermatol Monatsschr** 1989; 175(3):175–9 (Eng. Abstr.) **(Ger)**

[The syndrome of chronic actinic dermatitis. Persistent light reaction—actinic reticuloid] Wolf C, et al. **Hautarzt** 1988 Oct;39(10):635–41 (41 ref.) (Eng. Abstr.) **(Ger)**

[A case of actinic reticuloid] Belov AS, et al. **Vestn Dermatol Venerol** 1988;(9):60–4 (Eng. Abstr.) **(Rus)**

[Actinic reticuloid. Immunohistochemical study] Barnadas MA, et al. **Med Cutan Ibero Lat Am** 1988;16(5):359–65 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Pathogenesis and classification of solar urticaria: a new concept. Leenutaphong V, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 1):237–40 (21 ref.)

The "priming phenomenon" in the acute phototoxicity of erythropoietic protoporphyria. Poh-Fitzpatrick MB. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 1):311

PREVENTION & CONTROL

Prevention of cutaneous phototoxicity in photodynamic therapy. McLear PW, et al. **Am J Otolaryngol** 1989 Mar-Apr;10(2):92-8

An attempt to reduce the photosensitizing potential of chlorpromazine with the simultaneous use of beta- and dimethyl-beta-cyclodextrins in guinea pigs. Hoshino T, et al. **Arch Dermatol Res** 1989;281(1):60-5

Preventive effect of an E. coli-filtrate (Colibiogen) in polymorphous light eruption. Przybilla B, et al. **Br J Dermatol** 1989 Aug;121(2):229-33

Sunscreens and phototesting. Lowe NJ, et al. **Clin Dermatol** 1988 Jul-Sep;6(3):40-9 (47 ref.)

Prevention and repair of photoaging: sunscreens and retinoids. Kligman LH. **Cutis** 1989 May;43(5):458-65 (35 ref.)

Assessment by mouse model of the ultraviolet A protective effect of topical sunscreens. Furukawa RD, et al. **J Am Acad Dermatol** 1989 Jun;20(6):1031-7

Adverse effects of sunscreens in photosensitive patients [see comments] Farr PM, et al. **Lancet** 1989 Feb 25; 1(8635):429-31. **Comment in:** Lancet 1989 Jun 17;1(8651):1387

Effect of a sunscreen in photosensitive patients [letter] Farr PM, et al. **Lancet** 1989 May 13;1(8646):1087-8

[Sunburn. Irradiation, pathogenesis, therapy, prevention] Niedner R. **Med Monatsschr Pharm** 1989 May;12(5):141-6 (7 ref.) **(Ger)**

[Light protective agents] Ippen H. **Z Hautkr** 1988 Sep 15; 63(9):705 **(Ger)**

[Preparations containing sunscreens in West Germany 1988] Schauder S, et al. **Z Hautkr** 1988 Sep 15;63(9):707-63 (15 ref.) (Eng. Abstr.) **(Ger)**

[Evaluation of sunscreening agents] Schauder S. **Z Hautkr** 1988 Sep 15;63(9):764-70 (16 ref.) (Eng. Abstr.) **(Ger)**

SURGERY

Treatment of keratoses [letter] Marks R. **Australas J Dermatol** 1988 Apr;29(1):58-9

Animal studies questioned [letter; comment] Hoffer KJ. **Ophthalmology** 1989 Jun;96(6):925-6. **Comment on:** Ophthalmology 1988 Aug;95(8):1130-41

THERAPY

Retinal transplants into adult eyes affected by phototoxic retinopathy. del Cerro M, et al. **Prog Brain Res** 1988; 78:125-30

VETERINARY

Clinical biochemistry of sporidesmin natural intoxication (facial eczema) of sheep. Bonnefoi M, et al. **J Clin Chem Clin Biochem** 1989 Jan;27(1):13-8

Photosensitization problems in livestock. Rowe LD. **Vet Clin North Am Food Anim Pract** 1989 Jul;5(2):301-23 (100 ref.)

Photosensitization of cattle in Montana: is Descurainia pinnata the culprit? Pfister JA, et al. **Vet Hum Toxicol** 1989 Jun;31(3):225-7

Do microfungi help to induce the phototoxic disease alveld in Norway? Aas O, et al. **Vet Rec** 1989 May 27;124(21):563

PHOTOSYNTHESIS

Immobilized photosynthetic membranes and cells for the production of fuels and chemicals. Hall DO, et al. **Adv Exp Med Biol** 1988;238:225-45 (49 ref.)

Mechanism of photosynthetic water oxidation. Brudvig GW, et al. **Annu Rev Biophys Biophys Chem** 1989;18:25-46 (128 ref.)

Expression of a cytochrome c2 isozyme restores photosynthetic growth of Rhodobacter sphaeroides mutants lacking the wild-type cytochrome c2 gene. Fitch J, et al. **Arch Biochem Biophys** 1989 Jun;271(2):502-7

Effect of alkaline pH on photosynthetic water oxidation and the association of extrinsic proteins with Photosystem Two. Chapman DJ, et al. **Biochem J** 1989 Mar 1;258(2):357-62

Manganese-binding proteins of the oxygen-evolving complex. Mei R, et al. **Biochemistry** 1989 Jun 27; 28(13):5560-7

The relation of photosynthetic phosphorylation to the Hill reaction. 1958 [classical article] Avron M, et al. **Biochim Biophys Acta** 1989;1000:384-93

Hypothesis. The molecular 'double-pivot' mechanism for water oxidation. Christou G, et al. **Biochim Biophys Acta** 1987;895(3):259-74 (75 ref.)

How carotenoids function in photosynthetic bacteria. Cogdell RJ, et al. **Biochim Biophys Acta** 1987;895(2):63-79 (107 ref.)

Structure, function and organization of the Photosystem I reaction center complex. Golbeck JH. **Biochim Biophys Acta** 1987;895(3):167-204 (336 ref.)

Organization and expression of genes for photosynthetic pigments-protein complexes in photosynthetic bacteria. Zhu YS, et al. **Biotechnology** 1989;12:257-91 (121 ref.)

Effect of assam crude on photosynthesis and associated electron transport system in Anabaena doliolum. Singh AK, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):776-80

Dynamics of the photosystem II reaction center. Mattoo AK, et al. **Cell** 1989 Jan 27;56(2):241-6 (42 ref.)

Cell position and light influence C4 versus C3 patterns of photosynthetic gene expression in maize. Langdale JA, et al. **EMBO J** 1988 Dec 1;7(12):3643-51

Effects of metabolite binding to ribulosebisphosphate carboxylase on the activity of the Calvin photosynthesis cycle. Pettersson G, et al. **Eur J Biochem** 1988 Nov 1; 177(2):351-5

Turnover of thylakoid photosystem II proteins during photoinhibition of Chlamydomonas reinhardtii. Schuster G, et al. **Eur J Biochem** 1988 Nov 1;177(2):403-10

Structure and biogenesis of Chlamydomonas reinhardtii photosystem I. Schuster G, et al. **Eur J Biochem** 1988 Nov 1;177(2):411-6

Selective inhibition of photosystem II in spinach by tobacco mosaic virus: an effect of the viral coat protein. Hodgson RA, et al. **FEBS Lett** 1989 Mar 13;245(1-2):267-70

The mechanism of proton translocation in respiration and photosynthesis. Malmström BG. **FEBS Lett** 1989 Jun 19; 250(1):9-21 (48 ref.)

Chloride binding to photosystem II in the dark is in slow exchange. Shachar-Hill Y, et al. **FEBS Lett** 1989 Aug 28; 254(1-2):184-8

A 10 kDa polypeptide associated with the oxygen-evolving complex of photosystem II has a putative C-terminal non-cleavable thylakoid transfer domain. Webber AN, et al. **FEBS Lett** 1989 Jan 2;242(2):435-8

Formation of functional inter-species hybrid photosynthetic complexes in Rhodobacter capsulatus. Zilsel J, et al. **FEBS Lett** 1989 Aug 14;253(1-2):247-52

Mechanisms of light state transition in photosynthesis of green plants and red algae. Bose S, et al. **Indian J Biochem Biophys** 1988 Dec;25(6):631-5

Comparative efficiency of primary light conversion in photosynthetic bacteria Rhodospirillum rubrum and Rhodopseudomonas viridis. Paliwal R, et al. **Indian J Biochem Biophys** 1985 Dec;22(6):364-7

Oscillations in wheat chloroplast photochemical activity: Part III—Characterization of the possible oscillators in electron transport chain. Sayeed SA, et al. **Indian J Biochem Biophys** 1988 Dec;25(6):625-30

Microaerophilic growth and induction of the photosynthetic reaction center in Rhodopseudomonas viridis. Lang FS, et al. **J Bacteriol** 1989 May;171(5):2827-34

Light guides. Directional energy transfer in a photosynthetic antenna. Glazer AN. **J Biol Chem** 1989 Jan 5;264(1):1-4 (38 ref.)

Thioredoxin is essential for photosynthetic growth. The thioredoxin m gene of Anacystis nidulans. Muller EG, et al. **J Biol Chem** 1989 Mar 5;264(7):4008-14

DNA methylation and the differential expression of C4 photosynthesis genes in mesophyll and bundle sheath cells of greening maize leaves. Ngernprasirtsiri J, et al. **J Biol Chem** 1989 May 15;264(14):8241-8

Light availability influences the ratio of two forms of D1 in cyanobacterial thylakoids. Schaefer MR, et al. **J Biol Chem** 1989 May 5;264(13):7412-7

Structure-function studies on bacteriorhodopsin. X. Individual substitutions of arginine residues by glutamine affect chromophore formation, photocycle, and proton translocation. Stern LJ, et al. **J Biol Chem** 1989 Aug 25; 264(24):14202-8

Posttranslational events leading to the assembly of photosystem II protein complex: a study using photosynthesis mutants from Chlamydomonas reinhardtii. de Vitry C, et al. **J Cell Biol** 1989 Sep;109(3):991-1006

Orientational properties of biological pigments in ordered systems studied with polarized light: photosynthetic pigment-protein complexes in membranes. Van Gurp M, et al. **J Theor Biol** 1988 Apr 7;131(3):333-49

Genetic evidence for supraoperonal organization of genes for photosynthetic pigments and pigment-binding proteins in Rhodobacter capsulatus. Young DA, et al. **Mol Gen Genet** 1989 Jul;218(1):1-12

In photosynthetic reaction centers, the free energy difference for electron transfer between quinones bound at the primary and secondary quinone-binding sites governs the observed secondary site specificity. Giangiacomo KM, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2658-62

Correlation of paramagnetic states and molecular structure in bacterial photosynthetic reaction centers: the symmetry of the primary electron donor in Rhodopseudomonas viridis and Rhodobacter sphaeroides R-26. Norris JR, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4335-9

The manganese site of the photosynthetic water-splitting enzyme. George GN, et al. **Science** 1989 Feb 10; 243(4892):789-91

Dispersed polaron simulations of electron transfer in photosynthetic reaction centers. Warshel A, et al. **Science** 1989 Oct 6;246(4926):112-6

The dynamic photosynthetic membrane and regulation of solar energy conversion. Anderson JM, et al. **Trends Biochem Sci** 1988 Sep;13(9):351-5 (22 ref.)

The discovery of ferredoxin: the photosynthetic path [published erratum appears in Trends Biochem Sci 1988 Apr;13(4):143] Arnon DI. **Trends Biochem Sci** 1988 Jan; 13(1):30-3 (45 ref.)

Photosynthetic antenna proteins: 100 ps before photochemistry starts. Hunter CN, et al. **Trends Biochem Sci** 1989 Feb;14(2):72-6 (32 ref.)

Reaction centers of photosynthetic bacteria. Knaff DB. **Trends Biochem Sci** 1988 May;13(5):157-8 (10 ref.)

Textbooks ignore photosystem II-dependent ATP formation: is the Z scheme to blame? Ort DR, et al. **Trends Biochem Sci** 1988 Dec;13(12):467-9 (26 ref.)

[Protein constituents of photosystem-I reaction center complex] Hiyama T. **Tanpakushitsu Kakusan Koso** 1989 May;34(6):768-72 **(Jpn)**

[Structure and electron transfer process of photosystem I reaction center] Itoh S. **Tanpakushitsu Kakusan Koso** 1989 May;34(6):755-67 **(Jpn)**

[Three-dimensional structure of photosynthetic reaction center from purple bacteria] Miki K, et al. **Tanpakushitsu Kakusan Koso** 1989 May;34(6):726-40 **(Jpn)**

[Production of superoxide radicals in thylakoid membranes] Takahashi M. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):2723-9 **(Jpn)**

[Molecular organization in photosystem II reaction center] Takahashi Y, et al. **Tanpakushitsu Kakusan Koso** 1989 May; 34(6):741-54 **(Jpn)**

DRUG EFFECTS

Effect of glyphosate (Roundup formulation) on periphytic algal photosynthesis. Goldsborough LG, et al. **Bull Environ Contam Toxicol** 1988 Aug;41(2):253-60

Long-term effects of land application of aqueous oil effluent on photosynthetic efficiency of certain varieties of Oryza sativa L. Ilangovan K, et al. **Bull Environ Contam Toxicol** 1989 Feb;42(2):187-94

On the regulatory significance of inhibitors acting on non-equilibrium enzymes in the Calvin photosynthesis cycle. Pettersson G, et al. **Eur J Biochem** 1989 Jun 15; 182(2):373-7

Local anesthetics-induced inhibition of chloroplast electron transport. Semin BK, et al. **Gen Physiol Biophys** 1989 Jun; 8(3):233-44

Molecular modelling of inhibitors and herbicides for photosynthetic systems. Oettmeier W, et al. **Prog Clin Biol Res** 1989;291:251-4

[Paraquat, an active-oxygen producing herbicide] Matsunaka S. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2790-4 **(Jpn)**

[Evaluation of the effect of a single dose of ammonia on lettuce photosynthesis in a hermetically sealed phytotron] Berkovich IuA, et al. **Kosm Biol Aviakosm Med** 1989 Mar-Apr;23(2):67-70 (Eng. Abstr.) **(Rus)**

PHOTOTHERAPY

Rhythmic light therapy for depression and data processing analysis of its effects by directed coherence. Takigawa M. **Act Nerv Super (Praha)** 1988 Sep;30(3):177-80

Seasonal depression. Dilsaver SC, et al. **Am Fam Physician** 1988 Oct;38(4):173-6 (19 ref.)

Hyperbilirubinemia in otherwise healthy infants. Greenwald JL. **Am Fam Physician** 1988 Dec;38(6):151-8 (31 ref.)

Effect of phototherapy on spontaneous eye blink rate in subjects with seasonal affective disorder. Depue RA, et al. **Am J Psychiatry** 1988 Nov;145(11):1457-9

Response to phototherapy of an elderly patient with seasonal affective disorder [letter] Webb M, et al. **Am J Psychiatry** 1988 Dec;145(12):1607-8

Clinical experience with phototherapy. Tan KL, et al. **Ann Acad Med Singapore** 1989 Jan;18(1):43-8

Seasonal affective disorders and phototherapy. Report of a National Institute of Mental Health-sponsored workshop. Blehar MC, et al. **Arch Gen Psychiatry** 1989 May; 46(5):469-74 (32 ref.)

Phototherapy in individuals with and without subsyndromal seasonal affective disorder. Kasper S, et al. **Arch Gen Psychiatry** 1989 Sep;46(9):837-44

Light therapy and the seasonal affective disorder [letter] Mueller PS. **Arch Gen Psychiatry** 1989 Feb;46(2):194-5

Jaundice of the newborn. The use of phototherapy. Vigneswaran R. **Aust Fam Physician** 1989 May; 18(5):519-21

Transcutaneous bilirubinometry. Effect of irradiation on the skin bilirubin index. Yamauchi Y, et al. **Biol Neonate** 1988; 54(6):314-9

Free tryptophan decrease in jaundiced newborn infants during phototherapy. Zammarchi E, et al. **Biol Neonate** 1989;55(4-5):224-7

Differential killing of murine B-cell leukemia (BCL1) by photosensitization with merocyanine 540: implications for autologous bone marrow transplantation. Mumcuoglu M, et al. **Bone Marrow Transplant** 1989 Mar;4(2):143-6

Phototherapy and photochemotherapy in dermatologic diseases. Rajatanavin N, et al. **Compr Ther** 1988 Oct; 14(10):11-8 (19 ref.)

Bright white light does not improve narcoleptic symptoms. Hajek M, et al. **Eur Arch Psychiatry Neurol Sci** 1989; 238(4):203-7

Mechanism of phototherapy—newer concepts. Govil YC, et al. **Indian Pediatr** 1988 Nov;25(11):1078-84 (30 ref.)

The Dead Sea and psoriasis. Historical and geographic background. Even-Paz Z, et al. **Int J Dermatol** 1989 Jan-Feb;28(1):1-9 (66 ref.)

Histologic studies in psoriatic patients treated at the Dead Sea: comparison with photochemotherapy. Schewach-Millet M, et al. **J Am Acad Dermatol** 1989 Mar; 20(3):502-3

Actinic reticuloid. A clinical photobiologic, histopathologic, and follow-u study of 16 patients. Toonstra J, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 1):205–14

Ophthalmic implications of seasonal affective disorder. Paramore JE, et al. **J Am Optom Assoc** 1989 Jul; 60(7):508–10 (12 ref.)

Effect of phototherapy on nutrients utilization in newborn infants with jaundice. Tontisirin K, et al. **J Med Assoc Thai** 1989 Jan;72 Suppl 1:177–82

Photoradiation therapy of tumors [letter] Steichen JD. **J Neurosurg** 1989 Jul;71(1):151–2

Phototherapy—1988. A green light for a new approach? Eidelman AI, et al. **J Perinatol** 1989 Mar;9(1):69–71 (24 ref.)

The effect of photodynamic therapy on the microcirculation. Reed MW, et al. **J Surg Res** 1988 Nov;45(5):452–9

Protective light shields for neonatal phototherapy [letter] Moseley H, et al. **Lancet** 1988 Oct 8;2(8615):854–5

Treating hyperbilirubinemia. Wilkerson NN. **MCN** 1989 Jan–Feb;14(1):32–6

Why not treat melancholia with melatonin and tryptophan and treat seasonal affective disorders with bright light? Maurizi CP. **Med Hypotheses** 1988 Dec;27(4):271–6

Critical period of bilirubin–induced cerebellar hypoplasia in a new Sprague–Dawley strain of jaundiced Gunn rats. Keino H, et al. **Neurosci Res** 1989 Feb;6(3):209–15

Hematoporphyrin uptake in atherosclerotic plaques: therapeutic potentials. Neave V, et al. **Neurosurgery** 1988 Sep;23(3):307–12

The influence of light therapy in depressive patients. Fleischhauer J, et al. **Pharmacopsychiatry** 1988 Nov; 21(6):414–5

Phototherapy in subsyndromal seasonal affective disorder (S–SAD) and "diagnosed" controls. Kasper S, et al. **Pharmacopsychiatry** 1988 Nov;21(6):428–9

Phototherapy for neonatal jaundice. Ennever JF. **Photochem Photobiol** 1988 Jun;47(6):871–6 (59 ref.)

Geophysical variables and behavior: LVII. Seasonal affective disorder and phototherapy. Murray JB. **Psychol Rep** 1989 Jun;64(3 Pt 1):787–801 (90 ref.)

Bright light induction of strong (type 0) resetting of the human circadian pacemaker. Czeisler CA, et al. **Science** 1989 Jun 16;244(4910):1328–33

Illuminating jet lag [news] Pool R. **Science** 1989 Jun 16; 244(4910):1256–7

Crigler–Najjar syndrome: treatment at home with phototherapy. O'Reilly C, et al. **Scott Med J** 1988 Oct; 33(5):335–6

Phototherapy and the photobiology of bilirubin. McDonagh AF, et al. **Semin Liver Dis** 1988 Aug;8(3):272–83 (82 ref.)

[Clinical observation on treatment of amblyopia with red light flicker] Zhang ZP, et al. **Yen Ko Hsueh Pao** 1988 Dec;4(4):232–7 (Eng. Abstr.) **(Chi)**

[Transcutaneous bilirubinometry in neonates with hyperbilirubinemia treated with phototherapy] Vocel J, et al. **Cesk Pediatr** 1988 Dec;43(12):742–3 **(Cze)**

[Hastening the onset of the effect of antidepressive agents during the use of 3 different time periods of exposure to intensive white light] Praško J, et al. **Cesk Psychiatr** 1988 Dec;84(6):374–83 (Eng. Abstr.) **(Cze)**

[Effects of light in depressive syndromes] Souêtre E, et al. **Presse Med** 1989 Jan 21;18(2):53–4 **(Fre)**

[The antidepressive effect of phototherapy] Kick H. **Hautarzt** 1989 Jun;40(6):335–6 **(Ger)**

[Modification of the course of chronic intraocular inflammations by sunlight (Israel study)] Manthey KF, et al. **Klin Monatsbl Augenheilkd** 1988 Jul;193(1):44–7 (Eng. Abstr.) **(Ger)**

[Phagocytic activity of neutrophilic granulocytes in neonatal hyperbilirubinemia before and following phototherapy] Leipe S, et al. **Padiatr Grenzgeb** 1988;27(5):347–58 (Eng. Abstr.) **(Ger)**

[Effectiveness of phototherapy in the treatment of jaundice caused by ABO and Rh blood group incompatibility] Godula–Stuglik U, et al. **Acta Haematol Pol** 1988 Jan–Jun; 19(1–2):86–91 (Eng. Abstr.) **(Pol)**

[Use of phototherapy in combined treatment of neonatal jaundice] Rudenko EB, et al. **Pediatriia** 1988;(12):79–83 (68 ref.) **(Rus)**

[Dynamics of clinico–immunological indicators in children with neurodermatitis during climatotherapy] Tuleutaeva GA. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 May–Jun; (3):29–31 (Eng. Abstr.) **(Rus)**

[Effect of phototherapy on the chromosomes of jaundiced newborn infants] Carnevale A, et al. **Rev Invest Clin** 1988 Apr–Jun;40(2):125–8 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Diarrhoea in jaundiced neonates treated with phototherapy: role of intestinal secretion. De Curtis M, et al. **Arch Dis Child** 1989 Aug;64(8):1161–4

Sunbed–induced pseudoporphyria. Murphy GM, et al. **Br J Dermatol** 1989 Apr;120(4):555–62

Possible ultraviolet A–induced lentigines: a side effect of chronic tanning salon usage. Roth DE, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 2):950–4

Phototoxic effects of bilirubin [news] Christensen T, et al. **J Photochem Photobiol –B–** 1988 Mar;1(3):373–4

Photodynamic therapy [letter] Benzer A, et al. **Lancet** 1989 Aug 12;2(8659):382–3

Solarium pseudoporphyria [editorial] Thomsen K. **Photodermatol** 1989 Apr;6(2):61–2

[Influence of phototherapy on the secretion of TSH, PRL and thyroid hormones in premature neonates] Bona G, et al. **Minerva Pediatr** 1988 Sep;40(9):539–44 (Eng. Abstr.) **(Ita)**

[Evaluation of the possible effects of phototherapy on the nonnutritive sucking patterns in newborn infants] Latini G, et al. **Pediatr Med Chir** 1989 Mar–Apr;11(2):195–6 (Eng. Abstr.) **(Ita)**

[Neurosensory defects secondary to neonatal hyperbilirubinemia] Armas Ramos H, et al. **An Esp Pediatr** 1989 Mar;30(3):166–70 (Eng. Abstr.) **(Spa)**

INSTRUMENTATION

Effective eye shielding during phototherapy. Porat R, et al. **Clin Pediatr (Phila)** 1989 Apr;28(4):199–200

METHODS

Morning versus evening bright light treatment of late luteal phase dysphoric disorder. Parry BL, et al. **Am J Psychiatry** 1989 Sep;146(9):1215–7

Phototherapy and the use of heat shields [letter] Bayliss SC, et al. **Arch Dis Child** 1988 Oct;63(10):1295–6

Phototherapy for depressive disorders: a review. Lam RW, et al. **Can J Psychiatry** 1989 Mar;34(2):140–7 (79 ref.)

Phototherapy increases platelet 3H–imipramine binding in patients with winter depression. Szádóczky E, et al. **J Affective Disord** 1989 Mar–Jun;16(2–3):121–5

Efficacy of fluorescent daylight, blue, and green lamps in the management of nonhemolytic hyperbilirubinemia. Tan KL. **J Pediatr** 1989 Jan;114(1):132–7

Photodynamic therapy of malignant brain tumors: clinical results of, difficulties with, questions about, and future prospects for the neurosurgical applications. Perria C, et al. **Neurosurgery** 1988 Nov;23(5):557–63

Phototherapy for seasonal major depressive disorder: effectiveness of bright light of high or low intensity. Grota LJ, et al. **Psychiatry Res** 1989 Jul;29(1):29–35

[Is there a green light for the use of green light in phototherapy of neonatal icterus?] Jokiel K, et al. **Kinderarztl Prax** 1988 Aug;56(8):369–74 (26 ref.) (Eng. Abstr.) **(Ger)**

[Experiences with light therapy (bright light; phototherapy) in depressive syndromes] Peter K, et al. **Psychiatr Neurol Med Psychol Beih** 1988;41:77–8 **(Ger)**

[Effectiveness of bright light therapy in cyclothymic axis syndromes—a cross–over study in comparison with partial sleep deprivation] Heim M. **Psychiatr Neurol Med Psychol (Leipz)** 1988 May; 40(5):269–77 (Eng. Abstr.) **(Ger)**

[Quantitative assessment of heliotherapy in psoriasis vulgaris in high altitude climate] Vocks E, et al. **Z Hautkr** 1989 Jun 15;64(6):466–72 (Eng. Abstr.) **(Ger)**

[Phototherapy for neonatal hyperbilirubinemia: new approaches] Eidelman AI, et al. **Harefuah** 1988 Dec 1; 115(11):330–1 (19 ref.) **(Heb)**

[Phototherapy in the prevention of hyperbilirubinemia in premature infants] Adamowski E, et al. **Pediatr Pol** 1974 Feb;49(2):175–81 (Eng. Abstr.) **(Pol)**

[Concentrated sunlight in the therapy of patients with rheumatoid arthritis] Karimova NKh. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Sep–Oct;(5):34–7 **(Rus)**

[Treatment of patients with peptic ulcer using low–intensity noncoherent red light] Aliferov SI, et al. **Vrach Delo** 1988 Nov;(11):9–10 **(Rus)**

PSYCHOLOGY

[The effect of hyperbilirubinemia and phototherapy on the behavior organization of newborn infants] Schedle A, et al. **Z Klin Psychol Psychopathol Psychother** 1988; 36(1):34–45 (Eng. Abstr.) **(Ger)**

TRENDS

New development in phototherapy [editorial] **Lancet** 1989 May 20;1(8647):1116

PHOTOTOXICITY see **PHOTOSENSITIVITY DISORDERS**

PHOTOTROPHIC BACTERIA

ENZYMOLOGY

The coupling between protonmotive force and the NAD(P)+ transhydrogenase in chromatophores from photosynthetic bacteria. Cotton NP, et al. **Eur J Biochem** 1989 Jul 1;182(3):593–603

Purification and properties of L–alanine dehydrogenase of the phototrophic bacterium Rhodobacter capsulatus E1F1. Caballero FJ, et al. **J Bacteriol** 1989 Jun;171(6):3205–10

GENETICS

Formation of functional inter–species hybrid photosynthetic complexes in Rhodobacter capsulatus. Zilsel J, et al. **FEBS Lett** 1989 Aug 14;253(1–2):247–52

In vivo analysis of puf operon expression in Rhodobacter sphaeroides after deletion of a putative intercistronic transcription terminator. DeHoff BS, et al. **J Bacteriol** 1988 Oct;170(10):4681–92

Posttranscriptional control of puc operon expression of B800–850 light–harvesting complex formation in Rhodobacter sphaeroides [published erratum appears in J Bacteriol 1989 Aug;171(8):4530] Lee JK, et al. **J Bacteriol** 1989 Jun;171(6):3391–405

Open reading frame 5 (ORF5), encoding a ferredoxinlike protein, and nifQ are cotranscribed with nifE, nifN, nifX, and ORF4 in Rhodobacter capsulatus. Moreno–Vivian C, et al. **J Bacteriol** 1989 May;171(5):2591–8

Genetic evidence for superoperonal organization of genes for photosynthetic pigments and pigment–binding proteins in Rhodobacter capsulatus. Young DA, et al. **Mol Gen Genet** 1989 Jul;218(1):1–12

METABOLISM

Organic nitrogen metabolism of phototrophic bacteria. Klemme JH. **Antonie Van Leeuwenhoek** 1989;55(3):197–219 (95 ref.)

In vitro kinetics of reduction of cytochrome c554 isolated from the reaction center of the green phototrophic bacterium, Chloroflexus aurantiacus. Meyer TE, et al. **Arch Biochem Biophys** 1989 Jul;272(1):254–61

Distribution of delta–aminolevulinic acid biosynthetic pathways among phototrophic bacterial groups. Avissar YJ, et al. **Arch Microbiol** 1989;151(6):513–9

Oxidation–reduction thermodynamics of the acceptor quinone complex in whole–membrane fragments from Chloroflexus aurantiacus. Venturoli G, et al. **Eur J Biochem** 1988 Dec 15;178(2):503–9

Regulation of tetrapyrrole synthesis by light in chemostat cultures of Rhodobacter sphaeroides. Oelze J. **J Bacteriol** 1988 Oct;170(10):4652–7

Transformation of glutamate to delta–aminolevulinic acid by soluble extracts of Chlorobium vibrioforme. Rieble S, et al. **J Bacteriol** 1989 Jul;171(7):3782–7

PHYSIOLOGY

How carotenoids function in photosynthetic bacteria. Cogdell RJ, et al. **Biochim Biophys Acta** 1987;895(2):63–79 (107 ref.)

PHRENIC NERVE

Hemorrhagic compression of the phrenic nerve after streptokinase infusion. Seaberg DC, et al. **Am J Emerg Med** 1989 Mar;7(2):185–6

The diagnosis of phrenic nerve block on chest X–ray by a double–exposure technique. Hickey R, et al. **Anesthesiology** 1989 Apr;70(4):704–7

Phrenic nerve paralysis following pediatric cardiac surgery. Role of diaphragmatic plication. Affatato A, et al. **J Cardiovasc Surg (Torino)** 1988 Sep–Oct;29(5):606–9

Post–operative respiratory failure due to bilateral phrenic nerve palsy. Burgess RW, et al. **Postgrad Med J** 1989 Jan; 65(759):39–41

Diaphragm pacing [letter] Baer GA, et al. **Thorax** 1988 Sep; 43(9):743

Conditioning of the diaphragm by phrenic nerve pacing in primary alveolar hypoventilation. Wilcox PG, et al. **Thorax** 1988 Dec;43(12):1017–8

[Phrenic nerve paralysis complicating cervicofacial surgery] Goffart Y, et al. **Acta Otorhinolaryngol Belg** 1988; 42(4):564–70 (Eng. Abstr.) **(Fre)**

[Schwannoma of the endothoracic phrenic nerve. General review apropos of a case] Grunstein P, et al. **Rev Pneumol Clin** 1988;44(3):146–50 (31 ref.) (Eng. Abstr.) **(Fre)**

[Transient paralysis of the phrenic nerve following puncture of the internal jugular vein] Fuchs C, et al. **Anaesthesiol Reanim** 1989;14(1):55–8 (Eng. Abstr.) **(Ger)**

[Phrenic nerve paralysis associated with the use of ice slush for topical hypothermia during open heart surgery—the effect of cardiac insulation pad and two case reports of severe patients] Ohteki H, et al. **Kokyu To Junkan** 1988 Oct;36(10):1145–50 (Eng. Abstr.) **(Jpn)**

[A case of schwannoma of intrathoracic right phrenic nerve] Morisaki Y, et al. **Kyobu Geka** 1989 Mar;42(3):239–43 (Eng. Abstr.) **(Jpn)**

[Phrenic nerve conduction disorder after open heart surgery—electrophysiological study] Kido T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Apr;37(4):606–11 (Eng. Abstr.) **(Jpn)**

[A case of mediastinal schwannoma originating from the intrathoracic phrenic nerve] Ayabe H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Nov; 26(11):1187–90 (Eng. Abstr.) **(Jpn)**

[Diaphragmatic pacing by electrical stimulation of the phrenic nerve—a case report] Touho H, et al. **No To Shinkei** 1989 Mar;41(3):289–92 (Eng. Abstr.) **(Jpn)**

ANATOMY & HISTOLOGY

Spinal cord localization and characterization of the neurons which give rise to the accessory phrenic nerve in the adult rat. DeVries KL, et al. **Exp Neurol** 1989 Apr;104(1):88–90

CYTOLOGY

Localization of substance P immunoreactivity in phrenic primary afferent neurons. Holtman JR Jr. **Peptides** 1989 Jan–Feb;10(1):53–6

DRUG EFFECTS

Disruption of the rhythmic activity of the medullary inspiratory neurons and phrenic nerve by fentanyl and reversal with nalbuphine. Tabatabai M, et al. **Anesthesiology** 1989 Mar;70(3):489–95

Differential effects of mercurial and methylmercurial ions on the phrenic nerve and diaphragm of the mouse. Fu WM, et al. **Arch Int Pharmacodyn Ther** 1988 Sep–Oct;295:52–66

The influence of ouabain on twitch potentiation by anticholinesterases in the phrenic nerve–diaphragm muscles of mice. Nishimura M, et al. **Br J Pharmacol** 1989 Jan; 96(1):179–85

Beta-adrenoceptor stimulation enhances transmitter output from the rat phrenic nerve. Wessler I, et al. **Br J Pharmacol** 1988 Jul;94(3):669–74

Studies on the contracture of the mouse diaphragm induced by sodium selenite. Lin–Shiau SY, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):137–46

Ca antagonistic and non-specific effects of diltiazem on the rat phrenic nerve diaphragm preparation. Røed A. **Eur J Pharmacol** 1989 Jan 2;159(1):61–71

Influence of respiratory drive on airway responses to excitation of lung C-fibers. Haxhiu MA, et al. **J Appl Physiol** 1989 Jul;67(1):203–9

Effects of the sulphydryl inhibitor N–ethyl–maleimide on the phrenic nerve and diaphragm muscle of the rat. Røed A. **Neuropharmacology** 1989 Aug;28(8):765–73

INJURIES

Isolated birth injury of the phrenic nerve [letter] Rugtveit J, et al. **Dev Med Child Neurol** 1989 Feb;31(1):119

Isolated phrenic nerve injury after apparently atraumatic puncture of the internal jugular vein. Depierraz B, et al. **Intensive Care Med** 1989;15(2):132–4

Plication of the diaphragm for infants and young children with phrenic nerve palsy. Langer JC, et al. **J Pediatr Surg** 1988 Aug;23(8):749–51

[Phrenic nerve paralysis with consecutive eventration of the diaphragm as a complication of thoracic drainage] Deindl C. **Monatsschr Kinderheilkd** 1989 Feb;137(2):111–3 **(Ger)**

[Diaphragmatic paralysis caused by a phrenic nerve lesion secondary to internal jugular vein cutdown] Ugalde–Fernández JH, et al. **Bol Med Hosp Infant Mex** 1989 Jul;46(7):497–9 (Eng. Abstr.) **(Spa)**

[Acute respiratory insufficiency following thymectomy: an unusual cause] Zueras R, et al. **Rev Esp Anestesiol Reanim** 1989 Jan–Feb;36(1):51–3 (Eng. Abstr.) **(Spa)**

METABOLISM

5–Hydroxytryptamine in the phrenic nerve diaphragm: evidence for its existence and release. Das M, et al. **Neurosci Lett** 1989 Feb 27;97(3):345–9

Monoaminergic and GABAergic terminations in phrenic nucleus of rat identified by immunohistochemical labeling. Zhan WZ, et al. **Neuroscience** 1989;31(1):105–13

PHYSIOLOGY

Augmented breath provoked by lung inflation in cat. Romaniuk JR, et al. **Acta Neurobiol Exp (Warsz)** 1989; 49(2–3):57–71

Fatigue during continuous 20 Hz stimulation of the rat phrenic nerve diaphragm preparation. Røed A. **Acta Physiol Scand** 1988 Oct;134(2):217–21

Tracheal and phrenic responses to neurotensin applied to ventral medulla. Haxhiu MA, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R780–6

Diaphragm pacing in infants and children. A life–table analysis of implanted components. Weese–Mayer DE, et al. **Am Rev Respir Dis** 1989 Apr;139(4):974–9

Rehabilitation of quadriplegic patients with phrenic nerve pacers. Lee MY, et al. **Arch Phys Med Rehabil** 1989 Jul; 70(7):549–52

Synaptic inhibition of phrenic motoneurones evoked by stimulation of the superior laryngeal nerve. Bellingham MC, et al. **Brain Res** 1989 May 8;486(2):391–5

Motor recovery after cross–reinnervation of a forelimb nerve by the phrenic nerve in cats. Fujito Y, et al. **Brain Res** 1989 Jul 17;492(1–2):36–44

Involvement of fast synaptic inhibition in the generation of high–frequency oscillation in central respiratory system. Schmid K, et al. **Brain Res** 1989 Apr 17;485(1):193–8

Transpulmonary pressure and phrenic activity in early inspiration. Luijendijk SC, et al. **Eur J Appl Physiol** 1988; 58(1–2):208–13

Excitatory interactions between phrenic motoneurons: intracellular study in the cat. Khatib M, et al. **Exp Brain Res** 1989;74(1):131–8

Projections from inspiratory neurons of the nucleus retroambigualis to phrenic motoneurons in the cat. Fedorko L, et al. **Exp Neurol** 1989 Sep;105(3):306–10

Tonic activity in inspiratory muscles and phrenic motoneurons by stimulation of vagal afferents. Badier M, et al. **J Appl Physiol** 1989 Apr;66(4):1613–9

Motor unit territories supplied by primary branches of the phrenic nerve. Hammond CG, et al. **J Appl Physiol** 1989 Jan;66(1):61–71

Phrenic afferents and ventilatory control at increased end–expiratory lung volumes in cats. Iscoe S. **J Appl Physiol** 1989 Mar;66(3):1297–303

Kainic acid on the rostral ventrolateral medulla inhibits phrenic output and CO2 sensitivity. Nattie EE, et al. **J Appl Physiol** 1988 Oct;65(4):1525–34

Rostral ventrolateral medulla muscarinic receptor involvement in central ventilatory chemosensitivity. Nattie EE, et al. **J Appl Physiol** 1989 Mar;66(3):1462–70

Patterns of neural and muscular electrical activity in costal and crural portions of the diaphragm. Oyer LM, et al. **J Appl Physiol** 1989 May;66(5):2092–100

Diaphragm metabolism during supramaximal phrenic nerve stimulation. Pope A, et al. **J Appl Physiol** 1989 Feb; 66(2):567–72

Effect of diaphragm small–fiber afferent stimulation on ventilation in dogs. Revelette WR, et al. **J Appl Physiol** 1988 Nov;65(5):2097–106

Diaphragm motor unit recruitment during ventilatory and nonventilatory behaviors. Sieck GC, et al. **J Appl Physiol** 1989 Jun;66(6):2539–45

High–frequency oscillations within early and late phases of the phrenic neurogram. Webber CL Jr. **J Appl Physiol** 1989 Feb;66(2):886–93

Diaphragmatic relaxation rate after voluntary contractions and uni– and bilateral phrenic stimulation. Wilcox PG, et al. **J Appl Physiol** 1988 Aug;65(2):675–82

Relationship between sympathetic and phrenic nerve responses to peripheral chemoreflex in the cat. Huang W, et al. **J Auton Nerv Syst** 1988 Dec;25(2–3):95–105

Neuronal and glial changes in the rat phrenic nucleus occurring within hours after spinal cord injury. Goshgarian HG, et al. **J Comp Neurol** 1989 Jun 22;284(4):519–33

Synaptic effects of intercostal tendon organs on membrane potentials of medullary respiratory neurons. Bolser DC, et al. **J Neurophysiol** 1989 May;61(5):918–26

Repetitive firing properties of phrenic motoneurons in the cat. Jodkowski JS, et al. **J Neurophysiol** 1988 Aug; 60(2):687–702

Limitations of the technique of pressure microinjection of excitatory amino acids for evoking responses from localized regions of the CNS. Lipski J, et al. **J Neurosci Methods** 1988 Dec;26(2):169–79

Nerve regulation of class I and class II–asymmetric forms of acetylcholinesterase in rat skeletal muscles. Fadić R, et al. **J Neurosci Res** 1989 Apr;22(4):449–55

The effects of tetraethylammonium during twitch and tetanic stimulation of the phrenic nerve diaphragm preparation in the rat. Røed A. **Neuropharmacology** 1989 Jun;28(6):585–92

Phrenic–to–phrenic inhibition and excitation in spinal cats. Macron JM, et al. **Neurosci Lett** 1988 Aug 15;91(1):24–9

GABAB receptor mediated effects on central respiratory system and their antagonism by phaclofen. Schmid K, et al. **Neurosci Lett** 1989 May 8;99(3):305–10

Effects of Bay K 8644 on spontaneous and evoked transmitter release at the mouse neuromuscular junction. Pancrazio JJ, et al. **Neuroscience** 1989;30(1):215–21

Fundamental considerations in pacing of the diaphragm for chronic ventilatory insufficiency: a multi–center study. Glenn WW, et al. **PACE** 1988 Nov;11(11 Pt 2):2121–7

Electrical techniques for stimulation of the phrenic nerve to pace the diaphragm: inductive coupling and battery powered total implant in asynchronous and demand modes. Hogan JF, et al. **PACE** 1989 May;12(5):847–53

Diaphragm pacing in infants and children. Hunt CE, et al. **PACE** 1988 Nov;11(11 Pt 2):2135–41

Electrical activation of respiratory muscles by methods other than phrenic nerve cuff electrodes. Peterson DK, et al. **PACE** 1989 May;12(5):854–60

Respiratory pump failure and its treatment. Shneerson JM. **PACE** 1989 May;12(5):844–6

Influence of rubrospinal tract and the adjacent mesencephalic reticular formation on the activity of medullary respiratory neurons and the phrenic nerve discharge in the rabbit. Schmid K, et al. **Pflugers Arch** 1988 Nov;413(1):23–31

Reversal of the relation between respiratory drive and airway tone in cats. Baker DG, et al. **Respir Physiol** 1988 Jul; 73(1):21–30

Influence of lung volume on phrenic, hypoglossal and mylohyoid nerve activities. Bartlett D Jr, et al. **Respir Physiol** 1988 Jul;73(1):97–109

Studies on the inspiratory generating effect of the dorso–medial area of nucleus facialis. Lei L, et al. **Respir Physiol** 1989 Jan;75(1):65–73

Spectral composition of synchronized discharge of phrenic nerve activity in the rabbit and effects of pulmonary afferents. Schmid K, et al. **Respir Physiol** 1989 Apr; 76(1):37–52

Stimulating fastigial nucleus alters central mechanisms regulating phrenic activity. Williams JL, et al. **Respir Physiol** 1989 May;76(2):215–27

[Effect of ohmefentanyl injection to the region of nucleus tractus solitarius on discharge of phrenic nerve in rabbits] Zhou J, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jul; 9(4):296–9 (Eng. Abstr.) **(Chi)**

[Studies on the origin of different discharge pattern of the two types of phrenic motoneurones by cross–correlation analysis] Hu JM, et al. **Sheng Li Hsueh Pao** 1989 Apr; 41(2):163–71 (Eng. Abstr.) **(Chi)**

[Types of phrenic motoneurons and their contributions to phrenic discharges during expiratory phase in rabbits] Yu XJ, et al. **Sheng Li Hsueh Pao** 1988 Aug;40(4):365–73 (Eng. Abstr.) **(Chi)**

[Cervical magnetic stimulation. A new method of bilateral phrenic nerve stimulation for use in clinical practice] Similowski T, et al. **Rev Mal Respir** 1988;5(6):609–14 (Eng. Abstr.) **(Fre)**

[Control of breathing in the central alveolar hypoventilation syndrome with and without a phrenic pacemaker] Grubbauer HM, et al. **Klin Padiatr** 1988 Sep–Oct; 200(5):388–92 (Eng. Abstr.) **(Ger)**

[Measurement of magnetic field impulses in canine phrenic nerves with an openable toroidal coil] Hasegawa T, et al. **Iyodenshi To Seitai Kogaku** 1988 Sep;26(3):164–9 (Eng. Abstr.) **(Jpn)**

[The effects of the differential lung ventilation on efferent phrenic nerve activity in cats] Kasaba T, et al. **Masui** 1988 Jul;37(7):823–9 (Eng. Abstr.) **(Jpn)**

[Electrostimulation of the phrenic nerves in neural resuscitation] Zemskov AP, et al. **Zh Vopr Neirokhir** 1988 Sep–Oct;(5):40–5 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Spectral analysis on low frequency fluctuation in respiratory rhythm in the decerebrate cat. Kawahara K, et al. **Biol Cybern** 1989;61(4):265–70

Central motor program for relaxation of periesophageal diaphragm during the expulsive phase of vomiting. Miller AD, et al. **Brain Res** 1988 Jul 26;456(2):367–70

CO2 sensitivity of cat phrenic neurogram during hypoxic respiratory depression. Melton JE, et al. **J Appl Physiol** 1988 Aug;65(2):736–43

Influence of phasic afferent information on phrenic neural output during hypercapnia. Menon AS, et al. **J Appl Physiol** 1988 Aug;65(2):563–9

Electrophrenic respiration in patients with high quadriplegia. Sharkey PC, et al. **Neurosurgery** 1989 Apr;24(4):529–35

Twitch interpolation: application to patients. Brophy CJ, et al. **Prax Klin Pneumol** 1988 Dec;42 Suppl 2:814–6

RADIOGRAPHY

Right phrenic nerve: anatomy, CT appearance, and differentiation from the pulmonary ligament. Berkmen YM, et al. **Radiology** 1989 Oct;173(1):43–6

SURGERY

Selective reinnervation of the abductor and adductor muscles of the canine larynx after recurrent nerve paralysis. Marie JP, et al. **Ann Otol Rhinol Laryngol** 1989 Jul;98(7 Pt 1):530–6

[Cervical phrenicotomy in rats] Peláková A, et al. **Cesk Fysiol** 1988;37(5):463–7 **(Cze)**

O–PHTHALALDEHYDE see under **ALDEHYDES**

PHTHALAMUDINE see **CHLORTHALIDONE**

PHTHALAZINES see under **PYRIDAZINES**

PHTHALIC ACIDS

"Worst case" aerosol testing parameters: I. Sodium chloride and dioctyl phthalate aerosol filter efficiency as a function of particle size and flow rate. Stevens GA, et al. **Am Ind Hyg Assoc J** 1989 May;50(5):257–64

The Mersilene mesh sling—a new concept in ptosis surgery. Downes RN, et al. **Br J Ophthalmol** 1989 Jul;73(7):498–501

Complications following vasectomy. A comparison between Mersilene and autosuture surgiclips. Zeegers AG, et al. **Eur Urol** 1988;14(4):294–7

[The effect of pH in the solutions on the absorption of cinnamic acid into the administration set] Nakazawa K, et al. **Yakugaku Zasshi** 1988 Nov;108(11):1110–3 (Eng. Abstr.) **(Jpn)**

[Rechanneling of the nasal fossae with alloplastic material in ozena] Călărașu R, et al. **Rev Chir [Otorinolaringol]** 1988 Oct–Dec;33(4):303–6 (Eng. Abstr.) **(Rum)**

[Use of the method of discriminant analysis for the prognosis of early thrombosis of Lavsan vascular prostheses following surgery of occlusions of the iliac arteries] El'kov AN, et al. **Klin Khir** 1988;(7):23–5 (Eng. Abstr.) **(Rus)**

[Treatment of rupture of the supraspinous muscle] Anisimov VN. **Ortop Travmatol Protez** 1988 Aug;(8):30–2 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Allergic airway disease caused by methyl tetrahydrophthalic anhydride in epoxy resin. Nielsen J, et al. **Scand J Work Environ Health** 1989 Apr;15(2):154–5

What price progress? An update on vinyl plastic bags. Rubin RJ, et al. **Transfusion** 1989 May;29(4):358–61 (44 ref.)

[Formaldehyde and phthalic anhydride asthma. Demonstration of specific IgE antibodies with RAST] Imhof E, et al. **Schweiz Med Wochenschr** 1988 Oct 29; 118(43):1568–72 (Eng. Abstr.) **(Ger)**

[Lavsan ligatures as the cause of choledocholithiasis following resection of the stomach] Egorov VP, et al. **Khirurgiia (Mosk)** 1989 Jan;(1):96–7 **(Rus)**

ANALYSIS

Analysis by fast atom bombardment mass spectrometry of conjugated metabolites of bis(2–ethylhexyl) phthalate. Egestad B, et al. **Biomed Environ Mass Spectrom** 1988 Oct; 16(1–12):151–4

Residues of dacthal and metabolites in field–treated Chinese

cabbage. Sweet RD, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):642–4

The use of Chromosorb 102 to air samples pre-concentration in the determination of low concentrated dibutylphthalate. Wolska L. **Bull Inst Marit Trop Med Gdynia** 1988; 39(1–2):81–9

A new polyvinylchloride blood bag plasticized with less-leachable phthalate ester analogue, di-n-decyl phthalate, for storage of platelets. Shimizu T, et al. **Transfusion** 1989 May;29(4):292–7

[Establishment of a range of phtalate density for studying profiles of erythrocyte density] Chomel JC, et al. **Ann Biol Clin (Paris)** 1989;47(4):187–91 (17 ref.) (Eng. Abstr.) **(Fre)**

BLOOD

[Determination of di-(2-ethylhexyl-phthalate in blood using gas chromatography] Neumannová E, et al. **Cesk Farm** 1988 Sep;37(7):305–6 (Eng. Abstr.) **(Cze)**

IMMUNOLOGY

Di-octyl phthalate induced altered host resistance: viral and protozoal models in mice. Dogra RK, et al. **Ind Health** 1989;27(2):83–7

Antibody response to trimellityl hemoglobin in trimellitic anhydride-induced lung injury. Pien LC, et al. **J Allergy Clin Immunol** 1988 Dec;82(6):1098–103

ISOLATION & PURIFICATION

Extraction of diethylhexylphthalate from total nutrient solution-containing polyvinyl chloride bags. Mazur HI, et al. **JPEN J Parenter Enteral Nutr** 1989 Jan–Feb;13(1):59–62

METABOLISM

Biochemical studies on phthalic esters V. Comparative studies on in vitro hydrolysis of di-n-butyl phthalate isomers in rats. Takahashi T, et al. **Arch Toxicol** 1989; 63(1):72–4

Hydrolysis of phthalate esters by purified rat and human liver carboxylesterases. Mentlein R, et al. **Biochem Pharmacol** 1989 Sep 15;38(18):3126–8

Catabolism of homophthalic acid by a soil bacterium. Karegoudar TB, et al. **FEMS Microbiol Lett** 1989 Apr; 49(2–3):305–8

Anaerobic metabolism of phthalate and other aromatic compounds by a denitrifying bacterium. Nozawa T, et al. **J Bacteriol** 1988 Dec;170(12):5778–84

Mono-2-ethylhexyl phthalate, a metabolite of di-(2-ethylhexyl) phthalate, causally linked to testicular atrophy in rats. Albro PW, et al. **Toxicol Appl Pharmacol** 1989 Sep 1;100(2):193–200

Presystemic branchial metabolism limits di-2-ethylhexyl phthalate accumulation in fish. Barron MG, et al. **Toxicol Appl Pharmacol** 1989 Mar 15;98(1):49–57

The metabolism of mono-(2-ethylhexyl) phthalate (MEHP) and liver peroxisome proliferation in the hamster. Lhuguenot JC, et al. **Toxicol Ind Health** 1988 Dec; 4(4):431–41

PHARMACOKINETICS

Effects of co-administration of di(2-ethylhexyl)phthalate and testosterone on several parameters in the testis and pharmacokinetics of its mono-de-esterified metabolite. Oishi S. **Arch Toxicol** 1989;63(4):289–95

The fate of leached di-(2-ethylhexyl)-phthalate (DEHP) in patients on chronic haemodialysis. Flaminio LM, et al. **Int J Artif Organs** 1988 Nov;11(6):428–34

Liquid chromatographic analysis of di(2-ethylhexyl) phthalate: application to pharmacokinetic studies in the mongrel dog. Haughey DB, et al. **Pharm Res** 1988 Jan; 5(1):10–5

PHARMACOLOGY

Existence of acetyl-CoA-dependent chain elongation system in hepatic peroxisomes of rat: effects of clofibrate and di-(2-ethylhexyl)phthalate on the activity. Horie S, et al. **Arch Biochem Biophys** 1989 Oct;274(1):64–73

Effects of co-administration of di(2-ethylhexyl)phthalate and testosterone on several parameters in the testis and pharmacokinetics of its mono-de-esterified metabolite. Oishi S. **Arch Toxicol** 1989;63(4):289–95

The effect of the plasticizers TBEP (tris-(2-butoxyethyl)-phosphate) and DEHP (di-(2-ethylhexyl)-phthalate) on beta-adrenergic ligand binding to alpha 1-acid glycoprotein and mononuclear leukocytes. Sager G, et al. **Biochem Pharmacol** 1989 Aug 1;38(15):2551–7

Inhibition of mouse hepatocyte intercellular communication by phthalate monoesters. Klaunig JE, et al. **Cancer Lett** 1988 Dec 1;43(1–2):65–71

Inhibition of gap-junctional intercellular communication between Chinese hamster lung fibroblasts by di(2-ethylhexyl) phthalate (DEHP) and trisodium nitrilotriacetate monohydrate (NTA). Malcolm AR, et al. **Cell Biol Toxicol** 1989 Jun;5(2):145–53

In vitro studies of the inhibition of protein kinase C from rat brain by di-(2-ethylhexyl)phthalate. Shukla RR, et al. **Chem Biol Interact** 1989;69(1):73–85

Inhibition of human platelet phospholipase A2 by mono(2-ethylhexyl)phthalate. Labow RS, et al. **Environ Health Perspect** 1988 Jun;78:179–83

Purification and characterisation of NAD-glutamate dehydrogenase from Aspergillus nidulans. Stevens L, et al. **FEMS Microbiol Lett** 1989 Jan 15;48(2):173–7

In vitro immunologic studies on a population of workers exposed to phthalic and tetrachlorophthalic anhydride. Flaherty DK, et al. **J Occup Med** 1988 Oct;30(10):785–90

Effect of the plasticizer di-(2-ethylhexyl)phthalate on oxidative phosphorylation in rat liver mitochondria: modification of the function of the adenine nucleotide translocator. Kora S, et al. **J Pharmacobiodyn** 1988 Dec; 11(12):773–8

Effect of phthalate acid esters on transport in toad bladder membrane. Sabatini S, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):910–4

Changes to the integral membrane protein composition of mouse liver peroxisomes in response to the peroxisome proliferators clofibrate, Wy-14,643 and di(2-ethyl-hexyl)phthalate. Crane DI, et al. **Mol Cell Biochem** 1988 May;81(1):29–36

Effect of picotamide on prostacyclin production by human endothelial cells [letter] Landolfi R, et al. **Thromb Haemost** 1988 Dec 22;60(3):529

Acetylsalicylic acid, BM 13.177 and picotamide improve the survival of endotoxin-infused rabbits. Feldhoff CM, et al. **Thromb Res** 1988 Dec 1;52(5):487–92

Effect of mono-(2-ethylhexyl)phthalate on follicle-stimulating hormone responsiveness of cultured rat Sertoli cells. Lloyd SC, et al. **Toxicol Appl Pharmacol** 1988 Sep 30;95(3):484–9

Induction of hepatic metallothionein in male B6C3F1 mice exposed to hepatic tumor promoters: effects of phenobarbital, acetaminophen, sodium barbital, and di(2-ethylhexyl) phthalate. Waalkes MP, et al. **Toxicol Appl Pharmacol** 1989 Sep 1;100(2):217–26

The influence of di(2-ethylhexyl)phthalate on protein turnover in rat liver. Ganning AE, et al. **Toxicol Lett** 1989 Aug;48(2):185–92

THERAPEUTIC USE

Effects of prolonged picotamide therapy on platelet activity in patients with peripheral arterial disease. Danese C, et al. **Curr Med Res Opin** 1988;11(4):221–6

[Clinical study of picotamide in patients with vascular diseases] Speziale F, et al. **Recenti Prog Med** 1989 May; 80(5):271–5 (Eng. Abstr.) **(Ita)**

TOXICITY

Cardiotoxic effects of the plasticizer metabolite, mono (2-ethylhexyl)phthalate (MEHP), on human myocardium [letter] Barry YA, et al. **Blood** 1988 Oct;72(4):1438–9

Di-2-ethylhexylphthalate induced peroxidative stress in rat liver. Jayaraman S, et al. **Bull Environ Contam Toxicol** 1988 Sep;41(3):360–4

Relationship of hepatic peroxisome proliferation and replicative DNA synthesis to the hepatocarcinogenicity of the peroxisome proliferators di(2-ethylhexyl)phthalate and [4-chloro-6-(2,3-xylidino)-2-pyrimidinylthio]acetic acid (Wy-14,643) in rats. Marsman DS, et al. **Cancer Res** 1988 Dec 1;48(23):6739–44

Relationship of oxidative damage to the hepatocarcinogenicity of the peroxisome proliferators di(2-ethylhexyl)phthalate and Wy-14,643. Conway JG, et al. **Carcinogenesis** 1989 Mar;10(3):513–9

Di-(2-ethylhexyl) phthalate—missing links. Gray T, et al. **Food Chem Toxicol** 1988 Sep;26(9):811–2

Di(2-ethylhexyl) phthalate [letter] Schmezer P. **Food Chem Toxicol** 1989 Apr;27(4):275

Dermal absorption of phthalate diesters in rats. Elsisi AE, et al. **Fundam Appl Toxicol** 1989 Jan;12(1):70–7

Reproductive toxicity of three phthalic acid esters in a continuous breeding protocol. Heindel JJ, et al. **Fundam Appl Toxicol** 1989 Apr;12(3):508–18

Immunologic tolerance in rats during 13 weeks of inhalation exposure to trimellitic anhydride. Leach CL, et al. **Fundam Appl Toxicol** 1989 Apr;12(3):519–29

Comparison of changes in serum androgen binding protein with germinal epithelial damage and infertility induced by di-n-pentyl phthalate. Lindström P, et al. **Fundam Appl Toxicol** 1988 Oct;11(3):528–39

Lung injury induced by short-term intermittent trimellitic anhydride (TMA) inhalation. Zeiss CR, et al. **J Allergy Clin Immunol** 1989 Aug;84(2):219–23

Mechanism of testicular atrophy induced by di-n-butyl phthalate in rats. Part 1. Fukuoka M, et al. **J Appl Toxicol** 1989 Aug;9(4):277–83

Contribution of metabolites to the route- and time-dependent hepatic effects of di-(2-ethylhexyl)phthalate in the rat. Pollack GM, et al. **J Pharmacol Exp Ther** 1989 Jan; 248(1):176–81

Effects of parenteral di-(2-ethylhexyl)phthalate (DEHP) on gonadal biochemistry, pathology, and reproductive performance of mice. Agarwal DK, et al. **J Toxicol Environ Health** 1989;26(1):39–59

Exposure to di(2-ethylhexyl)phthalate in infants receiving extracorporeal membrane oxygenation [letter] Shneider B, et al. **N Engl J Med** 1989 Jun 8;320(23):1563

No embryotoxic or teratogenic effect of dimethyl phthalate in rats after epicutaneous application. Hansen E, et al. **Pharmacol Toxicol** 1989 Feb;64(2):237–8

Developmental toxicity screen: results of rat studies with diethylhexyl phthalate and ethylene glycol monomethyl ether. Morrissey RE, et al. **Teratogenesis Carcinog Mutagen** 1989;9(2):119–29

Mono-2-ethylhexyl phthalate, a metabolite of di-(2-ethylhexyl) phthalate, causally linked to testicular atrophy in rats. Albro PW, et al. **Toxicol Appl Pharmacol** 1989 Sep 1;100(2):193–200

Inhibition of FSH-stimulated cAMP accumulation by mono(2-ethylhexyl) phthalate in primary rat Sertoli cell cultures. Heindel JJ, et al. **Toxicol Appl Pharmacol** 1989 Feb;97(2):377–85

The chronic hepatic or renal toxicity of di(2-ethylhexyl) phthalate, acetaminophen, sodium barbital, and phenobarbital in male B6C3F1 mice: autoradiographic, immunohistochemical, and biochemical evidence for levels of DNA synthesis not associated with carcinogenesis or tumor promotion. Ward JM, et al. **Toxicol Appl Pharmacol** 1988 Dec;96(3):494–506

The induction of respiratory allergy in guinea-pigs following intradermal injection of trimellitic anhydride: a comparison with the response to 2,4-dinitrochlorobenzene. Botham PA, et al. **Toxicol Lett** 1989 Apr;47(1):25–39

Enhancing effects of luteinizing hormone-releasing hormone on testicular damage induced by di-(2-ethylhexyl)phthalate in rats. Oishi S. **Toxicol Lett** 1989 Jun;47(3):271–7

The effects of 1,3-dinitrobenzene and mono-(2-ethylhexyl)phthalate on hormonally stimulated lactate and pyruvate production by rat Sertoli cell cultures. Williams J, et al. **Toxicol Lett** 1989 Jun;47(3):249–57

[Mutagenic action of the dimethyl ester of terephthalic acid on murine somatic cells in vivo] Goncharova RI, et al. **Genetika** 1988 Jul;24(7):1226–33 (Eng. Abstr.) **(Rus)**

[Patterns of the toxic action and an accelerated setting of standards for a number of o-phthalic acid esters] Timofievskaia LA, et al. **Gig Tr Prof Zabol** 1988 Jul; (7):52–5 **(Rus)**

PHTHALIC ANHYDRIDES see under **PHTHALIC ACIDS**

PHTHALIMIDES

ADVERSE EFFECTS

[Embryotoxic and teratogenic effects of phthalimide-containing preparations] Ibragimov N. **Gig Sanit** 1988 Oct;(10):90–1 **(Rus)**

ANALYSIS

[Spectrophotometric analysis of potassium phthalimide in the air of the work area] Kravchuk SB, et al. **Gig Sanit** 1989 Apr;(4):34–5 **(Rus)**

CHEMICAL SYNTHESIS

N-(phthalimidoalkyl) derivatives of serotonergic agents: a common interaction at 5-HT1A serotonin binding sites? Glennon RA, et al. **J Med Chem** 1989 Aug;32(8):1921–6

Antipsychotic properties of new N-(4-substituted-1-piperazinylethyl)- and N-(4-substituted-1-piperidinylethyl)-phthalimides. al-Rashood KA, et al. **J Pharm Sci** 1988 Oct; 77(10):898–901

PHARMACOLOGY

Effects on atrio-ventricular conduction of alinidine and falipamil injected into the AV node artery of the anesthetized dog. Takeda M, et al. **Arch Int Pharmacodyn Ther** 1989 Jan–Feb;297:39–48

Effects of falipamil (AQ-A 39) on heart rate and blood pressure in resting and exercising healthy volunteers. Naudascher M, et al. **J Cardiovasc Pharmacol** 1989 Jul; 14(1):1–5

Bradycardic effects of AQ-A 39 (falipamil) in situ and in isolated, blood-perfused dog hearts. Comparison with alinidine and verapamil. Ogiwara Y, et al. **Jpn Heart J** 1988 Nov;29(6):849–61

Hypolipidemic activity of o-(N-phthalimido)acetophenone in Sprague Dawley rats. Hall IH, et al. **Pharm Res** 1987 Dec;4(6):472–9

The effects of phthalimide and saccharin derivatives on low-density lipoprotein (LDL) and high-density lipoprotein (HDL) receptor activity and related enzyme activities. Hall IH, et al. **Pharm Res** 1988 Jul;5(7):413–20

The hypolipidemic activity of 1-N-3-methylphthalimido-butan-3-semicarbazone in rodents. Wong OT, et al. **Pharm Res** 1989 Mar;6(3):230–4

Allosteric stabilization of 3H-N-methylscopolamine binding in guinea-pig myocardium by an antidote against organophosphate intoxication. Jepsen K, et al. **Pharmacol Toxicol** 1988 Sep;63(3):163–8

THERAPEUTIC USE

Biochemical and clinical studies on epileptic patients during two phase I trials with the novel anticonvulsant taltrimide. Airaksinen EM, et al. **Epilepsy Res** 1987 Sep;1(5):308–11

[Falipamil for decreasing intraoperative heart rate in pheochromocytoma] Huemer G, et al. **Acta Med Austriaca** 1988;15(4):103–5 (Eng. Abstr.) **(Ger)**

TOXICITY

Influence of bacterial growth of the overnight culture on the captan- and folpet-induced reversion in the Ames test. Barrueco C, et al. **Mutagenesis** 1989 Jan;4(1):1-5

PHTHIRAPTERA see **LICE**

PHYCOCYANIN see under **PIGMENTS**

PHYCOERYTHRIN see under **PIGMENTS**

PHYCOMYCES see under **MUCORALES**

PHYCOMYCETES

CLASSIFICATION

[The use of data on the fatty acid composition of lipids in fungi to determine precisely their phylogenetic relations] Feofilova EP, et al. **Biol Nauki** 1989;(4):66-7O **(Rus)**

GENETICS

Remarkably AT-rich genomic DNA from the anaerobic fungus Neocallimastix. Brownlee AG. **Nucleic Acids Res** 1989 Feb 25;17(4):1327-35

METABOLISM

[The action of protein-vitamin preparations from micromycetes on fur-bearing animals] Bilai VI, et al. **Mikrobiol Zh** 1987 May-Jun;49(3):65-9 (Eng. Abstr.) **(Rus)**

PATHOGENICITY

[Entomopathogenic mushrooms of the genus Coelomomyces in Madagascar] Rodhain F. **Arch Inst Pasteur Madagascar** 1988;54(1):243-52 **(Fre)**

PHYLLOQUINONE REDUCTASES see **QUINONE REDUCTASES**

PHYLOGENY

Origin and differentiation of human mitochondrial DNA. Excoffier L, et al. **Am J Hum Genet** 1989 Jan;44(1):73-85

Polymorphic DNA haplotypes at the LDL receptor locus. Leitersdorf E, et al. **Am J Hum Genet** 1989 Mar; 44(3):409-21

Angular homeostasis. V: Some issues in genetics, ontogeny, and evolution. Murphy EA, et al. **Am J Med Genet** 1988 Dec;31(4):963-79

The anterior buccal mandibular depressions: ontogeny and phylogeny. Arensburg B, et al. **Am J Phys Anthropol** 1989 Mar;78(3):431-7

Phylogenetic relationships of snake venom toxic proteins. Ventura MM. **An Acad Bras Cienc** 1988;60(2):239-44 (38 ref.)

Phylogenies from molecular sequences: inference and reliability. Felsenstein J. **Annu Rev Genet** 1988;22:521-65 (144 ref.)

Scanning electron microscopy of molar enamel structure of cricetodontine neogene rodents. Rodde J, et al. **Arch Oral Biol** 1988;33(10):749-59

Antigenic relationships between avian paramyxoviruses. III. A mathematical model of antigenic drift and a computer-assisted approach for construction of a phylogenetic tree. Lipkind M, et al. **Arch Virol** 1988; 103(1-2):83-98

Presumptive relict reproductive behavior in small parrots. Kavanau JL. **Brain Behav Evol** 1988;32(6):340-52 (72 ref.)

Persistence of the nervus terminalis in adult bats: a morphological and phylogenetical approach. Oelschläger HA. **Brain Behav Evol** 1988;32(6):330-9

A comparative phylogenetic study of the distribution of cerebellar GABAA/benzodiazepine receptors using radioligands and monoclonal antibodies. Schmitz E, et al. **Brain Res** 1988 Nov 15;473(2):314-20

Weak hierarchies associated with similarity measures--an additive clustering technique. Bandelt HJ, et al. **Bull Math Biol** 1989;51(1):133-66

Phylogenetic distribution of enamel proteins: immunohistochemical localization with monoclonal antibodies indicates the evolutionary appearance of enamelins prior to amelogenins. Herold R, et al. **Calcif Tissue Int** 1989 Aug;45(2):88-94

The use of functional analysis of the ribosome as a tool to determine archaebacterial phylogeny. Amils R, et al. **Can J Microbiol** 1989 Jan;35(1):141-7

A brief note concerning archaebacterial phylogeny. Olsen GJ, et al. **Can J Microbiol** 1989 Jan;35(1):119-23

The phylogeny of human chromosome specific alpha satellites. Alexandrov IA, et al. **Chromosoma** 1988; 96(6):443-53

Phylogenetic study of the oxytocin-like immunoreactive system in invertebrates. Mizuno J, et al. **Comp Biochem Physiol [A]** 1988;91(4):733-8

Phylogenetic study of the arginine-vasotocin/arginine-vasopressin-like immunoreactive system in invertebrates. Mizuno J, et al. **Comp Biochem Physiol [A]** 1988;91(4):739-47

Phylogenetic distribution of glutathione peroxidase. Smith J, et al. **Comp Biochem Physiol [B]** 1979;63(1):39-44

Merging of distance matrices and classification by dynamic clustering. Delorme MO, et al. **Comput Appl Biosci** 1988 Nov;4(4):453-8

Reducing the effect of the data order in algorithms for constructing phylogenetic trees. Dopazo J. **Comput Appl Biosci** 1988 Apr;4(2):307

An electrically mediated block to polyspermy in the primitive urodele Hynobius nebulosus and phylogenetic comparison with other amphibians. Iwao Y. **Dev Biol** 1989 Aug; 134(2):438-45

The evolution of blood cells: facts and enigmas. Millar DA, et al. **Endeavour** 1989;13(2):72-7 (45 ref.)

The phylogeny of the endocrine system. Barrington EJ. **Experientia** 1986 Jul 15;42(7):775-81

Cardiac design in lower vertebrates: what can phylogeny reveal about ontogeny? Burggren WW. **Experientia** 1988 Dec 1;44(11-12):919-30 (46 ref.)

Hemispheric dominance: its development and relation to speech disorders. Kertesz A. **Folia Phoniatr (Basel)** 1989; 41(2-3):61-88 (195 ref.)

Evolution of immunoglobulin allotypes and phylogeny of apes. Dugoujon JM, et al. **Folia Primatol (Basel)** 1987; 49(3-4):187-99

Ultrastructure of the spermatozoon of Lepidogalaxias salamandroides and its phylogenetic significance. Leung LK. **Gamete Res** 1988 Jan;19(1):41-9

Chromosome phylogenies of man, great apes, and Old World monkeys. De Grouchy J. **Genetica** 1987 Aug 31; 73(1-2):37-52 (71 ref.)

Detecting small amounts of gene flow from phylogenies of alleles. Slatkin M. **Genetics** 1989 Mar;121(3):609-12

The spider monkey psi eta-globin gene and surrounding sequences: recent or ancient insertions of LINEs and SINEs? Fitch DH, et al. **Genomics** 1988 Oct;3(3):237-55

Immunohistochemical study of ontogeny and phylogeny of a terminal N-acetylglucosamine cluster antigen. Chechik BE, et al. **Histochem J** 1989 Feb;21(2):107-14

Duplication of the tuf gene: a new insight into the phylogeny of eubacteria. Sela S, et al. **J Bacteriol** 1989 Jan; 171(1):581-4

Phylogenetic diversity of the Rickettsiae. Weisburg WG, et al. **J Bacteriol** 1989 Aug;171(8):4202-6

Cloning and sequence analysis of channel catfish heavy chain cDNA indicate phylogenetic diversity within the IgM immunoglobulin family. Ghaffari SH, et al. **J Immunol** 1989 Feb 15;142(4):1356-65

Phylogeny of regulatory proteins of the complement system. Isolation and characterization of a C4b/C3b inhibitor and a cofactor from sand bass plasma. Kaidoh T, et al. **J Immunol** 1989 Mar 1;142(5):1605-13

Nucleotide sequences of immunoglobulin-epsilon pseudogenes in man and apes and their phylogenetic relationships. Ueda S, et al. **J Mol Biol** 1989 Jan 5; 205(1):85-90

Phylogenetic relationships between the chlorophyll a/b binding protein (CAB) multigene family: an intra- and interspecies study. Demmin DS, et al. **J Mol Evol** 1989 Sep;29(3):266-79

On the maximum likelihood method for estimating molecular trees: uniqueness of the likelihood point. Fukami K, et al. **J Mol Evol** 1989 May;28(5):460-4

Dinoflagellates in evolution. A molecular phylogenetic analysis of large subunit ribosomal RNA. Lenaers G, et al. **J Mol Evol** 1989 Jul;29(1):40-51

Evolution of nested genes with special reference to cuticle proteins in Drosophila melanogaster. Moriyama EN, et al. **J Mol Evol** 1989 May;28(5):391-7

Shifting ditypic site analysis: heuristics for expanding the phylogenetic range of nucleotide sequences in Sankoff analyses. Nanney DL, et al. **J Mol Evol** 1989 May; 28(5):451-9

Ciliate evolution: the ribosomal phylogenies of the tetrahymenine ciliates. Preparata RM, et al. **J Mol Evol** 1989 May;28(5):427-41

Phylogenetic calibration of the 5' terminal domain of large rRNA achieved by determining twenty eucaryotic sequences. Qu LH, et al. **J Mol Evol** 1988 Dec-1989 Feb; 28(1-2):113-24

Phylogenetic relationships of the green alga Volvox carteri deduced from small-subunit ribosomal RNA comparisons. Rausch H, et al. **J Mol Evol** 1989 Sep;29(3):255-65

On the rate of DNA sequence evolution in Drosophila. Sharp PM, et al. **J Mol Evol** 1989 May;28(5):398-402

Presence of proteolipid protein in coelacanth brain myelin demonstrates tetrapod affinities and questions a chondrichthyan association. Waehneldt TV, et al. **J Neurochem** 1989 Jun;52(6):1941-3

The phylogeny of the cercomeria (Platyhelminthes: Rhabdocoela) and general evolutionary principles. Brooks DR. **J Parasitol** 1989 Aug;75(4):606-16

Phylogenetic relationships among genera of the Tetrabothriidae (Eucestoda). Hoberg EP. **J Parasitol** 1989 Aug;75(4):617-26

Comparison of ribosomal and isozymic phylogenies of tetrahymenine ciliates. Nanney DL, et al. **J Protozool** 1989 Jan-Feb;36(1):1-8

Hypothesis: Alzheimer's disease is a phylogenetic disease. Rapoport SI. **Med Hypotheses** 1989 Jul;29(3):147-50

Reverse transcriptase sequencing of ribosomal RNA for phylogenetic analysis. Lane DJ, et al. **Methods Enzymol** 1988;167:138-44

Phylogenetic analysis using ribosomal RNA. Olsen GJ. **Methods Enzymol** 1988;164:793-812

Small-subunit ribosomal RNA sequence from Naegleria gruberi supports the polyphyletic origin of amoebas. Clark CG, et al. **Mol Biol Evol** 1988 Sep;5(5):512-8

Molecular phylogeny of the kingdoms Animalia, Plantae, and Fungi. Gouy M, et al. **Mol Biol Evol** 1989 Mar;6(2):109-22

Molecular phylogeny and evolution of primate mitochondrial DNA. Hayasaka K, et al. **Mol Biol Evol** 1988 Nov; 5(6):626-44

Relationships between gene trees and species trees. Pamilo P, et al. **Mol Biol Evol** 1988 Sep;5(5):568-83

A note on the neighbor-joining algorithm of Saitou and Nei. Studier JA, et al. **Mol Biol Evol** 1988 Nov;5(6):729-31

Phylogeny of metabolic pathways: O-acetylserine sulphydrylase A is homologous to the tryptophan synthase beta subunit. Levy S, et al. **Mol Microbiol** 1988 Nov; 2(6):777-83

Molecular phylogeny. Archaebacteria and Archezoa [news] Cavalier-Smith T. **Nature** 1989 May 11;339(6220):100-1

Phylogenetic analysis based on rRNA sequences supports the archaebacterial rather than the eocyte tree. Gouy M, et al. **Nature** 1989 May 11;339(6220):145-7

DNA phylogeny of the extinct marsupial wolf. Thomas RH, et al. **Nature** 1989 Aug 10;340(6233):465-7

Reflex dementia: disinhibited primitive thinking [see comments] Landau WM. **Neurology** 1989 Jan;39(1):133-7 (28 ref.). **Comment in:** Neurology 1989 Jul;39(7):1001-2

Phylogenetic evidence for tertiary interactions in 16S-like ribosomal RNA. Haselman T, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2215-21

The 5' splice site: phylogenetic evolution and variable geometry of association with U1RNA. Jacob M, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2159-80

Spermatozoa of the deep-sea cephalopod Vampyroteuthis infernalis Chun: ultrastructure and possible phylogenetic significance. Healy JM. **Philos Trans R Soc Lond [Biol]** 1989 Jun 30;323(1219):589-600

Disparate evolution of yeasts and filamentous fungi indicated by phylogenetic analysis of glyceraldehyde-3-phosphate dehydrogenase genes. Smith TL. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7063-6

Trauma or drive--drive and trauma. A reading of Sigmund Freud's phylogenetic fantasy of 1915. Grubrich-Simitis I. **Psychoanal Study Child** 1988;43:3-32

Time bomb. Horgan J. **Sci Am** 1989 Mar;260(3):24, 26

Phylogeny and molecular data. **Science** 1989 Jan 27; 243(4890):548-51

Phylogenetic stains: ribosomal RNA-based probes for the identification of single cells [published erratum appears in Science 1989 Sep 22;245(4924):1312] DeLong EF, et al. **Science** 1989 Mar 10;243(4896):1360-3

Phylogenetic meaning of the kingdom concept: an unusual ribosomal RNA from Giardia lamblia. Sogin ML, et al. **Science** 1989 Jan 6;243(4887):75-7

The ontogeny and phylogeny of cellular differentiation in Volvox. Kirk DL. **Trends Genet** 1988 Feb;4(2):32-6 (28 ref.)

Phylogeny of antigenic variants of avian coronavirus IBV. Kusters JG, et al. **Virology** 1989 Mar;169(1):217-21

Molecular evolution of H+-ATPases. I. Methanococcus and Sulfolobus are monophyletic with respect to eukaryotes and Eubacteria. Gogarten JP, et al. **Z Naturforsch [C]** 1989 Jul-Aug;44(7-8):641-50

Algorithm for construction of phylogenetic trees. Tohá J, et al. **Z Naturforsch [C]** 1989 Mar-Apr;44(3-4):312-6

[Genetic program and environmental imprinting: the critical perinatal period] Csaba G. **Orv Hetil** 1988 Aug 28; 129(35):1847-52, 1855-6 (47 ref.) (Eng. Abstr.) **(Hun)**

[The history of nostalgy isn't just 300 years] Daněk K. **Tidsskr Nor Laegeforen** 1988 Dec 10;108(34-36):3217-21 **(Nor)**

[Experience in the formation of a deductive theory of specialization and integration of cells in phylo-, onto- and pathogenesis] Savostianov GA. **Arkh Anat Gistol Embriol** 1989 Feb;96(2):78-93 **(Rus)**

[The interrelation of adaptation and disease in phylogeny and ontogeny] Galankin VN. **Arkh Patol** 1988;50(10):73-8 (23 ref.) (Eng. Abstr.) **(Rus)**

[Classification of methylotrophic bacteria according to 5S ribosomal RNA sequencing] Bulygina ES, et al. **Mol Gen Mikrobiol Virusol** 1989 Apr;(4):18-24 (Eng. Abstr.) **(Rus)**

[Antigenic differentiation of tissues in phylogenesis and ontogenesis in man] Shabalin VN, et al. **Vestn Akad Med Nauk SSSR** 1988;(7):5-9 (Eng. Abstr.) **(Rus)**

[Lymphoid tissue during phylo- and ontogenesis] Chernyshenko LV, et al. **Vrach Delo** 1989 Feb;(2):72-6 (Eng. Abstr.) **(Rus)**

[Phylogenetic characteristics of the structure and function of polypeptide growth factors localized in the blood platelets of mammals] Stoika RS. **Zh Evol Biokhim Fiziol** 1989 May-Jun;25(3):373-9 (27 ref.) **(Rus)**

[Development of manipulative activity in vertebrate phylogeny] Deriagina MA, et al. **Zh Obshch Biol** 1988 May-Jun;49(3):304-17 (Eng. Abstr.) **(Rus)**

PHYSALAEMIN see under **TACHYKININS**

PHYSALOPTERA see **SPIRUROIDEA**

PHYSARUM

8th European Physarum Workshop. 69. Konferenz der Gesellschaft für Biologische Chemie. Regensburg, July 17th–22nd, 1988. Abstracts. **Biol Chem Hoppe Seyler** 1988 Oct;369(10):1075–90

ANALYSIS

Phosphohistidine is found in basic nuclear proteins of Physarum polycephalum. Pesis KH, et al. **FEBS Lett** 1988 Oct 24;239(1):151–4

CYTOLOGY

Dynamic organization of Physarum plasmodium. Kamiya N, et al. **Cell Motil Cytoskeleton** 1988;10(1–2):107–16

Regulation of mitosis onset and thymidine kinase activity during the cell cycle of Physarum polycephalum plasmodia: effect of hydroxyurea. Wright M, et al. **Exp Cell Res** 1988 Nov;179(1):263–72

Biological oxidation and the mobilization of mitochondrial calcium during the differentiation of Physarum polycephalum. Nations C, et al. **J Cell Physiol** 1989 Aug; 140(2):311–6

ENZYMOLOGY

Changes in activity and subcellular localization of alpha-like DNA polymerase during cell cycle of Physarum polycephalum. Shioda M, et al. **Biochem Int** 1989 Mar; 18(3):581–8

Expression of UDP-glucose: poriferasterol glucosyltransferase in the process of differentiation of a true slime mold, Physarum polycephalum. Murakami-Murofushi K, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):412–5

Activity of some dehydrogenase enzymes in mitochondria from Physarum polycephalum. McCarthy JL, et al. **Comp Biochem Physiol [B]** 1979;63(4):495–9

GENETICS

Transcriptionally active chromatin can be selectively released by DNase I from Physarum polycephalum genome. Fronk J, et al. **Acta Biochim Pol** 1988;35(3):191–8

A mobile group I intron in the nuclear rDNA of Physarum polycephalum. Muscarella DE, et al. **Cell** 1989 Feb 10; 56(3):443–54

Nucleotide sequence of the Physarum polycephalum small subunit ribosomal RNA as inferred from the gene sequence: secondary structure and evolutionary implications. Johansen T, et al. **Curr Genet** 1988 Sep;14(3):265–73

Some properties of RNA from Physarum amoebae undergoing encystment: electrophoretic similarity to Acanthamoeba RNA. Asgari M, et al. **Cytobios** 1989; 57(230–231):131–9

Photomorphogenesis in Physarum polycephalum. Temporal expression pattern of actin, alpha- and beta-tubulin. Poetsch B, et al. **Eur J Biochem** 1989 Jan 15;179(1):141–6

Structure and expression of an alpha-tubulin gene of Physarum polycephalum. Walden PD, et al. **Eur J Biochem** 1989 May 15;181(3):583–92

Evidence for a homolog of the yeast cell cycle regulatory gene product of cdc2+ in Physarum polycephalum. Shipley GL, et al. **Eur J Cell Biol** 1989 Feb;48(1):95–103

Coordinate replication of dispersed repetitive sequences in Physarum polycephalum. Read CM, et al. **Exp Cell Res** 1989 Apr;181(2):505–17

Identification of EcoRV fragments spanning the N alpha-tubulin gene of Physarum. Watts DI, et al. **FEBS Lett** 1988 Dec 5;241(1–2):229–33

Selective gene expression during sporulation of Physarum polycephalum. Martel R, et al. **J Bacteriol** 1988 Oct; 170(10):4784–90

Activation of a beta-tubulin gene during early development of the plasmodium in Physarum polycephalum. Solnica-Krezel L, et al. **J Gen Microbiol** 1988 May;134 (Pt 5):1323–31

Methylation is co-ordinated on the putative replication origins of Physarum ribosomal DNA. Cooney CA, et al. **J Mol Biol** 1988 Dec 20;204(4):889–901

Structure and expression of an actin gene of Physarum polycephalum. Gonzalez-y-Merchand JA, et al. **J Mol Biol** 1988 Jul 5;202(1):161–8

Histone genes in Physarum polycephalum: transcription and analysis of the flanking regions of the two H4 genes. Wilhelm ML, et al. **J Mol Evol** 1989 Apr;28(4):322–6

Sequence of a transcribed Physarum genomic DNA fragment containing a cluster of different U-RNA sequences. Curran ME, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9867

A structural analysis of P. polycephalum U1 RNA at the RNA and gene levels. Are ther differentially expressed U1 RNA genes in P. polycephalum? U1 RNA evolution. Myslinski E, et al. **Nucleic Acids Res** 1989 Feb 11; 17(3):1019–34

GROWTH & DEVELOPMENT

Replication timing of 10 developmentally regulated genes in Physarum polycephalum. Pierron G, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):553–66

METABOLISM

ADP-ribosylation in isolated nuclei of Physarum polycephalum. Golderer G, et al. **Biochem J** 1988 Aug 1; 253(3):859–67

An unusual polyanion from Physarum polycephalum that inhibits homologous DNA polymerase alpha in vitro. Fischer H, et al. **Biochemistry** 1989 Jun 13;28(12):5219–26

Immunoelectron microscopic localization of the nucleolar protein B-36 (fibrillarin) during the cell cycle of Physarum polycephalum. Pierron G, et al. **Biol Cell** 1989;65(2):119–26

Adenine salvage enzymes and intracellular nucleotide triphosphate content in Physarum flavicomum amoebae during growth and development. Cumaraswamy A, et al. **Can J Microbiol** 1989 May;35(5):554–8

Reactivation of cell-free models of Physarum plasmodia after myosin reconstitution. Bell R. **Eur J Cell Biol** 1988 Oct; 47(1):7–13

Changes in diadenosine tetraphosphate levels in Physarum polycephalum with different oxygen concentrations. Garrison PN, et al. **J Bacteriol** 1989 Mar;171(3):1506–12

Physarum myosin light chain interacts with actin in a Ca2+-dependent manner. Kohama K, et al. **J Biochem (Tokyo)** 1988 Dec;104(6):995–8

Distribution of postsynthetic methylation sites in Physarum histone H1. Jerzmanowski A, et al. **Mol Biol Rep** 1988; 13(2):97–101

Purification of tropomyosin from Saccharomyces cerevisiae and identification of related proteins in Schizosaccharomyces and Physarum. Liu HP, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):90–3

PHYSIOLOGY

Oxidative stress and cellular differentiation. Sohal RS, et al. **Ann N Y Acad Sci** 1988;551:59–73; discussion 74

Developmentally regulated late mRNAs in the encystment of Physarum polycephalum plasmodia. Savard L, et al. **Biochim Biophys Acta** 1989 Apr 12;1007(3):264–9

DNA synthesis by the isolated nuclear matrix from synchronized plasmodia of Physarum polycephalum. Shioda M, et al. **Biochim Biophys Acta** 1989 Apr 12; 1007(3):254–63

Assembly, disassembly, and movements of the microfilament-rich ridge during the amoeboflagellate transformation in Physarum polycephalum. Pagh KI, et al. **Cell Motil Cytoskeleton** 1988;11(4):223–34

ULTRASTRUCTURE

A method for isolation of nuclei containing undegraded RNA from RNAase-rich plasmodia of Physarum polycephalum. Nothacker KD, et al. **Biochim Biophys Acta** 1988 Sep 7; 950(3):403–10

Microtubule cytoskeleton and morphogenesis in the amoebae of the myxomycete Physarum polycephalum. Wright M, et al. **Biol Cell** 1988;63(2):239–48 (51 ref.)

Evidence for active interactions between microfilaments and microtubules in myxomycete flagellates. Uyeda TQ, et al. **J Cell Biol** 1989 May;108(5):1727–35

PHYSICAL CONDITIONING, ANIMAL

Quantitative morphometric analyses of the exercised extensor digitorum longus muscle of the mouse. el-Rimawi AS, et al. **Acta Anat (Basel)** 1989;134(3):191–8

The cardiovascular effects of deconditioning after endurance training in rats. Karhunen MK, et al. **Acta Physiol Scand** 1988 Jul;133(3):307–14

Effects of ageing and physical training on rat skeletal muscle. An experimental study on the properties of collagen, laminin, and fibre types in muscles serving different functions. Kovanen V. **Acta Physiol Scand Suppl** 1989; 577:1–56

The influence of regular physical activity on the cell-mediated immunity in pigs. Jensen M. **Acta Vet Scand** 1989;30(1):19–26

Epidemiological studies of musculoskeletal racing and training injuries in Thoroughbred horses, Minnesota, U.S.A. Robinson RA, et al. **Acta Vet Scand Suppl** 1988; 84:340–3

Training increases cardiac glucose uptake during rest and exercise in rats. Kainulainen H, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H839–45

Exercise inhibits reproductive quiescence induced by exogenous melatonin in hamsters. Pieper DR, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R718–23

Capillary tortuosity in rat soleus muscle is not affected by endurance training. Poole DC, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1110–6

Effects of exercise-rest cycles on energy balance in rats. Richard D, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):R886–91

Effect of exercise training on energy balance of orchidectomized rats. Rivest S, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):R550–5

Adrenal and sympathetic catecholamines in exercising rats. Scheurink AJ, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R155–60

Sympathoadrenal influence on glucose, FFA, and insulin levels in exercising rats. Scheurink AJ, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R161–8

Experience affects exercise-induced changes in catecholamines, glucose, and FFA. Scheurink AJ, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R169–73

Effect of physical activity on calcium and phosphorus metabolism in the rat. Yeh JK, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E1–6

Some effects of limited exercise on purpose-bred beagles. Campbell SA, et al. **Am J Vet Res** 1988 Aug;49(8):1298–301

Exercise produces sensitivity to metocurine. Gronert GA, et al. **Anesthesiology** 1989 Jun;70(6):973–7

Effects of exercise training on biochemical and biomechanical properties of rat aorta. Matsuda M, et al. **Angiology** 1989 Jan;40(1):51–8

Alkaline phosphatase activity in striated muscle: the effect of aging and long-term training in female mice. Reznick AZ, et al. **Arch Gerontol Geriatr** 1989 Jul;9(1):59–65

Effect of exercise training on plasma cholesterol and cholesterol kinetics in adult female rats. Ostlund RE Jr, et al. **Atherosclerosis** 1989 Jan;75(1):7–11

Assessment of copper and zinc status of farm horses and training thoroughbreds in south-east Queensland. De Auer, et al. **Aust Vet J** 1988 Oct;65(10):317–20

Effect of chronic exercise on glucose uptake and activities of glycolytic enzymes measured regionally in rat heart. Kainulainen H, et al. **Basic Res Cardiol** 1989 Mar-Apr; 84(2):174–90

Proteolytic enzyme activities in skeletal muscle of high jumping rats. Sohár I, et al. **Biomed Biochim Acta** 1989; 48(5–6):S422–5

Splenic immune responses following treadmill exercise in mice. Hoffman-Goetz L, et al. **Can J Physiol Pharmacol** 1988 Nov;66(11):1415–9

Effect of voluntary exercise on azoxymethane-induced colon carcinogenesis in male F344 rats. Reddy BS, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7079–81

Depressed in vivo myocardial reactivity to dobutamine in streptozotocin diabetic rats: influence of exercise training. Heller BA, et al. **Cardiovasc Res** 1988 Jun;22(6):417–24

The effects of chronic bacteremia on the metabolic response to exercise in the conscious rat. Musch TI, et al. **Circ Shock** 1988 Aug;25(4):245–58

Exercise training after experimental myocardial infarction increases the ventricular fibrillation threshold before and after the onset of reinfarction in the isolated rat heart. Posel D, et al. **Circulation** 1989 Jul;80(1):138–45

Effects of chronic dobutamine administration on the response to acute exercise in dogs. McKirnan MD, et al. **Clin Physiol** 1989 Feb;9(1):11–20

Exercise-induced increase in glucose transporters in plasma membranes of rat skeletal muscle. Douen AG, et al. **Endocrinology** 1989 Jan;124(1):449–54

Muscular adaptation of horses during intensive training and detraining. Essén-Gustavsson B, et al. **Equine Vet J** 1989 Jan;21(1):27–33

Circulatory and muscle metabolic responses to draught work compared to increasing trotting velocities. Gottlieb M, et al. **Equine Vet J** 1988 Nov;20(6):430–4

Muscle glycogen depletion patterns during draught work in Standardbred horses. Gottlieb M. **Equine Vet J** 1989 Mar; 21(2):110–5

Is exhaustive training adequate preparation for endurance performance? Katsuta S, et al. **Eur J Appl Physiol** 1988; 58(1–2):68–73

Respiratory and cardiac responses to exercise-simulating peripheral perfusion in endurance trained and untrained rats. I. Reflex responses and changes in perfusion outflow. Thimm F, et al. **Eur J Appl Physiol** 1988;58(1–2):105–11

Respiratory and cardiac responses to exercise-simulating peripheral perfusion in endurance trained and untrained rats. II. Temporal relationships between outflow parameters and cardiac and respiratory responses. Thimm F, et al. **Eur J Appl Physiol** 1988;58(1–2):112–9

The influence of a steroid hormone and of physical exercise on protein metabolism in rats. Menschikowski M, et al. **Exp Clin Endocrinol** 1988 Mar;92(3):341–8

Influence of one-week hindlimb suspension and intermittent high load exercise on rat muscles. Herbert ME, et al. **Exp Neurol** 1988 Nov;102(2):190–8

Effect of endurance and "sprint" physical training on lymphocyte-induced angiogenesis in rats. Polakowski IJ, et al. **Folia Biol (Praha)** 1989;35(1):45–9

Physical exercise affects cholinesterases and organophosphate response. Ryhänen R, et al. **Gen Pharmacol** 1988; 19(6):815–8

Effect of physical training on thrombotic tendency in rats: decrease in thrombotic tendency measured by the He-Ne laser-induced thrombus formation method. Yamamoto J, et al. **Haemostasis** 1989;19(5):260–5

The effect of dietary protein level on exercising horses. Miller PA, et al. **J Anim Sci** 1988 Sep;66(9):2185–92

Exercise training attenuates the myocardial dysfunction induced by endotoxin. DeBlieux PM, et al. **J Appl Physiol** 1989 Jun;66(6):2805–10

Endurance training in dogs increases vascular responsiveness to an alpha 1-agonist. Evans YM, et al. **J Appl Physiol** 1988 Aug;65(2):625–32

Serum potassium during exercise in Hereford calves: influence of physical conditioning. Fosha-Dolezal SR, et al. **J Appl Physiol** 1988 Sep;65(3):1360–6

Effect of exercise training on glucose homeostasis in normal and insulin-deficient diabetic rats. Goodyear LJ, et al. **J Appl Physiol** 1988 Aug;65(2):844–51

Extreme endurance training and fiber type adaptation in rat diaphragm. Green HJ, et al. **J Appl Physiol** 1989 Apr; 66(4):1914–20

Glycogenesis in muscle and liver during exercise. Hutber

CA, et al. **J Appl Physiol** 1989 Jun;66(6):2811–7
Skeletal muscle glucose transport in obese Zucker rats after exercise training. Ivy JL, et al. **J Appl Physiol** 1989 Jun; 66(6):2635–41
Dissociation of changes in VO2 max, muscle QO2, and performance with training in rats. Lambert MI, et al. **J Appl Physiol** 1989 Apr;66(4):1620–5
Costal diaphragmatic O2 and lactate extraction in laryngeal hemiplegic ponies during exercise. Manohar M, et al. **J Appl Physiol** 1988 Oct;65(4):1723–8
Effects of chronic swimming training on cardiac sarcolemmal function and composition. Pierce GN, et al. **J Appl Physiol** 1989 Apr;66(4):1715–21
Site-specific adipose tissue LPL responses to endurance training in female lean Zucker rats. Savard R, et al. **J Appl Physiol** 1988 Aug;65(2):693–9
Chronic exercise training protects aged cardiac muscle against hypoxia. Wei JY, et al. **J Clin Invest** 1989 Mar; 83(3):778–84
Exercise training and dietary chromium effects on glycogen, glycogen synthase, phosphorylase and total protein in rats. Campbell WW, et al. **J Nutr** 1989 Apr;119(4):653–60
Carbohydrate homeostasis and post-exercise ketosis in trained and untrained rats. Adams JH, et al. **J Physiol (Lond)** 1988 Dec;407:453–61
Effect of training on maximal oxygen uptake and aerobic capacity of locomotory muscles in tufted ducks, Aythya fuligula. Butler PJ, et al. **J Physiol (Lond)** 1988 Jul; 401:347–59
The use of enzyme profiles in the training and racing of horses: a review. Gummow B, et al. **J S Afr Vet Assoc** 1988 Dec;59(4):213–4 (18 ref.)
Effects of exercise training on the amylase activity and glycogen content in rat submandibular gland. Komabayashi T, et al. **J Sports Med Phys Fitness** 1988 Sep;28(3):293–7
The effects of cage size and pair housing on exercise of beagle dogs. Hughes HC, et al. **Lab Anim Sci** 1989 Jul;39(4):302–5
Effects of chronic exercise on the kidneys at different ages. Leon AS, et al. **Life Sci** 1974 Jul 1;15(1):29–36
Effect of caffeine on glycogenolysis during exercise in endurance trained rats. Arogyasami J, et al. **Med Sci Sports Exerc** 1989 Apr;21(2):173–7
Mass and fiber cross-sectional area of soleus muscle grafts following training. Clark KI, et al. **Med Sci Sports Exerc** 1989 Aug;21(4):432–6 (27 ref.)
Decreased insulin response to sustained hyperglycemia in exercise-trained rats. Farrell PA. **Med Sci Sports Exerc** 1988 Oct;20(5):469–73
Does exercise training alter myocardial creatine kinase MB isoenzyme content? Miller TD, et al. **Med Sci Sports Exerc** 1989 Aug;21(4):437–40 (27 ref.)
Norepinephrine turnover in various tissues at rest and during exercise: evidence for a training effect. Mazzeo RS, et al. **Metabolism** 1989 May;38(5):479–83
Effects of exercise training on the relationship between insulin binding and insulin-stimulated tyrosine kinase activity in rat skeletal muscle. Santos RF, et al. **Metabolism** 1989 Apr;38(4):376–86
Effects of training on blood glucose kinetics during glucose challenge in rats. Savage S, et al. **Pflugers Arch** 1988 Sep; 412(4):397–401
Dextrofenfluramine, but not 8-OH-DPAT affects the decrease in food consumed by rats submitted to physical exercise. Chaouloff F, et al. **Pharmacol Biochem Behav** 1989 Feb;32(2):573–6
Treadmill exercise training increases the oxidative capacity of chicken iliotibialis muscle. Brackenbury JH, et al. **Poult Sci** 1989 Apr;68(4):577–81
Glycogen metabolism and post-exercise ketosis in carbohydrate-restricted trained and untrained rats. Adams JH, et al. **Q J Exp Physiol** 1989 Jan;74(1):27–34
Importance of both amplitude and incidence measures in time-domain analysis [letter] Feinberg I. **Sleep** 1988 Dec; 11(6):571–2
Effects of long-term exercise and high-cholesterol diet on lipid-lipoprotein metabolism in rats. Terao T, et al. **Tokai J Exp Clin Med** 1987 Nov;12(4):243–51
In vitro strength of the suspensory apparatus in training and resting horses. Bukowiecki CF, et al. **Vet Surg** 1987 Mar–Apr;16(2):126–30
The effect of exercise on the healing of articular cartilage defects in the equine carpus. French DA, et al. **Vet Surg** 1989 Jul–Aug;18(4):312–21
[Metabolic response in laboratory rats after 3 days and 14 days of the physical stress of swimming] Holečková J, et al. **Cesk Fysiol** 1988;37(5):469–76 **(Cze)**
[Performance testing of mules and Haflinger horses used as pack animals] von Rennenkampff F, et al. **DTW** 1989 Jan; 96(1):17–20 (Eng. Abstr.) **(Ger)**
[The prevention of injuries in greyhounds] Bilkei G, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul–Aug; 96(7):374–5 (Eng. Abstr.) **(Ger)**
[Ultrastructural morphometric studies of myocardial cells of rats after 3 hour autolysis with and without preliminary short term physical exertion] Wassilew G, et al. **Gegenbaurs Morphol Jahrb** 1989;135(1):215–9 (Eng. Abstr.) **(Ger)**
[Function-structural features of cardiac adaptation to static physical loads] Gnatiuk LA, et al. **Fiziol Zh SSSR** 1989 Jan;75(1):52–7 (Eng. Abstr.) **(Rus)**

METHODS

Effects of age and life-long endurance training on the passive mechanical properties of rat skeletal muscle. Kovanen V, et al. **Compr Gerontol [A]** 1988 Feb;2(1):18–23
[Use of a quantitative method for optimizing a muscle training regimen in experimental research] Nazarov SB, et al. **Fiziol Zh SSSR** 1988 Jul;74(7):1041–3 **(Rus)**

PHYSICAL CONDITIONING, HUMAN see **EXERCISE THERAPY**

PHYSICAL EDUCATION AND TRAINING

The veteran athlete: an echocardiographic comparison of veteran cyclists, former cyclists and non-athletic subjects. Vollmer-Larsen A, et al. **Acta Physiol Scand** 1989 Mar; 135(3):393–8
Submaximal exercise effects on sleep patterns in young women before and after an aerobic training programme. Driver HS, et al. **Acta Physiol Scand Suppl** 1988;574:8–13
Effects of psychophysical lifting training on maximal repetitive lifting capacity. Sharp MA, et al. **Am Ind Hyg Assoc J** 1988 Dec;49(12):639–44
Effects of training and detraining on dose-response relationship between glucose and insulin secretion. Mikines KJ, et al. **Am J Physiol** 1989 May;256(5 Pt 1):E588–96
Articular mobility in ballet dancers. A follow-up study after four years. Klemp P, et al. **Am J Sports Med** 1989 Jan–Feb; 17(1):72–5
Elevated plasma hydroxyproline. A possible risk factor associated with connective tissue injuries during overuse. Murguia MJ, et al. **Am J Sports Med** 1988 Nov–Dec; 16(6):660–4
Controversies about intensive training in young athletes. Maffulli N, et al. **Arch Dis Child** 1988 Nov;63(11):1405–7 (26 ref.)
Orthostatic responses following 30-day bed rest deconditioning with isotonic and isokinetic exercise training. Greenleaf JE, et al. **Aviat Space Environ Med** 1989 Jun;60(6):537–42
Regional aortic compliance studied by magnetic resonance imaging: the effects of age, training, and coronary artery disease. Mohiaddin RH, et al. **Br Heart J** 1989 Aug; 62(2):90–6
Teachers' and boys' and girls' perceptions of competence in the primary school: the importance of physical competence. Granleese J, et al. **Br J Educ Psychol** 1989 Feb;59 (Pt 1):31–7
Injuries to rowers [letter] Brosh S, et al. **Br J Sports Med** 1988 Dec;22(4):169
Reliability of ratings of perceived effort regulation of exercise intensity. Eston RG, et al. **Br J Sports Med** 1988 Dec; 22(4):153–5
Physical activity and our human potential: a contemporary perspective. Rechnitzer PA. **Can J Sport Sci** 1989 Jun; 14(2):68–73
The role of preseason conditioning in preventing athletic injuries. Feiring DC, et al. **Clin Sports Med** 1989 Jul; 8(3):361–72 (54 ref.)
Effects of training on the serum lipid profile in normal men. Hespel P, et al. **Drugs** 1988;36 Suppl 2:27–32
Daily changes in neural activation, force-time and relaxation-time characteristics in athletes during very intense training for one week. Häkkinen K, et al. **Electromyogr Clin Neurophysiol** 1989 May–Jun;29(4):243–9
An endurance training programme for frequent manual carrying tasks. Genaidy AM, et al. **Ergonomics** 1989 Feb; 32(2):149–55
Self-regulation training in sport and work. Hardy L, et al. **Ergonomics** 1988 Nov;31(11):1573–83 (56 ref.)
Circadian specificity in exercise training. Hill DW, et al. **Ergonomics** 1989 Jan;32(1):79–92
Physical training in patients with heart diseases: training in coronary disease. 2nd workshop. Working Group on Exercise Physiology, Physiopathology and Electrocardiography, and Working Group on Cardiac Rehabilitation of the European Society of Cardiology. 27–29 September, 1987, Tours, France. **Eur Heart J** 1988 Nov;9 Suppl M:1–46
Programme and results of training during convalescence (phase II). Broustet JP, et al. **Eur Heart J** 1988 Nov;9 Suppl M:7–12
Exercise training, cardiac rehabilitation and return to work in patients with coronary artery disease. Danchin N, et al. **Eur Heart J** 1988 Nov;9 Suppl M:43–6
Psychological effects of training in coronary patients: a critical review of the literature. Langosch W. **Eur Heart J** 1988 Nov;9 Suppl M:37–42 (22 ref.)
Indications for and contraindications to training in angina pectoris. Mathes P. **Eur Heart J** 1988 Nov;9 Suppl M:2–6
Silent ischaemia in post-myocardial infarction patients submitted to physical training. Opasich C, et al. **Eur Heart J** 1988 Nov;9 Suppl M:22–7
Influence of training on blood lipids and coagulation. Sellier P, et al. **Eur Heart J** 1988 Nov;9 Suppl M:32–6
The effects of high intensity training upon respiratory gas exchanges during fixed term maximal incremental exercise in man. Aitken JC, et al. **Eur J Appl Physiol** 1989; 58(7):717–21
The effect of one-legged sprint training on intramuscular pH and nonbicarbonate buffering capacity. Bell GJ, et al. **Eur J Appl Physiol** 1988;58(1–2):158–64
Ventilatory threshold and mechanical efficiency in endurance runners. Bunc V, et al. **Eur J Appl Physiol** 1989;58(7):693–8
Beta-endorphin/beta-lipotropin release and gonadotropin secretion after acute exercise in physically conditioned males. Elias AN, et al. **Eur J Appl Physiol** 1989;58(5):522–7
Specificity of joint angle in isometric training. Kitai TA, et al. **Eur J Appl Physiol** 1989;58(7):744–8
Age- and training-related changes in the collagen metabolism of rat skeletal muscle. Kovanen V, et al. **Eur J Appl Physiol** 1989;58(7):765–71
Satellite cell activation in human skeletal muscle after training: evidence for muscle fiber neoformation. Appell HJ, et al. **Int J Sports Med** 1988 Aug;9(4):297–9
Blood lactate during exercise: time course of training adaptation in humans. Gaesser GA, et al. **Int J Sports Med** 1988 Aug;9(4):284–8
Effect of reduced training frequency on muscular strength. Graves JE, et al. **Int J Sports Med** 1988 Oct;9(5):316–9
Sympathoadrenergic regulation in elite fencers in training and competition. Hoch F, et al. **Int J Sports Med** 1988 Aug;9 Suppl 2:S141–5
Food intake and body composition in novice athletes during a training period to run a marathon. Janssen GM, et al. **Int J Sports Med** 1989 May;10 Suppl 1:S17–21
Epinephrine and some other hormonal responses to exercise in man: with special reference to physical training. Kjaer M. **Int J Sports Med** 1989 Feb;10(1):2–15
Natural killer cell activity in peripheral blood of highly trained and untrained persons. Pedersen BK, et al. **Int J Sports Med** 1989 Apr;10(2):129–31
Percentages of maximal heart rate, heart rate reserve, and VO2peak for determining endurance training intensity in sedentary women. Weltman A, et al. **Int J Sports Med** 1989 Jun;10(3):212–6 (23 ref.)
Psychological effects during reduced training in distance runners. Wittig AF, et al. **Int J Sports Med** 1989 Apr; 10(2):97–100
Does exercise training deteriorate ventricular function? [letter; comment] Fisman EZ, et al. **J Am Coll Cardiol** 1989 Jul;14(1):263–4. **Comment on:** J Am Coll Cardiol 1988 Aug;12(2):362–72
Contrasts in muscle and myofibers of elite male and female bodybuilders. Alway SE, et al. **J Appl Physiol** 1989 Jul; 67(1):24–31
CK and LD isozymes in human single muscle fibers in trained athletes. Apple FS, et al. **J Appl Physiol** 1989 Jun; 66(6):2717–20
Effect of swim exercise training on human muscle fiber function. Fitts RH, et al. **J Appl Physiol** 1989 Jan; 66(1):465–75
Use of doubly labeled water technique in soldiers training for jungle warfare. Forbes-Ewan CH, et al. **J Appl Physiol** 1989 Jul;67(1):14–8
Cardiovascular responses of 70- to 79-yr-old men and women to exercise training. Hagberg JM, et al. **J Appl Physiol** 1989 Jun;66(6):2589–94
Potential for strength and endurance training to amplify endurance performance. Hickson RC, et al. **J Appl Physiol** 1988 Nov;65(5):2285–90
Variability of responses across training levels to maximal treadmill exercise. Kyle SB, et al. **J Appl Physiol** 1989 Jul; 67(1):160–5
Peripheral effects of endurance training in young and old subjects. Meredith CN, et al. **J Appl Physiol** 1989 Jun; 66(6):2844–9
Dietary protein requirements and body protein metabolism in endurance-trained men. Meredith CN, et al. **J Appl Physiol** 1989 Jun;66(6):2850–6
Lipolytic response of fat cells to catecholamines in sedentary and exercise-trained women. Riviere D, et al. **J Appl Physiol** 1989 Jan;66(1):330–5
NADH shuttle enzymes and cytochrome b5 reductase in human skeletal muscle: effect of strength training. Schantz PG, et al. **J Appl Physiol** 1989 Jul;67(1):123–7
Enzyme activities of FT and ST muscle fibers in heavy-resistance trained athletes. Tesch PA, et al. **J Appl Physiol** 1989 Jul;67(1):83–7
Exercise intensity and glucose tolerance in trained and nontrained subjects. Young JC, et al. **J Appl Physiol** 1989 Jul;67(1):39–43
Lack of desensitization of catecholamine-induced lipolysis in fat cells from trained and sedentary women after physical exercise. Crampes F, et al. **J Clin Endocrinol Metab** 1988 Nov;67(5):1011–7
Estrogen 2-hydroxylase oxidation and menstrual function among elite oarswomen. Snow RC, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):369–76
A low-cost FES exercise bicycle for training paraplegics at home. Mulder AJ, et al. **J Med Eng Technol** 1989 Jan–Apr;13(1–2):90–2
Effects of aerobic exercise training and relaxation training on cardiovascular activity during psychological stress. Holmes DS, et al. **J Psychosom Res** 1988;32(4–5):469–74
Attitudes, knowledge, and beliefs as predictors of exercise intent and behavior in schoolchildren. Ferguson KJ, et al. **J Sch Health** 1989 Mar;59(3):112–5
Relationships among pulmonary diffusing capacity, lung volumes and maximal oxygen consumption. Farrell PA, et al. **J Sports Med Phys Fitness** 1988 Dec;28(4):387–93
Relation of ventilation to CO2 output during moderate

exercise in athletes. Haffor AS, et al. **J Sports Med Phys Fitness** 1988 Sep;28(3):224–8

Neuromuscular and hormonal adaptations during strength and power training. A review. Häkkinen K. **J Sports Med Phys Fitness** 1989 Mar;29(1):9–26 (60 ref.)

Peak physiological function and performance of recreational triathletes. Loftin M, et al. **J Sports Med Phys Fitness** 1988 Dec;28(4):330–5

Heat illness and servicemen [letter] Porter A. **Lancet** 1989 Aug 12;2(8659):398

Trunk muscle strength in athletes. Andersson E, et al. **Med Sci Sports Exerc** 1988 Dec;20(6):587–93

Muscle genetic variants and relationship with performance and trainability. Bouchard C, et al. **Med Sci Sports Exerc** 1989 Feb;21(1):71–7

Specificity of limited range of motion variable resistance training. Graves JE, et al. **Med Sci Sports Exerc** 1989 Feb; 21(1):84–9

Decreases in resting plasma beta-endorphin/-lipotropin after endurance training. Lobstein DD, et al. **Med Sci Sports Exerc** 1989 Apr;21(2):161–6

Ventilatory threshold and VO2max changes in children following endurance training. Mahon AD, et al. **Med Sci Sports Exerc** 1989 Aug;21(4):425–31 (29 ref.)

Alterations in plasma lipids consequent to endurance training and beta-blockade. Morton AR, et al. **Med Sci Sports Exerc** 1989 Jun;21(3):288–92

Improvement in maximal isokinetic cycle ergometry with cardiac rehabilitation. Oldridge NB, et al. **Med Sci Sports Exerc** 1989 Jun;21(3):308–12

Menarche in athletes: the influence of genetics and prepubertal training. Stager JM, et al. **Med Sci Sports Exerc** 1988 Aug;20(4):369–73

Physical educators' attitudes toward teaching students with handicaps. Rizzo TL, et al. **Ment Retard** 1988 Oct; 26(5):307–9

The glucose stimulus-response curve of the beta-cell in physically trained humans, assessed by hyperglycemic clamps. O'Rahilly SO, et al. **Metabolism** 1988 Oct; 37(10):919–23

Impaired fibrinolytic response to exercise in type II diabetes: effects of exercise and physical training. Schneider SH, et al. **Metabolism** 1988 Oct;37(10):924–9

Attitudes toward handicapped peers of mainstreamed and nonmainstreamed children in physical education. Archie VW, et al. **Percept Mot Skills** 1989 Aug;69(1):319–22

Effect of instructional units on the analysis of related and unrelated skills. Morrison C, et al. **Percept Mot Skills** 1986 Apr;62(2):563–6

College students' expectations when selecting racquetball and rhythmic fitness activity classes. Plummer OK, et al. **Percept Mot Skills** 1988 Dec;67(3):846

Attitude toward physical education and self-concepts of asthmatic and nonasthmatic children taught by physical education specialists. Routon JR, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1320–2

Effects of endurance training on body-consciousness in women. Skrinar GS, et al. **Percept Mot Skills** 1986 Apr; 62(2):483–90

Evaluation of a group exercise program for elderly women. Amundsen LR, et al. **Phys Ther** 1989 Jun;69(6):475–83

Endurance training and testosterone levels. Hackney AC. **Sports Med** 1989 Aug;8(2):117–27 (51 ref.)

Altitude, training and human performance. Jackson CG, et al. **Sports Med** 1988 Nov;6(5):279–84 (37 ref.)

Aerobic exercise and resistance weight-training during weight reduction. Implications for obese persons and athletes. Walberg JL. **Sports Med** 1989 Jun;7(6):343–56 (64 ref.)

Physiological considerations in training young athletes. Zauner CW, et al. **Sports Med** 1989 Jul;8(1):15–31 (140 ref.)

[The effect of exercise training on energy requirements at rest] Tremblay A, et al. **Schweiz Z Sportmed** 1988 Oct; 36(3):111–6 (Eng. Abstr.) **(Fre)**

[Special education sports: an interdisciplinary responsibility within the scope of preventive measures and the promotion of physically handicapped children] Böttger W. **Arztl Jugendkd** 1989;80(2):110–4 (Eng. Abstr.) **(Ger)**

[The preventive effect of training with an emphasis on endurance of the cardiovascular system in adolescents] Bringmann W. **Arztl Jugendkd** 1989;80(2):83–91 (Eng. Abstr.) **(Ger)**

[Remarks on sports education from the viewpoint of the pediatric neuropsychiatrist] Kinze W. **Arztl Jugendkd** 1989; 80(2):106–9 (Eng. Abstr.) **(Ger)**

[School sports and the assessment of physical endurance of healthy and performance handicapped children and adolescents] Nagel HJ. **Arztl Jugendkd** 1989;80(2):100–5 (Eng. Abstr.) **(Ger)**

[The influence of exhausting training on the development of the motor pattern of swimming and on the sleep-wake behavior of growing rats] Schwartze U, et al. **Biomed Biochim Acta** 1988;47(3):257–64 (Eng. Abstr.) **(Ger)**

[School sports—early prevention of coronary heart disease?] Krasemann EO, et al. **Fortschr Med** 1989 Jun 10; 107(17):375–7 (15 ref.) (Eng. Abstr.) **(Ger)**

[Performance training in pregnancy. Report of respiratory and cardiovascular physiologic changes in a pregnant high-performance athlete in comparison with a sample of normal pregnant patients] Bung P, et al. **Geburtshilfe Frauenheilkd** 1988 Jul;48(7):500–11 (Eng. Abstr.) **(Ger)**

[Possibility of the transformation of muscle fibers by training and the significance of muscle biopsies for recognizing talent in sports] Appell HJ. **Sportverletz Sportschaden** 1988 Mar;2(1):4–9 (44 ref.) (Eng. Abstr.) **(Ger)**

[Epiphysiolysis of the proximal tibia—an atypical sports injury?] Trepte CT, et al. **Sportverletz Sportschaden** 1988 Dec;2(4):172–7 (Eng. Abstr.) **(Ger)**

[Anthropometric studies of healthy boys participating in sports 9–12 years of age] Brauer BM, et al. **Z Gesamte Hyg** 1989 May;35(5):281–3 (Eng. Abstr.) **(Ger)**

[Training and conditioning in atopic patients following high altitude climate therapy] Schuh A, et al. **Z Hautkr** 1988; 63 Suppl 4:108–10 (Eng. Abstr.) **(Ger)**

[Differential diagnosis: physiologic-pathologic hypertrophy of the heart. A case report] Lehmann M, et al. **Z Kardiol** 1988 Dec;77(12):784–8 (Eng. Abstr.) **(Ger)**

[Study of variations in hematologic parameters in rugby players undergoing physical training at a high altitude] Bizzaro N. **Recenti Prog Med** 1989 May;80(5):237–40 (Eng. Abstr.) **(Ita)**

[Non-medical reasons for wishes not to participate in physical training. What role should the school physician take?] Dahl HA, et al. **Tidsskr Nor Laegeforen** 1988 Nov 30;108(33):3125–6 **(Nor)**

[Prevention of pain in the lumbosacral segment of the spine] Biliński PJ, et al. **Chir Narzadow Ruchu Ortop Pol** 1989; 54(1):26–33 (Eng. Abstr.) **(Pol)**

[Complex evaluation of ambulatory rehabilitation of patients based on long-term observation] Moczurad K. **Folia Med Cracov** 1987;28(3–4):227–56 (Eng. Abstr.) **(Pol)**

[Effects of metanabol and training on liver function and selected biochemical indicators of the blood and urine in weight lifters] Fojt E, et al. **Pol Tyg Lek** 1988 Sep 12; 43(37):1189–92 **(Pol)**

[Possibilities of enhancing human resistance to acute hypoxia after alpine adaptation and rapid high-altitude training] Katkov AIu. **Fiziol Cheloveka** 1988 May-Jun;14(3):441–5 **(Rus)**

[Dynamics of the cortisol and somatotropin content of the blood in male and female athletes training intensively] Viru AA, et al. **Fiziol Zh** 1988 Jul-Aug;34(4):61–6 (Eng. Abstr.) **(Rus)**

[Relation between health status indicators and physical fitness of students and their physical activity] Sergeev VN, et al. **Gig Sanit** 1988 Jul;(7):29–32 **(Rus)**

[Clinico-ergometric indicators in patients with ischemic heart disease with exertion-induced stenocardia after a 4-month physical training course] Abdullaev NA, et al. **Kardiologiia** 1988 Nov;28(11):32–5 (Eng. Abstr.) **(Rus)**

[Physical training in the treatment of hypertension] Bakhshaliev AB, et al. **Kardiologiia** 1988 Nov;28(11):109–10 **(Rus)**

[Effect of regular physical training on the clinical course of stenocardia and results of bicycle ergometry in patients with ischemic heart disease] Dovgiallo OG, et al. **Kardiologiia** 1989 Feb;29(2):101–2 **(Rus)**

[Effect of physical training on the clinical course and the status of blood coagulation hemostasis in patients with ischemic heart disease] Dudaev VA, et al. **Kardiologiia** 1988 Nov;28(11):22–6 (Eng. Abstr.) **(Rus)**

[Changes in the levels of various classes of cholesterol lipoproteins in patients with ischemic heart disease during physical training] Dudaev VA, et al. **Kardiologiia** 1989 Feb; 29(2):49–53 (Eng. Abstr.) **(Rus)**

[Newly developed stenocardia: effect of intensive physical training on the lipoprotein spectrum of blood plasma] Komendat VI, et al. **Kardiologiia** 1988 Jun;28(6):60–5 (Eng. Abstr.) **(Rus)**

[Swimming by infants] Aleksandrovich NZh. **Pediatriia** 1989; (4):80–4 **(Rus)**

[Effect of participation in physical activities on pulmonary rheograms of younger schoolchildren] Il'nitskiĭ VI, et al. **Pediatriia** 1988;(7):108–9 **(Rus)**

[Characteristics of physical activities of secondary school students of Moscow and Kaunas] Kardialis KK, et al. **Pediatriia** 1988;(7):107–8 **(Rus)**

[Effective health promotion at preschool institutions] Zmanovskiĭ IuF, et al. **Pediatriia** 1989;(4):74–9 **(Rus)**

[Effect of heat and physical training on the nonspecific resistance of the body] Sobolevskiĭ VI. **Voen Med Zh** 1988 Sep;(9):54–6 **(Rus)**

[Physiological energy requirements of schoolchildren] Gaĭlish LG, et al. **Vopr Pitan** 1988 May-Jun;(3):25–9 (Eng. Abstr.) **(Rus)**

[The nutrition of cyclists during training exercises and competitions] Korovnikov KA, et al. **Vopr Pitan** 1988 Sep-Oct;(5):40–3 (Eng. Abstr.) **(Rus)**

HISTORY

[The role of public health authorities of Bashkiria in the development of physical culture during the first few decades of Soviet rule] Ibragimov NG. **Sov Zdravookhr** 1989;(1):68–71 **(Rus)**

LEGISLATION & JURISPRUDENCE

Effects of Florida's Personal Fitness Course on cognitive, attitudinal and physical fitness measures of secondary students: a pilot study. Rider RA, et al. **Percept Mot Skills** 1986 Apr;62(2):548–50

[Release from mandatory physical education in East Germany—status and requirements] Arndt KH. **Z Arztl Fortbild (Jena)** 1989;83(2):63–5 **(Ger)**

METHODS

Quality assessment of athletic trainers. Foster DT, et al. **Am J Sports Med** 1989 Mar-Apr;17(2):258–62

Effects of high intensity canoeing training on fibre area and fibre type in the latissimus dorsi muscle. Baker SJ, et al. **Br J Sports Med** 1989 Mar;23(1):23–6

Sequencing of endurance and high-velocity strength training. Bell GJ, et al. **Can J Sport Sci** 1988 Dec;13(4):214–9

Nutrition in the training and performance of allergic athletes. Mahan LK. **Clin Rev Allergy** 1988 Winter;6(4):385–402 (57 ref.)

Effects of a short-term training programme in post-infarct patients with residual myocardial ischaemia. Ignone G, et al. **Eur Heart J** 1988 Nov;9 Suppl M:13–21

Effects of a comprehensive rehabilitation programme in patients with three-vessel coronary disease. Monpere C, et al. **Eur Heart J** 1988 Nov;9 Suppl M:28–31

Effects of reduced training on submaximal and maximal running responses. Houmard JA, et al. **Int J Sports Med** 1989 Feb;10(1):30–3

One- and two-dimensional echocardiography in body builders and endurance-trained subjects. Urhausen A, et al. **Int J Sports Med** 1989 Apr;10(2):139–44

Computerized analysis of isokinetic torque curves for muscle strengthening. Williamson SC, et al. **J Burn Care Rehabil** 1989 Mar-Apr;10(2):160–6 (32 ref.)

Project Readiness II: some results from a physical fitness and health enhancement program for law enforcement personnel. LeProtti SJ, et al. **J S C Med Assoc** 1989 Mar; 85(3):119–24

Effects of continuous and interval running programmes on aerobic and anaerobic capacities in schoolgirls aged 13 to 17 years. Adeniran SA, et al. **J Sports Med Phys Fitness** 1988 Sep;28(3):260–6 (46 ref.)

Effects of different running programmes on body fat and blood pressure in schoolboys aged 13–17 years. Adeniran SA, et al. **J Sports Med Phys Fitness** 1988 Sep;28(3):267–73 (42 ref.)

Effect of inter-repetition rest intervals in circuit weight training on PWC170 during arm-cranking exercise. Byrd R, et al. **J Sports Med Phys Fitness** 1988 Dec;28(4):336–40

Specificity of endurance, sprint and strength training on physical performance capacity in young athletes. Häkkinen K, et al. **J Sports Med Phys Fitness** 1989 Mar;29(1):27–35

Factor analysis of various anaerobic power tests. Manning JM, et al. **J Sports Med Phys Fitness** 1988 Jun;28(2):138–44

Comparison of two intense interval training programs on maximum oxygen uptake and running performance. Olsen R, et al. **J Sports Med Phys Fitness** 1988 Jun;28(2):158–64

A comparison of training responses to interval versus continuous aerobic dance. Perry A, et al. **J Sports Med Phys Fitness** 1988 Sep;28(3):274–9

Effects of low- and moderate-intensity training in spinal cord-injured persons. Hooker SP, et al. **Med Sci Sports Exerc** 1989 Feb;21(1):18–22

Training responses of plasma beta-endorphin, adrenocorticotropin, and cortisol. Kraemer WJ, et al. **Med Sci Sports Exerc** 1989 Apr;21(2):146–53

Mood disturbance following increased training in swimmers. Morgan WP, et al. **Med Sci Sports Exerc** 1988 Aug; 20(4):408–14

Effects of aquatic training on swimming skill development of preschool children. Erbaugh SJ. **Percept Mot Skills** 1986 Apr;62(2):439–46

Muscle strength and its development. New perspectives. Enoka RM. **Sports Med** 1988 Sep;6(3):146–68 (191 ref.)

Overtraining in elite athletes. Review and directions for the future. Kuipers H, et al. **Sports Med** 1988 Aug;6(2):79–92 (99 ref.)

[A twenty-seven year survey of hypobaric chamber physiological reactions of the Chinese Air Force] Wen TS, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Feb;41(2):103–8 (Eng. Abstr.) **(Chi)**

[Morphology of human skeletal muscle and its adaptability to different training conditions] Hoppeler H. **Sportverletz Sportschaden** 1987 Jun;1(2):71–5 (44 ref.) (Eng. Abstr.) **(Ger)**

[Principles and general practice of a goal-oriented training plan for diabetic patients participating in sports] Baron R, et al. **Wien Med Wochenschr** 1988 Jul 31;138(14):353–4 (Eng. Abstr.) **(Ger)**

[Physical training in hypertension] Priebe U. **Z Arztl Fortbild (Jena)** 1989;83(4):177–80 (38 ref.) **(Ger)**

[On the march for health] Titov VT. **Voen Med Zh** 1988 Sep;(9):57–8 **(Rus)**

[The importance of physical culture in promoting health and enhancing the work capacity of technical engineering workers] Nazarenko VS, et al. **Vrach Delo** 1988 Aug; (8):114–6 **(Rus)**

STANDARDS

[Hygienic substantiation of physical load standards in physical education of schoolchildren] Baĭbikova LS, et al. **Gig Sanit** 1989 May;(5):10–2 (Eng. Abstr.) **(Rus)**

PHYSICAL EFFORT see EXERTION

PHYSICAL ENDURANCE

The cardiovascular effects of deconditioning after endurance training in rats. Karhunen MK, et al. **Acta Physiol Scand** 1988 Jul;133(3):307–14

Decreased level of cardiac antioxidants in endurance-trained rats. Kihlström M, et al. **Acta Physiol Scand** 1989 Apr; 135(4):549–54

Chronic compartment syndrome. Lutz LJ, et al. **Am Fam Physician** 1989 Feb;39(2):191–6

Alterations in physiological and perceptual variables during exhaustive endurance work while wearing a pressure-demand respirator. Wilson JR, et al. **Am Ind Hyg Assoc J** 1989 Mar;50(3):139–46

Cardiovascular risk factors and graded treadmill exercise endurance in healthy adults: The Framingham Offspring Study. Abbott RD, et al. **Am J Cardiol** 1989 Feb 1; 63(5):342–6

Noninvasive evaluation of cardiac structure and function in alpinists. Kiratjoglu TK, et al. **Am J Cardiol** 1989 Sep 15; 64(10):676–9

Effect of endurance training on blood pressure at rest, during exercise and during 24 hours in sedentary men. Van Hoof R, et al. **Am J Cardiol** 1989 Apr 15;63(13):945–9

Zinc status of highly trained women runners and untrained women. Deuster PA, et al. **Am J Clin Nutr** 1989 Jun; 49(6):1295–301

Nutritional effects on work performance. Hultman E. **Am J Clin Nutr** 1989 May;49(5 Suppl):949–57 (54 ref.)

Lipids and lipoprotein profiles in a 4-h endurance test on a recumbent cycloergometer. Tsopanakis AD, et al. **Am J Clin Nutr** 1989 May;49(5 Suppl):980–4

Diet and endurance fitness. Williams C. **Am J Clin Nutr** 1989 May;49(5 Suppl):1077–83 (59 ref.)

Strength, flexibility, and maturity in adolescent athletes. Pratt M. **Am J Dis Child** 1989 May;143(5):560–3

Competence, duration, and heart rate--factors that affect exercise [letter] Kircher MA. **Am J Occup Ther** 1989 Aug; 43(8):549–50

Enhancement of blood lactate clearance following maximal swimming. Effect of velocity of recovery swimming. McMaster WC, et al. **Am J Sports Med** 1989 Jul-Aug; 17(4):472–7

Overuse injuries in ultraendurance triathletes. O'Toole ML, et al. **Am J Sports Med** 1989 Jul-Aug;17(4):514–8

Improvement in exercise endurance in patients with chronic airflow limitation using continuous positive airway pressure. O'Donnell DE, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1510–4

Isokinetic testing in young nonathletic able-bodied subjects. Nicholas JJ, et al. **Arch Phys Med Rehabil** 1989 Mar; 70(3):210–3 (21 ref.)

Prediction of human thermoregulatory responses and endurance time in water at 20 and 24 degrees C. Tikuisis P, et al. **Aviat Space Environ Med** 1988 Aug;59(8):742–8

Force, endurance time, and cardiovascular responses in voluntary isometric contractions of different muscle groups. Rehfeldt H, et al. **Biomed Biochim Acta** 1989; 48(5–6):S509–14

Interindividual variability of isometric endurance with regard to the endurance performance limit for static work. Ulmer HV, et al. **Biomed Biochim Acta** 1989;48(5–6):S504–8

Serum HGH, PRL and energetic fuel (glucose and FFA) levels during an endurance athletic race. Barletta C, et al. **Boll Soc Ital Biol Sper** 1988 Feb;64(2):159–63

Sequencing of endurance and high-velocity strength training. Bell GJ, et al. **Can J Sport Sci** 1988 Dec;13(4):214–9

Determinants of aerobic performance [editorial] Malina RM. **Can J Sport Sci** 1989 Jun;14(2):65–6

Perception of exertion [editorial] Shephard RJ. **Can J Sport Sci** 1989 Jun;14(2):66–7

Endurance exercise in the presence of heart disease. Douglas PS, et al. **Chest** 1989 Mar;95(3):697–9

Respiratory sinus arrhythmia and carotid baroreflex control of heart rate in endurance athletes and untrained controls. Reiling MJ, et al. **Clin Physiol** 1988 Oct;8(5):511–9

Effects of age and life-long endurance training on the passive mechanical properties of rat skeletal muscle. Kovanen V, et al. **Compr Gerontol [A]** 1988 Feb;2(1):18–23

Physiological responses to working with fire fighting equipment in the heat in relation to subjective fatigue. Faff J, et al. **Ergonomics** 1989 Jun;32(6):629–38

An endurance training programme for frequent manual carrying tasks. Genaidy AM, et al. **Ergonomics** 1989 Feb; 32(2):149–55

Effects of frequency and load to lift on endurance time. Genaidy AM, et al. **Ergonomics** 1989 Jan;32(1):51–7

The effect of induced alkalosis and acidosis on endurance running at an intensity corresponding to 4 mM blood lactate. George KP, et al. **Ergonomics** 1988 Nov; 31(11):1639–45

Stair stepping efficiency of mentally handicapped and nonhandicapped adult females. Seidl C, et al. **Ergonomics** 1989 May;32(5):519–24

Sex differences of physical working capacity in normoxia and hypoxia. Shephard RJ, et al. **Ergonomics** 1988 Aug; 31(8):1177–92

The metabolic consequences of reduced habitual activities in patients with muscle pain and disease. Wagenmakers AJ, et al. **Ergonomics** 1988 Nov;31(11):1519–27

Ventilatory threshold and mechanical efficiency in endurance runners. Bunc V, et al. **Eur J Appl Physiol** 1989;58(7):693–8

Is exhaustive training adequate preparation for endurance performance? Katsuta S, et al. **Eur J Appl Physiol** 1988; 58(1–2):68–73

Incidence of exercise induced hypoxemia in elite endurance athletes at sea level. Powers SK, et al. **Eur J Appl Physiol** 1988;58(3):298–302

Respiratory and cardiac responses to exercise-simulating peripheral perfusion in endurance trained and untrained rats. II. Temporal relationships between outflow parameters and cardiac and respiratory responses. Thimm F, et al. **Eur J Appl Physiol** 1988;58(1–2):112–9

Respiratory and cardiac responses to exercise-simulating peripheral perfusion in endurance trained and untrained rats. I. Reflex responses and changes in perfusion outflow. Thimm F, et al. **Eur J Appl Physiol** 1988;58(1–2):105–11

Habitual level of physical activity and cardiorespiratory endurance capacity in children. Weymans M, et al. **Eur J Appl Physiol** 1989;58(8):803–7

Running performance in Gambian children: effects of water-soluble vitamins or iron. Powers HJ, et al. **Eur J Clin Nutr** 1988 Nov;42(11):895–902

Effect of active warming-up on thermoregulatory, circulatory, and metabolic responses to incremental exercise in endurance-trained athletes. Chwalbińska-Moneta J, et al. **Int J Sports Med** 1989 Feb; 10(1):25–9

Effect of chronic endurance exercise on retention of dietary protein. Friedman JE, et al. **Int J Sports Med** 1989 Apr; 10(2):118–23

Effects of continuous and interval training on the parameters of the power-endurance time relationship for high-intensity exercise. Gaesser GA, et al. **Int J Sports Med** 1988 Dec;9(6):417–21

Mechanical output and iEMG of single and repeated isokinetic plantar flexions: a study of untrained and endurance-trained women. Johansson C, et al. **Int J Sports Med** 1988 Oct;9(5):330–3

Sympathoadrenergic regulation of metabolism and cardiocirculation during and following running exercises of different intensity and duration. Meyer R, et al. **Int J Sports Med** 1988 Aug;9 Suppl 2:S132–40

Effect of carbohydrate ingestion on exercise endurance and metabolism after a 1-day fast. Riley ML, et al. **Int J Sports Med** 1988 Oct;9(5):320–4

One- and two-dimensional echocardiography in body builders and endurance-trained subjects. Urhausen A, et al. **Int J Sports Med** 1989 Apr;10(2):139–44

Percentages of maximal heart rate, heart rate reserve, and VO2peak for determining endurance training intensity in sedentary women. Weltman A, et al. **Int J Sports Med** 1989 Jun;10(3):212–6 (23 ref.)

Cardiovascular responses of 70- to 79-yr-old men and women to exercise training. Hagberg JM, et al. **J Appl Physiol** 1989 Jun;66(6):2589–94

Metabolic responses to exercise in young and older athletes and sedentary men. Hagberg JM, et al. **J Appl Physiol** 1988 Aug;65(2):900–8

Potential for strength and endurance training to amplify endurance performance. Hickson RC, et al. **J Appl Physiol** 1988 Nov;65(5):2285–90

Peripheral effects of endurance training in young and old subjects. Meredith CN, et al. **J Appl Physiol** 1989 Jun; 66(6):2844–9

Dietary protein requirements and body protein metabolism in endurance-trained men. Meredith CN, et al. **J Appl Physiol** 1989 Jun;66(6):2850–6

Effect of training on the dose-response relationship for insulin action in men. Mikines KJ, et al. **J Appl Physiol** 1989 Feb;66(2):695–703

Cardiac adaptations to endurance training in rats with a chronic myocardial infarction. Musch TI, et al. **J Appl Physiol** 1989 Feb;66(2):712–9

Mathematical analysis of running performance and world running records. Péronnet F, et al. **J Appl Physiol** 1989 Jul;67(1):453–65

Site-specific adipose tissue LPL responses to endurance training in female lean Zucker rats. Savard R, et al. **J Appl Physiol** 1988 Aug;65(2):693–9

Sympathetic activation is associated with increases in EMG during fatiguing exercise. Seals DR, et al. **J Appl Physiol** 1989 Jan;66(1):88–95

Alterations in the hypothalamic-pituitary-ovarian and the hypothalamic-pituitary-adrenal axes in athletic women. Loucks AB, et al. **J Clin Endocrinol Metab** 1989 Feb; 68(2):402–11

Application of lactate threshold to endurance sports science. Kumagai S, et al. **J Hum Ergol (Tokyo)** 1987 Dec; 16(2):129–36

Muscle strength, endurance and recovery in the post-infection fatigue syndrome. Lloyd AR, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1316–22

Selection of soldiers. Physical build as an entry factor [letter] Kilpatrick WG. **J R Army Med Corps** 1989 Jun;135(2):95–6

Recovery metabolism and thermoregulation of endurance trained and heat acclimatized men. Pivarnik JM, et al. **J Sports Med Phys Fitness** 1988 Dec;28(4):375–80

Impaired pulmonary and cardiac function after maximal exercise. Rasmussen BS, et al. **J Sports Sci** 1988 Winter; 6(3):219–28

Opioid involvement in the perception of pain due to endurance exercise in trained man. Paulev PE, et al. **Jpn J Physiol** 1989;39(1):67–74

Avoidable heatstroke in the armed forces [letter] Brahams D. **Lancet** 1989 Aug 12;2(8659):399

Effect of caffeine on glycogenolysis during exercise in endurance trained rats. Arogyasami J, et al. **Med Sci Sports Exerc** 1989 Apr;21(2):173–7

Muscle genetic variants and relationship with performance and trainability. Bouchard C, et al. **Med Sci Sports Exerc** 1989 Feb;21(1):71–7

The effects of anabolic steroids and strength training on the human immune response. Calabrese LH, et al. **Med Sci Sports Exerc** 1989 Aug;21(4):386–92 (28 ref.)

Metabolism and performance following carbohydrate ingestion late in exercise. Coggan AR, et al. **Med Sci Sports Exerc** 1989 Feb;21(1):59–65

Exercise modality and selected coronary risk factors: a multivariate approach. Fang CL, et al. **Med Sci Sports Exerc** 1988 Oct;20(5):455–62

Influence of sodium bicarbonate on sprint performance: relationship to dosage. Horswill CA, et al. **Med Sci Sports Exerc** 1988 Dec;20(6):566–9

Decreases in resting plasma beta-endorphin/-lipotropin after endurance training. Lobstein DD, et al. **Med Sci Sports Exerc** 1989 Apr;21(2):161–6

Ventilatory threshold and VO2max changes in children following endurance training. Mahon AD, et al. **Med Sci Sports Exerc** 1989 Aug;21(4):425–31 (29 ref.)

Ten kilometer performance and predicted velocity at VO2max among well-trained male runners. Morgan DW, et al. **Med Sci Sports Exerc** 1989 Feb;21(1):78–83

Alterations in plasma lipids consequent to endurance training and beta-blockade. Morton AR, et al. **Med Sci Sports Exerc** 1989 Jun;21(3):288–92

Implications of exercise testing for prediction of athletic performance: a contemporary perspective. Noakes TD. **Med Sci Sports Exerc** 1988 Aug;20(4):319–30 (69 ref.)

Improvement in maximal isokinetic cycle ergometry with cardiac rehabilitation. Oldridge NB, et al. **Med Sci Sports Exerc** 1989 Jun;21(3):308–12

Acute changes in lipid, lipoprotein, apolipoprotein, and low-density lipoprotein particle size after an endurance triathlon. Lamon-Fava S, et al. **Metabolism** 1989 Sep; 38(9):921–5

The Army Physical Fitness Test (APFT): a review of the literature. Knapik J. **Milit Med** 1989 Jun;154(6):326–9 (32 ref.)

Causes of anemia in endurance athletes [letter] Johnson RJ. **Minn Med** 1986 Mar;69(3):150–1

Complex evaluation of velocity, force, and accuracy characteristics of the movements of upper extremities in young athletes. Jaščaninas J, et al. **Percept Mot Skills** 1989 Jun;68(3 Pt 1):705–6

Effects of endurance training on body-consciousness in women. Skrinar GS, et al. **Percept Mot Skills** 1986 Apr; 62(2):483–90

Lumbar myoelectric spectral analysis for endurance assessment. A comparison of normals with deconditioned patients. Mayer TG, et al. **Spine** 1989 Sep;14(9):986–91

Physiology of Alpine skiing. Andersen RE, et al. **Sports Med** 1988 Oct;6(4):210–21 (44 ref.)

Endurance training and testosterone levels. Hackney AC. **Sports Med** 1989 Aug;8(2):117–27 (51 ref.)

Physiological adaptations to resistance exercise. Implications for athletic conditioning. Kraemer WJ, et al. **Sports Med** 1988 Oct;6(4):246–56 (76 ref.)

Effect of low dose nebulised morphine on exercise endurance in patients with chronic lung disease. Young IH, et al. **Thorax** 1989 May;44(5):387–90

Influence of vibration on work performance during ergometer cycling. Samuelson B, et al. **Ups J Med Sci** 1989; 94(1):73–9

[Relation between endurance time and maximal oxygen consumption during supramaximal running] Camus G, et al. **J Physiol (Paris)** 1988;83(1):26–31 (Eng. Abstr.) **(Fre)**

[The preventive effect of training with an emphasis on endurance of the cardiovascular system in adolescents] Bringmann W. **Arztl Jugendkd** 1989;80(2):83–91 (Eng. Abstr.) **(Ger)**

[School sports and the assessment of physical endurance of healthy and performance handicapped children and adolescents] Nagel HJ. **Arztl Jugendkd** 1989;80(2):100–5 (Eng. Abstr.) **(Ger)**

[Life-threatening intestinal hemorrhage in a 21-year-old high performance athlete] Schraudolph M, et al. **Internist (Berlin)** 1989 Jul;30(7):447–50 **(Ger)**

[Physical training in the rehabilitation of patients with chronic respiratory tract disease] Haber P. **Prax Klin Pneumol** 1988 Jul;42(7):625–7 (Eng. Abstr.) **(Ger)**

[Sports therapy in the treatment of pediatric bronchial asthma. Comparison of interval and continuous training] Lecheler J, et al. **Prax Klin Pneumol** 1988 Jul;42(7):475–8 (Eng. Abstr.) **(Ger)**

[Principles and general practice of goal-oriented planning of training in patients with diabetic nephropathy and in dialysis patients] Haber P, et al. **Wien Med Wochenschr** 1988 Jul 31;138(14):350–2 (Eng. Abstr.) **(Ger)**

[Peak performance athletes speak with physicians about common problems--a panel discussion] Riedmann G, et al. **Wien Med Wochenschr** 1988 Sep 15;138(17):421–7 (Eng. Abstr.) **(Ger)**

[The clinical significance of delta VO2/work load as a new parameter of exercise tolerance] Matsumoto H, et al. **Kokyu To Junkan** 1988 Sep;36(9):987–91 (Eng. Abstr.) **(Jpn)**

[Positive cross-adaptation between endurance physical training and general cold tolerance to acute cold exposure in rats] Kashimura O. **Nippon Seirigaku Zasshi** 1988; 50(12):753–60 (Eng. Abstr.) **(Jpn)**

[Heart rate responses of fire-men to actual fire-fighting and their endurance capacity] Oda S, et al. **Sangyo Igaku** 1988 Sep;30(5):406–7 **(Jpn)**

[Studies of physical stress of parturients in the attempt to minimize intrapartum fetal risk. III. Comparative evaluation of exertion tolerance and the degree of stress in physiological labor] Brodziński W. **Ginekol Pol** 1988 Jan; 59(1):24–8 (Eng. Abstr.) **(Pol)**

[Possibilities of enhancing human resistance to acute hypoxia after alpine adaptation and rapid high-altitude training] Katkov AIu. **Fiziol Cheloveka** 1988 May-Jun;14(3):441–5 **(Rus)**

[Effect of complications in the acute period of myocardial infarction on physical exertion tolerance at the hospital stage of rehabilitation] Al'khimovich VM, et al. **Kardiologiia** 1988 Nov;28(11):27–32 (Eng. Abstr.) **(Rus)**

[Results of a long-term follow-up of exercise test indicators in patients with various courses of stenocardia] Anikin VV. **Kardiologiia** 1988 Nov;28(11):82–5 (Eng. Abstr.) **(Rus)**

[Clinical effectiveness and a change in the tolerance for physical loading in hypertension patients with a moderate limitation of table salt consumption] Liusov VA, et al. **Kardiologiia** 1988 Aug;28(8):22–6 (Eng. Abstr.) **(Rus)**

[Tolerance for physical loading in patients with a history of pulmonary thromboembolism] Antonova NIu, et al. **Klin Med (Mosk)** 1988 Aug;66(8):78–81 (Eng. Abstr.) **(Rus)**

[Tolerance of +Gz acceleration in pilots with health problems] Domashuk Iu. **Kosm Biol Aviakosm Med** 1988 Jul-Aug;22(4):84–6 (Eng. Abstr.) **(Rus)**

[Calculation of the effectiveness of an indirect method of evaluation of +GZ tolerance using a circulation simulation model] Palets BL, et al. **Kosm Biol Aviakosm Med** 1988 Sep-Oct;22(5):85–8 **(Rus)**

[Physical work capacity and social adaptation of patients with tetralogy of Fallot who have undergone the Blalock-Taussig operation at an early age] Il'in RN, et al. **Pediatriia** 1988;(6):53–7 **(Rus)**

[Enhancement of the body's capacity to resist various extreme factors by using normobaric hypoxic stimulation] Strelkov RB, et al. **Vestn Akad Med Nauk SSSR** 1988; (5):77–80 **(Rus)**

[Loading tests in assessing the treatment of patients having had a myocardial infarct] Cherevatov BG, et al. **Vrach Delo** 1988 Oct;(10):9–11 (Eng. Abstr.) **(Rus)**

[Prediction of the threshold power of a physical load in patients with ischemic heart disease] Ianovskiĭ GV, et al. **Vrach Delo** 1989 Apr;(4):39–41 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Anabolic steroids alter the haemodynamic effects of endurance training and deconditioning in rats. Karhunen MK, et al. **Acta Physiol Scand** 1988 Jul;133(3):297–306

Glucose polymer syrup attenuates prolonged endurance exercise-induced vasopressin release. Viinamäki O, et al. **Acta Physiol Scand** 1989 May;136(1):69–73

Improved working capacity following theophylline infusion in patients with ischaemic heart disease. Edlund A, et al. **Clin Physiol** 1988 Oct;8(5):453–61

Difference between beta-1-selective and non-selective beta-blockade during continuous and intermittent exercise. Gullestad L, et al. **Clin Physiol** 1988 Oct;8(5):487–99

The relationship between lactic acid and work load: a measure for endurance capacity or an indicator of carbohydrate deficiency? Maassen N, et al. **Eur J Appl Physiol** 1989;58(7):728–37

Effects of fluid, electrolyte and substrate ingestion on endurance capacity. Maughan RJ, et al. **Eur J Appl Physiol** 1989;58(5):481–6

Effect of calcium channel blockade and beta-adrenoceptor blockade on short graded and single-level endurance exercises in normal men. Vanhees L, et al. **Eur J Appl Physiol** 1988;58(1-2):87–91

The effects of theophylline on the physical performance and work capacity of well-trained athletes. Morton AR, et al. **J Allergy Clin Immunol** 1989 Jan;83(1):55–61

Effect of various doses of cocaine on endurance capacity in rats. Bracken ME, et al. **J Appl Physiol** 1989 Jan; 66(1):377–83

Effects of beta 1- vs. beta 1 + beta 2-blockade on exercise endurance and muscle metabolism in humans. Cleroux J, et al. **J Appl Physiol** 1989 Feb;66(2):548–54

Effect of saline infusion on body temperature and endurance during heavy exercise. Deschamps A, et al. **J Appl Physiol** 1989 Jun;66(6):2799–804

Physiological responses to caffeine during endurance running in habitual caffeine users. Tarnopolsky MA, et al. **Med Sci Sports Exerc** 1989 Aug;21(4):418–24 (31 ref.)

Effects of fructose-1,6-diphosphate on heart rate, ventilation, oxygen consumption and endurance performance. Ripari P, et al. **Pharmatherapeutica** 1988;5(4):249–55

Effect of opioid antagonism on the ability to tolerate maximal anaerobic exercise. Gordon NF, et al. **S Afr Med J** 1989 Sep 16;76(6):268–9

[Effect of hydrocortisone on physical endurance and various biochemical indicators in rats] Marev R, et al. **Eksp Med Morfol** 1988;27(3):31–4 (Eng. Abstr.) **(Bul)**

[Experimental studies on protalmine] Taskov M. **Eksp Med Morfol** 1989;28(1):40–5 (Eng. Abstr.) **(Bul)**

[Limits of doping: drugs and sports] Kuipers H. **Ned Tijdschr Geneeskd** 1988 Nov 5;132(45):2044–6 **(Dut)**

[Regression of hypertension-induced left heart enlargement in an endurance athlete treated with verapamil RR] Lehmann M, et al. **Z Kardiol** 1989 Jul;78(7):465–8 (Eng. Abstr.) **(Ger)**

[Effects of isosorbide-5-mononitrate on exercise capacity, prostacyclin synthesis, the renin-aldosterone axis and catecholamines in patients with cardiac insufficiency] Gandini R, et al. **Cardiologia** 1989 May;34(5):447–53 (Eng. Abstr.) **(Ita)**

[The action of methandrostenolone and ecdysterone on the physical endurance of animals and on protein metabolism in the skeletal muscles] Chermnykh NS, et al. **Farmakol Toksikol** 1988 Nov-Dec;51(6):57–60 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

[The dosage thresholds for disordered physical work capacity in mice and rats following irradiation] Malakhovskiĭ VN, et al. **Radiobiologiia** 1989 May-Jun;29(3):379–83 (Eng. Abstr.) **(Rus)**

PHYSICAL EXAMINATION

Mothers' attitudes towards children's three-year health examination. Nishi M, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Dec;30(6):680–5

Assembly-line physicals [letter] Dewester J. **Am Fam Physician** 1989 Sep;40(3):53

Approaching an adolescent about a pelvic exam. Szydlo VL. **Am J Nurs** 1988 Nov;88(11):1502–6

Child sexual abuse—genital tract findings in prepubertal girls. I. The unaided medical examination. Muram D. **Am J Obstet Gynecol** 1989 Feb;160(2):328–33

Child sexual abuse—genital tract findings in prepubertal girls. II. Comparison of colposcopic and unaided examinations. Muram D, et al. **Am J Obstet Gynecol** 1989 Feb; 160(2):333–5

The periodic physical examination in asymptomatic persons [letter] **Ann Intern Med** 1989 Jun 1;110(11):941–2

Physical examination of asymptomatic adults for screening [letter] [published erratum apears in Ann Intern Med 1989 Jun 1;110(11):949] **Ann Intern Med** 1989 May 1; 110(9):743–7

The periodic physical examination in asymptomatic adults. Oboler SK, et al. **Ann Intern Med** 1989 Feb 1;110(3):214–26 (140 ref.)

Acute traumatic haemarthrosis of the knee: expectant treatment or arthroscopy? Jones JR, et al. **Ann R Coll Surg Engl** 1989 Jan;71(1):40–3

Simple maturity classification of the newborn infant. Primhak RA, et al. **Ann Trop Paediatr** 1989 Jun;9(2):65–9

Have school entry medicals had their day? Kennedy FD. **Arch Dis Child** 1988 Oct;63(10):1261–3

Referral patterns after school medical examinations. Rona RJ, et al. **Arch Dis Child** 1989 Jun;64(6):829–33

The effect of digital rectal examination on serum levels of prostatic-specific antigen. Brawer MK, et al. **Arch Pathol Lab Med** 1988 Nov;112(11):1110–2

Assessing victims of sexual abuse [letter] Hetzel D. **Aust Fam Physician** 1988 Dec;17(12):1028

Undescended testis: how history and examination may influence treatment. MacKellar A. **Aust N Z J Surg** 1988 Aug;58(8):643–5

AIMS ratings—repeatability. Bergen JA, et al. **Br J Psychiatry** 1988 May;152:670–3

The more we learn, the less we know "with reasonable medical certainty"? [editorial] Krugman RD. **Child Abuse Negl** 1989;13(2):165–6

Medical issues in child abuse [editorial] Oates K. **Child Abuse Negl** 1989;13(2):167

Evaluation of the elderly patient. Greenberg MS. **Dent Clin North Am** 1989 Jan;33(1):51–7 (0 ref.)

Screening or examining? Whitmore K, et al. **Dev Med Child Neurol** 1988 Oct;30(5):673–6

Wilms tumours diagnosed by routine physical examinations [letter] Gutjahr P. **Eur J Pediatr** 1988 Nov;148(2):174

Comparison of the efficacy of digital rectal examination and transrectal ultrasonography in the diagnosis of prostatic cancer. Vallancien G, et al. **Eur Urol** 1989;16(5):321–4

Digital rectal examination to screen for prostatic cancer. Waaler G, et al. **Eur Urol** 1988;15(1-2):34–6

Is routine examination of the male partner of any prognostic value in the routine assessment of couples who complain of involuntary infertility? Dunphy BC, et al. **Fertil Steril** 1989 Sep;52(3):454–6

The theory and practice of office screenings. Thomas HE Jr. **Hosp Pract [Off]** 1989 May 30;24(5A):22–4, 27, 30 passim

Work-up of the HIV-infected patient. Practical approach. Hollander H. **Infect Dis Clin North Am** 1988 Jun;2(2):353–8 (14 ref.)

Pediatricians' use of chaperones when performing gynecologic examinations on adolescent females. Sanders JM Jr, et al. **J Adolesc Health Care** 1989 Mar;10(2):110–4

CARDIA: study design, recruitment, and some characteristics of the examined subjects. Friedman GD, et al. **J Clin Epidemiol** 1988;41(11):1105–16

Pelvic examination versus fiberoptic laparoscopy. A fictional study of patient preference in 1,534 women. Sturman MF. **J Clin Gastroenterol** 1988 Dec;10(6):612–3

Global assessment of patients—a bedside study. I: The influence of physical findings on the global assessment. Gjørup T, et al. **J Intern Med** 1989 Aug;226(2):123–5

Participation in a periodic physical examination program and group health care utilization and costs. Bernacki EJ, et al. **J Occup Med** 1988 Dec;30(12):949–52

Periodic examination of South African mine workers [comment] Frumkin H, et al. **J Occup Med** 1989 Jun; 31(6):563–5, **Comment on:** J Occup Med 1988 Jul;30(7):580–6

The path of giants: reflections on teaching clinical medicine. Smith WO. **J Okla State Med Assoc** 1989 Feb;82(2):69–71

Comfort of male adolescents during general and genital examination. Neinstein LS, et al. **J Pediatr** 1989 Sep; 115(3):494–7

Selective conservatism in abdominal stab wounds: the efficacy of serial physical examination. Zubowski R, et al. **J Trauma** 1988 Dec;28(12):1665–8

Assessment of screening for prostate cancer using the digital rectal examination. Chodak GW, et al. **J Urol** 1989 May; 141(5):1136–8

The limited reliability of physical signs for estimating hemodynamics in chronic heart failure. Stevenson LW, et al. **JAMA** 1989 Feb 10;261(6):884–8

Consent for vaginal examination by students on anaesthetised patients [letter] Bibby J, et al. **Lancet** 1988 Nov 12; 2(8620):1150

Teaching vaginal examination [letter] Cohen DL, et al. **Lancet** 1988 Dec 10;2(8624):1375

Examination stress, platelet peripheral benzodiazepine binding sites, and plasma hormone levels. Karp L, et al. **Life Sci** 1989;44(16):1077–82

Papanicolaou smear-tests [letter] **Med J Aust** 1988 Dec 5–19; 149(11–12):720

A model for evaluating the history taking and physical examination skills of medical students. Stone H, et al. **Med Teach** 1989;11(1):75–80

D&C results improved by hysteroscopy. Goldfarb HA. **N J Med** 1989 Apr;86(4):277–9 (28 ref.)

Diagnostic arthroscopy of the knee joint: comparison of the accuracy of physical examination, contrast arthrography and arthroscopy. Clevers GJ, et al. **Neth J Surg** 1988 Jun; 40(4):104–7

Valid medical standards reduce hiring hassles, costs for employers. Carmean G, et al. **Occup Health Saf** 1989 May; 58(5):83–5, 88

Health maintenance update: guidelines for the physician and patient. St. John RC, et al. **Ohio Med** 1989 Feb;85(2):149–51

Preparticipation evaluation for athletics. Hulse E, et al. **Pediatr Rev** 1987 Dec;9(6):173–82 (13 ref.)

Physiologic changes as patients get older. Perlman PE, et al. **Postgrad Med** 1989 Feb 1;85(2):213–4, 219

Evaluating the efficacy of skin self-exam and other surveillance measures in persons at various levels of risk for cutaneous malignant melanoma: an ongoing case-control study. Berwick M, et al. **Prog Clin Biol Res** 1989;293:297–305

Predictive models for frequency and proficiency of BSE performance. Chrvala CA, et al. **Prog Clin Biol Res** 1989; 293:159–73

Radionuclide thyroid studies: analysis of use and correlation with physical findings. Kiefe C, et al. **South Med J** 1989 Feb;82(2):201–5

Why perform a routine history and physical examination? Sapira JD. **South Med J** 1989 Mar;82(3):364–5

Screening for disease in asymptomatic patients. Kimball HR. **Trans Am Clin Climatol Assoc** 1987;99:23–31

[Personal experience with the organization of preventive gynecologic examinations in girls in the 8th grade in elementary schools] Formandlová E. **Cesk Gynekol** 1988 Nov;53(9):703–4 **(Cze)**

[Is urinalysis necessary in physical examinations?] Kunnamo I. **Duodecim** 1988;104(21):1736–7 **(Fin)**

[Clinical approach to the patient with polyvascular disease] Zicot M. **Acta Chir Belg** 1988 May-Jun;88(3):169–74 (Eng. Abstr.) **(Fre)**

[A project of medical examination for aptitude in physical activities and sports] Bouvrain Y. **Bull Acad Natl Med (Paris)** 1988 May;172(5):649–50 **(Fre)**

[The preanesthetic examination: an important judicial decision in the Federal Republic of Germany] Lassner J. **Cah Anesthesiol** 1988 Nov;36(7):585 **(Fre)**

[Importance of the initial examination after a rape in considering the criminal penalty and indemnification of the victim in a civil suit. Review of the documents from one Court of Assizes over 11 years] Soutoul JH, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(7):811–24 (Eng. Abstr.) **(Fre)**

[What can a neurophysiologic examination contribute to phlebologists?] Guex JJ, et al. **Phlebologie** 1988 Nov-Dec; 41(4):781–5 (Eng. Abstr.) **(Fre)**

[The small saphenous vein: clinical test data] Wallois P. **Phlebologie** 1988 Nov-Dec;41(4):719–21 **(Fre)**

[Physical examination preceding entry into apprenticeship: preventive measure or administrative burden?] Michaud PA, et al. **Schweiz Rundsch Med Prax** 1989 Feb 28;

78(9):228–31 (Eng. Abstr.) (Fre)
[Check-up examinations from the cardiologic viewpoint] Amann FW. **Ther Umsch** 1989 Jun;46(6):344–8 (Eng. Abstr.) (Ger)
[The medical check-up] Conen D. **Ther Umsch** 1989 Jun; 46(6):342–3 (Ger)
[The preoperative check-up, anesthesiologic aspects] Hilfiker O. **Ther Umsch** 1989 Jun;46(6):357–60 (Eng. Abstr.) (Ger)
[Check-ups in pneumonology] Keller R. **Ther Umsch** 1989 Jun;46(6):349–56 (40 ref.) (Eng. Abstr.) (Ger)
[Check-ups from the urologic viewpoint] Tscholl R. **Ther Umsch** 1989 Jun;46(6):378–83 (Eng. Abstr.) (Ger)
[Blood findings in healthy elementary school children selected by medical examination and physical fitness tests] Suzuki M, et al. **Rinsho Byori** 1989 Apr;37(4):359–65 (Jpn)
[A measurement and computing complex for control of the state of the operator] Akhutin VM, et al. **Med Tekh** 1989 May–Jun;(3):8–12 (Eng. Abstr.) (Rus)
[Strengthening the guarantee of an individual's rights and legal interests in performing medical examinations in criminal cases] Gordon ES, et al. **Sud Med Ekspert** 1988 Oct–Dec;31(4):3–4 (Eng. Abstr.) (Rus)
[Association of the lipid composition of the blood and other risk factors of ischemic heart disease with tolerance to physical load according to data of repeated random examination of a male population] Lipovetskiĭ BM, et al. **Ter Arkh** 1989;61(1):43–7 (Eng. Abstr.) (Rus)
[Physical examination even for psychiatric patients] Juhlin L. **Lakartidningen** 1988 Dec 7;85(49):4309 (Swe)

ADVERSE EFFECTS

Ventricular fibrillation during rectal examination. Munter DW, et al. **Am J Emerg Med** 1989 Jan;7(1):57–60

ECONOMICS

The Hsiao study, cost containment, and quality care [letter] Dagradi AE. **Am J Gastroenterol** 1989 Jun;84(6):680–1
Let robots do the work. Ball P. **Indiana Med** 1989 Apr; 82(4):302–3
Periodic physical examination programs [letter] Sherman MS. **J Occup Med** 1989 Aug;31(8):693–5
Recurrent abdominal pain: the cost of the aches and the aches of the cost. Coleman WL, et al. **Pediatr Rev** 1986 Nov; 8(5):143–51 (18 ref.)
Early prostate cancer: diagnostic costs of screening transrectal US and digital rectal examination. Torp-Pedersen ST, et al. **Radiology** 1988 Nov;169(2):351–4

EDUCATION

A model for evaluating the history taking and physical examination skills of medical students. Stone H, et al. **Proc Annu Conf Res Med Educ** 1988;27:46–50

INSTRUMENTATION

Instrumented Lachman tests for the evaluation of anterior laxity after reconstruction of the anterior cruciate ligament. Harter RA, et al. **J Bone Joint Surg [Am]** 1989 Aug; 71(7):975–83
[A pediatric examination table equipped with a 2-way mirror] Omarouayache NE. **Ann Pediatr (Paris)** 1989 Mar; 36(3):211–2 (Fre)
[The mirror as a possibility of participation in routine gynecologic examination: effects on the psychological status of the female] Blaser A, et al. **Gynakol Rundsch** 1989; 29(2):69–77 (Eng. Abstr.) (Ger)

METHODS

A musculoskeletal approach to the preparticipation physical examination. Preventing injury and improving performance. Kibler WB, et al. **Am J Sports Med** 1989 Jul–Aug;17(4):525–31
Complete skin examinations [letter] Chiarello SE. **Arch Dermatol** 1989 May;125(5):706
Smoking cessation counseling during periodic health examinations. Bronson DL, et al. **Arch Intern Med** 1989 Jul;149(7):1653–6
Physicians as gatekeepers. The impact of financial incentives. Clancy CM, et al. **Arch Intern Med** 1989 Apr;149(4):917–20
Pelvic examination pulmonary edema [letter] Kurnik PB. **Arch Intern Med** 1989 Feb;149(2):472
Physical examination. Its role as a single screening modality in the Canadian National Breast Screening Study. Baines CJ, et al. **Cancer** 1989 May 1;63(9):1816–22
Sexual abuse of English boys and girls: the importance of anal examination. Hobbs CJ, et al. **Child Abuse Negl** 1989; 13(2):195–210
Cool science for a hot topic. Kerns DL. **Child Abuse Negl** 1989;13(2):177–8
Perianal findings in prepubertal children selected for nonabuse: a descriptive study. McCann J, et al. **Child Abuse Negl** 1989;13(2):179–93
Child sexual abuse: relationship between sexual acts and genital findings. Muram D. **Child Abuse Negl** 1989; 13(2):211–6
Predictive accuracy and the diagnosis of sexual abuse: a big issue about a little tissue. Paradise JE. **Child Abuse Negl** 1989;13(2):169–76 (9 ref.)
Vaginal introital diameter in the evaluation of sexual abuse. White ST, et al. **Child Abuse Negl** 1989;13(2):217–24
The stabilized Lachman test. Wroble RR, et al. **Clin Orthop** 1988 Dec;(237):209–12
Digital and mirror assessment of the adenoids at operation. Phillips DE, et al. **Clin Otolaryngol** 1989 Apr;14(2):131–3
Evaluating child sexual abuse. Observations regarding ano-genital injury. Claytor RN, et al. **Clin Pediatr (Phila)** 1989 Sep;28(9):419–22
Preparticipation screening of the potential athlete. McKeag DB. **Clin Sports Med** 1989 Jul;8(3):373–97 (31 ref.)
Physicians and school sports physical examination. Cook DE. **Colo Med** 1988 Sep 15;85(17):373
The gross motor function measure: a means to evaluate the effects of physical therapy. Russell DJ, et al. **Dev Med Child Neurol** 1989 Jun;31(3):341–52
The periodic health examination in a family practice center: use, content, and results. Romm FJ. **Fam Pract Res J** 1987 Winter;7(2):69–77
Diagnostic and therapeutic challenges of fibromyalgia. Goldenberg DL. **Hosp Pract [Off]** 1989 Sep 30; 24(9A):39–52
Myocardial infarction caused by hypotension during physical examination maneuvers in the elderly. Murden RA, et al. **J Am Geriatr Soc** 1988 Dec;36(12):1120–2
Noninvasive examination of the venous system in the leg: presclerotherapy evaluation. Fronek HS. **J Dermatol Surg Oncol** 1989 Feb;15(2):170–3
The assessment of hand function: a critical review of techniques. Jones LA. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):221–8 (74 ref.)
Out-patient examination of the upper airway: a survey of current practice in the UK. Albizzati C, et al. **J Laryngol Otol** 1989 Mar;103(3):272–4
Unilateral absence of a palpable vas deferens [letter] Schneiderman H. **JAMA** 1989 Oct 6;262(13):1771–2
A digital test for pelvic muscle strength in older women with urinary incontinence. Brink CA, et al. **Nurs Res** 1989 Jul–Aug;38(4):196–9
An illustrated guide to adolescent gynecology. Rimsza ME. **Pediatr Clin North Am** 1989 Jun;36(3):639–63 (38 ref.)
Physical examination of sexually abused children and adolescents. Horowitz DA. **Pediatr Rev** 1987 Jul;9(1):25–9 (9 ref.)
The bimanual examination for assessing instability in naso-orbitoethmoidal injuries. Paskert JP, et al. **Plast Reconstr Surg** 1989 Jan;83(1):165–7
Fitness and its measurement. Sharp C. **Practitioner** 1988 Sep 8;232(1454 (Pt 1)):974–6
Musculoskeletal chest pain in patients with "angina": a prospective study. Levine PR, et al. **South Med J** 1989 May;82(5):580–5, 591
Mammography versus physical exam at a community hospital. Zelenik ME, et al. **Va Med** 1988 Nov; 115(11):543–4
[Gynecologic examination of young women] Cacciatore R, et al. **Duodecim** 1989;105(6):537–43 (Fin)
[The clinical postural examination] Guillaume P. **Agressologie** 1988 Oct;29(10):687–90 (Eng. Abstr.) (Fre)

STANDARDS

Place of biochemical tests in aircrew medical examinations. Cullen SA. **Aviat Space Environ Med** 1989 Jul;60(7 Pt 2):A48–9
Physical standards for scuba divers. Millington JT. **J Am Board Fam Pract** 1988 Jul–Sep;1(3):194–200 (13 ref.)
Diving medicals [letter] Chapman-Smith P. **N Z Med J** 1989 Mar 22;102(864):140
Assessment of the reliability of physical measures. Engstrom JL. **Res Nurs Health** 1988 Dec;11(6):383–9
1989 Volvo Award in clinical sciences. Reproducibility of physical signs in low-back pain. McCombe PF, et al. **Spine** 1989 Sep;14(9):908–18
New medical standards for Virginia's high school athletes. Perriello VA Jr, et al. **Va Med** 1989 Sep;116(9):359–67

VETERINARY

Clinical examination of the equine foot. Moyer W. **Vet Clin North Am Equine Pract** 1989 Apr;5(1):29–46 (21 ref.)
Llama medicine. Physical examination, restraint and handling. Fowler M. **Vet Clin North Am [Food Anim Pract]** 1989 Mar;5(1):27–35 (3 ref.)
Standardising equine examinations [letter] Gover RW. **Vet Rec** 1988 Dec 3;123(23):608

PHYSICAL EXAMINATION, PREADMISSION see **DIAGNOSTIC TESTS, ROUTINE**

PHYSICAL FITNESS

see related
PHYSICAL ENDURANCE

Submaximal exercise effects on sleep patterns in young women before and after an aerobic training programme. Driver HS, et al. **Acta Physiol Scand Suppl** 1988;574:8–13
Cardiovascular responses to maximal treadmill exercise in healthy adult Nigerians. Balogun MO, et al. **Afr J Med Med Sci** 1989 Jun;18(2):109–16
Association of physical activity with coronary risk factors and physical ability: twenty-year follow-up of a cohort of Finnish men. Marti B, et al. **Age Ageing** 1989 Mar; 18(2):103–9
The relationship of treadmill test performance to blood pressure and other cardiovascular risk factors in adolescents. Gillum RF. **Am Heart J** 1989 Jul;118(1):161–71
First International Conference on Nutrition and Fitness. Proceedings of a conference. Ancient Olympia, Greece, May 21–26, 1988. **Am J Clin Nutr** 1989 May;49(5 Suppl):909–1140
Special presentation. Health, fitness, and sport. Bannister R. **Am J Clin Nutr** 1989 May;49(5 Suppl):927–30
Policies and programs in nutrition and physical fitness in Australia. Dwyer T. **Am J Clin Nutr** 1989 May;49(5 Suppl):1030–4
Policies and programs in nutrition and physical fitness: framework for a national physical activity policy. Edwards RA. **Am J Clin Nutr** 1989 May;49(5 Suppl):934–6
Policies and programs in nutrition and physical fitness in Italy. Fidanza F. **Am J Clin Nutr** 1989 May;49(5 Suppl):1035–8
Assessment of youth fitness: the European perspective. Georgiades G, et al. **Am J Clin Nutr** 1989 May;49(5 Suppl):1048–53
United States government policies and programs in nutrition and physical fitness. Hayes AE. **Am J Clin Nutr** 1989 May; 49(5 Suppl):1039–41
Physical activity, fitness, and diet: behavior in the population compared with elite athletes in the GDR. Heinemann L, et al. **Am J Clin Nutr** 1989 May;49(5 Suppl):1007–16
The role of nutrition and fitness in chronic diseases. James WP. **Am J Clin Nutr** 1989 May;49(5 Suppl):933–4
Policies and programs in nutrition and physical fitness in Venezuela. Lara-Pantin E. **Am J Clin Nutr** 1989 May;49(5 Suppl):1057–9
Eating for health or for athletic performance? Leaf A, et al. **Am J Clin Nutr** 1989 May;49(5 Suppl):1066–9
Age-dependent changes in dietary intake related to work output, physical fitness, and body composition. Pařízková J. **Am J Clin Nutr** 1989 May;49(5 Suppl):962–7 (25 ref.)
Physical activity and chronic diseases. Powell KE, et al. **Am J Clin Nutr** 1989 May;49(5 Suppl):999–1006 (35 ref.)
International Olympic Committee Medical Commission's policies and programs in nutrition and physical fitness. Prokop L. **Am J Clin Nutr** 1989 May;49(5 Suppl):1065
Relationship of genetics, age, and physical fitness to daily energy expenditure and fuel utilization. Ravussin E, et al. **Am J Clin Nutr** 1989 May;49(5 Suppl):968–75 (57 ref.)
Nutrition and fitness in elderly people. Rudman D. **Am J Clin Nutr** 1989 May;49(5 Suppl):1090–8 (89 ref.)
Opening address. Nutrition and fitness from the first Olympiad in 776 BC to 393 AD and the concept of positive health. Simopoulos AP. **Am J Clin Nutr** 1989 May;49(5 Suppl):921–6
Fitness and nutrition policy in developing nations: Kenya's example. Thairu K. **Am J Clin Nutr** 1989 May;49(5 Suppl):1054–6
Diet and endurance fitness. Williams C. **Am J Clin Nutr** 1989 May;49(5 Suppl):1077–83 (59 ref.)
Predicting maximum oxygen uptake in adolescents. Hergenroeder AC, et al. **Am J Dis Child** 1989 Jun; 143(6):673–7
Physical and psychological effects of aerobic exercise in delinquent adolescent males. MacMahon JR, et al. **Am J Dis Child** 1988 Dec;142(12):1361–6
Surrogate measures of physical activity and physical fitness. Evidence for sedentary traits of resting tachycardia, obesity, and low vital capacity. Blair SN, et al. **Am J Epidemiol** 1989 Jun;129(6):1145–56
Chronic degenerative diseases in evolutionary perspective [letter] Abbott AV, et al. **Am J Med** 1988 Oct;85(4):595–6
Estimation of fertility and fitness in Huntington disease in New England. Mastromauro CA, et al. **Am J Med Genet** 1989 Jun;33(2):248–54
Competence, duration, and heart rate—factors that affect exercise [letter] Kircher MA. **Am J Occup Ther** 1989 Aug; 43(8):549–50
Effect of physical training on the insulin resistance of aging. Tonino RP. **Am J Physiol** 1989 Mar;256(3 Pt 1):E352–6
Predictors of healthy aging: prospective evidence from the Alameda County study. Guralnik JM, et al. **Am J Public Health** 1989 Jun;79(6):703–8
Longitudinal study of physical ability in the oldest-old. Harris T, et al. **Am J Public Health** 1989 Jun;79(6):698–702
An analysis of fitness and time-motion characteristics of handball. Alexander MJ, et al. **Am J Sports Med** 1989 Jan–Feb;17(1):76–82
A musculoskeletal approach to the preparticipation physical examination. Preventing injury and improving performance. Kibler WB, et al. **Am J Sports Med** 1989 Jul–Aug;17(4):525–31
Corporate fitness programmes and health enhancement. Gibbons LW. **Ann Acad Med Singapore** 1989 May; 18(3):272–8
Physical fitness, physical activity and blood pressure in children. Hansen HS, et al. **Ann Clin Res** 1988;20 Suppl 48:68–70
A new fitness test for cardiovascular epidemiology and exercise promotion. Oja P, et al. **Ann Med** 1989 Jun; 21(3):249–50
Hyperlipemic response of young trained and untrained men after a high fat meal. Merrill JR, et al. **Arteriosclerosis** 1989 Mar–Apr;9(2):217–23

Aerobic fitness in patients with fibrositis. A controlled study of respiratory gas exchange and 133xenon clearance from exercising muscle. Bennett RM, et al. **Arthritis Rheum** 1989 Apr;32(4):454–60

Circumference–estimated percent body fat vs. weight–height indices: relationships to physical fitness. Conway TL, et al. **Aviat Space Environ Med** 1989 May;60(5):433–7

Evaluation of the NASA/JSC Health Related Fitness Program. Wier LT, et al. **Aviat Space Environ Med** 1989 May;60(5):438–44

Beta–endorphin and components of emotionality discriminate between physically active and sedentary men. Lobstein DD, et al. **Biol Psychiatry** 1989 May;26(1):3–14

The effect of exercise and improved physical fitness on basal metabolic rate. Bingham SA, et al. **Br J Nutr** 1989 Mar; 61(2):155–73

Activity patterns of men attending for fitness assessment. Bland PK, et al. **Br J Sports Med** 1988 Sep;22(3):101–6

The road to success in international rowing. Budgett RG. **Br J Sports Med** 1989 Mar;23(1):49–50

The role of physiological assessment in team selection with special reference to rowing. Koutedakis Y. **Br J Sports Med** 1989 Mar;23(1):51–2

Cardio–respiratory fitness of young and older active and sedentary men. Steinhaus LA, et al. **Br J Sports Med** 1988 Dec;22(4):163–6

Re: Employee fitness: state of the art [letter] Yassi A, et al. **Can J Public Health** 1988 Sep–Oct;79(5):396

Influence of age and physical training on postural adaptation. Petrella RJ, et al. **Can J Sport Sci** 1989 Mar;14(1):4–9 (70 ref.)

Anaerobic performances of sedentary and trained subjects. Serresse O, et al. **Can J Sport Sci** 1989 Mar;14(1):46–52

Physical fitness and other individual factors relating to the shiftwork tolerance of women. Härmä M, et al. **Chronobiol Int** 1988;5(4):417–24

Preparticipation screening of the potential athlete. McKeag DB. **Clin Sports Med** 1989 Jul;8(3):373–97 (31 ref.)

Motor training and physical fitness: possible short– and long–term influences on the development of individual differences in behavior. Bekoff M. **Dev Psychobiol** 1988 Sep;21(6):601–12 (109 ref.)

Body composition and self–perceived health and fitness among indoor sports participants. Brodie DA, et al. **Ergonomics** 1988 Nov;31(11):1551–7

Stair stepping efficiency of mentally handicapped and nonhandicapped adult females. Seidl C, et al. **Ergonomics** 1989 May;32(5):519–24

Ratings of perceived exertion in individuals with varying fitness levels during walking and running. Berry MJ, et al. **Eur J Appl Physiol** 1989;58(5):494–9

A new approach to assessing maximal aerobic power in children: the Odense School Child Study. Hansen HS, et al. **Eur J Appl Physiol** 1989;58(6):618–24

Comparison of sympatho–adrenergic regulation at rest and of the adrenoceptor system in swimmers, long–distance runners, weight lifters, wrestlers and untrained men. Jost J, et al. **Eur J Appl Physiol** 1989;58(6):596–604

A comparison of coronary risk factors in groups of trained and untrained adolescents. Máček M, et al. **Eur J Appl Physiol** 1989;58(6):577–82

Biological age versus physical fitness age. Nakamura E, et al. **Eur J Appl Physiol** 1989;58(7):778–85

Benefits of short–term muscular training in reducing the effects of muscular over–exertion. Seaman R, et al. **Eur J Appl Physiol** 1988;58(3):257–61

Changes in nutrient intakes of conditioned men during a 5–day period of increased physical activity and other stresses. Smoak BL, et al. **Eur J Appl Physiol** 1988; 58(3):245–51

One– and two–dimensional echocardiography in bodybuilders using anabolic steroids. Urhausen A, et al. **Eur J Appl Physiol** 1989;58(6):633–40

Determinants of physical ability in 7th grade schoolchildren. Halfon ST, et al. **Eur J Epidemiol** 1989 Mar;5(1):90–6

Physical work capacity of older women and men living in rural communities of eastern Ontario, Canada. Métivier G, et al. **Gerontology** 1989;35(1):1–6

Influence of regular aerobic exercise on psychological health: a randomized, controlled trial of healthy middle–aged adults. King AC, et al. **Health Psychol** 1989;8(3):305–24

The effects of occupation, leisure activities, and body composition on aerobic fitness in western Samoan men. Pelletier DL. **Hum Biol** 1988 Dec;60(6):889–99

Body Recall. Greenwood S, et al. **Hygie** 1989 Jun;8(2):32–6

Impaired lymphocyte stimulation induced by long–term training. Papa S, et al. **Immunol Lett** 1989 Jul;22(1):29–33

Comparison of maximum aerobic power, maximum anaerobic power, and skinfold thickness of elite and nonelite junior wrestlers. Horswill CA, et al. **Int J Sports Med** 1989 Jun; 10(3):165–8

Reevaluation of contribution of physical fitness, body weight, and different sports activity to resting blood pressure in young men. Kumagai S, et al. **Int J Sports Med** 1988 Oct; 9(5):334–7

Physical fitness level in patients with anxiety and depressive disorders. Martinsen EW, et al. **Int J Sports Med** 1989 Feb; 10(1):58–61

Development of valid pulmonary function equations for trained athletes. Morrow JR Jr, et al. **Int J Sports Med** 1989 Feb;10(1):43–7

Habitual physical activity, strenuous exercise, and salivary immunoglobulin A levels in young adults: the Amsterdam Growth and Health Study. Schouten WJ, et al. **Int J Sports Med** 1988 Aug;9(4):289–93

Peak oxygen intake and hypoxia: influence of physical fitness. Shephard RJ, et al. **Int J Sports Med** 1988 Aug;9(4):279–83

Quantification of the influence of body fat content on selected physical performance variables in adolescent boys. Watson AW. **Ir J Med Sci** 1988 Dec;157(12):383–4

The effects of theophylline on the physical performance and work capacity of well–trained athletes. Morton AR, et al. **J Allergy Clin Immunol** 1989 Jan;83(1):55–61

Left ventricular dynamics during exercise in elite marathon runners. Fagard R, et al. **J Am Coll Cardiol** 1989 Jul; 14(1):112–8

Carotid baroreflex responsiveness in high–fit and sedentary young men. Barney JA, et al. **J Appl Physiol** 1988 Nov; 65(5):2190–4

Physical fitness and thermoregulatory reactions in a cold environment in men. Bittel JH, et al. **J Appl Physiol** 1988 Nov;65(5):1984–9

Aerobic power and cardiovascular response to stress. Claytor RP, et al. **J Appl Physiol** 1988 Sep;65(3):1416–23

Body composition response to exogenous GH during training in highly conditioned adults. Crist DM, et al. **J Appl Physiol** 1988 Aug;65(2):579–84

Blood pressure regulation during cardiac autonomic blockade: effect of fitness. Smith ML, et al. **J Appl Physiol** 1988 Oct;65(4):1789–95

Muscle strength, physical fitness, and weight but not age predict femoral neck bone mass. Pocock N, et al. **J Bone Miner Res** 1989 Jun;4(3):441–8

Cross–sectional and longitudinal relationships between physical fitness and risk factors for coronary heart disease in men and women: "the Adelaide 1000". Sedgwick AW, et al. **J Clin Epidemiol** 1989;42(3):189–200

Cardiovascular and behavioral effects of aerobic exercise training in healthy older men and women. Blumenthal JA, et al. **J Gerontol** 1989 Sep;44(5):M147–57

Fitness and the postmodern self. Glassner B. **J Health Soc Behav** 1989 Jun;30(2):180–91 (127 ref.)

Follow–up study of life span of farmers in relation to physical fitness data in 1963. Onishi N, et al. **J Hum Ergol (Tokyo)** 1988 Sep;17(1):43–56

Physical aptitudes to exertion in children with Down's syndrome. Eberhard Y, et al. **J Ment Defic Res** 1989 Apr; 33 (Pt 2):167–74

Factors associated with enrollment in an employee fitness center. Eakin JM, et al. **J Occup Med** 1988 Aug;30(8):633–7

Reliability and validity of expected outcomes and barriers for habitual physical activity. Steinhardt MA, et al. **J Occup Med** 1989 Jun;31(6):536–46

Personality correlates of physical fitness. Hogan J. **J Pers Soc Psychol** 1989 Feb;56(2):284–8

Life events, fitness, hardiness, and health: a simultaneous analysis of proposed stress–resistance effects. Roth DL, et al. **J Pers Soc Psychol** 1989 Jul;57(1):136–42

Changes in personality associated with changes in aerobic and anaerobic fitness in women and men. Jasnoski ML, et al. **J Psychosom Res** 1988;32(3):273–6

Selection of soldiers. Physical build as an entry factor [letter] Kilpatrick WG. **J R Army Med Corps** 1989 Jun;135(2):95–6

Step testing as an assessment of physical fitness on Polaris submarines. Berth–Jones J, et al. **J R Nav Med Serv** 1988 Summer;74(2):115–20

A simple test for the assessment of aerobic fitness. Smith DJ, et al. **J R Nav Med Serv** 1988 Summer;74(2):107–14

Physiological and performance comparisons of running flat and hill routes as applied to orienteering navigation. Knowlton RG, et al. **J Sports Med Phys Fitness** 1988 Jun; 28(2):189–93

Effect of physical training on exercise induced sweating in men. Pilardeau PA, et al. **J Sports Med Phys Fitness** 1988 Jun;28(2):176–80

The multistage 20 metre shuttle run test for aerobic fitness. Léger LA, et al. **J Sports Sci** 1988 Summer;6(2):93–101

Aerobic fitness and running performance of male and female recreational runners. Ramsbottom R, et al. **J Sports Sci** 1989 Spring;7(1):9–20

From the Centers for Disease Control. Progress toward achieving the 1990 national objectives for physical fitness and exercise. **JAMA** 1989 Aug 11;262(6):746, 748, 753

Nutrition and fitness. Simopoulos AP. **JAMA** 1989 May 19; 261(19):2862–3

Exercise training, fitness, and asthma. **Lancet** 1989 Apr 8; 1(8641):763–4 (18 ref.)

Exercise training, fitness, and asthma [letter] Plaut GS. **Lancet** 1989 May 20;1(8647):1147

Cardiorespiratory fitness in highly active versus inactive paraplegics. Davis GM, et al. **Med Sci Sports Exerc** 1988 Oct;20(5):463–8

Exercise modality and selected coronary risk factors: a multivariate approach. Fang CL, et al. **Med Sci Sports Exerc** 1988 Oct;20(5):455–62

Enkephalin metabolism: effect of acute exercise stress and cardiovascular fitness. Jaskowski MA, et al. **Med Sci Sports Exerc** 1989 Apr;21(2):154–60

Aerobic fitness and resting energy expenditure in young adult males. Poehlman ET, et al. **Metabolism** 1989 Jan; 38(1):85–90

Smoking and physical fitness among Navy shipboard men. Conway TL, et al. **Milit Med** 1988 Nov;153(11):589–94

Experience with a pre–basic fitness program at Fort Jackson, South Carolina. DiBenedetto M. **Milit Med** 1989 May; 154(5):259–63

Aerobic capacity of Polish soldiers. Drabik J, et al. **Milit Med** 1989 Apr;154(4):196–8

Evaluating the occupational physical fitness of Canadian forces infantry personnel. Jetté M, et al. **Milit Med** 1989 Jun;154(6):318–22

The Army Physical Fitness Test (APFT): a review of the literature. Knapik J. **Milit Med** 1989 Jun;154(6):326–9 (32 ref.)

Heart size and function of soldiers, athletes, and sedentary men. Rubal BJ, et al. **Milit Med** 1989 Mar;154(3):153–8 (30 ref.)

Weight–load marching as a method of conditioning Australian Army recruits. Rudzki SJ. **Milit Med** 1989 Apr; 154(4):201–5

Exertional rhabdomyolysis and acute renal failure following the Army Physical Fitness Test. Tietjen DP, et al. **Milit Med** 1989 Jan;154(1):23–5

Smoking and physical fitness among Navy shipboard men [letter] Tow DJ. **Milit Med** 1989 May;154(5):274

Progress toward achieving the 1990 national objectives for physical fitness and exercise. **MMWR** 1989 Jul 7; 38(26):449–53

Fitness of the future [editorial] Hagan JC 3d. **Mo Med** 1989 May;86(5):269–70

Physical fitness as a predictor of cardiovascular mortality in asymptomatic North American men. The Lipid Research Clinics Mortality Follow–up Study. Ekelund LG, et al. **N Engl J Med** 1988 Nov 24;319(21):1379–84

Health management personnel choice requires careful definition of needs. Chenoweth D. **Occup Health Saf** 1988 Dec;57(13):36–7

Employee health programs will thrive if they reflect employees' interests. Chenoweth D. **Occup Health Saf** 1989 Mar;58(3):19

Transition of physical fitness in wheelchair marathon competitors over several years. Okuma H, et al. **Paraplegia** 1989 Jun;27(3):237–43

Health–related fitness as preventive medicine. Jopling RJ. **Pediatr Rev** 1988 Nov;10(5):141–8 (16 ref.)

Cardiovascular fitness in children with asthma correlates with psychologic functioning of the child. Strunk RC, et al. **Pediatrics** 1989 Sep;84(3):460–4

Relating trait anxiety to perceived physical fitness. Abadie BR. **Percept Mot Skills** 1988 Oct;67(2):539–43

Construction and validation of a perceived physical fitness scale. Abadie BR. **Percept Mot Skills** 1988 Dec; 67(3):887–92

Physical fitness, body image, and locus of control in college freshman men and women. Adame DD, et al. **Percept Mot Skills** 1989 Apr;68(2):400–2

Influence of aerobic fitness on ratings of perceived exertion during light to moderate exercise. Felts WM, et al. **Percept Mot Skills** 1988 Oct;67(2):671–6

Smoking and performance on simulated firefighting tasks. Fowler RL. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1302

Pattern of psychological fitness as related to pattern of physical fitness among older adults. Netz Y, et al. **Percept Mot Skills** 1988 Oct;67(2):647–55

Effects of Florida's Personal Fitness Course on cognitive, attitudinal and physical fitness measures of secondary students: a pilot study. Rider RA, et al. **Percept Mot Skills** 1986 Apr;62(2):548–50

Are fun runs fun for kids?: A survey of school–aged participants. Welsh MC, et al. **Percept Mot Skills** 1989 Aug; 69(1):74

Fitness and its measurement. Sharp C. **Practitioner** 1988 Sep 8;232(1454 (Pt 1)):974–6

The meaning of "physical fitness". Hopkins WG, et al. **Prev Med** 1988 Nov;17(6):764–73

Injury prevalence and associated costs among participants of an employee fitness program. Tsai SP, et al. **Prev Med** 1988 Jul;17(4):475–82

Effects of selected physical activities on health–related fitness and psychological well–being. Ford HT Jr, et al. **Psychol Rep** 1989 Feb;64(1):203–8

Aerobic fitness and the cardiovascular response to stress. van Doornen LJ, et al. **Psychophysiology** 1989 Jan;26(1):17–28

Influence of age on physical performance, heart rate and systolic blood pressure response during exercise in apparently healthy women. Michelsen S, et al. **Scand J Clin Lab Invest** 1989 Feb;49(1):97–102

Blood pressure and physical fitness in school children. Hansen HS, et al. **Scand J Clin Lab Invest Suppl** 1989; 192:42–6

Aerobic power during maximal exercise in untrained and well–trained persons with quadriplegia and paraplegia. Eriksson P, et al. **Scand J Rehabil Med** 1988;20(4):141–7

Exercising choice. Case (almost) closed: fitness does seem to prolong life. Beardsley TM. **Sci Am** 1989 Feb;260(2):24

A prospective study of the role of cardiovascular risk factors and fitness in industrial back pain complaints. Battié MC, et al. **Spine** 1989 Feb;14(2):141–7

Exercise and fitness for persons with disabilities. Compton DM, et al. **Sports Med** 1989 Mar;7(3):150–62 (116 ref.)

Current perspectives on the economics of fitness and sport with particular reference to worksite programmes. Shephard RJ. **Sports Med** 1989 May;7(5):286–309 (50 ref.)

Factors affecting compliance in the NASA/Johnson Space Center fitness programme. Wier LT, et al. **Sports Med** 1989 Jul;8(1):9–14

Assessment of work performance in asthma for determination of cardiorespiratory fitness and training capacity. Clark CJ, et al. **Thorax** 1988 Oct;43(10):745–9

Physical fitness and the high school athlete. Kendig EL Jr. **Va Med** 1989 Sep;116(9):358

[Functional levels in nursing homes residents assessed by the Gottfries–Bråne–Steen scale] Skausig OB, et al. **Ugeskr Laeger** 1989 Feb 6;151(6):387–9 (Eng. Abstr.) **(Dan)**

[Physical activity and sports as health promoting behavior in middle age] Vanden Auweele Y. **Tijdschr Gerontol Geriatr** 1988 Dec;19(6):289–95 (Eng. Abstr.) **(Dut)**

[Physical fitness during the physical therapy of arthritis patients] Isomeri R, et al. **Duodecim** 1989;105(2):152–8 (16 ref.) **(Fin)**

[The physiatric contribution to physical fitness] Kallio V. **Duodecim** 1989;105(2):84–5 **(Fin)**

[Functional diagnosis in sports medicine in childhood and adolescence] Koinzer K. **Arztl Jugendkd** 1989;80(2):66–72 (Eng. Abstr.) **(Ger)**

[Possibilities and limits of preventive sports medicine examination by the Essen public health service] Habarta A, et al. **Off Gesundheitswes** 1989 Jul;51(7):349–51 (Eng. Abstr.) **(Ger)**

[Physical training in the rehabilitation of patients with chronic respiratory tract disease] Haber P. **Prax Klin Pneumol** 1988 Jul;42(7):625–7 (Eng. Abstr.) **(Ger)**

[Sports therapy in the treatment of pediatric bronchial asthma. Comparison of interval and continuous training] Lecheler J, et al. **Prax Klin Pneumol** 1988 Jul;42(7):475–8 (Eng. Abstr.) **(Ger)**

[Juvenile obesity and fitness for military service] Frehner C, et al. **Schweiz Med Wochenschr** 1988 Oct 8; 118(40):1427–36 (Eng. Abstr.) **(Ger)**

[Do joggers live longer? 3 current epidemiologic studies of the effect of physical activity on life expectancy] Marti B, et al. **Schweiz Rundsch Med Prax** 1988 Oct 11; 77(41):1097–100 (Eng. Abstr.) **(Ger)**

[Health benefits and risks in sports: the other side of the coin] Marti B. **Schweiz Rundsch Med Prax** 1989 Mar 14; 78(11):290–4 (Eng. Abstr.) **(Ger)**

[Interdisciplinary classification analysis in the framework of sports medicine training guidelines. Theoretical bases] Banzer WE. **Schweiz Z Sportmed** 1988 Oct;36(3):133–9 (Eng. Abstr.) **(Ger)**

[Senior sports in science and general practice] Barolin GS. **Wien Med Wochenschr** 1988 Sep 15;138(17):418–20 (Eng. Abstr.) **(Ger)**

[Ergospirometry and blood lactate data in the assessment of conditioning of soldiers in relation to physical activity within the scope of military service in the Austrian army] Baumgartl P, et al. **Wien Med Wochenschr** 1988 Sep 15; 138(17):433–7 (Eng. Abstr.) **(Ger)**

[Peak performance athletes speak with physicians about common problems—a panel discussion] Riedmann G, et al. **Wien Med Wochenschr** 1988 Sep 15;138(17):421–7 (Eng. Abstr.) **(Ger)**

[Characteristics of physical fitness as indicators of health status] Bräuer G. **Z Arztl Fortbild (Jena)** 1988;82(19):963–5 **(Ger)**

[Indicators of physical fitness of the musculoskeletal system] Fröhner G, et al. **Z Arztl Fortbild (Jena)** 1988;82(19):975–6 **(Ger)**

[The significance of movement-induced adaptations for the stability of health] Israel S. **Z Arztl Fortbild (Jena)** 1988; 82(19):966–8 **(Ger)**

[Criteria for the determination of physical fitness as a health indicator] Lehnert K. **Z Arztl Fortbild (Jena)** 1988; 82(19):970 **(Ger)**

[Fitness diagnosis of untrained subjects in determining health status indicators] Weber HC, et al. **Z Arztl Fortbild (Jena)** 1988;82(19):971 **(Ger)**

[Anthropometric studies of healthy boys participating in sports 9–12 years of age] Brauer BM, et al. **Z Gesamte Hyg** 1989 May;35(5):281–3 (Eng. Abstr.) **(Ger)**

[Differential diagnosis: physiologic–pathologic hypertrophy of the heart. A case report] Lehmann M, et al. **Z Kardiol** 1988 Dec;77(12):784–8 (Eng. Abstr.) **(Ger)**

[Technology of fitness testing] Apor P. **Orv Hetil** 1989 May 14;130(20):1039–43 (29 ref.) (Eng. Abstr.) **(Hun)**

[Cardiologic protocols for judging fitness for competition sports. Cardiologic Organizational Committee for Sports Fitness] **G Ital Cardiol** 1989 Mar;19(3):250–72 **(Ita)**

[Evaluation of cardiorespiratory and muscular function in healthy subjects at 1650 m. above sea level] Berti R, et al. **Riv Med Aeronaut Spaz** 1985 Jul–Sep;52(3):227–34 (Eng. Abstr.) **(Ita)**

[Blood findings in healthy elementary school children selected by medical examination and physical fitness tests] Suzuki M, et al. **Rinsho Byori** 1989 Apr;37(4):359–65 **(Jpn)**

[Evaluation of bioelectrical impedance method for fat measurement in corporate fitness program] Doya S, et al. **Sangyo Igaku** 1989 Jan;31(1):3–8 (Eng. Abstr.) **(Jpn)**

[Contemporary morphology and prospects for increasing human physical ability] Nikitiuk BA. **Arkh Anat Gistol Embriol** 1989 Jan;96(1):5–14 **(Rus)**

[Working capacity under high altitude conditions in Antarctica in persons with various levels of hypoxic resistance] Maksimov AL. **Fiziol Cheloveka** 1989 Jan–Feb; 15(1):100–4 **(Rus)**

[Effect of high temperature on several parameters of the functional state and working capacity] Mommadov IM, et al. **Fiziol Cheloveka** 1989 Jan–Feb;15(1):105–9 **(Rus)**

[Changes in the cardiac rhythm in female athletes during urgent restoration of working capacity (artistic gymnastics)] Shestakov VA, et al. **Fiziol Cheloveka** 1989 Jan–Feb;15(1):59–63 **(Rus)**

[Dependence of lipid peroxidation on the typologic characteristics of the nervous system and their relation to the resistance of the body to exertion] Deviatkina TA, et al. **Fiziol Zh** 1989 Jan–Feb;35(1):55–9 (Eng. Abstr.) **(Rus)**

[Age-related dynamics of the development of professionally important characteristics in students of educational–industrial combines in coal mining] Grebniak NP. **Gig Sanit** 1988 Oct;(10):29–32 (Eng. Abstr.) **(Rus)**

[Physical development of workers in various categories of engineering industry] Ovcharenko SA. **Gig Sanit** 1988 Jun; (6):80–1 **(Rus)**

[Relation between health status indicators and physical fitness of students and their physical activity] Sergeev VN, et al. **Gig Sanit** 1988 Jul;(7):29–32 **(Rus)**

[Development of the motor working capacity of vocational school and secondary school students in Łódź] Sobchak Z, et al. **Gig Sanit** 1988 Nov;(11):62–4 **(Rus)**

[Detection of hypodynamia and psychoemotional stress during the mass prophylactic examination of students] Nikolaeva AA, et al. **Sov Med** 1988;(8):45–8 **(Rus)**

[Oxygen supply and physical working capacity in patients with diabetes mellitus] Zubkova ST, et al. **Ter Arkh** 1988; 60(9):24–7 (Eng. Abstr.) **(Rus)**

[A method for assessing the psychophysiologic reserves of pilots] Shakula AV, et al. **Voen Med Zh** 1989 Feb;(2):46–9 **(Rus)**

[Effect of supplementary intake of vitamins for 6 months on physical and mental work capacity of children beginning school education at the age of 6 years] Kerimova MG, et al. **Vopr Pitan** 1988 Jul–Aug;(4):38–41 (Eng. Abstr.) **(Rus)**

[A case of supraventricular tachycardia due to an inadequate physical load] Mingkov II, et al. **Vrach Delo** 1988 Sep; (9):48–9 **(Rus)**

[The effect of nutrition and planned physical activity on the nutritional status, development and physical fitness in soldiers] Pavlica M, et al. **Vojnosanit Pregl** 1988 Jul–Aug; 45(4):254–8 (Eng. Abstr.) **(Scr)**

[Nutritional status, physical development and physical fitness of soldiers before and after training] Sovtić P, et al. **Vojnosanit Pregl** 1989 Jan–Feb;46(1):7–10 (Eng. Abstr.) **(Scr)**

[Present trends in sports medicine] Marček T, et al. **Bratisl Lek Listy** 1989 May;90(5):345–51 (Eng. Abstr.) **(Slo)**

HISTORY

The Combat Fitness Test—its Victorian origins. Bennett JD. **J R Army Med Corps** 1989 Jun;135(2):91–2

"Of no use without health": late nineteenth century medical prescriptions for female exercise through the life span. Vertinsky P. **Women Health** 1988;14(1):89–115

PHYSICAL MEDICINE

see related
BIOMECHANICS

Abstracts of scientific papers, Association of Academic Physiatrists. Spring meeting. March 1989—Scottsdale, Arizona. **Am J Phys Med Rehabil** 1989 Aug;68(4):205–7

Certificates for added/special qualifications. Status report and implications for the field. DeLisa JA. **Am J Phys Med Rehabil** 1989 Aug;68(4):172–8

Research in physical medicine and rehabilitation. II. The conceptual review of the literature or how to read more articles than you ever want to see in your entire life. Findley TW. **Am J Phys Med Rehabil** 1989 Apr; 68(2):97–102

Research in physical medicine and rehabilitation. III. The chart review or how to use clinical data for exploratory retrospective studies. Findley TW, et al. **Am J Phys Med Rehabil** 1989 Jun;68(3):150–7

Burnout in rehabilitation medicine. Osborn M, et al. **Am J Phys Med Rehabil** 1988 Dec;67(6):275–6

Maturation of a specialty: the early 1980s. Ditunno JF Jr. **Arch Phys Med Rehabil** 1988 Oct;69 Spec No:35–40

Citation classics: most-cited articles from Archives of PM&R. Key JD. **Arch Phys Med Rehabil** 1988 Dec; 69(12):1058–9

Research and the American Academy of PM&R. Lehmann JF, et al. **Arch Phys Med Rehabil** 1988 Oct;69 Spec No:59–63

Rheumatologic rehabilitation: a special interest for physiatrists? Nicholas JJ, et al. **Arch Phys Med Rehabil** 1988 Dec;69(12):1057

Physical medicine and rehabilitation. Smith BS, et al. **JAMA** 1989 May 19;261(19):2876–7

[The physiatric contribution to physical fitness] Kallio V. **Duodecim** 1989;105(2):84–5 **(Fin)**

[The physiatric management of potential axial and locomotor diseases] Lilius G. **Duodecim** 1989;105(2):88–91 **(Fin)**

[The physiatric management of orthopedic patients] Michelsson JE. **Duodecim** 1989;105(2):85–7 **(Fin)**

[Why a special issue on physiatrics?] Valtonen EJ. **Duodecim** 1989;105(2):83–4 **(Fin)**

EDUCATION

Survey and commentary on fellowship training for pediatric rehabilitation. Gans BM, et al. **Am J Phys Med Rehabil** 1988 Dec;67(6):273–4

Criteria for selection of physical medicine and rehabilitation residents. A survey of current practices and suggested changes. Garden FH, et al. **Am J Phys Med Rehabil** 1989 Jun;68(3):123–7

Survey of medical student electives in physical medicine and rehabilitation. Problems and solutions. Grabois M. **Am J Phys Med Rehabil** 1988 Oct;67(5):217–20

Medical education in the Academy: past, present, and a glimpse of the future. Braddom RL. **Arch Phys Med Rehabil** 1988 Oct;69 Spec No:53–8

[The role and place of physiotherapy among other medical disciplines in the current stage of the development of higher medical education] Shnipas PA, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 May–Jun; (3):69–70 **(Rus)**

HISTORY

Fifty years of physiatry. **Arch Phys Med Rehabil** 1988 Oct; 69 Spec No:1–68

Breaking new ground: Academy growth from 1975 to 1979. Granger CV. **Arch Phys Med Rehabil** 1988 Oct;69 Spec No:30–4

The 1970s—the first half. Gullickson G Jr. **Arch Phys Med Rehabil** 1988 Oct;69 Spec No:26–9

Struggle for identity: the turbulent 1960s. Johnson EW. **Arch Phys Med Rehabil** 1988 Oct;69 Spec No:20–5

The development of physiatry before 1950. Kottke FJ, et al. **Arch Phys Med Rehabil** 1988 Oct;69 Spec No:4–14

Building on the framework: the Academy in the 1950s. Martin GM. **Arch Phys Med Rehabil** 1988 Oct;69 Spec No:15–9

Fifty years of federal legislation and programs affecting PM&R. Verville RE. **Arch Phys Med Rehabil** 1988 Oct; 69 Spec No:64–8

INSTRUMENTATION

Upper extremity joint movement: comparison of two measurement devices. Greene BL, et al. **Arch Phys Med Rehabil** 1989 Apr;70(4):288–90

Reliability and validity of the WATSMART three-dimensional optoelectric motion analysis system. Scholz JP. **Phys Ther** 1989 Aug;69(8):679–89

METHODS

Research in physical medicine and rehabilitation. I. How to ask the question. Findley TW. **Am J Phys Med Rehabil** 1989 Feb;68(1):26–31

[Physical fitness during the physical therapy of arthritis patients] Isomeri R, et al. **Duodecim** 1989;105(2):152–8 (16 ref.) **(Fin)**

[The effectiveness of research on the treatment of refractory axial and locomotor disorders] Saloheimo E, et al. **Duodecim** 1989;105(2):214–21 (27 ref.) **(Fin)**

TRENDS

The medical practice committee of the Academy: evolution and growth. Gonzalez EG. **Arch Phys Med Rehabil** 1988 Oct;69 Spec No:47–52

21st Walter J. Zeiter lecture. Physiatric practice: an evolving "system" of care. LaBan MM. **Arch Phys Med Rehabil** 1989 Mar;70(3):177–9

The Academy in the space age: preparing for the 21st century. Materson RS. **Arch Phys Med Rehabil** 1988 Oct; 69 Spec No:41–6

The American Academy of Physical Medicine and Rehabilitation in 1988. Opitz JL. **Arch Phys Med Rehabil** 1989 Jan;70(1):1–5

Fifty years of physiatry...the forging of the chain. Opitz JL. **Arch Phys Med Rehabil** 1988 Oct;69 Spec No:1–3

PHYSICAL STIMULATION

Increased skin temperature after vibratory stimulation. Oliveri DJ, et al. **Am J Phys Med Rehabil** 1989 Apr; 68(2):81–5

Digital manipulation of the thrombosed arterio-venous conduit. Bloom RJ, et al. **Am Surg** 1989 Aug;55(8):482–4

Comparison of the human perception of hole size by the tongue and the fingers. Albashaireh ZS, et al. **Arch Oral Biol** 1988;33(3):183–5

Responses of diseased muscle to electrical and mechanical intervention. Dubowitz V. **Ciba Found Symp** 1988; 138:240–55 (24 ref.)

Changes in the Bishop score induced by manual nipple stimulation. A cross-over randomized study. Di Lieto A, et al. **Clin Exp Obstet Gynecol** 1989;16(1):26–9

Stimulation of preterm infants. Field T. **Pediatr Rev** 1988 Nov;10(5):149–53 (10 ref.)

Fetal expression of the leg extension response to anogenital stimulation. Smotherman WP, et al. **Physiol Behav** 1988; 43(2):243–4

ADVERSE EFFECTS

Guide to physical urticarias. Casale TB, et al. **J Allergy Clin Immunol** 1988 Nov;82(5 Pt 1):758–63 (43 ref.)

INSTRUMENTATION

An automatic prompting instrument to increase task-related responding in low-functioning individuals. Lancioni GE, et al. **J Behav Ther Exp Psychiatry** 1988 Dec;19(4):267–73

Vibrotactile stimulator for use with patients suffering from hemineglect. Wood RG, et al. **Med Biol Eng Comput** 1988 Mar;26(2):207–12

METHODS

A method for controlled mechanical stimulation of single semicircular canals. Dickman JD, et al. **J Neurosci Methods** 1988 Sep;25(2):111–9

Accepted and controversial neuromotor therapies for infants at high risk for cerebral palsy. Harris SR, et al. **J Perinatol** 1988 Winter;8(1):3–13 (93 ref.)

Teaching stimulation strategies to parents of infants at high risk. Harrison LL. **MCN** 1989 Mar–Apr;14(2):125

[Assistance procedures and physiologic balance in newborn infants] Paludetto R, et al. **Ann Osp Maria Vittoria Torino** 1987–88;30(1):44–9 (Eng. Abstr.) **(Ita)**

PHYSICAL THERAPY

The value of physiotherapy for faecal continence after correction of high anal atresia. A clinical and electromyographic study. Arnbjörnsson E, et al. **Acta Chir Scand** 1988 Jul–Aug;154(7–8):467–70

Physiotherapy in vertigo. Odkvist I, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;455:74–6 (8 ref.)

Functional electrical stimulation and the rehabilitation of the spinal cord-injured patient. Petrofsky JS. **Adv Clin Rehabil** 1987;1:115–36 (43 ref.)

A prospective trial of serial gait speed as a measure of rehabilitation in the elderly. Friedman PJ, et al. **Age Ageing** 1988 Jul;17(4):227–35

Physiotherapy for children with cerebral palsy. Evidence for its efficacy. Tirosh E, et al. **Am J Dis Child** 1989 May; 143(5):552–5 (33 ref.)

Nationally speaking—Hand rehabilitation. Kasch MC. **Am J Occup Ther** 1989 Mar;43(3):145–7

Primary repair of extensor tendons with assisted post-operative mobilisation. A series of 48 cases. Marin-Braun F, et al. **Ann Chir Main** 1989;8(1):7–21 **(Eng, Fre)**

Injections and physiotherapy for the painful stiff shoulder. Dacre JE, et al. **Ann Rheum Dis** 1989 Apr;48(4):322–5

The role of physiotherapy in the management of acute neck sprains following road-traffic accidents. McKinney LA, et al. **Arch Emerg Med** 1989 Mar;6(1):27–33

Quadriplegia from spinal cord injury in muscular dystrophy. Bloom KK, et al. **Arch Phys Med Rehabil** 1989 Aug; 70(8):642–3

Motor and functional recovery after stroke: accuracy of physical therapists' predictions. Korner-Bitensky N, et al. **Arch Phys Med Rehabil** 1989 Feb;70(2):95–9

Rehabilitation of the mastectomy patient: a randomized, blind, prospective study. Wingate L, et al. **Arch Phys Med Rehabil** 1989 Jan;70(1):21–4

TMJ dysfunction [letter] Gerrard B. **Aust Fam Physician** 1988 Oct;17(10):838

Research foundations of EMG biofeedback in rehabilitation. Basmajian JV. **Biofeedback Self Regul** 1988 Dec; 13(4):275–98 (69 ref.)

Chest physiotherapy [letter; comment] **BMJ** 1989 Mar 25; 298(6676):826–7. **Comment on:** BMJ 1989 Mar 4;298(6673):541–2

Chest physiotherapy [see comments] Selsby DS. **BMJ** 1989 Mar 4;298(6673):541–2 (36 ref.). **Comment in:** BMJ 1989 Mar 25;298(6676):826–7

The effect of pelvic floor exercises in the treatment of genuine urinary stress incontinence in women at two hospitals [letter] Hare DM, et al. **Br J Obstet Gynaecol** 1988 Nov; 95(11):1213

Ankylosing spondylitis and exercise [letter] Richards AJ. **Br J Rheumatol** 1989 Aug;28(4):365

Increased muscle efficiency and sustained benefits in an outpatient community hospital-based pulmonary rehabilitation program. Holle RH, et al. **Chest** 1988 Dec; 94(6):1161–8 (35 ref.)

Objective evaluation of results of a pulmonary rehabilitation program in a community hospital. Mall RW, et al. **Chest** 1988 Dec;94(6):1156–60

A conservative approach to anterior knee pain. Whitelaw GP Jr, et al. **Clin Orthop** 1989 Sep;(246):234–7

Effect of passive muscle stretching in osteoarthritis of the hip. Leivseth G, et al. **Clin Sci** 1989 Jan;76(1):113–7

The gross motor function measure: a means to evaluate the effects of physical therapy. Russell DJ, et al. **Dev Med Child Neurol** 1989 Jun;31(3):341–52

Back pain in physiotherapists involved in back care education. Scholey M, et al. **Ergonomics** 1989 Feb; 32(2):179–90

Management of the patient with rheumatoid arthritis. The role of the hand therapist. Philips CA. **Hand Clin** 1989 May;5(2):291–309 (27 ref.)

The effectiveness of physical therapy in the treatment of chronic daily headaches. Jay GW, et al. **Headache** 1989 Mar;29(3):156–62

Psychological, social and physical interventions for cancer pain. Evans WO. **Indiana Med** 1989 Jul;82(7):524–5

Research values of occupational and physical therapists. Fisher AG, et al. **J Allied Health** 1989 Winter;18(2):143–55

Rehabilitative considerations for patients with severe Stevens-Johnson syndrome or toxic epidermal necrolysis. A case report. McDonald K, et al. **J Burn Care Rehabil** 1989 Mar–Apr;10(2):167–71

A nonsplinting approach to the care of the thermally injured patient. Schnebly WA, et al. **J Burn Care Rehabil** 1989 May–Jun;10(3):263–6

PT/OT abstracts needed [letter] Ward RS. **J Burn Care Rehabil** 1988 Jul–Aug;9(4):338

Post-operative management of flexor tendon grafting. Tonkin M, et al. **J Hand Surg [Br]** 1988 Aug;13(3):277–81

Should you be reading JMPT? [letter] Kell PM. **J Manipulative Physiol Ther** 1988 Aug;11(4):332

Clinical evaluation of physical therapy in the management of internal derangement of the temporomandibular joint. Kirk WS Jr, et al. **J Oral Maxillofac Surg** 1989 Feb; 47(2):113–9

Role of conventional physiotherapy in cystic fibrosis [see comments] Reisman JJ, et al. **J Pediatr** 1988 Oct; 113(4):632–6. **Comment in:** J Pediatr 1989 Jul;115(1):167–8

Parent involvement in physical therapy: a controversial issue. Short DL, et al. **J Pediatr Orthop** 1989 Jul–Aug;9(4):444–6

Short-term effect of two therapeutic methods on myofascial pain and dysfunction of the masticatory system. Burgess JA, et al. **J Prosthet Dent** 1988 Nov;60(5):606–10

Autogenic drainage: a modern approach to physiotherapy in cystic fibrosis. Schöni MH. **J R Soc Med** 1989;82 Suppl 16:32–7 (41 ref.)

Physical therapy for lymphoedema [letter] Casley-Smith JR, et al. **Med J Aust** 1989 May 1;150(9):542–3

Manipulative physiotherapy [letter] Neame A. **N Z Med J** 1989 Mar 8;102(863):112

Abducted shoulder for cervical radicular pain [letter] Jones GJ. **Neurosurgery** 1989 Mar;24(3):474

Frozen shoulder. Part II: Treatment by manipulation under anesthesia. Parker RD, et al. **Orthopedics** 1989 Jul; 12(7):989–90

Sixty-five-year index of Physical Therapy. **Phys Ther** 1986; :1–120

Proceedings of the APTA Conference on Clinical Decision Making in Physical Therapy Practice, Education and Research. October 2–3, 1988, Osage Beach, Missouri. **Phys Ther** 1989 Jul;69(7):523–617

Impact of role stress on physical therapists' emotional and physical well-being. Deckard GJ, et al. **Phys Ther** 1989 Sep;69(9):713–8

Outpatient views on direct access to physical therapy in Indiana. Durant TL, et al. **Phys Ther** 1989 Oct;69(10):850–7

Health beliefs and health behaviors of physical therapists. Glazer-Waldman HR, et al. **Phys Ther** 1989 Mar; 69(3):204–10

Obstetrical physical therapy. Review of the literature. Gleeson PB, et al. **Phys Ther** 1988 Nov;68(11):1699–702 (41 ref.)

A model of orthopaedic dysfunction for clinical decision making in physical therapy practice. Harris BA, et al. **Phys Ther** 1989 Jul;69(7):548–53 (12 ref.)

Effects of a developmental physical therapy program on oxygen saturation and heart rate in preterm infants. Kelly MK, et al. **Phys Ther** 1989 Jun;69(6):467–74

Low-load, prolonged stretch in treatment of elbow flexion contractures secondary to head trauma: a case report. MacKay-Lyons M. **Phys Ther** 1989 Apr;69(4):292–6

The neuropathic foot—a management scheme: a case report. Nawoczenski DA, et al. **Phys Ther** 1989 Apr;69(4):287–91

Diagnosis: defining the term [editorial] Rose SJ. **Phys Ther** 1989 Feb;69(2):162–3

Our body of knowledge revisited [editorial] Rose SJ. **Phys Ther** 1989 Apr;69(4):297–8

Integrating physiological principles into the comprehensive management of cardiopulmonary dysfunction. Ross J, et al. **Phys Ther** 1989 Apr;69(4):255–9 (45 ref.)

Rehabilitative services for hip fractures [letter] Levine AM. **Postgrad Med** 1988 Nov 15;84(7):26

Partners in care: physiotherapy and the GP. England S. **Practitioner** 1988 Nov 22;232(1459):1303–4

The Swedish back school in chronic low back pain. Part I. Benefits. Hurri H. **Scand J Rehabil Med** 1989;21(1):33–40

The Swedish back school in chronic low back pain. Part II. Factors predicting the outcome. Hurri H. **Scand J Rehabil Med** 1989;21(1):41–4

Long-term strength assessment of postoperative diskectomy patients. Kahanovitz N, et al. **Spine** 1989 Apr;14(4):402–3

[Factors of significance for short or prolonged duration of physiotherapeutic treatment from private practicing physiotherapists] Gregersen H, et al. **Ugeskr Laeger** 1989 May 8;151(19):1184–6 (Eng. Abstr.) **(Dan)**

[Therapeutic rehabilitation of stroke patients] Waltimo O. **Duodecim** 1989;105(7):729–35 (34 ref.) **(Fin)**

[Principles of rehabilitation in sub-acromio-coracoid pathology: the centered humeral head] Heuleu JN. **Rev Chir Orthop** 1988;74(4):290–1 **(Fre)**

[Ergotherapy in finger and middle hand fractures] Wolf M, et al. **Beitr Orthop Traumatol** 1989 Jun;36(6):274–8 (Eng. Abstr.) **(Ger)**

[Conservative functional treatment of fibular capsule ligament rupture even in the performance athlete?] Sommer HM, et al. **Sportverletz Sportschaden** 1987 Apr;1(1):25–9 (Eng. Abstr.) **(Ger)**

[Results of controls of hospital health in physical therapy facilities of the Potsdam district] Gastmeier P, et al. **Z Gesamte Hyg** 1988 May;34(5):292–3 (Eng. Abstr.) **(Ger)**

[Unilateral secondary postmastectomy arm lymphedema. Study of inpatient physical therapy] Pfaff A. **Z Lymphol** 1988 Jul;12(1):19–23 **(Ger)**

[Use of preformed physical factors in the complex prevention and treatment of gestoses] Strugatskiĭ VM, et al. **Akush Ginekol (Mosk)** 1988 Jun;(6):74–8 **(Rus)**

[Effect of regular physical training on the clinical course of stenocardia and results of bicycle ergometry in patients with ischemic heart disease] Dovgiallo OG, et al. **Kardiologiia** 1989 Feb;29(2):101–2 **(Rus)**

[Use of physiotherapy in the treatment of trophic ulcers] Alekseenko AV, et al. **Klin Khir** 1988;(7):41–3 (Eng. Abstr.) **(Rus)**

[Physical culture in the prevention and therapy of diseases in children] Fonarev MI. **Pediatriia** 1988;(4):5–8 **(Rus)**

[Analgesic effect of physiotherapy in osteoarthritis] Shvartsova I, et al. **Revmatologiia (Moskva)** 1988 Jul–Sep; (3):76–7 **(Rus)**

[The role of a sanatorium-health resort factor in the complex treatment of patients with chronic prostatitis] Darenkov AF, et al. **Urol Nefrol (Mosk)** 1989 Mar–Apr;(2):17–21 (Eng. Abstr.) **(Rus)**

[Rehabilitation treatment of patients with uncomplicated fractures of the spine at a hospital rehabilitation center] Bagaturiia GO, et al. **Vestn Khir** 1989 Feb;142(2):63–6 (Eng. Abstr.) **(Rus)**

[Current problems of physical therapy in patients with joint diseases] Grigor'eva VD. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Jul–Aug;(4):1–7 (0 ref.) (Eng. Abstr.) **(Rus)**

[A method of elaborating criteria for evaluation of the effectiveness of health resort treatment] Vaisburd IF. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 May–Jun; (3):74–5 **(Rus)**

[Effectiveness of ozokerite, balneo- and physiotherapy in the combined treatment of diabetes mellitus patients (the late results)] Zavadiak MI, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Jul–Aug;(4):55–6 (Eng. Abstr.) **(Rus)**

[Roentgenogrammetry in assessing the action of physiotherapy in patients with cervical osteochondrosis] Zharkov PL, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Jul–Aug;(4):62–4 (Eng. Abstr.) **(Rus)**

[Preformed physical factors in the prevention and treatment of wound infection after obstetrical operations] Zheleznova EB, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 May–Jun;(3):75–7 (55 ref.) **(Rus)**

[Effect of the microclimate of salt mines on T- and B-lymphocyte function in bronchial asthma patients] Simonka IuM, et al. **Vrach Delo** 1989 Mar;(3):57–9 (Eng. Abstr.) **(Rus)**

[Free motricity: a prognostic manoeuver in children with cerebral motor disease] Benavides-González HM, et al. **Bol Med Hosp Infant Mex** 1988 Jun;45(6):359–65 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

[The problem of femoral neck fracture in multiple sclerosis] Kiessling WR, et al. **Fortschr Neurol Psychiatr** 1989 Mar; 57(3):107–9 (Eng. Abstr.) **(Ger)**

ECONOMICS

Physiotherapists—a professional body [letter] Chan MJ. **N Z Med J** 1989 Aug 9;102(873):418

[Economic effectiveness of the rehabilitation of patients after operations on the stomach and biliary tract] Vygodner EB, et al. **Sov Zdravookhr** 1988;(8):12–5 (Eng. Abstr.) **(Rus)**

EDUCATION

The Lesion Game: a special communication. Guiteras DJ. **Phys Ther** 1989 Oct;69(10):858–62

Obstetrics-gynecology in the physical therapy curriculum: a follow-up study. Hulme JB, et al. **Phys Ther** 1989 Apr; 69(4):264–7

The work of accreditation on-site evaluators. Enhancing the development of a profession. Jensen GM. **Phys Ther** 1988 Oct;68(10):1517–25

Cooperative education in a physical therapy curriculum. Noonan AC. **Phys Ther** 1989 May;69(5):349–53

Improving physical therapy students' clinical problem-solving skills: an analytical questioning model. Slaughter DS, et al. **Phys Ther** 1989 Jun;69(6):441–7

Efficiency analysis of two written short-answer student evaluation formats. Stratford PW. **Phys Ther** 1988 Oct; 68(10):1546–9

[The role and place of physiotherapy among other medical disciplines in the current stage of the development of higher medical education] Shnipas PA, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 May–Jun; (3):69–70 **(Rus)**

[Problems in the teaching of physiotherapy and health resort medicine to physicians] Ulashchik VS.

Vopr Kurortol Fizioter Lech Fiz Kult 1989 Mar-Apr;(2):1-5 **(Rus)**

HISTORY

[The history of the organization and activities of the State Institute of Physiotherapy] Obrosov AN. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Nov-Dec; (6):64-6 **(Rus)**

INSTRUMENTATION

Efficacy of continuous passive motion (CPM) devices with hand burns. Covey MH, et al. **J Burn Care Rehabil** 1988 Jul-Aug;9(4):397-400

Design and preliminary evaluation of a portable instrument for assisting physiotherapists and occupational therapists in the rehabilitation of the hand. Durand LG, et al. **J Rehabil Res Dev** 1989 Spring;26(2):47-54

The effects of continuous passive motion on the temporomandibular joint after surgery. Part I. Appliance design and fabrication. Poremba EP, et al. **Oral Surg Oral Med Oral Pathol** 1989 May;67(5):490-8 (41 ref.)

Factors affecting Caltrac and Calcount accelerometer output. Balogun JA, et al. **Phys Ther** 1988 Oct;68(10):1500-4

Reliability of a new device used to measure shoulder subluxation. Hayes KW, et al. **Phys Ther** 1989 Sep; 69(9):762-7

Intrasession and intersession reliability of hand-held dynamometer measurements taken on brain-damaged patients. Riddle DL, et al. **Phys Ther** 1989 Mar;69(3):182-94

[A method of defined partial load on the lower extremity] Leonhardt K, et al. **Beitr Orthop Traumatol** 1988 Jun; 35(6):281-3 (Eng. Abstr.) **(Ger)**

[Basic principles of after care following autoplastic reconstruction of the cruciate ligament] Kohn D, et al. **Sportverletz Sportschaden** 1989 Jun;3(2):67-73 (43 ref.) (Eng. Abstr.) **(Ger)**

[Postoperative continuous passive motion following augmentation of anterior cruciate ligament ruptures with polydioxanone ligaments. Early results of a prospective study] Oberbillig C, et al. **Unfallchirurgie** 1989 Jun; 15(3):145-51 (Eng. Abstr.) **(Ger)**

MANPOWER

Rehabilitation growth fuels PT shortages. Koska MT. **Hospitals** 1989 Mar 5;63(5):32

Perceptual correlates of physician referral to physical therapists: implications for role expansion. Ritchey FJ, et al. **Soc Sci Med** 1989;28(1):69-80 (40 ref.)

METHODS

No effect of continuous passive motion after arthroplasty of the knee. Nielsen PT, et al. **Acta Orthop Scand** 1988 Oct;59(5):580-1

Fibromyalgia: a rehabilitation approach. A review. Buckelew SP. **Am J Phys Med Rehabil** 1989 Feb;68(1):37-42 (40 ref.)

Periarthrosis of the shoulder associated with diabetes mellitus. Friedman NA, et al. **Am J Phys Med Rehabil** 1989 Feb;68(1):12-4

The lymphedema chaos: a lancet. Földi E, et al. **Ann Plast Surg** 1989 Jun;22(6):505-15

Treatment of sprained ankles by physiotherapists at professional soccer clubs. Leaman AM, et al. **Arch Emerg Med** 1988 Sep;5(3):177-9

Ultrasound physiotherapy treatment and calibration measurements in simulated tissue. Bydder EL, et al. **Australas Phys Eng Sci Med** 1989 Mar;12(1):24-32

Physiotherapy methods of relieving pain. Moncur C, et al. **Baillieres Clin Rheumatol** 1987 Apr;1(1):183-93 (45 ref.)

Application of hydroelastic waves of the Chinese traditional medicine solution to the traumatotherapy. Wu YP, et al. **Biorheology** 1988;25(1-2):77-83

Evaluation of directed coughing in cystic fibrosis. Bain J, et al. **Br J Dis Chest** 1988 Apr;82(2):138-48

Chest physiotherapy: time for reappraisal. Sutton PP. **Br J Dis Chest** 1988 Apr;82(2):127-37 (88 ref.)

Rehabilitation of the shoulder and elbow after arthroscopy. Blackburn TA Jr. **Clin Sports Med** 1987 Jul;6(3):587-606 (7 ref.)

The effects of physical therapy on cerebral palsy [letter] Bower E. **Dev Med Child Neurol** 1989 Apr;31(2):266

Stretching soleus muscle to prevent contractures [letter] Hurvitz EA. **Dev Med Child Neurol** 1989 Feb;31(1):117-8

Physical therapy for infants with spastic diplegia [letter] Palmer FB, et al. **Dev Med Child Neurol** 1989 Feb; 31(1):128-9

Controlled trials of physical therapy [letter] Sparling J. **Dev Med Child Neurol** 1988 Dec;30(6):829-30

The role of the physiotherapist in motor neurone disease. Burford K. **Int J Rehabil Res** 1987;10(4 Suppl 5):176-9

The management of knee flexion contractures in haemophilia: brief report. Nelson IW, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):327-8

Case report on the use of CPM on an electrical burn. McAllister LP, et al. **J Burn Care Rehabil** 1988 Jul-Aug; 9(4):401

The therapist's role in the management of girls with Rett syndrome. Lieb-Lundell C. **J Child Neurol** 1988;3 Suppl:S31-4 (5 ref.)

Respiratory physiotherapy for cystic fibrosis [letter; comment] Webber BA, et al. **J Pediatr** 1989 Jul; 115(1):167-8. **Comment on:** J Pediatr 1988 Oct;113(4):632-6

Chest physiotherapy in preterm infants with RDS in the first 24 hours of life. Raval D, et al. **J Perinatol** 1987 Fall; 7(4):301-4

The effects of continuous passive motion on the temporomandibular joint after surgery. Part II. Appliance improvement, normal subject evaluation, pilot clinical trial. Sebastian MH, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):644-53 (9 ref.)

Diagnosis and direct access: reactions to editorial [letter] **Phys Ther** 1989 Jul;69(7):620-1

Effect of therapeutic horseback riding on posture in children with cerebral palsy. Bertoti DB. **Phys Ther** 1988 Oct; 68(10):1505-12

Objective measures. Bohannon RW. **Phys Ther** 1989 Jul; 69(7):590-3

Use of survey research methods to study clinical decision making: referral to physical therapy of children with cerebral palsy. Campbell SK, et al. **Phys Ther** 1989 Jul; 69(7):610-5

Modified Motor Assessment Scale [letter] Carr J, et al. **Phys Ther** 1989 Sep;69(9):780

Subjective measures and clinical decision making. Delitto A. **Phys Ther** 1989 Jul;69(7):585-9

On developing expert-based decision-support systems in physical therapy: the NIOSH low back atlas. Delitto A, et al. **Phys Ther** 1989 Jul;69(7):554-8

Hypothesis-oriented algorithms. Echternach JL, et al. **Phys Ther** 1989 Jul;69(7):559-64

Single-subject experimental paradigm as a clinical decision tool. Gonnella C. **Phys Ther** 1989 Jul;69(7):601-9

MARATHON update [letter] Harker DW. **Phys Ther** 1989 May;69(5):358-9

Qualitative methods in physical therapy research: a form of disciplined inquiry. Jensen GM. **Phys Ther** 1989 Jun; 69(6):492-500

Measuring subjective clinical outcomes. Jette AM. **Phys Ther** 1989 Jul;69(7):580-4

Intertester reliability of clinical judgments of medial knee ligament integrity. McClure PW, et al. **Phys Ther** 1989 Apr;69(4):268-75

Clinical decision making in physical therapy: a practitioner's perspective. Magistro CM. **Phys Ther** 1989 Jul;69(7):525-34

Comments and clarification by MICRO-FLEX Systems [letter] Nalder G. **Phys Ther** 1989 May;69(5):356-7

Making decisions based on group designs and meta-analysis. Norton BJ, et al. **Phys Ther** 1989 Jul;69(7):594-600

Management of a patient with a diagnosis of bilateral plantar fasciitis and Achilles tendinitis. A case report. Riddle DL, et al. **Phys Ther** 1988 Dec;68(12):1913-6

Physical therapy diagnosis: role and function. Rose SJ. **Phys Ther** 1989 Jul;69(7):535-7

On defining subjective and objective measurements. Rothstein JM. **Phys Ther** 1989 Jul;69(7):577-9

Confidence limits for your ICC [letter] Stratford P. **Phys Ther** 1989 Mar;69(3):237-8

Reliability: consistency or differentiating among subjects? [letter] Stratford P. **Phys Ther** 1989 Apr;69(4):299-300

Not really reliability? [letter] Stratford PW. **Phys Ther** 1989 Aug;69(8):700-2

Clinical decision analysis. Watts NT. **Phys Ther** 1989 Jul; 69(7):569-76

Problem-knowledge coupling: a tool for physical therapy clinical practice. Zimny NJ, et al. **Phys Ther** 1989 Feb; 69(2):155-61

Treatment and functional restoration of the patient with back pain. Horenstein S. **Semin Neurol** 1986 Dec;6(4):390-402 (18 ref.)

Application of computer-assisted gait training (CAGT) program for hemiparetic stroke patients: a preliminary report. Nakamura R, et al. **Tohoku J Exp Med** 1988 Oct; 156(2):101-7

[Physiatrics of the elderly as a special group] Isohanni A. **Duodecim** 1989;105(2):208-12 **(Fin)**

[Physiatric health promotion] Junnila SY. **Duodecim** 1989; 105(2):203-6 **(Fin)**

[Rehabilitation of spinal cord injuries] Kannisto M, et al. **Duodecim** 1989;105(2):166-73 (25 ref.) **(Fin)**

[The physiatrics of stroke rehabilitation] Waltimo O, et al. **Duodecim** 1989;105(2):159-65 (25 ref.) **(Fin)**

[The use of physical agents in the treatment of spasticity] Frischknecht R, et al. **Ther Umsch** 1988 Jul;45(7):437-47 (49 ref.) (Eng. Abstr.) **(Fre)**

[The value of physiotherapy in sports traumatology] Gremion G, et al. **Ther Umsch** 1988 Jul;45(7):448-57 (Eng. Abstr.) **(Fre)**

[The value of physical medicine in the treatment of algodystrophies] Olivier JP, et al. **Ther Umsch** 1988 Jul; 45(7):466-73 (Eng. Abstr.) **(Fre)**

[Several aspects of rehabilitation of the hemiplegic patient] Uebelhart D, et al. **Ther Umsch** 1988 Jul;45(7):484-9 (Eng. Abstr.) **(Fre)**

[The treatment of arthroses using physical agents] Walther C, et al. **Ther Umsch** 1988 Jul;45(7):490-4 (Eng. Abstr.) **(Fre)**

[Management and results of conservative treatment of patients with injuries of the thoracic and lumbar vertebrae] Bilow H, et al. **Aktuel Traumatol** 1988 Jul;18 Suppl 1:7-17 (Eng. Abstr.) **(Ger)**

[Physical therapy within the scope of treatment of fractures in children--recommendations of the Study Group of Pediatric Traumatology] Vinz H, et al. **Beitr Orthop Traumatol** 1988 Dec;35(12):629-33 (Eng. Abstr.) **(Ger)**

[Physical therapy possibilities in the treatment of collagen diseases] Knopf B, et al. **Dermatol Monatsschr** 1989; 175(6):340-7 (Eng. Abstr.) **(Ger)**

[Sudeck syndrome of the hand. Historical review, treatment concept and results] von Rothkirch T, et al. **Handchir Mikrochir Plast Chir** 1989 May;21(3):115-26 (59 ref.) (Eng. Abstr.) **(Ger)**

[Surgical and physical therapy treatment of benign paroxysmal positional vertigo] Häusler R, et al. **Laryngorhinootologie** 1989 Jun;68(6):349-54 (Eng. Abstr.) **(Ger)**

[Common structures of psychotherapy and movement therapy] Herzka HS, et al. **Prax Kinderpsychol Kinderpsychiatr** 1989 Jul-Aug; 38(6):216-9 (Eng. Abstr.) **(Ger)**

[Bronchial clearance by physical therapy] Siemon G. **Prax Klin Pneumol** 1988 Jul;42(7):637-8 (Eng. Abstr.) **(Ger)**

[Physical respiratory therapy with intrapulmonary percussion] Wolf C. **Prax Klin Pneumol** 1988 Jul; 42(7):639-40 (Eng. Abstr.) **(Ger)**

[Physical therapy of vertebral and spondylogenic syndromes] Birrer E. **Schweiz Rundsch Med Prax** 1988 Sep 6; 77(36):945-8 (Eng. Abstr.) **(Ger)**

[Physical therapy of patients in general practice. Role of the main groups of physical therapy methods in acute and chronic problems of the locomotor system] Oliveri M. **Schweiz Rundsch Med Prax** 1989 Mar 14;78(11):281-9 (Eng. Abstr.) **(Ger)**

[The treatment of "chronic strains"] Dejung B. **Schweiz Z Sportmed** 1988 Dec;36(4):161-8 (Eng. Abstr.) **(Ger)**

[Exercise therapy and physical therapy measures in the treatment of shoulder and arm pain] Itel R. **Ther Umsch** 1988 Nov;45(11):812-9 (Eng. Abstr.) **(Ger)**

[Fracture of the calcaneus--sequelae, therapy and expert assessment] Meeder PJ, et al. **Unfallchirurg** 1988 Nov; 91(11):516-22 (15 ref.) (Eng. Abstr.) **(Ger)**

[Postoperative treatment of knee joint arthrolyses with position changes or continuous passive movement] Wittenberg HR, et al. **Unfallchirurg** 1988 Dec; 91(12):545-50 (Eng. Abstr.) **(Ger)**

[Comparison of the effectiveness of acupuncture and physical therapy in ambulatory patients with gonarthrosis] Ammer K, et al. **Wien Med Wochenschr** 1988 Nov 30;138(22):566-9 (Eng. Abstr.) **(Ger)**

[Treatment of migraine with controlled reflex methods and stimulation therapy] Heydenreich A. **Z Arztl Fortbild (Jena)** 1988;82(24):1247-9 (0 ref.) **(Ger)**

[Physical therapy of primary headache] Taubert K. **Z Arztl Fortbild (Jena)** 1988;82(24):1251-3 (6 ref.) **(Ger)**

[Autonomic dysregulation in school children--possible effects of physical therapy] Adler S. **Z Gesamte Hyg** 1988 Nov;34(11):665-6 (Eng. Abstr.) **(Ger)**

[Physical therapy in chronic obstructive lung diseases] Conradi E. **Z Gesamte Inn Med** 1988 Jun 15;43(12):328-30 (16 ref.) (Eng. Abstr.) **(Ger)**

[Intensive basic therapy decreases the need for drug treatment and improves glucose control: an important result of the diabetes intervention study] Hanefeld M, et al. **Z Gesamte Inn Med** 1988 Dec 15;43(24):700-2 (Eng. Abstr.) **(Ger)**

[Early rehabilitation following myocardial infarct--results and conclusions] Reinhold D, et al. **Z Gesamte Inn Med** 1988 Dec 15;43(24):698-700 (Eng. Abstr.) **(Ger)**

[Peculiarities of physical therapy in endangiitis obliterans] Sohr C. **Z Gesamte Inn Med** 1988 Sep 15;43(18):517-9 (14 ref.) (Eng. Abstr.) **(Ger)**

[Conditioning treatment in hypotonia with complications] Weber HC, et al. **Z Gesamte Inn Med** 1988 Dec 15; 43(24):696-7 (Eng. Abstr.) **(Ger)**

[Physical therapy and sports in patients with chronic dermatitis] Breuer TM. **Z Hautkr** 1988;63 Suppl 4:100-3 (10 ref.) (Eng. Abstr.) **(Ger)**

[Unilateral secondary postmastectomy lymphedema of the arm. Study of inpatient physical therapy (II)] Pfaff A. **Z Lymphol** 1988 Dec;12(2):54-65 **(Ger)**

[Results of treatment in a 6-month movement and sports therapy rehabilitation program of children with cerebral palsy] Froböse I. **Z Orthop** 1989 Jan-Feb;127(1):108-10 (Eng. Abstr.) **(Ger)**

[Scoliosis in infancy] Matzen PF, et al. **Z Orthop** 1988 Dec; 126(6):658-60 (Eng. Abstr.) **(Ger)**

[Concept of functional therapy exemplified by fresh closed humeral fracture] Ekkernkamp A, et al. **Zentralbl Chir** 1989;114(12):788-92 (Eng. Abstr.) **(Ger)**

[The potentials of physiotherapy for gynecologic patients at a women's consultation service] Loginova NE, et al. **Akush Ginekol (Mosk)** 1988 Aug;(8):74-9 **(Rus)**

[Physical methods in the combined therapy of hyphema and hemophthalmos] Imshenetskaia TA, et al. **Oftalmol Zh** 1988;(5):306-10 (54 ref.) **(Rus)**

[Physical factors in the complex treatment of bronchial asthma in children] Karachentseva TV, et al. **Pediatriia** 1989;(5):79-85 **(Rus)**

[Physiotherapy in middle age] Prokhorchik AF, et al. **Voen Med Zh** 1988 Aug;(8):63-5 **(Rus)**

[Use of computers for setting individual physical loads in the rehabilitation of patients with ischemic heart disease at a sanatorium] Churiukin GD, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Jul-Aug;(4):11-3 (Eng. Abstr.) **(Rus)**

[The use of mathematical methods in problem solving in health resort medicine and physiotherapy] Oranskiĭ IE, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Jul-Aug; (4):7-11 (Eng. Abstr.) **(Rus)**

[Treatment of autonomic vascular dystonia by combined physiotherapy methods] Lobzin VS, et al. **Vrach Delo** 1989 Mar;(3):22-3 (Eng. Abstr.) **(Rus)**

[Ambulatory treatment of hypertension patients using physical methods] Orzheshkovskiĭ VV, et al. **Vrach Delo** 1989 Apr;(4):47-8 (Eng. Abstr.) **(Rus)**

[Physiotherapeutic immune correction in patients with a history of infectious-allergic myocarditis] Vykhovaniuk IV, et al. **Vrach Delo** 1988 Sep;(9):54-6 (Eng. Abstr.) **(Rus)**

[Conductive education in integral rehabilitation of patients with cerebral palsy] Calderón-González R, et al. **Bol Med Hosp Infant Mex** 1989 Apr;46(4):265-71 (Eng. Abstr.) **(Spa)**

ORGANIZATION & ADMINISTRATION

Salary, education, and managerial-level differences of physical therapists in Maryland. Baker CL, et al. **Phys Ther** 1989 Jan;69(1):27-31

Section educational opportunities [letter] Johnson GR. **Phys Ther** 1989 Aug;69(8):702

Organizational socialization of physical therapists. Smith DM. **Phys Ther** 1989 Apr;69(4):282-6

PSYCHOLOGY

Behavioral contracting to increase chest physiotherapy. A study of a young cystic fibrosis patient. Stark LJ, et al. **Behav Modif** 1987 Jan;11(1):75-86

[Physiotherapy is a humane interaction] Talvitie U. **Duodecim** 1989;105(2):222-5 **(Fin)**

STANDARDS

Quality assurance: standard physiotherapy assessment forms and computerization. Nosworthy JC, et al. **Aust Clin Rev** 1989;9(1):46-8

Autonomy-based informed consent: ethical implications for patient noncompliance. Coy JA. **Phys Ther** 1989 Oct; 69(10):826-33

[Ways of increasing the effectiveness of the sanatorium and health resort stages of rehabilitation treatment of gynecologic patients] Khomianina NS, et al. **Sov Zdravookhr** 1988;(8):23-7 (Eng. Abstr.) **(Rus)**

STATISTICS & NUMERICAL DATA

Does balloon dilatation and anal sphincter training improve ileoanal-pouch function? Oresland T, et al. **Int J Color Dis** 1988 Aug;3(3):153-7

Monitoring polio trends from physiotherapy records. Independent sentinel surveillance in Pakistan. Miles M. **Trop Doct** 1989 Jan;19(1):3-5

SUPPLY & DISTRIBUTION

The availability of physiotherapy services within the National Health Service--changing trends in England and Wales. Partridge C. **Int J Rehabil Res** 1987;10(4 Suppl 5):171-2

[A system for analyzing the organization of physiotherapeutic services for the population of large cities] Kant MM, et al. **Sov Zdravookhr** 1988;(8):16-20 **(Rus)**

TRENDS

Gathering storms [editorial] Rose SJ. **Phys Ther** 1989 May; 69(5):354-5

Musing on diagnosis [editorial] Rose SJ. **Phys Ther** 1988 Nov; 68(11):1665

Diagnosis by the physical therapist--a prerequisite for treatment. A special communication. Sahrmann SA. **Phys Ther** 1988 Nov;68(11):1703-6 (12 ref.)

VETERINARY

Abomasal volvulus in cattle following correction of left displacement by casting and rolling. St. Jean G, et al. **Cornell Vet** 1989 Oct;79(4):345-51

PHYSICAL THERAPY DEPARTMENT, HOSPITAL see under **HOSPITAL DEPARTMENTS**

PHYSICALLY HANDICAPPED see **HANDICAPPED**

PHYSICIAN IMPAIRMENT

Mental illness in doctors [letter] a'Brook MF. **BMJ** 1989 Mar 4;298(6673):603

Sick doctors [letter] Philipp R, et al. **BMJ** 1989 Jul 8; 299(6691):122

Mental illness in doctors. Pilowski L, et al. **BMJ** 1989 Feb 4;298(6669):269-70

Impaired physicians: they are not the only ones at risk. Jacyk W. **Can Med Assoc J** 1989 Jul 15;141(2):147-8

Getting help for depressed colleagues [letter] Lattey M. **Can Med Assoc J** 1989 Mar 15;140(6):588

Hopelessness and helplessness: treating the doctors who treat AIDS patients. LeBourdais E. **Can Med Assoc J** 1989 Feb 15;140(4):440-3

Drunk doctors: in Nova Scotia, they're tackling the problem head on. Trent B. **Can Med Assoc J** 1989 Jul 1;141(1):52-5

HIV-infected physicians and the practice of seriously invasive procedures. Gostin L. **Hastings Cent Rep** 1989 Jan-Feb;19(1):32-9

Professional discipline [editorial] Alberts ME. **Iowa Med** 1988 Nov;78(11):533

The alcohol-impaired dentist: an educational challenge. Peterson RL, et al. **J Am Dent Assoc** 1988 Nov; 117(6):743-8

Doctors and dependency. Martindale JL. **J Arkansas Med Soc** 1988 Aug;85(3):129-30

Physician heal thyself [letter] **J Ky Med Assoc** 1989 Jul; 87(7):343

The impaired physicians program: comments on the minority report [editorial] Cohen MD. **J Med Assoc Ga** 1988 Aug; 77(8):618

MSMA impaired physicians program: an overview. Moffitt EM. **J Miss State Med Assoc** 1988 Dec;29(12):377-8

Impaired black physicians: a methodology for detection and rehabilitation. Carter JH. **J Natl Med Assoc** 1989 Jun; 81(6):663-7 (11 ref.)

The New York State Medical Society Impaired Physician Program [letter] Landolt AB. **JAMA** 1989 Mar 17; 261(11):1584

Managing the sick doctor [editorial] **Lancet** 1989 Aug 19; 2(8660):428

The doctor as patient: bioethical dilemmas reflected in literary narratives. Budge A, et al. **Lit Med** 1988;7:132-7

The ethics of impaired physicians: Wolfe's Dr. McGuire and Williams's Dr. Rivers. Willms J, et al. **Lit Med** 1988; 7:123-31

The way back. Dekornfeld TJ. **Mich Med** 1988 Jul;87(7):428, 430

Urine testing in impaired physicians. Croughan J, et al. **Mo Med** 1989 Jun;86(6):341-2

Creating the North Carolina Physicians Health and Effectiveness Program. Foust JW. **N C Med J** 1989 Jul; 50(7):368-70

Will you help a troubled physician? The North Carolina Physicians Health and Effectiveness Program. Vanderberry R. **N C Med J** 1989 Jul;50(7):372-3

Preemployment drug testing of housestaff physicians [letter] Lewy R. **N Y State J Med** 1988 Oct;88(10):553-4

402-393-3216. Raymond R. **Nebr Med J** 1989 Sep;74(9):289

The chemically dependent physician: clinical and legal considerations. Angres DH, et al. **New Dir Ment Health Serv** 1989 Spring;(41):21-32

The evaluation of the impaired physician. Logan WS. **New Dir Ment Health Serv** 1989 Spring;(41):33-53

A physician's ethical obligation to expose incompetent or unethical colleagues. Clarke OW. **Ohio Med** 1989 May; 85(5):376-7

Treating the chemically impaired medical family. Samkoff JS, et al. **Pa Med** 1989 Feb;92(2):32, 34

Families and physician impairment. Samkoff JS, et al. **Pa Med** 1989 Jan;92(1):38-9

The physician at the movies. Crawshaw R. **Pharos** 1988 Summer;51(3):43-6

Substance use and abuse among senior medical students in 23 medical schools. Baldwin DC Jr, et al. **Proc Annu Conf Res Med Educ** 1988;27:262-7

Substance use and the resident physician: a national study. Conard SE, et al. **Proc Annu Conf Res Med Educ** 1988; 27:256-61

Physicians' stress in the coronary care units. Hasegawa A, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 20;11 Suppl:474-9

Portrait of an impaired physician. Fluharty DG Jr. **Va Med** 1989 Jun;116(6):266-9

The physician recumbent. McGuire LB. **Va Med** 1988 Aug; 115(8):390-2

A new approach to impaired physicians. Adams TL. **Wis Med J** 1988 Aug;87(8):3-4

LEGISLATION & JURISPRUDENCE

The case of Dr. Y. Leitner WA. **Ala Med** 1989 Jan;58(7):9-10

Dealing with sickness and incompetence: success and failure. Smith R. **BMJ** 1989 Jun 24;298(6689):1695-8

Management and rehabilitation of sexually exploitive therapists. Gartrell N, et al. **Hosp Community Psychiatry** 1988 Oct;39(10):1070-4

Suspended doctors in the Health Service. Brahams D. **Lancet** 1988 Nov 19;2(8621):1205

Minnesota's physician reporting law: when am I my brother's or sister's keeper? Part I. Eelkema R, et al. **Minn Med** 1988 Sep;71(9):551-3

Addressing the problem of the impaired physician. Krizek CR. **New Dir Ment Health Serv** 1989 Spring;(41):11-9 (9 ref.)

Is justice served? Havener WH. **Ohio Med** 1989 Jan;85(1):11

Councilors rule on health facility ownership, AIDS, other issues [news] **Tex Med** 1989 May;85(5):13-4

Impaired physicians who are seeking help. Peer assistance, not public identification. Dickison HW. **W V Med J** 1989 Sep;85(9):390

PREVENTION & CONTROL

Drug abuse and the physician [editorial] Abraham GE 2d. **J Miss State Med Assoc** 1989 Mar;30(3):85

Message to Rhode Island physicians. Coustan DR, et al. **R I Med J** 1989 Aug;72(8):269-70

STATISTICS & NUMERICAL DATA

Mental health, job satisfaction, and job stress among general practitioners. Cooper CL, et al. **BMJ** 1989 Feb 11; 298(6670):366-70

PHYSICIAN INCENTIVE PLANS see under **PERSONNEL MANAGEMENT**

PHYSICIAN-PATIENT RELATIONS

see related
TRUTH DISCLOSURE

Responding to the patient who has AIDS. Koop CE. **Acad Med** 1989 Mar;64(3):113-5

Evaluating the interview performance of internal medicine interns. Meuleman JR, et al. **Acad Med**. 1989 May; 64(5):277-9

Short stories about doctors and patients: a course [letter] Ness DE. **Acad Med** 1989 Jul;64(7):390-1

Teaching first-year students the interpersonal recall process for patient interviews. Paniagua FA, et al. **Acad Med** 1989 Mar;64(3):170-1

A workshop to foster medical humanism in residents. Tarail M, et al. **Acad Med** 1989 May;64(5):280

Prolonged disability from job-related injury. Goodwin PA. **Am Fam Physician** 1988 Nov;38(5):165-70

The dying elderly patient. Streim JE, et al. **Am Fam Physician** 1988 Nov;38(5):175-83

Third party payments. The doctor/patient relationship. Self WM. **Am J Dermatopathol** 1988 Dec;10(6):549-51

The gastroenterologist and the graying of America. Almy TP. **Am J Gastroenterol** 1989 May;84(5):464-8

A nameless obituary. Reflections on the depersonalization of the elderly. Falk RH. **Am J Med** 1987 Dec;83(6):1134

Miss Alice and me: a lesson learned [letter] Hurich B. **Am J Med** 1989 Aug;87(2):244-5

Failed communication about life-support therapy: silent physicians and mute patients [editorial] Kinsella TD, et al. **Am J Med** 1989 Jun;86(6 Pt 1):643-4

One particular leviathan. LaCombe MA. **Am J Med** 1989 Mar;86(3):319-21

An affair of the heart. LaCombe MA. **Am J Med** 1987 Dec; 83(6):1131-3

Ode to my first patient. Mark RK. **Am J Med** 1989 May; 86(5):584

Miss Alice and me. Schwartz SN. **Am J Med** 1989 Jan; 86(1):93

Untrapping the metaphor of AIDS. Ward M, et al. **Am J Med** 1987 Dec;83(6):1135-7

Physician-patient privilege: who may have access to medical records? [clinical conference] **Am J Med Sci** 1989 Mar; 297(3):197-202

Influence of nondepressive psychiatric symptoms on whether patients tell a doctor about depression. Bucholz KK, et al. **Am J Psychiatry** 1989 May;146(5):640-4

Patients' surreptitious taping of forensic psychiatric examinations [letter] Goldstein RL. **Am J Psychiatry** 1989 Feb;146(2):279-80

Borderline personality disorder, boundary violations, and patient-therapist sex: medicolegal pitfalls. Gutheil TG. **Am J Psychiatry** 1989 May;146(5):597-602 (20 ref.)

Importance of the transference and therapeutic alliance in pharmacotherapy [letter] Kaminstein P. **Am J Psychiatry** 1989 Mar;146(3):404-5

Therapist-patient sexual involvement [letter] Mogul KM. **Am J Psychiatry** 1989 Oct;146(10):1356

This drug--what for? [letter] Borg WL. **Am Pharm** 1988 Nov;NS28(11):4

The impact of AIDS on practitioner and client. Notes for the therapeutic relationship. McKusick L. **Am Psychol** 1988 Nov;43(11):935-40

The doctor-patient-family relationship: a compensatory alliance. Hahn SR, et al. **Ann Intern Med** 1988 Dec 1; 109(11):884-9

Doctor, patient, and family [letter] Immerman K. **Ann Intern Med** 1989 Mar 1;110(5):412-3

The physician and the family [letter] Mauksch LB. **Ann Intern Med** 1989 May 15;110(10):848-9

Recognizing and adjusting to barriers in doctor-patient communication. Quill TE. **Ann Intern Med** 1989 Jul 1; 111(1):51-7 (32 ref.)

Tort, contract, and the patient-physician relationship [letter] Rubin H. **Ann Intern Med** 1988 Dec 1;109(11):929-30

Studies of doctor-patient interaction. Roter DL, et al. **Annu Rev Public Health** 1989;10:163-80 (59 ref.)

Effect of patient gender on evaluation of intern performance. Lieberman PB, et al. **Arch Intern Med** 1989 Aug; 149(8):1825-9

The residency-practice training mismatch [letter] Reynolds MD. **Arch Intern Med** 1989 Jun;149(6):1459

Tales of the unexpected or a sheep called Charlie. **Aust Fam Physician** 1989 Jun;18(6):692-3

Where the buck stops. Colquhoun JP. **Aust Fam Physician** 1989 Mar;18(3):257

Doctors around the world. Are they getting through? Hull

R. **Aust Fam Physician** 1989 Mar;18(3):258, 260–5
The dangerousness of psychiatrists. Ellard J. **Aust N Z J Psychiatry** 1989 Jun;23(2):169–75 (28 ref.)
Time to let the patient speak. Blau JN. **BMJ** 1989 Jan 7; 298(6665):39
General practitioners' attitudes towards AIDS [letter] Chetwynd J. **BMJ** 1989 Jul 22;299(6693):258
Form of address: an addition to history taking? [letter] Elizabeth JE. **BMJ** 1989 Jan 28;298(6668):257
Difficult patients: black holes and secrets. Gerrard TJ, et al. **BMJ** 1988 Aug 20–27;297(6647):530–2
Advertising by doctors and the public interest [editorial] Havard JD. **BMJ** 1989 Apr 8;298(6678):903–4
I do not love thee Mr Fell.... Jewell D. **BMJ** 1988 Aug 20–27; 297(6647):498–9
Communicate with cancer patients: 1. Handling bad news and difficult questions. Maguire P, et al. **BMJ** 1988 Oct 8;297(6653):907–9
Five years of heartsink patients in general practice. O'Dowd TC. **BMJ** 1988 Aug 20–27;297(6647):528–30
Time to let the patient speak [letter] Oisburgh B, et al. **BMJ** 1989 Feb 18;298(6671):458
Signals from the somatising patient [letter] Price J. **BMJ** 1989 Jul 8;299(6691):122
Time to let the patient speak [letter] Wilkinson C. **BMJ** 1989 Feb 11;298(6670):389
Self-disclosure in a clinical context by Asian and British psychiatric out-patients. Bennett M, et al. **Br J Clin Psychol** 1989 May;28 (Pt 2):155–63
The significance of the patient–therapist relationship in the treatment of obsessive-compulsive neurosis. Hoogduin CA, et al. **Br J Clin Psychol** 1989 May;28 (Pt 2):185–6
The hospital letter: room for improvement [letter] **Br J Hosp Med** 1989 Jun;41(6):589
Explanations may avoid litigation [letter] **Br J Hosp Med** 1988 Nov;40(5):406
Supportive psychotherapy: a contradiction in terms [letter] **Br J Psychiatry** 1988 Jun;152:855–7
Supportive analytical psychotherapy. An account of two cases. Holmes J. **Br J Psychiatry** 1988 Jun;152:824–9
Framing of information: its influence upon decisions of doctors and patients. Marteau TM. **Br J Soc Psychol** 1989 Mar;28 (Pt 1):89–94
Medical education & health care—is there a conflict? Clarke C. **Bristol Med Chir J** 1988 Feb;103(1):5–7
The clinician–investigator interface in psychiatry I—Values and problems. Garfinkel PE, et al. **Can J Psychiatry** 1989 Jun;34(5):361–3 (11 ref.)
The clinician–investigator interface in psychiatry: II—The role of the Clinical Investigation Unit. Garfinkel PE, et al. **Can J Psychiatry** 1989 Jun;34(5):364–8
Sexual exploitation of patients. The position of the Canadian Psychiatric Association. Sreenivasan U. **Can J Psychiatry** 1989 Apr;34(3):234–7 **(Eng, Fre)**
Is professional courtesy disappearing? [letter] Buncic JR. **Can Med Assoc J** 1988 Nov 1;139(9):827
MDs who don't communicate will lose patients, consultant warns [interview by Patrick Sullivan] Harrison K. **Can Med Assoc J** 1988 Nov 1;139(9):894
"Why are you going into geriatrics"? Kirshen AJ. **Can Med Assoc J** 1989 Apr 1;140(7):846–7
Exemplary family physicians and consultants: empirical definition of contemporary medical practice. Langley GR, et al. **Can Med Assoc J** 1989 Aug 15;141(4):301–7
The decision not to resuscitate: talking with patients and families. Latimer E. **Can Med Assoc J** 1989 Jan 15; 140(2):133–5
Should we tell them when their blood pressure is up? Linden W, et al. **Can Med Assoc J** 1989 Sep 1;141(5):409–15
Letting patients know where you stand [letter] Ney PG. **Can Med Assoc J** 1989 Mar 15;140(6):586
Chronic pain is an invisible reality [letter] Sheffman EJ. **Can Med Assoc J** 1988 Dec 15;139(12):1129
At Queen's, students learn the ropes at the old house on Stuart Street. Trent B. **Can Med Assoc J** 1989 Aug 1; 141(3):241–2
On "gentleness". Miller GA. **Cathet Cardiovasc Diagn** 1989 Aug;17(4):246–7
Malignancy as it affects the patient. Kushner H. **Clin Neurosurg** 1989;35:336–48
Emotional aspects of endometriosis: a physician's perspective. Jones KP. **Clin Obstet Gynecol** 1988 Dec;31(4):874–82
An approach to patients with endometriosis. Miller MM, et al. **Clin Obstet Gynecol** 1988 Dec;31(4):883–9
The emotional aspects of endometriosis: what the patient expects from her doctor. Weinstein K. **Clin Obstet Gynecol** 1988 Dec;31(4):866–73
Discontinuation of the physician–patient relationship. **Colo Med** 1989 May 15;86(10):174
The stresses of caring. Swogger G Jr. **Colo Med** 1988 Nov 15;85(21):453–4
One-to-one relationships with the long-term mentally ill: issues in training professionals. Lamb HR. **Community Ment Health J** 1988 Winter;24(4):328–37
Health care of the chronically mentally ill: the culture broker model. Schwab B, et al. **Community Ment Health J** 1988 Fall;24(3):174–84
Listen ... and you shall hear! Ariyan S. **Conn Med** 1988 Dec; 52(12):715–6
'Life after...' [letter] Fuldner RV. **Conn Med** 1989 Feb; 53(2):123
Life after.... Kendrick PR. **Conn Med** 1988 Dec;52(12):711–3
The oath, the art, the caring [editorial] Maletz FW. **Conn Med** 1989 Jul;53(7):431–2
Reflections on medicine. Too much science? Massey RU. **Conn Med** 1989 Feb;53(2):119
Zen and the art of brain maintenance. Severinghaus JW. **Crit Care Med** 1988 Oct;16(10):1019–21
Misunderstanding as therapy: doctors, patients and medicines in a rural clinic in Sri Lanka. Sachs L. **Cult Med Psychiatry** 1989 Sep;13(3):335–49
The decision. Cohen PR. **Cutis** 1988 Oct;42(4):283–4
Psychocutaneous medicine: delusions of parasitosis [letter] Koblenzer CS. **Cutis** 1989 Jul;44(1):72–3
My most unforgettable case. A workmanlike job. Levenson I. **Cutis** 1989 Mar;43(3):205
Pointing fingers [editorial] Robbins DC. **Diabetes Care** 1988 Oct;11(9):743–4
Compliance—a joint effort of the patient and his doctor. Feuerstein M, et al. **Epilepsy Res Suppl** 1988;1:51–6
The family approach at each moment. Candib LM. **Fam Med** 1985 Sep–Oct;17(5):201–8
Gender issues: family medicine's family secret [editorial] McDaniel SH, et al. **Fam Med** 1988 Nov–Dec;20(6):408–10
From soma to psyche: The crucial connection. (Perspectives on behavioral and cross cultural medicine addressed to first-year residents). Part 1. It ain't what you do—its the way how you do it: Style as substance [published erratum appears in Fam Med 1988 Nov–Dec;20(6):456–7] Marcus L, et al. **Fam Med** 1988 Sep–Oct;20(5):368–73
From soma to psyche: the crucial connection. Part 2. 'Cross-cultural medicine' decoded: learning about 'us' in the act of learning about 'them'. Marcus L, et al. **Fam Med** 1988 Nov–Dec;20(6):449–57 (28 ref.)
Helping people understand, a challenge of our time [letter] Medalie JH. **Fam Med** 1988 Jul–Aug;20(4):243–4
Disarming the family ghost: a family of origin experience. Mengel MB, et al. **Fam Med** 1989 Jan–Feb;21(1):45–9
Family medicine and the developmentally disabled: a relationship worth building [editorial] Pincus S, et al. **Fam Med** 1988 Sep–Oct;20(5):322–3
What is therapeutic in clinical relationships? Stein HF. **Fam Med** 1985 Sep–Oct;17(5):188–94
The submerged part of the iceberg and the family physician. Biderman A, et al. **Fam Pract** 1988 Sep;5(3):174–6
How doctors learn in a Balint group. Samuel O. **Fam Pract** 1989 Jun;6(2):108–13
How illness presents: a study in the People's Republic of China. Smith CK, et al. **Fam Pract** 1988 Sep;5(3):177–83
Leadership role of the rheumatologist: toward reaching a consensus. Calin A. **Gerontology** 1988;34 Suppl 1:42–4
Ethics and the daily language of medical discourse. Poirier S, et al. **Hastings Cent Rep** 1988 Aug–Sep;18(4):5–9
A rogue is a rogue is a rogue [letter] Surman OS. **Hastings Cent Rep** 1988 Oct–Nov;18(5):52
Ethical dilemmas in head and neck cancer. Frank HA, et al. **Head Neck** 1989 Jan–Feb;11(1):22–6
Why doctors get bad care [editorial] Adelman S. **Henry Ford Hosp Med J** 1988;36(2):132
Patient or client? [letter] **Hosp Community Psychiatry** 1989 May;40(5):535–8
Patient or client? Shore MF. **Hosp Community Psychiatry** 1988 Dec;39(12):1247
Assessment of the person. Stollerman GH. **Hosp Pract [Off]** 1989 Apr 30;24(4A):13–4, 16–7
Assessing the person now more than ever [letter] Volpintesta EJ. **Hosp Pract [Off]** 1989 May 30;24(5A):13
Physician/patient relationship prevails. Gallagher J. **IMJ** 1988 Jul;174(1):18–9
Confidentiality—a physician's tool for effective medical treatment. Macri PA. **Indiana Med** 1989 Feb;82(2):126–9
An ethical model for improving the patient–physician relationship. McCullough LB. **Inquiry** 1988 Winter; 25(4):454–68
Therapist gender and the same-sex puberty age psychotherapy group. Kennedy JF. **Int J Group Psychother** 1989 Apr;39(2):255–63
Differences in attitudes toward patients among medical specialties. Roskin G, et al. **Int J Psychiatry Med** 1988; 18(3):223–33
Where does the common ground among psychoanalysts end? Appy G. **Int J Psychoanal** 1989;70 (Pt 1):7–11
A shared view of the world. Goldberg A. **Int J Psychoanal** 1989;70 (Pt 1):16–20
Unwelcome guests: bugbears of the emergency room physician. Adityanjee, et al. **Int J Soc Psychiatry** 1988 Autumn;34(3):196–9
The quest for penile prosthesis: some uncommon aspects of the physician–patient relationship. Hertz DG, et al. **Isr J Psychiatry Relat Sci** 1988;25(2):113–25
Treatment of tetracycline toxicity with tetracycline [letter] Fisher M. **J Adolesc Health Care** 1989 Jan;10(1):57
Ave curator cutis! [letter] Chiarello SE. **J Am Acad Dermatol** 1988 Sep;19(3):567
The "holding function" of the therapist in the treatment of borderline patients. Richard-Jodoin RM. **J Am Acad Psychoanal** 1989 Summer;17(2):305–12
Medical care among strangers [letter] Ewing DR. **J Am Board Fam Pract** 1988 Oct–Dec;1(4):296
Any more cordials to the drooping spirit? Professional ethics, 1847–1989. Stephens GG. **J Am Board Fam Pract** 1989 Jul–Sep;2(3):212–5
Medical care among strangers. Stephens GG. **J Am Board Fam Pract** 1988 Jul–Sep;1(3):220–2
Living wills improve patient–physician communication [editorial] Allen TW. **J Am Osteopath Assoc** 1989 Aug; 89(8):1013
UNECOM's humanities program: an education in caring [letter] Perakis CR. **J Am Osteopath Assoc** 1989 Mar; 89(3):273, 276
An inventory to measure medical staff knowledge of behavioral methods with pediatric pain patients. Tarnowski KJ, et al. **J Behav Ther Exp Psychiatry** 1988 Dec; 19(4):281–4
At least do no harm [editorial] Hudacek AG. **J Bone Joint Surg [Am]** 1989 Apr;71(4):479–80
A reappraisal of some professional attitudes in orthopaedic surgery [letter] Rubacky GE. **J Bone Joint Surg [Am]** 1989 Aug;71(7):1108
Referral to child psychiatry: parent and doctor motives and expectations. Bailey D, et al. **J Child Psychol Psychiatry** 1989 May;30(3):449–58
Telling the diagnosis of cancer. Lind SE, et al. **J Clin Oncol** 1989 May;7(5):583–9
Doctor–patient communication and ethical issues [editorial] Parker LM. **J Clin Oncol** 1989 Sep;7(9):1182–3
Doctor–patient communication about breast cancer adjuvant therapy. Siminoff LA, et al. **J Clin Oncol** 1989 Sep; 7(9):1192–200
View from the Nation's Courts. Freishtat HW. **J Clin Psychopharmacol** 1988 Dec;8(6):434–6
Patient information and patient preparation in orthognathic surgery. The role of an information brochure a medical audit study. Rittersma J. **J Craniomaxillofac Surg** 1989 Aug; 17(6):278–9
First vs last name preferences of patients [letter] **J Fam Pract** 1989 Mar;28(3):329, 333
How patients and physicians address each other in the office [see comments] Bergman JJ, et al. **J Fam Pract** 1988 Oct; 27(4):399–402. **Comment in:** J Fam Pract 1989 Apr;28(4):388
Use of first name [letter; comment] Deisher JB. **J Fam Pract** 1989 Apr;28(4):388. **Comment on:** J Fam Pract 1988 Oct;27(4):399–402
Physician perspectives on the role of religion in the physician–older patient relationship. Koenig HG, et al. **J Fam Pract** 1989 Apr;28(4):441–8
Balint groups and difficult physician–patient relationships [letter] Pomeroy DP. **J Fam Pract** 1989 Jul;29(1):16–7
Physician and patient determinants of difficult physician–patient relationships. Schwenk TL, et al. **J Fam Pract** 1989 Jan;28(1):59–63
Advancements change nature of medicine. Butler ME. **J Fla Med Assoc** 1988 Sep;75(9):616–7
On speaking a foreign language. Anders DL. **J Gen Intern Med** 1989 Mar–Apr;4(2):133
The language of patient care [editorial] Branch WT. **J Gen Intern Med** 1989 Jul–Aug;4(4):359
Why a family doctor? [letter] Brungardt GS. **J Gen Intern Med** 1989 Jul–Aug;4(4):362
A new instrument for patients' ratings of physician performance in the hospital setting. Matthews DA, et al. **J Gen Intern Med** 1989 Jan–Feb;4(1):14–22
The language of attentive patient care: a comparison of two medical interviews. Mishler EG, et al. **J Gen Intern Med** 1989 Jul–Aug;4(4):325–35 (34 ref.)
Normative judgments and personal preferences [letter] Schacht TE. **J Gen Intern Med** 1989 Jul–Aug;4(4):360–1
Caring for the frail older patient: the doctor–patient–family caregiver relationship. Silliman RA. **J Gen Intern Med** 1989 May–Jun;4(3):237–41
Will sharing uncertainty reduce physician effectiveness? [letter] Simon GE. **J Gen Intern Med** 1988 Sep–Oct; 3(5):520–1
Relationship of patient request fulfillment to compliance, glycemic control, and other health care outcomes in insulin-dependent diabetes. Uhlmann RF, et al. **J Gen Intern Med** 1988 Sep–Oct;3(5):458–63
A critical theory of medical discourse: ideology, social control, and the processing of social context in medical encounters. Waitzkin H. **J Health Soc Behav** 1989 Jun; 30(2):220–39
Teaching medical students to use simple language when talking with patients. Cohen I. **J La State Med Soc** 1989 Jan;141(1):33–6
Patient dignity, physician dignity, and medical education. Cohen I, et al. **J La State Med Soc** 1988 Aug;140(8):3–4
Vulnerability, gratuitous service, and trust. Cohen IP. **J La State Med Soc** 1989 Aug;141(8):5–6
Foundations of decision-making: the necessity for philosophical considerations in the physician–patient relationship. Meyers S. **J La State Med Soc** 1988 Oct; 140(10):3–5
The ENT consultation: a prospective study of the doctor's and the patient's perceptions. Sim DW. **J Laryngol Otol** 1989 Apr;103(4):363–5
"Just push away from the table"! Cooper JT. **J Med Assoc Ga** 1989 Apr;78(4):209–11
Telling the whole truth—optimist or crepe hanger? Summers R. **J Med Assoc Ga** 1988 Dec;77(12):889–91
On cybernetics. Underwood CR. **J Med Assoc Ga** 1988 Aug; 77(8):616–7
What doctors should call their patients. Lavin M. **J Med Ethics** 1988 Sep;14(3):129–31
Limited autonomy and partnership: professional relationships in health care. Wilson-Barnett J. **J Med Ethics** 1989 Mar;

15(1):12–6
Our image: self-service or self-sacrifice [editorial] Hill JE. **J Miss State Med Assoc** 1989 Jun;30(6):184, 186
Medicine as a utility. McIntyre RV. **J Okla State Med Assoc** 1988 Oct;81(10):616
Ethical issues in the treatment of cancer patients. Roy DJ. **J Palliat Care** 1989 Jun;5(2):56–61
True charity and professional life: a patient advocacy program. Hiatt RL Sr, et al. **J Pediatr Ophthalmol Strabismus** 1988 Sep–Oct; 25(5):249–53
Managing the difficult patient: practical suggestions from a study day. Corney RH, et al. **J R Coll Gen Pract** 1988 Aug;38(313):349–52
A model for joint working [editorial] Dennis N. **J R Coll Gen Pract** 1988 Nov;38(316):491
AIDS and the general practitioner [news] Goldberg D. **J R Coll Gen Pract** 1988 Oct;38(315):476
Physicians' perceptions of anxiety and depression among their outpatients: relationships with patients and doctors' satisfaction with their interviews. Sensky T, et al. **J R Coll Physicians Lond** 1989 Jan;23(1):33–8 (53 ref.)
Undifferentiated illness: some suggestions for approaching the polysymptomatic patient [editorial] Lewith GT. **J R Soc Med** 1988 Oct;81(10):563–5
Taking a sexual history and managing common sexual problems. Franger AL. **J Reprod Med** 1988 Jul; 33(7):639–43
Patient communication and effective rheumatology [editorial] Caughey DE. **J Rheumatol** 1989 Jan;16(1):5–6
The challenge of AIDS. Gash JR. **J S C Med Assoc** 1988 Dec;84(12):588–90
Malpractice prophylaxis. Hunt JR. **J S C Med Assoc** 1989 Jan;85(1):36–8
Recovery-oriented psychotherapy: patient resistances and therapist dilemmas. Zweben JE. **J Subst Abuse Treat** 1989; 6(2):123–32
Is the poor patient at risk? Avery JK. **J Tenn Med Assoc** 1989 Aug;82(8):435
An old prescription for a new era of medicine. Smith G. **J Tenn Med Assoc** 1989 Apr;82(4):200–1
Doctors have feelings too [letter] **JAMA** 1989 Jan 20; 261(3):379–80
A piece of my mind. A small town hero. Bergom RO. **JAMA** 1989 May 5;261(17):2548
On building a private practice [letter] Chefetz RA. **JAMA** 1988 Dec 2;260(21):3131–2
A piece of my mind. The 'older' doctor. Cowan JA. **JAMA** 1988 Dec 16;260(23):3494
A piece of my mind. The empty times. Devassy KS. **JAMA** 1989 May 12;261(18):2699
Clinical etiquette: a critical primer. Furlow TW Jr. **JAMA** 1988 Nov 4;260(17):2558–9
Panel aims to make tomorrow's physicians more caring and better-trained clinicians [news] Goldsmith MF. **JAMA** 1988 Dec 23–30;260(24):3562
A piece of my mind. Mothers. Karr MD. **JAMA** 1988 Nov 4;260(17):2593–4
A piece of my mind. Flaky. Katz RA. **JAMA** 1989 Jul 14; 262(2):282
A piece of my mind. Tears. Krauser PS. **JAMA** 1989 Jun 23–30;261(24):3612
A piece of my mind. Ricky. Leff PT. **JAMA** 1988 Dec 9; 260(22):3336
A piece of my mind. Prairie wedding. Ohmart RV. **JAMA** 1989 Jan 27;261(4):616
Etiquette: preaching and teaching [editorial] Rabkin MT. **JAMA** 1988 Nov 4;260(17):2562–3
The unchanging art [editorial] Gray DE. **Kans Med** 1988 Sep;89(9):220
When manners matter most. Jensen HL. **Kans Med** 1989 Jul; 90(7):210–2
Paternalism and consumerism in the practice of medicine. Medhat MA, et al. **Kans Med** 1988 Sep;89(9):239–41
Medical abandonment. Stratton WT. **Kans Med** 1988 Oct; 89(10):250, 253
Informing patients [letter] Pelosi AJ. **Lancet** 1989 Sep 2; 2(8662):564
Informing patients [letter] Tattersall RB. **Lancet** 1989 Jul 29; 2(8657):280
A controversy about clinical form. Banks JT. **Lit Med** 1986; 5:24–6
A case of amyotrophic lateral sclerosis. Barnard D. **Lit Med** 1986;5:27–42
To render the lives of patients. Charon R. **Lit Med** 1986; 5:58–74
The pharmakos figure in modern American stories of physicians and patients. Cowan JC. **Lit Med** 1987;6:94–109
Medicine as business and patient welfare: Thomas Mann dissects the conflict of interest. Justin RG. **Lit Med** 1988; 7:138–47
A case of self defense. Rabkin E. **Lit Med** 1986;5:43–53
The limits of narrative. Smith DH. **Lit Med** 1986;5:54–7
Assessing the effects of physician-patient interactions on the outcomes of chronic disease [published erratum appears in Med Care 1989 Jul;27(7):679] Kaplan SH, et al. **Med Care** 1989 Mar;27(3 Suppl):S110–27
Patients' reactions and physician-patient communication in a mandatory surgical second-opinion program. Rosenberg SN, et al. **Med Care** 1989 May;27(5):466–77
Evaluating medical interview process components. Null correlations with outcomes may be misleading. Stiles WB. **Med Care** 1989 Feb;27(2):212–20 (64 ref.)
Detection of psychologic complaints by general practitioners. Verhaak PF. **Med Care** 1988 Oct;26(10):1009–20
Medical students, Aborigines and migrants: evaluation of a teaching programme. Copeman RC. **Med J Aust** 1989 Jan 16;150(2):84–7
General practitioners' detection of patients' smoking status. Dickinson JA, et al. **Med J Aust** 1989 Apr 17;150(8):420–2, 425–6
Patient desire for information before a total hip-replacement operation. Doust JA, et al. **Med J Aust** 1989 Aug 21; 151(4):201, 203
Evaluating interns' performance using simulated patients in a casualty department. Gordon JJ, et al. **Med J Aust** 1989 Jul 3;151(1):18–21
Are doctors doing enough to stop their patients smoking? [editorial] Hill D, et al. **Med J Aust** 1989 Apr 17; 150(8):413–4
Cigarette smoking and the Australian medical profession. Magnus P. **Med J Aust** 1989 Apr 17;150(8):437, 440–1 (31 ref.)
Patients and clients [letter] Shum N. **Med J Aust** 1989 Feb 6;150(3):167
Some Jewish teaching on doctor/patient relationships. Jakobovits. **Med Leg J** 1989;57 (Pt 1):19–28; discussion 29–33
Patients', parents', and oncologists' perceptions of informed consent for bone marrow transplantation. Lesko LM, et al. **Med Pediatr Oncol** 1989;17(3):181–7
Is consent really necessary? Ormrod R. **Med Sci Law** 1989 Jan;29(1):4–10
Physicians and suicidal patients. Marr J. **Mich Med** 1989 Jan; 88(1):24–5
The issues behind "living will" legislation. Eelkema R, et al. **Minn Med** 1989 Jan;72(1):41–3
Practice what you preach! Poston LM. **Minn Med** 1989 Mar; 72(3):163
Making peace with death. Physicians help heal the pain of loss. Saetre S. **Minn Med** 1988 Jul;71(7):418–23
Doctors helping smokers. A new way to intervene. Solberg LI, et al. **Minn Med** 1988 Jul;71(7):413–4, 441
Voice your opinion on HB 1596 [letter] Akher JE. **Mo Med** 1986 Jul;83(7):367, 387
Listening to patients [editorial] Budd MA. **Mo Med** 1989 Jun;86(6):315–6, 328
The numbers game adds up to trouble. Burkey JW. **Mo Med** 1986 Mar;83(3):129
Physician stress: is it inevitable? Orman MC. **Mo Med** 1989 Jan;86(1):21–5
The doctor-patient relationship [editorial] Sessions DG. **Mo Med** 1986 Sep;83(9):615, 620
A phone call [editorial] Sessions DG. **Mo Med** 1989 May; 86(5):263, 270
The physician and the dying patient [letter; comment] **N Engl J Med** 1989 Jun 8;320(23):1557–8. **Comment on:** N Engl J Med 1988 Dec 29;319(26):1728–30
Physician involvement. Formica PE. **N J Med** 1989 Feb; 86(2):93
Complaints and commendations. Formica PE. **N J Med** 1988 Jul;85(7):579
Of feelings and manners. Shapiro ET. **N J Med** 1989 Mar; 86(3):207–9
Medical ethics by osmosis [letter] Young K. **N J Med** 1989 Jun;86(6):442
Life after Cartwright [letter] **N Z Med J** 1989 Apr 12; 102(865):169
Information and consent. Gillett GR. **N Z Med J** 1988 Nov 23;101(858):792–5
A study of friendship in general practice [see comments] Kljakovic M. **N Z Med J** 1989 Apr 26;102(866):191–3. **Comment in:** N Z Med J 1989 Jun 14;102(869):299
Friendship in general practice [letter; comment] Thomson NP. **N Z Med J** 1989 Jun 14;102(869):299. **Comment on:** N Z Med J 1989 Apr 26;102(866):191–3
Changing standards [letter] Watt PJ. **N Z Med J** 1989 Jun 14;102(869):297–8
The ME syndrome [letter] Werry JS. **N Z Med J** 1988 Oct 12;101(855):642
Success of communication about renal transplantation between patient and doctor. Lock PM, et al. **Nephrol Dial Transplant** 1989;4(2):119–22
Links exist between communication and claims prevention. **Ohio Med** 1989 Mar;85(3):218
Telephone contact with the patient. **Ohio Med** 1988 Nov; 84(11):885, 895
Terminating the doctor-patient relationship. **Ohio Med** 1989 May;85(5):391–2
Fashions and values [editorial] Weiss W. **Pa Med** 1989 Jun; 92(6):28
Fumes from the spleen. **Paediatr Perinat Epidemiol** 1988 Apr; 2(2):116–8
So what? Coping with doctors [letter] Gaffin J. **Paediatr Perinat Epidemiol** 1987 Apr;1(1):16–8
Do you know these patients? High-risk pediatric encounters. Korsch BM. **Pediatr Rev** 1988 Oct;10(4):101–5 (0 ref.)
The pediatrician, the disabled child, and the family: a special relationship. Miller RL. **Pediatr Rev** 1987 Jan;8(7):195
Giving to our patients—should we draw the line? Nazarian LF. **Pediatr Rev** 1986 Sep;8(3):67
Suffering children hurt us. Barber J. **Pediatrician** 1989; 16(1–2):119–23
The Oath: an investigation of the injunction prohibiting physician-patient sexual relations. Campbell ML. **Perspect Biol Med** 1989 Winter;32(2):300–8
Attendings who never attend [letter] Braunstein H. **Pharos** 1989 Summer;52(3):38–9
Discussing dying: changing attitudes among patients, physicians, and medical students. Jeret JS. **Pharos** 1989 Winter;52(1):15–20 (24 ref.)
Past and present. Linenthal AJ. **Pharos** 1988 Summer;51(3):47
Should physicians always offer hope? [letter] Rifkin A. **Pharos** 1989 Summer;52(3):38
The rating game [editorial] Goldwyn RM. **Plast Reconstr Surg** 1989 Mar;83(3):518–9
Better care—more hostility [editorial] Goldwyn RM. **Plast Reconstr Surg** 1989 May;83(5):884–5
Professional courtesy [letter] Silversmith PE. **Plast Reconstr Surg** 1989 Oct;84(4):705
Medicine is changing. Davis JM. **Postgrad Med** 1989 Apr; 85(5):38–40
Pure gold in a pile of junk! Griffin GC. **Postgrad Med** 1988 Oct;84(5):11–2, 15
Why do I even try? [letter] Hunt J. **Postgrad Med** 1989 Jul; 86(1):30, 33
My patient, my friend. Neiblum DR. **Postgrad Med** 1989 Aug; 86(2):119–20
It's a miracle! Wassersug JD. **Postgrad Med** 1989 Jul; 86(1):76–7
Talking to patients about sex. d'Ardenne P. **Practitioner** 1988 Jul;232(1452):810–2
The ethics of paternalism and preventive screening. Doyal L, et al. **Practitioner** 1988 Jul;232(1452):820–3
New patients. Heathcote J. **Practitioner** 1988 Aug; 232(1453):894–5
Trivia in general practice. Lau BW. **Practitioner** 1987 Oct 8;231(1436):1333–5
Why I visit my patients in hospital [editorial] Vora A. **Practitioner** 1987 Dec;231(1440):1591–2
Facilitating patient participation: the doctor-patient encounter. Stoffelmayr B, et al. **Prim Care** 1989 Mar; 16(1):265–78 (80 ref.)
An assessment of entering freshman medical students' knowledge of and attitudes toward AIDS. Barkley SE, et al. **Proc Annu Conf Res Med Educ** 1988;27:221–5
Performance and perception in a simulated clinical encounter. Hassard TH, et al. **Proc Annu Conf Res Med Educ** 1988; 27:38–43
Defining fitness and aptitude to practice medicine. Holmes DB, et al. **Proc Annu Conf Res Med Educ** 1988;27:32–7
Assessing medical student interviews of HIV patients: a randomized trial of a simple intervention. Vincent DS, et al. **Proc Annu Conf Res Med Educ** 1988;27:216–20
The care of the child facing death. Lansdown R. **Prog Pediatr Surg** 1989;22:64–8
The violent patient. **Psychiatr Clin North Am** 1988 Dec; 11(4):499–698
Treating the patient who has been sexually exploited by a previous therapist. Kluft RP. **Psychiatr Clin North Am** 1989 Jun;12(2):483–500
Clinical evaluation of the violent patient. Reid WH. **Psychiatr Clin North Am** 1988 Dec;11(4):527–37
Patients who hate. Gabbard GO. **Psychiatry** 1989 Feb; 52(1):96–106 (41 ref.)
Relationship schema formulation: role-relationship models and intrapsychic conflict. Horowitz MJ. **Psychiatry** 1989 Aug;52(3):260–74
Converging evidence for identification of recurrent relationship themes: comparison of two methods. Johnson ME, et al. **Psychiatry** 1989 Aug;52(3):275–88
A relationship pattern measure: the core conflictual relationship theme. Luborsky L, et al. **Psychiatry** 1989 Aug; 52(3):250–9
Psychotherapeutic models and the treatment of schizophrenia: the records of three successive psychotherapists with one patient at Chestnut Lodge for 18 years. McGlashan TH, et al. **Psychiatry** 1988 Nov; 51(4):340–62
What makes something psychoanalytic? Schwartz W. **Psychiatry** 1988 Nov;51(4):417–31 (17 ref.)
Nonverbal expressions of anxiety in physician-patient interactions. Shreve EG, et al. **Psychiatry** 1988 Nov; 51(4):378–84
The statistical analysis of matched data in psychiatric research. Donner A, et al. **Psychiatry Res** 1989 Apr; 28(1):41–6
Cartesian dualism and psychosomatics. Brown TM. **Psychosomatics** 1989 Summer;30(3):322–31 (34 ref.)
Thoughts on patient care and the Emperor's New Clothes. Castelnuovo-Tedesco P. **Psychosomatics** 1989 Summer; 30(3):318–21
Physicians' emotional reactions to patients. Smith RC, et al. **Psychosomatics** 1988 Fall;29(4):392–7
Specific components of bedside manner in the general hospital psychiatric consultation: 12 concrete suggestions. Yager J. **Psychosomatics** 1989 Spring;30(2):209–12
Psychotherapeutic outcome: measuring reliable clinical change. Dormaar M, et al. **Psychother Psychosom** 1988; 50(2):95–101
Regular source of primary medical care and patient satisfaction. Weiss GL, et al. **QRB** 1989 Jun;15(6):180–4
Radiologists' roles in mammography [letter] Gulino LA, et al. **Radiology** 1988 Dec;169(3):873–4
Teaching effective communication on ward rounds. van der Merwe N. **S Afr Med J** 1989 Jul 15;76(2):47

Industrial physician's responsibilities to his patients and to management--confidential records. Beard RR.
Sangyo Ika Daigaku Zasshi 1989 Mar 1;11(1):83-9

Do we need to listen to the patient? The predictive value of symptoms. Petersen H, et al.
Scand J Gastroenterol Suppl 1988;155:30-6

The psychological aspects of the doctor-patient interaction in the healing process. General practitioners' attitudes and beliefs. Drottning K, et al. **Scand J Prim Health Care** 1988 Sep;6(3):149-54

Medical students experience early patient contact in general practice. A description and evaluation of a new course in the medical curriculum. Lassen LC, et al.
Scand J Prim Health Care 1989 Mar;7(1):53-5

Information and decision-making preferences of hospitalized adult cancer patients. Blanchard CG, et al.
Soc Sci Med 1988;27(11):1139-45

Communication in the hospital setting: a survey of medical and everyday language use amongst patients, nurses and doctors. Bourhis RY, et al. **Soc Sci Med** 1989;28(4):339-46

The sociological image of medicine and the patient. Gerhardt U. **Soc Sci Med** 1989;29(6):721-8 (81 ref.)

What patients like about their medical care and how often they are asked: a meta-analysis of the satisfaction literature. Hall JA, et al. **Soc Sci Med** 1988;27(9):935-9 (23 ref.)

It's how you say it: physicians' vocal behavior. Harrigan JA, et al. **Soc Sci Med** 1989;28(1):87-92

Sociology of hospitals and of patient-physician interaction in West Germany. Kohlmann T, et al. **Soc Sci Med** 1989; 29(1):107-8 (14 ref.)

Confrontation and politeness strategies in physician-patient interactions. Robins LS, et al. **Soc Sci Med** 1988; 27(3):217-21

Contributions of patients to general practitioner consultations in relation to their understanding of doctor's instructions and advice. Robinson EJ, et al. **Soc Sci Med** 1988; 27(9):895-900

Introduction of information during the initial medical visit: consequences for patient follow-through with physician recommendations for medication. Rost K, et al.
Soc Sci Med 1989;28(4):315-21

Have you laid yourself liable? [letter] Alexander E Jr.
South Med J 1989 Aug;82(8):1066

Diagnosis. Gaarder KR. **South Med J** 1989 Sep;82(9):1153-4

Physicians' responsibilities to help HIV-positive patients [letter] McKinney M. **Tex Med** 1988 Nov;84(11):6-7

Recognizing alcoholism and confronting the alcoholic patient. Reilly EL. **Tex Med** 1988 Sep;84(9):34-6

Our patients are talking to us--are we listening? [editorial] Tingley W Jr. **Tex Med** 1988 Nov;84(11):7-8

Patient expectations and the medical malpractice crisis [letter] Uzych L. **Tex Med** 1989 Feb;85(2):15-6

Releases and arbitration agreements between patients and physicians. Wilcox DP. **Tex Med** 1988 Aug;84(8):60-2

The physician recumbent. McGuire LB. **Va Med** 1988 Aug; 115(8):390-2

Trust at risk [see comments] Alper PR. **West J Med** 1988 Oct;149(4):489-90, **Comment in:** West J Med 1989 Jan;150(1):91

Taking care of patients--does it matter whether the physician is a woman? Arnold RM, et al. **West J Med** 1988 Dec; 149(6):729-33 (60 ref.)

A matter of trust. Borgenicht L. **West J Med** 1989 Aug; 151(2):229-30

Disclosure of sexual preference to physicians by black lesbian and bisexual women. Cochran SD, et al. **West J Med** 1988 Nov;149(5):616-9

Women and medicine. From tension to truce. Friedman E. **West J Med** 1988 Dec;149(6):681-2

The importance of hope. Levine AM. **West J Med** 1989 May; 150(5):609

The yin and yang of medical practice [letter] Pratt M.
West J Med 1988 Oct;149(4):466

Stress and tension in patient care [editorial] Watts MS.
West J Med 1989 Feb;150(2):205-6

The secret in a casual parenthesis. Murphy-Greenwood MA.
Wis Med J 1988 Sep;87(9):13, 15

[Psychotherapy as a factor in the professional competence of the physician] Beran J. **Cas Lek Cesk** 1988 Aug 12; 127(33):1025-9 (Eng. Abstr.) **(Cze)**

[Ethics in adolescent medicine in practice] Bendová O.
Cesk Pediatr 1988 Nov;43(11):688-90 **(Cze)**

[The influence of the therapist's personality on the effect of group psychotherapy] Plháková A. **Cesk Psychiatr** 1989 Jun;85(3):173-8 (Eng. Abstr.) **(Cze)**

[Contact patterns in general practice (editorial)] Bentzen N. **Ugeskr Laeger** 1988 Dec 19;150(51):3167-8 **(Dan)**

[Patient information] Lunde IM. **Ugeskr Laeger** 1988 Dec 12;150(50):3094-6 (Eng. Abstr.) **(Dan)**

[Is the information given by doctors understandable?] Lunde IM. **Ugeskr Laeger** 1988 Dec 12;150(50):3096-100 (Eng. Abstr.) **(Dan)**

[Diagnosis and treatment in general practice. 4. General practitioners' knowledge of their patients] Pedersen PA, et al. **Ugeskr Laeger** 1989 Jan 16;151(3):157-61 (Eng. Abstr.) **(Dan)**

[Fear of sanctions?] Landheer T. **Ned Tijdschr Geneeskd** 1989 Mar 4;133(9):457-61 **(Dut)**

[Testing for HIV infection in cardiology] Roscam Abbing HD. **Ned Tijdschr Geneeskd** 1988 Sep 10;132(37):1707-8 **(Dut)**

[The physician-patient relation as seen by a specialist: "Am I my brother's keeper?"] Wagener DJ.
Ned Tijdschr Geneeskd 1988 Oct 22;132(43):1984-8 **(Dut)**

[Early recognition and management of anorexia nervosa in adolescence] Weeda-Mannak WL.
Ned Tijdschr Geneeskd 1989 Feb 4;133(5):237-40 **(Dut)**

[House calls to patients with an immunodeficiency disorder] Keestra RW. **Tijdschr Kindergeneeskd** 1988 Oct; 56(5):218-25 (Eng. Abstr.) **(Dut)**

[The physician, the patient and psychosomatic signs] Huttunen MO. **Duodecim** 1989;105(4):323-33 (23 ref.) **(Fin)**

[Acknowledgement of drug addiction by physicians] Huttunen MO. **Duodecim** 1989;105(9):856-63 **(Fin)**

[Predictive value of patient psychological profile and type of physician-patient relationship in compliance of antihypertensive treatment] Consoli SM, et al.
Arch Mal Coeur 1988 Jun;81 Spec No:145-50 (Eng. Abstr.) **(Fre)**

[The physician and disability certificates: preconceived attitudes and behaviors] Monday J, et al.
Can J Psychiatry 1988 Oct;33(7):599-605 (Eng. Abstr.) **(Fre)**

[Psychiatric consultations in a general hospital (III): Positions of the consultant] Sirois F. **Can J Psychiatry** 1989 Apr; 34(3):244-8 (Eng. Abstr.) **(Fre)**

[The story of M. H. or the life of a 3d-year medical student during a medicosocial term outside of the hospital] Delay N. **Rev Med Suisse Romande** 1988 Oct;108(10):884-7 **(Fre)**

[From psychiatrist to family physician or return to sender] Laurent-Jaccard A. **Rev Med Suisse Romande** 1988 Oct; 108(10):855-7 **(Fre)**

[Prevention, females and physicians: the example of self-examination of the breast] Huguenin M.
Soz Praventivmed 1988;33(3):181-5 (Eng. Abstr.) **(Fre)**

[Disclosing the diagnosis in cancer] Besbes K, et al.
Tunis Med 1989 Jan;67(1):61-3 **(Fre)**

[The computer in independent psychiatric practice] Hamouda C. **Tunis Med** 1988 Jan;66(1):55-7 (Eng. Abstr.) **(Fre)**

[Perception of the attitude of physicians] Simard A, et al.
Union Med Can 1989 May-Jun;118(3):105 **(Fre)**

[Youth from the viewpoint of the pediatrician] Patzer H.
Arztl Jugendkd 1988;79(3):115-24 (23 ref.) (Eng. Abstr.) **(Ger)**

[Information needs of patients with psoriasis] Seikowski K, et al. **Dermatol Monatsschr** 1988;174(10):609-12 (Eng. Abstr.) **(Ger)**

[The helplessness of the physician in the treatment of chronic and terminally ill patients] Buddeberg C. **Fortschr Med** 1988 Aug 10;106(23):467-8 **(Ger)**

[What is possible with groups ... Tips for conducting group therapy--2] Geue B. **Fortschr Med** 1988 Jul 10;106(20):20 **(Ger)**

[So that nobody loses face...Tips for managing group therapy--9] Geue B. **Fortschr Med** 1989 Mar 15;107(8):22 **(Ger)**

[The psychological status of acne patients. Personality structure and physician-patient relations] Korczak D.
Fortschr Med 1989 May 10;107(14):309-13 (Eng. Abstr.) **(Ger)**

[Early detection of breast cancer in relation to patient and physician characteristics] Biefang S.
Geburtshilfe Frauenheilkd 1988 Oct;48(10):694-700 (Eng. Abstr.) **(Ger)**

[Truth at bedside in relation to poor prognosis. From the viewpoint of the clinician] Kessler FJ.
Langenbecks Arch Chir 1988;Suppl 2:543-6 (Eng. Abstr.) **(Ger)**

[Physician-patient relations in psychiatry] Meyer JE.
Nervenarzt 1989 Feb;60(2):102-5 (15 ref.) **(Ger)**

[Assessment of the function of language in social medicine expert testimony] Grosspietzsch R, et al.
Off Gesundheitswes 1988 Oct;50(10):565-7 (Eng. Abstr.) **(Ger)**

[Forensic-psychologic-psychiatric assessment from the viewpoint of perpetrators--data from a survey] Littmann E. **Psychiatr Neurol Med Psychol (Leipz)** 1988 Nov; 40(11):655-64 (Eng. Abstr.) **(Ger)**

[Aggressive conflicts in physician-patient relations in the course of inpatient treatment--considerations based on case examples] Steinert T, et al. **Psychiatr Prax** 1988 Sep; 15(5):171-5 (Eng. Abstr.) **(Ger)**

[The dynamics of the physician-patient relation in simulated disorder (secret artefact disease)] Eckhardt A.
Psychother Psychosom Med Psychol 1988 Sep-Oct; 38(9-10):352-8 (70 ref.) (Eng. Abstr.) **(Ger)**

[We and our patient--the "temporal symbiosis" of the psychiatrist with his patients] Müller P.
Psychother Psychosom Med Psychol 1988 Jul;38(7):247-50 (Eng. Abstr.) **(Ger)**

[Psycho-ecologic aspects of supportive psychotherapy] Willi J. **Psychother Psychosom Med Psychol** 1989 Jul; 39(7):225-31 (32 ref.) (Eng. Abstr.) **(Ger)**

[Informiag angiography patients. Results of a survey and critical comments] Kaiser R, et al. **Radiologe** 1988 Nov; 28(11):517-21 (Eng. Abstr.) **(Ger)**

[The physician as medication. Relationship effects in pharmaceutical medicine as exemplified by the placebo] Grob P. **Schweiz Rundsch Med Prax** 1989 Feb 21; 78(8):180-5 (Eng. Abstr.) **(Ger)**

[Sex- or symptom-specific behavior of male residents? An analysis of diagnosis and therapy of ambulatory female and male patients with abdominal pain] Conen D, et al.
Soz Praventivmed 1988;33(3):167-72 (Eng. Abstr.) **(Ger)**

[Psychological effect of ultrasound examination on patients, relatives and the technician] Wittmann BK, et al.
Ultraschall Med 1989 Feb;10(1):2-6 (Eng. Abstr.) **(Ger)**

[Changing physicians in general practice] Köhler FC.
Z Arztl Fortbild (Jena) 1989;83(1):25-7 **(Ger)**

[Technic in conflict with humanity in medical care?] Lindner H. **Z Arztl Fortbild (Jena)** 1988;82(24):1272-4 **(Ger)**

[Management of survivors. Aspects of patient and therapist behavior] Blumenthal-Barby K, et al. **Z Gesamte Hyg** 1988 Aug;34(8):451-3 (Eng. Abstr.) **(Ger)**

[Remarks on the problem of the daily medical practice] Gutt RW. **Z Gesamte Inn Med** 1988 Aug 1;43(15):439-40 (Eng. Abstr.) **(Ger)**

[Compliance in forms of drug therapy with special reference to aspects of trust] Bochmann F, et al.
Z Klin Psychol Psychopathol Psychother 1989;37(2):162-75 (Eng. Abstr.) **(Ger)**

[The anthropological phenomenon of strangeness in psychotherapy] Stüttgen T.
Z Klin Psychol Psychopathol Psychother 1989;37(1):74-84 (Eng. Abstr.) **(Ger)**

[Carcinoma of the breast: information on tumoral disease in hospitalized patients] Monzeglio C, et al.
Minerva Ginecol 1989 Feb;41(2):95-7 (Eng. Abstr.) **(Ita)**

[Balint groups. Investigations on the significance of 2 methodologic variants] Bogetto F, et al.
Minerva Psichiatr 1989 Apr-Jun;30(2):99-103 (Eng. Abstr.) **(Ita)**

[Specific and nonspecific effects of psychoactive drugs on the interactions of the physician-patient-environment system] Governa R, et al. **Minerva Psichiatr** 1988 Apr-Jun; 29(2):105-8 (Eng. Abstr.) **(Ita)**

[Telling the patient the diagnosis of cancer] Doi T.
Gan To Kagaku Ryoho 1989 Apr;16(4 Pt 2-1):1025-30 (Eng. Abstr.) **(Jpn)**

[Consultation analysis in hospitals. Experiences of an educational program in communication with patients] Jensen P, et al. **Tidsskr Nor Laegeforen** 1988 Nov 20; 108(32):2957-8 (Eng. Abstr.) **(Nor)**

[Criticism of doctors--a failure in training?] Vaglum P.
Tidsskr Nor Laegeforen 1988 Oct 30;108(30):2701-2 **(Nor)**

[Psychological indicators of the effectiveness of drug therapy of endogenous depression (review of the literature)] Habrat E, et al. **Psychiatr Pol** 1988 Jul-Aug;22(4):333-7 (40 ref.) **(Pol)**

[Brazil: the physician-patient relation and its social determinants] Nunes ED. **Educ Med Salud** 1988; 22(2):153-68 (Eng. Abstr.) **(Por)**

[Physicians' understanding of the mechanisms of adapting to the diagnosis in oncology] Delgado GL, et al.
Rev Paul Med 1988 Jul-Aug;106(4):209-14 (Eng. Abstr.) **(Por)**

[Beside general visits: a practice to be maintained or abandoned? (editorial)] de Lima Filho MT.
Rev Paul Med 1988 Jan-Feb;106(1):5 **(Por)**

[Evaluation of various personality characteristics and professional training of interns--internal medicine specialists] Trofimov VI, et al. **Klin Med (Mosk)** 1989 Mar; 67(3):145-6 (Eng. Abstr.) **(Rus)**

[Development of the personality of a physician-pediatrician] Bogomaz TA, et al. **Pediatriia** 1988;(4):95-7 **(Rus)**

[Medical secrecy and openness in physician-patient relations] Ostapenko AL. **Sov Med** 1989;(5):48-51 **(Rus)**

[Ethical and deontological evaluation of the activities of district physicians and public health administrators] Pilipchuk VL, et al. **Sov Zdravookhr** 1988;(8):21-3 (Eng. Abstr.) **(Rus)**

[Deontological problems of otorhinolaryngology in the era of scientific and technological progress] Antoniv VF, et al. **Vestn Otorinolaringol** 1988 May-Jun;(3):3-5 (Eng. Abstr.) **(Rus)**

[Deontological problems of childhood and adolescence] Kovalev VV. **Zh Nevropatol Psikhiatr** 1988;88(8):3-7 (Eng. Abstr.) **(Rus)**

[The physician-patient relationship: power, confidence and sexuality] Mayo Santana R. **Bol Asoc Med P R** 1989 Feb; 81(2):61-4 **(Spa)**

[Effectiveness of the physician's advice to quit smoking: evaluation of the impact a year after the fact] Nebot-Adell M, et al. **Rev Clin Esp** 1989 Mar;184(4):201-5 (Eng. Abstr.) **(Spa)**

[The work of the general practitioner--it's more than receiving patients] Krakau I, et al. **Lakartidningen** 1988 Oct 19;85(42):3444 **(Swe)**

[Activities of Balint groups--a way to survive] Silfverskiöld P. **Lakartidningen** 1989 Jul 26;86(30-31):2606-9 (Eng. Abstr.) **(Swe)**

[Self-care is essential for diabetic patients--the physician's role is to support] Oldinger E. **Nord Med** 1988 ; 103(12):348-9 **(Swe)**

PHYSICIAN PAYMENT REVIEW COMMISSION see under **REIMBURSEMENT MECHANISMS**

PHYSICIAN SHORTAGE AREA see **MEDICALLY UNDERSERVED AREA**

PHYSICIANS

A profile of academic physicians in British Columbia. Barer ML, et al. **Acad Med** 1989 Sep;64(9):524–32

High school students' motivations for a career as a physician. Wagoner NE, et al. **Acad Med** 1989 Jun;64(6):325–7

Assessment of pain: a comparison between patients and doctors. Forrest M, et al. **Acta Anaesthesiol Scand** 1989 Apr;33(3):255–6

Prophylactic aspirin use among US physicians. Mehta A, et al. **Am J Cardiol** 1989 Feb 1;63(5):370–2

Sensitive areas between physicians and pharmaceutical companies [editorial] Roberts WC. **Am J Cardiol** 1989 Jun 1;63(18):1421

Physician and nurse awareness of drug–use–review activities [letter] Bunz D, et al. **Am J Hosp Pharm** 1989 Jun; 46(6):1125–6

Isolated systolic hypertension in the elderly: results of a statewide survey of clinical practice in New Jersey. Breckenridge MB, et al. **Am J Med** 1989 Apr;86(4):370–5

A question of velleity. LaCombe MA. **Am J Med** 1989 Feb; 86(2):207–8

The illusion of futility in clinical practice. Lantos JD, et al. **Am J Med** 1989 Jul;87(1):81–4

The nonvalue of retrospective peer comparison feedback in containing hospital antibiotic costs. Parrino TA. **Am J Med** 1989 Apr;86(4):442–8

Effect of physician characteristics on the cesarean birth rate. Berkowitz GS, et al. **Am J Obstet Gynecol** 1989 Jul; 161(1):146–9

Experiences of a paraplegic psychiatry resident on an inpatient psychiatric unit. Lawn BB. **Am J Psychiatry** 1989 Jun;146(6):771–4

Risk factors associated with participation in the Ontario, Canada doctors' strike. Kravitz RL, et al. **Am J Public Health** 1989 Sep;79(9):1227–33

Doctor strikes and other signs of discontent [editorial] Mechanic D. **Am J Public Health** 1989 Sep;79(9):1218–9

Mail surveys of physicians [letter] Toffler WM, et al. **Am J Public Health** 1989 Oct;79(10):1434

'No' when the family says 'go': resisting families' requests for futile CPR [editorial] Ramos T, et al. **Ann Emerg Med** 1989 Aug;18(8):898–9

Physician attitudes toward cost containment. The missing piece of the puzzle. Greene HL, et al. **Arch Intern Med** 1989 Sep;149(9):1966–8

Professional satisfaction of physicians. Reames HR Jr, et al. **Arch Intern Med** 1989 Sep;149(9):1951–6

Expenditure targets not included in energy and commerce committee's physician payment reform proposal. Foreman J. **Arch Ophthalmol** 1989 Sep;107(9):1284

Maternity, paternity, and parental rights of doctors in the UK. Grüneberg AL. **BMJ** 1988 Nov 26;297(6660):1387–9

Distinction and merit awards: a 100m pound management tool? Raftery J. **BMJ** 1989 Apr 8;298(6678):946–8

Representation for all? [see comments] Walsh J. **Br Dent J** 1989 Feb 11;166(3):66. **Comment in:** Br Dent J 1989 Mar 25;166(6):197

Communication between doctors. Cybulska E, et al. **Br J Hosp Med** 1989 Mar;41(3):266–8

Early retirement [editorial] Mackay J. **Br J Hosp Med** 1989 Jan;41(1):19

Pensions: spoilt for choice? Mackay J. **Br J Hosp Med** 1989 Feb;41(2):191

Appropriate reimbursement of clinical services of infectious diseases practitioners. Lawton SE. **Bull N Y Acad Med** 1988 Jul–Aug;64(6):591–4

Doctor or mister? [letter] **Can J Surg** 1989 Jul;32(4):229–30

There are fewer doctors sitting in new Parliament [correction] [letter] **Can Med Assoc J** 1989 Mar 1;140(5):498

IPPNW: forum for Soviet anti–American propaganda? [letter] **Can Med Assoc J** 1988 Oct 15;139(8):698–700

A portrait of the doctor and his word processor. Buckman R. **Can Med Assoc J** 1989 Jun 1;140(11):1361, 1363

Do MDs know what's best for their families? [letter] Dawson HR. **Can Med Assoc J** 1988 Nov 15;139(10):932–3

Evaluation of the careers of graduates of the University of Manitoba's BSc (Medicine) program. Gerrard JM, et al. **Can Med Assoc J** 1988 Dec 1;139(11):1063–8

There are fewer doctors sitting in new Parliament. Gray C. **Can Med Assoc J** 1989 Jan 15;140(2):190–1

When is it time to quit? Green W. **Can Med Assoc J** 1988 Dec 15;139(12):1187–8

Medical geography: MDs should pay heed to "airs, waters, places". Helwig D. **Can Med Assoc J** 1988 Oct 15; 139(8):790–1

Uneasy allies: as nurses march towards 2000, some MDs get nervous. Houlihan P. **Can Med Assoc J** 1988 Dec 15; 139(12):1191–2

Are physicians' opinions about chiropractors changing? [letter] Kenney M. **Can Med Assoc J** 1988 Dec 15; 139(12):1132–3

Quebec's hunger–striking MDs: do FMGs automatically have right to practise? Lowry F. **Can Med Assoc J** 1989 Jun 1;140(11):1341–5

The doctor as medical entrepreneur: there are still MDs willing to take the plunge. Milne M. **Can Med Assoc J** 1989 Mar 15;140(6):691–5

Be cautious in the office: lawsuits can originate there too. Milne P. **Can Med Assoc J** 1988 Nov 15;139(10):997–8

Physician–authors: doctors take aim at a healthy market. Morgan PP. **Can Med Assoc J** 1989 Jun 1;140(11):1353–4, 1357–60

The Medical Network: saying "no" to human rights abuses. Payne D. **Can Med Assoc J** 1989 Aug 1;141(3):234–8

Competence, evaluation and learning [editorial] Squires BP. **Can Med Assoc J** 1989 Feb 15;140(4):357

Utilization management must be shared [editorial] Sutherland RW. **Can Med Assoc J** 1989 Aug 15;141(4):287

The ethics of physician–pharmaceutical company relationships. Thompson WG. **Can Med Assoc J** 1988 Nov 1;139(9):835–6

When is it time to quit? [letter] Virgin WJ. **Can Med Assoc J** 1989 Feb 15;140(4):364

On the outside, looking in. Waugh D. **Can Med Assoc J** 1989 Jan 1;140(1):67

Changing course. Waugh D. **Can Med Assoc J** 1988 Nov 1;139(9):885

Medical staff enforcement. Dilemmas and decisions. McAfee RE. **Cancer** 1989 Jul 1;64(1 Suppl):317–8; discussion 320–3

The physician's responsibility for the care of AIDS patients. An opinion. Block AJ. **Chest** 1988 Dec;94(6):1283–4

Physicians and school sports physical examination. Cook DE. **Colo Med** 1988 Sep 15;85(17):373

Patch tests with occupational contactants in nurses, doctors and dentists. Rudzki E, et al. **Contact Dermatitis** 1989 Apr; 20(4):247–50

Physicians' review of significant interventions by clinical pharmacists in inpatient care. Hatoum HT, et al. **Drug Intell Clin Pharm** 1988 Dec;22(12):980–2

Flexible fiberoptic sigmoidoscopy training for primary care physicians: results of a 5–year experience. Schertz RD, et al. **Gastrointest Endosc** 1989 Jul–Aug;35(4):316–20

Physicians not exempt from 'forced retirement'. Butler RN. **Geriatrics** 1989 Jan;44(1):19

Physicians' views of retirement migrants' impact on rural medical practice. Haas WH 3d, et al. **Gerontologist** 1988 Oct;28(5):663–6

DataWatch. Physician employment patterns: challenging conventional wisdom. Marder WD, et al. **Health Aff (Millwood)** 1988 Winter;7(5):137–45

Physicians' ranking of hospital attributes: a comparison by use group. Muller A, et al. **Health Care Manage Rev** 1989 Summer;14(3):77–84 (20 ref.)

Conflicting professional values in social work and medicine. Roberts CS. **Health Soc Work** 1989 Aug;14(3):211–8 (21 ref.)

Electronic information for physicians: a new dimension in solving problems. Yasnoff WA. **Indiana Med** 1988 Aug; 81(8):708–9

Time to plant the roses. Alberts ME. **Iowa Med** 1988 Dec; 78(12):567–8

Gearing up for retirement. Dunkel PL. **Iowa Med** 1988 Dec; 78(12):564–5

Physician assistant supervisor regulations. Huckabee MJ. **Iowa Med** 1989 Mar;79(3):109–10

Twenty years of doctor discipline: Iowa style, Mayo style and Minneapolis style. Myers M. **Iowa Med** 1988 Nov; 78(11):520–1

Pharmacy/medicine interface. Temple TR. **Iowa Med** 1989 Mar;79(3):104–6

Repaying our debts. Youngblade D. **Iowa Med** 1989 Jul; 79(7):316–7

Physician drug dispensing. Lober CW, et al. **J Am Acad Dermatol** 1988 Nov;19(5 Pt 1):915–9 (24 ref.)

Physician and dentist compliance with American Heart Association guidelines for prevention of bacterial endocarditis. Nelson CL, et al. **J Am Dent Assoc** 1989 Feb; 118(2):169–73

Telephone communication with the primary physician by staff of a long–term care facility [letter] Rezvan A. **J Am Geriatr Soc** 1989 Mar;37(3):289–90

Doctors' strike: non–availability of drugs: activation of seizures [letter] Agarwal A, et al. **J Assoc Physicians India** 1988 Jul;36(7):460–1

How expert physicians would wish to be treated if they had genitourinary cancer. Moore MJ, et al. **J Clin Oncol** 1988 Nov;6(11):1736–45

Anterograde amnesia following triazolam use in two emergency physicians. Huff JS, et al. **J Emerg Med** 1989 Mar–Apr;7(2):153–5 (16 ref.)

Patients' attitudes toward physician involvement in family conferences. Kushner K, et al. **J Fam Pract** 1989 Jan; 28(1):73–8

A closer examination of physician responsibility for expanding health care costs. Caldwell JR. **J Fla Med Assoc** 1989 Feb;76(2):265–8

Uplifting the physician's devalued state of mind. Caldwell JR. **J Fla Med Assoc** 1988 Dec;75(12):824–5

Is a split inevitable? Farmer HF Jr. **J Fla Med Assoc** 1988 Dec;75(12):790–1

Bureaucratic harassment must stop [editorial] Lacsamana RG. **J Fla Med Assoc** 1989 Feb;76(2):231

Quitting when the fun is gone [editorial] Lacsamana RG. **J Fla Med Assoc** 1988 Dec;75(12):789

Is teaching worth the risk? [letter] Pearl AJ. **J Fla Med Assoc** 1989 Feb;76(2):241–2

Professional responsibility [editorial] Levine S. **J Gen Intern Med** 1989 Mar–Apr;4(2):172–3

Notes on the sociology of medical discourse: the language of case presentation. Anspach RR. **J Health Soc Behav** 1988 Dec;29(4):357–75

Gender and medical socialization. Martin SC, et al. **J Health Soc Behav** 1988 Dec;29(4):333–43

Medical college exclusively for doctors' wards [letter] Mathias J. **J Indian Med Assoc** 1988 Apr;86(4):111

Physician liability under the "borrowed servant" rule. Berg RN. **J Med Assoc Ga** 1989 May;78(5):291–2

Consequences for medical education of problem–solving in science and medicine. Small PA Jr. **J Med Educ** 1988 Nov; 63(11):848–53

Borborygmia I [editorial] Johnston J. **J Miss State Med Assoc** 1988 Aug;29(8):235

Assessment of potential for cancer control by Golden State Medical Association physicians. Glazer ER, et al. **J Natl Med Assoc** 1989 Apr;81(4):437–46

How much is a physician worth? [editorial] McIntyre RV. **J Okla State Med Assoc** 1989 Jul;82(7):309

Home health care for children assisted by mechanical ventilation: the physician's perspective. Goldberg AI, et al. **J Pediatr** 1989 Mar;114(3):378–83

What physicians have in common with Sherlock Holmes: discussion paper. Peschel RE, et al. **J R Soc Med** 1989 Jan;82(1):33–6

How to review your own contracts. Anderson MV. **J Tenn Med Assoc** 1989 Aug;82(8):432–3

Court orders Social Security Administration to give treating physicians' opinions greater weight. Miller KA. **J Tenn Med Assoc** 1988 Sep;81(9):581

The doctors' dilemmas. Perdue GD. **J Vasc Surg** 1989 Feb; 9(2):190–2

Caring for the poor: the altruism of physicians [letter] **JAMA** 1989 Jan 20;261(3):378–9

Luxurious cars: should physicians flaunt their wealth? [letter] Cauthen DB. **JAMA** 1989 Sep 22–29;262(12):1631

Physicians and acquired immunodeficiency syndrome: a reply to patients [editorial] Dickey NW. **JAMA** 1989 Oct 13; 262(14):2002

Divorce among physicians. Comparisons with other occupational groups. Doherty WJ, et al. **JAMA** 1989 Apr 28;261(16):2374–7

Physicians and acquired immunodeficiency syndrome. What patients think about human immunodeficiency virus in medical practice. Gerbert B, et al. **JAMA** 1989 Oct 13; 262(14):1969–72

Physician advertising in 1886: touting by telephone [letter] Hayes H. **JAMA** 1989 Jan 20;261(3):379

Physician deaths under the age of 50 years: information from the obituaries [letter] Hermann RC. **JAMA** 1988 Dec 16; 260(23):3433

Physicians and journalists [letter; comment] Robinson–Haynes E. **JAMA** 1989 Mar 3;261(9):1280. **Comment on:** JAMA 1988 Aug 12;260(6):751–2, 757

Physicians who have lost their malpractice insurance. Their demographic characteristics and the surplus–lines companies that insure them. Schwartz WB, et al. **JAMA** 1989 Sep 8;262(10):1335–41

Physician advertising. Stratton WT. **Kans Med** 1988 Jul; 89(7):180, 212

Israel: doctors and defence forces [letter] Cutting P. **Lancet** 1989 Apr 8;1(8641):788–9

Physicians and peace prospects [letter] Holdstock D. **Lancet** 1988 Dec 24–31;2(8626–8627):1494

International Physicians for the Prevention of Nuclear War: Messiahs of the nuclear age? Orient JM. **Lancet** 1988 Nov 19;2(8621):1185–6

The white–coat effect and self–recording of blood pressure [letter] Stanek B, et al. **Lancet** 1989 Feb 11;1(8633):329

Criticism of IPPNW [letter] Zupanc ML. **Lancet** 1989 Jan 7;1(8628):48–9

Collaboration: needed more than ever [editorial] Bishop BE. **MCN** 1989 May–Jun;14(3):153

Physician advertising revisited [published erratum appears in Med Care 1989 Feb;27(2):220] Rizzo JA. **Med Care** 1988 Dec;26(12):1238–44

The ownership of health facilities and clinical decisionmaking. The case of the ESRD industry. Schlesinger M, et al. **Med Care** 1989 Mar;27(3):244–58

How well can physicians estimate mortality in a medical intensive care unit? McClish DK, et al. **Med Decis Making** 1989 Apr–Jun;9(2):125–32

Evaluating physicians' probabilistic judgments. Poses RM, et al. **Med Decis Making** 1988 Oct–Dec;8(4):233–40

Use of linear models to analyze physicians' decisions. Wigton RS. **Med Decis Making** 1988 Oct–Dec;8(4):241–52 (64 ref.)

What 'makes' a good doctor? Huxham GJ, et al. **Med Educ** 1989 Jan;23(1):3–13

The surgeon as a patient [letter] Arnold M. **Med J Aust** 1989 Feb 20;150(4):223

Cigarette smoking and the Australian medical profession. Magnus P. **Med J Aust** 1989 Apr 17;150(8):437, 440–1 (31 ref.)

MDPAC: a potent force in Michigan. McNerney BJ. **Mich Med** 1989 Feb;88(2):24, 26

The position of the Soviet physician: the bureaucratic professional. Field MG. **Milbank Q** 1988;66 Suppl 2:182–201

Doctors, partitocrazia, and the Italian state. Krause EA. **Milbank Q** 1988;66 Suppl 2:148–66

Is the best diagnosis an early retirement? Burkey JW. **Mo Med** 1986 Jan;83(1):13

PRO is unjustly criticized by a few, vocal physicians. Rall KL. **Mo Med** 1986 Mar;83(3):135–6

Medication dispensing: is it for you? Alexander C. **N C Med J** 1989 Apr;50(4):200–3

Physician employment contracts. Korenchuk KM.

N C Med J 1989 May;50(5):254–6
Physicians' opinions and use of colorectal cancer screening procedures. Sandler RS, et al. N C Med J 1989 Aug; 50(8):452–5
The debate over physician ownership of health care facilities. Iglehart JK. N Engl J Med 1989 Jul 20;321(3):198–204
Access to information—physicians' credentials and where you can't find them. Reade JM, et al. N Engl J Med 1989 Aug 17;321(7):466–8
Health, income, and activities of retired physicians. Rowe ML. N Y State J Med 1989 Aug;89(8):450–3
Survey of preclinical medical students: declining interest in becoming a physician. Arbegast K, et al. Nebr Med J 1989 Jul;74(7):178–9
Wall Street takes on doctors [editorial] Gelber BR. Nebr Med J 1989 Apr;74(4):71–2
Tribute to the doctor's wife and the doctor. It takes a lot of prayers [letter] Grace A. Nebr Med J 1989 Jul; 74(7):172–3
Doctor exposed to AIDS [news] Occup Health Saf 1989 Mar; 58(3):16–7
Physician parents. The mothers and fathers behind stethoscopes. Athy D. Ohio Med 1989 Feb;85(2):122–4, 126–7, 129
The physician and the computer: a tale of the future. Mieczkowski LE. Ohio Med 1989 Apr;85(4):265–8, 310
Cataract extractions for senior surgeons. Pizzarello LD, et al. Ophthalmic Surg 1988 Sep;19(9):629–32
Teller acuity cards versus clinical judgment in the diagnosis of amblyopia with strabismus. Ellis GS Jr, et al. Ophthalmology 1988 Jun;95(6):788–91
Withdrawing money from qualified retirement plans. Pa Med 1989 Jun;92(6):54–8
The physician search and triple net gain. Downing J 3d, et al. Pa Med 1988 Nov;91(11):36–7
Health care of physicians' children. Wasserman RC, et al. Pediatrics 1989 Mar;83(3):319–22
For clinical research: a formula for improved prognosis [letter] Gruber KA. Perspect Biol Med 1988 Summer; 31(4):612–4
How to stay out of jail (by not breaking antitrust laws) [editorial] Griffin GC. Postgrad Med 1989 Mar;85(4):15–6
Suicide among psychologists and a proposal for the American Psychological Association. Lester D. Psychol Rep 1989 Feb;64(1):65–6
New information resource, the National Practitioner Data Bank. Wilson MA. Public Health Rep 1989 May–Jun; 104(3):311–2
Physicians' do-not-resuscitate decisions and documentation in a community hospital. Lipton HL. QRB 1989 Apr; 15(4):108–13
The Jewish contribution to medicine. Part II. The 19th and 20th centuries. Dubovsky H. S Afr Med J 1989 Jul 15; 76(2):67–70
Needlesticks and HIV infection [editorial] Van Demark RE Sr. S D J Med 1989 Mar;42(3):15
Agreement between parents and physicians regarding clinical evaluation of patients with juvenile rheumatoid arthritis. Vandvik IH, et al. Scand J Rheumatol 1988;17(6):459–63
The practice of traditional Korean medicine in Washington, D.C. Pang KY. Soc Sci Med 1989;28(8):875–84
"I swear by Apollo the physician..." [letter] Baldwin MA. South Med J 1988 Dec;81(12):1598–9
Health manpower. II. Physician time expended in shaving [letter] Riley HD Jr. South Med J 1989 Jul;82(7):932–3
Physicians' views of periodic abstinence methods: a study in four countries. Snowden R, et al. Stud Fam Plann 1988 Jul–Aug;19(4):215–26
Physicians and the future of health care [letter] Amble F. Tex Med 1988 Sep;84(9):7
The federal antitrust laws—a primer for physicians. Francisco CJ 3d. Tex Med 1989 Mar;85(3):56–8
When the doctor dies. Kowierschke K. Tex Med 1989 Jan; 85(1):62–3
Directory of Virginia physicians 1989. Va Med 1989 Jul; 116(7):3–321
Why's, wherefore's, and what to do about soaring health plan rates. Godwin ID. Va Med 1989 Jan;116(1):3–4
Medical students [editorial] Kendig EL Jr. Va Med 1989 Sep; 116(9):375
Physician's guide to the Natural Death Act. Kramer S, et al. Va Med 1988 Nov;115(11):545
AIDS. The physician's legal duties. Kramer S. Va Med 1988 Nov;115(11):533–5
A tangled love affair. Fox ER. West J Med 1989 Apr; 150(4):484
Uncompensated and undercompensated care provided by San Francisco Medical Society physicians. Hogeland S. West J Med 1988 Sep;149(3):359–61
Physicians' attitudes toward the legalization of marijuana use. Linn LS, et al. West J Med 1989 Jun;150(6):714–7
Preventive attitudes, beliefs, and practices of physicians in fee-for-service and health maintenance organization settings. Scutchfield FD, et al. West J Med 1989 Feb; 150(2):221–5
Understanding of elderly patients' resuscitation preferences by physicians and nurses. Uhlmann RF, et al. West J Med 1989 Jun;150(6):705–7
Few physicians vaccinated against hepatitis B. Wis Med J 1989 Apr;88(4):14
The importance of the medical family [editorial] Adams TL. Wis Med J 1989 Jun;88(6):11
Peer review and the Patrick case [editorial] Boulanger WJ. Wis Med J 1988 Aug;87(8):5
Electronic information: Part II. Yasnoff WA. Wis Med J 1989 Jan;88(1):31, 35
Smoking declines in a group of Indian doctors [letter] Sharma TD. World Health Forum 1988;9(2):219–20
[Physicians' pension fund. Calculation an accounting 1987/1988] Ugeskr Laeger 1988 Sep 19;150(38):2270–92 (Dan)
[Medically staffed ambulances for trauma victims] Boll KL, et al. Ugeskr Laeger 1989 Jul 31;151(31):1970–2 (Eng. Abstr.) (Dan)
[An mobile intensive care unit manned with medical personnel. Experience from a 16-year period] Nielsen EM, et al. Ugeskr Laeger 1989 Jul 17;151(29):1859–61 (Eng. Abstr.) (Dan)
[Savings achieved by cooperation with physicians] Nielsen ID. Ugeskr Laeger 1989 Aug 7;151(32):2046–7 (Dan)
[Suicide among physicians] Nordentoft M. Ugeskr Laeger 1988 Oct 10;150(41):2440–3 (Eng. Abstr.) (Dan)
[The physician yesterday, today and tomorrow] Järvi O. Duodecim 1988;104(10):797–8 (Fin)
[Smoking today and physicians] Fréour P. Bull Acad Natl Med (Paris) 1988 Mar;172(3):347–53 (Eng. Abstr.) (Fre)
[The basic results of research into the health status of physicians of the USSR and Polish People's Republic (based on survey data)] Gdulewicz T, et al. Sante Publique (Bucur) 1988 Oct–Dec;31(4):289–97 (Eng. Abstr.) (Fre)
[Perception of the attitude of physicians] Simard A, et al. Union Med Can 1989 May–Jun;118(3):105 (Fre)
[The physician as consumer. An appeal for consumer protection] Straub PW. Schweiz Med Wochenschr 1989 Jun 3;119(22):781–4 (Ger)
[Specialist information and knowledge of radiation protection according to the x-ray ordinance for physicians and medical assistant personnel] Niklas K. Strahlenschutz Forsch Prax 1988;30:199–204 (Ger)
[Organizational concept of a register of medical personnel in the People's Republic of Poland] Dorosiński R, et al. Z Gesamte Hyg 1988 Oct;34(10):550–2 (Eng. Abstr.) (Ger)
[Advertising by physicians] Grunfeld GB. Harefuah 1989 Jan 15;116(2):120–3 (Heb)
[After the convention of physicians and artists] Sáry G. Orv Hetil 1989 Feb 12;130(6):301–2 (Hun)
[The occupational health physician in the public health structure] Bodini L. G Ital Med Lav 1987 Sep–Nov; 9(5–6):199–204 (Eng. Abstr.) (Ita)
[The occupational health physician in the factory] Losito B. G Ital Med Lav 1987 Sep–Nov;9(5–6):195–8 (Eng. Abstr.) (Ita)
[Informed consent for clinician] Kiuchi M. Kokyu To Junkan 1988 Dec;36(12):1315–9 (Jpn)
[Questionnaire survey of full-time occupational health physicians in Japan] Takahashi K, et al. Sangyo Igaku 1989 Mar;31(2):77–83 (Eng. Abstr.) (Jpn)
[HIV testing in occupational health physicians (letter)] Bedriftslegeforening N, et al. Tidsskr Nor Laegeforen 1988 Nov 10;108(31):2879–80 (Nor)
[Englishmen under stress] Elle PJ. Tidsskr Nor Laegeforen 1989 Mar 30;109(9):982–3 (Nor)
[Physicians and the psychosocial occupational environment] Larsen O. Tidsskr Nor Laegeforen 1989 May 30; 109(15):1611 (Nor)
[Physicians and the death penalty. Physicians' participation in the death penalty and executions] Mertz J. Tidsskr Nor Laegeforen 1989 Jun 20;109(17–18):1898–901 (Eng. Abstr.) (Nor)
[Physicians and the National Insurance System] Walmann BI, et al. Tidsskr Nor Laegeforen 1989 Aug 10; 109(22):2146–8 (Eng. Abstr.) (Nor)
[Oslo model: 37.5 hours/week-physicians] Wium P. Tidsskr Nor Laegeforen 1988 Oct 25;108(29B):2605–8 (Nor)
[Music in medicine: a double participation (editorial)] Décourt LV. Rev Paul Med 1988 Mar–Apr;106(2):59–61 (Por)
[All-Union Congress of Physicians] Kiriushchenkov AP. Akush Ginekol (Mosk) 1989 Jan;(1):3–5 (Rus)
[Views of pathologists and clinicians on autopsy] Milenkov Kh, et al. Arkh Patol 1989;51(3):73–6 (Eng. Abstr.) (Rus)
[Experience in attracting co-workers at a department of clinical laboratory diagnosis to diagnostic and therapeutic work] Zakhariia EA, et al. Lab Delo 1989;(2):71–2 (Eng. Abstr.) (Rus)
[Study of the activities of physicians at health education centers of different categories] Purina EA, et al. Sov Zdravookhr 1988;(6):34–7 (Eng. Abstr.) (Rus)
[The professional orientation of troop physicians] Dronov VN, et al. Voen Med Zh 1989 Mar;(3):18–20 (Rus)
[Let us cure our planet!] Sršeň S. Cesk Pediatr 1989 Jun; 44(6):321 (Eng. Abstr.) (Slo)
[Relations between the pharmaceutic industry and health professionals] Olalla JF, et al. Gac Sanit 1989 Mar–Apr; 3(11):389–91 (Spa)
[Prevalence of smoking among medical professionals (letter)] Sánchez Agudo L. Med Clin (Barc) 1989 Feb 18;92(6):236 (Spa)
[Desirable qualities in physicians] Agrest A. Medicina (B Aires) 1988;48(2):201–11 (Spa)
[Survey on the smoking habits of a population of hospital doctors] Martínez de la Iglesia J, et al. Rev Clin Esp 1988 May;182(8):429–34 (Eng. Abstr.) (Spa)
[Smoking in health professionals at a general hospital (letter)] Martínez Sande JL, et al. Rev Clin Esp 1989 Mar;184(5):274 (Spa)
[Physicians in the administration—will the county council risk that? (interview by Kristina Johnson)] Doctare C. Lakartidningen 1988 Sep 21;85(38):3016–7 (Swe)
[Alcoholism among physicians—seeking help] Liljenberg J. Lakartidningen 1988 Nov 16;85(46):3906 (Swe)
[Estonian physicians want to increase their contact with colleagues in the West] Orusild E, et al. Lakartidningen 1988 Nov 16;85(46):3949 (Swe)
[The midwives' work in intrauterine death should be easier if better cooperation with physicians existed] Rådestad I, et al. Lakartidningen 1989 May 24;86(21):2021–3 (Swe)
[The number of physicians who smoke is diminishing. There are big differences between specialties] Wilhelmsen L, et al. Lakartidningen 1988 Nov 23;85(47):4093–4, 4096 (Swe)
[Irregularity of the work load and long on-duty periods are the worst problems in the working environment for physicians in the Scandinavian countries] Nordahl V, et al. Nord Med 1989;104(1):4–6, 32 (Swe, Nor)

ECONOMICS

Changing economic environment: physicians vs. pharmacists. Considine JM, et al. N J Med 1988 Jul;85(7):589–91

HISTORY

John Mavuma Nembula, 1860–1897. First black physician in southern Africa. Shiels RA. J Natl Med Assoc 1988 Nov; 80(11):1255–6, 1258
The big five. A centenary tribute to Johns Hopkins Hospital. James DG. J R Coll Physicians Lond 1989 Jan;23(1):53–5
Fictional doctors and the evolution of medical ethics in the United States, 1975–1900. Burns CR. Lit Med 1988;7:39–55
Unna's boot. Kaplan D. N C Med J 1989 Feb;50(2):103
Great doctors and medical worthies. Emslie-Smith D. Scott Med J 1988 Jun;33(3):280–4
[Physicians buried in Olšan Cemetery] Palivec V. Cas Lek Cesk 1988 Oct 7;127(41):1274–6 (Cze)
[Russia-Halle reciprocity in medicine of the 18th century. V. Halle graduates employed in Russia and their medical fields] Kaiser W, et al. Z Gesamte Inn Med 1988 Jul 15; 43(14):391–6 (Eng. Abstr.) (Ger)
[The history of the Halle Ars medica Judaica. II. The beginnings of Jewish medical education] Kaiser W, et al. Z Gesamte Inn Med 1989 Jan 1;44(1):25–30 (Eng. Abstr.) (Ger)
[To be a physician 50 years ago] Storstein O. Tidsskr Nor Laegeforen 1988 Dec 10;108(34–36):3223–5 (Nor)
[Emanuel Ringelblum (1900–1944) as historian of Jewish medicine] Czeley-Wybieralska M, et al. Arch Hist Filoz Med 1988;51(2):187–212 (Eng. Abstr.) (Pol)
[Physician buried in the cemetery at Lipowa Street in Lublin] Domański CW. Arch Hist Filoz Med 1988;51(2):221–31 (Pol)
[Participation of pediatricians in congresses of Polish physicians and biologists] Wilkoszewski E. Pediatr Pol 1988 Oct;63(10):673–9 (Eng. Abstr.) (Pol)
[Punishment of Nazi physicians] Sterkowicz S. Przegl Lek 1989;46(1):143–9 (Pol)
[Rubião Meira and the former physicians in his memoir of São Paulo] Corrêa JV. Rev Hosp Clin Fac Med Sao Paulo 1988 Sep–Oct; 43(5):255–7 (Por)
[I.S. Ruzhei'nikov—a physician, revolutionary, bolshevik] Dushmanov SKh. Sov Zdravookhr 1989;(6):63–4 (Rus)
[Participation of medical scientists in Don in the revolutionary movement] Pankov GI, et al. Sov Zdravookhr 1989;(6):61–2 (Rus)
[The first public health physicians in Nizhnii Novgorod] Strikovskii DKh. Sov Zdravookhr 1988;(11):62–4 (Rus)
[The French revolution—a revolution even for health care] Hakulinen E. Lakartidningen 1989 Jul 12;86(28–29):2535–7 (Swe)

LEGISLATION & JURISPRUDENCE

Physician recredentialing. Reich DR. N Y State J Med 1989 Aug;89(8):484
[Calculation of salary of affiliated hospital physicians] Jansen C. Dtsch Med Wochenschr 1989 Apr 21;114(16):644–5 (Ger)
[Compensation for the drugs only when the physician is at fault] Lampe O. Dtsch Med Wochenschr 1988 Dec 2; 113(48):1898–9 (Ger)
[Specific legal questions concerning chief physician's contract] Rieger HJ. Dtsch Med Wochenschr 1988 Oct 28; 113(43):1693–4 (Ger)
[Physician's right to make decisions in a hospital] Rieger HJ. Dtsch Med Wochenschr 1988 Oct 14;113(41):1613–4 (Ger)
[Tasks and responsibilities of the occupational health physician employed in health services] Buzzi F. G Ital Med Lav 1987 Sep–Nov;9(5–6):215–8 (Eng. Abstr.) (Ita)

[Obligations and penal responsibilities of physicians, especially factory doctors, in regard to the protection of workers' health] Cottinelli V. **G Ital Med Lav** 1987 Sep-Nov;9(5-6):219-28 (Eng. Abstr.) **(Ita)**

[The professional responsibility of the factory physician] Tavani M. **G Ital Med Lav** 1987 Sep-Nov;9(5-6):211-3 (Eng. Abstr.) **(Ita)**

[Individual professional medical activity] Glushkov VA. **Klin Khir** 1988;(11):46-8 **(Rus)**

MANPOWER

Physician supply and distribution in Georgia. Dever GE, et al. **J Med Assoc Ga** 1989 Aug;78(8):553-7

Physicians supply in Georgia [editorial] Duttera MJ. **J Med Assoc Ga** 1989 Aug;78(8):531-2

PSYCHOLOGY

Stresses on physicians treating AIDS. Frierson RL, et al. **Am Fam Physician** 1987 Jun;35(6):153-9

HIV-infected patients: a primary care challenge. Sadovsky R. **Am Fam Physician** 1989 Sep;40(3):121-8 (30 ref.)

Consultation to a clinic following suicide. Young JJ, et al. **Am J Orthopsychiatry** 1989 Jul;59(3):473-6

Impact of public education and continuing medical education on physician attitudes and behavior concerning cholesterol. Block L, et al. **Am J Prev Med** 1988 Sep-Oct;4(5):255-60

Psychotherapy with physicians' families: when attributes in medical practice become liabilities in family life. Ellis JJ, et al. **Am J Psychother** 1988 Jul;42(3):380-8

Increasing response rates in physicians' mail surveys: an experimental study. Maheux B, et al. **Am J Public Health** 1989 May;79(5):638-9

Attitudes and experience of Singapore doctors and dental surgeons regarding acquired immunodeficiency syndrome (AIDS) and human immunodeficiency virus (HIV) positive patients. Lee L, et al. **Ann Acad Med Singapore** 1989 Jan; 18(1):19-21

Health maintenance activities of physicians and nonphysicians. Kahn KL, et al. **Arch Intern Med** 1988 Nov; 148(11):2433-6

An editorial indulgence: perspectives in quality assurance. Best J. **Aust Clin Rev** 1989;9(1):49-51

Appraisal of the event as a factor in coping with malpractice litigation. Charles SC, et al. **Behav Med** 1988 Winter; 14(4):148-55

Doctors' drinking habits and consumption of alcohol. Juntunen J, et al. **BMJ** 1988 Oct 15;297(6654):951-4

Getting help for depressed colleagues [letter] **Can Med Assoc J** 1989 May 15;140(10):1126-7

Ontario MDs worried new law threatens confidentiality of patient records. Cohen L. **Can Med Assoc J** 1988 Oct 15; 139(8):798

Understanding physicians' response to AIDS. Taylor KM, et al. **Can Med Assoc J** 1989 Mar 15;140(6):597-602

The stresses of caring: Part 2. Swogger G Jr. **Colo Med** 1988 Dec 1;85(22):478-9

Development of diabetes attitude scale for health-care professionals. Anderson RM, et al. **Diabetes Care** 1989 Feb; 12(2):120-7

Authoritarianism in diabetology [editorial] Andel M, et al. **Diabetic Med** 1989 Aug;6(6):471

Doctors' orders and patients' self-interest: two views of medication usage? Trostle J. **Epilepsy Res Suppl** 1988; 1:57-69

How doctors learn in a Balint group. Samuel O. **Fam Pract** 1989 Jun;6(2):108-13

Differences in attitudes toward patients among medical specialties. Roskin G, et al. **Int J Psychiatry Med** 1988; 18(3):223-33

Professional discipline [editorial] Alberts ME. **Iowa Med** 1988 Nov;78(11):533

The other side of the bedpan. Moore D. **J Am Med Wom Assoc** 1989 Jul-Aug;44(4):127-8

An epidemic affliction of contemporary physicians. Roberts HJ. **J Fla Med Assoc** 1988 Oct;75(10):679-81

Domains of medical practice: physicians' assessment of the role of physician extenders. Ferraro KF, et al. **J Health Soc Behav** 1989 Jun;30(2):192-205

Cardiovascular changes during mental stress: correlations with presence of coronary risk factors and cardiovascular disease in physicians and dentists. McKinney ME, et al. **J Hum Hypertens** 1987 Sep;1(2):137-45

The Resource Based Relative Value Scale studies. A report by AMA. **J Ky Med Assoc** 1989 Mar;87(3):137-40

The physician as critic [letter] McWhorter JH. **J Med Ethics** 1988 Sep;14(3):165-6

A science of individuals: medicine and casuistry. Hunter KM. **J Med Philos** 1989 Apr;14(2):193-212

Outrageous and beyond the bounds of decency. Epps CH Jr. **J Natl Med Assoc** 1989 Sep;81(9):975-7, 981, 985-6

"I've been there" [editorial] Bryan CS. **J S C Med Assoc** 1988 Oct;84(10):511-2

The essential healer. Sasser CG. **J S C Med Assoc** 1989 Aug; 85(8):389-92

Doctors have feelings too [letter] **JAMA** 1989 Jan 20; 261(3):379-80

A piece of my mind. Risky business. Anders DL. **JAMA** 1988 Dec 2;260(21):3184

Marriage: if it lasts, does that mean it's good? [editorial] Eisenberg L. **JAMA** 1989 Apr 28;261(16):2401

The psychology of postponement in the medical marriage. Gabbard GO, et al. **JAMA** 1989 Apr 28;261(16):2378-81

Doctors and nurses: friends or foes? Hallenbeck P. **JAMA** 1988 Nov 4;260(17):2589

A piece of my mind. Tears. Krauser PS. **JAMA** 1989 Jun 23-30;261(24):3612

A piece of my mind. Social Darwinism. LaCombe MA. **JAMA** 1988 Nov 18;260(19):2907

A piece of my mind. Coping with fallibility. Levinson W, et al. **JAMA** 1989 Apr 21;261(15):2252

Jewish law and the obligation of the physician to heal patients with AIDS [letter] Shalit P. **JAMA** 1989 Apr 21; 261(15):2199

One of at least three of a kind [letter] Spencer FJ. **JAMA** 1989 Jan 6;261(1):46

Memories: a neglected concept in care. Calman KC. **Lancet** 1988 Nov 19;2(8621):1184-5

Characterizing physicians' perceptions of ambiguity. Curley SP, et al. **Med Decis Making** 1989 Apr-Jun;9(2):116-24

Disaster, stress and the doctor. Fain RM, et al. **Med Educ** 1989 Jan;23(1):91-6

Computers and physicians--an appraisal study. Moidu K, et al. **Med Inf (Lond)** 1989 Jan-Mar;14(1):63-70

Risk rate neglect in decisions involving invasive diagnostic procedures. Manu P, et al. **Methods Inf Med** 1989 Jan; 28(1):20-3

Testing reality: the introduction of decision-support technologies for physicians. Shortliffe EH. **Methods Inf Med** 1989 Jan;28(1):1-5

Canadian medicine: dominance or proletarianization? Coburn D. **Milbank Q** 1988;66 Suppl 2:92-116 (81 ref.)

A re-examination of the hypothesis of physician deprofessionalization. Haug MR. **Milbank Q** 1988;66 Suppl 2:48-56

Medical dominance in Britain: image and historical reality. Larkin GV. **Milbank Q** 1988;66 Suppl 2:117-32

Professional dominance or proletarianization?: neither. Navarro V. **Milbank Q** 1988;66 Suppl 2:57-75

The professional status of physicians in the Nordic countries. Riska E. **Milbank Q** 1988;66 Suppl 2:133-47

Job and life satisfaction among rural physicians. Results of a survey. Pastor WH, et al. **Minn Med** 1989 Apr; 72(4):215-23

Physician stress: is it inevitable? Orman MC. **Mo Med** 1989 Jan;86(1):21-5

Salaried physicians and economic incentives [letter] **N Engl J Med** 1989 Jan 19;320(3):187-8

The physician factor in cesarean birth rates [letter] **N Engl J Med** 1989 Aug 24;321(8):548

Interactional styles of nurse practitioners and physicians regarding patient decision making. Taylor SG, et al. **Nurs Res** 1989 Jan-Feb;38(1):50-5

Wounded healers--malpractice on trial. MacDougall MK. **Ohio Med** 1989 May;85(5):333-5

Medicine--the co-dependent profession [letter] Isenberg SF. **Pharos** 1989 Spring;52(2):36-7

Reduce stress with a leisurely lunch [letter] Shulkin DJ. **Postgrad Med** 1989 Jan;85(1):35

Physicians' acceptability of termination of pregnancy after prenatal diagnosis in southern France. Julian C, et al. **Prenat Diagn** 1989 Feb;9(2):77-89

Self-care in Israel: physicians' views and perspectives. Shuval JT, et al. **Soc Sci Med** 1989;29(2):233-44

Professional uncertainty and physician medical decision-making in a multiple treatment framework. Wolff N. **Soc Sci Med** 1989;28(2):99-107

Doctoring: the philosophic milieu. Bessinger CD Jr. **South Med J** 1988 Dec;81(12):1558-62 (41 ref.)

Communication of information about therapeutic alternatives: end-stage renal disease model. McCauley CR, et al. **South Med J** 1989 Apr;82(4):418-22

Physician stress [letter] Lowinger P. **West J Med** 1989 Jan; 150(1):92

Nurse-physician conflicts as barriers to the enactment of nursing roles. Katzman EM, et al. **West J Nurs Res** 1988 Oct;10(5):576-90

[The concept of handicap by French physicians since 1975] Chapireau F. **Ann Med Psychol (Paris)** 1989 Jan; 147(1):129-34 **(Fre)**

[The physician's response to refusal of chemotherapy by cancer patients] Gilbar O. **Harefuah** 1988 Dec 1; 115(11):321-4 (Eng. Abstr.) **(Heb)**

[Opinion survey on the bioethical views of Catholic physicians in Japan. I. Contraception and induced abortion] Kahyo H. **Sangyo Ika Daigaku Zasshi** 1989 Jun 1; 11(2):193-211 (Eng. Abstr.) **(Jpn)**

[Stress and physicians. Interviews of 30 physicians working at hospitals] Riksaasen R. **Tidsskr Nor Laegeforen** 1989 Jun 10;109(16):1798-9 (Eng. Abstr.) **(Nor)**

[Correlation of mental fatigue due to work load and professional qualifications of physicians] Wichrowski A, et al. **Med Pr** 1988;39(4):246-52 (Eng. Abstr.) **(Pol)**

[The physician among physicians] Ruzyllo E. **Wiad Lek** 1988 Jun 1;41(11):689-99 **(Pol)**

[Why do physicians continue to smoke?] Rosemberg J. **Rev Paul Med** 1988 Jul-Aug;106(4):179-82 **(Por)**

[Development of the personality of a physician-pediatrician] Bogomaz TA, et al. **Pediatriia** 1988;(4):95-7 **(Rus)**

[Prestige in the roentgenologists' profession] Rabkin Ikh. **Sov Med** 1989;(5):51-4 **(Rus)**

[Effect of incentives on the quality and cost of medical services] Stoddart G. **Sov Zdravookhr** 1989;(4):60-1 **(Rus)**

[Physicians feel stress, anxiety and anger more often than other employees] Theorell T, et al. **Lakartidningen** 1988 Oct 5;85(40):3268-71 **(Swe)**

STANDARDS

Profile of the GMC [letter] **BMJ** 1989 Jun 17;298(6688):1641

Profile of the GMC. Discipline III: The final stages. Smith R. **BMJ** 1989 Jun 17;298(6688):1632-4

Profile of the GMC. Discipline II: The preliminary screener--a powerful gatekeeper. Smith R. **BMJ** 1989 Jun 10;298(6687):1569-71

Dealing with sickness and incompetence: success and failure. Smith R. **BMJ** 1989 Jun 24;298(6689):1695-8

Profile of the GMC: Discipline I: The hordes at the gates. Smith R. **BMJ** 1989 Jun 3;298(6686):1502-5

Qualifications of the physician in charge of the vascular diagnostic laboratory. Rutherford RB. **J Vasc Surg** 1988 Dec;8(6):732-5

Informed consent for federal clinicians. Kapp MB. **Milit Med** 1989 May;154(5):238-42

Position statement of the Hospital Association of New York State on the Report of the New York State Advisory Committee on Physician Recredentialing. **N Y State J Med** 1989 Apr;89(4):223-5

Professional medical conduct [letter] Tanner K. **N Y State J Med** 1989 May;89(5):293-4

STATISTICS & NUMERICAL DATA

Physician need [letter] **JAMA** 1989 Sep 1;262(9):1184

[Underemployment and unemployment among physicians in urban areas of Mexico] Frenk J, et al. **Salud Publica Mex** 1988 Sep-Oct;30(5):691-9 (Eng. Abstr.) **(Spa)**

SUPPLY & DISTRIBUTION

A second survey of graduates of a traditionally black college of medicine. Johnson DG, et al. **Acad Med** 1989 Feb; 64(2):87-94

Projections of physician supply and demand: a summary of HRSA and AMA studies. Singer AM. **Acad Med** 1989 May; 64(5):235-40

Medical manpower in Alabama: shortage, sufficiency or surfeit? Coggins WJ, et al. **Ala Med** 1989 Feb;58(8):15-19, 26

Changes in the distribution of physicians in rural areas of Minnesota, 1965-85. Dennis T. **Am J Public Health** 1988 Dec;78(12):1577-9

Physician distribution and health manpower policy in Korea. Yang BM, et al. **Asia Pac J Public Health** 1989;3(1):68-77, 85

The doctor's dilemma or the Three "Ms". Bleiker MA. **Bull Int Union Tubere Lung Dis** 1989 Mar;64(1):34-5

Canada's doctors--who they are and what they do: lessons from the CMA's 1986 manpower survey. Adams O. **Can Med Assoc J** 1989 Jan 15;140(2):212-21

Canada one country among many grappling with MD-oversupply issue. Adams O. **Can Med Assoc J** 1989 Jan 1;140(1):68-9

Are there too many doctors? CMA seeks "rational" approach to issue. Sullivan P. **Can Med Assoc J** 1989 Sep 1; 141(5):432-3

Latest enrollment statistics indicate Canada will be producing fewer new MDs. Sullivan P. **Can Med Assoc J** 1989 Jan 1;140(1):62

Manpower in gastroenterology in the United States: a position paper of the Training and Education Committee of the AGA. Modlin IM, et al. **Gastroenterology** 1989 Mar; 96(3):956-8

Market responses to declines in the output of M.D.s [letter] Blackstone EA. **Health Aff (Millwood)** 1988 Summer; 7(3):237-8

Physician supply in the year 2000. Ginzberg E. **Health Aff (Millwood)** 1989 Summer;8(2):84-90

The adequacy of physician supply in small rural counties. Kindig DA, et al. **Health Aff (Millwood)** 1989 Summer; 8(2):63-76

The availability of physician services: a geographic analysis. Wing P, et al. **Health Serv Res** 1988 Dec;23(5):649-67

Physician disinterest deters HMOs in Elgin, IL. Larkin H. **Hospitals** 1989 Jun 20;63(12):74

Health manpower study stock of allopathic medical graduates in Andhra Pradesh. Sridhar MS. **Indian J Public Health** 1987 Oct-Dec;31(4):261-7

Health manpower study projection of requirements for and supply of medical manpower in Andhra Pradesh. Sridhar MS. **Indian J Public Health** 1988 Jan-Mar;32(1):17-23

Accommodating rapid growth in physician supply: lessons from Israel, warnings for Canada. Barer ML, et al. **Int J Health Serv** 1989;19(1):95-115

Must we produce more doctors [letter] Basu D. **J Indian Med Assoc** 1988 Jun;86(6):158-9

Meeting the needs for health workers: proportions, prerogatives, and priorities. **J Public Health Policy** 1988 Autumn;9(3):309-18

Policy development for medical education in South Carolina [editorial] Bates GW. **J S C Med Assoc** 1989 May; 85(5):247-8

Physician manpower and graduate medical education: a review with implications for state policy development. McGowan JJ, et al. **J S C Med Assoc** 1989 May; 85(5):239-45

Physician supply and Medicaid participation. The causes of market failure. Fossett JW, et al. **Med Care** 1989 Apr; 27(4):386–96

Doctors qualifying from United Kingdom medical schools during the calendar years 1977 and 1983. Parkhouse J, et al. **Med Educ** 1989 Jan;23(1):62–9

Medical manpower [letter] Andrew RR. **Med J Aust** 1979 Oct 20;2(8):419–20

Medical manpower needs by the year 2000. Yeoh PH. **Med J Malaysia** 1988 Sep;43(3):195–9

Rural physicians are facing a variety of problems in the state. Marr J. **Mich Med** 1988 Aug;87(8):464–75

Physicians are scarce in rural Michigan. Marr J. **Mich Med** 1988 Aug;87(8):465, 467

Mandatory HMO enrollment in Medicaid: the issue of freedom of choice. Welch WP, et al. **Milbank Q** 1988; 66(4):618–39

Residencies in conflict: small vs. large. Kirkle DL. **Nebr Med J** 1989 Apr;74(4):80–2

Doctor glut or doctor shortage. Raymond R. **Nebr Med J** 1989 Jun;74(6):158–9

Physicians for rural Nebraska—a comment on the Report of the Commission on Medical Education [letter] Waldman RH, et al. **Nebr Med J** 1989 Sep;74(9):288

Glut reaction. DePaolis M. **Postgrad Med** 1989 Mar; 85(4):138, 141

Validity of the register of medical practitioners for manpower planning. Results and recommendations from a postal sample survey. Zwarenstein M, et al. **S Afr Med J** 1989 Aug 5;76(3):105–8

Judging doctor supply—market or health criteria? Roemer MI. **World Health Forum** 1988;9(4):547–51; discussion 551–4

[Greenland—a land without physicians? A new agreement, wishes— a new solution to big problems!] Johansen LG. **Ugeskr Laeger** 1989 Jan 23;151(4):269–71 **(Dan)**

[Admission to medical school and the needs of the country] Gonçalves EL. **Rev Paul Med** 1988 Jul–Aug;106(4):220–4 (Eng. Abstr.) **(Por)**

[The fourth meeting: human resources and health] **Educ Med Salud** 1988 Oct–Dec;22(4):488–98 **(Spa)**

[The demand for physicians in Chile] Medina E, et al. **Rev Med Chil** 1988 Apr;116(4):389–94 (Eng. Abstr.) **(Spa)**

[Characteristics of physician graduates from Chilean universities. Promotions 1978–1982. Part II. Employment and perceptions about improving, income and other relevant aspects of the professional activity] Ugalde H, et al. **Rev Med Chil** 1987 Dec;115(12):1195–204 (Eng. Abstr.) **(Spa)**

UTILIZATION

Pediatric critical care transport: is a physician always needed on the team? McCloskey KA, et al. **Ann Emerg Med** 1989 Mar;18(3):247–9

Physician need. An alternative projection from a study of large, prepaid group practices. Mulhausen R, et al. **JAMA** 1989 Apr 7;261(13):1930–4

Does having more time after retirement change the demand for physician services? Boaz RF, et al. **Med Care** 1989 Jan; 27(1):1–15

Physician use among the old–old. Factors affecting variability. Rosner TT, et al. **Med Care** 1988 Oct; 26(10):982–91

PHYSICIANS' ASSISTANTS

Assistants at cataract surgery [letter] Hoffer KJ. **Arch Ophthalmol** 1989 Jul;107(7):952

Prohibition on charges for services of assistant cataract surgeons upheld by Federal Court of Appeals. Portman RM. **Arch Ophthalmol** 1989 Jul;107(7):975–7

Physician assistant supervisor regulations. Huckabee MJ. **Iowa Med** 1989 Mar;79(3):109–10

Pediatricians' use of chaperones when performing gynecologic examinations on adolescent females. Sanders JM Jr, et al. **J Adolesc Health Care** 1989 Mar;10(2):110–4

Regulatory changes regarding physician's assistant clinical practice. Bottom WD, et al. **J Fla Med Assoc** 1988 Jul; 75(7):437–40

Domains of medical practice: physicians' assessment of the role of physician extenders. Ferraro KF, et al. **J Health Soc Behav** 1989 Jun;30(2):192–205

Rx for a healthier practice: professional medical assistants. Smith B. **Tex Med** 1988 Oct;84(10):60–1

The changing role of physician assistants. Lehman R. **Wis Med J** 1989 Mar;88(3):30

[Specialist information and knowledge of radiation protection according to the x-ray ordinance for physicians and medical assistant personnel] Niklas K. **Strahlenschutz Forsch Prax** 1988;30:199–204 **(Ger)**

EDUCATION

The training and utilization of surgical physician assistants. A retrospective study. Brandt LB, et al. **Arch Surg** 1989 Mar;124(3):348–51

Why invest in continuing education? Hall RM. **IMJ** 1988 Aug;174(2):80

LEGISLATION & JURISPRUDENCE

[Enlistment of assistant physicians without proof of qualification for the rescue service] Rieger HJ. **Dtsch Med Wochenschr** 1989 May 5;114(18):726–7 **(Ger)**

PSYCHOLOGY

Short-term memory constraints upon the generation of diagnosis hypotheses by novice clinicians. Niebuhr BR, et al. **Acad Med** 1989 Sep;64(9):550–1

Health beliefs and behaviors of physician assistants in Texas: implications for practice and education. Fasser CE, et al. **Am J Prev Med** 1988 Jul–Aug;4(4):208–15

An investigation of physician assistant and medical student empathic skills. Jarski RW. **J Allied Health** 1988 Aug; 17(3):211–9

PHYSICIANS' EXTENDERS see **PHYSICIANS' ASSISTANTS**

PHYSICIANS, FAMILY

Physicians' and medical students' knowledge of nutrition. Mlodinow SG, et al. **Acad Med** 1989 Feb;64(2):105–6

The family physician's role in the HIV epidemic [editorial] Goldschmidt RH. **Am Fam Physician** 1989 Sep;40(3):89–90

Meeting society's need for family physicians [editorial] Ostergaard DJ. **Am Fam Physician** 1989 May;39(5):119–20

HTLV–I infection and the family physician [editorial] Siwek J. **Am Fam Physician** 1989 Aug;40(2):91–2

A model to determine the feasibility of a pediatric practice. Miller KA, et al. **Am J Dis Child** 1989 Aug;143(8):919–23

Needlestick injuries and needle disposal in Minnesota physicians' offices. Thurn J, et al. **Am J Med** 1989 May; 86(5):575–9

Prescribing of psychotropic medication by primary care physicians and psychiatrists. Beardsley RS, et al. **Arch Gen Psychiatry** 1988 Dec;45(12):1117–9

Improvement in family physician recognition and treatment of hypercholesterolemia. Madlon–Kay DJ. **Arch Intern Med** 1989 Aug;149(8):1754–5

Where the buck stops. Colquhoun JP. **Aust Fam Physician** 1989 Mar;18(3):257

Is hour hobby really necessary? Colquhoun JP. **Aust Fam Physician** 1989 Jul;18(7):862–3

The ageing doctor. Fraser A. **Aust Fam Physician** 1989 May; 18(5):524–8

Doctors around the world. Are they getting through? Hull R. **Aust Fam Physician** 1989 Mar;18(3):258, 260–5

Doctors' beliefs about diabetes: a comparison of hospital and community doctors. Marteau TM, et al. **Br J Clin Psychol** 1988 Nov;27 (Pt 4):381–3

Psychological problems in general practice patients: two assumptions explored. Salmon P, et al. **Br J Clin Psychol** 1988 Nov;27 (Pt 4):371–9

Even minor surgery can go wrong [letter] **Br J Hosp Med** 1988 Aug;40(2):148

Rheumatology education in primary care practice [letter] Hynes DM. **Br J Rheumatol** 1989 Aug;28(4):362–3

Prenatal care: a comparative evaluation of nurse–midwives and family physicians [letter] **Can Med Assoc J** 1989 Jan 15;140(2):107, 110–1

Prenatal care: a comparative evaluation of nurse–midwives and family physicians [with correction] [letter] **Can Med Assoc J** 1988 Nov 15;139(10):930–1

Relation of family physician or specialist care to obstetric interventions and outcomes in patients at low fisk: a western Canadian cohort study. Krikke EH, et al. **Can Med Assoc J** 1989 Mar 15;140(6):637–43

Exemplary family physicians and consultants: empirical definition of contemporary medical practice. Langley GR, et al. **Can Med Assoc J** 1989 Aug 15;141(4):301–7

Attitudes and practices of primary care physicians in the management of elevated serum cholesterol levels [published erratum appears in Can Med Assoc J 1989 Aug 15;141(4):278] Langner NR, et al. **Can Med Assoc J** 1989 Jul 1;141(1):33–8

Family physician registration at locally produced short courses. Lockyer JM, et al. **Can Med Assoc J** 1988 Dec 15;139(12):1153–5

Do female general practitioners have a distinctive type of medical practice? Maheux B, et al. **Can Med Assoc J** 1988 Oct 15;139(8):737–40

Differences in intrapartum obstetric care provided to women at low risk by family physicians and obstetricians. Reid AJ, et al. **Can Med Assoc J** 1989 Mar 15;140(6):625–33

New registry allows FPs to refer obstetrical patients to other FPs. Sullivan P. **Can Med Assoc J** 1989 Jan 1;140(1):70–1

FPs have important role to play in AIDS battle, Ottawa specialist says. Sullivan P. **Can Med Assoc J** 1988 Dec 1; 139(11):1092–3

The meaning of information on GP referral rates to hospitals. Wilkin D, et al. **Community Med** 1989 Feb;11(1):65–70

An evaluation of diabetes knowledge amongst general practitioners and senior medical students. Central Manchester Health Authority Working Party on Diabetes Care. Hessett C, et al. **Diabetic Med** 1989 May–Jun; 6(4):351–3

Communication, the letter, and the GP. Hill P, et al. **Diabetic Med** 1988 Oct;5(7):611–2

Obstetrics in family medicine: effects on physician work load, income, and age of practice population. Bredfeldt RC, et al. **Fam Med** 1989 Jul–Aug;21(4):279–82

Affirming the alliance: family physicians and rural health care [editorial] Frey JJ. **Fam Med** 1989 May–Jun;21(3):179–80

Health promotion: what is the role of family physicians. Herbert CP. **Fam Med** 1989 Jan–Feb;21(1):10, 18

Do family physicians 'prevent' cesarean sections? A Canadian exploration. Klein M. **Fam Med** 1988 Nov–Dec;20(6):431–6

Physician–related influences on use of health resources by primary care physicians. Lawler FH, et al. **Fam Med** 1988 Sep–Oct;20(5):352–5

Process and outcome of critical care provided by community and academic primary care physicians. Lawler FH, et al. **Fam Med** 1989 Jul–Aug;21(4):268–72

From soma to psyche: The crucial connection. (Perspectives on behavioral and cross cultural medicine addressed to first–year residents). Part 1. It ain't what you do—its the way how you do it: Style as substance [published erratum appears in Fam Med 1988 Nov–Dec;20(6):456–7] Marcus L, et al. **Fam Med** 1988 Sep–Oct;20(5):368–73

From soma to psyche: the crucial connection. Part 2. 'Cross–cultural medicine' decoded: learning about 'us' in the act of learning about 'them'. Marcus L, et al. **Fam Med** 1988 Nov–Dec;20(6):449–57 (28 ref.)

Family medicine and the developmentally disabled: a relationship worth building [editorial] Pincus S, et al. **Fam Med** 1988 Sep–Oct;20(5):322–3

A five–year demonstration project associated with improvement in physician health maintenance behavior. Shank JC, et al. **Fam Med** 1989 Jul–Aug;21(4):273–8

Continuity of care and outcome in nursing home patients transferred to a community hospital. Susman J, et al. **Fam Med** 1989 Mar–Apr;21(2):118–21

Conversation with...Ken Dychtwald, PhD: where will the 'age wave' carry physicians? [interview by Richard L. Peck] Dychtwald K. **Geriatrics** 1989 Mar;44(3):117–9

Fitness to drive and the general practitioner. Nouri F. **Int Disabil Stud** 1988;10(3):101–3

Predicting abstainers in a smoking cessation programme administered by general practitioners. Richmond RL, et al. **Int J Epidemiol** 1988 Sep;17(3):530–4

Rural obstetric care [letter] **J Am Board Fam Pract** 1989 Apr–Jun;2(2):139–41

The consultant family physician [published erratum appears in J Am Board Fam Pract 1989 Apr–Jun;2(2):141] Amundson LH, et al. **J Am Board Fam Pract** 1989 Jan–Mar; 2(1):34–6

Hyperlipidemia [letter] Blossom HJ, et al. **J Am Board Fam Pract** 1988 Oct–Dec;1(4):295

Scuba diver standards [letter] Goldmann RW. **J Am Board Fam Pract** 1988 Oct–Dec;1(4):295

Potential benefits of a computer ECG interpretation system for primary care physicians in a community hospital. Grauer K, et al. **J Am Board Fam Pract** 1989 Jan–Mar; 2(1):17–24

Family physicians and general internists: do they treat hypertensive patients differently? Adamson TE, et al. **J Fam Pract** 1989 Jul;29(1):93–9

Antihypertensive drug–prescribing patterns of internists and family physicians. Carter BL, et al. **J Fam Pract** 1989 Sep; 29(3):257–61

Family physicians' involvement in obstetric care. Rural northeastern Minnesota and northwestern Wisconsin. Crouse BJ. **J Fam Pract** 1989 Jun;28(6):724, 727

Anemia in the elderly. A survey of physicians' approaches to diagnosis and workup. Daly MP, et al. **J Fam Pract** 1989 May;28(5):524–8

Can the family physician avoid conflict of interest in the gatekeeper role? An affirmative view. Ellsbury KE. **J Fam Pract** 1989 Jun;28(6):698–701

Physician perspectives on the role of religion in the physician–older patient relationship. Koenig HG, et al. **J Fam Pract** 1989 Apr;28(4):441–8

Who is the family doctor? Relating primary care to family care. Murata PJ, et al. **J Fam Pract** 1989 Sep;29(3):299–304

Sigmoidoscopy by family physicians [letter] Rodney WM. **J Fam Pract** 1989 Mar;28(3):254, 266

Endometrial sampling: analysis of 310 procedures performed by family physicians. Rosenthal TC, et al. **J Fam Pract** 1989 Sep;29(3):249–54; discussion 254–6

Obstetric privileges for family physicians: a national study. Schmittling G, et al. **J Fam Pract** 1989 Aug;29(2):179–84

Computer use by family physicians in the United States. Schmittling GT. **J Fam Pract** 1989 Aug;29(2):198–200

Family practice obstetrics in Michigan. Factors affecting physician participation. Smith MA, et al. **J Fam Pract** 1989 Apr;28(4):433–7

Can the family physician avoid conflict of interest in the gatekeeper role? An opposing view. Stephens GG. **J Fam Pract** 1989 Jun;28(6):701–4

The relinquishing–adopting patient and the family physician [clinical conference] Wherley S, et al. **J Fam Pract** 1989 Mar;28(3):257–8, 260–1

Why a family doctor? [letter] Brungardt GS. **J Gen Intern Med** 1989 Jul–Aug;4(4):362

Recognition of depression by internists in primary care: a comparison of internist and "gold standard" psychiatric assessments. Gerber PD, et al. **J Gen Intern Med** 1989 Jan–Feb;4(1):7–13

Medical art and medical science: an exhortation to students on primary care. Hughes JS. **J Gen Intern Med** 1989 Jan–Feb;4(1):48–53

A strategy to define the role of the primary care physician in occupational and environmental medicine. Kottke TE. **J Gen Intern Med** 1989 Jul–Aug;4(4):320–4

Identifying suicide potential in primary care. Lin EH, et al.

J Gen Intern Med 1989 Jan-Feb;4(1):1-6
Domiciliary hospice care: a survey of general practitioners. Copperman H. **J R Coll Gen Pract** 1988 Sep;38(314):411-3
AIDS and HIV infection: ethical problems for general practitioners. Gallagher M. **J R Coll Gen Pract** 1988 Sep; 38(314):414-7
AIDS and the general practitioner [news] Goldberg D. **J R Coll Gen Pract** 1988 Oct;38(315):476
Study of discharge communications from hospital doctors to an inner London general practice. Harding J. **J R Coll Gen Pract** 1987 Nov;37(304):494-5
HIV infection: ethical problems for general practitioners [letter] King M. **J R Coll Gen Pract** 1988 Nov; 38(316):521-2
Notifying general practitioners about deaths in hospital: an audit. Neville RG. **J R Coll Gen Pract** 1987 Nov; 37(304):496-7
Hours of work and fatigue in doctors [editorial] Pitts J. **J R Coll Gen Pract** 1988 Jan;38(306):2-3
Referring patients to geriatric day hospitals: a survey of general practitioners' opinions. Williams ES, et al. **J R Coll Gen Pract** 1988 Nov;38(316):498-9
GPs' drinking and patient alcohol education. Bicknell MA, et al. **J R Soc Health** 1989 Feb;109(1):36
A survey of current prescribing practices of antiinflammatory and urate lowering drugs in gouty arthritis in the province of Ontario. Bellamy N, et al. **J Rheumatol** 1988 Dec; 15(12):1841-7
Treadmill testing for the primary care physician. Harmon GE. **J S C Med Assoc** 1988 Aug;84(8):398-400
The care of patients with AIDS: don't ignore the family practitioner [letter] **JAMA** 1989 Jan 27;261(4):555-6
Comparison of critical care by family physicians and general internists [letter] Carlson RW, et al. **JAMA** 1989 Jan 13; 261(2):243-4
A piece of my mind. Family medicine. McClintic WR. **JAMA** 1989 Sep 8;262(10):1381
Dispensing hearing aids in the community [letter] Prinsley P, et al. **Lancet** 1989 Aug 26;2(8661):500-1
How physicians use the stress test for the management of angina. Hartz A, et al. **Med Decis Making** 1989 Jul-Sep; 9(3):157-61
A test of medical problem-solving scored by nurses and doctors: the handicap of expertise. de Graaff E. **Med Educ** 1989 Jul;23(4):381-6
Utilization of the "Smokescreen" smoking-cessation programme by general practitioners and their patients. Copeman RC, et al. **Med J Aust** 1989 Jul 17;151(2):83-7
General practitioners' detection of patients' smoking status. Dickinson JA, et al. **Med J Aust** 1989 Apr 17;150(8):420-2, 425-6
Knowledge of sexual abuse in children by general practitioners [letter] McDowell MJ, et al. **Med J Aust** 1989 Jul 3;151(1):52
Older persons' definitions of good health: implications for general practitioners. Saltman DC, et al. **Med J Aust** 1989 Apr 17;150(8):426, 428
On NC doctors and AIDS patients [letter] Fischer JJ. **N C Med J** 1988 Oct;49(10):555-6
Change and professional union [letter] Cairney P. **N Z Med J** 1989 May 10;102(867):232
AIDS and general practice. Chetwynd J. **N Z Med J** 1989 Aug 23;102(874):442-3
Friendship in general practice [letter; comment] Thomson NP. **N Z Med J** 1989 Jun 14;102(869):299. **Comment on:** N Z Med J 1989 Apr 26;102(866):191-3
Sportsmedicine and the primary care practitioner. Howe WB. **Orthop Rev** 1988 Nov;17(11):1074-9
A plea for the little guy in medicine. Klimes RL. **Pa Med** 1989 Jul;92(7):46-7
Newborn screening for sickle cell disease and other hemoglobinopathies. Perspective from the National Medical Association. Epps RP. **Pediatrics** 1989 May;83(5 Pt 2):911
Accident and emergency departments: a role for GPs [editorial] Houghton A. **Practitioner** 1988 Apr 8; 232(1446):359-60
Why I visit my patients in hospital [editorial] Vora A. **Practitioner** 1987 Dec;231(1440):1591-2
Physicians' perceptions of their role in cardiovascular risk reduction. Mann KV, et al. **Prev Med** 1989 Jan;18(1):45-58
Obstacles to family practitioners' use of screening tests: determinants of practice? Resnicow KA, et al. **Prev Med** 1989 Jan;18(1):101-12
Cancer screening services for the elderly. Weisman CS, et al. **Public Health Rep** 1989 May-Jun;104(3):209-14
Oncological radiotherapy--family medicine. Botturi M, et al. **Rays** 1988 Jan-Apr;13(1):89-99
Dementia in the elderly: the role of the general practitioner. Fossan G. **Scand J Prim Health Care** 1989 Mar;7(1):3-4
The general practitioner and the family. A study of the use of general practitioners' services by families with children. Johnsen N, et al. **Scand J Prim Health Care** 1988 Sep; 6(3):155-60
Diagnostic styles of general practitioners confronted with ambiguous symptoms. An exploratory study. Kuyvenhoven MM, et al. **Scand J Prim Health Care** 1989 Mar;7(1):43-8
Huntington's chorea: general practitioners' knowledge about individuals' at-risk status. Sørensen SA, et al. **Scand J Prim Health Care** 1989 Mar;7(1):49-52
Brief supportive psychotherapy by the primary care physician. Mohl PC. **Tex Med** 1988 Sep;84(9):28-32
Eating disorders: role of the primary care physician [published erratum appears in Tex Med 1988 Oct;84(10):7] Waller DA. **Tex Med** 1988 Sep;84(9):51-4
Sjogren's syndrome: implications for the primary care physician. Romano TJ, et al. **W V Med J** 1989 Jul; 85(7):282-8
Patient evaluations of low back pain care from family physicians and chiropractors. Cherkin DC, et al. **West J Med** 1989 Mar;150(3):351-5
Managing low back pain--a comparison of the beliefs and behaviors of family physicians and chiropractors [see comments] Cherkin DC, et al. **West J Med** 1988 Oct; 149(4):475-80. **Comment in:** West J Med 1989 Jan;150(1):93
Doctors as teachers. Siem H. **World Health Forum** 1988; 9(2):250-3
[Diagnosis and treatment in general practice. 5. Attitudes of general practitioners--a review] Gannik D, et al. **Ugeskr Laeger** 1989 Jan 16;151(3):161-5 (30 ref.) (Eng. Abstr.) **(Dan)**
[Diagnosis and treatment in general practice. 6. Attitudes of general practitioners--a study in Copenhagen County] Gannik D, et al. **Ugeskr Laeger** 1989 Jan 16;151(3):165-72 (Eng. Abstr.) **(Dan)**
[Prescription of benzodiazepines by general practitioners--how can habits be changed?] Osler M, et al. **Ugeskr Laeger** 1989 May 8;151(19):1178-9 (Eng. Abstr.) **(Dan)**
[Diagnosis and treatment in general practice. 4. General practitioners' knowledge of their patients] Pedersen PA, et al. **Ugeskr Laeger** 1989 Jan 16;151(3):157-61 (Eng. Abstr.) **(Dan)**
[Nature and extension of drug information to general practitioners. A questionnaire study] Rotwitt LB, et al. **Ugeskr Laeger** 1989 Mar 6;151(10):647-50 **(Dan)**
[Depression in patients with somatic illnesses (letter)] **Ned Tijdschr Geneeskd** 1989 Jul 1;133(26):1332-3 **(Dut)**
[Evaluation of the consensus deep venous thrombosis] van Everdingen JJ, et al. **Ned Tijdschr Geneeskd** 1988 Nov 26; 132(48):2208-11 (3 ref.) (Eng. Abstr.) **(Dut)**
[Role of the family physician in the prevention policy of colonic and rectal neoplasms] Klepping C, et al. **Presse Med** 1988 Dec 3;17(43):2271-2 **(Fre)**
[From theory to practice: the roles of the psychiatrist and the family physician] Lepage D. **Union Med Can** 1988 Sep; 117(4):261-7, 270-1 (Eng. Abstr.) **(Fre)**
[The assessment of suicidal inclination by the nonspecialist physician] Vollmoeller W. **Dtsch Med Wochenschr** 1989 Sep 15;114(37):1422-3 **(Ger)**
[Home visits by family physicians of a primary care clinic--1986] Karkabi K, et al. **Harefuah** 1989 Feb 15; 116(4):223-6 (Eng. Abstr.) **(Heb)**
[Physician-initiated smoking cessation program] Shmerling A, et al. **Harefuah** 1989 Mar 1;116(5):280-3 (Eng. Abstr.) **(Heb)**
[Psychiatry and the general practitioner. I. The schizophrenic as a patient of the general physician] Antignani P. **Minerva Psichiatr** 1989 Apr-Jun;30(2):61-8 (14 ref.) (Eng. Abstr.) **(Ita)**
[By a stroke of luck...] Anker H. **Tidsskr Nor Laegeforen** 1988 Oct 25;108(29B):2662-4 **(Nor)**
[From contact to contract. Psychiatric supervision of groups of general practitioners] Okkenhaug JL. **Tidsskr Nor Laegeforen** 1989 Mar 10;109(7-8):822-4 (Eng. Abstr.) **(Nor)**
[The patient and the health system. The function of the general physician based on the systems theory] Corral Corral C. **Med Clin (Barc)** 1989 Mar 4;92(8):306-8 (19 ref.) **(Spa)**
[Primary care and family physicians (letter)] Galego P. **Med Clin (Barc)** 1988 Sep 10;91(7):276 **(Spa)**
[The primary care physician and the problems of aid to patients with acquired immunodeficiency syndrome (letter)] Hernández Alonso AR, et al. **Med Clin (Barc)** 1989 Jan 14;92(1):36 **(Spa)**
[Family physicians: do they compete or cooperate with internists? (letter)] Pujol Farriols R. **Med Clin (Barc)** 1988 Sep 17;91(8):319 **(Spa)**
[Is pathologic anatomy or psychiatry the best basis for clinical perspective of general practitioner?] Bring G. **Lakartidningen** 1988 Oct 12;85(41):3352-3 **(Swe)**

ECONOMICS

Patient perceptions of general practitioner fees. Fergusson DM, et al. **N Z Med J** 1989 Jun 14;102(869):286-8
Area health boards and general practitioners [letter] Ridley-Smith RM. **N Z Med J** 1988 Dec 14;101(859):830
[The economics of medical technology in the internist's practice. Current situation and possible alternatives] Hennig AE. **Fortschr Med** 1989 Jan 15;107(1):51-3 **(Ger)**

EDUCATION

The acquired immunodeficiency syndrome is a primary care disease. Northfelt DW, et al. **Ann Intern Med** 1988 Nov 15;109(10):773-5 (31 ref.)
The part-time family doctor. Dalgleish K. **Aust Fam Physician** 1989 Jun;18(6):610-2
A trainee's viewpoint. Russell G. **Aust Fam Physician** 1989 Jun;18(6):595
CFPC, OMA programs help family doctors cope with AIDS. Michaels E. **Can Med Assoc J** 1989 Apr 15;140(8):943-4
Primary care education: a shortage of positions and applicants. Colwill JM. **Fam Med** 1988 Jul-Aug;20(4):250-4 (12 ref.)
A student teaching module: physician errors. Meyer BA. **Fam Med** 1989 Jul-Aug;21(4):299-300
Introductory course in medical English and primary care for overseas doctors. Ferguson JJ, et al. **Fam Pract** 1988 Dec;5(4):260-4
Mental health training of primary care physicians: an outcome study. Jones LR, et al. **Int J Psychiatry Med** 1988; 18(2):107-21
Flexible sigmoidoscopy [letter] Glinka SJ. **J Am Board Fam Pract** 1989 Jan-Mar;2(1):69-70
Study of relation of continuing medical education to quality of family physicians' care. Dunn EV, et al. **J Med Educ** 1988 Oct;63(10):775-84
National minimum standards [editorial] **J R Coll Gen Pract** 1988 Jun;38(311):245-7
Continuing education for general practitioners [editorial] Gray DP. **J R Coll Gen Pract** 1988 May;38(310):195-6
Training general practitioners to improve their recognition of emotional disturbance in the consultation. Whewell PJ, et al. **J R Coll Gen Pract** 1988 Jun;38(311):259-62
Training of general practitioners in interpreting chest radiographs. Paakkala T. **Med Educ** 1988 Sep;22(5):449-53
The Open University pack on coronary heart disease: reactions of Welsh general practitioners. Pill R, et al. **Med Educ** 1988 Nov;22(6):543-9
A self-directed learning package in rheumatology for family physicians. Jones E, et al. **Med Teach** 1987;9(4):433-7
Evaluation of a faculty development program for family physicians. Sheets KJ, et al. **Med Teach** 1988;10(1):75-83
Teaching psychiatry to primary care residents in a community hospital. Granet RB. **N J Med** 1989 Feb; 86(2):99-101
AIDS education in general practice [news] **N Z Med J** 1988 Dec 14;101(859):835-6
Assessing the practice. Bahrami J. **Practitioner** 1988 Jun 22; 232(1451):747-8, 751
Billing patterns of general practitioners and family physicians in Ontario: a comparison of graduates of McMaster Medical School with graduates of other Ontario medical schools. Woodward C, et al. **Proc Annu Conf Res Med Educ** 1988; 27:276-81
Toward a comprehensive psychiatry/behavioral science curriculum for primary care residents. Novack DH, et al. **Psychosomatics** 1989 Spring;30(2):213-23
A subcurriculum for general practice. Jacob A. **Scott Med J** 1989 Jun;34(3):453
[A publication for the family physician] Berndt H. **Z Arztl Fortbild (Jena)** 1989;83(1):3-4 **(Ger)**
[Training of the general practice physician in the problems of emergency surgical care] Mil'kov BO, et al. **Sov Zdravookhr** 1988;(7):46-8 (Eng. Abstr.) **(Rus)**
[Role of outpatient therapeutic preparation of subinterns in training as future general practitioners] Galkin VA. **Ter Arkh** 1989;61(1):107-10 **(Rus)**
[Strategies for improving the therapeutic patterns used in acute diarrhea in primary medical care units. VI. Evaluation of the strategy aimed at family physicians for increasing the use of oral rehydration and decreasing that of antibiotics and restrictive diets] Guiscafré H, et al. **Arch Invest Med (Mex)** 1988 Oct-Dec;19(4):395-407 (Eng. Abstr.) **(Spa)**

HISTORY

They don't make them like they used to . . . the country doctor. Hasskarl WF Jr. **Tex Med** 1989 Mar;85(3):51-3

LEGISLATION & JURISPRUDENCE

[Family physician reprimanded for interfering with judgment concerning a mentally handicapped subject] **Ned Tijdschr Geneeskd** 1988 Dec 17;132(51):2332-3 **(Dut)**

ORGANIZATION & ADMINISTRATION

[Family physician in the Republic of Cuba] Kicha DI. **Sov Zdravookhr** 1989;(3):63-6 **(Rus)**

PSYCHOLOGY

Impact of a comprehensive health promotion curriculum on physician behavior and attitudes. Patterson J, et al. **Am J Prev Med** 1989 Jan-Feb;5(1):44-9
Family practice physicians' perceptions and practices regarding health promotion for the elderly. Price JH, et al. **Am J Prev Med** 1988 Sep-Oct;4(5):274-81
Family physicians' views of chiropractors: hostile or hospitable? Cherkin D, et al. **Am J Public Health** 1989 May; 79(5):636-7
Heartsink--yet another challenge. Colquhoun. **Aust Fam Physician** 1989 May;18(5):559, 561
Mental health, job satisfaction, and job stress among general practitioners. Cooper CL, et al. **BMJ** 1989 Feb 11; 298(6670):366-70
Difficult patients: black holes and secrets. Gerrard TJ, et al. **BMJ** 1988 Aug 20-27;297(6647):530-2
General practitioners' attitudes towards AIDS and their perceived information needs. Shapiro JA. **BMJ** 1989 Jun 10;298(6687):1563-6
Responses by general practitioners in Avon to proposals for

general practice in the white paper Working for Patients. Whitfield M, et al. **BMJ** 1989 May 6;298(6682):1224–6
General practitioners' attitudes towards AIDS [letter] Wilkinson C. **BMJ** 1989 Jul 1;299(6690):55–6
Pharyngitis 1987: a survey of physicians' attitudes and practices in southern Alberta. Berger PC, et al. **Can J Public Health** 1989 Jan–Feb;80(1):38–41
Attitudes towards HIV-antibody testing among general practitioners and their patients. Massari V, et al. **Eur J Epidemiol** 1988 Dec;4(4):435–8
Disarming the family ghost: a family of origin experience. Mengel MB, et al. **Fam Med** 1989 Jan–Feb;21(1):45–9
Family physicians' and internists' consideration of psychosocial hypotheses during the diagnostic process. Simpson DE, et al. **Fam Pract Res J** 1989 Spring–Summer; 8(2):55–61
Microcomputer-generated reminders. Improving the compliance of primary care physicians with mammography screening guidelines. Chambers CV, et al. **J Fam Pract** 1989 Sep;29(3):273–80
Family physicians' perceptions of the family conference. Kushner K, et al. **J Fam Pract** 1989 Jan;28(1):65–8
Teenagers' beliefs about AIDS education and physicians' perceptions about them. Manning DT, et al. **J Fam Pract** 1989 Aug;29(2):173–7
Physician and patient determinants of difficult physician–patient relationships. Schwenk TL, et al. **J Fam Pract** 1989 Jan;28(1):59–63
Breast cancer screening. A curious problem in primary care. Taplin SH. **J Fam Pract** 1989 Sep;29(3):247–8
Physician interest in breast cancer screening education. A survey of Vermont family physicians. Warner SL, et al. **J Fam Pract** 1989 Sep;29(3):281–5
Views of general practitioners in the Oxford region on microcomputing and collaboration with health authorities and family practitioner committees. Brown S. **J R Coll Gen Pract** 1988 Mar;38(308):115–6
Job satisfaction and occupational stress among general practitioners—a pilot study. Makin PJ, et al. **J R Coll Gen Pract** 1988 Jul;38(312):303–6
Gender bias in psychotropic drug prescribing in primary care. Hohmann AA. **Med Care** 1989 May;27(5):478–90
Complementary medicine and the general practitioner: a survey of general practitioners in the Wellington area [see comments] Hadley CM. **N Z Med J** 1988 Nov 9; 101(857):766–8. **Comment in:** N Z Med J 1989 Jan 25;102(860):21
Physician burnout [letter] Vinson DC. **Pharos** 1988 Summer; 51(3):42
The psychological aspects of the doctor–patient interaction in the healing process. General practitioners' attitudes and beliefs. Drottning K, et al. **Scand J Prim Health Care** 1988 Sep;6(3):149–54
Practice compatibility and type of framework: essential dimensions in the salaried primary care practitioners' approach to practice. Ben-Sira Z. **Soc Sci Med** 1988; 27(12):1401–9
[The decision process of the family physician in the choice of a drug (letter)] Denig P, et al. **Ned Tijdschr Geneeskd** 1989 Mar 25;133(12):632–3 **(Dut)**
[The decision making process of the family physician in choosing a drug] Wierenga B, et al. **Ned Tijdschr Geneeskd** 1989 Jan 21;133(3):115–22 (Eng. Abstr.) **(Dut)**

STANDARDS

The interpretation of office radiographs by family physicians. Halvorsen JG, et al. **J Fam Pract** 1989 Apr;28(4):426–32
The recognition, diagnosis, and treatment of mental disorders by primary care physicians. Andersen SM, et al. **Med Care** 1989 Sep;27(9):869–86

STATISTICS & NUMERICAL DATA

[Tourists, the number of physicians and emergency care in Tönsberg. Utilization and epidemiology] Otterstad HK, et al. **Tidsskr Nor Laegeforen** 1989 May 20;109(14):1506–8 (Eng. Abstr.) **(Nor)**
[Who visit the health centers in Gothenburg? A study of visits to general practitioners] Bengtsson C, et al. **Lakartidningen** 1988 Oct 5;85(40):3291–4 (Eng. Abstr.) **(Swe)**

SUPPLY & DISTRIBUTION

Recruiting family physicians to underserviced areas [letter] **Can Med Assoc J** 1989 Apr 15;140(8):885–9
The intra-urban variation in general practitioner provision: a comparative study of London and Warsaw. Malczewski J. **Geogr Med** 1989;19:187–206
New efforts may lure physicians to rural areas. Koska MT. **Hospitals** 1989 Jun 20;63(12):64, 68
General practitioner relocation in an urban area. Smith AG, et al. **J R Coll Gen Pract** 1988 Mar;38(308):106–9
The plight of the family doctor. Buenafior M. **Mich Med** 1988 Aug;87(8):484, 492
A selective medical school admissions policy to increase the number of family physicians [letter] **N Engl J Med** 1989 Feb 23;320(8):539–40
General practitioner services [letter] Malcolm LA. **N Z Med J** 1989 Mar 22;102(864):141–2
Workloads in Auckland general practice 1981/82 to 1984/85. Thomson AN. **N Z Med J** 1988 Nov 9;101(857):763–5
Family physicians: supply and demand. Bowman MA. **Public Health Rep** 1989 May–Jun;104(3):286–93
Family physicians for underserved areas. The role of residency training. Gessert C, et al. **West J Med** 1989 Feb; 150(2):226–30
Wisconsin's family physician shortage. Beasley JW. **Wis Med J** 1989 Jan;88(1):11–4

UTILIZATION

Primary care utilization in Israel—analysis of national data. Grafstein O, et al. **Isr J Med Sci** 1989 Jan;25(1):32–7
Comparison of the work of a nurse practitioner with that of a general practitioner. Salisbury CJ, et al. **J R Coll Gen Pract** 1988 Jul;38(312):314–6
[Who visit the health centers in Gothenburg? A study of visits to general practitioners] Bengtsson C, et al. **Lakartidningen** 1988 Oct 5;85(40):3291–4 (Eng. Abstr.) **(Swe)**

PHYSICIANS' OFFICES see under **HEALTH FACILITIES**

PHYSICIAN'S PRACTICE PATTERNS

Pediatricians' recommendations for antipyretic agents with DTP immunizations: a survey of current practice [letter] Flanagan PJ, et al. **Am J Dis Child** 1989 May;143(5):517–8
Is standard practice in pediatrics 'standard'? A potential lesson for experts and practitioners [editorial] Fulginiti VA. **Am J Dis Child** 1989 May;143(5):529–30
Use of adrenergic bronchodilators by pediatric allergists and pulmonologists. Newcomb RW. **Am J Dis Child** 1989 Apr; 143(4):481–5
Psychiatrists and the treatment of addictions: perceptions and practices. Miller SI, et al. **Am J Drug Alcohol Abuse** 1986; 12(3):187–97
Treatment opportunities on a consultation/liaison service. Lyons JS, et al. **Am J Psychiatry** 1988 Nov;145(11):1435–7
Physician assessments of practice patterns in emergency department radiograph interpretation. O'Leary MR, et al. **Ann Emerg Med** 1988 Oct;17(10):1019–23
Promoting cancer screening. A randomized, controlled trial of three interventions. McPhee SJ, et al. **Arch Intern Med** 1989 Aug;149(8):1866–72
Utilisation review of radiation oncology practice. Shepherd J, et al. **Aust Clin Rev** 1988 Sep;8(30):131–8
Physicians need better training on prescribing nicotine gum: study [news] **Bol Asoc Med P R** 1988 Nov;80(11):445–6
Rheumatology patients and hospital secretaries [letter] Briggs S. **Br J Rheumatol** 1989 Aug;28(4):365
Determinants of practice patterns [letter] Armstrong DS. **Can Med Assoc J** 1989 Jun 15;140(12):1429–30
Relation of family physician or specialist care to obstetric interventions and outcomes in patients at low risk: a western Canadian cohort study. Krikke EH, et al. **Can Med Assoc J** 1989 Mar 15;140(6):637–43
Effect of medicolegal liability on patterns of general and family practice in Canada. Woodward CA, et al. **Can Med Assoc J** 1989 Aug 15;141(4):291–9
The meaning of information on GP referral rates to hospitals. Wilkin D, et al. **Community Med** 1989 Feb;11(1):65–70
Surgeons trace factors that affect practice. Koska MT. **Hospitals** 1988 Dec 5;62(23):41
Physician management key to making DRGs pay. Larkin H. **Hospitals** 1989 Sep 5;63(17):65
Dr. Xz, the placebo. Caplan RM. **Iowa Med** 1988 Aug; 78(8):378
Experience and training as factors in physician performance in a pediatric emergency room. Shohat M, et al. **Isr J Med Sci** 1989 Jun;25(6):305–9
The professional attitudes and practice characteristics of male and female specialists. Maheux B, et al. **J Am Med Wom Assoc** 1989 Sep–Oct;44(5):154–8
Self-reported referral patterns in practices of family/general practitioners, internists, and obstetricians/gynecologists. Sobal J, et al. **J Community Health** 1988 Fall;13(3):171–83
Family physicians and general internists: do they treat hypertensive patients differently? Adamson TE, et al. **J Fam Pract** 1989 Jul;29(1):93–9
Utilization of hospital services. A comparison of internal medicine and family practice. Bertakis KD, et al. **J Fam Pract** 1989 Jan;28(1):91–6
Microcomputer-generated reminders. Improving the compliance of primary care physicians with mammography screening guidelines. Chambers CV, et al. **J Fam Pract** 1989 Sep;29(3):273–80
Perceptions and utilization of hyperbaric oxygen therapy for carbon monoxide poisoning in an academic setting. Roy TM, et al. **J Ky Med Assoc** 1989 May;87(5):223–6
Attitudes and habits of chiropractors concerning referral to other health care providers [published erratum appears in J Manipulative Physiol Ther 1989 Aug;12(4):preceding 253] Sawyer CE, et al. **J Manipulative Physiol Ther** 1988 Dec; 11(6):480–3
Factors associated with hospital-specific cesarean birth rates. Newton ER, et al. **J Reprod Med** 1989 Jun;34(6):407–11
Is the poor patient at risk? Avery JK. **J Tenn Med Assoc** 1989 Aug;82(8):435
Transurethral prostatectomy: practice aspects of the dominant operation in American urology. Holtgrewe HL, et al. **J Urol** 1989 Feb;141(2):248–53
Should pharmacists evaluate the practices of physicians? [letter; comment] Bodey GP. **JAMA** 1989 Jul 14; 262(2):205–6, **Comment on:** JAMA 1988 Dec 23–30;260(24):3592
MCAT responds to changes in medical education and physician practice. Swanson A, et al. **JAMA** 1989 Jul 14; 262(2):261–3
Informing patients about clinical disagreement [editorial] **Lancet** 1989 Aug 12;2(8659):367–8
Trimethoprim resistance and single-agent use [letter] Maskell R, et al. **Lancet** 1989 Sep 2;2(8662):557–8
Practice computerization: hints and suggestions. McCray HE. **Md Med J** 1989 Jan;38(1):77–9
Practice pattern variation between two medical schools. Gillespie KN, et al. **Med Care** 1989 May;27(5):537–42
How physicians use the stress test for the management of angina. Hartz A, et al. **Med Decis Making** 1989 Jul–Sep; 9(3):157–61
Prospective audit of aminoglycoside usage in a general hospital with assessments of clinical processes and adverse clinical outcomes. Li SC, et al. **Med J Aust** 1989 Aug 21; 151(4):224–32
Effectiveness in health care. An initiative to evaluate and improve medical practice. Roper WL, et al. **N Engl J Med** 1988 Nov 3;319(18):1197–202
Physician prescribing patterns following hospital admission for ischemic cerebrovascular disease. Goldstein LB, et al. **Neurology** 1988 Nov;38(11):1806–9
Practice patterns often emerge as factors in malpractice lawsuits. **Ohio Med** 1988 Sep;84(9):759
Fashions and values [editorial] Weiss W. **Pa Med** 1989 Jun; 92(6):28
Obstacles to family practitioners' use of screening tests: determinants of practice? Resnicow KA, et al. **Prev Med** 1989 Jan;18(1):101–12
How physicians choose drugs. Denig P, et al. **Soc Sci Med** 1988;27(12):1381–6
The role of commercial sources in the adoption of a new drug. Peay MY, et al. **Soc Sci Med** 1988;26(12):1183–9
Biochemical testing in patients with alcoholic liver disease. Hubbell FA, et al. **South Med J** 1989 Mar;82(3):318–20
What you should know about the proposed "safe" harbors. Grad JD, et al. **Va Med** 1989 May;116(5):211–4
[Mental health legislation and clinical psychiatry] Kotachi H. **Seishin Shinkeigaku Zasshi** 1988;90(11):997–1000 **(Jpn)**
[Beside general visits: a practice to be maintained or abandoned? (editorial)] de Lima Filho MT. **Rev Paul Med** 1988 Jan–Feb;106(1):5 **(Por)**
[The role of social and professional factors in the activities of physicians] Kaptsov VA, et al. **Gig Sanit** 1988 Dec; (12):36–8 **(Rus)**
[Family physician in the Republic of Cuba] Kicha DI. **Sov Zdravookhr** 1989;(3):63–6 **(Rus)**

ECONOMICS

Physician dispensing: issues of law, legislation and social policy. Abood RR. **Am J Law Med** 1989;14(4):307–52
Inspector General's report on physician dispensing. As the practice continues to grow, states seek more regulations. Martin S. **Am Pharm** 1989 Jul;NS29(7):18–21
Fiscal scarcity and the inevitability of bedside budget balancing. Morreim EH. **Arch Intern Med** 1989 May; 149(5):1012–5
Effect of daily charge feedback on inpatient charges and physician knowledge and behavior. Pugh JA, et al. **Arch Intern Med** 1989 Feb;149(2):426–9
Ethics consultations masking economic dilemmas in patient care. Schiedermayer DL, et al. **Arch Intern Med** 1989 Jun; 149(6):1303–5
Paternalistic plantation mentality [letter] Betwee J. **Hawaii Med J** 1989 Jul;48(7):259–60
How joining an HMO or PPO can benefit your practice. Moretto TJ. **Indiana Med** 1988 Dec;81(12):1033–4
Primary medical care for elderly patients. Part II: Results of a survey of office based clinicians. Fahs MC, et al. **J Community Health** 1989 Summer;14(2):89–99
Primary medical care for elderly patients. Part I: Service mix as seen by an expert panel. Muller C, et al. **J Community Health** 1989 Summer;14(2):79–87
Contract medicine. In which hospitals contract with health plans but their doctors don't [editorial] Thomison JB. **J Tenn Med Assoc** 1988 Sep;81(9):588–90
Economics. Eisenberg JM. **JAMA** 1989 May 19; 261(19):2840–1
Computer software in general practice [letter] Marcus A. **Lancet** 1989 Sep 9;2(8663):622
Medicine for sale. Silver GA. **Lancet** 1989 Jul 8;2(8654):95
Generalized drug dispensing by physicians: an ethical dilemma. Breschi LC. **Md Med J** 1988 Nov;37(11):875–6
Physician supply and Medicaid participation. The causes of market failure. Fossett JW, et al. **Med Care** 1989 Apr; 27(4):386–96
How do financial incentives affect physicians' clinical decisions and the financial performance of health maintenance organizations? Hillman AL, et al. **N Engl J Med** 1989 Jul 13;321(2):86–92
Dispensing drugs for profit [letter] Siepel T. **N Y State J Med** 1988 Aug;88(8):442
Variations in resource utilization—the role of medical practice and its economic impact. Eckerlund I, et al. **Soc Sci Med** 1989;28(2):165–73
The effects of nursing and physician services: some preliminary results. Hogan AJ, et al. **Soc Sci Med** 1989;

29(4):527–36
Medical care costs [editorial] Scholten MG. **W V Med J** 1988 Nov;84(11):521–2
[Arguments for a unified evaluation scale] Hamm H. **Fortschr Med** 1989 Jan 15;107(1):47 **(Ger)**
[Observations critical of the new evaluation scale] Hege H. **Fortschr Med** 1989 Jan 15;107(1):47–9 **(Ger)**
[The economics of medical technology in the internist's practice. Current situation and possible alternatives] Hennig AE. **Fortschr Med** 1989 Jan 15;107(1):51–3 **(Ger)**

LEGISLATION & JURISPRUDENCE

Random springtime thoughts on Lysenko, HCFA, Pavlov and other fantasies. Conner SL. **Ala Med** 1989 May; 58(11):3–4, 6
Antitrust enforcement and the medical profession: no special treatment. **Colo Med** 1988 Dec 15;85(23):502–3, 507
Physicians' conflicts in patient referrals [comment] Stark FH. **JAMA** 1989 Jul 21;262(3):397. **Comment on:** JAMA 1989 Jul 21;262(3):390–4

STANDARDS

Genuine managed care in psychiatry. A proposed practice model. Goldstein LS. **Gen Hosp Psychiatry** 1989 Jul; 11(4):271–7
Practice guidelines for Medicare: needed or a nuisance? [news] Huddleston DA. **Geriatrics** 1989 Aug;44(8):75–8
The nursing home physician's image: time for a face–lift. Turnbull JM. **Geriatrics** 1989 Aug;44(8):83–4, 87, 90
Medical practice guidelines may affect payment. Robinson ML. **Hospitals** 1988 Nov 20;62(22):30–1
PROs use medical practice standards to assess quality. Robinson ML. **Hospitals** 1988 Oct 20;62(20):19–20
Medical practice standards: HCFA joins the fray. Robinson ML. **Hospitals** 1988 Dec 5;62(23):18
Medical care among strangers. Stephens GG. **J Am Board Fam Pract** 1988 Jul–Sep;1(3):220–2
Housecleaning in medicine needed [letter] Irwin TM. **J Fla Med Assoc** 1988 Aug;75(8):488–9
UTI: a new approach to its diagnosis. Hafiz S, et al. **JPMA** 1989 May;39(5):126–9
Assessing agreement [letter] Irwig LM, et al. **Med J Aust** 1989 Aug 21;151(4):235–6
A message from MSAA [letter] Loren ML. **Mo Med** 1988 Aug;85(8):439
Evaluating the appropriateness of care: a study of cesarean section rates. Kazandjian JA, et al. **QRB** 1989 Jul; 15(7):206–14
The ethics of progress [editorial] Boulanger WJ. **Wis Med J** 1989 Jan;88(1):4, 6
[A system of complex evaluation of physicians' activities] Gabrielin ES, et al. **Sov Zdravookhr** 1988;(12):3–9 **(Rus)**

STATISTICS & NUMERICAL DATA

Utilization of nasogastric feeding tubes in a group of chronically ill, elderly patients in a community hospital. Quill TE. **Arch Intern Med** 1989 Sep;149(9):1937–41
How much variation in referral rates among general practitioners is due to chance? Moore AT, et al. **BMJ** 1989 Feb 25;298(6672):500–2
The influence of practitioner and practice characteristics on service activity levels in a New Zealand general practice sample. Davis PB, et al. **Community Health Stud** 1989; 13(2):191–9
Ob/gyns top other specialties in admissions. Koska MT. **Hospitals** 1988 Nov 5;62(21):106–7
Endometrial sampling: analysis of 310 procedures performed by family physicians. Rosenthal TC, et al. **J Fam Pract** 1989 Sep;29(3):249–54; discussion 254–6
Physician interest in breast cancer screening education. A survey of Vermont family physicians. Warner SL, et al. **J Fam Pract** 1989 Sep;29(3):281–5
Changing test ordering behavior. A randomized controlled trial comparing probabilistic reasoning with cost–containment education. Davidoff F, et al. **Med Care** 1989 Jan;27(1):45–58
Methods of analyzing physician practice patterns in hypertension. Holmes MM, et al. **Med Care** 1989 Jan; 27(1):59–68
Consultation patterns in an urban hospital setting. Bienia R, et al. **Va Med** 1989 Sep;116(9):371–3

TRENDS

Open–access upper alimentary endoscopy. Gear MW, et al. **Br J Hosp Med** 1989 May;41(5):438, 440, 442–4
Differences in intrapartum obstetric care provided to women at low risk by family physicians and obstetricians. Reid AJ, et al. **Can Med Assoc J** 1989 Mar 15;140(6):625–33
The changing nature of physicians' office visits. Mitchell JB, et al. **Health Serv Res** 1988 Oct;23(4):575–91
The realities of practicing medicine in the 1990s. A look at the trends. Baumann BB. **Mich Med** 1989 Jul;88(7):14
"In the good old days. . ." [letter] Covell DG. **N Engl J Med** 1988 Oct 27;319(17):1158–9
[The physician yesterday, today and tomorrow] Järvi O. **Duodecim** 1988;104(10):797–8 **(Fin)**
[Growth in the number of physicians and the structure of medical practice. Has the quality of ambulatory care changed?] Flatten G. **Fortschr Med** 1989 Jan 15;107(1):42–6 (Eng. Abstr.) **(Ger)**

PHYSICIAN'S ROLE see under **ROLE**

PHYSICIANS, WOMEN

Maternity leave policies for residents: an overview of issues and problems. Bickel J. **Acad Med** 1989 Sep;64(9):498–501
The pediatrician as mother [letter] Furman L. **Am J Dis Child** 1989 Jun;143(6):638
Women in medicine. Vocational initiatives. Davis L, et al. **Aust Fam Physician** 1988 Aug;17(8):688, 690–2, 694–5 passim
Women in the medical workforce, Victoria. Rowe IL, et al. **Aust Fam Physician** 1989 Apr;18(4):390–3, 395, 397–9
Maternity, paternity, and parental rights of doctors in the UK. Grüneberg AL. **BMJ** 1988 Nov 26;297(6660):1387–9
The monstrous regiment [letter] Järventaus–Forrest R, et al. **BMJ** 1988 Oct 22;297(6655):1041
Northumbria women's police doctor scheme: a new approach to examining victims of sexual assault. Wright CM, et al. **BMJ** 1989 Apr 15;298(6679):1011–2
The need for part–time work [letter] **Br J Hosp Med** 1988 Sep;40(3):232
Meeting the need for part–time work [letter] Roberts SH. **Br J Hosp Med** 1988 Dec;40(6):479
Do female general practitioners have a distinctive type of medical practice? Maheux B, et al. **Can Med Assoc J** 1988 Oct 15;139(8):737–40
Chauvinism in the medico–political arena [letter] Werker D. **Can Med Assoc J** 1988 Oct 15;139(8):702
Gender equity. Bernstein AE. **J Am Med Wom Assoc** 1989 May–Jun;44(3):84–6
Air poisoning [editorial] Cromer MA. **J Am Med Wom Assoc** 1989 Mar–Apr;44(2):35
The surgical work force and women surgeons. Dalessandri K. **J Am Med Wom Assoc** 1988 Nov–Dec;43(6):169–70
Have you had your mammogram, doctor? Guinan ME. **J Am Med Wom Assoc** 1988 Nov–Dec;43(6):183–4
Women physicians and their mentors. Ochberg RL, et al. **J Am Med Wom Assoc** 1989 Jul–Aug;44(4):123–6
Day care in teaching hospitals. Wallis LA, et al. **J Am Med Wom Assoc** 1989 Sep–Oct;44(5):136, 140
Moving ahead in 1989. Wallis LA. **J Am Med Wom Assoc** 1989 Mar–Apr;44(2):37
Gender and medical socialization. Martin SC, et al. **J Health Soc Behav** 1988 Dec;29(4):333–43
Science and social reform: women in public health. Fee E, et al. **J Public Health Policy** 1989 Summer;10(2):161–77
Women's preferences for sex of doctor [letter] Snowise NG. **J R Coll Gen Pract** 1988 Mar;38(308):125–6
Women doctors and women patients in general practice. Newman LT. **J R Soc Health** 1988 Aug;108(4):115–8
Half our medical future [editorial] Parkhouse J. **Med Educ** 1989 Jan;23(1):1–2
The career aspirations of women doctors who qualified in 1974 and 1977 from a United Kingdom medical school. Rhodes PJ. **Med Educ** 1989 Mar;23(2):125–35
Breaking into the "old boys" network. Springer D. **Mich Med** 1988 Jul;87(7):418, 420
New age woman [interview by Richard L. Reece] LeTourneau BC. **Minn Med** 1989 Jan;72(1):8, 51–3
Where is the woman in obstetrics and gynecology? King CR. **Pharos** 1989 Summer;52(3):8–11
Women in medicine. Paton A. **Postgrad Med J** 1988 Oct; 64(756):829–31
Female residents not at increased risk for adverse pregnancy outcome. Osborn LM, et al. **Proc Annu Conf Res Med Educ** 1988;27:120–6
Taking care of patients—does it matter whether the physician is a woman? Arnold RM, et al. **West J Med** 1988 Dec; 149(6):729–33 (60 ref.)
Women in academic medicine. Equalizing the opportunities. Bartuska DG. **West J Med** 1988 Dec;149(6):779–80
Pregnancy complications of physicians. Katz VL, et al. **West J Med** 1988 Dec;149(6):704–7 (41 ref.)
Women physicians and organized medicine. McDonald LL. **West J Med** 1988 Dec;149(6):777–8
[The basic results of research into the health status of physicians of the USSR and Polish People's Republic (based on survey data)] Gdulewicz T, et al. **Sante Publique (Bucur)** 1988 Oct–Dec;31(4):289–97 (Eng. Abstr.) **(Fre)**
[Englishmen under stress] Elle PJ. **Tidsskr Nor Laegeforen** 1989 Mar 30;109(9):982–3 **(Nor)**
[Women in Norwegian medical schools] Midelfart A. **Tidsskr Nor Laegeforen** 1988 Dec 10;108(34–36):3208–11 (Eng. Abstr.) **(Nor)**

HISTORY

Women doctors in early Delaware. Rosenfeld JA. **Del Med J** 1989 May;61(5):235–6
Pioneering in women's medical education in the Swiss universities 1864–1914. Bonner TN. **Gesnerus** 1988;45 Pt 3–4:461–73
Rendezvous in Zurich. Seven who made a revolution in women's medical education, 1864–1874. Bonner TN. **J Hist Med Allied Sci** 1989 Jan;44(1):7–27
A long journey for women. Mason AS. **J R Coll Physicians Lond** 1989 Jan;23(1):23
"Looking forward": an exhibit on women and medicine at the College of Physicians of Philadelphia. Juergens N, et al. **Trans Stud Coll Physicians Phila** 1989 Jun;11(2):139–57
Medical women of the West. Scully AL. **West J Med** 1988 Dec;149(6):761–3
[Women physicians in the fight for peace and prevention of nuclear war] Trávníčková E. **Cas Lek Cesk** 1989 Mar 3;128(10):289–94 **(Cze)**
[Contribution of Russian physicians to the struggle for improving maternal and child health in the Turkmenistan] Iskhakov VI, et al. **Sov Zdravookhr** 1989;(3):74–6 **(Rus)**
[The first women physicians in pre–revolution Turkestan] Makhmudov M. **Sov Zdravookhr** 1988;(8):68–70 **(Rus)**
[P.F. Lesgaft and the medical education of women in Russia] Shabunin AV. **Sov Zdravookhr** 1988;(11):64–5 **(Rus)**
[The first women physicians in Vojvodina (1893–1919)] Berić BM, et al. **Med Pregl** 1988;41(1–2):79–82 **(Ser)**
[The first women physicians of Puerto Rico (letter)] Torres–Gómez JM. **Bol Asoc Med P R** 1988 Aug; 80(8):294–5 **(Spa)**
[About Miss Barry and her career as Inspector General James Barry MD] Freedman D. **Lakartidningen** 1989 Apr 26; 86(17):1576 **(Swe)**
[Women in medicine—a barber–surgeon, a midwife, a saint, a witch (Elizabeth Blackwell)] Hakulinen E. **Lakartidningen** 1989 Mar 1;86(9):747–9 **(Swe)**

PSYCHOLOGY

Towards achieving a balance for women doctors? Lefford F. **Br J Hosp Med** 1988 Sep;40(3):223, 226
Factors influencing career development: do men and women differ? Cohen M, et al. **J Am Med Wom Assoc** 1988 Sep–Oct;43(5):142, 147–54
Longer leaves needed [letter] Gracie CN. **J Am Med Wom Assoc** 1988 Sep–Oct;43(5):130, 157
Depression in medical women. Nash ES. **J Am Med Wom Assoc** 1988 Nov–Dec;43(6):176–80
Leadership and women in medicine. Wallis LA. **J Am Med Wom Assoc** 1988 Nov–Dec;43(6):164–5
Pediatrician and parent: a challenge for female physicians. Sells JM, et al. **Pediatrics** 1989 Aug;84(2):355–61
Careers of women physicians. Choices and constraints. Martin SC, et al. **West J Med** 1988 Dec;149(6):758–60 (30 ref.)

STATISTICS & NUMERICAL DATA

The new woman physician: her growing numbers are not yet represented in organized medicine. American Medical Association. **Hawaii Med J** 1988 Sep;47(9):444–5
Women in medical education [letter] **N Engl J Med** 1989 May 18;320(20):1348–50

SUPPLY & DISTRIBUTION

Women surgeons: a national survey. Ramos SM, et al. **J Am Med Wom Assoc** 1989 Jan–Feb;44(1):21–5

TRENDS

Women in medicine and the medical sciences: problems, progress, and prospects. Waxman M. **Conn Med** 1988 Dec; 52(12):717–20
Practicing medicine in the quiet zone [interview by Richard L. Reece] Stubbs ER. **Minn Med** 1989 Jan;72(1):9–10, 13, 15

UTILIZATION

Women doctors [letter] Naidoo N. **J R Coll Gen Pract** 1988 Mar;38(308):126

PHYSICS

Use of applied fields in biological treatment of toxic substances, wastewater, and sludges. Reimers RS, et al. **Adv Biotechnol Processes** 1989;12:235–72 (79 ref.)
Cutting fluid dermatitis. Grattan CE, et al. **Contact Dermatitis** 1989 May;20(5):372–6
Outcome of investigation of cutting fluid dermatitis. Grattan CE, et al. **Contact Dermatitis** 1989 May;20(5):377–8
Fundamental laws of nature. Morowitz HJ. **Hosp Pract [Off]** 1989 Sep 15;24(9):161–2
Representing statics as forces in equilibrium. Freyd JJ, et al. **J Exp Psychol [Gen]** 1988 Dec;117(4):395–407
1988 Nobel prizes announced for physics and for chemistry [news] Lindley D, et al. **Nature** 1988 Oct 27; 335(6193):752–3
Chaos theory: how big an advance? [news] Poole R. **Science** 1989 Jul 7;245(4913):26–8
The Doppler shift and speed of sound in blood [letter] Oates CP. **Ultrasound Med Biol** 1989;15(1):75
A second order approximation in the Doppler equation [letter] Wells PN, et al. **Ultrasound Med Biol** 1989; 15(1):73–4
[Doppler effect in cardiology. Continuous Doppler, pulsed Doppler, Doppler color] Houdas Y, et al. **Presse Med** 1988 Oct 29;17(38):2024–8 (18 ref.) (Eng. Abstr.) **(Fre)**
[Doppler echocardiography: physical principles, methodology and uses] de São José MC, et al. **Arq Bras Cardiol** 1988 Jan;50(1):53–7 (19 ref.) **(Por)**
[Inert and live materials] Bru Villaseca L. **An R Acad Nac Med (Madr)** 1988;105(3):251–62 **(Spa)**

EDUCATION

Physics instruction in radiology [letter] Stenzler SA. **AJR Am J Roentgenol** 1989 Jul;153(1):189–90
The teaching of physics and related courses to residents in

radiation oncology. Dunscombe P. **Can Assoc Radiol J** 1989 Aug;40(4):211–2

HISTORY

[Physics and the genesis of molecular biology] Eşanu V. **Virologie** 1989 Jan–Mar;40(1):79–92 **(Fre)**

[Pascal's law and pelvic torque in the physiological mechanism of childbirth] Mergoni A. **Minerva Ginecol** 1988 Mar;40(3):199–214 **(Ita)**

PHYSIOGNOMY

One face of beauty, one picture of health: the hidden aesthetic of medical practice. Stafford BM, et al. **J Med Philos** 1989 Apr;14(2):213–30

PHYSIOLOGIC AVAILABILITY see **BIOLOGICAL AVAILABILITY**

PHYSIOLOGY

Scientific session on physiological mechanisms of regulation in the organism of animals and man. Abstracts. Sofia, January 21–22, 1988. **Acta Physiol Pharmacol Bulg** 1988; 14(3):83–100

XVII Jubilee Congress of the Polish Physiological Society. Warszawa, September 16–18, 1987. Proceedings. **Acta Physiol Pol** 1988 Sep–Dec;39(5–6):313–420

XIX Nordic Congress of Physiology and Pharmacology. Oslo, Norway, 13–15 June 1988. Abstracts. **Acta Physiol Scand Suppl** 1988;575:1–139

Société belge de Physiologie et de Pharmacologie Fondamentales et Cliniques. Antwerp, December 1988. Abstracts. **Arch Int Physiol Biochim** 1989 Apr;97(2):P1–33

Société belge de Physiologie et de Pharmacologie fondamentales et clin. ues Liège, February 1988. Abstracts. **Arch Int Physiol Biochim** 1988 Dec;96(5):P33–47

Belgium Society of Physiology and Fundamental and Clinical Pharmacology. Meeting, Louvain-en-Woluwe, November 1987. Abstracts. **Arch Int Physiol Biochim** 1988 Jun; 96(2):P1–32

Is there a need for whole body physiology? [letter] **Bone Miner** 1987 May;2(3):243–4

Abstracts of the Canadian Physiological Society. 21st winter meeting. January 14–18, 1989, Whistler, B.C. **Can J Physiol Pharmacol** 1989 May;67(5):Ai–xliii

Systemic responses to anesthesia and operation. **Crit Care Clin** 1987 Apr;3(2):241–444

Federation of American Societies for Experimental Biology. 73rd annual meeting. New Orleans, Louisiana, March 19–23, 1989. Part I. Abstracts 1–4022. **FASEB J** 1989 Feb 9;3(3):A227–918

Federation of American Societies for Experimental Biology. 73rd annual meeting. New Orleans, Louisiana, March 19–23, 1989. Part II. Abstracts 4023–6650. **FASEB J** 1989 Feb 15;3(4):A919–1580

Abstracts of papers presented at the forty-second annual meeting of the Society of General Physiologists. Woods Hole, Massachusetts, 7–10 September 1988. **J Gen Physiol** 1988 Dec;92(6):1a–57a

Simultaneous acquisition of physiological data and nuclear medicine images. Rosenthal MS, et al. **J Nucl Med** 1988 Nov;29(11):1848–52

Author and subject indexes to Volumes 358–394 (January 1985–December 1987). **J Physiol (Lond)** 1988;:1–649

Biological control systems in health and disease. Sinclair JD. **N Z Med J** 1988 Oct 26;101(856 Pt 2):702–3

The 65th annual meeting of the Physiological Society of Japan. Wakayama, Japan, April 4–6, 1988. Abstracts. **Nippon Seirigaku Zasshi** 1988;50(8–9):253–657

Deutsche Physiologische Gesellschaft. Abstracts of the 66th meeting. 21–24 September 1988, Würzburg. **Pflugers Arch** 1988;412 Suppl 1:R1–98

Dutch Physiological Society and Belgian Society for Fundamental and Clinical Physiology. (Joint meeting). 10 June, 1988, Leuven, Belgium. Abstracts. **Pflugers Arch** 1988 Oct;412(6):S33–53

Deutsche Physiologische Gesellschaft, Israel Physiological and Pharmacological Society. Abstracts of the joint meeting (67th meeting). 5–10 March 1989, Jerusalem. **Pflugers Arch** 1989;413 Suppl 1:R1–60

Proceedings of the Czechoslovak Physiological Society. Prague, February 2–4, 1988. Abstracts. **Physiol Bohemoslov** 1988;37(6):507–74

Proceedings of the Czechoslovak Physiological Society. (Košice, September 9–11, 1987). **Physiol Bohemoslov** 1988; 37(4):355–84

39th annual fall meeting of the American Physiological Society. Montreal, Canada, October 9–13, 1988. Abstracts. **Physiologist** 1988 Aug;31(4):A1–245

A physiologist in Africa: lending a hand in developing countries. Sparks HV Jr. **Physiologist** 1989 Feb;32(1):1, 3–7

Development of children's concepts about the interior of the body. Glaun D, et al. **Psychother Psychosom** 1987; 48(1–4):63–7

Aspects of nutritional physiology. **World Rev Nutr Diet** 1988; 56:1–262

[The Association of Physiologists. Meeting of applied physiology. Rouen, 11–12 December 1987. Abstracts] **Arch Int Physiol Biochim** 1988 Aug;96(3):A136–58 **(Fre)**

[Association des Physiologistes. 56th meeting. Grenoble, 21–23 September 1988. Proceedings] **Arch Int Physiol Biochim** 1988 Sep;96(4):A287–479 **(Fre)**

[Studies of an information system in a laboratory for physiological function tests] Fujiwara M, et al. **Rinsho Byori** 1988 Jun;36(6):725–30 **(Jpn)**

[Questions of ecological physiology] Simonov PV. **Usp Fiziol Nauk** 1989 Apr–Jun;20(2):113–5 **(Rus)**

[Sociedad Chilena de Ciencias Fisiológicas. Balneario el Retiro (Quilpue), 29–30 April 1988. 3d annual meeting. Abstracts] **Arch Biol Med Exp (Santiago)** 1988 Dec; 21(3–4):R489–96 **(Spa)**

EDUCATION

Survey results and a recommendation for a change in U.S. medical physiology curricula. Carlin RD. **Acad Med** 1989 Apr;64(4):202–7

Computer software for physiology education. **Am J Physiol** 1989 Jun;256(6 Pt 3):S21–2

Teaching effectiveness analysis plan applied to lectures in medical physiology. Casteel CP, et al. **Am J Physiol** 1989 Jun;256(6 Pt 3):S3–8

Use of frog ventricle to examine mechanical and electrical activity of heart. Knight VA, et al. **Am J Physiol** 1989 Jun;256(6 Pt 3):S9–13

An agenda for research on teaching of physiology. Michael JA. **Am J Physiol** 1989 Jun;256(6 Pt 3):S14–7

Can technology replace live preparations in student laboratories? Modell HI. **Am J Physiol** 1989 Jun;256(6 Pt 3):S18–20

Charting a course for advances in physiology education [editorial] Modell HI. **Am J Physiol** 1989 Jun;256(6 Pt 3):S1–2

Construction of a flexible airway model for teaching. Wang PM, et al. **Anat Rec** 1988 Jul;221(3):780–1

Concept analysis: an approach to teaching physiologic variables. Goosen GM. **J Prof Nurs** 1989 Jan–Feb;5(1):31–8

Teaching basic science: Dr Fox in the physiology chicken coop. Whitman N, et al. **Med Educ** 1988 Sep;22(5):393–7

The effectiveness of alternative instructional media in physiology practical teaching. Tan CM. **Med Teach** 1988; 10(3–4):333–44

Filling the talent pool [editorial] Frank M. **Physiologist** 1989 Jun;32(3):37–8

[The concept of teaching biocybernetics in a physiology course] Wünsch Z, et al. **Cesk Fysiol** 1986;35(5):385–6 **(Cze)**

[Continuity in the teaching of the sensory organs at departments of anatomy, histology, and physiology] Kapinosov IK. **Arkh Anat Gistol Embriol** 1988 Jun; 94(6):90–2 **(Rus)**

[250 years of the teaching of physiology at the Petersburg–Leningrad University] Nozdrachev AD, et al. **Fiziol Zh SSSR** 1988 Jun;74(6):886–900 **(Rus)**

[Use of a method of stepwise formation of mental activity during preparation for practical tasks in the department of pathophysiology] Lindenbraten VD, et al. **Patol Fiziol Eksp Ter** 1988 Jul–Aug;(4):77–9 **(Rus)**

[Experience in organizing the scientific research work of students at a department of pathologic physiology] Petrishchev NN, et al. **Patol Fiziol Eksp Ter** 1988 Nov–Dec;(6):73–4 **(Rus)**

[Mathematical analysis of the results of academic experiments in practical exercises on pathological physiology] Zviagintsev NF. **Patol Fiziol Eksp Ter** 1988 Sep–Oct; (5):80–2 (Eng. Abstr.) **(Rus)**

[Teaching and learning of the physiopathology discipline: analysis of the process in a school of medicine] Cristoffanini AP. **Rev Med Chil** 1988 Aug;116(8):822–8 (Eng. Abstr.) **(Spa)**

HISTORY

The influence of German idealistic morphology on the development of C.J. van der Klaauw's epistemology. Trienes R. **Acta Biotheor (Leiden)** 1988;37(2):91–119

Habent sua fata libelli: the adventurous story of Albert Szent-Györgyi's book entitled Studies on Muscle (1945). Zallár A, et al. **Acta Physiol Scand** 1989 Apr;135(4):423–4

Björn Folkow. Uvnäs B. **Acta Physiol Scand Suppl** 1988; 571:9–13

Robin Fåhraeus: evolution of his concepts in cardiovascular physiology. Goldsmith HL, et al. **Am J Physiol** 1989 Sep; 257(3 Pt 2):H1005–15

The peak of electromechanical experimentation in physiology: a unique view through Walter Miles' "Report of a Visit to Foreign Laboratories" in 1920. Shepherd GM, et al. **Caduceus** 1989 Summer;5(2):1–84

History of physiology in Sri Lanka and Prof. A. C. E. Koch. Fonseka C. **Ceylon Med J** 1989 Mar;34(1):17–25

Local styles and experimental logic. "Essay review." Sturdy S. **Isis** 1989 Jun;80(302):289–94

A.D. Waller and the University of London physiological laboratory. Sykes AH. **Med Hist** 1989 Apr;33(2):217–34

The Wellcome physiological research laboratories 1894–1904: the home office, pharmaceutical firms, and animal experiments. Tansey EM. **Med Hist** 1989 Jan; 33(1):1–41

Establishment of the Caribbean Primate Research Center. Goodwin WJ. **P R Health Sci J** 1989 Apr;8(1):31–2

Cayo Santiago as a part of the laboratory of perinatal physiology (NINDB). Vandenbergh JG, et al. **P R Health Sci J** 1989 Apr;8(1):29–30

Giuseppe Moruzzi, 1910–1986. Pompeiano O. **Pflugers Arch** 1988 Sep;412(4):S9–11

Galen and the greatest medical book. Hiatt N, et al. **Pharos** 1989 Winter;52(1):24–6

History of Department of Physiology at Rochester, 1924–1969. Adolph EF. **Physiologist** 1988 Aug; 31(4):107–12

History of Department of Physiology and Biophysics, University of Texas Medical Branch at Galveston. Guest MM. **Physiologist** 1988 Aug;31(4):113–27

History of physiology at University of New Mexico. Solomon S. **Physiologist** 1988 Aug;31(4):128–31

[French physiology in the 1st half of the 19th century. Its rapport with Swiss and German physiology] Legée G. **Gesnerus** 1988;45 Pt 2:211–37 (Eng. Abstr.) **(Fre)**

[Physiology of the Lausanne University: the 1st half century (1881–1932)] Saudan G. **Gesnerus** 1988;45 Pt 2:263–70 (Eng. Abstr.) **(Fre)**

[Chemical assessment of physiologic problems. Predominantly illustrated by Bern authors] Liebi WA. **Gesnerus** 1988;45 Pt 2:201–10 (Eng. Abstr.) **(Ger)**

[Physiologic concepts from Galen to Haller] Mani N. **Gesnerus** 1988;45 Pt 2:165–90 (Eng. Abstr.) **(Ger)**

[The roots, concept, subject, and history of hemorheology, current tasks and further perspectives] Mikita J, et al. **Orv Hetil** 1989 Mar 5;130(10):491–5 (30 ref.) (Eng. Abstr.) **(Hun)**

[The main directions in the scientific activities of Prof. Stanisław Kozłowski. III. Thermoregulation] Kaciuba-Uściłko H. **Acta Physiol Pol** 1988;39 Suppl 31:32–42 **(Pol)**

[Prof. Stanisław Kozłowski: his life and activities] Mossakowski MJ. **Acta Physiol Pol** 1988;39 Suppl 31:1–8 **(Pol)**

[The main directions in the scientific activities of Prof. Stanisław Kozłowski. II. Physiological basis of physical work capacity and mechanisms in the control of energy metabolism] Nazar K. **Acta Physiol Pol** 1988;39 Suppl 31:21–31 **(Pol)**

[The main directions in the activities of Prof. Stanisław Kozłowski. I Regulation of the water–electrolyte balance] Szczepańska-Sadowska E. **Acta Physiol Pol** 1988;39 Suppl 31:9–20 **(Pol)**

[General pathology and pathological physiology in Poland (the history of organizational units during the years 1945–1986)] Guzek JW. **Arch Hist Filoz Med** 1988; 51(3):319–57 (Eng. Abstr.) **(Pol)**

[A. A. Ukhtomskiĭ and theoretical physiology] Kruglikov RI. **Nerv Sist** 1988;26:5–17 **(Rus)**

[Physiologic sciences in the USSR—the history of their formation and the basic developmental trends in 1917–1987] Lange KA, et al. **Usp Fiziol Nauk** 1989 Jan–Mar;20(1):9–20 **(Rus)**

[I. P. Razenkov and his contribution to the development of Soviet physiology (on the centenary of the birth of I. P. Razenkov)] Makarov VA. **Vestn Akad Med Nauk SSSR** 1989;(1):3–9 **(Rus)**

[The training of a physiologist: B. A. Houssay (editorial)] Pasqualini RQ. **Medicina (B Aires)** 1987;47(6):681–5 **(Spa)**

[Houssay and clinical research in Argentina (editorial)] Taquini AC. **Medicina (B Aires)** 1987;47(6):679–81 **(Spa)**

INSTRUMENTATION

The design of a phonoactograph suitable for study on the influence of pheromones on insect mobility. Lux S. **Acta Physiol Pol** 1988 Sep–Dec;39(5–6):513–6

The design of an olfactometer and a method for quantitative stud on the effect of odours on insect behaviour. Lux S. **Acta Physiol Pol** 1988 Sep–Dec;39(5–6):504–12

An improved apparatus for the optical recording of contraction of single heart cells. Boyett MR, et al. **Pflugers Arch** 1988 Dec;413(2):197–205

[A differential inductive transformer for measuring the strength characteristics of isolated smooth muscle preparations] Marinchenko EI, et al. **Fiziol Zh SSSR** 1988 Sep;74(9):1337–40 **(Rus)**

[An 8-channel multifunctional universal amplifier for physiological research] Murav'ev VI, et al. **Fiziol Zh SSSR** 1988 Jun;74(6):878–81 **(Rus)**

[Automated system for the throughput and processing of a complex of physiological indices on laboratory animals] Parfent'ev NA, et al. **Fiziol Zh SSSR** 1988 Oct; 74(10):1493–6 **(Rus)**

METHODS

Automatic method of instrumental alimentary conditioning in new-born rats. Vobořil P, et al. **Act Nerv Super (Praha)** 1988 Dec;30(4):296–7

Methodological errors in radioisotope flux measurements. Egnor RW, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):G696–9

A method for making solution changes in the sub-millisecond range at the tip of a patch pipette. Maconochie DJ, et al. **Pflugers Arch** 1989 Sep;414(5):589–96

TRENDS

Chronobiology in Poland. Cymborowski B. **Acta Physiol Pol** 1988 Sep–Dec;39(5–6):313–6

[Developmental prospects in human physiology] Bekhtereva NP, et al. **Usp Fiziol Nauk** 1989 Jan–Mar;20(1):28–33 **(Rus)**

[Trends in the development of physiologic research in the USSR in light of the acceleration of socioeconomic progress] Kostiuk PG. **Usp Fiziol Nauk** 1989 Jan-Mar; 20(1):3-8 **(Rus)**

[Evolutionary physiology. Results and outlook] Sviderskiĭ VL. **Usp Fiziol Nauk** 1989 Jan-Mar;20(1):34-45 **(Rus)**

PHYSIOTHERAPY see **PHYSICAL THERAPY**

PHYSOSTIGMINE

Micronized emulsion for controlled release of physostigmine after oral administration. Part I. Formulation design. Friedman D, et al. **Drug Des Deliv** 1989 Mar;4(2):135-42

ADMINISTRATION & DOSAGE

Micronized emulsion for controlled release of physostigmine after oral administration. Part II. Release characteristics and pharmacological evaluation. Benita S, et al. **Drug Des Deliv** 1989 Mar;4(2):143-53

Effect of ultrasound on transdermal drug delivery to rats and guinea pigs. Levy D, et al. **J Clin Invest** 1989 Jun; 83(6):2074-8

Long-term administration of oral physostigmine in Alzheimer's disease. Stern Y, et al. **Neurology** 1988 Dec; 38(12):1837-41

The effects of physostigmine sulphate eyedrops on human visual function. Kay CD, et al. **Q J Exp Physiol** 1988 Jul; 73(4):501-10

An evaluation of the effectiveness of intramuscular atropine or homatropine eyedrops in preventing the effects of physostigmine eyedrops on human vision. Kay CD, et al. **Q J Exp Physiol** 1988 Jul;73(4):511-9

[Pharmacologic modification of vigilance in the postnarcotic phase— naloxone or physostigmine?] Schneck HJ, et al. **Anasth Intensivther Notfallmed** 1988 Aug;23(4):209-13 (Eng. Abstr.) **(Ger)**

[Effect of physostigmine and various nootropic drugs on various mental disorders caused by brain injury] Kocur J, et al. **Psychiatr Pol** 1988 Sep-Oct;22(5):317-21 (Eng. Abstr.) **(Pol)**

ADVERSE EFFECTS

Memory impairment in myasthenia gravis [letter] Riker WF. **Neurology** 1989 Apr;39(4):611-2

ANALOGS & DERIVATIVES

Synthesis and anticholinesterase activity of (-)-N1-norphysostigmine, (-)-eseramine, and other N(1)-substituted analogues of (-)-physostigmine. Yu QS, et al. **J Med Chem** 1988 Dec;31(12):2297-300

Comparative inhibitory effects of various physostigmine analogs against acetyl- and butyrylcholinesterases. Atack JR, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):194-202

New analogs of physostigmine: alternative drugs for Alzheimer's disease? Marta M, et al. **Life Sci** 1988; 43(23):1921-8

Toxicity study of continuous administration of physostigmine salicylate. Lim DK, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):627-31

28-day toxicity in beagle dogs of physostigmine salicylate administered via subcutaneously implanted Alzet osmotic minipumps. Korte DW, et al. **Proc West Pharmacol Soc** 1989;32:159

ANALYSIS

Inhibition of acetylcholinesterase by new physostigmine derivatives. Marta M, et al. **Biomed Biochim Acta** 1988; 47(3):285-8

Determination of physostigmine in plasma and cerebrospinal fluid by liquid chromatography with electrochemical detection. Unni LK, et al. **Clin Chem** 1989 Feb;35(2):292-5

ANTAGONISTS & INHIBITORS

Prevention of physostigmine-, DFP-, and diazinon-induced acute toxicity by monoethylcholine and N-aminodeanol. Patterson TA, et al. **Br J Pharmacol** 1989 Jun;97(2):451-60

BLOOD

Determination of physostigmine in plasma by high-performance liquid chromatography and fluorescence detection. Elsayed NM, et al. **Anal Biochem** 1989 Feb 15; 177(1):207-11

Plasma physostigmine concentrations after controlled-release oral administration [letter] Thal LJ, et al. **Arch Neurol** 1989 Jan;46(1):13

CHEMICAL SYNTHESIS

Reply to comment. De bello physostigminico II (the physostigmine controversy). Brossi AR. **FEBS Lett** 1989 Jul 31;252(1-2):159

HISTORY

The first use of physostigmine in the treatment of atropine poisoning. A translation of Kleinwachter's paper entitled 'Observations on the effect of Calabar bean extract as an antidote to atropine poisoning' [classical article] Nickalls RW, et al. **Anaesthesia** 1988 Sep;43(9):776-9

PHARMACOKINETICS

Pharmacokinetics and pharmacodynamics of physostigmine in the rat after oral administration. Somani SM. **Biopharm Drug Dispos** 1989 Mar-Apr;10(2):187-203

Application of a new radiometric high-performance liquid chromatographic assay to define physostigmine pharmacokinetics in guinea pigs. Lukey BJ, et al. **J Chromatogr** 1989 Aug 25;493(1):117-24

PHARMACOLOGY

Effect of physostigmine and its combination with some drugs on the process of verbal learning. Hrbek J, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):74-5

Effect of RG-tannin on yawning behaviour induced by apomorphine or physostigmine in rats. Starec M, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):71-2

Behavioral hyporeactivity to physostigmine in detoxified primary alcoholics. Janowsky DS, et al. **Am J Psychiatry** 1989 Apr;146(4):538-9

Neuroendocrine responses to physostigmine in Alzheimer's disease. Raskind MA, et al. **Arch Gen Psychiatry** 1989 Jun; 46(6):535-40

Effects of physostigmine and d-amphetamine on the behavior of rats with selective fimbria-fornix lesions and intrahippocampal fetal septal cell transplants. Cassel JC, et al. **Behav Neural Biol** 1988 Sep;50(2):229-39

Interactions of drugs acting on central dopamine receptors and cholinoceptors on yawning responses in the rat induced by apomorphine, bromocriptine or physostigmine. Zarrindast MR, et al. **Br J Pharmacol** 1989 Apr;96(4):843-8

Cingulate cell discharge patterns related to hippocampal EEG and their modulation by muscarinic and nicotinic agents. Colom LV, et al. **Brain Res** 1988 Sep 20; 460(2):329-38

M2 muscarinic receptor agonists produce hypotension and bradycardia when injected into the nucleus tractus solitarii. Sundaram K, et al. **Brain Res** 1989 Jan 16;477(1-2):358-62

Effects of physostigmine and scopolamine on long-term potentiation of hippocampal population spikes in rats. Ito T, et al. **Can J Physiol Pharmacol** 1988 Aug;66(8):1010-6

An investigation of the in vitro inhibition of acetylcholinesterase by the carbamate inhibitor eserine sulphate in eserine resistant strains of Drosophila melanogaster. Burnell AM, et al. **Comp Biochem Physiol [C]** 1988;90(1):215-20

Enhancement of passive avoidance learning through small doses of intra-amygdaloid physostigmine in the young rat. Its relation to the development of acetylcholinesterase. Dumery V, et al. **Dev Psychobiol** 1988 Sep;21(6):553-65

Physostigmine stimulates phosphoinositide breakdown in the rat neostriatum. Góngora JL, et al. **Eur J Pharmacol** 1988 Oct 11;155(1-2):49-55

Physostigmine induces in rats a phenomenon resembling long-term potentiation. Ito T, et al. **Eur J Pharmacol** 1988 Nov 8;156(3):351-9

Discriminative stimulus properties of physostigmine in rats. Tang AH, et al. **Eur J Pharmacol** 1988 Aug 9;153(1):97-104

Effects of cholinergic drugs on learning impairment in ventral globus pallidus-lesioned rats. Ueki A, et al. **J Neurol Sci** 1989 Mar;90(1):1-21

Modulation of acetylcholine release by nicotinic receptors in the rat brain. De Sarno P, et al. **J Neurosci Res** 1989 Feb;22(2):194-200

Characterization of the discriminative stimulus effects of physostigmine in the rat. Locke KW, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):241-6

Atropine, diazepam, and physostigmine: thermoregulatory effects in the heat-stressed rat. Matthew CB, et al. **Life Sci** 1989;44(25):1921-7

In vivo dose response relationship between physostigmine and cholinesterase activity in RBC and tissues of rats. Somani SM, et al. **Life Sci** 1989;44(25):1907-15

Interaction between clonidine and physostigmine in normal rats and in rats after sinoaortic denervation. Taira CA, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 May; 339(5):522-7

Dipalmitoylphosphatidylcholine liposomes reduce [3H]acetylcholine levels in an eserine-sensitive manner in rat cerebral cortical synaptosomes. Bottiglieri D, et al. **Neurochem Res** 1989 Feb;14(2):161-7

Physostigmine, tacrine and metrifonate: the effect of multiple doses on acetylcholine metabolism in rat brain. Hallak M, et al. **Neuropharmacology** 1989 Mar;28(3):199-206

Physostigmine enhances blood flow-metabolism ratio in neocortex. Scremin OU, et al. **Neuropsychopharmacology** 1988 Dec;1(4):297-303

Inhibition of acetyl- and butyrylcholinesterase and amylase release from canine pancreas. Oguchi Y, et al. **Pancreas** 1989;4(4):423-8

Effects of ketamine, naloxone, and physostigmine on flash evoked potentials in rat superior colliculus. Hetzler BE, et al. **Pharmacol Biochem Behav** 1989 Feb;32(2):511-8

Physostigmine-insensitive behavioral excitatory effects of atropine in squirrel monkeys. Witkin JM, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):309-15

Physostigmine and metoclopramide in oesophageal peristaltic spread in man. Tolu E, et al. **Pharmacol Res Commun** 1988 Oct;20(10):869-82

Interaction between bambuterol and physostigmine: aspects on cholinesterase inhibition and neuromuscular transmission in the smooth and skeletal muscles of the guinea-pig. Jeppsson AB, et al. **Pharmacol Toxicol** 1988 Oct;63(4):211-4

Cholinergic regulation of female sexual behavior in rats demonstrated by manipulation of endogenous acetylcholine. Clemens LG, et al. **Physiol Behav** 1989 Feb; 45(2):437-42

Time course of physostigmine effects on neuroendocrine responding at varying environmental temperatures. Maickel RP, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988;12(6):935-49

Tolerance to behavioral effects of physostigmine under interval schedules of positive or negative reinforcement. Galbicka G, et al. **Psychopharmacology (Berlin)** 1989; 97(4):448-55

Environmental influences on the development of tolerance to the effects of physostigmine on schedule-controlled behavior. Genovese RF, et al. **Psychopharmacology (Berlin)** 1988;96(4):462-7

Pharmacological characterization of the physostigmine stimulus in rats. Jung M, et al. **Psychopharmacology (Berlin)** 1988;95(4):553-5

Physostigmine improves water maze performance following nucleus basalis magnocellularis lesions in rats. Mandel RJ, et al. **Psychopharmacology (Berlin)** 1988;96(3):421-5

Scopolamine and benzodiazepine models of dementia: cross-reversals by Ro 15-1788 and physostigmine. Preston GC, et al. **Psychopharmacology (Berlin)** 1989;98(4):487-94

Effect of physostigmine on memory consolidation and retrieval processes in intact and nucleus basalis-lesioned rats. Santucci AC, et al. **Psychopharmacology (Berlin)** 1989; 99(1):70-4

Central and peripheral muscarinic actions of physostigmine and oxotremorine on avoidance responding of squirrel monkeys. Witkin JM. **Psychopharmacology (Berlin)** 1989; 97(3):376-82

Effects of physostigmine infusion on healthy volunteers deprived of rapid eye movement sleep. Salín-Pascual RJ, et al. **Sleep** 1989 Jun;12(3):246-53

Interaction of reversible and irreversible cholinesterase inhibitors on the monosynaptic reflex in neonatal rats. Das Gupta S, et al. **Toxicol Appl Pharmacol** 1989 Jun 1; 99(1):28-36

Effects of subacute administration of physostigmine on blood acetylcholinesterase activity, motor performance, and soman intoxication. Harris LW, et al. **Toxicol Appl Pharmacol** 1989 Feb;97(2):267-71

The reversible carbamate, (-)physostigmine, reduces the size of synaptic end plate lesions induced by sarin, an irreversible organophosphate. Kawabuchi M, et al. **Toxicol Appl Pharmacol** 1989 Jan;97(1):98-106

Comparison of effects of anatoxin-a(s) and paraoxon, physostigmine and pyridostigmine on mouse brain cholinesterase activity. Cook WO, et al. **Toxicon** 1988; 26(8):750-3

[The effect of 4 anti-glaucoma drugs on the blood-aqueous barrier] Wang ME. **Chung Hua Yen Ko Tsa Chih** 1988 Sep; 24(5):289-91 (Eng. Abstr.) **(Chi)**

[Descending bulbospinal substance-P-containing pathway involved in the pressor response evoked by physostigmine] Zhu GQ. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Jun; 10(3):184-90 (Eng. Abstr.) **(Chi)**

[Pregnancy by insemination from a quadriplegic donor after stimulation by physostigmine] Leduc BE, et al. **Can Med Assoc J** 1988 Dec 1;139(11):1071-2 **(Fre)**

[Age-related modification of dopaminergic-cholinergic neuronal interaction in rats] Kishimoto O. **Yakubutsu Seishin Kodo** 1988 Dec;8(4):443-51 (Eng. Abstr.) **(Jpn)**

[Neuromotor transmission under conditions of acetylcholinesterase inhibition by eserine] Sel TP. **Nerv Sist** 1988;27:119-26 **(Rus)**

[The influence of morphine on the behavioral effects of pharmacological stimulation of the cholinergic structures of the cat brain] Shugalev NP. **Zh Vyssh Nerv Deiat** 1989 Jan-Feb;39(1):137-8 **(Rus)**

THERAPEUTIC USE

Physostigmine as a treatment for anejaculation with paraplegic men. Blockmans D, et al. **Andrologia** 1988 Jul-Aug;20(4):311-3

Update on cholinergic enhancement therapy for Alzheimer disease. Read SL. **Bull Clin Neurosci** 1987;52:34-7 (23 ref.)

Cortisol responses to cholinergic drugs in Alzheimer's disease. Kumar V, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Oct;26(10):471-6

Chronic oral physostigmine without lecithin improves memory in Alzheimer's disease. Thal LJ, et al. **J Am Geriatr Soc** 1989 Jan;37(1):42-8 (62 ref.)

Long-term outpatient treatment of senile dementia with oral physostigmine. Beller SA, et al. **J Clin Psychiatry** 1988 Oct;49(10):400-4

Physostigmine in the treatment of intrathecal baclofen overdose. Report of three cases. Müller-Schwefe G, et al. **J Neurosurg** 1989 Aug;71(2):273-5

Physostigmine induced beta-endorphin release as a mechanism for physostigmine management of early alcohol withdrawal. Backon J. **Med Hypotheses** 1989 Jun; 29(2):85-6

Tetrahydroaminoacridine, 3,4 diaminopyridine and physostigmine: direct comparison of effects on memory in aged primates [published erratum appears in Neurobiol

Aging 1989 Mar-Apr;10(2):225] Bartus RT, et al. **Neurobiol Aging** 1988 Jul-Aug;9(4):351-6

Prevention of soman toxicity after the continuous administration of physostigmine. Lim DK, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):633-9

Flumazenil (Ro 15-1788) and physostigmine. Lauven PM, et al. **Resuscitation** 1988;16 Suppl:S41-8 (15 ref.)

[Usefulness of physostigmine in the treatment of anticholinergic drug poisoning (letter)] Nogué S, et al. **Med Clin (Barc)** 1988 May 7;90(18):756-7 (Spa)

TOXICITY

The relationship between oxime-induced reactivation of carbamylated acetylcholinesterase and antidotal efficacy against carbamate intoxication. Harris LW, et al. **Toxicol Appl Pharmacol** 1989 Mar 15;98(1):128-33

PHYTAGGLUTININS see **LECTINS**

PHYTANIC ACID see under **EICOSANOIC ACIDS**

PHYTASE

ANALYSIS

Aspergillus ficuum phytase: partial primary structure, substrate selectivity, and kinetic characterization. Ullah AH. **Prep Biochem** 1988;18(4):459-71

ISOLATION & PURIFICATION

Immobilization of Aspergillus ficuum phytase: product characterization of the bioreactor. Ullah AH, et al. **Prep Biochem** 1988;18(4):483-9

Production, rapid purification and catalytic characterization of extracellular phytase from Aspergillus ficuum. Ullah AH. **Prep Biochem** 1988;18(4):443-58

METABOLISM

Phytase and phytate degradation in humans. **Nutr Rev** 1989 May;47(5):155-7 (5 ref.)

PHYTIC ACID

Effect of phytate removal on zinc absorption from soy formula. Lönnerdal B, et al. **Am J Clin Nutr** 1988 Nov; 48(5):1301-6

Spin equilibria in human methemoglobin: effects of bezafibrate and inositol hexaphosphate as measured by susceptometry and visible spectroscopy. Noble RW, et al. **Biochemistry** 1989 Jun 13;28(12):5288-92

Spin equilibrium in human methemoglobin: effects of inositol hexaphosphate and bezafibrate as measured by resonance Raman spectroscopy. Noble RW, et al. **Biochemistry** 1989 Jun 13;28(12):5293-7

Influence of phytate on the adsorption of human salivary mucins onto hydroxyapatite. Nieuw Amerongen AV, et al. **J Biol Buccale** 1988 Dec;16(4):203-8

Heat of complex formation of A1(III) and Cd(II) with phytic acid. IX. Evans WJ, et al. **J Inorg Biochem** 1988 Sep; 34(1):11-8

ADMINISTRATION & DOSAGE

A child with Refsum's disease: successful treatment with diet and plasma exchange. Dickson N, et al. **Dev Med Child Neurol** 1989 Feb;31(1):92-7

Effects of pH on mineral-phytate, protein-mineral-phytate, and mineral-fiber interactions. Possible consequences of atrophic gastritis on mineral bioavailability from high-fiber foods. Champagne ET. **J Am Coll Nutr** 1988 Dec; 7(6):499-508 (72 ref.)

ANALYSIS

Colorimetric determination of phytate in unpurified extracts of seeds and the products of their processing. Vaintraub IA, et al. **Anal Biochem** 1988 Nov 15;175(1):227-30

Effect of roasting and autoclaving on phytic acid content of chickpea. Hussain B, et al. **Nahrung** 1989;33(4):345-8

Influence of phytate on in vitro digestibility of casein under physiological conditions. Lathia D, et al. **Plant Foods Hum Nutr** 1987;37(3):229-35

BLOOD

Modification of partial pressure of oxygen (P50) in mammalian red blood cells by incorporation of an allosteric effector of hemoglobin. Bailleul C, et al. **Biotechnol Appl Biochem** 1989 Feb;11(1):31-40

Nutritional status and phytate:zinc and phytate x calcium:zinc dietary molar ratios of lacto-ovo vegetarian Trappist monks: 10 years later. Harland BF, et al. **J Am Diet Assoc** 1988 Dec;88(12):1562-6

Binding of inositol hexakisphosphate to the oxygenated derivative of dromedary (Camelus dromedarius) and human hemoglobin: 31P-NMR study. Ascenzi P, et al. **J Inorg Biochem** 1989 Apr;35(4):247-53

Effect of alpha-naphthylisothiocyanate on blood clearance of 99mTc-phytate in rats. Shibata H, et al. **J Toxicol Sci** 1989 Feb;14(1):33-42

Blood clearance of 99mTc-phytate for evaluation of hepatic dysfunction in rats. Shibata H, et al. **J Toxicol Sci** 1988 May;13(2):83-96

Erythrocyte membrane skeletal protein alterations induced by polyanions: implications to the osmotic-pulse incorporation of inositol hexaphosphate. Wyse JW, et al. **Prog Clin Biol Res** 1989;292:65-75

DIAGNOSTIC USE

Uptake of 99mTc-phytate in osteosarcoma cases. Rao PN, et al. **Eur J Nucl Med** 1989;15(3):162-4

Blood clearance of 99mTc-phytate for evaluation of hepatic dysfunction in dogs. Shibata H, et al. **J Toxicol Sci** 1988 Aug;13(3):151-9

METABOLISM

Phytic acid interactions with divalent cations in foods and in the gastrointestinal tract. Erdman JW Jr, et al. **Adv Exp Med Biol** 1989;249:161-71 (51 ref.)

The metabolism and functions of inositol pentakisphosphate and inositol hexakisphosphate. Carpenter D, et al. **Biochem Soc Trans** 1989 Feb;17(1):3-5

Endocytosis and inositol hexakisphosphate levels in ras transformants of Dictyostelium discoideum amoebae. Klein G, et al. **Experientia** 1989 Apr 15;45(4):365-7

Phytase and phytate degradation in humans. **Nutr Rev** 1989 May;47(5):155-7 (5 ref.)

In vitro availability of iron and zinc in white and coloured ragi (Eleusine coracana): role of tannin and phytate. Udayasekhara Rao P, et al. **Plant Foods Hum Nutr** 1988; 38(1):35-41

PHARMACOKINETICS

Radiopharmacological profiles of tracers under pathophysiological conditions. Bone uptake of 99mTc-phytate in vitamin D deficient rats. Noronha OP, et al. **Int J Rad Appl Instrum [B]** 1989;16(3):261-7

Effect of alpha-naphthylisothiocyanate on blood clearance of 99mTc-phytate in dogs. Shibata H, et al. **J Toxicol Sci** 1989 May;14(2):67-75

PHARMACOLOGY

Iron absorption: no intestinal adaptation to a high-phytate diet. Brune M, et al. **Am J Clin Nutr** 1989 Mar;49(3):542-5

Iron absorption in man: ascorbic acid and dose-dependent inhibition by phytate. Hallberg L, et al. **Am J Clin Nutr** 1989 Jan;49(1):140-4

Effects of inositol hexaphosphate induced high P50 on an isolated rabbit heart with free and limited coronary blood flow. Baron JF, et al. **Biomater Artif Cells Artif Organs** 1988;16(1-3):359-61

Cardiac effects of phytic acid induced high P50 with free and limited coronary blood flow. Baron JF, et al. **Biomater Artif Cells Artif Organs** 1988-89;16(5):871-85

Inositol-phosphate-induced enhancement of natural killer cell activity correlates with tumor suppression. Baten A, et al. **Carcinogenesis** 1989 Sep;10(9):1595-8

Inositol and inositol hexaphosphate suppress cell proliferation and tumor formation in CD-1 mice. Shamsuddin AM, et al. **Carcinogenesis** 1989 Aug;10(8):1461-3

Inositol hexaphosphate inhibits large intestinal cancer in F344 rats 5 months after induction by azoxymethane. Shamsuddin AM, et al. **Carcinogenesis** 1989 Mar; 10(3):625-6

Effect of reduced phytate wheat bran on zinc absorption. Hall MJ, et al. **Eur J Clin Nutr** 1989 Jun;43(6):431-40

Effect of inositol hexakisphosphate on the spectroscopic properties of the nitric oxide derivative of ferrous naturally glycated human hemoglobin HbA1c. Ascenzi P, et al. **J Inorg Biochem** 1988 Sep;34(1):19-24

Phytic acid-enhanced metal ion exchange reactions: the effect on carboxypeptidase A. Martin CJ, et al. **J Inorg Biochem** 1989 Apr;35(4):267-88

Inositol hexakisphosphate (phytic acid) enhances Ca2+ influx and D-[3H]aspartate release in cultured cerebellar neurons. Nicoletti F, et al. **J Neurochem** 1989 Oct; 53(4):1026-30

Inhibitory effects of phytic acid and other inositol phosphates on zinc and calcium absorption in suckling rats. Lönnerdal B, et al. **J Nutr** 1989 Feb;119(2):211-4

Effect of carrier erythrocytes containing inositol hexaphosphate on Babesia microti infection. Deloach JR, et al. **Res Vet Sci** 1988 Sep;45(2):262-3

The 24-hour posttransfusion survival and lifespan of autologous baboon red cells treated with inositol hexaphosphate-polyethylene glycol or inositol hexaphosphate-adenosine triphosphate-polyethylene glycol to decrease oxygen affinity. Franco RS, et al. **Vox Sang** 1988;55(2):90-6

PHYTIN see **PHYTIC ACID**

PHYTOCHROME see under **PLANT PROTEINS**

PHYTOHEMAGGLUTININS

Deficiency of lymphocyte lectin-dependent cytotoxicity in myelodysplastic syndromes. Fontana L, et al. **Acta Haematol (Basel)** 1989;82(1):1-6

Properties of three monoclonal antibodies that recognize an 80-kDa phytohemagglutinin-binding glycoprotein from porcine lymphocytes. Faucher S, et al. **Biochem Cell Biol** 1989 Apr-May;67(4-5):224-32

PHA-L can be transported anterogradely through fibers of passage. Cliffer KD, et al. **Brain Res** 1988 Aug 16; 458(1):185-91

Introduction of macromolecules into primary cultured neuronal cells by fusion with erythrocyte ghosts. Hikawa N, et al. **Brain Res** 1989 Feb 27;481(1):162-4

PHA activation of encephalitogenic T cells: in vitro line selection overcomes splenic suppression. Jones RE, et al. **Cell Immunol** 1989 Oct 1;123(1):60-9

Plasmodium falciparum schizont sonic extracts suppress lymphoproliferative responses to mitogens and antigens in malaria-immune adults. Riley EM, et al. **Infect Immun** 1989 Oct;57(10):3181-8

Human T cell activation with phytohemagglutinin. The function of IL-6 as an accessory signal. Ceuppens JL, et al. **J Immunol** 1988 Dec 1;141(11):3868-74

HIV-induced immunodeficiency. Relatively preserved phytohemagglutinin as opposed to decreased pokeweed mitogen responses may be due to possibly preserved responses via CD2/phytohemagglutinin pathway. Hofmann B, et al. **J Immunol** 1989 Mar 15;142(6):1874-80

Purification and amino acid analysis of two human monocyte chemoattractants produced by phytohemagglutinin-stimulated human blood mononuclear leukocytes. Yoshimura T, et al. **J Immunol** 1989 Mar 15; 142(6):1956-62

In vitro and in vivo transplantation of fetal rat brain cells following incubation with various anatomic tracing substances. Stoppinni L, et al. **J Neurosci Methods** 1989 Mar;27(2):121-32

Radioresistant pseudo-colony formation in the PHA-leukocyte feeder colony assay. Kluin-Nelemans JC, et al. **Leuk Res** 1988;12(11-12):917-22

Phytohemagglutinin-stimulated leukocyte-conditioned medium induces differentiation in acute promyelocytic leukemia cells in vitro. Selypes A, et al. **Leuk Res** 1988; 12(11-12):951-3

Triiodothyronine affects the phytohemagglutinin to concanavalin A proliferative response ratio in sex-linked dwarf chickens. Erf GF, et al. **Proc Soc Exp Biol Med** 1988 Oct;189(1):5-12

ANALYSIS

Neural connections identified with PHA-L anterograde and HRP retrograde tract-tracing techniques. Thompson AM, et al. **J Neurosci Methods** 1988 Aug;25(1):13-7

ANTAGONISTS & INHIBITORS

Inhibition of phytohemagglutinine-induced T lymphocyte proliferation by 6-(octadecyldithio)purine, a novel liposomal prodrug of 6-mercaptopurine. Daniel PT, et al. **Arch Toxicol Suppl** 1989;13:179-82

Anthralin, a non-phorbol tumor promoter, fails to inhibit metabolic cooperation in mutant human fibroblasts, but inhibits phytohemagglutinin-induced lymphocyte blastogenesis in vitro. Si EC, et al. **Toxicology** 1988 Dec 30;53(2-3):199-212

DIAGNOSTIC USE

Climbing fibers are labelled after injection of PHA-L into the nucleus interpositus of the cat. Murakami F, et al. **Brain Res** 1988 Oct 25;463(1):144-7

Anterograde neuroanatomical tracing with Phaseolus vulgaris-leucoagglutinin combined with immunocytochemistry of gamma-amino butyric acid, choline acetyltransferase or serotonin. Wouterlood FG. **Histochemistry** 1988;89(5):421-8

IMMUNOLOGY

Reactivity with legume lectins of three monoclonal antibodies made against the Lathyrus odoratus lectin. Kolberg J, et al. **Biol Chem Hoppe Seyler** 1988 May; 369(5):365-70

Inhibition of phytoagglutinin potency of Korean vicia unijuga by human urine. Moon GJ, et al. **Nippon Hoigaku Zasshi** 1989 Feb;43(1):16-9

Phytohemagglutinin skin test responses to evaluate in vivo cellular immune function in rats. Mendenhall CL, et al. **Proc Soc Exp Biol Med** 1989 Jan;190(1):117-20

Monoclonal antibodies against leucoagglutinin-reactive human T-lymphocyte surface components. II. Studies on the mechanism of K46M-induced activation and determination of the frequency of responding cells. Berzins T, et al. **Scand J Immunol** 1988 Dec;28(6):773-82

Monoclonal antibodies against leucoagglutinin-reactive human T-lymphocyte surface components. I. Characterization of cellular binding sites. Hammarström ML, et al. **Scand J Immunol** 1988 Dec;28(6):759-71

METABOLISM

Bacterial overgrowth by indigenous microflora in the phytohemagglutinin-fed rat. Banwell JG, et al. **Can J Microbiol** 1988 Aug;34(8):1009-13

Bacteria-lectin interactions in phytohemagglutinin-induced bacterial overgrowth of the small intestine. Ceri H, et al. **Can J Microbiol** 1988 Aug;34(8):1003-8

Phytohemagglutinin-binding sites in the skin. A useful histochemical marker of acrosyringium and distal portions of intradermal sweat ducts. Saida T, et al. **Dermatologica** 1989;179(1):25-8

Transport of proteins to the plant vacuole is not by bulk

flow through the secretory system, and requires positive sorting information. Dorel C, et al. **J Cell Biol** 1989 Feb; 108(2):327–37

Anterograde and retrograde axonal transport of Phaseolus vulgaris leucoagglutinin (PHA–L) from the globus pallidus to the striatum of the rat. Shu SY, et al. **J Neurosci Methods** 1988 Sep;25(2):175–80

PHARMACOLOGY

Inhibitory effect of interleukin–1 on the in vitro PHA–stimulated lymphocytes of some blood donors. Olinescu A, et al. **Arch Roum Pathol Exp Microbiol** 1988 Jul–Dec;47(3–4):289–97

Alpha–fetoprotein gene expression in human lymphoblastoid cells and in PHA–stimulated normal T–lymphocytes. Lafarge–Frayssinet C, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):112–8

Induction of poly(ADP–ribose) polymerase gene expression in lectin–stimulated human T lymphocytes is dependent on protein synthesis [published erratum appears in Biochem Biophys Res Commun 1988 Dec 30;157(3):1444] Menegazzi M, et al. **Biochem Biophys Res Commun** 1988 Oct 31; 156(2):995–9

Azidothymidine inhibits mitogen stimulated growth and DNA–repair in human peripheral lymphocytes. Munch–Petersen B. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1369–75

Effect of phytohemagglutinin and interleukin–2 on malignant and nonmalignant B and T lymphocytes. Porwit A, et al. **Cancer Detect Prev** 1988;12(1–6):91–6

Effect of age on the human high affinity interleukin 2 receptor of phytohaemagglutinin stimulated peripheral blood lymphocytes. Nagel JE, et al. **Clin Exp Immunol** 1989 Feb;75(2):286–91

Oral feeding of isolated lectins from red kidney bean stimulates rat small intestinal mucosal DNA synthesis and crypt cell division. Tajiri H, et al. **Dig Dis Sci** 1988 Nov; 33(11):1364–9

Suppression of phytohemagglutinin induced splenocyte proliferation during concurrent infection with Eimeria nieschulzi and Nippostrongylus brasiliensis. Bristol JR, et al. **Experientia** 1989 Aug 15;45(8):762–3

Chromosome abnormalities in PHA–stimulated and non stimulated bone marrow cultures from patients with non Hodgkin lymphoma. Palka G, et al. **Haematologica (Pavia)** 1988 Nov–Dec;73(6):489–94

Frequency and size distribution of micronuclei in lymphocytes stimulated with phytohemagglutinin and pokeweed mitogen in workers exposed to piperazine. Högstedt B, et al. **Hereditas** 1988;109(1):139–42

Frequencies of micronuclei in human peripheral blood lymphocytes stimulated in vitro by phytohemagglutinin and pokeweed mitogen. Högstedt B, et al. **Hereditas** 1988; 109(1):53–5

Mitotic cells in different lymphocyte subsets in unfractionated cultures stimulated by phytohaemagglutinin or pokeweed mitogen. Kovanen PE, et al. **Hereditas** 1989;110(1):69–74

The effect of immunomodulators on PHA or gamma–IFN induced release of neopterin from purified macrophages and peripheral blood mononuclear cells. Barak M, et al. **Immunol Lett** 1989 Jun 15;21(4):317–22

Insulin–like growth factor–1 increases the mitogenic response of human peripheral blood lymphocytes to phytohemagglutinin. Roldan A, et al. **Immunol Lett** 1989 Jan 15;20(1):5–8

Improvement of human myeloma stem cell growth in a liquid culture system supplemented with phytohemagglutinin. Visani G, et al. **Int J Cell Cloning** 1988 Sep;6(5):313–23

Inhibition of phytohemagglutinin (PHA) induced human T–cell colonies by methylprednisolone. Ghio R, et al. **Int J Immunopharmacol** 1988;10(3):237–45

Murine polyclonal T–lymphocyte activation induced by phytohemmagglutinin; differential lymphokine requirements of two unusual activation pathways defined by resistance to blockade by barium and by cyclosporin A. Peçanha LM, et al. **Int J Immunopharmacol** 1989; 11(2):149–56

The effect of non–steroidal anti–inflammatory drugs on phytohaemagglutinin stimulated lymphocytes: relevance to possible therapeutic immunosuppression by fenclofenac. Spiers EM, et al. **Int J Immunopharmacol** 1988;10(3):261–9

Effect of mitogen and lymphokine stimulation on proteoglycan synthesis by lymphocytes. Bartold PM, et al. **J Cell Physiol** 1989 Jul;140(1):82–90

Natural, lectin– and phorbol ester–induced cellular cytotoxicity in Crohn's disease and ulcerative colitis. Aparicio–Pagés MN, et al. **J Clin Lab Immunol** 1988 Nov; 27(3):109–13

Calcitriol inhibits the PHA–induced production of IL–2 and IFN–gamma and the proliferation of human peripheral blood leukocytes while enhancing the surface expression of HLA class II molecules. Saggese G, et al. **J Endocrinol Invest** 1989 May;12(5):329–35

Aging and the mobilization of intracellular calcium by phytohemagglutinin in human T cells. Lustyik G, et al. **J Gerontol** 1989 Mar;44(2):B30–6

T4 cell activation by immobilized phytohemagglutinin: differential capacity to induce IL–2 responsiveness and IL–2 production. Vine JB, et al. **J Immunol** 1988 Oct 15; 141(8):2593–600

Kinetic assay of cytotoxic T lymphocyte clones. II. Comparison of primary and secondary responses and lectin–dependent cytotoxicity. Jenski LJ. **J Immunol Methods** 1989 Feb 24;117(2):191–8

Immunomodulatory effect of bovine PTH extract on lymphocyte response to plant mitogens. Elias AN, et al. **J Med** 1988;19(2):109–17

Augmentation of cytotoxic activity by mitogens in rheumatic heart disease. Gray ED, et al. **J Rheumatol** 1988 Nov; 15(11):1672–6

Cimetidine–mediated augmentation of lymphocyte responses to phytohemagglutinin in gastric cancer patients. Kurosu Y, et al. **Jpn J Clin Oncol** 1989 Mar;19(1):56–61

Cluster formation in PHA–stimulated mononuclear cells from peripheral blood: effects of colcemid and taxol. Sondell K, et al. **Lymphology** 1988 Sep;21(3):181–6

The phytohemagglutinin response of human peripheral blood lymphocytes as a function of donor age: a re–examination using BrdU–Hoechst flow cytometry. Schindler D, et al. **Mech Ageing Dev** 1988 Sep;44(3):253–63

Induction of lymph follicle formation with endotoxin lipopolysaccharide in the draining lymph node of athymic nude mice. Hoshi H, et al. **Pathol Res Pract** 1988 Dec; 184(1):60–8

Modulation of CD7 is associated with inhibition of T cell proliferation in response to tetanus toxoid and phytohemagglutinin. Lazarovits AI, et al. **Transplant Proc** 1989 Apr;21(2):3325–7

[In vitro induction of differentiation in leukemic cells by various inducers] Chen CM, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Nov;40(5):417–24 (Eng. Abstr.) **(Chi)**

[Response of human lymphocytes to phytohemagglutinin (PHA) as measured by fluorescence polarization technique—differences between malignant conditions and benign or healthy conditions] Tenzaki T, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Apr 20;24(4):817–25 (Eng. Abstr.) **(Jpn)**

[Phenotypes of leukemic cells from chronic B cell leukemia and their proliferative responses to several kinds of mitogens or lymphokines: PHA or phorbol ester (TPA) induces a high responsibility to B cell growth factor (BCGF) in the leukemic cells] Takeuchi H. **Rinsho Ketsueki** 1988 Dec;29(12):2241–9 (Eng. Abstr.) **(Jpn)**

[Cytotoxic and suppressor activity of human peripheral blood lymphocytes stimulated by interleukin–2 and phytohemagglutinin before and after fractionation in the percoll gradient] Abronina IF, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):327–30 (Eng. Abstr.) **(Rus)**

[Stimulation of phosphoinositide turnover is an important but not a sole condition for activation of human T–lymphocyte proliferation by phytohemagglutinin and interleukin 2] Korichneva IL, et al. **Dokl Akad Nauk SSSR** 1989 Jan–Feb; 304(1):221–4 **(Rus)**

[Changes in the content of potassium, sodium and potassium influx in human peripheral blood lymphocytes during long–term cultivation with phytohemagglutinin] Ezhevskii SA, et al. **Tsitologiia** 1988 May;30(5):573–81 (Eng. Abstr.) **(Rus)**

[Effect of the tumor promoter TPA on the distribution of PHA–stimulated human lymphocytes by cell cycle phases] Vinogradov AE, et al. **Tsitologiia** 1988 Aug;30(8):983–90 (Eng. Abstr.) **(Rus)**

TOXICITY

Duodenal toxicity of dietary Phaseolus vulgaris lectins in the rat: an integrative assay. Lafont J, et al. **Digestion** 1988; 41(2):83–93

PHYTOHORMONES see **PLANT GROWTH REGULATORS**

PHYTOL see under **DITERPENES**

PHYTOMITOGENS see **LECTINS**

PHYTONADIONE

ADMINISTRATION & DOSAGE

Vitamin K in infancy [letter] Sann L, et al. **Eur J Pediatr** 1988 Nov;148(2):177–8

Effect of various intakes of phylloquinone on signs of vitamin K deficiency and serum and liver phylloquinone concentrations in the rat. Kindberg CG, et al. **J Nutr** 1989 Feb;119(2):175–80

ADVERSE EFFECTS

Anaphylactic shock and vitamin K1 [letter] de la Rubia J, et al. **Ann Intern Med** 1989 Jun 1;110(11):943

Pseudosclerodermatous reaction to phytomenadione injection (Texier's syndrome). Brunskill NJ, et al. **Clin Exp Dermatol** 1988 Jul;13(4):276–8

Pseudoscleroderma secondary to phytonadione (vitamin K1) injections. Pujol RM, et al. **Cutis** 1989 Apr;43(4):365–8

ANALOGS & DERIVATIVES

Sulfaquinoxaline inhibition of vitamin K epoxide and quinone reductase. Preusch PC, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):18–24

Determination of trans–phylloquinone in children's serum. Moussa F, et al. **Clin Chem** 1989 May;35(5):874–8

Simultaneous determination of vitamin K1, vitamin K1 2,3–epoxide and menaquinone–4 in human plasma by high–performance liquid chromatography with fluorimetric detection. Hirauchi K, et al. **J Chromatogr** 1988 Aug 19; 430(1):21–9

2–(Fluoromethyl)–3–phytyl–1,4–naphthoquinone and its 2,3–epoxide. Inhibition of vitamin K epoxide reductase. Silverman RB, et al. **J Med Chem** 1989 Sep;32(9):2138–41

BLOOD

Phylloquinone in plasma from elderly and young adults: factors influencing its concentration. Sadowski JA, et al. **Am J Clin Nutr** 1989 Jul;50(1):100–8

Serum phylloquinone concentrations in a normal population of children as compared with the reference interval in adults. Lambert WE, et al. **Clin Chem** 1989 Apr;35(4):671

Determination of trans–phylloquinone in children's serum. Moussa F, et al. **Clin Chem** 1989 May;35(5):874–8

Plasma concentrations of vitamin K1 and PIVKA–II in bottle–fed and breast–fed infants with and without vitamin K prophylaxis at birth. Widdershoven J, et al. **Eur J Pediatr** 1988 Nov;148(2):139–42

Simultaneous determination of vitamin K1, vitamin K1 2,3–epoxide and menaquinone–4 in human plasma by high–performance liquid chromatography with fluorimetric detection. Hirauchi K, et al. **J Chromatogr** 1988 Aug 19; 430(1):21–9

DEFICIENCY

Dietary deficiency of phylloquinone and reduced serum levels in febrile neutropenic cancer patients. Conly J, et al. **Am J Clin Nutr** 1989 Jul;50(1):109–13

Electron transfer reactions in photosystem I following vitamin K1 depletion by ultraviolet irradiation. Biggins J, et al. **FEBS Lett** 1989 Jul 3;250(2):271–4

METABOLISM

Vitamin K1 reduction in human liver. Location of the coumarin–drug–insensitive enzyme. Wallin R, et al. **Biochem J** 1989 Jun 15;260(3):879–84

Vitamin K1 and K2 in infant human liver. Kayata S, et al. **J Pediatr Gastroenterol Nutr** 1989 Apr;8(3):304–7

Phylloquinone in photosystem I: are quinones the secondary electron acceptors in all types of photosynthetic reaction centers? Hauska G. **Trends Biochem Sci** 1988 Nov; 13(11):415–6 (25 ref.)

PHARMACOKINETICS

The bioavailability of a mixed micellar preparation of vitamin K1, and its procoagulant effect in anticoagulated rabbits. Winn MJ, et al. **J Pharm Pharmacol** 1989 Apr;41(4):257–60

PHARMACOLOGY

An investigation of the pharmacological response to vitamin K1 in the rabbit. Winn MJ, et al. **Br J Pharmacol** 1988 Aug;94(4):1077–84

THERAPEUTIC USE

Effect of combination therapy of vitamin K1 and ursodeoxycholic acid on liver function tests. Iijima T, et al. **Trop Gastroenterol** 1988 Jul–Aug;9(3):139–44

PHYTOPHAGINEAE see **PLANT VIRUSES**

PHYTOPHTHORA see under **MASTIGOMYCOTINA**

PHYTOPLANKTON see under **PLANKTON**

PHYTOSTEROLS

BLOOD

Serum noncholesterol sterols related to cholesterol metabolism in familial hypercholesterolemia. Gylling H, et al. **Clin Chim Acta** 1988 Nov;178(1):41–9

Serum cholesterol precursors, cholestanol, and plant sterols in primary biliary cirrhosis. Nikkilä K, et al. **Scand J Gastroenterol** 1988 Oct;23(8):967–72

ISOLATION & PURIFICATION

[Sterols from Gynostemma pentafillum] Marino A, et al. **Boll Soc Ital Biol Sper** 1989 Apr;65(4):317–9 (Eng. Abstr.) **(Ita)**

[Phytochemical investigation of Adiantum capillus veneris] Marino A, et al. **Boll Soc Ital Biol Sper** 1989 May; 65(5):461–3 (Eng. Abstr.) **(Ita)**

METABOLISM

Cycloeucalenol–obtusifoliol isomerase. Structural requirements for transformation or binding of substrates and inhibitors. Rahier A, et al. **Eur J Biochem** 1989 May 15;181(3):615–26

[Biotransformation of sugarcane phytosterols into pharmaceutical intermediates] Martínez J, et al. **Rev Latinoam Microbiol** 1987 Oct–Dec;29(4):373–6 (Eng. Abstr.) **(Spa)**

PHARMACOLOGY

Fatty acid desaturase activities are modulated by phytosterol incorporation in microsomes. Leikin AI, et al. **Biochim Biophys Acta** 1989 Sep 25;1005(2):187–91

Inhibition of cholesterol absorption in rats by plant sterols. Ikeda I, et al. **J Lipid Res** 1988 Dec;29(12):1573–82

Effects of isoprothiolane and phytosterol on serum lipids and adipose tissue of rats given saturated fat diet. Katamoto H, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):119–27

[Effects of unsaponifiable extracts of avocado/soy beans (PIAS) on the production of collagen by cultures of synoviocytes, articular chondrocytes and skin fibroblasts] Mauviel A, et al. **Rev Rhum Mal Osteoartic** 1989 Feb; 56(2):207–11 **(Fre)**

PIA MATER

Familial oculoleptomeningeal amyloidosis. Report of a new family with unusual features. Uitti RJ, et al. **Arch Neurol** 1988 Oct;45(10):1118–22

Focal leptomeningeal rhabdomyomatosis of the posterior fossa. Fix SE, et al. **Arch Pathol Lab Med** 1989 Aug; 113(8):872–3

[Diffuse neoplastic infiltration of leptomeninges by malignant pleural mesothelioma] de Pangher Manzini V, et al. **Recenti Prog Med** 1989 Jan;80(1):16–7 (Eng. Abstr.) **(Ita)**

[Clinical significance of sialic acid in the CSF; in relation to the malignancy and leptomeningeal dissemination] Moroki K, et al. **No To Shinkei** 1989 Mar;41(3):305–7 (Eng. Abstr.) **(Jpn)**

BLOOD SUPPLY

Composition and mechanics of cerebral arterioles in hypertensive rats. Baumbach GL, et al. **Am J Pathol** 1988 Dec;133(3):464–71

Hemodilution causes size-dependent constriction of pial arterioles in the cat. Hudak ML, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H912–7

Impairment of endothelium-dependent dilatation of cerebral arterioles during diabetes mellitus. Mayhan WG. **Am J Physiol** 1989 Mar;256(3 Pt 2):H621–5

Effect of inosine on pial arterioles: potentiation of adenosine-induced vasodilation. Ngai AC, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H603–6

Ouabain prevents loss of autoregulation in rat pial arterioles caused by reoxygenation after a brief hypoxic episode. Kettler J, et al. **Can J Physiol Pharmacol** 1989 May; 67(5):423–7

Vascular responses to vasopressin are tone-dependent in the cerebral circulation of the newborn pig. Armstead WM, et al. **Circ Res** 1989 Jan;64(1):136–44

Endothelium-dependent constriction demonstrated in vivo in mouse cerebral arterioles. Rosenblum WI, et al. **Circ Res** 1988 Oct;63(4):837–43

Effect of aging on collateral circulation via pial anastomoses in cats. Yamaguchi S, et al. **Gerontology** 1988;34(4):157–64

Effects of dopamine on pial arteriolar diameter and CSF prostanoid levels in piglets. Busija DW, et al. **J Cereb Blood Flow Metab** 1989 Jun;9(3):264–7

Pial arterial pressure contribution to early ischemic brain edema. Yamaguchi S, et al. **J Cereb Blood Flow Metab** 1989 Oct;9(5):597–602

Pial arteriolar vessel diameter and CO2 reactivity during prolonged hyperventilation in the rabbit. Muizelaar JP, et al. **J Neurosurg** 1988 Dec;69(6):923–7

Effects of digital acupressure on the capillary arteriolar flow in cerebral pia mater of the dog. Han FY, et al. **J Tradit Chin Med** 1989 Jun;9(2):135–9

Endothelium dependence of dilation of pial arterioles in mouse brain by calcium ionophore. Rosenblum WI, et al. **Stroke** 1988 Nov;19(11):1379–82

[Effect of helium-neon laser on the microcirculation in blood vessels of the rat pia mater] Kozlov VI, et al. **Biull Eksp Biol Med** 1988 Sep;106(9):309–11 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

The effects of dipyridamole and theophylline on rat pial vessels during hypocarbia. Ibayashi S, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):829–33

[Effect of pikamilon on the cortical blood supply and microcirculation in the pial arteriole system] Mirzoian RS, et al. **Biull Eksp Biol Med** 1989 May;107(5):581–2 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Ontogenetic development of the leptomeninges of the laboratory mouse (Mus musculus v. alba). Zajícová A. **Folia Morphol (Praha)** 1988;36(4):431–40

INJURIES

Vicryl (polyglactin 910) mesh as a dural substitute in the presence of pia arachnoid injury. Nussbaum CE, et al. **J Neurosurg** 1989 Jul;71(1):124–7

METABOLISM

Immunocytochemical localization of luteinizing hormone-releasing hormone (LHRH) in the brain and nervus terminalis of the adult and early neonatal gray short-tailed opossum (Monodelphis domestica). Schwanzel-Fukuda M, et al. **J Comp Neurol** 1988 Oct 1; 276(1):44–60

PATHOLOGY

Leptomeningeal gliomatosis with spinal cord or cauda equina compression: a complication of supratentorial gliomas in adults. Delattre JY, et al. **Acta Neurol Scand** 1989 Feb; 79(2):133–9

PHYSIOLOGY

Immunohistochemical study on fetal raphe samples transplanted into the leptomeningeal tissue of 5,6-dihydroxytryptamine-treated adult rats. Ueda S, et al. **Cell Tissue Res** 1989 Jun;256(3):457–63

Nervus terminalis innervation of the goldfish retina and behavioral visual sensitivity. Davis RE, et al. **Neurosci Lett** 1988 Aug 31;91(2):126–30

Studies of pial vascular permeability [letter] Unterberg A, et al. **Stroke** 1988 Oct;19(10):1306–7

SURGERY

Multiple subpial transection: a new approach to the surgical treatment of focal epilepsy. Morrell F, et al. **J Neurosurg** 1989 Feb;70(2):231–9

ULTRASTRUCTURE

Ultrastructure of the saccus endolymphaticus and leptomeninges of the domestic fowl Gallus gallus f. domestica. Klika E, et al. **Folia Morphol (Praha)** 1988; 36(4):423–30

PIAL VEIN see **CEREBRAL VEINS**

PICA

COMPLICATIONS

Pica as a cause of death in three mentally handicapped men. McLoughlin IJ. **Br J Psychiatry** 1988 Jun;152:842–5

Fecal impaction due to geophagia [letter] Wrenn K. **South Med J** 1989 Jul;82(7):932

[Apropos of geophagia (letter)] d'Ivernois C, et al. **Presse Med** 1989 Mar 25;18(12):639 **(Fre)**

[A case of lead poisoning in a rachitic child with pica. Critical review of the literature] Vico P, et al. **Rev Med Brux** 1988 Oct;9(7–8):393–7 (12 ref.) (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Pica: a clue to iron deficiency anemia. Ferguson JV. **J Tenn Med Assoc** 1989 Apr;82(4):187–8

EPIDEMIOLOGY

Pica: prevalence and etiology. Bhatia MS, et al. **Indian Pediatr** 1988 Dec;25(12):1165–70

Quantitative assessment of geophagous behaviour as a potential source of exposure to geohelminth infection. Wong MS, et al. **Trans R Soc Trop Med Hyg** 1988; 82(4):621–5

ETIOLOGY

Coprophagia and urodipsia in a chronic mentally ill woman. McGee MD, et al. **Hosp Community Psychiatry** 1989 Mar; 40(3):302–3

Resistant hypertension due to pica (baking soda) [letter] Johnson BE. **Lancet** 1989 Mar 11;1(8637):550–1

THERAPY

Suppression of pica by water mist and aromatic ammonia. A comparative analysis. Rojahn J, et al. **Behav Modif** 1987 Jan;11(1):65–74

PICHIA see under **ENDOMYCETALES**

PICIBANIL see under **BIOLOGICAL PRODUCTS**

PICK DISEASE OF BRAIN see **DEMENTIA, PRESENILE**

PICK'S DISEASE OF HEART see **PERICARDITIS, CONSTRICTIVE**

PICKWICKIAN SYNDROME

DIAGNOSIS

Obesity-hypoventilation in childhood. Boxer GH, et al. **J Am Acad Child Adolesc Psychiatry** 1988 Sep;27(5):552–8

[Pickwickian syndrome or Dickens betrayed] Bonard EC. **Rev Med Suisse Romande** 1988 Oct;108(10):881–2 **(Fre)**

PHYSIOPATHOLOGY

[Pulmonary hypertension in disorders of respiratory regulation] Podszus T. **Internist (Berlin)** 1988 Oct; 29(10):681–7 (56 ref.) **(Ger)**

PICLORAM see under **PICOLINIC ACIDS**

PICODNAVIRUSES see **PARVOVIRIDAE**

PICOLINES

The role of Picolax before whole gut irrigation in the preparation of the colon for large bowel surgery. Grace RH. **Ann R Coll Surg Engl** 1988 Sep;70(5):322–3

ADMINISTRATION & DOSAGE

Preliminary development and evaluation of a parenteral emulsion formulation of penclomedine (NSC-338720; 3,5-dichloro-2,4-dimethoxy-6-trichloromethylpyridine): a novel, practically water insoluble cytotoxic agent. Prankerd RJ, et al. **J Parenter Sci Technol** 1988 May-Jun; 42(3):76–81

ANALOGS & DERIVATIVES

The ultrastructural effect of amprolium medication on development of Eimeria adenoeides in turkeys. Danforth HD, et al. **Avian Dis** 1989 Apr-Jun;33(2):303–9

Clinical and biochemical findings in bovine cerebrocortical necrosis produced by oral administration of amprolium. Kasahara T, et al. **Nippon Juigaku Zasshi** 1989 Feb; 51(1):79–85

[Amprolium residues in eggs following administration of amprolium/ethopabate in laying hens and breeding hens] Kan CA, et al. **Tijdschr Diergeneeskd** 1989 Jan 15; 114(2):76–82 (Eng. Abstr.) **(Dut)**

[Coccidiosis in lambs: observations in the preventive use of an amprolium-containing medicated feed] Talmon P, et al. **Tijdschr Diergeneeskd** 1989 Jun 1;114(11):611–7 (Eng. Abstr.) **(Dut)**

PHARMACOKINETICS

Pharmacokinetic profile and metabolism of 2-ethyl-6-methyl-3-hydroxypyridine in rats. Zherdev VP, et al. **Ann Ist Super Sanita** 1988;24(3):467–73

PHARMACOLOGY

Analysis of the mechanism of psychotropic action of a 3-hydroxypyridine derivative. Voronina TA, et al. **Ann Ist Super Sanita** 1988;24(3):461–6

Comparison of the effects of RP 49356, cromakalim and nifedipine on guinea-pig trachea in vitro. Brown TJ, et al. **Pflugers Arch** 1989;414 Suppl 1:S188–9

Cromakalim, pinacidil and RP 49356 activate a tolbutamide-sensitive K+ conductance in human skeletal muscle fibres. Quasthoff S, et al. **Pflugers Arch** 1989;414 Suppl 1:S179–80

The potassium channel opener RP 49356 modifies the ATP-sensitivity of K+-ATP channels in cardiac myocytes. Thuringer D, et al. **Pflugers Arch** 1989;414 Suppl 1:S175

THERAPEUTIC USE

Preclinical antitumor activity of an alpha-picoline derivative, penclomedine (NSC 338720), on human and murine tumors. Plowman J, et al. **Cancer Res** 1989 Apr 15;49(8):1909–15

[Effect of a 3-hydroxypyridine-class antioxidant on an ethanol-induced learning disorder in mice and the accumulation of lipofuscin] Kutepova OA, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):314–7 (Eng. Abstr.) **(Rus)**

TOXICITY

Eye and skin irritation induced by picolines. Dutertre-Catella H, et al. **Arch Toxicol Suppl** 1989;13:428–32

Teratologic evaluation of orally administered nitrapyrin in rats and rabbits. Berdasco NM, et al. **Fundam Appl Toxicol** 1988 Oct;11(3):464–71

PICOLINIC ACIDS

The reaction of pyridinecarboxylic acids with dicyclohexylcarbodiimide and p-nitrophenol. Ljungqvist A, et al. **Acta Chem Scand [B]** 1988 Jul;42(6):408–10

Complex formation between anionic semiquinoid form of a flavoenzyme D-amino acid oxidase and ligands. Stabilizing mechanism of anionic semiquinoid flavoenzyme. Nishina Y, et al. **J Biochem (Tokyo)** 1988 Nov;104(5):727–33

[Studies on the metabolisms of azolecarboxylic acids closely related to the fusaric acid(5-butylpyridine-2-carboxylic acid)] Sagi M, et al. **Yakugaku Zasshi** 1988 Apr; 108(4):350–4 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Persistence studies with the herbicide clopyralid in prairie soils at different temperatures. Smith AE, et al. **Bull Environ Contam Toxicol** 1989 May;42(5):670–5

Residues of clopyralide (3,6-dichloropicolinic acid) in strawberries and their changes. Hajšlová J, et al. **Nahrung** 1988;32(9):861–5

[Analysis for bacterial spore-specific dipicolinic acid by high-pressure liquid chromatography] Watabe K, et al. **Nippon Saikingaku Zasshi** 1988 Sep;43(5):927–30 (Eng. Abstr.) **(Jpn)**

CHEMICAL SYNTHESIS

Synthesis and pharmacology of a series of 3- and 4-(phosphonoalkyl)pyridine- and -piperidine-2-carboxylic acids. Potent N-methyl-D-aspartate receptor antagonists.

Ornstein PL, et al. **J Med Chem** 1989 Apr;32(4):827–33

METABOLISM

Interactions of the novel inhibitors of MAO–B Ro 19–6327 and Ro 16–6491 with the active site of the enzyme. Cesura AM, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 4:51–61

PHARMACOKINETICS

[Studies on the metabolisms of fusaric acid(5–butylpyridine–2–carboxylic acid) aza–analogues] Sagi M, et al. **Yakugaku Zasshi** 1988 Apr;108(4):325–30 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Influence of dietary picolinic acid on mineral metabolism in the rat. Seal CJ. **Ann Nutr Metab** 1988;32(4):186–91

Glucose metabolism and hemoglobin reactivity in human red blood cells exposed to the tryptophan metabolites 3–hydroxyanthranilate, quinolinate and picolinate. Dykens JA, et al. **Biochem Pharmacol** 1989 May 15;38(10):1555–62

[3H]Ro 19–6327: a reversible ligand and affinity labelling probe for moncamine oxidase–B. Cesura AM, et al. **Eur J Pharmacol** 1989 Mar 29;162(3):457–65

[Experimental study of the effect of herbicides on the species structure of microflora of reservoir water] Karaeva NIu. **Gig Sanit** 1988 Sep;(9):70–1 **(Rus)**

[Effect of various herbicides on pathogenic microflora in outdoor reservoir water] Karaeva NIu. **Gig Sanit** 1988 Aug;(8):24–6 (Eng. Abstr.) **(Rus)**

[The effect of picolinic acid and iron ions on the proliferation of SPEV cells] Kovalenko OA, et al. **Tsitologiia** 1989 Apr;31(4):447–52 (Eng. Abstr.) **(Rus)**

TOXICITY

Effects of paternal subacute exposure to Tordon 202c on fetal growth and development in CD–1 mice. Blakley PM, et al. **Teratology** 1989 Mar;39(3):237–41

Effects of preconceptional and gestational exposure to Tordon 202c on fetal growth and development in CD–1 mice. Blakley PM, et al. **Teratology** 1989 Jun;39(6):547–53

[Dipicolinic acid—an allergen?] Hums R. **Dermatol Monatsschr** 1988;174(6):333–8 (Eng. Abstr.) **(Ger)**

PICORNAVIRIDAE

Picornaviruses. Finding the receptors [news] Harrison SC. **Nature** 1989 Mar 16;338(6212):205–6

ENZYMOLOGY

Comparative analysis of viral cysteine protease structural models. Bazan JF, et al. **FEBS Lett** 1989 May 22;249(1):5–7

Chimeric picornavirus polyproteins demonstrate a common 3C proteinase substrate specificity. Dewalt PG, et al. **J Virol** 1989 Aug;63(8):3444–52

Viral cysteine proteases are homologous to the trypsin–like family of serine proteases: structural and functional implications. Bazan JF, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):7872–6

GENETICS

Molecular events leading to picornavirus genome replication. Wimmer E, et al. **J Cell Sci Suppl** 1987;7:251–76 (141 ref.)

3D gene of foot–and–mouth disease virus. Conservation by convergence of average sequences. Villaverde A, et al. **J Mol Biol** 1988 Dec 5;204(3):771–6

Conserved structural domains in the 5'–untranslated region of picornaviral genomes: an analysis of the segment controlling translation and neurovirulence. Pilipenko EV, et al. **Virology** 1989 Feb;168(2):201–9

IMMUNOLOGY

Toward understanding the molecular basis for attenuation of picornaviruses. Cohen JI. **Adv Virus Res** 1989;36:153–80 (124 ref.)

A possible homology between immunodeficiency virus p24 core protein and picornaviral VP2 coat protein: prediction of HIV p24 antigenic sites. Argos P. **EMBO J** 1989 Mar;8(3):779–85

ISOLATION & PURIFICATION

Characterization of Triatoma virus, a picorna–like virus isolated from the triatomine bug Triatoma infestans. Muscio OA, et al. **J Gen Virol** 1988 Nov;69 (Pt 11):2929–34

METABOLISM

An enzyme which specifically splits a covalent bond between picornaviral RNA and VPg. Drygin YuF, et al. **FEBS Lett** 1988 Nov 7;239(2):343–6

Changes in infectious flacherie virus–specific polypeptides and translatable mRNA in the midgut of the silkworm, Bombyx mori, during larval molt. Choi HK, et al. **J Invertebr Pathol** 1989 Jan;53(1):128–31

PHYSIOLOGY

The canyon hypothesis. Hiding the host cell receptor attachment site on a viral surface from immune surveillance. Rossmann MG. **J Biol Chem** 1989 Sep 5;264(25):14587–90 (47 ref.)

Relationship of p220 cleavage during picornavirus infection to 2A proteinase sequencing. Lloyd RE, et al. **J Virol** 1988 Nov;62(11):4216–23

PICORNAVIRUS INFECTIONS

[Acute respiratory viral infections] **Ter Arkh** 1989;61(3):8–13 **(Rus)**

COMPLICATIONS

Evidence for a novel picornavirus in human dermatomyositis. Rosenberg NL, et al. **Ann Neurol** 1989 Aug;26(2):204–9

DIAGNOSIS

Clinical manifestations of respiratory tract infections due to respiratory syncytial virus and rhinoviruses in hospitalized children. Kellner G, et al. **Acta Paediatr Scand** 1989 May;78(3):390–4

Polymerase chain reaction amplification of rhinovirus nucleic acids from clinical material. Gama RE, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9346

EPIDEMIOLOGY

Human calicivirus–associated diarrhea in children attending day care centers. Matson DO, et al. **J Infect Dis** 1989 Jan;159(1):71–8

ETIOLOGY

Contribution of rhinoviruses to respiratory viral infections in childhood: a prospective study in a mainly hospitalized infant population. Kellner G, et al. **J Med Virol** 1988 Aug;25(4):455–69

GENETICS

Amplification of rhinovirus specific nucleic acids from clinical samples using the polymerase chain reaction. Gama RE, et al. **J Med Virol** 1989 Jun;28(2):73–7

IMMUNOLOGY

Enumeration and distribution of T–cell subsets, macrophages, and IgG positive cells in the CNS of SJL/J mice infected with Theiler's virus. Lindsley MD, et al. **Ann N Y Acad Sci** 1988;540:657–60

PHYSIOPATHOLOGY

Alterations of the eustachian tube, middle ear, and nose in rhinovirus infection. McBride TP, et al. **Arch Otolaryngol Head Neck Surg** 1989 Sep;115(9):1054–9

Rhinovirus upper respiratory infection increases airway hyperreactivity and late asthmatic reactions. Lemanske RF Jr, et al. **J Clin Invest** 1989 Jan;83(1):1–10

PREVENTION & CONTROL

Intranasal tolerance and histopathologic effects of a novel synthetic interferon, rIFN–alpha Con1. Hayden FG, et al. **Antiviral Res** 1988 Dec 1;10(4–5):225–34

TRANSMISSION

Mechanisms of transmission of rhinovirus infections. Hendley JO, et al. **Epidemiol Rev** 1988;10:243–58 (60 ref.)

Near disappearance of rhinovirus along a fomite transmission chain. Jennings LC, et al. **J Infect Dis** 1988 Oct;158(4):888–92

VETERINARY

Detection of feline calicivirus antigens in the joints of infected cats. Bennett D, et al. **Vet Rec** 1989 Apr 1;124(13):329–32

Lameness in cats [letter] Dawson S. **Vet Rec** 1989 Jan 14;124(2):48

Prevalence of avain nephritis virus in England. Nicholas RA, et al. **Vet Rec** 1988 Oct 8;123(15):398

Visceral urate deposits in chicks inoculated with avian nephritis virus. Shirai J, et al. **Vet Rec** 1989 Jun 24;124(25):658–61

Viral haemorrhagic disease in rabbits: a review. Xu ZJ, et al. **Vet Res Commun** 1989;13(3):205–12 (28 ref.)

Experimental transmission and electron microscopic demonstration of the virus of haemorrhagic disease of rabbits in Czechoslovakia. Smíd B, et al. **Zentralbl Veterinarmed [B]** 1989 May;36(3):237–40

PICRATES

Aldehyde pararosanilin (true aldehyde fuchsin) stains purified insulin, oxidized or not, following adequate fixation with either formalin or Bouin's fluid. Mowry RW, et al. **Stain Technol** 1988 Sep;63(5):311–23

Picrosirius red staining of dental structures. Roush JK, et al. **Stain Technol** 1988 Nov;63(6):363–7

ANALYSIS

New method for testing the absorbency of surgical dressings. Betts TJ, et al. **J Pharm Pharmacol** 1988 Sep;40(9):664–5

DIAGNOSTIC USE

Effect of cefotetan on creatinine determination by the picric acid and enzymatic methods. Mauro LS, et al. **Clin Pharm** 1989 Jul;8(7):505–8

[Use of picrosirius for staining Parachoccidioides brasiliensis] Almeida H de O, et al. **Rev Soc Bras Med Trop** 1988 Apr–Jun;21(2):59–62 (Eng. Abstr.) **(Por)**

PHARMACOLOGY

Picrate and niflumate block anion modulation of radioligand binding to the gamma–aminobutyric acid/benzodiazepine receptor complex. Evoniuk G, et al. **Mol Pharmacol** 1988 Dec;34(6):837–42

TOXICITY

[Immunotoxicity of benzodiazepines. Influence on contact hypersensitivity to picryl chloride in mice] Descotes J, et al. **J Toxicol Clin Exp** 1985 Sep–Oct;5(5):309–13 (Eng. Abstr.) **(Fre)**

PICROTOXIN

Differential seizure sensitivities to picrotoxinin in two inbred strains of mice (DBA/2J and BALB/c ByJ): parallel changes in GABA receptor–mediated chloride flux and receptor binding. Schwartz RD, et al. **Brain Res** 1989 Feb 27;481(1):169–74

Steroid hormone effects on picrotoxin–induced seizures in female and male rats. Schwartz–Giblin S, et al. **Brain Res** 1989 Jan 9;476(2):240–7

Ultrastructural changes in granule cell somata and mossy fibers of the rat hippocampus during picrotoxin–induced convulsions. Watanabe H, et al. **Cell Tissue Res** 1989 Feb;255(2):261–7

ANALOGS & DERIVATIVES

The role of GABAA receptor function in peristaltic activity of the guinea–pig ileum: a comparative study with bicuculline, SR 95531 and picrotoxinin. Tonini M, et al. **Br J Pharmacol** 1989 Jun;97(2):556–62

The pentylenetetrazol–like interoceptive stimulus produced by ethanol withdrawal is potentiated by bicuculline and picrotoxinin. Idemudia SO, et al. **Neuropsychopharmacology** 1989 Jun;2(2):115–22

ANTAGONISTS & INHIBITORS

Modulation of the GABAA receptor complex by steroids in slices of rat cuneate nucleus. Turner JP, et al. **Br J Pharmacol** 1989 Feb;96(2):409–17

METABOLISM

The influence of folic acid on the picrotoxin–sensitive site of the GABAa–receptor complex. Van Rijn CM, et al. **Epilepsy Res** 1988 May–Jun;2(3):215–8

PHARMACOLOGY

Effects of muscimol, cetyl–GABA, pentetrazol and picrotoxin on timidity during intraspecies conflict in mice. Kršiak M. **Act Nerv Super (Praha)** 1989 Apr;31(1):64–6

GABA antagonists potentiate the cardioinhibitory reflex induced by capsaicin in the cat. Such G, et al. **Acta Physiol Hung** 1988;72(2):181–9

Retention enhancement with post–training picrotoxin: lack of state dependency. Castellano C, et al. **Behav Neural Biol** 1989 Mar;51(2):165–70

Epileptiform events induced by GABA–antagonists in entorhinal cortical cells in vitro are partly mediated by N–methyl–D–aspartate receptors. Jones RS. **Brain Res** 1988 Aug 2;457(1):113–21

The facilitation by diazepam of the electrically evoked release of [3H]5–HT from rat cortical slices is antagonized by picrotoxin and Ro 5–4864. Lista A, et al. **Eur J Pharmacol** 1988 Jul 26;152(1–2):195–6

Qualitative and quantitative changes in monoamine oxidase activity after acute third ventricle treatment of GABA, muscimol, and picrotoxin in rat. Rattan AK, et al. **Gegenbaurs Morphol Jahrb** 1989;135(2):357–65

Picrotoxin, a gamma–aminobutyric acid–receptor antagonist, retards craniofacial development in the weaning rat: I. Effect on mandibular bone growth. Ben–Shachar D, et al. **J Craniofac Genet Dev Biol** 1988;8(4):351–61

Picrotoxin, a gamma–aminobutyric acid–receptor antagonist, retards craniofacial development in the weaning rat: II. Effect on mandibular condylar cartilage. Ben–Shachar D, et al. **J Craniofac Genet Dev Biol** 1988;8(4):363–72

Effects of picrotoxin treatment on GABAA receptor supramolecular complexes in rat brain. Ito Y, et al. **J Neurochem** 1989 Apr;52(4):1064–70

Analysis of vertebrate eye movements following intravitreal drug injections. II. Spontaneous nystagmus induced by picrotoxin is mediated subcortically. Ariel M, et al. **J Neurophysiol** 1988 Sep;60(3):1022–35

Analysis of vertebrate eye movements following intravitreal drug injections. III. Spontaneous nystagmus is modulated by the GABAa receptor. Ariel M. **J Neurophysiol** 1989 Aug;62(2):469–80

Inhibitory effect of intravenous GABA antagonists on gastric acid secretion stimulated by secretagogues in rats. Lin WC, et al. **Jpn J Pharmacol** 1989 Feb;49(2):267–74

Effect of GABAergic transmission in the subpallidal region on the hypermotility response to the administration of excitatory amino acids and picrotoxin into the nucleus accumbens. Shreve PE, et al. **Neuropharmacology** 1988 Dec;27(12):1271–7

Pentobarbital and picrotoxin have reciprocal actions on single GABAA receptor channels. Twyman RE, et al. **Neurosci Lett** 1989 Jan 2;96(1):89–95

Intracellular picrotoxin blocks pentobarbital-gated Cl- conductance. Inomata N, et al. **Neurosci Res** 1988 Oct; 6(1):72–5

Effects of GABA antagonists on the pentobarbital-induced depression of respiration and cough in rats. Kamei J, et al. **Pharmacol Biochem Behav** 1989 Jan;32(1):357–60

Effects of naloxone and picrotoxin on diazepam- or pentobarbital-induced hyperphagia in nondeprived rats. Naruse T, et al. **Pharmacol Biochem Behav** 1988 Nov; 31(3):709–11

[Background impulsation of cortical neurons during blockade of synaptic inhibition in vital slices] Karnup SV. **Neirofiziologiia** 1989;21(1):16–24 (Eng. Abstr.) **(Rus)**

TOXICITY

The sex-related difference in the convulsant action of picrotoxin in rats [letter] Paul V, et al. **Indian J Physiol Pharmacol** 1988 Jul–Sep;32(3):221–2

PICRYL CHLORIDE

IMMUNOLOGY

IL-2 influences the balance between immunity and unresponsiveness in the picryl (TNP) contact sensitivity system by blocking the development or action of an Lyt-2+, I-J+ T suppressor cell. Madar J, et al. **Cell Immunol** 1988 Nov;117(1):209–17

Regulation of lymphocyte proliferation in contact sensitivity: homeostatic mechanisms and a possible explanation of antigenic competition. Kimber I, et al. **Immunology** 1989 Apr;66(4):577–82

The antigen-binding T cell factor PCl-F sensitizes mast cells for in vitro release of serotonin. Comparison with monoclonal IgE antibody. Meade R, et al. **J Immunol** 1988 Oct 15;141(8):2704–13

PHARMACOLOGY

Local effects of UV radiation on immunization with contact sensitizers. I. Down-regulation of contact hypersensitivity by application of TNCB to UV-irradiated skin. Cruz PD Jr, et al. **Photodermatol** 1988 Jun;5(3):126–32

PIEDRA see under **MYCOSES**

PIERRE ROBIN SYNDROME

CLASSIFICATION

[The Pierre-Robin syndrome. Classification and new therapeutic approach] Couly G, et al. **Arch Fr Pediatr** 1988 Oct;45(8):553–9 (Eng. Abstr.) **(Fre)**

COMPLICATIONS

Audiologic findings in Pierre Robin sequence. Gould HJ. **Ear Hear** 1989 Jun;10(3):211–3

GENETICS

Interstitial deletion of the long arm of chromosome 4. Chudley AE, et al. **Am J Med Genet** 1988 Nov;31(3):549–51

Trisomy 3q2 and Pierre-Robin sequence in a boy with unbalanced 46,XY, der(10), t(3;10)(q23;q26.3) de novo karyotype. Kleczkowska A, et al. **Helv Paediatr Acta** 1988 Nov;43(3):245–8

RADIOGRAPHY

Sickle-shaped scapulae in a patient with the Pierre Robin syndrome. Bezirdjian DR, et al. **Br J Radiol** 1989 Feb; 62(734):171–3

SURGERY

Innovative surgical approach for the Pierre Robin anomalad: subperiosteal release of the floor of the mouth musculature. Delorme RP, et al. **Plast Reconstr Surg** 1989 Jun; 83(6):960–4; discussion 965–6

THERAPY

[Pierre Robin syndrome] Reychler H. **Acta Stomatol Belg** 1988 Sep;85(3):207–16 (84 ref.) (Eng. Abstr.) **(Fre)**

PIGEONS

Studies on the virulence of pigeon paramyxovirus-1 (PMV-1). I. Changes in the virulence of pigeon PMV-1 strains isolated in Hungary upon passage in chickens, embryonated hen's eggs and pigeons. Kissi B. **Acta Vet Hung** 1988;36(3–4):283–92

Studies on the virulence of pigeon paramyxovirus-1 (PMV-1). II. Mechanism of the virulence increase of pigeon PMV-1. Kissi B, et al. **Acta Vet Hung** 1988; 36(3–4):293–8

Efficacy of oil-emulsion vaccines prepared with pigeon paramyxovirus-1, Ulster, and La Sota Newcastle disease viruses. Stone HD. **Avian Dis** 1989 Jan–Mar;33(1):157–62

Effects of lead shot ingestion on free-ranging mourning doves. Carrington ME, et al. **Bull Environ Contam Toxicol** 1989 Aug;43(2):173–9

An outbreak of paramyxovirus encephalomyelitis in racing pigeons in India. Mangat AP, et al. **Vet Rec** 1988 Nov 5;123(19):496

[Verification of the therapeutic effects of ornidazole (1-(3-chloro-2-hydroxypropyl)-2-methyl-5-nitroimidazole) manufactured in Czechoslovakia in trichomoniasis in pigeons] Kučera J, et al. **Vet Med (Praha)** 1988 Sep;33(9):551–6 (Eng. Abstr.) **(Cze)**

[A trial with attenuated live Salmonella typhimurium vaccine for protection against an experimental Salmonella infection in pigeons] Uyttebroek E, et al. **Tijdschr Diergeneeskd** 1989 Apr 1;114(7):381–3 (Eng. Abstr.) **(Dut)**

[Infections of pigeons as a risk to the health of humans and animals] Glünder G. **DTW** 1989 Mar;96(3):112–4, 116 (Eng. Abstr.) **(Ger)**

[Measures for the solution of animal welfare and hygiene problems concerning dogs and pigeons in a large city] Rulffes R. **DTW** 1989 Mar;96(3):116 (Eng. Abstr.) **(Ger)**

ANATOMY & HISTOLOGY

Neuromuscular organization of the pectoralis (pars thoracicus) of the pigeon (Columba livia): implications for motor control. Kaplan SR, et al. **Anat Rec** 1989 Jul; 224(3):426–30

Musculotopic innervation of the primary flight muscles, the pectoralis (Pars thoracicus) and supracoracoideus, of the pigeon (Columba livia): a WGA-HRP Study. Sokoloff A, et al. **Anat Rec** 1989 Sep;225(1):35–40

Cerebellar connections of the trigeminal system in the pigeon (Columba livia). Arends JJ, et al. **Brain Res** 1989 May 15; 487(1):69–78

Spinothalamic projections in the pigeon. Schneider A, et al. **Brain Res** 1989 Apr 10;484(1–2):139–49

Pretectal and tectal projections to the homologue of the dorsal lateral geniculate nucleus in the pigeon: an anterograde and retrograde tracing study with cholera toxin conjugated to horseradish peroxidase. Wild JM. **Brain Res** 1989 Feb 6;479(1):130–7

An ultrastructural study of the cere of the domestic pigeon (Columba livia). Purton MD. **J Anat** 1988 Apr;157:43–56

Projections of the nucleus of the tractus solitarius in the pigeon (Columba livia). Arends JJ, et al. **J Comp Neurol** 1988 Dec 15;278(3):405–29

The avian somatosensory system. I. Primary spinal afferent input to the spinal cord and brainstem in the pigeon (Columba livia). Wild JM. **J Comp Neurol** 1985 Oct 22; 240(4):377–95

Cells of origin of spinothalamic, spinotectal, spinoreticular and spinocerebellar pathways in the pigeon as studied by the retrograde transport of horseradish peroxidase. Necker R. **J Hirnforsch** 1989;30(1):33–43

SEM-studies of the nictitating membrane of the pigeon. Kühnel W, et al. **Prog Clin Biol Res** 1989;295:521–5

An immunohistochemical study on the distribution of endocrine cells in the gastrointestinal tract of domestic pigeon, (Columba livia var domestica). Saito T, et al. **Z Mikrosk Anat Forsch** 1989;103(2):237–46

[Light microscopic and ultrastructural study of the lower olivary complex in the pigeon (Columba livia)] Bozhilova-Pastirova, et al. **Eksp Med Morfol** 1989; 28(2):9–15 (Eng. Abstr.) **(Bul)**

[Structure of the right muscle atrioventricular valve in the avian heart] Prosheva VI, et al. **Arkh Anat Gistol Embriol** 1989 Jan;96(1):50–5 (Eng. Abstr.) **(Rus)**

BLOOD

Total body haematocrit iron kinetics and erythrocyte life span in pigeons (Columba livia). Kalomenopoulou M, et al. **Comp Biochem Physiol [A]** 1989;92(2):215–8

Plasma carnitine and cholesterol levels in monkeys and pigeons: species/breed differences and the influence of gender and diet. Bell FP, et al. **Comp Biochem Physiol [B]** 1979;63(2):215–9

Purification and regulatory properties of pigeon erythrocyte pyruvate kinase. Calomenopoulou M, et al. **Comp Biochem Physiol [B]** 1989;93(3):697–706

Serum lipoprotein profiles of young atherosclerosis-susceptible White Carneau and atherosclerosis-resistant Show Racer pigeons. Jensen PF, et al. **Comp Biochem Physiol [B]** 1978;60(1):67–9

Inhibition of cyclic AMP efflux by insect pheromones and fatty acids. Kanter JR, et al. **FEBS Lett** 1989 Feb 13; 244(1):149–53

Circulating levels of insulin and avian pancreatic polypeptide in pigeons under different experimental conditions. John TM, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):71–7

Concentrations of plasma prolactin and luteinizing hormone following nest deprivation and renesting in ring doves (Streptopelia risoria). Lea RW, et al. **Horm Behav** 1989 Jun;23(2):279–89

[Dexamethasone and prednisolone use in pigeons] Gröger U, et al. **Tierarztl Prax** 1989;17(2):167–70 (Eng. Abstr.) **(Ger)**

[The determination of blood parameters by Reflotron] Kürner D, et al. **Tierarztl Prax** 1989;17(1):101–3 (Eng. Abstr.) **(Ger)**

GENETICS

[Molecular and cytologic analysis of clusters of moderate repeats of bird genomes] Tarantul VZ, et al. **Mol Biol (Mosk)** 1989 Mar–Apr;23(2):481–90 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Comparative study of the early postnatal chicken and pigeon brain. A Golgi-study of telencephalon and cerebellum. Tömböl T. **J Hirnforsch** 1988;29(5):557–67

Observations on the pigmentation of the pigeon iris. Oliphant LW. **Pigment Cell Res** 1987;1(3):202–8

IMMUNOLOGY

Immunochemical properties of the antigens involved in the pigeon breeder's disease. Alonso A, et al. **Allergol Immunopathol (Madr)** 1988 Sep–Oct;16(5):347–52

Post-hatching development of the immune system of the pigeon, Columba livia. Selvaraj P, et al. **Dev Comp Immunol** 1988 Fall;12(4):879–84

In vitro reactivities of blood lymphocytes from symptomatic and asymptomatic pigeon breeders to antigen and mitogens. Bouic PJ, et al. **Int Arch Allergy Appl Immunol** 1989; 89(2–3):222–8

[Clinical picture and BALF changes in patients with bird fancier's lung after allergen provocation] Dąbrowski A, et al. **Pol Tyg Lek** 1988 May 23;43(21):669–73 (Eng. Abstr.) **(Pol)**

INJURIES

[The use of collagen fasciae and fibrin adhesive for supporting wound healing in skin defects with large surfaces] Hufnagel H, et al. **Tierarztl Prax** 1989;17(2):163–5 (Eng. Abstr.) **(Ger)**

METABOLISM

Molecular forms of pigeon skeletal muscle AMP deaminase. Kaletha K. **Acta Biochim Pol** 1988;35(4):405–14

Beta-VLDL metabolism by pigeon macrophages. Evidence for two binding sites with different potentials promoting cholesterol accumulation. Adelman SJ, et al. **Arteriosclerosis** 1989 Sep–Oct;9(5):673–83

Analysis of peptides from pigeon cerebrum: a comparison of sacrifice methods. Barraco RA, et al. **Brain Res Bull** 1978 Nov–Dec;3(6):645–53

Developmental changes of serotonin and 5-hydroxyindoleacetic acid levels in specific regions of the pigeon central nervous system. Alesci R, et al. **Brain Res Dev Brain Res** 1989 Jul 1;48(1):151–6

Comparative aspects of aminotransferases in the rat, pigeon and rainbow trout. Cornish EC, et al. **Comp Biochem Physiol [B]** 1978;61(3):375–8

Changes in myoglobin and lactate dehydrogenase in muscle tissues of a diving bird, the Pigeon Guillemot, during maturation. Haggblom L, et al. **Comp Biochem Physiol [B]** 1988;91(2):273–7

The effects of glucagon on hepatic mitochondrial metabolism in the pigeon, Columba livia. Ballantyne JS, et al. **Gen Comp Endocrinol** 1988 Oct;72(1):130–5

Effect of acetylcholine on metabolic activities of the kidney of blue rock pigeon Columba livia, Gmelin. Pilo B, et al. **Indian J Exp Biol** 1988 Sep;26(9):734–6

Distribution of mu, delta, and kappa opiate receptor types in the forebrain and midbrain of pigeons. Reiner A, et al. **J Comp Neurol** 1989 Feb 15;280(3):359–82

Pharmacokinetics and bioavailability of ronidazole from a prolonged release tablet in the homing pigeon (Columba livia). Herman J, et al. **J Vet Pharmacol Ther** 1989 Mar; 12(1):46–9

Protective effect of surface-active phospholipids against the acid-inducing inhibition of the tracheal mucociliary transport. Kai H, et al. **Jpn J Pharmacol** 1989 Mar; 49(3):375–80

A kainate binding protein in pigeon cerebellum: purification and localization by monoclonal antibody. Klein AU, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):359–64

Intraspinal substance P-containing projections to the sympathetic preganglionic neuropil in pigeon, Columba livia: high-performance liquid chromatography, radioimmunoassay and electron microscopic evidence. Davis BM, et al. **Neuroscience** 1988 Aug;26(2):655–68

[Purification, quaternary structure and regulatory properties of phosphorylase kinase from pigeon skeletal muscle] Morozov VE, et al. **Biokhimiia** 1989 Mar;54(3):448–55 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Avian paramyxovirus type 1 infection in pigeons: recent changes in clinical observations. Tangredi BP. **Avian Dis** 1988 Oct–Dec;32(4):839–41

PARASITOLOGY

Ventriculus worm infection in the pigeon (Columba livia domestica). Farah MO. **Br Vet J** 1988 Nov–Dec; 144(6):596–601

Antibody-mediated response of pigeons to Argas polonicus

larval feeding and characterization of larval antigen. Dusbábek F, et al. **Folia Parasitol (Praha)** 1989;36(1):83–92

Cutaneous and blood leucocyte response of pigeons to larval Argas polonicus feeding. Dusbábek F, et al. **Folia Parasitol (Praha)** 1988;35(3):259–68

Effects of infection with Eimeria labbeana on some serum constituents and liver glycogen in the palm dove (Streptopelia senegalensis aegyptiaca). Marzouk M, et al. **Parasitol Res** 1989;75(3):183–5

Action of the anticoccidial clazuril on the endogenous stages of Eimeria labbeana and E columbarum in experimentally infected pigeons. Coussement W, et al. **Res Vet Sci** 1988 Jul;45(1):117–9

PHYSIOLOGY

Gas exchange during high-frequency ventilation in the pigeon (Columba livia). Bech C, et al. **Acta Physiol Scand** 1988 Feb;132(2):217–21

Eye movements induced by calorization of the vertical semicircular canals. A study in pigeon. de Jong HA, et al. **Adv Otorhinolaryngol** 1988;42:36–8

Modulation of microphonics: a new method to study the vestibular system. Wit HP, et al. **Adv Otorhinolaryngol** 1988;42:59–64

Neural control of the jaw and ingestive behavior. Anatomical and behavioral studies of a trigeminal sensorimotor circuit. Zeigler HP. **Ann N Y Acad Sci** 1989;563:69–86

Behavioral spectral sensitivities of different retinal areas in pigeons. Remy M, et al. **Behav Neurosci** 1989 Feb; 103(1):170–7

Reversal learning in pigeons: effects of selective lesions of the Wulst. Shimizu T, et al. **Behav Neurosci** 1989 Apr; 103(2):262–72

Head orientation in pigeons: postural, locomotor and visual determinants. Erichsen JT, et al. **Brain Behav Evol** 1989; 33(5):268–78

Effects of hypothalamic lesions on temperature regulation in pigeons. Necker R, et al. **Brain Res Bull** 1989 May; 22(5):787–91

Telencephalic and pretectal modulation of the directional selectivity of accessory optic neurons in the pigeon. Hamassaki DE, et al. **Braz J Med Biol Res** 1988; 21(3):649–52

Diurnal variation in circulating levels of free fatty acids and growth hormone during crop gland activity in the pigeon (Columba livia). March GL, et al. **Comp Biochem Physiol [B]** 1978;59(2):143–5

Visual head extension: transitional head coordination in the pigeon squab (Columbia livia). Davies MN, et al. **Dev Psychobiol** 1989 Jul;22(5):477–88

Prehension in the pigeon. I. Descriptive analysis. Bermejo R, et al. **Exp Brain Res** 1989;75(3):569–76

Prehension in the pigeon. II. Kinematic analysis. Bermejo R, et al. **Exp Brain Res** 1989;75(3):577–85

Mechanics of a single-ossicle ear: II. The columella footplate of the pigeon. Gummer AW, et al. **Hear Res** 1989 May; 39(1–2):15–25

Mechanics of a single-ossicle ear: I. The extra-stapedius of the pigeon. Gummer AW, et al. **Hear Res** 1989 May; 39(1–2):1–13

Excitation and suppression of primary auditory fibres in the pigeon. Hill KG, et al. **Hear Res** 1989 May;39(1–2):37–48

Induced suppression in spike responses to tone-on-noise stimuli in the auditory nerve of the pigeon. Hill KG, et al. **Hear Res** 1989 May;39(1–2):49–62

Temporal synchronization in the primary auditory response in the pigeon. Hill KG, et al. **Hear Res** 1989 May; 39(1–2):63–73

Histomorphological alterations in gonads of normal and pinealectomized domestic pigeon, Columba livia, during breeding and post-breeding phases. Ramachandran AV, et al. **Indian J Exp Biol** 1988 Nov;26(11):835–8

Offense and defense after lateral septal lesions in Columba livia. Ramirez JM, et al. **Int J Neurosci** 1988 Aug; 41(3–4):241–50

Loss of the circadian rhythms of locomotor activity, food intake, and plasma melatonin concentration induced by constant bright light in the pigeon (Columba livia). Yamada H, et al. **J Comp Physiol [A]** 1988 Aug;163(4):459–63

A method for controlled mechanical stimulation of single semicircular canals. Dickman JD, et al. **J Neurosci Methods** 1988 Sep;25(2):111–9

Seasonal differences in glucose tolerance and insulin response of pinealectomized pigeons (Columba livia). Ramachandran AV, et al. **J Pineal Res** 1989;6(3):209–19

Neuronal coding of azimuthal sound direction in the auditory midbrain of the pigeon. Lewald J. **Naturwissenschaften** 1988 Sep;75(9):470–2

Orientation of displaced homing pigeons with shifted circadian clocks: prediction vs observation. Neuss M, et al. **Naturwissenschaften** 1988 Jul;75(7):363–5

Pigeon homing: wind exposition determines the importance of olfactory input. Wiltschko R, et al. **Naturwissenschaften** 1989 May;76(5):229–31

Spinal projections to the dorsal column nuclei in pigeons. Funke K. **Neurosci Lett** 1988 Sep 12;91(3):295–300

The contractile properties and movement dynamics of pigeon eye muscle. Stelling J, et al. **Pflugers Arch** 1988 Aug; 412(3):314–21

Interaction of the discriminative stimulus effects of phencyclidine with those of (+)-N-allylnormetazocine, pentobarbital and d-amphetamine. McMillan DE, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):711–5

Interaction of reinforcement history with methadone on responding maintained under a fixed-interval schedule. Nader MA, et al. **Pharmacol Biochem Behav** 1989 Mar; 32(3):643–9

Ovarian follicular growth and maturation in the domestic pigeon and guinea fowl (Numida meleagris). Birrenkott GP, et al. **Poult Sci** 1988 Dec;67(12):1783–6

Afferent vagal activity during hyperthermic polypnea in the pigeon. Mückenhoff K, et al. **Respir Physiol** 1989 Mar; 75(3):267–78

[Navigation by means of an olfactory map and a sun compass: the homing ability of pigeons] Wallraff HG. **Naturwissenschaften** 1988 Aug;75(8):380–92 (82 ref.) (Eng. Abstr.) **(Ger)**

[Correlation of the electrical and mechanical resonance frequencies of the cochlear hair cells of the auditory nerve fibers in the pigeon] Temchin AN. **Neirofiziologiia** 1988; 20(6):811–4 (Eng. Abstr.) **(Rus)**

SURGERY

Needle catheter duodenostomy: a technique for duodenal alimentation of birds. Goring RL, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1017–9

PIGMENT EPITHELIUM OF EYE

Risk factors for the development and severity of glaucoma in the pigment dispersion syndrome. Farrar SM, et al. **Am J Ophthalmol** 1989 Sep 15;108(3):223–9

Pattern dystrophy of the retinal pigment epithelium in a patient with McArdle's disease. Leonardy NJ, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):741–2

Central pigmentary sheen dystrophy. Noble KG, et al. **Am J Ophthalmol** 1989 Sep 15;108(3):255–9

Death associated with acute, multifocal, placoid pigment epitheliopathy. Case report. Hammer ME, et al. **Arch Ophthalmol** 1989 Feb;107(2):170–1

Immune responsiveness to retinal S-antigen and opsin in serpiginous choroiditis and other retinal diseases. Broekhuyse RM, et al. **Doc Ophthalmol** 1988 May; 69(1):83–93

Pattern dystrophy of the retinal pigment epithelium with vitelliform macular lesion: evolution in ten years. Cardillo Piccolino F, et al. **Int Ophthalmol** 1988 Feb;11(4):207–17

Bullous retinal detachment in diffuse retinal pigment epitheliopathy. Menchini U, et al. **Int Ophthalmol** 1988 Feb; 11(4):227–33

Acute posterior multifocal placoid pigment epitheliopathy associated with cerebral vasculitis. Weinstein JM, et al. **J Clin Neuro Ophthalmol** 1988 Sep;8(3):195–201

Combined hamartoma of the retina and retinal pigment epithelium of the juxtapapillary retina and optic disc. Hayasaka S, et al. **Ophthalmologica** 1988;197(1):42–6

Pigmented ocular fundus lesions in the inherited gastrointestinal polyposis syndromes and in hereditary nonpolyposis colorectal cancer. Traboulsi EI, et al. **Ophthalmology** 1988 Jul;95(7):964–9

Autosomal dominant pattern dystrophy of the retinal pigment epithelium. Intrafamilial variability. Giuffrè G. **Retina** 1988; 8(3):169–73

[A case of multiple epitheliopathy associated with sub-retinal neovascularization] Espinasse-Berrod MA, et al. **J Fr Ophtalmol** 1988;11(2):191–4 (Eng. Abstr.) **(Fre)**

[Acute multifocal placoid pigment epitheliopathy with inflammatory CSF findings. A special form of borreliosis?] Tönjes W, et al. **Dtsch Med Wochenschr** 1989 May 19; 114(20):793–5 (Eng. Abstr.) **(Ger)**

[Differential diagnosis of acute retinal pigment epitheliitis] Nasemann J, et al. **Fortschr Ophthalmol** 1988;85(6):705–8 (Eng. Abstr.) **(Ger)**

[Encephalomyelopathy, cardiomyopathy, cataract and changes in the retinal pigment epithelium resulting from a cytochrome c oxidase deficiency] Sieverding L, et al. **Klin Padiatr** 1988 Sep–Oct;200(5):381–7 (59 ref.) (Eng. Abstr.) **(Ger)**

[The "drops" symptom as a sign of miliary disseminated detachment of the retinal pigment epithelium] Todor GA. **Oftalmol Zh** 1988;(6):370–2 **(Rus)**

ABNORMALITIES

Congenital hypertrophy of the retinal pigment epithelium in familial adenomatous polyposis. Romania A, et al. **Ophthalmology** 1989 Jun;96(6):879–84

ANALYSIS

Extracellular matrix of the human retinal pigment epithelial cells in vitro. Ko MK, et al. **Korean J Ophthalmol** 1988 Dec;2(2):66–8

Attempts of tissue typing from human donor eyes. Baumgartner I, et al. **Ophthalmic Res** 1989;21(3):268–71

BLOOD SUPPLY

Choriocapillaris regeneration in the rabbit. Ultrastructure of new endothelial tube formation. Korte GE. **Invest Ophthalmol Vis Sci** 1989 Sep;30(9):1938–50

CYTOLOGY

The morphology of human cells from the choroid and retinal pigment epithelium grown in vitro on isolated Bruch's membrane. Nicolaissen B Jr, et al. **Acta Ophthalmol (Copenh)** 1988 Dec;66(6):617–22

Subretinal fluid stimulation of retinal pigment epithelial cell migration and proliferation is dependent on certain features of the detachment or its treatment. Hackett SF, et al. **Arch Ophthalmol** 1989 Mar;107(3):391–4

Retinal pigment epithelial cells in culture produce retinal vascular mitogens. Wong HC, et al. **Arch Ophthalmol** 1988 Oct;106(10):1439–43

Cellular and molecular background of wolffian lens regeneration. Eguchi G. **Cell Differ Dev** 1988 Nov;25 Suppl:147–58 (49 ref.)

Cytoskeletal organization of migrating retinal pigment epithelial cells during wound healing in organ culture. Hergott GJ, et al. **Cell Motil Cytoskeleton** 1989;13(2):83–93

Clonal origins of cells in the pigmented retina of the zebrafish eye. Streisinger G, et al. **Dev Biol** 1989 Jan;131(1):60–9

The chick retinal pigment epithelium grown on permeable support demonstrates functional polarity. Koh SW. **Exp Cell Res** 1989 Apr;181(2):331–47

Human retinal pigment epithelial cell cultures: phenotypic modulation by vitreous and macrophages. Kirchhof B, et al. **Exp Eye Res** 1988 Sep;47(3):457–63

Macrophage modulation of retinal pigment epithelial cell migration and proliferation. Kirchhof B, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(1):60–6

Effects of substrata and method of tissue dissociation on adhesion, cytoskeleton, and growth of chick retinal pigmented epithelium in vitro. Opas M, et al. **In Vitro Cell Dev Biol** 1988 Sep;24(9):885–92

Vitreous modulation of migration and proliferation of retinal pigment epithelial cells in vitro. Kirchhof B, et al. **Invest Ophthalmol Vis Sci** 1989 Sep;30(9):1951–7

Behavior of human RPE cultured on Bruch's membrane and on necrotic debris. Nicolaissen B Jr, et al. **Invest Ophthalmol Vis Sci** 1989 May;30(5):813–22

Cytoskeleton, adhesion, and extracellular matrix of fetal human retinal pigmented epithelial cells in culture. Turksen K, et al. **Ophthalmic Res** 1989;21(1):56–66

Evaluation of different procedures for the dissociation of retinal pigmented epithelium into single viable cells. Vielkind U, et al. **Pigment Cell Res** 1988;1(6):419–33

[New aspects of ultracytochemical studies on blood-retinal barriers. II. Newly developed cytochemistry on retinal Müller cells and pigment epithelial cells for interpretation of their contributions in blood-retinal barrier] Ueno S. **Nippon Ganka Gakkai Zasshi** 1988 Dec;92(12):1961–2014 (234 ref.) (Eng. Abstr.) **(Jpn)**

[Characteristics of the postnatal proliferation of retinal pigment epithelium cells in the Syrian hamster (Cricetus auratus)] Panova IG, et al. **Dokl Akad Nauk SSSR** 1988; 302(6):1481–3 **(Rus)**

[Early postnatal proliferation of the retinal pigment epithelium cells in the mouse] Ershov AV. **Ontogenez** 1988 Jul–Aug;19(4):414–7 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Regulation of uptake of inositol by glucose in cultured retinal pigment epithelial cells. Khatami M, et al. **Biochem Cell Biol** 1988 Sep;66(9):951–7

Superoxide dismutase activity and growth of retinal pigment epithelial cells are suppressed by 20% oxygen in vitro. Akeo K, et al. **Curr Eye Res** 1988 Oct;7(10):961–7

Cytochalasin D inhibits L-glutamate-induced disc shedding without altering L-glutamate-induced increase in adhesiveness. Defoe DM, et al. **Exp Eye Res** 1989 May; 48(5):641–52

A study on the sequence of phototoxic effects of rose bengal using retinal pigment epithelial cells in vitro. Menon IA, et al. **Exp Eye Res** 1989 Jul;49(1):67–73

Topical phenylephrine for mydriasis affects rabbit retinal pigment epithelial transport. Frambach DA, et al. **Invest Ophthalmol Vis Sci** 1989 Feb;30(2):343–4

Effect of drugs in vitro on lysosomal enzyme activities in bovine retinal pigment epithelial cells. Hayasaka S, et al. **Jpn J Ophthalmol** 1988;32(3):316–21

EMBRYOLOGY

Expression of the differentiated phenotype by epithelial cells in vitro is regulated by both biochemistry and mechanics of the substratum. Opas M. **Dev Biol** 1989 Feb; 131(2):281–93

Morphological observations of the apical surface of chick retinal pigment epithelium. Morioka K, et al. **Ophthalmic Res** 1989;21(3):191–9

ENZYMOLOGY

Differential expression of acetylcholinesterase molecular forms in neural retina and retinal pigmented epithelium during chick development. Martelly I, et al. **Brain Res** 1988 Sep 20;460(2):205–13

A microsystem to assay lysosomal enzyme activities in cultured retinal pigment epithelial cells. Cabral L, et al. **Curr Eye Res** 1988 Nov;7(11):1097–104

Aldose reductase expression in human diabetic retina and retinal pigment epithelium. Vinores SA, et al. **Diabetes** 1988 Dec;37(12):1658–64

Peroxisomes in pigment epithelium and Müller cells of amphibian retina possess D-amino acid oxidase as well as catalase. Beard ME, et al. **Exp Eye Res** 1988 Dec; 47(6):795–806

Ouabain-sensitive Na+-K+ ATPase pumps in cultured human retinal pigment epithelium. Jaffe GJ, et al. **Exp Eye Res** 1989 Jan;48(1):61–8

Regional comparisons of cathepsin D activity in bovine retinal pigment epithelium. Burke JM, et al. **Invest Ophthalmol Vis Sci** 1988 Dec;29(12):1789–93

Increased cytochrome oxidase activity in the diabetic rat retinal pigment epithelium. Caldwell RB, et al. **Invest Ophthalmol Vis Sci** 1989 Apr;30(4):591–9

Solubilization and partial purification of retinyl ester synthetase and retinoid isomerase from bovine ocular pigment epithelium. Barry RJ, et al. **J Biol Chem** 1989 Jun 5;264(16):9231–8

Lecithin:retinol acyltransferase in retinal pigment epithelial microsomes. Saari JC, et al. **J Biol Chem** 1989 May 25; 264(15):8636–40

Sphing. myelinase activity in the bovine and human eyes. Noda S, et al. **Ophthalmic Res** 1989;21(3):200–5

GROWTH & DEVELOPMENT

Topographical variation in growth in cultured bovine retinal pigment epithelium. Burke JM, et al. **Invest Ophthalmol Vis Sci** 1988 Dec;29(12):1784–8

IMMUNOLOGY

The retinal pigment epithelium and other tissues immunocytochemical studies using hybridoma supernatants. McKechnie NM, et al. **Acta Ophthalmol (Copenh)** 1988 Oct;66(5):514–21

Human retinal pigment epithelial cells differentially express MHC class II (HLA, DP, DR and DQ) antigens in response to in vitro stimulation with lymphokine or purified IFN-gamma. Liversidge JM, et al. **Clin Exp Immunol** 1988 Sep;73(3):489–94

In vitro phenotypic and functional characterization of human pigment epithelial cell lines. Dutt K, et al. **Curr Eye Res** 1989 May;8(5):435–40

[Phagocytosis in the retinal pigment epithelium of polystyrene particles with different surface characteristics] Ogata N, et al. **Nippon Ganka Gakkai Zasshi** 1988 Aug; 92(8):1406–13 (Eng. Abstr.) **(Jpn)**

METABOLISM

Carrier-dependent and carrier-independent uptake of myo-inositol in cultured retinal pigment epithelial cells: activation by heat and concentration [published erratum appears in Biochem Cell Biol 1989 Feb-Mar;67(2-3):177] Khatami M. **Biochem Cell Biol** 1988 Sep;66(9):942–50

Retinal pigment epithelial cells release an inhibitor of neovascularization. Glaser BM, et al. **Birth Defects** 1988; 24(1):121–7

Human retinal pigment epithelial cells in culture possess A2-adenosine receptors. Friedman Z, et al. **Brain Res** 1989 Jul 17;492(1-2):29–35

Induction of stress proteins in cultured human RPE-derived cells. Wong CG, et al. **Curr Eye Res** 1989 Jun;8(6):537–45

Retinal pigment epithelial cells produce a latent fibrinolytic inhibitor that is antigenically and biochemically related to type 1 plasminogen activator inhibitor produced by vascular endothelial cells. Campochiaro PA, et al. **Exp Eye Res** 1989 Aug;49(2):195–203

Retinal pigment epithelial cells produce PDGF-like proteins and secrete them into their media. Campochiaro PA, et al. **Exp Eye Res** 1989 Aug;49(2):217–27

The formation of autofluorescent granules in cultured human RPE. Boulton M, et al. **Invest Ophthalmol Vis Sci** 1989 Jan;30(1):82–9

3H-fucose incorporation into RPE cell surface proteins of normal and dystrophic rats. Clark VM. **Invest Ophthalmol Vis Sci** 1989 Jul;30(7):1542–7

Superoxide production by porcine retinal pigment epithelium in vitro. Dorey CK, et al. **Invest Ophthalmol Vis Sci** 1989 Jun;30(6):1047–54

Retinal pigment epithelium possesses both LDL and scavenger receptor activity. Hayes KC, et al. **Invest Ophthalmol Vis Sci** 1989 Feb;30(2):225–32

Protein phosphorylation in cultured rat RPE. Effects of protein kinase C activation. Heth CA, et al. **Invest Ophthalmol Vis Sci** 1988 Dec;29(12):1794–9

Retinal light damage reduces autofluorescent pigment deposition in the retinal pigment epithelium. Katz ML, et al. **Invest Ophthalmol Vis Sci** 1989 Jan;30(1):37–43

Na+/H+ exchange regulates intracellular pH in a cell clone derived from bovine pigmented ciliary epithelium. Helbig H, et al. **J Cell Physiol** 1988 Nov;137(2):384–9

Dependency on light and vitamin A derivatives of the biogenesis of 3-hydroxyretinal and visual pigment in the compound eyes of Drosophila melanogaster. Isono K, et al. **J Gen Physiol** 1988 Nov;92(5):587–600

Effect of taurine on the isolated retinal pigment epithelium of the frog: electrophysiologic evidence for stimulation of an apical, electrogenic Na+-K+ pump. Scharschmidt BF, et al. **J Membr Biol** 1988 Nov;106(1):71–81

Stimulation of distinct D2 dopaminergic and alpha 2-adrenergic receptors induces light-adaptive pigment dispersion in teleost retinal pigment epithelium. Dearry A, et al. **J Neurochem** 1988 Nov;51(5):1516–23

Aging changes in lipofuscin, lysosomes and melanin in the macular area of human retina and choroid. Hayasaka S. **Jpn J Ophthalmol** 1989;33(1):36–42

Development of lipofuscin-like fluorescence in the retinal pigment epithelium in response to protease inhibitor treatment. Katz ML, et al. **Mech Ageing Dev** 1989 Jul; 49(1):23–40

Analysis of a soluble lipid-protein complex carrying endogenous 11-cis retinaldehyde from bovine retinal pigment epithelium. Livrea MA, et al. **Mol Cell Biochem** 1989 Feb 21;85(2):181–9

Lithium decreases retinal melatonin levels in the frog. Kemali M, et al. **Neurosci Lett** 1989 Jan 16;96(2):235–9

Membranes as the energy source in the endergonic transformation of vitamin A to 11-cis-retinol. Deigner PS, et al. **Science** 1989 May 26;244(4907):968–71

[The effect of vortex vein occlusion on the resorption of subretinal fluid in rabbit eyes] Kadomoto H. **Nippon Ganka Gakkai Zasshi** 1988 Jul;92(7):1248–54 (Eng. Abstr.) **(Jpn)**

[Enhancement of membrane phospholipid breakdown and synthesis during phagocytosis in cultured chick retinal pigment epithelial cells] Nakashima S, et al. **Nippon Ganka Gakkai Zasshi** 1989 Jan;93(1):142–8 (Eng. Abstr.) **(Jpn)**

[Phosphoinositide turnover and Ca2+ mobilization during phagocytosis in cultured chick retinal pigment epithelial cells] Nakashima S, et al. **Nippon Ganka Gakkai Zasshi** 1989 Jan;93(1):149–54 (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

Replication of HIV in human fetal retinal cultures and established pigment epithelial cell lines. Dutt K, et al. **Invest Ophthalmol Vis Sci** 1989 Jul;30(7):1535–41

PATHOLOGY

Hyperpigmented lesions of the retinal pigment epithelium in familial adenomatous polyposis. Baker RH, et al. **Am J Med Genet** 1988 Oct;31(2):427–35

Response of pig retinal pigment epithelium to laser photocoagulation in organ culture. Del Priore LV, et al. **Arch Ophthalmol** 1989 Jan;107(1):119–22

Congenital hypertrophy of retinal pigment epithelium: a sign of familial adenomatous polyposis. Chapman PD, et al. **BMJ** 1989 Feb 11;298(6670):353–4

Bilaterality of tears of the retinal pigment epithelium. Chuang EL, et al. **Br J Ophthalmol** 1988 Dec;72(12):918–20

Retinal pigment hypertrophy and chorioretinal dystrophy. De Laey JJ, et al. **Bull Soc Belge Ophtalmol** 1987;223 Pt 2:67–73

Familial adenomatous polyposis [letter] Traboulsi EI. **Dis Colon Rectum** 1989 Jul;32(7):633–4

Differential expression of N-ras in metaplastic retinal pigmented epithelium. Wilcox DK, et al. **Exp Eye Res** 1989 Feb;48(2):271–80

Evolution of geographic atrophy of the retinal pigment epithelium. Sarks JP, et al. **Eye** 1988;2 (Pt 5):552–77

Pigmentary retinal dystrophy associated with pigmentary glaucoma. Piccolino FC, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(4):335–9

Patterned dystrophies of the retinal pigment epithelium. A review. Pinckers A. **Ophthalmic Paediatr Genet** 1988 Jul; 9(2):77–114 (57 ref.)

CHRPE in non-Gardner's familial polyposis coli patients [letter] Lynch HT, et al. **Ophthalmology** 1989 Mar; 96(3):399–400

Atrophic creep of the retinal pigment epithelium after focal macular photocoagulation. Morgan CM, et al. **Ophthalmology** 1989 Jan;96(1):96–103

Retinal pigment epithelial change and partial lipodystrophy. Davis TM, et al. **Postgrad Med J** 1988 Nov;64(757):871–4

Congenital hypertrophy of the pigment epithelium: light microscopic and ultrastructural findings in young children. Champion R, et al. **Retina** 1989;9(1):44–8

Development and degeneration of retina in rds mutant mice: altered disc shedding pattern in the albino heterozygotes and its relation to light exposure. Sanyal S, et al. **Vision Res** 1988;28(11):1171–8

[Perifoveal pigmentary dystrophy] Amalric P. **Bull Soc Ophtalmol Fr** 1988 Apr;88(4):497–500 (Eng. Abstr.) **(Fre)**

[Paravenous pigmented chorioretinal atrophy. Apropos of a case] Rouland JF, et al. **Bull Soc Ophtalmol Fr** 1988 Aug-Sep;88(8-9):1061-2 (5 ref.) (Eng. Abstr.) **(Fre)**

[Secondary pigmented macular pucker] Bopp S, et al. **Klin Monatsbl Augenheilkd** 1988 Sep;193(3):289–94 (Eng. Abstr.) **(Ger)**

[Diabetic retinal pigment epitheliopathy] Nanba M, et al. **Nippon Ganka Gakkai Zasshi** 1988 Sep;92(9):1523–9 (Eng. Abstr.) **(Jpn)**

[Metaplastic changes to fibroblast-like cells by retinal pigment epithelium] Ogata N, et al. **Nippon Ganka Gakkai Zasshi** 1988 Dec;92(12):2029–37 (Eng. Abstr.) **(Jpn)**

[Pathologic response of the retinal pigment epithelium. Migration and mitosis] Ogata N, et al. **Nippon Ganka Gakkai Zasshi** 1988 Oct;92(10):1650–6 (Eng. Abstr.) **(Jpn)**

[Implication of retinal pigment epithelium on experimental subretinal neovascularization in the involutional stage] Yamagishi K, et al. **Nippon Ganka Gakkai Zasshi** 1988 Oct; 92(10):1618–28 (Eng. Abstr.) **(Jpn)**

[Implication of retinal pigment epithelium on experimental subretinal neovascularization in the developmental stage] Yamagishi K, et al. **Nippon Ganka Gakkai Zasshi** 1988 Oct; 92(10):1629–36 (Eng. Abstr.) **(Jpn)**

[Radioautographic study of the postnatal cellular proliferation of the retinal pigment epithelium in Hunter rats with hereditary retinal dystrophy] Stroeva OG, et al. **Zh Obshch Biol** 1988 May-Jun;49(3):418–24 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Choriocapillaris regeneration in the rabbit: a study with vascular casts. Korte GE, et al. **Acta Anat (Basel)** 1988; 133(3):224–8

A bidirectional, turbulent, delaying, centripetal, suction filter. Havener WH, et al. **Ann Ophthalmol** 1989 Feb;21(2):53–4

Increased levels of leukotriene C4 in retinal pigment epithelium are correlated with early events in photoreceptor shedding in Xenopus laevis. Birkle DL, et al. **Curr Eye Res** 1989 Jun;8(6):557–61

Photoreceptor cell development in vitro: influence of pigment epithelium conditioned medium on outer segment differentiation. Spoerri PE, et al. **Eur J Cell Biol** 1988 Jun; 46(2):362–7

Retinomotor movements in the frog retinal pigment epithelium: dependence of pigment migration on Na+ and Ca2+. Mondragón R, et al. **Exp Eye Res** 1989 May; 48(5):589–603

The senescent lens and the retinal pigment epithelium. Weale RA. **Eye** 1988;2 Suppl:S157–63 (30 ref.)

Epithelium-capillary interactions in the eye: the retinal pigment epithelium and the choriocapillaris. Korte GE, et al. **Int Rev Cytol** 1989;114:221–48 (117 ref.)

Neuronal differentiation of retinoblastoma cells induced by medium conditioned by human RPE cells. Tombran-Tink J, et al. **Invest Ophthalmol Vis Sci** 1989 Aug;30(8):1700–7

Light-induced dopamine release from teleost retinas acts as a light-adaptive signal to the retinal pigment epithelium. Dearry A, et al. **J Neurochem** 1989 Sep;53(3):870–8

Effects of DIDS on the chick retinal pigment epithelium. I. Membrane potentials, apparent resistances, and mechanisms. Gallemore RP, et al. **J Neurosci** 1989 Jun; 9(6):1968–76

Effects of DIDS on the chick retinal pigment epithelium. II. Mechanism of the light peak and other responses originating at the basal membrane. Gallemore RP, et al. **J Neurosci** 1989 Jun;9(6):1977–84

[Fluorophotometric evaluation of aging changes in human retinal pigment epithelium] Kitagawa K, et al. **Nippon Ganka Gakkai Zasshi** 1988 May;92(5):780–4 (Eng. Abstr.) **(Jpn)**

[Pathologic response of the retinal pigment epithelium. The effect of mucopolysaccharide in the subretinal space to phagocytosis. Part 5] Ogata N, et al. **Nippon Ganka Gakkai Zasshi** 1989 Feb;93(2):187–95 (Eng. Abstr.) **(Jpn)**

[Detection of the capacity of retina pigmented epithelium cells in the newborn rat for phagocytosis of rod exterior segments] Ershov AV, et al. **Dokl Akad Nauk SSSR** 1988; 303(5):1239–41 **(Rus)**

[Findings of electrophysiological studies at various stages of combined surgical treatment of patients with proliferative diabetic retinopathy] Glinchuk IaI, et al. **Vestn Oftalmol** 1989 Jan-Feb;105(1):36–40 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Responses of the retinal pigment epithelium of the mouse after acute loss of blood. Li WW, et al. **Acta Anat (Basel)** 1988;133(4):337–40

The effect of choroidal congestion in retinal pigment epithelium function and the electroretinogram. Kawano S, et al. **Doc Ophthalmol** 1988 Jul;69(3):221–5

Volume flow across the isolated retinal pigment epithelium of cynomolgus monkey eyes. Tsuboi S, et al. **Invest Ophthalmol Vis Sci** 1988 Nov;29(11):1652–5

Effect of plasma osmolality and intraocular pressure on fluid movement across the blood-retinal barrier. Tsuboi S, et al. **Invest Ophthalmol Vis Sci** 1988 Nov;29(11):1747–9

TRANSPLANTATION

Transplantation of retinal pigment epithelial cells. Scientific advance and social responsibility [editorial] Fishman GA. **Arch Ophthalmol** 1988 Dec;106(12):1667–8

Inherited retinal dystrophy in the RCS rat: prevention of photoreceptor degeneration by pigment epithelial cell transplantation. Li LX, et al. **Exp Eye Res** 1988 Dec; 47(6):911–7

Transplantation of retinal pigment epithelial cells to immature and adult rat hosts: short- and long-term survival characteristics. Li LX, et al. **Exp Eye Res** 1988 Nov; 47(5):771–85

Functional and structural characteristics of photoreceptor cells rescued in RPE-cell grafted retinas of RCS dystrophic rats. Sheedlo HJ, et al. **Exp Eye Res** 1989 Jun;48(6):841–54

Transplantation of retinal epithelial cells [editorial] Gouras P, et al. **Invest Ophthalmol Vis Sci** 1989 Aug;30(8):1681–3

Transplanted retinal pigment epithelium modifies the retinal degeneration in the RCS rat. Lopez R, et al. **Invest Ophthalmol Vis Sci** 1989 Mar;30(3):586–8

Bovine RPE heterotransplants simulate proliferative vitreoretinopathy (PVR) in rabbits. Weinsieder A, et al. **Metab Pediatr Syst Ophthalmol** 1987;10(1):2–8

ULTRASTRUCTURE

Retinal fine structure in the European eel Anguilla anguilla. V. Pigment epithelium of the sexually immature silver eel stage. Braekevelt CR. **Anat Anz** 1988;166(1-5):13-21

Retinal fine structure in the European eel Anguilla anguilla. VII. Pigment epithelium of the sexually mature silver eel stage. Braekevelt CR. **Anat Anz** 1988;166(1-5):33-41

Cytoskeletons of retinal pigment epithelial cells: interspecies differences of expression patterns indicate independence of cell function from the specific complement of cytoskeletal proteins. Owaribe K, et al. **Cell Tissue Res** 1988 Nov;254(2):301-15

Role of microtubules in pigment granule migration in teleost retinal pigment epithelial cells. Troutt LL, et al. **Exp Eye Res** 1989 Mar;48(3):433-43

Morphological studies of the choriocapillaries and pigment epithelium of the eye after acute blood loss. Li WW, et al. **Gegenbaurs Morphol Jahrb** 1988;134(4):529-39

The unusual microtubule polarity in teleost retinal pigment epithelial cells. Troutt LL, et al. **J Cell Biol** 1988 Oct; 107(4):1461-4

Retinal attachment to the pigment epithelium. Linkage through an extracellular sheath surrounding cone photoreceptors. Hollyfield JG, et al. **Retina** 1989;9(1):59-68

[Embryonic development and structure of human Bruch's membrane] Fu J, et al. **Chung Hua Yen Ko Tsa Chih** 1989 Jan;25(1):18-9 (Eng. Abstr.) **(Chi)**

[Freeze fracture study of the retinal pigment epithelium of the chick embryo] Yan XY. **Chung Hua Yen Ko Tsa Chih** 1988 May;24(3):168-70 (Eng. Abstr.) **(Chi)**

[Histological studies of the retinal pigment epithelium and photoreceptor in the jaundiced rabbit] Okamoto I. **Nippon Ganka Gakkai Zasshi** 1988 Sep;92(9):1537-44 (Eng. Abstr.) **(Jpn)**

PIGMENTATION

see related

CHROMATOPHORES

Clinicopathologic correlation of pigmented epiretinal membranes. Cherfan GM, et al. **Am J Ophthalmol** 1988 Nov 15;106(5):536-45

Unique male mammary tumors developing in the inbred soft-furred field rats Millardia meltada. Lu J, et al. **Am J Pathol** 1989 Sep;135(3):477-88

Does pigmentation affect the trabecular meshwork? Johnson DH. **Arch Ophthalmol** 1989 Feb;107(2):250-4

Rearrangements of pterinosomes and cytoskeleton accompanying pigment dispersion in goldfish xanthophores. Palazzo RE, et al. **Cell Motil Cytoskeleton** 1989;13(1):9-20

cAMP-independent and cAMP-dependent protein phosphorylations by isolated goldfish xanthophore cytoskeletons: evidence for the association of cytoskeleton with a carotenoid droplet protein. Palazzo RE, et al. **Cell Motil Cytoskeleton** 1989;13(1):21-9

Pigmentation of glucocorticoid-induced cataractous lenses of developing chick embryos on heating. Nishigori H, et al. **Curr Eye Res** 1988 Oct;7(10):989-93

Bile and stone analysis in two infants with brown pigment gallstones and infected bile. Treem WR, et al. **Gastroenterology** 1989 Feb;96(2 Pt 1):519-23

Structure and ultrastructure of the pigmented cells in the adult dog pineal gland. Calvo J, et al. **J Anat** 1988 Oct; 160:67-73

Induction of pigmentation in mouse fibroblasts by expression of human tyrosinase cDNA. Bouchard B, et al. **J Exp Med** 1989 Jun 1;169(6):2029-42

Pigmented spleens in C57BL mice. Veninga TS, et al. **Lab Anim** 1989 Jan;23(1):16-20

The European Society for Pigment Cell Research abstracts. **Pigment Cell Res** 1988;1(4):260-302

Genetic analysis of the dominant white-spotting (W) region on mouse chromosome 5: identification of cloned DNA markers near W. Geissler EN, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9635-9

Flavonoids and plant color. Brouillard R, et al. **Prog Clin Biol Res** 1988;280:93-106

DRUG EFFECTS

Minocycline-related black thyroid. Hanzlick R, et al. **Am J Forensic Med Pathol** 1988 Sep;9(3):200-2

Long-term phenothiazine administration and the eye in 100 Malaysians. Ngen CC, et al. **Br J Psychiatry** 1988 Feb; 152:278-80

The effect of catecholamines and adenosine on the induction of morphological alterations and depigmentation of newt iris epithelial cells in vitro. Torres LD, et al. **Differentiation** 1988 Jul;38(2):104-14

Investigation of the regulation of pigmentation in alpha-melanocyte-stimulating hormone responsive and unresponsive cultured B16 melanoma cells. Hill SE, et al. **Pigment Cell Res** 1989 May-Jun;2(3):161-6

Effect of nicarbazin and narasin-nicarbazin combinations on broiler pigmentation. Bafundo KW. **Poult Sci** 1989 Mar; 68(3):374-9

GENETICS

Timing in the regulation of neural crest cell migration: retarded "maturation" of regional extracellular matrix inhibits pigment cell migration in embryos of the white axolotl mutant. Löfberg J, et al. **Dev Biol** 1989 Jan; 131(1):168-81

Inheritance of orange pupa and phosphoglucomutase in the mosquito Armigeres subalbatus. Tadano T, et al. **J Am Mosq Control Assoc** 1987 Dec;3(4):642-3

Linkage relationships of seven enzyme and two pigmentation loci in the snail Biomphalaria glabrata. Mulvey M, et al. **J Hered** 1988 Nov-Dec;79(6):473-6

Analysis of mammalian pigmentation at the molecular level. Hearing VJ, et al. **Pigment Cell Res** 1989 Mar-Apr; 2(2):75-85 (46 ref.)

Effect of the barring gene on eye pigmentation in the fowl. Schreck RE, et al. **Pigment Cell Res** 1989 May-Jun; 2(3):191-201

Dilute suppressor dsu acts semidominantly to suppress the coat color phenotype of a deletion mutation, dl20J, of the murine dilute locus. Moore KJ, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8131-5

RADIATION EFFECTS

Neodymium-YAG transscleral cyclophotocoagulation. The role of pigmentation. Cantor LB, et al. **Invest Ophthalmol Vis Sci** 1989 Aug;30(8):1834-7

Selective photothermolysis of cutaneous pigmentation by Q-switched Nd: YAG laser pulses at 1064, 532, and 355 nm. Anderson RR, et al. **J Invest Dermatol** 1989 Jul; 93(1):28-32

PIGMENTATION DISORDERS

Disorders of pigmentation. **Clin Dermatol** 1989 Apr-Jun; 7(2):1-151

Longitudinal melanonychia revisited. Baran R. **G Ital Dermatol Venereol** 1988 Nov;123(11):525-6 (0 ref.)

Dermatoses of the umbilicus [letter] Gharpuray MB, et al. **Int J Dermatol** 1989 Sep;28(7):482-3

Biology of hypopigmentation. Bolognia JL, et al. **J Am Acad Dermatol** 1988 Aug;19(2 Pt 1):217-55 (328 ref.)

Pigmentary dispersion syndrome and suspected low tension pigmentary glaucoma. Bass LJ, et al. **J Am Optom Assoc** 1988 Aug;59(8):630-4

[Hypomelanosis of Ito] Bruseghini C. **Minerva Pediatr** 1988 Apr;40(4):239-45 (Eng. Abstr.) **(Ita)**

BLOOD

Yellow nail syndrome with persistent hypoalbuminaemia. Sahi SP, et al. **Br J Clin Pract** 1988 Jan;42(1):36-7

CHEMICALLY INDUCED

Resolution of chlorpromazine-induced pigmentation with haloperidol substitution. Thompson TR, et al. **Acta Psychiatr Scand** 1988 Dec;78(6):763-5

Spontaneous disappearance of blue-gray facial pigmentation during amiodarone therapy (out of the blue). Beukema WP, et al. **Am J Cardiol** 1988 Nov 15;62(16):1146-7

Azidothymidine-induced hyperpigmentation mimicking primary adrenal insufficiency. Merenich JA, et al. **Am J Med** 1989 Apr;86(4):469-70

Sudan I as a cause of pigmented contact dermatitis in "kumkum" (an Indian cosmetic). Kozuka I, et al. **Ann Acad Med Singapore** 1988 Oct;17(4):492-4

Azidothymidine-induced hyperpigmentation of skin and nails [letter] Bendick C, et al. **Arch Dermatol** 1989 Sep; 125(9):1285-6

Observations and proposed mechanism of N,N',N''-triethylenethiophosphoramide (thiotepa)-induced hyperpigmentation. Horn TD, et al. **Arch Dermatol** 1989 Apr;125(4):524-7

Blue-gray discoloration of the face. Amiodarone-induced cutaneous hyperpigmentation. Klein AD, et al. **Arch Dermatol** 1989 Mar;125(3):417, 420-1

White lines in the fingernails induced by combination chemotherapy. Shetty MR. **BMJ** 1988 Dec 24-31; 297(6664):1635

Skin pigmentation associated with minocycline therapy. Okada N, et al. **Br J Dermatol** 1989 Aug;121(2):247-54

Pigmentary disorders and systemic drug therapy. Ferguson J, et al. **Clin Dermatol** 1989 Apr-Jun;7(2):44-54 (50 ref.)

Contact leucoderma from paraquat dichloride? George AO. **Contact Dermatitis** 1989 Mar;20(3):225

Confetti-like depigmentation from hydroquinone. Markey AC, et al. **Contact Dermatitis** 1989 Feb;20(2):148-9

Azidothymidine-induced nail pigmentation. Fisher CA, et al. **Cutis** 1989 Jun;43(6):552-4

Streaky pigmentation in a patient with acquired immune deficiency syndrome (AIDS). Lazar AP, et al. **Cutis** 1988 Nov;42(5):397-8

Mitoxantrone-induced discoloration of the nails [letter] Scheithauer W, et al. **Eur J Cancer Clin Oncol** 1989 Apr; 25(4):763-5

PUVA-induced pigmented nails. Weiss E, et al. **Int J Dermatol** 1989 Apr;28(3):188-9

Hyperpigmentation of the nail from lead deposition [letter] Zhu WY, et al. **Int J Dermatol** 1989 May;28(4):273-5

Perilesional linear atrophy and hypopigmentation after intralesional corticosteroid therapy. Report of two cases and review of the literature. Friedman SJ, et al. **J Am Acad Dermatol** 1988 Sep;19(3):537-41 (14 ref.)

Pigmented macules in patients treated with systemic 5-fluorouracil. Cho KH, et al. **J Dermatol (Tokyo)** 1988 Aug;15(4):342-6

Photosensitivity and hyperpigmentation in amiodarone-treated patients: incidence, time course, and recovery. Rappersberger K, et al. **J Invest Dermatol** 1989 Aug;93(2):201-9

Metoclopramide and prochlorperazine: "the blue-tongue sign" [letter] Alroe C, et al. **Med J Aust** 1989 Jun 19; 150(12):724-5

Hyperpigmentation due to cyclosporin therapy. Brady AJ, et al. **Nephrol Dial Transplant** 1989;4(4):309-10

Melanonychia induced by systemic photochemotherapy. Hann SK, et al. **Photodermatol** 1989 Apr;6(2):98-9

The black thyroid: an unusual finding during neck exploration. Noble JG, et al. **Postgrad Med J** 1989 Jan; 65(759):34-5

Nail pigmentation associated with zidovudine [letter] Dupon M, et al. **Scand J Infect Dis** 1989;21(2):237-8

[Green hair: clinical, chemical and epidemiologic study. Apropos of a case] Blanc D, et al. **Ann Dermatol Venereol** 1988;115(8):807-12 (Eng. Abstr.) **(Fre)**

[Striated nail discoloration caused by zidovudine] Bendick C, et al. **Z Hautkr** 1989 Feb 15;64(2):91-5 (Eng. Abstr.) **(Ger)**

[Hyperpigmented striae after bleomycin therapy] Massone L, et al. **G Ital Dermatol Venereol** 1988 May;123(5):225-7 (Eng. Abstr.) **(Ita)**

[Pigmentation abnormalities in the course of topical immunotherapy of alopecia areata] Valsecchi R, et al. **G Ital Dermatol Venereol** 1989 Jan-Feb;124(1-2):31-2 (Eng. Abstr.) **(Ita)**

[Hyperpigmentation and zidovudine (letter)] Valencia ME, et al. **Med Clin (Barc)** 1989 Mar 11;92(9):357-8 **(Spa)**

[Bluish pigmentation of the nails in AIDS patients. Possibly an adverse effect of Zidovudine? (letter)] González Lahoz JM, et al. **Rev Clin Esp** 1988 Oct;183(5):278-9 **(Spa)**

COMPLICATIONS

Hyperpigmented acral papular mucinosis, systemic lupus erythematosus and universal alopecia. Lacour JP, et al. **Acta Derm Venereol (Stockh)** 1989;69(3):212-6 (21 ref.)

Nail discoloration and human immunodeficiency virus infection. Chandrasekar PH. **Am J Med** 1989 Apr; 86(4):506-7

Hyperpigmentation of the lower extremities associated with porphyria cutanea tarda [letter] Held JL, et al. **Arch Dermatol** 1989 Feb;125(2):297-9

Incontinentia pigmenti, a chromosomal instability syndrome, is associated with childhood malignancy. Roberts WM, et al. **Cancer** 1988 Dec 1;62(11):2370-2 (19 ref.)

Cyclical Cushing's syndrome presenting as short stature in a boy with recurrent atrial myxomas and freckled skin pigmentation. Carson DJ, et al. **Clin Endocrinol (Oxf)** 1988 Feb;28(2):173-80

Brown bowel syndrome: an unusual cause of massive dilatation of the colon. Robinson MH, et al. **Gut** 1989 Jun; 30(6):882-4

Epidermolysis bullosa simplex with mottled pigmentation. Bruckner-Tuderman L, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 2):425-32

Oral hyperpigmentation in HIV-infected patients. Langford A, et al. **Oral Surg Oral Med Oral Pathol** 1989 Mar; 67(3):301-7

Hypomelanosis of Ito: neurologic complications. Golden SE, et al. **Pediatr Neurol** 1986 May-Jun;2(3):170-4

[Ito's hypomelanosis associated with congenital communicating hydrocephalus (letter)] Le Pelletier-Beaufond S, et al. **Arch Fr Pediatr** 1989 Feb; 46(2):153 **(Fre)**

[Yellow nail syndrome with chylous effusions] Valmary J, et al. **Rev Med Interne** 1988 Sep-Oct;9(4):425-8 (14 ref.) (Eng. Abstr.) **(Fre)**

[Melanonychia striata and Addison's disease] Bardazzi F, et al. **G Ital Dermatol Venereol** 1988 Nov;123(11):539-40 **(Ita)**

[Zinsser-Engman-Cole syndrome (dyskeratosis congenita) in a 13-year-old boy] Kopyść Z, et al. **Wiad Lek** 1988 Apr 15;41(8):525-30 (Eng. Abstr.) **(Pol)**

[The Sneddon syndrome] Karamanova EI, et al. **Klin Med (Mosk)** 1989 Jun;67(6):129-30 **(Rus)**

CONGENITAL

Periodic hypersomnia, congenital ectodermal disorders and multiple exostosis. Reimão R, et al. **Arq Neuropsiquiatr** 1989 Mar;47(1):76-9

Congenital dyschromia with erythrocyte, platelet, and tryptophan metabolism abnormalities. Foldès C, et al. **J Am Acad Dermatol** 1988 Oct;19(4):642-55

Dyskeratosis congenita. Davidson HR, et al. **J Med Genet** 1988 Dec;25(12):843-6

Persistent hyperplastic primary vitreous in the right eye and congenital grouped pigmentation of the retina in the left. Fujii M, et al. **Ophthalmologica** 1989;198(3):135-9

[Incontinentia pigmenti in 2 newborn infants] Ventura L, et al. **Pediatrie** 1988;43(3):223-5 (Eng. Abstr.) **(Fre)**

[Total congenital leukonychia] Patrizi A, et al. **G Ital Dermatol Venereol** 1988 Nov;123(11):547-9 **(Ita)**

[Zinsser-Cole-Engman syndrome (dyskeratosis congenita)] Korovenkov RI, et al. **Vestn Oftalmol** 1988 Sep-Oct; 104(5):75-6 **(Rus)**

DIAGNOSIS

Pseudo-cyanosis: time to reclassify cyanosis? [letter] Familton MJ, et al. **Anaesthesia** 1989 Mar;44(3):257

Clastogen-induced fragility may differentiate pancytopenia of congenital dyskeratosis from Fanconi anaemia. Schneider A, et al. **Eur J Pediatr** 1988 Oct;148(1):37-9

Chrysiasis: transmission electron microscopy, laser microprobe mass spectrometry and epipolarized light as adjuncts to diagnosis. Millard PR, et al. **Histopathology** 1988 Sep;13(3):281-8

Hypomelanosis of Ito (incontinentia pigmenti achromians). Desai PC, et al. **Indian Pediatr** 1988 Oct;25(10):1000-2

MRI evaluation of pigmented skin tumors. Preliminary study. Schwaighofer BW, et al. **Invest Radiol** 1989 Apr; 24(4):289-93

[What is your diagnosis? Frictional longitudinal melanonychia] Grosshans E. **Ann Dermatol Venereol** 1989; 116(1):45-6 **(Fre)**

[Clinical and biological studies of 14 cases of the Prader-Labhart-Willi syndrome] Mujica P, et al. **J Genet Hum** 1989 Jan;37(1):77-86 (Eng. Abstr.) **(Fre)**

[Idiopathic lenticular pigmentation of the buccal mucosa (Laugier's disease)] Kalamkarian AA, et al. **Vestn Dermatol Venerol** 1988;(6):4-6 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Hyperpigmentary disorders--mechanisms of action. Effect of azelaic acid on melanoma and other tumoral cells in culture. Breathnach AS, et al. **Acta Derm Venereol Suppl (Stockh)** 1989;143:62-6 (23 ref.)

Azelaic acid therapy in disorders of pigmentation. Breathnach AC, et al. **Clin Dermatol** 1989 Apr-Jun; 7(2):106-19 (50 ref.)

ETHNOLOGY

Pigmentary disorders in oriental skin. Jimbow M, et al. **Clin Dermatol** 1989 Apr-Jun;7(2):11-27 (42 ref.)

Pigmentary disorders in black skin. Kenney JA Jr. **Clin Dermatol** 1989 Apr-Jun;7(2):1-10 (30 ref.)

ETIOLOGY

Hypercarotenaemia in a tomato soup faddist. Gandhi M, et al. **BMJ** 1988 Dec 24-31;297(6664):1635

Pigmentary disorders associated with nutritional deficiency states. Burg G, et al. **Clin Dermatol** 1989 Apr-Jun; 7(2):36-43 (52 ref.)

Postinflammatory hyperpigmentation. Epstein JH. **Clin Dermatol** 1989 Apr-Jun;7(2):55-65 (80 ref.)

Hypopigmented mycosis fungoides. Sigal M, et al. **Clin Exp Dermatol** 1987 Nov;12(6):453-4

Nail discoloration due to mahogany. Harris AO, et al. **Cutis** 1989 Jan;43(1):55-6

Grey Turner's sign and Cullen's sign in acute pancreatitis. Meyers MA, et al. **Gastrointest Radiol** 1989 Winter; 14(1):31-7

Primary hyperpigmented cutaneous lesions in tuberculoid leprosy. Chattopadhyay SP, et al. **Indian J Lepr** 1988 Jan; 60(1):63-5

Hyperpigmentation in megaloblastic anemia. Lee SH, et al. **Int J Dermatol** 1988 Oct;27(8):571-5

Transverse striate leukonychia associated with acute rejection of renal allograft. Held JL, et al. **J Am Acad Dermatol** 1989 Mar;20(3):513-4

The "butterfly" sign in patients with primary biliary cirrhosis [letter] Venencie PY, et al. **J Am Acad Dermatol** 1988 Sep; 19(3):571-2

Adverse reaction to retin-A [letter] Rosenbluth M. **J Am Dent Assoc** 1989 Sep;119(3):346

Retrocorneal pigmentation. Dishman WA, et al. **J Am Optom Assoc** 1989 Jun;60(6):438-41

[The problem of pigmentation following dermabrasion] Li CL. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Jun;4(2):120-1, 158 (Eng. Abstr.) **(Chi)**

[Yellow nail syndrome. Description of 2 cases] Toffolo P, et al. **G Ital Dermatol Venereol** 1988 Nov;123(11):553-4 **(Ita)**

[Pigmented lesions of the oral cavity. I. Classification and etiopathogenesis] Bucci E, et al. **Minerva Stomatol** 1989 Mar;38(3):369-78 (162 ref.) (Eng. Abstr.) **(Ita)**

[Systemic diseases and pigmentary disorders] Hori Y. **Fukuoka Igaku Zasshi** 1988 Dec;79(12):862-5 (8 ref.) **(Jpn)**

[Pathogenesis of non-inflammatory arteriopathies with livedo-type lesions of the brain and skin (Sneddon's syndrome)] Kalashnikova LA. **Klin Med (Mosk)** 1989 Apr; 67(4):85-9 **(Rus)**

[Sneddon syndrome (its association with anti-cardiolipin antibodies)] Kalashnikova LA, et al. **Klin Med (Mosk)** 1988 Oct;66(10):32-7 (Eng. Abstr.) **(Rus)**

GENETICS

Hypopigmentation: a common feature of Prader-Labhart-Willi syndrome. Butler MG. **Am J Hum Genet** 1989 Jul;45(1):140-6

Of mice, persons, and pigment. Hall BD. **Am J Hum Genet** 1989 Aug;45(2):191-2

Selection against lethal alleles in females heterozygous for incontinentia pigmenti. Migeon BR, et al. **Am J Hum Genet** 1989 Jan;44(1):100-6

Association of pigmentary anomalies with chromosomal and genetic mosaicism and chimerism. Thomas IT, et al. **Am J Hum Genet** 1989 Aug;45(2):193-205 (48 ref.)

Ring chromosome 11 and café-au-lait spots. Fagan K, et al. **Am J Med Genet** 1988 Aug;30(4):911-6

The ermine phenotype: pigmentary-hearing loss heterogeneity. O'Doherty NJ, et al. **Am J Med Genet** 1988 Aug;30(4):945-52 (11 ref.)

Etiologic heterogeneity in dyskeratosis congenita. Pai GS, et al. **Am J Med Genet** 1989 Jan;32(1):63-6

Cytogenetic abnormalities in dyskeratosis congenita--report of five cases. Aguilar-Martinez A, et al. **Clin Exp Dermatol** 1988 Mar;13(2):100-4

Genetic counselling in hypomelanosis of Ito: case report and review. Moss C, et al. **Clin Genet** 1988 Aug;34(2):109-15 (41 ref.)

Cutaneous reaction patterns in blacks. McLaurin CI. **Dermatol Clin** 1988 Jul;6(3):353-62 (59 ref.)

Expression of c-kit gene products in known cellular targets of W mutations in normal and W mutant mice--evidence for an impaired c-kit kinase in mutant mice. Nocka K, et al. **Genes Dev** 1989 Jun;3(6):816-26

The gene for incontinentia pigmenti is assigned to Xq28. Sefiani A, et al. **Genomics** 1989 Apr;4(3):427-9

Incontinentia pigmenti and X-autosome translocations. Non-isotopic in situ hybridization with an X-centromere-specific probe (pSV2X5) reveals a possible X-centromeric breakpoint in one of five published cases. Crolla JA, et al. **Hum Genet** 1989 Feb;81(3):269-72

Linkage studies do not confirm the cytogenetic location of incontinentia pigmenti on Xp11. Sefiani A, et al. **Hum Genet** 1988 Nov;80(3):282-6

Incontinentia pigmenti in a male infant with Klinefelter syndrome. Prendiville JS, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 2):937-40

Hypomelanosis of Ito: a manifestation of mosaicism or chimerism. Donnai D, et al. **J Med Genet** 1988 Dec; 25(12):809-18

Hypomelanosis of Ito: spectrum of the disease. Glover MT, et al. **J Pediatr** 1989 Jul;115(1):75-80

[Dowling-Degos disease--an autosomal dominant genetic dermatosis] Biltz H, et al. **Z Hautkr** 1988 Aug 15; 63(8):642-4 (Eng. Abstr.) **(Ger)**

[Bloch-Sulzberger incontinentia pigmenti with associated neurologic and ophthalmologic complications] Petri H, et al. **Z Hautkr** 1988 Jul 15;63(7):568-72 (Eng. Abstr.) **(Ger)**

HISTORY

Erythema dyschromicum perstans. Convit J, et al. **Int J Dermatol** 1989 Apr;28(3):168-9

IMMUNOLOGY

Immunopathological investigations in purpura pigmentosa chronica. Simon M Jr, et al. **Acta Derm Venereol (Stockh)** 1989;69(2):101-4

Erythema dyschromicum perstans. Immunopathologic studies. Miyagawa S, et al. **J Am Acad Dermatol** 1989 May; 20(5 Pt 2):882-6

Recurrent encephalomyelitis associated with incontinentia pigmenti. Brunquell PJ. **Pediatr Neurol** 1987 May-Jun; 3(3):174-7

[Sneddon syndrome and antiphospholipid antibodies (letter)] Montalbán J. **Med Clin (Barc)** 1988 Sep 10;91(7):277 **(Spa)**

METABOLISM

[Gingival hyperpigmentation caused by dental restorations: the mechanism of detoxification using selenium] Surleve-Bazeille JE, et al. **J Biol Buccale** 1989 Mar; 17(1):21-5 (Eng. Abstr.) **(Fre)**

PATHOLOGY

Longitudinal melanonychia after healing of lichen planus. Juhlin L, et al. **Acta Derm Venereol (Stockh)** 1989; 69(4):338-9

Pigmented paravenous chorioretinal atrophy. Johansen J, et al. **Acta Ophthalmol (Copenh)** 1988 Aug;66(4):474-7

Piebaldism-Waardenburg syndrome: histopathologic evidence for a neural crest syndrome. Kaplan P, et al. **Am J Med Genet** 1988 Nov;31(3):679-88

Incidence of melanoma in surgically removed pigmented lesions. Fernando SS. **Australas J Dermatol** 1987 Dec; 28(3):126-8

Multiple inflamed pigmented lesions confined to the hands. Kossard S. **Australas J Dermatol** 1988 Apr;29(1):53-4

Darier's disease with peri-follicular depigmentation. Berth-Jones J, et al. **Br J Dermatol** 1989 Jun;120(6):827-30

A family with Dowling Degos disease showing features of Kitamura's reticulate acropigmentation. Berth-Jones J, et al. **Br J Dermatol** 1989 Mar;120(3):463-6

Reticulate hyperpigmentation distributed in a zosteriform fashion [letter] Patrizi A, et al. **Br J Dermatol** 1989 Aug; 121(2):280

Pigmented nail streaks may indicate Laugier-Hunziker syndrome. Sterling GB, et al. **Cutis** 1988 Oct;42(4):325-6

Transient blueberry muffin appearance of a newborn with congenital monoblastic leukemia. Gottesfeld E, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 2):347-51

Mucosal melanotic macule, reactive type: a simulation of melanoma. Horlick HP, et al. **J Am Acad Dermatol** 1988 Nov;19(5 Pt 1):786-91 (25 ref.)

Hyperpigmented macules and patches in a patient with GM1 type 1 gangliosidosis. Selsor LC, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 2):878-82

Ultraviolet light-induced confluent and reticulated papillomatosis. Vassileva S, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 2):413-4

Gingival pigmentation beneath a metallic crown: light and electron microscopic observations and energy dispersive X-ray analysis. Sakai T, et al. **J Oral Pathol** 1988 Sep; 17(8):409-15

Jaffe-Campanacci syndrome. Steinmetz JC, et al. **J Pediatr Orthop** 1988 Sep-Oct;8(5):602-4

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 21-1989. A newborn girl with respiratory distress and vesicular skin lesions. **N Engl J Med** 1989 May 25;320(21):1399-410

Carney's complex of primary pigmented nodular adrenocortical disease and pigmentous and myxomatous lesions. Cheung PS, et al. **Surg Gynecol Obstet** 1989 May; 168(5):413-6

[Crow-Fukase syndrome--the first case report in Bulgaria] Uzunov N, et al. **Vutr Boles** 1989;28(1):100-5 (Eng. Abstr.) **(Bul)**

[Apocrine chromhidrosis] Schwarz T, et al. **Hautarzt** 1989 Feb;40(2):106-9 (Eng. Abstr.) **(Ger)**

[A case of Laugier-Hunziker syndrome] Borrello P, et al. **G Ital Dermatol Venereol** 1988 Nov;123(11):537-8 **(Ita)**

[Ito's hypomelanosis. Ultrastructural investigation of the skin and the hair] Calvieri S, et al. **G Ital Dermatol Venereol** 1988 Nov;123(11):603-5 **(Ita)**

[An autopsy case of Crow-Fukase syndrome with massive appearance of amyloid bodies in the central nervous systems] Tomi H, et al. **Rinsho Shinkeigaku** 1988 Aug; 28(8):887-90 (Eng. Abstr.) **(Jpn)**

[Incontinentia pigmenti (the Bloch-Sulzberger syndrome)] Baliavichene GR, et al. **Arkh Patol** 1989;51(4):71-5 (Eng. Abstr.) **(Rus)**

[Ashy dermatosis (erithema dyschromicum perstans): prospective study of 23 patients] Navarro Jiménez BR, et al. **Med Cutan Ibero Lat Am** 1988;16(5):407-12 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

[Course of uveitis and visual functions in retarded cases of Harada's disease] Yoshida H, et al. **Nippon Ganka Gakkai Zasshi** 1988 May;92(5):726-30 (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

Willi Glas Crowns eliminate the "blue gums" phenomenon. Maier HJ. **Can Dent Assoc J** 1989 Aug;55(8):612

RADIOTHERAPY

[Development of laser systems in the treatment of hyperpigmented skin lesions] Iwasaki K, et al. **Iyodenshi To Seitai Kogaku** 1989 Mar;27(1):26-34 (Eng. Abstr.) **(Jpn)**

SURGERY

Comparative effectiveness of argon (488, 514 nm), green (514 nm.) and carbon dioxide (10,600 nm.) laser irradiation on vascular and other cutaneous lesions. Arndt KA. **Ann Acad Med Singapore** 1988 Oct;17(4):502-4

Grafting and transplantation of melanocytes for repigmenting vitiligo and other types of leukoderma. Falabella R. **Int J Dermatol** 1989 Jul-Aug;28(6):363-9 (38 ref.)

CO2 laser treatment of traumatic tattoos [letter] Dufresne RG Jr, et al. **J Am Acad Dermatol** 1989 Jan;20(1):137-8

[The use of chemical abrasion in plastic surgery] Wang XL. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Mar;4(1):19-20 **(Chi)**

THERAPY

Tattooing for the management of white patches. Vadodaria SJ, et al. **Ann Plast Surg** 1989 Jul;23(1):81-3

Treatment and camouflaging of pigmentary disorders. Benmaman O, et al. **Clin Dermatol** 1988 Jul-Sep;6(3):50-61 (73 ref.)

Probable coexisting exogenous ochronosis and mercurial pigmentation managed by dermabrasion. Lang PG Jr. **J Am Acad Dermatol** 1988 Nov;19(5 Pt 2):942-6

[In vitro study on decolorization effect of argon ion laser] Suzuki J. **Kokubyo Gakkai Zasshi** 1989 Mar;56(1):38-46 (Eng. Abstr.) **(Jpn)**

[In vitro culture of melanocyte-bearing epidermis and its application in the treatment of vitiligo and the stable leukodermas] Falabella R, et al. **Med Cutan Ibero Lat Am** 1989;17(3):193-8 (Eng. Abstr.) **(Spa)**

URINE

A case of dark urine, hyperpigmentation and hepatomegaly. McClements BM, et al. **Ir J Med Sci** 1988 May;157(5):157

VETERINARY

A case of chronic diffuse uveitis accompanied with dermal depigmentation in Akita dog. Usami H, et al.

Nippon Juigaku Zasshi 1989 Feb;51(1):215–8
Depletion of oxycarotenoid pigments in chickens and the failure of aflatoxin to alter it. Schaeffer JL, et al. **Poult Sci** 1988 Jul;67(7):1080–8

PIGMENTS

Chromophore conformational analysis in phycocyanin and in related chromopeptides by surface enhanced Raman spectroscopy. Debreczeny M, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1227–32
Tight binding of a copper (II) phthalocyanine (cuprolinic blue) to DNA. John DC, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1256–62
Brown bowel syndrome: an unusual cause of massive dilatation of the colon. Robinson MH, et al. **Gut** 1989 Jun; 30(6):882–4
The differentiation of cholesterol and pigment gallstones. Jüngst D. **Hepatology** 1989 Oct;10(4):518–20
In vitro attachment of bilins to apophycocyanin. II. Determination of the structures of tryptic bilin peptides derived from the phycocyanobilin adduct. Arciero DM, et al. **J Biol Chem** 1988 Dec 5;263(34):18350–7
In vitro attachment of bilins to apophycocyanin. III. Properties of the phycoerythrobilin adduct. Arciero DM, et al. **J Biol Chem** 1988 Dec 5;263(34):18358–63
In vitro attachment of bilins to apophycocyanin. I. Specific covalent adduct formation at cysteinyl residues involved in phycocyanobilin binding in C-phycocyanin. Arciero DM, et al. **J Biol Chem** 1988 Dec 5;263(34):18343–9
Marking planes of surgical excision on breast biopsy specimens: use of artists' pigments suspended in acetone. Paterson DA, et al. **J Clin Pathol** 1988 Sep;41(9):1013–6
Effects of the molecular environment on some spectroscopic properties of Blepharisma photoreceptor pigment. Lenci F, et al. **J Photochem Photobiol [B]** 1989 Jun;3(3):449–53
Eyelid pigment implantation: early and late histopathology. Wolfley DE, et al. **Plast Reconstr Surg** 1988 Nov; 82(5):770–4
[Pigmented lesions of the oral cavity. I. Classification and etiopathogenesis] Bucci E, et al. **Minerva Stomatol** 1989 Mar;38(3):369–78 (162 ref.) (Eng. Abstr.) **(Ita)**
[Reactivity of active oxygen with lipofuscin] Shimasaki H. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):3067–73 **(Jpn)**

ADVERSE EFFECTS

Red tattoo reactions: treatment with the carbon dioxide laser. Kyanko ME, et al. **J Dermatol Surg Oncol** 1989 Jun; 15(6):652–6

ANALYSIS

Autofluorescence emission spectra of neuronal lipopigment in mucopolysaccharidosis (Sanfilippo's syndrome). Dowson JH, et al. **Acta Neuropathol (Berl)** 1989;77(4):426–9
Characterization of disease-specific brain fluorophores in ceroid-lipofuscinosis. Katz ML, et al. **Am J Med Genet Suppl** 1988;5:253–64
Lipopigment in the aging brain. Wisniewski HM, et al. **Am J Med Genet Suppl** 1988;5:183–91 (12 ref.)
The complete amino-acid sequence of the alpha and beta subunits of B-phycoerythrin from the rhodophytan alga Porphyridium cruentum. Sidler W, et al. **Biol Chem Hoppe Seyler** 1989 Feb;370(2):115–24
The nature and properties of squirrel lens yellow pigment. Zigman S, et al. **Exp Eye Res** 1988 Dec;47(6):819–24
Distribution of tunichrome and vanadium in sea squirt blood cells sorted by flow cytometry. Oltz EM, et al. **Experientia** 1989 Feb 15;45(2):186–90
Volume fraction and ultrastructure of age pigment in the saccular epithelium of old mice. Hubel SB, et al. **Hear Res** 1989 Jan;37(2):171–7
Localization of phycoerythrin at the lumenal surface of the thylakoid membrane in Rhodomonas lens. Ludwig M, et al. **J Cell Biol** 1989 Mar;108(3):875–84
Accumulation of pigment granules in lacrymal gland epithelium in practolol-treated beagle dogs. Tsuchitani M, et al. **J Comp Pathol** 1989 Apr;100(3):237–43
The pigments in the dorsal skin of frogs. Suga T, et al. **J Nat Prod** 1988 Jul-Aug;51(4):713–8
Photoreceptor pigments for photomovement of microorganisms: some spectroscopic and related studies. Lenci F, et al. **J Photochem Photobiol [B]** 1989 Feb; 3(1):1–16 (74 ref.)
Relationship between mycobacterial species and their carotenoid pigments. Ichiyama S, et al. **Microbiol Immunol** 1988;32(5):473–9
Pigment resembling atmospheric dust in Peyer's patches. Urbanski SJ, et al. **Mod Pathol** 1989 May;2(3):222–6
Protective effect of vitamin E on cadmium-induced alterations in lipofuscin and superoxide dismutase in rat brain regions. Shukla GS, et al. **Pharmacol Toxicol** 1988 Oct;63(4):305–6
Presence of pteridine pigments in isolated iridophores. Bagnara JT, et al. **Pigment Cell Res** 1988;1(5):361–5
Pteridines and purines as major pigments of the avian iris. Oliphant LW. **Pigment Cell Res** 1987;1(2):129–31
Single-molecule fluorescence detection: autocorrelation criterion and experimental realization with phycoerythrin. Peck K, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(11):4087–91
Histochemical and ultrastructural studies on lipofuscin in the aged rat uterus. Staneva L, et al. **Prog Clin Biol Res** 1989; 296:411–4
Cholesterol and pigment gallstone disease: comparison of the reliability of three bile tests for differentiation between the two stone types. van Erpecum KJ, et al. **Scand J Gastroenterol** 1988 Oct;23(8):948–54
Nature of yellow-brown bodies. Histochemical and ultrastructural studies on the brown pigment. Senba M, et al. **Zentralbl Allg Pathol** 1989;135(4):351–5
[Characteristics of the extracellular fluorescing pigment of Bacillus mesentericus strain 90 R-variant] Kolev DA. **Acta Microbiol Bulg** 1988;22:50–5 (Eng. Abstr.) **(Bul)**
[Lipopigment in the adipose tissue of slaughtered swine] Ellerbroek L, et al. **DTW** 1989 Apr;96(4):229–32 (Eng. Abstr.) **(Ger)**
[Study of transverse sections and pigment granules of the hair of persons of various nationalities] Pavlov IuV. **Sud Med Ekspert** 1989 Jan-Mar;32(1):35–6 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

The effect of gabaculine on tetrapyrrole biosynthesis and heterotrophic growth in Cyanidium caldarium. Houghton JD, et al. **Biochem J** 1988 Sep 15;254(3):907–10
The formation of autofluorescent granules in cultured human RPE. Boulton M, et al. **Invest Ophthalmol Vis Sci** 1989 Jan;30(1):82–9
Comparison of fluorescence characteristics of products of peroxidation of membrane phospholipids with those of products derived from reaction of malonaldehyde with glycine as a model of lipofuscin fluorescent substances. Shimasaki H, et al. **J Biochem (Tokyo)** 1988 Nov; 104(5):761–6
Formation of a photoreversible phycocyanobilin-apophytochrome adduct in vitro. Elich TD, et al. **J Biol Chem** 1989 Aug 5;264(22):12902–8
Biosynthesis of the pigments of life. Battersby AR. **J Nat Prod** 1988 Jul-Aug;51(4):629–42 (17 ref.)
Fusarium moniliforme Sheld. A fungus producing a broad spectrum of bioactive metabolites. Brückner B, et al. **Zentralbl Mikrobiol** 1989;144(1):3–12 (41 ref.)
[Effect of metal cations on the formation of antibiotic and pigment by the mycophilic fungus Hypomyces rosellus 94/77] Toropova EG, et al. **Biol Nauki** 1989;(4):84–8 (Eng. Abstr.) **(Rus)**

BLOOD

Elevated levels of plasma lipofuscins in patients with chronic renal failure. Hegedus ZL, et al. **Arch Int Physiol Biochim** 1988 Dec;96(5):211–21

CEREBROSPINAL FLUID

Xanthochromia after subarachnoid haemorrhage needs no revisitation. Vermeulen M, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):826–8

CHEMICAL SYNTHESIS

Synthesis and photocytotoxicity of some new substituted phthalocyanines. Leznoff CC, et al. **Photochem Photobiol** 1989 Mar;49(3):279–84

DEFICIENCY

Characterization of a pyoverdine-deficient mutant of Pseudomonas fluorescens impaired in the secretion of extracellular lipase. Fernandez L, et al. **Arch Microbiol** 1988;150(6):523–8

DIAGNOSTIC USE

Use of allophycocyanin allows quantitative description by flow cytometry of alveolar macrophage surface antigens present in low numbers of cells. Fuchs HJ, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1124–8
A novel and inexpensive source of allophycocyanin for multicolor flow cytometry. Jung TM, et al. **J Immunol Methods** 1989 Jul 6;121(1):9–18

GENETICS

Iris pigment mosaicism in carriers of X-linked ocular albinism cum pigmento. Maguire AM, et al. **Am J Ophthalmol** 1989 Mar 15;107(3):298–9
Organization and expression of genes for photosynthetic pigments-protein complexes in photosynthetic bacteria. Zhu YS, et al. **Biotechnology** 1989;12:257–91 (121 ref.)
The long-range restriction map surrounding the mouse agouti locus reveals a disparity between physical and genetic distances. Barsh GS, et al. **Genomics** 1989 Jul; 5(1):9–18
Genetic analysis of phycobilisome mutants in the cyanobacterium Synechococcus species PCC 6301. Kalla R, et al. **Mol Microbiol** 1989 Mar;3(3):339–47
Adaptive eradication of methionine and cysteine from cyanobacterial light-harvesting proteins. Mazel D, et al. **Nature** 1989 Sep 21;341(6239):245–8

IMMUNOLOGY

Immunoreactivity of neuronal lipofuscin with monoclonal antibodies to the amyloid beta-protein. Bancher C, et al. **Neurobiol Aging** 1989 Mar-Apr;10(2):125–32

ISOLATION & PURIFICATION

Ovine ceroid lipofuscinosis. The major lipopigment protein and the lipid-binding subunit of mitochondrial ATP synthase have the same NH2-terminal sequence. Palmer DN, et al. **J Biol Chem** 1989 Apr 5;264(10):5736–40
Isolation and characterization of a novel yellow pigment from human and primate tissue. Horton FK, et al. **Pigment Cell Res** 1989 Jan-Feb;2(1):57–64
Further evidence that the pigment in the Dubin-Johnson syndrome is not melanin. Swartz HM, et al. **Pigment Cell Res** 1987;1(2):69–75

METABOLISM

Hermansky-Pudlak syndrome: an immunologic assessment of 15 cases. Shanahan F, et al. **Am J Med** 1988 Dec; 85(6):823–8
The biosynthesis of the chromophore of phycocyanin. Pathway of reduction of biliverdin to phycocyanobilin. Brown SB, et al. **Biochem J** 1989 Jul 1;261(1):259–63
Characterization of pigment aggregating alpha 2-adrenoceptors of fish melanophores by use of different agonists after partial irreversible receptor inactivation. Karlsson JO, et al. **Br J Pharmacol** 1989 May;97(1):222–8
Localisation of islet amyloid peptide in lipofuscin bodies and secretory granules of human B-cells and in islets of type-2 diabetic subjects. Clark A, et al. **Cell Tissue Res** 1989 Jul; 257(1):179–85
A novel photopigment candidate in membranes of cultured chick pineal cells. Wallingford JC, et al. **Exp Eye Res** 1988 Jun;46(6):909–18
Effect of ambient oxygen concentration on lipofuscin accumulation in cultured rat heart myocytes--a novel in vitro model of lipofuscinogenesis. Sohal RS, et al. **Free Radic Biol Med** 1989;6(1):23–30
Effects of long-term Hydergine administration on lipofuscin accumulation in senescent rat brain. Amenta D, et al. **Gerontology** 1988;34(5–6):250–6
Cell loss in the aging retina. Relationship to lipofuscin accumulation and macular degeneration. Dorey CK, et al. **Invest Ophthalmol Vis Sci** 1989 Aug;30(8):1691–9
Specificity of pyoverdine-mediated iron uptake among fluorescent Pseudomonas strains. Hohnadel D, et al. **J Bacteriol** 1988 Oct;170(10):4865–73
Use of bilirubin oxidase for probing chromophore topography in tetrapyrrole proteins. Singh BR, et al. **J Biochem Biophys Methods** 1989 Mar;18(2):135–47
In vitro attachment of bilins to apophycocyanin. I. Specific covalent adduct formation at cysteinyl residues involved in phycocyanobilin binding in C-phycocyanin. Arciero DM, et al. **J Biol Chem** 1988 Dec 5;263(34):18343–9
Light guides. Directional energy transfer in a photosynthetic antenna. Glazer AN. **J Biol Chem** 1989 Jan 5;264(1):1–4 (38 ref.)
Orientational properties of biological pigments in ordered systems studied with polarized light: photosynthetic pigment-protein complexes in membranes. Van Gurp M, et al. **J Theor Biol** 1988 Apr 7;131(3):333–49
Effects of lipofuscin on in situ hybridization in human neuronal tissue. Steiner I, et al. **J Virol Methods** 1989 Apr-May;24(1–2):1–9
Aging changes in lipofuscin, lysosomes and melanin in the macular area of human retina and choroid. Hayasaka S. **Jpn J Ophthalmol** 1989;33(1):36–42
Effects of acetyl-L-carnitine on the brain lipofuscin content and emotional behavior in aged rats. Kohjimoto Y, et al. **Jpn J Pharmacol** 1988 Nov;48(3):365–71
Hydrolysis of a fluorescent substance formed from an oxidized phospholipid and an amino compound by phospholipase A2. Iio T, et al. **Lipids** 1988 Oct; 23(10):937–41
Development of lipofuscin-like fluorescence in the retinal pigment epithelium in response to protease inhibitor treatment. Katz ML, et al. **Mech Ageing Dev** 1989 Jul; 49(1):23–40
Effect of ferric iron and desferrioxamine on lipofuscin accumulation in cultured rat heart myocytes. Marzabadi MR, et al. **Mech Ageing Dev** 1988 Dec;46(1–3):145–57
Immunoreactivity of ceroid lipofuscin storage pigment in Batten disease with monoclonal antibodies to the amyloid beta-protein [letter] Wisniewski KE, et al. **N Engl J Med** 1989 Jan 26;320(4):256–7
Altered lipofuscin pigmentation in the basal nucleus (Meynert) in Parkinson's disease. Ulfig N. **Neurosci Res** 1989 Jun;6(5):456–62
Interaction of enzyme-generated species with chlorophyll-alpha and probes bound to serum albumins. Bohne C, et al. **Photochem Photobiol** 1988 Sep;48(3):341–7
Permeabilized cell models for the study of granule transport in pigment cells. Schliwa M. **Pigment Cell Res** 1987; 1(2):65–8 (44 ref.)
Formation and role of malaria pigment. Jamjoom GA. **Rev Infect Dis** 1988 Sep-Oct;10(5):1029–34 (20 ref.)
[Effect of a 3-hydroxypyridine-class antioxidant on an ethanol-induced learning disorder in mice and the accumulation of lipofuscin] Kutepova OA, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):314–7 (Eng. Abstr.) **(Rus)**
[The origin of lipofuscin granules in a hybridoma cell culture] Tatariunas AB. **Biull Eksp Biol Med** 1989 Mar;107(3):363–7 (Eng. Abstr.) **(Rus)**
[The nitrosophenol system of iron metabolism regulation in

actinomycetes] Blinov NO, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Jan-Feb;(1):70-8 (Eng. Abstr.) **(Rus)**

[Pigment migration in the dermal melanophores of amphibian larvae in the interphase and during mitosis] Starodubov SM, et al. **Ontogenez** 1988 May-Jun;19(3):279-83 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Age-related accumulation of lipofuscin in myocardium of Japanese monkey (Macaca fuscata). Nakano M, et al. **Mech Ageing Dev** 1989 Jul;49(1):41-8

PHARMACOLOGY

Substituted phthalocyanines as photodynamic sensitizers. Rosenthal I, et al. **Basic Life Sci** 1988;49:467-72

Algal phycocyanins promote growth of human cells in culture. Shinohara K, et al. **In Vitro Cell Dev Biol** 1988 Oct;24(10):1057-60

[Inhibition of UV-induced accumulation of lipid peroxides by melanins and ommochromes] Pustynnikov MG, et al. **Biokhimiia** 1988 Jul;53(7):1117-20 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Cytomorphological and cytochemical responses of cortical neurons on intraneuronal accumulation of age-pigment lipofuscin. Sharma D. **Indian J Exp Biol** 1988 May; 26(5):400-2

[Dynamics of the redistribution of pigmented granules in the dermal melanophores of anuran larvae. 2. Aggregation] Nikeriasova EN, et al. **Ontogenez** 1988 Nov-Dec; 19(6):618-25 **(Rus)**

RADIATION EFFECTS

A light-sensitive yellow ommochrome pigment from the house fly. Bolognese A, et al. **Pigment Cell Res** 1988; 1(6):375-8

THERAPEUTIC USE

Modified porphyrins, chlorins, phthalocyanines, and purpurins: second-generation photosensitizers for photodynamic therapy. Kreimer-Birnbaum M. **Semin Hematol** 1989 Apr;26(2):157-73 (114 ref.)

PIGS see **SWINE**

PIKE see **SALMONIDAE**

PILAR CYST see **EPIDERMAL CYST**

PILI, BACTERIAL

Influence of bovine intestinal fluid on the expression of K99 pili by Escherichia coli. Francis DH, et al. **Am J Vet Res** 1989 Jun;50(6):822-6

Fimbrial structures of enterotoxigenic E. coli. De Graaf FK. **Antonie Van Leeuwenhoek** 1988;54(5):395-404

Chromosomal mapping of genes encoding mannose-sensitive (type I) and mannose-resistant F8 (P) fimbriae of Escherichia coli O18:K5:H5. Krallmann-Wenzel U, et al. **FEMS Microbiol Lett** 1989 Apr;49(2-3):315-21

Cloning and characterization of a new type of fimbria (S/F1C-related fimbria) expressed by an Escherichia coli O75:K1:H7 blood culture isolate. Pawelzik M, et al. **Infect Immun** 1988 Nov;56(11):2918-24

Distribution of the P-associated-pilus (pap) region among Escherichia coli from natural sources: evidence for horizontal gene transfer. Plos K, et al. **Infect Immun** 1989 May;57(5):1604-11

Purification, characterization, and pathogenicity of Moraxella bovis pili. Ruehl WW, et al. **J Exp Med** 1988 Sep 1; 168(3):983-1002

Production of diarrhea in the rabbit by a mutant of Escherichia coli (RDEC-1) that does not express adherence (AF/R1) pili. Cantey JR, et al. **J Infect Dis** 1989 Jul;160(1):136-41

Pili of Vibrio cholerae O1 biotype E1 Tor: a comparative study on adhesive and non-adhesive strains. Iwanaga M, et al. **Microbiol Immunol** 1989;33(1):1-9

The expression of mutant pilins in Pseudomonas aeruginosa: fifth position glutamate affects pilin methylation. Pasloske BL, et al. **Mol Microbiol** 1988 Jul;2(4):489-95

Population shift between piliated and non-piliated bacteria in various culture conditions of Corynebacterium renale. Koga T, et al. **Nippon Juigaku Zasshi** 1988 Dec; 50(6):1277-8

Fimbriae of Bacteroides nodosus: protein engineering of the structural subunit for the production of an exogenous peptide. Jennings PA, et al. **Protein Eng** 1989 Jan;2(5):365-9

[Pilus type, hemagglutination titer and hemolysin production of Escherichia coli isolated from urogenital infections] Goto T. **Nippon Hinyokika Gakkai Zasshi** 1988 Sep; 79(9):1582-6 (Eng. Abstr.) **(Jpn)**

[The virulence factor of E. coli in genitourinary tract infections. 2. Detection of P fimbriae and its role in genitourinary tract infections] Nasu Y. **Nippon Hinyokika Gakkai Zasshi** 1988 Jul;79(7):1169-76 (Eng. Abstr.) **(Jpn)**

[Type 1 fimbriae, P fimbriae and X adhesins in Escherichia strains causing pyelonephritis, cystitis and recurrent urinary infections] Andreu A, et al. **Med Clin (Barc)** 1989 Mar 25; 92(11):409-12 (Eng. Abstr.) **(Spa)**

ANALYSIS

Characterization of a pilus produced by Aeromonas hydrophila. Sato M, et al. **FEMS Microbiol Lett** 1989 Jun; 50(3):325-9

Actinomyces viscosus fibril antigens detected by immunogold electron microscopy. Ellen RP, et al. **Infect Immun** 1989 Apr;57(4):1327-31

Isolation and characterization of the alpha-galactosyl-1,4-beta-galactosyl-specific adhesin (P adhesin) from fimbriated Escherichia coli. Hoschützky H, et al. **Infect Immun** 1989 Jan;57(1):76-81

Molecular cloning and nucleotide sequence of the colonization factor antigen I gene of Escherichia coli. Karjalainen TK, et al. **Infect Immun** 1989 Apr; 57(4):1126-30

In vivo expression and variation of Escherichia coli type 1 and P pili in the urine of adults with acute urinary tract infections. Kisielius PV, et al. **Infect Immun** 1989 Jun; 57(6):1656-62

Immunological studies of the disulfide bridge region of Pseudomonas aeruginosa PAK and PAO pilins, using anti-PAK pilus and antipeptide antibodies. Lee KK, et al. **Infect Immun** 1989 Feb;57(2):520-6

Variable expression of P fimbriae in Escherichia coli urinary tract infection. Lichodziejewska M, et al. **Lancet** 1989 Jun 24;1(8652):1414-8

Investigation of minor components of Escherichia coli type 1 fimbriae: protein chemical and immunological aspects. Krogfelt KA, et al. **Microb Pathog** 1988 Mar;4(3):231-8

Characterization of fimbrial subunits from Bordetella species. Mooi FR, et al. **Microb Pathog** 1987 Jun;2(6):473-84

Purification of fimbriae from Pasteurella haemolytica A-1. Potter AA, et al. **Microb Pathog** 1988 Apr;4(4):311-6

Characterization of fimbriae from Bacteroides fragilis. van Doorn J, et al. **Microb Pathog** 1987 Aug;3(2):87-95

Purification of K88 and K99 pili from porcine enterotoxigenic Escherichia coli by affinity chromatography. Kuzuya M, et al. **Nippon Juigaku Zasshi** 1988 Aug;50(4):951-3

Nucleotide sequence of the F41 fimbriae subunit gene in Escherichia coli B41. Fidock DA, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2849

Detection of fimbrial adhesins of ETEC using monoclonal antibody-based latex reagents. Thorns CJ, et al. **Vet Rec** 1989 Jul 22;125(4):91-2

DRUG EFFECTS

Influence of fluoroquinolones on expression and function of P fimbriae in uropathogenic Escherichia coli. Kovarik JM, et al. **Antimicrob Agents Chemother** 1989 May;33(5):684-8

Influence of berberine sulfate on synthesis and expression of Pap fimbrial adhesin in uropathogenic Escherichia coli. Sun D, et al. **Antimicrob Agents Chemother** 1988 Aug; 32(8):1274-7

Mutations in cloned Escherichia coli P fimbriae genes that makes fimbriae-production resistant to suppression by trimethoprim. Väisänen-Rhen V, et al. **Microb Pathog** 1988 May;4(5):369-77

IMMUNOLOGY

Prevalence of fimbrial antigens and enterotoxins in nonclassical serogroups of Escherichia coli isolated from newborn pigs with diarrhea. Fairbrother JM, et al. **Am J Vet Res** 1988 Aug;49(8):1325-8

Effects of an orally administered live Escherichia coli pilus vaccine on duration of lacteal immunity to enterotoxigenic Escherichia coli in swine. Moon HW, et al. **Am J Vet Res** 1988 Dec;49(12):2068-71

Vaccination against infectious bovine keratoconjunctivitis: protective efficacy and antibody response induced by pili of homologous and heterologous strains of Moraxella bovis. Lepper AW. **Aust Vet J** 1988 Oct;65(10):310-6

Protection of turkey poults from Bordetella avium infection and disease by pili and bacterins. Akeila MA, et al. **Avian Dis** 1988 Oct-Dec;32(4):641-9

Diversity of pilus subunits of Escherichia coli isolated from avian species. Suwanichkul A, et al. **Avian Dis** 1988 Oct-Dec;32(4):822-5

Human antibody response to outer membrane proteins and fimbriae of Haemophilus influenzae type b. Erwin AL, et al. **Can J Microbiol** 1988 Jun;34(6):723-9

Mapping of transfer and H pilus coding regions of the IncHII plasmid pHH1508a. Yan W, et al. **Can J Microbiol** 1989 Feb;35(2):289-94

Requirement for capsular antigen KX105 and fimbrial antigen CS1541 in the pathogenicity of porcine enterotoxigenic Escherichia coli O8:KX105 strains. Broes A, et al. **Can J Vet Res** 1989 Jan;53(1):43-7

Serological response to P-fimbriae of Escherichia coli in patients with urinary tract infections. Agata N, et al. **Eur J Clin Microbiol Infect Dis** 1989 Feb;8(2):156-9

Transport of nutrients into the renal brush border membrane vesicles as marker in evaluating the role of antipili antibodies in modulation of ascending pyelonephritis in rats. Garg UC, et al. **FEMS Microbiol Lett** 1989 Jan 15; 48(2):155-9

A novel fimbrial haemagglutinin produced by a strain of Salmonella of serotype Salinatis. Yakubu DE, et al. **FEMS Microbiol Lett** 1989 Jan 1;48(1):29-33

Monoclonal antibodies defining immunogenic regions of pili from Bacteroides nodosus strains 198 (A1), 265 (H1) and 336 (F1). Young D, et al. **Immunol Cell Biol** 1989 Feb;67 (Pt 1):71-8

Immunological responsiveness of chinchillas to outer membrane and isolated fimbrial proteins of nontypeable Haemophilus influenzae. Bakaletz LO, et al. **Infect Immun** 1989 Oct;57(10):3226-9

Heterologous protection against invasive Escherichia coli K1 disease in newborn rats by maternal immunization with purified mannose-sensitive pili. Guerina NG, et al. **Infect Immun** 1989 May;57(5):1568-72

Comparison of type 2 and type 6 fimbriae of Bordetella pertussis by using agglutinating monoclonal antibodies. Li ZM, et al. **Infect Immun** 1988 Dec;56(12):3184-8

Cross-reactivity of Pseudomonas aeruginosa antipilin monoclonal antibodies with heterogeneous strains of P. aeruginosa and Pseudomonas cepacia. Saiman L, et al. **Infect Immun** 1989 Sep;57(9):2764-70

Characterization of the F41 fimbrial antigen of enterotoxigenic Escherichia coli by using monoclonal antibodies. van Zijderveld FG, et al. **Infect Immun** 1989 Apr;57(4):1192-9

Gal-Gal pili vaccines prevent pyelonephritis by piliated Escherichia coli in a murine model. Single-component Gal-Gal pili vaccines prevent pyelonephritis by homologous and heterologous piliated E. coli strains. Pecha B, et al. **J Clin Invest** 1989 Jun;83(6):2102-8

Mannose-resistant hemagglutination, enzyme-linked immunosorbent assay, and immune electron microscopy for detection of K99 fimbrial antigen in Escherichia coli from calves. Hernández F, et al. **J Clin Microbiol** 1989 Sep; 27(9):2123-4

Mitogenic stimulation of human B lymphocytes by the mannose-specific adhesin on Escherichia coli type 1 fimbriae. Ponniah S, et al. **J Immunol** 1989 Feb 1; 142(3):992-8

Priming of polymorphonuclear neutrophilic leukocyte oxidative activity by type 1 pili from Escherichia coli. Goetz MB. **J Infect Dis** 1989 Mar;159(3):533-42

Fimbrial serotypes of Escherichia coli strains isolated from extra-intestinal infections. De Ree JM, et al. **J Med Microbiol** 1989 Jun;29(2):95-9

Analysis of the serum antibody responses to type 1 and type 2 fimbriae in mice immunized with Actinomyces viscosus T14V. Haber J, et al. **J Periodont Res** 1989 Mar;24(2):81-7

Monoclonal antibodies with fimbrial F1C, F12, F13, and F14 specificities obtained with fimbriae from E. coli 04:K12:H-. Abe C, et al. **Microb Pathog** 1987 Jan;2(1):71-7

Monoclonal antibodies raised against Pap fimbriae recognize minor component(s) involved in receptor binding. de Ree JM, et al. **Microb Pathog** 1987 Feb;2(2):113-21

Monoclonal antibodies to K88ab, K88ac and K88ad fimbriae from enterotoxigenic Escherichia coli. Foged NT, et al. **Microb Pathog** 1986 Feb;1(1):57-69

The nucleotide sequence of the first two genes of the CFA/I fimbrial operon of human enterotoxigenic Escherichia coli. Hamers AM, et al. **Microb Pathog** 1989 Apr;6(4):297-309

Serological response to type 1-like somatic fimbriae in diarrheal infection due to classical enteropathogenic Escherichia coli. Karch H, et al. **Microb Pathog** 1987 Jun; 2(6):425-34

K88 fimbrial antigens: identification of antigenic determinants by the use of synthetic peptides. Krogfelt KA, et al. **Microb Pathog** 1987 Jun;2(6):465-72

Nucleotide sequence analysis of a P fimbrial regulatory element of the uropathogenic Escherichia coli strain KS71 (04:K12). Rhen M, et al. **Microb Pathog** 1987 Nov; 3(5):387-91

The role of fimbriae of uropathogenic Escherichia coli as carriers of the adhesin involved in mannose-resistant hemagglutination. van Die I, et al. **Microb Pathog** 1986 Feb;1(1):51-6

Purification and characterization of the CS2 pili of colonization factor antigen II produced by human enterotoxigenic Escherichia coli. Honda T, et al. **Microbiol Immunol** 1989;33(4):265-75

Characterization and molecular cloning of the PCF8775 CS5 antigen from an enterotoxigenic Escherichia coli 0115:H40 isolated in Central Australia. Heuzenroeder MW, et al. **Mol Microbiol** 1989 Mar;3(3):303-10

Probing the surface of Neisseria gonorrhoeae: immunoelectron microscopic studies to localize cyanogen bromide fragment 2 in gonococcal pili. Robinson EN Jr, et al. **Mol Microbiol** 1989 Jan;3(1):57-64

DNA transformation leads to pilin antigenic variation in Neisseria gonorrhoeae. Seifert HS, et al. **Nature** 1988 Nov 24;336(6197):392-5

Design and development of pilus vaccines for Haemophilus influenzae diseases. Brinton CC Jr, et al. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S54-61 (31 ref.)

Evaluation of pilus vaccines for prevention of experimental otitis media caused by nontypable Haemophilus influenzae. Karasic RB, et al. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S62-5

Effect of subinhibitory concentrations of tiamulin on the haemagglutinating properties of fimbriated Escherichia coli (K88, K99). Larsen JL. **Res Vet Sci** 1988 Jul;45(1):134-5

Different origins of IgA antibodies with various antigen specificities appearing in rat bile. Nilsson K, et al. **Scand J Immunol** 1988 Nov;28(5):547-51

Relative cell surface hydrophobicity of Escherichia coli

strains with various recognized fimbrial antigens and without recognized fimbriae. Gonzalez EA, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Aug; 269(2):218–36

[Studies on the detection of antibodies to Neisseria gonorrheae using pilus antigen] Ziems KD, et al. **Dermatol Monatsschr** 1989;175(3):163–9 (Eng. Abstr.) **(Ger)**

[P-fimbriated Escherichia coli and serum antibody responses to P-fimbriae in pregnant women with urinary tract infections and their children] Miyazawa H, et al. **Nippon Jinzo Gakkai Shi** 1989 Mar;31(3):293–9 (Eng. Abstr.) **(Jpn)**

[Pili (fimbriae) of the causative agents of plague and pseudotuberculosis: their detection in the hemagglutination reaction, the passive hemagglutination reaction and in an immunoenzyme analysis system] Vodop'ianov SO, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Aug;(8):7–10 (Eng. Abstr.) **(Rus)**

METABOLISM

Virulence factors of Bordetella pertussis. Mooi FR. **Antonie Van Leeuwenhoek** 1988;54(5):465–74 (59 ref.)

A novel lectin-independent interaction of P fimbriae of Escherichia coli with immobilized fibronectin. Westerlund B, et al. **FEBS Lett** 1989 Jan 30;243(2):199–204

Adsorbed salivary proline-rich protein 1 and statherin: receptors for type 1 fimbriae of Actinomyces viscosus T14V-J1 on apatitic surfaces. Gibbons RJ, et al. **Infect Immun** 1988 Nov;56(11):2990–3

Interaction of non-piliated Neisseria gonorrhoeae strain 7122 and protein IA with an epithelial cell monolayer. Layh-Schmitt G, et al. **Int J Med Microbiol** 1989 Jul; 271(2):158–70

Binding of F41 and K99 fimbriae of enterotoxigenic Escherichia coli to glycoproteins from bovine and porcine colostrum. Lindahl M. **Microbiol Immunol** 1989;33(5):373–9

Conservation of the D-mannose-adhesion protein among type 1 fimbriated members of the family Enterobacteriaceae. Abraham SN, et al. **Nature** 1988 Dec 15;336(6200):682–4

Interaction between pap-encoded pilin and adhesin gene products of uropathogenic Escherichia coli. Low D, et al. **Rev Infect Dis** 1988 Jul–Aug;10 Suppl 2:S300–5

PHYSIOLOGY

Genetic organization and biogenesis of adhesive fimbriae of Escherichia coli. Oudega B, et al. **Antonie Van Leeuwenhoek** 1988;54(4):285–99 (39 ref.)

Attachment of Moraxella bovis to calf corneal cells and inhibition by antiserum. Moore LJ, et al. **Aust Vet J** 1989 Feb;66(2):39–42

Adherence of vero cytotoxin-producing Escherichia coli serotype O157:H7 to isolated epithelial cells and brush border membranes in vitro: role of type 1 fimbriae (pili) as a bacterial adhesin expressed by strain CL-49. Durno C, et al. **Clin Invest Med** 1989 Jun;12(3):194–200

Structure and function of pili of pathogenic Neisseria species. Heckels JE. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S66–73 (75 ref.)

Incidence of hemagglutination activity among pathogenic and non-pathogenic Bacteroides fragilis strains and role of capsule and pili in HA and adherence. Pruzzo C, et al. **FEMS Microbiol Lett** 1989 May;50(1-2):113–8

Mutants of Actinomyces viscosus T14V lacking type 1, type 2, or both types of fimbriae. Cisar JO, et al. **Infect Immun** 1988 Nov;56(11):2984–9

Pellicle receptors for Actinomyces viscosus type 1 fimbriae in vitro. Clark WB, et al. **Infect Immun** 1989 Oct; 57(10):3003–8

Age-specific colonization of porcine intestinal epithelium by 987P-piliated enterotoxigenic Escherichia coli. Dean EA, et al. **Infect Immun** 1989 Jan;57(1):82–7

Evidence that in vitro adherence of Klebsiella pneumoniae to ciliated hamster tracheal cells is mediated by type 1 fimbriae. Fader RC, et al. **Infect Immun** 1988 Nov; 56(11):3011–3

In vitro adherence of type 1-fimbriated uropathogenic Escherichia coli to human ureteral mucosa. Fujita K, et al. **Infect Immun** 1989 Aug;57(8):2574–9

Type 3 fimbriae among enterobacteria and the ability of spermidine to inhibit MR/K hemagglutination. Gerlach GF, et al. **Infect Immun** 1989 Jan;57(1):219–24

Relationship of Haemophilus influenzae type b pilus structure and adherence to human erythrocytes. Gilsdorf JR, et al. **Infect Immun** 1989 Oct;57(10):3259–60

Type 1 pili are not necessary for colonization of the streptomycin-treated mouse large intestine by type 1-piliated Escherichia coli F-18 and E. coli K-12. McCormick BA, et al. **Infect Immun** 1989 Oct; 57(10):3022–9

Ganglioside epitope recognized by K99 fimbriae from enterotoxigenic Escherichia coli. Ono E, et al. **Infect Immun** 1989 Mar;57(3):907–11

Binding of Escherichia coli S fimbriae to cultured human endothelial cells. Parkkinen J, et al. **Infect Immun** 1989 Jul; 57(7):2256–9

Efficacy of interleukin-1 beta against systemic Candida albicans infections in normal and immunosuppressed mice. Pecyk RA, et al. **Infect Immun** 1989 Oct;57(10):3257–8

Fimbria-associated adhesin of Bacteroides loeschei that recognizes receptors on procaryotic and eucaryotic cells. Weiss EI, et al. **Infect Immun** 1989 Sep;57(9):2912–3

Identification and characterization of the genes encoding the type 3 and type 1 fimbrial adhesins of Klebsiella pneumoniae. Gerlach GF, et al. **J Bacteriol** 1989 Mar; 171(3):1262–70

Structure and function of conjugative pili: inducible synthesis of functional F pili by Escherichia coli K-12 containing a lac-tra operon fusion. Grossman TH, et al. **J Bacteriol** 1989 Feb;171(2):650–6

Differentiation of arcA, arcB, and cpxA mutant phenotypes of Escherichia coli by sex pilus formation and enzyme regulation. Iuchi S, et al. **J Bacteriol** 1989 May; 171(5):2889–93

Fimbriation genes of Salmonella enteritidis. Müller KH, et al. **J Bacteriol** 1989 Sep;171(9):4648–54

Genetic manipulation of major P-fimbrial subunits and consequences for formation of fimbriae. Van Die I, et al. **J Bacteriol** 1988 Dec;170(12):5870–6

Identification by heteroduplex analysis of an invertible element (Min) common among IncM group plasmids. Karste G, et al. **J Basic Microbiol** 1988;28(6):381–4

Toxin, toxin-coregulated pili, and the toxR regulon are essential for Vibrio cholerae pathogenesis in humans. Herrington DA, et al. **J Exp Med** 1988 Oct 1; 168(4):1487–92

Virulence of wild-type E. coli uroisolates in experimental pyelonephritis. Domingue GJ, et al. **Kidney Int** 1988 Dec; 34(6):761–5

Chromosomal deletions and rearrangements cause coordinate loss of haemolysis, fimbriation and serum resistance in a uropathogenic strain of Escherichia coli. Hughes C, et al. **Microb Pathog** 1987 Mar;2(3):227–30

Role of S- and common-type I-fimbriae of Escherichia coli in experimental upper and lower urinary tract infection. Marre R, et al. **Microb Pathog** 1987 Mar;2(3):223–6

DNA sequence analysis of point mutations in traA, the F pilin gene, reveal two domains involved in F-specific bacteriophage attachment. Frost LS, et al. **Mol Gen Genet** 1988 Jul;213(1):134–9

The nucleotide sequence of the fanD gene encoding the large outer membrane protein involved in the biosynthesis of K99 fimbriae. Roosendaal B, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1263

The effect of postnatal development on the adherence of nonfimbriated and fimbriated Salmonella typhimurium to isolated small intestinal enterocytes. el Monem AM, et al. **Pediatr Res** 1988 Oct;24(4):508–11

The PapG adhesin of uropathogenic Escherichia coli contains separate regions for receptor binding and for the incorporation into the pilus. Hultgren SJ, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4357–61

Type 1 fimbriae of Escherichia coli: genetic regulation, morphogenesis, and role in pathogenesis. Eisenstein BI. **Rev Infect Dis** 1988 Jul–Aug;10 Suppl 2:S341–4 (26 ref.)

[The virulence factor of E. coli in genitourinary tract infections. 3. Fimbrial specificity to genitourinary organs] Nasu Y. **Nippon Hinyokika Gakkai Zasshi** 1988 Jul; 79(7):1177–86 (Eng. Abstr.) **(Jpn)**

[Double control of pili formation in Yersinia pestis] Vodop'ianov SO. **Mikrobiol Zh** 1988 Nov–Dec;50(6):40–5 (Eng. Abstr.) **(Rus)**

[Effect of subinhibitory concentrations of antibacterial agents on the adherence of fimbriated Escherichia coli to uroepithelial cells] Padilla Espinosa C, et al. **Rev Latinoam Microbiol** 1988 Jan–Mar;30(1):5–9 (Eng. Abstr.) **(Spa)**

ULTRASTRUCTURE

Pilus colonization factors of enterotoxigenic Escherichia coli isolated from infantile diarrheal patients in Papua New Guinea. Honda T, et al. **Am J Trop Med Hyg** 1989 Aug; 41(2):220–3

Cloning of DNA sequences encoding foreign peptides and their expression in the K88 pili. Thiry G, et al. **Appl Environ Microbiol** 1989 Apr;55(4):984–93

Production of pili on Vibrio parahaemolyticus. Honda T, et al. **Can J Microbiol** 1988 Nov;34(11):1279–81

Presence of bacterial glycocalyx and fimbriae on Pasteurella haemolytica in feedlot cattle with pneumonic pasteurellosis. Morck DW, et al. **Can J Vet Res** 1989 Apr;53(2):167–71

Effect of subminimal inhibitory concentrations of pefloxacin on the piliation and adherence of E. coli. Desnottes JF, et al. **Drugs Exp Clin Res** 1988;14(10):629–34

Nucleotide sequence of the gene encoding the major subunit of CS3 fimbriae of enterotoxigenic Escherichia coli. Boylan M, et al. **Infect Immun** 1988 Dec;56(12):3297–300

Expression of type 1 fimbriae and mannose-sensitive hemagglutinin by recombinant plasmids. Gerlach GF, et al. **Infect Immun** 1989 Mar;57(3):764–70

Transformation-deficient mutants of piliated Neisseria gonorrhoeae. Biswas GD, et al. **J Bacteriol** 1989 Feb; 171(2):657–64

Assembly of mutant pilins in Pseudomonas aeruginosa: formation of pili composed of heterologous subunits. Pasloske BL, et al. **J Bacteriol** 1989 Apr;171(4):2142–7

Detection of piluslike structures on clinical and environmental isolates of Vibrio vulnificus. Gander RM, et al. **J Clin Microbiol** 1989 May;27(5):1015–21

Morphological description of surface structures on strain B41 of bovine enterotoxigenic Escherichia coli bearing both K99 and F41 antigens. Duchet-Suchaux M, et al. **J Gen Microbiol** 1988 Apr;134 (Pt 4):983–95

Detection of fimbriae and fimbrial antigens on the oral anaerobe Bacteroides gingivalis by negative staining and serological methods. Suzuki Y, et al. **J Gen Microbiol** 1988 Oct;134 (Pt 10):2713–20

Hydrophobic properties of Escherichia coli causing acute pyelonephritis. Jacobson SH, et al. **J Infect** 1989 Jul; 19(1):17–23

Morphological studies on fimbriae expressed by Vibrio cholerae 01. Hall RH, et al. **Microb Pathog** 1988 Apr; 4(4):257–65

Analysis of the primary structure of P-fimbrillins of uropathogenic Escherichia coli. van Die I, et al. **Microb Pathog** 1987 Sep;3(3):149–54 (26 ref.)

Surface structures, co-aggregation and adherence phenomena of Streptococcus oralis and related species. Willcox MD, et al. **Microbios** 1989;59(238):19–29

Understanding the structure and antigenicity of gonococcal pili. Getzoff ED, et al. **Rev Infect Dis** 1988 Jul–Aug;10 Suppl 2:S296–9 (12 ref.)

A new type of fimbriae on Salmonella typhimurium. Grund S, et al. **Zentralbl Veterinarmed [B]** 1988 Dec;35(10):779–82

[Detection of fibria-like surface structures in Staphylococcus saprophyticus as a pathogen in chronic pyelonephritis] Schmidt H, et al. **Z Urol Nephrol** 1988 Jul;81(7):437–44 (Eng. Abstr.) **(Ger)**

[Purification and characterization of Vibrio parahaemolyticus pili isolated from a patient with diarrhea: comparative studies with Vibrio cholerae O1 pili] Nakasone N, et al. **Nippon Saikingaku Zasshi** 1988 Nov;43(6):981–7 (Eng. Abstr.) **(Jpn)**

[Characteristics of Pseudomonas aeruginosa pili and an elucidation of their relation to the virulence of the bacteria] Ivanova TV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Oct;(10):3–6 (Eng. Abstr.) **(Rus)**

PILOCARPINE

Microinjection of muscimol into entopeduncular nucleus suppresses pilocarpine but not maximal electroshock seizures in rats. Hosford DA, et al. **Brain Res** 1988 Oct 18;462(2):205–10

Differential effects of non-steroidal anti-inflammatory drugs on seizures produced by pilocarpine in rats. Ikonomidou-Turski C, et al. **Brain Res** 1988 Oct 18; 462(2):275–85

The seizures induced by pilocarpine: behavioral, electroencephalographic and neuropathological studies in rodents. Turski L, et al. **Pol J Pharmacol Pharm** 1987 Sep-Oct;39(5):545–55 (51 ref.)

Review: cholinergic mechanisms and epileptogenesis. The seizures induced by pilocarpine: a novel experimental model of intractable epilepsy. Turski L, et al. **Synapse** 1989; 3(2):154–71 (198 ref.)

ADMINISTRATION & DOSAGE

Timolol-pilocarpine combined vs timolol and pilocarpine given separately. Söderström MB, et al. **Am J Ophthalmol** 1989 May 15;107(5):465–70

Comparison of different models for the testing of pilocarpine eyedrops using conventional eyedrops and a novel depot formulation (nanoparticles). Diepold R, et al. **Graefes Arch Clin Exp Ophthalmol** 1989;227(2):188–93

Failure in glaucoma surgery and its management. Mithal S, et al. **Indian J Ophthalmol** 1988 Apr-Jun;36(2):67–70

Pilocarpine hydrochloride liposomes: characterization in vitro and preliminary evaluation in vivo in rabbit eye. Benita S, et al. **J Microencapsul** 1984 Jul–Sep;1(3):203–16

A solid colloidal drug delivery system for the eye: encapsulation of pilocarpin in nanoparticles. Harmia T, et al. **J Microencapsul** 1986 Jan–Mar;3(1):3–12

Manufacture of polyalkylcyanoacrylate nanoparticles with pilocarpine and timolol by micelle polymerization: factors influencing particle formation. Harmia-Pulkkinen T, et al. **J Microencapsul** 1989 Jan–Mar;6(1):87–93

The in vivo evaluation of poly(lactic acid) microcapsules of pilocarpine hydrochloride. Vidmar V, et al. **J Microencapsul** 1985 Oct–Dec;2(4):289–92

Influence of ophthalmic ointments on the penetration of pilocarpine drops. Ellis PP, et al. **J Ocul Pharmacol** 1989 Summer;5(2):119–25

Comparative intraocular levels of pilocarpine achieved with drops and repository preparations. Ellis PP, et al. **J Ocul Pharmacol** 1987 Summer;3(2):121–8

The therapy of Adie's syndrome with dilute pilocarpine hydrochloride solutions. Flach AJ, et al. **J Ocul Pharmacol** 1985 Winter;1(4):353–62

Sustained release ophthalmic formulations of pilocarpine. Deshpande SG, et al. **J Pharm Pharmacol** 1989 Mar; 41(3):197–200

A technique for accurate application of pilocarpine gel. Fechtner RD, et al. **Ophthalmic Surg** 1988 Nov;19(11):823

All proper treatment is experimental [editorial] Spaeth GL. **Ophthalmic Surg** 1988 Aug;19(8):543–4

[The long-term effects of local medication on intraocular pressure control in primary angle-closure glaucoma] Yasuda N, et al. **Nippon Ganka Gakkai Zasshi** 1988 Oct; 92(10):1644–9 (Eng. Abstr.) **(Jpn)**

[Clinical application and significance of drug delivery systems. The Ocusert system] Araie M. **Nippon Rinsho** 1989 Jun;47(6):1357–62 **(Jpn)**

ADVERSE EFFECTS

Vitreous hemorrhage associated with pilocarpine. Schuman JS, et al. **Am J Ophthalmol** 1989 Sep 15;108(3):333–4
Atypical band keratopathy following long–term pilocarpine treatment. Brazier DJ, et al. **Br J Ophthalmol** 1989 Apr; 73(4):294–6

ANALOGS & DERIVATIVES

Cyclic carbamate analogues of pilocarpine. Sauerberg P, et al. **J Med Chem** 1989 Jun;32(6):1322–6

ANALYSIS

[Comparative study of the behavior of HPLC stationary phases for the analysis of pilocarpine and its impurities and degradation products] Durif C, et al. **Pharm Acta Helv** 1988;63(11):294–8 **(Fre)**
[Validation of an HPLC technic for analysis of pilocarpine and its impurities and degradation products] Durif C, et al. **Pharm Acta Helv** 1988;63(11):315–20 **(Fre)**

ANTAGONISTS & INHIBITORS

The rehabilitation of pilocarpine. Blake J.
Bull Soc Belge Ophtalmol 1987;224:179–82
The potassium channel activator, BRL 34915, antagonises a behavioural response to the muscarinic receptor agonist, pilocarpine. Tricklebank MD, et al. **Eur J Pharmacol** 1988 Jul 7;151(2):349–50

ISOLATION & PURIFICATION

Problems connected with HPLC separation of pilocarpine from its degradation products by means of silica gel and water–based mobile phase. Vespalec R, et al. **Pharmazie** 1988 Oct;43(10):689–91

PHARMACOKINETICS

Relative bioavailability of pilocarpine from a novel ophthalmic delivery system and conventional eyedrop formulations. Kelly JA, et al. **Br J Ophthalmol** 1989 May; 73(5):360–2
Sodium hyaluronate as an ophthalmic vehicle: some factors governing its effect on the ocular absorption of pilocarpine. Camber O, et al. **Curr Eye Res** 1989 Jun;8(6):563–7
Ocular bioavailability of pilocarpine with different vehicles. Sood NN, et al. **Indian J Ophthalmol** 1987;35(5–6):278–81
Mechanism of transcorneal permeation of pilocarpine. Mitra AK, et al. **J Pharm Sci** 1988 Sep;77(9):771–5

PHARMACOLOGY

Morphological changes in salivary glands after treatment with sialagogues. An electronmicroscopical study. Lundquist PG, et al. **Acta Otolaryngol (Stockh)** 1989 May–Jun;107(5–6):434–40
Age–related loss of morphologic responses to pilocarpine in rhesus monkey ciliary muscle. Lütjen–Drecoll E, et al.
Arch Ophthalmol 1988 Nov;106(11):1591–8
Relationship between serum–amylase activity and intraductal pressures in the rat parotid and submandibular salivary glands after administration of pilocarpine or isoprenaline. Ikeno T, et al. **Arch Oral Biol** 1988;33(6):403–6
Susceptibility to pilocarpine–induced seizures in rats increases with age. Patel S, et al. **Behav Brain Res** 1988 Dec 1; 31(2):165–7
Muscarinic inhibition of [3H]–noradrenaline release on rabbit iris in vitro: effects of stimulation conditions on intrinsic activity of methacholine and pilocarpine. Bognar IT, et al. **Br J Pharmacol** 1988 Jul;94(3):890–900
A technique for collecting saliva from the cattle–tick Boophilus microplus (Canestrini, 1887) using chemical stimulation. Environmental and temporal influences on secretion yield. Bechara GH, et al.
Braz J Med Biol Res 1988;21(3):479–84
Cluster headache: forehead sweating pattern during heating and pilocarpine tests. Variation as a function of time. Salvesen R, et al. **Cephalalgia** 1988 Dec;8(4):245–53
Desensitization of the isolated bovine iris sphincter muscles by pilocarpine. Suzuki R, et al. **Doc Ophthalmol** 1988 May; 69(1):73–81
The involvement of excitatory amino acid receptors within the prepiriform cortex in pilocarpine–induced limbic seizures in rats. Millan MH, et al. **Exp Brain Res** 1988; 72(3):517–22
Reduction of paired pulse inhibition in the CA1 region of the hippocampus by pilocarpine in naive and in amygdala–kindled rats. Michelson HB, et al.
Exp Neurol 1989 Jun;104(3):264–71
Intraoperative induced miosis in posterior chamber I.O.L. implantation. Bhatnagar R, et al. **Indian J Ophthalmol** 1987; 35(5–6):242–5
The muscarinic agonist pilocarpine inhibits DNA and interferon–gamma synthesis in peripheral blood mononuclear cells. Arzt ES, et al.
Int J Immunopharmacol 1989;11(3):275–81
Age changes in secretory function of male and female rat parotid glands in response to methoxamine and pilocarpine. Inanaga A, et al. **J Dent Res** 1988 Mar;67(3):565–73
The bimodal effect of cholinergic blocking agents on the human parotid gland deprived of parasympathetic control. Levin SL. **J Neural Transm** 1988;73(3):239–47
Pilocarpine mydriasis in mice. Koval R, et al.
J Ocul Pharmacol 1985 Summer;1(2):169–76
Ophthalmic epinephrine, phenylephrine, and pilocarpine affect the systemic absorption of ocularly applied timolol. Urtti A, et al. **J Ocul Pharmacol** 1989 Summer;5(2):127–32
Cholinergic influences on sleep–wake patterns and breathing movements in the fetus. Hinman DJ, et al.
J Pharmacol Exp Ther 1988 Oct;247(1):372–8
The effect of pilocarpine on the bovine eye uvea. Kovačik L, et al. **Klin Oczna** 1988 Apr–May;90(4–5):152–3
The influence of miotics on the visual field. Kee CW, et al. **Korean J Ophthalmol** 1987 Jun;1(1):52–8
Effects of pupillary constriction on automated perimetry in normal eyes. Lindenmuth KA, et al. **Ophthalmology** 1989 Sep;96(9):1298–301
Muscarinic receptor desensitization and downregulation induced by full and partial cholinergic agonists in rat pancreatic acini. Hootman SR, et al. **Pancreas** 1989; 4(3):315–22
Characteristics of limbic seizures evoked by peripheral injections of lithium and pilocarpine. Persinger MA, et al. **Physiol Behav** 1988;44(1):27–37
Assessment of the muscarinic receptor subtype involved in the mediation of pilocarpine–induced purposeless chewing behaviour. Stewart BR, et al.
Psychopharmacology (Berlin) 1989;97(2):228–34
The pharmacological characterisation of pilocarpine–induced purposeless chewing behaviour in the rat. Stewart BR, et al. **Psychopharmacology (Berlin)** 1988;96(1):55–62
Quantification and monitoring of visual field defects and a prospective, randomized comparison of pilocarpine and timolol using computerized perimetry. Sponsel WE.
Surv Ophthalmol 1989 Apr;33 Suppl:427–8; discussion 435–6
Overview of efficacy and local tolerability of a new timolol/pilocarpine combination. Vogel R.
Surv Ophthalmol 1989 Apr;33 Suppl:467–8; discussion 471–2
[Age–related modification of dopaminergic–cholinergic neuronal interaction in rats] Kishimoto O.
Yakubutsu Seishin Kodo 1988 Dec;8(4):443–51 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Laser trabeculoplasty versus medication treatment as primary therapy for glaucoma. Tuulonen A, et al.
Acta Ophthalmol (Copenh) 1989 Jun;67(3):275–80
Intraocular pressure response to replacing pilocarpine with carbachol. Reichert RW, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):747–8
Effects of 4% pilocarpine gel on normotensive and glaucomatous canine eyes. Carrier M, et al.
Am J Vet Res 1989 Feb;50(2):239–44
'A double–blind cross–over trial of a mucin–containing artificial saliva' [letter] Watts KD. **Br Dent J** 1989 May 6;166(9):319–20
Comparative evaluation of pilocarpine 2% and combined guanethidine 1% & adrenaline 0.5% in the treatment of chronic simple glaucoma. Mehrotra AN, et al.
Indian J Ophthalmol 1987 May–Jun;35(3):146–8
Pilocarpine isn't all that bad. Ripple PH.
Trans Pa Acad Ophthalmol Otolaryngol 1988;40:719
[Pilaren in the therapy of open–angle glaucoma] Erichev VP, et al. **Vestn Oftalmol** 1988 Sep–Oct;104(5):16–9 (Eng. Abstr.) **(Rus)**

TOXICITY

Peripheral versus central manifestations in the toxic interaction of lithium and pilocarpine. Roth D, et al.
Biol Psychiatry 1989 Jan 15;25(2):153–8
D–1 dopamine agonist administration reduces the threshold for convulsions produced by pilocarpine. Barone P, et al.
Boll Soc Ital Biol Sper 1989 Apr;65(4):337–41
[Ultrastructural changes in the conjunctiva of Cynomolgus monkeys following pilocarpine administration?] Steuhl KP, et al. **Klin Monatsbl Augenheilkd** 1988 Jun;192(6):672–6 (Eng. Abstr.) **(Ger)**

PILOERECTION see under **REFLEX**

PILONIDAL CYST

Congenital pilonidal sinus of the nose. Schache DJ, et al. **Aust N Z J Surg** 1989 Jun;59(6):511–2

COMPLICATIONS

Pilonidal sinus with an anal canal fistula. Report of a case. Accarpio G, et al. **Dis Colon Rectum** 1988 Dec;31(12):965–7 (18 ref.)

DRUG THERAPY

Phenol treatment of pilonidal sinuses of the natal cleft. Stansby G, et al. **Br J Surg** 1989 Jul;76(7):729–30

ETIOLOGY

Periareolar pilonidal abscesses in a hairdresser. Gannon MX, et al. **BMJ** 1988 Dec 24–31;297(6664):1641–2

SURGERY

Umbilical sepsis. Sroujieh AS, et al. **Br J Surg** 1989 Jul; 76(7):687–8
Recurrent squamous–cell carcinoma arising in pilonidal sinus tract—multiple flap reconstructions. Report of a case. Fasching MC, et al. **Dis Colon Rectum** 1989 Feb; 32(2):153–8
A new technique for treatment of pilonidal sinus. Obeid SA.
Dis Colon Rectum 1988 Nov;31(11):879–85
[Interdigital pilonidal sinus or barber's disease] De Wilde P, et al. **Acta Chir Belg** 1987 Sep–Oct;87(5):298–9 (Eng. Abstr.) **(Dut)**
[Morbidity of Z–plasty in the treatment of pilonidal sinus] Tschudi J, et al. **Chirurg** 1988 Jul;59(7):486–90 (Eng. Abstr.) **(Ger)**
[Open or closed therapy in pilonidal fistula] Reber M, et al. **Schweiz Rundsch Med Prax** 1988 Oct 4;77(40):1078–81 (Eng. Abstr.) **(Ger)**
[Lord and Millar method of treatment of pilonidal fistula. Experiences following 133 operations 1980–1987] Wehrli H, et al. **Schweiz Rundsch Med Prax** 1988 Oct 4; 77(40):1082–6 (Eng. Abstr.) **(Ger)**
[Treatment of pilonidal sinus. Our experience] Cimarelli S, et al. **Minerva Chir** 1989 Apr 15;44(7):1131–4 (Eng. Abstr.) **(Ita)**

THERAPY

Treatment of pilonidal sinus by phenol injection. Kelly SB, et al. **Ulster Med J** 1989 Apr;58(1):56–9

PILONIDAL SINUS see **PILONIDAL CYST**

PILOT PROJECTS

"Pilot" studies [letter] Nelson JE. **Ann Intern Med** 1989 Jul 15;111(2):188–9
Protooncogene expression and the clinical characteristics of acute nonlymphocytic leukemia: A Leukemia Intergroup pilot study. Preisler HD, et al. **Blood** 1989 Jan;73(1):255–62
Sex survey. Approval hoped for soon [news] Lindley D.
Nature 1989 Jul 13;340(6229):90

PIMARICIN

A controlled trial of house dust mite eradication using natamycin in homes of patients with atopic dermatitis: effect on clinical status and mite populations. Colloff MJ, et al. **Br J Dermatol** 1989 Aug;121(2):199–208

PHARMACOLOGY

Growth and aflatoxin production by Aspergillus parasiticus in a medium at different pH values and with or without pimaricin. Rusul G, et al. **Z Lebensm Unters Forsch** 1988 Nov;187(5):436–9

THERAPEUTIC USE

The use of 2.5% natamycin, as orally administered drops, in the treatment of fungal infections of the oral cavity in children with chronic blood diseases. Rokicka–Milewska R, et al. **J Int Med Res** 1989 Jan–Feb;17(1):82–6

PIMELIC ACIDS

BIOSYNTHESIS

Formation of a biotin precursor, pimelic acid, in yeasts from C18 fatty acids. Ohsugi M, et al.
J Nutr Sci Vitaminol (Tokyo) 1988 Aug;34(4):343–52

PHARMACOLOGY

In vivo effects of immunostimulating lipopeptides on mouse liver microsomal cytochromes P–450 and on paracetamol–induced toxicity. Migliore–Samour D, et al.
Experientia 1989 Sep 15;45(9):882–6
Immunopotentiating activities of a low molecular weight lipopeptide, RP 56 142—studies in infectious models. Floc'h F, et al. **Int J Immunopharmacol** 1988;10(7):863–73
Immunomodulating and antitumor activities of a synthetic lauroyltripeptide (RP 56 142). Fizames C, et al.
J Biol Response Mod 1989 Aug;8(4):397–408

PIMOZIDE

METABOLISM

Partition coefficients of dopamine antagonists in brain membranes and liposomes. Oliveira CR, et al.
Biochem Pharmacol 1989 Jul 1;38(13):2113–20

PHARMACOLOGY

Opioid–neuroleptic interaction in brainstem self–stimulation. Rompré PP, et al. **Brain Res** 1989 Jan 16;477(1–2):144–51
Behavioral evidence for midbrain dopamine depolarization inactivation. Rompré PP, et al. **Brain Res** 1989 Jan 16; 477(1–2):152–6
Differential effects of pimozide and SCH 23390 on acquisition of learning in mice. Ichihara K, et al. **Eur J Pharmacol** 1989 May 19;164(2):189–95
The dopaminergic regulation of gonadotropin–releasing hormone receptor binding in the pituitary of the African catfish, Clarias gariepinus. De Leeuw R, et al.
Gen Comp Endocrinol 1988 Dec;72(3):408–15
Cytological responses of the pituitary (rostral pars distalis) and immunoreactive corticotropin–releasing factor (CRF)

in the goldfish treated with dopamine antagonists. Olivereau M, et al. **Gen Comp Endocrinol** 1988 Sep; 71(3):506–15

Changes in food intake and stomach contents of tumor-bearing rats after treatment with dopamine antagonists. Sleeman M, et al. **Nutr Cancer** 1989;12(1):49–55

Force-proportional reinforcement: pimozide does not reduce rats' emission of higher forces for sweeter rewards. Kirkpatrick MA, et al. **Pharmacol Biochem Behav** 1989 Feb; 32(2):499–504

Main effects of current and pimozide on prepared and learned self-stimulation behaviors are on performance not reward. Mekarski JE. **Pharmacol Biochem Behav** 1988 Dec; 31(4):845–53

Assessment of pimozide's motor and hedonic effects on operant behavior in rats. Porter JH, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):779–86

Behavioural microanalysis of the role of dopamine in amphetamine anorexia. Towell A, et al. **Pharmacol Biochem Behav** 1988 Jul;30(3):641–8

Observations on dopamine receptor antagonists and gastric ulceration associated with experimental anorexia cachexia. Willis GL, et al. **Pharmacol Biochem Behav** 1988 Sep; 31(1):69–73

The effects of a D1 and a D2 dopamine antagonist on behavior maintained by cocaine or food. Woolverton WL, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):691–7

Scopolamine produces environment-specific conditioned activity that is not blocked by pimozide in rats. Mazurski EJ, et al. **Psychopharmacology (Berlin)** 1988;96(3):375–80

Effects of pimozide, across doses and within sessions, on discriminated lever release performance in rats. Skjoldager P, et al. **Psychopharmacology (Berlin)** 1988;96(1):21–8

THERAPEUTIC USE

Treatment of monosymptomatic hypochondriacal psychosis with pimozide in an AIDS patient [letter] Holmes VF. **Am J Psychiatry** 1989 Apr;146(4):554–5

Controlled study of haloperidol, pimozide and placebo for the treatment of Gilles de la Tourette's syndrome. Shapiro E, et al. **Arch Gen Psychiatry** 1989 Aug;46(8):722–30

Pimozide therapy for trigeminal neuralgia. Lechin F, et al. **Arch Neurol** 1989 Sep;46(9):960–3

The Scottish First Episode Schizophrenia Study V. One-year follow-up. The Scottish Schizophrenia Research Group. **Br J Psychiatry** 1988 Apr;152:470–6

A specific delusion in a schizophrenic patient treated with pimozide [letter] Rapp MS, et al. **Can J Psychiatry** 1988 Dec;33(9):873–4

Definite and sustained improvement with pimozide of two patients with severe trigeminal neuralgia. Some neurochemical, neurophysiological and neuroendocrinological findings. Lechin F, et al. **J Med** 1988;19(3–4):243–56

An evaluation of Tourette syndrome and medication use in Canada. Fulton WA, et al. **Neurosci Biobehav Rev** 1988 Fall-Winter;12(3–4):251–4

Biochemical pharmacology of Gilles de la Tourette's syndrome. Messiha FS. **Neurosci Biobehav Rev** 1988 Fall-Winter;12(3–4):295–305 (187 ref.)

Tourette's medications: effect on minor oxidative and reductive pathways of biogenic amines. Messiha FS. **Neurosci Biobehav Rev** 1988 Fall-Winter;12(3–4):215–8

PINDOLOL

ADVERSE EFFECTS

Pindolol-induced tremor. Koller W, et al. **Clin Neuropharmacol** 1987 Oct;10(5):449–52

Effects of pindolol on serum lipids, apolipoproteins, and lipoproteins in patients with mild to moderate essential hypertension. Sasaki J, et al. **Clin Ther** 1989 Mar–Apr; 11(2):219–24

Long-term effect of pindolol on lipids and lipoproteins in men with newly diagnosed hypertension. Terént A, et al. **Eur J Clin Pharmacol** 1989;36(4):347–50

Paradoxical response to pindolol treatment for aggression in a patient with Huntington's disease [letter] von Hafften AH, et al. **J Clin Psychiatry** 1989 Jun;50(6):230–1

ANALOGS & DERIVATIVES

Haemodynamic effects of atenolol and bopindolol at rest and during isometric exercise. A non-invasive study in healthy volunteers. Nieminen MS, et al. **Ann Clin Res** 1988; 20(6):431–5

Cardiohemodynamic effects of bopindolol in normotensive conscious dogs. A comparative study with pindolol. Ishibashi T, et al. **Arzneimittelforschung** 1989 Apr; 39(4):454–7

125I-iodopindolol binding to frog esophageal peptic cells. Detection of amine uptake and beta-adrenergic receptors coupled to pepsinogen secretion. Dickinson KE, et al. **Biochem Pharmacol** 1989 May 1;38(9):1481–9

Persistent beta-adrenoceptor blockade with alkylating pindolol (BIM) in guinea-pig left atria and trachea. Molenaar P, et al. **Biochem Pharmacol** 1988 Oct 1; 37(19):3601–7

Lymphocyte beta-adrenoreceptor density in patients with unipolar depression and normal controls. Magliozzi JR, et al. **Biol Psychiatry** 1989 May;26(1):15–25

Effect of nedocromil sodium on down-regulation of pulmonary beta-adrenoceptors. Kioumis I, et al. **Clin Sci** 1989 Jun;76(6):599–602

The effect of bopindolol on lipids and platelet aggregation. Pintérová E, et al. **Cor Vasa** 1988;30(5):352–60

Bopindolol in the treatment of moderate hypertension: a dose-response study. Moleur P, et al. **Fundam Clin Pharmacol** 1988;2(5):431–40

Bopindolol: long-term effects on blood pressure, renal function, plasma renin activity, and plasma aldosterone in mild-to-moderate essential hypertension. Shohat J, et al. **Fundam Clin Pharmacol** 1989;3(1):53–8

Reovirus type 3 and [125I]-iodocyanopindolol bind to distinct domains on the beta-adrenergic like receptor. Liu J, et al. **Immunol Res** 1988;7(3):232–8

Development of beta 1 and beta 2 adrenergic receptors in baboon brain: an autoradiographic study using [125I]iodocyanopindolol. Slesinger PA, et al. **J Comp Neurol** 1988 Jul 15;273(3):318–29

Beta-adrenoceptors in the extraorbital lacrimal gland of the Syrian hamster. Characterization with [125I]-iodopindolol and evidence of sexual dimorphism. Pangerl A, et al. **J Neural Transm** 1989;77(2–3):153–62

Demonstration of beta 1-adrenergic receptors in human placenta by (–)[125I]iodocyanopindolol binding. Paci A, et al. **J Nucl Med Allied Sci** 1989 Jan–Mar;33(1):15–21

Characterization of a bromoacetylated derivative of pindolol as a high affinity, irreversible beta adrenergic antagonist in cultured cells. Jasper JR, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):820–4

Kinetics of (–)125iodocyanopindolol binding to intact human mononuclear cells. Graafsma SJ, et al. **J Recept Res** 1988; 8(6):773–85

Selectivity of bunitrolol for beta 1- and beta 2-adrenergic receptors and 5HT1B-receptors: assessment by biphasic Scatchard plots and biphasic displacement curve analysis with 125I-iodocyanopindolol and 3H-CGP12177. Tsuchihashi H, et al. **Jpn J Pharmacol** 1989 Jun; 50(2):93–100

Analytical problems encountered during high-performance liquid chromatographic separation and coulometric detection of bopindolol metabolites in human plasma. Perkins SL, et al. **Ther Drug Monit** 1988;10(4):480–5

[Beta receptor block versus calcium antagonism. A comparative study of bopindolol and nifedipine with special regard to quality of life] Welzel D, et al. **Arzneimittelforschung** 1989 Apr;39(4):499–503 (Eng. Abstr.) **(Ger)**

[Bopindolol in the treatment of mild and moderate arterial hypertension] Monaci R, et al. **Minerva Cardioangiol** 1988 Oct;36(10):495–7 (Eng. Abstr.) **(Ita)**

[Antihypertensive effect of bopindolol on stroke-prone spontaneously hypertensive rats (SHRSP)] Yamashita K, et al. **Nippon Yakurigaku Zasshi** 1989 Jan;93(1):7–15 (Eng. Abstr.) **(Jpn)**

ANALYSIS

[The reactions of pindolol in aqueous solutions] Kertész P, et al. **Arch Pharm (Weinheim)** 1988 Jul;321(7):435–7 **(Ger)**

METABOLISM

Noradrenergic innervation does not affect chronic regulation of [125I]pindolol receptors in fetal rat brain transplants or host neocortex. Levin BE, et al. **Brain Res** 1989 Aug 14; 494(2):325–38

Beta 1- and beta 2-adrenergic 125I-pindolol binding sites in the interpeduncular nucleus of the rat: normal distribution and the effects of deafferentation. Battisti WP, et al. **J Neurosci** 1989 Jul;9(7):2509–18

PHARMACOLOGY

Effects of propranolol and pindolol on plasma ANP levels in humans at rest and during exercise. Bouissou P, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R259–64

Cardiohemodynamic effects of bopindolol in normotensive conscious dogs. A comparative study with pindolol. Ishibashi T, et al. **Arzneimittelforschung** 1989 Apr; 39(4):454–7

Differential effects of amiodarone and propranolol on lipid dynamics and enzymatic activities in cardiac sarcolemmal membranes. Chatelain P, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1231–9

Exercise haemodynamic effects of beta-blockade and intrinsic sympathomimetic activity. Ades PA, et al. **Eur J Clin Pharmacol** 1989;36(1):5–10

Catecholaminergic and opioidergic mechanisms involved in the hypotensive response of pindolol. Jones LF, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):123–8

Discrepancy between central sympathoinhibitory action and peripheral hemodynamic effects of pindolol in anesthetized rats. Yoshioka M, et al. **Hokkaido Igaku Zasshi** 1988 Nov; 63(6):957–62

The effect of betablockers with and without ISA on tonographic outflow facility. Diestelhorst M, et al. **Int Ophthalmol** 1989 Jan;13(1–2):63–5

Effect of beta-adrenoceptor blockade on renin-aldosterone and alpha-ANF during exercise at altitude. Bouissou P, et al. **J Appl Physiol** 1989 Jul;67(1):141–6

Antagonism by pindolol, but not betaxolol, of 8-OH-DPAT-induced facilitation of male rat sexual behavior. Ahlenius S, et al. **J Neural Transm** 1989; 77(2–3):163–70

Influence of pindolol and timolol treatment on the visual fields of glaucoma patients. Flammer J, et al. **J Ocul Pharmacol** 1986 Fall;2(4):305–11

Action of Viskaldix on serum lipids and lipoproteins. Völgyi Z, et al. **Ther Hung** 1988;36(2):62–6

[Hemodynamic effect of propranolol and pindolol in rabbits in vivo] Geršl V. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1988;31(1):15–25 (Eng. Abstr.) **(Cze)**

[Influence of pindolol on maternal cardiovascular parameters and contractility of the puerperal uterus] Egarter C, et al. **Z Geburtshilfe Perinatol** 1988 May-Jun;192(3):123–5 (Eng. Abstr.) **(Ger)**

[Hemodynamic effects of hydrochlorothiazide, propranolol and a combination of pindolol and clopamide in patients with essential hypertension] Meza N, et al. **Rev Esp Cardiol** 1989 May;42(5):304–8 (Eng. Abstr.) **(Spa)**

THERAPEUTIC USE

Acute hemodynamic effects of pindolol and propranolol in patients with dilated cardiomyopathy: relevance of intrinsic sympathomimetic activity. Shanes JG, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1268–75

Comparison of the effects of pindolol and propranolol on exercise performance in young men with systemic hypertension. Martin NB, et al. **Am J Cardiol** 1989 Aug 1;64(5):343–7

Improved blood pressure control with isradipine in hypertensive patients treated with pindolol. Frithz G, et al. **Am J Med** 1989 Apr 17;86(4A):115–8

Effect of pindolol versus atenolol on lipid profile in hypertensive patients. Notghi A, et al. **Atherosclerosis** 1989 Jun;77(2–3):215–20

Hemodynamic and hormonal adaptations to beta-adrenoceptor blockade. A 24-hour study of acebutolol, atenolol, pindolol, and propranolol in hypertensive patients. van den Meiracker AH, et al. **Circulation** 1988 Oct;78(4):957–68

Pindolol, not verapamil, in combination with digoxin is the treatment of choice in chronic atrial fibrillation [letter] Channer KS, et al. **Clin Sci** 1989 Feb;76(2):229–30

Improved control of atrial fibrillation with combined pindolol and digoxin therapy. James MA, et al. **Eur Heart J** 1989 Jan;10(1):83–90

Effects of pindolol, or a pindolol/clopamide combination preparation, on plasma lipid levels in essential hypertension. Hunter Hypertension Research Group. **Med J Aust** 1989 Jun 5;150(11):646, 648, 651–2 (17 ref.)

Treatment of behavioral problems with pindolol. Greendyke RM, et al. **Psychosomatics** 1989 Spring;30(2):161–5

[Comparative effects of pindolol and atenolol on blood pressure and lipids in mild to moderate arterial hypertension] Herpin D, et al. **Ann Med Interne (Paris)** 1988;139(7):484–7 (28 ref.) (Eng. Abstr.) **(Fre)**

[Clinical significance of intrinsic sympathomimetic activity of the beta blocker carteolol. II: Comparative studies of carteolol and pindolol in patients with bradycardia] Lohmöller G, et al. **Med Klin** 1989 Feb 15;84(2):81–5 (Eng. Abstr.) **(Ger)**

[Pindolol treatment of intraoperative supraventricular arrhythmia] Bandiera A, et al. **Minerva Anestesiol** 1987 Nov;53(11):613–6 (Eng. Abstr.) **(Ita)**

[Adrenergic beta receptor blockaders with intrinsic sympathomimetic activity in the treatment of arterial hypertension] Pyda M, et al. **Kardiol Pol** 1988;31(4):261–70 (42 ref.) **(Pol)**

[Effect of pindolol treatment on left-ventricular systolic and diastolic time intervals in men with borderline primary arterial hypertension] Gross-Sawicka E, et al. **Pol Tyg Lek** 1988 Jul 4;43(27):880–4 (Eng. Abstr.) **(Pol)**

[Effect of the treatment with pindolol and clopamide on left-ventricular systolic and diastolic time intervals in patients with moderate primary arterial hypertension] Gross-Sawicka E, et al. **Pol Tyg Lek** 1988 Jul 4; 43(27):885–8 (Eng. Abstr.) **(Pol)**

[Use of viskaldix in the treatment of patients with hypertension] Mikunis RI, et al. **Klin Med (Mosk)** 1988 Oct;66(10):62–4 (Eng. Abstr.) **(Rus)**

[Treatment of hypertension with hydrochlorothiazide and pindolol—good for the lipid pattern] Frithz G. **Lakartidningen** 1989 Jul 12;86(28–29):2531–3 **(Swe)**

PINEAL BODY

Surgical approach to pineal tumours. Pluchino F, et al. **Acta Neurochir (Wien)** 1989;96(1–2):26–31

Effects of electrical stimulation of the superior cervical ganglia on the number of "synaptic" ribbons and the activity of melatonin-forming enzymes in the rat pineal gland. Reuss S, et al. **Anat Embryol (Berl)** 1989;179(4):341–5

Tumours of the pineal region. Macfarlane R, et al. **Br J Hosp Med** 1989 Jun;41(6):548–53 (29 ref.)

Metastases to pineal gland. Weber P, et al. **Cancer** 1989 Jan 1;63(1):164–5

Cysts of the pineal gland. A new clinical entity to be distinguished from tumors of the pineal region. Tamaki N, et al. **Childs Nerv Syst** 1989 Jun;5(3):172–6

The effect of retinal S-antigen-specific monoclonal antibody therapy on experimental autoimmune uveoretinitis (EAU)

and experimental autoimmune pinealitis (EAP). Dua HS, et al. **Clin Exp Immunol** 1989 Jan;75(1):100–5

An 18–mer peptide derived from the retinal S antigen induces uveitis and pinealitis in primates. Hirose S, et al. **Clin Exp Immunol** 1989 Jul;77(1):106–11

Effect of pineal treatment on rat HDL–cholesterol under basal conditions and under stimulation with HCG. Damian E, et al. **Endocrinologie** 1989 Jan–Mar;27(1):9–16

Identification of an immunodominant and highly immunopathogenic determinant in the retinal interphotoreceptor retinoid–binding protein (IRBP). Sanui H, et al. **J Exp Med** 1989 Jun 1;169(6):1947–60

Immunoreactive S–antigen in cerebrospinal fluid: a marker of pineal parenchymal tumors? Korf HW, et al. **J Neurosurg** 1989 May;70(5):682–7

Problems and perspectives of diagnostic imaging: the pineal region. Passerini A, et al. **J Neurosurg Sci** 1989 Jan–Mar; 33(1):15–7

Changes in immunoreactivity in S–antigen–induced pinealitis. Das ND, et al. **J Pineal Res** 1989;6(1):9–16

Intensive chemotherapy followed by autologous bone marrow transplantation for a patient having wide–spread embryonal carcinoma in the central nervous system. Tsukada T, et al. **Jpn J Clin Oncol** 1989 Mar;19(1):67–71

CSF placental alkaline phosphatase as marker in cranial dysgerminoma [letter] Ramakrishnan S, et al. **Lancet** 1989 Jul 22;2(8656):225

Ectopic pinealoma in the region of the optic chiasma. Dănăilă L, et al. **Neurol Psychiatr (Bucur)** 1989 Jan–Mar;27(1):57–65

A case of malignant teratoma developing from the septum pellucidum 7 years after removal of a mature teratoma in the pineal region. Kamiya K, et al. **Surg Neurol** 1988 Dec; 30(6):462–7

Occipital transtentorial approach for removal of pineal region tumors: report of 64 consecutive cases. Luo SQ, et al. **Surg Neurol** 1989 Jul;32(1):36–9

Symptomatic glial cysts of the pineal gland. Vaquero J, et al. **Surg Neurol** 1988 Dec;30(6):468–70

[Surgical treatment of tumors of the pineal region using the right occipital supratentorial approach] Chen KF. **Chung Hua Wai Ko Tsa Chih** 1988 Sep;26(9):563–4, 575 (Eng. Abstr.) **(Chi)**

[The value of magnetic resonance tomography during radiotherapy of childhood tumors in the posterior fossa and the pineal region] Baierl P, et al. **ROFO** 1989 Jun; 150(6):663–9 (Eng. Abstr.) **(Ger)**

[Space–occupying lesions in the pineal region—MRT using Gd–DTPA] Kahn T, et al. **ROFO** 1989 Jun;150(6):657–62 (Eng. Abstr.) **(Ger)**

[Space–occupying lesions of the pineal region in magnetic resonance tomography] Neuhold A, et al. **ROFO** 1989 Aug; 151(2):210–5 (Eng. Abstr.) **(Ger)**

[Primary intracranial, AFP and/or HCG producing tumors with special reference to results of the treatment] Sakai N, et al. **Gan To Kagaku Ryoho** 1988 Dec;15(12):3297–300 **(Jpn)**

[Spinal metastasis detected 11 years after initial treatment for pineal germ cell tumor. Case report] Kunishio K, et al. **Neurol Med Chir (Tokyo)** 1988 May;28(5):491–7 (Eng. Abstr.) **(Jpn)**

[Surgical approaches to pineal tumors: complications and outcome] Nagao S, et al. **Neurol Med Chir (Tokyo)** 1988 Aug;28(8):779–85 (Eng. Abstr.) **(Jpn)**

[Radiotherapy of the pineal region tumors—analysis of the treatment technique] Nishino S, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Apr 20;23(4):822–8 (Eng. Abstr.) **(Jpn)**

[Pineal metastatic tumor from lung cancer initially caused by neurological abnormalities of pineal body tumor] Keyaki A, et al. **No Shinkei Geka** 1989 May;17(5):495–9 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Enkephalin–like immunoreactivity in neurons in the human pineal gland. Moore RY, et al. **Brain Res** 1988 Aug 9; 457(2):395–8

Effect of a pineal indolamine, 5–methoxyindole–3–acetic acid, on the estrous cycle and reproductive organs of female Wistar albino rats. Ocal–Irez T, et al. **Brain Res** 1989 Jul 24;493(1):1–7

Immunoelectron microscopy of rhodopsin and vitamin A in the pineal organ and lateral eye of the lamprey. Vigh–Teichmann I, et al. **Exp Biol** 1989;48(4):203–13

Effect of environmental temperature and photoperiod on the melatonin levels in the pineal, lateral eye, and plasma of the frog, Rana perezi: importance of ocular melatonin. Delgado MJ, et al. **Gen Comp Endocrinol** 1989 Jul; 75(1):46–53

Ultrastructural study of the distribution of calcium in the pineal gland of the rat subjected to manipulation of the photoperiod. Pizarro MD, et al. **Histochemistry** 1989; 92(2):161–9

Melatonin and other indoles in rat pineal. Chin JL. **J Chromatogr** 1988 Jun 24;428(1):206–8

Predominant cytosolic distribution of serotonin in rat pineal gland in contrast to biogenic monoamine localization in midbrain and adrenal gland. Boschi G, et al. **J Pineal Res** 1989;7(1):23–9

Status of dopamine in bovine pineal glands and the stimulation of N–acetyltransferase activity by D2–dopaminergic receptor agonists in the rat pineal glands in culture. Govitrapong P, et al. **J Pineal Res** 1989; 6(1):17–31

Characterization of a neurohypophyseal hormone–like activity isolated from ovine pineal glands. Noteborn HP, et al. **J Pineal Res** 1988;5(6):573–87

Radioimmunoassay for melatonin and its application to fowl pineal research. Sigüenza AF, et al. **Rev Esp Fisiol** 1988 Jun;44(2):221–6

Serotonin and melatonin contents in the pineal glands from different stocks and strains of laboratory rats. Vollrath L, et al. **Z Versuchstierkd** 1989;32(2):57–63

[Increase in the longevity and decrease in the tumor incidence in mice given polypeptide thymus and epiphysis factors at different age] Anisimov VN, et al. **Dokl Akad Nauk SSSR** 1988;302(2):473–6 **(Rus)**

ANATOMY & HISTOLOGY

Central projections of the pineal complex in the silver lamprey Ichthyomyzon unicuspis. Puzdrowski RL, et al. **Cell Tissue Res** 1989 Feb;255(2):269–74

Neuropeptide Y–containing neurons in the rat superior cervical ganglion: projections to the pineal gland. Reuss S, et al. **J Pineal Res** 1989;6(4):307–16

Pineal corpora arenacea produced by arachnoid cells in the bat Myotis blythi oxygnathus. Vigh B, et al. **Z Mikrosk Anat Forsch** 1989;103(1):36–45

[Study on the innervation of guinea pig pineal gland—with the methods of fluorescence and acetylcholinesterase] Bao TR, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec; 19(4):354–8 (Eng. Abstr.) **(Chi)**

[Changes in the morphology of the epiphysis of silver foxes during domestication] Kolesnikova LA, et al. **Zh Obshch Biol** 1988 Jul–Aug;49(4):487–92 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Acetylcholinesterase–positive intrapineal neuronal system in the palm squirrel Funambulus pennanti (Wroughton). Bhaskar KS, et al. **Biol Struct Morphog** 1989;2(1):7–11

Phenotypic expression of photoreceptor and endocrine cell properties by cultured pineal cells of the newborn rat. Araki M, et al. **Cell Differ Dev** 1988 Nov;25(2):155–63

Twenty–four–hour changes in pinealocytes, capillary endothelial cells and pericapillary and intercellular spaces in the pineal gland of the mouse. Semiquantitative electron–microscopic observations. Matsushima S, et al. **Cell Tissue Res** 1989 Feb;255(2):323–32

Principal neurons projecting to the pineal gland in close association with small intensely fluorescent cells in the superior cervical ganglion of rats. Reuss S, et al. **Cell Tissue Res** 1988 Oct;254(1):97–100

Pinealocytes immunoreactive with antisera against secretory glycoproteins of the subcommissural organ: a comparative study. Rodríguez EM, et al. **Cell Tissue Res** 1988; 254(3):469–80

Neuronal degeneration in the pineal ganglion during the post–hatching development of the domestic fowl. Sato T, et al. **Cell Tissue Res** 1988 Oct;254(1):25–30

"Light" and "dark" pinealocytes of the porcine pineal gland. Przybylska B. **Z Mikrosk Anat Forsch** 1989;103(2):329–35

[Histologic and histometric studies of the epiphysis cerebri of the fattening guinea fowl (Meleagris gallopavo) after the use of different light regimens] Gutte G, et al. **Arch Exp Veterinarmed** 1989 May;43(3):471–80 (Eng. Abstr.) **(Ger)**

DRUG EFFECTS

Forskolin stimulates pinealocyte cGMP accumulation. Dramatic potentiation by an alpha 1–adrenergic——[Ca2+]i mechanism involving protein kinase C. Ho AK, et al. **FEBS Lett** 1989 Jun 5;249(2):207–12

Diurnal variation in norepinephrine–stimulated release of pineal serotonin in vitro. Benson B, et al. **J Neural Transm** 1989;78(1):89–101

Ethanol enhancement of isoproterenol–stimulated melatonin and cyclic AMP release from cultured pineal glands. Chung CT, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):16–22

Effect of psychotropic drugs on the contents of melatonin, serotonin and N–acetylserotonin in rat pineal gland. Wakabayashi H, et al. **Jpn J Pharmacol** 1989 Feb; 49(2):225–34

12–Hydroperoxyeicosatetraenoic acid (12–HPETE) and 15–HPETE stimulate melatonin synthesis in rat pineals. Sakai K, et al. **Prostaglandins** 1988 Jun;35(6):969–76

The effect of estradiol on quantitative changes in the ultrastructure of pinealocyte structures in sexually immature female domestic pigs. Przybylska B, et al. **Z Mikrosk Anat Forsch** 1988;102(4):533–40

[The pharmacology of the epiphysis] Arushanian EB, et al. **Farmakol Toksikol** 1988 Sep–Oct;51(5):105–11 (83 ref.) **(Rus)**

EMBRYOLOGY

Pineal and retinal photoreceptors in embryonic Rivulus marmoratus poey. Ali MA, et al. **Anat Anz** 1988; 167(5):359–69

An embryonic pineal body as a multipotent system in cell differentiation. Watanabe K, et al. **Development** 1988 May; 103(1):17–26

ENZYMOLOGY

Ontogeny of pineal protein kinase C activity. Sugden D. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):701–6

Testicular dysfunction in experimental chronic renal insufficiency: a deficiency of nocturnal pineal N–acetyltransferase activity. Holmes EW, et al. **Br J Exp Pathol** 1989 Jun;70(3):349–56

Mechanism of the re–entrainment of the circadian rhythm in the rat pineal N–acetyltransferase activity to an eight–hour advance of the light–dark cycle: phase–jump is involved. Illnerová H. **Brain Res** 1989 Aug 14; 494(2):365–8

Pineal lysosomal enzymes in the Syrian hamster: circadian rhythm and effects of castration or short photoperiod treatment. Vaughan MK, et al. **Brain Res** 1989 Jun 12; 489(2):318–24

An antiserum against chicken hydroxyindole–O–methyltransferase reacts with the enzyme from pineal gland and retina and labels pineal modified photoreceptors. Voisin P, et al. **Brain Res** 1988 Aug;464(1):53–61

Failure of urethane anesthetic to block induction of pineal serotonin N–acetyltransferase activity in the rat. Shivers BD. **Brain Res Bull** 1978 Nov–Dec;3(6):579–81

Differential responses of rat pineal thyroxine type II 5'–deiodinase and N–acetyltransferase activities to either light exposure, isoproterenol, phenylephrine, or propranolol. Guerrero JM, et al. **Cell Mol Neurobiol** 1988 Dec;8(4):447–58

Cytochemical localization of type–A and –B monoamine oxidase in the rat pineal gland. Masson–Pévet M, et al. **Cell Tissue Res** 1989 Feb;255(2):299–305

Xylamine enhances pineal gland N–acetyltransferase activity in vitro. Haak KA, et al. **Gen Pharmacol** 1989;20(1):77–80

Photoperiod modifies daily maps of light and dark sensitivity for N–acetyltransferase activity in pineal glands of 3–week old Gallus domesticus. Binkley S, et al. **J Comp Physiol [B]** 1989;159(1):37–42

Possible mechanisms of inhibition and activation of rat N–acetyltransferase (EC 2.3.1.5.) by cations. Morton DJ. **J Neural Transm** 1989;75(1):51–64

Probable mechanism of catalysis of pineal gland hydroxyindole–O–methyltransferase (HIOMT) from rainbow trout (Salmo gairdneri). Morton DJ, et al. **J Neural Transm** 1989;75(1):65–71

Effects of steroids on serotonin–N–acetyltransferase activity of pineals in organ culture. Yuwiler A. **J Neurochem** 1989 Jan;52(1):46–53

Histochemical localization of cyclic 3',5'–AMP phosphodiesterase in rat pineal gland. Chons MH, et al. **J Pineal Res** 1988;5(4):345–50

Permissive role of calcium in alpha 1–adrenergic stimulation of pineal phosphatidylinositol phosphodiesterase (phospholipase C) activity. Ho AK, et al. **J Pineal Res** 1988;5(6):553–64

Pineal gland hydroxyindole–O–methyl transferase (HIOMT) from rainbow trout (Salmo gairdneri) subject to temperature–dependent substrate inhibition by N–acetylserotonin. Morton DJ, et al. **J Pineal Res** 1989; 7(1):31–6

Inhibition of the catalytic activity of bovine pineal gland hydroxyindole–O–methyltransferase (EC 2.1.1.4) by estrone, estradiol, progesterone, and testosterone but not pteridines. Morton DJ, et al. **J Pineal Res** 1989;6(3):259–65

Measurement of tryptophan hydroxylase activity in rat pineal glands and pinealocytes using an HPLC assay with electrochemical detection. Sugden D, et al. **J Pineal Res** 1989;6(3):285–92

Catecholaminergic mechanisms mediate hypothermia–induced elevations in pineal gland N–acetyltransferase in neonatal rats. Torres G, et al. **J Pineal Res** 1989;6(1):43–53

Rapid adjustment of the pineal N–acetyltransferase rhythm to change from long to short photoperiod in the Japanese quail (Coturnix coturnix japonica). Zeman M, et al. **J Pineal Res** 1988;5(6):565–71

Effects of acute ethanol administration on nocturnal pineal serotonin N–acetyltransferase activity. Creighton JA, et al. **Life Sci** 1988;43(24):2007–14

Comparison of isoproterenol and dibutyryl adenosine cyclic 3',5'–monophosphate stimulation of thyroxine 5'–deiodinase activity in cultured pineal glands from euthyroid and hypothyroid rats. Murakami M, et al. **Life Sci** 1989; 44(6):425–9

Comparison of the nocturnal temporal profiles of N–acetyl–transferase and thyroxine 5'–deiodinase in rat pineal. Murakami M, et al. **Neuroendocrinology** 1989 Jul; 50(1):88–92

Immunohistochemical demonstration of tyrosine hydroxylase (TH)–positive but dopamine beta–hydroxylase (DBH)–negative neuron–like cells in the pineal gland of golden hamsters. Jin KL, et al. **Neurosci Lett** 1988 Oct 31;93(1):28–31

Pineal gland N–acetyltransferase and hydroxyindole–O–methyltransferase activity in the rainbow trout (Salmo gairdneri): seasonal variation linked to photoperiod. Morton DJ, et al. **Neurosci Lett** 1988 Dec 5;94(3):333–7

An efficient strategy for cloning 5' extremities of rare transcripts permits isolation of multiple 5'–untranslated regions of rat tryptophan hydroxylase mRNA. Delort J, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6439–48

Evidence that rat pineal thyroxine 5'-deiodinase is primarily stimulated by beta- and not alpha-adrenergic agonists and that its adrenergic-stimulated and spontaneous rhythmic nocturnal rise require RNA and protein synthesis. Murakami M, et al. **Proc Soc Exp Biol Med** 1989 Feb; 190(2):190–4

Underfeeding and exposure to short photoperiod alters rat pineal and Harderian gland lysosomal enzyme activities. Vaughan MK, et al. **Proc Soc Exp Biol Med** 1988 Nov; 189(2):211–6

Peptide T does not affect induction of pineal N-acetyltransferase by vasoactive intestinal peptide. Yuwiler A, et al. **Regul Pept** 1989 Apr;25(1):69–73

GROWTH & DEVELOPMENT

Ontogeny of human pineal gland. Min KW. **J Child Neurol** 1988 Oct;3(4):275

Rhythm development in pineal and circulating serotonin, N-acetylserotonin, and melatonin in Syrian hamsters. Sato T, et al. **J Pineal Res** 1989;7(1):45–54

Ontogeny of tyrosine hydroxylase-positive but dopamine beta-hydroxylase-negative neuron-like cells in the pineal gland of golden hamsters. Jin KL, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):41–5

IMMUNOLOGY

Rat T-cell lines specific to a nonimmunodominant determinant of a retinal protein (IRBP) produce uveoretinitis and pinealitis. Hu LH, et al. **Cell Immunol** 1989 Aug;122(1):251–61

Rat pineal S-antigen: sequence analysis reveals presence of alpha-transducin homologous sequence. Abe T, et al. **FEBS Lett** 1989 Apr 24;247(2):307–11

INNERVATION

Noradrenergic innervation of human pineal gland: abnormalities in aging and Alzheimer's disease. Jengeleski CA, et al. **Brain Res** 1989 Mar 6;481(2):378–82

METABOLISM

Presence and distribution of LHRH- and alpha-MSH-like immunoreactive nerve fibers in the epithalamus of the sheep. Cozzi B. **Acta Anat (Basel)** 1989;135(2):105–10

The in vitro activation of cyclic AMP production by either forskolin or isoproterenol in the Syrian hamster pineal during the day is not accompanied by an increase in melatonin production. Santana C, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):930–6

Synthesis of melatonin by the pineal modified photoreceptors of birds immunocytochemical localization of hydroxyindole-O-methyltransferase. Guerlotte J, et al. **Biol Cell** 1988;64(1):93–6

Beta-adrenergic stimulation prior to darkness advances the nocturnal increase of Syrian hamster pineal melatonin synthesis. Gonzalez-Brito A, et al. **Brain Res** 1988 Dec 20;475(2):393–6

Twenty-four hour variation of alpha 1-adrenergic receptors in the pineal gland of the male Syrian hamster. Pangerl A, et al. **Brain Res** 1989 Jun 19;490(1):166–9

Twenty-four-hour pineal melatonin synthesis in the vasopressin-deficient Brattleboro rat. Schröder H, et al. **Brain Res** 1988 Sep 6;459(2):328–32

Pineal indoleamine metabolism in pyridoxine-deficient rats. Viswanathan M, et al. **Brain Res** 1988 Nov 8;473(1):37–42

The effects of melatonin and pinealectomy upon local cerebral glucose utilization in awake unrestrained rats are restricted to a few specific regions. Vitte PA, et al. **Brain Res** 1989 Jun 12;489(2):273–82

Relationship between light, calcium influx and cAMP in the acute regulation of melatonin production by cultured chick pineal cells. Zatz M. **Brain Res** 1989 Jan 16;477(1–2):14–8

Does calcium influx regulate melatonin production through the circadian pacemaker in chick pineal cells? Effects of nitrendipine, Bay K 8644, Co2+, Mn2+, and low external Ca2+. Zatz M, et al. **Brain Res** 1988 Nov 1;463(2):305–16

Retinoids in the bovine pineal gland. Phillips TS, et al. **Brain Res Bull** 1989 Feb;22(2):259–61

Release and effect of gamma-aminobutyric acid (GABA) on rat pineal melatonin production in vitro. Rosenstein RE, et al. **Cell Mol Neurobiol** 1989 Jun;9(2):207–19

Immunohistochemical demonstration and radioimmunoassay of melatonin in the mink pineal gland. Tillet Y, et al. **Cell Tissue Res** 1989 Jul;257(1):23–8

Pineal melatonin content in photoperiodically responsive and non-responsive phenotypes of deer mice. Blank JL, et al. **Comp Biochem Physiol [A]** 1988;91(3):535–7

Cholinergic stimulation of phosphoinositide hydrolysis in the rat pineal gland. Laitinen JT, et al. **Eur J Pharmacol** 1989 Feb 28;161(2–3):237–40

A novel photopigment candidate in membranes of cultured chick pineal cells. Wallingford JC, et al. **Exp Eye Res** 1988 Jun;46(6):909–18

[3H]AHN 086 acylates peripheral benzodiazepine receptors in the rat pineal gland. McCabe RT, et al. **FEBS Lett** 1989 Feb 27;244(2):263–7

Effect of ambient temperature on serotonin, norepinephrine, and epinephrine contents in the pineal-paraphyseal complex of the soft-shelled turtle (Lissemys punctata punctata). Mahapatra MS, et al. **Gen Comp Endocrinol** 1989 May;74(2):215–20

An immunocytochemical study of thyrotropin releasing hormone in the porcine, ovine and rodent pineal gland. Lew GM. **Histochemistry** 1989;91(1):43–6

Meningeal calcification of the rat pineal organ. Finestructural localization of calcium-ions. Vigh B, et al. **Histochemistry** 1989;91(2):161–8

Effects of thyroid hormone on light/dark melatonin synthesis and release by young and maturing rat pineal glands in vitro. Catala MD, et al. **Int J Dev Neurosci** 1988;6(3):285–8

A comparison of some photoreceptor characteristics in the pineal and retina. II. The Djungarian hamster (Phodopus sungorus). Foster RG, et al. **J Comp Physiol [A]** 1989 Aug; 165(4):565–72

Day-night rhythm of 5-methoxytryptamine biosynthesis in the pineal gland of the golden hamster (Mesocricetus auratus). Galzin AM, et al. **J Endocrinol** 1988 Sep; 118(3):389–97

Pineal sensitivity to nighttime swimming stress changes during the active season in Richardson's ground squirrels (Spermophilus richardsonii). Tannenbaum MG, et al. **J Exp Zool** 1989 Jun;250(3):298–303

Presence of a metallothionein-like protein in the bovine pineal gland. Awad A, et al. **J Neural Transm** 1989; 76(2):129–44

Low temperature in the golden hamster accelerates the gonadal atrophy induced by short photoperiod but does not affect the daily pattern of melatonin secretion. Pévet P, et al. **J Neural Transm** 1989;76(2):119–28

Gamma aminobutyric acid uptake, release, and effect on 36Cl—influx in bovine pineal gland. Rosenstein RE, et al. **J Neural Transm** 1989;77(2–3):141–52

Neither the pituitary gland nor the sympathetic nervous system is responsible for eliciting the large drop in elevated rat pineal melatonin levels due to swimming. Troiani ME, et al. **J Neural Transm** 1988;74(3):149–60

In vitro synthesis of dopamine and noradrenaline in the isolated rat pineal gland: day-night variations and effects of electrical stimulation. Racké K, et al. **J Neurochem** 1989 Aug;53(2):354–61

Identification of adenosine receptor in rat pineal gland: evidence for A-2 selectivity. Sarda N, et al. **J Neurochem** 1989 Sep;53(3):733–7

Voltage-dependent calcium channels regulate melatonin output from cultured chick pineal cells. Harrison NL, et al. **J Neurosci** 1989 Jul;9(7):2462–7

Heme precursor 5-aminolevulinic acid alters brain tryptophan and serotonin levels without changing pineal serotonin and melatonin concentrations. Daya S, et al. **J Neurosci Res** 1989 Jul;23(3):304–9

Catecholamine receptors regulating serotonin N-acetyltransferase activity and melatonin content of chicken retina and pineal gland: D2-dopamine receptors in retina and alpha-2 adrenergic receptors in pineal gland. Zawilska J, et al. **J Pharmacol Exp Ther** 1989 Jul; 250(1):86–92

Melatonin content of the pineal gland in different mouse strains. Goto M, et al. **J Pineal Res** 1989;7(2):195–204

Inhibition of pineal type-II 5'-deiodinase does not affect the nocturnal increase of N-acetyltransferase activity and melatonin content in either euthyroid or thyroidectomized rats. Guerrero JM, et al. **J Pineal Res** 1988;5(6):513–20

Melatonin, serotonin, 5-hydroxyindole-3-acetic acid and N-acetyltransferase in the pineal of the European hamster (Cricetus cricetus) kept under natural environmental conditions: lack of a day/night rhythm in melatonin formation in spring and early summer. Pévet P, et al. **J Pineal Res** 1989;6(3):233–42

Influence of age on August levels of pineal immunoreactive arginine vasotocin in rats. Prechel MM, et al. **J Pineal Res** 1989;6(1):1–7

Cyclic nucleotide metabolism in pineal homogenates. Sweat FW, et al. **J Pineal Res** 1988;5(4):333–44

On the uptake and incorporation of thymidine by cultured chick pineal glands. Wainwright SD, et al. **J Pineal Res** 1989;6(2):169–78

On thymidine incorporation by the cultured chick pineal gland. Wainwright SD, et al. **J Pineal Res** 1989;6(2):179–97

Serotonin release mechanisms in bovine pineal gland: stimulation by norepinephrine and dopamine. Chuluyan HE, et al. **Mol Cell Endocrinol** 1989 Jun;64(1):71–80

Twenty-four-hour patterns of pineal melatonin and pituitary and plasma prolactin in male rats under 'natural' and artificial lighting conditions. Laakso ML, et al. **Neuroendocrinology** 1988 Sep;48(3):308–13

Stimulatory effect of isoproterenol but not of dibutyryl cyclic AMP on N-acetyltransferase activity and melatonin content of Syrian hamster pineal gland in organ culture. Santana C, et al. **Neuroendocrinology** 1988 Sep;48(3):229–34

Adrenalectomy but not gonadectomy affects rat pineal beta-adrenergic receptor density. Gonzalez-Brito A, et al. **Neurosci Lett** 1988 Oct 17;92(3):330–4

Potassium currents in dissociated cells of the rat pineal gland. Castellano A, et al. **Pflugers Arch** 1989 Apr;413(6):644–50

Melatonin production in organ cultured chicken pineal: modulation by adenosine and its analogs. Falcón J, et al. **Pflugers Arch** 1988 Nov;413(1):93–5

Swimming-induced suppression of rat pineal melatonin is prevented by pretreatment with calcium channel blockers. Morton DJ, et al. **Proc Soc Exp Biol Med** 1989 Jan; 190(1):105–8

Pituitary-adrenal and thyroid effects on melatonin content of the rat pineal gland. Bauer MS, et al. **Psychoneuroendocrinology** 1989;14(3):165–75

[Diurnal variation in glucose utilization in the pineal body of the monkey] Ito M, et al. **No To Shinkei** 1988 Jun; 40(6):541–6 (Eng. Abstr.) **(Jpn)**

[The effect of prolonged exposure to gamma rays and hormonal stimulation with serum gonadotropin on the levels of catecholamines in the hypothalamus, epiphysis and adrenal glands in sheep] Pástorová B, et al. **Vet Med (Praha)** 1989 Mar;34(3):171–80 (Eng. Abstr.) **(Slo)**

PATHOLOGY

Malignant melanotic neuroectodermal tumor arising from the pineal body. Ogata A, et al. **Acta Neuropathol (Berl)** 1989; 77(6):654–8

Neuroepithelial and ectomesenchymal differentiation in a primitive pineal tumor ("pineal anlage tumor"). Schmidbauer M, et al. **Clin Neuropathol** 1989 Jan–Feb; 8(1):7–10

Sarcoidosis of the pineal region: CT and MR studies. Martin N, et al. **J Comput Assist Tomogr** 1989 Jan–Feb;13(1):110–2

The blood-brain barrier and response of C.N.S. metastases to chemotherapy. Toner GC, et al. **J Neurooncol** 1989 May; 7(1):21–4

A case of hemorrhagic pineal cyst: MR/CT correlation. Osborn RE, et al. **Neuroradiology** 1989;31(2):187–9

Immunohistochemical and in vitro functional analysis of pineal-germinoma infiltrating lymphocytes: report of a case. Sawamura Y, et al. **Neurosurgery** 1989 Sep; 25(3):454–7; discussion 457–8

PHYSIOLOGY

Effect of pinealectomy on the undernutrition-induced suppression of the reproductive axis in rats. Chik CL, et al. **Acta Endocrinol (Copenh)** 1989 May;120(5):569–73

Chronic treatment with desmethylimipramine increases the oxytocin content in the hypothalamus and neurohypophysis of normal and pinealectomized male rats. Juszczak M. **Acta Physiol Pol** 1988 Jul–Aug;39(4):261–8

Characterization of outward currents in a neurosecretory cell acutely isolated from the adult rat. Aguayo LG. **Adv Alcohol Subst Abuse** 1988;7(3–4):87–90

Neuroendocrine regulation of immune parameters. Photoperiod control of the spleen in Syrian hamsters. Brainard GC, et al. **Ann N Y Acad Sci** 1988;540:704–6

Endocrine system—sanguine system relationship: antiaggregant activity of the pineal polypeptidic hormone E5 on blood platelets. Neacşu C. **Arch Roum Pathol Exp Microbiol** 1988 Apr–Jun; 47(2):125–31

REM sleep deprivation increases early morning pineal melatonin in castrated rats. Peder M, et al. **Behav Neural Biol** 1989 Mar;51(2):237–46

Pineal and ovarian response to 22- and 24-h days in the ewe. English J, et al. **Biol Reprod** 1988 Aug;39(1):9–18

Pineal and pituitary involvement in the photoperiodic regulation of body weight, coat color and testicular size of the Djungarian hamster, Phodopus sungorus. Niklowitz P, et al. **Biol Reprod** 1988 Sep;39(2):489–98

Effect of maternal pinealectomy and reverse photoperiod on the circadian melatonin rhythm in the sheep and fetus during the last trimester of pregnancy. Yellon SM, et al. **Biol Reprod** 1988 Dec;39(5):1093–9

FMRFamide-like immunoreactive neurons of the nervus terminalis of teleosts innervate both retina and pineal organ. Ekström P, et al. **Brain Res** 1988 Sep 13;460(1):68–75

Day-night differences in the sensitivity of adrenoceptors in the Syrian hamster pineal gland: an in vivo iontophoretic study. Stehle J, et al. **Brain Res** 1989 May 29; 488(1–2):275–82

Paraventricular nucleus projections mediating pineal melatonin and gonadal responses to photoperiod in the hamster. Smale L, et al. **Brain Res Bull** 1989 Feb; 22(2):263–9

Light and melatonin as zeitgebers in man. Arendt J, et al. **Chronobiol Int** 1987;4(2):273–82 (56 ref.)

Salivary melatonin estimation in assessment of pineal-gland function [letter] Miles A, et al. **Clin Chem** 1989 Mar; 35(3):514–5

Transection of the pineal stalk produces convulsions in male Mongolian gerbils (Meriones unguiculatus). Champney TH. **Epilepsy Res** 1989 Jul–Aug;4(1):14–9

Membrane resistance properties of pineal photoreceptors in the trout. Kusmic C, et al. **Exp Biol** 1989;48(4):183–6

Lesions in suprachiasmatic nuclei simulate effects of pinealectomy on prolactin release in ovariectomized and sulpiride-treated female rats. Acuña D, et al. **Experientia** 1989 Aug 15;45(8):739–42

Pineal and ocular influences on male and female turkeys: plasma luteinizing hormone and prolactin levels during gonadal development. Siopes TD, et al. **Gen Comp Endocrinol** 1989 Feb;73(2):284–92

Photoperiodic modulation of sexual and aggressive behavior in female golden hamsters (Mesocricetus auratus): role of the pineal gland. Badura LL, et al. **Horm Behav** 1989 Mar; 23(1):27–42

Effect of pinealectomy and photoperiod on testis and thyroid gland of the Indian tropical palm-squirrel Funambulus pennanti. Haldar C, et al. **Indian J Exp Biol** 1988 Jul; 26(7):516–9

Histomorphological alterations in gonads of normal and

pinealectomized domestic pigeon, Columba livia, during breeding and post-breeding phases. Ramachandran AV, et al. **Indian J Exp Biol** 1988 Nov;26(11):835-8
Sex differences in nerve growth factor levels in superior cervical ganglia and pineals [published erratum appears in Int J Dev Neurosci 1989;7(1):123] Wright LL, et al. **Int J Dev Neurosci** 1987;5(5-6):383-90
Evidence of alpha 1-adrenergic——protein kinase C——Na+/H+ antiporter-dependent increase in pinealocyte intracellular pH. Role in the adrenergic stimulation of cGMP accumulation. Ho AK, et al. **J Biol Chem** 1989 Aug 5;264(22):12983-8
Effects of aggressive encounters on pineal melatonin formation in male gerbils (Meriones unguiculatus, Cricetidae). Heinzeller T, et al. **J Comp Physiol [A]** 1988 Nov;164(1):91-4
Evidence that olfactory bulbectomy does not influence testicular regression in golden hamsters on short photoperiod by altering pineal melatonin production. Pieper DR, et al. **J Comp Physiol [B]** 1988;158(3):301-5
Parachlorophenylalanine retards tail regeneration in the gekkonid lizard Hemidactylus flaviviridis exposed to continuous light. Ramachandran AV, et al. **J Exp Biol** 1989 May;143:235-43
Partial purification of (a) low molecular weight ovine pineal compound(s) with an inhibiting effect on the growth of human melanoma cells in vitro. Noteborn HP, et al. **J Neural Transm** 1988;73(2):135-55
Characterization of membrane currents in dissociated adult rat pineal cells. Aguayo LG, et al. **J Physiol (Lond)** 1988 Nov;405:397-419
Effect of pinealectomy on the histology of the adrenocortical homologue and plasma cortisol level in the Indian catfish, Heteropneustes fossilis (Bloch). Agha AK, et al. **J Pineal Res** 1989;6(4):335-40
Long-term effects of pinealectomy on testicular function, luteinizing hormone-releasing hormone hypothalamic system, and plasma prolactin levels in the mink, a short-day breeder. Boissin-Agasse L, et al. **J Pineal Res** 1988; 5(4):385-96
Effects of pinealectomy and continuous light on mating behavior of male rats. Colmenero Urquijo MD, et al. **J Pineal Res** 1989;6(4):359-66
Histopathologic features of DMBA-induced mammary tumors in blind-underfed, blind-anosmic, and blind cold-exposed rats: influence of the pineal gland. Cos S, et al. **J Pineal Res** 1989;6(3):221-31
Effect of pinealectomy, eye enucleation, and melatonin treatment on ovarian activity and vitellogenin levels in the catfish exposed to short photoperiod or long photoperiod. Garg SK. **J Pineal Res** 1989;7(2):91-104
Pineal gland and humidity effects on testicular function of the Indian palm squirrel, Funambulus pennanti. Haldar C, et al. **J Pineal Res** 1988;5(5):411-8
Regulation of melatonin in the harderian glands of golden hamsters. Hoffman RA, et al. **J Pineal Res** 1989;6(1):63-71
Hypothalamic and neurohypophysial vasopressin and oxytocin in melatonin-treated pinealectomized male rats. Juszczak M, et al. **J Pineal Res** 1988;5(6):545-52
Quantitative cytological analysis of functional changes in adrenomedullary chromaffin cells in normal, sham-operated, and pinealectomized rats in relation to time of day: III. Nuclear density. Kachi T, et al. **J Pineal Res** 1988;5(6):527-34
Effect of pinealectomy and of diabetes on liver insulin and glucagon receptor concentrations in the rat. Mellado C, et al. **J Pineal Res** 1989;6(4):295-306
Evidence for dual adrenergic receptor regulation of ovine pineal function. Morgan PJ, et al. **J Pineal Res** 1989; 7(2):175-83
Effect of pinealectomy on testosterone, estradiol-17 beta, esterone, and 17 alpha-hydroxyprogesterone levels during the annual reproductive cycle in the freshwater catfish, Clarias batrachus. Nayak PK, et al. **J Pineal Res** 1988; 5(5):419-26
Circannual serum creatine kinase patterns after ganglionectomy and pinealectomy of the Wistar rat. Peschke D, et al. **J Pineal Res** 1989;6(4):375-83
Preliminary evidence for pineal-mediated extraretinal photoreception in relation to tail regeneration in the Gekkonid lizard, Hemidactylus flaviviridis. Ramachandran AV, et al. **J Pineal Res** 1989;6(2):121-34
Pineal response in the cichlid fish Oreochromis mossambicus to extreme osmolality, pH, and temperature. Relkin R. **J Pineal Res** 1989;7(1):37-43
Effect of pinealectomy on liver insulin and glucagon receptor concentrations in the rat. Rodríguez V, et al. **J Pineal Res** 1989;6(1):77-88
Corpus luteum progesterone secretion in rats undergoing pineal-mediated reproductive regression. Sánchez-Criado JE, et al. **J Pineal Res** 1988;5(5):489-97
Role of postsynaptic alpha-adrenergic receptors in the beta-adrenergic stimulation of melatonin production in the Syrian hamster pineal gland in organ culture. Santana C, et al. **J Pineal Res** 1989;7(1):13-22
Long-term reproductive cycles in rams after pinealectomy or superior cervical ganglionectomy. Lincoln GA, et al. **J Reprod Fertil** 1989 Mar;85(2):687-704
Pineal involvement in the diurnal rhythm of nociception in the rat. Bar-Or A, et al. **Life Sci** 1989;44(16):1067-75
A seasonal pineal peptide rhythm persists in superior cervical ganglionectomized rats. Prechel MM, et al. **Life Sci** 1989; 44(2):103-10
Seasonal modification of ovine pineal function. I. Interaction of gonadal steroids and sympathetic innervation on beta-adrenoceptors. Maxwell CA, et al. **Neuroendocrinology** 1989 Jan;49(1):65-70
Membrane currents activated in acutely dissociated rat pineal cells during the circadian cycle. Aguayo LG, et al. **Neurosci Lett** 1988 Oct 5;92(2):155-60
Pineal 5-methoxytryptophol rhythms in the box turtle: effect of photoperiod and environmental temperature. Skene DJ, et al. **Neurosci Lett** 1989 Mar 13;98(1):69-73
Morphodynamic reactive response of the pineal gland of rats chronically exposed to stable strong magnetic field. Milin J, et al. **Neuroscience** 1988 Sep;26(3):1083-92
Changes in vasopressin-converting aminopeptidase activity in the rat pineal gland during summer: relationship to vasopressin contents. Liu B, et al. **Peptides** 1988 Nov-Dec; 9(6):1235-40
Circadian variations of vasopressin level and vasopressin-converting aminopeptidase activity in the rat pineal gland. Liu B, et al. **Peptides** 1988 Sep-Oct;9(5):973-8
Effects of photoperiod, the pineal gland and the gonads on agonistic behavior in female golden hamsters (Mesocricetus auratus). Fleming AS, et al. **Physiol Behav** 1988; 44(2):227-34
Magnetic field effects on pineal N-acetyltransferase activity and melatonin content in the gerbil--role of pigmentation and sex. Stehle J, et al. **Physiol Behav** 1988;44(1):91-4
Pineal-pancreas interaction: pineal hormone E5 action on insulin activity. Neacşu C. **Physiologie** 1988 Jul-Sep; 25(3):119-27
Pinealocytes-neuroendocrine units related to the vascular and cerebrospinal fluid compartments of the brain. Oksche A. **Prog Clin Biol Res** 1989;295:351-61
Psychoactive drugs, pineal gland and affective disorders. Srinivasan V. **Prog Neuropsychopharmacol Biol Psychiatry** 1989; 13(5):653-64 (49 ref.)
Evidence for a functional role of alpha-1 adrenoceptors in the regulation of melatonin secretion in man. Palazidou E, et al. **Psychoneuroendocrinology** 1989;14(1-2):131-5
Effects of pinealectomy and melatonin or 5-methoxytryptamine on testicular LH and PRL receptors in Syrian hamsters (Mesocricetus auratus). Amador AG, et al. **Rev Esp Fisiol** 1988 Mar;44(1):81-6
The effect of pinealectomy and jejunal loop diversion on rat small bowel crypt cell kinetics. Callaghan BD. **Virchows Arch [B]** 1989;57(5):323-8
[Response pattern and visual pigments of photosensory pineal organ] Morita Y, et al. **Tanpakushitsu Kakusan Koso** 1989 May;34(5):622-30 **(Jpn)**
[Features of the response of the rat thyroid gland to melatonin in pinealectomized rats] Shchervakova VS, et al. **Probl Endokrinol (Mosk)** 1988 Sep-Oct;34(5):75-8 (Eng. Abstr.) **(Rus)**
[Age-related dependence of epiphyseal influences on the central dopaminergic mechanisms in rats] Arushanian EB, et al. **Zh Vyssh Nerv Deiat** 1988 Jul-Aug;38(4):767-8 **(Rus)**

PHYSIOPATHOLOGY

The protective function of the pineal gland in tardive dyskinesia. Sandyk R, et al. **Int J Neurosci** 1988 Dec; 43(3-4):215-8
Tardive dyskinesia and the pineal gland. Sandyk R. **Int J Neurosci** 1988 Nov;43(1-2):111-4 (31 ref.)
Possible involvement of the hypothalamic dopaminergic system in the prolactin-inhibitory effects of the pineal gland in blind-anosmic male rats. Leadem CA, et al. **Neuroendocrinology** 1988 Jul;48(1):1-7
[The rhythm of melatonin synthesis in the epiphysis and its control by light] Hartmann W, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Apr;41(4):224-9 (16 ref.) (Eng. Abstr.) **(Ger)**

RADIATION EFFECTS

Morphological changes of the adrenal gland following soft-laser irradiation of the pineal gland. Guillot MD, et al. **Anat Anz** 1988;167(4):289-96
Effects of continuous light exposure on the rat retina and pineal gland. Mochizuki M, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(4):346-52
Circadian variation of beta-adrenoceptor binding sites in the pineal gland of the Syrian hamster and prevention of the nocturnal reduction by light exposure or propranolol treatment. Pangerl B, et al. **Neuroendocrinology** 1989 Jun; 49(6):570-3
One millisecond of light suffices to suppress nighttime pineal melatonin synthesis in rats. Vollrath L, et al. **Neurosci Lett** 1989 Apr 10;98(3):297-8

RADIOGRAPHY

Computed tomography of pineal region ependymoma. Clarke JC. **Br J Radiol** 1988 Oct;61(730):953-5
A radiologic study by CT scan of pineal size in cancer patients: correlation to melatonin blood levels. Tagliabue M, et al. **Tumori** 1989 Jun 30;75(3):226-8
[Intracranial physiological calcification on computed tomography (Part 1): Calcification of the pineal region] Kwak R, et al. **No To Shinkei** 1988 Jun;40(6):569-74 (Eng. Abstr.) **(Jpn)**

SECRETION

Serum levels of melatonin in cancer patients and their relation to body sizes. Barni S, et al. **Int J Biol Markers** 1988 Jul-Sep;3(3):193-6
Regulation of melatonin secretion in a photoreceptive pineal organ: an in vitro study in the pike. Falcón J, et al. **J Neurosci** 1989 Jun;9(6):1943-50
Kinetic study of melatonin release from rat pineal glands using a perifusion technique. Simonneaux V, et al. **J Pineal Res** 1989;7(1):63-83
Alpha-adrenergic control of serotonin release from rat pineal glands. Aloyo VJ, et al. **Neuroendocrinology** 1988 Jul; 48(1):61-6
[Factors regulating the synthesis and release of arginine vasotocin and its role in mammals] Kniażewski B, et al. **Pol Tyg Lek** 1988 Apr 25;43(17):531-3 (Eng. Abstr.) **(Pol)**
[Melatonin and mental disturbances. A review of the neuroendocrine aspects. 1: Anatomophysiologic aspects. Melatonin and mental disorders] Cuesta MJ, et al. **Actas Luso Esp Neurol Psiquiatr Cienc Afines** 1988 Sep-Oct;16(5):301-4 (0 ref.) **(Spa)**

SURGERY

Maternal pinealectomy abolishes the diurnal rhythm in plasma melatonin concentrations in the fetal sheep and pregnant ewe during late gestation. McMillen IC, et al. **J Endocrinol** 1989 Mar;120(3):459-64
Spontaneously ruptured pineal epidermoid cyst associated with a thalamic germinoma. Wang J, et al. **Neurosurgery** 1989 Jun;24(6):933-6
The use of hypothermia in surgical pinealectomy of the neonate rat. Cairncross KD, et al. **Physiol Behav** 1989 Mar; 45(3):663-5
Morphometric variations of the thymus cells 30 days after pinealectomy. Cimas Garcia C, et al. **Z Mikrosk Anat Forsch** 1988;102(4):619-26
[The effect of pinealectomy on the histologic picture of the thyroid gland in rats irradiated with a high dose of gamma rays] Kundurović Z, et al. **Med Pregl** 1988;41(9-10):369-72 (Eng. Abstr.) **(Scr)**

ULTRASTRUCTURE

Ultrastructural identification of calbindin-D28k-immunoreactive cells in the rat superficial pineal body. Krstić R, et al. **Acta Anat (Basel)** 1988; 133(2):122-6
Influence of a short light pulse at night on the ultrastructure of the rat pinealocyte: a quantitative study. Karasek M, et al. **Cell Tissue Res** 1988 Oct;254(1):247-9
Pineal gland ultrastructure in wild boar and miniature pig. Wyrzykowski Z, et al. **Folia Morphol (Warsz)** 1987; 46(3-4):161-73
Structure and ultrastructure of the pigmented cells in the adult dog pineal gland. Calvo J, et al. **J Anat** 1988 Oct; 160:67-73
Ultrastructure of the pineal gland in the adult dog. Calvo J, et al. **J Pineal Res** 1988;5(5):479-87
Unusual configurations of endoplasmic reticulum in pinealocytes of the Djungarian hamster (Phodopus sungorus). Fechner J. **J Pineal Res** 1989;6(1):55-62
Unusual ultrastructural features in the superficial pineal gland of the yellow-bellied country rat (Rattus losea Swinhoe). Huang HT, et al. **J Pineal Res** 1989;7(2):125-41
Cytochemical demonstration of lysosomes in the chicken pineal gland: changes induced by light-dark cycle. Ohshima K, et al. **J Pineal Res** 1989;6(2):103-10
Cytodifferentiation of the chick pineal gland, with special reference to the photosensory and secretory elements. Ohshima K, et al. **J Pineal Res** 1988;5(4):397-410
Improved procedures for pineal gland fixation for electron microscopy. Schultz RL, et al. **J Pineal Res** 1989; 6(3):267-84
Pinealocyte karyometric modifications in the albino rat following the application of magnetic fields. De la Guardia F, et al. **Z Mikrosk Anat Forsch** 1988;102(4):609-18
[Electron microscopic study of innervation of pineal gland of guinea pigs] Wu XF, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec;19(4):359-62 (Eng. Abstr.) **(Chi)**
[Synaptic ribbons in pinealocytes of olfactory bulbectomized rats under experimental conditions] Cos S, et al. **J Hirnforsch** 1989;30(1):91-8 (Eng. Abstr.) **(Ger)**

PINEALOMA

COMPLICATIONS

[Germinoma of the optic pathway (apropos of a case)] Chavy B, et al. **Bull Soc Ophtalmol Fr** 1988 Jan;88(1):145-8 **(Fre)**

DIAGNOSIS

Diagnosis and treatment of pineal tumours. Kyoto University experience (1941-1984). Yamashita J, et al. **Acta Neurochir Suppl (Wien)** 1988;42:137-41
Pinealomas and germinomas in children. Farwell JR, et al. **J Neurooncol** 1989 May;7(1):13-9
Multiple distinct intracranial tumors: association of pinealoma and craniopharyngioma. Case report. Hazen S, et al. **Surg Neurol** 1989 May;31(5):381-6

DRUG THERAPY

Phase II treatment of medulloblastoma and pineoblastoma with melphalan: clinical therapy based on experimental models of human medulloblastoma. Friedman HS, et al. **J Clin Oncol** 1989 Jul;7(7):904–11

[Primary intracranial, AFP and/or HCG producing tumors with special reference to results of the treatment] Sakai N, et al. **Gan To Kagaku Ryoho** 1988 Dec;15(12):3297–300 **(Jpn)**

GENETICS

Interstitial deletion of chromosome 11q in a pineoblastoma. Sreekantaiah C, et al. **Cancer Genet Cytogenet** 1989 May; 39(1):125–31

IMMUNOLOGY

Immunoreactive S-antigen in cerebrospinal fluid: a marker of pineal parenchymal tumors? Korf HW, et al. **J Neurosurg** 1989 May;70(5):682–7

PATHOLOGY

Neuroepithelial and ectomesenchymal differentiation in a primitive pineal tumor ("pineal anlage tumor"). Schmidbauer M, et al. **Clin Neuropathol** 1989 Jan–Feb; 8(1):7–10

Extranervous localization of a presumed suprasellar and pineal germinoma. Metastasis or multifocal origin? Ferraresi S, et al. **Eur Neurol** 1989;29(3):171–3

Pineoblastoma with neuronal differentiation—immunohistochemical and immunocytochemical studies. Okuda Y, et al. **J Neurooncol** 1988 Sep;6(2):193–8

Ectopic pinealoma in the region of the optic chiasma. Dănăilă L, et al. **Neurol Psychiatr (Bucur)** 1989 Jan–Mar;27(1):57–65

Immunohistochemical and in vitro functional analysis of pineal-germinoma infiltrating lymphocytes: report of a case. Sawamura Y, et al. **Neurosurgery** 1989 Sep; 25(3):454–7; discussion 457–8

RADIOGRAPHY

CT of pineal tumors and intracranial germ-cell tumors. Chang T, et al. **AJNR** 1989 Sep–Oct;10(5):1039–44

Unusual clinical presentation of a presumed pineal germinoma with two disseminated lesions. Nakano S, et al. **Neurosurgery** 1988 Aug;23(2):235–6

RADIOTHERAPY

Serial neuropsychological follow-up of a child following craniospinal irradiation. Bendersky M, et al. **Dev Med Child Neurol** 1988 Dec;30(6):816–20

SURGERY

Surgical approach to pineal tumours. Pluchino F, et al. **Acta Neurochir (Wien)** 1989;96(1–2):26–31

[Surgical treatment of tumors of the pineal region using the right occipital supratentorial approach] Chen KF. **Chung Hua Wai Ko Tsa Chih** 1988 Sep;26(9):563–4, 575 (Eng. Abstr.) **(Chi)**

THERAPY

Pineocytomas. Disclafani A, et al. **Cancer** 1989 Jan 15; 63(2):302–4

Suprasellar germinomas in childhood. A reappraisal. Legido A, et al. **Cancer** 1989 Jan 15;63(2):340–4

VETERINARY

Pineoblastoma in a cockatiel. Wilson RB, et al. **Avian Dis** 1988 Jul–Sep;32(3):591–3

PINK DISEASE see **ACRODYNIA**

PINNIPEDIA

Seal finger—diagnosis, prevention and treatment. Bergholt A, et al. **Arctic Med Res** 1989 Jan;48(1):3–5

Further studies on grey seal (Halichoerus grypus) pup mortality on North Rona. Baker JR. **Br Vet J** 1988 Sep–Oct;144(5):497–506

Body size and organ accumulation of mercury and selenium in young harbor seals (Phoca vitulina). Himeno S, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):503–9

Morbillivirus in seals: isolation and some growth characteristics in cell cultures. Liess B, et al. **DTW** 1989 Apr;96(4):180–2

Diskospondylitis in a California sea lion. Thomas-Baker B. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1151

The use of meperidine hydrochloride for chemical restraint in certain cetaceans and pinnipeds. Joseph BE, et al. **J Wildl Dis** 1988 Oct;24(4):691–4

Use of Telazol to immobilize female northern sea lions (Eumetopias jubatus) in Alaska. Loughlin TR, et al. **J Wildl Dis** 1989 Jul;25(3):353–8

Mortality of harbor seal pups at different sites in the inland waters of Washington. Steiger GH, et al. **J Wildl Dis** 1989 Jul;25(3):319–28

Characterization of a seal morbillivirus [letter] [published erratum appears in Nature 1988 Dec 22–29;336(6201):720] **Nature** 1988 Nov 10;336(6195):115–6

US sea lions join casualties [news] Barinaga M. **Nature** 1988 Nov 3;336(6194):8

Did virus transfer from harp seals to common seals? [letter] Goodhart CB. **Nature** 1988 Nov 3;336(6194):21

Transatlantic spread of seal virus [letter] Kennedy S, et al. **Nature** 1989 Feb 23;337(6209):695

Seal vaccination success [letter] Osterhaus AD, et al. **Nature** 1989 Jan 5;337(6202):21

Marine mammals join the Navy [news] Morrison DC. **Science** 1988 Dec 16;242(4885):1503–4

Navy marine mammals [letter] Ridgway SH. **Science** 1989 Feb 17;243(4893):875

Histopathologic and immunocytochemical studies of distemper in seals. Kennedy S, et al. **Vet Pathol** 1989 Mar; 26(2):97–103

Vaccinating seals [letter] **Vet Rec** 1989 May 27;124(21):570

The use of a ketamine–diazepam mixture to immobilise wild grey seals (Halichoerus grypus) and southern elephant seals (Mirounga leonina). Baker JR, et al. **Vet Rec** 1988 Sep 10; 123(11):287–9

Veterinarians and seals [letter] Munro R, et al. **Vet Rec** 1988 Oct 22;123(17):451

Distemper-like disease in harbor seals: virus isolation, further pathologic and serologic findings. Hofmeister R, et al. **Zentralbl Veterinarmed [B]** 1988 Dec;35(10):765–9

[An outbreak of distemper among seals (I)] Osterhaus A, et al. **Tijdschr Diergeneeskd** 1988 Sep 15;113(18):1011–2 (Eng. Abstr.) **(Dut)**

ANATOMY & HISTOLOGY

[Development of male germ cells in the fur seal (Callorhinus ursinus)] Ashchepkova LIu, et al. **Arkh Anat Gistol Embriol** 1988 Dec;95(12):59–66 (Eng. Abstr.) **(Rus)**

BLOOD

Influence of hematocrit on whole blood glucose levels: new evidence from marine mammals. Castellini MA, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1220–4

Carnivora: the primary structure of Weddell Seal (Leptonychotes weddelli, Pinnipedia) hemoglobin. Lin HX, et al. **Biol Chem Hoppe Seyler** 1989 Jul;370(7):707–13

Carnivora: the primary structure of the Pacific Walrus (Odobenus rosmarus divergens, Pinnipedia) hemoglobin. Lin HX, et al. **Biol Chem Hoppe Seyler** 1989 Feb; 370(2):135–40

The phospholipid and fatty acid compositions of seal platelets: a comparison with human platelets. Ahmed AA, et al. **Comp Biochem Physiol [B]** 1989;93(1):119–23

Electrophoretic transferrin variation in fur seals (Arctocephalus spp.) at Marion Island. Kerley GI. **Comp Biochem Physiol [B]** 1989;92(2):361–4

Blood viscosity in phocid seals: possible adaptations to diving. Wickham LL, et al. **J Comp Physiol [B]** 1989;159(2):153–8

Absence of circadian patterns of secretion of melatonin or cortisol in Weddell seals under continuous natural daylight. Barrell GK, et al. **J Endocrinol** 1989 Aug;122(2):445–9

IMMUNOLOGY

Clue to seal epizootic? [letter] Dietz R, et al. **Nature** 1989 Apr 20;338(6217):627

Vaccinating seals [letter] **Vet Rec** 1989 May 13;124(19):520

METABOLISM

Lectinhistochemical observations on the bronchial glands and the goblet cells of the airway epithelium of marine diving mammals. Welsch U, et al. **Acta Histochem Suppl (Jena)** 1988;36:255–61

Spatial differences and temporal trends of organochlorine compounds in biota from the northwestern hemisphere. Andersson O, et al. **Arch Environ Contam Toxicol** 1988 Nov;17(6):755–65

Purification and characterization of intestinal alkaline phosphatase from harp seal. Sakharov IYu, et al. **Comp Biochem Physiol [B]** 1988;90(4):709–14

Chemical modification and composition of tetrameric isozyme K of alkaline phosphatase from harp seal intestinal mucosa. Sakharov IYu, et al. **Comp Biochem Physiol [B]** 1989;92(1):119–22

Protective metabolic mechanisms during liver ischemia: transferable lessons from long-diving animals. Hochachka PW, et al. **Mol Cell Biochem** 1988 Nov;84(1):77–85

[Physico-chemical properties of alkaline phosphatase from the seal small intestine] Sakharov IIu, et al. **Biokhimiia** 1988 Jun;53(6):974–8 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Infection studies in mink with seal-derived morbillivirus. Blixenkrone-Møller M, et al. **Arch Virol** 1989; 106(1–2):165–70

Pathology and bacteriology of adult male Antarctic fur seals, Arctocephalus gazella, dying at Bird Island, South Georgia. Baker JR, et al. **Br Vet J** 1989 May–Jun;145(3):263–75

Distemper virus in Baikal seals [letter] **Nature** 1989 Mar 16; 338(6212):209–10

Seal disease predictions [letter] Harwood J, et al. **Nature** 1989 Jun 29;339(6227):670

Baikal seal virus [letter] Likhoshway YeV, et al. **Nature** 1989 May 25;339(6222):266

Plague on the seashore. **Vet Rec** 1988 Sep 10;123(11):281

Vaccination of seals [letter] **Vet Rec** 1988 Nov 12;123(20):527

Veterinarians and seals [letter] Barker J. **Vet Rec** 1988 Oct 15;123(16):426

Veterinarians and seals [letter] Farrell T. **Vet Rec** 1988 Sep 10;123(11):304

Veterinarians and seals [letter] Kennedy S, et al. **Vet Rec** 1988 Oct 29;123(18):475

Isolation of mycoplasmas from diseased seals. Kirchhoff H, et al. **Vet Rec** 1989 May 13;124(19):513–4

Seal virus [letter] Tribe GW. **Vet Rec** 1988 Oct 15;123(16):426

[An outbreak of dog distemper among seals (2)] Osterhaus A, et al. **Tijdschr Diergeneeskd** 1988 Oct 1;113(19):1061–2 (Eng. Abstr.) **(Jpn)**

PARASITOLOGY

Patterns of caudal papillae in Contracaecum osculatum (Nematoda) and some related species from different regions of the world. Fagerholm HP. **Int J Parasitol** 1988 Dec; 18(8):1039–51

In vitro effect of ivermectin on Pseudoterranova decipiens survival. Manley KM, et al. **J Helminthol** 1989 Mar; 63(1):72–4

Prevalence and pathology of nematode infections in the lungs of ringed seals (Phoca hispida) of the western arctic of Canada. Onderka DK. **J Wildl Dis** 1989 Apr;25(2):218–24

[Seal deaths in the Wadden Sea by Sylt in 1988: significance of the high degree of lungworm cases with a hypersensitivity reaction] Breuer EM, et al. **Zentralbl Veterinarmed [B]** 1988 Jul;35(6):467–73 (Eng. Abstr.) **(Ger)**

[Anisakiasis in the Caspian seal] Popov VN, et al. **Parazitologiia** 1989 Mar–Apr;23(2):178–81 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Cardiovascular responses to diving. Blix AS. **Acta Physiol Scand Suppl** 1988;571:61–8

Thermoregulatory control of expired air temperature in diving harp seals. Folkow LP, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R306–10

Survival versus nonsurvival determinants for neonatal harbor seals. Dierauf LA, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1024–8

Kinematics and estimated thrust production of swimming harp and ringed seals. Fish FE, et al. **J Exp Biol** 1988 Jul; 137:157–73

Sensory function in the harbor seal. Renouf D. **Sci Am** 1989 Apr;260(4):90–5 (5 ref.)

[The role of visual attention during the acquisition of differentiation in the northern fur seal] Dashevskii BA, et al. **Biol Nauki** 1989;(3):27–9 (Eng. Abstr.) **(Rus)**

[The formation in the northern fur seal (Callorhinus ursinus L.) of flexible behavioral programs determined by the structure of the complex visual stimulus] Blizniuk IaI, et al. **Zh Vyssh Nerv Deiat** 1989 Mar–Apr;39(2):243–51 (Eng. Abstr.) **(Rus)**

PINOCYTOSIS

Endocytosis and inositol hexakisphosphate levels in ras transformants of Dictyostelium discoideum amoebae. Klein G, et al. **Experientia** 1989 Apr 15;45(4):365–7

Cysticercus bovis: pinocytosis in the Cysticercus tegument. Schramlová J, et al. **Folia Parasitol (Praha)** 1988; 35(3):223–6

Measurement of the rates of basal pinocytosis of horseradish peroxidase and internalization of heat-aggregated IgG by macrophages from normal and streptozotocin-induced diabetic rats. Abrass CK. **Immunology** 1988 Nov; 65(3):411–5

Incorporation of monoclonal antibodies into cells by osmotic permeabilization. Effect on cellular metabolism. Chakrabarti R, et al. **J Biol Chem** 1989 May 15; 264(14):8214–21

Prelysosomal acidic vacuoles in Dictyostelium discoideum. Padh H, et al. **J Cell Biol** 1989 Mar;108(3):865–74

Lysosomal movements during heterophagy and autophagy: with special reference to nematolysosome and wrapping lysosome. Sakai M, et al. **J Electron Microsc Tech** 1989 Jun;12(2):101–31 (127 ref.)

Reduction of pinocytotic vesicle surface density in cultured bovine aortic endothelial cells. A quantitative ultrastructural freeze-etching study. Bianciardi G, et al. **J Submicrosc Cytol Pathol** 1988 Oct;20(4):777–82

DRUG EFFECTS

Reverse pinocytosis induced in cerebral endothelial cells by injection of histamine into the cerebral ventricle. Dux E, et al. **Acta Neuropathol (Berl)** 1988;76(5):484–8

Study on pinocytosis and antigen presentation by murine peritoneal macrophages to T cells in vitro after cisplatin treatment. Sodhi A, et al. **Arch Immunol Ther Exp (Warsz)** 1988;36(3):315–23

The effects of acetylated low-density lipoproteins on fluid-phase pinocytosis by macrophages. Knowles ME, et al. **Eur J Biochem** 1989 Jun 15;182(2):407–12

PINTA

IMMUNOLOGY

[Immunology of tertiary pinta] Pecher SA, et al. **Med Cutan Ibero Lat Am** 1988;16(2):111–4 (Eng. Abstr.) **(Por)**

PINWORMS see **ENTEROBIUS**

PIPECOLIC ACIDS

BLOOD

Peroxisomes and peroxisomal functions in hyperpipecolic acidaemia. Wanders RJ, et al. **J Inherited Metab Dis** 1988; 11 Suppl 2:161–4

Genetic and phenotypic heterogeneity in disorders of peroxisome biogenesis—a complementation study involving cell lines from 19 patients. Roscher AA, et al. **Pediatr Res** 1989 Jul;26(1):67–72

CHEMICAL SYNTHESIS

Synthesis and pharmacology of a series of 3- and 4-(phosphonoalkyl)pyridine- and -piperidine-2-carboxylic acids. Potent N-methyl-D-aspartate receptor antagonists. Ornstein PL, et al. **J Med Chem** 1989 Apr;32(4):827–33

METABOLISM

L-pipecolic acid oxidation in the rabbit and cynomolgus monkey. Evidence for differing organellar locations and cofactor requirements in each species. Mihalik SJ, et al. **J Biol Chem** 1989 Feb 15;264(5):2509–17

Peroxisomal oxidation of pipecolic acid in the rat. Kramar R, et al. **J Clin Chem Clin Biochem** 1989 May;27(5):319–21

Peroxisomal L-pipecolic acid oxidation is deficient in liver from Zellweger syndrome patients. Mihalik SJ, et al. **Pediatr Res** 1989 May;25(5):548–52

PHARMACOLOGY

Antiepileptic effects of the excitatory amino acid antagonist cis-2,3 piperidine-dicarboxylic acid depend on non-N-methyl-d-aspartate receptors. Sagratella S, et al. **Arch Int Pharmacodyn Ther** 1989 May-Jun;299:28–34

Effects of excitatory amino acid receptor antagonists and agonists on suprachiasmatic nucleus responses to retinohypothalamic tract volleys. Cahill GM, et al. **Brain Res** 1989 Feb 6;479(1):76–82

Antithrombotic effects of three thrombin inhibitors in a rat model of laser-induced thrombosis. Krupinski K, et al. **Haemostasis** 1989;19(2):74–82

Modulation of benzodiazepine by lysine and pipecolic acid on pentylenetetrazol-induced seizures. Chang YF, et al. **Life Sci** 1988;43(15):1177–88

Influence of pipecolic acid on the release and uptake of [3H]GABA from brain slices of mouse cerebral cortex. Gutiérrez MC, et al. **Neurochem Res** 1989 May;14(5):405–8

Behavioural and electroencephalographic effects of excitatory amino acid antagonists and sigma opiate/phencyclidine-like compounds in rats. Sagratella S, et al. **Neuropharmacology** 1989 Jan;28(1):57–61

Is a retinal input involved in the generation of eye resetting fast phases in the frog eye optokinetic nystagmus? Yücel YH, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):80–4

Antiamnesic effects of D-pipecolic acid and analogues of Pro-Leu-Gly-NH2 in rats. Kovács GL, et al. **Pharmacol Biochem Behav** 1988 Dec;31(4):833–7

Effect of synthetic thrombin inhibitor (MD805) as an alternative drug on heparin induced thrombocytopenia during hemodialysis. Matsuo T, et al. **Thromb Res** 1988 Oct 15;52(2):165–71

THERAPEUTIC USE

Effects of an antithrombotic agent (MD-805) on progressing cerebral thrombosis. Kobayashi S, et al. **Thromb Res** 1989 Feb 1;53(3):305–17

PIPEMIDIC ACID see under **NICOTINIC ACIDS**

PIPERACETAZINE see under **PHENOTHIAZINE TRANQUILIZERS**

PIPERACILLIN

ADMINISTRATION & DOSAGE

Randomized trial comparing ciprofloxacin plus netilmicin versus piperacillin plus netilmicin for empiric treatment of fever in neutropenic patients. Chan CC, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):87–91

Alterations in lower reproductive tract flora after single-dose piperacillin and triple-dose cefoxitin at vaginal and abdominal hysterectomy. Hemsell DL, et al. **Obstet Gynecol** 1988 Dec;72(6):875–80

Intravitreal injection of piperacillin. Semple HC, et al. **Ophthalmic Surg** 1989 Aug;20(8):588–90

Single-dose piperacillin versus triple-dose cefoxitin prophylaxis at vaginal and abdominal hysterectomy. Hemsell DL, et al. **South Med J** 1989 Apr;82(4):438–42

[Preventive use of antibiotics in colorectal interventions. Short-term versus one-shot prevention—a multicenter study] Tuchmann A, et al. **Fortschr Med** 1988 Sep 10; 106(26):537–40 (Eng. Abstr.) **(Ger)**

[Efficacy of the piperacillin–aztreonam combination in antibiotic prophylaxis during the neonatal period] Licata D, et al. **Minerva Pediatr** 1988 Jul;40(7):403–6 (Eng. Abstr.) **(Ita)**

ADVERSE EFFECTS

Randomized multi center study comparing nephrotoxicity of ceftazidime versus the combination of piperacillin and netilmicin with and without furosemide. Mondorf AW, et al. **Adv Exp Med Biol** 1989;252:307–12

[Acute interstitial nephritis following piperacillin] Dörner O, et al. **Klin Wochenschr** 1989 Jul 3;67(13):682–6 (Eng. Abstr.) **(Ger)**

ANALOGS & DERIVATIVES

Antibacterial activity of catecholic piperacillin analogues. Basker MJ, et al. **J Antibiot (Tokyo)** 1989 Aug; 42(8):1328–30

Structure activity relationships in PIPC-analogues against Pseudomonas aeruginosa. Mitsuyama J, et al. **J Antibiot (Tokyo)** 1989 Apr;42(4):598–603

ANALYSIS

High-performance liquid chromatographic determination of a new beta-lactamase inhibitor and its metabolite in combination therapy with piperacillin in biological materials. Marunaka T, et al. **J Chromatogr** 1988 Sep 23; 431(1):87–101

METABOLISM

Protection of piperacillin and ticarcillin from beta-lactamase hydrolysis by tazobactam (YTR-830) and clavulanic acid [letter] Diver JM, et al. **J Antimicrob Chemother** 1989 Jul; 24(1):89–92

PHARMACOKINETICS

A prospective evaluation of optimal sampling theory in the determination of the steady-state pharmacokinetics of piperacillin in febrile neutropenic cancer patients. Drusano GL, et al. **Clin Pharmacol Ther** 1989 Jun;45(6):635–41

[Excretion of antibiotics into bile and urine in patients with external cholecystostomy done in order to treat obstructive jaundice] Hidaka K, et al. **Jpn J Antibiot** 1988 Sep; 41(9):1295–303 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Correlation between the growth and killing curves of Escherichia coli in the presence of cefotetan or piperacillin. Yourassowsky E, et al. **Chemotherapy** 1989;35(1):12–6

Interaction between piperacillin and pefloxacin or amikacin on the selection of resistant mutants of Pseudomonas aeruginosa. Boisivon A, et al. **J Antimicrob Chemother** 1988 Nov;22(5):651–7

Comparison of disc-diffusion and plate-incorporation susceptibility testing of gram-negative bacilli to ticarcillin, piperacillin and ticarcillin/clavulanate. Elston RA, et al. **J Antimicrob Chemother** 1989 Feb;23(2):285–7

Use of a continuous culture system for susceptibility testing of gram-negative bacterial isolates to piperacillin. Godwin PG, et al. **J Antimicrob Chemother** 1988 Dec;22(6):899–904

Enhanced liposome-mediated antibacterial activity of piperacillin and gentamicin against gram-negative bacilli in vitro. Nacucchio MC, et al. **J Microencapsul** 1988 Oct-Dec;5(4):303–9

Microbial pharmacodynamics of piperacillin in neutropenic mice of systematic infection due to Pseudomonas aeruginosa. Zhi JG, et al. **J Pharmacokinet Biopharm** 1988 Aug;16(4):355–75

Comparison of in vitro susceptibilities among gram-negative rods. Westblom TU, et al. **W V Med J** 1989 Jul;85(7):279–80

[Comparative evaluation of the in vitro and in vivo antibacterial activity of ceftriaxone and piperacillin: determination of the inhibitory quotient in bronchial secretions] Fraschini F, et al. **Recenti Prog Med** 1988 May; 79(5):224–9 (Eng. Abstr.) **(Ita)**

[Efficiency of tazobactam as inhibitor of beta-lactamases, combined with piperacillin, against resistant strains to this penicillin] Roy C, et al. **Med Clin (Barc)** 1989 Mar 18; 92(10):371–4 (Eng. Abstr.) **(Spa)**

THERAPEUTIC USE

Protective effect of piperacillin against the nephrotoxicity of cisplatin in rats. Hayashi T, et al. **Antimicrob Agents Chemother** 1989 Apr;33(4):513–8

A comparative study of latamoxef disodium and gentamicin versus piperacillin and gentamicin in febrile granulocytopenic patients. O'Brien AJ, et al. **Br J Clin Pract** 1988 Feb;42(2):56–60

Treatment of febrile episodes in neutropenic leukemic patients with the antibiotic combinations piperacillin or ceftazidime plus amikacin: results of a randomized study. Fenu S, et al. **Chemioterapia** 1988 Oct;7(5):323–6

Piperacillin therapy for complicated urinary tract infections caused by enterococci alone and in association with multi-drug resistant pathogens. Gesu GP, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):508–10

A prospective comparative study of cefotetan with piperacillin for prophylaxis against infection in elective colorectal surgery. Hershman M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):600

Piperacillin plus amikacin versus cefotaxime plus amikacin in neutropenic and feverish patients with malignant hemopathies. Pavone V, et al. **Chemioterapia** 1988 Oct; 7(5):330–5

Antibiotic prophylaxis of infection after gynecologic surgery: a prospective randomized trial between cefotetan and piperacillin. Regallo M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):624–6

Piperacillin in prophylaxis and therapy of gynecologic cancer patients. Scalambrino S, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):535–7

Effect of piperacillin on some cellular and humoral factors of the immune system. Slavtcheva E, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):218

Randomized trial using piperacillin versus ampicillin and amikacin for treatment of premature neonates with risk factors for sepsis. Hammerberg O, et al. **Eur J Clin Microbiol Infect Dis** 1989 Mar;8(3):241–4

Piperacillin for prophylaxis in gynecological surgery. Trimbos JB, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Feb;30(2):141–9

Gentamicin and low dose piperacillin in febrile neutropenic patients. Boughton BJ, et al. **J Antimicrob Chemother** 1989 Jul;24(1):45–51

Selection of resistance by piperacillin during Pseudomonas aeruginosa endocarditis. Letendre ED, et al. **J Antimicrob Chemother** 1988 Oct;22(4):557–62

A double-blind placebo-controlled trial of perioperative prophylactic antibiotics for elective neurosurgery. Bullock R, et al. **J Neurosurg** 1988 Nov;69(5):687–91

Impact of dosage regimens on the efficacy of piperacillin against Pseudomonas aeruginosa in neutropenic mice. Zhi JG, et al. **J Pharm Sci** 1988 Nov;77(11):991–2

A new model of bacterial peritonitis in mice for evaluation of antibiotics. Effects of aspoxicillin and piperacillin. Matsushita T, et al. **Jpn J Antibiot** 1989 Apr;42(4):887–95

Re-emphasis of priorities in surgical antibiotic prophylaxis. Galandiuk S, et al. **Surg Gynecol Obstet** 1989 Sep; 169(3):219–22

[Reevaluation of clinical efficacy of piperacillin against complicated urinary tract infections] Ueno M, et al. **Hinyokika Kiyo** 1988 Sep;34(9):1675–8 (Eng. Abstr.) **(Jpn)**

[Combined antibiotic therapy of infections in patients with acute leukemia] Moriuchi Y, et al. **Rinsho Ketsueki** 1988 Sep;29(9):1371–5 (Eng. Abstr.) **(Jpn)**

[It is correct from the pharmaceutical point of view to use piperacillin in acute cholecystitis] Persson K, et al. **Lakartidningen** 1989 Aug 9;86(32–33):2656 **(Swe)**

PIPERAZINES

The interaction of the cardioprotective agent ICRF-187 [+)-1,2-bis(3,5-dioxopiperazinyl-1-yL)propane); its hydrolysis product (ICRF-198); and other chelating agents with the Fe(III) and Cu(II) complexes of adriamycin. Hasinoff BB. **Agents Actions** 1989 Mar;26(3–4):378–85

A symposium: Pharmacologic and therapeutic aspects of urapidil. November 11, 1988, Amsterdam. Proceedings. **Am J Cardiol** 1989 Aug 15;64(7):1D–39D

Urapidil, a multiple-action alpha-blocking drug. Prichard BN, et al. **Am J Cardiol** 1989 Aug 15;64(7):11D–15D (40 ref.)

Conclusions on the position of urapidil. van Zwieten PA. **Am J Cardiol** 1989 Aug 15;64(7):38D–39D

A comparison of two preservation media (CSM and K-Sol) by scanning electron microscopy of preserved corneal endothelium. Saggau DD, et al. **Arch Ophthalmol** 1989 Mar; 107(3):429–32

Contamination of K-Sol corneal storage medium with Propionibacterium acnes. Sieck EA, et al. **Arch Ophthalmol** 1989 Jul;107(7):1023–4

Iron autoxidation in Mops and Hepes buffers. Tadolini B. **Free Radic Res Commun** 1987;4(3):149–60

The thieno[3,2-c]pyridine and furo[3,2-c]pyridine rings: new pharmacophores with potential antipsychotic activity. New JS, et al. **J Med Chem** 1989 Jun;32(6):1147–56

Comparison of corneal storage in K-Sol and chondroitin sulfate corneal storage medium in human corneal transplantation. Lass JH, et al. **Ophthalmology** 1989 May; 96(5):688–97

Lysosomal enzyme levels in corneal storage media. K-Sol versus McCarey-Kaufman. Morgan KM, et al. **Ophthalmology** 1988 Nov;95(11):1498–503

The determination of microscopic ionization constants of a substituted piperazine using estimates from model compounds. Pandit NK, et al. **Pharm Res** 1989 Feb; 6(2):177–81

[Clinical, electromyographic and electromechanographic studies of the nondepolarizing muscle relaxant pipecurium bromide (Arduan)] Stoianov E, et al. **Khirurgiia (Sofiia)** 1988;41(5):35–7 **(Bul)**

ADMINISTRATION & DOSAGE

A preliminary study of the effects of intravenous m-chlorophenylpiperazine, a serotonin agonist, in elderly subjects. Lawlor BA, et al. **Biol Psychiatry** 1989 Mar 15; 25(6):679–86

ADVERSE EFFECTS

Cardiovascular effects of pipecuronium and pancuronium in patients undergoing coronary artery bypass grafting. Tassonyi E, et al. **Anesthesiology** 1988 Nov;69(5):793–6

Extensive oxidative metabolism of dextromethorphan in patients with almitrine neuropathy. Belec L, et al. **Br J Clin Pharmacol** 1989 Mar;27(3):387–90

Razoxane and T-cell lymphoma [letter] Zuiable AG, et al. **Br J Dermatol** 1989 Jul;121(1):149

Peripheral neuropathies during treatment with almitrine: report of 46 cases. Bouche P, et al. **J Neurol** 1989 Jan; 236(1):29–33

An experimental study on dependence liability of zipeprol. Moretti V, et al. **Pharmacol Res** 1989 Mar–Apr;21(2):223–9

Hypoxia, almitrine, and peripheral neuropathy. Howard P. **Thorax** 1989 Apr;44(4):247–50 (35 ref.)

[Fever after taking fipexide hydrochloride (letter)] Guy C, et al. **Presse Med** 1989 May 27;18(21):1076 **(Fre)**

ANALYSIS

Determination of Arduan and its desacetyl metabolites in biological fluids. Gábor S, et al. **Acta Pharm Hung** 1989 Jul;59(4):167–72

Physical characterization of the methanol solvate of urapidil. Botha SA, et al. **J Pharm Sci** 1989 Jan;78(1):28–34

Acid catalyzed hydrolysis of a series of zopiclone analogues. Largeron M, et al. **J Pharm Sci** 1989 Aug;78(8):627–31

The distribution of histidyl-proline diketopiperazine [cyclo(His–Pro)] in discrete rat hypothalamic nuclei. Yamada M, et al. **Neuropeptides** 1989 May–Jun;13(4):221–3

Identification and characterization of cyclo(His–Pro)–like immunoreactivity in amniotic fluid. Hilton CW, et al. **Peptides** 1989 Mar–Apr;10(2):299–301

ANTAGONISTS & INHIBITORS

Reversal of the cardiotonic and action-potential prolonging effects of DPI 201–106 by BDF 8784, a methyl-indol derivative. Armah BI, et al. **Br J Pharmacol** 1989 Apr; 96(4):807–16

Long-term lithium treatment in rats attenuates m-chlorophenylpiperazine-induced decreases in food intake but not locomotor activity. Aulakh CS, et al. **Psychopharmacology (Berlin)** 1989;98(4):448–52

BLOOD

Analysis of almitrine and its metabolites in plasma using on-line fast atom bombardment liquid chromatography/mass spectrometry. Luijten W, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):93–7

Determination of the antihypertensive drug 1-[2-ethoxy-2-(3'-pyridyl)ethyl]-4-(2'-methoxyphenyl) piperazine (IP/66) in rat and human plasma by high-performance liquid chromatography and isotope dilution mass spectrometry. Agostini O, et al. **J Chromatogr** 1989 Feb 24;487(2):331–40

Fully automated analytical system using liquid–solid extraction and liquid chromatography for the determination of CGP 6140 in plasma. Rouan MC, et al. **J Chromatogr** 1988 Dec 2;456(1):45–51

Radioimmunoassay of cyclo(His–Pro) in unextracted human plasma: report of a normal range and definition of factors critical for successful assay. Hilton CW, et al. **Neuropeptides** 1989 Jan;13(1):65–70

CHEMICAL SYNTHESIS

Studies on 2(1H)-quinolinone derivatives as neuroleptic agents I. Synthesis and biological activities of (4-phenyl-1-piperazinyl)-propoxy-2(1H)-quinolinone derivatives. Banno K, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4377–88

Agents acting on the central nervous system. Synthesis of 3-phenyl-2-piperazinyl-1-benzazocines, 3-substituted-2-piperazinyl-1-benzazepines and related compounds. Hino K, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2386–400

Synthesis of saframycins. II. Preparations and reactions of N-methyl-2,5-piperazinediones. Kubo A, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2607–14

Acrylamide derivatives as antiallergic agents. III. Synthesis and structure-activity relationships of N-[4-(4-diphenylmethyl-1-piperazinyl)butyl]- and N-[4-(4-diphenylmethylene-1-piperidyl)butyl]-3-heteroarylacry lamides. Nishikawa Y, et al. **Chem Pharm Bull (Tokyo)** 1989 Mar;37(3):684–7

Acrylamide derivatives as antiallergic agents. I. Synthesis and structure-activity relationships of N-[(4-substituted 1-piperazinyl)alkyl]-3-(aryl and heteroaryl)acrylamides. Nishikawa Y, et al. **Chem Pharm Bull (Tokyo)** 1989 Jan; 37(1):100–5

Studies on positive inotropic agents. V. Synthesis of 1-heteroaroylpiperazine derivatives. Ogawa H, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):2253–8

Benzylpiperazine derivatives. X. Syntheses and structure—antiulcer activity relationship of 1-benzyl-4-piperazineacetic acid esters. Ohtaka H, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec;36(12):4825–33

Benzylpiperazine derivatives. VIII. Syntheses, antiulcer and cytoprotective activities of 1-(aminocarbonylalkyl)-4-benzylpiperazine derivatives and related compounds. Ohtaka H, et al. **Chem Pharm Bull (Tokyo)** 1988 Oct;36(10):3948–54

Benzylpiperazine derivatives. IX. Structure-antiulcer activity studies of 1-(aminocarbonylalkyl)-4-benzylpiperazine derivatives by the adaptive least-squares method. Ohtaka H, et al. **Chem Pharm Bull (Tokyo)** 1988 Oct;36(10):3955–60

Synthesis and antimicrobial activity of some pyrrole derivatives. III—2-(4-arylpiperazino)-3-ethoxycarbonyl-5-aryl-pyrrole derivatives. Cocco MT, et al. **Farmaco [Sci]** 1988 Dec;43(12):951–60

Preparation and biodistribution of 1-[2-(3-[125I]iodo-4-aminophenyl)ethyl]-4-[3-(trifluoromethyl) phenyl]piperazine and 1-[2-(3-[125I]iodo-4-azidophenyl)ethyl]-4-[3-(trifluoromethyl)phenyl] piperazine. Chumpradit S, et al. **J Med Chem** 1989 Mar;32(3):543–7

5-(1-piperazinyl)-1H-1,2,4-triazol-3-amines as antihypertensive agents. Meyer WE, et al. **J Med Chem** 1989 Mar;32(3):593–7

Antipsychotic properties of new N-(4-substituted-1-piperazinylethyl)- and N-(4-substituted-1-piperidinylethyl)-phthalimides. al-Rashood KA, et al. **J Pharm Sci** 1988 Oct; 77(10):898–901

[Antimycotic agents. 22. Chlor-(1-piperazinyl)-1,3,5-triazines] Kreutzberger A, et al. **Arch Pharm (Weinheim)** 1988 Dec;321(12):836–40 (Eng. Abstr.) **(Ger)**

[Synthesis of 2-oxooctahydroimidazo[1,2-alpha]pyridine-3-spiro-4'-piperidine derivatives possessing antiapomorphine activity] Tashiro C, et al. **Yakugaku Zasshi** 1989 Feb;109(2):93–101 (Eng. Abstr.) **(Jpn)**

DIAGNOSTIC USE

More on self mutilation and obsessive compulsive disorder [letter] Hollander E, et al. **Can J Psychiatry** 1988 Oct; 33(7):675

Morphologic changes of K-Sol preserved human corneas. Farge EJ, et al. **Cornea** 1989 Sep;8(3):159–69

New brain perfusion imaging agents based on 99mTc-bis(aminoethanethiol) complexes: stereoisomers and biodistribution. Kung HF, et al. **J Med Chem** 1989 Feb;32(2):433–7

Dopamine transport sites selectively labeled by a novel photoaffinity probe: 125I-DEEP. Grigoriadis DE, et al. **J Neurosci** 1989 Aug;9(8):2664–70

[Piribedil test in cephalalgic syndromes. Diagnostic and therapeutic usefulness] Frediani F, et al. **Clin Ter** 1987 May 31;121(4):287–91 (Eng. Abstr.) **(Ita)**

METABOLISM

1-(m-chlorophenyl)piperazine (mCPP) interactions with neurotransmitter receptors in the human brain. Hamik A, et al. **Biol Psychiatry** 1989 Mar 1;25(5):569–75

[3H]GBR-12935 binding to dopamine uptake sites in the human brain. Marcusson J, et al. **Brain Res** 1988 Aug 2; 457(1):122–9

Hypothalamic regulation of histidyl-proline diketopiperazine binding sites in the rat liver. Ogawa N, et al. **Brain Res** 1988 Jun 7;451(1–2):115–8

5-Methyl-urapidil discriminates between subtypes of the alpha 1-adrenoceptor. Gross G, et al. **Eur J Pharmacol** 1988 Jul 7;151(2):333–5

[3H]GBR 12935 binding to dopamine uptake sites: subcellular localization and reduction in Parkinson's disease and progressive supranuclear palsy. Maloteaux JM, et al. **Eur J Pharmacol** 1988 Nov 8;156(3):331–40

The NMDA antagonists, CPP and CGS 19755, lack affinity for central benzodiazepine receptors. Williams M, et al. **Eur J Pharmacol** 1988 Oct 11;155(1–2):185–7

A marine Micrococcus produces metabolites ascribed to the sponge Tedania ignis. Stierle AC, et al. **Experientia** 1988 Dec 1;44(11–12):1021

Determination of trimetazidine in biological fluids by gas chromatography-mass spectrometry. Fay L, et al. **J Chromatogr** 1989 May 5;490(1):198–205

Characterization of buffalo lactotransferrin by polyacrylamide gel electrophoresis in 6 M urea. Kumar S, et al. **J Chromatogr** 1988 Dec 29;434(1):228–31

Arylpiperazine derivatives as high-affinity 5-HT1A serotonin ligands. Glennon RA, et al. **J Med Chem** 1988 Oct;31(10):1968–71

[3H] GBR 12935 binding to the dopamine uptake site in post-mortem brain tissue in schizophrenia. Czudek C, et al. **J Neural Transm** 1989;77(2–3):227–30

[3H]GBR-12935 binding sites in human striatal membranes: binding characteristics and changes in parkinsonians and schizophrenics. Hirai M, et al. **Jpn J Pharmacol** 1988 Jul; 47(3):237–43

Thyrotropin releasing hormone in the pancreas of newborn rats from streptozotocin-treated mothers. Strbák V, et al. **Life Sci** 1989;44(12):779–87

Evidence for the involvement of cytochrome P-450 in tiaramide N-oxide reduction. Sugiura M, et al. **Life Sci** 1974 Oct 15;15(8):1433–42

Kynurenate and 2-amino-5-phosphonovalerate interact with multiple binding sites of the N-methyl-D-aspartate-sensitive glutamate receptor domain. Danysz W, et al. **Neurosci Lett** 1989 Jan 30; 96(3):340–4

In vivo and in vitro autoradiographic labelling of central dopaminergic systems with [3H]GBR12783 in rodents. Leroux-Nicollet I, et al. **Neurosci Lett** 1988 Dec 19; 95(1–3):7–12

Time course of postmortem modifications in synaptosomal [3H]dopamine uptake and [3H]GBR 12783 binding to the dopamine uptake complex in the rat striatum. Thibaut F, et al. **Neurosci Lett** 1989 Jan 30;96(3):335–9

Diketopiperazine formation, hydrolysis, and epimerization of the new dipeptide angiotensin-converting enzyme inhibitor RS-10085. Gu L, et al. **Pharm Res** 1987 Oct;4(5):392–7

Characterization and solubilization of cyclo(His-Pro) binding from rat liver membranes. Mori M, et al. **Proc Soc Exp Biol Med** 1989 Jun;191(2):108–12

Dopamine transporter: solubilization from dog caudate nucleus. Lew R, et al. **Synapse** 1989;3(4):372–5

PHARMACOKINETICS

The influence of renal failure on the pharmacokinetics and duration of action of pipecuronium bromide in patients anesthetized with halothane and nitrous oxide. Caldwell JE, et al. **Anesthesiology** 1989 Jan;70(1):7–12

Single oral dose proportionality pharmacokinetics of almitrine bismesylate in humans. Stavchansky S, et al. **Biopharm Drug Dispos** 1989 May–Jun;10(3):229–37

Relative bioavailability of almitrine bismesylate in humans. Stavchansky S, et al. **Biopharm Drug Dispos** 1989 May–Jun; 10(3):239–46

One year administration of almitrine bismesylate (Vectarion) to chronic obstructive pulmonary disease patients: pharmacokinetic analysis. Stavchansky S, et al. **Biopharm Drug Dispos** 1989 May–Jun;10(3):247–55

Pipecuronium and pancuronium: comparison of pharmacokinetics and duration of action. Caldwell JE, et al. **Br J Anaesth** 1988 Dec;61(6):693–7

Pharmacokinetics and disposition of pipecuronium bromide in the cat. Agoston S, et al. **Eur J Anaesthesiol** 1988 Jul; 5(4):233–42

Dose-response and pharmacokinetic study with almitrine bismesylate after single oral administrations in COPD patients. Bury T, et al. **Eur Respir J** 1989 Jan;2(1):49–55

Pharmacokinetics of centperazine: a new antifilarial agent. Agarwal N, et al. **Int J Clin Pharmacol Res** 1988;8(4):231–7

Influence of food intake on the bioavailability of urapidil in healthy volunteers. Kirsten R, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Jun;27(6):298–301

Permeation of the blood–brain barrier by urapidil and its influence on intracranial pressure in man in the presence of compromised intracranial dynamics. Anger C, et al. **J Hypertens Suppl** 1988 Dec;6(2):S63–4

Correlation between (3H)dopamine specific uptake and (3H)GBR 12783 specific binding during the maturation of rat striatum. Bonnet JJ, et al. **Life Sci** 1989;44(23):1759–65

Foetoplacental drug clearance in the rabbit: studies with trimazosin, acebutolol and tolmesoxide. Prach AT, et al. **Xenobiotica** 1988 Aug;18(8):967–72

PHARMACOLOGY

Behavioural effects of fluprazine in aggressive and timid mice during intraspecies conflict. Kršiak M. **Act Nerv Super (Praha)** 1989 Apr;31(1):63–4

Long-term effects of thyrotropin-releasing hormone and histidyl-proline diketopiperazine on the maturation of homeothermia and mitochondrial enzyme activities in neonatal rats. Miyamori C, et al. **Acta Endocrinol (Copenh)** 1988 Dec;119(4):575–81

Effect of an original piperazine derivative of tetraline on the adrenergically mediated metabolic responses in cats and rats. Bogoslovova T, et al. **Acta Physiol Pharmacol Bulg** 1988;14(4):55–64

Urapidil-induced hemodynamic changes in humans. Bielen E, et al. **Am J Cardiol** 1989 Aug 15;64(7):16D–21D (16 ref.)

Evidence for the interaction of urapidil with 5-HT1A receptors in the brain leading to a decrease in blood pressure. Kolassa N, et al. **Am J Cardiol** 1989 Feb 2; 63(6):36C–39C (30 ref.)

Involvement of brain 5-HT1A receptors in the hypotensive response to urapidil. Kolassa N, et al. **Am J Cardiol** 1989 Aug 15;64(7):7D–10D (32 ref.)

Pharmacologic profile of urapidil. van Zwieten PA. **Am J Cardiol** 1989 Aug 15;64(7):1D–6D (34 ref.)

Protein kinase inhibitor prevents pulmonary edema in response to H2O2. Johnson A, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1012–22

Enhancement of hypoxic pulmonary vasoconstriction by low dose almitrine bismesylate in normal humans. Mélot C, et al. **Am Rev Respir Dis** 1989 Jan;139(1):111–9

Effect of almitrine on ventilation–perfusion distribution in adult respiratory distress syndrome. Reyes A, et al. **Am Rev Respir Dis** 1988 May;137(5):1062–7

Clinical pharmacology of pipecuronium bromide. Larijani GE, et al. **Anesth Analg** 1989 Jun;68(6):734–9

Dose-response relation and time course of action of pipecuronium bromide in humans anesthetized with nitrous oxide and isoflurane, halothane, or droperidol and fentanyl. Wierda JM, et al. **Anesth Analg** 1989 Mar;68(3):208–13

Pipecuronium-induced neuromuscular blockade during nitrous oxide–fentanyl, isoflurane, and halothane anesthesia in adults and children. Pittet JF, et al. **Anesthesiology** 1989 Aug;71(2):210–3

Hyperresponsivity to the serotonin agonist m-chlorophenylpiperazine in Alzheimer's disease. A controlled study. Lawlor BA, et al. **Arch Gen Psychiatry** 1989 Jun;46(6):542–9

Effects of the novel class Ia and class III antiarrhythmic agent RS-87337 on myocardial conduction in the anaesthetised dog. Allely MC, et al. **Arch Int Pharmacodyn Ther** 1988 Sep–Oct;295:138–46

Effect of the alpha-adrenoceptor antagonist urapidil on the pacemaker activity of rabbit sino-atrial node preparations. Kotake H, et al. **Arch Int Pharmacodyn Ther** 1988 Jul–Aug; 294:149–58

Positive inotropic and vasodilatory actions of saterinone in vivo. Armah BI, et al. **Arzneimittelforschung** 1988 Sep; 38(9):1303–9

Pharmacological properties of the positive inotropic and alpha 1-adrenoceptor blocking agent saterinone. Armah BI, et al. **Arzneimittelforschung** 1988 Sep;38(9):1287–92

Selective inhibition of cAMP phosphodiesterase III activity by the cardiotonic agent saterinone in guinea pig myocardium. Brunkhorst D, et al. **Arzneimittelforschung** 1988 Sep;38(9):1293–8

Electrophysiologic effects of saterinone and milrinone in the isolated guinea pig myocardium. Iven H, et al. **Arzneimittelforschung** 1988 Sep;38(9):1298–302

Cardiovascular effects of 1-(3,4-dimethoxyphenyl)-2-(4-diphenylmethylpiperazinyl) ethanol and possible mechanisms involved. Kushiku K, et al. **Arzneimittelforschung** 1989 Apr;39(4):458–63

Effects of H-7 are not exclusively mediated through protein kinase C or the cyclic nucleotide-dependent kinases. Love JT Jr, et al. **Biochem Biophys Res Commun** 1989 Jul 14; 162(1):138–43

Protein kinase C blockers and neutrophil receptors for leukotriene B4. O'Flaherty JT, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1456–60

Na+-H+ antiport during fertilization of the sea urchin egg is blocked by W-7 but is insensitive to K252a and H-7. Shen SS. **Biochem Biophys Res Commun** 1989 Jun 30; 161(3):1100–8

Endothelin action: Inhibition by a protein kinase C inhibitor and involvement of phosphoinositols. Sugiura M, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):170–6

Effect of H-7 on the modulation of glucagon actions by activators of protein kinase-C. García-Sáinz JA, et al. **Biochem Int** 1989 Jan;18(1):243–9

Free-radical generation by copper ions and hydrogen peroxide. Stimulation by Hepes buffer. Simpson JA, et al. **Biochem J** 1988 Sep 1;254(2):519–23

Reduced amounts of S-adenosylmethionine decarboxylase in the adrenal glands of rats following administration of piribedil or 2-deoxyglucose. Ekker M, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3613–8

Beneficial effects of trimetazidine on mitochondrial function and superoxide production in the cardiac muscle of monocrotaline-treated rats. Guarnieri C, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4685–8

Binding of [G-3H]6-(4-nitrobenzylmercapto)purine ribonucleoside to isolated membranes. Inhibitory effect of mioflazine and its derivatives. Ogbunude PO, et al. **Biochem Pharmacol** 1989 Sep 15;38(18):3011–5

Almitrine, a new kind of energy-transduction inhibitor acting on mitochondrial ATP synthase. Rigoulet M, et al. **Biochim Biophys Acta** 1989 Aug 3;975(3):325–9

The carotid bodies of spontaneously hypertensive rats (SHR) after long-term stimulation by almitrine bismesylate. Habeck JO, et al. **Biomed Biochim Acta** 1988;47(6):543–5

Effects of pipecuronium and pancuronium on the isolated rabbit heart. Deam RK, et al. **Br J Anaesth** 1989 Mar; 62(3):287–9

Reversal of the cardiotonic and action-potential prolonging effects of DPI 201-106 by BDF 8784, a methyl-indol derivative. Armah BI, et al. **Br J Pharmacol** 1989 Apr; 96(4):807–16

Alpha 1-adrenoceptor antagonist activity of novel pyrimidine derivatives (SHI437 and IK29) in rabbit aorta and trigone of the bladder. Azuma H, et al. **Br J Pharmacol** 1989 Apr; 96(4):1000–6

Subclassification of alpha 1-adrenoceptor recognition sites by urapidil derivatives and other selective antagonists. Hanft G, et al. **Br J Pharmacol** 1989 Jul;97(3):691–700

8-OH-DPAT, flesinoxan and guanfacine: systemic and regional haemodynamic effects of centrally acting antihypertensive agents in anaesthetized rabbits. Hof RP, et al. **Br J Pharmacol** 1989 Apr;96(4):864–71

Mechanisms of positive inotropic effects and delayed relaxation produced by DPI 201-106 in mammalian working myocardium: effects on intracellular calcium handling. Kihara Y, et al. **Br J Pharmacol** 1989 Apr; 96(4):927–39

Effects of the NMDA receptor/channel antagonists CPP and MK801 on hippocampal field potentials and long-term potentiation in anesthetized rats. Abraham WC, et al. **Brain Res** 1988 Oct 11;462(1):40–6

Astrocyte morphology altered by 1-(5-isoquinolinylsulfonyl) 2-methyl piperazine (H-7) and other protein kinase inhibitors. Bedoy CA, et al. **Brain Res** 1989 Jun 26; 490(2):243–54

NMDA receptor antagonists block norepinephrine-induced long-lasting potentiation and long-term potentiation in rat dentate gyrus. Burgard EC, et al. **Brain Res** 1989 Mar 20; 482(2):351–5

Inhibition by H-7 of the protein kinase C prevents formation of brain edema in Sprague-Dawley CFY rats. Joó F, et al. **Brain Res** 1989 Jun 19;490(1):141–3

Neuroprotective effects of MK-801, TCP, PCP and CPP against N-methyl-D-aspartate induced neurotoxicity in an in vivo perinatal rat model. McDonald JW, et al. **Brain Res** 1989 Jun 19;490(1):33–40

Effects of two nucleoside transport inhibitors, dipyridamole and soluflazine, on purine release from the rat cerebral cortex. Phillis JW, et al. **Brain Res** 1989 Mar 6; 481(2):309–16

Suppression of auditory nerve activity in the guinea pig cochlea by 1-(p-bromobenzoyl)-piperazine-2,3-dicarboxylic acid. Puel JL, et al. **Brain Res** 1989 May 15;487(1):9–15

Effect of pretreatment with ICRF-187 on the total cumulative dose of doxorubicin tolerated by beagle dogs. Herman EH, et al. **Cancer Res** 1988 Dec 1;48(23):6918–25

Almitrine decreases the distensibility of the large pulmonary arteries in man. Herve P, et al. **Chest** 1989 Sep;96(3):572–7

Pretreatment with ICRF-187 allows a marked increase in the total cumulative dose of doxorubicin tolerated by beagle dogs. Herman EH, et al. **Drugs Exp Clin Res** 1988; 14(9):563–70

Anticonvulsant action of the nucleoside transport inhibitor, soluflazine, on synaptic and non-synaptic epileptogenesis in the guinea-pig hippocampus. Ashton D, et al. **Epilepsy Res** 1988 Mar–Apr;2(2):65–71

Ventilatory, circulatory, endocrine, and renal effects of almitrine infusion in man: a contribution to high altitude physiology. Koller EA, et al. **Eur J Appl Physiol** 1989; 58(4):419–25

Modulation of catecholamine effects during hypoglycaemia in man by urapidil and propranolol. Petersen KG, et al. **Eur J Clin Pharmacol** 1989;36(4):351–5

Effects of zopiclone and temazepam on sleep, behaviour and mood during the day. van der Kleijn E. **Eur J Clin Pharmacol** 1989;36(3):247–51

Effects of respiratory and metabolic alkalosis and acidosis on pipecuronium neuromuscular block. Biró K. **Eur J Pharmacol** 1988 Sep 23;154(3):329–33

Cardiac and hemodynamic profile of the new cardiotonic agent, DPI 201-106, in the conscious dog. Gerard JL, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):39–49

NAN-190: an arylpiperazine analog that antagonizes the stimulus effects of the 5-HT1A agonist 8-hydroxy-2-(di-n-propylamino)tetralin (8-OH-DPAT). Glennon RA, et al. **Eur J Pharmacol** 1988 Sep 23; 154(3):339–41

Interaction of DPI 201-106 with cardiac muscarinic receptors. Groschner K, et al. **Eur J Pharmacol** 1989 Jan 10;159(2):125–31

Inhibition of nucleoside transport by a new series of compounds related to lidoflazine and mioflazine. Ijzerman AP, et al. **Eur J Pharmacol** 1989 Aug 15;172(3):273–81

Opposite control mediated by central 5-HT1A and non-5-HT1A (5-HT1B or 5-HT1C) receptors on periaqueductal gray aversion. Jenck F, et al. **Eur J Pharmacol** 1989 Feb 28;161(2-3):219–21

The quinoxalinediones antagonise the visual firing of sustained retinal ganglion cells. Kay CD, et al. **Eur J Pharmacol** 1989 May 19;164(2):381–4

Evaluation of CPP, a selective NMDA antagonist, in various rodent models of epilepsy. Comparison with other NMDA antagonists, and with diazepam and phenobarbital. Löscher W, et al. **Eur J Pharmacol** 1988 Jul 26;152(1-2):9–17

Three putative 5-HT1A agonists act as 5-HT antagonists in frog sensory neurons. Marszalec W, et al. **Eur J Pharmacol** 1988 Sep 23;154(3):325–8

Block of conditioned avoidance responding in the rat by substituted phenylpiperazines. Martin GE, et al. **Eur J Pharmacol** 1988 Nov 1;156(2):223–9

Evidence that the novel antihypertensive agent, flesinoxan, causes differential sympathoinhibition and also increases vagal tone by a central action. Ramage AG, et al. **Eur J Pharmacol** 1988 Jul 14;151(3):373–9

Release of thromboxane A2 by low-dose almitrine in the hypoxic dog. Chuma R, et al. **Eur Respir J** 1988 Aug; 1(8):706–10

Comparative effects of almitrine and raubasine, singly and in combination, on electroencephalographic activity in young and old rats. Sebban C, et al. **Exp Gerontol** 1989; 24(1):11–24

Phorbol myristate acetate induces IL-2 secretion by HUT 78 cells by a mechanism independent of protein kinase C translocation. Kelleher D, et al. **Immunology** 1988 Nov; 65(3):351–5

Effect of protein kinase C inhibitor (H-7) and calmodulin antagonist (W-7) on pertussis toxin-induced IL-1 production by human adherent monocytes. Comparison with lipopolysaccharide as a stimulator of IL-1 production. Taniguchi H, et al. **Immunology** 1989 Jun;67(2):210–5

Oxatomide inhibits the release of chemical mediators from human lung tissues and from granulocytes. Manabe H, et al. **Int Arch Allergy Appl Immunol** 1988;87(1):91–7

Double-blind study on the hypnotic and antianxiety effects of zopiclone compared with nitrazepam in the treatment of insomnia. Agnoli A, et al. **Int J Clin Pharmacol Res** 1989;9(4):277–81

A potent inhibitor of protein kinase C inhibits natural killer activity. Ito M, et al. **Int J Immunopharmacol** 1988; 10(3):211–6

Radiation survival properties of cultured human gastric adenocarcinoma cells and the effect of AT-1727. He SQ, et al. **Int J Radiat Oncol Biol Phys** 1989 Feb;16(2):361–8

Effects of amperozide and azaperone on aggression and productivity of growing-finishing pigs. Gonyou HW, et al. **J Anim Sci** 1988 Nov;66(11):2856–64

Structure-activity relationships in a series of piperazine-2,3-dione containing penicillins and cephalosporins. II. Derivatives substituted at N(4) of the piperazine ring. Harrington FP, et al. **J Antibiot (Tokyo)** 1989 Aug;42(8):1241–7

Stimulus interaction between CO2 and almitrine in the cat carotid chemoreceptors. Lahiri S, et al. **J Appl Physiol** 1989 Jul;67(1):232–8

Dopamine and ventilatory effects of hypoxia and almitrine in chronically hypoxic rats. Wach RA, et al. **J Appl Physiol** 1989 Jul;67(1):186–92

Antagonism of alpha 1-adrenoceptor-mediated vascular contraction by urapidil in isolated arterial strips of spontaneously hypertensive rats. Aoki K, et al. **J Cardiovasc Pharmacol** 1988 Aug;12(2):167–78

Electrophysiologic, antiarrhythmic, and cardioprotective effects of N-[3,5 dichlorophenyl] 4-[4-hydroxy-2-methoxy-phenyl] piperazine carboxamidine dihydrochloride (RS-87337). Dumez D, et al. **J Cardiovasc Pharmacol** 1989 Aug;14(2):184–93

Interaction of DPI 201-106 with cardiac glycosides. Scholtysik G, et al. **J Cardiovasc Pharmacol** 1989 Feb; 13(2):342–7

Cardiac electrophysiologic effects of orally administered DPI 201-106 in conscious canines: effects of pharmacologic autonomic blockade or cardiac transplantation. Walker MJ, et al. **J Cardiovasc Pharmacol** 1989 Sep;14(3):381–8

Protein kinase C inhibitor H-7 alters the actin cytoskeleton of cultured cells. Birrell GB, et al. **J Cell Physiol** 1989 Oct;141(1):74–84

Role of intracellular sodium in the regulation of intracellular calcium and contractility. Effects of DPI 201-106 on excitation-contraction coupling in human ventricular myocardium. Gwathmey JK, et al. **J Clin Invest** 1988 Nov; 82(5):1592–605

Differential effect of DPI 201-106 on the sensitivity of the myofilaments to Ca2+ in intact and skinned trabeculae from control and myopathic human hearts. Hajjar RJ, et al. **J Clin Invest** 1988 Nov;82(5):1578–84

A dose-response evaluation of pipecuronium bromide in elderly patients under balanced anesthesia. Azad SS, et al. **J Clin Pharmacol** 1989 Jul;29(7):657–9

Interaction of urapidil with brain serotonin-1A receptors increases the blood pressure reduction due to peripheral alpha-adrenoceptor inhibition. Sanders KH, et al. **J Hypertens Suppl** 1988 Dec;6(2):S65–8

Inhibition of human natural killer cell activity by the protein kinase C inhibitor 1-(5-isoquinolinesulfonyl)-2-methylpiperazine is an early but post-binding event. Steele TA, et al. **J Immunol** 1988 Nov 1;141(9):3164–9

Activity of aromatic substituted phenylpiperazines lacking affinity for dopamine binding sites in a preclinical test of antipsychotic efficacy. Martin GE, et al. **J Med Chem** 1989 May;32(5):1052–6

Biochemical and functional effects of nucleoside transport inhibition in the isolated cat heart. Van Belle H, et al. **J Mol Cell Cardiol** 1989 Aug;21(8):797–805

Exploratory hypoactivity induced by m-trifluoromethylphenylpiperazine (TFMPP) and m-chlorophenylpiperazine (m-CPP). Kłodzińska A, et al. **J Neural Transm Park Dis Dement Sect** 1989;1(3):207–18

Role of protein kinase C in glial cell proliferation. Bhat NR. **J Neurosci Res** 1989 Jan;22(1):20–7

Effect of HEPES on the taurine uptake by cultured glial cells. Lleu PL, et al. **J Neurosci Res** 1989 May;23(1):78–86

Reversal of neuroleptic-induced catalepsy by novel aryl-piperazine anxiolytic drugs. McMillen BA, et al. **J Pharm Pharmacol** 1988 Dec;40(12):885–7

Effects of urapidil on catecholamine turnover and release in the central nervous system of the rat. Singer EA, et al. **J Pharm Pharmacol** 1989 Mar;41(3):173–8

Different serotonin receptors mediate blood pressure, heart rate, plasma catecholamine and prolactin responses to m-chlorophenylpiperazine in conscious rats. Bagdy G, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):72–8

Agonist and antagonist activities of arylpiperazines at human platelet serotonin2 receptors. Britt SG, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):965–70

Effects of protein kinase inhibitor, 1-(5-isoquinolinylsulfonyl)-2-methylpiperazine, on beta-2 adrenergic receptor activation and desensitization in intact human lymphocytes. Hui KK, et al. **J Pharmacol Exp Ther** 1989 May;249(2):492–8

Effect of 1-(m-chlorophenyl)piperazine and 1-(m-trifluoromethylphenyl)piperazine on locomotor activity. Lucki I, et al. **J Pharmacol Exp Ther** 1989 Apr; 249(1):155–64

Properties of some 1-arylpiperazines as antagonists of stereotyped behaviors mediated by central serotonergic receptors in rodents. Simansky KJ, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1073–81

Screening of positive inotropic agents in isolated cardiac preparations from different sources. Böhm M, et al. **J Pharmacol Methods** 1989 Mar;21(1):33–44

Negative chronotropic and positive inotropic effects of a

unique cardioactive agent, N,N'-dicyclopropyl methyl piperazine (bis) hydrochloride (INO 2628), in isolated, blood-perfused dog atria. Furukawa Y, et al. **Jpn Heart J** 1988 Nov;29(6):863–9

Effect of NC-1100 [1-(3,4-dimethoxyphenyl)-2-(4-diphenylmethylpiperazinyl) ethanol dihydrochloride] on gamma-aminobutyric acid (GABA) metabolism in rat brain: analysis using stroke-prone spontaneously hypertensive rat. Hashimoto T, et al. **Jpn J Pharmacol** 1989 Jun;50(2):131–9

Effects of KB-2796, a new calcium antagonist, and other diphenylpiperazines on [3H]nitrendipine binding. Iwamoto T, et al. **Jpn J Pharmacol** 1988 Oct;48(2):241–7

Effects of mafoprazine, a phenylpiperazine derivative, on the central dopaminergic system. Yamamura M, et al. **Jpn J Pharmacol** 1989 Jul;50(3):295–305

A behavioral pharmacological study of mafoprazine, a new phenylpiperazine derivative. Yamamura M, et al. **Jpn J Pharmacol** 1988 Oct;48(2):203–12

The protective effects of trimetazidine on normothermic ischemic myocardium in rats. Rahman F, et al. **Jpn J Surg** 1989 May;19(3):346–50

Characterization of 1,1-dimethyl-4-phenylpiperazinium induced increased proenkephalin processing in bovine chromaffin cells. Cherdchu C, et al. **Life Sci** 1988; 43(13):1069–77

Effects of fenfluramine, m-chlorophenylpiperazine, and other serotonin-related agonists and antagonists on penile erections in nonhuman primates. Szele FG, et al. **Life Sci** 1988;43(16):1297–303

The chemistry and biology of the immunomodulating agent gliotoxin and related epipolythiodioxopiperazines. Waring P, et al. **Med Res Rev** 1988 Oct-Dec;8(4):499–524 (83 ref.)

Mode of action of razoxane: inhibition of basement membrane collagen-degradation by a malignant tumor enzyme. Karakiulakis G, et al. **Methods Find Exp Clin Pharmacol** 1989 Apr;11(4):255–61

Psychophysiological research in psychiatry and neuropsychopharmacology. II. The investigation of antihypoxidotic/nootropic drugs (tenilsetam and co-dergocrine-mesylate) in elderlies with the Viennese Psychophysiological Test-System (VPTS). Saletu B, et al. **Methods Find Exp Clin Pharmacol** 1989 Jan;11(1):43–55

Interaction of arylpiperazines with 5-HT1A, 5-HT1B, 5-HT1C and 5-HT1D receptors: do discriminatory 5-HT1B receptor ligands exist? Schoeffter P, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jun; 339(6):675–83

Interactions of DPI 201-106, a novel cardiotonic agent, with cardiac calcium channels. Siegl PK, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Dec; 338(6):684–91

Differential neuroendocrine responses to the 5-HT agonist m-chlorophenylpiperazine in Fawn-Hooded rats relative to Wistar and Sprague-Dawley rats. Aulakh CS, et al. **Neuroendocrinology** 1988 Oct;48(4):401–6

Cyclo(His-Pro) and the development of tolerance to the hypothermic effect of ethanol. Prasad C, et al. **Neuropeptides** 1988 Aug-Sep;12(2):75–9

The serotonin agonist, M-chlorophenylpiperazine, markedly increases levels of plasma catecholamines in the conscious rat. Bagdy G, et al. **Neuropharmacology** 1988 Oct; 27(10):975–80

Responses of anterior hypothalamic-preoptic thermosensitive neurons to thyrotropin releasing hormone and cyclo(His-Pro). Hori T, et al. **Neuropharmacology** 1988 Sep;27(9):895–901

Serotonin-antagonist effects of 1-(1-naphthyl)piperazine on operant behavior of squirrel monkeys. McKearney JW. **Neuropharmacology** 1989 Aug;28(8):817–21

Comparison of changes in the EEG of freely moving rats induced by enciprazine, buspirone and diazepam. Nickel B, et al. **Neuropharmacology** 1989 Aug;28(8):799–803

The discriminative stimulus effects of N-methyl-D-aspartate antagonists in phencyclidine-trained rats. Willetts J, et al. **Neuropharmacology** 1988 Dec;27(12):1249–56

NMDA receptor antagonists CPP and MK-801 partially suppress the epileptiform discharges induced by the convulsant drug bicuculline in the rat neocortex. Hwa GG, et al. **Neurosci Lett** 1989 Mar 27;98(2):189–93

Differential effects of competitive and non-competitive N-methyl-D-aspartate antagonists on glucose use in the limbic system. Nehls DG, et al. **Neurosci Lett** 1988 Aug 31;91(2):204–10

The NMDA antagonists MK801 and CPP disrupt compensation for unilateral labyrinthectomy in the guinea pig. Smith PF, et al. **Neurosci Lett** 1988 Dec 5;94(3):309–13

A novel enhancement of SV40 enhancer activity by treatment of mouse neuroblastoma N18TG2 with protein kinase inhibitor H-7. Kikuchi K, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10171–81

Properties of the bursting Na channel in the presence of DPI 201-106 in guinea-pig ventricular myocytes. Nilius B, et al. **Pflugers Arch** 1989 Jan;413(3):234–41

Different conductance states of the bursting Na channel in guinea-pig ventricular myocytes. Nilius B, et al. **Pflugers Arch** 1989 Jan;413(3):242–8

A comparison of feeding and locomotion responses to serotonin agonists in three rat strains. Aulakh CS, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):567–71

Long-term imipramine treatment potentiates m-chlorophenylpiperazine-induced changes in prolactin but not corticosterone or growth hormone levels in rats. Aulakh CS, et al. **Pharmacol Biochem Behav** 1989 Jan; 32(1):37–42

Psychopharmacological profile of 1-(m-(trifluoromethyl) phenyl) piperazine (TFMPP). Frances H. **Pharmacol Biochem Behav** 1988 Sep;31(1):37–41

Buffer effects on high affinity [3H]-prazosin binding in brain and spinal cord. Herr DW, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):831–4

Apparent antinociceptive properties of piperazine-type serotonin agonists: trifluoromethylphenylpiperazine, chlorophenylpiperazine, and MK-212. McKearney JW. **Pharmacol Biochem Behav** 1989 Mar;32(3):657–60

Stability of the stimulus properties of drugs over time. Schechter MD, et al. **Pharmacol Biochem Behav** 1989 Jan; 32(1):361–4

Use of TFMPP stimulus properties as a model of 5-HT1B receptor activation. Schechter MD. **Pharmacol Biochem Behav** 1988 Sep;31(1):53–7

Selective breeding for increased cholinergic function: increased serotonergic sensitivity. Wallis E, et al. **Pharmacol Biochem Behav** 1988 Oct;31(2):345–50

Influence of urapidil on in vitro platelet response to adrenaline and other aggregating agents. Emanuelli G, et al. **Pharmacol Res Commun** 1988 Oct;20(10):883–99

Effects of amperozide in two animal models of anxiety. Engel JA, et al. **Pharmacol Toxicol** 1989 May;64(5):429–33

Relaxing effects of dilazep and lidoflazine in dog cerebral and renal arteries independent of adenosine. Mustafa SJ, et al. **Pharmacology** 1988;37(2):75–84

Evidence for a decline with age in behavioral responsivity to the serotonin agonist, m-chlorophenylpiperazine, in healthy human subjects. Lawlor BA, et al. **Psychiatry Res** 1989 Jul;29(1):1–10

The effects of repeated administration of fluprazine on target biting and intruder-evoked attacks. Carelli RM, et al. **Psychopharmacology (Berlin)** 1988;95(4):476–81

Infusion of the 5-hydroxytryptamine agonists RU24969 and TFMPP into the paraventricular nucleus of the hypothalamus causes hypophagia. Hutson PH, et al. **Psychopharmacology (Berlin)** 1988;95(4):550–2

Evidence that hypophagia induced by mCPP and TFMPP requires 5-HT1C and 5-HT1B receptors; hypophagia induced by RU 24969 only requires 5-HT1B receptors. Kennett GA, et al. **Psychopharmacology (Berlin)** 1988; 96(1):93–100

Blockade of conditioned avoidance responding by trazodone, etoperidone, and MCPP. Martin GE, et al. **Psychopharmacology (Berlin)** 1989;99(1):94–7

Comparative anxiogenic, neuroendocrine, and other physiologic effects of m-chlorophenylpiperazine given intravenously or orally to healthy volunteers. Murphy DL, et al. **Psychopharmacology (Berlin)** 1989;98(2):275–82

Effects of the NMDA antagonists CPP and MK-801 on delayed conditional discrimination. Tan S, et al. **Psychopharmacology (Berlin)** 1989;98(4):556–60

Anti oxy-radical properties of trimetazidine. Guarnieri C, et al. **Res Commun Chem Pathol Pharmacol** 1989 May; 64(2):215–25

Alpha adrenergic blocking activity of urapidil in man. Jamieson MJ, et al. **Res Commun Chem Pathol Pharmacol** 1988 Nov; 62(2):173–85

The effect of almitrine bismesylate on the steady-state responses of arterial chemoreceptors to CO2 and O2 in the cat. Maxwell DL, et al. **Respir Physiol** 1988 Dec; 74(3):275–84

Almitrine enhances in low dose the reactivity of pulmonary vessels to hypoxia. Nakanishi S, et al. **Respir Physiol** 1988 Nov;74(2):139–50

Respiratory center output following zopiclone or diazepam administration in patients with pulmonary disease. Beaupré A, et al. **Respiration** 1988;54(4):235–40

Breathing pattern--gas exchange relation and acute effect of almitrine in severe chronic airflow obstruction. Damato S, et al. **Respiration** 1988;54(1):42–9

Modulation of delta activity by hypnotics in middle-aged subjects: studies with a benzodiazepine (flurazepam) and a cyclopyrrolone (zopiclone). Wright NA, et al. **Sleep** 1986 Jun;9(2):348–52

Almitrine bismesylate reduces hypoxic pulmonary vasoconstriction in isolated rat lungs. Kato S, et al. **Tohoku J Exp Med** 1989 Feb;157(2):119–29

[2 newly synthesized compounds of the piperazine group studied for their analgesic action] Ianeva-Balabanska I, et al. **Eksp Med Morfol** 1988;27(4):27–31 (Eng. Abstr.) **(Bul)**

[Neuropharmacologic effect of 2 newly synthesized compounds of the piperazine group. Report II. Effect on the behavior of experimental animals] Ianeva-Balabanska I, et al. **Eksp Med Morfol** 1988;27(3):22–6 (Eng. Abstr.) **(Bul)**

[Effect of 2 newly synthesized compounds of the piperazine group on the aggressive behavior of white mice] Ianeva-Balabanska I, et al. **Eksp Med Morfol** 1988; 27(3):27–31 (Eng. Abstr.) **(Bul)**

[Preventive effect of mioflazine on myocardial calcium-overload during postischemic reperfusion in the rabbit heart] Liu GS, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Apr;27(4):221–3, 261 (Eng. Abstr.) **(Chi)**

[Effects of bimolane on immune responses in mice] Dan N, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Sep;9(5):471–4 (Eng. Abstr.) **(Chi)**

[Effects of bimolane and probimane on the incorporation of (3H)TdR, (3H)UR and (3H)Leu into Ehrlich ascites carcinoma cells iv vitro] Wang MY, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jul;9(4):367–9 (Eng. Abstr.) **(Chi)**

[Chemoreceptor control of ventilation in rats: the particular case of almitrine dimesylate] Lagneaux D, et al. **Bull Mem Acad R Med Belg** 1988;143(7-9):342–55 (Eng. Abstr.) **(Fre)**

[Comparison of the effects of zopiclone and triazolam on the sleep of normal subjects] Tiberge M, et al. **Encephale** 1988 Jul-Aug;14(4):319–24 (Eng. Abstr.) **(Fre)**

[Effects of zopiclone on sleep, daytime somnolence and nocturnal and daytime performance in healthy volunteers] Billiard M, et al. **Neurophysiol Clin** 1989 May;19(2):131–43 (Eng. Abstr.) **(Fre)**

[The effect of almitrine dimesylate on pulmonary hemodynamics in healthy subjects and in patients with chronic obstructive bronchitis] Ansquer JC. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:409–10 (30 ref.) (Eng. Abstr.) **(Fre)**

[New analgesically-active N'-acylated phenylpiperazines] Oepen G, et al. **Arzneimittelforschung** 1988 Nov; 38(11):1549–52 (Eng. Abstr.) **(Ger)**

[Effects of different buffers, ethanol and hydrogen peroxide on the morphology of cultured brain cells] Lindner G, et al. **J Hirnforsch** 1989;30(2):213–21 (Eng. Abstr.) **(Ger)**

[Effect of almitrine, a chemoreceptor stimulator, on nocturnal hypercapnia and pulmonary artery pressure during O2 respiration in chronic obstructive lung disease] Rühle KH, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:411–4 (Eng. Abstr.) **(Ger)**

[The effect of almitrine on hypoxic pulmonary vasoconstriction in isolated perfused rat lungs] Kato S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jul; 26(7):707–13 (Eng. Abstr.) **(Jpn)**

[Electroencephalographic study on the central action of a new anxiolytic: 3a alpha, 4 beta, 7 beta, 7a alpha-hexahydro-2-(4-(4-(2-pyrimidinyl)-1-piperazinyl)-butyl)-4, 7-methano-1H-isoindole-1, 3(2H)-dione dihydrogen citrate (SM-3997)] Hirose A, et al. **Nippon Yakurigaku Zasshi** 1989 Feb;93(2):41–7 (Eng. Abstr.) **(Jpn)**

[Behavioral effects of NC-1100, 1-(3,4-dimethoxyphenyl)-2-(4-diphenylmethylpiperazinyl) ethanol dihydrochloride--on ambulatory activity, discrete lever-press response and shuttle avoidance response in mice] Kuribara H, et al. **Nippon Yakurigaku Zasshi** 1989 Apr;93(4):245–53 (Eng. Abstr.) **(Jpn)**

[Pharmacological studies on the clathrate compound of mobenzoxamine with beta-cyclodextrin. (I). Effects on the digestive system] Yokochi E, et al. **Nippon Yakurigaku Zasshi** 1988 Nov;92(5):297–310 (Eng. Abstr.) **(Jpn)**

[The search for compounds with dopaminergic activity. VII. Synthesis of piribedil analogs] Woliński J, et al. **Acta Pol Pharm** 1988;45(3):206–9 (Eng. Abstr.) **(Pol)**

[Ionic selectivity of bilayer lipid membranes modified by triforine] Golubev VN, et al. **Biofizika** 1989 Jan-Feb; 34(1):42–4 (Eng. Abstr.) **(Rus)**

[Effect of the antitumor preparations prospidin and spirobromin on the function of the liver lysosomal apparatus in mice] Kliment'eva TK, et al. **Farmakol Toksikol** 1989 Jan-Feb;52(1):71–4 (Eng. Abstr.) **(Rus)**

[Analysis of the baroreflex activation of the sympathetic system in waking cats induced by urapidil and sodium nitroprusside] Medvedev OS, et al. **Farmakol Toksikol** 1988 Jul-Aug;51(4):53–6 (Eng. Abstr.) **(Rus)**

[Antimicrobial properties of 1,4-bis-(N,N-methyl-N,N-decoxycarbonylmethylene)= piperazinium dibromide] Petrenko GT, et al. **Mikrobiol Zh** 1987 Mar-Apr;49(2):96–7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Neurobiology of cyclo(His-Pro). Prasad C. **Ann N Y Acad Sci** 1989;553:232–51 (137 ref.)

THERAPEUTIC USE

Inability of flunarizine, lidoflazine or magnesium to counteract delayed hypoperfusion after forebrain ischaemia in the rat. Grøgaard B, et al. **Acta Neurochir (Wien)** 1988; 95(3-4):136–42

Propranolol, clonidine, urapidil and trazodone infusion in essential tremor: a double-blind crossover trial. Caccia MR, et al. **Acta Neurol Scand** 1989 May;79(5):379–83

Acute responses to urapidil in hypertensive persons. de Leeuw PW, et al. **Am J Cardiol** 1989 Aug 15; 64(7):22D–24D

Therapeutic assessment of urapidil or angiotensin-converting enzyme inhibition in systemic hypertension. Rosenthal J, et al. **Am J Cardiol** 1989 Aug 15;64(7):25D–29D

Overview of clinical trials with urapidil. Schook CE, et al. **Am J Cardiol** 1989 Aug 15;64(7):30D–37D (58 ref.)

The effects of urapidil therapy on hemodynamics and gas exchange in exercising patients with chronic obstructive pulmonary disease and pulmonary hypertension. Adnot S,

et al. **Am Rev Respir Dis** 1988 May;137(5):1068–74

Piperazinedione plus total body irradiation: an alternative preparative regimen for allogeneic bone marrow transplantation in advanced phases of chronic myelogenous leukemia. Horwitz LJ, et al. **Bone Marrow Transplant** 1989 Jan;4(1):101–5

Effects of ICRF–187 on the cardiac and renal toxicity of epirubicin in spontaneously hypertensive rats. Dardir M, et al. **Cancer Chemother Pharmacol** 1989;23(5):269–75

ADR–529 (ICRF–187). **Cancer Invest** 1989;7(1):101

Almitrine decreases compliance of pulmonary arteries in COPD [letter] Hervé P, et al. **Chest** 1988 Nov; 94(5):1119–20

Piribedil therapy in Parkinson's disease. Use of the drug in the retard form. Mentenopoulos G, et al. **Clin Neuropharmacol** 1989 Feb;12(1):23–8

Low dose almitrine bismesylate improves pulmonary gas exchange during canine one–lung hypoxia. Takasaki M, et al. **Crit Care Med** 1989 Jul;17(7):661–5

Acute haemodynamic effects of urapidil in patients with chronic left ventricular failure. Tebbe U, et al. **Eur J Clin Pharmacol** 1988;35(3):305–8

Zopiclone in insomniac shiftworkers. Evaluation of its hypnotic properties and its effects on mood and work performance. Monchesky TC, et al. **Int Arch Occup Environ Health** 1989;61(4):255–9

Improved orthostatic dysregulation record after administration of a sustained–release form of urapidil. Kirsten R, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Jul;27(7):338–41

Systemic haemodynamic and humoral changes during urapidil treatment in hypertensive patients. Leonetti G, et al. **J Hypertens Suppl** 1988 Dec;6(2):S25–9 (18 ref.)

Antihypertensive efficacy and safety of urapidil, alone or in combination with beta–blockers, in patients with phaeochromocytoma. Miura Y, et al. **J Hypertens Suppl** 1988 Dec;6(2):S59–62

Pharmacological effects of urapidil on bronchospasm, myocardial hypoxia and postural hypotension in experimental animals. Murai T, et al. **J Hypertens Suppl** 1988 Dec;6(2):S55–8

Clinical pharmacology of urapidil. Prichard BN, et al. **J Hypertens Suppl** 1988 Dec;6(2):S13–9 (40 ref.)

Efficacy of urapidil in the management of essential hypertension: a comparison with captopril. Rosenthal J, et al. **J Hypertens Suppl** 1988 Dec;6(2):S69–71

Urapidil in patients with severe hypertension and in long–term treatment. Takeda T, et al. **J Hypertens Suppl** 1988 Dec;6(2):S37–42

Wasting pig syndrome (WPS) in weaners—treatment with amperozide. Kyriakis SC, et al. **J Vet Pharmacol Ther** 1989 Jun;12(2):232–6

Activity of thiocarbamazine in patients dually infected with Schistosoma and Onchocerca volvulus [letter] Soula G, et al. **Lancet** 1989 Apr 1;1(8640):726

A double–blind evaluation of ciladopa in Parkinson's disease. Weiner WJ, et al. **Mov Disord** 1987;2(3):211–7

ICRF–187 and doxorubicin–induced cardiac toxicity [letter] **N Engl J Med** 1989 Feb 9;320(6):399–400

A quantitative morphological assessment of the effect of lidoflazine and deferoxamine therapy on global brain ischaemia. Kumar K, et al. **Neurol Res** 1988 Sep; 10(3):136–40

Single doses of the serotonin agonists buspirone and m–chlorophenylpiperazine do not relieve neuropathic pain. Kishore–Kumar R, et al. **Pain** 1989 May;37(2):223–7

The effect of OPC–4392, a partial dopamine receptor agonist on negative symptoms: results of an open study. Gerbaldo H, et al. **Pharmacopsychiatry** 1988 Nov;21(6):387–8

Effects of a novel calcium antagonist, KB–2796, on neurologic outcome and size of experimental cerebral infarction in rats. Harada K, et al. **Surg Neurol** 1989 Jul; 32(1):16–20

Peripheral nerve function in patients with chronic bronchitis receiving almitrine or placebo. Allen MB, et al. **Thorax** 1989 Apr;44(4):292–7

[Hemodynamic changes and left ventricular function in patients with hypertension during an acute trial of urapidil] Sirakova V, et al. **Vutr Boles** 1988;27(5):20–3 (Eng. Abstr.) **(Bul)**

[Protective effects of lidoflazine and mioflazine in ischemic myocardium] Liu GS, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Apr; 16(2):100–2, 127 (Eng. Abstr.) **(Chi)**

[Cytokinetic effects of 1,2–bis(4–isobutoxycarbonyloxymethyl–3,5–dioxopiperazin–1–yl) ethane (MST–16) on leukemia L1210 cells in mice] He H, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jul;9(4):369–73 (Eng. Abstr.) **(Chi)**

[Almitrine bismesylate. A peripheral chemoreceptor agonist] Nielsen SP. **Ugeskr Laeger** 1988 Nov 14;150(46):2797–800 (Eng. Abstr.) **(Dan)**

[Zopiclone (imovane)—a new sedative agent] Wildschiødtz G, et al. **Ugeskr Laeger** 1989 Feb 20;151(8):518–20 **(Dan)**

[Stimulation of somatotropin hormone by piribedil, a dopaminergic agonist, in endogenous depression. Preliminary study] Guillaume R, et al. **Acta Psychiatr Belg** 1988 Mar–Apr;88(2):153–61 (23 ref.) (Eng. Abstr.) **(Fre)**

[Value of trimetazidine in the long–term treatment of cardiomyopathies of ischemic origin] Brottier L, et al. **Ann Cardiol Angeiol (Paris)** 1989 Mar;38(3):179–82 (Eng. Abstr.) **(Fre)**

[Metabolically neutral therapy of hypertension. An open, multicenter, prospective long–term study of the tolerance, safety and effectiveness of urapidil] Liebau H, et al. **Fortschr Med** 1988 Nov 10;106(32):651–4 (Eng. Abstr.) **(Ger)**

[Antihypertensive effect and tolerance to urapidil. Comparison with nifedipine in a multicenter double–blind study] Stumpe KO, et al. **Fortschr Med** 1989 Jan 15; 107(1):54–7 (Eng. Abstr.) **(Ger)**

[Lung function and blood gas analysis studies in patients with COPD and respiratory insufficiency receiving almitrine medication with special reference to its clinical aspects] Hillebrand M, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:391–3 (Eng. Abstr.) **(Ger)**

[The results of Vectarion therapy (comments on 3 clinical cases)] Mihăltan F, et al. **Rev Ig [Pneumoftiziol]** 1988 Jul–Sep;37(3):249–56 (Eng. Abstr.) **(Rum)**

[The basic agent prospidin in the therapy of rheumatoid arthritis (late observations)] Benenson EV, et al. **Revmatologiia (Moskva)** 1988 Oct–Dec;(4):6–12 (Eng. Abstr.) **(Rus)**

[Clinical effectiveness of prospidin in systemic lupus erythematosus (results of a 6–month follow–up)] Benenson EV, et al. **Ter Arkh** 1989;61(5):21–6 (Eng. Abstr.) **(Rus)**

[Treatment of hematosis disorders in chronic obstructive bronchitis with almitrine bismesilate (letter)] Raimondi GA. **Medicina (B Aires)** 1987;47(6):687–8 **(Spa)**

TOXICITY

Anxiogenic–like effects of mCPP and TFMPP in animal models are opposed by 5–HT1C receptor antagonists. Kennett GA, et al. **Eur J Pharmacol** 1989 May 30; 164(3):445–54

Frequency and size distribution of micronuclei in lymphocytes stimulated with phytohemagglutinin and pokeweed mitogen in workers exposed to piperazine. Högstedt B, et al. **Hereditas** 1988;109(1):139–42

Phase 1 study of a new antipsychotic drug, OPC–4392. Murasaki M, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(5):793–802

Effects of repeated dosing of zopiclone on endocrine system in male rats. Kawamoto H, et al. **Res Commun Chem Pathol Pharmacol** 1989 May; 64(2):255–71

PIPERIDINES

Symposium on roxatidine acetate. Rottach–Egern, 3–5 June 1987. Proceedings. **Drugs** 1988;35 Suppl 3:1–142

Synthesis and structure–activity relationships of a new series of antiarrhythmic agents: monobasic derivatives of disobutamide. Desai BN, et al. **J Med Chem** 1988 Nov; 31(11):2158–64

Pyrrolidine, a non–controlled substance, can replace piperidine for the chemical sequencing of DNA. Shi YG, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3317

Chemical and biologic characteristics of roxatidine acetate. Bickel M, et al. **Scand J Gastroenterol Suppl** 1988;146:78–88

ADMINISTRATION & DOSAGE

Suppression of spontaneous LH surges in estrogen–treated ovariectomized rats by microimplants of antiestrogens into the preoptic brain. Petersen SL, et al. **Brain Res** 1989 Apr 10;484(1–2):279–89

A comparison of roxatidine acetate 150 mg once daily and 75 mg twice daily in gastric ulcer healing. Rösch W. **Drugs** 1988;35 Suppl 3:127–33

Effect of ritanserin on sleep stages and sleep EEG in the rat. Borbély AA, et al. **Eur J Pharmacol** 1988 Nov 1; 156(2):275–8

A possible mechanism on the potentiating vascular effect of coadministration of ifenprodil tartrate and calcium hopantenate: a study in the internal carotid artery. Shibuya T, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Sep; 26(9):448–52

Suppression of neuroleptic–induced persistent abnormal movements in Cebus apella monkeys by enantiomers of 3–PPP. Kovacic B, et al. **J Neural Transm** 1988; 74(2):97–107

Self–prescribing and promotion of antidiarrhoeal drugs [letter] [see comments] Cutting WA. **Lancet** 1989 May 13; 1(8646):1080–1. **Comment in:** Lancet 1989 Jun 17;1(8651):1393

Antinociceptive effects of the 5–HT2 antagonist ritanserin in rats: evidence for an activation of descending monoaminergic pathways in the spinal cord. Barber A, et al. **Neurosci Lett** 1989 Apr 24;99(1–2):234–8

A comparative study of the effects of four motor–stimulating agents on canine jejunal spike bursts. The use of a computer program to analyze spike burst spread. Summers RW, et al. **Scand J Gastroenterol** 1988 Dec;23(10):1173–81

Inhibition of food–stimulated acid secretion (intragastric titration) by roxatidine acetate. Dose–response study. Bonfils S, et al. **Scand J Gastroenterol Suppl** 1988; 146:135–41

Fifteen years of experience on the use of Libexin tablets. Csürös L. **Ther Hung** 1989;37(1):50–4 (48 ref.)

ADVERSE EFFECTS

Oral tyramine pressor test and the safety of monoamine oxidase inhibitor drugs: comparison of brofaromine and tranylcypromine in healthy subjects. Bieck PR, et al. **J Clin Psychopharmacol** 1988 Aug;8(4):237–45

Bradycardia due to biperiden. Grosse Aldenhövel H, et al. **Pharmacopsychiatry** 1989 Jan;22(1):42–3

ANALYSIS

Investigation of the mechanism of the electrochemical oxidation of bamipine hydrochloride by voltammetry. Biryol I, et al. **Analyst** 1989 Feb;114(2):181–4

Piperidine ester derivatives in mass spectrometric analysis of fatty acids from human serum phospholipids and cholesteryl esters. Marnela KM, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):443–6

Deuterated ritanserin analysis by gas chromatography/mass spectrometry: a sensitive technique to study human ritanserin pharmacokinetics. Timmerman P, et al. **Biomed Environ Mass Spectrom** 1989 Jul;18(7):498–502

Conformational study of a histamine H2–receptor antagonist: crystal structures of 2–acetoxy–N–[3–[m–(1–piperidinomethyl)=phenoxy]propyl]acetamide (roxatidine acetate) and its hydrochloride salt. In Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2295–302

Solid state characterization and solubility enhancement of loperamide hydrochloride. Giordano F, et al. **Farmaco [Prat]** 1988 Sep;43(9):267–78

Determination of roxatidine in human plasma, urine and milk by capillary gas chromatography using nitrogen–selective detection. Burrows JL, et al. **J Chromatogr** 1988 Nov 18; 432:199–208

Gas–liquid chromatographic resolution of some racemic synthons for lamtidine analogous histamine H2–receptor antagonists via diastereomeric amides of (1S)–(–)–camphanic acid. Büyüktimkin N, et al. **J Chromatogr** 1989 Apr 28;467(2):402–5

High–performance liquid chromatographic determination of loperamide hydrochloride in pharmaceutical preparations. Leung CP, et al. **J Chromatogr** 1988 Sep 30;449(1):341–4

Determination of drugs containing fluorine with ion–selective electrode. Part 2: Butyrophenones and bis(4–fluorophenyl)butylpiperidines. Hopkala H, et al. **Pharmazie** 1989 Jan;44(1):65

[Determination of heptacaine hydrochloride and its metabolites in human urine and blood] Dunčková E, et al. **Pharmazie** 1989 Feb;44(2):156–7 **(Ger)**

[Parameters for adsorption chromatography. 6. Adsorption parameters within a group of CNS–active substances and their importance for structure–activity relationships] Perina Z, et al. **Pharmazie** 1989 Feb;44(2):125–8 (Eng. Abstr.) **(Ger)**

BLOOD

Quantitative determination of brofaromin in human plasma after high performance liquid chromatographic separation. Horne C, et al. **Arch Pharm (Weinheim)** 1988 Jun; 321(6):359–61

A simple but highly sensitive radioreceptor assay for the determination of scopolamine and biperiden in human plasma. Stoll L, et al. **Res Commun Chem Pathol Pharmacol** 1989 Apr;64(1):59–68

CHEMICAL SYNTHESIS

Analgesic activity of some 3–(arylpiperidinomethyl)–2–benzoxazolinone derivatives. Erdoğan H, et al. **Arch Pharm (Weinheim)** 1989 Feb; 322(2):75–7

Acrylamide derivatives as antiallergic agents. III. Synthesis and structure–activity relationships of N–[4–(4–diphenylmethyl–1–piperazinyl)butyl]– and N–[4–(4–diphenylmethylene–1–piperidyl)butyl]–3–heteroarylacry lamides. Nishikawa Y, et al. **Chem Pharm Bull (Tokyo)** 1989 Mar;37(3):684–7

Synthesis and antinociceptive activity of 7–aryloxysulfonyl piperidines. Buolamwini JK, et al. **Drug Des Deliv** 1988 Jul;3(1):35–47

Synthesis and biological activity of a GABAA agonist which has no effect on benzodiazepine binding and of structurally related glycine antagonists. Byberg JR, et al. **Drug Des Deliv** 1987 May;1(4):261–74

Optical isomers of some piperidine–derived hemicholinium congeners containing secondary alcohol groups: preparation and biological activities. Cannon JG, et al. **Drug Des Deliv** 1988 Jul;3(1):49–56

Synthesis, binding affinities for alpha–adrenoceptor and eudismic analysis of chiral benzodioxane derivatives and their chiral opened analogues. Ferri V, et al. **Farmaco [Sci]** 1988 Dec;43(12 Suppl):1153–63

Synthesis and pharmacological evaluation of 4,4–disubstituted piperidines. Colapret JA, et al. **J Med Chem** 1989 May;32(5):968–74

4–(Phosphonoalkyl)– and 4–(phosphonoalkenyl)–2–piperidinecarboxylic acids: synthesis, activity at N–methyl–D–aspartic acid receptors, and anticonvulsant activity. Hutchison AJ, et al. **J Med Chem** 1989 Sep;32(9):2171–8

Synthesis and beta–adrenergic antagonism of 2–(aryloxy)–1–(2–piperidyl)ethanols. Mauleón D, et al.

J Med Chem 1988 Nov;31(11):2122–6

Synthesis, absolute configuration, and molecular modeling study of etoxadrol, a potent phencyclidine-like agonist. Thurkauf A, et al. **J Med Chem** 1988 Dec;31(12):2257–63

Synthesis and antiallergy activity of 4-(diarylhydroxymethyl)-1-[3-(aryloxy)propyl]piperidines and structurally related compounds. Walsh DA, et al. **J Med Chem** 1989 Jan;32(1):105–18

Synthesis and biological evaluation of [125I]- and [123I]-4-iododexetimide, a potent muscarinic cholinergic receptor antagonist. Wilson AA, et al. **J Med Chem** 1989 May;32(5):1057–62

Antipsychotic properties of new N-(4-substituted-1-piperazinylethyl)- and N-(4-substituted-1-piperidinylethyl)-phthalimides. al-Rashood KA, et al. **J Pharm Sci** 1988 Oct; 77(10):898–901

Study of local anaesthetics. Part 93: A contribution to the study of OSAR in the group of derivatives of phenylcarbamic acid. Bachratá M, et al. **Pharmazie** 1989 Jan;44(1):25–8

[(Arylpiperazino-4-butyryl)-6 benzoxazolinones and reduction products: chemistry and pharmacodynamic study] Moussavi Z, et al. **Farmaco** 1989 Jan;44(1):77–88 (Eng. Abstr.) **(Fre)**

[Synthesis of 14C-anpirtoline] Engel J, et al. **Arch Pharm (Weinheim)** 1988 Nov;321(11):821–2 (Eng. Abstr.) **(Ger)**

DIAGNOSTIC USE

Measuring the serotonin uptake site using [3H]paroxetine--a new serotonin uptake inhibitor. Gleiter CH, et al. **Adv Alcohol Subst Abuse** 1988;7(3-4):107–11

Highly potent and selective ligands for a new class H3 of histamine receptor. Arrang JM, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S130–2

Feedforward inhibition of the rat entorhinal cortex and subicular complex. Finch DM, et al. **J Neurosci** 1988 Jul; 8(7):2213–26

[A method of peroral relaxation ileocecography] Rozenshtraukh LS. **Vestn Rentgenol Radiol** 1988 Sep–Oct; (5):72–6 (Eng. Abstr.) **(Rus)**

HISTORY

Fifty-seven years ago in Current Researches in Anesthesia and Analgesia: 1932;11:177–183. P. D. Woodbridge: Neothesin for Spinal and Regional Anesthesia: A preliminary Clinical Report. Greene NM. **Anesth Analg** 1989 May;68(5):681

ISOLATION & PURIFICATION

FR-900520 and FR-900523, novel immunosuppressants isolated from a Streptomyces. I. Taxonomy of the producing strain. Hatanaka H, et al. **J Antibiot (Tokyo)** 1988 Nov;41(11):1586–91

FR-900520 and FR-900523, novel immunosuppressants isolated from a Streptomyces. II. Fermentation, isolation and physico-chemical and biological characteristics. Hatanaka H, et al. **J Antibiot (Tokyo)** 1988 Nov; 41(11):1592–601

METABOLISM

4,4-Diphenylpiperidine derivates and their sila analogues. A comparative study of their interaction with neural receptor biding sites and synaptosomal monoamine uptake. Stasch JP, et al. **Arzneimittelforschung** 1988 Aug;38(8):1075–8

Characterization of the binding of [3H]-CGS 19755: a novel N-methyl-D-aspartate antagonist with nanomolar affinity in rat brain. Murphy DE, et al. **Br J Pharmacol** 1988 Nov; 95(3):932–8

High affinity [3H]paroxetine binding to serotonin uptake sites in human brain tissue. Bäckström I, et al. **Brain Res** 1989 May 8;486(2):261–8

Heterogeneity of [3H]neurotensin bindings: studies with dynorphin, L-156,903 and levocabastine. Pettibone DJ, et al. **Brain Res** 1988 Aug 9;457(2):212–8

Affinity and selectivity of biperiden enantiomers for muscarinic receptor subtypes. Eltze M, et al. **Eur J Pharmacol** 1988 Dec 6;158(1-2):11–9

Sertraline potently displaces (+)-[3H]3-PPP binding to sigma sites in rat brain. Schmidt A, et al. **Eur J Pharmacol** 1989 Jun 20;165(2-3):335–6

The NMDA antagonists, CPP and CGS 19755, lack affinity for central benzodiazepine receptors. Williams M, et al. **Eur J Pharmacol** 1988 Oct 11;155(1-2):185–7

Expression of (+)-3-PPP binding sites in the PC12 pheochromocytoma cell line. Yang ZW, et al. **Eur J Pharmacol** 1989 May 30;164(3):607–10

Etoxadrol-meta-isothiocyanate: a potent, enantioselective, electrophilic affinity ligand for the phencyclidine-binding site. Thurkauf A, et al. **FEBS Lett** 1988 Oct 10; 238(2):369–74

Substituted diphenylbutylpiperidines bind to a unique high affinity site on the L-type calcium channel. Evidence for a fourth site in the cardiac calcium entry blocker receptor complex. King VF, et al. **J Biol Chem** 1989 Apr 5; 264(10):5633–41

Determination of the new monoamine oxidase inhibitor brofaromine and its major metabolite in biological material by gas chromatography with electron-capture detection. Schneider W, et al. **J Chromatogr** 1989 Mar 17; 488(1):275–82

Dissociation kinetics of [3H]paroxetine binding to rat brain consistent with a single-site model of the antidepressant binding/5-hydroxytryptamine uptake site. Marcusson J, et al. **J Neurochem** 1988 Nov;51(5):1477–81

In vivo labeling of serotonin uptake sites with [3H]paroxetine. Scheffel U, et al. **J Neurochem** 1989 May;52(5):1605–12

Subcellular localization of 3H-piperidine in the rat brain. Kasé Y, et al. **Life Sci** 1974 Sep 15;15(6):1197–202

Effects of dextromethorphan site ligands and allosteric modifiers on the binding of (+)-[3H]3-(-3-hydroxyphenyl)-N-(1-propyl)piperidine. Musacchio JM, et al. **Mol Pharmacol** 1989 Jan;35(1):1–5

Autoradiography of antidepressant binding sites in the human brain: localization using [3H]imipramine and [3H]paroxetine. Cortés R, et al. **Neuroscience** 1988 Nov; 27(2):473–96

Reduction of a benzamidoxime derivative to the corresponding benzamidine in vivo and in vitro. Hauptmann J, et al. **Pharmazie** 1988 Aug;43(8):559–60

Drug inhibition indicates a single-site model of the 5-HT uptake site/antidepressant binding site in rat and human brain. Marcusson JO, et al. **Psychopharmacology (Berlin)** 1989;99(1):17–21

Phencyclidine and sigma receptors in rat spinal cord: binding characterization and quantitative autoradiography. Aanonsen LM, et al. **Synapse** 1989;4(1):1–10

Autoradiographic localization of 3H-paroxetine-labeled serotonin uptake sites in rat brain. De Souza EB, et al. **Synapse** 1987;1(5):488–96

PHARMACOKINETICS

The pharmacokinetics, antihistamine and concentration-effect relationship of ebastine in healthy subjects. Vincent J, et al. **Br J Clin Pharmacol** 1988 Nov; 26(5):497–502

Pharmacokinetics of roxatidine in healthy volunteers. Collins JD, et al. **Drugs** 1988;35 Suppl 3:41–7

A pharmacokinetic study of roxatidine acetate in chronic renal failure. Lameire N, et al. **Drugs** 1988;35 Suppl 3:48–52

The pharmacodynamics and pharmacokinetics of multiple doses of the new H2-receptor antagonist, roxatidine acetate, in healthy men. Lassman HB, et al. **Drugs** 1988; 35 Suppl 3:53–64

Enhanced pirmenol elimination by rifampin. Stringer KA, et al. **J Clin Pharmacol** 1988 Dec;28(12):1094–7

Biochemical profile of risperidone, a new antipsychotic. Leysen JE, et al. **J Pharmacol Exp Ther** 1988 Nov; 247(2):661–70

Platelet 3H-paroxetine binding in depressed patients. D'haenen H, et al. **Psychiatry Res** 1988 Oct;26(1):11–7

Pharmacokinetics of histamine (H2)-receptor antagonists, including roxatidine, in chronic renal failure. Lameire N, et al. **Scand J Gastroenterol Suppl** 1988;146:100–10 (44 ref.)

Penetration of roxatidine into the cerebrospinal fluid. Tryba M, et al. **Scand J Gastroenterol Suppl** 1988;146:153–8

[Triperiden (Norakin): biotransformation in vivo and in vitro] Haussner M, et al. **Pharmazie** 1988 Jul;43(7):489–92 (Eng. Abstr.) **(Ger)**

[Bioequivalence of two oral formulations of cisapride] Lucchetti G, et al. **Boll Chim Farm** 1988 Feb; 127(2):18S–21S (Eng. Abstr.) **(Ita)**

[Characteristics of 3H-paroxetine-labeled serotonin uptake sites in rat brain] Yoshida Y. **Yakubutsu Seishin Kodo** 1988 Jun;8(2):345–57 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

The 5-HT2 antagonist ritanserin blocks the effect of pre-frontal cortex inactivation on rat A10 dopamine neurons in vivo. Svensson TH, et al. **Acta Physiol Scand** 1989 Jul;136(3):497–8

Effects of norakin on respiratory syncytial virus in tissue culture and in mice. Mentel R, et al. **Acta Virol (Praha)** 1989 Mar;33(2):162–6

Histamine H2-receptor blocking activity of ranitidine and lamtidine analogues containing aminomethyl-substituted aliphatic systems. Orsetti M. **Agents Actions** 1988 Dec; 25(3-4):291–5

Interaction between R 56865 and alpha-adrenoceptors in the pithed rat. Koch P, et al. **Arch Int Pharmacodyn Ther** 1989 May-Jun;299:134–43

Cytoprotective action of roxatidine acetate HCl. Shiratsuchi K, et al. **Arch Int Pharmacodyn Ther** 1988 Jul-Aug; 294:295–304

Mutations in the hemagglutinin gene associated with influenza virus resistance to norakin. Prösch S, et al. **Arch Virol** 1988;102(1-2):125–9

Effects of the antiparkinson drug budipine on EEG activity in unrestrained rats. Dimpfel W, et al. **Arzneimittelforschung** 1989 May;39(5):560–3

Anti-ischemic effect of the novel anti-ischemic agent 2-(4-(p-fluorobenzoyl)-piperidin-1-yl)-2'-acetonaphthone hydrochloride and possible mechanism of its action. Kaneko T, et al. **Arzneimittelforschung** 1989 Apr; 39(4):445–50

Pharmacological profile of a new potent 5-hydroxytryptamine (5-HT2) alpha 1-receptor antagonist. Schröder G, et al. **Arzneimittelforschung** 1988 Jun; 38(6):765–70

Actions of the brain-penetrating H2-antagonist zolantidine on histamine dynamics and metabolism in rat brain. Hough LB, et al. **Biochem Pharmacol** 1988 Dec 15;37(24):4707–11

Stimulation of 12-HETE production in human platelets by an immunomodulator, LF 1695. Evidence for activation of arachidonate liberation coupled to cyclo-oxygenase inhibition. Hullin F, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2763–72

Relationships between chemical structure and inhibition of epinephrine-induced human blood platelet aggregation. Petrusewicz J, et al. **Biochim Biophys Acta** 1989 Aug 7; 983(2):161–6

Effects on the lower oesophageal sphincter of cisapride given before the combined administration of atropine and neostigmine. Jones MJ, et al. **Br J Anaesth** 1989 Feb; 62(2):124–8

Cisapride and anaesthesia. Rowbotham DJ. **Br J Anaesth** 1989 Feb;62(2):121–3 (27 ref.)

Cisapride has no effect on antipyrine clearance [letter] Davies DS, et al. **Br J Clin Pharmacol** 1988 Dec;26(6):808–9

Comparison of the effect of cisapride and metoclopramide on morphine-induced delay in gastric emptying. Rowbotham DJ, et al. **Br J Clin Pharmacol** 1988 Dec; 26(6):741–6

The effect of roxatidine acetate and cimetidine on hepatic drug clearance assessed by simultaneous administration of three model substrates. Tanaka E, et al. **Br J Clin Pharmacol** 1989 Aug;28(2):171–4

Ebastine: the effect of a new antihistamine on psychomotor performance and autonomic responses in healthy subjects. Vincent J, et al. **Br J Clin Pharmacol** 1988 Nov;26(5):503–8

Cardiovascular (ECG and systolic time intervals) and anticholinergic effects of repeated doses of femoxetine--a comparison with amitriptyline and placebo in healthy men. Warrington SJ, et al. **Br J Clin Pharmacol** 1989 Mar; 27(3):343–51

The affinity of some acetylenic analogues of 4-DAMP methobromide for muscarinic receptors in guinea-pig ileum and atria. Barlow RB, et al. **Br J Pharmacol** 1988 Jul; 94(3):947–51

Inhibition of cyclic AMP formation in N1E-115 neuroblastoma cells is mediated by a non-cardiac M2 muscarinic receptor subtype. Surichamorn W, et al. **Brain Res** 1989 Jul 31;493(2):320–5

Monoamine oxidase inhibition by phenelzine and brofaromine in healthy volunteers. Bieck PR, et al. **Clin Pharmacol Ther** 1989 Mar;45(3):260–9

Cisapride stimulates propulsive motility patterns in human jejunum. Coremans G, et al. **Dig Dis Sci** 1988 Dec; 33(12):1512–9

Effects of cisapride on postcibal jejunal motor activity. Stacher G, et al. **Dig Dis Sci** 1989 Sep;34(9):1405–10

Involvement of serotonergic mechanisms in the disruption of ovine duodenal migrating myoelectric complex cycles by duodenal acidification. Crichlow EC, et al. **Digestion** 1989;42(1):44–50

Effect of roxatidine acetate on daytime and night-time peptone-stimulated gastric acid secretion. Hagenmüller F. **Drugs** 1988;35 Suppl 3:65–8

Effects of roxatidine acetate on 24-hour gastric acidity. Early evening versus bedtime administration in healthy subjects. Hemery P, et al. **Drugs** 1988;35 Suppl 3:76–81

Interaction of roxatidine acetate with antacids, food and other drugs. Labs RA. **Drugs** 1988;35 Suppl 3:82–9 (12 ref.)

Cisapride. A preliminary review of its pharmacodynamic and pharmacokinetic properties, and therapeutic use as a prokinetic agent in gastrointestinal motility disorders. McCallum RW, et al. **Drugs** 1988 Dec;36(6):652–81 (123 ref.)

The effects of roxatidine acetate on 24-hour intragastric acidity. Investigations in healthy volunteers and comparison with ranitidine and placebo. Merki HS, et al. **Drugs** 1988;35 Suppl 3:69–75

A review of the animal pharmacology of roxatidine acetate. Scholtholt J, et al. **Drugs** 1988;35 Suppl 3:30–40 (24 ref.)

The effects of the 5 HT2 antagonist ritanserin on blood pressure and serotonin-induced platelet aggregation in patients with untreated essential hypertension. Stott DJ, et al. **Eur J Clin Pharmacol** 1988;35(2):123–9

Opioid and non-opioid actions of loperamide on cholinergic nerve function in human isolated colon. Burleigh DE. **Eur J Pharmacol** 1988 Jul 26;152(1-2):39–46

Ifenprodil and SL 82.0715 are antagonists at the polyamine site of the N-methyl-D-aspartate (NMDA) receptor. Carter C, et al. **Eur J Pharmacol** 1989 May 30;164(3):611–2

Action of loperamide on neuronally mediated and Ca2+- or cAMP-mediated secretion in rat colon. Diener M, et al. **Eur J Pharmacol** 1988 Aug 2;152(3):217–25

The protective action of R56865 against ouabain-induced intoxication in rat heart isolated atria and ventricles. Finet M, et al. **Eur J Pharmacol** 1989 May 30;164(3):555–63

The competitive N-methyl-D-aspartate (NMDA) antagonist CGS 19755 attenuates the rate-decreasing effects of NMDA in rhesus monkeys without producing ketamine-like discriminative stimulus effects. France CP, et al. **Eur J Pharmacol** 1989 Jan 10;159(2):133–9

Cardiovascular effects of 1-methyl-4-(1-naphthylvinyl)piperidine hydrochloride. Henderson TR, et al. **Eur J Pharmacol** 1988 Dec 6; 158(1-2):149–52

Dopamine (DA) autoreceptor efficacy of 3-PPP enantiomers after short-term synaptic DA deprivation. Hjorth S, et al. **Eur J Pharmacol** 1988 Aug 2;152(3):207–15

Different effects of R 56865 and calcium entry blockers on K+- and noradrenaline-induced contractions and 45Ca uptake in rat aorta. Koch P, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):183-90

(+)-[3H]3-(3-hydroxyphenyl)-N-(1-propyl)-piperidine binding to sigma receptors in mouse brain in vivo. Koe BK, et al. **Eur J Pharmacol** 1989 Feb 28;161(2-3):263-6

p-fluoro-hexahydro-sila-difenidol: the first M2 beta-selective muscarinic antagonist. Lambrecht G, et al. **Eur J Pharmacol** 1988 Jul 26;152(1-2):193-4

CGS 19755 is a potent and competitive antagonist at NMDA-type receptors. Lehmann J, et al. **Eur J Pharmacol** 1988 Sep 1;154(1):89-93

Post-tetanic influences on primary afferent depolarization in the cat spinal cord. Gynther BD, et al. **Exp Brain Res** 1989; 74(2):365-74

Effects of cisapride on the pancreatic exocrine secretion in rats. Funakoshi A, et al. **Gastroenterol Jpn** 1988 Oct; 23(5):559-63

Effect of a new H2-receptor antagonist (roxatidine acetate) on the acid secretion by isolated canine parietal cells. Saito E, et al. **Gastroenterol Jpn** 1989 Apr;24(2):221

Effects of cisapride on cholinergic neurotransmission and propulsive motility in the guinea pig ileum. Tonini M, et al. **Gastroenterology** 1989 May;96(5 Pt 1):1257-64

Effect of M2 muscarinic receptor antagonist 4-DAMP, on prostaglandin synthesis and mechanical function in the isolated rabbit heart. Jaiswal N, et al. **Gen Pharmacol** 1989; 20(4):497-502

Serotonin blockade in conscious, unrestrained cirrhotic dogs with portal hypertension. Mastaï R, et al. **Hepatology** 1989 Feb;9(2):265-8

Effects of fenfluramine and ritanserin on prolactin response to insulin-induced hypoglycemia in obese patients: evidence for failure of the serotoninergic system. Bernini GP, et al. **Horm Res** 1989;31(3):133-7

Serotoninergic effects on sensory and motor responses in extraverts and introverts. Netter P, et al. **Int Clin Psychopharmacol** 1989 Jan;4 Suppl 1:21-6

Ritanserin versus lorazepam: a double-blind, cross-over study of reaction times in healthy volunteers. Altamura AC, et al. **Int J Clin Pharmacol Res** 1989;9(3):197-201

Evidence of muscarinic receptor subtypes in airway smooth muscle of normal volunteers and of chronic obstructive pulmonary disease patients. Cazzola M, et al. **Int J Clin Pharmacol Res** 1989;9(1):65-70

A possible mechanism on the potentiated vascular effect of coadministration of ifenprodil tartrate and calcium hopantenate: a study in the basilar and vertebral arteries. Shibuya T, et al. **Int J Clin Pharmacol Ther Toxicol** 1988 Nov;26(11):534-9

Effects of roxatidine acetate hydrochloride and cimetidine on the pharmacokinetics of theophylline in healthy subjects. Yoshimura N, et al. **Int J Clin Pharmacol Ther Toxicol** 1989 Jun;27(6):308-12

Immunological studies on paroxetine, a novel anti-depressant drug. Henderson DC, et al. **Int J Immunopharmacol** 1988; 10(4):361-7

In vitro and in vivo immunomodulation by LF 1695 of human and rat macrophages and platelets in schistosomiasis. Thorel T, et al. **Int J Immunopharmacol** 1988;10(6):739-46

Serotonin as a modulator of skeletal muscle oxygenation: effects of ketanserin and ritanserin on oxygen pressure distributions. Thorborg P, et al. **Int J Microcirc Clin Exp** 1989 Apr;8(2):191-203

Effect of levocabastine, a new H1 antagonist, in a conjunctival provocation test with allergens. Zuber P, et al. **J Allergy Clin Immunol** 1988 Oct;82(4):590-4

The role of endogenously formed diacylglycerol in the propagation and termination of platelet activation. A biochemical and functional analysis using the novel diacylglycerol kinase inhibitor, R 59 949. de Chaffoy de Courcelles D, et al. **J Biol Chem** 1989 Feb 25; 264(6):3274-85

Effects of pirmenol hydrochloride on the spontaneous action potentials and membrane current systems of rabbit sinoatrial node cells. Kotake H, et al. **J Electrocardiol** 1988 Nov;21(4):355-9

Effects of the opiate agonist loperamide on pituitary-adrenal function in patients with suspected hypercortisolism. Ambrosi B, et al. **J Endocrinol Invest** 1989 Jan;12(1):31-5

Quantitative structure-activity relationship study on some dihydropteridine reductase inhibitors. Babbar R, et al. **J Enzym Inhib** 1989;2(4):231-7

Synthesis and antiallergy activity of 4-(diarylhydroxymethyl)-1-[3-(aryloxy)propyl]piperidines and structurally related compounds. Walsh DA, et al. **J Med Chem** 1989 Jan;32(1):105-18

The partial dopamine receptor agonists (--)-3-PPP and transdihydrolisuride enhance prolactin secretion in female but not in male rats. Carlsson M, et al. **J Neural Transm** 1989;77(2-3):211-6

Effects of the histamine H3-agonist (R)-alpha-methylhistamine and the antagonist thioperamide on histamine metabolism in the mouse and rat brain. Oishi R, et al. **J Neurochem** 1989 May; 52(5):1388-92

Changes in cortical 5-HT2 receptors following 5-HTP and paroxetine administration in rats. Koshikawa N, et al. **J Nihon Univ Sch Dent** 1988 Sep;30(3):218-26

Behavioral pharmacological profile of CGS 19755, a competitive antagonist at N-methyl-D-aspartate receptors. Bennett DA, et al. **J Pharmacol Exp Ther** 1989 Aug; 250(2):454-60

Behavioral tolerance and sensitization to CGS 19755, a competitive N-methyl-D-aspartate receptor antagonist. Boast CA, et al. **J Pharmacol Exp Ther** 1988 Nov; 247(2):556-61

Ifenprodil and SL 82.0715 as cerebral anti-ischemic agents. II. Evidence for N-methyl-D-aspartate receptor antagonist properties. Carter C, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):1222-32

Inhibition of naloxone-resistant antinociception by centrally administered H2-antagonists. Gogas KR, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):262-7

Contribution of M2 alpha and M2 beta muscarinic receptors to the action of cholinergic stimuli on prostaglandin synthesis and mechanical function in the isolated rabbit heart. Jaiswal N, et al. **J Pharmacol Exp Ther** 1988 Oct; 247(1):104-13

Involvement of calcitonin gene-related peptide in the positive chronotropic and inotropic effects of piperine and development of cross-tachyphylaxis between piperine and capsaicin in the isolated rat atria. Miyauchi T, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):816-24

Stereoisomers of quaternary and tertiary 4-methyl piperidine analogs of hemicholinium-3. Sheff KY, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):640-4

Alterations in acetylcholine metabolism in rat striatal slices by a 4-methyl piperidine analog of hemicholinium-3. Tedford CE, et al. **J Pharmacol Exp Ther** 1988 Nov; 247(2):460-5

Psychotomimetic sigma-ligands, dexoxadrol and phencyclidine block the same presynaptic potassium channel in rat brain. Bartschat DK, et al. **J Physiol (Lond)** 1988 Sep;403:341-53

Actions of the novel gastrointestinal prokinetic agent cisapride on equine bowel motility. King JN, et al. **J Vet Pharmacol Ther** 1988 Dec;11(4):314-21

Prokinetic effects of cisapride, naloxone and parasympathetic stimulation at the equine ileo-caeco-colonic junction. Ruckebusch Y, et al. **J Vet Pharmacol Ther** 1988 Dec; 11(4):322-9

Antiarrhythmic plasma concentrations of pirmenol on canine ventricular arrhythmias. Hashimoto K, et al. **Jpn J Pharmacol** 1988 Oct;48(2):273-82

Frequency- and voltage-dependent depression of maximum upstroke velocity of action potentials by pirmenol in guinea pig ventricular muscles. Nakaya H, et al. **Jpn J Pharmacol** 1988 Dec;48(4):423-34

Cisapride and cystic fibrosis [letter] Smith HL, et al. **Lancet** 1989 Feb 11;1(8633):338

Effects of intracerebral administration of piperidine on EEG and behavior. Miyata T, et al. **Life Sci** 1974 Sep 15; 15(6):1135-52

Effect of the immunomodulator LF 1695 on T-lymphocytes and macrophages. Activity in HIV infection. Touraine JL. **Med Oncol Tumor Pharmacother** 1989;6(1):59-61 (6 ref.)

Loperamide, an opiate analog, differently modifies the adrenocorticotropin responses to corticotropin-releasing hormone and lysine vasopressin in patients with Addison's disease. Bochicchio D, et al. **Neuroendocrinology** 1988 Dec; 48(6):611-4

A comparison of the effects of the selective 5-HT uptake inhibitor WY 27587 on 5-HT uptake into platelets and synaptosomes in the rat. Billingsley AJ, et al. **Neuropharmacology** 1989 Jan;28(1):33-6

Comparison of the actions of phencyclidine and sigma ligands on CA1 hippocampal pyramidal neurons in the rat. Malouf AT, et al. **Neuropharmacology** 1988 Nov;27(11):1161-70

Effects of intraperitoneal administration of apomorphine and the isomers of 3-(1-propyl-3-piperidinyl)phenol on the firing activity of substantia nigra dopamine neurons: comparison of agonist efficacies and development of acute tolerance. Meltzer LT, et al. **Neuropharmacology** 1988 Sep; 27(9):933-42

Comparison of the effects of the acute administration of dexoxadrol, levoxadrol, MK-801 and phencyclidine on body temperature in the rat. Pechnick RN, et al. **Neuropharmacology** 1989 Aug;28(8):829-35

Facilitation of gamma-aminobutyric acid-induced depression by (+)PCMP and dexoxadrol in the cerebellar Purkinje neurons of the rat. Wang Y, et al. **Neuropharmacology** 1989 Apr;28(4):343-50

Methoctramine and hexahydrodifenidol antagonise two muscarinic responses on the rat superior cervical ganglion with opposite selectivity. Field JL, et al. **Neurosci Lett** 1989 May 22;100(1-3):254-8

Effects of piperine on calcitonin gene-related peptide (CGRP)-containing nerves in the isolated rat atria. Miyauchi T, et al. **Neurosci Lett** 1988 Aug 31;91(2):222-7

Selective blockage of cell membrane K conductance by an antisecretory agent in guinea-pig gallbladder epithelium. Wehner F, et al. **Pflugers Arch** 1989 Jul;414(3):331-9

H2-receptor-mediated stress-induced analgesia is dependent on neither pituitary nor adrenal activation. Gogas KR, et al. **Pharmacol Biochem Behav** 1988 Jul;30(3):791-4

Effects of 5-HT2 receptor antagonist on cycloheximide-induced amnesia in mice. Nabeshima T, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):787-90

Effects of ritanserin on the rewarding properties of d-amphetamine, morphine and diazepam revealed by conditioned place preference in rats. Nomikos GG, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):853-8

Attenuation of morphine analgesia by the S2 antagonists, pirenperone and ketanserin. Paul D, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):641-7

Effect of metoclopramide, bethanechol, and loperamide on gastric residence time, gastric emptying, and mouth-to-cecum transit time. Kirby MG, et al. **Pharmacotherapy** 1989;9(4):226-31

Pharmacological characterization of a new structural variant of 4-amidinophenylalanine amide-type synthetic thrombin inhibitor. Hauptmann J, et al. **Pharmazie** 1989 Apr; 44(4):282-4

Cisapride potentiates fast nicotinic synaptic potentials in the myenteric plexus of the guinea pig ileum. Galligan JJ, et al. **Proc West Pharmacol Soc** 1988;31:9-11

Effects of ifenprodil tartrate on calcium flux in arteries and brain synaptosomes. Honda H, et al. **Proc West Pharmacol Soc** 1989;32:155-8

Sabeluzole (R58 735) increases consistent retrieval during serial learning and relearning of nonsense syllables. Clincke GH, et al. **Psychopharmacology (Berlin)** 1988;96(3):309-10

Effect of paroxetine on the electrocardiogram. Edwards JG, et al. **Psychopharmacology (Berlin)** 1989;97(1):96-8

Increased food intake in satiated rats induced by the 5-HT antagonists methysergide, metergoline and ritanserin. Fletcher PJ. **Psychopharmacology (Berlin)** 1988; 96(2):237-42

Risperidone (R 64 766), a potent and complete LSD antagonist in drug discrimination by rats. Meert TF, et al. **Psychopharmacology (Berlin)** 1989;97(2):206-12

Differential effects of the new antipsychotic risperidone on large and small motor movements in rats: a comparison with haloperidol. Megens AA, et al. **Psychopharmacology (Berlin)** 1988;95(4):493-6

Ritanserin, a 5-HT2 receptor antagonist, activates midbrain dopamine neurons by blocking serotonergic inhibition. Ugedo L, et al. **Psychopharmacology (Berlin)** 1989; 98(1):45-50

Central effects of N-substituted derivatives of 2,6-dioxopiperidine in mice. Tateoka Y, et al. **Res Commun Chem Pathol Pharmacol** 1988 Sep; 61(3):315-26

Cisapride induces clustered spikes and irregular spiking of the small intestine of the rat. Lördal M, et al. **Scand J Gastroenterol Suppl** 1988;152:48-53

Assessment of intragastric acidity in man: modern aspects, reproducibility of intragastric pH-monitoring, and pharmacodynamic results obtained with H2-receptor antagonists. Merki HS, et al. **Scand J Gastroenterol Suppl** 1988;146:142-52

Cisapride-cimetidine interaction: enhanced cisapride bioavailability and accelerated cimetidine absorption. Kirch W, et al. **Ther Drug Monit** 1989;11(4):411-4

[Mechanism of the acetylcholine-release effect of cisapride on guinea-pig gastrointestinal tract] Chen HT, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Apr;41(4):263-70 (Eng. Abstr.) **(Chi)**

[Potential interest in powerful and specific ligands for the histamine H3 receptor] Arrang JM, et al. **Allerg Immunol (Paris)** 1988 Nov;20(9):327-9, 331 (Eng. Abstr.) **(Fre)**

[Cisapride: pharmacology, current therapeutic results and future prospects] Fraitag B, et al. **Gastroenterol Clin Biol** 1989 Mar;13(3):265-76 (100 ref.) **(Fre)**

POISONING

Dinner with De Quincey. Loperamide overdose. Mack RB. **N C Med J** 1989 Apr;50(4):204-6

[Fatal intoxication with indalpine] Djeghout H, et al. **J Toxicol Clin Exp** 1985 Mar-Apr;5(2):125-8 (Eng. Abstr.) **(Fre)**

THERAPEUTIC USE

Risperidone (R64 766) in psychotic patients. A first clinical therapeutic exploration. Roose K, et al. **Acta Psychiatr Belg** 1988 May-Jun;88(3):233-41

Cisapride accelerates colonic transit in constipated patients with colonic inertia. Krevsky B, et al. **Am J Gastroenterol** 1989 Aug;84(8):882-7

Pharmacological manipulation of postoperative intestinal adhesions. Sparnon AL, et al. **Aust N Z J Surg** 1989 Sep; 59(9):725-9

Reversal of histamine-induced bronchoconstriction by the H1-receptor antagonist levocabastine: a potential model for efficacy in anaphylaxis. Ferner RE, et al. **Br J Clin Pharmacol** 1988 Nov;26(5):509-13

Biperiden withdrawal in schizophrenic inpatients receiving long-term antipsychotic medication. Wada Y, et al. **Clin Neuropharmacol** 1987 Aug;10(4):370-5

Relief of epigastric pain in nonulcer dyspepsia: controlled trial of the promotility drug cisapride. De Nutte N, et al. **Clin Ther** 1989;11(1):62-8

Symptomatic, radionuclide and therapeutic assessment of chronic idiopathic dyspepsia. A double-blind placebo-controlled evaluation of cisapride. Jian R, et al. **Dig Dis Sci** 1989 May;34(5):657-64

Cisapride stimulates antral motility and decreases biliary reflux in patients with severe dyspepsia. Rezende-Filho J, et al. **Dig Dis Sci** 1989 Jul;34(7):1057-62

Roxatidine acetate in the long term maintenance of gastric ulcers. Börsch G. **Drugs** 1988;35 Suppl 3:134-8

Roxatidine acetate in the long term maintenance of duodenal ulcers. Brunner G. **Drugs** 1988;35 Suppl 3:102–5

Appendix 1. Therapeutic resistance of peptic ulcers. Classen M. **Drugs** 1988;35 Suppl 3:140–1

A comparison of roxatidine acetate 150 mg once daily and 75 mg twice daily in duodenal ulcer healing. Hentschel E, et al. **Drugs** 1988;35 Suppl 3:96–101

A comparison of roxatidine acetate and ranitidine in duodenal ulcer healing. Hüttemann W. **Drugs** 1988;35 Suppl 3:90–5

Clinical studies on the use of roxatidine acetate for the treatment of peptic ulcer in Japan. Inoue M. **Drugs** 1988; 35 Suppl 3:114–9

A comparison of roxatidine acetate and ranitidine in gastric ulcer healing. Judmaier G. **Drugs** 1988;35 Suppl 3:120–6

The use of roxatidine acetate in fasting patients prior to induction of anaesthesia as prophylaxis against the acid aspiration syndrome. Tryba M, et al. **Drugs** 1988;35 Suppl 3:20–4

Effect of six weeks of treatment with cisapride in gastroparesis and intestinal pseudoobstruction. Camilleri M, et al. **Gastroenterology** 1989 Mar;96(3):704–12

Double blind trial of loperamide for treating acute watery diarrhoea in expatriates in Bangladesh. van Loon FP, et al. **Gut** 1989 Apr;30(4):492–5

Comparative short-term evaluation of penfluridol and trifluoperazine in chronic schizophrenia. Khorana AB, et al. **Indian J Physiol Pharmacol** 1988 Oct–Dec;32(4):293–8

Experience with ketanserin and ritanserin in hypertensive patients. Hedner T, et al. **J Cardiovasc Pharmacol** 1988;11 Suppl 1:S44–8

Antihypertensive effects of ketanserin and ritanserin in the spontaneously hypertensive rat. Persson B, et al. **J Cardiovasc Pharmacol** 1988;11 Suppl 1:S22–4

Cisapride versus placebo in reflux esophagitis. A multicenter double-blind trial. Baldi F, et al. **J Clin Gastroenterol** 1988 Dec;10(6):614–8

Efficacy and pharmacokinetics of oral pirmenol, a new antiarrhythmic drug. Garg DC, et al. **J Clin Pharmacol** 1988 Sep;28(9):812–7

Effect of cisapride on esophageal pH monitoring in children with reflux-associated bronchopulmonary disease. Saye Z, et al. **J Pediatr Gastroenterol Nutr** 1989 Apr;8(3):327–32

Gastroesophageal reflux incidence and respiratory dysfunction during sleep in infants: treatment with cisapride. Vandenplas Y, et al. **J Pediatr Gastroenterol Nutr** 1989 Jan;8(1):31–6

The prevention of post-operative adhesions using a gastrointestinal prokinetic agent. Springall RG, et al. **J Pediatr Surg** 1989 Jun;24(6):530–3

Ifenprodil and SL 82.0715 as cerebral anti-ischemic agents. I. Evidence for efficacy in models of focal cerebral ischemia. Gotti B, et al. **J Pharmacol Exp Ther** 1988 Dec; 247(3):1211–21

Effect of AHR-5333 on flea antigen extract-induced skin reactions in flea-allergic dogs. Yanni JM, et al. **J Vet Pharmacol Ther** 1988 Jun;11(2):221–5

Cisapride for severe non-ulcer dyspepsia, pseudoobstruction and constipation [letter] Graham JR. **Med J Aust** 1989 Jun 5;150(11):667

Chemopreventive effect of antineoplaston A-10 on urethane-induced pulmonary neoplasm in mice. Eriguchi N, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jul 20; 23(7):1560–5

Levocabastine. Evaluation in the histamine and compound 48/80 models of ocular allergy in humans. Abelson MB, et al. **Ophthalmology** 1988 Nov;95(11):1494–7

Study to establish the indication for the selective S2 antagonist ritanserin. Klieser E, et al. **Pharmacopsychiatry** 1988 Nov;21(6):391–3

First results of an open phase II study with the antidepressant paroxetine. Stuppäck C, et al. **Pharmacopsychiatry** 1988 Nov;21(6):369–70

Efficacy and tolerance of femoxetine and imipramine in the treatment of depressive states. A randomized, double-blind study. Suominen J, et al. **Pharmacopsychiatry** 1988 Sep; 21(5):238–44

Serotonin-influencing drugs in the treatment of panic disorder. Westenberg HG, et al. **Psychopathology** 1989;22 Suppl 1:68–77

Effects of ritanserin on sleep disturbances of dysthymic patients. Paiva T, et al. **Psychopharmacology (Berlin)** 1988; 96(3):395–9

Treatment of chronic diarrhoea: loperamide versus ispaghula husk and calcium. Qvitzau S, et al. **Scand J Gastroenterol** 1988 Dec;23(10):1237–40

Therapeutic approach in patients with concomitant disease/drug—drug interactions (roxatidine acetate). Collins JD. **Scand J Gastroenterol Suppl** 1988;146:89–99 (22 ref.)

Clinical characteristics of roxatidine acetate: a review. Dammann HG, et al. **Scand J Gastroenterol Suppl** 1988; 146:121–34 (95 ref.)

The novel N-methyl-D-aspartate (NMDA) antagonist CGS 19755 prevents ischemia-induced reductions of adenosine A1, NMDA, and PCP receptors in gerbil brain. Jarvis MF, et al. **Synapse** 1988;2(6):577–84

[A double-blind study on the effect of clozapine penfluridol and chlorpromazine in the treatment of schizophrenia] Bao XQ. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Oct;21(5):274–6, 318 (Eng. Abstr.) **(Chi)**

[Ifenprodil tartrate in the treatment of occlusive arteriopathies of the lower limbs. Results of a prospective double-blind controlled multicenter trial] Natali J, et al. **Ann Cardiol Angeiol (Paris)** 1989 Jun;38(6):339–42 **(Fre)**

[Cloperastine fendizoate in the treatment of cough-producing diseases in pediatrics] Scotti L, et al. **Minerva Pediatr** 1988 May;40(5):283–6 (Eng. Abstr.) **(Ita)**

[Cisapride—a new drug effective in the treatment of disorders of gastrointestinal motility] Kasicka A, et al. **Przegl Lek** 1989;46(3):356–9 (25 ref.) **(Pol)**

[L-dopa, biperiden and sebum excretion in Parkinson disease] Villares JC. **Arq Neuropsiquiatr** 1989 Mar;47(1):31–8 (Eng. Abstr.) **(Por)**

[Effect of imodium on the evacuatory function of the gastric stump and the small intestine in patients with the dumping syndrome] Saakian AG, et al. **Klin Med (Mosk)** 1988 Jul; 66(7):112–5 (Eng. Abstr.) **(Rus)**

[Treatment of the drug-induced dyspeptic syndrome] Voznyi EK, et al. **Sov Med** 1988;(11):75–7 **(Rus)**

TOXICITY

Disobutamide: a model agent for investigating intracellular drug storage. Ruben Z, et al. **Toxicol Appl Pharmacol** 1989 Jan;97(1):57–71

[Use of a chromatographic model for predicting the toxicity and hazards of non-electrolytes] Esin MS, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):25–7 (Eng. Abstr.) **(Rus)**

PIPERIDONES see under **PIPERIDINES**

PIPERONYL BUTOXIDE

Susceptibility status of Aedes albopictus to three topically applied adulticides. Khoo BK, et al. **J Am Mosq Control Assoc** 1988 Sep;4(3):310–3

Pyrethroid-synergist mixtures: toxicity, resistance and field efficacy toward pyrethroid-resistant horn flies (Diptera: Muscidae). Sparks TC, et al. **J Econ Entomol** 1988 Dec; 81(6):1567–74

PIPEROXAN see under **PIPERIDINES**

PIPOTHIAZINE see under **PHENOTHIAZINE TRANQUILIZERS**

PIPOTHIAZINE PALMITATE see under **PHENOTHIAZINE TRANQUILIZERS**

PIRACETAM see under **PYRROLIDINONES**

PIRENZEPINE

ADMINISTRATION & DOSAGE

Do anticholinergics interact with histamine H2 receptor antagonists on night intragastric acidity in active duodenal ulcer patients? Fiorucci S, et al. **Am J Gastroenterol** 1988 Dec;83(12):1371–5

A comparison of two dosage regimens of pirenzepine versus cimetidine in endoscopically diagnosed duodenal ulcer. A randomised, controlled clinical trial. Nanivadekar SA, et al. **J Assoc Physicians India** 1988 Oct;36(10):597–9

[Pirenzepine and cimetidine in the treatment of duodenal ulcer] Szathmári M, et al. **Dtsch Z Verdau Stoffwechselkr** 1988;48(2):75–9 (Eng. Abstr.) **(Ger)**

[Prevention of stress-induced hemorrhage of the upper gastrointestinal tract in neurosurgical intensive care patients. A controlled, randomized double-blind study with ranitidine alone and in combination with pirenzepine] Krakamp B, et al. **Med Klin** 1989 Mar 15;84(3):133–4, 172 (Eng. Abstr.) **(Ger)**

[Single evening administration of a new antimuscarinic agent telenzepine in therapy of acute duodenal ulcer. Results of a randomized double-blind comparative study versus pirenzepine] Dammann HG, et al. **Z Gastroenterol** 1989 Apr;27(4):203–6 (Eng. Abstr.) **(Ger)**

[Evaluation of a combination of colloidal bismuth and pirenzepine in duodenal ulcer in non-responders to anti-H2 receptors] Manca A, et al. **Minerva Dietol Gastroenterol** 1988 Apr–Jun;34(2):135–8 (Eng. Abstr.) **(Ita)**

[Results of treatment of peptic ulcers using Gastrozepine and antacids in the endoscopic picture] Sorf M, et al. **Vnitr Lek** 1989 Feb;35(2):120–5 (Eng. Abstr.) **(Slo)**

ADVERSE EFFECTS

Side effects of stress bleeding prophylaxis. Tryba M. **Am J Med** 1989 Jun 9;86(6A):85–93 (69 ref.)

ANALOGS & DERIVATIVES

M2 muscarinic receptor agonists produce hypotension and bradycardia when injected into the nucleus tractus solitarii. Sundaram K, et al. **Brain Res** 1989 Jan 16;477(1–2):358–62

Quantitative autoradiography of M2 muscarinic receptors in the rat brain identified by using a selective radioligand [3H]AF-DX 116. Wang JX, et al. **Brain Res** 1989 Jan 16; 477(1–2):322–6

Differential effects of M1- and M2-muscarinic drugs on striatal dopamine release and metabolism in freely moving rats. Xu M, et al. **Brain Res** 1989 Aug 28;495(2):232–42

Interaction of telenzepine with muscarinic receptors in mammalian sympathetic ganglia. Galvan M, et al. **Eur J Pharmacol** 1989 Aug 11;167(1):1–10

The affinity, selectivity and biological activity of telenzepine enantiomers. Schudt C, et al. **Eur J Pharmacol** 1989 Jun 8;165(1):87–96

Determination of telenzepine in human serum by gas chromatography-mass spectrometry. Sturm E, et al. **J Chromatogr** 1988 Aug 19;430(1):43–51

Tricyclic compounds as selective muscarinic receptor antagonists. 3. Structure-selectivity relationships in a series of cardioselective (M2) antimuscarinics. Engel WW, et al. **J Med Chem** 1989 Aug;32(8):1718–24

Regional differences in the binding of selective muscarinic receptor antagonists in rat brain: comparison with minimum-energy conformations. Messer WS Jr, et al. **J Med Chem** 1989 Jun;32(6):1164–72

Contribution of M2 alpha and M2 beta muscarinic receptors to the action of cholinergic stimuli on prostaglandin synthesis and mechanical function in the isolated rabbit heart. Jaiswal N, et al. **J Pharmacol Exp Ther** 1988 Oct; 247(1):104–13

AF-DX 116 discriminates heart from gland M2-cholinoceptors in man. Pitschner HF, et al. **Life Sci** 1989;45(6):493–8

AFDX-116 discriminates between muscarinic M2 receptors of the heart and the iris smooth muscle. Honkanen RE, et al. **Mol Cell Biochem** 1988 Jul–Aug;82(1–2):131–5

The existence of stable enantiomers of telenzepine and their stereoselective interaction with muscarinic receptor subtypes. Eveleigh P, et al. **Mol Pharmacol** 1989 Apr; 35(4):477–83

AF-DX 116 differentiates between prejunctional muscarine receptors located on noradrenergic and cholinergic nerves. Dammann F, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Mar; 339(3):268–71

The relative potencies of cholinomimetics and muscarinic antagonists on the rat iris in vivo: effects of pH on potency of pirenzepine and telenzepine. Hagan JJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):476–83

Muscarinic pharmacology of the spinal cord of the neonatal rat in vitro. Newberry NR, et al. **Neuropharmacology** 1989 Feb;28(2):149–52

Does the prolonged occupancy of M1 receptors by telenzepine protect them against the action of vagally released acetylcholine? Schudt C, et al. **Pharmacology** 1988; 37 Suppl 1:32–9

Characterization of [3H]AF-DX 116 binding sites in the rat brain: evidence for heterogeneity of muscarinic-M2 receptor sites. Araujo DM, et al. **Synapse** 1989;4(2):106–14

Quantitative autoradiographic distribution of [3H]AF-DX 116 muscarinic-M2 receptor binding sites in rat brain. Regenold W, et al. **Synapse** 1989;4(2):115–25

Muscarinic receptor heterogeneity in smooth muscle: binding and functional studies with AF-DX 116. Ladinsky H, et al. **Trends Pharmacol Sci** 1988 Feb;Suppl:44–8 (17 ref.)

The effect of the M1-selective telenzepine on esophageal acid exposure in healthy volunteers. Stockbrügger RW, et al. **Z Gastroenterol** 1988 Jun;26(6):297–302

[Single evening administration of a new antimuscarinic agent telenzepine in therapy of acute duodenal ulcer. Results of a randomized double-blind comparative study versus pirenzepine] Dammann HG, et al. **Z Gastroenterol** 1989 Apr;27(4):203–6 (Eng. Abstr.) **(Ger)**

METABOLISM

Evidence for an endogenous factor involved in maintenance of pirenzepine high-affinity binding in rat brain stem. van Koppen CJ, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):42–7

Bilateral changes in neocortical [3H]pirenzepine and [3H]oxotremorine-M binding following unilateral lesions of the rat nucleus basalis magnocellularis: an autoradiographic study. Atack JR, et al. **Brain Res** 1989 Apr 3;483(2):367–72

Regional differences in the binding of selective muscarinic receptor antagonists in rat brain: comparison with minimum-energy conformations. Messer WS Jr, et al. **J Med Chem** 1989 Jun;32(6):1164–72

Characterization of muscarinic receptor subtypes in human tissues. Giraldo E, et al. **Life Sci** 1988;43(19):1507–15

Dose-response curves of pirenzepine in man in relation to M1- and M2-cholinoceptor occupancy. Pitschner HF, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Aug; 338(2):207–10

PHARMACOKINETICS

Effect of an aluminium-hydroxide containing antacid on the oral bioavailability of pirenzepine. Vergin H, et al. **Arzneimittelforschung** 1989 Apr;39(4):520–3

Steady-state intravenous pharmacokinetics of pirenzepine in patients with hepatic insufficiency and combined renal- and hepatic insufficiency. Krakamp B, et al. **Eur J Clin Pharmacol** 1989;36(1):71–3

Steady-state intravenous pharmacokinetics of pirenzepine in patients with differing degrees of renal dysfunction. Krakamp B, et al. **Eur J Clin Pharmacol** 1989;36(1):75–8

Pharmacokinetic and pharmacodynamic studies in man simulating acute and chronic treatment with oral pirenzepine. Londong W, et al. **Eur J Clin Pharmacol** 1989; 36(4):369–74

[Promotion of gastrointestinal absorption of pirenzepine dihydrochloride in the rat. I] Nakagawa H, et al. **Yakugaku Zasshi** 1988 Jul;108(7):669–73 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Simultaneous inhibition by pirenzepine of the GH responses to GnRH and TRH in insulin-dependent diabetics and in patients with major depression. Coiro V, et al. **Acta Endocrinol (Copenh)** 1989 Feb;120(2):143–8

Identification of M1 muscarinic receptors in pulmonary sympathetic nerves in the guinea-pig by use of pirenzepine. Maclagan J, et al. **Br J Pharmacol** 1989 Jun;97(2):499–505

Effect of pirenzepine and gallamine on cardiac and pulmonary muscarinic receptors in the rabbit. Maclagan J, et al. **Br J Pharmacol** 1989 Jun;97(2):506–12

M2 muscarinic receptor agonists produce hypotension and bradycardia when injected into the nucleus tractus solitarii. Sundaram K, et al. **Brain Res** 1989 Jan 16;477(1–2):358–62

Differential effects of M1- and M2-muscarinic drugs on striatal dopamine release and metabolism in freely moving rats. Xu M, et al. **Brain Res** 1989 Aug 28;495(2):232–42

Effect of pirenzepine on basal gastric acid and pepsin secretion and on secretion stimulated with graded doses of pentagastrin in duodenal ulcer patients. Meneghelli UG, et al. **Braz J Med Biol Res** 1988;21(4):781–9

Mucosal protective agents: why forget pirenzepine? [letter] Scarpignato C. **Dig Dis Sci** 1988 Nov;33(11):1500

Preventive effect of pirenzepine on atrophic erosive gastritis in rats. Kishimoto S, et al. **Hiroshima J Med Sci** 1988 Sep; 37(3):119–25

Evidence of muscarinic receptor subtypes in airway smooth muscle of normal volunteers and of chronic obstructive pulmonary disease patients. Cazzola M, et al. **Int J Clin Pharmacol Res** 1989;9(1):65–70

Muscarinic M-1 receptors mediate the bronchial hyperresponsiveness during methacholine inhalation. Cazzola M, et al. **Int J Clin Pharmacol Res** 1989;9(1):71–6

Pirenzepine prevents diethyl pyrocarbonate inhibition of central CO_2 sensitivity. Nattie EE, et al. **J Appl Physiol** 1988 Nov;65(5):1962–6

Rostral ventrolateral medulla muscarinic receptor involvement in central ventilatory chemosensitivity. Nattie EE, et al. **J Appl Physiol** 1989 Mar;66(3):1462–70

Chronic treatment with pirenzepine decreases growth hormone secretion in insulin-dependent diabetes mellitus. Martina V, et al. **J Clin Endocrinol Metab** 1989 Feb; 68(2):392–6

Pseudo-noncompetitive antagonism of muscarinic receptor-mediated cyclic GMP formation and phosphoinositide hydrolysis by pirenzepine. el-Fakahany EE, et al. **J Pharmacol Exp Ther** 1988 Dec;247(3):934–40

Pharmacologic discrimination between receptor heterogeneity and allosteric interaction: resultant analysis of gallamine and pirenzepine antagonism of muscarinic responses in rat trachea. Kenakin T, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):944–52

The effect of cholinergic blockade on the growth hormone response to galanin in humans. Chatterjee VK, et al. **Metabolism** 1988 Nov;37(11):1089–91

The relative potencies of cholinomimetics and muscarinic antagonists on the rat iris in vivo: effects of pH on potency of pirenzepine and telenzepine. Hagan JJ, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):476–83

Facilitatory and inhibitory muscarine receptors on the rat phrenic nerve: effects of pirenzepine and dicyclomine. Wessler I, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Aug;338(2):138–42

Muscarinic pharmacology of the spinal cord of the neonatal rat in vitro. Newberry NR, et al. **Neuropharmacology** 1989 Feb;28(2):149–52

Calcium-dependent pirenzepine-sensitive muscarinic response in the rat hippocampal slice. Pitler TA, et al. **Neurosci Lett** 1988 Aug 31;91(2):177–82

The effect of pirenzepine on spatial learning in the Morris Water Maze. Hunter AJ, et al. **Pharmacol Biochem Behav** 1988 Jun;30(2):519–23

Systemic injection of pirenzepine induces a deficit in passive avoidance learning in rats. Worms P, et al. **Psychopharmacology (Berlin)** 1989;98(2):286–8

Cytoprotective effect of pirenzepine and palm wine on rats gastric mucosa. Ibu JO, et al. **Scand J Gastroenterol Suppl** 1986;124:209–11

[Antiulcer effects of pirenzepine in rats] Zheng W, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Sep;9(5):442–5 (Eng. Abstr.) **(Chi)**

[Evaluation of blood flow in the gastric microcirculation in humans during pirenzepine infusion] Spiga L, et al. **Minerva Dietol Gastroenterol** 1988 Oct–Dec;34(4):257–63 (Eng. Abstr.) **(Ita)**

[Action of the drug pirenzepine on regenerating parietal cells. Morphological and quantitative study] Ibáñez F, et al. **Rev Esp Enferm Apar Dig** 1988 Sep;74(3):205–9 (Eng. Abstr.) **(Spa)**

THERAPEUTIC USE

The role of pirenzepine-sensitive (M1) muscarinic receptors in vagally mediated bronchoconstriction in humans. Lammers JW, et al. **Am Rev Respir Dis** 1989 Feb; 139(2):446–9

Cholinergic muscarinic blockade produces short-term suppression of growth hormone secretion in children with tall stature. Hindmarsh PC, et al. **Clin Endocrinol (Oxf)** 1988 Sep;29(3):289–96

Double-blind trial of pirenzepine in acute pancreatitis. Moreno-Otero R, et al. **Digestion** 1989;42(1):51–6

Early morning hyperglycemia in insulin-dependent diabetes: acute and sustained effects of cholinergic blockade. Atiea JA, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):390–5

Treatment of Campylobacter pylori gastritis: a pilot study using pirenzepine dihydrochloride (Gastrozepin) and three formulations of colloidal bismuth subcitrate (De-Nol). Morris A, et al. **N Z Med J** 1988 Oct 26;101(856 Pt 1):651–4

Pirenzepine in the treatment of reflux esophagitis. Stanciu C, et al. **Rev Med Chir Soc Med Nat Iasi** 1988 Oct–Dec; 92(4):643–7

Pirenzepine and cimetidine for duodenal ulcers. A comparative randomised double-blind controlled study. Simjee AE, et al. **S Afr Med J** 1988 Nov 5;74(9):446–7

The intragastric milieu during gastric ulcer treatment with pirenzepine 50 mg b.i.d. or cimetidine 400 mg b.i.d. Stockbrügger RW, et al. **Z Gastroenterol** 1988 Nov; 26(11):685–8

[Pirenzepine in the prevention of gastric intolerance to drugs used in pulmonary pathology] Guarino C, et al. **Minerva Dietol Gastroenterol** 1988 Apr–Jun;34(2):129–34 (Eng. Abstr.) **(Ita)**

[Pirenzepine in the treatment of chronic gastritis in patients exposed to organic solvents] Spisni R, et al. **Minerva Dietol Gastroenterol** 1988 Oct–Dec;34(4):265–8 (Eng. Abstr.) **(Ita)**

[Receptor characteristics of the duodenal mucosa in peptic ulcer: a new approach to the individual selection of the therapy] Pavlov SA, et al. **Ter Arkh** 1989;61(2):24–7 (Eng. Abstr.) **(Rus)**

PIRIBEDIL see under **PIPERAZINES**

PIRINITRAMIDE see under **ISONIPECOTIC ACIDS**

PIROMIDIC ACID see under **NICOTINIC ACIDS**

PIROPLASMA see **BABESIA**

PIROPLASMOSIS see **BABESIOSIS**

PIROXICAM

ADMINISTRATION & DOSAGE

Premedication with piroxicam in patients having dental surgery under general anaesthesia with halothane or isoflurane. Parsloe M, et al. **Br J Anaesth** 1988 Dec; 61(6):702–6

[Piroxicam versus naproxen in primary dysmenorrhea] Saltveit T. **Tidsskr Nor Laegeforen** 1989 Feb 20; 109(5):576–8 (Eng. Abstr.) **(Nor)**

ADVERSE EFFECTS

Piroxicam-induced renal failure following relief of chronic retention. Loeffler M, et al. **Br J Urol** 1989 Apr;63(4):438–9

Fatal acute renal failure after piroxicam [letter] Sarma PS. **Clin Nephrol** 1989 Jan;31(1):54

Piroxicam-induced agranulocytosis [letter] García S, et al. **Drug Intell Clin Pharm** 1988 Dec;22(12):1003

Comparison of faecal blood loss, upper gastrointestinal mucosal integrity and symptoms after piroxicam beta-cyclodextrin, piroxicam and placebo administration. Patoia L, et al. **Eur J Clin Pharmacol** 1989;36(6):599–604

Mechanism of photosensitive reactions induced by piroxicam [letter] Cirne de Castro JL, et al. **J Am Acad Dermatol** 1989 Apr;20(4):706–7

[Acute hemolytic anemia and hepatonephritis caused by piroxicam (letter)] Allier I, et al. **Therapie** 1988 Oct–Dec; 43(6):504 **(Fre)**

ANALOGS & DERIVATIVES

Evidence for isoxicam binding to site I as a primary site and to site II as a secondary site of human serum albumin. Bree F, et al. **Biochem Pharmacol** 1989 Mar 1;38(5):753–8

The effect of concurrent aspirin upon plasma concentrations of tenoxicam. Day RO, et al. **Br J Clin Pharmacol** 1988 Oct;26(4):455–62

Comparison of the gastroduodenal tolerance of tenoxicam and diclofenac Na. A double-blind, endoscopically controlled study in healthy volunteers. Müller P, et al. **Eur J Clin Pharmacol** 1989;36(4):419–21

Single and multiple dose pharmacokinetics of tenoxicam in the elderly. Nilsen OG, et al. **Eur J Clin Pharmacol** 1988; 35(5):563–6

Plasma tenoxicam concentrations after single and multiple oral doses. Crevoisier C, et al. **Eur J Drug Metab Pharmacokinet** 1989 Jan–Mar;14(1):23–7

Blood distribution of tenoxicam in humans: a particular HSA drug interaction. Bree F, et al. **Fundam Clin Pharmacol** 1989;3(3):267–79

Chlortenoxicam and renal function of normal human volunteers [letter] Warrington SJ, et al. **Hum Toxicol** 1989 Jan;8(1):53–4

A randomized, double-blind study to compare tenoxicam with sustained release indomethacin in osteoarthritic patients treated in general practice. Hooper PA, et al. **J Int Med Res** 1989 Jan–Feb;17(1):17–23

Validation study of WOMAC: a health status instrument for measuring clinically important patient relevant outcomes to antirheumatic drug therapy in patients with osteoarthritis of the hip or knee. Bellamy N, et al. **J Rheumatol** 1988 Dec;15(12):1833–40

Chlortenoxicam pharmacokinetics in young and elderly human volunteers. Ankier SI, et al. **Postgrad Med J** 1988 Oct;64(756):752–4

International experience with tenoxicam: a review. Bird HA. **Scand J Rheumatol Suppl** 1988;73:22–7

Integrated plasma and synovial fluid pharmacokinetics of tenoxicam in patients with rheumatoid arthritis and osteoarthritis: factors determining the synovial fluid/plasma distribution ratio. Hinderling PH, et al. **Ther Drug Monit** 1988;10(3):250–60

[Tenoxicam] Friis J. **Ugeskr Laeger** 1988 Oct 17;150(42):2542 **(Dan)**

[The binding of oxicam derivatives to human serum albumin (published erratum appears in Arzneimittelforschung 1988 Dec;38(12):1849)] Kinawi A, et al. **Arzneimittelforschung** 1988 Aug;38(8):1089–92 (Eng. Abstr.) **(Ger)**

[Open clinical trial of tenoxicam in parenteral form in patients with acute rheumatic pain] Marini U, et al. **Boll Chim Farm** 1988 Jan;127(1):9S–15S (Eng. Abstr.) **(Ita)**

[Clinical pharmacology of non-steroidal anti-inflammatory drugs. A new benzothiazine derivative: cinnoxicam] Bertè F, et al. **Minerva Med** 1988 Sep;79(9):811–30 (116 ref.) **(Ita)**

ANALYSIS

Simultaneous determination of piroxicam residual solvents by a new GLC method. Capitani F, et al. **Farmaco [Prat]** 1988 May;43(5):189–99

Quantitative determination of Piroxicam and its impurities by HPTLC spectrodensitometry. Quaglia MG, et al. **Pharm Acta Helv** 1989;64(3):86–9

X-ray studies on piroxicam modifications. Reck G, et al. **Pharmazie** 1988 Jul;43(7):477–81

[A structural study of the inclusion compound of piroxicam with beta-cyclodextrin by NMR] Miao ZC, et al. **Yao Hsueh Hsueh Pao** 1988;23(9):682–7 (Eng. Abstr.) **(Chi)**

BLOOD

The effect of rifampicin on piroxicam kinetics [letter] Patel RB, et al. **Indian J Physiol Pharmacol** 1988 Jul–Sep; 32(3):226–8

High-performance liquid chromatographic assay for piroxicam in human plasma. Boudinot FD, et al. **J Chromatogr** 1988 Sep 9;430(2):424–8

Rapid analysis of piroxicam in dog, rat and human plasma by high-performance liquid chromatography. Gillilan RB, et al. **J Chromatogr** 1989 Jan 27;487(1):232–35

[Steady-state plasma levels of piroxicam of 4 different origins and relation to clinical effects in the treatment of rheumatoid arthritis] Pavelka K Sr, et al. **Cas Lek Cesk** 1988 Jul 15;127(29):905–8 (Eng. Abstr.) **(Cze)**

[A micromethod for determining piroxicam concentration in the blood] Migulla H, et al. **Pharmazie** 1988 Dec; 43(12):866–7 **(Ger)**

METABOLISM

Binding of piroxicam to human serum albumin: effect of piroxicam on warfarin and diazepam binding. Matsuyama K, et al. **Pharm Res** 1987 Aug;4(4):355–7

PHARMACOKINETICS

Influence of cimetidine on the pharmacokinetics of piroxicam in rat and man. Said SA, et al. **Arzneimittelforschung** 1989 Jul;39(7):790–2

Piroxicam in breast milk after long-term treatment. Ostensen M, et al. **Eur J Clin Pharmacol** 1988;35(5):567–9

The effect of age on piroxicam disposition in rheumatoid arthritis. Blocka KL, et al. **J Rheumatol** 1988;15(5):757–63

Comparative study of the multiple dose pharmacokinetics and the tolerance of a new NSAID (droxicam) versus piroxicam in healthy volunteers. Martínez L, et al. **Methods Find Exp Clin Pharmacol** 1988 Nov;10(11):729–37

[Binding of voltaren and piroxicam with the membranes of erythrocyte ghosts and liposomes] Mogilevich SE, et al. **Farmakol Toksikol** 1988 Jul–Aug;51(4):87–90 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Radiation exposure and the effect of piroxicam and diclofenac on mediator release from isolated guinea-pig lung. Khayyal MT, et al. **Arch Int Pharmacodyn Ther** 1989 Mar–Apr; 298:247–63

Proteoglycan metabolism in isolated chondrocytes from human cartilage and in short-term tissue-cultured human articular cartilage. Verbruggen G, et al. **Clin Exp Rheumatol** 1989 Jan–Feb;7(1):13–7

Protection against experimental allergic encephalomyelitis with complete Freund's adjuvant is unaffected by prostaglandin synthesis inhibition. Weber F, et al. **Int Arch Allergy Appl Immunol** 1989;89(2–3):242–5

Comparative effect of tiaprofenic acid and piroxicam alone

and as adjuvants to antibilharzial therapy on pulmonary granuloma in unsensitized mice. Botros SS, et al. **Int J Immunopharmacol** 1988;10(5):601–7

Proteoglycan metabolism in tissue cultured human articular cartilage. Influence of piroxicam. Verbruggen G, et al. **J Rheumatol** 1989 Mar;16(3):355–62

Influence of piroxicam on the contractile action of prostaglandin E1 on the isolated rat uterus. Gamaniel K, et al. **Methods Find Exp Clin Pharmacol** 1988 Aug; 10(8):493–6

A comparison of anti-inflammatory, analgesic and ulcerogenic action of tryptamide, ibuprofen and piroxicam. Kulig D, et al. **Pol J Pharmacol Pharm** 1987 Nov–Dec; 39(6):769–72

THERAPEUTIC USE

Piroxicam in the treatment of immunologic, experimental inflammation of the anterior part of the eyeball. Gieldanowski J. **Arch Immunol Ther Exp (Warsz)** 1988; 36(3):229–37

Therapeutic focus. Piroxicam. Calin A. **Br J Clin Pract** 1988 Apr;42(4):161–4 (9 ref.)

A clinical evaluation of piroxicam gel: an open comparative trial with diclofenac gel in the treatment of acute musculoskeletal disorders. Kroll MP, et al. **Clin Ther** 1989 May–Jun;11(3):382–91

Effect of piroxicam therapy on granulocyte function and granulocyte elastase concentration in peripheral blood and synovial fluid of rheumatoid arthritis patients. Montecucco C, et al. **Inflammation** 1989 Apr;13(2):211–20

Piroxicam treatment protects mice from lethal pulmonary challenge with Pseudomonas aeruginosa [published erratum appears in J Infect Dis 1989 Jul;160(1):182] Sordelli DO, et al. **J Infect Dis** 1989 Feb;159(2):232–8

Prospective, randomized trial of oral piroxicam in the prophylaxis of postoperative cystoid macular edema. Abelson MB, et al. **J Ocul Pharmacol** 1989 Summer; 5(2):147–53

Validation study of WOMAC: a health status instrument for measuring clinically important patient relevant outcomes to antirheumatic drug therapy in patients with osteoarthritis of the hip or knee. Bellamy N, et al. **J Rheumatol** 1988 Dec;15(12):1833–40

Management of endodontic pain with nonsteroidal anti-inflammatory agents: a double-blind, placebo-controlled study. Negm MM. **Oral Surg Oral Med Oral Pathol** 1989 Jan;67(1):88–95

Modulation of immunity in cancer patients by prostaglandin antagonists. Braun DP, et al. **Prog Clin Biol Res** 1989; 288:439–48

[Regression and slowing of the growth of human pulmonary metastases induced by piroxicam, an inhibitor of prostaglandin synthesis] Breau JL, et al. **Bull Cancer (Paris)** 1989;75(3):321–8 (Eng. Abstr.) **(Fre)**

[Piroxicam eyedrops in keratoconjunctivitis sicca. A new therapeutic perspective] Bragliani G, et al. **Ophtalmologie** 1988 Oct;2(4):359–62 (Eng. Abstr.) **(Fre)**

PIT AND FISSURE SEALANTS

The glass ionomer rest-a-seal. Henry RJ, et al. **ASDC J Dent Child** 1989 Jul–Aug;56(4):283–7

The effect of etch-time on the bond strength of a sealant and on the etch-pattern in primary and permanent enamel: an evaluation. Tandon S, et al. **ASDC J Dent Child** 1989 May–Jun;56(3):186–90

Evaluation of dye penetrations around two resin-based materials used as fissure sealants. Flanagan RA, et al. **Biomaterials** 1988 Sep;9(5):460–2

Sealant restorations (preventive resin restorations). An addition to the NHS armamentarium. Crawford PJ. **Br Dent J** 1988 Oct 8;165(7):250–3 (22 ref.)

'Sealant restorations (preventive resin restorations)' [letter] Crawford PJ. **Br Dent J** 1988 Dec 24;165(12):422

'A double-blind clinical trial to determine the importance of pumice prophylaxis on fissure sealant retention' [letter] Levinkind M, et al. **Br Dent J** 1988 Dec 24;165(12):422

What is a sealant restoration? [letter] Osterloh KE. **Br Dent J** 1988 Aug 20;165(4):118

'Fissure sealants on the NHS' [letter] Prendergast MJ, et al. **Br Dent J** 1988 Sep 10;165(5):159

Fissure sealants and the preventive resin restoration on the NHS. Simonsen RJ. **Br Dent J** 1988 Oct 8;165(7):238–9

Clinical evaluation comparing sealant and amalgam after 7 years: final report. Straffon LH, et al. **J Am Dent Assoc** 1988 Nov;117(6):751–5

A comparative in vitro study of visible light-cured sealants. Lekka MP, et al. **J Oral Rehabil** 1989 May;16(3):287–99

Dental pit and fissure sealants: implications for school health personnel. McCormack-Brown KR, et al. **J Sch Health** 1989 Feb;59(2):69–73 (50 ref.)

The effect of varnish and pit and fissure sealants on the sealing capacity of retrofilling techniques. Negm MM. **Oral Surg Oral Med Oral Pathol** 1988 Oct;66(4):483–8

Sealing root canals with low-viscosity resins in vitro: a scanning electron microscopy study of canal cleansing and resin adaption. Rawlinson A. **Oral Surg Oral Med Oral Pathol** 1989 Sep;68(3):330–8

ADMINISTRATION & DOSAGE

A double-blind clinical trial to determine the importance of pumice prophylaxis on fissure sealant retention. Donnan MF, et al. **Br Dent J** 1988 Oct 22;165(8):283–6

Economical fissure sealing [letter] Manley G. **Br Dent J** 1989 May 6;166(9):321

PHARMACOLOGY

Penetration of fluoride-containing self-gelling liquids into human molar occlusal fissures in vitro. Bottenberg P, et al. **Caries Res** 1989;23(5):303–8

THERAPEUTIC USE

A clinical evaluation of a light-cured fissure sealant (Helioseal). De Craene GP, et al. **ASDC J Dent Child** 1989 Mar–Apr;56(2):97–102 (42 ref.)

Sealant knowledge and use by pediatric dentists: 1987 Minnesota survey. Gonzalez CD, et al. **ASDC J Dent Child** 1988 Nov–Dec;55(6):434–40

Fissure sealants on the NHS. Ball IA. **Br Dent J** 1988 Aug 6;165(3):80–1

Economical fissure sealing [letter] Boden DJ. **Br Dent J** 1989 Jul 22;167(2):52

'A double-blind clinical trial to determine the importance of pumice prophylaxis on fissure sealant retention' [letter] Donnan MN, et al. **Br Dent J** 1989 Feb 25;166(4):109–10

Pit and fissure sealants: one more time. Moore CE, et al. **Can Dent Assoc J** 1988 Oct;54(10):728–30

Selection of children for fissure sealing. Worthington HV, et al. **Community Dent Health** 1988 Sep;5(3):251–4

Cost-effectiveness of sealants [letter] Burt B. **Community Dent Oral Epidemiol** 1989 Aug;17(4):220

Importance of variables affecting pit and fissure sealant use in the United Kingdom. Cohen L, et al. **Community Dent Oral Epidemiol** 1988 Dec;16(6):317–20

Fissure sealants: a critique of their cost-effectiveness. Mitchell L, et al. **Community Dent Oral Epidemiol** 1989 Feb;17(1):19–23 (52 ref.)

Eruption pattern of permanent molars: implications for school-based dental sealant programs. Kuthy RA, et al. **J Public Health Dent** 1989 Winter;49(1):7–14

Evaluation of a clinic-based sealant program. Sterritt GR, et al. **J Public Health Dent** 1988 Fall;48(4):220–4

Dental sealants in the prevention of tooth decay. **Natl Inst Health Consensus Dev Conf Summ** 1984;4(11):9 p. (0 ref.)

Fissure sealant in permanent first molars after 10 years. Wendt LK, et al. **Swed Dent J** 1988;12(5):181–5

PIT VIPER VENOMS see **CROTALID VENOMS**

PITCH DISCRIMINATION

How is a trumpet known? The "basic object level" concept and perception of musical instruments. Palmer CF, et al. **Am J Psychol** 1989 Spring;102(1):17–37

An auditory Stroop effect for pitch, loudness, and time. Morgan AL, et al. **Brain Lang** 1989 May;36(4):592–603

Infants' perception of musical relations in short transposed tone sequences. Cohen AJ, et al. **Can J Psychol** 1987 Mar; 41(1):33–47

Equal loudness contours derived from comparisons of sensory differences. Schneider BA, et al. **Can J Psychol** 1987 Dec;41(4):429–41

Components of monaural envelope correlation perception. Richards VM. **Hear Res** 1988 Sep 1;35(1):47–57

Discrimination of frequency transitions by human infants. Aslin RN. **J Acoust Soc Am** 1989 Aug;86(2):582–90

Discrimination of interaural differences of time in the envelopes of high-frequency signals: integration times. Buell TN, et al. **J Acoust Soc Am** 1988 Dec;84(6):2063–6

Detection thresholds for sinusoidal frequency modulation. Demany L, et al. **J Acoust Soc Am** 1989 Mar;85(3):1295–301

Duration discrimination of steady and gliding tones: a new method for estimating sensitivity to rate of change. Dooley GJ, et al. **J Acoust Soc Am** 1988 Oct;84(4):1332–7

Frequency discrimination near the spectral edge of simultaneous and forward maskers. Fantini DA. **J Acoust Soc Am** 1989 Apr;85(4):1691–8

Comodulation masking release using SAM tonal complex maskers: effects of modulation depth and signal position. Grose JH, et al. **J Acoust Soc Am** 1989 Mar;85(3):1276–84

Models of the additivity of masking. Humes LE, et al. **J Acoust Soc Am** 1989 Mar;85(3):1285–94 (34 ref.)

Forward-masking properties of multicomponent signals in normal and hearing-impaired subjects. Kim M, et al. **J Acoust Soc Am** 1989 Aug;86(2):828–31

Pure-tone sensitivity of human infants. Olsho LW, et al. **J Acoust Soc Am** 1988 Oct;84(4):1316–24

Speech masking. II: Simultaneous masking thresholds under "naturalistic" listening conditions. Spiegel M. **J Acoust Soc Am** 1988 Dec;84(6):2033–44

Illusory continuity of tonal and infratonal periodic sounds. Warren RM, et al. **J Acoust Soc Am** 1988 Oct;84(4):1338–42

Song frequency as a cue for recognition of species and individuals in the field sparrow (Spizella pusilla). Nelson DA. **J Comp Psychol** 1989 Jun;103(2):171–6

Relative pitch perception in the European starling (Sturnus vulgaris): further evidence for an elusive phenomenon. Page SC, et al. **J Exp Psychol [Anim Behav]** 1989 Apr; 15(2):137–46

Timing light and tone signals in pigeons. Roberts WA, et al. **J Exp Psychol [Anim Behav]** 1989 Jan;15(1):23–35

On cross-modal similarity: the perceptual structure of pitch, loudness, and brightness. Marks LE. **J Exp Psychol [Hum Percept]** 1989 Aug;15(3):586–602

Dimensional interaction between color and pitch. Melara RD. **J Exp Psychol [Hum Percept]** 1989 Feb;15(1):69–79

Effects of metric and harmonic rhythm on the detection of pitch alterations in melodic sequences. Smith KC, et al. **J Exp Psychol [Hum Percept]** 1989 Aug;15(3):457–71

Precision and accuracy in the reproduction of simple tone sequences. Vos PG, et al. **J Exp Psychol [Hum Percept]** 1989 Feb;15(1):179–87

Musical imagery: generation of tones and chords. Hubbard TL, et al. **J Exp Psychol [Learn Mem Cogn]** 1988 Oct; 14(4):656–67

Frequency discrimination ability and stop-consonant identification in normally hearing and hearing-impaired subjects. Ochs MT, et al. **J Speech Hear Res** 1989 Mar; 32(1):133–42

Hemispheric specialization for speech and non-verbal stimuli in Chinese and French Canadian subjects. Cohen H, et al. **Neuropsychologia** 1989;27(2):241–5

Cerebral lateralization of music perception in the dual task paradigm: unfamiliar melody recognition in sinistrals. LaBarba RC, et al. **Neuropsychologia** 1989;27(2):247–50

Perceptual asymmetry in schizophrenia and affective disorder: implications from a right hemisphere task. Overby LA 3d, et al. **Neuropsychologia** 1989;27(6):861–70

Effects of auditory frequency-shifts on zero and below-zero SCR habituation. Flaten MA. **Pavlov J Biol Sci** 1989 Jul–Sep;24(3):98–101

Auditory illusion analogous to Baldwin illusion redux. Brigner WL. **Percept Mot Skills** 1989 Jun;68(3 Pt 2):1065–6

The perception of expressive timing in music. Clarke EF. **Psychol Res** 1989;51(1):2–9

Dynamic attending and responses to time. Jones MR, et al. **Psychol Rev** 1989 Jul;96(3):459–91

Effects of a change in tone frequency on the habituated orienting response of the sleeping rat. Johnen M, et al. **Psychophysiology** 1989 May;26(3):343–51

Within-channel selection and event-related potentials during selective auditory attention. Okita T. **Psychophysiology** 1989 Mar;26(2):127–39

[The effect of temporal distribution in relation to constant frequency of stimuli on habituation of the orienting reaction] Baltissen R, et al. **Z Exp Angew Psychol** 1989; 36(2):181–98 (Eng. Abstr.) **(Ger)**

PHYSIOLOGY

Frequency-specific auditory brainstem responses. Effective masking levels and relationship to behavioural thresholds in normal hearing adults. Purdy SC, et al. **Audiology** 1989; 28(2):82–91

Role of context in the expression of learning-induced plasticity of single neurons in auditory cortex. Diamond DM, et al. **Behav Neurosci** 1989 Jun;103(3):471–94

Selective attention in the presence of music: an event-related potentials (ERP) study. Dalbokova D, et al. **Biol Psychol** 1988 Jun;26(1–3):307–19

Frequency-resolving ability in systemic lupus erythematosus. Narula AA, et al. **Br J Audiol** 1989 Feb;23(1):69–72

Functional morphology in the inferior colliculus of the marmoset. Garey LJ, et al. **Hear Res** 1989 Mar; 38(1–2):67–79

Modulation of cochlear tuning by low-frequency sound. Klis JF, et al. **Hear Res** 1988 Nov;36(2–3):163–73

Response from the exposed intracranial human auditory nerve to low-frequency tones: basic characteristics. Møller AR, et al. **Hear Res** 1989 Mar;38(1–2):163–75

Auditory profile analysis: potential pitch cues. Richards VM, et al. **Hear Res** 1989 May;39(1–2):27–36

The spatial representation of frequency in the rat dorsal cochlear nucleus and inferior colliculus. Ryan AF, et al. **Hear Res** 1988 Nov;36(2–3):181–9

Masking patterns in the bullfrog (Rana catesbeiana). II: Physiological effects. Freedman EG, et al. **J Acoust Soc Am** 1988 Dec;84(6):2081–91

Spectro-temporal analysis in normal-hearing and cochlear-impaired listeners. Hall JW 3d, et al. **J Acoust Soc Am** 1988 Oct;84(4):1325–31

Offset AP masker tuning curve and the FFT of the stimulus. Henry KR, et al. **J Acoust Soc Am** 1988 Oct;84(4):1354–62

Detection and discrimination of frequency modulation of complex signals. Horst JW. **J Acoust Soc Am** 1989 May; 85(5):2022–30

Detection of temporal gaps in sinusoids by normally hearing and hearing-impaired subjects. Moore BC, et al. **J Acoust Soc Am** 1989 Mar;85(3):1266–75

Noise susceptibility and immunity of phase locking in amphibian auditory-nerve fibers. Narins PM, et al. **J Acoust Soc Am** 1989 Mar;85(3):1255–65

Effects of acoustic overstimulation on spectral and temporal processing in the amphibian auditory nerve. Penna M, et al. **J Acoust Soc Am** 1989 Apr;85(4):1617–29

Frequency difference limens in normal and sensorineural hearing impaired chinchillas. Prosen CA, et al. **J Acoust Soc Am** 1989 Mar;85(3):1302–13

Synchrony-dependent autocorrelation in eighth-nerve-fiber response to rippled noise. ten Kate JH, et al. **J Acoust Soc Am** 1988 Dec;84(6):2092–102

Tonotypic cortical representation in man (case report). Bhatnagar SC, et al. **Pavlov J Biol Sci** 1989 Apr–Jun; 24(2):50–3

[Frequency-dependent cochlear microphonics in inner ear hearing loss with various pitch thresholds] Marangos N, et al. **HNO** 1989 Jan;37(1):27-9 (Eng. Abstr.) **(Ger)**

[The process of distinguishing the pitch of sounds and auditory evoked potentials] Karaichev KI, et al. **Fiziol Cheloveka** 1988 May-Jun;14(3):387-94 **(Rus)**

PITCH PERCEPTION

Pitch identification of simultaneous diotic and dichotic two-tone complexes. Beerends JG, et al. **J Acoust Soc Am** 1989 Feb;85(2):813-9

Is it necessary to measure hearing protector attenuation at 3.15 and 6.3 kHz? Berger EH, et al. **J Acoust Soc Am** 1989 Apr;85(4):1590-4

Frequency selectivity in amplitude-modulation detection. Houtgast T. **J Acoust Soc Am** 1989 Apr;85(4):1676-80

The growth of and recovery from TTS in human subjects exposed to impact noise. Laroche C, et al. **J Acoust Soc Am** 1989 Apr;85(4):1681-90

The effect of varying the amplitude-frequency response on the masked speech-reception threshold of sentences for hearing-impaired listeners. van Dijkhuizen JN, et al. **J Acoust Soc Am** 1989 Aug;86(2):621-8

Formation of tone-US associations does not interfere with the formation of context-US associations in pigeons. Balsam PD, et al. **J Exp Psychol [Anim Behav]** 1988 Oct; 14(4):401-12

The distinction between integral and separable dimensions: evidence for the integrality of pitch and loudness. Grau JW, et al. **J Exp Psychol [Gen]** 1988 Dec;117(4):347-70

The relation between vowel recognition and measures of frequency resolution. Turner CW, et al. **J Speech Hear Res** 1989 Mar;32(1):49-58

Do redundant visual and auditory target variables facilitate control behavior? McCord DM. **Percept Mot Skills** 1989 Aug;69(1):275-82

DRUG EFFECTS

Synergistic interactions of gentamicin and pure tones causing cochlear hair cell loss in pigmented guinea pigs. Collins PW. **Hear Res** 1988 Nov;36(2-3):249-59

PHYSIOLOGY

The hippocampal formation is necessary for rats to learn and remember configural discriminations. Rudy JW, et al. **Behav Brain Res** 1989 Aug 1;34(1-2):97-109

Sequential effects on P3 in a counting task: a partial replication. Verleger R. **Biol Psychol** 1987 Dec; 25(3):221-46

Frequency dependence of interear asymmetries and binaural interaction in the human ABR. DeVries SM, et al. **Ear Hear** 1988 Oct;9(5):275-82

Interferometric measurement of the amplitude and phase of tympanic membrane vibrations in cat. Decraemer WF, et al. **Hear Res** 1989 Mar;38(1-2):1-17

Influence of envelope rise time on neural responses in the auditory system of anurans. Hall JC, et al. **Hear Res** 1988 Nov;36(2-3):261-76

Physiological and psychophysical correlates of temporal processes in hearing. Javel E, et al. **Hear Res** 1988 Aug; 34(3):275-94 (54 ref.)

Rapid assessment of sound-evoked olivocochlear feedback: suppression of compound action potentials by contralateral sound. Liberman MC. **Hear Res** 1989 Mar;38(1-2):47-56

Off-responses in the auditory system in relation to the signal end phase and neuronal characteristic frequency. Radionova EA. **Hear Res** 1988 Sep 15;35(2-3):229-35

Detection and discrimination of frequency modulation of complex signals. Horst JW. **J Acoust Soc Am** 1989 May; 85(5):2022-30

Perception of the missing fundamental in nonhuman primates. Tomlinson RW, et al. **J Acoust Soc Am** 1988 Aug; 84(2):560-5

Perception of complex tone pairs mistuned from unison. Warren RM, et al. **J Acoust Soc Am** 1989 Jul;86(1):116-25

Pitch perception of complex tones and human temporal-lobe function. Zatorre RJ. **J Acoust Soc Am** 1988 Aug; 84(2):566-72

[Recent trends in the psychology of music perception: the perceptual processes of melody and musical pitch] Tsuzaki M. **Shinrigaku Kenkyu** 1988 Aug;59(3):176-90 (79 ref.) (Eng. Abstr.) **(Jpn)**

[Modeling of auditory mechanisms of pitch perception] Livshits MS. **Biofizika** 1988 Jul-Aug;33(4):708-12 (Eng. Abstr.) **(Rus)**

PITUITARY ADENOMA, PROLACTIN-SECRETING see **PROLACTINOMA**

PITUITARY-ADRENAL FUNCTION TESTS

Salivary cortisol and adrenal function [letter] Harris B, et al. **Biol Psychiatry** 1988 Dec;24(8):954-6

[Value of determining dexamethasone in the rapid adrenal suppression test] Lamiable D, et al. **Ann Endocrinol (Paris)** 1989;50(1):44-8 (Eng. Abstr.) **(Fre)**

[Adrenocortical function in renal allograft recipients followed for more than 5 years] Nakamura H, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Sep;79(9):1550-4 (Eng. Abstr.) **(Jpn)**

PITUITARY-ADRENAL SYSTEM

ABNORMALITIES

Adrenal hypoplasia and pituitary agenesis in a normocephalic infant, with a review of the literature. Newman NM, et al. **Aust Paediatr J** 1988 Oct;24(5):300-3 (35 ref.)

DRUG EFFECTS

Effect of melittin on pituitary-adrenal responsiveness to stress. Dunn JD, et al. **Acta Endocrinol (Copenh)** 1988 Nov; 119(3):339-44

Intracerebroventricular and systemic saralasin used to investigate angiotensin-elicited activation of the pituitary-adrenocortical axis in the goat. Junkergård J, et al. **Acta Physiol Scand** 1988 Oct;134(2):271-5

Functional status of the pituitary-adrenal axis during treatment of RU486 for termination of early pregnancy in combination with PGs in Chinese women. Yang XL, et al. **Adv Contracept** 1989 Mar;5(1):31-9

Ethanol differentially enhances adrenocortical response in LS and SS mice. Zgombick JM, et al. **Alcohol** 1988 Jul-Aug;5(4):287-94

Interleukin-1 induces conditioned taste aversion in rats: a possible explanation for its pituitary-adrenal stimulating activity. Tazi A, et al. **Brain Res** 1988 Nov 15;473(2):369-71

Changes in pituitary-adrenal function in diabetics and their response to aminoglutethimide. Lu JM, et al. **Chin Med J [Engl]** 1988 Aug;101(8):587-90

Effects of exogenous melatonin on human pituitary and adrenal secretions. Hormonal responses to specific stimuli after acute administration of different doses at two opposite circadian stages in men. Paccotti P, et al. **Chronobiologia** 1988 Oct-Dec;15(4):279-87

Recovery from glucocorticoid inhibition of the responses to corticotrophin-releasing hormone. Watson AC, et al. **Clin Endocrinol (Oxf)** 1988 May;28(5):471-7

Effects of lithium on the hypothalamo-pituitary-adrenal axis. Sugawara M, et al. **Endocrinol Jpn** 1988 Oct;35(5):655-63

The alkyl-ether phospholipid platelet-activating factor is a stimulator of the hypothalamic-pituitary-adrenal axis in the rat. Bernardini R, et al. **Endocrinology** 1989 Aug; 125(2):1067-73

Effect of interleukin-1 on adrenocortical activity in intact and hypothalamic deafferentated male rats. Ovadia H, et al. **Exp Brain Res** 1989;76(1):246-9

Glucocorticoids but not vasopressin or oxytocin inhibit luteinizing hormone secretion in patients with psychogenic amenorrhea. Monzani A, et al. **Gynecol Endocrinol** 1989; 3(1):55-62

Exogenous opioid regulation of the hypothalamic-pituitary-adrenal axis in fetal sheep. Brooks AN, et al. **J Endocrinol** 1988 Dec;119(3):389-95

Stimulatory effect of caffeine on the hypothalamo-pituitary-adrenocortical axis in the rat. Nicholson SA. **J Endocrinol** 1989 Aug;122(2):535-43

Effects of the opiate agonist loperamide on pituitary-adrenal function in patients with suspected hypercortisolism. Ambrosi B, et al. **J Endocrinol Invest** 1989 Jan;12(1):31-5

Pituitary-adrenal responses to CRH and insulin hypoglycemia in patients with idiopathic GH deficiency. Sartorio A, et al. **J Endocrinol Invest** 1989 Jan;12(1):19-23

A randomized, placebo-controlled trial of effects of dexamethasone on hypothalamic-pituitary-adrenal axis in preterm infants. Wilson DM, et al. **J Pediatr** 1988 Oct; 113(4):764-8

Prenatal fetal adrenal suppression following in utero diagnosis of congenital adrenal hyperplasia. Shapiro E, et al. **J Urol** 1989 Aug;142(2 Pt 2):663-6; discussion 667-8

Naloxone does not antagonize PCP-induced stimulation of the pituitary-adrenal axis in the rat. Pechnick RN, et al. **Life Sci** 1989;44(2):143-7

Influence of type of immunosuppressive therapy on secretion of somatotropin and function of the pituitary-adrenal and pituitary-gonadal axis in patients with a kidney transplant. Nieszporek T, et al. **Nephron** 1989;53(1):65-9

Adaptation of the adrenocorticotropic response to chronic intermittent stress was altered by intracerebroventricular infusion of hemicholinium-3. Ramade F, et al. **Neuroendocrinology** 1989 Aug;50(2):165-9

Chronic administration of tricyclic antidepressants suppresses hypothalamo-pituitary-adrenocortical activity in male rats. Shimoda K, et al. **Psychoneuroendocrinology** 1988; 13(5):431-40

Relationship of the hypothalamic-pituitary-adrenal axis with chemically induced immunomodulation. I. Stress-like response after exposure to T-2 toxin. Taylor MJ, et al. **Toxicology** 1989 Jun 1;56(2):179-95

[Effect of continuous epidural infusion of morphine for postoperative analgesia on pituitary-adrenocortical function] Murakawa T, et al. **Masui** 1989 May;38(5):625-31 (Eng. Abstr.) **(Jpn)**

[Effect of combined oral contraceptives on the hypophyseo-thyroid and hypophyseo-adrenal systems in women with various anatomy of the thyroid gland] Zigizmund VA, et al. **Akush Ginekol (Mosk)** 1988 Nov; (11):50-3 (Eng. Abstr.) **(Rus)**

[The role of various classes of catecholamines in the central regulation of the hypothalamo-hypophyseo-adrenal cortex system] Eremina SA, et al. **Fiziol Zh SSSR** 1988 Sep; 74(9):1316-20 (Eng. Abstr.) **(Rus)**

[Study of the combined effect of carbon monoxide, nitrogen dioxide and hydrocarbons on the body of the rat] Vyskochil A, et al. **Gig Sanit** 1989 Mar;(3):69-71 **(Rus)**

[Effect of ketalar on the hypophyseo-adrenal system and glucose-insular homeostasis in children with malignant neoplasms] Iagubov RS. **Vestn Khir** 1987 Dec;139(12):63-6 (Eng. Abstr.) **(Rus)**

[Effect of ionol and eleutherococcus on changes of the hypophyseo-adrenal system in rats under extreme conditions] Golotin VG, et al. **Vopr Med Khim** 1989 Jan-Feb;35(1):35-7 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Maturation of the pituitary-adrenal function in rat fetuses. Boudouresque F, et al. **Neuroendocrinology** 1988 Oct; 48(4):417-22

Development of the fetal pituitary-adrenal axis in the sheep. Brieu V, et al. **Reprod Nutr Dev** 1988;28(4B):1129-44 (60 ref.)

GROWTH & DEVELOPMENT

Pituitary-adrenal response to bacterial endotoxin in developing rats. Witek-Janusek L. **Am J Physiol** 1988 Oct; 255(4 Pt 1):E525-30

IMMUNOLOGY

Differential regulation of lipopolysaccharide-induced interleukin 1 and tumor necrosis factor synthesis: effects of endogenous and exogenous glucocorticoids and the role of the pituitary-adrenal axis. Zuckerman SH, et al. **Eur J Immunol** 1989 Feb;19(2):301-5

Interactions between immunological cells and the hypothalamus pituitary-adrenal axis: an example of neuroendocrine immunoregulation. Besedovsky HO, et al. **Recenti Prog Med** 1988 Jul-Aug;79(7-8):300-4

INNERVATION

Studies on hypothalamo-pituitary corticoliberin system. VI. Comparison of the effects of long-term intraventricular CRF-administration and adrenalectomy in CRF- and neurophysin-immunoreactive neurons in the rat. Miśkowiak B. **Z Mikrosk Anat Forsch** 1988;102(3):432-44

METABOLISM

Effect of chlorpromazine on the pituitary-adrenal functions evaluated with insulin tolerance test and dexamethasone suppression test in patients with paranoid schizophrenia. Horodnicki JM, et al. **Act Nerv Super (Praha)** 1989 Apr; 31(1):46-8

The influence of human corticotropin-releasing hormone on somatostatin secretion in depressed patients and controls. Lesch KP, et al. **J Neural Transm** 1989;75(2):111-8

PHYSIOLOGY

Immunologically-mediated pituitary-adrenal activation. Blalock JE. **Adv Exp Med Biol** 1988;245:217-23 (27 ref.)

Maternal modulation of pituitary-adrenal activity during ontogeny. Levine S, et al. **Adv Exp Med Biol** 1988; 245:295-310

Human placenta and the hypothalamic-pituitary-adrenal axis. Margioris AN, et al. **Adv Exp Med Biol** 1988; 245:389-98 (45 ref.)

Pituitary-adrenal stress response in the absence of brain-pituitary connections. Carr DB, et al. **Anesth Analg** 1989 Aug;69(2):197-201

Role of the pituitary-adrenal hormones in the acquisition of schedule-induced polydipsia. Levine R, et al. **Behav Neurosci** 1989 Jun;103(3):621-37

Regulation of the hypothalamic-pituitary-adrenal axis in birth. Brooks AN, et al. **Can J Physiol Pharmacol** 1988 Aug;66(8):1106-12 (61 ref.)

The immune-hypothalamic-pituitary-adrenal axis. Bateman A, et al. **Endocr Rev** 1989 Feb;10(1):92-112 (220 ref.)

Role of pituitary-adrenocortical system in body adaptation abilities. Filaretov AA, et al. **Exp Clin Endocrinol** 1988 Dec;92(2):129-36

Studies on hypothalamo-pituitary corticoliberin system. V. The effects of gonadectomy and sex hormones on plasma ACTH and on the reactivity of the anterior pituitary gland to CRF. Miśkowiak B, et al. **Exp Clin Endocrinol** 1988 Sep;92(1):1-6

Effects of stress transmission pathways on acute ulcerogenesis in rats under cold-restraint stress. Kodama O, et al. **Hiroshima J Med Sci** 1988 Jun;37(2):57-62

Hypothalamic-pituitary-adrenal responses to short-duration high-intensity cycle exercise. Kraemer WJ, et al. **J Appl Physiol** 1989 Jan;66(1):161-6

Alterations in the hypothalamic-pituitary-ovarian and the hypothalamic-pituitary-adrenal axes in athletic women. Loucks AB, et al. **J Clin Endocrinol Metab** 1989 Feb; 68(2):402-11

A critical assessment of the interactions between the immune system and the hypothalamo-pituitary-adrenal axis. Buzzetti R, et al. **J Endocrinol** 1989 Feb;120(2):183-7 (40 ref.)

Involvement of the hypothalamo-pituitary-adrenal axis in the control of circadian blood pressure rhythm. Munakata M, et al. **J Hypertens Suppl** 1988 Dec;6(4):S44-6

Adrenal-pituitary-gonadal relationships and ejaculate characteristics in captive leopards (Panthera pardus kotiya) isolated on the island of Sri Lanka. Brown JL, et al. **J Reprod Fertil** 1989 Mar;85(2):605–13

Effect of neuropeptide Y on the hypothalamic-pituitary-adrenal axis in the dog. Inoue T, et al. **Life Sci** 1989;44(15):1043–51

Studies of the regulation of the hypothalamic-pituitary-adrenal axis in sheep with hypothalamic-pituitary disconnection. I. Effect of an audiovisual stimulus and insulin-induced hypoglycemia. Engler D, et al. **Neuroendocrinology** 1988 Nov;48(5):551–60

Regulation of the central nervous system-pituitary-adrenal axis in rats after neonatal treatment with monosodium glutamate. Magariños AM, et al. **Neuroendocrinology** 1988 Aug;48(2):105–11

Age-related adaptation of pituitary-adrenocortical responses to stress. Odio M, et al. **Neuroendocrinology** 1989 Apr; 49(4):382–8

Role of alpha-adrenergic mechanism in effects of morphine on the hypothalamo-pituitary-adrenocortical and cardiovascular systems in the rat. Suemaru S, et al. **Neuroendocrinology** 1989 Feb;49(2):181–90

Pituitary—adrenal response to capture in Cayo Santiago—derived group M rhesus monkeys. Suomi SJ, et al. **P R Health Sci J** 1989 Apr;8(1):171–6

Pituitary-adrenal and thyroid effects on melatonin content of the rat pineal gland. Bauer MS, et al. **Psychoneuroendocrinology** 1989;14(3):165–75

Effect of single and repeated electroconvulsive shock on the hypothalamic-pituitary-adrenal axis and plasma catecholamines in rats. Thiagarajan AB, et al. **Psychopharmacology (Berlin)** 1989;97(4):548–52

Pituitary-adrenocortical activity in the fetal pig in the last third of gestation. Silver M, et al. **Q J Exp Physiol** 1989 Mar;74(2):197–206

[The sympathetico-adrenal, hypophyseo-adrenal and kallikrein-kinin systems in the regulation of hemodynamics during normovolemic hemodilution] Sergeeva NA, et al. **Anesteziol Reanimatol** 1988 Nov-Dec;(6):16–9 (Eng. Abstr.) **(Rus)**

[Status of the hypophyseo-adrenal system and functional morphology of the adrenal glands in residents of Northern European areas of the USSR] Sukhanov SG, et al. **Arkh Patol** 1989;51(4):58–62 (Eng. Abstr.) **(Rus)**

[Interrelation of the sympatho-adrenal and hypothalamo-hypophyseo-adrenal system and sports results (correlation analysis)] Shreiberg GL, et al. **Fiziol Cheloveka** 1989 Mar-Apr;15(2):108–14 **(Rus)**

[Reaction of the hypophyseo-adrenal system to submaximal physical loading in untrained healthy subjects of various ages] Kovalenko AP. **Fiziol Zh** 1988 Jul-Aug;34(4):87–92 (Eng. Abstr.) **(Rus)**

[Role of the hypophyseo-adrenal system in regulating the acid-secreting function of the kidneys] Krishtal' NV, et al. **Fiziol Zh** 1989 Jan-Feb;35(1):59–62 (Eng. Abstr.) **(Rus)**

[The role of the paraventricular hypothalamic nuclei in the reaction of the hypophyseo-adrenal cortex system to cold adaptation] Kormilitsyna NK. **Fiziol Zh SSSR** 1988 Jul; 74(7):933–7 (Eng. Abstr.) **(Rus)**

[Genotypic differences in the reactivity of the hypophyseo-adrenal system and the resistance of mice to cooling] Koriakina LA. **Genetika** 1988 Jul;24(7):1199–208 (Eng. Abstr.) **(Rus)**

[Role of breast feeding in the development of the function of the hypophyseal-adrenal system in newborn infants in the early neonatal period] Pavliuk VP. **Probl Endokrinol (Mosk)** 1988 Sep-Oct;34(5):35–8 (Eng. Abstr.) **(Rus)**

[Early effects of the influence of ionizing radiation in relatively small doses on the neuromediator systems responding to the central regulation of the hypothalamo-pituitary-adrenal cortex system] Taĭts MIu, et al. **Radiobiologiia** 1988 Sep-Oct;28(5):660–2 (Eng. Abstr.) **(Rus)**

[Alcohol and endocrine pathology (editorial)] Marañón Cabello A. **Rev Clin Esp** 1989 Apr;184(6):277–9 **(Spa)**

PHYSIOPATHOLOGY

Influence of imipramine and amitriptyline on the hypothalamic function in affective disorders. Horodnicki JM, et al. **Act Nerv Super (Praha)** 1989 Apr;31(1):27–9

Allogenic bone marrow transplantation in adults: endocrine sequelae after 1–6 years. Benker G, et al. **Acta Endocrinol (Copenh)** 1989 Jan;120(1):37–42

Diabetes mellitus, adrenal function and the defeat response. Meehan WP, et al. **Acta Physiol Scand Suppl** 1988; 571:117–28

Hypothalamic-pituitary-adrenal and -thyroid axis dysfunctions and decrements in the availability of L-tryptophan as biological markers of suicidal ideation in major depressed females. Maes M, et al. **Acta Psychiatr Scand** 1989 Jul;80(1):13–7

Hypophysiotropic regulation of stress-induced ACTH secretion. Plotsky PM. **Adv Exp Med Biol** 1988;245:65–81 (61 ref.)

HPA axis hyperactivity and recovery from functional psychoses. Coryell WH, et al. **Am J Psychiatry** 1989 Apr; 146(4):473–7

Plasma dexamethasone levels and disagreement between the DST and other markers of HPA axis function [letter] Hunt GE, et al. **Am J Psychiatry** 1989 Apr;146(4):569–70

Pathophysiology of HPA axis abnormalities in patients with major depression: an update. Kathol RG, et al. **Am J Psychiatry** 1989 Mar;146(3):311–7 (98 ref.)

Adrenocortical function in old age as reflected by plasma cortisol and ACTH test during the course of acute myocardial infarction. Jensen BA, et al. **Arch Gerontol Geriatr** 1988 Dec;7(4):289–96

Maternal deprivation potentiates pituitary-adrenal stress responses in infant rats. Stanton ME, et al. **Behav Neurosci** 1988 Oct;102(5):692–700

The significance of HPA axis disturbance in panic disorder. Coryell W, et al. **Biol Psychiatry** 1989 Apr 15; 25(8):989–1002

Prediction of outcome in depressed patients by weekly monitoring with the dexamethasone suppression test. Schweitzer I, et al. **Br J Psychiatry** 1987 Dec;151:780–4

Adrenocorticotrophin (ACTH) deficiency undetected by standard dynamic tests of the hypothalamic-pituitary-adrenal axis. Tsatsoulis A, et al. **Clin Endocrinol (Oxf)** 1988 Feb;28(2):225–32

Abnormalities in the hypothalamo-pituitary-adrenal axis in spontaneously hypertensive rats during development of hypertension. Hashimoto K, et al. **Endocrinology** 1989 Sep; 125(3):1161–7

Psychiatric implications of altered limbic-hypothalamic-pituitary-adrenocortical activity. Holsboer F. **Eur Arch Psychiatry Neurol Sci** 1989; 238(5–6):302–22 (164 ref.)

Pharmacoendocrinology of major depression. Rubin RT. **Eur Arch Psychiatry Neurol Sci** 1989;238(5–6):259–67 (121 ref.)

Ovine corticotropin-releasing hormone stimulation test in patients with chronic renal failure: pharmacokinetic properties, and plasma adrenocorticotropic hormone and serum cortisol responses. Siamopoulos KC, et al. **Horm Res** 1988;30(1):17–21

Impaired mitogen-induced lymphocyte responses and the hypothalamic-pituitary-adrenal axis in depressive disorders. Cosyns P, et al. **J Affective Disord** 1989 Jan-Feb; 16(1):41–8

Influences on cortisol and noradrenergic turnover of healthy controls and depressed patients during L-tryptophan loading. Maes M, et al. **J Affective Disord** 1989 Sep-Oct; 17(2):173–82

Adrenal function in 15 dogs with insulin-dependent diabetes mellitus. Zerbe CA, et al. **J Am Vet Med Assoc** 1988 Aug 15;193(4):454–6

Judgement of the hypothalamic-pituitary-adrenocortical function in psychiatric patients by betamethasone-induced cortisol suppressibility. Kasper S, et al. **J Neural Transm** 1988;74(3):161–74

Individual housing does not influence the adaptation of the pituitary-adrenal axis and other physiological variables to chronic stress in adult male rats. Giralt M, et al. **Physiol Behav** 1989 Mar;45(3):477–81

A further analysis of behavioral and endocrine effects of unpredictable chronic stress. Rodríguez Echandía EL, et al. **Physiol Behav** 1988;43(6):789–95

Inflammatory mediator-induced hypothalamic-pituitary-adrenal axis activation is defective in streptococcal cell wall arthritis-susceptible Lewis rats. Sternberg EM, et al. **Proc Natl Acad Sci U S A** 1989 Apr; 86(7):2374–8

The role of the hypothalamic-pituitary-adrenocortical axis in post-stress induced ethanol consumption by rats. Nash JF Jr, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(5):653–71

Psychoneuroendocrinology of depression. Brown GM. **Psychiatr J Univ Ottawa** 1989 Jun;14(2):344–8; discussion 349–51 (40 ref.)

Noradrenergic function and hypothalamic-pituitary-adrenal axis activity in adolescents with major depressive disorder. de Villiers AS, et al. **Psychiatry Res** 1989 Feb;27(2):101–9

Hypothalamo-pituitary-adrenal axis abnormalities in depression: a review and a model. Charlton BG, et al. **Psychol Med** 1989 May;19(2):331–6 (49 ref.)

The assessment of abnormalities in hormonal responsiveness at multiple levels of the hypothalamic-pituitary-adrenocortical axis in depressive illness. Amsterdam JD, et al. **Psychoneuroendocrinology** 1989;14(1–2):43–62

Opioidergic regulation of hypothalamo-pituitary-adrenal function in depression and Cushing's disease: an interim report. Zis AP. **Psychoneuroendocrinology** 1988; 13(5):419–30 (75 ref.)

[Effects of modified NLA with droperidol and eptazocine and surgery on pituitary-adrenocortical function in man] Takahashi S, et al. **Masui** 1989 Apr;38(4):523–30 (Eng. Abstr.) **(Jpn)**

[Effect of controlled normovolemic hemodilution on the activity of neurohumoral adaptive reactions in patients after operations on the abdominal organs] Kuznetsov NA, et al. **Anesteziol Reanimatol** 1988 Jul-Aug;(4):51–3 (Eng. Abstr.) **(Rus)**

[Status of the sympathetic-adrenal, hypophyseal-adrenal and serotonin systems during surgery with the use of electro-acupuncture combined with amitriptyline and local anesthesia] Malygina SI, et al. **Anesteziol Reanimatol** 1988 May-Jun;(3):48–50 (Eng. Abstr.) **(Rus)**

[Relation between activities of vasopressinergic and pituitary-adrenal cortex systems] Filaretov AA, et al. **Dokl Akad Nauk SSSR** 1988;301(2):500–2 **(Rus)**

[The "low-renin" forms of hypertension and hypophyseo-adrenal cortex dysfunction] Shabrov AV. **Kardiologiia** 1988 Aug;28(8):99–101 **(Rus)**

[Characteristics of the immune and neuroendocrine systems in children with thymomegaly] Dadambaev ET, et al. **Pediatriia** 1989;(5):100–3 (71 ref.) **(Rus)**

[Hypophyseal-gonadal and hypophyseal-corticoadrenal system in healthy persons and in patients with ischemic heart disease aged 60–89 years] Kovalenko AN. **Ter Arkh** 1988;60(9):52–7 (Eng. Abstr.) **(Rus)**

[Functional status of the adrenal and pituitary-adrenal systems in children with urologic diseases under general anesthesia] Katkovskiĭ DG, et al. **Vestn Khir** 1988 May; 140(5):90–2 (Eng. Abstr.) **(Rus)**

[Functional state of the hypophyseo-adrenal system in patients with chronic alcoholism and various degrees of liver damage] Borodulin VG, et al. **Zh Nevropatol Psikhiatr** 1988;88(9):118–21 (Eng. Abstr.) **(Rus)**

[Brain serotonin in response to the hypothalamo-hypophyseal-adrenal system to insulin hypoglycemia] Montilla P, et al. **Rev Esp Fisiol** 1988 Mar; 44(1):93–7 (Eng. Abstr.) **(Spa)**

RADIATION EFFECTS

[Cytogenetic and endocrinologic changes in experimental animals exposed to high-frequency electromagnetic fields] Nikitina VN, et al. **Gig Sanit** 1989 May;(5):85–6 **(Rus)**

SECRETION

[The role of central noradrenergic neurons in the hypothalamic-pituitary-adrenocortical axis of rats: with special reference to feeding cycle and biological rhythm] Noe Y. **Hokkaido Igaku Zasshi** 1988 Nov;63(6):897–912 (Eng. Abstr.) **(Jpn)**

[Hormonal factors in the pathogenesis of hypertension] Meshkov AP. **Kardiologiia** 1989 Mar;29(3):117–22 (104 ref.) **(Rus)**

[Status of the pituitary-adrenal system in patients with non-specific ulcerative colitis] Kirkin BV, et al. **Klin Med (Mosk)** 1989 May;67(5):116–9 (Eng. Abstr.) **(Rus)**

PITUITARY APOPLEXY

Computed tomography of hemorrhage in a pituitary adenoma without apoplexy. Parikh VP, et al. **J Comput Tomogr** 1988 Jul;12(3):187–9

CHEMICALLY INDUCED

Pituitary apoplexy [letter] Harvey R, et al. **BMJ** 1989 Jan 28;298(6668):258

Pituitary apoplexy manifested during a bromocriptine test in a patient with a growth hormone- and prolactin-producing pituitary adenoma. Shirataki K, et al. **Neurosurgery** 1988 Sep;23(3):395–8

COMPLICATIONS

Acute monocular disturbances mimicking optic neuritis in pituitary apoplexy. Petersen P, et al. **Acta Neurol Scand** 1988 Aug;78(2):101–3

Hemorrhage within pituitary adenomas: how often associated with pituitary apoplexy syndrome? Ostrov SG, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):153–60

Pituitary apoplexy presenting as monocular blindness. Noël NE, et al. **Ann Emerg Med** 1989 Apr;18(4):414–7

Pituitary apoplexy. Hutchinson DO, et al. **N Z Med J** 1989 Apr 12;102(865):158–60

ETIOLOGY

Apoplexy of a pituitary adenoma after dynamic testing with gonadotropin-releasing hormone. Arafah BM, et al. **Am J Med** 1989 Jul;87(1):103–5

[A case of Cushing's disease resulting in remission due to pituitary apoplexy during radiation therapy] Ohtsuka T, et al. **Nippon Naika Gakkai Zasshi** 1988 Jul;77(7):1095–6 **(Jpn)**

PATHOLOGY

Classical pituitary apoplexy presentation and a follow-up of 13 patients. Ahmed M, et al. **Horm Res** 1989;31(3):125–32

PHYSIOPATHOLOGY

Spontaneous remission of acromegaly after pituitary apoplexy following head trauma. Tamasawa N, et al. **J Endocrinol Invest** 1988 Jun;11(6):429–32

RADIOGRAPHY

Pituitary apoplexy. Lewin IG, et al. **BMJ** 1988 Dec 10; 297(6662):1526–7

[A case of pituitary apoplexy presented with a niveau formation on computed tomography] Asari S, et al. **Rinsho Hoshasen** 1988 Aug;33(8):905–6 (Eng. Abstr.) **(Jpn)**

SURGERY

[Surgical treatment of pituitary apoplexy] Szeifert G, et al. **Orv Hetil** 1989 Jan 15;130(3):119–23 (23 ref.) (Eng. Abstr.) **(Hun)**

PITUITARY DISEASES

BLOOD

Plasma transferrin levels in abnormal endocrine states. I. The changes in hypophysial diseases before and after treatment. Matsubara M, et al. **Horm Metab Res** 1988 Aug;20(8):506–9

Insulin hypoglycemia test and releasing hormone (corticotropin–releasing hormone and growth hormone–releasing hormone) stimulation in patients with pituitary failure of different origin. Stalla GK, et al. **Horm Res** 1988;29(5–6):191–6

COMPLICATIONS

A case of hypopituitarism due to granulomatous and lymphocytic adenohypophysitis with minimal pituitary enlargement: a possible variant of lymphocytic adenohypophysitis. Miyamoto M, et al. **Endocrinol Jpn** 1988 Aug;35(4):607–16

Assessment of hypothalamic–pituitary–adrenal (HPA) axis dysfunction: comparison of ACTH stimulation, insulin–hypoglycemia and metyrapone. Hartzband PI, et al. **J Endocrinol Invest** 1988 Dec;11(11):769–76

A case of Rathke's cleft cyst associated with diabetes insipidus and Hashimoto's thyroiditis. Koshiyama H, et al. **Jpn J Med** 1989 May–Jun;28(3):406–9

Case report: idiopathic giant cell granuloma of the hypophysis: an unusual cause of panhypopituitarism. Siqueira E, et al. **Surg Neurol** 1989 Jul;32(1):68–71

[Apoplexy of the hypophysis in acromegaly] Marova EI, et al. **Probl Endokrinol (Mosk)** 1989 Jan–Feb;35(1):8–11 **(Rus)**

[Partial pituitary deficit and autoimmune lymphocytic thyroiditis in the postpartum period (letter)] Escudero Alvarez E, et al. **Rev Clin Esp** 1989 Mar;184(4):218–9 **(Spa)**

DIAGNOSIS

Atypical CT and MR appearance of a Rathke cleft cyst. Mize W, et al. **AJNR** 1989 Sep–Oct;10(5 Suppl):S83–4

Diagnostic value of serum testosterone measurement in infancy: two case reports. Ismail AA, et al. **Ann Clin Biochem** 1989 May;26 (Pt 3):259–61

Isolated hypophyseal tuberculoma: case report. Delsedime M, et al. **Clin Neuropathol** 1988 Nov–Dec;7(6):311–3

Human corticotropin–releasing hormone test in normal subjects and patients with hypothalamic, pituitary or adrenocortical disorders. Fukata J, et al. **Endocrinol Jpn** 1988 Jun;35(3):491–502

Marked elevation of serum dehydroepiandrosterone sulphate in Cushing's disease with macronodular adrenocortical hyperplasia. Jackson JA, et al. **J Endocrinol Invest** 1989 Apr;12(4):269–72

Mucinous cysts of the pituitary stalk. Report of two cases. Panagopoulos KP, et al. **J Neurosurg** 1989 Aug;71(2):276–8

[Ultra-sensitive TSH and the TRH test in the follow–up of thyroid and pituitary diseases] Mathe C, et al. **Ann Endocrinol (Paris)** 1989;50(1):73–6 (Eng. Abstr.) **(Fre)**

DRUG THERAPY

Syndrome of inappropriate secretion of TSH [letter] **Clin Endocrinol (Oxf)** 1988 Apr;28(4):445–7

ETIOLOGY

Hemorrhage within pituitary adenomas: how often associated with pituitary apoplexy syndrome? Ostrov SG, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):153–60

Pituitary abscess after autologous bone marrow transplantation. Leff RS, et al. **Am J Hematol** 1989 May; 31(1):62–4

Transnasal hypophysectomy—an unusual sporting injury. Rawlinson JN, et al. **Surg Neurol** 1988 Oct;30(4):311–5

[Lymphocytic adenohypophysitis (letter)] Borensztein P, et al. **Ann Med Interne (Paris)** 1989;140(3):219–21 (14 ref.) **(Fre)**

[A case of sarcoidosis associated with diabetes insipidus, anterior pituitary insufficiency and alveolar hypoventilation on a central basis] Tohda S, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):374–8 **(Jpn)**

METABOLISM

Idiopathic isolated ACTH deficiency and the response to CRF. Nowakowski KJ, et al. **J Endocrinol Invest** 1989 Apr; 12(4):253–5

[A study of the secretion capacity of TSH–beta in patients with pituitary disorders] Hara H, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Oct 20;64(10):1038–50 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Pituitary pathology in acquired immunodeficiency syndrome. Sano T, et al. **Arch Pathol Lab Med** 1989 Sep; 113(9):1066–70

Lymphocytic hypophysitis. Report of 3 new cases and review of the literature. Cosman F, et al. **Medicine (Baltimore)** 1989 Jul;68(4):240–56 (71 ref.)

Pathology of the pituitary gland in patients with the acquired immune deficiency syndrome (AIDS). Ferreiro J, et al. **Pathology** 1988 Jul;20(3):211–5

PHYSIOPATHOLOGY

Lymphocytic adenohypophysitis in a man [letter] Guay AT, et al. **Can J Neurol Sci** 1988 Nov;15(4):439–40

RADIOGRAPHY

[Computed tomographic diagnosis of diseases of the pituitary region] Flentje M, et al. **Radiologe** 1989 Jan;29(1):7–13 (53 ref.) (Eng. Abstr.) **(Ger)**

SURGERY

The pituitary–thyroid axis in patients with pituitary disorders. Eskildsen PC, et al. **Horm Metab Res** 1989 Jul;21(7):387–90

PITUITARY FUNCTION TESTS

Treatment of craniopharyngiomas—the stereotactic approach in a ten to twenty–three years' perspective. II. Psychosocial situation and pituitary function. Sääf M, et al. **Acta Neurochir (Wien)** 1989;99(3–4):97–103

Pituitary testing with and without bromocryptine in an aspermic man with elevated serum prolactin/FSH levels. Cumming DC, et al. **Arch Androl** 1989;22(3):239–43

Specific effect of CV 205–502, a potent nonergot dopamine agonist, during a combined anterior pituitary function test. Gaillard RC, et al. **J Clin Endocrinol Metab** 1989 Feb; 68(2):329–35

Pituitary function tests in patients with Sheehan's syndrome. Rajatanavin R, et al. **J Med Assoc Thai** 1988 Aug; 71(8):443–50

Endocrine function in patients with large pituitary tumors treated with operative decompression and radiation therapy. Nelson PB, et al. **Neurosurgery** 1989 Mar; 24(3):398–400

Pituitary hyposecretion and hypersecretion produced by a Rathke's cleft cyst presenting as a noncystic hypothalamic mass. Wenzel M, et al. **Neurosurgery** 1989 Mar;24(3):424–8

Pituitary function in brain–stem dead organ donors: a prospective survey. Keogh AM, et al. **Transplant Proc** 1988 Oct;20(5):729–30

Pituitary thyrotroph hypofunction in aged euthyroid subjects as assayed by the administration of iopanoic acid. Szabolcs I, et al. **ZFA** 1988 Sep–Oct;43(5):289–93

[Use of function tests in the diagnosis of hyperprolactinemia in women treated for sterility] Pšeničnikova TJ, et al. **Cesk Gynekol** 1989 May;54(4):268–73 (Eng. Abstr.) **(Cze)**

[Trans–sphenoid meningoencephalocele as a cause of anterior hypophyseal lobe insufficiency] Braunsdorf WE. **Nervenarzt** 1989 Jul;60(7):441–3 **(Ger)**

[Clinical symptoms and duration of anamnesis in patients with hypophyseal tumors] Dietel P, et al. **Z Gesamte Inn Med** 1989 May 15;44(10):293–6 (Eng. Abstr.) **(Ger)**

[Determination of prolactin secretion in idiopathic galactorrhea] Iannotta F, et al. **Minerva Endocrinol** 1989 Apr–Jun;14(2):119–23 (Eng. Abstr.) **(Ita)**

METHODS

The role of a highly sensitive amplified enzyme immunoassay for thyrotrophin in the evaluation of thyrotroph function in hypopituitary patients. Blunt S, et al. **Clin Endocrinol (Oxf)** 1988 Oct;29(4):387–93

PITUITARY GLAND

see related

HYPOPHYSECTOMY

MR imaging of the ectopic bright signal of posterior pituitary regeneration. el Gammal T, et al. **AJNR** 1989 Mar–Apr; 10(2):323–8

Pituitary–containing benign cystic teratoma arising from the uterosacral ligament. Heller DS, et al. **Arch Pathol Lab Med** 1989 Jul;113(7):802–4

Receptor number determines latency and amplitude of the thyrotropin–releasing hormone response in Xenopus oocytes injected with pituitary RNA. Straub RE, et al. **Mol Endocrinol** 1989 Jun;3(6):907–14

Precocious puberty due to an ectopic pituitary gland—case report. Niikawa S, et al. **Neurol Med Chir (Tokyo)** 1988 Jul;28(7):681–4

Ectopic prolactinoma within the sphenoid sinus. Heitzmann A, et al. **Neurosurgery** 1989 Feb;24(2):279–82

[Pituitary gland activity and the empty sella] Niskanen L, et al. **Duodecim** 1988;104(18):1461–5 **(Fin)**

ABNORMALITIES

Magnetic resonance imaging of pituitary and parasellar abnormalities. Chakeres DW, et al. **Radiol Clin North Am** 1989 Mar;27(2):265–81 (29 ref.)

ANALYSIS

Regulation of vasopressin and oxytocin synthesis in anterior pituitary and peripheral tissues. Dave JR, et al. **Adv Alcohol Subst Abuse** 1988;7(3–4):231–4

The effects of estrogens on tumor growth and on prolactin and growth hormone mRNA expression in rat pituitary tissues. Lloyd RV, et al. **Am J Pathol** 1988 Nov; 133(2):397–406

Comparative immunohistochemical study of the presence of glial fibrillary acidic protein in the pituitary of several vertebrates. Redecker P, et al. **Anat Anz** 1989;168(1):37–47

The distribution and biological effects of neuromedins B and U. Domin J, et al. **Ann N Y Acad Sci** 1988;547:391–403

Immunohistochemical localization of intermediate filament and S–100 proteins in several non–endocrine cells of the human pituitary gland. Marin F, et al. **Arch Histol Cytol** 1989 Jul;52(3):241–8

Pituitary follicular cells secrete a novel heparin–binding growth factor specific for vascular endothelial cells. Ferrara N, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):851–8

Pituitary fibroblast growth factors: immunocharacterization of an acid component and N–terminal sequence analysis of a truncated basic component. Ho PL, et al. **Biochem Int** 1988 Nov;17(5):973–80

Pituitary receptors for gonadotropin–releasing hormone in relation to changes in pituitary and plasma gonadotropins in ovariectomized hypothalamo/pituitary–disconnected ewes. II. A marked rise in receptor number during the acute feedback effects of estradiol. Clarke IJ, et al. **Biol Reprod** 1988 Sep;39(2):349–54

Subcellular distribution of rat pituitary homogenates by poly(ethylene glycol)–dextran countercurrent partitioning. De Marco L, et al. **Biomed Chromatogr** 1986 Feb;1(1):12–4

Bovine pituitary heparin–binding fibroblast growth factors: acidic and basic forms. Ho PL, et al. **Braz J Med Biol Res** 1988;21(2):203–12

The pituitary–specific transcription factor GHF–1 is a homeobox–containing protein. Bodner M, et al. **Cell** 1988 Nov 4;55(3):505–18

Blood pressure, plasma and pituitary prolactin levels and their responses to bromocriptine in the segregating F2 generation of the SHR/WKY hybrid. Tan BK, et al. **Clin Exp Hypertens [A]** 1988;10(6):995–1007

In situ hybridization detection of marked differences in pre–proopiomelanocortin messenger ribonucleic acid content of individual corticotropes and melanotropes. Hatfield JM, et al. **Endocrinology** 1989 Mar;124(3):1359–64

Two forms of glycosylated human prolactin have different pigeon crop sac–stimulating activities. Lewis UJ, et al. **Endocrinology** 1989 Mar;124(3):1558–63

Sigma–receptors in endocrine organs: identification, characterization, and autoradiographic localization in rat pituitary, adrenal, testis, and ovary. Wolfe SA Jr, et al. **Endocrinology** 1989 Mar;124(3):1160–72

Plasma and pituitary gonadotropins and prolactin after hysterectomy and treatment with uterine extracts in female rats. A kinetic study. Biro J, et al. **Exp Clin Endocrinol** 1988 Dec;92(2):137–44

Immunohistochemical detection of a substance resembling growth hormone–releasing factor in the brain of the rainbow trout (Salmo gairdneri). Luo D, et al. **Experientia** 1989 Jun 15;45(6):577–80

Presence of tyrosine–O–sulfate in sheep pituitary prolactin. Kohli R, et al. **FEBS Lett** 1988 Dec 19;242(1):139–43

Particular processing of pro–opiomelanocortin in Xenopus laevis intermediate pituitary. Sequencing of alpha– and beta–melanocyte–stimulating hormones. Rouillé Y, et al. **FEBS Lett** 1989 Mar 13;245(1–2):215–8

Immunological evidence for multiple forms of alpha–melanotropin (alpha–MSH) in the pars intermedia of the Australian lungfish, Neoceratodus forsteri. Dores RM, et al. **Gen Comp Endocrinol** 1988 Sep;71(3):468–74

Peptidergic innervation of the adrenocorticotropic hormone (ACTH)– and growth hormone (GH)–producing cells in the pars distalis of the sea bass (Dicentrarchus labrax). Moons L, et al. **Gen Comp Endocrinol** 1988 Nov; 72(2):171–80

Isolation and characterization of two distinct gonadotropins from chum salmon pituitary glands. Suzuki K, et al. **Gen Comp Endocrinol** 1988 Aug;71(2):292–301

Isolation and characterization of subunits from two distinct salmon gonadotropins. Suzuki K, et al. **Gen Comp Endocrinol** 1988 Aug;71(2):302–6

Homologous radioimmunoassay for plasma and pituitary prolactin in the toad, Bufo japonicus. Yamamoto K, et al. **Gen Comp Endocrinol** 1989 Jun;74(3):373–6

Isolation and primary structures of elephant adrenocorticotropin and beta–lipotropin. Li CH, et al. **Int J Pept Protein Res** 1988 Dec;32(6):573–8

Isolation and characterization of growth hormone from a marine fish, bonito (Katsuwonus pelamis). Noso T, et al. **Int J Pept Protein Res** 1988 Dec;32(6):579–89

Purification and characterization of pituitary bovine somatotropin. Wood DC, et al. **J Biol Chem** 1989 Sep 5; 264(25):14741–7

Identification of a 15,000–molecular–weight form of immunoreactive transforming growth factor alpha in extracts of porcine pituitary. Riss TL, et al. **J Cell Physiol** 1989 Feb;138(2):393–404

Altered balance between thyrotropin–releasing hormone and dopamine in prolactinomas and other pituitary tumors compared to normal pituitaries. Le Dafniet M, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):267–71

One–step purification of chicken growth hormone from a

crude pituitary extract by use of a monoclonal immunoadsorbent. Berghman LR, et al. **J Endocrinol** 1988 Sep;118(3):381–7

Quantitative in–situ hybridization histochemistry in the rat pituitary gland: effect of bromocriptine on prolactin and pro–opiomelanocortin gene expression. Levy A, et al. **J Endocrinol** 1988 Aug;118(2):205–10

Multiple hormone storage by cells of the human pituitary. Newman GR, et al. **J Histochem Cytochem** 1989 Aug; 37(8):1183–92

Electron microscopic autoradiographic localization of prolactin mRNA in rat pituitary. Tong Y, et al. **J Histochem Cytochem** 1989 May;37(5):567–71

Melatonin–binding sites in the rat brain and pituitary mapped by in–vitro autoradiography. Williams LM. **J Mol Endocrinol** 1989 Jul;3(1):71–5

Gonadal steroids and anterior lobe dynorphin in the male rat. Fullerton MJ, et al. **J Steroid Biochem** 1989 Feb; 32(2):303–8

Chromogranin A and B messenger ribonucleic acids in pituitary and other normal and neoplastic human endocrine tissues. Lloyd RV, et al. **Lab Invest** 1989 Apr;60(4):548–56

Dopamine receptors in immunohistochemically characterized null cell adenomas and normal human pituitaries. Lloyd RV, et al. **Mod Pathol** 1988 Jan;1(1):51–6

Argyrophil organizer region proteins (AgNORs) in adenohypophysial cells and adenomas of the human pituitary. Stefaneanu L, et al. **Mod Pathol** 1989 May; 2(3):192–9

Discrepancy between prolactin (PRL) messenger ribonucleic acid and PRL content in rat fetal pituitary cells: possible role of dopamine. Hooghe–Peters EL, et al. **Mol Endocrinol** 1988 Dec;2(12):1163–8

Solubilization and characterization of pituitary thyrotropin–releasing hormone receptors. Phillips WJ, et al. **Mol Pharmacol** 1989 Apr;35(4):533–40

Structural characterization and immunohistochemical localization of receptors for insulin–like growth factor II in the rat pituitary gland. Ocrant I, et al. **Neuroendocrinology** 1989 Mar;49(3):248–54

Differences in glycoconjugates of adrenocorticotropic hormone–secretory granules between nonadenomatous pituitary cells and adenoma cells as detected by double labeling. Hori T, et al. **Neurosurgery** 1988 Jul;23(1):52–7

Presence of acetylated and shortened endorphins in human fetal pituitary gland. Facchinetti F, et al. **Pediatr Res** 1989 Jun;25(6):652–5

The isolation of multiple forms of beta–endorphin from the intermediate pituitary of the Australian lungfish, Neoceratodus forsteri. Dores RM, et al. **Peptides** 1988 Jul–Aug;9(4):801–8

Urotensin I– and CRF–like peptides in Catostomus commersoni brain and pituitary—HPLC and RIA characterization. McMaster D, et al. **Peptides** 1988 Sep–Oct;9(5):1043–8

Distribution of immunoreactive mesotocin and vasotocin in the brain and pituitary of chickens. Robinzon B, et al. **Peptides** 1988 Jul–Aug;9(4):829–33

Angiotensin II receptors in paraventricular nucleus, subfornical organ, and pituitary gland of hypophysectomized, adrenalectomized, and vasopressin–deficient rats. Castrén E, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):725–9

Isolation and characterization of bovine pancreastatin. Nakano I, et al. **Regul Pept** 1989 May;25(2):207–13

Influence of thyroidectomy on serum and pituitary FSH in control and orchidectomized rats. Ruiz M, et al. **Res Exp Med (Berl)** 1989;189(2):85–90

FMRFamide–like immunoreactivity in the brain and pituitary of the teleost. Eigenmannia lineata (Gymnotiformes). Bonn U, et al. **Z Mikrosk Anat Forsch** 1989;103(2):221–36

[Immunocytochemical study pituitary using anti–serum to N terminal polypeptide analog of human prolactin] Liang S. **Chung Hua I Hsueh Tsa Chih** 1988 Aug;68(8):425–7, 30 (Eng. Abstr.) **(Chi)**

[Immunochemical properties of two natural forms of pituitary porcine prolactin] Butnev VIu, et al. **Probl Endokrinol (Mosk)** 1989 Mar–Apr;35(2):74–7 (Eng. Abstr.) **(Rus)**

[Development of methodologic conditions for studying cortisol receptors in hypophyseal tissue using carbon dextran] Loustaunau E, et al. **Arch Invest Med (Mex)** 1988 Jan–Mar;19(1):49–53 (Eng. Abstr.) **(Spa)**

ANATOMY & HISTOLOGY

Morphometric investigations on endocrine glands. VI. Changes in rat pituitary glands after ovarectomy and a single injection of estradiol benzoate once per cycle period. Löw O, et al. **Exp Pathol** 1988;33(3):193–5

Effect of aromatase inhibitors on the functional morphology of the pituitary gland of dogs and monkeys. Habenicht UF, et al. **Pathol Res Pract** 1988 Sep;183(5):651–3

Alpha–melanocyte–stimulating hormone (alpha–MSH) in the brain of the cartilagenous fish. Immunohistochemical localization and biochemical characterization. Vallarino M, et al. **Peptides** 1988 Jul–Aug;9(4):899–907

[The sphenoid sinus, clinical anatomy of approaches to the pituitary region] Lang J, et al. **Gegenbaurs Morphol Jahrb** 1988;134(3):291–307 (Eng. Abstr.) **(Ger)**

BLOOD SUPPLY

Light microscopic study of the hypophyseal angioarchitecture in the rabbit. Foster WG, et al. **Am J Anat** 1989 Mar;184(3):205–11

Concentrations of dopamine and noradrenaline in hypophysial portal blood in the sheep and the rat. Thomas GB, et al. **J Endocrinol** 1989 Apr;121(1):141–7

Studies of the secretion of corticotropin–releasing factor and arginine vasopressin into the hypophysial–portal circulation of the conscious sheep. I. Effect of an audiovisual stimulus and insulin–induced hypoglycemia. Engler D, et al. **Neuroendocrinology** 1989 Apr;49(4):367–81

[Microsurgical anatomy of extraorganic arteries of the hypothalamo–hypophyseal complex and the rational technic of its removal for transplantation] Kirpatovskiĭ ID, et al. **Zh Vopr Neirokhir** 1988 Jul–Aug;(4):44–52 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Comparative histochemistry of the mucoproteic cells of the hypophysis from Rhamdia hilarii, Hypostomus punctatus, Prochilodus scrofa and Cyprinus carpio (Teleostei). Immunohistochemical identification of the gonadotropic cells. Val–Sella MV, et al. **Biol Struct Morphog** 1988; 1(4):137–41

Cultured fetal rat pituitaries kept in synthetic medium are able to initiate synthesis of trophic hormones. Nemeskéri A, et al. **Cell Tissue Res** 1989 Mar;255(3):645–50

Studies on the development of growth hormone and prolactin cells in the rat pituitary gland by in situ hybridization. Nogami H, et al. **Cell Tissue Res** 1989 Jan;255(1):23–8

Beta–lipotropin–like immunoreactivity in intraglandular colloid from pituitary intermediate lobe cells. Boyd WH, et al. **Endocrinol Exp** 1988 Dec;22(4):221–7

Effects of sex steroids on the response of cultured rat pituitary cells to growth hormone–releasing hormone and somatostatin. Hertz P, et al. **Endocrinology** 1989 Aug; 125(2):581–5

Acetylcholine stimulates alpha–melanocyte–stimulating hormone release from frog pituitary melanotrophs through activation of muscarinic and nicotinic receptors. Lamacz M, et al. **Endocrinology** 1989 Aug;125(2):707–14

Prolactin cell activity and sodium fluxes in tilapia (Oreochromis mossambicus) after long–term acclimation to acid water. Flik G, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):39–45

Thyrotropin–releasing hormone stimulates the activity of the rat thyrotropin beta–subunit gene promoter transfected into pituitary cells. Carr FE, et al. **Mol Endocrinol** 1989 Apr; 3(4):717–24

DNAse I footprint analysis of nuclear proteins from pituitary and nonpituitary cells that specifically bind to the rat growth hormone promoter and 5'–regulatory region. Guérin SL, et al. **Mol Endocrinol** 1988 Nov;2(11):1101–7

Adrenocorticotropic hormone released by pituitary cells from ovine fetuses and lambs. Polymorphism and biological activity. Brieu V, et al. **Neuroendocrinology** 1989 Mar; 49(3):300–8

Immunohistochemical distribution of delta sleep inducing peptide in the rabbit brain and hypophysis. Charnay Y, et al. **Neuroendocrinology** 1989 Feb;49(2):169–75

Melanin–concentrating hormone (MCH) immunoreactivity in the brain and pituitary of the dogfish Scyliorhinus canicula. Colocalization with alpha–melanocyte–stimulating hormone (alpha–MSH) in hypothalamic neurons. Vallarino M, et al. **Peptides** 1989 Mar–Apr;10(2):375–82

Direct evidence for control by cytosolic Ca2+ of K+ currents in pituitary cells. Mollard P, et al. **Pflugers Arch** 1989;414 Suppl 1:S156–7

Protein secretion by constitutive and regulated pathways. Moore HP, et al. **Soc Gen Physiol Ser** 1989;44:189–201

Heterogeneity of motilin immunoreactivity in mammalian tissue. Nilaver G, et al. **Synapse** 1988;2(3):266–75

[Phorbol myristate acetate promotes entry of calcium in hypophysial cells GH3 B6 via potential dependent calcium channels] Taupignon AI, et al. **C R Soc Biol (Paris)** 1988; 182(1):74–8 (Eng. Abstr.) **(Fre)**

DRUG EFFECTS

In vitro effects of ketoconazole on corticotrope cell morphology and ACTH secretion of two pituitary adenomas removed from patients with Nelson's syndrome. Jimenez Reina L, et al. **Acta Endocrinol (Copenh)** 1989 Aug; 121(2):185–90

The antimycotic drug terbinafine in contrast to ketoconazole lacks acute effects on the pituitary–testicular function of healthy men: a placebo–controlled double–blind trial. Nashan D, et al. **Acta Endocrinol (Copenh)** 1989 May; 120(5):677–81

Pituitary–ovarian activity when switching from various monophasic pills to a triphasic pill. Eyong E, et al. **Adv Contracept** 1989 Mar;5(1):1–11

Paraventricular stimulation with glutamate elicits bradycardia and pituitary responses. Darlington DN, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):R112–9

Reversible effects of long–term treatment with D–Trp6–LH–RH–microcapsules on pituitary–gonadal axis, spermatogenesis and prostate morphology in adolescent and adult dogs. Cavitte JC, et al. **Andrologia** 1988 May–Jun; 20(3):249–63

Antidopaminergic effect of oral domperidone on the pituitary gland in normal and hyperprolactinemic women. Forsbach G, et al. **Arch Invest Med (Mex)** 1988 Apr–Jun;19(2):183–91

Effect of interleukin 1 beta on transducing mechanisms in 235–1 clonal pituitary cells. Part I: Modulation of adenylate cyclase activity. Schettini G, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1089–96

Effect of interleukin 1 beta on transducing mechanisms in 235–1 clonal pituitary cells. Part II: Modulation of calcium fluxes. Schettini G, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1097–104

Direct effects of estradiol–17 beta on the number of gonadotropin–releasing hormone receptors in the ovine pituitary. Gregg DW, et al. **Biol Reprod** 1989 Feb; 40(2):288–93

The interaction of benzodiazepines with thyrotropin–releasing hormone receptors on clonal pituitary cells. Joels LA, et al. **Br J Pharmacol** 1989 Feb; 96(2):450–6

Effects of estradiol on prolactin and growth hormone messenger RNAs in cultured normal and neoplastic (MtT/W15 and GH3) rat pituitary cells. Song JY, et al. **Cancer Res** 1989 Mar 1;49(5):1247–53

Stimulation of the pituitary adrenocortical system in man by cerulein, a cholecystokinin–8–like peptide. Späth–Schwalbe E, et al. **Clin Physiol Biochem** 1988;6(6):316–20

Hormone secretory patterns, pituitary characteristics and selected blood metabolites in feedlot steers implanted with growth stimulants. Loy DD, et al. **Domest Anim Endocrinol** 1988 Jul;5(3):199–208

Cyclic AMP–independent, dual regulation of voltage–dependent Ca2+ currents by LHRH and somatostatin in a pituitary cell line. Rosenthal W, et al. **EMBO J** 1988 Jun;7(6):1627–33

The effect of in vitro ethanol exposure on basal growth hormone secretion. Emanuele MA, et al. **Endocr Res** 1988–89;14(4):283–91

Pituitary and ovarian suppression rate after high dosage of gonadotropin–releasing hormone agonist. Bider D, et al. **Fertil Steril** 1989 Apr;51(4):578–81

Effects of 180 micrograms and 250 micrograms norgestimate on pituitary–ovarian function and cervical mucus. Eyong E, et al. **Fertil Steril** 1988 Nov;50(5):756–60

Routine pituitary suppression with leuprolide before ovarian stimulation for oocyte retrieval. Meldrum DR, et al. **Fertil Steril** 1989 Mar;51(3):455–9

The dopaminergic regulation of gonadotropin–releasing hormone receptor binding in the pituitary of the African catfish, Clarias gariepinus. De Leeuw R, et al. **Gen Comp Endocrinol** 1988 Dec;72(3):408–15

Several hypothalamic peptides stimulate in vitro thyrotropin secretion by pituitaries of anuran amphibians. Denver RJ. **Gen Comp Endocrinol** 1988 Dec;72(3):383–93

Effect of Des–Gly10–(im–Bzl–D–His6)LHRH–ethylamide on hypophysial gonadotrophs and ovary of the juvenile frog Rana cyanophlyctis (Schn.). Saidapur SK, et al. **Gen Comp Endocrinol** 1989 Feb;73(2):233–41

Progesterone and progestins modulate beta–endorphin concentrations in the hypothalamus and in the pituitary of castrated female rats. Genazzani AR, et al. **Gynecol Endocrinol** 1987 Mar;1(1):61–9

The effect of different LH–RH agonists on the levels of immunoreactive gonadotropins. Insler V, et al. **Gynecol Endocrinol** 1988 Dec;2(4):305–12

Suppression with gonadotropin–releasing hormone analogues prior to stimulation with gonadotropins: comparison of three protocols. Lipitz S, et al. **Gynecol Obstet Invest** 1989; 28(1):31–4

Effects of zeranol on in vitro growth hormone release by lamb and rat pituitary cells. Phelps CJ, et al. **J Anim Sci** 1988 Oct;66(10):2614–25

The electrophysiological effects of thyrotropin–releasing hormone are similar in human TSH– and prolactin–secreting pituitary cells. Dufy B, et al. **J Clin Endocrinol Metab** 1988 Dec;67(6):1178–85

Mode of suppression of pituitary and gonadal function after acute or prolonged administration of a luteinizing hormone–releasing hormone analogue in normal men. Pavlou SN, et al. **J Clin Endocrinol Metab** 1989 Feb; 68(2):446–54

Decreased basal and stimulated thyrotropin secretion in healthy elderly men. van Coevorden A, et al. **J Clin Endocrinol Metab** 1989 Jul;69(1):177–85

Long–term negative feedback effects of oestrogen and progesterone on the pituitary gland of the long–term ovariectomized ewe. Clarke IJ, et al. **J Endocrinol** 1989 Feb;120(2):207–14

Dexamethasone induces an increased biosynthesis of chromogranin A in rat pituitary gland. Fischer–Colbrie R, et al. **J Endocrinol** 1989 Jun;121(3):487–94

Ascorbic acid potentiates the inhibitory effect of dopamine on prolactin release in primary cultured rat pituitary cells. Shin SH, et al. **J Endocrinol** 1988 Aug;118(2):287–94

Pituitary and adrenal response to ovine corticotropin–releasing hormone in women with polycystic ovarian syndrome. Mongioi A, et al. **J Endocrinol Invest** 1988 Oct;11(9):637–40

Cyproheptadine may act at the pituitary in Cushing's disease: evidence from CRF stimulation. Tucci JR, et al. **J Endocrinol Invest** 1989 Mar;12(3):197–200

The duration of pituitary suppression by means of intranasal gonadotropin hormone–releasing hormone analogue

administration does not influence the ovarian response to gonadotropin stimulation and success rate in a gamete intrafallopian transfer (GIFT) program. Remorgida V, et al. **J In Vitro Fert Embryo Transf** 1989 Apr;6(2):76–80

Effects of McN–6186 on voltage–dependent Ca+ + channels in heart and pituitary cells. Rampe D, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):164–70

Melatonin effects on prolactin secretion in pituitary–grafted male rats. Villanua MA, et al. **J Pineal Res** 1989;6(1):33–41

Modulation of gonadotropin–releasing hormone receptor concentration in cultured female rat pituitary cells by estradiol treatment. Emons G, et al. **J Steroid Biochem** 1988 Nov;31(5):751–6

Effect of aminophylline injection on the pituitary–thyroid axis in asthmatics. Hikita T, et al. **Jpn J Med** 1989 May–Jun; 28(3):303–8

Magnetic resonance imaging of estrogen–induced pituitary hypertrophy in rats. van Nesselrooij JH, et al. **Magn Reson Med** 1989 Aug;11(2):161–71

Effect of naloxone on TRH–induced PRL and TSH response in normal man. Rampinini A, et al. **Minerva Endocrinol** 1989 Apr–Jun;14(2):125–8

Effect of triiodothyronine treatment on thyrotrophin beta– and alpha–messenger RNAs in the pituitary of the euthyroid rat. Franklyn JA, et al. **Mol Cell Endocrinol** 1988 Nov;60(1):1–5

Ionophore bromo–A23187 reveals cellular calcium stores in single pituitary somatotropes. Holl RW, et al. **Mol Cell Endocrinol** 1989 Jun;64(1):105–10

Calcium channel agonists and antagonists: effects of chronic treatment on pituitary prolactin synthesis and intracellular calcium. Hinkle PM, et al. **Mol Endocrinol** 1988 Nov; 2(11):1132–8

Cobalt–protoporphyrin suppresses testosterone secretion by multiple interactions within the brain–pituitary–testicular axis. Galbraith RA, et al. **Neuroendocrinology** 1989 Jun; 49(6):641–8

Hypophyseal actions of pulsatile gonadotropin–releasing hormone in the ewe: development and application of a new experimental model. Kaynard AH, et al. **Neuroendocrinology** 1988 Sep;48(3):287–95

Dose response effects of pulsatile GnRH administration on restoration of pituitary GnRH receptors and pulsatile LH secretion during lactation. Lee LR, et al. **Neuroendocrinology** 1989 Jun;49(6):664–8

Effect of the antiandrogen flutamide on pituitary LH content and release. Sardañons ML, et al. **Neuroendocrinology** 1989 Aug;50(2):211–6

Naltrexone effects on pituitary and gonadal hormones in male and female rhesus monkeys. Mello NK, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):683–91

Inhibition of the pituitary–gonadal axis by a single intramuscular administration of D–Trp–6–LH–RH (decapeptyl) in a sustained–release formulation in patients with prostatic carcinoma. Gonzalez–Barcena D, et al. **Prostate** 1989;14(4):291–300

Pituitary resistance to L–thyroxine after thyroidectomy. A case report. Mulaisho C, et al. **S Afr Med J** 1989 Mar 4; 75(5):236–7

Role of inositol lipid second messengers in regulation of secretion: studies of thyrotropin–releasing hormone action in pituitary cells. Gershengorn MC. **Soc Gen Physiol Ser** 1989;44:1–15

The effect of sex hormone binding globulin (SHBG) on the pituitary testicular axis in hyperthyroid men. Garden GA, et al. **Steroids** 1988 Oct;52(4):385–6

Some endocrine and morphological aspects of the acute toxicity of 2,3,7,8–tetrachlorodibenzo–p–dioxin (TCDD). Gorski JR, et al. **Toxicol Pathol** 1988;16(3):313–20

Analysis of immunoreactive PRL–cells following treatment with Met–enkephalin. Carretero J, et al. **Z Mikrosk Anat Forsch** 1988;102(5):711–20

[Effect of the combined use of alcohol and dopaminergic agents during pregnancy on the function of the hypophyseo–thyroid system in the progeny of rats] Boiadzhieva N. **Eksp Med Morfol** 1988;27(4):31–4 (Eng. Abstr.) **(Bul)**

[Effect of the combined prenatal use of benzodiazepine preparations and alcohol on the functions of the hypophyseal–thyroid system in newborn rat pups] Boiadzhieva N, et al. **Eksp Med Morfol** 1988;27(2):28–31 (Eng. Abstr.) **(Bul)**

[Effects of o,p'–DDD on pituitary–gonadal function in patients with Cushing's disease] Ojima M, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Jun 20;64(6):451–62 (Eng. Abstr.) **(Jpn)**

[Effect of alcohol on the content of sex steroid receptors in the hypothalamus and hypophysis of male rats] Babichev VN, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):204–7 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Survival and weight increase in the fetal rat after selective hypophysectomy in utero. Enemar A, et al. **Acta Anat (Basel)** 1989;134(2):89–93

The development and morphogenesis of the human pituitary gland. Ikeda H, et al. **Anat Embryol (Berl)** 1988; 178(4):327–36

Pituitary changes of desacetyl–alpha–melanocyte–stimulating hormone throughout development. Facchinetti F, et al. **Biol Neonate** 1988;54(2):86–92

Fetal hypophysectomy causes a decrease in preadipocyte growth and insulin like growth factor–1 in pigs. Jewell DE, et al. **Domest Anim Endocrinol** 1989 Jul;6(3):243–52

Maturation and activation of hypothalamic–pituitary adrenal function in fetal sheep. Challis JR, et al. **Endocr Rev** 1989 May;10(2):182–204 (262 ref.)

Hypophysectomy of the fetal lamb leads to a fall in the plasma concentration of insulin–like growth factor I (IGF–I), but not IGF–II. Mesiano S, et al. **Endocrinology** 1989 Mar;124(3):1485–91

The uptake of [3H]testosterone and its metabolites by the brain and pituitary gland of the fetal macaque. Michael RP, et al. **Endocrinology** 1989 Mar;124(3):1319–26

Progestin receptors in brain and pituitary of 20–day–old fetal mice: an autoradiographic study using [125I]progestin. Shughrue PJ, et al. **Endocrinology** 1989 Jan;124(1):333–8

Secretion of multiple forms of human luteinizing hormone by cultured fetal human pituitary cells. Snyder PJ, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1033–8

Analysis of proopiomelanocortin gene expression during prenatal development of the rat pituitary gland. Lugo DI, et al. **Mol Endocrinol** 1989 Aug;3(8):1313–24

A zonal pattern of neuroglial cells during the development of the intermediate lobe of the rat pituitary. Lakke EA, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):146–51

Peptide regulation of pituitary and target tissue function and growth in the primate fetus. Jaffe RB, et al. **Recent Prog Horm Res** 1988;44:431–549 (360 ref.)

ENZYMOLOGY

Assay of sulfotransferase in subcellular fractions of hypothyroid mouse pituitary and liver tissue. Magner JA. **Biochem Med Metab Biol** 1989 Feb;41(1):81–3

Immunocytochemical study of peptidylarginine deiminase: localization of its immunoreactivity in prolactin cells of female rat pituitaries. Akiyama K, et al. **Endocrinology** 1989 Sep;125(3):1121–7

Growth hormone–releasing factor–sensitive adenylate cyclase system of purified somatotrophs: effects of guanine nucleotides, somatostatin, calcium, and magnesium. Narayanan N, et al. **Endocrinology** 1989 Jan;124(1):484–95

Peptidylarginine deiminase in rat pituitary: sex difference, estrous cycle–related changes, and estrogen dependence. Senshu T, et al. **Endocrinology** 1989 Jun;124(6):2666–70

Aromatase activity in brain and pituitary of immature and mature Atlantic salmon (Salmo salar L.) parr. Andersson E, et al. **Gen Comp Endocrinol** 1988 Dec;72(3):394–401

Activation and membrane binding of carboxypeptidase E. Fricker LD. **J Cell Biochem** 1988 Dec;38(4):279–89

Evidence of a functional aromatase system in the pituitary gland of the chick embryo in vitro. Guennoun R, et al. **J Endocrinol** 1988 Nov;119(2):229–32

Endocrine regulation of cytochrome P–450 in the rat brain and pituitary gland. Warner M, et al. **J Endocrinol** 1989 Jul;122(1):341–9

Regulated secretion of pro–opiomelanocortin converting enzyme and an aminopeptidase B–like enzyme from dispersed bovine intermediate lobe pituitary cells. Castro MG, et al. **J Neurochem** 1989 May;52(5):1619–28

Regulation of thyrotropin releasing hormone degrading enzymes in rat brain and pituitary by L–3,5,3'–triiodothyronine. Suen CS, et al. **J Neurochem** 1989 Mar;52(3):884–8

Use of protein kinase C–depleted cells for investigation of the role of protein kinase C in stimulus–response coupling in the pituitary. McArdle CA, et al. **Methods Enzymol** 1989; 168:287–301

Removal of Arg1 and Phe22 from CLIP (ACTH18–39) by rodent pituitary and blood peptidases. McDermott JR, et al. **Peptides** 1988 Jul–Aug;9(4):757–61

Biosynthesis of peptide neurotransmitters: studies on the formation of peptide amides. Bradbury AF, et al. **Physiol Bohemoslov** 1988;37(3):267–74

A pituitary N–acetylgalactosamine transferase that specifically recognizes glycoprotein hormones. Smith PL, et al. **Science** 1988 Nov 11;242(4880):930–3

Characterization of peptidylglycine alpha–amidating activities in rat pituitary, brain and small intestine using glycine–extended C–terminal analogues of vasoactive intestinal polypeptide as substrate. Noguchi M, et al. **Tohoku J Exp Med** 1988 Oct;156(2):191–207

GROWTH & DEVELOPMENT

Pubertal changes in the secretion of gonadotropic hormones, testicular gonadotropic receptors and testicular function in the ram. Yarney TA, et al. **Domest Anim Endocrinol** 1989 Jul;6(3):219–29

The effect of age on prostaglandin E2 stimulation of growth hormone release from cultured rat pituitary cells. Cuttler L, et al. **Endocrinology** 1989 Feb;124(2):661–6

Ontogeny of expression of the corticotropin–releasing factor gene in the hypothalamic paraventricular nucleus and of the proopiomelanocortin gene in rat pituitary. Grino M, et al. **Endocrinology** 1989 Jan;124(1):60–8

Postnatal development of glial fibrillary acidic protein (GFAP) immunoreactivity in pituicytes and tanycytes of the Mongolian gerbil (Meriones unguiculatus). Redecker P. **Histochemistry** 1989;91(6):507–15

Fibroblast growth factor and the control of pituitary and gonad development and function. Gospodarowicz D, et al. **J Steroid Biochem** 1989 Jan;32(1B):183–91 (103 ref.)

IMMUNOLOGY

Parkinson's disease and autoimmunity. Møller A, et al. **Acta Neurol Scand** 1989 Feb;79(2):173–5

Localization and characterization of prolactin–like immunoreactivity in the pituitary of the frog Rana ridibunda. Andersen AC, et al. **Gen Comp Endocrinol** 1989 Feb;73(2):299–307

Immunoreactivity in pituitary gonadotropes and hypothalamic vasopressinergic neurons for the monoclonal antibody INO. Madsen JR, et al. **J Neuroimmunol** 1988 Nov;20(1):83–91

Regulation of pro–opiomelanocortin biosynthesis and processing by transplantation immunity. Zakarian S, et al. **Nature** 1989 Jun 15;339(6225):553–6

Immunogenic functions of folliculo–stellate cells of the normal human pituitary? Günzl HJ, et al. **Pathol Res Pract** 1988 Sep;183(5):634–5

INJURIES

Growth hormone–releasing factor, thyrotropin–releasing hormone and gonadotropin–releasing hormone in pituitary stalk transection. Kikuchi K, et al. **Acta Paediatr Jpn Overseas Ed** 1988;30 Suppl:72–8

Transnasal hypophysectomy—an unusual sporting injury. Rawlinson JN, et al. **Surg Neurol** 1988 Oct;30(4):311–5

INNERVATION

Innervation of the pituitary gland by supraependymal neurons. Michael DB, et al. **Brain Res** 1989 Jan 30; 478(2):227–32

Co–localization of tyrosine hydroxylase (TH)– and serotonin (5–HT)–immunoreactive innervation in the rat pituitary gland. Saland LC, et al. **Neurosci Lett** 1988 Nov 22; 94(1–2):39–45

METABOLISM

Immunocytochemical localization of vimentin in the posterior lobe of the cat, rabbit and rat pituitary glands. Marin F, et al. **Acta Anat (Basel)** 1989;134(3):184–90

Daily illuminance levels affect pituitary prolactin in male rats. Laakso ML, et al. **Acta Endocrinol (Copenh)** 1989 Apr; 120(4):429–34

Pituitary–thyroid interaction: effects of thyroid hormone, non thyroidal illness and various agents on TSH secretion. Vagenakis AG. **Acta Med Austriaca** 1988;15 Suppl 1:52–6 (28 ref.)

Localization and pharmacology of some dopamine receptor complexes in the striatum and the pituitary gland: synaptic and son–synaptic communication. Stoof JC. **Acta Morphol Neerl Scand** 1988–89;26(2–3):115–30 (53 ref.)

Systemic amyloid deposition in old age and dementia of Alzheimer type: the relationship of brain amyloid to other amyloid. Yamada M, et al. **Acta Neuropathol (Berl)** 1988; 77(2):136–41

Double–labeling immunogold electron–microscopic study of hormonal colocalization in nontumorous and adenomatous rat pituitaries. Losinski NE, et al. **Am J Anat** 1989 Jun–Jul; 185(2–3):236–43

POMC biosynthesis in the intermediate lobe of the spontaneously hypertensive rat. Felder RA, et al. **Am J Hypertens** 1989 Aug;2(8):618–24

The ontogeny of growth hormone in the human fetal pituitary. Suganuma N, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):729–33

Vasoactive intestinal peptide in the human pituitary gland and adenomas. An immunocytochemical study. Hsu DW, et al. **Am J Pathol** 1989 Aug;135(2):329–38

Analysis of S–100 protein positive folliculo–stellate cells in rat pituitary tissues. Lloyd RV, et al. **Am J Pathol** 1988 Nov;133(2):338–46

Pituitary TRH receptors. Hinkle PM. **Ann N Y Acad Sci** 1989;553:176–87 (57 ref.)

The binding of 3H–(3–MeHis2) thyrotropin releasing hormone to brain and pituitary membranes of hyperthyroid rats. Bhargava HN, et al. **Arch Int Pharmacodyn Ther** 1989 Jan–Feb;297:247–59

Indirect evidence that protein kinase C plays a critical role in signal transduction of both vasopressin and corticotropin–releasing factor on pituitary cells in culture. Koch B, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):1014–20

Rapid transient elevations of cytosolic calcium triggered by thyrotropin releasing hormone in individual cells of the pituitary line GH3B6. Winiger BP, et al. **Biochem J** 1988 Oct 1;255(1):161–7

Receptor activation, G–protein and second–messenger cross–talk in human pituitary clonal cells. Lo WW. **Biochem Soc Trans** 1988 Aug;16(4):437–40

The gonadotrope polypeptide (GP 87) released from pituitary cells under luteinizing hormone–releasing hormone stimulation is a secretogranin II form. Chanat E, et al. **Biochimie** 1988 Oct;70(10):1361–8

Functional relationship between receptor binding and biological activity for analogs of mammalian and salmon gonadotropin–releasing hormones in the pituitary of goldfish (Carassius auratus). Habibi HR, et al. **Biol Reprod** 1989 Jun;40(6):1152–61

Metabolic profiling of opioid peptides in canine pituitary and selected brain regions using HPLC with a radioreceptor assay detector. Takeshita H, et al. **Biomed Chromatogr** 1986

Jun;1(3):126–39
Interleukin–1 beta inhibits acetylcholine synthesis in the pituitary corticotropic cell line AtT20. Carmeliet P, et al. **Brain Res** 1989 Jul 3;491(1):199–203
Acetylcholine in the rat pituitary: a possible humoral factor. Egozi Y, et al. **Brain Res** 1988 Dec 20;475(2):376–9
Rat brain regional distribution and spinal cord neuronal pathway of FLFQPQRF–NH2, a mammalian FMRF–NH2–like peptide. Majane EA, et al. **Brain Res** 1989 Aug 7;494(1):1–12
Hyperprolactinemia–induced modifications in vasoactive intestinal peptide binding site densities in the rat central nervous system and pituitary gland: evidence for an interaction between estradiol–17 beta and prolactin effects. Montagne MN, et al. **Brain Res** 1989 Apr 24;485(2):258–66
Evaluation by push–pull cannulation of ACTH in the cerebrospinal fluid of intact and hypophysectomized rats. Barbanel G, et al. **Brain Res Bull** 1988 Aug;21(2):163–7
The effects of immobilization stress on beta–endorphin levels are modulated by testosterone. Forman LJ, et al. **Brain Res Bull** 1988 Jul;21(1):7–12
Prenatal ontogenesis of pro–opiomelanocortin in the mouse central nervous system and pituitary gland: an in situ hybridization and immunocytochemical study. Elkabes S, et al. **Brain Res Dev Brain Res** 1989 Mar 1;46(1):85–95
Postnatal ontogeny of POMC gene expression in the rat pituitary: an analysis by in situ hybridization histochemistry. Wang YQ, et al. **Brain Res Dev Brain Res** 1989 May 1;47(1):53–8
Calcitonin inhibits the rise of intracellular calcium induced by thyrotropin–releasing hormone in GH3 cells. Epand RM, et al. **Cell Calcium** 1989 Apr;10(3):145–9
Ultrastructural localization of thyrotropin (TSH)–like immunoreactivity in specific secretory cells of the hypophyseal pars tuberalis in the Djungarian hamster, Phodopus sungorus. Bergmann M, et al. **Cell Tissue Res** 1989 Jun;256(3):649–52
Immunocytochemical localization of S–100 protein in the hypophysis and saccus vasculosus of the elasmobranchs Mustelus manazo and Scyliorhinus torazame. Chiba A, et al. **Cell Tissue Res** 1989 Feb;255(2):255–60
Morphometric evaluation of subcellular changes induced by in vivo TRH treatment in the pituitary gland of Rana perezi: effects on prolactin and thyrotropic cells. Malagón MM, et al. **Cell Tissue Res** 1989;256(2):391–8
Localization and identification of nuclear radioactivity in the pituitary gland and genital tract after administering 3H–testosterone, 3H–dihydrotestosterone, or 3H–estradiol to male rhesus monkeys. Rees HD, et al. **Cell Tissue Res** 1988 Oct;254(1):139–46
Immunoreactivity to gonadotropin–releasing hormone and gonadotropic hormone in the brain and pituitary of the rainbow trout Salmo gairdneri. Schäfer H, et al. **Cell Tissue Res** 1989 Jul;257(1):227–35
Tuberoinfundibular transport of intrahypothalamic–administered dopamine in normo– and hypertensive rats. Sim MK. **Clin Exp Hypertens [A]** 1988; 10(6):1023–30
Blood pressure, plasma and pituitary prolactin responses to bromocriptine in New Zealand genetically hypertensive and normotensive rats. Tan BK, et al. **Clin Exp Pharmacol Physiol** 1989 Jan;16(1):13–8
Changes in met–enkephalin and beta–endorphin contents in the hypothalamus and the pituitary in diabetic rats: effects of insulin therapy. Tang F. **Clin Exp Pharmacol Physiol** 1989 Feb;16(2):65–75
Pituitary concentration of GH messenger ribonucleic acid in rats with anterolateral hypothalamic deafferentation. Kato Y, et al. **Endocrinol Jpn** 1989 Feb;36(1):87–93
Synthesis of gonadotropin–releasing hormone receptors by gonadotrope cell cultures: both preexisting receptors and those unmasked by protein kinase–C activators show a similar synthetic rate. Braden TD, et al. **Endocrinology** 1989 Sep;125(3):1623–9
Synthesis and release of acetylcholine by normal and tumoral pituitary corticotrophs. Carmeliet P, et al. **Endocrinology** 1989 May;124(5):2218–27
Rapid as well as delayed inhibitory effects of glucocorticoid hormones on pituitary adrenocorticotropic hormone release are mediated by type II glucocorticoid receptors and require newly synthesized messenger ribonucleic acid as well as protein. Dayanithi G, et al. **Endocrinology** 1989 Jul;125(1):308–13
Thyrotropin (TSH)–releasing hormone–stimulated TSH release and TSH concentration in the guinea pig pituitary, as determined by a heterologous radioimmunoassay. DeVito WJ, et al. **Endocrinology** 1989 Mar;124(3):1190–7
Comparison of different agonists and antagonists of luteinizing hormone–releasing hormone for receptor–binding ability to rat pituitary and human breast cancer membranes. Fekete M, et al. **Endocrinology** 1989 Feb;124(2):946–55
Regulation and secretion of proopiomelanocortin peptides from isolated perifused dog pituitary pars intermedia cells. Kemppainen RJ, et al. **Endocrinology** 1989 May; 124(5):2208–17
Changes in messenger ribonucleic acid concentrations and plasma levels of growth hormone during the ovine estrous cycle and in response to exogenous estradiol. Landefeld TD, et al. **Endocrinology** 1989 Sep;125(3):1474–8
Thyroid and glucocorticoid hormone regulation of rat pituitary growth hormone messenger ribonucleic acid as revealed by in situ hybridization. Martinoli MG, et al. **Endocrinology** 1989 Sep;125(3):1246–52
Proadrenocorticotropin/endorphin production and messenger ribonucleic acid levels in primary intermediate pituitary cultures: effects of serum, isoproterenol, and dibutyryl adenosine 3',5'–monophosphate. May V, et al. **Endocrinology** 1989 Jan;124(1):157–66
Retinoic acid selectively stimulates growth hormone secretion and messenger ribonucleic acid levels in rat pituitary cells. Morita S, et al. **Endocrinology** 1989 May; 124(5):2052–6
Studies on prolactin and growth hormone gene expression in the pituitary gland of spontaneous dwarf rats. Nogami H, et al. **Endocrinology** 1989 Aug;125(2):964–70
Gonadotropin–releasing hormone regulates follicle–stimulating hormone beta–subunit gene expression in the male rat. Rodin DA, et al. **Endocrinology** 1989 Sep; 125(3):1282–9
Characterization of insulin–like growth factor–binding proteins in cultured rat pituitary cells. Rosenfeld RG, et al. **Endocrinology** 1989 Jun;124(6):2867–74
Pituitary immediate release pools of growth hormone and prolactin are preferentially refilled by new rather than stored hormone. Stachura ME, et al. **Endocrinology** 1989 Jul;125(1):444–9
Cytosolic androgen receptors in the neuroendocrine tissues of the golden hamster: influence of photoperiod and melatonin treatment. Stankov B, et al. **Endocrinology** 1989 Sep;125(3):1742–4
Nucleotide regulation of growth hormone–releasing factor binding to rat pituitary receptors. Struthers RS, et al. **Endocrinology** 1989 Jan;124(1):24–9
Gonadotropin–releasing hormone–dependent regulation of gonadotropin subunit messenger ribonucleic acid levels in the rat. Wierman ME, et al. **Endocrinology** 1989 Jan; 124(1):272–8
The novel pituitary polypeptide 7B2 is a highly–conserved protein coexpressed with proopiomelanocortin. Martens GJ, et al. **Eur J Biochem** 1989 Apr 15;181(1):75–9
The effect of pepstatin A, an inhibitor of the pro–opiomelanocortin (POMC)–converting enzyme, on POMC processing in mouse intermediate pituitary. Loh YP. **FEBS Lett** 1988 Sep 26;238(1):142–6
In vitro binding characteristics of [3H]spiperone to the pituitary of the goldfish (Carassius auratus). Omeljaniuk RJ, et al. **Gen Comp Endocrinol** 1989 Apr;74(1):57–67
Immunocytochemical localization of LH–RH in the brain and pituitary of the catfish, Clarias batrachus (Linn.). Subhedar N, et al. **Gen Comp Endocrinol** 1988 Dec; 72(3):431–42
Variability in gold bead density in cells. Quantitative immunocytochemistry. Hammel I, et al. **Histochemistry** 1989;91(6):527–30
Immunohistochemical study of cells positive for glial fibrillary acidic protein (GFAP) in the human pituitary gland, with special reference to folliculo–stellate cells. Redecker P, et al. **Histochemistry** 1989;91(3):227–34
Renin and cathepsin B in human pituitary lactotroph cells. An ultrastructural study. Saint–André JP, et al. **Histochemistry** 1989;91(4):291–7
Functional studies after storage at – 190 degrees C of isolated and cultivated pituitary cells from pig and rat. Markó M. **Horm Metab Res** 1989 Mar;21(3):120–2
Immunoreactive beta–endorphin and met– and leu–enkephalin contents in pancreas and pituitary of corpulent (cp/cp) rats. Timmers K, et al. **Int J Obes** 1989 Jun;13(3):337–45
The vasopressin precursor in the Brattleboro (di/di) rat. Birkett SD, et al. **Int J Pept Protein Res** 1988 Dec; 32(6):565–72
Pituitary gonadotropin content in gonadectomized rats. Immunoassay measurements influenced by extraction solvent and testosterone replacement. Spitzbarth TL, et al. **J Androl** 1988 Jul–Aug;9(4):294–304
Loss of a calcium requirement for protein synthesis in pituitary cells following thermal or chemical stress. Brostrom MA, et al. **J Biol Chem** 1989 Jan 25; 264(3):1638–43
Protein kinase C–mediated gonadotropin–releasing hormone receptor sequestration is associated with uncoupling of phosphoinositide hydrolysis. Huckle WR, et al. **J Biol Chem** 1989 May 25;264(15):8619–26
Thyrotropin–releasing hormone and phorbol esters stimulate sphingomyelin synthesis in GH3 pituitary cells. Evidence for involvement of protein kinase C. Kolesnick RN. **J Biol Chem** 1989 Jul 15;264(20):11688–92
Trifluoperazine stimulates the coordinate degradation of sphingomyelin and phosphatidylcholine in GH3 pituitary cells. Kolesnick RN, et al. **J Biol Chem** 1989 Aug 25; 264(24):14057–61
Effects of bromocriptine on pituitary and adrenal cortex in pre–adrenarchal rabbits. Pérez–Fernandez R, et al. **J Endocrinol Invest** 1989 Apr;12(4):221–7
Distribution of somatostatin (SRIF) in the brain and pituitary of Eigenmannia lineata (Gymnotiformes, Teleostei). An immunohistochemical study. Bonn U, et al. **J Hirnforsch** 1989;30(2):203–12
FMRFamide immunoreactivity in the brain and pituitary of Carassius auratus (Cyprinidae, Teleostei). Bonn U, et al. **J Hirnforsch** 1989;30(3):361–70
Solubilization and characterization of the rat pituitary gonadotrophin–releasing hormone receptor. Iwashita M, et al. **J Mol Endocrinol** 1988 Nov;1(3):187–96
Role of calcium in thyrotrophin–releasing hormone–stimulated release of melanocyte–stimulating hormone from frog neurointermediate lobe. Lamacz M, et al. **J Mol Endocrinol** 1988 Sep;1(2):131–9
Gonadal and sex steroid feedback regulation of gonadotrophin mRNA levels and secretion in neonatal male and female rats. Pakarinen P, et al. **J Mol Endocrinol** 1989 Sep;3(2):139–44
The expression of progastrin, procholecystokinin and their hormonal products in pituitary cells. Rehfeld JF. **J Mol Endocrinol** 1988 Sep;1(2):87–94 (68 ref.)
In vivo labelling of pituitary dopamine D–2 receptors in the male rat using [3H]–raclopride. Köhler C, et al. **J Neural Transm** 1989;76(1):13–28
Interleukin–2 induction of ACTH secretion: presence of an interleukin–2 receptor alpha–chain–like molecule on pituitary cells. Smith LR, et al. **J Neuroimmunol** 1989 Feb; 21(2–3):249–54
Size heterogeneity of affinity labeled estrogen receptors in the MtTF4 tumor whose growth is inhibited by estradiol, in pituitary gland and uterus. Bouillard B, et al. **J Steroid Biochem** 1989 Jan;32(1A):45–52
Corticosterone decreases toxicity of 2,3,7,8–tetrachlorodibenzo–p–dioxin (TCDD) in hypophysectomized rats. Gorski JR, et al. **J Toxicol Environ Health** 1988;25(3):349–60
Dexamethasone suppresses ACTH release without attenuating pituitary cyclic AMP response to stress in vivo. Kant GJ, et al. **Life Sci** 1989;45(2):125–31
Central mu, delta, and kappa opioid binding sites, and brain and pituitary beta–endorphin and met–enkephalin in genetically obese (ob/ob) and lean mice. Khawaja XZ, et al. **Life Sci** 1989;44(16):1097–105
Expression and regulation of the pituitary– and placenta–specific human glycoprotein hormone alpha–subunit gene is restricted to the pituitary in transgenic mice. Fox N, et al. **Mol Cell Biol** 1988 Dec; 8(12):5470–6
Effect of inhibin from primate Sertoli cells and GnRH on gonadotropin subunit mRNA in rat pituitary cell cultures. Attardi B, et al. **Mol Endocrinol** 1989 Aug;3(8):1236–42
Variable modes of proopiomelanocortin gene transcription in human tumors. de Keyzer Y, et al. **Mol Endocrinol** 1989 Jan;3(1):215–23
Growth hormone–releasing hormone stimulates and somatostatin inhibits the release of a novel protein by cultured rat pituitary cells. Tachibana K, et al. **Mol Endocrinol** 1988 Oct;2(10):973–8
Transgenic mice with inducible dwarfism. Borrelli E, et al. **Nature** 1989 Jun 15;339(6225):538–41
Secretion of melanocyte–stimulating hormone and adrenocorticotropin from transplanted pituitary pars intermedia in stressed and nonstressed rats. Iturriza FC, et al. **Neuroendocrinology** 1989 Jun;49(6):610–6
Pituitary gonadotropin–releasing hormone binding sites in persistent estrous rats. Köves K, et al. **Neuroendocrinology** 1988 Nov;48(5):489–94
Twenty–four–hour patterns of pineal melatonin and pituitary and plasma prolactin in male rats under 'natural' and artificial lighting conditions. Laakso ML, et al. **Neuroendocrinology** 1988 Sep;48(3):308–13
Patch–clamp study of the ionic currents underlying action potentials in cultured frog pituitary melanotrophs. Louiset E, et al. **Neuroendocrinology** 1988 Nov;48(5):507–15
Opposite changes of pituitary and ovarian receptors for LHRH in ageing rats: further evidence for a direct neural control of ovarian LHRH receptor activity. Marchetti B, et al. **Neuroendocrinology** 1988 Sep;48(3):242–51
Substance p in the median eminence and pituitary of the rat: demonstration of immunoreactive fibers and specific binding sites. Mikkelsen JD, et al. **Neuroendocrinology** 1989 Jul;50(1):100–8
Mechanism of release of beta–endorphin from rat pituitary cells. Role of lipoxygenase products of arachidonic acid. Nishizaki T, et al. **Neuroendocrinology** 1989 May; 49(5):483–8
Dopaminergic agents differentially regulate both processing and content of alpha–N–acetylated endorphin and alpha–MSH in the ovine pituitary intermediate lobe. Smith AI, et al. **Neuroendocrinology** 1989 May;49(5):545–50
Fractional reduction of somatostatin concentration interacted with rat growth hormone releasing hormone to titrate the magnitude of pulsatile growth hormone and prolactin release in perifusion. Stachura ME, et al. **Neuroendocrinology** 1988 Nov;48(5):500–6
Solubilization of stereospecific and quisqualate–sensitive activity of [3H]glutamate binding in the pituitary of the rat. Yoneda Y, et al. **Neuropharmacology** 1989 Jun; 28(6):611–6
A novel two–site immunoradiometric assay for beta–endorphin using nitrocellulose as solid phase. Voellmy DR, et al. **Neurosci Biobehav Rev** 1988 Fall–Winter; 12(3–4):199–204
Melatonin binding sites in the sheep pars tuberalis. de Reviers MM, et al. **Neurosci Lett** 1989 May 22;100(1–3):89–93
Autoradiographic localization of binding sites for vasotocin in the brain and pituitary of the sea bass (Dicentrarchus labrax). Moons L, et al. **Neurosci Lett** 1989 May 22; 100(1–3):11–6
Estrogen induction of galanin synthesis in the rat anterior pituitary gland demonstrated by in situ hybridization and

immunohistochemistry. Vrontakis ME, et al. **Neurosci Lett** 1989 May 22;100(1–3):59–64

Nerve growth factor–like activity in the rat pituitary intermediate lobe. Soinila S, et al. **Neurosci Res** 1988 Dec; 6(2):123–30

Induction of neurofilament phosphorylation in cultured chromaffin cells. Grant NJ, et al. **Neuroscience** 1988 Nov; 27(2):717–26

Biological demonstration of nerve growth factor in the rat pituitary gland. Lahtinen T, et al. **Neuroscience** 1989; 30(1):165–70

Regional distribution of chromogranin B 420–493–like immunoreactivity in the pituitary gland and central nervous system of man, guinea–pig and rat. Salahuddin MJ, et al. **Neuroscience** 1989;30(1):231–40

Expression of two growth hormone genes in the Xenopus pituitary gland. Martens GJ, et al. **Nucleic Acids Res** 1989 May 25;17(10):3974

Presence of beta hCG mRNA in the human pituitary. van Strien A, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5406

Pituitary, hypothalamic and pancreatic 7B2 concentrations in rats with streptozotocin–induced diabetes and spontaneously diabetic mice. Suzuki H, et al. **Pancreas** 1988; 3(6):662–7

Hormone ontogeny in the ovine fetus: XIX: The effect of a potent luteinizing hormone–releasing factor agonist on gonadotropin and testosterone release in the fetus and neonate. Clark SJ, et al. **Pediatr Res** 1989 Apr;25(4):347–52

Corticotropin–releasing factor (CRF) receptors in intermediate lobe of the pituitary: biochemical characterization and autoradiographic localization. Grigoriadis DE, et al. **Peptides** 1989 Jan–Feb;10(1):179–88

Thyroid hormone modulation of TRH precursor levels in rat hypothalamus, pituitary, thyroid and blood. Simard M, et al. **Peptides** 1989 Jan–Feb;10(1):145–55

Effects of ethanol withdrawal on beta–endorphin levels in rat brain and pituitary. Hutchison WD, et al. **Pharmacol Biochem Behav** 1988 Aug;30(4):933–9

ACTH, prolactin, corticosterone and pituitary cyclic AMP responses to repeated stress. Kant GJ, et al. **Pharmacol Biochem Behav** 1989 Feb;32(2):557–61

Brain and pituitary receptors for thyrotropin–releasing hormone in hypothyroid rats. Bhargava HN, et al. **Pharmacology** 1989;38(4):243–52

Differential expression of alpha and beta thyroid hormone receptor genes in rat brain and pituitary. Bradley DJ, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7250–4

Pituitary–specific expression and glucocorticoid regulation of a proopiomelanocortin fusion gene in transgenic mice. Tremblay Y, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(23):8890–4

Brefeldin A inhibits oligosaccharide processing of glycoproteins in mouse hypothyroid pituitary tissue at several subcellular sites. Perkel VS, et al. **Proc Soc Exp Biol Med** 1989 Mar;190(3):286–93

Effects of urethane administration on somatostatin receptors in rat cerebral cortex and pituitary. Iwahana H, et al. **Tokushima J Exp Med** 1988 Dec;35(3–4):69–77

Lymphocytic choriomeningitis virus selectively alters differentiated but not housekeeping functions: block in expression of growth hormone gene is at the level of transcriptional initiation. Klavinskis LS, et al. **Virology** 1989 Feb;168(2):232–5

[Functional and morphological identification of FSH– and LH–producing cells in the pituitary gland] Lange F. **Acta Anat (Basel)** 1989;135(1):41–5 (Eng. Abstr.) **(Ger)**

[Qualitative and quantitative changes of luteinizing hormone (LH) in the pituitary glands in female Japanese monkeys (Macaca fuscata) during the menstrual cycle and after castration] Hamada K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Mar;41(3):241–8 (Eng. Abstr.) **(Jpn)**

[Features of melanotrophic activity of the blood and hypophysis in the early postnatal development of mutant Campbell and Hunter rats with hereditary retinal dystrophy] Ershov AV, et al. **Dokl Akad Nauk SSSR** 1989; 304(4):1009–11 **(Rus)**

[Changes in the number of estradiol and testosterone–binding sites of the hypophysis in cyclic female rats in the period of elevated follicle–stimulating hormone levels] Babichev VN, et al. **Probl Endokrinol (Mosk)** 1989 Mar–Apr; 35(2):59–62 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Pituitary enlargement, hypertrichosis and blunted growth hormone secretion in primary hypothyroidism. Nishi Y, et al. **Acta Paediatr Scand** 1989 Jan;78(1):136–40

The effect of bilateral adrenalectomy on the nucleus arcuatus–hypophysis and the circumventricular organs of Balb mice. Srebro Z, et al. **Agressologie** 1989 Feb;30(2):85–8

Congenital adrenal hypoplasia and selective absence of pituitary luteinizing hormone: a new autosomal recessive syndrome. Burke BA, et al. **Am J Med Genet** 1988 Sep; 31(1):75–97 (90 ref.)

Prolactin levels and pituitary enlargement in hormone–treated male–to–female transsexuals. Asscheman H, et al. **Clin Endocrinol (Oxf)** 1988 Jun;28(6):583–8

Amyloid protein of vessels in leptomeninges, cortices, choroid plexuses, and pituitary glands from patients with systemic amyloidosis. Ishihara T, et al. **Hum Pathol** 1989 Sep;20(9):891–5

Anterior pituitary involvement in Wegener's granulomatosis. Lohr KM, et al. **J Rheumatol** 1988;15(5):855–7

Spontaneous pituitary gonadotroph nodules in aging male Lobund–Wistar rats. Sano T, et al. **Lab Invest** 1989 Sep; 61(3):343–9

Quantitative magnetic resonance imaging of estradiol–induced pituitary hyperplasia in rats. Rudin M, et al. **Magn Reson Med** 1988 Jul;7(3):285–91

Two patients with hypergonadotropic ovarian failure due to pituitary hyperplasia. Okuda K, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):498–501

Third meeting of the Pituitary Pathology Club. Soltau, September 18–21, 1987. Proceedings. **Pathol Res Pract** 1988 Sep;183(5):531–655

Assessment of the pituitary hyperplasia/neoplasia interface. Bloodworth JM Jr. **Pathol Res Pract** 1988 Sep; 183(5):626–30 (29 ref.)

Pituitary pathology in Cushing's disease. Histology and morphometry of pituitary tissues removed through microsurgery. Olivier L, et al. **Pathol Res Pract** 1988 Sep; 183(5):587–91

Immunoelectron microscopic observation of prolactin (PRL) in human PRL secreting pituitary adenomas and non–neoplastic pituitary PRL cells. Osamura RY. **Pathol Res Pract** 1988 Sep;183(5):584–6

Pituitary pathology in Cushing's disease. Saeger W, et al. **Pathol Res Pract** 1988 Sep;183(5):592–5

Immunohistological study of Crooke's cells. Uei Y. **Pathol Res Pract** 1988 Sep;183(5):636–7

Comparative morphological study of the pituitary gland by computed tomography and magnetic resonance imaging. Loxton AJ. **S Afr Med J** 1988 Oct 15;74(8):406–7

Distribution of Crooke's cells and ACTH cells in the human pituitary glands. Takahashi K, et al. **Tohoku J Exp Med** 1988 Aug;155(4):379–83

An immunocytochemical study of pituitary adenomas and focal hyperplasia in old Sprague–Dawley and Fischer 344 rats. Sandusky GE, et al. **Toxicol Pathol** 1988;16(3):376–80

[Changes in the hypophysis in several autopsy cases of AIDS] Giampalmo A, et al. **Pathologica** 1988 Sep–Oct; 80(1069):627–31 (Eng. Abstr.) **(Ita)**

PHYSIOLOGY

Effects of aging on biologically active pituitary LH in rats. Keel BA. **Arch Androl** 1988;20(3):203–9

Hypophysectomy and adrenalectomy decrease Ca2+–induced swelling of rat liver mitochondria. Bedetti CD, et al. **Biochem Int** 1988 Jul;17(1):111–9

Pineal and pituitary involvement in the photoperiodic regulation of body weight, coat color and testicular size of the Djungarian hamster, Phodopus sungorus. Niklowitz P, et al. **Biol Reprod** 1988 Sep;39(2):489–98

Mammary gland development and alpha–lactalbumin production in hypophysectomized, pregnant mice. Thordarson G, et al. **Biol Reprod** 1989 Mar;40(3):517–24

Pituitary dependence of bone marrow function. Nagy E, et al. **Br J Haematol** 1989 Apr;71(4):457–62

Diacylglycerol modulates action potential frequency in GH3 pituitary cells: correlative biochemical and electrophysiological studies. Gammon CM, et al. **Brain Res** 1989 Feb 13;479(2):217–24

Growth hormone releasing factor depolarizes rat pituitary cells in Na+–dependent mechanism. Kato M, et al. **Brain Res** 1989 Jan 2;476(1):145–8

Inactivation of calcium channels in rat pituitary intermediate lobe cells. Stanley EF, et al. **Brain Res** 1988 Dec 13; 475(1):64–72

Identification of a GABA–activated chloride–mediated synaptic potential in rat pars intermedia. Williams PJ, et al. **Brain Res** 1989 Mar 27;483(1):130–4

The regulation of the corticomelanotropic cell activity in aves. III—Effect of various peptides on the release of MSH from dispersed, perfused duck pituitary cells. Cosecretion of ACTH with MSH. Castro MG, et al. **Comp Biochem Physiol [C]** 1988;91(2):389–93

The effect of hypophysectomy on the mitotic activity of the regenerating adrenal cortex in rats. Nowakowska–Jankiewicz B, et al. **Cytobios** 1988; 56(226–227):145–8

Concentrations of luteinizing hormone, follicle stimulating hormone and prolactin following transection of the pituitary stalk in ovariectomized ewes. Gust CM, et al. **Domest Anim Endocrinol** 1987 Apr;4(2):103–10

Endogenous human growth hormone (GH) modulates the effect of gonadotropin–releasing hormone on pituitary function and the gonadotropin response to the negative feedback effect of testosterone in adult male transgenic mice bearing human GH gene. Chandrashekar V, et al. **Endocrinology** 1988 Dec;123(6):2717–22

Hormonal control of tyrosine hydroxylase in the median eminence: demonstration of a central role for the pituitary gland. Gonzalez HA, et al. **Endocrinology** 1989 May; 124(5):2122–7

Prolactin maintains relaxin and progesterone secretion by aging corpora lutea after hypophysial stalk transection or hypophysectomy in the pig. Li Y, et al. **Endocrinology** 1989 Mar;124(3):1294–304

Prospective study of the pituitary–ovarian function after tubal sterilization by the Pomeroy or Uchida techniques. Alvarez F, et al. **Fertil Steril** 1989 Apr;51(4):604–8

Relation between dopaminergic control of pituitary lactotroph function and deceleration of age–related changes in serum prolactin of diet–restricted rats. Atterwill CK, et al. **Food Chem Toxicol** 1989 Feb;27(2):97–103

Estradiol secretion by the ovarian tissue, in response to hypophyseal stimulation, during ontogenesis of the bullfrog. Hsu CY, et al. **Gen Comp Endocrinol** 1989 Apr; 74(1):161–4

Changes in plasma and pituitary levels of prolactin in the toad, Bufo japonicus, throughout the year with special reference to the breeding migration. Ishii S, et al. **Gen Comp Endocrinol** 1989 Jun;74(3):365–72

The intracellular regulation of prolactin cell function in the rainbow trout, Salmo gairdneri. Johnston LR, et al. **Gen Comp Endocrinol** 1988 Aug;71(2):284–91

Alterations in pituitary GnRH and dopamine receptors associated with the seasonal variation and regulation of gonadotropin release in the goldfish (Carassius auratus). Omeljaniuk RJ, et al. **Gen Comp Endocrinol** 1989 Jun; 74(3):392–9

Plasma LH and gonadal LH–binding cells in normal and surgically decapitated chick embryos. Woods JE, et al. **Gen Comp Endocrinol** 1989 Apr;74(1):1–13

Effects of salinity, hypophysectomy, and prolactin on whole–animal transepithelial potential in the tilapia Oreochromis mossambicus. Young PS, et al. **Gen Comp Endocrinol** 1988 Sep;71(3):389–97

Pituitary–gonadal response to extreme cold exposure in healthy men. Solter M, et al. **Horm Metab Res** 1989 Jun; 21(6):343–4

Pituitary and testicular function in the restricted (Hre) rat. Heindel JJ, et al. **Int J Androl** 1988 Aug;11(4):313–26

Thyroid hormone regulation of the rat glycoprotein hormone alpha–subunit gene promoter activity. Burnside J, et al. **J Biol Chem** 1989 Apr 25;264(12):6886–91

Blockade of neonatal activation of the pituitary–testicular axis: effect on peripubertal luteinizing hormone and testosterone secretion and on testicular development in male monkeys. Mann DR, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):600–7

Circulating immunoreactive oxytocin during the human menstrual cycle comes from the pituitary and is estradiol dependent. Shukovski L, et al. **J Clin Endocrinol Metab** 1989 Feb;68(2):455–60

Differential effects of FSH and testosterone on the maintenance of spermatogenesis in the adult hypophysectomized rat. Bartlett JM, et al. **J Endocrinol** 1989 Apr;121(1):49–58

Influence of tri–iodothyronine or lipid administration on the response of the pituitary–thyroid axis to exposure to cold in the newborn lamb. Wrutniak C, et al. **J Endocrinol** 1989 May;121(2):361–5

Electrophysiology of neurosecretory cells from the pituitary intermediate lobe. McBurney RN, et al. **J Exp Biol** 1988 Sep;139:317–28 (30 ref.)

Neither the pituitary gland nor the sympathetic nervous system is responsible for eliciting the large drop in elevated rat pineal melatonin levels due to swimming. Troiani ME, et al. **J Neural Transm** 1988;74(3):149–60

Ca2+ regulates hormone secretion and proopiomelanocortin gene expression in melanotrope cells via the calmodulin and the protein kinase C pathways. Loeffler JP, et al. **J Neurochem** 1989 Apr;52(4):1279–83

Electrophysiological responses to somatostatin of rat hypophysial cells in somatotroph–enriched primary cultures. Chen C, et al. **J Physiol (Lond)** 1989;408:493–510

Pituitary and Leydig cell function in boars actively immunized against gonadotrophin–releasing hormone. Awoniyi CA, et al. **J Reprod Fertil** 1988 Sep;84(1):295–302

Regulation of growth hormone secretion and cyclic AMP metabolism in ovine pituitary cells: interactions involved in activation induced by growth hormone–releasing hormone and phorbol esters. Ray KP, et al. **Mol Cell Endocrinol** 1988 Aug;58(2–3):243–52

Does protein kinase C mediate pituitary actions of gonadotropin–releasing hormone? Conn PM. **Mol Endocrinol** 1989 May;3(5):755–7 (17 ref.)

Analysis of rat prolactin promoter sequences that mediate pituitary–specific and 3',5'–cyclic adenosine monophosphate–regulated gene expression in vivo. Keech CA, et al. **Mol Endocrinol** 1989 May;3(5):832–9

Hypophysectomy differentially alters P–450 protein levels and enzyme activities in rat liver: pituitary control of hepatic NADPH cytochrome P–450 reductase. Waxman DJ, et al. **Mol Pharmacol** 1989 Apr;35(4):519–25

Metabolic mapping of functional activity in rat brain and pituitary after water deprivation. Duncan GE, et al. **Neuroendocrinology** 1989 May;49(5):489–95

Importance of pituitary and neural actions of estradiol in induction of the luteinizing hormone surge in the ewe. Kaynard AH, et al. **Neuroendocrinology** 1988 Sep; 48(3):296–303

Luteinizing hormone and prolactin secretion in hypophysial–stalk–transected pigs given estradiol and pulsatile gonadotropin–releasing hormone. Kesner JS, et al. **Neuroendocrinology** 1989 May;49(5):502–8

Effect and site of action of hypothalamic neuropeptides on prolactin release in sheep. Thomas GB, et al. **Neuroendocrinology** 1988 Sep;48(3):252–7

Ultrastructural evidence that the negative feedback mechanism of the pituitary–thyroid axis can operate without the hypothalamus in fetal rats: observation of thyroid follicular cells. Shirai M, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):244–50

Slice cultures of LHRH neurons in the presence and absence

of brainstem and pituitary. Wray S, et al. **Peptides** 1988 Sep–Oct;9(5):1151–75

Glucocorticoid receptors in brain and pituitary of the lactating rat. Meaney MJ, et al. **Physiol Behav** 1989 Jan; 45(1):209–12

Hormonal treatment of cryptorchidism: role of pituitary gonadal axis. De Muinck Keizer–Schrama SM, et al. **Semin Urol** 1988 May;6(2):84–95 (101 ref.)

The role of estrogen as a parahormone in brain and pituitary. Callard GV, et al. **Steroids** 1987 Oct–Dec;50(4–6):475–93 (46 ref.)

Neuroendocrinology of the pituitary gland. Reichlin S. **Toxicol Pathol** 1989;17(2):250–5 (5 ref.)

[Restoration of pituitary–ovarian function after long–term application of combined norethindrone oenanthate] Shen KY. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Sep; 23(5):293–5, 318 (Eng. Abstr.) **(Chi)**

[Hypophysis and estradiol secretion in the chick embryo] Weniger JP, et al. **C R Acad Sci [III]** 1989;308(20):531–6 (Eng. Abstr.) **(Fre)**

[Neurochemical induction of the factor of postural asymmetry in the pituitary] Vartanian GA, et al. **Dokl Akad Nauk SSSR** 1988;300(2):501–3 **(Rus)**

[Polymorphism of the response of the hypophyseo–gonadal system to the long–term administration of an agonist of luliberin] Goncharova ND, et al. **Probl Endokrinol (Mosk)** 1989 Mar–Apr;35(2):62–7 (Eng. Abstr.) **(Rus)**

[Seasonal rhythms in the functioning of the hypophyseo–thyroid system of the suslik Citellus parryi] Nevretdinova ZG. **Zh Evol Biokhim Fiziol** 1989 May–Jun; 25(3):310–7 (Eng. Abstr.) **(Rus)**

[Seasonal characteristics of the functioning of the hypophysis–gonad system in the suslik Citellus parryi] Shvareva NV, et al. **Zh Evol Biokhim Fiziol** 1989 Jan–Feb; 25(1):52–9 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Effects of protracted hypothyroidism on pituitary function and structure in endemic cretinism. Boyages S, et al. **Clin Endocrinol (Oxf)** 1989 Jan;30(1):1–12

Studies on pituitary–gonadal function in patients with Cushing's syndrome. Odagiri E, et al. **Endocrinol Jpn** 1988 Jun;35(3):421–7

Hypothalamic–pituitary dysfunction in polycystic ovarian disease. Adashi EY. **Endocrinol Metab Clin North Am** 1988 Dec;17(4):649–66 (49 ref.)

Effects of carbamazepine on pituitary responsiveness to luteinizing hormone–releasing hormone, thyrotropin–releasing hormone, and metoclopramide in epileptic patients. Isojärvi JI, et al. **Epilepsia** 1989 Jan–Feb; 30(1):50–6

The pituitary–thyroid axis in acromegaly. Eskildsen PC, et al. **Horm Metab Res** 1988 Dec;20(12):755–7

Growth and pituitary function in children treated for brain tumours or acute lymphoblastic leukaemia. Shalet SM, et al. **Horm Res** 1988;30(2–3):53–61 (38 ref.)

Pituitary response to LHRH during chronic renal insufficiency in the male rat. Nazian SJ, et al. **J Androl** 1989 May–Jun;10(3):174–9

Effect of short–term starvation on reproductive hormone gene expression, secretion and receptor levels in male rats. Bergendahl M, et al. **J Endocrinol** 1989 Jun;121(3):409–17

Melatonin and pituitary–gonadal function in disorders of eating behavior. Ferrari E, et al. **J Pineal Res** 1989; 7(2):115–24

[Functional status of the hypophysis in patients with chronic pancreatitis] Komarov FI, et al. **Klin Med (Mosk)** 1989 Mar;67(3):95–8 (Eng. Abstr.) **(Rus)**

[The hypophyseo–thyroid system in psoriatic arthritis combined with chronic opisthorchiasis] Milevskaia SG, et al. **Med Parazitol (Mosk)** 1989 Mar–Apr;(2):38–42 (Eng. Abstr.) **(Rus)**

[The effect of metoclopramide on the hypophyseo–ovarian relations in patients with amenorrhea resulting from body mass loss] Potin VV, et al. **Probl Endokrinol (Mosk)** 1989 Mar–Apr;35(2):44–8 (Eng. Abstr.) **(Rus)**

[The status of the pituitary–gonadal system and immunologic parameters in patients with rheumatoid arthritis] Aliushin ML, et al. **Ter Arkh** 1989;61(5):48–51 (Eng. Abstr.) **(Rus)**

[Hypophyseal–gonadal and hypophyseal–corticoadrenal system in healthy persons and in patients with ischemic heart disease aged 60–89 years] Kovalenko AN. **Ter Arkh** 1988;60(9):52–7 (Eng. Abstr.) **(Rus)**

[Seasonal fluctuations in the functioning of the hypophyseo–thyroid system in patients with atopic dermatitis] Kachuk MV, et al. **Vestn Dermatol Venerol** 1989;(5):32–4 (Eng. Abstr.) **(Rus)**

[The functional state of the pituitary–thyroid gland system in patients with eczema] Kachuk MV, et al. **Vestn Dermatol Venerol** 1989;(3):12–5 (Eng. Abstr.) **(Rus)**

[Disorders of hypothalamico–pituitary regulation of adrenal and ovarian function in women suffering from Itsenko–Cushing disease] Manusharova RA. **Vrach Delo** 1989 Feb;(2):24–7 (Eng. Abstr.) **(Rus)**

[Function of the hypophyseo–thyroid system in patients with post–thyrotoxic encephalo–ophthalmopathy] Oleinik VA, et al. **Vrach Delo** 1988 Sep;(9):72–5 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

A prospective study of the development of growth hormone deficiency in children given cranial irradiation, and its relation to statural growth. Brauner R, et al. **J Clin Endocrinol Metab** 1989 Feb;68(2):346–51

[Effect of proton irradiation of the hypophysis on its gonadotropic and thyrotropic functions in patients with prolactinoma] Isakov AV, et al. **Probl Endokrinol (Mosk)** 1988 Jul–Aug;34(4):28–32 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Pituitary atrophy in patients with Sheehan's syndrome. Barkan AL. **Am J Med Sci** 1989 Jul;298(1):38–40

Hyperprolactinaemia [letter] Baxter MA, et al. **BMJ** 1989 Jan 14;298(6666):118

[Pituitary changes under CT scan before and after replacement therapy in patients with primary hypothyroidism] Lu JM. **Chung Hua I Hsueh Tsa Chih** 1989 Mar;69(3):140–2, 12 (Eng. Abstr.) **(Chi)**

[CT and MR compared in the study of hypophysis] Juliani G, et al. **Radiol Med (Torino)** 1989 Jan–Feb;77(1–2):51–64 (Eng. Abstr.) **(Ita)**

[Diagnosis of pituitary adenoma by dynamic CT scanning: concerning direct sign and indirect sign for diagnosis of pituitary microadenoma] Tanabe S, et al. **No Shinkei Geka** 1988 Dec;16(13):1457–63 (Eng. Abstr.) **(Jpn)**

[Results of computerized tomography of the head in pituitary dwarfism] Grądzki J, et al. **Pol Przegl Radiol (Warszawa)** 1987 Sep–Oct;51(5):225–8 (Eng. Abstr.) **(Pol)**

SECRETION

Influence of starvation on hormonal control of hypophyseal secretion in rats. Hugues JN, et al. **Acta Endocrinol (Copenh)** 1988 Oct;119(2):195–202

Effect of norfloxacin, a new quinolone, on GABA modulation of TRH–induced TSH release from perifused rat pituitaries. Roussel JP, et al. **Acta Endocrinol (Copenh)** 1988 Dec;119(4):481–7

Catecholamine inhibition of luteinizing hormone secretion in isolated pig pituitary cells. Li PH. **Biol Reprod** 1989 May;40(5):914–9

Limited responsiveness of LHRH neurons to norepinephrine may account for failure of locus coeruleus or medullary A1 electrical stimulation to increase plasma LH in estrogen–treated ovariectomized rats. Hartman RD, et al. **Brain Res** 1989 Jan 2;476(1):35–44

Assessment of the effects of a synthetic gonadotropin–releasing hormone associated peptide on hormone release from the in situ and ectopic pituitaries in adult male rats. Chandrashekar V, et al. **Brain Res Bull** 1988 Jul;21(1):95–9

Increased GH response to GHRH in normal tall men. Batrinos M, et al. **Clin Endocrinol (Oxf)** 1989 Jan;30(1):13–7

The synergistic effects of His–D–Trp–Ala–Trp–D–Phe–Lys–NH2 on growth hormone (GH)–releasing factor–stimulated GH release and intracellular adenosine 3',5'–monophosphate accumulation in rat primary pituitary cell culture. Cheng K, et al. **Endocrinology** 1989 Jun;124(6):2791–8

Characterization and charge distribution of the asparagine–linked oligosaccharides on secreted mouse thyrotropin and free alpha–subunits. Gesundheit N, et al. **Endocrinology** 1989 Jun;124(6):2967–77

Growth hormone secretion by individual somatotropes of the testicular feminized rat. Martha PM Jr, et al. **Endocrinology** 1989 Mar;124(3):1124–30

The phorbol ester–induced extracellular Ca2+–independent release of LH is dependent on estradiol and de novo protein synthesis. Bourne GA, et al. **FEBS Lett** 1989 Apr 10; 247(1):159–62

Studies of secretory cysts in the pituitary gland of the Indian palm squirrel Funambulus pennanti and their origin and significance. Singh M, et al. **Folia Morphol (Praha)** 1988; 36(4):408–13

Dopamine inhibition of gonadotropin and alpha–melanocyte–stimulating hormone release in vitro from the pituitary of the goldfish (Carassius auratus). Omeljaniuk RJ, et al. **Gen Comp Endocrinol** 1989 Jun; 74(3):451–67

Autocrine–paracrine inhibition of growth hormone and prolactin production by GH3 cell–conditioned medium. Lapp CA, et al. **In Vitro Cell Dev Biol** 1989 Jun; 25(6):528–34

Kinetics of secretion of luteinizing hormone subunits and free alpha, and effects of gonadotropin releasing hormone. Vogel DL, et al. **J Androl** 1989 May–Jun;10(3):180–7

A complex mechanism of facilitation in pituitary ACTH cells: recent single–cell studies. Leong DA. **J Exp Biol** 1988 Sep; 139:151–68 (67 ref.)

Role of the corpus luteum of pregnancy in controlling pituitary gonadotrophin secretion during the early post–partum period in the ewe. al–Gubory KH, et al. **J Reprod Fertil** 1989 Jul;86(2):697–703

Studies of the effectiveness of gonadotrophin–releasing hormone, steroids and follicular fluid in modulating ovine gonadotrophin output in vivo and in vitro. Henderson KM, et al. **J Reprod Fertil** 1989 May;86(1):105–17

Effects of in–vivo administration of GnRH on the release of gonadotrophins in the female rabbit. YoungLai EV, et al. **J Reprod Fertil** 1989 Jan;85(1):325–9

Differentiation between androgen and estrogen receptor mediated effects of testosterone on FSH using androgen receptor deficient (Tfm) and normal mice. Schleicher G, et al. **J Steroid Biochem** 1989 Jul;33(1):49–51

Lithium suppresses ovariectomy–induced surges in plasma gonadotropins in rats. Sheikha SH, et al. **Life Sci** 1989; 44(19):1363–9

In vitro perifusion of human hypothalamic and pituitary tissue. Rasmussen DD. **Methods Enzymol** 1989;168:206–18

Peptides co–released with luteinizing hormone by perifused pituitary cell aggregates. Sion B, et al. **Mol Cell Endocrinol** 1988 Dec;60(2–3):151–61

Central actions of adenosine on pituitary secretion of prolactin, luteinizing hormone and thyrotropin. Ondo JG, et al. **Neuroendocrinology** 1989 Jun;49(6):654–8

Prolonged neuroendocrine effects of a brief exposure of adult male rats to diethylstilbestrol. Steger RW, et al. **Neuroendocrinology** 1989 Feb;49(2):191–6

Corticotropin–releasing factor (CRF) and neurotransmitters modulate melanotropic peptide release from rat neurointermediate pituitary in vitro. Saland LC, et al. **Neuropeptides** 1988 Aug–Sep;12(2):59–66

Inhibin, a member of a new peptide family. Burger HG. **Reprod Fertil Dev** 1989;1(1):1–13 (51 ref.)

Pituitary gland: neuropeptides, neurotransmitters and growth factors. Koenig JI. **Toxicol Pathol** 1989;17(2):256–65 (89 ref.)

[Somatotropin: endocrinological aspects] Suurd GJ, et al. **Tijdschr Diergeneeskd** 1988 Sep 15;113(18):999–1008 (75 ref.) (Eng. Abstr.) **(Dut)**

[Effect of immobilization stress on the gonadotropic function of the hypophysis in male hamadryas baboons (Papio hamadryas)] Katsiia GV, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):231–4 (Eng. Abstr.) **(Rus)**

SURGERY

Studies of the regulation of the hypothalamic–pituitary–adrenal axis in sheep with hypothalamic–pituitary disconnection. I. Effect of an audiovisual stimulus and insulin–induced hypoglycemia. Engler D, et al. **Neuroendocrinology** 1988 Nov;48(5):551–60

TRANSPLANTATION

Immunohistochemical identification of prolactin–producing cells in pituitary isografts in CBA mice. Harigaya T, et al. **Anat Anz** 1988;167(3):205–12

Influence of pituitary grafts or prolactin administrations on the hormone sensitivity of ovarian hormone–independent mouse mammary MXT tumors. Kiss R, et al. **Cancer Res** 1989 Jun 1;49(11):2945–51

Effect of pituitary graft–induced hyperprolactinemia on adrenal circadian rhythmicity. Villanúa MA, et al. **Chronobiol Int** 1988;5(4):337–43

Castration induces luteinizing hormone (LH) secretion in hypophysectomized pituitary–grafted rats receiving pulsatile LH–releasing hormone infusions. Strobl FJ, et al. **Endocrinology** 1989 Mar;124(3):1140–4

Acid phosphatase activity and fresh tissue weights of accessory sex organs in adult male rats following pituitary transplantation. Tripathi Y, et al. **Indian J Physiol Pharmacol** 1988 Oct–Dec;32(4):271–7

Melatonin effects on prolactin secretion in pituitary–grafted female rats. Esquifino AI, et al. **J Endocrinol Invest** 1989 Mar;12(3):171–6

Two kinds of cells in grafts of pituitary pars intermedia and their probable dependence on dopamine. Iturriza FC. **Neuroendocrinology** 1989 Jan;49(1):1–6

Effects of estradiol on circulating levels of prolactin in female rats bearing ectopic pituitaries. Fernández–Ruiz JJ, et al. **Rev Esp Fisiol** 1988 Jun;44(2):205–10

Fetal pituitary transplants into the hypothalamic area of hypophysectomized rats. Akalan N, et al. **Surg Neurol** 1988 Nov;30(5):342–9

ULTRASTRUCTURE

The ultrastructure of the pars intermedia and the subdivision of its glandular cells in the young sheep pituitary. Ishii T, et al. **Arch Histol Cytol** 1989 May;52(2):123–33

Immunocytochemical and ultrastructural study of the frog (Rana pipiens) pars distalis with special reference to folliculo–stellate cell function during in vitro superfusion. Gracia–Navarro F, et al. **Cell Tissue Res** 1989 Jun; 256(3):623–30

Ultrastructural observation on influence of gossypol on the hormone–secreting cells of pituitary–testis axis of rats. Yu MQ, et al. **J Tongji Med Univ** 1988;8(4):229–31

Prolactin cells and plasma prolactin levels in the aging male Wistar rat: an immunocytochemical and biochemical study. van Putten LJ, et al. **Mech Ageing Dev** 1988 Nov 30; 45(3):253–76

PITUITARY GLAND, ANTERIOR

Immunocytochemical demonstration of growth hormone in an acidophilic adenoma of the adenohypophysis in a cat. Heinrichs M, et al. **Vet Pathol** 1989 Mar;26(2):179–80

ABNORMALITIES

Micropenis and congenital adrenal hypoplasia. Bourgeois MJ,

et al. **Am J Perinatol** 1989 Jan;6(1):69–71

ANALYSIS

Renin–angiotensin system in the anterior pituitary of the rat. Ganong WF, et al. **Am J Hypertens** 1989 Apr;2(4):320–2 (15 ref.)

Immunocytochemical localization of vimentin in stellate cells (folliculo–stellate cells) of the rat, cat and rabbit pituitary pars distalis. Marin F, et al. **Anat Embryol (Berl)** 1989; 179(5):491–5

A tissue–specific transcription factor containing a homeodomain specifies a pituitary phenotype. Ingraham HA, et al. **Cell** 1988 Nov 4;55(3):519–29

Increased production of alpha–melanocyte–stimulating hormone in the pituitary gland of patients with untreated Addison's disease. Coates PJ, et al. **Clin Endocrinol (Oxf)** 1988 Oct;29(4):421–6

Partial purification of a sodium pump inhibitor from bovine adenohypophysis. Its comparison with the natriuretic factor isolated from hypothalamus. Illescas M, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:301–7

Measurement of the amount of mRNA for gonadotropins during an estradiol–induced preovulatory–like surge of LH and FSH in ovariectomized ewes. Hamernik DL, et al. **Domest Anim Endocrinol** 1988 Apr;5(2):129–39

Concentrations of bioactive and immunoactive luteinizing hormone in bovine anterior pituitary tissue. Moss GE, et al. **Domest Anim Endocrinol** 1988 Apr;5(2):185–90

Pituitary receptors for GnRH and estradiol, and pituitary content of gonadotropins in beef cows. I. Changes during the estrous cycle. Nett TM, et al. **Domest Anim Endocrinol** 1987 Apr;4(2):123–32

Adenohypophyseal receptors for LHRH, pituitary content of gonadotropins and plasma concentrations of LH in cyclic, pregnant and postpartum beef cows. Rahe CH, et al. **Domest Anim Endocrinol** 1988 Oct;5(4):291–8

Dynamic change in charge heterogeneity of pituitary FSH throughout the estrous cycle in female rats. Ozawa K, et al. **Endocrinol Jpn** 1988 Apr;35(2):321–32

Estrogen and progestin receptor immunocytochemistry in lactotropes versus gonadotropes of monkey pituitary cell cultures. Sprangers SA, et al. **Endocrinology** 1989 Mar; 124(3):1462–70

Presence of angiotensin II in the adult male rat anterior pituitary gland: immunocytochemical study after cryoultramicrotomy. Chabot JG, et al. **Exp Cell Res** 1989 Jan;180(1):189–97

Purification and characterization of Atlantic salmon prolactin. Andersen O, et al. **Gen Comp Endocrinol** 1989 Mar;73(3):354–60

Purification of maturational gonadotropin from Atlantic croaker (Micropogonias undulatus) and development of a homologous radioimmunoassay. Copeland PA, et al. **Gen Comp Endocrinol** 1989 Mar;73(3):425–41

Purification and characterization of bullfrog growth hormone. Kobayashi T, et al. **Gen Comp Endocrinol** 1989 Mar;73(3):417–24

The distribution of GAWK–like immunoreactivity in neuroendocrine cells of the human gut, pancreas, adrenal and pituitary glands and its co–localisation with chromogranin B. Bishop AE, et al. **Histochemistry** 1989; 90(6):475–83

Localization of fibronectin in the folliculo–stellate cells of the rat anterior pituitary by the double bridge peroxidase–antiperoxidase method. Liu YC, et al. **Histochemistry** 1989;92(1):43–5

Somatostatin receptors in brain and pituitary. Epelbaum J, et al. **Horm Res** 1989;31(1–2):45–50 (45 ref.)

Purification and characterization of the D2–dopamine receptor from bovine anterior pituitary. Senogles SE, et al. **J Biol Chem** 1988 Dec 15;263(35):18996–9002

Characterization of oxytocin receptors in rat adenohypophysis using a radioiodinated receptor antagonist peptide. Chadio SE, et al. **J Endocrinol** 1989 Aug;122(2):465–70

Demonstration of desacetyl alpha–melanocyte–stimulating hormone in fetal and adult human anterior pituitary corticotrophs. Coates PJ, et al. **J Endocrinol** 1989 Mar; 120(3):525–30

The anterior pituitary content of neuromedin U–like immunoreactivity is altered by thyrotrophin–releasing hormone and thyroid hormone status in the rat. Domin J, et al. **J Endocrinol** 1989 Aug;122(2):471–6

Reduced vasoactive intestinal polypeptide immunoreactivity in the pituitaries of hormone–deficient mutant mice. Noguchi T, et al. **J Endocrinol** 1988 Aug;118(2):179–85

Demonstration of melatonin–binding sites on the pars tuberalis of the rat. Williams LM, et al. **J Endocrinol** 1988 Oct;119(1):R1–3

Nuclear proteins from the rat pituitary gland bind to regulatory sequences of the thyrotrophin–beta gene. Ahlquist JA, et al. **J Mol Endocrinol** 1989 Mar;2(2):85–91

Treatment of ovariectomized heifers with bovine follicular fluid specifically suppresses pituitary levels of FSH–beta mRNA. Beard AJ, et al. **J Mol Endocrinol** 1989 Sep; 3(2):85–91

Prolactin (PRL) mRNA from human decidua differs from pituitary PRL mRNA but resembles the IM–9–P3 lymphoblast PRL transcript. Gellersen B, et al. **Mol Cell Endocrinol** 1989 Jun;64(1):127–30

Prolactin variants in the rat adenohypophysis. Shah GN, et al. **Mol Cell Endocrinol** 1989 Jan;61(1):97–107

Transforming growth factor–alpha expression in the anterior pituitary gland: regulation by epidermal growth factor and phorbol ester in dispersed cells. Mueller SG, et al. **Mol Endocrinol** 1989 Jun;3(6):976–83

Evidence of pre–prosomatostatin mRNA in human normal and tumoral anterior pituitary gland. Pagesy P, et al. **Mol Endocrinol** 1989 Aug;3(8):1289–94

Testosterone and dihydrotestosterone, but not estradiol, selectively maintain pituitary and serum follicle–stimulating hormone in gonadotropin–releasing hormone antagonist treated male rats. Arslan M, et al. **Neuroendocrinology** 1989 Apr;49(4):395–401

Neurotensin in microdissected brain nuclei and in the pituitary of the lean and obese Zucker rats. Beck B, et al. **Neuropeptides** 1989 Jan;13(1):1–7

ANATOMY & HISTOLOGY

[The histology of the adenohypophysis in swine (Sus scrofa dom.)] Gutte G, et al. **Arch Exp Veterinarmed** 1988 Sep; 42(5):683–92 (Eng. Abstr.) **(Ger)**

CYTOLOGY

Classifications of somatotropes, lactotropes and corticotropes in the mouse adenohypophysis with immunohistochemistry. Iwama Y, et al. **Acta Anat (Basel)** 1989;134(3):232–6

Crystalloid inclusions in folliculostellate cells of adenohypophysis following estrogen withdrawal from primed male rats. Reifel CW, et al. **Acta Anat (Basel)** 1989; 135(3):219–21

Cytological, immunocytochemical and ultrastructural study of GH cells of pars distalis adenohipophysaria of kids (Capra hircus). Gomez MA, et al. **Anat Histol Embryol** 1989 Jun;18(2):165–76

Intercellular communication between rat anterior pituitary cells. Soji T, et al. **Anat Rec** 1989 Aug;224(4):523–33

The immature type of pro–opiomelanocortin cell of the rat anterior pituitary as observed by immunogold electron microscopy. Kurosumi K, et al. **Arch Histol Cytol** 1989 May;52(2):135–50

Scanning electron microscopy of cytoplasmic filaments in rat anterior pituitary cells. Senda T, et al. **Arch Histol Cytol** 1988 Oct;51(4):371–8

Polichromic staining of five distinct cellular types in human and rat pituitaries. Villarreal ML, et al. **Bol Estud Med Biol** 1987 Jul–Dec;35(3–4):231–8

Granular, ciliated cells in the anterior pituitaries of immature rats. Gon G, et al. **Cell Tissue Res** 1988 Sep;253(3):683–4

Two types of mammosomatotropes in mouse adenohypophysis. Sasaki F, et al. **Cell Tissue Res** 1989 Jun; 256(3):645–8

Laminin induces formation of neurite–like processes and potentiates prolactin secretion by GH3 rat pituitary cells. Brunet–de Carvalho N, et al. **Differentiation** 1989 May; 40(2):106–18

LH release from dispersed bovine pituitary cells in culture: in vitro effects of estradiol and procedural variables. Chao CC, et al. **Domest Anim Endocrinol** 1987 Jul;4(3):139–47

Enrichment of corticotropes by counterflow centrifugation. Childs GV, et al. **Endocrinology** 1988 Dec;123(6):2885–95

Luteinizing hormone (LH)–releasing hormone: effects of induction of LH, follicle–stimulating hormone, and prolactin cell differentiation. Horacek MJ, et al. **Endocrinology** 1989 Apr;124(4):1800–6

Gonadal steroid modulation of signal transduction and luteinizing hormone release in cultured chicken pituitary cells. King JA, et al. **Endocrinology** 1989 Apr; 124(4):1830–40

Is atrial natriuretic peptide synthesized and internalized by gonadotrophs? Morel G, et al. **Endocrinology** 1989 Apr; 124(4):1703–10

Tumor necrosis factor–alpha inhibits growth hormone secretion from cultured anterior pituitary cells. Walton PE, et al. **Endocrinology** 1989 Aug;125(2):925–9

Secretory granules and endosomes show saltatory movement biased to the anterograde and retrograde directions, respectively, along microtubules in AtT20 cells. Kreis TE, et al. **Eur J Cell Biol** 1989 Jun;49(1):128–39

Morphometric investigations on endocrine glands. VII. The influence of some estrogens on the formation of castration cells in the anterior pituitary of rats. Löw O. **Exp Pathol** 1988;35(3):149–57

Growth hormone release from chicken anterior pituitary cells in primary culture: TRH and hpGRF synergy, protein synthesis, and cyclic adenosine 3'5'–monophosphate. Perez FM, et al. **Gen Comp Endocrinol** 1989 Jan;73(1):12–20

Control of prolactin secretion in the teleost Oreochromis mossambicus: effects of water acidification. Wendelaar Bonga SE, et al. **Gen Comp Endocrinol** 1988 Oct;72(1):1–12

Study of the gonadotropic cells in the rat after chronic administration of met–enkephalin: light, electron microscope and image analysis. Valle–Soto ME, et al. **Gynecol Endocrinol** 1988 Jun;2(2):139–49

Dome formation of keratin–containing agranular cells from rat anterior pituitary gland in vitro. Shimada T, et al. **In Vitro Cell Dev Biol** 1988 Dec;24(12):1193–200

Quantitative in–situ hybridization histochemistry studies on growth hormone (GH) gene expression in acromegalic somatotrophs: effects of somatostatin, GH–releasing factor and cortisol. Levy A, et al. **J Mol Endocrinol** 1988 Jul; 1(1):19–26

Argyrophil organizer region proteins (AgNORs) in adenohypophysial cells and adenomas of the human pituitary. Stefaneanu L, et al. **Mod Pathol** 1989 May; 2(3):192–9

Stimulation and inhibition of prolactin release from rat pituitary lactotrophs by the cholinomimetic carbachol in vitro. Influence of hormonal environment and intercellular contacts. Carmeliet P, et al. **Mol Cell Endocrinol** 1989 May; 63(1–2):121–31

Restoration of the LH secretory response in desensitized gonadotropes. Gorospe WC, et al. **Mol Cell Endocrinol** 1988 Sep;59(1–2):101–10

An ultrastructural and functional characterization of rat somatotrophs highly enriched on a continuous Percoll density gradient. Ohlsson L, et al. **Mol Cell Endocrinol** 1988 Sep;59(1–2):47–55

Regulatory activity and topological distribution of folliculo–stellate cells in rat anterior pituitary cell aggregates. Allaerts W, et al. **Neuroendocrinology** 1989 Apr; 49(4):409–18

Androgens exert selective effects on protein kinase C induced LH and FSH release in rat anterior pituitary cells in culture. Hubert JF, et al. **Neuroendocrinology** 1988 Oct;48(4):360–6

A subset of neurons containing immunoreactive prolactin is a target for estrogen regulation of gene expression in rat hypothalamus. Shivers BD, et al. **Neuroendocrinology** 1989 Jan;49(1):23–7

Substance P–like immunoreactive nerve fibers in the pars distalis of the adenohypophysis of macaque monkeys. Liu SJ, et al. **Neurosci Lett** 1988 Nov 22;94(1–2):1–4

Morphometric study of normal and adenomatous pituitary somatotrophs in humans. Tsanaclis AM, et al. **Pathol Res Pract** 1988 Sep;183(5):572–6

Hypothalamic peptides affect the ratios of GH and PRL cells: role of cell division. Frawley LS, et al. **Peptides** 1988 Jul–Aug;9(4):825–8

Dopamine affects two voltage–dependent K+ currents of identified rat lactotroph cells. Lledo PM, et al. **Pflugers Arch** 1989;414 Suppl 1:S160–1

Hormonal and neurotransmitter regulation of Ca channel activity in cultured adenohypophyseal cells. Cota G, et al. **Soc Gen Physiol Ser** 1989;44:143–65

Modulation of potassium channels by dopamine in rat pituitary lactotrophs: a role in the regulation of prolactin secretion? Gregerson KA, et al. **Soc Gen Physiol Ser** 1989; 44:123–41

Ion channels, intracellular calcium, and exocytosis: control of hormone secretion in cultured bovine pituitary lactotrophs. Mason WT, et al. **Soc Gen Physiol Ser** 1989; 44:225–38

[A quantitative immunocytochemical study on the gonadotrophs in the female rats during the estrous cycle] Chou SK, et al. **Sheng Li Hsueh Pao** 1988 Oct;40(5):430–6 (Eng. Abstr.) **(Chi)**

DRUG EFFECTS

Danazol stimulates the release of follicle–stimulating hormone and inhibits the release of prolactin in vitro studies on rat pituitary cell cultures. Kugu K, et al. **Arch Gynecol Obstet** 1989;244(3):157–62

Antagonism of estrogen–induced prolactin release by progesterone. Brann DW, et al. **Biol Reprod** 1988 Dec; 39(5):1067–73

In vitro estrogen–like effects of 7,12–dimethylbenz(a)anthracene on anterior pituitary dopamine receptors of rats. Pasqualini C, et al. **Cancer Res** 1988 Nov 15;48(22):6434–7

Contraceptive potential of RU 486 by ovulation inhibition: II. Suppression of pituitary gonadotropin secretion in vitro. Wolf JP, et al. **Contraception** 1989 Aug;40(2):185–93

Failure of neuropeptide Y to modulate the release of LH and prolactin by cultured bovine pituitary cells. Chao CC, et al. **Domest Anim Endocrinol** 1987 Oct;4(4):309–14

Effects of progesterone and weaning on LH and FSH responses to naloxone in postpartum beef cows. Cross JC, et al. **Domest Anim Endocrinol** 1987 Apr;4(2):111–22

Modulation of growth hormone–releasing factor–induced release of growth hormone from bovine pituitary cells. Padmanabhan V, et al. **Domest Anim Endocrinol** 1987 Oct; 4(4):243–52

Effects of parachlorophenylalanine, quipazine and cyproheptadine on growth hormone and adrenocorticotropin secretion in steers. Sartin JL, et al. **Domest Anim Endocrinol** 1987 Jan;4(1):33–41

The effect of bromocriptine on the lactotroph cells in two inbred strains of mice C3H/Sy and AKR/Sy. Stravoravdi P, et al. **Eur J Cancer Clin Oncol** 1988 Aug;24(8):1313–9

Cytological responses of the pituitary (rostral pars distalis) and immunoreactive corticotropin–releasing factor (CRF) in the goldfish treated with dopamine antagonists. Olivereau M, et al. **Gen Comp Endocrinol** 1988 Sep; 71(3):506–15

Pituitary response during pulsatile luteinizing hormone–releasing hormone ovulation—induction in patients with clomiphene citrate–resistant polycystic ovary–like disease. Burger CW, et al. **Gynecol Endocrinol** 1988 Mar;2(1):19–33

Influences of season and artificial photoperiod on stallions: pituitary and testicular responses to exogenous GnRH. Clay CM, et al. **J Anim Sci** 1989 Mar;67(3):763–70

Effects of metal cations on pituitary hormone secretion in vitro. Cooper RL, et al. **J Biochem Toxicol** 1987 Fall–Winter;2:241–9

Dependence of secretory responses to gonadotropin-releasing hormone on diacylglycerol metabolism. Studies with a diacylglycerol lipase inhibitor, RHC 80267. Chang JP, et al. **J Biol Chem** 1988 Dec 15; 263(35):18614–20

Arginine stimulates growth hormone secretion by suppressing endogenous somatostatin secretion. Alba-Roth J, et al. **J Clin Endocrinol Metab** 1988 Dec;67(6):1186–9

Testosterone administration inhibits gonadotropin secretion by an effect directly on the human pituitary. Sheckter CB, et al. **J Clin Endocrinol Metab** 1989 Feb;68(2):397–401

Lack of in vivo somatotroph desensitization or depletion after 14 days of continuous growth hormone (GH)-releasing hormone administration in normal men and a GH-deficient boy. Vance ML, et al. **J Clin Endocrinol Metab** 1989 Jan; 68(1):22–8

Effects of thyroxine on oestrogen receptor concentrations in anterior pituitary and hypothalamus of hypothyroid rats. Altschuler LR, et al. **J Endocrinol** 1988 Dec;119(3):383–7

Vitamin D-enhanced thyrotrophin release from rat pituitary cells: effects of Ca2+, dihydropyridines and ionomycin. d'Emden MC, et al. **J Endocrinol** 1989 Jun;121(3):441–50

Effects of tri-iodothyronine, cortisol and transcriptional inhibitors on vitamin D3-enhanced thyrotrophin secretion by rat pituitary cells in vitro. d'Emden MC, et al. **J Endocrinol** 1989 Jun;121(3):451–8

Gonadotrophin-releasing activity of neurohypophysial hormones: I. Potential for modulation of pituitary hormone secretion in rats. Evans JJ, et al. **J Endocrinol** 1989 Jul; 122(1):99–106

In-vitro control of growth hormone secretion by synthetic releasing factors in young and adult ducks (Anas platyrhynchos). Foltzer-Jourdainne C, et al. **J Endocrinol** 1988 Dec;119(3):421–9

Burmese Russell's viper venom causes hormone release from rat pituitary cells in vitro. Hart GR, et al. **J Endocrinol** 1989 Aug;122(2):489–94

The mitogenic effects of corticotrophin-releasing factor on the anterior pituitary gland of the rat. McNicol AM, et al. **J Endocrinol** 1988 Aug;118(2):237–41

Glucocorticoids act rapidly in vitro to attenuate second messenger responses to ACTH secretagogues in rats. Nicholson SA, et al. **J Endocrinol** 1989 Aug;122(2):545–51

Phorbol ester pretreatment attenuates the growth hormone (GH) response to GH-releasing factor in cultured rat pituitary cells. Ohmura E, et al. **J Endocrinol** 1988 Sep; 118(3):423–8

Indomethacin inhibits the effects of oestrogen in the anterior pituitary gland of the rat. Rosental DG, et al. **J Endocrinol** 1989 Jun;121(3):513–9

Impairment of stress-induced secretion of prolactin during development: effects of adrenalectomy, TRH and sulpiride. el Feki A, et al. **J Physiol (Paris)** 1988;83(1):36–42

Pituitary and ovarian responses of post-partum acyclic beef cows to continuous long-term GnRH and GnRH agonist treatment. D'Occhio MJ, et al. **J Reprod Fertil** 1989 Mar; 85(2):495–502

Inhibitory effects of the antiprogestin, RU 486, on progesterone actions and luteinizing hormone secretion in pituitary gonadotrophs. Ortmann O, et al. **J Steroid Biochem** 1989 Feb;32(2):291–7

Responsiveness of rat pituitary gland in vitro to pulsatile luteinising hormone-releasing hormone(LHRH) during the oestrous cycle. Aslam M, et al. **JPMA** 1988 Sep; 38(9):237–41

The action of hypothalamic and placental corticotropin releasing factor on the corticotrope. Thomson M, et al. **Mol Cell Endocrinol** 1989 Mar;62(1):1–12 (119 ref.)

Divergent effects of estradiol on gonadotropin gene transcription in pituitary fragments. Shupnik MA, et al. **Mol Endocrinol** 1989 Mar;3(3):474–80

Transient outward current (IA) in clonal anterior pituitary cells: blockade by aminopyridine analogs. Rogawski MA. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Aug; 338(2):125–32

Arginine vasopressin is a much more potent stimulus to ACTH release from ovine anterior pituitary cells than ovine corticotropin-releasing factor. 1. In vitro studies. Familari M, et al. **Neuroendocrinology** 1989 Aug; 50(2):152–7

Suppression of basal and GnRH-stimulated gonadotropin secretion rate in vitro by GnRH antagonist: differential effects on metestrous and proestrous pituitaries. Hiatt ES, et al. **Neuroendocrinology** 1989 Aug;50(2):158–64

Differential actions of arachidonic acid and melittin on luteinizing hormone release and synthesis. Liu TC, et al. **Neuroendocrinology** 1989 Jun;49(6):617–22

Effect of corticotropin-releasing factor on the release and synthesis of prolactin. Morel G, et al. **Neuroendocrinology** 1989 Jun;49(6):669–75

Activation of anterior pituitary folliculo-stellate cells in the formation of estrogen-induced prolactin-secreting tumors. Schechter J, et al. **Neuroendocrinology** 1988 Nov; 48(5):569–76

Effects of the benzazepine SCH 23390 on prolactin release from isolated pituitary. Navarra P, et al. **Pharmacol Toxicol** 1988 Aug;63(2):135–6

Human studies on the mu opiate receptor agonist fentanyl: neuroendocrine and behavioral responses. Hoehe M, et al. **Psychoneuroendocrinology** 1988;13(5):397–408

Paradoxical effect of corticosteroids on pituitary ACTH/beta-endorphin release in stressed animals. Young EA, et al. **Psychoneuroendocrinology** 1988;13(4):317–23

Multimodal control of pituitary gonadotropin biosynthesis. Effects of gonadal steroids, GnRH, cyclic AMP and diacylglycerols. Counis R, et al. **Reprod Nutr Dev** 1988; 28(4B):1193–205

[Comparison of the effect of various dosages of anordrin and levonorgestrel on the pituitary responsiveness to GnRH] Lu WY, et al. **Sheng Li Hsueh Pao** 1988 Jun;40(3):271–7 (Eng. Abstr.) **(Chi)**

[Functional relation of dopamine receptor stimulation and ionic fluxes in lactotroph cells] Valerio A, et al. **Ann Ist Super Sanita** 1988;24(4):543–5 (Eng. Abstr.) **(Ita)**

[Effects of chronic administration of several calcium antagonists on pituitary release of TSH] Castro N, et al. **Clin Ter** 1987 Aug 31;122(4):251–5 (Eng. Abstr.) **(Ita)**

[Effect of combined oral contraceptives on the hypophyseo-thyroid and hypophyseo-adrenal systems in women with various anatomy of the thyroid gland] Zigizmund VA, et al. **Akush Ginekol (Mosk)** 1988 Nov; (11):50–3 (Eng. Abstr.) **(Rus)**

[Effect of synthetic analogs of the sex steroid hormones on the secretory and proliferative activity of the adenohypophysis in vivo and in vitro in rats] Fedotov VP, et al. **Farmakol Toksikol** 1988 Sep-Oct;51(5):57–61 (Eng. Abstr.) **(Rus)**

[Effect of the stimulation of T-lymphocytes by thymus mitogenic factor on the somatotropic function of the hypophysis] Jighi KN, et al. **Fiziol Zh** 1988 Jul-Aug; 34(4):96–8 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

The development of corticotrophs in the fetal sheep pars distalis: the effect of adrenalectomy or cortisol infusion. Antolovich GC, et al. **Endocrinology** 1989 Mar; 124(3):1333–9

Pro-opiomelanocortin mRNA levels fall in the fetal sheep pituitary before birth. McMillen IC, et al. **J Mol Endocrinol** 1988 Sep;1(2):141–5

ENZYMOLOGY

Effect of guanine nucleotides on phospholipase C activity in permeabilized pituitary cells: possible involvement of an inhibitory GTP-binding protein. Limor R, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):209–15

Monooxygenase mediating catecholestrogen formation by rat anterior pituitary is an estrogen-4-hydroxylase. Bui QD, et al. **Endocrinology** 1989 Feb;124(2):1085–7

Aging alters the activity of 5'-deiodinase in the adenohypophysis, thyroid gland, and liver of the male rat. Donda A, et al. **Endocrinology** 1989 Mar;124(3):1305–9

Attenuation of anterior pituitary phosphoinositide phosphorylase activity by the D2 dopamine receptor. Jarvis WD, et al. **Endocrinology** 1988 Dec;123(6):2793–9

Localization of acid phosphatase in lysosomes of pituitary folliculo-stellate cells following estrogen withdrawal from primed male rats. Reifel CW, et al. **Histochemistry** 1989; 91(6):483–5

Ultrastructural study of the Ca2+-dependent ATPase activity in rat adenohypophyseal cells. el-sherif G, et al. **Histochemistry** 1989;91(6):501–5

Differential modulation of D1 and D2 dopamine-sensitive adenylate cyclases by 17 beta-estradiol in cultured striatal neurons and anterior pituitary cells. Maus M, et al. **J Neurochem** 1989 Feb;52(2):410–8

Estrogen regulation of rat anterior pituitary adenylate cyclase. Borgundvaag B, et al. **Mol Cell Endocrinol** 1988 Sep;59(1-2):35–45

Tissue-specific regulation of pyroglutamate aminopeptidase II activity by thyroid hormones. Ponce G, et al. **Neuroendocrinology** 1988 Aug;48(2):211–3

Somatostatin stimulates phosphodiesterase in rat anterior pituitary and brain, and GH4C1 cells. Rendón MC, et al. **Second Messengers Phosphoproteins** 1988;12(2-3):75–81

[5-alpha-reductase activity in the hypothalamus and pituitary gland of rats in various stages of pregnancy] Rembiesa R, et al. **Endokrynol Pol** 1988;39(1):27–32 (Eng. Abstr.) **(Pol)**

GROWTH & DEVELOPMENT

Detection of adrenocorticotropin-related and alpha-melanocyte-stimulating hormone-related substances in the anterior pituitary of larval and adult Ambystoma tigrinum (class: Amphibia). Dores RM, et al. **Endocrinology** 1989 Feb;124(2):1007–16

Ontogeny of prolactin secretion in the neonatal rat is regulated posttranscriptionally. Frawley LS, et al. **Endocrinology** 1989 Jan;124(1):3–6

Onset of glucocorticoid responsiveness of anterior pituitary corticotrophs during development is scheduled by corticotropin-releasing factor. Grino M, et al. **Endocrinology** 1989 Jun;124(6):2686–92

Ontogenesis of the three parts of the fetal rat adenohypophysis. A detailed immunohistochemical analysis. Nemeskéri A, et al. **Neuroendocrinology** 1988 Nov; 48(5):534–43

The melatonin receptors in rat ontogenesis. Vaněček J. **Neuroendocrinology** 1988 Aug;48(2):201–3

IMMUNOLOGY

Antibodies to newly recognized murine 13-18 KDa pituitary peptides crossreact with growth hormone and prolactin from several species, including man. Sinha YN, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):386–93

Cell surface antibodies in type 1 (insulin-dependent) diabetic patients. I. Presence of immunoglobulins M which bind to rat pituitary cells. Vercammen M, et al. **Diabetologia** 1989 Aug;32(8):611–7

Anterior pituitary cell antibodies detected in Hashimoto's thyroiditis and Graves' disease. Kobayashi I, et al. **Endocrinol Jpn** 1988 Oct;35(5):705–8

Effect of estrogen on the expression of a cell-surface antigen associated with rat anterior pituitary somatotrophs. Chen HT, et al. **Mol Cell Endocrinol** 1988 Oct;59(3):233–40

Neuroendocrine regulation of immunogenesis in alcoholism. Aliev NA. **Neurosci Behav Physiol** 1988 Nov-Dec; 18(6):519–21

[A case of Sheehan's syndrome and her two family members associated with anti-anterior pituitary cell autoantibodies] Murai T, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar; 78(3):404–5 **(Jpn)**

INNERVATION

Immunocytochemical demonstration of close relationships between neuropeptidergic nerve fibers and hormone-producing cell types in the adenohypophysis of the sea bass (Dicentrarchus labrax). Moons L, et al. **Gen Comp Endocrinol** 1989 Feb;73(2):270–83

METABOLISM

Presence of androgen receptors in the hen hypothalamus and pituitary. Kawashima M, et al. **Acta Endocrinol (Copenh)** 1989 Feb;120(2):217–24

Quantitative in-situ hybridization histochemistry of anterior pituitary hormone mRNA species in human pituitary adenomas. Levy A, et al. **Acta Endocrinol (Copenh)** 1988 Nov;119(3):397–404

Evidence for direct action of calcitonin in the rat pituitary gland. Morel G, et al. **Acta Endocrinol (Copenh)** 1989 May; 120(5):682–8

Dopamine D1 and D2 receptor selectivities of agonists and antagonists. Seeman P, et al. **Adv Exp Med Biol** 1988; 235:55–63

Cytosolic free calcium in normal somatotropes: effects of forskolin and phorbol ester. Holl RW, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):E375–9

TRH and BAY K 8644 synergistically stimulate prolactin release but not 45Ca2+ uptake. Pachter JA, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):C633–40

Co-localization pattern of growth hormone (GH) and prolactin (PRL) within the anterior pituitary cells in the female rat and female musk shrew. Ishibashi T, et al. **Anat Rec** 1989 Feb;223(2):185–93

Regulation of ion transport in hypophysial pars intermedia follicular cell monolayers. Ferrara N, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1376–82

Three growth hormone- and two prolactin-related novel peptides of Mr 13,000-18,000 identified in the anterior pituitary. Sinha YN, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):171–9

Release of beta-endorphin-immunoreactivity from rat pituitary and hypothalamus in vitro: effects of isoproterenol, dopamine, corticotropin-releasing factor and arginine8-vasopressin. Sweep CG, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):221–8

Thyrotropin-releasing hormone effects on phosphatidylinositol metabolism and binding in rat pituitary and retina. Naseem SM. **Biochem Int** 1989 Jan;18(1):203–10

Ba2+ stimulation of luteinizing-hormone release demonstrates two mechanisms of Ca2+ entry in gonadotrope cells. Smith CE, et al. **Biochem J** 1989 Apr 1;259(1):217–21

Incompletely processed LH molecules synthesized by rat gonadotrophs treated with inhibitors of oligosaccharide processing. Hattori M, et al. **Biochim Biophys Acta** 1989 Sep 15;992(3):272–80

The effect of acetylcholine on inositol lipid metabolism and intracellular calcium concentrations in bovine anterior pituitary cells. Wood CA, et al. **Biochim Biophys Acta** 1989 Sep 19;1013(2):180–9

Short-term pituitary-testicular responses of prepubertal ram lambs to hemicastration. Brown JL, et al. **Biol Reprod** 1988 Nov;39(4):854–61

Regulation of alpha and luteinizing hormone beta subunit messenger ribonucleic acids during stimulatory and downregulatory phases of gonadotropin-releasing hormone action. Kim WH, et al. **Biol Reprod** 1988 Nov;39(4):847–53

Actions of 17 beta-estradiol on gonadotropin release induced by drugs that activate intracellular signal transduction mechanisms in rat anterior pituitary cells. Liu TC, et al. **Biol Reprod** 1988 Nov;39(4):787–96

Role of the ventromedial hypothalamus in the regulation of adenohypophyseal immunoreactive dynorphin in the rat. Spampinato S, et al. **Brain Res** 1988 Oct 25;463(1):100–6

Short days induce changes in specific melatonin binding in hamster median eminence and anterior pituitary. Vaněček J, et al. **Brain Res** 1989 Jan 16;477(1-2):387–90

Neuropeptide Y does not inhibit the release of alpha-MSH from the pars intermedia of the rat adenohypophysis. Kraicer J, et al. **Can J Physiol Pharmacol** 1988 Apr;

66(4):318–20
Regional patterning of hormones in the female rat anterior pituitary: disproportionate changes over the estrous cycle. Goldman JM, et al. **Endocr Res** 1988–89;14(4):263–82
Phosphorylation of a group of proteins related to the physiological, multihormonal regulations of the various cell types in the anterior pituitary gland. Beretta L, et al. **Endocrinology** 1989 Sep;125(3):1358–64
Covalent labeling of the somatostatin receptor in rat anterior pituitary membranes. Bruno JF, et al. **Endocrinology** 1989 Feb;124(2):831–7
D-2 dopamine receptor activation reduces free [3H]arachidonate release induced by hypophysiotropic peptides in anterior pituitary cells. Canonico PL. **Endocrinology** 1989 Sep;125(3):1180–6
Characterization of anterior pituitary target cells for arginine vasopressin: including cells that store adrenocorticotropin, thyrotropin–beta, and both hormones. Childs GV, et al. **Endocrinology** 1989 Jul;125(1):554–9
Growth hormone synthesis and secretion by a somatomammotroph cell line derived from normal adult pituitary of the rat. Chomczynski P, et al. **Endocrinology** 1988 Nov;123(5):2276–83
The posttranslational processing of prodynorphin in the rat anterior pituitary. Day R, et al. **Endocrinology** 1989 May; 124(5):2392–405
Bovine pituitary folliculo–stellate cells have beta–adrenergic receptors positively coupled to adenosine 3',5'–cyclic monophosphate production. Findell PR, et al. **Endocrinology** 1988 Nov;123(5):2454–61
Protein kinase C is not essential for growth hormone (GH)–releasing factor–induced GH release from rat somatotrophs. French MB, et al. **Endocrinology** 1989 May; 124(5):2235–44
Evidence for neuropeptide Y synthesis in the rat anterior pituitary and the influence of thyroid hormone status: comparison with vasoactive intestinal peptide, substance P, and neurotensin. Jones PM, et al. **Endocrinology** 1989 Jul;125(1):334–41
Vasoactive intestinal peptide in the anterior pituitary is increased in hypothyroidism. Lam KS, et al. **Endocrinology** 1989 Feb;124(2):1077–84
Binding of a iodinated substance P analog to a NK–1 receptor on isolated cell membranes from rat anterior pituitary. Larsen PJ, et al. **Endocrinology** 1989 May;124(5):2548–57
Blockade of growth hormone–releasing factor (GRF) activity in the pituitary and hypothalamus of the conscious rat with a peptidic GRF antagonist. Lumpkin MD, et al. **Endocrinology** 1989 Mar;124(3):1522–31
Dopamine withdrawal and addition of thyrotropin–releasing hormone stimulate membrane translocation of protein kinase–C and phosphorylation of an endogenous 80K substrate in enriched lactotrophs. Martínez de la Escalera G, et al. **Endocrinology** 1989 Sep;125(3):1168–73
Chronic estrogen treatment promotes a functional uncoupling of the D2 dopamine receptor in rat anterior pituitary gland. Munemura M, et al. **Endocrinology** 1989 Jan;124(1):346–55
The gonadotropin–releasing hormone pituitary receptor interacts with a guanosine triphosphate–binding protein: differential effects of guanyl nucleotides on agonist and antagonist binding. Perrin MH, et al. **Endocrinology** 1989 Feb;124(2):798–804
Ovariectomy permits progesterone to increase the binding of [3H]spiperone to the anterior pituitary gland in estrogen–primed rats. Pilotte NS, et al. **Endocrinology** 1989 Feb;124(2):805–11
Production and regulation of inhibin subunits in pituitary gonadotropes. Roberts V, et al. **Endocrinology** 1989 Jan; 124(1):552–4
The dynamics of arachidonic acid liberation and prolactin release: a comparison of thyrotropin–releasing hormone, angiotensin II, and neurotensin stimulation in perifused rat anterior pituitary cells. Ross PC, et al. **Endocrinology** 1988 Nov;123(5):2445–53
Estrogen regulation of prolactin gene transcription in vivo: paradoxical effects of 17 beta–estradiol dose. Shull JD, et al. **Endocrinology** 1989 Jan;124(1):279–85
Modulation of pituitary gonadotropin–releasing hormone receptors during lactation in the rat. Smith MS, et al. **Endocrinology** 1989 Mar;124(3):1456–61
Interleukin–6 stimulates anterior pituitary hormone release in vitro. Spangelo BL, et al. **Endocrinology** 1989 Jul; 125(1):575–7
Effects of protein kinase–C–related adrenocorticotropin secretagogues and interleukin–1 on proopiomelanocortin gene expression in rat anterior pituitary cells. Suda T, et al. **Endocrinology** 1989 Mar;124(3):1444–9
Effect of purified 31K bovine inhibin on the specific binding of gonadotropin–releasing hormone to rat anterior pituitary cells in culture. Wang QF, et al. **Endocrinology** 1988 Nov; 123(5):2161–6
Inhibitory effect of pure 31–kilodalton bovine inhibin on gonadotropin–releasing hormone (GnRH)–induced up–regulation of GnRH binding sites in cultured rat anterior pituitary cells. Wang QF, et al. **Endocrinology** 1989 Jan;124(1):363–8
Indirect relationship between vasopressin–induced secretion of ACTH and cyclic nucleotides in cultured anterior pituitary cells. Koch B, et al. **Eur J Pharmacol** 1989 Jan 2;159(1):53–60
Effect of sex steroids on GABA receptors in the rat hypothalamus and anterior pituitary gland. Lasaga M, et al. **Eur J Pharmacol** 1988 Oct 11;155(1–2):163–6
Opioids and cytosolic calcium in rat anterior pituitary: dynorphin preparation showed LHRH–like action due to contamination. Knepel W, et al. **Experientia** 1988 Dec 1; 44(11–12):1003–5
Extracellular adenosine triphosphate activates phospholipase C and mobilizes intracellular calcium in primary cultures of sheep anterior pituitary cells. van der Merwe PA, et al. **FEBS Lett** 1989 Jan 30;243(2):333–6
Beta–endorphin in the brainstem, pituitary, and spinal fluid of infants at autopsy: relation to sudden infant death syndrome. Hollander N. **Forensic Sci Int** 1988 Jul–Aug; 38(1–2):67–74
Relationship between serum growth hormone levels and the brain and pituitary content of immunoreactive somatostatin in the goldfish, Carassius auratus L. Marchant TA, et al. **Gen Comp Endocrinol** 1989 Mar;73(3):458–68
Effect of clomiphene citrate on prolactin and gonadotropin release during GnRH–analog treatment. Martikainen H, et al. **Gynecol Endocrinol** 1988 Mar;2(1):53–8
Pulsatile beta–endorphin release from the human pituitary in vitro. Rossmanith WG, et al. **Gynecol Endocrinol** 1988 Mar;2(1):1–10
Calcium ion uptake, somatotropin release, and fine structure of somatotrophs in cultures of the rat anterior pituitary upon the action of an oligopeptide (Boc–Gln–Leu–Lysinal). Rappay G, et al. **Histochemistry** 1989;91(6):517–21
Presence of a insulin–like growth factor I (somatomedin C) immunoreactive substance in GH producing cells in the bovine anterior pituitary. Noguchi T, et al. **Horm Metab Res** 1989 Apr;21(4):165–7
Expression of human preproapo AI and pre(delta pro)apoAI in a murine pituitary cell line (AtT–20). A comparison of their intracellular compartmentalization and lipid affiliation. Fennewald SM, et al. **J Biol Chem** 1988 Oct 25;263(30):15568–77
Evidence for a role of protein kinase C in luteinizing hormone synthesis and secretion. Impaired responses to gonadotropin–releasing hormone in protein kinase C–depleted pituitary cells. Stojilković SS, et al. **J Biol Chem** 1988 Nov 25;263(33):17307–11
Substance P receptors in human pituitary: a potential inhibitor of luteinizing hormone secretion. Wormald PJ, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):612–5
Multiple forms of rat prolactin and growth hormone in pituitary cell subpopulations separated using a Percoll gradient system: disulphide–bridged dimers and glycosylated variants. Bollengier F, et al. **J Endocrinol** 1989 Feb;120(2):201–6
Gonadotrophin–releasing activity of neurohypophysial hormones: II. The pituitary oxytocin receptor mediating gonadotrophin release differs from that of corticotrophs. Evans JJ, et al. **J Endocrinol** 1989 Jul;122(1):107–16
Effects of 31 kDa bovine inhibin on FSH and LH in rat pituitary cells in vitro: antagonism of gonadotrophin–releasing hormone agonists. Farnworth PG, et al. **J Endocrinol** 1988 Nov;119(2):233–41
Effect of serotonin on alpha–melanocyte–stimulating hormone secretion from perifused frog neurointermediate lobe: evidence for the presence of serotonin–containing cells in the frog pars intermedia. Lamacz M, et al. **J Endocrinol** 1989 Jul;122(1):135–46
Facilitated calcium mobilization and inositol phosphate production in the priming effect of LH–releasing hormone in the rat. Mitchell R, et al. **J Endocrinol** 1988 Nov; 119(2):293–301
Stimulation of release of growth hormone from the anterior pituitary by alpha–melanocyte–stimulating hormone: a possible mechanism for induction of pseudopregnancy in the rat. Volosin M, et al. **J Endocrinol** 1988 Sep; 118(3):465–70
Thyrotrophin–releasing hormone (TRH)–induced growth hormone secretion in fowl: binding of TRH to pituitary membranes. Harvey S, et al. **J Mol Endocrinol** 1989 Jul; 3(1):23–32
Presence of pro–vasopressin mRNA, neurophysin and arginine vasopressin in mouse anterior pituitary cells and the AtT–20 corticotrophic tumour cell line. Loh YP, et al. **J Mol Endocrinol** 1988 Jul;1(1):39–48
Protein phosphorylation induced by phorbol esters and cyclic AMP in anterior pituitary cells: possible role in adrenocorticotropin release and synthesis. Rougon G, et al. **J Neurochem** 1989 Apr;52(4):1270–8
Phorbol esters and corticotropin releasing factor stimulate calcium influx in the anterior pituitary tumor cell line, AtT–20, through different intracellular sites of action. Reisine T. **J Pharmacol Exp Ther** 1989 Mar;248(3):984–90
Testosterone metabolism in neuroendocrine organs in male rats under atrazine and deethylatrazine influence. Babić–Gojmerac T, et al. **J Steroid Biochem** 1989 Jul; 33(1):141–6
Effect of ethanol on androgen receptors in the anterior pituitary, hypothalamus and brain cortex in rats. Chung KW. **Life Sci** 1989;44(4):273–80
Different processing of chromogranin B into GAWK–immunoreactive fragments in the bovine adrenal medulla and pituitary gland. Iguchi H, et al. **Life Sci** 1988; 43(23):1945–52
Intracellular calcium levels in rat anterior pituitary cells: single–cell techniques. Leong DA. **Methods Enzymol** 1989; 168:263–84
Adenosine regulates the release of adrenocorticotropic hormone (ACTH) from cultured anterior pituitary cells. Anand–Srivastava MB, et al. **Mol Cell Biochem** 1989 Aug 15;89(1):21–8
Transmembrane signals mediating adrenocorticotropin release from mouse anterior pituitary cells. Castro MG, et al. **Mol Cell Endocrinol** 1989 Aug;65(1–2):165–73
Regulation of human chorionic somatomammotropin gene expression in rat pituitary tumour cells. Cattini PA, et al. **Mol Cell Endocrinol** 1988 Dec;60(2–3):217–24
Monensin influences basal and human growth hormone–releasing hormone 44–induced release of stored and new rat growth hormone and prolactin. Farmer PK, et al. **Mol Cell Endocrinol** 1989 Apr;62(2):253–62
Lutropin molecules synthesized by rat gonadotroph primary cultures in the presence of swainsonine: their oligosaccharides and biological potencies. Hattori M, et al. **Mol Cell Endocrinol** 1988 Sep;59(1–2):1–11
Binding and internalization of a iodinated substance P analog by cultured anterior pituitary cells. Larsen PJ, et al. **Mol Cell Endocrinol** 1989 Aug;65(1–2):91–101
Similarity of an estrogen–induced protein and a luteinizing hormone releasing hormone–induced protein. Mobbs C, et al. **Mol Cell Endocrinol** 1989 Apr;62(2):297–306
Production and secretion of the 21–23.5 kDa prolactin–like molecules. Oetting WS, et al. **Mol Cell Endocrinol** 1989 Feb;61(2):189–99
Activation of protein kinase C and L calcium channels enhances binding of biotinylated corticotropin–releasing hormone by anterior pituitary corticotropes. Childs GV, et al. **Mol Endocrinol** 1989 Jan;3(1):117–26
Proximal rat prolactin promoter sequences direct optimal, pituitary cell–specific transcription. Lufkin T, et al. **Mol Endocrinol** 1989 Mar;3(3):559–66
Proteolytic processing of pro–ACTH/endorphin begins in the Golgi complex of pituitary corticotropes and AtT–20 cells. Schnabel E, et al. **Mol Endocrinol** 1989 Aug; 3(8):1223–35
Arachidonic acid elevates cytosolic free calcium concentration in rat anterior pituitary cells. Knepel W, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Sep; 338(3):303–9
cAMP– and diacylglycerol–mediated pathways elevate cytosolic free calcium concentration via dihydropyridine–sensitive, omega–conotoxin–insensitive calcium channels in normal rat anterior pituitary cells. Schöfl C, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan–Feb;339(1–2):1–7
Evidence that clomethiazole interacts with the macromolecular GABA A–receptor complex in the central nervous system and in the anterior pituitary gland. Vincens M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Apr; 339(4):397–402
Differential alterations in dopamine turnover rates in the stalk–median eminence and posterior pituitary during the preovulatory prolactin surge. Arbogast LA, et al. **Neuroendocrinology** 1989 May;49(5):525–30
Post–translational processing of pro–opiomelanocortin in the Brattleboro (di/di) rat pituitary. Canny BJ, et al. **Neuroendocrinology** 1988 Dec;48(6):603–10
A D–2 dopaminergic agonist stimulates secretion of anterior pituitary immunoreactive beta–endorphin in rats. Farah JM Jr, et al. **Neuroendocrinology** 1989 Jul;50(1):26–32
GABAergic biochemical parameters of the tuberoinfundibular neurons following chronic hyperprolactinemia. Felman K, et al. **Neuroendocrinology** 1989 Jun;49(6):580–5
Biochemical investigation of the subcellular localization of the estrogen–induced pro–glandular kallikrein in the rat anterior pituitary. Hatala MA, et al. **Neuroendocrinology** 1989 May;49(5):537–44
Studies on the conditions determining the inhibitory effect of somatostatin on adrenocorticotropin, prolactin and thyrotropin release by cultured rat pituitary cells. Lamberts SW, et al. **Neuroendocrinology** 1989 Jul;50(1):44–50
Changes in the number of GnRH–receptive cells during the rat estrous cycle: biphasic effects of estradiol. Lloyd JM, et al. **Neuroendocrinology** 1988 Aug;48(2):138–46
Spontaneous changes in LHRH release during the rat estrous cycle, as measured with repetitive push–pull perfusions of the pituitary gland in the same female rats. Park OK, et al. **Neuroendocrinology** 1989 Jul;50(1):66–72
Gonadotropin–releasing hormone–stimulated phosphoinositide hydrolysis in the anterior pituitary. Modulation by protein kinase C but not by cyclic nucleotides. Sortino MA, et al. **Neuroendocrinology** 1988 Nov;48(5):544–50
Production of interleukin–6 by folliculo–stellate cells of the anterior pituitary gland in a histiotypic cell aggregate culture system. Vankelecom H, et al. **Neuroendocrinology** 1989 Jan;49(1):102–6
The dopamine agonist, PHNO ((+)–4–propyl–9–hydroxynaphthoxazine), inhibits cyclic adenosine 3',5'–monophosphate formation and prolactin release from anterior pituitary cells. Login IS, et al. **Neuropharmacology** 1989 Jun;28(6):647–50
Interaction of putative vasopressin receptors in rat brain and bovine pituitary gland with a vasopressin anti–idiotype antibody as revealed by immunoblotting. Abood LG, et al. **Peptides** 1988 Nov–Dec;9(6):1407–9
Small–conductance chloride channels activated by calcium on cultured endocrine cells from mammalian pars intermedia. Taleb O, et al. **Pflugers Arch** 1988 Oct;

412(6):641–6
Adenohypophysial changes in conventional, germ free and food–restricted aging Lobund–Wistar rats. A histologic, immunocytochemical and electron microscopic study. Kovacs K, et al. **Prog Clin Biol Res** 1989;287:181–90
Identification of a thyroid hormone receptor that is pituitary–specific. Hodin RA, et al. **Science** 1989 Apr 7; 244(4900):76–9
Conversion of 17 alpha–hydroxyprogesterone to 5 alpha, 3 alpha, and 20 alpha–reduced metabolites by female rat anterior pituitary and hypothalamus. Karavolas HJ, et al. **Steroids** 1988 May–Jun;51(5–6):527–41

PATHOLOGY

Cytoendocrinological findings in the pituitary glands of patients with psoriasis. Weber G, et al.
Acta Endocrinol (Copenh) 1988 Dec;119(4):501–5
Morphological studies on the paraneuron in spontaneously hypertensive rats. Tabei R, et al.
Clin Exp Hypertens [A] 1988;10 Suppl 1:235–47
A case of hypopituitarism due to granulomatous and lymphocytic adenohypophysitis with minimal pituitary enlargement: a possible variant of lymphocytic adenohypophysitis. Miyamoto M, et al. **Endocrinol Jpn** 1988 Aug;35(4):607–16
Bromocriptine–responsive Cushing's disease associated with anterior pituitary corticotroph hyperplasia or normal pituitary gland. Croughs RJ, et al.
J Clin Endocrinol Metab 1989 Feb;68(2):495–8
Pituitary hyperplasia. Horvath E. **Pathol Res Pract** 1988 Sep; 183(5):623–5 (10 ref.)
Fine structural cytology and immunohistochemistry of the non–adenomatous pars distalis of the human pituitary. Horvath E. **Pathol Res Pract** 1988 Sep;183(5):631–3 (7 ref.)
Analysis of mammosomatotropic cells in normal and neoplastic human pituitaries. Lloyd RV.
Pathol Res Pract 1988 Sep;183(5):577–9
Pathology of the pituitary gland in patients with the acquired immune deficiency syndrome (AIDS). Ferreiro J, et al. **Pathology** 1988 Jul;20(3):211–5

PHYSIOLOGY

Ultrastructural and functional characteristics of anterior pituitary cells in the Indian fruit bat, Rousettus leschenaulti (Desmarest). Bhiwgade DA, et al. **Acta Anat (Basel)** 1989; 135(2):129–41
Endocrine disorders and growth after cranial radiation. Rappaport R, et al. **Acta Paediatr Jpn Overseas Ed** 1988; 30 Suppl:55–60
Functions for calcium channels in pituitary cells. DeRiemer SA. **Ann N Y Acad Sci** 1989;560:413–4
The effect of an anti–progestin compound (RU486) on gonadotropin release from rat anterior pituitary cells in vitro. Arakawa S, et al.
Asia Oceania J Obstet Gynaecol 1988 Jun;14(2):251–7
Ability of repetitive Ca2+ spikes to stimulate prolactin release is frequency dependent. Law GJ, et al.
Biochem Biophys Res Commun 1989 Feb 15;158(3):811–6
Vasoactive intestinal peptide and anterior pituitary function. Prysor–Jones RA, et al. **Clin Endocrinol (Oxf)** 1988 Dec; 29(6):677–88 (67 ref.)
Response and binding elements for ligand–dependent positive transcription factors integrate positive and negative regulation of gene expression. Rosenfeld MG, et al.
Cold Spring Harb Symp Quant Biol 1988;53 Pt 1:545–56
Subcellular localization of prolactin in the anterior pituitary cells of the female Japanese house bat, Pipistrellus abramus. Ishibashi T, et al. **Endocrinology** 1989 Feb;124(2):1056–63
Expression of alpha–subunit and luteinizing hormone (LH) beta messenger ribonucleic acid in the rat during lactation and after pup removal: relationship to pituitary gonadotropin–releasing hormone receptors and pulsatile LH secretion. Lee LR, et al. **Endocrinology** 1989 Feb; 124(2):776–82
Nitroimidazole derivatives inhibit anterior pituitary cell function apparently by a direct effect on the catalytic subunit of the adenylate cyclase holoenzyme. Stalla GK, et al. **Endocrinology** 1989 Aug;125(2):699–706
Hypothalamic regulation of the adenohypophyseal–testicular axis in the male chick embryo. Woods JE, et al.
Gen Comp Endocrinol 1989 May;74(2):167–72
Multiple transduction mechanisms of dopamine, somatostatin and angiotensin II receptors in anterior pituitary cells. Enjalbert A. **Horm Res** 1989;31(1–2):6–12 (46 ref.)
Characterization of 17–beta–estradiol–dependent and –independent somatostatin receptor subtypes in rat anterior pituitary. Kimura N, et al. **J Biol Chem** 1989 Apr 25; 264(12):7033–40
Specific effect of CV 205–502, a potent nonergot dopamine agonist, during a combined anterior pituitary function test. Gaillard RC, et al. **J Clin Endocrinol Metab** 1989 Feb; 68(2):329–35
The nature of the gonadotropin–releasing hormone stimulus–luteinizing hormone secretory response of human gonadotrophs in vivo. Veldhuis JD, et al.
J Clin Endocrinol Metab 1989 Mar;68(3):661–70
The oestrogen–induced surge of LH requires a 'signal' pattern of gonadotrophin–releasing hormone input to the pituitary gland in the ewe. Clarke IJ, et al. **J Endocrinol** 1989 Jul; 122(1):127–34
The self–priming action of LHRH increases the low pituitary LH and FSH response caused by ovarian factors: observations in vitro. de Koning J, et al. **J Endocrinol** 1989 Mar;120(3):439–47
Osmotic regulation of hypothalamo–neurointermediate lobe corticotrophin–releasing factor–41 in the rat. Jessop DS, et al. **J Endocrinol** 1989 Jan;120(1):119–24
In–vitro secretion of prolactin and growth hormone in the presence of melatonin by pituitary gland from mink kept under long or short days. Meunier M, et al.
J Endocrinol 1988 Nov;119(2):287–92
The somatotrope: an endocrine cell with functional calcium transients. Thorner MO, et al. **J Exp Biol** 1988 Sep; 139:169–79 (40 ref.)
Changes in pituitary responsiveness during the ovulatory cycle of the Japanese quail, in vitro. Connolly PB, et al.
J Exp Zool 1988 Aug;247(2):172–6
2–Hydroxyestradiol is not mediating the effects of estradiol on tuberoinfundibular dopaminergic neurons controlling prolactin secretion in female rats. Fernández–Ruiz JJ, et al. **J Steroid Biochem** 1989 Jan;32(1A):71–5
Patch clamp recording from anterior pituitary cells identified by reverse hemolytic plaque assay. Croxton TL, et al.
Methods Enzymol 1989;168:144–66
Cell–to–cell communication in peptide target cells of anterior pituitary. Denef C, et al. **Methods Enzymol** 1989;168:47–71
Dopamine has no effect on thyrotropin–releasing hormone mobilization of calcium from intracellular stores in rat anterior pituitary cells. Law GJ, et al. **Mol Endocrinol** 1988 Oct;2(10):966–72
Aminopyridines enhance opening of calcium–activated potassium channels in GH3 anterior pituitary cells. Rogawski MA. **Mol Pharmacol** 1989 Apr;35(4):458–68
Regulatory activity and topological distribution of folliculo–stellate cells in rat anterior pituitary cell aggregates. Allaerts W, et al. **Neuroendocrinology** 1989 Apr; 49(4):409–18
Chromogranin A messenger RNA expression in the rat anterior pituitary is permissively regulated by the adrenal gland. Grino M, et al. **Neuroendocrinology** 1989 Jan; 49(1):107–10
Some aspects of the neurotransmitter control of anterior pituitary function. Müller EE. **Pharmacol Res** 1989 Jan–Feb;21(1):75–85 (46 ref.)
Regulatory role of galanin in control of hypothalamic–anterior pituitary function. Ottlecz A, et al.
Proc Natl Acad Sci U S A 1988 Dec;85(24):9861–5
Pituitary intracisternal granule formation during the estrus cycle of the rat. Peters LL, et al. **Tissue Cell** 1989;21(1):11–5

PHYSIOPATHOLOGY

Corticotropin releasing factor receptors: characterization and actions in the anterior pituitary gland. Aguilera G, et al.
Adv Exp Med Biol 1988;245:83–105 (57 ref.)
Studies on the secretion of corticotropin–releasing factor into hypophysial portal blood. Guillaume V, et al.
Adv Exp Med Biol 1988;245:137–41 (17 ref.)
Regulation of pituitary cyclic AMP, plasma prolactin and POMC–derived peptide responses to stressful conditions. Meyerhoff JL, et al. **Adv Exp Med Biol** 1988;245:107–22 (92 ref.)
Pituitary–thyroid relationships in hypothyroidism. Silva JE. **Baillieres Clin Endocrinol Metab** 1988 Aug;2(3):541–65 (129 ref.)
The role of a highly sensitive amplified enzyme immunoassay for thyrotrophin in the evaluation of thyrotroph function in hypopituitary patients. Blunt S, et al.
Clin Endocrinol (Oxf) 1988 Oct;29(4):387–93
The effect of oxytocin infusion on adenohypophysial and adrenal cortical responses to insulin–induced hypoglycaemia. Nussey SS, et al. **Clin Endocrinol (Oxf)** 1988 Sep;29(3):257–64
Pituitary–ovarian responses to nafarelin testing in the polycystic ovary syndrome. Barnes RB, et al.
N Engl J Med 1989 Mar 2;320(9):559–65
Anterior and posterior pituitary function in brain–stem–dead donors. A possible role for hormonal replacement therapy. Howlett TA, et al. **Transplantation** 1989 May;47(5):828–34
[Hann syndrome: remission of diabetes insipidus by functional failure of the anterior pituitary gland] Honti J, et al.
Z Gesamte Inn Med 1988 Aug 1;43(15):414–5 (Eng. Abstr.) **(Ger)**
[Function of the adenohypophysis and adrenals in ruptures of aneurysms of the cerebral arteries] Alekseev VV, et al.
Sov Med 1988;(12):8–12 (Eng. Abstr.) **(Rus)**

SECRETION

Quantitation of uncombined gonadotropin subunits within and released by the rat anterior pituitary. Grotjan HE Jr.
Acta Endocrinol (Copenh) 1988 Oct;119(2):203–12
In vivo administration of a GnRH antagonist to male mice: effects on pituitary gonadotropin secretion in vitro. Ultee–van Gessel AM, et al. **Acta Endocrinol (Copenh)** 1989 Mar;120(3):308–14
Studies of the thyrotropic function of the adenopituitary of the offspring of rats treated during pregnancy with dopaminergic agents. Boyadjieva M, et al.
Acta Physiol Pharmacol Bulg 1988;14(3):63–6
Isolated pituitary cells: glucocorticoids do not rapidly suppress ACTH secretion in response to CRF. Familari M, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):E145–51
Effect of Li+ substitution for extracellular Na+ on GRF–induced GH secretion from rat pituitary cells. Kato M, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):C712–8
Role of Ca2+ and Na+ on luteinizing hormone release from the calf pituitary. Kile JP, et al. **Am J Physiol** 1988 Oct; 255(4 Pt 1):E469–74
Effect of epoxyeicosatrienoic acids on growth hormone release from somatotrophs. Snyder GD, et al.
Am J Physiol 1989 Feb;256(2 Pt 1):E221–6
The mode of secretion in the anterior pituitary gland of the cow and the ewe. Schwarz R, et al. **Anat Anz** 1988; 167(3):183–9
Changes in the pituitary–testicular axis function with age in normal adult males. Díaz Sánchez V, et al.
Arch Invest Med (Mex) 1988 Jul–Sep;19(3):309–17
Guanosine 3':5'cyclic monophosphate and activators of guanylate cyclase inhibit secretagogue–induced corticotropin release by rat anterior pituitary cells. Antoni FA, et al. **Biochem Biophys Res Commun** 1989 Feb 15; 158(3):824–30
Activin–A: a modulator of multiple types of anterior pituitary cells. Kitaoka M, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):48–54
A stimulatory effect of somatostatin: enhancement of activin A–mediated FSH secretion in rat pituitary cells. Kitaoka M, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):958–62
Cell swelling induced by the permeant molecules urea or glycerol induces immediate high amplitude thyrotropin and prolactin secretion by perifused adenohypophyseal cells. Wang X, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):471–5
Lack of effect of histamine in influencing prolactin and TSH release from anterior pituitary gland in vitro. Basile V, et al. **Boll Soc Ital Biol Sper** 1988 May;64(5):449–52
Inhibition of thyrotropin secretion during prolonged administration of exogenous thyrotropin–releasing hormone in normal man. Custro N, et al.
Boll Soc Ital Biol Sper 1989 May;65(5):437–43
Release of growth hormone from purified somatotrophs: effects of the calcium channel antagonists diltiazem and nifedipine on release induced by growth hormone–releasing factor. Lussier BT, et al. **Can J Physiol Pharmacol** 1988 Nov;66(11):1373–80
Alpha–2–adrenergic pathways release growth hormone via a non–GRF–dependent mechanism in normal human subjects. Valcavi R, et al. **Clin Endocrinol (Oxf)** 1988 Sep; 29(3):309–16
In vitro effect of ethanol exposure on basal and GnRH–stimulated LH secretion from pituitary cells. Emanuele MA, et al. **Endocr Res** 1989;15(3):393–401
The role of calcium in gonadotropin–releasing hormone induction of follicle–stimulating hormone release by the pituitary gonadotrope. Simpson WG, et al. **Endocr Res** 1989;15(3):355–73
The preovulatory prolactin surge: an evaluation of the role of dopamine. Arbogast LA, et al. **Endocrinology** 1988 Dec; 123(6):2690–5
Growth hormone (GH) response to GH–releasing hormone by perifused pituitary cells from male, female, and testicular feminized rats. Batson JM, et al. **Endocrinology** 1989 Jan; 124(1):444–8
Gonadotropin–releasing hormone–stimulated luteinizing hormone (LH) release from ovine gonadotrophs in culture is separate from phorbol ester–stimulated LH release. Beggs MJ, et al. **Endocrinology** 1989 Feb;124(2):667–74
Platelet–activating factor stimulates prolactin release from dispersed rat anterior pituitary cells in vitro. Camoratto AM, et al. **Endocrinology** 1989 Mar;124(3):1502–6
Dihydropyridine–sensitive calcium channel activity related to prolactin, growth hormone, and luteinizing hormone release from anterior pituitary cells in culture: interactions with somatostatin, dopamine, and estrogens. Drouva SV, et al. **Endocrinology** 1988 Dec;123(6):2762–73
Effects of gonadectomy on the in vitro and in vivo gonadotropin responses to gonadotropin–releasing hormone in male and female rats. Fallest PC, et al.
Endocrinology 1989 Mar;124(3):1370–9
4–Acetamido–4'–isothiocyanostilbene–2,2'–disulfonic acid inhibits adrenocorticotropin secretion from anterior pituitary cells. Heisler S, et al. **Endocrinology** 1989 Sep; 125(3):1231–8
Mammotroph autoregulation: the differential roles of the 24K isoforms of prolactin. Ho TW, et al. **Endocrinology** 1989 Mar;124(3):1507–14
Evidence that phorbol diester–sensitive protein kinase–C(s) may not be directly involved in secretagogue–stimulated prolactin release and arachidonate liberation. Judd AM, et al. **Endocrinology** 1989 Sep;125(3):1134–41
Physiological concentrations of atrial natriuretic factors with intact N–terminal sequences inhibit corticotropin–releasing factor–stimulated adrenocorticotropin secretion from cultured anterior pituitary cells. King MS, et al.
Endocrinology 1989 Jan;124(1):286–92
Effects of gonadal steroids on gonadotropin secretion in males: studies with perifused rat pituitary cells. Kotsuji F, et al. **Endocrinology** 1988 Dec;123(6):2683–9
The interrelationship between the effects of insulin–like growth factor I and somatostatin on growth hormone secretion by normal rat pituitary cells: the role of glucocorticoids. Lamberts SW, et al. **Endocrinology** 1989 Feb;124(2):905–11
Oxytocin mediates the hypothalamic action of vasoactive

intestinal peptide to stimulate prolactin secretion. Samson WK, et al. **Endocrinology** 1989 Feb;124(2):812–9

Tumor necrosis factor–alpha is a potent ACTH secretagogue: comparison to interleukin–1 beta. Sharp BM, et al. **Endocrinology** 1989 Jun;124(6):3131–3

Regulation of growth hormone (GH) secretion by GH–releasing factor, somatostatin, and insulin–like growth factor I in ovine fetal and neonatal pituitary cells in vitro. Silverman BL, et al. **Endocrinology** 1989 Jan;124(1):84–9

Relaxin stimulates prolactin secretion from anterior pituitary cells. Sortino MA, et al. **Endocrinology** 1989 Apr; 124(4):2013–5

Effects of age and long term ovariectomy on prolactin secretion, as assessed by the reverse hemolytic plaque assay. Sortino MA, et al. **Endocrinology** 1989 Jan;124(1):90–6

Impaired suppression of growth hormone release by somatostatin in cultured adenohypophyseal cells of spontaneously diabetic BB/W rats. Welsh JB, et al. **Endocrinology** 1988 Nov;123(5):2230–4

Selective suppression of follicle–stimulating hormone secretion in anterior pituitary cells by the gonadal steroid 3 alpha–hydroxy–4–pregnen–20–one. Wood PH, et al. **Endocrinology** 1989 Jul;125(1):41–8

Opioid components of the clockwork that governs luteinizing hormone and prolactin release in male rats. Almeida OF, et al. **FASEB J** 1988 Oct;2(13):2874–7

Effects of pretreatment with tetradecanoyl phorbol acetate on regulation of growth hormone and prolactin secretion from ovine anterior pituitary cells. Boyd RS, et al. **FEBS Lett** 1989 Jul 17;251(1–2):99–103

Dual effects of G–protein activation on Ca–dependent exocytosis in bovine lactotrophs. Sikdar SK, et al. **FEBS Lett** 1989 Aug 14;253(1–2):88–92

Novel effect of vasoactive intestinal polypeptide and peptide histidine isoleucine: inhibition of in vitro secretion of prolactin in the tilapia, Oreochromis mossambicus. Kelley KM, et al. **Gen Comp Endocrinol** 1988 Oct;72(1):97–106

Gonadal steroid modulation of basal and vasoactive intestinal polypeptide–stimulated prolactin release by turkey anterior pituitary cells. Knapp TR, et al. **Gen Comp Endocrinol** 1988 Nov;72(2):226–36

Induction of gonadotropin surge by steroid hormone implantation in ovariectomized and sexually regressed female goldfish. Kobayashi M, et al. **Gen Comp Endocrinol** 1989 Mar;73(3):469–76

Leukotrienes stimulate gonadotropin release in vitro. Kiesel L, et al. **Gynecol Endocrinol** 1987 Mar;1(1):25–35

Angiotensin II in the brain and pituitary: contrasting roles in the regulation of adenohypophyseal secretion. Ganong WF. **Horm Res** 1989;31(1–2):24–31 (57 ref.)

Insulin hypoglycemia test and releasing hormone (corticotropin–releasing hormone and growth hormone–releasing hormone) stimulation in patients with pituitary failure of different origin. Stalla GK, et al. **Horm Res** 1988;29(5–6):191–6

Human follicular gonadotropin releasing peptide analogs. Evaluation of biological (in vitro) and immunological activity. Ramasharma K, et al. **Int J Pept Protein Res** 1988 Dec;32(6):419–24

Photosubstitution of cymantrenylalanine as a tool in peptide chemistry. Synthesis and biological activity of new GnRH analogs. Ricouart A, et al. **Int J Pept Protein Res** 1988 Jul;32(1):56–63

Mechanisms of secretory responses to gonadotropin–releasing hormone and phorbol esters in cultured pituitary cells. Participation of protein kinase C and extracellular calcium mobilization. Stojilković SS, et al. **J Biol Chem** 1988 Nov 25;263(33):17301–6

Desensitization of pituitary gonadotropin secretion by agonist–induced inactivation of voltage–sensitive calcium channels. Stojilković SS, et al. **J Biol Chem** 1989 Jul 5; 264(19):10939–42

Heterogeneity of growth hormone (GH) release by individual pituitary adenoma cells from acromegalic patients, as determined by the reverse hemolytic plaque assay: effects of SMS 201–995, GH–releasing hormone and thyrotropin–releasing hormone. Hofland LJ, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):613–20

Normal and growth hormone (GH)–secreting adenomatous human pituitaries release somatostatin and GH–releasing hormone. Joubert D, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):572–7

Pulsatile secretion of LH in women. Perks NF, et al. **J Endocrinol** 1988 Oct;119(1):1–3 (23 ref.)

Possible involvement of lipoxygenase pathway of arachidonic acid in rat pituitary hormone release in vitro. Miyake A, et al. **J Endocrinol Invest** 1988 Dec;11(11):805–8

Control of secretion in anterior pituitary cells—linking ion channels, messengers and exocytosis. Mason WT, et al. **J Exp Biol** 1988 Sep;139:287–316 (88 ref.)

Actions of pertussis toxin on the inhibitory effects of dopamine and somatostatin on prolactin and growth hormone release from ovine anterior pituitary cells. Boyd RS, et al. **J Mol Endocrinol** 1988 Nov;1(3):179–86

Bradykinin stimulates phosphoinositide metabolism and prolactin secretion in rat anterior pituitary cells. Jones TH, et al. **J Mol Endocrinol** 1989 Jan;2(1):47–53

Heterogeneity of responses to LH–releasing hormone and phorbol ester among rat gonadotrophs: a study using a reverse haemolytic plaque assay for LH. Lewis CE, et al. **J Mol Endocrinol** 1989 Jan;2(1):55–63

Whole–cell recordings of ionic currents in bovine somatotrophs and their involvement in growth hormone secretion. Mason WT, et al. **J Physiol (Lond)** 1988 Nov; 405:577–93

The adrenal gland and progesterone stimulates testicular steroidogenesis in the rat in vivo. Feek CM, et al. **J Steroid Biochem** 1989 Apr;32(4):573–9

Rapid release of multiple hormones from rat pituitaries perifused with recombinant interleukin–1. Beach JE, et al. **Life Sci** 1989;44(1):1–7

Changes in mean plasma ACTH reflect changes in amplitude and frequency of secretory pulses. Carnes M, et al. **Life Sci** 1988;43(22):1785–90

5,6–Epoxyeicosatrienoic acid stimulates growth hormone release in rat anterior pituitary cells. Cashman JR. **Life Sci** 1989;44(19):1387–93

Estrogenic effects of phenol red on rat pituitary cell responsiveness to gonadotropin–releasing hormone. Dumesic DA, et al. **Life Sci** 1989;44(6):397–406

Regulation of GH and TSH release from hyperplastic and ectopic pituitaries: effects of dopamine in vitro. Esquifino AI, et al. **Life Sci** 1989;45(3):199–206

Measurement of hormone secretion from individual cells by cell blot assay. Kendall ME, et al. **Methods Enzymol** 1989; 168:327–38

Superfusion and static culture techniques for measurement of rapid changes in prolactin secretion. Martínez de la Escalera G, et al. **Methods Enzymol** 1989;168:254–63

Evidence for an ultradian secretion of adrenocorticotropin, beta–endorphin and alpha–melanocyte–stimulating hormone by the ovine anterior and intermediate pituitary. Engler D, et al. **Neuroendocrinology** 1989 Apr;49(4):349–60

Iso stimulation of GH and cAMP: comparison of beta–adrenergic– to GRF–stimulated GH release and cAMP accumulation in monolayer cultures of anterior pituitary cells in vitro. Gabriel SM, et al. **Neuroendocrinology** 1989 Aug;50(2):170–6

A possible role for lipoxygenase and epoxygenase arachidonate metabolites in prolactin release from pituitary cells. Judd AM, et al. **Neuroendocrinology** 1988 Oct; 48(4):407–16

Human recombinant interleukin–1 beta and –alpha, but not recombinant tumor necrosis factor alpha stimulate ACTH release from rat anterior pituitary cells in vitro in a prostaglandin E2 and cAMP independent manner. Kehrer P, et al. **Neuroendocrinology** 1988 Aug;48(2):160–6

Effects of gonadotropin–releasing hormone and its agonists on prolactin secretion from normal and tumorous pituitary cells. Lamberts SW, et al. **Neuroendocrinology** 1989 Feb; 49(2):157–63

Differential effects of thyrotropin–releasing hormone on in vitro release of in vivo or in vitro newly synthesized and mature prolactin by lactating rat adenohypophyses. Further evidence for a sequential pattern of hormone release. Mena F, et al. **Neuroendocrinology** 1989 Feb;49(2):207–14

Interaction of vasoactive intestinal peptide (VIP) and growth hormone releasing factor (GRF) with corticotropin releasing factor (CRF) on corticotropin secretion in vitro. Léonard JF, et al. **Neuropeptides** 1988 Oct;12(3):131–3

Studies on the influence of selective adenomectomy on hormone secretion from normal anterior pituitary gland. Popp G, et al. **Pathol Res Pract** 1988 Sep;183(5):540–5

Monensin inhibition of corticotropin releasing factor mediated ACTH release. Sobel DO, et al. **Peptides** 1988 Sep–Oct;9(5):1037–42

Steroid modulation of prolactin release from single lactotropes in male and female rats studied by the reverse hemolytic plaque assay. Landolfi E, et al. **Pharmacol Res Commun** 1988 Dec;20(12):1075–6

Galanin is an estrogen–inducible, secretory product of the rat anterior pituitary. Kaplan LM, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7408–12

Cachectin alters anterior pituitary hormone release by a direct action in vitro. Milenkovic L, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2418–22

Induction of exocytosis in permeabilized pituitary cells by alpha– and beta–type protein kinase C. Naor Z, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4501–4

Depletion and release of prolactin from rat pituitaries and pituitary tumors in vitro. Kendall ME, et al. **Proc Soc Exp Biol Med** 1988 Dec;189(3):291–6

Ether as an anesthetic for decapitation in the rat: gonadotropin secretion by subsequently established anterior pituitary cell cultures. O'Conner JL, et al. **Proc Soc Exp Biol Med** 1989 Apr;190(4):320–3

REM sleep in humans begins during decreased secretory activity of the anterior pituitary. Follenius M, et al. **Sleep** 1988 Dec;11(6):546–55

Regulation of luteinizing hormone secretion by neuropeptide Y in rats: hypothalamic and pituitary actions. Crowley WR, et al. **Synapse** 1988;2(3):276–81

Multifactorial control of pituitary hormone secretion: the "wheels" of the brain. Jacobowitz DM. **Synapse** 1988; 2(3):186–92 (104 ref.)

The release of luteinizing hormone from pituitaries perifused with thymic extracts. Zaidi SA, et al. **Thymus** 1988–89; 12(4):253–64

[Effects of neurohypophysis hormones on the secretion of some adenohypophysis hormones] Li H. **Sheng Li Ko Hsueh Chin Chan** 1989 Jan;20(1):45–8 (43 ref.) **(Chi)**

[Control mechanism of FSH secretion from the pituitary] Igarashi M. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Aug; 40(8):973–8 (Eng. Abstr.) **(Jpn)**

[Diurnal rhythm of thyrotropin secretion in women in the third trimester of uncomplicated pregnancy] Bielawski J, et al. **Ginekol Pol** 1988 Feb;59(2):86–8 (Eng. Abstr.) **(Pol)**

[Evaluation of various parameters of the pituitary gland–adrenal cortex axis in obese persons and in those with normal body weight] Cheba L, et al. **Pol Tyg Lek** 1988 Oct 3;43(40):1288–90 (Eng. Abstr.) **(Pol)**

[Circadian organization of hormonal function of the hypophyseo–ovarian system (experimental study of Papio hamadryas monkeys)] Goncharov NP, et al. **Akush Ginekol (Mosk)** 1988 Nov;(11):56–9 (Eng. Abstr.) **(Rus)**

[The role of the thyroid in the female reproductive system] Sosnova EA. **Akush Ginekol (Mosk)** 1989 Apr;(4):6–11 (71 ref.) **(Rus)**

[Reaction of the pituitary gland–adrenal cortex system of miners to vibration and noise] ChatskiiGIa, et al. **Gig Tr Prof Zabol** 1988 Dec;(12):52–3 **(Rus)**

TRANSPLANTATION

Hypogonadism does not mediate urinary calcium loss in pituitary–grafted rats. Adler RA, et al. **Metabolism** 1989 Aug;38(8):805–9

Survival of adenohypophyseal homologous transplants in the rat striatum associated with prolactin–like immunoreactivity in the surrounding neuropil of the striatum. Bjelke B, et al. **Neurosci Lett** 1988 Nov 11; 93(2–3):139–45

ULTRASTRUCTURE

Seasonal ultrastructural changes of the hypophyseal pars tuberalis in the hedgehog (Erinaceus europaeus L.). Rütten A, et al. **Acta Anat (Basel)** 1988;133(3):217–23

Morphofunctional study of mammotropic cells following intraventricular administration of met–enkephalin. Carretero J, et al. **Anat Embryol (Berl)** 1989;179(3):243–50

Subcellular distribution of laminin and prolactin in stimulated and blocked prolactin cells in the pituitary of lactating rats. Vila–Porcile E, et al. **Cell Tissue Res** 1988;254(3):617–27

Semi–automatic morphometric analysis of secretory granules in the cells of the rat adenohypophysis. del Valle Soto ME, et al. **Folia Morphol (Praha)** 1989;37(1):26–32

Putative role of adenohypophysis in the osmoregulation of tilapia larvae (Oreochromis mossambicus; Teleostei): an ultrastructure study. Hwang PP, et al. **Gen Comp Endocrinol** 1989 Mar;73(3):335–41

Immunocytochemical and ultrastructural characterization of the cell types in the adenohypophysis of Sparus aurata L. (teleost). Quesada J, et al. **Gen Comp Endocrinol** 1988 Nov; 72(2):209–25

Deglycosylation and proteolysis of photolabeled D2 dopamine receptors of the porcine anterior pituitary. Jarvie KR, et al. **J Biochem (Tokyo)** 1989 Jul;106(1):17–22

Fine structural cytology of the adenohypophysis in rat and man. Horvath E, et al. **J Electron Microsc Tech** 1988 Apr; 8(4):401–32 (94 ref.)

Sex differences and changes in the three–dimensional structure of growth hormone cells during the estrous cycle in adult mouse adenohypophysis. Sasaki F. **J Electron Microsc (Tokyo)** 1988;37(3):155–8

High resolution autoradiographic localization of LHRH receptors in the rat anterior pituitary using fixed sections. Badr M, et al. **Mol Cell Endocrinol** 1988 Aug; 58(2–3):257–61

Ultrastructural distribution of growth hormone (GH) mRNA and GH intron I sequences in rat pituitary gland: effects of GH releasing factor and somatostatin. Morel G, et al. **Mol Cell Endocrinol** 1989 Aug;65(1–2):81–90

Human fetal adenohypophysis. Electron microscopic and ultrastructural immunocytochemical analysis. Asa SL, et al. **Neuroendocrinology** 1988 Oct;48(4):423–31

The morphology of adenohypophysial cells in aging Lobund–Wistar rats in tissue culture: an ultrastructural study. Asa SL, et al. **Prog Clin Biol Res** 1989;287:191–200

Ultrastructural morphology of the hypophyseal cleft in some mammals. Correr S, et al. **Prog Clin Biol Res** 1989; 295:395–400

AgNOR numbers in rat pituitary corticotrophs following adrenalectomy or corticotrophin releasing factor administration. Peebles SE, et al. **Virchows Arch [B]** 1989; 57(4):209–12

PITUITARY GLAND, POSTERIOR

ABNORMALITIES

Ectopic posterior lobe of the pituitary gland and intractable nocturnal enuresis in a case with pituitary dwarfism. Kikuchi K, et al. **Acta Paediatr Scand** 1989 May; 78(3):479–81

Pituitary stalk agenesis: magnetic resonance imaging of 'ectopic posterior lobe' with surgical correlation. Kaufman BA, et al. **Pediatr Neurosci** 1988;14(3):140–4

ANALYSIS

Appearance of a cardiodepressant factor in the medium incubating in situ the posterior pituitary lobe of the rat. II. Differentiation from other active compounds. Gorąca A, et al. **Acta Physiol Pol** 1988 Mar–Apr;39(2):98–111

The posterior pituitary contains a potent prolactin-releasing factor: in vivo studies. Hyde JF, et al. **Endocrinology** 1989 Aug;125(2):736–41

An immunoelectron microscopic study of peptide substances in the rat neurohypophysis. Zhu CG, et al. **J Tongji Med Univ** 1989;9(1):29–35

Isolation of neurosecretory granules containing vasotocin, mesotocin, MSEL- and VLDV-neurophysins from goose neurohypophysis. Rouillé Y, et al. **Neuropeptides** 1989 Apr; 13(3):187–90

[Decrease in the immunoreactivity of protein 7B2 in vasopressinergic cells in the supraoptic nucleus and in fibers of the neurohypophysis, in Brattleboro rats] Marcinkiewicz M, et al. **C R Acad Sci [III]** 1988;307(12):689–94 (Eng. Abstr.) **(Fre)**

ANATOMY & HISTOLOGY

Frequency and variation of the posterior pituitary bright signal on MR images. Brooks BS, et al. **AJNR** 1989 Sep–Oct;10(5):943–8

Histochemical characterization and functional significance of the hyperintense signal on MR images of the posterior pituitary. Kucharczyk J, et al. **AJR** 1989 Jan;152(1):153–7

Hyperintense signal of the posterior pituitary on T1-weighted MR images: an experimental study. Fujisawa I, et al. **J Comput Assist Tomogr** 1989 May–Jun;13(3):371–7

[Microvesicles of secretory nerve endings of the neurohypophysis are biochemically similar to small synaptic vesicles of nerve terminals] Navone F, et al. **Ann Ist Super Sanita** 1988;24(4):507–10 (Eng. Abstr.) **(Ita)**

CYTOLOGY

Distributional pattern of oxytocin- and vasopressin-immunoreactivity in the neurohypophysis of the Djungarian hamster (Phodopus sungorus). Redecker P, et al. **Cell Tissue Res** 1988 Sep;253(3):677–81

Hypothalamic angiotensinergic fibre systems terminate in the neurohypophysis. Imboden H, et al. **Neurosci Lett** 1989 Jan 2;96(1):42–6

DRUG EFFECTS

Chronic treatment with desmethylimipramine increases the oxytocin content in the hypothalamus and neurohypophysis of normal and pinealectomized male rats. Juszczak M. **Acta Physiol Pol** 1988 Jul–Aug;39(4):261–8

Effects of the posterior hypophysis and ovary on pheromonal production in normal females and in the reproductive behavior of male rats treated with D,L-propranolol. Zipper J, et al. **Int J Fertil** 1988 Nov–Dec;33(6):426–31

Neurohypophyseal secretion in response to cholecystokinin but not meal-induced gastric distention in humans. Miaskiewicz SL, et al. **J Clin Endocrinol Metab** 1989 Apr; 68(4):837–43

Differential effects of potassium channel blockers on neurohypophysial release of oxytocin and vasopressin. Evidence for frequency-dependent interaction with the endogenous opioid inhibition of oxytocin release. Racké K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):560–6

Influence of vincristine on the neurosecretory nuclei of the hypothalamo-neurohypophyseal system of the developing rat. Pietrzak M. **Neuropatol Pol** 1988;26(4):521–35

Opioid inhibition of secretion from oxytocin and vasopressin nerve terminals following selective depletion of neurohypophysial catecholamines. Bicknell RJ, et al. **Neurosci Lett** 1988 Nov 11;93(2–3):281–6

EMBRYOLOGY

The human brain at stage 16, including the initial evagination of the neurohypophysis. Müller F, et al. **Anat Embryol (Berl)** 1989;179(6):551–69

ENZYMOLOGY

Processing of the oxytocin precursor: isolation of an exopeptidase from neurosecretory granules of bovine pituitaries. Nörenberg U, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):898–904

Proocytocin/neurophysin convertase from bovine neurohypophysis and corpus luteum secretory granules: complete purification, structure-function relationships, and competitive inhibitor. Plevrakis I, et al. **Biochemistry** 1989 Mar 21;28(6):2705–10

Tyrosine hydroxylase in the stalk-median eminence and posterior pituitary is inactivated only during the plateau phase of the preovulatory prolactin surge. Arbogast LA, et al. **Endocrinology** 1989 Aug;125(2):667–74

Processing endoprotease recognizes a structural feature at the cleavage site of peptide prohormones. The pro-ocytocin/neurophysin model. Brakch N, et al. **J Biol Chem** 1989 Sep 25;264(27):15912–6

IMMUNOLOGY

Immunoreactive galanin-like material in magnocellular hypothalamo-neurohypophysial neurones of the rat. Gaymann W, et al. **Cell Tissue Res** 1989 Jan;255(1):139–47

Developmental study of neuropeptide Y-like immunoreactivity in the neurohypophysis and intermediate lobe of the rhesus monkey (Macaca mulatta). McDonald JK, et al. **Cell Tissue Res** 1988;254(3):499–509

METABOLISM

The effect of substance P (SP) infusion above the supraoptic nuclei of hypothalamus on the vasopressin content in the posterior pituitary lobe after haemorrhage in rats. Rubacha G, et al. **Acta Physiol Pol** 1988 May–Jun;39(3):175–82

Low-affinity uptake of [3H]choline by rat neurointermediate lobe in vitro. Von Spreckelsen S, et al. **Acta Physiol Scand** 1988 Jun;133(2):239–46

Total translation of vasopressin and oxytocin in neurohypophysis of rats. Robinson AG, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R109–17

Calcium-dependent and ouabain-resistant oxygen consumption in the rat neurohypophysis. Shibuki K. **Brain Res** 1989 May 15;487(1):96–104

Facilitation by forskolin of electrically evoked vasopressin release in vitro requires bursting pattern of stimulation. Treiman M, et al. **Brain Res** 1989 May 29;488(1–2):260–4

Functional kappa-opioid receptors on oxytocin and vasopressin nerve terminals isolated from the rat neurohypophysis. Zhao BG, et al. **Brain Res** 1988 Oct 11; 462(1):62–6

Beta-adrenergic and opioid receptors on pituicytes cultured from adult rat neurohypophysis: regulation of cell morphology. Bicknell RJ, et al. **Brain Res Bull** 1989 Feb; 22(2):379–88

Quantitative autoradiographic localization of neuropeptide Y (NPY) binding sites in rat posterior pituitary lobe. Saavedra JM, et al. **Cell Mol Neurobiol** 1988 Sep;8(3):333–8

Distribution of FMRFamide-like immunoreactivity in the brain and neurohypophysis of the lamprey, Lampetra japonica. Ohtomi M, et al. **Cell Tissue Res** 1989 Jun; 256(3):581–4

Insulin and release of neurohypophysial hormones: in vivo and in vitro studies. Guzek JW, et al. **Exp Clin Endocrinol** 1988 Sep;92(1):43–50

Variability in gold bead density in cells. Quantitative immunocytochemistry. Hammel I, et al. **Histochemistry** 1989;91(6):527–30

Immunocytochemical and morphometrical study of thyrotropic cells of Rana ridibunda. Malagón MM, et al. **Histochemistry** 1988;89(5):461–6

Immunogold electron microscopic localization of glial fibrillary acidic protein (GFAP) in neurohypophyseal pituicytes and tanycytes of the Mongolian gerbil (Meriones unguiculatus). Redecker P. **Histochemistry** 1989; 91(4):333–7

Frequency-dependent effects of activation and inhibition of protein kinase C on neurohypophysial release of oxytocin and vasopressin. Racké K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jun; 339(6):617–24

Differential alterations in dopamine turnover rates in the stalk-median eminence and posterior pituitary during the preovulatory prolactin surge. Arbogast LA, et al. **Neuroendocrinology** 1989 May;49(5):525–30

Specificity of vasopressin binding to the posterior pituitary gland in the rat. An autoradiographic study. Dashwood MR, et al. **Neuroendocrinology** 1988 Aug;48(2):180–7

Co-existence of TRH with mesotocin in the same axon terminals of the bullfrog pars nervosa as revealed by double labeling immunocytochemistry. Shioda S, et al. **Neurosci Lett** 1989 Mar 13;98(1):25–8

Endogenous opioid inhibition of the release of oxytocin from the isolated rat neurohypophysis during high-frequency stimulation of the pituitary stalk. Wammack R, et al. **Neurosci Lett** 1988 Sep 23;92(1):114–8

Interaction of putative vasopressin receptors in rat brain and bovine pituitary gland with a vasopressin anti-idiotype antibody as revealed by immunoblotting. Abood LG, et al. **Peptides** 1988 Nov–Dec;9(6):1407–9

Effects of sinoaortic denervation on glucose utilization in the subfornical organ and pituitary neural lobe during administration of angiotensin II. Kadekaro M, et al. **Peptides** 1989 Jan–Feb;10(1):103–8

Quantitative changes of CRF-like immunoreactivity in eels treated with reserpine and cortisol. Olivereau M, et al. **Peptides** 1988 Nov–Dec;9(6):1261–7

Effects of prostaglandin E2 and D2 on the release of vasopressin and oxytocin. Hashimoto H, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Apr; 36(1):9–14

PATHOLOGY

MR imaging of the posterior hypophysis in children. Gudinchet F, et al. **AJR Am J Roentgenol** 1989 Aug; 153(2):351–4

Subhypothalamic high-intensity signals identified by magnetic resonance imaging in children with idiopathic anterior hypopituitarism. Evidence suggestive of an 'ectopic' posterior pituitary gland. Root AW, et al. **Am J Dis Child** 1989 Mar;143(3):366–7

Ultrastructural evidence for alterations of pituicytes in reanimated rats in connection with experimentally induced clinical death. Loesch A. **J Hirnforsch** 1988;29(6):683–93

Magnetic resonance imaging in diabetes insipidus [letter] Chiumello G, et al. **Lancet** 1989 Apr 22;1(8643):901

Pathology of the neurohypophysis. Felix IA. **Pathol Res Pract** 1988 Sep;183(5):535–7 (19 ref.)

Pathology of the pituitary gland in patients with the acquired immune deficiency syndrome (AIDS). Ferreiro J, et al. **Pathology** 1988 Jul;20(3):211–5

PHYSIOLOGY

Anti-calmodulin agents affect osmotic and angiotensin II-induced vasopressin release. Rossi NF, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):E516–23

The calcium channel antagonist omega-conotoxin inhibits secretion from peptidergic nerve terminals. Dayanithi G, et al. **Biochem Biophys Res Commun** 1988 Oct 14; 156(1):255–62

Effects of BAY K 8644 on Ca-channel currents and electrical activity in mouse melanotrophs. Taraskevich PS, et al. **Brain Res** 1989 Jul 3;491(1):102–8

Time-dependent increase in plasma prolactin after pituitary stalk section: role of posterior pituitary dopamine. Murai I, et al. **Endocrinology** 1989 May;124(5):2343–9

The peak phase of the proestrous prolactin surge is blocked by either posterior pituitary lobectomy or antisera to vasoactive intestinal peptide. Murai I, et al. **Endocrinology** 1989 Feb;124(2):1050–5

Optimizing release from peptide hormone secretory nerve terminals. Bicknell RJ. **J Exp Biol** 1988 Sep;139:51–65 (55 ref.)

Optical studies of the secretory event at vertebrate nerve terminals. Salzberg BM, et al. **J Exp Biol** 1988 Sep; 139:195–231 (97 ref.)

Spike propagation and conduction failure in the rat neural lobe. Dyball RE, et al. **J Physiol (Lond)** 1988 Jul;401:241–56

Differential effects of pituitary stalk-section on posterior pituitary and hypothalamic contents of prolactin-releasing factor, oxytocin, dopamine and beta-endorphin. Hyde JF, et al. **Neuroendocrinology** 1988 Sep;48(3):314–9

Differential responses in vasopressin and oxytocin gene expression in distinct hypothalamic nuclei after hypothalamoneurohypophyseal disconnection and vasopressin substitution. Van Tol HH, et al. **Neuroendocrinology** 1989 Apr;49(4):337–43

Hydrins, hydroosmotic neurohypophysial peptides: osmoregulatory adaptation in amphibians through vasotocin precursor processing. Rouillé Y, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5272–5

PHYSIOPATHOLOGY

Neurohypophyseal function in postpartum hypopituitarism: impaired plasma vasopressin response to osmotic stimuli. Iwasaki Y, et al. **J Clin Endocrinol Metab** 1989 Mar; 68(3):560–5

Anterior and posterior pituitary function in brain-stem-dead donors. A possible role for hormonal replacement therapy. Howlett TA, et al. **Transplantation** 1989 May;47(5):828–34

[Disorders of the posterior pituitary] Yoshida S. **Nippon Naika Gakkai Zasshi** 1988 Sep;77(9):1373–7 **(Jpn)**

SECRETION

Pituicytes, glia and control of terminal secretion. Hatton GI. **J Exp Biol** 1988 Sep;139:67–79 (47 ref.)

Signals, transducers, and secretion [editorial] **Lancet** 1989 Apr 22;1(8643):880–2

Neurohypophyseal aging: differential changes in oxytocin and vasopressin release, studied in Fischer 344 and Sprague-Dawley rats. Zbuzek V, et al. **Neuroendocrinology** 1988 Dec;48(6):619–26

Opioid-noradrenergic interactions in the neurohypophysis. I. Differential opioid receptor regulation of oxytocin, vasopressin, and noradrenaline release. Zhao BG, et al. **Neuroendocrinology** 1988 Jul;48(1):16–24

Opioid-noradrenergic interactions in the neurohypophysis. II. Does noradrenaline mediate the actions of endogenous opioids on oxytocin and vasopressin release? Zhao BG, et al. **Neuroendocrinology** 1988 Jul;48(1):25–31

A study on the release mechanism of vasopressin and oxytocin. Hashimoto H, et al. **Neuropeptides** 1988 Nov-Dec;12(4):199–206

Species-specific effects of bombesin on gastric emptying and neurohypophyseal secretion. Verbalis JG, et al. **Peptides** 1988 Nov–Dec;9(6):1289–93

Cholecystokinin evokes secretion of oxytocin and vasopressin from rat neural lobe independent of external calcium. Bondy CA, et al. **Proc Natl Acad Sci U S A** 1989 Jul; 86(13):5198–201

Possible role for ionic channels in neurosecretory granules of the rat neurohypophysis. Lemos JR, et al. **Soc Gen Physiol Ser** 1989;44:333–47

Excitation and secretion at the nerve terminals of vertebrates: optical measurements with and without voltage-sensitive dyes. Salzberg BM, et al. **Soc Gen Physiol Ser** 1989; 44:311–31

[Study on oxytocin secretion from the guinea pig hypothalamo-neurohypophyseal complex (HNC) in organ culture] Haginiwa I, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Mar;41(3):273–9 (Eng. Abstr.) **(Jpn)**

ULTRASTRUCTURE

The effect of bromocriptine on the intermediate lobe of the rat pituitary: an electron-microscopic, morphometric study. Bäck N. **Cell Tissue Res** 1989 Feb;255(2):405–10

Immunocytochemical and ultrastructural studies on allografts of the pituitary neurointermediate lobe in the third cerebral ventricle of the rat. Vuillez P, et al. **Cell Tissue Res** 1989 Feb;255(2):393–404

[Effect of complete cerebral ischemia on the ultrastructure of the hypothalamo-hypophyseal neurosecretory system of rats] Gajkowska B, et al. **Neuropatol Pol** 1988; 26(3):317-33 (Eng. Abstr.) **(Pol)**

[Ultrastructure of neurohypophysis during autolysis] Zimina IS. **Biull Eksp Biol Med** 1988 Sep;106(9):371-4 (Eng. Abstr.) **(Rus)**

PITUITARY GLYCOPROTEIN HORMONE, ALPHA SUBUNIT see **GLYCOPROTEIN HORMONES, ALPHA SUBUNIT**

PITUITARY GONADOTROPIN RECEPTORS see **RECEPTORS, GONADOTROPIN**

PITUITARY GROWTH HORMONE see **SOMATOTROPIN**

PITUITARY HORMONE RECEPTORS see **RECEPTORS, PITUITARY HORMONE**

PITUITARY HORMONE RELEASE INHIBITING HORMONES

ADMINISTRATION & DOSAGE

GnRH analog delivery systems: present and future options. Miller JD. **Obstet Gynecol Surv** 1989 May;44(5):326-9

ADVERSE EFFECTS

GnRH analogs and safety. Comite F. **Obstet Gynecol Surv** 1989 May;44(5):319-25 (45 ref.)

PHYSIOLOGY

[Factors regulating the synthesis and release of arginine vasotocin and its role in mammals] Kniażewski B, et al. **Pol Tyg Lek** 1988 Apr 25;43(17):531-3 (Eng. Abstr.) **(Pol)**

THERAPEUTIC USE

Clinical experience in the treatment of endometriosis with GnRH agonist. Hill GA. **Obstet Gynecol Surv** 1989 May; 44(5):305-7

General applications of GnRH agonists in gynecology: past, present, and future. Hodgen GD. **Obstet Gynecol Surv** 1989 May;44(5):293-6 (22 ref.)

Endometriosis: pathophysiology, diagnosis, and treatment. Hurst BS, et al. **Obstet Gynecol Surv** 1989 May; 44(5):297-304 (35 ref.)

Clinical experience with the use of GnRH agonists in the treatment of premenstrual syndrome. Muse KN. **Obstet Gynecol Surv** 1989 May;44(5):317-8

PITUITARY HORMONE RELEASING HORMONES

ADMINISTRATION & DOSAGE

The effect of long-term pulsatile GnRH administration on the 24-hour integrated concentration of GH in hypogonadotropic hypogonadic patients. Giusti M, et al. **Acta Endocrinol (Copenh)** 1989 Jun;120(6):724-8

The effects of pulsatile GnRH infusion upon the diurnal variations in serum LH and testosterone in pre-pubertal and pubertal boys. Gordon D, et al. **Acta Endocrinol (Copenh)** 1989 Aug;121(2):241-5

Use of pulsatile intravenous administration of gonadotropin-releasing hormone to induce fertile estrus in bitches. Cain JL, et al. **Am J Vet Res** 1988 Nov; 49(11):1993-6

Endocrine dynamics during pulsatile GnRH administration in patients with hypothalamic amenorrhea and polycystic ovarian disease. Rossmanith WG, et al. **Gynecol Endocrinol** 1989;3(1):21-34

Recovery of hormone secretion after chronic gonadotropin-releasing hormone agonist administration in women with polycystic ovarian disease. de Ziegler D, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1111-7

Gonadotropin release by clinically nonfunctioning and gonadotroph pituitary adenomas in vivo and in vitro: relation to sex and effects of thyrotropin-releasing hormone, gonadotropin-releasing hormone, and bromocriptine. Kwekkeboom DJ, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1128-35

Subcutaneous implantable infusion device for chronic intravenous pulsatile gonadotropin-releasing hormone treatment. Schmutzler R, et al. **J Med Primatol** 1988; 17(5):281-5

Pituitary and ovarian responses of post-partum acyclic beef cows to continuous long-term GnRH and GnRH agonist treatment. D'Occhio MJ, et al. **J Reprod Fertil** 1989 Mar; 85(2):495-502

Closed intravenous administration of gonadotropin-releasing hormone: safety of extended peripheral intravenous catheterization. Hopkins CC, et al. **Obstet Gynecol** 1989 Aug;74(2):267-70

[Changes in the prolactin level under the effect of pulsatile infusion of gonadotropin releasing hormone] Koloszár S, et al. **Orv Hetil** 1989 Jul 2;130(27):1433-6 (Eng. Abstr.) **(Hun)**

ADVERSE EFFECTS

Apoplexy of a pituitary adenoma after dynamic testing with gonadotropin-releasing hormone. Arafah BM, et al. **Am J Med** 1989 Jul;87(1):103-5

Hypersensitivity reaction with intravenous GnRH after pulsatile subcutaneous GnRH treatment in male hypogonadotrophic hypogonadism. Popović V, et al. **Postgrad Med J** 1988 Mar;64(749):245-6

[Increased incidence of ovarian hyperstimulation syndrome following combined GnRH agonist/hMG therapy] Lindner C, et al. **Geburtshilfe Frauenheilkd** 1989 Apr;49(4):337-44 (Eng. Abstr.) **(Ger)**

ANALYSIS

Comparison of immunoreactive gonadotropin-releasing hormone and human chorionic gonadotropin in term placentas from normal women and those with insulin-dependent and gestational diabetes. Elkind-Hirsch KE, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):71-8

Pituitary receptors for GnRH and estradiol, and pituitary content of gonadotropins in beef cows. II. Changes during the postpartum period. Nett TM, et al. **Domest Anim Endocrinol** 1988 Jan;5(1):81-9

Development of a radioimmunoassay for measuring gonadotrophin releasing hormone in patients receiving treatment. Mosby VA, et al. **J Clin Pathol** 1989 May; 42(5):542-7

Microdialysis for measurement of neuroendocrine peptides. Levine JE, et al. **Methods Enzymol** 1989;168:166-81

ANTAGONISTS & INHIBITORS

Testosterone dose-dependency of sexual and nonsexual behaviors in the gonadotropin-releasing hormone antagonist-treated male rat. Fielder TJ, et al. **J Androl** 1989 May-Jun;10(3):167-73

Effect of inhibin from primate Sertoli cells and GnRH on gonadotropin subunit mRNA in rat pituitary cell cultures. Attardi B, et al. **Mol Endocrinol** 1989 Aug;3(8):1236-42

Characterization and purification of a placental protein that inactivates GnRH, TRH and angiotensin II. Siler-Khodr TM, et al. **Placenta** 1989 May-Jun;10(3):283-96

[Recent progress in endocrine therapy of patients with breast cancer] Tominaga T. **Gan To Kagaku Ryoho** 1988 Dec; 15(12):3196-202 (Eng. Abstr.) **(Jpn)**

DEFICIENCY

[Pathophysiology of the polycystic ovary syndrome] Alieva EA, et al. **Akush Ginekol (Mosk)** 1989 Apr;(4):3-6 (69 ref.) **(Rus)**

DIAGNOSTIC USE

Suppression of LH response to gonadotrophin-releasing hormone or oestradiol by ACTH(1-24) treatment in anoestrous ewes. Dobson H, et al. **J Endocrinol** 1988 Aug; 118(2):193-7

Evaluation of the human gonadotroph free alpha-subunit secretory pools by administration of gonadotropin hormone-releasing hormone into normal subjects at different phases of the ovarian cycle. Balin MS, et al. **J Endocrinol Invest** 1989 Jun;12(6):373-81

Plasma prolactin response to gonadotropin-releasing hormone during benzodiazepine treatment. De Marinis L, et al. **Psychoneuroendocrinology** 1988;13(4):325-31

[Clinical value of the gonadotropic hormone releasing hormone (GHRH) test in the diagnosis of growth deficiency] Hümmelink R, et al. **Monatsschr Kinderheilkd** 1988 Sep;136(9):618-21 (Eng. Abstr.) **(Ger)**

[Somatotropin response following stimulation with human gonadotropin releasing factor 1-44 in young adults and in the elderly] Zachariewa S, et al. **ZFA** 1988 Nov-Dec; 43(6):325-9 (Eng. Abstr.) **(Ger)**

GENETICS

Pubertal changes in gonadotropin-releasing hormone and proopiomelanocortin gene expression in the brain of the male rat. Wiemann JN, et al. **Endocrinology** 1989 Apr; 124(4):1760-7

The rat gonadotropin-releasing hormone: SH locus: structure and hypothalamic expression. Bond CT, et al. **Mol Endocrinol** 1989 Aug;3(8):1257-62

[Gene expression of gonadotropin releasing hormone in the rat brain--an in situ hybridization technic using an oligoRNA probe] Ikeda M. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Dec; 40(12):1845-50 (Eng. Abstr.) **(Jpn)**

METABOLISM

The hypogonadotropic state of the prepubertal male rhesus monkey (Macaca mulatta) is not associated with a decrease in hypothalamic gonadotropin-releasing hormone content. Fraser MO, et al. **Biol Reprod** 1989 May;40(5):972-80

Functional relationship between receptor binding and biological activity for analogs of mammalian and salmon gonadotropin-releasing hormones in the pituitary of goldfish (Carassius auratus). Habibi HR, et al. **Biol Reprod** 1989 Jun;40(6):1152-61

Regulation of alpha and luteinizing hormone beta subunit messenger ribonucleic acids during stimulatory and downregulatory phases of gonadotropin-releasing hormone action. Kim WH, et al. **Biol Reprod** 1988 Nov;39(4):847-53

Prenatal development of the gonadotropin-releasing hormone-containing systems in rat brain. Jennes L. **Brain Res** 1989 Mar 13;482(1):97-108

Effects of estrogen on hypothalamic gonadotropin-releasing hormone release in castrated male rhesus macaques. Pau KY, et al. **Brain Res** 1988 Aug 30;459(1):70-5

Pre- and postsynaptic actions of GABA on the release of hypothalamic gonadotropin-releasing hormone (GnRH). Nikolarakis KE, et al. **Brain Res Bull** 1988 Oct;21(4):677-83

Immunoreactivity to gonadotropin-releasing hormone and gonadotropic hormone in the brain and pituitary of the rainbow trout Salmo gairdneri. Schäfer H, et al. **Cell Tissue Res** 1989 Jul;257(1):227-35

Molecular mechanism of gonadotropin releasing hormone (GnRH) action. I. The GnRH receptor [published erratum appears in Endocr Rev 1989 May;10(2):229] Hazum E, et al. **Endocr Rev** 1988 Nov;9(4):379-86 (95 ref.)

Molecular mechanism of gonadotropin releasing hormone action. II. The effector system. Huckle WR, et al. **Endocr Rev** 1988 Nov;9(4):387-95 (94 ref.)

Pulsatile release of gonadotropin-releasing hormone from hypothalamic explants is restrained by blockade of N-methyl-D,L-aspartate receptors. Bourguignon JP, et al. **Endocrinology** 1989 Aug;125(2):1090-6

The interaction of gonadotropin-releasing hormone and estradiol on luteinizing hormone and prolactin gene expression in female hypogonadal (hpg) mice. Saade G, et al. **Endocrinology** 1989 Apr;124(4):1744-53

Gonadotropin releasing hormone binding sites in human epithelial ovarian carcinomata. Emons G, et al. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):215-21

Requirement of extracellular calcium in fish pituitary gonadotropin release by gonadotropin hormone-releasing hormone. Jamaluddin M, et al. **Gen Comp Endocrinol** 1989 May;74(2):190-8

Gonadotropin-releasing hormone activates phospholipase D in ovarian granulosa cells. Possible role in signal transduction. Liscovitch M, et al. **J Biol Chem** 1989 Jul 15;264(20):11762-7

beta-Endorphin and gonadotropin-releasing hormone synaptic input to gonadotropin-releasing hormone neurosecretory cells in the male rat. Chen WP, et al. **J Comp Neurol** 1989 Aug 1;286(1):85-95

Role of gonadotropin releasing hormone agonists in ovulation induction. Dodson WC. **J Reprod Med** 1989 Jan;34(1 Suppl):76-80 (25 ref.)

Combined immunohistochemistry for gonadotropin-releasing hormone (GnRH) and pro-GnRH, and in situ hybridization for GnRH messenger ribonucleic acid in rat brain. Ronnekleiv OK, et al. **Mol Endocrinol** 1989 Feb;3(2):363-71

PHARMACOKINETICS

Pharmacodynamics of gonadotropin-releasing hormone. 1. Effects of gonadotropin-releasing hormone pulse contour on pituitary luteinizing hormone secretion in vivo in sheep. Handelsman DJ, et al. **Neuroendocrinology** 1988 Oct; 48(4):432-8

PHARMACOLOGY

Simultaneous inhibition by pirenzepine of the GH responses to GnRH and TRH in insulin-dependent diabetics and in patients with major depression. Coiro V, et al. **Acta Endocrinol (Copenh)** 1989 Feb;120(2):143-8

Growth hormone-releasing factor, thyrotropin-releasing hormone and gonadotropin-releasing hormone in pituitary stalk transection. Kikuchi K, et al. **Acta Paediatr Jpn Overseas Ed** 1988;30 Suppl:72-8

Effects of electroacupuncture and gonadotropin-releasing hormone treatments on hormonal changes in anoestrous sows. Lin JH, et al. **Am J Chin Med** 1988;16(3-4):117-26

Effects of fetal sex, stage of gestation, dibutyryl cyclic adenosine monophosphate, and gonadotropin releasing hormone on secretion of human chorionic gonadotropin by placental explants in vitro. Haning RV Jr, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1332-7

Responses of luteinizing hormone (LH) and follicle-stimulating hormone levels to exogenous gonadotropin-releasing hormone during the estrogen-induced LH surge in the ovariectomized rhesus monkey. Weick RF, et al. **Can J Physiol Pharmacol** 1989 Feb;67(2):135-9

Effects of changing gonadotrophin-releasing hormone pulse frequency on gonadotrophin secretion in men. Sauder SE, et al. **Clin Endocrinol (Oxf)** 1988 Jun;28(6):647-56

Circulating inhibin alpha concentrations in infant, prepubertal, and adult male rhesus monkeys (Macaca mulatta) and in juvenile males during premature initiation of puberty with pulsatile gonadotropin-releasing hormone treatment. Abeyawardene SA, et al. **Endocrinology** 1989 Jul;125(1):250-6

Bilateral orchidectomy and concomitant testosterone replacement in the juvenile male rhesus monkey (Macaca mulatta) receiving an invariant intravenous gonadotropin-releasing hormone (GnRH) infusion results, as in the hypothalamus lesioned GnRH-driven adult male, in a selective hypersecretion of follicle-stimulating hormone. Abeyawardene SA, et al. **Endocrinology** 1989 Jul; 125(1):257-9

The frequency of gonadotropin-releasing-hormone

stimulation differentially regulates gonadotropin subunit messenger ribonucleic acid expression. Dalkin AC, et al. **Endocrinology** 1989 Aug;125(2):917–24

Gonadotropin-releasing hormone (GnRH) as antidepressant: a psychopharmacological animal study. Massol J, et al. **Eur J Pharmacol** 1989 Feb 7;160(3):395–9

Danazol but not gonadotropin-releasing hormone agonists suppresses autoantibodies in endometriosis. el-Roeiy A, et al. **Fertil Steril** 1988 Dec;50(6):864–71

Modulation of prolactin responses to gonadotropin releasing hormone by acute testosterone infusions in normal women. Serafini P, et al. **Gynecol Endocrinol** 1987 Sep;1(3):247–53

Effect of exogenous and endogenous gonadotropin-releasing hormone on prolactin secretion in perimenopausal women. Cano A, et al. **Gynecol Obstet Invest** 1988;26(4):308–12

Potentiation of cholinergic tone counteracts the suppressive effect of oral glucose administration on the GH response to GHRH in man. Balzano S, et al. **Horm Metab Res** 1989 Jan;21(1):52–3

Effect of GnRH administration on blood polyamines and LH levels in normal and obese children. Bernasconi S, et al. **Horm Metab Res** 1988 Oct;20(10):648–51

Effects of gonadotropin-releasing hormone analogs on cis-platinum-induced spermatogenic damage. Handelsman DJ, et al. **Int J Androl** 1988 Oct;11(5):425–35

Kinetics of secretion of luteinizing hormone subunits and free alpha, and effects of gonadotropin releasing hormone. Vogel DL, et al. **J Androl** 1989 May–Jun;10(3):180–7

Effect of active immunization against estrogen on gonadotropin response to testosterone propionate treatment in ovariectomized pony mares. Garza F Jr, et al. **J Anim Sci** 1989 Jan;67(1):226–31

Gonadotropin-releasing hormone-induced luteinizing hormone release in heifers: effect of nutrition during gestation. Killen JH, et al. **J Anim Sci** 1989 Feb; 67(2):496–500

Effects of thyrotropin-releasing hormone and gonadotropin-releasing hormone on inositol phospholipid turnover in endocrinologically inactive pituitary adenomas and prolactinomas. Levy A, et al. **J Clin Endocrinol Metab** 1989 Jul;69(1):122–6

The nature of the gonadotropin-releasing hormone stimulus-luteinizing hormone secretory response of human gonadotrophs in vivo. Veldhuis JD, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):661–70

Dynamics of gonadotropin release following ovariectomy and injection of gonadotropin-releasing hormone in early postpartum dairy cows. Dissen GA, et al. **J Dairy Sci** 1988 Dec;71(12):3489–96

The oestrogen-induced surge of LH requires a 'signal' pattern of gonadotrophin-releasing hormone input to the pituitary gland in the ewe. Clarke IJ, et al. **J Endocrinol** 1989 Jul; 122(1):127–34

Effects of 31 kDa bovine inhibin on FSH and LH in rat pituitary cells in vitro: antagonism of gonadotrophin-releasing hormone agonists. Farnworth PG, et al. **J Endocrinol** 1988 Nov;119(2):233–41

Gonadotrophin-releasing hormone regulation of gonadotrophin subunit gene expression: studies in tri-iodothyronine-suppressed rats. Haisenleder DJ, et al. **J Endocrinol** 1989 Jul;122(1):117–25

Treatment with bovine follicular fluid suppresses follicular development in gonadotrophin-releasing hormone-treated anoestrous ewes. Hunter MG, et al. **J Endocrinol** 1988 Oct; 119(1):95–100

Influence of neonatal opioid blockade or injections of gonadotrophin-releasing hormone on the timing of puberty in female rats: correlation of opioid effects with occupation of hypothalamic mu-opioid receptors. Landymore KM, et al. **J Endocrinol** 1988 Dec;119(3):447–52

Effect of level of food intake of ewes on the secretion of LH and FSH and on the pituitary response to gonadotrophin-releasing hormone in ovariectomized ewes. Rhind SM, et al. **J Endocrinol** 1989 May;121(2):325–30

Effects of morphine and naloxone on plasma levels of LH, FSH, prolactin and growth hormone in the immature male pig. Trudeau VL, et al. **J Endocrinol** 1988 Dec;119(3):501–8

Influence of bovine LH tracer quality on levels of LH in GnRH-treated cows. Madej A, et al. **J Immunoassay** 1989; 10(2–3):277–300

Ovarian capillary blood flow in seasonally anoestrous ewes induced to ovulate by treatment with GnRH. Brown BW, et al. **J Reprod Fertil** 1988 Nov;84(2):653–8

Study of LH response to GnRH in the young male as a criterion of genetic merit for female reproduction in sheep. Haley CS, et al. **J Reprod Fertil** 1989 May;86(1):119–33

Studies of the effectiveness of gonadotrophin-releasing hormone, steroids and follicular fluid in modulating ovine gonadotrophin output in vivo and in vitro. Henderson KM, et al. **J Reprod Fertil** 1989 May;86(1):105–17

Function of abnormal corpora lutea in vitro after GnRH-induced ovulation in the anoestrous ewe. Hunter MG, et al. **J Reprod Fertil** 1988 Sep;84(1):139–48

Absence of direct effects of GnRH on testicular steroid secretion in the ram. Meijer JC, et al. **J Reprod Fertil** 1989 Jul;86(2):517–24

Effect of injection of gonadotrophin-releasing hormone on testicular steroidogenesis in the hypogonadal (hpg) mouse. Sheffield JW, et al. **J Reprod Fertil** 1989 Jul;86(2):609–17

Effect of hysterectomy on the short life-cycle corpus luteum produced after GnRH-induced ovulation in the anoestrous ewe. Southee JA, et al. **J Reprod Fertil** 1988 Sep; 84(1):149–55

Function of abnormal corpora lutea in vivo after GnRH-induced ovulation in the anoestrous ewe. Southee JA, et al. **J Reprod Fertil** 1988 Sep;84(1):131–7

Gonadotrophin response to releasing hormone in post-menopausal patients with ovarian tumours. Mango D, et al. **Maturitas** 1989 Jun;11(2):129–36

Simultaneous effect of gonadotropin-releasing hormone (GnRH) on the expression of two gonadotropin beta genes by passive immunization to GnRH. Kato Y, et al. **Mol Cell Endocrinol** 1989 Mar;62(1):135–9

Stimulation of pituitary luteinizing hormone secretion by gonadotropin-releasing hormone is not coupled to beta-luteinizing hormone gene transcription. Salton SR, et al. **Mol Endocrinol** 1988 Nov;2(11):1033–42

Delayed sexual maturation induced by daily melatonin administration eliminates the LH response to naloxone despite normal responsiveness to GnRH in juvenile male rats. Aubert ML, et al. **Neuroendocrinology** 1988 Jul; 48(1):72–80

Suppression of basal and GnRH-stimulated gonadotropin secretion rate in vitro by GnRH antagonist: differential effects on metestrous and proestrous pituitaries. Hiatt ES, et al. **Neuroendocrinology** 1989 Aug;50(2):158–64

Luteinizing hormone and prolactin secretion in hypophysial-stalk-transected pigs given estradiol and pulsatile gonadotropin-releasing hormone. Kesner JS, et al. **Neuroendocrinology** 1989 May;49(5):502–8

Effect of the antiandrogen flutamide on pituitary LH content and release. Sardañons ML, et al. **Neuroendocrinology** 1989 Aug;50(2):211–6

Chicken gonadotropin-releasing hormone II increases plasma catecholamines in the bullfrog. Wilson JX, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):354–8

Hypothalamic peptides affect the ratios of GH and PRL cells: role of cell division. Frawley LS, et al. **Peptides** 1988 Jul–Aug;9(4):825–8

Administration of gonadotropin-releasing hormone to pregnant rats inhibits postpartum sexual behavior. Dunlap KD, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):725–8

Effects of growth hormone-releasing factor and somatostatin on growth hormone secretion in hypophysial stalk-transected beef calves. Plouzek CA, et al. **Proc Soc Exp Biol Med** 1988 Nov;189(2):158–67

Multimodal control of pituitary gonadotropin biosynthesis. Effects of gonadal steroids, GnRH, cyclic AMP and diacylglycerols. Counis R, et al. **Reprod Nutr Dev** 1988; 28(4B):1193–205

[Use of gonadoliberin (GnRH) or analogs in veterinary medicine. Pharmacologic and therapeutic evaluation in cattle] Thibier M. **Ann Rech Vet** 1988;19(3):153–67 (113 ref.) (Eng. Abstr.) **(Fre)**

[Experimental endocrinological studies in gilts near the time of ovulation using Gn-RH vet. "Berlin Chemistry"] George G, et al. **Arch Exp Veterinarmed** 1989 Jan; 43(1):23–37 (Eng. Abstr.) **(Ger)**

[The course of ovulation in gilts after the partial replacement of HCG by GnRH for ovulation stimulation] Schlegel W, et al. **Arch Exp Veterinarmed** 1989 Jan;43(1):97–100 (Eng. Abstr.) **(Ger)**

[The course of ovulation in gilts after the use of two GnRH injections for ovulation stimulation] Schlegel W, et al. **Arch Exp Veterinarmed** 1989 Jan;43(1):101–5 (Eng. Abstr.) **(Ger)**

[Effects on growth hormone secretion of a new somatostatin analogue (SMS 201-995) and nonspecific releasing hormones in patients with acromegaly] Candrina R. **Medicina (Firenze)** 1988 Apr–Jun;8(2):180–1 (Eng. Abstr.) **(Ita)**

PHYSIOLOGY

Evidence that gonadotropin-releasing hormone also functions as a growth hormone-releasing factor in the goldfish. Marchant TA, et al. **Endocrinology** 1989 May; 124(5):2509–18

A gonadotropin-releasing hormone agonist and an activator of protein kinase C improve in vitro oocyte maturation in Macaca fascicularis. Lefèvre B, et al. **Gamete Res** 1988 Oct;21(2):193–7

Gonadotrophin-releasing hormone: its actions and receptors. Clayton RN. **J Endocrinol** 1989 Jan;120(1):11–9 (62 ref.)

Short-term use of gonadotropin-releasing hormone agonist [editorial] Kreiner D, et al. **J In Vitro Fert Embryo Transf** 1988 Dec;5(6):313–4

In vivo effect of melatonin and gonadotropin-releasing hormone on testicular function in Rana temporaria. Alonso-Bedate M, et al. **J Pineal Res** 1988;5(4):323–32

Pituitary and Leydig cell function in boars actively immunized against gonadotrophin-releasing hormone. Awoniyi CA, et al. **J Reprod Fertil** 1988 Sep;84(1):295–302

Cyclic adenosine monophosphate and phorbol ester, like gonadotropin-releasing hormone, stimulate the biosynthesis of luteinizing hormone polypeptide chains in a nonadditive manner. Starzec A, et al. **Mol Endocrinol** 1989 Apr; 3(4):618–24

Effects of ovariectomy on GnRH mRNA, proGnRH and GnRH levels in the preoptic hypothalamus of the female rat. Kelly MJ, et al. **Neuroendocrinology** 1989 Jan; 49(1):88–97

Transplanted gonadotropin-releasing hormone neurons promote pulsatile luteinizing hormone secretion in congenitally hypogonadal (hpg) male mice. Kokoris GJ, et al. **Neuroendocrinology** 1988 Jul;48(1):45–52

Gonadotropin releasing hormone (GnRH) affects precopulatory behavior in testosterone-treated geldings. McDonnell SM, et al. **Physiol Behav** 1989 Jan;45(1):145–9

Effect of gonadal steroids on gonadotropin-releasing hormones stimulated human chorionic gonadotropin release by trophoblast cells. Iwashita M, et al. **Placenta** 1989 Jan–Feb;10(1):103–12

Indomethacin inhibits hCG and GnRH agonist-induced secretion of plasminogen activator by granulosa and theca interstitial cells of hypophysectomized rats. Liu YX, et al. **Sci Sin [B]** 1988 Jul;31(7):807–17

Gonadotropin releasing hormone (GnRH) neurons are directly innervated by catecholamine terminals. Chen WP, et al. **Synapse** 1989;3(3):288–90

SECRETION

Estrogen stimulates gonadotropin-releasing hormone release from rat hypothalamus independently through catecholamine and histamine in vitro. Ohtsuka S, et al. **Acta Endocrinol (Copenh)** 1989 May;120(5):644–8

Alterations of the hypothalamic GnRH interpulse interval sequence over the normal menstrual cycle. Santoro N, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):E696–701

The GNRH/gonadotropin axis in the ewe, cow and sow. Clarke IJ. **Domest Anim Endocrinol** 1989 Jan;6(1):1–14 (114 ref.)

Direct activation of gonadotropin-releasing hormone secretion through different receptors to neuroexcitatory amino acids. Bourguignon JP, et al. **Neuroendocrinology** 1989 Apr;49(4):402–8

Ectopic release of GHRH and ACTH from an adenoid cystic carcinoma resulting in acromegaly and complicated by pituitary infarction. Southgate HJ, et al. **Postgrad Med J** 1988 Feb;64(748):145–8

THERAPEUTIC USE

Successful GnRH treatment in a patient with Kallmann's syndrome, who previously failed HMG/HCG treatment. Berezin M, et al. **Andrologia** 1988 Jul–Aug;20(4):285–8

Gonadotrophin releasing hormone analogues for gynaecological disorders and infertility. Fraser HM, et al. **BMJ** 1989 Feb 25;298(6672):475–6 (21 ref.)

Pulsatile gonadotropin-releasing hormone. Physiological and clinical aspects. Leyendecker G, et al. **Contrib Gynecol Obstet** 1989;17:18–35 (29 ref.)

Induction of spermatogenesis and fertility in hypogonadotropic azoospermic men by intravenous pulsatile gonadotropin-releasing hormone (GnRH). Blumenfeld Z, et al. **Gynecol Endocrinol** 1988 Jun; 2(2):151–64

Treatment of cryptorchidism with human chorionic gonadotropin or gonadotropin releasing hormone. A double-blind controlled study of 243 boys. Christiansen P, et al. **Horm Res** 1988;30(4–5):187–92

Surgical and hormonal therapy for cryptorchidism: an overview. Rajfer J. **Horm Res** 1988;30(4–5):139–43

Pulsatile gonadotrophin releasing hormone therapy in patients with hyperandrogenaemia or hypothalamic amenorrhoea. Gerhard I, et al. **Hum Reprod** 1988 Oct; 3(7):835–43

Endometrial biopsies during treatment with subcutaneous pulsatile gonadotropin-releasing hormone and luteal-phase human chorionic gonadotropin. Campbell BF, et al. **Int J Fertil** 1988 Sep–Oct;33(5):329–33

Effect of gonadotropin-releasing hormone on clinical response and fertility in cows with cystic ovaries, as related to milk progesterone concentration and days after parturition. Dinsmore RP, et al. **J Am Vet Med Assoc** 1989 Aug 1;195(3):327–30

Clinical applications of GnRH analogs. Forti G. **J Endocrinol Invest** 1988 Nov;11(10):745–54 (80 ref.)

Induction of ovulation with gonadotrophin-releasing hormone—life-table analysis of 50 courses of treatment. Kovacs GT, et al. **Med J Aust** 1989 Jul 3;151(1):21, 24–6

GnRH analogues in the treatment of endometriosis. Erickson LD, et al. **Obstet Gynecol Clin North Am** 1989 Mar; 16(1):123–45 (76 ref.)

[Analogs of gonadoliberin (GnRH) in the treatment of endometriosis] Presl J. **Cesk Gynekol** 1988 Dec; 53(10):756–62 (36 ref.) **(Cze)**

[The use of pulsatile gonadotropins and gonadotropin releasing hormone analogues for ovulation induction in chronic anovulatory patients] Bacchi Modena A, et al. **Minerva Ginecol** 1988 Aug;40(8):457–60 (Eng. Abstr.) **(Ita)**

PITUITARY HORMONES

[Recent studies on 7B2, a novel pituitary protein] Iguchi H, et al. **Nippon Rinsho** 1988 Oct;46(10):2323–34 (21 ref.) **(Jpn)**

ANALYSIS

Two-dimensional immunoblotting analysis and immunocytochemical localization of the secretory polypeptide 7B2 in adrenal medulla. Marcinkiewicz M, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):81–7

Ultrastructural localization of secretory granule constituent chromogranin and 7 B 2. Osamura RY, et al. **Pathol Res Pract** 1988 Sep;183(5):617–9

Melanin-concentrating hormone (MCH) immunoreactivity in the brain and pituitary of the dogfish Scyliorhinus canicula. Colocalization with alpha-melanocyte-stimulating hormone (alpha-MSH) in hypothalamic neurons. Vallarino M, et al. **Peptides** 1989 Mar-Apr;10(2):375-82

An immunocytochemical study of pituitary adenomas and focal hyperplasia in old Sprague-Dawley and Fischer 344 rats. Sandusky GE, et al. **Toxicol Pathol** 1988;16(3):376-80

[Decrease in the immunoreactivity of protein 7B2 in vasopressinergic cells in the supraoptic nucleus and in fibers of the neurohypophysis, in Brattleboro rats] Marcinkiewicz M, et al. **C R Acad Sci [III]** 1988;307(12):689-94 (Eng. Abstr.) **(Fre)**

[Hypophyseal and adrenal hormones and the immune reactivity of patients with Itsenko-Cushing disease after an adrenal autograft] Komissarenko IV, et al. **Vrach Delo** 1989 Jan;(1):20-2 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Melanin concentrating hormone analogues: contraction of the cyclic structure. II. Antagonist activity. Lebl M, et al. **Life Sci** 1989;44(7):451-7

BIOSYNTHESIS

Cultured fetal rat pituitaries kept in synthetic medium are able to initiate synthesis of trophic hormones. Nemeskéri A, et al. **Cell Tissue Res** 1989 Mar;255(3):645-50

The expression of progastrin, procholecystokinin and their hormonal products in pituitary cells. Rehfeld JF. **J Mol Endocrinol** 1988 Sep;1(2):87-94 (68 ref.)

An immunological study of the secretory activity of neurons producing melanin-concentrating hormone in a teleost. Bird DJ, et al. **Neuroscience** 1989;28(1):245-51

BLOOD

A new pituitary protein 7B2 is increased in patients with high alpha- or beta-hCG. Leonhardt U, et al. **Acta Endocrinol (Copenh)** 1989 Mar;120(3):289-94

Effects of psychological stress on pituitary hormones in man. Meyerhoff JL, et al. **Adv Exp Med Biol** 1988;245:465-78

Inferior petrosal sinus sampling in acromegaly. Crock PA, et al. **Aust N Z J Med** 1989 Jun;19(3):244-7

Elevation of a novel pituitary protein (7B2) in the plasma in small cell carcinoma of the lung. Iguchi H, et al. **Eur J Cancer Clin Oncol** 1989 Aug;25(8):1225-32

The measurement of melanin-concentrating hormone in trout blood. Kishida M, et al. **Gen Comp Endocrinol** 1989 May; 74(2):221-9

Occupational lead exposure and pituitary function. Gustafson A, et al. **Int Arch Occup Environ Health** 1989;61(4):277-81

Hormonal profile in benign breast disease. Endocrine status of cyclical mastalgia patients. Parlati E, et al. **J Endocrinol Invest** 1988 Oct;11(9):679-83

Influence of subchronic intake of melatonin at various times of the day on fatigue and hormonal levels: a placebo-controlled, double-blind trial. Nickelsen T, et al. **J Pineal Res** 1989;6(4):325-34

Epileptic but not psychogenic seizures are accompanied by simultaneous elevation of serum pituitary hormones and cortisol levels. Rao ML, et al. **Neuroendocrinology** 1989 Jan;49(1):33-9

Remarkable changes in the plasma levels of pituitary protein "7B2" during childhood. Iguchi H, et al. **Pediatr Res** 1988 Aug;24(2):194-6

Age, cellular immunity and the HP axis in major depression. Darko DF, et al. **Prog Neuropsychopharmacol Biol Psychiatry** 1988; 12(5):713-20

[Hormonal aspects in the diagnosis of hirsutism] Maleev A, et al. **Akush Ginekol (Sofiia)** 1989;28(1):60-6 (Eng. Abstr.) **(Bul)**

[Gamma-camera scintigraphy and radioimmunological study of the hormones of the hypophyseal-gonadal axis to evaluate testicular function in patients with hypogonadism and infertility] Sultanov S, et al. **Akush Ginekol (Sofiia)** 1989;28(2):64-6 (Eng. Abstr.) **(Bul)**

[Gamma-camera scintigraphy of the testes and the concentration of hormones of the hypophyseo-gonadal axis in patients with cryptorchism and infertility] Sultanova S, et al. **Akush Ginekol (Sofiia)** 1989;28(1):77-80 **(Bul)**

[Hypothalamic pituitary function in brain death patients—from blood pituitary hormones and hypothalamic hormones] Arita K, et al. **No Shinkei Geka** 1988 Sep; 16(10):1163-71 (Eng. Abstr.) **(Jpn)**

CEREBROSPINAL FLUID

Pituitary protein 7B2-like immunoreactivity in cerebrospinal fluid: comparison with other neuropeptides. Suzuki H, et al. **J Lab Clin Med** 1989 Jun;113(6):743-8

Age-related change in 7B2 (a novel pituitary polypeptide) concentrations in human cerebrospinal fluid. Natori S, et al. **Regul Pept** 1988 Sep;22(4):371-6

CHEMICAL SYNTHESIS

Melanin concentrating hormone (MCH): synthesis and bioactivity studies of MCH fragment analogues. Matsunaga TO, et al. **Peptides** 1989 Mar-Apr;10(2):349-54

GENETICS

Differential expression of the gene encoding the novel pituitary polypeptide 7B2 in human lung cancer cells. Roebroek AJ, et al. **Cancer Res** 1989 Aug 1;49(15):4154-8

Regional mapping of the human gene encoding the novel pituitary polypeptide 7B2 to chromosome 15q13----q14 by in situ hybridization. Roebroek AJ, et al. **Cytogenet Cell Genet** 1989;50(2-3):158-60

Cloning, characterization, and sequence of a porcine cDNA encoding a secreted neuronal and endocrine protein. Brayton KA, et al. **DNA** 1988 Dec;7(10):713-9

Structures of two kinds of mRNA encoding the chum salmon melanin-concentrating hormone. Ono M, et al. **Gene** 1988 Nov 30;71(2):433-8

cDNA sequence of neuroendocrine protein 7B2 expressed in beta cell tumors of transgenic mice. Mbikay M, et al. **Int J Pept Protein Res** 1989 Jan;33(1):39-45

Gonadal regulation of pituitary hormone mRNA levels in male rats. Abbot SD, et al. **J Mol Endocrinol** 1988 Jul; 1(1):61-8

cDNA sequence of salmon melanin-concentrating hormone exhibits similarities with 7SL RNA. Nahon JL, et al. **Nucleic Acids Res** 1989 May 11;17(9):3598

Two precursors of melanin-concentrating hormone: DNA sequence analysis and in situ immunochemical localization. Minth CD, et al. **Proc Natl Acad Sci U S A** 1989 Jun; 86(11):4292-6

Melanocyte stimulating hormone and melanin concentration hormone may be structurally and evolutionarily related. Castrucci AM, et al. **Regul Pept** 1989 Jan;24(1):27-35

IMMUNOLOGY

Plasma 7B2 (a novel pituitary protein) immunoreactivity concentrations in patients with various endocrine disorders. Natori S, et al. **Endocrinol Jpn** 1988 Aug;35(4):651-4

ISOLATION & PURIFICATION

Characterization of melanin-concentrating hormone from rat hypothalamus. Vaughan JM, et al. **Endocrinology** 1989 Sep; 125(3):1660-5

METABOLISM

Ultrastructural and functional characteristics of anterior pituitary cells in the Indian fruit bat, Rousettus leschenaulti (Desmarest). Bhiwgade DA, et al. **Acta Anat (Basel)** 1989; 135(2):129-41

Immunohistochemical study of Rathke's cleft cyst. Ikeda H, et al. **Acta Neuropathol (Berl)** 1988;77(1):33-8

Presence of high concentration of 7B2 in pleural effusion. Iguchi H, et al. **Endocrinol Jpn** 1988 Dec;35(6):885-9

The effect of altered thyroid status on pituitary hormone messenger ribonucleic acid concentrations in the rat. Samuels MH, et al. **Endocrinology** 1989 May;124(5):2277-82

Interleukin-6 stimulates anterior pituitary hormone release in vitro. Spangelo BL, et al. **Endocrinology** 1989 Jul; 125(1):575-7

Role of carbohydrates in glycoprotein hormone signal transduction. Sairam MR. **FASEB J** 1989 Jun;3(8):1915-26 (47 ref.)

Human hypothalamic neuronal system revealed with a salmon melanin-concentrating hormone (MCH) antiserum. Bresson JL, et al. **Neurosci Lett** 1989 Jul 17;102(1):39-43

Coexistence of acetylcholinesterase-, human growth hormone-releasing factor(1-37)-, alpha-melanotropin- and melanin-concentrating hormone-like immunoreactivities in neurons of the rat hypothalamus: a light and electron microscope study. Risold PY, et al. **Neurosci Lett** 1989 May 22;100(1-3):23-8

Pituitary, hypothalamic and pancreatic 7B2 concentrations in rats with streptozotocin-induced diabetes and spontaneously diabetic mice. Suzuki H, et al. **Pancreas** 1988; 3(6):662-7

PHARMACOLOGY

Effect and site of action of hypothalamic neuropeptides on prolactin release in sheep. Thomas GB, et al. **Neuroendocrinology** 1988 Sep;48(3):252-7

Ionic requirements for melanin concentrating hormone (MCH) actions on teleost Poecilia reticulata melanophores. Visconti MA, et al. **Pigment Cell Res** 1989 May-Jun; 2(3):213-7

Potentiation of response to insulin and anti-insulin action by two human pituitary peptides in lean agouti A/a, obese yellow Avy/A, and C57BL/6J-ob/ob mice. Salem MA, et al. **Proc Soc Exp Biol Med** 1989 Jun;191(2):113-23

Effects of hypophysectomy and the insulin-like and anti-insulin pituitary peptides on carbohydrate metabolism in yellow Avy/A (BALB/c x VY)F1 hybrid mice. Salem MA, et al. **Proc Soc Exp Biol Med** 1989 Sep;191(4):408-19

Effects of hypophysectomy and pituitary hormones on hepatic microsomal carboxylesterase isozymes in male rats. Hosokawa M, et al. **Res Commun Chem Pathol Pharmacol** 1988 Nov; 62(2):279-88

Final maturation and ovulation provoked by supply of homologous hypophysis in Hoplias m. malabaricus (Pisces, Erythrinidae). Matkovic M, et al. **Rev Bras Biol** 1989 Feb; 49(1):213-20

Oogenesis and ovulation in normal conditions or induced by homologous hypophysis in Hoplias m. malabaricus (Pisces, Erythrynidae). Matkovic M, et al. **Rev Bras Biol** 1989 Feb;49(1):203-12

PHYSIOLOGY

Mammary gland development and alpha-lactalbumin production in hypophysectomized, pregnant mice. Thordarson G, et al. **Biol Reprod** 1989 Mar;40(3):517-24

Hormonal regulation of peripheral benzodiazepine binding sites in female rat adrenal gland and kidney. Fares F, et al. **J Recept Res** 1989;9(2):143-57

Reproductive hormones control striatal tyrosine hydroxylase activity in the male rat. Abreu P, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):213-7

Pituitary hormones and reproduction in vertebrates. A.I.P. I.N.R.A. Versailles, October 22, 1987. (Institut National de la Resherche Agronomique). **Reprod Nutr Dev** 1988; 28(4B):989-1206

[Effects of neurohypophysis hormones on the secretion of some adenohypophysis hormones] Li H. **Sheng Li Ko Hsueh Chin Chan** 1989 Jan;20(1):45-8 (43 ref.) **(Chi)**

SECRETION

Changes in the pituitary-testicular axis function with age in normal adult males. Díaz Sánchez V, et al. **Arch Invest Med (Mex)** 1988 Jul-Sep;19(3):309-17

Influence of norepinephrine administration upon pituitary hormone secretion in normal men. Mileikowsky GN, et al. **J Endocrinol Invest** 1988 Oct;11(9):641-5

Rapid release of multiple hormones from rat pituitaries perifused with recombinant interleukin-1. Beach JE, et al. **Life Sci** 1989;44(1):1-7

Effects of withdrawal from chronic exposure to cigarette smoke on hypothalamic and preoptic catecholamine nerve terminal systems and on the secretion of pituitary hormones in the male rat. Andersson K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Apr; 339(4):387-96

[The functional pathology of hypophyseal adenomas] Kovacs K, et al. **Z Gesamte Inn Med** 1988 Aug 1;43(15):405-7 (12 ref.) (Eng. Abstr.) **(Ger)**

[Endocrine disorders in obesity—with special reference to the pituitary, thyroid and adrenal functions] Inoue S, et al. **Nippon Rinsho** 1988 Nov;46(11):2395-9 **(Jpn)**

PITUITARY HORMONES, ANTERIOR

Stokes radius determination of radioiodinated polypeptide hormones by gel filtration. Ribela MT, et al. **Anal Biochem** 1988 Nov 1;174(2):693-7

ANALYSIS

Stokes radius determination of radioiodinated polypeptide hormones by gel filtration. Ribela MT, et al. **Anal Biochem** 1988 Nov 1;174(2):693-7

Multiple hormone storage by cells of the human pituitary. Newman GR, et al. **J Histochem Cytochem** 1989 Aug; 37(8):1183-92

Microdialysis for measurement of neuroendocrine peptides. Levine JE, et al. **Methods Enzymol** 1989;168:166-81

Simultaneous production of the alpha-subunit of glycoprotein hormones and other hormones in pituitary adenomas. Jautzke G. **Pathol Res Pract** 1988 Sep; 183(5):601-5

[Multihormonal adenomas of the pituitary: immunohistochemical study of 13 cases] Félix IA, et al. **Arch Invest Med (Mex)** 1988 Jul-Sep;19(3):231-40 (Eng. Abstr.) **(Spa)**

BLOOD

Serum levels of thyroid and adrenal hormones, testosterone, TSH, LH, GH and prolactin in men after a 2-h stay in a cold room. Leppäluoto J, et al. **Acta Physiol Scand** 1988 Apr;132(4):543-8

Effects of a brain-enhanced chemical delivery system for estradiol on body weight and serum hormones in middle-aged male rats. Anderson WR, et al. **Endocr Res** 1988;14(2-3):131-48

The effect of season on the circulating concentrations of anterior pituitary, ovarian and adrenal cortex hormones and hormone binding proteins in the subarctic area; evidence of increased activity of the pituitary-ovarian axis in spring. Kauppila A, et al. **Gynecol Endocrinol** 1987 Jun; 1(2):137-50

Indomethacin and oxaprozin lower seminal prostaglandin levels but do not influence sperm motion characteristics and serum hormones of young healthy men in a placebo-controlled double-blind trial. Knuth UA, et al. **J Androl** 1989 Mar-Apr;10(2):108-19

Neuroendocrine aberrations in women with functional hypothalamic amenorrhea. Berga SL, et al. **J Clin Endocrinol Metab** 1989 Feb;68(2):301-8

Periovulatory follicular fluid hormone levels in spontaneous human cycles. Seibel MM, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1073-7

Hormonal changes in major depressive disorder. Kitamura T, et al. **Keio J Med** 1989 Mar;38(1):40-52

Hormonal effects of CV 205-502, a novel octahydrobenzo [g] quinoline with potent dopamine agonist properties. Gaillard RC, et al. **Life Sci** 1988;43(17):1355-62

Adenohypophyseal hormones and catecholamines in patients

with diencephalic pathology. Damianova G, et al. **Neurol Psychiatr (Bucur)** 1989 Apr-Jun;27(2):127-31

[Towards an attempt at biological differentiation of endogenous and exogenous depression: a study of beta-endorphins and other parameters (prolactin, growth hormone and dexamethasone repression test) in a cohort of ambulatory depressed patients] Gallart JM, et al. **Ann Med Psychol (Paris)** 1988 Jul-Aug;146(8):758-63 **(Fre)**

[The pituitary in the cirrhotic patient: hormonal data] Cotrozzi G, et al. **Boll Soc Ital Biol Sper** 1988 Apr; 64(4):323-7 (Eng. Abstr.) **(Ita)**

[Influence of phototherapy on the secretion of TSH, PRL and thyroid hormones in premature neonates] Bona G, et al. **Minerva Pediatr** 1988 Sep;40(9):539-44 (Eng. Abstr.) **(Ita)**

[Level of pituitary, adrenal and thyroid hormones in parturients with allergy and in their progeny] Krivonogova TS, et al. **Pediatriia** 1989;(6):11-3 **(Rus)**

[Changes in hormonal indicators during the treatment of depression of different types] Krasnov VI, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):101-5 (Eng. Abstr.) **(Rus)**

[Study of intersystemic hormonal interrelations in patients with depression] Markova MN, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):105-10 (Eng. Abstr.) **(Rus)**

DEFICIENCY

[Trans-sphenoid meningoencephalocele as a cause of anterior hypophyseal lobe insufficiency] Braunsdorf WE. **Nervenarzt** 1989 Jul;60(7):441-3 **(Ger)**

GENETICS

Thyroid hormone response elements in pituitary genes. Ahlquist JA, et al. **Biochim Biophys Acta** 1989 Jul 7; 1008(2):251-4

METABOLISM

Protein secretion by mesometrial and antimesometrial rat decidual tissue: evidence for differential gene expression. Jayatilak PG, et al. **Endocrinology** 1989 Aug;125(2):659-66

PHARMACOLOGY

[Sensitivity of the rabbit embryonal Leydig cells to the action of different pituitary hormones] Brindak OI, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):91-3 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Pituitary-thyroid relationships in hypothyroidism. Silva JE. **Baillieres Clin Endocrinol Metab** 1988 Aug;2(3):541-65 (129 ref.)

The importance of hypophyseal hormones for structural cardiovascular adaptation in hypertension. Folkow B, et al. **J Hypertens Suppl** 1988 Dec;6(4):S166-9

Alcohol effects on luteinizing hormone releasing hormone-stimulated anterior pituitary and gonadal hormones in women. Mendelson JH, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):902-9

[Hormonal effects of cold and light] Leppäluoto J. **Duodecim** 1989;105(5):430-6 (49 ref.) **(Fin)**

SECRETION

The effect of ceruletide, a cholecystokinin analogue, on the secretion of pituitary hormones in man. Krassowski J, et al. **Acta Med Pol** 1987;28(1-4):35-9

Growth hormone-releasing factor, thyrotropin-releasing hormone and gonadotropin-releasing hormone in pituitary stalk transection. Kikuchi K, et al. **Acta Paediatr Jpn Overseas Ed** 1988;30 Suppl:72-8

Anterior and posterior pituitary hormone release induced in sheep by cholecystokinin. Ebenezer IS, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1355-7

Inhibition of monoamine oxidase by moclobemide: effects on monoamine metabolism and secretion of anterior pituitary hormones and cortisol in healthy volunteers. Koulu M, et al. **Br J Clin Pharmacol** 1989 Feb;27(2):243-55

The role of somatostatin in the regulation of anterior pituitary hormone secretion and the use of its analogs in the treatment of human pituitary tumors. Lamberts SW. **Endocr Rev** 1988 Nov;9(4):417-36 (199 ref.)

Dihydropyridine-sensitive calcium channel activity related to prolactin, growth hormone, and luteinizing hormone release from anterior pituitary cells in culture: interactions with somatostatin, dopamine, and estrogens. Drouva SV, et al. **Endocrinology** 1988 Dec;123(6):2762-73

Effects of metal cations on pituitary hormone secretion in vitro. Cooper RL, et al. **J Biochem Toxicol** 1987 Fall-Winter;2:241-9

Gonadotropin and alpha-subunit responses to chronic gonadotropin-releasing hormone analog administration in patients with glycoprotein hormone-secreting pituitary tumors. Klibanski A, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):81-6

Analysis of hormone secretion by clinically nonfunctioning human pituitary adenomas using the reverse hemolytic plaque assay. Yamada S, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):73-80

Possible involvement of lipoxygenase pathway of arachidonic acid in rat pituitary hormone release in vitro. Miyake A, et al. **J Endocrinol Invest** 1988 Dec;11(11):805-8

Patch clamp recording from anterior pituitary cells identified by reverse hemolytic plaque assay. Croxton TL, et al. **Methods Enzymol** 1989;168:144-66

Cell-to-cell communication in peptide target cells of anterior pituitary. Denef C, et al. **Methods Enzymol** 1989;168:47-71

Measurement of hormone secretion from individual cells by cell blot assay. Kendall ME, et al. **Methods Enzymol** 1989; 168:327-38

Involvement of D1 dopamine receptors in the nicotine-induced neuro-endocrine effects and depletion of diencephalic catecholamine stores in the male rat. Andersson K, et al. **Neuroendocrinology** 1988 Aug; 48(2):188-200

Prolonged neuroendocrine effects of a brief exposure of adult male rats to diethylstilbestrol. Steger RW, et al. **Neuroendocrinology** 1989 Feb;49(2):191-6

Eicosanoids and the hypothalamo-pituitary axis. Cowell AM, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jun; 36(4):235-50 (154 ref.)

Multifactorial control of pituitary hormone secretion: the "wheels" of the brain. Jacobowitz DM. **Synapse** 1988; 2(3):186-92 (104 ref.)

Hormone secreting pituitary tumors. Skillman TG. **Trans Assoc Life Insur Med Dir Am** 1989;72:144-51 (9 ref.)

[Neuroendocrinologic studies on autism] Aihara R, et al. **No To Hattatsu** 1989 Mar;21(2):154-62 (Eng. Abstr.) **(Jpn)**

[Effect of antihypertensive treatment on the secretion of corticotropin, prolactin, growth hormone and cortisol] Kokot F, et al. **Pol Arch Med Wewn** 1985 Oct;74(4):235-41 (Eng. Abstr.) **(Pol)**

[Basal secretion of hormones of the anterior lobe of the pituitary gland, thyroid gland and adrenal cortex in children and adolescents with epilepsy] Kirichenko VD. **Zh Nevropatol Psikhiatr** 1989;89(6):26-30 (Eng. Abstr.) **(Rus)**

[Central regulation of adenohypophyseal function] Vigaš M. **Vnitr Lek** 1989 Mar;35(3):242-8 (Eng. Abstr.) **(Slo)**

PITUITARY HORMONES, POSTERIOR

see related
NEUROPHYSINS

Mass spectrometric charting of bovine posterior/intermediate pituitary peptides. Feistner GJ, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6013-7

ANALYSIS

Identification of neurohypophysial peptides in the ovaries of several mammalian and nonmammalian species. Watkins WB, et al. **Peptides** 1988 Sep-Oct;9(5):927-32

BIOSYNTHESIS

[Common precursors of neurohypophysial hormones and neurophysins] Chauvet J. **Ann Endocrinol (Paris)** 1988; 49(4-5):377-83 (24 ref.) (Eng. Abstr.) **(Fre)**

BLOOD

mu- and K-opiate receptor agonists reduce plasma neurohypophysial hormone concentrations in water-deprived and normally hydrated rats. Evans RG, et al. **Clin Exp Pharmacol Physiol** 1989 Mar;16(3):191-7

CEREBROSPINAL FLUID

Cerebrospinal fluid neurohypophysial peptides in benign intracranial hypertension. Seckl J, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1538-41

HISTORY

Harvey Cushing and the secretion of the posterior pituitary into the cerebro spinal fluid. Aziz TZ. **Bristol Med Chir J** 1988 Feb;103(1):11-2

ISOLATION & PURIFICATION

Characterization of a neurohypophyseal hormone-like activity isolated from ovine pineal glands. Noteborn HP, et al. **J Pineal Res** 1988;5(6):573-87

METABOLISM

Structure, processing and evolution of the neurohypophysial hormone-neurophysin precursors. Acher R, et al. **Biochimie** 1988 Sep;70(9):1197-207 (31 ref.)

A seasonal pineal peptide rhythm persists in superior cervical ganglionectomized rats. Prechel MM, et al. **Life Sci** 1989; 44(2):103-10

PHARMACOLOGY

Inhibitory effect of neurohypophysial peptides on cyclic AMP accumulation by isolated hepatocytes of the trout. Lahlou B, et al. **J Endocrinol** 1988 Dec;119(3):439-45

[Specificity of enteral effects participating in adrenergic inhibition of gastric secretion] Trefilov AB. **Fiziol Zh SSSR** 1989 Mar;75(3):412-4 **(Rus)**

PHYSIOLOGY

[Effect of neurohypophyseal hormones on hepatic circulation] Tsybenko VA, et al. **Fiziol Zh** 1988 Nov-Dec; 34(6):70-5 (Eng. Abstr.) **(Rus)**

SECRETION

Anterior and posterior pituitary hormone release induced in sheep by cholecystokinin. Ebenezer IS, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):R1355-7

PITUITARY IRRADIATION

Stereotactic irradiation for pituitary disease. Thorén M, et al. **Horm Res** 1988;30(2-3):101-3

Endocrine function in patients with large pituitary tumors treated with operative decompression and radiation therapy. Nelson PB, et al. **Neurosurgery** 1989 Mar; 24(3):398-400

[Proton irradiation of the hypophysis in combined antiandrogen treatment of prostatic cancer] Lopatkin NA, et al. **Khirurgiia (Sofiia)** 1988;41(3):1-3 (Eng. Abstr.) **(Rus)**

[Effect of proton irradiation of the hypophysis on its gonadotropic and thyrotropic functions in patients with prolactinoma] Isakov AV, et al. **Probl Endokrinol (Mosk)** 1988 Jul-Aug;34(4):28-32 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

[Neurologic changes following proton irradiation of the hypophysis in patients with generalized breast cancer] Volnarevich AO, et al. **Zh Nevropatol Psikhiatr** 1988; 88(6):88-91 (Eng. Abstr.) **(Rus)**

METHODS

Treatment of craniopharyngiomas—the stereotactic approach in a ten to twenty-three years' perspective. II. Psychosocial situation and pituitary function. Sääf M, et al. **Acta Neurochir (Wien)** 1989;99(3-4):97-103

PITUITARY NEOPLASMS

A case of multiple endocrine neoplasia (MEN) type 1; the immunohistochemical and ultrastructural studies of its tumors and the analysis of hormones in tumor extracts. Ishii H, et al. **Endocrinol Jpn** 1989 Feb;36(1):37-45

[Biology, diagnosis and treatment of pituitary tumors] Sane T. **Duodecim** 1988;104(21):1676-86 (75 ref.) **(Fin)**

[Prolactin adenoma in pregnancy. Anterior and posterior pituitary deficiency caused by tumor growth and later recovery (letter)] Le Thi Huong Du, et al. **Presse Med** 1989 May 6;18(18):941 **(Fre)**

[Internal medicine aspects of endocrine tumors. The hypophysis, epithelial bodies and adrenal glands] Raue F, et al. **Radiologe** 1989 Jan;29(1):1-6 (5 ref.) (Eng. Abstr.) **(Ger)**

ANALYSIS

Enzyme-immunoassay for estrogen receptors in human pituitary adenomas. Nakao H, et al. **Acta Endocrinol (Copenh)** 1989 Feb;120(2):233-8

Immunohistochemical study of folliculo-stellate cells in human pituitary adenomas. Tachibana O, et al. **Acta Neuropathol (Berl)** 1988;76(5):458-64

Concentrations of zinc, copper, manganese and selenium in blood and urine of patients with prolactinoma. Nishi Y, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Apr; 30(2):199-203

A 64 kDa protein is a candidate for a thyrotropin-releasing hormone receptor in prolactin-producing rat pituitary tumor cells (GH4C1 cells). Wright M, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):875-82

Flow cytometric analysis of pituitary tumors. Correlation of nuclear antigen p105 and DNA content with clinical behavior. Fitzgibbons PL, et al. **Cancer** 1988 Oct 15; 62(8):1556-60

Effects of estradiol on prolactin and growth hormone messenger RNAs in cultured normal and neoplastic (MtT/W15 and GH3) rat pituitary cells. Song JY, et al. **Cancer Res** 1989 Mar 1;49(5):1247-53

Immunoreactive human chorionic gonadotrophin from the cyst fluid and CSF of patients with craniopharyngioma. Harris PE, et al. **Clin Endocrinol (Oxf)** 1988 Nov; 29(5):503-8

Altered balance between thyrotropin-releasing hormone and dopamine in prolactinomas and other pituitary tumors compared to normal pituitaries. Le Dafniet M, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):267-71

Peptides related to alpha-melanocyte-stimulating hormone are commonly produced by human pituitary corticotroph adenomas: no relationship with pars intermedia origin. Coates PJ, et al. **J Endocrinol** 1989 Mar;120(3):531-6

Alpha-amidated peptides derived from pro-opiomelanocortin in human pituitary tumours. Fenger M, et al. **J Endocrinol** 1988 Aug;118(2):329-38

Detection of mRNA of prolactin and ACTH in clinically nonfunctioning pituitary adenomas. Sakurai T, et al. **J Neurosurg** 1988 Nov;69(5):653-9

Argyrophil organizer region proteins (AgNORs) in adenohypophysial cells and adenomas of the human

pituitary. Stefaneanu L, et al. **Mod Pathol** 1989 May; 2(3):192–9

Evidence of pre–prosomatostatin mRNA in human normal and tumoral anterior pituitary gland. Pagesy P, et al. **Mol Endocrinol** 1989 Aug;3(8):1289–94

Differences in glycoconjugates of adrenocorticotropic hormone–secretory granules between nonadenomatous pituitary cells and adenoma cells as detected by double labeling. Hori T, et al. **Neurosurgery** 1988 Jul;23(1):52–7

Microsequencing evidence for the maturation of human proopiomelanocortin into an 18 amino acid beta–melanocyte stimulating hormone [h beta MSH(5–22)] in nonpituitary tissue. Bertagna X, et al. **Peptides** 1989 Jan–Feb;10(1):83–7

An immunocytochemical study of pituitary adenomas and focal hyperplasia in old Sprague–Dawley and Fischer 344 rats. Sandusky GE, et al. **Toxicol Pathol** 1988;16(3):376–80

[The immunohistochemistry of pituitary adenomas] Gottschalk J, et al. **Zentralbl Allg Pathol** 1989; 135(2):123–45 (134 ref.) (Eng. Abstr.) **(Ger)**

[Multihormonal adenomas of the pituitary: immunohistochemical study of 13 cases] Félix IA, et al. **Arch Invest Med (Mex)** 1988 Jul–Sep;19(3):231–40 (Eng. Abstr.) **(Spa)**

BLOOD

Role of prolactin in age–related change in serum dehydroepiandrosterone sulphate concentrations. Yamaji T, et al. **Acta Endocrinol (Copenh)** 1989 May;120(5):655–60

Growth hormone–releasing factor increases serum prolactin concentrations in normal subjects and in patients with pituitary adenomas. Serri O, et al. **Clin Endocrinol (Oxf)** 1989 Jan;30(1):65–75

Gonadotropin release by clinically nonfunctioning and gonadotroph pituitary adenomas in vivo and in vitro: relation to sex and effects of thyrotropin–releasing hormone, gonadotropin–releasing hormone, and bromocriptine. Kwekkeboom DJ, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1128–35

Prolactin–lowering effect of luteinizing hormone–releasing hormone agonist administration in prolactinoma patients. Rubio MA, et al. **J Clin Endocrinol Metab** 1989 Aug; 69(2):444–7

Variations in red blood cell polyamines in brain tumour patients treated with stereotactic radiosurgery. von Essen C, et al. **Neurol Res** 1989 Jun;11(2):76–8

Intraoperative measurement of adrenocorticotropic hormone in peripituitary blood in Cushing's disease. Lüdecke DK. **Neurosurgery** 1989 Feb;24(2):201–5

[Pregnancy: a way of recovering from prolactin–secreting adenoma? 18 cases] Bricaire C, et al. **Presse Med** 1988 Nov 12;17(40):2117–9 (Eng. Abstr.) **(Fre)**

[Changes in serum levels of glycoprotein hormone alpha subunits in patients with alphoma–type pituitary tumors during LHRH and TRH stimulation tests] Waśko R. **Endokrynol Pol** 1989;40(1):1–8 (Eng. Abstr.) **(Pol)**

CHEMICALLY INDUCED

Effects of N–nitroso–N–methylurea on mammary and pituitary glands of young female Sprague–Dawley rats. Bernard DJ, et al. **Anticancer Res** 1988 Jul–Aug;8(4):717–24

Enhanced dopamine synthesis and release in vitro in the median eminence of rat hypothalamus are associated with involution of estradiol–induced pituitary tumors. Arita J, et al. **Endocrinology** 1989 Apr;124(4):1998–2004

Kallikrein gene expression in estrogen–induced pituitary tumors. Fuller PJ, et al. **Mol Cell Endocrinol** 1988 Dec; 60(2–3):225–32

Activation of anterior pituitary folliculo–stellate cells in the formation of estrogen–induced prolactin–secreting tumors. Schechter J, et al. **Neuroendocrinology** 1988 Nov; 48(5):569–76

CLASSIFICATION

[Immunoelectron microscopy in the functional classification of pituitary adenomas by using an immunogold probe] Wang FA. **Chung Hua I Hsueh Tsa Chih** 1988 Sep; 68(9):522–3 **(Chi)**

[A new classification of pituitary adenomas] Zang X. **Chung–hua Ping Li Hsueh Tsa Chih** 1988 Dec;17(4):260–3 (Eng. Abstr.) **(Chi)**

[Immunohistochemical classification of hypophyseal adenomas] Dušková J, et al. **Cesk Patol** 1989 Mar; 25(1):26–34 (Eng. Abstr.) **(Cze)**

COMPLICATIONS

Hemorrhage within pituitary adenomas: how often associated with pituitary apoplexy syndrome? Ostrov SG, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):153–60

Apoplexy of a pituitary adenoma after dynamic testing with gonadotropin–releasing hormone. Arafah BM, et al. **Am J Med** 1989 Jul;87(1):103–5

Pituitary adenocarcinoma in an acromegalic patient: response to bromocriptine and pituitary testing: a review of the literature on 36 cases of pituitary carcinoma. Mountcastle RB, et al. **Am J Med Sci** 1989 Aug;298(2):109–18 (79 ref.)

Recurrent blepharoptosis secondary to a pituitary tumor. Small KW, et al. **Am J Ophthalmol** 1988 Dec 15; 106(6):760–1

Diencephalic epilepsy with congenital suprasellar arachnoid cyst in an infant. Giroud M, et al. **Childs Nerv Syst** 1988 Aug;4(4):252–4

"Empty sella" with invasive microprolactinoma. Hufnagel TJ, et al. **Clin Neuropathol** 1989 May–Jun;8(3):126–9

Multi–channel visual evoked potentials in early compressive lesions of the chiasm. Flanagan JG, et al. **Doc Ophthalmol** 1988 Jul;69(3):271–81

Excessive growth in a child with craniopharyngioma and growth hormone deficiency. Wit JM, et al. **Eur J Pediatr** 1988 Aug;147(6):658–61

Recurrent transitional cell carcinoma of the renal pelvis presenting as diabetes insipidus. Gurney HP, et al. **Eur J Surg Oncol** 1989 Jun;15(3):282–4

Pituitary adenoma presenting as painful intermittent third nerve palsy. Cano M, et al. **Headache** 1989 Jul;29(7):451–2

Mania in a girl with Cushing's disease. Frank R, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jul;28(4):610–1

Thyrotoxicosis secondary to TSH secreting pituitary tumour. Menon PS, et al. **J Assoc Physicians India** 1988 Apr; 36(4):283–5

Pituitary adenoma in McCune–Albright syndrome: MR demonstration. O'Laughlin RL, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):685–8

Invasive pituitary adenoma presenting with nasal obstruction. Dent JA, et al. **J Laryngol Otol** 1989 Jun;103(6):605–9

Intrasellar persistent trigeminal artery associated with a pituitary adenoma. Case report. Lee KS, et al. **J Neurosurg** 1989 Feb;70(2):271–3

Persistent trigeminal artery and pituitary adenoma [letter] Salcman M. **J Neurosurg** 1989 Aug;71(2):301–2

Primary hypothyroidism mimicking pituitary adenoma. Zelissen PM, et al. **Neth J Med** 1989 Aug;35(1–2):95–9

Pituitary apoplexy manifested during a bromocriptine test in a patient with a growth hormone– and prolactin–producing pituitary adenoma. Shirataki K, et al. **Neurosurgery** 1988 Sep;23(3):395–8

Pituitary hyposecretion and hypersecretion produced by a Rathke's cleft cyst presenting as a noncystic hypothalamic mass. Wenzel M, et al. **Neurosurgery** 1989 Mar;24(3):424–8

Two patients with hypergonadotropic ovarian failure due to pituitary hyperplasia. Okuda K, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):498–501

Cyclic Cushing's disease in association with a pituitary stone. La Civita KA, et al. **South Med J** 1989 Sep;82(9):1174–6

Prolactinoma in a middle–aged man with an osteoporotic fracture. Taylor SD, et al. **West J Med** 1989 Jul;151(1):80–2

[Isolated painful ophthalmoplegia manifesting a hypophyseal tumor] Delreux V, et al. **Acta Clin Belg** 1988;43(5):384–7 (Eng. Abstr.) **(Fre)**

[Hyperthyroidism with normal thyrotropin assay disclosing thyrotropic pituitary adenoma (letter)] Thieblot P, et al. **Presse Med** 1988 Oct 29;17(38):2035–6 **(Fre)**

[Occlusion of the intracranial segment of the carotid artery by a hypophyseal tumor] Schnur S, et al. **Neurochirurgia (Stuttg)** 1989 Mar;32(2):58–60 (Eng. Abstr.) **(Ger)**

[Acute bilateral hearing loss as the initial symptom of craniopharyngioma] Doberenz I, et al. **Padiatr Grenzgeb** 1988;27(5):359–61 (Eng. Abstr.) **(Ger)**

[Pituitary adenoma combined with aneurysm of the circle of willis: A report of 2 cases] Brachmann J, et al. **Zentralbl Neurochir** 1988;49(2):128–32 (Eng. Abstr.) **(Ger)**

[Regression of a pituitary tumor, associated with primary hyperthyroidism, under the effect of 1–thyroxine] Tóth M, et al. **Orv Hetil** 1989 May 21;130(21):1111–3 (Eng. Abstr.) **(Hun)**

[A case of male acromegaly with galactorrhea] Tokunaga T, et al. **No Shinkei Geka** 1988 Aug;16(9):1101–5 (Eng. Abstr.) **(Jpn)**

[Persistent trigeminal artery variant—a case report] Kadota K, et al. **Rinsho Hoshasen** 1988 Dec;33(13):1703–6 (Eng. Abstr.) **(Jpn)**

[Sudden hemorrhage into asymptomatic hypophyseal tumors] Kandel' EI. **Zh Nevropatol Psikhiatr** 1988;88(11):51–4 (Eng. Abstr.) **(Rus)**

[Restorative electric stimulation of the optic nerve in patients with diseases of the chiasmal–sellar area] Khil'ko VA, et al. **Zh Nevropatol Psikhiatr** 1989;89(5):51–4 (Eng. Abstr.) **(Rus)**

[Hyperprolactinemia in craniopharyngiomas] Aksenova MA, et al. **Zh Vopr Neirokhir** 1989 Mar–Apr;(2):26–9 (Eng. Abstr.) **(Rus)**

[Recurrence of Cushing's disease in a child after transsphenoidal excision of a pituitary adenoma: hypothalamic change?] Barcia Vidal E, et al. **An Esp Pediatr** 1988 Jun;28(6):553–6 (Eng. Abstr.) **(Spa)**

[Oncogenic osteomalacia and Cushing's disease (letter)] García RV, et al. **Rev Clin Esp** 1989 Apr;184(6):333–4 **(Spa)**

CONGENITAL

Neonatal craniopharyngioma: CT and ultrasonographic features. Hurst RW, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):858–61

DIAGNOSIS

Do folliculo–stellate adenomas of the pituitary gland exist or are they intrasellar meningiomas? Vogel H, et al. **Acta Neuropathol (Berl)** 1988;77(2):219–23

High–resolution MR imaging of pituitary microadenomas at 1.5 T: experience with Cushing disease. Peck WW, et al. **AJR** 1989 Jan;152(1):145–51

Impotence as a presenting symptom of presumed prolactinoma in a patient with diabetes mellitus. Shakir KM. **Diabetes Care** 1983 Sep–Oct;6(5):510–1

ACTH determination in a petrosal sinus venous specimen after corticotrophin releasing factor provides the best clue on the laterality of microadenoma in Cushing's disease. Yamada S, et al. **Endocrinol Jpn** 1989 Apr;36(2):269–74

Pituitary adenoma and meningioma in the same patient. Report of three cases. Zentner J, et al. **Eur Arch Psychiatry Neurol Sci** 1989;238(3):144–8

MR appearance of a prolactinoma. Parizel PM, et al. **J Belge Radiol** 1988;71(6):736–7

Gadolinium DTPA enhanced MR imaging of ACTH–secreting microadenomas of the pituitary gland. Doppman JL, et al. **J Comput Assist Tomogr** 1988 Sep–Oct; 12(5):728–35

MR imaging of intrasellar meningiomas simulating pituitary adenomas. Michael AS, et al. **J Comput Assist Tomogr** 1988 Nov–Dec;12(6):944–6

Mass screening for hyperprolactinemia and prolactinoma in men. Miyake A, et al. **J Endocrinol Invest** 1988 May; 11(5):383–4

Visual evoked potentials in the assessment of patients with non–functioning chromophobe adenomas. Holder GE, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):31–7

The value of paramagnetic contrast agent gadolinium–DTPA in the diagnosis of pituitary adenomas. Nakamura T, et al. **Neuroradiology** 1988;30(6):481–6

Ectopic prolactinoma within the sphenoid sinus. Heitzmann A, et al. **Neurosurgery** 1989 Feb;24(2):279–82

Primary intrasellar microgerminoma detected by magnetic resonance imaging: case report. Oishi M, et al. **Neurosurgery** 1989 Sep;25(3):458–62

Magnetic resonance imaging of symptomatic Rathke's cleft cyst: report of a case. Wagle VG, et al. **Neurosurgery** 1989 Feb;24(2):276–8

Computed tomography versus magnetic resonance imaging for the evaluation of suspected pituitary adenomas. Stein AL, et al. **Obstet Gynecol** 1989 Jun;73(6):996–9

Clinical diagnosis of pituitary adenoma. Kamijo K, et al. **Pathol Res Pract** 1988 Sep;183(5):538–9

Unusual presentation of a large pituitary tumour in relation to diving. Bakheit AM, et al. **Postgrad Med J** 1989 Jan; 65(759):27–30

Gd–DTPA enhanced high resolution MR imaging of pituitary adenomas. Steiner E, et al. **Radiographics** 1989 Jul;9(4):587–98

Chemical shift imaging with paramagnetic contrast material enhancement for improved lesion depiction. Simon JH, et al. **Radiology** 1989 May;171(2):539–43

Pituitary adenomas: possible role of bromocriptine in intratumoral hemorrhage. Yousem DM, et al. **Radiology** 1989 Jan;170(1 Pt 1):239–43

Aspergillosis of sphenoid sinus presenting as a pituitary tumour. Tan KT, et al. **Singapore Med J** 1988 Aug; 29(4):410–2

Multiple distinct intracranial tumors: association of pinealoma and craniopharyngioma. Case report. Hazen S, et al. **Surg Neurol** 1989 May;31(5):381–6

Primary intrasellar schwannoma: case report. Wilberger JE Jr. **Surg Neurol** 1989 Aug;32(2):156–8

A case of refetoff syndrome: selective venous sampling for TSH is useful in differentiating thyroid hormone resistance from TSH secreting tumor. Itagaki Y, et al. **Tohoku J Exp Med** 1989 Jan;157(1):69–78

[Diffuse invasive pituitary adenoma—a report of two cases] Shen WC, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Dec; 42(6):481–6 (Eng. Abstr.) **(Chi)**

[New elements in the diagnosis and treatment of thyrotropic pituitary adenomas with hyperthyroidism] Linquette M, et al. **Bull Acad Natl Med** 1989 Feb;173(2):217–20; discussion 221–2 (Eng. Abstr.) **(Fre)**

[A case of craniopharyngioma. Diagnostic difficulties] Segal A, et al. **Bull Soc Ophtalmol Fr** 1988 Oct;88(10):1135–6, 1139–40 (Eng. Abstr.) **(Fre)**

[Magnetic resonance tomography of pituitary tumors] Gückel F, et al. **Radiologe** 1989 Jan;29(1):14–7 (15 ref.) (Eng. Abstr.) **(Ger)**

[Gd–DTPA in the MR diagnosis of pituitary adenomas] Steiner E, et al. **ROFO** 1989 Mar;150(3):323–7 (Eng. Abstr.) **(Ger)**

[Clinical symptoms and duration of anamnesis in patients with hypophyseal tumors] Dietel P, et al. **Z Gesamte Inn Med** 1989 May 15;44(10):293–6 (Eng. Abstr.) **(Ger)**

[Amineptine in the differential diagnosis of hyperprolactinemic states] Casazza S, et al. **Minerva Ginecol** 1988 Jun;40(6):357–62 (Eng. Abstr.) **(Ita)**

[Gadolinium DTPA in a MR study of expansive lesions of the cranial base] Bartolozzi C, et al. **Radiol Med (Torino)** 1988 Sep;76(3):152–7 (Eng. Abstr.) **(Ita)**

[MRI of craniopharyngioma] Hashimoto H, et al. **Rinsho Hoshasen** 1988 Sep;33(9):953–9 (Eng. Abstr.) **(Jpn)**

[Complex x–ray diagnosis of craniopharyngioma in adults] Valchis ChM, et al. **Zh Vopr Neirokhir** 1989 Jan–Feb; (1):20–4 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

The effect of the long-acting somatostatin analogue SMS 201-995 on ACTH secretion in Nelson's syndrome and Cushing's disease. Lamberts SW, et al. **Acta Endocrinol (Copenh)** 1989 Jun;120(6):760-6

Size reduction of an ACTH-secreting pituitary macroadenoma in Nelson's syndrome by sodium valproate: effect of withdrawal and re-institution of treatment. Loli P, et al. **Acta Endocrinol (Copenh)** 1988 Nov;119(3):435-42

Rhinorrhea following dopamine agonist therapy of invasive macroprolactinoma. Hildebrandt G, et al. **Acta Neurochir (Wien)** 1989;96(3-4):107-13

Prolactinoma in an adolescent girl: unusual response to bromocriptine therapy. Tiwary CM. **Am J Dis Child** 1989 May;143(5):521-3

Short-term recovery of visual field loss in acromegaly during treatment with a long-acting somatostatin analogue. Cobb WE, et al. **Am J Med** 1989 Apr;86(4):496-8

NIH conference. Somatostatin and somatostatin analogue (SMS 201-995) in treatment of hormone-secreting tumors of the pituitary and gastrointestinal tract and non-neoplastic diseases of the gut. Gorden P, et al. **Ann Intern Med** 1989 Jan 1;110(1):35-50 (153 ref.)

Reversible shrinkage of a growth hormone-secreting pituitary adenoma by a long-acting somatostatin analogue, octreotide. Barakat S, et al. **Arch Intern Med** 1989 Jun; 149(6):1443-5

Long-term treatment of Nelson's syndrome with sodium valproate. Kelly W, et al. **Clin Endocrinol (Oxf)** 1988 Feb; 28(2):195-204

The role of somatostatin in the regulation of anterior pituitary hormone secretion and the use of its analogs in the treatment of human pituitary tumors. Lamberts SW. **Endocr Rev** 1988 Nov;9(4):417-36 (199 ref.)

A case of large prolactinoma supposed to be cured by bromocriptine therapy. Arita K, et al. **Endocrinol Jpn** 1988 Jun;35(3):503-9

The effect of sodium valproate on plasma ACTH and cortisol concentrations in Cushing's disease and Nelson's syndrome. Kasperlik-Załuska A, et al. **Endokrynol Pol** 1988; 39(5):245-52

Reduction in the size of prolactin-producing pituitary tumor after Cabergoline administration. Melis GB, et al. **Fertil Steril** 1989 Sep;52(3):412-5

Bromocriptine treatment of acromegaly: possible dose dependency of the tumor size-reducing effect. Gross DJ, et al. **Isr J Med Sci** 1989 May;25(5):256-60

Preoperative treatment of acromegaly with long-acting somatostatin analog SMS 201-995: shrinkage of invasive pituitary macroadenomas and improved surgical remission rate. Barkan AL, et al. **J Clin Endocrinol Metab** 1988 Nov; 67(5):1040-8

Resistance to bromocriptine in prolactinomas. Pellegrini I, et al. **J Clin Endocrinol Metab** 1989 Sep;69(3):500-9

Preliminary results of intracavitary treatment of craniopharyngioma with bleomycin. Broggi G, et al. **J Neurosurg Sci** 1989 Jan-Mar;33(1):145-8

Ultrastructural study of prolactinoma after bromocriptine therapy. Wang CJ, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1988 Dec; 4(12):660-6

The effect of sodium valproate in Cushing's disease, Nelson's syndrome and Addison's disease. Reincke M, et al. **Klin Wochenschr** 1988 Aug 1;66(15):686-9

Growth of prolactinoma despite lowering of serum prolactin by bromocriptine. Kupersmith MJ, et al. **Neurosurgery** 1989 Mar;24(3):417-23

Successful treatment of a prolactin-producing pituitary macroadenoma with intravaginal bromocriptine mesylate: a novel approach to intolerance of oral therapy. Katz E, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 2):517-20

Changes in prolactinomas and somatotropinomas in humans treated with bromocriptine. Mori H, et al. **Pathol Res Pract** 1988 Sep;183(5):580-3

Treatment of prolactinomas and growth hormone-producing adenomas with an injectable bromocriptine retard preparation and a somatostatin analogue delivered by an implantable pump. Schatz H, et al. **Pathol Res Pract** 1988 Sep;183(5):546-51

Effect of nivazol in Nelson's syndrome. Ball JA, et al. **Postgrad Med J** 1988 Mar;64(749):220-1

Influence of pergolide treatment on xenotransplanted human pituitary tumors of prolactinoma. Schumm-Draeger PM, et al. **Strahlenther Onkol** 1989 Jul;165(7):560-1

[Effects of therapy and pregnancy on hyperprolactemia caused by a pituitary adenoma. A clinical case] Pasinetti E, et al. **Minerva Ginecol** 1989 Mar;41(3):157-60 (51 ref.) (Eng. Abstr.) **(Ita)**

[Dihydroergotoxine mesylate in the treatment of functioning pituitary adenoma] Fujii T, et al. **Neurol Med Chir (Tokyo)** 1989 Feb;29(2):94-8 (Eng. Abstr.) **(Jpn)**

[Macroprolactinoma resistant to bromocriptine] López-Espinosa E, et al. **Arch Invest Med (Mex)** 1989 Jan-Mar;20(1):1-8 (19 ref.) (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Protein kinase C stimulates adenylate cyclase activity in prolactin-secreting rat adenoma (GH4C1) pituicytes by inactivating the inhibitory GTP-binding protein Gi. Gordeladze JO, et al. **Eur J Biochem** 1989 Aug 1; 183(2):397-406

Hormone-sensitive adenylate cyclase of prolactin-producing rat pituitary adenoma (GH4C1) cells: molecular organization. Gordeladze JO, et al. **Eur J Biochem** 1988 Nov 15;177(3):665-72

EPIDEMIOLOGY

Tumourigenesis by partial body X-irradiation in mice. Sato F, et al. **Nippon Juigaku Zasshi** 1988 Dec;50(6):1161-8

GENETICS

Hereditary pituitary prolactinomas: a new rat model. Chedid A, et al. **Acta Endocrinol (Copenh)** 1988 Dec;119(4):535-42

Familial acromegaly. Pestell RG, et al. **Acta Endocrinol (Copenh)** 1989 Aug;121(2):286-9

Coordinate decrease of tissue insulinlike growth factor I posttranscriptional alternative mRNA transcripts in diabetes mellitus. Fagin JA, et al. **Diabetes** 1989 Apr; 38(4):428-34

Thyroid hormone regulates the mouse thyrotropin beta-subunit gene promoter in transfected primary thyrotropes. Wood WM, et al. **J Biol Chem** 1989 Sep 5; 264(25):14840-7

Pro-opiomelanocortin mRNA size heterogeneity in ACTH-dependent Cushing's syndrome. Clark AJ, et al. **J Mol Endocrinol** 1989 Jan;2(1):3-9

Thyroid hormone-responsive elements of the prolactin gene: evidence for both positive and negative regulation. Day RN, et al. **Mol Endocrinol** 1989 Jun;3(6):931-8

GTPase inhibiting mutations activate the alpha chain of Gs and stimulate adenylyl cyclase in human pituitary tumours. Landis CA, et al. **Nature** 1989 Aug 31;340(6236):692-6

Impulse cytophotometric DNA analysis in pituitary adenomas. Ahyai A, et al. **Neurosurg Rev** 1988;11(1):77-86

Human chorionic somatomammotropin and growth hormone gene expression in rat pituitary tumour cells is dependent on proximal promoter sequences. Nachtigal MW, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4327-37

HISTORY

An early effect of Wyndham Lewis' pituitary tumour on his art: an inquiry prompted by a note in The World Through Blunted Sight. Conway JF. **Eye** 1988;2 (Pt 6):677-81

METABOLISM

Quantitative in-situ hybridization histochemistry of anterior pituitary hormone mRNA species in human pituitary adenomas. Levy A, et al. **Acta Endocrinol (Copenh)** 1988 Nov;119(3):397-404

Immunocytochemistry of four mixed pituitary adenomas and intrasellar gangliocytomas associated with different clinical syndromes: acromegaly, amenorrhea-galactorrhea, Cushing's disease and isolated tumoral syndrome. Li JY, et al. **Acta Neuropathol (Berl)** 1989;77(3):320-8

Fluorescence histochemistry of RNA in human pituitary adenomas. Sarnat HB, et al. **Acta Neuropathol (Berl)** 1989; 78(3):245-51

Double-labeling immunogold electron-microscopic study of hormonal colocalization in nontumorous and adenomatous rat pituitaries. Losinski NE, et al. **Am J Anat** 1989 Jun-Jul; 185(2-3):236-43

Vasoactive intestinal peptide in the human pituitary gland and adenomas. An immunocytochemical study. Hsu DW, et al. **Am J Pathol** 1989 Aug;135(2):329-38

Characterization of a salt-extractable phosphatidylinositol synthase from rat pituitary-tumour membranes. Cubitt AB, et al. **Biochem J** 1989 Feb 1;257(3):639-44

Corticotropin-releasing factor and vasopressin production in the rat pituitary tumor 7315a: biochemical and immunohistochemical studies. Morano MI, et al. **Cancer Res** 1989 May 15;49(10):2755-60

Growth hormone releasing hormone-sensitive adenylate cyclase activity in growth hormone-producing pituitary adenoma: correlation to the response of plasma growth hormone to growth hormone releasing hormone in patients with acromegaly. Natori S, et al. **Endocrinol Jpn** 1989 Apr; 36(2):229-36

Synthesis and release of acetylcholine by normal and tumoral pituitary corticotrophs. Carmeliet P, et al. **Endocrinology** 1989 May;124(5):2218-27

Comparison of different agonists and antagonists of luteinizing hormone-releasing hormone for receptor-binding ability to rat pituitary and human breast cancer membranes. Fekete M, et al. **Endocrinology** 1989 Feb;124(2):946-55

Sodium butyrate induces pyroglutamyl peptidase I and decreases thyrotropin-releasing hormone receptors in GH3 cells. Suen CS, et al. **Endocrinology** 1989 Apr; 124(4):1654-60

Immunohistochemical analyses of oncocytic and chromophobe pituitary adenomas. Günzl HJ, et al. **Exp Clin Endocrinol** 1988 Sep;92(1):51-8

Prolactin synthesis in cultured pituitary cells is chloride-dependent. Day RN, et al. **J Biol Chem** 1988 Nov 5;263(31):15922-7

Effects of thyrotropin-releasing hormone and gonadotropin-releasing hormone on inositol phospholipid turnover in endocrinologically inactive pituitary adenomas and prolactinomas. Levy A, et al. **J Clin Endocrinol Metab** 1989 Jul;69(1):122-6

Interleukin-1 beta and other cytokines stimulate adrenocorticotropin release from cultured pituitary cells of patients with Cushing's disease. Malarkey WB, et al. **J Clin Endocrinol Metab** 1989 Jul;69(1):196-9

The growth hormone responses to octreotide in acromegaly correlate with adenoma somatostatin receptor status. Reubi JC, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):844-50

Antagonism of thyroid hormone action by amiodarone in rat pituitary tumor cells. Norman MF, et al. **J Clin Invest** 1989 Jan;83(1):306-13

Effects of recombinant human interleukin-1 alpha, -1 beta, 2 and 6 on ACTH synthesis and release in the mouse pituitary tumour cell line AtT-20. Fukata J, et al. **J Endocrinol** 1989 Jul;122(1):33-9

Calcium dependence of prolactin mRNA accumulation in GH3 rat pituitary tumour cells. Davis JR, et al. **J Mol Endocrinol** 1988 Sep;1(2):111-6

Elevated levels of head activator in human brain tumors and in serum of patients with brain and other neurally derived tumors. Schaller HC, et al. **J Neurooncol** 1988 Nov; 6(3):251-8

Phorbol esters and corticotropin releasing factor stimulate calcium influx in the anterior pituitary tumor cell line, AtT-20, through different intracellular sites of action. Reisine T. **J Pharmacol Exp Ther** 1989 Mar;248(3):984-90

A pituitary thyrotrophinoma causing thyrotoxicosis and amenorrhoea/galactorrhoea: studies of alpha-subunit in the tumour and in blood. Fisken RA, et al. **J R Soc Med** 1989 May;82(5):298-9

Size heterogeneity of affinity labeled estrogen receptors in the MtTF4 tumor whose growth is inhibited by estradiol, in pituitary gland and uterus. Bouillard B, et al. **J Steroid Biochem** 1989 Jan;32(1A):45-52

Variable modes of proopiomelanocortin gene transcription in human tumors. de Keyzer Y, et al. **Mol Endocrinol** 1989 Jan;3(1):215-23

AtT20 cells express modified forms of pp60c-src. Gould KL, et al. **Mol Endocrinol** 1989 Jan;3(1):79-88

[Clinicopathologic investigation of 63 cases of pituitary adenoma—special reference to immunohistochemical study of hormone production] Inoue K, et al. **Hokkaido Igaku Zasshi** 1989 Mar;64(2):204-7 (Eng. Abstr.) **(Jpn)**

[A case of postoperative craniopharyngioma with hypernatremia. The mechanisms of ADH and atrial natriuretic peptide (ANP) releases] Ota M, et al. **Nippon Naika Gakkai Zasshi** 1988 Aug;77(8):1262-7 **(Jpn)**

PATHOLOGY

Heterogeneity of pituitary adenoma cell subpopulations from acromegalic patients obtained by Percoll density gradient centrifugation. Hofland LJ, et al. **Acta Endocrinol (Copenh)** 1989 Aug;121(2):270-8

Nucleolar organiser regions in pituitary adenomas. McNicol AM, et al. **Acta Neuropathol (Berl)** 1989;77(5):547-9

Gd-DTPA-enhanced MR imaging of pituitary adenomas. Newton DR, et al. **AJNR** 1989 Sep-Oct;10(5):949-54

Multiple pituitary hormonal abnormalities in a 60-year-old man [clinical conference] **Am J Med** 1987 Dec;83(6):1111-9

Unsuspected Cushing's disease in a patient with fatal staphylococcal bacteremia and multiple pituitary adenomas. Dunlap NE, et al. **Am J Med** 1989 Feb;86(2):217-21

Silent somatotroph adenomas of the human pituitary. A morphologic study of three cases including immunocytochemistry, electron microscopy, in vitro examination, and in situ hybridization. Kovacs K, et al. **Am J Pathol** 1989 Feb;134(2):345-53

The effects of estrogens on tumor growth and on prolactin and growth hormone mRNA expression in rat pituitary tissues. Lloyd RV, et al. **Am J Pathol** 1988 Nov; 133(2):397-406

Large pituitary adenomas with extension into the nasopharynx. Report of three cases with a review of the literature. van der Mey AG, et al. **Ann Otol Rhinol Laryngol** 1989 Aug;98(8 Pt 1):618-24

Polichromic staining of five distinct cellular types in human and rat pituitaries. Villarreal ML, et al. **Bol Estud Med Biol** 1987 Jul-Dec;35(3-4):231-8

Late regrowth of pituitary adenomas after irradiation and/or surgery. Hazard function analysis. Grigsby PW, et al. **Cancer** 1989 Apr 1;63(7):1308-12

Light microscopical morphometric classification of oncocytic and chromophobe pituitary adenomas. Diehl S, et al. **Exp Clin Endocrinol** 1988 Aug;91(3):341-9

Necroses of prolactin-secreting pituitary adenomas under treatment with dopamine agonists: light microscopical and morphometric studies. Hallenga B, et al. **Exp Clin Endocrinol** 1988 Sep;92(1):59-68

Pituitary adenomas. McNicol AM. **Histopathology** 1987 Oct; 11(10):995-1011 (78 ref.)

Classical pituitary apoplexy presentation and a follow-up of 13 patients. Ahmed M, et al. **Horm Res** 1989;31(3):125-32

Teratoma of the pituitary gland in a young male rat. Maekawa A, et al. **J Comp Pathol** 1989 Apr;100(3):349-52

Computed tomography of hemorrhage in a pituitary adenoma without apoplexy. Parikh VP, et al. **J Comput Tomogr** 1988 Jul;12(3):187-9

Oestradiol, vasoactive intestinal peptide and fibroblast growth factor in the growth of human pituitary tumour cells in vitro. Prysor-Jones RA, et al. **J Endocrinol** 1989 Jan;120(1):171-7

Subcellular distribution of secretogranins I and II in GH3 rat tumoral prolactin (PRL) cells as revealed by electron microscopic immunocytochemistry. Tougard C, et al. **J Histochem Cytochem** 1989 Sep;37(9):1329–36

Spontaneous haemorrhage in craniopharyngioma [letter] Yamamoto T, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):803–4

MRI features of craniopharyngiomas at 1.5 Tesla. A series of 13 cases. Pigeau I, et al. **J Neuroradiol** 1988;15(3):276–87 **(Eng, Fre)**

Null cell adenomas of the pituitary gland. An immunohistochemical study. Holm R, et al. **J Pathol** 1989 Jul;158(3):213–7

Mixed growth hormone- and prolactin cell adenomas of the pituitary gland. An immunoelectron microscopic study. Holm R, et al. **J Submicrosc Cytol Pathol** 1989 Apr; 21(2):339–50

Spontaneous pituitary gonadotroph nodules in aging male Lobund–Wistar rats. Sano T, et al. **Lab Invest** 1989 Sep; 61(3):343–9

Stimulation and inhibition of prolactin release from rat pituitary lactotrophs by the cholinomimetic carbachol in vitro. Influence of hormonal environment and intercellular contacts. Carmeliet P, et al. **Mol Cell Endocrinol** 1989 May; 63(1–2):121–31

Morphology of a plurihormonal human pituitary adenoma composed of FSH, LH and TSH cells. Tașcă C. **Morphol Embryol (Bucur)** 1988 Jul–Sep;34(3):189–94

Bromocriptine–induced morphological changes in cultured growth hormone–producing pituitary adenoma cells. Inoue A, et al. **Neurol Med Chir (Tokyo)** 1989 Jan;29(1):6–9

Third meeting of the Pituitary Pathology Club. Soltau, September 18–21, 1987. Proceedings. **Pathol Res Pract** 1988 Sep;183(5):531–655

In vitro studies of human pituitary adenomas. Asa SL. **Pathol Res Pract** 1988 Sep;183(5):561–4

Assessment of the pituitary hyperplasia/neoplasia interface. Bloodworth JM Jr. **Pathol Res Pract** 1988 Sep; 183(5):626–30 (29 ref.)

Immunocytochemical studies on the pituitary gland and spontaneous pituitary tumors of Sprague–Dawley rats. el Etreby MF, et al. **Pathol Res Pract** 1988 Sep;183(5):645–50

Pathology of the neurohypophysis. Felix IA. **Pathol Res Pract** 1988 Sep;183(5):535–7 (19 ref.)

Fine structural cytology and immunohistochemistry of the non–adenomatous pars distalis of the human pituitary. Horvath E. **Pathol Res Pract** 1988 Sep;183(5):631–3 (7 ref.)

Simultaneous production of the alpha–subunit of glycoprotein hormones and other hormones in pituitary adenomas. Jautzke G. **Pathol Res Pract** 1988 Sep; 183(5):601–5

Malignant pituitary tumors. Kameya T. **Pathol Res Pract** 1988 Sep;183(5):620–2

Pathology of growth hormone excess. Kovacs K. **Pathol Res Pract** 1988 Sep;183(5):565–8 (32 ref.)

Differentiation of two types of amyloid occurring in pituitary adenomas. Landolt AM, et al. **Pathol Res Pract** 1988 Sep; 183(5):552–4

Production of the alpha–subunit of glycoprotein hormones by pituitary adenomas. Landolt AM, et al. **Pathol Res Pract** 1988 Sep;183(5):610–2

Analysis of mammosomatotropic cells in normal and neoplastic human pituitaries. Lloyd RV. **Pathol Res Pract** 1988 Sep;183(5):577–9

Analysis of human pituitary tumors by in situ hybridization. Lloyd RV. **Pathol Res Pract** 1988 Sep;183(5):558–60

The pathology of non–functional pituitary adenomas. Martinez AJ. **Pathol Res Pract** 1988 Sep;183(5):613–6 (25 ref.)

Pituitary pathology in Cushing's disease. Histology and morphometry of pituitary tissues removed through microsurgery. Olivier L, et al. **Pathol Res Pract** 1988 Sep; 183(5):587–91

Immunoelectron microscopic observation of prolactin (PRL) in human PRL secreting pituitary adenomas and non–neoplastic pituitary PRL cells. Osamura RY. **Pathol Res Pract** 1988 Sep;183(5):584–6

Pituitary pathology in Cushing's disease. Saeger W, et al. **Pathol Res Pract** 1988 Sep;183(5):592–5

Animal models of human pituitary tumors. Trouillas J, et al. **Pathol Res Pract** 1988 Sep;183(5):638–41

Morphometric study of normal and adenomatous pituitary somatotrophs in humans. Tsanaclis AM, et al. **Pathol Res Pract** 1988 Sep;183(5):572–6

Amyloid in pituitary adenomas. Voigt C, et al. **Pathol Res Pract** 1988 Sep;183(5):555–7

Oncocytomas and null cell adenomas of the human pituitary: morphometric and in vitro functional comparison. Yamada S, et al. **Virchows Arch [A]** 1988;413(4):333–9

[Pathological analysis of 1458 cases of tumor in the sella turcica region] Lu DH, et al. **Chung Hua Chung Liu Tsa Chih** 1988 May;10(3):205–8 (Eng. Abstr.) **(Chi)**

[Prolactin microadenoma and macroadenoma do not have the same prognosis in a case of pregnancy (letter)] Konopka P. **Presse Med** 1989 Mar 18;18(11):589 **(Fre)**

[The functional pathology of hypophyseal adenomas] Kovacs K, et al. **Z Gesamte Inn Med** 1988 Aug 1;43(15):405–7 (12 ref.) (Eng. Abstr.) **(Ger)**

[Craniopharyngioma in a fetus] Jänisch W, et al. **Zentralbl Allg Pathol** 1989;135(1):65–9 (Eng. Abstr.) **(Ger)**

[Craniopharyngioma with malignant transformation—a report of two cases] Suzuki F, et al. **Gan No Rinsho** 1989 May;35(6):723–8 (12 ref.) (Eng. Abstr.) **(Jpn)**

[Ectopic salivary gland within the pituitary gland. Case report] Kato T, et al. **Neurol Med Chir (Tokyo)** 1988 Sep; 28(9):930–3 (Eng. Abstr.) **(Jpn)**

[Hyperprolactinemia associated with growth hormone–secreting pituitary adenoma. Endocrinological and histological evaluation] Kawashima K, et al. **Neurol Med Chir (Tokyo)** 1988 Dec;28(12):1145–51 (Eng. Abstr.) **(Jpn)**

[Asymptomatic and symptomatic Rathke's cleft cysts. Histological study of 45 cases] Keyaki A, et al. **Neurol Med Chir (Tokyo)** 1989 Feb;29(2):88–93 (Eng. Abstr.) **(Jpn)**

[A case of anaplastic astrocytoma associated with pituitary adenoma] Ezura M, et al. **No Shinkei Geka** 1988 Dec; 16(13):1505–9 (Eng. Abstr.) **(Jpn)**

[Compression of structures in the visual pathway by arteries of the circle of Willis in suprasellar tumors] Steňo J. **Cesk Neurol Neurochir** 1989 Mar;52(2):143–7 (Eng. Abstr.) **(Slo)**

PHYSIOPATHOLOGY

Receptors and neurohormones in human pituitary adenomas. Peillon F, et al. **Horm Res** 1989;31(1–2):13–8

Abnormal dopamine sensitivity in some human prolactinomas. Pellegrini I, et al. **Horm Res** 1989; 31(1–2):19–23

Normal and growth hormone (GH)–secreting adenomatous human pituitaries release somatostatin and GH–releasing hormone. Joubert D, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):572–7

Effects of the new prolactin–producing tumour 7315b on gonadotrophin secretion in adult male and female rats. Kooy A, et al. **J Endocrinol** 1989 Feb;120(2):261–8

Visual evoked potentials and nonfunctioning pituitary tumours [editorial] **Lancet** 1989 Apr 22;1(8643):883–4

Effects of bromocriptine on prolactin cellular hypertrophy, proliferation and secretory activity in diethylstilbestrol–induced pituitary tumors. Phelps CJ, et al. **Mol Cell Endocrinol** 1988 Aug;58(2–3):137–48

Interactions between transplanted pituitary tumor and gonads in nude mice. Mori H, et al. **Pathol Res Pract** 1988 Sep; 183(5):642–4

[Intrasellar diseases and visual field changes] Fan ZJ. **Chung Hua Yen Ko Tsa Chih** 1988 Jan;24(1):31–2 (Eng. Abstr.) **(Chi)**

RADIOGRAPHY

Pregnancy–induced changes in prolactinomas as assessed with computed tomography. Toffle RC, et al. **J Reprod Med** 1988 Oct;33(10):821–6

Parasellar mass. Stavas J. **Nebr Med J** 1988 Aug;73(8):271–3

Malignancy criteria in computed tomography of primary supratentorial tumors in infancy and childhood. Pedersen H, et al. **Neuroradiology** 1989;31(1):24–8

[Diagnosis of pituitary microadenoma on coronal CT scan] Shao SF. **Chung Hua Fang She Hsueh Tsa Chih** 1989 Feb; 23(1):5–7 (Eng. Abstr.) **(Chi)**

[Diagnosis of pituitary adenoma by dynamic CT scanning: concerning direct sign and indirect sign for diagnosis of pituitary microadenoma] Tanabe S, et al. **No Shinkei Geka** 1988 Dec;16(13):1457–63 (Eng. Abstr.) **(Jpn)**

[X–ray diagnosis of pituitary adenoma without suprasellar growth] Skriabin VV, et al. **Vestn Rentgenol Radiol** 1988 Nov–Dec;(6):44–8 (Eng. Abstr.) **(Rus)**

RADIOTHERAPY

Treatment of craniopharyngiomas—the stereotactic approach in a ten to twenty–three years' perspective. I. Surgical, radiological and ophthalmological aspects. Backlund EO, et al. **Acta Neurochir (Wien)** 1989;99(1–2):11–9

The choice of treatment after incomplete adenomectomy in acromegaly: proton—versus high voltage radiation. Lüdecke DK, et al. **Acta Neurochir (Wien)** 1989; 96(1–2):32–8

Treatment of craniopharyngiomas—the stereotactic approach in a ten to twenty–three years' perspective. II. Psychosocial situation and pituitary function. Sääf M, et al. **Acta Neurochir (Wien)** 1989;99(3–4):97–103

Long–term results of radiotherapy in the treatment of pituitary adenomas in children and adolescents. Grigsby PW, et al. **Am J Clin Oncol** 1988 Dec;11(6):607–11

Malignant glioma of the optic chiasm eight years after radiotherapy for prolactinoma. Hufnagel TJ, et al. **Arch Ophthalmol** 1988 Dec;106(12):1701–5

Focal neuronal gigantism and cerebral cortical thickening after therapeutic irradiation of the central nervous system. Caccamo D, et al. **Arch Pathol Lab Med** 1989 Aug; 113(8):880–5

Incidence of cerebral infarction after radiotherapy for pituitary adenoma. Flickinger JC, et al. **Cancer** 1989 Jun 15;63(12):2404–8

Radiotherapy of nonfunctional adenomas of the pituitary gland. Results with long–term follow–up. Flickinger JC, et al. **Cancer** 1989 Jun 15;63(12):2409–14

Stereotactic irradiation for pituitary disease. Thorén M, et al. **Horm Res** 1988;30(2–3):101–3

Repeat megavoltage irradiation of pituitary and suprasellar tumors. Flickinger JC, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):171–5

Prognostic factors and results of radiotherapy alone in the management of pituitary adenomas. Grigsby PW, et al. **Int J Radiat Oncol Biol Phys** 1988 Nov;15(5):1103–10

Pituitary adenoma: the efficacy of radiotherapy as the sole treatment. Rush SC, et al. **Int J Radiat Oncol Biol Phys** 1989 Jul;17(1):165–9

Intrasellar meningioma after radiotherapy for prolactinoma. Kasantikul V, et al. **J Med Assoc Thai** 1988 Sep;71(9):524–7

Results of surgery and irradiation or irradiation alone for pituitary adenomas. Grigsby PW, et al. **J Neurooncol** 1988 Sep;6(2):129–34

Radiosurgery in intracranial tumors and vascular malformations. Backlund EO. **J Neurosurg Sci** 1989 Jan–Mar;33(1):91–3 (14 ref.)

Colloidal radioisotopes as part of a multi–modality treatment of craniopharyngiomas. Backlund EO. **J Neurosurg Sci** 1989 Jan–Mar;33(1):95–7

Long term results of stereotactic endocavitary beta irradiation of craniopharyngioma cysts. Munari C, et al. **J Neurosurg Sci** 1989 Jan–Mar;33(1):99–105 (47 ref.)

Sequential growth hormone deficiency and acromegaly. Heffernan A. **Postgrad Med J** 1988 Sep;64(755):690–2

[Irradiation of TSH–secreting hypophyseal adenomas] Tschakert H, et al. **Strahlenther Onkol** 1989 Jan; 165(1):47–51 (Eng. Abstr.) **(Ger)**

[Intracystic instillation of yttrium 90 silicate colloid in cystic craniopharyngioma] Julow J, et al. **Orv Hetil** 1989 Jun 25; 130(26):1367–8, 1371–5 (44 ref.) (Eng. Abstr.) **(Hun)**

[Results of the treatment of patients with prolactinoma using a high–energy proton beam] Konnov BA, et al. **Akush Ginekol (Mosk)** 1988 Nov;(11):44–7 (Eng. Abstr.) **(Rus)**

[The place of radiotherapy in the treatment of pituitary adenomas] Liass FM, et al. **Med Radiol (Mosk)** 1989 Aug; 34(8):12–23 (Eng. Abstr.) **(Rus)**

[Effect of proton irradiation of the hypophysis on its gonadotropic and thyrotropic functions in patients with prolactinoma] Isakov AV, et al. **Probl Endokrinol (Mosk)** 1988 Jul–Aug;34(4):28–32 (Eng. Abstr.) **(Rus)**

SECONDARY

Metastatic carcinoma to pituitary adenomas: a report of two cases. Ramsay JA, et al. **Exp Clin Endocrinol** 1988 Sep; 92(1):69–76

Infundibular metastasis and panhypopituitarism. Allen EM, et al. **J Natl Med Assoc** 1989 Mar;81(3):325–30

Pituitary gland metastasis from adenocarcinoma of the prostate. Case report. Couldwell WT, et al. **J Neurosurg** 1989 Jul;71(1):138–40 (14 ref.)

Metastatic carcinoma to pituitary adenoma. Report of two cases. Post KD, et al. **Surg Neurol** 1988 Oct;30(4):286–92

[Endocrine localization of Hodgkin's disease] Nedelcheva E, et al. **Vutr Boles** 1989;28(3):114–7 (Eng. Abstr.) **(Bul)**

[Hann syndrome: remission of diabetes insipidus by functional failure of the anterior pituitary gland] Honti J, et al. **Z Gesamte Inn Med** 1988 Aug 1;43(15):414–5 (Eng. Abstr.) **(Ger)**

[Metastatic pituitary tumor presenting as bitemporal visual field defects. Case report] Kimura A, et al. **Neurol Med Chir (Tokyo)** 1988 Nov;28(11):1123–7 (14 ref.) (Eng. Abstr.) **(Jpn)**

SECRETION

In vitro effects of ketoconazole on corticotrope cell morphology and ACTH secretion of two pituitary adenomas removed from patients with Nelson's syndrome. Jimenez Reina L, et al. **Acta Endocrinol (Copenh)** 1989 Aug; 121(2):185–90

Size reduction of an ACTH–secreting pituitary macroadenoma in Nelson's syndrome by sodium valproate: effect of withdrawal and re–institution of treatment. Loli P, et al. **Acta Endocrinol (Copenh)** 1988 Nov;119(3):435–42

Clinical response of thyrotropin–secreting macroadenoma to bromocriptine and radiotherapy. McLellan AR, et al. **Acta Endocrinol (Copenh)** 1988 Oct;119(2):189–94

Hormonal control of thyrotropin and growth hormone secretion in a human thyrotrope pituitary adenoma studied in vitro. Simard M, et al. **Acta Endocrinol (Copenh)** 1988 Oct;119(2):283–90

Somatostatin inhibits prolactin secretion by multiple mechanisms involving a site of action distal to increased cyclic adenosine 3',5'–monophosphate and elevated cytosolic $Ca2+$ in rat lactotrophs. Bjøro T, et al. **Acta Physiol Scand** 1988 Jul;133(3):271–82

Human growth hormone and prolactin secreting pituitary adenomas analyzed by in situ hybridization. Lloyd RV, et al. **Am J Pathol** 1989 Mar;134(3):605–13

A bromocriptine–responsive corticotroph adenoma secreting alpha–MSH in a patient with Cushing's disease. Hale AC, et al. **Clin Endocrinol (Oxf)** 1988 Feb;28(2):215–23

Characterization of the MMQ cell, a prolactin–secreting clonal cell line that is responsive to dopamine. Judd AM, et al. **Endocrinology** 1988 Nov;123(5):2341–50

Vasopressin enhances a calcium current in human ACTH–secreting pituitary adenoma cells. Mollard P, et al. **FASEB J** 1988 Oct;2(13):2907–12

Effect of bromocriptine on secretion and morphology of human prolactin cell adenomas in vitro. Duffy AE, et al.

Horm Res 1988;30(1):32–8

Autocrine–paracrine inhibition of growth hormone and prolactin production by GH3 cell–conditioned medium. Lapp CA, et al. **In Vitro Cell Dev Biol** 1989 Jun; 25(6):528–34

Inversely related evolution of growth hormone and prolactin secretions in long–term tissue cultures of human pituitary adenomas from acromegalic patients. Loras B, et al. **In Vitro Cell Dev Biol** 1988 Nov;24(11):1064–70

Alteration of the collagen type III/type I ratio and intracranial saccular aneurysms in GH–secreting hypophyseal adenomas. Acqui M, et al. **Ital J Neurol Sci** 1988 Aug;9(4):365–8

Osmotic regulation of prolactin secretion. Possible role of chloride. Day RN, et al. **J Biol Chem** 1988 Nov 5; 263(31):15915–21

Receptor density determines secretory response patterns mediate by inositol lipid–derived second messengers. Comparison of thyrotropin–releasing hormone and carbamylcholine actions in thyroid–stimulating hormone–secreting mouse pituitary tumor cells. Winicov I, et al. **J Biol Chem** 1989 Jun 5;264(16):9438–43

Regulation of growth hormone secretion and messenger ribonucleic acid accumulation in human somatotropinoma cells in vitro. Davis JR, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):704–8

Human pituitary tumors secrete chromogranin–A. Deftos LJ, et al. **J Clin Endocrinol Metab** 1989 May;68(5):869–72

Heterogeneity of growth hormone (GH) release by individual pituitary adenoma cells from acromegalic patients, as determined by the reverse hemolytic plaque assay: effects of SMS 201–995, GH–releasing hormone and thyrotropin–releasing hormone. Hofland LJ, et al. **J Clin Endocrinol Metab** 1989 Mar;68(3):613–20

Gonadotropin and alpha–subunit responses to chronic gonadotropin–releasing hormone analog administration in patients with glycoprotein hormone–secreting pituitary tumors. Klibanski A, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):81–6

Clinical and molecular studies of a thyrotropin–secreting pituitary adenoma. Samuels MH, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1211–5

Hypercortisolism due to an autonomously functioning pituitary adenoma: limitations in diagnostic test procedures. Westphal SA, et al. **J Clin Endocrinol Metab** 1988 Nov; 67(5):1105–10

Analysis of hormone secretion by clinically nonfunctioning human pituitary adenomas using the reverse hemolytic plaque assay. Yamada S, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):73–80

Long–term effects of a gonadotrophin–releasing hormone agonist ([D–Ser(But)6]GnRH(1–9)nonapeptide–ethylamide) on gonadotrophin secretion from human pituitary gonadotroph cell adenomas in vitro. Daniels M, et al. **J Endocrinol** 1988 Sep;118(3):491–6

Bilateral and simultaneous venous sampling of inferior petrosal sinuses for ACTH and PRL determination: preoperative localization of ACTH–secreting microadenomas. Vignati F, et al. **J Endocrinol Invest** 1989 Apr;12(4):235–8

Effects of gonadotropin–releasing hormone and its agonists on prolactin secretion from normal and tumorous pituitary cells. Lamberts SW, et al. **Neuroendocrinology** 1989 Feb; 49(2):157–63

Response of a GH– and TSH–secreting pituitary adenoma to a somatostatin analogue (SMS 201–995): evidence that GH and TSH coexist in the same cell and secretory granules. Malarkey WB, et al. **Neuroendocrinology** 1989 Mar;49(3):267–74

Prolactin–secreting adenomas: surgical results and long–term follow–up. Maira G, et al. **Neurosurgery** 1989 May; 24(5):736–43

Effects of pregnancy, delivery and lactation in hyperprolactinemia with prolactin producing pituitary adenoma. Kondo I, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 May; 41(5):595–600

The TSH secretion in the human pituitary adenomas. Trouillas J, et al. **Pathol Res Pract** 1988 Sep;183(5):596–600

Plain film and tomographic study of the sellar turcica in 50 cases of GH–secreting pituitary adenoma. Zhou FX, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(3):166–9

Depletion and release of prolactin from rat pituitaries and pituitary tumors in vitro. Kendall ME, et al. **Proc Soc Exp Biol Med** 1988 Dec;189(3):291–6

Hormone secreting pituitary tumors. Skillman TG. **Trans Assoc Life Insur Med Dir Am** 1989;72:144–51 (9 ref.)

[Pulsar analysis of the 24–hour secretion of GH in normal subjects, in acromegalics and in patients with non–secreting and prolactin–secreting pituitary adenoma] Morosini P, et al. **Recenti Prog Med** 1988 Oct;79(10):400–6 (Eng. Abstr.) **(Ita)**

[A case of pituitary adenoma with hyponatremia, polydipsia and polyuria produced by low resetting of the osmostat for antidiuretic hormone (ADH) release and potentiated thirst perception] Sato K, et al. **Nippon Naika Gakkai Zasshi** 1988 Aug;77(8):1251–6 **(Jpn)**

SURGERY

Treatment and recurrences in 135 pituitary adenomas. Vlahovitch B, et al. **Acta Neurochir Suppl (Wien)** 1988; 42:120–3

The management of pituitary tumours and post–operative visual deterioration. Adams CB. **Acta Neurochir (Wien)** 1988;94(3–4):103–16

Nasal complication after transsphenoidal surgery for pituitary pathologies. Nabe–Nielsen J. **Acta Neurochir (Wien)** 1989; 96(3–4):122–5

Transsphenoidal surgery with the additional use of the Nd–Yag–laser. Oeckler R, et al. **Acta Neurochir (Wien)** 1988;94(1–2):66–9

Management of primary or recurring grossly cystic craniopharyngiomas by means of draining systems. Topic review and 6 case reports. Spaziante R, et al. **Acta Neurochir (Wien)** 1989;97(3–4):95–106 (56 ref.)

MR imaging of the ectopic bright signal of posterior pituitary regeneration. el Gammal T, et al. **AJNR** 1989 Mar–Apr; 10(2):323–8

Failure of hypophysectomy to correct pituitary–dependent Cushing's disease in two patients. Cook DM, et al. **Arch Intern Med** 1988 Nov;148(11):2497–500

Nelson's syndrome and behavioural changes reversed by selective adenomectomy. Buckler HM, et al. **Br J Psychiatry** 1988 Mar;152:412–4

Plasma growth hormone half–life after selective removal of adenoma in acromegalics determines the outcome of surgery. Roelfsema F, et al. **Clin Endocrinol (Oxf)** 1988 Jan;28(1):51–9

A lateral rhinotomy approach to transsphenoidal hypophysectomy. Petruson B, et al. **Clin Otolaryngol** 1988 Aug;13(4):251–8

Transsphenoidal surgery for pituitary tumors. Nicholson MW, et al. **Hawaii Med J** 1989 Feb;48(2):12, 15

Prognostic factors and results of surgery and postoperative irradiation in the management of pituitary adenomas. Grigsby PW, et al. **Int J Radiat Oncol Biol Phys** 1989 Jun; 16(6):1411–7

Subdural and intraventricular tension pneumocephalus after transsphenoidal operation [letter] Candrina R, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):1005–6

Acidophil stem–cell pituitary adenoma in a prepubescent female. Case report. Marks WA, et al. **J Neurosurg** 1989 Feb;70(2):266–70

The sublabial transseptal transsphenoidal approach to sellar and parasellar lesions. Eisele DW, et al. **Laryngoscope** 1988 Dec;98(12):1301–8 (22 ref.)

Assessment of desmopressin–enhanced cognitive function in a neurosurgical patient. Dons RF, et al. **Milit Med** 1989 Feb;154(2):83–5

Sellar chondroma in a case of Ollier's disease. Pospiech J, et al. **Neurochirurgia (Stuttg)** 1989 Jan;32(1):30–5

Diagnostic problems and operative treatment of pituitary microadenomas. Rauhut F, et al. **Neurochirurgia (Stuttg)** 1988 Sep;31 Suppl 1:186–91

Epidermoid tumor of unusual expansion at the skull base. Malorny M, et al. **Neurosurg Rev** 1987;10(4):299–303

Tension pneumocephalus after transsphenoidal surgery: case report. Altinörs N, et al. **Neurosurgery** 1988 Oct;23(4):516–8

Surgical treatment of tumors in the anterior skull base using the transbasal approach. Arita N, et al. **Neurosurgery** 1989 Mar;24(3):379–84

Craniopharyngiomas: fluctuation in cyst size following surgery and radiation therapy. Constine LS, et al. **Neurosurgery** 1989 Jan;24(1):53–9

Pseudotumor of the sellar and parasellar areas. Gartman JJ Jr, et al. **Neurosurgery** 1989 Jun;24(6):896–901

Endocrine function in patients with large pituitary tumors treated with operative decompression and radiation therapy. Nelson PB, et al. **Neurosurgery** 1989 Mar; 24(3):398–400

Visual outcome after surgical removal of craniopharyngiomas. Repka MX, et al. **Ophthalmology** 1989 Feb;96(2):195–9

Studies on the influence of selective adenomectomy on hormone secretion from normal anterior pituitary gland. Popp G, et al. **Pathol Res Pract** 1988 Sep;183(5):540–5

Haematological, neurological and psychiatric complications of chronic hypothermia following surgery for craniopharyngioma. Griffiths AP, et al. **Postgrad Med J** 1988 Aug;64(754):617–20

The progressive Zollinger–Ellison syndrome in multiple endocrine neoplasia. Luttwak EM, et al. **Surg Gynecol Obstet** 1988 Nov;167(5):415–9

A pitfall in the interhemispheric translamina terminalis approach for the removal of a craniopharyngioma. Significance of preserving draining veins. Part I. Clinical study. Kanno T, et al. **Surg Neurol** 1989 Aug;32(2):111–5

A pitfall in the interhemispheric translamina terminalis approach for the removal of a craniopharyngioma. Significance of preserving draining veins. Part II. Experimental study. Kasama A, et al. **Surg Neurol** 1989 Aug;32(2):116–20

Intracranial mycotic aneurysm associated with transsphenoidal surgery to the pituitary adenoma. Onishi H, et al. **Surg Neurol** 1989 Feb;31(2):149–54

Transsphenoidal pituitary surgery in the treatment of patients with Cushing's disease. Freidberg SR. **Urol Clin North Am** 1989 Aug;16(3):589–95 (51 ref.)

[Recurrence of a central Cushing's syndrome following transsphenoidal surgery of the pituitary] Merk W, et al. **Internist (Berlin)** 1988 Sep;29(9):636–8 **(Ger)**

[A fatal course of Nelson syndrome] Baumann S, et al. **Schweiz Med Wochenschr** 1988 Oct 15;118(41):1487–92 (Eng. Abstr.) **(Ger)**

[Neuropsychiatric–psychological findings in patients with hypophyseal adenoma following trans–sphenoidal surgery] Pittasch D, et al. **Zentralbl Neurochir** 1988;49(3):202–5 (Eng. Abstr.) **(Ger)**

[Surgical treatment of pituitary apoplexy] Szeifert G, et al. **Orv Hetil** 1989 Jan 15;130(3):119–23 (23 ref.) (Eng. Abstr.) **(Hun)**

[Long–term results of surgical therapy of prolactin–secreting hypophysis macroadenomas] Candrino R, et al. **Medicina (Firenze)** 1988 Oct–Dec;8(4):434–6 (Eng. Abstr.) **(Ita)**

[Anesthetic management of a patient with acromegaly complicated with hyperthyroidism] Kawakubo A, et al. **Masui** 1989 May;38(5):674–8 (Eng. Abstr.) **(Jpn)**

[The results of treatment of craniopharyngiomas in 33 children] Tanaka T, et al. **No Shinkei Geka** 1988 Jun; 16(7):845–50 (Eng. Abstr.) **(Jpn)**

[Evaluation of the radicalness of the removal of craniopharyngioma of the 3d ventricle in children and the possible sources of their continued growth and recurrence] Konovalov AN, et al. **Zh Vopr Neirokhir** 1988 Nov–Dec; (6):7–12 (Eng. Abstr.) **(Rus)**

THERAPY

Management of prolactinomas. Molitch ME. **Annu Rev Med** 1989;40:225–32 (33 ref.)

Suprasellar germinomas in childhood. A reappraisal. Legido A, et al. **Cancer** 1989 Jan 15;63(2):340–4

Medical therapy of glycoprotein hormone–secreting pituitary tumors. Oppenheim DS, et al. **Endocrinol Metab Clin North Am** 1989 Jun;18(2):339–58 (116 ref.)

A comparison of the roles of surgery and radiation therapy in the management of craniopharyngiomas. Wen BC, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):17–24

[Prolactin adenomas in women under 20 years of age: apropos of 11 cases] Cáceres Narizzano O, et al. **Medicina (B Aires)** 1988;48(5):459–68 (Eng. Abstr.) **(Spa)**

ULTRASTRUCTURE

Evidence for multiple protein constituents of the somatostatin receptor in pituitary tumor cells: affinity cross–linking and molecular characterization. Murthy KK, et al. **Endocrinology** 1989 Aug;125(2):948–56

Mixed growth hormone and prolactin–secreting human pituitary adenomas: a pathologic, immunocytochemical, ultrastructural, and immunoelectron microscopic study. Robert F, et al. **Hum Pathol** 1988 Nov;19(11):1327–34

Heterogeneity of secretory granules of silent pituitary adenomas. Holck S, et al. **Mod Pathol** 1988 May;1(3):212–5

Immunoelectron microscopic demonstration of glycoprotein subunits in the FSH producing pituitary adenomas. Osamura RY. **Pathol Res Pract** 1988 Sep;183(5):606–9

Immunoelectron microscopic studies of GH and alpha subunit in GH secreting pituitary adenomas. Osamura RY. **Pathol Res Pract** 1988 Sep;183(5):569–71

Ultrastructural localization of secretory granule constituent chromogranin and 7 B 2. Osamura RY, et al. **Pathol Res Pract** 1988 Sep;183(5):617–9

[Immunohistochemical and electron microscopic study of nonfunctioning pituitary adenomas. With special reference to gonadotroph adenomas] Miyazaki H, et al. **Neurol Med Chir (Tokyo)** 1988 May;28(5):442–7 (Eng. Abstr.) **(Jpn)**

[Changes in the dendrite ultrastructure of the cerebral cortex neurons in human tumors located in the hypothalamo–hypophyseal area] Kaganovskaia EA. **Arkh Anat Gistol Embriol** 1988 Sep;95(9):5–11 (Eng. Abstr.) **(Rus)**

VETERINARY

Diabetes insipidus and hyperadrenocorticism associated with high plasma adrenocorticotropin concentration and a hypothalamic/pituitary mass in a dog. Ferguson DC, et al. **J Am Vet Med Assoc** 1988 Oct 1;193(7):835–9

Pituitary macroadenomas and macroadenocarcinomas in dogs treated with mitotane for pituitary–dependent hyperadrenocorticism: 13 cases (1981–1986). Nelson RW, et al. **J Am Vet Med Assoc** 1989 Jun 1;194(11):1612–7

Neurologic, endocrinologic, and pathologic findings associated with large pituitary tumors in dogs: eight cases (1976–1984). Sarfaty D, et al. **J Am Vet Med Assoc** 1988 Oct 1;193(7):854–6

Hypertrophic osteopathy in a pony with a pituitary adenoma. Sweeney CR, et al. **J Am Vet Med Assoc** 1989 Jul 1; 195(1):103–5

Teratoma of the pituitary gland in a young male rat. Mackawa A, et al. **J Comp Pathol** 1989 Apr;100(3):349–52

Craniopharyngioma in the Mongolian gerbil (Meriones unguiculatus): a case report. Guzmán–Silva MA, et al. **Lab Anim** 1988 Oct;22(4):365–8

Immunocytochemical demonstration of growth hormone in an acidophilic adenoma of the adenohypophysis in a cat. Heinrichs M, et al. **Vet Pathol** 1989 Mar;26(2):179–80

PITUITRIN see under **PITUITARY HORMONES,**

POSTERIOR

PITYRIASIS

Papulosquamous eruptions: manifestation and management. Hu CH. **Compr Ther** 1988 Oct;14(10):42–6

CHEMICALLY INDUCED

Pityriasis lichenoides–like eruption occurring during therapy for myelogenous leukemia. Isoda M. **J Dermatol (Tokyo)** 1989 Feb;16(1):73–5

COMPLICATIONS

Meyerson's naevi in pityriasis rosea [letter] Crovato F, et al. **Br J Dermatol** 1989 Feb;120(2):318–9

Mucha–Habermann's disease and arthritis: possible association with reactivated Epstein–Barr virus infection. Edwards BL, et al. **J Rheumatol** 1989 Mar;16(3):387–9

DIAGNOSIS

Pityriasis rotunda [letter] Weiss RM. **Arch Dermatol** 1989 Jul;125(7):1002

EPIDEMIOLOGY

Pityriasis rosea [letter] Zahra A. **Int J Dermatol** 1988 Sep; 27(7):526

ETIOLOGY

Pityriasis rotunda as a cutaneous marker of hepatocellular carcinoma: a comparison with its prevalence in other diseases. Berkowitz I, et al. **Br J Dermatol** 1989 Apr; 120(4):545–9

Pityriasis folliculorum revisited. Dominey A, et al. **J Am Acad Dermatol** 1989 Jul;21(1):81–4

GENETICS

[Pityriasis rotunda: study of 2 family groups. Preliminary report] Alberti A, et al. **G Ital Dermatol Venereol** 1988 Apr;123(4):159–60 **(Ita)**

IMMUNOLOGY

Evolutionary changes of immunohistological characteristics of secondary lesions in pityriasis rosea. Sugiura H, et al. **Arch Dermatol Res** 1988;280(7):405–10

[Lichenoid pityriasis. Immunologic study of 10 children] Gelmetti A, et al. **Med Cutan Ibero Lat Am** 1988; 16(3):251–3 (Eng. Abstr.) **(Spa)**

PATHOLOGY

Comparative clinicopathological study on pityriasis lichenoides chronica and small plaque parapsoriasis. Benmamán O, et al. **Am J Dermatopathol** 1988 Jun; 10(3):189–96

Febrile ulceronecrotic Mucha Habermann disease: a fatality. Hoghton MA, et al. **J R Soc Med** 1989 Aug;82(8):500–1

[Toyama's pityriasis rotunda] Agostini G, et al. **Ann Dermatol Venereol** 1988;115(11):1226–7 **(Fre)**

THERAPY

Dandruff. Lane P. **Aust Fam Physician** 1988 Nov;17(11):973, 975 (5 ref.)

PITYRIASIS RUBRA PILARIS

Pityriasis rubra pilaris: a review of diagnosis and treatment. Cohen PR, et al. **J Am Acad Dermatol** 1989 May;20(5 Pt 1):801–7 (52 ref.)

COMPLICATIONS

Eruptive seborrheic keratoses associated with erythrodermic pityriasis rubra pilaris. Possible role of retinoid therapy. Schwengle LE, et al. **Acta Derm Venereol (Stockh)** 1988; 68(5):443–5

Pityriasis rubra pilaris and vitiligo in Down's syndrome. Hazini AR, et al. **Clin Exp Dermatol** 1988 Sep;13(5):334–5

DRUG THERAPY

Lack of effect of cyclosporin A in pityriasis rubra pilaris [letter] Meyer P, et al. **Acta Derm Venereol (Stockh)** 1989; 69(3):272

Possible significance of aqueous emulsified vitamin A in effective therapy for pityriasis rubra pilaris. Kellum RE. **J Am Acad Dermatol** 1989 Jan;20(1):126–8

PATHOLOGY

Focal acantholytic dyskeratosis occurring in pityriasis rubra pilaris. Kao GF, et al. **Am J Dermatopathol** 1989 Apr; 11(2):172–6

[Vesicular pityriasis rosea] Strauss T, et al. **Hautarzt** 1988 Aug;39(8):524–6 (Eng. Abstr.) **(Ger)**

PSYCHOLOGY

[Emotional stresses and cognitive processes in patients with neurodermatitis] Korth EE, et al. **Psychother Psychosom Med Psychol** 1988 Aug;38(8):276–81 (Eng. Abstr.) **(Ger)**

PITYRIASIS VERSICOLOR see **TINEA VERSICOLOR**

PITYROSPORUM see **MALASSEZIA**

PIVAMPICILLIN see under **AMPICILLIN**

PIXE see **SPECTROMETRY, X-RAY EMISSION**

PIZOTYLINE see under **THIOPHENES**

PLACEBOS

Placebo responding in the same direction as alcohol in women. Newlin DB. **Alcoholism (NY)** 1989 Feb;13(1):36–9

Placebos in clinical trials of peptic ulcer. ACG Committee on FDA–Related Matters. Smith JL. **Am J Gastroenterol** 1989 May;84(5):469–74

The placebo effect. The placebo effect in the management of chronic myofascial pain: a review. Stockstill JW. **J Am Coll Dent** 1989 Summer;56(2):14–8 (33 ref.)

Efficacy and duration of action of placebo responses in the prevention of exercise–induced asthma in children. Boner AL, et al. **J Asthma** 1988;25(1):1–5

Dynamics and significance of placebo response in primary dysmenorrhea. Fedele L, et al. **Pain** 1989 Jan;36(1):43–7

Estimating the superiority of a drug to a placebo when all and only those patients at risk are treated with the drug. Robbins H, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(9):3003–5

A two–period crossover design for the comparison of two active treatments and placebo. Koch GG, et al. **Stat Med** 1989 Apr;8(4):487–504

How much of the placebo 'effect' is really statistical regression? [letter] Senn SJ. **Stat Med** 1988 Nov;7(11):1203

[Nocebo—the antipode to placebo] Kaada B. **Nord Med** 1989; 104(6–7):192–8 (Eng. Abstr.) **(Nor)**

[Placebo—an anti–pole of nocebo (letter)] Aalen OO. **Tidsskr Nor Laegeforen** 1989 Apr 30;109(12):1327–8 **(Nor)**

[Nocebo—the opposite of placebo] Kaada B. **Tidsskr Nor Laegeforen** 1989 Mar 10;109(7–8):814–21 (83 ref.) (Eng. Abstr.) **(Nor)**

[Placebo—nocebo] Naess K. **Tidsskr Nor Laegeforen** 1989 Mar 10;109(7–8):802–4 **(Nor)**

THERAPEUTIC USE

Double–blind trial of recombinant gamma–interferon versus placebo in the treatment of rheumatoid arthritis. Cannon GW, et al. **Arthritis Rheum** 1989 Aug;32(8):964–73

A one–sided interim analysis with binary outcomes. Bristol DR. **Controlled Clin Trials** 1988 Sep;9(3):206–11

The role of a placebo–treated control group in combination drug trials. Pledger G. **Controlled Clin Trials** 1989 Mar; 10(1):97–107

Multicenter, double–blind, multiple–dose, parallel–groups efficacy and safety trial of azelastine, chlorpheniramine, and placebo in the treatment of spring allergic rhinitis. Weiler JM, et al. **J Allergy Clin Immunol** 1988 Nov;82(5 Pt 1):801–11

The "natural history" of ulcerative colitis: an analysis of the placebo response. Meyers S, et al. **J Clin Gastroenterol** 1989 Feb;11(1):33–7 (19 ref.)

The mechanism of the psychophysiological effects of placebo. Kojo I. **Med Hypotheses** 1988 Dec;27(4):261–4

Conditioned response models of placebo phenomena: further support. Voudouris NJ, et al. **Pain** 1989 Jul;38(1):109–16

Placebo response in depression: a search for predictors. Brown WA, et al. **Psychiatry Res** 1988 Dec;26(3):259–64

Placebos and common factors in two decades of psychotherapy research. Horvath P. **Psychol Bull** 1988 Sep; 104(2):214–25 (132 ref.)

Optimal placebo response rates for comparing two binomial proportions. Day SJ. **Stat Med** 1988 Nov;7(11):1187–94

[Psychological and biological aspects of the placebo effect] Marquez C. **Agressologie** 1988 Mar;29(3):147–50 (Eng. Abstr.) **(Fre)**

[The conditioning of drug effects. A pathway for research on placebo effects?] Kuschinsky K. **Dtsch Med Wochenschr** 1989 Jul 28;114(30):1171–4 (25 ref.) **(Ger)**

[The physician as medication. Relationship effects in pharmaceutical medicine as exemplified by the placebo] Grob P. **Schweiz Rundsch Med Prax** 1989 Feb 21; 78(8):180–5 (Eng. Abstr.) **(Ger)**

[Psychological aspects of the treatment of pain] Tazowski J. **Przegl Lek** 1989;46(3):360–2 (15 ref.) **(Pol)**

[The placebo effect: between mind and brain] Burunat E, et al. **Med Clin (Barc)** 1989 Feb 18;92(6):232–5 **(Spa)**

PLACENTA

see related
MATERNAL–FETAL EXCHANGE

Removing a retained placenta by oxytocin—a controlled study. Wilken–Jensen C, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):155–6

Intravenous nitroglycerin for uterine relaxation in the postpartum patient with retained placenta [letter] Peng AT, et al. **Anesthesiology** 1989 Jul;71(1):172–3

Expression of pregnancy specific beta 1–glycoprotein gene in human placenta and hydatiform mole. Bocco JL, et al. **Biochem Int** 1989 May;18(5):999–1008

Placental morphology & histochemistry in iron deficiency anemia. Rusia U, et al. **Indian J Med Res** 1988 May; 87:468–74

Viscosity reduction of red blood cells from preterm and full–term neonates and adults in narrow tubes (Fahraeus–Lindqvist effect). Zilow EP, et al. **Pediatr Res** 1989 Jun;25(6):595–9

Abstracts of papers, 3rd meeting of the European Placenta Group. Dourdan, France, 27–30 September 1989. **Placenta** 1989 Sep–Oct;10(5):453–527

Fetus amorphus or placental teratoma? Stephens TD, et al. **Teratology** 1989 Jul;40(1):1–10 (65 ref.)

[Epikeratoplasty. Use of lenses made of human placental collagen] Colin J, et al. **Ophtalmologie** 1988 Jul–Sep; 2(3):189–90 (Eng. Abstr.) **(Fre)**

[Ultrasound structure of the placenta in acute maternal infection] Griban' AN, et al. **Akush Ginekol (Mosk)** 1989 Jan;(1):60–1 **(Rus)**

[Use of the human placenta for detoxication] Shalimov SA, et al. **Klin Khir** 1989;(5):70 **(Rus)**

ANALYSIS

Cystatins of human placenta. Warwas M, et al. **Acta Biochim Pol** 1989;36(1):7–15

Comparison of immunoreactive gonadotropin–releasing hormone and human chorionic gonadotropin in term placentas from normal women and those with insulin–dependent and gestational diabetes. Elkind–Hirsch KE, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):71–8

Radioactivity in breast milk and placentas during the year after Chernobyl. Gori G, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1232–4

Placental fibrin. Faulk WP. **Am J Reprod Immunol** 1989 Apr; 19(4):132–5 (34 ref.)

Inhibin: circulating levels in women during ovulation induction and detection in human placenta by specific radioimmunoassay. Healy DL, et al. **Ann N Y Acad Sci** 1988;541:162–78

Human placental fibronectin: demonstration of structural differences between the A and B chains in the extra domain–A region. Tressel T, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):639–43

In the absence of antibody IgGsorb precipitates human placenta phosphotyrosine–containing proteins. Goren HJ, et al. **Biochem Biophys Res Commun** 1989 Feb 28; 159(1):332–6

Cytosol components from human placenta and rat liver in iodothyronine 5– and 5'–deiodination. Iwase K, et al. **Biochem Cell Biol** 1989 Jan;67(1):58–63

Spectral perturbation of human microsomal cytochrome P–450 by flavonoid binding. Moochhala SM, et al. **Biochem Int** 1988 Oct;17(4):755–62

Delineation of atypical insulin receptors from classical insulin and type I insulin–like growth factor receptors in human placenta. Jonas HA, et al. **Biochem J** 1989 Jan 1; 257(1):101–7

A subfamily of bovine prolactin–related transcripts distinct from placental lactogen in the fetal placenta. Kessler MA, et al. **Biochemistry** 1989 Jun 13;28(12):5154–61

A highly efficient chemical isolation procedure for the rat placental transferrin receptor. Huebers HA, et al. **Biochim Biophys Acta** 1989 Apr 25;991(1):30–5

Isolation of a novel prolactin–like cDNA clone from bovine placenta: occurrence of new family members. Tanaka M, et al. **Biochim Biophys Acta** 1989 Jul 7;1008(2):193–7

Immunocytochemical localization of heparan sulfate proteoglycan in human decidual cell secretory bodies and placental fibrinoid. Kisalus LL, et al. **Biol Reprod** 1988 Sep; 39(2):419–30

High performance liquid chromatographic measurement of lignocaine in tissue samples following transabdominal placental biopsy. Monkman SC, et al. **Biomed Chromatogr** 1989 Mar;3(2):88–91

Effect of time and adrenaline on the feto–maternal distribution of bupivacaine. Reynolds F, et al. **Br J Anaesth** 1989 May;62(5):509–14

The fate of intravenously injected tissue ferritin in pregnant guinea–pigs. Lamparelli RD, et al. **Br J Haematol** 1989 May;72(1):100–5

Inhibition of tumor cell proliferation by a novel growth regulator from placenta: modulation of membrane phosphorylation and oncogene expression. Csaikl U, et al. **Cancer Lett** 1989 Mar;44(3):227–31

Immunoactive products of human placenta. I. An immunoregulatory factor obtained from explant cultures of human placenta inhibits CTL generation and cytotoxic effector activity. Menu E, et al. **Cell Immunol** 1989 Apr 1;119(2):341–52

The localization of laminin mRNA and protein in the postimplantation embryo and placenta of the mouse: an in situ hybridization and immunocytochemical study. Senior PV, et al. **Development** 1988 Nov;104(3):431–46

Insulin–gene expression in extrafetal membranes of rats. Rau K, et al. **Diabetes** 1989 Jan;38(1):39–43

Characterization of cDNA encoding human pregnancy–specific beta 1–glycoprotein from placenta and extraplacental tissues and their comparison with carcinoembryonic antigen. Chan WY, et al. **DNA** 1988 Oct; 7(8):545–55

The concentration of bovine placental lactogen and the incidence of different forms in fetal cotyledons and in fetal serum. Byatt JC, et al. **Domest Anim Endocrinol** 1987 Oct;

4(4):231–41

Identification of proteins immunochemically related to human pregnancy-specific beta 1-glycoprotein in the rat placenta. Ogilvie S, et al. **Endocrinology** 1989 Jul; 125(1):287–94

Storage of sialic acid-containing carbohydrates in the placenta of a human galactosialidosis fetus. Isolation and structural characterization of 16 sialyloligosaccharides. Van Pelt J, et al. **Eur J Biochem** 1988 Nov 1;177(2):327–38

Simultaneous isolation of high molecular weight RNA and DNA from limited amounts of tissues and cells. Meese E, et al. **Gene Anal Tech** 1987 May-Jun;4(3):45–9

Characteristic differences in immunohistochemical localization of new placental proteins (PP1, PP19, PP21) in the human placenta. Takayama M, et al. **Gynecol Obstet Invest** 1988;26(4):274–80

Cesium-137 levels in breast milk and placentae after fallout from the reactor accident at Chernobyl. Gattavecchia E, et al. **Health Phys** 1989 Feb;56(2):245–8

Quantitative immunohistochemistry of metallothionein in rat placenta. Hazelhoff Roelfzema W, et al. **Histochemistry** 1989;90(5):365–9

The use of DNA flow cytometry in the diagnosis of triploidy in human abortions. van Oven MW, et al. **Hum Pathol** 1989 Mar;20(3):238–42

Pregnancy-specific beta 1 glycoprotein mRNA is present in placental as well as non-placental tissues. Chan WY, et al. **Hum Reprod** 1988 Jul;3(5):677–85

Structures of asparagine-linked oligosaccharides of human placental fibronectin. Takamoto M, et al. **J Biochem (Tokyo)** 1989 May;105(5):742–50

Existence of associated, non-associated, and oligomeric forms of human chorionic gonadotropin subunits in placental extracts. Tominaga N, et al. **J Biochem (Tokyo)** 1989 Jun; 105(6):992–7

Isolation and characterization of an anticoagulant protein from human placenta. Yoshizaki H, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):178–83

Phospholipid binding properties of human placental anticoagulant protein-I, a member of the lipocortin family. Tait JF, et al. **J Biol Chem** 1989 May 15;264(14):7944–9

Immunogold localization of placental lactogen and the SBU-3 antigen by cryoultramicrotomy at implantation in the sheep. Morgan G, et al. **J Cell Sci** 1987 Nov;88 (Pt 4):503–12

Tissue levels of active and total renin, angiotensinogen, human chorionic gonadotropin, estradiol, and progesterone in human placentas from different methods of delivery. Lenz T, et al. **J Clin Endocrinol Metab** 1989 Jul;69(1):31–7

Localization of alpha-interferon in the human feto-placental unit. Howatson AG, et al. **J Endocrinol** 1988 Dec; 119(3):531–4

Human 'pregnancy-associated endometrial alpha 1-globulin', an insulin-like growth factor-binding protein: immunohistological localization in the decidua and placenta during pregnancy employing monoclonal antibodies. Waites GT, et al. **J Endocrinol** 1989 Feb;120(2):351–7

Simultaneous fractionation of four placental neutral glycosphingolipids with a continuous gradient. Strasberg P, et al. **J Lipid Res** 1989 Jan;30(1):121–7

Identification of relaxin in the placenta of the ewe. Wathes DC, et al. **J Reprod Fertil** 1988 Sep;84(1):247–57

Identification of 19-hydroxy-progesterone in human placenta. Melby JC, et al. **J Steroid Biochem** 1988 Oct; 31(4A):475–7

Expression of merosin, a tissue-specific basement membrane protein, in the intermediate trophoblast cells of choriocarcinoma and placenta. Leivo I, et al. **Lab Invest** 1989 Jun;60(6):783–90

Purification and characterization of fatty acid-binding protein from human placenta. Das T, et al. **Lipids** 1988 Jun;23(6):528–33

Preprocorticotropin releasing hormone: cDNA sequence and in vitro processing. Robinson BG, et al. **Mol Cell Endocrinol** 1989 Feb;61(2):175–80

The action of hypothalamic and placental corticotropin releasing factor on the corticotrope. Thomson M, et al. **Mol Cell Endocrinol** 1989 Mar;62(1):1–12 (119 ref.)

Carbohydrate moieties of small placental hCG: requirement of mannose structure for biological activity. Wang HY, et al. **Mol Cell Endocrinol** 1989 Mar;62(1):13–22

Diagnosis of cystinosis with use of placenta [letter] Smith ML, et al. **N Engl J Med** 1989 Aug 10;321(6):397–8

Nucleotide sequence of human cDNA coding for a lipoprotein lipase (LPL) cloned from placental cDNA library. Gotoda T, et al. **Nucleic Acids Res** 1989 Mar 25; 17(6):2351

The distribution of intermediate filament proteins, actin and desmoplakins in human placental tissue as revealed by polyclonal and monoclonal antibodies. Beham A, et al. **Placenta** 1988 Sep-Oct;9(5):479–92

The structure of placental glycogen. Blows JM, et al. **Placenta** 1988 Sep-Oct;9(5):493–500

LHRH-like immunoreactivity in the human placenta is not identical to LHRH. Gautron JP, et al. **Placenta** 1989 Jan-Feb;10(1):19–35

Receptors for alpha 2-macroglobulin- and pregnancy zone protein-proteinase complexes in the human placental syncytiotrophoblast. Jensen PH, et al. **Placenta** 1988 Sep-Oct;9(5):463–77

Methodological problems in placental morphometry: apologia for the use of stereology based on sound sampling practice. Mayhew TM, et al. **Placenta** 1988 Nov-Dec; 9(6):565–81 (103 ref.)

Corticotrophin-releasing factor in human placenta: localization, concentration and release in vitro. Saijonmaa O, et al. **Placenta** 1988 Jul-Aug;9(4):373–85

Detection of benzo[a]pyrene diol epoxide-DNA adducts in human placenta. Manchester DK, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9243–7

Gestational changes in calbindin-D9k in rat uterus, yolk sac, and placenta: implications for maternal-fetal calcium transport and uterine muscle function. Mathieu CL, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3433–7

T-cell mitogenesis stimulates the synthesis of a mRNA species coding for a 43-kDa peptide reactive with CM-H-9, a monoclonal antibody specific for placental isoferritin. Moroz C, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3282–5

Detection of histamine in human placental perfusate and the effect of histamine releasers. Kohler FW Jr, et al. **Res Commun Chem Pathol Pharmacol** 1988 Aug; 61(2):185–200

Lead and cadmium in maternal blood, umbilical cord blood, amniotic fluid and placenta of cows and buffaloes after foetal death (abortion) and after normal parturition. Kaur S. **Sci Total Environ** 1989 Apr;79(3):287–90

Molecular cloning of two types of GAP complementary DNA from human placenta. Trahey M, et al. **Science** 1988 Dec 23;242(4886):1697–700

Plasma concentration and placental transfer of bromofenofos in rats. Yoshimura H, et al. **Toxicology** 1989 May 15; 55(3):299–306

[Cellular targets of immunoglobulins eluted from the placenta] Cohen JH, et al. **Rev Rhum Mal Osteoartic** 1988 Jun;55(8):601–6 (Eng. Abstr.) **(Fre)**

[Human placental oxytocin and its increase by prostaglandin E2 and F2 alpha] Sugahara M, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Mar; 41(3):287–92 (Eng. Abstr.) **(Jpn)**

[Changes in lipid composition of maternal and fetal blood and placental tissues in intrauterine growth retardation] Mikhaĭlenko ET, et al. **Akush Ginekol (Mosk)** 1989 Jan; (1):66–7 **(Rus)**

ANATOMY & HISTOLOGY

On the cause of the retardation of fetal growth in multiple gestations. Bleker OP, et al. **Acta Genet Med Gemellol (Roma)** 1988;37(1):41–6

Relationship between placental shape, cord insertion, lobes and gestational outcome. Nordenvall M, et al. **Acta Obstet Gynecol Scand** 1988;67(7):611–6

The effect of placental location on uterine artery flow velocity waveforms. Kofinas AD, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1504–8

Placental volume measurement by ultrasonography: evaluation of the method [letter] Veersema D, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1304–5

Second-trimester placental volume measurement by ultrasound: prediction of fetal outcome. Wolf H, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):121–6

Incidence of spontaneous abortion after amniocentesis: influence of placental localization and past obstetric and gynecologic history. Andreasen E, et al. **Am J Perinatol** 1989 Apr;6(2):268–73

Placental histology and the production of human choriogonadotrophin and its subunits in pregnancy. Hay DL. **Br J Obstet Gynaecol** 1988 Dec;95(12):1268–75

Determination of local variation of the thickness of the capillary basement membrane of the human placenta at term by a morphometric method. Jirkovská M. **Folia Morphol (Praha)** 1989;37(1):106–12

The human placental bed: histology, immunohistochemistry and pathology. Wells M, et al. **Histopathology** 1988 Nov; 13(5):483–98 (103 ref.)

Term human fetal umbilical vein oxygen content, placental weight, and maternal blood pressure. Bonds DR, et al. **J Perinatol** 1987 Spring;7(2):114–7

The effects of placental site on the arcuate artery flow velocity waveform. Chambers SE, et al. **J Ultrasound Med** 1988 Dec;7(12):671–3

Placental weight in diabetic pregnancies. Clarson C, et al. **Placenta** 1989 May-Jun;10(3):275–81

An evaluation of the use of texture measurements for the tissue characterisation of ultrasonic images of in vivo human placentae. Morris DT. **Ultrasound Med Biol** 1988; 14(5):387–95

[Functional morphology of the human placenta] Scheuner G, et al. **Zentralbl Allg Pathol** 1989;135(4):307–28 (198 ref.) (Eng. Abstr.) **(Ger)**

[Echographic criteria of placental development] Sidorova IS, et al. **Akush Ginekol (Mosk)** 1989 Jan;(1):77–80 **(Rus)**

BLOOD SUPPLY

Umbilical artery and uteroplacental blood flow velocity waveforms in normal pregnancy—a cross-sectional study. Gudmundsson S, et al. **Acta Obstet Gynecol Scand** 1988; 67(4):347–54

Effect of exercise on maternal hemodynamics and placental blood flow in healthy women. Rauramo I, et al. **Acta Obstet Gynecol Scand** 1988;67(1):21–5

Effect of exercise on placental blood flow in pregnancies complicated by hypertension, diabetes or intrahepatic cholestasis. Rauramo I, et al. **Acta Obstet Gynecol Scand** 1988;67(1):15–20

Changes in uteroplacental blood flow in relation to intrauterine hazard to fetus. Rýznar V, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;119:367–73

Measurement of regional uteroplacental blood flow. Rýznar V, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;119:353–9

Pregnancy-induced hypertension and its influence on uteroplacental blood flow. Rýznar V, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;119:361–5

Maternal floor infarction: an unusual cause of intrauterine growth retardation. Nickel RE. **Am J Dis Child** 1988 Dec; 142(12):1270–1

Nifedipine does not adversely affect uteroplacental blood flow in the hypertensive term-pregnant rat. Ahokas RA, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1440–5

Labetalol does not decrease placental perfusion in the hypertensive term-pregnant rat. Ahokas RA, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):480–4

Selective increase in placental blood flow by atrial natriuretic peptide in hypertensive rats. Chemtob S, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):477–9

Neodymium:yttrium-aluminum-garnet laser occlusion of rhesus placental vasculature via fetoscopy. DeLia JE, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):485–9

Fetoplacental vascular responses to prostacyclin after thromboxane-induced vasoconstriction. Parisi VM, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):502–7

Regional blood flow change in the lamb during the perinatal period. Richardson BS, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):919–25

Ultrastructural aspects of preeclampsia. I. Placental bed and uterine boundary vessels. Shanklin DR, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):735–41

Comparison of the vasoactive effects of leukotrienes with thromboxane mimic in the perfused human placenta. Thorp JA, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1376–80

Low-dose aspirin inhibits thromboxane, but not prostacyclin, production by human placental arteries. Thorp JA, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1381–4

Dynamics of the uteroplacental circulation in health and disease. Assali NS. **Am J Perinatol** 1989 Apr;6(2):105–9 (15 ref.)

Maternofetal potential difference in pigs. Boyd RD, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R37–43

Fetal placental vascular responses to prostacyclin after angiotensin II-induced vasoconstriction. Parisi VM, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):E102–7

Role of the renin-angiotensin system in hypertension during reduced uteroplacental perfusion pressure. Woods LL, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R204–9

Fetal nutrition. Battaglia FC, et al. **Annu Rev Nutr** 1988; 8:43–61 (115 ref.)

Examination of the placental circulation by Doppler ultrasound. Redman CW. **BMJ** 1989 Mar 11; 298(6674):621–2 (13 ref.)

Morphometric differences between the placental vasculature of non-smokers, smokers and ex-smokers. Burton GJ, et al. **Br J Obstet Gynaecol** 1989 Aug;96(8):907–15

Reference ranges and sources of variation for indices of pulsed Doppler flow velocity waveforms from the uteroplacental and fetal circulation [letter] Fogarty PP. **Br J Obstet Gynaecol** 1988 Sep;95(9):954–6

The effect of sublingual nifedipine on uteroplacental blood flow in hypertensive pregnancy. Lindow SW, et al. **Br J Obstet Gynaecol** 1988 Dec;95(12):1276–81

Uteroplacental perfusion after epidural analgesia for elective caesarean section. Long MG, et al. **Br J Obstet Gynaecol** 1988 Oct;95(10):1081–2

Maternal blood viscosity and uteroplacental blood flow velocity waveforms in normal and complicated pregnancies. Steel SA, et al. **Br J Obstet Gynaecol** 1988 Aug;95(8):747–52

Duplex ultrasonography of the fetal aorta, umbilical artery, and placental arcuate artery throughout normal human pregnancy. Cameron A, et al. **Can Assoc Radiol J** 1989 Jun;40(3):145–9

Feto-placental haemodynamics in growth retardation: a pulsed Doppler study. Bogatti P, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Jun;31(3):213–9

Prolactin levels in blood from the intervillous space of the human placenta. Ferriani RA, et al. **Gynecol Obstet Invest** 1988;26(1):73–6

Pulsatility index and its relationship to placental vascular resistance during partial umbilical venous occlusion: a study in fetal lambs. van Vugt JM, et al. **Gynecol Obstet Invest** 1988;26(1):1–7

Pregnancy hypertension, placental evidences of low uteroplacental blood flow, and spontaneous premature delivery. Naeye RL. **Hum Pathol** 1989 May;20(5):441–4

Effects of histamine on vascular resistance and protein permeability in the isolated dually perfused guinea-pig placenta. Berhe A, et al. **J Dev Physiol** 1988 Aug; 10(4):357–69

Forskolin dilates the maternal ovine placental vascular bed. Rankin JH, et al. **J Dev Physiol** 1988 Jun;10(3):201–9

Placental vascular response to prostaglandin I2 in the rabbit. Rankin JH, et al. **J Dev Physiol** 1988 Dec;10(6):541–6

Effect of endogenous vasoconstrictors on maternal intramyometrial and fetal stem villous arteries in pre-eclampsia. Allen J, et al. **J Hypertens** 1989 Jul; 7(7):529–36

Doppler analysis of the umbilical artery. The importance of choosing the placental end of the cord. Abramowicz JS, et al. **J Ultrasound Med** 1989 Apr;8(4):219–21

Placental vascular resistance using umbilical velocimetry in patients undergoing cesarean section for fetal distress. Brar HS, et al. **J Ultrasound Med** 1989 Apr;8(4):211–4

Hemodynamic validation of Doppler assessment of fetoplacental circulation in a sheep model system. Maulik D, et al. **J Ultrasound Med** 1989 Apr;8(4):177–81

Simultaneous use of Doppler ultrasound and electromagnetic flow probes in fetal flow assessment. Nimrod C, et al. **J Ultrasound Med** 1989 Apr;8(4):201–5

Intraobserver variation in Doppler ultrasound indices of placental perfusion derived from different numbers of waveforms. Spencer JA, et al. **J Ultrasound Med** 1989 Apr; 8(4):197–9

Assessment of utero-placental blood flow velocity wave forms in a pregnant patient with systemic lupus erythematosus. Meizner I, et al. **JCU** 1988 Jan;16(1):55–7

Blood velocity waveforms and placental vascular formation [letter] Loquet P, et al. **Lancet** 1988 Nov 26;2(8622):1252–3

Effect of allyloestrenol on deteriorating uteroplacental circulation [letter] Pearce JM, et al. **Lancet** 1988 Nov 26; 2(8622):1252

Eradicating fetomaternal fluid shift during perfusion fixation of the human placenta. Burton GJ, et al. **Placenta** 1988 May–Jun;9(3):327–32

Comparison between measurements of maternal placental blood flow with dynamic placental scintigraphy and radioactive microspheres. Skjöldebrand A, et al. **Placenta** 1989 Jan–Feb;10(1):95–102

Placentation in the rat: a sem study of microvascular casts. Christofferson R, et al. **Prog Clin Biol Res** 1989;296:435–42

Combined microcorrosion casts of maternal and fetal placental vasculature. A new method of characterizing different placental types. Leiser R, et al. **Prog Clin Biol Res** 1989;296:421–33

Establishment of uteroplacental circulation. Pijnenborg R. **Reprod Nutr Dev** 1988;28(6B):1581–6

Increased placental resistance and late decelerations associated with severe proteinuric hypertension predicts poor fetal outcome. Pattinson RC, et al. **S Afr Med J** 1989 Mar 4;75(5):211–4 (12 ref.)

Effect of placental resistance, arterial diameter, and blood pressure on the uterine arterial velocity waveform: a computer modeling approach. Adamson SL, et al. **Ultrasound Med Biol** 1989;15(5):437–42

[Uterero–placenta blood flow and intrauterine growth retardation] Li YL, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1989 Mar;24(2):108–10 (21 ref.) **(Chi)**

[Scanning electron microscopy observations on the vascular casts of the placental chorion in normal pregnancy and pregnancy-induced hypertension] Song L. **Chung Hua Fu Chan Ko Tsa Chih** 1989 Jan;24(1):8–10, 57 (Eng. Abstr.) **(Chi)**

[Uterine spiral arteries in the maternal placental bed in cases of fetal growth retardation] Wang ZN. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Jul;23(4):212–4, 252–3 (Eng. Abstr.) **(Chi)**

[Feto–placental microcirculation and pathologic changes of the chorionic villi in pregnancy–induced hypertension syndrome] Yang CS, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Nov;68(11):632–4, 44 (Eng. Abstr.) **(Chi)**

[Beta–mimetics and Pourcelot's index] Mourey C, et al. **Rev Fr Gynecol Obstet** 1988 Nov;83(11):713–5 (Eng. Abstr.) **(Fre)**

[The so–called endothelial vacuoles of the placental vessels—physiology or disease?] Hey A, et al. **Pathologe** 1989 Jan;10(1):66–9 **(Ger)**

[Comment on a previous article] Jimenez E, et al. **Pathologe** 1989 Jan;10(1):67–9 **(Ger)**

[Study of maternal and fetal blood flow in Rh incompatibility] Dmoch E, et al. **Acta Haematol Pol** 1988 Jan–Jun; 19(1–2):33–8 (Eng. Abstr.) **(Pol)**

[Status of the utero–placental blood circulation in pregnant women with chronic pyelonephritis and nephropathy] Alieva EM, et al. **Akush Ginekol (Mosk)** 1989 May;(5):24–8 (Eng. Abstr.) **(Rus)**

[Analysis of the correlation of indicators of utero–placental blood flow and various blood enzymes in pregnant women at high–risk of perinatal pathology] Burler VA, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):49–54 (Eng. Abstr.) **(Rus)**

[Value of utero–placental and feto–placental Doppler flowmetry in selecting rational tactics in the management of pregnancy and the method of delivery] Strizhakov AN, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):24–7 (Eng. Abstr.) **(Rus)**

[Relations between indicators of the activity of several blood enzymes and the state of the utero–placental blood flow in pregnant women at high risk of perinatal pathology] Volobuev AI, et al. **Akush Ginekol (Mosk)** 1989 Jan; (1):38–42 (Eng. Abstr.) **(Rus)**

[Changes in utero–placental blood flow in comparison with placental morphological characteristics in chronic threatened abortion] Zheleznov BI, et al. **Akush Ginekol (Mosk)** 1988 Dec;(12):13–8 (Eng. Abstr.) **(Rus)**

CYTOLOGY

Human placental cytotrophoblast cells: identification and culture. Truman P, et al. **Arch Gynecol Obstet** 1989; 246(1):39–49

In situ localization of two prolactin–related messenger ribonucleic acids to binucleate cells of bovine placentomes. Milosavljevic M, et al. **Endocrinology** 1989 Aug; 125(2):883–9

Adhesive and degradative properties of human placental cytotrophoblast cells in vitro. Fisher SJ, et al. **J Cell Biol** 1989 Aug;109(2):891–902

Characterization and histologic localization of human growth hormone–variant gene expression in the placenta. Liebhaber SA, et al. **J Clin Invest** 1989 Jun;83(6):1985–91

Correlation of placental erythrocyte morphology and gestational age. Salafia CM, et al. **Pediatr Pathol** 1988; 8(5):495–502

Replication of herpes simplex virus in blood monocytes and placental macrophages from human neonates. Plaeger–Marshall S, et al. **Pediatr Res** 1989 Aug; 26(2):135–9

Isolation of phenotypically distinct trophoblast cell lines from normal rat chorioallantoic placentas. Hunt JS, et al. **Placenta** 1989 Mar–Apr;10(2):161–77

The Hofbauer cells of the human placenta: morphological and immunological aspects. Castellucci M, et al. **Prog Clin Biol Res** 1989;296:443–51

[Immunohistochemical demonstration of fibronectin in the human placenta] Pfister C, et al. **Acta Histochem (Jena)** 1988;84(1):83–91 (Eng. Abstr.) **(Ger)**

DRUG EFFECTS

Effects of nicotine and nicotine/ethanol on human placental amino acids transfer. Schenker S, et al. **Alcohol** 1989 Jul–Aug;6(4):289–96

Effect of ethanol on human placental transport of model amino acids and glucose. Schenker S, et al. **Alcoholism (NY)** 1989 Feb;13(1):112–9

Dose–response curves of the uterine and placental vascular beds to prostaglandin I2. Hollister MC, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1372–5

Interleukin–1 alpha and tumor necrosis factor alpha cause placental injury in the rat. Silen ML, et al. **Am J Pathol** 1989 Aug;135(2):239–44

Light and electron microscopic investigation of the rat placenta after cadmium administration during pregnancy. Hazelhoff Roelfzema W, et al. **Anat Embryol (Berl)** 1988; 178(4):345–51

Effect of general anesthesia on syncytiotrophoblast plasma membranes from human placenta. Mazzanti L, et al. **Biochem Int** 1988 Jun;16(6):1095–101

The effect of estrogen on androstenedione production by rat placental cells in vitro. Jackson JA, et al. **Biol Reprod** 1989 Jan;40(1):74–80

Cadmium effects and biochemical status in hamsters following acute exposure in late gestation. Hanlon DP, et al. **Experientia** 1989 Aug 15;45(8):767–70

Prostaglandin I2 and the constricted maternal ovine placenta: effects of local infusion and placental age. Rankin JH, et al. **J Dev Physiol** 1988 Oct;10(5):393–8

Effect of oestrogens and progesterone on the metabolic inactivation of noradrenaline in the human placenta. Saarikoski S. **Placenta** 1988 Sep–Oct;9(5):507–12

[The modifying influence of adenosylcobalamin on the transplacental carcinogenic effect of N–nitroso–N–ethylurea in organ cultures of the kidneys of DBA/2 mice] Golenko OD, et al. **Eksp Onkol** 1989; 11(3):11–4 (Eng. Abstr.) **(Rus)**

[Effect of partusisten and complamin on the general hemodynamics and on uteroplacental blood flow in pregnant rabbits] Tsypkun AG. **Fiziol Zh** 1988 Jul–Aug; 34(4):101–4 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Arylsulfatase A from human tissues contains an endo–beta–N–acetylglucosaminidase F–resistant oligosaccharide. Laidler PM, et al. **Acta Biochim Pol** 1988; 35(4):343–56

Calcium pump epitopes in placental trophoblast basal plasma membranes. Borke JL, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):c341–6

Partial amino acid sequence analysis of human placenta monoamine oxidase A and bovine liver monoamine oxidase B. Chen SA, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):445–50

Affinity labeling of cofactor–binding region of human placental estradiol 17 beta–dehydrogenase by periodate–oxidized NADP+ (o–NADP+). Inano H, et al. **Biochem Biophys Res Commun** 1989 Jan 31;158(2):617–23

Human placental endonuclease cleaves Holliday junctions. Jeyaseelan R, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):1054–60

Phospholipase A2 from human synovial fluid: purification and structural homology to the placental enzyme. Lai CY, et al. **Biochem Biophys Res Commun** 1988 Dec 15; 157(2):488–93

Complete primary structure of the transacylase (E2b) subunit of the human branched chain alpha–keto acid dehydrogenase complex. Nobukuni Y, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1035–41

Inhibitory effect of tannin on poly(ADP–ribose) glycohydrolase from human placenta. Tanuma S, et al. **Biochem Int** 1989 Apr;18(4):701–8

Isolation, characterization and Ca2+ and calmodulin regulation of cyclic nucleotide phosphodiesterases from human placentae of different ages. Tertrin–Clary C, et al. **Biochem Int** 1989 Jan;18(1):99–117

Cyanide—an uncompetitive inhibitor of NAD(P)–dependent malic enzyme from human term placental mitochondria. Zolnierowicz S, et al. **Biochem Int** 1988 Aug;17(2):303–9

Protein phosphotyrosine phosphatase purified from the particulate fraction of human placenta dephosphorylates insulin and growth–factor receptors. Roome J, et al. **Biochem J** 1988 Dec 1;256(2):493–500

A putative functional domain of human placental alkaline phosphatase predicted from sequence comparisons [letter] Tsonis PA, et al. **Biochem J** 1988 Sep 1;254(2):623–4

Monoamine oxidase A from human placenta and monoamine oxidase B from bovine liver both have one FAD per subunit. Weyler W. **Biochem J** 1989 Jun 15;260(3):725–9

Human placental dipeptidyl aminopeptidase III: hydrolysis of enkephalins and its stimulation by cobaltous ion. Shimamori Y, et al. **Biochem Med Metab Biol** 1988 Dec; 40(3):305–10

Aminopeptidases in human retroplacental sera: purification and characterization of two enzymes. Watanabe Y, et al. **Biochem Med Metab Biol** 1989 Apr;41(2):139–48

Ontogeny of the activity of alcohol dehydrogenase and aldehyde dehydrogenases in the liver and placenta of the guinea pig. Card SE, et al. **Biochem Pharmacol** 1989 Aug 1;38(15):2535–41

Determination of the absolute concentrations of monoamine oxidase A and B in human tissues. O'Carroll AM, et al. **Biochem Pharmacol** 1989 Mar 15;38(6):901–5

Inhibition of human hepatic and placental xenobiotic monooxygenases by imidazole antimycotics. Pasanen M, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3861–6

Isolation of multiple forms of DNA polymerase delta: evidence of proteolytic modification during isolation. Lee MY. **Biochemistry** 1988 Jul 12;27(14):5188–93

Human placental estradiol 17 beta–dehydrogenase: evidence for inverted substrate orientation ("wrong–way" binding) at the active site. Murdock GL, et al. **Biochemistry** 1988 Jun 14;27(12):4452–8

Purification and physicochemical characterization of a human placental acid phosphatase possessing phosphotyrosyl protein phosphatase activity. Waheed A, et al. **Biochemistry** 1988 Jun 14;27(12):4265–73

Purification and determination of the NH2–terminal amino acid sequence of uracil–DNA glycosylase from human placenta. Wittwer CU, et al. **Biochemistry** 1989 Jan 24; 28(2):780–4

Localization, in human placenta, of the tightly bound form of DNA methylase in the higher order of chromatin organization. Caiafa P, et al. **Biochim Biophys Acta** 1988 Nov 10;951(1):191–200

Separation of the protein–tyrosine kinase and phosphatidylinositol kinase activities of the human placental insulin receptor. Carroscosa JM, et al. **Biochim Biophys Acta** 1988 Sep 16;971(2):170–8

Purification and properties of human placental acid phosphatase III. DiPietro DL. **Biochim Biophys Acta** 1971 Jun 16;235(3):458–65

Characterization of rat and human steroid sulfatases. Kawano J, et al. **Biochim Biophys Acta** 1989 Aug 31;997(3):199–205

Hormone–sensitive lipase is involved in the hydrolysis of lipoidal derivatives of estrogens and other steroid hormones. Lee FT, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):258–64

Co–purification of thymidylate kinase and cytosolic thymidine kinase from human term placenta by affinity chromatography. Tamiya N, et al. **Biochim Biophys Acta** 1989 Mar 16;995(1):28–35

Human placental ecto–5'–nucleotidase: isoforms and chemical crosslinking products of the membrane–bound and isolated enzyme. Buschette–Brambrink S, et al. **Biol Chem Hoppe Seyler** 1989 Jan;370(1):67–74

Developmental expression of adenosine deaminase in placental tissues of the early postimplantation mouse embryo and uterine stroma. Knudsen TB, et al. **Biol Reprod** 1988 Nov;39(4):937–51

Purification to homogeneity of human placental acid sphingomyelinase. Zou L, et al. **Biotechnol Appl Biochem** 1989 Apr;11(2):217–25

Comparison of GST–P versus GGT as markers of hepatocellular lineage during analyses of initiation of carcinogenesis. Cameron RG. **Cancer Invest** 1988; 6(6):725–34

Elevation of the placental glutathione S–transferase form (GST–pi) in tumor tissues and the levels in sera of patients with cancer. Tsuchida S, et al. **Cancer Res** 1989 Sep 15; 49(18):5225–9

Expression of the glutathione S–transferase placental form in human lung carcinomas. Eimoto H, et al. **Carcinogenesis** 1988 Dec;9(12):2325–7

Time–dependent inactivation of human placental aromatase by bromoacetoxy 4–androsten–3–ones in the presence of reduced nicotinamide adenine dinucleotide phosphate (NADPH). Numazawa M, et al. **Chem Pharm Bull (Tokyo)** 1989 Mar;37(3):735–7

Inhibition of human placenta aldose reductase by tannic acid. Sawada H, et al. **Chem Pharm Bull (Tokyo)** 1989 Jun; 37(6):1662–4

Multicenter evaluation of human placental alkaline phosphatase as a possible tumor-associated antigen in serum. De Broe ME, et al. **Clin Chem** 1988 Oct; 34(10):1995-9

Isolation of creatine kinase BB isoenzyme with high specific activity and adequate purity for radioimmunoassay from human placenta on preparative polyacrylamide gel electrophoresis. Geng JG, et al. **Clin Chim Acta** 1989 Apr 28;181(1):1-10

Purification of acidic glutathione S-transferases from human lung, placenta and erythrocyte and the development of a specific radioimmunoassay for their measurement. Howie AF, et al. **Clin Chim Acta** 1988 Sep 30;177(1):65-75

Allelic polymorphism of human placental alkaline phosphatase in three races: sugar chain heterogeneities. Sato M, et al. **Clin Chim Acta** 1988 Nov;178(1):101-8

Purification and characterization of placental membrane phosphotyrosine phosphatases. Pallen CJ, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:447-54

Activity of alcohol dehydrogenase and aldehyde dehydrogenase in maternal liver, fetal liver and placenta of the near-term pregnant ewe. Clarke DW, et al. **Dev Pharmacol Ther** 1989;12(1):35-41

An enzyme-linked immunosorbent assay for quantitation of aromatase cytochrome P-450. Kitawaki J, et al. **Endocrinology** 1989 Mar;124(3):1417-23

Purification and properties of microsomal carboxypeptidase N (kininase I) in human placenta. Ito Y, et al. **Enzyme** 1989; 42(1):8-14

Human acid beta-glucosidase: inhibition studies using glucose analogues and pH variation to characterize the normal and Gaucher disease glycon binding sites. Osiecki-Newman K, et al. **Enzyme** 1988;40(4):173-88

Acidic and basic forms of glutathione S-transferases from human placenta and comparison with human kidney glutathione S-transferase. Steisslinger HW, et al. **Enzyme** 1988;40(1):1-6

Purification and characterization of human placental aminopeptidase A. Yamada R, et al. **Enzyme** 1988; 40(4):223-30

In vitro degradation of opioid peptides by human placental aminopeptidase M. Furuhashi M, et al. **Exp Clin Endocrinol** 1988 Dec;92(2):235-7

Effects of progesterone and estradiol on aminopeptidase A (AAP) and leucine aminopeptidase (LAP) activities in the pregnancy serum and placenta of the rat. Kurauchi O, et al. **Exp Clin Endocrinol** 1989 Apr;93(1):90-4

Complete amino acid sequence of human placental 17 beta-hydroxysteroid dehydrogenase deduced from cDNA. Peltoketo H, et al. **FEBS Lett** 1988 Oct 24;239(1):73-7

DNA polymerase alpha-DNA primase from human placenta. Immunoaffinity purification and preliminary characterization. Podust VN, et al. **FEBS Lett** 1989 Mar 13;245(1-2):14-6

Effects of cadmium exposure on glycogen phosphorylase activity in rat placenta as demonstrated by histochemical means. Hazelhoff Roelfzema W, et al. **Histochemistry** 1989; 91(4):305-8

Lack of effect of insulin or insulin-like growth factor I on the steroid sulfatase activity of human placental cytotrophoblasts. Nestler JE. **Horm Metab Res** 1989 May; 21(5):258-60

Correlation between RsaI restriction fragment length polymorphism and electrophoretic types of human placental alkaline phosphatase. Beckman G, et al. **Hum Hered** 1989;39(1):41-5

Placental glucose dehydrogenase polymorphism in Japanese. Kido A, et al. **Hum Hered** 1989;39(2):116-7

Characterization of lysosomal alpha-mannosidase from human placenta. Basu D, et al. **Indian J Biochem Biophys** 1988 Dec;25(6):695-8

Lectin binding of subunits of placental and serum oxytocinase after electrophoresis and transblotting to nitrocellulose. Lalu K, et al. **Int J Biochem** 1988;20(9):1009-14

Human placenta S-adenosylmethionine: protein carboxyl O-methyltransferase (protein methylase II). Purification and characterization. Paik MK, et al. **Int J Biochem** 1988; 20(10):1107-12

Proteinase and proteinase inhibitor localization in the human placenta. Earl U, et al. **Int J Gynecol Pathol** 1989; 8(2):114-24

Comparison of properties between human recombinant and placental copper-zinc SOD. Kajihara J, et al. **J Biochem (Tokyo)** 1988 Nov;104(5):851-4

Relation between ESR-detectable Cu(II) and superoxide dismutase activity. Kajihara J, et al. **J Biochem (Tokyo)** 1988 Nov;104(5):855-7

Sedimentation equilibrium analysis of five lipocortin-related phospholipase A2 inhibitors from human placenta. Evidence against a mechanistically relevant association between enzyme and inhibitor. Ahn NG, et al. **J Biol Chem** 1988 Dec 15;263(35):18657-63

Identification of a Mg2+-dependent protease in human placenta which cleaves hydrophobic folate-binding proteins to hydrophilic forms. Antony AC, et al. **J Biol Chem** 1989 Feb 5;264(4):1911-4

Molecular cloning of the type 5, iron-containing, tartrate-resistant acid phosphatase from human placenta. Ketcham CM, et al. **J Biol Chem** 1989 Jan 5;264(1):557-63

Glutathione transferase from bovine placenta. Preparation, biochemical characterization, crystallization, and preliminary crystallographic analysis of a neutral class PI enzyme. Schäffer J, et al. **J Biol Chem** 1988 Nov 25; 263(33):17405-11

High Km soluble 5'-nucleotidase from human placenta. Properties and allosteric regulation by IMP and ATP. Spychala J, et al. **J Biol Chem** 1988 Dec 15; 263(35):18759-65

Identification and in vitro reconstitution of lysosomal neuraminidase from human placenta. van der Horst GT, et al. **J Biol Chem** 1989 Jan 15;264(2):1317-22

Estrogen synthetase (aromatase) activity in primary culture of human term placental cells: effects of cell preparation, growth medium, and serum on adenosine 3',5'-monophosphate response. Lobo JO, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):868-74

Ovine placental steroid 17 alpha-hydroxylase/C-17,20-lyase, aromatase and sulphatase in dexamethasone-induced and natural parturition. Mason JI, et al. **J Endocrinol** 1989 Jul; 122(1):351-9

Gestational changes in prostaglandin synthase activity of ovine cotyledonary microsomes. Rice GE, et al. **J Endocrinol** 1988 Aug;118(2):265-70

Preparation of monoclonal antibodies to glutathione S-transferase-pi and application to immunohistochemical study. Aiso S, et al. **J Histochem Cytochem** 1989 Aug; 37(8):1247-52

Atrial natriuretic peptide and sodium azide dependent guanylate cyclase activities in placentas from normal and severely toxemic patients. Hatjis CG, et al. **J Perinat Med** 1989;17(1):25-31

Kinetic analysis of human placental, ovarian, and adrenal 3 beta-hydroxysteroid dehydrogenase inhibition by epostane in vitro. López Bernal A. **J Steroid Biochem** 1989 Sep;33(3):483-5

Regulation of the 3 beta-hydroxysteroid dehydrogenase activity in tissue fragments and microsomes from human term placenta: kinetic analysis and inhibition by steroids. Raimondi SG, et al. **J Steroid Biochem** 1989 Mar; 32(3):413-20

Human placental 3 beta-hydroxy-5-ene-steroid dehydrogenase and steroid 5----4-ene-isomerase: purification from microsomes, substrate kinetics, and inhibition by product steroids. Thomas JL, et al. **J Steroid Biochem** 1988 Nov;31(5):785-93

Human placental 3 beta-hydroxy-5-ene-steroid dehydrogenase and steroid 5----4-ene-isomerase: purification from mitochondria and kinetic profiles, biophysical characterization of the purified mitochondrial and microsomal enzymes. Thomas JL, et al. **J Steroid Biochem** 1989 Aug;33(2):209-17

L-methylmalonyl-CoA mutase from human placenta. Kolhouse JF, et al. **Methods Enzymol** 1988;166:407-14

Human placental 17 beta-hydroxysteroid dehydrogenase is homologous to NodG protein of Rhizobium meliloti. Baker ME. **Mol Endocrinol** 1989 May;3(5):881-4

Characterization of cDNAs for human estradiol 17 beta-dehydrogenase and assignment of the gene to chromosome 17: evidence of two mRNA species with distinct 5'-termini in human placenta. The VL, et al. **Mol Endocrinol** 1989 Aug;3(8):1301-9

Full length cDNA structure and deduced amino acid sequence of human 3 beta-hydroxy-5-ene steroid dehydrogenase. The VL, et al. **Mol Endocrinol** 1989 Aug; 3(8):1310-2

Characterization and quantitation of monoamine oxidases A and B in mitochondria from human placenta. Riley LA, et al. **Mol Pharmacol** 1989 Jul;36(1):54-60

Mechanism of incision by an apurinic/apyrimidinic endonuclease present in human placenta. Haukanes BI, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5529-35

Prostaglandin catabolism in the bovine placenta. Erwich JJ, et al. **Placenta** 1988 May-Jun;9(3):297-302

Cytosolic epoxide hydrolase in human placenta. Wixtrom RN, et al. **Placenta** 1988 Sep-Oct;9(5):559-63

Processing at the carboxyl terminus of nascent placental alkaline phosphatase in a cell-free system: evidence for specific cleavage of a signal peptide. Bailey CA, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):22-6

Conversion of placental alkaline phosphatase from a phosphatidylinositol-glycan-anchored protein to an integral transmembrane protein. Berger J, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1457-60

Human placenta protein-tyrosine-phosphatase: amino acid sequence and relationship to a family of receptor-like proteins. Charbonneau H, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5252-6

Multiple regulatory elements and phorbol 12-O-tetradecanoate 13-acetate responsiveness of the rat placental glutathione transferase gene. Sakai M, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9456-60

Pst I restriction fragment length polymorphism of human placental alkaline phosphatase gene: Mendelian segregation and localization of mutation site in the gene. Tsavaler L, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7680-4

Purification of the human placental NAD-linked 15-hydroxyprostaglandin dehydrogenase. Jarabak J, et al. **Prostaglandins** 1988 Aug;36(2):205-13

Estrogen synthetase (aromatase) in cultured human term placental cells and neoplastic human trophoblast. Bellino FL, et al. **Steroids** 1987 Jul-Sep;50(1-3):73-87

Stereoselective inhibition of human placental aromatase. Childers WE, et al. **Steroids** 1987 Jul-Sep;50(1-3):121-34

Purification and characterization of aromatase from human placenta. Hall PF, et al. **Steroids** 1987 Jul-Sep; 50(1-3):37-50

Immunoaffinity purification of aromatase cytochrome P-450 from human placental microsomes, metabolic switching from aromatization to 1 beta and 2 beta-monohydroxylation, and recognition of aromatase isozymes. Osawa Y, et al. **Steroids** 1987 Jul-Sep; 50(1-3):11-28

Aromatase cytochrome P-450. Purification and characterization of the enzyme from human placenta. Vickery LE, et al. **Steroids** 1987 Jul-Sep;50(1-3):29-36

[Changes in N-acetyl-beta-glucosaminidase activity in the maternal plasma and utero-placental tissues during normal pregnancy and parturition] Soga H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep;40(9):1413-6 (Eng. Abstr.) **(Jpn)**

[Effect of nitrous oxide on methionine synthetase activity in human placenta] Jendryczko A, et al. **Wiad Lek** 1988 Oct 1;41(19):1286-8 (Eng. Abstr.) **(Pol)**

[Purification and various properties of uracil-DNA-glycosylase from human placenta] Kuz'min IA, et al. **Biokhimiia** 1988 Jun;53(6):1002-8 (Eng. Abstr.) **(Rus)**

[Purification and characterization of DNA-dependent DNA-polymerase alpha from human placenta] Lavrik OI, et al. **Mol Biol (Mosk)** 1989 Mar-Apr;23(2):388-99 (Eng. Abstr.) **(Rus)**

[Amine oxidases of the human placenta] Kirkel' AZ. **Vopr Med Khim** 1989 Jan-Feb;35(1):11-8 (60 ref.) (Eng. Abstr.) **(Rus)**

[Placental alkaline phosphatase as a marker of malignant neoplasms] Pashintseva LP, et al. **Vopr Med Khim** 1989 May-Jun;35(3):68-71 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

The phenotype of human placental macrophages and its variation with gestational age. Goldstein J, et al. **Am J Pathol** 1988 Dec;133(3):648-59

Immunoregulatory placental functions in normal and pathological pregnancies. Chaouat G. **Am J Reprod Immunol Microbiol** 1988 May;17(1):18-21 (35 ref.)

Human placenta—an antibody sponge? Innes A, et al. **Am J Reprod Immunol Microbiol** 1988 Jun;17(2):57-60

Polyclonal antibodies directed against human placental Fcgamma receptor. Characterization of the antibodies and their interaction with the receptor. Mikulska J, et al. **Arch Immunol Ther Exp (Warsz)** 1987;35(6):819-30

Human placental microvilli as a source of antigen for the preparation of a polyclonal antibody directed against the LDL receptor. Goldstein S, et al. **Biochimie** 1989 Mar; 71(3):379-82

Immunopathology of the placenta in pemphigoid gestationis and linear IgA disease. Kelly SE, et al. **Br J Dermatol** 1989 Jun;120(6):735-43

Identification of immunoreactive neuropeptide-gamma in human placenta: localization, secretion, and binding sites. Petraglia F, et al. **Endocrinology** 1989 Apr;124(4):2016-22

Antibodies of aborted bovine fetuses respond to placental structures. Hässig M. **Experientia** 1989 Apr 15;45(4):379-80

Differential expression of the extra domain-containing form of cellular fibronectin in human placentas at different stages of maturation. Virtanen I, et al. **Histochemistry** 1988; 90(1):25-30

Site-directed differences in the immune response to the fetus. Gogolin-Ewens KJ, et al. **Immunology** 1989 Feb; 66(2):312-7

Phenotypic characterization of macrophages in human term placenta. Mues B, et al. **Immunology** 1989 Jul;67(3):303-7

Demonstration of a barrier to transplacental passage of murine enteroviruses in late gestation. Abzug MJ, et al. **J Infect Dis** 1989 Apr;159(4):761-5

Pemphigoid gestationis: a unique mechanism of initiation of an autoimmune response by MHC class II molecules? Kelly SE, et al. **J Pathol** 1989 May;158(1):81-2

Enhancement of murine splenic immunoglobulin secretion in vitro by supernatants from fetal and placental cell cultures. Bernadotte F, et al. **J Reprod Immunol** 1988 Dec; 14(3):225-34

Ontogeny and distribution of cells expressing HLA-B locus-specific determinants in the placenta and extraplacental membranes. Hunt JS, et al. **J Reprod Immunol** 1989 Mar;15(1):21-30

Histological and immunohistochemical studies on the localization of immunoglobulins in porcine placenta. Yano K, et al. **Jpn J Vet Res** 1988 Oct;36(3-4):205-21

Localization of fetal major histocompatibility complex antigens and maternal leukocytes in murine placenta. Implications for maternal-fetal immunological relationship. Redline RW, et al. **Lab Invest** 1989 Jul;61(1):27-36

Identification of murine placental glycoproteins in relation to in vivo and in vitro immunomodulatory properties against H-2 antigens. Gupta GS, et al. **Nephrologie** 1988; 9(4):167-75

Class I MHC antigens on rat placental trophoblast and yolk sac fetal membrane. Billington WD, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):555-6

IgG on normal human placenta is bound both to antigen and Fc receptors. Jalali GR, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):572-4

A unique placental antigen controlled by an MHC-linked locus, RT11. Kunz HW, et al. **Transplant Proc** 1989 Feb;

21(1 Pt 1):559–60

DNA sequence analysis of a class I clone from a rat cDNA placental library. Radojcic A, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):557–8

[Role of the placenta in maintaining the fetal allograft] Chaouat G, et al. **Reprod Nutr Dev** 1988;28(6B):1587–98 (61 ref.) (Eng. Abstr.) (Fre)

METABOLISM

Calcitonin-like immunoreactivity and calcitonin gene expression in the placenta and in the mammary gland of the rat. Jousset V, et al. **Acta Endocrinol (Copenh)** 1988 Nov;119(3):443–51

A study of taurine transport and absorption in placenta and neonatal intestine and kidney. Moriyama IS, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Dec;29(6):807–14

The effects of various hormones on human chorionic gonadotropin production in early and late placental explant cultures. Ahmed NA, et al. **Am J Obstet Gynecol** 1988 Nov;159(5):1220–7

Placental transfer of cefoperazone and sulbactam in the isolated in vitro perfused human placenta. Fortunato SJ, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):1002–6

Determination of pentamidine transfer in the in vitro perfused human cotyledon with high-performance liquid chromatography. Fortunato SJ, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):759–61

Atrial natriuretic peptide receptors in guinea pig placentas. Hatjis CG, et al. **Am J Obstet Gynecol** 1989 Aug; 161(2):493–6

Atrial natriuretic peptide receptors in sheep cotyledons. Hatjis CG, et al. **Am J Obstet Gynecol** 1988 Dec; 159(6):1337–40

Placental isoferritin: a new serum marker in toxemia of pregnancy. Maymon R, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):681–4

Thromboxane production in placentas of women with preeclampsia [letter] Walsh SW. **Am J Obstet Gynecol** 1989 Jun;160(6):1535–6

Vitamin D3 metabolites stimulate prostaglandin production by human fetal membranes and placenta in vitro. Jones SA, et al. **Am J Perinatol** 1989 Apr;6(2):138–41

Transport and metabolism of ascorbic acid in human placenta. Choi JL, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):C110–3

Decreasing pH of rat embryos and fluids estimated by transplacental distribution of DMO. Collins MD, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):R542–9

Evidence for functional thromboxane A2-prostaglandin H2 receptors in human placenta. Hedberg A, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):E256–63

Alanine transport systems in isolated basal plasma membrane of human placenta. Hoeltzli SD, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C630–7

Chloride transport across placental microvillous membranes measured by fluorescence. Illsley NP, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C789–97

Fetal neuromuscular blockade: effect on oxygen demand and placental transport. Wilkening RB, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H734–8

Macromolecule entrapment in human placental microvillous membrane vesicles. Illsley NP, et al. **Anal Biochem** 1988 Nov 15;175(1):106–13

A randomized comparison between midazolam and thiopental for elective cesarean section anesthesia: III. Placental transfer and elimination in neonates. Bach V, et al. **Anesth Analg** 1989 Mar;68(3):238–42

Characteristics of an adenosine A1 binding site in human placental membranes. Work C, et al. **Arch Biochem Biophys** 1989 Jan;268(1):191–202

Effect of exposure to cold and fasting on the placental glycogen and triglyceride content in the rat. Górski J, et al. **Arch Gynecol Obstet** 1989;244(3):151–5

Phospholipase C activity in human placental membrane. Matsuda T, et al. **Arch Gynecol Obstet** 1989;246(1):27–33

Cloning and nucleotide sequence of placental hGH-V cDNA. Igout A, et al. **Arch Int Physiol Biochim** 1988 Mar; 96(1):63–7

Comparative distribution, pharmacokinetics and placental permeabilities of all-trans-retinoic acid, 13-cis-retinoic acid, all-trans-4-oxo-retinoic acid, retinyl acetate and 9-cis-retinal in hamsters. Howard WB, et al. **Arch Toxicol** 1989;63(2):112–20

Fetal aortic cholesterol concentration and metabolism: relationship to plasma cholesterol and potential role of placental factors. Cayatte AJ, et al. **Atherosclerosis** 1989 Apr;76(2–3):131–8

Influence of cyclic nucleotides on the processing of the carbohydrate part of the alpha-subunit of human choriogonadotropin by first trimester human placenta tissue. Hilf G, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):26–33

Local stimulation of prostaglandin production by corticotropin-releasing hormone in human fetal membranes and placenta. Jones SA, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):192–9

Aldehyde oxidation in human placenta. Purification and properties of 1-pyrroline-5-carboxylate dehydrogenase. Farrés J, et al. **Biochem J** 1988 Dec 1;256(2):461–7

Solubilization of functional calcitonin receptors. Nicholson GC, et al. **Biochem J** 1988 Jul 15;253(2):505–10

Characterization of the cDNA encoding human nucleophosmin and studies of its role in normal and abnormal growth. Chan WY, et al. **Biochemistry** 1989 Feb 7;28(3):1033–9

In vitro protein kinase C phosphorylation sites of placental lipocortin. Schlaepfer DD, et al. **Biochemistry** 1988 Jun 14;27(12):4253–8

Placental anticoagulant proteins: isolation and comparative characterization four members of the lipocortin family. Tait JF, et al. **Biochemistry** 1988 Aug 23;27(17):6268–76

Relationship between insulin receptor subunit association and protein kinase activation: insulin-dependent covalent and Mn/MgATP-dependent noncovalent association of alpha beta heterodimeric insulin receptors into an alpha 2 beta 2 heterotetrameric state. Wilden PA, et al. **Biochemistry** 1989 Jan 24;28(2):785–92

Purification and Na+ uptake by human placental microvillus membrane vesicles prepared by three different methods. Glazier JD, et al. **Biochim Biophys Acta** 1988 Nov 22; 945(2):127–34

Dicarboxylate transport in human placental brush-border membrane vesicles. Ogin C, et al. **Biochim Biophys Acta** 1989 Apr 14;980(2):248–54

A receptor for formaldehyde-treated serum albumin on human placental brush-border membrane. Takami M, et al. **Biochim Biophys Acta** 1988 Nov 22;945(2):291–7

Lysine and alanine transport in the perfused guinea-pig placenta. Wheeler CP, et al. **Biochim Biophys Acta** 1989 Jan 30;978(2):257–66

An update of fetal and placental metabolism: carbohydrate and amino acids. Battaglia FC. **Biol Neonate** 1989; 55(6):347–54 (42 ref.)

Stimulation by 17 alpha-hydroxyprogesterone of glycoprotein and glycosaminoglycan synthesis in human placenta in vitro. Burton A, et al. **Biol Neonate** 1989; 55(3):151–5

Extracellular volume of the human placenta in vitro. Lear GH, et al. **Biol Neonate** 1989;55(3):143–50

Rabbit placental-conditioned medium stimulates progesterone accumulation by granulosa-lutein cells in culture: preliminary characterization of a placental luteotropic hormone. Gadsby JE, et al. **Biol Reprod** 1989 Feb;40(2):239–49

Changes in cytosolic and nuclear progesterone receptors during pregnancy in rat placenta. Ogle TF, et al. **Biol Reprod** 1989 May;40(5):1012–9

Vanadium-mediated lipid peroxidation in microsomes from human term placenta. Byczkowski JZ, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):696–703

Calcium transport through the placenta. Brunette MG. **Can J Physiol Pharmacol** 1988 Oct;66(10):1261–9 (100 ref.)

Placental barrier to atrial natriuretic peptide in rats. Mulay S, et al. **Can J Physiol Pharmacol** 1989 Jan;67(1):1–4

Uptake of alpha 2-macroglobulin-trypsin complex by human placenta is mediated by a microvillous membrane receptor. Eaton BM, et al. **Cell Biochem Funct** 1989 Jan;7(1):57–64

Immunohistochemical profile of the human placenta. Studies on localization of prolactin, human chorionic gonadotropin, human placental lactogen, renin and oxytocin. Unnikumar KR, et al. **Cell Mol Biol** 1988;34(6):697–10

Metabolism of androstenedione by placental microsomes in pregnancy hypertension. Hähnel ME, et al. **Clin Chim Acta** 1989 Apr 28;181(1):103–8

Markers of physical integrity and metabolic viability of the perfused human placental lobule. Cannell GR, et al. **Clin Exp Pharmacol Physiol** 1988 Nov;15(11):837–44

Disposition of phenytoin and phenobarbitone in the isolated perfused human placenta. Kluck RM, et al. **Clin Exp Pharmacol Physiol** 1988 Nov;15(11):827–36

Mouse placental receptor for basic somatomedin following maternal ethanol administration. Kennedy LA, et al. **Dev Pharmacol Ther** 1988;11(4):237–42

Effect of chronic maternal drug addiction on placental drug metabolism. Ostrea EM Jr, et al. **Dev Pharmacol Ther** 1989; 12(1):42–8

Maternal diabetes in rats. I. Effects on placental growth and protein turnover. Robinson J, et al. **Diabetes** 1988 Dec; 37(12):1665–70

Some factors affecting phencyclidine biotransformation by human liver and placenta. Pohorecki R, et al. **Drug Metab Dispos** 1989 May-Jun;17(3):271–4

Regulation of progesterone biosynthesis by estrogen during baboon pregnancy: placental mitochondrial cholesterol side-chain cleavage activity in antiestrogen (ethamoxytriphetol, MER-25)-treated baboons. Babischkin JS, et al. **Endocrinology** 1989 Apr;124(4):1638–45

Binding sites for growth hormone in rabbit placental cytosol. Ymer SI, et al. **Endocrinology** 1989 Aug;125(2):993–9

Placental transfer and distribution of pinazepam and its metabolite N-desmethyldiazepam in the maternal and fetal rabbit: effect of the stage of gestation. Pacifici GM, et al. **Eur J Drug Metab Pharmacokinet** 1989 Jan-Mar;14(1):1–6

Pharmacokinetics, tissue distribution, and placental permeability of all-trans- and 13-cis-N-ethyl retinamides in pregnant hamsters. Howard WB, et al. **Fundam Appl Toxicol** 1989 Apr;12(3):621–7

NADPH-dependent drug redox cycling and lipid peroxidation in microsomes from human term placenta. Byczkowski JZ, et al. **Int J Biochem** 1989;21(2):183–90

The effect of cervical dilatation by laminaria tent in first trimester legal abortions on blood loss related to fibrinolytic activity in the decidua and placenta. Jonasson A, et al. **Int J Gynaecol Obstet** 1989 May;29(1):73–7

Complete amino acid sequence of a beta-galactoside-binding lectin from human placenta. Hirabayashi J, et al. **J Biochem (Tokyo)** 1988 Jul;104(1):1–4

Evidence for an imipramine-sensitive serotonin transporter in human placental brush-border membranes. Balkovetz DF, et al. **J Biol Chem** 1989 Feb 5;264(4):2195–8

Human methylated DNA-binding protein. Determinants of a pBR322 recognition site. Khan R, et al. **J Biol Chem** 1988 Oct 5;263(28):14374–83

Intrinsic kinase activity of the insulin receptor. The intact (alpha 2 beta 2) insulin receptor from rat liver contains a kinase domain with greater intrinsic activity than the intact insulin receptor from human placenta. O'Hare T, et al. **J Biol Chem** 1989 Jan 5;264(1):602–10

The expression of alpha(1)-acid glycoprotein mRNA during rat development. High levels of expression in the decidua. Thomas T, et al. **J Biol Chem** 1989 Apr 5;264(10):5784–90

Concentration of transferrin receptor in human placental coated vesicles. Turkewitz AP, et al. **J Cell Biol** 1989 Jun; 108(6):2127–35

Ca2+, but not membrane lipid hydrolysis, mediates human chorionic gonadotropin production by luteinizing hormone-releasing hormone in human term placenta. Bélisle S, et al. **J Clin Endocrinol Metab** 1989 Jul; 69(1):117–21

Changes in epidermal growth factor receptor and its messenger ribonucleic acid levels in human placenta and isolated trophoblast cells during pregnancy. Chen CF, et al. **J Clin Endocrinol Metab** 1988 Dec;67(6):1171–7

Dynamics of steroid biosynthesis during the luteal-placental shift in rhesus monkeys. Ellinwood WE, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):348–55

Steroids modulate corticotropin-releasing hormone production in human fetal membranes and placenta. Jones SA, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):825–30

Different insulin-like growth factor binding species in human placenta and decidua. Pekonen F, et al. **J Clin Endocrinol Metab** 1988 Dec;67(6):1250–7

Sterol synthesis and low density lipoprotein clearance in vivo in the pregnant rat, placenta, and fetus. Sources for tissue cholesterol during fetal development. Belknap WM, et al. **J Clin Invest** 1988 Dec;82(6):2077–85

Production of corticotrophin releasing hormone by the sheep placenta in vivo. Jones CT, et al. **J Dev Physiol** 1989 Feb; 11(2):97–101

Leukotriene release by human fetal membranes, placenta and decidua in relation to parturition. Rees MC, et al. **J Endocrinol** 1988 Sep;118(3):497–500

Stress-related peptide hormones in the placenta: their possible physiological significance. Sirinathsinghji DJ, et al. **J Endocrinol** 1989 Aug;122(2):435–7 (32 ref.)

Blood and placental concentrations of cadmium, lead, and mercury in mothers and their newborns. Truska P, et al. **J Hyg Epidemiol Microbiol Immunol** 1989;33(2):141–7

Differential expression of the class I MHC genes in the embryo and placenta during midgestational development in the mouse. Hedley ML, et al. **J Immunol** 1989 Jun 1; 142(11):4046–53

Maternal, umbilical, uterine and amniotic prostaglandin E and F2 alpha levels in labour. Sahmay S, et al. **J Int Med Res** 1988 Jul-Aug;16(4):280–5

Demonstration of beta 1-adrenergic receptors in human placenta by (-)[125I]iodocyanopindolol binding. Paci A, et al. **J Nucl Med Allied Sci** 1989 Jan-Mar;33(1):15–21

Transplacental transfer and biotransformation studies of valproic acid and its glucuronide(s) in the perfused human placenta. Fowler DW, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):318–23

Transport and metabolism of adenosine in the perfused guinea-pig placenta. Wheeler CP, et al. **J Physiol (Lond)** 1988 Nov;405:511–26

Angiogenic activity of maternal and fetal placental tissues of ewes throughout gestation. Millaway DS, et al. **J Reprod Fertil** 1989 Jul;86(2):689–96

An immunological cryo-ultrastructural study of a sequential appearance of proteins in placental binucleate cells in early pregnancy in the cow. Morgan G, et al. **J Reprod Fertil** 1989 Jul;86(2):745–52

Characterisation and covalent labeling of the human placental methyltrienolone binding protein. Macaulay JO, et al. **J Steroid Biochem** 1989 Apr;32(4):493–8

Evidence for separate sites for aromatisation of androstenedione and 16 alpha-hydroxyandrostenedione in human placental microsomes. Purohit A, et al. **J Steroid Biochem** 1989 Sep;33(3):439–48

Control of bovine placental progestin synthesis: calcium dependent steroidogenesis is modulated at the site of the cholesterol side chain cleavage enzyme. Shalem Z, et al. **J Steroid Biochem** 1988 Nov;31(5):835–8

Opioid binding properties of the purified kappa receptor from human placenta. Ahmed MS, et al. **Life Sci** 1989; 44(13):861–71

Increased autophosphorylation of insulin-like growth factor-I and insulin receptors in placentas of diabetic women. Bhaumick B, et al. **Life Sci** 1989;44(22):1685–96

Specific receptors for endothelin on membranes from human placenta. Characterization and use in a binding assay. Fischli W, et al. **Life Sci** 1989;44(20):1429–36

Differential effects of 8-bromo-cyclic AMP on human chorionic gonadotropin (hCG), progesterone and estrogen production by term placental cells. Rodway M, et al. **Life Sci** 1988;43(18):1451–8

Expression and regulation of the pituitary- and

placenta-specific human glycoprotein hormone alpha-subunit gene is restricted to the pituitary in transgenic mice. Fox N, et al. **Mol Cell Biol** 1988 Dec; 8(12):5470-6

Characterization of angiotensin II binding sites in the human term placenta. Tencé M, et al. **Mol Cell Endocrinol** 1989 May;63(1-2):111-9

Characterization of pregnancy-specific beta 1-glycoprotein synthesized by human placental fibroblasts. Chou JY, et al. **Mol Endocrinol** 1989 Jan;3(1):89-96

Expression of low density lipoprotein receptor gene in human placenta during pregnancy. Furuhashi M, et al. **Mol Endocrinol** 1989 Aug;3(8):1252-6

Expression of adrenocorticotropin-releasing hormone precursor gene in placenta and other nonhypothalamic tissues in man. Usui T, et al. **Mol Endocrinol** 1988 Sep; 2(9):871-5

Characterization of human placental opioid receptors by 3H-ethylketocyclazocine and 3H-naloxone binding. Agbas A, et al. **Neuropeptides** 1988 Oct;12(3):171-6

Expression and secretion of the human placental growth hormone in Escherichia coli. Igout A, et al. **Nucleic Acids Res** 1989 May 25;17(10):3998

Related sites in human and herpesvirus DNA recognized by methylated DNA-binding protein from human placenta. Zhang XY, et al. **Nucleic Acids Res** 1989 Feb 25; 17(4):1459-74

Description of a human placental anti-insulin receptor polyclonal antibody that activates insulin binding to the receptor in vitro. Ganguly S. **Oncogene** 1988 Sep;3(3):341-4

Control of transfer across the mature placenta. Sibley CP, et al. **Oxf Rev Reprod Biol** 1988;10:382-435 (253 ref.)

Effect of parathyroid hormone on PO4 transport through the human placenta microvilli. Brunette MG, et al. **Pediatr Res** 1989 Jan;25(1):15-8

Characteristics of histidine uptake by human placental microvillous membrane vesicles. Karl PI, et al. **Pediatr Res** 1989 Jan;25(1):19-26

Increased binding of epidermal growth factor to placental membranes of intrauterine growth restricted fetal rats. Lawrence S, et al. **Pediatr Res** 1989 Feb;25(2):214-8

Impermeability of the ovine placenta to 35S-recombinant erythropoietin. Widness JA, et al. **Pediatr Res** 1989 Jun; 25(6):649-51

Characterization of MAO A and MAO B in human placental mitochondria by activity, immunoblotting and radioimmunoassay with monoclonal antibodies and active site labeling with 3H-pargyline. Denney RM, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 4:1-5

Uptake of gentamicin in foetal and newborn rats after a single intraperitoneal injection. Nässberger L, et al. **Pharmacol Toxicol** 1989 Jan;64(1):126-31

Human embryonal extracts modulate placental function in the first trimester: effects of visceral tissues upon chorionic gonadotropin and progesterone secretion. Barnea ER, et al. **Placenta** 1989 Jul-Aug;10(4):331-44

The appearance of transferrin receptors on cultured human cytotrophoblast and in vitro-formed syncytiotrophoblast. Bierings MB, et al. **Placenta** 1988 Jul-Aug;9(4):387-96

Production of insulin-like growth factor binding protein(s) (IGF-BPs) by human placenta: variation with gestational age. Fant M, et al. **Placenta** 1988 Jul-Aug;9(4):397-407

Effects of opioids on acetylcholine output of perfused human placental cotyleda. Gude NM, et al. **Placenta** 1989 Sep-Oct; 10(5):445-52

Uptake of bicarbonate/CO2 in the isolated guinea pig placenta. Hatano H, et al. **Placenta** 1989 Mar-Apr; 10(2):213-21

Changes in placental atrial natriuretic peptide receptors associated with severe toxemia of pregnancy. Hatjis CG, et al. **Placenta** 1989 Mar-Apr;10(2):153-9

Placental vanadium in gestational diabetes mellitus. Manci EA, et al. **Placenta** 1989 Jul-Aug;10(4):417-25

Placental permeability for morphine-3-beta-D-glucuronide in the guinea pig. Olsen GD, et al. **Placenta** 1989 Jan-Feb; 10(1):83-93

The determination of kinetic parameters for carrier-mediated transport of non-labelled substrate analogues: a general method applied to the study of divalent anion transport in placental membrane vesicles. Deves R, et al. **Proc R Soc Lond [Biol]** 1989 Jun 22;237(1286):85-97

Effect of maternal glucose concentration on uteroplacental glucose consumption and transfer in pregnant sheep. Hay WW Jr, et al. **Proc Soc Exp Biol Med** 1989 Jan;190(1):63-9

Trans-placental transport and metabolism of carbacyclin by perfused human placental in vitro. Walenga RW, et al. **Prostaglandins** 1989 Jan;37(1):121-34

A new form of asymmetry in epithelia: kinetics of apical and basal sulphate transport in human placenta. Bustamante JC, et al. **Q J Exp Physiol** 1988 Nov;73(6):1013-6

The transfer of zinc across the term dually perfused human placental lobule. Page KR, et al. **Q J Exp Physiol** 1988 Jul;73(4):585-93

Cyclic AMP-responsive DNA-binding protein: structure based on a cloned placental cDNA. Hoeffler JP, et al. **Science** 1988 Dec 9;242(4884):1430-3

Acetaldehyde production and transfer by the perfused human placental cotyledon. Karl PI, et al. **Science** 1988 Oct 14; 242(4876):273-5

The role of the placenta in lipid metabolism and transport. Coleman RA. **Semin Perinatol** 1989 Jun;13(3):180-91 (148 ref.)

The specific 3H-ouabain binding to Na+/K+-ATPase of the human placental tissue is inhibited by newborn plasma extracts. Paci A, et al. **Steroids** 1988 Oct;52(4):363-4

Inhibition of progesterone synthesis in normal and transformed human placental cells by tight binding inhibitors of 3 beta-hydroxysteroid dehydrogenase. Sharp RB, et al. **Steroids** 1988 May-Jun;51(5-6):441-57

Transfer of 2,4,5,2',4',5'-hexachlorobiphenyl across the in situ perfused guinea pig placenta. Ring BJ, et al. **Toxicol Appl Pharmacol** 1988 Oct;96(1):7-13

Transplacental pharmacokinetics and teratogenicity of a single dose of retinol (vitamin A) during organogenesis in the mouse. Eckhoff C, et al. **Toxicol Lett** 1989 Aug; 48(2):171-84

The transfer and metabolism of 7-ethoxycoumarin and androstenedione during the in vitro perfusion of the human placental lobule. Cummings AJ, et al. **Xenobiotica** 1988 Aug;18(8):905-17

Foetoplacental drug clearance in the rabbit: studies with trimazosin, acebutolol and tolmesoxide. Prach AT, et al. **Xenobiotica** 1988 Aug;18(8):967-72

Low sensitivity to oestrogens in bovine placenta at term. Sauerwein H, et al. **Zentralbl Veterinarmed [A]** 1989 Mar; 36(3):236-40

[Interactions between soluble placental opioid receptors and lectins] Ge BL, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 May;9(3):221-4 (Eng. Abstr.) **(Chi)**

[Placental microvilli and the physical-chemical status of the placental membrane. II. Placenta in pregnancy with gestational hypertension] Valensise H, et al. **Ann Ostet Ginecol Med Perinat** 1988 May-Jun; 109(3):139-44 (Eng. Abstr.) **(Ita)**

[The study on the human placental L-lactate transport mechanism (using placental microvillous membrane vesicles)] Nabuchi K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Feb;41(2):137-42 (Eng. Abstr.) **(Jpn)**

[Possible adverse effects of phenytoin given transplacentally on the fetal growth. I. Transplacental transmission of phenytoin] Tanaka K, et al. **No To Hattatsu** 1988; 20(5):363-7 (Eng. Abstr.) **(Jpn)**

[Possible adverse effects of phenytoin given transplacentally on the fetal growth. II. Possible adverse effects on the fetal growth] Tanaka K, et al. **No To Hattatsu** 1988;20(5):368-72 (Eng. Abstr.) **(Jpn)**

[Effects of stress, ACTH and dexamethasone on the activity of steroidogenesis-related enzymes in pregnant rats. I. Steroid hormone levels in the serum, ovary and placenta and their synthesis in the placenta in vitro] Rembiesa R, et al. **Endokrynol Pol** 1988;39(1):1-9 (Eng. Abstr.) **(Pol)**

[Effect of agonists and antagonists of the adrenergic system on the synthesis of steroid hormones in the corpus luteum and placenta of rats] Rembiesa R, et al. **Endokrynol Pol** 1988;39(1):11-7 (Eng. Abstr.) **(Pol)**

[Effect of oxytocin on steroidogenesis in the rat ovary and placenta during the placental phase of pregnancy] Warszyńska A, et al. **Endokrynol Pol** 1988;39(1):19-25 (Eng. Abstr.) **(Pol)**

[Lipid peroxidation in the uterus-placenta-fetus system in cases of nephropathy and fetal hypotrophy] Sieroń G, et al. **Ginekol Pol** 1988 Oct;59(10):618-23 (Eng. Abstr.) **(Pol)**

[Physico-chemical characteristics of the plasma membrane of the human placenta in placental insufficiency] Krukier II, et al. **Akush Ginekol (Mosk)** 1989 Jan;(1):35-8 (Eng. Abstr.) **(Rus)**

[Diagnostic value of the study of the protein-synthesizing function of the placenta in cases of missed abortion] Zaitseva IV, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):61-2 **(Rus)**

[Glycogen-containing cells in the maternal and embryonic portions of the placenta in the rat and the common vole Microtus subarvalis] Zybina TG. **Tsitologiia** 1988 Oct; 30(10):1180-7 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Isolation of human immunodeficiency virus from the placenta or from maternal blood contaminating the placenta? [letter] Greenspoon JS, et al. **Am J Obstet Gynecol** 1989 Aug; 161(2):501-2

Immunocytochemical HBsAg evidence in placentas of asymptomatic carrier mothers. Lucifora G, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):839-42

Postpartum bacteremia and placental colonization with genital mycoplasmas and pregnancy outcome. Naessens A, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):647-50

Isolation of acquired immunodeficiency syndrome virus from the placenta [letter; comment] Peuchmaur M, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):765. **Comment on:** Am J Obstet Gynecol 1987 Jul;157(1):10-1

Mycoplasmalike particles within the placenta. A potential placental-fetal pathogen. Sander CH, et al. **Ann N Y Acad Sci** 1988;549:81-102

Detection of rubella virus in fetal and placental tissues and in the throats of neonates after serologically confirmed rubella in pregnancy. Cradock-Watson JE, et al. **Prenat Diagn** 1989 Feb;9(2):91-6

PATHOLOGY

Feasibility of placental biopsy in the second trimester for fetal diagnosis. Chieri PR, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):581-3

Histologic examination of the placenta in the growth-retarded fetus. Rayburn W, et al. **Am J Perinatol** 1989 Jan;6(1):58-61

Evaluation of histopathologic and physiologic changes in cows having premature births after consuming Ponderosa pine needles. Jensen R, et al. **Am J Vet Res** 1989 Feb; 50(2):285-9

Placental characteristics in twin transfusion syndrome. Sala MA, et al. **Arch Gynecol Obstet** 1989;246(1):51-6

Placental metastasis from maternal bronchial oat cell carcinoma. Delerive C, et al. **Arch Pathol Lab Med** 1989 May;113(5):556-8

Vasa praevia: another cause for concern in in vitro fertilization pregnancies. Burton G, et al. **Aust N Z J Obstet Gynaecol** 1988 Aug;28(3):180-1

Morphological changes in the placentas of smoking mothers: a histomorphometric study. Teasdale F, et al. **Biol Neonate** 1989;55(4-5):251-9

Histological features of uteroplacental vessels in normal and hypertensive patients in relation to birthweight. Frusca T, et al. **Br J Obstet Gynaecol** 1989 Jul;96(7):835-9

Ultrasonography in extended placental retention and intra-uterine adhesions; a case report. Vartiainen J, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Jan;30(1):89-93

Diagnostic value of the placenta in medico-legal practice. Ito Y, et al. **Forensic Sci Int** 1989 Jan;40(1):79-84

The predictive value of chorionic villus histology for identifying chromosomally normal and abnormal spontaneous abortions. Minguillon C, et al. **Hum Genet** 1989 Jul;82(4):373-6

Is there a correlation between morphological and cytogenetic findings in placental tissue from early missed abortions? Rehder H, et al. **Hum Genet** 1989 Jul;82(4):377-85

Cryptococcosis of the placenta in a woman with acquired immunodeficiency syndrome. Kida M, et al. **Hum Pathol** 1989 Sep;20(9):920-1

Immunocytochemical staining patterns of placentas associated with hydrops fetalis. Kamat BR, et al. **Int J Gynecol Pathol** 1989;8(3):246-54

Placental examination in perinatal asphyxia. Marks WA, et al. **J Child Neurol** 1989 Apr;4(2):124

Morphohistometric investigations in placentas of gestational diabetes. Stoz F, et al. **J Perinat Med** 1988;16(3):205-9

Morphohistometric investigations of placentas of diabetic patients in correlation to the metabolic adjustment of the disease. Stoz F, et al. **J Perinat Med** 1988;16(3):211-6

Intra-amniotic hemorrhage secondary to placenta circumvallate. Cutillo DP, et al. **J Ultrasound Med** 1989 Jul;8(7):399-401

Ultrasonographic diagnosis and morphological study of placenta circumvallate. Jauniaux E, et al. **JCU** 1989 Feb; 17(2):126-31

Histologic analysis of placental tissue in first trimester abortions. Novak R, et al. **Pediatr Pathol** 1988;8(5):477-82

Placental morphology in cytomegalovirus infection. Garcia AG, et al. **Placenta** 1989 Jan-Feb;10(1):1-18

Morphometric analysis of the histology of spontaneous fetal resorption in a murine pregnancy. Gendron RL, et al. **Placenta** 1989 May-Jun;10(3):309-18

Morphological aspects of the placenta in HIV pregnancies [published erratum appears in Placenta 1989 May-Jun;10(3):320] Jauniaux E, et al. **Placenta** 1988 Nov-Dec;9(6):633-42

Vascular anastomoses in fused, dichorionic twin placentas resulting in twin transfusion syndrome. Lage JM, et al. **Placenta** 1989 Jan-Feb;10(1):55-9

Placental bed morphology in black women with eclampsia. Moodley J, et al. **S Afr Med J** 1989 Apr 15;75(8):376-8

Fetal and placental lesions in bovine abortion due to Tritrichomonas foetus. Rhyan JC, et al. **Vet Pathol** 1988 Sep;25(5):350-5

[Normal placental development and ovular anomalies during the 1st trimester of gestation] Nessmann C. **Reprod Nutr Dev** 1988;28(6B):1569-80 (18 ref.) (Eng. Abstr.) **(Fre)**

[Value of examining the placenta in pregnancies complicated by fetal malformations] Jauniaux E, et al. **Rev Med Brux** 1989 Jan-Feb;10(1-2):3-9 (Eng. Abstr.) **(Fre)**

[Morphologic studies of the placentas of HIV-positive mothers] Jimenez E, et al. **Pathologe** 1988 Jul;9(4):228-34 **(Ger)**

[Histologic placenta findings in prolonged pregnancy: correlation of placental retarded maturation, fetal outcome and Doppler sonographic findings in the umbilical artery] Hitschold T, et al. **Z Geburtshilfe Perinatol** 1989 Jan-Feb; 193(1):42-6 (Eng. Abstr.) **(Ger)**

[Chromosomal mosaicism after diagnostic chorionic villi biopsy. Subsequent study of the placenta] Seidl E, et al. **Z Geburtshilfe Perinatol** 1988 Nov-Dec;192(6):253-8 (Eng. Abstr.) **(Ger)**

[Morphology of the placenta in relation to glycemia status in pregnancy in diabetes mellitus] Semmler K, et al. **Z Geburtshilfe Perinatol** 1989 May-Jun;193(3):124-8 (Eng. Abstr.) **(Ger)**

[The significance of morphologic placental findings in fetal distress] Estel C, et al. **Zentralbl Gynakol** 1988; 110(19):1224-8 (Eng. Abstr.) **(Ger)**

[Characteristics of the course of pregnancy in the presence of shaggy chorion] Agadzhanova AA, et al. **Akush Ginekol (Mosk)** 1988 Sep;(9):47-50 (Eng. Abstr.)

(Rus)

[Pathomorphology of the placenta in nephropathy developing in chronic pyelonephritis] Alieva EM, et al. **Akush Ginekol (Mosk)** 1988 Jun;(6):29–31 (Eng. Abstr.) (Rus)

[Placental characteristics in fetal growth retardation syndrome] Zheleznov BI, et al. **Akush Ginekol (Mosk)** 1988 Jul;(7):26–8 (Eng. Abstr.) (Rus)

[Morphologic changes in the placenta and liver in fetal hypoxia] Eshchenko OI, et al. **Vrach Delo** 1988 Oct;(10):67–70 (Eng. Abstr.) (Rus)

[Evaluation of fetal maturity using ultrasonography of the placenta in comparison with analysis of amniotic fluid] Hodek B, et al. **Jugosl Ginekol Perinatol** 1988 Sep–Dec; 28(5–6):107–11 (Eng. Abstr.) (Scr)

PHYSIOLOGY

The clinical significance of asymptomatic mid–trimester low placentation diagnosed by ultrasound. Andersen ES, et al. **Acta Obstet Gynecol Scand** 1988;67(4):339–41

Growth hormone secretion during termination of pregnancy. Further evidence of a placental variant. Eriksson L, et al. **Acta Obstet Gynecol Scand** 1988;67(6):549–52

Normal placental function and fetoplacental blood circulation in advanced abdominal pregnancy. Kirkinen P, et al. **Acta Obstet Gynecol Scand** 1988;67(3):283–6

Evolution of tissue levels of steroids: oestradiol–17 beta, oestrone and progesterone in the macaque myometrium during gestation. Germain G, et al. **Acta Physiol Hung** 1988; 71(4):471–6

Human placenta and the hypothalamic–pituitary–adrenal axis. Margioris AN, et al. **Adv Exp Med Biol** 1988; 245:389–98 (45 ref.)

Trophoblast differentiation during the transition from trophoblastic plate to lacunar stage of implantation in the rhesus monkey and human. Enders AC. **Am J Anat** 1989 Sep;186(1):85–98

The effect of estrogen on placental delivery after fetectomy in baboons. Albrecht ED, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):237–41

Ovine placental perfusion balance: effect of marijuana smoke. Clapp JF 3d, et al. **Am J Obstet Gynecol** 1988 Dec; 159(6):1430–4

Placental transfer of thiamine in the human subject: in vitro perfusion studies and maternal–cord plasma concentrations. Dancis J, et al. **Am J Obstet Gynecol** 1988 Dec; 159(6):1435–9

Prediction of fetoplacental blood volume in isoimmunized pregnancy. MacGregor SN, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1493–7

Fetal vascular responses to prostacyclin. Parisi VM, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):871–6; discussion 876–8

Glucose metabolism in pregnant sheep when placental growth is restricted. Owens JA, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):R350–7

Effect of umbilical blood flow on transplacental diffusion of ethanol and oxygen. Wilkening RB, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H813–20

Pregnancy–associated plasma protein–A. A marker of placental function? Sinosich MJ, et al. **Ann N Y Acad Sci** 1988;541:510–3

Expression of CEA–related genes in the first trimester human placenta. McLenachan T, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1486–93

Chloride conductance in membrane vesicles from human placenta using a fluorescent probe. Implications for cystic fibrosis. Dechecchi MC, et al. **Biochim Biophys Acta** 1988 Nov 22;945(2):113–20

Effects of lymphokines and immune complexes on murine placental cell growth in vitro. Armstrong DT, et al. **Biol Reprod** 1989 Mar;40(3):466–74

Cyclic adenosine 3',5'–monophosphate analogues modulate rat placental cell growth and differentiation. Soares MJ, et al. **Biol Reprod** 1989 Feb;40(2):435–47

Receptors for erythropoietin in mouse and human erythroid cells and placenta. Sawyer ST, et al. **Blood** 1989 Jul; 74(1):103–9

Suppression of lymphocyte alloreactivity by early gestational human decidua. II. Characterization of the suppressor mechanisms. Lala PK, et al. **Cell Immunol** 1988 Oct 15; 116(2):411–22

Suppression of lymphocyte alloreactivity by early gestational human decidua. I. Characterization of suppressor cells and suppressor molecules. Parhar RS, et al. **Cell Immunol** 1988 Oct 15;116(2):392–410

Common 30–day multiple in gestation time of terrestrial placentals. Brown FM. **Chronobiol Int** 1988;5(3):195–210

Thermodynamic network modelling of transfer across the perfused guinea–pig placenta, using SPICE. van Kreel BK, et al. **Comput Methods Programs Biomed** 1989 Feb; 28(2):137–49

Placental and fetal development in straightbred and reciprocal crosses of Yorkshire and Ossabaw swine. Gilbertson–Beadling SK, et al. **Growth Dev Aging** 1988 Summer;52(2):97–101

A partial characterization of uterine and mammary growth stimulatory activity from placenta. Grissom FE, et al. **Growth Dev Aging** 1988 Spring;52(1):23–35

Restriction of placental growth in sheep enhances placental metabolism of fetal beta–endorphin–like immunoreactivity. Owens PC, et al. **J Dev Physiol** 1989 Feb;11(2):63–71

Purification and biochemical assay of synexin and of the homologous calcium–dependent membrane–binding proteins, endonexin II and lipocortin I. Pollard HB, et al. **Methods Cell Biol** 1989;31:207–27

Maternal smoking and accelerated placental maturation. Pinette MG, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):379–82

Use of fetal streptozotocin injection to determine the role of normal levels of fetal insulin in regulating uteroplacental and umbilical glucose exchange. Hay WW Jr, et al. **Pediatr Res** 1988 Sep;24(3):312–7

In vivo placental permeability to hydrophilic solutes as a function of fetal weight in the guinea pig. Adams AK, et al. **Placenta** 1988 Jul–Aug;9(4):409–16

Lack of short–term modulation of in vitro placental progesterone secretion in sheep. de la Llosa–Hermier MP, et al. **Placenta** 1988 Nov–Dec;9(6):623–31

Molecular charge effects on the protein permeability of the guinea–pig placenta [letter] Faber JJ, et al. **Placenta** 1988 Jul–Aug;9(4):455–7

Placental corticotrophin releasing factor may modulate human parturition. Quartero HW, et al. **Placenta** 1989 Sep–Oct;10(5):439–43

Permeability of the near–term rat placenta to hydrophilic solutes. Robinson NR, et al. **Placenta** 1988 Jul–Aug; 9(4):361–72

Placental–derived regulators and the complex control of luteal cell function. Gibori G, et al. **Recent Prog Horm Res** 1988;44:377–429 (175 ref.)

The role of M–CSF and GM–CSF in fostering placental growth, fetal growth, and fetal survival. Wegmann TG, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):566–8

[Monitoring placental function by measurement of placental enzymes in late pregnancy] Xu HL. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Sep;23(5):262–4, 316 (Eng. Abstr.) (Chi)

[A short history of placenta research] Strauss F. **Gesnerus** 1988;45 Pt 3–4:381–409 (Eng. Abstr.) (Ger)

[Placental barrier and its structural modulations. Morpho–functional aspects] Vasi V, et al. **Boll Soc Ital Biol Sper** 1988 Feb;64(2):165–71 (Eng. Abstr.) (Ita)

[Placental calcium–phospholipid binding protein (calphobindin)] Maki M, et al. **Rinsho Byori** 1989 Apr;Spec No 81:229–39 (Jpn)

[Evaluation of the endocrine function of the placenta and the feto–placental complex (clinical lecture)] Bagramian ER. **Akush Ginekol (Mosk)** 1988 Jul;(7):10–3 (Rus)

[Central hemodynamic characteristics and function of the feto–placental system of pregnant women with arterial hypotension] Bunin AT, et al. **Akush Ginekol (Mosk)** 1988 May;(5):50–3 (Eng. Abstr.) (Rus)

[Relationship between the functional status of the fetus and placental maturity assessed by ultrasound studies] Lebedeva EG, et al. **Akush Ginekol (Mosk)** 1989 Jan;(1):61–3 (Rus)

PHYSIOPATHOLOGY

The effects of syphilis on endocrine function of the fetoplacental unit. Parker CR Jr, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1327–31

The placenta. Interface between the mother and the fetus. Driscoll SG. **Ann N Y Acad Sci** 1988;549:17–23 (46 ref.)

Can the fetus cause placental separation? Eden J. **Aust N Z J Obstet Gynaecol** 1988 May;28(2):119–20

Doppler ultrasound of the uteroplacental circulation as a screening test for severe pre–eclampsia with intra–uterine growth retardation. Steel SA, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Aug;28(4):279–87

Enhanced glucose metabolism and impaired placental function in hypoxic pregnant rats. Sakuragawa N, et al. **Int J Rad Appl Instrum [B]** 1988;15(6):645–50

[Compensatory–adaptive reactions of the placenta in nephropathy in pregnancy and intrauterine fetal hypotrophy] Barkov LA, et al. **Akush Ginekol (Mosk)** 1988 Jun;(6):32–5 (Eng. Abstr.) (Rus)

[Complex evaluation of fetal risk in prolonged pregnancy] Bozhinova S, et al. **Akush Ginekol (Mosk)** 1988 Oct; (10):54–5 (Rus)

[Status of the feto–placental system in obese pregnant women] Chernukha GE, et al. **Akush Ginekol (Mosk)** 1988 Oct;(10):40–3 (Eng. Abstr.) (Rus)

[Nature of the polarity of the maternal–fetal functional system and its role in the pathogenesis of threatened abortion] Orlov VI, et al. **Akush Ginekol (Mosk)** 1988 Jul;(7):13–7 (Eng. Abstr.) (Rus)

[Morphofunctional adaptation of the placenta under conditions of natural high–altitude hypoxia] Milovanov AP, et al. **Arkh Patol** 1988;50(9):11–7 (Eng. Abstr.) (Rus)

SECRETION

Effects of fetal sex, stage of gestation, dibutyryl cyclic adenosine monophosphate, and gonadotropin releasing hormone on secretion of human chorionic gonadotropin by placental explants in vitro. Haning RV Jr, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1332–7

Secretion of corticotropin–releasing hormone by superfused human placental fragments. Thomson M, et al. **Gynecol Endocrinol** 1988 Jun;2(2):87–100

Spontaneous, gonadotropin–releasing hormone–induced, and progesterone–inhibited pulsatile secretion of human chorionic gonadotropin in the first trimester placenta in vitro. Barnea ER, et al. **J Clin Endocrinol Metab** 1989 Jul; 69(1):215–7

The role of growth factors on the expression of differentiated functions of the ovary and placenta. Maruo T. **Nippon Naibunpi Gakkai Zasshi** 1988 Dec 20; 64(12):1214–22

Stimulatory effect of prolactin on human placental progesterone secretion at term in vitro: possible inhibitory effect on oestradiol secretion. Barnea ER, et al. **Placenta** 1989 Jan–Feb;10(1):37–43

A role for calcium in gonadotrophin–releasing hormone (GnRH) stimulated secretion of chorionic gonadotrophin by first trimester human placental minces in vitro. Mathialagan N, et al. **Placenta** 1989 Jan–Feb;10(1):61–70

Inhibin and activin modulate the release of gonadotropin–releasing hormone, human chorionic gonadotropin, and progesterone from cultured human placental cells. Petraglia F, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5114–7

TRANSPLANTATION

[Use of a placental implant by the Filatov technic in the intrascleral surgery of a severe case of retinal detachment] Jebejian R, et al. **J Fr Ophtalmol** 1988;11(8–9):609–11 (Fre)

ULTRASTRUCTURE

Placental mosaicism and intrauterine survival of trisomies 13 and 18. Kalousek DK, et al. **Am J Hum Genet** 1989 Mar; 44(3):338–43

Placental pathology and prenatal diagnosis of infantile type of neuronal ceroid–lipofuscinosis. Rapola J, et al. **Am J Med Genet Suppl** 1988;5:99–103

Fetal membranes and placenta of the African green monkey (Cercopithecus aethiops). Owiti GE, et al. **Anat Embryol (Berl)** 1989;179(6):591–604

The ultrastructure of the trophoblast fossal regions in the pig placenta during pregnancy. Its steroidogenic features. Czarnowska E. **Anat Histol Embryol** 1988 Sep;17(3):207–25

Ultrastructural localization of the 9–kilodalton vitamin D–dependent calcium–binding protein in the murine intraplacental yolk sac. Riad NH, et al. **Anat Rec** 1988 Nov; 222(3):252–9

Carrier–mediated transport system for cephalexin in human placental brush–border membrane vesicles. Kudo Y, et al. **Biochim Biophys Acta** 1989 Jan 30;978(2):313–8

Scanning electron microscopic studies on rhesus monkey placenta during early gestational malarial infection. Saxena N, et al. **Indian J Exp Biol** 1988 Sep;26(9):712–4

Cl/HCO3 exchange in human placental brush border membrane vesicles. Grassl SM. **J Biol Chem** 1989 Jul 5; 264(19):11103–6

High affinity insulin binding in the human placenta insulin receptor requires alpha beta heterodimeric subunit interactions. Swanson ML, et al. **J Membr Biol** 1989 Jun; 108(3):217–25

Dissociation of 19–hydroxy– 19–oxo–, and aromatizing–activities in human placental microsomes through the use of suicide substrates to aromatase. Bednarski PJ, et al. **J Steroid Biochem** 1989 Feb; 32(2):309–16

Influence of insulin on phosphate uptake by brush border membranes from human placenta. Brunette MG, et al. **Mol Cell Endocrinol** 1989 May;63(1–2):57–65

Properties of fatty acyl–coenzyme A: estradiol–17 beta acyltransferase in bovine placenta microsomes. Martyn P, et al. **Mol Cell Endocrinol** 1988 Nov;60(1):7–13

Chorangiocarcinoma: an unusual tumour of the placenta. The missing link? Jauniaux E, et al. **Placenta** 1988 Nov–Dec; 9(6):607–13

Extracellular transport pathways in the haemochorial placenta. Stulc J. **Placenta** 1989 Jan–Feb;10(1):113–9 (18 ref.)

Cytosolic epoxide hydrolase in human placenta. Wixtrom RN, et al. **Placenta** 1988 Sep–Oct;9(5):559–63

Tissue specific trisomy––the significance of confined placental mosaicism. Kalousek DK. **Prog Clin Biol Res** 1989;311:153–63

[Ultrastructural study of the placenta in post–term pregnancy] Xi YP. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Jul;23(4):202–4, 252 (Eng. Abstr.) (Chi)

[Immunofluorescence study of the extracellular matrix of the human placenta] Rukosuev VS, et al. **Ontogenez** 1989 Mar–Apr;20(2):171–8 (Eng. Abstr.) (Rus)

[Ultrastructural features of the nucleus and cytoplasm of rat trophoblast cells of the connective zone of the placenta and labyrinth] Zybina EV, et al. **Tsitologiia** 1988 Nov; 30(11):1283–90 (Eng. Abstr.) (Rus)

PLACENTA ACCRETA

Term interstitial pregnancy with uterine torsion: sonographic, pathologic, and clinical findings. Bond AL, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):857–9

COMPLICATIONS

Spontaneous uterine rupture in late pregnancy caused by placenta percreta: a case report. Nsofor BI, et al. **Cent Afr J Med** 1989 May;35(5):407–8

Occult infiltrating placenta previa percreta: an unusual case highlighting the management problems in a young patient. Ruparelia BA, et al. **Int J Gynaecol Obstet** 1988 Oct; 27(2):285–7

Placenta percreta invading the bladder: report of 2 cases. Klotz PG, et al. **J Urol** 1989 Apr;141(4):938–9

Vesicouterine fistula associated with placenta percreta. Krysiewicz S, et al. **Urol Radiol** 1988;10(4):213–5

[Uterine rupture due to placenta accreta at 22 weeks' pregnancy. Apropos of a case] Faguer C. **J Gynecol Obstet Biol Reprod (Paris)** 1988;17(5):646–9 (Eng. Abstr.) **(Fre)**

[Placenta percreta: a danger in pregnancy] Kerl J, et al. **Geburtshilfe Frauenheilkd** 1988 Dec;48(12):900–1 (Eng. Abstr.) **(Ger)**

PATHOLOGY

[Placenta percreta—a case report] Katsulov A, et al. **Akush Ginekol (Sofiia)** 1988;27(5):68–70 **(Bul)**

[Case report of placenta praevia reflexa et increta] Gitsch G. **Geburtshilfe Frauenheilkd** 1988 Aug;48(8):603–5 (Eng. Abstr.) **(Ger)**

SURGERY

Emergency hysterectomies in obstetrics. Chua SM. **Singapore Med J** 1988 Jun;29(3):281–4

PLACENTA DISEASES

Primary invasive ovarian adenocarcinoma with brain and placental metastases: a case report. Patsner B, et al. **Gynecol Oncol** 1989 Apr;33(1):112–5

[Iterative placental infection by P. falciparum during 2 successive pregnancies in Bobo–Dioulasso (Burkina–Faso)] Molez JF, et al. **Bull Soc Pathol Exot Filiales** 1989; 82(3):373–80 (Eng. Abstr.) **(Fre)**

CHEMICALLY INDUCED

The effect of maternal Naja nigricollis envenomation on the placenta. An experimental study. Nawar NN, et al. **Biol Struct Morphog** 1989;2(1):13–7

COMPLICATIONS

Two rare complications of simultaneously occurring placenta praevia and placenta percreta. Mashiah N, et al. **Acta Obstet Gynecol Scand** 1988;67(7):655–7

A case of hydrops fetalis due to placental chorioangioma. Imakita M, et al. **Acta Pathol Jpn** 1988 Jul;38(7):941–5

Asymptomatic thrombocytopenia associated with chorioangioma of placenta. Limaye NS, et al. **Am J Obstet Gynecol** 1989 Jul;161(1):76–7

Fetal high output cardiac failure and acute hydramnios caused by large placental chorioangioma. Case report. Eldar–Geva T, et al. **Br J Obstet Gynaecol** 1988 Nov; 95(11):1200–3

Motility in the fetus and young infant: implications for neurological development. Touwen BC. **Eur J Clin Nutr** 1989;43 Suppl 1:27–32 (19 ref.)

Two cases of large placental chorioangioma with fetal and neonatal complications. Nuutinen EM, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Dec;29(4):315–20

Placental alterations and fetal conditions in relation to the presence of anti–human immunodeficiency virus (HIV) in pregnant mothers. Carretti N, et al. **Panminerva Med** 1988 Apr–Jun;30(2):77–80

[Cytomegalovirus infection with a placental cyst: a case report] Akiba K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep;40(9):1483–6 **(Jpn)**

[Fetal growth retardation syndrome: its pathogenesis, clinical aspects, diagnosis and treatment] Bunin AT, et al. **Akush Ginekol (Mosk)** 1988 Jul;(7):74–8 **(Rus)**

[Complex study of the feto–placental system and therapeutic tactics in intrauterine fetal growth retardation] Sadauskas VM, et al. **Akush Ginekol (Mosk)** 1988 Jul;(7):17–9 (Eng. Abstr.) **(Rus)**

[Clinical significance of umbilical varicose veins] Utkin VM, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):65–6 **(Rus)**

[Inflammation of the amniotic membranes and placenta in late abortion and premature labor] Jukić S, et al. **Jugosl Ginekol Perinatol** 1988 Sep–Dec;28(5–6):113–7 (Eng. Abstr.) **(Scr)**

DIAGNOSIS

Sonography of placental abnormalities and oligohydramnios in women with elevated alpha–fetoprotein levels: comparison with control subjects. Kelly RB, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):815–9

Doppler velocimetry and placental disease. Bracero LA, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):388–93

Increased neonatal urinary ammonia: a marker for in utero caloric deprivation? Wolfe HM, et al. **Am J Perinatol** 1989 Jan;6(1):4–7

Second trimester chorioamniotic separation and amniocentesis. Børlum KG. **Eur J Obstet Gynecol Reprod Biol** 1989 Jan;30(1):35–8

Umbilical cord gamma–glutamyl transpeptidase and placental dysfunction. Bartnicki J, et al. **Int J Gynaecol Obstet** 1989 May;29(1):31–4

Intra–amniotic hemorrhage secondary to placenta circumvallate. Cutillo DP, et al. **J Ultrasound Med** 1989 Jul;8(7):399–401

Ultrasonographic diagnosis and morphological study of placenta circumvallate. Jauniaux E, et al. **JCU** 1989 Feb; 17(2):126–31

Reduced fetal platelet counts in pregnancies with abnormal Doppler umbilical flow waveforms. Wilcox GR, et al. **Obstet Gynecol** 1989 Apr;73(4):639–43

Peripheral placental separation: a review. Harris BA Jr. **Obstet Gynecol Surv** 1988 Oct;43(10):577–81 (25 ref.)

[Significance of determining placental function in post–term pregnancy] Yang HL, et al. **Chung Hua Fu Chan Ko Tsa Chih** 1988 Jul;23(4):210–1 **(Chi)**

[Ultrasound in the detection of residua after labor, abortion and induced abortion] Burnog T, et al. **Cesk Gynekol** 1988 Jul;53(6):438–9 **(Cze)**

[The significance of Doppler blood flow measurement in recognizing placental insufficiency] Vetter K. **Arch Gynecol Obstet** 1988;244 Suppl:S12–8 **(Ger)**

[Comparison of the clinical value of 2 frequently used indices of fetal blood flow analysis (pulsatility index PI and resistance index RI)] Hecher K, et al. **Geburtshilfe Frauenheilkd** 1988 Nov;48(11):809–13 (Eng. Abstr.) **(Ger)**

[Synchronous cardiotocographic registration of fetal body and respiratory movements in placenta insufficiency] Gross W, et al. **Zentralbl Gynakol** 1989;111(7):433–43 (Eng. Abstr.) **(Ger)**

[Analysis of the correlation of indicators of utero–placental blood flow and various blood enzymes in pregnant women at high–risk of perinatal pathology] Burler VA, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):49–54 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Intraumbilical oxytocin for the retained placenta [letter] Golan A. **Am J Obstet Gynecol** 1988 Nov;159(5):1309–10

Prophylaxis of congenital toxoplasmosis. Effects of spiramycin on placental infection. Couvreur J, et al. **J Antimicrob Chemother** 1988 Jul;22 Suppl B:193–200

Pharmacological management of an impending placental insufficiency. Köpernick H, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Sep; 33(3):179–83

[Carnitine in therapy of placental insufficiency—initial experiences] Genger H, et al. **Z Geburtshilfe Perinatol** 1988 Jul–Aug;192(4):155–7 (Eng. Abstr.) **(Ger)**

[Monitoring of platelet activity as a basis for the use of antiaggregants in placental insufficiency] Kiriushchenkov PA. **Akush Ginekol (Mosk)** 1989 Jan;(1):30–5 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Vascular placental insufficiency in the rabbit. Changes in creatine kinase and adenylate kinase activities in fetal tissues. Harel S, et al. **Biol Neonate** 1988;54(2):116–20

UDP galactose:ceramide galactosyltransferase, CDP choline:1,2–diacyl–sn–glycerol phosphocholine transferase, and microsomal reductases in major regions of the developing rat brain in nutritional stress. Padmini S, et al. **J Neurosci Res** 1989 Jul;23(3):310–5

EPIDEMIOLOGY

Maternal malignancy metastatic to the products of conception: a review. Dildy GA 3d, et al. **Obstet Gynecol Surv** 1989 Jul;44(7):535–40 (55 ref.)

ETIOLOGY

[Functional morphology of the human placenta] Scheuner G, et al. **Zentralbl Allg Pathol** 1989;135(4):307–28 (198 ref.) (Eng. Abstr.) **(Ger)**

[Exposure to hexachlorophene during pregnancy: effects on the development of pups from eutrophic and malnourished rats] Dos Santos AM, et al. **Rev Paul Med** 1987 Nov–Dec; 105(6):312–6 (Eng. Abstr.) **(Por)**

[Hematogenic placentitis in chagasic mothers] Bittencourt AL, et al. **Rev Soc Bras Med Trop** 1986 Oct–Dec; 19(4):239–42 (Eng. Abstr.) **(Por)**

[Characteristics of the course of pregnancy in the presence of shaggy chorion] Agadzhanova AA, et al. **Akush Ginekol (Mosk)** 1988 Sep;(9):47–50 (Eng. Abstr.) **(Rus)**

METABOLISM

Perinatal brain serotonin metabolism in rats malnourished in utero. Manjarréz G, et al. **Biol Neonate** 1988;54(4):232–40

Newborn humans and rats malnourished in utero: free plasma L–tryptophan, neutral amino acids and brain serotonin synthesis. Hernández J, et al. **Brain Res** 1989 May 29; 488(1–2):1–13

[Physico–chemical characteristics of the plasma membrane of the human placenta in placental insufficiency] Krukier II, et al. **Akush Ginekol (Mosk)** 1989 Jan;(1):35–8 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Mycoplasmalike particles within the placenta. A potential placental–fetal pathogen. Sander CH, et al. **Ann N Y Acad Sci** 1988;549:81–102

Chlamydia infect the placenta less often than gonococci [letter] Frost E, et al. **Genitourin Med** 1988 Oct; 64(5):349–50

PATHOLOGY

Placental teratoma. Unger JL. **Am J Clin Pathol** 1989 Sep; 92(3):371–3

Histologic examination of the placenta in the growth–retarded fetus. Rayburn W, et al. **Am J Perinatol** 1989 Jan;6(1):58–61

Plasmodium falciparum associated placental pathology: a light and electron microscopic and immunohistologic study. Yamada M, et al. **Am J Trop Med Hyg** 1989 Aug; 41(2):161–8

Teratoma of the placenta, a case report. Fernández Figueras MT, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Aug; 32(2):169–72

Trophoblastic tumors: ultrastructural comparison of choriocarcinoma and placental–site trophoblastic tumor. Duncan DA, et al. **Hum Pathol** 1989 Apr;20(4):370–81

"Placental polyp": light microscopic and immunohistochemical observations. Lawrence WD, et al. **Hum Pathol** 1988 Dec;19(12):1467–70

Adenoid cystic carcinoma of trachea metastatic to the placenta. Schmitt FC, et al. **Hum Pathol** 1989 Feb; 20(2):193–5

Intraplacental choriocarcinoma: a report of two cases. Fox H, et al. **J Clin Pathol** 1988 Oct;41(10):1085–8

The prevalence and distribution of acute placental inflammation in uncomplicated term pregnancies. Salafia CM, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 1):383–9

Villous oedema of the placenta: a clinicopathological study. Shen–Schwarz S, et al. **Placenta** 1989 May–Jun; 10(3):297–307

[Smoking and gestosis: comparative results of clinical and histomorphometric studies] Toussaint MN. **Geburtshilfe Frauenheilkd** 1989 Jan;49(1):53–7 (Eng. Abstr.) **(Ger)**

[A space–occupying lesion of the placenta in the 3d trimester with progressive placental insufficiency] Meinen K, et al. **Zentralbl Gynakol** 1988;110(19):1243–6 (Eng. Abstr.) **(Ger)**

[Levels of plasma renin activity in fetuses with growth defects associated with low placental weight] Meriaidi A, et al. **Boll Soc Ital Biol Sper** 1988 Nov;64(11):1033–6 (Eng. Abstr.) **(Ita)**

PHYSIOPATHOLOGY

Abnormal fetal heart rate patterns and placental inflammation. Salafia CM, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):140–7

Effect of malnutrition during different periods on the small intestine of the rat. Firmansyah A, et al. **Jpn J Exp Med** 1989 Feb;59(1):1–7

The effects of undernutrition during early life on spatial learning. Campbell LF, et al. **Physiol Behav** 1989 May; 45(5):883–90

[Histologic placenta findings in prolonged pregnancy: correlation of placental retarded maturation, fetal outcome and Doppler sonographic findings in the umbilical artery] Hitschold T, et al. **Z Geburtshilfe Perinatol** 1989 Jan–Feb; 193(1):42–6 (Eng. Abstr.) **(Ger)**

[Massive hemorrhage into the villous membrane of the placenta with subsequent delivery of an infant in good condition] Szymanowski K, et al. **Ginekol Pol** 1988 Dec; 59(12):744–7 (Eng. Abstr.) **(Pol)**

[Characteristics of the development during the 1st year of life of children born to mothers with threatened premature labor of the endocrine etiology] Kuznetsova VA, et al. **Pediatriia** 1989;(6):8–11 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

[Peripheral rheography as a screening study for chronic placental insufficiency] Feiks A, et al. **Gynakol Rundsch** 1988;28 Suppl 2:146–8 **(Ger)**

PSYCHOLOGY

[Psychosomatic aspects of females with placental insufficiency] Enzelsberger H, et al. **Z Geburtshilfe Perinatol** 1989 Mar–Apr;193(2):92–5 (Eng. Abstr.) **(Ger)**

THERAPY

The effect of fluorocarbon emulsion on placental insufficiency. Faithfull NS, et al. **Adv Exp Med Biol** 1989; 248:357–64

TRANSMISSION

Demonstration of a barrier to transplacental passage of murine enteroviruses in late gestation. Abzug MJ, et al. **J Infect Dis** 1989 Apr;159(4):761–5

VETERINARY

Effects of intrauterine dilute iodine solution infusion on the incidence of retained placenta and endometritis in dairy cows. Putro PP. **Acta Vet Scand Suppl** 1988;83:58–65

Behavior of the Breslow–Storer model in a prospective study on retained placenta in dairy cows. Schukken YH, et al. **Acta Vet Scand Suppl** 1988;84:453–5

Retained placenta and mastitis [editorial] Schukken YH. **Cornell Vet** 1989 Apr;79(2):129–31
A hospital-based study of the relationship between retained placenta and mastitis in dairy cows. Schukken YH, et al. **Cornell Vet** 1989 Oct;79(4):319–26
Early postpartum reproductive profiles in Holstein cows with retained placenta and uterine discharges. Holt LC, et al. **J Dairy Sci** 1989 Feb;72(2):533–9
GnRH-analogue leads to improved breeding efficiency in cows with retained fetal membranes. Mori J, et al. **Vet Rec** 1988 Sep 24;123(13):352

PLACENTA PRAEVIA

[Tactics of pregnancy and labor management in cases of low position of the placenta] Sidorova IS, et al. **Akush Ginekol (Mosk)** 1989 Jun;(6):73–8 **(Rus)**

COMPLICATIONS

Two rare complications of simultaneously occurring placenta praevia and placenta percreta. Mashiah N, et al. **Acta Obstet Gynecol Scand** 1988;67(7):655–7
Occult infiltrating placenta previa percreta: an unusual case highlighting the management problems in a young patient. Ruparelia BA, et al. **Int J Gynaecol Obstet** 1988 Oct; 27(2):285–7
[Placenta praevia—a diagnostic problem in hemorrhage in pregnancy] Loch EG. **Gynakologe** 1989 Jun;22(3):185–9 (8 ref.) **(Ger)**
[Anesthetic management of caesarean section in a patient with idiopathic thrombocytopenic purpura and placenta praevia] Miyamoto M, et al. **Masui** 1989 Mar;38(3):384–7 (Eng. Abstr.) **(Jpn)**
[Use of partusisten in cases of placenta praevia and the incidence of respiratory distress syndrome in newborn infants] Gerber J, et al. **Wiad Lek** 1989 Jan 1;42(1):35–9 (Eng. Abstr.) **(Pol)**

DIAGNOSIS

The clinical significance of asymptomatic mid-trimester low placentation diagnosed by ultrasound. Andersen ES, et al. **Acta Obstet Gynecol Scand** 1988;67(4):339–41
Vaginal ultrasound for ruling out placenta praevia. Case report. Farine D, et al. **Br J Obstet Gynaecol** 1989 Jan; 96(1):117–9
Vaginal ultrasound for ruling out placenta praevia. Case report [letter] Neale EJ, et al. **Br J Obstet Gynaecol** 1989 Jul;96(7):881–2
Is it really a placenta previa? Farine D, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 May;31(2):103–8
Torsion of the pregnant uterus with a change in placental localization on ultrasound; a case report. Kremer JA, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Jun;31(3):273–5
Transvaginal ultrasonography for diagnosis of placenta praevia [letter] Rotten S, et al. **Lancet** 1989 Feb 25; 1(8635):444–5
[Ultrasonic diagnosis in the prevention of shock in placenta praevia] Hodek B, et al. **Jugosl Ginekol Perinatol** 1988 May–Aug;28(3–4):99–101 (Eng. Abstr.) **(Scr)**

DRUG THERAPY

Comment: Tocolysis in placenta previa [letter] Celayeta MA. **Drug Intell Clin Pharm** 1988 Oct;22(10):828

EPIDEMIOLOGY

Placenta previa in twin gestations. Strong TH Jr, et al. **J Reprod Med** 1989 Jun;34(6):415–6

ETIOLOGY

Placenta previa and antepartum hemorrhage after previous cesarean section. Nielsen TF, et al. **Gynecol Obstet Invest** 1989;27(2):88–90

PATHOLOGY

[Case report of placenta praevia reflexa et increta] Gitsch G. **Geburtshilfe Frauenheilkd** 1988 Aug;48(8):603–5 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Fetal umbilical velocimetry for the surveillance of pregnancies complicated by placenta previa. Brar HS, et al. **J Reprod Med** 1988 Sep;33(9):741–4

PLACENTAL EXTRACTS

ADVERSE EFFECTS

Blistering skin disease in a man after injections of human placental extracts. Saurat JH, et al. **BMJ** 1988 Sep 24; 297(6651):775

PHARMACOLOGY

Fetal aortic cholesterol concentration and metabolism: relationship to plasma cholesterol and potential role of placental factors. Cayatte AJ, et al. **Atherosclerosis** 1989 Apr;76(2–3):131–8
Dose-dependent enhancement of morphine-induced analgesia by ingestion of amniotic fluid and placenta. Kristal MB, et al. **Pharmacol Biochem Behav** 1988 Oct; 31(2):351–6
[Immunobiological characteristics of regeneration in the use of official protein preparations] Miroshnikov VM, et al. **Patol Fiziol Eksp Ter** 1988 Jul–Aug;(4):54–7 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Post-irradiation cystitis improved by instillation of early placental extract in saline. Mićić S, et al. **Eur Urol** 1988; 14(4):291–3

PLACENTAL HORMONES

BIOSYNTHESIS

Expression of human placental ribonuclease inhibitor in Escherichia coli. Lee FS, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):115–20

BLOOD

A comparison between the composition of maternal peripheral plasma and plasma collected from the retroplacental compartment at caesarean section. A study on protein and steroid hormones and binding proteins. Norman M, et al. **Arch Gynecol Obstet** 1989;244(4):215–26
Comparison of serum placental protein hormone levels in diabetic and normal pregnancy. Braunstein GD, et al. **J Clin Endocrinol Metab** 1989 Jan;68(1):3–8

GENETICS

Primary structure of human placental ribonuclease inhibitor. Lee FS, et al. **Biochemistry** 1988 Nov 15;27(23):8545–53
The primary structure of human ribonuclease/angiogenin inhibitor (RAI) discloses a novel highly diversified protein superfamily with a common repetitive module. Schneider R, et al. **EMBO J** 1988 Dec 20;7(13):4151–6
Differential expression of placental lactogen-II and prolactin-like protein-A in the rat chorioallantoic placenta. Campbell WJ, et al. **Endocrinology** 1989 Sep;125(3):1565–74
Species-specific placental corticotropin releasing hormone messenger RNA and peptide expression. Robinson BG, et al. **Mol Cell Endocrinol** 1989 Apr;62(2):337–41

IMMUNOLOGY

Isolation and characterization of monoclonal antibodies against ribonuclease inhibitor. Feldman M, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):286–94

METABOLISM

An in vitro binding assay for angiogenin using placental ribonuclease inhibitor. Bond MD. **Anal Biochem** 1988 Aug 15;173(1):166–73
Isolation of bovine angiogenin using a placental ribonuclease inhibitor binding assay [published erratum appears in Biochemistry 1989 Feb 21;28(4):1930] Bond MD, et al. **Biochemistry** 1988 Aug 23;27(17):6282–7
Tight-binding inhibition of angiogenin and ribonuclease A by placental ribonuclease inhibitor [published erratum appears in Biochemistry 1989 Mar 7;28(5):2354] Lee FS, et al. **Biochemistry** 1989 Jan 10;28(1):225–30
Binding of placental ribonuclease inhibitor to the active site of angiogenin. Lee FS, et al. **Biochemistry** 1989 Apr 18; 28(8):3556–61
Tryptophan fluorescence as a probe of placental ribonuclease inhibitor binding to angiogenin. Lee FS, et al. **Biochemistry** 1989 Jan 10;28(1):219–24
Rabbit placental-conditioned medium stimulates progesterone accumulation by granulosa-lutein cells in culture: preliminary characterization of a placental luteotropic hormone. Gadsby JE, et al. **Biol Reprod** 1989 Feb;40(2):239–49
Placental hormones and maternal glucose metabolism. A study of fetal growth in normal pregnancy. Langhoff-Roos J, et al. **Br J Obstet Gynaecol** 1989 Mar;96(3):320–6
Role of carbohydrates in glycoprotein hormone signal transduction. Sairam MR. **FASEB J** 1989 Jun;3(8):1915–26 (47 ref.)
Discordant secretion of placental protein hormones in differentiating trophoblasts in vitro. Kato Y, et al. **J Clin Endocrinol Metab** 1989 Apr;68(4):814–20
[Pathobiochemistry of endocrine diseases and analysis of hormones of the feto-placental system] Freymann E, et al. **Z Med Lab Diagn** 1988;29(4):suppl 1–7 **(Ger)**

PHARMACOLOGY

Inhibition of tumor cell proliferation by a novel growth regulator from placenta: modulation of membrane phosphorylation and oncogene expression. Csaikl U, et al. **Cancer Lett** 1989 Mar;44(3):227–31

PHYSIOLOGY

Human chorionic gonadotrophin and inhibin as placental hormones. Healy DL, et al. **J Reprod Fertil Suppl** 1988; 36:99–107 (40 ref.)
[Evaluation of the endocrine function of the placenta and the feto-placental complex (clinical lecture)] Bagramian ER. **Akush Ginekol (Mosk)** 1988 Jul;(7):10–3 **(Rus)**

SECRETION

Effects of human growth hormone upon term placental hormone secretion in vitro. Barnea ER, et al. **Gynecol Obstet Invest** 1989;27(3):133–6

PLACENTAL INSUFFICIENCY see under **PLACENTA DISEASES**

PLACENTAL LACTOGEN

Biological, immunological, and binding properties of recombinant mouse placental lactogen-I. Colosi P, et al. **Endocrinology** 1988 Dec;123(6):2662–7

ANALYSIS

The concentration of bovine placental lactogen and the incidence of different forms in fetal cotyledons and in fetal serum. Byatt JC, et al. **Domest Anim Endocrinol** 1987 Oct; 4(4):231–41
High molecular weight forms of placental lactogen: evidence for lactogen-macroglobulin complexes in rodents and humans. Southard JN, et al. **Endocrinology** 1989 Aug; 125(2):791–800
Vaginal fluid prolactin: a reliable marker for the diagnosis of prematurely ruptured membranes. Comparison with vaginal fluid alpha-fetoprotein and placental lactogen. Phocas I, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 May;31(2):133–41
Immunogold localization of placental lactogen and the SBU-3 antigen by cryoultramicrotomy at implantation in the sheep. Morgan G, et al. **J Cell Sci** 1987 Nov;88 (Pt 4):503–12
An immunological cryo-ultrastructural study of a sequential appearance of proteins in placental binucleate cells in early pregnancy in the cow. Morgan G, et al. **J Reprod Fertil** 1989 Jul;86(2):745–52
Antipeptide antibodies reveal structural and functional characteristics of rat placental lactogen-II. Deb S, et al. **Mol Cell Endocrinol** 1989 May;63(1–2):45–56
Characterization of bovine placental lactogen as a glycoprotein with N-linked and O-linked carbohydrate side chains. Shimomura K, et al. **Mol Endocrinol** 1988 Sep; 2(9):845–53

BIOSYNTHESIS

Human chorionic somatomammotropin gene expression in primary placental cell cultures. Klassen ME, et al. **Placenta** 1989 Jul–Aug;10(4):321–9

BLOOD

A longitudinal study of circulating progesterone, oestradiol, hCG and hPL during pregnancy in type 1 diabetic mothers. Stewart MO, et al. **Br J Obstet Gynaecol** 1989 Apr; 96(4):415–23
Turbidimetric latex immunoassay of placental lactogen on microtiter plates. Collet-Cassart D, et al. **Clin Chem** 1989 Jan;35(1):141–3
Relationships between plasma concentrations of placental lactogen, insulin-like growth factors, metabolites and lamb size in late gestation ewes subject to nutritional supplementation and in their lambs at birth. Gluckman PD, et al. **Domest Anim Endocrinol** 1988 Jul;5(3):209–17
Rising human chorionic somatomammotropin predicts ectopic pregnancy rupture following methotrexate chemotherapy. Carson SA, et al. **Fertil Steril** 1989 Apr; 51(4):593–7
Influence of ritodrine on plasma steroids and human placental lactogen levels in third-trimester pregnancies. Schreyer P, et al. **Gynecol Obstet Invest** 1989;27(1):10–3
High-density lipoproteins (HDL) stimulate placental lactogen secretion in pregnant ewes: further evidence for a role of HDL in placental lactogen secretion during pregnancy. Grandis A, et al. **J Endocrinol** 1989 Mar; 120(3):423–7
Measurement of serum levels of oestriol and human placental lactogen in the management of pre-eclamptic pregnancies. Isouard G. **Med J Aust** 1979 Oct 20;2(8):401–4
[Clinical significance of pregnancy-specific beta glycoprotein, human placental lactogen and beta-human chorionic gonadotropin in the serum of patients with trophoblastic diseases] Zhang WY. **Chung Hua I Hsueh Tsa Chih** 1989 Apr;69(4):206–8, 16 (Eng. Abstr.) **(Chi)**
[The value of fetal blood flow measurements in intrauterine growth retardation in comparison with E3 and human placental lactogen determinations] Spernol R, et al. **Geburtshilfe Frauenheilkd** 1989 May;49(5):463–5 (Eng. Abstr.) **(Ger)**
[Dose-dependent effect of locally administered sulprostone gel on serum luteal and placental hormones in cervix priming in the 1st trimester] Rath W, et al. **Zentralbl Gynakol** 1989;111(10):634–44 (Eng. Abstr.) **(Ger)**
[Effect of sulprostone on prolactin, HPL, HCG, progesterone and estradiol serum level in abortion induction in the first trimester in primigravidae] Rudolf K, et al. **Zentralbl Gynakol** 1988;110(13):827–31 (Eng. Abstr.) **(Ger)**
[Usefulness and limitations of hormonal monitoring of pregnancy with HPL and estriol in improving fetal prognosis and preventing neonatal neurologic deficiency]

Paci S, et al. **Minerva Ginecol** 1989 Jun;41(6):265–75 (Eng. Abstr.) **(Ita)**

[Growth hormone, insulin and placental lactogen in the sera of mothers and fetal blood of infants from physiological pregnancy and pregnancy complicated by diabetes mellitus] Dudkiewicz J, et al. **Endokrynol Pol** 1989;40(1):9–13 (Eng. Abstr.) **(Pol)**

GENETICS

Molecular biology of growth hormone. Parks JS. **Acta Paediatr Scand Suppl** 1989;349:127–35 (40 ref.)

A subfamily of bovine prolactin-related transcripts distinct from placental lactogen in the fetal placenta. Kessler MA, et al. **Biochemistry** 1989 Jun 13;28(12):5154–61

Bovine placental lactogen: molecular cloning and protein structure. Schuler LA, et al. **Biochemistry** 1988 Nov 1; 27(22):8443–8

Strategy for selection of internal, low redundancy probes for identification of specific cDNA. Shimomura K, et al. **Biotechnol Appl Biochem** 1989 Jun;11(3):288–95

Pituitary-specific factor binding to the human prolactin, growth hormone, and placental lactogen genes. Lemaigre FP, et al. **DNA** 1989 Apr;8(3):149–59

Differential expression of placental lactogen-II and prolactin-like protein-A in the rat chorioallantoic placenta. Campbell WJ, et al. **Endocrinology** 1989 Sep;125(3):1565–74

Regulation of human chorionic somatomammotropin gene expression in rat pituitary tumour cells. Cattini PA, et al. **Mol Cell Endocrinol** 1988 Dec;60(2–3):217–24

Human chorionic somatomammotropin and growth hormone gene expression in rat pituitary tumour cells is dependent on proximal promoter sequences. Nachtigal MW, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4327–37

[Experimental conditions of a technic of in vitro transcription using placental nuclei] Hess K, et al. **C R Soc Biol (Paris)** 1988;182(3):286–95 (Eng. Abstr.) **(Fre)**

IMMUNOLOGY

[Obtaining antibodies to placental lactogen for radioimmunologic analysis] Piven' NV, et al. **Probl Endokrinol (Mosk)** 1989 Mar–Apr;35(2):77–81 (Eng. Abstr.) **(Rus)**

METABOLISM

Nutritional regulation of the placental lactogen receptor in fetal liver: implications for fetal metabolism and growth. Freemark M, et al. **Endocrinology** 1989 Sep;125(3):1504–12

Synthetic amphipathic peptides resembling apolipoproteins stimulate the release of human placental lactogen. Jorgensen EV, et al. **J Biol Chem** 1989 Jun 5;264(16):9215–9

Angiotensin II stimulates both inositol phosphate production and human placental lactogen release from human trophoblastic cells. Petit A, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):280–6

A mutant lactogenic hormone binds, but does not activate, the prolactin receptor. Davis JA, et al. **Mol Endocrinol** 1989 Jun;3(6):949–53

PHARMACOLOGY

Human placental lactogen administration in the pregnant rat: acceleration of fetal growth. Collins JW Jr, et al. **Pediatr Res** 1988 Dec;24(6):663–7

Inhibition of nocturnal prolactin surges in the pregnant rat by incubation medium containing placental lactogen. Voogt J, et al. **Proc Soc Exp Biol Med** 1989 Sep;191(4):403–7

PHYSIOLOGY

The role of placental lactogen in the regulation of fetal metabolism and growth. Freemark M, et al. **J Pediatr Gastroenterol Nutr** 1989 Apr;8(3):281–3

Ovine chorionic somatomammotropin and foetal growth. Chêne N, et al. **Reprod Nutr Dev** 1988;28(6B):1707–29 (92 ref.)

[Placental growth hormone. Significance relative to growth hormone and lactogen hormone] Hennen G, et al. **Reprod Nutr Dev** 1988;28(6B):1699–706 (14 ref.) (Eng. Abstr.) **(Fre)**

[Studies on the effects of placental lactogen on calcium metabolism during pregnancy] Takeuchi K, et al. **Nippon Naibunpi Gakkai Zasshi** 1988 Nov 20; 64(11):1175–86 (Eng. Abstr.) **(Jpn)**

PLACENTAL PROTEINS see **PREGNANCY PROTEINS**

PLACENTAL VILLI see **CHORIONIC VILLI**

PLACENTATION

Relationship between placentation and maternal serum alpha-fetoprotein in twin pregnancies. Veress L, et al. **Acta Chir Hung** 1988;29(2):183–6

Twin study: relationship between birth weight, zygosity, placentation, and pathologic placental changes. Ramos-Arroyo MA, et al. **Acta Genet Med Gemellol (Roma)** 1988;37(3–4):229–38

Decidualization and insulin-like growth factor (IGF) binding protein: implications for its role in stromal cell differentiation and the decidual cell in haemochorial placentation. Bell SC. **Hum Reprod** 1989 Feb;4(2):125–30 (48 ref.)

Localization of mRNA for the oncotrophoblastic protein oncomodulin during implantation and early placentation in the rat. Brewer LM, et al. **Placenta** 1989 Jul–Aug; 10(4):359–75

[Ultrasonic criteria for the evaluation of placentation in twin pregnancies] Uccello N, et al. **Minerva Ginecol** 1989 Feb; 41(2):75–7 (Eng. Abstr.) **(Ita)**

PLACENTOMA, NORMAL see **PLACENTA**

PLACENTOME see **PLACENTA**

PLAGUE

EPIDEMIOLOGY

Human plague in 1987. **Can Dis Wkly Rep** 1988 Dec 24; 14(51):231 **(Eng, Fre)**

Internationally quarantinable diseases. **Can Dis Wkly Rep** 1989 May 6;15(18):100 **(Eng, Fre)**

Identification of a Yersinia pestis-specific DNA probe with potential for use in plague surveillance. McDonough KA, et al. **J Clin Microbiol** 1988 Dec;26(12):2515–9

Leads from the MMWR. Human plague—United States, 1988. **JAMA** 1988 Nov 18;260(19):2800, 2806

Human plague—United States, 1988 [published erratum appears in MMWR 1988 Nov 4;37(43):675] **MMWR** 1988 Oct 28;37(42):653–6

[The results of using an immunoenzyme method in an epizootiologic survey of natural Siberian foci of plague] Golubinskiĭ EP, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Oct;(10):34–7 (Eng. Abstr.) **(Rus)**

HISTORY

The pest house at Jaffa: medicine, art and French romantic painting. Merrill JM, et al. **Caduceus** 1988 Fall–Winter; 4(3–4):58–73

Alexandre Yersin and recollections of Vietnam [letter] Barrett O Jr. **Hosp Pract [Off]** 1989 May 30;24(5A):13

Alexandre Yersin: pursuer of plague. Bendiner E. **Hosp Pract [Off]** 1989 Mar 30;24(3A):121–8, 131–2, 135–8 passim

Richard Pearson Strong and the Manchurian epidemic of pneumonic plague, 1910–1911. Chernin E. **J Hist Med Allied Sci** 1989 Jul;44(3):296–319

Three days in October of 1630: detailed examination of mortality during an early modern plague epidemic in Venice. Ell SR. **Rev Infect Dis** 1989 Jan–Feb;11(1):128–41

The bubonic plague [letter] Durrant RE. **Sci Am** 1988 Jul; 259(1):8

The bubonic plague. McEvedy C. **Sci Am** 1988 Feb; 258(2):118–23

[Statistics from the last epidemic of bubonic plague in Prague 1713–1714] Rozsívalová E. **Cas Lek Cesk** 1988 Jul 29; 127(31):986–7 **(Cze)**

[Teachings on "Alpine epidemic pneumonia"—in the nosographic studies from Guggenbühl to Sticker. A reminiscence of the epidemic theory and description of the history of the epidemic in the 19th and early 20th century] Quick M. **Gesnerus** 1988;45 Pt 3–4:353–79 (Eng. Abstr.) **(Ger)**

[The plague in Iceland in the 15th century] Oeding P. **Tidsskr Nor Laegeforen** 1988 Dec 10;108(34–36):3196–201 (Eng. Abstr.) **(Nor)**

METABOLISM

Changes in the activity of oxygen-dependent metabolism in polymorphonuclear leukocytes and macrophages from a primary focus during experimental Y. pestis infection in the mouse. Isin ZM. **J Hyg Epidemiol Microbiol Immunol** 1989;33(2):229–32

MICROBIOLOGY

Differential clearance and host-pathogen interactions of YopE- and YopK- YopL- Yersinia pestis in BALB/c mice. Straley SC, et al. **Infect Immun** 1989 Apr; 57(4):1200–10

[Study of trimethoprim sensitivity in strains of Yersinia pestis isolated from various natural foci of plague] Kravchenko AN, et al. **Antibiot Khimioter** 1989 Jan;34(1):42–6 (Eng. Abstr.) **(Rus)**

[Results of screening of plasmids of Yersinia pestis strains from various regions of endemic central-asian plague focus] Balakhonov SV. **Mol Gen Mikrobiol Virusol** 1989 Apr; (4):39–42 (Eng. Abstr.) **(Rus)**

PARASITOLOGY

[An attempt to search for the correlations between the indices of plague infectivity in small mammals and fleas] Burdelov LA, et al. **Parazitologiia** 1989 Mar–Apr;23(2):98–103 (Eng. Abstr.) **(Rus)**

PLAGUE VACCINE

IMMUNOLOGY

[The modifying action of normal human blood serum on vaccinal EV76 and virulent 363(1/1479) strains of Yersinia pestis] Ziuzina VP, et al. **Mikrobiol Zh** 1988 Sep–Oct; 50(5):87–92 (Eng. Abstr.) **(Rus)**

PLAICE see **FLATFISHES**

PLANARIANS see under **TURBELLARIA**

PLANIGRAPHY, X-RAY see **TOMOGRAPHY, X-RAY**

PLANKTON

see related
EUTROPHICATION

Variance within homogeneous phytoplankton populations, I: Theoretical framework for interpreting histograms. Campbell JW, et al. **Cytometry** 1989 Sep;10(5):587–95

Variance within homogeneous phytoplankton populations, II: Analysis of clonal cultures. Campbell JW, et al. **Cytometry** 1989 Sep;10(5):596–604

Variance within homogeneous phytoplankton populations, III: Analysis of natural populations. Campbell JW, et al. **Cytometry** 1989 Sep;10(5):605–11

Using phytoplankton and flow cytometry to analyze grazing by marine organisms. Cucci TL, et al. **Cytometry** 1989 Sep; 10(5):659–69

Optical plankton analyser: a flow cytometer for plankton analysis, II: Specifications. Dubelaar GB, et al. **Cytometry** 1989 Sep;10(5):529–39

Optical plankton analyser: a flow cytometer for plankton analysis, I: Design considerations. Peeters JC, et al. **Cytometry** 1989 Sep;10(5):522–8

Flow cytometry and phytoplankton. Phinney DA, et al. **Cytometry** 1989 Sep;10(5):511–21

A simple method to preserve oceanic phytoplankton for flow cytometric analyses. Vaulot D, et al. **Cytometry** 1989 Sep; 10(5):629–35

The potential of mosquito-indigestible phytoplankton for mosquito control. Marten GG. **J Am Mosq Control Assoc** 1987 Mar;3(1):105–6

Predation on ocean krill [letter] Hobson ES. **Science** 1989 Jan 13;243(4888):237–8

ANALYSIS

Polychlorinated biphenyl congeners in sediments, plankton, molluscs, crustaceans, and eel in a freshwater lake: implications of using reference chemicals and indicator organisms in bioaccumulation studies. van der Oost R, et al. **Arch Environ Contam Toxicol** 1988 Nov;17(6):721–9

Mercury levels in total suspended matter and in plankton of the Mediterranean basin. Ferrara R, et al. **Sci Total Environ** 1989 Aug;84:129–34

CLASSIFICATION

Shipboard analytical flow cytometry of oceanic ultraphytoplankton. Li WK. **Cytometry** 1989 Sep; 10(5):564–79

CYTOLOGY

Use of a neural net computer system for analysis of flow cytometric data of phytoplankton populations. Frankel DS, et al. **Cytometry** 1989 Sep;10(5):540–50

DRUG EFFECTS

Effects of cadmium exposure on feeding of freshwater planktonic crustaceans. Gulati RD, et al. **Comp Biochem Physiol [C]** 1988;90(2):335–40

ENZYMOLOGY

Coprecipitation of enzymes with water soluble starch—an alternative to freeze-drying. Randén L, et al. **J Pharm Pharmacol** 1988 Nov;40(11):763–6

GROWTH & DEVELOPMENT

[Effect of the industrial activity of man on the parasitic fauna of fish] Grabda-Kazubska B. **Wiad Parazytol** 1988; 34(4–6):573–7 (Eng. Abstr.) **(Pol)**

ISOLATION & PURIFICATION

Discrimination of eukaryotic phytoplankton cell types from light scatter and autofluorescence properties measured by flow cytometry. Olson RJ, et al. **Cytometry** 1989 Sep; 10(5):636–43

Separation and concentration of phytoplankton populations using centrifugal elutriation. Pomponi SA, et al. **Cytometry** 1989 Sep;10(5):580–6

METABOLISM

A flow cytometric approach to assessing the environmental and physiological status of phytoplankton. Demers S, et al. **Cytometry** 1989 Sep;10(5):644–52

Rapid analytical technique for the assessment of cell metabolic activity in marine microalgae. Dorsey J, et al. **Cytometry** 1989 Sep;10(5):622–8

Carbon dynamics of logarithmetic and stationary phase phytoplankton as determined by track autoradiography. Knoechel R, et al. **Cytometry** 1989 Sep;10(5):612–21

PLANNED PARENTHOOD see **FAMILY PLANNING**

PLANNING, HEALTH AND WELFARE see **HEALTH**

PLANNING

PLANNING, HEALTH FACILITY see HEALTH FACILITY PLANNING

PLANNING TECHNICS

see related
HEALTH PLANNING
SOCIAL PLANNING

Impact analysis reduces the guesswork in budgeting. McCutcheon DJ. **Dimens Health Serv** 1988 Nov;65(8):24–5

PLANNING THEORIES see PLANNING TECHNICS

PLANT AGGLUTININS see LECTINS

PLANT DISEASES

Control of phytopathogens by inhibitors of polyamine biosynthesis. Galston AW, et al. **Adv Exp Med Biol** 1988; 250:589–99

Antiviral activity of tiazofurine against barley stripe mosaic virus. Nagy PD, et al. **Antiviral Res** 1989 Feb;11(1):41–5

Microbial colonization of injured cactus tissue (Stenocereus gummosus) and its relationship to the ecology of cactophilic Drosophila mojavensis. Fogleman JC, et al. **Appl Environ Microbiol** 1989 Jan;55(1):100–5

Association of viral 126 kDa protein–containing X–bodies with nuclei in mosaic–diseased tobacco leaves. Wijdeveld MM, et al. **Arch Virol** 1989;104(3–4):225–39

Deoxyribonuclease I sensitivity of the T–DNA ipt gene is associated with gene expression. Reid RA, et al. **Biochemistry** 1988 Jul 26;27(15):5748–54

The respiratory chains of pathogenic pseudomonads. Zannoni D. **Biochim Biophys Acta** 1989 Aug 3;975(3):299–316 (259 ref.)

An electron spin resonance investigation of internal rust spot, a physiological disorder of the potato tuber. Monk LS, et al. **Free Radic Res Commun** 1989;5(6):345–50

Effect of bavistin, aureofungin application on Panama wilt and Sigatoka leaf spot of banana. Eswaramurthy S, et al. **Hindustan Antibiot Bull** 1988 Feb–May;30(1–2):25–6

In vitro studies on toxicity of heavy metals against Sclerotium rolfsii sacc. A foot–rot pathogen of barley. Singh RK. **Hindustan Antibiot Bull** 1988 Feb–May;30(1–2):40–3

Interactions between citrus exocortis and potato spindle tuber viroids in plants of Gynura aurantiaca and Lycopersicon esculentum. Pallás V, et al. **Intervirology** 1989;30(1):10–7

Regulation and role in pathogenicity of Erwinia chrysanthemi 3937 pectin methylesterase. Boccara M, et al. **J Bacteriol** 1989 Jul;171(7):4085–7

Molecular cloning of a Pseudomonas syringae pv. syringae gene cluster that enables Pseudomonas fluorescens to elicit the hypersensitive response in tobacco plants. Huang HC, et al. **J Bacteriol** 1988 Oct;170(10):4748–56

Toxigenicity of some fusaria associated with plant and human diseases in the Malaysian peninsula. Salleh B, et al. **J Gen Microbiol** 1988 Mar;134 (Pt 3):841–7

Size reversion of African cassava mosaic virus coat protein gene deletion mutants during infection of Nicotiana benthamiana. Etessami P, et al. **J Gen Virol** 1989 Feb;70 (Pt 2):277–89

Partial cleavage of sweet potato feathery mottle virus coat protein subunit by an enzyme in extracts of infected symptomless leaves. Salomon R. **J Gen Virol** 1989 Aug;70 (Pt 8):1943–9

Hop stunt viroid strains from dapple fruit disease of plum and peach in Japan. Sano T, et al. **J Gen Virol** 1989 Jun; 70 (Pt 6):1311–9

Viroids. Pathogenesis by antisense [news] Symons B. **Nature** 1989 Apr 13;338(6216):542–3

Isolation and nucleotide sequence of cDNA clones for the pathogenesis–related proteins PR1a, PR1b and PR1c of Nicotiana tabacum cv. Xanthi nc induced by TMV infection. Cutt JR, et al. **Nucleic Acids Res** 1988 Oct 25; 16(20):9861

Sequence variability in avocado sunblotch viroid (ASBV). Pallás V, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9864

Infectious TYMV RNA from cloned cDNA: effects in vitro and in vivo of point substitutions in the initiation codons of two extensively overlapping ORFs. Weiland JJ, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4675–87

Molecular variation in vector–borne plant viruses: epidemiological significance. Harrison BD, et al. **Philos Trans R Soc Lond [Biol]** 1988 Oct 31; 321(1207):447–62 (57 ref.)

Coevolution of host and pathogen populations in the Hordeum vulgare–Rhynchosporium secalis pathosystem. McDonald BA, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(10):3924–7

Subviral pathogens of plants: the viroids. Diener TO. **Ric Clin Lab** 1989 Apr–Jun;19(2):105–28 (120 ref.)

Bacterial blight of soybean: regulation of a pathogen gene determining host cultivar specificity. Huynh TV, et al. **Science** 1989 Sep 22;245(4924):1374–7

Are the PR1 proteins of tobacco involved in genetically engineered resistance to TMV? Carr JP, et al. **Virology** 1989 Apr;169(2):470–3

Turnip crinkle virus infection from RNA synthesized in vitro. Heaton LA, et al. **Virology** 1989 May;170(1):214–8

The pattern of accumulation of cauliflower mosaic virus–specific products in infected turnips. Maule AJ, et al. **Virology** 1989 Apr;169(2):436–46

In vitro synthesis of biologically active beet necrotic yellow vein virus RNA. Quillet L, et al. **Virology** 1989 Sep; 172(1):293–301

Resistance to TMV in transgenic plants results from interference with an early event in infection. Register JC 3d, et al. **Virology** 1988 Oct;166(2):524–32

Transgenic tobacco plants accumulating tobacco rattle virus coat protein resist infection with tobacco rattle virus and pea early browning virus. van Dun CM, et al. **Virology** 1988 Dec;167(2):649–52

[Control studies of the downy mildew of yanhusuo (Corydalis yanhusuo W.T. Wang] Bao DF. **Chung Yao Tung Pao** 1988 May;13(5):14–6, 61 (Eng. Abstr.) **(Chi)**

[Contamination with pathogenic plant viruses of soil and water] Kleinhempel H, et al. **Z Gesamte Hyg** 1988 Sep; 34(9):496–9 (Eng. Abstr.) **(Ger)**

[Mannan sulfates—inducers of plant resistance to viral infection] Kovalenko AG, et al. **Vopr Virusol** 1988 Nov–Dec;33(6):732–7 (Eng. Abstr.) **(Rus)**

[Characterization of Xanthomonas campestris pv. cucurbitae, causal agent of the bacterial spot of squash] Alippi AM. **Rev Argent Microbiol** 1989 Jan–Mar;21(1):15–9 (Eng. Abstr.) **(Spa)**

PLANT EXTRACTS

Hazards of henna [letter] Goucke R. **Anesth Analg** 1989 Sep; 69(3):416–7

Khat consumption: a pharmacological review. Nencini P, et al. **Drug Alcohol Depend** 1989 Jan;23(1):19–29 (94 ref.)

Khat chewing spread to the Somali community in Rome. Nencini P, et al. **Drug Alcohol Depend** 1989 Jun;23(3):255–8

Miraa. **East Afr Med J** 1988 Jun;65(6):353–4

Toxicity of colocynithin and hydrated colocynithin from alcoholic extract of Citrullus colocynthis pulp. el–Naggar ME, et al. **J Egypt Soc Parasitol** 1989 Jun;19(1):179–85

Chemistry of Hyptis mutabilis: new pentacyclic triterpenoids. Pereda–Miranda R, et al. **J Nat Prod** 1988 Sep–Oct; 51(5):996–8

Isolation and structure of the cytostatic lignan glycoside phyllanthostatin A. Pettit GR, et al. **J Nat Prod** 1988 Nov–Dec;51(6):1104–12

Khat: a plant with amphetamine effects. Kalix P. **J Subst Abuse Treat** 1988;5(3):163–9 (50 ref.)

The role of behavior in the survival of Biomphalaria glabrata in bioassays with the plant molluscicide Phytolacca dodecandra. Jurberg P, et al. **Mem Inst Oswaldo Cruz** 1988 Jan–Mar;83(1):41–6

Resistance to Millettia molluscicide in Biomphalaria glabrata: a quantitative genetical approach. Lam PK, et al. **Parasitology** 1989 Feb;98 (Pt 1):17–20

Preference of Biomphalaria tenagophila among macrophytes and their periphytons determined through the degree of attractiveness. dos Santos MB, et al. **Rev Inst Med Trop Sao Paulo** 1988 Jul–Aug;30(4):264–9

Mollusc–killing agents from Khaya grandifoliola. Makanga B, et al. **Trop Med Parasitol** 1989 Jun;40(2):117–8

Molluscicidal activity of Solanum aculeatum (family: Solanaceae) berries against Biomphalaria pfeifferi, Bulinus globosus and Lymnaea natalensis. Mkoji GM, et al. **Trop Med Parasitol** 1989 Jun;40(2):119–20

[Effect of several extracts derived from plants on the survival of larvae of Aedes fluviatilis (Lutz) (Diptera: Culicidae) in the laboratory] Consoli RA, et al. **Mem Inst Oswaldo Cruz** 1988 Jan–Mar;83(1):87–93 (Eng. Abstr.) **(Por)**

ADMINISTRATION & DOSAGE

Association of class II DNA restriction fragments with responsiveness to Ambrosia artemisiifolia (short ragweed)–pollen allergen Amb a V in ragweed–allergic patients. Zwollo P, et al. **J Allergy Clin Immunol** 1989 Jan; 83(1):45–54

The treatment of burns with a topical spray. Ghani AN, et al. **Ther Hung** 1988;36(4):179–81

[Personal experiences with naturopathy. Wound treatment with plant substances. The process of wound healing—flavonoids, I] Zimmermann W. **Fortschr Med** 1989 Feb 20;107(5):20–2 **(Ger)**

[Amborum Special F and ASFO—2 glucocorticoid–containing herbal remedies] Knoblauch A, et al. **Schweiz Med Wochenschr** 1989 Jun 3;119(22):796–802 (Eng. Abstr.) **(Ger)**

[Studies on the viscous–elastic properties of the skin in evaluating ointments to improve the elasticity of scars] Janicki S, et al. **Przegl Dermatol** 1988 Sep–Oct;75(5):352–7 (Eng. Abstr.) **(Pol)**

ADVERSE EFFECTS

Khat–induced hypnagogic hallucinations. Granek M, et al. **Acta Psychiatr Scand** 1988 Oct;78(4):458–61

Khat–induced paranoid psychosis [letter] Maitai CK, et al. **Br J Psychiatry** 1988 Feb;152:294

Sensitizing potency of coleon O in Coleus sp. (Lamiaceae). Hausen BM, et al. **Contact Dermatitis** 1988 Sep;19(3):217–8

Contact stomatitis from a breath refresher (Eundan). Kim SC, et al. **Contact Dermatitis** 1988 Oct;19(4):309

Psychiatric morbidity among khat chewers. Dhadphale M, et al. **East Afr Med J** 1988 Jun;65(6):355–9

Anaphylactic reaction after the ingestion of chamomile tea: a study of cross–reactivity with other composite pollens. Subiza J, et al. **J Allergy Clin Immunol** 1989 Sep;84(3):353–8

[Dieffenbachia and the eye] Vácha J, et al. **Cesk Oftalmol** 1988 Nov;44(6):453–5 (Eng. Abstr.) **(Cze)**

[Aspiration pneumonia caused by an alternative drug] Handest P. **Ugeskr Laeger** 1989 Jan 2;151(1):31–2 (Eng. Abstr.) **(Dan)**

ANALYSIS

Screening extracts of Euphorbia garuana N.E.Br. for in–vitro cytotoxicity. Abo KA. **Afr J Med Med Sci** 1988 Dec; 17(4):227–30

Allergic contact dermatitis to Ginkgo biloba L.: relationship with urushiol. Lepoittevin JP, et al. **Arch Dermatol Res** 1989;281(4):227–30

Identification by methane chemical ionization gas chromatography/mass spectrometry of the products obtained by steam distillation and aqueous acid extraction of commercial Piper methysticum. Cheng D, et al. **Biomed Environ Mass Spectrom** 1988 Nov;17(5):371–6

Blood–group active proteoglycan containing 3–O–methylrhamnose (acofriose) from young plants of Osmunda japonica. Akiyama T, et al. **Carbohydr Res** 1988 Jul 15;178:320–6

Formation of mutagenic N–nitroso compounds in vegetable extracts upon nitrite treatment: a comparison with the glucosinolate content. Tiedink HG, et al. **Food Chem Toxicol** 1988 Nov–Dec;26(11–12):947–54

Analysis of allergenic components of a Parietaria judaica pollen extract by chromatographic methods for the evaluation of purification procedures. Bassoli A, et al. **J Chromatogr** 1988 Jul 1;444:209–18

Micropreparative–scale enrichment of some allergenic components of Parietaria pollen extract. Bassoli A, et al. **J Chromatogr** 1988 Jul 27;446:179–85

Isolation of biologically active plant constituents by liquid chromatography. Marston A, et al. **J Chromatogr** 1988 Oct 19;450(1):3–11

A comparative trial of garlic, its extract and ammonium–potassium tartrate as anthelmintics in carp. Peña N, et al. **J Ethnopharmacol** 1988 Dec;24(2–3):199–203

Uptake into mouse brain of four compounds present in the psychoactive beverage kava. Keledjian J, et al. **J Pharm Sci** 1988 Dec;77(12):1003–6

Preliminary studies of the development of a direct compression cellulose excipient from bagasse. Padmadisastra Y, et al. **J Pharm Sci** 1989 Jun;78(6):508–14

Nonradioactive, photobiotin–labelled DNA probes for routine diagnosis of viroids in plant extracts. McInnes JL, et al. **J Virol Methods** 1989 Mar;23(3):299–312

Populus candicans and the Balm of Gilead. Whatley FR, et al. **Z Naturforsch [C]** 1989 May–Jun;44(5–6):353–6

[Studies on high–performance liquid chromatographic analysis of safflomin A and B in safflower yellow (the extract of Carthamus tinctorius L.) and commercial safflower yellows] Goda Y, et al. **Eisei Shikenjo Hokoku** 1988;(106):101–5 (Eng. Abstr.) **(Jpn)**

[Studies on methods for microdetermination of plant constituents by immunoassay. I. Synthesis of four haptens and their application for radioimmunoassay of atropine] Inoue K, et al. **Yakugaku Zasshi** 1988 Oct;108(10):951–63 (Eng. Abstr.) **(Jpn)**

[The sanitary bacteriologic characteristics of the air in Kharkov subway stations] Kosobutskiĭ LA, et al. **Mikrobiol Zh** 1988 Mar–Apr;50(2):72–7 (Eng. Abstr.) **(Rus)**

[Effect of certain factors on the antimicrobial activity of salvin] Smirnov VV, et al. **Mikrobiol Zh** 1988 May–Jun; 50(3):72–5 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

[Biological properties of staphylococci resistant to salvin] Pavlenko LV, et al. **Mikrobiol Zh** 1987 May–Jun; 49(3):25–30 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Ferns and their allergenic importance: skin and nasal provocation tests to fern spore extract in allergic and non–allergic patients. Bunnag C, et al. **Ann Allergy** 1989 Jun;62(6):554–8

[Modification of avian humoral immunoreactions by Influex and Echinacea angustifolia extract] Schranner I, et al. **Zentralbl Veterinarmed [B]** 1989 Jul;36(5):353–64 (Eng. Abstr.) **(Ger)**

[Allergy–unresponsive vaccines and allergoids] Matsuhashi T. **Arerugi** 1988 Sep;37(9):897–904 (24 ref.) **(Jpn)**

ISOLATION & PURIFICATION

Zoapatle XIII. Isolation of water soluble fractions from Montanoa frutescens and some biological activities. Guzmán–Durán A, et al. **Arch Invest Med (Mex)** 1988 Apr–Jun;19(2):157–63

Xanthine oxidase inhibitory activity of Paraguayan Myrtaceae. Theoduloz C, et al. **J Ethnopharmacol** 1988 Dec;24(2–3):179–83

METABOLISM

Phytoalexin synthesis in soybean: purification and

reconstitution of cytochrome P450 3,9-dihydroxypterocarpan 6a-hydroxylase and separation from cytochrome P450 cinnamate 4-hydroxylase. Kochs G, et al. **Arch Biochem Biophys** 1989 Sep;273(2):543-53

Modulations in the biotransformation of tobacco extract and N'-nitrosonornicotine under differential dietary protein status. Ammigan N, et al. **J Biochem Toxicol** 1989 Spring; 4(1):7-13

Identification of some human urinary metabolites of the intoxicating beverage kava. Duffield AM, et al. **J Chromatogr** 1989 Jul 28;475:273-81

Interrelationship of kernel water activity, soil temperature, maturity, and phytoalexin production in preharvest aflatoxin contamination of drought-stressed peanuts. Dorner JW, et al. **Mycopathologia** 1989 Feb;105(2):117-28

Defense strategies of soybean against the fungus Phytophthora megasperma f.sp. glycinea: a molecular analysis. Ebel J, et al. **Trends Biochem Sci** 1988 Jan; 13(1):23-7 (27 ref.)

Mutagenicity assay with Salmonella typhimurium revealing biotransformation of antiphytoviral substances by cell-free plant extract. el-Tarras A, et al. **Zentralbl Mikrobiol** 1989; 144(3):197-202

PHARMACOLOGY

Biochemical and physiological alterations in female reproductive organs of cyclic rats treated with aqueous extract of Moringa oleifera Lam. Shukla S, et al. **Acta Eur Fertil** 1988 Jul-Aug;19(4):225-32

The effect of Permixon on androgen receptors. el-Sheikh MM, et al. **Acta Obstet Gynecol Scand** 1988;67(5):397-9

Platelet-activating factor in organ transplant rejection. Foegh ML, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:377-82

Preliminary investigation of in-vitro antimicrobial activity of two Nigerian Diospyros species (Ebenaceae). Odelola HA, et al. **Afr J Med Med Sci** 1988 Sep;17(3):167-70

Thapsigargin, a novel molecular probe for studying intracellular calcium release and storage. Thastrup O, et al. **Agents Actions** 1989 Apr;27(1-2):17-23

Histamine release from mast cells by terpenoid aldehydes isolated from glanded varieties of cotton. Elissalde MH, et al. **Am Ind Hyg Assoc J** 1985 Jul;46(7):396-401

Morphology of noncardiogenic pulmonary edema induced by Perilla ketone in sheep. Guerry-Force ML, et al. **Am J Pathol** 1988 Nov;133(2):285-97

Bronchial responsiveness after inhalation of cotton bract extract. Witek TJ Jr, et al. **Am Rev Respir Dis** 1988 Dec; 138(6):1579-83

Some biological properties of plant flavonoids. Middleton E Jr. **Ann Allergy** 1988 Dec;61(6 Pt 2):53-7 (20 ref.)

Inhibition of herpes simplex virus infection by pine cone antitumor substances. Fukuchi K, et al. **Anticancer Res** 1989 Mar-Apr;9(2):313-7

Use of microdilution to assess in vitro antiamoebic activities of Brucea javanica fruits, Simarouba amara stem, and a number of quassinoids. Wright CW, et al. **Antimicrob Agents Chemother** 1988 Nov;32(11):1725-9

Influence of dopamine agonists and an opiate antagonist on agaricus-induced catalepsy, as tested by a new method. Sukul NC, et al. **Arch Int Pharmacodyn Ther** 1988 Sep-Oct; 295:40-51

Experimental evaluation of mimosa tenuiflora (willd.) poir. (Tepescohuite) I. Screening of the antimicrobial properties of bark extracts. Lozoya X, et al. **Arch Invest Med (Mex)** 1989 Jan-Mar;20(1):87-93

Reversible prevention of platelet activation by (E,Z)-4,5,9-trithiadodeca-1,6,11-triene 9-oxide (ajoene) in dogs under extracorporeal circulation. Apitz-Castro R, et al. **Arzneimittelforschung** 1988 Jul;38(7):901-4

Influence of carbohydrates on the cytotoxicity of an aqueous mistletoe drug and of purified mistletoe lectins tested on human T-leukemia cells. Doser C, et al. **Arzneimittelforschung** 1989 Jun;39(6):647-51

The molluscicidal activity of Phytolacca dodecandra. I. Location of the activating esterase. Parkhurst RM, et al. **Biochem Biophys Res Commun** 1989 Jan 31;158(2):436-9

Thapsigargin, a novel promoter, phosphorylates the epidermal growth factor receptor at threonine 669. Takishima K, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):740-6

Effect of khat on the metabolism of erythrocytes. Farag RM, et al. **Biochem Pharmacol** 1989 Feb 15;38(4):563-6

Ajoene, the antiplatelet compound derived from garlic, specifically inhibits platelet release reaction by affecting the plasma membrane internal microviscosity. Rendu F, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1321-8

Stimulation of histamine release and arachidonic acid metabolism in rat peritoneal mast cells by thapsigargin, a non-TPA-type tumor promoter. Ohuchi K, et al. **Biochim Biophys Acta** 1989 May 15;1003(1):9-14

Effect of thapsigargin on cytoplasmic Ca2+ and proliferation of human lymphocytes in relation to AIDS. Scharff O, et al. **Biochim Biophys Acta** 1988 Dec 9;972(3):257-64

Effects of an extract of feverfew (Tanacetum parthenium) on arachidonic acid metabolism in human blood platelets. Loesche W, et al. **Biomed Biochim Acta** 1988; 47(10-11):S241-3

Effect of a PAF antagonist, BN52063, on PAF-induced bronchoconstriction in normal subjects. Roberts NM, et al. **Br J Clin Pharmacol** 1988 Jul;26(1):65-72

Analysis of the stimulative effect of thapsigargin, a non-TPA-type tumour promoter, on arachidonic acid metabolism in rat peritoneal macrophages. Ohuchi K, et al. **Br J Pharmacol** 1988 Jul;94(3):917-23

Excitatory action of a plant extract, stizolobic acid, in the isolated spinal cord of the rat. Ishida M, et al. **Brain Res** 1988 Nov 8;473(1):193-7

A novel property of an aqueous guaraná extract (Paullinia cupana): inhibition of platelet aggregation in vitro and in vivo. Bydlowski SP, et al. **Braz J Med Biol Res** 1988; 21(3):535-8

Blockade of the bradykinin-evoked diphasic response of isolated rat duodenum by the crude extract of and compounds obtained from Mandevilla velutina. Calixto JB, et al. **Braz J Med Biol Res** 1988;21(5):1015-8

Effect of Astronium urundeuva (aroeira) on gastrointestinal transit in mice. Menezes AM, et al. **Braz J Med Biol Res** 1988;21(3):531-3

Characterization of convulsions induced by a hexanic extract of Spilanthes acmella var. oleracea in rats. Moreira VM, et al. **Braz J Med Biol Res** 1989;22(1):65-7

Promoting activity of betel quid ingredients and their inhibition by retinol. Stich HF, et al. **Cancer Lett** 1989 Apr; 45(1):71-7

Modulatory potency of the beta-galactoside-specific lectin from mistletoe extract (Iscador) on the host defense system in vivo in rabbits and patients. Hajto T, et al. **Cancer Res** 1989 Sep 1;49(17):4803-8

The effect of citrus limonoids on hamster buccal pouch carcinogenesis. Miller EG, et al. **Carcinogenesis** 1989 Aug; 10(8):1535-7

Presence of translational inhibitory activity in partially purified extracts from two Petrocoptis species. Ferreras JM, et al. **Cell Mol Biol** 1989;35(1):89-95

Studies on crude drugs effective on visceral larva migrans. IV. Isolation and identification of larvicidal principles in pepper. Kiuchi F, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2452-65

Isolation of ovulatory-active substances from crops of Job's tears (Coix lacryma-jobi L. var. ma-yuen STAPF.). Kondo Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug;36(8):3147-52

Effect of extracts of Zingiberaceae herbs on gastric secretion in rabbits. Sakai K, et al. **Chem Pharm Bull (Tokyo)** 1989 Jan;37(1):215-7

Effect of water extracts of aloe and some herbs in decreasing blood ethanol concentration in rats. II. Sakai K, et al. **Chem Pharm Bull (Tokyo)** 1989 Jan;37(1):155-9

Screening for molluscicidal activity in crude drugs. Takeda O, et al. **Chem Pharm Bull (Tokyo)** 1989 Apr;37(4):1090-1

The hypoglycaemic and insulinotropic activity of Tinospora crispa: studies with human and rat islets and HIT-T15 B cells. Noor H, et al. **Diabetologia** 1989 Jun;32(6):354-9

Ginkgo biloba extract facilitates recovery from penetrating brain injury in adult male rats. Attella MJ, et al. **Exp Neurol** 1989 Jul;105(1):62-71

Superoxide anion scavenging effect and superoxide dismutase activity of Ginkgo biloba extract. Pincemail J, et al. **Experientia** 1989 Aug 15;45(8):708-12

Feverfew--an antithrombotic drug? Loesche W, et al. **Folia Haematol (Leipz)** 1988;115(1-2):181-4

Enhanced ethanol-induced changes in disposition and toxic response to dietary aflatoxin B1 due to Sacoglottis gabonensis bark extract, a Nigerian alcoholic beverage additive. Okoye ZS, et al. **Food Chem Toxicol** 1988 Aug; 26(8):679-89

Chronic administration of aqueous extract of Stevia rebaudiana (Bert.) Bertoni in rats: endocrine effects. Oliveira-Filho RM, et al. **Gen Pharmacol** 1989;20(2):187-91

Screening of Indian plants for biological activity: Part XIII. Bhakuni DS, et al. **Indian J Exp Biol** 1988 Nov; 26(11):883-904

Effect of alcoholic extract of Clitoria ternatea Linn. on central nervous system in rodents. Kulkarni C, et al. **Indian J Exp Biol** 1988 Dec;26(12):957-60

Effect of Foeniculum vulgare seed extracts on cervix & vagina of ovariectomised rats. Annusuya S, et al. **Indian J Med Res** 1988 Apr;87:364-7

In vitro antimalarial activity of medicinal plants of India. Badam L, et al. **Indian J Med Res** 1988 Apr;87:379-83

Extracts of Indian plants as mosquito larvicides. Evans DA, et al. **Indian J Med Res** 1988 Jul;88:38-41

Antifertility activity of Caesalpinia decapetala--a preliminary report. Keshri G, et al. **Indian J Med Res** 1988 Apr; 87:377-8

Antibacterial activity of Euphorbia thymifolia Linn. Khan NH, et al. **Indian J Med Res** 1988 Apr;87:395-7

Effect of Ocimum sanctum Linn. on humoral immune responses. Mediratta PK, et al. **Indian J Med Res** 1988 Apr;87:384-6

Sperm immobilizing activity of betaine obtained from Malvaviscus conzattii flower extract. Pakrashi A, et al. **Indian J Med Res** 1988 Nov;88:458-60

Effect of Commiphora mukul (gum guggulu) in patients of hyperlipidemia with special reference to HDL-cholesterol. Verma SK, et al. **Indian J Med Res** 1988 Apr;87:356-60

Immunopharmacological studies on picrorhiza kurroa Royle-Ex-Benth. Part V: Anti-inflammatory action: relation with cell types involved in inflammation. Pandey BL, et al. **Indian J Physiol Pharmacol** 1988 Oct-Dec; 32(4):289-92

Immunopharmacological studies on Picrorhiza kurroa Royle-ex-Benth. Part IV: Cellular mechanisms of anti-inflammatory action. Pandey BL, et al. **Indian J Physiol Pharmacol** 1989 Jan-Mar;33(1):28-30

Immunopharmacological studies on Picrorhiza kurroa Royle ex Benth. Part VI: Effect on anaphylactic activation events in rat peritoneal mast cells. Pandey BL, et al. **Indian J Physiol Pharmacol** 1989 Jan-Mar;33(1):47-52

Wound healing profile of Septilin. Udupa AL, et al. **Indian J Physiol Pharmacol** 1989 Jan-Mar;33(1):39-42

Effect of Ginkgo biloba extract on microsomal enzyme induction. Duche JC, et al. **Int J Clin Pharmacol Res** 1989; 9(3):165-8

Evaluation of Melia volkensii extract fractions as mosquito larvicides. Mwangi RW, et al. **J Am Mosq Control Assoc** 1988 Dec;4(4):442-7

Antimicrobial activity and inhibition of aflatoxin B1 formation by olive plant tissue constituents. Paster N, et al. **J Appl Bacteriol** 1988 Apr;64(4):293-7

Activation of calcium entry by the tumor promoter thapsigargin in parotid acinar cells. Evidence that an intracellular calcium pool and not an inositol phosphate regulates calcium fluxes at the plasma membrane. Takemura H, et al. **J Biol Chem** 1989 Jul 25; 264(21):12266-71

The vascular action of aqueous extracts of Foeniculum vulgare leaves. Abdul-Ghani AS, et al. **J Ethnopharmacol** 1988 Dec;24(2-3):213-8

Medicinal plants with hypoglycemic activity. Atta-Ur-Rahman, et al. **J Ethnopharmacol** 1989 Jun; 26(1):1-55 (383 ref.)

Eugenia uniflora leaf extract and lipid metabolism in Cebus apella monkeys. Ferro E, et al. **J Ethnopharmacol** 1988 Dec; 24(2-3):321-5

Ocimum sanctum--a preliminary study evaluating its immunoregulatory profile in albino rats. Godhwani S, et al. **J Ethnopharmacol** 1988 Dec;24(2-3):193-8

Effects of Palicourea marcgravii on laboratory rodents. Górniak SL, et al. **J Ethnopharmacol** 1989 Apr;25(2):221-6

Responses of gastrointestinal smooth muscle preparations to a muscarinic principle present in Sida veronicaefolia. Lutterodt GD. **J Ethnopharmacol** 1988 Jul-Aug; 23(2-3):313-22

Effects of bamboo buds: structural and functional changes in the epididymis of rats. Manonayagi S, et al. **J Ethnopharmacol** 1989 Apr;25(2):201-12

Anticomplementary activity of the constituents of Eucommia ulmoides bark. Oshima Y, et al. **J Ethnopharmacol** 1988 Jul-Aug;23(2-3):159-64

Acute effects of a khat extract on the rat electroencephalogram. Saleh M, et al. **J Ethnopharmacol** 1988 Jul-Aug;23(2-3):291-8

Effect of an extract of Erioglossum edule on the central nervous system. Sattar MA, et al. **J Ethnopharmacol** 1989 Apr;25(2):217-20

Anti-inflammatory activity of Echinops echinatus. Singh B, et al. **J Ethnopharmacol** 1989 Apr;25(2):189-99

Antifertility effect of Bambusa arundinacea shoot extracts in male rats. Vanithakumari G, et al. **J Ethnopharmacol** 1989 Apr;25(2):173-80

Carrot phytoalexin alters the membrane permeability of Candida albicans and multilamellar liposomes. Amin M, et al. **J Gen Microbiol** 1988 Jan;134 (Pt 1):241-6

Stimulation of granulocytic cell iodination by pine cone antitumor substances. Unten S, et al. **J Leukoc Biol** 1989 Feb;45(2):168-75

Antifungal agents: in vitro and in vivo antifungal extract from the common daisy, Bellis perennis. Desevedavy C, et al. **J Nat Prod** 1989 Jan-Feb;52(1):184-5

Plant antimutagenic agents, 1. General bioassay and isolation procedures. Wall ME, et al. **J Nat Prod** 1988 Sep-Oct; 51(5):866-73

Effect of oral ingestion of different fractions of Allium cepa on the blood and erythrocyte membrane lipids and certain membrane-bound enzymes in rats. Ahluwalia P, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Apr;35(2):155-61

Effects of BN 52063 and other agents inhibiting platelet-activating factor-induced contractile responses in rat portal vein. Hellegouarch A, et al. **J Pharm Pharmacol** 1988 Aug;40(8):589-91

Effects of an extract of feverfew on endothelial cell integrity and on cAMP in rabbit perfused aorta. Voyno-Yasenetskaya TA, et al. **J Pharm Pharmacol** 1988 Jul;40(7):501-2

Effect of a fecal bulking agent on diarrhea during enteral feeding in the critically ill. Hart GK, et al. **JPEN J Parenter Enteral Nutr** 1988 Sep-Oct;12(5):465-8

Effect of Grewia asiatica, Gossypium herbacium and Gymnema sylvestre on blood glucose, cholesterol and triglycerides levels in normoglycaemic and alloxan diabetic rabbits. Dogar IA, et al. **JPMA** 1988 Nov;38(11):289-95

Reversed effects between crude and processed ginger extracts on PGF2 alpha-induced contraction in mouse mesenteric veins. Pancho LR, et al. **Jpn J Pharmacol** 1989 Jun; 50(2):243-6

Enzyme-inducing and cytotoxic effects of wood-based materials used as bedding for laboratory animals. Comparison by a cell culture study. Törrönen R, et al. **Life Sci** 1989;45(6):559-65

Anti-mutagenicity of catechin against environmental mutagens. Nagabhushan M, et al. **Mutagenesis** 1988 Jul; 3(4):293-6

Antimutagenic effects of several subfractions of extract from wheat sprout toward benzo[a]pyrene-induced mutagenicity

in strain TA98 of Salmonella typhimurium. Peryt B, et al. **Mutat Res** 1988 Oct;206(2):221–5
The mutagenic potencies of plant extracts containing quercetin in Salmonella typhimurium TA98 and TA100. Schimmer O, et al. **Mutat Res** 1988 Oct;206(2):201–8
The effect of wheat sprout extract on benzo(a)pyrene and 7,2–dimethylbenz(a)anthracene activity. Tudek B, et al. **Neoplasma** 1988;35(5):515–23
Anticancer potential of Viva–Natural, a dietary seaweed extract, on Lewis lung carcinoma in comparison with chemical immunomodulators and on cyclosporine–accelerated AKR leukemia. Furusawa E, et al. **Oncology** 1989;46(5):343–8
Antitumor–promoting activity of garlic extracts. Nishino H, et al. **Oncology** 1989;46(4):277–80
A succinylcholine–like action of an Ipomoea carnea Jacq subsp. fistulosa (Mart. ex choisy) extract. Abdelhadi AA, et al. **Pharmacol Res** 1989 Jul–Aug;21(4):431–7
Effects of Ginkgo biloba extract on glucose transport and glycogen synthesis of cultured smooth muscle cells from pig aorta. Bruel A, et al. **Pharmacol Res** 1989 Jul–Aug; 21(4):421–9
Pharmacology of natural compounds. I. Smooth muscle relaxant activity induced by a Ginkgo biloba L. extract on guinea–pig trachea. Puglisi L, et al. **Pharmacol Res Commun** 1988 Jul;20(7):573–89
The effects of valerian, propranolol, and their combination on activation, performance, and mood of healthy volunteers under social stress conditions. Kohnen R, et al. **Pharmacopsychiatry** 1988 Nov;21(6):447–8
Hypoglycemic activity in various species of the genus Lavandula. Part 2: Lavandula dentata and Lavandula latifolia. Gamez MJ, et al. **Pharmazie** 1988 Jun;43(6):441–2
Schistosomicidal effects of Pavetta owariensis and Harrisonia abyssinica in mice infected with Schistosoma mansoni. Baldé AM, et al. **Planta Med** 1989 Feb;55(1):41–3
Neuropharmacological studies on Mikania cordata root extract. Bhattacharya S, et al. **Planta Med** 1988 Dec; 54(6):483–7
Anti–hepatotoxic activity of extracts and constituents of Buddleja species. Houghton PJ, et al. **Planta Med** 1989 Apr;55(2):123–6
An evaluation of the potency of Osbeckia octandra and Melothria maderaspantana as antihepatotoxic agents. Jayathilaka KA, et al. **Planta Med** 1989 Apr;55(2):137–9
Effects of the extracts of Ganoderma lucidum on blood glucose level in rats. Kimura Y, et al. **Planta Med** 1988 Aug;54(4):290–4
Choleretic and hepatoprotective properties of Eupatorium cannabinum in the rat. Lexa A, et al. **Planta Med** 1989 Apr;55(2):127–32
Novel antihepatotoxic principles of Solanum incanum. Lin CN, et al. **Planta Med** 1988 Jun;54(3):222
Inhibition of the behaviour of human polynuclear leukocytes by an extract of Chrysanthemum parthenium. Lösche W, et al. **Planta Med** 1988 Oct;54(5):381–4
Studies of Panax japonicus fibrinolysis. Matsuda H, et al. **Planta Med** 1989 Feb;55(1):18–21
Effect of Eriobotrya japonica on blood glucose levels of normal and alloxan–diabetic rabbits. Noreen W, et al. **Planta Med** 1988 Jun;54(3):196–9
Spermicidal activity and chemical analysis of Pentapanax leschenaultii. Pant G, et al. **Planta Med** 1988 Oct;54(5):477
Comparative hypotensive effects of compounds extracted from Lippia multiflora leaves. Pham Huu Chanh, et al. **Planta Med** 1988 Aug;54(4):294–6
Neuropharmacological activity of extracts from Passiflora incarnata. Speroni E, et al. **Planta Med** 1988 Dec; 54(6):488–91
Taspine is the cicatrizant principle in Sangre de Grado extracted from Croton lechleri. Vaisberg AJ, et al. **Planta Med** 1989 Apr;55(2):140–3
Phosphorylation at threonine–654 is not required for negative regulation of the epidermal growth factor receptor by non–phorbol tumor promoters. Friedman BA, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):812–6
Extracts from two frequently consumed spices—cumin (Cuminum cyminum) and turmeric (Curcuma longa)—inhibit platelet aggregation and alter eicosanoid biosynthesis in human blood platelets. Srivastava KC. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jul; 37(1):57–64
Endogenous digoxin–like activity of mammalian–lignans and their derivatives. Hirano T, et al. **Res Commun Chem Pathol Pharmacol** 1989 May; 64(2):227–40
Effects of ackee fruit extracts on bronchomotor tone in rats. Melville GN, et al. **West Indian Med J** 1988 Jun;37(2):97–9
Isolation and effects of some garlic components on platelet aggregation and metabolism of arachidonic acid in human blood platelets. Srivastava KC, et al. **Wien Klin Wochenschr** 1989 Apr 14;101(8):293–9
[Androgenic and aphrodesiac action of the medicinal plant Lithospermum Arvense (bird millet)] Ilarionov I. **Eksp Med Morfol** 1989;28(1):28–33 (Eng. Abstr.) **(Bul)**
[The uterotonic activity of Bridelia atroviridis and Phyllanthus discoideus (Euphorbiaceae). Evidence of an effect on alpha–adrenergic receptors] Corallo MA, et al. **Ann Pharm Fr** 1988;46(3):171–7 (Eng. Abstr.) **(Fre)**
[Preliminary study of the anti–inflammatory action of Dittrichia viscosa (L.) W. Greuter] Martín MJ, et al. **Ann Pharm Fr** 1988;46(5):309–12 (Eng. Abstr.) **(Fre)**
[Adsorbed plant extracts, use of extracts of dried seeds of Orthosiphon stamineus benth] Casadebaig–Lafon J, et al. **Pharm Acta Helv** 1989;64(8):220–4 (Eng. Abstr.) **(Fre)**
[Effects of unsaponifiable extracts of avocado/soy beans (PIAS) on the production of collagen by cultures of synoviocytes, articular chondrocytes and skin fibroblasts] Mauviel A, et al. **Rev Rhum Mal Osteoartic** 1989 Feb; 56(2):207–11 **(Fre)**
[Anti–inflammatory, analgesic and antipyretic effect of various plant extracts and their combinations in an animal model] Okpanyi SN, et al. **Arzneimittelforschung** 1989 Jun; 39(6):698–703 (Eng. Abstr.) **(Ger)**
[Improving venous tone and capillary sealing. Effect of a combination of Ruscus extract and hesperidine methyl chalcone in healthy probands in heat stress] Rudofsky G. **Fortschr Med** 1989 Jun 30;107(19):52, 55–8 (Eng. Abstr.) **(Ger)**
[Cardiospermum—a new phytogenic drug in dermatology?] Gehring W, et al. **Z Hautkr** 1989 Apr 15;64(4):274, 277–8 (Eng. Abstr.) **(Ger)**
[Superficial and deep EEG recordings of valerian–related drugs] de Romanis F, et al. **Clin Ter** 1988 Jul 31; 126(2):101–8 (Eng. Abstr.) **(Ita)**
[Studies on prophylaxis against anisakiasis—a screening of killing effects of extracts from foods on the larvae] Kasuya S, et al. **Kansenshogaku Zasshi** 1988 Dec;62(12):1152–6 (Eng. Abstr.) **(Jpn)**
[Studies on hypoglycemic constituents of Japanese tea] Shimizu M, et al. **Yakugaku Zasshi** 1988 Oct;108(10):964–70 (Eng. Abstr.) **(Jpn)**
[The effect of salvin on the growth and ultrastructure of Staphylococcus aureus 209P] Pavlenko LV, et al. **Mikrobiol Zh** 1989 Mar–Apr;51(2):86–91 (Eng. Abstr.) **(Rus)**
[Effect of ionol and eleutherococcus on changes of the hypophyseo–adrenal system in rats under extreme conditions] Golotin VG, et al. **Vopr Med Khim** 1989 Jan–Feb;35(1):35–7 (Eng. Abstr.) **(Rus)**
[The effect of various doses of nopal (Opuntia streptacantha Lemaire) on the glucose tolerance test in healthy individuals] Frati Munari AC, et al. **Arch Invest Med (Mex)** 1988 Apr–Jun;19(2):143–8 (Eng. Abstr.) **(Spa)**

POISONING

Hepatotoxicity due to Atractylis gummifera–L. Georgiou M, et al. **J Toxicol Clin Toxicol** 1988;26(7):487–93
[Lidocaine treatment of poisoning with yew needles (Taxus baccata L.)] von Dach B, et al. **Schweiz Med Wochenschr** 1988 Jul 30;118(30):1113–6 (Eng. Abstr.) **(Ger)**

STANDARDS

The international collaborative study on the first international standard of birch (Betula verrucosa)–pollen extract. Arntzen FC, et al. **J Allergy Clin Immunol** 1989 Jan; 83(1):66–82

THERAPEUTIC USE

Garlic extract prevents acute platelet thrombus formation in stenosed canine coronary arteries. DeBoer LW, et al. **Am Heart J** 1989 Apr;117(4):973–5
Rush immunotherapy with a standardized Bermuda grass pollen extract. Armentia–Medina A, et al. **Ann Allergy** 1989 Aug;63(2):127–35
Feverfew in rheumatoid arthritis: a double blind, placebo controlled study. Pattrick M, et al. **Ann Rheum Dis** 1989 Jul;48(7):547–9
Induction of antimicrobial activity by antitumor substances from pine cone extract of Pinus parviflora Sieb. et Zucc. Harada H, et al. **Anticancer Res** 1988 Jul–Aug;8(4):581–7
The experimental cirrhosis—enzymatic changes and influence of Regopar. Andronescu E, et al. **Arch Roum Pathol Exp Microbiol** 1988 Apr–Jun; 47(2):133–8
Podophyllum derivatives (CPH 82) compared with placebo in the treatment of rheumatoid arthritis. Larsen A, et al. **Br J Rheumatol** 1989 Apr;28(2):124–7
Evidence that 1 per cent Meshushit ointment prevents progressive dermal ischaemia of experimental deep partial skin thickness burns: a preliminary, quantitative controlled study. Kaufman T, et al. **Burns Incl Therm Inj** 1989 Feb; 15(1):27–30
Studies on crude drugs effective on visceral larva migrans. V. The larvicidal principle in mace (aril of Myristica fragrans). Nakamura N, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2685–8
Anticancer activities as well as antiviral and virus–enhancing properties of aqueous fruit extracts from fifty–six European plant species. Sauter C, et al. **Eur J Cancer Clin Oncol** 1989 Jun;25(6):987–90
Cardioprotective effects of certain indigenous drugs in myocardial ischaemia in rabbits. Dwivedi S, et al. **Indian J Exp Biol** 1988 Dec;26(12):969–75
Changes in brain biogenic amines under influence of an indigenous drug, geriforte, following immobilization stress. Upadhya L, et al. **Indian J Exp Biol** 1988 Nov;26(11):911–2
Gum guggul (Commiphora mukul)—the success story of an ancient insight leading to a modern discovery. Satyavati GV. **Indian J Med Res** 1988 Apr;87:327–35 (42 ref.)
Effects of long term feeding of acetone extract of Momordica charantia (whole fruit powder) on alloxan diabetic albino rats. Singh N, et al. **Indian J Physiol Pharmacol** 1989 Apr–Jun;33(2):97–100
The Ayurvedic medicines Haritaki, Amala and Bahira reduce cholesterol–induced atherosclerosis in rabbits. Thakur CP, et al. **Int J Cardiol** 1988 Nov;21(2):167–75
Screening for cytotoxic activity of plants used in traditional medicine. Chapuis JC, et al. **J Ethnopharmacol** 1988 Jul–Aug;23(2–3):273–84
Studies on the mechanism of action of Semecarpus anacardium in rheumatoid arthritis. Saraf MN, et al. **J Ethnopharmacol** 1989 Apr;25(2):159–64
Evaluation of the efficacy of Melothria maderaspatana in the alleviation of carbon tetrachloride–induced liver dysfunction. Thabrew MI, et al. **J Ethnopharmacol** 1988 Jul–Aug;23(2–3):305–12
The anti–ulcer effect in rats of ginger constituents. Yamahara J, et al. **J Ethnopharmacol** 1988 Jul–Aug;23(2–3):299–304
A new approach for the treatment of demyelinating diseases? Bohuslavizki KH, et al. **J Neuroimmunol** 1988 Dec; 20(2–3):251–2
Studies on antinephritic effect of TJ–8014, a new Japanese herbal medicine, and its mechanisms (1): Effects on original–type anti–GBM nephritis in rats and platelet aggregation. Hattori T, et al. **Jpn J Pharmacol** 1989 Aug; 50(4):477–85
Artemisia herba–alba extract for treating Enterobius vermicularis infection. al–Waili NS. **Trans R Soc Trop Med Hyg** 1988;82(4):626
[Clinical trial of the laksafer preparation on patients following gynecological operations] Doganov N, et al. **Akush Ginekol (Sofiia)** 1989;28(2):47–51 (Eng. Abstr.) **(Bul)**
[Misteltoe therapy of metastasizing kidney cancer. A phase II study (letter)] Heinzer I. **Ugeskr Laeger** 1988 Sep 26; 150(39):2352–4 **(Dan)**
[A new drug for hip dysplasia? (2) (letter)] Gloudemans MG. **Tijdschr Diergeneeskd** 1988 Nov 1;113(21):1208–9 **(Dut)**
[Efficacy of an extract of Ginkgo biloba in the treatment of chronic obliterating arteriopathies of the lower limbs in stage III of Fontaine's classification] Saudreau F, et al. **J Mal Vasc** 1989;14(3):177–82 (Eng. Abstr.) **(Fre)**
[Evaluation of 2 homeopathic products on the resumption of transit after digestive surgery. A multicenter controlled trial] **Presse Med** 1989 Jan 21;18(2):59–62 (Eng. Abstr.) **(Fre)**
[The action of a Chamenerion angustifolium extract in experimental influenza virus infection in mice] Vila S, et al. **Virologie** 1989 Apr–Jun;40(2):129–32 (Eng. Abstr.) **(Fre)**
[Ginkgo biloba extract and folic acid in the therapy of changes caused by autonomic neuropathy] Költringer P, et al. **Acta Med Austriaca** 1989;16(2):35–7 (Eng. Abstr.) **(Ger)**
[Personal experiences with naturopathy. Wound treatment with plant products. Wound medicines containing tannic acid (II)] Zimmermann W. **Fortschr Med** 1989 Mar 10; 107(7):20 **(Ger)**
[Therapy of chronic hepatitis B] Piontek M, et al. **Z Gastroenterol** 1989 Mar;27(3):151–2 **(Ger)**
[Eudermic activity of 2 dermo–protective products on the skin of the atopic child] Bleidl D, et al. **G Ital Dermatol Venereol** 1988 Apr;123(4):XIX–XXII (Eng. Abstr.) **(Ita)**
[A decrease in the toxic action of rubomycin on the small intestine of mice with a transplantable tumor through the use of a Rhodiola extract] Borovskaia TG, et al. **Antibiot Khimioter** 1988 Aug;33(8):615–7 **(Rus)**
[Clinico–immunologic effectiveness of chlorophyllypt in the treatment of acute destructive pneumonia] Simvolokov SI, et al. **Klin Med (Mosk)** 1989 Feb;67(2):108–12 (Eng. Abstr.) **(Rus)**
[Clinico–immunologic evaluation of saparal in the treatment of recurrent ulcers] Tsimmerman IaS, et al. **Klin Med (Mosk)** 1988 Jul;66(7):78–82 (Eng. Abstr.) **(Rus)**
[Experimental study of the efficacy of plant preparation–based ophthalmic ointments in penetrating corneal injuries] Nedel'ka AF, et al. **Oftalmol Zh** 1988; (7):429–31 (Eng. Abstr.) **(Rus)**
[Arfazetin in the treatment of diabetes mellitus] Korotkova VD, et al. **Probl Endokrinol (Mosk)** 1988 Jul–Aug; 34(4):25–8 (Eng. Abstr.) **(Rus)**
[Chlorophyllypt in the combined treatment of pulmonary tuberculosis and chronic alcoholism] Pilipchuk NS, et al. **Sov Med** 1988;(12):115 **(Rus)**
[New phyto– and synthetic spasmolytics in chronic acalculous cholecystitis] Tsimmerman IaS, et al. **Sov Med** 1989;(4):84–7 **(Rus)**
[Changes in the iris in the phytotherapy of digestive organ diseases] Filippenko VI, et al. **Voen Med Zh** 1989 Apr; (4):40–3 **(Rus)**
[Enhancement of the antitumor activity of the regenerating liver in rats by an extract of rose root] Udintsev SN, et al. **Vopr Onkol** 1989;35(5):618–20 **(Rus)**
[Experience in treating digestive organ diseases with medicinal plants] Krivenko VV, et al. **Vrach Delo** 1989 Mar;(3):76–8 (Eng. Abstr.) **(Rus)**

TOXICITY

Natural inhibitors of complement. IV. Systemic toxicity of the complement inhibitor from pokeweed fruits and the

effect of antioxidizing enzymes, glutathione and phenobarbital. Popescu C, et al. **Arch Roum Pathol Exp Microbiol** 1988 Jan–Mar; 47(1):37–41

Biochemical investigation of atractylis gummifera L. hepatotoxicyty in the rat. Hedili A, et al. **Arch Toxicol Suppl** 1989;13:312–5

Carcinogenicity studies of masheri, a pyrolysed product of tobacco. Kulkarni JR, et al. **Carcinogenesis** 1988 Nov; 9(11):2137–8

Mutagenic principles in Sinomeni Caulis et Rhizoma. II. The mutagenicity of liriodenine in the basic fraction of the methanol extract. Nozaka T, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):2259–62

In vitro and in vivo phototoxicity of furocoumarin–containing plants. Knudson EA, et al. **Clin Exp Dermatol** 1988 Mar;13(2):92–6

Weak carcinogenic effect of masheri, a pyrolysed tobacco product, in mouse skin tumor models. Kulkarni J, et al. **J Cancer Res Clin Oncol** 1989;115(2):166–9

Alteration of glucose–6–phosphatase activity and regenerative, and total DNA concentrations in regenerating and normal rat liver of aqueous extracts of two Nigerian plants. Oruambo IF. **J Environ Pathol Toxicol Oncol** 1989 Mar–Apr;9(2):191–9

Modifying effects of components of plant essence on the induction of sister–chromatid exchanges in cultured Chinese hamster ovary cells. Sasaki YF, et al. **Mutat Res** 1989 Jun;226(2):103–10

Mutagenic activity of Mintostachys mollis in AHH1 lymphoblast cells. Carvajal G, et al. **Plant Foods Hum Nutr** 1988;38(2):105–14

The developmental toxicity of an isolate from the plant Solanum dimidiatum (potato–weed) in Syrian golden hamsters. Casteel SW, et al. **Toxicon** 1989;27(7):757–62

Effects of Cassia obtusifolia (sicklepod) extracts and anthraquinones on muscle mitochondrial function. Lewis DC, et al. **Toxicon** 1989;27(5):519–29

Toxicity of isolated Lantana (Lantana camara L) constituents to male and female guinea pigs. Sharma OP, et al. **Vet Hum Toxicol** 1989 Feb;31(1):10–3

URINE

Detection and identification of the plant lignans lariciresinol, isolariciresinol and secoisolariciresinol in human urine. Bannwart C, et al. **Clin Chim Acta** 1989 Apr 14; 180(3):293–301

PLANT EXTRACTS, CHINESE see **DRUGS, CHINESE HERBAL**

PLANT GROWTH REGULATORS

18th annual UCLA symposium. Abstracts: Developmental biology. **J Cell Biochem Suppl** 1989;13C:237–96

On the use of 1H–NMR and 13C–NMR chemical shifts in a QSAR of benzotriazole derivatives. Caliendo G, et al. **Prog Clin Biol Res** 1989;291:387–90

[Utilization of plant growth regulators in medicinal plant production] Guo QS. **Chung Yao Tung Pao** 1988 Dec; 13(12):3–6, 57 (0 ref.) (Eng. Abstr.) **(Chi)**

[Role of auxin in increasing the output of Fritillaria thunbergii Miq.] Xu ZX, et al. **Chung Yao Tung Pao** 1988 Dec; 13(12):15–7, 57–8 (Eng. Abstr.) **(Chi)**

[Effect of hydrazine derivatives, plant growth regulators, on the cytochrome oxidase reaction] Avakian AKh, et al. **Izv Akad Nauk SSSR [Biol]** 1989 Mar–Apr;(2):302–4 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

[Gonadotoxic effect of dicurine after its intragastric administration by tube and with food] Shepel'skaia NR. **Gig Sanit** 1988 Nov;(11):78–9 **(Rus)**

BIOSYNTHESIS

Fusarium moniliforme Sheld. A fungus producing a broad spectrum of bioactive metabolites. Brückner B, et al. **Zentralbl Mikrobiol** 1989;144(1):3–12 (41 ref.)

GENETICS

Primary structure of a hormonally regulated beta–glucanase of Nicotiana plumbaginifolia. De Loose M, et al. **Gene** 1988 Oct 15;70(1):13–23

Nucleotide sequence, evolutionary origin and biological role of a rearranged cytokinin gene isolated from a wide host range biotype III Agrobacterium strain. Bonnard G, et al. **Mol Gen Genet** 1989 Apr;216(2–3):428–38

Sequence and distribution of IS866, a novel T region–associated insertion sequence from Agrobacterium tumefaciens. Bonnard G, et al. **Plasmid** 1989 Jul;22(1):70–81

Plant hormone mutants. King PJ. **Trends Genet** 1988 Jun; 4(6):157–62 (26 ref.)

HISTORY

Annales de l'Institut Pasteur, Volume 34, 1910: The presence and utility of boron in plants [classical article] Agulhon H. **Nutr Rev** 1988 Oct;46(10):353–5

ISOLATION & PURIFICATION

Immunochemical identification of a tRNA–independent cytokinin–like compound in Salmonella typhimurium. Blum PH, et al. **Biochim Biophys Acta** 1989 Mar 1; 1007(2):196–202

METABOLISM

Preparation by two–dimensional electrophoresis of proteins for antibody production: antibodies against proteins whose synthesis is reduced by auxin in tobacco mesophyll protoplasts. Meyer Y, et al. **Electrophoresis** 1988 Nov; 9(11):704–12

The interface of mycology and endocrinology. Stevens DA. **J Med Vet Mycol** 1989;27(3):133–40 (33 ref.)

PHARMACOLOGY

A rapid response to a plant hormone: auxin stimulates phospholipase A2 in vivo and in vitro. Scherer GF, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):111–7

[Growth–inhibiting action of platinum(II) complexes of the triamine and tetraamine types containing purines, pyrimidines and their nucleosides] Ivanov VB, et al. **Izv Akad Nauk SSSR [Biol]** 1988 Sep–Oct;(5):746–51 (Eng. Abstr.) **(Rus)**

[Isolation and partial characterization of poly–(a)+mRNA of soybean grown in the presence of gibberellic acid] Dzhokhadze DI, et al. **Ukr Biokhim Zh** 1989 May–Jun; 61(3):107–11 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Auxin–regulated gene expression in plants. Theologis A. **Biotechnology** 1989;12:229–43 (22 ref.)

Evidence of an auxin–mediated phosphoinositide turnover and an inositol (1,4,5)trisphosphate effect on isolated membranes of Daucus carota L. Zbell BA, et al. **J Cell Biochem** 1989 Jul;40(3):331–40

Effects of heat treatments and germination on trypsin inhibitor activity and polyphenols in jack bean (Canavalia ensiformis L. DC). Babar VS, et al. **Plant Foods Hum Nutr** 1988;38(4):319–24

TOXICITY

DNA methylation in rat liver by daminozide, 1,1–dimethylhydrazine, and dimethylnitrosamine. Sagelsdorff P, et al. **Fundam Appl Toxicol** 1988 Nov; 11(4):723–30

[Toxic properties of urorost] Elinskaia OL. **Gig Tr Prof Zabol** 1989;(3):47–8 **(Rus)**

PLANT HORMONES see **PLANT GROWTH REGULATORS**

PLANT LICE see **APHIDS**

PLANT OILS

Olive oil and liver cholesterol [letter] Beynen AC. **Am J Clin Nutr** 1989 Feb;49(2):392–4

Acute gastroenteritis in children––aetiology and comparison of two modes of treatment. Ooi BC, et al. **Ann Acad Med Singapore** 1989 Jan;18(1):40–2

Spanish toxic oil syndrome neuropathy in three patients with hereditary motor and sensory neuropathy type I. de Pablos C, et al. **Arch Neurol** 1989 Feb;46(2):202–4

Citrus oil: an effective vasodilator in rabbit blood collection [letter] Rao S. **Arch Toxicol** 1989;63(1):79

Studies on hypocholesterolemic activity of rice bran oil. Seetharamaiah GS, et al. **Atherosclerosis** 1989 Aug; 78(2–3):219–23

Distribution of bacteria in the rumen contents of dairy cows given a diet supplemented with soya–bean oil. Legay–Carmier F, et al. **Br J Nutr** 1989 May;61(3):725–40

Effects of an olive–oil–rich diet on erythrocyte membrane lipid composition and cation transport systems. Pagnan A, et al. **Clin Sci** 1989 Jan;76(1):87–93

Hyposensitization to poison ivy after working in a cashew nut shell oil processing factory. Reginella RF, et al. **Contact Dermatitis** 1989 Apr;20(4):274–9

Serum lipids, apoproteins and nutrient intake in rural Cretan boys consuming high–olive–oil diets. Aravanis C, et al. **J Clin Epidemiol** 1988;41(11):1117–23

Artificial liposomes as a model for studying the lipid peroxidation effect of p–phenylene diamine. Gupta V, et al. **J Microencapsul** 1989 Jul–Sep;6(3):311–8

The palm oil debate––health considerations. Chandrasekharan N. **Med J Malaysia** 1988 Mar;43(1):1–3

Comparative study of sandfly trapping techniques. Asimeng EJ. **Trop Med Parasitol** 1988 Jun;39(2):153–4

[Cholesterol: olive oil or seed oil] Pollari G, et al. **Riv Eur Sci Med Farmacol** 1987 Dec;9(4):423–5 (Eng. Abstr.) **(Ita)**

ADMINISTRATION & DOSAGE

Premalignant alterations in rat colonic N1–acetylspermidine levels induced by 1,2–dimethylhydrazine: effects of a high corn oil dietary regimen. Halline AG, et al. **Biochim Biophys Acta** 1989 Mar 24;990(3):280–7

Effect of different levels of omega–3 and omega–6 fatty acids on azoxymethane–induced colon carcinogenesis in F344 rats. Reddy BS, et al. **Cancer Res** 1988 Dec 1;48(23):6642–7

Effect of dietary palm oils on mammary carcinogenesis in female rats induced by 7,12–dimethylbenz(a)anthracene. Sundram K, et al. **Cancer Res** 1989 Mar 15;49(6):1447–51

Plasma cholecystokinin and gallbladder responses to intraduodenal fat in gallstone patients. Masclee AA, et al. **Dig Dis Sci** 1989 Mar;34(3):353–9

Changes in the concentration of metabolites in milk from cows fed on diets supplemented with soyabean oil or fatty acids. Faulkner A, et al. **J Dairy Res** 1989 May;56(2):179–83

A comparison of dietary fish oil and corn oil in experimental colorectal carcinogenesis. Nelson RL, et al. **Nutr Cancer** 1988;11(4):215–20

Dietary fat–induced hyperphagia in rats as a function of fat type and physical form. Lucas F, et al. **Physiol Behav** 1989 May;45(5):937–46

D–1 and D–2 receptor antagonists decrease corn oil sham feeding in rats. Weatherford SC, et al. **Physiol Behav** 1988; 44(4–5):569–72

Enhancement of immunosuppression by substitution of fish oil for olive oil as a vehicle for cyclosporine. Kelley VE, et al. **Transplantation** 1989 Jul;48(1):98–102

[Treatment of irritable bowel syndrome with peppermint oil. A double–blind study with a placebo] Lech Y, et al. **Ugeskr Laeger** 1988 Oct 3;150(40):2388–9 (Eng. Abstr.) **(Dan)**

[Olive oil–lipiodol mixture and anticancer agents (5FU, MMC) emulsion as a chemoembolic agent] Ohno K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Sep 25; 48(9):1189–91 (Eng. Abstr.) **(Jpn)**

[Effect of diet with changed fat composition on various indicators of lipid and energy metabolism in infants born with intrauterine dystrophy] Szotowa W, et al. **Pediatr Pol** 1974 Feb;49(2):143–7 (Eng. Abstr.) **(Pol)**

ADVERSE EFFECTS

Cholesterol vehicle in experimental atherosclerosis. A brief review with special reference to peanut oil. Kritchevsky D. **Arch Pathol Lab Med** 1988 Oct;112(10):1041–4 (34 ref.)

Irritant contact dermatitis due to the herbal oil, black man oil. Lee TY, et al. **Contact Dermatitis** 1989 Mar; 20(3):229–30

Factors affecting poor performance and scours in preruminant calves fed corn oil. Jenkins KJ. **J Dairy Sci** 1988 Nov;71(11):3013–20

Morphological evaluation of the atherogenicity of corn oil, hydrogenated corn oil, and butter fat in quail. Toda T, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Dec;34(6):615–26

Oil–seed rape [letter] Hannant D. **Vet Rec** 1988 Jul 2; 123(1):40

[Exanthema of the face (letter)] Frimodt–Møller J. **Ugeskr Laeger** 1988 Oct 17;150(42):2540 **(Dan)**

ANALYSIS

Pesticide residues in edible oils and oil seeds. Dikshith TS, et al. **Bull Environ Contam Toxicol** 1989 Jan;42(1):50–6

A new tumor promoter from the seed oil of Jatropha curcas L., an intramolecular diester of 12–deoxy–16–hydroxyphorbol. Hirota M, et al. **Cancer Res** 1988 Oct 15;48(20):5800–4

Cuphea: a new plant source of medium–chain fatty acids. Graham SA. **CRC Crit Rev Food Sci Nutr** 1989; 28(2):139–73 (158 ref.)

Gas chromatographic–mass spectrometric determination of epoxidized soybean oil contamination of foods by migration from plastic packaging. Castle L, et al. **J Assoc Off Anal Chem** 1988 Nov–Dec;71(6):1183–6

Determination of iodine value by bromine/instrumental neutron activation analysis. Iskander FY. **J Assoc Off Anal Chem** 1989 May–Jun;72(3):498–500

Determination of fluazifop–butyl and fluazifop acid in soybeans and soybean oil using liquid chromatography with oxidative amperometric detection. Worobey BL, et al. **J Assoc Off Anal Chem** 1989 Mar–Apr;72(2):368–71

Determination of oil oxidation by an aldehyde–requiring mutant of luminous bacteria. Berkovich A, et al. **J Biolumin Chemilumin** 1989 Jul–Sep;3(3):125–9

Analysis of palm oil carotenoids by HPLC with diode–array detection. Ng JH, et al. **J Chromatogr Sci** 1988 Sep; 26(9):463–9

Analysis of free malondialdehyde in photoirradiated corn oil and beef fat via a pyrazole derivative. Umano K, et al. **Lipids** 1988 Aug;23(8):811–4

Oil content and fatty acid composition of promising Indian Brassica campestris L. (Toria) genotypes. Ahuja KL, et al. **Plant Foods Hum Nutr** 1989 Jun;39(2):155–60

The essential oil of Hyptis pectinata. Malan K, et al. **Planta Med** 1988 Dec;54(6):531–2

Volatile constituents of Eugenia uniflora leaf oil. Weyerstahl P, et al. **Planta Med** 1988 Dec;54(6):546–9

Trans fatty acid content of selected brands of West German nut–nougat cream. Laryea MD, et al. **Z Ernahrungswiss** 1988 Dec;27(4):266–71

Determination of residual tetrachloroethylene in olive oil by headspace–gas chromatography. Van Rillaer W, et al. **Z Lebensm Unters Forsch** 1989 Mar;188(3):221–2

[Determination of cinnamaldehyde in cinnamon oil by gas chromatography] Zhang WG, et al. **Chung Yao Tung Pao** 1988 Dec;13(12):38–40, 60 (Eng. Abstr.) **(Chi)**

[Studies on the chemical constituents of Chinese sandalwood oil and preliminary structures of five novel compounds] Yu JG, et al. **Yao Hsueh Hsueh Pao** 1988 Nov; 23(11):868–72 (Eng. Abstr.) **(Chi)**

[Studies on high-performance liquid chromatographic analysis of safflomin A and B in safflower yellow (the extract of Carthamus tinctorius L.) and commercial safflower yellows] Goda Y, et al.
Eisei Shikenjo Hokoku 1988;(106):101-5 (Eng. Abstr.) **(Jpn)**

[Identification of polychlorinated phenyldibenzofurans (PCPDFs) in the casual rice oil associated with Yusho] Kuroki H, et al. **Fukuoka Igaku Zasshi** 1989 May; 80(5):189-95 (Eng. Abstr.) **(Jpn)**

[Peroxide content of dietary vegetable oils under various storage conditions] Golotin VG, et al. **Vopr Pitan** 1989 Jan-Feb;(1):68-9 **(Rus)**

[Identification of nutritious vegetable oils by their triglyceride composition] Liapkov BG, et al. **Vopr Pitan** 1988 May-Jun;(3):61-5 (Eng. Abstr.) **(Rus)**

[Wild and cultivated carrot greens as a potential nutritional and medicinal resource] Kilibarda V, et al.
Vojnosanit Pregl 1988 May-Jun;45(3):188-91 (Eng. Abstr.) **(Scr)**

BIOSYNTHESIS

Synthesis of the major oil-body membrane protein in developing rapeseed (Brassica napus) embryos. Integration with storage-lipid and storage-protein synthesis and implications for the mechanism of oil-body formation. Murphy DJ, et al. **Biochem J** 1989 Feb 15;258(1):285-93

ISOLATION & PURIFICATION

[Study of azulen in 3 subspecies of Achillea millefolium L.] Lamaison JL, et al. **Ann Pharm Fr** 1988;46(2):139-43 (Eng. Abstr.) **(Fre)**

METABOLISM

Macronutrient selection in an animal model of cholestatic liver disease. Deems RO, et al. **Appetite** 1988 Oct; 11(2):73-80

Lumenal hydrolysis of menhaden and rapeseed oils and their fatty acid methyl and ethyl esters in the rat. Yang LY, et al. **Biochem Cell Biol** 1989 Apr-May;67(4-5):192-204

Dietary supplementation of undernourished rats with soy or safflower oil: effects on myelin polyunsaturated fatty acids. Divakaran P, et al. **Metab Brain Dis** 1986 Jun;1(2):157-64

PHARMACOKINETICS

[Intraindividual comparison of the elimination kinetics of Lipofundin S and Intralipid in consecutive lipid tolerance tests] Leonhardt W, et al. **Infusionstherapie** 1988 Aug; 15(4):159-62 (Eng. Abstr.) **(Ger)**

[Biopharmaceutic research on the new ointment base Novadeps U] Verbuţă A, et al.
Rev Med Chir Soc Med Nat Iasi 1988 Jul-Sep;92(3):577-9 (Eng. Abstr.) **(Rum)**

[Use of mebendazole in a mixture with sunflower seed oil (pharmacokinetic research)] Lur'e AA, et al.
Med Parazitol (Mosk) 1988 Sep-Oct;(5):43-6 (Eng. Abstr.) **(Rus)**

[Clinical trial of the possibility of increasing the bioavailability of mebendazole using sunflower oil in echinococcosis] Shcherbakov AM, et al.
Med Parazitol (Mosk) 1989 May-Jun;(3):46-9 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Feeding of partially hydrogenated fish oils to rats in comparison with partially hydrogenated soybean oil and refined rapeseed oil: a combined chronic oral toxicity and carcinogenicity study with in utero phase. Duthie IF, et al. **Acta Med Scand Suppl** 1988;726:1-89

Experimental atherosclerosis in rabbits fed cholesterol-free diets. 13. Interaction of proteins and fat. Kritchevsky D, et al. **Atherosclerosis** 1989 Feb;75(2-3):123-7

Effects of corn oil- and fish oil-supplemented diets on phospholipid fatty acid composition of rat liver nuclei. Iritani N, et al. **Biochim Biophys Acta** 1988 Nov 25; 963(2):224-30

Dietary effects of omega 3-fatty acids on intestinal transport function. Thomson AB, et al. **Can J Physiol Pharmacol** 1988 Aug;66(8):985-92

Postpromotional effects of dietary marine or safflower oils on large bowel or pulmonary implants of CT-26 in mice. Cannizzo F Jr, et al. **Cancer Res** 1989 Aug 1;49(15):4289-94

Effects of fish oil and corn oil diets on prostaglandin-dependent and myelopoiesis-associated immune suppressor mechanisms of mice bearing metastatic Lewis lung carcinoma tumors. Young MR, et al.
Cancer Res 1989 Apr 15;49(8):1931-6

Influence of absorbable and nonabsorbable lipids and lipidlike substances on drug bioavailability. Roberts RJ, et al.
Clin Pharmacol Ther 1989 Mar;45(3):299-304

Influence of diet on the expression of hepatotoxicity from carbon tetrachloride in ICR mice. Shertzer HG, et al.
Drug Nutr Interact 1988;5(4):275-82

Experimental study of the cholagogic and choleretic actions of essential oils extracted from locally grown and introduced plants. Rangelov A, et al.
Folia Med (Plovdiv) 1987;29(4):30-40

Laboratory evaluation of essential oil of Mentha piperita Linn. against Trichophyton mentagrophytes. Rai MK, et al. **Hindustan Antibiot Bull** 1988 Aug-Nov;30(3-4):82-4

Effect of certain volatile oils on ejaculated human spermatozoa. Buch JG, et al. **Indian J Med Res** 1988 Apr; 87:361-3

Mechanism of antifertility action of neem oil. Riar SS, et al. **Indian J Med Res** 1988 Oct;88:339-42

Pharmacological activity of the essential oil of Bupleurum gibraltaricum: anti-inflammatory activity and effects on isolated rat uteri. Ocete MA, et al. **J Ethnopharmacol** 1989 May;25(3):305-13

Pharmacologic screening and antimicrobial activity of the essential oil of Calamintha sylvatica subsp. ascendens. Ortiz de Urbina AV, et al. **J Ethnopharmacol** 1988 Jul-Aug; 23(2-3):323-8

Patterns of lipogenesis in laying hens fed a high fat diet containing safflower oil. Naber EC, et al. **J Nutr** 1989 May; 119(5):690-5

A study of the early morphological changes initiated in the uterine luminal epithelium by substances (oil and carrageenan) which induce the decidual cell reaction in mice. Finn CA, et al. **J Reprod Fertil** 1989 Jul;86(2):619-26

Effect of dietary alpha-linolenate/linoleate balance on mean survival time, incidence of stroke and blood pressure of spontaneously hypertensive rats. Shimokawa T, et al.
Life Sci 1988;43(25):2067-75

Eicosanoid synthesis in 7,12-dimethylbenz(a)anthracene-induced mammary carcinomas in Sprague-Dawley rats fed primrose oil, menhaden oil or corn oil diet. Abou-el-Ela SH, et al.
Lipids 1988 Oct;23(10):948-54

Effects of dietary palm oil on arterial thrombosis, platelet responses and platelet membrane fluidity in rats. Rand ML, et al. **Lipids** 1988 Nov;23(11):1019-23

Fungitoxic properties of the essential oil of Citrus limon (L.) Burm. against a few dermatophytes. Misra N, et al.
Mycoses 1988 Jul;31(7):380-2

Dietary fat-induced hyperphagia in rats as a function of fat type and physical form. Lucas F, et al. **Physiol Behav** 1989 May;45(5):937-46

Serum and liver lipids of rats fed rubber seed oil. Nwokolo E, et al. **Plant Foods Hum Nutr** 1988;38(2):145-53

Effects of dietary corn oil and salmon oil on the oxidation of fatty acids and prostaglandin E2 in rat gastric mucosa. Vamecq J, et al. **Prostaglandins** 1989 Mar;37(3):335-44

Uniqueness of dietary olive oil in stimulating aortic prostacyclin production in post-weanling rats. Blankenship JW, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Apr;36(1):31-4

[Effect of fish oil and soybean oil on plasma lipids in rats] Chang WK, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Oct; 42(4):233-40 (Eng. Abstr.) **(Chi)**

[Ingestion of soybean epoxide oil. Effects on monooxygenases, epoxide hydrolase and activities of UDP glucuronosyltransferases in hepatic microsomes of the rat] Mounié J, et al. **C R Soc Biol (Paris)** 1988;182(1):105-17 (Eng. Abstr.) **(Fre)**

[Anticarcinogenesis activity of natural carotenes] Nishino H, et al. **C R Soc Biol (Paris)** 1989;183(1):85-9 (Eng. Abstr.) **(Fre)**

[Effects of addition of palmitostearin or soybean oil on the protozoa in the rumen of dairy cows and sheep] Bauchart D, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:85-6 (Eng. Abstr.) **(Fre)**

[Effects of a duodenal infusion of rapeseed oil in cows in full lactation. 1. Food intake, production and composition of milk, content of circulating metabolites] Chilliard Y, et al. **Reprod Nutr Dev** 1988;28 Suppl 1:173-4 (Eng. Abstr.) **(Fre)**

[Effects of a duodenal infusion of rapeseed oil in cows in full lactation. 2. Lipogenic and lipolytic activities of the perirenal adipose tissue] Gagliostro G, et al.
Reprod Nutr Dev 1988;28 Suppl 1:175-6 (Eng. Abstr.) **(Fre)**

[Effect of fats on the emptying function of the gastric stump and small intestine in patients after gastrectomy by the Billroth II method] Saakia AR, et al. **Ter Arkh** 1989; 61(2):49-51 (Eng. Abstr.) **(Rus)**

[Effect of a fat emulsion on cellular immunity in experimental parenteral feeding] Kachorovskiĭ BV, et al. **Vopr Pitan** 1988 Sep-Oct;(5):51-4 (Eng. Abstr.) **(Rus)**

POISONING

Spanish toxic oil syndrome neuropathy in three patients with hereditary motor and sensory neuropathy type I. de Pablos C, et al. **Arch Neurol** 1989 Feb;46(2):202-4

Polychlorinated biphenyls and polychlorinated dibenzofurans in the tissues of patients with yusho or yu-chen: total toxicity. Olafsson PG, et al.
Bull Environ Contam Toxicol 1988 Jul;41(1):63-70

Pulmonary hypertension due to toxic oil syndrome. A clinicopathologic study. Gómez-Sánchez MA, et al.
Chest 1989 Feb;95(2):325-31

Synthesis of N-(5-vinyl-1,3-thiazolidin-2-ylidene)phenylamine and analysis of oils implicated in the Spanish toxic oil syndrome for its presence. Bernert JT Jr, et al.
Food Chem Toxicol 1989 Mar;27(3):159-64

Several aspects of mineral/protein nutrition in relation to consumption of an oil involved in the toxic syndrome. Navarro MP, et al. **Food Chem Toxicol** 1988 Sep; 26(9):759-65

Structural identification of a heterocyclic compound implicated in the Spanish toxic oil syndrome. Nomura GS, et al. **Food Chem Toxicol** 1989 Mar;27(3):165-71

Spanish toxic oil syndrome: an isothiocyanate-derived compound cannot be substantiated as a causative agent [letter] Verhaar HJ, et al. **Food Chem Toxicol** 1989 Mar; 27(3):205-6

A comparative study on polychlorinated biphenyls (PCB) and polychlorinated quaterphenyls (PCQ) concentrations in subcutaneous fat tissue, blood and hair of patients with Yusho and normal control in Nagasaki prefecture. Ohgami T, et al. **Fukuoka Igaku Zasshi** 1989 May;80(5):307-12

Fair dinkum koala kuisine--eucalyptus oil poisoning. Mack RB. **N C Med J** 1988 Nov;49(11):599-600

Eucalyptus oil: 14 cases of exposure. Spoerke DG, et al.
Vet Hum Toxicol 1989 Apr;31(2):166-8

[Analysis of PCB- and PCT-methylsulfones in the blood in Yusho patients] Haraguchi K, et al.
Fukuoka Igaku Zasshi 1989 May;80(5):291-5 (Eng. Abstr.) **(Jpn)**

[Dermatological findings in the annual examination of the patients with Yusho in 1987-1988--with special reference to the alteration of the skin symptoms in the patients followed up for 20 years] Honbo S, et al.
Fukuoka Igaku Zasshi 1989 May;80(5):324-30 (Eng. Abstr.) **(Jpn)**

[Polychlorinated dibenzofurans (PCDFs) in the subcutaneous adipose tissue of Yusho patients and normal controls] Iida T, et al. **Fukuoka Igaku Zasshi** 1989 May;80(5):296-301 (Eng. Abstr.) **(Jpn)**

[Polychlorinated dibenzo-p-dioxins in the subcutaneous adipose tissue of Yusho patients] Iida T, et al.
Fukuoka Igaku Zasshi 1989 May;80(5):302-6 (Eng. Abstr.) **(Jpn)**

[Introduction of the information processing system of medical examinations of Yusho patients and some results obtained by the 1986 survey] Kataoka K, et al.
Fukuoka Igaku Zasshi 1989 May;80(5):331-41 (Eng. Abstr.) **(Jpn)**

[Renal function in patients with Yusho] Murai K, et al.
Fukuoka Igaku Zasshi 1989 May;80(5):318-23 (Eng. Abstr.) **(Jpn)**

[Statistical analysis of subjects with type A, BC and C pattern of blood PCB on GC] Nakagawa R, et al.
Fukuoka Igaku Zasshi 1989 May;80(5):287-90 (Eng. Abstr.) **(Jpn)**

[Concentration changes in PCB isomers in the blood in patients with PCB poisoning] Ohma M, et al.
Fukuoka Igaku Zasshi 1989 May;80(5):281-6 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Fish oil and plasma fibrinogen [letter] Gans RO, et al.
BMJ 1988 Oct 15;297(6654):978-9

Evening primrose oil and olive oil in treatment of rheumatoid arthritis. Jäntti J, et al. **Clin Rheumatol** 1989 Jun;8(2):238-44

Menhaden fish oil, n-3 polyunsaturated fatty acids, and protection of newborn rats from oxygen toxicity. Sosenko IR, et al. **Pediatr Res** 1989 Apr;25(4):399-404

[Chemoprophylactic activity of soaps containing essential oil from the fruit of Pterodon pubescens in schistosomiasis mansoni] Santos Filho D, et al.
Mem Inst Oswaldo Cruz 1987;82 Suppl 4:343-5 (Eng. Abstr.) **(Por)**

[Experimental study of wound-healing effect of the preparation "Aekol" (artificial sea buckthorn oil)] Kostrikova EV. **Ortop Travmatol Protez** 1989 Jan;(1):32-6 (Eng. Abstr.) **(Rus)**

[Antiulcerogenic properties of bran rice oil in rats] Gimeno Forner L, et al. **Rev Esp Enferm Apar Dig** 1989 Mar; 75(3):225-30 (Eng. Abstr.) **(Spa)**

TOXICITY

The effect of avocado oils on some liver characteristics in growing rats. Werman MJ, et al. **Food Chem Toxicol** 1989 May;27(5):279-82

Teratological evaluation of Juniperus sabina essential oil in mice. Pages N, et al. **Planta Med** 1989 Apr;55(2):144-6

Mutagenic lipid peroxides from edible oils. Kensese SM, et al. **Teratogenesis Carcinog Mutagen** 1989;9(3):133-45

Biochemical toxicology of argemone alkaloids. III. Effect on lipid peroxidation in different subcellular fractions of the liver. Upreti KK, et al. **Toxicol Lett** 1988 Sep; 42(3):301-8

PLANT POISONING

Chechum (poison sap tree) toxin, a potent activator of protein kinase C [letter] Markby DP, et al. **Lancet** 1989 Jun 10; 1(8650):1320

Amyotrophic lateral sclerosis and Parkinson's disease complex on Guam linked to an environmental neurotoxin. Kurland LT. **Trends Neurosci** 1988 Feb;11(2):51-4 (38 ref.)

Commentary on a review on the mechanism of ackee-induced vomiting sickness. Kean EA.
West Indian Med J 1988 Sep;37(3):139-42

[Dieffenbachia and toxicological problems] Jícha J, et al.
Cesk Pediatr 1989 May;44(5):305-7 **(Cze)**

[Familial poisoning with the root of the plant, Scopolia carniolica Jacq.] Cuculić M, et al.
Arh Hig Rada Toksikol 1988 Sep;39(3):345-8 (Eng. Abstr.) **(Scr)**

BLOOD

Detection of poisoning by plant-origin cardiac glycoside with the Abbott TDx analyzer. Cheung K, et al. **Clin Chem** 1989 Feb;35(2):295-7

COMPLICATIONS

Aconite intoxication and cardiac arrhythmias [letter] Gohel DR, et al. **J Assoc Physicians India** 1989 Mar;37(3):245

A rare case of poisoning by Gloriosa superba. Jose J, et al. **J Assoc Physicians India** 1988 Jul;36(7):451-2

Yellow oleander (cerbera thevetia) poisoning with jaundice and renal failure. Samal KK, et al. **J Assoc Physicians India** 1989 Mar;37(3):232-3

Hepatic veno-occlusive disease and herbal teas [letter; comment] Ridker PM. **J Pediatr** 1989 Jul;115(1):167. **Comment on:** J Pediatr 1988 Mar;112(3):433-6

Toxic shock syndrome associated with poison oak dermatitis. Kishaba RG, et al. **Pediatr Emerg Care** 1989 Mar;5(1):40-2

DIAGNOSIS

Comments on diagnosis of intoxication due to taxus. Smith RA. **Vet Hum Toxicol** 1989 Apr;31(2):177

EPIDEMIOLOGY

[Clinico-epidemiologic study of accidental poisoning with Robinia pseudoacacia L. in school children] Artero Sivera A, et al. **An Esp Pediatr** 1989 Mar;30(3):191-4 (35 ref.) (Eng. Abstr.) **(Spa)**

ETIOLOGY

Five cases of Thermopsis poisoning. Spoerke DG, et al. **J Toxicol Clin Toxicol** 1988;26(5-6):397-406

Fate accompli. Rhododendron toxicity. Mack RB. **N C Med J** 1988 Jul;49(7):363-4

HISTORY

The first use of physostigmine in the treatment of atropine poisoning. A translation of Kleinwachter's paper entitled 'Observations on the effect of Calabar bean extract as an antidote to atropine poisoning' [classical article] Nickalls RW, et al. **Anaesthesia** 1988 Sep;43(9):776-9

PATHOLOGY

Poisoning by toxic plants in China. Report of 19 autopsy cases. Zhang YG, et al. **Am J Forensic Med Pathol** 1988 Dec;9(4):313-9

[Toxic rhabdomyolysis and tubular necrosis in hemlock poisoning. 4 case reports] Rizzi D, et al. **Clin Ter** 1988 Feb 15;124(3):193-201 (Eng. Abstr.) **(Ita)**

VETERINARY

Toxicosis in pigs fed selenium-accumulating Astragalus plant species or sodium selenate. Baker DC, et al. **Am J Vet Res** 1989 Aug;50(8):1396-9

Comments on pine needle-induced changes in cows having premature births [letter] Conley AJ. **Am J Vet Res** 1989 Jun;50(6):995

Evaluation of histopathologic and physiologic changes in cows having premature births after consuming Ponderosa pine needles. Jensen R, et al. **Am J Vet Res** 1989 Feb; 50(2):285-9

Adonis microcarpa (pheasant's eye) toxicity in pigs fed field pea screenings. Davies RL, et al. **Aust Vet J** 1989 May; 66(5):141-3

Acute oxalate toxicity of sheep associated with slender iceplant (Mesembryanthemum nodiflorum). Jacob RH, et al. **Aust Vet J** 1989 Mar;66(3):91-2

Treatment of lantana poisoning in cattle. McLennan MW, et al. **Aust Vet J** 1989 Mar;66(3):93-4

Carcinogen in rock fern (Chielanthes sieberi) from New Zealand and Australia. Smith BL, et al. **Aust Vet J** 1989 Jul;66(7):230-1

Vaccination as a possible means of preventing lantana poisoning. Stewart C, et al. **Aust Vet J** 1988 Nov; 65(11):349-52

A fatal case of oak poisoning in a double-wattled cassowary (Casuarius casuarius). Kinde H. **Avian Dis** 1988 Oct-Dec; 32(4):849-51

Pine needle abortion in cattle: a review and report of 1973-1984 research. James LF, et al. **Cornell Vet** 1989 Jan; 79(1):39-52 (41 ref.)

Pine needle abortion in cattle: associated changes in serum cortisol, estradiol and progesterone. Short RE, et al. **Cornell Vet** 1989 Jan;79(1):53-60

Pine needle abortion in cattle: pathological observations. Stuart LD, et al. **Cornell Vet** 1989 Jan;79(1):61-9

Dopaminergic-like activity in toxic fescue alters prolactin but not growth hormone or thyroid stimulating hormone in ewes. Elsasser TH, et al. **Domest Anim Endocrinol** 1987 Oct;4(4):259-69

Effects of induced fescue toxicosis on plasma and tissue catecholamine concentrations in sheep. Henson MC, et al. **Domest Anim Endocrinol** 1987 Jan;4(1):7-15

Thermopsis montana-induced myopathy in calves. Baker DC, et al. **J Am Vet Med Assoc** 1989 May 1;194(9):1269-72

Hound's-tongue (Cynoglossum officinale) poisoning in a calf. Baker DC, et al. **J Am Vet Med Assoc** 1989 Apr 1; 194(7):929-30

Confusion over toxicity of poinsettia [letter] Hornfeldt CS. **J Am Vet Med Assoc** 1989 Apr 15;194(8):1004

Toxicosis in tule elk caused by ingestion of poison hemlock. Jessup DA, et al. **J Am Vet Med Assoc** 1986 Nov 1; 189(9):1173-5

Apparent toxicosis associated with lily-of-the-valley (Convallaria majalis) ingestion in a dog. Moxley RA, et al. **J Am Vet Med Assoc** 1989 Aug 15;195(4):485-7

Delayed phalaris grass toxicosis in sheep and cattle. Nicholson SS, et al. **J Am Vet Med Assoc** 1989 Aug 1; 195(3):345-6

Compensatory weight gain in steers recovered from oak bud toxicosis. Ostrowski SR, et al. **J Am Vet Med Assoc** 1989 Aug 15;195(4):481-4

Black walnut toxicosis in ten horses. Uhlinger C. **J Am Vet Med Assoc** 1989 Aug 1;195(3):343-4

Toxicity and metabolism of pyrrolizidine alkaloids. Cheeke PR. **J Anim Sci** 1988 Sep;66(9):2343-50 (49 ref.)

Livestock models of human birth defects, reviewed in relation to poisonous plants. Keeler RF. **J Anim Sci** 1988 Sep;66(9):2414-27 (87 ref.)

Economic impact of poisonous plants on the rangeland livestock industry. Nielsen DB. **J Anim Sci** 1988 Sep; 66(9):2330-3

Toxicoses in livestock from the hemlocks (Conium and Cicuta spp.). Panter KE, et al. **J Anim Sci** 1988 Sep; 66(9):2407-13 (27 ref.)

Cattle grazing Wahweap milkvetch in southeastern Utah. Ralphs MH, et al. **J Anim Sci** 1988 Dec;66(12):3124-30

Plant-animal interactions in larkspur poisoning in cattle. Ralphs MH, et al. **J Anim Sci** 1988 Sep;66(9):2334-42 (44 ref.)

Poisoning of wildlife in southern Africa. Basson PA. **J S Afr Vet Assoc** 1987 Dec;58(4):219-28 (43 ref.)

Acute Lantana camara toxicity in cattle. Fourie N, et al. **J S Afr Vet Assoc** 1987 Dec;58(4):173-8

Clinical pathological changes in gousiekte, a plant-induced cardiotoxicosis of ruminants. Fourie N, et al. **Onderstepoort J Vet Res** 1989 Mar;56(1):73-80

A field outbreak in Ile-de-France sheep of a cardiotoxicosis caused by the plant Pachystigma pygmaeum (Schltr) Robyns (Rubiaceae). Prozesky L, et al. **Onderstepoort J Vet Res** 1988 Dec;55(4):193-6

Identification of the phenolic substances in bovine urine associated with oak leaf poisoning. Shi ZC. **Res Vet Sci** 1988 Sep;45(2):152-5

Plants causing sudden death in livestock. Burrows GE, et al. **Vet Clin North Am Food Anim Pract** 1989 Jul; 5(2):263-89 (22 ref.)

Tremorgenic syndromes in livestock. Nicholson SS. **Vet Clin North Am Food Anim Pract** 1989 Jul;5(2):291-300 (6 ref.)

Photosensitization problems in livestock. Rowe LD. **Vet Clin North Am Food Anim Pract** 1989 Jul;5(2):301-23 (100 ref.)

Neurological disorders in sheep during signal grass (Brachiaria decumbens) toxicity. Abdullah AS, et al. **Vet Hum Toxicol** 1989 Apr;31(2):128-9

Isolation of a steroidal sapogenin from the bile of a sheep fed Agave lecheguilla. Camp BJ, et al. **Vet Hum Toxicol** 1988 Dec;30(6):533-5

Rhododendron macrophyllum poisoning in a group of goats and sheep. Casteel S, et al. **Vet Hum Toxicol** 1989 Apr; 31(2):176-7

Acute poisoning of cows by autumnal crocus. Chareyre S, et al. **Vet Hum Toxicol** 1989 Jun;31(3):261-2

Experimental Chrozophora plicata poisoning in goats and sheep. Galal M, et al. **Vet Hum Toxicol** 1988 Oct; 30(5):447-52

Individual animal susceptibility and its relationship to induced adaptation or tolerance in sheep to Galega officinalis L. Keeler RF, et al. **Vet Hum Toxicol** 1988 Oct;30(5):420-3

Taxus (yews)--a highly toxic plant. Ogden L. **Vet Hum Toxicol** 1988 Dec;30(6):563-4

The relationship of Oxytropis sericea (green and dry) and Astragalus lentiginosus with high mountain disease in cattle. Panter KE, et al. **Vet Hum Toxicol** 1988 Aug; 30(4):318-23

Transient testicular degeneration in rams fed locoweed (Astragalus lentiginosus). Panter KE, et al. **Vet Hum Toxicol** 1989 Feb;31(1):42-6

Photosensitization of cattle in Montana: is Descurainia pinnata the culprit? Pfister JA, et al. **Vet Hum Toxicol** 1989 Jun;31(3):225-7

Evaluation of Cassia obtusifolia (sicklepod) seed consumption in Holstein calves. Putnam MR, et al. **Vet Hum Toxicol** 1988 Aug;30(4):316-8

Acute weakness and death in a cat. Rose A, et al. **Vet Hum Toxicol** 1988 Aug;30(4):334-5

Accidental Conium maculata poisoning in the rabbit. Short SB, et al. **Vet Hum Toxicol** 1989 Feb;31(1):54-7

Kochia (Kochia scoparia) toxicosis in cattle: results of four experimental grazing trials. Thilsted J, et al. **Vet Hum Toxicol** 1989 Feb;31(1):34-41

Poisoning of sheep by Astragalus lusitanicus in Morocco: field and experimental studies. el-Hamidi M, et al. **Zentralbl Veterinarmed** [A] 1989 Feb;36(2):115-21

[Neurotoxic syndrome of sheep due to the ingestion of plants of the Mediterranean scrub: clinical, histopathological, histochemical and ultrastructural observations] Leoni A, et al. **Schweiz Arch Tierheilkd** 1989;131(6):361-8 (Eng. Abstr.) **(Ita)**

PLANT PROTEINS

Analysis of the near-ultraviolet absorption and circular dichroic spectra of parsley plastocyanin for the effects of pH and copper center conformation changes. Durell SR, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):217-27

500 MHz 1H NMR of chlorophylls in the major light-harvesting chlorophyll-protein complex of photosystem II. Dijkema C, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1085-92

Hydrophobic-cluster analysis of plant protein sequences. A domain homology between storage and lipid-transfer proteins. Henrissat B, et al. **Biochem J** 1988 Nov 1; 255(3):901-5

Conformational studies of a synthetic peptide corresponding to the repeat motif of C hordein. Tatham AS, et al. **Biochem J** 1989 Apr 15;259(2):471-6

Tyrosine hydrogen-bonding and environmental effects in proteins probed by ultraviolet resonance Raman spectroscopy. Hildebrandt PG, et al. **Biochemistry** 1988 Jul 26;27(15):5426-33

1H NMR studies of plastocyanin from Scenedesmus obliquus: complete sequence-specific assignment, secondary structure analysis, and global fold. Moore JM, et al. **Biochemistry** 1988 Oct 4;27(20):7806-16

Interactions between native oat phytochrome and tetrapyrroles. Singh BR, et al. **Biochim Biophys Acta** 1989 Jun 13;996(1-2):62-9

Amino acid sequence of a crystalline seed albumin (winged bean albumin-1) from Psophocarpus tetragonolobus (L.) DC. Sequence similarity with Kunitz-type seed inhibitors and 7S storage globulins. Kortt AA, et al. **Eur J Biochem** 1989 May 1;181(2):403-8

N-terminal sequencing of photosystem II low-molecular-mass proteins. 5 and 4.1 kDa components of the O2-evolving core complex from higher plants. Ikeuchi M, et al. **FEBS Lett** 1989 Jan 2;242(2):263-9

COOH-terminal residues of D1 and the 44 kDa CPa-2 at spinach photosystem II core complex. Takahashi M, et al. **FEBS Lett** 1988 Nov 21;240(1-2):6-8

Amino acid sequence of Mirabilis antiviral protein, total synthesis of its gene and expression in Escherichia coli. Habuka N, et al. **J Biol Chem** 1989 Apr 25;264(12):6629-37

Molecular cloning of a Chinese hamster mitochondrial protein related to the "chaperonin" family of bacterial and plant proteins. Picketts DJ, et al. **J Biol Chem** 1989 Jul 15;264(20):12001-8

Hormonotoxins. Preparation and characterization of ovine luteinizing hormone-gelonin conjugate. Singh V, et al. **J Biol Chem** 1989 Feb 25;264(6):3089-95

Complete assignment of the 1H nuclear magnetic resonance spectrum of French bean plastocyanin. Application of an integrated approach to spin system identification in proteins. Chazin WJ, et al. **J Mol Biol** 1988 Aug 5; 202(3):603-22

Complete assignment of the 1H nuclear magnetic resonance spectrum of French bean plastocyanin. Sequential resonance assignments, secondary structure and global fold. Chazin WJ, et al. **J Mol Biol** 1988 Aug 5;202(3):623-36

Preparation and preliminary X-ray studies of two crystal forms of the anti-T lectin from jackfruit (Artocarpus integrifolia) [letter] Dhanaraj V, et al. **J Mol Biol** 1988 Oct 20;203(4):1135-6

Structure of the complex of Streptomyces griseus proteinase B and polypeptide chymotrypsin inhibitor-1 from Russet Burbank potato tubers at 2.1 A resolution. Greenblatt HM, et al. **J Mol Biol** 1989 Jan 5;205(1):201-28

Preliminary crystallographic analysis of a plant pathogenic factor: pectate lyase. Kim CY, et al. **J Mol Biol** 1989 Jul 20;208(2):365-7

Two-dimensional structure of plant light-harvesting complex at 37 A resolution by electron crystallography. Kühlbrandt W, et al. **J Mol Biol** 1989 Jun 20;207(4):823-8

Structure of light-harvesting chlorophyll a/b protein complex from plant photosynthetic membranes at 7 A resolution in projection. Kühlbrandt W. **J Mol Biol** 1988 Aug 20;202(4):849-64

Three-dimensional model of stellacyanin and its implications for electron transfer reactivity. Wherland S, et al. **J Mol Biol** 1988 Nov 20;204(2):407-15

Resonance Raman spectra of the Pr-form of phytochrome. Fodor SP, et al. **Photochem Photobiol** 1988 Aug; 48(2):129-36

Determination of three-dimensional structures of proteins by simulated annealing with interproton distance restraints. Application to crambin, potato carboxypeptidase inhibitor and barley serine proteinase inhibitor 2. Nilges M, et al. **Protein Eng** 1988 Apr;2(1):27-38

Test of circular dichroism (CD) methods for crambin and CD-assisted secondary structure prediction of its homologous toxins. Teeter MM, et al. **Proteins** 1988; 4(4):262-73

The photosystem I reaction centre. Knaff DB. **Trends Biochem Sci** 1988 Dec;13(12):460-1 (26 ref.)

[Factorial analysis on artificial termination of pregnancy using trichosanthin] Wang DZ, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Aug;8(8):461-3, 451-2 (Eng. Abstr.) **(Chi)**

ADMINISTRATION & DOSAGE

B-cell restricted saporin immunotoxins: activity against B-cell lines and chronic lymphocytic leukemia cells. Bregni

M, et al. **Blood** 1989 Feb 15;73(3):753–62
Evaluation of white lupines and triticale in calf starter diets. Wright KL, et al. **J Dairy Sci** 1989 Apr;72(4):1002–11
Bispecific F(ab' gamma)2 antibody for the delivery of saporin in the treatment of lymphoma. Glennie MJ, et al. **J Immunol** 1988 Nov 15;141(10):3662–70

ANALYSIS

High-resolution two-dimensional electrophoresis of plant proteins. Holloway PJ, et al. **Anal Biochem** 1988 Jul; 172(1):8–15
Reestimations of the protein concentrations of birch pollen allergen extracts selected as candidates for the international standard (IS) preparation. Vik H, et al. **Ann Allergy** 1989 Feb;62(2):87–90
Evidence for function of the ferredoxin/thioredoxin system in the reductive activation of target enzymes of isolated intact chloroplasts. Crawford NA, et al. **Arch Biochem Biophys** 1989 May 15;271(1):223–39
Superoxide production in aprotic interior of chloroplast thylakoids. Takahashi M, et al. **Arch Biochem Biophys** 1988 Dec;267(2):714–22
Thylakoid membrane protein topography: transmembrane orientation of the chloroplast cytochrome b-559 psbE gene product. Tae GS, et al. **Biochemistry** 1988 Dec 27; 27(26):9075–80
Amino acid composition of peptides remaining after in vitro digestion of a gliadin sub-fraction with duodenal mucosa from patients with coeliac disease. Cornell HJ. **Clin Chim Acta** 1988 Sep 15;176(3):279–89
Enzyme-linked immunosorbent assay for quantitation of cereal proteins toxic in coeliac disease. Friis SU. **Clin Chim Acta** 1988 Dec 30;178(3):261–70
Two-dimensional electrophoresis of plant proteins. **Electrophoresis** 1988 Nov;9(11):681–796
Comparative study of electrophoretic patterns of latex proteins from clones of Hevea brasiliensis. Arreguin B, et al. **Electrophoresis** 1988 Jul;9(7):323–6
Wheat cultivar identification by a totally automatic soft-laser scanning densitometry and computer-aided analysis of protein electropherograms. Autran JC, et al. **Electrophoresis** 1988 May;9(5):205–13
A two-dimensional electrophoresis procedure for single meristems of different forest species. Bon MC. **Electrophoresis** 1989 Jul;10(7):530–2
A continuous acetic acid system for polyacrylamide gel electrophoresis of gliadins and other prolamines. Clements RL. **Electrophoresis** 1988 Feb;9(2):90–3
Genetic aspects of variation of protein amounts in maize and pea. de Vienne D, et al. **Electrophoresis** 1988 Nov; 9(11):742–50
The use of two-dimensional gel electrophoresis in the analysis of organ-specific maize proteins. Goday A, et al. **Electrophoresis** 1988 Nov;9(11):738–41
Two-dimensional electrophoresis with immobilized pH gradients of leaf proteins from barley (Hordeum vulgare): method, reproducibility and genetic aspects. Görg A, et al. **Electrophoresis** 1988 Nov;9(11):681–92
Use of electrophoretic techniques in determining the composition of seed storage proteins in alfalfa. Krochko JE, et al. **Electrophoresis** 1988 Nov;9(11):751–63
The use of ultrathin-layer polyacrylamide gel isoelectric focusing in two-dimensional analysis of plant and fungal proteins. Marlow GC, et al. **Electrophoresis** 1988 Nov; 9(11):693–704
Preparation by two-dimensional electrophoresis of proteins for antibody production: antibodies against proteins whose synthesis is reduced by auxin in tobacco mesophyll protoplasts. Meyer Y, et al. **Electrophoresis** 1988 Nov; 9(11):704–12
Determination of molecular mass, Stokes' radius, frictional coefficient and isomer-type of non-denatured proteins by time-dependent pore gradient gel electrophoresis. Rothe GM. **Electrophoresis** 1988 Jul;9(7):307–16
Primary structure of the major allergen of yellow mustard (Sinapis alba L.) seed, Sin a I. Menéndez-Arias L, et al. **Eur J Biochem** 1988 Oct 15;177(1):159–66
The rotational diffusion of chloroplast phosphate translocator and of lipid molecules in bilayer membranes. Wagner R, et al. **Eur J Biochem** 1989 Jun 1;182(1):165–73
Identification of photosystem I components from the cyanobacterium, Synechococcus vulcanus by N-terminal sequencing. Koike H, et al. **FEBS Lett** 1989 Aug 14; 253(1–2):257–63
Chloride binding to photosystem II in the dark is in slow exchange. Shachar-Hill Y, et al. **FEBS Lett** 1989 Aug 28; 254(1–2):184–8
A 10 kDa polypeptide associated with the oxygen-evolving complex of photosystem II has a putative C-terminal non-cleavable thylakoid transfer domain. Webber AN, et al. **FEBS Lett** 1989 Jan 2;242(2):435–8
Changes in nucleus, nucleolus and cell size accompanying somatic embryogenesis of Theobroma cacao L. II. Relation between basic protein content and size of nucleus, nucleolus and cell. Kononowicz H, et al. **Folia Histochem Cytobiol** 1988;26(4):249–56
Immunoblotting of pollen proteins: Tween 20 mediates nonspecific binding of gammaglobulins to immunoblots of oak-pollen proteins. Loria RC, et al. **J Allergy Clin Immunol** 1988 Nov;82(5 Pt 1):834–41
The protein responsible for center A/B in spinach photosystem I: isolation with iron-sulfur cluster(s) and complete sequence analysis. Oh-oka H, et al. **J Biochem (Tokyo)** 1988 Jun;103(6):962–8
Evidence for only one iron-sulfur cluster in center X of photosystem I from higher plants. Guigliarelli B, et al. **J Biol Chem** 1989 Apr 15;264(11):6025–8
Subunit composition of photosystem I and identification of center X as a [4Fe-4S] iron-sulfur cluster. Scheller HV, et al. **J Biol Chem** 1989 Apr 25;264(12):6929–34
Light-harvesting pigment-proteins of photosystem I in maize. Subunit composition and biogenesis. Vainstein A, et al. **J Biol Chem** 1989 Mar 5;264(7):4058–63
Isolation and analysis of peptidic fragments of alpha-gliadin using reversed-phase high-performance liquid chromatography. Kocna P, et al. **J Chromatogr** 1988 Dec 30;434(2):429–38
Detection and quantitation of pea and soy-derived proteins in calf milk replacers. Schoonderwoerd M, et al. **J Dairy Sci** 1989 Jan;72(1):157–61
Microsequence analysis of winged bean seed proteins electroblotted from two-dimensional gel. Hirano H. **J Protein Chem** 1989 Feb;8(1):115–30
Biochemical studies of some non conventional sources of protein. Part 4. The proteins of mango waste stone kernels. Lásztity R, et al. **Nahrung** 1988;32(9):867–73
Functional and electrophoretic characteristics of faba bean (Vicia faba) flour proteins as affected by germination. Rahma EH. **Nahrung** 1988;32(6):577–83
Domain structure of phytochrome from Avena sativa visualized by electron microscopy. Jones AM, et al. **Photochem Photobiol** 1989 Apr;49(4):479–83
Nutritional evaluation of chickpea and germinated chickpea flours. Fernandez ML, et al. **Plant Foods Hum Nutr** 1988; 38(2):127–34
Nutrient composition and protein quality of minor millets. Geervani P, et al. **Plant Foods Hum Nutr** 1989 Jun; 39(2):201–8
Variation of the amino acid scores and of the nitrogen-to-protein conversion factors in barley grain as a function of nitrogen content as compared with wheat and rye. Huet JC, et al. **Plant Foods Hum Nutr** 1988; 38(2):175–88
Protein digestibility (in vitro) of chickpea and blackgram seeds as affected by domestic processing and cooking. Jood S, et al. **Plant Foods Hum Nutr** 1989 Jun;39(2):149–54
Amino acid compositions of different protein fractions in developing grains of NP 113 barley and its high lysine Notch-2 mutant. Joshi S, et al. **Plant Foods Hum Nutr** 1988;38(4):277–86
Effect of methanol/acetone/water extraction and enzymatic hydrolysis on the nutritional value of unheated rapeseed proteins. Lacroix M, et al. **Plant Foods Hum Nutr** 1988; 38(4):343–53
Amino acid composition protein quality and water-soluble vitamin content of germinated cowpeas (Vigna unguiculata). Nnanna IA, et al. **Plant Foods Hum Nutr** 1989 Jun;39(2):187–200
Nutritional and biological evaluation of tobacco leaf protein concentrate. Parameswaran M, et al. **Plant Foods Hum Nutr** 1988;38(4):269–76
Comparison of procedures to determine protein content of developing bean seeds (Phaseolus vulgaris). Paredes-López O, et al. **Plant Foods Hum Nutr** 1989 Jun;39(2):137–48
Protein content and amino acid profile of some wild leguminous seeds. Prakash D, et al. **Plant Foods Hum Nutr** 1988;38(1):61–5
Amino acid profiles of some under-utilised seeds. Prakash D, et al. **Plant Foods Hum Nutr** 1988;38(3):235–41
Studies on amylase inhibitors in some Egyptian legume seeds. Shekib LA, et al. **Plant Foods Hum Nutr** 1988;38(4):325–32
Nutritional evaluation of selected Nigerian rubber seed products—a chemical approach. Ukhun ME, et al. **Plant Foods Hum Nutr** 1988;38(4):309–18
The amino acid sequence of plastocyanin from rice (Oryza sativa, subspecies japonica). Yano H, et al. **Protein Seq Data Anal** 1989 Aug;2(5):385–9
Crystal structures of two intensely sweet proteins. Kim SH, et al. **Trends Biochem Sci** 1988 Jan;13(1):13–5 (15 ref.)
[Localization of ricinus agglutinin receptors in tumor cells in malignant histiocytosis] Ji YY. **Chung Hua I Hsueh Tsa Chih** 1989 Mar;69(3):166–8 **(Chi)**
[Protein body] Hara-Nishimura I. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):61–72 (84 ref.) **(Jpn)**
[Protein analysis using the immunoblot techniques] Takabe T. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):186–90 **(Jpn)**
[Detection by the use of silver ions of additional protein zones in gradient polyacrylamide gels stained with Coomassie] Moskalenko AA, et al. **Biol Nauki** 1988;(5):101–5 (Eng. Abstr.) **(Rus)**
[Primary structure of the "fast" component of avenin (Avena sativa L.)] Egorov TsA. **Bioorg Khim** 1988 Jul;14(7):959–62 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Coordinated synthesis of leghemoglobin and root protein R18 in yellow lupin. Sikorski MM, et al. **Acta Biochim Pol** 1989; 36(1):63–72
Synthesis of the major oil-body membrane protein in developing rapeseed (Brassica napus) embryos. Integration with storage-lipid and storage-protein synthesis and implications for the mechanism of oil-body formation. Murphy DJ, et al. **Biochem J** 1989 Feb 15;258(1):285–93
Formation of protein bodies and glyoxysomes. Lord JM, et al. **Biochem Soc Trans** 1988 Oct;16(5):706–8 (18 ref.)
Regulation and expression of plant genes in microorganisms. Gatenby AA. **Biotechnology** 1989;12:93–112 (88 ref.)
The S-locus specific glycoproteins of Brassica accumulate in the cell wall of developing stigma papillae. Kandasamy MK, et al. **Dev Biol** 1989 Aug;134(2):462–72
The induction of manganese superoxide dismutase in response to stress in Nicotiana plumbaginifolia. Bowler C, et al. **EMBO J** 1989 Jan;8(1):31–8
Primary structure of spinach-chloroplast thioredoxin f. Protein sequencing and analysis of complete cDNA clones for spinach-chloroplast thioredoxin f. Kamo M, et al. **Eur J Biochem** 1989 Jun 15;182(2):315–22
The effect of light on the biosynthesis of leaf-specific thionins in barley, Hordeum vulgare. Reimann-Philipp U, et al. **Eur J Biochem** 1989 Jun 15;182(2):283–9
Chloroplast proteins of cytoplasmic origin. Effect of chloramphenicol on their synthesis, transport and intraplastidial localization. Ultrastructural autoradiographic studies. Kwiatkowska M, et al. **Folia Histochem Cytobiol** 1988;26(3):163–70
Phytochrome chromophore biosynthesis. Treatment of tetrapyrrole-deficient Avena explants with natural and non-natural bilatrienes leads to formation of spectrally active holoproteins. Elich TD, et al. **J Biol Chem** 1989 Jan 5;264(1):183–9
Formation of a photoreversible phycocyanobilin-apophytochrome adduct in vitro. Elich TD, et al. **J Biol Chem** 1989 Aug 5;264(22):12902–8
Defective co-translational formation of disulphide bonds in protein disulphide-isomerase-deficient microsomes. Bulleid NJ, et al. **Nature** 1988 Oct 13;335(6191):649–51

CHEMICAL SYNTHESIS

Hormonotoxins. I. Strategy for synthesis of ovine luteinizing hormone--gelonin conjugate bearing the toxin in the beta-subunit. Singh V, et al. **Int J Pept Protein Res** 1989 Jan;33(1):22–8
Hormonotoxins. Preparation and characterization of ovine luteinizing hormone-gelonin conjugate. Singh V, et al. **J Biol Chem** 1989 Feb 25;264(6):3089–95

GENETICS

Active site chemical mutagenesis of Ecballium elaterium trypsin inhibitor II: new microproteins inhibiting elastase and chymotrypsin. Favel A, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):79–82
Polymorphism and inheritance of gliadin components controlled by chromosome 6A of spring durum wheat. Kudryavtsev AM, et al. **Biochem Genet** 1988 Dec; 26(11–12):693–703
A fern spore storage protein is genetically similar to the 1.7 S seed storage protein of Brassica napus. Templeman TS, et al. **Biochem Genet** 1988 Oct;26(9–10):595–603
The transcription and translation in vitro of individual cereal storage-protein genes from wheat (Triticum aestivum, cv. Chinese Spring). Evidence for translocation of the translation products and disulphide-bond formation. Bulleid NJ, et al. **Biochem J** 1988 Sep 15;254(3):805–10
Processing and assembly of chloroplast proteins. Ellis RJ, et al. **Biochem Soc Trans** 1988 Oct;16(5):703–4 (23 ref.)
The chloroplast genome and the biogenesis of the chloroplast thylakoid membrane. Gray JC, et al. **Biochem Soc Trans** 1988 Oct;16(5):704–6 (26 ref.)
Expression of synthetic thaumatin genes in yeast. Lee JH, et al. **Biochemistry** 1988 Jul 12;27(14):5101–7
Molecular cloning of the barley seed protein CMd: a variant member of the alpha-amylase/trypsin inhibitor family of cereals. Halford NG, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):435–40
Targeting of proteins into chloroplasts. Keegstra K, et al. **Bioessays** 1988 Jul;9(1):15–9 (35 ref.)
Primary structure of a C-hordein gene from barley. Entwistle J. **Carlsberg Res Commun** 1988;53(4):247–58
In vitro transcription and translation of the psbD gene encoding the D-2 protein of photosystem II in barley. Neumann EM. **Carlsberg Res Commun** 1988;53(7):395–409
Primary structure of barley genes encoding quinone and chlorophyll a binding proteins of photosystem II. Neumann EM. **Carlsberg Res Commun** 1988;53(4):259–75
Mutation at the Chlamydomonas nuclear NAC2 locus specifically affects stability of the chloroplast psbD transcript encoding polypeptide D2 of PS II. Kuchka MR, et al. **Cell** 1989 Sep 8;58(5):869–76
Nucleotide sequences of cDNAs encoding four complete nuclear-encoded plastid ribosomal proteins. Gantt JS. **Curr Genet** 1988 Nov;14(5):519–28
Molecular analysis of the transcripts encoding the light-harvesting chlorophyll a/b protein in Euglena gracilis: unusual size of the mRNA. Houlne G, et al. **Curr Genet** 1987;12(8):611–6
Cotranscription of the genes encoding two P700 chlorophyll a apoproteins with the gene for ribosomal protein CS14: determination of the transcriptional initiation site by in vitro capping. Meng BY, et al. **Curr Genet** 1988 Oct; 14(4):395–400
Nucleotide sequences of cDNAs encoding the entire precursor polypeptides for subunits II and III of the

photosystem I reaction center from spinach. Münch S, et al. **Curr Genet** 1988 Nov;14(5):511–8

Pretranslational control of the levels of glyoxysomal protein gene expression by the embryonic axis in maize. Skadsen RW, et al. **Dev Genet** 1989;10(1):1–10

Two-dimensional electrophoresis as a tool for structural and genetic studies of seed proteins from Poaceae and Fagaceae. Garcia-Olmedo F, et al. **Electrophoresis** 1988 Nov;9(11):719–27

The triose phosphate-3-phosphoglycerate-phosphate translocator from spinach chloroplasts: nucleotide sequence of a full-length cDNA clone and import of the in vitro synthesized precursor protein into chloroplasts. Flügge UI, et al. **EMBO J** 1989 Jan;8(1):39–46

A light-entrained circadian clock controls transcription of several plant genes. Giuliano G, et al. **EMBO J** 1988 Dec 1;7(12):3635–42

Glycine-rich cell wall proteins in bean: gene structure and association of the protein with the vascular system. Keller B, et al. **EMBO J** 1988 Dec 1;7(12):3625–33

Cell position and light influence C4 versus C3 patterns of photosynthetic gene expression in maize. Langdale JA, et al. **EMBO J** 1988 Dec 1;7(12):3643–51

Abscisic acid and water-stress induce the expression of a novel rice gene. Mundy J, et al. **EMBO J** 1988 Aug; 7(8):2279–86

Nucleotide sequence of cDNA coding for saporin-6, a type-1 ribosome-inactivating protein from Saponaria officinalis. Benatti L, et al. **Eur J Biochem** 1989 Aug 1;183(2):465–70

Mutation in phenol-type herbicide resistance maps within the psbA gene in Synechocystis 6714. Ajlani G, et al. **FEBS Lett** 1989 Mar 27;246(1–2):207–10

A new photosystem II reaction center component (4.8 kDa protein) encoded by chloroplast genome. Ikeuchi M, et al. **FEBS Lett** 1988 Dec 5;241(1–2):99–104

N-terminal sequencing of low-molecular-mass components in cyanobacterial photosystem II core complex. Two components correspond to unidentified open reading frames of plant chloroplast DNA. Ikeuchi M, et al. **FEBS Lett** 1989 Aug 14;253(1–2):178–82

Low-molecular-mass proteins in cyanobacterial photosystem II: identification of psbH and psbK gene products by N-terminal sequencing. Koike H, et al. **FEBS Lett** 1989 Feb 27;244(2):391–6

Signal peptide homology between the sweet protein thaumatin II and unrelated cereal alpha-amylase/trypsin inhibitors. Lázaro A, et al. **FEBS Lett** 1988 Oct 24; 239(1):147–50

A cDNA clone encoding the precursor for a 10.2 kDa photosystem I polypeptide of barley. Okkels JS, et al. **FEBS Lett** 1989 Jul 3;250(2):575–9

A cDNA clone encoding a 10.8 kDa photosystem I polypeptide of barley. Okkels JS, et al. **FEBS Lett** 1988 Sep 12;237(1–2):108–12

Nucleotide sequence of cDNA clones encoding the entire precursor polypeptides for subunits IV and V of the photosystem I reaction center from spinach. Steppuhn J, et al. **FEBS Lett** 1988 Sep 12;237(1–2):218–24

The 23 KDa polypeptide of the photosynthetic oxygen-evolving complex from mustard seedlings (Sinapis alba L.). Nucleotide sequence of cDNA and evidence for phytochrome control of its mRNA abundance. Wenng A, et al. **FEBS Lett** 1989 Mar 27;246(1–2):140–4

Structure of the Chlamydomonas reinhardtii cabII-1 gene encoding a chlorophyll-a/b-binding protein. Imbault P, et al. **Gene** 1988 Dec 20;73(2):397–407

Cloning and nucleotide sequence analysis of genes coding for the major chlorophyll-binding protein of the moss Physcomitrella patens and the halotolerant alga Dunaliella salina. Long ZF, et al. **Gene** 1989;76(2):299–312

Nucleotide sequence and endosperm-specific expression of the structural gene for the toxin alpha-hordothionin in barley (Hordeum vulgare L.). Rodríguez-Palenzuela P, et al. **Gene** 1988 Oct 30;70(2):271–81

Organization of the sunflower 11S storage protein gene family. Vonder Haar RA, et al. **Gene** 1988 Dec 30; 74(2):433–43

Biochemical data bearing on the relationship between the genome of Triticum urartu and the A and B genomes of the polyploid wheats. Kerby K, et al. **Genome** 1988 Aug; 30(4):576–81

Isolation and characterization of messenger RNA from male inflorescences and pollen of the white birch (Betula verrucosa). Breiteneder H, et al. **Int Arch Allergy Appl Immunol** 1988;87(1):19–24

Molecular characterization of phycobilisome regulatory mutants of Fremyella diplosiphon. Bruns BU, et al. **J Bacteriol** 1989 Feb;171(2):901–8

Occurrence and distribution of gas vesicle genes among cyanobacteria. Damerval T, et al. **J Bacteriol** 1989 Mar; 171(3):1445–52

Two functional psbD genes in the cyanobacterium Synechococcus sp. strain PCC 7942. Golden SS, et al. **J Bacteriol** 1989 Sep;171(9):4707–13

Genes encoding core components of the phycobilisome in the cyanobacterium Calothrix sp. strain PCC 7601: occurrence of a multigene family. Houmard J, et al. **J Bacteriol** 1988 Dec;170(12):5512–21

Characterization of a cyanobacterial iron stress-induced gene similar to psbC. Laudenbach DE, et al. **J Bacteriol** 1988 Nov;170(11):5018–26

Characterization of a Synechococcus sp. strain PCC 7002 spontaneous mutant strain defective in accumulation of photosystem II core chlorophyll-protein complexes. Webb R, et al. **J Bacteriol** 1989 Apr;171(4):2262–4

Amino acid sequences and disulfide bridges of serine proteinase inhibitors from bitter gourd (Momordica charantia LINN.) seeds. Hara S, et al. **J Biochem (Tokyo)** 1989 Jan;105(1):88–91

A truncated analog of a pre-light-harvesting chlorophyll a/b protein II transit peptide inhibits protein import into chloroplasts. Buvinger WE, et al. **J Biol Chem** 1989 Jan 15;264(2):1195–202

Polypeptide structure of germin as deduced from cDNA sequencing. Dratewka-Kos E, et al. **J Biol Chem** 1989 Mar 25;264(9):4896–900

Translation and stability of proteins encoded by the plastid psbA and psbB genes are regulated by a nuclear gene during light-induced chloroplast development in barley. Gamble PE, et al. **J Biol Chem** 1989 May 5;264(13):7236–43

Amino acid sequence of Mirabilis antiviral protein, total synthesis of its gene and expression in Escherichia coli. Habuka N, et al. **J Biol Chem** 1989 Apr 25;264(12):6629–37

trans-splicing of transcripts for the chloroplast psaA1 gene. In vivo requirement for nuclear gene products. Herrin DL, et al. **J Biol Chem** 1988 Oct 15;263(29):14601–4

Transport of proteins into chloroplasts. Organization, orientation, and lateral distribution of the plastocyanin processing peptidase in the thylakoid network. Kirwin PM, et al. **J Biol Chem** 1988 Dec 5;263(34):18128–32

The chlorophyll a/b-binding protein inserts into the thylakoids independent of its cognate transit peptide. Lamppa GK. **J Biol Chem** 1988 Oct 15;263(29):14996–9

Differential regulation of phenylalanine ammonia-lyase genes during plant development and by environmental cues. Liang XW, et al. **J Biol Chem** 1989 Aug 25; 264(24):14486–92

psbG is not a photosystem two gene but may be an ndh gene. Nixon PJ, et al. **J Biol Chem** 1989 Aug 25; 264(24):14129–35

Molecular cloning and sequencing of the psaD gene encoding subunit II of photosystem I from the cyanobacterium, Synechocystis sp. PCC 6803. Reilly P, et al. **J Biol Chem** 1988 Nov 25;263(33):17658–62

Fusion protein-based epitope mapping of phytochrome. Precise identification of an evolutionarily conserved domain. Thompson LK, et al. **J Biol Chem** 1989 Jul 25; 264(21):12426–31

What is the role of the transit peptide in thylakoid integration of the light-harvesting chlorophyll a/b protein? Viitanen PV, et al. **J Biol Chem** 1988 Oct 15;263(29):15000–7

Posttranslational events leading to the assembly of photosystem II protein complex: a study using photosynthesis mutants from Chlamydomonas reinhardtii. de Vitry C, et al. **J Cell Biol** 1989 Sep;109(3):991–1006

Phylogenetic relationships between the chlorophyll a/b binding protein (CAB) multigene family: an intra- and interspecies study. Demmin DS, et al. **J Mol Evol** 1989 Sep;29(3):266–79

Protein sequences as taxonomic probes of cyanobacteria. Aitken A. **Methods Enzymol** 1988;167:145–54

Primary structure of a human mitochondrial protein homologous to the bacterial and plant chaperonins and to the 65-kilodalton mycobacterial antigen. Jindal S, et al. **Mol Cell Biol** 1989 May;9(5):2279–83

Molecular and genetic analysis of an embryonic gene, DC 8, from Daucus carota L. Franz G, et al. **Mol Gen Genet** 1989 Jul;218(1):143–51

Ribosomal protein S12 as a site for streptomycin resistance in Nicotiana chloroplasts. Galili S, et al. **Mol Gen Genet** 1989 Aug;218(2):289–92

Novel cis-acting elements in Petunia Cab gene promoters. Gidoni D, et al. **Mol Gen Genet** 1989 Jan;215(2):337–44

Two genes encoding gas vacuole proteins in Halobacterium halobium. Horne M, et al. **Mol Gen Genet** 1988 Aug; 213(2–3):459–64

Targeting a foreign protein to chloroplasts using fusions to the transit peptide of a chlorophyll a/b protein. Kavanagh TA, et al. **Mol Gen Genet** 1988 Dec;215(1):38–45

Multiple genes are transcribed in Hordeum vulgare and Zea mays that carry the DNA binding domain of the myb oncoproteins. Marocco A, et al. **Mol Gen Genet** 1989 Apr; 216(2–3):183–7

Gene structure and in situ transcript localization of pathogenesis-related protein 1 in parsley. Somssich IE, et al. **Mol Gen Genet** 1988 Jul;213(1):93–8

Isolation and characterization of a maize chlorophyll a/b binding protein gene that produces high levels of mRNA in the dark. Sullivan TD, et al. **Mol Gen Genet** 1989 Feb; 215(3):431–40

Gene sequence for the 9 kDa component of Photosystem II from the cyanobacterium Phormidium laminosum indicates similarities between cyanobacterial and other leader sequences. Wallace TP, et al. **Mol Gen Genet** 1989 Apr;216(2–3):334–9

The gene for the precursor of plastocyanin from the cyanobacterium Anabaena sp. PCC 7937: isolation, sequence and regulation. Van der Plas J, et al. **Mol Microbiol** 1989 Mar;3(3):275–84

Two tobacco DNA-binding proteins with homology to the nuclear factor CREB. Katagiri F, et al. **Nature** 1989 Aug 31;340(6236):727–30

psbA genes indicate common ancestry of prochlorophytes and chloroplasts [published erratum appears in Nature 1989 Jun 1;339(6223):400] Morden CW, et al. **Nature** 1989 Jan 26;337(6205):382–5

The primary structure of sunflower (Helianthus annuus) ubiquitin. Binet MN, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2119

Translation of chloroplast-encoded mRNA: potential initiation and termination signals. Bonham-Smith PC, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2057–80

Nucleotide sequence of rye chloroplast DNA fragment, comprising psbD, psbC and trnS genes. Bukharov AA, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):798

Nucleotide sequence of the barley chloroplast psbE, psbF genes and flanking regions. Chakhmakhcheva OG, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2858

Sequence of the chloroplast psbF gene encoding the Photosystem II 10 kDa phosphoprotein from Oryza sativa L. Côté JC, et al. **Nucleic Acids Res** 1988 Nov 11; 16(21):10384

Isolation and nucleotide sequence of cDNA clones for the pathogenesis-related proteins PR1a, PR1b and PR1c of Nicotiana tabacum cv. Xanthi nc induced by TMV infection. Cutt JR, et al. **Nucleic Acids Res** 1988 Oct 25; 16(20):9861

Pre-plastocyanin from Lycopersicon esculentum. Detlefsen DJ, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6414

Sequence of cDNA for a novel light-induced glycine-rich protein. Kaldenhoff R, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2853

The sequence of the rice phytochrome gene. Kay SA, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2865–6

Nucleotide sequence of a 25S rRNA gene from tomato. Kiss T, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):796

Nucleotide sequence of the rye chloroplast psbA gene, encoding D1 protein of photosystem II. Kolosov VL, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1759

Nucleotide sequence of the rye chloroplast DNA fragment, comprising psbE and psbF genes. Kolosov VL, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1760

Nucleotide sequences of two genes encoding the light harvesting chlorophyll a/b binding protein of rice. Luan S, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2357–8

Nucleotide sequence of the Zea mays mitochondrial cytochrome oxidase subunit III gene. McCarty DM, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9873

Nucleotide sequence of a cDNA encoding the light-harvesting chlorophyll a/b binding protein from spinach. Mason JG. **Nucleic Acids Res** 1989 Jul 11; 17(13):5387

Codon usage in plant genes. Murray EE, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):477–98

Nucleotide sequence of the chloroplast genes for tRNA(Gln) and the 4 kD K polypeptide of photosystem II from mustard (Sinapis alba). Neuhaus H. **Nucleic Acids Res** 1989 Jan 11;17(1):444

Integrated R2 sequence in mitochondria of fertile B37N maize encodes and expresses a 130 kD polypeptide similar to that encoded by the S2 episome of S-type male sterile plants. O'Brien C, et al. **Nucleic Acids Res** 1989 Jan 11; 17(1):405–22

Structure and expression of elongation factor 1 alpha in tomato. Pokalsky AR, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4661–73

Nucleotide sequence of a second psbA gene from the unicellular cyanobacterium Synechocystis 6803. Ravnikar PD, et al. **Nucleic Acids Res** 1989 May 25;17(10):3991

Nucleotide sequence of the 5.2 kbp barley chloroplast DNA fragment, containing psbB-psbH-petB-petD gene cluster. Reverdatto SV, et al. **Nucleic Acids Res** 1989 Apr 11; 17(7):2859–60

Nucleotide sequence of the barley chloroplast psbC gene. Reverdatto SV, et al. **Nucleic Acids Res** 1989 May 25; 17(10):3996

Genomic sequence of a 12S seed storage protein from oilseed rape (Brassica napus c.v. jet neuf). Ryan AJ, et al. **Nucleic Acids Res** 1989 May 11;17(9):3584

Soybean nodulin 26 is homologous to the major intrinsic protein of the bovine lens fiber membrane. Sandal NN, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9347

A chloroplast gene encoding a protein with one zinc finger. Sasaki Y, et al. **Nucleic Acids Res** 1989 Aug 11; 17(15):6217–27

Homology of MIP26 to Nod26. Shiels A, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9348

Nucleotide sequence of the canavalin gene from Canavalia gladiata seeds. Takei Y, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4381

Two group I introns with long internal open reading frames in the chloroplast psbA gene of Chlamydomonas moewusii. Turmel M, et al. **Nucleic Acids Res** 1989 May 25; 17(10):3875–87

Isolation, characterization and evolutionary relatedness of three members from the soybean multigene family encoding chlorophyll a/b binding proteins. Walling LL, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10477–92

Nucleotide sequence of the Sesbania rostrata leghemoglobin (Srglb3) gene. Welters P, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1253

Structure of an Arabidopsis thaliana cDNA encoding rubisco activase. Werneke JM, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2871

Thaumatin II: a simple marker gene for use in plants. Witty M. **Nucleic Acids Res** 1989 Apr 25;17(8):3312

Nucleotide sequence of a full length cDNA clone of light harvesting chlorophyll a/b binding protein gene from green dark-grown pine (Pinus tunbergii) seedling. Yamamoto N, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11829

Mutations in the maize mitochondrial T-urf13 gene eliminate sensitivity to a fungal pathotoxin. Braun CJ, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4435–9

Identification of upstream regulatory elements involved in the developmental expression of the Arabidopsis thaliana cab1 gene. Ha SB, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8017–21

Lc, a member of the maize R gene family responsible for tissue-specific anthocyanin production, encodes a protein similar to transcriptional activators and contains the myc-homology region. Ludwig SR, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7092–6

Ethylene-regulated expression of a tomato fruit ripening gene encoding a proteinase inhibitor I with a glutamic residue at the reactive site. Margossian LJ, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8012–6

Function and assembly of photosystem II: genetic and molecular analysis. Rochaix JD, et al. **Trends Biochem Sci** 1988 Feb;13(2):56–9

Gene regulation by phytochrome. Nagy F, et al. **Trends Genet** 1988 Feb;4(2):37–42 (41 ref.)

Pathogenesis-related proteins in plants. Rigden J, et al. **Trends Genet** 1988 Apr;4(4):87–9

[Structure and expression of genes coding for sporamin, the major protein of the sweet potato tuberous root] Hattori T, et al. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):261–76 (49 ref.) **(Jpn)**

[Chloroplast proteins] Shinohara K, et al. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):324–34 (71 ref.) **(Jpn)**

[Nucleotide sequence of the gene psbD from barley chloroplast DNA coding for protein D2 of the photosystem II] Efimov VA, et al. **Bioorg Khim** 1988 Nov;14(11):1573–6 (Eng. Abstr.) **(Rus)**

[Nucleotide sequence of the barley chloroplast DNA psbA gene coding for a herbicide-binding protein] Efimov VA, et al. **Bioorg Khim** 1988 Aug;14(8):1117–21 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

IgA1, IgA2 or secretory piece containing antigliadin antibodies in the sera of coeliac patients. Blanco A, et al. **Allergol Immunopathol (Madr)** 1989 Mar-Apr;17(2):77–80

Mapping of antigenic domains on phytochrome from etiolated Avena sativa L. by immunoblot analysis of proteolytically derived peptides. Pratt LH, et al. **Arch Biochem Biophys** 1988 Dec;267(2):723–35

The low uptake of an abrin A-chain immunotoxin by rat hepatic cells in vivo and in vitro. Skilleter DN, et al. **Cancer Lett** 1989 Aug;46(3):161–6

The prolamin antibody reactivity against hordein polypeptides in sera from patients with coeliac disease. Friis SU, et al. **Clin Chim Acta** 1988 Sep 15;176(3):241–50

Anti-gliadin antibody specificity for gluten-derived peptides toxic to coeliac patients. Devery JM, et al. **Clin Exp Immunol** 1989 Jun;76(3):384–90

Studies on the interaction between alpha-gliadin and HLA and T cell receptor molecules in coeliac disease. Gallagher RB, et al. **Clin Exp Immunol** 1988 Dec;74(3):413–8

Normal levels of gliadin antibodies in symptomless celiac disease [letter] Paerregaard A, et al. **Dig Dis Sci** 1988 Dec; 33(12):1641

IgG, IgA and IgE gliadin antibody determinations as screening test for untreated coeliac disease in children, a multicentre study. Bürgin-Wolff A, et al. **Eur J Pediatr** 1989 Apr;148(6):496–502

Production of antibodies to gliadin in intestinal mucosa of patients with coeliac disease: a study at the single cell level. Lycke N, et al. **Gut** 1989 Jan;30(1):72–7

Antigenic determinant of trichosanthin peptide fragments. Ke YP, et al. **Immunopharmacol Immunotoxicol** 1988; 10(2):131–9

Gliadin antibody production by small intestinal lymphocytes from patients with coeliac disease. Ciclitira PJ, et al. **Int Arch Allergy Appl Immunol** 1989;89(2–3):246–9

Responses of antigen-specific long-term murine T cell lines to wheat gliadin fractions. Howdle PD, et al. **Int Arch Allergy Appl Immunol** 1989;89(2–3):269–74

The subclass profile and complement activating potential of anti-alpha-gliadin antibodies in coeliac disease. Gallagher RB, et al. **J Clin Lab Immunol** 1989 Mar;28(3):115–21

The production and characterisation of monoclonal antibodies to wheat gliadin peptides. Ellis HJ, et al. **J Immunol Methods** 1989 Jun 2;120(1):17–22

Flow cytometric detection of anti-gliadin antibodies. Presani G, et al. **J Immunol Methods** 1989 May 12;119(2):197–202

Are immunological markers of gluten-sensitive enteropathy detectable in IgA nephropathy? [letter] Kumar V, et al. **Lancet** 1988 Dec 3;2(8623):1307

Association between villous atrophy in rheumatoid arthritis and a rheumatoid factor and gliadin-specific IgG. O'Farrelly C, et al. **Lancet** 1988 Oct 8;2(8615):819–22

IgA antigliadin antibodies as a possible marker for IgA mesangial glomerulonephritis in adults with primary glomerulonephritis [letter] Rostoker G, et al. **N Engl J Med** 1989 May 11;320(19):1283–4

[How sensitive and specific is the determination of gliadin antibodies in the serum of patients with severe damage of small intestine mucosa?] Hebel E, et al. **Monatsschr Kinderheilkd** 1988 Aug;136(8):459–61 (Eng. Abstr.) **(Ger)**

[Usefulness of the determination of antigliadin antibodies (AGA) in the approach to and monitoring of celiac disease. Case series contribution] Ceccarelli M, et al. **Minerva Pediatr** 1988 Aug;40(8):455–8 (Eng. Abstr.) **(Ita)**

[Antigliadin antibodies (AGA) in the various stages of celiac disease in children] Bottaro G, et al. **Pediatr Med Chir** 1988 Jul–Aug;10(4):409–13 (Eng. Abstr.) **(Ita)**

[Evaluation of the antigliadin antibody titer in adult celiac disease] Ferfoglia G, et al. **Recenti Prog Med** 1989 May; 80(5):245–8 (Eng. Abstr.) **(Ita)**

ISOLATION & PURIFICATION

Isolation and characterization of root nodule proteins from lupin. Stróżycki P, et al. **Acta Biochim Pol** 1988;35(1):39–50

A method for two-dimensional electrophoresis of proteins from green plant tissues. Flengsrud R, et al. **Anal Biochem** 1989 Feb 15;177(1):33–6

A rapid procedure for the isolation of phycobilisomes from cyanobacteria. Menon VK, et al. **Anal Biochem** 1988 Aug 1;172(2):377–81

Antifungal proteins from plants. Roberts WK, et al. **Ann N Y Acad Sci** 1988;544:141–51

An NADP/thioredoxin system in leaves: purification and characterization of NADP-thioredoxin reductase and thioredoxin h from spinach. Florencio FJ, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):496–507

Characterization of a translation inhibitory protein from Luffa aegyptiaca. Ramakrishnan S, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):509–16

Partial purification of a protein from maize (Zea mays) coleoptile membranes binding the Ca2+-channel antagonist verapamil. Harvey HJ, et al. **Biochem J** 1989 Jan 1;257(1):95–100

Isolation and characterization of the 47 kDa protein and the D1-D2-cytochrome b-559 complex. Ghanotakis DF, et al. **Biochim Biophys Acta** 1989 Apr 17;974(1):44–53

Purification and properties of the intact P-700 and Fx-containing Photosystem I core protein. Parrett KG, et al. **Biochim Biophys Acta** 1989 Feb 28;973(2):324–32

Purification of an acidic plastocyanin from Microcystis aeruginosa. Tan S, et al. **Biochim Biophys Acta** 1989 Feb 28;973(2):111–7

Hemagglutinating activity of Dolichos lablab seed protein. Silva-Lima M, et al. **Braz J Med Biol Res** 1988; 21(2):219–22

Probing in vitro translation products with monoclonal antibodies to chlorophyll a/b-binding proteins of barley thylakoids. Høyer-Hansen G, et al. **Carlsberg Res Commun** 1988;53(5):297–308

Extraction of plant proteins for two-dimensional electrophoresis. Granier F. **Electrophoresis** 1988 Nov; 9(11):712–8

Trichokirin, a ribosome-inactivating protein from the seeds of Trichosanthes kirilowii Maximowicz. Purification, partial characterization and use for preparation of immunotoxins. Casellas P, et al. **Eur J Biochem** 1988 Oct 1;176(3):581–8

Structural determination of the photosystem II core complex from spinach. Irrgang KD, et al. **Eur J Biochem** 1988 Dec 1;178(1):209–17

New dimeric inhibitor of heterologous alpha-amylases encoded by a duplicated gene in the short arm of chromosome 3B of wheat (Triticum aestivum L.). Sanchez-Monge R, et al. **Eur J Biochem** 1989 Jul 15; 183(1):37–40

Structure and biogenesis of Chlamydomonas reinhardtii photosystem I. Schuster G, et al. **Eur J Biochem** 1988 Nov 1;177(2):411–6

N-terminal sequence of some ribosome-inactivating proteins. Montecucchi PC, et al. **Int J Pept Protein Res** 1989 Apr; 33(4):263–7

The protein responsible for center A/B in spinach photosystem I: isolation with iron-sulfur cluster(s) and complete sequence analysis. Oh-oka H, et al. **J Biochem (Tokyo)** 1988 Jun;103(6):962–8

Intracellular thionins of barley. A second group of leaf thionins closely related to but distinct from cell wall-bound thionins. Reimann-Philipp U, et al. **J Biol Chem** 1989 May 25;264(15):8978–84

Novel water stress protein from a desiccation-tolerant cyanobacterium. Purification and partial characterization. Scherer S, et al. **J Biol Chem** 1989 Jul 25;264(21):12546–53

A family of abundant plasma membrane-associated glycoproteins related to the arabinogalactan proteins is unique to flowering plants. Pennell RI, et al. **J Cell Biol** 1989 May;108(5):1967–77

Phycobiliproteins. Glazer AN. **Methods Enzymol** 1988; 167:291–303

The primary structure of soybean (Glycine max) ubiquitin is identical to other plant ubiquitins. Fortin MG, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11377

[Demonstration of antibodies against gliadin using an immunofluorescence method in childhood celiac disease] Polgár M, et al. **Orv Hetil** 1989 Apr 16;130(16):833–8 (36 ref.) (Eng. Abstr.) **(Hun)**

[Isolation and characterization of gliadins from Aegilops squarrosa seeds] Odintsova TI, et al. **Biokhimiia** 1989 Mar; 54(3):396–408 (Eng. Abstr.) **(Rus)**

METABOLISM

Interference of electron transport inhibitors with desaturation of monogalactosyl diacylglycerol in intact chloroplasts. Andrews J, et al. **Arch Biochem Biophys** 1989 May 1; 270(2):611–22

Protein phosphorylation as a mechanism for regulation of spinach leaf sucrose-phosphate synthase activity. Huber JL, et al. **Arch Biochem Biophys** 1989 May 1;270(2):681–90

Hypocholesterolemic effect of vegetable protein in a hypocaloric diet. Jenkins DJ, et al. **Atherosclerosis** 1989 Aug;78(2–3):99–107

Plant protein in milk replacers for rearing buffalo calves. II. Effect of replacing 75% of the milk proteins by plant proteins on the preweaning performance of buffalo calves. el-Ashry MA, et al. **Beitr Trop Landwirtsch Veterinarmed** 1988;26(2):189–95

A nuclear casein type II kinase from maize endosperm phosphorylating HMG proteins. Grasser KD, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):456–63

Intracellular protein phosphorylation in oat (Avena sativa L.) protoplasts by phytochrome action. 1. Measurement of action spectra for the protein phosphorylation. Park MH, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):9–14

Ribosome-inactivating proteins from plant cells in culture. Barbieri L, et al. **Biochem J** 1989 Feb 1;257(3):801–7

Effect of alkaline pH on photosynthetic water oxidation and the association of extrinsic proteins with Photosystem Two. Chapman DJ, et al. **Biochem J** 1989 Mar 1;258(2):357–62

Directed mutagenesis indicates that the donor to P+680 in photosystem II is tyrosine-161 of the D1 polypeptide. Debus RJ, et al. **Biochemistry** 1988 Dec 27;27(26):9071–4

Location and magnetic relaxation properties of the stable tyrosine radical in photosystem II. Innes JB, et al. **Biochemistry** 1989 Feb 7;28(3):1116–25

Manganese-binding proteins of the oxygen-evolving complex. Mei R, et al. **Biochemistry** 1989 Jun 27; 28(13):5560–7

Oxidoreduction reactions involving the electrostatic and the covalent complex of cytochrome c and plastocyanin: importance of the protein rearrangement for the intracomplex electron-transfer reaction. Peerey LM, et al. **Biochemistry** 1989 Feb 21;28(4):1861–8

The electron-transfer site of spinach plastocyanin. Rush JD, et al. **Biochemistry** 1988 Aug 9;27(16):5876–84

Laser flash photolysis as a probe of redox protein-membrane interactions: effect of binding of spinach plastocyanin and horse cytochrome c to lipid bilayer vesicles on the kinetics of reduction by flavin semiquinone. Senthilathipan V, et al. **Biochemistry** 1989 Feb 7;28(3):1133–8

Cytochrome b-559 may function to protect photosystem II from photoinhibition. Thompson LK, et al. **Biochemistry** 1988 Sep 6;27(18):6653–8

Structural and functional properties of the cyanobacterial photosystem I complex. Wynn RM, et al. **Biochemistry** 1989 Jun 27;28(13):5554–60

Interaction of plastocyanin with photosystem I: a chemical cross-linking study of the polypeptide that binds plastocyanin. Wynn RM, et al. **Biochemistry** 1988 Aug 9; 27(16):5863–9

On the interaction between cytochrome f and plastocyanin. Adam Z, et al. **Biochim Biophys Acta** 1989 Jun 23; 975(1):158–63

State transitions in a pycobilisome-less mutant of the cyanobacterium Synechococcus sp. PCC 7002. Bruce D, et al. **Biochim Biophys Acta** 1989 Apr 17;974(1):66–73

Structure, function and organization of the Photosystem I reaction center complex. Golbeck JH. **Biochim Biophys Acta** 1987;895(3):167–204 (336 ref.)

Binding proteins for sweet compounds from gustatory papillae of the cow, pig and rat. Persaud KC, et al. **Biochim Biophys Acta** 1988 Oct 13;967(1):65–75

Visualization of antibody binding to the photosynthetic membrane: the transmembrane orientation of cytochrome b-559. Vallon O, et al. **Biochim Biophys Acta** 1989 Jun 23;975(1):132–41

Antenna structure and excitation dynamics in photosystem I. II. Studies with mutants of Chlamydomonas reinhardtii lacking photosystem II. Owens TG, et al. **Biophys J** 1989 Jul;56(1):95–106

Monitoring the fate of dietary proteins in rumen fluid using gel electrophoresis. Spencer D, et al. **Br J Nutr** 1988 Sep; 60(2):241–7

Amino acid sequence of the 9-kDa iron-sulfur protein of photosystem I in barley. Scheller HV, et al. **Carlsberg Res Commun** 1989;54(1):11–5

Transport and routing of proteins into chloroplasts. Keegstra K. **Cell** 1989 Jan 27;56(2):247–53 (66 ref.)

Dynamics of the photosystem II reaction center. Mattoo AK, et al. **Cell** 1989 Jan 27;56(2):241–6 (42 ref.)

Binding site requirements for pea nuclear protein factor GT-1 correlate with sequences required for light-dependent transcriptional activation of the rbcS-3A gene. Green PJ, et al. **EMBO J** 1988 Dec 20;7(13):4035–44

Turnover of thylakoid photosystem II proteins during photoinhibition of Chlamydomonas reinhardtii. Schuster G, et al. **Eur J Biochem** 1988 Nov 1;177(2):403–10

Electron transfer reactions in photosystem I following vitamin K1 depletion by ultraviolet irradiation. Biggins J, et al. **FEBS Lett** 1989 Jul 3;250(2):271–4

Local anesthetics-induced inhibition of chloroplast electron transport. Semin BK, et al. **Gen Physiol Biophys** 1989 Jun; 8(3):233–44

Effect of urea, guanidine hydrochloride and sodium dodecyl sulphate on the isolated major protein fraction, lupinin, from lupin seed (Lupinus angustifolius). Kim CS, et al. **Indian J Biochem Biophys** 1988 Jun;25(3):292–301

Trypsin effect on water splitting site and its relation with electron transport in normal and salt–washed photosystem II preparation. Paliwal R, et al. **Indian J Biochem Biophys** 1988 Oct;25(5):397–403

A model for changes in the conformation of oxygen evolving complex of chloroplasts during oxidation of water. Raval MK, et al. **Indian J Biochem Biophys** 1988 Aug;25(4):341–3

Growth response to escape protein and forage intake by growing cattle grazing cornstalks. Fernandez–Rivera S, et al. **J Anim Sci** 1989 Feb;67(2):574–80

Raw mung beans as a protein source for bred gilts. Luce WG, et al. **J Anim Sci** 1989 Feb;67(2):329–33

Changes in polypeptide composition of Synechocystis sp. strain 6308 phycobilisomes induced by nitrogen starvation. Duke CS, et al. **J Bacteriol** 1989 Apr;171(4):1960–6

A photoreversible phytochrome affinity column chromatography for putative phytochrome receptor studies. Singh BR, et al. **J Biochem Biophys Methods** 1989 Mar;18(2):105–12

Use of bilirubin oxidase for probing chromophore topography in tetrapyrrole proteins. Singh BR, et al. **J Biochem Biophys Methods** 1989 Mar;18(2):135–47

Kinetic studies on a cross–linked complex between plastocyanin cytochrome f. Takabe T, et al. **J Biochem (Tokyo)** 1989 Jan;105(1):98–102

Bowringia milbraedii agglutinin. Specificity of binding to early processing intermediates of asparagine–linked oligosaccharide and use as a marker of endoplasmic reticulum glycoproteins. Animashaun T, et al. **J Biol Chem** 1989 Mar 15;264(8):4657–63

Chemical modification of chalcone isomerase by mercurials and tetrathionate. Evidence for a single cysteine residue in the active site. Bednar RA, et al. **J Biol Chem** 1989 Aug 25;264(24):14272–6

A truncated analog of a pre–light–harvesting chlorophyll a/b protein II transit peptide inhibits protein import into chloroplasts. Buvinger WE, et al. **J Biol Chem** 1989 Jan 15;264(2):1195–202

Light guides. Directional energy transfer in a photosynthetic antenna. Glazer AN. **J Biol Chem** 1989 Jan 5;264(1):1–4 (38 ref.)

Ubiquitin–phytochrome conjugates. Pool dynamics during in vivo phytochrome degradation. Jabben M, et al. **J Biol Chem** 1989 Mar 25;264(9):4998–5005

ATP is required for the binding of precursor proteins to chloroplasts. Olsen LJ, et al. **J Biol Chem** 1989 Apr 25; 264(12):6724–9

Light availability influences the ratio of two forms of D1 in cyanobacterial thylakoids. Schaefer MR, et al. **J Biol Chem** 1989 May 5;264(13):7412–7

Internal ATP is the only energy requirement for the translocation of precursor proteins across chloroplastic membranes. Theg SM, et al. **J Biol Chem** 1989 Apr 25; 264(12):6730–6

Lateral distribution and diffusion of plastocyanin in chloroplast thylakoids. Haehnel W, et al. **J Cell Biol** 1989 Apr;108(4):1397–405

The molecular topography of phytochrome: chromophore and apoprotein. Song PS. **J Photochem Photobiol –B–** 1988 Jul;2(1):43–57

A plant DNA–binding protein that recognizes 5–methylcytosine residues. Zhang DL, et al. **Mol Cell Biol** 1989 Mar;9(3):1351–6

The amyloplast–targeting transit peptide of the waxy protein of maize also mediates protein transport in vitro into chloroplasts. Klösgen RB, et al. **Mol Gen Genet** 1989 May; 217(1):155–61

A purified 124–kDa oat phytochrome does not possess a protein kinase activity. Kim IS, et al. **Photochem Photobiol** 1989 Mar;49(3):319–23

Formation of aggregates of tryptic fragments derived from the carboxyl–terminal half of pea phytochrome and localization of the site of contact between the fragments by amino–terminal amino acid sequence analysis. Yamamoto KT, et al. **Photochem Photobiol** 1989 Jul; 50(1):113–20

Separate photosensitizers mediate degradation of the 32–kDa photosystem II reaction center protein in the visible and UV spectral regions. Greenberg BM, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6617–20

Hemolytic activity of thionin from Pyrularia pubera nuts and snake venom toxins of Naja naja species: Pyrularia thionin and snake venom cardiotoxin compete for the same membrane site. Osorio e Castro VR, et al. **Toxicon** 1989; 27(5):511–7

Phylloquinone in photosystem I: are quinones the secondary electron acceptors in all types of photosynthetic reaction centers? Hauska G. **Trends Biochem Sci** 1988 Nov; 13(11):415–6 (25 ref.)

Photosystem II, the water–splitting enzyme. Rutherford AW. **Trends Biochem Sci** 1989 Jun;14(6):227–32 (35 ref.)

[125I]azido–ioxynil labels Val249 of the photosystem II D–1 reaction center protein. Oettmeier W, et al. **Z Naturforsch [C]** 1989 May–Jun;44(5–6):444–9

[Biogenesis of protein body] Hara–Nishimura I. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):408–19 (43 ref.) **(Jpn)**

[Effect of various dietary proteins on the processes of lipid transport in the blood serum] Sharmanov TSh, et al. **Vopr Pitan** 1988 Jul–Aug;(4):45–8 (Eng. Abstr.) **(Rus)**

[Experimental 3–month study of safety of textured soybeans Becsei] Tóth K, et al. **Vopr Pitan** 1988 May–Jun;(3):38–41 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Effect of immunotoxins against Trypanosoma cruzi. Santana JM, et al. **Am J Trop Med Hyg** 1989 Aug;41(2):177–82

High–pressure–liquid–chromatographic and fluorimetric methods for the determination of adenine released from ribosomes by ricin and gelonin. Zamboni M, et al. **Biochem J** 1989 May 1;259(3):639–43

Effect of gliadin on the distribution of sucrase among different fractions of fetal chick intestine. Mothes T, et al. **Biomed Biochim Acta** 1989;48(1):137–41

Immunotoxin–mediated inhibition of chronic lymphocytic leukemia cell proliferation in humans. Siena S, et al. **Cancer Res** 1989 Jun 15;49(12):3328–32

Inhibition of radiation–induced transformation of C3H/10T1/2 cells by carboxypeptidase inhibitor 1 and inhibitor II from potatoes. Billings PC, et al. **Carcinogenesis** 1989 Apr;10(4):687–91

Immunotoxins containing saporin 6 and monoclonal antibodies recognizing plasma cell–associated antigens: effects on target cells and on normal myeloid precursors (CFU–GM). Barbieri L, et al. **Eur J Haematol** 1989 Mar; 42(3):238–45

Purothionin from wheat endosperm reversibly blocks myogenic differentiation of chick embryonic muscle cells in culture. Kwak KB, et al. **Exp Cell Res** 1989 Aug; 183(2):501–7

Differential activity of saporin 6 on normal and leukemic hemopoietic cells. Gasperi–Campani A, et al. **Exp Hematol** 1989 Aug;17(7):755–9

The 23 KDa polypeptide of the photosynthetic oxygen–evolving complex from mustard seedlings (Sinapis alba L.). Nucleotide sequence of cDNA and evidence for phytochrome control of its mRNA abundance. Wenng A, et al. **FEBS Lett** 1989 Mar 27;246(1–2):140–4

Ribosome–inactivating proteins from plants inhibit ribosome activity of Trypanosoma and Leishmania. Cenini P, et al. **J Protozool** 1988 Aug;35(3):384–7

Rapid transcriptional regulation by phytochrome of the genes for phytochrome and chlorophyll a/b–binding protein in Avena sativa. Lissemore JL, et al. **Mol Cell Biol** 1988 Nov; 8(11):4840–50

Getting to the root of AIDS [news] **Occup Health Saf** 1989 Jun;:16

Intestinal mucosa of celiacs in remission is unable to abolish toxicity of gliadin peptides on in vitro developing fetal rat intestine and cultured atrophic celiac mucosa. Cornell HJ, et al. **Pediatr Res** 1988 Aug;24(2):233–7

Cellular responses to Pyrularia thionin are mediated by Ca2+ influx and phospholipase A2 activation and are inhibited by thionin tyrosine iodination. Evans J, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5849–53

GLQ223: an inhibitor of human immunodeficiency virus replication in acutely and chronically infected cells of lymphocyte and mononuclear phagocyte lineage. McGrath MS, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2844–8

Selective killing of CD4+ and CD8+ cells with immunotoxins containing saporin. Barbieri L, et al. **Scand J Immunol** 1989 Sep;30(3):369–72

Evaluation of antihuman T lymphocyte saporin immunotoxins potentially useful in human transplantation. Siena S, et al. **Transplantation** 1988 Nov;46(5):747–53

PHYSIOLOGY

Intracellular protein phosphorylation in oat (Avena sativa L.) protoplasts by phytochrome action. 1. Measurement of action spectra for the protein phosphorylation. Park MH, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):9–14

State transitions in a phycobilisome–less mutant of the cyanobacterium Synechococcus sp. PCC 7002. Bruce D, et al. **Biochim Biophys Acta** 1989 Apr 17;974(1):66–73

Analysis of the electron transfer from Pheo– to QA in PS II membrane fragments from spinach by time resolved 325 nm absorption changes in the picosecond domain. Eckert HJ, et al. **FEBS Lett** 1988 Nov 21;240(1–2):153–8

ATP hydrolysis catalyzed by a beta subunit preparation purified from the chloroplast energy transducing complex CF1.CF0. Frasch WD, et al. **J Biol Chem** 1989 Mar 25; 264(9):5064–9

A nod at differentiation: the nodD gene product and initiation of Rhizobium nodulation. Winsor BA. **Trends Genet** 1989 Jul;5(7):199–201 (28 ref.)

Are the PR1 proteins of tobacco involved in genetically engineered resistance to TMV? Carr JP, et al. **Virology** 1989 Apr;169(2):470–3

[Control of chlorophyll a synthesis by phytochrome and cryptochrome in the red alga Corallina elongata Ellis et Soland] López–Figueroa F, et al. **Rev Esp Fisiol** 1988 Sep; 44(3):287–94 (Eng. Abstr.) **(Spa)**

RADIATION EFFECTS

Primary photoprocesses of phytochrome. Picosecond fluorescence kinetics of oat and pea phytochromes. Song PS, et al. **Biochemistry** 1989 Apr 18;28(8):3265–71

A photoreversible conformational change in 124 kDa Avena phytochrome. Singh BR, et al. **Biochim Biophys Acta** 1988 Dec 7;936(3):395–405

THERAPEUTIC USE

Clinical trials for GLQ223 as a treatment for AIDS [news] **Am Fam Physician** 1989 Aug;40(2):324

Compound Q clinical tests begin [news] Katzin L. **Am J Nurs** 1989 Jul;89(7):916

Selective cytotoxic activity of immunotoxins composed of a monoclonal anti–Thy 1.1 antibody and the ribosome–inactivating proteins bryodin and momordin. Stirpe F, et al. **Br J Cancer** 1988 Nov;58(5):558–61

[Effects of pokeweed antiviral protein on nephrotoxic serum nephritis accelerated by rabbit IgG in mice] Zhu Q, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Sep;9(5):474–7 (Eng. Abstr.) **(Chi)**

[Effect of gliadin on cholesterol synthesis of the enterocytes in celiac disease in children] Kuberger MB, et al. **Pediatriia** 1988;(11):15–9 (Eng. Abstr.) **(Rus)**

TOXICITY

Biological and chemical characterization of basic FGF–saporin mitotoxin. Lappi DA, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):917–23

Comparison of the pharmacokinetics and hepatotoxic effects of saporin and ricin A–chain immunotoxins on murine liver parenchymal cells. Blakey DC, et al. **Cancer Res** 1988 Dec 15;48(24 Pt 1):7072–8

Cytotoxicity of pokeweed antiviral protein. Aron GM, et al. **Cytobios** 1988;55(221):105–11

Enteropathy induced in young rats by feeding with gliadin—similarity with coeliac disease. Štěpánková R, et al. **Folia Biol (Praha)** 1989;35(1):19–26

Cytotoxicity of gelonin and its conjugates with antibodies is determined by the extent of their endocytosis. Goldmacher VS, et al. **J Cell Physiol** 1989 Oct; 141(1):222–34

Growth rate, muscle protein composition, intestinal absorption of D–galactose and L–leucine and nitrogen balance in rats fed the raw legume Chamaecytisus proliferus L. Santidrian S, et al. **Plant Foods Hum Nutr** 1988; 38(2):135–43

Action of a thionin isolated from nuts of Pyrularia pubera on human erythrocytes. Osorio e Castro VR, et al. **Toxicon** 1989;27(5):501–10

[Animal experimento–toxicologic studies of protein isolates in sunflower seeds] Hoernicke E, et al. **Nahrung** 1988; 32(7):691–700 (Eng. Abstr.) **(Ger)**

ULTRASTRUCTURE

Complete amino acid sequence and structure characterization of the taste–modifying protein, miraculin. Theerasilp S, et al. **J Biol Chem** 1989 Apr 25;264(12):6655–9

Three–dimensional reconstructions from incomplete data: interpretability of density maps at "atomic" resolution. Glaeser RM, et al. **Ultramicroscopy** 1989 Apr;27(3):307–18

PLANT STEROLS see **PHYTOSTEROLS**

PLANT TUMORS

Map location on Agrobacterium root–inducing plasmids of homologies with the virulence region of tumor–inducing plasmids. Birot AM, et al. **Plasmid** 1988 May;19(3):189–202

GENETICS

Nucleotide sequence and analysis of the plant–inducible locus pinF from Agrobacterium tumefaciens. Kanemoto RH, et al. **J Bacteriol** 1989 May;171(5):2506–12

MICROBIOLOGY

Assignment of wound tumor virus nonstructural polypeptides to cognate dsRNA genome segments by in vitro expression of tailored full–length cDNA clones. Xu ZK, et al. **Virology** 1989 Jan;168(1):73–8

PLANT VIRUSES

Coat protein of potyviruses. 4. Comparison of biological properties, serological relationships, and coat protein amino acid sequences of four strains of potato virus Y. Shukla DD, et al. **Arch Virol** 1988;102(3–4):207–19

Coat protein of potyviruses. 5. Symptomatology, serology, and coat protein sequences of three strains of passionfruit woodiness virus. Shukla DD, et al. **Arch Virol** 1988; 102(3–4):221–32

Plant viruses and new perspectives in cross–protection. Valle RP, et al. **Biochimie** 1988 May;70(5):695–703 (67 ref.)

Turnip crinkle virus infection from RNA synthesized in vitro. Heaton LA, et al. **Virology** 1989 May;170(1):214–8

[The structure of the CMtV virion at a resolution of 18 Angstroms] Morgunova Elu, et al. **Dokl Akad Nauk SSSR** 1989;305(2):469–74 **(Rus)**

ANALYSIS

Physical identification of a virus in a crude leaf extract by its Ferguson plot in agarose gel electrophoresis. Orbán L, et al. **Electrophoresis** 1988 Apr;9(4):162–6

Detection of turnip crinkle virus on agarose gel electropherograms at the nanogram load level. Orbán L, et al. **Electrophoresis** 1988 Jul;9(7):299–302

Primary structure of belladonna mottle virus coat protein. Suryanarayana S, et al. **J Biol Chem** 1989 Apr 15; 264(11):6273–9

Partial cleavage of sweet potato feathery mottle virus coat protein subunit by an enzyme in extracts of infected symptomless leaves. Salomon R. **J Gen Virol** 1989 Aug;70 (Pt 8):1943–9

Production of antiserum to a non-structural potyviral protein and its use to detect narcissus yellow stripe and other potyviruses. Mowat WP, et al. **J Virol Methods** 1989 Aug; 25(2):199–209

Protein–RNA interactions in an icosahedral virus at 3.0 A resolution. Chen ZG, et al. **Science** 1989 Jul 14; 245(4914):154–9

Virus–ribosome complexes from cell-free translation systems supplemented with cowpea chlorotic mottle virus particles. Roenhorst JW, et al. **Virology** 1989 Jan;168(1):138–46

CLASSIFICATION

Identification and classification of potyviruses on the basis of coat protein. sequence data and serology. Brief review. Shukla DD, et al. **Arch Virol** 1989;106(3–4):171–200 (110 ref.)

Applying the species concept to plant viruses. Van Regenmortel MH. **Arch Virol** 1989;104(1–2):1–17 (70 ref.)

Evolution of plus-strand RNA viruses. Goldbach R, et al. **Intervirology** 1988;29(5):260–7 (32 ref.)

Relationship of lychnis ringspot virus to barley stripe mosaic virus and poa semilatent virus. Hunter BG, et al. **Intervirology** 1989;30(1):18–26

Biological concepts in virus classification. Kingsbury DW. **Intervirology** 1988;29(5):242–53 (35 ref.)

Species concept should not be universally applied to virus taxonomy—but what to do instead? Milne RG. **Intervirology** 1988;29(5):254–9 (23 ref.)

DRUG EFFECTS

Inhibitory effects of 9-(2,3-dihydroxypropyl)adenine and 3-(adenin-9-yl)-2-hydroxypropanoic acid 2-methylpropylester on potato virus X replication. Schuster G, et al. **Antiviral Res** 1988 Aug;9(5):329–34

ENZYMOLOGY

Chlorella viruses code for restriction and modification enzymes. Van Etten JL, et al. **Gene** 1988 Dec 25; 74(1):113–5

In vitro studies on the nucleocapsid-associated RNA polymerase of wheat rosette stunt virus. Sun W, et al. **Intervirology** 1988;29(3):154–61

Autocatalytic processing of the potyvirus helper component proteinase in Escherichia coli and in vitro. Carrington JC, et al. **J Virol** 1989 Oct;63(10):4459–63

Artificial cleavage site recognized by plum pox potyvirus protease in Escherichia coli. García JA, et al. **J Virol** 1989 Jun;63(6):2457–60

A site-specific single strand endonuclease activity induced by NYs-1 virus infection of a Chlorella-like green alga. Xia YN, et al. **Nucleic Acids Res** 1988 Oct 25; 16(20):9477–87

Characterization of the catalytic residues of the tobacco etch virus 49-kDa proteinase. Dougherty WG, et al. **Virology** 1989 Sep;172(1):302–10

GENETICS

Cloning of the gene for the capsid protein of potato leafroll virus. Tacke E, et al. **Arch Virol** 1989;105(3–4):153–63

Expression of a potyvirus non-structural protein in transgenic tobacco. Graybosch R, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):425–32

RNA catalytic properties of the minimum (-)sTRSV sequence. Hampel A, et al. **Biochemistry** 1989 Jun 13; 28(12):4929–33

A novel aspect of the information content of viroids. Juhász A, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):455–8

Plant viruses: a tool-box for genetic engineering and crop protection. Wilson TM. **Bioessays** 1989 Jun;10(6):179–86 (45 ref.)

Mapping of Digitaria streak virus transcripts reveals different RNA species from the same transcription unit. Accotto GP, et al. **EMBO J** 1989 Apr;8(4):1033–9

A second proteinase encoded by a plant potyvirus genome. Carrington JC, et al. **EMBO J** 1989 Feb;8(2):365–70

Identification of regions affecting virulence, RNA processing and infectivity in the virulent satellite of turnip crinkle virus. Simon AE, et al. **EMBO J** 1988 Sep;7(9):2645–51

Conserved and variable elements in RNA genomes of potexviruses. Skryabin KG, et al. **FEBS Lett** 1988 Nov 21;240(1–2):33–40

Nucleotide sequence and organization of potato leafroll virus genomic RNA. van der Wilk F, et al. **FEBS Lett** 1989 Mar 13;245(1–2):51–6

Characterization of southern African isolates of maize streak virus: typing of three isolates by restriction mapping. Clarke BA, et al. **Intervirology** 1989;30(2):86–95

Evolutionary relationship of three southern African maize streak virus isolates. Kirby R, et al. **Intervirology** 1989; 30(2):96–101

Structure and replication of geminivirus genomes. Davies JW, et al. **J Cell Sci Suppl** 1987;7:95–107

Mutational analysis of the virion-sense genes of maize streak virus. Boulton MI, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2309–23

The nucleotide sequence of satellite RNA in grapevine fanleaf virus, strain F13. Fuchs M, et al. **J Gen Virol** 1989 Apr;70 (Pt 4):955–62

Nucleotide sequence of the 3'-terminal region of cymbidium ringspot virus RNA. Grieco F, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2533–8

Identification and characterization of the potato leafroll virus putative coat protein gene. Kawchuk LM, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):783–8

Organization and interviral homologies of the 3'-terminal portion of potato virus S RNA. MacKenzie DJ, et al. **J Gen Virol** 1989 May;70 (Pt 5):1053–63

The complete nucleotide sequence of plum pox virus RNA. Maiss E, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):513–24

Nucleotide sequence of potato leafroll luteovirus RNA. Mayo MA, et al. **J Gen Virol** 1989 May;70 (Pt 5):1037–51

Nucleotide sequence of potato virus Y (N Strain) genomic RNA. Robaglia C, et al. **J Gen Virol** 1989 Apr;70 (Pt 4):935–47

Partial nucleotide sequence of potato virus M RNA shows similarities to protexviruses in gene arrangement and the encoded amino acid sequences. Rupasov VV, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1861–9

Hop stunt viroid strains from dapple fruit disease of plum and peach in Japan. Sano T, et al. **J Gen Virol** 1989 Jun; 70 (Pt 6):1311–9

Molecular cloning of a potato virus Y genome: nucleotide sequence homology in non-coding regions of potyviruses. Turpen T. **J Gen Virol** 1989 Aug;70 (Pt 8):1951–60

Nucleotide sequence of rice dwarf virus genome segment 9. Uyeda I, et al. **J Gen Virol** 1989 May;70 (Pt 5):1297–300

Nucleotide sequence of the 3'-terminal region of potato virus YN RNA. van der Vlugt R, et al. **J Gen Virol** 1989 Jan; 70 (Pt 1):229–33

Probable reassortment of genomic elements among elongated RNA-containing plant viruses. Morozov SYu, et al. **J Mol Evol** 1989 Jul;29(1):52–62

Comparative analysis of alternating purine–pyrimidine tracts and potential Z-DNA sequences in DNA plant viruses. Rollo F, et al. **J Mol Evol** 1989 Mar;28(3):225–31

Variability and evolution of the plant RNA virus pepper mild mottle virus. Rodríguez-Cerezo E, et al. **J Virol** 1989 May; 63(5):2198–203

Rapid isolation of double stranded RNA segments from disulphide crosslinked polyacrylamide gels. Dulieu P, et al. **J Virol Methods** 1989 Apr-May;24(1–2):77–83

Anomalous electrophoretic behavior of the major potato virus X RNA translation product. Karasev AV, et al. **J Virol Methods** 1989 Feb;23(2):223–7

Nucleotide cDNA sequence coding for the PVYo coat protein. Bravo-Almonacid F, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4401

Complete nucleotide sequence of wound tumor virus genomic segment S11. Dall DJ, et al. **Nucleic Acids Res** 1989 May 11;17(9):3599

The nucleotide sequence of cymbidium ringspot virus RNA. Grieco F, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6383

Pea early browning virus RNA1 encodes four polypeptides including a putative zinc-finger protein. MacFarlane SA, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2245–60

Nucleotide cDNA sequence coding for the PVXc coat protein. Mandel AM, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1265

The complete nucleotide sequence of the maize chlorotic mottle virus genome. Nutter RC, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3163–77

Sequence variability in avocado sunblotch viroid (ASBV). Pallás V, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9864

Nucleotide sequence of the potato leafroll virus coat protein gene. Prill B, et al. **Nucleic Acids Res** 1989 Feb 25; 17(4):1768

Nucleotide sequence of a hop stunt viroid (HSVd) isolate from the German grapevine rootstock 5BB as determined by PCR-mediated sequence analysis. Puchta H, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5841

The nucleotide sequence of potato virus X RNA. Skryabin KG, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10929–30

Nucleotide sequence of beet western yellows virus RNA. Veidt I, et al. **Nucleic Acids Res** 1988 Nov 11; 16(21):9917–32

Replication of wheat dwarf virus DNA in protoplasts and analysis of coat protein mutants in protoplasts and plants. Woolston CJ, et al. **Nucleic Acids Res** 1989 Aug 11; 17(15):6029–41

Molecular variation in vector-borne plant viruses: epidemiological significance. Harrison BD, et al. **Philos Trans R Soc Lond [Biol]** 1988 Oct 31; 321(1207):447–62 (57 ref.)

Infectious in vitro transcripts from cloned cDNA of a potyvirus, tobacco vein mottling virus. Domier LL, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3509–13

Derivation of an infectious viral RNA by autolytic cleavage of in vitro transcribed viral cDNAs. Dzianott AM, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4823–7

Geminivirus genes and vectors. Davies JW, et al. **Trends Genet** 1989 Mar;5(3):77–81 (40 ref.)

Sequence of cowpea chlorotic mottle virus RNAs 2 and 3 and evidence of a recombination event during bromovirus evolution. Allison RF, et al. **Virology** 1989 Sep; 172(1):321–30

Expression of the 16K cistron of tobacco rattle virus in protoplasts. Angenent GC, et al. **Virology** 1989 Apr; 169(2):305–11

Genome structure of tobacco rattle virus strain PLB: further evidence on the occurrence of RNA recombination among tobraviruses. Angenent GC, et al. **Virology** 1989 Jul; 171(1):271–4

Complete nucleotide sequence of wound tumor virus genomic segments encoding nonstructural polypeptides. Anzola JV, et al. **Virology** 1989 Jul;171(1):222–8

Intraviral homology and subgenomic RNAs of pepper ringspot virus. Bergh ST, et al. **Virology** 1989 Feb; 168(2):339–43

The genome structure of turnip crinkle virus. Carrington JC, et al. **Virology** 1989 May;170(1):219–26

Novel virus-like particles containing circular single-stranded DNAs associated with subterranean clover stunt disease. Chu PW, et al. **Virology** 1988 Nov;167(1):38–49

Molecular genetic analysis of a plant virus polyprotein cleavage site: a model. Dougherty WG, et al. **Virology** 1989 Aug;171(2):356–64

Molecular genetic and biochemical evidence for the involvement of the heptapeptide cleavage sequence in determining the reaction profile at two tobacco etch virus cleavage sites in cell-free assays. Dougherty WG, et al. **Virology** 1989 Sep;172(1):145–55

Proteolytic activity of the plum pox potyvirus NIa-like protein in Escherichia coli. García JA, et al. **Virology** 1989 Jun;170(2):362–9

Organization of tomato bushy stunt virus genome: characterization of the coat protein gene and the 3' terminus. Hillman BI, et al. **Virology** 1989 Mar;169(1):42–50

Grapevine viroid 1B, a new member of the apple scar skin viroid group contains the left terminal region of tomato planta macho viroid. Koltunow AM, et al. **Virology** 1989 Jun;170(2):575–8

In vitro synthesis of biologically active beet necrotic yellow vein virus RNA. Quillet L, et al. **Virology** 1989 Sep; 172(1):293–301

Complete nucleotide sequence of the cucumber necrosis virus genome. Rochon DM, et al. **Virology** 1989 Apr; 169(2):251–9

Transgenic tobacco plants accumulating tobacco rattle virus coat protein resist infection with tobacco rattle virus and pea early browning virus. van Dun CM, et al. **Virology** 1988 Dec;167(2):649–52

Assignment of wound tumor virus nonstructural polypeptides to cognate dsRNA genome segments by in vitro expression of tailored full-length cDNA clones. Xu ZK, et al. **Virology** 1989 Jan;168(1):73–8

The 3'-terminal sequence of a wound tumor virus transcript can influence conformational and functional properties associated with the 5'-terminus. Xu ZK, et al. **Virology** 1989 Jun;170(2):511–22

Expression of the plum pox virus coat protein region in Escherichia coli. Mattanovich D, et al. **Virus Genes** 1989 Mar;2(2):119–27

Nucleotide sequence of the capsid protein gene of potato virus Y (PVY). Rosner A, et al. **Virus Genes** 1988 Jun; 1(3):255–60

The complete nucleotide sequence of plum pox potyvirus RNA. Laín S, et al. **Virus Res** 1989 Jun;13(2):157–72

[Primary structure and organization of the genome of potato virus X] Kraev AS, et al. **Dokl Akad Nauk SSSR** 1988; 300(3):711–6 **(Rus)**

[Use of a cell-free protein synthesizing system from cells of ascites carcinoma Krebs-2 for RNA translation of plant viruses] Karasev AV, et al. **Mol Biol (Mosk)** 1989 Jan–Feb; 23(1):119–26 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Kinetics of velvet tobacco mottle virus satellite RNA synthesis and encapsidation. Hanada K, et al. **Virology** 1989 May;170(1):48–54

[Viruses pathogenic for plants in surface waters] Lesemann DE, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1988; 78:147–52 (18 ref.) **(Ger)**

IMMUNOLOGY

Use of enzyme-linked immunosorbent assay for the determination of serological relationship between two comoviruses. Gallo J, et al. **Acta Virol (Praha)** 1988 Sep; 32(5):443–54

Accessibility of three continuous epitopes in tomato bushy stunt virus. Jaegle M, et al. **Ann Inst Pasteur Virol** 1988 Jan-Mar;139(1):39–50

Possible members of the potyvirus group transmitted by mites or whiteflies share epitopes with aphid-transmitted definitive members of the group. Shukla DD, et al. **Arch Virol** 1989;105(3–4):143–51

Early screening for anti-plum pox virus monoclonal antibodies with different epitope specificities by means of gold-labelled immunosorbent electron microscopy. Himmler G, et al. **J Virol Methods** 1988 Dec;22(2–3):351–7

A general method for the detection of potyviral gene products in plant protoplasts and tissue. Luciano CS, et al. **J Virol Methods** 1989 Jun;24(3):347–55

Production and use of monoclonal antibodies for the detection of apple chlorotic leaf spot virus. Poul F, et al. **J Virol Methods** 1989 Aug;25(2):153–65

Differentiation of peanut clump virus serotypes by

monoclonal antibodies. Huguenot C, et al. **Res Virol** 1989 Mar-Apr;140(2):87-102
Strategies for virus resistance in plants. Baulcombe D. **Trends Genet** 1989 Feb;5(2):56-60 (35 ref.)
Analysis of lettuce necrotic yellows virus structural proteins with monoclonal antibodies and concanavalin A. Dietzgen RG, et al. **Virology** 1988 Oct;166(2):486-94
[Comparison of antigenic properties of the X-potato virus and its coat proteins. Effect of proteolytic cleavage on antigenic characteristics] Bobkova AF, et al. **Mol Gen Mikrobiol Virusol** 1989 Feb;(2):35-41 (Eng. Abstr.) **(Rus)**
[Antibodies against structural proteins of carlaviruses in human and other mammals] Morozov VA, et al. **Mol Gen Mikrobiol Virusol** 1988 Jul;(7):16-20 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Effects of pH and ionic strength on precipitation of phytopathogenic viruses by polyethylene glycol. Pastorek J, et al. **Acta Virol (Praha)** 1989 Jan;33(1):68-74
Biotinylated nucleic acid hybridization probes for potato virus detection. Hopp HE, et al. **Arch Virol** 1988; 103(3-4):231-41
Strain differentiation of barley yellow dwarf virus isolates using specific monoclonal antibodies in immunosorbent electron microscopy. Forde SM. **J Virol Methods** 1989 Mar;23(3):313-9
Simultaneous quantification of two plant viruses by double-label time-resolved immunofluorometric assay. Saarma M, et al. **J Virol Methods** 1989 Jan;23(1):47-54
Use of rabbit Fab'-peroxidase conjugates prepared by the maleimide method for detecting plant viruses by ELISA. Weiss E, et al. **J Virol Methods** 1989 Apr-May; 24(1-2):11-25
Characterisation of synthetic DNA probe detecting potato spindle tuber viroid. Welnicki M, et al. **J Virol Methods** 1989 Apr-May;24(1-2):141-52
Comparison of enzyme-linked immunosorbent assay (ELISA) with dot hybridization using 32P- or 2-acetylaminofluorene (AAF)-labelled cDNA probes for the detection and characterization of beet necrotic yellow vein virus. Sakamoto H, et al. **Mol Cell Probes** 1989 Jun; 3(2):159-66
Transcription and in vitro translation of the dsRNA virus isolated from Rhizoctonia solani. Finkler A, et al. **Virus Genes** 1988 Mar;1(2):205-19
[Contamination with pathogenic plant viruses of soil and water] Kleinhempel H, et al. **Z Gesamte Hyg** 1988 Sep; 34(9):496-9 (Eng. Abstr.) **(Ger)**

METABOLISM

Is the role of basic amino terminal arm replaced by polyamines in tymoviruses? Suryanarayana S, et al. **Indian J Biochem Biophys** 1988 Dec;25(6):580-4
A "zinc-finger"-type binding domain in tobacco streak virus coat protein. Sehnke PC, et al. **Virology** 1989 Jan; 168(1):48-56

PHYSIOLOGY

Biology and molecular biology of furoviruses. Brunt AA, et al. **Adv Virus Res** 1989;36:1-32 (192 ref.)
Wheat dwarf virus, a geminivirus of graminaceous plants needs splicing for replication. Schalk HJ, et al. **EMBO J** 1989 Feb;8(2):359-64

ULTRASTRUCTURE

Structure of potyvirus coat proteins and its application in the taxonomy of the potyvirus group. Shukla DD, et al. **Adv Virus Res** 1989;36:273-314 (123 ref.)
Coconut foliar decay virus particles are 20-nm icosahedra. Randles JW, et al. **Intervirology** 1989;30(3):177-80
Three-dimensional reconstruction from electron micrographs of disordered specimens. II. Implementation and results. Vogel RH, et al. **Ultramicroscopy** 1988;25(3):223-39
[The submolecular structure of the Carnation Mottle virus] Morgunova EYu, et al. **Mol Gen Mikrobiol Virusol** 1989 Mar;(3):29-34 (Eng. Abstr.) **(Rus)**

PLANTAGO see under **PLANTS, MEDICINAL**

PLANTAR PRINTS see **DERMATOGLYPHICS**

PLANTS

Removing cactus spines [letter] Cooper LI. **Am J Dis Child** 1988 Nov;142(11):1140
Hypersensitivity pneumonitis in an orchid grower associated with sensitivity to the fungus Cryptostroma corticale. Shepherd GM, et al. **Ann Allergy** 1989 Jun;62(6):522-5
A novel ubiquitous protein 'chaperonin' supports the endosymbiotic origin of mitochondrion and plant chloroplast. Gupta RS, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):780-7
The state of plant biology: views from the other side of the fence [letter; comment] **Cell** 1989 Mar 24;56(6):914-5. **Comment on:** Cell 1989 Jan 27;56(2):141-2
The state of plant molecular biology: is there a second chance for Ag schools? [see comments] Finer GR. **Cell** 1989 Jan 27;56(2):141-2. **Comment in:** Cell 1989 Mar 24;56(6):914-5
Serum thyroid hormone levels of heifers grazing leucaena leucocephala in southern Taiwan. Huang JC, et al. **Chin J Physiol** 1988;31(1):23-9
Hand-held computer program for field-capture and analysis of herbage yield and composition data using a modified dry-weight-rank and yield estimate method. Griffin GF, et al. **Comput Appl Biosci** 1988 Apr;4(2):239-42
Contact dermatitis due to Paeonia (peony). Bruynzeel DP. **Contact Dermatitis** 1989 Feb;20(2):152-3
Contact dermatitis from madder. Castelain M, et al. **Contact Dermatitis** 1988 Sep;19(3):228-9
Phytophotodermatitis from a Cachrys species. Ena P, et al. **Contact Dermatitis** 1989 Feb;20(2):144-5
An investigation of the irritant and allergenic properties of daffodils (Narcissus pseudonarcissus L., Amaryllidaceae). A review of daffodil dermatitis. Gude M, et al. **Contact Dermatitis** 1988 Jul;19(1):1-10
Primula dermatitis: prevalence, detection and outcome. Logan RA, et al. **Contact Dermatitis** 1988 Jul;19(1):68-9
Contact dermatitis from plants in a geriatric nurse. Muñoz D, et al. **Contact Dermatitis** 1989 Mar;20(3):227-8
Contact allergy to Nephrolepsis ferns. Stoof TJ, et al. **Contact Dermatitis** 1989 Mar;20(3):234-5
1,1,1-Trichloroethane: medium-term toxicity to carp, daphnids, and higher plants. Thompson RS, et al. **Ecotoxicol Environ Safety** 1989 Apr;17(2):172-82
Attachment behaviour of immatures of Mansonia annulifera (Theobald), 1901. Rajendran G, et al. **Indian J Med Res** 1989 May;89:192-7
Laboratory evaluation of the bladderwort plant, Utricularia vulgaris (Lentibulariaceae), as a predator of late instar Culex pipiens and assessment of its biocontrol potential. Baumgartner DL. **J Am Mosq Control Assoc** 1987 Sep; 3(3):504-7
Failure of mosquitoes to colonize teasel axils in Illinois. Baumgartner DL. **J Am Mosq Control Assoc** 1986 Sep; 2(3):371-3
Mosquito larval development in container habitats: the role of rotting Scirpus californicus. Berkelhamer RC, et al. **J Am Mosq Control Assoc** 1989 Jun;5(2):258-60
Use of an artificial bromeliad to show the importance of color value in restricting colonization of bromeliads by Aedes aegypti and Culex quinquefasciatus. Frank JH. **J Am Mosq Control Assoc** 1985 Mar;1(1):28-32
Relative role of different types of aquatic plants in the production of Mansonia. Chandrasekharan A, et al. **J Commun Dis** 1988 Sep;20(3):202-8
High prevalence of human papillomavirus infection and possible association with betel quid chewing and smoking in oral epidermoid carcinomas in Taiwan. Chang KW, et al. **J Med Virol** 1989 May;28(1):57-61
Some little-known hallucinogenic plants of the Aztecs. Elferink JG. **J Psychoactive Drugs** 1988 Oct-Dec; 20(4):427-35
South Carolina florists dermatitis: case report and survey results. Bethea LK, et al. **J S C Med Assoc** 1988 Sep; 84(9):446-8
Effect of plant polysaccharides on T and B lymphocytes in normal and tumor transplanted mice. Gu YX, et al. **J Tradit Chin Med** 1988 Sep;8(3):198-202
Effect of plant polysaccharides on T and B lymphocytes in tumor transplanted mice irradiated by X-ray. Gu YX, et al. **J Tradit Chin Med** 1988 Dec;8(4):277-81
Asthma and rhinitis associated with lycopodium spores on condoms [letter] Juhlin L. **Lancet** 1989 Mar 11;1(8637):563
Houseplant peritonitis [letter] al-Wali W, et al. **Lancet** 1988 Oct 22;2(8617):957
Contact dermatitis and Primula obconica [letter] Apted J. **Med J Aust** 1988 Oct 17;149(8):452
Bamboo flowering and pandas [letter] Taylor AH, et al. **Nature** 1989 Sep 14;341(6238):111
Knowledge, attitudes and practices among rural communities in Zimbabwe in relation to Phytolacca dodecandra—a plant molluscicide. Ndamba J, et al. **Soc Sci Med** 1989; 28(12):1249-53
Diazepam and N-desmethyldiazepam in plant food and in brain [letter] de Blas AL. **Trends Neurosci** 1988 Nov; 11(11):489-90
Parietaria. A newly identified cause of pollen allergy in California. Kaufman HS. **West J Med** 1989 Mar; 150(3):364-5
[Occupational eczema due to contact with Alstromeria (Inca lily)] Mikkelsen S, et al. **Ugeskr Laeger** 1989 Apr 3; 151(14):898 (Eng. Abstr.) **(Dan)**
[Photo-aggravated Parthenium hysterophorus contact eczema] Jeanmougin M, et al. **Ann Dermatol Venereol** 1988; 115(11):1238-40 **(Fre)**
[Pitfalls in occupational dermatology: airborne contact eczema caused by plants] Diepgen TL, et al. **Derm Beruf Umwelt** 1989 Jan-Feb;37(1):23-5 (Eng. Abstr.) **(Ger)**
[The incidence of occupationally-induced allergic skin diseases in a large flower market] Hausen BM, et al. **Derm Beruf Umwelt** 1988 Jul-Aug;36(4):117-24 (Eng. Abstr.) **(Ger)**
[Plant pesticides and ground water. Inventory, prevention and clean-up strategies. Bodies of Water and Plant Pesticides VI. 6th technical discussion. Berlin, 30 May-1 June 1988] **Schriftenr Ver Wasser Boden Lufthyg** 1989; 79:1-702 **(Ger)**
[Aerogenic contact dermatitis] Schwanitz HJ, et al. **Z Hautkr** 1988;63 Suppl 4:70-2 (Eng. Abstr.) **(Ger)**
[Purification of waste water from olive-oil pressing plants using hydrophytes. Preliminary study on the use of Eichornia crassipes] Ferrara L, et al. **Boll Soc Ital Biol Sper** 1989 Apr;65(4):303-9 (Eng. Abstr.) **(Ita)**
[Rhinitis and osmylogenic asthma caused by prickly pear. Presentation of a clinical case] Vargas VH, et al. **Rev Alerg Mex** 1989 Mar-Apr;36(2):69-71 **(Spa)**

ANALYSIS

Long-chain polyprenols in gymnosperm plants. Swieżewska E, et al. **Acta Biochim Pol** 1988;35(2):131-47
The spectrophotometric determination of nanomole quantities of chloride in plant tissue. Allen CR, et al. **Anal Biochem** 1988 Aug 15;173(1):54-8
Mixed plant tissue-carbon paste bioelectrode. Wang J, et al. **Anal Chem** 1988 Aug 1;60(15):1545-8
Isotope dilution spark-source mass spectrometric determination of total mercury in botanical and biological samples. Moody JR, et al. **Analyst** 1988 Jun;113(6):923-7
Macromolecular components of tomato fruit pectin. Fishman ML, et al. **Arch Biochem Biophys** 1989 Oct;274(1):179-91
Identification of GTP-binding proteins in the plasma membrane of higher plants. Blum W, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):954-9
The measurement and mass spectral identification of indole-3-pyruvate from tomato shoots. Cooney TP, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):761-6
Detection of desmethyldiazepam and diazepam in brain of different species and plants. Unseld E, et al. **Biochem Pharmacol** 1989 Aug 1;38(15):2473-8
Plant phospholipids. I. Identification of the phosphatidyl glycerols. 1958 [classical article] Benson AA, et al. **Biochim Biophys Acta** 1989;1000:452-8
Properties of the subunits of wheat germ initiation factor 3. Heufler C, et al. **Biochim Biophys Acta** 1988 Nov 10; 951(1):182-90
MicroHLPC determination of amygdalin in Semen pruni armeniacae and Semen pruni persicae. He LY, et al. **Biomed Chromatogr** 1988 Nov;2(6):271-3
Photodecomposition of monocrotophos in soil, on plant foliage, and in water. Dureja P. **Bull Environ Contam Toxicol** 1989 Aug;43(2):239-45
Influence of continuous monoculture and insecticide treatments on the rate of chlorfenvinphos soil biodegradation in cabbage crops. Rouchaud J, et al. **Bull Environ Contam Toxicol** 1989 Mar;42(3):409-16
Triclopyr persistence in northern Idaho forest vegetation. Whisenant SG, et al. **Bull Environ Contam Toxicol** 1989 May;42(5):660-5
Dermal penetration enhancement by crude drugs: in vitro skin permeation of prednisolone enhanced by active constituents in cardamon seed. Yamahara J, et al. **Chem Pharm Bull (Tokyo)** 1989 Mar;37(3):855-6
Effect of chemical constituents from plants on 12-O-tetradecanoylphorbol-13-acetate-induced inflammation in mice. Yasukawa K, et al. **Chem Pharm Bull (Tokyo)** 1989 Apr;37(4):1071-3
Identification of different classes of superoxide dismutase in carnation petals. Droillard MJ, et al. **Electrophoresis** 1989 Jan;10(1):46-8
Detection of polypeptides associated with the cold acclimation process in spinach. Guy CL, et al. **Electrophoresis** 1988 Nov;9(11):787-96
Photocontrol of organelle and cell type specific changes in the polypeptide composition of Euglena and sorghum. Monroy AF, et al. **Electrophoresis** 1988 Nov;9(11):764-73
Chloride binding to photosystem II in the dark is in slow exchange. Shachar-Hill Y, et al. **FEBS Lett** 1989 Aug 28; 254(1-2):184-8
Phenolic compounds of the mulberry tree and related plants. Nomura T. **Fortschr Chem Org Naturst** 1988;53:87-201 (179 ref.)
Plant/soil concentration ratios of 226Ra for contrasting sites around an active U mine-mill. Ibrahim SA, et al. **Health Phys** 1988 Dec;55(6):903-10
Dependence of the 137Cs soil-to-plant transfer factor on soil parameters. Schuller P, et al. **Health Phys** 1988 Sep; 55(3):575-7
Natural plant enzyme inhibitors: comparison of the action of tuber protease inhibitors on animal pancreatic systems. Rao NM, et al. **Indian J Biochem Biophys** 1985 Dec; 22(6):373-5
N-terminal sequence of some ribosome-inactivating proteins. Montecucchi PC, et al. **Int J Pept Protein Res** 1989 Apr; 33(4):263-7
Amino acid sequences of ferredoxin isoproteins from radish roots. Wada K, et al. **J Biochem (Tokyo)** 1989 Apr; 105(4):619-25
The location of calmodulin in the pea plasma membrane. Collinge M, et al. **J Biol Chem** 1989 May 25; 264(15):8865-72
Plant cells contain calsequestrin. Krause KH, et al. **J Biol Chem** 1989 Mar 15;264(8):4269-72
Intracellular thionins of barley. A second group of leaf thionins closely related to but distinct from cell wall-bound thionins. Reimann-Philipp U, et al. **J Biol Chem** 1989 May 25;264(15):8978-84
A family of abundant plasma membrane-associated glycoproteins related to the arabinogalactan proteins is unique to flowering plants. Pennell RI, et al. **J Cell Biol** 1989 May;108(5):1967-77
Reversed-phase high-performance liquid chromatographic

separation of lutein and lutein fatty acid esters from marigold flower petal powder. Rivas JD. **J Chromatogr** 1989 Mar 3;464(2):442–7

Determination of amino acids in biological, pharmaceutical, plant and food samples by automated precolumn derivatization and high-performance liquid chromatography. Schuster R. **J Chromatogr** 1988 Oct 14; 431(2):271–84

Rapid separation of flavonoids by analytical high-speed counter-current chromatography. Zhang TY, et al. **J Chromatogr** 1988 Jul 8;445(1):199–206

A new lectin-gold complex for ultrastructural localization of galacturonic acids. Benhamou N, et al. **J Histochem Cytochem** 1988 Nov;36(11):1403–11

Pyrrolizidine alkaloids from Cynoglossum creticum. Synthesis of the pyrrolizidine alkaloids echinatine, rinderine, and analogues. Asibal CF, et al. **J Nat Prod** 1989 Jan-Feb;52(1):109–18

Toxicants from mangrove plants, V. Isolation of the piscicide, 2-hydroxy-5-methoxy-3-undecyl-1,4 benzoquinone (5-O-methylembelin) from Aegiceras corniculatum. Gomez E, et al. **J Nat Prod** 1989 May-Jun;52(3):649–51

Bullatacin and bullatacinone: two highly potent bioactive acetogenins from Annona bullata. Hui YH, et al. **J Nat Prod** 1989 May-Jun;52(3):463–77

Antimicrobial and cytotoxic activity of rottlerin-type compounds from Hypericum drummondii. Jayasuriya H, et al. **J Nat Prod** 1989 Mar-Apr;52(2):325–31

7-O-methylhorminone and other cytotoxic diterpene quinones from Lepechinia bullata. Jonathan LT, et al. **J Nat Prod** 1989 May-Jun;52(3):571–5

Polypodoside A, an intensely sweet constituent of the rhizomes of Polypodium glycyrrhiza. Kim J, et al. **J Nat Prod** 1988 Nov-Dec;51(6):1166–72

Bioactive compounds from the root of Myrsine africana. Li XH, et al. **J Nat Prod** 1989 May-Jun;52(3):660–2

Bioactivity of the essential oil of Bupleurum fruticosum. Lorente I, et al. **J Nat Prod** 1989 Mar-Apr;52(2):267–72

Retrodihydrochalcones from Dracaena loureiri. Meksuriyen D, et al. **J Nat Prod** 1988 Nov-Dec;51(6):1129–35

3 beta-O-palmityl longispinogenin from Trichocereus chilensis. Morales G, et al. **J Nat Prod** 1989 Mar-Apr; 52(2):381–4

Halleridone, a cytotoxic constituent from Cornus controversa. Nishino C, et al. **J Nat Prod** 1988 Nov-Dec; 51(6):1281–2

Irritant principles of the spurge family (Euphorbiaceae). XIII. Oligocyclic and macrocyclic diterpene esters from latices of some Euphorbia species utilized as source plants of honey. Sosath S, et al. **J Nat Prod** 1988 Nov-Dec; 51(6):1062–74

Diterpenoids from the roots of Salvia hypargeia. Ulubelen A, et al. **J Nat Prod** 1988 Nov-Dec;51(6):1178–83

Plant antimutagenic agents, 4. Isolation and structure elucidation of maesol, an inactive constituent of Maesa spp. Wall ME, et al. **J Nat Prod** 1988 Nov-Dec;51(6):1226–31

Plant antimutagenic agents, 3. Coumarins. Wall ME, et al. **J Nat Prod** 1988 Nov-Dec;51(6):1148–52

Macrophage activation by the polysaccharide arabinogalactan isolated from plant cell cultures of Echinacea purpurea. Luettig B, et al. **J Natl Cancer Inst** 1989 May 3;81(9):669–75

Determination of beta-N-methylamino-L-alanine (BMAA) in plant (Cycas circinalis L.) and animal tissue by precolumn derivatization with 9-fluorenylmethyl chloroformate (FMOC) and reversed-phase high-performance liquid chromatography. Kisby GE, et al. **J Neurosci Methods** 1988 Nov;26(1):45–54

Pyrrolizidine alkaloids. Robins DJ. **Nat Prod Rep** 1989 Jun; 6(3):221–30 (95 ref.)

Could mosses be used for the subsequent mapping of the Chernobyl fallout? Daróczy S, et al. **Naturwissenschaften** 1988 Nov;75(11):569–70

Purification of the major UsnRNPs from broad bean nuclear extracts and characterization of their protein constituents. Pálfi Z, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1445–58

Annales de l'Institut Pasteur, Volume 34, 1910: The presence and utility of boron in plants [classical article] Agulhon H. **Nutr Rev** 1988 Oct;46(10):353–5

Thiaminase activities and thiamine content of Pteridium aquilinum, Equisetum ramosissimum, Malva parviflora, Pennisetum clandestinum and Medicago sativa. Meyer P. **Onderstepoort J Vet Res** 1989 Jun;56(2):145–6

Prostaglandins and prostaglandin-like compounds in plants. Bosisio E. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:99–103 (14 ref.)

Tigliane-type diterpene esters from Synadenium grantii. Bagavathi R, et al. **Planta Med** 1988 Dec;54(6):506–10

Northalibroline: a new bisbenzylisoquinoline alkaloid from Thalictrum minus var. minus. Başer KH, et al. **Planta Med** 1988 Dec;54(6):513–5

9-O-demethylmaritidine: a new alkaloid from Narcissus radinganorum. Bastida J, et al. **Planta Med** 1988 Dec; 54(6):524–6

Ellagic acid derivatives of Agrostistachys hookeri. Choi YH, et al. **Planta Med** 1988 Dec;54(6):511–3

Unusual norhomoditerpenes and other constituents from Kyrsteniopsis dibollii. Jakupovic J, et al. **Planta Med** 1988 Dec;54(6):533–7

Inhibition of the behaviour of human polynuclear leukocytes by an extract of Chrysanthemum parthenium. Lösche W, et al. **Planta Med** 1988 Oct;54(5):381–4

New sesquiterpenoids from Chrysanthemum indicum var. tuneful. Mladenova K, et al. **Planta Med** 1988 Dec; 54(6):553–5

Epicuticular flavonoids from Encelia. Proksch P, et al. **Planta Med** 1988 Dec;54(6):542–6

Alkaloids and coumarins from the roots of Ruta chalepensis var. latifolia. Ulubelen A, et al. **Planta Med** 1988 Dec; 54(6):551–2

Search for new plant constituents with potential antiphlogistic and antiallergic activity. Wagner H. **Planta Med** 1989 Jun;55(3):235–41 (103 ref.)

Cytotoxicity of isoquinoline alkaloids and their N-oxides. Wu YC, et al. **Planta Med** 1989 Apr;55(2):163–5

Interception and retention of Chernobyl-derived 134Cs, 137Cs and 106Ru in a spruce stand. Bunzl K, et al. **Sci Total Environ** 1989 Jan;78:77–87

Effect of applications of sewage sludge on N, P, K, Ca, Mg and trace element contents of plant tissues. Couillard D, et al. **Sci Total Environ** 1989 May 15;80(2-3):113–25

Atmospheric deposition of arsenic and selenium across Canada using Sphagnum moss as a biomonitor. Glooschenko WA, et al. **Sci Total Environ** 1988 Jul 15; 73(3):269–75

Assimilation of thorium isotopes into terrestrial vegetation. Rayno DR. **Sci Total Environ** 1989 May 15;80(2-3):243–66

A new technique for orcein banding with acid treatment. Chattopadhyay D, et al. **Stain Technol** 1988 Sep;63(5):283–7

Sequential estimation of nuclear DNA and silver staining of nucleoli in plant cells. Doležel J, et al. **Stain Technol** 1989 Jan;64(1):9–13

Fluorescent staining of primary plant cell walls using bisbenzimide (33258 Hoechst) fluorochrome. Hernández LF, et al. **Stain Technol** 1988 May;63(3):190–2

A rapid screening technique for detection of diosgenin through in situ cytophotometry. Kundu AK, et al. **Stain Technol** 1988 Nov;63(6):369–72

Staining of xylem parenchyma mitochondria with photo-oxidized 3,3'-diaminobenzidine. Ros Barcelo A, et al. **Stain Technol** 1988 Sep;63(5):277–81

Kochia scoparia oxalate content. Dickie CW, et al. **Vet Hum Toxicol** 1989 Jun;31(3):240–2

Spectrophotometric determination of copper in foods, feedingstuffs and plants: a comparison between the glyoxal bis(4-phenyl-3-thiosemicarbazone) and bathocuproine disulphonate methods. Jiménez AM, et al. **Z Gesamte Hyg** 1989 Mar;35(3):143–5

[Antibiotics in higher plants] Orzechowski G. **Pharm Unserer Zeit** 1972 Apr;1(2):42–53 **(Ger)**

[Tilitriandrin: a new bisbenzylisoquinoline alkaloid from tiliacora triandra] Pachaly P, et al. **Planta Med** 1988 Dec; 54(6):516–9 (Eng. Abstr.) **(Ger)**

[Behavior of residues of plant pesticides on plant surfaces] Goedicke HJ. **Z Gesamte Hyg** 1988 May;34(5):279–82 (42 ref.) (Eng. Abstr.) **(Ger)**

[I. Migration of elements from pesticides into plants] Argenziano Cutolo A, et al. **Boll Chim Farm** 1988 Jul-Aug; 127(7-8):176–7 (Eng. Abstr.) **(Ita)**

[Sterols from Gynostemma pentafillum] Marino A, et al. **Boll Soc Ital Biol Sper** 1989 Apr;65(4):317–9 (Eng. Abstr.) **(Ita)**

[Sterols from Spergularia ramosa] Senatore A, et al. **Boll Soc Ital Biol Sper** 1988 Jul;64(7):627–9 (Eng. Abstr.) **(Ita)**

[Two distinct ferredoxins in plants] Shin M, et al. **Seikagaku** 1989 Apr;61(4):251–60 (57 ref.) **(Jpn)**

[Amyloplast] Akazawa T. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):81–5 **(Jpn)**

[Preparation of monoclonal antibody and its application for plant cell biochemistry] Aoki K, et al. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):171–85 (38 ref.) **(Jpn)**

[Nuclei and chromosomes] Hotta Y. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):15–27 (10 ref.) **(Jpn)**

[Biochemical aspect of microtubule protein from higher plants] Mizuno K. **Tanpakushitsu Kakusan Koso** 1987 Jul; (30 Suppl):92–101 (33 ref.) **(Jpn)**

[Anti-calmodulin antibody] Muto S. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):217–22 **(Jpn)**

[Microbodies] Nishimura M. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):37–42 (21 ref.) **(Jpn)**

[Preparation of etioplasts] Obokata J. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):86–91 **(Jpn)**

[Analysis of plant membrane lipids] Sato N, et al. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):163–70 (33 ref.) **(Jpn)**

[Endoplasmic reticulum] Satoh S. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):73–80 (40 ref.) **(Jpn)**

[Gas-chromatographic method of determining the levels of tri-allate in the water, soil and plants] Pilenkova II, et al. **Gig Sanit** 1989 May;(5):51–2 **(Rus)**

[Use of a method of atomic absorption spectroscopy for hygienic evaluation of the accumulation of lead and copper in plants] Sokolova GN, et al. **Gig Sanit** 1989 May;(5):52–4 **(Rus)**

ANATOMY & HISTOLOGY

Plant cell wall architecture. Varner JE, et al. **Cell** 1989 Jan 27;56(2):231–9 (75 ref.)

CYTOLOGY

Electric pulse induced membrane permeabilization. Spatial orientation and kinetics of solute efflux in freely suspended and dielectrophoretically aligned plant mesophyll protoplasts. Mehrle W, et al. **Biochim Biophys Acta** 1989 Jan 30;978(2):267–75

Adhesion of suspension-cultured Catharanthus roseus cells to surfaces: effect of pH, ionic strength, and cation valency. Facchini PJ, et al. **Biomaterials** 1989 Jul;10(5):318–24

Exponential pattern of cell age distribution in dividing cells of plant meristems. Cuadrado A, et al. **Cell Biol Int Rep** 1989 Mar;13(3):283–9

Three-dimensional localization and redistribution of F-actin in higher plant mitosis and cell plate formation. Molè-Bajer J, et al. **Cell Motil Cytoskeleton** 1988;10(1-2):217–28

Indirect mitotic nondisjunction in Vicia faba and Chinese hamster cells. Rizzoni M, et al. **Chromosoma** 1989 Jan; 97(4):339–46

Lipid phase transitions measured in intact cells with Fourier transform infrared spectroscopy. Crowe JH, et al. **Cryobiology** 1989 Feb;26(1):76–84

Cell lineage analysis of maize bundle sheath and mesophyll cells. Langdale JA, et al. **Dev Biol** 1989 May;133(1):128–39

Quin2-induced metaphase arrest in stamen hair cells can be reversed by 1,2-dioctanoylglycerol but not by 1,3-dioctanoylglycerol. Larsen PM, et al. **Eur J Cell Biol** 1989 Apr;48(2):212–9

Ultrastructural and autoradiographic studies of non-generative cells in the antheridium of Chara vulgaris L. III. Shield cells. Kwiatkowska M, et al. **Folia Histochem Cytobiol** 1988;26(4):225–35

The lack of correlation between the rate of rRNA transport from nucleoli into cytoplasm and the duration of G1 and G2 phases in root meristem cells. Olszewska MJ, et al. **Folia Histochem Cytobiol** 1989;27(2):107–12

Heavy metal action on the dry mass content and surface area of nuclei and cytoplasm during differentiation of cortex cells in pea (Pisum sativum L.) roots. Romaniuk J, et al. **Folia Histochem Cytobiol** 1988;26(4):263–73

Voltage-activated, delayed rectifier K+ current from pulvinar protoplasts of Mimosa pudica. Stoeckel H, et al. **Pflugers Arch** 1989;414 Suppl 1:S150–1

[The architecture of plant cells] **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):1–428 **(Jpn)**

[Fractionation of organelle membranes] Miyao M. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):157–62 (34 ref.) **(Jpn)**

[Induction of differentiation in plant cell culture systems] Nomura K, et al. **Tanpakushitsu Kakusan Koso** 1987 Jul; (30 Suppl):123–30 (18 ref.) **(Jpn)**

[Synchronization of suspension culture] Takebe I, et al. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):102–8 (24 ref.) **(Jpn)**

[Protein A-gold technique] Yokota S. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):150–6 (25 ref.) **(Jpn)**

DRUG EFFECTS

Effect of heavy metals on the growth of tissue cultures (II). Maróti M, et al. **Acta Biol Hung** 1988;39(1):75–85

The effect of benzoic acid derivatives on Nicotiana tabacum growth in relation to PR-b1 production. Abad P, et al. **Antiviral Res** 1988 Aug;9(5):315–27

Triticone A: a novel bioactive lactam with potential as a molecular probe. Kenfield D, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):174–82

Fluazifop, a grass-selective herbicide which inhibits acetyl-CoA carboxylase in sensitive plant species [published erratum appears in Biochem J 1988 Nov 1;255(3):1061] Walker KA, et al. **Biochem J** 1988 Aug 15; 254(1):307–10

Fenvalerate interception by and dissipation from sugarcane foliage as affected by application technology. Smith S, et al. **Bull Environ Contam Toxicol** 1989 Jan;42(1):30–6

Herbicidal triazines: acute toxicity on Daphnia, fish, and plants and analysis of its relationships with structural factors. Marchini S, et al. **Ecotoxicol Environ Safety** 1988 Oct;16(2):148–57

A plant indicator of air pollution and human health in Japanese rural communities. Kagamimori S, et al. **Environ Res** 1978 Aug;17(1):33–45

Field evaluations of the phytotoxic effects of Arosurf MSF on selected species of aquatic vegetation. Hester PG, et al. **J Am Mosq Control Assoc** 1989 Jun;5(2):272–4

Organic solvents inhibit the mutagenicity of promutagens dimethylnitrosamine and methylbutylnitrosamine in a higher plant Arabidopsis thaliana. Gichner T, et al. **Mutagenesis** 1986 Mar;1(2):107–9

Water hyacinth (Eichnornia crassipes) to biomonitor genotoxicity of low levels of mercury in aquatic environment. Panda BB, et al. **Mutat Res** 1988 Oct; 206(2):275–9

Some biological properties of traversianal, a strongly molluscicidal diterpenoid aldehyde from Cercospora traversiana. Stoessl A, et al. **Mycopathologia** 1989 Apr; 106(1):41–6

Effects of lime on nickel uptake and toxicity in celery grown on muck soil contaminated by a nickel refinery. Bisessar S. **Sci Total Environ** 1989 Aug;84:82–90

Allium micronucleus (MNC) assay to assess bioavailability,

bioconcentration and genotoxicity of mercury from solid waste deposits of a chloralkali plant, and antagonism of L-cysteine [published erratum appears in Sci Total Environ 1989 Apr;79(3):300] Panda KK, et al. **Sci Total Environ** 1989 Feb;79(1):25–36

[Aluminum toxicity and tolerance in plant roots] Ojima K. **Seikagaku** 1989 Jan;61(1):34–8 **(Jpn)**

ENZYMOLOGY

Influence of EDTA on the ATPase activities of plasma membranes from winter wheat roots. Bérczi A. **Acta Biochim Biophys Hung** 1988;23(2):175–9

The DI- and polyamine oxidases of plants. Smith TA, et al. **Adv Exp Med Biol** 1988;250:573–87 (89 ref.)

The formation of lipoxins and 6,7-dihydrolipoxins by 5-lipoxygenase and reductase partially purified from potato tubers. Ho HY, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:137–40

Mechanism of formation of leukotrienes and lipoxins from arachidonic acid catalyzed by homogenous lipoxygenase from potato tubers. Reddy CC, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:132–6

Mini-chromatofocusing of plant and fungal polyphenoloxidases. Moore BM, et al. **Anal Biochem** 1988 Aug 1;172(2):504–8

Assay of strictosidine synthase from plant cell cultures by high-performance liquid chromatography. Pennings EJ, et al. **Anal Biochem** 1989 Feb 1;176(2):412–5

Assay of glutathione reductase in crude tissue homogenates using 5,5'-dithiobis(2-nitrobenzoic acid). Smith IK, et al. **Anal Biochem** 1988 Dec;175(2):408–13

Monoterpene biosynthesis: mechanistic evaluation of the geranyl pyrophosphate:(-)-endo-fenchol cyclase from fennel (Foeniculum vulgare). Croteau R, et al. **Arch Biochem Biophys** 1989 Mar;269(2):507–16

Geranyl pyrophosphate synthase: characterization of the enzyme and evidence that this chain-length specific prenyltransferase is associated with monoterpene biosynthesis in sage (Salvia officinalis). Croteau R, et al. **Arch Biochem Biophys** 1989 Jun;271(2):524–35

Purification and characterization of prephenate aminotransferase from Anchusa officinalis cell cultures. De-Eknamkul W, et al. **Arch Biochem Biophys** 1988 Nov 15;267(1):87–94

Regulatory seryl-phosphorylation of C4 phosphoenolpyruvate carboxylase by a soluble protein kinase from maize leaves. Jiao JA, et al. **Arch Biochem Biophys** 1989 Mar;269(2):526–35

Formation of trans-caffeoyl-CoA from trans-4-coumaroyl-CoA by Zn2+-dependent enzymes in cultured plant cells and its activation by an elicitor-induced pH shift. Kneusel RE, et al. **Arch Biochem Biophys** 1989 Mar;269(2):455–62

A kinetic study of the effects of phosphate and organic phosphates on the activity of phosphoenolpyruvate carboxylase from Crassula argentea. Meyer CR, et al. **Arch Biochem Biophys** 1989 May 15;271(1):84–97

Aspartate aminotransferase from Panicum maximum Jacq. var. trichoglume Eyles, a C4 plant: purification, molecular properties, and preparation of antibody. Numazawa T, et al. **Arch Biochem Biophys** 1989 Apr;270(1):313–9

S-adenosyl-L-methionine:trans-caffeoyl-coenzyme A 3-O-methyltransferase from elicitor-treated parsley cell suspension cultures. Pakusch AE, et al. **Arch Biochem Biophys** 1989 Jun;271(2):488–94

Kinetic investigation of the substrate specificity of the cyanogenic beta-D-glucosidase (linamarase) of white clover. Pócsi I, et al. **Arch Biochem Biophys** 1989 Aug 1; 272(2):496–506

Chloroplast glucose-6-phosphate dehydrogenase: Km shift upon light modulation and reduction. Scheibe R, et al. **Arch Biochem Biophys** 1989 Oct;274(1):290–7

Phytoalexin synthesis in soybean cells: elicitor induction of reductase involved in biosynthesis of 6'-deoxychalcone. Welle R, et al. **Arch Biochem Biophys** 1989 Jul; 272(1):97–102

A qualitative and quantitative assay of dihydrofolate reductase in carrot cells resistant to methotrexate. Nano R, et al. **Basic Appl Histochem** 1989;33(2):81–92

The calmodulin-stimulated ATPase of maize coleoptiles forms a phosphorylated intermediate. Briars SA, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):185–91

Lipoxygenase-catalyzed epoxidation of benzo(a)pyrene-7,8-dihydrodiol. Byczkowski JZ, et al. **Biochem Biophys Res Commun** 1989 Mar 31; 159(3):1199–205

Characterization of epitopes on the cationic peanut peroxidase by four monoclonal antibodies. Hu CF, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):500–5

Formation of 6,13-dihydroxyoctadecatrienoic acid isomers from gamma-linolenic acid. Kim MR, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1154–60

Inositol phospholipids activate plasma membrane ATPase in plants. Memon AR, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1295–301

Isolation and characterization of 5-lipoxygenase from tulip bulbs. Reddanna P, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1348–51

N.m.r., e.p.r. and magnetic-c.d. studies of cytochrome f. Identity of the haem axial ligands. Rigby SE, et al. **Biochem J** 1988 Dec 1;256(2):571–7

Transcription of left-handed Z-DNA templates: increased rate of single-step addition reactions catalyzed by wheat germ RNA polymerase II. Job D, et al. **Biochemistry** 1988 Aug 23;27(17):6371–8

Structural map of the dicyclohexylcarbodiimide site of chloroplast coupling factor determined by resonance energy transfer. Mitra B, et al. **Biochemistry** 1989 Apr 4; 28(7):3063–9

Inactivation of soybean lipoxygenase 1 by 12-iodo-cis-9-octadecenoic acid. Rotenberg SA, et al. **Biochemistry** 1988 Nov 29;27(24):8813–8

Activity of soybean lipoxygenase in the absence of lipid hydroperoxide. Wiseman JS, et al. **Biochemistry** 1988 Nov 29;27(24):8810–3

Specificity determinants of maize casein kinase-IIB are related to but distinct from those of rat liver casein kinase-2. Dobrowolska G, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):274–7

Partial purification and characterization of an endonuclease from spinach that cleaves ultraviolet light-damaged duplex DNA. Doetsch PW, et al. **Biochim Biophys Acta** 1989 Apr 12;1007(3):309–17

Prosthetic group content and ligand binding properties of a spinach catalase. Hirasawa M, et al. **Biochim Biophys Acta** 1989 Feb 23;994(3):229–34

Stereospecificity of C4 nicotinamide hydrogen transfer of the NADP-dependent glyceraldehyde-3-phosphate dehydrogenase. Levy LM, et al. **Biochim Biophys Acta** 1989 Aug 31;997(3):331–3

Characterization of catalase transcripts and their differential expression in maize. Redinbaugh MG, et al. **Biochim Biophys Acta** 1988 Nov 10;951(1):104–16

Lactose-hydrolyzing beta-glycosidases of barley meal. Simos G, et al. **Biochim Biophys Acta** 1988 Oct 13;967(1):17–24

Isolation and characterization of a cDNA for mitochondrial manganese superoxide dismutase (SOD-3) of maize and its relation to other manganese superoxide dismutases. White JA, et al. **Biochim Biophys Acta** 1988 Nov 10; 951(1):61–70

Characterization of beta-fructosidase, an extracellular glycoprotein of carrot cells. Laurière C, et al. **Biochimie** 1988 Nov;70(11):1483–91

Inhibition of the vacuolar ATPase of Acer pseudoplatanus cells by vanadate. Montrichard F, et al. **Biochimie** 1989 Jul;71(7):813–7

The thiol proteinases from the latex of Carica papaya L. II. The primary structure of proteinase omega. Dubois T, et al. **Biol Chem Hoppe Seyler** 1988 Aug;369(8):741–54

The thiol proteinases from the latex of Carica papaya L. I. Fractionation, purification and preliminary characterization. Dubois T, et al. **Biol Chem Hoppe Seyler** 1988 Aug;369(8):733–40

Ribulose-1,5-bisphosphate carboxylase/oxygenase from Zea mays: amino-acid sequence of the small subunit. Ren L, et al. **Biol Chem Hoppe Seyler** 1988 Jul;369(7):609–15

Purification and partial amino acid sequence of the glutamate 1-semialdehyde aminotransferase of barley and synechococcus. Grimm B, et al. **Carlsberg Res Commun** 1989;54(2):67–79

Nuclear-organelle interactions: nuclear antisense gene inhibits ribulose bisphosphate carboxylase enzyme levels in transformed tobacco plants. Rodermel SR, et al. **Cell** 1988 Nov 18;55(4):673–81

Are spontaneous conformational interconversions a molecular basis for long-period oscillations in enzyme activity? Queiroz-Claret C, et al. **Chronobiol Int** 1988; 5(4):301–9

Alcohol-oxidizing enzymes from various organisms. Cardemil E. **Comp Biochem Physiol [B]** 1978;60(1):1–7 (60 ref.)

Two genes encode the adenine nucleotide translocator of maize mitochondria. Isolation, characterisation and expression of the structural genes. Bathgate B, et al. **Eur J Biochem** 1989 Aug 1;183(2):303–10

Purification, characterization and induction of L-phenylalanine ammonia-lyase in Phaseolus vulgaris. da Cunha A. **Eur J Biochem** 1988 Dec 1;178(1):243–8

Primary structures and catalytic properties of isoenzymes encoded by the two 4-coumarate: CoA ligase genes in parsley. Lozoya E, et al. **Eur J Biochem** 1988 Oct 1; 176(3):661–7

Metabolites controlling the rate of starch synthesis in the chloroplast of C3 plants. Pettersson G, et al. **Eur J Biochem** 1989 Jan 15;179(1):169–72

Effects of metabolite binding to ribulosebisphosphate carboxylase on the activity of the Calvin photosynthesis cycle. Pettersson G, et al. **Eur J Biochem** 1988 Nov 1; 177(2):351–5

Molecular and immunological characterization of plastid and cytosolic pyruvate kinase isozymes from castor-oil-plant endosperm and leaf. Plaxton WC. **Eur J Biochem** 1989 May 1;181(2):443–51

Cycloeucalenol-obtusifoliol isomerase. Structural requirements for transformation or binding of substrates and inhibitors. Rahier A, et al. **Eur J Biochem** 1989 May 15;181(3):615–26

Modulation of the GTPase activity of the chloroplast F1-ATPase by ATP binding at noncatalytic sites. Xue Z, et al. **Eur J Biochem** 1989 Feb 15;179(3):677–81

Production of antibodies against the coenzyme pyrrolequinoline quinone. Citro G, et al. **FEBS Lett** 1989 Apr 24;247(2):201–4

N-terminal region of Proteus mirabilis glutathione transferase is not homologous to mammalian and plant glutathione transferases. Di Ilio C, et al. **FEBS Lett** 1989 Jun 19; 250(1):57–9

Biosynthesis of psoralens. Psoralen 5-monooxygenase activity from elicitor-treated Ammi majus cells. Hamerski D, et al. **FEBS Lett** 1988 Nov 7;239(2):263–5

Cloning and nucleotide sequence of cDNA for the plastid glycerol-3-phosphate acyltransferase from squash. Ishizaki O, et al. **FEBS Lett** 1988 Oct 10;238(2):424–30

Stem bromelain: amino acid sequence and implications for weak binding of cystatin. Ritonja A, et al. **FEBS Lett** 1989 Apr 24;247(2):419–24

Cytochemical methods for the localization of invertase activity in plant tissues. Chapman J, et al. **Histochemistry** 1988;90(3):215–7

Glycolytic activity in embryos of Pisum sativum and of non-dormant or dormant seeds of Avena sativa L. expressed through activities of PFK and PPi-PFK. Corbineau F, et al. **Histochemistry** 1989;90(5):359–64

Subperoxisomal localization of glycolate oxidase. Vaughn KC. **Histochemistry** 1989;91(2):99–105

The effects of camptothecin on the reaction and the specificity of the wheat germ type I topoisomerase. Champoux JJ, et al. **J Biol Chem** 1989 Jan 15;264(2):1010–5

Further enzymatic characteristics of a thylakoid protein kinase. Coughlan S, et al. **J Biol Chem** 1988 Nov 15; 263(32):16631–6

Biosynthesis of monoterpenes. Stereochemical implications of acyclic and monocyclic olefin formation by (+)- and (-)-pinene cyclases from sage. Croteau R, et al. **J Biol Chem** 1989 Sep 15;264(26):15309–15

Characterization of six nucleotide-binding sites on chloroplast coupling factor 1 and one site on its purified beta subunit. Girault G, et al. **J Biol Chem** 1988 Oct 15; 263(29):14690–5

Correspondence of minor subunits of plant mitochondrial F1ATPase to F1F0ATPase subunits of other organisms. Kimura T, et al. **J Biol Chem** 1989 Feb 25;264(6):3183–6

Oxygen isotope effects on the ribulosebisphosphate oxygenase reaction. Kreckl W, et al. **J Biol Chem** 1989 Jul 5;264(19):10982–6

Limited proteolysis of the nitrate reductase from spinach leaves. Kubo Y, et al. **J Biol Chem** 1988 Dec 25; 263(36):19684–9

Peripheral and integral subunits of the tonoplast H+-ATPase from oat roots. Lai SP, et al. **J Biol Chem** 1988 Nov 15; 263(32):16731–7

Delta subunit of chloroplast coupling factor 1 inhibits proton leakage through coupling factor O. Lill H, et al. **J Biol Chem** 1988 Oct 5;263(28):14518–22

The active site of spinach glycolate oxidase. Lindqvist Y, et al. **J Biol Chem** 1989 Feb 25;264(6):3624–8

Purification and characterization of fructose-2,6-bisphosphatase, a substrate-specific cytosolic enzyme from leaves. Macdonald FD, et al. **J Biol Chem** 1989 Apr 5;264(10):5540–4

Identification of substrate and effector binding sites of phosphoenolpyruvate carboxylase from Crassula argentea. A possible role of phosphoenolpyruvate as substrate and activator. Rustin P, et al. **J Biol Chem** 1988 Nov 25; 263(33):17611–4

Alteration of the nucleotide-binding site asymmetry of chloroplast coupling factor 1 by catalysis. Shapiro AB, et al. **J Biol Chem** 1988 Oct 5;263(28):14160–5

Inhibition of in vivo and in vitro transcription by monoclonal antibodies prepared against wheat germ RNA polymerase II that react with the heptapeptide repeat of eukaryotic RNA polymerase II. Thompson NE, et al. **J Biol Chem** 1989 Jul 5;264(19):11511–20

Purification of the decomposing enzyme from Nepenthes alata against glycophorin B of human red blood cells by high-performance liquid chromatography. Kamesaki T, et al. **J Chromatogr** 1989 Apr 14;489(2):384–9

H+-ATPase from vacuolar membranes of higher plants. Bennett AB, et al. **Methods Enzymol** 1988;157:579–90

Utilization of sulfometuron methyl, an acetolactate synthase inhibitor, in molecular biological and metabolic studies of plants and microbes. LaRossa RA, et al. **Methods Enzymol** 1988;166:97–107

H+-ATPase from plasma membranes of Saccharomyces cerevisiae and Avena sativa roots: purification and reconstitution. Serrano R. **Methods Enzymol** 1988; 157:533–44

Purification of isocitrate lyase from Escherichia coli and watermelon using fast protein liquid chromatography. Conder MJ, et al. **Prep Biochem** 1988;18(4):431–42

Post-translational modifications in the large subunit of ribulose bisphosphate carboxylase/oxygenase. Houtz RL, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1855–9

Mandelonitrile lyase from Ximenia americana L.: stereospecificity and lack of flavin prosthetic group. Kuroki GW, et al. **Proc Natl Acad Sci U S A** 1989 Sep; 86(18):6978–81

Effect of mutations on the binding and translocation functions of a chloroplast transit peptide. Reiss B, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):886–90

Photosystem II, the water-splitting enzyme. Rutherford AW. **Trends Biochem Sci** 1989 Jun;14(6):227–32 (35 ref.)

Localization and orientation of subunit delta of spinach

chloroplast ATP-synthase within the CF0CF1 complex. 1. Distinction of shielded and exposed surfaces of delta on the thylakoid membrane. Berzborn RJ, et al. **Z Naturforsch [C]** 1989 Jan-Feb;44(1-2):153-60

Localization and orientation of subunit delta of spinach chloroplast ATP-synthase within the CF0 CF1 complex. 2. Identification of C-terminal residues of delta, exposed on the thylakoid membrane. Berzborn RJ, et al. **Z Naturforsch [C]** 1989 May-Jun;44(5-6):480-6

[Biosynthesis of secretory enzyme] Mitsui T. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):386-97 (51 ref.) **(Jpn)**

GENETICS

A procedure for the small-scale isolation of plant RNA suitable for RNA blot analysis. Wadsworth GJ, et al. **Anal Biochem** 1988 Jul;172(1):279-83

Classical and molecular genetics of tomato: highlights and perspectives. Rick CM, et al. **Annu Rev Genet** 1988; 22:281-300 (86 ref.)

Maize developmental genetics: genes of morphogenesis. Sheridan WF. **Annu Rev Genet** 1988;22:353-85 (174 ref.)

Foreign genes in plants: transfer, structure, expression, and applications. Weising K, et al. **Annu Rev Genet** 1988; 22:421-77 (386 ref.)

Basic processes underlying Agrobacterium-mediated DNA transfer to plant cells. Zambryski P. **Annu Rev Genet** 1988; 22:1-30 (115 ref.)

Plant transposable elements. Proceedings of an international symposium. August 22-26, 1987, Madison, Wisconsin. **Basic Life Sci** 1988;47:1-404

Molecular cloning of a family of plant genes encoding a protein homologous to plasma membrane H+-translocating ATPases. Boutry M, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):567-74

Initiation of transcription of rDNA in rice. Nandabalan K, et al. **Biochem Biophys Res Commun** 1989 May 15; 160(3):1117-23

A map of barley chromosome 2 using isozymic and morphological markers. Cesar Benito M, et al. **Biochem Genet** 1988 Jun;26(5-6):387-94

Aspartate aminotransferase isozymes in the genus Capsella (Brassicaceae): subcellular location, gene duplication, and polymorphism. Hurka H, et al. **Biochem Genet** 1989 Feb; 27(1-2):77-90

Polymorphism and inheritance of gliadin components controlled by chromosome 6A of spring durum wheat. Kudryavtsev AM, et al. **Biochem Genet** 1988 Dec; 26(11-12):693-703

An allele of the Prot locus in maize is a variant for the site of protein processing. Osterman JC. **Biochem Genet** 1988 Aug;26(7-8):463-74

A fern spore storage protein is genetically similar to the 1.7 S seed storage protein of Brassica napus. Templeman TS, et al. **Biochem Genet** 1988 Oct;26(9-10):595-603

New isozyme systems for maize (Zea mays L.): aconitate hydratase, adenylate kinase, NADH dehydrogenase, and shikimate dehydrogenase. Wendel JF, et al. **Biochem Genet** 1988 Jun;26(5-6):421-45

Primary structure of the carboxy-terminal region of a higher plant beta-tubulin. Okamura S, et al. **Biochem Int** 1988 Jun; 16(6):1103-9

The chloroplast genome and the biogenesis of the chloroplast thylakoid membrane. Gray JC, et al. **Biochem Soc Trans** 1988 Oct;16(5):704-6 (26 ref.)

Higher order structure of chloroplastic 5S ribosomal RNA from spinach. Romby P, et al. **Biochemistry** 1988 Jun 28; 27(13):4721-30

Mutations, epimutations, and the developmental programming of the maize Suppressor-mutator transposable element. Fedoroff N, et al. **Bioessays** 1989 May;10(5):139-44 (46 ref.)

Unusual features of cereal seed protein structure and evolution. Kreis M, et al. **Bioessays** 1989 Jun;10(6):201-7 (19 ref.)

Proteinase inhibitor gene families: strategies for transformation to improve plant defenses against herbivores. Ryan CA. **Bioessays** 1989 Jan;10(1):20-4 (34 ref.)

Identification of a dispersed MboI repeat family in five higher plant genomes. Ranade SA, et al. **Biosci Rep** 1988 Oct; 8(5):435-41

Plant transposable elements: their role in evolution. Saedler H. **Biosci Rep** 1988 Dec;8(6):585-8

Plant biotechnology. **Biotechnology** 1989;12:1-423

The molecular architecture of plant genes and their regulation. Elliston K, et al. **Biotechnology** 1989;12:115-39 (32 ref.)

Regulation and expression of plant genes in microorganisms. Gatenby AA. **Biotechnology** 1989;12:93-112 (88 ref.)

Genetic manipulation of the chloroplast genome. Gray JC. **Biotechnology** 1989;12:317-35 (73 ref.)

Auxin-regulated gene expression in plants. Theologis A. **Biotechnology** 1989;12:229-43 (22 ref.)

Processing and secretion of barley (1-3,1-4)-beta-glucanase in yeast. Olsen O, et al. **Carlsberg Res Commun** 1989; 54(2):29-39

Arabidopsis thaliana mutant that develops as a light-grown plant in the absence of light. Chory J, et al. **Cell** 1989 Sep 8;58(5):991-9

Genetic polymorphism of self-incompatibility in flowering plants. Ebert PR, et al. **Cell** 1989 Jan 27;56(2):255-62 (52 ref.)

Regulation of gene expression during plant embryogenesis. Goldberg RB, et al. **Cell** 1989 Jan 27;56(2):149-60 (78 ref.)

The AU-rich sequences present in the introns of plant nuclear pre-mRNAs are required for splicing. Goodall GJ, et al. **Cell** 1989 Aug 11;58(3):473-83

Chloroplast gene expression: how plants turn their plastids on. Gruissem W. **Cell** 1989 Jan 27;56(2):161-70 (128 ref.)

Signals and transduction mechanisms for activation of plant defenses against microbial attack. Lamb CJ, et al. **Cell** 1989 Jan 27;56(2):215-24 (83 ref.)

Molecular biology of plant mitochondria. Levings CS 3d, et al. **Cell** 1989 Jan 27;56(2):171-9 (113 ref.)

Arabidopsis, a useful weed. Meyerowitz EM. **Cell** 1989 Jan 27;56(2):263-9 (65 ref.)

Evolution of plant mitochondrial genomes via substoichiometric intermediates. Small I, et al. **Cell** 1989 Jul 14;58(1):69-76

Transfer and function of T-DNA genes from agrobacterium Ti and Ri plasmids in plants. Zambryski P, et al. **Cell** 1989 Jan 27;56(2):193-201 (107 ref.)

Applications of plant cell and tissue culture. **Ciba Found Symp** 1988;137:1-269

Sequence analysis of the junction of the large single copy region and the large inverted repeat in the petunia chloroplast genome. Aldrich J, et al. **Curr Genet** 1988 Nov; 14(5):487-92

The role of insertions/deletions in the evolution of the intergenic region between psbA and trnH in the chloroplast genome. Aldrich J, et al. **Curr Genet** 1988 Aug;14(2):137-46

Variation in copy number of a 24-base pair tandem repeat in the chloroplast DNA of Oenothera hookeri strain Johansen. Blasko K, et al. **Curr Genet** 1988 Sep; 14(3):287-92

Properties and nucleotide sequence of a mitochondrial plasmid from sunflower. Crouzillat D, et al. **Curr Genet** 1989 Apr;15(4):283-9

Nucleotide sequences of cDNAs encoding the entire precursor polypeptides for subunits II and III of the photosystem I reaction center from spinach. Münch S, et al. **Curr Genet** 1988 Nov;14(5):511-8

Location, identity, amount and serial entry of chloroplast DNA sequences in crucifer mitochondrial DNAs. Nugent JM, et al. **Curr Genet** 1988 Nov;14(5):501-9

Conserved sequence elements at putative processing sites in plant mitochondria. Schuster W, et al. **Curr Genet** 1989 Mar;15(3):187-92

Partial characterization of the gene coding for subunit IV of soybean mitochondrial NADH dehydrogenase. Wintz H, et al. **Curr Genet** 1989 Feb;15(2):155-60

An embryo-lethal mutant of Arabidopsis thaliana is a biotin auxotroph. Schneider T, et al. **Dev Biol** 1989 Jan; 131(1):161-7

Plant molecular developmental genetics. **Dev Genet** 1987; 8(5-6):305-511

Regulated expression of genes encoding soybean beta-conglycinins in transgenic plants. Chen ZL, et al. **Dev Genet** 1989;10(2):112-22

Pretranslational control of the levels of glyoxysomal protein gene expression by the embryonic axis in maize. Skadsen RW, et al. **Dev Genet** 1989;10(1):1-10

Use of nuclear mutants in the analysis of chloroplast development. Taylor WC, et al. **Dev Genet** 1987; 8(5-6):305-20

Preparation of plant DNA for separation by pulsed field gel electrophoresis. Devos KM, et al. **Electrophoresis** 1989 Apr;10(4):267-8

Acid phosphatase typing for breeding nematode-resistant tomatoes by isoelectric focusing with an ultranarrow immobilized pH gradient. Günther S, et al. **Electrophoresis** 1988 Sep;9(9):618-20

A new locus (NIA 1) in Arabidopsis thaliana encoding nitrate reductase. Cheng CL, et al. **EMBO J** 1988 Nov; 7(11):3309-14

Interaction of a DNA binding factor with the 5'-flanking region of an ethylene-responsive fruit ripening gene from tomato. Deikman J, et al. **EMBO J** 1988 Nov;7(11):3315-20

A homologue of the nuclear coded 49 kd subunit of bovine mitochondrial NADH-ubiquinone reductase is coded in chloroplast DNA. Fearnley IM, et al. **EMBO J** 1989 Mar; 8(3):665-72

The triose phosphate-3-phosphoglycerate-phosphate translocator from spinach chloroplasts: nucleotide sequence of a full-length cDNA clone and import of the in vitro synthesized precursor protein into chloroplasts. Flügge UI, et al. **EMBO J** 1989 Jan;8(1):39-46

TnpA product encoded by the transposable element En-1 of Zea mays is a DNA binding protein. Gierl A, et al. **EMBO J** 1988 Dec 20;7(13):4045-53

A light-entrained circadian clock controls transcription of several plant genes. Giuliano G, et al. **EMBO J** 1988 Dec 1;7(12):3635-42

A phenylalanine ammonia-lyase gene from parsley: structure, regulation and identification of elicitor and light responsive cis-acting elements. Lois R, et al. **EMBO J** 1989 Jun; 8(6):1641-8

Activity of the transposon Tam3 in Antirrhinum and tobacco: possible role of DNA methylation. Martin C, et al. **EMBO J** 1989 Apr;8(4):997-1004

Nuclear and chloroplast mutations affect the synthesis or stability of the chloroplast psbC gene product in Chlamydomonas reinhardtii. Rochaix JD, et al. **EMBO J** 1989 Apr;8(4):1013-21

Inducible in vivo DNA footprints define sequences necessary for UV light activation of the parsley chalcone synthase gene. Schulze-Lefert P, et al. **EMBO J** 1989 Mar; 8(3):651-6

Gene fusions to lacZ reveal new expression patterns of chimeric genes in transgenic plants. Teeri TH, et al. **EMBO J** 1989 Feb;8(2):343-50

Conserved epitopes on plant H1 histones recognized by monoclonal antibodies. Mazzolini L, et al. **Eur J Biochem** 1989 Jan 2;178(3):779-87

DNA fiber replication during a morphogenetic switch in the shoot meristematic cells of a higher plant. Jacqmard A, et al. **Exp Cell Res** 1988 Dec;179(2):454-61

A new photosystem II reaction center component (4.8 kDa protein) encoded by chloroplast genome. Ikeuchi M, et al. **FEBS Lett** 1988 Dec 5;241(1-2):99-104

DNA-binding protein(s) interacts with a conserved nonameric sequence in the upstream regions of wheat histone genes. Kawata T, et al. **FEBS Lett** 1988 Nov 7; 239(2):319-23

Signal peptide homology between the sweet protein thaumatin II and unrelated cereal alpha-amylase/trypsin inhibitors. Lázaro A, et al. **FEBS Lett** 1988 Oct 24; 239(1):147-50

A cDNA clone encoding a 10.8 kDa photosystem I polypeptide of barley. Okkels JS, et al. **FEBS Lett** 1988 Sep 12;237(1-2):108-12

Nucleotide sequence of cDNA clones encoding the entire precursor polypeptides for subunits IV and V of the photosystem I reaction center from spinach. Steppuhn J, et al. **FEBS Lett** 1988 Sep 12;237(1-2):218-24

The 23 KDa polypeptide of the photosynthetic oxygen-evolving complex from mustard seedlings (Sinapis alba L.). Nucleotide sequence of cDNA and evidence for phytochrome control of its mRNA abundance. Wenng A, et al. **FEBS Lett** 1989 Mar 27;246(1-2):140-4

Sequence analysis of the wheat mitochondrial atp6 gene reveals a fused upstream reading frame and markedly divergent N termini among plant ATP6 proteins. Bonen L, et al. **Gene** 1988 Dec 15;73(1):47-56

Polyadenylation of histone H3 and H4 mRNAs in dicotyledonous plants. Chaboute ME, et al. **Gene** 1988 Nov 15;71(1):217-23

Cloning and nucleotide sequence analysis of genes coding for the major chlorophyll-binding protein of the moss Physcomitrella patens and the halotolerant alga Dunaliella salina. Long ZF, et al. **Gene** 1989;76(2):299-312

Cloning of ara, a putative Arabidopsis thaliana gene homologous to the ras-related gene family. Matsui M, et al. **Gene** 1989;76(2):313-9

Organization and nucleotide sequence of genes at both junctions between the two inverted repeats and the large single-copy region in the rice chloroplast genome. Moon E, et al. **Gene** 1988 Oct 15;70(1):1-12

A dual-labeling method for identifying differentially expressed genes: use in the identification of cDNA clones that hybridize to RNAs whose abundance in tomato flowers is potentially regulated by gibberellins. Olszewski NE, et al. **Gene** 1989 Apr 15;77(1):155-62

Isolation, characterization and sequencing of a novel repetitive DNA from the mung bean Vigna radiata. Roy P, et al. **Gene** 1988 Dec 15;73(1):57-66

Antisense genes in plants: an overview. van der Krol AR, et al. **Gene** 1988 Dec 10;72(1-2):45-50 (22 ref.)

Identification of functional open reading frames in chloroplast genomes. Wolfe KH, et al. **Gene** 1988 Jun 30; 66(2):215-22

Interspecies comparison of the highly-repeated DNA of Australasian Luzula (Juncaceae). Collet C, et al. **Genetica** 1987 Oct 15;74(2):95-103

Allelic and genotypic composition of ancestral Spanish and colonial Californian gene pools of Avena barbata: evolutionary implications. Garcia P, et al. **Genetics** 1989 Jul;122(3):687-94

Complex organization of the length heterogeneous 5'external spacer of mung bean (Vigna radiata) ribosomal DNA. Gerstner J, et al. **Genome** 1988 Oct;30(5):723-33

Biochemical data bearing on the relationship between the genome of Triticum urartu and the A and B genomes of the polyploid wheats. Kerby K, et al. **Genome** 1988 Aug; 30(4):576-81

Can abortive early homologous associations promote increased crossing-over in an adjacent rearranged segment? Maguire MP. **Genome** 1988 Aug;30(4):469-72

The Genetical Society, two hundred and eighth meeting. 13th-15th April 1988, Norwich. Abstracts. **Heredity (Edinburgh)** 1988 Oct;61 (Pt 2):273-318

Geographical patterns of karyotype polymorphism in Italian populations of Ornithogalum montanum (Liliaceae). Barbujani G, et al. **Heredity (Edinburgh)** 1989 Feb;62 (Pt 1):67-75

Ribosomal RNA genes in B chromosomes of Crepis capillaris detected by non-radioactive in situ hybridization. Maluszynska J, et al. **Heredity (Edinburgh)** 1989 Feb;62 (Pt 1):59-65

Extreme chromosomal heterogeneity in a small-island population of Rumex acetosa. Parker JS, et al. **Heredity (Edinburgh)** 1989 Feb;62 (Pt 1):133-40

Molecular characterization of pigeonpea genome. Dabak MM, et al. **Indian J Biochem Biophys** 1988 Jun;25(3):230-6

Isolation and characterisation of a tandemly repeated DNA

sequence from the crucifer Sisymbrium irio. Grellet F, et al. **Indian J Biochem Biophys** 1988 Dec;25(6):483–7

Homology of repeated DNA sequences in Vigna species. Ranade SA, et al. **Indian J Biochem Biophys** 1985 Dec; 22(6):327–30

Amyloplast from parent NP 113 and high lysine mutant Notch-2 barley. Santha IM, et al. **Indian J Biochem Biophys** 1988 Dec;25(6):532–6

Transgenic plants: horizontal transfer of nifHD DNA to tobacco. Viegas PM, et al. **Indian J Biochem Biophys** 1988 Dec;25(6):528–31

The encoded primary sequence of a rice seed ADP-glucose pyrophosphorylase subunit and its homology to the bacterial enzyme. Anderson JM, et al. **J Biol Chem** 1989 Jul 25;264(21):12238–42

Isolation and characterization of a cDNA clone encoding the lima bean lectin. Imbrie-Milligan C, et al. **J Biol Chem** 1989 Oct 5;264(28):16793–7

Chloroplast rpoA, rpoB, and rpoC genes specify at least three components of a chloroplast DNA-dependent RNA polymerase active in tRNA and mRNA transcription. Little MC, et al. **J Biol Chem** 1988 Oct 5;263(28):14302–7

The atp6 coding region has been disrupted and a novel reading frame generated in the mitochondrial genome of cytoplasmic male-sterile radish. Makaroff CA, et al. **J Biol Chem** 1989 Jul 15;264(20):11706–13

cDNA sequence and homologies of the "57-kDa" nucleotide-binding subunit of the vacuolar ATPase from Arabidopsis. Manolson MF, et al. **J Biol Chem** 1988 Dec 5;263(34):17987–94

DNA methylation and the differential expression of C4 photosynthesis genes in mesophyll and bundle sheath cells of greening maize leaves. Ngernprasirtsiri J, et al. **J Biol Chem** 1989 May 15;264(14):8241–8

Structure and expression of the rice glutelin multigene family. Okita TW, et al. **J Biol Chem** 1989 Jul 25;264(21):12573–81

Structure of a plasma membrane H+-ATPase gene from the plant Arabidopsis thaliana. Pardo JM, et al. **J Biol Chem** 1989 May 25;264(15):8557–62

Chloroplast ribosomal protein L13 is encoded in the nucleus and is considerably larger than its bacterial homologue. Construction, immunoisolation, and nucleotide sequence (including transit peptide) its cDNA clone from an angiosperm. Phua SH, et al. **J Biol Chem** 1989 Feb 5; 264(4):1968–71

cDNA cloning, primary structure, and in vitro biosynthesis of the DB58 lectin from Dolichos biflorus. Schnell DJ, et al. **J Biol Chem** 1988 Oct 15;263(29):14648–53

What is the role of the transit peptide in thylakoid integration of the light-harvesting chlorophyll a/b protein? Viitanen PV, et al. **J Biol Chem** 1988 Oct 15;263(29):15000–7

18th annual UCLA symposium. Abstracts: Plant gene transfer. **J Cell Biochem Suppl** 1989;13D:227–347

Three-dimensional organization of chromosomes of Crepis capillaris by optical tomography. Rawlins DJ, et al. **J Cell Sci** 1988 Nov;91 (Pt 3):401–14

DNA transposition between plant organellar genomes. Stern DB. **J Cell Sci Suppl** 1987;7:145–54

Structure and organization of Marchantia polymorpha chloroplast genome. III. Gene organization of the large single copy region from rbcL to trnI(CAU). Fukuzawa H, et al. **J Mol Biol** 1988 Sep 20;203(2):333–51

Structure and organization of Marchantia polymorpha chloroplast genome. IV. Inverted repeat and small single copy regions. Kohchi T, et al. **J Mol Biol** 1988 Sep 20; 203(2):353–72

Structure and organization of Marchantia polymorpha chloroplast genome. I. Cloning and gene identification. Ohyama K, et al. **J Mol Biol** 1988 Sep 20;203(2):281–98

Structure and organization of Marchantia polymorpha chloroplast genome. II. Gene organization of the large single copy region from rps'12 to atpB. Umesono K, et al. **J Mol Biol** 1988 Sep 20;203(2):299–331

Phylogenetic relationships between the chlorophyll a/b binding protein (CAB) multigene family: an intra- and interspecies study. Demmin DS, et al. **J Mol Evol** 1989 Sep;29(3):266–79

Examination of protein sequence homologies: V. New perspectives on evolution between bacterial and chloroplast-type ferredoxins inferred from sequence evidence. Otaka E, et al. **J Mol Evol** 1989 Sep;29(3):246–54

Plant mitochondrial DNA evolves rapidly in structure, but slowly in sequence. Palmer JD, et al. **J Mol Evol** 1988 Dec-1989 Feb;28(1-2):87–97

Classical plant taxonomic ambiguities extend to the molecular level. Syvanen M, et al. **J Mol Evol** 1989 Jun;28(6):536–44

Sequence variability in three wheat germ agglutinin isolectins: products of multiple genes in polyploid wheat. Wright CS, et al. **J Mol Evol** 1989 Apr;28(4):327–36

Cloning and identification of ribosomal protein genes in chloroplast DNA. Prombona A, et al. **Methods Enzymol** 1988;164:748–61

Molecular phylogeny of the kingdoms Animalia, Plantae, and Fungi. Gouy M, et al. **Mol Biol Evol** 1989 Mar;6(2):109–22

Primary structure of a human mitochondrial protein homologous to the bacterial and plant chaperonins and to the 65-kilodalton mycobacterial antigen. Jindal S, et al. **Mol Cell Biol** 1989 May;9(5):2279–83

Rapid transcriptional regulation by phytochrome of the genes for phytochrome and chlorophyll a/b-binding protein in Avena sativa. Lissemore JL, et al. **Mol Cell Biol** 1988 Nov; 8(11):4840–50

The major low-molecular-weight heat shock protein in chloroplasts shows antigenic conservation among diverse higher plant species. Vierling E, et al. **Mol Cell Biol** 1989 Feb;9(2):461–8

Molecular characterization of rDt, a maize transposon of the "Dotted" controlling element system. Brown JJ, et al. **Mol Gen Genet** 1989 Jan;215(2):239–44

Characterization of a polyubiquitin gene from Arabidopsis thaliana. Burke TJ, et al. **Mol Gen Genet** 1988 Aug; 213(2-3):435–43

Molecular characterization of an active wheat LMW glutenin gene and its relation to other wheat and barley prolamin genes. Colot V, et al. **Mol Gen Genet** 1989 Mar;216(1):81–90

Point mutations in the 23 S rRNA genes of four lincomycin resistant Nicotiana plumbaginifolia mutants could provide new selectable markers for chloroplast transformation. Cseplö A, et al. **Mol Gen Genet** 1988 Oct;214(2):295–9

Efficient transformation of Arabidopsis thaliana using direct gene transfer to protoplasts. Damm B, et al. **Mol Gen Genet** 1989 May;217(1):6–12

Overproduction of alfalfa glutamine synthetase in transgenic tobacco plants. Eckes P, et al. **Mol Gen Genet** 1989 Jun; 217(2-3):263–8

5S rRNA genes in Pisum: sequence, long range and chromosomal organization. Ellis TH, et al. **Mol Gen Genet** 1988 Oct;214(2):333–42

Molecular and genetic analysis of an embryonic gene, DC 8, from Daucus carota L. Franz G, et al. **Mol Gen Genet** 1989 Jul;218(1):143–51

Novel cis-acting elements in Petunia Cab gene promoters. Gidoni D, et al. **Mol Gen Genet** 1989 Jan;215(2):337–44

The genes coding for subunit 3 of NADH dehydrogenase and for ribosomal protein S12 are present in the wheat and maize mitochondrial genomes and are co-transcribed. Gualberto JM, et al. **Mol Gen Genet** 1988 Dec; 215(1):118–27

Transcriptional interaction between the promoters of the maize chloroplast genes which encode the beta subunit of ATP synthase and the large subunit of ribulose 1,5-bisphosphate carboxylase. Hanley-Bowdoin L, et al. **Mol Gen Genet** 1989 Jan;215(2):217–24

The complete sequence of the rice (Oryza sativa) chloroplast genome: intermolecular recombination between distinct tRNA genes accounts for a major plastid DNA inversion during the evolution of the cereals. Hiratsuka J, et al. **Mol Gen Genet** 1989 Jun;217(2-3):185–94

Sequence heterogeneity and differential expression of the alpha-Amy2 gene family in wheat. Huttly AK, et al. **Mol Gen Genet** 1988 Oct;214(2):232–40

Organ regulated expression of Parasponia andersonii haemoglobin gene in transgenic tobacco plants. Landsmann J, et al. **Mol Gen Genet** 1988 Sep;214(1):68–73

Unusual characteristics of Codium fragile chloroplast DNA revealed by physical and gene mapping. Manhart JR, et al. **Mol Gen Genet** 1989 Apr;216(2-3):417–21

Multiple genes are transcribed in Hordeum vulgare and Zea mays that carry the DNA binding domain of the myb oncoproteins. Marocco A, et al. **Mol Gen Genet** 1989 Apr; 216(2-3):183–7

An unusual wheat insertion sequence (WIS1) lies upstream of an alpha-amylase gene in hexaploid wheat, and carries a "minisatellite" array. Martienssen RA, et al. **Mol Gen Genet** 1989 Jun;217(2-3):401–10

Primary structure and promoter analysis of leghemoglobin genes of the stem-nodulated tropical legume Sesbania rostrata: conserved coding sequences, cis-elements and trans-acting factors. Metz BA, et al. **Mol Gen Genet** 1988 Oct;214(2):181–91

Rice mitochondrial genome contains a rearranged chloroplast gene cluster. Moon E, et al. **Mol Gen Genet** 1988 Aug; 213(2-3):247–53

Chloroplast DNA sequences integrated into an intron of a tomato nuclear gene. Pichersky E, et al. **Mol Gen Genet** 1988 Dec;215(1):65–8

A NADH dehydrogenase subunit gene is co-transcribed with the abnormal Petunia mitochondrial gene associated with cytoplasmic male sterility. Rasmussen J, et al. **Mol Gen Genet** 1989 Jan;215(2):332–6

Molecular cloning, nucleotide sequence, and abscisic acid induction of a suberization-associated highly anionic peroxidase. Roberts E, et al. **Mol Gen Genet** 1989 Jun; 217(2-3):223–32

Selection of an atrazine-resistant tobacco cell line having a mutant psbA gene. Sato F, et al. **Mol Gen Genet** 1988 Oct;214(2):358–60

The bz-rcy allele of the Cy transposable element system of Zea mays contains a Mu-like element insertion. Schnable PS, et al. **Mol Gen Genet** 1989 Jun;217(2-3):459–63

The function of plant heat shock promoter elements in the regulated expression of chimaeric genes in transgenic tobacco. Schöffl F, et al. **Mol Gen Genet** 1989 Jun; 217(2-3):246–53

Nucleotide sequence of a cDNA coding for the NADPH-protochlorophyllide oxidoreductase (PCR) of barley (Hordeum vulgare L.) and its expression in Escherichia coli. Schulz R, et al. **Mol Gen Genet** 1989 Jun; 217(2-3):355–61

An element with long terminal repeats and its variant arrangements in the genome of Lilium henryi. Sentry JW, et al. **Mol Gen Genet** 1989 Jan;215(2):349–54

Sequences responsible for the tissue specific promoter activity of a pea legumin gene in tobacco. Shirsat A, et al. **Mol Gen Genet** 1989 Jan;215(2):326–31

Gene structure and in situ transcript localization of pathogenesis-related protein 1 in parsley. Somssich IE, et al. **Mol Gen Genet** 1988 Jul;213(1):93–8

Differential expression within a family of novel wound-induced genes in potato. Stanford A, et al. **Mol Gen Genet** 1989 Jan;215(2):200–8

Characterization of the ndhC-psbG-ORF157/159 operon of maize plastid DNA and of the cyanobacterium Synechocystis sp. PCC6803. Steinmüller K, et al. **Mol Gen Genet** 1989 Mar;216(1):60–9

Difference between two major size classes of carrot rDNA repeating units is due to reiteration of sequences of about 460 bp in the large spacer. Taira T, et al. **Mol Gen Genet** 1988 Jul;213(1):170–4

Isolation and expression of an anther-specific gene from tomato. Twell D, et al. **Mol Gen Genet** 1989 Jun; 217(2-3):240–5

Molecular cloning and characterisation of the two homologous genes coding for nitrate reductase in tobacco. Vaucheret H, et al. **Mol Gen Genet** 1989 Mar;216(1):10–5

Deletions/insertions, short inverted repeats, sequences resembling att-lambda, and frame shift mutated open reading frames are involved in chloroplast DNA differences in the genus Oenothera subsection Munzia. vom Stein J, et al. **Mol Gen Genet** 1988 Aug;213(2-3):513–8

Cotranscription of the S10- and spc-like operons in spinach chloroplasts and identification of three of their gene products. Zhou DX, et al. **Mol Gen Genet** 1989 Apr; 216(2-3):439–45

Repair of bleomycin-induced DNA double-strand breaks in Vicia faba. Angelis KJ, et al. **Mutat Res** 1989 Jun; 212(2):155–7

Are SCE frequencies indicative of adaptive response of plant cells? Schubert I, et al. **Mutat Res** 1989 Apr;211(2):301–6

Molecular dosimetry studies of forward mutation induced at the yg2 locus in maize by ethyl methanesulfonate. Schy WE, et al. **Mutat Res** 1989 Apr;211(2):231–41

Genetic engineering: the flowers that bloom next spring [news] Dickman S. **Nature** 1989 Jun 1;339(6223):325

Plant researchers eager for genome programme [news] Ezzell C, et al. **Nature** 1989 Aug 17;340(6234):491

Tnt1, a mobile retroviral-like transposable element of tobacco isolated by plant cell genetics. Grandbastien MA, et al. **Nature** 1989 Jan 26;337(6205):376–80

RNP in maize protein [letter; comment] Mortenson E, et al. **Nature** 1989 Jan 26;337(6205):312. **Comment on:** Nature 1988 Jul 21;334(6179):262–4

Moving in on plant genes [news] Shields R. **Nature** 1989 Jan 26;337(6205):308

A copia-like transposable element family in Arabidopsis thaliana. Voytas DF, et al. **Nature** 1988 Nov 17; 336(6196):242–4

Molecular analysis of eight U1 RNA gene candidates from tomato that could potentially be transcribed into U1 RNA sequence variants differing from each other in similar regions of secondary structure. Abel S, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6319–37

Nucleotide sequence of cDNA for sulfhydryl-endopeptidase (SH-EP) from cotyledons of germinating Vigna mungo seeds. Akasofu H, et al. **Nucleic Acids Res** 1989 Aug 25; 17(16):6733

The nucleotide sequences of two Lupinus luteus asparagine tRNAs. Barciszewska MZ, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9349

Diversity of 7 SL RNA from the signal recognition particle of maize endosperm. Campos N, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1573–88

Three mitochondrial tRNA genes from Arabidopsis thaliana: evidence for the conversion of a tRNAPhe gene into a tRNATyr gene. Chen HC, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2613–21

Nucleotide sequence of chloroplast CF1-ATPase epsilon-subunit and elongator tRNAMet genes from Arabidopsis thaliana. Chen HC, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10372

Nuclear transcriptional activity of the tobacco plastid psbA promoter. Cornelissen M, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):19–29

Sequence of the chloroplast rps14 gene encoding the chloroplast ribosomal protein S14 from rice. Côté JC, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1780

Sequence of the chloroplast psbF gene encoding the Photosystem II 10 kDa phosphoprotein from Oryza sativa L. Côté JC, et al. **Nucleic Acids Res** 1988 Nov 11; 16(21):10384

Nucleotide sequence of the Ppc2 gene encoding a housekeeping isoform of phosphoenolpyruvate carboxylase from Mesembryanthemum crystallinum. Cushman JC, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6743–4

Nucleotide sequence of the gene encoding a CAM specific isoform of phosphoenolpyruvate carboxylase from Mesembryanthemum crystallinum. Cushman JC, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6745–6

Pre-plastocyanin from Lycopersicon esculentum. Detlefsen DJ, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6414

The BamHI, XhoI, SmaI restriction enzyme maps of the normal maize mitochondrial genome genotype B37. Fauron CM, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10395–6

The nucleotide sequences of nuclear 5S rRNA genes and spacer regions of Petunia hybrida. Frasch M, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2857

Sequence analysis of a genomic clone encoding an endochitinase from Solanum tuberosum. Gaynor JJ, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5855–6
Nucleotide sequence of the 25S–18S ribosomal gene spacer from Arabidopsis thaliana. Gruendler P, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6395–6
Nucleotide sequence of the wheat mitochondrial tRNA(Glu)(UUC) gene. Gualberto JM, et al. **Nucleic Acids Res** 1989 May 11;17(9):3586
Development of large DNA methods for plants: molecular cloning of large segments of Arabidopsis and carrot DNA into yeast. Guzmán P, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11091–105
Stability and expression of bacterial genes in replicating geminivirus vectors in plants. Hayes RJ, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2391–403
Chloroplast-like transfer RNA genes expressed in wheat mitochondria. Joyce PB, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):4461–76
A nicked group II intron and trans-splicing in liverwort, Marchantia polymorpha, chloroplasts. Kohchi T, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10025–36
Nucleotide sequence of the rye chloroplast DNA fragment, comprising psbE and psbF genes. Kolosov VL, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1760
Nucleotide sequence of the rye chloroplast psbA gene, encoding D1 protein of photosystem II. Kolosov VL, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1759
Wheat phosphoglycerate kinase: evidence for recombination between the genes for the chloroplastic and cytosolic enzymes. Longstaff M, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6569–80
Nucleotide sequences of two genes encoding the light harvesting chlorophyll a/b binding protein of rice. Luan S, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2357–8
A wheat cDNA clone which is homologous to the 17 kd heat-shock protein gene family of soybean. McElwain EF, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1764
cDNA cloning of the wheat germ SRP 7S RNAs. Marshallsay C, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1771
Nucleotide sequence of a cDNA encoding the light-harvesting chlorophyll a/b binding protein from spinach. Mason JG. **Nucleic Acids Res** 1989 Jul 11;17(13):5387
The isochore organization and the compositional distribution of homologous coding sequences in the nuclear genome of plants. Matassi G, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5273–90
The nucleotide sequence of 5.8S rRNA from the fern Marsilia quadrifolia L. Melekhovets YuF, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6399
Integrated R2 sequence in mitochondria of fertile B37N maize encodes and expresses a 130 kD polypeptide similar to that encoded by the S2 episome of S-type male sterile plants. O'Brien C, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):405–22
Specialized binary vector for plant transformation: expression of the Arabidopsis thaliana AHAS gene in Nicotiana tabacum. Olszewski NE, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10765–82
Structure and expression of elongation factor 1 alpha in tomato. Pokalsky AR, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4661–73
DNA sequence of a genomic clone encoding an Arabidopsis acyl carrier protein (ACP). Post-Beittenmiller MA, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1777
A tandemly repeated DNA sequence from Brassica juncea. Reddy AS, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5849
Nucleotide sequence of the barley chloroplast psbC gene. Reverdatto SV, et al. **Nucleic Acids Res** 1989 May 25;17(10):3996
Genomic sequence of a 12S seed storage protein from oilseed rape (Brassica napus c.v. jet neuf). Ryan AJ, et al. **Nucleic Acids Res** 1989 May 11;17(9):3584
Nucleotide sequence of a maize mitochondrial tRNAGlu (UUC) gene. Sangare A, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5837
Protein sequence homology between plant 4-coumarate:CoA ligase and firefly luciferase. Schröder J. **Nucleic Acids Res** 1989 Jan 11;17(1):460
The nucleotide sequence of 5.8S rRNA from the moss Mnium rugicum Laur. Troitsky AV, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):459
Structure and expression of the U5 snRNA gene of Arabidopsis thaliana. Conserved upstream sequence elements in plant U-RNA genes. Vankan P, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10425–40
A small-scale procedure for the rapid isolation of plant RNAs. Verwoerd TC, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2362
Isolation, characterization and evolutionary relatedness of three members from the soybean multigene family encoding chlorophyll a/b binding proteins. Walling LL, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10477–92
Sequence of a 21 kd zein gene from maize containing an in-frame stop codon. Wandelt C, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2354
Thaumatin II: a simple marker gene for use in plants. Witty M. **Nucleic Acids Res** 1989 Apr 25;17(8):3312
Plant expression vectors with the origin of replication of the W-type plasmid Sa. Alliotte T, et al. **Plasmid** 1988 May;19(3):251–4
A gene encoding the tryptophan synthase beta subunit of Arabidopsis thaliana. Berlyn MB, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4604–8
Mutations in the maize mitochondrial T-urf13 gene eliminate sensitivity to a fungal pathotoxin. Braun CJ, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4435–9
Molecular cloning and analysis of cDNA encoding a plant tryptophan decarboxylase: comparison with animal dopa decarboxylases. De Luca V, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2582–6
An evolutionarily conserved protein binding sequence upstream of a plant light-regulated gene. Giuliano G, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7089–93
Identification of upstream regulatory elements involved in the developmental expression of the Arabidopsis thaliana cab1 gene. Ha SB, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8017–21
A 4-kDa maize chloroplast polypeptide associated with the cytochrome b6-f complex: subunit 5, encoded by the chloroplast petE gene. Haley J, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1534–8
Molecular cloning and sequence of cDNA encoding the plasma membrane proton pump (H+-ATPase) of Arabidopsis thaliana. Harper JF, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1234–8
Structure and coding properties of Bs1, a maize retrovirus-like transposon. Jin YK, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6235–9
Barley alpha-amylase genes and the thiol protease gene Aleurain: use of a single poly(A) addition signal associated with a conserved pentanucleotide at the cleavage site. Khursheed B, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):3987–91
Molecular cloning of plant transcripts encoding protein kinase homologs. Lawton MA, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3140–4
3-Hydroxy-3-methylglutaryl-coenzyme A reductase from Arabidopsis thaliana is structurally distinct from the yeast and animal enzymes. Learned RM, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2779–83
Lc, a member of the maize R gene family responsible for tissue-specific anthocyanin production, encodes a protein similar to transcriptional activators and contains the myc-homology region. Ludwig SR, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7092–6
Mobility of the maize suppressor-mutator element in transgenic tobacco cells. Masson P, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2219–23
A genomic DNA segment from Petunia hybrida leads to increased transformation frequencies and simple integration patterns. Meyer P, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8568–72
Synthesis of an opine-like compound, a rhizopine, in alfalfa nodules is symbiotically regulated. Murphy PJ, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9133–7
Intramolecular recombination of chloroplast genome mediated by short direct-repeat sequences in wheat species. Ogihara Y, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8573–7
Primary structure of cucumber (Cucumis sativus) ascorbate oxidase deduced from cDNA sequence: homology with blue copper proteins and tissue-specific expression. Ohkawa J, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1239–43
Protection against tobacco mosaic virus in transgenic plants that express tobacco mosaic virus antisense RNA. Powell PA, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6949–52
M13 repeat probe detects DNA minisatellite-like sequences in gymnosperms and angiosperms. Rogstad SH, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9176–8
Cloning the mRNA encoding 1-aminocyclopropane-1-carboxylate synthase, the key enzyme for ethylene biosynthesis in plants. Sato T, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6621–5
Cloning and characterization of a cDNA encoding the chloroplastic copper/zinc-superoxide dismutase from pea. Scioli JR, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7661–5
Plant retrotransposon from Lilium henryi is related to Ty3 of yeast and the gypsy group of Drosophila. Smyth DR, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5015–9
A CACGTG motif of the Antirrhinum majus chalcone synthase promoter is recognized by an evolutionarily conserved nuclear protein. Staiger D, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6930–4
Gene for proliferating-cell nuclear antigen (DNA polymerase delta auxiliary protein) is present in both mammalian and higher plant genomes. Suzuka I, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3189–93
Identification of an assembly domain in the small subunit of ribulose-1,5-bisphosphate carboxylase. Wasmann CC, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1198–202
Date of the monocot-dicot divergence estimated from chloroplast DNA sequence data. Wolfe KH, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6201–5
Binding and transcription of relaxed DNA templates by fractions of maize chloroplast extracts. Zaitlin D, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):876–80
Genome projects are growing like weeds [news] Palca J. **Science** 1989 Jul 14;245(4914):131
A protein that binds to a cis-acting element of wheat histone genes has a leucine zipper motif. Tabata T, et al. **Science** 1989 Sep 1;245(4921):965–7
Phenotypic diversity mediated by the maize transposable elements Ac and Spm. Wessler SR. **Science** 1988 Oct 21;242(4877):399–405 (86 ref.)
A technique for C-banding plant chromosomes with Wright stain. Dillé JE. **Stain Technol** 1988 Sep;63(5):271–5
Engineering herbicide resistance in plants. Botterman J, et al. **Trends Genet** 1988 Aug;4(8):219–22 (29 ref.)
Somaclonal variation—genetic basis and breeding applications. Evans DA. **Trends Genet** 1989 Feb;5(2):46–50 (29 ref.)
A phytophile responds...[letter] Jones J. **Trends Genet** 1989 Jul;5(7):202
Plant hormone mutants. King PJ. **Trends Genet** 1988 Jun;4(6):157–62 (26 ref.)
Pathogenesis-related proteins in plants. Rigden J, et al. **Trends Genet** 1988 Apr;4(4):87–9
The use of transgenic plants to study plant gene expression. Willmitzer L. **Trends Genet** 1988 Jan;4(1):13–8 (35 ref.)
The expression, localization, and effect of a human interferon in plants. De Zoeten GA, et al. **Virology** 1989 Sep;172(1):213–22
[Introduction to experiments in genetic engineering. XVIII. Regulatory mechanisms of gene expression in higher plants] Yamaguchi J, et al. **Radioisotopes** 1989 Apr;38(4):229–36 (61 ref.) **(Jpn)**
[Mitochondrial proteins] Hase T, et al. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):367–76 (31 ref.) **(Jpn)**
[Cell cycle-dependent regulation of transcription of plant genes] Iwabuchi M, et al. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):207–16 (32 ref.) **(Jpn)**
[Amyloplast DNA] Kobayashi H. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):345–53 (54 ref.) **(Jpn)**
[Introduction and expression of foreign genes into plant cells using a Ti plasmid vector] Matsumoto S, et al. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):191–200 (72 ref.) **(Jpn)**
[Mitochondrial DNA] Mikami T, et al. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):354–66 (44 ref.) **(Jpn)**
[Purification of mRNA by polysome immunoprecipitation] Mori H. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):201–6 (14 ref.) **(Jpn)**
[Gene transfer into plant cells by electric field pulse] Morikawa H. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):109–18 (29 ref.) **(Jpn)**
[Multigene families in plants] Tanifuji S, et al. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):277–87 (37 ref.) **(Jpn)**
[Gene expression by direct DNA transfer] Uchimiya H. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):119–22 **(Jpn)**
[Stock of chromosome-types and tissue cultured shoot primordium] Tanaka R, et al. **Yakugaku Zasshi** 1988 Nov;108(11):1023–39 (28 ref.) (Eng. Abstr.) **(Jpn)**
[Genes of plastid genomes, their organization, structure and transcription] Goździcka-Józefiak A, et al. **Postepy Biochem** 1988;34(1-2):7–22 (120 ref.) **(Pol)**
[The genome of fungi and higher plants contains sequences homologous to a fragment of mammalian mos gene] Demirov DG, et al. **Dokl Akad Nauk SSSR** 1988 Jul-Aug;301(1):226–9 **(Rus)**
[Expression of the Escherichia coli glucose isomerase gene in transgenic plants] Piruzian ES, et al. **Dokl Akad Nauk SSSR** 1989;305(3):729–31 **(Rus)**
[Phylogenetic analysis of partial nucleotide sequences of 18S rRNA for 14 plant species] Rakhimova GM, et al. **Mol Biol (Mosk)** 1989 May-Jun;23(3):830–42 (Eng. Abstr.) **(Rus)**
[RNA-recognizing function of the DNA-recognizing structure helix-turn-helix in ribosomal proteins S4 and S7 of Escherichia coli and plant chloroplasts] Shestopalov BV. **Mol Biol (Mosk)** 1988 May-Jun;22(3):624–7 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Polyamines in growth and differentiation of plant cell cultures: the effect of nitrogen nutrition, salt stress and embryogenic media. Altman A, et al. **Adv Exp Med Biol** 1988;250:559–72 (33 ref.)
Polyamines as growth substances in higher plants. Bagni N, et al. **Adv Exp Med Biol** 1988;250:547–58 (20 ref.)
Increase of natural benzodiazepines in wheat and potato during germination. Wildmann J. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1436–43
Nickel as a micronutrient element for plants. Dalton DA, et al. **Biofactors** 1988 Jan;1(1):11–6 (62 ref.)
Development and differentiation in plants. Johri MM. **Biosci Rep** 1988 Dec;8(6):553–64
Effect of linear alkyl benzene sulphonate on germination of spores of the aquatic fern Ceratopteris thalictroides. Singh J, et al. **Bull Environ Contam Toxicol** 1989 Jul;43(1):11–7
Fate and effects of xanthates in laboratory freshwater systems. Xu Y, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):683–9
Developmental programming of the shoot meristem. Sussex IM. **Cell** 1989 Jan 27;56(2):225–9 (38 ref.)
Plant senescence processes and free radicals. Leshem YY.

Free Radic Biol Med 1988;5(1):39–49 (112 ref.)

RGD–dependent linkage between plant cell wall and plasma membrane: consequences for growth. Schindler M, et al. **J Cell Biol** 1989 May;108(5):1955–65

The effects of daily exposure to UV–A light on phenylalanine ammonia–lyase activity during the growth of barley plants. Baztan J, et al. **Rev Esp Fisiol** 1988 Mar;44(1):73–9

The assessment of air and soil as contributors of some trace metals to vegetable plants. I. Use of a filtered air growth cabinet. Harrison RM, et al. **Sci Total Environ** 1989 Jul 1;83(1–2):13–34

[Toxicological evaluation of pesticide and chemical residues in control of biological processes in vegetables under glass and plastics] Goedicke HJ. **Nahrung** 1988;32(6):565–70 (29 ref.) (Eng. Abstr.) **(Ger)**

[The use of viruses pathogenic for insects in plant protection] Huber J. **Schriftenr Ver Wasser Boden Lufthyg** 1988; 78:153–63 (14 ref.) **(Ger)**

IMMUNOLOGY

On the pollen morphology and frequency of allergic sensitization in Sicily of the genus Salsola L. (Chenopodiaceae). Crimi N, et al. **Allergol Immunopathol (Madr)** 1988 Jul–Aug;16(4):259–62

Parietaria judaica and dermo–respiratory allergy in Barcelona: a study of 250 cases. Valero Santiago A, et al. **Allergol Immunopathol (Madr)** 1988 Jul–Aug;16(4):209–14

Ferns and their allergenic importance: skin and nasal provocation tests to fern spore extract in allergic and non–allergic patients. Bunnag C, et al. **Ann Allergy** 1989 Jun;62(6):554–8

Hypersensitivity pneumonitis in an orchid grower associated with sensitivity to the fungus Cryptostroma corticale. Shepherd GM, et al. **Ann Allergy** 1989 Jun;62(6):522–5

Studies on the allergenicity of the developing spores of Pteris vittata L. Singh J, et al. **Ann Allergy** 1989 Sep;63(3):239–43

Human maximization test of falcarinol, the principal contact allergen of English ivy and Algerian ivy (Hedera helix, H. canariensis). Gafner F, et al. **Contact Dermatitis** 1988 Aug;19(2):125–8

Strategies for virus resistance in plants. Baulcombe D. **Trends Genet** 1989 Feb;5(2):56–60 (35 ref.)

METABOLISM

Accumulation of cadmium by plants of Zawar Mines, Rajasthan, India. Aery NC, et al. **Acta Biol Hung** 1988; 39(1):87–98

Relationship between polyamine and ethylene biosynthesis in plants and its significance for morphogenesis in cell cultures. Minocha SC. **Adv Exp Med Biol** 1988;250:601–16 (111 ref.)

Allene oxides as intermediates in biosynthesis of ketols and cyclopentenones. Brash AR, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:70–3

Glutamine synthetase specific activity and protein concentration in symbiotic Anabaena associated with Azolla caroliniana. Lee KY, et al. **Antonie Van Leeuwenhoek** 1988;54(4):345–55

Regulation of alternative pathway activity in plant mitochondria: nonlinear relationship between electron flux and the redox poise of the quinone pool. Dry IB, et al. **Arch Biochem Biophys** 1989 Aug 15;273(1):148–57

An NADP/thioredoxin system in leaves: purification and characterization of NADP–thioredoxin reductase and thioredoxin h from spinach. Florencio FJ, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):496–507

Biosynthesis of 12–oxo–10,15(Z)–phytodienoic acid: identification of an allene oxide cyclase. Hamberg M. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):543–50

Amino acid composition and proteolytic generated domains of higher plant tubulin. Picquot P, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):304–11

Changes in intracellular redox and energy status during induced transplasma membrane electron transport in Cuscuta protoplasts. Revis S, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):940–6

Comparison of glycerolipid biosynthesis in non–green plastids from sycamore (Acer pseudoplatanus) cells and cauliflower (Brassica oleracea) buds. Alban C, et al. **Biochem J** 1989 May 1;259(3):775–83

The interaction of xylosyltransferase and glucuronyltransferase involved in glucuronoxylan synthesis in pea (Pisum sativum) epicotyls. Baydoun EA, et al. **Biochem J** 1989 Feb 1;257(3):853–8

Resolution and characterization of the glycine–cleavage reaction in pea leaf mitochondria. Properties of the forward reaction catalysed by glycine decarboxylase and serine hydroxymethyltransferase. Bourguignon J, et al. **Biochem J** 1988 Oct 1;255(1):169–78

Effect of alkaline pH on photosynthetic water oxidation and the association of extrinsic proteins with Photosystem Two. Chapman DJ, et al. **Biochem J** 1989 Mar 1;258(2):357–62

Carrot cells detoxify N–phosphonoacetyl–L–aspartate by esterification. Cole SC, et al. **Biochem J** 1988 Nov 1; 255(3):813–6

Incorporation of atmospheric oxygen into the carbonyl functionality of the protochlorophyllide isocyclic ring. Walker CJ, et al. **Biochem J** 1989 Jan 15;257(2):599–602

Formation of protein bodies and glyoxysomes. Lord JM, et al. **Biochem Soc Trans** 1988 Oct;16(5):706–8 (18 ref.)

A 'nova' in phosphate metabolism, GPG, and discovery of phosphatidylglycerol: a commentary on 'Plant Phospholipids. I. Identification of the Phosphatidyl Glycerols'. Benson AA, et al. **Biochim Biophys Acta** 1989; 1000:447–51

Visualization of antibody binding to the photosynthetic membrane: the transmembrane orientation of cytochrome b–559. Vallon O, et al. **Biochim Biophys Acta** 1989 Jun 23;975(1):132–41

Targeting of proteins into chloroplasts. Keegstra K, et al. **Bioessays** 1988 Jul;9(1):15–9 (35 ref.)

Studies on activity recovery in some mercury–exposed freshwater fish by using selected weeds. Shrivastava S, et al. **Bull Environ Contam Toxicol** 1989 Jun;42(6):840–6

Preparation and characterization of antibodies against 6–O–alpha–D–xylopyranosyl–beta–D–glucopyranose (beta–isoprimeverose), the disaccharide unit of xyloglucan in plant cell–walls. Sone Y, et al. **Carbohydr Res** 1989 Aug 1;191(1):79–89

Transport and routing of proteins into chloroplasts. Keegstra K. **Cell** 1989 Jan 27;56(2):247–53 (66 ref.)

Dynamics of the photosystem II reaction center. Mattoo AK, et al. **Cell** 1989 Jan 27;56(2):241–6 (42 ref.)

Cyanogenesis in animal–plant interactions. Jones DA. **Ciba Found Symp** 1988;140:151–70 (41 ref.)

Detoxification of cyanide by plants and hormone action. Manning K. **Ciba Found Symp** 1988;140:92–110 (33 ref.)

The maintenance of respiratory control at 25 degrees C by mitochondria from various animal and plant sources. Goldblatt M, et al. **Comp Biochem Physiol [B]** 1978; 61(1):189–90

Enzymatic degradation of cell wall and related plant polysaccharides. Ward OP, et al. **Crit Rev Biotechnol** 1989; 8(4):237–74 (367 ref.)

Kinetics of the uptake of 14C–labeled chlorinated benzenes from soil by plants. Topp E, et al. **Ecotoxicol Environ Safety** 1989 Apr;17(2):157–66

The 7S RNA from tomato leaf tissue resembles a signal recognition particle RNA and exhibits a remarkable sequence complementarity to viroids. Haas B, et al. **EMBO J** 1988 Dec 20;7(13):4063–74

Fructose 2,6–bisphosphate and the climacteric in bananas. Ball KL, et al. **Eur J Biochem** 1988 Nov 15;177(3):637–41

Molecular oxygen and the state of geometric isomerism of intermediates are essential in the carotene desaturation and cyclization reactions in daffodil chromoplasts. Beyer P, et al. **Eur J Biochem** 1989 Sep 1;184(1):141–50

The nucleolar RNA–binding protein B–36 is highly conserved among plants. Guiltinan MJ, et al. **Eur J Cell Biol** 1988 Aug;46(3):547–53

Selective inhibition of photosystem II in spinach by tobacco mosaic virus: an effect of the viral coat protein. Hodgson RA, et al. **FEBS Lett** 1989 Mar 13;245(1–2):267–70

Bioavailability of Tc incorporated in plant material. Dehut JP, et al. **Health Phys** 1989 Aug;57(2):263–7

Reaction mechanisms responsible for transformation of pertechnetate in photoautotrophic organisms. Lembrechts JF, et al. **Health Phys** 1989 Aug;57(2):255–62

The uptake of TcO–4 by plants: a mathematical description. Van Loon LR, et al. **Health Phys** 1989 Aug;57(2):309–14

A simple fixation and embedding method for use in hybridization histochemistry on plant tissues. McFadden GI, et al. **Histochem J** 1988 Oct;20(10):575–86

DNA–polymerase activity detected in situ. Relationship between incorporation of 3H–deoxytriphosphates and 3H–actinomycin D binding during the cell cycle in antheridial filaments of Chara vulgaris L. Effect of auxin and cytokinins. Godlewski M. **Histochemistry** 1988; 90(4):309–13

Trypsin effect on water splitting site and its relation with electron transport in normal and salt–washed photosystem II preparation. Paliwal R, et al. **Indian J Biochem Biophys** 1988 Oct;25(5):397–403

Protoporphyrinogen oxidation, a step in heme synthesis in soybean root nodules and free–living rhizobia. Jacobs NJ, et al. **J Bacteriol** 1989 Jan;171(1):573–6

Requirements for the translational repression of ferritin transcripts in wheat germ extracts by a 90–kDa protein from rabbit liver. Brown PH, et al. **J Biol Chem** 1989 Aug 15;264(23):13383–6

Evidence that the 59–kDa protein synthesis initiation factor from wheat germ is functionally similar to the 80–kDa initiation factor 4B from mammalian cells. Browning KS, et al. **J Biol Chem** 1989 May 25;264(15):8491–4

A truncated analog of a pre–light–harvesting chlorophyll a/b protein II transit peptide inhibits protein import into chloroplasts. Buvinger WE, et al. **J Biol Chem** 1989 Jan 15;264(2):1195–202

Phytochrome chromophore biosynthesis. Treatment of tetrapyrrole–deficient Avena explants with natural and non–natural bilatrienes leads to formation of spectrally active holoproteins. Elich TD, et al. **J Biol Chem** 1989 Jan 5;264(1):183–9

The kinetics of ligand binding to plant hemoglobins. Structural implications. Gibson QH, et al. **J Biol Chem** 1989 Jan 5;264(1):100–7

Transport of proteins into chloroplasts. Organization, orientation, and lateral distribution of the plastocyanin processing peptidase in the thylakoid network. Kirwin PM, et al. **J Biol Chem** 1988 Dec 5;263(34):18128–32

The chlorophyll a/b–binding protein inserts into the thylakoids independent of its cognate transit peptide. Lamppa GK. **J Biol Chem** 1988 Oct 15;263(29):14996–9

Respiration supported nitrogenase activity of isolated Rhizobium meliloti bacteroids. Miller RW, et al. **J Cell Biochem** 1988 Sep;38(1):35–49

Evidence of an auxin–mediated phosphoinositide turnover and an inositol (1,4,5)trisphosphate effect on isolated membranes of Daucus carota L. Zbell BA, et al. **J Cell Biochem** 1989 Jul;40(3):331–40

Lateral distribution and diffusion of plastocyanin in chloroplast thylakoids. Haehnel W, et al. **J Cell Biol** 1989 Apr;108(4):1397–405

Quantitative analysis of outward rectifying K+ channel currents in guard cell protoplasts from Vicia faba. Schroeder JI. **J Membr Biol** 1989 Mar;107(3):229–35

Structure of the complex of Streptomyces griseus proteinase B and polypeptide chymotrypsin inhibitor–1 from Russet Burbank potato tubers at 2.1 A resolution. Greenblatt HM, et al. **J Mol Biol** 1989 Jan 5;205(1):201–28

Inhibitory effects of para–aminobenzoic acid on the formation and mutagenicity of N–nitroso compounds. Gichner T, et al. **Mutagenesis** 1988 Jul;3(4):329–31

Activation of two environmental mixtures by plant S9. Shane BS, et al. **Mutat Res** 1989 Jan;222(1):9–18

Effects of specific monooxygenase and oxidase inhibitors on the activation of 2–aminofluorene by plant cells. Wagner ED, et al. **Mutat Res** 1989 Jun;216(3):163–78

New varieties of Actinidia kolomikta—one of the richest sources of vitamin C. Kola J, et al. **Nahrung** 1988; 32(5):513–5

Natural products from plant tissue culture. Ellis BE. **Nat Prod Rep** 1988 Dec;5(6):581–612 (465 ref.)

The biosynthesis of plant alkaloids and nitrogenous microbial metabolites. Herbert RB. **Nat Prod Rep** 1988 Oct; 5(5):523–40 (123 ref.)

Transformation of the Fusarium mycotoxin zearalenone in maize cell suspension cultures. Engelhardt G, et al. **Naturwissenschaften** 1988 Jun;75(6):309–10

Cellulose biogenesis in bacteria and higher plants is disrupted by magnetic fields. Gretz MR, et al. **Naturwissenschaften** 1989 Aug;76(8):380–3

Nucleotide sequence of the chloroplast genes for tRNA(Gln) and the 4 kD K polypeptide of photosystem II from mustard (Sinapis alba). Neuhaus H. **Nucleic Acids Res** 1989 Jan 11;17(1):444

Replication of wheat dwarf virus DNA in protoplasts and analysis of coat protein mutants in protoplasts and plants. Woolston CJ, et al. **Nucleic Acids Res** 1989 Aug 11; 17(15):6029–41

Comparative study on the production and accumulation of unusual phenylpropanoids in plants and in vitro cultures of Coreopsis tinctoria and C. lanceolata. Reichling J, et al. **Pharm Weekbl [Sci]** 1989 Jun 23;11(3):83–6

A purified 124–kDa oat phytochrome does not possess a protein kinase activity. Kim IS, et al. **Photochem Photobiol** 1989 Mar;49(3):319–23

Separate photosensitizers mediate degradation of the 32–kDa photosystem II reaction center protein in the visible and UV spectral regions. Greenberg BM, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6617–20

The assessment of air and soil as contributors of some trace metals to vegetable plants. II. Translocation of atmospheric and laboratory–generated cadmium aerosols to and within vegetable plants. Harrison RM, et al. **Sci Total Environ** 1989 Jul 1;83(1–2):35–45

The assessment of air and soil as contributors of some trace metals to vegetable plants. III. Experiments with field–grown plants. Harrison RM, et al. **Sci Total Environ** 1989 Jul 1;83(1–2):47–62

Effect of actinomycete metabolites on ion absorption by rice seedlings. Nardi S, et al. **Sci Total Environ** 1989 Jun; 81–82:675–8

A continuous cell–free translation system capable of producing polypeptides in high yield. Spirin AS, et al. **Science** 1988 Nov 25;242(4882):1162–4

The photosystem I reaction centre. Knaff DB. **Trends Biochem Sci** 1988 Dec;13(12):460–1 (26 ref.)

Plant tricothecenes. Prince RC. **Trends Biochem Sci** 1989 Jun;14(6):204 (13 ref.)

Involvement of ion channels and active transport in osmoregulation and signaling of higher plant cells. Schroeder JI, et al. **Trends Biochem Sci** 1989 May; 14(5):187–92 (40 ref.)

Topography of the chloroplast cytochrome b6: orientation of the cytochrome and accessibility of the lumen–side interhelix loops. Szczepaniak A, et al. **Z Naturforsch [C]** 1989 May–Jun;44(5–6):453–61

[Studies on plant metabolism using stable isotopes] Yoneyama T, et al. **Radioisotopes** 1988 Aug;37(8):475–84 (41 ref.) **(Jpn)**

[Metabolism and function of glutathione in plants] Asada K, et al. **Tanpakushitsu Kakusan Koso** 1988 Jul;33(9):1513–21 (68 ref.) **(Jpn)**

[Protein constituents of photosystem–I reaction center complex] Hiyama T. **Tanpakushitsu Kakusan Koso** 1989 May;34(6):768–72 **(Jpn)**

[Paraquat, an active–oxygen producing herbicide] Matsunaka S. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2790–4 **(Jpn)**

[Mitochondria (plant leaves)] Yamaya T. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):28–36 (46 ref.) **(Jpn)**

[Production of useful compounds by plant cell cultures—de

novo synthesis and biotransformation] Furuya T. **Yakugaku Zasshi** 1988 Aug;108(8):675–96 (88 ref.) (Eng. Abstr.) **(Jpn)**

MICROBIOLOGY

Microbial colonization of injured cactus tissue (Stenocereus gummosus) and its relationship to the ecology of cactophilic Drosophila mojavensis. Fogleman JC, et al. **Appl Environ Microbiol** 1989 Jan;55(1):100–5

Relationship between nitrogen-fixing sulfate reducers and fermenters in salt marsh sediments and roots of Spartina alterniflora. Gandy EL, et al. **Appl Environ Microbiol** 1988 Aug;54(8):2031–6

Mycotoxin production by Fusarium oxysporum and Fusarium sporotrichioides isolated from Baccharis spp. from Brazil. Mirocha CJ, et al. **Appl Environ Microbiol** 1989 Jan;55(1):254–5

Plant viruses and new perspectives in cross-protection. Valle RP, et al. **Biochimie** 1988 May;70(5):695–703 (67 ref.)

Recovery of Agrobacterium tumefaciens T-DNA molecules from whole plants early after transfer. Bakkeren G, et al. **Cell** 1989 Jun 2;57(5):847–57

Production of antiserum to a non-structural potyviral protein and its use to detect narcissus yellow stripe and other potyviruses. Mowat WP, et al. **J Virol Methods** 1989 Aug; 25(2):199–209

Biotinylated RNA probes for the detection of potato spindle tuber viroid (PSTV) in plants. Roy BP, et al. **J Virol Methods** 1989 Feb;23(2):149–55

A microscale procedure for isolating and sequencing the viroid RNA present in one gram of infected leaf tissue. Tabler M, et al. **J Virol Methods** 1989 Feb;23(2):111–26

A simple method for detection of viral satellite RNAs in small plant tissue samples. White JL, et al. **J Virol Methods** 1989 Feb;23(2):83–93

The causal agent of halo blight in bean, Pseudomonas syringae pv. phaseolicola, attaches to stomata via its pili. Romantschuk M, et al. **Microb Pathog** 1986 Apr; 1(2):139–48

Transient transfection of mammalian cells with DNA of the plant-pathogenic Ti-plasmid and expression of marker and resident sequences. Geider K, et al. **Mol Cell Biochem** 1989 Jan 23;85(1):19–28

DNA transfer from Agrobacterium to Zea mays or Brassica by agroinfection is dependent on bacterial virulence functions. Grimsley N, et al. **Mol Gen Genet** 1989 Jun; 217(2–3):309–16

The pattern of accumulation of cauliflower mosaic virus-specific products in infected turnips. Maule AJ, et al. **Virology** 1989 Apr;169(2):436–46

[Micro-organisms and aromatic plants: effects in food, cosmetics and pharmaceuticals] Aureli P, et al. **Boll Chim Farm** 1988 May;127(5):124–7 (Eng. Abstr.) **(Ita)**

[Bacteriocin typing of Pseudomonas cepacia strains isolated from patients and the rhizosphere of plants] Dodatko TA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jan;(1):21–6 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Molecular aspects of fertilization in flowering plants. Cornish EC, et al. **Annu Rev Cell Biol** 1988;4:209–28 (83 ref.)

Belgian Association of Plant Physiology. Louvain-la-Neuve, 27 May 1988. Abstracts. **Arch Int Physiol Biochim** 1988 Dec;96(5):PP33–45

Toxicity of chlorine dioxide to early life stages of marine organisms. Hose JE, et al. **Bull Environ Contam Toxicol** 1989 Mar;42(3):315–9

An unusual gene cluster for the cytochrome bc1 complex in Bradyrhizobium japonicum and its requirement for effective root nodule symbiosis. Thöny-Meyer L, et al. **Cell** 1989 May 19;57(4):683–97

An experimental analysis and comparison of three rhythms of movements in bean (Phaseolus vulgaris L.). Millet B, et al. **Chronobiol Int** 1988;5(3):187–93

Masking in plants. Vanden Driessche T, et al. **Chronobiol Int** 1989;6(1):13–9

The S-locus specific glycoproteins of Brassica accumulate in the cell wall of developing stigma papillae. Kandasamy MK, et al. **Dev Biol** 1989 Aug;134(2):462–72

Cryptic floral determination: stem explants from vegetative tobacco plants have the capacity to regenerate floral shoots. McDaniel CN, et al. **Dev Biol** 1989 Aug;134(2):473–8

Phytochemical mimicry of reproductive hormones and modulation of herbivore fertility by phytoestrogens. Hughes CL Jr. **Environ Health Perspect** 1988 Jun;78:171–4

A stretch-activated anion channel in tobacco protoplasts. Falke LC, et al. **FEBS Lett** 1988 Sep 12;237(1–2):141–4

Protein kinase C is involved in regulation of Ca2+ channels in plasmalemma of Nitella syncarpa. Zherelova OM. **FEBS Lett** 1989 Jan 2;242(2):330–2

Movement of water in conjunction with plant movement visualized by NMR imaging. Tamiya T, et al. **J Biochem (Tokyo)** 1988 Jul;104(1):5–8

O-antigen from Bradyrhizobium japonicum lipopolysaccharide inhibits intercellular (symplast) communication between soybean (Glycine max) cells. Gharyal PK, et al. **J Biol Chem** 1989 Jul 25; 264(21):12119–21

Analysis of pss genes of Rhizobium leguminosarum required for exopolysaccharide synthesis and nodulation of peas: their primary structure and their interaction with psi and other nodulation genes. Borthakur D, et al. **Mol Gen Genet** 1988 Jul;213(1):155–62

Flavonoids and plant color. Brouillard R, et al. **Prog Clin Biol Res** 1988;280:93–106

Flavonoids in the environment: structure-activity relationships. Harborne JB. **Prog Clin Biol Res** 1988; 280:17–27 (23 ref.)

Tannins and plant-animal interactions. Waterman PG. **Prog Clin Biol Res** 1988;280:77–91 (43 ref.)

[Parthenocissus tricuspidata: a plant model of biological adhesion] Ragni G, et al. **Bull Group Int Rech Sci Stomatol Odontol** 1988 Aug-Dec; 31(3–4):189–205 (Eng. Abstr.) **(Fre)**

[Golgi body] Akazawa T. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):43–7 (18 ref.) **(Jpn)**

[Plant organelles] Akazawa T. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):8–14 (63 ref.) **(Jpn)**

[Biogenesis of protein body] Hara-Nishimura I. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):408–19 (43 ref.) **(Jpn)**

[Osmoregulation in plant cells] Takabe T. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):420–8 (24 ref.) **(Jpn)**

[Generation of active oxygen by environmental factors; air pollutions] Tanaka K. **Tanpakushitsu Kakusan Koso** 1988 Dec;33(16):2824–9 **(Jpn)**

RADIATION EFFECTS

Purification and characterization of amidating enzyme from nuclei of gamma-irradiated potato buds. Nair PM. **Indian J Biochem Biophys** 1985 Dec;22(6):339–43

ULTRASTRUCTURE

A small scale procedure for the isolation of transport competent vesicles from plant tissues. Giannini JL, et al. **Anal Biochem** 1988 Nov 1;174(2):561–7

Origin of nucleolus-like bodies found in the nucleoplasm and cytoplasm of Vicia faba meristematic cells. Sato S, et al. **Biol Cell** 1988;64(3):321–9

Plant actin filament and microtubule interactions during anaphase--telophase transition: effects of antagonist drugs. Schmit AC, et al. **Biol Cell** 1988;64(3):309–19

Structural organization of the sperm chromatin in a fern (Scolopendrium vulgare) studied by spreading methods. Khlifi S, et al. **Gamete Res** 1987 May;17(1):21–33

Transport of proteins to the plant vacuole is not by bulk flow through the secretory system, and requires positive sorting information. Dorel C, et al. **J Cell Biol** 1989 Feb; 108(2):327–37

Supramolecular structure of the thylakoid membrane of Prochlorothrix hollandica: a chlorophyll b-containing prokaryote. Miller KR, et al. **J Cell Sci** 1988 Dec;91 (Pt 4):577–86

Extraction of carbon 14-labeled compounds from plant tissue during processing for electron microscopy. Coetzee J, et al. **J Electron Microsc Tech** 1989 Feb;11(2):155–60

Differential morphometric values induced in Golgi apparatus of higher plant cells by aldehyde and permanganate fixation. Gonzalez-Reyes JA, et al. **J Electron Microsc Tech** 1989 Jan;11(1):1–8

A method for producing synaptonemal complex complements in lily and mouse. Hasenkampf CA. **J Hered** 1989 May-Jun; 80(3):197–202

The effect of bovine serum albumin and cytohelicase on surface-spread synaptonemal complexes of rye (Secale cereale). de Jong JH, et al. **Stain Technol** 1988 Jul; 63(4):213–20

Plant protoplasts immobilized in calcium alginate: a simple method of preparing fragile cells for transmission electron microscopy. Draget KI, et al. **Stain Technol** 1988 May; 63(3):159–64

A scanning electron microscopic method for intracellular and extracellular structure. Van Aelst AC, et al. **Stain Technol** 1988 Sep;63(5):327–8

[Protoplasts isolated from microsporocytes and microspores in higher plants] Ito M, et al. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):131–9 (16 ref.) **(Jpn)**

[Vacuoles] Nishimura M. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):55–60 (19 ref.) **(Jpn)**

[Isolation of plant plasma membranes by an aqueous two-polymer phase system] Yoshida S, et al. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):48–54 (16 ref.) **(Jpn)**

PLANTS, EDIBLE

Cocoa feeding and human lactose intolerance. Lee CM, et al. **Am J Clin Nutr** 1989 May;49(5):840–4

Effect of bupropion on chocolate craving [letter] [see comments] Michell GF, et al. **Am J Psychiatry** 1989 Jan; 146(1):119–20. **Comment in:** Am J Psychiatry 1989 Aug;146(8):1089

Chocolate: pleasure or pain? [letter; comment] Rakatansky H. **Am J Psychiatry** 1989 Aug;146(8):1089. **Comment on:** Am J Psychiatry 1989 Jan;146(1):119–20

Effects of condensed tannins prepared from leaves of fodder plants on digestive enzymes in vitro and in the intestine of rats. Horigome T, et al. **Br J Nutr** 1988 Sep;60(2):275–85

Characteristics of the sorption of chlorothalonil and azinphos-methyl to a soil from a commercial cranberry bog. Reduker S, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):633–41

Chemical and biological impact of effluent from edible bamboo shoot canning factory on a stream. Ueda N, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):628–33

Evaluation of a dental preventive program for Danish chocolate workers. Petersen PE. **Community Dent Oral Epidemiol** 1989 Apr;17(2):53–9

Prevention of cancer: vegetables and plants. Hocman G. **Comp Biochem Physiol [B]** 1989;93(2):201–12 (69 ref.)

Food biotechnology review: traditional solid-state fermentations of plant raw materials--application, nutritional significance, and future prospects. Paredes-López O, et al. **CRC Crit Rev Food Sci Nutr** 1988; 27(3):159–87 (67 ref.)

Effects of capsicum fruit on theophylline absorption and bioavailability in rabbits. Bouraoui A, et al. **Drug Nutr Interact** 1988;5(4):345–50

Traditional food plants. **FAO Food Nutr Pap** 1988;42:1–593

Quantification of the putative neurotoxin 2-amino-3-(methylamino)propanoic acid (BMAA) in cycadales: analysis of the seeds of some members of the family Cycadaceae. Duncan MW, et al. **J Anal Toxicol** 1989 May-Jun;13(3):169–75

Rapid impedance detection of salmonellas in confectionery using modified LICNR broth. Bullock RD, et al. **J Appl Bacteriol** 1989 May;66(5):385–91

Post-processing microflora and the shelf stability of gari marketed in Port Harcourt. Ofuya CO, et al. **J Appl Bacteriol** 1988 May;64(5):389–94

Comparison of epidemiological marker methods for identification of Salmonella typhimurium isolates from an outbreak caused by contaminated chocolate. Kapperud G, et al. **J Clin Microbiol** 1989 Sep;27(9):2019–24

Hepatic veno-occlusive disease and herbal teas [letter; comment] Ridker PM. **J Pediatr** 1989 Jul;115(1):167. **Comment on:** J Pediatr 1988 Mar;112(3):433–6

Epidemiologic survey on lung cancer with respect to cigarette smoking and plant diet. Sakai R. **Jpn J Cancer Res** 1989 Jun;80(6):513–20

Malnutrition among Semai children. Khor GL. **Med J Malaysia** 1988 Dec;43(4):318–26

Intensely sweet compounds of natural origin. Kinghorn AD, et al. **Med Res Rev** 1989 Jan-Mar;9(1):91–115 (39 ref.)

Transient hyperoxaluria after ingestion of chocolate as a high risk factor for calcium oxalate calculi. Balcke P, et al. **Nephron** 1989;51(1):32–4

Mutagenic activity of Mintostachys mollis in AHH1 lymphoblast cells. Carvajal G, et al. **Plant Foods Hum Nutr** 1988;38(2):105–14

Predicting pesticide residues to reduce crop contamination. Spynu EI. **Rev Environ Contam Toxicol** 1989;109:89–107

Cassava root meal in diets for growing rabbits. Radwan MA, et al. **Trop Anim Health Prod** 1989 Feb;21(1):32–6

Diabetes and cassava in Dominica. Cooles P. **Trop Geogr Med** 1988 Jul;40(3):272–3

Supporting Evidence for the Use of Cassava [Manihot esculeta] Products Instead of Wheat Flour Products in the Diet of the Diabetic [letter] Byam N. **West Indian Med J** 1988 Dec;37(4):246

Supporting evidence for the use of cassava (manihot esculeta) products instead of wheat flour products in the diet of the diabetic. Simon OR, et al. **West Indian Med J** 1988 Jun; 37(2):100–5

[Physiological, psychological and ergonomic research on jobs in the manufacture of chocolate products] Draganova N, et al. **Probl Khig** 1988;13:63–70 (Eng. Abstr.) **(Bul)**

[The noise factor in the manufacture of chocolate and pastry products] Tsvetkov D, et al. **Probl Khig** 1988;13:71–6 (Eng. Abstr.) **(Bul)**

[The contaminated chocolate epidemic of 1987] Kapperud G, et al. **Tidsskr Nor Laegeforen** 1989 Jun 30; 109(19–21):1982–5 (Eng. Abstr.) **(Nor)**

[Report from Perú--chemical composition and nutritive value of native Andean foods] Hernández EM. **Arch Latinoam Nutr** 1987 Dec;37(4):719–22 **(Spa)**

[Biotransformation of sugarcane phytosterols into pharmaceutical intermediates] Martínez J, et al. **Rev Latinoam Microbiol** 1987 Oct-Dec;29(4):373–6 (Eng. Abstr.) **(Spa)**

ANALYSIS

Immobilization of linamarase and its use in the determination of bound cyanide in cassava using flow injection analysis. Narinesingh D, et al. **Anal Biochem** 1988 Jul;172(1):89–95

Toxic and potentially toxic constituents of gari and beef marketed in Nigerian traditional markets. Ukhun ME, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):553–7

Cyanide content of cassava mash and gari flour and influence of water activity (aw) during storage. Ukhun ME, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):548–52

Studies on the constitution of edible and medicinal plants. I. Isolation and identification of 4-O-methylpyridoxine, toxic principle from the seed of Ginkgo biloba L. Wada K, et al. **Chem Pharm Bull (Tokyo)** 1988 May;36(5):1779–82

Cuphea: a new plant source of medium-chain fatty acids. Graham SA. **CRC Crit Rev Food Sci Nutr** 1989; 28(2):139–73 (158 ref.)

Structural determination of the photosystem II core complex from spinach. Irrgang KD, et al. **Eur J Biochem** 1988 Dec

1;178(1):209–17
Primary structure of spinach–chloroplast thioredoxin f. Protein sequencing and analysis of complete cDNA clones for spinach–chloroplast thioredoxin f. Kamo M, et al. **Eur J Biochem** 1989 Jun 15;182(2):315–22
Effects of tapioca obtained from cassava (Manihot utilissima) on the disintegration and dissolution rates of paracetamol tablets. Esezobo S, et al. **J Pharm Pharmacol** 1989 Jan; 41(1):7–10
The common occurrence of furan fatty acids in plants. Hannemann K, et al. **Lipids** 1989 Apr;24(4):296–8
A study on composition and hypolipidemic effect of dietary fibre from some plant foods. Agarwal V, et al. **Plant Foods Hum Nutr** 1988;38(2):189–97
Developmental changes in composition and quality of prickly pear cactus cladodes (nopalitos). Rodriguez–Felix A, et al. **Plant Foods Hum Nutr** 1988;38(1):83–93
Kochia (Kochia scoparia) toxicosis in cattle: results of four experimental grazing trials. Thilsted J, et al. **Vet Hum Toxicol** 1989 Feb;31(1):34–41
Trans fatty acid content of selected brands of West German nut–nougat cream. Laryea MD, et al. **Z Ernahrungswiss** 1988 Dec;27(4):266–71
[Iodine deficiency in ruminants. 1. The iodine content of feed, plants and drinking water] Groppel B, et al. **Arch Tierernahr** 1989 Jan–Feb;39(1–2):211–20 (Eng. Abstr.) **(Ger)**

CYTOLOGY

Changes in nucleus, nucleolus and cell size accompanying somatic embryogenesis of Theobroma cacao L. I. Relationship between DNA and total protein content and size of nucleus, nucleolus and cell. Kononowicz H, et al. **Folia Histochem Cytobiol** 1988;26(4):237–47
Changes in nucleus, nucleolus and cell size accompanying somatic embryogenesis of Theobroma cacao L. II. Relation between basic protein content and size of nucleus, nucleolus and cell. Kononowicz H, et al. **Folia Histochem Cytobiol** 1988;26(4):249–56

ENZYMOLOGY

Characterization of cyanogenic beta–glucosidase (linamarase) from cassava (Manihot esculenta Crantz). Eksittikul T, et al. **Arch Biochem Biophys** 1988 Oct;266(1):263–9
Betaine aldehyde dehydrogenase from spinach leaves: purification, in vitro translation of the mRNA, and regulation by salinity. Weretilnyk EA, et al. **Arch Biochem Biophys** 1989 May 15;271(1):56–63
Activity changes in cranberry bean (Phaseolus vulgaris) alpha–amylase inhibitor by chemical modification and enzymatic digestion. Kotaru M, et al. **J Nutr Sci Vitaminol (Tokyo)** 1989 Feb;35(1):71–80

GENETICS

Development of large DNA methods for plants: molecular cloning of large segments of Arabidopsis and carrot DNA into yeast. Guzmán P, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11091–105
Nucleotide sequence of a tomato mitochondrial tRNA(Cys) (GCA) gene. Izuchi S, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1248
Nucleotide sequence of a 17S (18S) rRNA gene from tomato. Kiss T, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2127

METABOLISM

Fermentation products and plant cell wall–degrading enzymes produced by monocentric and polycentric anaerobic ruminal fungi. Borneman WS, et al. **Appl Environ Microbiol** 1989 May;55(5):1066–73
The recombinant spinach acyl–acyl carrier protein–I expressed in Escherichia coli is the 18:1 delta 11(cis) thioester. Guerra DJ, et al. **Arch Biochem Biophys** 1989 May 15;271(1):246–53
NAD(P)H oxidation elicits anion superoxide formation in radish plasmalemma vesicles. Vianello A, et al. **Biochim Biophys Acta** 1989 Apr 14;980(2):202–8
Evidence for the incorporation of [32P]orthophosphate into leaf inositol phospholipids. Wagh SS, et al. **Biochim Biophys Acta** 1988 Sep 23;962(2):178–85
[Evaluation of the effect of a single dose of ammonia on lettuce photosynthesis in a hermetically sealed phytotron] Berkovich IuA, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):67–70 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

[Comparative ecologic study of microbial biocenosis of the lettuce rhizosphere under various conditions of cultivation] Drugova NA, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):75–9 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

[Combined effects of beta radiation and shock wave on the seeds of lettuce Lactuca sativa L.] Brill' OD, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):70–4 (Eng. Abstr.) **(Rus)**

PLANTS, MEDICINAL

see related
ALKALOIDS
MEDICINE, HERBAL
PHARMACOGNOSY

Evaluation of traditional plant treatments for diabetes: studies in streptozotocin diabetic mice. Swanston–Flatt SK, et al. **Acta Diabetol Lat** 1989 Jan–Mar;26(1):51–5
Biochemical and physiological alterations in female reproductive organs of cyclic rats treated with aqueous extract of Moringa oleifera Lam. Shukla S, et al. **Acta Eur Fertil** 1988 Jul–Aug;19(4):225–32
Guaianolides and other constituents from Centaurea sinaica. Sarg T, et al. **Acta Pharm Hung** 1988 May;58(3):129–33
Preliminary investigation of in–vitro antimicrobial activity of two Nigerian Diospyros species (Ebenaceae). Odelola HA, et al. **Afr J Med Med Sci** 1988 Sep;17(3):167–70
The use of medicinal plants by the Alaska natives. Fortuine R. **Alaska Med** 1988 Nov–Dec;30(6):189–226
Effects of san–huang–hsieh–hsin–tang on central monoaminergic and GABAergic systems in rats. Chu CY, et al. **Am J Chin Med** 1988;16(1–2):57–66
Effect of toki–shakuyaku–san on ovulation induced by human menopausal gonadotropin in rats. Koyama T, et al. **Am J Chin Med** 1988;16(3–4):169–72
Effect of Japanese kampo medicine on hypothalamic–pituitary–ovarian function in women with ovarian insufficiency. Koyama T, et al. **Am J Chin Med** 1988;16(1–2):47–55
Blended effects of herbal components of tokishakuyakusan on rat corpus luteum function in vivo. Usuki S. **Am J Chin Med** 1988;16(3–4):107–16
Hachimijiogan and Tokishakuyakusan enhance deoxyribonucleic acid alpha–nucleotidyltransferase activity in relationship to DNA synthesis by ovarian follicles via a cyclic AMP system. Usuki S. **Am J Chin Med** 1988; 16(1–2):37–46
Effects of Tokishakuyakusan and its components on rat corpus luteum function in vitro. Usuki S. **Am J Chin Med** 1988;16(1–2):11–9
Tokishakuyakusan stimulates cyclic adenosine 3',5'–monophosphate accumulation and progestin production by corpora lutea. Usuki S. **Am J Chin Med** 1988;16(1–2):21–8
Study of wild Egyptian plants of potential medicinal activity. Sixth communication: antibacterial and antifungal activities of some selected plants. Shabana MM, et al. **Arch Exp Veterinarmed** 1988 Sep;42(5):737–41
Natural inhibitors of complement. III. Inactivation of the complement cascade in vitro by vegetal spices (Ocimum basilicum, Artemisia dracunculus and Thymus vulgaris). Gancevici GG, et al. **Arch Roum Pathol Exp Microbiol** 1987 Oct–Dec;46(4):321–31
The protective effect of Allium sativum and crataegus on isoprenaline–induced tissue necroses in rats. Ciplea AG, et al. **Arzneimittelforschung** 1988 Nov;38(11):1583–92
Suppression of puerperal lactation using jasmine flowers (Jasminum sambac). Shrivastav P, et al. **Aust N Z J Obstet Gynaecol** 1988 Feb;28(1):68–71
Effects of an extract of feverfew (Tanacetum parthenium) on arachidonic acid metabolism in human blood platelets. Loesche W, et al. **Biomed Biochim Acta** 1988; 47(10–11):S241–3
Steroidal constituents and anti–inflammatory activity of the horse chestnut (Aesculus hippocastanum L.) bark. Senatore F, et al. **Boll Soc Ital Biol Sper** 1989 Feb;65(2):137–41
A novel property of an aqueous guaraná extract (Paullinia cupana): inhibition of platelet aggregation in vitro and in vivo. Bydlowski SP, et al. **Braz J Med Biol Res** 1988; 21(3):535–8
Blockade of the bradykinin–evoked diphasic response of isolated rat duodenum by the crude extract of and compounds obtained from Mandevilla velutina. Calixto JB, et al. **Braz J Med Biol Res** 1988;21(5):1015–8
Effect of Astronium urundeuva (aroeira) on gastrointestinal transit in mice. Menezes AM, et al. **Braz J Med Biol Res** 1988;21(3):531–3
Effects of Piper sp extract on pregnancy in rats. Schneid ES, et al. **Braz J Med Biol Res** 1988;21(1):111–3
Effect of Desmodium adscendens fractions on antigen– and arachidonic acid–induced contractions of guinea pig airways. Addy ME, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):820–5
Sister chromatid exchange and betel quid chewing [letter] Adhvaryu SG, et al. **Cancer Genet Cytogenet** 1989 Feb; 37(2):291
Identification in rats of N–nitrosonipecotic acid as a major urinary metabolite of the areca–nut alkaloid–derived nitrosamines, N–nitrosoguvacoline and N–nitrosoguvacine. Ohshima H, et al. **Cancer Lett** 1989 Mar;44(3):211–6
Anticarcinogenic effect of betel leaf extract against tobacco carcinogens. Padma PR, et al. **Cancer Lett** 1989 Jun; 45(3):195–202
Promoting activity of betel quid ingredients and their inhibition by retinol. Stich HF, et al. **Cancer Lett** 1989 Apr; 45(1):71–7
Irritant contact dermatitis due to the herbal oil, black man oil. Lee TY, et al. **Contact Dermatitis** 1989 Mar; 20(3):229–30
Traditional plant medicines as treatments for diabetes. Bailey CJ, et al. **Diabetes Care** 1989 Sep;12(8):553–64 (140 ref.)
Glycaemic effects of traditional European plant treatments for diabetes. Studies in normal and streptozotocin diabetic mice. Swanston–Flatt SK, et al. **Diabetes Res** 1989 Feb; 10(2):69–73
The hypoglycaemic and insulinotropic activity of Tinospora crispa: studies with human and rat islets and HIT–T15 B cells. Noor H, et al. **Diabetologia** 1989 Jun;32(6):354–9
Use of extract of Ruscus aculeatus in venous disease in the lower limbs. Cappelli R, et al. **Drugs Exp Clin Res** 1988; 14(4):277–83
Efficacy of traditional chewing sticks in plaque control. Kaimenyi JT, et al. **East Afr Med J** 1987 Sep;64(9):624–7 (17 ref.)
Inhibition of platelet behaviour by feverfew: a mechanism of action involving sulphydryl groups. Heptinstall S, et al. **Folia Haematol (Leipz)** 1988;115(4):447–9
Screening of medicinal plants of Chhindwara District against Trichophyton mentagrophytes: a causal organism of Tinea pedis. Rai MK, et al. **Hindustan Antibiot Bull** 1988 Feb–May;30(1–2):33–6
Researchers reconsider plants as drug sources. Souhrada L. **Hospitals** 1989 Mar 5;63(5):34
Formation of reactive oxygen species and of 8–hydroxy–2'–deoxyguanosine in DNA in vitro with betel–quid ingredients. Friesen M, et al. **IARC Sci Publ** 1988;(89):417–21
Screening of Indian plants for biological activity: Part XIII. Bhakuni DS, et al. **Indian J Exp Biol** 1988 Nov; 26(11):883–904
Medicinal plants. **Indian J Med Res** 1988 Apr;87:327–415
An in vitro assessment of the genotoxic potential of pan masalas. Adhvaryu SG, et al. **Indian J Med Res** 1989 Apr; 90:131–4
A review of Indian medicinal plants with interceptive activity. Kamboj VP. **Indian J Med Res** 1988 Apr; 87:336–55 (115 ref.)
Hypolipidaemic effects of Curcuma longa L and Nardostachys jatamansi, DC in triton–induced hyperlipidaemic rats. Dixit VP, et al. **Indian J Physiol Pharmacol** 1988 Oct–Dec;32(4):299–304
A neuropsychopharmacological profile of "Cinkara", a polyherbal preparation. Sakina MR, et al. **Indian J Physiol Pharmacol** 1989 Jan–Mar;33(1):43–6
Effect of raw deseeded fruit powder of Trichosanthes dioica (Roxb) on blood sugar, serum cholesterol, high density lipo–protein, phospholipid and triglyceride levels in the normal albino rabbits. Sharma G, et al. **Indian J Physiol Pharmacol** 1988 Apr–Jun;32(2):161–3
Effect of Nagarmotha (Cyperus rotundus Linn) on reserpine–induced emesis in pigeons [letter] Shinde S, et al. **Indian J Physiol Pharmacol** 1988 Jul–Sep;32(3):229–30
Wound healing profile of Septilin. Udupa AL, et al. **Indian J Physiol Pharmacol** 1989 Jan–Mar;33(1):39–42
Evaluation of the carcinogenicity of different preparations of areca nut in mice. Rao AR, et al. **Int J Cancer** 1989 Apr 15;43(4):728–32
The Ayurvedic medicines Haritaki, Amala and Bahira reduce cholesterol–induced atherosclerosis in rabbits. Thakur CP, et al. **Int J Cardiol** 1988 Nov;21(2):167–75
Anti–inflammatory activity of Aloe vera against a spectrum of irritants. Davis RH, et al. **J Am Podiatr Med Assoc** 1989 Jun;79(6):263–76
Aloe vera and gibberellin. Anti–inflammatory activity in diabetes. Davis RH, et al. **J Am Podiatr Med Assoc** 1989 Jan;79(1):24–6
Pan Masala [letter] Didwania Pradid DK, et al. **J Assoc Physicians India** 1988 Feb;36(2):181
Pan Masala: is it really safe? A clarification [letter] Sogani RK. **J Assoc Physicians India** 1988 Sep;36(9):574
The oral features of betel nut chewers without submucous fibrosis. Seedat HA, et al. **J Biol Buccale** 1988 Sep; 16(3):123–8
Aqueous extract of betel–nut of north–east India induces DNA–strand breaks and enhances rate of cell proliferation in vitro. Effects of betel–nut extract in vitro. Wary KK, et al. **J Cancer Res Clin Oncol** 1988;114(6):579–82
Alteration of glucose–6–phosphatase activity and regenerative, and total DNA concentrations in regenerating and normal rat liver of aqueous extracts of two Nigerian plants. Oruambo IF. **J Environ Pathol Toxicol Oncol** 1989 Mar–Apr;9(2):191–9
Paspalum spp. and Claviceps paspali in ancient and modern India. Aaronson S. **J Ethnopharmacol** 1988 Dec; 24(2–3):345–8
Effect of prolonged administration of sublethal concentrations of aridanin isolated from Tetrapleura tetraptera and bayluscide on the glycogen and protein content of Biomphalaria glabrata. Adewunmi CO, et al. **J Ethnopharmacol** 1988 Sep;24(1):107–14
Screening for antimalarial activity in the genus Potomorphe. Amorim CZ, et al. **J Ethnopharmacol** 1988 Sep;24(1):101–6
Medicinal plants with hypoglycemic activity. Atta–Ur–Rahman, et al. **J Ethnopharmacol** 1989 Jun; 26(1):1–55 (383 ref.)
Ethnopharmacologic and phytochemical studies of the Thymelaeaceae. Borris RP, et al. **J Ethnopharmacol** 1988 Sep;24(1):41–91 (438 ref.)
Pharmacological study of Cymbopogon citratus leaves. Carbajal D, et al. **J Ethnopharmacol** 1989 Feb;25(1):103–7
Screening for cytotoxic activity of plants used in traditional medicine. Chapuis JC, et al. **J Ethnopharmacol** 1988 Jul–Aug;23(2–3):273–84
Plants used in traditional medicine in eastern Tanzania. II. Angiosperms (Capparidaceae to Ebenaceae). Chhabra SC, et al. **J Ethnopharmacol** 1989 May;25(3):339–59 (81 ref.)
New contribution to the ethnopharmacological study of the

Canary Islands. Darias V, et al. **J Ethnopharmacol** 1989 Feb;25(1):77–92

Eugenia uniflora leaf extract and lipid metabolism in Cebus apella monkeys. Ferro E, et al. **J Ethnopharmacol** 1988 Dec; 24(2–3):321–5

Hypoglycemic effects of Teucrium polium. Gharaibeh MN, et al. **J Ethnopharmacol** 1988 Sep;24(1):93–9

Mechanisms of hypoglycemic activity of aconitan A, a glycan from Aconitum carmichaeli roots. Hikino H, et al. **J Ethnopharmacol** 1989 May;25(3):295–304

Effects of active compounds isolated from Angelica shikokiana on lipid metabolism in fat cells. Kimura Y, et al. **J Ethnopharmacol** 1989 May;25(3):269–80

Inhibition of gastrointestinal release of acetylcholine by quercetin as a possible mode of action of Psidium guajava leaf extracts in the treatment of acute diarrhoeal disease. Lutterodt GD. **J Ethnopharmacol** 1989 May;25(3):235–47

Pharmacological activity of the essential oil of Bupleurum gibraltaricum: anti-inflammatory activity and effects on isolated rat uteri. Ocete MA, et al. **J Ethnopharmacol** 1989 May;25(3):305–13

Ethnopharmacology and Western medicine. Phillipson JD, et al. **J Ethnopharmacol** 1989 Feb;25(1):61–72 (27 ref.)

Antifertility effect in male rats of oleanolic acid, a triterpene from Eugenia jambolana flowers. Rajasekaran M, et al. **J Ethnopharmacol** 1988 Sep;24(1):115–21

Acute diuretic effects in conscious rats produced by some medicinal plants used in the state of São Paulo, Brasil. Ribeiro R de A, et al. **J Ethnopharmacol** 1988 Sep; 24(1):19–29

Screening methods for natural products with antimicrobial activity: a review of the literature. Rios JL, et al. **J Ethnopharmacol** 1988 Jul–Aug;23(2–3):127–49 (108 ref.)

Hepatoprotective effects of Wedelia calendulacea. Sharma AK, et al. **J Ethnopharmacol** 1989 Feb;25(1):93–102

Ethnopharmacology of kratom and the Mitragyna alkaloids [letter] Shellard EJ. **J Ethnopharmacol** 1989 Feb; 25(1):123–4

Histoarchitecture of the genital tract of ovariectomized rats treated with an aqueous extract of Moringa oleifera roots. Shukla S, et al. **J Ethnopharmacol** 1989 May;25(3):249–61

Ethnopharmacologic analysis of medicinal plants used by Laotian Hmong refugees in Minnesota. Spring MA. **J Ethnopharmacol** 1989 Jun;26(1):65–91 (82 ref.)

Hypoglycemic activity of Artemisia herba alba. Twaij HA, et al. **J Ethnopharmacol** 1988 Dec;24(2–3):123–6

Some phytochemical aspects of medicinal plant research. Verpoorte R. **J Ethnopharmacol** 1989 Feb;25(1):43–59 (42 ref.)

Use of extracts of Picralima nitida bark in the treatment of experimental trypanosomiasis: a preliminary study. Wosu LO, et al. **J Ethnopharmacol** 1989 May;25(3):263–8

The optimum dose of Puag-Haad in the treatment of taeniasis. Charoenlarp P, et al. **J Med Assoc Thai** 1989 Feb; 72(2):71–3

High prevalence of human papillomavirus infection and possible association with betel quid chewing and smoking in oral epidermoid carcinomas in Taiwan. Chang KW, et al. **J Med Virol** 1989 May;28(1):57–61

Submucous fibrosis (SF) in ex-betel nut chewers: a report of 14 cases. Seedat HA, et al. **J Oral Pathol** 1988 May; 17(5):226–9

Effects of an extract of feverfew on endothelial cell integrity and on cAMP in rabbit perfused aorta. Voyno-Yasenetskaya TA, et al. **J Pharm Pharmacol** 1988 Jul;40(7):501–2

Intestinal obstruction due to phytobezor (a case report). Hardikar JV, et al. **J Postgrad Med** 1988 Oct;34(4):244–5

A modern-day shamanistic healer in the Peruvian Amazon: pharmacopoeia and trance. Dobkin de Rios M. **J Psychoactive Drugs** 1989 Jan–Mar;21(1):91–9

Psychoactive properties of mitragynine (kratom). Jansen KL, et al. **J Psychoactive Drugs** 1988 Oct–Dec;20(4):455–7

Herbs and substance abuse treatment: a 10-year perspective. Nebelkopf E. **J Psychoactive Drugs** 1988 Jul–Sep; 20(3):349–54 (47 ref.)

Gold, frankincense and myrrh. Hillson RM. **J R Soc Med** 1988 Sep;81(9):542–3

The pitcher plant. Newsom B. **J S C Med Assoc** 1988 Nov; 84(11):561

Holly. Newsom B. **J S C Med Assoc** 1988 Dec;84(12):599

Gentiana catesbei. Newsom B. **J S C Med Assoc** 1989 Feb; 85(2):89

The yellow jasmine. Newsom B. **J S C Med Assoc** 1988 Sep; 84(9):473

Effect of Grewia asiatica, Gossypium herbacium and Gymnema sylvestre on blood glucose, cholesterol and triglycerides levels in normoglycaemic and alloxan diabetic rabbits. Dogar IA, et al. **JPMA** 1988 Nov;38(11):289–95

Hypaconitine, the dominant constituent responsible for the neuromuscular blocking action of the Japanese-sino medicine "bushi" (aconite root). Kimura M, et al. **Jpn J Pharmacol** 1988 Oct;48(2):290–3

Immunological mechanisms of antitumor activity of some kinds of Chinese herbs: Meth A-induced delayed type hypersensitivity. Mori H, et al. **Jpn J Pharmacol** 1988 Sep; 48(1):37–46

Antiinflammatory effect of mace, aril of Myristica fragrans Houtt., and its active principles. Ozaki Y, et al. **Jpn J Pharmacol** 1989 Feb;49(2):155–63

Effect of Phyllanthus amarus on chronic carriers of hepatitis B virus [letter] Brook MG. **Lancet** 1988 Oct 29; 2(8618):1017–8

Ethnobotanical treatments of diabetes in Baja California Norte. Winkelman M. **Med Anthropol** 1989 Jun; 11(3):255–68 (41 ref.)

Mulberry roots and seeds may be effective in the treatment of AIDS. Sergio W. **Med Hypotheses** 1989 May;29(1):75–6

Ginger (Zingiber officinale) and rheumatic disorders. Srivastava KC, et al. **Med Hypotheses** 1989 May;29(1):25–8

Comfrey: assessing the low-dose health risk. Abbott PJ. **Med J Aust** 1988 Dec 5–19;149(11–12):678–82 (29 ref.)

Comparative study of immunomodulating activity of Indian medicinal plants, lithium carbonate and glucan. Thatte UM, et al. **Methods Find Exp Clin Pharmacol** 1988 Oct; 10(10):639–44

Glaucium flavum Crantz. IV.Antimicrobial activity. Cabo J, et al. **Microbios** 1988;56(228–229):177–80

Protective effect of hydroxychavicol, a phenolic component of betel leaf, against the tobacco-specific carcinogens. Amonkar AJ, et al. **Mutat Res** 1989 Feb;210(2):249–53

The involvement of reactive oxygen species in oral cancers of betel quid/tobacco chewers. Stich HF, et al. **Mutat Res** 1989 Sep;214(1):47–61 (99 ref.)

Getting to the root of AIDS [news] **Occup Health Saf** 1989 Jun;:16

Anticancer potential of Viva-Natural, a dietary seaweed extract, on Lewis lung carcinoma in comparison with chemical immunomodulators and on cyclosporine-accelerated AKR leukemia. Furusawa E, et al. **Oncology** 1989;46(5):343–8

Tropical rain forests: potential source of new drugs? Soejarto DD, et al. **Perspect Biol Med** 1989 Winter;32(2):244–56 (54 ref.)

Computerized tridimensional reconstruction of vegetable structures. Buffo G, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:139–44

Comparison of biological activity induced by Ailanthus altissima plant or cell cultures extracts. Crespi Perellino N, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:45–8

Antibacterial activity of some African medicinal plants. Forestieri AM, et al. **Pharmacol Res Commun** 1988 Dec; 20 Suppl 5:33–6

Activity of lavandino essential oil against non-tubercular opportunistic rapid grown mycobacteria. Gabbrielli G, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:37–40

Effects of Smilax macrophylla Vers. in normal or hyperuricemic and hyperuricosuric rats. Giachetti D, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:59–62

Sedative, anti-inflammatory and anti-diuretic effects induced in rats by essential oils of varieties of Anthemis nobilis: a comparative study. Rossi T, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:71–4

Anti-inflammatory activity of Echinacea angustifolia fractions separated on the basis of molecular weight. Tragni E, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:87–90

Effects of Trema guineense decoction on some metabolic activities in the rat. Trovato A, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:63–5

The effects of valerian, propranolol, and their combination on activation, performance, and mood of healthy volunteers under social stress conditions. Kohnen R, et al. **Pharmacopsychiatry** 1988 Nov;21(6):447–8

Conservation, ethnobotany, and the search for new jungle medicines: pharmacognosy comes of age ... again. Plotkin MJ. **Pharmacotherapy** 1988;8(5):257–62

Short lectures and posters. 36th annual congress of the Society for Medicinal Plant Research. Freiburg, 12–16 September 1988. **Planta Med** 1988 Dec;54(6):558–84

Traditional herbal medicines—the role of polyphenols. Haslam E, et al. **Planta Med** 1989 Feb;55(1):1–8 (10 ref.)

Aloe vera, salicylic acid, and aspirin for burns [letter] Frumkin A. **Plast Reconstr Surg** 1989 Jan;83(1):196

Aloe vera and burn wound healing [letter] Kaufman T, et al. **Plast Reconstr Surg** 1989 Jun;83(6):1075–6

Aloe vera for burns [letter] Kivett WF. **Plast Reconstr Surg** 1989 Jan;83(1):195

Response of White Leghorn hens to various dietary levels of Cassia obtusifolia and nutrient fortification as a means of alleviating depressed performance. Flunker LK, et al. **Poult Sci** 1989 Jul;68(7):909–13

Betel-nut chewing and submucous fibrosis in Durban. Seedat HA, et al. **S Afr Med J** 1988 Dec 3;74(11):568–71

Betel chewing and dietary habits of chewers without and with submucous fibrosis and with concomitant oral cancer. Seedat HA, et al. **S Afr Med J** 1988 Dec 3;74(11):572–5

Betel quid and oral carcinogenesis. Awang MN. **Singapore Med J** 1988 Dec;29(6):589–93 (73 ref.)

Effects of Cassia obtusifolia (sicklepod) extracts and anthraquinones on muscle mitochondrial function. Lewis DC, et al. **Toxicon** 1989;27(5):519–29

Experimental Chrozophora plicata poisoning in goats and sheep. Galal M, et al. **Vet Hum Toxicol** 1988 Oct; 30(5):447–52

Evaluation of Cassia obtusifolia (sicklepod) seed consumption in Holstein calves. Putnam MR, et al. **Vet Hum Toxicol** 1988 Aug;30(4):316–8

Fatal intoxications in Denmark following intake of morphine from opium poppies. Steentoft A, et al. **Z Rechtsmed** 1988; 101(3):197–204

[The antiviral action of a polyphenol complex isolated from the medicinal plant Geranium sanguineum L. VI. Reproduction of the influenza virus pretreated with the polyphenol complex] Serkedzhieva Iu, et al. **Acta Microbiol Bulg** 1988;22:16–21 (Eng. Abstr.) **(Bul)**

[Androgenic and aphrodesiac action of the medicinal plant Lithospermum Arvense (bird millet)] Ilarionov I. **Eksp Med Morfol** 1989;28(1):28–33 (Eng. Abstr.) **(Bul)**

[Effects of rhubarb and anti-pneumonia mixture III on endotoxemia in acute infections] Chen YW, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Nov;8(11):654–7, 644 (Eng. Abstr.) **(Chi)**

[Effects of rhubarb on arachidonic acid metabolism of the renal medulla in the rabbit] Guo CY, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Mar;9(3):161–3, 134 (Eng. Abstr.) **(Chi)**

[Alcoholic extract tablet of rhubarb in treating acute upper gastrointestinal hemorrhage] Jiao DH. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Jun;8(6):344–6, 324–5 (Eng. Abstr.) **(Chi)**

[Erythrocyte sodium pump activity in the human and the effect of Rheum palmatum on its activity] Yuan ZD, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Sep;8(9):536–7, 517 (Eng. Abstr.) **(Chi)**

["Red tree" extraction in the treatment of burn wounds—experimental study and report of 681 cases] Zhang ZR. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Jun;4(2):106–8 **(Chi)**

[Effect of orally administered rhubarb extract on partial nephrectomy in rats] Huang SM, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Dec;27(12):734–7, 781 (Eng. Abstr.) **(Chi)**

[Effects of rhubarb on electrical and contractive activities of the isolated intestine in rats] Jin BL, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Apr;14(4):239–41, 256 (Eng. Abstr.) **(Chi)**

[Studies on the original plants of nuoteng, hanshuiteng and dahuteng] Zheng JS. **Chung Kuo Chung Yao Tsa Chih** 1989 Mar;14(3):6–7, 61 (Eng. Abstr.) **(Chi)**

[Control studies of the downy mildew of yanhusuo (Corydalis yanhusuo W.T. Wang] Bao DF. **Chung Yao Tung Pao** 1988 May;13(5):14–6, 61 (Eng. Abstr.) **(Chi)**

[Textual studies on Curcuma species] Fan ST. **Chung Yao Tung Pao** 1988 Apr;13(4):3–6, 61 (Eng. Abstr.) **(Chi)**

[A preliminary report on a survey of medicinal plant resources in the Dabie Mountains in Henan Province] Jian J. **Chung Yao Tung Pao** 1988 Dec;13(12):11–3, 57 (Eng. Abstr.) **(Chi)**

[The history of the processing of rhubarb] Jiang WJ. **Chung Yao Tung Pao** 1988 Oct;13(10):3–6, 61 (33 ref.) (Eng. Abstr.) **(Chi)**

[A preliminary investigation on medicinal plants in Mount Fenghuang] Zhou YC. **Chung Yao Tung Pao** 1988 Oct; 13(10):9–11, 61 (Eng. Abstr.) **(Chi)**

[An agent against nocturnal enuresis (letter)] Ostenfeld I. **Ugeskr Laeger** 1989 Aug 14;151(33):2096 **(Dan)**

[Preliminary study of the anti-inflammatory action of Dittrichia viscosa (L.) W. Greuter] Martín MJ, et al. **Ann Pharm Fr** 1988;46(5):309–12 (Eng. Abstr.) **(Fre)**

[Methods of preselecting febrifugal plants from the Madascan flora in view of research on their antimalarial activity] Rakotoamboa JL, et al. **Arch Inst Pasteur Madagascar** 1988; 54(1):185–93 **(Fre)**

[Plants and traditional medicine in southeast Madagascar] Beaujard P. **J Ethnopharmacol** 1988 Jul–Aug; 23(2–3):165–265 (Eng. Abstr.) **(Fre)**

[Anti-infective phytotherapies of the tree-savannah, Senegal (occidental Africa). III: A review of phytochemical substances and the antimicrobial activity of 43 species] Le Grand A. **J Ethnopharmacol** 1989 May;25(3):315–38 (143 ref.) (Eng. Abstr.) **(Fre)**

[In vitro studies of the effect of the components of Stullmisan on the vitality of different gram-negative enterobacteria] Böckeler W, et al. **Berl Munch Tierarztl Wochenschr** 1988 Dec 1;101(12):401–5 (Eng. Abstr.) **(Ger)**

[Personal experiences with naturopathy. Wound treatment with plant substances. The process of wound healing—flavonoids, I] Zimmermann W. **Fortschr Med** 1989 Feb 20;107(5):20–2 **(Ger)**

[Personal experiences with naturopathy. Wound treatment with plant products. Wound medicines containing tannic acid (II)] Zimmermann W. **Fortschr Med** 1989 Mar 10; 107(7):20 **(Ger)**

[Plant preparations for immunostimulation] Wagner H. **Internist (Berlin)** 1988 Jul;29(7):472–8 (36 ref.) **(Ger)**

[Medicinal plants, an imprudent natural apothecary] Müller-Limmroth W. **Pharm Unserer Zeit** 1989 Jan; 18(1):1–9 **(Ger)**

[New perspectives on the use of Pygeum Africanum in prostato-bladder pathology] Menchini-Fabris GF, et al. **Arch Ital Urol Nefrol Androl** 1988 Sep;60(3):313–22 (Eng. Abstr.) **(Ita)**

[Superficial and deep EEG recordings of valerian-related drugs] de Romanis F, et al. **Clin Ter** 1988 Jul 31; 126(2):101–8 (Eng. Abstr.) **(Ita)**

[Race against time in the fight against AIDS and cancer: research on rare plants] Gandolfi A. **Minerva Stomatol** 1988 Nov;37(11):IX **(Ita)**

[Aflatoxin production of Aspergillus flavus isolated from indonesian crude herbal drugs] Ichinoe M, et al. **Eisei Shikenjo Hokoku** 1988;(106):25–9 (Eng. Abstr.) **(Jpn)**

[Microbial contamination of traditional herbal drugs in Indonesia] Ichinoe M, et al. **Eisei Shikenjo Hokoku** 1988;

(106):18–24 (Eng. Abstr.) (Jpn)
[Api- and phytotherapy in preventing late pregnancy toxemia] Voronin KV, et al. **Akush Ginekol (Mosk)** 1989 May;(5):52–5 (Rus)
[A decrease in the toxic action of rubomycin on the small intestine of mice with a transplantable tumor through the use of a Rhodiola extract] Borovskaia TG, et al. **Antibiot Khimioter** 1988 Aug;33(8):615–7 (Rus)
[Immunotropic effect of a tincture of the tissue culture biomass of ginseng cells and of an Eleutherococcus extract in mice] Chubarev VN, et al. **Farmakol Toksikol** 1989 Mar–Apr;52(2):55–9 (Eng. Abstr.) (Rus)
[The mechanisms of the immunostimulating action of plant heteropolysaccharides] Oakovlev AI, et al. **Farmakol Toksikol** 1988 Sep–Oct;51(5):68–72 (Eng. Abstr.) (Rus)
[A method for choosing preparations that reduce the toxicity of cytostatics in experimental chemotherapy of tumors] Zueva EP, et al. **Farmakol Toksikol** 1989 Jan–Feb; 52(1):74–7 (Eng. Abstr.) (Rus)
[Isolation of antimicrobial substances from arenarin] Vasil'ev VN, et al. **Mikrobiol Zh** 1987 Jul–Aug;49(4):88–91 (Eng. Abstr.) (Rus)
[The role of thrombocyte aggregation function in the mechanism of the antimetastatic action of an extract of Baikal skullcap] Razina TG, et al. **Vopr Onkol** 1989; 35(3):331–5 (Eng. Abstr.) (Rus)
[Wild and cultivated carrot greens as a potential nutritional and medicinal resource] Kilibarda V, et al. **Vojnosanit Pregl** 1988 May–Jun;45(3):188–91 (Eng. Abstr.) (Scr)
[Effects of medicinal fiber on colonic transit in patients with irritable colon syndrome] Soifer LO, et al. **Acta Gastroenterol Latinoam** 1987;17(4):317–23 (Eng. Abstr.) (Spa)
[Antimicrobial activity in medicinal plants of Panama] Gupta MP, et al. **Rev Med Panama** 1988 May;13(2):79–84 (Eng. Abstr.) (Spa)
[The effect of the infusion of Haploppapus baylahuen in dogs with liver damage induced by carbon tetrachloride] Martin R, et al. **Zentralbl Veterinarmed [A]** 1988 Nov;35(9):691–5 (Eng. Abstr.) (Spa)

ANALYSIS

Anti-inflammatory drugs from plant and marine sources. Lewis DA. **Agents Actions Suppl** 1989;27:3–373
Identification by methane chemical ionization gas chromatography/mass spectrometry of the products obtained by steam distillation and aqueous acid extraction of commercial Piper methysticum. Cheng D, et al. **Biomed Environ Mass Spectrom** 1988 Nov;17(5):371–6
Naturally occurring anthraquinone derivatives. Bombardelli E, et al. **Boll Chim Farm** 1988 Jan;127(1):3–12 (25 ref.)
The competitive antagonistic effect of compounds from Mandevilla velutina on kinin-induced contractions of rat uterus and guinea-pig ileum in vitro. Calixto JB, et al. **Br J Pharmacol** 1988 Aug;94(4):1133–42
Squamocin, a new cytotoxic bis-tetrahydrofuran containing acetogenin from Annona squamosa. Fujimoto Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec;36(12):4802–6
Studies on the constituents of Japanese mistletoes from different host trees, and their antimicrobial and hypotensive properties. Fukunaga T, et al. **Chem Pharm Bull (Tokyo)** 1989 Jun;37(6):1543–6
Metabolism of barbaloin by intestinal bacteria. Hattori M, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4462–6
A cytotoxic flavone from Scoparia dulcis L. Hayashi T, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec;36(12):4849–51
Isolation of dillapiol from a chemotype of Perilla frutescens as an active principle for prolonging hexobarbital-induced sleep. Honda G, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug; 36(8):3153–5
The screening of Chinese crude drugs for Ca2+ antagonist activity: identification of active principles from the aerial part of Pogostemon cablin and the fruits of Prunus mume. Ichikawa K, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb; 37(2):345–8
Phytochemical studies of seeds of medicinal plants. I. Two sulfated triterpenoid glycosides, sulfapatrinosides I and II, from seeds of Patrinia scabiosaefolia FISCHER. Inada A, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4269–74
Diterpenes from rhizomes of Hedychium coronarium. Itokawa H, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul; 36(7):2682–4
A quantitative structure-activity relationship for antitumor activity of long-chain phenols from Ginkgo biloba L. Itokawa H, et al. **Chem Pharm Bull (Tokyo)** 1989 Jun; 37(6):1619–21
Studies on the saponins of Lonicera japonica THUNB. Kawai H, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec; 36(12):4769–75
Isolation of ovulatory-active substances from crops of Job's tears (Coix lacryma-jobi L. var. ma-yuen STAPF.). Kondo Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug;36(8):3147–52
Monoamine oxidase inhibitors from Cinchonae Cortex. Mitsui N, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb;37(2):363–6
Studies on crude drugs effective on visceral larva migrans. V. The larvicidal principle in mace (aril of Myristica fragrans). Nakamura N, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2685–8
Platelet aggregation inhibitors from jyu-yaku (houttuyniae herb). Nishiya H, et al. **Chem Pharm Bull (Tokyo)** 1988 May;36(5):1902–4
Mutagenic principles in Sinomeni Caulis et Rhizoma. II. The mutagenicity of liriodenine in the basic fraction of the methanol extract. Nozaka T, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):2259–62
Effect of water extracts of aloe and some herbs in decreasing blood ethanol concentration in rats. II. Sakai K, et al. **Chem Pharm Bull (Tokyo)** 1989 Jan;37(1):155–9
Effect of extracts of Zingiberaceae herbs on gastric secretion in rabbits. Sakai K, et al. **Chem Pharm Bull (Tokyo)** 1989 Jan;37(1):215–7
Anti-inflammatory constituents of topically applied crude drugs. III. Constituents and anti-inflammatory effect of Paraguayan crude drug "Tamandá cuná" (Catasetum barbatum LINDLE). Shimizu M, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4447–52
Anti-inflammatory constituents of topically applied crude drugs. II. Constituents and anti-inflammatory effect of Cryptomeria japonica D. Don. Shimizu M, et al. **Chem Pharm Bull (Tokyo)** 1988 Oct;36(10):3967–73
Structural elucidation of triptofordins F-1, F-2, F-3, and F-4, new sesquiterpenes polyesters from Tripterygium wilfordii HOOK fil. var. regelii MAKINO. Takaishi Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4275–83
Studies on the constitution of edible and medicinal plants. I. Isolation and identification of 4-O-methylpyridoxine, toxic principle from the seed of Ginkgo biloba L. Wada K, et al. **Chem Pharm Bull (Tokyo)** 1988 May;36(5):1779–82
Studies on pharmacologically active principles from Indonesian crude drugs. II. Hypothermic principle from Curcuma xanthorrhiza Roxb. Yamazaki M, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):2075–8
Studies on pharmacologically active principles from Indonesian crude drugs. I. Principle prolonging pentobarbital-induced sleeping time from Curcuma xanthorrhiza Roxb. Yamazaki M, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun;36(6):2070–4
Biological study of triterpenequinones from celastraceae. Gonzáles AG, et al. **Farmaco [Sci]** 1988 Jun;43(6):501–5
Ammonium positive-ion and hydroxide negative-ion chemical ionization gas chromatography-mass spectrometry for the identification of pyrrolizidine alkaloids in Eupatorium rotundifolium L. var. ovatum. Hendriks H, et al. **J Chromatogr** 1988 Jul 15;428(2):352–6
Determination of alkaloids of Fumaria parviflora and Fumaria capreolata by high-performance liquid chromatography and capillary isotachophoresis. Válka I, et al. **J Chromatogr** 1988 Jul 8;445(1):258–63
An antifungal constituent from the stem bark of Butea monosperma. Bandara BM, et al. **J Ethnopharmacol** 1989 Feb;25(1):73–5
Cardiovascular effects in the rat of dihydrocorynantheine isolated from Uncaria callophylla. Chang P, et al. **J Ethnopharmacol** 1989 Apr;25(2):213–5
Convulsive action of (25S)-isosolafloridine isolated from Solanum pseudo-quina bark. de Oliveira RA, et al. **J Ethnopharmacol** 1988 Dec;24(2–3):155–65
Screening in mice of some medicinal plants used for analgesic purposes in the state of São Paulo. di Stasi LC, et al. **J Ethnopharmacol** 1988 Dec;24(2–3):205–11
Castanospermum and anti-AIDS activity. Duke JA. **J Ethnopharmacol** 1989 Apr;25(2):227–8
Antimalarial effects of eight African medicinal plants. Gbeassor M, et al. **J Ethnopharmacol** 1989 Feb;25(1):115–8
Testicular cell population dynamics following palmitine hydroxide treatment in male dogs. Gupta RS, et al. **J Ethnopharmacol** 1989 Apr;25(2):151–7
Effects on mice locomotor activity of a narcotic-like principle from Psidium guajava leaves. Lutterodt GD, et al. **J Ethnopharmacol** 1988 Dec;24(2–3):219–31
Pharmacologic effects of lactones isolated from Pulsatilla alpina subsp. apiifolia. Martin ML, et al. **J Ethnopharmacol** 1988 Dec;24(2–3):185–91
Sedating and antipyretic activity of the essential oil of Calamintha sylvatica subsp. ascendens. Ortiz de Urbina AV, et al. **J Ethnopharmacol** 1989 Apr;25(2):165–71
Effects of Abana, an Ayurvedic preparation, on rabbit atrium and intestine. Pasnani JS, et al. **J Ethnopharmacol** 1988 Dec; 24(2–3):287–302
The zoapatle. XV. Activity of 16 alpha-hydroxy-ent-kauran-19-oic acid isolated from Montanoa hibiscifolia, and its methyl ester on rat and guinea pig uterus. Ponce-Monter H, et al. **J Ethnopharmacol** 1988 Dec;24(2–3):127–34
Studies on the mechanism of action of Semecarpus anacardium in rheumatoid arthritis. Saraf MN, et al. **J Ethnopharmacol** 1989 Apr;25(2):159–64
Effect of an extract of Erioglossum edule on the central nervous system. Sattar MA, et al. **J Ethnopharmacol** 1989 Apr;25(2):217–20
Anti-inflammatory activity of Echinops echinatus. Singh B, et al. **J Ethnopharmacol** 1989 Apr;25(2):189–99
Xanthine oxidase inhibitory activity of Paraguayan Myrtaceae. Theoduloz C, et al. **J Ethnopharmacol** 1988 Dec;24(2–3):179–83
Wheat rootlet growth inhibition test of Rwandese medicinal plants: active principles of Tetradenia riparia and Diplolophium africanum. van Puyvelde L, et al. **J Ethnopharmacol** 1988 Dec;24(2–3):233–46
Two new bioactive carbazole alkaloids from the root bark of Clausena harmandiana [published erratum appears in J Nat Prod 1989 Mar–Apr;52(2):375] Chaichantipyuth C, et al. **J Nat Prod** 1988 Nov–Dec;51(6):1285–8
Studies on cytotoxic constituents in pericarps of Mallotus japonicus, Part III. Fujita A, et al. **J Nat Prod** 1988 Jul–Aug;51(4):708–12
Pentagalloylglucose, a xanthine oxidase inhibitor from a Paraguayan crude drug, "Molle-i" (Schinus terebinthifolius). Hayashi T, et al. **J Nat Prod** 1989 Jan–Feb; 52(1):210–1
The mystery of trichothecene antibiotics in Baccharis species. Jarvis BB, et al. **J Nat Prod** 1988 Jul–Aug;51(4):736–44
Studies on inhibitors of skin tumor promotion, III. Inhibitory effects of isoflavonoids from Wisteria brachybotrys on Epstein-Barr virus activation. Konoshima T, et al. **J Nat Prod** 1988 Nov–Dec;51(6):1266–70
Chemical studies on Mexican plants used in traditional medicine, V. Cucurbitacin glucosides from Cigarrilla mexicana. Mata R, et al. **J Nat Prod** 1988 Sep–Oct; 51(5):836–9
Chemical studies on mexican plants used in traditional medicine, VI. Additional new 4-phenylcoumarins from Exostema caribaeum. Mata R, et al. **J Nat Prod** 1988 Sep–Oct;51(5):851–6
Isolation and characterization of taxifolin 6-C-glucoside from Garcinia epunctata. Mbafor JT, et al. **J Nat Prod** 1989 Mar–Apr;52(2):417–9
Constituents of Michelia Rajaniana. Two new germacranolide amides. Ruangrungsi N, et al. **J Nat Prod** 1988 Nov–Dec;51(6):1220–5
Umuhengerin, a new antimicrobially active flavonoid from Lantana trifolia. Rwangabo PC, et al. **J Nat Prod** 1988 Sep–Oct;51(5):966–8
Isolation of flavonoids and a chalcone from Helichrysum odoratissimum and synthesis of helichrysetin. Van Puyvelde L, et al. **J Nat Prod** 1989 May–Jun;52(3):629–33
Citlalitrione, a new diterpene from Jatropha dioica var. sessiliflora. Villarreal AM, et al. **J Nat Prod** 1988 Jul–Aug; 51(4):749–53
Prostaglandin synthetase inhibitors in feverfew. Pugh WJ, et al. **J Pharm Pharmacol** 1988 Oct;40(10):743–5
Studies on zoapatle. VIII: Novel cytotoxic sesquiterpene lactones from Montanoa tomentosa ssp. microcephala. Topcu G, et al. **J Pharm Sci** 1988 Jun;77(6):553–6
Sociopsychotherapeutic functions of ayahuasca healing in Amazonia. Andritzky W. **J Psychoactive Drugs** 1989 Jan–Mar;21(1):77–89 (77 ref.)
The sacred journey in dynastic Egypt: shamanistic trance in the context of the narcotic water lily and the mandrake. Emboden W. **J Psychoactive Drugs** 1989 Jan–Mar; 21(1):61–75
Psychoactive properties of !Kung Bushmen medicine plants. Winkelman M, et al. **J Psychoactive Drugs** 1989 Jan–Mar; 21(1):51–9
Effects of Laurus nobilis (Lauraceae) on Biomphalaria glabrata (Say, 1818). Ré L, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 4:315–20
Hydroxychavicol: a new anti-nitrosating phenolic compound from betel leaf. Nagabhushan M, et al. **Mutagenesis** 1989 May;4(3):200–4
Antimutagenic effects of betel leaf extract against the mutagenicity of two tobacco-specific N-nitrosamines. Padma PR, et al. **Mutagenesis** 1989 Mar;4(2):154–6
Erythrina and related alkaloids. Chawla AS, et al. **Nat Prod Rep** 1989 Feb;6(1):55–66 (35 ref.)
Study in the chemical constituents of plantago cynops L. and antibacterial evaluation of verbascoside. Debrauwer L, et al. **Pharm Acta Helv** 1989;64(7):183–7
The volatiles of Chaerophyllum bulbosum L. ssp. bulbosum growing wild in Greece. Kokkalou E, et al. **Pharm Acta Helv** 1989;64(5–6):133–4
Iridoids and secoiridoids from Guettarda platypoda. Aquino R, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:105–8
Papaver somniferum L. var. album D.C. cultivated in Sicily: phytochemical investigation and use. Attaguile G, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:129–33
Glycosides of the Magydaris pastinacea L. Cerri R, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:109–12
A study of the diterpene alkaloids of Aconitum napellus ssp. neomontanum during its onthogenetic cycle. Colombo ML, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:123–8
Localization of the active principles of the male fern (Dryopteris filix-mas (L.) Schott.) by fluorescence microscopy. Franchi GG, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:135–8
TLC determination of flavonoid accumulation in clonal populations of Passiflora incarnata L. Menghini A, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:113–6
Accumulation and distribution of thiophenes in Tagetes patula. Tosi B, et al. **Pharmacol Res Commun** 1988 Dec; 20 Suppl 5:117–21
An approach to the study of the biological activity of Eschscholtzia californica Cham. Vincieri FF, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:41–4
Hypoglycemic activity in various species of the genus Lavandula. Part 2: Lavandula dentata and Lavandula latifolia. Gamez MJ, et al. **Pharmazie** 1988 Jun;43(6):441–2
Comparative study of different essential oils of Bupleurum gibraltaricum Lamarck. Gil ML, et al. **Pharmazie** 1989 Apr; 44(4):284–7
Studies on contamination of vegetable drugs with halogen derivative pesticides. Part 2: Concentrations of halogen derivative pesticides in vegetable blends and herbal

granulated products produced in Poland in 1980–1984. Pluta J. **Pharmazie** 1988 May;43(5):348–51
Studies on concentration of halogen derivatives in herbal products from various regions of Poland. Pluta J. **Pharmazie** 1989 Mar;44(3):222–4
Isolation and identification of an anti-inflammatory principle from Capparis spinosa. al-Said MS, et al. **Pharmazie** 1988 Sep;43(9):640–1
Antisickling activity of Adansonia digitata. Adesanya SA, et al. **Planta Med** 1988 Aug;54(4):374
Effects of 5,7,2',5'-tetraacetoxy-4-phenylcoumarin in guinea pig tracheal preparations. Araújo CC, et al. **Planta Med** 1988 Dec;54(6):494–7
Antifungal constituents of Limonia acidissima. Bandara BM, et al. **Planta Med** 1988 Aug;54(4):374–5
Alkaloidal constituents of Erythrina variegata bark. Chawla AS, et al. **Planta Med** 1988 Dec;54(6):526–8
The complex nature of the mechanism of toxicity of antibiotic dithiacyclohexadiene polyines (thiarubrines) from the asteraceae. Constabel CP, et al. **Planta Med** 1989 Feb; 55(1):35–7
Studies on the relationship of structure to antimicrobial properties of diterpenoid compounds from Sideritis. Díaz RM, et al. **Planta Med** 1988 Aug;54(4):301–4
An antitumor principle from Euphorbia lathyris. Itokawa H, et al. **Planta Med** 1989 Jun;55(3):271–2
Cytotoxic diterpenes from the rhizomes of Hedychium coronarium. Itokawa H, et al. **Planta Med** 1988 Aug; 54(4):311–5
New 5'-nucleotidase inhibitors, NPF–86IA, NPF–86IB, NPF–86IIA, and NPF–86IIB from Areca catechu; Part II. Anti-tumor effects. Iwamoto M, et al. **Planta Med** 1988 Oct;54(5):422–5
Effects of the extracts of Ganoderma lucidum on blood glucose level in rats. Kimura Y, et al. **Planta Med** 1988 Aug;54(4):290–4
Antifertility principle of Ruta graveolens. Kong YC, et al. **Planta Med** 1989 Apr;55(2):176–8
An antihypertensive chromone from Ptaeroxylon obliquum. Langenhoven JH, et al. **Planta Med** 1988 Aug;54(4):373
The cytotoxic principles of Prunella vulgaris, Psychotria serpens, and Hyptis capitata: ursolic acid and related derivatives. Lee KH, et al. **Planta Med** 1988 Aug; 54(4):308–11
Antihepatotoxic principles of Sambucus formosana. Lin CN, et al. **Planta Med** 1988 Jun;54(3):223–4
Alkaloids of Siparuna pauciflora. López JA, et al. **Planta Med** 1988 Dec;54(6):552–3
Antitumor constituents from bulbs of Crocosmia crocosmiiflora. Nagamoto N, et al. **Planta Med** 1988 Aug; 54(4):305–7
Isolation and high performance liquid chromatography (HPLC) of isoflavonoids from the Pueraria root. Ohshima Y, et al. **Planta Med** 1988 Jun;54(3):250–4
Ellagitannins as active constituents of medicinal plants. Okuda T, et al. **Planta Med** 1989 Apr;55(2):117–22 (52 ref.)
Effect of fenugreek and lupine seeds on the development of experimental diabetes in rats. Riyad MA, et al. **Planta Med** 1988 Aug;54(4):286–90
Chemistry and pharmacology of Gentiana lactea. Schaufelberger D, et al. **Planta Med** 1988 Jun;54(3):219–21
Metabolism of swertiamarin from Swertia japonica by human intestinal bacteria. el-Sedawy AI, et al. **Planta Med** 1989 Apr;55(2):147–50
A cytotoxic triterpenoid and flavonoids from Crossopteryx febrifuga. Tomás-Barberán FA, et al. **Planta Med** 1988 Jun; 54(3):266–7
New 5'-nucleotidase inhibitors, NPF–86IA, NPF–86IB, NPF–86IIA, and NPF–86IIB from Areca catechu; Part I. Isolation and biological properties. Uchino K, et al. **Planta Med** 1988 Oct;54(5):419–22
Isobyakangelicin angelate; a novel furanocoumarin from Peucedanum palustre. Vuorela H, et al. **Planta Med** 1988 Dec;54(6):538–42
New antihepatotoxic naphtho-pyrone glycosides from the seeds of Cassia tora. Wong SM, et al. **Planta Med** 1989 Jun;55(3):276–80
Effects of anthraquinones of Polygonum cuspidatum on HL-60 cells. Yeh SF, et al. **Planta Med** 1988 Oct; 54(5):413–4
Initiation and maintenance of callus tissue culture of Uncaria elliptica for flavonoid productio[illegible] Law KH, et al. **Prog Clin Biol Res** 1988;280:67-[illegible]
Do natural compounds need specific drug development? Simon P, et al. **Prog Clin Biol Res** 1988;280:407–21
Antifungal flavonoids from the leaf surfaces of Helichrysum nitens and from the stem bark of Erythrina berteroana. Tomas-Barberan FA, et al. **Prog Clin Biol Res** 1988; 280:61–5
Occurrence of flavonoid aglycones in medicinal plants. Wollenweber E. **Prog Clin Biol Res** 1988;280:45–55 (46 ref.)
This and that: deception and the stuff of dreams. Max B. **Trends Pharmacol Sci** 1988 Jun;9(6):198–200 (14 ref.)
Populus candicans and the Balm of Gilead. Whatley FR, et al. **Z Naturforsch [C]** 1989 May-Jun;44(5–6):353–6
[Selection of the extraction conditions for total anthraquinone derivatives in rhubarb by using orthogonal experiment design] Ding AW. **Chung Yao Tung Pao** 1988 May; 13(5):37–9, 63 (Eng. Abstr.) **(Chi)**
[Comparison of the contents of the main chemical constituents in various processed preparations of ginger] Ding AW, et al. **Chung Yao Tung Pao** 1988 Nov; 13(11):17–9, 62 (Eng. Abstr.) **(Chi)**
[Quality evaluation of cultivated Salvia miltiorrhiza Bge. in Chongming, a suburb of Shanghai] Ni XB, et al. **Chung Yao Tung Pao** 1988 Jun;13(6):11–3, 61–2 (Eng. Abstr.) **(Chi)**
[Determination of indican in Polygonum tinctorium ait. in various growth periods] Wang HJ, et al. **Chung Yao Tung Pao** 1988 Nov;13(11):11–3, 61–2 (Eng. Abstr.) **(Chi)**
[The fingerprint spectrum analysis of GC relative retention values for essential oil of 19 species of Bupleurum genus] Hong XK, et al. **Yao Hsueh Hsueh Pao** 1988 Nov; 23(11):839–45 (Eng. Abstr.) **(Chi)**
[Studies on TLC-scanning determination of alkaloids in the Chinese drug qinjiao (Gentiana macrophylla)] Zhong JF, et al. **Yao Hsueh Hsueh Pao** 1988;23(8):601–5 (Eng. Abstr.) **(Chi)**
[The uterotonic activity of Bridelia atroviridis and Phyllanthus discoideus (Euphorbiaceae). Evidence of an effect on alpha-adrenergic receptors] Corallo MA, et al. **Ann Pharm Fr** 1988;46(3):171–7 (Eng. Abstr.) **(Fre)**
[Identification of amino acids in aerial parts of the bursa-pastoris, Capsella bursa-pastoris Moench. Analytical technic] Maillard C, et al. **Ann Pharm Fr** 1988;46(3):211–6 (Eng. Abstr.) **(Fre)**
[Flavones isolated from Thymus carnosus Boiss.] Maruhenda E, et al. **Ann Pharm Fr** 1987;45(6):467–70 (Eng. Abstr.) **(Fre)**
[Adsorbed plant extracts, use of extracts of dried seeds of Orthosiphon stamineus benth] Casadebaig-Lafon J, et al. **Pharm Acta Helv** 1989;64(8):220–4 (Eng. Abstr.) **(Fre)**
[The contents of sabal fruits and testing of their anti-inflammatory effect] Hiermann A. **Arch Pharm (Weinheim)** 1989 Feb;322(2):111–4 (Eng. Abstr.) **(Ger)**
[The isolation of plant drugs] Hickel E. **Pharm Unserer Zeit** 1972 Jan;1(1):26–30 **(Ger)**
[Foreign substances in plant drugs] Ennet D. **Pharmazie** 1989 Jun;44(6):383–6 (18 ref.) **(Ger)**
[Immunosuppressive and virostatic action of petunia hybrids] Hassan R, et al. **Pharmazie** 1988 Nov;43(11):801–2 **(Ger)**
[Asa foetida—a remedy in Asiatic folk medicine] Martinetz D, et al. **Pharmazie** 1988 Oct;43(10):720–2 **(Ger)**
[Composition of essential oils from native Hungarian camomile] Marczal G, et al. **Acta Pharm Hung** 1989 Jul; 59(4):145–56 **(Hun)**
[Identification of the root of Punica granatum in galenic preparations using TLC] Ferrara L, et al. **Boll Soc Ital Biol Sper** 1989 May;65(5):385–90 (Eng. Abstr.) **(Ita)**
[Phytochemical investigation of Adiantum capillus veneris] Marino A, et al. **Boll Soc Ital Biol Sper** 1989 May; 65(5):461–3 (Eng. Abstr.) **(Ita)**
[Studies on the constituents of Pinus densiflora Sieb. et Zucc. leaves. II. On the ethanol-extractable amino acids compared with Pinus thunbergii Parl. leaves] Arai M, et al. **Yakugaku Zasshi** 1989 Feb;109(2):127–43 (Eng. Abstr.) **(Jpn)**
[Studies on inhibition mechanism of autoxidation by tannins and flavonoids. III. Inhibition mechanism of tannins isolated from medicinal plants and related compounds on autoxidation of methyl linoleate] Fujita Y, et al. **Yakugaku Zasshi** 1988 Jun;108(6):528–37 (Eng. Abstr.) **(Jpn)**
[Studies on the constituents of Leucoseptrum stellipillum] Isobe T, et al. **Yakugaku Zasshi** 1989 Mar;109(3):175–8 (Eng. Abstr.) **(Jpn)**
[Studies on the constituents of trichosanthes root. II. Constituents of roots of Trichosanthes cucumeroides Maxim] Kitajima J, et al. **Yakugaku Zasshi** 1989 Apr; 109(4):256–64 (Eng. Abstr.) **(Jpn)**
[Studies on the constituents of trichosanthes root. III. Constituents of roots of Trichosanthes bracteata Voigt] Kitajima J, et al. **Yakugaku Zasshi** 1989 Apr;109(4):265–70 (Eng. Abstr.) **(Jpn)**
[Studies on the constituents of trichosanthes root. I. Constituents of roots of Trichosanthes kirilowii Maxim. var. japonicum Kitam] Kitajima J, et al. **Yakugaku Zasshi** 1989 Apr;109(4):250–5 (Eng. Abstr.) **(Jpn)**
[Screening test for platelet aggregation inhibitor in natural products. The active principle of Anemarrhenae Rhizoma] Niwa A, et al. **Yakugaku Zasshi** 1988 Jun;108(6):555–61 (Eng. Abstr.) **(Jpn)**

ANATOMY & HISTOLOGY

[Pharmacognostic studies on the Chinese drug guanzhong produced in East China] Ai TM, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Mar;14(3):7–10, 61 (Eng. Abstr.) **(Chi)**
[Studies on the histology and essential oil of the Chinese drug sharen and its adulterants in Amomum] Chen SW, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Jan;14(1):9–12, 61 (Eng. Abstr.) **(Chi)**
[Medicinal plants of Asarum in Anhui Province] Wang DQ, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Apr; 14(4):198–200, 253 (Eng. Abstr.) **(Chi)**
[A comparative identification of four Gynostemma spp. herbs and their various species from Guangxi] Zhou ZJ, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Apr;14(4):202–6, 253 (Eng. Abstr.) **(Chi)**
[Morphological studies on the Chinese drug sharen and it's adulterants in Amomum] Chen SW, et al. **Chung Yao Tung Pao** 1988 Jun;13(6):4–7, 61 (Eng. Abstr.) **(Chi)**
[Identification studies of cortex Ailanthi Altissimae and cortex Toonae Sinensis] Chen YL, et al. **Chung Yao Tung Pao** 1988 Jun;13(6):7–8, 61 (Eng. Abstr.) **(Chi)**
[Comparative studies on the roots of wild and cultured Bupleurum chinense DC] Jin RL, et al. **Chung Yao Tung Pao** 1988 Apr;13(4):11–3, 61 (Eng. Abstr.) **(Chi)**
[Herbalogic study and commercial research on herba epimedii] Liang HR, et al. **Chung Yao Tung Pao** 1988 Dec; 13(12):7–10, 57 (Eng. Abstr.) **(Chi)**
[Pharmacognostic studies on three species of Lepidium in Xinjiang] Liu YM, et al. **Chung Yao Tung Pao** 1988 Oct; 13(10):11–4, 61 (Eng. Abstr.) **(Chi)**
[Comparative studies of the histology of rhizoma Arisaematis and Pinelliae] Qin MZ. **Chung Yao Tung Pao** 1988 Apr; 13(4):6–8, 61 (Eng. Abstr.) **(Chi)**
[Studies on the identification of zhushagen (Ardisia crenata sims), kaihoujian [A. crispa(thunb.) A.DC.] and their analogues] Song LK, et al. **Chung Yao Tung Pao** 1988 Nov; 13(11):8–10, 61 (Eng. Abstr.) **(Chi)**
[Herbal studies on the plants of Schisandraceae] Song WZ. **Chung Yao Tung Pao** 1988 Aug;13(8):3–6, 61 (Eng. Abstr.) **(Chi)**
[Original botanical study and identification of Flos Magnoliae] Zhao ZZ, et al. **Chung Yao Tung Pao** 1988 Jun;13(6):3–4, 61 (Eng. Abstr.) **(Chi)**
[Studies on the original plants of the traditional drug haifengteng: comparative studies between piper hancei Maxim. var hancei Maxim. and piper hancei Maxim. var. squamiglanduferum Fan] Fan ST, et al. **Yao Hsueh Hsueh Pao** 1988;23(12):944–52 (Eng. Abstr.) **(Chi)**

CLASSIFICATION

[The classification of therapeutically used species of the genus Echinacea] Heinzer F, et al. **Pharm Acta Helv** 1988; 63(4–5):132–6 **(Ger)**
[Pharmacognostical studies on Adiantum plants. I. On histotaxonomy of series Caudata and the origins of related crude drugs] Namba T, et al. **Yakugaku Zasshi** 1988 Dec; 108(12):1154–67 (Eng. Abstr.) **(Jpn)**
[Pharmacognostical studies on Adiantum plants. II. On histotaxonomy of series Pedata and Flabellulata and the origins of related crude drugs] Namba T, et al. **Yakugaku Zasshi** 1988 Dec;108(12):1168–78 (Eng. Abstr.) **(Jpn)**
[Pharmacognostical studies on Adiantum plants. III. On histotaxonomy of series Venusta and the origins of related crude drugs] Namba T, et al. **Yakugaku Zasshi** 1988 Dec; 108(12):1179–87 (Eng. Abstr.) **(Jpn)**

DRUG EFFECTS

Effect of cadmium on germination, growth and active principle contents of Achillea millefolium L. De Pasquale R, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:145–9
Effect of cadmium on germination, growth and active principle contents of Matricaria recutita L. De Pasquale R, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:151–4
Radioactivity from 137Cs in plant drugs and their preparations after Chernobyl. Menghini A, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:155–9

ENZYMOLOGY

Partial purification and properties of geranyl pyrophosphate synthase from Lithospermum erythrorhizon cell cultures. Heide L, et al. **Arch Biochem Biophys** 1989 Sep; 273(2):331–8

GENETICS

The cDNA clone for strictosidine synthase from Rauvolfia serpentina. DNA sequence determination and expression in Escherichia coli. Kutchan TM, et al. **FEBS Lett** 1988 Sep 12;237(1–2):40–4
Amino acid sequence of Mirabilis antiviral protein, total synthesis of its gene and expression in Escherichia coli. Habuka N, et al. **J Biol Chem** 1989 Apr 25;264(12):6629–37

GROWTH & DEVELOPMENT

[Advances in research on Chinese medicinal plant breeding] Guo QS. **Chung Kuo Chung Yao Tsa Chih** 1989 Apr; 14(4):207–10, 254 (Eng. Abstr.) **(Chi)**
[Studies on the quality of Gastrodia elata Bl. cultivated with various kinds of fungus-growing materials] Wang YZ, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Mar;14(3):15–8, 62 (Eng. Abstr.) **(Chi)**
[In vitro culture of premature seeds of Dendrobium huoshanense Tang et Cheng] Yang QG, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Mar;14(3):19–20, 62 (Eng. Abstr.) **(Chi)**
[A preliminary study on pollinating bees for Amomum compactum Soland ex Maton] Zhu T, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Jan;14(1):17–9, 62 (Eng. Abstr.) **(Chi)**
[Polyethylene glycol as a promotor of germination of some

medicinal plant seeds] Chen Y, et al. **Chung Yao Tung Pao** 1988 Jun;13(6):14–5, 62 (Eng. Abstr.) **(Chi)**

[Utilization of plant growth regulators in medicinal plant production] Guo QS. **Chung Yao Tung Pao** 1988 Dec; 13(12):3–6, 57 (0 ref.) (Eng. Abstr.) **(Chi)**

[Rapid propagation of Gynostemma pentaphyllum Makino via tissue culture] Hu SK, et al. **Chung Yao Tung Pao** 1988 Oct;13(10):17–9, 62 (Eng. Abstr.) **(Chi)**

[Trimming honeysuckle] Li FL, et al. **Chung Yao Tung Pao** 1988 Jul;13(7):14–5, 62 (Eng. Abstr.) **(Chi)**

[Reproduction of Gastrodia elata bl. by the branchlet-leaf fungal bed method] Liu YT. **Chung Yao Tung Pao** 1988 Sep;13(9):11–3, 61 (Eng. Abstr.) **(Chi)**

[Influence of the covering of a field with plastic film on Trichosanthes kirilowii Maxim. yield] Lu SD. **Chung Yao Tung Pao** 1988 Aug;13(8):10–1, 62 (Eng. Abstr.) **(Chi)**

[Polyploid breeding of Achyranthes bidentata Bl.] Lu SM, et al. **Chung Yao Tung Pao** 1988 Jul;13(7):11–4, 61 (Eng. Abstr.) **(Chi)**

[Studies on the inhibition of seed germination of Gastrodia elata Bl. by Armillaria mellea Qul] Ran YZ, et al. **Chung Yao Tung Pao** 1988 Oct;13(10):15–7, 62 (Eng. Abstr.) **(Chi)**

[Role of auxin in increasing the output of Fritillaria thunbergii Miq.] Xu ZX, et al. **Chung Yao Tung Pao** 1988 Dec; 13(12):15–7, 57–8 (Eng. Abstr.) **(Chi)**

[Tuber formation in tissue culture of Corydalis yanhusuo W.T. Wang] Zhao LH, et al. **Chung Yao Tung Pao** 1988 Oct;13(10):19–20, 62 (Eng. Abstr.) **(Chi)**

[Studies on rapid propagation of Dendrobium candum in vitro] Liu RJ, et al. **Yao Hsueh Hsueh Pao** 1988; 23(8):636–40 (Eng. Abstr.) **(Chi)**

METABOLISM

Excretion of morphine in urine following the ingestion of poppy seeds. Struempler RE. **Milit Med** 1988 Sep; 153(9):468–70

On the podophyllotoxins of root cultures of Linum flavum. Berlin J, et al. **Planta Med** 1988 Jun;54(3):204–6

Production of the alkaloids emetine and cephaeline in callus cultures of Cephaelis ipecacuanha. Jha S, et al. **Planta Med** 1988 Dec;54(6):504–6

Formation of forskolin by suspension cultures of Coleus forskohlii. Mersinger R, et al. **Planta Med** 1988 Jun; 54(3):200–4

[Tissue cultures of Lithospermum erythrorhizon and biosynthesis of shikonin derivatives] Fan HX, et al. **Yao Hsueh Hsueh Pao** 1988;23(9):716–20 (43 ref.) **(Chi)**

MICROBIOLOGY

'Fungal contamination of arecanut'. Borle RM, et al. **Indian J Pathol Microbiol** 1987 Oct;30(4):357–60

PARASITOLOGY

[Transmission of Anhui fritillary rot by Rhizoglyphus robini Claparede and its control] Wu ZT, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Jan;14(1):15–7, 62 (Eng. Abstr.) **(Chi)**

RADIATION EFFECTS

Gamma irradiation of Sennae Folium. Microbiological and phytochemical studies. Van Doorne H, et al. **Pharm Weekbl [Sci]** 1988 Oct 14;10(5):217–20

PLANTS, TOXIC

Poisoning by toxic plants in China. Report of 19 autopsy cases. Zhang YG, et al. **Am J Forensic Med Pathol** 1988 Dec;9(4):313–9

Contact urticaria caused by stinging nettles [letter] Kulze A, et al. **Br J Dermatol** 1988 Aug;119(2):269–70

A rare case of poisoning by Gloriosa superba. Jose J, et al. **J Assoc Physicians India** 1988 Jul;36(7):451–2

Yellow oleander (cerbera thevetia) poisoning with jaundice and renal failure. Samal KK, et al. **J Assoc Physicians India** 1989 Mar;37(3):232–3

Isolation of a toxic factor from jojoba meal. Booth AN, et al. **Life Sci** 1974 Sep 15;15(6):1115–20

Fate accompli. Rhododendron toxicity. Mack RB. **N C Med J** 1988 Jul;49(7):363–4

A comparative study of behavioural and autonomic effects of atropine and Atropa belladonna. Mazzanti G, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:49–53

A comparative study of Atropa belladonna and atropine on an animal model of urinary retention. Tita B, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:55–8

Structural characterization of toxic cyclic peptides from blue-green algae by tandem mass spectrometry. Krishnamurthy T, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):770–4

Plants causing adverse skin reactions. Benezra C. **Prog Clin Biol Res** 1988;280:395–400

Observations on the use of some known and suspected toxic Liliiflorae in Zulu and Xhosa medicine. Hutchings A, et al. **S Afr Med J** 1989 Jan 21;75(2):62–9

A review of the noxious plant Lantana camara. Sharma OP, et al. **Toxicon** 1988;26(11):975–87 (96 ref.)

A poisonous plant file in TOXLINE. Wagstaff DJ, et al. **Toxicon** 1989;27(2):259–63

Toxic effects of Crotalaria saltiana in mice. Barri ME, et al. **Vet Hum Toxicol** 1988 Oct;30(5):429–31

Photosensitization of cattle in Montana: is Descurainia pinnata the culprit? Pfister JA, et al. **Vet Hum Toxicol** 1989 Jun;31(3):225–7

Acute weakness and death in a cat. Rose A, et al. **Vet Hum Toxicol** 1988 Aug;30(4):334–5

Berry identification by emergency health care providers. Scalise JA, et al. **Vet Hum Toxicol** 1988 Oct;30(5):426–8

Poisonous plant information system (PPIS). Wagstaff DJ, et al. **Vet Hum Toxicol** 1989 Jun;31(3):237–8

Toxicity of microcystin LR, a cyclic heptapeptide hepatotoxin from Microcystis aeruginosa, to rats and mice. Hooser SB, et al. **Vet Pathol** 1989 May;26(3):246–52

[Mandragora] Palivec V. **Cas Lek Cesk** 1988 Dec 23; 127(52):1625 **(Cze)**

[Poison—subject and parable. Facts and fables on flora] Giebelmann R. **Z Gesamte Hyg** 1988 Dec;34(12):739–42 (Eng. Abstr.) **(Ger)**

[Experimental study of wound-healing effect of the preparation "Aekol" (artificial sea buckthorn oil)] Kostrikova EV. **Ortop Travmatol Protez** 1989 Jan;(1):32–6 (Eng. Abstr.) **(Rus)**

[Phytodermatoses] Rukavishnikova VM, et al. **Vestn Dermatol Venerol** 1988;(5):38–43 (65 ref.) **(Rus)**

[Phytophotodermatitis. Some photobiological aspects of psoralens] Corrales Padilla H. **Med Cutan Ibero Lat Am** 1988;16(3):267–72 (Eng. Abstr.) **(Spa)**

ANALYSIS

Carcinogen in rock fern (Cheilanthes sieberi) from New Zealand and Australia. Smith BL, et al. **Aust Vet J** 1989 May;66(5):154–5

Carcinogen in rock fern (Chielanthes sieberi) from New Zealand and Australia. Smith BL, et al. **Aust Vet J** 1989 Jul;66(7):230–1

Podophyllum derivatives (CPH 82) compared with placebo in the treatment of rheumatoid arthritis. Larsen A, et al. **Br J Rheumatol** 1989 Apr;28(2):124–7

The toxic effects of a chronic administration of the gut-stimulating principle in Croton penduliflorus hutch. seeds in mice. Asuzu IU, et al. **Drug Chem Toxicol** 1989 Mar;12(1):85–93

The mechanism of action of the cytotoxic lectin from Phoradendron californicum: the RNA N-glycosidase activity of the protein. Endo Y, et al. **FEBS Lett** 1989 May 8;248(1–2):115–8

High-performance liquid chromatographic determination of molluscicidal saponins from Phytolacca dodecandra (Phytolaccaceae). Slacanin I, et al. **J Chromatogr** 1988 Sep 2;448(2):265–74

Determination of molluscicidal sesquiterpene lactones from Ambrosia maritima (Compositae). Slacanin I, et al. **J Chromatogr** 1988 Dec 21;457:325–31

Effects of Palicourea marcgravii on laboratory rodents. Górniak SL, et al. **J Ethnopharmacol** 1989 Apr;25(2):221–6

Irritant principles of the mezereon family (Thymelaeaceae), V. New skin irritants and tumor promoters of the daphnane and 1 alpha-alkyldaphnane type from Synaptolepis kirkii and Synaptolepis retusa. Adolf W, et al. **J Nat Prod** 1988 Jul–Aug;51(4):662–74

Antifertility and hormonal properties of certain carotane sesquiterpenes of Ferula jaeschkeana. Singh MM, et al. **Planta Med** 1988 Dec;54(6):492–4

METABOLISM

T-2 toxin and diacetoxyscirpenol metabolism by Baccharis spp. Mirocha CJ, et al. **Appl Environ Microbiol** 1988 Sep; 54(9):2277–80

PLAQUE ASSAY

Red plaque formation of Coxiella burnetii and reduction assay by monoclonal antibodies. Cheng XX, et al. **Acta Virol (Praha)** 1989 May;33(3):281–9

Effect of prostaglandins PGE2 and PGF alpha 2 on the mean plaque size of bovine herpesvirus 1. Thiry E, et al. **Ann Rech Vet** 1988;19(4):291–3

Susceptibility testing of herpes viruses. Drew WL, et al. **Clin Lab Med** 1989 Jun;9(2):279–86 (26 ref.)

Plaque size phenotype as a selectable marker to generate vaccinia virus recombinants. Rodriguez JF, et al. **J Virol** 1989 Feb;63(2):997–1001

Factors affecting virus plaque confirmation procedures. Dahling DR, et al. **J Virol Methods** 1989 Apr–May; 24(1–2):111–22

Quantitation of infectious human immunodeficiency virus using a modified plaque forming assay. Kiernan RE, et al. **J Virol Methods** 1988 Dec;22(2–3):303–8

Titration of avirulent Newcastle disease virus by the plaque assay method. Kournikakis B, et al. **J Virol Methods** 1988 Aug;20(4):285–93

Plaque formation and replication of porcine parvovirus in embryonic swine kidney cell line, ESK cells. Kawamura H, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):803–8

[Morphological characteristics of lytic plaques produced by the SP1 strain of the equine herpes virus type 1] Galosi CM, et al. **Rev Argent Microbiol** 1988 Jul–Sep;20(3):137–40 (Eng. Abstr.) **(Spa)**

METHODS

Averaging of TNTC counts [published erratum appears in Appl Environ Microbiol 1988 Nov;54(11):2884] Haas CN, et al. **Appl Environ Microbiol** 1988 Aug;54(8):2069–72

[A micromethod of titrating viruses by plaque formation] Grigor'ian SS, et al. **Vopr Virusol** 1988 Sep–Oct;33(5):606–7 **(Rus)**

PLAQUE THERAPY, RADIOISOTOPE see **BRACHYTHERAPY**

PLASMA

Membranoproliferative glomerulonephritis in a patient with congenital deficiency of the third component of complement: effect of treatment with plasma. Roord JJ, et al. **Am J Kidney Dis** 1989 May;13(5):413–7

Reduction of fresh frozen plasma use with a simple education program. Ayoub MM, et al. **Am Surg** 1989 Sep;55(9):563–5

Gelling of urea-linked gelatin with fresh frozen plasma. Murray F, et al. **Anaesthesia** 1989 May;44(5):392–3

Early fresh frozen plasma prophylaxis of abnormal coagulation parameters in the severely head-injured patient is not effective. Winter JP, et al. **Ann Emerg Med** 1989 May;18(5):553–5

Determinants of homologous blood usage utilizing autologous platelet-rich plasma in cardiac operations. Giordano GF Sr, et al. **Ann Thorac Surg** 1989 Jun; 47(6):897–902

Immunoglobulin deposition in the cornea after application of autologous serum. McDonnell PJ, et al. **Arch Ophthalmol** 1988 Oct;106(10):1423–5 (20 ref.)

Successful plasma infusion treatment of a patient with C2 deficiency and systemic lupus erythematosus: clinical experience over forty-five months. Steinsson K, et al. **Arthritis Rheum** 1989 Jul;32(7):906–13

Backfiltration: does it occur in membrane plasma separation? Smolik G, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):594–7

Characterization of plasma-stabilized liposomes composed of dioleoylphosphatidylethanolamine and oleic acid. Liu DX, et al. **Biochem Biophys Res Commun** 1989 Jul 14; 162(1):326–33

Plasma from uninephrectomized rats stimulates phospholipid methylation and arachidonic acid release in renal-cortical slices. Banfić H, et al. **Biochem J** 1989 Jun 1;260(2):365–9

Extracellular Ca2+ influences 1,2-diacylglycerol and inositol monophosphate formation in renal cortical slices stimulated with plasma obtained from uninephrectomized rats. Banfić H. **Biochim Biophys Acta** 1989 Apr 26; 1002(3):273–6

Replacement therapy for protein C deficiency using fresh frozen plasma [letter] Majer RV, et al. **Br J Haematol** 1989 Jul;72(3):475

Failure of fresh frozen plasma infusions to alter the course of hemolytic uremic syndrome. Sheth KJ, et al. **Child Nephrol Urol** 1988–89;9(1–2):38–41

Differences between values for plasma and serum in tests performed in the Ektachem 700 XR Analyzer, and evaluation of "plasma separator tubes (PST)". Doumas BT, et al. **Clin Chem** 1989 Jan;35(1):151–3

Synthetic versus natural protease inhibitors in acute experimental pancreatitis [letter] Lankisch PG, et al. **Dig Dis Sci** 1988 Nov;33(11):1497–8

Monitoring of patients with nonseminomatous testicular cancer by nuclear magnetic resonance spectroscopy of plasma. Höfeler H, et al. **Eur J Cancer Clin Oncol** 1989 Aug;25(8):1141–3

Platelet aggregation in platelet rich plasma and whole blood in 18 patients affected by idiopathic myelofibrosis. Balduini CL, et al. **Eur J Haematol** 1988 Sep;41(3):267–72

The disturbance of hemostasis in septic shock: role of neutrophil elastase and thrombin, effects of antithrombin III and plasma substitution. Seitz R, et al. **Eur J Haematol** 1989 Jul;43(1):22–8

Fresh frozen plasma therapy in acute pancreatitis: an experimental study. Leese T, et al. **Int J Pancreatol** 1988 Dec;3(6):437–47

Efficacy of intrauterine infusion of plasma for treatment of infertility and endometritis in mares. Adams GP, et al. **J Am Vet Med Assoc** 1989 Feb 1;194(3):372–8

Effect of ultrafiltration on plasma colloid oncotic pressure and red cell volume during cardiopulmonary bypass. Zhou JL, et al. **J Cardiovasc Surg (Torino)** 1989 Jan–Feb; 30(1):40–1

A sensitive test for the detection of NK activity. Plasma clot clonogenic assay. Dinota A, et al. **J Immunol Methods** 1988 Nov 10;114(1–2):53–9

Plasma exudation. Correlation between Evans blue dye and radiolabeled albumin in guinea pig airways in vivo. Rogers DF, et al. **J Pharmacol Methods** 1989 Jul;21(4):309–15

Increased plasma oncotic pressure inhibits pulmonary fluid transport when pulmonary pressures are elevated. Wareing TH, et al. **J Surg Res** 1989 Jan;46(1):29–34

Platelet function abnormalities following plasma perfusion over protein A-silica in cancer patients. Ciavarella D, et al. **Prog Clin Biol Res** 1988;283:607–9

Immunological determination of proteinase inhibitor complexes (PICs) and their behaviour during plasma derivate treatment in septic infections. Egbring R, et al. **Prog Clin Biol Res** 1989;308:971–6

Antithrombin III and plasma substitution in septic shock. Seitz R, et al. **Prog Clin Biol Res** 1989;308:965–9

Reversibility and reproducibility of histamine induced plasma leakage in nasal airways. Svensson C, et al. **Thorax** 1989 Jan;44(1):13–8

Plasma fractions for the treatment of hemophilia. 1. On the preparation and use of fraction I–O. Blombäck M, et al. **Thromb Diath Haemorrh Suppl** 1969;35:21–5

Plasma components are required for platelet activation by the toxin of Loxosceles reclusa. Rees RS, et al. **Toxicon** 1988;26(11):1035–45

Thawing of fresh–frozen plasma with a new microwave oven. Söhngen D, et al. **Transfusion** 1988 Nov–Dec;28(6):576–80

Effect of donation time on platelet concentrates and fresh–frozen plasma. An in vitro study. Huh YO, et al. **Vox Sang** 1989;56(1):21–4

[H–NMR spectroscopy of plasma cannot be used for cancer screening] Tran Dinh S, et al. **Bull Cancer (Paris)** 1988; 75(8):795–800 (Eng. Abstr.) **(Fre)**

[Dosage recommendations for substitution of antithrombin III with coagulation–active human citrated plasma] Hinsenbrock KP, et al. **Anaesthesiol Reanim** 1988; 13(5):281–5 (Eng. Abstr.) **(Ger)**

[When is fresh frozen plasma indicated?] Wegener S, et al. **Anaesthesiol Reanim** 1989;14(1):37–42 (22 ref.) (Eng. Abstr.) **(Ger)**

[The indications for therapy using fresh–frozen plasma] Hiller E, et al. **Dtsch Med Wochenschr** 1989 Sep 8;114(36):1371–4 (21 ref.) (Eng. Abstr.) **(Ger)**

[Thrombocyte storage in plasma. Preparation and storage of thrombocyte concentrates in polyvinyl chloride PL 146 standard bags] Berndsen G. **Folia Haematol (Leipz)** 1989; 116(2):227–34 (Eng. Abstr.) **(Ger)**

[Effect of the transfusion of blood and hemoderivatives on the prognosis of colorectal cancer] Hermanek P Jr, et al. **Langenbecks Arch Chir** 1989;374(2):118–24 (Eng. Abstr.) **(Ger)**

[Graft versus host reaction in an infant with DiGeorge syndrome] Wintergerst U, et al. **Monatsschr Kinderheilkd** 1989 Jun;137(6):345–7 (Eng. Abstr.) **(Ger)**

[Experiences with the use of a lyophilized reference plasma for calibrating the determination of thromboplastin time values] Flach W, et al. **Z Med Lab Diagn** 1989;30(4):239–43 (Eng. Abstr.) **(Ger)**

[A study of the effects of fresh frozen plasma to improve host defense against bacterial infection and levels of coagulation factors after hepatectomy] Ichikura T. **Nippon Geka Gakkai Zasshi** 1988 Nov;89(11):1796–809 (Eng. Abstr.) **(Jpn)**

[Changes in hemostasis after the use of plasma and plasma substitutes in the treatment of intestinal infections in children] Burakovskiĭ NI. **Pediatriia** 1989;(4):56–9 **(Rus)**

[The therapeutic properties of an alcohol extract of plasma in a combined radiation–thermal lesion] Riabinin VE, et al. **Radiobiologiia** 1989 Jul–Aug;29(4):524–8 (Eng. Abstr.) **(Rus)**

[Plasmapheresis or infusion of fresh plasma in the treatment of thrombotic thrombocytopenic purpura. Preliminary report] Avilés A, et al. **Rev Invest Clin** 1988 Jul–Sep; 40(3):241–3 (Eng. Abstr.) **(Spa)**

ANALYSIS

Fibrinogen degradation products in fresh frozen plasma. Possible contribution to immunosuppression. Donnell CA, et al. **Am Surg** 1989 Aug;55(8):505–7

Proton NMR spectroscopy of human blood plasma and red blood cells. Instrumentation. Rabenstein DL, et al. **Anal Chem** 1988 Dec 15;60(24):1380A–1391A (46 ref.)

Novel purification of vitronectin from human plasma by heparin affinity chromatography. Yatohgo T, et al. **Cell Struct Funct** 1988 Aug;13(4):281–92

(acyl)carnitine distribution between plasma, erythrocytes, and leukocytes in human blood [letter] Maccari F, et al. **Clin Chem** 1989 Apr;35(4):711

Plasma and serum lactoferrin levels in cystic fibrosis. Relationship with the presence of cystic fibrosis protein. Barthe C, et al. **Clin Chim Acta** 1989 May 15;181(2):183–8

A micromethod for the determination of fructose in human erythrocytes and plasma. Liu SQ, et al. **Clin Chim Acta** 1989 May 15;181(2):219–22

Detection of tumours with nuclear magnetic resonance spectroscopy of plasma. Berger S, et al. **Eur J Cancer Clin Oncol** 1989 Mar;25(3):535–43

Experimental studies in animals on the use of a fibrin glue from the human plasma fraction Cohn I in nerve reconstruction. Hamm KD, et al. **Folia Haematol (Leipz)** 1988;115(1–2):208–12

Fibrin glue on the Cohn I fraction basis in repairing cerebral and dura defects—an experimental study on rats. Steube D, et al. **Folia Haematol (Leipz)** 1988;115(1–2):213–7

Technical evaluation of newly–developed inorganic membranes for plasma fractionation. Ozawa K, et al. **Int J Artif Organs** 1989 Mar;12(3):195–8

Plasma very low density lipoproteins contain a single molecule of apolipoprotein B. Elovson J, et al. **J Lipid Res** 1988 Nov;29(11):1461–73

Plasma and leukocyte zinc and copper levels in patients with protein energy malnutrition. Tanzer F, et al. **J Trop Pediatr** 1988 Dec;34(6):306–8

Human plasma thrombopoietin [letter] Kelemen E, et al. **Leukemia** 1989 Jan;3(1):89

Plasminogen activation in plasma of patients with systemic lupus erythematosus. Negoro N, et al. **Rheumatol Int** 1989; 8(6):273–7

Use of a monoclonal antibody for the therapeutic monitoring of cyclosporine in plasma and whole blood. Copeland KR, et al. **Ther Drug Monit** 1988;10(4):453–8

Comparison of aminoglycoside concentrations measured in plasma versus serum. Ebert SC, et al. **Ther Drug Monit** 1989;11(1):44–6

Adoption of new methods for high–yield factor VIII recovery [letter] Rock G. **Transfusion** 1989 Jun;29(5):466–7

The pharmacology of a new pasteurized antihemophilic factor concentrate derived from human blood plasma. Rousell RH, et al. **Transfusion** 1989 Mar–Apr;29(3):208–12

Importance of a quality assurance scheme for factor VIII assays in quality monitoring of human plasma destined for fractionation into factor VIII concentrate. Gabra GS, et al. **Vox Sang** 1989;56(2):65–70

[Comparative studies of collecting fresh plasma (FFP) using various plasmapheresis methods] Eichler H, et al. **Beitr Infusionther** 1988;21:122–6 **(Ger)**

[The influence of thermal load on the immunochemical detection of dried blood plasma supplements in meat mixtures] Otto W, et al. **Berl Munch Tierarztl Wochenschr** 1989 Jan 1;102(1):14–8 (Eng. Abstr.) **(Ger)**

[Evaluation of alpha 1 protease inhibitor difference between citrated plasma and serum] Ishizaki T, et al. **Rinsho Byori** 1989 Feb;37(2):173–7 **(Jpn)**

CYTOLOGY

Apolipoprotein A–I inhibits transformation of high density lipoprotein subpopulations during incubation of human plasma. Hopkins GJ, et al. **Atherosclerosis** 1989 Jan; 75(1):73–82

DRUG EFFECTS

[Effect of nucleotide aggregants and anti–aggregants on the coagulation potential of blood plasma] Chumakov VN, et al. **Gematol Transfuziol** 1989 Feb;34(2):30–4 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Automated determination of cholinesterase activity in plasma and erythrocytes by flow–injection analysis, and application to identify subjects sensitive to succinylcholine. Lainé–Cessac P, et al. **Clin Chem** 1989 Jan;35(1):77–80

[A comparative evaluation of the lactate dehydrogenase activity in blood serum and plasma] Bezrukova GA, et al. **Lab Delo** 1989;(1):62–3 **(Rus)**

IMMUNOLOGY

Evidence of a plasma–mediated "window" of immunodeficiency in rats following trauma. Mills CD, et al. **J Clin Immunol** 1989 Mar;9(2):139–50

Relapse of multiple sclerosis following acute allergic reactions to plasma during plasmapheresis. Wirguin I, et al. **J Neurol** 1989 Jan;236(1):62–3

Measurement of complement activation in rabbit plasma or serum using monoclonal antibodies against C5a. Bergh K, et al. **Scand J Immunol** 1989 Mar;29(3):333–41

[Commercially available control sera contaminated with anti–HIV antibody, HIV antigen and anti–ATLA antibody] Sugimoto H, et al. **Rinsho Byori** 1988 Aug;36(8):933–8 **(Jpn)**

[Organizational and immunologic aspects of obtaining antistaphylococcal plasma from immune donors] Sorokin IuV, et al. **Voen Med Zh** 1989 Mar;(3):33–4 **(Rus)**

[Protective activity of preparations of blood plasma from donors with a high titer of natural antibodies to Re–glycolipid of gram–negative bacteria] Rudik AA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Jul;(7):60–3 (Eng. Abstr.) **(Rus)**

[The risk of infecting premature newborn infants with the HB virus in transfusions with plasma HBsAg–negative by counterimmunoelectrophoresis] Sychev AV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jan;(1):36–41 (Eng. Abstr.) **(Rus)**

METABOLISM

The effect of endotoxin on glucose metabolism in skeletal muscle requires the presence of plasma. Amaral JF, et al. **Arch Surg** 1989 Jun;124(6):727–32

Distribution of cyclosporin A metabolites among plasma and cells in whole blood: effect of temperature, hematocrit, and metabolite concentration. Lensmeyer GL, et al. **Clin Chem** 1989 Jan;35(1):56–63

Erythrocyte and plasma cholesterol exchange in sickle cell anemia. Ngogang J, et al. **Clin Chim Acta** 1989 Feb 22; 179(3):295–304

Neurogenic plasma extravasation: inhibition by morphine in guinea pig airways in vivo. Belvisi MG, et al. **J Appl Physiol** 1989 Jan;66(1):268–72

A nutritional evaluation of vitamin E status in very low birth weight infants with respect to changes in plasma and red blood cell tocopherol levels. Tanaka H, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Jun;34(3):293–307

Effects of temperature on reactivity of plasma in recombinant HIV–1 competitive assay [letter] **Lancet** 1989 Apr 1; 1(8640):723–4

Substance P–induced cutaneous plasma extravasation in rats is mediated by NK–1 tachykinin receptors. Devor M, et al. **Neurosci Lett** 1989 Aug 28;103(2):203–8

MICROBIOLOGY

Virus inactivation in plasma products. **Curr Stud Hematol Blood Transfus** 1989;(56):1–158

Virus inactivation by addition of neutralizing antibodies. Brummelhuis HG, et al. **Curr Stud Hematol Blood Transfus** 1989;(56):128–37

Removal of viruses from plasma fractions by chromatography. Einarsson M, et al. **Curr Stud Hematol Blood Transfus** 1989;(56):138–45 (10 ref.)

Removal of viral contaminants by monoclonal antibody purification of plasma proteins. Schreiber AB, et al. **Curr Stud Hematol Blood Transfus** 1989;(56):146–53

Inactivation of hepatitis viruses and HIV in plasma and plasma derivatives by treatment with beta–propiolactone/UV irradiation. Stephan W. **Curr Stud Hematol Blood Transfus** 1989;(56):122–7 (19 ref.)

Survival of Borrelia burgdorferi in blood products. Badon SJ, et al. **Transfusion** 1989 Sep;29(7):581–3

PHYSIOLOGY

The mechanism of plasminogen activation and fibrin dissolution by single chain urokinase–type plasminogen activator in a plasma milieu in vitro. Lijnen HR, et al. **Blood** 1989 May 15;73(7):1864–72

In situ–generated thrombin is the only enzyme that effectively activates factor VIII and factor V in thromboplastin–activated plasma. Pieters J, et al. **Blood** 1989 Aug 15;74(3):1021–4

Blood flow and plasma extravasation in skeletal muscle during endotoxemia. A study in rats. van Lambalgen AA, et al. **Int J Microcirc Clin Exp** 1989 Apr;8(2):217–32

Effect of exercise hemoconcentration and hyperosmolality on exercise responses. Fortney SM, et al. **J Appl Physiol** 1988 Aug;65(2):519–24

Possible prognostic value of plasma activity augmenting polymorphonuclear neutrophils (PMN) adherence estimations in untreated patients with chronic myeloid leukemia. Wysocki H, et al. **Leuk Res** 1988;12(8):627–9

Measurement of contact–activation patterns of human plasma samples with synthetic substrates. Dooijewaard G, et al. **Methods Enzymol** 1988;163:80–5

Hemolysis of chicken erythrocytes by t–butyl hydroperoxide and protection by plasma. Smith RC, et al. **Poult Sci** 1988 Nov;67(11):1632–5

Active role of plasma in blood hypercoagulability induced by phenylhydrazine. Cazaña FJ, et al. **Thromb Res** 1989 Jan 15;53(2):215–20

[Thrombocyte storage as platelet–rich plasmas or as concentrate?] Söhngen D, et al. **Beitr Infusionther** 1988; 21:91–9 **(Ger)**

[Comparison and analysis of the characteristics of the coagulation of blood and plasma exposed to thrombin] Arkhipov BF, et al. **Lab Delo** 1988;(10):45–9 (Eng. Abstr.) **(Rus)**

[Effect of blood plasma and serum and its fractions on the activity of the sodium channels in neuroblastoma cells] Zubov AN, et al. **Tsitologiia** 1988 Dec;30(12):1487–91 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

[Ultraviolet irradiation of lymphoplasma in combination with lymphocytapheresis in the treatment of patients with diseases of the blood system] Archvadze VG, et al. **Vestn Khir** 1989 Feb;142(2):87–90 (Eng. Abstr.) **(Rus)**

TRANSPLANTATION

Experimental allergic neuritis: effect of plasma infusions. Harvey GK, et al. **Clin Exp Immunol** 1989 Jun;76(3):452–7

Therapeutic indications for platelets, plasma and plasma derivatives in the neonate. Kevy SV. **Mead Johnson Symp Perinat Dev Med** 1986;(28):55–60 (17 ref.)

Data that suggest that FFP does not transmit CMV [letter] Adler SP. **Transfusion** 1988 Nov–Dec;28(6):604

Refreezing previously thawed fresh–frozen plasma. Stability of coagulation factors V and VIII:C. Dzik WH, et al. **Transfusion** 1989 Sep;29(7):600–4

An unusual complication of FFP infusion: coagulation in the infusion set [letter] Lane TA, et al. **Transfusion** 1989 Jan; 29(1):86

Evidence for plasma–mediated immunomodulation—transfusions of plasma–rich blood components are associated with a greater risk of acquired immunodeficiency syndrome than transfusions of red blood cells alone. Blumberg N, et al. **Transplant Proc** 1988 Dec; 20(6):1138–42

PLASMA CELL ANTIGENS PC–1 see **ANTIGENS, DIFFERENTIATION, B LYMPHOCYTE**

PLASMA CELL DYSCRASIAS see **PARAPROTEINEMIAS**

PLASMA CELL LEUKEMIA see **LEUKEMIA, PLASMACYTIC**

PLASMA CELLS

The relation between serum sex steroid levels and plasma cell infiltrates in endometritis. Punnonen R, et al. **Arch Gynecol Obstet** 1989;244(4):185–91

Diagnostic significance of bone marrow reactive plasmacytosis in Zimbabweans. Mukiibi JM, et al. **East Afr Med J** 1988 Jul;65(7):483–9

T-cell and plasma cell populations in coeliac small intestinal mucosa in relation to dermatitis herpetiformis. Jenkins D, et al. **Gut** 1989 Jul;30(7):955–8

Adrenal carcinoma with reactive plasmacytosis. Sivasankaran S, et al. **J Assoc Physicians India** 1989 Mar;37(3):237–9

[High-resolution x-ray computed tomography in lymphoid interstitial pneumonia] Vilgrain V, et al. **J Radiol** 1989 Mar; 70(3):167–73 (23 ref.) (Eng. Abstr.) **(Fre)**

[The percentage of bone marrow plasmacytes and prognosis in multiple myeloma] Paule B, et al. **Rev Rhum Mal Osteoartic** 1988 Dec;55(12):969–72 (Eng. Abstr.) **(Fre)**

ANALYSIS

Ig VH gene family repertoire of plasma cells derived from lupus-prone MRL/lpr and MRL/++ mice. Komisar JL, et al. **J Immunol** 1989 Jul 1;143(1):340–7

CLASSIFICATION

Immunological phenotype of plasma cells in monoclonal gammopathy of undetermined significance [letter] Miguel-Garcia A, et al. **Blut** 1989 Jan;58(1):51–2

CYTOLOGY

The nature of the adherent hemopoietic cells in human long-term bone marrow cultures (HLTBMCs): presence of lymphocytes and plasma cells next to the myelomonocytic population. Berneman ZN, et al. **Leukemia** 1989 Sep;3(9):648–61

ENZYMOLOGY

Vacuolated plasma cell: ultrastructural distribution of acid phosphatase and intracellular immunoglobulin. Yasuda N, et al. **Acta Haematol (Basel)** 1989;81(4):203–7

IMMUNOLOGY

Plasma cells in the dermal infiltrate of mycosis fungoides are of polyclonal origin. Boehncke WH, et al. **Acta Derm Venereol (Stockh)** 1989;69(2):166–9

A subpopulation of germinal center B cells differentiate directly into antibody forming cells upon secondary immunization. Tew JG, et al. **Adv Exp Med Biol** 1988; 237:215–20

CD30(Ki-1) antigen expression in a subset of gastric mucosal plasma cells and in a primary gastric plasmacytoma. Möller P, et al. **Am J Clin Pathol** 1989 Jan;91(1):18–23

Multiple myeloma: relationship between light chain isotype suppression, labelling index of plasma cells, and CD38 expression on peripheral blood lymphocytes. Joshua DE, et al. **Am J Hematol** 1988 Sep;29(1):5–11

Elimination of chemoresistant multiple myeloma clonogenic colony-forming cells by combined treatment with a plasma cell-reactive monoclonal antibody and a P-glycoprotein-reactive monoclonal antibody. Tong AW, et al. **Cancer Res** 1989 Sep 1;49(17):4829–34

Plasma cell numbers in uteri of mares with persistent endometritis and in ovariectomised mares treated with ovarian steroids. Watson ED, et al. **Equine Vet J** 1988 Nov; 20(6):424–5

PB76: a novel surface glycoprotein preferentially expressed on mouse pre-B cells and plasma cells detected by the monoclonal antibody G-5-2. Strasser A. **Eur J Immunol** 1988 Nov;18(11):1803–10

An immunohistological and genotypic study of the plasma cell form of Castleman's disease. Hall PA, et al. **Histopathology** 1989 Apr;14(4):333–46; discussion 429–32

Monoclonality and polyclonality of plasma cells in Castleman's disease of the plasma cell variant. Radaszkiewicz T, et al. **Histopathology** 1989 Jan; 14(1):11–24

A major peritoneal reservoir of precursors for intestinal IgA plasma cells. Kroese FG, et al. **Immunol Invest** 1989 Jan-May;18(1-4):47–58

Distribution of immunoglobulin isotypes including IgA subclasses in adult, juvenile, and rapidly progressive periodontitis. Kilian M, et al. **J Clin Periodontol** 1989 Mar; 16(3):179–84

Immunohistochemical staining of neoplastic and inflammatory plasma cell lesions in feline tissues. Kyriazidou A, et al. **J Comp Pathol** 1989 Apr;100(3):337–41

Anti-HBs- and anti-HBc-containing plasma cells in livers of patients with chronic type B hepatitis. Petrovic LM, et al. **J Hepatol** 1988 Aug;7(1):7–13

Distribution of the murine plasma cell antigen PC-1 in non-lymphoid tissues. Harahap AR, et al. **J Immunol** 1988 Oct 1;141(7):2317–20

Kinetics of IgA plasma cells in the intestine of NIH mice infected with Trichinella spiralis. Brown PJ, et al. **Res Vet Sci** 1989 Mar;46(2):187–91

Targeting of a plasma cell line with a conjugate containing xanthine oxidase and the monoclonal antibody 62B1. Tazzari PL, et al. **Transplantation** 1989 Jul;48(1):119–22

METABOLISM

Glutathione and glutathione S-transferases in a human plasma cell line resistant to melphalan. Gupta V, et al. **Biochem Pharmacol** 1989 Jun 15;38(12):1993–2000

Production of interleukin-1 by bone marrow myeloma cells. Cozzolino F, et al. **Blood** 1989 Jul;74(1):380–7

The plasma cell labeling index: a valuable tool in primary systemic amyloidosis. Gertz MA, et al. **Blood** 1989 Aug 15;74(3):1108–11

Peanut agglutinin shows specificity for bone marrow plasma cells. Rhodes EG, et al. **Br J Haematol** 1989 Feb; 71(2):183–7

Proline-incorporating cells in chronic active liver diseases. Hassan G, et al. **Hepatology** 1989 Jan;9(1):37–49

PATHOLOGY

Uncommon type of meningiomas with conspicuous plasmo-lymphocytic infiltration. An immunohistochemical and histochemical study. Ohmori T, et al. **Acta Pathol Jpn** 1989 Mar;39(3):190–4

Giant lymph node hyperplasia of the hyaline vascular type with plasmacytoid T-cells and presentation in infancy. Hunt SJ, et al. **Am J Clin Pathol** 1989 Mar;91(3):344–7

Cell kinetics and therapy in multiple myeloma: an update of the M83 protocol. Pileri A, et al. **Bone Marrow Transplant** 1989 Jan;4 Suppl 1:168–9

In situ hybridisation and S1 mapping show that the presence of infiltrating plasma cells is associated with poor prognosis in breast cancer. Parkes H, et al. **Br J Cancer** 1988 Dec; 58(6):715–22

Altered expression of growth-regulated protooncogenes in human malignant plasma cells. Palumbo AP, et al. **Cancer Res** 1989 Sep 1;49(17):4701–4

Early plasma cell recruitment in multiple myeloma following chemotherapy. Ucci G, et al. **Cell Tissue Kinet** 1988 Nov; 21(6):405–9

Bronchoalveolar lavage plasmacytosis in a patient with a plasma cell dyscrasia. Menashe P, et al. **Chest** 1989 Jan; 95(1):226–7

Plasma cell panniculitis: a unique clinical and pathologic presentation of linear scleroderma. Vincent F, et al. **J Am Acad Dermatol** 1989 Aug;21(2 Pt 2):357–60

Interleukin 3 and interleukin 6 synergistically promote the proliferation and differentiation of malignant plasma cell precursors in multiple myeloma. Bergui L, et al. **J Exp Med** 1989 Aug 1;170(2):613–8

Human long-term bone marrow cultures (HLTBMCs) in myelomatous disorders. Berneman ZN, et al. **Leukemia** 1989 Feb;3(2):151–4

Atypical monoclonal plasma cell hyperplasia of the central nervous system: precursor of plasmacytoma with evolutionary considerations. Weidenheim KM, et al. **Neurosurgery** 1989 Mar;24(3):429–34

Prognostic significance of plasma cell morphology in multiple myeloma. Paule B, et al. **Nouv Rev Fr Hematol** 1988; 30(4):209–12

Quantification of IgG-containing plasma cells as an adjunct to histopathology in distinguishing acute self-limited colitis from active idiopathic inflammatory bowel disease. Keren DF, et al. **Pathol Immunopathol Res** 1987;6(5-6):435–41

Transformation and plasmacytoid differentiation of EBV-infected human B lymphoblasts by ras oncogenes. Seremetis S, et al. **Science** 1989 Feb 3;243(4891):660–3

Inflammatory cell infiltrate in distal ureteral segments from patients with reflux. Josifidis HT, et al. **Urology** 1989 Sep; 34(3):131–3

Effects of Staphylococcus aureus mastitis on bovine mammary gland plasma cell populations and immunoglobin concentrations in milk. Doymaz MZ, et al. **Vet Immunol Immunopathol** 1988 Dec;20(1):87–93

[Nuclear lobulation in the plasma cells of a patient with multiple myeloma (Bence Jones type)] Fujii H, et al. **Rinsho Ketsueki** 1988 Nov;29(11):2086–90 (Eng. Abstr.) **(Jpn)**

[A case of idiopathic plasmacytic lymphadenopathy with polyclonal hyperimmunoglobulinemia concurrent with severe anemia and hyperviscosity syndrome] Iseki T, et al. **Rinsho Ketsueki** 1988 Aug;29(8):1250–5 (Eng. Abstr.) **(Jpn)**

[Kinetic characteristics of tumor growth in multiple myeloma] Golenkov AK, et al. **Gematol Transfuziol** 1988 Dec;33(12):34–6 (Eng. Abstr.) **(Rus)**

[Clinical importance of studying the proliferative activity of plasma cells in multiple myeloma] Tsykalov VA, et al. **Gematol Transfuziol** 1988 Jul;33(7):36–40 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Transcriptional control of MHC class II gene expression during differentiation from B cells to plasma cells. Dellabona P, et al. **J Immunol** 1989 Apr 15;142(8):2902–10

ULTRASTRUCTURE

Formation of secretion granules in the Golgi apparatus of plasma cells in the rat. Rambourg A, et al. **Am J Anat** 1989 Jan;184(1):52–61

Heterogeneity of the plasma cell response to bovine staphylococcal mastitis: an ultrastructural study. Nickerson SC. **Cytobios** 1988;55(222-223):155–65

PLASMA EXCHANGE

Plasma exchange in myasthenia gravis: changes in serum complement and immunoglobulins. Thorlacius S, et al. **Acta Neurol Scand** 1988 Sep;78(3):221–7

Treatment of von Willebrand's disease and hypofibrinogenemia with single donor cryoprecipitate from plasma exchange donation. McLeod BC, et al. **Am J Hematol** 1989 Oct;32(2):112–6

Therapeutic effect of plasma exchange with the biliary drainage in the treatment of obstructive jaundice. Ohyanagi H, et al. **Artif Organs** 1988 Oct;12(5):394–401

An adsorption and filtration technique for temporary hepatic assistance. Agishi T, et al. **ASAIO Trans** 1988 Oct-Dec; 34(4):969–71

Temporary metabolic support by extracorporeal blood therapy for liver failure after surgery. Matsubara S, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):266–9

Quantitative ultrastructural study of platelet plasma-membrane in hypercholesterolemic type IIa patients after plasma exchange and LDL-apheresis. Bianciardi G, et al. **Beitr Infusionther** 1988;23:183–8

Plasma exchange treatment for severe familial hypercholesterolemia: a comparison of two different techniques. Dairou F, et al. **Beitr Infusionther** 1988; 23:152–9

From plasma-exchange to LDL-apheresis: new developments in the treatment of familial hypercholesterolemia. Postiglione A, et al. **Beitr Infusionther** 1988;23:74–80

Plasma exchange for cerebral lupus erythematosus [letter] Unterweger B, et al. **Biol Psychiatry** 1988 Dec;24(8):946–7

Therapeutic applications of plasma exchange. Savage CO, et al. **Br J Hosp Med** 1988 Oct;40(4):272–4, 276–9, 282–3

Therapeutic haemapheresis. Sibinga CT. **Bull Soc Sci Med Grand Duche Luxemb** 1988;125(2):79–83

Plasmaexchange plus immunoglobulins for treatment of hypergammaglobulinaemic patients with AIDS and AIDS-related complex (ARC). Rogna S, et al. **Cancer Detect Prev** 1988;12(1-6):273–6

Successful removal of antiphospholipid antibodies using repeated plasma exchanges and prednisone [letter] Ferro D, et al. **Clin Exp Rheumatol** 1989 Jan-Feb;7(1):103–4

A child with Refsum's disease: successful treatment with diet and plasma exchange. Dickson N, et al. **Dev Med Child Neurol** 1989 Feb;31(1):92–7

Plasma exchange in the therapy of Behçet's disease. Raizman MB, et al. **Graefes Arch Clin Exp Ophthalmol** 1989; 227(4):360–3

Behçet's disease with severe cutaneous necrotizing vasculitis: response to plasma exchange—report of a case. Cornelis F, et al. **J Am Acad Dermatol** 1989 Sep;21(3 Pt 1):576–9

A randomized trial of plasma exchange in the treatment of burn shock. Kravitz M, et al. **J Burn Care Rehabil** 1989 Jan-Feb;10(1):17–26

Multiple plasma exchanges successfully maintain a young adult patient with Crigler-Najjar syndrome type I. Ahmed P, et al. **J Clin Apheresis** 1989;5(1):17–20

Kinetics modeling of plasma exchange: intra- and post-plasma exchange. Kellogg RM, et al. **J Clin Apheresis** 1988;4(4):183–7

Complete remission of paraneoplastic sensorimotor neuropathy: a case associated with small-cell lung cancer responsive to chemotherapy, plasma exchange, and radiotherapy. Weissman DE, et al. **J Clin Apheresis** 1989; 5(1):3–6

Plasma exchange with selective immunoadsorption of anti-acetylcholine receptor antibodies. Somnier FE, et al. **J Neuroimmunol** 1989 Apr;22(2):123–7

The natural history of the Guillain-Barré syndrome in 18 children and 50 adults. Kleyweg RP, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):853–6

Membrane plasma exchange in experimental allergic neuritis: effect on antibody levels and clinical course. Harvey GK, et al. **J Neurol Sci** 1988 Dec;88(1-3):207–18

Plasma exchange for Guillain-Barré syndrome. Tharakan J, et al. **J R Soc Med** 1989 Aug;82(8):458–61

Factors affecting the response to plasma therapy in thrombotic thrombocytopenic purpura. Koyama T, et al. **Jpn J Med** 1989 Jan-Feb;28(1):16–21

A successful delivery of an extremely immature infant in Rh incompatibility after plasma exchange. Hayashi K, et al. **Keio J Med** 1989 Jun;38(2):184–91

Reduction of Lp(a) by different methods of plasma exchange. Schenck I, et al. **Klin Wochenschr** 1988 Dec 15; 66(24):1197–201

Platelet factor 4 and the response to plasma exchange in the treatment of thrombotic thrombocytopenic purpura. Wiedemann G, et al. **Klin Wochenschr** 1989 May 15; 67(10):551–5

Complement activation in plasma exchange [editorial] **Lancet** 1988 Dec 24-31;2(8626-8627):1464–5

Treatment of systemic capillary leak syndrome [letter] **Lancet** 1988 Dec 24-31;2(8626-8627):1496

Plasma exchange and the anticardiolipin syndrome in pregnancy [letter] Fulcher D, et al. **Lancet** 1989 Jul 15; 2(8655):171

Crescentic glomerulonephritis—which patients should be treated with plasma exchange? Bell GM, et al. **Life Support Syst** 1983;1 Suppl 1:92–4

Removal and recovery rate of paraproteins by plasma exchange. Busnach G, et al. **Life Support Syst** 1983;1 Suppl

1:112–4
Plasma exchange therapy in acute renal failure due to multiple myeloma. Cagnoli L, et al. **Life Support Syst** 1983; 1 Suppl 1:102–5
Acute vascular rejection treated by plasma exchange. Fassbinder W, et al. **Life Support Syst** 1983;1 Suppl 1:115–7
Plasmafiltration on patients with hypertriglyceridemia (MT) in regular dialytic treatment (RDT). Setti G, et al. **Life Support Syst** 1983;1 Suppl 1:95–7
Treatment of intra-heptic cholestasis in primary biliary cirrhosis by long term plasmapheresis. Vankeerberghen L, et al. **Life Support Syst** 1983;1 Suppl 1:106–11
Immunoadsorbent (IM-P) plasma perfusion in patients with rheumatoid arthritis or SLE. Yamazaki Z, et al. **Life Support Syst** 1983;1 Suppl 1:98–101
Beneficial effects of intensive plasma exchange followed by immunosuppressive therapy in severe Graves' ophthalmopathy. Glinoer D, et al. **Metab Pediatr Syst Ophthalmol** 1988;11(3):133–40
Plasma exchange and immunosuppression for rapidly progressive glomerulonephritis: prognosis and complications. Rondeau E, et al. **Nephrol Dial Transplant** 1989;4(3):196–200
Plasma exchange in a rat model of autoimmune glomerulonephritis. Vendeville B, et al. **Nephrol Dial Transplant** 1988;3(4):405–11
Plasma exchange in acute renal failure due to postpartum hemolytic-uremic syndrome. Report of a case. Conte F, et al. **Nephron** 1988;50(2):167–8
Thrombotic thrombocytopenic purpura: clinical course and response to therapy in twelve patients. Holdrinet RS, et al. **Neth J Med** 1988 Oct;33(3–4):113–32
Double-blind study of true vs. sham plasma exchange in patients treated with immunosuppression for acute attacks of multiple sclerosis. Weiner HL, et al. **Neurology** 1989 Sep;39(9):1143–9
Treatment of serious heparin-induced thrombocytopenia by plasma exchange: report on 4 cases [letter] Bouvier JL, et al. **Thromb Res** 1988 Aug 1;51(3):335–6
Simultaneous collection of platelets and cryoprecipitate by plasma-exchange donation. McLeod BC, et al. **Transfusion** 1989 May;29(4):332–6
Long-term use of antecubital veins for plasma exchange. The Canadian Cooperative Multiple Sclerosis Study Group. Noseworthy JH, et al. **Transfusion** 1989 Sep;29(7):610–3
Qualitative analysis of antibody rebound after plasma exchange in the rat. Reding R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):777–8
Failure of splenectomy to affect the antibody rebound after plasma exchange in the rat. Reding R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):779–80
Effect of plasma exchange on guinea pig-to-rat heart xenografts. Reding R, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):534–6
Role of anti-donor antibodies in bone marrow transplant rejection: evaluation by flow cytometry and effect of plasma exchanges. Scornik JC, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2974–5
Plasma exchange for recurrent nephrotic syndrome following renal transplantation. Laufer J, et al. **Transplantation** 1988 Oct;46(4):540–2
[A clinical experience of plasma exchange in the treatment of severely complicated wasp stings—a case study] Chiou SS, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1988 Jul;4(7):414–20 (Eng. Abstr.) **(Chi)**
[Plasma exchange in dermatomyositis. A retrospective study of 21 cases] Lok C, et al. **Ann Dermatol Venereol** 1989; 116(3):219–24 **(Fre)**
[3d meeting of the French Society of Hemapharesis. Paris, 29–30 January 1988. Proceedings] **Ann Med Interne (Paris)** 1988;139 Suppl 1:1–87 **(Fre)**
[Removal of prednisone and prednisolone during plasma exchange] Assogba U, et al. **Ann Med Interne (Paris)** 1988; 139 Suppl 1:38–9 (Eng. Abstr.) **(Fre)**
[Plasma exchange with very low molecular weight heparin CY 222. Biological profile and therapeutic value] Assogba U, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:66–8 (Eng. Abstr.) **(Fre)**
[Functional recovery in Guillain-Barre syndrome: benefits of plasma exchange] Cassuto-Viguier E, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:43–5 (Eng. Abstr.) **(Fre)**
[Major hypertriglyceridemia, associated with severe acute pancreatitis, successfully treated with plasma exchange] Deleplanque P, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:86–7 (Eng. Abstr.) **(Fre)**
[Acquired factor VII inhibitor: treatment using high-dose immunoglobulins, corticotherapy and plasma exchange] Delmer A, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:48–50 (Eng. Abstr.) **(Fre)**
[Pyoderma gangrenosum: treatment with plasma exchange (4 cases)] Gérard A, et al. **Ann Med Interne (Paris)** 1988; 139 Suppl 1:29–31 (Eng. Abstr.) **(Fre)**
[Does plasma exchange have a place in the treatment of necrotizing angiodermatitis?] Guillot B, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:26–8 (Eng. Abstr.) **(Fre)**
[Prognosis and treatment of glomerulonephritis of periarteritis nodosa. The role of plasma exchange] Jarrousse B, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:23–5 (Eng. Abstr.) **(Fre)**
[Treatment using plasma exchange of massive acute hemolysis. 15 cases] Lambert H, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:40–2 (Eng. Abstr.) **(Fre)**
[Changes of erythrocyte and lymphocyte membrane fluidity after plasma extraction in children with type II homozygous hypercholesterolemia] Motta C, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:83–5 (Eng. Abstr.) **(Fre)**
[Cholinergic crisis in a patient with myasthenia treated by plasma exchange and anticholinesterase agents] Pourrat O, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:51–2 (Eng. Abstr.) **(Fre)**
[Primary biliary cirrhosis: therapeutic trial using plasma exchange and immunosuppression. Preliminary results] Rifle G, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:32–4 (Eng. Abstr.) **(Fre)**
[The value of plasma exchange during flare-ups of benign recurrent intrahepatic cholestasis] Sanderson F, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:35–7 (Eng. Abstr.) **(Fre)**
[Treatment of systemic scleroderma using plasma exchange. A study of 19 cases] Schmidt C, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:20–2 (Eng. Abstr.) **(Fre)**
[Evaluation of an automated system of measuring erythrocyte aggregation in dysglobulinemia treated by plasma exchange] Schooneman F, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:63–5 (Eng. Abstr.) **(Fre)**
[Plasma exchange in polyradiculoneuritis in AIDS] Sobel A, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:46–7 (Eng. Abstr.) **(Fre)**
[Glanzmann's thrombasthenia and pregnancy. Contribution of plasma exchange before scheduled cesarean section] Vivier M, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989; 18(4):507–13 (Eng. Abstr.) **(Fre)**
[Plasma exchange in children] Floret D. **Pediatrie** 1988; 43(6):567–70 (Eng. Abstr.) **(Fre)**
[Comparison between treatments of severe forms of familial hypercholesterolemia by total plasma exchange and selective removal of low density lipoproteins (LDLapheresis)] Dairou F, et al. **Presse Med** 1988 Oct 1; 17(33):1679–82 (Eng. Abstr.) **(Fre)**
[Role of hemodialysis and plasma exchange in the removal of methotrexate (letter)] Thierry FX, et al. **Presse Med** 1988 Dec 10;17(44):2356 **(Fre)**
[Superiority of a new etiopathogenic treatment curing periarteritis nodosa caused by hepatitis B virus, using a combination of brief corticotherapy, vidarabine and plasma exchange] Trepo C, et al. **Presse Med** 1988 Sep 10; 17(30):1527–31 (Eng. Abstr.) **(Fre)**
[Serum demyelinating activity and Guillain-Barre syndrome: favorable effect of plasma exchange] Metral S, et al. **Rev Neurol (Paris)** 1989;145(4):312–9 (Eng. Abstr.) **(Fre)**
[Homologous fresh frozen plasma in heart surgery. Myth or necessity] Boldt J, et al. **Anaesthesist** 1989 Jul;38(7):353–9 (Eng. Abstr.) **(Ger)**
[Treatment of endotoxin shock due to gram-negative bacteremia using extracorporeal circulation] Asanuma Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Feb; 86(2):246–52 (Eng. Abstr.) **(Jpn)**
[Thrombotic thrombocytopenic purpura (TTP) associated with chromosomal aberration and treated with plasma exchange] Itoh Y, et al. **Rinsho Ketsueki** 1989 Apr; 30(4):546–52 (Eng. Abstr.) **(Jpn)**
[Possibilities of emergency treatment of acute polyradiculoneuropathy using plasma exchange] Dordević D, et al. **Neurologija** 1988;37(3–4):7–16 (Eng. Abstr.) **(Scr)**
[Neonatal polycythemia and erythrophoresis] Gutiérrez C, et al. **Rev Chil Pediatr** 1988 Jan-Feb;59(1):16–20 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Of oil changes and their complications [editorial] Huestis DW. **Transfusion** 1989 Feb;29(2):97–8
Complications of plasma exchange. Sutton DM, et al. **Transfusion** 1989 Feb;29(2):124–7
Effect of splenectomy on antibody rebound after plasma exchange. Reding R, et al. **Transplantation** 1989 Jul; 48(1):145–6
[Hyperreninemic hypoaldosteronism syndrome induced by plasma exchange] Fourrier F, et al. **Presse Med** 1988 Oct 8;17(34):1737–40 (Eng. Abstr.) **(Fre)**
[Side effects of therapeutic plasma exchange. A controlled prospective study] Mercatello A, et al. **Presse Med** 1989 Feb 18;18(7):325–9 (Eng. Abstr.) **(Fre)**

INSTRUMENTATION

Evaluation of a rotating filter for use with therapeutic plasma exchange. Kaplan AA, et al. **ASAIO Trans** 1988 Jul-Sep; 34(3):274–6
Membrane plasmapheresis with plasma cryofiltration: characterization of cryogel and clinical response. Smith JW, et al. **Life Support Syst** 1983;1 Suppl 1:439–42

METHODS

Controlled study of plasma exchange in pemphigus. Guillaume JC, et al. **Arch Dermatol** 1988 Nov; 124(11):1659–63
Plasmapheresis in familial hypercholesterolemia. Thompson GR, et al. **Arteriosclerosis** 1989 Jan-Feb;9(1 Suppl):I152–7
Complement activation in plasma exchange by single filtration and centrifugation and in cascade filtration. Stegmayr B, et al. **Blood Purif** 1989;7(1):10–5
Plasma exchange technique in the unheparinized, unanaesthetized rat. Reding R, et al. **Lab Anim** 1988 Oct; 22(4):293–6
[Plasma exchange with human albumin or preserved serum and infusion therapy with preserved serum in posterior and intermediate uveitis] Brunner R, et al. **Fortschr Ophthalmol** 1988;85(6):731–6 (Eng. Abstr.) **(Ger)**
[Modification of hemorrheologic and laboratory chemical parameters by infusion therapy and preserved serum and by plasma exchange with human albumin and preserved serum in patients with posterior and intermediate uveitis] Jahn M, et al. **Fortschr Ophthalmol** 1988;85(6):740–3 (Eng. Abstr.) **(Ger)**
[Experience using exchange plasmapheresis in the treatment of suppurative and septic complications] Perveev VI, et al. **Vestn Khir** 1988 Jul;141(7):83–6 (Eng. Abstr.) **(Rus)**

PLASMA MEMBRANE see **CELL MEMBRANE**

PLASMA PROKALLIKREIN see **PREKALLIKREIN**

PLASMA PROTEINS see **BLOOD PROTEINS**

PLASMA SUBSTITUTES

see related
BLOOD SUBSTITUTES

Pericardial pressure attenuates release of atriopeptin in volume-expanded dogs. Stone JA, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H648–54
Long-term observation following traumatic-hemorrhagic shock in the dog: a comparison of crystalloidal vs. colloidal fluids. Hein LG, et al. **Circ Shock** 1988 Dec;26(4):353–64
A randomized clinical trial of 10% pentastarch (low molecular weight hydroxyethyl starch) versus 5% albumin for plasma volume expansion after cardiac operations. London MJ, et al. **J Thorac Cardiovasc Surg** 1989 May; 97(5):785–97
Crystalloid inclusions present in the epididymal principal cells of the buffalo (Bubalus bubalis: Bovidae). Landim e Alvarenga F da C. **Rev Bras Biol** 1988 May;48(2):281–8
Evaluation of platelet concentrates prepared from buffy coats and stored in a glucose-free crystalloid medium. Bertolini F, et al. **Transfusion** 1989 Sep;29(7):605–9
Albumin-augmented crystalloid or hyperosmolar colloid solutions for clinical pancreas preservation. Toledo-Pereyra LH, et al. **Transplant Proc** 1988 Oct; 20(5):1021–2
[Hemodilution in general surgery] Sýkora V, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;120:319–22 **(Ger)**
[Colloids and crystalloids: a critical re-evaluation] Iervolino M, et al. **Rev Paul Med** 1987 Nov-Dec;105(6):329–35 (29 ref.) (Eng. Abstr.) **(Por)**

ADMINISTRATION & DOSAGE

Coagulation changes during packed red cell replacement of major blood loss. Murray DJ, et al. **Anesthesiology** 1988 Dec;69(6):839–45
Liver lactate uptake in correcting of hemorrhagic shock with crystalloid, colloid, or whole blood. Mäkisalo HJ. **Eur Surg Res** 1988;20(4):267–76
Intraosseous crystalloid and blood infusion in a swine model. Schoffstall JM, et al. **J Trauma** 1989 Mar;29(3):384–7
Effect of polymyxin B on hemoglobin-mediated hepatotoxicity. Marks DH, et al. **Milit Med** 1989 Apr; 154(4):180–4
[Plasma substitutes and normovolemic hemodilution] De Ville A. **Rev Med Brux** 1989 Apr;10(4):143–7 (Eng. Abstr.) **(Fre)**
[Rheology of stored erythrocyte concentrates in plasma substitutes] Koerner K, et al. **Beitr Infusionther** 1988; 21:43–8 **(Ger)**
[Intra- and postoperative effect of various plasma substitutes on blood rheology and conjunctival oxygen partial pressure in microsurgical intervertebral disk operations] Simon J, et al. **Infusionstherapie** 1989 Feb;16(1):30–8 (Eng. Abstr.) **(Ger)**
[Principles of using blood preparation in children with hemophilia and other congenital hemorrhagic disorders] Adamowicz-Salach A, et al. **Pediatr Pol** 1988 May; 63(5):273–8 **(Pol)**
[Status of central hemodynamics in puerperants with postpartum hemorrhage in relation to the characteristics of infusion therapy] Strizhakov AN, et al. **Akush Ginekol (Mosk)** 1988 Sep;(9):30–4 (Eng. Abstr.) **(Rus)**
[Endolymphatic polytherapy in the complex treatment of endotoxicosis] Mezentsev SS, et al. **Sov Med** 1988;(5):25–8 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Acute renal failure precipitated by elevated colloid osmotic pressure. Rozich JD, et al. **Am J Med** 1989 Sep; 87(3):359–60
ECG artifact produced by crystalloid administration through

blood/fluid warming sets [letter] Paulsen AW, et al. **Anesthesiology** 1988 Nov;69(5):803–4

[Anaphylactic reaction to volume substitute agents] Kleinhans D, et al. **Dtsch Med Wochenschr** 1989 Jan 6; 114(1):37 (Ger)

PHARMACOKINETICS

Plasma retention and metabolic fate of hemoglobin modified with an interdimeric covalent cross link. Keipert PE, et al. **ASAIO Trans** 1989 Apr–Jun;35(2):153–9

In vitro colloid osmotic pressure of commonly used plasma expanders and substitutes: a study of the diffusibility of colloid molecules. Webb AR, et al. **Intensive Care Med** 1989;15(2):116–20

PHARMACOLOGY

Volume expansion attenuates baroreflex sensitivity in the conscious nonhuman primate. Cornish KG, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):R595–8

Reduced renal responses to volume expansion in streptozotocin-induced diabetic rats. Patel KP, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):R672–9

Effect of crystalloid infusion on hematocrit and intravascular volume in healthy, nonbleeding subjects. Greenfield RH, et al. **Ann Emerg Med** 1989 Jan;18(1):51–5

Role of kidney dopamine in the natriuretic response to volume expansion in rats. Hegde SS, et al. **Hypertension** 1989 Jun;13(6 Pt 2):828–34

Dissociation of renal nerve and excretory responses to volume expansion in prehypertensive Dahl salt-sensitive and Dahl salt-resistant rats. Veelken R, et al. **Hypertension** 1989 Jun;13(6 Pt 2):822–7

Effects of crystalloid and colloid infusions on intracranial pressure and computerized electroencephalographic data in dogs with vasogenic brain edema. Tranmer BI, et al. **Neurosurgery** 1989 Aug;25(2):173–8; discussion 178–9

THERAPEUTIC USE

Plasma volume substitution. Karanko MS. **Acta Anaesthesiol Scand Suppl** 1988;89:54–7 (20 ref.)

Plasma derivative replacement therapy in diss. intravasc.coag.(DIC) induced by septic disorders with highly elevated elastase alpha 1AT-complexes. Egbring R, et al. **Adv Exp Med Biol** 1988;240:473–80

Crystalloid versus colloid for circulatory preload for epidural caesarean section. Murray AM, et al. **Anaesthesia** 1989 Jun; 44(6):463–6

Hemodynamic and oxygen transport effects of pentastarch in burn resuscitation. Waxman K, et al. **Ann Surg** 1989 Mar;209(3):341–5

Burn resuscitation with a low-volume plasma regimen—analysis of mortality. Aharoni A, et al. **Burns** 1989 Aug;15(4):230–2

Hetastarch: an alternative colloid in burn shock management. Waters LM, et al. **J Burn Care Rehabil** 1989 Jan–Feb; 10(1):11–6

An easy and effective procedure to prevent radiocontrast agent nephrotoxicity in high-risk patients [letter] Teruel JL, et al. **Nephron** 1989;51(2):282

Early aneurysm surgery and prophylactic hypervolemic hypertensive therapy for the treatment of aneurysmal subarachnoid hemorrhage. Solomon RA, et al. **Neurosurgery** 1988 Dec;23(6):699–704

Effect of large volume replacement with crystalloids on extravascular lung water in human septic shock syndrome. Zadrobilek E, et al. **Prog Clin Biol Res** 1989;308:809–13

Acute effects of isovolemic hemodilution with crystalloids in a canine model of focal cerebral ischemia. Hyodo A, et al. **Stroke** 1989 Apr;20(4):534–40

Volume therapy in orthostatic transient ischemic attacks. Pascual-Leone A, et al. **Stroke** 1989 Sep;20(9):1267–70

Crystalloid versus colloid fluid resuscitation: a meta-analysis of mortality. Velanovich V. **Surgery** 1989 Jan;105(1):65–71

[Comparative effects of fluid gelatins on bleeding during heart surgery in the adult] Zerr C, et al. **Cah Anesthesiol** 1988 Nov;36(7):527–32 (Fre)

[Blood correctors in the combined therapy of chronic hepatitis and liver cirrhosis] Zherebtsov LA, et al. **Gematol Transfuziol** 1988 Jul;33(7):3–7 (Eng. Abstr.) (Rus)

[Changes in hemostasis after the use of plasma and plasma substitutes in the treatment of intestinal infections in children] Burakovskiĭ NI. **Pediatriia** 1989;(4):56–9 (Rus)

PLASMA THROMBOPLASTIN ANTECEDENT see **FACTOR XI**

PLASMA THROMBOPLASTIN COMPONENT see **FACTOR IX**

PLASMA VOLUME

Decrease in plasma volume from intraabdominal trauma in rats. Akerström G, et al. **Acta Anaesthesiol Scand** 1989 May; 33(4):272–6

Microvascular permeability in endotoxin and bacterial shock. Groeneveld AB, et al. **Acute Care** 1986;12(3–4):195–218 (157 ref.)

Platelet vasopressin levels in childhood idiopathic nephrotic syndrome. Trachtman H, et al. **Am J Dis Child** 1988 Dec; 142(12):1313–6

Plasma volume, umbilical artery Doppler [editorial] Farmakides G. **Am J Perinatol** 1989 Jul;6(3):371

Plasma volume, umbilical artery Doppler flow, and antepartum fetal heart testing in high-risk pregnancies. Villar MA, et al. **Am J Perinatol** 1989 Jul;6(3):341–6

Age-related changes in body fluid volumes in young spontaneously hypertensive rats. Von Dreele MM. **Am J Physiol** 1988 Nov;255(5 Pt 2):F953–6

Sauna, shower, and ice water immersion. Physiological responses to brief exposures to heat, cool, and cold. Part I. Body fluid balance. Kauppinen K. **Arctic Med Res** 1989 Apr;48(2):55–63

Human intravascular immunoglobulin responses to exercise-heat and hypohydration. Sawka MN, et al. **Aviat Space Environ Med** 1989 Jul;60(7):634–8

Circulating lactate and FFA during exercise: effect of reduction in plasma volume following exposure to simulated microgravity. Williams DA, et al. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 1):1042–6

Indocyanine green clearance and estimation of plasma volume in the normal horse. Parry BW, et al. **Equine Vet J** 1989 Mar;21(2):142–4

Changes in plasma volume and red cell formation after a marathon competition. Schmidt W, et al. **Eur J Appl Physiol** 1989;58(5):453–8

Comparison of indirect methods to estimate plasma volume changes during hemodialysis. Kirschbaum B. **Int J Artif Organs** 1989 May;12(5):307–13

Plasma dilution during transdermal clonidine antihypertensive monotherapy. Zawada ET Jr, et al. **Int J Artif Organs** 1989 Mar;12(3):200–3

Plasma volume responses associated with a sprint triathlon in novice triathletes. McNaughton LR. **Int J Sports Med** 1989 Jun;10(3):161–4 (42 ref.)

The pattern of plasma volume changes in well-nourished and in food- or protein-restricted pregnant rats. Lederman SA, et al. **J Am Coll Nutr** 1989 Jun;8(3):215–24

Effect of exercise hemoconcentration and hyperosmolality on exercise responses. Fortney SM, et al. **J Appl Physiol** 1988 Aug;65(2):519–24

Changes in plasma volume during bed rest: effects of menstrual cycle and estrogen administration. Fortney SM, et al. **J Appl Physiol** 1988 Aug;65(2):525–33

Heterologous serum albumin as tracer for plasma volume measurements evaluated in conscious nondehydrated and 48-hour water-deprived rats. Carvalho JS. **J Cardiovasc Pharmacol** 1989 Apr;13(4):603–7

Kinetics modeling of plasma exchange: intra- and post-plasma exchange. Kellogg RM, et al. **J Clin Apheresis** 1988;4(4):183–7

Intravascular volume expansion and fetal outcome in pregnant Nigerians with hemoglobin SS and SC. Abudu OO, et al. **J Natl Med Assoc** 1988 Aug;80(8):906–12

Atrial natriuretic peptide and the renal response to hypervolemia in nephrotic humans. Peterson C, et al. **Kidney Int** 1988 Dec;34(6):825–31

Relation of plasma volume change to intensity of weight lifting. Collins MA, et al. **Med Sci Sports Exerc** 1989 Apr; 21(2):178–85

Effects of endotoxemia on systemic plasma loss and hematocrit in rats. van Lambalgen AA, et al. **Microvasc Res** 1988 Nov;36(3):291–304

Acute effects of changing plasma osmolality and colloid oncotic pressure on the formation of brain edema after cryogenic injury. Kaieda R, et al. **Neurosurgery** 1989 May; 24(5):671–8

Plasma volume in nephrotic patients showing chronic glomerulonephritis with normal kidney function. Onoyama K, et al. **Nippon Jinzo Gakkai Shi** 1988 Mar;30(3):259–64

Trial to differentiate idiopathic edema by plasma volume changes. Suzuki M, et al. **Nippon Jinzo Gakkai Shi** 1988 Mar;30(3):265–71

Dilution kinetics of chemicals used for estimation of water content of body compartments in perinatal medicine. Brans YW, et al. **Pediatr Res** 1989 Apr;25(4):377–82

Thermal panting in dehydrated dogs: effects of plasma volume expansion and drinking. Baker MA, et al. **Pflugers Arch** 1989 Mar;413(5):511–5

The effects of hypoproteinemia and volume expansion on lung and soft tissue transvascular fluid filtration. Harms BA, et al. **Surgery** 1989 May;105(5):605–14

[Distribution of extracellular fluid volume in relation to renal hemodynamics in essential hypertension] Ohta H, et al. **Nippon Naika Gakkai Zasshi** 1988 Nov;77(11):1693–6 (Jpn)

[The importance of spontaneous compensation of post-traumatic fluid loss from the circulation in relation to resistance to further injury] Savić J. **God Vojnomed Akad** 1987;29:50–3 (Eng. Abstr.) (Scr)

[Importance of changes in plasmatic volume in the evaluation of TSH, L-T3 and L-T4, during muscular activity] Fernández-Pastor VJ, et al. **Rev Esp Fisiol** 1988 Sep; 44(3):331–6 (Eng. Abstr.) (Spa)

DRUG EFFECTS

Effect of catecholamines and insulin on plasma volume and intravascular mass of albumin in man. Hilsted J, et al. **Clin Sci** 1989 Aug;77(2):149–55

Effects of three colloid solutions on plasma volume and hemodynamics after coronary bypass surgery [letter] Smith JS Jr. **Crit Care Med** 1989 Apr;17(4):383

Plasma volume expansion in rats: effects on thermoregulation and exercise. Francesconi RP, et al. **J Appl Physiol** 1989 Apr;66(4):1749–55

Modulation by chronic nifedipine of plasma atrial natriuretic peptide, cell Na+ transport and plasma volume in rats with renal hypertension. Knorr AM, et al. **J Hypertens** 1988 Oct;6(10):839–44

The hypertensive effect of synthetic glucocorticoids in man: role of sodium and volume. Whitworth JA, et al. **J Hypertens** 1989 Jul;7(7):537–49

PLASMA VOLUME EXPANDERS see **PLASMA SUBSTITUTES**

PLASMACYTES see **PLASMA CELLS**

PLASMACYTIC LEUKEMIA see **LEUKEMIA, PLASMACYTIC**

PLASMACYTOMA

Plasmacytoma of the orbit. Tung G, et al. **Arch Ophthalmol** 1988 Nov;106(11):1622

Solitary plasmacytoma of the spine (a case report and review of literature). Mohan V, et al. **Australas Radiol** 1988 May; 32(2):272–5 (16 ref.)

Plasma cell tumors of the head and neck. Abemayor E, et al. **J Otolaryngol** 1988 Dec;17(7):376–81

Spontaneous regression of extramedullary plasmacytoma—a case report. Arunabh, et al. **Jpn J Surg** 1988 Jul;18(4):455–9

[Apparently solitary plasmacytoma with mandibular localization] Baiotti G, et al. **Minerva Stomatol** 1989 Jun; 38(6):629–32 (Eng. Abstr.) (Ita)

[A case of extramedullary plasmacytoma of nasal sinus] Ohtsuka T, et al. **Rinsho Ketsueki** 1988 Nov;29(11):2091–5 (Eng. Abstr.) (Jpn)

[Extramedullary plasmacytoma of the larynx] Borodavko NS, et al. **Vesta Otorinolaringol** 1988 Sep–Oct;(5):70 (Rus)

[Solitary extramedullary plasmacytoma of the larynx] Kralj Z, et al. **Lijec Vjesn** 1989 Apr–May;111(4–5):147–9 (Eng. Abstr.) (Scr)

COMPLICATIONS

Thyroid plasmacytoma with dermatomyositis and palmar fasciitis. Caron P, et al. **J Rheumatol** 1989 Jul;16(7):997–9

Plasmacytic neoplasm of the gastrointestinal tract in a patient with long-standing monoclonal gammopathy. Means RT Jr, et al. **South Med J** 1988 Oct;81(10):1331–2

[Plasmocytic sarcoma in HIV infected patients (letter)] Gastaut JA, et al. **Presse Med** 1989 Mar 18;18(11):586 (Fre)

[Long-term suppression of acid secretion with omeprazole use in metastatic gastrinoma] Schaub N, et al. **Schweiz Med Wochenschr** 1988 Nov 12;118(45):1660–6 (48 ref.) (Eng. Abstr.) (Ger)

[Amyloidoma of the right false vocal cord subsequent to extramedullary plasmacytoma of the left parotid gland] Kanoh T, et al. **Nippon Naika Gakkai Zasshi** 1988 May; 77(5):722–5 (Jpn)

[Plasmacytoma of the testis: report of a case] Abad Hernández MM, et al. **Arch Esp Urol** 1989 May; 42(4):369–71 (Eng. Abstr.) (Spa)

DIAGNOSIS

Changes of serum proteinase "cathepsin B-like" activity in patients with lung cancer and plasmocytoma after therapy. Vodvářka P, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;119:173–9

Plasmacytoma of the breast. Unusual initial presentation of myeloma: report of two cases and review of the literature. Ben-Yehuda A, et al. **Blut** 1989 Mar;58(3):169–70 (12 ref.)

An integrated approach to multiple and solitary plasmacytoma. Waldman JD. **Chic Med Sch Q** 1970; 29(4):190–202 (39 ref.)

Plasmacytoma of the stomach. Shapira I, et al. **Eur J Surg Oncol** 1989 Apr;15(2):165–7

Plasmacytoma of the pancreatic head. Fukuya T, et al. **Gastrointest Radiol** 1989 Summer;14(3):226–8

[Extramedullary plasmacytoma of small intestine—a case report] Zhao J. **Chung Hua Chung Liu Tsa Chih** 1988 Sep; 10(5):395–6 (Eng. Abstr.) (Chi)

[Regional mucocutaneous plasmacytosis] Bartolo E, et al. **Med Cutan Ibero Lat Am** 1988;16(4):339–42 (Eng. Abstr.) (Por)

DRUG THERAPY

Deficiency in immunocompetence of mice cured from large MOPC-315 plasmacytomas by melphalan therapy. Shoval S, et al. **Cancer Immunol Immunother** 1989;29(4):279–87

Importance of Lyt 2+ T-cells in the curative effectiveness of a low dose of melphalan for mice bearing a large MOPC-315 tumor. Mokyr MB, et al. **Cancer Res** 1989 Aug 15;49(16):4597–606

Phenotypic cyclophosphamide resistance in mouse myeloma hybridomas. Frondoza CG, et al. **Hybridoma** 1988 Aug; 7(4):397–405

Tumoricidal and immunomodulatory activities of drugs and implications for therapy of mice bearing a late stage MOPC-315 plasmacytoma. Berko R, et al. **Int J Immunopharmacol** 1988;10(7):825–34

Mechanism of action of the antitumour effect of K18. Fujii T, et al. **J Int Med Res** 1989 Mar–Apr;17(2):132–40

Analogues of cisplatin derived from diaminodideoxytetritols. Synthesis and activity against the ADJ/PC6 plasmacytoma in mice. Haines AH, et al. **J Med Chem** 1989 Apr; 32(4):742–5

Control of a murine plasmacytoma with doxorubicin–cisplatin: dependence on circadian stage of treatment. Sothern RB, et al. **J Natl Cancer Inst** 1989 Jan 18;81(2):135–45

ENZYMOLOGY

Purification and characterization of UV endonucleases I and II from murine plasmacytoma cells. Kim J, et al. **J Biol Chem** 1989 Feb 15;264(5):2739–45

ETIOLOGY

A case of plasmacytoma in muscle as a complication of needle tract seeding after percutaneous bone marrow biopsy. Kansara G, et al. **Am J Clin Pathol** 1989 May;91(5):604–6

Synergy of an IgH promoter–enhancer–driven c–myc/v–Ha–ras retrovirus and pristane in the induction of murine plasmacytomas. Clynes R, et al. **Curr Top Microbiol Immunol** 1988;141:115–24

The genetics of susceptibility to RIM–induced plasmacytomagenesis. Mock B, et al. **Curr Top Microbiol Immunol** 1988;141:125–7

Plasmacytoma induction by J series of v–myc recombinant retroviruses: evidence for the requirement of two (raf and myc) oncogenes for transformation. Troppmair J, et al. **Curr Top Microbiol Immunol** 1988;141:110–4

Plasmacytoma induction in radiochimeras. Silva S, et al. **Int J Cancer** 1989 Aug 15;44(2):337–42

The accelerating role of Abelson murine leukemia virus in murine plasmacytoma development: in vitro infection of spleen cells generates donor–type tumors after transfer to pristane–treated BALB/c mice. Sugiyama H, et al. **Int J Cancer** 1989 Aug 15;44(2):348–52

IgA lambda monoclonal gammopathy with Bence Jones proteinuria and intestinal plasmacytoma in a renal transplant recipient. Pascali E, et al. **Quad Sclavo Diagn** 1987 Dec;23(4):363–8

GENETICS

A repressor of c–myc transcription is found specifically in plasmacytomas. Kakkis E, et al. **Curr Top Microbiol Immunol** 1988;141:231–7

Suppression of transformed phenotypes and c–myc expression in a mouse plasmacytoma line after cell fusion with normal fibroblasts. Oikawa T, et al. **IARC Sci Publ** 1988;(92):32–42

Determinant differences between the rabbit and mouse immunoglobulin kappa enhancers impair the activity of the rabbit enhancer in mouse myeloma cells. Akimenko MA, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4745–55

IMMUNOLOGY

Nonsecretory myeloma: a study on hypoimmunoglobulinemia. Shustik C, et al. **Acta Haematol (Basel)** 1988;80(3):153–8

CD30(Ki–1) antigen expression in a subset of gastric mucosal plasma cells and in a primary gastric plasmacytoma. Möller P, et al. **Am J Clin Pathol** 1989 Jan;91(1):18–23

Successful in vitro graft–versus–tumor effect against an Ia–bearing tumor using cyclosporine–induced syngeneic graft–versus–host disease in the rat. Geller RB, et al. **Blood** 1989 Aug 15;74(3):1165–71

Effect of low–dose cyclophosphamide therapy on specific and nonspecific T cell–dependent immune responses of spleen cells from mice bearing large MOPC–315 plasmacytomas. Wise JA, et al. **Cancer Immunol Immunother** 1988;27(3):191–7

Immunoregulation of murine plasmacytoma. I. Generation of anomalous killer cells in vitro by cocultivation with MOPC 104E. Hayashida I, et al. **Cancer Invest** 1989; 7(1):17–26

Immunoregulation of murine plasmacytoma. II. Target selectivity of anomalous killer cells and role of immune T cells for the induction. Hayashida I, et al. **Cancer Invest** 1989;7(1):27–38

Lysis of ..ntigenically unrelated tumor cells mediated by Lyt 2+ splenic T–cells from melphalan–cured MOPC–315 tumor bearers. Barker E, et al. **Cancer Res** 1989 Sep 15; 49(18):5007–15

Interleukin 2 requirement for the in vitro generation of antitumor cytotoxicity by thymocytes from melphalan–cured MOPC–315 tumor bearers. Mokyr MB, et al. **Cancer Res** 1989 Feb 15;49(4):870–6

Augmentation of the generation of cytotoxic T lymphocytes against syngeneic tumor cells by recombinant human tumor necrosis factor. Nakano K, et al. **Cell Immunol** 1989 Apr 15;120(1):154–64

Selective in–vitro activation of BALB/c T suppressor lymphocytes specific for syngeneic ADJ–PC–5 plasmacytoma cells. Haubeck HD, et al. **Clin Exp Immunol** 1988 Oct;74(1):53–8

Regression of MOPC 104E plasmacytoma with monoclonal anti–idiotype antibodies. Kodama K, et al. **J Biol Response Mod** 1989 Aug;8(4):385–96

Cloning of myelomas and hybridomas in fibrin clots. Rueda AZ, et al. **J Immunol Methods** 1988 Nov 10;114(1–2):213–7

METABOLISM

Zinc, calcium, and magnesium metabolism: effects on plasmacytomas in Balb/c mice. Song MK, et al. **Am J Clin Nutr** 1989 Apr;49(4):701–7

Murine interleukin–4 displays potent anti–tumor activity in vivo. Tepper RI, et al. **Cell** 1989 May 5;57(3):503–12

Induction of vimentin synthesis in a murine myeloma cell line by TPA is strongly dependent on the composition of the cell culture medium. Giese G, et al. **Eur J Cell Biol** 1988 Dec;47(2):291–9

Immunoreactive cytokeratins in plasmacytomas. Wotherspoon AC, et al. **Histopathology** 1989 Feb; 14(2):141–50

Photoexcitation of zinc phthalocyanine in mouse myeloma cells: the observation of triplet states but not of singlet oxygen. Firey PA, et al. **Photochem Photobiol** 1988 Sep; 48(3):357–60

PATHOLOGY

The role of plasmacytoma growth factor in the in vitro responses of murine plasmacytoma cells. Nordan RP, et al. **Ann N Y Acad Sci** 1989;557:200–5

Extramedullary plasmacytoma (amyloid tumour) of the caruncle. Cooper JH, et al. **Can J Ophthalmol** 1989 Jun; 24(4):166–8

Tumour cell recruitment of the JB–1 and L 1210 ascites tumour determined directly by double labelling with [14C]– and [3H]–thymidine. Maurer–Schultze B, et al. **Cell Tissue Kinet** 1988 Jul;21(4):271–83

Plasma cell dyscrasias. Buss DH, et al. **Hematol Oncol Clin North Am** 1988 Dec;2(4):603–15 (33 ref.)

Plasmacytoma growth factor activity of murine granulocyte–macrophage colony–stimulating factor. Vink A, et al. **J Immunol** 1988 Sep 15;141(6):1996–9

Human long–term bone marrow cultures (HLTBMCs) in myelomatous disorders. Berneman ZN, et al. **Leukemia** 1989 Feb;3(2):151–4

Atypical monoclonal plasma cell hyperplasia of the central nervous system: precursor of plasmacytoma with evolutionary considerations. Weidenheim KM, et al. **Neurosurgery** 1989 Mar;24(3):429–34

Testicular plasmacytoma. Avitable AM, et al. **Urology** 1989 Jul;34(1):51–4 (24 ref.)

[Cutaneous plasmacytoma] Foldès C, et al. **Ann Dermatol Venereol** 1988;115(11):1217–9 **(Fre)**

[Extramedullary plasmacytoma] Berkessy S, et al. **Orv Hetil** 1988 Aug 21;129(34):1817–9 (Eng. Abstr.) **(Hun)**

[Extramedullary plasmocytoma: clinical, histopathologic and immunohistochemical study of a case with a tonsillar site] Gorini E, et al. **Acta Otorhinolaryngol Ital** 1988 Mar–Apr; 8(2):183–6 (Eng. Abstr.) **(Ita)**

[Cutaneous plasmacytoma with eventual development into multiple myeloma] Kanoh T, et al. **Nippon Naika Gakkai Zasshi** 1987 Nov;76(11):1706–9 **(Jpn)**

[An autopsy case of primary cutaneous plasmacytoma] Fuji H, et al. **Rinsho Ketsueki** 1989 Feb;30(2):256–61 (19 ref.) (Eng. Abstr.) **(Jpn)**

[Tumor progression in myeloma (a case of morphological and immunochemical transformation] Iavorkovskiĭ LI, et al. **Gematol Transfuziol** 1989 Apr;34(4):52–5 **(Rus)**

[Solitary extramedullary plasmocytoma of the small intestine] Torner Gracia J, et al. **Rev Esp Enferm Apar Dig** 1989 Feb;75(2):169–74 (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

Neuroradiology case of the day. Plasmacytoma of the skull vault. Romano AJ, et al. **AJR Am J Roentgenol** 1989 Jun; 152(6):1335–7

Primary plasmacytoma of the oesophagus. Davies RA, et al. **Br J Radiol** 1988 Dec;61(732):1180–1

Solitary plasmacytoma of bone in the calcaneus. Sprinkle RL 3d, et al. **J Am Podiatr Med Assoc** 1988 Dec; 78(12):636–42 (81 ref.)

Evaluating EMP with computed tomography. Fueredi GA, et al. **Wis Med J** 1989 Apr;88(4):15–6

[A case of plasmacytoma of the maxillary sinus] Tamamoto F, et al. **Rinsho Hoshasen** 1988 Jun;33(6):707–10 (16 ref.) (Eng. Abstr.) **(Jpn)**

RADIONUCLIDE IMAGING

Tc–99m DTPA uptake in extramedullary plasmacytoma of the retroperitoneum. Aburano T, et al. **Clin Nucl Med** 1988 Dec;13(12):903–6

Bone marrow investigation with technetium–99m microcolloid and magnetic resonance imaging in patients with malignant myelolympho–proliferative diseases. Widding A, et al. **Eur J Nucl Med** 1989;15(5):230–8

RADIOTHERAPY

Solitary plasmacytoma of bone: Mayo Clinic experience. Frassica DA, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan; 16(1):43–8

Lack of radiosensitization in Lewis lung carcinoma and a murine plasmacytoma by MTDQ and MTDQ–DA. Schlappack OK, et al. **Strahlenther Onkol** 1988 Nov; 164(11):684–8

SECONDARY

Plasmacytoma of the uvea in a case of multiple myeloma. Sandberg HO, et al. **Acta Ophthalmol (Copenh)** 1989 Jun; 67(3):329–32

Cutaneous involvement of multiple myeloma and extramedullary plasmacytoma. Patterson JW, et al. **J Am Acad Dermatol** 1988 Nov;19(5 Pt 1):879–90 (46 ref.)

SURGERY

Acute massive dural compression secondary to methyl methacrylate replacement of a tumorous lumbar vertebral body. Dolin MG. **Spine** 1989 Jan;14(1):108–10

Solitary plasmacytoma of the trachea treated by loop resection and laser therapy. Kairalla RA, et al. **Thorax** 1988 Dec;43(12):1011–2

[Pharyngeal complications following ventral fusion operations of the cervical spine] Bernemann D, et al. **Laryngorhinootologie** 1989 Feb;68(2):128–9 (Eng. Abstr.) **(Ger)**

[Reconstruction of the thoracic wall in neoplasms of the manubrium of sternum] Baisi A, et al. **Minerva Chir** 1989 Apr 30;44(8):1289–92 (Eng. Abstr.) **(Ita)**

[Solitary plasmacytoma of the thorax: report of two cases] Hara F, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov; 36(11):2516–20 (Eng. Abstr.) **(Jpn)**

THERAPY

Analysis of electrophoretic mobility histograms of mouse splenocytes and thymocytes during tumor growth and after combined chemotherapy and immunotherapy. Iwaguchi T, et al. **J Biochem Biophys Methods** 1989 Mar;18(2):157–66

[Plasmacytoma in childhood] Kanoh T, et al. **Nippon Naika Gakkai Zasshi** 1988 Jun;77(6):886–7 **(Jpn)**

ULTRASTRUCTURE

Gastric plasmacytoma with rod–shaped intracytoplasmic inclusions. Report of a case studied by light and electron microscopy and immunohistochemistry. Matsumoto K, et al. **Acta Pathol Jpn** 1988 Jun;38(6):815–21

Extramedullary plasmacytoma of skeletal muscle. A case report with immunocytochemistry and ultrastructural study. Akosa AB, et al. **Cancer** 1989 Oct 1;64(7):1504–7

VETERINARY

Mucocutaneous plasmacytomas in dogs: 75 cases (1980–1987). Rakich PM, et al. **J Am Vet Med Assoc** 1989 Mar 15; 194(6):803–10

Immunohistochemical staining of neoplastic and inflammatory plasma cell lesions in feline tissues. Kyriazidou A, et al. **J Comp Pathol** 1989 Apr;100(3):337–41

An immunohistochemical study of canine extramedullary plasma cell tumours. Kyriazidou A, et al. **J Comp Pathol** 1989 Apr;100(3):259–66

Lymphoplasmacytic lymphoma with cytoplasmic immunoglobulin–G in a pig. Nakajima H, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):835–7

Cutaneous plasmacytomas in dogs: a morphologic and immunohistochemical study. Baer KE, et al. **Vet Pathol** 1989 May;26(3):216–21

PLASMALOGENS

Chemical study of the mechanism for conversion of dimethylacetal obtained by methanolysis of plasmalogen to alkenylmethylether. Hara A, et al. **J Biochem (Tokyo)** 1988 Dec;104(6):1011–5

BIOSYNTHESIS

Effects of eicosapentaenoic and docosahexaenoic acid supplements on phospholipid composition and plasmalogen biosynthesis in P388D1 cells. Blank ML, et al. **Arch Biochem Biophys** 1989 Mar;269(2):603–11

Mutation of Bacillus firmus OF4 to duramycin resistance results in substantial replacement of membrane lipid phosphatidylethanolamine by its plasmalogen form. Clejan S, et al. **J Bacteriol** 1989 Mar;171(3):1744–6

Plasmalogen biosynthesis in the diagnosis of peroxisomal disorders. Kremser K, et al. **J Clin Chem Clin Biochem** 1989 May;27(5):315–7

Choline plasmalogen synthesis by the methylation pathway in chick neurons in culture. Mozzi R, et al. **Neurochem Res** 1989 Jun;14(6):579–83

BLOOD

Behaviour of plasmalogens during high–performance liquid chromatography on a silica column with a mobile phase containing phosphoric acid. Hoving EB, et al. **J Chromatogr** 1988 Dec 30;434(2):411–6

ISOLATION & PURIFICATION

Structural characterization of the glycoinositol phospholipid membrane anchor of human erythrocyte acetylcholinesterase by fast atom bombardment mass spectrometry. Roberts WL, et al. **J Biol Chem** 1988 Dec 15;263(35):18776–84

The precursors of fecapentaenes: purification and properties of a novel plasmalogen. Van Tassell RL, et al. **Lipids** 1989 May;24(5):454–9

METABOLISM

Plasmalogen content and distribution in the sarcolemma of cultured neonatal rat myocytes. Post JA, et al. **FEBS Lett** 1988 Nov 21;240(1-2):78-82

Lipids of the developing human retina: I. Total fatty acids, plasmalogens, and fatty acid composition of ethanolamine and choline phosphoglycerides. Martinez M, et al. **J Neurosci Res** 1988 Aug;20(4):484-90

Subcellular distribution, molecular dynamics and catabolism of plasmalogens in myocardium. Scherrer LA, et al. **Mol Cell Biochem** 1989 Jun 27-Jul 24;88(1-2):97-105 (31 ref.)

Plasmenylethanolamine is the major storage depot for arachidonic acid in rabbit vascular smooth muscle and is rapidly hydrolyzed after angiotensin II stimulation. Ford DA, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(10):3479-83

[Lipopolysaccharide-induced hydrolysis of plasmalogenic phosphatidylethanolamine in human platelets] Viktorov AV, et al. **Biokhimiia** 1988 May;53(5):842-7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Influence of plasmalogen deficiency on membrane fluidity of human skin fibroblasts: a fluorescence anisotropy study. Hermetter A, et al. **Biochim Biophys Acta** 1989 Jan 16; 978(1):151-7

PLASMAPHERESIS

Beneficial effects of plasmapheresis followed by immunosuppressive therapy in pretibial myxedema. Noppen M, et al. **Acta Clin Belg** 1988;43(5):381-3

Treatment of severe iodine-induced hyperthyroidism with plasmapheresis. Segers O, et al. **Acta Clin Belg** 1988; 43(5):335-43

Membrane plasmapheresis and its current possibilities in internal medicine. Zadražil J, et al. **Acta Univ Palacki Olomuc Fac Med** 1987;117:185-93 (24 ref.)

Multicompartment analysis of the effects of plasmapheresis. Application to lipid kinetics in humans. May ME, et al. **Am J Clin Pathol** 1989 Jun;91(6):688-94

Hypersensitivity reaction to bacillus Calmette-Guérin treated with plasmapheresis. DeHertogh D, et al. **Am J Med** 1989 Mar;86(3):343-4

Neutropenia in a patient with essential cryoglobulinemia type 1: rapid reversal by plasmapheresis. Schifferli JA, et al. **Am J Med** 1989 Jan;86(1):139-40

Thrombotic thrombocytopenic purpura in an asplenic patient with hereditary spherocytosis: failure of plasmapheresis, antiplatelet therapy, and corticosteroids. Becton DL, et al. **Am J Pediatr Hematol Oncol** 1988 Spring;10(1):5-8

Selective removal of triglyceride-rich lipoproteins by plasmapheresis in diabetic patients with severe hypertriglyceridemia. Ito H, et al. **Artif Organs** 1989 Jun; 13(3):190-6

Anticoagulant and membrane effects on humoral and cellular changes during plasmapheresis. Omokawa S, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):404-9

LDL-apheresis with the HELP system: a 16-month study in severe hypercholesterolemic patients with ischemic heart disease. Baggio G, et al. **Beitr Infusionther** 1988;23:146-51

Quantitative ultrastructural study of platelet plasma-membrane in hypercholesterolemic type IIa patients after plasma exchange and LDL-apheresis. Bianciardi G, et al. **Beitr Infusionther** 1988;23:183-8

Plasma exchange treatment for severe familial hypercholesterolemia: a comparison of two different techniques. Dairou F, et al. **Beitr Infusionther** 1988; 23:152-9

The use of combined LDL affinity apheresis utilizing dextran sulfate cellulose columns and hypolipidemic medications in patients with severe hypercholesterolemia to assess regression of atherosclerosis. Jones PH. **Beitr Infusionther** 1988;23:142-5

Long-term plasmapheresis in the management of severe hypercholesterolemia. Keller C, et al. **Beitr Infusionther** 1988;23:81-6

Effects on coronary atherosclerosis of long-term treatment of familial hypercholesterolemia by LDL-apheresis. Mabuchi H, et al. **Beitr Infusionther** 1988;23:87-96

From plasma-exchange to LDL-apheresis: new developments in the treatment of familial hypercholesterolemia. Postiglione A, et al. **Beitr Infusionther** 1988;23:74-80

Extracorporeal LDL elimination with immunoabsorption or heparin precipitation: a comparison in 10 patients. Richter WO, et al. **Beitr Infusionther** 1988;23:127-31

Treatment of severe hypercholesterolemia by LDL-apheresis: cholesterol-lowering effect and clinical evaluation. Saito Y, et al. **Beitr Infusionther** 1988;23:160-71

Treatment of severe hypercholesterolemia by heparin-induced extracorporeal LDL precipitation (HELP). Schuff-Werner P, et al. **Beitr Infusionther** 1988; 23:118-26

Selective continuous removal of low density lipoproteins by dextran sulfate cellulose column adsorption apheresis in the therapy of familial hypercholesterolemia. Stefanutti C, et al. **Beitr Infusionther** 1988;23:172-82

Combined treatment of immune nephropathies with plasmapheresis and immunosuppressants. Nenov D, et al. **Biomater Artif Cells Artif Organs** 1988-89;16(5):991-7

Plasmapheresis and fulminant acute pancreatitis [letter] **BMJ** 1988 Oct 15;297(6654):979-80

Plasmapheresis and fulminant acute pancreatitis? [letter] Larvin M, et al. **BMJ** 1988 Nov 19;297(6659):1332

Plasmapheresis: a rational treatment for fulminant acute pancreatitis? Larvin M, et al. **BMJ** 1988 Sep 3; 297(6648):593-4

Possible effectiveness of plasmapheresis and immunosuppressive therapy in reversing subcutaneous insulin resistance: a case report. Vannini P, et al. **Diabete Metab** 1989 Mar-Apr;15(2):98-101

Therapeutic plasmapheresis and haemostatic system. Ziemer S, et al. **Folia Haematol (Leipz)** 1988;115(4):563-8

Successful treatment of malaria tropica with acute renal failure and cerebral involvement by plasmapheresis and hemodialysis. Stuby U, et al. **Infection** 1988;16(6):362-4

Uncontrolled trial of cryofiltration in rheumatoid arthritis. Malchesky PS, et al. **J Clin Apheresis** 1988;4(4):158-65

Plasmapheresis in the treatment of acute relapsing inflammatory demyelinating polyradiculoneuropathy associated with human immunodeficiency virus infection: a case report. Wuest D, et al. **J Clin Apheresis** 1988; 4(4):149-51

Plasma exchange in dermatomyositis/polymyositis: beneficial effects in three cases. Clarke CR, et al. **J Clin Lab Immunol** 1988 Nov;27(3):149-52

The value of plasmapheresis in the treatment of acute and chronic Guillain-Barré syndrome. Kunze K, et al. **J Neuroimmunol** 1988 Dec;20(2-3):301-3

Role of therapeutic plasmapheresis in the acute Guillain-Barré syndrome. McKhann GM, et al. **J Neuroimmunol** 1988 Dec;20(2-3):297-300

Relapse of multiple sclerosis following acute allergic reactions to plasma during plasmapheresis. Wirguin I, et al. **J Neurol** 1989 Jan;236(1):62-3

Plasmapheresis in treatment of human T-lymphotropic virus type-I associated myelopathy. Matsuo H, et al. **Lancet** 1988 Nov 12;2(8620):1109-13

Plasmapheresis for late-stage trypanosomiasis [letter] Spinazzola F, et al. **Lancet** 1989 May 27;1(8648):1200

Plasmapheresis influences the immune response affecting T cell subsets. Giacchino F, et al. **Life Support Syst** 1983;1 Suppl 1:118-21

New approach to treatment of AIDS and AIDS related complex. Yabrov A. **Med Hypotheses** 1988 Sep;27(1):81-2

Plasmapheresis in the treatment of stiff-man syndrome [letter] Vicari AM, et al. **N Engl J Med** 1989 Jun 1;320(22):1499

Successful treatment of mitomycin C-associated hemolytic uremic syndrome by plasmapheresis. Garibotto G, et al. **Nephron** 1989;51(3):409-12

Prospective multicentre trial on the short-term effects of plasma exchange versus cytotoxic drugs in steroid-resistant lupus nephritis. Derksen RH, et al. **Neth J Med** 1988 Oct; 33(3-4):168-77

Thrombotic thrombocytopenic purpura: clinical course and response to therapy in twelve patients. Holdrinet RS, et al. **Neth J Med** 1988 Oct;33(3-4):113-32

The therapeutic potential of plasmapheresis in systemic lupus erythematosus (SLE). Swaak AJ. **Neth J Med** 1988 Oct; 33(3-4):155-9

Possible therapeutic application of low density lipoprotein apheresis (LDL-A) in conjunction with double filtration plasmapheresis (DFPP) in drug-resistant nephrotic syndrome due to focal glomerular sclerosis (FGS). Tojo K, et al. **Nippon Jinzo Gakkai Shi** 1988 Sep;30(9):1153-60

Bernard-Soulier syndrome complicating pregnancy: a case report. Peaceman AM, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 2):457-9

Plasmapheresis treatment in patients with severe atopic keratoconjunctivitis. Aswad MI, et al. **Ophthalmology** 1988 Apr;95(4):444-7

Plasmapheresis for fulminant meningococcemia. Drapkin MS, et al. **Pediatr Infect Dis J** 1989 Jun;8(6):399-400

Plasmapheresis associated with a relapsing course in Guillain-Barré syndrome. Shanks DE, et al. **Pediatr Neurol** 1989 May-Jun;5(3):189-90

Plasmapheresis in the treatment of the Guillain-Barré syndrome in childhood. Yoshioka M, et al. **Pediatr Neurol** 1985 Nov-Dec;1(6):329-34

Haemodynamic effects during treatment of sepsis and septic shock with immunoglobulins and plasma-pheresis. Werdan K, et al. **Prog Clin Biol Res** 1989;308:1025-30

Visceral improvement following combined plasmapheresis and immunosuppressive drug therapy in progressive systemic sclerosis. Akesson A, et al. **Scand J Rheumatol** 1988;17(5):313-23

Selective removal of plasma components to achieve immune modulation. Proceedings of a satellite symposium. December 2, 1988, San Antonio, TX. **Semin Hematol** 1989 Apr;26(2 Suppl 1):1-51

Biomodulation effects of extracorporeal circulation in apheresis. Malchesky PS, et al. **Semin Hematol** 1989 Apr; 26(2 Suppl 1):42-51 (45 ref.)

Selective extraction of plasma constituents [editorial] Pineda AA. **Transfusion** 1989 May;29(4):283-4

Successful transplantation in highly sensitized patients. Backman U, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):762-3

Perioperative management of fulminant and subfulminant hepatic failure with therapeutic plasmapheresis. Munoz SJ, et al. **Transplant Proc** 1989 Jun;21(3):3535-6

Outcome of renal transplantation after DFPP treatment in presensitized recipients. Sato T, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):737-8

Prolongation of heart xenograft survival in the rat: effectiveness of cyclosporine in preventing early xenoantibody rebound after membrane plasmapheresis. Van de Stadt J, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):543-5

[Extracorporeal detoxication via plasmapheresis and plasmasorption in the treatment of suppurative-septic urologic diseases and acute kidney failure] Kozlov VA. **Khirurgiia (Sofiia)** 1988;41(6):28-32 **(Bul)**

[Extracorporeal therapy (hemosorption, plasmapheresis) in the combined treatment of severe forms of Sjögren's disease] Chiklikchi AS, et al. **Vutr Boles** 1988;27(6):58-62 (Eng. Abstr.) **(Bul)**

[Application of plasmapheresis in patients with malignant paraproteinemia and hyperviscosity syndrome] Wu TJ, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Nov;42(5):367-72 (Eng. Abstr.) **(Chi)**

[Plasmapheresis in the treatment of peripheral HIV neuropathy] Salim YS, et al. **Ugeskr Laeger** 1989 Jul 3; 151(27):1754-6 (Eng. Abstr.) **(Dan)**

[Blood products and plasma derivatives] Faber JC. **Bull Soc Sci Med Grand Duche Luxemb** 1988;125(2):45-53 **(Fre)**

[Severe autoimmune hepatitis: efficacy of plasmapheresis? (letter)] Combis JM, et al. **Gastroenterol Clin Biol** 1989 May;13(5):529-30 **(Fre)**

[Meningoradiculitis in the primary phase of HIV infection. Value of plasmapheresis (letter)] Beytout J, et al. **Presse Med** 1989 May 20;18(20):1031-2 **(Fre)**

[Preparation of maternal platelets collected by separator for use in fetal transfusion in a case of alloimmunization by anti-PLA1] Woimant G, et al. **Rev Fr Transfus Hemobiol** 1989 Jun;32(3):227-34 (Eng. Abstr.) **(Fre)**

[Intensive immunosuppression in progressive multiple sclerosis. An open study comparing 3 groups: cyclophosphamide, cyclophosphamide-plasmapheresis and control subjects. Results after 3 years] Trouillas P, et al. **Rev Neurol (Paris)** 1989;145(5):369-77 (37 ref.) (Eng. Abstr.) **(Fre)**

[Use of plasmapheresis in therapy of systemic lupus erythematosus: a controlled study] Zielinski C, et al. **Acta Med Austriaca** 1988;15(5):155-8 (Eng. Abstr.) **(Ger)**

[Exchange transfusion and (or) plasmapheresis in more severe falciparum malaria?] Bambauer R. **Dtsch Med Wochenschr** 1988 Oct 7;113(40):1576-7 **(Ger)**

[Induction of remission in severe lupus erythematosus by intensified therapy] Euler HH, et al. **Immun Infekt** 1989 Apr;17(2):51-3 (Eng. Abstr.) **(Ger)**

[Plasmapheresis in diseases of the glomerula] Samtleben W, et al. **Internist (Berlin)** 1989 Mar;30(3):196-204 (74 ref.) **(Ger)**

[Use and efficacy of extracorporeal detoxication procedures in poisoning in children] Stolpe HJ, et al. **Kinderarztl Prax** 1989 Apr;57(4):163-70 (30 ref.) (Eng. Abstr.) **(Ger)**

[Plasmapheresis therapy in Guillain-Barré polyneuroradiculitis] Zwahlen H, et al. **Schweiz Med Wochenschr** 1988 Dec 10;118(49):1854-8 (Eng. Abstr.) **(Ger)**

[Plasmapheresis in neurological disease--a year's experience (editorial)] Wirguin I, et al. **Harefuah** 1988 Sep; 115(5-6):153-5 **(Heb)**

[Plasmapheresis in neuromuscular diseases. Personal cases] Affuso R, et al. **Acta Neurol (Napoli)** 1989 Apr-Jun; 11(2-3):200-10 (Eng. Abstr.) **(Ita)**

[A new therapeutic approach in the treatment of acute trichloroethylene poisoning. First clinical results] Pelaia P, et al. **Minerva Anestesiol** 1988 Jun;54(6):291-5 (Eng. Abstr.) **(Ita)**

[Selective intra-arterial administration of a high dose of CDDP in combination with plasmapheresis] Tateyama I, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Apr 20; 23(4):889-98 (Eng. Abstr.) **(Jpn)**

[Experimental study on therapeutic plasmapheresis with the biliary decompression in the treatment of obstructive jaundice] Kimata H, et al. **Nippon Geka Gakkai Zasshi** 1988 Aug;89(8):1211-22 (Eng. Abstr.) **(Jpn)**

[A case of angioimmunoblastic lymphadenopathy with dysproteinemia (AILD) associated with nephrotic syndrome which remitted after double filtration plasma pheresis (DFPP) therapy] Yoshie T, et al. **Nippon Naika Gakkai Zasshi** 1988 Sep;77(9):1440-5 **(Jpn)**

[A case of antigranulocyte antibody positive Felty's syndrome and its efficacy of plasmapheresis] Suzuki T, et al. **Ryumachi** 1989 Feb;29(1):52-6 (Eng. Abstr.) **(Jpn)**

[Results of the use of plasmapheresis in the treatment of Rh incompatibility] Czeszyńska M, et al. **Acta Haematol Pol** 1988 Jan-Jun;19(1-2):47-55 (Eng. Abstr.) **(Pol)**

[Effectiveness of the treatment of Rh serologic incompatibility by plasmapheresis] Woytoń J, et al. **Acta Haematol Pol** 1988 Jul-Dec;19(3-4):202-4 (Eng. Abstr.) **(Pol)**

[Step-by-step treatment of progressive edematous-infiltrative ophthalmopathy in Graves' disease. Results of the treatment by plasmapheresis (stage II) and

cobalt teletherapy of orbital tissues (stage III)] Pilarska K, et al. **Endokrynol Pol** 1988;39(5):237–44 (Eng. Abstr.) **(Pol)**

[Treatment of the fetus with Rh incompatibility by the combined methods of plasmapheresis and intrauterine blood transfusion] Lozińska D, et al. **Pol Tyg Lek** 1988 Nov 7; 43(45):1449–51 (Eng. Abstr.) **(Pol)**

[Evaluation of the blood cell system in pregnant women with Rh isoimmunization treated by plasmapheresis] Gabryś M, et al. **Wiad Lek** 1989 Dec 1;41(23):1563–5 (Eng. Abstr.) **(Pol)**

[Effectiveness of the treatment of serologic incompatibility by plasmapheresis] Woytoń J, et al. **Wiad Lek** 1988 Oct 15;41(20):1361–5 (Eng. Abstr.) **(Pol)**

[Myasthenia gravis: treatment with thymectomy, corticoids and plasmapheresis] Dias-Tosta E, et al. **Arq Neuropsiquiatr** 1989 Mar;47(1):39–50 (Eng. Abstr.) **(Por)**

[Correction of electrolyte balance during extracorporeal regulation of the blood composition in patients with ischemic heart disease] Pisarevskiĭ AA, et al. **Anesteziol Reanimatol** 1988 Nov-Dec;(6):38–40 (Eng. Abstr.) **(Rus)**

[Immunocorrective treatment of idiopathic thrombocytopenic purpura by plasmapheresis] Kovaleva LG, et al. **Gematol Transfuziol** 1989 Feb;34(2):9–12 (Eng. Abstr.) **(Rus)**

[Therapeutic plasmapheresis in dermatologic practice (a propos of an article by A. Ia.Fel'ker and N. F. Konstantinova] Malakhovskiĭ IuE, et al. **Gematol Transfuziol** 1988 Sep;33(9):60–2 **(Rus)**

[Effect of intensive plasma- and leukapheresis on the indices of hemodynamics, rheology and blood coagulation in donors] Mel'nikova VN, et al. **Gematol Transfuziol** 1988 Jul;33(7):12–6 (Eng. Abstr.) **(Rus)**

[Plasmapheresis in the combination therapy of patients with pyogenic destructive diseases of the lungs and pleura] Alekseeva ME, et al. **Grudn Khir** 1989 Jan-Feb;(1):59–62 (Eng. Abstr.) **(Rus)**

[Plasmapheresis with extracorporeal membrane oxygenation of the blood in the treatment of peritonitis] Abdullaev EG, et al. **Klin Khir** 1989;(4):47–8 (Eng. Abstr.) **(Rus)**

[A case using plasmapheresis in treating infectious toxicosis in young infants] Burakovskiĭ NI, et al. **Pediatriia** 1988; (6):98–9 **(Rus)**

[Plasmapheresis in the therapy of infection, destructive pneumonia and intestinal toxicosis in children] Manerov FK, et al. **Pediatriia** 1988;(9):56–61 **(Rus)**

[Plasma macroproteins in the evaluation of the effectiveness of therapeutic plasmapheresis in patients with rheumatoid arthritis] Movshev BE, et al. **Revmatologiia (Moskva)** 1989 Jan-Mar;(1):32–6 (Eng. Abstr.) **(Rus)**

[Plasmapheresis in the treatment of severe and malignant arterial hypertension] Legkonogov AV, et al. **Sov Med** 1988;(10):38–42 (Eng. Abstr.) **(Rus)**

[Efferent methods in the complex treatment of myasthenia gravis] Sazonov AM, et al. **Sov Med** 1989;(1):17–20 (Eng. Abstr.) **(Rus)**

[Therapeutic plasmolymphocytapheresis in autoimmune hemolytic anemia] Shpakova AP, et al. **Sov Med** 1988; (11):20–2 (Eng. Abstr.) **(Rus)**

[Use of plasmapheresis in the nephrotic syndrome] Kuznetsova OP, et al. **Ter Arkh** 1988;60(8):96–8 (Eng. Abstr.) **(Rus)**

[Clinical and hemodynamic evaluation of the effectiveness of plasmapheresis in high arterial hypertension refractory to drug treatment agents] Legkonogov AV, et al. **Ter Arkh** 1988;60(5):80–5 (Eng. Abstr.) **(Rus)**

[Use of plasmapheresis in the treatment of patients with severe arterial hypertension refractory to drug therapy] Legkonogov AV, et al. **Ter Arkh** 1988;60(6):60–4 (Eng. Abstr.) **(Rus)**

[Plasmapheresis in clinical practice] Malakhovskiĭ IuE, et al. **Ter Arkh** 1988;60(5):124–9 (Eng. Abstr.) **(Rus)**

[Therapeutic use of plasmapheresis in a patient with bullous pemphigoid] Bandemir W, et al. **Vestn Dermatol Venerol** 1989;(2):10–3 (Eng. Abstr.) **(Rus)**

[Mechanisms of therapeutic effect of extracorporeal detoxication in autoimmune bullous dermatoses] Grando SA, et al. **Vestn Dermatol Venerol** 1988;(7):6–11 (Eng. Abstr.) **(Rus)**

[Plasmapheresis in the treatment of critical stages of ischemia in diabetic angiopathy of the lower extremities] Georgadze AK, et al. **Vestn Khir** 1989 Mar;142(3):20–4 (Eng. Abstr.) **(Rus)**

[Comparative characteristics of reactions of central hemodynamics to the exfusion of blood and plasma in surgical diseases] Singaevskiĭ SB, et al. **Vestn Khir** 1988 Dec;141(12):71–3 (Eng. Abstr.) **(Rus)**

[Plasmapheresis in the intensive therapy of renal insufficiency] Starikov AV. **Vestn Khir** 1989 Mar; 142(3):16–20 (Eng. Abstr.) **(Rus)**

[Plasmapheresis in severe forms of suppurative-septic diseases in children] Tsuman VG, et al. **Vestn Khir** 1988 Jun;140(6):67–70 (Eng. Abstr.) **(Rus)**

[Exchange plasmapheresis in combined treatment of severe uveitis] Chentsova OB, et al. **Vestn Oftalmol** 1989 Jan-Feb; 105(1):40–3 (Eng. Abstr.) **(Rus)**

[How does plasmapheresis work?] Cala S. **Lijec Vjesn** 1988 Aug;110(8):289–90 (Eng. Abstr.) **(Scr)**

[Plasmapheresis, immunosuppressive therapy and kidney transplant in a pre-sensitized patient] Cuéllar-Cabrera H, et al. **Bol Med Hosp Infant Mex** 1989 Apr;46(4):246–50 (Eng. Abstr.) **(Spa)**

[Plasmapheresis and heparin-induced thrombocytopenia-thrombosis (letter)] Manzano L, et al. **Med Clin (Barc)** 1989 Apr 29;92(16):639 **(Spa)**

[Treatment of pemphigus vulgaris with plasmapheresis] Woscoff A, et al. **Medicina (B Aires)** 1988;48(4):395–400 (Eng. Abstr.) **(Spa)**

[Plasmapheresis or infusion of fresh plasma in the treatment of thrombotic thrombocytopenic purpura. Preliminary report] Avilés A, et al. **Rev Invest Clin** 1988 Jul-Sep; 40(3):241–3 (Eng. Abstr.) **(Spa)**

[Thrombotic, thrombocytopenic purpura: treatment with plasmapheresis, fresh plasma, platelet antiaggregants and corticoids] Cuesta B, et al. **Rev Med Univ Navarra** 1987 Jul-Sep;31(3):145–7 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Transmission of HIV and AIDS by plasmapheresis for Guillain-Barré syndrome. Boucher CA, et al. **Clin Neurol Neurosurg** 1988;90(3):235–6

Tenth case of HIV transmission after plasma donation [letter] Kohlhof A, et al. **Lancet** 1988 Oct 22;2(8617):965

HIV infection after plasma donation in Valencia: yet another case [letter] Laga M, et al. **Lancet** 1988 Oct 15;2(8616):905

Follow-up of NANB hepatitis outbreak in plasmapheresis unit [letter] Laskus T, et al. **Lancet** 1989 Feb 18;1(8634):391

Complications of plasma exchange. Sutton DM, et al. **Transfusion** 1989 Feb;29(2):124–7

[Problem of differential diagnosis of hepatitis in donors of blood for plasmapheresis] Golosova TV, et al. **Gematol Transfuziol** 1989 Mar;34(3):35–7 (Eng. Abstr.) **(Rus)**

INSTRUMENTATION

Plasma filtration in Couette flow membrane devices. Beaudoin G, et al. **Artif Organs** 1989 Feb;13(1):43–51

Use of a new plasma separation membrane for plasma donation. Technical and biological results. Schooneman F, et al. **Artif Organs** 1988 Dec;12(6):526–9

A high efficiency membrane separator for donor plasmapheresis. Bellhouse BJ, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):747–54

Successful long-term use of a miniaturized plasmapheresis circuit in rabbits. Dennis MB Jr, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):651–4

Rotation-induced Taylor vortex enhances filtrate flux in plasma separation. Ohashi K, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):300–7

A novel system of LDL apheresis combining a centrifugal plasma separator with a specific LDL adsorption column. Nakajima T, et al. **Atherosclerosis** 1988 Oct;73(2-3):143–8

Modelling of plasma-separation through microporous membranes. Gupta BB, et al. **Int J Artif Organs** 1989 Jan; 12(1):51–8

Membrane plasma fractionation: effect of the surface area. Wojcicki J, et al. **Int J Artif Organs** 1988 Sep;11(5):387–92

Plateletpheresis concentrates produced in 30 minutes along with plasma and packed red cells: preliminary results. Valbonesi M, et al. **J Clin Apheresis** 1988;4(4):152–4

Autotransfusion and hemoseparation in cardiac surgery. What can be saved in cardiac reoperations and operations of thoracic aortic aneurysms? Dietrich W, et al. **Thorac Cardiovasc Surg** 1989 Apr;37(2):84–8

Donor safety and plasma quality in automated plasmapheresis. Comparison of two filter materials. Aeschbacher B, et al. **Vox Sang** 1989;57(2):104–11

[Clinical use of IM-PH immuno-columns] Maresca MC, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:69–71 (Eng. Abstr.) **(Fre)**

[Comparative studies of collecting fresh plasma (FFP) using various plasmapheresis methods] Eichler H, et al. **Beitr Infusionther** 1988;21:122–6 **(Ger)**

[Therapeutic plasmapheresis using a cell separator] Kalinin NN, et al. **Folia Haematol (Leipz)** 1989;116(2):177–82 (Eng. Abstr.) **(Ger)**

[Mechanical donor plasmapheresis using the Haemonetics Ultralite plasma collection system. 1. Collection of fresh plasma] Matthes G, et al. **Folia Haematol (Leipz)** 1989; 116(2):343–8 (Eng. Abstr.) **(Ger)**

[Plasmapheresis on blood fractionators] Kalinin NN, et al. **Sov Med** 1988;(12):23–6 (Eng. Abstr.) **(Rus)**

METHODS

Hickman catheter used in a pregnant patient for prolonged plasmapheresis treatment. Shechter Y, et al. **Acta Obstet Gynecol Scand** 1988;67(1):89–90

Indications for future studies on the treatment of pemphigus with plasmapheresis [letter] Blaszczyk M, et al. **Arch Dermatol** 1989 Jun;125(6):843–4

Plasmapheresis therapy of pemphigus. Bystryn JC. **Arch Dermatol** 1988 Nov;124(11):1702–4

Plasmapheresis and pulse cyclophosphamide therapy in pemphigus vulgaris: a novelty or a reappraisal? [letter] Ruocco V. **Arch Dermatol** 1988 Nov;124(11):1716–8

Surface area effects on efficiency and biocompatibility in experimental membrane plasmapheresis. Omokawa S, et al. **Artif Organs** 1989 Feb;13(1):78–86

Kinetic analysis of cholesterol removal by thermofiltration. Malchesky PS, et al. **ASAIO Trans** 1988 Oct-Dec; 34(4):965–8

Plasma perfusion in myasthenia gravis. Passalacqua S, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):602–5

Apheretic treatment of severe familial hypercholesterolemia: comparison of dextran sulfate cellulose and double membrane filtration methods for low density lipoprotein removal. Franceschini G, et al. **Atherosclerosis** 1988 Oct; 73(2-3):197–202

Double-filtration plasmapheresis in heterozygous familial hypercholesterolemia: our experience over 25 treatments. Candrina R, et al. **Beitr Infusionther** 1988;23:189–90

LDL-apheresis by dextran sulfate cellulose adsorption columns: two methods. Falco C, et al. **Beitr Infusionther** 1988;23:191–4

Comparison of dextran sulphate cellulose and double filtration plasmapereses for the treatment of severe hypercholesterolemia. Franceschini G, et al. **Beitr Infusionther** 1988;23:112–7

Efficacy of plasmapheresis, cascade-filtration and dextran-sulfate adsorption apheresis with calculation of the recovery rate of lipids and lipoproteins. Schwartzkopff W, et al. **Beitr Infusionther** 1988;23:103–11

Indications of plasmapheresis and selection of different substitution solutions. Bambauer R, et al. **Biomater Artif Cells Artif Organs** 1989;17(1):9–26

Different cascade filtration operating modalities in clinical use. Busnach G, et al. **Int J Artif Organs** 1988 Nov; 11(6):493–6

Formation of a cryogel during processing of cell-free plasma. Rock G, et al. **Transfusion** 1989 Feb;29(2):165–9

[Preoperative plasmapheresis] Schleinzer W, et al. **Klin Wochenschr** 1988;66 Suppl 15:33–9 (Eng. Abstr.) **(Ger)**

[Plasmapheresis treatment in neurologic diseases--a report of experiences] Hendrich A, et al. **Psychiatr Neurol Med Psychol Beih** 1988;40:79–83 **(Ger)**

[Selective elimination of atherogenic lipoproteins using dextran-sulfate cellulose. Experiences in 2 patients with heterozygote familial hypercholesterolemia] Riesen WF, et al. **Schweiz Med Wochenschr** 1989 Jan 14;119(2):55–8 (Eng. Abstr.) **(Ger)**

[Evaluation of plasmapheresis in terminal stage patients with urogenital malignant tumors] Ogawa Y, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Oct;79(10):1673–9 (Eng. Abstr.) **(Jpn)**

[Changes in colloid osmotic pressure in double filtration plasmapheresis] Takeyasu N, et al. **Nippon Jinzo Gakkai Shi** 1988 Jun;30(6):757–65 (Eng. Abstr.) **(Jpn)**

[Mathematical modeling and optimization of plasmadiafiltration] Putintsev MD. **Biofizika** 1988 Sep-Oct; 33(5):867–71 (Eng. Abstr.) **(Rus)**

[Characteristics of the immune system of donors after instrumental plasmapheresis] Klimova KN, et al. **Gematol Transfuziol** 1988 Dec;33(12):42–5 **(Rus)**

[Effectiveness of different methods of blood separation in performing plasma- and cytapheresis] Ryzhko VV, et al. **Ter Arkh** 1988;60(5):85–8 (Eng. Abstr.) **(Rus)**

[Use of plasmapheresis in surgery] Gromov MI. **Vestn Khir** 1989 Jan;142(1):134–8 (31 ref.) **(Rus)**

[Experience using exchange plasmapheresis in the treatment of suppurative and septic complications] Perveev VI, et al. **Vestn Khir** 1988 Jul;141(7):83–6 (Eng. Abstr.) **(Rus)**

STANDARDS

Adaptation of the Bio-Rad protein microassay to a 96 well microtitre procedure for monitoring plasmapheresis donors [letter] Howie RI, et al. **Transfusion** 1989 Jul-Aug; 29(6):561–2

TRENDS

[Plasmapheresis--an international determination of status] Ivanovich P, et al. **Z Gesamte Inn Med** 1988 Dec 15; 43(24):693–6 (Eng. Abstr.) **(Ger)**

VETERINARY

Total and antigen-specific serum immunoglobulin isotype concentrations in hyperimmunized cattle that have undergone plasmapheresis. McVey DS, et al. **Am J Vet Res** 1989 May;50(5):758–61

PLASMIDS

The construction of the hybrid plasmid containing genes of the central part of phage T4 baseplate and gene 29 product separation. Nieradko J, et al. **Acta Biochim Pol** 1988; 35(4):357–66

Cloning of cysE gene of Escherichia coli with a mini-Mu-lac containing a plasmid replicon. Sirko AE, et al. **Acta Biochim Pol** 1988;35(1):51–5

Structure of pAL5000, a plasmid from M. fortuitum and its utilization in transformation of mycobacteria. Gicquel-Sanzey B, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:208–11

Transformation of BCG with plasmid DNA. Lugosi L, et al. **Acta Leprol (Geneve)** 1989;7 Suppl 1:256–7

Determination of phage type, colicin type and plasmid profile in Shigella sonnei. Tóth I, et al. **Acta Microbiol Hung** 1988; 35(2):115–20

Extrachromosomal control of antibiotic resistance, DNase activity and enterotoxin production in Streptococcus

faecalis. Soni SK, et al. **Acta Microbiol Pol** 1988; 37(3-4):345-8

Study of plasmid screening amongst pathogenic bacteria isolated in Nigeria. Olukoya DK, et al. **Afr J Med Med Sci** 1988 Sep;17(3):163-6

Isolation, characterization, and molecular cloning of cryptic plasmids isolated from Edwardsiella ictaluri. Newton JC, et al. **Am J Vet Res** 1988 Nov;49(11):1856-60

The introduction of biologically active foreign genes into human respiratory epithelial cells using electroporation. Iannuzzi MC, et al. **Am Rev Respir Dis** 1988 Oct; 138(4):965-8

A rapid procedure for cell colony hybridization using DNA probes. Avraham H, et al. **Anal Biochem** 1989 Jun; 179(2):217-21

Large-scale purification of plasmid insert DNA sequences using low-percentage agarose exclusion chromatography. Hansen JC, et al. **Anal Biochem** 1989 May 15;179(1):167-70

An efficiently mutagenizable recombinant plasmid for in vitro transcription of the Escherichia coli 16 S RNA gene. Krzyzosiak WJ, et al. **Anal Biochem** 1988 Dec; 175(2):373-85

Purification of plasmid DNA by fast protein liquid chromatography on superose 6 preparative grade. McClung JK, et al. **Anal Biochem** 1989 Mar;177(2):378-82

A new method of plasmid DNA preparation by sucrose-mediated detergent lysis from Escherichia coli (gram-negative) and Staphylococcus aureus (gram-positive). Saha B, et al. **Anal Biochem** 1989 Feb 1; 176(2):344-9

A simple and efficient method for the oligonucleotide-directed mutagenesis using plasmid DNA template and phosphorothioate-modified nucleotide. Sugimoto M, et al. **Anal Biochem** 1989 Jun;179(2):309-11

The pR plasmid: a tool for studying DNA repair and mutagenesis in prokaryotic and eukaryotic cells. Battaglia PA, et al. **Ann Ist Super Sanita** 1989;25(1):145-8

Repair of imidazole ring-opened purines in DNA: overproduction of the formamidopyrimidine-DNA glycosylase of Escherichia coli using plasmids containing the fpg+ gene. O'Connor TR, et al. **Ann Ist Super Sanita** 1989;25(1):27-31

The genes encoding major surface proteins of Borrelia burgdorferi are located on a plasmid. Barbour AG, et al. **Ann N Y Acad Sci** 1988;539:144-53

Genetic determinants of Shigella pathogenicity. Maurelli AT, et al. **Annu Rev Microbiol** 1988;42:127-50 (106 ref.)

Isolation, characterization, and cloning of a plasmid-borne gene encoding a phosphotransferase that confers high-level amikacin resistance in enteric bacilli. Gaynes R, et al. **Antimicrob Agents Chemother** 1988 Sep;32(9):1379-84

Transferable vancomycin and teicoplanin resistance in Enterococcus faecium. Leclercq R, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):10-5

Small plasmids are involved in amoxicillin-clavulanate resistance in Escherichia coli [letter] Martinez JL, et al. **Antimicrob Agents Chemother** 1989 Apr;33(4):595

RSF1010 and a conjugative plasmid contain sulII, one of two known genes for plasmid-borne sulfonamide resistance dihydropteroate synthase. Rådström P, et al. **Antimicrob Agents Chemother** 1988 Nov;32(11):1684-92

Transfer of beta-lactamase plasmids from Neisseria gonorrhoeae to Neisseria meningitidis and commensal Neisseria species by the 25.2-megadalton conjugative plasmid. Roberts MC, et al. **Antimicrob Agents Chemother** 1988 Sep;32(9):1430-2

Characterization of a streptomycin-sulfonamide resistance plasmid from Actinobacillus pleuropneumoniae. Willson PJ, et al. **Antimicrob Agents Chemother** 1989 Feb; 33(2):235-8

Low- and intermediate-copy-number cloning vectors based on the Pseudomonas plasmid pVS1. Itoh Y, et al. **Antonie Van Leeuwenhoek** 1988;54(6):567-73

Studies on Saccharomyces cerevisiae carrying the plasmid pCYG4 related with ammonia assimilation. Batch experiments. Lima Filho JL, et al. **Appl Biochem Biotechnol** 1988 Oct;19(1):27-32

Novel method for studying plasmid transfer in undisturbed river epilithon. Bale MJ, et al. **Appl Environ Microbiol** 1988 Nov;54(11):2756-8

Model suicide vector for containment of genetically engineered microorganisms. Bej AK, et al. **Appl Environ Microbiol** 1988 Oct;54(10):2472-7

The TOL (pWW0) catabolic plasmid. Burlage RS, et al. **Appl Environ Microbiol** 1989 Jun;55(6):1323-8 (54 ref.)

Plasmid expression and maintenance during long-term starvation-survival of bacteria in well water. Caldwell BA, et al. **Appl Environ Microbiol** 1989 Aug;55(8):1860-4

Identification of Pseudomonas alcaligenes chromosomal DNA in the plasmid DNA of the chlorobenzene-degrading recombinant Pseudomonas putida strain CB1-9. Carney BF, et al. **Appl Environ Microbiol** 1989 Apr;55(4):1037-9

Insertion and amplification of foreign genes in the Lactococcus lactis subsp. lactis chromosome. Chopin MC, et al. **Appl Environ Microbiol** 1989 Jul;55(7):1769-74

In situ survival of plasmid-bearing and plasmidless Pseudomonas aeruginosa in pristine tropical waters. Cruz-Cruz NE, et al. **Appl Environ Microbiol** 1988 Oct; 54(10):2574-7

Plasmid transformation by electroporation of Leuconostoc paramesenteroides and its use in molecular cloning. David S, et al. **Appl Environ Microbiol** 1989 Jun;55(6):1483-9

BamHI restriction endonuclease analysis of Yersinia ruckeri plasmids and their relatedness to the genus Yersinia 42- to 47-megadalton plasmid. Guilvout I, et al. **Appl Environ Microbiol** 1988 Oct;54(10):2594-7

Dissimilar plasmids isolated from Pseudomonas diminuta MG and a Flavobacterium sp. (ATCC 27551) contain identical opd genes. Harper LL, et al. **Appl Environ Microbiol** 1988 Oct;54(10):2586-9

Localization, cloning, and expression of genetic determinants for bacteriophage resistance (Hsp) from the conjugative plasmid pTR2030. Hill C, et al. **Appl Environ Microbiol** 1989 Jul;55(7):1684-9

Characteristics and restriction analysis of the 4-chlorobiphenyl catabolic plasmid, pSS50. Hooper SW, et al. **Appl Environ Microbiol** 1989 May;55(5):1286-8

Construction of an Escherichia coli-Clostridium perfringens shuttle vector and plasmid transformation of Clostridium perfringens. Kim AY, et al. **Appl Environ Microbiol** 1989 Feb;55(2):360-5

Campbell-like integration of heterologous plasmid DNA into the chromosome of Lactococcus lactis subsp. lactis. Leenhouts KJ, et al. **Appl Environ Microbiol** 1989 Feb; 55(2):394-400

Conjugal transfer of R68.45 and FP5 between Pseudomonas aeruginosa strains in a freshwater environment. O'Morchoe SB, et al. **Appl Environ Microbiol** 1988 Aug;54(8):1923-9

Influence of soil variables on in situ plasmid transfer from Escherichia coli to Rhizobium fredii. Richaume A, et al. **Appl Environ Microbiol** 1989 Jul;55(7):1730-4

Complete nucleotide sequence and characterization of a cryptic plasmid from Lactobacillus helveticus subsp. jugurti. Takiguchi R, et al. **Appl Environ Microbiol** 1989 Jun;55(6):1653-5

Cloning of two bacteriocin genes from a lactococcal bacteriocin plasmid. van Belkum MJ, et al. **Appl Environ Microbiol** 1989 May;55(5):1187-91

Relationships between plasmids and phenotypes of presumptive strains of Vibrio anguillarum isolated from different fish species. Wiik R, et al. **Appl Environ Microbiol** 1989 Apr;55(4):826-31

Differential regulation of lambda pL and pR promoters by a cI repressor in a broad-host-range thermoregulated plasmid marker system. Winstanley C, et al. **Appl Environ Microbiol** 1989 Apr;55(4):771-7

Construction of a bifunctional genetically labelled plasmid for Bacillus thuringiensis subsp. israelensis. Miteva VI, et al. **Arch Microbiol** 1988;150(5):496-8

A new bacteriocinogenic activity: megacin BII encoded by plasmid pSE 203 in strains of Bacillus megaterium. Ståhl S. **Arch Microbiol** 1989;151(2):159-65

Catabolic instability, plasmid gene deletion and recombination in Alcaligenes sp. BR60. Wyndham RC, et al. **Arch Microbiol** 1988;150(3):237-43

New BK virus episomal vector for complementary DNA expression in human cells. Grossi MP, et al. **Arch Virol** 1988;102(3-4):275-83

Identification of a 2-Md plasmid from Shigella flexneri associated with reactive arthritis. Stieglitz H, et al. **Arthritis Rheum** 1989 Aug;32(8):937-46

Antimicrobial drug resistance and the occurrence of plasmids in Haemophilus paragallinarum. Blackall PJ. **Avian Dis** 1988 Oct-Dec;32(4):742-7

Stable inheritance of bacterial plasmids: practical considerations in the release of organisms into the environment. Cohen SN, et al. **Basic Life Sci** 1988; 45:97-104 (15 ref.)

Plasmid-encoded lysostaphin endopeptidase resistance of Staphylococcus simulans biovar staphylolyticus. Heath HE, et al. **Biochem Biophys Res Commun** 1989 May 15; 160(3):1106-9

A dual-circular plasmid structure dependent on DNA replication generated in monkey COS7 cells and cell extracts. Jenab S, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):53-9

Probable detection of kil peptide derived from colicin E1 plasmid in the envelope fraction of Escherichia coli HB101 carrying pEAP31. Aono R. **Biochem J** 1988 Oct 1; 255(1):365-8

Carcinogen-nucleic acid interactions: equilibrium binding studies of aflatoxin B1 with the oligodeoxynucleotide d(ATGCAT)2 and with plasmid pBR322 support intercalative association with the B-DNA helix. Gopalakrishnan S, et al. **Biochemistry** 1989 Jan 24; 28(2):726-34

Deoxyribonuclease I sensitivity of the T-DNA ipt gene is associated with gene expression. Reid RA, et al. **Biochemistry** 1988 Jul 26;27(15):5748-54

Linking number anomalies in DNA under conditions close to condensation. Ringquist S, et al. **Biochemistry** 1989 Feb 7;28(3):1076-85

DNA repair in cells sensitive and resistant to cis-diamminedichloroplatinum(II): host cell reactivation of damaged plasmid DNA. Sheibani N, et al. **Biochemistry** 1989 Apr 4;28(7):3120-4

Effect of pulsed and reversing electric fields on the orientation of linear and supercoiled DNA molecules in agarose gels. Stellwagen NC. **Biochemistry** 1988 Aug 23; 27(17):6417-24

In vitro replication and mutagenesis of ColE1 plasmid DNA in extracts from repair deficient Escherichia coli mutants. Casaregola S, et al. **Biochim Biophys Acta** 1989 Jun 1; 1008(1):45-51

Mechanism of plasmid pT181 DNA replication. Khan SA, et al. **Biochim Biophys Acta** 1988 Dec 20;951(2-3):375-81

The origin of conjugative IncP plasmid transfer: interaction with plasmid-encoded products and the nucleotide sequence at the relaxation site. Pansegrau W, et al. **Biochim Biophys Acta** 1988 Dec 20;951(2-3):365-74

The expression of functional ricin B-chain in Saccharomyces cerevisiae. Richardson PT, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):385-94

The pnd gene in E. coli plasmid R16: nucleotide sequence and gene expression leading to cell Mg2+ release and stable RNA degradation. Sakikawa T, et al. **Biochim Biophys Acta** 1989 Mar 1;1007(2):158-66

Analysis of nonpolar insertion mutations in the trfA gene of IncP plasmid RK2 which affect its broad-host-range property. Shingler V, et al. **Biochim Biophys Acta** 1989 Apr 12;1007(3):301-8

Two linear plasmid-like DNA elements simultaneously maintained in Pleurotus ostreatus. Yui Y, et al. **Biochim Biophys Acta** 1988 Nov 10;951(1):53-60

Identification of cell wall antigens associated with a large conjugative plasmid encoding phage resistance and lactose fermentation ability in lactic streptococci. Dunny GM, et al. **Biochimie** 1988 Mar;70(3):443-50

Plasmid-linked maltose utilization in Lactobacillus ssp. Liu ML, et al. **Biochimie** 1988 Mar;70(3):351-5

High fidelity of guanine translation in a plasmid-directed in vitro system. Negre D, et al. **Biochimie** 1988 Dec; 70(12):1715-8

Plasmid-encoded functions of ropy lactic acid streptococcal strains from Scandinavian fermented milk. Neve H, et al. **Biochimie** 1988 Mar;70(3):437-42

Transposition of the Streptococcus lactis ssp. lactis Z270 lactose plasmid to pVA797: demonstration of an insertion sequence and its relationship to an inverted repeat sequence isolated by self-annealing. Novel M, et al. **Biochimie** 1988 Apr;70(4):543-51

Cloning and expression of the phospho-beta-galactosidase genes on the lactose plasmid and the chromosome of Lactobacillus casei C257 in Escherichia coli. Shimizu-Kadota M. **Biochimie** 1988 Apr;70(4):523-9

Construction of a vector plasmid family and its use for molecular cloning in Streptococcus lactis. Simon D, et al. **Biochimie** 1988 Apr;70(4):559-66

Loss of phage resistance encoded by plasmid pSK112 in chemostat cultures of Lactococcus lactis ssp. cremoris SK110. Sterkenburg A, et al. **Biochimie** 1988 Mar; 70(3):451-6

Transfer of a human preproinsulin gene containing plasmid into non-pancreatic mammalian cells. Walther R, et al. **Biomed Biochim Acta** 1988;47(4-5):343-8

The internal dynamics of gene 32 protein-DNA complexes studied by quasi-elastic light scattering. Kuil ME, et al. **Biophys Chem** 1988 Dec;32(2-3):211-27

Specific interactions between DNA left-handed supercoils and actinomycin D. Leoni L, et al. **Biophys Chem** 1989 Mar;33(1):11-7

Dielectric behavior of aqueous solutions of plasmid DNA at microwave frequencies [published erratum appears in Biophys J 1989 Jun;55(6):1277-8] Gabriel C, et al. **Biophys J** 1989 Jan;55(1):29-34

Raman spectroscopy of supercoiled and nicked ColE1 plasmid. Christens-Barry WA, et al. **Biopolymers** 1989 Sep; 28(9):1515-26

Helix-coil transition of plasmid DNA by adiabatic differential scanning microcalorimetry. Maeda Y, et al. **Biopolymers** 1988 Dec;27(12):1917-25

A precaution when preparing very large plasmids by alkaline lysis procedure. Thomas NR, et al. **Biotechnol Appl Biochem** 1988 Oct;10(5):402-7

Plasmid vectors for the analysis of regulatory sequences in yeast. Altherr MR, et al. **Biotechnology** 1988;10:405-17 (58 ref.)

The plasmid, pBR322. Balbas P, et al. **Biotechnology** 1988; 10:5-41 (180 ref.)

Phage-plasmid hybrid vectors. Cesareni G. **Biotechnology** 1988;10:103-11 (26 ref.)

Specialized plasmid vectors for cloning cDNA. Denhardt DT, et al. **Biotechnology** 1988;10:237-51 (48 ref.)

Improved suppressor tRNA cloning vectors and plasmid-phage recombination. Huang HV, et al. **Biotechnology** 1988;10:269-83 (45 ref.)

Promoter probe plasmids for gram-positive bacteria. Lovett PS, et al. **Biotechnology** 1988;10:363-84 (61 ref.)

Chimeric single-stranded DNA phage-plasmid cloning vectors. Mead DA, et al. **Biotechnology** 1988;10:85-102 (53 ref.)

Broad-host-range plasmid cloning vectors for gram-negative bacteria. Schmidhauser TJ, et al. **Biotechnology** 1988; 10:287-332 (191 ref.)

Plasmid positive selection vectors. Stephenson FH, et al. **Biotechnology** 1988;10:131-52 (67 ref.)

Mobilization and transfer of Azospirillum lipoferum plasmid by the Tn5-Mob transposon into a plasmid-free Agrobacterium tumefaciens strain. Bally R, et al. **Can J Microbiol** 1988 Dec;34(12):1354-7

Gene duplication in haloaromatic degradative plasmids pJP4 and pJP2. Ghosal D, et al. **Can J Microbiol** 1988 Jun; 34(6):709-15

Characterization of the small endogenous plasmid of Halobacterium strain SB3 and its use in transformation of H. halobium. Hackett NR, et al. **Can J Microbiol** 1989 Jan;

35(1):86–91
Unusual nucleotide sequence heterogeneity of small multicopy pHSB plasmid from Halobacterium strain SB3, an archaebacterium. Kagramanova VK, et al. **Can J Microbiol** 1989 Jan;35(1):160–3
Aspects of plasmid F maintenance in Escherichia coli. Kline BC. **Can J Microbiol** 1988 Apr;34(4):526–35 (75 ref.)
Genome structure of Halobacterium halobium: plasmid dynamics in gas vacuole deficient mutants. Pfeifer F, et al. **Can J Microbiol** 1989 Jan;35(1):96–100
Isolation and partial characterization of plasmids found in three Halobacterium volcanii isolates. Rosenshine I, et al. **Can J Microbiol** 1989 Jan;35(1):92–5
Survival of and plasmid stability in Pseudomonas and Klebsiella spp. introduced into agricultural drainage water. Trevors JT, et al. **Can J Microbiol** 1989 Jul;35(7):675–80
Plasmid transfer and plasmid-mediated genetic exchange in Brucella abortus. Rigby CE, et al. **Can J Vet Res** 1989 Jul;53(3):326–30
Supercoiling of intracellular DNA can occur in eukaryotic cells. Glaever GN, et al. **Cell** 1988 Dec 2;55(5):849–56
Chloroplast gene expression: how plants turn their plastids on. Gruissem W. **Cell** 1989 Jan 27;56(2):161–70 (128 ref.)
A consensus sequence of three DNA replication terminus sites on the E. coli chromosome is highly homologous to the terR sites of the R6K plasmid. Hidaka M, et al. **Cell** 1988 Nov 4;55(3):467–75
A novel reverse transcriptase activity associated with mitochondrial plasmids of Neurospora [published erratum appears in Cell 1989 Jan 13;56(1):following 139] Kuiper MT, et al. **Cell** 1988 Nov 18;55(4):693–704
ColE1 replication control circuitry: sense from antisense. Polisky B. **Cell** 1988 Dec 23;55(6):929–32 (0 ref.)
Transfer and function of T-DNA genes from agrobacterium Ti and Ri plasmids in plants. Zambryski P, et al. **Cell** 1989 Jan 27;56(2):193–201 (107 ref.)
Antimicrobial sensitivity and plasmid-mediated tetracycline resistance in Campylobacter jejuni isolated in Bangladesh. Akhtar SQ. **Chemotherapy** 1988;34(4):326–31
Plasmid DNA survey of clinically isolated Shigella strains in Shanghai area. Arai T, et al. **Chin Med J [Engl]** 1988 May;101(5):346–52
Serogrouping, plasmid and drug resistance of Pseudomonas aeruginosa in Taiwan. Ding MJ, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1988 Aug;21(3):165–78
Antibiogram, biotyping and plasmid profile analysis of Acinetobacter calcoaceticus var. anitratus. Teng LJ, et al. **Chung Hua Min Kuo Wei Sheng Wu Chi Mien I Hsueh Tsa Chih** 1988 Nov;21(4):236–42
Use of plasmid profiles in epidemiologic surveillance of disease outbreaks and in tracing the transmission of antibiotic resistance. Mayer LW. **Clin Microbiol Rev** 1988 Apr;1(2):228–43 (210 ref.)
Transfer of plasmid Hly in vivo in pigs intestine. Klimuszko D, et al. **Comp Immunol Microbiol Infect Dis** 1989; 12(1–2):29–38
A Macintosh program for drawing circular plasmid maps. Liu JD, et al. **Comput Appl Biosci** 1989 Jul;5(3):237–8
Multicopy plasmids containing the gene for the transcriptional activator LAC9 are not tolerated by K. lactis cells. Breunig KD. **Curr Genet** 1989 Feb;15(2):143–8
High frequency FLP-independent homologous DNA recombination of 2 mu plasmid in the yeast Saccharomyces cerevisiae. Bruschi CV, et al. **Curr Genet** 1988 Sep; 14(3):191–9
Introduction of nonselectible 2 mu plasmid into [cir(o)] cells of the yeast S. cerevisiae by DNA transformation and in vivo site-specific resolution. Bruschi CV, et al. **Curr Genet** 1989 Feb;15(2):83–90
Properties and nucleotide sequence of a mitochondrial plasmid from sunflower. Crouzillat D, et al. **Curr Genet** 1989 Apr;15(4):283–9
Meiotic segregation of circular plasmid-minichromosomes from intact chromosomes in Saccharomyces cerevisiae. Kaback DB. **Curr Genet** 1989 Jun;15(6):385–92
Heterologous gene expression of the glyphosate resistance marker and its application in yeast transformation. Kunze G, et al. **Curr Genet** 1989 Feb;15(2):91–8
Nucleotide sequence and molecular characterization of a maize mitochondrial plasmid-like DNA. Smith AG, et al. **Curr Genet** 1987;12(8):617–23
Origin and direction of replication in mitochondrial plasmid DNAs of broad bean, Vicia faba. Wahleithner JA, et al. **Curr Genet** 1988 Aug;14(2):163–70
Nuclear plasmids in the Dictyostelium slime molds. Hughes JE, et al. **Dev Genet** 1988;9(4–5):495–504
Electroporation of mammalian cells with a firefly luciferase expression plasmid: kinetics of transient expression differ markedly among cell types. Maxwell IH, et al. **DNA** 1988 Oct;7(8):557–62
Generation of multiple independent substitution mutants by M13 in vitro mutagenesis using a single mutagenic oligonucleotide. Reyes AA, et al. **DNA** 1988 Oct; 7(8):579–84
The kinetics of SHV-2 plasmid-mediated beta-lactamase compared to those of the parent enzyme from which it is derived. Labia R, et al. **Drugs Exp Clin Res** 1988; 14(5):335–9
The integrated conjugative plasmid pSAM2 of Streptomyces ambofaciens is related to temperate bacteriophages. Boccard F, et al. **EMBO J** 1989 Mar;8(3):973–80
Conditional high copy number ColE1 mutants: resistance to RNA1 inhibition in vivo and in vitro. Fitzwater T, et al. **EMBO J** 1988 Oct;7(10):3289–97
Control of replication of plasmid R1: kinetics of in vitro interaction between the antisense RNA, CopA, and its target, CopT. Persson C, et al. **EMBO J** 1988 Oct; 7(10):3279–88
Joining of linear plasmid DNA is reduced and error-prone in Bloom's syndrome cells. Rünger TM, et al. **EMBO J** 1989 May;8(5):1419–25
The arginine repressor is essential for plasmid-stabilizing site-specific recombination at the ColE1 cer locus. Stirling CJ, et al. **EMBO J** 1988 Dec 20;7(13):4389–95
Derivatives of ColE1 cer show altered topological specificity in site-specific recombination. Summers DK. **EMBO J** 1989 Jan;8(1):309–15
The partition locus of plasmid pSC101 is a specific binding site for DNA gyrase. Wahle E, et al. **EMBO J** 1988 Jun; 7(6):1889–95
Diversity of plasmids in Staphylococcus saprophyticus isolated from urinary tract infections in women. Cristino JA, et al. **Epidemiol Infect** 1989 Jun;102(3):413–9
Electropherotyping of plasmid DNA of different serotypes of Shigella flexneri isolated in Bangladesh. Haider K, et al. **Epidemiol Infect** 1989 Jun;102(3):421–8
Subdivision of Salmonella enteritidis phage types by plasmid profile typing. Threlfall EJ, et al. **Epidemiol Infect** 1989 Jun;102(3):459–65
Evaluation of plasmid-encoded beta-lactamase resistance in Escherichia coli blood culture isolates. Huovinen S, et al. **Eur J Clin Microbiol Infect Dis** 1988 Oct;7(5):651–5
Isolation and molecular characterization of an ROB-1 beta-lactamase plasmid in a Haemophilus influenzae strain in France [letter] Livrelli V, et al. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):583–5
Plasmid content, serotypes, and antimicrobial susceptibility of Neisseria gonorrhoeae strains isolated in Munich in 1987–88. Abeck D, et al. **Eur J Epidemiol** 1989 Jun; 5(2):170–2
Replication and maintenance of the Kluyveromyces linear pGKL plasmids. Gunge N, et al. **Eur J Epidemiol** 1988 Dec;4(4):409–14 (28 ref.)
Regulation of yeast fructose-1,6-bisphosphatase in strains containing multicopy plasmids coding for this enzyme. de la Guerra R, et al. **FEBS Lett** 1988 Dec 19;242(1):149–52
Similarities between the regulatory sequences of the unrelated tetracycline genes of pBR322 and Tn10. Hung A, et al. **FEBS Lett** 1989 Mar 13;245(1–2):57–60
Convenient plasmid vectors for construction of chimeric mouse/human antibodies. Kameyama K, et al. **FEBS Lett** 1989 Feb 27;244(2):301–6
Production of plasmids giving high expression of recombinant DNA-derived ovine growth hormone variants in Escherichia coli. Wallis OC, et al. **FEBS Lett** 1989 Jul 3;250(2):371–6
Virulence of Salmonella enteritidis phage type 4 is related to the possession of a 38 MDa plasmid. Chart H, et al. **FEMS Microbiol Lett** 1989 Apr;49(2–3):299–303
The nucleotide sequence of a small cryptic plasmid found in Staphylococcus aureus and its relationship to other plasmids. Dyke KG, et al. **FEMS Microbiol Lett** 1989 Apr; 49(2–3):209–15
Occurrence of Salmonella typhimurium virulence plasmid-specific sequences in different serovars of Salmonella. Korpela K, et al. **FEMS Microbiol Lett** 1989 Mar;49(1):49–54
Conjugal transfer of plasmid pIP501 from Lactococcus lactis to Lactobacillus delbrückii subsp. bulgaricus and Lactobacillus helveticus. Langella P, et al. **FEMS Microbiol Lett** 1989 Jul 15;51(1):149–52
Cytotoxic effect of multinucleation in HeLa cell cultures associated with the presence of Vir plasmid in Escherichia coli strains. Oswald E, et al. **FEMS Microbiol Lett** 1989 Mar;49(1):95–9
pEG plasmid involved in styrene degradation: molecular dimorphism and integration of a segment into the chromosome. Ruzzi M, et al. **FEMS Microbiol Lett** 1989 Jun;50(3):337–43
A new simple method of curing plasmids in lactic streptococci (Streptococcus cremoris; Streptococcus lactis, plasmids). Sinha RP. **FEMS Microbiol Lett** 1989 Feb; 48(3):349–52
Construction of shuttle vectors useful for transforming Clostridium acetobutylicum. Truffaut N, et al. **FEMS Microbiol Lett** 1989 Mar;49(1):15–20
A small nonconjugative plasmid encoded for streptomycin-resistant character in Shigella dysenteriae. Datta S, et al. **Folia Microbiol (Praha)** 1988;33(6):525–8
Plasmid pIMI38—the pBR322 derivative with increased stability in E. coli cells. Navrátil O, et al. **Folia Microbiol (Praha)** 1988;33(4):241–6
Osmium tetroxide probing of local DNA structure in linear and supercoiled plasmids containing curvature-inducing sequences. Paleček E, et al. **Gen Physiol Biophys** 1988 Aug; 7(4):379–93
P1 plasmid replication requires Escherichia coli Dam-methylated DNA. Abeles AL, et al. **Gene** 1988 Dec 25;74(1):185–6
A vector for sequencing long (40-kb) DNA fragments. Ahmed A. **Gene** 1989 Feb 20;75(2):315–21
A family of high-copy-number plasmid vectors with single end-label sites for rapid nucleotide sequencing. Arnold W, et al. **Gene** 1988 Oct 15;70(1):171–9
Mutational analysis of an ssi region carried by plasmid pACYC184. Bahk JD, et al. **Gene** 1989 Feb 20; 75(2):297–304
A rapid and versatile site-directed method of mutagenesis for double-stranded plasmid DNA. Bellini AV, et al. **Gene** 1988 Sep 30;69(2):325–30
Jekyll, a family of phage-plasmid shuttle vectors. Burmeister M, et al. **Gene** 1988 Dec 15;73(1):245–50
Versatile plasmid vectors for use in studies of eukaryotic gene expression. Cab-Barrera EL, et al. **Gene** 1988 Oct 30; 70(2):411–3
Versatility of a vector for expressing foreign polypeptides at the surface of gram-negative bacteria. Charbit A, et al. **Gene** 1988 Oct 15;70(1):181–9
A general method for the construction of recombinant vaccinia viruses expressing multiple foreign genes. Coupar BE, et al. **Gene** 1988 Aug 15;68(1):1–10
Competitive expression of two heterologous genes inserted into one plasmid in Saccharomyces cerevisiae. Egel-Mitani M, et al. **Gene** 1988 Dec 15;73(1):113–20
A self-inducing runaway-replication plasmid expression system utilizing the Rop protein. Giza PE, et al. **Gene** 1989 May 15;78(1):73–84
Retroregulation of an int-lacZ gene fusion in a plasmid system. Guarneros G, et al. **Gene** 1988 Dec 10; 72(1–2):129–30
Nucleotide sequence of the F plasmid transfer gene, traH: identification of a new gene and a promoter within the transfer operon. Ham LM, et al. **Gene** 1989 Jan 30; 75(1):157–65
A simple procedure for transferring genes cloned in Escherichia coli vectors into other gram-negative bacteria: phenotypic analysis and mapping of TOL plasmid gene xylK. Harayama S, et al. **Gene** 1989 May 15;78(1):19–27
Two single-strand DNA initiation signals located in the oriV region of plasmid RSF1010. Honda Y, et al. **Gene** 1988 Sep 7;68(2):221–8
Direct selection for curing and deletion of Rhizobium plasmids using transposons carrying the Bacillus subtilis sacB gene. Hynes MF, et al. **Gene** 1989 May 15; 78(1):111–20
Nucleotide sequence of the regulatory gene xylR of the TOL plasmid from Pseudomonas putida. Inouye S, et al. **Gene** 1988 Jun 30;66(2):301–6
Promoters and transcription of the plasmid-mediated citrate-utilization system in Escherichia coli. Ishiguro N, et al. **Gene** 1988 Sep 7;68(2):181–92
Efficient synthesis of influenza virus hemagglutinin in mammalian cells with an extrachromosomal Epstein-Barr virus vector. Jalanko A, et al. **Gene** 1989 May 30; 78(2):287–96
The nucleotide sequence of a plasmid determinant for resistance to tellurium anions. Jobling MG, et al. **Gene** 1988 Jun 30;66(2):245–58
Improved broad-host-range plasmids for DNA cloning in gram-negative bacteria. Keen NT, et al. **Gene** 1988 Oct 15;70(1):191–7
Construction of a recombinant expression plasmid encoding a staphylococcal protein A-ricin A fusion protein. Kim JH, et al. **Gene** 1988 Sep 7;68(2):315–21
Stability of the pBR322 plasmid as affected by the promoter region of the tetracycline-resistance gene. Kolot MN, et al. **Gene** 1989 Feb 20;75(2):335–9
Broad-host-range plasmid and M13 bacteriophage-derived vectors for promoter analysis in Escherichia coli and Pseudomonas aeruginosa. Konyecsni WM, et al. **Gene** 1988 Dec 30;74(2):375–86
A novel vector allowing the expression of genes in a wide range of gram-negative bacteria. Kozlowski M, et al. **Gene** 1988 Oct 15;70(1):199–204
Identification and characterization of the nifH and nifJ promoter regions located on the nif-plasmid pEA3 of Enterobacter agglomerans 333. Kreutzer R, et al. **Gene** 1989 May 15;78(1):101–9
A plasmid vector for the isolation of transcriptional terminators in Bacillus subtilis. Kupsch J. **Gene** 1989 May 15;78(1):179–82
pACYC184-derived cloning vectors containing the multiple cloning site and lacZ alpha reporter gene of pUC8/9 and pUC18/19 plasmids. Martinez E, et al. **Gene** 1988 Aug 15; 68(1):159–62
Novel eukaryotic expression vectors which permit single-stranded replication in Escherichia coli and in vitro translational analysis of cloned genes. Mongkolsuk S. **Gene** 1988 Oct 30;70(2):313–9
Plasmid vector for overproduction and export of recombinant protein in Escherichia coli: efficient one-step purification of a recombinant antigen from Echinococcus multilocularis (Cestoda). Müller N, et al. **Gene** 1989 Feb 20;75(2):329–34
Translational control by antisense RNA in control of plasmid replication. Nordström K, et al. **Gene** 1988 Dec 10; 72(1–2):237–40
Highly efficient positive selection of recombinant plasmids using a novel rglB-based Escherichia coli K-12 vector system. Noyer-Weidner M, et al. **Gene** 1988 Jun 30; 66(2):269–78
A plasmid vector and quantitative techniques for the study of transcription termination in Escherichia coli using bacterial luciferase. Peabody DS, et al. **Gene** 1989 Feb 20; 75(2):289–96

Expression vector with two-step control by the cI-pR-Q-pR-qut-tR module of coliphage lambda. Petrenko LA, et al. **Gene** 1989 May 15;78(1):85-91

Construction of a temperature-sensitive mutation for the direct identification of plasmids encoding DNA methyltransferases. Piekarowicz A, et al. **Gene** 1988 Dec 25;74(1):233-5

A new cloning system for Bacillus subtilis comprising elements of phage, plasmid and transposon vectors. Poth H, et al. **Gene** 1988 Dec 15;73(1):215-26

Complete nucleotide sequence of pAL5000, a plasmid from Mycobacterium fortuitum. Rauzier J, et al. **Gene** 1988 Nov 30;71(2):315-21

New plasmid vectors for high level synthesis of eukaryotic fusion proteins in Escherichia coli. Rimm DL, et al. **Gene** 1989 Feb 20;75(2):323-7

Rapid synthesis and cloning of complementary DNA from any RNA molecule into plasmid and phage M13 vectors. Rutledge RG, et al. **Gene** 1988 Aug 15;68(1):151-8

Use of transmissible plasmids as cloning vectors in Caulobacter crescentus. Schoenlein PV, et al. **Gene** 1988 Oct 30;70(2):321-9

Multiple amylase genes in two strains of Bacillus stearothermophilus. Sen S, et al. **Gene** 1989 Mar 15; 76(1):137-44

Sequence-specific chemical modification of double-stranded DNA with alkylating oligodeoxyribonucleotide derivatives. Vlassov VV, et al. **Gene** 1988 Dec 10; 72(1-2):313-22

Integration of multiple copies of a foreign sequence into the Ti plasmid of Agrobacterium tumefaciens. Ward ER, et al. **Gene** 1989 Feb 20;75(2):305-14

A new revision of the sequence of plasmid pBR322. Watson N. **Gene** 1988 Oct 30;70(2):399-403

Integration of efficient promoters of the E. coli system into plasmid vectors. Bujard H, et al. **Gene Amplif Anal** 1983; 3:65-87

Expression plasmid for B. subtilis. Lovett PS, et al. **Gene Amplif Anal** 1983;3:117-34

Expression of the yeast CYC genes and CYC1/GalK fusion genes on yeast plasmids. Zitomer RS, et al. **Gene Amplif Anal** 1983;3:175-200

Cloning of the BamHI methyl transferase gene from Bacillus amyloliquefaciens. Connaughton JF, et al. **Gene Anal Tech** 1988 Nov-Dec;5(6):116-24

Preparation of large numbers of plasmid DNA samples in microtiter plates by the alkaline lysis method. Gibson TJ, et al. **Gene Anal Tech** 1987 May-Jun;4(3):41-4

In vivo plasmid construction by integrative recombination within a 156 bp sequence homology. Park SF, et al. **Gene Anal Tech** 1988 Jan-Feb;5(1):1-4

Quick screening of plasmid deletion clones carrying inserts of desired sizes for DNA sequencing. Xie WQ, et al. **Gene Anal Tech** 1989 Jan-Feb;6(1):17-20

Recombination and replication of plasmid-like derivatives of a short section of the mitochondrial chromosome of Neurospora crassa. Gross SR, et al. **Genetics** 1989 Apr; 121(4):693-701

Genetic and physical analysis of plasmid recombination in recB recC sbcB and recB recC sbcA Escherichia coli K-12 mutants. Luisi-DeLuca C, et al. **Genetics** 1989 Jun; 122(2):269-78

Extrachromosomal elements cause a reduced division potential in nib 1 strains of Saccharomyces cerevisiae. Sweeney R, et al. **Genetics** 1989 Aug;122(4):749-57

Construction of three plasmids, each containing two or three different human globin gene fragments. Liu JZ, et al. **Hemoglobin** 1988;12(5-6):755-61

Plasmid mediated drug resistance in Shigella flexneri serotypes 1-6 during 1974-85. Gebre-Yohannes A, et al. **Indian J Med Res** 1988 Dec;88:480-7

Characterization of a wide host range plasmid pANV-6 from Citrobacter diversus. Misra AK, et al. **Indian J Med Res** 1989 Jan;89:28-35

Evaluation of the variety of plasmid profiles in S epidermidis isolates from hospital patients and staff. Valentine CR, et al. **Infect Control Hosp Epidemiol** 1988 Oct;9(10):441-6

Functional homology of virulence plasmids in Salmonella gallinarum, S. pullorum, and S. typhimurium. Barrow PA, et al. **Infect Immun** 1989 Oct;57(10):3136-41

Interaction of drug resistance plasmids and bacteriophages with diarrheagenic strains of Escherichia coli. Bradley DE. **Infect Immun** 1989 Aug;57(8):2331-8

Expression of type 1 fimbriae and mannose-sensitive hemagglutinin by recombinant plasmids. Gerlach GF, et al. **Infect Immun** 1989 Mar;57(3):764-70

Cloning and transposon insertion mutagenesis of virulence genes of the 100-kilobase plasmid of Salmonella typhimurium. Gulig PA, et al. **Infect Immun** 1988 Dec; 56(12):3262-71

Determinants for thermoinducible cell binding and plasmid-encoded cellular penetration detected in the absence of the Yersinia pseudotuberculosis invasin protein. Isberg RR. **Infect Immun** 1989 Jul;57(7):1998-2005

Identification of additional virulence determinants on the pYV plasmid of Yersinia enterocolitica W227. Mulder B, et al. **Infect Immun** 1989 Aug;57(8):2534-41

Mucoid phenotype of Klebsiella pneumoniae is a plasmid-encoded virulence factor. Nassif X, et al. **Infect Immun** 1989 Feb;57(2):546-52

Plasmid-associated adherence of Shigella flexneri in a HeLa cell model. Pál T, et al. **Infect Immun** 1989 Aug; 57(8):2580-2

Plasmid-influenced changes in Mycobacterium avium catalase activity. Pethel ML, et al. **Infect Immun** 1989 Jun; 57(6):1714-8

Construction of a plasmid for expression of foreign epitopes as fusion proteins with subunit B of Escherichia coli heat-labile enterotoxin. Schödel F, et al. **Infect Immun** 1989 Apr;57(4):1347-50

Nature and distribution of mucosal lesions associated with enteropathogenic and enterohemorrhagic Escherichia coli in piglets and the role of plasmid-mediated factors. Tzipori S, et al. **Infect Immun** 1989 Apr;57(4):1142-50

Sequence analysis of rsk, a portion of the 95-kilobase plasmid of Salmonella typhimurium associated with resistance to the bactericidal activity of serum. Vandenbosch JL, et al. **Infect Immun** 1989 Mar;57(3):850-7

Evidence of coordinate regulation of virulence in Salmonella typhimurium involving the rsk element of the 95-kilobase plasmid. Vandenbosch JL, et al. **Infect Immun** 1989 Aug; 57(8):2566-8

Efficient transformation of Micromonospora purpurea with pIJ702 plasmid. Kelemen GH, et al. **J Antibiot (Tokyo)** 1989 Feb;42(2):325-8

Antibiotic susceptibilities and plasmid profiles of Haemophilus ducreyi isolates from southern Africa. Abeck D, et al. **J Antimicrob Chemother** 1988 Oct;22(4):437-44

A novel gonococcal beta-lactamase plasmid. Brett M. **J Antimicrob Chemother** 1989 Apr;23(4):653-4

Novel plasmid-mediated ceftazidimase from Klebsiella pneumoniae isolates [letter] Chanal C, et al. **J Antimicrob Chemother** 1988 Jul;22(1):81-2

Plasmid-mediated ceftazidime resistance. Drabu YJ, et al. **J Antimicrob Chemother** 1989 Feb;23(2):287-90

Plasmid-mediated ceftazidime resistance [letter] Phillips I, et al. **J Antimicrob Chemother** 1989 Jul;24(1):85

Evidence for the conjugal transfer of the broad host range plasmid pIP501 into strains of Lactobacillus helveticus. Thompson JK, et al. **J Appl Bacteriol** 1988 Oct;65(4):309-19

Plasmids in coryneform bacteria of human origin. Williams SM, et al. **J Appl Bacteriol** 1988 Jun;64(6):475-82

Protein-DNA interactions in regulation of P1 plasmid replication. Abeles AL, et al. **J Bacteriol** 1989 Jan; 171(1):43-52

Plasmid structural instability associated with pC194 replication functions. Ballester S, et al. **J Bacteriol** 1989 May;171(5):2271-7

Plasmid-mediated production of the phytotoxin coronatine in Pseudomonas syringae pv. tomato. Bender CL, et al. **J Bacteriol** 1989 Feb;171(2):807-12

Homology of mycoplasma plasmid pADB201 and staphylococcal plasmid pE194. Bergemann AD, et al. **J Bacteriol** 1989 Jan;171(1):593-5

Suppression of recA deficiency in plasmid recombination by bacteriophage lambda beta protein in RecBCD- ExoI- Escherichia coli cells. Berger I, et al. **J Bacteriol** 1989 Jun; 171(6):3523-9

Overinitiation of replication of the Escherichia coli chromosome from an integrated runaway-replication derivative of plasmid R1. Bernander R, et al. **J Bacteriol** 1989 Feb;171(2):674-83

Involvement of integration host factor (IHF) in maintenance of plasmid pSC101 in Escherichia coli: mutations in the topA gene allow pSC101 replication in the absence of IHF. Biek DP, et al. **J Bacteriol** 1989 Apr;171(4):2066-74

Involvement of integration host factor (IHF) in maintenance of plasmid pSC101 in Escherichia coli: characterization of pSC101 mutants that replicate in the absence of IHF. Biek DP, et al. **J Bacteriol** 1989 Apr;171(4):2056-65

Temporal expression of transcription and relative copy number of plasmid pSFB-1 in Scytalidium flavo-brunneum. Caprioglio DR, et al. **J Bacteriol** 1989 Sep;171(9):4876-80

In vitro construction of gshB::kan in Escherichia coli and use of gshB::kan in mapping the gshB locus. Daws T, et al. **J Bacteriol** 1989 Sep;171(9):5218-21

Localization and symbiotic function of a region on the Rhizobium leguminosarum Sym plasmid pRL1JI responsible for a secreted, flavonoid-inducible 50-kilodalton protein. de Maagd RA, et al. **J Bacteriol** 1989 Feb;171(2):1151-7

Identification of plasmid and Bacillus subtilis chromosomal recombination sites used for pE194 integration. Dempsey LA, et al. **J Bacteriol** 1989 May;171(5):2856-65

Plasmid control of the Pseudomonas aeruginosa and Pseudomonas putida phenotypes and of linalool and p-cymene oxidation. de Smet MJ, et al. **J Bacteriol** 1989 Sep;171(9):5155-61

Replication and segregational stability of Bacillus plasmid pBAA1. Devine KM, et al. **J Bacteriol** 1989 Feb; 171(2):1166-72

appR gene product activates transcription of microcin C7 plasmid genes. Díaz-Guerra L, et al. **J Bacteriol** 1989 May; 171(5):2906-8

DNA bending near the replication origin of IncFII plasmid NR1. Dong XN, et al. **J Bacteriol** 1989 Feb;171(2):703-7

Identification and sequence of the basic replication region of a broad-host-range plasmid isolated from Thiobacillus ferrooxidans. Dorrington RA, et al. **J Bacteriol** 1989 May; 171(5):2735-9

Tn5-mediated transposition of plasmid DNA after transduction to Myxococcus xanthus. Downard JS. **J Bacteriol** 1988 Oct;170(10):4939-41

Genetic determinants of a nickel-specific transport system are part of the plasmid-encoded hydrogenase gene cluster in Alcaligenes eutrophus. Eberz G, et al. **J Bacteriol** 1989 Mar;171(3):1340-5

Characterization of a purF operon mutation which affects colicin V production. Fath MJ, et al. **J Bacteriol** 1989 Jun; 171(6):3158-61

Use of gene replacement to construct Escherichia coli strains carrying mutations in two genes required for stability of multicopy plasmids. Flinn H, et al. **J Bacteriol** 1989 Apr; 171(4):2241-3

An enhancer of DNA replication. Gennaro ML, et al. **J Bacteriol** 1988 Dec;170(12):5709-17

Involvement of Tn4430 in transfer of Bacillus anthracis plasmids mediated by Bacillus thuringiensis plasmid pXO12. Green BD, et al. **J Bacteriol** 1989 Jan; 171(1):104-13

Mutagenesis of the Tra1 core region of RK2 by using Tn5: identification of plasmid-specific transfer genes. Guiney DG, et al. **J Bacteriol** 1989 Jul;171(7):4100-3

Characterization of five genes in the upper-pathway operon of TOL plasmid pWW0 from Pseudomonas putida and identification of the gene products. Harayama S, et al. **J Bacteriol** 1989 Sep;171(9):5048-55

Phenoxyacetic acid degradation by the 2,4-dichlorophenoxyacetic acid (TFD) pathway of plasmid pJP4: mapping and characterization of the TFD regulatory gene, tfdR. Harker AR, et al. **J Bacteriol** 1989 Jan; 171(1):314-20

The ssb gene of plasmid ColIb-P9. Howland CJ, et al. **J Bacteriol** 1989 May;171(5):2466-73

Direction of conjugative transfer of IncI1 plasmid ColIb-P9. Howland CJ, et al. **J Bacteriol** 1988 Oct;170(10):4958-9

Staphylococcus aureus chromosomal mutations that decrease efficiency of Rep utilization in replication of pT181 and related plasmids. Iordanescu S, et al. **J Bacteriol** 1989 Aug; 171(8):4501-3

Staphylococcus aureus chromosomal mutation plaC1 amplifies plasmid pT181 by depressing synthesis of its negative-effector countertranscripts. Iordanescu S. **J Bacteriol** 1989 Sep;171(9):4831-5

Complete nucleotide sequence of the Streptomyces lividans plasmid pIJ101 and correlation of the sequence with genetic properties. Kendall KJ, et al. **J Bacteriol** 1988 Oct; 170(10):4634-51

Degradation of phenol and m-toluate in Pseudomonas sp. strain EST1001 and its Pseudomonas putida transconjugants is determined by a multiplasmid system. Kivisaar MA, et al. **J Bacteriol** 1989 Sep;171(9):5111-6

Site-specific integration in Streptomyces ambofaciens: localization of integration functions in S. ambofaciens plasmid pSAM2. Kuhstoss S, et al. **J Bacteriol** 1989 Jan; 171(1):16-23

Recruitment of a chromosomally encoded maleylacetate reductase for degradation of 2,4-dichlorophenoxyacetic acid by plasmid pJP4. Kukor JJ, et al. **J Bacteriol** 1989 Jun;171(6):3385-90

virG, a plasmid-coded virulence gene of Shigella flexneri: identification of the virG protein and determination of the complete coding sequence. Lett MC, et al. **J Bacteriol** 1989 Jan;171(1):353-9

Genetics and sequence analysis of the pcnB locus, an Escherichia coli gene involved in plasmid copy number control. Liu JD, et al. **J Bacteriol** 1989 Mar;171(3):1254-61

Formation of supercoiling domains in plasmid pBR322. Lodge JK, et al. **J Bacteriol** 1989 Apr;171(4):2181-7

Effect of degradative plasmid CAM-OCT on responses of Pseudomonas bacteria to UV light. McBeth DL. **J Bacteriol** 1989 Feb;171(2):975-82

Escherichia coli dnaT gene function is required for pBR322 plasmid replication but not for R1 plasmid replication. Masai H, et al. **J Bacteriol** 1989 Jun;171(6):2975-80

Transduction and transformation of plasmid DNA in Streptomyces fradiae strains that express different levels of restriction. Matsushima P, et al. **J Bacteriol** 1989 Jun; 171(6):3080-4

Site-specific recombination at oriT of plasmid R1162 in the absence of conjugative transfer. Meyer R. **J Bacteriol** 1989 Feb;171(2):799-806

Deletion hot spots in chimeric Escherichia coli plasmids. Michel B, et al. **J Bacteriol** 1989 Apr;171(4):1846-53

Metal ion uptake by a plasmid-free metal-sensitive Alcaligenes eutrophus strain. Nies DH, et al. **J Bacteriol** 1989 Jul;171(7):4073-5

Transformation of a conditionally peptidoglycan-deficient mutant of Staphylococcus aureus with plasmid DNA. Nieuwlandt DT, et al. **J Bacteriol** 1989 Sep;171(9):4906-13

Termination sites T1 and T2 from the Escherichia coli chromosome inhibit DNA replication in ColE1-derived plasmids. Pelletier AJ, et al. **J Bacteriol** 1989 Mar; 171(3):1739-41

Nucleotide sequence analysis and expression of the minimum REPI replication region and incompatibility determinants of pColV-K30. Perez-Casal JF, et al. **J Bacteriol** 1989 Apr; 171(4):2195-201

Duplication of a 2,4-dichlorophenoxyacetic acid monooxygenase gene in Alcaligenes eutrophus JMP134(pJP4). Perkins EJ, et al. **J Bacteriol** 1988 Dec; 170(12):5669-72

Role of countertranscript RNA in the copy number control system of an IncB miniplasmid. Praszkier J, et al. **J Bacteriol** 1989 Sep;171(9):5056-64

Region of the streptococcal plasmid pMV158 required for conjugative mobilization. Priebe SD, et al. J Bacteriol 1989 Sep;171(9):4778–84

Mobilization of the relaxable Staphylococcus aureus plasmid pC221 by the conjugative plasmid pGO1 involves three pC221 loci. Projan SJ, et al. J Bacteriol 1989 Apr; 171(4):1841–5

Transfer of tra proteins into the recipient cell during bacterial conjugation mediated by plasmid ColIb–P9. Rees CE, et al. J Bacteriol 1989 Jun;171(6):3152–7

Exchange of chromosomal and plasmid alleles in Escherichia coli by selection for loss of a dominant antibiotic sensitivity marker. Russell CB, et al. J Bacteriol 1989 May; 171(5):2614–8

Implication of nifA in regulation of genes located on a Rhizobium meliloti cryptic plasmid that affect nodulation efficiency. Sanjuan J, et al. J Bacteriol 1989 Aug; 171(8):4154–61

Factors affecting transfer frequency of pAM beta 1 from Streptococcus faecalis to Lactobacillus plantarum. Sasaki Y, et al. J Bacteriol 1988 Dec;170(12):5939–42

Nucleotide sequence and replication characteristics of RepFIB, a basic replicon of IncF plasmids. Saul D, et al. J Bacteriol 1989 May;171(5):2697–707

Ornithine cyclodeaminase from octopine Ti plasmid Ach5: identification, DNA sequence, enzyme properties, and comparison with gene and enzyme from nopaline Ti plasmid C58. Schindler U, et al. J Bacteriol 1989 Feb; 171(2):847–54

Identification of polypeptides encoded by cloned pJM1 iron uptake DNA isolated from Vibrio anguillarum 775. Singer JT, et al. J Bacteriol 1989 May;171(5):2293–302

Plasmid DNA from the acetotrophic methanogen Methanosarcina acetivorans. Sowers KR, et al. J Bacteriol 1988 Oct;170(10):4979–82

Expression of the kil gene of the ColE1 plasmid in Escherichia coli Kilr mutants causes release of periplasmic enzymes and of colicin without cell death. Suit JL, et al. J Bacteriol 1988 Oct;170(10):4963–6

Sequence determination and characterization of the replicator region in the tumor-inducing plasmid pTiB6S3. Tabata S, et al. J Bacteriol 1989 Mar;171(3):1665–72

Identification and cloning of the conjugative transfer region of Staphylococcus aureus plasmid pGO1. Thomas WD Jr, et al. J Bacteriol 1989 Feb;171(2):684–91

Opines stimulate induction of the vir genes of the Agrobacterium tumefaciens Ti plasmid. Veluthambi K, et al. J Bacteriol 1989 Jul;171(7):3696–703

Divergence of the aerobactin iron uptake systems encoded by plasmids pColV–K30 in Escherichia coli K–12 and pSMN1 in Aerobacter aerogenes 62–1. Waters VL, et al. J Bacteriol 1988 Nov;170(11):5153–60

Participation of the lytic replicon in bacteriophage P1 plasmid maintenance. Yarmolinsky MB, et al. J Bacteriol 1989 Sep;171(9):4785–91

Nucleotide sequence of plasmid NAH7 gene nahR and DNA binding of the nahR product. You IS, et al. J Bacteriol 1988 Dec;170(12):5409–15

Regulation of gene expression in plasmid ColE1: delayed expression of the kil gene. Zhang SP, et al. J Bacteriol 1988 Dec;170(12):5460–7

Identification by heteroduplex analysis of an invertible element (Min) common among IncM group plasmids. Karste G, et al. J Basic Microbiol 1988;28(6):381–4

DNA fingerprinting of conjugative plasmids incompatible with R6K (IncX). Prager R, et al. J Basic Microbiol 1988; 28(6):385–8

Amplification of different ColE1 plasmids in an Escherichia coli relA strain. Schroeter A, et al. J Basic Microbiol 1988; 28(8):553–5

Multiple DNA secondary structures in perfect inverted repeat inserts in plasmids. Right-handed B–DNA, cruciforms, and left-handed Z–DNA. Blaho JA, et al. J Biol Chem 1988 Oct 5;263(28):14446–55

Use of psoralen-modified oligonucleotides to trap three-stranded RecA–DNA complexes and repair of these cross-linked complexes by ABC excinuclease. Cheng S, et al. J Biol Chem 1988 Oct 15;263(29):15110–7

Characterization of the binding specificity of two anticruciform DNA monoclonal antibodies. Frappier L, et al. J Biol Chem 1989 Jan 5;264(1):334–41

Genetically engineered polymers of human CuZn superoxide dismutase. Biochemistry and serum half-lives. Hallewell RA, et al. J Biol Chem 1989 Mar 25;264(9):5260–8

Intramolecular DNA triplexes in supercoiled plasmids. II. Effect of base composition and noncentral interruptions on formation and stability. Hanvey JC, et al. J Biol Chem 1989 Apr 5;264(10):5950–6

Human methylated DNA–binding protein. Determinants of a pBR322 recognition site. Khan R, et al. J Biol Chem 1988 Oct 5;263(28):14374–83

The effect of dnaA protein and n' sites on the replication of plasmid ColE1. Ma D, et al. J Biol Chem 1988 Oct 15;263(29):15008–15

Leading strand synthesis of R1 plasmid replication in vitro is primed by primase alone at a specific site downstream of oriR. Masai H, et al. J Biol Chem 1989 May 15; 264(14):8082–90

Initiation of lagging-strand synthesis for pBR322 plasmid DNA replication in vitro is dependent on primosomal protein i encoded by dnaT. Masai H, et al. J Biol Chem 1988 Oct 15;263(29):15016–23

Purification and characterization of SopA and SopB proteins essential for F plasmid partitioning. Mori H, et al. J Biol Chem 1989 Sep 15;264(26):15535–41

Synthesis of single-stranded plasmid pT181 DNA in vitro. Initiation and termination of DNA replication. Murray RW, et al. J Biol Chem 1989 Jan 15;264(2):1051–7

Transcriptional activation of pBR322 DNA can lead to duplex DNA unwinding catalyzed by the Escherichia coli preprimosome. Parada CA, et al. J Biol Chem 1989 Sep 5;264(25):15120–9

Enhanced expression of the Escherichia coli serA gene in a plasmid vector. Purification, crystallization, and preliminary X-ray data of D–3 phosphoglycerate dehydrogenase. Schuller DJ, et al. J Biol Chem 1989 Feb 15;264(5):2645–8

Intramolecular DNA triplexes in supercoiled plasmids. I. Effect of loop size on formation and stability. Shimizu M, et al. J Biol Chem 1989 Apr 5;264(10):5944–9

Asymmetric DNA bending induced by the yeast multifunctional factor TUF. Vignais ML, et al. J Biol Chem 1989 May 25;264(15):8463–6

TraJ protein of plasmid RP4 binds to a 19-base pair invert sequence repetition within the transfer origin. Ziegelin G, et al. J Biol Chem 1989 Jul 15;264(20):11989–94

DNA and protein interactions in the regulation of plasmid replication. Filutowicz M, et al. J Cell Sci Suppl 1987; 7:15–31

Application of an asymmetrical flow field–flow fractionation channel to the separation and characterization of proteins, plasmids, plasmid fragments, polysaccharides and unicellular algae. Wahlund KG, et al. J Chromatogr 1989 Jan 6;461:73–87

Enzyme polymorphism, prodigiosin production, and plasmid fingerprints in clinical and naturally occurring isolates of Serratia marcescens. Gargallo-Viola D. J Clin Microbiol 1989 May;27(5):860–8

Plasmid analysis of Shigella dysenteriae type 1 isolates obtained from widely scattered geographical locations. Haider K, et al. J Clin Microbiol 1988 Oct;26(10):2083–6

Restriction enzyme analysis of plasmid DNA and bacteriophage typing of paired Staphylococcus aureus blood culture isolates. Hartstein AI, et al. J Clin Microbiol 1989 Aug;27(8):1874–9

Characterization of a circular plasmid from Borrelia burgdorferi, etiologic agent of Lyme disease. Hyde FW, et al. J Clin Microbiol 1988 Oct;26(10):2203–5

Plasmids in Vibrio salmonicida isolated from salmonids with hemorrhagic syndrome (Hitra disease). Sørum H, et al. J Clin Microbiol 1988 Sep;26(9):1679–83

Genetic transfer systems for delivery of plasmid deoxyribonucleic acid to Lactobacillus acidophilus ADH: conjugation, electroporation, and transduction. Luchansky JB, et al. J Dairy Sci 1989 Jun;72(6):1408–17

Plasmid patterns, serotyping and Kanagawa phenomenon of Vibrio parahaemolyticus isolates from man, water and fish in Calcutta, India. Mitra U, et al. J Diarrhoeal Dis Res 1987 Sep;5(3):171–4

Comparison of the meta pathway operons on NAH plasmid pWW60–22 and TOL plasmid pWW53–4 and its evolutionary significance. Assinder SJ, et al. J Gen Microbiol 1988 Oct;134 (Pt 10):2769–78

The association between a large molecular mass plasmid and virulence in a strain of Salmonella pullorum. Barrow PA, et al. J Gen Microbiol 1988 Aug;134 (Pt 8):2307–16

Localization of plasmid loci necessary for the entry of Shigella flexneri into HeLa cells, and characterization of one locus encoding four immunogenic polypeptides. Baudry B, et al. J Gen Microbiol 1987 Dec;133 (Pt 12):3403–13

The replication, partition and yop regulation of the pYV plasmids are highly conserved in Yersinia enterocolitica and Y. pseudotuberculosis. Biot T, et al. J Gen Microbiol 1988 Jun;134 (Pt 6):1525–34

Preferential uptake of restriction fragments from a gonococcal cryptic plasmid by competent Neisseria gonorrhoeae. Burnstein KL, et al. J Gen Microbiol 1988 Mar;134 (Pt 3):547–57

The nucleotide sequence of Staphylococcus aureus plasmid pT48 conferring inducible macrolide–lincosamide–streptogramin B resistance and comparison with similar plasmids expressing constitutive resistance. Catchpole I, et al. J Gen Microbiol 1988 Mar; 134 (Pt 3):697–709

Characterization of the conjugation system associated with the Staphylococcus aureus plasmid pJE1. Evans J, et al. J Gen Microbiol 1988 Jan;134 (Pt 1):1–8

The isolation of strains of Bacillus subtilis showing improved plasmid stability characteristics by means of selective chemostat culture. Fleming G, et al. J Gen Microbiol 1988 Aug;134 (Pt 8):2095–101

Effects of dnats genes on the replication of plasmids in Bacillus subtilis. Forough R, et al. J Gen Microbiol 1987 Dec;133 (Pt 12):3313–8

Plasmid analysis and cloning of the dichloromethane–utilization genes of Methylobacterium sp. DM4. Gälli R, et al. J Gen Microbiol 1988 Apr;134 (Pt 4):943–52

Chromosomal mutations that increase the production of a plasmid–encoded haemolysin in Escherichia coli. Godessart N, et al. J Gen Microbiol 1988 Oct;134 (Pt 10):2779–87

Distribution of plasmid sequences in avian and mammalian strains of Chlamydia psittaci. McClenaghan M, et al. J Gen Microbiol 1988 Mar;134 (Pt 3):559–65

Stability fluctuations of plasmid–bearing cells: immobilization effects. Nasri M, et al. J Gen Microbiol 1988 Aug;134 (Pt 8):2325–31

The presence of two complete homologous meta pathway operons on TOL plasmid pWW53. Osborne DJ, et al. J Gen Microbiol 1988 Nov;134 (Pt 11):2965–75

Occurrence, transfer and mobilization in epilithic strains of Acinetobacter of mercury–resistance plasmids capable of transformation. Rochelle PA, et al. J Gen Microbiol 1988 Nov;134 (Pt 11):2933–41

Stability of plasmid sequences in an acute Q–fever strain of Coxiella burnetii. Samuel JE, et al. J Gen Microbiol 1988 Jul;134 (Pt 7):1795–1805

Utilization of IncP–1 plasmids as vectors for transposon mutagenesis in myxobacteria. Saulnier P, et al. J Gen Microbiol 1988 Nov;134 (Pt 11):2889–95

Physical and functional mapping of two cointegrate plasmids derived from RP4 and TOL plasmid pDK1. Shaw LE, et al. J Gen Microbiol 1988 Sep;134 (Pt 9):2463–74

Transfer of the Ti plasmid from Agrobacterium tumefaciens into Escherichia coli cells. Sprinzl M, et al. J Gen Microbiol 1988 Feb;134 (Pt 2):413–24

Physical and biochemical characterization of the qacA gene encoding antiseptic and disinfectant resistance in Staphylococcus aureus. Tennent JM, et al. J Gen Microbiol 1989 Jan;135 (Pt 1):1–10

Plasmid–mediated serum resistance and alterations in the composition of lipopolysaccharides in Salmonella dublin. Terakado N, et al. J Gen Microbiol 1988 Jul;134 (Pt 7):2089–93

A common virulence region on plasmids from eleven serotypes of Salmonella. Williamson CM, et al. J Gen Microbiol 1988 Apr;134 (Pt 4):975–82

Herpes simplex virus causes amplification of recombinant plasmids containing simian virus 40 sequences. Matz B. J Gen Virol 1989 Jun;70 (Pt 6):1347–58

Plasmid analysis of 219 methicillin–resistant Staphylococcus aureus strains with uncommon profiles isolated in Lisbon. Cristino JA, et al. J Hosp Infect 1989 Feb;13(2):133–41

Frequency of plasmids in strains of Acinetobacter calcoaceticus. Gerner-Smidt P. J Hosp Infect 1989 Jul; 14(1):23–8

Drug resistance and plasmid profiles in Staphylococcus epidermidis in 1964 and 1986. Møller JK. J Hosp Infect 1988 Jul;12(1):19–27

A new methicillin- and gentamicin–resistant Staphylococcus aureus in Dublin: molecular genetic analysis. Carroll JD, et al. J Med Microbiol 1989 Jan;28(1):15–23

Plasmid profiles and restriction enzyme fragmentation patterns of plasmids of methicillin–sensitive and methicillin–resistant isolates of Staphylococcus aureus from hospital and the community. Coia JE, et al. J Med Microbiol 1988 Dec;27(4):271–6

Molecular divergence of the serotype–specific plasmid (pSLT) among strains of Salmonella typhimurium of human and veterinary origin and comparison of pSLT with the serotype specific plasmids of S. enteritidis and S. dublin. Platt DJ, et al. J Med Microbiol 1988 Dec;27(4):277–84

Nucleotide sequence of the Varkud mitochondrial plasmid of Neurospora and synthesis of a hybrid transcript with a 5' leader derived from mitochondrial RNA. Akins RA, et al. J Mol Biol 1988 Nov 5;204(1):1–25

An autonomously replicating sequence of pSRI plasmid is effective in two yeast species, Zygosaccharomyces rouxii and Saccharomyces cerevisiae. Araki H, et al. J Mol Biol 1989 Jun 20;207(4):757–69

UmuC function is not essential for the production of all targeted lacI mutations induced by ultraviolet light. Christensen JR, et al. J Mol Biol 1988 Oct 5;203(3):635–41

In–vivo studies on the cis–acting replication initiator protein of IncFII plasmid NR1. Dong XN, et al. J Mol Biol 1988 Aug 5;202(3):495–509

Functional organization of the plasmid pT181 replication origin. Gennaro ML, et al. J Mol Biol 1989 Jan 20; 205(2):355–62

Tetracycline promoter mutations decrease non–B DNA structural transitions, negative linking differences and deletions in recombinant plasmids in Escherichia coli. Jaworski A, et al. J Mol Biol 1989 Jun 5;207(3):513–26

Construction of plasmids containing a unique acetylaminofluorene adduct located within a mutation hot spot. A new probe for frameshift mutagenesis. Koehl P, et al. J Mol Biol 1989 May 20;207(2):355–64

Ultraviolet light induces different spectra of lacI sequence changes in vegetative and conjugating cells of Escherichia coli. LeClerc JE, et al. J Mol Biol 1988 Oct 5;203(3):619–33

Complementation of mutants of the stability locus of IncFII plasmid NR1. Essential functions of the trans–acting stbA and stbB gene products. Min YN, et al. J Mol Biol 1988 Nov 20;204(2):345–56

Use of a bioluminescence gene reporter for the investigation of red–dependent and gam–dependent plasmid recombination in Escherichia coli K12. Nussbaum A, et al. J Mol Biol 1988 Sep 20;203(2):391–402

Saccharomyces cerevisiae protein involved in plasmid maintenance is necessary for mating of MAT alpha cells. Passmore S, et al. J Mol Biol 1988 Dec 5;204(3):593–606

Kinetics of complementary RNA–RNA interaction involved in plasmid ColE1 copy number control. Perelson AS, et al. J Mol Biol 1989 Jul 20;208(2):245–55

Replication of mini RK2 plasmid in extracts of Escherichia

coli requires plasmid-encoded protein TrfA and host-encoded proteins DnaA, B, G DNA gyrase and DNA polymerase III. Pinkney M, et al. **J Mol Biol** 1988 Oct 20;203(4):927–38

FLP recombinase of the 2 microns circle plasmid of Saccharomyces cerevisiae bends its DNA target. Isolation of FLP mutants defective in DNA bending. Schwartz CJ, et al. **J Mol Biol** 1989 Feb 20;205(4):647–58

Genetic organization and nucleotide sequence of the stability locus of IncFII plasmid NR1. Tabuchi A, et al. **J Mol Biol** 1988 Aug 5;202(3):511–25

Tumorigenic transformation of mouse NIH 3T3 cells by transfection with plasmid pSV2neo. Wallace JS, et al. **J Pathol** 1988 Sep;156(1):73–6

Excision-repair capacity of UV-irradiated strains of Escherichia coli and Streptococcus pneumoniae, estimated by plasmid recovery. Estevenon AM, et al. **J Photochem Photobiol [B]** 1989 Apr;3(2):185–92

A mathematical model of recombinational amplification of the 2 mu plasmid in the yeast Saccharomyces cerevisiae. Wittrup KD, et al. **J Theor Biol** 1988 Feb 21;130(4):481–92

Functional limits of oriP, the Epstein-Barr virus plasmid origin of replication. Chittenden T, et al. **J Virol** 1989 Jul; 63(7):3016–25

Construction and application of plasmids containing bidirectional promoters of vaccinia virus. Tsao H, et al. **J Virol** 1988 Dec;62(12):4832–4

Molecular characterization of virulence plasmid in Shigella species. Lin SR, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1988 Nov; 4(11):633–42

ColV increases the virulence of Escherichia coli K1 strains in animal models of neonatal meningitis and urinary infection. Aguero ME, et al. **Med Microbiol Immunol (Berl)** 1989;178(4):211–6

Determinants of invasion and survival of Yersinia enterocolitica in intestinal tissue. An in vivo study. Hanski C, et al. **Med Microbiol Immunol (Berl)** 1989;178(5):289–96

Isolation and interspecies-transfer of a plasmid from Pasteurella multocida encoding for streptomycin resistance. Schwarz S, et al. **Med Microbiol Immunol (Berl)** 1989; 178(2):121–5

Isolation of yeast plasmid chromatin. Dean A, et al. **Methods Enzymol** 1989;170:26–41

Analysis of plasmid-coded ribosomal RNA maxicell techniques. Jemiolo DK, et al. **Methods Enzymol** 1988; 164:691–706

Loss of virulence in Shigella strains preserved in culture collections due to molecular alteration of the invasion plasmid. Chosa H, et al. **Microb Pathog** 1989 May; 6(5):337–42

Analysis of the plasmids of Escherichia coli O148:H28 from travellers with diarrhea. Danbara H, et al. **Microb Pathog** 1987 Oct;3(4):269–78

Molecular cloning and expression of calcium-regulated, plasmid-coded proteins of Y. pseudotuberculosis. Forsberg A, et al. **Microb Pathog** 1987 Feb;2(2):123–37

Plasmid-associated virulence of Salmonella enteritidis. Hovi M, et al. **Microb Pathog** 1988 May;4(5):385–91

Evidence of correlation between 50-kilobase plasmid of Salmonella choleraesuis and its virulence. Kawahara K, et al. **Microb Pathog** 1988 Feb;4(2):155–63

Genetic relatedness of the basic replicon of the virulence plasmid in shigellae and enteroinvasive Escherichia coli. Makino S, et al. **Microb Pathog** 1988 Oct;5(4):267–74

A new method for the physical and genetic mapping of large plasmids: application to the localisation of the virulence determinants on the 90 kb plasmid of Salmonella typhimurium. Michiels T, et al. **Microb Pathog** 1987 Aug; 3(2):109–16

The role of the traT gene of the Salmonella typhimurium virulence plasmid for serum resistance and growth within liver macrophages. Rhen M, et al. **Microb Pathog** 1988 Oct;5(4):275–85

Localization by insertion mutagenesis of a virulence-associated region on the Salmonella typhimurium 96 kilobase pair plasmid. Rhen M, et al. **Microb Pathog** 1989 Feb;6(2):153–8

Modulation of the low-calcium response in Yersinia pestis via plasmid-plasmid interaction. Sample AK, et al. **Microb Pathog** 1987 Jun;2(6):443–53

Post-translational regulation of Lcr plasmid-mediated peptides in pesticinogenic Yersinia pestis. Sample AK, et al. **Microb Pathog** 1987 Oct;3(4):239–48

Identification of an essential virulence region on Salmonella plasmids. Williamson CM, et al. **Microb Pathog** 1988 Dec; 5(6):469–73

Characteristics of a colicin plasmid in Escherichia coli strain B177 isolated from a septicemic calf. Harasawa R, et al. **Microbiol Immunol** 1988;32(10):999–1005

Linkage of K99 production and STa activity in a plasmid of an Escherichia coli porcine isolate. Shimizu M, et al. **Microbiol Immunol** 1988;32(6):635–9

Identification and classification of bacterial plasmids. Couturier M, et al. **Microbiol Rev** 1988 Sep;52(3):375–95 (154 ref.)

The family of highly interrelated single-stranded deoxyribonucleic acid plasmids. Gruss A, et al. **Microbiol Rev** 1989 Jun;53(2):231–41 (84 ref.)

Transient transfection of mammalian cells with DNA of the plant-pathogenic Ti-plasmid and expression of marker and resident sequences. Geider K, et al. **Mol Cell Biochem** 1989 Jan 23;85(1):19–28

Characterization of mutant mitochondrial plasmids of Neurospora spp. that have incorporated tRNAs by reverse transcription. Akins RA, et al. **Mol Cell Biol** 1989 Feb; 9(2):678–91

Herpes simplex virus induces the replication of foreign DNA. Danovich RM, et al. **Mol Cell Biol** 1988 Aug;8(8):3272–81

Homologous plasmid recombination is elevated in immortally transformed cells. Finn GK, et al. **Mol Cell Biol** 1989 Sep; 9(9):4009–17

Holliday intermediates and reaction by-products in FLP protein-promoted site-specific recombination. Meyer-Leon L, et al. **Mol Cell Biol** 1988 Sep;8(9):3784–96

Autonomously replicating episomes contain mdr1 genes in a multidrug-resistant human cell line. Ruiz JC, et al. **Mol Cell Biol** 1989 Jan;9(1):109–15

A yeast mutation that stabilizes a plasmid bearing a mutated ARS1 element. Thrash-Bingham C, et al. **Mol Cell Biol** 1989 Feb;9(2):809–16

Copy number and partition of the Saccharomyces cerevisiae 2 micron plasmid controlled by transcription regulators. Veit BE, et al. **Mol Cell Biol** 1988 Nov;8(11):4949–57

Kinds and spectrum of mutations induced by 1-nitrosopyrene adducts during plasmid replication in human cells. Yang JL, et al. **Mol Cell Biol** 1988 Aug;8(8):3364–72

Transcriptional regulation by estrogen of episomal prolactin gene regulatory elements. Seyfred MA, et al. **Mol Endocrinol** 1989 Feb;3(2):305–14

Functional analysis of the dna (Ts) mutants of Bacillus subtilis: plasmid pUB110 replication as a model system. Alonso JC, et al. **Mol Gen Genet** 1988 Nov;214(3):482–9

Interplasmidic illegitimate recombination in Bacillus subtilis. Bashkirov VI, et al. **Mol Gen Genet** 1988 Aug; 213(2–3):465–70

High efficiency transduction of single strand plasmid DNA into enteric bacteria. Benedik MJ. **Mol Gen Genet** 1989 Aug;218(2):353–4

Characterization of the ColE1 mobilization region and its protein products. Boyd AC, et al. **Mol Gen Genet** 1989 Jun;217(2–3):488–98

Integrative suppression of dnaA46 by broad host-range plasmid R1162. Brasch MA, et al. **Mol Gen Genet** 1988 Dec;215(1):139–45

Cloning and DNA sequence of plasmid determinant iss, coding for increased serum survival and surface exclusion, which has homology with lambda DNA. Chuba PJ, et al. **Mol Gen Genet** 1989 Apr;216(2–3):287–92

IS1-mediated mobility of the aerobactin system of pColV-K30 in Escherichia coli. de Lorenzo V, et al. **Mol Gen Genet** 1988 Aug;213(2–3):487–90

"Strong incompatibility" between derivatives of the Streptomyces multi-copy plasmid pIJ101. Deng ZX, et al. **Mol Gen Genet** 1988 Oct;214(2):286–94

Structural and functional analysis of mitochondrial plasmids in Claviceps purpurea. Düvell A, et al. **Mol Gen Genet** 1988 Sep;214(1):128–34

Genetic evidence for the existence of a repressor that modulates colicin D expression on plasmid ColD-CA23. Ghersa P, et al. **Mol Gen Genet** 1988 Jul;213(1):36–41

The uvp1 gene of plasmid pR cooperates with mucAB genes in the DNA repair process. Gigliani F, et al. **Mol Gen Genet** 1989 Jul;218(1):18–24

Transfer of IncP plasmids into Stigmatella aurantiaca leading to insertional mutants affected in spore development. Glomp I, et al. **Mol Gen Genet** 1988 Oct;214(2):213–7

Identification and characterization of a locus inhibiting extrachromosomal maintenance of the Streptomyces plasmid SLP1. Grant SR, et al. **Mol Gen Genet** 1989 Jun; 217(2–3):324–31

Molecular analysis and nucleotide sequence of finQ, a transcriptional inhibitor of the F plasmid transfer genes. Ham LM, et al. **Mol Gen Genet** 1989 Mar;216(1):99–105

Transcription of a region downstream from lambda ori is required for replication of plasmids derived from coliphage lambda. Hase T, et al. **Mol Gen Genet** 1989 Mar; 216(1):120–5

In vivo generation of R68.45-pPGH1 hybrid plasmids conferring a Phl+ (meta pathway) phenotype. Herrmann H, et al. **Mol Gen Genet** 1988 Sep;214(1):173–6

Dam methylated and hemimethylated oriC plasmids are replicated symmetrically; a novel and general test of replication symmetry. Hughes P, et al. **Mol Gen Genet** 1989 Jun;217(2–3):278–80

Palindrome-hairpin linear plasmids possessing only a part of the ORF1 gene of the yeast killer plasmid pGKL1. Kitada K, et al. **Mol Gen Genet** 1988 Dec;215(1):46–52

Nucleotide sequence of the rci gene encoding shufflon-specific DNA recombinase in the IncI1 plasmid R64: homology to the site-specific recombinases of integrase family. Kubo A, et al. **Mol Gen Genet** 1988 Jul; 213(1):30–5

dam methylation and the initiation of DNA replication on oriC plasmids. Landoulsi A, et al. **Mol Gen Genet** 1989 Apr;216(2–3):217–23

Nucleotide sequences from the colicin E5, E6 and E9 operons: presence of a degenerate transposon-like structure in the ColE9-J plasmid. Lau PC, et al. **Mol Gen Genet** 1989 Jun;217(2–3):269–77

Properties and incompatibility behavior of miniplasmids derived from the bireplicon plasmid pCG86. Maas R, et al. **Mol Gen Genet** 1989 Aug;218(2):190–8

The linear mitochondrial plasmid pClK1 of the phytopathogenic fungus Claviceps purpurea may code for a DNA polymerase and an RNA polymerase. Oeser B, et al. **Mol Gen Genet** 1989 May;217(1):132–40

Repair of double-strand breaks in plasmid DNA in the yeast Saccharomyces cerevisiae. Perera JR, et al. **Mol Gen Genet** 1988 Aug;213(2–3):421–4

Formation of deletion in Escherichia coli between direct repeats located in the long inverted repeats of a cellular slime mold plasmid: participation of DNA gyrase. Saing KM, et al. **Mol Gen Genet** 1988 Sep;214(1):1–5

Mutagenic DNA repair genes on plasmids from the 'pre-antibiotic era'. Sedgwick SG, et al. **Mol Gen Genet** 1989 Aug;218(2):323–9

Excision of pIJ408 from the chromosome of Streptomyces glaucescens and its transfer into Streptomyces lividans. Sosio M, et al. **Mol Gen Genet** 1989 Jul;218(1):169–76

Multicopy plasmid stability in Escherichia coli requires host-encoded functions that lead to plasmid site-specific recombination. Stirling CJ, et al. **Mol Gen Genet** 1988 Sep; 214(1):80–4

Isolation and characterization of an ipt gene from the Ti plasmid Bo542. Strabala TJ, et al. **Mol Gen Genet** 1989 Apr;216(2–3):388–94

Ars region TL-DNA on octopine type Ti plasmids. Suzuki Y, et al. **Mol Gen Genet** 1989 Aug;218(2):284–8

Replication of ColE2 and ColE3 plasmids: two ColE2 incompatibility functions. Tajima Y, et al. **Mol Gen Genet** 1988 Nov;214(3):451–5

Effect of the pem system on stable maintenance of plasmid R100 in various Escherichia coli hosts. Tsuchimoto S, et al. **Mol Gen Genet** 1989 Feb;215(3):463–8

Identification and characterization of Tn4653, a transposon covering the toluene transposon Tn4651 on TOL plasmid pWW0. Tsuda M, et al. **Mol Gen Genet** 1988 Jul; 213(1):72–7

Structural and functional organization of ColE2 and ColE3 replicons. Yasueda H, et al. **Mol Gen Genet** 1989 Jan; 215(2):209–16

A dual transcriptional activation system for the 230 kb plasmid genes coding for virulence-associated antigens of Shigella flexneri. Adler B, et al. **Mol Microbiol** 1989 May; 3(5):627–35

Comparison of the chemotactic behaviour of Rhizobium leguminosarum with and without the nodulation plasmid. Armitage JP, et al. **Mol Microbiol** 1988 Nov;2(6):743–8

The structure of a plasmid of Chlamydia trachomatis believed to be required for growth within mammalian cells. Comanducci M, et al. **Mol Microbiol** 1988 Jul;2(4):531–8

Transcription of rhiA, a gene on a Rhizobium leguminosarum bv. viciae Sym plasmid, requires rhiR and is repressed by flavanoids that induce nod genes. Economou A, et al. **Mol Microbiol** 1989 Jan;3(1):87–93

Construction, transfer and properties of a novel temperature-sensitive integrable plasmid for genomic analysis of Staphylococcus aureus. Luchansky JB, et al. **Mol Microbiol** 1989 Jan;3(1):65–78

Cloning and expression of plasmid DNA sequences involved in Salmonella serotype typhimurium virulence. Norel F, et al. **Mol Microbiol** 1989 Jun;3(6):733–43

virG of Agrobacterium tumefaciens plasmid pTiC58 encodes a DNA-binding protein. Powell BS, et al. **Mol Microbiol** 1989 Mar;3(3):411–9

Transformation of Mycobacterium smegmatis with Escherichia coli plasmids carrying a selectable resistance marker. Zainuddin ZF, et al. **Mol Microbiol** 1989 Jan; 3(1):29–34

Studies of error-prone DNA repair in Escherichia coli K-12 and Ames Salmonella typhimurium strains using a model alkylating agent. Little CA, et al. **Mutagenesis** 1989 Mar; 4(2):90–4

Characterization of hydroxyl free radical mediated damage to plasmid pBR322 DNA. Schneider JE, et al. **Mutat Res** 1989 Sep;214(1):23–31

The development of transient SV40 based shuttle vectors for mutagenesis studies: problems and solutions. Seidman M. **Mutat Res** 1989 Mar-May;220(2–3):55–60

Effect of DNA damage on stable transformation of mammalian cells with integrative and episomal plasmids. Vos JM, et al. **Mutat Res** 1989 Mar-May;220(2–3):205–20

Bacterial conjugative plasmids mobilize DNA transfer between bacteria and yeast. Heinemann JA, et al. **Nature** 1989 Jul 20;340(6230):205–9

Independent transfer of mitochondrial plasmids in Neurospora crassa. May G, et al. **Nature** 1989 May 25; 339(6222):320–2

Loss of virulence associated with plasmid curing of chicken pathogenic Escherichia coli. Sekizaki T, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):659–61

Demonstration of the correlation of a 36-megadalton Salmonella serovar enteritidis plasmid to virulence in mice by reintroduction of the plasmid. Suzuki S, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):203–5

Functional analysis of the leading strand replication origin of plasmid pUB110 in Bacillus subtilis. Alonso JC, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9127–45

Rom transcript of plasmid ColE1. Brenner M, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4309–26

A rapid procedure for colony screening using nylon filters. Buluwela L, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):452

Cosmid vector pCpG and plasmid vector pKNUN1, and their use for cloning DNA sequences adjacent to sites for rare cutting restriction endonucleases. Douwerse HG, et al.

Nucleic Acids Res 1989 May 11;17(9):3603
A one-tube plasmid DNA mini-preparation suitable for sequencing. Del Sal G, et al. Nucleic Acids Res 1988 Oct 25;16(20):9878
Purification and characterization of RepA, a protein involved in the copy number control of plasmid pLS1. del Solar GH, et al. Nucleic Acids Res 1989 Apr 11;17(7):2405–20
Protein-induced unwinding of DNA: measurement by gel electrophoresis of complexes with DNA minicircles. Application to restriction endonuclease EcoRI, catabolite gene activator protein and lac repressor. Douc-Rasy S, et al. Nucleic Acids Res 1989 Jul 11;17(13):5173–89
Complete nucleotide sequence of the colicin E9 (cei) gene. Eaton T, et al. Nucleic Acids Res 1989 Feb 25;17(4):1761
Nucleotide sequence of a developmentally regulated Dictyostelium discoideum endogenous plasmid gene and 5' flanking region. Farrar NA, et al. Nucleic Acids Res 1988 Nov 25;16(22):10914
Phasduction--a simplified protocol for oligonucleotide-directed mutagenesis by the gapped duplex DNA method. Friedrich K, et al. Nucleic Acids Res 1989 Jul 25;17(14):5862
Nucleotide sequence of the sulfonamide resistance gene from plasmid R46. Guerineau F, et al. Nucleic Acids Res 1989 Jun 12;17(11):4370
A plasmid facilitating in vitro construction of phoA gene fusions in Escherichia coli. Gutierrez C, et al. Nucleic Acids Res 1989 May 25;17(10):3999
Plasmid multimers as high resolution molecular weight standards for pulsed field gel electrophoresis. Hanlon DJ, et al. Nucleic Acids Res 1989 Jul 11;17(13):5413
Amplified inverted duplications within and adjacent to heterologous selectable DNA. Heartlein MW, et al. Nucleic Acids Res 1989 Feb 25;17(4):1697–716
A simple method for site-directed mutagenesis using the polymerase chain reaction. Hemsley A, et al. Nucleic Acids Res 1989 Aug 25;17(16):6545–51
Direct solid phase sequencing of genomic and plasmid DNA using magnetic beads as solid support. Hultman T, et al. Nucleic Acids Res 1989 Jul 11;17(13):4937–46
New recombinant linear DNA-elements derived from Kluyveromyces lactis killer plasmids. Kämper J, et al. Nucleic Acids Res 1989 Feb 25;17(4):1781
A tRNA-like structure from a linear plasmid of the fungus Ascobolus immersus. Kempken F. Nucleic Acids Res 1989 Aug 25;17(16):6740
A rapid procedure for the transformation of Saccharomyces cerevisiae by plasmids extracted from yeasts. Keszenman-Pereyra D, et al. Nucleic Acids Res 1989 Jun 26;17(12):4893
Nucleotide sequence of the IncE region of plasmid pColV-H247. Kim HY, et al. Nucleic Acids Res 1988 Oct 25;16(20):9856
Molecular analysis of the linear 2.3 kb plasmid of maize mitochondria: apparent capture of tRNA genes. Leon P, et al. Nucleic Acids Res 1989 Jun 12;17(11):4089–99
Frame-shift mutation in the lacZ gene of certain commercially available pUC18 plasmids. Lobet Y, et al. Nucleic Acids Res 1989 Jun 26;17(12):4897
Construction of plasmids that express E. coli beta-galactosidase in mammalian cells. MacGregor GR, et al. Nucleic Acids Res 1989 Mar 25;17(6):2365
Complete nucleotide sequence of pGI2, a Bacillus thuringiensis plasmid containing Tn4430. Mahillon J, et al. Nucleic Acids Res 1988 Dec 23;16(24):11827–8
Eukaryotic expression vectors for the analysis of mutant proteins. Matthias P, et al. Nucleic Acids Res 1989 Aug 11;17(15):6418
Secondary structure analysis of the RepA mRNA leader transcript involved in control of replication of plasmid R1. Ohman M, et al. Nucleic Acids Res 1989 Apr 11; 17(7):2557–79
Sequence organization and gene expression of pGD1, a plasmid found in a wild isolate of Dictyostelium. Orii H, et al. Nucleic Acids Res 1989 Feb 25;17(4):1395–408
The mitochondrial plasmid from Neurospora intermedia strain Labelle-1b contains a long open reading frame with blocks of amino acids characteristic of reverse transcriptases and related proteins. Pande S, et al. Nucleic Acids Res 1989 Mar 11;17(5):2023–42
Complex structural behavior of oligopurine-oligopyrimidine sequence cloned within the supercoiled plasmid. Parniewski P, et al. Nucleic Acids Res 1989 Jan 25;17(2):617–29
Three regions in the DNA of plasmid pLS1 show sequence-directed static bending. Pérez-Martín J, et al. Nucleic Acids Res 1988 Oct 11;16(19):9113–26
Nucleotide sequence of the plasmid stimulating portion of Xrep. Riley DE. Nucleic Acids Res 1989 Mar 25;17(6):2361
A rapid and efficient 'miniprep' for isolation of plasmid DNA. Serghini MA, et al. Nucleic Acids Res 1989 May 11; 17(9):3604
The construction of a highly efficient and versatile set of mammalian expression vectors. Stephens PE, et al. Nucleic Acids Res 1989 Sep 12;17(17):7110
DNA cleavage by restriction endonuclease PflMI is inhibited in recognition sites modified by dcm methylation. Sturm RA, et al. Nucleic Acids Res 1989 May 11;17(9):3615
Modified Birnboim-Doly method for rapid detection of plasmid copy number. Taylor DE, et al. Nucleic Acids Res 1988 Sep 26;16(18):9056
Energy-structure correlations of plasmid DNA in different topological forms. Thumm W, et al. Nucleic Acids Res 1988 Dec 23;16(24):11737–57
Microlysate: a method for screening cloned fragments using single colonies. Tu J, et al. Nucleic Acids Res 1989 Apr 25;17(8):3321
Improved yield of helper P-element by switching its vector from pBR322 to pBluescript. Voth WP, et al. Nucleic Acids Res 1989 Aug 11;17(15):6424
A rapid and sensitive method for plasmid copy number comparisons. Weber PC, et al. Nucleic Acids Res 1989 Jul 25;17(14):5866
A set of small bacterial plasmids with unique cloning sites. Willson TA, et al. Nucleic Acids Res 1988 Dec 23; 16(24):11819
Quantitative evaluation of Escherichia coli host strains for tolerance to cytosine methylation in plasmid and phage recombinants. Woodcock DM, et al. Nucleic Acids Res 1989 May 11;17(9):3469–78
Characterization of early DNA synthesis in Xenopus eggs after injection of circular plasmid DNA. Yasui W, et al. Nucleic Acids Res 1989 May 25;17(10):3709–23
lambda SK9--a diphasmid for constructing genomic libraries, capable of converting inserts into plasmid and single stranded forms. Zabarovsky ER, et al. Nucleic Acids Res 1989 Jun 12;17(11):4407
Distinct mouse DNA sequences enable establishment and persistence of plasmid DNA polymers in mouse cells. Zastrow G, et al. Nucleic Acids Res 1989 Mar 11; 17(5):1867–79
Simple and effective method of electroporation for introduction of plasmid and cosmid DNAs to mammalian cells. Hama-Inaba H, et al. Nucleic Acids Symp Ser 1988; (19):149–52
The use of the pTZ19 phagemid for preparing site-directed mutations in long size DNA fragment. Jones DS, et al. Nucleic Acids Symp Ser 1988;(19):37–8
Construction of a plasmid for high-level expression of goat alpha-lactalbumin and its derivative in E. coli. Kumagai I, et al. Nucleic Acids Symp Ser 1988;(19):179–80
Differential scanning calorimetry of antitumor antibiotics-plasmid DNA interaction. Maeda Y, et al. Nucleic Acids Symp Ser 1988;(19):101–4
A new transfection method of mouse FM3A mammary carcinoma cells with plasmid DNA. Ogawa T, et al. Nucleic Acids Symp Ser 1988;(19):153–5
Singlet oxygen induces frank strand breaks as well as alkali- and piperidine-labile sites in supercoiled plasmid DNA. Blazek ER, et al. Photochem Photobiol 1989 May; 49(5):607–13
Meeting abstracts. Proceedings of the twelfth annual Mid-Atlantic Regional Extrachromosomal Genetic Elements Conference. November 4–6, 1988, Virginia Beach, Virginia. Plasmid 1989 Mar;21(2):161–5
Plant expression vectors with the origin of replication of the W-type plasmid Sa. Alliotte T, et al. Plasmid 1988 May; 19(3):251–4
Plasmid partition. Austin SJ. Plasmid 1988 Jul;20(1):1–9 (33 ref.)
A runaway-replication plasmid pSY343 contains two ssi signals. Bahk JD, et al. Plasmid 1988 Nov;20(3):266–70
Characterization of a plasmid isolated from Branhamella catarrhalis and detection of plasmid sequences within the genome of a B. catarrhalis strain. Beaulieu D, et al. Plasmid 1988 Sep;20(2):158–62
pBR322-derived multicopy plasmids harboring large inserts are often dimers in Escherichia coli K-12. Berg CM, et al. Plasmid 1989 Mar;21(2):138–41
Transformation of Azotobacter vinelandii OP with a broad host range plasmid containing a cloned chromosomal nif-DNA marker. Bingle WH. Plasmid 1988 May; 19(3):242–50
Map location on Agrobacterium root-inducing plasmids of homologies with the virulence region of tumor-inducing plasmids. Birot AM, et al. Plasmid 1988 May;19(3):189–202
Structural analysis of loci involved in pSAM2 site-specific integration in Streptomyces. Boccard F, et al. Plasmid 1989 Jan;21(1):59–70
Instability of recombinant pUB110 plasmids in Bacillus subtilis: plasmid-encoded stability function and effects of DNA inserts. Bron S, et al. Plasmid 1988 May;19(3):231–41
Purification and characterization of plasmid-like DNA from the antimycotic producing fungus, Scytalidium flavo-brunneum. Caprioglio DR, et al. Plasmid 1988 Nov; 20(3):175–81
Stability of pBR322-derived plasmids. Chiang CS, et al. Plasmid 1988 Nov;20(3):207–20
Sex pheromones and plasmid transfer in Enterococcus faecalis. Clewell DB, et al. Plasmid 1989 May;21(3):175–84 (54 ref.)
Identification of insertion sequence element IS427 in pTiT37 plasmid DNA of an Agrobacterium tumefaciens T37 isolate. De Meirsman C, et al. Plasmid 1989 Mar; 21(2):129–37
Spontaneous insertion of an IS2 element into the promoter region of the lac operon. De Togni P, et al. Plasmid 1988 Sep;20(2):143–7
ColIb plasmid genes that inhibit the replication of T5 and T7 bacteriophage. Duckworth DH, et al. Plasmid 1988 Nov;20(3):182–93
Transformation of Acholeplasma laidlawii with streptococcal plasmids pVA868 and pVA920. Dybvig K. Plasmid 1989 Mar;21(2):155–60
Why do bacterial plasmids carry some genes and not others? Eberhard WG. Plasmid 1989 May;21(3):167–74 (80 ref.)
Transfer and maintenance of small, mobilizable plasmids with ColE1 replication origins in Legionella pneumophila. Engleberg NC, et al. Plasmid 1988 Jul;20(1):83–91
In vivo assembly of chromatin on pBR322 sequences cloned into yeast plasmids. Estruch F, et al. Plasmid 1989 Mar; 21(2):113–9
A plasmid to visualize and assay termination and antitermination of transcription in Escherichia coli. Franklin NC. Plasmid 1989 Jan;21(1):31–42
Factors that affect transposition mediated by the Tn21 transposase. Grinsted J, et al. Plasmid 1988 Jul;20(1):54–60
Location of the relaxation complex nick site within the minimal origin of transfer region of RK2. Guiney DG, et al. Plasmid 1988 Nov;20(3):259–65
Construction of shuttle cloning vectors for Bacteroides fragilis and use in assaying foreign tetracycline resistance gene expression. Guiney DG, et al. Plasmid 1988 Jul; 20(1):17–22
Nucleotide sequence of a DNA fragment that contains the abi gene of the ColIb plasmid. Gupta SK, et al. Plasmid 1988 Nov;20(3):194–206
Novel virulence properties of the Salmonella typhimurium virulence-associated plasmid: immune suppression and stimulation of splenomegaly. Hoertt BE, et al. Plasmid 1989 Jan;21(1):48–58
A unique deletion in pBR322 DNA caused by insertion of poly(dA).poly(dT). Ikpeazu EV, et al. Plasmid 1989 May; 21(3):247–50
Replication properties of mini-Rts1 derivatives deleted for DnaA boxes in the replication origin. Itoh Y, et al. Plasmid 1989 May;21(3):242–6
Construction of transposons carrying the transfer functions of RP4. Johnson DA. Plasmid 1988 Nov;20(3):249–58
Characterization of a gram-positive broad-host-range plasmid isolated from Lactobacillus hilgardii. Josson K, et al. Plasmid 1989 Jan;21(1):9–20
Replication of an RK2 miniplasmid derivative in vitro by a DNA/membrane complex extracted from Escherichia coli: involvement of the dnaA but not dnaK host proteins and association of these and plasmid-encoded proteins with the inner membrane. Kostyal DA, et al. Plasmid 1989 May; 21(3):226–37
Construction of an extrachromosomally replicating transformation vector for Dictyostelium discoideum. Leiting B, et al. Plasmid 1988 Nov;20(3):241–8
Use of a versatile lacZ vector to analyze the upstream region of the Bacillus subtilis spoOF gene. Lewandoski M, et al. Plasmid 1988 Sep;20(2):148–54
Physical and biological characterization of linear DNA plasmids of the yeast Pichia inositovora. Ligon JM, et al. Plasmid 1989 May;21(3):185–94
Plasmid studies of genetic exchange in Saccharomyces cerevisiae. Livingston DM. Plasmid 1988 Sep;20(2):97–105 (43 ref.)
Versatile cassettes designed for the copper inducible expression of proteins in yeast. Macreadie IG, et al. Plasmid 1989 Mar;21(2):147–50
Plasmid localization and mapping of two Azospirillum brasilense loci that affect exopolysaccharide synthesis. Michiels K, et al. Plasmid 1989 Mar;21(2):142–6
Cloning and genetic analysis of tra cistrons of the Tra 2/Tra 3 region of plasmid RP1. Palombo EA, et al. Plasmid 1989 Jul;22(1):59–69
Plasmid deletion formation in Bacillus subtilis. Peijnenburg AC, et al. Plasmid 1988 Jul;20(1):23–32
Plasmid deletion formation in recE4 and addB72 mutants of Bacillus subtilis. Peijnenburg AC, et al. Plasmid 1989 May;21(3):205–15
Structural instability of a bifunctional plasmid pZG1 and single-stranded DNA formation in Streptomyces. Pigac J, et al. Plasmid 1988 May;19(3):222–30
Comparative analysis of five related Staphylococcal plasmids. Projan SJ, et al. Plasmid 1988 May;19(3):203–21
Host-specific effects of the korA-korB operon and oriT region on the maintenance of miniplasmid derivatives of broad host-range plasmid RK2. Schmidhauser TJ, et al. Plasmid 1989 Mar;21(2):99–112
Multipartite structure of mitochondrial DNA in a fungal longlife mutant. Schulte E, et al. Plasmid 1989 Jan; 21(1):79–84
Detection of killer-independent dsRNA plasmids in Ustilago maydis by a simple and rapid method of extraction of dsRNA. Seroussi E, et al. Plasmid 1989 May;21(3):216–25
The EcoDXX1 restriction and modification system: cloning the genes and homology to type I restriction and modification systems. Skrzypek E, et al. Plasmid 1989 May; 21(3):195–204
Conjugal transfer of genetic material by Lactococcus lactis subsp. lactis 11007. Steele JL, et al. Plasmid 1989 Jul; 22(1):32–43
Characterization of the genetic element coding for lactose metabolism in Lactococcus lactis subsp. lactis KP3. Steele JL, et al. Plasmid 1989 Jul;22(1):44–51
A novel xylB-based positive selection vector. Stevis PE, et al. Plasmid 1988 Jul;20(1):92–5
Cloning, sequencing, and expression in Ficoll-generated minicells of an Escherichia coli heat-stable enterotoxin gene. Stieglitz H, et al. Plasmid 1988 Jul;20(1):42–53
A kinetic model for plasmid curing. Sýkora P, et al. Plasmid 1989 Mar;21(2):85–98
A broad-host-range vector system for cloning and

translational lacZ fusion analysis. Tai TN, et al. **Plasmid** 1988 May;19(3):175–88

Specificity of transposition of Tn7 in Vibrio parahaemolyticus. Thomasian SK, et al. **Plasmid** 1989 Jul; 22(1):82–5

Plasmid pColBM–Cl139 does not encode a colicin lysis protein but contains sequences highly homologous to the D protein (resolvase) and the oriV region of the miniF plasmid. Thumm G, et al. **Plasmid** 1988 Jul;20(1):75–82

Intermolecular plasmid recombination in fibroblasts from humans with DNA damage–processing defects. Timme TL, et al. **Plasmid** 1989 Jul;22(1):1–9

Use of lacZ expression to monitor transcription. Tomich CS, et al. **Plasmid** 1988 Sep;20(2):167–70

Specificity of deletion events in pBR322. Weston–Hafer K, et al. **Plasmid** 1989 May;21(3):251–3

Construction of miniplasmids from the 7.2–kb and 5.1–kb penicillinase–producing plasmids of Neisseria gonorrhoeae reveals two replication regions. Yeung KH, et al. **Plasmid** 1988 Nov;20(3):232–40

Asbestos fibers mediate transformation of monkey cells by exogenous plasmid DNA [published erratum appears in Proc Natl Acad Sci U S A 1989 Feb;86(3):997] Appel JD, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7670–4

Efficient gene transfer into mammalian primary endocrine cells with lipopolyamine–coated DNA. Behr JP, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):6982–6

Identification of **icsA**, a plasmid locus of Shigella flexneri that governs bacterial intra– and intercellular spread through interaction with F–actin. Bernardini ML, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3867–71

Single adduct mutagenesis: strong effect of the position of a single acetylaminofluorene adduct within a mutation hot spot [published erratum appears in Proc Natl Acad Sci U S A 1989 Sep;86(18):7097] Burnouf D, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4147–51

A plasmid–encoded regulatory gene, rns, required for expression of the CS1 and CS2 adhesins of enterotoxigenic Escherichia coli. Caron J, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):963–7

Plasmids can stably transform yeast mitochondria lacking endogenous mtDNA. Fox TD, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7288–92

Conjugative transfer of promiscuous IncP plasmids: interaction of plasmid–encoded products with the transfer origin. Fürste JP, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):1771–5

The virD operon of Agrobacterium tumefaciens Ti plasmid encodes a DNA–relaxing enzyme. Ghai J, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3109–13

Model of the interactions of calichemicin gamma 1 with a DNA fragment from pBR322. Hawley RC, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1105–9

The noncovalent complex between DNA and the bifunctional intercalator ditercalinium is a substrate for the UvrABC endonuclease of Escherichia coli. Lambert B, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6557–61

A host–encoded DNA–binding protein promotes termination of plasmid replication at a sequence–specific replication terminus. Sista PR, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3026–30

High levels of double–stranded transferred DNA (T–DNA) processing from an intact nopaline Ti plasmid. Steck TR, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2133–7

Role of the overdrive sequence in T–DNA border cleavage in Agrobacterium. Toro N, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8558–62

Characterization of invasion plasmid antigen genes (ipaBCD) from Shigella flexneri. Venkatesan MM, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9317–21

Construction of a plasmid vector for the regulatable high level expression of eukaryotic genes in Escherichia coli: an application to overproduction of chicken lysozyme. Miki T, et al. **Protein Eng** 1987 Aug–Sep;1(4):327–32

Plasmid–mediated beta–lactamase (TEM–7) involved in resistance to ceftazidime and aztreonam. Gutmann L, et al. **Rev Infect Dis** 1988 Jul–Aug;10(4):860–6

Mycobacteriophage vector systems. Jacobs WR Jr, et al. **Rev Infect Dis** 1989 Mar–Apr;11 Suppl 2:S404–10 (12 ref.)

The plasmid–encoded outer–membrane proteins of Yersinia pestis. Straley SC. **Rev Infect Dis** 1988 Jul–Aug;10 Suppl 2:S323–6 (12 ref.)

Plasmid–mediated beta–lactamases among aminoglycoside resistant gram–negative bacilli. Huovinen S, et al. **Scand J Infect Dis** 1989;21(3):303–9

Plasmids in the environment. Linton AH. **Schriftenr Ver Wasser Boden Lufthyg** 1988;78:197–224 (83 ref.)

Experiences with the first field release of genetically engineered viruses. Possee RD, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1988;78:165–86

Cloning in Yersinia enterocolitica of K99 antigen gene from Escherichia coli. Sun WL, et al. **Sci Sin [B]** 1988 Aug; 31(8):944–52

Immune response to cholera toxin epitope inserted in Salmonella flagellin. Newton SM, et al. **Science** 1989 Apr 7;244(4900):70–2

Frequency in the United States of non–beta–lactamase–producing strains of Neisseria gonorrhoeae possessing the 24.5–Mdal conjugative plasmid. Knapp JS, et al. **Sex Transm Dis** 1989 Apr–Jun;16(2):79–83

Transfer frequency of various 25.2 Mdal tetracycline resistance plasmids in Neisseria gonorrhoeae. Roberts MC, et al. **Sex Transm Dis** 1989 Apr–Jun;16(2):91–4

Paradoxical regulation of human argininosuccinate synthetase cDNA minigene in opposition to endogenous gene: evidence for intragenic control sequences. Boyce FM 3d, et al. **Somat Cell Mol Genet** 1989 Mar;15(2):123–9

Nuclear plasmids in the simple eukaryotes Saccharomyces cerevisiae and Dictyostelium discoideum. Farrar NA, et al. **Trends Genet** 1988 Dec;4(12):343–8 (32 ref.)

The detection of mycobacterial DNA sequences in uncultured clinical specimens with cloned Mycobacterium tuberculosis DNA as probes. Pao CC, et al. **Tubercle** 1988 Mar;69(1):27–36

Tagging and elimination of plasmids in Salmonella of avian origin. Poppe C, et al. **Vet Microbiol** 1988 Sep;18(1):73–87

Transcriptional activation with concurrent or nonconcurrent template replication has differential effects on transient expression from herpes simplex virus promoters. Snowden BW, et al. **Virus Genes** 1989 Mar;2(2):129–45

Herpes simplex virus type 1 alpha gene containing plasmids can inhibit expression regulated from an alpha promoter in CV–1 but not HeLa cells. Block T, et al. **Virus Res** 1988 Nov;11(4):269–79

Characterisation of an ARS–plasmid stabilisation element in the fission yeast Schizosaccharomyces pombe. Bonfils D, et al. **Yeast** 1989 Apr;5 Spec No:S261–6

The 2 micron circle plasmid of Saccharomyces cerevisiae. Futcher AB. **Yeast** 1988 Mar;4(1):27–40 (94 ref.)

Linear DNA killer plasmids from the yeast Kluyveromyces. Gunge N. **Yeast** 1986 Sep;2(3):153–62 (90 ref.)

Mutations in ARS1 increase the rate of simple loss of plasmids in Saccharomyces cerevisiae. Strich R, et al. **Yeast** 1986 Sep;2(3):169–78

Physical separation and functional interaction of Kluyveromyces lactis and Saccharomyces cerevisiae ARS elements derived from killer plasmid DNA. Thompson A, et al. **Yeast** 1986 Sep;2(3):179–91

Possible gene interchange between plasmid and chromosome in yeast. Utatsu I, et al. **Yeast** 1988 Sep;4(3):179–90

[The expression of a new bifunctional vector for cloning in Bacillus thuringiensis subsp. israelensis and its deletion variants] Miteva V, et al. **Acta Microbiol Bulg** 1988;23:22–8 (Eng. Abstr.) **(Bul)**

[Restriction mapping of E. coli–cloned fragments of the plasmid DNA of Bacillus thuringiensis subsp. israelensis] Takova Ts, et al. **Acta Microbiol Bulg** 1988;23:18–21 (Eng. Abstr.) **(Bul)**

[Plasmid analysis and restriction enzyme digest pattern study in 20 cases of neonatal subcutaneous gangrene due to Staphylococcus aureus] Tang J, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Jun;68(6):332–4, 24 (Eng. Abstr.) **(Chi)**

[Comparative physiologic studies on plasmid–containing and plasmidless streptococcus mutans] Wang DS. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Nov; 23(6):348–50 **(Chi)**

[Detection of plasmids in Streptococcus mutans] Wang DS. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Mar; 23(2):79–81, 126–7 (Eng. Abstr.) **(Chi)**

[Construction of plasmids containing different human globin gene fragments] Liu JZ. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Dec; 10(6):411–5 (Eng. Abstr.) **(Chi)**

[Studies on the transformation of NIH 3 T 3 cells with v–fos gene] Jin JJ, et al. **Shih Yen Sheng Wu Hsueh Pao** 1988 Dec;21(4):467–79 (Eng. Abstr.) **(Chi)**

[Restriction map of E. coli shuttle plasmid (p# GTE5) with secretive function] Chen YX, et al. **Wei Sheng Wu Hsueh Pao** 1989 Jun;29(3):228–31 (Eng. Abstr.) **(Chi)**

[Study of the virulence plasmids of 100 strains of Yersinia pestis isolated in Madagascar] Rasolofonirina N, et al. **Arch Inst Pasteur Madagascar** 1988;54(1):93–7 **(Fre)**

[Behavior of ceftazidime in regard to different classes of beta–lactamases. The situation in 1988] Labia R, et al. **Presse Med** 1988 Oct 26;17(37):1890–4 (36 ref.) (Eng. Abstr.) **(Fre)**

[Plasmid resistance to 3d generation cephalosporins] Philippon A, et al. **Presse Med** 1988 Oct 26;17(37):1883–9 (28 ref.) (Eng. Abstr.) **(Fre)**

[Episomes as a defensive weapon in microbes] Reinhard E. **Pharm Unserer Zeit** 1972 May;1(3):67–73 **(Ger)**

[Viruses and plasmids in the environment. Elimination, release, biotechnology] **Schriftenr Ver Wasser Boden Lufthyg** 1988;78:1–315 **(Ger)**

[Questions of the safety of setting viruses and plasmids free] Seeber E. **Schriftenr Ver Wasser Boden Lufthyg** 1988;78:5–6 **(Ger)**

[Epidemiologic study of 2 S. typhimurium outbreaks using plasmid fingerprints] Baumgartner A, et al. **Schweiz Med Wochenschr** 1989 Apr 5;119(13–14):430–3 (Eng. Abstr.) **(Ger)**

[Submerged–phase gel electrophoresis in the analysis of plasmids for epidemiologic purposes] Caldini G, et al. **Quad Sclavo Diagn** 1987 Sep;23(3):274–86 (Eng. Abstr.) **(Ita)**

[Possible control of capsule formation and intracellular synthesis of envelope antigen by each different plasmid] Tsukano H. **Kansenshogaku Zasshi** 1989 Mar;63(3):234–9 (Eng. Abstr.) **(Jpn)**

[Plasmid fingerprinting suggests nosocomial spread of methicillin–resistant Staphylococcus aureus in a newborn baby care unit] Tobita M, et al. **Rinsho Byori** 1988 Jul; 36(7):861–5 **(Jpn)**

[Introduction and expression of foreign genes into plant cells using a Ti plasmid vector] Matsumoto S, et al. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):191–200 (72 ref.) **(Jpn)**

[Biological characteristics of palindromic deoxyribonucleic acid. III] Fujii T, et al. **Yakugaku Zasshi** 1988 Nov; 108(11):1064–71 (Eng. Abstr.) **(Jpn)**

[Total nucleotide sequence of plasmid pKYM and its replication origin] Hirose T, et al. **Yakugaku Zasshi** 1988 Sep;108(9):886–93 (Eng. Abstr.) **(Jpn)**

[Incompatibility and the copy number of plasmid pKYM is regulated by ribonucleic acid] Hirose T, et al. **Yakugaku Zasshi** 1988 Sep;108(9):894–903 (Eng. Abstr.) **(Jpn)**

[Effect of plasmid pIJ350 on genetic stability of antibiotic production by Streptomyces bambergiensis] Zotchev SB, et al. **Antibiot Khimioter** 1989 Mar;34(3):180–6 (Eng. Abstr.) **(Rus)**

[Study of the binding of RNA polymerase by a recombinant plasmid using electron microscopy] Beritashvili DR, et al. **Biofizika** 1989 Mar–Apr;34(2):225–9 (Eng. Abstr.) **(Rus)**

[Synthesis in E. coli cells of short RNA encoded in plasmids] Dontsova OA, et al. **Biokhimiia** 1989 May;54(5):870–6 (Eng. Abstr.) **(Rus)**

[Purification and properties of two enzymes of meta–cleaving the aromatic ring controlled by the biphenyl biodegradation plasmid pBS 241 from Pseudomonas putida] Selifonov SA, et al. **Biokhimiia** 1988 Jun;53(6):1040–7 (Eng. Abstr.) **(Rus)**

[Recombinant plasmids containing hybrid protein genes with antigenic determinants of the foot and mouth virus] Chernen'kaia EA, et al. **Bioorg Khim** 1989 Apr;15(4):508–13 (Eng. Abstr.) **(Rus)**

[The transposon content of nonconjugated E. coli plasmids] Gigani OB, et al. **Biull Eksp Biol Med** 1988 Dec; 106(12):711–4 (Eng. Abstr.) **(Rus)**

[The PaeD253 restriction–modification system determined by the biodegradation plasmid pBS253 of Pseudomonas aeruginosa] Boronin AM, et al. **Dokl Akad Nauk SSSR** 1989;304(6):1472–4 **(Rus)**

[Amplifying sequence of Streptomyces rimosus: study of ability to co–amplification of hybrid plasmids containing this sequence in Streptomyces lividans 66] Danilenko VN, et al. **Dokl Akad Nauk SSSR** 1988;301(6):1488–92 **(Rus)**

[Conjugative transfer of plasmids between Bacillus spp.] Koretskaia NG, et al. **Dokl Akad Nauk SSSR** 1988; 303(2):488–91 **(Rus)**

[A new pathogenic trait encoded by Yersinia pseudotuberculosis pVM82 plasmid] Gintsburg AL, et al. **Genetika** 1988 Sep;24(9):1562–71 (Eng. Abstr.) **(Rus)**

[Mutagenesis on cloned yeast genes. The mutation of the yeast gene comprising the plasmid and chromosome] Gracheva LM, et al. **Genetika** 1988 Jul;24(7):1178–86 (Eng. Abstr.) **(Rus)**

[Effect of the heat shock reaction on the phenotypic manifestation of mutations in rifampicin resistance affecting the gene of the RNA polymerase beta–subunit under the control of the lactose promotor] Kashlev MV, et al. **Genetika** 1988 Aug;24(8):1343–52 (Eng. Abstr.) **(Rus)**

[Genetic control of plasmid recombination in the cotransformation of Saccharomyces cerevisiae: the role of RAD52 and FLP genes] Kozhina TN, et al. **Genetika** 1988 Jun;24(6):993–7 (Eng. Abstr.) **(Rus)**

[Internal promoter of Escherichia coli rplJL operon exhibits high efficiency on recombinant pNM481 plasmid] Krupskaia IV, et al. **Genetika** 1989 Jan;25(1):154–7 (Eng. Abstr.) **(Rus)**

[Mutations in the Escherichia coli RNA–polymerase beta–subunit gene cloned in a multicopy plasmid] Ogryz'ko EP, et al. **Genetika** 1988 Oct;24(10):1894–6 (Eng. Abstr.) **(Rus)**

[Restriction of two–replicon shuttle Escherichia coli–Streptomyces plasmids in Streptomyces lividans strain 66] Orekhov AV, et al. **Genetika** 1989 Apr;25(4):614–25 (Eng. Abstr.) **(Rus)**

[The induction of auxotrophic mutations for riboflavin by the integration of plasmid pLRS33 into the chromosome of Bacillus subtilis] Shevchenko TN, et al. **Genetika** 1988 Aug;24(8):1371–4 (Eng. Abstr.) **(Rus)**

[Cloning and localization of the replication and mobilization regions in the D–plasmid of Pseudomonas putida pBS286 (IncP–9) with a broad host range] Tsoi TV, et al. **Genetika** 1988 Jun;24(6):980–92 (Eng. Abstr.) **(Rus)**

[Degradation of alpha–methylstyrene and toluene by plasmid–containing bacterial strains of the genus Pseudomonas] Golovleva LA, et al. **Izv Akad Nauk SSSR [Biol]** 1988 Jul–Aug;(4):558–64 (Eng. Abstr.) **(Rus)**

[Differential isolation of low–molecular plasmids] Kovtun GIu. **Lab Delo** 1989;(4):61–2 (Eng. Abstr.) **(Rus)**

[Virulence plasmids of pathogenic enterobacteria] Bondarenko VM, et al. **Mikrobiol Zh** 1987 Jul–Aug; 49(4):92–105 (73 ref.) **(Rus)**

[Isolation of a hybrid plasmid coding for the leucine biosynthesis gene (Leu A) of Bacillus subtilis] Fomin VV, et al. **Mikrobiol Zh** 1987 May–Jun;49(3):3–6 (Eng. Abstr.) **(Rus)**

[A study of the possibility of conjugated transmission of the RP4 plasmid from Pseudomonas aeruginosa by strains of

Pseudomonas mallei and Pseudomonas pseudomallei] Peters MK, et al. **Mikrobiol Zh** 1983 May–Jun;45(3):11–4 (Eng. Abstr.) **(Rus)**

[Transformation of Streptomyces sp. 1912–8 protoplasts using plasmid pSG 1912 DNA] Polishchuk LV, et al. **Mikrobiol Zh** 1987 Jan–Feb;49(1):24–8 (Eng. Abstr.) **(Rus)**

[Characteristics of the conjugation transfer of the plasmids of P–1–group incompatibility to Pseudomonas pseudomallei strains] Seimova IK, et al. **Mikrobiol Zh** 1988 May–Jun;50(3):68–71 (Eng. Abstr.) **(Rus)**

[Effect of a fragment of pBR322 plasmid in the region of tetracycline resistance gene on the stability of this plasmid] Kolot MN, et al. **Mol Biol (Mosk)** 1988 Sep–Oct; 22(5):1301–6 (Eng. Abstr.) **(Rus)**

[Complementary addressed modification of plasmid DNA] Vlasov VV, et al. **Mol Biol (Mosk)** 1989 Mar–Apr; 23(2):556–61 (Eng. Abstr.) **(Rus)**

[Construction of plasmids coding for diphtheria toxin fragments] Zdanovskiĭ AG, et al. **Mol Biol (Mosk)** 1988 Sep–Oct;22(5):1293–300 (Eng. Abstr.) **(Rus)**

[The use of the plasmid pTH10 for isolating the donor strains of Pseudomonas mallei] Ageeva NP, et al. **Mol Gen Mikrobiol Virusol** 1989 Apr;(4):14–8 (Eng. Abstr.) **(Rus)**

[Isolation of DNA fragments of the barley genome, supporting autonomous regulation of plasmids in Saccharomyces cerevisiae] Anan'ev EV, et al. **Mol Gen Mikrobiol Virusol** 1989 Feb;(2):46–9 (Eng. Abstr.) **(Rus)**

[Results of screening of plasmids of Yersinia pestis strains from various regions of endemic central–asian plague focus] Balakhonov SV. **Mol Gen Mikrobiol Virusol** 1989 Apr; (4):39–42 (Eng. Abstr.) **(Rus)**

[Interplasmid illegitimate recombination in Bacillus subtilis cells] Bashkirov VI, et al. **Mol Gen Mikrobiol Virusol** 1988 Nov;(11):12–8 (Eng. Abstr.) **(Rus)**

[Intraspecies plasmid transformation of Bacillus thuringiensis] Bessol'tsev VV, et al. **Mol Gen Mikrobiol Virusol** 1989 Mar; (3):25–8 (Eng. Abstr.) **(Rus)**

[The effect of mutations in recB and recC genes on the precise excision of Tn5 from pNM1 plasmid genome] Davenis SV, et al. **Mol Gen Mikrobiol Virusol** 1988 Sep; (9):14–7 (Eng. Abstr.) **(Rus)**

[Sucrose utilization determinants of transposon Tn2555] Doroshenko VG, et al. **Mol Gen Mikrobiol Virusol** 1988 Nov;(11):29–35 (Eng. Abstr.) **(Rus)**

[Transposition of insertional sequence IS21 in E. coli cells activated by an exogenous promotor] Dubeĭkovskiĭ AN. **Mol Gen Mikrobiol Virusol** 1989 Jan;(1):19–24 (Eng. Abstr.) **(Rus)**

[Integration with the chromosome--an alternative state of calcium–dependency plasmids in Yersinia] Gintsburg AL, et al. **Mol Gen Mikrobiol Virusol** 1989 May;(5):7–11 (Eng. Abstr.) **(Rus)**

[Formation of an IS1–induced deletion in pNt6::IS1 plasmid] Glukhov IL, et al. **Mol Gen Mikrobiol Virusol** 1989 Jan; (1):10–4 (Eng. Abstr.) **(Rus)**

[Structural rearrangements of the plasmid R68,45 in cells of Brucella suis] Gorelov VN, et al. **Mol Gen Mikrobiol Virusol** 1988 Jun;(6):23–30 (Eng. Abstr.) **(Rus)**

[Molecular cloning of plasmid ColIb–P9 genes responsible for its mutator function] Kolot MN, et al. **Mol Gen Mikrobiol Virusol** 1988 Sep;(9):8–14 (Eng. Abstr.) **(Rus)**

[Structural–functional analysis of the par–region of ColE1 plasmid] Kolot MN, et al. **Mol Gen Mikrobiol Virusol** 1989 Apr;(4):45–8 (Eng. Abstr.) **(Rus)**

[Glycine–dependent cryotransformation of Bacillus cereus by plasmid DNA] Loginova OG, et al. **Mol Gen Mikrobiol Virusol** 1988 Nov;(11):45–9 (Eng. Abstr.) **(Rus)**

[Deletional and insertional analysis of the antitumorigenicity of the plasmid R388 in Agrobacterium tumefaciens] Mashkovskaia GV, et al. **Mol Gen Mikrobiol Virusol** 1988 Dec;(12):11–6 (Eng. Abstr.) **(Rus)**

[Conjugation transfer of the plasmid pAMbeta1 into various Bacillus species] Riabchenko NF, et al. **Mol Gen Mikrobiol Virusol** 1988 Aug;(8):23–8 (Eng. Abstr.) **(Rus)**

[SOS–induction of the RP4 plasmid tet–determinant] Skavronskaia AG, et al. **Mol Gen Mikrobiol Virusol** 1988 Aug;(8):17–23 (Eng. Abstr.) **(Rus)**

[Plasmid transduction by Bacillus anthracis bacteriophage CP54] Stepanov AS, et al. **Mol Gen Mikrobiol Virusol** 1989 Jan;(1):14–9 (Eng. Abstr.) **(Rus)**

[Intra– and intermolecular recombination of test plasmids in K12 Escherichia coli cells carrying an RTF derivative of the R1drd–19 plasmid] Terent'ev MA, et al. **Mol Gen Mikrobiol Virusol** 1989 Mar;(3):10–5 (Eng. Abstr.) **(Rus)**

[Unpaired bases in the B—Z junction of the supercoiled plasmid] Ulanov BP, et al. **Mol Gen Mikrobiol Virusol** 1988 Nov;(11):21–5 (Eng. Abstr.) **(Rus)**

[Integration and amplification of plasmid DNA in the Bacillus subtilis chromosome] Shevchenko TN, et al. **Tsitol Genet** 1989 Mar–Apr;23(2):53–8 (Eng. Abstr.) **(Rus)**

[A library of genes of plasmid PSS120 of Shigella sonnei] Belova TS, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Jul;(7):20–3 (Eng. Abstr.) **(Rus)**

[Change in the ultrastructure of the cell wall of Bacillus cereus, determined by RP4 MUCTS62 plasmid] Goderdzishvili MG, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Feb;(2):8–11 (Eng. Abstr.) **(Rus)**

[Meningococcal plasmids] Khetsuriani KG, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Mar;(3):27–30 (Eng. Abstr.) **(Rus)**

[Occurrence of plasmids and analysis of resistance in clinical strains of Escherichia coli] Burian J, et al. **Cesk Epidemiol Mikrobiol Imunol** 1988 Nov;37(6):329–35 (Eng. Abstr.) **(Slo)**

[Analysis of phenotype resistance of clinical strains of Escherichia coli] Burian J, et al. **Cesk Epidemiol Mikrobiol Imunol** 1989 May;38(3):167–73 (Eng. Abstr.) **(Slo)**

[Use of the plasmid profile of bacteria in epidemiologic studies] Majtánová L, et al. **Cesk Epidemiol Mikrobiol Imunol** 1988 Sep;37(5):309–15 (30 ref.) (Eng. Abstr.) **(Slo)**

[Molecular epidemiology of infective agents] Ruiz Trevisán A, et al. **Medicina (B Aires)** 1988;48(2):194–200 (35 ref.) **(Spa)**

[Methodology for the preparation and analysis of plasmids from a large number of bacterial strains] Ruiz Trevisan A, et al. **Rev Argent Microbiol** 1984;16(3):169–76 **(Spa)**

DRUG EFFECTS

A cell–free system for studying a priming factor involved in repair of bleomycin–damaged DNA. Seki S, et al. **Acta Med Okayama** 1989 Apr;43(2):73–80

Virulence associated plasmid and R–plasmid curing in Yersinia enterocolitica by some tricyclic compounds. Molnár J, et al. **Acta Microbiol Hung** 1988;35(3):307–12

Ciprofloxacin and etoposide (VP16) produce a similar pattern of DNA cleavage in a plasmid of an archaebacterium. Sioud M, et al. **Biochemistry** 1989 May 2;28(9):3638–41

Plasmid "curing" by some recently synthetized 4–quinolone compounds. Selan L, et al. **Chemioterapia** 1988 Oct; 7(5):292–4

Plasmid copy number and mutant frequencies in S. typhimurium TA102. Albertini S, et al. **Environ Mol Mutagen** 1988;12(4):353–63

Mixed–ligand complexes of platinum(II) as curing agents for pBR322 and pBR329 (ColE1) plasmids in Escherichia coli. Lakshmi VV, et al. **J Gen Microbiol** 1988 Jul;134 (Pt 7):1977–81

Effect of detergents on pathogenicity plasmids of escherichias. Krivoshein YuS, et al. **J Hyg Epidemiol Microbiol Immunol** 1988;32(3):345–52

DNA damage caused by ascorbate in the presence of Cu2+ induces mutations. Kobayashi S, et al. **Nucleic Acids Symp Ser** 1988;(19):29–32

A kinetic model for plasmid curing. Sýkora P, et al. **Plasmid** 1989 Mar;21(2):85–98

Antibiotic resistance in Neisseria gonorrhoeae: genetics and mechanisms of resistance. Johnson SR, et al. **Sex Transm Dis** 1988 Oct–Dec;15(4):217–24 (67 ref.)

[The effect of thiocyanate on bacterial plasmids using the plasmid screening test] Kramer A, et al. **Z Gesamte Hyg** 1989 May;35(5):253–5 (Eng. Abstr.) **(Ger)**

RADIATION EFFECTS

UV–induced cross–linking of proteins to plasmid pBR322 containing 8–azidoadenine 2'–deoxyribonucleotides. Meffert R, et al. **FEBS Lett** 1988 Nov 7;239(2):190–4

Repair of the plasmid pBR322 damaged by gamma–irradiation or by restriction endonucleases using different recombination–proficient E. coli strains. Bien M, et al. **Mutat Res** 1988 Nov;194(3):193–205

Protein–DNA conjugates produced by UV irradiation and their use as probes for hybridization. Czichos J, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1563–72

Biological deactivation and single–strand breakage of plasmid DNA by photosensitization using tris(2,2'–bipyridyl)ruthenium(II) and peroxydisulfate. Aboul–Enein A, et al. **Photochem Photobiol** 1988 Jul; 48(1):27–34

Photosensitization of single–strand breaks in pBR322 DNA by rose bengal. Ciulla TA, et al. **Photochem Photobiol** 1989 Mar;49(3):293–8

Photosensitization by antitumor agents--7. Correlation between anthracenedione–photosensitized DNA damage, NADH oxidation and oxygen consumption following visible light illumination. Hartley JA, et al. **Photochem Photobiol** 1988 Jul;48(1):19–25

Inhibition of transient gene expression in Chinese hamster ovary cells by cyclobutane dimers and (6–4) photoproducts in transfected ultraviolet–irradiated plasmid DNA. Mitchell DL, et al. **Plasmid** 1989 Jan;21(1):21–30

PLASMIN see FIBRINOLYSIN

PLASMINOGEN

Ligand–binding effects on the kringle 4 domain from human plasminogen: a study by laser photo–CIDNP 1H–NMR spectroscopy. De Marco A, et al. **Biochim Biophys Acta** 1989 Feb 2;994(2):121–37

Structural aspects of the plasminogen of various species. Schaller J, et al. **Enzyme** 1988;40(2–3):63–9

Human plasminogen kringle 4. Crystallization and preliminary diffraction data of two different crystal forms. Mulichak AM, et al. **J Biol Chem** 1989 Feb 5;264(4):1922–3

[Abnormal plasminogen accompanying pulmonary embolism] Katoh K, et al. **Rinsho Hoshasen** 1988 Sep;33(9):1003–4 **(Jpn)**

ADMINISTRATION & DOSAGE

Intravenous thrombolytic treatment for acute myocardial infarction. Effects of early intervention and early examination. Golf S, et al. **Acta Med Scand** 1988; 224(6):523–9

Limitation of myocardial infarct size and preservation of left ventricular function by early administration of APSAC in myocardial infarction. Bassand JP, et al. **Am J Cardiol** 1989 Jul 5;64(2):18A–23A; discussion 24A–26A

Prehospital use of APSAC: results of a placebo–controlled study. Castaigne AD, et al. **Am J Cardiol** 1989 Jul 5; 64(2):30A–33A; discussion 41A–42A

Study finds similar reperfusion rates with intravenous APSAC and intracoronary streptokinase in acute myocardial infarction [news] **Clin Pharm** 1988 Sep;7(9):634, 638

Low dose intra–arterial streptokinase and acylated plasminogen–streptokinase activator complex: a retrospective review of two thrombolytic regimes in recent peripheral arterial ischaemia. Earnshaw JJ, et al. **Eur J Vasc Surg** 1987 Jun;1(3):151–8

Development of anisoylated plasminogen–streptokinase activator complex from the acyl enzyme concept. Fears R. **Semin Thromb Hemost** 1989 Apr;15(2):129–39 (46 ref.)

ADVERSE EFFECTS

Vasculitis complicating treatment with intravenous anisoylated plasminogen streptokinase activator complex in acute myocardial infarction [letter] Gemmill JD, et al. **Br Heart J** 1988 Oct;60(4):361

ANALYSIS

The fibrinolytic enzyme system in pregnancy in Nigerians. Akinsete I, et al. **Afr J Med Med Sci** 1989 Jun;18(2):89–93

Plasminogen activation in diabetes mellitus. Kinetics of plasmin formation with tissue plasminogen activator and plasminogen from individual diabetic donors and with in vitro glucosylated plasminogen. Geiger M, et al. **Enzyme** 1988;40(2–3):149–57

Plasma plasminogen concentrations in clinically normal horses: the effect of age, sex and pregnancy. Morris DD, et al. **Equine Vet J** 1989 Mar;21(2):119–22

Comparison of human normal, full–term, fetal and adult plasminogen by physical and chemical analyses. Summaria L. **Haemostasis** 1989;19(5):266–73

Immunoassay by particle counting for coagulation testing: application to the determination of antithrombin III, von Willebrand factor antigen (vWF:Ag) and plasminogen. Borque L, et al. **J Clin Chem Clin Biochem** 1989 Mar; 27(3):175–9

Plasminogen and plasminogen proactivator in liver diseases. Boyadjian HP, et al. **Med Interne** 1988 Oct–Dec; 26(4):291–6

Elevated plasma concentrations of fibrinogen may cause an overestimation of functional plasminogen [letter] Gram J, et al. **Thromb Haemost** 1989 Feb 28;61(1):154

[Detection of plasma AT–III and plasminogen in patients with epidemic hemorrhagic fever and its clinical significance] Zhang TM. **Chung Hua I Hsueh Tsa Chih** 1988 Jul;68(7):393–4 **(Chi)**

[Recent progress on analysis of blood coagulation factors and fibrinolytic agents; new synthetic chromogenic substrate assays for hemostatic parameters] Hiura H, et al. **Rinsho Byori** 1989 Apr;Spec No 81:214–9 **(Jpn)**

[Recent progress on analysis of blood coagulation factors and fibrinolytic agents; measurement with new synthetic substrate method] Ujiie M, et al. **Rinsho Byori** 1989 Apr; Spec No 81:208–13 **(Jpn)**

[Aggregative function of thrombocytes and the status of the anticoagulation system of the blood in patients with ischemic heart disease during treatment with nitroderm] Zadionchenko VS, et al. **Klin Med (Mosk)** 1989 Mar; 67(3):72–3 **(Rus)**

[New methods of studying the plasmin system using azofibrin] Monastyrskiĭ VA, et al. **Lab Delo** 1988;(10):49–53 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

The effect of cervical dilatation by laminaria tent in first trimester legal abortions on blood loss related to fibrinolytic activity in the decidua and placenta. Jonasson A, et al. **Int J Gynaecol Obstet** 1989 May;29(1):73–7

BLOOD

The mechanism of plasminogen activation and fibrin dissolution by single chain urokinase–type plasminogen activator in a plasma milieu in vitro. Lijnen HR, et al. **Blood** 1989 May 15;73(7):1864–72

DEFICIENCY

Severe thrombotic tendency associated with a type I plasminogen deficiency. Leebeek FW, et al.

Am J Hematol 1989 Jan;30(1):32–5

Thrombovascular disease and familial plasminogen deficiency: a report of three kindreds. Dolan G, et al. **Br J Haematol** 1988 Dec;70(4):417–21

Thrombotic manifestations in plasminogen deficiency and in plasminogen abnormalities [letter] Girolami A, et al. **Thromb Haemost** 1988 Dec 22;60(3):528

GENETICS

Expression of human plasminogen cDNA in a baculovirus vector–infected insect cell system. Whitefleet–Smith J, et al. **Arch Biochem Biophys** 1989 Jun;271(2):390–9

Plasminogen polymorphism in swine. Rapacz J Jr, et al. **Comp Biochem Physiol [B]** 1989;93(2):325–31

Application of plasminogen polymorphism to forensic hemogenetics. Skoda U, et al. **Electrophoresis** 1988 Aug; 9(8):422–6

Dysplasminogenemias. Robbins KC. **Enzyme** 1988; 40(2–3):70–8 (20 ref.)

Genetic linkage between lipoprotein(a) phenotype and a DNA polymorphism in the plasminogen gene. Drayna DT, et al. **Genomics** 1988 Oct;3(3):230–6

A gene homologous to plasminogen located on human chromosome 2q11–p11. Frank SL, et al. **Genomics** 1989 Apr;4(3):449–51

The gene for the Lp(a)–specific glycoprotein is closely linked to the gene for plasminogen on chromosome 6. Lindahl G, et al. **Hum Genet** 1989 Jan;81(2):149–52

PLG A91 and PLG M6: two new plasminogen allotypes in Japan. Yuasa I, et al. **Hum Genet** 1989 Apr;82(1):94

Further evidence of a silent plasminogen (PLG) allele in two paternity cases. Weidinger S, et al. **Z Rechtsmed** 1988; 101(2):99–104

[The racial differences of plasminogen A gene (PLG* A) frequencies] Shintaku K, et al. **Sangyo Ika Daigaku Zasshi** 1989 Mar 1;11(1):49–54 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

An anti–plasminogen antibody preparation that inhibits the activation of human plasminogen but enhances the activator activity of the B–chain–streptokinase complex. Summaria L, et al. **Thromb Res** 1989 Apr 1;54(1):1–15

ISOLATION & PURIFICATION

Isolation and characterization of microplasminogen. A low molecular weight form of plasminogen. Shi GY, et al. **J Biol Chem** 1988 Nov 15;263(32):17071–5

A rapid and simple method for the separation of four molecular forms of human plasminogen. Nieuwenhuizen W, et al. **Thromb Haemost** 1989 Apr 25;61(2):208–10

METABOLISM

Plasminogen activation in the bovine udder. Hedkvist L, et al. **Acta Vet Scand** 1989;30(1):103–5

Functional analogy between lipoprotein(a) and plasminogen in the binding to the kringle 4 binding protein, tetranectin. Kluft C, et al. **Biochem Biophys Res Commun** 1989 Jun 15;161(2):427–33

Mechanism of fibrin–specific fibrinolysis by staphylokinase: participation of alpha 2–plasmin inhibitor. Sakai M, et al. **Biochem Biophys Res Commun** 1989 Jul 31;162(2):830–7

Lipoprotein a inhibits streptokinase–mediated activation of human plasminogen. Edelberg JM, et al. **Biochemistry** 1989 Mar 21;28(6):2370–4

Further characterization of the cellular plasminogen binding si.e: evidence that plasminogen 2 and lipoprotein a compete for the same site. Gonzalez–Gronow M, et al. **Biochemistry** 1989 Mar 21;28(6):2374–7

Kinetic analysis of covalent hybrid plasminogen activators: effect of CNBr–degraded fibrinogen on kinetic parameters of Glu1–plasminogen activation. Lee PP, et al. **Biochemistry** 1988 Sep 20;27(19):7506–13

An elastase–dependent pathway of plasminogen activation. Machovich R, et al. **Biochemistry** 1989 May 16; 28(10):4517–22

1H NMR studies of aliphatic ligand binding to human plasminogen kringle 4. Petros AM, et al. **Biochemistry** 1989 Feb 7;28(3):1368–76

Effectors of the activation of human [Glu1]plasminogen by human tissue plasminogen activator. Urano T, et al. **Biochemistry** 1988 Aug 23;27(17):6522–8

Urokinase–catalysed plasminogen activation. Effects of ligands binding to the AH–site of plasminogen. Christensen U. **Biochim Biophys Acta** 1988 Nov 23;957(2):258–65

Plasminogen interactions with platelets in plasma. Adelman B, et al. **Blood** 1988 Nov;72(5):1530–5

Thrombospondin interaction with plasminogen. Evidence for binding to a specific region of the kringle structure of plasminogen. DePoli P, et al. **Blood** 1989 Mar;73(4):976–82

Plasminogen binding to rat hepatocytes in primary culture and to thin slices of rat liver. Gonias SL, et al. **Blood** 1989 Aug 1;74(2):729–36

Expression of plasminogen receptors on C6 glioma cells. Hall SW, et al. **Brain Res** 1989 Aug 28;495(2):373–6

A comparison of bovine serum albumins, modified with a variety of carboxyl group agents, as stimulators of tissue–type plasminogen activator–catalyzed activation of plasminogen. Soeda S, et al. **Chem Pharm Bull (Tokyo)** 1989 Mar;37(3):723–8

Streptokinase binds to lactate dehydrogenase subunit–M, which shares an epitope with plasminogen. Podlasek SJ, et al. **Clin Chem** 1989 Jan;35(1):69–73

Prognostic significance of antithrombin III, plasminogen and proactivator of plasminogen activity in viral hepatitis. Boyadjian HP. **Dtsch Z Verdau Stoffwechselkr** 1988; 48(2):83–93

Enzymology of plasminogen activation. **Enzyme** 1988; 40(2–3):61–172

Binding of plasminogen to Escherichia coli adhesion proteins. Parkkinen J, et al. **FEBS Lett** 1989 Jul 3;250(2):437–40

Intravascular coagulation phenomena associated with prevalent fall in fibrinogen and plasminogen during L–asparaginase treatment in leukemic children. Legnani C, et al. **Haemostasis** 1988;18(3):179–86

Enhancement of the activation of Glu–plasminogen by urokinase in the simultaneous presence of tranexamic acid or fibrin. Takada A, et al. **Haemostasis** 1989;19(1):26–31

Anticoagulant low molecular weight heparin does not enhance the activation of plasminogen by tissue plasminogen activator. Andrade–Gordon P, et al. **J Biol Chem** 1989 Sep 15;264(26):15177–81

Plasminogen activation initiated by single–chain urokinase–type plasminogen activator. Potentiation by U937 monocytes. Ellis V, et al. **J Biol Chem** 1989 Feb 5;264(4):2185–8

Binding and activation of plasminogen on immobilized immunoglobulin G. Identification of the plasmin–derived Fab as the plasminogen–binding fragment. Harpel PC, et al. **J Biol Chem** 1989 Jan 5;264(1):616–24

Activation of pro–urokinase and plasminogen on human sarcoma cells: a proteolytic system with surface–bound reactants. Stephens RW, et al. **J Cell Biol** 1989 May; 108(5):1987–95

Endothelial cell–mediated conversion of Glu–plasminogen to Lys–plasminogen. Further evidence for assembly of the fibrinolytic system on the endothelial cell surface. Hajjar KA, et al. **J Clin Invest** 1988 Nov;82(5):1769–78

Binding of Lys–plasminogen to monocytes/macrophages. Silverstein RL, et al. **J Clin Invest** 1988 Dec;82(6):1948–55

Plasmin and plasminogen in bovine milk: a relationship with involution? Politis I, et al. **J Dairy Sci** 1989 Apr;72(4):900–6

Influence of various structural domains of fibrinogen and fibrin on the potentiation of plasminogen activation by recombinant tissue plasminogen activator. de Serrano VS, et al. **J Protein Chem** 1989 Feb;8(1):61–77

Plasminogen activation in plasma of patients with systemic lupus erythematosus. Negoro N, et al. **Rheumatol Int** 1989; 8(6):273–7

The effect of human recombinant tissue–type plasminogen activator on clinical and laboratory parameters of hemostasis and systemic plasminogen activation in the dog and the rat. Bloom JC, et al. **Thromb Haemost** 1988 Oct 31;60(2):271–9

Modified crossed immunoelectrophoresis to study with whole plasma the reversible complex formation of histidine–rich glycoprotein with plasminogen. Kluft C, et al. **Thromb Haemost** 1988 Dec 22;60(3):411–4

Analysis of ligand binding to kringles 4 and 5 fragments from human plasminogen. Novokhatny VV, et al. **Thromb Res** 1989 Feb 1;53(3):243–52

Absence of synergism between tissue–type plasminogen activator and urokinase on plasminogen activation rate in plasma. Rydzewski A, et al. **Thromb Res** 1989 Mar 15; 53(6):577–83

The conversion of streptokinase–plasminogen complex to SK–plasmin complex in the presence of fibrin or fibrinogen. Takada Y, et al. **Thromb Res** 1989 Apr 15;54(2):133–9

[Kinetic alterations of coagulation–anticoagulation and the fibrinolytic system in patients with epidemic hemorrhagic fever and their significance] Dong CR. **Chung Hua I Hsueh Tsa Chih** 1988 Dec;68(12):678–81, 46 (Eng. Abstr.) **(Chi)**

[Effects of ribavirin on coagulation–anticoagulation in patients with epidemic hemorrhagic fever] Wang XJ. **Chung Hua I Hsueh Tsa Chih** 1988 Dec;68(12):699–701 **(Chi)**

[A dynamic study of plasminogen, antithrombin III, fibrinogen and DIC in epidemic hemorrhagic fever] Xiang LB, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Dec; 27(12):743–6, 782 (Eng. Abstr.) **(Chi)**

[Clinical evaluation of measurement of plasma antithrombin III, alpha 2–plasmin inhibitor and plasminogen in various liver disease] Yanagisawa N, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec;85(12):2601–9 (Eng. Abstr.) **(Jpn)**

[Effect of platelet on fibrinolytic activation] Deguchi K, et al. **Rinsho Byori** 1989 Apr;Spec No 81:28–33 **(Jpn)**

[Binding of Glu–plasminogen by fibrinogen and byproducts of its proteolysis] Grinenko TV, et al. **Biokhimiia** 1989 Feb; 54(2):213–20 (Eng. Abstr.) **(Rus)**

[Binding of lys–plasminogen to E–fragment of fibrinogen] Kudinov SA, et al. **Biokhimiia** 1988 Oct;53(10):1684–90 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

The role of plasminogen in cell–mediated collagen degradation. Gavrilovic J, et al. **Cell Biol Int Rep** 1989 Apr;13(4):367–75

The role of plasminogen in interleukin–1 mediated cartilage degradation. Collier S, et al. **J Rheumatol** 1988 Jul; 15(7):1129–37

Potentiated thrombolysis in a Chandler system using rtPA and lys–plasminogen. Ljungberg J, et al. **Thromb Res** 1989 Mar 15;53(6):569–76

PHYSIOLOGY

Regulation of plasminogen activation in isolated perfused rat kidney. Muellbacher W, et al. **Am J Physiol** 1989 May; 256(5 Pt 2):F787–93

Cell–associated plasminogen activation: regulation and physiological functions. Saksela O, et al. **Annu Rev Cell Biol** 1988;4:93–126 (230 ref.)

Plasminogen activation: biochemistry, physiology, and therapeutics. Wun TC. **Crit Rev Biotechnol** 1988; 8(2):131–48 (148 ref.)

Fibrinogen Nijmegen: congenital dysfibrinogenemia associated with impaired t–PA mediated plasminogen activation and decreased binding of t–PA. Engesser L, et al. **Thromb Haemost** 1988 Aug 30;60(1):113–20

Evidence for the formation of a trimolecular complex between streptokinase, plasminogen and fibrinogen. Takada Y, et al. **Thromb Res** 1989 Feb 15;53(4):409–15

Plasminogen activation by tissue plasminogen activator in the presence of platelets. Deguchi K, et al. **Thromb Res Suppl** 1988;8:65–72

[The regulation of fibrinolysis] Matsuo O. **Nippon Rinsho** 1989 Apr;47(4):739–45 **(Jpn)**

THERAPEUTIC USE

Effect of reperfusion on electrocardiographic and enzymatic infarct size: results of a randomized multicenter study of intravenous anisoylated plasminogen streptokinase activator complex (APSAC) versus intracoronary streptokinase in acute myocardial infarction. Hackworthy RA, et al. **Am Heart J** 1988 Oct;116(4):903–14

A symposium: Early intervention in the treatment of acute myocardial infarction—clinical profile of Eminase (APSAC). November 12, 1988, Washington, D.C. **Am J Cardiol** 1989 Jul 5;64(2):1A–42A

Reperfusion, patency and reocclusion with anistreplase (APSAC) in acute myocardial infarction. Anderson JL. **Am J Cardiol** 1989 Jul 5;64(2):12A–17A; discussion 24A–26A (31 ref.)

Relation of plasma D–dimer concentrations to coronary artery reperfusion before and after thrombolytic treatment in patients with acute myocardial infarction. Brenner B, et al. **Am J Cardiol** 1989 May 15;63(17):1179–84

Increased survival after APSAC: 30–day and 12–month mortality data from the APSAC Intervention Mortality Study. Julian DG. **Am J Cardiol** 1989 Jul 5;64(2):27A–29A; discussion 41A–42A

The treatment of venous thrombosis of the upper and lower limbs with "APSAC" (p–anisoylated streptokinase–plasminogen complex). Ruckley CV, et al. **Eur J Vasc Surg** 1987 Apr;1(2):107–12

Venous thrombolysis [letter] Scott DJ, et al. **Eur J Vasc Surg** 1988 Aug;2(4):274

Thrombolytic treatment of pulmonary embolism with APSAC. Vander Sande J, et al. **Eur Respir J** 1988 Aug; 1(8):721–5

Multicenter trial of intravenous anisoylated plasminogen streptokinase activator complex (APSAC) in acute myocardial infarction: effects on infarct size and left ventricular function. Bassand JP, et al. **J Am Coll Cardiol** 1989 Apr;13(5):988–97

[Socioeconomic implications of the practice of thrombolysis in the acute stage of myocardial infarction] Hervé C, et al. **Arch Mal Coeur** 1989 Mar;82(3):353–8 (Eng. Abstr.) **(Fre)**

[Local thrombolysis using a combination of RTPA and Lys–plasminogen in ischemia due to a previous thrombosis] Marcon JL, et al. **J Mal Vasc** 1989;14(3):265–6 **(Fre)**

[At home thrombolysis. 100 cases (letter)] Hervé C, et al. **Presse Med** 1988 Dec 3;17(43):2308 **(Fre)**

PLASMINOGEN ACTIVATOR, TISSUE–TYPE

Stability of recombinant tissue plasminogen activator. Jaffe GJ, et al. **Am J Ophthalmol** 1989 Jul 15;108(1):90–1

Genentech, Inc, and symposium sponsorship [letter] Spiro M. **Ann Emerg Med** 1989 Aug;18(8):908–9

Structural changes in fibrin clot associated with the proteolytic activity induced by tissue type plasminogen activator. An NMR study. Azoury R, et al. **Biochim Biophys Acta** 1989 May 1;995(3):295–300

Evaluation of the inhibition by heparin and hirudin of coagulation activation during r–tPA–induced thrombolysis. Mirshahi M, et al. **Blood** 1989 Aug 15;74(3):1025–30

Activation of fibrin–bound plasminogen by pro–urokinase and its complementariness with that by tissue plasminogen activator. Gurewich V. **Enzyme** 1988;40(2–3):97–108 (56 ref.)

Structural and kinetic comparison of recombinant human single– and two–chain tissue plasminogen activator. Loscalzo J. **J Clin Invest** 1988 Oct;82(4):1391–7

Prediction of the three–dimensional structure of the enzymatic domain of t–PA. Heckel A, et al. **J Comput Aided Mol Des** 1988 Apr;2(1):7–14

Claims on tissue plasminogen activator. Crespi RS. **Nature** 1989 Jan 26;337(6205):317–8

New battle over TPA [news] Ezzell C. **Nature** 1989 Aug

10;340(6233):418

Synthesis of taurine- and/or acetyl group-conjugated poly(D-Glu, D-Lys) derivatives and their effects on fibrinolysis. Soeda S, et al. **Thromb Res** 1988 Oct 15; 52(2):101-10

[Tissue-type plasminogen activator and plasminogen activator inhibitor] Sakata Y. **Nippon Rinsho** 1989 Apr; 47(4):752-8 **(Jpn)**

[Comparison of structures and functions of urokinase (u-PA) and tissue plasminogen activator (t-PA)] Takada A, et al. **Nippon Rinsho** 1989 Apr;47(4):891-900 **(Jpn)**

ADMINISTRATION & DOSAGE

Single-bolus injection of recombinant tissue-type plasminogen activator in acute myocardial infarction. Tebbe U, et al. **Am J Cardiol** 1989 Sep 1;64(8):448-53

Effect of combined administration of saruplase and single-chain alteplase on coronary recanalization in acute myocardial infarction. Tranchesi B Jr, et al. **Am J Cardiol** 1989 Jul 15;64(3):229-32

Investigational use of tPA in acute stroke. del Zoppo GJ. **Ann Emerg Med** 1988 Nov;17(11):1196-201 (53 ref.)

Thrombolytic therapy of massive pulmonary embolism during prolonged cardiac arrest using recombinant tissue-type plasminogen activator. Langdon RW, et al. **Ann Emerg Med** 1989 Jun;18(6):678-80

Thrombolytic properties of human tissue-type plasminogen activator, single-chain urokinase-type plasminogen activator, and synergistic combinations in venous thrombosis models in dogs and rabbits. Spriggs DJ, et al. **Blood** 1989 Apr;73(5):1207-12

Dose ranging study of tissue plasminogen activator in acute myocardial infarction [letter] Day SJ. **BMJ** 1988 Sep 3; 297(6648):623

A double blind placebo controlled study of early and late administration of recombinant tissue plasminogen activator in acute myocardial infarction. McNeill AJ, et al. **Br Heart J** 1989 Apr;61(4):316-21

Local thrombolytic therapy of acute peripheral arterial ischaemia with tissue plasminogen activator: a dose-ranging study. Earnshaw JJ, et al. **Br J Surg** 1988 Dec;75(12):1196-200

Intra-arterial thrombolysis using recombinant tissue plasminogen activator (r-TPA): the optimal agent, at the optimal dose? Berridge DC, et al. **Eur J Vasc Surg** 1989 Aug;3(4):327-32

Case history: successful thrombolytic therapy in a patient with acute myocardial infarction. Sait YR. **Heart Lung** 1988 Nov;17(6 Pt 2):782-6

A new thrombolytic regimen for acute myocardial infarction using combination half dose tissue-type plasminogen activator with full dose streptokinase: a pilot study. KAMIT Study Group. Grines CL, et al. **J Am Coll Cardiol** 1989 Sep;14(3):573-80

Randomized, double-blind, placebo-controlled trial of tissue plasminogen activator in unstable angina. Nicklas JM, et al. **J Am Coll Cardiol** 1989 Feb;13(2):434-41

Insights derived from the thrombolysis and angioplasty in myocardial infarction (TAMI) trials. Topol EJ, et al. **J Am Coll Cardiol** 1988 Dec;12(6 Suppl A):24A-31A

Acute intervention in myocardial infarction--role of thrombolytic therapy and adjuvant angioplasty. Joseph A, et al. **J Ky Med Assoc** 1988 Oct;86(10):561-6

Effect of intravenous streptokinase as compared with that of tissue plasminogen activator on left ventricular function after first myocardial infarction. White HD, et al. **N Engl J Med** 1989 Mar 30;320(13):817-21

Evaluation of recombinant tissue plasminogen activator in embolic stroke. Chehrazi BB, et al. **Neurosurgery** 1989 Mar; 24(3):355-60

Importance of fibrin specificity in therapeutic thrombolysis and the rationale of using sequential and synergistic combinations of tissue plasminogen activator and pro-urokinase. Gurewich V. **Semin Thromb Hemost** 1989 Apr;15(2):123-8 (40 ref.)

Thrombolytic treatment for acute myocardial infarction. Kleiman N, et al. **Tex Med** 1988 Oct;84(10):27-32 (29 ref.)

Bolus dose response characteristics of single chain urokinase plasminogen activator and tissue plasminogen activator in a dog model of arterial thrombosis. Badylak SF, et al. **Thromb Res** 1988 Nov 15;52(4):295-312

[Hemorrhagic risk in intravenously administered thrombolytic treatment in acute myocardial infarction] Acar J, et al. **Arch Mal Coeur** 1988 May;81 Spec No:59-65 (Eng. Abstr.) **(Fre)**

[Thrombolysis following myocardial infarct: benefits are clarified] Michel D. **Fortschr Med** 1989 Jan 30;107(3):14-5 **(Ger)**

["Initial experiences with thrombolysis at Swiss hospitals" by H.P. Krayenbühl, H. Ziegler, T. Moccetti and R. Ritz, Schweiz. med. Wschr. 1988; 118: 1695-1697] Behrens M, et al. **Schweiz Med Wochenschr** 1989 Feb 11;119(6):196 **(Ger)**

[Systemic fibrinolysis with recombinant tissue-type plasminogen activator in subrenal aortic occlusions] Hönigl K, et al. **Vasa Suppl** 1988;26:99-102 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Associated reactions during and immediately after rtPA infusion. Linnik W, et al. **Ann Emerg Med** 1989 Mar; 18(3):234-9

Intracerebral hemorrhage complicating intravenous tissue plasminogen activator treatment. Carlson SE, et al. **Arch Neurol** 1988 Oct;45(10):1070-3

Fatal ischemic brain oedema after tissue plasminogen activator [letter] **BMJ** 1989 Feb 11;298(6670):382-3

Fatal ischaemic brain oedema after early thrombolysis with tissue plasminogen activator in acute stroke. Koudstaal PJ, et al. **BMJ** 1988 Dec 17;297(6663):1571-4

Mediastinal haemorrhage: a complication of thrombolytic treatment. Suddes KP, et al. **BMJ** 1988 Aug 20-27; 297(6647):527

Increased serum levels of fibrinogen degradation products due to treatment with recombinant tissue-type plasminogen activator for acute myocardial infarction are related to bleeding complications, but not to coronary patency. European Co-operative Study Groups for rt-PA. Arnold AE, et al. **J Am Coll Cardiol** 1989 Sep;14(3):581-8

ANALYSIS

Multicentric reticulohistiocytosis. Report of three cases with the evaluation of tissue proteinase activity. Lotti T, et al. **Am J Dermatopathol** 1988 Dec;10(6):497-504

A differential scanning calorimetric investigation of the domains of recombinant tissue plasminogen activator. Radek JT, et al. **Arch Biochem Biophys** 1988 Dec; 267(2):776-86

Molecular characterization of plasminogen activator in human supragingival plaque. Schmid J, et al. **Arch Oral Biol** 1989;34(1):17-21

Properties of molecular variants of tissue-type plasminogen activator. Krause J, et al. **Arzneimittelforschung** 1989 May; 39(5):632-7 (79 ref.)

Lectin affinity bioassay: an assay method for glycoprotein enzyme. Electricwala A. **Biochim Biophys Acta** 1989 Jan 27;990(1):53-8

Comparative study of plasminogen activators in cancers and normal mucosae of human urinary bladder. Hasui Y, et al. **Cancer Res** 1989 Feb 15;49(4):1067-70

Relationship of membrane-bound tissue type and urokinase type plasminogen activators in human breast cancers to estrogen and epidermal growth factor receptors. Needham GK, et al. **Cancer Res** 1988 Nov 15;48(22):6603-7

Plasminogen activators and plasminogen activator inhibitor in malignant and non-malignant ascitic fluid. Huber K, et al. **Eur J Clin Invest** 1988 Dec;18(6):595-9

Pharmacokinetics and haematological effects of desmopressin. Köhler M, et al. **Eur J Clin Pharmacol** 1988; 35(3):281-5

Fatty streaks and fibrous plaques in human aorta show increased plasminogen activator activity. Smokovitis A, et al. **Haemostasis** 1988;18(3):146-53

Study of the primary structure of recombinant tissue plasminogen activator by reversed-phase high-performance liquid chromatographic tryptic mapping. Chloupek RC, et al. **J Chromatogr** 1989 Feb 3;463(2):375-96

Plasminogen activator and plasminogen activator inhibitor in human preovulatory follicular fluid. Jones PB, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1039-45

Detection of impaired fibrinolytic activity in coronary artery disease--electrophoretic and immuno-blotting analysis of tissue plasminogen activator. Uno M, et al. **Jpn Circ J** 1989 Mar;53(3):229-36

Tissue-type plasminogen activator (t-PA) and dilute blood clot lysis time in nephrotic patients. Cucuianu MP, et al. **Thromb Haemost** 1989 Apr 25;61(2):270-4

Tissue plasminogen activator in human megakaryocytes and platelets: immunocytochemical localization, immunoblotting and zymographic analysis. Jeanneau C, et al. **Thromb Haemost** 1988 Jun 16;59(3):529-34

Effect of harvest medium composition on yield and chain nature of recombinant tissue-type plasminogen activator species. Dodd I, et al. **Thromb Res** 1989 Jul 1;55(1):79-85

Absence of t-PA in spontaneous metastatic lesions induced by a newly established cell line. Inufusa H, et al. **Thromb Res** 1989 Feb 15;53(4):395-400

Measurement of tPA and tPA-PAI-1 complexes by ELISA, using monoclonal antibodies: clinical relevance. Amiral J, et al. **Thromb Res Suppl** 1988;8:99-113

Functional identification of t-PA in crude and purified systems. Anglés-Cano E, et al. **Thromb Res Suppl** 1988; 8:123-30

Susceptibility of plasminogen activators to suicide inactivation. Mor A, et al. **Thromb Res Suppl** 1988;8:35-44

Tissue plasminogen activator and inhibitors of fibrinolysis in malignant melanoma. Kwaan HC, et al. **Tumour Biol** 1988;9(6):301-6

ANTAGONISTS & INHIBITORS

Potential attenuation of fibrinolysis by growth factors released from platelets and their pharmacologic implications. Fujii S, et al. **Am J Cardiol** 1989 Jun 15; 63(20):1505-11

Kinetic analysis of the interaction between plasminogen activator inhibitor-1 and tissue-type plasminogen activator. Masson C, et al. **Biochem J** 1988 Nov 15;256(1):237-44

Inhibition of fibrinolytic enzymes by thrombin inhibitors. Gilboa N, et al. **Enzyme** 1988;40(2-3):144-8

Inhibition of plasminogen activators and the growth of cultured human tumour cells. Scott GK. **Int J Biochem** 1988;20(8):817-22

Bleeding diathesis due to decreased functional activity of type 1 plasminogen activator inhibitor. Schleef RR, et al. **J Clin Invest** 1989 May;83(5):1747-52

Different mechanisms contribute to simultaneous inhibition of urokinase and tissue-type plasminogen activators by glucocorticoids in human ovarian carcinoma cells. Karlan BY, et al. **Mol Endocrinol** 1989 Jun;3(6):1006-13

Inhibition of tissue plasminogen activator inhibitor by defibrotide in atherosclerotic patients. Violi F, et al. **Semin Thromb Hemost** 1989 Apr;15(2):226-9

[Quantification of a specific inhibitor (PAI-1) of tissue-type plasminogen activator (t-PA) in the plasma] Masson C, et al. **Ann Biol Clin (Paris)** 1989;47(5):269-74 (Eng. Abstr.) **(Fre)**

BIOSYNTHESIS

Effect of fibrin on endothelial cell production of prostacyclin and tissue plasminogen activator. Kaplan KL, et al. **Arteriosclerosis** 1989 Jan-Feb;9(1):43-9

Recombinant human interleukin-1 stimulates human articular cartilage to undergo resorption and human chondrocytes to produce both tissue- and urokinase-type plasminogen activator. Campbell IK, et al. **Biochim Biophys Acta** 1988 Nov 17;967(2):183-94

Interleukin-4 stimulates human monocytes to produce tissue-type plasminogen activator. Hart PH, et al. **Blood** 1989 Sep;74(4):1222-5

Regulation and secretion of plasminogen activators and their inhibitors in a human leukemic cell line (K562). Oliver LJ, et al. **Blood** 1989 Sep;74(4):1321-7

Enhanced plasminogen activator production of Syrian hamster embryo cells transformed by chemicals or the c-Ha-ras oncogene: type of plasminogen activators involved and their contribution to the transformed phenotype. de Kok AJ, et al. **Carcinogenesis** 1989 Jul; 10(7):1155-61

Production and characterization of single-chain tissue-type plasminogen activator produced by an established cell line from human uterine muscle. Matsuo O, et al. **Cell Struct Funct** 1989 Feb;14(1):45-60

DHFR coamplification of t-PA in DHFR+ bovine endothelial cells: in vitro characterization of the purified serine protease. Connors RW, et al. **DNA** 1988 Nov; 7(9):651-61

Protein kinase C and the stimulation of tissue plasminogen activator release from human endothelial cells. Dependence on the elevation of messenger RNA. Levin EG, et al. **J Biol Chem** 1989 Sep 25;264(27):16030-6

Human monocytes can produce tissue-type plasminogen activator. Hart PH, et al. **J Exp Med** 1989 Apr 1; 169(4):1509-14

Periovulatory changes in the ovary. Morphology and expression of tissue-type plasminogen activator. Cajander SB. **Prog Clin Biol Res** 1989;296:91-101 (38 ref.)

Influence of nicotine and cotinine on the expression of plasminogen activator activity in bovine aortic endothelial cells. Kuo BS, et al. **Thromb Haemost** 1989 Feb 28; 61(1):70-6

BLOOD

Sensitive and direct assays for functionally active plasminogen activators (tissue-type and urokinase-type) in plasma. Mahmoud-Alexandroni M, et al. **Am J Clin Pathol** 1989 Sep;92(3):308-14

Defective release of tissue plasminogen activator in patients with sickle cell anemia. Phillips G, et al. **Am J Hematol** 1988 Sep;29(1):52-3

Differences between binding of one-chain and two-chain tissue plasminogen activators to non-cross-linked and cross-linked fibrin clots. Husain SS, et al. **Blood** 1989 Aug 15;74(3):999-1006

Increased tissue-plasminogen activator (t-PA) levels in patients under oral anticoagulant therapy. Grulich-Henn J, et al. **Blut** 1989 Jan;58(1):39-43

Diurnal variation of tissue-type plasminogen activator and its rapid inhibitor (PAI-1). Angleton P, et al. **Circulation** 1989 Jan;79(1):101-6

Dependence of fibrinolytic activity on the concentration of free rather than total tissue-type plasminogen activator in plasma after pharmacologic administration. Lucore CL, et al. **Circulation** 1989 Jun;79(6):1204-13

Impact of acute phase on concentrations of tissue plasminogen activator and plasminogen activator inhibitor in plasma after deep-vein thrombosis or open-heart surgery. Jansson JH, et al. **Clin Chem** 1989 Jul;35(7):1544-5

Impact of immediate acidification of blood on measurement of plasma tissue plasminogen activator (tPA) activity in surgical patients. Nilsson TK, et al. **Clin Chem** 1989 Sep; 35(9):1999

Evidence for increased levels of plasminogen activator inhibitor and tissue plasminogen activator in plasma of patients with angiographically verified coronary artery disease. Olofsson BO, et al. **Eur Heart J** 1989 Jan; 10(1):77-82

Leukocyte tissue-type plasminogen activator activity in dialysis patients. Nishimoto K, et al. **Int J Artif Organs** 1989 Feb;12(2):91-5

Characterization of the binding of human tissue-type plasminogen activator to platelets. Vaughan DE, et al. **J Biol Chem** 1989 Sep 25;264(27):15869-74

Fibrinolytic variables are related to age, sex, blood pressure, and body build measurements: a cross-sectional study in

Norsjö, Sweden. Sundell IB, et al. **J Clin Epidemiol** 1989; 42(8):719–23

Rise of plasma t-PA fibrinolytic activity in a group of maturity onset diabetic patients shifted from a first generation (tolbutamide) to a second generation sulphonylurea (gliclazide). Gram J, et al. **J Intern Med** 1989 Apr;225(4):241–7

Optimum conditions for the stabilization and measurement of tissue plasminogen activator activity in human plasma. Chandler WL, et al. **J Lab Clin Med** 1989 Mar; 113(3):362–71

Tissue-type plasminogen activator and fast-acting plasminogen activator inhibitor in plasma. Verheijen JH. **Methods Enzymol** 1988;163:302–9

Promotion and subsequent inhibition of plasminogen activation after administration of intravenous endotoxin to normal subjects. Suffredini AF, et al. **N Engl J Med** 1989 May 4;320(18):1165–72

Functional determination of tPA, PAI and fibrinogen in endotoxin shock of the pig. Spannagl M, et al. **Prog Clin Biol Res** 1989;308:395–9

The effect of body build, diet and endocrine factors on the extrinsic fibrinolytic system in healthy young women. Sundell IB, et al. **Scand J Clin Lab Invest** 1988 Oct; 48(6):557–64

Normal but not hypertriglyceridemic very low-density lipoprotein induces rapid release of tissue plasminogen activator from cultured human umbilical vein endothelial cells. Booyse FM, et al. **Semin Thromb Hemost** 1988 Apr; 14(2):175–9

Circadian fluctuations of plasminogen activator inhibitor and tissue plasminogen activator levels in plasma of patients with unstable coronary artery disease and acute myocardial infarction. Huber K, et al. **Thromb Haemost** 1988 Dec 22; 60(3):372–6

Tissue-type plasminogen activator in patients with intracranial meningiomas. Tsuda H, et al. **Thromb Haemost** 1988 Dec 22;60(3):508–13

Relationship between smoking and fibrinolytic system with special reference to t-PA and PA inhibitor. Hashimoto Y, et al. **Thromb Res** 1988 Aug 1;51(3):303–11

Heparin induced increase of t-PA antigen plasma levels in patients with unstable angina: no evidence for clinical benefit of heparinization during the initial phase of treatment. Huber K, et al. **Thromb Res** 1989 Sep 15; 55(6):779–84

Source of increased plasminogen activators during pregnancy and puerperium. Shimada H, et al. **Thromb Res** 1989 Apr 15;54(2):91–8

Changes in levels of t-PA and alpha 2PI-plasmin complex in plasma in patients with DIC. Matsuda T, et al. **Thromb Res Suppl** 1988;8:143–51

Measurements of the concentration of free plasminogen activator inhibitor (PAI-1) and its complex with tissue plasminogen activator in human plasma. Takada Y, et al. **Thromb Res Suppl** 1988;8:15–22

Alterations in plasminogen activator and plasminogen activator inhibitor levels during liver transplantation. Virji MA, et al. **Transplant Proc** 1989 Jun;21(3):3540–1

[Changes in plasma tissue plasminogen activator and plasminogen activator inhibitor in acute myocardial infarction and its clinical significance] Jia HY, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Aug; 16(4):214–6, 254 (Eng. Abstr.) **(Chi)**

GENETICS

Purification and characterization of tissue plasminogen activator kringle-2 domain expressed in Escherichia coli. Cleary S, et al. **Biochemistry** 1989 Feb 21;28(4):1884–91

Thrombin regulation of mRNA levels of tissue plasminogen activator and plasminogen activator inhibitor-1 in cultured human umbilical vein endothelial cells. Dichek D, et al. **Blood** 1989 Jul;74(1):222–8

Tissue-type plasminogen activator mutants. Theoretical and clinical considerations. Bang NU. **Circulation** 1989 Jun; 79(6):1391–2

Cloning and characterization of a cDNA for rat tissue-type plasminogen activator. Ny T, et al. **DNA** 1988 Dec; 7(10):671–7

Variants of human tissue-type plasminogen activator that lack specific structural domains of the heavy chain. Gething MJ, et al. **EMBO J** 1988 Sep;7(9):2731–40

Neutralization by plasminogen activator inhibitor-1 of mutants of tissue plasminogen activator. Bergum PW, et al. **Enzyme** 1988;40(2–3):122–9

Construction and expression of a hybrid plasminogen activator gene with sequences from non-protease region of tissue-type plasminogen activator (t-PA) and protease region of urokinase (u-PA). Kalyan NK, et al. **Gene** 1988 Sep 7;68(2):205–12

Human tissue-type plasminogen activator synthesized by using a baculovirus vector in insect cells compared with human plasminogen activator produced in mouse cells. Steiner H, et al. **Gene** 1988 Dec 20;73(2):449–57

Amplified expression constructs for human tissue-type plasminogen activator in Chinese hamster ovary cells: instability in the absence of selective pressure. Weidle UH, et al. **Gene** 1988 Jun 30;66(2):193–203

A protease-hypersensitive deletion derivative of human tissue-type plasminogen activator. Weidle UH, et al. **Gene** 1988 Dec 20;73(2):439–47

A new expression system for mammalian cells based on putative replicator sequences of the mouse and a truncated thymidine kinase gene. Weidle UH, et al. **Gene** 1988 Dec 20;73(2):427–37

Characterization of interaction of active-site serine mutants of tissue-type plasminogen activator with plasminogen activator inhibitor-1. Monge JC, et al. **J Biol Chem** 1989 Jun 25;264(18):10922–5

Alteplase (rtPA) patent case. Brahams D. **Lancet** 1988 Nov 26;2(8622):1263

Differentiation-responsive elements in the 5' region of the mouse tissue plasminogen activator gene confer two-stage regulation by retinoic acid and cyclic AMP in teratocarcinoma cells. Rickles RJ, et al. **Mol Cell Biol** 1989 Apr;9(4):1691–704

Adenovirus E1A-mediated negative control of genes activated during F9 differentiation. Young KS, et al. **Mol Cell Biol** 1989 Jul;9(7):3109–13

Glucocorticoid and cyclic nucleotide regulation of plasminogen activator and plasminogen activator-inhibitor gene expression in primary cultures of rat hepatocytes. Heaton JH, et al. **Mol Endocrinol** 1989 Jan;3(1):185–92

Hormonal regulation of tissue-type plasminogen activator messenger ribonucleic acid levels in rat granulosa cells: mechanisms of induction by follicle-stimulating hormone and gonadotropin releasing hormone. Ohlsson M, et al. **Mol Endocrinol** 1988 Sep;2(9):854–61

Regulation of urokinase- and tissue-type plasminogen activator gene expression in the rat seminiferous epithelium. Vihko KK, et al. **Mol Endocrinol** 1989 Jan;3(1):52–9

Claims on tissue plasminogen activator. Crespi RS. **Nature** 1989 Jan 26;337(6205):317–8

Genentech loses appeal against Wellcome [news] McGourty C. **Nature** 1988 Nov 3;336(6194):4

Serpin-resistant mutants of human tissue-type plasminogen activator. Madison EL, et al. **Nature** 1989 Jun 29; 339(6227):721–4

Construction of a tissue plasminogen activator gene having unique restriction sites to facilitate domain manipulation: a model for the analysis of multi-domain proteins. Rehberg EF, et al. **Protein Eng** 1989 Jan;2(5):371–7

[Development of new thrombolytic enzymes by gene technology--with special references to t-PA, scu-PA, protein C] Ueshima S. **Nippon Rinsho** 1989 Apr;47(4):901–9 **(Jpn)**

IMMUNOLOGY

Antibody-directed fibrinolysis. An antibody specific for both fibrin and tissue plasminogen activator. Bode C, et al. **J Biol Chem** 1989 Jan 15;264(2):944–8

Functional characterization of monoclonal antibodies directed against fibrin binding domains of tissue-type plasminogen activator. Wojta J, et al. **J Biol Chem** 1989 May 15;264(14):7957–61

A fibrin specific monoclonal antibody which interferes with the fibrinolytic effect of tissue plasminogen activator. Gargan PE, et al. **Thromb Haemost** 1988 Jun 16; 59(3):426–31

ISOLATION & PURIFICATION

Structural fingerprinting of Asn-linked carbohydrates from specific attachment sites in glycoproteins by mass spectrometry: application to tissue plasminogen activator. Carr SA, et al. **Biochimie** 1988 Nov;70(11):1445–54

Heterogeneity of human tissue-type plasminogen activator. Opdenakker G, et al. **FEBS Lett** 1988 Sep 26;238(1):129–34

Isolation and interrelationships of the multiple molecular tissue-type and urokinase-type plasminogen activator forms produced by cultured human umbilical vein endothelial cells. Booyse FM, et al. **J Biol Chem** 1988 Oct 15;263(29):15129–38

Carbohydrate structures of human tissue plasminogen activator expressed in Chinese hamster ovary cells. Spellman MW, et al. **J Biol Chem** 1989 Aug 25; 264(24):14100–11

Characterization of a plasminogen activator and its inhibitor in human mesangial cells. Lacave R, et al. **Kidney Int** 1989 Mar;35(3):806–11

Isolation, identification and pharmacokinetic properties of human tissue-type plasminogen activator species: possible localisation of a clearance recognition site. Dodd I, et al. **Thromb Haemost** 1988 Jun 16;59(3):523–8

METABOLISM

Tissue plasminogen activator in human aqueous humor and its possible therapeutic significance. Tripathi RC, et al. **Am J Ophthalmol** 1988 Dec 15;106(6):719–22

Regulation of tissue plasminogen activator expression. Gerard RD, et al. **Annu Rev Physiol** 1989;51:245–62 (134 ref.)

Stimulation by fibrinogen of the amidolytic activity of single-chain tissue plasminogen activator. Urano T, et al. **Arch Biochem Biophys** 1989 Apr;270(1):356–62

Production of proteases type plasminogen activator and their inhibitor in cornea. Mirshahi M, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1021–5

The single-chain form of tissue-type plasminogen activator has catalytic activity: studies with a mutant enzyme that lacks the cleavage site. Boose JA, et al. **Biochemistry** 1989 Jan 24;28(2):635–43

Effect of residue 65 substitutions on thermal stability of tissue plasminogen activator kringle-2 domain. Kelley RF, et al. **Biochemistry** 1989 May 2;28(9):4047–54

Proteolytic modification of tissue plasminogen activator: importance of the N-terminal part of the catalytically active B-chain for enzymatic activity. Norrman B, et al. **Biochemistry** 1988 Nov 1;27(22):8325–30

Effectors of the activation of human [Glu1]plasminogen by human tissue plasminogen activator. Urano T, et al. **Biochemistry** 1988 Aug 23;27(17):6522–8

Clot uptake of labeled active and inhibited tissue plasminogen activator. Lavie E, et al. **Biochim Biophys Acta** 1989 Apr 25;991(1):62–7

Immunohistochemical localisation of tissue plasminogen activator in human brain tumours. Franks AJ, et al. **Br J Cancer** 1989 Mar;59(3):462–6

Immunohistochemical localization of tissue-type plasminogen activator in ovaries before and after induced and spontaneous ovulation in the rat. Cajander SB, et al. **Cell Tissue Res** 1989 Jul;257(1):1–8

Increasing selectivity of plasminogen activators with antibodies. Runge MS, et al. **Clin Res** 1988 Sep;36(5):501–6 (30 ref.)

Tissue-type plasminogen activator in subretinal fluid. Immonen I, et al. **Curr Eye Res** 1989 Mar;8(3):249–52

Tissue-type plasminogen activator in rat oocytes: expression during the periovulatory period, after fertilization, and during follicular atresia. Bicsak TA, et al. **Endocrinology** 1989 Jan;124(1):187–94

Estrogen regulation of human breast cancer cell line MCF-7 tissue plasminogen activator. Dickerman HW, et al. **Endocrinology** 1989 Jul;125(1):492–500

Epidermal growth factor stimulates tissue plasminogen activator activity and messenger ribonucleic acid levels in cultured rat granulosa cells: mediation by pathways independent of protein kinases-A and -C. Galway AB, et al. **Endocrinology** 1989 Jul;125(1):126–35

Enzymology of plasminogen activation. **Enzyme** 1988; 40(2–3):61–172

Plasminogen activator and its inhibitor in the experimental corneal wound. Tervo T, et al. **Exp Eye Res** 1989 Mar; 48(3):445–9

Influence of hirudin on the thrombin-induced release of tissue plasminogen activator from isolated perfused pig ear. Klöcking HP, et al. **Folia Haematol (Leipz)** 1988; 115(1–2):110–2

Elevated tissue type plasminogen activator in human granulosa cells correlates with fertilizing capacity. Deutinger J, et al. **Hum Reprod** 1988 Jul;3(5):597–9

Enhancement of urokinase-type plasminogen activator activity during the growth of a murine mammary adenocarcinoma [letter] Pereyra-Alfonso S, et al. **Int J Cancer** 1989 Feb 15;43(2):356–7

The effect of cervical dilatation by laminaria tent in first trimester legal abortions on blood loss related to fibrinolytic activity in the decidua and placenta. Jonasson A, et al. **Int J Gynaecol Obstet** 1989 May;29(1):73–7

Thrombin enhances release of tissue plasminogen activator from bovine corneal endothelial cells. Fukushima M, et al. **Invest Ophthalmol Vis Sci** 1989 Jul;30(7):1576–83

Anticoagulant low molecular weight heparin does not enhance the activation of plasminogen by tissue plasminogen activator. Andrade-Gordon P, et al. **J Biol Chem** 1989 Sep 15;264(26):15177–81

Rat oocyte tissue plasminogen activator is a catalytically efficient enzyme in the absence of fibrin. Endogenous potentiation of enzyme activity. Bicsak TA, et al. **J Biol Chem** 1989 Jan 5;264(1):630–4

Identification of the domains of tissue-type plasminogen activator involved in the augmented binding to fibrin after limited digestion with plasmin. de Vries C, et al. **J Biol Chem** 1989 Jul 25;264(21):12604–10

Functional effects of asparagine-linked oligosaccharide on natural and variant human tissue-type plasminogen activator. Hansen L, et al. **J Biol Chem** 1988 Oct 25; 263(30):15713–9

Characterization of a chimeric plasminogen activator consisting of amino acids 1 to 274 of tissue-type plasminogen activator and amino acids 138 to 411 of single-chain urokinase-type plasminogen activator. Lijnen HR, et al. **J Biol Chem** 1988 Dec 15;263(35):19083–91

Catabolism of tissue-type plasminogen activator by the human hepatoma cell line Hep G2. Modulation by plasminogen activator inhibitor type 1. Morton PA, et al. **J Biol Chem** 1989 May 5;264(13):7228–35

Cyclic AMP potentiates phorbol ester stimulation of tissue plasminogen activator release and inhibits secretion of plasminogen activator inhibitor-1 from human endothelial cells. Santell L, et al. **J Biol Chem** 1988 Nov 15; 263(32):16802–8

Structural domains of human tissue-type plasminogen activator that confer stimulation by heparin. Stein PL, et al. **J Biol Chem** 1989 Sep 15;264(26):15441–4

Characterization of 125I-tissue plasminogen activator binding to cerebellar granule neurons. Verrall S, et al. **J Cell Biol** 1989 Jul;109(1):265–71

Simultaneous stimulation of urokinase and tissue-type plasminogen activators by phorbol esters in human ovarian carcinoma cells. Band V, et al. **J Cell Physiol** 1989 Jan; 138(1):106–14

Interaction between plasminogen activator inhibitor type 1 (PAI-1) bound to fibrin and either tissue-type plasminogen activator (t-PA) or urokinase-type plasminogen activator (u-PA). Binding of t-PA/PAI-1 complexes to fibrin

mediated by both the finger and the kringle-2 domain of t-PA. Wagner OF, et al. **J Clin Invest** 1989 Aug; 84(2):647–55

Modulation of mRNA levels for urinary- and tissue-type plasminogen activator and plasminogen activator inhibitors 1 and 2 in human fibroblasts by interleukin 1. Michel JB, et al. **J Immunol** 1989 Aug 1;143(3):890–5

Tumor growth and metastases in malignant disease. A review. Kwaan HC. **J Med** 1988;19(3–4):179–91 (59 ref.)

Modulation of plasminogen activator systems by matrix components in two breast cancer cell lines: MCF-7 and MDA-MB-231. Pourreau-Schneider N, et al. **J Natl Cancer Inst** 1989 Feb 15;81(4):259–66

Induction of morphological differentiation of human neuroblastoma cells is accompanied by induction of tissue-type plasminogen activator. Neuman T, et al. **J Neurosci Res** 1989 Jul;23(3):274–81

Tissue plasminogen activator binding to mouse cerebellar granule neurons. Verrall S, et al. **J Neurosci Res** 1988 Oct-Dec;21(2–4):420–5

Fibrinolytic activity and localization of plasminogen activator in bovine vitreous body and aqueous humor. Hayashi K, et al. **Jpn J Ophthalmol** 1989;33(1):66–75

Neuroendocrine regulation of oocyte tissue plasminogen activator. Bicsak TA, et al. **Methods Enzymol** 1989; 168:422–30

Tissue plasminogen activator in the lens. Tripathi BJ, et al. **Ophthalmic Res** 1988;20(3):160–3

Plasmin-mediated fibrinolysis by variant recombinant tissue plasminogen activators. Urano S, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2568–71

Renal and hepatic handling of endogenous tissue-type plasminogen activator (t-PA) and its inhibitor in man. Brommer EJ, et al. **Thromb Haemost** 1988 Jun 16; 59(3):404–11

Uptake and degradation of tissue plasminogen activator in rat liver. Einarsson M, et al. **Thromb Haemost** 1988 Jun 16;59(3):474–9

Norepinephrine and DDAVP induced rise in tissue plasminogen activator [letter] Grant PJ, et al. **Thromb Haemost** 1988 Oct 31;60(2):342

Investigation by HPLC of the catabolism of recombinant tissue plasminogen activator in the rat. Harris R, et al. **Thromb Haemost** 1988 Aug 30;60(1):107–12

Binding of tissue plasminogen activator to vascular grafts. Harvey RA, et al. **Thromb Haemost** 1989 Feb 28; 61(1):131–6

Monoclonal antibodies to tissue-type plasminogen activator which prolong its clearance in vivo. Reilly TM, et al. **Thromb Haemost** 1989 Apr 25;61(2):259–61

Tissue plasminogen activator is endocytosed by mannose and galactose receptors of rat liver cells. Smedsrød B, et al. **Thromb Haemost** 1988 Jun 16;59(3):480–4

Intraoperative evolution of coagulation parameters and t-PA/PAI balance in orthotopic liver transplantation. Arnoux D, et al. **Thromb Res** 1989 Aug 1;55(3):319–28

Kinetic study of tPA release induced by heparin and heparin fragment. Doutremepuich C, et al. **Thromb Res** 1989 Mar 15;53(6):615–21

Placental and decidual u-PA, t-PA, PAI-1 and PAI-2 concentrations, as affected by cervical dilatation with laminaria tents or Hegar dilators. Jonasson A, et al. **Thromb Res** 1989 Jan 15;53(2):91–7

Characterization of a chimaeric plasminogen activator obtained by insertion of the second kringle structure of tissue-type plasminogen activator (amino acids 173 through 262) between residues Asp130 and Ser139 of urokinase-type plasminogen activator. Lijnen HR, et al. **Thromb Res** 1988 Dec 1;52(5):431–41

Monoclonal antibody interferes with fibrin binding of t-PA. Matsuo O, et al. **Thromb Res** 1988 Sep 1;51(5):485–94

Inhibition by tranexamic acid of the conversion of single-chain tissue plasminogen activator to its two chain form by plasmin: the presence on tissue plasminogen activator of a site to bind with lysine binding sites of plasmin. Takada A, et al. **Thromb Res** 1989 Sep 15; 55(6):717–25

[Effect of dermatan sulphate on plasminogen activator activity in perfused rat hindlegs] Zhu GJ. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Dec; 10(6):435–8 (Eng. Abstr.) **(Chi)**

[Plasminogen activator activity in mouse ovaries during periovulatory period] Liu YX, et al. **Sheng Li Hsueh Pao** 1989 Jun;41(3):284–90 (Eng. Abstr.) **(Chi)**

[Persistent changes in tissue-type plasminogen activator and plasminogen activator inhibitor fibrinolytic parameters in patients following juvenile ischemic cerebral infarct] Baumgartner C, et al. **Klin Wochenschr** 1988 Nov 15; 66(22):1110–5 (Eng. Abstr.) **(Ger)**

PHARMACOKINETICS

Pharmacokinetic and distribution analysis of variant forms of tissue-type plasminogen activator with prolonged clearance in rat. Larsen GR, et al. **Blood** 1989 May 15; 73(7):1842–50

Pharmacokinetics and systemic effects of tissue-type plasminogen activator in normal subjects. Tanswell P, et al. **Clin Pharmacol Ther** 1989 Aug;46(2):155–62

Characterization of the interaction in vivo of tissue-type plasminogen activator with liver cells. Kuiper J, et al. **J Biol Chem** 1988 Dec 5;263(34):18220–4

The influence of carbohydrate structure on the clearance of recombinant tissue-type plasminogen activator. Hotchkiss A, et al. **Thromb Haemost** 1988 Oct 31;60(2):255–61

Uptake of human recombinant tissue-type plasminogen activator by rat hepatocytes in vivo: an electron microscope autoradiographic study. Bugelski PJ, et al. **Thromb Res** 1989 Feb 1;53(3):287–303

PHARMACOLOGY

Tissue plasminogen activator and the corneal endothelium. McDermott ML, et al. **Am J Ophthalmol** 1989 Jul 15; 108(1):91–2

PGE1 accelerates thrombolysis by tissue plasminogen activator. Vaughan DE, et al. **Blood** 1989 Apr;73(5):1213–7

A comparison of bovine serum albumins, modified with a variety of carboxyl group agents, as stimulators of tissue-type plasminogen activator-catalyzed activation of plasminogen. Soeda S, et al. **Chem Pharm Bull (Tokyo)** 1989 Mar;37(3):723–8

Synergistic disaggregation of platelets by tissue-type plasminogen activator, prostaglandin E1, and nitroglycerin. Stamler JS, et al. **Circ Res** 1989 Sep;65(3):796–804

Time course of thrombolysis induced by intravenous bolus or infusion of tissue plasminogen activator in a rabbit jugular vein thrombosis model. Clozel JP, et al. **Circulation** 1989 Jan;79(1):125–33

Synergistic combinations of recombinant human tissue-type plasminogen activator and human single-chain urokinase-type plasminogen activator. Effect on thrombolysis and reocclusion in a canine coronary artery thrombosis model with high-grade stenosis. Ziskind AA, et al. **Circulation** 1989 Feb;79(2):393–9

A factor from endothelium facilitates activation of plasminogen by tissue plasminogen activator. Machovich R, et al. **Enzyme** 1988;40(2–3):109–12

Comparison of thrombolytic, fibrinolytic, and fibrinogenolytic properties of tissue plasminogen activator, streptokinase, single-chain urokinase, high molecular weight and low molecular weight urokinase in human plasma in vitro. Samama M, et al. **Fundam Clin Pharmacol** 1988;2(6):509–23

Evaluation of the acute hemodynamic effects and pharmacokinetics of coronary thrombolysis produced by intravenous tissue-type plasminogen activator in the anesthetized dog. Kopia GA, et al. **J Cardiovasc Pharmacol** 1988 Sep;12(3):308–16

Influence of various structural domains of fibrinogen and fibrin on the potentiation of plasminogen activation by recombinant tissue plasminogen activator. de Serrano VS, et al. **J Protein Chem** 1989 Feb;8(1):61–77

The usefulness of systemic administration of recombinant human tissue-type plasminogen activator in femoral arterial thrombolysis of rabbits. Mino T, et al. **Jpn J Pharmacol** 1989 Aug;50(4):429–33

Recombinant tissue plasminogen activator: a brief review. Grossbard EB. **Pharm Res** 1987 Oct;4(5):375–8 (27 ref.)

The effect of human recombinant tissue-type plasminogen activator on clinical and laboratory parameters of hemostasis and systemic plasminogen activation in the dog and the rat. Bloom JC, et al. **Thromb Haemost** 1988 Oct 31;60(2):271–9

Potentiated thrombolysis in a Chandler system using rtPA and lys-plasminogen. Ljungberg J, et al. **Thromb Res** 1989 Mar 15;53(6):569–76

Platelet activity during acute myocardial infarction treated with tissue plasminogen activator. Ring ME, et al. **Thromb Res** 1988 Aug 1;51(3):331–4

Absence of synergism between tissue-type plasminogen activator and urokinase on plasminogen activation rate in plasma. Rydzewski A, et al. **Thromb Res** 1989 Mar 15; 53(6):577–83

Effect of thromboxane synthase inhibition on the thrombolytic action of tissue-type plasminogen activator in a rabbit model of peripheral arterial thrombosis. Shebuski RJ, et al. **Thromb Res** 1988 Dec 1;52(5):381–92

Plasminogen activation by tissue plasminogen activator in the presence of platelets. Deguchi K, et al. **Thromb Res Suppl** 1988;8:65–72

Changes in various parameters of fibrinolysis in persons infused with tissue plasminogen activator: special reference to plasminogen activator inhibitor. Takada A, et al. **Thromb Res Suppl** 1988;8:23–33

[Actilyse: biological aspects] Samama M, et al. **Arch Mal Coeur** 1988 May;81 Spec No:51–7 (25 ref.) (Eng. Abstr.) **(Fre)**

[Effects of tissue-type plasminogen activator from a culture of calf kidney cells on hemostasis and fibrinolysis in experimental nephritis] Andreenko GV, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):424–6 (Eng. Abstr.) **(Rus)**

[Thrombolysis using tissue-type plasminogen activator and pro-urokinase: synergism; mutants and hybrids] Páramo JA, et al. **Sangre (Barc)** 1989 Aug;34(4):297–9 (28 ref.) **(Spa)**

PHYSIOLOGY

Suppression of ovulation rate by antibodies to tissue-type plasminogen activator and alpha 2-antiplasmin. Tsafriri A, et al. **Endocrinology** 1989 Jan;124(1):415–21

Plasminogen activation in diabetes mellitus. Kinetics of plasmin formation with tissue plasminogen activator and plasminogen from individual diabetic donors and with in vitro glucosylated plasminogen. Geiger M, et al. **Enzyme** 1988;40(2–3):149–57

Biological control of tissue plasminogen activator-mediated fibrinolysis. Rånby M, et al. **Enzyme** 1988;40(2–3):130–43 (165 ref.)

Tissue-type plasminogen activator inhibits aggregation of platelets in vitro. Mizuta T, et al. **Life Sci** 1988; 43(12):955–63

Molecular mechanisms in the hormonal regulation of plasminogen activator activity in ovarian granulosa cells and cumulus-oocyte complexes. Hsueh AJ, et al. **Prog Clin Biol Res** 1988;267:227–57 (41 ref.)

Fibrinogen Nijmegen: congenital dysfibrinogenemia associated with impaired t-PA mediated plasminogen activation and decreased binding of t-PA. Engesser L, et al. **Thromb Haemost** 1988 Aug 30;60(1):113–20

Tissue-type-plasminogen-activator-associated fibrinolysis in orthotopic liver transplantation. Porte RJ, et al. **Transplant Proc** 1989 Jun;21(3):3542

Systemic effects of tissue plasminogen activator-associated fibrinolysis and its relation to thrombin generation in orthotopic liver transplantation. Porte RJ, et al. **Transplantation** 1989 Jun;47(6):978–84

[Studies on ovarian plasminogen activators and their inhibitor] Liu YX. **Sheng Li Hsueh Pao** 1988 Oct; 40(5):421–9 (20 ref.) (Eng. Abstr.) **(Chi)**

[Effect of platelet on fibrinolytic activation] Deguchi K, et al. **Rinsho Byori** 1989 Apr;Spec No 81:28–33 **(Jpn)**

[Role of t-PA on the initiation and regulation of fibrinolysis] Matsuo O. **Rinsho Byori** 1989 Apr;Spec No 81:99–106 **(Jpn)**

[Tissue-type plasminogen activator—a fibrinolytic preparation] Makarov VA. **Farmakol Toksikol** 1989 Mar-Apr;52(2):90–3 (14 ref.) (Eng. Abstr.) **(Rus)**

SECRETION

Inhibition of endothelial secretion of tissue-type plasminogen activator and its rapid inhibitor by agents which increase intracellular cyclic AMP. Francis RB Jr, et al. **Biochim Biophys Acta** 1989 Jul 11;1012(2):207–13

Active human tissue plasminogen activator secreted from insect cells using a baculovirus vector. Furlong AM, et al. **Biotechnol Appl Biochem** 1988 Oct;10(5):454–64

Features of endothelial dysfunction in early diabetic nephropathy. Jensen T, et al. **Lancet** 1989 Mar 4; 1(8636):461–3

Reduction of endogenous GRP78 levels improves secretion of a heterologous protein in CHO cells. Dorner AJ, et al. **Mol Cell Biol** 1988 Oct;8(10):4063–70

Glycosylation and secretion of human tissue plasminogen activator in recombinant baculovirus-infected insect cells. Jarvis DL, et al. **Mol Cell Biol** 1989 Jan;9(1):214–23

Fluid flow stimulates tissue plasminogen activator secretion by cultured human endothelial cells. Diamond SL, et al. **Science** 1989 Mar 17;243(4897):1483–5

THERAPEUTIC USE

Drugs recently released in Belgium. Recombinant DNA tissue plasminogen activator (rt-PA) famotidine-sultamicillin. Harvengt C. **Acta Clin Belg** 1988; 43(5):396–400

Selective embolization and clot dissolution with tPA in the internal carotid artery circulation of the rabbit. Phillips DA, et al. **AJNR** 1988 Sep;9(5):899–902

31P spectroscopy in thrombolytic treatment of experimental cerebral infarct. Lee BC, et al. **AJR** 1989 Mar;152(3):623–8

Enhancement of arterial thrombolysis with native tissue type plasminogen activator by pretreatment with heparin or batroxobin: an angioscopic study. Tomaru T, et al. **Am Heart J** 1989 Feb;117(2):275–81

Intermittent, dose-related fluctuations of pain and ST elevation during infusion of recombinant tissue plasminogen activator during acute myocardial infarction. Barbash GI, et al. **Am J Cardiol** 1989 Jul 15;64(3):225–8

Potential use of thrombolytic therapy before hospitalization. Kennedy JW, et al. **Am J Cardiol** 1989 Jul 5;64(2):8A–11A; discussion 24A–26A

Early intravenous thrombolytic therapy for acute myocardial infarction in patients with prior coronary artery bypass grafts. Kleiman NS, et al. **Am J Cardiol** 1989 Jan 1; 63(1):102–4

Early versus late hospital arrival for acute myocardial infarction in the western Washington thrombolytic therapy trials. Maynard C, et al. **Am J Cardiol** 1989 Jun 1; 63(18):1296–300

Variables predictive of good functional outcome following thrombolytic therapy in the Thrombolysis in Myocardial Infarction phase II (TIMI II) pilot study. Rogers WJ, et al. **Am J Cardiol** 1989 Mar 1;63(9):503–12

Prediction of early recurrent myocardial ischemia and coronary reocclusion after successful thrombolysis: a qualitative and quantitative angiographic study. Wall TC, et al. **Am J Cardiol** 1989 Feb 15;63(7):423–8

Treatment of postvitrectomy fibrin pupillary block with tissue plasminogen activator. Jaffe GJ, et al. **Am J Ophthalmol** 1989 Aug 15;108(2):170–5

Filtering bleb thrombolysis with tissue plasminogen activator. Ortiz JR, et al. **Am J Ophthalmol** 1988 Nov 15;106(5):624–5

The thrombolytic effects of native tissue-type plasminogen activator (AK-124) on experimental canine coronary

thrombosis. Tomaru T, et al. **Angiology** 1989 May; 40(5):429–35
The investigational use of tPA for stroke. Brott T, et al. **Ann Emerg Med** 1988 Nov;17(11):1202–5 (31 ref.)
Identification and transport of patients with acute myocardial infarction for thrombolytic therapy. Burney RE, et al. **Ann Emerg Med** 1988 Nov;17(11):1158–65 (46 ref.)
Chest pain: can we overemphasize that 'time is myocardium'? [editorial] Butman SM, et al. **Ann Emerg Med** 1989 Jul; 18(7):789–91
Experience with the use of tPA in the treatment of acute myocardial infarction. Califf RM, et al. **Ann Emerg Med** 1988 Nov;17(11):1176–89 (60 ref.)
Acute pulmonary embolism treated with thrombolytic agents: current status of tPA and future implications for emergency medicine. Kessler CM, et al. **Ann Emerg Med** 1988 Nov; 17(11):1216–20 (41 ref.)
The effects of a new tissue plasminogen activator analogue, Fb–Fb–CF, on cerebral reperfusion in a rabbit embolic stroke model. Phillips DA, et al. **Ann Neurol** 1989 Mar; 25(3):281–5
An overview of the thrombolysis and angioplasty in acute myocardial infarction (TAMI) trials. Topol EJ. **Arch Mal Coeur** 1988 May;81 Spec No:45–9
Intravitreal tissue plasminogen activator treatment of experimental vitreous hemorrhage. Johnson RN, et al. **Arch Ophthalmol** 1989 Jun;107(6):891–4
Intravenous tissue plasminogen activator and size of infarct, left ventricular function, and survival in acute myocardial infarction. Van de Werf F, et al. **BMJ** 1988 Nov 26; 297(6660):1374–9
Intrathecal fibrinolytic therapy after subarachnoid hemorrhage: dosage study in a primate model and review of the literature. Findlay JM, et al. **Can J Neurol Sci** 1989 Feb;16(1):28–40 (99 ref.)
Guidelines for the use of intravenous thrombolytic agents in acute myocardial infarction. Ontario Medical Association Consensus Group on Thrombolytic Therapy [published erratum appears in Can Med Assoc J 1989 Jul 15;141(2):104] Naylor CD, et al. **Can Med Assoc J** 1989 Jun 1;140(11):1289–99
Tissue plasminogen activator (tPA) in cardiopulmonary disease. **Chest** 1989 May;95(5 Suppl):243S–292S
Thrombolytic therapy for acute myocardial infarction. Bates ER, et al. **Chest** 1989 May;95(5 Suppl):257S–264S (56 ref.)
Coronary artery dissection following tPA administration [letter] Bergeron G. **Chest** 1989 Apr;95(4):936
How to select patients with deep vein thrombosis for tPA therapy. Brown WD, et al. **Chest** 1989 May;95(5 Suppl):276S–278S
Tissue plasminogen activator in acute pulmonary embolism. Goldhaber SZ. **Chest** 1989 May;95(5 Suppl):282S–289S
Selection of patients with acute pulmonary embolism for thrombolytic therapy. Thrombolysis in pulmonary embolism (TIPE) patient survey. The TIPE Investigators. Terrin M, et al. **Chest** 1989 May;95(5 Suppl):279S–281S
Comparison of tissue plasminogen activator and streptokinase in the management of acute myocardial infarction. White HD. **Chest** 1989 May;95(5 Suppl):265S–269S (36 ref.)
Thrombolysis with tissue plasminogen activator in suspected acute myocardial infarction. The ASSET Study. Wilcox RG. **Chest** 1989 May;95(5 Suppl):270S–275S
Increased thromboxane biosynthesis during coronary thrombolysis. Evidence that platelet activation and thromboxane A2 modulate the response to tissue-type plasminogen activator in vivo. Fitzgerald DJ, et al. **Circ Res** 1989 Jul;65(1):83–94
Correlation between template bleeding times and spontaneous bleeding during treatment of acute myocardial infarction with recombinant tissue-type plasminogen activator. Gimple LW, et al. **Circulation** 1989 Sep;80(3):581–8
Simultaneous administration of thromboxane A2- and serotonin S2-receptor antagonists markedly enhances thrombolysis and prevents or delays reocclusion after tissue-type plasminogen activator in a canine model of coronary thrombosis. Golino P, et al. **Circulation** 1989 Apr; 79(4):911–9
Prognostic implications and predictors of enhanced regional wall motion of the noninfarct zone after thrombolysis and angioplasty therapy of acute myocardial infarction. The TAMI Study Groups. Grines CL, et al. **Circulation** 1989 Aug;80(2):245–53
Differential sensitivity of erythrocyte-rich and platelet-rich arterial thrombi to lysis with recombinant tissue-type plasminogen activator. A possible explanation for resistance to coronary thrombolysis. Jang IK, et al. **Circulation** 1989 Apr;79(4):920–8
Does tissue-type plasminogen activator have direct beneficial effects on the myocardium independent of its ability to lyse intracoronary thrombi? Kloner RA, et al. **Circulation** 1989 May;79(5):1125–36
Recombinant tissue-type plasminogen activator in canine embolic pulmonary hypertension. Effects of bolus versus short-term administration on dynamics of thrombolysis and on pulmonary vascular pressure-flow characteristics. Prewitt RM, et al. **Circulation** 1989 Apr;79(4):929–38
Monitoring of fibrin generation during thrombolytic therapy of acute myocardial infarction with recombinant tissue-type plasminogen activator. Rapold HJ, et al. **Circulation** 1989 May;79(5):980–9
A randomized controlled trial of intravenous tissue plasminogen activator and early intravenous heparin in acute myocardial infarction. Topol EJ, et al. **Circulation** 1989 Feb;79(2):281–6
Tissue plasminogen activator: an update. Myears DW, et al. **Compr Ther** 1989 Apr;15(4):3–9 (10 ref.)
Recombinant tissue plasminogen activator reduces adhesion formation in a rabbit uterine horn model. Doody KJ, et al. **Fertil Steril** 1989 Mar;51(3):509–12
Tissue plasminogen activator: Toronto (TPAT) placebo-controlled randomized trial in acute myocardial infarction. Armstrong PW, et al. **J Am Coll Cardiol** 1989 Jun;13(7):1469–76
Reperfusion therapy in inferior myocardial infarction. Bates ER. **J Am Coll Cardiol** 1988 Dec;12(6 Suppl A):44A–51A (48 ref.)
Thrombolysis and Angioplasty in Myocardial Infarction (TAMI-1) trial: influence of infarct location on arterial patency, left ventricular function and mortality. Bates ER, et al. **J Am Coll Cardiol** 1989 Jan;13(1):12–8
Antecedent angina: a predictor of residual stenosis after thrombolytic therapy. Bergelson BA, et al. **J Am Coll Cardiol** 1989 Jul;14(1):91–5
The European Cooperative Study Group trial of intravenous recombinant tissue-type plasminogen activator (rt-PA) and conservative therapy versus rt-PA and immediate coronary angioplasty. de Bono DP. **J Am Coll Cardiol** 1988 Dec;12(6 Suppl A):20A–23A
Plasminogen Activator Italian Multicenter Study (PAIMS): comparison of intravenous recombinant single-chain human tissue-type plasminogen activator (rt-PA) with intravenous streptokinase in acute myocardial infarction. Magnani B. **J Am Coll Cardiol** 1989 Jan;13(1):19–26
Tissue plasminogen activator: why the backlash? Topol EJ, et al. **J Am Coll Cardiol** 1989 Jun;13(7):1477–80
Lessons from the European Cooperative recombinant tissue-type plasminogen activator (rt-PA) versus placebo trial. Van de Werf F. **J Am Coll Cardiol** 1988 Dec;12(6 Suppl A):14A–19A
Quantitative radionuclide assessment of regional ventricular function after thrombolytic therapy for acute myocardial infarction: results of phase I Thrombolysis in Myocardial Infarction (TIMI) trial. Wackers FJ, et al. **J Am Coll Cardiol** 1989 Apr;13(5):998–1005
A canine model of coronary artery thrombosis with superimposed high grade stenosis for the investigation of rethrombosis after thrombolysis. Yasuda T, et al. **J Am Coll Cardiol** 1989 May;13(6):1409–14
Thrombolytic therapy of acute myocardial infarction in a community hospital. Baxley PJ, et al. **J Arkansas Med Soc** 1989 Jan;85(8):334–6
Tissue plasminogen activator and acute pulmonary embolism. Goldhaber SZ, et al. **J Cell Biochem** 1988 Dec;38(4):303–12
Human tissue-type plasminogen activator releases fibrinopeptides A and B from fibrinogen. Weitz JI, et al. **J Clin Invest** 1988 Nov;82(5):1700–7
Effect of tissue-type plasminogen activator (t-PA) on the treatment with benzylpenicillin of rabbits with experimental Streptococcus sanguis endocarditis. Buiting AG, et al. **J Infect Dis** 1989 Apr;159(4):780–4
Prevention of intra-abdominal abscesses by fibrinolysis using recombinant tissue plasminogen activator. Rotstein OD, et al. **J Infect Dis** 1988 Oct;158(4):766–72
Effect of intrathecal thrombolytic therapy on subarachnoid clot and chronic vasospasm in a primate model of SAH. Findlay JM, et al. **J Neurosurg** 1988 Nov;69(5):723–35
Relationship of thrombolysis to vasospasm [letter] Seifert V. **J Neurosurg** 1989 Jun;70(6):969–70
Demonstration of reperfusion after thrombolysis with technetium-99m isonitrile myocardial imaging. Kayden DS, et al. **J Nucl Med** 1988 Nov;29(11):1865–7
Repeated successful thrombolysis of an acute peripheral arterial thrombosis with tissue plasminogen activator. Berridge DC, et al. **J R Coll Surg Edinb** 1989 Feb; 34(1):49–51
Microvascular thrombolysis to salvage a free flap using human recombinant tissue plasminogen activator. Fudem GM, et al. **J Reconstr Microsurg** 1989 Jul;5(3):231–4
Thrombolytic therapy for acute myocardial infarction. Haley FL. **J Tenn Med Assoc** 1989 Apr;82(4):183–6
Informed consent in emergency research. Prehospital thrombolytic therapy for acute myocardial infarction. Grim PS, et al. **JAMA** 1989 Jul 14;262(2):252–5
The TPA controversy and the drug approval process. The view of the Cardiovascular and Renal Drugs Advisory Committee. Kowey PR, et al. **JAMA** 1988 Oct 21; 260(15):2250–2 (20 ref.)
Thrombolysis of tricuspid Björk-Shiley prosthesis with tissue-type plasminogen activator. Matsuda M, et al. **Jpn Circ J** 1988 Jun;52(6):583–7
Coronary angioplasty after thrombolysis. Vine DL. **Kans Med** 1988 Jul;89(7):214–5
Tissue plasminogen activator therapy of glomerular thrombi in the Shwartzman reaction. Bergstein JM. **Kidney Int** 1989 Jan;35(1):14–8
Thrombolysis "update" [letter] **Lancet** 1988 Dec 24–31; 2(8626–8627):1499
Use of recombinant tissue plasminogen activator before balloon angioplasty [letter] Berridge DC. **Lancet** 1989 Aug 12;2(8659):390–1
Local recombinant tissue plasminogen activator to clear cerebral artery thrombosis developing soon after surgery [letter] Buteux G, et al. **Lancet** 1988 Nov 12;2(8620):1143–4
Tissue plasminogen activator versus urokinase [letter] Ebers GC. **Lancet** 1988 Oct 29;2(8618):1028
Thrombolytic therapy for superior vena cava syndrome [letter] Fine DG, et al. **Lancet** 1989 May 27;1(8648):1200–1
Urokinase versus tissue plasminogen activator in pulmonary embolism [letter] Goldhaber SZ, et al. **Lancet** 1988 Oct 15;2(8616):915
Alteplase versus placebo in myocardial infarction [letter] Hine LK. **Lancet** 1988 Dec 3;2(8623):1318
Thrombolysis with systemically administered t-PA in a new venous thrombosis model. Hayden RE, et al. **Laryngoscope** 1989 Jan;99(1):100–4
Thrombolytic therapy in acute myocardial infarction: Part II—rt-PA. Mueller HS, et al. **Med Clin North Am** 1989 Mar;73(2):387–407 (49 ref.)
Coronary thrombolysis [letter] Thompson PL, et al. **Med J Aust** 1989 Apr 17;150(8):466–7
Thrombolysis in myocardial infarction (TIMI) phase II trial [letter] **N Engl J Med** 1989 Aug 31;321(9):612
Tissue plasminogen activator [letter] **N Engl J Med** 1989 Feb 2;320(5):317–8
Comparison of invasive and conservative strategies after treatment with intravenous tissue plasminogen activator in acute myocardial infarction. Results of the thrombolysis in myocardial infarction (TIMI) phase II trial. The TIMI Study Group. **N Engl J Med** 1989 Mar 9;320(10):618–27
Streptokinase or tissue plasminogen activator and left ventricular function after myocardial infarction [letter] **N Engl J Med** 1989 Sep 7;321(10):687–9
Decreased incidence of ventricular late potentials after successful thrombolytic therapy for acute myocardial infarction. Gang ES, et al. **N Engl J Med** 1989 Sep 14; 321(11):712–6
TIMI II and the role of angioplasty in acute myocardial infarction [editorial] Guerci AD, et al. **N Engl J Med** 1989 Mar 9;320(10):663–5
Acute myocardial infarction: a true medical emergency. White HD. **N Z Med J** 1989 Jun 14;102(869):281–3 (30 ref.)
Problems with anti-clotting drug [news] Barinaga M. **Nature** 1988 Oct 27;335(6193):751
Genentech's heart drug [news] Ezzell C. **Nature** 1989 Mar 2;338(6210):6
Tissue plasminogen activator-mediated thrombolysis of cerebral emboli and its effect on hemorrhagic infarction in rabbits. Lyden PD, et al. **Neurology** 1989 May; 39(5):703–8
Putaminal haemorrhage after recanalization of an embolic MCA occlusion treated with tissue plasminogen activator. Brückmann H, et al. **Neuroradiology** 1989;31(1):95–7
Safety and efficacy of intrathecal thrombolytic therapy in a primate model of cerebral vasospasm. Findlay JM, et al. **Neurosurgery** 1989 Apr;24(4):491–8
The thrombolytic effect of human tissue-type plasminogen activator on the experimental thrombosis in rabbit. Masunaga H, et al. **Nippon Juigaku Zasshi** 1988 Dec; 50(6):1232–8
Tissue plasminogen activator treatment of postoperative intraocular fibrin. Johnson RN, et al. **Ophthalmology** 1988 May;95(5):592–6
Tissue plasminogen activator in the treatment of experimental retinal vein occlusion. Oncel M, et al. **Retina** 1989;9(1):1–7
Which clot-dissolving drug is best? [news] Marx JL. **Science** 1988 Dec 16;242(4885):1505–6
Fibrinolytic profiles in local low-dose thrombolysis with streptokinase and recombinant tissue plasminogen activator. Berridge DC, et al. **Thromb Haemost** 1989 Apr 25;61(2):275–8
Fibrin metabolism in patients with acute myocardial infarction during and after treatment with tissue-type plasminogen activator. Ring ME, et al. **Thromb Haemost** 1988 Dec 22;60(3):428–33
Absence of potentiation with murine antiplatelet GPIIb/IIIa antibody of thrombolysis with recombinant tissue-type plasminogen activator (rt-PA) in a canine venous thrombosis model. Spriggs D, et al. **Thromb Haemost** 1989 Feb 28;61(1):93–6
Multicenter pilot study of the efficacy and safety of systemic rt-PA administration in the treatment of deep vein thrombosis of the lower extremities and/or pelvis. Verhaeghe R, et al. **Thromb Res** 1989 Jul 1;55(1):5–11
[Reocclusion after treatment with actilyse] Raynaud P, et al. **Arch Mal Coeur** 1988 May;81 Spec No:25–32 (62 ref.) **(Fre)**
[Advantages of immediate coronary dilatation after thrombolysis using tissue-type plasminogen activator in acute myocardial infarction. A European Cooperative Group trial] Vahanian A. **Arch Mal Coeur** 1988 May;81 Spec No:39–43 (Eng. Abstr.) **(Fre)**
[Local thrombolysis using a combination of RTPA and Lys-plasminogen in ischemia due to a previous thrombosis] Marcon JL, et al. **J Mal Vasc** 1989;14(3):265–6 **(Fre)**
[Treatment of blue phlebitis by in situ thrombolysis with a plasminogen activator (letter)] Marcon JL, et al. **Presse Med** 1989 Jun 17;18(24):1209–10 **(Fre)**
[Treatment of pulmonary embolism with tissue plasminogen activator (letter)] Tafani C, et al. **Presse Med** 1988 Oct 29;17(38):2038 **(Fre)**
[Thrombolytic therapy with recombinant tissue-type plasminogen activator in patients with branch or central vein occlusion of the retina] Kreutzer A, et al. **Fortschr Ophthalmol** 1988;85(5):511–3 (Eng. Abstr.) **(Ger)**

[Antibody mediated thrombolysis. A new therapeutic principle] Bode C, et al. **Klin Wochenschr** 1989 Jul 3; 67(13):651–8 (39 ref.) (Eng. Abstr.) **(Ger)**

[Fibrinolysis in acute myocardial infarct. Treatment rate, assessment and follow-up treatment in the Zürich hospitals] Marx BE, et al. **Schweiz Med Wochenschr** 1988 Nov 26; 118(47):1753–7 (Eng. Abstr.) **(Ger)**

[Thrombolysis in acute myocardial infarct. Initial experiences in a Swiss university hospital] Ritz R, et al. **Schweiz Med Wochenschr** 1988 Nov 19;118(46):1706–10 (Eng. Abstr.) **(Ger)**

[Fibrinolytic therapy—plasminogen activator inhibitors] Hönigl K, et al. **Vasa Suppl** 1988;26:103–6 (Eng. Abstr.) **(Ger)**

[Cerebral infarction—thrombolytic therapy by tissue-type plasminogen activator or prourokinase] Amano T. **Nippon Rinsho** 1989 Apr;47(4):917–20 **(Jpn)**

[Coronary thrombolysis by t-PA and pro-UK] Kanmatsuse K, et al. **Nippon Rinsho** 1989 Apr;47(4):910–6 **(Jpn)**

[Thrombolysis with tissue plasminogen activator in patients with acute myocardial infarction. Preliminary report] Ribeiro EE, et al. **Arq Bras Cardiol** 1988 May;50(5):329–33 (Eng. Abstr.) **(Por)**

[Immediate coronary angioplasty in patients with acute infarct of myocardium treated with tissue plasminogen activator: evaluation with cardiac perfusion gammagraphy in exertion] Magriñá J, et al. **Rev Esp Cardiol** 1988;41 Suppl 2:42–7 (Eng. Abstr.) **(Spa)**

TOXICITY

Recombinant plasminogen activator inhibitor-1 reverses the bleeding tendency associated with the combined administration of tissue-type plasminogen activator and aspirin in rabbits. Vaughan DE, et al. **J Clin Invest** 1989 Aug;84(2):586–91

[Possible side effects of plasminogen activators on the conduction system of the heart] Stark G, et al. **Vasa Suppl** 1988;26:205–8 (Eng. Abstr.) **(Ger)**

PLASMINOGEN ACTIVATORS

Lipoprotein a inhibits streptokinase-mediated activation of human plasminogen. Edelberg JM, et al. **Biochemistry** 1989 Mar 21;28(6):2370–4

Plasminogen activators. The old and the new. Runge MS, et al. **Circulation** 1989 Feb;79(2):217–24 (56 ref.)

Second-generation plasminogen activators. Harris TJ. **Protein Eng** 1987 Dec;1(6):449–58 (84 ref.)

Unusual activation mechanism of plasminogen. Kichenin-Martin V, et al. **Thromb Res** 1988 Dec 1; 52(5):469–78

ADMINISTRATION & DOSAGE

Low dose urokinase preactivated natural prourokinase for thrombolysis in acute myocardial infarction. Gulba DC, et al. **Am J Cardiol** 1989 May 1;63(15):1025–31

Effect of combined administration of saruplase and single-chain alteplase on coronary recanalization in acute myocardial infarction. Tranchesi B Jr, et al. **Am J Cardiol** 1989 Jul 15;64(3):229–32

Guidelines for preparing and administering tissue plasminogen activator. Asbury WH. **Am J Hosp Pharm** 1988 Nov;45(11):2383–5

Alteplase dosages adjusted for patient weight [letter] Brown BK. **Am J Hosp Pharm** 1989 Feb;46(2):262

Femoral artery recanalisation with percutaneous angioplasty and segmentally enclosed plasminogen activator. Jørgensen B, et al. **Lancet** 1989 May 20;1(8647):1106–8

Importance of fibrin specificity in therapeutic thrombolysis and the rationale of using sequential and synergistic combinations of tissue plasminogen activator and pro-urokinase. Gurewich V. **Semin Thromb Hemost** 1989 Apr;15(2):123–8 (40 ref.)

Bolus dose response characteristics of single chain urokinase plasminogen activator and tissue plasminogen activator in a dog model of arterial thrombosis. Badylak SF, et al. **Thromb Res** 1988 Nov 15;52(4):295–312

[Pseudostabilization of unstable angina pectoris: disappearance of symptoms in persistence of silent myocardial ischemia] Hausmann D, et al. **Z Kardiol** 1988 Dec;77(12):805–10 (Eng. Abstr.) **(Ger)**

ANALYSIS

The clinical relevance of plasminogen activator assays [editorial] Bick RL. **Am J Clin Pathol** 1989 Sep;92(3):383–4

A chromogenic assay for the detection of plasmin generated by plasminogen activator immobilized on nitrocellulose using a para-nitroanilide synthetic peptide substrate. Kulisek ES, et al. **Anal Biochem** 1989 Feb 15;177(1):78–84

A colorimetric assay for the simultaneous measurement of plasminogen activators and plasminogen activator inhibitors in serum-free conditioned media from cultured cells. Leprince P, et al. **Anal Biochem** 1989 Mar; 177(2):341–6

Immunological characterization of plasminogen activators in human parotid saliva. Kjaeldgaard M, et al. **Arch Oral Biol** 1987;32(12):855–7

Alterations in plasminogen activator and inhibitor activity during the differentiation of a human neuroblastoma cell line, SMS-KAN. Benjamin LA, et al. **Cancer Lett** 1989 Feb;44(2):101–8

Comparative study of plasminogen activators in cancers and normal mucosae of human urinary bladder. Hasui Y, et al. **Cancer Res** 1989 Feb 15;49(4):1067–70

Relationship of membrane-bound tissue type and urokinase type plasminogen activators in human breast cancers to estrogen and epidermal growth factor receptors. Needham GK, et al. **Cancer Res** 1988 Nov 15;48(22):6603–7

Modulation of plasminogen activator activity in human endometrial adenocarcinoma cells by basic fibroblast growth factor and transforming growth factor beta. Presta M, et al. **Cancer Res** 1988 Nov 15;48(22):6384–9

Plasminogen activator activity and urokinase inhibitor activity in human amniotic fluid and fetal membranes. Milwidsky A, et al. **Clin Biochem** 1988 Oct;21(5):301–6

Plasminogen activator activity in clonogenic cell populations separated from a murine fibrosarcoma. Nagy B, et al. **Clin Exp Metastasis** 1989 Mar–Apr;7(2):243–50

Studies on two siblings with recessive dystrophic epidermolysis bullosa (Hallopeau-Siemens) and the plasminogen activator and its inhibitor in the lesion. Kaneko F, et al. **Dermatologica** 1989;178(3):156–63

Fatty streaks and fibrous plaques in human aorta show increased plasminogen activator activity. Smokovitis A, et al. **Haemostasis** 1988;18(3):146–53

Urokinase-type plasminogen activator in colorectal carcinomas and adenomatous polyps: quantitative expression of active and proenzyme. Sim PS, et al. **Int J Cancer** 1988 Oct 15;42(4):483–8

Comparative study of plasminogen activator antigens in colonic carcinomas and adenomas. Suzumiya J, et al. **Int J Cancer** 1988 Oct 15;42(4):627–32

Charge heterogeneity of recombinant pro-urokinase and urinary urokinase, as revealed by isoelectric focusing in immobilized pH gradients. Righetti PG, et al. **J Chromatogr** 1989 May 26;470(2):337–50

Plasminogen activators and their inhibitors. Loskutoff DJ, et al. **Methods Enzymol** 1988;163:293–302

Decrease in plasminogen activator correlates with synapse elimination during neonatal development of mouse skeletal muscle. Hantaï D, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):362–6

Demonstration of plasminogen activator activity in the intima and media of the normal human aorta and other large arteries: immunological identification of the plasminogen activator(s). Smokovitis AA, et al. **Thromb Res** 1989 Jul 15;55(2):259–65

[Enzymatic determination of plasminogen activators] Fischer BE. **Z Med Lab Diagn** 1988;29(6):327–32 (Eng. Abstr.) **(Ger)**

[Molecular markers of hemostatic mechanisms—interaction of plasminogen activator and its inhibitor] Sakata Y. **Rinsho Byori** 1989 Mar;37(3):256–60 **(Jpn)**

ANTAGONISTS & INHIBITORS

Reduction in plasminogen activator inhibitor-1 (PAI-1) with omega-3 polyunsaturated fatty acid (PUFA) intake. Mehta J, et al. **Am Heart J** 1988 Nov;116(5 Pt 1):1201–6

Abnormal fibrinolysis in healthy male cigarette smokers: role of plasminogen activator inhibitors. Haire WD, et al. **Am J Hematol** 1989 May;31(1):36–40

Stimulation of plasminogen activator inhibitor activity in human monocytes infected with dengue virus. Krishnamurti C, et al. **Am J Trop Med Hyg** 1989 Jan; 40(1):102–7

Kinetics of the inhibition by plasminogen activator inhibitor 2 of urokinase isolated from human urine and recombinant microorganisms. Further evidence for correct tertiary structure of recombinant urokinase. Cramer J, et al. **Arzneimittelforschung** 1988 Aug;38(8):1196–8

Purification and partial characterization of a plasminogen activator inhibitor from the human glioblastoma, U138. Rehemtulla A, et al. **Biochem Cell Biol** 1988 Dec; 66(12):1270–7

Plasminogen activator inhibitor-type I is a major biosynthetic product of retinal microvascular endothelial cells and pericytes in culture. Canfield AE, et al. **Biochem J** 1989 Apr 15;259(2):529–35

Platelet plasminogen activator inhibitor: purification and characterization of interaction with plasminogen activators and activated protein C. Fay WP, et al. **Biochemistry** 1989 Jul 11;28(14):5773–8

A moderate fish intake increases plasminogen activator inhibitor type-1 in human volunteers. Emeis JJ, et al. **Blood** 1989 Jul;74(1):233–7

Changes in the plasma levels of type 1 and type 2 plasminogen activator inhibitors in normal pregnancy and in patients with severe preeclampsia. Estellés A, et al. **Blood** 1989 Sep; 74(4):1332–8

Dependence of fibrinolytic activity on the concentration of free rather than total tissue-type plasminogen activator in plasma after pharmacologic administration. Lucore CL, et al. **Circulation** 1989 Jun;79(6):1204–13

Standardization of methods for measuring plasminogen activator inhibitor activity in human plasma. Chandler WL, et al. **Clin Chem** 1989 May;35(5):787–93

Plasminogen activator inhibitors—a review. Kruithof EK. **Enzyme** 1988;40(2-3):113–21 (86 ref.)

Plasminogen activators and plasminogen activator inhibitor in malignant and non-malignant ascitic fluid. Huber K, et al. **Eur J Clin Invest** 1988 Dec;18(6):595–9

Retinal pigment epithelial cells produce a latent fibrinolytic inhibitor that is antigenically and biochemically related to type 1 plasminogen activator inhibitor produced by vascular endothelial cells. Campochiaro PA, et al. **Exp Eye Res** 1989 Aug;49(2):195–203

Identification of the inhibitor of the plasminogen activator as the major protein secreted by endothelial rat liver cells. Kuiper J, et al. **FEBS Lett** 1989 Mar 13;245(1-2):229–34

Cloning and sequencing of cDNA for the rat plasminogen activator inhibitor-1. Zeheb R, et al. **Gene** 1988 Dec 20; 73(2):459–68

Inhibition of plasminogen activators and the growth of cultured human tumour cells. Scott GK. **Int J Biochem** 1988;20(8):817–22

Detection and partial characterization of a specific plasminogen activator inhibitor in human chondrocyte cultures. Yamada H, et al. **J Biochem (Tokyo)** 1988 Dec; 104(6):960–7

Purification of a protein from bovine plasma that binds to type 1 plasminogen activator inhibitor and prevents its interaction with extracellular matrix. Evidence that the protein is vitronectin. Mimuro J, et al. **J Biol Chem** 1989 Jan 15;264(2):936–9

Binding of type 1 plasminogen activator inhibitor to the extracellular matrix of cultured bovine endothelial cells. Mimuro J, et al. **J Biol Chem** 1989 Mar 25;264(9):5058–63

Fibrinolytic variables are related to age, sex, blood pressure, and body build measurements: a cross-sectional study in Norsjö, Sweden. Sundell IB, et al. **J Clin Epidemiol** 1989; 42(8):719–23

Characterization of keratinocyte plasminogen activator inhibitors and demonstration of the prevention of pemphigus IgG-induced acantholysis by a purified plasminogen activator inhibitor. Hashimoto K, et al. **J Invest Dermatol** 1989 Mar;92(3):310–4

Human articular cartilage contains an inhibitor of plasminogen activator. Yamada H, et al. **J Rheumatol** 1988 Jul;15(7):1138–43

Regulation of fibrinolysis in aortic surgery. Gomez MJ, et al. **J Vasc Surg** 1988 Oct;8(4):384–8

Characterization of a plasminogen activator and its inhibitor in human mesangial cells. Lacave R, et al. **Kidney Int** 1989 Mar;35(3):806–11

Plasminogen activator inhibitor types 1 and 2 in human trophoblasts. PAI-1 is an immunocytochemical marker of invading trophoblasts. Feinberg RF, et al. **Lab Invest** 1989 Jul;61(1):20–6

Blocking of the fibrinolytic antiactivator by substituted benzoates. Nanninga L, et al. **Life Sci** 1974 Jun 16; 14(12):2507–11

Fat distribution and plasminogen activator inhibitor activity in nondiabetic obese women. Vague P, et al. **Metabolism** 1989 Sep;38(9):913–5

Protease nexin I, a serpin, inhibits plasminogen-dependent degradation of muscle extracellular matrix. Rao JS, et al. **Muscle Nerve** 1989 Aug;12(8):640–6 (49 ref.)

Accessibility of receptor-bound urokinase to type-1 plasminogen activator inhibitor. Cubellis MV, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4828–32

Type 1 plasminogen activator inhibitor. Loskutoff DJ, et al. **Prog Hemost Thromb** 1989;9:87–115 (191 ref.)

Serine proteases and serpins: their possible roles in the motor system. Hantaï D, et al. **Rev Neurol (Paris)** 1988; 144(11):680–7

Insulin stimulates the synthesis of plasminogen activator inhibitor 1 by the human hepatocellular cell line Hep G2. Alessi MC, et al. **Thromb Haemost** 1988 Dec 22;60(3):491–4

Renal and hepatic handling of endogenous tissue-type plasminogen activator (t-PA) and its inhibitor in man. Brommer EJ, et al. **Thromb Haemost** 1988 Jun 16; 59(3):404–11

Impaired fibrinolysis in obstructive jaundice—evidence from clinical and experimental studies. Colucci M, et al. **Thromb Haemost** 1988 Aug 30;60(1):25–9

Activated protein C increases fibrin clot lysis by neutralization of plasminogen activator inhibitor—no evidence for a cofactor role of protein S. de Fouw NJ, et al. **Thromb Haemost** 1988 Oct 31;60(2):328–33

Circadian fluctuations of plasminogen activator inhibitor and tissue plasminogen activator levels in plasma of patients with unstable coronary artery disease and acute myocardial infarction. Huber K, et al. **Thromb Haemost** 1988 Dec 22; 60(3):372–6

Inhibition in purified systems and in human plasma of chimaeric plasminogen activators consisting of the NH2-terminal region of tissue-type plasminogen activator and the COOH-terminal region of urokinase-type plasminogen activator. Lijnen HR, et al. **Thromb Haemost** 1988 Oct 31;60(2):247–50

Plasminogen activator inhibitor activity in bacterial infection. Páramo JA, et al. **Thromb Haemost** 1988 Jun 16;59(3):451–4

Evidence for a discrete binding protein of plasminogen activator inhibitor in plasma. Wiman B, et al. **Thromb Haemost** 1988 Jun 16;59(3):392–5

Intraoperative evolution of coagulation parameters and t-PA/PAI balance in orthotopic liver transplantation. Arnoux D, et al. **Thromb Res** 1989 Aug 1;55(3):319–28

Acid treatment of plasma for the inactivation of plasminogen activator inhibitor-1 (PAI-1). de Maat MP, et al. **Thromb Res** 1988 Dec 1;52(5):425–30

Relationship between smoking and fibrinolytic system with special reference to t-PA and PA inhibitor. Hashimoto Y, et al. **Thromb Res** 1988 Aug 1;51(3):303–11

Placental and decidual u-PA, t-PA, PAI-1 and PAI-2

concentrations, as affected by cervical dilatation with laminaria tents or Hegar dilators. Jonasson A, et al. **Thromb Res** 1989 Jan 15;53(2):91–7

Effect of urinary trypsin inhibitor on osteoarthritis. Matsuo O, et al. **Thromb Res** 1988 Nov 1;52(3):237–45

Interleukin-1, endotoxin or tumor necrosis factor/cachectin enhance the level of plasminogen activator inhibitor messenger RNA in bovine aortic endothelial cells. Medina R, et al. **Thromb Res** 1989 Apr 1;54(1):41–52

Aspirin effect on the release of plasminogen activator inhibitors by human platelets. Woods AI, et al. **Thromb Res** 1988 Oct 15;52(2):119–25

Tumor necrosis factor (TNF) stimulates plasminogen activator inhibitor (PAI) production by endothelial cells and decreases blood fibrinolytic activity in the rat. Dosne AM, et al. **Thromb Res Suppl** 1988;8:115–22

Susceptibility of plasminogen activators to suicide inactivation. Mor A, et al. **Thromb Res Suppl** 1988;8:35–44

Changes in various parameters of fibrinolysis in persons infused with tissue plasminogen activator: special reference to plasminogen activator inhibitor. Takada A, et al. **Thromb Res Suppl** 1988;8:23–33

Measurements of the concentration of free plasminogen activator inhibitor (PAI-1) and its complex with tissue plasminogen activator in human plasma. Takada Y, et al. **Thromb Res Suppl** 1988;8:15–22

Alterations in plasminogen activator and plasminogen activator inhibitor levels during liver transplantation. Virji MA, et al. **Transplant Proc** 1989 Jun;21(3):3540–1

[Changes in plasma tissue plasminogen activator and plasminogen activator inhibitor in acute myocardial infarction and its clinical significance] Jia HY, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Aug; 16(4):214–6, 254 (Eng. Abstr.) **(Chi)**

[Fibrinolytic therapy—plasminogen activator inhibitors] Hönigl K, et al. **Vasa Suppl** 1988;26:103–6 (Eng. Abstr.) **(Ger)**

BIOSYNTHESIS

Induction of plasminogen activator activity by phorbol ester in transformed fetal bovine aortic endothelial cells. Possible independence from protein kinase C. Maier JA, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):682–91

Examination of the effects of epidermal growth factor on the production of urokinase and the expression of the plasminogen activator receptor in a human colon cancer cell line. Boyd D. **Cancer Res** 1989 May 1;49(9):2427–32

Induction of plasminogen activator by N-methyl-N'-nitro-N-nitrosoguanidine in mer+ and mer- human tumour cell strains. Brdar B, et al. **Carcinogenesis** 1988 Dec;9(12):2191–5

Enhanced plasminogen activator production of Syrian hamster embryo cells transformed by chemicals or the c-Ha-ras oncogene: type of plasminogen activators involved and their contribution to the transformed phenotype. de Kok AJ, et al. **Carcinogenesis** 1989 Jul; 10(7):1155–61

Effects of asbestos on epithelioid cell lines. Neugut AI, et al. **Environ Res** 1978 Oct;17(2):256–65

Regulation of the synthesis and secretion of plasminogen activators by endothelial cells. van Hinsbergh VW. **Haemostasis** 1988;18(4–6):307–27 (163 ref.)

Synthesis of recombinant human single-chain urokinase-type plasminogen activator variants resistant to plasmin and thrombin. Miyake T, et al. **J Biochem (Tokyo)** 1988 Oct; 104(4):643–7

Vascular origin determines plasminogen activator expression in human endothelial cells. Renal endothelial cells produce large amounts of single chain urokinase type plasminogen activator. Wojta J, et al. **J Biol Chem** 1989 Feb 15; 264(5):2846–52

Role of extracellular matrix in the action of basic fibroblast growth factor: matrix as a source of growth factor for long-term stimulation of plasminogen activator production and DNA synthesis. Flaumenhaft R, et al. **J Cell Physiol** 1989 Jul;140(1):75–81

Role of polyamines in the stimulation of synthesis and secretion of plasminogen activator from bovine aortic endothelial cells. Kuo BS, et al. **J Cell Physiol** 1988 Oct; 137(1):192–8

Production of protease inhibitors by postsurgical macrophages. Fukasawa M, et al. **J Surg Res** 1989 Mar; 46(3):256–61

Production of plasminogen activator by alveolar macrophages in normal subjects and patients with interstitial lung disease. Robinson BW. **Thorax** 1988 Jul; 43(7):508–15

Heparin potentiates endothelial cell growth factor stimulation of plasminogen activator synthesis by diploid human lung fibroblasts. Rappaport RS, et al. **Thromb Haemost** 1988 Jun 16;59(3):514–22

Stimulated production of urokinase and plasminogen activator inhibitor-2 by the human promyelocytic leukemia cell line HL-60. Alving BM, et al. **Thromb Res** 1988 Jul 15;51(2):175–85

[Differences in plasminogen activator species released from endothelial cells of different sites] Nakashima Y. **Nippon Ketsueki Gakkai Zasshi** 1988 Nov;51(7):1214–8 **(Jpn)**

BLOOD

Elevated urokinase-type plasminogen activator level and bleeding in amyloidosis: case report and literature review. Sane DC, et al. **Am J Hematol** 1989 May;31(1):53–7 (25 ref.)

Effect of specific antagonists on PAF-induced platelet aggregation and release of plasminogen activator. Hofmann B, et al. **Biomed Biochim Acta** 1988;47(10–11):S157–60

The bleeding disorder in acute promyelocytic leukaemia: fibrinolysis due to u-PA rather than defibrination. Bennett B, et al. **Br J Haematol** 1989 Apr;71(4):511–7

Influence of temperature on the release of plasminogen activator. Fracasso JF, et al. **Braz J Med Biol Res** 1988; 21(1):31–3

Evidence for increased levels of plasminogen activator inhibitor and tissue plasminogen activator in plasma of patients with angiographically verified coronary artery disease. Olofsson BO, et al. **Eur Heart J** 1989 Jan; 10(1):77–82

Plasma urokinase-type plasminogen activator correlates to bone scintigraphy in prostatic carcinoma. Hienert G, et al. **Eur Urol** 1988;15(3–4):256–8

Plasminogen activator in nephrotic syndrome. Andreenko GV, et al. **Folia Haematol (Leipz)** 1988;115(3):351–5

Depletion of fibrinolysis activators as a result of continuous stress. Lyutova LV, et al. **Folia Haematol (Leipz)** 1988; 115(3):356–60

Plasminogen activators and antiplasmin activity in atopic dermatitis. Lotti T, et al. **Int J Dermatol** 1989 Sep; 28(7):457–9

Plasminogen activator and plasminogen activator inhibitor activities in men with coronary artery disease. Oseroff A, et al. **J Lab Clin Med** 1989 Jan;113(1):88–93

Plasminogen and plasminogen proactivator in liver diseases. Boyadjian HP, et al. **Med Interne** 1988 Oct–Dec; 26(4):291–6

Source of increased plasminogen activators during pregnancy and puerperium. Shimada H, et al. **Thromb Res** 1989 Apr 15;54(2):91–8

[Studies on the determination of PA activity level in plasma using euglobulin fraction] Soma M, et al. **Rinsho Byori** 1988 Aug;36(8):957–61 **(Jpn)**

[Changes in the plasma levels of plasminogen activator in various tumors] Soma M, et al. **Rinsho Ketsueki** 1988 Nov; 29(11):2024–8 (Eng. Abstr.) **(Jpn)**

[Changes in exercise-induced plasminogen activator activity] Soma M, et al. **Rinsho Ketsueki** 1988 May;29(5):694–8 (Eng. Abstr.) **(Jpn)**

[Interaction of plasminogen activator of urokinase type with human serum] Vakulina OP, et al. **Vopr Med Khim** 1988 Jul-Aug;34(4):32–6 (Eng. Abstr.) **(Rus)**

[Protease-antiprotease balance in patients with invasive carcinoma of the cervix and uterus before and after radiotherapy] Benítez-Bribiesca L, et al. **Arch Invest Med (Mex)** 1989 Jan-Mar;20(1):9–21 (Eng. Abstr.) **(Spa)**

DEFICIENCY

Hematologic and surgical management of the dental patient with plasminogen activator deficiency. Scheitler LE, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec;66(6):680–2

GENETICS

Regulation by epidermal growth factor of human squamous cell carcinoma plasminogen activator-mediated proteolysis of extracellular matrix. Niedbala MJ, et al. **Cancer Res** 1989 Jun 15;49(12):3302–9

Production in eukaryotic cells and characterization of four hybrids of tissue-type and urokinase-type plasminogen activators. Piérard L, et al. **DNA** 1989 Jun;8(5):321–8

The relevance of plasminogen activators to neoplastic growth. A review of recent literature. Markus G. **Enzyme** 1988;40(2–3):158–72 (74 ref.)

Dysplasminogenemias. Robbins KC. **Enzyme** 1988; 40(2–3):70–8 (20 ref.)

Structural and functional characterization of mutants of recombinant single-chain urokinase-type plasminogen activator obtained by site-specific mutagenesis of Lys158, Ile159 and Ile160. Lijnen HR, et al. **Eur J Biochem** 1988 Nov 15;177(3):575–82

Nucleotide sequence of the plasminogen activator gene of Yersinia pestis: relationship to ompT of Escherichia coli and gene E of Salmonella typhimurium. Sodeinde OA, et al. **Infect Immun** 1989 May;57(5):1517–23

Urokinase-type plasminogen activator biosynthesis is induced by the EJ-Ha-ras oncogene in CL26 mouse colon carcinoma cells. Testa JE, et al. **Int J Cancer** 1989 May 15;43(5):816–22

Synthesis of recombinant human single-chain urokinase-type plasminogen activator variants resistant to plasmin and thrombin. Miyake T, et al. **J Biochem (Tokyo)** 1988 Oct; 104(4):643–7

Expression of human recombinant plasminogen activators enhances invasion and experimental metastasis of H-ras-transformed NIH 3T3 cells. Axelrod JH, et al. **Mol Cell Biol** 1989 May;9(5):2133–41

Glucocorticoid induction of plasminogen activator and plasminogen activator-inhibitor messenger RNA in rat hepatoma cells. Heaton JH, et al. **Mol Endocrinol** 1989 Feb; 3(2):349–55

[Development of new thrombolytic enzymes by gene technology—with special references to t-PA, scu-PA, protein C] Ueshima S. **Nippon Rinsho** 1989 Apr;47(4):901–9 **(Jpn)**

ISOLATION & PURIFICATION

Human ovarian tumor-associated trypsin. Its purification and characterization from mucinous cyst fluid and identification as an activator of pro-urokinase. Koivunen E, et al. **J Biol Chem** 1989 Aug 25;264(24):14095–9

New type of plasminogen activator produced by an established cell line from human ovary. Matsuo O, et al. **Thromb Res Suppl** 1988;8:45–55

METABOLISM

Effect of viscous macromolecules on peritoneal plasminogen activator activity: a potential mechanism for their ability to reduce postoperative adhesion formation. Mayer M, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):957–63

Increased alveolar plasminogen activator in early asbestosis. Cantin A, et al. **Am Rev Respir Dis** 1989 Mar;139(3):604–9

Association between alveolar macrophage plasminogen activator activity and indices of lung function in young cigarette smokers. Reilly JJ, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1422–8

Production of proteases type plasminogen activator and their inhibitor in cornea. Mirshahi M, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1021–5

Polymorphonuclear leukocytes regulate the plasminogen-activating system of cultured endothelial cells. Gilboa N, et al. **Biochem Int** 1988 Sep;17(3):585–92

Binding of plasminogen activators to fibrin: characterization and pharmacological consequences. Fears R. **Biochem J** 1989 Jul 15;261(2):313–24 (110 ref.)

Comparison of the effects of auranofin and retinoic acid on plasminogen activator activity of peritoneal macrophages and Lewis lung carcinoma cells. Lison D, et al. **Biochem Pharmacol** 1989 Jul 1;38(13):2107–12

Kinetic analysis of covalent hybrid plasminogen activators: effect of CNBr-degraded fibrinogen on kinetic parameters of Glu1-plasminogen activation. Lee PP, et al. **Biochemistry** 1988 Sep 20;27(19):7506–13

Cell cycle-specific variation of intracellular plasminogen activator activity in cultured human alveolar epithelial carcinoma and rat hepatoma cells. Orfanoudakis G, et al. **Biol Cell** 1989;65(3):297–300

Plasminogen activators in dextran sulfate-activated euglobulin fractions: a molecular analysis of factor XII- and prekallikrein-dependent fibrinolysis. Hauert J, et al. **Blood** 1989 Mar;73(4):994–9

Cellular and extracellular plasminogen activator and inhibitor in an experimental tumour. Dong Q, et al. **Br J Exp Pathol** 1988 Oct;69(5):685–95

Effect of retinoic acid on asbestos induced plasminogen activator activity of peritoneal macrophages. Lison D, et al. **Br J Ind Med** 1989 Jul;46(7):496–7

Reduced human peritoneal plasminogen activating activity: possible mechanism of adhesion formation. Thompson JN, et al. **Br J Surg** 1989 Apr;76(4):382–4

A comparison of the effect of several factors on the plasminogen activator activity of cloned lines from an ethylnitrosourea-induced glioma and from normal tissue. Neame SJ, et al. **Carcinogenesis** 1989 Apr;10(4):785–7

Effects of vitamin D3 and related compounds on angiotensin converting enzyme activity of endothelial cells and on release of plasminogen activator from them. Hagiwara H, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec;36(12):4858–64

Induction of plasminogen activator by UV light in mouse keratinocyte-derived cell line, Pam 212. Takashima A, et al. **Dermatologica** 1989;179 Suppl 1:133

Prognostic significance of antithrombin III, plasminogen and proactivator of plasminogen activity in viral hepatitis. Boyadjian HP. **Dtsch Z Verdau Stoffwechselkr** 1988; 48(2):83–93

Glucocorticoids stimulate plasminogen activator production by rat granulosa cells. Wang C, et al. **Endocrinology** 1989 Apr;124(4):1595–601

Plasminogen activators in (pre)malignant conditions of the colorectum. Verspaget HW, et al. **Eur J Cancer Clin Oncol** 1989 Mar;25(3):565–9 (54 ref.)

Interaction of urokinase with specific receptors stimulates mobilization of bovine adrenal capillary endothelial cells. Fibbi G, et al. **Exp Cell Res** 1988 Dec;179(2):385–95

Plasminogen activator and its inhibitor in the experimental corneal wound. Tervo T, et al. **Exp Eye Res** 1989 Mar; 48(3):445–9

Fibrinolytic activity in human tears [letter] van Haeringen NJ, et al. **Exp Eye Res** 1989 Mar;48(3):461–4

Plasminogen activator and its enhancement in differentiating mouse Friend erythroleukemia cells. Amici C, et al. **Int J Cancer** 1989 Jan 15;43(1):171–6

Plasminogen activator activity in vitamin A-deficient rat corneas. Hayashi K, et al. **Invest Ophthalmol Vis Sci** 1988 Dec;29(12):1810–9

Anticoagulant low molecular weight heparin does not enhance the activation of plasminogen by tissue plasminogen activator. Andrade-Gordon P, et al. **J Biol Chem** 1989 Sep 15;264(26):15177–81

Plasminogen activators in the mouse mammary gland: Decreased expression during lactation. Busso N, et al. **J Biol Chem** 1989 May 5;264(13):7455–7

Plasminogen activation initiated by single-chain

urokinase-type plasminogen activator. Potentiation by U937 monocytes. Ellis V, et al. **J Biol Chem** 1989 Feb 5;264(4):2185-8

Characterization of the cellular binding site for the urokinase-type plasminogen activator. Estreicher A, et al. **J Biol Chem** 1989 Jan 15;264(2):1180-9

Characterization of a chimeric plasminogen activator consisting of amino acids 1 to 274 of tissue-type plasminogen activator and amino acids 138 to 411 of single-chain urokinase-type plasminogen activator. Lijnen HR, et al. **J Biol Chem** 1988 Dec 15;263(35):19083-91

The interaction of plasminogen activator with a reconstituted basement membrane matrix and extracellular macromolecules produced by cultured epithelial cells. McGuire PG, et al. **J Cell Biochem** 1989 Jun;40(2):215-27

Mouse L cells expressing human prourokinase-type plasminogen activator: effects on extracellular matrix degradation and invasion. Cajot JF, et al. **J Cell Biol** 1989 Aug;109(2):915-25

Activation of pro-urokinase and plasminogen on human sarcoma cells: a proteolytic system with surface-bound reactants. Stephens RW, et al. **J Cell Biol** 1989 May; 108(5):1987-95

Enhancement of plasminogen activator activity in cultured endothelial cells by granulocyte colony-stimulating factor. Kojima S, et al. **J Cell Physiol** 1989 Jan;138(1):192-6

Characterization of the intrinsic fibrinolytic properties of pro-urokinase through a study of plasmin-resistant mutant forms produced by site-specific mutagenesis of lysine(158). Gurewich V, et al. **J Clin Invest** 1988 Dec;82(6):1956-62

Interaction between plasminogen activator inhibitor type 1 (PAI-1) bound to fibrin and either tissue-type plasminogen activator (t-PA) or urokinase-type plasminogen activator (u-PA). Binding of t-PA/PAI-1 complexes to fibrin mediated by both the finger and the kringle-2 domain of t-PA. Wagner OF, et al. **J Clin Invest** 1989 Aug; 84(2):647-55

Modulation of urokinase-type plasminogen activator and plasminogen activator inhibitor-2 expression by U-937 mononuclear phagocytes. Effects of 1 alpha, 25-dihydroxyvitamin D3 and phorbol ester. Gyetko MR, et al. **J Immunol** 1988 Oct 15;141(8):2693-8

Plasminogen activator and prostaglandin E2 levels in human synovial fibroblasts. Differential stimulation by synovial activator and other cytokines. Leizer T, et al. **J Immunol** 1989 Aug 1;143(3):971-8

Modulation of plasminogen activator systems by matrix components in two breast cancer cell lines: MCF-7 and MDA-MB-231. Pourreau-Schneider N, et al. **J Natl Cancer Inst** 1989 Feb 15;81(4):259-66

Type beta transforming growth factor and epidermal growth factor suppress the plasminogen activator activity in a human glioblastoma cell line. Helseth E, et al. **J Neurooncol** 1988 Nov;6(3):277-83

Tissue plasminogen activator binding to mouse cerebellar granule neurons. Verrall S, et al. **J Neurosci Res** 1988 Oct-Dec;21(2-4):420-5

Plasminogen activators in human prostate cancer cell lines and tumors: correlation with the aggressive phenotype. Gaylis FD, et al. **J Urol** 1989 Jul;142(1):193-8

Fibrinolytic activity and localization of plasminogen activator in bovine vitreous body and aqueous humor. Hayashi K, et al. **Jpn J Ophthalmol** 1989;33(1):66-75

Tumor necrosis factor-alpha regulates mRNA for urokinase-type plasminogen activator and type-1 plasminogen activator inhibitor in human neoplastic cell lines. Georg B, et al. **Mol Cell Endocrinol** 1989 Jan; 61(1):87-96

Plasminogen activation and endotoxin [letter] **N Engl J Med** 1989 Sep 28;321(13):903-4

Brain basic fibroblast growth factor stimulates the release of plasminogen activators by newborn rat cultured astroglial cells. Rogister B, et al. **Neurosci Lett** 1988 Sep 12;91(3):321-6

Accessibility of receptor-bound urokinase to type-1 plasminogen activator inhibitor. Cubellis MV, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4828-32

Considerations on the role of the plasminogen activators/plasmin system in the generation of conditions for more efficient interaction of malignant cells with large granular lymphocytes. Juranić Z, et al. **Res Immunol** 1989 Mar-Apr;140(3):281-3

Plasminogen activators in the intestine of patients with inflammatory bowel disease. de Bruin PA, et al. **Thromb Haemost** 1988 Oct 31;60(2):262-6

Marked potentiation of the plasminogenolytic activity of pro-urokinase by unfractionated heparin and a low molecular-weight heparin. Dosne AM, et al. **Thromb Res** 1988 Sep 15;51(6):627-30

Fibrin activatable urokinase (FA-UK): a latent form of UK found in urine related to a complex with an inhibitor/fibrin-interacting cofactor. Dwivedi C, et al. **Thromb Res** 1988 Jul 15;51(2):197-208

Evidence for regulation of endothelial plasminogen-activating system by polymorphonuclear leukocyte elastase. Gilboa N, et al. **Thromb Res** 1989 Jun 1;54(5):467-75

Concurrent expression of procoagulant and plasminogen activator activities by rabbit alveolar macrophages in vitro: opposite modulating effects of prostaglandin E2. Hasday JD, et al. **Thromb Res** 1988 Sep 1;51(5):521-31

Distribution of plasminogen activators in human kidney and male genital organs using a highly sensitive enzyme immunoassay. Hasui Y, et al. **Thromb Res** 1988 Aug 15; 51(4):453-9

Placental and decidual u-PA, t-PA, PAI-1 and PAI-2 concentrations, as affected by cervical dilatation with laminaria tents or Hegar dilators. Jonasson A, et al. **Thromb Res** 1989 Jan 15;53(2):91-7

Purification and characterization of the bacterial plasminogen activator staphylokinase secreted by a recombinant Bacillus subtilis. Gerlach D, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 269(3):314-22

[Effects of PGE2 and PGF2 alpha on plasminogen activator activity in rat granulosa cells] Lu YL, et al. **Shih Yen Sheng Wu Hsueh Pao** 1988 Sep;21(3):321-9 (Eng. Abstr.) **(Chi)**

[Plasminogen activators in malignant tissues and lungs of mice during metastatic spreading and administration of various pharmacological agents] Chubinskaia SG, et al. **Eksp Onkol** 1988;10(5):46-9 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Pharmacokinetics of plasmatic plasminogen activator in rabbits. González Rey JR, et al. **Folia Haematol (Leipz)** 1988;115(1-2):171-6

Slow clearance of acylated, hybrid thrombolytic enzymes. Robinson JH, et al. **Thromb Haemost** 1988 Jun 16; 59(3):421-5

PHARMACOLOGY

Plasminogen activation in the bovine udder. Hedkvist L, et al. **Acta Vet Scand** 1989;30(1):103-5

Additional myocardial salvage by coadministration of the epoprostenol analog taprostene to recombinant single-chain urokinase-type plasminogen activator in a canine coronary thrombosis model. Groves R, et al. **Arzneimittelforschung** 1989 Apr;39(4):534-8

Effect of various plasminogen activators on prostacyclin synthesis in cultured vascular cells. Kawaguchi H, et al. **Circ Res** 1988 Dec;63(6):1029-35

Synergistic combinations of recombinant human tissue-type plasminogen activator and human single-chain urokinase-type plasminogen activator. Effect on thrombolysis and reocclusion in a canine coronary artery thrombosis model with high-grade stenosis. Ziskind AA, et al. **Circulation** 1989 Feb;79(2):393-9

Activation of fibrin-bound plasminogen by pro-urokinase and its complementariness with that by tissue plasminogen activator. Gurewich V. **Enzyme** 1988;40(2-3):97-108 (56 ref.)

Mechanisms of plasminogen activation by mammalian plasminogen activators. Lijnen HR, et al. **Enzyme** 1988; 40(2-3):90-6 (27 ref.)

A factor from endothelium facilitates activation of plasminogen by tissue plasminogen activator. Machovich R, et al. **Enzyme** 1988;40(2-3):109-12

Streptokinase—biochemistry and clinical application. Reddy KN. **Enzyme** 1988;40(2-3):79-89 (63 ref.)

A model system for the in vivo determination of the thrombolytic effect of plasminogen activators. Scheu JD, et al. **Thromb Res** 1988 Aug 15;51(4):391-402

[Thrombolysis using tissue-type plasminogen activator and pro-urokinase: synergism; mutants and hybrids] Páramo JA, et al. **Sangre (Barc)** 1989 Aug;34(4):297-9 (28 ref.) **(Spa)**

PHYSIOLOGY

Role of plasminogen activator in pemphigus vulgaris. Wilkinson JE, et al. **Am J Pathol** 1989 Mar;134(3):561-9

Cell-associated plasminogen activation: regulation and physiological functions. Saksela O, et al. **Annu Rev Cell Biol** 1988;4:93-126 (230 ref.)

Plasminogen activators and their inhibitors: regulators of extracellular proteolysis and cell function. Hart DA, et al. **Comp Biochem Physiol [B]** 1988;90(4):691-708 (249 ref.)

Plasminogen activators: possible roles in cell proliferation. Takada A, et al. **Dermatologica** 1989;179 Suppl 1:77-83

Plasminogen activator activity is associated with neural crest cell motility in tissue culture. Erickson CA, et al. **J Exp Zool** 1989 Aug;251(2):123-33

Functional inhibition of endogenously produced urokinase decreases cell proliferation in a human melanoma cell line. Kirchheimer JC, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5424-8

Molecular mechanisms in the hormonal regulation of plasminogen activator activity in ovarian granulosa cells and cumulus-oocyte complexes. Hsueh AJ, et al. **Prog Clin Biol Res** 1988;267:227-57 (41 ref.)

[The regulation of fibrinolysis] Matsuo O. **Nippon Rinsho** 1989 Apr;47(4):739-45 **(Jpn)**

[Role of single chain pro-UK on the initiation and regulation of fibrinolysis] Arimura H, et al. **Rinsho Byori** 1989 Apr; Spec No 81:107-17 **(Jpn)**

SECRETION

Hormonal control of plasminogen activator secretion in organ culture of rat ventral prostate. Martikainen P, et al. **Acta Endocrinol (Copenh)** 1989 Jan;120(1):43-9

Tissue-type plasminogen activator release in response to epinephrine in perfused rat hindlegs. Zhu GJ, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H404-10

Plasminogen activator secretion in the rat seminiferous epithelium after hypophysectomy and gonadotropin treatment. Toppari J, et al. **Arch Androl** 1988;20(3):219-27

High frequency of plasminogen activator secretion by malignant human lymphoid cell lines of T-cell type origin. Venuat AM, et al. **Cancer** 1988 Nov 1;62(9):1952-7

A protease of Bacteroides gingivalis degrades cell surface and matrix glycoproteins of cultured gingival fibroblasts and induces secretion of collagenase and plasminogen activator. Uitto VJ, et al. **Infect Immun** 1989 Jan; 57(1):213-8

Plasminogen activator secretion in relation to Schwann cell activities. Krystosek A, et al. **Int J Dev Neurosci** 1988; 6(5):483-93

Estradiol and plasminogen activator secretion by cultured rat Sertoli cells in response to melanocyte-stimulating hormones. Boitani C, et al. **J Androl** 1989 May-Jun; 10(3):202-9

Secretion of plasminogen activator in response to follicle-stimulating hormone in culture medium of human testicular cells from biopsy specimens. Nishimune Y, et al. **J Androl** 1989 Jul-Aug;10(4):283-8

Heparin stimulation of plasminogen activator secretion by macrophage-like cell line RAW264.7: role of the scavenger receptor. Falcone DJ. **J Cell Physiol** 1989 Aug; 140(2):219-26

Indomethacin inhibits hCG and GnRH agonist-induced secretion of plasminogen activator by granulosa and theca interstitial cells of hypophysectomized rats. Liu YX, et al. **Sci Sin [B]** 1988 Jul;31(7):807-17

Influence of alpha-NAPAP on thrombin-induced release of plasminogen activator. Klöcking HP, et al. **Thromb Res** 1988 Oct 1;52(1):71-3

[Coagulation and fibrinolytic system of macrophages] Ogura M, et al. **Nippon Rinsho** 1989 Mar;47(3):545-9 **(Jpn)**

THERAPEUTIC USE

Randomized, double-blinded multicenter study. Comparison of intracoronary single-chain urokinase-type plasminogen activator, pro-urokinase (GE-0943), and intracoronary urokinase in patients with acute myocardial infarction. Kambara H, et al. **Circulation** 1988 Oct;78(4):899-905

Clot-selective coronary thrombolysis with pro-urokinase. Loscalzo J, et al. **Circulation** 1989 Apr;79(4):776-82

Plasminogen activators and their potential in therapy. Hollander IJ. **Crit Rev Biotechnol** 1987;6(3):253-71 (125 ref.)

Randomised double-blind trial of recombinant pro-urokinase against streptokinase in acute myocardial infarction. PRIMI Trial Study Group. **Lancet** 1989 Apr 22;1(8643):863-8

Stereotactic evacuation of hypertensive cerebellar hemorrhage using plasminogen activator. Yokote H, et al. **No Shinkei Geka** 1989 May;17(5):421-6

Innovative approaches to plasminogen activator therapy. Haber E, et al. **Science** 1989 Jan 6;243(4887):51-6 (54 ref.)

Potentiation of the thrombolytic efficacy of single-chain urokinase (Pro-urokinase) by heparin [letter] Gulba DC, et al. **Thromb Haemost** 1988 Oct 31;60(2):350-1

Evaluation of fibrinolytic capacity in plasma during thrombolytic therapy with single (scu-PA) or two-chain urokinase type plasminogen activator (tcu-PA) by a combined assay system for urokinase type plasminogen activator antigen and function. Wojta J, et al. **Thromb Haemost** 1989 Apr 25;61(2):289-93

[Cerebral infarction—thrombolytic therapy by tissue-type plasminogen activator or prourokinase] Amano T. **Nippon Rinsho** 1989 Apr;47(4):917-20 **(Jpn)**

[Coronary thrombolysis by t-PA and pro-UK] Kanmatsuse K, et al. **Nippon Rinsho** 1989 Apr;47(4):910-6 **(Jpn)**

[Ischemic cardiopathy (VIII). Thrombolysis with plasminogen activator in myocardial infarct] Azqueta M, et al. **Rev Esp Cardiol** 1988 Oct;41(8):491-500 (57 ref.) **(Spa)**

URINE

Modulation of mRNA levels for urinary- and tissue-type plasminogen activator and plasminogen activator inhibitors 1 and 2 in human fibroblasts by interleukin 1. Michel JB, et al. **J Immunol** 1989 Aug 1;143(3):890-5

PLASMINOKINASE see **STREPTODORNASE AND STREPTOKINASE**

PLASMODIUM

Cellular and molecular biology of trypanosomes and Plasmodium. Dakar, March 28-30, 1988. Proceedings. **Biol Cell** 1988;64(2):107-260

Experimental transmission of Plasmodium mexicanum by bites of infected Lutzomyia vexator (Diptera: Psychodidae). Klein TA, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):154-64

Vector incrimination and experimental transmission of Plasmodium floridense by bites of infected Culex (Melanoconion) erraticus. Klein TA, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):165-75

[Experimental evidence of the possibility of managing the vector capacity of Anopheles mosquitoes] Alekseev AN, et al. **Med Parazitol (Mosk)** 1988 Nov-Dec;(6):22-6 (Eng. Abstr.) **(Rus)**

ANALYSIS

Identification of Plasmodium knowlesi erythrocyte binding proteins. Miller LH, et al. **Mol Biochem Parasitol** 1988 Dec; 31(3):217–22

CLASSIFICATION

Additional Plasmodium species from Anolis lizards of Hispaniola and Panama. Telford SR Jr, et al. **Int J Parasitol** 1989 May;19(3):275–84

The use of a DNA probe for the differentiation of rodent malaria strains and species. Viriyakosol S, et al. **Mol Biochem Parasitol** 1989 Jan 1;32(1):93–100

[Plasmodia of lemurs in Madagascar] Landau I, et al. **Ann Parasitol Hum Comp** 1989;64(3):171–84 (Eng. Abstr.) **(Fre)**

[A new Plasmodium species from a lemur: Plasmodium coulangesi n. sp.] Lepers JP, et al. **Ann Parasitol Hum Comp** 1989;64(3):163–70 (Eng. Abstr.) **(Fre)**

DRUG EFFECTS

In vitro activity of antimalarial compounds on the exoerythrocytic stages of Plasmodium cynomolgi and P. knowlesi. Fisk TL, et al. **Am J Trop Med Hyg** 1989 Mar; 40(3):235–9

In vitro and in vivo activities of atalaphillinine and related acridone alkaloids against rodent malaria. Fujioka H, et al. **Antimicrob Agents Chemother** 1989 Jan;33(1):6–9

Prostaglandin derivatives inhibit the growth of malarial parasites in mice. Ohnishi ST, et al. **Cell Biochem Funct** 1989 Apr;7(2):105–9

Drug combinations in the treatment of malaria. Donno L. **J Chemother** 1989 Feb;1(1):52–8

ENZYMOLOGY

Neutral proteases involved in the reinvasion of erythrocytes by Plasmodium merozoites. Schrevel J, et al. **Biol Cell** 1988; 64(2):233–44

Serine hydroxymethyltransferase from pyrimethamine-sensitive and -resistant strains of Plasmodium chabaudi. Ruenwongsa P, et al. **Mol Biochem Parasitol** 1989 Mar 15;33(3):265–71

GENETICS

Detection of all human Plasmodium species by a telomeric DNA fragment cloned from Plasmodium berghei. Pace T, et al. **Bull WHO** 1988;66(6):759–62

Molecular basis for mutation in a surface protein expressed by malaria parasites. Hudson DE, et al. **J Mol Biol** 1988 Oct 5;203(3):707–14

Rapid, sensitive diagnosis of malaria based on ribosomal RNA. Waters AP, et al. **Lancet** 1989 Jun 17;1(8651):1343–6

High level sequence homology between a Plasmodium chabaudi heat shock protein gene and its Plasmodium falciparum equivalent. Sheppard M, et al. **Mol Biochem Parasitol** 1989 Feb;33(1):101–3

Molecular karyotyping of the rodent malarias Plasmodium chabaudi, Plasmodium berghei and Plasmodium vinckei. Sheppard M, et al. **Mol Biochem Parasitol** 1989 Apr; 34(1):45–52

Sequence identification of cytochrome b in Plasmodium gallinaceum. Aldritt SM, et al. **Mol Cell Biol** 1989 Sep; 9(9):3614–20

Characterization of a conserved extrachromosomal element isolated from the avian malarial parasite Plasmodium gallinaceum. Joseph JT, et al. **Mol Cell Biol** 1989 Sep; 9(9):3621–9

Sequence of a small ribosomal RNA gene from Plasmodium lophurae [published erratum appears in Nucleic Acids Res 1989 May 11;17(9):3630–1] Waters AP, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1763

GROWTH & DEVELOPMENT

Application of anti-TNF to Plasmodium vinckei-infected mice is followed by an increase of parasitaemia. Neifer S, et al. **Acta Trop (Basel)** 1989 Jul;46(4):273–5

Cultivation of exoerythrocytic stages of Plasmodium cynomolgi, P. knowlesi, P. coatneyi, and P. inui in Macaca mulatta hepatocytes. Millet P, et al. **Am J Trop Med Hyg** 1988 Dec;39(6):529–34

Association of a Plasmodium-refractory phenotype with an esterase locus in Anopheles gambiae. Vernick KD, et al. **Am J Trop Med Hyg** 1989 Jun;40(6):593–7

Effects of magainins and cecropins on the sporogonic development of malaria parasites in mosquitoes. Gwadz RW, et al. **Infect Immun** 1989 Sep;57(9):2628–33

Sporogony, development and ultrastructure of Plasmodium floridense in Culex erraticus. Klein TA, et al. **Int J Parasitol** 1988 Sep;18(6):711–9

Ultrastructural localization of phenoloxidase in the midgut of refractory Anopheles gambiae and association of the enzyme with encapsulated Plasmodium cynomolgi. Paskewitz SM, et al. **J Parasitol** 1989 Aug;75(4):594–600

Phospholipid metabolism in Plasmodium-infected erythrocytes: guidelines for further studies using radioactive precursor incorporation. Vial HJ, et al. **Parasitology** 1989 Jun;98 Pt 3:351–7

Swellengrebel lecture. Hypnozoites and 'relapses' in Plasmodium vivax and in vivax-like malaria. Garnham PC. **Trop Geogr Med** 1988 Jul;40(3):187–95

[Attempt to develop erythrocyte forms of Plasmodium brasilianum in vitro] Oliveira SG, et al. **Rev Soc Bras Med Trop** 1987 Jan-Mar;20(1):45–6 **(Por)**

[The initial stages of the post-sporozoite development of the malarial parasite in the mosquito] Chernov IuV, et al. **Med Parazitol (Mosk)** 1988 Jul-Aug;(4):7–10 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Immune-complexes-mediated evasion of Plasmodium knowlesi from destruction by macrophages. Singh PP, et al. **Acta Trop (Basel)** 1989 Jul;46(4):239–47

The role of mitogenic factors in the pathogenesis of certain features of malarial infection. Oyeyinka GO. **Afr J Med Med Sci** 1988 Dec;17(4):201–7 (68 ref.)

Localization of circumsporozoite antigen in exoerythrocytic schizonts of Plasmodium cynomolgi. Atkinson CT, et al. **Am J Trop Med Hyg** 1989 Feb;40(2):131–40

Antibody responses to malarial antigens in the Wopkaimin population of the Star Mountains, Papua New Guinea. Collins WE, et al. **Am J Trop Med Hyg** 1988 Sep; 39(3):241–5

Cross-reacting antigens to Pc96, a protective antigen of Plasmodium chabaudi, in P. falciparum, P. vivax, and P. cynomolgi. Wanidworanun C, et al. **Am J Trop Med Hyg** 1989 Jun;40(6):579–84

Role of non-human primates in malaria vaccine development: memorandum from a WHO meeting. **Bull WHO** 1988; 66(6):719–28

Expression of the parasite protein Pc90 in plasma membranes of erythrocytes infected with Plasmodium chabaudi. Wunderlich F, et al. **Eur J Cell Biol** 1988 Dec;47(2):157–64

Cloned T cells provide help for malaria-specific polyclonal antibody responses. Goldring JP, et al. **Eur J Immunol** 1989 Mar;19(3):559–61

Malaria transmission-enhancing activity in mosquitoes by mammalian host anti-sporozoite antibodies. Hollingdale MR, et al. **Exp Parasitol** 1989 Apr;68(3):365–8 (19 ref.)

Plasmodium vivax: in vitro development of exoerythrocytic stages in squirrel monkey hepatocytes and inhibition by an anti-P. cynomolgi monoclonal antibody. Millet P, et al. **Exp Parasitol** 1989 Jul;69(1):91–3

T cell immunity to malaria sporozoites. Schofield L. **Exp Parasitol** 1989 Apr;68(3):357–64 (45 ref.)

Antibodies to lactate dehydrogenase of Plasmodium knowlesi are specific to Plasmodium species. Kaushal DC, et al. **Immunol Invest** 1988 Aug-Oct;17(6-7):507–16

Stabilization of Plasmodium knowlesi antigen for seroepidemiology of malaria. Saxena SK, et al. **Indian J Malariol** 1988 Jun;25(1):27–32

Fractionation of Plasmodium knowlesi antigen for seroepidemiology of human malaria by IHA test. Saxena SK, et al. **Indian J Malariol** 1988 Jun;25(1):33–9

Association of microneme antigens of Plasmodium brasilianum merozoites with knobs and other parasite-induced structures in host erythrocytes. Torii M, et al. **Infect Immun** 1989 Feb;57(2):596–601

In vivo selection of populations of Plasmodium chabaudi chabaudi AS resistant to a monoclonal antibody that reacts with the precursor to the major merozoite surface antigen. Wood JC, et al. **Infect Immun** 1989 Jul;57(7):2128–35

Purification and characterization of an erythrocyte membrane protein complex carrying Duffy blood group antigenicity. Possible receptor for Plasmodium vivax and Plasmodium knowlesi malaria parasite. Chaudhuri A, et al. **J Biol Chem** 1989 Aug 15;264(23):13770–4

Target antigens of malaria transmission blocking immunity. Kaushal DC, et al. **J Commun Dis** 1987 Dec;19(4):417–21

Production of low titre and non-precipitating antibodies against Plasmodium knowlesi isoenzyme bands. Pasha ST, et al. **J Commun Dis** 1987 Dec;19(4):387–90

Interdependence of CD4+ T cells and malarial spleen in immunity to Plasmodium vinckei vinckei. Relevance to vaccine development. Kumar S, et al. **J Immunol** 1989 Sep 15;143(6):2017–23

Induction of TNF in vitro as a model for the identification of toxic malaria antigens. Taverne J, et al. **Lymphokine Res** 1989 Fall;8(3):317–22

Detection of parasite antigens in different biological fluids. Katzin AM. **Mem Inst Oswaldo Cruz** 1988 Nov;83 Suppl 1:478–81

Comparison of the primary structure of the 25 kDa ookinete surface antigens of Plasmodium falciparum and Plasmodium gallinaceum reveal six conserved regions. Kaslow DC, et al. **Mol Biochem Parasitol** 1989 Mar 15; 33(3):283–7

Vaccination trials in rhesus monkeys with a minor, invariant, Plasmodium knowlesi 66 kD merozoite antigen. Deans JA, et al. **Parasite Immunol** 1988 Sep;10(5):535–52

Circumsporozoite protein of Plasmodium gallinaceum characterized by monoclonal antibodies. Krettli AU, et al. **Parasite Immunol** 1988 Sep;10(5):523–33

In-vitro exoerythrocytic development of Plasmodium cynomolgi bastianellii: inhibitory activity of monoclonal antibodies against sporozoites of different P. cynomolgi strains and of P. knowlesi. Millet P, et al. **Parasite Immunol** 1989 May;11(3):223–30

Localisation of Plasmodium chabaudi antigens by cryomicrotomy using monoclonal antibodies and the immunogold-silver staining method for light microscopy. Chadwick CJ, et al. **Parasitol Res** 1989;75(3):247–9

Mechanisms of immunity to malaria and the possibilities of a blood-stage vaccine: a critical appraisal. Butcher GA. **Parasitology** 1989 Apr;98 Pt 2:315–27 (134 ref.)

An update on candidate malaria vaccines. Mitchell GH. **Parasitology** 1989;98 Suppl:S29–47 (146 ref.)

A protective monoclonal antibody recognizes a linear epitope in the precursor to the major merozoite antigens of Plasmodium chabaudi adami. Lew AM, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3768–72

Antisporozoite vaccine for malaria: experimental basis and current status. Nussenzweig RS, et al. **Rev Infect Dis** 1989 May-Jun;11 Suppl 3:S579–85 (40 ref.)

Immunodeficiency associated with malaria. Tosta CE. **Rev Soc Bras Med Trop** 1987 Jan-Mar;20(1):1–5 (35 ref.) **(Eng, Por)**

[Acquisition of immunity in a zone of endemic malaria (the Sudan-Sahelian savannah)] Cot M, et al. **Ann Soc Belg Med Trop** 1988 Mar;68(1):25–35 (Eng. Abstr.) **(Fre)**

[Plasmodia from lemurs used as antigens in the indirect immunofluorescence reaction. Crossed reaction with Plasmodium falciparum] Lepers JP, et al. **Arch Inst Pasteur Madagascar** 1988;54(1):175–7 **(Fre)**

[Malaria in Gabon. Transplacental passage and dynamics of development of fluorescent antimalarial antibodies with age] Richard-Lenoble D, et al. **Bull Soc Pathol Exot Filiales** 1988;81(4):732–7 (Eng. Abstr.) **(Fre)**

ISOLATION & PURIFICATION

Identification of malaria species by ELISA in sporozoite and oocyst infected Anopheles from western Kenya. Beier MS, et al. **Am J Trop Med Hyg** 1988 Oct;39(4):323–7

Detection of Plasmodium ovale in Koraput district, Orissa state. Jambulingam P, et al. **Indian J Med Res** 1989 Mar; 89:115–6

METABOLISM

Evidence for electrogenic accumulation of mefloquine by malarial parasites. Vanderkooi G, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3623–31

Erythrocyte invasion by the malarial merozoite: recent advances. Perkins ME. **Exp Parasitol** 1989 Jul;69(1):94–9 (21 ref.)

Formation and role of malaria pigment. Jamjoom GA. **Rev Infect Dis** 1988 Sep-Oct;10(5):1029–34 (20 ref.)

PATHOGENICITY

[Susceptibility of Aedes Aegypti L. mosquitoes infected with an entomopathogenic virus to malarial plasmodia] Zakharova NF, et al. **Med Parazitol (Mosk)** 1988 Nov-Dec; (6):18–22 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Morphological changes in erythrocytes induced by malarial parasites. Aikawa M. **Biol Cell** 1988;64(2):173–81

Pre-erythrocytic stages of plasmodia. Role of specific and nonspecific factors. Mazier D, et al. **Biol Cell** 1988; 64(2):165–72 (70 ref.)

Sex determination and sex differentiation in malaria parasites. Cornelissen AW. **Biol Rev Cambridge Philosophic Soc** 1988 Aug;63(3):379–94 (120 ref.)

Experimental modifications of the circadian rythm of Plasmodium vinckei petteri following cryopreservation; probable resistance of the merozoite to thawing. Montalvo-Alvarez AM, et al. **C R Acad Sci [III]** 1988; 307(1):5–10

Malaria parasite invasion: interactions with the red cell membrane. Mitchell GH, et al. **CRC Crit Rev Oncol Hematol** 1988;8(4):225–310 (213 ref.)

Susceptibility of Culex nigripalpus to several isolates of Plasmodium hermani from wild turkeys in Florida. Nayar JK, et al. **J Am Mosq Control Assoc** 1985 Jun;1(2):253–5

Lectin-binding sites in the midgut of the mosquitoes Anopheles stephensi Liston and Aedes aegypti L. (Diptera: Culicidae). Rudin W, et al. **Parasitol Res** 1989;75(4):268–79

Improved isolation of Plasmodium knowlesi-infected erythrocyte host-cell membrane on polycationic beads. Vial HJ, et al. **Parasitol Res** 1989;75(5):419–21

The sex ratio of Plasmodium gametocytes. Schall JJ. **Parasitology** 1989 Jun;98 Pt 3:343–50

[Recent findings on the epidemiology of malaria and on the distribution of plasmodial species in Madagascar in 1987] Lepers JP, et al. **Arch Inst Pasteur Madagascar** 1988; 54(1):151–67 **(Fre)**

ULTRASTRUCTURE

Release of merozoite dense granules during erythrocyte invasion by Plasmodium knowlesi. Torii M, et al. **Infect Immun** 1989 Oct;57(10):3230–3

The fine structure of secretion by Plasmodium knowlesi merozoites during red cell invasion. Bannister LH, et al. **J Protozool** 1989 Jul-Aug;36(4):362–7

Comparative morphology of human and animal malaria parasites. I. Host-parasite interface. Mackenstedt U, et al. **Parasitol Res** 1989;75(7):528–35

PLASMODIUM BERGHEI

[Experimental evidence of the possibility of managing the vector capacity of Anopheles mosquitoes] Alekseev AN,

et al. **Med Parazitol (Mosk)** 1988 Nov-Dec;(6):22-6 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Effect of mefloquine and artemisinin on the sporogonic cycle of Plasmodium berghei ANKA in Anopheles stephensi mosquitoes. Coleman RE, et al. **Acta Leiden** 1988; 57(1):61-73

Effect of chloroquine on the sporogonic cycle of Plasmodium falciparum and Plasmodium berghei in anpheline mosquitoes. do Rosario VE, et al. **Acta Leiden** 1988; 57(1):53-60

Delay in emergence of mefloquine resistance in Plasmodium berghei by use of drug combinations. Puri SK, et al. **Acta Trop (Basel)** 1989 Jul;46(4):209-12

Antiparasitic activity of nine pyrazole derivatives against Trichomonas vaginalis, Entamoeba invadens and Plasmodium berghei. Escario JA, et al. **Ann Trop Med Parasitol** 1988 Jun;82(3):257-62

The in vitro and in vivo antimalarial activity of some Mannich bases derived from 4-[7'-bromo (and chloro)-1',5'-naphthyridin-4'-ylamino]phenol and 4-(7'-trifluoromethylquinolin-4'-ylamino)phenol. Scott HV, et al. **Ann Trop Med Parasitol** 1988 Apr;82(2):127-34

Antihistaminic drugs that reverse chloroquine resistance in Plasmodium falciparum [letter] Peters W, et al. **Lancet** 1989 Aug 5;2(8658):334-5

Antimalarial properties of ebselen. Hüther AM, et al. **Parasitol Res** 1989;75(5):353-60

Relations between resistance to chloroquine and acidification of endocytic vesicle of Plasmodium berghei. Mahmalgi J, et al. **Parasitology** 1989 Feb;98 (Pt 1):1-6

Sensitivity of malaria parasites to artemether (qinghaosu derivative) depends on host cell age. Waki S, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):913-4

Influence of aflatoxin on malarial infection in mice. Young RH, et al. **Trans R Soc Trop Med Hyg** 1988;82(4):559-60

[Development of artemether-resistant of line of Plasmodium berghei] Cheng LF, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jul;9(4):352-5 (Eng. Abstr.) **(Chi)**

[Mutagenic effects of N-methyl-N-nitro-N-nitrosoguanidine (MNNG) and ethyl methanesulfonate (EMS) on chloroquine resistance in Plasmodium berghei ANKA strain] Yao SN, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jul;9(4):356-60 (Eng. Abstr.) **(Chi)**

[Inhibitory effect of artemisinine-sulfadoxine-pyrimethamine combination on the development of drug-resistance in Plasmodium berghei] Zhou YQ, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Sep;9(5):453-7 (Eng. Abstr.) **(Chi)**

[Effect of vitamin E on the lipid composition of the erythrocytes of mice and of the malarial parasite Plasmodium berghei] Chuenkova MV, et al. **Med Parazitol (Mosk)** 1988 Jul-Aug;(4):13-5 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

[Detection of malarial parasite isoenzymes by cellulose acetate electrophoresis combined with blood concentration in capillaries] Allakhverdiev AM. **Med Parazitol (Mosk)** 1988 Nov-Dec;(6):6-8 (Eng. Abstr.) **(Rus)**

GENETICS

Molecular karyotyping of the rodent malarias Plasmodium chabaudi, Plasmodium berghei and Plasmodium vinckei. Sheppard M, et al. **Mol Biochem Parasitol** 1989 Apr; 34(1):45-52

GROWTH & DEVELOPMENT

Plasmodium berghei: gametocyte production, DNA content, and chromosome-size polymorphisms during asexual multiplication in vivo. Janse CJ, et al. **Exp Parasitol** 1989 Apr;68(3):274-82

Use of various animal erythrocytes for in vitro cultivation of Plasmodium berghei. Ramaiya ML, et al. **Int J Parasitol** 1988 Jul;18(5):639-41

The complete development in vitro of the vertebrate phase of the mammalian malarial parasite Plasmodium berghei. Suhrbier A, et al. **Trans R Soc Trop Med Hyg** 1987; 81(6):907-9

[Development of Plasmodium berghei and the immunosuppression phenomenon in the early phase of experimental malaria in mice] Gilpin-Jackson E, et al. **Med Parazitol (Mosk)** 1988 Sep-Oct;(5):9-11 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Expression of Plasmodium berghei circumsporozoite antigen on the surface of exoerythrocytic schizonts and merozoites. Atkinson CT, et al. **Am J Trop Med Hyg** 1989 Jul; 41(1):9-17

Multiple T helper cell epitopes of the circumsporozoite protein of Plasmodium berghei. Romero PJ, et al. **Eur J Immunol** 1988 Dec;18(12):1951-7

Plasmodium berghei: immunosuppression of the cell-mediate immune response induced by nonviable antigenic preparations. Gross A, et al. **Exp Parasitol** 1989 Jan;68(1):83-92

Soluble malarial antigens are toxic and induce the production of tumour necrosis factor in vivo. Bate CA, et al. **Immunology** 1989 Apr;66(4):600-5

Di-octyl phthalate induced altered host resistance: viral and protozoal models in mice. Dogra RK, et al. **Ind Health** 1989;27(2):83-7

Immune response gene regulation of immunity to Plasmodium berghei sporozoites and circumsporozoite protein vaccines. Overcoming genetic restriction with whole organism and subunit vaccines. Hoffman SL, et al. **J Immunol** 1989 May 15;142(10):3581-4

Interactions of Plasmodium berghei sporozoites and murine Kupffer cells in vitro. Seguin MC, et al. **J Immunol** 1989 Sep 1;143(5):1716-22

Modulation of the host's immune response to Plasmodium berghei by a parasite-derived immunosuppressive factor. Srour EF, et al. **J Protozool** 1989 Jul-Aug;36(4):341-4

Protective and pathological activity in serum of mice developing resistance to Plasmodium berghei infection. Schetters TP, et al. **Parasite Immunol** 1989 Jul;11(4):413-23

Stage-specific proteins of Plasmodium berghei-infected red blood cells detected by antibodies of immune mouse serum. Schetters TP, et al. **Parasitol Res** 1988;75(1):69-72

Acquirement of protective immunity in mice through infection with an attenuated isolate and its failure in parent virulent Plasmodium berghei. Waki S, et al. **Parasitol Res** 1989;75(8):614-8

Plasmodium antigens external to the parasite but with the infected erythrocyte. Wiser MF. **Parasitol Res** 1989; 75(3):206-11

Sporozoite vaccine induces genetically restricted T cell elimination of malaria from hepatocytes. Hoffman SL, et al. **Science** 1989 Jun 2;244(4908):1078-81

Anemia and anti-erythrocyte antibodies developed after repeated injections of sonicated preparations of Plasmodium berghei and Babesia rodhaini. Kanbara T, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Jul; 269(1):100-8

METABOLISM

Phosphorylation of Plasmodium berghei derived phosphoproteins associated with the host erythrocyte membrane by the spectrin kinase. Wiser MF. **Mol Cell Biochem** 1988 Nov;84(1):51-7

PHYSIOLOGY

Sex determination and sex differentiation in malaria parasites. Cornelissen AW. **Biol Rev Cambridge Philosophic Soc** 1988 Aug;63(3):379-94 (120 ref.)

Host cell specificity and schizogony of Plasmodium berghei under different in vitro conditions. Janse CJ, et al. **Int J Parasitol** 1989 Aug;19(5):509-14

Malaria sporozoites leave behind trails of circumsporozoite protein during gliding motility. Stewart MJ, et al. **J Protozool** 1988 Aug;35(3):389-93

ULTRASTRUCTURE

[Effects of large doses of pyronaridine and chloroquine on the ultrastructure of the erythrocytic stages of pyronaridine-resistant line of Plasmodium berghei] Wu LJ. **Chung Kuo Yao Li Hsueh Pao** 1988 Jan;9(1):87-9 (Eng. Abstr.) **(Chi)**

PLASMODIUM FALCIPARUM

Naturally occurring anti-band 3 autoantibodies recognize a high molecular weight protein on the surface of Plasmodium falciparum infected erythrocytes. Winograd E, et al. **Biochem Biophys Res Commun** 1989 May 15; 160(3):1357-63

Bioflavonoid effects on in vitro cultures of Plasmodium falciparum. Inhibition of permeation pathways induced in the host cell membrane by the intraerythrocytic parasite. Silfen J, et al. **Biochem Pharmacol** 1988 Nov 15; 37(22):4269-76

In vitro drug sensitivity of Plasmodium falciparum in Acre, Brazil. Kremsner PG, et al. **Bull WORLD Health Organ** 1989;67(3):289-93

Susceptibility of Anopheles culicifacies species A and B to Plasmodium vivax and Plasmodium falciparum as determined by immunoradiometric assay. Subbarao SK, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):394-7

A specific hepatocyte receptor for the circumsporozoite protein: an unlikely hypothesis [letter] Suhrbier A. **Trans R Soc Trop Med Hyg** 1988;82(2):351-2

A septate polycarbonate cell culture unit used for Plasmodium falciparum and hybridomas. Thélu J, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):360-2

ANALYSIS

The N-terminal amino acid sequences of the Plasmodium falciparum (FCB1) merozoite surface antigens of 42 and 36 kilodalton, both derived from the 185-195-kilodalton precursor. Heidrich HG, et al. **Mol Biochem Parasitol** 1989 May 1;34(2):147-54

A 60-kDa Plasmodium falciparum protein at the moving junction formed between merozoite and erythrocyte during invasion. Klotz FW, et al. **Mol Biochem Parasitol** 1989 Sep; 36(2):177-85

Purification and partial characterization of an unusual protein of Plasmodium falciparum: histidine-rich protein II. Panton LJ, et al. **Mol Biochem Parasitol** 1989 Jun 15;35(2):149-60

CLASSIFICATION

New approaches to the serotypic analysis of the epidemiology of Plasmodium falciparum. Forsyth KP, et al. **Philos Trans R Soc Lond [Biol]** 1988 Oct 31; 321(1207):485-93 (24 ref.)

DRUG EFFECTS

Effect of chloroquine on the sporogonic cycle of Plasmodium falciparum and Plasmodium berghei in anpheline mosquitoes. do Rosario VE, et al. **Acta Leiden** 1988; 57(1):53-60

Chloroquine-resistant Plasmodium falciparum in eastern Sudan. Bayoumi RA, et al. **Acta Trop (Basel)** 1989 May; 46(3):157-65

The effects of polyamine analogues on malaria parasites in vitro and in vivo. Bitonti AJ, et al. **Adv Exp Med Biol** 1988;250:717-26

A comparison of the in vitro activities of amodiaquine and desethylamodiaquine against isolates of Plasmodium falciparum. Childs GE, et al. **Am J Trop Med Hyg** 1989 Jan;40(1):7-11

Stage specific actions of antimalarial drugs on Plasmodium falciparum in culture. Geary TG, et al. **Am J Trop Med Hyg** 1989 Mar;40(3):240-4

Antimalarial drug susceptibility of Plasmodium falciparum isolates from forest fringe dwelling aborigines (Orang Asli) of Peninsular Malaysia. Lambros C, et al. **Am J Trop Med Hyg** 1989 Jul;41(1):3-8

Iron chelators: in vitro inhibitory effect on the liver stage of rodent and human malaria. Stahel E, et al. **Am J Trop Med Hyg** 1988 Sep;39(3):236-40

The in vitro and in vivo antimalarial activity of some Mannich bases derived from 4-[7'-bromo (and chloro)-1',5'-naphthyridin-4'-ylamino]phenol and 4-(7'-trifluoromethylquinolin-4'-ylamino)phenol. Scott HV, et al. **Ann Trop Med Parasitol** 1988 Apr;82(2):127-34

Activity of fluoroquinolone antibiotics against Plasmodium falciparum in vitro. Divo AA, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1182-6

In vitro and in vivo studies of the effects of halogenated histidine analogs on Plasmodium falciparum. Panton LJ, et al. **Antimicrob Agents Chemother** 1988 Nov;32(11):1655-9

Selective activity of 5-fluoroorotic acid against Plasmodium falciparum in vitro. Rathod PK, et al. **Antimicrob Agents Chemother** 1989 Jul;33(7):1090-4

Response of Plasmodium falciparum to antimalarial drugs in vitro at Wad Medani, Sudan. Ibrahim AM. **APMIS Suppl** 1988;3:44-6

In vitro response of Plasmodium falciparum to chloroquine and mefloquine in southeast Madagascar. Kightlinger MB, et al. **Arch Inst Pasteur Madagascar** 1988;54(1):169-74

Selective antimalarial activity of tetrandrine against chloroquine resistant Plasmodium falciparum. Ye ZG, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):242-8

Effects of lysosomotropic detergents on the human malarial parasite Plasmodium falciparum in in vitro culture. Cabantchik ZI, et al. **Biochem Pharmacol** 1989 Apr 15; 38(8):1271-7

Alkalinization of the food vacuole of malaria parasites by quinoline drugs and alkylamines is not correlated with their antimalarial activity. Ginsburg H, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2645-54

In vitro activity of natural and synthetic naphthoquinones against erythrocytic stages of Plasmodium falciparum. Carvalho LH, et al. **Braz J Med Biol Res** 1988;21(3):485-7

Effectiveness of amodiaquine, sulfadoxine-pyrimethamine, and combinations of these drugs for treating chloroquine-resistant falciparum malaria in Hainan Island, China. Huang OL, et al. **Bull WHO** 1988;66(3):353-8

In vivo and in vitro responses to quinine and quinidine of Plasmodium falciparum. Sabchareon A, et al. **Bull WHO** 1988;66(3):347-52

Development of a blood culture medium and a standard in vitro microtest for field-testing the response of Plasmodium falciparum to antifolate antimalarials. Payne D, et al. **Bull WORLD Health Organ** 1989;67(1):59-64

Chloroquine-resistant Plasmodium falciparum malaria acquired in central Africa--Quebec. Pichette G, et al. **Can Dis Wkly Rep** 1988 Apr 23;14(16):65-6 **(Eng, Fre)**

Compounds binding to cytoskeletal proteins are active against Plasmodium falciparum in vitro. Dieckmann-Schuppert A, et al. **Cell Biol Int Rep** 1989 Feb;13(2):207-14

Compounds binding to cytoskeletal proteins are active against Plasmodium falciparum in vitro. Dieckmann-Schuppert A, et al. **Cell Biol Int Rep** 1989 May;13(5):411-8

Quinine-resistant Plasmodium falciparum in Zambia [letter] Bisseru B. **Cent Afr J Med** 1988 Jan;34(1):17-8

A comparison of the sensitivity of Plasmodium falciparum malaria to chloroquine in two areas of Isoka District--Zambia. Maboshe MN, et al. **Cent Afr J Med** 1988 Oct;34(10):244-6

Fluorometric determination of the antimalarial efficacy of artemisinin and artemether against Plasmodium falciparum in vitro. Gu HM, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Mar;9(2):160-3

Response of Plasmodium falciparum to chloroquine in hospital patients at Muheza, Tanzania. Mutabingwa TK, et al. **East Afr Med J** 1986 Dec;63(12):771-85

Plasmodium falciparum: induction of resistance to mefloquine

in cloned strains by continuous drug exposure in vitro. Oduola AM, et al. **Exp Parasitol** 1988 Dec;67(2):354–60

The use of 5-fluorocytosine and ketoconazole in the culture of the erythrocytic stages of Plasmodium falciparum and some tumor cell lines. Roth EF Jr, et al. **Experientia** 1989 May 15;45(5):478–80

In vitro cytocidal effect of novel lytic peptides on Plasmodium falciparum and Trypanosoma cruzi. Jaynes JM, et al. **FASEB J** 1988 Oct;2(13):2878–83

Killing of blood-stage Plasmodium falciparum by lipid peroxides from tumor necrosis serum. Rockett KA, et al. **Infect Immun** 1988 Dec;56(12):3180–3

A sensitive bioassay for serum cycloguanil using Plasmodium falciparum in vitro. Scott HV, et al. **Int J Parasitol** 1988 Jul;18(5):605–9

Decreased sensitivity of artesunate and chloroquine of Plasmodium falciparum infecting hemoglobin H and/or hemoglobin constant spring erythrocytes. Yuthavong Y, et al. **J Clin Invest** 1989 Feb;83(2):502–5

DNA hybridization for assessment of response of Plasmodium falciparum to chloroquine therapy. McLaughlin GL, et al. **J Clin Microbiol** 1988 Sep; 26(9):1704–7

Studies on efficacy of treatment with sulfamethoxazole + trimethoprim and sulfalene + pyrimethamine combinations in Plasmodium falciparum malaria of known and unknown resistant status. Barkakaty BN, et al. **J Commun Dis** 1988 Sep;20(3):165–74

Cerebral malaria from West Africa: chloroquine-resistant Plasmodium falciparum? [letter] Nathwani DN, et al. **J Infect** 1988 Sep;17(2):183–4

Antimalarial activity of new water-soluble dihydroartemisinin derivatives. 2. Stereospecificity of the ether side chain. Lin AJ, et al. **J Med Chem** 1989 Jun; 32(6):1249–52

Premature release of Plasmodium falciparum from swollen erythrocytes induced by some antimalarials. Gu HM, et al. **J Parasitol** 1989 Feb;75(1):153–7

Stage-dependent inhibition of Plasmodium falciparum by potent Ca2+ and calmodulin modulators. Tanabe K, et al. **J Protozool** 1989 Mar–Apr;36(2):139–43

Serial studies on the evolution of drug resistance in malaria in an area of east Africa: findings from 1979 up to 1986. Draper CC, et al. **J Trop Med Hyg** 1988 Oct;91(5):265–73

The response of Plasmodium falciparum to chloroquine and mefloquine in Bandar-Abbas and Minab areas, Hormozgan Province, southern Iran. Edrissian GH, et al. **J Trop Med Hyg** 1989 Apr;92(2):75–9

Floods and resistant malaria [letter] **Lancet** 1988 Dec 10; 2(8624):1367

Leupeptin alters the proteolytic processing of P126, the major parasitophorous vacuole antigen of Plasmodium falciparum. Debrabant A, et al. **Mol Biochem Parasitol** 1989 Mar 1;33(2):151–8

Antimalarial action of nitrobenzylthioinosine in combination with purine nucleoside antimetabolites. Gero AM, et al. **Mol Biochem Parasitol** 1989 Apr;34(1):87–97

Mitochondria as the site of action of tetracycline on Plasmodium falciparum. Kiatfuengfoo R, et al. **Mol Biochem Parasitol** 1989 May 1;34(2):109–15

Antimalarial properties of ebselen. Hüther AM, et al. **Parasitol Res** 1989;75(5):353–60

Bis(benzyl)polyamine analogs inhibit the growth of chloroquine-resistant human malaria parasites (Plasmodium falciparum) in vitro and in combination with alpha-difluoromethylornithine cure murine malaria. Bitonti AJ, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):651–5

Chloroquine and acid vesicle function. Krogstad DJ, et al. **Prog Clin Biol Res** 1989;313:53–9 (13 ref.)

Activated oxygen mediates the antimalarial activity of qinghaosu. Meshnick SR, et al. **Prog Clin Biol Res** 1989; 313:95–104

In vitro strategies for circumventing antimalarial drug resistance. Milhous WK, et al. **Prog Clin Biol Res** 1989; 313:61–72 (17 ref.)

Antimalarial activity of selected aromatic chelators V. Localization of 59Fe in Plasmodium falciparum in the presence of oxines. Scheibel LW, et al. **Prog Clin Biol Res** 1989;313:119–49 (79 ref.)

In vitro confirmation of chloroquine-resistant Plasmodium falciparum malaria in KwaZulu. Freese JA, et al. **S Afr Med J** 1988 Dec 3;74(11):576–8

Reversal of chloroquine resistance in malaria parasite Plasmodium falciparum by desipramine. Bitonti AJ, et al. **Science** 1988 Dec 2;242(4883):1301–3

Problems of chloroquine-resistant plasmodium falciparum. Axmann A, et al. **Ther Hung** 1988;36(2):51–5

Inhibition of growth in vitro of Plasmodium falciparum by complex polysaccharides. Butcher GA, et al. **Trans R Soc Trop Med Hyg** 1988;82(4):558–9

Chloroquine-resistant Plasmodium falciparum in Mali revealed by congenital malaria. Chabasse D, et al. **Trans R Soc Trop Med Hyg** 1988;82(4):547

Chloroquine-resistant Plasmodium falciparum malaria from Ivory Coast. Charmot G, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):392–3

In vitro drug sensitivity of Plasmodium falciparum malaria from Nigeria. de Francisco Serpa LA, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):403–4

A rapid in vitro assay system using anti-bromodeoxyuridine for drug susceptibility of Plasmodium falciparum. Doi H, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):190–3

The first report of Plasmodium falciparum resistant to chloroquine plus sulphadoxine/pyrimethamine in Rwanda. Giboda M, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):383

Recombinant human tumour necrosis factor is not inhibitory to Plasmodium falciparum in vitro. Hviid L, et al. **Trans R Soc Trop Med Hyg** 1988;82(1):48–9

Chloroquine-resistant Plasmodium falciparum malaria in Punjab (northern India [letter] Lemnge MM. **Trans R Soc Trop Med Hyg** 1988;82(3):511

In vivo and in vitro sensitivity of Plasmodium falciparum to chloroquine at Lubwe and Kalene in Zambia: use of amodiaquine as an alternative antimalarial drug. Lemnge MM, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):194–6

Superior antimalarial activity of proguanil to cycloguanil after in vitro bioconversion. Ramanaiah TV, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):358–9

Evaluation of the sensitivity in vivo and in vitro of Plasmodium falciparum malaria to quinine in an area of full sensitivity to chloroquine. Salako LA, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):366–8

Chloroquine-resistant falciparum malaria from Guinea. Sanguigni S, et al. **Trans R Soc Trop Med Hyg** 1988; 82(3):359

Antagonism of chloroquine with other antimalarials. Stahel E, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):221

Evidence of increased chloroquine sensitivity in Thai isolates of Plasmodium falciparum. Thaithong S, et al. **Trans R Soc Trop Med Hyg** 1988;82(1):37–8

Variability in drug susceptibility amongst clones and isolates of Plasmodium falciparum. Thaithong S, et al. **Trans R Soc Trop Med Hyg** 1988;82(1):33–6

Susceptibility of Plasmodium falciparum to chloroquine and mefloquine in Somalia. Warsame M, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):202–4

In vitro microtest for chloroquine resistance of Plasmodium falciparum [letter] Wernsdorfer WH, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):349–50

Low prevalence of P. falciparum in-vivo resistance to chloroquine in northern Cameroon in 1986. Lavoue V, et al. **Trop Med Parasitol** 1988 Sep;39(3):249–50

[Observation on the inhibitory effect of ketotifen, cyproheptadine and pizotifenum on Plasmodium falciparum in vitro] Zhou MX, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(2):130–3 (Eng. Abstr.) **(Chi)**

[Effects of artesunate, pyronaridine and hydroxypiperaquine on chloroquine-sensitive and chloroquine-resistant isolates of Plasmodium falciparum in vitro] Li J, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jan;9(1):83–6 (Eng. Abstr.) **(Chi)**

[Malaria in a village of the high plateau area of Madagascar in 1987. Present status of Plasmodium falciparum sensitivity to chloroquine. In vitro study. Some epidemiologic findings] Lepers JP, et al. **Arch Inst Pasteur Madagascar** 1988;54(1):133–41 **(Fre)**

[Low levels of chloroquine resistance of Plasmodium falciparum in the province of Zou in Benin] Djivoh C, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3):332–7 (Eng. Abstr.) **(Fre)**

[Surveillance of Plasmodium falciparum drug sensitivity in Yaounde and its surroundings (Cameroon). In vivo and in vitro study] Hengy C, et al. **Bull Soc Pathol Exot Filiales** 1989;82(2):217–23 (Eng. Abstr.) **(Fre)**

[In vitro sensitivity of Plasmodium falciparum to chloroquine in the highland region of Madagascar in 1987] Lepers JP, et al. **Bull Soc Pathol Exot Filiales** 1988;81(3):338–44 (Eng. Abstr.) **(Fre)**

[In vivo sensitivity of Plasmodium falciparum to amodiaquine in the town of Edea (Cameroon)] Macaigne F, et al. **Bull Soc Pathol Exot Filiales** 1989;82(2):208–16 (Eng. Abstr.) **(Fre)**

[In vivo study of chloroquine resistance of Plasmodium falciparum malaria in Mayotte] Julvez J, et al. **Med Trop (Mars)** 1989 Jan–Mar;49(1):63–5 (Eng. Abstr.) **(Fre)**

[Emergence of chloroquine-resistant malaria in West Africa: the case of Sokode (Togo)] Gbary AR, et al. **Trop Med Parasitol** 1988 Jun;39(2):142–4 (Eng. Abstr.) **(Fre)**

[Chloroquine and fansidar resistance of Plasmodium falciparum now also in Ghana] Kupferschmidt HG, et al. **Angew Parasitol** 1988 Nov;29(4):211–3 (Eng. Abstr.) **(Ger)**

[Mefloquine-resistant Plasmodium falciparum infection from Kenya? (letter)] Shah PM, et al. **Dtsch Med Wochenschr** 1988 Dec 2;113(48):1901 **(Ger)**

[Effect of pasta ulmi on malaria parasites] Zhao CX. **J Tongji Med Univ** 1989;9(1):22–4 (Eng. Abstr.) **(Ger)**

[An imported case of malaria resistant to chloroquine] Golinski M, et al. **Harefuah** 1988 Sep;115(5–6):119–20 (Eng. Abstr.) **(Heb)**

[Evaluation of the Plasmodium falciparum response to chloroquine, quinine and mefloquine] Di Santi SM, et al. **Rev Inst Med Trop Sao Paulo** 1988 May–Jun;30(3):147–52 (Eng. Abstr.) **(Por)**

[In vitro activity of gentian violet on evolutive forms of Plasmodium falciparum] Yang SL, et al. **Rev Inst Med Trop Sao Paulo** 1988 Jan–Feb;30(1):17–20 (Eng. Abstr.) **(Por)**

[In vivo resistance of Plasmodium falciparum to 4-aminoquinolines and to a sulfadoxine-pyrimethamine combination. II—The Emperatriz study, Maranhão, 1983–1984] Passos AD, et al. **Rev Soc Bras Med Trop** 1987 Apr–Jun;20(2):109–13 (Eng. Abstr.) **(Por)**

[Stimulation of the development of chloroquine-sensitive and -resistant strains of Plasmodium falciparum by cocultivation with Mastomys natalensis cells] Allakhverdiev AM, et al. **Med Parazitol (Mosk)** 1988 May–Jun;(3):70–2 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Study of dihydrofolate reductase-thymidylate synthase in Plasmodium falciparum. Inselburg J, et al. **Am J Trop Med Hyg** 1988 Oct;39(4):328–36

Characterization of adenine phosphoribosyltransferase from the human malaria parasite, Plasmodium falciparum. Queen SA, et al. **Biochim Biophys Acta** 1989 Jul 6;996(3):160–5

Activation of a Plasmodium falciparum protease correlated with merozoite maturation and erythrocyte invasion. Braun-Breton C, et al. **Biol Cell** 1988;64(2):223–31

The enzymes of the glycolytic pathway in erythrocytes infected with Plasmodium falciparum malaria parasites. Roth EF Jr, et al. **Blood** 1988 Dec;72(6):1922–5

NADPH production by the malarial parasite Plasmodium falciparum. Vander Jagt DL, et al. **Blood** 1989 Jul; 74(1):471–4

Plasmodium falciparum: purification, properties, and immunochemical study of ornithine decarboxylase, the key enzyme in polyamine biosynthesis. Assaraf YG, et al. **Exp Parasitol** 1988 Oct;67(1):20–30

Plasmodium falciparum: three amino acid changes in the dihydrofolate reductase of a pyrimethamine-resistant mutant. Inselburg J, et al. **Exp Parasitol** 1988 Dec; 67(2):361–3

Plasmodium falciparum: inhibitor sensitivity of the endogenous superoxide dismutase. Ranz A, et al. **Exp Parasitol** 1989 Aug;69(2):125–8

High-performance liquid chromatographic assay for thymidylate synthase from the human malaria parasite, Plasmodium falciparum. Krungkrai J, et al. **J Chromatogr** 1989 Jan 27;487(1):51–9

Plasmodium falciparum: association with erythrocytic superoxide dismutase. Arias AE, et al. **J Protozool** 1988 Aug;35(3):348–51

Purification of Plasmodium falciparum digestive vacuoles and partial characterization of the vacuolar membrane ATPase. Choi I, et al. **Mol Biochem Parasitol** 1988 Oct;31(1):71–8

Glucose-6-phosphate dehydrogenase activity of the malaria parasite Plasmodium falciparum. Ling IT, et al. **Mol Biochem Parasitol** 1988 Oct;31(1):47–56

Properties and substrate specificity of a purine phosphoribosyltransferase from the human malaria parasite, Plasmodium falciparum. Queen SA, et al. **Mol Biochem Parasitol** 1988 Aug;30(2):123–33

Plasmodium falciparum: inhibitors of lysosomal cysteine proteinases inhibit a trophozoite proteinase and block parasite development. Rosenthal PJ, et al. **Mol Biochem Parasitol** 1989 Jun 15;35(2):177–83

Malarial proteinase? [letter] Higgins DG, et al. **Nature** 1989 Aug 24;340(6235):604

Purification and identification of a neutral endopeptidase in Plasmodium falciparum schizonts and merozoites. Grellier P, et al. **Parasitol Res** 1989;75(6):455–60

Characterization of cobalamin-dependent methionine synthase purified from the human malarial parasite, Plasmodium falciparum. Krungkrai J, et al. **Parasitol Res** 1989;75(7):512–7

Studies of Plasmodium falciparum dihydrofolate-reductase thymidylate synthase: potential advantages. Inselburg J, et al. **Prog Clin Biol Res** 1989;313:29–43 (26 ref.)

The parasite derived glucose-6-phosphate dehydrogenase of P. falciparum: what is its role? Roth E Jr, et al. **Prog Clin Biol Res** 1989;313:83–93

Parasite proteases and antimalarial activities of protease inhibitors. Vander Jagt DL, et al. **Prog Clin Biol Res** 1989; 313:105–18

Superoxide dismutase and catalase activities of cultured erythrocytes infected with Plasmodium falciparum. Areekul S, et al. **Southeast Asian J Trop Med Public Health** 1988 Dec; 19(4):601–7

GENETICS

Amplification of the multidrug resistance gene in some chloroquine-resistant isolates of P. falciparum. Foote SJ, et al. **Cell** 1989 Jun 16;57(6):921–30

Large deletions result from breakage and healing of P. falciparum chromosomes. Pologe LG, et al. **Cell** 1988 Dec 2;55(5):869–74

Plasmodium falciparum: an intervening sequence in the GBP 130/96 tR gene. Bonnefoy S, et al. **Exp Parasitol** 1989 Jul; 69(1):37–43

Plasmodium falciparum: gene structure and hydropathy profile of the major merozoite surface antigen (gp195) of the Uganda-Palo Alto isolate. Chang SP, et al. **Exp Parasitol** 1988 Oct;67(1):1–11

Chromosomal polymorphisms and gene expression in Plasmodium falciparum. Ravetch JV. **Exp Parasitol** 1989 Jan;68(1):121–5 (16 ref.)

Plasmodium falciparum: comparison of the genomic organization of the knob protein gene in knobby and knobless variants. Tan-Ariya P, et al. **Exp Parasitol** 1988

Dec;67(2):129–36
Plasmodium falciparum: dimorphism of the p190 alleles. Tanabe K, et al. **Exp Parasitol** 1989 May;68(4):470–3
Characterisation of the dihydrofolate reductase–thymidylate synthetase gene from human malaria parasites highly resistant to pyrimethamine. Snewin VA, et al. **Gene** 1989 Mar 15;76(1):41–52
Long–range restriction maps of Plasmodium falciparum chromosomes: crossingover and size variation among geographically distant isolates. Sinnis P, et al. **Genomics** 1988 Nov;3(4):287–95
Amino acid sequence of the serine–repeat antigen (SERA) of Plasmodium falciparum determined from cloned cDNA. Bzik DJ, et al. **Mol Biochem Parasitol** 1988 Sep; 30(3):279–88
The circumsporozoite protein gene from NF54, a Plasmodium falciparum isolate used in malaria vaccine trials. Caspers P, et al. **Mol Biochem Parasitol** 1989 Jun 15;35(2):185–9
Identification of Plasmodium falciparum–infected mosquitoes using a probe containing repetitive DNA. Delves CJ, et al. **Mol Biochem Parasitol** 1989 Jan 15;32(2–3):105–12
cDNA sequence predicting an octapeptide–repeat antigen of Plasmodium falciparum. Favaloro JM, et al. **Mol Biochem Parasitol** 1989 Jan 15;32(2–3):297–9
Mitochondrial DNA of the human malarial parasite Plasmodium falciparum. Gardner MJ, et al. **Mol Biochem Parasitol** 1988 Oct;31(1):11–7
A general approach to isolating Plasmodium falciparum genes using non–redundant oligonucleotides inferred from protein sequences of other organisms. Hyde JE, et al. **Mol Biochem Parasitol** 1989 Jan 15;32(2–3):247–61
Molecular cloning, genomic structure and localization in a blood stage antigen of Plasmodium falciparum characterized by a serine stretch. Knapp B, et al. **Mol Biochem Parasitol** 1989 Jan 1;32(1):73–83
Structure and expression of the Plasmodium falciparum SERA gene. Li WB, et al. **Mol Biochem Parasitol** 1989 Feb;33(1):13–25
High level sequence homology between a Plasmodium chabaudi heat shock protein gene and its Plasmodium falciparum equivalent. Sheppard M, et al. **Mol Biochem Parasitol** 1989 Feb;33(1):101–3
Molecular cloning and partial sequence of a 5.8 kilobase pair repetitive DNA from Plasmodium falciparum. Suplick K, et al. **Mol Biochem Parasitol** 1988 Sep;30(3):289–90
Structure of a Plasmodium falciparum gene that encodes a glutamic acid–rich protein (GARP). Triglia T, et al. **Mol Biochem Parasitol** 1988 Nov;31(2):199–201
Extremely diverged actin proteins in Plasmodium falciparum. Wesseling JG, et al. **Mol Biochem Parasitol** 1988 Aug; 30(2):143–53
Stage–specific expression and genomic organization of the actin genes of the malaria parasite Plasmodium falciparum. Wesseling JG, et al. **Mol Biochem Parasitol** 1989 Jun 15; 35(2):167–76
DNA sequence of the gene encoding a Plasmodium falciparum malaria candidate vaccine antigen. Campbell JR. **Nucleic Acids Res** 1989 Jul 25;17(14):5854
Identification of a heat shock–like antigen in P. falciparum, related to the heat shock protein 90 family. Jendoubi M, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10928
The sequence of a third member of the heat shock protein family in Plasmodium falciparum. Kun J, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5384
The 5' coding region of the Plasmodium falciparum circumsporozoite protein gene is a focus for deletion and insertion events. Lockyer MJ. **Nucleic Acids Res** 1988 Sep 26;16(18):9041
Nucleotide and deduced amino acid sequence of the gp195 (MSA–1) gene from Plasmodium falciparum Palo Alto PLF–3/B11. Myler PJ. **Nucleic Acids Res** 1989 Jul 11; 17(13):5401
The M13 repeat probe detects RFLPs between two strains of the protozoan malaria parasite Plasmodium falciparum. Rogstad SH, et al. **Nucleic Acids Res** 1989 May 11; 17(9):3610
Sequence and length polymorphism of a major malaria vaccine candidate analysed following DNA amplification. Scherf A, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1774
The synthesis, cloning and expression of a repeating segment of the circumsporozoite surface protein of Plasmodium falciparum. Armah GE, et al. **Nucleic Acids Symp Ser** 1988; (19):165–9
Subtelomeric chromosome deletions in field isolates of Plasmodium falciparum and their relationship to loss of cytoadherence in vitro. Biggs BA, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2428–32
Amino acid changes linked to pyrimethamine resistance in the dihydrofolate reductase–thymidylate synthase gene of Plasmodium falciparum. Cowman AF, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9109–13
Evidence that a point mutation in dihydrofolate reductase–thymidylate synthase confers resistance to pyrimethamine in falciparum malaria. Peterson DS, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9114–8
Amplification of a gene related to mammalian mdr genes in drug–resistant Plasmodium falciparum. Wilson CM, et al. **Science** 1989 Jun 9;244(4909):1184–6
Differentiation of Plasmodium falciparum clones by means of a repetitive DNA probe. Fucharoen S, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):209–11

GROWTH & DEVELOPMENT

Growth and immunity conferred by a Plasmodium falciparum temperature sensitive mutant in Panamanian owl monkeys. Inselburg J, et al. **Am J Trop Med Hyg** 1989 May;40(5):465–9
Non–immune human sera at higher concentrations inhibit Plasmodium falciparum growth in vitro. Golightly EK, et al. **Ann Trop Med Parasitol** 1988 Dec;82(6):527–9
Storage of red cells for in vitro cultivation of Plasmodium falciparum. Morakote N, et al. **Ann Trop Med Parasitol** 1988 Dec;82(6):625–6
Biology and biochemistry of sexual and sporogenic stages of Plasmodium falciparum: a review. Meuwissen JH, et al. **Biol Cell** 1988;64(2):245–9 (17 ref.)
Development of an asexual blood stage malaria vaccine. Moreno A, et al. **Blood** 1989 Aug 1;74(2):537–46 (73 ref.)
Abnormalities in the mechanical properties of red blood cells caused by Plasmodium falciparum. Nash GB, et al. **Blood** 1989 Aug 1;74(2):855–61
The adaptation of Plasmodium falciparum to oxidative stress in G6PD deficient human erythrocytes. Roth E Jr, et al. **Br J Haematol** 1988 Nov;70(3):363–7
Continuous culture of Plasmodium falciparum asexual stages in "normal" air atmosphere. Mirovský P. **Folia Parasitol (Praha)** 1989;36(2):107–12
Isolation of different erythrocytic stages of Plasmodium falciparum and synchronization in culture. Biswas S, et al. **Indian J Malariol** 1988 Jun;25(1):7–10
Cryopreserved human erythrocytes for in vitro cultivation of Plasmodium falciparum. Srinivasa H, et al. **Indian J Malariol** 1988 Jun;25(1):23–5
Febrile temperatures can synchronize the growth of Plasmodium falciparum in vitro. Kwiatkowski D. **J Exp Med** 1989 Jan 1;169(1):357–61
Effects of thalassaemic serum on the in vitro development of the malarial parasite Plasmodium falciparum. Thanomsub BW, et al. **Parasitol Res** 1989;75(3):212–7
The use of murine feeder cells in the cultivation of Plasmodium falciparum asexual blood stages. Trenholme KR, et al. **Parasitol Res** 1989;75(7):518–21
Sera from Cameroon induce crisis forms during Plasmodium falciparum growth inhibition studies in vitro. Nkuo TK, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):380–3
Inhibitory effect of beta zero–thalassaemia/haemoglobin E erythrocytes on Plasmodium falciparum growth in vitro. Yuthavong Y, et al. **Trans R Soc Trop Med Hyg** 1987; 81(6):903–6
Inhibition of the intraerythrocytic development of Plasmodium falciparum in glucose–6–phosphate dehydrogenase deficient erythrocytes is enhanced by oxidants and by crisis form factor. Golenser J, et al. **Trop Med Parasitol** 1988 Dec;39(4):273–6
[Production of sporozoites of human Plasmodium in Bobo–Dioulasso (Burkina Faso)] Boudin C, et al. **Ann Soc Belg Med Trop** 1989 Mar;69(1):3–23 (Eng. Abstr.) **(Fre)**
[Stimulation of the chemiluminescence of human polymorphonuclear leukocytes in various stages of the intraerythrocyte development of Plasmodium falciparum] Malhotra K, et al. **C R Soc Biol (Paris)** 1988;182(3):270–8 (Eng. Abstr.) **(Fre)**

IMMUNOLOGY

Immune response of humans to the circumsporozoite protein of Plasmodium falciparum: limited T cell response to the immunodominant central repeat region. Campbell JR, et al. **Am J Trop Med Hyg** 1988 Sep;39(3):232–5
Estimate of Plasmodium falciparum sporozoite content of Anopheles stephensi used to challenge human volunteers. Davis JR, et al. **Am J Trop Med Hyg** 1989 Feb;40(2):128–30
Small area variation in prevalence of an S–antigen serotype of Plasmodium falciparum in villages of Madang, Papua New Guinea. Forsyth KP, et al. **Am J Trop Med Hyg** 1989 Apr;40(4):344–50
The ELISA–U: an enzyme–linked immunosorbent assay using urease as the enzyme marker for rapid detection of Plasmodium falciparum antibody in human serum. Lee M, et al. **Am J Trop Med Hyg** 1988 Nov;39(5):421–6
Differential non–responsiveness in humans of candidate Plasmodium falciparum vaccine antigens. Quakyi IA, et al. **Am J Trop Med Hyg** 1989 Aug;41(2):125–34
Structure and function of a thymic peptide is mimicked by Plasmodium falciparum peptides. Dubois P, et al. **Ann Inst Pasteur Immunol** 1988 Sep–Oct;139(5):557–67
Common Plasmodium falciparum antigen detected in in vitro culture supernatant. Ramos MI, et al. **Ann Trop Med Parasitol** 1988 Aug;82(4):393–5
Immunofluorescent and immunoelectron microscopic localization of protein antigens in red cells infected with the human malaria Plasmodium falciparum. Sherman IW, et al. **Ann Trop Med Parasitol** 1988 Dec;82(6):531–45
Structure and function of candidate vaccine antigens in Plasmodium falciparum. Anders RF, et al. **Biochem Soc Symp** 1987;53:103–14 (66 ref.)
Protein p126: a parasitophorous vacuole antigen associated with the release of Plasmodium falciparum merozoites. Delplace P, et al. **Biol Cell** 1988;64(2):215–21
Isolation and functional characterization of Plasmodium falciparum merozoite antigens. Heidrich HG. **Biol Cell** 1988;64(2):205–14
T–cell antigenic sites of the malaria circumsporozoite protein. Good MF, et al. **Blood** 1989 Aug 15;74(3):895–900 (40 ref.)
Malaria: the search for vaccine antigens and new chemotherapeutic strategies. Howard RJ. **Blood** 1989 Aug 1;74(2):533–6 (9 ref.)
Circumsporozoite antibodies and falciparum malaria incidence in children living in a malaria endemic area. Pang LW, et al. **Bull WHO** 1988;66(3):359–63
Cellular immune responses to Plasmodium falciparum antigens in Gambian children during and after an acute attack of falciparum malaria. Riley EM, et al. **Clin Exp Immunol** 1988 Jul;73(1):17–22
Human T cells recognize polymorphic and non–polymorphic regions of the Plasmodium falciparum circumsporozoite protein. Guttinger M, et al. **EMBO J** 1988 Aug;7(8):2555–8
Sorting of malarial antigens into vesicular compartments within the host cell cytoplasm as demonstrated by immunoelectron microscopy. Stenzel DJ, et al. **Eur J Cell Biol** 1989 Aug;49(2):311–8
Plasmodium falciparum: analysis of B epitopes of a polypeptide antigen expressed in Escherichia coli, using monoclonal antibodies. Blisnick T, et al. **Exp Parasitol** 1988 Dec;67(2):247–56
Plasmodium falciparum: an abundant stage–specific protein expressed during early gametocyte development. Carter R, et al. **Exp Parasitol** 1989 Aug;69(2):140–9
Malaria vaccines: results of human trials and directions of current research. Cattani JA. **Exp Parasitol** 1989 Feb; 68(2):242–7 (23 ref.)
Plasmodium falciparum: characterization of a 33–kDa soluble antigen. Ramos MI, et al. **Exp Parasitol** 1989 Apr; 68(3):297–307
Plasmodium falciparum: natural and experimental transmission–blocking immunity. Targett GA. **Immunol Lett** 1988 Nov;19(3):235–40 (32 ref.)
T cell reactivity of defined peptides from a major Plasmodium falciparum vaccine candidate: the Pf155/RESA antigen. Troye–Blomberg M, et al. **Immunol Lett** 1988 Nov;19(3):229–33
The real difficulties for malaria sporozoite vaccine development: nonresponsiveness and antigenic variation. Good MF, et al. **Immunol Today** 1988 Nov;9(11):351–5 (53 ref.)
Naturally occurring antibodies to an epitope on Plasmodium falciparum gametes detected by monoclonal antibody–based competitive enzyme–linked immunosorbent assay. Graves PM, et al. **Infect Immun** 1988 Nov; 56(11):2818–21
Effector cells involved in nonspecific and antibody–dependent mechanisms directed against Plasmodium falciparum blood stages in vitro. Lunel F, et al. **Infect Immun** 1989 Jul;57(7):2043–9
Plasmodium falciparum schizont sonic extracts suppress lymphoproliferative responses to mitogens and antigens in malaria–immune adults. Riley EM, et al. **Infect Immun** 1989 Oct;57(10):3181–8
CD8+ T cells inhibit Plasmodium falciparum–induced lymphoproliferation and gamma interferon production in cell preparations from some malaria–immune individuals. Riley EM, et al. **Infect Immun** 1989 Apr;57(4):1281–4
Reversed–phase liquid chromatography and sodium dodecyl sulfate polyacrylamide gel electrophoresis characteristics of a recombinant DNA derived malaria antigen. Benedek K, et al. **J Chromatogr** 1988 Jul 1;444:191–202
Differential antibody responses to Plasmodium falciparum and P. vivax circumsporozoite proteins in a human population. Burkot TR, et al. **J Clin Microbiol** 1989 Jun; 27(6):1346–51
Evidence for a 6.5–day minimum exoerythrocytic cycle for Plasmodium falciparum in humans and confirmation that immunization with a synthetic peptide representative of a region of the circumsporozoite protein retards infection. Murphy JR, et al. **J Clin Microbiol** 1989 Jul;27(7):1434–7
Restricted or absent immune responses in human populations to Plasmodium falciparum gamete antigens that are targets of malaria transmission–blocking antibodies. Carter R, et al. **J Exp Med** 1989 Jan 1;169(1):135–47
Lack of cross–reactivity between variant T cell determinants from malaria circumsporozoite protein. de la Cruz VF, et al. **J Immunol** 1988 Oct 1;141(7):2456–60
The immunologic significance of variation within malaria circumsporozoite protein sequences. De La Cruz VF, et al. **J Immunol** 1989 May 15;142(10):3568–75
Defective production of and response to IL–2 in acute human falciparum malaria. Ho M, et al. **J Immunol** 1988 Oct 15; 141(8):2755–9
Human lymphocyte proliferative response to a sporozoite T cell epitope correlates with resistance to falciparum malaria. Hoffman SL, et al. **J Immunol** 1989 Feb 15; 142(4):1299–303
Immune response to a synthetic peptide corresponding to an epitope of a parasitophorous vacuole membrane antigen from Plasmodium falciparum. Kara U, et al. **J Immunol** 1989 Aug 15;143(4):1334–9
Sialic acid–dependent binding of Plasmodium falciparum merozoite surface antigen, Pf200, to human erythrocytes. Perkins ME, et al. **J Immunol** 1988 Nov 1;141(9):3190–6
Peptide mapping of conformational epitopes in a human malarial parasite heat shock protein. Richman SJ, et al. **J Immunol** 1989 Jul 1;143(1):285–92
Cell–mediated immune responses to vaccine peptides derived from the circumsporozoite protein of Plasmodium falciparum. Russo DM, et al. **J Immunol** 1989 Jul 15;

143(2):655–9
Identification of T epitopes within a potential Plasmodium falciparum vaccine antigen. A study of human lymphocyte responses to repeat and nonrepeat regions of Pf155/RESA [published erratum appears in J Immunol 1989 Apr 15;142(8):2968] Rzepczyk CM, et al. **J Immunol** 1988 Nov 1;141(9):3197–202
Reactivity of the human monoclonal antibody 33G2 with repeated sequences of three distinct Plasmodium falciparum antigens. Udomsangpetch R, et al. **J Immunol** 1989 May 15;142(10):3620–6
A new tool for the serodiagnosis of acute Plasmodium falciparum malaria in individuals with primary infection. Früh K, et al. **J Immunol Methods** 1989 Aug 15; 122(1):25–32
Early acquisition of antibody to Plasmodium falciparum sporozoites in nonimmune temporary residents of Africa. Miller KD, et al. **J Infect Dis** 1988 Oct;158(4):868–71
Comparative study of various serological criteria in malaria survey. Ittiravivongs A, et al. **J Trop Med Hyg** 1988 Dec; 91(6):288–91
Selection of blood donors in malaria-endemic countries [letter] Choudhury N, et al. **Lancet** 1988 Oct 22; 2(8617):972–3
Developing a human malaria sporozoite vaccine. Young JF, et al. **Microb Pathog** 1987 Apr;2(4):237–40 (16 ref.)
Passive modulation of antigenic expression in the surface of normal and malaria-infected erythrocytes. Baruch D, et al. **Mol Biochem Parasitol** 1989 Sep;36(2):127–37
N-terminal amino acid sequencing of the 105 kilodalton rhoptry antigen of Plasmodium falciparum. Cooper JA, et al. **Mol Biochem Parasitol** 1989 Mar 1;33(2):203–4
MESA is a Plasmodium falciparum phosphoprotein associated with the erythrocyte membrane skeleton. Coppel RL, et al. **Mol Biochem Parasitol** 1988 Dec;31(3):223–31
Polymorphism of a 35–48 kDa Plasmodium falciparum merozoite surface antigen. Fenton B, et al. **Mol Biochem Parasitol** 1989 Apr;34(1):79–86
Enhancement or inhibition of Plasmodium falciparum erythrocyte reinvasion in vitro by antibodies to an asparagine rich protein. Franzén L, et al. **Mol Biochem Parasitol** 1989 Jan 15;32(2–3):201–11
Minimal variation in a vaccine candidate from the sexual stage of Plasmodium falciparum. Kaslow DC, et al. **Mol Biochem Parasitol** 1989 Jan 1;32(1):101–3
Comparison of the primary structure of the 25 kDa ookinete surface antigens of Plasmodium falciparum and Plasmodium gallinaceum reveal six conserved regions. Kaslow DC, et al. **Mol Biochem Parasitol** 1989 Mar 15; 33(3):283–7
A component of an antigenic rhoptry complex of Plasmodium falciparum is modified after merozoite invasion. Lustigman S, et al. **Mol Biochem Parasitol** 1988 Sep;30(3):217–24
Plasmodium falciparum antigens associated with membrane structures in the host erythrocyte cytoplasm. Stanley HA, et al. **Mol Biochem Parasitol** 1989 Sep;36(2):139–49
Variation in p126, a parasitophorous vacuole antigen of Plasmodium falciparum. Coppel RL, et al. **Mol Biol Med** 1988 Dec;5(3):155–66
Integral membrane protein located in the apical complex of Plasmodium falciparum. Peterson MG, et al. **Mol Cell Biol** 1989 Jul;9(7):3151–4
A malaria T-cell epitope recognized in association with most mouse and human MHC class II molecules. Sinigaglia F, et al. **Nature** 1988 Dec 22–29;336(6201):778–80
Characterization of epitopes on the 25 kD protein of the macrogametes/zygotes of Plasmodium falciparum. Fries HC, et al. **Parasite Immunol** 1989 Jan;11(1):31–45
Immunization against Plasmodium falciparum with recombinant polypeptides produced in Escherichia coli. Holder AA, et al. **Parasite Immunol** 1988 Nov;10(6):607–17
Demonstration of soluble Plasmodium falciparum antigens reactive with Limulus amoebocyte lysate and polymyxin B. Jakobsen PH, et al. **Parasite Immunol** 1988 Nov; 10(6):593–606
Cross-reactive antigenic determinants present on different Plasmodium falciparum blood-stage antigens [published erratum appears in Parasite Immunol 1989 May;11(3):299] Mattei D, et al. **Parasite Immunol** 1989 Jan;11(1):15–29
Identification of a peptide sequence of the 25 kD surface protein of Plasmodium falciparum recognized by transmission-blocking monoclonal antibodies: implications for synthetic vaccine development. van Amerongen A, et al. **Parasite Immunol** 1989 Jul;11(4):425–8
Long-term protection of squirrel monkeys (Saimiri sciureus) against Plasmodium falciparum challenge inoculations after various time intervals. Roussilhon C, et al. **Parasitol Res** 1988;75(2):118–22
A hybrid gene to express protein epitopes from both sporozoite and merozoite surface antigens of Plasmodium falciparum. Holder AA, et al. **Parasitology** 1988 Dec;97 (Pt 3):373–82
Application in clinical epidemiology of new advances in immunology and molecular biology of malaria. Björkman A, et al. **Parassitologia** 1986 Aug–Dec;28(2–3):95–9
Detection of antibodies to Plasmodium falciparum sporozoites by employing synthetic peptides. Del Giudice G, et al. **Parassitologia** 1986 Aug–Dec;28(2–3):107–11
Immunity to Plasmodium sporozoites: recent advances and applications to field research. Esposito F, et al. **Parassitologia** 1986 Aug–Dec;28(2–3):101–5
CS antigen localization in malaria vectors: hypothetical refractoriness to transmission observed in the field. Lombardi S, et al. **Parassitologia** 1986 Aug–Dec; 28(2–3):113–6
Generalized immunological recognition of the major merozoite surface antigen (gp195) of Plasmodium falciparum. Chang SP, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6343–7
Vaccine T-cell epitope selection by a peptide competition assay. Kilgus J, et al. **Proc Natl Acad Sci U S A** 1989 Mar; 86(5):1629–33
Development of asexual erythrocytic malaria vaccines. Chulay JD. **Prog Clin Biol Res** 1989;313:13–21 (34 ref.)
Primary and secondary responses to (NANP) peptides by Plasmodium falciparum sporozoites in various strains of mice. Del Giudice G, et al. **Scand J Immunol** 1989 May; 29(5):555–62
Limited immunological recognition of critical malaria vaccine candidate antigens. Good MF, et al. **Science** 1988 Oct 28;242(4878):574–7
Development of asexual blood stage malaria vaccines. Kidson C. **Southeast Asian J Trop Med Public Health** 1988 Sep; 19(3):391–6
Malaria vaccines: experience with sporozoite vaccines against falciparum malaria. Levine MM, et al. **Southeast Asian J Trop Med Public Health** 1988 Sep; 19(3):369–74
Vaccines for human malaria: epidemiological and immunological perspectives. Webster HK, et al. **Southeast Asian J Trop Med Public Health** 1988 Sep; 19(3):375–89 (59 ref.)
Prevalence and levels of antibodies to the circumsporozoite protein of Plasmodium falciparum in an endemic area and their relationship to resistance against malaria infection. Esposito F, et al. **Trans R Soc Trop Med Hyg** 1988; 82(6):827–32
Dot-ELISA, a potential immunoassay for the detection of Plasmodium falciparum antibodies. Londner MV, et al. **Trans R Soc Trop Med Hyg** 1988;82(5):686–8
Anti-sporozoite antibodies and immunity to malaria in a rural Gambian population. Marsh K, et al. **Trans R Soc Trop Med Hyg** 1988;82(4):532–7
The use of immunofluorescence to evaluate the efficacy of malarial chemoprophylaxis. Myint Lwin, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):896–8
Sera from Cameroon recognize proteins of Plasmodium falciparum isolates from geographically diverse areas of the world. Nkuo TK, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):891–5
Study of the distribution of circumsporozoite antigen in Anopheles gambiae infected with Plasmodium falciparum, using the enzyme-linked immunosorbent assay. Robert V, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):389–91
Epidemiological and immunological aspects of human crisis form factor in falciparum malaria: cell-mediated responses? Jensen JB, et al. **Vet Parasitol** 1988 Sep;29(2–3):171–7 (24 ref.)
[Plasmodium falciparum: correlation between immunofluorescent properties of monoclonal antibodies and their protective activities] Li JL, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(2):115–7 (Eng. Abstr.) **(Chi)**
[Antigenic diversity of Plasmodium falciparum and serodiagnosis of tropical malaria] Giboda M, et al. **Cesk Epidemiol Mikrobiol Imunol** 1989 Jan;38(1):18–26 (Eng. Abstr.) **(Cze)**
[Study of malaria serology using indirect immunofluorescence in children of the Tananarive area. 1987] Lepers JP, et al. **Arch Inst Pasteur Madagascar** 1988; 54(1):143–9 **(Fre)**
[Identification by immuno-transfer of probable immunogenic fractions extracted from exo-antigens of Plasmodium falciparum] Ambroise-Thomas P, et al. **Bull Acad Natl Med (Paris)** 1988 Mar;172(3):395–401 (Eng. Abstr.) **(Fre)**
[Malaria: vaccines and clinical trials] Fernex M, et al. **Schweiz Rundsch Med Prax** 1988 Dec 6;77(49):1341–2 (32 ref.) **(Ger)**

ISOLATION & PURIFICATION

Comparison of thick films, in vitro culture and DNA hybridization probes for detecting Plasmodium falciparum malaria. Lanar DE, et al. **Am J Trop Med Hyg** 1989 Jan; 40(1):3–6
A comparative field study of radiolabeled and enzyme-conjugated synthetic DNA probes for the diagnosis of falciparum malaria. Sethabutr O, et al. **Am J Trop Med Hyg** 1988 Sep;39(3):227–31
Anopheles sergenti (Theobald) a potential malaria vector in Egypt. Shehata MG, et al. **Ann Parasitol Hum Comp** 1989; 64(1):72–6
Rapid diagnosis of malaria by acridine orange staining of centrifuged parasites. Rickman LS, et al. **Lancet** 1989 Jan 14;1(8629):68–71
Submicroscopic double infection of Plasmodium falciparum in P. vivax malaria. Takagi T, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):384
[Malaria in Oudalan, a Sahelian region of Burkina Faso] Gazin P, et al. **Ann Soc Belg Med Trop** 1988 Sep; 68(3):255–64 (Eng. Abstr.) **(Fre)**
[Malaria in the forest region of Mayombe, People's Republic of the Congo. II. Parasitologic observations] Richard A, et al. **Ann Soc Belg Med Trop** 1988 Dec;68(4):305–16 (Eng. Abstr.) **(Fre)**

METABOLISM

Polyamines in the cell cycle of the malarial parasite Plasmodium falciparum. Bachrach U, et al. **Adv Exp Med Biol** 1988;250:643–50
Plasmodium falciparum: high parasitaemias in static cultures. Schnelle V, et al. **Ann Trop Med Parasitol** 1988 Jun; 82(3):305–6
3H-azidcpine photoaffinity labeling of high molecular weight proteins in chloroquine resistant falciparum malaria. Ye ZG, et al. **Biochem Biophys Res Commun** 1989 Jul 31; 162(2):809–13
The deamination of adenosine and adenosine monophosphate in Plasmodium falciparum-infected human erythrocytes: in vitro use of 2'deoxycoformycin and AMP deaminase-deficient red cells. Roth E Jr, et al. **Blood** 1989 Aug 15;74(3):1121–5
Localization of a parasite encoded protein to erythrocyte cytoplasmic vesicles of Plasmodium falciparum-infected cells. Etzion Z, et al. **Eur J Cell Biol** 1989 Apr;48(2):174–9
Immunogold determination of Plasmodium falciparum circumsporozoite protein in Anopheles stephensi salivary gland cells. Posthuma G, et al. **Eur J Cell Biol** 1989 Jun; 49(1):66–72
Receptor binding domain of glycophorin A for Plasmodium falciparum surface proteins. Davidson EA, et al. **Indian J Biochem Biophys** 1988 Feb–Apr;25(1–2):90–4
Binding of normal human immunoglobulins to Plasmodium falciparum. Ramasamy R. **Indian J Med Res** 1988 Jun; 87:584–93
Metabolic interconnection between the human malarial parasite Plasmodium falciparum and its host erythrocyte. Regulation of ATP levels by means of an adenylate translocator and adenylate kinase. Kanaani J, et al. **J Biol Chem** 1989 Feb 25;264(6):3194–9
Transport of fluorescent phospholipid analogues from the erythrocyte membrane to the parasite in Plasmodium falciparum-infected cells. Haldar K, et al. **J Cell Biol** 1989 Jun;108(6):2183–92
A human 88-kD membrane glycoprotein (CD36) functions in vitro as a receptor for a cytoadherence ligand on Plasmodium falciparum-infected erythrocytes. Barnwell JW, et al. **J Clin Invest** 1989 Sep;84(3):765–72
De novo and salvage biosynthesis of pteroylpentaglutamates in the human malaria parasite, Plasmodium falciparum. Krungkrai J, et al. **Mol Biochem Parasitol** 1989 Jan 1; 32(1):25–37
Phosphorylation of erythrocyte membrane and cytoskeleton proteins in cells infected with Plasmodium falciparum. Murray MC, et al. **Mol Biochem Parasitol** 1989 May 15; 34(3):229–36
Structural specificity of the P. falciparum merozoite-erythrocyte interaction. Perkins ME, et al. **Prog Clin Biol Res** 1989;313:23–8
P. falciparum iron metabolism. Pollack S. **Prog Clin Biol Res** 1989;313:151–61 (19 ref.)
[Protein biosynthesis in the causative agent of tropical malaria P. falciparum in a probable resting stage in culture] Allakhverdiev AM, et al. **Med Parazitol (Mosk)** 1988 Jul–Aug;(4):10–3 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

[Isolation of virus-like particles of in vitro cultures of Plasmodium falciparum] Samso A, et al. **C R Acad Sci [III]** 1988;307(6):317–22 (Eng. Abstr.) **(Fre)**

PARASITOLOGY

Infrequency of asymptomatic malaria in an endemic area in Amazonas, Brazil. Prata A, et al. **Rev Soc Bras Med Trop** 1988 Apr–Jun;21(2):51–4

PATHOGENICITY

Erythrocyte invasion by two Plasmodium falciparum isolates differing in sialic acid dependency in the presence of glycophorin A antibodies. Holt EH, et al. **Am J Trop Med Hyg** 1989 Mar;40(3):245–51
Movement of a falciparum malaria protein through the erythrocyte cytoplasm to the erythrocyte membrane is associated with lysis of the erythrocyte and release of gametes. Quakyi IA, et al. **Infect Immun** 1989 Mar; 57(3):833–9
Malaria invasion of human erythrocytes. Synthesis of peptides relevant to glycophorin A and evaluation of their inhibitory properties. Lacombe JM, et al. **Int J Pept Protein Res** 1988 Aug;32(2):104–16

PHYSIOLOGY

Seasonal population changes and malaria transmission potential of Anopheles pharoensis and the minor anophelines in Mwea Irrigation Scheme, Kenya. Mukiama TK, et al. **Acta Trop (Basel)** 1989 May;46(3):181–9
Plasmodium falciparum: cytoadherence of a knobless clone. Biggs BA, et al. **Exp Parasitol** 1989 Aug;69(2):189–97
Susceptibility of Plasmodium falciparum to a peroxidase-mediated oxygen-dependent microbicidal system. Malhotra K, et al. **Infect Immun** 1988 Dec; 56(12):3305–9

Expression of the histidine-rich protein PfHRP1 by knob-positive Plasmodium falciparum is not sufficient for cytoadherence of infected erythrocytes. Rock EP, et al. **Infect Immun** 1988 Dec;56(12):3301-4

Characterization of a modified red cell membrane protein expressed on erythrocytes infected with the human malaria parasite Plasmodium falciparum: possible role as a cytoadherent mediating protein. Winograd E, et al. **J Cell Biol** 1989 Jan;108(1):23-30

Cytoadherence by Plasmodium falciparum-infected erythrocytes is correlated with the expression of a family of variable proteins on infected erythrocytes. Magowan C, et al. **J Exp Med** 1988 Oct 1;168(4):1307-20

Plasmodium falciparum-infected erythrocytes form spontaneous erythrocyte rosettes. Udomsangpetch R, et al. **J Exp Med** 1989 May 1;169(5):1835-40

A study of red cell membrane properties in relation to malarial invasion. Rangachari K, et al. **Mol Biochem Parasitol** 1989 Apr;34(1):63-74

Human and murine CD4 T cell epitopes map to the same region of the malaria circumsporozoite protein: limited immunogenicity of sporozoites and circumsporozoite protein. Dontfraid F, et al. **Mol Biol Med** 1988 Dec; 5(3):185-96

Cytoadherence of knobless Plasmodium falciparum-infected erythrocytes and its inhibition by a human monoclonal antibody. Udomsangpetch R, et al. **Nature** 1989 Apr 27; 338(6218):763-5

Gametocytogenesis induction in cultured Plasmodium falciparum and further development of the gametocytes to ookinetes in prolonged culture. Ono T, et al. **Parasitol Res** 1989;75(5):348-52

Infectivity of cultured Plasmodium falciparum gametocytes to mosquitoes. Ponnudurai T, et al. **Parasitology** 1989 Apr; 98 Pt 2:165-73

In vitro cytoadherence of Plasmodium falciparum-infected erythrocytes to melanoma cells: factors affecting adhesion. Sherman IW, et al. **Parasitology** 1989 Jun;98 Pt 3:359-69

Characterization of Plasmodium falciparum cloned lines with respect to gametocyte production in vitro, infectivity to Anopheles mosquitoes, and transmission to Aotus monkeys. Teklehaimanot A, et al. **Trans R Soc Trop Med Hyg** 1987; 81(6):885-7

[Inhibitory effect of chemically and enzymatically treated erythrocytic membrane on the invasion of Plasmodium falciparum merozoites] Lin FB, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1989;7(1):49-52 (Eng. Abstr.) **(Chi)**

ULTRASTRUCTURE

Ultrastructure of Plasmodium falciparum "in vitro". II. Morphological patterns of different quinolines effects. Olliaro P, et al. **Microbiologica** 1989 Jan;12(1):15-28

Ultrastructure of Plasmodium falciparum "in vitro". I. Base-line for drug effects evaluation. Olliaro P, et al. **Microbiologica** 1989 Jan;12(1):7-14

46-53 kilodalton glycoprotein from the surface of Plasmodium falciparum merozoites. Clark JT, et al. **Mol Biochem Parasitol** 1989 Jan 1;32(1):15-24

PLASMODIUM GALLINACEUM see under **PLASMODIUM**

PLASMODIUM INFECTIONS see **MALARIA**

PLASMODIUM MALARIAE

GENETICS

Structure of the circumsporozoite gene of Plasmodium malariae. Lal AA, et al. **Mol Biochem Parasitol** 1988 Sep; 30(3):291-4

GROWTH & DEVELOPMENT

The Uganda I/CDC strain of Plasmodium malariae in Saimiri sciureus boliviensis. Collins WE, et al. **J Parasitol** 1989 Apr;75(2):310-3

The Uganda I/CDC strain of Plasmodium malariae in Aotus lemurinus griseimembra monkeys. Collins WE, et al. **J Parasitol** 1989 Feb;75(1):61-5

IMMUNOLOGY

The effect of substance(s) associated with malarial parasites on C3b inactivator. Okerengwo AA, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):881-4

ISOLATION & PURIFICATION

[Malaria in the forest region of Mayombe, People's Republic of the Congo. II. Parasitologic observations] Richard A, et al. **Ann Soc Belg Med Trop** 1988 Dec;68(4):305-16 (Eng. Abstr.) **(Fre)**

PLASMODIUM VIVAX

Susceptibility of Anopheles culicifacies species A and B to Plasmodium vivax and Plasmodium falciparum as determined by immunoradiometric assay. Subbarao SK, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):394-7

DRUG EFFECTS

Micro test for assaying sensitivity of Plasmodium vivax in vitro. Renapurkar DM, et al. **Chemotherapy** 1989; 35(3):160-3

Development of in vitro microtest for the assessment of Plasmodium vivax sensitivity to chloroquine. Brockelman CR, et al. **Southeast Asian J Trop Med Public Health** 1989 Mar;20(1):41-7

GENETICS

Plasmodium vivax: cloning and expression of a major blood-stage surface antigen. del Portillo HA, et al. **Exp Parasitol** 1988 Dec;67(2):346-53

Plasmodium vivax: karyotype polymorphism of field isolates. Langsley G, et al. **Exp Parasitol** 1988 Dec;67(2):301-6

Partial sequence of the asexually expressed SU rRNA gene of Plasmodium vivax [published erratum appears in Nucleic Acids Res 1989 May 11;17(9):3630-1] Waters AP, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2135

Does biased gene conversion influence polymorphism in the circumsporozoite protein-encoding gene of Plasmodium vivax? Arnot DE, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8102-6

Circumsporozoite protein heterogeneity in the human malaria parasite Plasmodium vivax. Rosenberg R, et al. **Science** 1989 Sep 1;245(4921):973-6

GROWTH & DEVELOPMENT

Plasmodium vivax: in vitro development of exoerythrocytic stages in squirrel monkey hepatocytes and inhibition by an anti-P. cynomolgi monoclonal antibody. Millet P, et al. **Exp Parasitol** 1989 Jul;69(1):91-3

Swellengrebel lecture. Hypnozoites and 'relapses' in Plasmodium vivax and in vivax-like malaria. Garnham PC. **Trop Geogr Med** 1988 Jul;40(3):187-95

IMMUNOLOGY

Immunization of Saimiri sciureus boliviensis with recombinant vaccines based on the circumsporozoite protein of Plasmodium vivax. Collins WE, et al. **Am J Trop Med Hyg** 1989 May;40(5):455-64

Interaction of Malaysian sera with Plasmodium vivax sporozoite antigen. Lee M, et al. **Am J Trop Med Hyg** 1988 Dec;39(6):535-9

Immunoelectron microscopic localization of vivax malaria antigens to the clefts and caveola-vesicle complexes of infected erythrocytes. Matsumoto Y, et al. **Am J Trop Med Hyg** 1988 Oct;39(4):317-22

Purification and characterization of an erythrocyte membrane protein complex carrying Duffy blood group antigenicity. Possible receptor for Plasmodium vivax and Plasmodium knowlesi malaria parasite. Chaudhuri A, et al. **J Biol Chem** 1989 Aug 15;264(23):13770-4

Differential antibody responses to Plasmodium falciparum and P. vivax circumsporozoite proteins in a human population. Burkot TR, et al. **J Clin Microbiol** 1989 Jun; 27(6):1346-51

Modulation of human malaria transmission by anti-gamete transmission blocking immunity. de Zoysa AP, et al. **Trans R Soc Trop Med Hyg** 1988;82(4):548-53

Diagnosis of tertian malaria by enzyme-linked immunosorbent assay. Wang M, et al. **Trans R Soc Trop Med Hyg** 1987;81(6):888-90

[Monoclonal antibodies against erythrocytic stages of Plasmodium vivax inhibitory effect on gametocyte infectivity and development within mosquitoes] Wang XZ, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec; 19(4):350-3 (Eng. Abstr.) **(Chi)**

ISOLATION & PURIFICATION

Submicroscopic double infection of Plasmodium falciparum in P. vivax malaria. Takagi T, et al. **Trans R Soc Trop Med Hyg** 1988;82(3):384

[Comparative experimental studies on Plasmodium vivax isolated from south Yunnan and northwest Hunan] Yang BL, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(2):107-10 (Eng. Abstr.) **(Chi)**

METABOLISM

Plasmodium vivax: merozoite antigens, the Duffy blood group, and erythrocyte invasion. Barnwell JW, et al. **Prog Clin Biol Res** 1989;313:1-11 (29 ref.)

PARASITOLOGY

Infrequency of asymptomatic malaria in an endemic area in Amazonas, Brazil. Prata A, et al. **Rev Soc Bras Med Trop** 1988 Apr-Jun;21(2):51-4

PATHOGENICITY

[Experimental observation on the incubation period and relapse pattern of Plasmodium vivax in Guangxi] Ye YY, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(3):166-8 (Eng. Abstr.) **(Chi)**

PHYSIOLOGY

Plasmodium vivax malaria: parasite biology defines potential targets for vaccine development. David PH, et al. **Biol Cell** 1988;64(2):251-60 (76 ref.)

In vitro evaluation of the role of the Duffy blood group in erythrocyte invasion by Plasmodium vivax. Barnwell JW, et al. **J Exp Med** 1989 May 1;169(5):1795-802

[Further studies on the rise and decline of Plasmodium vivax gametocyte viability] Yang BL. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1988 Dec; 9(6):329-31 (Eng. Abstr.) **(Chi)**

[Studies on the variability of incubation period of vivax malaria following mosquito biting] Li QJ, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1989;7(1):28-31 (Eng. Abstr.) **(Chi)**

PLASMODIUM YOELII

Comparative susceptibilities of Anopheles quadrimaculatus mutants to Plasmodium yoelii. Wing SR, et al. **J Am Mosq Control Assoc** 1985 Dec;1(4):511-3

DRUG EFFECTS

Qinghaosu, dietary vitamin E, selenium, and cod-liver oil: effect on the susceptibility of mice to the malarial parasite Plasmodium yoelii. Levander OA, et al. **Am J Clin Nutr** 1989 Aug;50(2):346-52

Iron chelators: in vitro inhibitory effect on the liver stage of rodent and human malaria. Stahel E, et al. **Am J Trop Med Hyg** 1988 Sep;39(3):236-40

Selection of Plasmodium yoelii nigeriensis resistant to triple drug combination (sulphadoxine/pyrimethamine/mefloquine) and its response to other antimalarials. Shukla B, et al. **Indian J Malariol** 1988 Jun;25(1):1-6

Single dose curative and prophylactic efficacy of antimalarial drugs against multi-resistant Plasmodium yoelii nigeriensis. Shukla B, et al. **J Commun Dis** 1988 Sep;20(3):175-84

Antimalarial efficacy of arteether against multiple drug resistant strain of Plasmodium yoelii nigeriensis. Dutta GP, et al. **Pharmacol Res** 1989 Jul-Aug;21(4):415-9

[Effects of pyrimethamine on the oocyst formation of Plasmodium yoelii yoelii] Zhu XP, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(2):111-4 (Eng. Abstr.) **(Chi)**

GENETICS

Cloning of Plasmodium yoelii genes expressing three different sporozoite-specific antigens. Wortman A, et al. **Microb Pathog** 1989 Mar;6(3):227-31

Molecular clones of alpha-tubulin genes of Plasmodium yoelii reveal an unusual feature of the carboxy terminus. Akella R, et al. **Mol Biochem Parasitol** 1988 Aug; 30(2):165-74

Sequences similar to genes for two mitochondrial proteins and portions of ribosomal RNA in tandemly arrayed 6-kilobase-pair DNA of a malarial parasite. Vaidya AB, et al. **Mol Biochem Parasitol** 1989 Jun 15;35(2):97-107

IMMUNOLOGY

Plasmodium yoelii: characterization of a protective idiotype during malarial infection in mice. Majarian WR, et al. **Exp Parasitol** 1988 Dec;67(2):227-37

Soluble malarial antigens are toxic and induce the production of tumour necrosis factor in vivo. Bate CA, et al. **Immunology** 1989 Apr;66(4):600-5

A protective monoclonal antibody recognizes a variant-specific epitope in the precursor of the major merozoite surface antigen of the rodent malarial parasite Plasmodium yoelii. Burns JM Jr, et al. **J Immunol** 1989 Apr 15;142(8):2835-40

Dual action of anti-sporozoite antibodies in vitro. Nudelman S, et al. **J Immunol** 1989 Aug 1;143(3):996-1000

[Studies on the effective components in protective sera against Plasmodium yoelii infections in mice] Cheng Q, et al. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1988;6(2):81-6 (Eng. Abstr.) **(Chi)**

METABOLISM

Effect of temperature on erythrocyte-free Plasmodium yoelii. Izumo A, et al. **Ann Trop Med Parasitol** 1988 Aug; 82(4):389-91

The plasma membrane and mitochondrial membrane potentials of Plasmodium yoelii. Izumo A, et al. **Comp Biochem Physiol [B]** 1988;91(4):735-9

PHYSIOLOGY

Transport processes of 2-deoxy-D-glucose in erythrocytes infected with Plasmodium yoelii, a rodent malaria parasite. Izumo A, et al. **Parasitology** 1989 Jun;98 Pt 3:371-9

Changes in the spontaneous flight activity of the mosquito Anopheles stephensi by parasitization with the rodent malaria Plasmodium yoelii. Rowland M, et al. **Parasitology** 1988 Oct;97 (Pt 2):221-7

ULTRASTRUCTURE

[Scanning electron microscopic observations of ookinete formation of Plasmodium yoelii yoelii in vitro] Gao XZ. **Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih** 1989;7(1):53-5 (Eng. Abstr.) **(Chi)**

[Some ultrastructural characteristics of Plasmodium yoelii yoelii in erythrocytic schizogony and gametocytosis] Liu BF, et al.
Chung Kuo Chi Sheng Chung Hsueh Yu Chi Sheng Chung Ping Tsa Chih 1988;6(4):249–52 (Eng. Abstr.) **(Chi)**

PLASMOSOME see **CELL NUCLEOLUS**

PLASTER CASTS see **CASTS, SURGICAL**

PLASTER OF PARIS see **CALCIUM SULFATE**

PLASTICITY, NEURONAL see **NEURONAL PLASTICITY**

PLASTICIZERS

Influence of plasticised poly(vinyl chloride) on platelet adhesion and platelet aggregates. Jones C, et al. **Int J Artif Organs** 1989 Jul;12(7):466–70

BLOOD

Perioperative exposure to plasticizers in patients undergoing cardiopulmonary bypass. Barry YA, et al. **J Thorac Cardiovasc Surg** 1989 Jun;97(6):900–5

PHARMACOLOGY

The effect of the plasticizers TBEP (tris–(2–butoxyethyl)–phosphate) and DEHP (di–(2–ethylhexyl)–phthalate) on beta–adrenergic ligand binding to alpha 1–acid glycoprotein and mononuclear leukocytes. Sager G, et al. **Biochem Pharmacol** 1989 Aug 1;38(15):2551–7

Effect of phthalate acid esters on transport in toad bladder membrane. Sabatini S, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):910–4

TOXICITY

Effect of acute tri–o–tolyl phosphate exposure on 2', 3'–cyclic nucleotide 3'–phosphohydrolase activity in hen neural tissues. Luttrell WE, et al. **Neurotoxicology** 1988 Fall; 9(3):539–44

PLASTICS

Solubility of I–653, sevoflurane, isoflurane, and halothane in plastics and rubber composing a conventional anesthetic circuit. Targ AG, et al. **Anesth Analg** 1989 Aug; 69(2):218–25

Prolene plug repair for femoral hernia. Allan SM, et al. **Ann R Coll Surg Engl** 1989 Jul;71(4):220–1

Evaluating glass, polystyrene, and polypropylene containers for semen collection and sperm washing. Check JH, et al. **Arch Androl** 1988;20(3):251–5

Problems with a plastic bread–bag clip [letter] Ellul JP, et al. **Arch Emerg Med** 1989 Jun;6(2):156–7

Surgical manipulation and the tensile strength of polypropylene sutures. Dobrin PB. **Arch Surg** 1989 Jun; 124(6):665–8

The effect of suture material on platelet deposition onto prosthetic material. Connolly R, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):874–7

Tissue reactions around two alloplastic ligament substitute materials: experimental study on rats with carbon fibres and polypropylene. Mäkisalo SE, et al. **Biomaterials** 1989 Mar;10(2):105–8

Torsional moment to failure for carbon fibre polysulphone expandable rivets as compared with stainless steel screws for carbon fibre–reinforced epoxy fracture plate fixation. Sell PJ, et al. **Biomaterials** 1989 Apr;10(3):182–4

Creep rupture of polypropylene sutures as a function of diameter, radiation dose and temperature. Whitley JQ, et al. **Biomaterials** 1988 Nov;9(6):538–46

Laxative properties of indigestible plastic particles. Tomlin J, et al. **BMJ** 1988 Nov 5;297(6657):1175–6

Variations in the gliding characteristics of 10–ml plastic syringes used to locate the extradural space by "loss of resistance" techniques. Bricker SR, et al. **Br J Anaesth** 1988 Dec;61(6):776–81

Internal jugular vein cannulation [letter] Rogers HS, et al. **Br J Surg** 1988 Aug;75(8):828–9

Natural history of vertical abdominal parietal closure: Prolene versus Dexon. Lewis RT, et al. **Can J Surg** 1989 May;32(3):196–200

Contamination of insulin by silicone oil: a potential hazard of plastic insulin syringes. Baldwin RN. **Diabetic Med** 1988 Nov;5(8):789–90

Drug sorption to glass and plastics. Yahya AM, et al. **Drug Metabol Drug Interact** 1988;6(1):1–45 (126 ref.)

Potential toxicological problems associated with antioxidants in plastics and rubber consumables. Scott G. **Free Radic Res Commun** 1988;5(3):141–7 (19 ref.)

Room temperature storage of pooled platelet concentrates in gas–permeable plastic bags for five days. Rácz Z, et al. **Haematologia (Budap)** 1989;22(2):89–96

Theoretical quantification of the effects of plastic wall thickness on phantom measurements in electromagnetic hyperthermia. Ross MP, et al. **IEEE Trans Biomed Eng** 1989 Aug;36(8):869–72

Plastics in medical applications. Lantos PR. **J Biomater Appl** 1988 Jan;2(3):358–71

Analysis of surface damage in retrieved carbon fiber–reinforced and plain polyethylene tibial components from posterior stabilized total knee replacements. Wright TM, et al. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1312–9

Gas chromatographic quantification of underivatized amphetamine in whole blood. Blood stored in plastic containers—a source of error. Christophersen AS, et al. **J Chromatogr** 1988 Nov 18;432:290–6

An acrylic head appliance for craniomaxillary fixation. Chu DY, et al. **J Oral Maxillofac Surg** 1989 Jun;47(6):649–50

Some mechanical properties of polypropylene sutures: relationship to the use of polypropylene in vascular surgery. Dobrin PB. **J Surg Res** 1988 Dec;45(6):568–73

Polydioxanone and polypropylene suture material in free internal mammary artery graft anastomoses. Aarnio P, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):741–5

Chemical and biological characterization of products of incomplete combustion from the simulated field burning of agricultural plastic. Linak WP, et al. **JAPCA** 1989 Jun; 39(6):836–46

Ultrasonographic detection of plastic materials in various organs of the human body. Pery M, et al. **JCU** 1989 Sep; 17(7):489–95

Plastic or paraffin? [editorial] **Lancet** 1989 Jan 21; 1(8630):139–40

Plastic or paraffin? [letter] Kingsley TC, et al. **Lancet** 1989 Mar 11;1(8637):563

Plastic or paraffin? [letter] Murray GI, et al. **Lancet** 1989 Feb 18;1(8634):387

A new material and technique for appliance therapy. Weinberg LA. **N Y State Dent J** 1989 Jan;55(1):36–8

The effect of the thermoplastic Minerva body jacket on cervical spine motion. Maiman D, et al. **Neurosurgery** 1989 Sep;25(3):363–7; discussion 367–8

Primary mass closure of midline incisions with a continuous running monofilament suture in gynecologic patients. Gallup DG, et al. **Obstet Gynecol** 1989 Apr;73(4):675–7

A technique for early wound management using polypropylene mesh reconstruction of the abdominal wall. Johnson PC, et al. **Surg Gynecol Obstet** 1988 Nov; 167(5):435–6

A novel second–generation polyolefin container for storage of single–donor apheresis platelets. Shimizu T, et al. **Vox Sang** 1989;56(3):174–80

["Elastic osteosynthesis" with autocompression plates of carbon fiber reinforced thermoplastic material] Stange J, et al. **Biomed Tech (Berlin)** 1989 Jun;34(6):143–8 (Eng. Abstr.) **(Ger)**

[Management of fresh and older ruptures of the anterior cruciate ligament with the Kennedy modified polypropylene ligament augmented tendonplasty. Preliminary contribution] Paar O. **Chirurg** 1988 Nov; 59(11):788–92 **(Ger)**

[The importance of the choice of materials and their design for the efficacy of orthodontic appliances] Newesely H. **Fortschr Kieferorthop** 1989 Apr;50(2):99–108 (Eng. Abstr.) **(Ger)**

[The material properties of a combined plaster–plastic cast] Schönle C, et al. **Z Orthop** 1989 Mar–Apr;127(2):253–6 (Eng. Abstr.) **(Ger)**

[Increased urinary excretion of D–glucaric acid in workers exposed to styrene in reinforced plastics industry] Volpi R, et al. **Med Lav** 1988 Mar–Apr;79(2):136–41 (Eng. Abstr.) **(Ita)**

[Residue on evaporation of the migration solution of the plastic part of corn poppers] Ishiwata H, et al. **Eisei Shikenjo Hokoku** 1988;(106):126–7 (Eng. Abstr.) **(Jpn)**

[Plastic containers for solutions used for injections] Krasowska M. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:83–7 (Eng. Abstr.) **(Pol)**

[Blood coagulation evaluation of the biocompatibility of dental plastics] Zhad'ko SI, et al. **Stomatologiia (Mosk)** 1989 Jan–Feb;68(1):62–4 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

End–to–end oesophageal anastomosis: an experimental study in the rat. Man DW, et al. **Aust N Z J Surg** 1988 Dec; 58(12):975–8

Reproductive outcomes of pregnant workers employed at 36 reinforced plastics companies. II. Lowered birth weight. Lemasters GK, et al. **J Occup Med** 1989 Feb;31(2):115–20

Storage of platelets in earth orbit. Effect of gravity and the formulation of plastic storage containers on platelet IgG and C3. Szymanski IO, et al. **Vox Sang** 1989;57(2):116–9

[Interactions of drugs and their transitory containers during infusions] Airaudo CB, et al. **Agressologie** 1988 Nov;29(11 Spec No):743–65 (Eng. Abstr.) **(Fre)**

[Significance of immunocytochemical indices of body reactivity of workers engaged in the production of carbonic plastics on the base of formaldehyde–containing and epoxide resins] Dueva LA, et al. **Gig Tr Prof Zabol** 1989; (6):14–7 (Eng. Abstr.) **(Rus)**

[Destruction of dental polymers and its role in the etiology of denture stomatitis] Temirbaev MA, et al. **Stomatologiia (Mosk)** 1989 Jan–Feb;68(1):68–70 (Eng. Abstr.) **(Rus)**

CHEMICAL SYNTHESIS

[Plastics] Roth HJ. **Pharm Unserer Zeit** 1972 Apr;1(2):35–41 **(Ger)**

DIAGNOSTIC USE

Elimination of leukemia cells from human bone marrow using floating beads. Hirn–Scavennec J, et al. **Transplantation** 1988 Oct;46(4):558–63

RADIATION EFFECTS

Ageing of radiation–sterilized polypropylene: changes in semicrystallinity. Jayabalan M, et al. **Biomaterials** 1989 Jan; 10(1):33–7

[The action of gamma irradiation on trypsin immobilized on a modified polypropylene textile material] Ryl'tsev VV, et al. **Radiobiologiia** 1989 May–Jun;29(3):425–7 (Eng. Abstr.) **(Rus)**

STANDARDS

Researchers respond to hospitals' plastic needs. Souhrada L. **Hospitals** 1989 Apr 20;63(8):36

Adverse effects of anesthetic agents on polycarbonate plastic oxygenators [letter] Walls JT, et al. **J Thorac Cardiovasc Surg** 1988 Oct;96(4):667–8

TOXICITY

[Ways of improving working conditions and reducing morbidity at plastic–processing plants] Asaenok IS, et al. **Gig Sanit** 1989 May;(5):24–6 (Eng. Abstr.) **(Rus)**

[Hygienic regulation of secondary polymer materials having contact with food products] Gnoevaia VL, et al. **Gig Sanit** 1989 May;(5):66–8 (10 ref.) **(Rus)**

[Hygienic characteristics of polymer foam materials] Vlasiuk MG, et al. **Gig Sanit** 1988 Nov;(11):32–4 (Eng. Abstr.) **(Rus)**

PLASTOCYANIN see under **PLANT PROTEINS**

PLASTOQUINONE see under **QUINONES**

PLATANNA see **XENOPUS LAEVIS**

PLATELET ACTIVATING FACTOR

Modulation of mediator precursors by changes in essential fatty acid composition. Pickett WC, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:614–7

Experimental acute pancreatitis induced by platelet activating factor in rabbits. Emanuelli G, et al. **Am J Pathol** 1989 Feb;134(2):315–26

Phospholipids chiral at phosphorus. Synthesis and stereospecificity of phosphorothioate analogues of platelet–activating factor. Rosario–Jansen T, et al. **Biochemistry** 1988 Jun 28;27(13):4619–24

Local opioid–sensitive afferent sensory neurones in the modulation of gastric damage induced by Paf. Esplugues JV, et al. **Br J Pharmacol** 1989 Jun;97(2):579–85

An asymmetric synthesis of (R) and (S)–1–alkoxy–2,3–propanediols including precursors to platelet activating factor. Johnson RA, et al. **Chem Phys Lipids** 1989 May;50(2):119–26

Granulocytes, platelet–activating factor, and myocardial injury [letter] Joseph R, et al. **Circulation** 1989 Jun; 79(6):1401

Suppression by tetrandrine of human platelet aggregation induced by platelet–activating factor and other stimulants. Teh BS, et al. **Int Arch Allergy Appl Immunol** 1989; 88(3):267–72

Mechanism of arachidonic acid liberation in platelet–activating factor–stimulated human polymorphonuclear neutrophils. Nakashima S, et al. **J Immunol** 1989 Aug 15;143(4):1295–302

Supplementation of in–vitro fertilisation culture medium with platelet activating factor. O'Neill C, et al. **Lancet** 1989 Sep 30;2(8666):769–72

Biochemistry of platelet–activating factor: a unique class of biologically active phospholipids. Snyder F. **Proc Soc Exp Biol Med** 1989 Feb;190(2):125–35 (138 ref.)

Platelet activating factor receptor occupancy in relation to activation and desensitization of phosphoinositide specific phospholipase C. Shukla SD, et al. **Prog Clin Biol Res** 1988; 283:341–4

ADMINISTRATION & DOSAGE

Effect of platelet–activating factor and its receptor antagonist, SRI 63–675, on gastric bleeding in rats. Berstad A, et al. **Scand J Gastroenterol** 1988 Aug;23(6):738–42

[Effect of long–term administration of platelet activating factor on pulmonary response and morphology in the guinea pig] Mencia–Huerta JM, et al. **Allerg Immunol (Paris)** 1988 Dec;22 Suppl 10:21, 23–4 (Eng. Abstr.) **(Fre)**

ANALOGS & DERIVATIVES

Effect of PAF acether on oriented egg phosphatidylcholine multibilayers; interaction with cholesterol; comparison to lyso–PC and lyso–PAF. Oliver JL, et al. **Agents Actions** 1989 Jan;26(1–2):121–2

Fluorophore–labeled ether lipids: substrates for enzymes of the platelet–activating factor cycle in peritoneal polymorphonuclear leukocytes. Schindler PW, et al.

Anal Biochem 1988 Nov 1;174(2):477–84

Photoaffinity labeling of platelet activating factor binding sites in rabbit platelet membranes. Chau LY, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1070–6

Metabolism of platelet-activating factor (PAF; 1-O-alkyl-2-acetyl-sn-glycero-3-phosphocholine) and lyso-PAF (1-O-alkyl-2-lyso-sn-glycero-3-phosphocholine) by cultured rat Kupffer cells. Chao W, et al. **Biochem J** 1989 Jul 1;261(1):77–81

Phospholipids chiral at phosphorus. Synthesis and stereospecificity of phosphorothioate analogues of platelet-activating factor. Rosario-Jansen T, et al. **Biochemistry** 1988 Jun 28;27(13):4619–24

Possible origins of PAF-acether and lyso-PAF-acether in rat lung alveoli secondary to hypoxia. Prévost MC, et al. **Biochim Biophys Acta** 1988 Oct 14;962(3):354–61

Influence of PAF-acether on lecithin-oriented multibilayers monitored by ESR: interaction of PAF-acether with cholesterol. Olivier JL, et al. **Biochimie** 1989 Jan; 71(1):105–9

Analysis of lyso-platelet activating factor by negative ion gas chromatography/mass spectrometry of the nitrobenzal acetal derivatives. Mallet AI. **Biomed Environ Mass Spectrom** 1988 Oct;16(1-12):207–10

Acyl type platelet-activating factor in normal rat uterus determined by gas chromatography mass spectrometry. Yasuda K, et al. **Biomed Environ Mass Spectrom** 1988 Oct; 16(1–12):137–41

Plasma levels of the lyso-derivative of platelet-activating factor are related to age. Taylor RR, et al. **Clin Sci** 1989 Feb;76(2):195–8

Presence of 1-O-alk-1'-enyl-2-O-acetyl glycerophosphocholine (vinyl form of PAF) in perfused rat and guinea pig hearts. Nakayama R, et al. **J Biochem (Tokyo)** 1989 Apr;105(4):494–6

Hydrolysis of platelet activating factor and its methylated analogs by acetylhydrolases. Yanoshita R, et al. **J Biochem (Tokyo)** 1988 May;103(5):815–9

Subcellular localization of phospholipids and enzymes involved in PAF-acether metabolism. Record M, et al. **J Cell Biochem** 1989 Jul;40(3):353–9

Platelet activating factor-amidophosphonate (PAF-AP), a partial agonist inhibited platelet activating factor-induced calcium mobilization in human monocytic leukemic U-937 cell. Barzaghi G, et al. **Life Sci** 1989;44(5):361–6

Capillary gas chromatography and tandem mass spectrometry of paf-acether and analogs: absence of 1-O-alkyl-2-propionyl-sn-glycero-3-phosphocholine in human polymorphonuclear neutrophils. Bossant MJ, et al. **Lipids** 1989 Feb;24(2):121–4

Phospholipid analysis of human eosinophils: high levels of alkylacylglycerophosphocholine (PAF precursor). Ojima-Uchiyama A, et al. **Lipids** 1988 Aug;23(8):815–7

Inhibition of lyso-PAF: acetyl-CoA acetyltransferase by salicylates and other compounds. White HL, et al. **Prostaglandins** 1988 Jun;35(6):939–44

ANALYSIS

Embryo-derived platelet-activating factor. Its diagnostic and therapeutic future. O'Neill C, et al. **Ann N Y Acad Sci** 1988;541:398–406

The detection of platelet-activating factor in inflamed human gingival tissue. Noguchi K, et al. **Arch Oral Biol** 1989; 34(1):37–41

Analysis of platelet activating factor in human saliva by gas chromatography/mass spectrometry. Christman BW, et al. **Biomed Environ Mass Spectrom** 1989 Apr;18(4):258–64

Quantitative analysis of platelet activating factor using fast atom bombardment/tandem mass spectrometry. Haroldsen PE, et al. **Biomed Environ Mass Spectrom** 1989 Jun; 18(6):439–44

Analysis of lyso-platelet activating factor by negative ion gas chromatography/mass spectrometry of the nitrobenzal acetal derivatives. Mallet AI. **Biomed Environ Mass Spectrom** 1988 Oct;16(1-12):207–10

A superfusion bioassay for platelet-activating factor. Cirino G, et al. **Can J Physiol Pharmacol** 1989 Jan;67(1):72–4

Platelet aggregating activity in human embryo culture media free of PAF-acether. Amiel ML, et al. **Hum Reprod** 1989 Apr;4(3):327–30

Biochemical and pharmacological characterization of human embryo-derived platelet activating factor. Collier M, et al. **Hum Reprod** 1988 Nov;3(8):993–8

Highly sensitive gas chromatographic—mass spectrometric method for the determination of platelet-activating factor in human blood. Yamada K, et al. **J Chromatogr** 1988 Dec 9;433:243–7

Platelet-activating factor and anti-platelet-aggregating factor in acute reduction of blood pressure following percutaneous transluminal renal angioplasty in patients with renovascular hypertension. Masugi F, et al. **J Hum Hypertens** 1988 Aug;2(2):111–6

Novel molecular analogues of phosphatidylcholines in a lipid extract from bovine brain: 1-long-chain acyl-2-short-chain acyl-sn-glycero-3-phosphocholines. Tokumura A, et al. **J Lipid Res** 1989 Feb;30(2):219–24

Platelet aggregation in whole blood: is the response to adrenaline, 5-hydroxytryptamine and PAF a direct consequence of stimulation by these agonists? Petty AC, et al. **Thromb Res** 1989 Apr 15;54(2):151–9

ANTAGONISTS & INHIBITORS

Chemistry and pharmacology of PAF antagonists. Evaluation of changes at potential metabolism sites on activity and duration of activity. Handley DA, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:367–70

Tumor necrosis factor-induced bowel necrosis: the role of platelet-activating factor. Hsueh W, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:363–6

Recent development of platelet-activating factor antagonists. Shen TY, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:359–62 (12 ref.)

Effects of PAF and PAF antagonists on the shape of venous endothelial cells in vitro. Northover AM. **Agents Actions** 1989 Aug;28(1–2):142–8

Effect of the PAF-antagonist WEB 2086 on anaphylactic lung reaction: comparison of inhalative and intravenous challenge. Heuer H, et al. **Agents Actions Suppl** 1988; 23:207–15

Pharmacological evaluation of prophylactic anti-asthma drugs by reference to the pathological sequelae of exposure to allergen or platelet activating factor. Morley J, et al. **Agents Actions Suppl** 1988;23:187–94

Drugs affecting pulmonary responses to platelet activating factor as novel anti-asthma drugs. Page CP, et al. **Agents Actions Suppl** 1988;23:173–85 (56 ref.)

Effects of LG 30435 on different platelet activating factor-induced responses. Subissi A, et al. **Agents Actions Suppl** 1988;23:201–6

Reduced serum inhibition of platelet-activating factor activity in preeclampsia. Benedetto C, et al. **Am J Obstet Gynecol** 1989 Jan;160(1):100–4

Arachidonic acid metabolism and cerebral blood flow in the normal, ischemic, and reperfused gerbil brain. Inhibition of ischemia-reperfusion-induced cerebral injury by a platelet-activating factor antagonist (BN 52021). Panetta T, et al. **Ann N Y Acad Sci** 1989;559:340–51

Pharmacologic modulation of experimental postischemic hepatic function. Ontell SJ, et al. **Ann Surg** 1989 Feb; 209(2):200–10

Protective effect of BN 52021, a specific antagonist of platelet-activating factor (PAF-acether) against diet-induced cholesteryl ester deposition in rabbit aorta. Feliste R, et al. **Atherosclerosis** 1989 Aug;78(2–3):151–8

The benzodiazepine receptor ligands RO 5-4864 and RO 15-1788 do not block the inhibition of PAF-induced platelet aggregation seen with the hetrazepine WEB2086. Griffin K, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):263–7

A specific, photolabile and irreversible antagonist (L662,025) of the PAF-receptor. Hussaini IM, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):23–30

Effect of cyclosporin A and the platelet-activating factor (PAF) antagonist, BN 52021, on PAF- and antigen-induced bronchoconstriction in the guinea-pig. Touvay C, et al. **Biochem Biophys Res Commun** 1989 Aug 30; 163(1):118–23

Platelet activating factor antagonist L-652,731 inhibits thymidine transport. Bazill GW, et al. **Biochem Pharmacol** 1989 Jan 15;38(2):373–4

An antagonist to platelet activating factor counteracts the tumoricidal action of alkyl lysophospholipids. Bazill GW, et al. **Biochem Pharmacol** 1989 Jan 15;38(2):374–7

From anti-asthma drugs to PAF-acether antagonism and back. Present status. Pretolani M, et al. **Biochem Pharmacol** 1989 May 1;38(9):1373–84 (143 ref.)

PAF-receptors on eosinophils: identification with a novel ligand, [3H]WEB 2086. Ukena D, et al. **Biochem Pharmacol** 1989 May 15;38(10):1702–5

Effect of specific antagonists on PAF-induced platelet aggregation and release of plasminogen activator. Hofmann B, et al. **Biomed Biochim Acta** 1988;47(10–11):S157–60

The effects of PAF antagonists on ischaemia and reperfusion arrhythmias and ischaemia-induced platelet aggregation. Wainwright CL, et al. **Biomed Biochim Acta** 1988; 47(10–11):S224–7

Effect of a PAF antagonist, BN52063, on PAF-induced bronchoconstriction in normal subjects. Roberts NM, et al. **Br J Clin Pharmacol** 1988 Jul;26(1):65–72

Interference of WEB 2086 and BN 52021 with Paf-induced effects on guinea-pig trachea. Brunelleschi S, et al. **Br J Pharmacol** 1989 Jun;97(2):469–74

The effect of Paf antagonists on bronchial hyperresponsiveness induced by Paf, propranolol or indomethacin. Dixon EJ, et al. **Br J Pharmacol** 1989 Jul; 97(3):717–22

Antagonism of Paf-induced oedema formation in rabbit skin: a comparison of different antagonists. Hellewell PG, et al. **Br J Pharmacol** 1989 May;97(1):171–80

Pharmacological modulation of Paf-induced rat pleurisy and its role in inflammation by zymosan. Martins MA, et al. **Br J Pharmacol** 1989 Feb;96(2):363–71

Limited interference of specific Paf antagonists with hyper-responsiveness to Paf itself of lungs from actively sensitized guinea-pigs. Pretolani M, et al. **Br J Pharmacol** 1989 Jun;97(2):433–42

Selective inhibition of adrenaline-induced human platelet aggregation by the structurally related Paf antagonist Ro 19-3704. Schattner M, et al. **Br J Pharmacol** 1989 Apr; 96(4):759–66

Platelet-activating factor (Paf) antagonist, WEB 2086, protects against Paf-induced hypotension in Macaca fascicularis. Stanton AW, et al. **Br J Pharmacol** 1989 Jul; 97(3):643–6

Leukotriene D4 and platelet-activating factor-acether antagonists on allergic and arachidonic acid-induced reactions in guinea pig airways. Burka JF, et al. **Can J Physiol Pharmacol** 1989 May;67(5):483–90

The antagonist effects of compounds derived from khellactone on platelet-activating factor. Takeuchi N, et al. **Chem Pharm Bull (Tokyo)** 1988 Oct;36(10):4221–4

Safety, tolerability, and pharmacologic activity of multiple doses of the new platelet activating factor antagonist WEB 2086 in human subjects. Adamus WS, et al. **Clin Pharmacol Ther** 1989 Mar;45(3):270–6

The effects of PAF antagonists on arrhythmias and platelets during acute myocardial ischaemia and reperfusion. Wainwright CL, et al. **Eur Heart J** 1989 Mar;10(3):235–43

Inhibitory effect of oral WEB 2086, a novel selective PAF-acether antagonist, on ex vivo platelet aggregation. Adamus WS, et al. **Eur J Clin Pharmacol** 1988;35(3):237–40

Doxofylline exerts a prophylactic effect against bronchoconstriction and pleurisy induced by PAF. Franzone JS, et al. **Eur J Pharmacol** 1989 Jun 20; 165(2–3):269–77

Ginkgolide B protects isolated hearts against arrhythmias induced by ischemia but not reperfusion. Koltai M, et al. **Eur J Pharmacol** 1989 May 19;164(2):293–302

Spermicidal effect of antagonists of platelet-activating factor. Harper MJ, et al. **Fertil Steril** 1989 May;51(5):890–5

High affinity acceptor sites in guinea pig brain for [3H]52770 RP, a PAF antagonist. Levy C, et al. **Fundam Clin Pharmacol** 1989;3(1):37–46

Improved hepatic function in the 24-hour preserved rat liver with UW-lactobionate solution and SRI 63–441. Ontell SJ, et al. **Gastroenterology** 1988 Dec;95(6):1617–24

The effect of the platelet-activating factor antagonist, BN 52021, on human natural killer cell-mediated cytotoxicity. Mandi Y, et al. **Immunology** 1989 Jul;67(3):370–4

Antiasthmatic effects of onions. Prevention of platelet-activating factor induced bronchial hyperreactivity to histamine in guinea pigs by diphenylthiosulfinate. Dorsch W, et al. **Int Arch Allergy Appl Immunol** 1989; 88(1–2):228–30

Effect of the platelet-activating factor antagonist BN 52021 on human natural killer cell cytotoxicity. Mandi Y, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):222–4

Effects of combined receptor antagonists of leukotriene D4 (LTD4) and platelet-activating factor (PAF) on rhesus airway responses to LTD4, PAF and antigen. Patterson R, et al. **Int Arch Allergy Appl Immunol** 1989;88(4):462–70

Structure-activity relationships and effects of platelet-activating factor antagonists in the hetrazepine series. Weber KH, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):82–7

Release of eicosanoids in rat peritoneal cavity during the Arthus reaction. Effect of the PAF-antagonist BN-52021 and indomethacin. Jancar S, et al. **Int J Immunopharmacol** 1989;11(2):129–32

Inhibition of platelet-activating factor (PAF)-induced chemotaxis and PAF binding to human eosinophils and neutrophils by the specific ginkgolide-derived PAF antagonist, BN 52021. Kurihara K, et al. **J Allergy Clin Immunol** 1989 Jan;83(1):83–90

Platelet-activating factor antagonists increase vascular reactivity in perfused rat lungs. Haynes J, et al. **J Appl Physiol** 1988 Nov;65(5):1921–8

Effects of platelet-activating factor antagonist SRI 63-441 on endotoxemia in sheep. Sessler CN, et al. **J Appl Physiol** 1988 Dec;65(6):2624–31

A PAF antagonist blocks antigen-induced airway hyperresponsiveness and inflammation in sheep. Solèr M, et al. **J Appl Physiol** 1989 Jul;67(1):406–13

Protective effects of a platelet activating factor (PAF) antagonist and its combined treatment with prostaglandin (PG) E1 in traumatic shock. Terashita Z, et al. **J Cardiovasc Pharmacol** 1988;12(5):505–11

Pentadienyl carboxamide derivatives as antagonists of platelet-activating factor. Guthrie RW, et al. **J Med Chem** 1989 Aug;32(8):1820–35

Platelet activating factor antagonists: synthesis and structure-activity studies of novel PAF analogues modified in the phosphorylcholine moiety. Takatani M, et al. **J Med Chem** 1989 Jan;32(1):56–64

Biphenylcarboxamide derivatives as antagonists of platelet-activating factor. Tilley JW, et al. **J Med Chem** 1989 Aug;32(8):1814–20

Platelet-activating factor antagonist BN52021 decreases accumulation of free poiyunsaturated fatty acid in mouse brain during ischemia and electroconvulsive shock. Birkle DL, et al. **J Neurochem** 1988 Dec;51(6):1900–5

Inhibition of the alkali burn-induced lipoxygenation of arachidonic acid in the rabbit cornea in vivo by a platelet activating factor antagonist. Bazan HE, et al. **J Ocul Pharmacol** 1987 Winter;3(4):357–65

Effects of BN 52063 and other agents inhibiting platelet-activating factor-induced contractile responses in rat portal vein. Hellegouarch A, et al. **J Pharm Pharmacol** 1988 Aug;40(8):589–91

Biological effects of the orally active platelet activating factor receptor antagonist SDZ 64–412. Handley DA, et al. **J Pharmacol Exp Ther** 1988 Nov;247(2):617–23

Pharmacological manipulation of inflammation in rabbit hydronephrosis: effects of a combined cyclooxygenase/lipoxygenase inhibitor ethoxyquin, a thromboxane synthase inhibitor RS-5186 and a PAF antagonist L-659,989. Spaethe SM, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1308-16

Radioligand competitive binding methodology for the evaluation of platelet-activating factor (PAF) and PAF-receptor antagonism using intact canine platelets. Janero DR, et al. **J Pharmacol Methods** 1988 Nov; 20(3):237-53

Antagonists of embryo-derived platelet-activating factor prevent implantation of mouse embryos. Spinks NR, et al. **J Reprod Fertil** 1988 Sep;84(1):89-98

PAF antagonists in asthma [editorial] **Lancet** 1989 Mar 18; 1(8638):592-3

Idiopathic thrombocytopenia treated with Paf-acether antagonist WEB 2086 [letter] Lohmann HF, et al. **Lancet** 1988 Nov 12;2(8620):1147

Platelet-activating factor [letter] Martin J. **Lancet** 1988 Dec 24-31;2(8626-8627):1486

Hetrazepines as antagonists of platelet activating factor. Weber KH, et al. **Med Res Rev** 1989 Apr-Jun;9(2):181-218 (165 ref.)

Effect of the PAF antagonists, CV-3988 and L-652,731 on the pulmonary and hematological responses to guinea pig anaphylaxis. Danko G, et al. **Pharmacol Res Commun** 1988 Sep;20(9):785-98

BN-52021 protects guinea-pig from heart anaphylaxis. Magni F, et al. **Pharmacol Res Commun** 1988 Dec;20 Suppl 5:75-8

Effect of PAF-antagonists in endotoxin shock--ovine and rat experiments. Bahrami S, et al. **Prog Clin Biol Res** 1989; 308:931-6

Effect of a new and specific PAF-antagonist, WEB 2086, on PAF and endotoxin/tumor necrosis factor induced changes in mortality and intestinal transit velocity. Heuer H. **Prog Clin Biol Res** 1989;308:919-24

Modulation of eosinophil recruitment in the rat by the platelet-activating factor (PAF) antagonist, BN 52021, the somatostatin analog, BIM 23014, and by cyclosporin A. Etienne A, et al. **Prostaglandins** 1989 Mar;37(3):345-57

Platelet activating factor antagonism with BN52021 protects the kidney against acute ischemic injury. Plante GE, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Oct; 34(1):53-60

Mediators of inflammation and antagonism of experimental pleurisy in the rat by fenspiride. Lima MC, et al. **Rhinology** 1988;Suppl 4:85-92

Effect of therapy on platelet activating factor-induced aggregation in acute stroke. Joseph R, et al. **Stroke** 1989 May;20(5):609-11

Protective effects of a specific platelet activating factor (PAF) antagonist, WEB 2086, in traumatic shock. Stahl GL, et al. **Thromb Res** 1989 Feb 1;53(3):327-38

Effect of platelet-activating factor antagonist on cyclosporine nephrotoxicity. Glomerular hemodynamics evaluation. dos Santos OF, et al. **Transplantation** 1989 Apr; 47(4):592-5

PAF: new antagonists, new roles in disease and a major role in reproductive biology. Page C, et al. **Trends Pharmacol Sci** 1989 Jul;10(7):255-7 (2 ref.)

[Platelet activating factor and platelet activating factor antagonists. New methods in asthma therapy?] Uhl D. **Med Monatsschr Pharm** 1989 Jun;12(6):170-2 **(Ger)**

[Effect of a specific antagonist of platelet-activating factor, FR-900452, on proteinuria and urinary thromboxane excretion in aminonucleoside nephrotic rats] Suzuki S, et al. **Nippon Jinzo Gakkai Shi** 1988 Aug;30(8):985-90 (Eng. Abstr.) **(Jpn)**

[Effects of a platelet activating factor (PAF) antagonist CV-3988 on acute gastric erosions in rats by water immersion and restrained stress, and by ethanol] Nogami M, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Oct; 85(10):2149-54 (Eng. Abstr.) **(Jpn)**

BIOSYNTHESIS

Modulation of PAF biosynthesis in human polymorphonuclear leukocytes. The role of phorbol esters and protein kinases. Sanchez Crespo M, et al. **Agents Actions** 1989 Jan;26(1-2):111-2

Paf-acether production by Escherichia coli. Denizot Y, et al. **Biochem Biophys Res Commun** 1989 Jun 15; 161(2):939-43

The de novo biosynthesis of platelet-activating factor in rat brain. Francescangeli E, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):107-12

Renal necrosis and the involvement of a single enzyme of the de novo pathway for the biosynthesis of platelet-activating factor in the rat kidney inner medulla. Lee TC, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):1002-5

Biosynthesis of paf-acether. XIV. Paf-acether output in murine peritoneal macrophages is regulated by the level of acetylhydrolase. Palmantier R, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):475-82

The effect of long-term consumption of fish oil on platelet-activating factor synthesis in rat renal microsomes. Yeo YK, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1238-42

Biosynthesis of platelet-activating factor by cultured rat Kupffer cells stimulated with calcium ionophore A23187. Chao W, et al. **Biochem J** 1989 Feb 1;257(3):823-9

Biosynthesis of platelet-activating factor in glandular gastric mucosa. Evidence for the involvement of the 'de novo' pathway and modulation by fatty acids. Fernandez-Gallardo S, et al. **Biochem J** 1988 Sep 15; 254(3):707-14

Inhibition of eicosanoid and PAF formation by dexamethasone in rat inflammatory polymorphonuclear neutrophils may implicate lipocortin 's'. Fradin A, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):248-57

Production and effects of platelet-activating factor in the rat brain. Kumar R, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):375-83

Biosynthesis of paf-acether. XI. Regulation of acetyltransferase by enzyme-substrate imbalance. Ninio E, et al. **Biochim Biophys Acta** 1988 Nov 25;963(2):288-94

Possible origins of PAF-acether and lyso-PAF-acether in rat lung alveoli secondary to hypoxia. Prévost MC, et al. **Biochim Biophys Acta** 1988 Oct 14;962(3):354-61

Inhibition of platelet-activating factor biosynthesis via the acetyltransferase by arachidonic and oleic acids in ionophore A23187-stimulated bovine neutrophils. Remy E, et al. **Biochim Biophys Acta** 1989 Sep 11;1005(1):87-92

Synthesis of platelet activating factor by tissues from the rainbow trout, Salmo gairdneri. Turner MR, et al. **Biochim Biophys Acta** 1989 Jul 17;1004(1):49-52

Castor oil increases intestinal formation of platelet-activating factor and acid phosphatase release in the rat. Pinto A, et al. **Br J Pharmacol** 1989 Apr;96(4):872-4

Angiotensin II causes formation of platelet activating factor in cultured rat mesangial cells. Neuwirth R, et al. **Circ Res** 1989 Jun;64(6):1224-9

Detection of platelet-activating factor during traumatic shock. Stahl GL, et al. **Circ Shock** 1988 Nov;26(3):237-44

Pharmacological modulation of leukotriene and platelet activating factor biosynthesis and activities by alternative dietary fatty acids. Lee TH. **Clin Exp Allergy** 1989 Jan;19 Suppl 1:15-23 (56 ref.)

Tumor necrosis factor stimulates human neutrophils to release leukotriene B4 and platelet-activating factor. Induction of phospholipase A2 and acetyl-CoA:1-alkyl-sn-glycero-3-phosphocholine O2-acetyltransferase activity and inhibition by antiproteinase. Camussi G, et al. **Eur J Biochem** 1989 Jul 1;182(3):661-6

Synthesis of paf-acether from exogenous precursors by the prokaryote Escherichia coli. Denizot Y, et al. **FEBS Lett** 1989 Jan 16;243(1):13-6

Role of platelet-activating factor in ulcerative colitis. Enhanced production during active disease and inhibition by sulfasalazine and prednisolone. Eliakim R, et al. **Gastroenterology** 1988 Nov;95(5):1167-72

Role of Na+/H+ exchange in thrombin-induced platelet-activating factor production by human endothelial cells. Ghigo D, et al. **J Biol Chem** 1988 Dec 25; 263(36):19437-46

Stimulation of platelet-activating factor synthesis by a nonmetabolizable bioactive analog of platelet-activating factor and influence of arachidonic acid metabolites. Tessner TG, et al. **J Biol Chem** 1989 Mar 25;264(9):4794-9

Subcellular localization of phospholipids and enzymes involved in PAF-acether metabolism. Record M, et al. **J Cell Biochem** 1989 Jul;40(3):353-9

Platelet activating factor (PAF) production by mouse embryos in vitro and its effect on embryonic metabolism. Ryan JP, et al. **J Cell Biochem** 1989 Jul;40(3):387-95

Hydrogen peroxide stimulates the synthesis of platelet-activating factor by endothelium and induces endothelial cell-dependent neutrophil adhesion. Lewis MS, et al. **J Clin Invest** 1988 Dec;82(6):2045-55

Synthesis and release of platelet-activating factor is inhibited by plasma alpha 1-proteinase inhibitor or alpha 1-antichymotrypsin and is stimulated by proteinases. Camussi G, et al. **J Exp Med** 1988 Oct 1;168(4):1293-306

Biosynthesis of paf-acether. X. Phorbol myristate acetate-induced paf-acether biosynthesis and acetyltransferase activation in human neutrophils. Leyravaud S, et al. **J Immunol** 1989 Jul 1;143(1):245-9

Biphasic platelet-activating factor synthesis by human monocytes stimulated with IL-1-beta, tumor necrosis factor, or IFN-gamma. Valone FH, et al. **J Immunol** 1988 Dec 1;141(11):3945-50

Platelet-activating factor production in human neutrophils by sequential stimulation with granulocyte-macrophage colony-stimulating factor and the chemotactic factors C5A or formyl-methionyl-leucyl-phenylalanine. Wirthmueller U, et al. **J Immunol** 1989 May 1;142(9):3213-8

IL-1 and related cytokines enhance thrombin-stimulated PGI2 production in cultured endothelial cells without affecting thrombin-stimulated von Willebrand factor secretion or platelet-activating factor biosynthesis. Zavoico GB, et al. **J Immunol** 1989 Jun 1;142(11):3993-9

Acetylcholine and dopamine promote the production of platelet activating factor in immature cells of chick embryonic retina. Bussolino F, et al. **J Neurochem** 1988 Dec;51(6):1755-9

Vitamin E. deficiency increases the synthesis of platelet-activating factor (PAF) in rat polymorphonuclear leucocytes. Fukuzawa K, et al. **Lipids** 1989 Mar;24(3):236-9

Biosynthesis of platelet-activating factor: the role of the remodeling pathway. Sánchez Crespo M. **Methods Find Exp Clin Pharmacol** 1989 Apr;11(4):289-97 (44 ref.)

Relationship between PAF-acether and thromboxane A2 biosynthesis in endotoxin-induced intestinal damage in the rat. Boughton-Smith NK, et al. **Prostaglandins** 1989 Sep; 38(3):319-33

Lipid mediator production by post-implantation rat embryos in vitro. Geissler FT, et al. **Prostaglandins** 1989 Aug; 38(2):145-55

Beneficial effects of prostaglandin E2 in endotoxic shock are unrelated to effects on PAF-acether synthesis. Ibbotson GC, et al. **Prostaglandins** 1989 Feb;37(2):237-50

[Production of PAF (1-0-alkyl-2-acetyl-sn-glycero-3-phosphocholine) in the chick retina during embryogenesis] Bussolino F. **Ann Ist Super Sanita** 1988;24(4):535-7 (Eng. Abstr.) **(Ita)**

[Effect of glycyrrhizin on the production of platelet-activating factor from rat peritoneal exudate cells] Ichikawa Y, et al. **Arerugi** 1989 Apr;38(4):365-9 (Eng. Abstr.) **(Jpn)**

[Changes in production of platelet activating factor by adherent hepatocytes of mice with experimental liver failure] Kioka K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Mar;86(3):759-63 (Eng. Abstr.) **(Jpn)**

[Platelet-activating factor producing cell--target cell interactions] Oda M, et al. **Rinsho Byori** 1989 Apr;Spec No 81:9-15 **(Jpn)**

BLOOD

Increased levels of platelet-activating factor in blood following intestinal ischemia in the dog. Filep J, et al. **Biochem Biophys Res Commun** 1989 Jan 31;158(2):353-9

PAF of biological fluids in disease: blood levels in allergic rhinitis. Labrakis-Lazanas K, et al. **Haematologica (Pavia)** 1988 Sep-Oct;73(5):379-82

CHEMICAL SYNTHESIS

Semisynthetic preparation of 1-O-hexadecyl-2-acetyl-sn-glyceryl-3-phosphorylcholine (platelet activating factor). Lekka ME, et al. **Z Naturforsch [C]** 1988 Sep-Oct;43(9-10):665-70

IMMUNOLOGY

Effect of topical capsaicin on the cutaneous responses to inflammatory mediators and to antigen in man. McCusker MT, et al. **J Allergy Clin Immunol** 1989 Jun;83(6):1118-24

Late appearance of phospholipid platelet-activating factor and leukotriene B4 in human skin after repeated antigen challenge. Shalit M, et al. **J Allergy Clin Immunol** 1989 Mar;83(3):691-6

Immunoregulatory functions of paf-acether (platelet-activating factor). Dulioust A, et al. **Prog Clin Biol Res** 1988;282:87-96 (35 ref.)

[Platelet activating factor in allergic reaction] Makino S. **Arerugi** 1988 May;37(5):245-9 (32 ref.) **(Jpn)**

ISOLATION & PURIFICATION

Platelet-activating factor. Wykle RL, et al. **Methods Enzymol** 1988;163:44-54

METABOLISM

The role of lipid mediators in asthma (current views and perspectives). König W, et al. **Allergol Immunopathol (Madr)** 1988 Sep-Oct;16(5):289-98 (46 ref.)

Release of platelet-activating factor from ischemic-reperfused rabbit heart. Montrucchio G, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1236-46

Extra- and intracellular metabolism of platelet-activating factor by cultured mesangial cells. Neuwirth R, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):F735-41

Evidence of PAF-acether metabolic pathway activation in antigen challenge of upper respiratory airways. Miadonna A, et al. **Am Rev Respir Dis** 1989 Jul;140(1):142-7

Prostaglandin E2, leukotriene C4, and platelet-activating factor receptor sites in the brain. Binding parameters and pharmacological studies. Dray F, et al. **Ann N Y Acad Sci** 1989;559:100-11 (57 ref.)

Inhibition of [3H]platelet activating factor (PAF) binding by Zn2+: a possible explanation for its specific PAF antiaggregating effects in human platelets. Nunez D, et al. **Arch Biochem Biophys** 1989 Aug 1;272(2):466-75

Competitive inhibition of tritium-labeled platelet-activating factor binding to rabbit platelet membranes by amiloride and amiloride analogs. Hwang SB. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):165-71

Evidence for two platelet activating factor receptors on eosinophils: dissociation between PAF-induced intracellular calcium mobilization degranulation and superoxides anion generation in eosinophils. Kroegel C, et al. **Biochem Biophys Res Commun** 1989 Jul 14; 162(1):511-21

Metabolism of platelet-activating factor (PAF; 1-O-alkyl-2-acetyl-sn-glycero-3-phosphocholine) and lyso-PAF (1-O-alkyl-2-lyso-sn-glycero-3-phosphocholine) by cultured rat Kupffer cells. Chao W, et al. **Biochem J** 1989 Jul 1;261(1):77-81

Location of platelet activating factor binding in rat liver. Hill CE, et al. **Biochem J** 1988 Aug 1;253(3):651-7

Regulation of cellular retention of paf-acether by extracellular pH and cell concentration. Leyravaud S, et al. **Biochim Biophys Acta** 1989 Sep 25;1005(2):192–5

Release of platelet-activating factor (PAF) and accelerated healing induced by a PAF antagonist in an animal model of chronic colitis. Wallace JL. **Can J Physiol Pharmacol** 1988 Apr;66(4):422–5

Mediators of heat urticaria [letter] Archer CB. **Clin Exp Dermatol** 1988 Nov;13(6):418

Specific receptor sites for PAF in iris and ciliary body of the rabbit eye. van Delft JL, et al. **Curr Eye Res** 1988 Nov; 7(11):1063–8

Release of PAF-acether and eicosanoids from guinea-pig alveolar macrophages by FMLP: effect of cyclo-oxygenase and lipoxygenase inhibition. Fitzgerald MF, et al. **Eur J Pharmacol** 1989 May 30;164(3):539–46

Effect of sulfhydryl reagents on PAF binding to human neutrophils and platelets. Ng DS, et al. **Eur J Pharmacol** 1988 Sep 1;154(1):47–52

Characterization of PAF receptors on human neutrophils using the specific antagonist, WEB 2086. Correlation between receptor binding and function. Dent G, et al. **FEBS Lett** 1989 Feb 27;244(2):365–8

Receptor-independent metabolism of platelet-activating factor by myelogenous cells. O'Flaherty JT, et al. **FEBS Lett** 1989 Jul 3;250(2):341–4

Enhanced degradation of platelet-activating factor in serum from diabetic patients. Hofmann B, et al. **Haemostasis** 1989; 19(3):180–4

The contribution of individual lipoproteins to the degradation of platelet-activating factor in human serum. Ostermann G, et al. **Haemostasis** 1989;19(3):160–8

Cytosolic ionized calcium homeostasis in platelets: an abnormal sensitivity to PAF-activation in migraine. Joseph R, et al. **Headache** 1988 Jul;28(6):396–402

Hydrolysis of platelet activating factor and its methylated analogs by acetylhydrolases. Yanoshita R, et al. **J Biochem (Tokyo)** 1988 May;103(5):815–9

Identification of receptors for platelet-activating factor in rat Kupffer cells. Chao W, et al. **J Biol Chem** 1989 Aug 15;264(23):13591–8

Platelet-activating factor acetylhydrolase increases during macrophage differentiation. A novel mechanism that regulates accumulation of platelet-activating factor. Elstad MR, et al. **J Biol Chem** 1989 May 25;264(15):8467–70

Phorbol diester enhances calcium ionophore A23187-induced [3H]acetate incorporation into platelet-activating factor in murine macrophages: predominant incorporation into 1-O-acyl-2-acetyl-sn-glycero-3-phosphocholine. Wey HE. **J Cell Biochem** 1989 Mar;39(3):305–13

Interaction of platelet-activating factor with endothelial and vascular smooth muscle cells in coculture. Stoll LL, et al. **J Cell Physiol** 1989 May;139(2):253–61

Occupancy of platelet receptors for platelet-activating factor in patients with septicemia. Lopez Diez F, et al. **J Clin Invest** 1989 May;83(5):1733–40

Presence of PAF-acether in human breast carcinoma: relation to axillary lymph node metastasis. Pitton C, et al. **J Natl Cancer Inst** 1989 Sep 6;81(17):1298–302

Evidence for the existence and ionic modulation of platelet-activating factor receptors mediating degranulatory responses in human polymorphonuclear leukocytes. Marquis O, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):293–300

Simultaneous presence of platelet activating factor, leukotriene B4, prostaglandin F1 alpha and F2 alpha in the supernatant of human neutrophils treated with phospholipase A2 of human monocytes. Sipka S, et al. **Klin Wochenschr** 1989 Feb 1;67(3):123–5

Phorbol 12-myristate 13-acetate inhibits binding of leukotriene B4 and platelet-activating factor and the responses they induce in neutrophils: site of action. Yamazaki M, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(15):5791–4

Paf-acether, an ether phospho-lipid with biological activity. Benveniste J. **Prog Clin Biol Res** 1988;282:73–85 (76 ref.)

The interaction of alpha-1-acid glycoprotein with endogenous autocoids, in particular, platelet activating factor (PAF). McNamara PJ, et al. **Prog Clin Biol Res** 1989; 300:307–19 (41 ref.)

Metabolism of platelet activating factor and related ether lipids: enzymatic pathways, subcellular sites, regulation, and membrane processing. Snyder F. **Prog Clin Biol Res** 1988;282:57–72 (79 ref.)

Interrelationships among platelet-activating factor binding and metabolism and induction of platelet activation. Valone FH. **Prog Clin Biol Res** 1988;283:319–40 (67 ref.)

Granulocytes, platelet activating factor, and stroke [letter] Joseph R, et al. **Stroke** 1989 Aug;20(8):1116

The degradation of platelet-activating factor in serum and its discriminative value in atherosclerotic patients. Ostermann G, et al. **Thromb Res** 1988 Dec 15;52(6):529–40

[Which signals of early pregnancy are known currently, what cer- tainty have they and exactly how far are they applicable in practice?] Straube W. **Zentralbl Gynakol** 1989; 111(3):187–8 **(Ger)**

PHARMACOLOGY

AGEPC: a potent calcium-dependent chemical mediator in the liver. Fisher RA, et al. **Adv Exp Med Biol** 1988; 232:203–12

Effect of chronic administration of platelet-activating factor (PAF) in the guinea-pig and the rat. Pignol B, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:371–6

PAF-acether modifies human peritoneal macrophage cAMP levels in a biphasic fashion. Adolfs MJ, et al. **Agents Actions** 1989 Jan;26(1-2):119–20

Interactions between cyclic AMP stimulating drugs and PAF-acether in guinea-pig alveolar macrophages. Bachelet M, et al. **Agents Actions** 1989 Jan;26(1-2):113–4

Failure of PAF-acether to induce in vivo neutrophil migration. Cunha FQ, et al. **Agents Actions** 1988 Aug; 25(1-2):191–4

Role of platelet activating factor in the endotoxin induced tracheal hyperreactivity to histamine in the guinea pig. Nijkamp FP, et al. **Agents Actions** 1989 Jan;26(1-2):117–8

The effects of TMB-8 on the shape changes of vascular endothelial cells resulting from exposure to various inflammatory agents. Northover AM. **Agents Actions** 1989 Mar;26(3-4):367–71

Effect of PAF acether on oriented egg phosphatidylcholine multibilayers; interaction with cholesterol; comparison to lyso-PC and lyso-PAF. Oliver JL, et al. **Agents Actions** 1989 Jan;26(1-2):121–2

Agonist-induced calcium flux, phosphoinositide metabolism, aggregation and enzyme secretion in human neutrophils. Rossi AG, et al. **Agents Actions** 1988 Jul;24(3-4):272–82

The effects of PAF-acether and FMLP on eicosanoid production in guinea pig alveolar macrophages. Zijlstra FJ, et al. **Agents Actions** 1989 Jan;26(1-2):115–6

Lipoxygenase metabolites as mediators of platelet activating factor-induced increased airways responsiveness to histamine in the guinea-pig. Anderson GP, et al. **Agents Actions Suppl** 1988;23:195–200

Platelet activating factor-induced early pregnancy factor activity from the perfused rabbit ovary and oviduct. Sueoka K, et al. **Am J Obstet Gynecol** 1988 Dec;159(6):1580–4

Glomerular responses to platelet-activating factor in the rat: role of thromboxane A2. Badr KF, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):F35–43

Circulatory effects of PAF-acether in newborn piglets. Bradley LM, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):H205–12

Platelet activating factor induces dopamine release in PC-12 cell line. Bussolino F, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):C559–65

Mechanisms contributing to gastric motility changes induced by PAF-acether and endotoxin in rats. Esplugues JV, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):G275–82

Effects of PAF and BN 52021 on cardiac function and regional blood flow in conscious rats. Sirén AL, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H25–32

Active immunization induces lung hyperresponsiveness in the guinea pig. Pharmacologic modulation and triggering role of the booster injection. Pretolani M, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1572–8

The effect of platelet-activating factor on histamine and muscarinic receptor function in guinea pig airways. Robertson DN, et al. **Am Rev Respir Dis** 1988 Jun; 137(6):1317–22

Mechanism of platelet activating factor-induced bronchoconstriction in humans. Smith LJ, et al. **Am Rev Respir Dis** 1988 May;137(5):1015–9

Forskolin and prostacyclin inhibit fluoride induced platelet activation and protein kinase C dependent responses. Doni MG, et al. **Biochem Biophys Res Commun** 1988 Nov 15; 156(3):1316–23

Differential activation of human skin cells by platelet activating factor: stimulation of phosphoinositide turnover and arachidonic acid mobilization in keratinocytes but not in fibroblasts. Fisher GJ, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1344–50

Augmentation of DNA synthesis in guinea pig bone marrow cells by platelet-activating factor (PAF). Kato T, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):563–8

The induction of glycogenolysis in the perfused liver by platelet activating factor is mediated by prostaglandin D2 from Kupffer cells. Kuiper J, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1288–95

Alkyl chain homologs of platelet-activating factor and their effects on the mammalian heart. Levi R, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1341–7

Platelet activating factor is a potent stimulant of the production of active oxygen species by human monocyte-derived macrophages. Rouis M, et al. **Biochem Biophys Res Commun** 1988 Nov 15; 156(3):1293–301

The effects of platelet-activating factor and platelet-derived compounds on bovine luteal cell progesterone production. Battista PJ, et al. **Biol Reprod** 1989 Apr;40(4):769–75

Influence of the specific antagonist of PAF-acether, BN 52021, and of Ginkgo extract on the rejection of murine tail skin allografts and the PAF-acether mortality in mice in particular consideration of the role of TXB2. Becker K, et al. **Biomed Biochim Acta** 1988;47(10-11):S165–8

Influence of prostaglandins and PG-analogues on the mortality of PAF-acether in mice and the TXB2 release from human granulocytes. Becker K, et al. **Biomed Biochim Acta** 1988;47(10-11):S169–72

Release of cysteinyl-leukotrienes is of minor importance in PAF induced reduction of perfusion rate in the gastric vascular bed. Dembińska-Kieć A, et al. **Biomed Biochim Acta** 1988;47(10-11):S228–32

Effects of synthetic analogues of platelet-activating factor (PAF) on fibrinolytic activity in the rat. Hofmann B, et al. **Biomed Biochim Acta** 1988;47(10-11):S161–4

The arrhythmogenic effect of platelet activating factor (PAF) is inhibited by PAF antagonist and by substances influencing eicosanoids. Mest HJ, et al. **Biomed Biochim Acta** 1988;47(10-11):S219–23

Structure-activity relationships of synthetic analogues of platelet-activating factor. Ostermann G, et al. **Biomed Biochim Acta** 1988;47(10-11):S233–6

Effects of REV 5901, a 5-lipoxygenase inhibitor and leukotriene antagonist, on pulmonary responses to platelet activating factor in the guinea-pig. Anderson G, et al. **Br J Pharmacol** 1988 Aug;94(4):1115–22

Paf-induced release of spasmogens from guinea-pig lungs. Jancar S, et al. **Br J Pharmacol** 1989 Jan;96(1):153–62

E-type prostaglandins but not iloprost inhibit platelet activating factor-induced generation of leukotriene B4 by human polymorphonuclear leukocytes. Ney P, et al. **Br J Pharmacol** 1989 Jan;96(1):186–92

Evidence for an intracellular action of platelet-activating factor in bovine cultured aortic endothelial cells. Stewart AG, et al. **Br J Pharmacol** 1989 Mar;96(3):503–5

Tracheal responsiveness to histamine, PAF-acether and acetylcholine in normal and actively ovalbumin-sensitized guinea pigs. Medeiros YS, et al. **Braz J Med Biol Res** 1989; 22(1):97–101

Adrenalectomy exacerbates paw edema without interfering with desensitization induced by PAF-acether in rats. Silva PM, et al. **Braz J Med Biol Res** 1988;21(4):855–8

Inhibition of platelet-activating factor induced renal hemodynamic and tubular dysfunctions with L-655,240, a new thromboxane-prostaglandin endoperoxide antagonist. Hébert RL, et al. **Can J Physiol Pharmacol** 1989 Apr;67(4):304–8

Mechanism of action of platelet-activating factor on guinea-pig lung parenchyma strips. Jancar S, et al. **Can J Physiol Pharmacol** 1988 Sep;66(9):1187–91

Platelet-activating factor: lack of direct action on guinea pig myocardium and possible transmitter release from cardiac sympathetic nerve endings at high concentrations. Shigenobu K, et al. **Can J Physiol Pharmacol** 1989 Jun; 67(6):669–74

Influence of platelet-activating factor on leukotriene D4-induced contractions of the guinea pig parenchymal strip. Yaghi A, et al. **Can J Physiol Pharmacol** 1989 Apr; 67(4):315–21

Equine peritoneal macrophage production of thromboxane and prostacyclin in response to platelet activating factor and its receptor antagonist SRI 63-441. Morris DD, et al. **Circ Shock** 1989 Jun;28(2):149–58

Acute and long-term pulmonary effects of platelet-activating factor. Mencia-Huerta JM, et al. **Clin Exp Allergy** 1989 Mar;19(2):125–42 (169 ref.)

Inhibition of vasoconstriction by platelet activating factor in the in situ blood perfused rat mesentery. Gerkens JF. **Clin Exp Pharmacol Physiol** 1989 Mar;16(3):161–7

Regional and time-dependent effects of inflammatory mediators on airway microvascular permeability in the guinea pig. Evans TW, et al. **Clin Sci** 1989 May; 76(5):479–85

The alkyl-ether phospholipid platelet-activating factor is a stimulator of the hypothalamic-pituitary-adrenal axis in the rat. Bernardini R, et al. **Endocrinology** 1989 Aug; 125(2):1067–73

Platelet-activating factor stimulates prolactin release from dispersed rat anterior pituitary cells in vitro. Camoratto AM, et al. **Endocrinology** 1989 Mar;124(3):1502–6

Platelet-activating-factor-induced serum-albumin release from rabbit platelets in the absence of calcium. Bette-Bobillo P, et al. **Eur J Biochem** 1988 Nov 15; 177(3):643–7

The effect of platelet activating factor on nasal hypersensitivity. Andersson M, et al. **Eur J Clin Pharmacol** 1988;35(3):231–5

Platelet activating factor is a potent colonic secretagogue with actions independent of specific PAF receptors. Buckley TL, et al. **Eur J Pharmacol** 1989 Apr 25; 163(2-3):275–83

Effect of paf-acether on isoprenaline-induced relaxation in isolated tracheal segments of rats and guinea pigs. Chand N, et al. **Eur J Pharmacol** 1988 Dec 6;158(1-2):135–7

The diacylglycerol kinase inhibitor, R 59022, suppresses contractility of intestinal smooth muscle. Lippe IT, et al. **Eur J Pharmacol** 1989 Jan 2;159(1):1–8

Platelet-activating factor stimulates phosphatidylinositol hydrolysis in the rat myometrium. Varol FG, et al. **Eur J Pharmacol** 1989 Jan 2;159(1):97–8

Platelet-activating factor increases inositol phosphate production and cytosolic free Ca2+ concentrations in cultured rat Kupffer cells. Fisher RA, et al. **FEBS Lett** 1989 Jul 17;251(1-2):22–6

Characterization of platelet-activating factor-induced elevation of cytosolic free calcium concentration in eosinophils. Kroegel C, et al. **FEBS Lett** 1989 Jan 16; 243(1):41–6

Biphasic increase in intracellular calcium induced by platelet-activating factor in macrophages. Randriamampita C, et al. **FEBS Lett** 1989 Jun 5;249(2):199–206

Formation and release of nitric oxide from human neutrophils and HL-60 cells induced by a chemotactic peptide, platelet activating factor and leukotriene B4. Schmidt HH, et al.

FEBS Lett 1989 Feb 27;244(2):357–60

Alteration of hepatic tissue spaces by platelet-activating factor and phenylephrine. Lapointe DS, et al. **Hepatology** 1989 Feb;9(2):278–84

Increased sensitivity of the chemoattractant-induced chemiluminescence in eosinophils isolated from atopic individuals. Koenderman L, et al. **Immunology** 1989 Aug; 67(4):534–6

Enhanced human monocyte cytotoxicity by platelet-activating factor. Valone FH, et al. **Immunology** 1988 Aug;64(4):715–8

Effect of platelet-activating factor on leukocyte adhesion to microvascular endothelium. Time course and dose-response relationships. Dillon PK, et al. **Inflammation** 1988 Dec;12(6):563–73

Effect of platelet-activating factor on monocyte activation and production of tumor necrosis factor. Bonavida B, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):157–60

Modulation by drugs of eosinophil recruitment induced by immune challenge in the rat. Possible roles of interleukin 5 and platelet-activating factor. Etienne A, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):216–21

Effect of long-term administration of platelet-activating factor on pulmonary responsiveness and morphology in the guinea pig. Mencia-Huerta JM, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):154–6

Effect of long-term treatment with platelet-activating factor on cytokine production by rat spleen cells. Pignol B, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):161–3

Inhibition by histamine of platelet-activating-factor-induced neutrophil chemotaxis in bronchial asthma. Rabier M, et al. **Int Arch Allergy Appl Immunol** 1989;89(2–3):314–7

Flow-cytometric analysis of increased IgE uptake by normal eosinophils following activation with PAF-acether and other inflammatory mediators. Walsh GM, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):194–6

Platelet-activating factor and laser trauma of the iris. Verbey NL, et al. **Invest Ophthalmol Vis Sci** 1989 Jun;30(6):1101–3

Effect of PAF on parasympathetic contraction of canine airways. Bethel RA, et al. **J Appl Physiol** 1989 Jun; 66(6):2629–34

Mechanisms of hypotension produced by platelet-activating factor. Laurindo FR, et al. **J Appl Physiol** 1989 Jun; 66(6):2681–90

Evidence for platelet-activating factor secretion during immune activation in dogs. Munoz NM, et al. **J Appl Physiol** 1989 Apr;66(4):1860–6

PAF-induced contraction of canine trachea mediated by 5-hydroxytryptamine in vivo. Murphy TM, et al. **J Appl Physiol** 1989 Feb;66(2):638–43

Role of platelets in contraction of canine tracheal muscle elicited by PAF in vitro. Popovich KJ, et al. **J Appl Physiol** 1988 Aug;65(2):914–20

Importance of vasoconstriction in lipid mediator-induced pulmonary edema. Sakai A, et al. **J Appl Physiol** 1989 Jun; 66(6):2667–74

Analysis of bronchoconstrictor responses to platelet-activating factor in the cat. Underwood DC, et al. **J Appl Physiol** 1989 Jul;67(1):377–82

Elevation of cytosolic free Ca2+ is directly evoked by thromboxane A2 in human platelets during activation with collagen. Moriyama T, et al. **J Biochem (Tokyo)** 1988 Jun; 103(6):901–2

Platelet-activating factor-stimulated hepatic glycogenolysis is not mediated through cyclooxygenase-derived metabolites of arachidonic acid. Lapointe DS, et al. **J Biol Chem** 1989 Jul 25;264(21):12130–3

Bidirectional effects of protein kinase C activators. Studies with human neutrophils and platelet-activating factor. O'Flaherty JT, et al. **J Biol Chem** 1989 Apr 25; 264(12):6836–43

Beta 2-adrenergic agonist regulation of immune aggregate- and platelet-activating factor-stimulated hepatic metabolism. Steinhelper ME, et al. **J Biol Chem** 1989 Jul 5;264(19):10976–81

Enhancement of phorbol ester-induced protein kinase activity in human neutrophils by platelet-activating factor. Gay JC, et al. **J Cell Physiol** 1988 Dec;137(3):439–47

Platelet-activating factor (PAF) enhances tumor necrosis factor production by alveolar macrophages. Prevention by PAF receptor antagonists and lipoxygenase inhibitors. Dubois C, et al. **J Immunol** 1989 Aug 1;143(3):964–70

Stimulation of degranulation from human eosinophils by platelet-activating factor. Kroegel C, et al. **J Immunol** 1989 May 15;142(10):3518–26

Influence of platelet activating factor and a nonmetabolizable analogue on superoxide production by bone marrow derived macrophages. Storch J, et al. **J Leukoc Biol** 1988 Nov;44(5):385–90

Myocardial dysfunction and coronary vasoconstriction induced by platelet-activating factor in the post-infarcted rabbit isolated heart. Mickelson JK, et al. **J Mol Cell Cardiol** 1988 Jun;20(6):547–61

Platelet-activating factor-induced phosphoinositide metabolism in differentiated U-937 cells in culture. Barzaghi G, et al. **J Pharmacol Exp Ther** 1989 Feb; 248(2):559–66

PAF-acether and endotoxin display similar effects on rat mesenteric microvessels: inhibition by specific antagonists. Lagente V, et al. **J Pharmacol Exp Ther** 1988 Oct; 247(1):254–61

Role of lipoxygenase metabolites for the hyper-responsiveness to platelet-activating factor of lungs from actively sensitized guinea pigs. Pretolani M, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):353–9

Role of platelet-activating factor (PAF) in the initiation of the decidual reaction in the rat. Acker G, et al. **J Reprod Fertil** 1989 Mar;85(2):623–9

Effects of platelet-activating factor on rat airways. Misawa M, et al. **Jpn J Pharmacol** 1988 Sep;48(1):7–13

Nonimmunological alterations of glomerular filtration by s-PAF in the rat kidney. Schwertschlag US, et al. **Kidney Int** 1988 Dec;34(6):779–85

Effects of C-reactive protein on human neutrophil granulocytes challenged with N-formyl-methionyl-leucyl-phenylalanine and platelet-activating factor. Filep J, et al. **Life Sci** 1989; 44(8):517–24

Staurosporine potentiates platelet activating factor stimulated phospholipase C activity in rabbit platelets but does not block desensitization by platelet activating factor. Morrison WJ, et al. **Life Sci** 1989;45(4):333–9

Involvement of platelet-activating factor (PAF) in endotoxin-induced intestinal motor disturbances in rats. Pons L, et al. **Life Sci** 1989;45(6):533–41

A novel bioaction of PAF: induction of microbicidal activity in guinea pig bone marrow cells. Hayashi H, et al. **Lipids** 1988 Dec;23(12):1119–24

PAF-induced platelet aggregation ex vivo as a method for monitoring pharmacological activity in healthy volunteers. Adamus WS, et al. **Methods Find Exp Clin Pharmacol** 1989 Jun;11(6):415–20

CNS effects of platelet-activating factor on the rat stomach. Cucala M, et al. **Methods Find Exp Clin Pharmacol** 1989; 11 Suppl 1:67–71

Gastric effects of PAF. Esplugues JV, et al. **Methods Find Exp Clin Pharmacol** 1989;11 Suppl 1:61–6 (29 ref.)

Dose-response relationships between platelet activating factor and permeability—surface area product of FITC-dextran 150 in the hamster cheek pouch. Bekker AY, et al. **Microcirc Endothelium Lymphatics** 1988 Dec; 4(6):433–46

Platelet-activating factor stimulates arachidonic acid metabolism in rat liver cells (C-9 cell line) by a receptor-mediated mechanism. Levine L. **Mol Pharmacol** 1988 Dec;34(6):793–9

Desensitization of platelet-activating factor-stimulated protein phosphorylation in platelets. Shukla SD, et al. **Mol Pharmacol** 1989 Apr;35(4):409–13

Platelet-activating factor-induced contraction of guinea-pig lung parenchymal strips: possible involvement of arachidonate metabolites. Del Monte M, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):417–21

Role of neutrophils in gastric damage induced by platelet activating factor. Etienne A, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):422–5

Platelet activating factor and airway smooth muscle. Morley J, et al. **Pharmacol Ther** 1989;40(3):373–82 (53 ref.)

The involvement of platelet-activating factor (PAF)-induced monocyte activation and tumor necrosis factor (TNF) production in shock. Bonavida B, et al. **Prog Clin Biol Res** 1989;308:485–9

Effect of platelet-activating factor (PAF) administration in chronically instrumented sheep—analysis of PAF in plasma. Gasser H, et al. **Prog Clin Biol Res** 1989;308:447–53

Systemic and renal hemodynamic response to platelet activating factor. Schirmer WJ, et al. **Prog Clin Biol Res** 1989;299:227–32

Central regulation of gastric acid secretion by platelet-activating factor in anesthesized rats. Cucala M, et al. **Prostaglandins** 1989 Feb;37(2):275–85

The effects of platelet-activating factor on flow rate and eicosanoid release in the isolated perfused rat gastric vascular bed. Dembinska-Kiec A, et al. **Prostaglandins** 1989 Jan;37(1):69–91

Effect of inhaled platelet-activating factor on circulating neutrophils and platelets in vivo and ex vivo in man. Kioumis I, et al. **Prostaglandins** 1988 Sep;36(3):343–54

PAF increases vascular permeability in selected tissues: effect of BN-52021 and L-655,240. Sirois MG, et al. **Prostaglandins** 1988 Nov;36(5):631–44

Release of eicosanoids in rat peritoneal cavity stimulated with platelet-activating factor (PAF). Effect of the PAF-antagonist BN-52021. Jancar S, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jul; 37(1):23–4

Effect of PAF on selected smooth muscle preparations. Jancar S, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jan;63(1):157–60

Effect of platelet-activating factor (PAF) on cytosolic free calcium in human peripheral blood mononuclear leukocytes. Ng DS, et al. **Res Commun Chem Pathol Pharmacol** 1989 May; 64(2):351–4

Platelet-activating factor-induced functional changes in the guinea pig trachea in vitro. Inoue T, et al. **Respir Physiol** 1989 Aug;77(2):157–71

Effect of intrarenal infusion of synthetic PAF-acether in dogs. Santos JC, et al. **Rev Esp Fisiol** 1988 Sep;44(3):273–7

Effects of salbutamol on bronchoconstriction, bronchial hyperresponsiveness, and leucocyte responses induced by platelet activating factor in man. Chung KF, et al. **Thorax** 1989 Feb;44(2):102–7

Effects of platelet activating factor on airway calibre, airway responsiveness, and circulating cells in asthmatic subjects. Chung KF, et al. **Thorax** 1989 Feb;44(2):108–15

The thieno-triazolodiazepine WEB 2086 inhibits platelet aggregation and ATP release from porcine platelets induced by platelet activating factor (PAF). Griffin KJ, et al. **Thromb Res** 1988 Jul 15;51(2):219–23

Platelet-activating factor and red blood cells. Joseph R, et al. **Thromb Res** 1989 Mar 15;53(6):629–33

PAF-induced platelet aggregation and TXB2 formation [letter] Küster LJ, et al. **Thromb Res** 1989 Jan 1;53(1):89–90

Response to platelet-activating factor in human platelets stored and aged in plasma. Decrease in aggregation, phosphoinositide turnover, and receptor affinity. Shukla SD, et al. **Transfusion** 1989 Jul-Aug;29(6):528–33

Platelet activating factor as a mediator of equine cell locomotion. Dawson J, et al. **Vet Res Commun** 1988; 12(2–3):101–7

[The effect of platelet-activating factor (PAF) inhalation on airway responsiveness in beagles] Kamiya I, et al. **Arerugi** 1988 May;37(5):274–82 (Eng. Abstr.) **(Jpn)**

[Effects of platelet activating factor on the bronchial musculature and vasculature in dogs] Misawa M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jul;26(7):737–44 (Eng. Abstr.) **(Jpn)**

[Platelet activating factor in nephrology: physiopathologic and therapeutic perspectives] Santos OF, et al. **Rev Paul Med** 1988 Jul-Aug;106(4):231–4 (36 ref.) **(Por)**

[The thrombocyte-activation factor and endotoxin-induced thrombocyte activation] Lomazova KD, et al. **Biull Eksp Biol Med** 1989 May;107(5):538–40 (Eng. Abstr.) **(Rus)**

[Cardiodepressive effect of platelet activating factor] Vornovitskiĭ EG, et al. **Biull Eksp Biol Med** 1989 Jan; 107(1):27–30 (Eng. Abstr.) **(Rus)**

[Effect of analogs and antagonists of the thrombocyte-activating factor (PAF) on blood platelet aggregation] Lakin KM, et al. **Farmakol Toksikol** 1988 Jul-Aug;51(4):113–23 (123 ref.) **(Rus)**

[Platelet activating factor—a new agent to control asthma] Bylin G. **Lakartidningen** 1989 Feb 22;86(8):620 **(Swe)**

PHYSIOLOGY

PAF-acether (platelet-activating factor). Benveniste J. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:355–8 (27 ref.)

Recent studies on icosanoids and PAF-acether modulation of some central neurosecretions in the rat. Dray F, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:383–6

Platelet-activating factor in organ transplant rejection. Foegh ML, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:377–82

Platelet-activating factor in renal diseases. Camussi G, et al. **Am J Nephrol** 1989;9 Suppl 1:23–6 (28 ref.)

Fluorophore-labeled ether lipids: substrates for enzymes of the platelet-activating factor cycle in peritoneal polymorphonuclear leukocytes. Schindler PW, et al. **Anal Biochem** 1988 Nov 1;174(2):477–84

The role of platelet-activating factor in cerebral ischemia and related disorders. Braquet P, et al. **Ann N Y Acad Sci** 1989;559:296–312 (75 ref.)

The amplificative role of PAF-acether in the oxidative stress following reperfusion of ischemic stomach. Droy-Lefaix MT, et al. **Basic Life Sci** 1988;49:887–90

Endothelin-induced mobilization of Ca2+ and the possible involvement of platelet activating factor and thromboxane A2. Takayasu M, et al. **Biochem Biophys Res Commun** 1989 Apr 28;160(2):751–7

Synergism between chemotactic peptide and platelet-activating factor in stimulating thromboxane B2 and leukotriene B4 biosynthesis in human neutrophils. Tanizawa H, et al. **Biochem Pharmacol** 1989 Aug 1; 38(15):2559–63

Platelet-activating factor: a paracrine factor in preimplantation stages of reproduction? Harper MJ. **Biol Reprod** 1989 May;40(5):907–13 (71 ref.)

Platelet activating factor as a mediator in cerebral ischemia and related disorders. Braquet P, et al. **Biomed Biochim Acta** 1988;47(10–11):S195–218 (75 ref.)

Platelet activating factor in pulmonary pathobiology. McManus LM, et al. **Clin Chest Med** 1989 Mar;10(1):107–18 (93 ref.)

Role of thromboxane A2 as a mediator of platelet-activating-factor-induced aggregation of human platelets. McCulloch RK, et al. **Clin Sci** 1989 Jul; 77(1):99–103

Induction of tissue injury and altered cardiovascular performance by platelet-activating factor: relevance to multiple systems organ failure. Lefer AM. **Crit Care Clin** 1989 Apr;5(2):331–52 (146 ref.)

Embryo-derived platelet activating factor: a preimplantation embryo mediator of maternal recognition of pregnancy. O'Neill C. **Domest Anim Endocrinol** 1987 Apr;4(2):69–85 (66 ref.)

Role of leukotrienes and platelet activating factor in acute gastric mucosal lesions in rats. Konturek SJ, et al. **Eur J Pharmacol** 1989 May 19;164(2):285–92

Attenuation of burn-induced changes in hemodynamics and

glucose metabolism by the PAF antagonist SRI 63–675. Lang C, et al. **Eur J Pharmacol** 1988 Nov 1;156(2):207–14
Occurrence of platelet-activating factor (PAF) in normal rat stomach and alteration of PAF level by water immersion stress. Sugatani J, et al. **FASEB J** 1989 Jan;3(1):65–70
Platelet-activating factor and inflammatory bowel disease. Stenson WF. **Gastroenterology** 1988 Nov;95(5):1416–9
Platelet-activating factor as a mediator of bronchial asthma [published erratum appears in Hosp Pract [Off] 1989 Jan 15;24(1):17] Wasserman SI. **Hosp Pract [Off]** 1988 Nov 15; 23(11):49–58 (4 ref.)
Role of cytokines and platelet-activating factor in microvascular immune injury. Braquet P, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):88–100 (68 ref.)
Comparative studies of human eosinophil migration towards platelet-activating factor and leukotriene B4. Czarnetzki BM, et al. **Int Arch Allergy Appl Immunol** 1989; 88(1–2):191–3
PAF-acether and experimental anaphylaxis as a model for asthma. Pretolani M, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):149–53 (22 ref.)
Role of paf-acether in the mediation of pathophysiological responses to aggregated immunoglobulins. Studies with the platelet-activating factor receptor antagonist BN 52021. Fernandez-Gallardo S, et al. **Int J Immunopharmacol** 1988; 10(4):353–60
Platelet function: aggregation by PAF or sequestration in lung is not modified during immediate or late allergen-induced bronchospasm in man. Hemmendinger S, et al. **J Allergy Clin Immunol** 1989 May;83(5):990–6
Platelet-activating factor and airway reactivity. Townley RG, et al. **J Allergy Clin Immunol** 1989 Jun;83(6):997–1010 (130 ref.)
A possible role for PAF in allergen-induced late responses: modification by a selective antagonist. Abraham WM, et al. **J Appl Physiol** 1989 May;66(5):2351–7
Involvement of protein kinase C in platelet-activating factor-stimulated diacylglycerol accumulation in murine peritoneal macrophages. Uhing RJ, et al. **J Biol Chem** 1989 Jun 5;264(16):9224–30
The regulation of platelet-activating factor production in endothelial cells. The role of calcium and protein kinase C. Whatley RE, et al. **J Biol Chem** 1989 Apr 15; 264(11):6325–33
Evidence for the role of platelet-activating factor in immune complex vasculitis in the rat. Warren JS, et al. **J Clin Invest** 1989 Feb;83(2):669–78
IL-1-induced adhesion of polymorphonuclear leukocytes to cultured human endothelial cells. Role of platelet-activating factor. Breviario F, et al. **J Immunol** 1988 Nov 15;141(10):3391–7
Lipid inflammatory mediators in glomerulonephritis [editorial] Lianos EA. **J Lab Clin Med** 1989 May; 113(5):535–6
Enhanced glomerular thromboxane A2 mediates some pathophysiologic effect of platelet-activating factor in rabbit nephrotoxic nephritis: evidence from biochemical measurements and inhibitor trials. Macconi D, et al. **J Lab Clin Med** 1989 May;113(5):549–60
Role of platelet activating factor in endotoxemic acute renal failure in the male rat. Tolins JP, et al. **J Lab Clin Med** 1989 Mar;113(3):316–24
Pharmacological modulation of platelet activating factor (PAF)-induced bronchoconstriction and hypertension in anaesthetized guinea-pigs. Iwama T, et al. **J Pharm Pharmacol** 1988 Aug;40(8):544–7
Antagonism of platelet activating factor receptor binding and stimulated phosphoinositide-specific phospholipase C in rabbit platelets. Morrison WJ, et al. **J Pharmacol Exp Ther** 1989 Sep;250(3):831–5
Role of platelet activating factor in propagation of cardiac damage during myocardial ischemia. Stahl GL, et al. **J Pharmacol Exp Ther** 1988 Mar;244(3):898–904
Effect of etizolam (Depas) on production of superoxide anion by platelet-activating factor and N-formyl-methionyl-leucyl-phenylalanine-stimulated guinea pig polymorphonuclear leukocytes. Aratani H, et al. **Jpn J Pharmacol** 1988 Jun;47(2):200–3
Actions of cyclosporin A on cultured rat mesangial cells. Rodríguez-Puyol D, et al. **Kidney Int** 1989 Feb;35(2):632–7
Hypothesis: a central role for platelet activating factor in the pathogenesis of pre-eclampsia. Rodrigues FA, et al. **Med Hypotheses** 1989 Apr;28(4):285–6
Plates and anti-asthma drugs. Williams WR, et al. **Pneumonol Pol** 1988 Oct;56(10):457–62
The potential role of platelet-activating factor (PAF) in shock, sepsis and adult respiratory distress syndrome (ARDS). Braquet P, et al. **Prog Clin Biol Res** 1989; 308:425–39 (63 ref.)
Platelet-activating factor (PAF) and blastocyst-endometrial interactions. Harper MJ, et al. **Prog Clin Biol Res** 1989; 294:305–15
The pathophysiological role of PAF in anaphylactic lung reaction in the guinea pig and in endotoxin shock evidenced by the specific PAF-antagonist WEB 2086. Heuer H, et al. **Prog Clin Biol Res** 1989;308:925–30
The role of platelet-activating factor (PAF) in immune and cytotoxic processes. Mencia-Hurerta JM, et al. **Prog Clin Biol Res** 1989;308:441–6 (17 ref.)
The involvement of platelet activating factor in ovulation. Abisogun AO, et al. **Science** 1989 Jan 20;243(4889):381–3
Effect of platelet-activating factor on platelets and vascular endothelium. Braquet P, et al. **Semin Thromb Hemost** 1989 Apr;15(2):184–96 (159 ref.)
Eicosanoids and platelet activating factor mechanisms in organ rejection. Foegh ML. **Transplant Proc** 1988 Dec; 20(6):1260–3 (21 ref.)
[Effects of platelet activating factor on blood platelets] Fu JM. **Sheng Li Ko Hsueh Chin Chan** 1989 Jan;20(1):40–4 (45 ref.) **(Chi)**
[Renal diseases and platelet activating factor] Pirotzky E, et al. **Pediatrie** 1989;44(3):163–7 (Eng. Abstr.) **(Fre)**
[Function of platelet activating factor in asthma] Ukena D, et al. **Dtsch Med Wochenschr** 1988 Oct 21;113(42):1651–6 (50 ref.) **(Ger)**
[The significance of platelet activating factor and its antagonists in bronchial asthma] Beume R, et al. **Med Klin** 1989 Jun 15;84(6):286–93 (66 ref.) **(Ger)**
[Platelet activating factor produces platelet activating factor, comes to nothing] Nolte D. **Med Klin** 1989 Jun 15; 84(6):319–20 **(Ger)**
[Effect of platelet-activating factor (PAF) on blood pressure, peripheral, coronary and renovascular system] Kawaguchi H, et al. **Kokyu To Junkan** 1988 Aug;36(8):819–25 (30 ref.) **(Jpn)**
[Platelet-activating factor and disease] Makino S. **Kokyu To Junkan** 1989 Feb;37(2):118–26 (75 ref.) **(Jpn)**
[Interactions between platelet activating factor and leukotrienes during endotoxin shock in the rat] Yoshikawa D, et al. **Masui** 1988 Dec;37(12):1460–5 (Eng. Abstr.) **(Jpn)**
[Role of polymorphonuclear leukocytes and oxygen-derived free radicals in the formation of gastric mucosal lesions induced by platelet-activating factor] Yoshikawa T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Apr;86(4):858–64 (Eng. Abstr.) **(Jpn)**
[Thrombocyte activation factor: biochemical and pathophysiologic aspects] Svetlov SI, et al. **Patol Fiziol Eksp Ter** 1989 Jan–Feb;(1):70–5 (52 ref.) **(Rus)**
[Clinical significance of studies of platelet activating factor (review of the literature)] Daĭkhin EI, et al. **Vopr Med Khim** 1989 Mar–Apr;35(2):10–6 (88 ref.) **(Rus)**

TOXICITY

Effects of anti-asthma drugs on PAF-induced death in mice. Subissi A, et al. **Prostaglandins** 1988 Dec;36(6):797–806

PLATELET ADHESIVENESS

see related

PLATELET MEMBRANE GLYCOPROTEINS

Adsorption of coagulation proteins and adhesion and activation of platelets at the blood-solid interface. An experimental study of human whole blood. Nygren H, et al. **Acta Physiol Scand** 1988 Aug;133(4):573–7
Platelets adhere to thrombin-treated endothelial cells in vitro. Kaplan JE, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H423–33
Blood platelets are concentrated near the wall and red blood cells, in the center in flowing blood. Aarts PA, et al. **Arteriosclerosis** 1988 Nov–Dec;8(6):819–24
Axial dependence of platelet-collagen interactions in flowing blood. Upstream thrombus growth impairs downstream platelet adhesion. Sakariassen KS, et al. **Arteriosclerosis** 1989 Jan–Feb;9(1):33–42
Red blood cell effect on platelet adhesion and aggregation in low-stress shear flow. Myth or fact? Alkhamis TM, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):868–73
Acute and chronic canine ex vivo blood interactions with NHLBI-DTB primary reference materials. McCoy TJ, et al. **Biomaterials** 1989 May;10(4):243–50
Platelet accumulation and turnover on de-endothelialized aortae in rats. Winocour PD, et al. **Br J Exp Pathol** 1989 Jun;70(3):337–48
Effect of serum cholesterol on platelet adhesiveness in vascular complications of diabetes mellitus. Ramani A, et al. **Indian Heart J** 1988 May–Jun;40(3):144–7
Influence of plasticised poly(vinyl chloride) on platelet adhesion and platelet aggregates. Jones C, et al. **Int J Artif Organs** 1989 Jul;12(7):466–70
Identification of glycoprotein IV (CD36) as a primary receptor for platelet-collagen adhesion. Tandon NN, et al. **J Biol Chem** 1989 May 5;264(13):7576–83
Inhibition of platelet adhesion to glow discharge modified surfaces. Sharma CP, et al. **J Biomater Appl** 1987 Apr; 1(4):533–52
Platelet adhesion onto protein-coated and uncoated polyetherurethaneurea having tertiary amino groups in the substituents and its derivatives. Ito Y, et al. **J Biomed Mater Res** 1989 Feb;23(2):191–206
Heparin immobilization onto segmented polyurethane-urea surfaces—effect of hydrophilic spacers. Park KD, et al. **J Biomed Mater Res** 1988 Nov;22(11):977–92
Glycoprotein IV mediates thrombospondin-dependent platelet-monocyte and platelet-U937 cell adhesion. Silverstein RL, et al. **J Clin Invest** 1989 Aug;84(2):546–52
Adhesion of platelets to purified solid-phase von Willebrand factor: effects of wall shear rate, ADP, thrombin, and ristocetin. Olson JD, et al. **J Lab Clin Med** 1989 Jul; 114(1):6–18
Increased platelet volume—sign of impaired thrombopoiesis in diabetes mellitus. Tschöpe D, et al. **Klin Wochenschr** 1989 Feb 15;67(4):253–9
Platelets: receptors, adhesion, secretion. Part A. **Methods Enzymol** 1989;169:1–512
Platelet interaction with artificial surfaces: in vitro evaluation. Lindon JN, et al. **Methods Enzymol** 1989;169:104–17
Ex vivo measurement of platelet adhesion to polymeric surfaces. Park K, et al. **Methods Enzymol** 1989;169:91–104
Measurements of platelet interaction with components of the vessel wall in flowing blood. Sakariassen KS, et al. **Methods Enzymol** 1989;169:37–70 (82 ref.)
Dark-field electron microscopy of platelet adhesive macromolecules. Slayter HS. **Methods Enzymol** 1989; 169:326–35
Laminin receptor on platelets is the integrin VLA-6. Sonnenberg A, et al. **Nature** 1988 Dec 1;336(6198):487–9
The molecular biology of platelet and endothelial cell adhesion receptors. Fitzgerald LA, et al. **Prog Clin Biol Res** 1988;283:387–418 (122 ref.)
Platelets and the adhesion receptor superfamily. Ginsberg MH, et al. **Prog Clin Biol Res** 1988;283:171–95 (125 ref.)
The role of tumor-induced platelet aggregation, platelet adhesion and adhesive proteins in tumor metastasis. Karpatkin S, et al. **Prog Clin Biol Res** 1988;283:585–606
Molecular basis of platelet adhesion to collagen. Santoro SA. **Prog Clin Biol Res** 1988;283:291–314 (62 ref.)
Cellular adhesion: GPIIb-IIIa as a prototypic adhesion receptor. Plow EF, et al. **Prog Hemost Thromb** 1989; 9:117–56 (281 ref.)
Asialo von Willebrand factor enhances platelet adhesion to vessel subendothelium. Bastida E, et al. **Thromb Haemost** 1988 Aug 30;60(1):30–4
Growth and stability of thrombi in flowing citrated blood: assessment of platelet-surface interactions with computer-assisted morphometry. Sakariassen KS, et al. **Thromb Haemost** 1988 Dec 22;60(3):392–8
Platelet adherence and thrombus formation with flowing human blood on atherosclerotic plaque: reduced thrombogenicity of Watanabe-heritable hyperlipidemic rabbit aortic subendothelium. Lawrence JB, et al. **Thromb Res** 1989 Apr 15;54(2):99–114
Turnover of platelets adhered to fibrinogen-coated surfaces. Wang HM, et al. **Thromb Res** 1989 May 1;54(3):165–75
[Alteration of platelet function in myeloproliferative disorder and its clinical significance] Ni HY, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Sep;19(3):312–6 (Eng. Abstr.) **(Chi)**
[Platelets and myocardial ischemia] Zhao ZQ, et al. **Sheng Li Ko Hsueh Chin Chan** 1989 Jan;20(1):36–9 (29 ref.) **(Chi)**
[Behavior of platelets and leukocytes on the luminal surface of small caliber prosthetic grafts] Matsumoto M. **Nippon Geka Hokan** 1988 Sep 1;57(5):351–9 (Eng. Abstr.) **(Jpn)**
[A case of temporal arteritis with polyneuropathy, posterior ischemic optic neuropathy (PION), and enhanced platelet adhesion and aggregation] Kohtoku N, et al. **Ryumachi** 1988 Jun;28(3):156–63 (Eng. Abstr.) **(Jpn)**
[Functional status of thrombocytes and the anti-aggregative activity of the vascular wall in dyslipoproteinemias and ischemic heart disease] Mikhailova IA, et al. **Ter Arkh** 1989; 61(2):101–4 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

Effects of contrast media on endothelial cell monolayers under controlled flow conditions. Grabowski EF. **Am J Cardiol** 1989 Sep 5;64(9):10E–15E
The preparation of a urokinase-AT-III-PGE1-methyldopa complex, and its effects on platelet adhesion, coagulation times, protein adsorption, and fibrinolysis. Chandy T, et al. **Artif Organs** 1989 Jun;13(3):229–37
The effect of antihypertensive drugs on protein adsorption, platelet adhesion, and blood coagulation toward an artificial surface. Sharma CP, et al. **Artif Organs** 1989 Jun; 13(3):219–28
Dipyridamole inhibits red cell-induced platelet activation. Saniabadi AR, et al. **Atherosclerosis** 1989 Apr; 76(2–3):149–54
Thrombin induced platelet adhesion to endothelium is modified by endothelial derived relaxing factor (EDRF). Venturini CM, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):349–54
Alpha-tocopherol, an effective inhibitor of platelet adhesion. Jandak J, et al. **Blood** 1989 Jan;73(1):141–9
Inhibition of platelet-von Willebrand factor binding to platelets by adhesion site peptides. Parker RI, et al. **Blood** 1989 Sep;74(4):1226–30
Inhibition of platelet adhesion to fibronectin, fibrinogen, and von Willebrand factor substrates by complex gangliosides. Santoro SA. **Blood** 1989 Feb;73(2):484–9
Eicosapentaenoic acid alters vascular reactivity and platelet adhesion in Watanabe heritable hyperlipidemic rabbits. Pfister SL, et al. **Eur J Pharmacol** 1989 Feb 14;161(1):85–9
Flavones in citrus exhibit antiadhesive action on platelets. Robbins RC. **Int J Vitam Nutr Res** 1988;58(4):418–21
Effects of contrast media on erythrocyte and platelet interactions with endothelial cell monolayers exposed to flowing blood. Grabowski EF. **Invest Radiol** 1988 Nov;23 Suppl 2:S351–8
In vitro platelet interactions with a heparin-polyvinyl alcohol hydrogel. Cholakis CH, et al. **J Biomed Mater Res** 1989

Apr;23(4):399–415

Inhibition of ticlopidine of platelet adhesion to human venous subendothelium in patients with diabetes. Orlando E, et al. **J Lab Clin Med** 1988 Nov;112(5):583–8

Interaction of thrombin–stimulated platelets with vitronectin (S–protein of complement) substrate: inhibition by a monoclonal antibody to glycoprotein IIb–IIIa complex. Thiagarajan P, et al. **Thromb Haemost** 1988 Dec 22; 60(3):514–7

[Clinical and hemorrheologic study in treating the blood–stasis syndrome in angina pectoris with huoxue granule] Hu YB, et al.
Chung Hsi I Chieh Ho Tsa Chih 1988 Oct;8(10):599–600, 581 (Eng. Abstr.) **(Chi)**

[Evaluation of the effect of polopirin S on platelet adhesiveness in chronic peripheral circulatory failure in arteriosclerosis] Obara A, et al. **Wiad Lek** 1988 Nov 1; 41(21):1427–31 (Eng. Abstr.) **(Pol)**

PLATELET AGGREGATION

see related
PLATELET MEMBRANE GLYCOPROTEINS

Platelet function in classic migraine during attack–free periods. Hedman C, et al. **Acta Neurol Scand** 1988 Oct; 78(4):271–7

Pathogenesis of cardiovascular disorders in streptozotocin–induced diabetes in rat. II. Correlation between lipid peroxides, thromboxane A2/prostacyclin, and platelet aggregation in different stages of diabetes. Somova L, et al. **Acta Physiol Pharmacol Bulg** 1988; 14(3):57–62

Vasospasm and injuries of cerebral arteries induced by activation of platelets in vivo: it may be due to thromboxane A2. Yamazaki H, et al.
Adv Prostaglandin Thromboxane Leukotriene Res 1989; 19:289–92

Ability of whole blood aggregometer to detect platelet hyperaggregability. Abbate R, et al. **Am J Clin Pathol** 1989 Feb;91(2):159–64

Platelet parameters and aggregation in essential and reactive thrombocytosis. Sehayek E, et al. **Am J Clin Pathol** 1988 Oct;90(4):431–6

Platelet function and ABO blood group. Sweeney JD, et al. **Am J Clin Pathol** 1989 Jan;91(1):79–81

Platelet activation during pain crisis in sickle cell anemia patients. Beurling–Harbury C, et al. **Am J Hematol** 1989 Aug;31(4):237–41

Evaluation of the clinical utility of platelet aggregation studies. Remaley AT, et al. **Am J Hematol** 1989 Jul; 31(3):188–93

Spontaneous platelet aggregation in type IIB Tampa von Willebrand disease is inhibited by the 52/48–kDa fragment of normal von Willebrand factor, which contains the GPIb binding domain. Saba HI, et al. **Am J Hematol** 1989 Mar; 30(3):150–3

Heparin–dependent in vitro aggregation of normal platelets by plasma of a patient with heparin–induced skin necrosis: specific diagnostic test for a rare side effect. Stricker H, et al. **Am J Med** 1988 Nov;85(5):721–4

Evidence that smoking alters prostacyclin formation and platelet aggregation in women who use oral contraceptives. Mileikowsky GN, et al. **Am J Obstet Gynecol** 1988 Dec; 159(6):1547–52

Dietary fats and platelet function among Finnish men. Salo MK. **Ann Med** 1989 Feb;21(1):39–46

Hormonal contraceptive increases plasma lipid peroxides in female rats. Relationship to platelet aggregation and lipid biosynthesis. Ciavatti M, et al. **Arteriosclerosis** 1989 Jan–Feb;9(1):84–9

Platelet aggregations, fatty acids, clotting factors and serum lipids in rural and urban blacks, and urban whites in South Africa. Chetty N, et al. **Artery** 1988;15(5):234–49

Red blood cell effect on platelet adhesion and aggregation in low–stress shear flow. Myth or fact? Alkhamis TM, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):868–73

Effect of dried garlic on blood coagulation, fibrinolysis, platelet aggregation and serum cholesterol levels in patients with hyperlipoproteinemia. Harenberg J, et al.
Atherosclerosis 1988 Dec;74(3):247–9

In vitro study of vascular endothelial injury by activated platelets and its prevention. Kishi Y, et al.
Atherosclerosis 1989 Apr;76(2–3):95–101

Reduced platelet aggregability and increased vascular prostacyclin formation in a variant rat strain (IVA–SIV) with endogenous hypertriglyceridemia. Lovati MR, et al. **Atherosclerosis** 1988 Nov;74(1–2):169–77

Platelet aggregating activity in the plasma of patients with established thrombosis. Jackson SP, et al.
Aust N Z J Med 1989 Apr;19(2):126–31

Monitoring of the activation of receptor–operated calcium channels in human platelets. Alonso MT, et al.
Biochem Biophys Res Commun 1989 Jul 14;162(1):24–9

Interrelation of platelet aggregation, release reaction and thromboxane A2 production. Balduini CL, et al.
Biochem Biophys Res Commun 1988 Oct 31;156(2):823–9

Cleavage of a 100 kDa membrane protein (aggregin) during thrombin–induced platelet aggregation is mediated by the high affinity thrombin receptors. Puri RN, et al.
Biochem Biophys Res Commun 1989 Aug 15;162(3):1017–24

The role of microtubules in platelet secretory release. Berry S, et al. **Biochim Biophys Acta** 1989 Jun 15;1012(1):46–56

Effect of intracellular Na+ on platelet aggregation and Ca2+ mobilization. Kitagawa S, et al.
Biochim Biophys Acta 1989 May 10;1011(2–3):117–21

The occupancy of glycoprotein IIb–IIIa complex modulates thrombin activation of human platelets. Sinigaglia F, et al.
Biochim Biophys Acta 1989 Sep 4;984(2):225–30

Platelet aggregation induced by latex particles. I. Effects of size, surface potential and hydrophobicity of particles. Miyamoto M, et al. **Biomaterials** 1989 May;10(4):251–7

Relationship between fatty acid pattern and platelet aggregation in long–term insulin–dependent type I diabetics. Schimke E, et al. **Biomed Biochim Acta** 1988; 47(10–11):S274–7

The secretory release reaction initiated by complement proteins C5b–9 occurs without platelet aggregation through glycoprotein IIb–IIIa. Ando B, et al. **Blood** 1989 Feb;73(2):472–8

A form of protease nexin I is expressed on the platelet surface during platelet activation. Gronke RS, et al. **Blood** 1989 Feb;73(2):472–8

Heparin binding to resting and activated platelets. Horne MK 3d, et al. **Blood** 1989 Jul;74(1):238–43

Biochemical mechanisms of platelet activation. Kroll MH, et al. **Blood** 1989 Sep;74(4):1181–95 (211 ref.)

Studies on the mechanism of expression of secreted fibrinogen on the surface of activated human platelets. Legrand C, et al. **Blood** 1989 Apr;73(5):1226–34

Role of botrocetin in platelet agglutination: formation of an activated complex of botrocetin and von Willebrand factor. Read MS, et al. **Blood** 1989 Aug 15;74(3):1031–5

Association of transient ischaemic attack in alcohol withdrawal with changes in haemostasis. Neiman J.
Br J Addict 1988 Dec;83(12):1457–9

Platelet hyperaggregability in two patients with Klinefelter's syndrome complicated by leg ulcers [letter] Higgins EJ, et al. **Br J Dermatol** 1989 Feb;120(2):322

Association of fibrinogen with human platelets pretreated with chymotrypsin or aggregated with ADP or thrombin: an immunocytochemical study. Suzuki H, et al.
Br J Exp Pathol 1989 Aug;70(4):479–88

A plasma inhibitor of platelet aggregation in patients with Lassa fever. Cummins D, et al. **Br J Haematol** 1989 Aug; 72(4):543–8

Platelet aggregation induced by type IIb platelet von Willebrand factor. Gralnick HR, et al. **Br J Haematol** 1989 Feb;71(2):253–8

PL2–49, a monoclonal antibody against glycoprotein IIb which is a platelet activator. Morel MC, et al.
Br J Haematol 1989 Jan;71(1):57–63

Lupus anticoagulant induces a selective defect in thrombin–mediated endothelial prostacyclin release and platelet aggregation. Schorer AE, et al. **Br J Haematol** 1989 Mar;71(3):399–407

Increased platelet reactivity in pregnancy–induced hypertension and uncomplicated diabetic pregnancy: an indication for antiplatelet therapy? Greer IA, et al.
Br J Obstet Gynaecol 1988 Nov;95(11):1204–6

Familial exudative vitreoretinopathy (FEVR) and platelet dysfunction [letter] Friedrich CA, et al.
Br J Ophthalmol 1989 Jun;73(6):477–8

Platelet inhibition by endothelium–derived relaxing factor from the rabbit perfused aorta. Bult H, et al.
Br J Pharmacol 1988 Dec;95(4):1308–14

Lipids and platelet function in runners. Haigh JR, et al.
Br J Sports Med 1988 Jun;22(2):66–70

Plasma eicosanoids, platelet function and cold sensitivity. Wilkinson D, et al. **Br J Surg** 1989 Apr;76(4):401–5

Platelet aggregability in sleep–related stroke. Voll CL, et al. **Can J Neurol Sci** 1989 Feb;16(1):71–7

Involvement of platelet membrane glycoprotein Ib and glycoprotein IIb/IIIa complex in thrombin–dependent and –independent platelet aggregations induced by tumor cells. Kitagawa H, et al. **Cancer Res** 1989 Feb 1;49(3):537–41

Human rhabdosarcoma cell–induced aggregation of blood platelets. Longenecker GL, et al. **Cancer Res** 1989 Jan 1; 49(1):16–9

Relative effects of cigarette smoke and ethanol on acute platelet thrombus formation in stenosed canine coronary arteries. Keller JW, et al. **Cardiovasc Res** 1988 Jan; 22(1):73–8

Influence of ciprofloxacin on collagen– and ADP–induced platelet aggregation in vitro. Menz G, et al.
Chemioterapia 1987 Jun;6(2 Suppl):324–5

The effect of edible black tree fungus (Auricuaria auricula) on experimental atherosclerosis in rabbits. Fan YM, et al.
Chin Med J [Engl] 1989 Feb;102(2):100–5

A new variant of platelet aggregation defect. Shen D, et al. **Chin Med J [Engl]** 1988 Aug;101(8):543–6

Impaired endothelium–dependent relaxation to aggregating platelets and related vasoactive substances in porcine coronary arteries in hypercholesterolemia and atherosclerosis. Shimokawa H, et al. **Circ Res** 1989 May; 64(5):900–14

N–acetylcysteine potentiates platelet inhibition by endothelium–derived relaxing factor. Stamler J, et al.
Circ Res 1989 Sep;65(3):789–95

Endothelium–dependent relaxation in response to aggregating platelets in porcine femoral veins and its modulation by diet. Komori K, et al. **Circulation** 1989 Aug; 80(2):401–9

Myocardial inotropic responses to aggregating platelets and modulation by the endocardium. Shah AM, et al.
Circulation 1989 Jun;79(6):1315–23

Platelet thermophysiology: a new field of investigation dependent upon an improved sub–ambient platelet aggregometer. Trenchard PM, et al.
Clin Phys Physiol Meas 1989 Feb;10(1):65–74

Thrombocytosis in active rheumatoid arthritis. Relation to other parameters of inflammatory activity and confounding effect of automated cell counting. Dahlqvist SR, et al.
Clin Rheumatol 1988 Sep;7(3):335–41

Altered platelet function during mental stress and adrenaline infusion in humans: evidence for an increased aggregability in vivo as measured by filtragometry. Larsson PT, et al.
Clin Sci 1989 Apr;76(4):369–76

Role of thromboxane A2 as a mediator of platelet–activating–factor–induced aggregation of human platelets. McCulloch RK, et al. **Clin Sci** 1989 Jul; 77(1):99–103

Characterization of the normal bovine platelet aggregation response. Bondy GS, et al. **Comp Biochem Physiol [C]** 1989; 92(1):67–72

Correlated measurement of platelet release and aggregation in whole blood. Ault KA, et al. **Cytometry** 1989 Jul; 10(4):448–55

The relationship of insulin antibodies, platelet–fixing immune complexes and platelet–associated IgG to in vitro platelet aggregation and thromboxane B2 synthesis in childhood type I (insulin–dependent) diabetes mellitus. Triolo G, et al. **Diabetes Res** 1989 Jan;10(1):1–5

Inhibitory action of gliclazide on platelet functions. Mizuno A, et al. **Diabetes Res Clin Pract** 1989 Aug 1;7(2):141–7

Release of human epidermal growth factor from platelets in accordance with aggregation in vitro. Nakamura T, et al. **Endocrinol Jpn** 1989 Feb;36(1):23–8

Platelet aggregation in platelet rich plasma and whole blood in 18 patients affected by idiopathic myelofibrosis. Balduini CL, et al. **Eur J Haematol** 1988 Sep;41(3):267–72

Platelet kinetics following carotid endarterectomy: the effect of aspirin and patch angioplasty. Meek AC, et al.
Eur J Vasc Surg 1988 Apr;2(2):99–104

Human platelets release alpha–6–L–fucosyltransferase upon activation. Antoniewicz J, et al. **FEBS Lett** 1989 Feb 27; 244(2):388–90

"Sticky platelet syndrome": a congenital platelet abnormality predisposing to thrombosis? Mammen EF, et al.
Folia Haematol (Leipz) 1988;115(3):361–5

Platelet aggregability in patients with common carotid artery ligation. Mariak Z, et al. **Folia Haematol (Leipz)** 1988; 115(5):689–93

Blood platelet calcium content and aggregation behaviour in myeloproliferative disorders and secondary thrombocytosis. Mindner K, et al.
Folia Haematol (Leipz) 1988;115(4):461–4

Platelet reactivity: a contribution to age dependence studies. Pařízek M, et al. **Folia Haematol (Leipz)** 1988;115(5):621–7

In vitro platelet function in infantile autism. Safai–Kutti S, et al. **Folia Haematol (Leipz)** 1988;115(6):897–901

The effect of alkaline phosphatase on platelet aggregation. Weitberg AB. **Haematologia (Budap)** 1989;22(2):65–8

Interaction of blood platelets with the vessel wall. Nievelstein PF, et al. **Haemostasis** 1988;18(4–6):342–59 (132 ref.)

Altered platelet function in cirrhosis of the liver: impairment of inositol lipid and arachidonic acid metabolism in response to agonists. Laffi G, et al. **Hepatology** 1988 Nov–Dec;8(6):1620–6

Platelet aggregating activity in human embryo culture media free of PAF–acether. Amiel ML, et al. **Hum Reprod** 1989 Apr;4(3):327–30

Platelet calcium and quenched–flow aggregation kinetics in essential hypertension. Taylor MA, et al. **Hypertension** 1989 Jun;13(6 Pt 1):558–66

Platelet function in type I (insulin dependent) diabetes without vascular disease. Dinda AK, et al.
Indian J Med Res 1989 Jun;90:159–62

Platelet functions in acute viral hepatitis. Prasad HS, et al.
Indian J Med Res 1988 Jul;88:42–6

Role of immunoglobulin G in platelet aggregation by viridans group streptococci. Sullam PM, et al. **Infect Immun** 1988 Nov;56(11):2907–11

Inhibition of human platelet aggregation and secretion by ant venom and a compound isolated from venom. Hink WF, et al. **Inflammation** 1989 Apr;13(2):175–84

The effect of low molecular weight dextran on early platelet deposition onto vascular grafts. Al–Huneidi W, et al.
Int Angiol 1988 Jul–Sep;7(3):266–9

Influence of plasticised poly(vinyl chloride) on platelet adhesion and platelet aggregates. Jones C, et al.
Int J Artif Organs 1989 Jul;12(7):466–70

Human breast and colon carcinomas express cysteine proteinase activities with pro–aggregating and pro–coagulant properties. Grignani G, et al.
Int J Cancer 1988 Oct 15;42(4):554–7

Platelet aggregation and arrhythmias after myocardial infarction. Gębalska J, et al. **Int J Cardiol** 1989 Apr; 23(1):137–8

Effects of leptospiral lipopolysaccharide on rabbit platelets. Isogai E, et al. **Int J Med Microbiol** 1989 Jul;271(2):186–96

Mechanisms of platelet activation by cultured human cancer cells and cells freshly isolated from tumor tissues. Grignani G, et al. **Invasion Metastasis** 1989;9(5):298–309

Platelet aggregation in transient global amnesia. Matias–Guiu J, et al. **Ital J Neurol Sci** 1989 Apr;10(2):171–4

Hypercholesterolemia causes generalized impairment of

endothelium-dependent relaxation to aggregating platelets in porcine arteries. Shimokawa H, et al. **J Am Coll Cardiol** 1989 May;13(6):1402-8

Effect of platelet depletion on lung vasoconstriction in heparin-protamine reactions. Montalescot G, et al. **J Appl Physiol** 1989 May;66(5):2344-50

Rapid purification and partial characterization of human platelet glycoprotein IIIb. Interaction with thrombospondin and its role in platelet aggregation. McGregor JL, et al. **J Biol Chem** 1989 Jan 5;264(1):501-6

Characterization of a novel membrane glycoprotein involved in platelet activation. Scott JL, et al. **J Biol Chem** 1989 Aug 15;264(23):13475-82

Functional expression of the amplification reaction between serotonin and epinephrine on platelets. De Clerck F, et al. **J Cardiovasc Pharmacol** 1988;11 Suppl 1:S1-5

Second messenger function of phosphatidic acid in platelet activation. Kroll MH, et al. **J Cell Physiol** 1989 Jun; 139(3):558-64

Measurement of the release of adenine nucleotides during platelet aggregation by small-bore-column isocratic high-performance liquid chromatography. Bodola F, et al. **J Chromatogr** 1988 Dec 28;459:281-9

Fibrinogen Stony Brook, a heterozygous A alpha 16Arg——Cys dysfibrinogenemia. Evaluation of diminished platelet aggregation support and of enhanced inhibition of fibrin assembly. Galanakis DK, et al. **J Clin Invest** 1989 Jul;84(1):295-304

Early stages of hemostatic plug formation studied by thin-sectioning and freeze-fracturing electron microscopy. Hatano J, et al. **J Electron Microsc (Tokyo)** 1988; 37(3):125-33

Visualization of vascular platelet aggregation by plastic embedding and light microscopy. Berliner S, et al. **J Exp Pathol** 1989;4(2):79-85

Changes in platelet function due to hypertension: comparison of experimental hypertension with spontaneous hypertension in rats. Umegaki K, et al. **J Hypertens** 1989 Jan;7(1):13-9

Blood platelets and angiotensin II: angiotensin II release after platelet aggregation. Ferri C, et al. **J Hypertens Suppl** 1988 Nov;6(1):S69-71

Bovine platelet aggregation by Fusobacterium necrophorum. Kanoe M, et al. **J Med Microbiol** 1989 May;29(1):13-7

Hematologic dysfunction in Lassa fever. Fisher-Hoch S, et al. **J Med Virol** 1988 Oct;26(2):127-35

Platelet activation in outpatients undergoing esophagogastroduodenoscopy. Sagripanti A, et al. **J Nucl Med Allied Sci** 1989 Jan-Mar;33(1):22-5

In vivo method for the assessment of platelet accumulation. Smith D, et al. **J Pharmacol Methods** 1989 Mar;21(1):45-59

The effect of transfusion of fresh whole blood versus platelet concentrates after cardiac operations. A scanning electron microscope study of platelet aggregation on extracellular matrix. Lavee J, et al. **J Thorac Cardiovasc Surg** 1989 Feb; 97(2):204-12

Platelet reactivity in human aortic grafts: a prospective, randomized midterm study of platelet adherence and release products in Dacron and polytetrafluoroethylene conduits. Wakefield TW, et al. **J Vasc Surg** 1989 Feb; 9(2):234-43

Platelet aggregation in feline cardiomyopathy. Helenski CA, et al. **J Vet Intern Med** 1987 Jan-Mar;1(1):24-8

Transient platelet aggregation as a mechanism of unstable angina. Aggressive treatment with coronary angioplasty. Pimentel Filho WA, et al. **Jpn Heart J** 1988 Jul;29(4):485-9

Platelet function testing in the pony. Boudreaux MK, et al. **Lab Anim Sci** 1988 Aug;38(4):448-51

Reduced platelet aggregation in long-distance runners [letter; comment] **Lancet** 1989 Jun 17;1(8651):1398-9. **Comment on:** Lancet 1989 May 6;1(8645):1013

Reduced platelet aggregation in long-distance runners [letter] [see comments] Watts EJ, et al. **Lancet** 1989 May 6; 1(8645):1013. **Comment in:** Lancet 1989 Jun 17;1(8651):1398-9

Tissue-type plasminogen activator inhibits aggregation of platelets in vitro. Mizuta T, et al. **Life Sci** 1988; 43(12):955-63

Bernard-Soulier syndrome: whole blood diagnostic assays of platelets. Nichols WL, et al. **Mayo Clin Proc** 1989 May; 64(5):522-30

Intralipid infusion into humans reduces in vitro platelet aggregation and alters platelet lipid composition. Aviram M, et al. **Metabolism** 1989 Apr;38(4):343-7

Fixation platelets and platelet agglutination/aggregation tests. Brinkhous KM, et al. **Methods Enzymol** 1989; 169:149-63

Platelet aggregation measured in vitro by microscopic and electronic particle counting. Frojmovic MM, et al. **Methods Enzymol** 1989;169:134-49

Platelet aggregation measured by the photometric method. Zucker MB. **Methods Enzymol** 1989;169:117-33

Analysis of the ultrastructure of the platelets during the process of aggregation, with emphasis in the cytoskeleton and membranous changes. Cañizares C, et al. **Microsc Electron Biol Celular** 1988 Jun;12(1):1-15

Comparison of intimal platelet accumulation in cerebral arteries in two experimental models of subarachnoid hemorrhage. Honma Y, et al. **Neurosurgery** 1989 Apr; 24(4):487-90

von Willebrand factor synthesized by endothelial cells from a patient with type IIB von Willebrand disease supports platelet adhesion normally but has an increased affinity for platelets. de Groot PG, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3793-7

Thrombus imaging in a primate model with antibodies specific for an external membrane protein of activated platelets. Palabrica TM, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1036-40

Human neutrophils and mononuclear cells inhibit platelet aggregation by releasing a nitric oxide-like factor. Salvemini D, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(16):6328-32

Role of ADP in platelet aggregation and fibrinogen binding induced by prostaglandin endoperoxides: studies in a patient with a selective defect of ADP-induced platelet aggregation. Cattaneo M, et al. **Prog Clin Biol Res** 1988; 283:279-83

Aggregin: the platelet receptor mediating activation by ADP. Colman RW, et al. **Prog Clin Biol Res** 1988;283:263-77

Inhibition of platelet aggregation by a monoclonal antibody to a pan-myeloid antigen (D-51). Gareau R, et al. **Prog Clin Biol Res** 1988;283:285-9

The role of tumor-induced platelet aggregation, platelet adhesion and adhesive proteins in tumor metastasis. Karpatkin S, et al. **Prog Clin Biol Res** 1988;283:585-606

Decompression inducible platelet aggregation (DIPA) is inhibited by Arg-Gly-Asp. Murayama M. **Prog Clin Biol Res** 1988;283:203-9

Role of GPIV as a platelet receptor for collagen adhesion. Tandon NN, et al. **Prog Clin Biol Res** 1988;283:315-8

Thrombospondin promotes the aggregation of platelets. Tuszynski GP, et al. **Prog Clin Biol Res** 1988;283:211-7

Platelet membrane ultrastructure and its changes during platelet activation. White JG. **Prog Clin Biol Res** 1988; 283:1-32 (42 ref.)

Postprandial hyperlipemia inhibits platelet aggregation without affecting prostanoid metabolism. Nimpf J, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jul; 37(1):7-13

Plasma eicosanoids and platelet aggregation as parameters to monitor tumor patients. A study in 12 healthy subjects to obtain baseline levels. Petit AJ, et al. **Prostaglandins Leukot Essent Fatty Acids** 1988 Nov; 34(2):113-8

Platelet deposition at angioplasty sites and its relation to restenosis in human iliac and femoropopliteal arteries. Minar E, et al. **Radiology** 1989 Mar;170(3 Pt 1):767-72

The effect of red cells on platelet aggregation: a study with the electronic whole blood aggregometer. Balduini CL, et al. **Scand J Clin Lab Invest** 1988 Jun;48(4):337-40

Histamine is an intracellular messenger mediating platelet aggregation. Saxena SP, et al. **Science** 1989 Mar 24; 243(4898):1596-9

Effect of platelet-activating factor on platelets and vascular endothelium. Braquet P, et al. **Semin Thromb Hemost** 1989 Apr;15(2):184-96 (159 ref.)

Platelets and atherosclerosis. Hoak JC. **Semin Thromb Hemost** 1988 Apr;14(2):202-5 (13 ref.)

Platelet function during the acute phase of dengue hemorrhagic fever. Srichaikul T, et al. **Southeast Asian J Trop Med Public Health** 1989 Mar; 20(1):19-25

Selective platelet deposition during focal cerebral ischemia in cats. Jafar JJ, et al. **Stroke** 1989 May;20(5):664-7

Positive platelet scintigram of a vertebral aneurysm presenting thromboembolic transient ischemic attacks. Maruyama M, et al. **Stroke** 1989 May;20(5):687-90

The relationship between the structure of a thrombus or a hemostatic plug and the mechanisms involved in its formation. Mustard JF. **Thromb Diath Haemorrh Suppl** 1968;28:57-64; discussion 75-95 (24 ref.)

Platelet interaction with vessel wall and collagen in pigs with homozygous von Willebrand's disease associated with abnormal collagen aggregation. Badimon L, et al. **Thromb Haemost** 1989 Feb 28;61(1):57-64

Spontaneous whole blood platelet aggregation in insulin-dependent diabetes mellitus: an evaluation in an epidemiologic study. Cho NH, et al. **Thromb Haemost** 1989 Feb 28;61(1):127-30

Dose-response aggregometry in maternal/neonatal platelets. Gader AM, et al. **Thromb Haemost** 1988 Oct 31;60(2):314-8

Aging and diabetes increase the aggregating potency of rat skin collagen towards normal platelets. Grigorova-Borsos AM, et al. **Thromb Haemost** 1988 Aug 30;60(1):75-8

A monoclonal antibody to the human platelet glycoprotein IIb/IIIa complex induces platelet activation. Modderman PW, et al. **Thromb Haemost** 1988 Aug 30;60(1):68-74

The influence of adrenaline on gender difference in adenosine diphosphate-induced aggregation of platelets in the rat. Oyekan AO, et al. **Thromb Haemost** 1988 Dec 22; 60(3):481-5

Effect of a moderate fish intake on platelet aggregation in human platelet-rich plasma. van Houwelingen AC, et al. **Thromb Haemost** 1988 Jun 16;59(3):507-13

Changes of spontaneous and induced platelet aggregation in the presence of a human endothelial cell monolayer. Altorjay I, et al. **Thromb Res** 1989 Jul 1;55(1):69-77

Modified forms of low density lipoprotein affect platelet aggregation in vitro. Aviram M. **Thromb Res** 1989 Mar 15;53(6):561-7

Measuring platelet function with platelet shape change, an early event in aggregation. Beaumont DO, et al. **Thromb Res** 1989 Jan 15;53(2):109-27

Continuous measurement of shear-induced platelet aggregation. Fukuyama M, et al. **Thromb Res** 1989 May 1;54(3):253-60

Platelet aggregation: the use of optical density fluctuations to study microaggregate formation in platelet suspension. Gabbasov ZA, et al. **Thromb Res** 1989 May 1;54(3):215-23

Transient aggregation resistance of human blood platelets in fresh plasma. I. Methodology. Hardeman MR, et al. **Thromb Res** 1989 Jun 15;54(6):719-31

Exercise-induced changes in platelet aggregation; a comparison of whole blood and platelet rich plasma techniques. Hendra TJ, et al. **Thromb Res** 1988 Dec 1; 52(5):443-51

Evidence for the presence of red and white cells within "platelet" aggregates formed in whole-blood. Joseph R, et al. **Thromb Res** 1989 Mar 1;53(5):485-91

Electron microscopic study of platelet agglutination induced by thrombotic thrombocytopenic purpura plasma containing 37-KDa platelet agglutinating protein. Li JZ, et al. **Thromb Res** 1989 Sep 15;55(6):757-66

Endothelium-dependent potentiation of human platelet aggregation. Loeb AL, et al. **Thromb Res** 1989 Jun 1; 54(5):477-86

A computerized analysis of platelet aggregation detected by ultrasound. Mahony C, et al. **Thromb Res** 1989 Aug 1; 55(3):351-60

Is there any correlation between platelet aggregation, plasma lipoproteins, apoproteins and membrane fluidity of human blood platelets? Malle E, et al. **Thromb Res** 1989 Jan 15; 53(2):181-90

DIPA (decompression-inducible platelet aggregation) and hemostasis: vascular occlusion and its prevention, in the web of the frog's foot. Murayama M. **Thromb Res** 1989 Jun 1;54(5):493-8

Platelet aggregation in whole blood: is the response to adrenaline, 5-hydroxytryptamine and PAF a direct consequence of stimulation by these agonists? Petty AC, et al. **Thromb Res** 1989 Apr 15;54(2):151-9

Decreased aggregability of platelets in hydatidiform molar pregnancy [letter] Rákóczi I, et al. **Thromb Res** 1988 Oct 1;52(1):75-6

The Na+/H+ exchange is required for platelet aggregation induced by AVP (arginine-vasopressin). Toledo T, et al. **Thromb Res** 1989 Aug 1;55(3):389-93

Response to platelet-activating factor in human platelets stored and aged in plasma. Decrease in aggregation, phosphoinositide turnover, and receptor affinity. Shukla SD, et al. **Transfusion** 1989 Jul-Aug;29(6):528-33

Na+/H+ exchange as a modulator of platelet activation. Siffert W, et al. **Trends Biochem Sci** 1988 Apr;13(4):148-51 (28 ref.)

Dietary fatty acids, serum lipids, platelet biochemistry and function. Galli C, et al. **Wien Klin Wochenschr** 1989 Apr 14;101(8):267-71 (16 ref.)

Dietary lipids, platelet function and arterial thrombosis. Hornstra G. **Wien Klin Wochenschr** 1989 Apr 14; 101(8):272-7 (45 ref.)

[Ultrastructural and aggregation studies of the thrombocytes during cytopheresis] Dobreva A, et al. **Eksp Med Morfol** 1988;27(2):42-5 (Eng. Abstr.) **(Bul)**

[Thrombocyte aggregation and the secretion reaction in hemophilia patients] Lisichkov T. **Vutr Boles** 1989; 28(2):81-4 (Eng. Abstr.) **(Bul)**

[Correlation of platelet aggregation, platelet cAMP content and TXB2 synthesis in patients with diabetes mellitus] Chen SY. **Chung Hua I Hsueh Tsa Chih** 1988 Oct;68(10):561-4, 38 (Eng. Abstr.) **(Chi)**

[The diagnostic value of platelet malondialdehyde/malondialdehyde-a in blood in hypercoagulable states and thrombotic diseases] Zheng RL, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Nov;27(11):683-5, 716-7 (Eng. Abstr.) **(Chi)**

[Alteration of platelet function in myeloproliferative disorder and its clinical significance] Ni HY, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Sep;19(3):312-6 (Eng. Abstr.) **(Chi)**

[Platelets and myocardial ischemia] Zhao ZQ, et al. **Sheng Li Ko Hsueh Chin Chan** 1989 Jan;20(1):36-9 (29 ref.) **(Chi)**

[The importance of studying circulating platelet aggregation in cerebrovascular stroke] Krajíčková D, et al. **Sb Ved Pr Lek Fak Karlovy Univerzity Hradci Kralove Suppl** 1987;30(5):681-6 (Eng. Abstr.) **(Cze)**

[Platelet aggregation in asthma] Palma-Carlos ML, et al. **Allerg Immunol (Paris)** 1989 May;21(5):177-82 (Eng. Abstr.) **(Fre)**

[Development of aggregation in store thrombocyte concentrates] Aulmann HM, et al. **Beitr Infusionther** 1988; 21:103-8 **(Ger)**

[Examination of platelet aggregation and ultrastructure in patients with non-Hodgkin's lymphoma] Ignatova E, et al. **Folia Haematol (Leipz)** 1988;115(4):603-8 (Eng. Abstr.) **(Ger)**

[Value of the endothelium-derived relaxant factor as a mediator in vascular regulation. Effect of the vascular endothelium on vascular tone and thrombocyte function] Bassenge E, et al. **Fortschr Med** 1988 Jul 10;106(20):428-30 (21 ref.) (Eng. Abstr.) **(Ger)**

[Thrombotic thrombocytopenic purpura (Moschcowitz syndrome) in a patient with EPH gestosis. The pathophysiologic principle of HELLP syndrome? On the question of the identity of the HELLP syndrome with

thrombotic thrombocytopenic purpura] Staiger HJ, et al. **Geburtshilfe Frauenheilkd** 1989 Jun;49(6):597–600 (Eng. Abstr.) **(Ger)**

[The flow properties of blood and their clinical significance in the arterial vascular patient] Kiesewetter H, et al. **Internist (Berlin)** 1989 Jul;30(7):420–8 (99 ref.) **(Ger)**

[Measurement of bleeding time and study of thrombocyte aggregation. Standardization of methods, normal values and results in patients with suspected hemorrhagic diathesis] Thommen D, et al. **Schweiz Med Wochenschr** 1988 Oct 29;118(43):1559–67 (Eng. Abstr.) **(Ger)**

[Differences in platelet aggregation in various microangiopathic complications of diabetes mellitus] Szénási P, et al. **Orv Hetil** 1989 Mar 19;130(12):617–20 (21 ref.) (Eng. Abstr.) **(Hun)**

[Evaluation of platelet aggregation on whole blood with an impedantiometric technic in athletes and sedentary subjects subjected to submaximal physical exertion] Craveri A, et al. **Minerva Cardioangiol** 1988 Oct;36(10):541–7 (Eng. Abstr.) **(Ita)**

[Spontaneous platelet aggregation after experimental focal ischemia in the rabbit. "Sensitivity", "specificity" and value of the test used] Taccola A, et al. **Minerva Med** 1989 Jan; 80(1):71–7 (Eng. Abstr.) **(Ita)**

[Platelet activation during exacerbation of bronchial asthma--thrombin induced ATP release from washed platelets and plasma beta-TG, PF4, beta-TG/PF4 ratio] Yasuba H, et al. **Arerugi** 1988 Dec;37(12):1152–60 (Eng. Abstr.) **(Jpn)**

[Blood coagulation and metastasis] Niitsu Y, et al. **Gan To Kagaku Ryoho** 1989 Apr;16(4 Pt 2–1):1223–32 (Eng. Abstr.) **(Jpn)**

[Significance of multiple analysis of platelet Ca2+ mobilization by using some available methods measuring cytosolic Ca2+ concentration, membrane-bound Ca2+ and Ca2+ flux across the plasma membrane] Katabami F. **Hokkaido Igaku Zasshi** 1989 May;64(3):328–48 (Eng. Abstr.) **(Jpn)**

[Studies on platelets and coagulofibrinolytic system in ischemic heart disease] Kuroiwa Y. **Igaku Kenkyu** 1988 Dec;58(6):383–95 (Eng. Abstr.) **(Jpn)**

[Platelet hyperaggregability in a patient with pheochromocytoma] Oka T, et al. **Masui** 1988 Aug; 37(8):993–6 (Eng. Abstr.) **(Jpn)**

[Platelet activity as an etiological factor of diabetic retinopathy] Takigawa Y, et al. **Nippon Ganka Gakkai Zasshi** 1988 Aug;92(8):1375–9 (Eng. Abstr.) **(Jpn)**

[The platelet aggregation inhibition activity of placental brush border membrane] Hisanaga H, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jan;41(1):95–6 **(Jpn)**

[Platelet function and intracellular Ca2+ mobilization, especially with regard to morphological abnormalities] Akutsu Y, et al. **Rinsho Byori** 1989 Apr;Spec No 81:16–27 **(Jpn)**

[Reduced platelet aggregation in hereditary haemorrhagic telangiectasia] Endo Y. **Rinsho Byori** 1989 Apr;Spec No 81:46–53 **(Jpn)**

[Hemostatic tests for the diagnosis of thrombosis. Activated platelet] Fujimura K, et al. **Rinsho Byori** 1988 Jun; 36(6):640–5 **(Jpn)**

[Hemostatic tests for the diagnosis of thrombosis. Examination of thrombotic disease by impedance aggregometry using whole blood] Mizuno A, et al. **Rinsho Byori** 1988 Jun;36(6):632–9 **(Jpn)**

[Multipathway leading to platelet aggregation and in vivo platelet secretion in cerebral ischemia] Uchiyama S, et al. **Rinsho Shinkeigaku** 1988 Sep;28(9):1065–71 (Eng. Abstr.) **(Jpn)**

[A case of temporal arteritis with polyneuropathy, posterior ischemic optic neuropathy (PION), and enhanced platelet adhesion and aggregation] Kohtoku N, et al. **Ryumachi** 1988 Jun;28(3):156–63 (Eng. Abstr.) **(Jpn)**

[Usefulness of the tourniquet test in the evaluation of hemostasis. I. The blood coagulation and fibrinolysis systems and blood platelets in the early normal puerperium] Małofiejew M. **Ginekol Pol** 1988 Oct;59(10):606–12 (Eng. Abstr.) **(Pol)**

[Usefulness of the tourniquet test in the evaluation of hemostasis. II. Activities of thromboxanes and prostacyclins in the early normal puerperium] Małofiejew M. **Ginekol Pol** 1988 Oct;59(10):613–7 (Eng. Abstr.) **(Pol)**

[Platelet and platelet-leukocyte aggregates in the blood of patients during hemodialysis] Myśliewiec M, et al. **Pol Arch Med Wewn** 1985 May;73(5):298–304 (Eng. Abstr.) **(Pol)**

[EDRF--endothelium-derived relaxant factor: its properties and biological significance] Pietraszek MH, et al. **Pol Tyg Lek** 1988 Jun 13;43(24):763–4 (Eng. Abstr.) **(Pol)**

[Platelet membrane glycoproteins and their role in the receptor activity of blood platelets] Pawlowska Z, et al. **Postepy Biochem** 1988;34(3):183–207 (163 ref.) **(Pol)**

[Behavior of the platelet number and aggregation in elderly patients with coronary disease subjected to stress] Pierri H, et al. **Arq Bras Cardiol** 1988 Dec;51(6):451–3 (Eng. Abstr.) **(Por)**

[Measurement of the concentration of free cytoplasmic calcium in the process of platelet aggregation using a fluorescent method] Popov EG, et al. **Biofizika** 1989 Mar–Apr;34(2):263–6 (Eng. Abstr.) **(Rus)**

[Structural-functional state of platelets at the initial stage of aggregation] Samal' AB, et al. **Biofizika** 1989 Mar–Apr; 34(2):267–71 (Eng. Abstr.) **(Rus)**

[Effect of a diet fortified with polyunsaturated fatty acids of the omega-3 group on plasma lipids and apolipoproteins and thrombocyte aggregation in patients with newly developed stenocardia] Kalinkina OM. **Biull Vsesoluznogo Kardiol Nauchn Tsentra AMN SSSR** 1989;12(1):92 **(Rus)**

[Effect of emotional stress on the aggregation of platelets, content of zinc, copper, manganese, calcium and magnesium in plasma, erythrocytes and hair of healthy persons with different types of behavior] Gribauskas PS, et al. **Fiziol Cheloveka** 1988 Sep–Oct;14(5):857–62 **(Rus)**

[Aggregation capability of thrombocytes in rabbits with acute hypoxia and pathogenetic prophylaxis of thromboembolic complications] Bakanskaia VV. **Fiziol Zh** 1988 Nov–Dec; 34(6):13–8 (Eng. Abstr.) **(Rus)**

[Seasonal changes in the thrombocyte aggregation activity of rats] Zakrevskaia AL, et al. **Fiziol Zh SSSR** 1988 Dec; 74(12):1765–8 (Eng. Abstr.) **(Rus)**

[Adrenergic receptors of thrombocytes] Alekseeva EA, et al. **Gematol Transfuziol** 1989 Feb;34(2):49–54 (69 ref.) **(Rus)**

[The locomotive-contractile system of thrombocytes--an effector apparatus of their hemostatic function] Ermolaeva TA. **Gematol Transfuziol** 1989 Feb;34(2):43–9 (59 ref.) **(Rus)**

[The pH of the culture medium as a factor regulating the functional properties of thrombocytes] Samal' AB, et al. **Gematol Transfuziol** 1989 Feb;34(2):35–8 (Eng. Abstr.) **(Rus)**

[Effect of lipids on thrombocyte aggregation in patients with ischemic heart disease] Bornikov VT, et al. **Kardiologiia** 1989 Jun;29(6):22–4 (Eng. Abstr.) **(Rus)**

[Newly developed stenocardia: functional activity of thrombocytes] Shalaev SV, et al. **Kardiologiia** 1988 Jul; 28(7):63–8 (Eng. Abstr.) **(Rus)**

[Thrombocytic hemostasis and the prostaglandin system at early stages of arterial hypertension] Kolomiets VI, et al. **Klin Med (Mosk)** 1989 Apr;67(4):82–5 (Eng. Abstr.) **(Rus)**

[A device for studying platelet aggregation] Ivanov VI, et al. **Lab Delo** 1988;(11):15–7 (Eng. Abstr.) **(Rus)**

[Use of the BIAN photocolorimeter for studying the aggregation of thrombocytes and erythrocytes] Rabinovich BA, et al. **Lab Delo** 1989;(2):73–4 **(Rus)**

[A method of determining the speed of platelet aggregation] Romanova EP, et al. **Lab Delo** 1988;(11):12–3 (Eng. Abstr.) **(Rus)**

[Evaluation of methods of studying hemostasis] Tarasova LN, et al. **Lab Delo** 1989;(5):18–21 (Eng. Abstr.) **(Rus)**

[A simplified method of determining the aggregation and disaggregation of thrombocytes] Zakhariia EA, et al. **Lab Delo** 1989;(1):36–8 (Eng. Abstr.) **(Rus)**

[The effect of normobaric hypoxic stimulation on the aggregation properties of blood cells in an irradiated host] Sobolev AA, et al. **Radiobiologiia** 1989 Jan–Feb;29(1):79–82 (Eng. Abstr.) **(Rus)**

[Characteristics of the aggregative function of thrombocytes in amyloidosis] Charyev BM, et al. **Ter Arkh** 1988; 60(6):85–8 (Eng. Abstr.) **(Rus)**

[Functional status of thrombocytes and the anti-aggregative activity of the vascular wall in dyslipoproteinemias and ischemic heart disease] Mikhailova IA, et al. **Ter Arkh** 1989; 61(2):101–4 (Eng. Abstr.) **(Rus)**

[New approaches to the study of thrombocyte aggregation in patients with dilated cardiomyopathy] Skvortsov AA, et al. **Ter Arkh** 1989;61(2):95–7 (Eng. Abstr.) **(Rus)**

[Criteria of the evaluation of the aggregative capacity of thrombocytes in patients with chronic renal failure during hemodialysis] Rud'ko IA, et al. **Urol Nefrol (Mosk)** 1988 May–Jun;(3):48–53 (Eng. Abstr.) **(Rus)**

[Pathogenesis of thrombus formation in varicose veins] Vedenskiĭ AN, et al. **Vestn Khir** 1988 Sep;141(9):41–3 (Eng. Abstr.) **(Rus)**

[Characteristics of various indicators of the rheological properties of the blood in patients with initial manifestations of cerebrovascular insufficiency and ischemic stroke] Eninia GI, et al. **Zh Nevropatol Psikhiatr** 1988;88(9):23–8 (Eng. Abstr.) **(Rus)**

[Rheologic properties of the blood and the system of hemostasis in patients with circulatory encephalopathy treated by hemosorption] Fedin AI, et al. **Zh Nevropatol Psikhiatr** 1989;89(6):72–7 (Eng. Abstr.) **(Rus)**

[The effect of moderate physical activity on thrombocyte aggregation in persons with ischemic heart disease] Ciko Z, et al. **Vojnosanit Pregl** 1988 Nov–Dec;45(6):403–6 (Eng. Abstr.) **(Scr)**

DRUG EFFECTS

Phorbol-myristate-acetate-induced platelet aggregation in the presence of inhibitors. Jerushalmy Z, et al. **Acta Haematol (Basel)** 1988;80(4):210–5

Effects of dietary linoleic acid and gamma linolenic acid on platelets of patients with multiple sclerosis. Mcgregor L, et al. **Acta Neurol Scand** 1989 Jul;80(1):23–7

Effects of some calcium antagonists on aggregation by adrenalin and serotonin and on alpha-adrenoceptor radioligand binding in human platelets. Vinge E, et al. **Acta Physiol Scand** 1988 Jul;133(3):407–16

Inhibition of phospholipase C dependent processes by U-73, 122. Bleasdale JE, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:590–3

Further studies with 5E and 5Z analogues of PGI2 in platelets and vasculature. Oliva D, et al. **Adv Prostaglandin Thromboxane Leukotriene Res** 1989; 19:172–5

The pharmacological effects of allicin, a constituent of garlic oil. Mayeux PR, et al. **Agents Actions** 1988 Aug; 25(1–2):182–90

Effect of ketotifen and disodium cromoglycate on human platelet aggregation. García Mesa M, et al. **Allergol Immunopathol (Madr)** 1989 Jan–Feb;17(1):33–4

A trial of dipyridamole and aspirin in the prevention of smoking-induced changes in platelets and endothelium in men with coronary artery disease. Davis JW, et al. **Am J Cardiol** 1989 Jun 15;63(20):1450–4

Effects of contrast media on endothelial cell monolayers under controlled flow conditions. Grabowski EF. **Am J Cardiol** 1989 Sep 5;64(9):10E–15E

Resolution of spontaneous contrast with platelet disaggregatory therapy (trifluoperazine). Mahony C, et al. **Am J Cardiol** 1989 Apr 15;63(13):1009–10

Taurine modulates platelet aggregation in cats and humans. Hayes KC, et al. **Am J Clin Nutr** 1989 Jun;49(6):1211–6

Declining platelet counts and platelet aggregation during porcine VIII:C infusions. Green D, et al. **Am J Med** 1989 Feb;86(2):222–4

Epinephrine potentiates human platelet activation but is not an aggregating agent. Lanza F, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1276–88

Failure of aspirin to impair bovine platelet function. Gentry PA, et al. **Am J Vet Res** 1989 Jun;50(6):919–22

Infusion of sodium nitroprusside induces platelet dysfunction in vitro. Hines R, et al. **Anesthesiology** 1989 Apr;70(4):611–5

Effects of glycosaminoglycans and protamine chloridrate on platelet aggregation induced by collagen and thrombin. Luzzatto G, et al. **Angiology** 1989 Mar;40(3):170–4

Individually controlled aspirin in the long-term treatment of patients with chronic arterial diseases. Misselwitz F, et al. **Angiology** 1989 May;40(5):464–71

Inhibition of in vitro platelet aggregation and release and fibrinolysis. Narayanan S. **Ann Clin Lab Sci** 1989 Jul–Aug; 19(4):260–5 (14 ref.)

Inhibition of [3H]platelet activating factor (PAF) binding by Zn2+: a possible explanation for its specific PAF antiaggregating effects in human platelets. Nunez D, et al. **Arch Biochem Biophys** 1989 Aug 1;272(2):466–75

Thrombin-induced platelet aggregation involves an indirect proteolytic cleavage of aggregin by calpain. Puri RN, et al. **Arch Biochem Biophys** 1989 Jun;271(2):346–58

Inhibition of platelet aggregation by idebenone and the mechanism of the inhibition. Suno M, et al. **Arch Gerontol Geriatr** 1989 May;8(3):313–21

Influence of phentolamine on platelet aggregation, thromboxane B2 production and release reaction. Anfossi G, et al. **Arch Int Pharmacodyn Ther** 1988 Nov–Dec; 296:144–54

Passive smoking affects endothelium and platelets. Davis JW, et al. **Arch Intern Med** 1989 Feb;149(2):386–9

Endocrine system--sanguine system relationship: antiaggregant activity of the pineal polypeptidic hormone E5 on blood platelets. Neacşu C. **Arch Roum Pathol Exp Microbiol** 1988 Apr–Jun; 47(2):125–31

Effect of dietary omega-3 fatty acid on serum lipids, platelet function, and atherosclerosis in Watanabe heritable hyperlipidemic rabbits. Clubb FJ Jr, et al. **Arteriosclerosis** 1989 Jul–Aug;9(4):529–37

Arterial blood derived low density lipoprotein increases platelet aggregation and macrophage cholesterol content in comparison to lipoprotein derived from veinous blood. Keidar S, et al. **Artery** 1989;16(2):62–71

Heparin neutralization of antiplatelet effect of aspirin and dipyridamole. Mohammad SF, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):322–7

Platelet activation by oxidatively modified low density lipoproteins. Ardlie NG, et al. **Atherosclerosis** 1989 Apr; 76(2–3):117–24

Does platelet aggregation play a role in the reduction in localized intimal proliferation in normolipidemic pigs with fixed coronary artery stenosis fed dietary fish oil? Hartog JM, et al. **Atherosclerosis** 1989 Mar;76(1):79–88

Dipyridamole inhibits red cell-induced platelet activation. Saniabadi AR, et al. **Atherosclerosis** 1989 Apr; 76(2–3):149–54

The effect of histamine challenge on platelet count and platelet activation. Duggan CJ, et al. **Aust N Z J Med** 1989 Aug;19(4):327–30

The sulfhydryl reagent thimerosal elicits human platelet aggregation by mobilization of intracellular calcium and secondary prostaglandin endoperoxide formation. Hecker M, et al. **Biochem Biophys Res Commun** 1989 Mar 31; 159(3):961–8

Competitive inhibition of tritium-labeled platelet-activating factor binding to rabbit platelet membranes by amiloride and amiloride analogs. Hwang SB. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):165–71

Platelet aggregation is inhibited by long chain acyl-CoA. Lascu I, et al. **Biochem Biophys Res Commun** 1988 Oct

31;156(2):1020–5
The affinities of prostaglandin H2 and thromboxane A2 for their receptor are similar in washed human platelets. Mayeux PR, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):733–9
Altered properties of platelet membrane in childhood obesity. Tangorra A, et al. **Biochem Int** 1988 Nov;17(5):837–46
Prostacyclin inhibits platelet aggregation induced by phorbol ester or Ca2+ ionophore at steps distal to activation of protein kinase C and Ca2+–dependent protein kinases. Siess W, et al. **Biochem J** 1989 Feb 15;258(1):57–65
Phosphorylation–dependent and –independent pathways of platelet aggregation. Watson SP, et al. **Biochem J** 1989 Mar 1;258(2):479–85
Low–density lipoprotein derived from atherosclerotic patients enhances macrophage cholesterol accumulation and in vitro platelet aggregation. Keidar S, et al. **Biochem Med Metab Biol** 1989 Apr;41(2):117–24
Differential effects of dimethyl sulfoxide on human platelet aggregation and arachidonic acid metabolism. Saeed SA, et al. **Biochem Med Metab Biol** 1988 Oct;40(2):143–50
Inhibitory effect of 8–bromo cyclic GMP on an extracellular Ca2+–dependent arachidonic acid liberation in collagen–stimulated rabbit platelets. Matsuoka I, et al. **Biochem Pharmacol** 1989 Jun 1;38(11):1841–7
Iloprost binding and inhibition of aggregation in platelet rich plasma. Differences between normal and type IIa hypercholesterolemic subjects. Oliva DW, et al. **Biochem Pharmacol** 1989 Jan 1;38(1):39–45
Inhibitory effects of phenol derivatives on bovine platelet aggregation and their effects on Ca2+ mobilization. Kitagawa S, et al. **Biochim Biophys Acta** 1989 Mar 28; 1011(1):52–7
Weak inhibition of protein kinase C coupled with various non–specific effects make sphingosine an unsuitable tool in platelet signal transduction studies. Krishnamurthi S, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):258–64
Effect of rat phosphorylcholine–binding protein on platelet aggregation. Nagpurkar A, et al. **Biochim Biophys Acta** 1988 Oct 13;967(1):76–81
Triwaglerin: a potent platelet aggregation inducer purified from Trimeresurus wagleri snake venom. Teng CM, et al. **Biochim Biophys Acta** 1989 Sep 15;992(2):258–64
Effect of specific antagonists on PAF–induced platelet aggregation and release of plasminogen activator. Hofmann B, et al. **Biomed Biochim Acta** 1988;47(10–11):S157–60
Beneficial effects of a thromboxane receptor antagonist (BM 13.505) on platelet hyperreactivity and thromboxane formation in cholesterol–fed rabbits. Löbel P, et al. **Biomed Biochim Acta** 1988;47(10–11):S86–9
Individually controlled acetylsalicyclic acid (ASA) in the long–term treatment of patients with arteriosclerosis. Misselwitz F, et al. **Biomed Biochim Acta** 1988; 47(10–11):S303–6
Structure–activity relationships of synthetic analogues of platelet–activating factor. Ostermann G, et al. **Biomed Biochim Acta** 1988;47(10–11):S233–6
The effects of PAF antagonists on ischaemia and reperfusion arrhythmias and ischaemia–induced platelet aggregation. Wainwright CL, et al. **Biomed Biochim Acta** 1988; 47(10–11):S224–7
Aurin tricarboxylic acid: a novel inhibitor of the association of von Willebrand factor and platelets. Phillips MD, et al. **Blood** 1988 Dec;72(6):1898–903
The response of platelets to epinephrine in storage pool deficiency––evidence pertaining to the role of adenosine diphosphate in mediating primary and secondary aggregation. Weiss HJ, et al. **Blood** 1988 Nov;72(5):1717–25
Effect of etomidate and metronidazole on platelet aggregation [letter] Olesen AS, et al. **Br J Anaesth** 1988 Oct;61(4):514–5
The effect of nisoldipine on whole blood platelet aggregation in patients with Raynaud's phenomenon. Francis JL, et al. **Br J Clin Pharmacol** 1988 Jun;25(6):751–4
Glyceryl trinitrate and platelet aggregation: effects of N–acetyl–cysteine. Hogan JC, et al. **Br J Clin Pharmacol** 1989 May;27(5):617–9
Ristocetin and platelet aggregation [letter] Cattaneo M, et al. **Br J Haematol** 1989 Feb;71(2):301–2
Inhibitory effect of a selective thromboxane A2 receptor antagonist, EP 092, on platelet aggregation in whole blood ex vivo and in vivo. Booth RF, et al. **Br J Pharmacol** 1989 Feb;96(2):395–405
AH6809, a prostaglandin DP–receptor blocking drug on human platelets. Keery RJ, et al. **Br J Pharmacol** 1988 Jul;94(3):745–54
Selective inhibition of adrenaline–induced human platelet aggregation by the structurally related Paf antagonist Ro 19–3704. Schattner M, et al. **Br J Pharmacol** 1989 Apr; 96(4):759–66
A novel property of an aqueous guaraná extract (Paullinia cupana): inhibition of platelet aggregation in vitro and in vivo. Bydlowski SP, et al. **Braz J Med Biol Res** 1988; 21(3):535–8
Inhibition of platelet aggregation by manoalide: preliminary results. Freitas JC, et al. **Braz J Med Biol Res** 1988; 21(2):337–40
Biochemical and pharmacological screening of snake (Bothrops) venoms: characterization of components acting on blood coagulation and platelet aggregation. Zingali RB, et al. **Braz J Med Biol Res** 1988;21(4):763–5
Platelet–tumor cell interaction: effect of prostacyclin and a synthetic analog on metastasis formation. Costantini V, et al. **Cancer Chemother Pharmacol** 1988;22(4):289–93
Identification of a platelet–aggregating factor of murine colon adenocarcinoma 26: Mr 44,000 membrane protein as determined by monoclonal antibodies. Watanabe M, et al. **Cancer Res** 1988 Nov 15;48(22):6411–6
Effects of chronic treatment with adrenaline or propranolol on platelet function and c–AMP levels in the rat. Terres W, et al. **Cardiovasc Res** 1989 Feb;23(2):112–6
Effect of dietary alpha–linolenate/linoleate balance on collagen–induced platelet aggregation and serotonin release in rats. Watanabe S, et al. **Chem Pharm Bull (Tokyo)** 1989 Jun;37(6):1572–5
Effects of tetramethylpyrazine on platelet aggregation. Ding YA, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Dec; 40(6):493–6
Synergistic disaggregation of platelets by tissue–type plasminogen activator, prostaglandin E1, and nitroglycerin. Stamler JS, et al. **Circ Res** 1989 Sep;65(3):796–804
Collagen–stimulated human platelet aggregation is mediated by endogenous calcium–activated neutral protease. Toyo–oka T, et al. **Circ Res** 1989 Feb;64(2):407–10
Protective effects of ONO 3708, a new thromboxane A2 receptor antagonist, during experimental endotoxin shock. Taneyama C, et al. **Circ Shock** 1989 May;28(1):69–77
Effects of aspirin and prostaglandin E1 on in vitro thrombolysis with urokinase. Evidence for a possible role of inhibiting platelet activity in thrombolysis. Terres W, et al. **Circulation** 1989 Jun;79(6):1309–14
Suppression of silent ischemia by metoprolol without alteration of morning increase of platelet aggregability in patients with stable coronary artery disease. Willich SN, et al. **Circulation** 1989 Mar;79(3):557–65
Characterization of human platelet vasopressin receptor and the relation between vasopressin–induced platelet aggregation and vasopressin binding to platelets. Inaba K, et al. **Clin Endocrinol (Oxf)** 1988 Oct;29(4):377–86
Increased platelet sensitivity to collagen–induced aggregation in whole blood patients with systemic sclerosis. Goodfield MJ, et al. **Clin Exp Rheumatol** 1988 Jul–Sep;6(3):285–8
The effect of bopindolol on lipids and platelet aggregation. Pintérová E, et al. **Cor Vasa** 1988;30(5):352–60
Effects of prolonged picotamide therapy on platelet activity in patients with peripheral arterial disease. Danese C, et al. **Curr Med Res Opin** 1988;11(4):221–6
Enhancement of platelet aggregation by low–density lipoproteins from IDDM patients. Watanabe J, et al. **Diabetes** 1988 Dec;37(12):1652–7
Magnesium administration reduces platelet hyperaggregability in NIDDM [letter] Paolisso G, et al. **Diabetes Care** 1989 Feb;12(2):167–8
Effect of gliclazide on thromboxane B2, parameters of haemostasis, fluorescent IgG and lipid peroxides in non–insulin dependent diabetes mellitus. Florkowski CM, et al. **Diabetes Res** 1988 Oct;9(2):87–90
Ex vivo platelet studies following oral nisoldipine in normotensive insulin–dependent diabetics and non–diabetic controls. Hendra TJ, et al. **Diabetes Res** 1988 Jul; 8(3):117–22
Study of the effect of metformin on platelet aggregation in insulin–dependent diabetics. Gin H, et al. **Diabetes Res Clin Pract** 1989 Jan 3;6(1):61–7
Effect of alpha a–adrenoceptor antagonist on platelet activation during insulin–induced hypoglycaemia in type 2 (non–insulin–dependent) diabetes mellitus [letter] Mikhailidis DP, et al. **Diabetologia** 1989 Feb;32(2):147–9
Effect of alpha 2–adrenoceptor antagonist on platelet activation during insulin–induced hypoglycaemia in type 2 (non–insulin–dependent) diabetes mellitus. Takeda H, et al. **Diabetologia** 1988 Sep;31(9):657–63
Hyperreactivity of platelets to serotonin (5–hydroxytryptamine) in patients with cardiovascular diseases. Influence of ketanserin, a serotonin S2–receptor antagonist. De Crée J, et al. **Drugs** 1988;36 Suppl 1:87–91
Serotonin and platelet aggregation in patients with essential hypertension compared with a normotensive control group. Stott DJ, et al. **Drugs** 1988;36 Suppl 1:78–82
The influence of epidural analgesia on platelet function and correlation with plasma bupivacaine concentrations. Odoom JA, et al. **Eur J Anaesthesiol** 1988 Sep;5(5):305–12
Anti–(Arg–Gly–Asp–Ser) antibody and its interaction with fibronectin, fibrinogen and platelets. Cierniewski CS, et al. **Eur J Biochem** 1988 Oct 15;177(1):109–15
Neomycin inhibits platelet functions and inositol phospholipid metabolism upon stimulation with thrombin, but not with ionomycin or 12–O–tetradecanoyl–phorbol 13–acetate. Tysnes OB, et al. **Eur J Biochem** 1988 Oct 15; 177(1):219–23
Inhibitory effect of oral WEB 2086, a novel selective PAF–acether antagonist, on ex vivo platelet aggregation. Adamus WS, et al. **Eur J Clin Pharmacol** 1988;35(3):237–40
Pharmacokinetics of low–dose oral modified release, soluble and intravenous aspirin in man, and effects on platelet function. Bochner F, et al. **Eur J Clin Pharmacol** 1988; 35(3):287–94
The effects of the 5 HT2 antagonist ritanserin on blood pressure and serotonin–induced platelet aggregation in patients with untreated essential hypertension. Stott DJ, et al. **Eur J Clin Pharmacol** 1988;35(2):123–9
Effects of three beta–blockers with different pharmacodynamic properties on platelet aggregation and platelet and plasma cyclic AMP. Winther K, et al. **Eur J Clin Pharmacol** 1988;35(1):17–20
Quantification of extracorporeal platelet deposition in cardiopulmonary bypass: effects of ZK 36374, a prostacyclin analogue. Martin W, et al. **Eur J Nucl Med** 1989;15(3):128–32
Effect of maternal ketorolac administration of platelet function in the newborn. Greer IA, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Dec;29(4):257–60
Human endothelial cells inhibit platelet aggregation by separately stimulating platelet cyclic AMP and cyclic GMP. Alheid U, et al. **Eur J Pharmacol** 1989 May 2; 164(1):103–10
Endothelium–derived relaxing factor inhibits platelet aggregation in human whole blood in vitro and in the rat in vivo. Bhardwaj R, et al. **Eur J Pharmacol** 1988 Nov 15;157(1):83–91
Effects of ONO–3708, an antagonist of the thromboxane A2/prostaglandin endoperoxide receptor, on platelet aggregation and thrombosis. Kondo K, et al. **Eur J Pharmacol** 1989 Apr 25;163(2–3):253–61
Effect of fibrinopeptides A and B on human and rat platelet aggregation in vitro. Moore PK, et al. **Eur J Pharmacol** 1988 Aug 24;153(2–3):231–8
Endothelin inhibits ex vivo platelet aggregation in the rabbit. Thiemermann C, et al. **Eur J Pharmacol** 1988 Dec 6; 158(1–2):181–2
In vitro enhancement of human platelet aggregation by somatostatin. Gazzaniga PP, et al. **Experientia** 1988 Oct 15;44(10):892–4
Thrombin–induced platelet aggregation is affected by external Na+ independently of the Na+/H+ exchange. Agam G, et al. **FEBS Lett** 1989 Feb 13;244(1):231–6
Epinephrine and the Ca2+ ionophore A23187 synergistically induce platelet aggregation without protein kinase C activation. Olbrich C, et al. **FEBS Lett** 1989 Jan 30; 243(2):275–9
Effect of verapamil on platelet aggregation. Glusa E. **Folia Haematol (Leipz)** 1988;115(4):469–73
Platelet aggregation, rheological parameters and blood glucose profiles in diabetic children (type I) treated with human and porcine insulin. Leipnitz G, et al. **Folia Haematol (Leipz)** 1988;115(3):366–70
Inhibition of platelet activation by 2–mercaptopropionylglycin in vitro and in vivo. Loesche W, et al. **Folia Haematol (Leipz)** 1988;115(1–2):185–8
Effect of heparin and related glycosaminoglycans (GAGs) on thrombin–induced platelet aggregation and release. Cofrancesco E, et al. **Haematologica (Pavia)** 1988 Nov–Dec;73(6):471–5
Effects of nicotine on platelet function. Pfueller SL, et al. **Haemostasis** 1988;18(3):163–9
Ticlopidine in China: comparative study on the effect of two dose levels on bleeding time and platelet function in healthy volunteers. Ruan C, et al. **Haemostasis** 1989;19(2):94–9
Effect of single and multiple doses of acetylsalicylic acid on platelet aggregation. Nayak VK, et al. **Indian Heart J** 1988 Jan–Feb;40(1):47–50
Suppression by tetrandrine of human platelet aggregation induced by platelet–activating factor and other stimulants. Teh BS, et al. **Int Arch Allergy Appl Immunol** 1989; 88(3):267–72
Structure–activity relationships and effects of platelet–activating factor antagonists in the hetrazepine series. Weber KH, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):82–7
Short–term effects of alcohol on peripheral blood flow, platelet aggregation and noradrenaline output in normal man. Finch MB, et al. **Int J Tissue React** 1988;10(4):257–60
Effects of contrast media on erythrocyte and platelet interactions with endothelial cell monolayers exposed to flowing blood. Grabowski EF. **Invest Radiol** 1988 Nov;23 Suppl 2:S351–8
Sch 38519, a novel platelet aggregation inhibitor produced by a Thermomonospora sp. Taxonomy, fermentation, isolation, physico–chemical properties, structure and biological properties. Patel M, et al. **J Antibiot (Tokyo)** 1989 Jul;42(7):1063–9
Alterations in platelet aggregation and microsomal benzo–alpha–pyrene hydroxylase activities after exposure of rats to a Prudhoe Bay crude oil. Chaudhury S, et al. **J Biochem Toxicol** 1987 Summer;2:93–104
Echistatin. A potent platelet aggregation inhibitor from the venom of the viper, Echis carinatus. Gan ZR, et al. **J Biol Chem** 1988 Dec 25;263(36):19827–32
Thyroid hormones inhibit platelet function and myosin light chain kinase. Mamiya S, et al. **J Biol Chem** 1989 May 25; 264(15):8575–9
Inhibition of platelet–collagen interaction by propolypeptide of von Willebrand factor. Takagi J, et al. **J Biol Chem** 1989 Apr 15;264(11):6017–20
Platelet shape change and cytoskeletal reorganization on polyurethaneureas. Goodman SL, et al. **J Biomed Mater Res** 1989 Jan;23(1):105–23
Antithrombogenic surfaces: characterization and bioactivity of surface immobilized PGE1–heparin conjugate. Jacobs HA, et al. **J Biomed Mater Res** 1989 Jun;23(6):611–30
Serotonin metabolism and platelet aggregation under antihypertensive treatment with nitrendipine. Sebeková K, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 4:S161–3
Platelet–modified low density lipoprotein induces macrophage cholesterol accumulation and platelet activation. Aviram M, et al. **J Clin Chem Clin Biochem**

1989 Jan;27(1):3–12

Thrombin is an important mediator of platelet aggregation in stenosed canine coronary arteries with endothelial injury. Eidt JF, et al. **J Clin Invest** 1989 Jul;84(1):18–27

Abnormal platelet aggregation in patients with Raynaud's phenomenon. Biondi ML, et al. **J Clin Pathol** 1989 Jul; 42(7):716–8

Treatment of hypertension with captopril: preservation of regional blood flow and reduced platelet aggregation. James IM, et al. **J Hum Hypertens** 1988 Jun;2(1):21–5

Heparin–associated thrombocytopenia: observations on the mechanism of platelet aggregation. Adelman B, et al. **J Lab Clin Med** 1989 Feb;113(2):204–10

Effect of epinephrine on rapid ADP–induced aggregation, protein phosphorylation, and cytoplasmic calcium dynamics of platelets: a quenched–flow study. Carty DJ, et al. **J Lab Clin Med** 1988 Nov;112(5):603–11

Synthesis, platelet aggregation inhibitory activity, and in vivo antithrombotic activity of new 1,4–dihydropyridines. Sunkel CE, et al. **J Med Chem** 1988 Oct;31(10):1886–90

Inhibition of tumor cell–induced platelet aggregation and experimental tumor metastasis by the synthetic Gly–Arg–Gly–Asp–Ser peptide. Ugen KE, et al. **J Natl Cancer Inst** 1988 Nov 16;80(18):1461–6

Chronic naltrexone suppresses platelet aggregation induced by adrenaline and 5–hydroxytryptamine in former heroin addicts. García–Sevilla JA, et al. **J Neural Transm** 1988; 73(2):157–60

Effects of various ginseng saponins on 5–hydroxytryptamine release and aggregation in human platelets. Kimura Y, et al. **J Pharm Pharmacol** 1988 Dec;40(12):838–43

Effect of R and S enantiomers of naproxen on aggregation and thromboxane production in human platelets. Kean WF, et al. **J Pharm Sci** 1989 Apr;78(4):324–7

Trifenagrel: a chemically novel platelet aggregation inhibitor. Abrahams SL, et al. **J Pharmacol Exp Ther** 1989 May; 249(2):359–65

Prothrombotic cytotoxicity of cyanoacrylate tissue adhesive. Papatheofanis FJ. **J Surg Res** 1989 Oct;47(4):309–12

The effects of trapidil and propranolol on platelet aggregation and prostacyclin–thromboxane balance following acute myocardial infarction in rabbits. Lu XA, et al. **J Tongji Med Univ** 1988;8(4):238–42

Heparin–induced platelet activation: the role of thromboxane A2 synthesis and the extent of platelet granule release in two patients. Kappa JR, et al. **J Vasc Surg** 1989 Apr; 9(4):574–9

Stimulation of the growth of metastatic clones of mouse colon adenocarcinoma 26 in vitro by platelet–derived growth factor. Tsuruo T, et al. **Jpn J Cancer Res** 1989 Feb; 80(2):136–40

Studies on antinephritic effect of TJ–8014, a new Japanese herbal medicine, and its mechanisms (1): Effects on original–type anti–GBM nephritis in rats and platelet aggregation. Hattori T, et al. **Jpn J Pharmacol** 1989 Aug; 50(4):477–85

The measurement of platelet aggregation and ATP–release in mice with liver damage induced by carbon tetrachloride (CCl4) using a whole blood aggregometer. Okazaki M, et al. **Jpn J Pharmacol** 1988 Dec;48(4):407–15

Blood platelet function after chronic treatment of rats and guinea pigs with nicotine. Becker BF, et al. **Klin Wochenschr** 1988;66 Suppl 11:28–36

Different effects of furosemide on alpha–adrenoceptors and on platelet aggregation in man. Kribben A, et al. **Klin Wochenschr** 1988 Jul 15;66(14):624–7

Diurnal variation in platelet aggregation responses [editorial] **Lancet** 1988 Dec 17;2(8625):1405–6

Inhibition of platelet aggregation by abnormal high density lipoprotein particles in plasma from patients with hepatic cirrhosis. Desai K, et al. **Lancet** 1989 Apr 1;1(8640):693–5

Neuropeptide Y and platelet aggregation by adrenaline. Dewar HA, et al. **Life Sci** 1989;45(5):367–70

Effects of tannins from different sources on airway epithelial and platelet function. Cloutier MM, et al. **Lung** 1989; 167(2):117–28

PAF–induced platelet aggregation ex vivo as a method for monitoring pharmacological activity in healthy volunteers. Adamus WS, et al. **Methods Find Exp Clin Pharmacol** 1989 Jun;11(6):415–20

Exposure of fibrinogen–binding sites on stored platelets on stimulation by aggregating agents—an electron microscopic study. Kitajima H, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Feb;52(1):93–101

In vitro studies with an anti–platelet monoclonal antibody; P256. Stuttle AW, et al. **Nucl Med Commun** 1988 Oct; 9(10):813–5

Influence of urapidil on in vitro platelet response to adrenaline and other aggregating agents. Emanuelli G, et al. **Pharmacol Res Commun** 1988 Oct;20(10):883–99

Effects of PGI2 and its stable analog on platelet function in hyperlipoproteinemia. Maderna P, et al. **Pharmacol Res Commun** 1988 Sep;20 Suppl 3:85–99 (35 ref.)

Effects of protopine on blood platelet aggregation; 1. Matsuda H, et al. **Planta Med** 1988 Dec;54(6):498–501

Effects of Chinese drugs "xiebai" and "dasuan" on human platelet aggregation (Allium bakeri, A. sativum). Okuyama T, et al. **Planta Med** 1989 Jun;55(3):242–4

Lipoxins A4 and B4: comparison of icosanoids having bronchoconstrictor and vasodilator actions but lacking platelet aggregatory activity. Lefer AM, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8340–4

Effects of capsaicinoids on platelet aggregation. Sylvester DM, et al. **Proc West Pharmacol Soc** 1989;32:95–100

Thrombin receptors on human platelets. Wyler B, et al. **Prog Clin Biol Res** 1988;283:163–9

The PGI2–analogue iloprost and the TXA2–receptor antagonist sulotroban synergistically inhibit TXA2–dependent platelet activation. Stürzebecher S, et al. **Prostaglandins** 1988 Dec;36(6):751–60

Binding to prostaglandin (PG) receptors and activation of adenyl cyclase by 20–isopropylidene–PGS in rabbit platelet membranes. Ushiyama S, et al. **Prostaglandins** 1988 Oct; 36(4):477–89

Influence of propranolol on platelet aggregation and thromboxane B2 production from platelet–rich plasma and whole blood. Anfossi G, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Apr; 36(1):1–7

Extract of a spice—omum (Trachyspermum ammi)–shows antiaggregatory effects and alters arachidonic acid metabolism in human platelets. Srivastava KC. **Prostaglandins Leukot Essent Fatty Acids** 1988 Jul;33(1):1–6

Platelet function and antiaggregant therapy in ischemic stroke. Pettigrew LC, et al. **Semin Neurol** 1986 Sep; 6(3):293–8 (63 ref.)

Polypharmacologic interactions in the management of thrombosis. Born GV. **Semin Thromb Hemost** 1989 Apr; 15(2):140–3 (26 ref.)

Current perspectives in the antiplatelet therapy of thrombotic disorders. Breddin HK. **Semin Thromb Hemost** 1989 Apr; 15(2):144–9 (35 ref.)

Pharmacology of ticlopidine: a review. Defreyn G, et al. **Semin Thromb Hemost** 1989 Apr;15(2):159–66 (38 ref.)

Perspective on antiplatelet drugs. O'Brien JR. **Semin Thromb Hemost** 1989 Apr;15(2):171–2

Update on the pharmacology of pentoxifylline and its combination with low–dose acetylsalicylic acid (HWA 5112). Seiffge D, et al. **Semin Thromb Hemost** 1989 Apr; 15(2):150–8

Effect of therapy on platelet activating factor–induced aggregation in acute stroke. Joseph R, et al. **Stroke** 1989 May;20(5):609–11

Resolution and reconstitution of interplatelet recognition during aggregation. Agam G, et al. **Thromb Haemost** 1988 Jun 16;59(3):504–6

Endotoxin–induced platelet activation in human whole blood in vitro. Csako G, et al. **Thromb Haemost** 1988 Jun 16; 59(3):378–82

Impairment of platelet behaviour by isosorbide dinitrate [letter; comment] Dutrillaux F, et al. **Thromb Haemost** 1989 Feb 28;61(1):152–3. **Comment on:** Thromb Haemost 1988 Apr 8;59(2):207–11

Mechanism of rabbit platelet agglutination induced by acidic mucopolysaccharide extracted from Stichopus japonicus Selenka. Li JZ, et al. **Thromb Haemost** 1988 Jun 16; 59(3):432–4

Aggregation of human platelets by acidic mucopolysaccharide extracted from Stichopus japonicus Selenka. Li JZ, et al. **Thromb Haemost** 1988 Jun 16; 59(3):435–9

In vivo effects of a low molecular weight heparin fragment on platelet aggregation and platelet dependent hemostasis in dogs. Ljungberg B, et al. **Thromb Haemost** 1988 Oct 31;60(2):232–5

Effect of thromboxane synthetase inhibition on platelet function and morphology during ovine pregnancy–induced hypertension. Miller KW, et al. **Thromb Haemost** 1988 Dec 22;60(3):365–71

Effects of ethanol on pathways of platelet aggregation in vitro. Rand ML, et al. **Thromb Haemost** 1988 Jun 16; 59(3):383–7

Platelet function during long–term treatment with ketanserin of claudicating patients with peripheral atherosclerosis. A multi–center, double–blind, placebo–controlled trial. The PACK Trial Group. **Thromb Res** 1989 Jul 1;55(1):13–23

Why single daily dose of aspirin may not prevent platelet aggregation. Altman R, et al. **Thromb Res** 1988 Aug 1; 51(3):259–66

Heparin–induced thrombocytopenia: effects of rabbit IgG, and its Fab and FC fragments on antibody–heparin–platelet interaction. Chong BH, et al. **Thromb Res** 1989 Jul 15; 55(2):291–5

Platelet aggregation by a phospholipase C from Pseudomonas aeruginosa. Coutinho IR, et al. **Thromb Res** 1988 Sep 1; 51(5):495–505

Inhibition of thrombin–induced platelet aggregation by myristic acid. Fukamachi N, et al. **Thromb Res** 1988 Nov 1;52(3):227–35

Verapamil is a potent inhibitor of 5–HT–induced platelet aggregation. Glusa E, et al. **Thromb Res** 1989 Jul 15; 55(2):239–245

Sulphinpyrazone inhibits platelet function and enhances blood fibrinolytic activity in the rat. Hussaini IM, et al. **Thromb Res** 1988 Nov 15;52(4):337–41

Importance of fibrinogen and platelet membrane glycoprotein IIb/IIIa in shear–induced platelet aggregation. Ikeda Y, et al. **Thromb Res** 1988 Jul 15;51(2):157–63

Mechanism of platelet effects of cardiotoxins from Naja nigricollis crawshawii (spitting cobra) snake venom. Kini RM, et al. **Thromb Res** 1988 Nov 1;52(3):185–95

PAF–induced platelet aggregation and TXB2 formation [letter] Küster LJ, et al. **Thromb Res** 1989 Jan 1;53(1):89–90

Effects of aggregating agents and of blood cells on the aggregation of whole blood by impedance technique. Mannucci L, et al. **Thromb Res** 1988 Oct 15;52(2):143–51

Paraproteinaemias and platelet aggregation: role of whole blood aggregometry. Schinco PC, et al. **Thromb Res** 1989 Jul 15;55(2):267–77

Response of thromboxane B2, malondialdehyde and platelet sensitivity to 3 weeks low–dose aspirin (ASA) in healthy volunteers. Sinzinger H, et al. **Thromb Res** 1989 Feb 1; 53(3):261–9

The effect of fish oil consumption on platelet aggregation responses in washed human platelet suspensions. Skeaff CM, et al. **Thromb Res** 1988 Jul 15;51(2):105–15

Inhibition of platelet aggregation by an irreversible local anesthetic. Stubbins JF, et al. **Thromb Res** 1988 Aug 15; 51(4):417–23

Collagen banded fibril structure and the collagen–platelet reaction. Sylvester MF, et al. **Thromb Res** 1989 Jul 1; 55(1):135–48

Platelet aggregation induced by equinatoxin. Teng CM, et al. **Thromb Res** 1988 Dec 1;52(5):401–11

In–vitro platelet sensitivity to collagen–induced aggregation and in–vitro platelet deterioration rate during storage, are both inversely proportional to the in–vivo blood platelet concentration in normal individuals: preliminary documentation of these theoretically predictable relationships. Trenchard PM. **Thromb Res** 1988 Aug 15; 51(4):425–37

Transient aggregation resistance of human blood platelets in fresh plasma. II. Physiological relevance: influence of fish oil. Vreeken J, et al. **Thromb Res** 1989 Jun 15; 54(6):733–40

Isolation of an acidic phospholipase A2 from the venom of Agkistrodon acutus (five pace snake) and its effect on platelet aggregation. Chen RH, et al. **Toxicon** 1989; 27(6):675–82

Effect of diltiazem and a prostaglandin derivative (PGBx) on platelet function during long–term storage. Smith DJ, et al. **Transfusion** 1989 Feb;29(2):153–8

The effects of cyclosporine on human platelet aggregation and thromboxane release. Jorkasky DK, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):948–9

Does cigarette smoking alter platelet aggregation in women receiving the contraceptive pill? Crooks G, et al. **Ulster Med J** 1988 Oct;57(2):177–80

Platelet disposition at angioplasty sites and platelet survival time after PTA in iliac and femoral arteries [letter] Ahmadi R, et al. **Vasa** 1989;18(1):79 **(Eng, Ger)**

Platelet aggregation and platelet sensitivity–behaviour during normal and abnormal glucose tolerance testing. Virgolini I, et al. **Vasa** 1989;18(2):117–21

Prostaglandins and clostridial vaccination [letter] Doyle AJ, et al. **Vet Rec** 1989 Jun 24;124(25):667

Prostaglandins and clostridial vaccines [letter] McNally JR. **Vet Rec** 1989 Jul 1;125(1):26

Isolation and effects of some garlic components on platelet aggregation and metabolism of arachidonic acid in human blood platelets. Srivastava KC, et al. **Wien Klin Wochenschr** 1989 Apr 14;101(8):293–9

[Observation on platelet aggregation in retinal vein occlusion] Deng ZH. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Feb; 9(2):88–90, 69 (Eng. Abstr.) **(Chi)**

[Effects of sodium ferulate on platelet aggregation and platelet thromboxane A2 in patients with coronary heart disease] Gao SW, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 May;8(5):263–5, 259 (Eng. Abstr.) **(Chi)**

[Anti–atherosclerosis effect with Allium nerimifolium extract capsule] Hou Y, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 May;8(5):266–7, 259 (Eng. Abstr.) **(Chi)**

[Clinical and hemorrheologic study in treating the blood–stasis syndrome in angina pectoris with huoxue granule] Hu YB, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Oct;8(10):599–600, 581 (Eng. Abstr.) **(Chi)**

[Effects of samupulenzhuerbu (sa–mu) and zachongzhusumu (za–chong) on platelet aggregation and arterial thrombosis in animals] Li ZX. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Oct;8(10):618–20 **(Chi)**

[Clinical and experimental studies on naoxuekang in treating hypertensive cerebral hemorrhage] Xie DZ. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Jun;8(6):341–3, 324 (Eng. Abstr.) **(Chi)**

[Calcium antagonism of allitridi] Chen SH, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Nov;9(6):533–5 (Eng. Abstr.) **(Chi)**

[Effects of procainamide on blood platelet aggregation in rabbits] Shan CW, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jul;9(4):338–41 (Eng. Abstr.) **(Chi)**

[Inhibitory effects of paeonol on experimental atherosclerosis and platelet aggregation of rabbit] Shi L, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Nov;9(6):555–8 (Eng. Abstr.) **(Chi)**

[Effects of methylflavonolamine on platelet aggregation in rabbits] Wu YJ, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Jan;9(1):79–83 (Eng. Abstr.) **(Chi)**

[Effect of beta–phenyl lactic acid on platelet aggregation, thrombosis, and plasma cAMP content] Zhu L, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 May;9(3):249–51 (Eng. Abstr.) **(Chi)**

[Effects of cinnarizine on rabbit platelet aggregation and experimental cerebral thrombosis in rats] Zhou YH, et al. **Yao Hsueh Hsueh Pao** 1988 May;23(5):332–5 (Eng. Abstr.)

(Chi)
[Effects of 2 doses of lysine acetylsalicylate on platelet aggregation, beta-thromboglobulin and platelet factor 4 in aged atherosclerotic patients] Roussel B, et al. **Therapie** 1988 Jun-Jul;43(4):267-71 (Eng. Abstr.) (Fre)
[In vitro study of platelet concentrate preparations from whole blood using N-(2-mercaptopropionyl)-glycine] Bergmann I, et al. **Folia Haematol (Leipz)** 1988; 115(6):869-80 (Eng. Abstr.) (Ger)
[Prevention with thrombocyte aggregation inhibitors in cardiovascular indications] Lorenz R. **Internist (Berlin)** 1989 May;30(5):315-21 (38 ref.) (Ger)
[No disorder of arachidonic acid-induced thrombocyte aggregation in familial exudative vitreoretinopathy] Bopp S, et al. **Klin Monatsbl Augenheilkd** 1989 Jan;194(1):13-5 (Eng. Abstr.) (Ger)
[Fibrinolytic activity, thrombocyte function and pharmacokinetics during intra-arterial or intravenous prostaglandin E1 infusion in patients with chronic arterial occlusive disease] Fitscha P, et al.
Wien Klin Wochenschr 1988 Jul 15;100(14):477-81 (Eng. Abstr.) (Ger)
[Prostaglandin E1 between pathomechanism and therapy] Sinzinger H, et al. **Wien Klin Wochenschr** 1988 Jul 15; 100(14):469-70 (17 ref.) (Ger)
[Collagen-induced thrombocyte aggregation in parenteral therapy using Ginkgo biloba] Költringer P, et al.
Wien Med Wochenschr 1989 Mar 15;139(5):92-4 (Eng. Abstr.) (Ger)
[Somatostatin deficiency, hyperinsulinism and thrombocyte aggregation in psoriasis] Neugebauer D, et al. **Z Hautkr** 1988 Jul 15;63(7):585-6, 589-90 (Eng. Abstr.) (Ger)
[Modification of blood coagulation by the anti-arrhythmia drug prajmalium bitartrate in vivo] Riess H, et al.
Z Kardiol 1989 Feb;78(2):130-3 (Eng. Abstr.) (Ger)
[Lipid-lowering and anti-aggregating effect of low-dose therapy with fish oil] Terres W, et al. **Z Kardiol** 1989 Feb; 78(2):125-9 (Eng. Abstr.) (Ger)
[Antiplatelet effects of combined therapy with ticlopidine and low doses of aspirin on patients with ischemic cardiopathy] Davi G, et al. **Cardiologia** 1989 Jan; 34(1):69-71 (Eng. Abstr.) (Ita)
[Effects of acute loading of alcohol on platelet aggregation in normal subjects] Galante A, et al. **Clin Ter** 1989 Feb 28;128(4):267-70 (Eng. Abstr.) (Ita)
[Effects of the treatment with ticlopidine in hemodialyzed patients] Traietti P, et al. **Clin Ter** 1988 Oct 15;127(1):27-35 (Eng. Abstr.) (Ita)
[Evaluation of morning platelet aggregation in patients with ischemic cardiopathy after evening administration of indobufen] Craveri A, et al. **Minerva Cardioangiol** 1988 Sep; 36(9):411-8 (Eng. Abstr.) (Ita)
[Platelet aggregation induced by adenosine diphosphate, collagen and adrenaline in human platelet subpopulations] Nubile G, et al. **Quad Sclavo Diagn** 1987 Sep;23(3):331-40 (Eng. Abstr.) (Ita)
[Effects of dilazep on platelet thrombus formation and intimal thickening after mechanical injury of aorta in rabbit] Hayashi T. **Fukuoka Igaku Zasshi** 1988 Oct;79(10):723-37 (Eng. Abstr.) (Jpn)
[Evaluation of antiplatelet drugs on platelet functions--comparison between ticlopidine and dipyridamole after prosthetic valve replacement] Saitoh H, et al. **Kokyu To Junkan** 1989 Jan;37(1):87-92 (Eng. Abstr.) (Jpn)
[Effect of various contrast media on platelet aggregation--an in vivo study] Shinmoto H, et al.
Nippon Igaku Hoshasen Gakkai Zasshi 1989 Feb 25; 49(2):163-7 (Eng. Abstr.) (Jpn)
[Effect of a new thromboxane A2 antagonist, S-145, on platelet aggregation] Kakushi H, et al.
Nippon Yakurigaku Zasshi 1989 Mar;93(3):171-8 (Eng. Abstr.) (Jpn)
[Platelet function and catecholamines] Endo Y, et al.
Rinsho Byori 1989 Jan;37(1):25-30 (Jpn)
[Heparin and platelet; reference to heparin induced thrombocytopenia] Matsuo T, et al. **Rinsho Byori** 1989 Apr; Spec No 81:34-40 (Jpn)
[Clinical evaluation of the control of antiplatelet therapy through platelet aggregation rate on polycythemia vera associated with thrombocytosis and erythromelalgia] Kurihara A, et al. **Rinsho Ketsueki** 1989 Jan;30(1):99-104 (Eng. Abstr.) (Jpn)
[Identification and determination of platelet aggregation inhibitor from safflower (Carthamus tinctorius Linné)] Kutsuna H, et al. **Yakugaku Zasshi** 1988 Nov; 108(11):1101-3 (Eng. Abstr.) (Jpn)
[Thromboxane synthetase inhibitors. I. Synthesis of some imidazolylarylmethanols and their inhibitory activity on platelet aggregation] Tsuruda M, et al. **Yakugaku Zasshi** 1989 Jan;109(1):33-45 (Eng. Abstr.) (Jpn)
[Effect of Polfos on bleeding time. I. Changes in the formed elements of the blood in rats exposed to Polfos] Konopelko M, et al. **Med Pr** 1988;39(6):391-8 (Eng. Abstr.) (Pol)
[Effect of vitamin E on platelet function and anemia in patients on long-term hemodialysis] Janicka L, et al.
Pol Tyg Lek 1988 Nov 28;43(48):1557-8 (Pol)
[Use of sodium nitroprusside in the prevention and treatment of postoperative hypertension and the correction of the indicators of primary hemostasis in patients with vasorenal hypertension] Seleznev MN, et al.
Anesteziol Reanimatol 1988 May-Jun;(3):31-4 (Eng. Abstr.)

(Rus)
[Dependence of the thrombocyte aggregation reaction on plasma fibronectin and the tripeptide arginyl-glycyl-asparagilin] Iuranek IO, et al.
Biull Eksp Biol Med 1989 May;107(5):536-7 (Eng. Abstr.) (Rus)
[Effect of thrombomodulin on specific thrombin functions: fibrinogen coagulation and thrombocyte aggregation] Lukianenko EF, et al. **Biull Eksp Biol Med** 1988 Nov; 106(11):517-9 (Eng. Abstr.) (Rus)
[Effect of calcium-channel blockers on human thrombocyte aggregation induced by alpha-adrenoreceptor agonists] Ivleva AIa, et al. **Farmakol Toksikol** 1989 Mar-Apr; 52(2):77-80 (Eng. Abstr.) (Rus)
[Effect of analogs and antagonists of the thrombocyte-activating factor (PAF) on blood platelet aggregation] Lakin KM, et al. **Farmakol Toksikol** 1988 Jul-Aug;51(4):113-23 (123 ref.) (Rus)
[H2O2-induced thrombocyte aggregation and deaggregation] Samal' AB, et al. **Gematol Transfuziol** 1988 Nov;33(11):34-7 (Eng. Abstr.) (Rus)
[Inducers of thrombocyte aggregation: general patterns and characteristics of their action] Shenkman BZ.
Gematol Transfuziol 1988 Nov;33(11):48-51 (25 ref.) (Rus)
[Effect of verapamil on the functional status of thrombocytes in patients with ischemic heart disease] Belousov IuB, et al. **Kardiologiia** 1989 Feb;29(2):42-5 (Eng. Abstr.) (Rus)
[Effect of essential phospholipids on the lipid spectrum of blood plasma and the aggregative capacity of thrombocytes in patients with ischemic heart disease] Botolova EN, et al. **Kardiologiia** 1988 Sep;28(9):57-61 (Eng. Abstr.) (Rus)
[Problems of a pharmacologic search for inhibitors of platelet aggregation] Lakin KM. **Kardiologiia** 1988 Oct; 28(10):120-6 (95 ref.) (Rus)
[Effect of alpha-tocopherol combined with finoptin on the level of lipid hydroperoxides in plasma lipoproteins and on the functional activity of thrombocytes in patients with exertion-induced stable stenocardia] Levchenklo VA, et al. **Kardiologiia** 1989 Jun;29(6):25-8 (Eng. Abstr.) (Rus)
[Changes in thrombocyte-vascular hemostasis and cyclic nucleotide levels after anti-arrhythmia therapy in patients with ischemic heart disease] Liusov VA, et al.
Kardiologiia 1989 Jan;29(1):9-13 (Eng. Abstr.) (Rus)
[The effect of troxevasin on the aggregation capability of thrombocytes in children under 3 years of age with various forms of acute suppurative destructive pneumonia] Topuzov VS, et al. **Klin Khir** 1989;(6):26-7 (Eng. Abstr.) (Rus)
[Aggregative function of thrombocytes and the status of the anticoagulation system of the blood in patients with ischemic heart disease during treatment with nitroderm] Zadionchenko VS, et al. **Klin Med (Mosk)** 1989 Mar; 67(3):72-3 (Rus)
[Positive and negative effects of "antihypoxic agents" on hypoxia tolerance and the aggregative function of thrombocytes in relation to the duration of the adaptation to altitude] Aliev MA, et al. **Kosm Biol Aviakosm Med** 1989 Jan-Feb;23(1):79-81 (Rus)
[Effect of tobacco smoke on the antiaggregation activity of the gingiva] Silenko IuI. **Stomatologiia (Mosk)** 1988 Sep-Oct;67(5):15-6 (Eng. Abstr.) (Rus)
[Anti-aggregation therapy of patients with ischemic heart disease] Liusov VA, et al. **Ter Arkh** 1988;60(8):55-9 (Rus)
[Advantages and shortcomings of platelet antiaggregants in the treatment of myocardial infarction] Nechaev DD, et al. **Ter Arkh** 1988;60(8):59-63 (Eng. Abstr.) (Rus)
[Ultrastructural changes of platelets during ADP- stimulated aggregation (in the presence of fibrinogen)] Belitser NV, et al. **Tsitol Genet** 1989 May-Jun;23(3):3-7 (Eng. Abstr.) (Rus)
[Low molecular weight and protein dinitrosyl complexes of non-heme iron as inhibitors of platelet aggregation] Kuznetsov VA, et al. **Vopr Med Khim** 1988 Sep-Oct; 34(5):43-6 (Eng. Abstr.) (Rus)
[Effect of dietary linoleic acid on the platelet aggregation, fatty acid composition of platelet phospholipids and synthesis of platelet prostaglandins in rats] Markov KhM, et al. **Vopr Med Khim** 1988 Jul-Aug;34(4):37-41 (Eng. Abstr.) (Rus)
[The role of thrombocyte aggregation function in the mechanism of the antimetastatic action of an extract of Baikal skullcap] Razina TG, et al. **Vopr Onkol** 1989; 35(3):331-5 (Eng. Abstr.) (Rus)

RADIATION EFFECTS

[Effects of low-energy laser irradiation on platelet aggregation in cerebrovascular disorders] Stebliukova IA, et al. **Sov Med** 1989;(3):77-80 (Rus)

PLATELET AGGREGATION INHIBITORS

see related
BLOOD PLATELETS
PLATELET AGGREGATION
Phorbol-myristate-acetate-induced platelet aggregation in the presence of inhibitors. Jerushalmy Z, et al.
Acta Haematol (Basel) 1988;80(4):210-5
Inhibition of platelet aggregation by idebenone and the mechanism of the inhibition. Suno M, et al.
Arch Gerontol Geriatr 1989 May;8(3):313-21
Reversible prevention of platelet activation by (E,Z)-4,5,9-trithiadodeca-1,6,11-triene 9-oxide (ajoene) in dogs under extracorporeal circulation. Apitz-Castro R, et al. **Arzneimittelforschung** 1988 Jul;38(7):901-4
The benzodiazepine receptor ligands RO 5-4864 and RO 15-1788 do not block the inhibition of PAF-induced platelet aggregation seen with the hetrazepine WEB2086. Griffin K, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):263-7
Weak inhibition of protein kinase C coupled with various non-specific effects make sphingosine an unsuitable tool in platelet signal transduction studies. Krishnamurthi S, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):258-64
(5Z)-carbacyclin displays agonist-antagonist properties on prostacyclin-receptors in platelets and vascular myocytes. Corsini A, et al. **Biomed Biochim Acta** 1988; 47(10-11):S104-7
Effect of halothane on metabolic ATP and induced aggregation of human blood platelets. Hofmann JG, et al.
Biomed Biochim Acta 1989;48(4):337-41
Platelet inhibitory and haemodynamic effects of a new stable PGI2 analogue, cicaprost (ZK 96480), in different animal species and in man. Stürzebecher S, et al.
Biomed Biochim Acta 1988;47(10-11):S45-7
Studies on vasoactive heterocyclic compounds. Preparation and evaluation of the hypotensive and antiaggregating activities of phthalazinol nitrates. Ito S, et al.
Chem Pharm Bull (Tokyo) 1988 Jul;36(7):2669-72
Platelet aggregation inhibitors from jyu-yaku (houttuyniae herb). Nishiya H, et al. **Chem Pharm Bull (Tokyo)** 1988 May;36(5):1902-4
Influence of ciprofloxacin on collagen- and ADP-induced platelet aggregation in vitro. Menz G, et al.
Chemioterapia 1987 Jun;6(2 Suppl):324-5
Investigations on the effects of ciprofloxacin on epinephrine- and collagen-induced platelet aggregation in vitro. Reuter HD. **Chemioterapia** 1987 Jun;6(2 Suppl):322-4
Effects of tetramethylpyrazine on platelet aggregation. Ding YA, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Dec; 40(6):493-6
Iron chelators inhibit human platelet aggregation, thromboxane A2 synthesis and lipoxygenase activity. Barradas MA, et al. **FEBS Lett** 1989 Mar 13;245(1-2):105-9
Structure-activity relationships and effects of platelet-activating factor antagonists in the hetrazepine series. Weber KH, et al.
Int Arch Allergy Appl Immunol 1989;88(1-2):82-7
Inhibition of platelet aggregation following chronic in vivo treatment of rats with nicotine: prevention by simultaneous application of propranolol. Terres W, et al.
J Cardiovasc Pharmacol 1989 Feb;13(2):233-7
Endothelin-1 releases prostacyclin and inhibits ex vivo platelet aggregation in the anesthetized rabbit. Thiemermann C, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S138-41; discussion S142
Effects of various ginseng saponins on 5-hydroxytryptamine release and aggregation in human platelets. Kimura Y, et al. **J Pharm Pharmacol** 1988 Dec;40(12):838-43
S-nitrosocaptopril. I. Molecular characterization and effects on the vasculature and on platelets. Loscalzo J, et al.
J Pharmacol Exp Ther 1989 Jun;249(3):726-9
Inhibition of platelet aggregation by a monoclonal antibody to a p α-myeloid antigen (D-51). Gareau R, et al.
Prog Clin Biol Res 1988;283:285-9
The PGI2-analogue iloprost and the TXA2-receptor antagonist sulotroban synergistically inhibit TXA2-dependent platelet activation. Stürzebecher S, et al. **Prostaglandins** 1988 Dec;36(6):751-60
Effects of calcium channel blockers on in vitro platelet function in whole blood using single platelet counting. Walley TJ, et al. **Thromb Haemost** 1989 Feb 28;61(1):137-9
Inhibition of human platelet function in vitro and ex vivo by acetaminophen. Lages B, et al. **Thromb Res** 1989 Mar 15;53(6):603-13
[Calcium antagonism of allitridi] Chen SH, et al.
Chung Kuo Yao Li Hsueh Pao 1988 Nov;9(6):533-5 (Eng. Abstr.) (Chi)
[Lipid-lowering and anti-aggregating effect of low-dose therapy with fish oil] Terres W, et al. **Z Kardiol** 1989 Feb; 78(2):125-9 (Eng. Abstr.) (Ger)
[Antithrombogenic therapy by use of antiplatelet agents with warfarin--its efficiency for the outpatients with prosthetic valve] Saitoh H. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov;36(11):2396-407 (Eng. Abstr.) (Jpn)

ADMINISTRATION & DOSAGE

Alpha-tocopherol, an effective inhibitor of platelet adhesion. Jandak J, et al. **Blood** 1989 Jan;73(1):141-9
RGDV peptide selectively inhibits platelet-dependent thrombus formation in vivo. Studies using a baboon model. Cadroy Y, et al. **J Clin Invest** 1989 Sep;84(3):939-44
[Anticoagulants and inhibitors of thrombocyte function in the long-term treatment of arteriosclerosis] Norden C, et al. **Z Gesamte Inn Med** 1989 Mar 15;44(6):183-6 (7 ref.) (Eng. Abstr.) (Ger)

ANALYSIS

Platelet-activating factor and anti-platelet-aggregating factor in acute reduction of blood pressure following

percutaneous transluminal renal angioplasty in patients with renovascular hypertension. Masugi F, et al. **J Hum Hypertens** 1988 Aug;2(2):111–6

[Methods for the analytic control of polyunsaturated acids with platelet antiaggregational activity extracted from sea fish oil] Pollino G, et al. **Boll Chim Farm** 1988 Sep–Oct; 127(9–10):221–6 (Eng. Abstr.) **(Ita)**

BLOOD

Specific binding of the new stable epoprostenol analogue beraprost sodium to prostacyclin receptors on human and rat platelets. Kajikawa N, et al. **Arzneimittelforschung** 1989 Apr;39(4):495–9

A plasma inhibitor of platelet aggregation in patients with Lassa fever. Cummins D, et al. **Br J Haematol** 1989 Aug; 72(4):543–8

Human neutrophils and mononuclear cells inhibit platelet aggregation by releasing a nitric oxide–like factor. Salvemini D, et al. **Proc Natl Acad Sci U S A** 1989 Aug; 86(16):6328–32

[Functional status of thrombocytes and the anti–aggregative activity of the vascular wall in dyslipoproteinemias and ischemic heart disease] Mikhailova IA, et al. **Ter Arkh** 1989; 61(2):101–4 (Eng. Abstr.) **(Rus)**

CHEMICAL SYNTHESIS

Thromboxane A2 receptor antagonists. III. Synthesis and pharmacological activity of 6,6-dimethylbicyclo[3.1.1]heptane derivatives with a substituted sulfonylamino group at C-2. Seno K, et al. **Chem Pharm Bull (Tokyo)** 1989 Jun;37(6):1524–33

Synthesis and platelet antiaggregatory activity of trimetoquinol analogs as endoperoxide/thromboxane A2 antagonists. Harrold MW, et al. **Drug Des Deliv** 1987 Feb; 1(3):193–207

Synthesis, antilipidemic and platelet antiaggregatory activity of 2–aminobenzimidazole amide derivatives. Caroti P, et al. **Farmaco** 1989 Mar;44(3):227–55

N,N–disubstituted 4–amino–(6–methoxy)–3–phenyl–2H–naphtho [1,2–b]pyran–2–ones with antiarrhythmic, platelet antiaggregating and local anesthetic activities. Bargagna A, et al. **Farmaco [Sci]** 1988 Nov;43(11):857–77

Amidinosemicarbazido derivatives of pyrazole: synthesis and inhibitory effect on blood coagulation and platelet aggregation. Ferroni R, et al. **Farmaco [Sci]** 1988 Nov; 43(11):891–9

Synthesis of acylguanidine analogues: inhibitors of ADP–induced platelet aggregation. Thomas EW, et al. **J Med Chem** 1989 Jan;32(1):228–36

Chemical synthesis of echistatin, a potent inhibitor of platelet aggregation from Echis carinatus: synthesis and biological activity of selected analogs. Garsky VM, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4022–6

[Anti–aggregatory and anticoagulant effects of oligoamines. 9. The pharmacokinetics of N,N',N''–tris–4–(3–iodo–4–methoxyphenyl)–butyl–1,3,5–benzene triethanamine] Rehse K, et al. **Arch Pharm (Weinheim)** 1988 Nov;321(11):813–6 (Eng. Abstr.) **(Ger)**

[Antiaggregative and anticoagulant effects of oligoamines. 8. Oligoamines with N–heterocyclic space structures] Rehse K, et al. **Arch Pharm (Weinheim)** 1988 Sep; 321(9):533–6 (Eng. Abstr.) **(Ger)**

[Synthesis and antiaggregation activity of prostacyclin analogs. II. Direct synthesis of 15–fluoro–13,14–didehydrocarbacyclin] Lopp MI, et al. **Bioorg Khim** 1988 Jun;14(6):834–8 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

PI–083, a new platelet aggregation inhibitor. Kawashima A, et al. **J Antibiot (Tokyo)** 1988 Dec;41(12):1913–4

Partial purification of a bioactive substance(s) from human veins independent of prostacyclin production. Bermejo E, et al. **Thromb Res** 1989 Aug 1;55(3):385–8

Purification and partial characterization of a bioactive substance from rat's vessel wall independent of prostacyclin production. Kempfer AC, et al. **Thromb Res** 1988 Oct 15; 52(2):127–35

[Platelet aggregation inhibitors from Salvia miltiorrhiza Bunge] Luo HW, et al. **Yao Hsueh Hsueh Pao** 1988 Nov; 23(11):830–4 (Eng. Abstr.) **(Chi)**

[Screening test for platelet aggregation inhibitor in natural products. The active principle of Anemarrhenae Rhizoma] Niwa A, et al. **Yakugaku Zasshi** 1988 Jun;108(6):555–61 (Eng. Abstr.) **(Jpn)**

METABOLISM

On the metabolism of ditazole in man. Maurer H, et al. **Arzneimittelforschung** 1988 Dec;38(12):1843–5

Alpha fetoprotein inhibits aggregation of human platelets. Czokało M, et al. **Haematologia (Budap)** 1989;22(1):11–8

PHARMACOKINETICS

Pharmacokinetic interaction in beagle dogs of antiplatelet drugs: acetylsalicylic acid, dipyridamole and calcium dobesilate. Plessas CT, et al. **Eur J Drug Metab Pharmacokinet** 1989 Jan–Mar; 14(1):79–83

PHARMACOLOGY

Inhibition of platelet hemostatic plug formation by trigramin, a novel RGD–peptide. Cook JJ, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1038–43

Ethanol interferes with collagen–induced platelet activation by inhibition of arachidonic acid mobilization. Rubin R. **Arch Biochem Biophys** 1989 Apr;270(1):99–113

Endocrine system—sanguine system relationship: antiaggregant activity of the pineal polypeptidic hormone E5 on blood platelets. Neacşu C. **Arch Roum Pathol Exp Microbiol** 1988 Apr–Jun; 47(2):125–31

Endothelial cell proliferation in vitro after incubation with anticoagulant and antiplatelet drugs. Lindblad B, et al. **Artery** 1988;16(1):15–24

Studies on the antiplatelet effect of the stable epoprostenol analogue beraprost sodium and its mechanism of action in rats. Umetsu T, et al. **Arzneimittelforschung** 1989 Jan; 39(1):68–73

A synthetic tetrapeptide as a novel platelet–preserving agent during cardiopulmonary bypass. Tatsumi E, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):813–6

A specific, photolabile and irreversible antagonist (L662,025) of the PAF–receptor. Hussaini IM, et al. **Biochem Biophys Res Commun** 1989 May 30;161(1):23–30

The fibrinogen–derived peptide (RGDS) prevents proteolytic degradation of protein kinase C in platelets by inhibiting platelet aggregation. Krishnamurthi S, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1256–64

Ajoene, the antiplatelet compound derived from garlic, specifically inhibits platelet release reaction by affecting the plasma membrane internal microviscosity. Rendu F, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1321–8

Relationships between chemical structure and inhibition of epinephrine–induced human blood platelet aggregation. Petrusewicz J, et al. **Biochim Biophys Acta** 1989 Aug 7; 983(2):161–6

Antiplatelet actions of panaxynol and ginsenosides isolated from ginseng. Teng CM, et al. **Biochim Biophys Acta** 1989 Mar 24;990(3):315–20

In vivo antiaggregatory effect of BM 13.177 on the spontaneous platelet aggregation in anaesthetized beagle dogs. Hermán F, et al. **Biomed Biochim Acta** 1988; 47(10–11):S90–3

Effects of PGI2, CH–7284 and CH–7384 on spontaneous platelet aggregation and blood pressure of anaesthetized beagles. Hermán F, et al. **Biomed Biochim Acta** 1988; 47(10–11):S113–6

Methylene blue inhibits the arachidonic acid metabolism in human blood platelets. Lösche W, et al. **Biomed Biochim Acta** 1988;47(10–11):S100–3

Effects of a novel antiplatelet agent in mural thrombogenesis on collagen–coated glass. Folie BJ, et al. **Blood** 1988 Oct; 72(4):1393–400

Inhibition of platelet–von Willebrand factor binding to platelets by adhesion site peptides. Parker RI, et al. **Blood** 1989 Sep;74(4):1226–30

Aurin tricarboxylic acid: a novel inhibitor of the association of von Willebrand factor and platelets. Phillips MD, et al. **Blood** 1988 Dec;72(6):1898–903

The limited importance of factor Xa inhibition to the anticoagulant property of heparin in thromboplastin–activated plasma. Pieters J, et al. **Blood** 1988 Dec;72(6):2048–52

Aspirin and other platelet active drugs. Relationship among dose, effectiveness, and side effects. Hirsh J, et al. **Chest** 1989 Feb;95(2 Suppl):12S–18S (77 ref.)

The human pharmacology of platelet inhibitory drugs. Pedersen AK. **Dan Med Bull** 1988 Jun;35(3):253–69 (257 ref.)

Cyclic nucleotide elevating vasodilators inhibit platelet aggregation at an early step of the activation cascade. Waldmann R, et al. **Eur J Pharmacol** 1989 Jan 17; 159(3):317–20

The influence of endothelial seeding and platelet inhibition on the patency of ePTFE grafts used to replace small arteries—an experimental study. Campbell JB, et al. **Eur J Vasc Surg** 1988 Dec;2(6):365–70

Effect of platelet inhibitors on platelet and fibrin deposition following transluminal angioplasty of the atherosclerotic rabbit aorta. Plate G, et al. **Eur J Vasc Surg** 1989 Apr; 3(2):127–33

In vivo modulation of platelet deposition on human atherosclerotic lesions by various antiaggregatory prostaglandins. Fitscha P, et al. **Folia Haematol (Leipz)** 1988;115(4):443–6

Inhibition of platelet behaviour by feverfew: a mechanism of action involving sulphydryl groups. Heptinstall S, et al. **Folia Haematol (Leipz)** 1988;115(4):447–9

How can we inhibit 5–HT–induced platelet aggregation and why should we bother? Heptinstall S, et al. **Folia Haematol (Leipz)** 1988;115(4):475–8

Potentiating effect of 3–isobutyryl–2–isopropylpyrazolo–[1,5a]–pyridine (KC–404), a new cerebral vasodilator with anti–platelet activity, on prostacyclin–induced increase of cyclic AMP content in platelets of rat. Hisayama T, et al. **Gen Pharmacol** 1989;20(2):183–6

Suppression by tetrandrine of human platelet aggregation induced by platelet–activating factor and other stimulants. Teh BS, et al. **Int Arch Allergy Appl Immunol** 1989; 88(3):267–72

Sch 38519, a novel platelet aggregation inhibitor produced by a Thermomonospora sp. Taxonomy, fermentation, isolation, physico–chemical properties, structure and biological properties. Patel M, et al. **J Antibiot (Tokyo)** 1989 Jul;42(7):1063–9

Thrombin–induced membrane depolarization of platelets and its inhibition by cetiedil. Yamaguchi A, et al. **J Biochem (Tokyo)** 1988 May;103(5):787–91

Ligand inhibition of the platelet glycoprotein IIb–IIIa complex function as a calcium channel in liposomes. Rybak ME, et al. **J Biol Chem** 1989 Sep 5;264(25):14617–20

Trifenagrel: a chemically novel platelet aggregation inhibitor. Abrahams SL, et al. **J Pharmacol Exp Ther** 1989 May; 249(2):359–65

Improving microgratt patency. Nichter LS, et al. **Microsurgery** 1988;9(4):235–41

Difluorothromboxane A2 and stereoisomers: stable derivatives of thromboxane A2 with differential effects on platelets and blood vessels. Morinelli TA, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5600–4

Effects of ifenprodil tartrate on calcium flux in arteries and brain synaptosomes. Honda H, et al. **Proc West Pharmacol Soc** 1989;32:155–8

Decompression inducible platelet aggregation (DIPA) is inhibited by Arg–Gly–Asp. Murayama M. **Prog Clin Biol Res** 1988;283:203–9

Effects of TRK–100, a stable prostacyclin analogue, on regulation of cyclic AMP metabolism in platelets. Nogimori K, et al. **Prostaglandins** 1989 Feb;37(2):205–12

Significance of plasma adenosine in the antiplatelet activity of forskolin: potentiation by dipyridamole and dilazep. Agarwal KC, et al. **Thromb Haemost** 1989 Feb 28; 61(1):106–10

Measurement of aspirin concentrations in portal and systemic blood in pigs: effect on platelet aggregation, thromboxane and prostacyclin production. Bochner F, et al. **Thromb Haemost** 1989 Apr 25;61(2):211–6

DN 9693: a phosphodiesterase inhibitor with a platelet membrane effect. Jackson C, et al. **Thromb Haemost** 1989 Apr 25;61(2):266–9

Correlation between the enzymatic activity, anticoagulant and antiplatelet effects of phospholipase A2 isoenzymes from Naja nigricollis venom. Kini RM, et al. **Thromb Haemost** 1988 Oct 31;60(2):170–3

In vitro effects of ethanol on rabbit platelet aggregation, secretion of granule contents, and cyclic AMP levels in the presence of prostacyclin. Rand ML, et al. **Thromb Haemost** 1989 Apr 25;61(2):254–8

Demonstration of Ac–Arg–Gly–Asp–Ser–NH2 as an antiaggregatory agent in the dog by intracoronary administration. Shebuski RJ, et al. **Thromb Haemost** 1989 Apr 25;61(2):183–8

Why single daily dose of aspirin may not prevent platelet aggregation. Altman R, et al. **Thromb Res** 1988 Aug 1; 51(3):259–66

Antiaggregatory effect of selenium incorporated into algae with no effect on the microsomal enzymes in rats [letter] Blaskó G, et al. **Thromb Res** 1988 Aug 1;51(3):337–8

Inhibition of thrombin–induced platelet aggregation by myristic acid. Fukamachi N, et al. **Thromb Res** 1988 Nov 1;52(3):227–35

The thieno–triazolodiazepine WEB 2086 inhibits platelet aggregation and ATP release from porcine platelets induced by platelet activating factor (PAF). Griffin KJ, et al. **Thromb Res** 1988 Jul 15;51(2):219–23

Sulphinpyrazone inhibits platelet function and enhances blood fibrinolytic activity in the rat. Hussaini IM, et al. **Thromb Res** 1988 Nov 15;52(4):337–41

Differences among beta–adrenoceptor blocking drugs in modifying platelet aggregation and arachidonic acid liberation under thrombin stimulation. Jancinová V, et al. **Thromb Res** 1989 Jun 15;54(6):687–98

Specific inhibition of 40 K protein phosphorylation in platelet by a new antithrombotic agent, d–indobufen. Mamiya S, et al. **Thromb Res** 1989 Jun 1;54(5):447–56

Potentiation of platelet interaction with collagen substrates by heparin is insensitive to aspirin. Mazurov AV, et al. **Thromb Res** 1988 Dec 15;52(6):573–85

Effect of calcium dobesilate on platelet function. Michal M, et al. **Thromb Res** 1988 Sep 15;51(6):593–605

Antiplatelet activity of dipyridamole in non anticoagulated whole blood. Pérez Requejo JL, et al. **Thromb Res** 1988 Nov 15;52(4):279–86

Potent antiplatelet effects of cyclic clofibric acid (CPIB) analogs on human platelets. Romstedt KJ, et al. **Thromb Res** 1989 May 15;54(4):289–99

Inhibition of cyclooxygenase–independent platelet aggregation by sodium salicylate. Violi F, et al. **Thromb Res** 1989 Jun 15;54(6):583–93

Isradipine: a potent calcium blocker with beneficial effects on platelet function and vascular prostacyclin production. Weiss K, et al. **Thromb Res** 1989 May 15;54(4):311–7

[Effects of polydatin on platelet aggregation in rabbits] Shan CW. **Yao Hsueh Hsueh Pao** 1988 May;23(5):394–6 (Eng. Abstr.) **(Chi)**

[Evaluation of morning platelet aggregation in patients with ischemic cardiopathy after evening administration of indobufen] Craveri A, et al. **Minerva Cardioangiol** 1988 Sep; 36(9):411–8 (Eng. Abstr.) **(Ita)**

[Development of antithrombotic drugs and its clinical use—related to platelet function] Matsuno K. **Nippon Rinsho** 1989 Apr;47(4):921–8 **(Jpn)**

[Platelet inhibitors and their mechanism of action] Dmoszyńska-Giannopoulou A. **Pol Arch Med Wewn** 1985 Jun;73(6):365-70 (24 ref.) **(Pol)**

[Effect of analogs and antagonists of the thrombocyte-activating factor (PAF) on blood platelet aggregation] Lakin KM, et al. **Farmakol Toksikol** 1988 Jul-Aug;51(4):113-23 (123 ref.) **(Rus)**

[Problems of a pharmacologic search for inhibitors of platelet aggregation] Lakin KM. **Kardiologiia** 1988 Oct; 28(10):120-6 (95 ref.) **(Rus)**

[Mechanisms of action of anti-platelet agents] Carreras LO. **Sangre (Barc)** 1988 Dec;33(6):505-21 (198 ref.) **(Spa)**

PHYSIOLOGY

Inhibition of platelet adhesion to fibronectin, fibrinogen, and von Willebrand factor substrates by complex gangliosides. Santoro SA. **Blood** 1989 Feb;73(2):484-9

Mechanism of fibronectin-mediated cell migration: dependence or independence of cell migration susceptibility on RGDS-directed receptor (integrin). Straus AH, et al. **Exp Cell Res** 1989 Jul;183(1):126-39

Platelet procoagulant activity & heterologous antiplatelet antibody. Quadri MI, et al. **Indian J Med Res** 1988 Dec; 88:505-8

THERAPEUTIC USE

Prevention of cutaneous phototoxicity in photodynamic therapy. McLear PW, et al. **Am J Otolaryngol** 1989 Mar-Apr;10(2):92-8

Thrombotic thrombocytopenic purpura in an asplenic patient with hereditary spherocytosis: failure of plasmapheresis, antiplatelet therapy, and corticosteroids. Becton DL, et al. **Am J Pediatr Hematol Oncol** 1988 Spring;10(1):5-8

Non-Q-wave myocardial infarction: pathophysiology, prognosis, and therapeutic strategy. Gibson RS. **Annu Rev Med** 1989;40:395-410 (90 ref.)

Aspirin and other antiplatelet drugs in the prophylaxis of thrombosis. Webster J, et al. **Blood Rev** 1987 Mar;1(1):9-20 (74 ref.)

2nd ACCP Conference on Antithrombotic Therapy. American College of Chest Physicians. June 21, 1988. Proceedings. **Chest** 1989 Feb;95(2 Suppl):1S-169S

Antithrombotic agents in coronary artery disease. Resnekov L, et al. **Chest** 1989 Feb;95(2 Suppl):52S-72S (136 ref.)

The statistical analysis of graft patency data in a clinical trial of antiplatelet agents following coronary artery bypass grafting. Henderson WG, et al. **Controlled Clin Trials** 1988 Sep;9(3):189-205 (16 ref.)

The effect of indobufen on the thrombogenic potential of a Dacron prosthesis in an artificial circulation. Sheehan SJ, et al. **Eur J Vasc Surg** 1988 Aug;2(4):223-7

Antiplatelet therapy for ischemic heart disease in the elderly. Frishman WH, et al. **Geriatrics** 1988 Dec;43 Suppl:46-56 (106 ref.)

PAF antagonists in asthma [letter] Barnes PJ, et al. **Lancet** 1989 May 13;1(8646):1071-2

Effect of beraprost sodium (TRK-100) on acetic acid-induced skin ulcer. Nishio S, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jun; 64(3):381-93

A contemporary overview of ischaemic heart disease and anti-platelet therapy. **S Afr Med J** 1988 Nov 5;Suppl:1-8 (28 ref.)

Platelet function and antiaggregant therapy in ischemic stroke. Pettigrew LC, et al. **Semin Neurol** 1986 Sep; 6(3):293-8 (63 ref.)

Polypharmacologic interactions in the management of thrombosis. Born GV. **Semin Thromb Hemost** 1989 Apr; 15(2):140-3 (26 ref.)

Current perspectives in the antiplatelet therapy of thrombotic disorders. Breddin HK. **Semin Thromb Hemost** 1989 Apr; 15(2):144-9 (35 ref.)

Perspective on antiplatelet drugs. O'Brien JR. **Semin Thromb Hemost** 1989 Apr;15(2):171-2

Antiplatelet agents in stroke prevention [letter] Peto R. **Stroke** 1988 Nov;19(11):1446-7

Stable prostacyclin analogue preventing microcirculatory derangement in experimental cerebral ischemia in cats. Tanaka K, et al. **Stroke** 1988 Oct;19(10):1267-74

Prevention of the formation of arterial thrombi using different antiplatelet drugs: experimental study in dogs. Escudero-Vela MC, et al. **Thromb Res** 1989 May 1; 54(3):187-95

Angioplasty, restenosis, and antiplatelet therapy. Cooke RH, et al. **Transplant Proc** 1989 Aug;21(4):3685

[Value and limits of antiplatelet agents in cerebral ischemic pathology] Milandre L, et al. **Schweiz Arch Neurol Psychiatr** 1988;139(5):11-25 (65 ref.) (Eng. Abstr.) **(Fre)**

[Prevention with thrombocyte aggregation inhibitors in cardiovascular indications] Lorenz R. **Internist (Berlin)** 1989 May;30(5):315-21 (38 ref.) **(Ger)**

[Drug therapy in peripheral arterial occlusive disease] Bollinger A. **Schweiz Med Wochenschr** 1988 Sep 10; 118(36):1283-9 (59 ref.) (Eng. Abstr.) **(Ger)**

[Chronic treatment of vascular diseases with indobufen] Belcaro G, et al. **Minerva Cardioangiol** 1989 May; 37(5):241-50 (Eng. Abstr.) **(Ita)**

[Prevention of thromboses in vascular microanastomoses. Experimental study on the role of anti-aggregant drugs. Preliminary remarks] Cerillo A, et al. **Minerva Chir** 1988 Oct 15;43(19):1593-5 (Eng. Abstr.) **(Ita)**

[Oral anticoagulants and platelet anti-aggregants in the prevention of metastases: state of the art and perspectives of a combined therapy] Finzi G, et al. **Recenti Prog Med** 1989 Jan;80(1):28-32 (49 ref.) (Eng. Abstr.) **(Ita)**

[Platelet aggregation inhibitory therapy in chronic arterial occlusive disease of the lower limbs: results of short-term clinico-instrumental study with indobufen] Landini G, et al. **Recenti Prog Med** 1989 Apr;80(4):204-7 (Eng. Abstr.) **(Ita)**

[Clinical study of picotamide in patients with vascular diseases] Speziale F, et al. **Recenti Prog Med** 1989 May; 80(5):271-5 (Eng. Abstr.) **(Ita)**

[A case of hypertrophic obstructive cardiomyopathy with left atrial giant thrombus during anti-platelet therapy] Hata K, et al. **Kokyu To Junkan** 1989 Mar;37(3):341-6 (Eng. Abstr.) **(Jpn)**

[Current topics of anticoagulant therapy and antiplatelet therapy after cardiac valve replacement] Kudo T, et al. **Kyobu Geka** 1988 Jul;41(8):644-8 (Eng. Abstr.) **(Jpn)**

[Effects of anti-platelet aggregating agents on peplomycin induced pulmonary toxicity in mice] Okada M, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Apr 20;24(4):793-7 (Eng. Abstr.) **(Jpn)**

[Review on internal medicine (1986). Recent progress in hematology. 8. Evaluation of antiplatelet therapy on biochemical and pharmacological basis] Kuramoto A. **Nippon Naika Gakkai Zasshi** 1987 May;76(5):670-4 (10 ref.) **(Jpn)**

[Clinical evaluation of the control of antiplatelet therapy through platelet aggregation rate on polycythemia vera associated with thrombocytosis and erythromelalgia] Kurihara A, et al. **Rinsho Ketsueki** 1989 Jan;30(1):99-104 (Eng. Abstr.) **(Jpn)**

[Monitoring of platelet activity as a basis for the use of antiaggregants in placental insufficiency] Kiriushchenkov PA. **Akush Ginekol (Mosk)** 1989 Jan;(1):30-5 (Eng. Abstr.) **(Rus)**

[Use of a combination of rheopolyglucin, complamin and trental in the complex treatment of acute postoperative pancreatitis] Lupal'tsev VI. **Klin Khir** 1988;(11):27-9 (Eng. Abstr.) **(Rus)**

[Anti-aggregation therapy of patients with ischemic heart disease] Liusov VA, et al. **Ter Arkh** 1988;60(8):55-9 **(Rus)**

[Correction of blood rheological disorders in patients with chronic kidney failure using heparin and antiaggregants] Vorob'ev PA, et al. **Ter Arkh** 1988;60(5):73-6 (Eng. Abstr.) **(Rus)**

[Eskuzan in the therapy of patients with chronic prostatitis] Gorbachev AG, et al. **Vestn Dermatol Venerol** 1988; (8):63-6 (Eng. Abstr.) **(Rus)**

[Anti-aggregation therapy. Mechanism of its effect and evaluation of its preventive value] Uzelac S, et al. **Vojnosanit Pregl** 1989 Mar-Apr;46(2):119-23 (52 ref.) **(Scr)**

[Thrombotic, thrombocytopenic purpura: treatment with plasmapheresis, fresh plasma, platelet antiaggregants and corticoids] Cuesta B, et al. **Rev Med Univ Navarra** 1987 Jul-Sep;31(3):145-7 (Eng. Abstr.) **(Spa)**

PLATELET ANTAGONISTS see **PLATELET AGGREGATION INHIBITORS**

PLATELET ANTIAGGREGANTS see **PLATELET AGGREGATION INHIBITORS**

PLATELET COUNT

The HELLP syndrome: a serious complication of pregnancy with hemolysis, elevated levels of liver enzymes, and low platelet count. Baca L, et al. **Am J Med** 1988 Oct; 85(4):590-1

Correlation between bleeding times and platelet counts in women with preeclampsia undergoing cesarean section. Ramanathan J, et al. **Anesthesiology** 1989 Aug;71(2):188-91

Pre-eclampsia and the HELLP syndrome. Liaw ST. **Aust Fam Physician** 1989 May;18(5):485, 487, 490

Transfusion-associated fall in platelet count in very low birthweight infants. Austin N, et al. **Aust Paediatr J** 1988 Dec;24(6):354-6

Flow cytometric analysis of megakaryocytes from patients with abnormal platelet counts. Tomer A, et al. **Blood** 1989 Aug 1;74(2):594-601

Effect of intentional hemodilution on platelet survival in secondary pulmonary hypertension. Lopes AA, et al. **Chest** 1989 Jun;95(6):1207-10

Mechanisms of the haematological changes induced by hyperventilation. Stäubli M, et al. **Eur J Appl Physiol** 1988; 58(3):233-8

Increased proportion of giant platelets and platelet distribution width are better indicators of altered platelet homeostasis than mean platelet volume in liver cirrhosis. Luzzatto G, et al. **Folia Haematol (Leipz)** 1988; 115(5):719-26

Chronic myeloproliferative diseases with an elevated platelet count (in excess of 1,000,000/microliter): a clinicopathological study on 46 patients with special emphasis on primary (essential) thrombocythemia. Thiele J, et al. **Hematol Pathol** 1987;1(4):227-37

Blood leucocytes in Mastomys natalensis with filarial infections. Mukherjee M, et al. **Indian J Med Res** 1988 Sep;88:222-4

Thrombocytosis in pediatric outpatients. Heath HW, et al. **J Pediatr** 1989 May;114(5):805-7

Platelet-activating factor [letter] Martin J. **Lancet** 1988 Dec 24-31;2(8626-8627):1486

Platelet number and size in relation to serum orosomucoid concentration in Crohn's disease. Shah A, et al. **Med Lab Sci** 1989 Jan;46(1):79-80

Long-term intra-individual variation of platelet parameters. Siebers RW, et al. **Med Lab Sci** 1989 Jan;46(1):77-8

Hematological indices and the prevalence of anemia in an elderly Chinese population. Woo J, et al. **Pathology** 1989 Jan;21(1):31-4 (15 ref.)

White cell and platelet trapping in patients with chronic venous insufficiency. Thomas PR, et al. **Phlebologie** 1988 Nov-Dec;41(4):771-6

High platelet counts in heterozygous beta-thalassaemia. Castaldi G, et al. **Riv Eur Sci Med Farmacol** 1987 Mar; 9(1):73-5

5HT-kinetics and sensitivity of human blood platelets: variations with age, gender and platelet number. Fetkovska N, et al. **Thromb Haemost** 1988 Dec 22;60(3):486-90

Reversal of hyperthyroidism to euthyroidism leads to increased numbers of small-sized platelets [letter] Haubenstock A, et al. **Thromb Haemost** 1988 Oct 31; 60(2):346-7

In-vitro platelet sensitivity to collagen-induced aggregation and in-vitro platelet deterioration rate during storage, are both inversely proportional to the in-vivo blood platelet concentration in normal individuals: preliminary documentation of these theoretically predictable relationships. Trenchard PM. **Thromb Res** 1988 Aug 15; 51(4):425-37

Effects of altered platelet number on pulmonary hypertension and platelet sequestration in monocrotaline pyrrole-treated rats. White SM, et al. **Toxicol Appl Pharmacol** 1989 Jun 15;99(2):302-13

Thrombocytopenia following routine blood transfusion: micro-aggregate blood filters prevent worsening thrombocytopenia in patients with low platelet counts. Lim S, et al. **Vox Sang** 1989;56(1):40-1

[2 cases of the HELLP (Hemolysis Elevated Liver Low Platelet) syndrome] Estebe JP, et al. **Rev Fr Gynecol Obstet** 1989 Apr;84(4):359-62 (Eng. Abstr.) **(Fre)**

[Long-term prognosis of the results of splenectomy in idiopathic thrombocytopenic purpura] Arendt T, et al. **Folia Haematol (Leipz)** 1989;116(2):337-42 (Eng. Abstr.) **(Ger)**

[Statistical analysis of parameters which determine yield in continuous centrifugal plateletpheresis] Hühn A, et al. **Folia Haematol (Leipz)** 1989;116(2):277-81 (Eng. Abstr.) **(Ger)**

[Sequential evaluation of platelet count and mean platelet volume during myocardial infarction] D'Erasmo E, et al. **Medicina (Firenze)** 1988 Jan-Mar;8(1):58-60 (Eng. Abstr.) **(Ita)**

[Changes in the thrombocyte count under a muscle load] Imelik OI. **Fiziol Cheloveka** 1988 Jan-Feb;14(1):158-60 **(Rus)**

[Value of platelet count as an activity index in chronic inflammatory intestinal diseases (letter)] Olm Font M, et al. **Med Clin (Barc)** 1988 Oct 1;91(10):397 **(Spa)**

DRUG EFFECTS

Daily exposure to forty percent oxygen causes a decrease in platelet count. Meintjes AF, et al. **Am J Hematol** 1988 Dec;29(4):201-3

Declining platelet counts and platelet aggregation during porcine VIII:C infusions. Green D, et al. **Am J Med** 1989 Feb;86(2):222-4

The effect of histamine challenge on platelet count and platelet activation. Duggan CJ, et al. **Aust N Z J Med** 1989 Aug;19(4):327-30

The relationship of human platelet density to platelet age: platelet population labeling by monoamine oxidase inhibition. Chamberlain KG, et al. **Blood** 1989 Apr; 73(5):1218-25

Effect of zidovudine on platelet count. Flegg PJ, et al. **BMJ** 1989 Apr 22;298(6680):1074-5

Correlative patterns of neutrophil and platelet counts during very early remission of acute myeloblastic leukemia. Ventura GJ, et al. **Hematol Pathol** 1987;1(2):113-6

Interactions of liposomes and platelets. Reinish LW, et al. **Thromb Haemost** 1988 Dec 22;60(3):518-23

[Effect of anticoagulant on platelet count and their parameters] Ishii K, et al. **Rinsho Byori** 1988 Aug; 36(8):962-9 **(Jpn)**

INSTRUMENTATION

Electric sizing of platelets stimulated by adenosine diphosphate (ADP). Tatsumi N, et al. **Folia Haematol (Leipz)** 1988;115(5):747-53

Occurrence of spuriously elevated platelet count on Coulter S-Plus VI in two patients affected by disseminated intravascular coagulation [letter] Dolci A, et al. **Haematologica (Pavia)** 1989 Mar-Apr;74(2):222

Evaluation of two instruments for noninvasive platelet concentrate quality assessment. George V, et al. **Transfusion** 1989 Mar-Apr;29(3):273-5

METHODS

Scalp platelet counts and management of immunologic thrombocytopenic purpura [letter] Ayromlooi J. **Am J Obstet Gynecol** 1989 Feb;160(2):518

Platelet Survival Studies [letter] Verwilghen RL. **Haematologica (Pavia)** 1989 Mar-Apr;74(2):219

Use of theophylline in the investigation of pseudothrombocytopenia induced by edetic acid (EDTA-2K). Ohnuma O, et al. **J Clin Pathol** 1988 Aug; 41(8):915-7

Determination of platelet volume and number. Bessman D. **Methods Enzymol** 1989;169:164-72

STANDARDS

Analytic inaccuracy resulting from hematology specimen characteristics. Three cases of clinically misleading artifacts affecting white blood cell and platelet counts. Savage RA. **Am J Clin Pathol** 1989 Sep;92(3):295-9

VETERINARY

Cytoplasmic fragmentation associated with lymphoid leukemia in ruminants: interference with electronic determination of platelet concentration. Weiser MG, et al. **Vet Pathol** 1989 Mar;26(2):177-8

PLATELET-DERIVED GROWTH FACTOR

Tumour growth factors. Ernberg IT. **Acta Chir Scand Suppl** 1989;549:11-6 (14 ref.)

Cell attachment of human gingival fibroblasts in vitro to porous-surfaced titanium alloy discs coated with collagen and platelet-derived growth factor. Lowenberg BF, et al. **Biomaterials** 1988 Jul;9(4):302-9

Platelet-derived growth factor. Ross R. **Lancet** 1989 May 27;1(8648):1179-82 (19 ref.)

ADMINISTRATION & DOSAGE

Topical growth factors and wound contraction in the rat: Part II. Platelet-derived growth factor and wound contraction in normal and steroid-impaired rats. Engrav LH, et al. **Ann Plast Surg** 1989 Sep;23(3):245-8

ANALOGS & DERIVATIVES

Two peptides related to platelet-derived growth factor are present in human wound fluid. Matsuoka J, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4416-20

ANALYSIS

Ultrastructural localization of platelet-derived growth factor and related factors in normal and transformed cells. van den Eijnden-van Raaij AJ, et al. **Exp Cell Res** 1988 Oct; 178(2):479-92

Immunohistologic demonstration of platelet-derived growth factor (PDGF) and sis-oncogene expression in scleroderma. Gay S, et al. **J Invest Dermatol** 1989 Feb; 92(2):301-3

Progression activity for platelet-derived growth factor in plasma of patients with idiopathic thrombocytopenic purpura and aplastic anemia. Katoh O, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Feb;52(1):113-7

BIOSYNTHESIS

Endotoxin stimulates platelet-derived growth factor production from cultured human pulmonary endothelial cells. Albelda SM, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):L65-70

Growth factor production by human colon carcinoma cell lines. Anzano MA, et al. **Cancer Res** 1989 Jun 1; 49(11):2898-904

Tumor necrosis factor-induced expression of platelet-derived growth factor A-chain messenger RNA in fibroblasts. Paulsson Y, et al. **Exp Cell Res** 1989 Feb;180(2):490-6

Production of platelet-derived growth factorlike protein(s) by a human carcinoma cell line. O'Donnell KA, et al. **In Vitro Cell Dev Biol** 1989 Apr;25(4):381-4

Production of growth factors related to fibroblast growth factor and platelet-derived growth factor by human embryonal carcinoma cells. Tiesman J, et al. **In Vitro Cell Dev Biol** 1988 Dec;24(12):1209-16

Platelet-derived growth factor production by human umbilical vein endothelial cells is regulated by basic fibroblast growth factor. Kourembanas S, et al. **J Biol Chem** 1989 Mar 15;264(8):4456-9

Induction of platelet-derived growth factor A-chain and c-myc gene expressions by angiotensin II in cultured rat vascular smooth muscle cells. Naftilan AJ, et al. **J Clin Invest** 1989 Apr;83(4):1419-24

Transformation by v-sis occurs by an internal autoactivation mechanism. Bejcek BE, et al. **Science** 1989 Sep 29; 245(4925):1496-9

BLOOD

Changes in the mitogenic activity of platelet-derived growth factor(s) in patients with myeloproliferative disease. Caenazzo A, et al. **Acta Haematol (Basel)** 1989;81(3):131-5

Platelet-derived growth factor (PDGF) in type 1 diabetes mellitus. Guillausseau PJ, et al. **Eur J Clin Invest** 1989 Apr; 19(2):172-5

Increased plasma levels of platelet-derived growth factor activity in patients with progressive systemic sclerosis. Pandolfi A, et al. **Proc Soc Exp Biol Med** 1989 May; 191(1):1-4

[Phylogenetic characteristics of the structure and function of polypeptide growth factors localized in the blood platelets of mammals] Stoika RS. **Zh Evol Biokhim Fiziol** 1989 May-Jun;25(3):373-9 (27 ref.) **(Rus)**

GENETICS

Evaluation of c-sis mRNA expression by human megakaryocytic cells in normals and patients with myeloproliferative disorders. Kanz L, et al. **Adv Exp Med Biol** 1988;241:73-80

The expression of the platelet-derived and transforming growth factor genes in human nonsmall lung cancer cell lines is related to tumor stroma formation in nude mice tumors. Bergh J. **Am J Pathol** 1988 Dec;133(3):434-9

Interferon-gamma modulates messenger RNA levels of c-sis (PDGF-B chain), PDGF-A chain, and IL-1 beta genes in human vascular endothelial cells. Suzuki H, et al. **Am J Pathol** 1989 Jan;134(1):35-43

Kidney epithelial cells express c-sis protooncogene and secrete PDGF-like protein. Kartha S, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):F800-6

Mitogenic signals for thrombin in mesangial cells: regulation of phospholipase C and PDGF genes. Shultz PJ, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):F366-74

Mesangial cells express PDGF mRNAs and proliferate in response to PDGF. Shultz PJ, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):F674-84

Mechanisms by which genes encoding growth factors and growth factor receptors contribute to malignant transformation. Kraus MH, et al. **Ann N Y Acad Sci** 1988; 551:320-35; discussion 336 (52 ref.)

Preparation of biologically active platelet-derived growth factor type BB from a fusion protein expressed in Escherichia coli. Hoppe J, et al. **Biochemistry** 1989 Apr 4;28(7):2956-60

Expression and stability of c-sis mRNA in human glioblastoma cells. Press RD, et al. **Biochemistry** 1988 Jul 26;27(15):5736-41

Translocation of c-abl oncogene and PDGFB (c-sis) gene in a case of CML with 46,XY, t(22;22). Gradl G, et al. **Blut** 1989 Jun;58(6):279-85

Expression of growth factor and epidermal growth factor receptor encoded transcripts in human gastric tissues. Bennett C, et al. **Cancer Res** 1989 Apr 15;49(8):2104-11

Differentially regulated production of platelet-derived growth factor and of transforming growth factor beta by a human teratocarcinoma cell line. Weima SM, et al. **Differentiation** 1988 Sep;38(3):203-10

Involvement of oncogene-coded growth factors in the neoplastic process. Robbins KC, et al. **Gene Amplif Anal** 1986;4:161-76 (44 ref.)

Distinct pathways mediate transcriptional regulation of platelet-derived growth factor B/c-sis expression. Daniel TO, et al. **J Biol Chem** 1988 Dec 25;263(36):19815-20

Synthesis and assembly of a functionally active recombinant platelet-derived growth factor AB heterodimer. Ostman A, et al. **J Biol Chem** 1988 Nov 5;263(31):16202-8

Selective expression of mRNA encoding platelet-derived growth factor B chain following transfection of foreign genes into cell lines derived from baby hamster kidney. Sakariassen KS, et al. **J Cell Biochem** 1989 Jan;39(1):87-94

Cultured primate aortic smooth muscle cells express both the PDGF-A and PDGF-B genes but do not secrete mitogenic activity or dimeric platelet-derived growth factor protein. Valente AJ, et al. **J Cell Physiol** 1988 Sep; 136(3):479-85

Expression and purification of biologically active v-sis/platelet-derived growth factor B protein by using a baculovirus vector system. Giese N, et al. **J Virol** 1989 Jul;63(7):3080-6

The alternatively spliced exon of the platelet-derived growth factor A chain encodes a nuclear targeting signal. Maher DW, et al. **Mol Cell Biol** 1989 May;9(5):2251-3

Alternative splicing of the platelet-derived growth factor A-chain transcript occurs in normal as well as tumor cells and is conserved among mammalian species. Matoskova B, et al. **Mol Cell Biol** 1989 Jul;9(7):3148-50

Functional identification of regulatory elements within the promoter region of platelet-derived growth factor 2. Pech M, et al. **Mol Cell Biol** 1989 Feb;9(2):396-405

Growth factor genes as oncogenes. Chiu IM. **Mol Chem Neuropathol** 1989 Feb;10(1):37-52 (60 ref.)

Aberrant expression of platelet-derived growth factor A-chain cDNAs due to cryptic splicing of RNA transcripts in COS-1 cells. Wise RJ, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6591-601

SIS/PDGF-B expression in benign and malignant human breast lesions. Ro J, et al. **Oncogene** 1989 Mar;4(3):351-4

Cyclic AMP blocks expression of the c-sis gene in tumor cells. Harsh GR, et al. **Oncogene Res** 1989;4(1):65-73

Increased expression of growth factor mRNAs accompanies viral transformation of rodent cells. Jakowlew SB, et al. **Oncogene Res** 1988;2(2):135-48

Endothelial cell hyperplasia in human glioblastoma: coexpression of mRNA for platelet-derived growth factor (PDGF) B chain and PDGF receptor suggests autocrine growth stimulation. Hermansson M, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7748-52

Generation of fibrosarcomas in vivo by a retrovirus that expresses the normal B chain of platelet-derived growth factor and mimics the alternative splice pattern of the v-sis oncogene. Pech M, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2693-7

Platelet-derived growth factor synthesis in mesangial cells: induction by multiple peptide mitogens. Silver BJ, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1056-60

Developmental expression of PDGF, TGF-alpha, and TGF-beta genes in preimplantation mouse embryos. Rappolee DA, et al. **Science** 1988 Sep 30;241(4874):1823-5

Genes for beta 2-adrenergic receptor and platelet-derived growth factor receptor map to mouse chromosome 18. Sundaresan S, et al. **Somat Cell Mol Genet** 1989 Jul; 15(4):367-71

IMMUNOLOGY

Characterization of a high-molecular-weight protein immunoprecipitated by platelet-derived growth factor antisera. Graves DT, et al. **J Cell Physiol** 1988 Nov; 137(2):263-71

Coagulation increases neutrophil CR1 and CR3 expression: primary role for platelet-derived growth factor. Garcia-Aguilar J, et al. **J Lab Clin Med** 1989 Sep; 114(3):312-20

ISOLATION & PURIFICATION

Partial purification of porcine platelet-derived growth factor (PDGF). Narczewska B, et al. **Arch Immunol Ther Exp (Warsz)** 1987;35(6):831-7

High-yield purification of platelet-derived endothelial cell growth factor: structural characterization and establishment of a specific antiserum. Miyazono K, et al. **Biochemistry** 1989 Feb 21;28(4):1704-10

Human platelet-derived mitogens. I. Identification of insulinlike growth factors I and II by purification and N alpha amino acid sequence analysis. Karey KP, et al. **Blood** 1989 Aug 15;74(3):1084-92

A major part of platelet-derived growth factor purified from human platelets is a heterodimer of one A and one B chain. Hammacher A, et al. **J Biol Chem** 1988 Nov 5; 263(31):16493-8

Expression of platelet-derived growth factor (PDGF)-related transcripts and synthesis of biologically active PDGF-like proteins by human malignant epithelial cell lines. Sariban E, et al. **J Clin Invest** 1988 Oct; 82(4):1157-64

Platelet-derived growth factor: purification and characterization. Antoniades HN, et al. **Methods Enzymol** 1989;169:210-24

Two peptides related to platelet-derived growth factor are present in human wound fluid. Matsuoka J, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4416-20

METABOLISM

Platelet-derived growth factor. Three isoforms that bind to two distinct cell surface receptors. Claesson-Welsh L, et al. **Acta Oncol** 1989;28(3):331-4 (32 ref.)

Binding domains and epitopes in platelet-derived growth factor. Vogel S, et al. **Biochemistry** 1989 Apr 4;28(7):2961-6

Effect of the growth conditions on the expression of cell-surface-associated platelet-derived growth factor receptors in mouse fibroblasts. Zippel R, et al. **Biochim Biophys Acta** 1988 Oct 7;971(3):351-7

Human platelet-derived mitogens. II. Subcellular localization of insulinlike growth factor I to the alpha-granule and release in response to thrombin. Karey KP, et al. **Blood** 1989 Aug 15;74(3):1093-100

Control of the expression of c-sis mRNA in human glioblastoma cells by phorbol ester and transforming growth factor beta 1. Press RD, et al. **Cancer Res** 1989 Jun 1;49(11):2914-20

Suramin inhibits binding and degradation of platelet-derived growth factor in arterial smooth muscle cells but does not interfere with autocrine stimulation of DNA synthesis. Sjölund M, et al. **Cell Tissue Res** 1989 Apr;256(1):35-43

Production of insulin-like growth factors, platelet-derived growth factor, and transforming growth factors and their role in the density-dependent growth regulation of a differentiated embryonal carcinoma cell line. van Zoelen EJ, et al. **Endocrinology** 1989 Apr;124(4):2029-41

Polyamines, molecules necessary for cell division, colocalize with peptide growth factors. Hougaard DM, et al. **Eur J Cell Biol** 1989 Feb;48(1):14-8

Transforming growth factor (TGF beta) decreases the proliferation of human bone marrow fibroblasts by inhibiting the platelet-derived growth factor (PDGF) binding. Bryckaert MC, et al. **Exp Cell Res** 1988 Dec; 179(2):311-21

Retinal pigment epithelial cells produce PDGF-like proteins and secrete them into their media. Campochiaro PA, et al. **Exp Eye Res** 1989 Aug;49(2):217-27

Ligand-induced dimerization of the platelet-derived growth factor receptor. Monomer-dimer interconversion occurs independent of receptor phosphorylation. Bishayee S, et al. **J Biol Chem** 1989 Jul 15;264(20):11699-705

Sera and conditioned media contain different isoforms of platelet-derived growth factor (PDGF) which bind to different classes of PDGF receptor. Bowen-Pope DF, et

al. **J Biol Chem** 1989 Feb 15;264(5):2502–8
Collagen–induced binding to human platelets of platelet–derived growth factor leading to inhibition of P43 and P20 phosphorylation. Bryckaert MC, et al. **J Biol Chem** 1989 Mar 15;264(8):4336–41
Dimerization of B–type platelet–derived growth factor receptors occurs after ligand binding and is closely associated with receptor kinase activation. Heldin CH, et al. **J Biol Chem** 1989 May 25;264(15):8905–12
Platelet–derived growth factor receptor inducibility is acquired immediately after translation and does not require glycosylation. Keating MT, et al. **J Biol Chem** 1989 Jun 5;264(16):9129–32
Phosphatidylinositol linkage of a truncated form of the platelet–derived growth factor receptor. Orchansky PL, et al. **J Biol Chem** 1988 Oct 15;263(29):15159–65
Two different subunits associate to create isoform–specific platelet–derived growth factor receptors. Seifert RA, et al. **J Biol Chem** 1989 May 25;264(15):8771–8
TGF–beta stimulates primary human skin fibroblast DNA synthesis via an autocrine production of PDGF–related peptides. Soma Y, et al. **J Cell Physiol** 1989 Aug; 140(2):246–53
Observations on human smooth muscle cell cultures from hyperplastic lesions of prosthetic bypass grafts: production of a platelet–derived growth factor–like mitogen and expression of a gene for a platelet–derived growth factor receptor—a preliminary study. Birinyi LK, et al. **J Vasc Surg** 1989 Aug;10(2):157–65
Human uterine leiomyoma cells: binding and growth responses to epidermal growth factor, platelet–derived growth factor, and insulin. Fayed YM, et al. **Lab Invest** 1989 Jan;60(1):30–7
Characterization of a novel anti–peptide antibody that recognizes a specific conformation of the platelet–derived growth factor receptor. Bishayee S, et al. **Mol Cell Biol** 1988 Sep;8(9):3696–702
cDNA cloning and expression of a human platelet–derived growth factor (PDGF) receptor specific for B–chain–containing PDGF molecules. Claesson–Welsh L, et al. **Mol Cell Biol** 1988 Aug;8(8):3476–86
Structural and functional aspects of platelet–derived growth factor and its role in the pathogenesis of glioblastoma. Betsholtz C, et al. **Mol Chem Neuropathol** 1989 Feb; 10(1):27–36 (44 ref.)
cDNA cloning and expression of the human A–type platelet–derived growth factor (PDGF) receptor establishes structural similarity to the B–type PDGF receptor. Claesson–Welsh L, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4917–21
Growth factors and cell proliferation in human atherosclerosis. Gordon D, et al. **Transplant Proc** 1989 Aug; 21(4):3692–4 (43 ref.)

PHARMACOLOGY

Eicosanoid synthesis in platelet–derived growth factor–stimulated fibroblasts. Habenicht AJ, et al. **Adv Exp Med Biol** 1988;243:55–9 (20 ref.)
Mitogenesis by serum and PDGF is independent of PI degradation and PKC in VSMC. Kihara M, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):C886–92
Atrial natriuretic factor inhibits proliferation of vascular smooth muscle cells stimulated by platelet–derived growth factor. Abell TJ, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1392–6
Platelet–derived growth factor (PDGF)–induced phospholipase C–mediated hydrolysis of phosphoinositides in vascular smooth muscle cells—different sensitivity of PDGF– and angiotensin II–induced phospholipase C reactions to protein kinase C–activating phorbol esters. Kawahara Y, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):846–54
Plasma membrane hyperpolarization and [Ca2+]i increase induced by fibroblast growth factor in NIH–3T3 fibroblasts: resemblance to early signals generated by platelet–derived growth factor. Pandiella A, et al. **Biochem Biophys Res Commun** 1989 Sep 29;163(3):1325–31
Antagonistic effect of PDGF and NGF on transcription of ribosomal DNA and tumor cell proliferation. Rakowicz–Szulczynska EM, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):649–56
Differential effects of PDGF and PDGF–BB on vascular smooth muscle cells. Reilly CF, et al. **Biochem Biophys Res Commun** 1989 May 15;160(3):1047–54
Characterization of pp64, a nuclear phosphoprotein induced by platelet–derived growth factor. Shawver LK, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1118–25
Rapid modulation of a 64 K dalton fibroblast protein: a PDGF mediated early cellular event. Singh JP, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):394–401
Bombesin and platelet–derived growth factor stimulate formation of inositol phosphates and Ca2+ mobilization in Swiss 3T3 cells by different mechanisms. Blakeley DM, et al. **Biochem J** 1989 Feb 15;258(1):177–85
Effect of growth factors on hyaluronan synthesis in cultured human fibroblasts. Heldin P, et al. **Biochem J** 1989 Mar 15;258(3):919–22
Platelet–derived–growth–factor–stimulated heterogeneous polyphosphoinositide metabolism and phosphate uptake in C3H fibroblasts. Holmsen H, et al. **Biochem J** 1989 Jun 1;260(2):589–92
Vasoactive effects of growth factors. Berk BC, et al. **Biochem Pharmacol** 1989 Jan 15;38(2):219–25 (77 ref.)
Inhibition by retinoids of platelet growth factor–dependent stimulation of DNA synthesis and cell division in density–arrested C3H 10T1/2 fibroblasts. Mordan LJ. **Cancer Res** 1989 Feb 15;49(4):906–9
PDGF–dependent tyrosine phosphorylation stimulates production of novel polyphosphoinositides in intact cells. Auger KR, et al. **Cell** 1989 Apr 7;57(1):167–75
Impaired proliferation response after PDGF induction in fibroblasts from Hutchinson–Guilford Progeria syndrome. Stachniak JB, et al. **Cell Biol Int Rep** 1988 Aug;12(8):621–6
Association of increased intracellular free Ca2+ by platelet–derived growth factor with mitogenesis but not with proteoglycan synthesis in chondrocytes—effect of suramin. Fukuo K, et al. **Cell Calcium** 1989 Jan;10(1):29–35
Stimulation of the phosphorylation of cytoskeletal 350–kDa and 300–kDa proteins by insulin–like growth factor–I, platelet–derived growth factor and phorbol ester in rat 3Y1 cells. Nishida E, et al. **Cell Struct Funct** 1988 Oct; 13(5):417–23
Platelet–derived growth factor generates at least two distinct intracellular signals that modulate gene expression. Jones SD, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:531–6
Genomic response to growth factors. Nathans D, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 2:893–900
raf family serine/threonine protein kinases in mitogen signal transduction. Rapp UR, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:173–84
Different effects of homo– and heterodimers of platelet–derived growth factor A and B chains on human and mouse fibroblasts. Kazlauskas A, et al. **EMBO J** 1988 Dec 1;7(12):3727–35
Temporal relationship between inositol polyphosphate formation and increases in cytosolic Ca2+ in quiescent 3T3 cells stimulated by platelet–derived growth factor, bombesin and vasopressin. Nånberg E, et al. **EMBO J** 1988 Sep;7(9):2741–7
PDGF A chain homodimers drive proliferation of bipotential (O–2A) glial progenitor cells in the developing rat optic nerve. Pringle N, et al. **EMBO J** 1989 Apr;8(4):1049–56
The effects of platelet–derived growth factor in cultured microvessel endothelial cells. Bar RS, et al. **Endocrinology** 1989 Apr;124(4):1841–8
Platelet–derived growth factor enhances deoxyribonucleic acid and collagen synthesis in osteoblast–enriched cultures from fetal rat parietal bone. Centrella M, et al. **Endocrinology** 1989 Jul;125(1):13–9
Interleukin–1 promotes proliferation of vascular smooth muscle cells in coordination with PDGF or a monocyte derived growth factor. Bonin PD, et al. **Exp Cell Res** 1989 Apr;181(2):475–82
Inhibition of mitogenic activity of PDGF, EGF, and FGF by interferon–gamma. Oleszak E. **Exp Cell Res** 1988 Dec; 179(2):575–80
The effect of platelet–derived growth factor on phagocytosis of cultured human trabecular cells. Tamura M, et al. **Exp Eye Res** 1989 Jun;48(6):761–70
Stimulation of prostacyclin formation by the platelet–derived growth factor—an important pathomechanism for atherogenesis? Sinzinger H, et al. **Exp Pathol** 1988; 34(3):151–60
Bradykinin blocks the action of EGF, but not PDGF, on fibroblast division. Newman EL, et al. **FEBS Lett** 1989 Jul 17;251(1–2):225–9
Differential effect of platelet–derived growth factor– versus serum–induced growth on smooth muscle alpha–actin and nonmuscle beta–actin mRNA expression in cultured rat aortic smooth muscle cells. Corjay MH, et al. **J Biol Chem** 1989 Jun 25;264(18):10501–6
Reconstitution of epidermal growth factor receptor transmodulation by platelet–derived growth factor in Chinese hamster ovary cells. Countaway JL, et al. **J Biol Chem** 1989 Aug 15;264(23):13642–7
Purification and characterization of a platelet–derived growth factor and heavy metal–modulated nuclear protein. Disa S, et al. **J Biol Chem** 1989 Sep 25;264(27):15993–9
Quantitative changes in polyphosphoinositides 1,2–diacylglycerol and inositol 1,4,5–trisphosphate by platelet–derived growth factor and prostaglandin F2 alpha. Fukami K, et al. **J Biol Chem** 1989 Sep 5;264(25):14985–9
Evidence for coordinate, selective regulation of eicosanoid synthesis in platelet–derived growth factor–stimulated 3T3 fibroblasts and in HL–60 cells induced to differentiate into macrophages or neutrophils. Goerig M, et al. **J Biol Chem** 1988 Dec 25;263(36):19384–91
Guanosine 5'–O–(3–thiotrisphosphate) potentiates both thrombin– and platelet–derived growth factor–induced inositol phosphate release in permeabilized vascular smooth muscle cells. Signaling mechanisms distinguished by sensitivity to pertussis toxin and phorbol esters. Huang CL, et al. **J Biol Chem** 1989 Mar 15;264(8):4391–7
Platelet–derived growth factor regulates glucose transporter expression. Rollins BJ, et al. **J Biol Chem** 1988 Nov 15; 263(32):16523–6
Platelet–derived growth factor induces phosphorylation of a 64–kDa nuclear protein. Shawver LK, et al. **J Biol Chem** 1989 Jan 15;264(2):1046–50
Lipopolysaccharide–inducible macrophage early genes are induced in Balb/c 3T3 cells by platelet–derived growth factor. Tannenbaum CS, et al. **J Biol Chem** 1989 Mar 5; 264(7):4052–7
Effects of platelet–derived growth factor and fibroblast growth factor on free intracellular calcium and mitogenesis. Tucker RW, et al. **J Cell Biochem** 1989 Feb;39(2):139–51
Interferon and growth factor modulation of nuclear factors binding to 5' upstream elements of the 2–5A synthetase gene. Williams BR, et al. **J Cell Biochem** 1988 Dec; 38(4):261–7
Effects of platelet–derived growth factor on bone formation in vitro. Canalis E, et al. **J Cell Physiol** 1989 Sep; 140(3):530–7
Both homodimeric isoforms of PDGF (AA and BB) have mitogenic and chemotactic activity and stimulate phosphoinositol turnover. Hosang M, et al. **J Cell Physiol** 1989 Sep;140(3):558–64
Cell cycle regulation of human diploid fibroblasts: possible mechanisms of platelet–derived growth factor. Larsson O, et al. **J Cell Physiol** 1989 Jun;139(3):477–83
Differential inhibitory effects of TGF–beta on EGF–, PDGF–, and HBGF–1–stimulated MG63 human osteosarcoma cell growth: possible involvement of growth factor interactions at the receptor and postreceptor levels. Mioh H, et al. **J Cell Physiol** 1989 Jun;139(3):509–16
Cyclic AMP can partially restore platelet–derived growth factor–stimulated prostaglandin E2 biosynthesis, and calcium mobilization in EJ–ras–transformed NIH–3T3 cells. Olinger PL, et al. **J Cell Physiol** 1989 May; 139(2):335–45
Platelet–derived growth factor or basic fibroblast growth factor induce anchorage–independent growth of human fibroblasts. Palmer H, et al. **J Cell Physiol** 1988 Dec; 137(3):588–92
Influence of the extracellular matrix on the proliferative response of human skin fibroblasts to serum and purified platelet–derived growth factor. Rhudy RW, et al. **J Cell Physiol** 1988 Oct;137(1):185–91
Platelet–derived growth factor and angiotensin II cause increases in cytosolic free calcium by different mechanisms in vascular smooth muscle cells. Roe MW, et al. **J Cell Physiol** 1989 Apr;139(1):100–8
Diacylglycerol, but not inositol 1,4,5–trisphosphate, accounts for platelet–derived growth factor–stimulated proliferation of BALB 3T3 cells. Suzuki–Sekimori R, et al. **J Cell Physiol** 1989 Sep;140(3):432–8
Relationship of cytosolic ion fluxes and protein kinase C activation to platelet–derived growth factor induced competence and growth in BALB/c–3T3 cells. Zagari M, et al. **J Cell Physiol** 1989 Apr;139(1):167–74
Anchorage–independent growth of synoviocytes from arthritic and normal joints. Stimulation by exogenous platelet–derived growth factor and inhibition by transforming growth factor–beta and retinoids. Lafyatis R, et al. **J Clin Invest** 1989 Apr;83(4):1267–76
Stimulation of human synovial fibroblast DNA synthesis by platelet–derived growth factor and fibroblast growth factor. Differences to the activation by IL–1. Butler DM, et al. **J Immunol** 1989 May 1;142(9):3098–103
Increased chemotactic and mitogenic response of psoriatic fibroblasts to platelet–derived growth factor. Gu XF, et al. **J Invest Dermatol** 1988 Dec;91(6):599–602
Terbinafine inhibits the mitogenic response to platelet–derived growth factor in vitro and neointimal proliferation in vivo. Nemecek GM, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1167–74
Effects of rat platelet extracts and human platelet–derived growth factor on megakaryocytopoiesis in vitro. Uyar R, et al. **J Surg Oncol** 1988 Dec;39(4):217–24
Endothelin potentiates growth factor–stimulated DNA synthesis in Swiss 3T3 cells. Kusuhara M, et al. **Jpn J Cancer Res** 1989 Apr;80(4):302–5
Stimulation of the growth of metastatic clones of mouse colon adenocarcinoma 26 in vitro by platelet–derived growth factor. Tsuruo T, et al. **Jpn J Cancer Res** 1989 Feb; 80(2):136–40
Glucose inhibition of human fibroblast proliferation and response to growth factors is prevented by inhibitors of aldose reductase. Sibbitt WL Jr, et al. **Mech Ageing Dev** 1989 Mar;47(3):265–79
Regulation of 2',5'–oligoadenylate synthetase gene expression by interferons and platelet–derived growth factor. Garcia–Blanco MA, et al. **Mol Cell Biol** 1989 Mar; 9(3):1060–8
Platelet–derived growth factor induces multisite phosphorylation of pp60c–src and increases its protein–tyrosine kinase activity. Gould KL, et al. **Mol Cell Biol** 1988 Aug;8(8):3345–56
Evidence for a novel signal transduction pathway activated by platelet–derived growth factor and by double–stranded RNA. Hall DJ, et al. **Mol Cell Biol** 1989 Apr;9(4):1705–13
Platelet–derived growth factor does not induce c–fos in NIH 3T3 cells expressing the EJ–ras oncogene. Lin AH, et al. **Mol Cell Biol** 1988 Nov;8(11):5052–5
Platelet–derived growth factor induces rapid and sustained tyrosine phosphorylation of phospholipase C–gamma in quiescent BALB/c 3T3 cells. Wahl MI, et al. **Mol Cell Biol** 1989 Jul;9(7):2934–43
P21 v–ras inhibits induction of c–myc and c–fos expression by platelet–derived growth factor. Zullo JN, et al. **Mol Cell Biol** 1988 Dec;8(12):5080–5
Regulation of multiple basic fibroblast growth factor messenger ribonucleic acid transcripts by protein kinase C activators. Murphy PR, et al. **Mol Endocrinol** 1988 Dec; 2(12):1196–201

Food intake suppression by growth factors and platelet peptides by direct action in the central nervous system. Plata-Salamán CR. **Neurosci Lett** 1988 Nov 22; 94(1-2):161-6

Bovine platelet-derived factor showing mitogenic activity on bovine leukemia virus-infected lymphocytes. Tsukiyama K, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):746-53

Labile repressors are involved in the transcriptional control of PDGF-responsive genes. Hall DJ, et al. **Oncogene Res** 1989;4(3):177-84

Ca2+-channel blockers inhibit the action of recombinant platelet-derived growth factor in vascular smooth muscle cells. Block LH, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2388-92

Activation of single-channel currents in mouse fibroblasts by platelet-derived growth factor. Frace AM, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2511-5

Signal transduction from membrane to cytoplasm: growth factors and membrane-bound oncogene products increase Raf-1 phosphorylation and associated protein kinase activity. Morrison DK, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):8855-9

Transforming growth factor beta reverses the glucocorticoid-induced wound-healing deficit in rats: possible regulation in macrophages by platelet-derived growth factor. Pierce GF, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2229-33

Growth and transparency in the lens, an epithelial tissue, stimulated by pulses of PDGF. Brewitt B, et al. **Science** 1988 Nov 4;242(4879):777-9

[Acquisition of competence by resting cells for entry into the DNA synthesis period after incubation with growth factors and protein synthesis inhibitors] Rozenval'd IB, et al. **Dokl Akad Nauk SSSR** 1989;305(4):977-80 **(Rus)**

PHYSIOLOGY

Platelet-derived growth factor--its role in health and disease. Ross R, et al. **Adv Exp Med Biol** 1988;234:9-21 (85 ref.)

Effects of protein kinase inhibitors on growth factor-stimulated DNA synthesis in cultured rat vascular smooth muscle cells. Takagi Y, et al. **Atherosclerosis** 1988 Dec;74(3):227-30

Structure and function of platelet-derived growth factor (PDGF) and related proteins. Hannink M, et al. **Biochim Biophys Acta** 1989 Jul 28;989(1):1-10 (87 ref.)

Platelet-derived growth factor: a multifunctional regulator of normal and abnormal cell growth. Deuel TF, et al. **Biofactors** 1988 Oct;1(3):213-7 (134 ref.)

Direct activation of the serine/threonine kinase activity of Raf-1 through tyrosine phosphorylation by the PDGF beta-receptor. Morrison DK, et al. **Cell** 1989 Aug 25; 58(4):649-57

Signal transduction by the platelet-derived growth factor receptor. Williams LT, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:455-65

Platelet-derived growth factor is not chemotactic for human peripheral blood monocytes. Graves DT, et al. **Exp Cell Res** 1989 Feb;180(2):497-503

Platelet derived growth factor (PDGF) and prostaglandins (PGE1, PGI2) as modulators of the atherogenetic process. Sinzinger H, et al. **Folia Haematol (Leipz)** 1988; 115(4):439-42

Platelet-derived growth factor and vascular proliferative lesions of the skin. Fine RM. **Int J Dermatol** 1989 Apr; 28(3):170-1

Effects of platelet-derived growth factor on phosphorylation of the epidermal growth factor receptor in human skin fibroblasts. Decker SJ, et al. **J Biol Chem** 1989 Jun 5; 264(16):9204-9

Platelet-derived growth factor-inducible gene JE is a member of a family of small inducible genes related to platelet factor 4. Kawahara RS, et al. **J Biol Chem** 1989 Jan 15;264(2):679-82

The platelet-derived growth factor-inducible KC gene encodes a secretory protein related to platelet alpha-granule proteins. Oquendo P, et al. **J Biol Chem** 1989 Mar 5;264(7):4133-7

Platelet-derived growth factor and transforming growth factor-beta enhance tissue repair activities by unique mechanisms. Pierce GF, et al. **J Cell Biol** 1989 Jul; 109(1):429-40

Platelet-derived growth factor, epidermal growth factor, and insulin-like growth factor I regulate specific cell-cycle parameters of human diploid fibroblasts in serum-free culture. Chen Y, et al. **J Cell Physiol** 1989 Jul;140(1):59-67

Platelet isoforms of platelet-derived growth factor stimulate fibroblasts to contract collagen matrices. Clark RA, et al. **J Clin Invest** 1989 Sep;84(3):1036-40

Inhibition of human natural killer cell activity by platelet-derived growth factor. II. Membrane binding studies, effects of recombinant IFN-alpha and IL-2, and lack of effect on T cell and antibody-dependent cellular cytotoxicity. Gersuk GM, et al. **J Immunol** 1988 Dec 1; 141(11):4031-8

Platelet-derived growth factor and IL-1 interactions in rheumatoid arthritis. Regulation of synoviocyte proliferation, prostaglandin production, and collagenase transcription. Kumkumian GK, et al. **J Immunol** 1989 Aug 1;143(3):833-7

Platelet-derived growth factor: structural and functional aspects. Westermark B, et al. **J Intern Med** 1989 Jan; 225(1):55-8

Role of tyrosine kinase and membrane-spanning domains in signal transduction by the platelet-derived growth factor receptor. Escobedo JA, et al. **Mol Cell Biol** 1988 Dec; 8(12):5126-31

Abelson murine leukemia virus induces platelet-derived growth factor-independent fibroblast growth: correlation with kinase activity and dissociation from full morphologic transformation. Rees-Jones RW, et al. **Mol Cell Biol** 1989 Jan;9(1):278-87

Insulin, insulin-like growth factor I and platelet-derived growth factor interact additively in the induction of the protooncogene c-myc and cellular proliferation in cultured bovine aortic smooth muscle cells. Banskota NK, et al. **Mol Endocrinol** 1989 Aug;3(8):1183-90

Identification of angiogenic activity and the cloning and expression of platelet-derived endothelial cell growth factor. Ishikawa F, et al. **Nature** 1989 Apr 13; 338(6216):557-62

Depletion of PDGF from serum inhibits growth of AIDS-related and sporadic Kaposi's sarcoma cells in culture. Roth WK, et al. **Oncogene** 1989 Apr;4(4):483-7

Isolation of a novel receptor cDNA establishes the existence of two PDGF receptor genes. Matsui T, et al. **Science** 1989 Feb 10;243(4892):800-4

Interleukin-1 mitogenic activity for fibroblasts and smooth muscle cells is due to PDGF-AA. Raines EW, et al. **Science** 1989 Jan 20;243(4889):393-6

Signal transduction by the platelet-derived growth factor receptor. Williams LT. **Science** 1989 Mar 24; 243(4898):1564-70 (72 ref.)

Platelet-derived growth factor: three isoforms and two receptor types. Heldin CH, et al. **Trends Genet** 1989 Apr; 5(4):108-11 (38 ref.)

New roles for PDGF and CNTF in controlling the timing of glial cell differentiation in the optic nerve. Anderson DJ. **Trends Neurosci** 1989 Mar;12(3):83-5 (20 ref.)

[Thrombocyte growth factor--its participation in normal and malignant development, atherosclerosis and other pathological states] Mitev V, et al. **Eksp Med Morfol** 1988; 27(2):55-61 (14 ref.) **(Bul)**

[Transduction of mitogen signal induced by the product of c-sis proto-oncogene] Ruggiero M, et al. **Medicina (Firenze)** 1988 Oct-Dec;8(4):429-31 (Eng. Abstr.) **(Ita)**

[Role of growth factors of platelets (PDGF, TGF-beta, EGF) in the pathogenesis of myelofibrosis] Kimura A, et al. **Rinsho Byori** 1989 Apr;Spec No 81:1-8 **(Jpn)**

[Role of PDGF on myeloproliferative disorders] Kimura A, et al. **Rinsho Ketsueki** 1988 Jul;29(7):989-93 (Eng. Abstr.) **(Jpn)**

[Atherogenesis: new concepts] Giannini SD, et al. **Arq Bras Cardiol** 1988 Jul;51(1):37-42 (58 ref.) **(Por)**

SECRETION

Autoregulation of MeWo metastatic melanoma cell growth: characterization of intracellular (FGF, MGSA) and secreted (PDGF) growth factors. Pichon F, et al. **J Cell Physiol** 1989 Aug;140(2):344-58

Human peripheral blood monocytes secrete a unique form of PDGF. Pencev D, et al. **Oncogene Res** 1988;3(4):333-42

A platelet-derived growth factor homolog secreted by alveolar macrophages is complexed to an alpha-macroglobulin. Bonner JC, et al. **Transplant Proc** 1989 Aug;21(4):3704-5

THERAPEUTIC USE

A combination of platelet-derived and insulin-like growth factors enhances periodontal regeneration. Lynch SE, et al. **J Clin Periodontol** 1989 Sep;16(8):545-8

PLATELET FACTOR 3 see under **BLOOD COAGULATION FACTORS**

PLATELET FACTOR 4

The three-dimensional structure of bovine platelet factor 4 at 3.0-A resolution. St. Charles R, et al. **J Biol Chem** 1989 Feb 5;264(4):2092-9

ANALYSIS

Measurement of platelet factor 4 and beta-thromboglobulin by an enzyme-linked immunosorbent assay [letter] Takahashi H, et al. **Clin Chim Acta** 1988 Jun 30; 175(1):113-4

Platelet activation in angina at rest. Evidence by paired measurement of plasma beta-thromboglobulin and platelet factor 4. De Caterina R, et al. **Eur Heart J** 1988 Aug; 9(8):913-22

Ultrastructural localization of platelet factor 4 in rat megakaryocytes and platelets by gold-labeled antibody detection. Hegyi E, et al. **Exp Hematol** 1989 Mar; 17(3):223-8

Glomerular localization of platelet secretory proteins in mesangial proliferative lesions induced by habu snake venom. Barnes JL. **J Histochem Cytochem** 1989 Jul; 37(7):1075-82

Platelet activation indices and apolipoproteins in hypertensive patients. Catalano M, et al. **J Hum Hypertens** 1988 Oct;2(3):195-7

Platelet factor 4 and the response to plasma exchange in the treatment of thrombotic thrombocytopenic purpura. Wiedemann G, et al. **Klin Wochenschr** 1989 May 15; 67(10):551-5

Serial determinations of PF4 and beta TG: comparisons between multiple venipunctures vs a catheter infusion system. Strauss W, et al. **Thromb Haemost** 1988 Jun 16; 59(3):491-4

[Plasma beta-thromboglobulin and platelet factor 4 in essential hypertension] Gao PJ, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Dec; 16(6):343-6, 382-3 (Eng. Abstr.) **(Chi)**

[Plasma platelet-derived factors in patients with systemic scleroderma--alterations of plasma beta-thromboglobulin and platelet factor 4 levels after vibration stress on bilateral hands] Maeda M, et al. **Nippon Hifuka Gakkai Zasshi** 1988 Nov;98(12):1205-9 (Eng. Abstr.) **(Jpn)**

[Multipathway leading to platelet aggregation and in vivo platelet secretion in cerebral ischemia] Uchiyama S, et al. **Rinsho Shinkeigaku** 1988 Sep;28(9):1065-71 (Eng. Abstr.) **(Jpn)**

ANTAGONISTS & INHIBITORS

[The role of cathepsin D in inactivation of platelet factor 4 and the platelet fibrin stabilizing factor] Ostrowska H, et al. **Rocz Akad Med Bialymstoku** 1984-85;29-30:145-52 (Eng. Abstr.) **(Pol)**

BIOSYNTHESIS

Heparin-induced platelet factor 4 release by serial heparin injections. Stevanato F, et al. **J Nucl Med Allied Sci** 1988 Apr-Jun;32(2):106-9

BLOOD

Platelet specific proteins (beta-thromboglobulin and platelet factor 4) in normal pregnancy and in pregnancy complicated by preeclampsia. Csaicsich P, et al. **Arch Gynecol Obstet** 1989;244(2):91-5

Relationships between chemical structure and inhibition of ADP-stimulated human thrombocyte release of serotonin and platelet factor 4. Dillingham EO, et al. **Biochim Biophys Acta** 1989 Feb 24;990(2):128-32

GENETICS

Platelet-derived growth factor-inducible gene JE is a member of a family of small inducible genes related to platelet factor 4. Kawahara RS, et al. **J Biol Chem** 1989 Jan 15;264(2):679-82

Identification and characterization of PF4varl, a human gene variant of platelet factor 4. Green CJ, et al. **Mol Cell Biol** 1989 Apr;9(4):1445-51

ISOLATION & PURIFICATION

Platelet basic protein, low-affinity platelet factor 4, and beta-thromboglobulin: purification and identification. Holt JC, et al. **Methods Enzymol** 1989;169:224-33

Improved method for purification of human platelet factor 4 by affinity and ion-exchange chromatography. Medici I, et al. **Thromb Res** 1989 May 15;54(4):277-87

METABOLISM

Platelet factor 4 (PF4) in septicaemia. Lorenz R, et al. **Infection** 1988 Sep-Oct;16(5):273-6

Lack of influence of low-dose acetylsalicylic acid (100 mg daily) on platelet survival time, beta-thromboglobulin and platelet factor 4 in patients with peripheral arterial occlusive disease. Minar E, et al. **Thromb Res** 1988 Nov 1;52(3):219-26

The influence of physical exercise and intravenous heparin on plasmatic concentration of platelet factor 4 in young survivors of myocardial infarction. Zawilska K, et al. **Thromb Res** 1989 Jul 1;55(1):155-60

[Effects of 2 doses of lysine acetylsalicylate on platelet aggregation, beta-thromboglobulin and platelet factor 4 in aged atherosclerotic patients] Roussel B, et al. **Therapie** 1988 Jun-Jul;43(4):267-71 (Eng. Abstr.) **(Fre)**

[Platelet activation during exacerbation of bronchial asthma--thrombin induced ATP release from washed platelets and plasma beta-TG, PF4, beta-TG/PF4 ratio] Yasuba H, et al. **Arerugi** 1988 Dec;37(12):1152-60 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Food intake suppression by growth factors and platelet peptides by direct action in the central nervous system. Plata-Salamán CR. **Neurosci Lett** 1988 Nov 22; 94(1-2):161-6

PHYSIOLOGY

Influence of platelet factor 4 on the neutralization of heparin by protamine. Shanberge JN, et al. **Ann N Y Acad Sci** 1989; 556:354-65

Interaction of platelet factor four with cultured vascular endothelial cells. Rybak ME, et al. **Blood** 1989 May 1; 73(6):1534-9

No evidence of platelet activation during atrial pacing in subjects with stable angina. Bazzan M, et al. **Cardiologia** 1989 Mar;34(3):217-20

Inhibition of human megakaryocytopoiesis in vitro by platelet factor 4 (PF4) and a synthetic COOH-terminal PF4 peptide. Gewirtz AM, et al. **J Clin Invest** 1989 May;

83(5):1477–86
[Neutralization of the nonenzymatic fibrinolytic activity of complex heparin compounds by platelet factor 4] Liapina LA, et al. **Gematol Transfuziol** 1988 Nov;33(11):42–4 (Eng. Abstr.) **(Rus)**

PLATELET FUNCTION TESTS

Fish oil diet rich in eicosapentaenoic acid increases bleeding time in the rat by interaction with sympathetic transmitters. Juan H, et al. **Agents Actions** 1989 Aug;28(1–2):130–6
A comparative study of variables affecting the bleeding time using two disposable devices. Buchanan GR, et al. **Am J Clin Pathol** 1989 Jan;91(1):45–51
A randomized and blinded comparison of the sensitivity and the reproducibility of the Ivy and Simplate II bleeding time techniques. Koster T, et al. **Am J Clin Pathol** 1989 Sep; 92(3):315–20
Modified bleeding time in the infant. Andrew M, et al. **Am J Hematol** 1989 Mar;30(3):190–1
Subcutaneous desmopressin (DDAVP) shortens the bleeding time in uremia. Viganò GL, et al. **Am J Hematol** 1989 May;31(1):32–5
Hermansky–Pudlak syndrome: correction of bleeding time by 1-desamino-8D-arginine vasopressin. Wijermans PW, et al. **Am J Hematol** 1989 Mar;30(3):154–7
Platelet glass bead retention is useful in monitoring response to 1-deamino-8-D-arginine-vasopressin (d-DAVP). Zeigler ZR. **Am J Hematol** 1989 Aug;31(4):248–52
Factors influencing hemostasis after umbilical vein puncture in vitro. Ney JA, et al. **Am J Obstet Gynecol** 1989 Feb; 160(2):424–6
Correlation between bleeding times and platelet counts in women with preeclampsia undergoing cesarean section. Ramanathan J, et al. **Anesthesiology** 1989 Aug;71(2):188–91
A reassessment of the bleeding time: association of age, hematocrit, platelet function, von Willebrand factor, and bleeding time thromboxane B2 with the length of the bleeding time. Gerrard JM, et al. **Clin Invest Med** 1989 Jun;12(3):165–71
Correlated measurement of platelet release and aggregation in whole blood. Ault KA, et al. **Cytometry** 1989 Jul; 10(4):448–55
Studies on platelet functions in hirudin plasma. Glusa E, et al. **Folia Haematol (Leipz)** 1988;115(1–2):88–93
Platelet reactivity: a contribution to age dependence studies. Pařízek M, et al. **Folia Haematol (Leipz)** 1988;115(5):621–7
Ticlopidine in China: comparative study on the effect of two dose levels on bleeding time and platelet function in healthy volunteers. Ruan C, et al. **Haemostasis** 1989;19(2):94–9
Platelet calcium and quenched-flow aggregation kinetics in essential hypertension. Taylor MA, et al. **Hypertension** 1989 Jun;13(6 Pt 1):558–66
Effect of aspirin on platelet functions in females. Jha S, et al. **Indian J Physiol Pharmacol** 1989 Jan–Mar;33(1):72–3
Evaluation of blood compatibility of PEO grafted and heparin immobilized polyurethanes. Han DK, et al. **J Biomed Mater Res** 1989 Aug;23(A2 Suppl):211–28
Clinical application of a new in vitro bleeding time device on surgical patients. Tsujinaka T, et al. **Jpn J Surg** 1988 Jul;18(4):430–7
Dose-effect and pharmacokinetics of estrogens given to correct bleeding time in uremia. Viganò G, et al. **Kidney Int** 1988 Dec;34(6):853–8
Platelet function and the bleeding time in progressive renal failure. Gordge MP, et al. **Thromb Haemost** 1988 Aug 30; 60(1):83–7
No acute effect of cigarette smoking on bleeding time of habitual smokers. Kampman MT, et al. **Thromb Res** 1988 Nov 15;52(4):287–94
Reproducibility of two in vivo tests of platelet function. Miller VT, et al. **Thromb Res** 1988 Dec 15;52(6):507–15
Prevention of acquired defects in platelet function during blood processing. Washitani Y, et al. **Transfusion** 1988 Nov-Dec;28(6):571–5
[Correction of bleeding time after administration of desmopressin in a woman treated with ticlopidine (letter)] Calenda E, et al. **Presse Med** 1988 Nov 12;17(40):2143 **(Fre)**
[Megakaryocytic myelosis—clinical aspects, morphology and platelet function] Hochhaus A, et al. **Klin Wochenschr** 1989 Jan 20;67(2):51–9 (Eng. Abstr.) **(Ger)**
[Measurement of bleeding time and study of thrombocyte aggregation. Standardization of methods, normal values and results in patients with suspected hemorrhagic diathesis] Thommen D, et al. **Schweiz Med Wochenschr** 1988 Oct 29;118(43):1559–67 (Eng. Abstr.) **(Ger)**
[Effect of cod liver oil administration on blood lipid levels, lipoprotein profile and bleeding time] Burchard HU, et al. **Z Ernahrungswiss** 1988 Dec;27(4):222–8 (Eng. Abstr.) **(Ger)**
[Modification of blood coagulation by the anti-arrhythmia drug prajmalium bitartrate in vivo] Riess H, et al. **Z Kardiol** 1989 Feb;78(2):130–3 (Eng. Abstr.) **(Ger)**
[Platelet tests and evaluation] Fujimaki M, et al. **Rinsho Byori** 1988 May;36(5):512–6 **(Jpn)**

INSTRUMENTATION

Ability of whole blood aggregometer to detect platelet hyperaggregability. Abbate R, et al. **Am J Clin Pathol** 1989 Feb;91(2):159–64
A comparative study of variables affecting the bleeding time using two disposable devices. Buchanan GR, et al. **Am J Clin Pathol** 1989 Jan;91(1):45–51
Clinical application of a new in vitro bleeding time device on surgical patients. Tsujinaka T, et al. **Jpn J Surg** 1988 Jul;18(4):430–7

METHODS

An in vitro bleeding time test. Brubaker DB. **Am J Clin Pathol** 1989 Apr;91(4):422–9
A randomized and blinded comparison of the sensitivity and the reproducibility of the Ivy and Simplate II bleeding time techniques. Koster T, et al. **Am J Clin Pathol** 1989 Sep; 92(3):315–20
In vitro bleeding test—a sensitive method for the detection of platelet function impairment and a potential test for the control of low-dose aspirin efficacy [letter] Kretschmer V, et al. **Blut** 1989 Aug;59(2):188
A sensitive in vivo platelet function test in rats based on intravenously injected collagenase. Völkl KP. **Haemostasis** 1989;19(3):174–9
Guidelines on platelet function testing. The British Society for Haematology BCSH Haemostasis and Thrombosis Task Force. **J Clin Pathol** 1988 Dec;41(12):1322–30
ACP Broadsheet 122: August 1989. Platelet function testing. Hutton RA, et al. **J Clin Pathol** 1989 Aug;42(8):858–64
Measuring platelet function with platelet shape change, an early event in aggregation. Beaumont DO, et al. **Thromb Res** 1989 Jan 15;53(2):109–27
[Hemostatic tests for the diagnosis of thrombosis. Examination of thrombotic disease by impedance aggregometry using whole blood] Mizuno A, et al. **Rinsho Byori** 1988 Jun;36(6):632–9 **(Jpn)**

PLATELET MEMBRANE GLYCOPROTEIN COMPLEX IIB–IIIA see **PLATELET MEMBRANE GLYCOPROTEINS**

PLATELET MEMBRANE GLYCOPROTEIN IB see **PLATELET MEMBRANE GLYCOPROTEINS**

PLATELET MEMBRANE GLYCOPROTEINS

see related
PLATELET ADHESIVENESS
PLATELET AGGREGATION

A monoclonal anti-platelet antibody which recognizes p55 antigen. Takaishi M, et al. **Hiroshima J Med Sci** 1989 Mar; 38(1):7–11

ANALYSIS

PADGEM (GMP140) is a component of Weibel–Palade bodies of human endothelial cells. Bonfanti R, et al. **Blood** 1989 Apr;73(5):1109–12
Human vascular endothelial cells express a membrane protein complex immunochemically indistinguishable from the platelet VLA-2 (glycoprotein Ia–IIa) complex. Giltay JC et al. **Blood** 1989 Apr;73(5):1235–41
Identification of the target platelet glycoprotein in autoimmune thrombocytopenia occurring after allogeneic bone marrow transplantation. Benda H, et al. **Blut** 1989 Mar;58(3):151–3
Heterogeneity of fibrinogen receptor expression on platelets activated in normal plasma with ADP: analysis by flow cytometry. Jackson CW, et al. **Br J Haematol** 1989 Jul; 72(3):407–14
Platelet specific alloantigens on the platelet glycoprotein Ia/IIa complex. Smith JW, et al. **Br J Haematol** 1989 Aug; 72(4):534–8
Bone marrow and tissue expression of gpIIb/IIIa, LFA-1, Mac-1 and gp150,95 glycoproteins. Soligo D, et al. **Eur J Haematol** 1989 Feb;42(2):173–81
Analysis of human hemopoietic progenitor cells for the expression of glycoprotein IIIa. Kanz L, et al. **Exp Hematol** 1988 Oct;16(9):741–7
Structural and biosynthetic studies of the granule membrane protein, GMP-140, from human platelets and endothelial cells. Johnston GI, et al. **J Biol Chem** 1989 Jan 25; 264(3):1816–23
Application of analytical isotachophoresis in the study of platelet membrane proteins in patients with chronic myeloproliferative disorders. Kajii E, et al. **J Chromatogr** 1989 May 5;490(1):53–8
Particle agglutination assays for rapid detection of fibronectin, fibrinogen, and collagen receptors on Staphylococcus aureus. Naidu AS, et al. **J Clin Microbiol** 1988 Aug;26(8):1549–54
Presence of platelet glycoproteins Ib and IIb–IIIa in inflammatory and noninflammatory synovium. Konttinen YT, et al. **J Rheumatol** 1989 May;16(5):578–84
Bernard–Soulier syndrome: whole blood diagnostic assays of platelets. Nichols WL, et al. **Mayo Clin Proc** 1989 May; 64(5):522–30
PADGEM protein. Berman CL, et al. **Methods Enzymol** 1989;169:311–26
Biochemistry of platelet membrane glycoproteins. Clemetson KJ. **Prog Clin Biol Res** 1988;283:33–75 (205 ref.)
Membrane alterations in stored human platelets: lectins as probes. Dhar A, et al. **Prog Clin Biol Res** 1988;283:705–8
Ultrastructural immunolocalization and morphometric quantification of platelet membrane GPIb and GPIIb–IIIa in uremic patients. Escolar G, et al. **Prog Clin Biol Res** 1988;283:197–201
Heterogeneity of fibrinogen receptor expression on human platelets activated by ADP in native plasma. Jennings LK, et al. **Prog Clin Biol Res** 1988;283:381–5
Expression, regulation and detection of fibrinogen receptors on activated human platelets. Shattil SJ. **Prog Clin Biol Res** 1988;283:345–80 (114 ref.)
Platelet membrane glycoprotein V: characterization of the thrombin-sensitive glycoprotein from human platelets. Zafar RS, et al. **Thromb Res** 1989 Jan 1;53(1):31–44
[Quantitative immunofluorescence study of platelet membrane glycoprotein in coronary heart disease] Song M, et al. **Chung Hua Hsin Hsueh Kuan Ping Tsa Chih** 1988 Feb;16(1):45–7, 64 (Eng. Abstr.) **(Chi)**
[Hemostatic tests for the diagnosis of thrombosis. Activated platelet] Fujimura K, et al. **Rinsho Byori** 1988 Jun; 36(6):640–5 **(Jpn)**

BIOSYNTHESIS

Biogenesis of the vitronectin receptor in human endothelial cell: evidence that the vitronectin receptor and GPIIb–IIIa are synthesized by a common mechanism. Polack B, et al. **Blood** 1989 May 1;73(6):1519–24
Processing and assembly of the integrin, glycoprotein IIb–IIIa, in HEL cells. Rosa JP, et al. **J Biol Chem** 1989 Jul 25;264(21):12596–603
GMP-140, a platelet alpha-granule membrane protein, is also synthesized by vascular endothelial cells and is localized in Weibel–Palade bodies. McEver RP, et al. **J Clin Invest** 1989 Jul;84(1):92–9

BLOOD

Thrombin-induced platelet aggregation involves an indirect proteolytic cleavage of aggregin by calpain. Puri RN, et al. **Arch Biochem Biophys** 1989 Jun;271(2):346–58
Isolation and characterization of human platelet glycoprotein IX. Roth GJ, et al. **Biochem Biophys Res Commun** 1988 Oct 31;156(2):931–9
GP Ib and Bernard–Soulier platelets [letter] Nurden AT, et al. **Blood** 1989 Jun;73(8):2225–7
Immunoblot analysis of platelet glycoprotein IIb in patients with Glanzmann thrombasthenia in Israel. Seligsohn U, et al. **Br J Haematol** 1989 Jul;72(3):415–23
Comparative studies on the glycoprotein composition of mammalian platelets. Nurden AT, et al. **Comp Biochem Physiol [B]** 1977;56(4):407–13
Analysis of platelet glycoproteins in thrombocytopathias using the lectin–avidin–biotin–peroxidase (LABP) technique. Kehrel B, et al. **Folia Haematol (Leipz)** 1988; 115(4):425–9
A platelet disorder due to a structural abnormality of membrane glycoprotein Ib. Meyer M, et al. **Folia Haematol (Leipz)** 1988;115(4):515–8
Cyclic AMP-dependent phosphorylation of glycoprotein Ib inhibits collagen-induced polymerization of actin in platelets. Fox JE, et al. **J Biol Chem** 1989 Jun 5; 264(16):9520–6
Effect of the thiol group inhibitor monobromobimane and other inhibitors on the composition of the platelet cytoskeletal core and its association with glycoprotein IIIa. Puszkin EG, et al. **J Cell Biochem** 1989 Apr;39(4):339–54

DEFICIENCY

A variant form of Bernard–Soulier syndrome: mild haemostatic defect associated with partial platelet GPIb deficiency. Stevens MC, et al. **Clin Lab Haematol** 1988; 10(4):443–51
The use of fluorescence flow cytometry in the characterization of Bernard–Soulier syndrome and Glanzmann's thrombasthenia. Fabris F, et al. **Haematologica (Pavia)** 1989 Jan–Feb;74(1):39–44

DIAGNOSTIC USE

Correlated measurement of platelet release and aggregation in whole blood. Ault KA, et al. **Cytometry** 1989 Jul; 10(4):448–55

GENETICS

Isolation of the human platelet glycoprotein IIb gene and characterization of the 5' flanking region. Prandini MH, et al. **Biochem Biophys Res Commun** 1988 Oct 14; 156(1):595–601
Structure of the human blood platelet membrane glycoprotein Ib alpha gene. Wenger RH, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):389–95
Translation of the human C3b/C4b receptor mRNA in a cell-free system and by Xenopus oocytes. Kumar V, et al. **Biochemistry** 1989 May 2;28(9):4040–6
Structural integrity of the glycoprotein IIb and IIIa genes in Glanzmann thrombasthenia patients from Israel. Russell ME, et al. **Blood** 1988 Nov;72(5):1833–6
Cloning of GMP-140, a granule membrane protein of platelets and endothelium: sequence similarity to proteins involved in cell adhesion and inflammation. Johnston GI, et al. **Cell** 1989 Mar 24;56(6):1033–44
Acquisition of tumorigenic potential in the human myoepithelial HBL100 cell line is associated with decreased expression of HLA class I, class II and integrin beta 3 and increased expression of c-myc. Krief P, et al.

Int J Cancer 1989 Apr 15;43(4):658–64

The yopM gene of Yersinia pestis encodes a released protein having homology with the human platelet surface protein GPIb alpha. Leung KY, et al. **J Bacteriol** 1989 Sep; 171(9):4623–32

The primary structure of the VLA–2/collagen receptor alpha 2 subunit (platelet GPIa): homology to other integrins and the presence of a possible collagen–binding domain. Takada Y, et al. **J Cell Biol** 1989 Jul;109(1):397–407

The human platelet alloantigens, PlA1 and PlA2, are associated with a leucine33/proline33 amino acid polymorphism in membrane glycoprotein IIIa, and are distinguishable by DNA typing. Newman PJ, et al. **J Clin Invest** 1989 May;83(5):1778–81

Physical linkage of the genes for platelet membrane glycoproteins IIb and IIIa. Bray PF, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8683–7

Human platelet glycoprotein IX: an adhesive prototype of leucine–rich glycoproteins with flank–center–flank structures. Hickey MJ, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6773–7

IMMUNOLOGY

Interchain and intrachain disulphide bonds in human platelet glycoprotein IIb. Localization of the epitopes for several monoclonal antibodies. Calvete JJ, et al. **Biochem J** 1989 Jul 15;261(2):551–60

Effects of an antiplatelet glycoprotein Ib antibody on hemostatic function in the guinea pig. Becker BH, et al. **Blood** 1989 Aug 1;74(2):690–4

A monoclonal antibody (LYP18) directed against the blood platelet glycoprotein IIb/IIIa complex inhibits human melanoma growth in vivo. Boukerche H, et al. **Blood** 1989 Aug 15;74(3):909–12

Monoclonal antibodies against porcine platelet membrane glycoproteins Ib and IIb/IIIa. Takami H, et al. **Blood** 1988 Nov;72(5):1740–7

Laboratory workshop on the characterization of anti–platelet antibodies in immune thrombocytopenic purpura. Gerber H, et al. **Blut** 1989 Jul;59(1):61–6

The serology and immunochemistry of HIV–induced platelet–bound immunoglobulin. Klaassen RJ, et al. **Blut** 1989 Jul;59(1):75–81

Human monoclonal autoantibodies to characterize platelet antigens in immune–mediated thrombocytopenia. Nugent DJ. **Blut** 1989 Jul;59(1):52–8

Altered expression of platelet surface glycoproteins during storage. Dhar A, et al. **Br J Haematol** 1988 Sep;70(1):71–5

PL2–49, a monoclonal antibody against glycoprotein IIb which is a platelet activator. Morel MC, et al. **Br J Haematol** 1989 Jan;71(1):57–63

Immunochemical characterization of an autoantigen on platelet glycoprotein IIb in chronic ITP: comparison with the Baka alloantigen. Tomiyama Y, et al. **Br J Haematol** 1989 Jan;71(1):77–83

Monoclonal antibodies against human platelet membrane glycoprotein IIIa and collagen–induced platelet activation. Kawashima H, et al. **Chem Pharm Bull (Tokyo)** 1989 Feb; 37(2):397–403

Flow cytometric analysis of platelet surface antigens. Marti GE, et al. **Cytometry** 1988 Sep;9(5):448–55

Antibodies to platelet membrane glycoprotein antigens in three cases of infectious mononucleosis–induced thrombocytopenic purpura. Winiarski J. **Eur J Haematol** 1989 Jul;43(1):29–34

The immunohistological detection of platelets, megakaryocytes and thrombi in routinely processed specimens. Gatter KC, et al. **Histopathology** 1988 Sep; 13(3):257–67

Identification and characterization of a novel antigen complex on mouse mammary tumor cells using a monoclonal artibody against platelet glycoprotein Ic. Sonnenberg A, et al. **J Biol Chem** 1988 Oct 5; 263(28):14030–8

Antigenic polymorphism of human very late activation protein–2 (platelet glycoprotein Ia–IIa). Platelet alloantigen Hca. Woods VL Jr, et al. **J Clin Invest** 1989 Mar; 83(3):978–85

Antiplatelet monoclonal F(ab')2 antibody directed against the platelet GPIIb/IIIa receptor complex prevents coronary artery thrombosis in the canine heart. Mickelson JK, et al. **J Mol Cell Cardiol** 1989 Apr;21(4):393–405

Thrombus imaging in a primate model with antibodies specific for an external membrane protein of activated platelets. Palabrica TM, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1036–40

Platelet glycoprotein antigens and immune receptors. Kunicki TJ. **Prog Clin Biol Res** 1988;283:87–123 (175 ref.)

Absence of potentiation with murine antiplatelet GPIIb/IIIa antibody of thrombolysis with recombinant tissue–type plasminogen activator (rt–PA) in a canine venous thrombosis model. Spriggs D, et al. **Thromb Haemost** 1989 Feb 28;61(1):93–6

Autoantibody against platelet glycoprotein IIb/IIIa in a patient with non–Hodgkin's lymphoma. Kubota T, et al. **Thromb Res** 1989 Feb 15;53(4):379–86

Early immunization against platelet glycoprotein IIIa in a newborn Glanzmann type I patient. Bierling P, et al. **Vox Sang** 1988;55(2):109–13

[Antigenicity of human platelet membrane dissociated glycoproteins IIb and IIIa, and glycoprotein IIb/IIIa complex] Nakazawa M, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Aug;51(5):893–900 (Eng. Abstr.) **(Jpn)**

[Preparation of platelet GP IIb/IIIa complex monoclonal antibody and its clinical application] Yoshioka M, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Nov;51(7):1138–46 (Eng. Abstr.) **(Jpn)**

ISOLATION & PURIFICATION

Complete localization of the intrachain disulphide bonds and the N–glycosylation points in the alpha–subunit of human platelet glycoprotein IIb. Calvete JJ, et al. **Biochem J** 1989 Jul 15;261(2):561–8

Structural and functional characterization of major platelet membrane components derived by limited proteolysis of glycoprotein IIIa. Niewiarowski S, et al. **Biochim Biophys Acta** 1989 Jul 24;983(1):91–9

Human platelet glycoprotein Ia. One component is only expressed on the surface of activated platelets and may be a granule constituent. Bienz D, et al. **J Biol Chem** 1989 Jan 5;264(1):507–14

Isolation and characterization of a platelet membrane protein related to the vitronectin receptor. Lam SC, et al. **J Biol Chem** 1989 Mar 5;264(7):3742–9

Rapid purification and partial characterization of human platelet glycoprotein IIIb. Interaction with thrombospondin and its role in platelet aggregation. McGregor JL, et al. **J Biol Chem** 1989 Jan 5;264(1):501–6

Isolation and characterization of platelet glycoprotein IV (CD36). Tandon NN, et al. **J Biol Chem** 1989 May 5; 264(13):7570–5

Purification and properties of human platelet membrane glycoprotein V (GPV). Zafar R, et al. **Prog Clin Biol Res** 1988;283:83–6

METABOLISM

Immunogold–surface replica study of ADP–induced ligand binding and fibrinogen receptor clustering in human platelets. Isenberg WM, et al. **Am J Anat** 1989 Jun–Jul; 185(2–3):142–8

Inhibition of fibrinogen binding to human platelets by blockage of Na+/H+ exchange. De Cristofaro R, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1228–32

Cleavage of a 100 kDa membrane protein (aggregin) during thrombin–induced platelet aggregation is mediated by the high affinity thrombin receptors. Puri RN, et al. **Biochem Biophys Res Commun** 1989 Aug 15;162(3):1017–24

Modulation of an RGDS binding site on the platelet membrane glycoprotein IIb–IIIa complex. Santoro SA, et al. **Biochem Biophys Res Commun** 1989 Apr 14; 160(1):189–95

Fibrinogen association with human monocytes: evidence for constitutive expression of fibrinogen receptors and for involvement of Mac–1 (CD18, CR3) in the binding. Trezzini C, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):477–84

Platelet receptor recognition domains on the alpha chain of human fibrinogen: structure–function analysis. Hawiger J, et al. **Biochemistry** 1989 Apr 4;28(7):2909–14

Trigramin: primary structure and its inhibition of von Willebrand factor binding to glycoprotein IIb/IIIa complex on human platelets. Huang TF, et al. **Biochemistry** 1989 Jan 24;28(2):661–6

Platelet receptor recognition domain on the gamma chain of human fibrinogen and its synthetic peptide analogues. Kloczewiak M, et al. **Biochemistry** 1989 Apr 4;28(7):2915–9

Antiplatelet "hybrid" peptides analogous to receptor recognition domains on gamma and alpha chains of human fibrinogen. Timmons S, et al. **Biochemistry** 1989 Apr 4; 28(7):2919–23

The effect of peptides and monoclonal antibodies that bind to platelet glycoprotein IIb–IIIa complex on the development of clot tension. Cohen I, et al. **Blood** 1989 May 15;73(7):1880–7

Uncoupling in the expression of platelet GP IIb/IIIa in human endothelial cells and K562 cells: absence of immunologic crossreactivity between platelet GP IIb and the vitronectin receptor alpha chain. Kieffer N, et al. **Blood** 1988 Oct;72(4):1209–15

Covalent modification of platelet proteins by palmitate. Muszbek L, et al. **Blood** 1989 Sep;74(4):1339–47

Heterogeneity of drug–dependent platelet antigens and their antibodies in quinine– and quinidine–induced thrombocytopenia: involvement of glycoproteins Ib, IIb, IIIa, and IX. Pfueller SL, et al. **Blood** 1988 Oct; 72(4):1155–62

Thrombin–induced increase in surface expression of epitopes on platelet membrane glycoprotein IIb/IIIa complex and GMP–140 is a function of platelet age. Savage B, et al. **Blood** 1989 Aug 15;74(3):1007–14

Platelet glycoprotein IIb/IIIa complex in cultured cells. Localization in focal adhesion sites in spreading HEL cells. Ylänne J, et al. **Blood** 1988 Nov;72(5):1478–86

Involvement of platelet membrane glycoprotein Ib and glycoprotein IIb/IIIa complex in thrombin–dependent and –independent platelet aggregations induced by tumor cells. Kitagawa H, et al. **Cancer Res** 1989 Feb 1;49(3):537–41

The GPIIB–IIIa–like complex may function as a human melanoma cell adhesion receptor for thrombospondin. Tuszynski GP, et al. **Exp Cell Res** 1989 Jun;182(2):473–81

Palmitylation of the glycoprotein IIb–IIIa complex in human blood platelets. Cierniewski CS, et al. **J Biol Chem** 1989 Jul 25;264(21):12158–64

Complement proteins C5b–9 induce secretion of high molecular weight multimers of endothelial von Willebrand factor and translocation of granule membrane protein GMP–140 to the cell surface. Hattori R, et al. **J Biol Chem** 1989 May 25;264(15):9053–60

Stimulated secretion of endothelial von Willebrand factor is accompanied by rapid redistribution to the cell surface of the intracellular granule membrane protein GMP–140. Hattori R, et al. **J Biol Chem** 1989 May 15;264(14):7768–71

Purification and identification of the lipoprotein–binding proteins from human blood platelet membrane. Koller E, et al. **J Biol Chem** 1989 Jul 25;264(21):12412–8

Structure of the von Willebrand factor domain interacting with glycoprotein Ib. Mohri H, et al. **J Biol Chem** 1988 Dec 5;263(34):17901–4

Glycoprotein Ib and glycoprotein IX in human platelets are acylated with palmitic acid through thioester linkages. Muszbek L, et al. **J Biol Chem** 1989 Jun 15;264(17):9716–9

Determination of the putative binding site for fibronectin on platelet glycoprotein IIb–IIIa complex through a hydropathic complementarity approach. Pasqualini R, et al. **J Biol Chem** 1989 Aug 25;264(24):14566–70

Evidence that monoclonal antibodies against CD9 antigen induce specific association between CD9 and the platelet glycoprotein IIb–IIIa complex. Slupsky JR, et al. **J Biol Chem** 1989 Jul 25;264(21):12289–93

Ca2+–dependent binding of a synthetic Arg–Gly–Asp (RGD) peptide to a single site on the purified platelet glycoprotein IIb–IIIa complex. Steiner B, et al. **J Biol Chem** 1989 Aug 5;264(22):13102–8

A monoclonal antibody against the platelet fibrinogen receptor contains a sequence that mimics a receptor recognition domain in fibrinogen. Taub R, et al. **J Biol Chem** 1989 Jan 5;264(1):259–65

Isolation and functional characterization of the von Willebrand factor–binding domain located between residues His1–Arg293 of the alpha–chain of glycoprotein Ib. Vicente V, et al. **J Biol Chem** 1988 Dec 5; 263(34):18473–9

Platelet glycoprotein Ib beta is phosphorylated on serine 166 by cyclic AMP–dependent protein kinase. Wardell MR, et al. **J Biol Chem** 1989 Sep 15;264(26):15656–61

Differential structural requirements for fibrinogen binding to platelets and to endothelial cells. Tranqui L, et al. **J Cell Biol** 1989 Jun;108(6):2519–27

Fibrinogen–independent platelet adhesion and thrombus formation on subendothelium mediated by glycoprotein IIb–IIIa complex at high shear rate. Weiss HJ, et al. **J Clin Invest** 1989 Jan;83(1):288–97

Loss of platelet fibrinogen receptors during clinical cardiopulmonary bypass. Wenger RK, et al. **J Thorac Cardiovasc Surg** 1989 Feb;97(2):235–9

Expression of platelet glycoproteins by erythroid blasts in four cases of trisomy 21. Debili N, et al. **Leukemia** 1989 Sep;3(9):669–78

Kinetic study of platelet glycoproteins and PPO activity in TPA–induced k562 cells. Adachi M, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Sep;51(6):1069–79

Tyrosine–specific protein phosphorylation is regulated by glycoprotein IIb–IIIa in platelets. Ferrell JE Jr, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2234–8

Thrombin–induced changes in platelet membrane glycoproteins. Michelson AD, et al. **Prog Clin Biol Res** 1988;283:159–62

Role of GPIV as a platelet receptor for collagen adhesion. Tandon NN, et al. **Prog Clin Biol Res** 1988;283:315–8

A monoclonal antibody to the human platelet glycoprotein IIb/IIIa complex induces platelet activation. Modderman PW, et al. **Thromb Haemost** 1988 Aug 30;60(1):68–74

Interaction of thrombin–stimulated platelets with vitronectin (S–protein of complement) substrate: inhibition by a monoclonal antibody to glycoprotein IIb–IIIa complex. Thiagarajan P, et al. **Thromb Haemost** 1988 Dec 22; 60(3):514–7

Collagen–platelet interaction: inhibition by a monoclonal antibody which binds a 90,000 dalton platelet glycoprotein. Chiang TM, et al. **Thromb Res** 1989 Jan 15;53(2):129–43

PHARMACOLOGY

Importance of fibrinogen and platelet membrane glycoprotein IIb/IIIa in shear–induced platelet aggregation. Ikeda Y, et al. **Thromb Res** 1988 Jul 15;51(2):157–63

PHYSIOLOGY

Spontaneous platelet aggregation in type IIB Tampa von Willebrand disease is inhibited by the 52/48–kDa fragment of normal von Willebrand factor, which contains the GPIb binding domain. Saba HI, et al. **Am J Hematol** 1989 Mar; 30(3):150–3

Ultrastructural identification of platelet surface glycoproteins and particle endocytosis with gold–labeled reagents. Hovig T, et al. **APMIS Suppl** 1988;2:183–203

The occupancy of glycoprotein IIb–IIIa complex modulates thrombin activation of human platelets. Sinigaglia F, et al. **Biochim Biophys Acta** 1989 Sep 4;984(2):225–30

The secretory release reaction initiated by complement proteins C5b–9 occurs without platelet aggregation through glycoprotein IIb–IIIa. Ando B, et al. **Blood** 1989 Feb;73(2):462–7

Platelet–melanoma cell interaction is mediated by the

glycoprotein IIb–IIIa complex. Boukerche H, et al. **Blood** 1989 Aug 1;74(2):658–63

Collagen–platelet interactions: evidence for a direct interaction of collagen with platelet GPIa/IIa and an indirect interaction with platelet GPIIb/IIIa mediated by adhesive proteins. Coller BS, et al. **Blood** 1989 Jul; 74(1):182–92

Platelet membrane glycoprotein IIb heavy chain forms a complex with glycoprotein IIIa that binds Arg–Gly–Asp peptides. Lam SC, et al. **Blood** 1989 May 1;73(6):1513–8

Efficient surface expression of platelet GPIIb–IIIa requires both subunits. O'Toole TE, et al. **Blood** 1989 Jul;74(1):14–8

Calcium ions and the conformation of glycoprotein IIIa that is essential fibrinogen binding to platelets: analysis by a new monoclonal anti–GP IIIa antibody, TM83. Yamamoto N, et al. **Blood** 1989 May 1;73(6):1552–60

PADGEM protein in human erythroleukemia cells. Yeo E, et al. **Blood** 1989 Feb 15;73(3):722–8

Platelet membrane glycoproteins and their function: an overview. Kunicki TJ. **Biut** 1989 Jul;59(1):30–4 (41 ref.)

Bidirectional control of membrane expression and/or activation of the tumor cell IRGpIIb/IIIa receptor and tumor cell adhesion by lipoxygenase products of arachidonic acid and linoleic acid. Grossi IM, et al. **Cancer Res** 1989 Feb 15;49(4):1029–37

Recognition of distinct adhesive sites on fibrinogen by related integrins on platelets and endothelial cells. Cheresh DA, et al. **Cell** 1989 Sep 8;58(5):945–53

Amino acid sequences in fibrinogen mediating its interaction with its platelet receptor, GPIIbIIIa. Andrieux A, et al. **J Biol Chem** 1989 Jun 5;264(16):9258–65

Ligand inhibition of the platelet glycoprotein IIb–IIIa complex function as a calcium channel in liposomes. Rybak ME, et al. **J Biol Chem** 1989 Sep 5;264(25):14617–20

Characterization of a novel membrane glycoprotein involved in platelet activation. Scott JL, et al. **J Biol Chem** 1989 Aug 15;264(23):13475–82

Identification of glycoprotein IV (CD36) as a primary receptor for platelet–collagen adhesion. Tandon NN, et al. **J Biol Chem** 1989 May 5;264(13):7576–83

The membrane glycoprotein Ia–IIa (VLA–2) complex mediates the Mg++–dependent adhesion of platelets to collagen. Staatz WD, et al. **J Cell Biol** 1989 May; 108(5):1917–24

Role of IIb–IIIa–like glycoproteins in cell–substratum adhesion of human melanoma cells. Knudsen KA, et al. **J Cell Physiol** 1988 Sep;136(3):471–8

Platelet alpha–granule protein–induced chemotaxis of inflammatory cells and fibroblasts. Senior RM, et al. **Methods Enzymol** 1989;169:233–44

Intercellular adhesion molecule–1 is an endothelial cell adhesion receptor for Plasmodium falciparum. Berendt AR, et al. **Nature** 1989 Sep 7;341(6237):57–9

Lipoxygenase products regulate IRGpIIb/IIIa receptor mediated adhesion of tumor cells to endothelial cells, subendothelial matrix and fibronectin. Honn KV, et al. **Proc Soc Exp Biol Med** 1988 Oct;189(1):130–5

Aggregin: the platelet receptor mediating activation by ADP. Colman RW, et al. **Prog Clin Biol Res** 1988;283:263–77

The molecular biology of platelet and endothelial cell adhesion receptors. Fitzgerald LA, et al. **Prog Clin Biol Res** 1988;283:387–418 (122 ref.)

Cellular adhesion: GPIIb–IIIa as a prototypic adhesion receptor. Plow EF, et al. **Prog Hemost Thromb** 1989; 9:117–56 (281 ref.)

Identification of a platelet membrane glycoprotein as a falciparum malaria sequestration receptor. Ockenhouse CF, et al. **Science** 1989 Mar 17;243(4897):1469–71

Glycoprotein Ib has a partial role in platelet–von Willebrand factor collagen interaction. Aihara M, et al. **Thromb Haemost** 1988 Oct 31;60(2):182–7

[Endothelial glycoprotein IIb/IIIa–like protein is functionally and antigenically different from platelet glycoprotein IIb/IIIa] Yamamoto N, et al. **Nippon Ketsueki Gakkai Zasshi** 1988 Nov;51(7):1234–43 **(Jpn)**

[The structure and function of platelet membrane glycoproteins] Handa M, et al. **Nippon Rinsho** 1989 Apr; 47(4):778–87 **(Jpn)**

[Platelet membrane glycoproteins and their role in the receptor activity of blood platelets] Pawłowska Z, et al. **Postepy Biochem** 1988;34(3):183–207 (163 ref.) **(Pol)**

PLATELET NUMBER see **PLATELET COUNT**

PLATELET STORAGE POOL DEFICIENCY see under **BLOOD PLATELET DISORDERS**

PLATELETPHERESIS see under **BLOOD COMPONENT REMOVAL**

PLATELETS see **BLOOD PLATELETS**

PLATINUM

see related
ORGANOPLATINUM COMPOUNDS

Use of platinum as a modifier in the sensitive detection of tellurium in biological samples. Siddik ZH, et al. **Anal Biochem** 1988 Jul;172(1):190–6

High–resolution electron microscopic investigation of supported platinum particles reduced at high temperatures. Wang L, et al. **J Electron Microsc Tech** 1988 Sep;10(1):7–14

Synthesis, molecular structure determination, and antitumor activity of platinum(II) and palladium(II) complexes of 2–substituted benzimidazole. Mylonas S, et al. **J Inorg Biochem** 1988 Dec;34(4):265–75

ADVERSE EFFECTS

Asthma due to the complex salts of platinum—a cross–sectional survey of workers in a platinum refinery. Merget R, et al. **Clin Allergy** 1988 Nov;18(6):569–80

[Occupational selection in the prevention of respiratory platinosis] Rapoport ZhZh, et al. **Gig Tr Prof Zabol** 1989; (1):8–11 (Eng. Abstr.) **(Rus)**

[Biochemical tests in the diagnosis of nephrotoxicity: assessment of the significance] Pashintseva LP, et al. **Ter Arkh** 1989;61(4):124–7 (Eng. Abstr.) **(Rus)**

ANALYSIS

Comparative study of intravenous and intraarterial cis–platinum on intratumoral platinum concentration in carcinoma of the cervix. Vennin P, et al. **Gynecol Oncol** 1989 Feb;32(2):180–3

A method for in vivo analysis of platinum after chemotherapy with cisplatin. Jonson R, et al. **Phys Med Biol** 1988 Jul; 33(7):847–57

[Plasma, renal and tumor determination of total platinum during predictive tests of chemosensitivity of human tumor implants in the renal capsule in syngeneic mice] Favre R, et al. **Pathol Biol (Paris)** 1988 Dec;36(10):1199–203 (Eng. Abstr.) **(Fre)**

DIAGNOSTIC USE

Noninvasive monitoring of drug biodistribution and metabolism: studies with intraarterial Pt–195m–cisplatin in humans. Shani J, et al. **Cancer Res** 1989 Apr 1;49(7):1877–81

METABOLISM

Different binding to DNA of enantiomeric platinum complexes assessed by inhibition of restriction enzyme activity. Coluccia M, et al. **Anticancer Res** 1989 May–Jun; 9(3):795–8

Platinum(II) binding to metallothioneins. Bongers J, et al. **J Inorg Biochem** 1988 Sep;34(1):55–62

Excretion of platinum into breast milk [letter] [published erratum appears in Lancet 1989 Apr 8;1(8641):798] de Vries EG, et al. **Lancet** 1989 Mar 4;1(8636):497

Correlation of levels of Pt and Se in rats treated simultaneously with cisplatin and sodium selenite. Sakurai H, et al. **Naturwissenschaften** 1988 Aug;75(8):405–6

Covalent binding of platinum to renal protein from sensitive and resistant guinea pigs treated with cisplatin: possible role in nephrotoxicity. Litterst CL, et al. **Res Commun Chem Pathol Pharmacol** 1988 Jul;61(1):35–48

Dithiocarbamate–induced biliary platinum excretion and the control of cis–platinum nephrotoxicity. Basinger MA, et al. **Toxicol Appl Pharmacol** 1989 Feb;97(2):279–88

PHARMACOKINETICS

Evaluation of the effect of furosemide on ultrafilterable platinum kinetics in patients treated with cis–diamminedichloroplatinum. Dumas M, et al. **Cancer Chemother Pharmacol** 1989;23(1):37–40

Platinum concentrations and DNA adduct levels in tumors and organs of cisplatin–treated LOU/M rats inoculated with cisplatin–sensitive or –resistant immunoglobulin M immunocytoma. Fichtinger–Schepman AM, et al. **Cancer Res** 1989 Jun 1;49(11):2862–7

Pharmacokinetics of platinum in cancer patients treated with carboplatin in combination with high–dose methotrexate. el–Yazigi A, et al. **Pharm Res** 1989 Jun;6(6):492–6

[Clinical study of platinum accumulation in gastric cancer after preoperative intra–arterial injection of cisplatin] Itoh A, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2722–5 (Eng. Abstr.) **(Jpn)**

PHARMACOLOGY

Effect of heat on the cytotoxicity and interaction with DNA of a series of platinum complexes. Herman TS, et al. **Int J Radiat Oncol Biol Phys** 1989 Feb;16(2):443–9

Microcalorimetric studies of the effects of platinum group metal complexes on bacterial growth. Bunker JC, et al. **Microbios** 1989;58(235):83–93

[Growth–inhibiting action of platinum(II) complexes of the triamine and tetraamine types containing purines, pyrimidines and their nucleosides] Ivanov VB, et al. **Izv Akad Nauk SSSR [Biol]** 1988 Sep–Oct;(5):746–51 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Platinum–dye complexes inhibit repair of potentially lethal damage following bleomycin treatment. Wang Y, et al. **Br J Cancer** 1989 May;59(5):722–6

[Cisplatin (platidiam) and the prospects for using complex platinum compounds in the clinical chemotherapy of malignant tumors] Gorbunova VA. **Vopr Onkol** 1989; 35(3):325–30 (Eng. Abstr.) **(Rus)**

PLATINUM DIAMMINODICHLORIDE see **CISPLATIN**

PLATYBASIA

see related
ARNOLD–CHIARI DEFORMITY

COMPLICATIONS

Osteogenesis imperfecta associated with basilar impression and cerebral atrophy: a case report. Brooks ML, et al. **Comput Med Imaging Graph** 1989 Jul–Aug;13(4):363–7

[Hereditary syndromes accompanied by pronounced deformity of the spine] Semiachkina AN, et al. **Pediatriia** 1989;(1):104–5 **(Rus)**

DIAGNOSIS

Exophthalmos and basilar impression. A contribution to differential diagnosis of endocrine orbitopathy. Kahaly G, et al. **Neurosurg Rev** 1988;11(3–4):287–92

ETIOLOGY

[Traumatic basilar impression—a special form of atlanto–occipital lesions. Case report] Klossek H, et al. **Zentralbl Chir** 1988;113(14):911–6 **(Ger)**

PLATYFISH see **CYPRINODONTIFORMES**

PLATYHELMINTHS

ANALYSIS

Localization, quantification, and characterization of pancreatic polypeptide immunoreactivity in the parasitic flatworm Diclidophora merlangi and its fish host (Merlangius merlangus). Maule AG, et al. **Gen Comp Endocrinol** 1989 Apr;74(1):50–6

CLASSIFICATION

Monogenea in the light of new evidence and their position among platyhelminths. Lebedev BI. **Angew Parasitol** 1988 Sep;29(3):149–67 (65 ref.)

The phylogeny of the cercomeria (Platyhelminthes: Rhabdocoela) and general evolutionary principles. Brooks DR. **J Parasitol** 1989 Aug;75(4):606–16

ENZYMOLOGY

Occurrence and possible adaptive significance of some histochemically demonstrable dehydrogenases in two entosymbiotic rhabdocoels (Platyhelminthes: Turbellaria). Jennings JB, et al. **Comp Biochem Physiol [B]** 1979; 62(4):301–4

GROWTH & DEVELOPMENT

Development and differentiation of neuronal subsets in asexually reproducing Microstomum lineare. Immunocytochemistry of 5–HT, RF–amide and SCPB. Reuter M, et al. **Histochemistry** 1989;91(2):123–31

METABOLISM

Tetrodotoxin in two species of ribbon worm (Nemertini), Lineus fuscoviridis and Tubulanus punctatus. Miyazawa K, et al. **Toxicon** 1988;26(9):867–74

ULTRASTRUCTURE

Neurocytology of the cerebral ganglion of Fasciola hepatica (Platyhelminthes). Sukhdeo SC, et al. **J Comp Neurol** 1988 Dec 15;278(3):337–43

PLATYPUS see under **MONOTREMATA**

PLATYRRHINA see **CEBIDAE**

PLAY AND PLAYTHINGS

Masked I go forward—play research and creativity: overview. Horan R. **Adolesc Psychiatry** 1988;15:301–5

The semiotics of play fighting at a residential treatment center. Horan R. **Adolesc Psychiatry** 1988;15:367–81

Word child: transformations in play story. Kelly–Byrne D. **Adolesc Psychiatry** 1988;15:333–45

On the relation between creativity and cutting corners. Mechling J. **Adolesc Psychiatry** 1988;15:346–66

Creativity and the vicissitudes of play. Sutton–Smith B. **Adolesc Psychiatry** 1988;15:307–18

Balloons as a cause of airway obstruction. Henderson JM. **Am Fam Physician** 1989 Aug;40(2):171–3

Introducing the 'Henderson maneuver' [editorial] Siwek J. **Am Fam Physician** 1989 Aug;40(2):92

Planning playgrounds for children with disabilities. Stout J. **Am J Occup Ther** 1988 Oct;42(10):653–7 (33 ref.)

Therapeutic intervention with an adapted toy. Williams SE, et al. **Am J Occup Ther** 1988 Oct;42(10):673–6

Serious eye injuries due to war games. Acheson JF, et al. **BMJ** 1989 Jan 7;298(6665):26

The video invasion of rehabilitation. Adriaenssens P, et al. **Burns Incl Therm Inj** 1988 Oct;14(5):417–9

Component processes in bridge bidding and novel problem–solving tasks. Charness N. **Can J Psychol** 1987 Jun;41(2):223–43

Qualitative assessment of the effect of play materials in dyadic peer interactions of children with autism. Dewey D, et

al. **Can J Psychol** 1988 Jun;42(2):242–60
Interaction of normal children with anatomical dolls. Sivan AB, et al. **Child Abuse Negl** 1988;12(3):295–304
Parent playfulness: a case study of infant twins with handicaps. McCollum JA. **Child Care Health Dev** 1988 Jul–Aug;14(4):235–53
Characteristics of social interactions between mothers and their disabled infants: a review. Rogers SJ. **Child Care Health Dev** 1988 Sep–Oct;14(5):301–17 (60 ref.)
Social interactions and play patterns of parents and toddlers with feminine, masculine, and neutral toys. Caldera YM, et al. **Child Dev** 1989 Feb;60(1):70–6
Intercommunity differences in aggression among Zapotec children. Fry DP. **Child Dev** 1988 Aug;59(4):1008–19
Joint attention and infant toy exploration: effects of Down syndrome and prematurity. Landry SH, et al. **Child Dev** 1989 Feb;60(1):103–18
Habituation and maternal encouragement of attention in infancy as predictors of toddler language, play, and representational competence. Tamis-LeMonda CS, et al. **Child Dev** 1989 Jun;60(3):738–51
A comparison of sexually abused and nonsexually abused children's behavioral responses to anatomically correct dolls. August RL, et al. **Child Psychiatry Hum Dev** 1989 Fall;20(1):39–47
Videogames and epilepsy. De Marco P, et al. **Dev Med Child Neurol** 1985 Aug;27(4):519–21
Aggressive behaviors in adult rats deprived of playfighting experience as juveniles. Potegal M, et al. **Dev Psychobiol** 1989 Mar;22(2):159–72
Play behavior of hearing impaired children: integrated and segregated settings. Esposito BG, et al. **Except Child** 1989 Feb;55(5):412–9
Decreasing violent or aggressive theme play among preschool children with behavior disorders. Sherburne S, et al. **Except Child** 1988 Oct;55(2):166–72
Plastic toy whistles in paediatric tracheobronchial tree. Yadav SP, et al. **Indian J Chest Dis Allied Sci** 1988 Jul–Sep; 30(3):197–8
Rattler chips aspiration [letter] Nachiappan M, et al. **Indian Pediatr** 1988 Jul;25(7):701
The effect of play on immobilized children in hospital. Gillis AJ. **Int J Nurs Stud** 1989;26(3):261–9
The relationship of play behavior to cognitive ability in developmentally disabled preschoolers. Power TJ, et al. **J Autism Dev Disord** 1989 Mar;19(1):97–107
Puppets for Prevention: "playing safe is playing smart". Morrison MI, et al. **J Burn Care Rehabil** 1988 Nov–Dec; 9(6):650–1
The response of young, non-sexually abused children to anatomically correct dolls. Glaser D, et al. **J Child Psychol Psychiatry** 1989 Jul;30(4):547–60
Factors influencing the selection of toys for handicapped and normally developing preschool children. Fallon MA, et al. **J Genet Psychol** 1989 Jun;150(2):125–34
Placing toys, pictures, and colorful objects in the isolettes with premature infants [letter] Iskersky V, et al. **J Perinatol** 1988 Fall;8(4):396
Fantasy play in 5- and 6-year-old children. Wall SM, et al. **J Psychol** 1989 May;123(3):245–56
Health wheel of fortune. Fields T. **J Sch Health** 1989 Feb; 59(2):81–2
Object transformations in the play of language-impaired children. Terrell BY, et al. **J Speech Hear Disord** 1988 Nov; 53(4):459–66
Frequency resolution in children. Allen P, et al. **J Speech Hear Res** 1989 Jun;32(2):317–22
Leads from the MMWR. Playground-related injuries in preschool-aged children—United States, 1983–1987. **JAMA** 1988 Nov 18;260(19):2799–800
Toy weapons and firecrackers: a source of hearing loss. Gupta D, et al. **Laryngoscope** 1989 Mar;99(3):330–4
Effects of symbolic play intervention with children who have mental retardation. Kim YT, et al. **Ment Retard** 1989 Jun; 27(3):159–65
Playground-related injuries in preschool-aged children—United States, 1983–1987. **MMWR** 1988 Oct 21; 37(41):629–32
Playground injuries. **N Y State J Med** 1988 Dec;88(12):667–8
Blow hole syndrome [letter] McDonald I. **N Z Med J** 1989 Apr 12;102(865):171
Near-miss asphyxiation from a toy ball: a small parts failure. Baker MD. **Pediatr Emerg Care** 1989 Mar;5(1):34–6
Perinatal factors in the development of gender-related play behavior: sex hormones versus pregnancy complications. Meyer-Bahlburg HF, et al. **Psychiatry** 1988 Aug; 51(3):260–71
Safe on playgrounds? The nature and causes of children's playground accidents and opportunities for prevention. Buck DJ. **Public Health** 1988 Nov;102(6):603–11
Eye injuries associated with 'war games'. Welsh NH, et al. **S Afr Med J** 1989 Sep 16;76(6):270–1

PLAY THERAPY

A preschooler in a disaster. Sugar M. **Am J Psychother** 1988 Oct;42(4):619–29
Send in the clowns.... Edwards KS. **Ohio Med** 1989 May; 85(5):343–5

HISTORY

Play interview therapy: its history, theory and practice—a fifty year retrospective account. Conn JH. **Child Psychiatry Hum Dev** 1989 Fall;20(1):3–13

METHODS

Hypno-play therapy with adults: theory, method, and practice. Shapiro MK. **Am J Clin Hypn** 1988 Jul;31(1):1–10
Child life services and persons with mental retardation. Kastner T, et al. **J Dev Behav Pediatr** 1989 Aug; 10(4):198–200
[A fantasy game as group psychotherapy for handicapped children] Maxeiner V. **Prax Kinderpsychol Kinderpsychiatr** 1988 Sep;37(7):252–7 (Eng. Abstr.) **(Ger)**

PLETHYSMOGRAPHY

Non-invasive assessment of blood vessels. Jonnart LE. **Acta Cardiol** 1989;44(1):1–6
Workplace measurement of respirator effects using respiratory inductive plethysmography. Hodous TK, et al. **Am Ind Hyg Assoc J** 1989 Jul;50(7):372–8
Computerized segmental plethysmography and laser flowmetry. Winsor T, et al. **Am J Cardiol** 1989 Aug 2; 64(6):57C–60C
Ocular pneumoplethysmography can help in the diagnosis of giant-cell arteritis. Bosley TM, et al. **Arch Ophthalmol** 1989 Mar;107(3):379–81
The complementary value of Doppler-ultrasonography and ocular pneumoplethysmography according to Gee (OPG-Gee) in carotid obstructions. Strik F. **Clin Neurol Neurosurg** 1988;90(3):227–33
A modified method of curve analysis in foot volumetry and its reference values. Brudin LH, et al. **Clin Physiol** 1989 Apr;9(2):189–97
Venous occlusion plethysmography reduces arterial diameter and flow velocity. Hiatt WR, et al. **J Appl Physiol** 1989 May;66(5):2239–44
Ocular pneumoplethysmography after lens implantation [letter] Gee W, et al. **J Cataract Refract Surg** 1989 Jan; 15(1):115–6
Remote monitoring of free flaps with telephonic transmission of photoplethysmograph waveforms. Jones JW, et al. **J Reconstr Microsurg** 1989 Apr;5(2):141–4
The value of the photoplethysmograph in monitoring skin closure in microsurgery. Scheker LR, et al. **J Reconstr Microsurg** 1985 Oct;2(1):1–5
Postoperative carotid duplex scan and ocular pneumoplethysmography [letter] Gee W. **J Vasc Surg** 1989 Mar;9(3):508
Quantitative estimation of compliance of human systemic veins by occlusion plethysmography with radionuclide—methodology and the effect of nitroglycerin. Takatsu H, et al. **Jpn Circ J** 1989 Mar;53(3):245–54
Assessment of arterial and venous circulation in upper and lower extremities by venous occlusion strain gauge plethysmography. Normal values and reproducibility. Altenkirch HU, et al. **Vasa** 1989;18(2):140–5
[Phallo-plethysmographic examination in clinical practice] Zvěřina J. **Cesk Psychiatr** 1988 Aug;84(4):231–6 (Eng. Abstr.) **(Cze)**
[Detection of acute venous thromboses using plethysmography. Possibilities and limitations] Langeron P, et al. **J Mal Vasc** 1989;14 Suppl B:52–5 (14 ref.) (Eng. Abstr.) **(Fre)**
[Evaluation of the diagnostic reliability of combination plethysmography-Doppler. Evaluated on the basis of a prospective study of 176 patients with suspected thrombophlebitis of the limbs including 60 phlebographic correlations (letter)] Planchon B, et al. **J Mal Vasc** 1988; 13(3):290 **(Fre)**
[Venous hemodynamics in axillary venous stasis] Joel A, et al. **Z Gesamte Inn Med** 1988 Oct 15;43(20):592–3 (Eng. Abstr.) **(Ger)**
[Photoplethysmography in the diagnosis of post-thrombotic syndrome] Mlačak B. **Lijec Vjesn** 1989 Jan–Feb; 111(1–2):31–2 (Eng. Abstr.) **(Scr)**
[Plethysmography in the study and follow-up of patients operated on for varices] Alvarez Sánchez JA, et al. **Angiologia** 1988 Jul–Aug;40(4):145–8 **(Spa)**
[Validation of ultrasonic flowmetry and occlusion plethysmography in venous thromboses] Vega Gómez ME, et al. **Angiologia** 1988 Jul–Aug;40(4):129–32 (Eng. Abstr.) **(Spa)**

INSTRUMENTATION

Design for an ultrasound-based instrument for measurement of tissue blood flow. Burns SM, et al. **Biomater Artif Cells Artif Organs** 1989;17(1):61–8
Observations on the photoplethysmograph pulse derived from a laser Doppler flowmeter. Almond NE, et al. **Clin Phys Physiol Meas** 1989 May;10(2):137–45
Rhinomanometry in children. Parker LP, et al. **Int J Pediatr Otorhinolaryngol** 1989 May;17(2):127–37
On the construction, circuitry and properties of liquid metal strain gages. Meglan D, et al. **J Biomech** 1988;21(8):681–5
Computerized artifact detection for ventilatory inductance plethysmographic apnea monitors. East KA, et al. **J Clin Monit** 1989 Jul;5(3):170–6
Automated venous occlusion plethysmograph. Sinton AM, et al. **Med Biol Eng Comput** 1988 May;26(3):295–302
[The application of informatics to mercury gauge plethysmography] Barthel J, et al. **Phlebologie** 1989 Jan–Mar;42(1):143–50 (Eng. Abstr.) **(Fre)**
[Theoretical and experimental studies of the diagnostic relevance and comparability of mechanical oscillation parameters] Müller E, et al. **Pneumologie** 1989 Jul; 43(7):339–47 (Eng. Abstr.) **(Ger)**
[Noninvasive and continuous intensive care monitoring of regional microcirculation of the brain by opto-encephalography] Bilz D. **Psychiatr Neurol Med Psychol Beih** 1988;40:89–93 **(Ger)**
[Computer-assisted plethysmographic vascular diagnosis: new methodologic aspects] Blazek V, et al. **Vasa Suppl** 1988;23:81–5 **(Ger)**

METHODS

Photoplethysmographic documentation of improved microcirculation after pentoxifylline therapy. Roeren T, et al. **Angiology** 1988 Nov;39(11):929–33
Duplex ultrasound and ocular pneumoplethysmography concordance in detecting severe carotid stenosis. Castaldo JE, et al. **Arch Neurol** 1989 May;46(5):518–22
Ocular pneumoplethysmography in giant-cell arteritis [letter] Bates JH. **Arch Ophthalmol** 1989 Sep;107(9):1279
Skin photoplethysmography—a review. Kamal AA, et al. **Comput Methods Programs Biomed** 1989 Apr;28(4):257–69 (63 ref.)
OODG-Ulrich and OPG-Gee: a comparative study. Strik F. **Doc Ophthalmol** 1988 May;69(1):51–71
Calibration of respiratory inductive plethysmograph during natural breathing. Sackner MA, et al. **J Appl Physiol** 1989 Jan;66(1):410–20
High quality photoplethysmograph signals from a laser Doppler flowmeter: preliminary studies of two simultaneous outputs from the finger. Almond NE, et al. **J Biomed Eng** 1988 Oct;10(5):458–62
Photoplethysmography in the assessment of venous insufficiency. Nicolaides AN, et al. **J Vasc Surg** 1987 Mar; 5(3):405–12
Potential distribution in the thorax in relation to electrical field plethysmography. Bhattacharya B, et al. **Med Biol Eng Comput** 1988 May;26(3):303–9
Analysis of haemorheological variables—methodology and reference values. Sandhagen B. **Ups J Med Sci** 1989; 94(1):81–7
[Venous plethysmography in a sitting position] Zicot M. **J Mal Vasc** 1988;13(4):317–20 (Eng. Abstr.) **(Fre)**
[Light reflection rheography and invasive measurement of venous pressure in the standing exercise test] Seyček J. **Vasa** 1989;18(1):18–23 (Eng. Abstr.) **(Ger)**
[A new autonomic functional test using digital analysis of digital plethysmography] Toshima H, et al. **Rinsho Shinkeigaku** 1988 May;28(5):552–7 (Eng. Abstr.) **(Jpn)**

STANDARDS

Combined non-invasive diagnostics of deep vein thrombosis of the lower extremities. Ovcharenko KI, et al. **Cor Vasa** 1989;31(1):42–50
[Reproducibility of venous occlusion plethysmography. Value of a computerized system of calculation] Serise JM, et al. **J Mal Vasc** 1988;13(3):195–9 (Eng. Abstr.) **(Fre)**

PLETHYSMOGRAPHY, IMPEDANCE

Management of clinically suspected acute venous thrombosis in outpatients with serial impedance plethysmography in a community hospital setting. Huisman MV, et al. **Arch Intern Med** 1989 Mar;149(3):511–3
Spectral analysis of impedance respirogram in newborn infants. Äärimaa T, et al. **Biol Neonate** 1988;54(4):188–94
Pitfalls and limitations in the use of impedance cardiography [letter] de Mey C, et al. **Br Heart J** 1989 Jan;61(1):128–9
Impedance monitoring for subcutaneous free flap transfers. Harrison DH, et al. **Br J Plast Surg** 1989 May;42(3):318–23
Detection of impaired left ventricular function in coronary artery disease with acceleration index in the first derivative of the transthoracic impedance change. Feng S, et al. **Clin Cardiol** 1988 Dec;11(12):843–7
Seasonal transepidermal water loss and impedance of forearm skin in atopics and non-atopics. den Arend JA, et al. **Contact Dermatitis** 1988 Nov;19(5):376–8
Comparative estimation of central haemodynamics during dynamic load by impedance cardiography and radiocardiography. Eisenberg BM, et al. **Cor Vasa** 1988; 30(4):285–91
Determination of extracellular fluid volume using impedance measurements. Espejo MG, et al. **Crit Care Med** 1989 Apr; 17(4):360–3
Noninvasive assessment of cardiac output by impedance cardiography in the newborn canine. Gotshall RW, et al. **Crit Care Med** 1989 Jan;17(1):63–5
Use of transthoracic bioimpedance to determine cardiac output in pediatric patients. Introna RP, et al. **Crit Care Med** 1988 Nov;16(11):1101–5
Comparison of cardiac output estimation by thoracic electrical bioimpedance, thermodilution, and Fick methods. Salandin V, et al. **Crit Care Med** 1988 Nov;16(11):1157–8
Origins of the impedance change in impedance cardiography by a three-dimensional finite element model. Kim DW, et al. **IEEE Trans Biomed Eng** 1988 Dec;35(12):993–1000
Changes in the impedance cardiogram occurring with change

in posture in patients with heart disease. Richards NT, et al. **Int J Cardiol** 1988 Sep;20(3):365–72

Thoracic electric bioimpedance measurement of cardiac output in the newborn infant. Belik J, et al. **J Pediatr** 1988 Nov;113(5):890–5

A comparative study of cardiac output in neonates supported by mechanical ventilation: measurement with thoracic electrical bioimpedance and pulsed Doppler ultrasound. Tibballs J. **J Pediatr** 1989 Apr;114(4 Pt 1):632–5

The limitations of impedance plethysmography in the diagnosis of acute deep venous thrombosis. Patterson RB, et al. **J Vasc Surg** 1989 May;9(5):725–9; discussion 729–30

Prognosis of chronic subdural hematoma using noninvasive skull impedance plethysmography. Takeuchi T, et al. **Neurol Med Chir (Tokyo)** 1988 Jul;28(7):654–60

The evaluation of systolic time intervals and impedance cardiogram of neonates. Kagiya A, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 May;41(5):601–8

Pediatric defibrillation: importance of paddle size in determining transthoracic impedance. Atkins DL, et al. **Pediatrics** 1988 Dec;82(6):914–8

Laser-Doppler velocimetry and photoplethysmography in the diagnosis of abnormal venous reflux. Lucarotti ME, et al. **Phlebologie** 1988 Nov–Dec;41(4):735–9

Correlation study of left atrial pressure and pulmonary rheogram. Zhang XY, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1989; 4(1):34–7

A comparison of tracheal breath sounds, airflow, and impedance pneumography in the detection of childhood apnea. Beckerman RC, et al. **Sleep** 1985 Dec;8(4):342–6

Detection of physiological events by impedance. Kim DW. **Yonsei Med J** 1989;30(1):1–11 (58 ref.)

[Physical work capacity and left ventricular function assessed using an impedance cardiographic method in patients with a rheumatic mitral valve defect] Terzieva L. **Vutr Boles** 1989;28(1):36–41 (Eng. Abstr.) **(Bul)**

[Influence of opposing needles on the rheoencephalogram of rabbits suffering from acute experimental cerebral ischemia] Li LS, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Aug;8(8):481–2, 454 (Eng. Abstr.) **(Chi)**

[Peripheral rheography as a screening study for chronic placental insufficiency] Feiks A, et al. **Gynakol Rundsch** 1988;28 Suppl 2:146–8 **(Ger)**

[Impedance cardiography in labor: clinical significance of several hemodynamic parameters] Moggian G, et al. **Gynakol Rundsch** 1989;29(1):32–4 (Eng. Abstr.) **(Ger)**

[Technic and application of light reflection rheography] Tumino G, et al. **Clin Ter** 1987 Dec 31;123(6):449–56 (Eng. Abstr.) **(Ita)**

[Application of bioelectric impedance measurement in the evaluation of body fat] Tagliabue A, et al. **Recenti Prog Med** 1989 Feb;80(2):59–62 (Eng. Abstr.) **(Ita)**

[Comparison between the methods of thoracic bioimpedance and thermodilution for determining cardiac output in heart disease patients (letter)] Máttar JA. **Arq Bras Cardiol** 1988 Mar;50(3):213–6 **(Por)**

[Accuracy of the rheographic method of evaluating stroke volume] Zemtsovskiĭ EV, et al. **Kardiologiia** 1989 Jun; 29(6):75–9 (Eng. Abstr.) **(Rus)**

[Rheography: nature, perspectives, trends and errors in use (50th anniversary of the method)] Kedrov AA. **Klin Med (Mosk)** 1989 Jan;67(1):13–8 (33 ref.) **(Rus)**

[Rheocardiographic volume parameters of the heart using computer-assisted technology] Scheidová L, et al. **Bratisl Lek Listy** 1988 Oct;89(10):748–51 (Eng. Abstr.) **(Slo)**

[Measurement technic of tissue resistance in electrocardiography] Alcalde MP, et al. **Rev Esp Fisiol** 1988 Dec;44(4):353–8 (Eng. Abstr.) **(Spa)**

INSTRUMENTATION

Estimation of body fluid volumes using tetrapolar bioelectrical impedance measurements. Lukaski HC, et al. **Aviat Space Environ Med** 1988 Dec;59(12):1163–9

Design and implementation of a digital filter for beat-by-beat impedance cardiography. Yamamoto Y, et al. **IEEE Trans Biomed Eng** 1988 Dec;35(12):1086–90

Possible technique to measure ventricular volume using electrical impedance measurements with an oesophageal electrode. Patterson RP. **Med Biol Eng Comput** 1987 Nov; 25(6):677–9

Respiratory inductance plethysmography with an electrical impedance plethysmograph. Sinton AM, et al. **Med Biol Eng Comput** 1988 Mar;26(2):213–7

[Non-invasive determination and follow up of circulatory parameters by means of impedance cardiography] Gömöry A, et al. **Orv Hetil** 1988 Sep 25;129(39):2083–9 (Eng. Abstr.) **(Hun)**

[Results of new diagnostic applications in the phlebologic field with reflected-light rheography] Tumino G, et al. **Ann Ital Chir** 1987;59(1–6):391–401 **(Ita)**

[Metrologic aspects of interactions of probing currents with the impedance of biological objects in the system of temporary channel separation in rheographic equipment] Psakhis MB, et al. **Med Tekh** 1989 Jan–Feb;(1):37–40 (Eng. Abstr.) **(Rus)**

[An electrode for rheorectography] Gaponov VV, et al. **Vestn Khir** 1989 Feb;142(2):97 **(Rus)**

METHODS

Pathologic myopia and pharmaceutical agents: rheo-oculographic experience. Giovannini A, et al. **Acta Ophthalmol Suppl (Copenh)** 1988;185:100–1

Computer method for automatic determination of stroke volume using impedance cardiography signals. Cybulski G. **Acta Physiol Pol** 1988 Sep–Dec;39(5–6):494–503

Comparison of two impedance cardiographic techniques for measuring cardiac output in critically ill patients. Gotshall RW, et al. **Crit Care Med** 1989 Aug;17(8):806–11

Assessment of the optimal atrio-ventricular delay in DDD paced patients by impedance plethysmography. Eugene M, et al. **Eur Heart J** 1989 Mar;10(3):250–5

Evaluation of consistency among different electrical impedance indices of relative cerebral blood flow in normal resting individuals. Jevning R, et al. **J Biomed Eng** 1989 Jan;11(1):53–6

Study of brain tissue impedance in the hydrocephalic cat. Higashi K, et al. **J Neurol Neurosurg Psychiatry** 1989 May; 52(5):636–42

Elimination of breathing artefacts from impedance cardiograms at rest and during exercise. Eiken O, et al. **Med Biol Eng Comput** 1988 Jan;26(1):13–6

Microprocessor-based system for measurement of electrical impedances during haemodialysis and in postoperative care. Goovaerts HG, et al. **Med Biol Eng Comput** 1988 Jan; 26(1):75–80

[Light reflex rheography--a new examination method in phlebology] Bizoň J. **Vnitr Lek** 1989 Feb;35(2):158–63 (Eng. Abstr.) **(Cze)**

[The diagnosis of acute (deep venous thrombosis) amd of chronic venous circulatory disorders *chronic venous insufficiency) using light reflection rheography (LRR) in clinical and hospital practice] Hördegen KM. **Schweiz Rundsch Med Prax** 1988 Nov 8;77(45):1224–30 (Eng. Abstr.) **(Ger)**

[Mechano- and impedance cardiography parameters in patients with heart failure in administration of a calcium antagonist. The significance of the Heather index] Linde M, et al. **Z Kardiol** 1989 Mar;78(3):181–6 (Eng. Abstr.) **(Ger)**

[Use of rheography for studying renal blood flow in small laboratory animals] Barinov EF, et al. **Fiziol Zh** 1988 Jul–Aug;34(4):111–4 (Eng. Abstr.) **(Rus)**

[Assessment of myocardial contractility by transthoracic impedance rheoplethysmography] Gurevich MI, et al. **Fiziol Zh** 1988 Jul–Aug;34(4):3–8 (Eng. Abstr.) **(Rus)**

[A new method of pulmonary rheography in an experiment] Vaĭda RI, et al. **Fiziol Zh** 1988 Jul–Aug;34(4):109–11 (Eng. Abstr.) **(Rus)**

[Possibilities of further improvement in rheographic methods of examination in cardiology] Kaziulin AN, et al. **Kardiologiia** 1988 Jul;28(7):90–1 **(Rus)**

PLETHYSMOGRAPHY, WHOLE BODY

Sources of error in flow–volume curves. Effect of expired volume measured at the mouth vs that measured in a body plethysmograph. Coates AL, et al. **Chest** 1988 Nov; 94(5):976–82

Differences in plethysmographic lung volumes. Effects of linked vs unlinked spirometry. Williams JH Jr, et al. **Chest** 1989 Jan;95(1):117–23

[Contribution of whole body plethysmography to respiratory functional exploration] Tabka Z, et al. **Tunis Med** 1989 Mar; 67(3):137–43 (25 ref.) **(Fre)**

[Airway resistance curves in obstructive respiratory tract diseases. 8 types of airway resistance curves in spontaneous respiration] Ulmer WT, et al. **Fortschr Med** 1988 Nov 20; 106(33):663–4, 665–6, 667 (13 ref.) (Eng. Abstr.) **(Ger)**

[Body plethysmography studies in patients with obstructed nasal respiration before and following corrective surgery of the nasal septum] Kautzky M, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Nov;67(11):593–8 (Eng. Abstr.) **(Ger)**

INSTRUMENTATION

[Bronchial provocation in children: a comparison between the polyfrequent oscillation method and body plethysmography] Buhr W, et al. **Pneumologie** 1989 Jul; 43(7):400–2 (Eng. Abstr.) **(Ger)**

[Oscillatory measurement of airway resistance with the custo vit in comparison with Oscillaire and whole body plethysmography] Fichter J, et al. **Pneumologie** 1989 Jul; 43(7):382–6 (Eng. Abstr.) **(Ger)**

[Practical experiences with 2 oscillatory measuring procedures, Siregnost FD 5 and custo vit, in the assessment of chronic airway obstruction] Pleger E, et al. **Pneumologie** 1989 Jul;43(7):353–7 (Eng. Abstr.) **(Ger)**

METHODS

Assessment of airway reactivity in guinea pigs: comparison of methods employing whole body plethysmography. Thorne PS, et al. **Toxicology** 1988 Nov 14;52(1–2):141–63

[Improvement in measuring airway resistance by lowering the oscillatory frequency] Wuthe H, et al. **Prax Klin Pneumol** 1988 Nov;42(11):790–2 (Eng. Abstr.) **(Ger)**

[Evaluation of airway resistance determined by whole-body plethysmography] Kuznetsova VK, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):392–5 (Eng. Abstr.) **(Rus)**

PLEURA

State of the art. The pleura. Sahn SA. **Am Rev Respir Dis** 1988 Jul;138(1):184–234 (594 ref.)

Unilateral Horner's syndrome associated with interpleural catheter injection of local anesthetic. Parkinson SK, et al. **Anesth Analg** 1989 Jan;68(1):61–2

Pain of delayed traumatic splenic rupture masked by intrapleural lidocaine. Pond WW, et ai. **Anesthesiology** 1989 Jan;70(1):154–5

Hanging-drop technique for intrapleural analgesia [letter] Squier RC, et al. **Anesthesiology** 1989 May;70(5):882

A simplified method for pleural abrasion [letter] Bognolo DA, et al. **Ann Thorac Surg** 1989 Feb;47(2):332

Intrapleural regional analgesia for pain management in cholecystectomy. el-Naggar MA, et al. **Arch Surg** 1989 May;124(5):568–70

Intrapleural analgesia for post-thoracotomy pain and blood levels of bupivacaine following intrapleural injection. Kambam JR, et al. **Can J Anaesth** 1989 Mar;36(2):106–9

Interpleural block [editorial] Lewis GW. **Can J Anaesth** 1989 Mar;36(2):103–5 **(Eng, Fre)**

Breakage and detachment of an Abrams needle in the pleural cavity during performance of a pleural biopsy. Fité E, et al. **Chest** 1989 Apr;95(4):928–9

Diaphragmatic excursion after pleural sclerosis. Loring SH, et al. **Chest** 1989 Feb;95(2):374–8

Pleural block: technique for regional anesthesia during percutaneous hepatobiliary drainage. Rosenblatt M, et al. **Radiology** 1989 Jul;172(1):279–80

[Interpleural analgesia (letter)] Aguilar JL, et al. **Rev Esp Anestesiol Reanim** 1988 Nov–Dec;35(6):345–6 **(Spa)**

[Localization of the interpleural space using the "hanging drop" method] Blanco E, et al. **Rev Esp Anestesiol Reanim** 1989 Mar–Apr;36(2):117–8 (Eng. Abstr.) **(Spa)**

[Intrapleural analgesia in thoracic pathology (letter)] Rojas Castro A, et al. **Rev Esp Anestesiol Reanim** 1988 Sep–Oct; 35(5):274 **(Spa)**

[The Orebro pleural drainage constructed at the clinic] Dernevik L, et al. **Lakartidningen** 1989 Feb 1;86(5):336 **(Swe)**

ABNORMALITIES

[A case of bilateral pneumothoraces due to intrathoracic communication through a defect in the mediastinal pleura] Nomori H, et al. **Kyobu Geka** 1988 Aug;41(9):761–3 (Eng. Abstr.) **(Jpn)**

ANATOMY & HISTOLOGY

Pleural pressure from abdominal to pulmonary rib cage: sweep of the lung border. Agostoni E, et al. **Respir Physiol** 1989 Jan;75(1):105–15

Pleural liquid pressure at the caudal border of the lung. Agostoni E, et al. **Respir Physiol** 1989 Jan;75(1):117–28

[Morphostructural features of the pleural lymphatic circulation in the pig] Paino G, et al. **Boll Soc Ital Biol Sper** 1989 Apr;65(4):289–94 (Eng. Abstr.) **(Ita)**

BLOOD SUPPLY

Familial multiple-organ arterial ectasia with massive hemoptysis. Su CC, et al. **Ann Thorac Surg** 1989 Mar; 47(3):461–3

CYTOLOGY

[Effects of anisodamine on the metabolism of arachidonic acid by rat pleural neutrophils] Yue TL, et al. **Yao Hsueh Hsueh Pao** 1988;23(10):727–31 (Eng. Abstr.) **(Chi)**

DRUG EFFECTS

Chemical pleurodesis in primary spontaneous pneumothorax. van den Brande P, et al. **Thorac Cardiovasc Surg** 1989 Jun; 37(3):180–2

IMMUNOLOGY

Antitumour potential of pleural cavity macrophages in lung cancer patients without malignant effusion. Kimura S, et al. **Br J Cancer** 1989 Apr;59(4):535–9

Fibrinolysis by rat mesothelial cells in vitro: the effect of mineral dusts at non-toxic doses. Donaldson K, et al. **Br J Exp Pathol** 1988 Aug;69(4):487–94

Elevated levels of GM-CSF and IL-1 in the serum, peritoneal and pleural cavities of GM-CSF transgenic mice. Gearing AJ, et al. **Immunology** 1989 Jun;67(2):216–20

Identification of antigens of Mycobacterium tuberculosis using human monoclonal antibodies. Wallis RS, et al. **J Clin Invest** 1989 Jul;84(1):214–9

[Levels of complement components in sera and pleural fluid in patients with various types of pleural pathology] Cicioğlu R, et al. **Mikrobiyol Bul** 1987 Jul;21(3):185–93 (Eng. Abstr.) **(Tur)**

INJURIES

Tracheopleuropulmonary injuries following enteral tube insertion. Odocha O, et al. **J Natl Med Assoc** 1989 Mar; 81(3):275–81

Transthoracic repair of a traumatic subarachnoid–pleural fistula. Dosios T, et al. **Neurochirurgia (Stuttg)** 1989 May; 32(3):82–3

INNERVATION

[Subpleural nerve block in stenocardia and myocardial infarction] Vagner EA, et al. **Sov Med** 1989;(4):68–71 **(Rus)**

METABOLISM

Pleural mesothelial cells stimulated by asbestos release chemotactic activity for neutrophils in vitro. Antony VB, et al. **Am Rev Respir Dis** 1989 Jan;139(1):199–206

Low glucose and pH levels in malignant pleural effusions. Diagnostic significance and prognostic value in respect to pleurodesis. Rodríguez–Panadero F, et al. **Am Rev Respir Dis** 1989 Mar;139(3):663–7

Pharmacokinetics of cefonicid in serum and its penetration into lung tissue, bronchial mucosa and pleura. Furlan G, et al. **Int J Clin Pharmacol Res** 1989;9(1):49–53

Comparative permeability of canine visceral and parietal pleura. Payne DK, et al. **J Appl Physiol** 1988 Dec; 65(6):2558–64

PATHOLOGY

Raja pleural biopsy needle. A comparison with the Abrams needle in experimental pleural effusion. Ogirala RG, et al. **Am Rev Respir Dis** 1989 Apr;139(4):984–7

Guidelines for thoracentesis and needle biopsy of the pleura. This position paper of the American Thoracic Society was adopted by the ATS Board of Directors, June 1988. Sokolowski JW Jr, et al. **Am Rev Respir Dis** 1989 Jul; 140(1):257–8

Occurrence and morphology of tumors induced in nude mice transplanted with chrysotile–transformed rat pleural mesothelial cells. Fleury–Feith J, et al. **Biol Cell** 1989; 65(1):45–50

Pleural and lung cryobiopsies during thoracoscopy. Bonniot JP, et al. **Chest** 1989 Mar;95(3):492–3

Low–risk large–needle biopsy of chest lesions. Clore F, et al. **Chest** 1989 Sep;96(3):538–41

Pulmonary disease associated with pleural "asbestos" plaques. Sison RF, et al. **Chest** 1989 Apr;95(4):831–5

MR imaging of malignant pleural mesothelioma. Lorigan JG, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):617–20

Mesothelial papillary proliferation of the pleura associated with radiation therapy: does it have a role in the pathogenesis of mesothelioma? Jagirdar J, et al. **Mt Sinai J Med** 1989 Mar;56(2):147–9

Pathology of pleural infections. Harley RA. **Semin Respir Infect** 1988 Dec;3(4):291–7 (21 ref.)

[Needle biopsy of thoracic lesions (a clinical analysis of 410 cases)] Cui ZH. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Dec; 11(6):338–40, 385 (Eng. Abstr.) **(Chi)**

[Asbestos and the lung. II] Konietzko N. **Med Klin** 1988 Jun 17;83(13–14):449–55 (105 ref.) **(Ger)**

[Thoracoscopy: surgical technic] Maassen W. **Pneumologie** 1989 Feb;43(2):53–4 (Eng. Abstr.) **(Ger)**

[Pleural porosity in idiopathic spontaneous pneumothorax] Radomsky J, et al. **Pneumologie** 1989 May;43(5):250–3 (Eng. Abstr.) **(Ger)**

[The German Society of Pneumology and Tuberculosis. Recommendations for personnel and time requirements in pneumologic studies. Bronchoscopy, thoracoscopy, lung and pleura puncture] **Prax Klin Pneumol** 1988 Dec; 42(12):853–8 (13 ref.) **(Ger)**

[Surgical diagnostic methods in the thoracic area] Engelmann C. **Z Erkr Atmungsorgane** 1988;171(1):19–28 (19 ref.) (Eng. Abstr.) **(Ger)**

[Pleural thickening associated with solitary pulmonary nodule: evaluation with thin–slice CT] Maehara Y, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Mar 25; 49(3):253–8 (Eng. Abstr.) **(Jpn)**

[Intra–pleural examinations by the flexible fiberoptic bronchoscope] Tonotsuka H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Sep; 26(9):936–42 (Eng. Abstr.) **(Jpn)**

[Chronic nonspecific pleural empyema (histoimmunohistochemical study] Sivakov AE, et al. **Probl Tuberk** 1988;(7):52–6 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Effects of unilateral pleural symphysis on respiratory system mechanics and gas exchange in anesthetized dogs. Deschamps C, et al. **Am Rev Respir Dis** 1988 Jun; 137(6):1385–9

The mouse pericardium: it allows passage of particulate matter from the pleural to the pericardial cavity. Fukuo Y, et al. **Anat Rec** 1988 Sep;222(1):1–5

Pleural pressure between diaphragm and rib cage during inspiratory muscle activity. Macklem PT, et al. **J Appl Physiol** 1988 Sep;65(3):1286–95

Pleural and extrapleural interstitial liquid pressure measured by cannulas and micropipettes. Miserocchi G, et al. **J Appl Physiol** 1988 Aug;65(2):555–62

Effect of positive–pressure ventilatory frequency on regional pleural pressure. Novak R, et al. **J Appl Physiol** 1988 Sep; 65(3):1314–23

Effects of changes in left ventricular loading and pleural pressure on mitral flow. Robotham JL, et al. **J Appl Physiol** 1988 Oct;65(4):1662–75

Neuroendocrine bag cells of Aplysia are activated by bag cell peptide–containing neurons in the pleural ganglion. Brown RO, et al. **J Neurophysiol** 1989 Jun;61(6):1142–52

Influence of pleural pressure variations on cardiovascular system dynamics: a model study. Goldstein Y, et al. **Med Biol Eng Comput** 1988 May;26(3):251–9

Lung border sweep upon phrenic stimulation: dynamic fall in pleural liquid pressure. Agostoni E, et al. **Respir Physiol** 1989 Sep;77(3):379–94

Pleural liquid pressure in the zone of apposition and in the lung zone. Agostoni E, et al. **Respir Physiol** 1989 Mar; 75(3):357–70

PHYSIOPATHOLOGY

Relationship of lung geometry to the development of pleural abnormalities in insulation workers exposed to asbestos. Delfino R, et al. **Am J Ind Med** 1989;15(4):417–25

Pleural effusions associated with ethchlorvynol lung injury result from visceral pleural leak. Miller KS, et al. **Am Rev Respir Dis** 1989 Sep;140(3):764–70

RADIATION EFFECTS

Pleural irradiation in thoracic malignancies [letter] Habrand JL, et al. **Int J Radiat Oncol Biol Phys** 1988 Oct;15(4):1050

RADIOGRAPHY

Between– and within–reader variability in the assessment of pleural abnormality using the ILO 1980 international classification of pneumoconioses. Bourbeau J, et al. **Am J Ind Med** 1988;14(5):537–43

Roentgenogram of the month. A middle–aged man with a right upper lobe mass. Rounded atelectasis of the right upper lobe with bilateral pleural thickening. Green D, et al. **Chest** 1989 Feb;95(2):435–7

The fate of people with pleural hyalinosis (plaques): relationship to direct and indirect asbestos exposure. Navrátil M, et al. **Czech Med** 1988;11(3):146–56

The radiographic pleural abnormalities in asbestos exposure: relationship to physiologic abnormalities. Jones RN, et al. **J Thorac Imaging** 1988 Oct;3(4):57–66 (51 ref.)

Costal pleura: appearances at high–resolution CT. Im JG, et al. **Radiology** 1989 Apr;171(1):125–31

The pleuropulmonary manifestations of ankylosing spondylitis. Boushea DK, et al. **Semin Arthritis Rheum** 1989 May;18(4):277–81 (28 ref.)

[The pathologic basis of pleural indentation sign in lung cancer] Xiao XS. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Apr;22(2):85–8 (Eng. Abstr.) **(Chi)**

[X–ray manifestations and pathologic basis of lung and pleural adjacent to peripheral pulmonary masses] Yang XM. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Apr; 22(2):89–92 (Eng. Abstr.) **(Chi)**

[The radiologic description of pleural effusions with special reference to an additional projection] Hartung K. **Tierarztl Prax** 1989;17(2):119–23 (5 ref.) (Eng. Abstr.) **(Ger)**

[Clinical evaluation of cases with pleural plaque on chest X–ray] Kishimoto T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Dec; 26(12):1263–6 (Eng. Abstr.) **(Jpn)**

[Roentgenologic evaluation of indrawn parietal pleura] Kubota H, et al. **Rinsho Hoshasen** 1989 Jan;34(1):51–7 (Eng. Abstr.) **(Jpn)**

[Clinico–radiologic pleuropulmonary aspects of major collagenoses] Hascalovici M, et al. **Rev Ig [Pneumoftiziol]** 1988 Oct–Dec;37(4):327–44 **(Rum)**

SURGERY

Pleuroperitoneal shunts in the management of persistent chylothorax. Murphy MC, et al. **Ann Thorac Surg** 1989 Aug;48(2):195–200

Spontaneous pneumothorax: an analysis of pleurectomy vs. conservative therapy in United States Air Force fliers. Everett WD. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 1):1089–93

Reconstruction of a large full thickness chest wall defect by a double–folded vertical rectus abdominis musculocutaneous flap. Kiyoizumi T, et al. **Br J Plast Surg** 1989 Jul;42(4):460–2

Management of intractable pleural effusion in a dog with pleuroperitoneal shunt. Smeak DD, et al. **Vet Surg** 1987 May–Jun;16(3):212–6

[Treatment of spontaneous pneumothorax] Zeri G. **Minerva Chir** 1989 Feb 28;44(4):687–91 (56 ref.) **(Ita)**

[Pleuroperitoneal shunt for malignant pleural effusions] Sadahiro S, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Jan 20;24(1):1–6 (Eng. Abstr.) **(Jpn)**

[A case of intractable hepatic hydrothorax treated by pleuro–venous shunt] Oizumi H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Apr;37(4):751–4 (Eng. Abstr.) **(Jpn)**

[A rare case of eosinophilic pleuritis treated by means of decortication] Oizumi H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul;36(7):1206–9 (Eng. Abstr.) **(Jpn)**

[Hyperbaric oxygenation in the prevention and treatment of suppurative complications after operations on the lungs and pleura] Biriukov IuV, et al. **Grudn Khir** 1988 May–Jun; (3):49–51 (Eng. Abstr.) **(Rus)**

[Prevention of bronchopleural complications in children by the use of Scalpel–1 laser] Mavliutova MG, et al. **Grudn Khir** 1989 May–Jun;(3):56–8 (Eng. Abstr.) **(Rus)**

[A method of draining the pleural cavity] Komarov NV, et al. **Klin Khir** 1988;(10):67 **(Rus)**

[Treatment of residual pleural cavity and clotted hemothorax in patients operated on in pulmonary tuberculosis] Kabanov AN, et al. **Probl Tuberk** 1988;(11):34–5 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Differentiation of malignant from normal and reactive mesothelial cells by the argyrophil technique for nucleolar organiser region associated proteins. Ayres JG, et al. **Thorax** 1988 May;43(5):366–70

PLEURAL DISEASES

Tuberculous empyema with bronchopleural fistula revisited. Williams J, et al. **J Tenn Med Assoc** 1988 Oct;81(10):622–3

[Benign pleural pathology of asbestos] Chailleux E, et al. **Rev Pneumol Clin** 1988;44(4):166–80 (138 ref.) (Eng. Abstr.) **(Fre)**

[Pleuropulmonary asbestosis. Observations on a clinical case] Salatino A, et al. **Minerva Chir** 1988 Nov 15;43(21):1855–9 (Eng. Abstr.) **(Ita)**

BLOOD

Phenotypes of peripheral blood lymphoid cells in patients with asbestos–related pleural lesions. Ozesmi M, et al. **Eur Respir J** 1988 Dec;1(10):938–42

CHEMICALLY INDUCED

Respiratory morbidity in workers exposed to asbestos in the primary manufacture of building materials. Robins TG, et al. **Am J Ind Med** 1988;14(4):433–48

Pleuropulmonary disease during bromocriptine treatment of Parkinson's disease. McElvaney NG, et al. **Arch Intern Med** 1988 Oct;148(10):2231–6

Natural history of pleural thickening after exposure to crocidolite. de Klerk NH, et al. **Br J Ind Med** 1989 Jul; 46(7):461–7

COMPLICATIONS

Histoplasmoma, pleural fibrosis, and slowly enlarging pleural effusion in an asymptomatic patient [letter] Aelony Y. **Am Rev Respir Dis** 1988 Jun;137(6):1513

Rounded atelectasis. Clinical experience with 74 patients. Hillerdal G. **Chest** 1989 Apr;95(4):836–41

DIAGNOSIS

Chest sonography. Differentiation of pulmonary consolidation from pleural disease. Acunas B, et al. **Acta Radiol** 1989 May–Jun;30(3):273–5

Thoracic manifestations of internal pancreatic fistulas: report of five cases. Izbicki JR, et al. **Am J Gastroenterol** 1989 Mar;84(3):265–71

State of the art. The pleura. Sahn SA. **Am Rev Respir Dis** 1988 Jul;138(1):184–234 (594 ref.)

Ultrasound in chest disease: 1. Pleura. Fataar S. **Australas Radiol** 1988 Aug;32(3):295–301

Gastro–pleuro–bronchial fistula mimicking bronchiectasis. Irwin ST, et al. **Br J Clin Pract** 1988 Dec;42(12):514–7

Colopleural fistula presenting as tension pneumothorax in strangulated diaphragmatic hernia. Report of a case. Reddy SA, et al. **Dis Colon Rectum** 1989 Feb;32(2):165–7

Thoracic actinomycosis. Jensen BM, et al. **Scand J Thorac Cardiovasc Surg** 1989;23(2):181–4

[Pleuro–parenchymatous asbestosis. The value of bronchoalveolar lavage fluid analysis] Corhay JL, et al. **Rev Med Liege** 1989 Mar 15;44(6):218–28 **(Fre)**

[Thoracoscopy in thoracic wall processes] Greschuchna D. **Pneumologie** 1989 Feb;43(2):119–21 (Eng. Abstr.) **(Ger)**

[Value of ultrasonography in the diagnosis of pleural diseases in children] Boroń Z, et al. **Radiol Diagn (Berl)** 1988; 29(6):849–56 (Eng. Abstr.) **(Ger)**

[Malignant fibrous mesothelioma and granulomas (letter)] Esquirol Puig X, et al. **Med Clin (Barc)** 1989 Feb 11; 92(5):198 **(Spa)**

EPIDEMIOLOGY

Re: "US prevalence of occupational pleural thickening: a look at chest x–rays from the first National Health and Nutrition Examination Survey" [letter] Cooper WC. **Am J Epidemiol** 1989 Jan;129(1):229–30

An epidemiological study in an Anatolian village environmentally exposed to tremolite asbestos. Baris YI, et al. **Br J Ind Med** 1988 Dec;45(12):838–40

ETIOLOGY

Candida tropicalis empyema associated with acquired gastropleural fistula in a newborn infant. Malik S, et al. **Am J Perinatol** 1989 Jul;6(3):347–8

Intravascular and pleural involvement by Pneumocystis carinii in a patient with the acquired immunodeficiency syndrome (AIDS) [letter] Dyner TS, et al. **Ann Intern Med** 1989 Jul 1;111(1):94–5

Pleural effusions and pancreatico–pleural fistulae associated with asymptomatic pancreatic disease. Cooper CB, et al. **Br J Dis Chest** 1988 Jul;82(3):315–20

Bronchopleurobiliary fistula. A complication of intrahepatic biliary stent migration. Dasmahapatra HK, et al. **Chest** 1988 Oct;94(4):874–5

Amyloidosis with pleural involvement. Graham DR, et al. **Eur Respir J** 1988 Jun;1(6):571–2

Oesophago–pleural fistula secondary to empyema thoracis. Singla R, et al. **Indian J Chest Dis Allied Sci** 1988 Jul–Sep; 30(3):225–9

Pleuropulmonary manifestations of actinomycosis and nocardiosis. Heffner JE. **Semin Respir Infect** 1988 Dec; 3(4):352–61 (57 ref.)

Fungal diseases of the pleura: clinical manifestations, diagnosis, and treatment. Lambert RS, et al. **Semin Respir Infect** 1988 Dec;3(4):343–51 (51 ref.)

Bleeding as a complication of fine needle lung biopsy. Doyle T, et al. **Thorax** 1988 Dec;43(12):1013–4

Pulmonary tuberculosis complicated by bronchopleural fistula. van der Werf TS, et al. **Trop Doct** 1989 Jan; 19(1):31–3

Cardiovascular and pulmonary complications of epidemic typhus. Diab SM, et al. **Trop Geogr Med** 1989 Jan; 41(1):76–9

[Toxoplasmic pleuro–pericarditis associated with Hodgkin's disease] Guignard E, et al. **Rev Med Interne** 1988 Nov–Dec; 9(5):473–6 (17 ref.) (Eng. Abstr.) **(Fre)**

[Late complications of lung and pleural tuberculosis] Krieger HG, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:211–4 (Eng. Abstr.) **(Ger)**

[A strange calcification on/in the thorax. A dorsal pleural calcification following long–term drainage of a splinter injury and pleural empyema on the right] Frahm R. **Radiologe** 1989 Jan;29(1):51–2 **(Ger)**

[Study of postoperative bronchopleural fistulas—analysis of factors related to bronchopleural fistulas] Sato M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Mar;37(3):498–503 (Eng. Abstr.) **(Jpn)**

[Postoperative bronchopleural fistula—diagnostic significance of masked cases and results of early re–operation] Sato M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jan;37(1):11–6 (Eng. Abstr.) **(Jpn)**

[Transdiaphragmatic bronchopleural fistulas as complications of subdiaphragmatic abscesses] Lokhvitskiĭ SV, et al. **Grudn Khir** 1989 May–Jun;(3):71–7 (Eng. Abstr.) **(Rus)**

[Pleuropulmonary manifestations of rheumatoid arthritis (a review of the literature)] Sukhareva GE. **Vrach Delo** 1989 Mar;(3):51–5 (65 ref.) **(Rus)**

[Pancreato–pleural fistula as a complication of post–traumatic pancreatic mediastinal pseudocyst] Matejiček E, et al. **Rozhl Chir** 1989 Apr;68(4):240–4 (Eng. Abstr.) **(Slo)**

[Renopleural fistula secondary to xanthogranulomatous pyelonephritis] Fernández García JS, et al. **Actas Urol Esp** 1989 Jan–Feb;13(1):45–8 (Eng. Abstr.) **(Spa)**

[Pleural calcifications in pneumoconiosis caused by mica (letter)] García Pachón E, et al. **Rev Clin Esp** 1989 Jun; 185(1):45–6 **(Spa)**

IMMUNOLOGY

[Prognostic significance of the leukocyte interferon reaction in the treatment of acute surgical infection in children] Kutubidze RA, et al. **Klin Khir** 1988;(6):22–4 (Eng. Abstr.) **(Rus)**

[Levels of complement components in sera and pleural fluid in patients with various types of pleural pathology] Cicioğlu R, et al. **Mikrobiyol Bul** 1987 Jul;21(3):185–93 (Eng. Abstr.) **(Tur)**

MICROBIOLOGY

[Anaerobic bacteria in pathology of the lungs and pleura] Mil'chenko KP, et al. **Mikrobiol Zh** 1987 Sep–Oct; 49(5):52–5 (Eng. Abstr.) **(Rus)**

[Isolation of non–spore–forming anaerobic bacteria from patients with tuberculosis of the lungs and other diseases of the respiratory organs] Kazarova TA, et al. **Probl Tuberk** 1989;(1):48–51 (Eng. Abstr.) **(Rus)**

[Pleural aspergillosis: apropos of a case (letter)] Rovira M, et al. **Rev Clin Esp** 1988 Jun;183(2):97 **(Spa)**

PARASITOLOGY

Parasitic infections of the pleural space. Roberts PP. **Semin Respir Infect** 1988 Dec;3(4):362–82 (108 ref.)

PATHOLOGY

Cytopathology of alpha chain disease involving the central nervous system and pleura. Kumar PV, et al. **Acta Cytol** 1988 Nov–Dec;32(6):902–7

Pulmonary disease associated with pleural "asbestos" plaques. Sison RF, et al. **Chest** 1989 Apr;95(4):831–5

Transient expectoration of pancreatic fluids in a patient with pancreaticopleural fistula. Gouin PR, et al. **Crit Care Med** 1989 Mar;17(3):293–4

Role of percutaneous needle biopsy by Cope's needle in the diagnosis of pleural diseases. Raj B, et al. **Indian J Chest Dis Allied Sci** 1988 Apr–Jun;30(2):88–92

Pleural plaques [letter] Lemeshow S, et al. **J Occup Med** 1989 Jan;31(1):55–6

Percutaneous aspiration, drainage, and biopsy in children. Liu P, et al. **J Pediatr Surg** 1989 Sep;24(9):865–6

[Needle biopsy of thoracic lesions (a clinical analysis of 410 cases)] Cui ZH. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Dec; 11(6):338–40, 385 (Eng. Abstr.) **(Chi)**

[Intra–pleural examinations by the flexible fiberoptic bronchoscope] Tonotsuka H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Sep; 26(9):936–42 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Railroad workers with pleural plaques: II. Small airway dysfunction among asbestos–exposed workers. Hjortsberg U, et al. **Am J Ind Med** 1988;14(6):643–7

Railroad workers with pleural plaques: I. Spirometric and nitrogen washout investigation on smoking and nonsmoking asbestos–exposed workers. Hjortsberg U, et al. **Am J Ind Med** 1988;14(6):635–41

Asbestos–related pleural plaques and lung function. Oliver LC, et al. **Am J Ind Med** 1988;14(6):649–56

Progressive apical pleural fibrosis: a 'constrictive' ventilatory defect. Oliver RM, et al. **Br J Dis Chest** 1988 Oct; 82(4):439–43

Pressure–flow behavior of a bronchopleural fistula during mechanical ventilation with positive pressure. Pérez Fontán JJ, et al. **J Appl Physiol** 1989 Apr;66(4):1789–99

PREVENTION & CONTROL

[Possibilities of bronchoscopy in the treatment of acute destructive pneumonia and in the prevention of its complications] Manerov FK, et al. **Pediatriia** 1988;(4):36–40 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Computerized tomographic identification of visceral pleural changes other than in interlobar lung fissures. Solomon A. **Am J Ind Med** 1989;15(5):557–63

Relationship between number of asbestos bodies in autopsy lung and pleural plaques on chest X–ray film. Kishimoto T, et al. **Chest** 1989 Mar;95(3):549–52

Roentgenographic evidence for predominant left–sided location of unilateral pleural plaques. Withers BF, et al. **Chest** 1989 Jun;95(6):1262–4

Bilateral pleural plaques in Corsica: a marker of non–occupational asbestos exposure. Boutin G, et al. **IARC Sci Publ** 1989;(90):406–10

Use of oblique chest roentgenograms in detecting pleural disease in asbestos–exposed workers. Sherman CB, et al. **J Occup Med** 1988 Sep;30(9):681–3

Neonatal radiologic casebook: pleural calcification in a premature newborn infant. Sekar KC, et al. **J Perinatol** 1987 Winter;7(1):67–8

The diaphragm, chest wall, and pleura. **J Thorac Imaging** 1989 Jan;4(1):1–94

Computed tomography in the diagnosis of asbestos–related thoracic disease. Gamsu G, et al. **J Thorac Imaging** 1989 Jan;4(1):61–7 (25 ref.)

The radiographic pleural abnormalities in asbestos exposure: relationship to physiologic abnormalities. Jones RN, et al. **J Thorac Imaging** 1988 Oct;3(4):57–66 (51 ref.)

Conventional and high resolution computed tomography in the diagnosis of asbestos–related diseases. Lynch DA, et al. **Radiographics** 1989 May;9(3):523–51

Thoraco–pleural actinomycosis presenting like diffuse pulmonary embolism. Møller–Jensen B, et al. **Thorac Cardiovasc Surg** 1988 Oct;36(5):284–6

Relationship of lung function to radiographic reading (ILO) in patients with asbestos related lung disease. Cotes JE, et al. **Thorax** 1988 Oct;43(10):777–83

[The contribution of computer tomography in improving the diagnosis of disorders of the thoracic wall and pleura] Salamoun V, et al. **Cesk Radiol** 1988 Nov;42(6):412–9 (Eng. Abstr.) **(Cze)**

[Clinical evaluation of cases with pleural plaque on chest X–ray] Kishimoto T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Dec; 26(12):1263–6 (Eng. Abstr.) **(Jpn)**

RADIONUCLIDE IMAGING

The use of radionuclide cisternography in the diagnosis of pleural cerebrospinal fluid fistulae. Krasnow AZ, et al. **J Nucl Med** 1989 Jan;30(1):120–3

SURGERY

Closure of chronic postpneumonectomy bronchopleural fistula using the transsternal transpericardial approach. Ginsberg RJ, et al. **Ann Thorac Surg** 1989 Feb;47(2):231–5

Transpericardial bronchial closure with omentopexy for postpneumonectomy bronchopleural fistula. Saito H, et al. **Ann Thorac Surg** 1989 Feb;47(2):312–3

Surgical transsternal treatment of bronchopleural fistula postpneumonectomy. Beltrami V. **Chest** 1989 Feb; 95(2):379–82

Esophago coloplasty for esophago–pleural fistula. Rao KS, et al. **Indian J Chest Dis Allied Sci** 1988 Oct–Dec; 30(4):287–90

Transthoracic repair of a traumatic subarachnoid–pleural fistula. Dosios T, et al. **Neurochirurgia (Stuttg)** 1989 May; 32(3):82–3

The laser in thoracoscopy. Boutin C. **Pneumologie** 1989 Feb; 43(2):96–7

Treatment of postpneumonectomy empyema and associated bronchopleural fistula. Experience of 100 consecutive postpneumonectomy patients. Eerola S, et al. **Scand J Thorac Cardiovasc Surg** 1988;22(3):235–9

Surgery for pulmonary aspergilloma and pleural aspergillosis. Stamatis G, et al. **Thorac Cardiovasc Surg** 1988 Dec; 36(6):356–60

[Bronchopleural fistula after pneumonectomy and its transpericardial closure] Pafko P, et al. **Rozhl Chir** 1989 Apr;68(4):230–2 (Eng. Abstr.) **(Cze)**

[Echinococcus cysticus costalis: report of 2 cases and review of the literature] Stamatis G, et al. **Pneumologie** 1989 Apr; 43(4):213–6 (13 ref.) (Eng. Abstr.) **(Ger)**

[Clinical significance of omental pedicle flap closure method in chronic empyema with bronchopleural fistula] Kitano M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug; 36(8):1255–63 (Eng. Abstr.) **(Jpn)**

[Treatment of bronchopleural fistula and empyema after pulmonary resection] Saitoh Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep;36(9):1972–7 (Eng. Abstr.) **(Jpn)**

[Endoscopic intubation of an esophageo–pleural fistula] Korabel'nikov AI, et al. **Klin Khir** 1988;(10):65 **(Rus)**

THERAPY

Postural management of bronchopleural fistula [letter] Lau KY. **Chest** 1988 Nov;94(5):1122

The challenge of bilateral bronchopleural fistula [letter] Weksler N, et al. **Chest** 1989 Apr;95(4):938–9

High–frequency oscillatory ventilation of a canine bronchopleural fistula. Mayers I, et al. **Crit Care Med** 1989 Jan;17(1):58–62

Thoracoscopic closure of distal bronchopleural fistulas, using tissue glue. Aasebø U. **Eur Respir J** 1989 Apr;2(4):383–4

Conventional versus high frequency jet ventilation with a bronchopleural fistula. Spinale FG, et al. **J Surg Res** 1989 Feb;46(2):147–51

Occlusion of bronchopleural fistula after lung injury—a new treatment by bronchoscopy. Regel G, et al. **J Trauma** 1989 Feb;29(2):223–6

Closure of a post–pneumonectomy bronchopleural fistula with fibrin sealant (Tisseel). Onotera RT, et al. **Thorax** 1988 Dec;43(12):1015–6

[Endoscopic closure of broncho–pleural fistula after pneumonectomy] Nomoto S, et al. **Kyobu Geka** 1988 May; 41(6):521–4 (Eng. Abstr.) **(Jpn)**

[Endoscopic closure of the postoperative bronchopleural fistula] Ikushima Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov;36(11):2521–4 (Eng. Abstr.) **(Jpn)**

[Plasmapheresis in the combination therapy of patients with pyogenic destructive diseases of the lungs and pleura] Alekseeva ME, et al. **Grudn Khir** 1989 Jan–Feb;(1):59–62 (Eng. Abstr.) **(Rus)**

[Temporary occlusion of the bronchi in the treatment of complex suppurative destruction of the lungs] Gredzhev AF, et al. **Grudn Khir** 1989 Mar–Apr;(2):41–4 (Eng. Abstr.) **(Rus)**

PLEURAL EFFUSION

Pleural effusions: pathogenesis, radiologic evaluation, and therapy. Henschke CI, et al. **J Thorac Imaging** 1989 Jan; 4(1):49–60 (70 ref.)

[Usefulness of the determination of lipids parameters in pleural effusions] Romero Candeira S, et al. **Med Clin (Barc)** 1989 Apr 1;92(12):450–3 (Eng. Abstr.) **(Spa)**

BLOOD

Thin–layer chromatographic separation and in situ fluorimetric determination of ofloxacin in plasma and pleural fluid. Warlich R, et al. **J Chromatogr** 1989 May 30;490(2):395–403

[Evaluation of T lymphocytes and lymphocyte subpopulations in patients with pleural effusion] D'Andrea A, et al. **Arch Monaldi Mal Torace** 1987 Nov–Dec; 42(6):555–61 (Eng. Abstr.) **(Ita)**

CHEMICALLY INDUCED

Pleuropulmonary involvement during bromocriptine treatment. Kinnunen E, et al. **Chest** 1988 Nov;94(5):1034–6

Bilateral exudative pleural effusions following intravenous ethchlorvynol administration. Miller KS, et al. **Chest** 1989 Feb;95(2):464–6

Isotretinoin and eosinophilic pleural effusion [letter] Bunker CB, et al. **Lancet** 1989 Feb 25;1(8635):435–6

Unilateral pleural effusion as the presenting feature of ovarian hyperstimulation syndrome. Anderson K, et al. **Scott Med J** 1988 Oct;33(5):338–9

[Drug–induced respiratory complications. Study of 27 cases] Foucher P, et al. **Therapie** 1989 May–Jun;44(3):229–35 (Eng. Abstr.) **(Fre)**

COMPLICATIONS

Myelopathy, ascites and pleural effusion in systemic lupus erythematosus. Waga S, et al.
Acta Paediatr Jpn Overseas Ed 1989 Feb;31(1):78–84

Carditis complicating inflammatory bowel disease in children. Case report and review of the literature. Granot E, et al. **Eur J Pediatr** 1988 Dec;148(3):203–5

Diaphragmatic defect as a cause of massive hydrothorax in cirrhosis of liver. Chen A, et al. **J Clin Gastroenterol** 1988 Dec;10(6):663–6 (8 ref.)

Tension gastrothorax complicating traumatic diaphragmatic hernia. Sidhu BS, et al. **J Indian Med Assoc** 1988 Jul; 86(7):182–4

Pleural effusion in polycystic kidney disease: case report. Westerfield BT, et al. **Va Med** 1988 Nov;115(11):546–7

Recurrent spontaneous infected pleural effusion in a patient with alcoholic cirrhosis, hepatic hydrothorax, and ascites. Baylor PA, et al. **West J Med** 1988 Aug;149(2):216–7

[Pleural effusion and yellow nails (letter)] Voisin S, et al. **Ann Med Interne (Paris)** 1988;139(4):287–9 **(Fre)**

[Fever, cough, fatigue (clinical conference)] Steiner A, et al. **Schweiz Rundsch Med Prax** 1988 Oct 18;77(42):1144–6 (Eng. Abstr.) **(Ger)**

[Plasma cell leukemia originating with pleural effusion] Guzzini F, et al. **Minerva Med** 1989 Feb;80(2):177–80 (26 ref.) (Eng. Abstr.) **(Ita)**

DIAGNOSIS

Immunostaining of mesothelial cells: no reactivity with HLE–1 [letter] Guzman J, et al. **Acta Cytol** 1989 Jan–Feb; 33(1):136–7

Distinguishing benign from malignant pleural effusions by lectin immunocytochemistry. Rosen–Levin E, et al.
Acta Cytol 1989 Jul–Aug;33(4):499–504

Thoracoscopy: a review of 121 consecutive surgical procedures. Page RD, et al. **Ann Thorac Surg** 1989 Jul; 48(1):66–8

Postpartum pleural effusion. Udeshi UL, et al.
Br J Obstet Gynaecol 1988 Sep;95(9):894–7

The prevalence of pleural effusions in pre–eclampsia: an ultrasound study. Wallis MG, et al.
Br J Obstet Gynaecol 1989 Apr;96(4):431–3

Diagnostic value of ferritin in malignant pleural and peritoneal effusions. Yinnon A, et al. **Cancer** 1988 Dec 15; 62(12):2564–8

The sonographic features and implications of fetal pleural effusions. Adams H, et al. **Clin Radiol** 1988 Jul; 39(4):398–401 (24 ref.)

Ultrasound guided puncture of pleural fluid collections and superficial thoracic masses. Rasmussen OS, et al.
Eur J Radiol 1989 May;9(2):91–2

Diagnostic value of carcinoembryonic antigen assay of pleural & peritoneal effusions in malignancy. Gandhi AK, et al. **Indian J Med Res** 1989 Feb;90:22–6

Real–time ultrasound evaluation of tuberculous pleural effusions. Carazo Martínez O, et al. **JCU** 1989 Jul–Aug; 17(6):407–10

Thoracoscopy in the diagnosis of pleural effusions. Wu MH, et al. **Jpn J Clin Oncol** 1989 Jun;19(2):116–9

Antenatal detection of fetal pleural effusions and neonatal management. Thomas DB, et al. **Med J Aust** 1979 Oct 20;2(8):435–6

Extralobar pulmonary sequestration presenting as intractable pleural effusion. Vade A, et al. **Pediatr Radiol** 1989; 19(5):333–4

Imaging of pleural infections. Schabel SI.
Semin Respir Infect 1988 Dec;3(4):298–307 (48 ref.)

[Diagnostic value of CEA assay combined with CA50 in malignant and benign effusion] Xu WB.
Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih 1988 Dec; 11(6):327–9, 384 (Eng. Abstr.) **(Chi)**

[Thoracoscopy in the diagnosis of pleural effusions] Hsiue BH, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Mar; 41(3):233–6 (Eng. Abstr.) **(Chi)**

[Adenosine deaminase assay for the diagnosis of tuberculous pleural effusion] Yiin KT, et al.
Chung Hua I Hsueh Tsa Chih 1988 Sep;42(3):201–4 (Eng. Abstr.) **(Chi)**

[Thoracoscopy using flexible fiberoptic bronchoscopy—a preliminary report of experimental and clinical studies] Zhang DH, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Jan; 28(1):3–6, 60 (Eng. Abstr.) **(Chi)**

[Iatrogenic Cushing's syndrome with mediastinal lipomatosis simulating cardiomegaly and pleural effusion: report of a case] Tao HY, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Apr;87(4):500–4 (Eng. Abstr.) **(Chi)**

[Diagnosis of post–traumatic pleural effusion] Capellier G, et al. **Ann Fr Anesth Reanim** 1989;8(2):131–2 (Eng. Abstr.) **(Fre)**

[Significance of ultrasonic–guided pleural punctures/thoracic drainage after abdominal procedures and blunt abdominal/thoracic trauma] Kohlberger EJ, et al.
Helv Chir Acta 1989 Jun;56(1–2):155–7 (Eng. Abstr.) **(Ger)**

[Immunocytochemistry of pleural effusion in breast carcinoma using the adhesive slide assay] Guzman J, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:377–9 (Eng. Abstr.) **(Ger)**

[Optical, bioptic, cytological and chemical laboratory studies in pleural effusion] Loddenkemper R.
Prax Klin Pneumol 1988 Jun;42 Suppl 1:373–6 (Eng. Abstr.) **(Ger)**

[Sonography of the diaphragmatic pleura in tumor patients] Görg C, et al. **Ultraschall Med** 1988 Dec;9(6):274–8 (Eng. Abstr.) **(Ger)**

[Sonographic volumetry of pleural effusions] Lorenz J, et al. **Ultraschall Med** 1988 Oct;9(5):212–5 (Eng. Abstr.) **(Ger)**

[Pulmonary atelectasis and massive pleural effusion. Echocardiography] Zuppiroli A, et al. **G Ital Cardiol** 1987 Dec;17(12):1161–4 (Eng. Abstr.) **(Ita)**

[Evaluation of lactate dehydrogenase isoenzyme patterns in patients with pleural effusion with and without neoplasms] Ricci F, et al. **Medicina (Firenze)** 1988 Jul–Sep;8(3):323–6 (Eng. Abstr.) **(Ita)**

[Diagnostic value of determination of pleural and serum lysozyme activity in patients with pleural effusion of various causes] Moriwaki Y, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1988 Dec; 26(12):1274–8 (Eng. Abstr.) **(Jpn)**

[Possibilities and place of USG in the diagnosis of pleural diseases] Boroń Z. **Pol Przegl Radiol (Warszawa)** 1988 May–Jun;52(3):131–4 (Eng. Abstr.) **(Pol)**

[Diagnosis and treatment of pleural exudates] Alekseev VG, et al. **Voen Med Zh** 1988 Nov;(11):35–7 **(Rus)**

[Purulent pericarditis, pleural effusion and acute arterial occlusion of a lower limb (clinical conference)]
Medicina (B Aires) 1988;48(3):297–302 **(Spa)**

DRUG THERAPY

Bio–adhesio–chemo (BAC) therapy for patients with malignant pleural effusion. Sugitachi A, et al.
Am J Clin Oncol 1989 Apr;12(2):156–61

Steroid resistant pleural effusion in systemic lupus erythematosus treated with tetracycline pleurodesis. Gilleece MH, et al. **Ann Rheum Dis** 1988 Dec;47(12):1031–2

Treating pleural effusion [letter] Miller JM. **Chest** 1989 Sep; 96(3):703

Intrapleural adriamycin in treatment of myelomatous pleural effusion: a case report [letter] Iannitto E, et al.
Haematologica (Pavia) 1988 Jul–Aug;73(4):325–6

Intracavitary therapy with bleomycin for the treatment of malignant pleural effusions. Ostrowski MJ.
J Surg Oncol Suppl 1989;1:7–13 (27 ref.)

[Studies on an appropriate intra thoracic administration of cisplatin and sodium thiosulfate in malignant pleural effusion] Kitajima K, et al. **Gan To Kagaku Ryoho** 1988 Dec;15(12):3253–9 (Eng. Abstr.) **(Jpn)**

ENZYMOLOGY

High amylase levels in neoplasm–related pleural effusion. Kramer MR, et al. **Ann Intern Med** 1989 Apr 1;110(7):567–9 (13 ref.)

Pleural fluid neuron–specific enolase. A useful diagnostic marker for small cell lung cancer pleurisy. Shimokata K, et al. **Chest** 1989 Mar;95(3):602–3

Molecular forms of adenosine deaminase in pleural effusions. Ungerer JP, et al. **Enzyme** 1988;40(1):7–13

Guillain–Barré syndrome and tularemia pleuritis with high adenosine deaminase activity in pleural fluid. Syrjälä H, et al. **Infection** 1989 May–Jun;17(3):152–3

The evaluation of ADA activity in pleural effusion for the diagnosis of tuberculous pleural effusion. Kao SJ, et al. **Kekkaku** 1988 Jun;63(6):441–6

[The determination of adenosine deaminase activity in the diagnosis of tuberculous pleuritis (letter)] van Keimpema AR, et al. **Ned Tijdschr Geneeskd** 1988 Oct 22; 132(43):1990–1 **(Dut)**

[Determination of adenosine deaminase in 295 samples of pleural fluid] Kuhn M, et al. **Rev Mal Respir** 1988; 5(6):641–4 (Eng. Abstr.) **(Fre)**

[Analysis of adenosine deaminase and its subfractions as a diagnostic parameter in tuberculous pleural effusion] Blanco Vaca F, et al. **Rev Clin Esp** 1989 Jan;184(1):7–11 (33 ref.) (Eng. Abstr.) **(Spa)**

EPIDEMIOLOGY

Pleural metastatic tumours and effusions. Frequency and pathogenic mechanisms in a post–mortem series. Rodríguez–Panadero F, et al. **Eur Respir J** 1989 Apr; 2(4):366–9

ETIOLOGY

Pleural effusions and eosinophilia in a 63–year–old woman [clinical conference] Herzig G, et al. **Am J Med** 1989 Sep; 87(3):316–24

The role of fiberoptic bronchoscopy in evaluating the causes of pleural effusions. Chang SC, et al. **Arch Intern Med** 1989 Apr;149(4):855–7

Constrictive pericarditis presenting as pleural effusion of unknown origin. Tomaselli G, et al. **Arch Intern Med** 1989 Jan;149(1):201–3

Human adjuvant disease. A new cause of chylous effusions. Walsh FW, et al. **Arch Intern Med** 1989 May;149(5):1194–6 (23 ref.)

Malignant paraganglioma causing bilateral pleural effusions. Clarnette RM, et al. **Aust N Z J Med** 1989 Feb;19(1):61–3

Pleural effusions and pancreatico–pleural fistulae associated with asymptomatic pancreatic disease. Cooper CB, et al. **Br J Dis Chest** 1988 Jul;82(3):315–20

Bilateral extrapleural effusions complicating bilateral pneumonia. Bogin RM, et al. **Chest** 1989 Apr;95(4):933–5

Pleural effusion in Churg–Strauss syndrome. Erzurum SC, et al. **Chest** 1989 Jun;95(6):1357–9

Pleural fluid in Wegener's granulomatosis [letter] Gris P, et al. **Chest** 1989 Jul;96(1):224

Pleural effusion as the initial manifestation of disseminated cryptococcosis in acquired immune deficiency syndrome. Diagnosis by pleural biopsy. Katz AS, et al. **Chest** 1989 Aug;96(2):440–1

Serosanguineous pleural effusions in AIDS–associated Kaposi's sarcoma. O'Brien RF, et al. **Chest** 1989 Sep; 96(3):460–6

Concentration of hyaluronic acid in pleural fluid as a diagnostic aid for malignant mesothelioma. Pettersson T, et al. **Chest** 1988 Nov;94(5):1037–9

Pleuroperitoneal shunt for pneumonectomy cavity malignant effusion. Pope AR, et al. **Chest** 1989 Sep;96(3):686–8

Diagnostic value of serum to pleural fluid zinc ratios in pleural effusions [letter] Shepherd KE. **Chest** 1989 Mar; 95(3):707

Left pleural effusion: masking subphrenic abscess—caused by Salmonella enteritidis serotype Heidelberg. Schwartz ID, et al. **Clin Pediatr (Phila)** 1989 Jun;28(6):266–7

Modulation of plasma exudation by PGE2 and that of leukocyte migration by LTB4 in inflammatory models. Katori M, et al. **Dermatologica** 1989;179 Suppl 1:60–3

Diseases of the pleural space. Vukich DJ.
Emerg Med Clin North Am 1989 May;7(2):309–24 (50 ref.)

Amyloidosis with pleural involvement. Graham DR, et al.
Eur Respir J 1988 Jun;1(6):571–2

Neuron–specific enolase in the diagnosis of small–cell lung cancer with pleural effusion: a negative report. Pettersson T, et al. **Eur Respir J** 1988 Aug;1(8):698–700

Pleural exudate in a tropical hospital. Sinzobahamvya N, et al. **Eur Respir J** 1989 Feb;2(2):145–8 (10 ref.)

Pleural effusion coinciding with acute exacerbations in a patient with chronic hepatitis B. Lee HS, et al.
Gastroenterology 1989 Jun;96(6):1604–6

Bilateral pleural effusions due to amyloidosis in a case of Waldenström's macroglobulinemia. Lindemalm C, et al.
Haematologica (Pavia) 1988 Sep–Oct;73(5):407–9

Pleural effusion in Michigan caused by Coccidioides immitis after travel to an endemic area. Hughes CW, et al.
Henry Ford Hosp Med J 1989;37(1):47–9

Pitfalls in the assessment of late lung damage in irradiated mice: complications related to pleural effusion. Down JD, et al. **Int J Radiat Biol** 1989 Mar;55(3):473–8

Re: Assessment of late lung damage. Parkins CS.
Int J Radiat Biol 1989 Mar;55(3):479–81

Pleural effusion and hydronephrosis in a newborn. Lee SD.
J Am Board Fam Pract 1989 Jan–Mar;2(1):55–7

Relapsing pleural exudate complicating chronic pancreatitis. Becx MC, et al. **Neth J Med** 1989 Feb;34(1–2):88–92

Dyspnea resulting from accumulation of pleural effusion after radical neck dissection. A case report. Oi K, et al.
Oral Surg Oral Med Oral Pathol 1989 Mar;67(3):258–61

Diagnostic results in secondary malignant pleural effusions. Cantó Armengod A. **Pneumologie** 1989 Feb;43(2):58–60

Thoracoscopy in rheumatoid pleural effusion. Faurschou P.
Pneumologie 1989 Feb;43(2):69–71

Prediction of the diagnostic utility of thoracoscopy in pleural effusion. Martensson G. **Pneumologie** 1989 Feb;43(2):72–5

Thoracoscopy: diagnostic and therapeutic indications. Newhouse MT. **Pneumologie** 1989 Feb;43(2):48–52 (59 ref.)

Pancreatic pleural effusion associated with oncocytic carcinoma of the pancreas. England DW, et al.
Postgrad Med J 1988 Jun;64(752):465–6

The role of fibreoptic bronchoscopy in the investigation of pleural effusion. Heaton RW, et al. **Postgrad Med J** 1988 Aug;64(754):581–2

A case of eosinophilic pleural effusion complicating multiple myeloma. Lipworth BJ, et al. **Scott Med J** 1988 Jun; 33(3):278

Pleural effusions in the atypical pneumonias. Sahn SA.
Semin Respir Infect 1988 Dec;3(4):322–34 (74 ref.)

Infectious mononucleosis with pleural effusion. Cloney DL, et al. **South Med J** 1988 Nov;81(11):1441–2

Iatrogenic pleural effusions. Jurivich DA. **South Med J** 1988 Nov;81(11):1417–20 (52 ref.)

Laboratory diagnosis of pleural effusion with special reference to pH. Hsu CY.
Taiwan I Hsueh Hui Tsa Chih 1988 Jul;87(7):736–41

Pleural effusion with intimal injury of superior vena cava caused by central venous catheter: report of a case. Okada A, et al. **Tokushima J Exp Med** 1987 Dec;34(3–4):113–8

Unusual presentation of amoebic liver abscess. Fadlalla Ahmed H, et al. **Trop Geogr Med** 1989 Jan;41(1):69–72

[Pleural localization of multiresistant non–typhoid Salmonella (letter)] Gosset S, et al. **Presse Med** 1988 Nov 19; 17(41):2200 **(Fre)**

[Diagnosis of tuberculous pleural effusion] Szüle P.
Pneumologie 1989 Feb;43(2):66–8 (Eng. Abstr.) **(Ger)**

[Pleural effusion in lymphoma. Description of an unusual case] Cantore M, et al. **Recenti Prog Med** 1988 May; 79(5):210–1 (Eng. Abstr.) **(Ita)**

[A case of intravascular bronchioloalveolar tumor with pleural effusion] Hayashi T, et al.
Nippon Kyobu Shikkan Gakkai Zasshi 1988 Nov; 26(11):1207–12 (Eng. Abstr.) **(Jpn)**

[A case of sarcoidosis complicated by pleural effusion] Ohmori H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Oct;26(10):1092–5 (Eng. Abstr.) **(Jpn)**

[A case of malignant lymphoma presenting with pleuropericardial effusion] Taniguchi H, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr;78(4):575–6 **(Jpn)**

[Pleural complications in patients with focal lesions of the liver] Al'perovich BI, et al. **Klin Khir** 1988;(9):60 **(Rus)**

[Bilateral pleural effusion] Krut'ko VS. **Probl Tuberk** 1989; (5):72–4 **(Rus)**

[Rheumatoid pleural effusion and adenosine deaminase (letter)] Nolla JM, et al. **Med Clin (Barc)** 1989 Apr 1; 92(12):478 **(Spa)**

[Massive pleural effusion secondary to hydronephrosis] Javaloyas M, et al. **Rev Clin Esp** 1989 Jun;185(1):19–20 (Eng. Abstr.) **(Spa)**

[Benign pleural effusions in cancer patients. Frequency and etiopathogenic mechanism in a series of autopsy cases] Rodríguez-Panadero F, et al. **Rev Clin Esp** 1988 Oct; 183(6):311–2 (Eng. Abstr.) **(Spa)**

[Pleurodesis with tetracycline in neoplastic effusions. Is an acid pH necessary?] Varela G, et al. **Rev Med Univ Navarra** 1988 Jul–Sep;32(3):143–6 (32 ref.) (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Elevation of sialyl stage-specific mouse embryonic antigen levels in pleural effusion in patients with adenocarcinoma of the lung. Iguchi H, et al. **Cancer** 1989 Apr 1; 63(7):1327–30

Infiltration of interleukin-2-inducible killer cells in ascitic fluid and pleural effusions of advanced cancer patients. Blanchard DK, et al. **Cancer Res** 1988 Nov 15; 48(22):6321–7

Pleural T-lymphocyte subsets in amiodarone-associated pleuropneumonitis. Akoun GM, et al. **Chest** 1989 Mar; 95(3):596–7

Assay of specific antibody response to mycobacterial antigen for the diagnosis of a pleural effusion in a patient with AIDS. Van Vooren JP, et al. **Tubercle** 1988 Dec; 69(4):303–5

[The diagnostic value of carcinoembryonic antigen (CEA) and tissue polypeptide antigen (TPA) in pleural effusion] Chen TM, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Oct; 40(4):375–82 (Eng. Abstr.) **(Chi)**

[Diagnostic value of pleural effusion carcinoembryonic antigen, squamous cell carcinoma related antigen and neuron-specific-enolase in patients with lung cancer] Fujii M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 May; 26(5):519–23 (Eng. Abstr.) **(Jpn)**

[Carbohydrate antigen 19-9 (CA 19-9) in pleural effusions of malignant and benign origin] Plavec G, et al. **Plucne Bolesti** 1988 Jan–Jun;40(1–2):18–21 (Eng. Abstr.) **(Scr)**

[Carcinoembryonic antigen in pleural effusion. Diagnostic value] Plavec G, et al. **Vojnosanit Pregl** 1988 May–Jun; 45(3):183–7 (Eng. Abstr.) **(Scr)**

[Lymphocyte response to mitogens and antigens in pleurisy] Ribera E, et al. **Med Clin (Barc)** 1988 Jun 18;91(4):131–4 (Eng. Abstr.) **(Spa)**

[Value of the determination of a monoclonal CEA (CEA MARIA) in the diagnosis of neoplastic serositis (letter)] Fernández de Sevilla T, et al. **Rev Clin Esp** 1988 May; 182(8):444 **(Spa)**

METABOLISM

Low glucose and pH levels in malignant pleural effusions. Diagnostic significance and prognostic value in respect to pleurodesis. Rodríguez-Panadero F, et al. **Am Rev Respir Dis** 1989 Mar;139(3):663–7

Penetration of ciprofloxacin in the pleural fluid. Bölcskei P, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):290–2

Treatment of congestive heart failure. Its effect on pleural fluid chemistry. Chakko SC, et al. **Chest** 1989 Apr; 95(4):798–802

Atrial natriuretic factor in the pleural fluid of congestive heart failure patients. Vesely DL, et al. **Chest** 1989 May; 95(5):1107–9

Fibronectin is unsuitable as a tumor marker in pleural effusions. Delpuech P, et al. **Clin Chem** 1989 Jan; 35(1):166–8

Presence of high concentration of 7B2 in pleural effusion. Iguchi H, et al. **Endocrinol Jpn** 1988 Dec;35(6):885–9

Adenosine deaminase, alpha 1 antitrypsin, alpha 1 acid glycoprotein, ceruloplasmin and protein in the diagnosis of tuberculous pleural effusion. Sulochana G, et al. **Indian J Chest Dis Allied Sci** 1988 Jan–Mar;30(1):15–8

Potentiation of the macrophage 25-hydroxyvitamin D-1-hydroxylation reaction by human tuberculous pleural effusion fluid. Adams JS, et al. **J Clin Endocrinol Metab** 1989 Aug;69(2):457–60

Transpleural gradient of 1,25-dihydroxyvitamin D in tuberculous pleuritis. Barnes PF, et al. **J Clin Invest** 1989 May;83(5):1527–32

Amikacin pharmacokinetics in plasma and pleural fluid. Limthongkul S, et al. **J Med Assoc Thai** 1989 Feb; 72(2):90–6

Purified protein derivative induced cytotoxicity in carcinomatous and tuberculous pleurisy. Okubo Y, et al. **Jpn J Med** 1988 Aug;27(3):255–60

Lymphokine activity in malignant effusions after intracavitary viral oncolysate. Freedman RS, et al. **Lymphokine Res** 1989 Summer;8(2):115–22

[Iron and iron-binding proteins in the differential diagnosis of pleural effusion] Franciolli M, et al. **Schweiz Med Wochenschr** 1989 Jun 3;119(22):785–90 (Eng. Abstr.) **(Ger)**

[Immunocytochemical studies of epithelial markers in pleural and peritoneal effusions as an adjunct to cytologic diagnosis] Lossnitzer A, et al. **Zentralbl Allg Pathol** 1988; 134(6):539–45 (Eng. Abstr.) **(Ger)**

[Clinical evaluation of various tumor markers in pleural effusion and in the serum] Jibiki K, et al. **Gan No Rinsho** 1989 Aug;35(9):991–8 (Eng. Abstr.) **(Jpn)**

[A case of pulmonary infiltration with eosinophilia syndrome with pleural effusion which contained eosinophil chemotactic factor and eosinophil colony stimulating factor] Nakamura Y, et al. **Nippon Naika Gakkai Zasshi** 1988 Oct;77(10):1582–3 **(Jpn)**

[A case of immunoglobulin conjugated with lactate dehydrogenase in pleural fluid] Uchiyama K, et al. **Rinsho Byori** 1988 Jul;36(7):871–4 **(Jpn)**

[The clinical value of determining the general antitrypsin activity of the blood and exudate in tuberculous pleurisy] Tiukhtin NS, et al. **Probl Tuberk** 1989;(6):37–40 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Legionella tucsonensis sp. nov. isolated from a renal transplant recipient. Thacker WL, et al. **J Clin Microbiol** 1989 Aug;27(8):1831–4

[Means of improving the diagnosis of pleural exudates] Tiukhtin NS, et al. **Probl Tuberk** 1988;(11):18–20 (Eng. Abstr.) **(Rus)**

PATHOLOGY

Distribution of silver-stained interphase nucleolar organizer regions as a parameter to distinguish neoplastic from nonneoplastic reactive cells in human effusions. Derenzini M, et al. **Acta Cytol** 1989 Jul–Aug;33(4):491–8

Characteristic cytology in rheumatoid pleural effusion. Shinto R, et al. **Am J Med** 1988 Oct;85(4):587–9

Raja pleural biopsy needle. A comparison with the Abrams needle in experimental pleural effusion. Ogirala RG, et al. **Am Rev Respir Dis** 1989 Apr;139(4):984–7

Guidelines for thoracentesis and needle biopsy of the pleura. This position paper of the American Thoracic Society was adopted by the ATS Board of Directors, June 1988. Sokolowski JW Jr, et al. **Am Rev Respir Dis** 1989 Jul; 140(1):257–8

Rheumatoid arthritis cells and biochemical changes in turpentine-induced pleuritis in rabbits. Faurschou P, et al. **APMIS** 1989 May;97(5):413–8

Ultrastructural histochemistry of mesotheliomas and adenocarcinomas in malignant effusions. Barsotti P, et al. **Diagn Cytopathol** 1989;5(2):154–61

An intriguing finding in malignant effusions [letter] Finkle HI. **Diagn Cytopathol** 1989;5(2):234–5

Tuberculous pleural effusions: lymphocyte phenotypes in comparison with other lymphocyte-rich effusions. Guzman J, et al. **Diagn Cytopathol** 1989;5(2):139–44

Lupus erythematosus cells in pleural fluid [letter] Makashir R, et al. **Diagn Cytopathol** 1988;4(3):273–4

Cytologic presentation of malignant mesothelioma in pleural effusions. Pedio G, et al. **Exp Cell Biol** 1988;56(4):211–6

Morphometric diagnosis of serous effusions: refinement of differences between benign and malignant cases by use of outlying values and larger sample size. Scott N, et al. **J Clin Pathol** 1989 Jun;42(6):607–12

Pleural lavage cytology immediately after thoracotomy as a prognostic factor for patients with lung cancer. Kondo H, et al. **Jpn J Cancer Res** 1989 Mar;80(3):233–7

Biopsy-documented tuberculous pleural effusion in a patient with biopsy-proven coexisting sarcoidosis. Giotaki HA, et al. **Respiration** 1988;54(3):193–6

[An examination of pleural effusion] Pettersson T, et al. **Duodecim** 1988;104(6):386–91 **(Fin)**

[A case of pulmonary infarction with nodular opacities and reactive mesothelial cells in pleural effusion] Tao Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Nov; 26(11):1213–7 (Eng. Abstr.) **(Jpn)**

[Comparison of the initial yield in cytology, biopsy and carcinoembryonic antigen in the study of pleural effusions] Romero Candeira S, et al. **Med Clin (Barc)** 1988 Jun 4; 91(2):45–9 (Eng. Abstr.) **(Spa)**

[Clinical presentation of systemic lupus erythematosus as a massive pleural effusion with a mesothelial reaction (letter)] Barrios Alonso V, et al. **Rev Clin Esp** 1989 Feb; 184(2):109–10 **(Spa)**

PHYSIOPATHOLOGY

Left atrial hypertension causes pleural effusion formation in unanesthetized sheep. Allen S, et al. **Am J Physiol** 1989 Aug;257(2 Pt 2):H690–2

Pleural effusions associated with ethchlorvynol lung injury result from visceral pleural leak. Miller KS, et al. **Am Rev Respir Dis** 1989 Sep;140(3):764–70

Pleural liquid and solute exchange. Pistolesi M, et al. **Am Rev Respir Dis** 1989 Sep;140(3):825–47 (204 ref.)

Postural effect on gas exchange in patients with unilateral pleural effusions. Chang SC, et al. **Chest** 1989 Jul;96(1):60–3

The role of lymphatics in removing pleural liquid in discrete hydrothorax. Nakamura T, et al. **Eur Respir J** 1988 Oct; 1(9):826–31

Effect of positional change on ventilation-perfusion distribution in unilateral pleural effusion. Gillespie DJ, et al. **Intensive Care Med** 1989;15(4):266–8

Relationship of pleural effusions to increased permeability pulmonary edema in anesthetized sheep. Wiener-Kronish JP, et al. **J Clin Invest** 1988 Oct;82(4):1422–9

Influence of a fibrothorax on the flow/volume curve. Bolliger CT, et al. **Respiration** 1988;54(3):197–200

[Gaseous exchanges in pleural effusions] Rambaldi M, et al. **Arch Monaldi Mal Torace** 1987 Sep–Oct;42(5):491–504 (Eng. Abstr.) **(Ita)**

PREVENTION & CONTROL

Systemic absorption of tetracycline and lidocaine following intrapleural instillation. Wooten SA, et al. **Chest** 1988 Nov; 94(5):960–3

Malignant pleural effusions: pleurodesis using a small-bore percutaneous catheter. Walsh FW, et al. **South Med J** 1989 Aug;82(8):963–5, 972

RADIOGRAPHY

Radiographically guided percutaneous catheter drainage of pleural fluid collections. Merriam MA, et al. **AJR** 1988 Dec;151(6):1113–6

Pleuropulmonary haemangiopericytoma masquerading as a post-infective encysted pleural effusion. Page AC, et al. **Br J Dis Chest** 1988 Oct;82(4):426–30

The cause of a pleural effusion diagnosed by a fixed gas-bubble. Nijhuis-Heddes JM, et al. **Chest** 1988 Oct; 94(4):851–2

Pleural effusion as a presentation of AIDS-related lymphoma. Sider L, et al. **Invest Radiol** 1989 Feb; 24(2):150–3

Computed tomography of pseudotumoral pleural fluid collections in the azygoesophageal recess. Pecorari A, et al. **J Comput Assist Tomogr** 1989 Sep–Oct;13(5):803–5

Multiple vanishing tumours simulating pulmonary neoplasms. A case report. van Gelderen WF. **S Afr Med J** 1989 May 20;75(10):498–9

[Phantom tumor in left heart failure] Kweider M, et al. **Pneumologie** 1989 May;43(5):259–61 (Eng. Abstr.) **(Ger)**

[Computerized tomography in the evaluation of serous effusions] Gualdi GF, et al. **Clin Ter** 1988 Aug 31; 126(4):277–9 **(Ita)**

[Woman of fertile age with pleural effusion and an interstitial lung pattern] Gómez-León N, et al. **Rev Clin Esp** 1988 Jun;183(2):95–6 **(Spa)**

RADIONUCLIDE IMAGING

Verification of peritoneo-pleural fluid communication and mediastinal lymph nodes by intraperitoneal injection of technetium-99m albumin colloid [letter] Shih WJ, et al. **J Nucl Med** 1989 Apr;30(4):559–60

Additional extrarenal abnormalities seen in Tc-99m DTPA renal flow study. Shih WJ, et al. **Radiat Med** 1988 Mar–Apr;6(2):49–53

RADIOTHERAPY

[Palliative therapy of tumor-induced pleural effusions with radioisotopes] Austgen M. **Pneumologie** 1989 Feb; 43(2):88–91 (Eng. Abstr.) **(Ger)**

SURGERY

Pleuro-peritoneal shunting. Alternative therapy for pleural effusions. Little AG, et al. **Ann Surg** 1988 Oct;208(4):443–50

Streptokinase in a loculated pleural effusion. Effectiveness determined by site of instillation. Ogirala RG, et al. **Chest** 1988 Oct;94(4):884–6

Drainage of malignant effusions [letter] Mansi JL, et al. **Lancet** 1989 Jul 1;2(8653):43

Pleuroamniotic shunting for decompression of fetal pleural effusions [letter] Meizner I. **Obstet Gynecol** 1989 Feb; 73(2):298–9

Pleural peritoneal shunting for benign and malignant pleural effusions. Cimochowski GE, et al. **Surg Annu** 1989;21:49–71

Acute pericarditis with effusion and the general surgeon. Smith F. **Trop Doct** 1989 Jul;19(3):105–8

[Phrenic nerve paralysis with consecutive eventration of the diaphragm as a complication of thoracic drainage] Deindl C. **Monatsschr Kinderheilkd** 1989 Feb;137(2):111–3 **(Ger)**

[Fibrin glue pleurodesis in recurrent malignant pleural effusions] Gust R, et al. **Pneumologie** 1989 Feb;43(2):85–7 (Eng. Abstr.) **(Ger)**

[Pleuroperitoneal shunt for malignant pleural effusions] Sadahiro S, et al. **Nippon Gan Chiryo Gakkai Shi** 1989 Jan 20;24(1):1–6 (Eng. Abstr.) **(Jpn)**

THERAPY

Treatment of pleural effusions and pneumothorax with catheters placed percutaneously under imaging guidance. Reinhold C, et al. **AJR Am J Roentgenol** 1989 Jun; 152(6):1189–91

The use of fine bore silastic catheters to drain carcinomatous pleural effusions. Shand J, et al. **Br J Dis Chest** 1988 Oct; 82(4):394–7

Small bore catheter drainage and sclerotherapy for malignant pleural effusions. Parker LA, et al. **Cancer** 1989 Sep 15; 64(6):1218–21

The sun should never set on a parapneumonic effusion [editorial] Sahn SA, et al. **Chest** 1989 May;95(5):945–7

Comparison of efficacy of mitomycin–C and corynebacterium parvum in the management of malignant pleural effusion. Yew WW, et al. **Chin Med J [Engl]** 1988 Oct;101(10):737–9

Continuous thoracic epidural analgesia for the control of pain associated with pleural sclerosis. Culling RD, et al. **Gynecol Oncol** 1989 Jan;32(1):76–8

Ultrasound guided drainage of pleural fluid. Ng J, et al. **Indiana Med** 1989 Apr;82(4):282–4

Fatal recurrent reexpansion pulmonary edema. Fanning J, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):495–7

A randomized trial of intracavitary bleomycin and Corynebacterium parvum in the control of malignant pleural effusions. Ostrowski MJ, et al. **Radiother Oncol** 1989 Jan;14(1):19–26

[Pleuroperitoneal shunt in the treatment of exudative carcinomatous pleurisy (letter)] de Boer WA, et al. **Ned Tijdschr Geneeskd** 1988 Aug 13;132(33):1549 **(Dut)**

[Value of talc administration using thoracoscopy in the symptomatic treatment of recurrent pleurisy. Apropos of 302 cases] Boniface E, et al. **Rev Mal Respir** 1989; 6(2):133–40 (Eng. Abstr.) **(Fre)**

[Talc pleural symphysis using thoracoscopy (editorial)] Boutin C. **Rev Mal Respir** 1989;6(2):91–3 **(Fre)**

[Results of talc administration using thoracoscopy in neoplastic pleurisies. Apropos of 218 cases] Ladjimi S, et al. **Rev Mal Respir** 1989;6(2):147–50 (Eng. Abstr.) **(Fre)**

[Pleurodesis with tetracycline hydrochloride] Frank W, et al. **Pneumologie** 1989 Feb;43(2):80–4 (Eng. Abstr.) **(Ger)**

[Management of malignant pleural effusion by tetracycline pleurodesis] Horváth T, et al. **Orv Hetil** 1989 May 14; 130(20):1051–2 (Eng. Abstr.) **(Hun)**

[Natural beta–interferon for local use in the treatment of metastatic pleural effusion caused by neoplasm of the breast] Terzoli E, et al. **G Ital Oncol** 1989 Apr–Sep; 9(2–3):53–7 (Eng. Abstr.) **(Ita)**

[Treatment of malignant pleural effusion] Takada M, et al. **Gan To Kagaku Ryoho** 1989 Feb;16(2):165–72 (42 ref.) (Eng. Abstr.) **(Jpn)**

[Pleurodesis as a palliative method in the treatment of pleural effusions of malignant etiology] Sikimić S, et al. **Plucne Bolesti** 1988 Jan–Jun;40(1–2):13–7 (Eng. Abstr.) **(Scr)**

VETERINARY

Pleural effusion resulting from malignant hepatoblastoma in a horse. Prater PE, et al. **J Am Vet Med Assoc** 1989 Feb 1;194(3):383–5

Evaluation of pleural and peritoneal effusions. Tyler RD, et al. **Vet Clin North Am Small Anim Pract** 1989 Jul; 19(4):743–68 (21 ref.)

Management of intractable pleural effusion in a dog with pleuroperitoneal shunt. Smeak DD, et al. **Vet Surg** 1987 May–Jun;16(3):212–6

[The radiologic description of pleural effusions with special reference to an additional projection] Hartung K. **Tierarztl Prax** 1989;17(2):119–23 (5 ref.) (Eng. Abstr.) **(Ger)**

PLEURAL NEOPLASMS

Brain metastases in malignant pleural mesothelioma. Case report and review of the literature. Sridhar KS, et al. **Am J Clin Oncol** 1989 Jun;12(3):222–8 (35 ref.)

Natural history and staging of malignant mesothelioma. Antman KH. **Chest** 1989 Jul;96(1 Suppl):93S–95S

The epidemiology and pathogenesis of malignant mesothelioma. Cr:ighead JE. **Chest** 1989 Jul;96(1 Suppl):92S–93S (26 ref.)

[Radiologic diagnosis and therapy of pleural mesothelioma] Lange S. **Rontgenblatter** 1989 Jan;42(1):28–30 (Eng. Abstr.) **(Ger)**

[Localized mesotheliomas of the visceral pleura] Egiazarian VT, et al. **Vestn Khir** 1988 May;140(5):60 **(Rus)**

ANALYSIS

Non–occupational malignant mesotheliomas. Gibbs AR, et al. **IARC Sci Publ** 1989;(90):219–28

BLOOD

Absence of components of coagulation and fibrinolysis pathways in situ in mesothelioma. Wojtukiewicz MZ, et al. **Thromb Res** 1989 Jul 15;55(2):279–84

CHEMICALLY INDUCED

Pleural mesothelioma in a lift mechanic. Huncharek M, et al. **Br J Ind Med** 1989 Jul;46(7):500–1

Amosite mesothelioma in a cohort of asbestos workers. Ribak J, et al. **Scand J Work Environ Health** 1989 Apr; 15(2):106–10

[Death risk due to tumors of the respiratory system in workers employed in chromate production] de Marco R, et al. **Med Lav** 1988 Sep–Oct;79(5):368–76 (Eng. Abstr.) **(Ita)**

COMPLICATIONS

Malignant paraganglioma causing bilateral pleural effusions. Clarnette RM, et al. **Aust N Z J Med** 1989 Feb;19(1):61–3

Hemothorax and hemopericardium in a patient with Bean's blue rubber bleb nevus syndrome. Langleben D, et al. **Chest** 1989 Jun;95(6):1352–3

Esophageal achalasia secondary to mesothelioma. Goldschmiedt M, et al. **Dig Dis Sci** 1989 Aug;34(8):1285–9

Diagnostic results in secondary malignant pleural effusions. Cantó Armengod A. **Pneumologie** 1989 Feb;43(2):58–60

Prediction of the diagnostic utility of thoracoscopy in pleural effusion. Martensson G. **Pneumologie** 1989 Feb;43(2):72–5

Malignant pleural effusions: pleurodesis using a small–bore percutaneous catheter. Walsh FW, et al. **South Med J** 1989 Aug;82(8):963–5, 972

[Pleuroperitoneal shunt in the treatment of exudative carcinomatous pleurisy (letter)] de Boer WA, et al. **Ned Tijdschr Geneeskd** 1988 Aug 13;132(33):1549 **(Dut)**

[Pleural mesothelioma in a HIV seropositive patient (letter)] Quilichini R, et al. **Presse Med** 1989 Mar 4;18(9):495–6 **(Fre)**

[Results of talc administration using thoracoscopy in neoplastic pleurisies. Apropos of 218 cases] Ladjimi S, et al. **Rev Mal Respir** 1989;6(2):147–50 (Eng. Abstr.) **(Fre)**

[A case from practice (141). Patient: Mr. Z. P., born 1927, electrician] Stürmer T. **Schweiz Rundsch Med Prax** 1989 Jun 13;78(24):702–3 **(Ger)**

[Mezlocillin in bronchopneumopathy caused by neoplasm obstruction] Bruno CG. **Arch Monaldi Mal Torace** 1987 Jul–Aug;42(4):389–96 (Eng. Abstr.) **(Ita)**

DIAGNOSIS

Pleural mesothelioma. Davenport J. **Am Fam Physician** 1989 Mar;39(3):151–4 (18 ref.)

Pulmonary and pleural involvements at initial diagnosis in children with malignant neoplasm. Ishii E, et al. **Am J Pediatr Hematol Oncol** 1989 Fall;11(3):281–5

Localized benign and malignant fibrous tumors of the pleura. A clinicopathologic review of 223 cases. England DM, et al. **Am J Surg Pathol** 1989 Aug;13(8):640–58

The immunohistochemical diagnosis of mesothelioma. Differentiation of mesothelioma and lung adenocarcinoma. Ordóñez NG. **Am J Surg Pathol** 1989 Apr;13(4):276–91

Diagnosis of thoracic splenosis by tru–cut needle biopsy. Gaines JJ, et al. **Am Rev Respir Dis** 1986 Jun; 133(6):1199–201

Ultrasound in chest disease: 1. Pleura. Fataar S. **Australas Radiol** 1988 Aug;32(3):295–301

Immunocytology in malignant pleural mesothelioma. Expression of tumor markers and distribution of lymphocyte subsets. Guzman J, et al. **Chest** 1989 Mar; 95(3):590–5

Sudden death as the initial manifestation of diffuse pleural mesothelioma. Lie JT. **Chest** 1989 Mar;95(3):682–4

Concentration of hyaluronic acid in pleural fluid as a diagnostic aid for malignant mesothelioma. Pettersson T, et al. **Chest** 1988 Nov;94(5):1037–9

Ultrasound guided puncture of pleural fluid collections and superficial thoracic masses. Rasmussen OS, et al. **Eur J Radiol** 1989 May;9(2):91–2

MR imaging of malignant pleural mesothelioma. Lorigan JG, et al. **J Comput Assist Tomogr** 1989 Jul–Aug;13(4):617–20

Malignant mesothelioma of the pleura. Pisani RJ, et al. **Mayo Clin Proc** 1988 Dec;63(12):1234–44 (78 ref.)

Thoracoscopy in malignant mesothelioma. Boutin C. **Pneumologie** 1989 Feb;43(2):61–5

Differentiation of malignant from normal and reactive mesothelial cells by the argyrophil technique for nucleolar organiser region associated proteins. Ayres JG, et al. **Thorax** 1988 May;43(5):366–70

[Solitary (localized) fibrous mesothelioma of the pleura] Olesen LL. **Ugeskr Laeger** 1988 Sep 5;150(36):2127–8 (Eng. Abstr.) **(Dan)**

[Immunohistochemistry in malignant mesothelioma (letter)] Mezger J. **Pathologe** 1989 May;10(3):197 **(Ger)**

[Value of ultrasonography in the diagnosis of pleural diseases in children] Boroń Z, et al. **Radiol Diagn (Berl)** 1988; 29(6):849–56 (Eng. Abstr.) **(Ger)**

[Is malignant mesothelioma of the pleura only an occupational disease?] Foresti V, et al. **Minerva Med** 1989 Feb;80(2):145–8 (Eng. Abstr.) **(Ita)**

[Diagnosis and prognosis of malignant mesothelioma. A description of 8 clinical cases] Piffer S, et al. **Minerva Med** 1989 Apr;80(4):405–10 (Eng. Abstr.) **(Ita)**

[A case of localized pleural mesothelioma, examined by magnetic resonance imaging] Inada T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Aug; 26(8):893–7 (Eng. Abstr.) **(Jpn)**

[Possibilities and place of USG in the diagnosis of pleural diseases] Boroń Z. **Pol Przegl Radiol (Warszawa)** 1988 May–Jun;52(3):131–4 (Eng. Abstr.) **(Pol)**

[Malignant fibrous mesothelioma and granulomas (letter)] Esquirol Puig X, et al. **Med Clin (Barc)** 1989 Feb 11; 92(5):198 **(Spa)**

[Value of the determination of a monoclonal CEA (CEA MARIA) in the diagnosis of neoplastic serositis (letter)] Fernández de Sevilla T, et al. **Rev Clin Esp** 1988 May; 182(8):444 **(Spa)**

DRUG THERAPY

Bio–adhesio–chemo (BAC) therapy for patients with malignant pleural effusion. Sugitachi A, et al. **Am J Clin Oncol** 1989 Apr;12(2):156–61

24–hour cyclophosphamide infusion therapy for malignant mesothelioma of the pleura. Anderson H, et al. **Br J Dis Chest** 1988 Jan;82(1):64–9

Activity of pirarubicin (4'–0–tetrahydropyranyladriamycin) in malignant mesothelioma. Sridhar KS, et al. **Cancer** 1989 Mar 15;63(6):1084–91

A phase II study of vincristine in malignant mesothelioma––a negative report. Mårtensson G, et al. **Cancer Chemother Pharmacol** 1989;24(2):133–4

Interleukin–2 in malignant pleural mesothelioma (and adenocarcinoma of the lung). The use of intrapleural and continuous intravenous infusions: preliminary results. Thatcher N, et al. **Cancer Treat Rev** 1989 Jun;16 Suppl A:161–2

A phase II study of VP–16 and cisplatin in patients with unresectable malignant mesothelioma. An NCI Canada Clinical Trials Group Study. Eisenhauer EA, et al. **Invest New Drugs** 1988 Dec;6(4):327–9

[A case of malignant pleural mesothelioma and its sensitivity tests for anti–cancer drugs] Asakura S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jul;26(7):695–9 (Eng. Abstr.) **(Jpn)**

[Treatment of diffuse malignant mesothelioma of the pleura] Solheim O, et al. **Tidsskr Nor Laegeforen** 1988 Nov 30; 108(33):3091–3 (Eng. Abstr.) **(Nor)**

ENZYMOLOGY

High amylase levels in neoplasm–related pleural effusion. Kramer MR, et al. **Ann Intern Med** 1989 Apr 1;110(7):567–9 (13 ref.)

A study of guanidinobenzoatase during development of mesothelioma induced in the rat by fibrous erionite. Steven FS, et al. **Br J Cancer** 1988 Nov;58(5):610–3

EPIDEMIOLOGY

Effects on health of non–occupational exposure to airborne mineral fibres. Gardner MJ, et al. **IARC Sci Publ** 1989; (90):375–97 (72 ref.)

Epidemiological observations on mesothelioma and their implications for non–occupational exposure. McDonald JC, et al. **IARC Sci Publ** 1989;(90):420–7

Diffuse malignant mesothelioma of the pleura in Ontario and Quebec: a retrospective study of 332 patients. Ruffie P, et al. **J Clin Oncol** 1989 Aug;7(8):1157–68

The incidence of malignant mesothelioma in Australia, 1947–1980. Musk AW, et al. **Med J Aust** 1989 Mar 6; 150(5):242–3, 246

The rising epidemic of malignant mesothelioma [letter; comment] Orr KB. **Med J Aust** 1989 May 15;150(10):607 . **Comment on:** Med J Aust 1989 Mar 6;150(5):233–5

ETIOLOGY

On Dr. Dunnigan's commentary linking chrysotile asbestos with mesothelioma [letter] Becklake MR. **Am J Ind Med** 1988;14(2):239–40

Reply to Dr. Dunnigan. Chrysotile as a mesothelial carcinogen in man. Churg A. **Am J Ind Med** 1988; 14(2):235–8

Response to Dr. Dunnigan's commentary. The role of chrysotile in the pathogenesis of mesothelioma [letter] Craighead JM. **Am J Ind Med** 1988;14(2):241–3

Tremolite, other amphiboles, and mesothelioma [letter] [published erratum appears in Am J Ind Med 1989;15(1):127] McDonald JC. **Am J Ind Med** 1988; 14(2):247–9

Amphiboles and chrysotile asbestos exposure [letter] Roggli VL, et al. **Am J Ind Med** 1988;14(2):245–6

Pneumothorax in pleuropulmonary Kaposi's sarcoma related to acquired immunodeficiency syndrome. Floris C, et al. **Am J Med** 1989 Jul;87(1):123–4

Occurrence and morphology of tumors induced in nude mice transplanted with chrysotile–transformed rat pleural mesothelial cells. Fleury–Feith J, et al. **Biol Cell** 1989; 65(1):45–50

Non–occupational asbestos related chest diseases in a small Anatolian village. Bariş YI, et al. **Br J Ind Med** 1988 Dec; 45(12):841–2

Domestic asbestos exposure, lung fibre burden, and pleural mesothelioma in a housewife. Huncharek M, et al. **Br J Ind Med** 1989 May;46(5):354–5

Pleural mesothelioma in a brake mechanic. Huncharek M, et al. **Br J Ind Med** 1989 Jan;46(1):69–71

Specificity of asbestos–induced chromosomal aberrations in short–term cultured human mesothelial cells. Olofsson K, et al. **Cancer Genet Cytogenet** 1989 Aug;41(1):33–9

The epidemiology of pleural mesothelioma: current concepts and controversies. Huncharek M. **Cancer Invest** 1989; 7(1):93–9

Localized fibrous mesothelioma of pleura following external ionizing radiation therapy. Bilbey JH, et al. **Chest** 1988 Dec; 94(6):1291–2

Serosanguineous pleural effusions in AIDS–associated Kaposi's sarcoma. O'Brien RF, et al. **Chest** 1989 Sep; 96(3):460–6

Evaluation of the pleural malignant mesothelioma patients with the relation of asbestos exposure. Kishimoto T, et al. **Environ Res** 1989 Feb;48(1):42–8

Mesothelial cell proliferation and localized pleural pseudotumour associated with Mycoplasma pneumoniae infection. Abo W, et al. **Eur J Pediatr** 1988 Oct;148(1):62–3

Mesothelioma in Cyprus. McConnochie K, et al. **IARC Sci Publ** 1989;(90):411–9

Relation of environmental exposure to erionite fibres to risk of respiratory cancer. Simonato L, et al.

IARC Sci Publ 1989;(90):398–405
Genesis of mesothelioma. **J Occup Med** 1989 Aug;31(8):643–4
Asbestos-contaminated nappies and familial mesothelioma [letter] Li FP, et al. **Lancet** 1989 Apr 22;1(8643):909–10
Malignant pleural mesothelioma among Swiss furniture workers. A new high-risk group. Minder CE, et al. **Scand J Work Environ Health** 1988 Aug;14(4):252–6
[Ultrastructural and immunohistochemical study of mesothelioma induced by asbestos in rat] Yang GH, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec;19(4):337–41 (Eng. Abstr.) **(Chi)**
[Late occupational disease (letter)] Buronfosse D, et al. **Rev Pneumol Clin** 1988;44(4):217 **(Fre)**
[Thoracic splenosis] Destable MD, et al. **Rev Pneumol Clin** 1989;45(1):34–5 (8 ref.) (Eng. Abstr.) **(Fre)**
[Mesotheliomas among mechanics of the railways in Italy: a current problem] Maltoni C, et al. **Med Lav** 1989 Mar–Apr;80(2):103–10 (Eng. Abstr.) **(Ita)**
[Diffuse malignant mesothelioma of the pleura] Niezabitowski A, et al. **Nowotwory** 1988 Apr–Jun;38(2):128–32 (Eng. Abstr.) **(Pol)**

GENETICS

Further analyses of the evolutionary characteristics of a sequentially studied human malignant mesothelioma. Mark J, et al. **Hereditas** 1989;110(1):85–6
Immunohistochemical analysis of normal and mutated ras oncogene p21 expression in human pulmonary and pleural neoplasms. Radosevich JA, et al. **Virchows Arch [B]** 1989; 56(6):377–83
[Familial malignant pleural mesothelioma. Report of 3 cases] Muñoz L, et al. **Rev Invest Clin** 1988 Oct–Dec;40(4):413–7 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Verification of the histologic diagnosis of malignant mesothelioma in relation to the binding of an antimesothelial cell antibody. Donna A, et al. **Cancer** 1989 Apr 1;63(7):1331–6
Indomethacin augments lymphokine-activated killer cell generation by patients with malignant mesothelioma. Manning LS, et al. **Clin Immunol Immunopathol** 1989 Oct; 53(1):68–77

METABOLISM

Low glucose and pH levels in malignant pleural effusions. Diagnostic significance and prognostic value in respect to pleurodesis. Rodríguez-Panadero F, et al. **Am Rev Respir Dis** 1989 Mar;139(3):663–7
[A case of malignant pleural mesothelioma producing colony-stimulating factor (CSF)] Okazaki H, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr;78(4):506–11 **(Jpn)**

MORTALITY

Cancer mortality in relation to measures of occupational exposure to crocidolite at Wittenoom Gorge in Western Australia. de Klerk NH, et al. **Br J Ind Med** 1989 Aug; 46(8):529–36
[Mortality caused by pleural mesothelioma in the 1979–1983 lustre in Italy regarding provinces and single local health districts] Facchini U, et al. **Med Lav** 1989 Mar–Apr; 80(2):148–54 (Eng. Abstr.) **(Ita)**

PATHOLOGY

Linking chrysotile asbestos with mesothelioma. Dunnigan J. **Am J Ind Med** 1988;14(2):205–9
Establishment of a human in vitro mesothelial cell model system for investigating mechanisms of asbestos-induced mesothelioma. Ke Y, et al. **Am J Pathol** 1989 May; 134(5):979–91
Sarcomatous tumor of the chest wall with osteochondroid differentiation. Evidence of mesothelial origin. Andrion A, et al. **Am J Surg Pathol** 1989 Aug;13(8):707–12
Malignant mesothelioma in infancy. Lin-Chu M, et al. **Arch Pathol Lab Med** 1989 Apr;113(4):409–11 (15 ref.)
Progressive growth of a human pleural mesothelioma xenografted to athymic rats and mice. Lindén CJ, et al. **Br J Cancer** 1988 Nov;58(5):614–8
Low-risk large-needle biopsy of chest lesions. Clore F, et al. **Chest** 1989 Sep;96(3):538–41
Mixed clinicopathologic behavior of a solitary mesothelioma. Hsu V, et al. **Chest** 1988 Dec;94(6):1293–4
Aspiration biopsy cytology of mesothelioma. Tao LC. **Diagn Cytopathol** 1989;5(1):14–21 (15 ref.)
Cytologic presentation of malignant mesothelioma in pleural effusions. Pedio G, et al. **Exp Cell Biol** 1988;56(4):211–6
Flow cytometric analysis of malignant pleural mesotheliomas. Burmer GC, et al. **Hum Pathol** 1989 Aug;20(8):777–83
Mesotheliomas of the pleura: a twelve year experience with fifteen cases. Bhaduri AS, et al. **Indian J Cancer** 1988 Mar; 25(1):7–15
Rehydration of air dried smears: application in body cavity fluid cytology [letter] Kung IT, et al. **J Clin Pathol** 1989 Jan;42(1):113
Pleural mesothelioma of connective tissue type, localized fibrous tumour of the pleura, and reactive submesothelial hyperplasia. An immunohistochemical comparison. Al-Izzi M, et al. **J Pathol** 1989 May;158(1):41–4
Malignant schwannoma. Walling AD. **Kans Med** 1989 Apr; 90(4):102–3
Malignant pleural mesothelioma in a child. Dische MR, et al. **Pediatr Pathol** 1988;8(4):437–41
Malignant pleural mesothelioma in western Glasgow 1980–6. Hulks G, et al. **Thorax** 1989 Jun;44(6):496–500
Desmoplastic mesothelioma [letter] Thomas JS, et al. **Thorax** 1988 Jul;43(7):584
Spontaneous regression of a pleural thickening with the histological appearance of an inflammatory pseudotumour. Rasmussen H, et al. **Virchows Arch [A]** 1989;414(3):253–5
[Morphology, diagnosis and differential diagnosis of mesothelioma] Wu RL, et al. **Chung Hua Chung Liu Tsa Chih** 1988 Mar;10(2):123–5 (Eng. Abstr.) **(Chi)**
[Pathological investigation of asbestosis complicated by mesothelioma: report of 4 cases] Zhang P. **Chung-hua Ping Li Hsueh Tsa Chih** 1988 Sep;17(3):182–4 (Eng. Abstr.) **(Chi)**
[Pathological studies of an asbestosis case complicated by pleural malignant mesothelioma at autopsy] Wang MG. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 May; 22(3):143–5 (Eng. Abstr.) **(Chi)**
[Pleural mesothelioma—problems in diagnosis and clinical course in 25 patients] Liewald F, et al. **Langenbecks Arch Chir** 1989;374(2):105–10 (Eng. Abstr.) **(Ger)**
[Cell marker for the differential diagnosis of malignant mesotheliomas] Hastka J, et al. **Pathologe** 1988 Jul; 9(4):245–7 **(Ger)**
[Mesothelioma register now in Bochum] Müller KM. **Pathologe** 1988 Jul;9(4):258–9 **(Ger)**
[Intracranial ependymoma with extraneural metastases] Schreiber D, et al. **Zentralbl Allg Pathol** 1989;135(1):57–64 (43 ref.) (Eng. Abstr.) **(Ger)**
[Diffuse neoplastic infiltration of leptomeninges by malignant pleural mesothelioma] de Pangher Manzini V, et al. **Recenti Prog Med** 1989 Jan;80(1):16–7 (Eng. Abstr.) **(Ita)**
[Clinicopathological study of 23 pleural malignant mesotheliomas] Bombi JA, et al. **Rev Clin Esp** 1988 May; 182(9):464–70 (Eng. Abstr.) **(Spa)**

PREVENTION & CONTROL

[Further facts in pleural recurrence prevention by radio-colloidal gold in operated breast cancer] Sattler A. **Osterr Z Erforsch Bekampf Krebskr** 1970;25(1):6–23 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Pleuropulmonary haemangiopericytoma masquerading as a post-infective encysted pleural effusion. Page AC, et al. **Br J Dis Chest** 1988 Oct;82(4):426–30
Pleural metastasis of malignant thymoma. A pitfall in the CT-diagnosis of pleural mesothelioma. Görich J, et al. **Comput Med Imaging Graph** 1989 Mar–Apr;13(2):169–70
CT appearance of primary pleural lymphoma. Malatskey A, et al. **Comput Med Imaging Graph** 1989 Mar–Apr; 13(2):165–7
[A case of huge benign localized mesothelioma in which an abnormal shadow had been recognized since 43 years ago] Mizukoshi K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Sep; 26(9):1000–4 (Eng. Abstr.) **(Jpn)**

SECONDARY

Cytogenetic abnormalities common to adenocarcinoma metastatic to the pleura. Cagle PT, et al. **Cancer Genet Cytogenet** 1989 Jun;39(2):219–25
Late pleuropulmonary metastases of a cerebral ependymoma. Lioté HA, et al. **Chest** 1988 Nov;94(5):1097–8
Survival time of patients with pleural metastatic carcinoma predicted by glucose and pH studies. Rodriguez-Panadero F, et al. **Chest** 1989 Feb;95(2):320–4
Pleural metastatic tumours and effusions. Frequency and pathogenic mechanisms in a post-mortem series. Rodríguez-Panadero F, et al. **Eur Respir J** 1989 Apr; 2(4):366–9
Combination chemotherapy in metastatic tumors of unknown origin. 5-Fluorouracil, adriamycin and mitomycin C for adenocarcinomas and adriamycin, vinblastine and mitomycin C for anaplastic carcinomas. Sulkes A, et al. **Isr J Med Sci** 1988 Sep–Oct;24(9–10):604–10
Ruptured hepatocellular carcinoma evokes risk of implanted metastases. Sonoda T, et al. **J Surg Oncol** 1989 Jul; 41(3):183–6
Intracavitary therapy with bleomycin for the treatment of malignant pleural effusions. Ostrowski MJ. **J Surg Oncol Suppl** 1989;1:7–13 (27 ref.)
[Efficacy and toxicity of intrapleural mitoxantrone: apropos of 18 cases of pleural metastases of breast cancer] Feuilhade F, et al. **Bull Cancer (Paris)** 1989;76(4):361–5 (Eng. Abstr.) **(Fre)**
[Palliative therapy of tumor-induced pleural effusions with radioisotopes] Austgen M. **Pneumologie** 1989 Feb; 43(2):88–91 (Eng. Abstr.) **(Ger)**
[Pleurodesis with tetracycline hydrochloride] Frank W, et al. **Pneumologie** 1989 Feb;43(2):80–4 (Eng. Abstr.) **(Ger)**
[Fibrin glue pleurodesis in recurrent malignant pleural effusions] Gust R, et al. **Pneumologie** 1989 Feb;43(2):85–7 (Eng. Abstr.) **(Ger)**
[Sonography of the diaphragmatic pleura in tumor patients] Görg C, et al. **Ultraschall Med** 1988 Dec;9(6):274–8 (Eng. Abstr.) **(Ger)**

SURGERY

Squamous cell carcinoma in a chronically draining chest empyema. Gleeson MJ, et al. **Ir J Med Sci** 1988 Jul; 157(7):242
Malignant mesothelioma of the pleura. A prospective therapeutic study of 132 patients from 1981–1985. Calavrezos A, et al. **Klin Wochenschr** 1988 Jul 15; 66(14):607–13
Pleural peritoneal shunting for benign and malignant pleural effusions. Cimochowski GE, et al. **Surg Annu** 1989;21:49–71
[A clinical study of six surgically treated patients with malignant tumors arising from chronic pleuritis and pyothorax] Watanabe S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb;37(2):281–6 (Eng. Abstr.) **(Jpn)**

THERAPY

Malignant pleural mesothelioma treatment: the current state of the art. Falkson G, et al. **Cancer Treat Rev** 1988 Dec; 15(4):231–42 (78 ref.)
Therapeutic approach to malignant mesothelioma. Aisner J. **Chest** 1989 Jul;96(1 Suppl):95S–97S (12 ref.)

ULTRASTRUCTURE

The ultrastructural pathology of malignant pleural mesothelioma. Coleman M, et al. **Pathol Annu** 1989;24 Pt 1:303–53 (101 ref.)
[Ultrastructural and immunohistochemical study of mesothelioma induced by asbestos in rat] Yang GH, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec;19(4):337–41 (Eng. Abstr.) **(Chi)**

PLEURAL RUB see **RESPIRATORY SOUNDS**

PLEURISY

Infections of the pleural space. **Semin Respir Infect** 1988 Dec; 3(4):289–394

BLOOD

Effects of ketoprofen and indomethacin on leukocyte migration in two models of pleurisy induced by carrageenan or zymosan-activated serum in rats. Vannier E, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):286–91
[Effects of electro-acupuncture on leukocyte migration and studies of the effective mechanism in rats of pleurisy] Zhang KJ, et al. **Chen Tzu Yen Chiu** 1988;13(3):226–30 (Eng. Abstr.) **(Chi)**

CHEMICALLY INDUCED

Participation of lipid peroxides in rat pertussis vaccine pleurisy. II. Leucocytes and related enzymes. Yuda Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2490–8
Mediators of inflammation and antagonism of experimental pleurisy in the rat by fenspiride. Lima MC, et al. **Rhinology** 1988;Suppl 4:85–92
[Eosinophil pleuritis induced by salazosulfapyridine (letter)] Farre JM, et al. **Presse Med** 1989 May 13;18(19):987–8 **(Fre)**

CLASSIFICATION

[Classification of pleurisy] Iablokov DD. **Probl Tuberk** 1989; (4):19–23 (Eng. Abstr.) **(Rus)**

COMPLICATIONS

[A clinical study of six surgically treated patients with malignant tumors arising from chronic pleuritis and pyothorax] Watanabe S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb;37(2):281–6 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Imaging of pleural infections. Schabel SI. **Semin Respir Infect** 1988 Dec;3(4):298–307 (48 ref.)
[Serofibrinous pleurisy—malignant non-Hodgkin's lymphoma with leukemic transformation] Murgoci G. **Rev Ig [Pneumoftiziol]** 1988 Jul–Sep;37(3):275–82 **(Rum)**
[Comparative analysis of the results of echography and radiography of pleurisy and pneumonia in children] Dvoriakovskii IV, et al. **Vestn Rentgenol Radiol** 1988 Jul–Aug;(4):52–7 (Eng. Abstr.) **(Rus)**
[Ultrasonic diagnosis of pleurisy] Kirsanov ON. **Vestn Rentgenol Radiol** 1989 Jan–Feb;(1):69–73 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Modulation of the IL-1 content by anti-inflammatory drugs during an acute non-specific inflammation. Paegelow I, et al. **Agents Actions** 1989 Jan;26(1–2):189–90
Mitomycin C adsorbed on activated carbon particles: is intraperitoneal chemotherapy effective for synchronous pleuritis carcinomatosa? [letter] Yokota T, et al. **Am J Gastroenterol** 1989 Sep;84(9):1124–5
Investigation of the anti-inflammatory properties of

hydroxypyridinones. Hewitt SD, et al. **Ann Rheum Dis** 1989 May;48(5):382–8

Antiinflammatory action of salicylates: aspirin is not a prodrug for salicylate against rat carrageenin pleurisy. Chiabrando C, et al. **Eur J Pharmacol** 1989 Jan 17; 159(3):257–64

[Complete remission, obtained by multidisciplinary treatment of recurrent breast cancer with carcinomatous pleuritis, and cervical lymph node and diver metastasis] Kusama M, et al. **Gan No Rinsho** 1989 Jan;35(1):93–9 (Eng. Abstr.) **(Jpn)**

[Intrapleural instillation of recombinant IL-2 in a patient with pleuritis carcinomatosa] Kimura H, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Jul 20;23(7):1580–4 (Eng. Abstr.) **(Jpn)**

ENZYMOLOGY

[Pleurisy with elevated amylase in ovarian cancer (letter)] Milleron B, et al. **Presse Med** 1988 Oct 15;17(35):1814–5 **(Fre)**

ETIOLOGY

Mouse interstitial lung disease and pleuritis induction by human Mollicute-like organisms. Wirostko E, et al. **Br J Exp Pathol** 1988 Dec;69(6):891–902

Pharmacological demonstration of inflammatory mediators using experimental inflammatory models: rat pleurisy induced by carrageenin and phorbol myristate acetate. Oh-ishi S, et al. **Dermatologica** 1989;179 Suppl 1:68–71

Pleural infection caused by Legionella anisa. Bornstein N, et al. **J Clin Microbiol** 1989 Sep;27(9):2100–1

[Results of talc administration using thoracoscopy in neoplastic pleurisies. Apropos of 218 cases] Ladjimi S, et al. **Rev Mal Respir** 1989;6(2):147–50 (Eng. Abstr.) **(Fre)**

[An unrecognized etiology of pleurisy: ovarian hyperstimulation syndrome (report of a case and physiopathologic discussion) (letter)] M'Raihi ML, et al. **Rev Pneumol Clin** 1989;45(1):43–4 **(Fre)**

[Pericarditis, pleurisy, pulmonary coin lesions: extra-articular manifestations of rheumatoid arthritis?] Breuer HW, et al. **Med Klin** 1988 Oct 28;83(21):727–31 **(Ger)**

[Mast cells of the lungs in experimental hyperergic pleurisy] Lipshits RU, et al. **Fiziol Zh** 1989 May-Jun;35(3):102–6 (Eng. Abstr.) **(Rus)**

[Pulmonary and pleural changes in children with systemic lupus erythematosus] Fedoseeva NA, et al. **Pediatriia** 1989; (5):45–51 **(Rus)**

METABOLISM

Change of glycosaminoglycan in pus of patients with purulent pleurisy. Masuda H, et al. **Biochem Med Metab Biol** 1989 Apr;41(2):155–63

Participation of lipid peroxidation in rat pertussis vaccine pleurisy. I. Thiobarbituric acid (TBA) reactant and ceruloplasmin. Yuda Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Jul;36(7):2691–4

Time course analyses of kinins and other mediators in plasma exudation of rat kaolin-induced pleurisy. Hori Y, et al. **Eur J Pharmacol** 1988 Aug 2;152(3):235–45

Experimental approach to a role of the increased T-kininogen level in carrageenin-induced pleurisy of rats. Oh-ishi S, et al. **Jpn J Pharmacol** 1989 May;50(1):11–8

Pharmacological studies on zymosan inflammation in rats and mice. 2: Zymosan-induced pleurisy in rats. Tarayre JP, et al. **Pharmacol Res** 1989 Jul-Aug;21(4):385–95

Changes of Cu & Zn in carrageenan pleurisy and paw-oedema in rat. Marrella M, et al. **Pharmacol Res Commun** 1988 Jul;20(7):629–30

PATHOLOGY

Reactive eosinophilic pleuritis. A sequela of pneumothorax in pulmonary eosinophilic granuloma. McDonnell TJ, et al. **Am J Clin Pathol** 1989 Jan;91(1):107–11

Rheumatoid arthritis cells and biochemical changes in turpentine-induced pleuritis in rabbits. Faurschou P, et al. **APMIS** 1989 May;97(5):413–8

Pathology of pleural infections. Harley RA. **Semin Respir Infect** 1988 Dec;3(4):291–7 (21 ref.)

PHYSIOPATHOLOGY

Carrageenan pleurisy. Bliven ML, et al. **Methods Enzymol** 1988;162:334–9

Croton oil pleurisy induces pulmonary hyperreactivity. Hernandez A, et al. **Pharmacol Res Commun** 1988 Nov; 20(11):983–92

PREVENTION & CONTROL

Pharmacological modulation of Paf-induced rat pleurisy and its role in inflammation by zymosan. Martins MA, et al. **Br J Pharmacol** 1989 Feb;96(2):363–71

Doxofylline exerts a prophylactic effect against bronchoconstriction and pleurisy induced by PAF. Franzone JS, et al. **Eur J Pharmacol** 1989 Jun 20; 165(2-3):269–77

RADIOGRAPHY

Cryptogenic bilateral fibrosing pleuritis. Buchanan DR, et al. **Br J Dis Chest** 1988 Apr;82(2):186–93

SURGERY

[A rare case of eosinophilic pleuritis treated by means of decortication] Oizumi H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul;36(7):1206–9 (Eng. Abstr.) **(Jpn)**

[Surgical treatment of acute suppurative metapneumonic pleurisy] Gorshkov VIu. **Klin Khir** 1988;(10):26–8 (Eng. Abstr.) **(Rus)**

THERAPY

Treatment of malignant ascites and pleurisy by a streptococcal preparation OK-432 with fresh frozen plasma--a mechanism of polymorphonuclear leukocyte (PMN) accumulation. Kato H, et al. **Int J Immunopharmacol** 1989;11(2):117–28

[The use of Corynebacterium parvum in pleurodesis] Helin T, et al. **Duodecim** 1988;104(4):262–5 **(Fin)**

[Prevention and treatment of pulmonary complications after surgery of the abdominal organs] Chepkii LP, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):107–10 **(Rus)**

[Analysis of the results of the treatment of children with acute bacterial destructive pneumonia with pleuropulmonary complications in the North] Plaksin ED. **Pediatriia** 1989;(4):111–2 **(Rus)**

VETERINARY

Chronic pleurisy in pigs: the relationship between weight, age and frequency in 3 conventional herds. Mousing J. **Acta Vet Scand Suppl** 1988;84:253–5

Pneumonia, lung abscesses and pleuritis in adult horses: a review of 51 cases. Mair TS, et al. **Equine Vet J** 1989 May; 21(3):175–80

Prevalence of pleurisy in pigs at slaughter. Hartley PE, et al. **Vet Rec** 1988 Aug 13;123(7):173–5

The influence of pleural lesions in the pig at slaughter on the duration of the fattening period: an on-farm study. Hartley PE, et al. **Vet Rec** 1988 Aug 20;123(8):208

PLEURODELES see under **SALAMANDRIDAE**

PLEURODYNIA, EPIDEMIC

ETIOLOGY

The myalgic encephalomyelitis syndrome. Murdoch JC. **Fam Pract** 1988 Dec;5(4):302–6 (29 ref.)

[Muscle carnitine deficiency associated with myalgia and rhabdomyolysis following exercise] Miyajima H, et al. **Rinsho Shinkeigaku** 1989 Jan;29(1):93–7 (Eng. Abstr.) **(Jpn)**

PSYCHOLOGY

Features of Coxsackie B virus (CBV) infection in children with prolonged physical and psychological morbidity. Wilson PM, et al. **J Psychosom Res** 1989;33(1):29–36

PLEURODYNIA VIRUS see **COXSACKIE B VIRUSES**

PLEURONECTIFORMES see **FLATFISHES**

PLEUROPNEUMONIA

ETIOLOGY

[Pleuropulmonary colibacillus infection in a 9-year-old boy leading to the diagnosis of Bruton agammaglobulinemia] Séaume H, et al. **Ann Pediatr (Paris)** 1989 Jan;36(1):39–41 (Eng. Abstr.) **(Fre)**

[Pleuropulmonary staphylococci in adults] Ispas LT. **Rev Ig [Pneumoftiziol]** 1988 Apr-Jun;37(2):145–52 (Eng. Abstr.) **(Rum)**

HISTORY

[Teachings on "Alpine epidemic pneumonia"--in the nosographic studies from Guggenbühl to Sticker. A reminiscence of the epidemic theory and description of the history of the epidemic in the 19th and early 20th century] Quick M. **Gesnerus** 1988;45 Pt 3-4:353–79 (Eng. Abstr.) **(Ger)**

MICROBIOLOGY

[Pleuropneumonia with abscess formation caused by TWAR] Kindmark CO, et al. **Lakartidningen** 1988 Dec 21; 85(51):4539–41 **(Swe)**

PATHOLOGY

[A case of pleuropneumopathy due to Eikenella corrodens] Moro D, et al. **Rev Mal Respir** 1988;5(5):523–4 (Eng. Abstr.) **(Fre)**

VETERINARY

Blood gas stability and hematological changes in experimentally-induced acute porcine pleuropneumonia. Kiorpes AL, et al. **Can J Vet Res** 1989 Jan;53(1):95–9

Ultrasonography as a diagnostic aid in horses with anaerobic bacterial pleuropneumonia and/or pulmonary abscessation: 27 cases (1984–1986). Reimer JM, et al. **J Am Vet Med Assoc** 1989 Jan 15;194(2):278–82

Changes in the susceptibility of Actinobacillus pleuropneumoniae to antimicrobial agents in Quebec (1981–1986). Vaillancourt JP, et al. **J Am Vet Med Assoc** 1988 Aug 15;193(4):470–3

An acute pleuropneumonia in a pig caused by Chromobacterium violaceum. Liu CH, et al. **J Comp Pathol** 1989 May;100(4):459–63

Antimicrobial susceptibility of Actinobacillus (Haemophilus) pleuropneumoniae isolated from pigs with pleuropneumonia. Suzuki S, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):450–2

Biochemical and serological properties of Actinobacillus pleuropneumoniae biotype 2 strains isolated from swine. Fodor L, et al. **Vet Microbiol** 1989 Jun;20(2):173–80

[Experiences with vaccination against Haemophilus pleuropneumonia of swine] Ewald C, et al. **Berl Munch Tierarztl Wochenschr** 1989 Jan 1;102(1):6–11 (Eng. Abstr.) **(Ger)**

PLEUROPNEUMONIA, CONTAGIOUS see under **MYCOPLASMA INFECTIONS**

PLEUROPNEUMONIA-LIKE ORGANISMS see **MYCOPLASMA**

PLOIDIES

Correlation of DNA ploidy and morphological features of human glioma cell cultures with the establishment of cell lines. Onda K, et al. **Acta Neuropathol (Berl)** 1988; 76(5):433–40

DNA ploidy and steroid receptors as predictors of disease course in patients with endometrial carcinoma. Iversen OE, et al. **Acta Obstet Gynecol Scand** 1988;67(6):531–7

DNA ploidy and S-phase fraction in primary breast carcinomas in relation to prognostic factors and survival for premenopausal patients at high risk for recurrent disease. Lykkesfeldt AE, et al. **Acta Oncol** 1988; 27(6A):749–56

DNA ploidy profiles as prognostic indicators in CIN lesions. Bibbo M, et al. **Am J Clin Pathol** 1989 Sep;92(3):261–5

Prognostic value of DNA ploidy and proliferative activity in Hodgkin's disease. Joensuu H, et al. **Am J Clin Pathol** 1988 Dec;90(6):670–3

Flow cytometry of normal, hyperplastic, and malignant human endometrium. A study of ploidy and proliferative indices including comparison with in vitro S-phase labeling. Thornton JG, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):487–92

Ploidy and condylomata [letter] Fu YS, et al. **Am J Surg Pathol** 1989 Feb;13(2):171–3

Ploidy and morphology in osteosarcoma. Bauer HC, et al. **Anal Quant Cytol Histol** 1989 Apr;11(2):96–103

Diagnostic and prognostic value of DNA cytometry in gynecologic cytology. Böcking A, et al. **Anal Quant Cytol Histol** 1989 Jun;11(3):177–86 (139 ref.)

Value of assessment of ploidy in rectal cancers. Fisher ER, et al. **Arch Pathol Lab Med** 1989 May;113(5):525–8

The relationship between megakaryocyte ploidy and platelet volume. Corash L. **Blood Cells** 1989;15(1):81–107 (98 ref.)

The relationship between megakaryocyte ploidy and platelet volume. Martin J. **Blood Cells** 1989;15(1):108–21

DNA ploidy in early gastric cancer and its relationship to prognosis. de Aretxabala X, et al. **Br J Cancer** 1988 Jul; 58(1):81–4

DNA ploidy pattern and tumour spread in gastric cancer. de Aretxabala X, et al. **Br J Surg** 1988 Aug;75(8):770–3

Relationship between DNA ploidy and survival in patients with primary breast cancer. Eskelinen MJ, et al. **Br J Surg** 1989 Aug;76(8):830–4

Combination of blood group ABH antigen status and DNA ploidy as independent prognostic factor in transitional cell carcinoma of the urinary bladder. Malmström PU, et al. **Br J Urol** 1989 Jul;64(1):49–55

Cell dissociation techniques in human breast cancer--variations in tumor cell viability and DNA ploidy. Ljung BM, et al. **Breast Cancer Res Treat** 1989 Mar; 13(2):153–9

A physical method for separating Saccharomyces cerevisiae cells according to their ploidy. Vágvölgyi C, et al. **Can J Microbiol** 1988 Sep;34(9):1102–4

Flow cytometry DNA ploidy analysis and catecholamine secretion profiles in neuroblastoma. Abramowsky CR, et al. **Cancer** 1989 May 1;63(9):1752–6

Gastric cancer heterogeneity. de Aretxabala X, et al. **Cancer** 1989 Feb 15;63(4):791–8

DNA ploidy patterns in cervical intraepithelial neoplasia grade III, with and without synchronous invasive squamous cell carcinoma. Measurements in nuclei isolated from paraffin-embedded tissue. Hanselaar AG, et al. **Cancer** 1988 Dec 15;62(12):2537–45

Binding of wheat and peanut lectins to human transitional cell carcinomas. Correlation with histopathologic grade, invasion, and DNA ploidy. Langkilde NC, et al. **Cancer** 1989 Aug 15;64(4):849–53

Intratumoral regional differences in DNA ploidy of gastrointestinal carcinomas. Sasaki K, et al. **Cancer** 1988 Dec 15;62(12):2569–75

Correlation of DNA ploidy and proliferative activity in human gastric cancer. Yonemura Y, et al. **Cancer** 1988 Oct 15;62(8):1497–502

Human skin fibroblast in vitro tetraploidy. Flow cytometric DNA assay used to confirm metaphase assay in patients

with various colonic diseases. Svendsen LB, et al. **Cancer Genet Cytogenet** 1989 Jun;39(2):245–51

Ploidy and karyotype of hepatocytes isolated from enzyme-altered foci in two different protocols of multistage hepatocarcinogenesis in the rat. Sargent L, et al. **Carcinogenesis** 1989 Feb;10(2):387–91

Commitment to ploidy conversion of 3Y1 cells during metaphase arrest by colcemid. Okuda A, et al. **Cell Tissue Kinet** 1988 Jan;21(1):21–31

Duplicate gene expression in tetraploid fishes of the tribe Moxostomatini (Cypriniformes, Catostomidae). Buth DG. **Comp Biochem Physiol [B]** 1979;63(1):7–12

Coincident chromosomal disomy in meiotic dyads from triploid yeast. Campbell DA, et al. **Curr Genet** 1987; 12(8):569–76

Sexual immaturity and maternal age: incidence of aneuploidy and polyploidy in first-cleavage mouse embryos. Catala V, et al. **Cytogenet Cell Genet** 1988;48(4):233–7

Autolysis is a potential source of false aneuploid peaks in flow cytometric DNA histograms. Alanen KA, et al. **Cytometry** 1989 Jul;10(4):417–25

An immunohistological study of gastric cancer—with special reference to the expression of carbohydrate antigens and nuclear DNA ploidy patterns. Sowa M, et al. **Eur J Surg Oncol** 1989 Aug;15(4):307–15

Prognostic relevance of ploidy and proliferative activity of renal cell carcinoma. Al-Abadi H, et al. **Eur Urol** 1988; 15(3–4):271–6

Measurement of megakaryocyte frequency and ploidy distribution in unfractionated murine bone marrow. Corash L, et al. **Exp Hematol** 1989 Mar;17(3):278–86 (51 ref.)

Flow cytometric DNA analysis of stage I endometrial carcinoma. Britton LC, et al. **Gynecol Oncol** 1989 Sep; 34(3):317–22

DNA ploidy in oral cavity carcinomas, with special reference to prognosis. Tytor M, et al. **Head Neck** 1989 May–Jun; 11(3):257–63

Flow cytometric analysis of DNA ploidy in lymphomas of the thyroid. Zirker TA, et al. **Head Neck Surg** 1988 May–Jun;10(5):324–9

Ploidy, proliferative activity, cluster differentiation antigen expression and clinical remission in high-grade non-Hodgkin's lymphoma. Williamson JM, et al. **Histopathology** 1987 Oct;11(10):1043–54

The biology of tetraploid hydatidiform moles: histopathology, cytogenetics, and flow cytometry. Lage JM, et al. **Hum Pathol** 1989 May;20(5):419–25

The dygynic origin of a triploid fetus from an IVF pregnancy. Restagno G, et al. **Hum Reprod** 1988 Aug; 3(6):791–3

Ploidy in mesenteric vessels of aged spontaneously hypertensive and Wistar-Kyoto rats. Lombardi DM, et al. **Hypertension** 1989 May;13(5):475–9

Relationship between DNA ploidy, antigen expression and survival in renal cell carcinoma. Oosterwijk E, et al. **Int J Cancer** 1988 Nov 15;42(5):703–8

Flow cytometric analysis of DNA ploidy pattern from deparaffinized formalin-fixed gastric cancer tissue. Tosi P, et al. **Int J Cancer** 1988 Dec 15;42(6):868–71

Relationship between changes in ploidy and stable cellular resistance to hydrogen peroxide. Spitz DR, et al. **J Cell Physiol** 1989 Jun;139(3):592–8

DNA content and MHC class II antigen expression in malignant melanoma: clinical course. Zaloudik J, et al. **J Clin Pathol** 1988 Oct;41(10):1078–84

Effects of increasing ploidy on the lumbar lateral motor column and hindlimb of newly metamorphosed Xenopus laevis: a comparison of diploid and triploid siblings. Sperry DG. **J Comp Neurol** 1988 Nov 22;277(4):499–508

Auxotrophic heterozygosities and the ploidy of Candida parapsilosis and Candida krusei. Whelan WL, et al. **J Med Vet Mycol** 1988 Jun;26(3):163–71

Changes in ploidy distributions in human liver carcinogenesis. Saeter G, et al. **J Natl Cancer Inst** 1988 Nov 16; 80(18):1480–5

Silver-binding nucleolar organizer regions (AgNORs) in benign and malignant breast lesions: correlations with ploidy and growth phase by DNA flow cytometry. Giri DD, et al. **J Pathol** 1989 Apr;157(4):307–13

Cytogenetics of unfertilized human oocytes. Djalali M, et al. **J Reprod Fertil** 1988 Nov;84(2):647–52

Correlation of DNA ploidy and clinical outcome in Borrmann type 4 gastric carcinoma. Yonemura Y, et al. **J Surg Oncol** 1989 Sep;42(1):1–4

Ultrasound findings in pregnancies complicated by fetal triploidy. Pircon RA, et al. **J Ultrasound Med** 1989 Sep; 8(9):507–11

Transitional cell carcinoma of the renal pelvis: nuclear deoxyribonucleic acid ploidy studied by flow cytometry. Blute ML, et al. **J Urol** 1988 Nov;140(5):944–9

Embryonal rhabdomyosarcoma of bladder and prostate: nuclear DNA patterns studied by flow cytometry. Boyle ET Jr, et al. **J Urol** 1988 Nov;140(5 Pt 2):1119–21

Nuclear deoxyribonucleic acid ploidy in squamous cell bladder cancer. Winkler HZ, et al. **J Urol** 1989 Feb; 141(2):297–302

Ploidy of primary germ cell tumors of the testis. Pathogenetic and clinical relevance. Oosterhuis JW, et al. **Lab Invest** 1989 Jan;60(1):14–21

Distinct antigen expression related to DNA ploidy in a case of biphenotypic leukemia. Paietta E, et al. **Leukemia** 1989 Jan;3(1):76–8

The streaming liver. V: Time and age-dependent changes of hepatocyte DNA content, following partial hepatectomy. Zajicek G, et al. **Liver** 1989 Jun;9(3):164–71

CEA, tumour differentiation and DNA ploidy pattern. Rognum TO. **Scand J Gastroenterol Suppl** 1988;149:166–78

Modal DNA as prognostic indicator in untreated prostatic cancer. Hedlund PO, et al. **Scand J Urol Nephrol Suppl** 1988;110:125–9

[Prognostic value of DNA ploidy of colorectal tumor cells] Givel JC, et al. **Helv Chir Acta** 1989 Jan;55(5):679–83 (Eng. Abstr.) **(Fre)**

[Contribution of quantitative cytology and ploidy in the diagnosis and monitoring of tumors of the bladder. Study of 52 cases using the Samba analyser] Assailly J, et al. **J Urol (Paris)** 1989;95(1):3–9 (Eng. Abstr.) **(Fre)**

[Early manifestation of severe gestosis (pre-eclampsia) in fetal triploidy—diagnosis and obstetrical management] Bender G, et al. **Geburtshilfe Frauenheilkd** 1989 Feb; 49(2):189–91 (Eng. Abstr.) **(Ger)**

[Prognostic significance of DNA ploidy and distribution of cell cycle phases in non-small cell bronchial cancer. A 5-year survival study] Volm M. **Versicherungsmedizin** 1989 Jan 1;41(1):2–5 (Eng. Abstr.) **(Ger)**

[Partial hydatidiform mole—phenotype of triploidy] Zahradka M, et al. **Zentralbl Gynakol** 1988;110(20):1315–7 (Eng. Abstr.) **(Ger)**

[Biological activity of hepatocellular carcinoma by analysing nuclear DNA ploidy patterns and using anti BrdU monoclonal antibody] Jung-Rou T. **Nippon Geka Gakkai Zasshi** 1989 Feb;90(2):168–80 (Eng. Abstr.) **(Jpn)**

[Malignancy in gastric carcinoma, with special reference to the DNA ploidy and proliferative activity] Yonemura Y, et al. **Nippon Geka Gakkai Zasshi** 1988 Aug;89(8):1175–80 (Eng. Abstr.) **(Jpn)**

[Proteoglycan synthesis in fibroblast cell lines obtained from human aborted fetuses with triploid chromosomes] Kukharenko VI. **Akush Ginekol (Mosk)** 1989 Jan;(1):69–71 **(Rus)**

[Relation of steroid receptors, tumor ploidy, and cell proliferation in various histologic types of breast cancer] Zubrikhina GN, et al. **Arkh Patol** 1989;51(3):10–6 (Eng. Abstr.) **(Rus)**

[RNA and protein content in cells of diploid and tetraploid toads of the Bufo viridis group] Kudriavtsev VN, et al. **Tsitologiia** 1988 Nov;30(11):1324–31 (Eng. Abstr.) **(Rus)**

DRUG EFFECTS

The influence of phenobarbital and butylated hydroxytoluene on the ploidy rate in rat hepatocarcinogenesis. Haesen S, et al. **Carcinogenesis** 1988 Oct;9(10):1755–61

The effect of partially purified thrombopoietin on guinea pig megakaryocyte ploidy in vitro. Hill RJ, et al. **Exp Hematol** 1989 Sep;17(8):903–7

PLOTOSUS see **CATFISH**

PLUMBING see **SANITARY ENGINEERING**

PLUMMER-VINSON SYNDROME see under **DEGLUTITION DISORDERS**

PLUTONIUM

Mortality of workers at the Hanford site: 1945–1981. Gilbert ES, et al. **Health Phys** 1989 Jan;56(1):11–25

The accuracy of some simple models for predicting particulate interception and retention in agricultural systems. Pinder JE 3d, et al. **Health Phys** 1989 Apr; 56(4):441–50

Effects of continuous exposure to 239Pu-alpha rays on Co631 cells. Rau W, et al. **Sci Total Environ** 1989 Jul 15; 83(3):253–62

[Hemodynamics in dogs during external (60Co) and internal (239Pu) irradiation] Karpova VN. **Med Radiol (Mosk)** 1988 Oct;33(10):46–9 (Eng. Abstr.) **(Rus)**

[Disorders of hematopoiesis induced by plutonium-239 dioxide] Murzina LD, et al. **Radiobiologiia** 1988 Nov–Dec; 28(6):847–52 (Eng. Abstr.) **(Rus)**

[Frequency of structural chromosome aberrations in the hepatocytes of rats exposed to polymeric 239Pu] Zakharova ML, et al. **Radiobiologiia** 1988 Nov–Dec; 28(6):752–5 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Quantitative scanning electron microscopic autoradiography of inhaled 239PuO2. Sanders CL, et al. **Health Phys** 1989 Mar;56(3):321–5

Pulmonary immune response of dogs after exposure to 239PuO2. Galvin JB, et al. **Int J Radiat Biol** 1989 Feb; 55(2):285–96

Behaviour of spherical and irregular (U,Pu)O2 particles after inhalation or intratracheal instillation in rat lung and during in vitro culture with bovine alveolar macrophages. Müller HL, et al. **Int J Radiat Biol** 1989 May;55(5):829–42

Promotion of pulmonary carcinogenesis by plutonium particle aggregation following inhalation of 239PuO2. Sanders CL, et al. **Radiat Res** 1988 Dec;116(3):393–405

Effect of inhaled alpha-emitting nuclides on mouse alveolar macrophages. Talbot RJ, et al. **Radiat Res** 1989 Aug; 119(2):271–85

[Aminotransferase and lactate dehydrogenase activity in the blood of dogs exposed to the joint action of external gamma- and internal alpha-radiation] Elkina NI, et al. **Radiobiologiia** 1988 Sep–Oct;28(5):657–9 (Eng. Abstr.) **(Rus)**

[Quantitative evaluation of the combined effect of external gamma radiation and internal alpha radiation from 239Pu based on biochemical indices of the organs of the rat immune system] Elkina NI, et al. **Radiobiologiia** 1988 Sep–Oct;28(5):695–9 (Eng. Abstr.) **(Rus)**

ANALYSIS

Sources for Pu in near surface air. Hartmann G, et al. **Health Phys** 1989 Jan;56(1):55–69

Calibration of a double phoswich detector assembly for estimation of homogeneously or inhomogeneously distributed 241Am and/or 239Pu in untreated fecal samples. Kramer GH, et al. **Health Phys** 1989 Mar;56(3):361–5

Preparation and analysis of spike soil standards [letter] Olson DG, et al. **Health Phys** 1989 Jul;57(1):208–9

Determining the ratio of 239Pu to 241Am in wounds by measuring the L gamma x-rays with a Si(Li) detector. Palmer HE, et al. **Health Phys** 1989 Feb;56(2):249–52

Utilization of femoral head for estimating the skeletal burden of U and Pu in humans. Singh NP, et al. **Health Phys** 1989 Mar;56(3):341–3

Scanning electron microscopic autoradiography of lung. Lauhala KE, et al. **Scanning Microsc** 1988 Sep;2(3):1631–4

ANTAGONISTS & INHIBITORS

[Effect of the inhalation of tributyl phosphate on the behavior of Pu-239 in the bodies of rats] Chudin VA. **Gig Sanit** 1989 Apr;(4):71–2 **(Rus)**

METABOLISM

Chelation of 238Pu(IV) in vivo by 3,4,3-LICAM(C): effects of ligand methylation and pH. Durbin PW, et al. **Health Phys** 1989 Jun;56(6):839–55

Influence of age at exposure on concentrations of 239Pu in beagle gonads. Miller SC, et al. **Health Phys** 1989 Apr; 56(4):485–91

Testing of methyleneiminodiacetic-catechol and other aromatic chelating agents for decorporation of 238Pu and 241Am in rats. Luo MC, et al. **Int J Radiat Biol** 1989 Apr; 55(4):679–88

Investigations of the binding of 239Pu to liver cell membranes. Planas-Bohne F, et al. **Sci Total Environ** 1989 Jul 15;83(3):263–71

PHARMACOKINETICS

A review of parameter values used to assess the transport of plutonium, uranium, and thorium in terrestrial food chains. Garten CT Jr. **Environ Res** 1978 Dec;17(3):437–52 (44 ref.)

Distribution of 238Pu in tissues of fish from the canal in Miamisburg, Ohio. Kennedy CW, et al. **Environ Res** 1978 Oct;17(2):228–35

Kinetic model of the distribution of 239Pu in the beagle skeleton. Polig E. **Health Phys** 1989 Sep;57(3):449–60

Localization of plutonium retention in the small intestine of the neonatal rat, guinea pig, baboon and macaca after Pu-citrate ingestion. Fritsch P, et al. **Int J Radiat Biol** 1988 Oct;54(4):537–43

Efficacy and toxicity of N,N',N",N"'-tetra(2,3,4-trihydroxybenzoyl)-spermine for decorporation of 239Pu from mice. Szot Z, et al. **Int J Radiat Biol** 1989 Jan;55(1):141–9

Cellular aspects of retention and transport of inhaled soluble and insoluble actinide compounds in the rat lung. Müller HL, et al. **Sci Total Environ** 1989 Jul 15;83(3):239–51

The biodistribution and toxicity of plutonium, americium and neptunium. Taylor DM. **Sci Total Environ** 1989 Jul 15; 83(3):217–25

[Distribution of plutonium-239 in the bodies of rats after its administration together with tributyl phosphate combined with organic solvents] Kuz'menko OV, et al. **Gig Sanit** 1989 Apr;(4):17–9 (Eng. Abstr.) **(Rus)**

[Distribution of plutonium-239 in the body of dogs 7 days after the intravenous administration of a citrate complex of the metal] Fetisova LI, et al. **Radiobiologiia** 1988 Nov–Dec;28(6):857–9 (Eng. Abstr.) **(Rus)**

[Effect of liposome-encapsulated pentacin on plutonium-239 excretion] Il'in LA, et al. **Radiobiologiia** 1989 Mar–Apr; 29(2):197–201 (Eng. Abstr.) **(Rus)**

[Distribution of plutonium in the body of rats after its intratracheal administration in the form of a Pu(IV)-TBP complex] Khalturin GV, et al **Radiobiologiia** 1988 Sep–Oct;28(5):700–2 (Eng. Abstr.) **(Rus)**

[Lung histopathology during plutonium-238 incorporation] Zhorova ES, et al. **Radiobiologiia** 1989 Mar–Apr; 29(2):202–6 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Primary liver tumors in beagle dogs exposed by inhalation to aerosols of plutonium-238 dioxide. Gillett NA, et al. **Am J Pathol** 1988 Nov;133(2):265–76

[The antibody-producing cell count of rats exposed to polymeric 239Pu] Kirillova EN, et al. **Radiobiologiia** 1989 Jul–Aug;29(4):511–4 (Eng. Abstr.) **(Rus)**

TOXICITY

Effect of inhaled 239PuO2 on alveolar type II cells. Shen ZY, et al. **Int J Radiat Biol** 1989 Aug;56(2):169–78

Evaluation of the genetic effects of 238Pu incorporated into mice. Pomerantseva MD, et al. **Mutat Res** 1989 Jun; 226(2):93–8

[Evaluation of changes in the median life span of animals following separate and combined exposures to external 137Cs gamma irradiation and incorporated 239Pu] Levdik TI, et al. **Radiobiologiia** 1989 Jul–Aug;29(4):550–3 **(Rus)**

URINE

Plutonium from atmospheric weapons testing: fission track analysis of urine samples. Moorthy AR, et al. **Anal Chem** 1988 Jul 15;60(14):857A–860A

PMS see GONADOTROPINS, EQUINE

PMSG see GONADOTROPINS, EQUINE

PNEUMATIC SUITS see G SUITS

PNEUMATOSIS CYSTOIDES INTESTINALIS

CHEMICALLY INDUCED

Pneumatosis intestinalis and pneumoperitoneum after sclerotherapy. DeMarino GB, et al. **AJR** 1988 Nov; 151(5):953–4

A report of a worker suffering from pneumatosis cystoides intestinalis following trichloroethylene exposure. Ogata M, et al. **Ind Health** 1988;26(3):179–82

[The clinical aspect of pneumatosis cystoides coli with special reference to association of trichloroethylene exposure] Yamaguchi K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Oct;85(10):2161–7 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Pneumo–retroperitoneum associated with pneumatosis cystoides intestinals. Mack P. **Ann Acad Med Singapore** 1988 Oct;17(4):600–2

Pneumatosis coli producing colo–colic intussusception: a case report. Wang SC, et al. **Australas Radiol** 1988 Nov; 32(4):483–6

Pneumatosis cystoides intestinalis and benign pneumoperitoneum in a patient with antinuclear antibody negative systemic lupus erythematosus. Pruitt RE, et al. **J Rheumatol** 1988 Oct;15(10):1575–7

Advanced scleroderma bowel: complications and management. Stafford–Brady FJ, et al. **J Rheumatol** 1988; 15(5):869–74

[Pneumatosis cystoides intestinalis and pneumoperitoneum complicated with progressive systemic sclerosis: a case report] Yonemitsu K, et al. **Nippon Naika Gakkai Zasshi** 1988 May;77(5):734–5 **(Jpn)**

[A case of mixed connective tissue disease complicated by pneumatosis cystoides intestinalis] Yoshinaga T, et al. **Ryumachi** 1988 Aug;28(4):255–62 (17 ref.) (Eng. Abstr.) **(Jpn)**

[Pneumatosis cystoides intestinalis] Wójcik A, et al. **Pol Tyg Lek** 1988 Sep 19;43(38):1233–4 (Eng. Abstr.) **(Pol)**

[56–year–old man with the clinical picture of intestinal obstruction (clinical conference)] **Rev Clin Esp** 1988 Jun; 183(2):90–4 **(Spa)**

[Intestinal cystic pneumatosis producing an acute pseudoappendicular picture] González–Pinto Arrillaga I, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 1):607–9 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Pneumatosis intestinalis in children beyond the neonatal period. West KW, et al. **J Pediatr Surg** 1989 Aug; 24(8):818–22 (17 ref.)

[Air cysts of the colon] Bennicke K, et al. **Ugeskr Laeger** 1989 May 1;151(18):1126–7 (Eng. Abstr.) **(Dan)**

ETIOLOGY

Gastrointestinal vasculitis and pneumatosis intestinalis due to systemic lupus erythematosus: successful treatment with pulse intravenous cyclophosphamide. Laing TJ. **Am J Med** 1988 Oct;85(4):555–8

Neonatal pneumatosis cystoides intestinalis caused by volvulus of the mid intestine. Eggli KD, et al. **Arch Dis Child** 1989 Aug;64(8):1189–90

PATHOLOGY

Pneumatosis cystoides intestinalis. Histological mucosal changes mimicking inflammatory bowel disease. Suarez V, et al. **Arch Pathol Lab Med** 1989 Aug;113(8):898–901

Pneumatosis cystoides–like appearances in a mature cystic teratoma of the ovary. Maudsley G, et al. **Histopathology** 1989 Apr;14(4):420–2

[Pneumatosis cystoides intestinalis. Description of 4 cases including a review of the literature (clinical conference)] Micklefield GH, et al. **Med Klin** 1988 Oct 28;83(21):716–22 (50 ref.) **(Ger)**

[Clinico–pathologic conference. Colonic meteorism with air inclusions in the intestinal wall in endocarditis] von Bernhard Strittmatter B, et al. **Med Klin** 1988 Dec 9; 83(24):838–40 **(Ger)**

[Pneumatosis cystoides intestinalis] Gangemi P, et al. **Pathologica** 1989 Jan–Feb;81(1071):71–5 (Eng. Abstr.) **(Ita)**

RADIOGRAPHY

Pneumatosis cystoides intestinalis in young patients. Case report. Påhlman L, et al. **Acta Chir Scand** 1988 Sep; 154(9):547–8

Pneumatosis intestinalis in bone–marrow transplantation patients: diagnosis on routine chest radiographs. Bates FT, et al. **AJR Am J Roentgenol** 1989 May;152(5):991–4

Pneumatosis coli: is there a relationship with sigmoid colon redundancy? Moote DJ, et al. **Gastrointest Radiol** 1989 Winter;14(1):79–82

[Contribution of computerized tomography in pneumatosis intestinalis] Sánchez Corral JA, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 2):470–2 (Eng. Abstr.) **(Spa)**

PNEUMOCEPHALUS

"Sunken brain syndrome"—case report. Aoki N. **Neurol Med Chir (Tokyo)** 1988 Jun;28(6):601–3

[Tension pneumocephalus—report of four cases] Chung WY, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Dec;40(6):563–8 (Eng. Abstr.) **(Chi)**

DIAGNOSIS

Spontaneous bronchial–subarachnoid fistula: an unusual cause of pneumocephalus. Lerner EJ, et al. **AJNR** 1989 Sep–Oct; 10(5 Suppl):S103

Magnetic resonance imaging of traumatic pneumocephalus—case report. Komiyama M, et al. **Neurol Med Chir (Tokyo)** 1988 Jul;28(7):677–80

ETIOLOGY

Intracerebral pneumocephalus after ventriculoperitoneal shunt. Coraddu M, et al. **Acta Neurol (Napoli)** 1989 Feb; 11(1):42–5

"Spontaneous" pneumocephalus associated with aerobic bacteremia. Tanaka T, et al. **Clin Imaging** 1989 Jun; 13(2):134–9

Intracranial pneumocephalus (secondary to frontoethmoidal osteoma). Ferlito A, et al. **J Laryngol Otol** 1989 Jun; 103(6):634–7

Subdural and intraventricular tension pneumocephalus after transsphenoidal operation [letter] Candrina R, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):1005–6

CSF fistula and tension pneumatocele 22 years after head injury. Schiffer J, et al. **Neurochirurgia (Stuttg)** 1988 Nov; 31(6):228–31

Tension pneumocephalus after transsphenoidal surgery: case report. Altinörs N, et al. **Neurosurgery** 1988 Oct;23(4):516–8

Tension pneumocephalus after clipping of a carotid–ophthalmic artery aneurysm via an interhemispheric approach: case report. Asai A, et al. **Neurosurgery** 1988 Nov;23(5):650–4 (26 ref.)

[Post–traumatic pneumocephalus] Marczewski R, et al. **Wiad Lek** 1988 May 15;41(10):671–3 (Eng. Abstr.) **(Pol)**

[Pneumocephalus as a complication of osteoma of the frontal sinus] Bein BN, et al. **Zh Vopr Neirokhir** 1988 Sep–Oct; (5):47–8 **(Rus)**

RADIOGRAPHY

Diffuse pneumocephalus from Clostridium perfringens meningitis: CT findings. Klein MA, et al. **AJNR** 1989 Mar–Apr;10(2):447

Intrauterine chronic subdural hematoma with postoperative tension pneumocephalus. Atluru VL, et al. **Pediatr Neurol** 1987 Sep–Oct;3(5):306–9

PNEUMOCOCCAL INFECTIONS

Pneumococcal vertebral osteomyelitis presenting with an aseptic knee effusion in a child. Malleson PN, et al. **Clin Exp Rheumatol** 1988 Jul–Sep;6(3):325–8

Pneumococcal infection of a prosthetic hip joint. Wollner A, et al. **Int Orthop** 1989;13(2):135–6

Aspects of pneumococcal infection including bacterial virulence, host response and vaccination. Gillespie SH. **J Med Microbiol** 1989 Apr;28(4):237–48 (96 ref.)

Natural history of pneumococcal infections. Gray BM, et al. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S23–5 (24 ref.)

[Neonatal pneumococcus laryngitis] Rodrigue D, et al. **Arch Fr Pediatr** 1989 Feb;46(2):127–8 (Eng. Abstr.) **(Fre)**

[Infections caused by penicillin–resistant pneumococci] Gudiol F. **Rev Clin Esp** 1989 Feb;184(3):147–50 (26 ref.) **(Spa)**

COMPLICATIONS

Occult bacteremia in children with simple febrile seizures [letter] **Am J Dis Child** 1989 Mar;143(3):273–4

Purpura and gangrene in a septic patient. Purpura fulminans secondary to pneumococcal sepsis. Benson PM, et al. **Arch Dermatol** 1988 Dec;124(12):1851, 1854

Epiglottitis in AIDS patients. Rothstein SG, et al. **Laryngoscope** 1989 Apr;99(4):389–92

Simultaneous pneumococcal arthritis and osteoarticular tuberculosis. Klein MD, et al. **South Med J** 1989 May; 82(5):664–5

CONGENITAL

Pneumococcal neonatal colonization and sepsis in association with maternal genital pneumococcal colonization. Case reports. Alzahawi MF, et al. **Br J Obstet Gynaecol** 1988 Nov;95(11):1198–9

DIAGNOSIS

Evaluation of a latex kit reagent for the detection and identification of pneumococci. West PW, et al. **APMIS Suppl** 1988;3:13–6

Pneumococcal arthritis mimicking juvenile chronic arthritis. Earley A, et al. **Arch Dis Child** 1988 Sep;63(9):1089–90

Caution advisable when interpreting gram–stained smears of material from peritoneal paracentesis [letter] Heltberg O. **J Infect** 1989 Jan;18(1):93–4

Pneumococcal colitis: report of a case with radiologic and endoscopic findings. Brown BP, et al. **J Pediatr Gastroenterol Nutr** 1989 Feb;8(2):269–71

DRUG THERAPY

Synergy between a non–neuroleptic thioxanthene stereo–isomer and penicillin in vivo. Kristiansen JE, et al. **APMIS** 1988 Dec;96(12):1079–84

Erythromycin–resistant Streptococcus pneumoniae [letter] [published erratum appears in Lancet 1989 Jan 7;1(8628):58] **Lancet** 1988 Dec 17;2(8625):1432–3

Pneumococcaemia caused by erythromycin–resistant Streptococcus pneumoniae type 14 [letter] Eykyn SJ. **Lancet** 1988 Nov 5;2(8619):1086

[Antibiotic resistance of Streptococcus pneumoniae (Pneumococcus). Epidemiologic and clinical aspects] Kaufhold A. **Med Klin** 1988 Oct 28;83(21):723–6 (52 ref.) **(Ger)**

EPIDEMIOLOGY

Surveillance of Streptococcus pneumoniae infection during 1974–1981. Mihalcu F, et al. **Arch Roum Pathol Exp Microbiol** 1983 Jan–Mar; 42(1):65–74

Pneumococcal carriage amongst children in Adelaide, South Australia. Hansman D, et al. **Epidemiol Infect** 1988 Oct; 101(2):411–7

Pneumococcosuria in children. Miller MA, et al. **J Clin Microbiol** 1989 Jan;27(1):99–101

Epidemiological studies of Streptococcus pneumoniae in infants: antibody to types 3, 6, 14, and 23 in the first two years of life. Gray BM, et al. **J Infect Dis** 1988 Nov; 158(5):948–55

Invasive pneumococcal disease in an Alaska native population, 1980 through 1986. Davidson M, et al. **JAMA** 1989 Feb 3;261(5):715–8

Epidemiology of pneumococcal capsular types causing pediatric infections. Austrian R. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S21–2 (19 ref.)

Bacteremic pneumococcal pneumonia in Stockholm, Sweden, in 1984. Ortqvist A, et al. **Scand J Infect Dis** 1988; 20(4):451–2

[Serotypes and epidemiological study of pneumococcal infection in 18 provinces (cities) in China] Shen SJ. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1989 Jun; 10(3):133–7 (Eng. Abstr.) **(Chi)**

[Epidemiologic problems of pneumococcal infection] Vishniakova LA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Aug;(8):64–8 (Eng. Abstr.) **(Rus)**

ETIOLOGY

A rat model for bacterial otitis media. Hermansson A, et al. **Acta Otolaryngol Suppl (Stockh)** 1989;457:144–7

Bacterial corneoscleritis complicating pterygium excision. Farrell PL, et al. **Am J Ophthalmol** 1989 May 15; 107(5):515–7

Overwhelming pneumococcal bacteraemia in systemic lupus erythematosus. Petros D, et al. **Ann Rheum Dis** 1989 Apr; 48(4):333–5

Postsplenectomy sepsis syndrome. Schreiner RD, et al. **J Tenn Med Assoc** 1989 Jan;82(1):23–4

[Infections caused by penicillin–resistant pneumococcus: apropos of 3 cases] Bermejo J, et al. **Medicina (B Aires)** 1988;48(3):285–9 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

Antipneumococcal effects of C–reactive protein and monoclonal antibodies to pneumococcal cell wall and capsular antigens. Briles DE, et al. **Infect Immun** 1989 May; 57(5):1457–64

Analysis of humoral and phagocytic defenses against Streptococcus pneumoniae serotypes 1 and 3. Fine DP, et al. **J Lab Clin Med** 1988 Oct;112(4):487–97

Pneumococcal vaccine improves pulmonary clearance of live pneumococci after splenectomy. Hebert JC. **J Surg Res** 1989 Oct;47(4):283–7

Role of interferon in streptococcal infection in the mouse. Weigent DA, et al. **Microb Pathog** 1986 Aug;1(4):399–407

Immunodeficiency associated with recurrent infections and an isolated in vivo inability to respond to bacterial polysaccharides: follow-up immunization with pneumococcal polysaccharides [letter] Gigliotti F. **Pediatr Infect Dis J** 1988 Aug;7(8):604

Standardization of antibody assays for measuring the response to pneumococcal infection and immunization. Siber GR, et al. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S84–91 (32 ref.)

MICROBIOLOGY

Survey of antimicrobial susceptibility of community isolates of Streptococcus pneumoniae in Ontario. Mazzulli T, et al. **Can Dis Wkly Rep** 1989 Jul 1;15(26):131–3 **(Eng, Fre)**

Primary pneumococcal peritonitis in patients with cardiac ascites: report of 2 cases. Shaked Y, et al. **Cardiology** 1988; 75(5):372–4

Impaired antipneumococcal activity of bronchoalveolar lining material of neonatal rats. Coonrod JD, et al. **Infect Immun** 1989 Feb;57(2):359–66

Surveillance of invasive Streptococcus pneumoniae infection in Quebec, Canada, from 1984 to 1986: serotype distribution, antimicrobial susceptibility, and clinical characteristics. Jetté LP, et al. **J Clin Microbiol** 1989 Jan; 27(1):1–5

Fatal infection caused by a multiply resistant type 3 pneumococcus. Lawrenson JB, et al. **J Clin Microbiol** 1988 Aug;26(8):1590–1

Pneumococcal cellulitis: a rare manifestation of pneumococcaemia in adults. Peters NS, et al. **J Infect** 1989 Jul;19(1):57–9 (5 ref.)

Pneumococcal serotyping [letter] Smart LE, et al. **J Infect** 1989 May;18(3):296–8

Drug resistance patterns and serogroups or serotypes of pneumococcal isolates from cerebrospinal fluid or blood, 1979–1986. Klugman KP, et al. **J Infect Dis** 1988 Nov; 158(5):956–64

Role of pneumococcal surface protein A in the virulence of Streptococcus pneumoniae. Briles DE, et al. **Rev Infect Dis** 1988 Jul–Aug;10 Suppl 2:S372–4

Pneumococcal infections in eastern Saudi Arabia: serotypes and antibiotic sensitivity patterns. el-Mouzan MI, et al. **Trop Geogr Med** 1988 Jul;40(3):213–7

[Penicillin insensitive and resistant Streptococcus pneumoniae infection in children] Sato K, et al. **Kansenshogaku Zasshi** 1989 Mar;63(3):189–94 (Eng. Abstr.) **(Jpn)**

[Distribution of serotypes of S. pneumoniae in upper respiratory tract infections] Dake Y, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Feb;92(2):228–32 (Eng. Abstr.) **(Jpn)**

MORTALITY

Fatal pneumococcal infection in neurocutaneous melanosis [letter] Adeyanju M, et al. **J Child Neurol** 1988 Oct; 3(4):293–4

PATHOLOGY

[Polymicrobial septicemia in children. Apropos of a case] Chirio R, et al. **Ann Pediatr (Paris)** 1988 Oct;35(8):583–5 (11 ref.) (Eng. Abstr.) **(Fre)**

PHYSIOPATHOLOGY

A rat model for pneumococcal otitis media. Hermansson A, et al. **Am J Otolaryngol** 1988 May–Jun;9(3):97–101

Effects of sepsis on diaphragmatic function in rats. Boczkowski J, et al. **Am Rev Respir Dis** 1988 Aug; 138(2):260–5

PREVENTION & CONTROL

The emergency department as part of a successful strategy for increasing adult immunization. Polis MA, et al. **Ann Emerg Med** 1988 Oct;17(10):1016–8

Correction: pneumococcal vaccine and pneumococcal pneumonia [letter] Austrian R. **Ann Intern Med** 1988 Nov 1;109(9):762–3

Vaccination against pneumococcal infection. Noah ND. **BMJ** 1988 Nov 26;297(6660):1351–2 (23 ref.)

Canadian Immunization Guide. National Advisory Committee on Immunization. **Can Dis Wkly Rep** 1989 Apr 22;15(16):85–8 **(Eng, Fre)**

Prophylaxis and treatment of pneumococcal bacteremia by immune globulin intravenous in a mouse model. Chudwin DS. **Clin Immunol Immunopathol** 1989 Jan;50(1 Pt 1):62–71

Pneumococcal endophthalmitis after corneal transplantation: control by modification of harvesting techniques. Moore PJ, et al. **Infect Control Hosp Epidemiol** 1989 Mar; 10(3):102–5

Increased utilization of influenza and pneumococcal vaccines in an elderly hospitalized population. Bloom HG, et al. **J Am Geriatr Soc** 1988 Oct;36(10):897–901

The continuing problem of pneumococcal infection [letter] Chattopadhyay B. **J Antimicrob Chemother** 1988 Oct; 22(4):569–70

Is pneumococcal infection a preventable disease? Finch R. **J Infect** 1988 Sep;17(2):95–8 (26 ref.)

Prevention of pneumococcal bacteremia by immunization with type 6 pneumococcal capsular polysaccharide vaccine in splenectomized rats. Iinuma H, et al. **J Infect Dis** 1989 Jul;160(1):66–75

The effects of subclass on the ability of anti-phosphocholine antibodies to protect mice from fatal infection with Streptococcus pneumoniae. Briles DE, et al. **J Mol Cell Immunol** 1984;1(5):305–9

Gamma-globulin enhances survival in pneumococcal-challenged asplenic infant rats. Ford EG, et al. **J Pediatr Surg** 1989 Aug;24(8):815–7

Health maintenance issues of the elderly. Immunization. Levitt A. **Md Med J** 1989 Feb;38(2):141–3

Pneumococcal immunization program—California, 1986–1988. **MMWR** 1989 Aug 4;38(30):517–9

Pneumococcal otitis media vaccine trials. Klein JO. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S82–3

Pneumococcal polysaccharide vaccines. Austrian R. **Rev Infect Dis** 1989 May–Jun;11 Suppl 3:S598–602 (43 ref.)

TRANSMISSION

Dangers of "eye-to-eye" contact [letter] Hibberd PL, et al. **Infect Control Hosp Epidemiol** 1989 Mar;10(3):99–101

Nasal and hand carriage of Streptococcus pneumoniae in children and mothers in the Tari Basin of Papua New Guinea. Pickering H, et al. **Trans R Soc Trop Med Hyg** 1988;82(6):911–3

[Pneumococcal pneumonia and septic shock in the newborn infant] Larchet M, et al. **Pediatrie** 1988;43(6):515–8 (Eng. Abstr.) **(Fre)**

VETERINARY

Serodiagnosis of Streptococcus pneumoniae infection in guinea pigs by an enzyme-linked immunosorbent assay. Matsubara J, et al. **Lab Anim** 1988 Oct;22(4):304–8

PNEUMOCOCCUS see **STREPTOCOCCUS PNEUMONIAE**

PNEUMOCONIOSIS

Caplan's syndrome. Ondrašík M. **Baillieres Clin Rheumatol** 1989 Apr;3(1):205–10 (29 ref.)

Inorganic dust pneumoconioses [editorial] Rockoff SD, et al. **J Thorac Imaging** 1988 Oct;3(4):vii

Pathology of silicon carbide pneumoconiosis. Massé S, et al. **Mod Pathol** 1988 Mar;1(2):104–8

[Occupational bronchopneumopathies] Sartorelli E. **G Clin Med** 1988 Aug–Sep;69(8–9):483–92 **(Ita)**

[The natural history of pneumoconiosis] Chiyotani K. **Kokyu To Junkan** 1988 Sep;36(9):955–9 **(Jpn)**

[Comparative evaluation of the morphologic and x-ray changes in the lungs of coal miners] Donets IK, et al. **Vestn Rentgenol Radiol** 1988 May–Jun;(3):87–8 **(Rus)**

CLASSIFICATION

[Chronic dust-induced lung disease] Zislin DM. **Gig Tr Prof Zabol** 1988 Oct;(10):10–2 (Eng. Abstr.) **(Rus)**

COMPLICATIONS

Cigarette smoking and pneumoconiosis: structuring the debate. Blanc PD, et al. **Am J Ind Med** 1989;16(1):1–4 (31 ref.)

Massive melanoptysis: a serious unrecognized complication of coal worker's pneumoconiosis. Mosquera JA. **Eur Respir J** 1988 Aug;1(8):766–8

Induction of thoracic malignancy in inorganic dust pneumoconiosis. Scatarige JC, et al. **J Thorac Imaging** 1988 Oct;3(4):67–79 (72 ref.)

Left vocal cord paralysis caused by coalworkers' pneumoconiosis and progressive massive fibrosis. Haffar M, et al. **Postgrad Med J** 1988 Feb;64(748):143–4

DIAGNOSIS

Magnetopneumography: a general review. Le Gros V, et al. **Eur Respir J** 1989 Feb;2(2):149–59 (46 ref.)

Recognizing occupational lung disease. Mandel JH, et al. **Hosp Pract [Off]** 1989 Jan 30;24(1A):21–4, 27–30

Transit time analysis of forced expiration in workers exposed to dust: a cross-sectional study. Nakadate T, et al. **Ind Health** 1989;27(1):1–7

A study of respiratory function in glass bangle worker's pneumoconiosis. Rastogi SK, et al. **Indian J Chest Dis Allied Sci** 1988 Jan–Mar;30(1):5–10

Cigarette smoking and federal black lung benefits in bituminous coal miners. Roy TM, et al. **J Occup Med** 1989 Feb;31(2):98–101

Imaging the pneumoconioses: a multidisciplinary approach. Bégin R, et al. **J Thorac Imaging** 1988 Oct;3(4):37–50 (58 ref.)

[Diagnostic approach in occupational asthma] Bessot JC, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:275–7 (Eng. Abstr.) **(Fre)**

[Estimation of pulmonary dust load using magnetic pneumography] Le Gros V, et al. **Rev Mal Respir** 1988; 5(6):601–8 (Eng. Abstr.) **(Fre)**

[Lung function and symptoms in employees of poultry farms] Danuser B, et al. **Soz Praventivmed** 1988;33(6):286–91 (Eng. Abstr.) **(Ger)**

[Mass screening of patients with pneumoconiosis] Monaenkova AM, et al. **Gig Tr Prof Zabol** 1988 Aug;(8):3–7 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

[Differentiated immunocorrective therapy of dust-induced bronchitis in machine builders] Kleĭner AI, et al. **Gig Tr Prof Zabol** 1988 Aug;(8):19–21 (Eng. Abstr.) **(Rus)**

[Broncholytic drug agents in the treatment of dust-induced lung diseases] Tolmach DV, et al. **Vrach Delo** 1988 Nov; (11):108–10 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Re: "US prevalence of occupational pleural thickening: a look at chest x-rays from the first National Health and Nutrition Examination Survey" [letter] Cooper WC. **Am J Epidemiol** 1989 Jan;129(1):229–30

Health status of anthracite surface coal miners. Amandus HE, et al. **Arch Environ Health** 1989 Mar–Apr;44(2):75–81

Longitudinal study of workers in an aluminum smelter. Chan-Yeung M, et al. **Arch Environ Health** 1989 May–Jun; 44(3):134–9

Re-examination of longitudinal studies of workers [editorial] Kilburn KH. **Arch Environ Health** 1989 May–Jun; 44(3):132–3

China clay workers in the south west of England: analysis of chest radiograph readings, ventilatory capacity, and respiratory symptoms in relation to type and duration of occupation. Ogle CJ, et al. **Br J Ind Med** 1989 Apr; 46(4):261–70

Prevalence and pathogenesis of pneumoconiosis in coal workers. Heppleston AG. **Environ Health Perspect** 1988 Jun;78:159–70 (126 ref.)

Weak associations in occupational epidemiology: adjustment for exposure estimation error. Heederik D, et al. **Int J Epidemiol** 1988 Dec;17(4):970–4

Pneumoconiosis in iron ore surface mining in Labrador. Martin JR, et al. **J Occup Med** 1988 Oct;30(10):780–4

ETIOLOGY

Relationship of lipid secretion and particle size to diffuse interstitial change in pneumoconiosis: a pathogenetic perspective. Heppleston AG. **Am J Ind Med** 1989; 15(4):427–39 (63 ref.)

Chronic respiratory disorders related to farming and exposure to grain dust in a rural adult community. Manfreda J, et al. **Am J Ind Med** 1989;15(1):7–19

Respiratory function in animal food processing workers. Zuskin E, et al. **Am J Ind Med** 1989;16(2):179–87

Acrylic resin pneumoconiosis: report of a case in a dental student. Barrett TE, et al. **Am Rev Respir Dis** 1989 Mar; 139(3):841–3

Detection of reactive free radicals in fresh coal mine dust and their implication for pulmonary injury. Dalal NS, et al. **Ann Occup Hyg** 1989;33(1):79–84

Dusts causing pneumoconiosis generate .OH and produce hemolysis by acting as Fenton catalysts. Kennedy TP, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):359–64

Respiratory disease and lung function in a tobacco industry. Kjaergaard SK, et al. **Arch Environ Health** 1989 May–Jun; 44(3):164–70

Respiratory findings in spice factory workers. Zuskin E, et al. **Arch Environ Health** 1988 Sep–Oct;43(5):335–9

Pulmonary complications in lead miners. Masjedi MR, et al. **Chest** 1989 Jul;96(1):18–21

Accumulation of mixed mineral dusts in the lungs of rats during chronic inhalation exposure. McMillan CH, et al. **Environ Res** 1989 Apr;48(2):218–37

Pneumoconiosis in carbon electrode workers. Petsonk EL, et al. **J Occup Med** 1988 Nov;30(11):887–91

Stannosis. A report of 2 cases. Sluis-Cremer GK, et al. **S Afr Med J** 1989 Feb 4;75(3):124–6

Exposure to silica dust in the Danish stone industry. Guénel P, et al. **Scand J Work Environ Health** 1989 Apr; 15(2):147–53

Generation of free oxygen radicals from human polymorphonuclear granulocytes by cytokines from human mononuclear cells, treated with quartz dust DQ12 or coal mine dust TF-1—new aspects in pathogenesis of pneumoconiosis. Maly ER. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Dec; 187(2):142–65

[Experimental study of pathogenic effects of dusts of vanad-titan-magnetite on rats lungs] Song YK. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1989 Mar;23(2):87–9 (Eng. Abstr.) **(Chi)**

[Morphological studies on the lung of the rat exposed to aluminium dust] Sun MS. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Jul;22(4):214–6 (Eng. Abstr.) **(Chi)**

[Aluminum dust lungs] Lapp H, et al. **Z Erkr Atmungsorgane** 1988;171(3):235–42 (Eng. Abstr.) **(Ger)**

[Exposure to asbestos dust and asbestosis of employees in a Thüringen rubber industry] Schunk W, et al. **Z Gesamte Hyg** 1989 Mar;35(3):152–4 (Eng. Abstr.) **(Ger)**

[Occupational pneumoconiosis and x-ray check-ups performed by the National Board of Occupational Protection] Borgersen A, et al. **Tidsskr Nor Laegeforen** 1989 Jun 20;109(17–18):1887–90 (Eng. Abstr.) **(Nor)**

[Fly ash and its biological effects. I. Production, utilization and physico-chemical properties of fly ash] Woźniak H, et al. **Med Pr** 1988;39(5):338–46 (Eng. Abstr.) **(Pol)**

[Classification of dusts with regard to the degree of fibrogenicity] Beletskiĭ VS. **Gig Sanit** 1988 Nov;(11):34–7 (Eng. Abstr.) **(Rus)**

[Acute and chronic changes in the respiratory system of workers exposed to tobacco dust] Dzhoze S, et al. **Gig Tr Prof Zabol** 1988 Aug;(8):24–8 **(Rus)**

[Hygienic characteristics of working conditions and their effect on the functional state of workers engaged in the manufacture of reinforced concrete products] Kurashvili ME, et al. **Gig Tr Prof Zabol** 1989;(5):11–4 (Eng. Abstr.) **(Rus)**

[Occupational origin of upper respiratory tract diseases in workers in dusty industries] Pankova VB, et al. **Vestn Otorinolaringol** 1988 Nov–Dec;(6):20–3 (Eng. Abstr.) **(Rus)**

[Characteristics of the development and course of pneumoconiosis in deep-shaft miners] Tolmach DV, et al. **Vrach Delo** 1988 Aug;(8):98–101 (Eng. Abstr.) **(Rus)**

[Bronchiolitis obliterans with secondary pneumoconiosis] Tardío Torio E, et al. **An Esp Pediatr** 1989 Feb;30(2):134–6 (Eng. Abstr.) **(Spa)**

IMMUNOLOGY

[Neutrophil chemiluminescence in pneumoconiosis] Saburi Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jan; 27(1):57–63 (Eng. Abstr.) **(Jpn)**

[Experience using immunocorrecting agents in workers engaged in the manufacture of graphite and asbestos products] Bezzub SL, et al. **Gig Tr Prof Zabol** 1988 Sep; (9):27–9 (Eng. Abstr.) **(Rus)**

METABOLISM

Spontaneous and stimulated release of tumor necrosis factor-alpha (TNF) from blood monocytes of miners with coal workers' pneumoconiosis. Borm PJ, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1589–94

[Analysis of minerals of lobar lavage fluid from patients with silicosis, stannosis and cement pneumoconiosis] Wang LH. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Mar; 22(2):88–91 (Eng. Abstr.) **(Chi)**

[Biochemical evaluation of the status of the bronchopulmonary system and liver in workers engaged in the manufacture of graphite products] Arkhipova OG, et al. **Gig Tr Prof Zabol** 1988 Sep;(9):24–7 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

[Respiratory tract infections caused by Branhamella catarrhalis in outpatients with pneumoconiosis] Ide M, et al. **Kansenshogaku Zasshi** 1989 Apr;63(4):363–8 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Giant-cell interstitial pneumonia and hard-metal pneumoconiosis. A clinicopathologic study of four cases and review of the literature. Ohori NP, et al. **Am J Surg Pathol** 1989 Jul;13(7):581–7 (25 ref.)

PHYSIOPATHOLOGY

X-ray findings, lung function, and respiratory symptoms in black South African vermiculite workers. Hessel PA, et al. **Am J Ind Med** 1989;15(1):21–9

Resting gas exchange in nonsmoking bituminous-coal miners with simple pneumoconiosis. Roy TM, et al. **Respiration** 1989;55(1):28–32

[Evaluation of the sequelae of occupational asthma] Rosenberg N, et al. **Rev Mal Respir** 1989;6(1):35–8 (Eng. Abstr.) **(Fre)**

[Function of the respiratory system in miners with chronic regional hypobaric hypoxia and hypothermia] Lutai AV, et al. **Gig Tr Prof Zabol** 1989;(2):25–8 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

[Basic principles of protective reactions of phagocytic cells of the respiratory tract to deposition of cytotoxic dust particles and its regulation] Privalova LI. **Gig Sanit** 1989 Mar;(3):28–31 (Eng. Abstr.) **(Rus)**

[Ways of further solving theoretical and practical problems regarding the prevention of dust-induced occupational diseases of the respiratory organs (data of the 2nd international symposium. Czechoslovakia, September 22–27, 1986)] Elovskaia LT. **Gig Tr Prof Zabol** 1988 Nov; (11):4–7 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Between- and within-reader variability in the assessment of pleural abnormality using the ILO 1980 international classification of pneumoconioses. Bourbeau J, et al. **Am J Ind Med** 1988;14(5):537–43

Solitary pulmonary masses in progressive massive fibrosis: a diagnostic pitfall. Adams H. **Br J Clin Pract** 1988 Dec; 42(12):519–21

Inorganic dust diseases: issues and controversies. **J Thorac Imaging** 1988 Oct;3(4):1–85

The effect of cigarette smoking on the detection of small radiographic opacities in inorganic dust diseases. Blanc PD, et al. **J Thorac Imaging** 1988 Oct;3(4):51–6 (47 ref.)

Radiographic type p pneumoconiosis: high-resolution CT. Akira M, et al. **Radiology** 1989 Apr;171(1):117–23

[Inter-observer variations in thoracic radiogram readings in pneumoconiosis] Maranelli G, et al. **Med Lav** 1988 May-Jun;79(3):187–93 (Eng. Abstr.) **(Ita)**

PNEUMOCYSTIS CARINII

Extrapulmonary Pneumocystis infection [letter] **Ann Intern Med** 1989 Aug 15;111(4):339–40

Aerosolized pentamidine and disseminated infection with Pneumocystis carinii [letter] **Ann Intern Med** 1989 Sep 1; 111(5):442–3

The Society of Protozoologists and the National Institute of Allergy and Infectious Diseases. Workshop on Pneumocystis carinii. Bristol, England, U.K., July 19–22, 1988. **J Protozool** 1989 Jan–Feb;36(1):1S–80S

Historical perspectives on Pneumocystis carinii. Walzer PD. **J Protozool** 1989 Jan–Feb;36(1):39–41 (14 ref.)

ANALYSIS

Identification and isolation of a major cell surface glycoprotein of Pneumocystis carinii. Radding JA, et al. **Infect Immun** 1989 Jul;57(7):2149–57

Glycoproteins of Pneumocystis carinii: characterization by electrophoresis and microscopy. Pesanti EL, et al. **J Infect Dis** 1988 Dec;158(6):1353–9

Lectins as probes to Pneumocystis carinii surface glycocomplexes. De Stefano JA, et al. **J Protozool** 1989 Jan–Feb;36(1):65S–66S

Analyses of Pneumocystis fatty acids. Kaneshiro ES, et al. **J Protozool** 1989 Jan–Feb;36(1):69S–72S

Surface labeling of Pneumocystis carinii from in vitro culture. Radding JA, et al. **J Protozool** 1989 Jan–Feb;36(1):61S–62S

Detection of surface carbohydrates of Pneumocystis carinii. Yoshikawa H, et al. **J Protozool** 1989 Jan–Feb; 36(1):63S–64S

Ultrastructural detection of carbohydrates in the pellicle of Pneumocystis carinii. Yoshikawa H, et al. **Parasitol Res** 1988;74(6):537–43

CLASSIFICATION

Pneumocystis carinii: sequence from ribosomal RNA implies a close relationship with fungi. Stringer SL, et al. **Exp Parasitol** 1989 May;68(4):450–61

Nomenclature for Pneumocystis carinii [letter] Markus MB. **J Infect Dis** 1989 Feb;159(2):366

5S ribosomal RNA sequence of Pneumocystis carinii and its phylogenetic association with "Rhizopoda/Myxomycota/Zygomycota group". Watanabe J, et al. **J Protozool** 1989 Jan–Feb;36(1):16S–18S

CYTOLOGY

Proliferation of Pneumocystis trophozoites in human lymph nodes and in nude mice lungs. Matsumoto Y, et al. **J Protozool** 1989 Jan–Feb;36(1):33S–34S

Binary fission of Pneumocystis carinii trophozoites grown in vitro. Richardson JD, et al. **J Protozool** 1989 Jan–Feb; 36(1):27S–29S

DRUG EFFECTS

Tricyclic 2,4-diaminopyrimidines with broad antifolate activity and the ability to inhibit Pneumocystis carinii growth in cultured human lung fibroblasts in the presence of leucovorin. Rosowsky A, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2677–84

ENZYMOLOGY

Lack of detectable activity of ornithine decarboxylase in Pneumocystis carinii [letter] Pesanti EL, et al. **J Infect Dis** 1988 Nov;158(5):1137–8

Enzymes of Pneumocystis carinii: electrophoretic mobility on starch gels. Pesanti EL. **J Protozool** 1989 Jan–Feb; 36(1):2S–3S

GENETICS

Cloning of DNA from Pneumocystis carinii. Wakefield AE, et al. **J Infect Dis** 1988 Oct;158(4):859–62

A method for isolation of RNA from Pneumocystis carinii. Cushion MT, et al. **J Protozool** 1989 Jan–Feb;36(1):12S–14S

Ribosomal RNA genes of Pneumocystis carinii. Edman JC, et al. **J Protozool** 1989 Jan–Feb;36(1):18S–20S

Organization of DNA and RNA from rat Pneumocystis carinii. Fishman JA, et al. **J Protozool** 1989 Jan–Feb; 36(1):4S–5S

Sequence from ribosomal RNA of Pneumocystis carinii compared to those of four fungi suggests an ascomycetous affinity. Stringer SL, et al. **J Protozool** 1989 Jan–Feb; 36(1):14S–16S

Cloning of DNA from Pneumocystis carinii. Wakefield AE, et al. **J Protozool** 1989 Jan–Feb;36(1):5S–7S

Development of DNA probes for Pneumocystis carinii. Woodmansee DB, et al. **J Protozool** 1989 Jan–Feb; 36(1):7S–9S

Characterization and cloning of Pneumocystis carinii nucleic acid. Worley MA, et al. **J Protozool** 1989 Jan–Feb; 36(1):9S–11S

Phylogenetic association of Pneumocystis carinii with the 'Rhizopoda/Myxomycota/Zygomycota group' indicated by comparison of 5S ribosomal RNA sequences. Watanabe J, et al. **Mol Biochem Parasitol** 1989 Jan 15;32(2–3):163–7

A self-splicing intron in the small subunit rRNA gene of Pneumocystis carinii. Sogin ML, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5349–59

Isolation and expression of the Pneumocystis carinii thymidylate synthase gene. Edman U, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6503–7

GROWTH & DEVELOPMENT

In vitro differentiation of human-derived Pneumocystis carinii. Blumenfeld W, et al. **J Clin Microbiol** 1989 Mar; 27(3):480–5

Propagation and purification of rat Pneumocystis carinii in short-term cell culture. Armstrong MY, et al. **J Protozool** 1989 Jan–Feb;36(1):24S–27S

Adherence of Pneumocystis carinii in lung cells during in vitro cultivation. Burnstein T, et al. **J Protozool** 1989 Jan–Feb;36(1):35S–37S; discussion 37S–38S

In vitro studies of Pneumocystis carinii. Cushion MT. **J Protozool** 1989 Jan–Feb;36(1):45–52 (38 ref.)

A culture method allowing production of relatively pure Pneumocystis carinii trophozoites. Durkin MM, et al. **J Protozool** 1989 Jan–Feb;36(1):31S–32S

A fifteen-year perspective on the in vitro culture of Pneumocystis carinii. Pifer LL. **J Protozool** 1989 Jan–Feb; 36(1):23S–24S (16 ref.)

Ultrastructural observations on life cycle stages of Pneumocystis carinii. Ruffolo JJ, et al. **J Protozool** 1989 Jan–Feb;36(1):53S–54S

New system of in vitro cultivation of Pneumocystis carinii without feeder cells. Tegoshi T, et al. **J Protozool** 1989 Jan–Feb;36(1):29S–31S

IMMUNOLOGY

Anticardiolipin antibodies and Pneumocystis carinii pneumonia [letter] Masala C, et al. **Ann Intern Med** 1989 May 1;110(9):749

Type I reactions directed against Pneumocystis carinii in AIDS patients. Pedersen M, et al. **APMIS** 1989 Feb; 97(2):120–4

Pneumocystis carinii pneumonia [letter] Ho-Len DO, et al. **BMJ** 1988 Oct 1;297(6652):855

Blastogenic responses to Pneumocystis carinii among patients with human immunodeficiency (HIV) infection. Hagler DN, et al. **Clin Exp Immunol** 1988 Oct;74(1):7–13

Properties of the major antigens of rat and human Pneumocystis carinii. Linke MJ, et al. **Infect Immun** 1989 May;57(5):1547–55

Glycoproteins composed of major surface immunodeterminants of Pneumocystis carinii. Tanabe K, et al. **Infect Immun** 1989 May;57(5):1363–8

Pneumocystis carinii antigen detection in rat serum and lung lavage. McNabb SJ, et al. **J Clin Microbiol** 1988 Sep; 26(9):1763–71

The level of IgG and IgM in Pneumocystis carinii infection. el-Sibae MM, et al. **J Egypt Soc Parasitol** 1989 Dec; 19(2):635–9

Purification and initial characterization of a ferret Pneumocystis carinii surface antigen. Gigliotti F, et al. **J Infect Dis** 1988 Oct;158(4):848–54

Monoclonal antibodies to Pneumocystis carinii: identification of specific antigens and characterization of antigenic differences between rat and human isolates. Kovacs JA, et al. **J Infect Dis** 1989 Jan;159(1):60–70

Characterization of Pneumocystis carinii monoclonal antibodies. Bogucki MS, et al. **J Protozool** 1989 Jan–Feb; 36(1):41S–43S

Cross-reactive antigens of the rat and human Pneumocystis carinii. Fishman JA. **J Protozool** 1989 Jan–Feb; 36(1):66S–67S

Immunological studies of Pneumocystis carinii. Graves DC. **J Protozool** 1989 Jan–Feb;36(1):60–9 (62 ref.)

Pneumocystis antigen appearance during immunosuppression. Ivey MH, et al. **J Protozool** 1989 Jan–Feb;36(1):38S–41S

Identification of antigens specific for Pneumocystis carinii. Kovacs JA, et al. **J Protozool** 1989 Jan–Feb;36(1):67S–69S

Analysis of a surface antigen of Pneumocystis carinii. Linke MJ, et al. **J Protozool** 1989 Jan–Feb;36(1):60S–61S

Structure of major surface determinants and DNA diagnosis of Pneumocystis carinii. Nakamura Y, et al. **J Protozool** 1989 Jan–Feb;36(1):58S–60S

Interaction of Pneumocystis carinii with secretions of alveolar macrophages and type II epithelial cells. Pesanti EL. **J Protozool** 1989 Jan–Feb;36(1):47S–49S

Recent developments in the immunobiology of Pneumocystis. Beckers PJ. **Parassitologia** 1986 Aug–Dec;28(2–3):117–21 (25 ref.)

Immunobiology of Pneumocystis carinii. Walzer PD, et al. **Pathol Immunopathol Res** 1989;8(3–4):127–40 (37 ref.)

Humoral and cellular responses to Pneumocystis carinii, CMV, and herpes simplex in patients with AIDS and in controls. Hofmann B, et al. **Scand J Infect Dis** 1988; 20(4):389–94

ISOLATION & PURIFICATION

Pneumocystis carinii: rapid diagnosis with the microwave oven [letter] Loughman NT. **Acta Cytol** 1989 May-Jun; 33(3):416–7

Diagnosis of Pneumocystis pneumonia by induced sputum technique in patients without the acquired immunodeficiency syndrome. Masur H, et al.

Ann Intern Med 1988 Nov 1;109(9):755–6

Nonspecific interstitial pneumonitis without evidence of Pneumocystis carinii in asymptomatic patients infected with human immunodeficiency virus (HIV). Ognibene FP, et al. **Ann Intern Med** 1988 Dec 1;109(11):874–9

Comparison of methenamine silver nitrate and Giemsa stain for detection of Pneumocystis carinii in bronchoalveolar lavage specimens from HIV infected patients. Holten-Andersen W, et al. **APMIS** 1989 Aug;97(8):745–7

Use of a monoclonal antibody to detect Pneumocystis carinii in induced sputum and bronchoalveolar lavage fluid by immunoperoxidase staining. Blumenfeld W, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1233–6

Sputum examination in the diagnosis of Pneumocystis carinii pneumonia in the acquired immunodeficiency syndrome. del Rio C, et al. **Arch Pathol Lab Med** 1988 Dec; 112(12):1229–32

The use of mucolysed induced sputum for the identification of pulmonary pathogens associated with human immunodeficiency virus infection. Ng VL, et al. **Arch Pathol Lab Med** 1989 May;113(5):488–93

Rapid methenamine silver stain [letter] Yu PK, et al. **Arch Pathol Lab Med** 1989 Feb;113(2):111

Optimal use of the cytocentrifuge for recovery and diagnosis of Pneumocystis carinii in bronchoalveolar lavage and sputum specimens. Gill VJ, et al. **J Clin Microbiol** 1988 Sep;26(9):1641–4

Rapid separation of Pneumocystis carinii from lung lavage fluids. Pesanti EL, et al. **J Clin Microbiol** 1988 Aug; 26(8):1598–9

Giemsa staining for cysts and trophozoites of Pneumocystis carinii. Walker J, et al. **J Clin Pathol** 1989 Apr;42(4):432–4

The microscopic identification of Pneumocystis carinii. Savoia D, et al. **J Protozool** 1989 Jan–Feb;36(1):72S–74S

Identification of Pneumocystis carinii in immunodeficient mice. Sundberg JP, et al. **Lab Anim Sci** 1989 May; 39(3):213–8

Sputum induction for diagnosis of Pneumocystis carinii pneumonia. Leigh TR, et al. **Lancet** 1989 Jul 22; 2(8656):205–6

Cresyl violet: a rapid, simple, easily interpretable stain for detecting Pneumocystis carinii in sputum. Moas CM, et al. **South Med J** 1989 Aug;82(8):957–9

Rapid and simple metachromatic stain for Pneumocystis carinii. Woosley JT. **South Med J** 1989 Feb;82(2):245–6

[Induced expectoration in the search for Pneumocystis carinii in HIV seropositive patients. Value and limitations (letter)] Delacour T, et al. **Presse Med** 1989 Jan 21;18(2):81 **(Fre)**

METABOLISM

Pneumocystis carinii: surface reactive carbohydrates detected by lectin probes. Cushion MT, et al. **Exp Parasitol** 1988 Dec;67(2):137–47

Characterization of de novo folate synthesis in Pneumocystis carinii and Toxoplasma gondii: potential for screening therapeutic agents. Kovacs JA, et al. **J Infect Dis** 1989 Aug;160(2):312–20

PATHOGENICITY

Decreased yield of Pneumocystis carinii from cortisonized rats. Eisen S. **J Parasitol** 1989 Feb;75(1):82–5

ULTRASTRUCTURE

Silver staining of Pneumocystis carinii in the rat's lung. Schraufnagel DE, et al. **J Infect** 1989 Jan;18(1):39–44

Ultrastructural study of Pneumocystis carinii in explant cultures of rabbit lung and in cultures with and without feeder cells. Dei-Cas E, et al. **J Protozool** 1989 Jan–Feb; 36(1):55S–57S

Yeast glucan in the cyst wall of Pneumocystis carinii. Matsumoto Y, et al. **J Protozool** 1989 Jan–Feb; 36(1):21S–22S

Ultrastructural studies of Pneumocystis carinii. Yoshida Y. **J Protozool** 1989 Jan–Feb;36(1):53–60 (20 ref.)

Ultrastructure of Pneumocystis carinii: a freeze-fracture study. Yoshikawa H, et al. **J Protozool** 1989 Jan–Feb; 36(1):51S–52S

PNEUMOCYSTIS CARINII PNEUMONIA see **PNEUMONIA, PNEUMOCYSTIS CARINII**

PNEUMOENCEPHALOGRAPHY

[Diagnostic value of computer tomographic pneumomeatocisternography] Dutka J, et al. **Cesk Radiol** 1988 Nov;42(6):396–401 (Eng. Abstr.) **(Cze)**

METHODS

RISA cisternography in the option of ventriculocisternal shunt for infantile non-tumoural aqueductal stenosis. Palma L, et al. **Acta Neurochir Suppl (Wien)** 1988;42:225–9

[Computerized pneumoencephalographic cysternography in the diagnosis of acoustic neurinoma] Meli FJ, et al. **Medicina (B Aires)** 1988;48(1):12–6 (Eng. Abstr.) **(Spa)**

PNEUMOGASTRIC NERVE see **VAGUS NERVE**

PNEUMOLOGY see **PULMONARY DISEASE (SPECIALTY)**

PNEUMOMEDIASTINUM see **MEDIASTINAL EMPHYSEMA**

PNEUMOMEDIASTINUM, DIAGNOSTIC

METHODS

Some aspects of mediastinal anatomy and radiology. Webster RV, et al. **CRC Crit Rev Diagn Imaging** 1977;10(1):1–16 (13 ref.)

PNEUMONECTOMY

Pulmonary resections in cystic fibrosis [letter; comment] Feigelson J. **Acta Paediatr Scand** 1989 Mar;78(2):317–8. **Comment on:** Acta Paediatr Scand 1988 Jul;77(4):569–75

Stretch-related changes in lung cAMP after partial pneumonectomy. Russo LA, et al. **Am J Physiol** 1989 Aug; 257(2 Pt 1):E261–8

Postpneumonectomy compensatory lung growth. Cagle PT, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1314–26 (89 ref.)

Postpneumonectomy compensatory lung growth [letter] Laros CD, et al. **Am Rev Respir Dis** 1989 Jun; 139(6):1569–70

Transthoracic resection of esophageal cancer in patients with pulmonary dysfunction. Usefulness of high frequency ventilation during thoracotomy. Imamura M, et al. **Ann Surg** 1988 Nov;208(5):601–5

Effect of perioperative blood transfusion on outcome in patients with surgically resected lung cancer. Moores DW, et al. **Ann Thorac Surg** 1989 Mar;47(3):346–51

Assessment of exercise oxygen consumption [letter] Olsen GN, et al. **Ann Thorac Surg** 1988 Oct;46(4):483–4

The evolving role of exercise testing prior to lung resection. Olsen GN. **Chest** 1989 Jan;95(1):218–25 (45 ref.)

Submaximal invasive exercise testing and quantitative lung scanning in the evaluation for tolerance of lung resection. Olsen GN, et al. **Chest** 1989 Feb;95(2):267–73

Pleuroperitoneal shunt for pneumonectomy cavity malignant effusion. Pope AR, et al. **Chest** 1989 Sep;96(3):686–8

Breathlessness and hypoxaemia in the upright position after right pneumonectomy. van Rossum P, et al. **Eur Heart J** 1988 Nov;9(11):1230–3

Squamous cell carcinoma in a chronically draining chest empyema. Gleeson MJ, et al. **Ir J Med Sci** 1988 Jul; 157(7):242

Survival after incomplete resection or exploratory thoracotomy in patients with advanced non small cell lung cancer. Ratto GB, et al. **Ital J Surg Sci** 1988;18(4):377–83

Long-term consequences of compensatory lung growth. Thurlbeck WM, et al. **J Appl Physiol** 1989 Jun;66(6):2891–4

Multiple tumor emboli after lung resection. Schneiderman J, et al. **J Cardiovasc Surg (Torino)** 1989 May–Jun; 30(3):496–8

MR appearance of the normal chest after pneumonectomy. Laissy JP, et al. **J Comput Assist Tomogr** 1989 Mar–Apr; 13(2):248–52

Orthotopic heart transplantation eleven years after left pneumonectomy. Goenen M, et al. **J Heart Transplant** 1988 Jul–Aug;7(4):309–11

Post-pneumonectomy evaluation of the chest: a prospective comparative study of MRI with CT. Laissy JP, et al. **Magn Reson Imaging** 1989 Jan–Feb;7(1):55–60

Campylobacter fetus as a pulmonary pathogen in man. Case report of post-pneumonectomy empyema. Hoover EL, et al. **N Y State J Med** 1989 Feb;89(2):90–1

The effect of age on postpneumonectomy growth in rabbits. Cagle PT, et al. **Pediatr Pulmonol** 1988;5(2):92–5

Normal reference values for regional pulmonary peripheral airspace epithelial permeability. Influence of pneumonectomy and the smoking habit. Todisco T, et al. **Respiration** 1989;55(2):84–93

The clinical value of high-frequency jet ventilation in major airway reconstructive surgery. Watanabe Y, et al. **Scand J Thorac Cardiovasc Surg** 1988;22(3):227–33

Post-pneumonectomy pulmonary oedema [letter] Bell MD. **Thorax** 1988 Dec;43(12):1026

[Possibilities for dynamic follow-up of hemodynamics during thoracic operations] Terzinacheva P. **Khirurgiia (Sofiia)** 1988;41(5):55–7 (Eng. Abstr.) **(Bul)**

[Analysis of 57 cases of unilateral diseased lungs treated by pleuropneumonectomy] Wei CK, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Jan;26(1):25–6, 60 (Eng. Abstr.) **(Chi)**

[Pneumonectomy in lung cancer: an analysis of 74 cases] Xu JX. **Chung Hua Wai Ko Tsa Chih** 1988 Apr;26(4):227–9, 255 (Eng. Abstr.) **(Chi)**

[Surveillance elements of pneumonectomy spaces. Comparison of MRI and x-ray CT] Laissy JP, et al. **Ann Chir** 1988;42(8):602–5 (Eng. Abstr.) **(Fre)**

[2 cases of pulmonary excision in patients with acquired immunodeficiency syndrome. What is the role of surgery in AIDS?] Velly JF, et al. **Ann Chir** 1989;43(2):142–6 (Eng. Abstr.) **(Fre)**

[Radiologic aspects of pneumonectomies] Boyer B, et al. **Ann Radiol (Paris)** 1989;32(3):201–7 (Eng. Abstr.) **(Fre)**

[Heart surgery in 2 previously pneumonectomized patients] Lecharpentier Y, et al. **Cah Anesthesiol** 1988 Dec; 36(8):645–7 (Eng. Abstr.) **(Fre)**

[Antibiotic and antiseptic prophylaxis in thoracic surgery. Controlled study] Regnard JF, et al. **Pathol Biol (Paris)** 1989 May;37(5):477–80 (Eng. Abstr.) **(Fre)**

[Surgical therapy of lung metastases: correlation of the clinical course and growth behavior in the nude mouse model] Ortlieb H, et al. **Helv Chir Acta** 1988 Nov; 55(4):449–53 (Eng. Abstr.) **(Ger)**

[Trends in surgery of bronchial cancer 1972–1984] Stulz P, et al. **Helv Chir Acta** 1988 Nov;55(4):445–8 (Eng. Abstr.) **(Ger)**

[Lung resection in the principle disease of mucoviscidosis and status following poliomyelitis—2 case reports] Usener U, et al. **Klin Padiatr** 1988 Jul–Aug;200(4):339–43 (Eng. Abstr.) **(Ger)**

[Long-term survival following pneumonectomy, chemotherapy and radiotherapy in central small cell bronchial cancer] Lexer G, et al. **Prax Klin Pneumol** 1988 Jul;42(7):588–9 (Eng. Abstr.) **(Ger)**

[The value of mediastinal lymphadenectomy in centrally located non-oat cell carcinoma] Weitensfelder W, et al. **Prax Klin Pneumol** 1988 Jul;42(7):590–1 (Eng. Abstr.) **(Ger)**

[Hemodynamics in the early postoperative period after thoracotomy and lung resection] Radenbach D, et al. **Thorac Cardiovasc Surg** 1988 Dec;36(6):365–9 (Eng. Abstr.) **(Ger)**

[Compensatory response of the residual lung after exeresis (ultrastructural study)] Marcello MF, et al. **Boll Soc Ital Biol Sper** 1989 Feb;65(2):89–96 **(Ita)**

[Use of selective high-frequency jet ventilation (HFJV) in pulmonary lobectomy] Bartolini P, et al. **Minerva Anestesiol** 1987 Nov;53(11):627–31 (Eng. Abstr.) **(Ita)**

[Pneumonectomy and resection-anastomosis in malignant tumors of the lung. Problems of surgical radicalism and postoperative physiopathology] Catrambone G, et al. **Minerva Chir** 1988 Apr 15;43(7):593–600 (Eng. Abstr.) **(Ita)**

[Preoperative functional assessment with a balloon catheter in fiber bronchoscopy of patients who are candidates for pneumonectomy in bronchial cancer] Varoli F, et al. **Minerva Med** 1989 Jul;80(7):697–700 **(Ita)**

[A case of Chilaiditi's syndrome appeared in drug-resistant pulmonary tuberculosis following lobectomy] Umeki S, et al. **Kekkaku** 1988 Aug;63(8):587–91 (Eng. Abstr.) **(Jpn)**

[Three cases of pulmonary resection in bronchiolo-alveolar cell carcinoma of the lung] Kaneda M, et al. **Kyobu Geka** 1988 Jul;41(8):652–5 (Eng. Abstr.) **(Jpn)**

[Endoscopic closure of broncho-pleural fistula after pneumonectomy] Nomoto S, et al. **Kyobu Geka** 1988 May; 41(6):521–4 (Eng. Abstr.) **(Jpn)**

[Thin-section computed tomography of intrapulmonary metastases after surgical resection of lung cancer] Kuriyama K, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Jan 25; 49(1):48–54 (Eng. Abstr.) **(Jpn)**

[A resected case of malignant melanoma originated in the lung] Arita M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep;36(9):2117–21 (22 ref.) (Eng. Abstr.) **(Jpn)**

[A case of chest wall tumor developed 13 years after surgery of small cell lung cancer] Inoue K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov;36(11):2484–8 (Eng. Abstr.) **(Jpn)**

[Evaluation of bronchial circulation and wound healing after sleeve lobectomy—a study on tissue oxygen tension and hydroxyproline concentration of the anastomotic site] Kato R. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jun; 36(6):923–30 (Eng. Abstr.) **(Jpn)**

[A case of pulmonary mucormycosis accompanied by lymphocytic leukemia successfully treated by pulmonary lobectomy] Kondoh Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Apr;37(4):734–7 (14 ref.) (Eng. Abstr.) **(Jpn)**

[Surgical treatment of pulmonary metastases from osteogenic sarcoma-significance of aggressive resection of bilateral multiple metastases and tumors invading adjacent organs] Maeda H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb;37(2):344–9 (Eng. Abstr.) **(Jpn)**

[Study on indication of unilateral pulmonary artery occlusion test in patients undergoing pneumonectomy] Maeda H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Mar; 37(3):449–54 (Eng. Abstr.) **(Jpn)**

[Pneumonectomy of lung cancer diagnosed 21 years after irradiation of 6000 rads for hilar lymphadenopathy] Morota N, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Dec; 36(12):2655–61 (Eng. Abstr.) **(Jpn)**

[Prediction of postpneumonectomy pulmonary function using perfusion lung scanning] Nonoyama A, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct;36(10):2221–8 (Eng. Abstr.) **(Jpn)**

[Pneumonectomy in lung cancer in patients over 70 years old—prediction of postpneumonectomy pulmonary function] Nonoyama A, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul;36(7):1096–105 (Eng. Abstr.) **(Jpn)**

[A study on the alteration of hemodynamics in patients with pulmonary operation and the signification of unilateral pulmonary artery occlusion test—using hemodynamogram] Ohishi A. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul; 36(7):1106–15 (Eng. Abstr.) **(Jpn)**

[Treatment of massive hemoptysis by embolization of bronchial artery, surgical resection and bronchial artery ligation] Reshad K, et al.

Nippon Kyobu Geka Gakkai Zasshi 1988 Aug;36(8):1333–8 (Eng. Abstr.) **(Jpn)**

[Treatment of bronchopleural fistula and empyema after pulmonary resection] Saitoh Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep;36(9):1972–7 (Eng. Abstr.) **(Jpn)**

[Relationships between extravascular lung water volume using thermal-dye dilution technique and pulmonary functions in patients undergoing pneumonectomy] Sakuma T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul; 36(7):1039–43 (Eng. Abstr.) **(Jpn)**

[Postoperative bronchopleural fistula—diagnostic significance of masked cases and results of early re-operation] Sato M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jan;37(1):11–6 (Eng. Abstr.) **(Jpn)**

[The follow-up study of the patients with infiltrated lung cancer to the bronchial stump after pulmonary resection] Terada Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct;36(10):2263–6 (Eng. Abstr.) **(Jpn)**

[Prediction of postoperative lung function after pulmonary resection] Yoshikawa K. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov; 36(11):2437–46 (Eng. Abstr.) **(Jpn)**

[Structural and functional features of the myocardial microcirculatory bed after resection of the lungs] Vaida RI, et al. **Fiziol Zh** 1988 Nov–Dec;34(6):27–32 (Eng. Abstr.) **(Rus)**

[Ligation of patent ductus arteriosus, removal of an aneurysm of a segmental artery and resection of the left lung] Beliaev PA, et al. **Grudn Khir** 1989 Jan–Feb;(1):87–8 **(Rus)**

[A case of lung resection for chronic abscess in a patient with lymphogranulomatosis] Gagua RO, et al. **Grudn Khir** 1988 May–Jun;(3):93–4 **(Rus)**

[Outcome in lung resection and pulmonectomy in disseminated forms of tuberculosis] Kariev TM, et al. **Grudn Khir** 1988 May–Jun;(3):45–8 (Eng. Abstr.) **(Rus)**

[Extensive operations in stage I and II lung cancer] Samkharadze ShP. **Grudn Khir** 1988 May–Jun;(3):42–5 (Eng. Abstr.) **(Rus)**

[Central hemodynamics in the early postoperative period following lobectomy and pneumonectomy] Seregin GI, et al. **Grudn Khir** 1989 Jan–Feb;(1):55–8 (Eng. Abstr.) **(Rus)**

[Emergency mitral re-commissurotomy and pneumonectomy in pulmonary hemorrhage] Ivanov SP, et al. **Kardiologiia** 1988 Oct;28(10):104–5 **(Rus)**

[Lobectomy with wedge resection of the bronchus in surgical and combination treatment of cancer of the lung] Kharchenko VP, et al. **Khirurgiia (Mosk)** 1988 Nov; (11):46–50 (Eng. Abstr.) **(Rus)**

[Heliox correction of the changes in hemodynamics and gas exchange in the early period after lung resection] Kogosov IuA, et al. **Klin Khir** 1988;(10):3–4 (Eng. Abstr.) **(Rus)**

[Lung resection of isolated pseudotumorous amyloidosis] Marchuk IK, et al. **Klin Khir** 1988;(10):58 **(Rus)**

[Pulmonary lobectomy in a female patient with idiopathic pulmonary hemosiderosis] Frishman MN, et al. **Pediatriia** 1988;(6):97–8 **(Rus)**

[Cavernotomy in patients with solitary lung] Krasnov VA, et al. **Probl Tuberk** 1989;(2):32–4 (Eng. Abstr.) **(Rus)**

[Resection of superior and lower lobes of the right lung in a female patient with fibro-cavernous tuberculosis and congenital defect] Ladnyĭ AIa, et al. **Probl Tuberk** 1988; (12):53–5 **(Rus)**

[Immediate and late results of the surgical treatment of patients with post-tuberculosis cavities] Vorozhtsova MP. **Probl Tuberk** 1989;(2):37–9 (Eng. Abstr.) **(Rus)**

[Results of cooperative studies on the combined treatment of cancer of the lungs including postoperative polychemotherapy] Trakhtenberg AKh, et al. **Sov Med** 1989;(1):92–5 **(Rus)**

[Simultaneous nephrectomy and lobectomy of the lung in cancer of the kidney] Orlov VA, et al. **Urol Nefrol (Mosk)** 1988 May–Jun;(3):63–4 **(Rus)**

[Results of various methods of combined treatment of patients with squamous cell carcinoma of the lung] Goldobenko GV, et al. **Vestn Akad Med Nauk SSSR** 1988;(6):12–5 (Eng. Abstr.) **(Rus)**

[Mediastinal lymphadenectomy in diffuse forms of lung cancer] Kotliarov EV, et al. **Vestn Khir** 1988 Aug; 141(8):18–21 (Eng. Abstr.) **(Rus)**

[Possible correction of chemotactic activity of peripheral blood leukocytes before surgical treatment of patients with chronic pneumonia] Sel'vashchuk AP, et al. **Vestn Khir** 1988 Jun;140(6):130–1 **(Rus)**

[Repeat surgery of intrapulmonary metastases] Biriukov IuV, et al. **Vopr Onkol** 1988;34(11):1379–84 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Preoperative assessment as a predictor of mortality and morbidity after lung resection. Markos J, et al. **Am Rev Respir Dis** 1989 Apr;139(4):902–10

Closure of chronic postpneumonectomy bronchopleural fistula using the transsternal transpericardial approach. Ginsberg RJ, et al. **Ann Thorac Surg** 1989 Feb;47(2):231–5

Left atrial tumor embolization during pulmonary resection: review of literature and report of two cases. Mansour KA, et al. **Ann Thorac Surg** 1988 Oct;46(4):455–6

Transpericardial bronchial closure with omentopexy for postpneumonectomy bronchopleural fistula. Saito H, et al. **Ann Thorac Surg** 1989 Feb;47(2):312–3

Determinants of perioperative morbidity and mortality after pneumonectomy. Wahi R, et al. **Ann Thorac Surg** 1989 Jul; 48(1):33–7

Surgical transsternal treatment of bronchopleural fistula postpneumonectomy. Beltrami V. **Chest** 1989 Feb; 95(2):379–82

Left upper lobe torsion following lower lobe resection. Early recognition of a rare complication. Kucich VA, et al. **Chest** 1989 May;95(5):1146–7

Cardiac arrhythmias following lung resection in patients treated and untreated with digitalis prophylaxis. Baldi S, et al. **Int Surg** 1989 Apr–Jun;74(2):133–4

Right pneumonectomy syndrome: a lethal complication of lung resection in a newborn with cystic adenomatoid malformation. Stolar C, et al. **J Pediatr Surg** 1988 Dec; 23(12):1180–3

Diffusing capacity predicts morbidity and mortality after pulmonary resection. Ferguson MK, et al. **J Thorac Cardiovasc Surg** 1988 Dec;96(6):894–900

Treatment of postpneumonectomy empyema and associated bronchopleural fistula. Experience of 100 consecutive postpneumonectomy patients. Eerola S, et al. **Scand J Thorac Cardiovasc Surg** 1988;22(3):235–9

Endoscopic sealing of infected bronchus stump fistulae with fibrin following lung resections. Experimental and clinical experience. Waclawiczek HW, et al. **Surg Endosc** 1987; 1(2):99–102

[Management of resistant empyema postpneumonectomy—analysis of 45 cases] Tong WP. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Dec; 11(6):359–61, 387 (Eng. Abstr.) **(Chi)**

[Post-operative pleural infection of lung cancer and its influence on survival] Cai LF. **Chung Hua Chung Liu Tsa Chih** 1989 Jan;11(1):57–9 (Eng. Abstr.) **(Chi)**

[Bronchopleural fistula after pneumonectomy and its transpericardial closure] Pafko P, et al. **Rozhl Chir** 1989 Apr;68(4):230–2 (Eng. Abstr.) **(Cze)**

[A fatal complication following pneumonectomy] de Lange JJ, et al. **Ned Tijdschr Geneeskd** 1989 Jan 7;133(1):32–4 (Eng. Abstr.) **(Dut)**

[Paraplegia caused by extradural spinal hematoma after radical pulmonary lobectomy in cancer] Batellier J, et al. **Ann Chir** 1989;43(3):210–4 (10 ref.) (Eng. Abstr.) **(Fre)**

[Post-pneumonectomy bronchial fistula. Treatment by resection of the carina] Christides C, et al. **Presse Med** 1988 Dec 3;17(43):2299–301 (Eng. Abstr.) **(Fre)**

[The right postpneumonectomy syndrome] Stark P, et al. **Radiologe** 1989 Jun;29(6):279–81 (Eng. Abstr.) **(Ger)**

[CT diagnosis of the postoperative mediastinal lymphocele] Gamroth A, et al. **ROFO** 1989 Mar;150(3):356–7 **(Ger)**

[Paraplegia following pneumonectomy. An anesthesiological or a surgical complication?] Jöhr M, et al. **Schweiz Med Wochenschr** 1988 Oct 1;118(39):1412–4 (Eng. Abstr.) **(Ger)**

[Emergency operation in impending rupture of aortic arch dissecting aneurysm—a case report of dissecting aortic aneurysm with adhesion to the lung after lobectomy] Hata T, et al. **Kyobu Geka** 1989 Feb;42(2):164–8 (Eng. Abstr.) **(Jpn)**

[One-stage repair of esophageal fistula after left pneumonectomy using omental pedicle flap] Asaoka M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug; 36(8):1417–21 (18 ref.) (Eng. Abstr.) **(Jpn)**

[Correction of disorders of the cardiovascular system and factors of humoral regulation in patients with suppurative processes of the lungs in the early postoperative period] Nelmark II, et al. **Grudn Khir** 1988 Nov–Dec;(6):67–9 (Eng. Abstr.) **(Rus)**

[Role of extracorporeal hemosorption in the prevention of disorders of gas exchange and hemodynamics following pneumonectomy] Shulutko ML, et al. **Grudn Khir** 1988 Jul–Aug;(4):51–4 (Eng. Abstr.) **(Rus)**

[Immunoallergic criteria in the prognosis of suppurative postoperative complications in patients with pulmonary tuberculosis] Morozov VL, et al. **Probl Tuberk** 1988; (10):36–9 (Eng. Abstr.) **(Rus)**

[Immunological approaches to the prevention of suppurative postoperative complications in patients with pulmonary tuberculosis] Morozov VL, et al. **Probl Tuberk** 1988; (7):37–9 (Eng. Abstr.) **(Rus)**

[Endobronchial laser coagulation in persistent hemoptysis due to granulation of the bronchial stump] Gerasin VA, et al. **Vestn Khir** 1988 Dec;141(12):32–3 **(Rus)**

HISTORY

Hugh Morriston Davies and lobectomy for cancer, 1912. Meyer JA. **Ann Thorac Surg** 1988 Oct;46(4):472–4

METHODS

Extended operations for T3–T4 primary lung cancers. Indications and results. Dartevelle P, et al. **Chest** 1989 Jul; 96(1 Suppl):51S–53S

Limited resection in the treatment of stage I non-small cell lung cancer; an overview. Ginsberg RJ. **Chest** 1989 Jul;96(1 Suppl):50S–51S (11 ref.)

Bronchoplastic and bronchovascular procedures of the tracheobronchial tree in the management of primary lung cancer. Naruke T. **Chest** 1989 Jul;96(1 Suppl):53S–56S

Technique of bronchial closure after pneumonectomy. Sarsam MA, et al. **J Thorac Cardiovasc Surg** 1989 Aug; 98(2):220–3

Left pneumonectomy associated with subtotal esophagectomy for carcinoma of the esophagus invading the left main bronchus. Tachimori Y, et al. **Jpn J Clin Oncol** 1989 Jun;19(2):167–9

Effect of lung resection on pulmonary function. A comparative study in different surgical procedures. Baldi S, et al. **Panminerva Med** 1989 Jan–Mar;31(1):19–21

Managing the difficult pulmonary artery during completion pneumonectomy. Mansour KA, et al. **Surg Gynecol Obstet** 1989 Aug;169(2):161–2

Surgery for pulmonary aspergilloma and pleural aspergillosis. Stamatis G, et al. **Thorac Cardiovasc Surg** 1988 Dec; 36(6):356–60

[Multisegmental and multilobar pulmonary resection with upward displacement of the diaphragm in the treatment of bronchiectasis of multisegmental type] Ma WK, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Feb;26(2):96–7, 125 (Eng. Abstr.) **(Chi)**

[Sleeve resection: possibilities and risks] Sartori F, et al. **Minerva Chir** 1989 Feb 15;44(3):361–4 (14 ref.) **(Ita)**

[Sleeve lobectomy by preserving bronchial arteries] Suito T, et al. **Kyobu Geka** 1988 Aug;41(9):746–8 (Eng. Abstr.) **(Jpn)**

[Surgical problems of sleeve lobectomy on the left side] Tsubota N. **Kyobu Geka** 1988 May;41(6):486–9 (Eng. Abstr.) **(Jpn)**

[Operative procedures for right sleeve lobectomy] Watanabe Y, et al. **Kyobu Geka** 1988 May;41(6):480–5 (Eng. Abstr.) **(Jpn)**

[Surgical treatment in pulmonary metastases of colorectal cancer] Kondo D, et al. **Nippon Geka Gakkai Zasshi** 1989 Jan;90(1):75–81 (Eng. Abstr.) **(Jpn)**

[Characteristics of surgical technics in repeat operations on the lungs in children] Avilova OM, et al. **Klin Khir** 1988; (6):14–6 (Eng. Abstr.) **(Rus)**

[Surgical interventions in diffuse pulmonary tuberculosis in undisciplined patients] Cherkasov VA, et al. **Probl Tuberk** 1989;(2):34–6 (Eng. Abstr.) **(Rus)**

[Preoperative radiation therapy in the treatment of lung cancer] Medvedev VN, et al. **Vestn Akad Med Nauk SSSR** 1988;(6):15–9 (Eng. Abstr.) **(Rus)**

[Circular resection of the pulmonary artery during removal of the upper lobe of the left lung] Egiazarian VT, et al. **Vestn Khir** 1988 Sep;141(9):53–4 **(Rus)**

[Resection of the lung in tuberculosis with predominant involvement of the lower lobe] Kariev TM, et al. **Vestn Khir** 1988 May;140(5):56–7 **(Rus)**

MORTALITY

[Causes of fatal outcome and their prevention in patients with tuberculosis of the lungs subjected to surgical interventions] Prilmak AA, et al. **Grudn Khir** 1988 Nov–Dec;(6):62–6 (Eng. Abstr.) **(Rus)**

REHABILITATION

[Economic evaluation of the degree of disability in lung cancer after its radical treatment] Komiakov IP, et al. **Sov Med** 1989;(1):60–2 **(Rus)**

[Disability of patients with lung cancer after surgical treatment] Artemkina NI, et al. **Vestn Khir** 1989 Jan; 142(1):38–41 (Eng. Abstr.) **(Rus)**

VETERINARY

Lung resection using surgical staples in dogs and cats. LaRue SM, et al. **Vet Surg** 1987 May–Jun;16(3):238–40

PNEUMONIA

CDC definitions for nosocomial infections, 1988. **Am Rev Respir Dis** 1989 Apr;139(4):1058–9

Pneumonia in hospital. White R, et al. **Br J Dis Chest** 1988 Apr;82(2):121–6

Immotile cilia syndrome (primary ciliary dyskinesia) and inflammatory lung disease. Rubin BK. **Clin Chest Med** 1988 Dec;9(4):657–68 (119 ref.)

Nosocomial pneumonia. Hessen MT, et al. **Crit Care Clin** 1988 Apr;4(2):245–57 (82 ref.)

Pneumonias. Carden DL, et al. **Emerg Med Clin North Am** 1989 May;7(2):255–78 (106 ref.)

Bacteraemic Haemophilus influenzae pneumonia. Allen MB, et al. **Eur Respir J** 1988 Dec;1(10):929–31

Pneumonia. Reich M. **J Am Osteopath Assoc** 1988 Dec; 88(12):1555–9 (17 ref.)

Reappraisal of pneumonias. Kulpati DD, et al. **J Assoc Physicians India** 1988 Nov;36(11):660–4 (30 ref.)

Pneumonia due to Branhamella catarrhalis. Capewell S, et al. **Thorax** 1988 Nov;43(11):929–30

[Pyocyanea pneumonia] Zhang XP, et al. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Apr; 11(2):111–4 (23 ref.) **(Chi)**

[A retrospective study of 115 cases of fungal pneumonia] Xu XQ, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Jan; 28(1):7–10, 60 (Eng. Abstr.) **(Chi)**

[Pneumonia—etiology, diagnosis and treatment] Riewerts Eriksen NH, et al. **Nord Med** 1988;103(8–9):235–7, 255 (Eng. Abstr.) **(Dan)**

[Epidemiology of bronchopulmonary hospital infections] Moiraghi-Ruggenini A, et al. **Boll Ist Sieroter Milan** 1988;

67(3):219–25 (Eng. Abstr.) (Ita)

BLOOD

Serum lipids in pneumonia of different aetiology. Kerttula Y, et al. **Ann Clin Res** 1988;20(3):184–8

Coagulation inhibitor levels in pneumonia and stroke: changes due to consumption and acute phase reaction. Sandset PM, et al. **J Intern Med** 1989 May;225(5):311–6

[Effect of flow-type ultraviolet irradiation of the blood on its gas level in patients with chronic renal failure complicated by suppurative infections] Cherniakov VL, et al. **Anesteziol Reanimatol** 1988 May–Jun;(3):57–60 (Eng. Abstr.) (Rus)

[Lysosomal cation proteins of neutrophils in acute pneumonia and chronic bronchitis] Iakushin SS. **Klin Med (Mosk)** 1989 Feb;67(2):102–4 (Eng. Abstr.) (Rus)

[Evaluation of the cationic-lysosomal test in patients with pneumonia against a background of therapy] Domashenko ON, et al. **Lab Delo** 1989;(5):15–7 (Eng. Abstr.) (Rus)

[Improving the informativeness of studying the content of cationic proteins in blood leukocytes in inflammatory diseases of the lungs] Iashchenko LV, et al. **Lab Delo** 1989;(6):22–6 (Eng. Abstr.) (Rus)

[Cytophotometry of the peripheral blood neutrophils in patients with acute pneumonia] Novosad AB, et al. **Lab Delo** 1989;(3):70–1 (Rus)

[Lipid peroxidation as a mechanism of bioenergetic regulation in inflammation of the respiratory organs] Semenov VL. **Patol Fiziol Eksp Ter** 1989 Mar–Apr;(2):17–20 (Eng. Abstr.) (Rus)

[Enzymatic spectrum of the lysosomal system of granulocytes and mononuclear phagocytes in the blood of young children with acute pneumonia] Faiziev KhN. **Pediatriia** 1989;(2):110–1 (Rus)

[Phagocytic activity of neutrophils in children with hereditary glucose-6-phosphate dehydrogenase deficiency during acute pneumonia] Kasumova SM, et al. **Pediatriia** 1988;(9):24–7 (Eng. Abstr.) (Rus)

[Clinical significance of disorders of hemostasis in children with chronic pneumonia and mucoviscidosis] Niiazova MKh, et al. **Pediatriia** 1989;(2):27–30 (Eng. Abstr.) (Rus)

[Natural killer cells in the peripheral blood of patients with tuberculosis, pneumonia and cancer of the lungs] Savula MM, et al. **Probl Tuberk** 1988;(11):47–9 (Eng. Abstr.) (Rus)

[Synthesis of oxygen free radicals by neutrophils in acute pneumonia] Aleksandrova IV, et al. **Sov Med** 1988;(5):8–10 (Eng. Abstr.) (Rus)

[Changes in the spectrum of low-molecular physiologically active substances in patients with acute pneumonia who abuse alcohol] Shuba NM, et al. **Vrach Delo** 1989 Jan;(1):64–7 (Eng. Abstr.) (Rus)

CHEMICALLY INDUCED

Ozone-induced inflammation in the lower airways of human subjects. Koren HS, et al. **Am Rev Respir Dis** 1989 Feb; 139(2):407–15

Methotrexate pneumonitis. Bronchoalveolar lavage findings suggest an immunologic disorder. White DA, et al. **Am Rev Respir Dis** 1989 Jan;139(1):18–21

Leukocyte migration inhibition in amiodarone-associated pneumonitis. Akoun GM, et al. **Chest** 1988 Nov; 94(5):1050–3

Gold-naproxen pneumonitis. A toxic drug interaction? McFadden RG, et al. **Chest** 1989 Jul;96(1):216–8

Cephalosporin-induced diffuse pulmonary inflammation depicted by Ga-67 scintigraphy. Krasnow AZ, et al. **Clin Nucl Med** 1989 May;14(5):379–80

Methotrexate pneumonitis: a case report and summary of the literature. Hand SH, et al. **J Med Assoc Ga** 1989 Sep; 78(9):625–8 (10 ref.)

Cell response in bronchoalveolar lavage fluid after sulfur dioxide exposure. Sandström T, et al. **Scand J Work Environ Health** 1989 Apr;15(2):142–6

Isocyanate exposure and hypersensitivity pneumonitis—report of a probable case and prevalence of specific immunoglobulin G antibodies among exposed individuals. Seldén AI, et al. **Scand J Work Environ Health** 1989 Jun;15(3):234–7

[Acute pneumonitis caused by inhalation of mercury vapor—report of a case] Lin TC, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Feb;43(2):141–6 (Eng. Abstr.) (Chi)

[Pneumonitis following amiodarone therapy] Denis L, et al. **J Belge Radiol** 1989 Apr;72(2):107–9 (Eng. Abstr.) (Dut)

[Pneumonia following bronchography] Philippou S, et al. **Pneumologie** 1989 Jun;43(6):305–7 (Eng. Abstr.) (Ger)

[The pathogenesis of trehalose dimycolate-induced hemorrhagic pneumonia induced in mice as animal model of human alveolar hemorrhagic syndrome] Sakamoto Y. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Feb; 27(2):206–13 (Eng. Abstr.) (Jpn)

[A case of minocycline induced pneumonitis] Shigematsu T, et al. **Nippon Naika Gakkai Zasshi** 1988 Oct;77(10):1584–5 (Jpn)

[A case of acute pneumonitis following nitric acid gas inhalation] Kitahara M. **Sangyo Igaku** 1988 Sep;30(5):412–3 (Jpn)

[A case study of acute cadmium poisoning by welding work] Ohshiro H, et al. **Sangyo Igaku** 1988 May;30(3):210–1 (Jpn)

[Cyclophosphamide-induced pneumonitis] Borchsenius F, et al. **Tidsskr Nor Laegeforen** 1989 Mar 30;109(9):964–5 (Eng. Abstr.) (Nor)

COMPLICATIONS

Lung inflammation, its significance for asthma therapy. Morley J, et al. **Agents Actions** 1989 Jan;26(1–2):31–9 (93 ref.)

Haemophilus influenzae pneumonia in young adults with AIDS, ARC, or risk of AIDS. Schlamm HT, et al. **Am J Med** 1989 Jan;86(1):11–4

Pneumonia and the syndrome of inappropriate antidiuretic hormone secretion: don't pour water on the fire [editorial] Dixon BS, et al. **Am Rev Respir Dis** 1988 Sep;138(3):512–3

An unusual case of systemic lupus erythematosus with isolated hypoglossal nerve palsy, fulminant acute pneumonitis, and pulmonary amyloidosis. Chan CN, et al. **Ann Rheum Dis** 1989 Mar;48(3):236–9

Chlamydia trachomatis pneumonia in a patient with multiple myeloma [letter] Vlasveld LT, et al. **Arch Intern Med** 1988 Oct;148(10):2302–3

Streptococcus pyogenes pneumonia with abscess formation. McIntyre HD, et al. **Aust N Z J Med** 1989 Jun;19(3):248–9

Bilateral extrapleural effusions complicating bilateral pneumonia. Bogin RM, et al. **Chest** 1989 Apr;95(4):933–5

Human immunodeficiency virus-related lymphocytic alveolitis. Guillon JM, et al. **Chest** 1988 Dec;94(6):1264–70

The sun should never set on a parapneumonic effusion [editorial] Sahn SA, et al. **Chest** 1989 May;95(5):945–7

Sputum retention [letter] Stangel P. **Chest** 1989 Apr; 95(4):939–40

Pseudomonas aeruginosa pneumonia as a presenting entity in an AIDS patient. Kowal-Vern A, et al. **Clin Pediatr (Phila)** 1989 Sep;28(9):403

Trichosporon beigelii pneumonia in a neutropenic patient. Marin J, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jul; 8(7):631–3

Hyperglycemia as a predictor for mortality in veterans with pneumonia. Kinzel T, et al. **Exp Aging Res** 1988 Summer–Autumn;14(2–3):99–102 (20 ref.)

Mental depression, acute infection and coma in a patient treated with interferon-alpha [letter] Russo D, et al. **Haematologica (Pavia)** 1989 Mar–Apr;74(2):228

Clinical aspects of pneumonia in the elderly veteran. Harper C, et al. **J Am Geriatr Soc** 1989 Sep;37(9):867–72

Saccharomyces cerevisiae pneumonia in a patient with acquired immune deficiency syndrome. Tawfik OW, et al. **J Clin Microbiol** 1989 Jul;27(7):1689–91 (12 ref.)

Postpneumonic empyema in childhood: selecting appropriate therapy. Hoff SJ, et al. **J Pediatr Surg** 1989 Jul; 24(7):659–63; discussion 663–4

Clinical signs of pneumonia in children [letter] Campbell H, et al. **Lancet** 1989 Apr 22;1(8643):899–900

Clinical signs of pneumonia in children [letter] Shann F. **Lancet** 1989 Mar 25;1(8639):673

Chlamydia trachomatis pneumonia in an HIV-seropositive patient [letter] Kroon FP, et al. **N Engl J Med** 1989 Mar 23;320(12):806–7

Ureaplasmal pneumonia and sepsis associated with persistent pulmonary hypertension of the newborn. Waites KB, et al. **Pediatrics** 1989 Jan;83(1):79–85

Frequency of thromboembolic complications in patients with acute pneumonia and pyelonephritis. Wallmark E, et al. **Scand J Infect Dis** 1988;20(4):453–4

Pleural effusions in the atypical pneumonias. Sahn SA. **Semin Respir Infect** 1988 Dec;3(4):322–34 (74 ref.)

[Nursing care of children with pneumonia complicated by heart failure in its early stage] Tang YJ, et al. **Chung Hua Hu Li Tsa Chih** 1989 Mar;24(3):141–2 (Chi)

[Infection in malignant blood disorders] Ruutu P. **Duodecim** 1989;105(11):1130–7 (32 ref.) (Fin)

[Opportunistic pulmonary infections in immunologic deficiencies] Chretien J, et al. **Prax Klin Pneumol** 1988 Jun; 42 Suppl 1:197–200 (Eng. Abstr.) (Fre)

[Chronic interstitial pneumonia and Gougerot-Sjögren syndrome in a 53-year-old woman (clinical conference)] Lacronique J, et al. **Rev Pneumol Clin** 1988;44(4):208–13 (Fre)

[Pulmonary complications in acquired immunodeficiency syndrome] Schaberg T, et al. **Fortschr Med** 1988 Nov 20; 106(33):668, 669–70, 671 (30 ref.) (Eng. Abstr.) (Ger)

[Rhodococcus equi infection in HIV disease] Flepp M, et al. **Schweiz Med Wochenschr** 1989 May 6;119(18):566–74 (Eng. Abstr.) (Ger)

[Clinical aspects of AIDS—opportunistic infections of the lung and heart] Goebel FD. **Verh Dtsch Ges Inn Med** 1988; 94:511–6 (10 ref.) (Ger)

[A case of septic shock due to pneumonia caused by Klebsiella pneumoniae] Baba M, et al. **Kansenshogaku Zasshi** 1989 May;63(5):489–93 (Eng. Abstr.) (Jpn)

[A case of Klebsiella pneumoniae pneumonia associated with bacteremia and a giant cavity on the chest roentgenogram] Maeda K, et al. **Kansenshogaku Zasshi** 1988 Aug; 62(8):728–33 (Eng. Abstr.) (Jpn)

[A case of summer-type hypersensitivity pneumonitis with mediastinal and subcutaneous emphysema] Fujiwara H, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Oct; 26(10):1102–6 (Eng. Abstr.) (Jpn)

[Surgical treatment of acute suppurative metapneumonic pleurisy] Gorshkov VIu. **Klin Khir** 1988;(10):26–8 (Eng. Abstr.) (Rus)

[Gastrointestinal hemorrhage in children against a background of viral and bacterial infections] Kireev SS, et al. **Klin Khir** 1989;(6):27–9 (Eng. Abstr.) (Rus)

[Severe forms of acute pneumonia with a protracted course accompanied by liver and intestinal dysfunction and dysbacteriosis in young children] Fedenko NN, et al. **Pediatriia** 1988;(11):36–41 (Rus)

[Hemoperfusion during resuscitation of children with toxic pneumonia] Kireev SS, et al. **Pediatriia** 1988;(4):40–2 (Eng. Abstr.) (Rus)

[Various aspects of the pathogenesis of cardiorespiratory disorders in acute pneumonia] Tatarkina ND, et al. **Ter Arkh** 1989;61(3):78–81 (Eng. Abstr.) (Rus)

[Coffin Lowry syndrome associated with repeated pneumonia] Bustos Lozano G, et al. **An Esp Pediatr** 1988 May;28(5):451–3 (Eng. Abstr.) (Spa)

CONGENITAL

Congenital candida pneumonia and sepsis: a case report and review of the literature. Gerberding KM, et al. **J Perinatol** 1989 Jun;9(2):159–61 (15 ref.)

Fetal death from sepsis following a reassuring intrapartum fetal acoustic stimulation test. Strong TH Jr, et al. **Obstet Gynecol** 1989 Sep;74(3 Pt 2):465–8

[Differential diagnosis of congenital pneumonia and hyaline membrane disease in the newborn infant] Salzer HR, et al. **Prax Klin Pneumol** 1988 Jul;42(7):570–2 (Eng. Abstr.) (Ger)

DIAGNOSIS

Early diagnosis of postoperative pneumonia following upper abdominal surgery. A study in patients without cardiopulmonary disorder at operation. Ejlertsen T, et al. **Acta Chir Scand** 1989 Feb;155(2):93–8

Diagnosis of nosocomial bacterial pneumonia in intubated patients undergoing ventilation: comparison of the usefulness of bronchoalveolar lavage and the protected specimen brush [published erratum appears in Am J Med 1989 Feb;86(2):258] Chastre J, et al. **Am J Med** 1988 Oct; 85(4):499–506

Diagnostic value of telescoping plugged catheters in mechanically ventilated patients with bacterial pneumonia using the Metras catheter. Torres A, et al. **Am Rev Respir Dis** 1988 Jul;138(1):117–20

Controversies in pulmonary medicine. Fiberoptic bronchoscopy with protected brush catheterization should be used for the specific diagnosis of nosocomial pneumonia. Winterbauer RH, et al. **Am Rev Respir Dis** 1988 Oct; 138(4):1072–4

Occult pulmonary artery associated with failure to thrive and recurrent pneumonia—a case report. Lax D, et al. **Angiology** 1989 Sep;40(9):849–53

Decision rules and clinical prediction of pneumonia: evaluation of low-yield criteria. Singal BM, et al. **Ann Emerg Med** 1989 Jan;18(1):13–20

Community- and hospital-acquired pneumonia associated with Chlamydia TWAR infection demonstrated serologically. Grayston JT, et al. **Arch Intern Med** 1989 Jan;149(1):169–73

Diagnostic value of broncho-alveolar lavage in certain interstitial and/or immunological pneumonia. Akoun GM, et al. **Bull Int Union Tuberc Lung Dis** 1988 Sep;63(3):32–4

Bronchoalveolar lavage in the diagnosis of pulmonary infiltrates in patients with acute leukemia. Saito H, et al. **Chest** 1988 Oct;94(4):745–9

Evaluation of centrifugation cultures of bronchoalveolar lavage fluid for the diagnosis of cytomegalovirus pneumonitis. Erice A, et al. **Diagn Microbiol Infect Dis** 1988 Aug;10(4):205–12

Diagnostic efficacy of a nasotracheal protected specimen brush in patients with suspected bacterial pneumonia. Gong H Jr, et al. **Diagn Microbiol Infect Dis** 1988 Oct; 11(2):87–100

Nitrofurantoin hypersensitivity masquerading as pneumonia [letter] Muoghalu BU, et al. **DICP** 1989 Jan;23(1):89–90

Diagnosis of nosocomial pneumonia in intensive care unit patients. Chastre J, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jan;8(1):35–9 (22 ref.)

Diagnosis of pulmonary infections in patients infected with the human immunodeficiency virus. Chave JP, et al. **Eur J Clin Microbiol Infect Dis** 1989 Feb;8(2):123–6

Unusual course of a Chlamydia pneumonia in an infant with IgG2/IgG4-deficiency. Klingebiel T, et al. **Eur J Pediatr** 1989 Feb;148(5):431–4

Pneumonia due to Legionella pneumophila and pneumococcal pneumonia: similarities and differences on presen[illegible]os A, et al. **Eur Respir J** 1989 Feb; 2(2):1[illegible]

Compari[illegible]achoscopic bronchoalveolar lavage to open lung biopsy for the bacteriologic diagnosis of pulmonary infections in mechanically ventilated patients. Gaussorgues P, et al. **Intensive Care Med** 1989;15(2):94–8

Antilipopolysaccharide antibodies and differential diagnosis of chronic Pseudomonas aeruginosa lung infection in cystic fibrosis. Fomsgaard A, et al. **J Clin Microbiol** 1989 Jun; 27(6):1222–9

Comparison of two rapid microscopic methods and culture for detection of Chlamydia trachomatis in ocular and nasopharyngeal specimens from infants. Roblin PM, et al.

J Clin Microbiol 1989 May;27(5):968–70

The problem of diagnosing bacterial pneumonia in patients with chronic bronchitis. Bacteria in sputum and bronchial washings from patients with chronic bronchitis are antibody coated. Yoo OH, et al. **Mt Sinai J Med (NY)** 1988 Oct;55(5):395–8

Pneumonia and pulmonary tuberculosis in pregnancy. Maccato ML. **Obstet Gynecol Clin North Am** 1989 Jun; 16(2):417–30 (42 ref.)

Counterimmunoelectrophoresis and latex particle agglutination in the etiologic diagnosis of presumed bacterial pneumonia in pediatric patients. Rusconi F, et al. **Pediatr Infect Dis J** 1988 Nov;7(11):781–5

Use of bronchoalveolar lavage in immunocompromised children with pneumonia. Pattishall EN, et al. **Pediatr Pulmonol** 1988;5(1):1–5

Differentiating bacterial from viral pneumonias in children. Bettenay FA, et al. **Pediatr Radiol** 1988;18(6):453–4

A new diagnostic approach to the patient with severe pneumonia. Sörensen J, et al. **Scand J Infect Dis** 1989; 21(1):33–41

Rapid etiological diagnosis of pneumonia in young men. Lehtomäki K. **Scand J Infect Dis Suppl** 1988;54:1–56

Polyarteritis nodosa presenting as recurrent pneumonia following splenectomy for hairy-cell leukemia. Komadina KH, et al. **Semin Arthritis Rheum** 1989 May;18(4):252–7 (27 ref.)

Organization of microbiology laboratory services for the diagnosis of pulmonary infections in patients with human immunodeficiency virus infection. Hadley WK, et al. **Semin Respir Infect** 1989 Jun;4(2):85–92

Pulmonary diagnostic evaluation in patients suspected of having an HIV-related disease. Luce JM, et al. **Semin Respir Infect** 1989 Jun;4(2):93–101

Q fever pneumonia presenting as an eosinophilic pleural effusion. Murphy PP, et al. **Thorax** 1989 Mar;44(3):228–9

[Diagnostic methods in infectious and inflammatory lung diseases] Milman N. **Nord Med** 1988;103(8–9):238–41 (Eng. Abstr.) **(Dan)**

[Loeffler's syndrome versus Carrington's disease: sometimes a difficult differential diagnosis] Gilbert P, et al. **Allerg Immunol (Paris)** 1989 Jan;21(1):5–11 (25 ref.) (Eng. Abstr.) **(Fre)**

[Diagnostic and therapeutic problems in pulmonary opportunistic infections in AIDS and chemotherapy] Lamy P, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:201–5 (Eng. Abstr.) **(Fre)**

[Inflammatory pseudo-tumor of the lung in adults. 1 case (letter)] Quiot JJ, et al. **Presse Med** 1988 Nov 5; 17(39):2088–9 **(Fre)**

[The diagnostic significance of bronchoalveolar lavage in AIDS] Costabel U, et al. **Med Klin** 1988 Aug 12; 83(16):520–2, 540 (22 ref.) **(Ger)**

[Fever, productive cough, night sweats (clinical conference)] Overlack A, et al. **Schweiz Rundsch Med Prax** 1989 Jun 27;78(26):751–3 (Eng. Abstr.) **(Ger)**

[Bronchopneumopathies in children. Diagnostic criteria] Gomirato G, et al. **Minerva Pediatr** 1989 Feb;41(2):85–90 (Eng. Abstr.) **(Ita)**

[A histopathological study on pseudomonas pneumonia diagnosed by immunostaining with monoclonal antibody] Tashiro T, et al. **Kansenshogaku Zasshi** 1989 Jan;63(1):1–9 (Eng. Abstr.) **(Jpn)**

[Pneumonia in children caused by Chlamydia trachomatis] Drak D, et al. **Wiad Lek** 1988 Aug 15;41(16):1104–7 (Eng. Abstr.) **(Pol)**

[Primary bacterial pneumonia] Misiewicz A, et al. **Wiad Lek** 1988 May 15;41(10):629–34 (Eng. Abstr.) **(Pol)**

[Early period of pneumonia caused by Chlamydia trachomatis in an infant] Okrzeja D, et al. **Wiad Lek** 1988 Jul 15;41(14):944–8 (Eng. Abstr.) **(Pol)**

[Differential diagnosis of immunopathologic and bacterial pulmonary inflammation] Chumakova LP, et al. **Klin Med (Mosk)** 1988 Dec;66(12):44–8 (Eng. Abstr.) **(Rus)**

[A case of generalized actinomycosis] Egorova LP, et al. **Klin Med (Mosk)** 1989 Apr;67(4):116–8 **(Rus)**

[Acute pneumonia (its clinical picture and treatment)] Gembitskiĭ EV, et al. **Klin Med (Mosk)** 1988 Sep; 66(9):125–33 **(Rus)**

[A case of Goodpasture's syndrome] Martovitskaia AA, et al. **Klin Med (Mosk)** 1988 Oct;66(10):141–2 **(Rus)**

[Pseudomonas aeruginosa destruction of the lungs in children] Lishke AA, et al. **Pediatriia** 1988;(5):78–81 **(Rus)**

[Clinical significance of fibronectin level in the assessment of severity and prognosis of acute diseases of the respiratory tract in children] Pikuza OI, et al. **Pediatriia** 1988;(9):19–22 (Eng. Abstr.) **(Rus)**

[Clinical aspects of disseminated nonspecific pneumonia] Adomovich VN, et al. **Probl Tuberk** 1989;(5):32–5 (Eng. Abstr.) **(Rus)**

[Fluorescent properties of the blood serum of patients with infiltrative pulmonary tuberculosis and acute pneumonia] Malyshev VV, et al. **Probl Tuberk** 1988;(9):55–6 (Eng. Abstr.) **(Rus)**

[Local secretory immunity and its significance in the diagnosis of cancer and chronic suppurative-inflammatory diseases of the lungs] Kochetkova VA, et al. **Sov Med** 1989; (5):83–6 **(Rus)**

[Diagnosis and treatment of pneumonia] Pomerantsev VP, et al. **Sov Med** 1988;(9):37–42 **(Rus)**

[New possibilities of using laboratory research in oncology] Sokolova II, et al. **Sov Med** 1988;(8):15–7 (Eng. Abstr.) **(Rus)**

[Features of the diagnosis and treatment of paracancerous pneumonia in bronchogenic pulmonary carcinoma] Iakovlev VN, et al. **Ter Arkh** 1989;61(5):103–8 (Eng. Abstr.) **(Rus)**

[Comparative analysis of the results of echography and radiography of pleurisy and pneumonia in children] Dvoriakovskiĭ IV, et al. **Vestn Rentgenol Radiol** 1988 Jul–Aug;(4):52–7 (Eng. Abstr.) **(Rus)**

[A pneumonia-like form of bronchioloalveolar cancer] Shulutko ML, et al. **Vopr Onkol** 1989;35(3):294–9 (Eng. Abstr.) **(Rus)**

[A case of rheumatic pneumonia] Revutskaia AE, et al. **Vrach Delo** 1989 Feb;(2):67–8 **(Rus)**

[Clinical picture of acute pneumonia due to Klebsiella ozaenae in patients with influenza] Trinus EK, et al. **Vrach Delo** 1988 Aug;(8):106–8 (Eng. Abstr.) **(Rus)**

[Accelerated laboratory diagnosis of bacterial pneumonia] Baĭzhomartov MS, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Aug;(8):36–9 (Eng. Abstr.) **(Rus)**

[Detection of Legionella pneumophila antibodies in the blood serum of pneumonia patients by an immunoenzyme method] Tartakovskiĭ IS, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Nov;(11):79–81 (Eng. Abstr.) **(Rus)**

[Pneumonia. Invasive diagnostic technics] Liñán S. **An Esp Pediatr** 1988 Sep;29 Suppl 33:217–22 (21 ref.) **(Spa)**

[Pneumonias. Microbiologic and general analysis diagnosis] Navarro Merino M. **An Esp Pediatr** 1988 Sep;29 Suppl 33:212–7 (14 ref.) **(Spa)**

[Clinico-radiologic diagnostic protocol of pneumonia] Tardío Torio E, et al. **An Esp Pediatr** 1988 Sep;29 Suppl 33:206–12 (18 ref.) **(Spa)**

DRUG THERAPY

Cure of Curvularia pneumonia by amphotericin B in a patient with megakaryocytic leukemia [letter] Brubaker LH, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1178–9

Chemotherapeutic efficacy of ofloxacin against experimental pneumonia with Pseudomonas aeruginosa in guinea pigs. Otani T, et al. **Arzneimittelforschung** 1989 Jun;39(6):694–7

A double-blind comparison of spiramycin and doxycycline in treatment of respiratory tract infections (pneumonia and suppurative bronchitis). Bitsch M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):453–5

Pharmacokinetics of azlocillin in bronchial secretions. Gouin F, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):256–7

Comparative study of aztreonam in gram-negative pneumonia versus a therapeutic regimen that includes an aminoglycoside. Spanish Study Group. Marco V, et al. **Chemotherapy** 1989;35 Suppl 1:81–8

A comparative analysis of aztreonam + clindamycin versus tobramycin + clindamycin or amikacin + mezlocillin in the treatment of gram-negative lower respiratory tract infections. Rivera-Vazquez CR, et al. **Chemotherapy** 1989; 35 Suppl 1:89–100

Therapeutic efficacy of the combination of aztreonam with cefotaxime in the treatment of severe nosocomial pneumonia. Comparative study against amikacin combined with cefotaxime. Torres A, et al. **Chemotherapy** 1989;35 Suppl 1:15–24

Antibiotic studies in pneumonia. Pitfalls in interpretation and suggested solutions. Chow JW, et al. **Chest** 1989 Sep; 96(3):453–6

New drugs for treating lung infection. Nolan PE, et al. **Chest** 1988 Nov;94(5):1076–9 (6 ref.)

A clinical pharmacy-oriented drug surveillance network: results of a nationwide antibiotic utilization review of bacterial pneumonia—1987. Grasela TH Jr, et al. **DICP** 1989 Feb;23(2):162–70

Systemic antimicrobial therapy of nosocomial pneumonia: monotherapy versus combination therapy. LaForce FM. **Eur J Clin Microbiol Infect Dis** 1989 Jan;8(1):61–8 (29 ref.)

Treatment of nosocomial pneumonia: monotherapy versus combination therapy. Greco T. **Geriatrics** 1989 Aug;44 Suppl A:28–31

Comparison of spiramycin and doxycycline in the treatment of lower respiratory infections in general practice. Biermann C, et al. **J Antimicrob Chemother** 1988 Jul;22 Suppl B:155–8

The pharmacokinetics of aztreonam and penetration into the bronchial secretions of critically ill patients. Boccazzi A, et al. **J Antimicrob Chemother** 1989 Mar;23(3):401–7

Cytomegalovirus pneumonia: the use of ganciclovir in marrow transplant recipients. Ettinger NA, et al. **J Antimicrob Chemother** 1989 Jul;24(1):53–62

Roxithromycin in the treatment of pneumonia. Peterslund NA, et al. **J Antimicrob Chemother** 1989 May;23(5):737–41

Use of oral ciprofloxacin in community-acquired pneumonia. Chrysanthopoulos CJ, et al. **J Chemother** 1989 Apr; 1(2):103–6

Comparative antibiotic dose-effect relations at several dosing intervals in murine pneumonitis and thigh-infection models. Leggett JE, et al. **J Infect Dis** 1989 Feb;159(2):281–92

Piroxicam treatment protects mice from lethal pulmonary challenge with Pseudomonas aeruginosa [published erratum appears in J Infect Dis 1989 Jul;160(1):182] Sordelli DO, et al. **J Infect Dis** 1989 Feb;159(2):232–8

Clinical and experimental studies on paediatric pneumonia treated by lung easing tablets. Chen DM, et al. **J Tradit Chin Med** 1989 Jun;9(2):128–31

Trial of co-trimoxazole versus procaine penicillin with ampicillin in treatment of community-acquired pneumonia in young Gambian children. Campbell H, et al. **Lancet** 1988 Nov 19;2(8621):1182–4

Single injection for treatment of community-acquired pneumonia [letter] Lamb WH. **Lancet** 1989 Feb 11; 1(8633):336–7

Atypical pneumonia [letter] Grant S, et al. **Med J Aust** 1989 Feb 6;150(3):168

Re: Standard treatments for pneumonia in Papua New Guinea [letter; comment] Shann F. **P N G Med J** 1989 Mar; 32(1):73–4. **Comment on:** P N G Med J 1988 Mar;31(1):75–6

Potential toxicity of tobramycin given daily in a single large dose [letter] Moore CM. **Pediatr Infect Dis J** 1989 Mar; 8(3):191–2

The effect of huoxue huayu drugs on radiation pneumonitis and pulmonary fibrosis. Shen Y, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(3):139–43

Imipenem-cilastatin. A new dimension [published erratum appears in S Afr Med J 1988 Dec 3;74(11):593] **S Afr Med J** 1988 Nov 5;74(9 Suppl):1–8

Imipenem/cilastatin in the treatment of severe nosocomial pneumonia. Potgieter PD, et al. **S Afr Med J** 1988 Oct 15;74(8):390–2

[Effects of rhubarb and anti-pneumonia mixture III on endotoxemia in acute infections] Chen YW, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Nov;8(11):654–7, 644 (Eng. Abstr.) **(Chi)**

[Clinical analysis of 71 cases of nonagenarian] Liu SQ, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Jul;8(7):407–9, 389 (Eng. Abstr.) **(Chi)**

[Which antibiotics for pneumonia treatment?] Ruutu P. **Duodecim** 1989;105(3):227–9 **(Fin)**

[Prospective randomized controlled study of a ceftazidime and pefloxacin combination versus a ceftazidime and amikacin combination in the empirical treatment of pneumonia and nosocomial septicemia at intensive care units] Beuscart C, et al. **Pathol Biol (Paris)** 1989 May; 37(5):496–9 (Eng. Abstr.) **(Fre)**

[Controlled randomized prospective study of a ceftazidime-pefloxacin combination versus a ceftazidime-amikacin combination in the empirical treatment of nosocomial pneumonias and septicemias of resuscitation. Preliminary results] Mouton Y, et al. **Presse Med** 1988 Oct 26;17(37):1928–32 (Eng. Abstr.) **(Fre)**

[Antibiotic therapy of bacterial pneumonia in the elderly] Janssens JP, et al. **Ther Umsch** 1989 Jan;46(1):30–4 (Eng. Abstr.) **(Fre)**

[Therapy of pulmonary complications in AIDS] Kroegel C, et al. **Med Klin** 1988 Aug 12;83(16):523–5 (22 ref.) **(Ger)**

[Infections of the lower respiratory tract—effectiveness of beta-lactam antibiotics on bacterial isolates from sputum and bronchial secretions] Kapfhammer G, et al. **Prax Klin Pneumol** 1988 Jul;42(7):592–3 (Eng. Abstr.) **(Ger)**

[Treatment of pneumonia in childhood] Dietzsch HJ. **Z Arztl Fortbild (Jena)** 1989;83(6):301–4 (6 ref.) **(Ger)**

[Interstitial electrophoresis in acute pleural and lung suppuration] Aleksejenko AW, et al. **Z Erkr Atmungsorgane** 1988;171(3):219–23 (Eng. Abstr.) **(Ger)**

[Differential therapeutic aspects of pneumonia in the aged] Schulz J, et al. **ZFA** 1988 Sep–Oct;43(5):273–7 (Eng. Abstr.) **(Ger)**

[Treatment of infectious bronchopneumopathies in children with amoxicillin and clavulanic acid] Mogavero S, et al. **Pediatr Med Chir** 1988 Sep–Oct;10(5):511–5 **(Ita)**

[Pharmacokinetic, bacteriological and clinical studies of ceftizoxime in neonates] Iwai N, et al. **Jpn J Antibiot** 1988 Aug;41(8):1087–105 (Eng. Abstr.) **(Jpn)**

[Clinical studies of rokitamycin dry syrup on Chlamydia trachomatis infections in the neonate and infant] Motohiro T, et al. **Jpn J Antibiot** 1988 Oct;41(10):1493–502 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetic, bacteriological and clinical studies of ceftizoxime in neonates and low birth weight infants] Motohiro T, et al. **Jpn J Antibiot** 1988 Aug;41(8):1116–28 (Eng. Abstr.) **(Jpn)**

[Clinical evaluation of ceftizoxime in neonates and premature infants] Okura KE, et al. **Jpn J Antibiot** 1988 Aug; 41(8):1106–15 (Eng. Abstr.) **(Jpn)**

[Comparative clinical study of CS-807 and cefaclor for bacterial pneumonia by a double-blind method] Shiba K, et al. **Kansenshogaku Zasshi** 1988 Nov;62(11):973–1001 (Eng. Abstr.) **(Jpn)**

[Double-blind comparative study of roxithromycin (RU 28965) and midecamycin acetate (MOM) in the treatment of pneumonia] Soejima R, et al. **Kansenshogaku Zasshi** 1989 May;63(5):501–29 (Eng. Abstr.) **(Jpn)**

[Investigation of severe tuberculous pneumonia associated with irreversible exacerbation after intensive antituberculer chemotherapy—with regard to the etiology of initial reversible roentgenographic progression] Umeki S, et al. **Kekkaku** 1989 Feb;64(2):85–93 (Eng. Abstr.) **(Jpn)**

[Prevention and treatment of pneumonia in burn patients using a microtracheostomy] Matveenko AV, et al. **Klin Khir** 1989;(3):55–6 (Eng. Abstr.) **(Rus)**

[The effect of troxevasin on the aggregation capability of thrombocytes in children under 3 years of age with various forms of acute suppurative destructive pneumonia] Topuzov VS, et al. **Klin Khir** 1989;(6):26–7 (Eng. Abstr.) **(Rus)**

[Effect of antioxidant therapy on lipid peroxidation in patients with acute and protracted pneumonia] Borovkova MS, et al. **Klin Med (Mosk)** 1988 Dec;66(12):62–4 (Eng. Abstr.) **(Rus)**

[Drug therapy of patients with acute pneumonia] Kokosov AN. **Klin Med (Mosk)** 1988 Aug;66(8):137–45 **(Rus)**

[Aerosol therapy of patients with lung diseases] Kokosov AN, et al. **Klin Med (Mosk)** 1988 Dec;66(12):108–13 **(Rus)**

[Assessment of antibiotic activity in the treatment of bacterial pneumonia] Smirnov GA. **Klin Med (Mosk)** 1988 Sep; 66(9):140–4 (Eng. Abstr.) **(Rus)**

[Validation of the use of protease inhibitors in severe forms of pneumonia in young infants] Gorishniak LKh, et al. **Pediatriia** 1988;(5):109–10 **(Rus)**

[The clinical effectiveness of treating patients with infectious-inflammatory lung diseases using intrapulmonary drugs administered via a needle-jet injector] Nikitin AV, et al. **Probl Tuberk** 1988;(8):63–6 **(Rus)**

[Protease inhibitors in the combined therapy of acute pneumonia] Telkov SV, et al. **Sov Med** 1988;(6):92–5 **(Rus)**

[Non-operative sanitation of suppurative-septic foci] Lytkin MI, et al. **Vestn Khir** 1989 Feb;142(2):3–8 (Eng. Abstr.) **(Rus)**

[Endolymphatic antegrade infusion of drugs in the treatment of suppurative-inflammatory diseases] Sinenchenko GI. **Vestn Khir** 1988 Oct;141(10):143–5 (32 ref.) **(Rus)**

[The treatment of patients with nonspecific inflammatory lung diseases under outpatient conditions] Nersesian ON, et al. **Vrach Delo** 1989 Jun;(6):70–3 (Eng. Abstr.) **(Rus)**

[Intrapulmonary administration of kontrikal in the treatment of patients with acute pneumonia] Provotorov VM, et al. **Vrach Delo** 1989 May;(5):86–7 (Eng. Abstr.) **(Rus)**

[Therapeutic protocols of pneumonia in children] Cobos Barroso N. **An Esp Pediatr** 1988 Sep;29 Suppl 33:222–32 (23 ref.) **(Spa)**

EPIDEMIOLOGY

Bacterial superinfection in RSV lower respiratory tract illnesses and the epidemiology of Chlamydia trachomatis pneumonitis of infants in Tokyo. Meguro H, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Jun;30(3):247–52

Pneumonia during pregnancy: has modern technology improved maternal and fetal outcome? Madinger NE, et al. **Am J Obstet Gynecol** 1989 Sep;161(3):657–62

Chlamydial pneumonia in Costa Rica: results of a case-control study. Farrow JM, et al. **Bull WHO** 1988; 66(3):365–8

Surveillance of acute respiratory infections in three kindergartens in Beijing. Zeng DL, et al. **Chin Med J [Engl]** 1988 Nov;101(11):787–92

Q fever pneumonia: a review of 164 community-acquired cases in the Basque country. Sobradillo V, et al. **Eur Respir J** 1989 Mar;2(3):263–6

Chlamydia species strain TWAR. Sinnott JT 4th, et al. **Infect Control Hosp Epidemiol** 1989 Apr;10(4):175–7

Nosocomial Legionella micdadei pneumonia: 10 years experience and a case-control study. Doebbeling BN, et al. **J Hosp Infect** 1989 Apr;13(3):289–98 (39 ref.)

Prospective study of pneumonia hospitalizations and mortality of U.S. older people: the role of chronic conditions, health behaviors, and nutritional status. LaCroix AZ, et al. **Public Health Rep** 1989 Jul–Aug;104(4):350–60

Epidemiology and prospects for prevention of disease due to Haemophilus influenzae in developing countries. Munson RS Jr, et al. **Rev Infect Dis** 1989 May–Jun;11 Suppl 3:S588–97 (62 ref.)

Role of legionellae in acute infections of the lower respiratory tract. Reingold AL. **Rev Infect Dis** 1988 Sep–Oct; 10(5):1018–28 (40 ref.)

Nursing home-acquired pneumonia. Crossley KB, et al. **Semin Respir Infect** 1989 Mar;4(1):64–72 (52 ref.)

Magnitude, presentation, management and outcome of acute respiratory infections in children under the age of five in hospitals and rural health centres in Tanzania. Mtango FD, et al. **Trop Med Parasitol** 1989 Jun;40(2):97–102

[Incidence of atypical pneumonias] Károlyi A, et al. **Orv Hetil** 1988 Dec 25;129(52):2793–4 **(Hun)**

[Community acquired pulmonary infections in a general hospital] Kikuchi N, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Feb; 27(2):166–72 (Eng. Abstr.) **(Jpn)**

[Autopsy cases of terminal pulmonary infections] Nagata N, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Jan; 27(1):14–24 (Eng. Abstr.) **(Jpn)**

[Incidence of pneumonia and bronchitis in hospitalized children, duration of hospitalization and the type of antibiotic therapy (personal experience)] Maruszewski W, et al. **Pediatr Pol** 1988 Oct;63(10):623–5 (Eng. Abstr.) **(Pol)**

[Prevalence of premorbid forms and chronic nonspecific lung diseases: study based on special examination of the population of 3 administrative districts of Leningrad] Tsiura IG, et al. **Vestn Akad Med Nauk SSSR** 1989;(2):38–42 (Eng. Abstr.) **(Rus)**

ETIOLOGY

Pathology of culture-proven JK Corynebacterium pneumonia. An autopsy case report. Waters BL. **Am J Clin Pathol** 1989 May;91(5):616–9

The lung matrix and inflammation: Part II. Biochemical and molecular mechanisms of fibrogenesis: implications for environmental lung disease. Brody AR, et al. **Am Rev Respir Dis** 1988 Oct;138(4):1056–7

Neuropeptides in the pathogenesis of lung inflammation. Casale TB, et al. **Am Rev Respir Dis** 1988 Oct;138(4):1053–5

Nosocomial pneumonia in patients receiving continuous mechanical ventilation. Prospective analysis of 52 episodes with use of a protected specimen brush and quantitative culture techniques. Fagon JY, et al. **Am Rev Respir Dis** 1989 Apr;139(4):877–84

Long-term respiratory support and risk of pneumonia in critically ill patients. Intensive Care Unit Group of Infection Control. Langer M, et al. **Am Rev Respir Dis** 1989 Aug;140(2):302–5

Blast cells transfer experimental hypersensitivity pneumonitis in guinea pigs. Schuyler M, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1449–55

Diagnostic value of quantitative cultures of bronchoalveolar lavage and telescoping plugged catheters in mechanically ventilated patients with bacterial pneumonia. Torres A, et al. **Am Rev Respir Dis** 1989 Aug;140(2):306–10

Vibrio vulnificus and pulmonary infection [letter] Sabapathi R. **Ann Intern Med** 1988 Dec 15;109(12):988–9

Legionella pneumonia and AIDS [letter] Allam AA, et al. **Chest** 1989 Mar;95(3):707–8

Recurrent lupus pneumonitis with pulmonary hemorrhage in systemic lupus erythematosus associated with chronic thyroiditis and antithyroid hormone autoantibodies. Ichikawa Y, et al. **Clin Exp Rheumatol** 1989 May–Jun; 7(3):309–13

Community acquired pneumonia in AIDS [editorial] Johnson DP. **Conn Med** 1988 Dec;52(12):735–6

Incidence and etiology of pneumonia acquired during mechanical ventilation. Jiménez P, et al. **Crit Care Med** 1989 Sep;17(9):882–5

Enteral nutrition as a risk factor for nosocomial pneumonia. Pingleton SK. **Eur J Clin Microbiol Infect Dis** 1989 Jan; 8(1):51–5 (41 ref.)

Lactobacillus pneumonia in a patient with oesophageal carcinoma. Querol JM, et al. **Eur Respir J** 1989 Jun; 2(6):589–91

Anaerobic pulmonary infection. Finegold SM. **Hosp Pract [Off]** 1989 May 15;24(5):103–10, 116–8, 122 passim (8 ref.)

Profile of pneumonias in hospitalized medical patients. Sharma BK, et al. **Indian J Chest Dis Allied Sci** 1988 Jul–Sep;30(3):199–204

Community-acquired bacteremic Acinetobacter calcoaceticus var. anitratus pneumonia [letter] Westh H, et al. **Infection** 1988 Sep–Oct;16(5):303–4

Pulmonary infiltrate in acute toxoplasmosis. Shimoni Z, et al. **Isr J Med Sci** 1989 Jan;25(1):46–7

Tracheal tube biofilm as a source of bacterial colonization of the lung. Inglis TJ, et al. **J Clin Microbiol** 1989 Sep; 27(9):2014–8

Cavitating pneumonia caused by Corynebacterium group JK. McNaughton RD, et al. **J Clin Microbiol** 1988 Oct; 26(10):2216–7

Legionella pneumophila serogroup 12 pneumonia in a renal transplant recipient: case report and environmental observations. Meigh RE, et al. **J Hosp Infect** 1989 Apr; 13(3):315–9

Perinatal Chlamydia trachomatis infection in a low birth weight infant. Amato M, et al. **J Perinat Med** 1988; 16(5–6):487–9

Systemic lupus erythematosus presenting with pericardial tamponade and lupus pneumonitis. Inase N, et al. **Jpn J Med** 1989 May–Jun;28(3):362–5

Fatal pneumonia after glandular fever and rubella [letter] Pether JV, et al. **Lancet** 1989 May 27;1(8648):1210

Atypical pneumonia [letter] Grant S, et al. **Med J Aust** 1989 Feb 6;150(3):168

A prospective hospital study of the aetiology of community-acquired pneumonia. Lim I, et al. **Med J Aust** 1989 Jul 17;151(2):87–91

Legionella longbeachae pneumonia: report of two cases. Lim I, et al. **Med J Aust** 1989 May 15;150(10):599–601

Experimental chronic pulmonary infection in mice caused by Klebsiella pneumoniae. Iizawa Y, et al. **Microbiol Immunol** 1988;32(9):895–906

Pneumonia caused by hypersensitivity to pseudomonas. Presentation of a series. Galietti F, et al. **Panminerva Med** 1988 Apr–Jun;30(2):124–7

Nocardia pneumonia in a neonate with chronic granulomatous disease. Johnston HC, et al. **Pediatr Infect Dis J** 1989 Aug;8(8):526–8

Fatal pneumonia caused by Flavobacterium meningosepticum. Tam AY, et al. **Pediatr Infect Dis J** 1989 Apr;8(4):252–4 (24 ref.)

Experimental radiation pneumonitis. Corticosteroids increase the replicative activity of alveolar type 2 cells. Gross NJ, et al. **Radiat Res** 1988 Sep;115(3):543–9

Repair kinetics of mouse lung. Vegesna V, et al. **Radiother Oncol** 1989 May;15(1):115–23

Fever, hypotension, and pulmonary infiltrates in a young Haitian man [clinical conference] Cohen JI, et al. **Rev Infect Dis** 1988 Sep–Oct;10(5):1052–60

Bacterial pneumonia in patients with human immunodeficiency virus infection. Chaisson RE. **Semin Respir Infect** 1989 Jun;4(2):133–8 (24 ref.)

Human immunodeficiency virus--associated lung infection: an overview. Hopewell PC. **Semin Respir Infect** 1989 Jun; 4(2):73–4

Q fever pneumonia. Marrie TJ. **Semin Respir Infect** 1989 Mar;4(1):47–55

Chlamydial pneumonia of infancy in siblings. Brayden RM, et al. **Sex Transm Dis** 1988 Oct–Dec;15(4):200–1

Bronchiolitis obliterans organising pneumonia in a patient with ulcerative colitis. Swinburn CR, et al. **Thorax** 1988 Sep;43(9):735–6

Chronic necrotising pneumonia caused by Aspergillus niger. Wiggins J, et al. **Thorax** 1989 May;44(5):440–1

A multivariate analysis of risk factors for pneumonia following cardiac transplantation. Corensek MJ, et al. **Transplantation** 1988 Dec;46(6):860–5

Cardiovascular and pulmonary complications of epidemic typhus. Diab SM, et al. **Trop Geogr Med** 1989 Jan; 41(1):76–9

Clove cigarettes. The basis for concern regarding health effects. Guidotti TL, et al. **West J Med** 1989 Aug; 151(2):220–8

Fatal Pasteurella multocida pneumonia in an IgA-deficient cat fancier. Henderson JA, et al. **West J Med** 1989 Feb; 150(2):208–10

[Cytomegalovirus pneumonitis in renal transplantation—a case report] Kuo HP, et al. **Chang Keng I Hsueh** 1989 Mar 20;12(1):57–61 (Eng. Abstr.) **(Chi)**

[A case of pneumopathy] **Bull Cancer (Paris)** 1988; 75(8):822–30 **(Fre)**

[Bronchiolitis obliterans with cryptogenetic-like organizing pneumonia. Demonstration of gastro-esophageal reflux in 5 cases] Sadoun D, et al. **Presse Med** 1988 Dec 17; 17(45):2383–5 (Eng. Abstr.) **(Fre)**

[Unusual manifestations of Q fever disclosing hairy cell leukemia] Vuille C, et al. **Schweiz Med Wochenschr** 1989 Feb 11;119(6):187–91 (Eng. Abstr.) **(Fre)**

[Iatrogenic bacterial pneumopathies at the intensive care unit] Jerbi Z, et al. **Tunis Med** 1988 Oct;66(10):719 **(Fre)**

[Frequency of colonization and pneumonia and development of resistance in long-term ventilated intensive-care patients subjected to selective decontamination of the digestive tract] Konrad F, et al. **Anaesthesist** 1989 Mar;38(3):99–109 (Eng. Abstr.) **(Ger)**

[Recurrent gastrointestinal hemorrhage in portal vein thrombosis and antibiotic-resistant pneumonia in a 38-year-old patient] Klaubert W, et al. **Internist (Berlin)** 1988 Oct;29(10):705–9 **(Ger)**

[AIDS and the lung] Rühle KH, et al. **Med Klin** 1988 Aug 12;83(16):526–7 **(Ger)**

[Diagnosis and therapeutic strategies in pneumonia in childhood] Schmitzberger R, et al. **Padiatr Padol** 1989; 24(1):49–61 (Eng. Abstr.) **(Ger)**

[Pneumonia in childhood: peculiarities in diagnosis and therapy] Lindemann H. **Pneumologie** 1989 Apr;43(4):204–9 (13 ref.) (Eng. Abstr.) **(Ger)**

[Pneumonia as a postoperative complication in neurosurgery] Friedrich P. **Psychiatr Neurol Med Psychol Beih** 1988; 40:109–11 **(Ger)**

[Demarcation of diseases] Braun RN, et al. **Wien Klin Wochenschr** 1989 Mar 17;101(6):185–7 (Eng. Abstr.) **(Ger)**

[Radiation pneumonitis. Morphology and pathogenesis] Schuh D, et al. **Zentralbl Allg Pathol** 1988;134(7):611–26 (36 ref.) (Eng. Abstr.) **(Ger)**

[Inflammatory changes in the lung in rheumatoid arthritis] Bély M. **Morphol Igazsagugyi Orv Sz** 1988 Oct;28(4):263–9 (Eng. Abstr.) **(Hun)**

[Chlamydia trachomatis pneumonia in childhood. An underestimated problem?] Bonito L, et al. **Pediatr Med Chir** 1988 Jul–Aug;10(4):379–82 (Eng. Abstr.) **(Ita)**

[Immunodeficiency and pulmonary diseases] Saito A. **Kokyu To Junkan** 1988 Dec;36(12):1274–80 (45 ref.) **(Jpn)**

[Experimental studies on mechanisms and prevention of radiation pneumonitis] Hashimura T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1989 Mar 25; 49(3):335–43 (Eng. Abstr.) **(Jpn)**

[A case of obstructive pneumonitis caused by anthracotic lymphadenopathy] Fukushima K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Oct; 26(10):1096–101 (Eng. Abstr.) **(Jpn)**

[A case of rheumatoid arthritis complicated with prolonged pneumonia and pulmonary edema possibly caused by gold sodium thiomalate-induced hypogammaglobulinemia] Takahashi S, et al. **Nippon Naika Gakkai Zasshi** 1988 Jul; 77(7):1041–5 **(Jpn)**

[Etiology and therapy of primary bacterial pneumonia in our practice] Misiewicz A, et al. **Przegl Lek** 1988;45(7):566–9 (Eng. Abstr.) **(Pol)**

[A foreign body in the bronchus as a cause of protracted pneumonia] Bednarski Z. **Wiad Lek** 1988 Dec 15; 41(24):1661–4 (Eng. Abstr.) **(Pol)**

[Acute pneumonia in a patient with a history of aggravated allergy] Solodkovskiĭ ML, et al. **Klin Med (Mosk)** 1988 Oct;66(10):140–1 **(Rus)**

[The role of viral-bacterial associations in the etiology of acute lung inflammation in an influenza interepidemic period] Kondratenko GP, et al. **Mikrobiol Zh** 1988 Mar-Apr;50(2):59-63 (Eng. Abstr.) **(Rus)**

[Present-day etiological structure of hospital-acquired pneumonia and its treatment] Al'-Dimiraui F, et al. **Pediatriia** 1988;(9):31-5 (Eng. Abstr.) **(Rus)**

[Pathogenesis of acute pneumonia] Novozhenov VG, et al. **Ter Arkh** 1989;61(3):84-7 (Eng. Abstr.) **(Rus)**

[Infectious endocarditis, meningitis and pneumonia in alcoholic liver cirrhosis] Zharkov OB, et al. **Ter Arkh** 1988; 60(10):115-7 **(Rus)**

[Pathogenesis of protracted pneumonia] Maianskiĭ DN, et al. **Vestn Akad Med Nauk SSSR** 1989;(2):42-50 **(Rus)**

[Mechanisms of the development and clinical prodromes of secondary pneumonia in explosive mine trauma (2)] Viazitskiĭ PO, et al. **Voen Med Zh** 1989 Mar;(3):21-4 **(Rus)**

[Mechanisms of the development and the clinical prodromata of secondary pneumonias in mine-explosion trauma (1)] Viazitskiĭ PO, et al. **Voen Med Zh** 1988 Nov;(11):25-8 **(Rus)**

[Pneumonia caused by Mycobacterium chelonei. Apropos of a case (letter)] Chimpén Ruiz VA, et al. **Med Clin (Barc)** 1988 Sep 17;91(8):318-9 **(Spa)**

[Sepsis caused by non-typhi Salmonella and pulmonary infiltrates in patients infected with HIV (letter)] Buzón L, et al. **Rev Clin Esp** 1988 Dec;183(9):500-1 **(Spa)**

[Bronchiolitis obliterans with organizing pneumonia in an 81-year-old man (letter)] Garrido JA, et al. **Rev Clin Esp** 1989 Apr;184(7):388-9 **(Spa)**

[Pulmonary infection in cranio-cerebral injuries (letter)] Rovira I, et al. **Rev Esp Anestesiol Reanim** 1988 Nov-Dec; 35(6):344 **(Spa)**

[Acute pneumonia today] Nordbring F. **Nord Med** 1988; 103(8-9):233-4 (Eng. Abstr.) **(Swe)**

HISTORY

Richard Pearson Strong and the Manchurian epidemic of pneumonic plague, 1910-1911. Chernin E. **J Hist Med Allied Sci** 1989 Jul;44(3):296-319

[The history of the illness of I.A. Krylov] Evdokimov PP. **Klin Med (Mosk)** 1989 Apr;67(4):157 **(Rus)**

IMMUNOLOGY

Cellular influx and activation increase macrophage cytotoxicity and interleukin-1 elaboration during pulmonary inflammation in rats. Fuchs HJ, et al. **Am Rev Respir Dis** 1988 Sep;138(3):572-7

CD4 counts as predictors of opportunistic pneumonias in human immunodeficiency virus (HIV) infection. Masur H, et al. **Ann Intern Med** 1989 Aug 1;111(3):223-31

Pulmonary macrophages in nosocomial pneumonia: defense function and dysfunction, and prospects for activation. Rose RM. **Eur J Clin Microbiol Infect Dis** 1989 Jan; 8(1):25-8 (26 ref.)

Fungus dose-dependent primary pulmonary aspergillosis in immunosuppressed mice. Dixon DM, et al. **Infect Immun** 1989 May;57(5):1452-6

Humoral immune response to chlamydial genital infection of mice with the agent of mouse pneumonitis. Ramsey KH, et al. **Infect Immun** 1989 Aug;57(8):2441-6

Spontaneous regression in murine hypersensitivity pneumonitis: lack of immunological tolerance. Takizawa H, et al. **Int Arch Allergy Appl Immunol** 1989; 89(2-3):173-80

Antibody response to Pseudomonas aeruginosa surface protein antigens in a rat model of chronic lung infection. Cochrane DM, et al. **J Med Microbiol** 1988 Dec; 27(4):255-61

A health hazard evaluation of pheasant handlers. Goldstein MD, et al. **J Occup Med** 1989 May;31(5):473-6

Lupus pneumonitis and anti-SSA(Ro) antibodies. Boulware DW, et al. **J Rheumatol** 1989 Apr;16(4):479-81

From the National Institutes of Health. Raub W. **JAMA** 1989 Oct 6;262(13):1748

[Opportunistic pulmonary infections: immunologic principles] Westhoff-Bleck M, et al. **Rontgenblatter** 1988 Nov;41(11):465-8 (20 ref.) (Eng. Abstr.) **(Ger)**

[Serologic cross reactions between Legionellae and other pathogens of respiratory infections in the sera of patients with pneumonia] Lück PC, et al. **Z Gesamte Hyg** 1988 May;34(5):294-5 (Eng. Abstr.) **(Ger)**

[Analysis of Trichosporon cutaneum and Cryptococcus neoformans antigens by crossed immunoelectrophoresis using antiserum, sera and bronchoalveolar lavage fluid obtained from patients with summer-type hypersensitivity pneumonitis] Miyagawa T, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Nov; 26(11):1142-9 (Eng. Abstr.) **(Jpn)**

[Serology in lower respiratory tract infections. Virus, mycoplasma and ornithosis serology] Sundsfjord A, et al. **Tidsskr Nor Laegeforen** 1988 Oct 30;108(30):2719-20 (Eng. Abstr.) **(Nor)**

[Clinico-immunocytological characteristics of critical states of pneumonia in young children] Abdushelishvili NM, et al. **Pediatriia** 1988;(9):22-4 (Eng. Abstr.) **(Rus)**

[Immunologic characteristics of children with varying sensitivity to tuberculin having recovered from pneumonia] Mykolyshin LI, et al. **Probl Tuberk** 1989;(2):23-5 (Eng. Abstr.) **(Rus)**

[Tuberculin sensitivity in children with tuberculosis and a history of pneumonia] Mykolyshin LI. **Probl Tuberk** 1988; (9):6-8 (Eng. Abstr.) **(Rus)**

[Aging and immunological reactivity in lung pathology] Tsarev VN. **Sov Med** 1988;(5):6-7 (Eng. Abstr.) **(Rus)**

[Clinical and immunological comparisons of different patterns of croupous and focal pneumonia in miners in deep coal mines of the Donetsk region] Gniliskaia VB, et al. **Ter Arkh** 1988;60(7):61-3 **(Rus)**

[Clinico-immunological characteristics of acute pneumonia in young patients] Iakovlev GM, et al. **Ter Arkh** 1988; 60(7):57-60 (Eng. Abstr.) **(Rus)**

[Possible correction of chemotactic activity of peripheral blood leukocytes before surgical treatment of patients with chronic pneumonia] Sel'vashchuk AP, et al. **Vestn Khir** 1988 Jun;140(6):130-1 **(Rus)**

[Clinico-immunologic characteristics of the course of acute pneumonia in the local and newly arrived inhabitants of western Siberia] Vasil'ev NV, et al. **Voen Med Zh** 1988 Sep;(9):50-1 **(Rus)**

[Immune system function and lipid peroxidation processes in protracted forms of pneumonia] Efimov VV, et al. **Vrach Delo** 1989 Apr;(4):73-5 (Eng. Abstr.) **(Rus)**

[Clinico-immunologic characteristics of acute pneumonia in patients with risk factors] Shuba NM. **Vrach Delo** 1988 Nov;(11):70-1 (Eng. Abstr.) **(Rus)**

[Recurrent respiratory diseases and specific immunity] Spišák B, et al. **Cesk Pediatr** 1986 Oct;41(10):582-5 (Eng. Abstr.) **(Slo)**

METABOLISM

The effect of acute inflammatory lung injury on the respiratory burst and protein kinase C activity of rat pulmonary alveolar macrophages. Brieland JK, et al. **Am Rev Respir Dis** 1989 Feb;139(2):378-81

Release of soluble fibronectin containing an extra type III domain (ED1) during acute pulmonary injury mediated by oxidants or leukocytes in vivo. Peters JH, et al. **Am Rev Respir Dis** 1988 Jul;138(1):167-74

[Value of determining myoglobin and creatine phosphokinase levels in the evaluation of the cardiovascular status in children with acute pneumonia] Barlybaeva NA, et al. **Pediatriia** 1988;(4):33-6 (Eng. Abstr.) **(Rus)**

[An oxygen regimen in acute pneumonia and bronchitis in children] Itskovich AI, et al. **Pediatriia** 1988;(6):107 **(Rus)**

[Peroxidation of lipids from liver mitochondria during pneumonia] Semenov VL. **Ukr Biokhim Zh** 1988 Sep-Oct; 60(5):85-7 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Use of bacterial antigen detection in the diagnosis of acute pneumonia in childhood. Namba M, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Jun;30(3):261-6

Comparison of tracheal aspirates and protected brush catheter specimens for identifying pathogenic bacteria in mechanically ventilated patients. Lambert RS, et al. **Am J Med Sci** 1989 Jun;297(6):377-82

Detection of nosocomial lung infection in ventilated patients. Use of a protected specimen brush and quantitative culture techniques in 147 patients. Fagon JY, et al. **Am Rev Respir Dis** 1988 Jul;138(1):110-6

Endotracheal aspiration for the bacteriological diagnosis of nosocomial- and measles-associated pneumonia. Berkowitz FE, et al. **Ann Trop Paediatr** 1988 Dec;8(4):217-21

Aetiology of severe pneumonia in developing countries [letter] Campbell H, et al. **Arch Dis Child** 1989 Aug; 64(8):1207

Acute pneumonia in Zimbabwe: bacterial isolates by lung aspiration. Ikeogu MO. **Arch Dis Child** 1988 Oct; 63(10):1266-7

Community-acquired Acinetobacter pneumonia. Gottlieb T, et al. **Aust N Z J Med** 1989 Jun;19(3):259-60

Emerging pathogens in nosocomial pneumonia. Berk SL, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jan;8(1):11-4

Nosocomial pneumonia in the intubated patient: role of gastric colonization. Craven DE, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jan;8(1):40-50 (81 ref.)

Current knowledge on Chlamydia pneumoniae, strain TWAR, an important cause of pneumonia and other acute respiratory diseases. Grayston JT, et al. **Eur J Clin Microbiol Infect Dis** 1989 Mar;8(3):191-202 (35 ref.)

Neisseria sicca pneumonia and bronchiectasis. Gris P, et al. **Eur Respir J** 1989 Jul;2(7):685-7

New causes of pneumonia, meningitis, and disseminated infections associated with immersion. Dworzack DL, et al. **Infect Dis Clin North Am** 1987 Sep;1(3):615-33 (72 ref.)

Ureaplasma urealyticum pneumonia: experimental production and demonstration of age-related susceptibility. Rudd PT, et al. **Infect Immun** 1989 Mar;57(3):918-25

Pneumonia and meningitis caused by a new nonfermentative unknown gram-negative bacterium. Casalta JP, et al. **J Clin Microbiol** 1989 Jul;27(7):1446-8

Phenotypic characteristics of Branhamella catarrhalis strains. Soto-Hernandez JL, et al. **J Clin Microbiol** 1989 May; 27(5):903-8

Experimental induction of pneumonia in mice with Bordetella parapertussis isolated from sheep. Chen WX, et al. **J Comp Pathol** 1989 Jan;100(1):77-89

Cavitating pneumonia due to Trichosporon beigelii in a patient with acute myeloid leukaemia. Santhosh-Kumar CR, et al. **J Infect** 1989 Jul;19(1):65-8

Pneumonia in children in the Eastern Highlands of Papua New Guinea: a bacteriologic study of patients selected by standard clinical criteria. Barker J, et al. **J Infect Dis** 1989 Feb;159(2):348-52

Treatment of experimental Pseudomonas aeruginosa pneumonia with a human IgM monoclonal antibody. Hector RF, et al. **J Infect Dis** 1989 Sep;160(3):483-9

Serological confirmation of group C streptococcal pneumonia. Rizkallah MF, et al. **J Infect Dis** 1988 Nov; 158(5):1092-4

Branhamella catarrhalis pneumonia in non-immunocompromised pediatric patients: report of three cases and review of the literature. Keren G, et al. **J Med** 1989;20(1):65-72 (29 ref.)

Experimental blastomycosis pneumonia in mice by infection with conidia. Sugar AM, et al. **J Med Vet Mycol** 1988; 26(6):321-6

Cell-mediated and humoral immune responses in mice during experimental infection with Mycoplasma pulmonis. Kishima M, et al. **Lab Anim** 1989 Apr;23(2):138-42

Disease due to the Legionellaceae (other than Legionella pneumophila). Historical, microbiological, clinical, and epidemiological review [published erratum appears in Medicine (Baltimore) 1989 Jul;68(4):209] Fang GD, et al. **Medicine (Baltimore)** 1989 Mar;68(2):116-32 (125 ref.)

Nocardia transvalensis pneumonia in a child. Baghdadlian H, et al. **Pediatr Infect Dis J** 1989 Jul;8(7):470-1

Problems in determining the etiology of community-acquired childhood pneumonia. Isaacs D. **Pediatr Infect Dis J** 1989 Mar;8(3):143-8

Nontypable Haemophilus influenzae nosocomial pulmonary infections in children following intubation. Hicks RA, et al. **Pediatr Pulmonol** 1989;6(3):153-7

Cytomegalovirus the predominant cause of pneumonia in renal transplant patients. A two-year study of pneumonia in renal transplant recipients with evaluation of fiberoptic bronchoscopy. Heurlin N, et al. **Scand J Infect Dis** 1989; 21(3):245-53

Pneumonia caused by Mycoplasma pneumoniae and the TWAR agent. Atmar RL, et al. **Semin Respir Infect** 1989 Mar;4(1):19-31 (73 ref.)

Bacteremic Hemophilus influenzae pneumonia in the adult. Quinones CA, et al. **Semin Respir Infect** 1989 Mar;4(1):12-8 (34 ref.)

Pneumonia due to Moraxella (Branhamella) catarrhalis. Wright PW, et al. **Semin Respir Infect** 1989 Mar;4(1):40-6 (31 ref.)

[Pneumonia in artificially ventilated patients: the significance of Gram preparation und bronchoscopic specimen collection methods in diagnosis and therapy] Konrad F, et al. **Anasth Intensivther Notfallmed** 1989 Jun;24(3):147-52 (Eng. Abstr.) **(Ger)**

[Infections of the lower respiratory tract (editorial)] Opferkuch W. **Immun Infekt** 1989 Feb;17(1):3 **(Ger)**

[Septic pneumonia caused by Bacillus cereus] Kovács AM, et al. **Orv Hetil** 1989 Apr 23;130(17):887-8 (Eng. Abstr.) **(Hun)**

[A case of fatal pneumonia caused by Salmonella] Szabó N, et al. **Orv Hetil** 1988 Oct 16;129(42):2251-3 (Eng. Abstr.) **(Hun)**

[Transtracheal aspiration bacteriological studies of elderly pneumonia cases] Yamamoto K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Nov; 26(11):1170-6 (Eng. Abstr.) **(Jpn)**

[Antibiotic sensitivity of Haemophilus influenzae isolated from patients with inflammatory lung diseases] Faustova ME, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Jan; (1):27-30 (Eng. Abstr.) **(Rus)**

[Interaction of opportunistic bacteria and factors in the body's anti-infective resistance against a background of antibacterial therapy of children with acute pneumonia] Savitskaia KI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Mar;(3):39-45 (Eng. Abstr.) **(Rus)**

[TWAR--a newly discovered cause of pneumonia] Persson K. **Lakartidningen** 1988 Dec 21;85(51):4505-6 **(Swe)**

MORTALITY

Hospital-acquired pneumonia. Attributable mortality and morbidity. Leu HS, et al. **Am J Epidemiol** 1989 Jun; 129(6):1258-67

Leads from the MMWR. Increase in pneumonia mortality among young adults and the HIV epidemic--New York City, United States. **JAMA** 1988 Oct 21;260(15):2181, 2185

Predicting hospital-associated mortality for Medicare patients. A method for patients with stroke, pneumonia, acute myocardial infarction, and congestive heart failure. Daley J, et al. **JAMA** 1988 Dec 23-30;260(24):3617-24

Interpreting hospital mortality data. The role of clinical risk adjustment. Jencks SF, et al. **JAMA** 1988 Dec 23-30; 260(24):3611-6

Pneumonia and influenza mortality--United States, 1988-89 season [published erratum appears in MMWR 1989 Feb 24;38(7):115] **MMWR** 1989 Feb 17;38(6):97

[The incidence of lung infection in patients with mucoviscidosis and the disease course with various pathogen spectra] Dietzsch HJ, et al. **Kinderarztl Prax** 1989 Feb;57(2):81-7 (Eng. Abstr.) **(Ger)**

[Causes of insufficient reduction of mortality rate after

operations for incarcerated external ventral hernia] Napalkov PN. **Vestn Khir** 1988 Sep;141(9):111–6 **(Rus)**

[Differential mortality by sex. Causes and behavior of respiratory and gastroenteric infections in Mexico] García-Sancho MC, et al. **Salud Publica Mex** 1989 Jan–Feb;31(1):18–31 (Eng. Abstr.) **(Spa)**

[High number of fatal cases among intensive care patients with AIDS complicated by severe pneumonias] Blomqvist H, et al. **Lakartidningen** 1988 Nov 2;85(44):3663–4 **(Swe)**

PARASITOLOGY

A case of severe Strongyloides stercoralis infection with jejunal perforation in an Australian ex-prisoner-of-war. Kennedy S, et al. **Med J Aust** 1989 Jan 16;150(2):92–3

PATHOLOGY

Sudden unexpected death in a neonate. Imaizumi SO, et al. **Am J Perinatol** 1989 Jul;6(3):281–3

The effect of crystal structure on mouse lung inflammation and fibrosis. Wiessner JH, et al. **Am Rev Respir Dis** 1988 Aug;138(2):445–50

Open lung biopsy diagnosis of diffuse pulmonary infiltrates after marrow transplantation. Crawford SW, et al. **Chest** 1988 Nov;94(5):949–53

Lectin-detectable effects of localized pneumonia on airway mucous cell populations: role of cyclooxygenase metabolites. Mariassy AT, et al. **Exp Lung Res** 1989; 15(1):113–37

Inflammation in the lungs of infants dying suddenly. A comparative study from two countries. Lignitz E, et al. **Forensic Sci Int** 1989 Jul;42(1–2):85–94

O2- and pneumonia-induced lung injury. I. Pathological and morphometric studies. Coalson JJ, et al. **J Appl Physiol** 1989 Jul;67(1):346–56

Alveolar epithelial responses in experimental streptococcal pneumonia. Rhodes GC, et al. **J Pathol** 1989 Apr; 157(4):347–57

Factors contributing to mortality in lung transplant recipients: an autopsy study. Cagle PT, et al. **Mod Pathol** 1989 Mar;2(2):85–9

[Chronic dysplasia of the respiratory ciliary epithelium] Lucas T, et al. **Monatsschr Kinderheilkd** 1989 Mar; 137(3):162–4 (Eng. Abstr.) **(Ger)**

[Nocardiosis of the lung] Zahradka W, et al. **Z Gesamte Inn Med** 1988 Aug 15;43(16):471–2 (Eng. Abstr.) **(Ger)**

[Lung changes in chronic polyarthritis] Bély M. **Zentralbl Allg Pathol** 1988;134(7):647–64 (Eng. Abstr.) **(Ger)**

[A case report of psittacosis and chlamydial isolation from bowel and faeces of a pet bird] Hayashi Y, et al. **Kansenshogaku Zasshi** 1988 Jul;62(7):669–74 (Eng. Abstr.) **(Jpn)**

[A clinical study on pulmonary tuberculosis as terminal pneumonia] Mochizuki Y, et al. **Kekkaku** 1988 Aug; 63(8):569–75 (Eng. Abstr.) **(Jpn)**

[Morphological characteristics of the thymus and adrenal glands of infants with thymus hyperplasia who died of acute pneumonia] Gevorkian DK, et al. **Pediatriia** 1988;(9):110–1 **(Rus)**

PHYSIOPATHOLOGY

Acute infectious pneumonia is accompanied by a latent vasopressin-dependent impairment of renal water excretion. Dreyfuss D, et al. **Am Rev Respir Dis** 1988 Sep; 138(3):583–9

Neutrophil chemotactic factors in bacterial pneumonia. Hopkins H, et al. **Chest** 1989 May;95(5):1021–7

Role in vivo for gamma interferon in control of pneumonia caused by Chlamydia trachomatis in mice. Williams DM, et al. **Infect Immun** 1988 Nov;56(11):3004–6

Effects of products from inflammatory pulmonary neutrophils on alveolar macrophage chemotaxis, spreading, and thymidine incorporation. Donaldson K, et al. **Inflammation** 1989 Aug;13(4):443–53

Unilateral radiation pneumonitis in sheep: physiological changes and bronchoalveolar lavage. Tillman BF, et al. **J Appl Physiol** 1989 Mar;66(3):1273–9

Role for T lymphocytes in silica-induced pulmonary inflammation. Hubbard AK. **Lab Invest** 1989 Jul; 61(1):46–52

[Lung tissue volume changes before and after treatment of radiation pneumonitis] Zheng WC. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Dec; 11(6):347–9, 386 (Eng. Abstr.) **(Chi)**

[Gas exchange disturbance with pneumonia in the elderly in relation to quantitative estimate of roentgenologic infiltrates] Nagase T, et al. **Nippon Ronen Igakkai Zasshi** 1988 Jul;25(4):413–8 (Eng. Abstr.) **(Jpn)**

[Use of liposomes for correction of respiratory hypoxia in experimental pneumonia] Bryginskiĭ SA, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):421–3 (Eng. Abstr.) **(Rus)**

[Parasympathetic component of the regulation of the kallikrein-kinin system in experimental pneumonia] Perevozchikov PN, et al. **Biull Eksp Biol Med** 1988 Oct; 106(10):417–9 (Eng. Abstr.) **(Rus)**

[Status of capillary blood flow in the lungs in various outcomes of acute pneumonia] Busarova GA, et al. **Klin Med (Mosk)** 1989 May;67(5):49–52 (Eng. Abstr.) **(Rus)**

[Pulmonary blood flow in acute pneumonia] Korovina OV, et al. **Klin Med (Mosk)** 1988 Sep;66(9):41–4 (Eng. Abstr.) **(Rus)**

[Interrelations between blood circulation and the activity of the sympathetic-adrenal system in infants with acute pneumonia and its suppurative complications] Arinchin VN, et al. **Pediatriia** 1989;(2):18–23 (Eng. Abstr.) **(Rus)**

[Decompressive volume load as a method of evaluating the functional reserves of the heart] Arinchin VN. **Pediatriia** 1988;(4):50–4 **(Rus)**

[Glucocorticoid function of the adrenals and indicators of anti-infection protection in infants with pneumonia] Dubasova EP, et al. **Pediatriia** 1988;(4):112 **(Rus)**

[Pathophysiological mechanisms of acute disorders of hemodynamics in young children with pneumonia during severe and terminal states and after recovery] Gobets AA. **Pediatriia** 1988;(9):27–31 (Eng. Abstr.) **(Rus)**

[Changes in central, peripheral and cerebral blood flow in young children with pneumonia] Guragata AM, et al. **Pediatriia** 1988;(12):26–32 (Eng. Abstr.) **(Rus)**

[Cardiorespiratory reactions to physical load in patients with a history of acute pneumonia] Golikov AP, et al. **Sov Med** 1988;(5):51–4 **(Rus)**

[Status of hemodynamics and its response to exercise in patients with acute pneumonia] Korovina OV, et al. **Ter Arkh** 1989;61(3):81–4 (Eng. Abstr.) **(Rus)**

[Microcirculatory function in variants of acute pneumonia] Zhuravleva TA, et al. **Ter Arkh** 1988;60(11):106–9 **(Rus)**

PREVENTION & CONTROL

Critical evaluation of common clinical parameters of postoperative pneumonia after thoracic surgery with perioperative prophylaxis. Bardua R, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):580–2

Perioperative prophylaxis and postoperative treatment of pneumonia with oxacillin and acylureidopenicillin in thoracic surgery. Koch A, et al. **Chemioterapia** 1987 Jun; 6(2 Suppl):583

Prevention of pneumonia in an intensive care unit: a randomized multicenter clinical trial. Intensive Care Unit Group of Infection Control. Mandelli M, et al. **Crit Care Med** 1989 Jun;17(6):501–5

Minimizing the potential for nosocomial pneumonia: architectural, engineering, and environmental considerations for the intensive care unit. du Moulin G. **Eur J Clin Microbiol Infect Dis** 1989 Jan;8(1):69–74 (56 ref.)

Hospital-acquired pneumonia: overview of the current state of the art for prevention and control. Wenzel RP. **Eur J Clin Microbiol Infect Dis** 1989 Jan;8(1):56–60 (44 ref.)

Guidelines for the prevention of nosocomial pneumonia. The Hospital Infection Control Group of Thailand. **J Med Assoc Thai** 1989 Jul;72 Suppl 2:74–5

Use of the kinetic treatment table to prevent the pulmonary complications of multiple trauma. Demarest GB, et al. **West J Med** 1989 Jan;150(1):35–8

[Contamination of respirators in long-term ventilation] Bonath K, et al. **Anasth Intensivther Notfallmed** 1989 Jun; 24(3):181–5 (Eng. Abstr.) **(Ger)**

[Adjuvant therapy with pseudomonas immunoglobulin in artificially ventilated patients at a surgical intensive care unit] Class I, et al. **Anasth Intensivther Notfallmed** 1989 Jun;24(3):167–71 (Eng. Abstr.) **(Ger)**

[Prevention of pneumonia in artificial respiration therapy] Vogel F, et al. **Med Klin** 1989 Jun 15;84(6):303–6 (26 ref.) **(Ger)**

[Prevention of stress ulcer and nosocomial pneumonia] Koop H. **Z Gastroenterol** 1988 Jun;26(6):337–8 **(Ger)**

[Immunotherapy by polyvalent bacterial antigen (Broncasma Berna) in the prevention of pneumonia in the elderly] Suzuki K, et al. **Kansenshogaku Zasshi** 1989 Mar; 63(3):173–81 (Eng. Abstr.) **(Jpn)**

[Prevention of pneumonia and the dispensary care of recovering patients] Iakovlev VA, et al. **Voen Med Zh** 1988 Sep;(9):26–8 **(Rus)**

[Treatment with sucralfate in stress ulcer reduces the number of nosocomial pneumonias] Enkvist C. **Lakartidningen** 1989 Apr 19;86(16):1469, 1471 **(Swe)**

RADIOGRAPHY

The radiographic appearances of infection and acute rejection of the lung after heart-lung transplantation. Millet B, et al. **Am Rev Respir Dis** 1989 Jul;140(1):62–7

Pneumonia appearing as multiple 'coin lesions' [letter] Masuda H, et al. **Arch Intern Med** 1989 Apr;149(4):966

Rapidly progressive pneumonia in a patient with chronic obstructive pulmonary disease. Palmer LB, et al. **Chest** 1989 Jan;95(1):179–80

Accuracy of radiographic differentiation of bacterial from nonbacterial pneumonia. Courtoy I, et al. **Clin Pediatr (Phila)** 1989 Jun;28(6):261–4

Diagnostic imaging of post-irradiation changes in the chest [letter] Glynne-Jones R. **Clin Radiol** 1988 Sep;39(5):570

Clinical criteria for the detection of pneumonia in adults: guidelines for ordering chest roentgenograms in the emergency department. Gennis P, et al. **J Emerg Med** 1989 May-Jun;7(3):263–8

Atypical pneumonia. Schriener RD, et al. **J Tenn Med Assoc** 1989 May;82(5):252–3

Listeria pneumonia. A case report. Whitelock-Jones L, et al. **S Afr Med J** 1989 Feb 18;75(4):188–9

Mass lesion in an intravenous drug user. Round pneumonia. Pandya K, et al. **West J Med** 1989 Jan;150(1):95–6

[Pneumonia? Diagnosis: aortic aneurysm which has ruptured in the upper left lobe of the lung] Frahm R, et al. **Radiologe** 1988 Sep;28(9):441–2 **(Ger)**

[Radiologic diagnosis of opportunistic pulmonary infections] Galanski M, et al. **Rontgenblatter** 1988 Nov;41(11):469–75 (26 ref.) (Eng. Abstr.) **(Ger)**

[A case of bronchiolitis obliterans organizing pneumonia with reticulo-nodular shadows on the chest radiographs] Yoshino K, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Oct;26(10):1086–91 (18 ref.) (Eng. Abstr.) **(Jpn)**

[Chest X-ray findings in infantile Chlamydia trachomatis pneumonia; report of two cases] Ono M, et al. **Rinsho Hoshasen** 1989 Jan;34(1):173–6 (Eng. Abstr.) **(Jpn)**

[Clinical x-ray characteristics of patients with caseous pneumonia and their treatment results] Anastas'ev VS, et al. **Probl Tuberk** 1988;(8):58–61 **(Rus)**

[Computed tomography in the x-ray diagnosis of pneumonia] Degtiareva IA, et al. **Vestn Rentgenol Radiol** 1989 Jan–Feb; (1):8–14 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

[The place of 67Ga scintigraphy in the primary diagnosis and follow-up evaluation of opportunistic pneumonia in patients with AIDS] Tatsch K, et al. **Nuklearmedizin** 1988 Oct;27(5):219–25 (Eng. Abstr.) **(Ger)**

[Delayed lung scintigraphy with N-isopropyl-I-123-p-iodoamphetamine in lung cancer and inflammatory disease] Suematsu T, et al. **Kaku Igaku** 1989 Jan;26(1):45–53 (Eng. Abstr.) **(Jpn)**

REHABILITATION

[Rehabilitative treatment of patients with acute pneumonia] Mal'tsev LM, et al. **Voen Med Zh** 1988 Sep;(9):23–6 **(Rus)**

[Assessment of the effectiveness of the medical rehabilitation of patients with acute pneumonia] Polozhentsev SD, et al. **Voen Med Zh** 1988 Sep;(9):49–50 **(Rus)**

[Thermovibrotherapy in the combined rehabilitation of children with a history of acute pneumonia] Kreĭmer AIa, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Jan–Feb; (1):43–5 (Eng. Abstr.) **(Rus)**

SURGERY

[Evaluation of the postoperative condition of patients with chronic suppurative diseases of the lungs] Kol'tsun SS, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):108–12 **(Rus)**

THERAPY

Pressure control inverse ratio ventilation as a method to reduce peak inspiratory pressure and provide adequate ventilation and oxygenation. Lain DC, et al. **Chest** 1989 May;95(5):1081–8

Nasopharyngeal oxygen in children [letter; comment] Shann F. **Lancet** 1989 May 13;1(8646):1077–8. **Comment on:** Lancet 1989 Mar 4;1(8636):493–4

[Use of pseudomonas immunoglobulin. Indications and results] Werdan K, et al. **Anasth Intensivther Notfallmed** 1989 Jun;24(3):153–61 (Eng. Abstr.) **(Ger)**

[Therapeutic bronchoalveolar lavage in pulmonary infections] Katoh M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Apr; 26(4):359–66 (Eng. Abstr.) **(Jpn)**

[Hemosorption in the complex therapy of severe forms of acute pneumonia and infectious destruction of the lungs] Levashev IuN, et al. **Grudn Khir** 1989 Mar-Apr;(2):51–5 (Eng. Abstr.) **(Rus)**

[Prevention and treatment of pulmonary complications after surgery of the abdominal organs] Chepkiĭ LP, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):107–10 **(Rus)**

[Value of correcting microcirculatory disorders of inflammatory foci in the treatment of infection] Sholkhet IaN, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):58–61 (Eng. Abstr.) **(Rus)**

[Emergencies in acute pneumonia] Iakovlev VN, et al. **Klin Med (Mosk)** 1989 Jan;67(1):132–6 **(Rus)**

[Provision of optimal microclimate parameters in pediatric pulmonology hospitals and their effect on the course of acute pneumonia in young infants] Korshunov SF. **Pediatriia** 1988;(8):83–5 **(Rus)**

[Experience with extracorporeal ultraviolet irradiation of autologous blood in children with suppurative-septic diseases] Kurapov EP, et al. **Pediatriia** 1989;(4):59–61 **(Rus)**

[Plasmapheresis in the therapy of infection, destructive pneumonia and intestinal toxicosis in children] Manerov FK, et al. **Pediatriia** 1988;(9):56–61 **(Rus)**

[Analysis of the results of the treatment of children with acute bacterial destructive pneumonia with pleuropulmonary complications in the North] Plaksin ED. **Pediatriia** 1989;(4):111–2 **(Rus)**

[Use of quantum hemotherapy in young children with severe variants of pneumonia] Zhidkova EG, et al. **Pediatriia** 1989; (6):90–1 **(Rus)**

[A machine analysis of the medical documentation on patients with acute pneumonia treated at pulmonology departments] Tutskaniuk K, et al. **Probl Tuberk** 1988;(8):29–30 (Eng.

Abstr.) (Rus)
[Temporary disability in patients with acute pneumonia at an outpatient clinic] Terekhova TM, et al. **Ter Arkh** 1989; 61(1):75–7 (Eng. Abstr.) (Rus)
[Emergency care of acute pneumonia at the polyclinic and at the hospital] Tikhomirov ES, et al. **Voen Med Zh** 1988 Sep;(9):20–2 (Rus)
[Effect of the UV irradiation of autologous blood on the humoral link in the immune response of patients with chronic inflammatory processes] Ivanov EM, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Jan–Feb;(1):45–7 (Eng. Abstr.) (Rus)
[Effectiveness of therapeutic and rehabilitation complexes in the treatment of children with chronic bronchopulmonary diseases and mucoviscidosis] Simonova OI, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 May–Jun; (3):23–5 (Rus)

TRANSMISSION

Community-acquired pneumonia requiring hospitalization: 5-year prospective study. Marrie TJ, et al. **Rev Infect Dis** 1989 Jul–Aug;11(4):586–99

URINE

Excretion of urinary collagen metabolites correlates to severity of pulmonary disease in cystic fibrosis. Ammitzbøll T, et al. **Acta Paediatr Scand** 1988 Nov;77(6):842–6
[Urinary excretion of free corticosteroids in healthy infants and in those with pneumonia] Targoński J. **Wiad Lek** 1988 Sep 1;41(17):1141–6 (Eng. Abstr.) (Pol)

VETERINARY

Corynebacterium pseudotuberculosis infection in goats. VI. Clinical and pathological changes after intravenous inoculation of the organism. Holstad G, et al. **Acta Vet Scand** 1988;29(3–4):281–6
Effective use of slaughter checks to determine economic losses from morbidity in swine. Boessen CR, et al. **Acta Vet Scand Suppl** 1988;84:366–8
Serum and tissue concentrations of erythromycin in calves with induced pneumonic pasteurellosis. Burrows GE, et al. **Am J Vet Res** 1989 Jul;50(7):1166–9
Identification of Mycoplasma hyopneumoniae in formalin-fixed porcine lung, using an indirect immunoperoxidase method. Doster AR, et al. **Am J Vet Res** 1988 Oct;49(10):1719–21
Fatal Pasteurella haemolytica pneumonia in bighorn sheep after direct contact with clinically normal domestic sheep. Foreyt WJ. **Am J Vet Res** 1989 Mar;50(3):341–4
Pathology and bacteriology of adult male Antarctic fur seals, Arctocephalus gazella, dying at Bird Island, South Georgia. Baker JR, et al. **Br Vet J** 1989 May–Jun;145(3):263–75
Mycoplasma hyopneumoniae increases the susceptibility of pigs to experimental Pasteurella multocida pneumonia. Ciprián A, et al. **Can J Vet Res** 1988 Oct;52(4):434–8
Pasteurella multocida and Bordetella bronchiseptica in atrophic rhinitis and pneumonia in swine. Cowart RP, et al. **Can J Vet Res** 1989 Jul;53(3):295–300
Virulence differences among three strains of Haemophilus somnus following intratracheal inoculation of calves. Groom SC, et al. **Can J Vet Res** 1988 Jul;52(3):349–54
Susceptibility of Rocky Mountain bighorn sheep and domestic sheep to pneumonia induced by bighorn and domestic livestock strains of Pasteurella haemolytica. Onderka DK, et al. **Can J Vet Res** 1988 Oct;52(4):439–44
Experimental studies of chronic pneumonia of sheep. Gilmour JS, et al. **Comp Immunol Microbiol Infect Dis** 1979; 1(4):285–93
Pneumonia, lung abscesses and pleuritis in adult horses: a review of 51 cases. Mair TS, et al. **Equine Vet J** 1989 May; 21(3):175–80
Rhodococcus equi foal pneumonia: protective effects of immune plasma in experimentally infected foals. Martens RJ, et al. **Equine Vet J** 1989 Jul;21(4):249–55
Congestive heart failure and pneumonia in a baboon. Levin JL, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1226–7
What is your diagnosis? Fulminant parasitic pneumonia. Tidwell AS, et al. **J Am Vet Med Assoc** 1989 Apr 1; 194(7):957–8
Pulmonary persistence of Haemophilus somnus in the presence of specific antibody. Gogolewski RP, et al. **J Clin Microbiol** 1989 Aug;27(8):1767–74
Pulmonary corpora amylacea in sheep. Lin X, et al. **J Comp Pathol** 1989 Apr;100(3):267–74
Parasitic pneumonia in a dog caused by a lung fluke of the genus Paragonimus. Van Rensburg IB, et al. **J S Afr Vet Assoc** 1987 Dec;58(4):203–6
Experimental contact transmission of Pasteurella haemolytica from clinically normal domestic sheep causing pneumonia in Rocky Mountain bighorn sheep. Onderka DK, et al. **J Wildl Dis** 1988 Oct;24(4):663–7
Efficacy of a commercial bacterin in protecting strain 13 guineapigs against Bordetella bronchiseptica pneumonia. Stephenson EH, et al. **Lab Anim** 1989 Jul;23(3):261–9
Outbreak of pneumonia caused by Pasteurella haemolytica infection in Shiba goats in Japan. Hayashidani H, et al. **Nippon Juigaku Zasshi** 1988 Aug;50(4):960–2
Effect of a new macrolide antibiotic (tilmicosin) on pneumonia experimentally induced in calves by Mycoplasma bovis and Pasteurella haemolytica. Gourlay RN, et al. **Res Vet Sci** 1989 Jul;47(1):84–9
The evolution of vaccines for bovine pneumonic pasteurellosis. Mosier DA, et al. **Res Vet Sci** 1989 Jul; 47(1):1–10 (140 ref.)
Acute phase response of sheep: changes in the concentrations of ceruloplasmin, fibrinogen, haptoglobin and the major blood cell types associated with pulmonary damage. Pfeffer A, et al. **Res Vet Sci** 1989 Jan;46(1):118–24
Protection of lambs against experimental pneumonic pasteurellosis by transfer of immune serum. Jones GE, et al. **Vet Microbiol** 1989 May;20(1):59–71
Evidence that blood-borne infection is involved in the pathogenesis of bovine pneumonic pasteurellosis. Thomas LH, et al. **Vet Pathol** 1989 May;26(3):253–9
Effect of enrofloxacin therapy on shipping fever pneumonia in feedlot cattle. Lekeux P, et al. **Vet Rec** 1988 Aug 20; 123(8):205–7
Rain and windchill as factors in the occurrence of pneumonia in sheep. McIlroy SG, et al. **Vet Rec** 1989 Jul 22; 125(4):79–82
Single-dose treatment of neonatal calf pneumonia with the new macrolide antibiotic tilmicosin. Ose EE, et al. **Vet Rec** 1988 Oct 1;123(14):367–9
Sheep herpesvirus does not increase susceptibility to pneumonic pasteurellosis. Scott FM, et al. **Vet Rec** 1989 Aug 5;125(6):133
Experimental bovine pneumonic pasteurellosis: a review. Shoo MK. **Vet Rec** 1989 Feb 11;124(6):141–4 (53 ref.)
Necrotizing pneumonia in cats associated with infection by EF-4a bacteria. Ceyssens K, et al. **Zentralbl Veterinarmed [B]** 1989 Jun;36(4):314–6
Changes in the relative concentrations of surfactant phospholipids in young pigs with experimental pneumonia. Sachse K. **Zentralbl Veterinarmed [B]** 1989 Jul;36(5):385–90
[The control of the biosynthesis of cellular amino acids by pneumonia-causing agents] Kludas KH, et al. **Arch Exp Veterinarmed** 1988 Jul;42(4):484–9 (Eng. Abstr.) (Ger)
[Direct detection of Actinobacillus (Haemophilus) pleuropneumoniae in the lungs of swine] Bunka S, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul–Aug; 96(7):371–3 (Eng. Abstr.) (Ger)

PNEUMONIA, ASPIRATION

Aspiration and swallowing disorders. **Otolaryngol Clin North Am** 1988 Nov;21(4):595–788
Pulmonary aspiration. The three syndromes. Russin SJ, et al. **Postgrad Med** 1989 Jan;85(1):155–6, 159–61 (22 ref.)
Bronchopulmonary aspiration. LoCicero J 3d. **Surg Clin North Am** 1989 Feb;69(1):71–6 (12 ref.)

CHEMICALLY INDUCED

Aspiration pneumonia following diesel oil siphonage—analysis of 12 cases. Lee CH, et al. **Chang Keng I Hsueh** 1988 Sep 20;11(3):180–4
Aspiration of high-density barium contrast medium causing acute pulmonary inflammation—report of two fatal cases in elderly women with disordered swallowing. Gray C, et al. **Clin Radiol** 1989 Jul;40(4):397–400
Exogenous lipoid pneumonia. Cornacchia DJ, et al. **J Am Osteopath Assoc** 1989 May;89(5):659–63
Hydrocarbon ingestion: an unusual cause of multiple pulmonary pseudotumors. Scott PP. **South Med J** 1989 Aug;82(8):1032–3
[Lipid pneumopathy caused by occupational exposure to cutting oil] Perol M, et al. **Rev Mal Respir** 1989;6(3):271–4 (Eng. Abstr.) (Fre)
[Pulmonitis caused by aspiration of hydrocarbons. Histological and ultrastructural study of a case in childhood] Ceccamea A, et al. **Minerva Pediatr** 1988 Apr; 40(4):233–7 (Eng. Abstr.) (Ita)
[A case of pneumonia caused by aspiration of diesel fuel] Vertkin IuI, et al. **Gig Tr Prof Zabol** 1989;(3):41–4 (Eng. Abstr.) (Rus)

COMPLICATIONS

Laryngospasm and reflex central apnoea caused by aspiration of refluxed gastric content in adults. Bortolotti M. **Gut** 1989 Feb;30(2):233–8

DIAGNOSIS

Bronchoalveolar lavage in the diagnosis of lipoid pneumonia. Silverman JF, et al. **Diagn Cytopathol** 1989;5(1):3–8
MR diagnosis of lipoid pneumonia. Carrillon Y, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):876–7

ETIOLOGY

Aspiration pneumonia complicating small bowel biopsy. Noskin G, et al. **Am J Gastroenterol** 1989 May;84(5):557–9
Aspiration in patients with head and neck cancer and tracheostomy. Muz J, et al. **Am J Otolaryngol** 1989 Jul–Aug;10(4):282–6
Cut-off values and aspiration risk [letter] Gorback MS. **Anesth Analg** 1989 Sep;69(3):417
Pulmonary disease in progressive systemic sclerosis. A complication of gastroesophageal reflux and occult aspiration? Johnson DA, et al. **Arch Intern Med** 1989 Mar; 149(3):589–93
Aspiration pneumonitis following electroconvulsive therapy in patients with gastroparesis. Zibrak JD, et al. **Biol Psychiatry** 1988 Nov;24(7):812–4
Fatal pulmonary aspiration of oral activated charcoal. Menzies DG, et al. **BMJ** 1988 Aug 13;297(6646):459–60
Infectious mononucleosis complicated by necrotizing epiglottitis, dysphagia, and pneumonia. Biem J, et al. **Chest** 1989 Jul;96(1):204–5
Charcoal lung. Bronchiolitis obliterans after aspiration of activated charcoal. Elliott CG, et al. **Chest** 1989 Sep; 96(3):672–4
Vena caval penetration by gastric ulcer: massive hemorrhage and embolization of gastric contents to lungs. Palmer RC. **J Clin Gastroenterol** 1989 Aug;11(4):455–7
Atypical legionellosis: isolation of Legionella pneumophila serogroup 1 from a patient with aspiration pneumonia. Wright JB, et al. **J Hosp Infect** 1989 Feb;13(2):187–90
Neurologic disorders and aspiration. Brin MF, et al. **Otolaryngol Clin North Am** 1988 Nov;21(4):691–9 (35 ref.)
Near fatal aspiration of a candy pacifier. Ramsey KP, et al. **Pediatrics** 1989 Jul;84(1):126–7
No elimination of aspiration pneumonia in neurologically disabled patients with feeding gastrostomy. Hassett JM, et al. **Surg Gynecol Obstet** 1988 Nov;167(5):383–8
[Aspiration pneumonia caused by an alternative drug] Handest P. **Ugeskr Laeger** 1989 Jan 2;151(1):31–2 (Eng. Abstr.) (Dan)
[Digestive and respiratory complications in enteral nutrition] Rampal P, et al. **Ann Gastroenterol Hepatol (Paris)** 1988 Nov;24(6):297–300 (35 ref.) (Eng. Abstr.) (Fre)
[Mendelson's syndrome in obstetrics. History or fact?] Torrielli R, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(1):93–8 (26 ref.) (Eng. Abstr.) (Fre)
[Cinematographic study of the pathologic mechanisms of aspiration pneumonia] Hannig C, et al. **ROFO** 1989 Mar; 150(3):260–7 (Eng. Abstr.) (Ger)
[Increasing incidence of childhood accidents with lamp oil] Rowedder E. **Schweiz Rundsch Med Prax** 1988 Sep 13; 77(37):969–72 (Eng. Abstr.) (Ger)
[Aspiration pneumonia in newborn infants with atresia of the esophagus] Babliak DE, et al. **Khirurgiia (Mosk)** 1988 Jul; (7):12–7 (Eng. Abstr.) (Rus)
[A case of lipoid pneumonia in a 2-month-old infant] Vázquez León G, et al. **An Esp Pediatr** 1988 Aug; 29(2):166–8 (Spa)

METABOLISM

Pulmonary phospholipid accumulation distal to an obstructed bronchus. A morphologic study. Verbeken EK, et al. **Arch Pathol Lab Med** 1989 Aug;113(8):886–90
Conjugated diene production after airway acid aspiration. Stothert JC Jr, et al. **Prog Clin Biol Res** 1989;299:69–74
Chemotactic factor generation and cell accumulation in acute lung injury induced by endotracheal acid instillation. Ishii Y, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jul;37(1):65–70

PATHOLOGY

Acid aspiration in primates (a surprising experimental result) [letter] Raidoo DM, et al. **Anaesth Intensive Care** 1988 Aug; 16(3):375–6
Aspiration pneumonia, necrotizing pneumonia, and lung abscess. Pennza PT. **Emerg Med Clin North Am** 1989 May; 7(2):279–307 (58 ref.)
[Forensic medicine and morphologic aspects of fatal amniotic fluid aspiration] Althoff H, et al. **Z Rechtsmed** 1989; 102(1):11–23 (Eng. Abstr.) (Ger)
[The histomorphology of granulomatous lipid pneumonia due to dietary fat aspiration in achalasia of the esophagus (megaesophagus)] Jäger J, et al. **Zentralbl Allg Pathol** 1988; 134(7):681–6 (Eng. Abstr.) (Ger)

PHYSIOPATHOLOGY

Hemodynamic effects of nifedipine in a canine model of acid aspiration. Griffeth JK, et al. **Anesth Analg** 1988 Dec; 67(12):1166–8
Acute acid aspiration lung injury in the rat: biphasic pathogenesis. Kennedy TP, et al. **Anesth Analg** 1989 Jul; 69(1):87–92

PREVENTION & CONTROL

Does gastrostomy and fundoplication prevent aspiration pneumonia in mentally retarded persons? Bui HD, et al. **Am J Ment Retard** 1989 Jul;94(1):16–9
Comparison of the effects of famotidine and ranitidine on gastric secretion in patients undergoing elective surgery. Escolano F, et al. **Anaesthesia** 1989 Mar;44(3):212–5
Prophylaxis against acid aspiration syndrome. Single oral dose of H2-antagonist on the evening before elective surgery. Gallagher EG, et al. **Anaesthesia** 1988 Dec; 43(12):1011–4
Fatal pulmonary aspiration of oral activated charcoal [letter] **BMJ** 1988 Oct 8;297(6653):918–9
Use of i.m. ranitidine for the prophylaxis of aspiration pneumonitis in obstetrics. Colman RD, et al. **Br J Anaesth** 1988 Dec;61(6):720–9
Awake fibreoptic intubation in the patient at high risk of aspiration. Ovassapian A, et al. **Br J Anaesth** 1989 Jan; 62(1):13–6
Reducing the risk of aspiration pneumonitis. Gonzalez ER, et al. **DICP** 1989 Mar;23(3):203–8 (51 ref.)
The use of roxatidine acetate in fasting patients prior to induction of anaesthesia as prophylaxis against the acid

aspiration syndrome. Tryba M, et al. **Drugs** 1988;35 Suppl 3:20–4

Avoiding the risk of aspiration in intubated infants. Brand JM, et al. **J Am Osteopath Assoc** 1989 Feb;89(2):175–6

Routine H2-receptor antagonists before elective surgery? [editorial] **Lancet** 1989 Jun 17;1(8651):1363–4

Comparative study of famotidine and metoclopramide alone or combined for prophylaxis of aspiration pneumonitis. Chan-Liao DM, et al. **Ma Tsui Hsueh Tsa Chi** 1988 Jun; 26(2):139–46

Evaluation of microleakage due to cuffs of endotracheal tubes during positive end-expiratory pressure ventilation. Wang YP, et al. **Ma Tsui Hsueh Tsa Chi** 1989 Mar;27(1):39–42

Usefulness of acid and gastric juice secretion decreasing action of cimetidine in anaesthesia for the prevention of aspiration. Takács G. **Ther Hung** 1989;37(1):43–5

[Intraoperative, direct and continuous measurement of stomach pH following pretreatment with ranitidine or sodium citrate] Kuster M, et al. **Anaesthesist** 1989 Feb; 38(2):59–64 (Eng. Abstr.) **(Ger)**

[X-ray diagnosis of the upper gastrointestinal tract at risk for aspiration using a nonionic iso-osmolar contrast medium] Gmeinwieser J, et al. **Rontgenpraxis** 1988 Oct; 41(10):361–6 **(Ger)**

[The combination of ranitidine and metoclopramide using the intravenous route for prevention of the acid aspiration syndrome in elective surgery. Evaluation of the effective period of protection] D'Este JP, et al.
Rev Esp Anestesiol Reanim 1988 Nov–Dec;35(6):301–7 (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

[Very peculiar bilateral parenchymatous opacities: lipoid pneumonia] Monod B, et al. **Rev Pneumol Clin** 1988; 44(4):205–7 **(Fre)**

RADIONUCLIDE IMAGING

Detection of pulmonary aspiration in children by radionuclide "salivagram". Heyman S, et al.
J Nucl Med 1989 May;30(5):697–9

Gastrobronchial reflux in patients on artificial ventilation and antacid therapy [letter] [published erratum appears in Lancet 1989 Mar 4;1(8636:512] Nachtkamp J, et al.
Lancet 1989 Jan 21;1(8630):160–1

The radionuclide salivagram for detecting the pulmonary aspiration of saliva in an infant. Heyman S.
Pediatr Radiol 1989;19(3):208–9

How useful is gastroesophageal reflux scintigraphy in suspected childhood aspiration? [letter] Miller JH.
Pediatr Radiol 1988;19(1):70

SURGERY

Indications for the tracheoesophageal diversion procedure and the laryngotracheal separation procedure. Eisele DW, et al. **Ann Otol Rhinol Laryngol** 1988 Sep–Oct;97(5 Pt 1):471–5 (27 ref.)

Laryngotracheal separation for intractable aspiration. Snyderman CH, et al. **Ann Otol Rhinol Laryngol** 1988 Sep–Oct;97(5 Pt 1):466–70 (23 ref.)

Intractable aspiration in a young child and its surgical management. Violaris NS. **J Laryngol Otol** 1988 Nov; 102(11):1060–1

Surgical management of aspiration. Blitzer A, et al.
Otolaryngol Clin North Am 1988 Nov;21(4):743–50 (40 ref.)

THERAPY

A retrospective survey of treatment and mortality in aspiration pneumonia. Hickling KG, et al.
Intensive Care Med 1988;14(6):617–22 (40 ref.)

Treatment of canine aspiration pneumonitis: fluid volume reduction vs. fluid volume expansion. Long R, et al.
J Appl Physiol 1988 Oct;65(4):1736–44

Aspiration pneumonia. Medical management. Kirsch CM, et al. **Otolaryngol Clin North Am** 1988 Nov;21(4):677–89 (105 ref.)

VETERINARY

Diagnostic exercise: pneumonia in a rat. Dixon D, et al.
Lab Anim Sci 1988 Dec;38(6):727–8

PNEUMONIA, ATYPICAL INTERSTITIAL, OF CATTLE

COMPLICATIONS

[Atypical interstitial pneumonia (AIP) in calves and young cattle in Schleswig-Holstein in conjunction with an infection by the bovine respiratory syncytial virus (BRSV)] Appel G, et al. **DTW** 1989 Apr;96(4):226–8 (Eng. Abstr.) **(Ger)**

PNEUMONIA, EOSINOPHILIC see **PULMONARY EOSINOPHILIA**

PNEUMONIA, INTERSTITIAL see **PULMONARY FIBROSIS**

PNEUMONIA, INTERSTITIAL PLASMA CELL see **PNEUMONIA, PNEUMOCYSTIS CARINII**

PNEUMONIA, LIPID see under **PNEUMONIA, ASPIRATION**

PNEUMONIA, LOBAR

[Pneumococcal pneumonia: a report of 100 cases] Zhang XP, et al. **Chung Hua Nei Ko Tsa Chih** 1989 Jan;28(1):11–4, 60–1 (Eng. Abstr.) **(Chi)**

COMPLICATIONS

Rhabdomyolysis with pneumococcal pneumonia: a report of two cases. Hroncich ME, et al. **Am J Med** 1989 Apr; 86(4):467–8

Bacteremia in febrile children with lobar pneumonia and leukocytosis. Bonadio WA. **Pediatr Emerg Care** 1988 Dec; 4(4):241–2

Empyema in pneumococcal bacteremia [letter] Gransden WR, et al. **Rev Infect Dis** 1988 Nov–Dec;10(6):1227–8

Recurrent lobar pneumonia associated with idiopathic Eaton-Lambert syndrome. Wathen CG, et al. **Thorax** 1988 Jul;43(7):574–5

[Adult respiratory distress syndrome, a manifestation of severe pneumococcal infection] Thoreux PH, et al.
Rev Mal Respir 1989;6(3):261–4 (Eng. Abstr.) **(Fre)**

[Stevens-Johnson syndrome with a fulminant course] Karkowski MK, et al. **Wiad Lek** 1988 Mar 1;41(5):317–9 (Eng. Abstr.) **(Pol)**

DIAGNOSIS

Latex agglutination test for diagnosing pneumococcal pneumonia in children in developing countries. O'Neill KP, et al. **BMJ** 1989 Apr 22;298(6680):1061–4

Pneumonia due to Legionella pneumophila and pneumococcal pneumonia: similarities and differences on presentation. Granados A, et al. **Eur Respir J** 1989 Feb; 2(2):130–4

Bacterial pneumonia in the elderly. Bentley DW.
Hosp Pract [Off] 1988 Dec 15;23(12):99–104, 107–9, 114–6 (6 ref.)

DRUG THERAPY

Empirical treatment of pneumococcal pneumonia in Spain [letter] Manresa F, et al. **Lancet** 1989 Jun 10;1(8650):1338–9

Can community health workers deal with pneumonia? Rai NK, et al. **World Health Forum** 1988;9(2):221–8

[Clinico-immunologic effectiveness of chlorophyllypt in the treatment of acute destructive pneumonia] Simvolokov SI, et al. **Klin Med (Mosk)** 1989 Feb;67(2):108–12 (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

Increased risk of bacterial pneumonia in HIV-infected intravenous drug users without AIDS. Selwyn PA, et al. **Aids** 1988 Aug;2(4):267–72

Bacteremic pneumococcal pneumonia in Stockholm, Sweden, in 1984. Ortqvist A, et al. **Scand J Infect Dis** 1988; 20(4):451–2

ETIOLOGY

[Serious infections in alcoholics. 1. Bacteremia, lobar pneumococcal pneumonia and pneumococcal meningitis in alcoholics 1974–1987] Siboni A, et al. **Ugeskr Laeger** 1989 Feb 6;151(6):374–6 (Eng. Abstr.) **(Dan)**

[Pneumococcal pneumonia and septic shock in the newborn infant] Larchet M, et al. **Pediatrie** 1988;43(6):515–8 (Eng. Abstr.) **(Fre)**

[A case of preoperative esophageal cancer developing lobar pneumonia due to MRSA infection of the catheter] Inoue H, et al. **Nippon Geka Gakkai Zasshi** 1988 Jul;89(7):1122–6 (Eng. Abstr.) **(Jpn)**

[Salmonella typhimurium pneumonia. Report of a case] Ferreira IM, et al. **Rev Paul Med** 1988 Mar–Apr; 106(2):109–12 (Eng. Abstr.) **(Por)**

IMMUNOLOGY

Rapid detection of pneumococcal antigens in sputa in patients with community-acquired pneumonia by coagglutination. Zhang XP, et al. **Med Microbiol Immunol (Berl)** 1988; 177(6):333–8 (11 ref.)

Pneumococcal antibody concentrations in young Papua New Guinean Highland children with pneumonia. Witt CS, et al. **Pediatr Infect Dis J** 1989 Aug;8(8):533–4

MICROBIOLOGY

The role of percutaneous lung aspiration in the bacteriological diagnosis of pneumonia in adults. Barnes DJ, et al. **Aust N Z J Med** 1988 Oct;18(6):754–7

Community-acquired pneumonia and septic arthritis caused by penicillin-resistant pneumococci. Fullerton RC, et al. **J Tenn Med Assoc** 1989 Jan;82(1):13–4

Streptococcus acidominimus infections in a human. Akaike T, et al. **Jpn J Med** 1988 Aug;27(3):317–20

MORTALITY

Community-acquired pneumonia of diverse aetiology: prognostic features in patients admitted to an intensive care unit and a "severity of illness" core. Feldman C, et al.
Intensive Care Med 1989;15(5):302–7

[An analysis of the therapeutic and diagnostic measures taken in croupous pneumonia with a fatal outcome] Golikov AP, et al. **Sov Med** 1988;(12):67–70 **(Rus)**

PATHOLOGY

[Morphofunctional characteristics of the lungs in experimental mycoplasmal and pneumococcal infection] Tomson VV, et al. **Probl Tuberk** 1988;(8):41–5 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Pneumococcal pneumonia with abdominal pain. Esposito AL. **Hosp Pract [Off]** 1989 Apr 30;24(4A):61–7, 70–2

Pneumococcal pneumonia. Coonrod JD.
Semin Respir Infect 1989 Mar;4(1):4–11 (50 ref.)

PREVENTION & CONTROL

Correction: pneumococcal vaccine and pneumococcal pneumonia [letter] Austrian R. **Ann Intern Med** 1988 Nov 1;109(9):762–3

Leads from the MMWR. Recommendations of the Immunization Practices Advisory Committee. Pneumococcal polysaccharide vaccine. **JAMA** 1989 Mar 3;261(9):1265–7 (41 ref.)

Pneumococcal polysaccharide vaccine. **MMWR** 1989 Feb 10;38(5):64–8, 73–6 (41 ref.)

Vaccination against influenza and pneumococcal disease—are we doing our best? Morris A, et al. **N Z Med J** 1989 Apr 26;102(866):193–5

Lectins and their role in a new polyvalent bacterial vaccine against ARI. Luther P, et al.
Zentralbl Bakteriol Mikrobiol Hyg [A] 1988 Nov; 270(1–2):16–21

RADIOGRAPHY

An unusual neonatal case presentation: Streptococcus pneumoniae pneumonia with abscess and pneumatocele formation. Purdy GD, et al. **J Perinatol** 1987 Fall; 7(4):378–81 (16 ref.)

SURGERY

[Possibilities of bronchoscopy in the treatment of acute destructive pneumonia and in the prevention of its complications] Manerov FK, et al. **Pediatriia** 1988;(4):36–40 (Eng. Abstr.) **(Rus)**

PNEUMONIA, MYCOPLASMA

[Mycoplasma pneumoniae infections] Levieil ML, et al.
Rev Pneumol Clin 1989;45(1):5–13 (34 ref.) (Eng. Abstr.) **(Fre)**

COMPLICATIONS

IgM binding to sialosyllactosaminylparagloboside in a patient with polyradiculoneuropathy due to Mycoplasma pneumoniae infection. Inuzuka T, et al.
Acta Neurol Scand 1988 Jul;78(1):53–7

Concomitant Mycoplasma pneumoniae and virus infection in children with acute lower respiratory infections. Komatsu S, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Jun; 30(3):276–81 (10 ref.)

The clinical observation of M. pneumoniae infections among children in Asahi General Hospital with special reference to mixed viral infections. Sakurai N, et al.
Acta Paediatr Jpn Overseas Ed 1988 Jun;30(3):267–75

Mesothelial cell proliferation and localized pleural pseudotumour associated with Mycoplasma pneumoniae infection. Abo W, et al. **Eur J Pediatr** 1988 Oct;148(1):62–3

Mononeuritis multiplex with brachial plexus neuropathy coincident with Mycoplasma pneumoniae infection. Kidron D, et al. **Eur Neurol** 1989;29(2):90–2

Erythema multiforme minor associated with Mycoplasma pneumoniae infection. Henkin Y, et al. **Isr J Med Sci** 1989 Aug;25(8):456–8

A TIA-like syndrome associated with Mycoplasma pneumoniae infection. Maytal J, et al. **Pediatr Neurol** 1985 Sep–Oct;1(5):308–10

Post-infectious leukoencephalopathy as a complication of Mycoplasma pneumoniae infection. Nara T, et al.
Pediatr Neurol 1987 May–Jun;3(3):171–3 (10 ref.)

Psychosis in mycoplasma infection. Moor S, et al.
Postgrad Med J 1989 Feb;65(760):96–7

[Measles, still a problem today?] Roosen YM, et al.
Ned Tijdschr Geneeskd 1989 May 20;133(20):1009–11 **(Dut)**

[Mycoplasma pneumoniae respiratory infection in a child presenting with positive HIV 1 serology (letter)] Brouard J, et al. **Arch Fr Pediatr** 1989 Feb;46(2):155–6 **(Fre)**

[Severe neurologic manifestations of Mycoplasma pneumoniae infections (letter)] Hoen B, et al.
Presse Med 1989 Feb 11;18(5):229–30 **(Fre)**

[Acute renal insufficiency in Mycoplasma pneumoniae pneumonia (letter)] Masson P, et al. **Presse Med** 1988 Nov 12;17(40):2139–40 **(Fre)**

[Hemolytic anemia and myocarditis caused by Mycoplasma pneumoniae infection] Wróblewska-Kałużewska M, et al. **Wiad Lek** 1989 Dec 1;41(23):1603–6 (Eng. Abstr.) **(Pol)**

[Extrapulmonary complications in infection caused by Mycoplasma pneumoniae] Wróblewska-Kałużewska M.
Wiad Lek 1988 Jun 15;41(12):791–7 (39 ref.) (Eng. Abstr.) **(Pol)**

DIAGNOSIS

Mycoplasma pneumoniae pneumonia. Mansel JK, et al. **Chest** 1989 Mar;95(3):639–46 (71 ref.)

Development of urease conjugated enzyme-linked immunosorbent assays (ELISA) for the detection of IgM and IgG antibodies against Mycoplasma pneumoniae in human sera. Chia WK, et al. **Diagn Microbiol Infect Dis** 1988 Oct;11(2):101–7

Laboratory diagnosis of Mycoplasma pneumoniae infection. 2. Comparison of methods for the direct detection of specific antigen or nucleic acid sequences in respiratory exudates. Harris R, et al. **Epidemiol Infect** 1988 Dec; 101(3):685–94

Laboratory diagnosis of Mycoplasma pneumoniae infection. 1. Direct detection of antigen in respiratory exudates by enzyme immunoassay. Kok TW, et al. **Epidemiol Infect** 1988 Dec;101(3):669–84

MRI appearances of the CNS manifestations of Mycoplasma pneumoniae: a report of two cases. Francis DA, et al. **J Neurol** 1988 Sep;235(7):441–3

Psittacosis pneumonia. Stubbs R, et al. **J Tenn Med Assoc** 1989 Apr;82(4):189–90 (9 ref.)

Detection of specific IgM antibodies for the diagnosis of Mycoplasma pneumoniae infections: a clinical evaluation. Vikerfors T, et al. **Scand J Infect Dis** 1988;20(6):601–10

[Mycoplasma pneumoniae infections in children] Roorda RJ, et al. **Ned Tijdschr Geneeskd** 1989 Mar 11;133(10):481–3 (20 ref.) **(Dut)**

[Respiratory Mycoplasma pneumoniae infections in the acquired immunodeficiency syndrome (letter)] Petitjean J, et al. **Presse Med** 1988 Oct 8;17(34):1762 **(Fre)**

[Atypical pneumonia with simultaneous acute hemolysis in a 33-year- old patient] Sauter G, et al. **Internist (Berlin)** 1989 Feb;30(2):120–3 **(Ger)**

[Epidemic occurrence of pneumonia caused by Mycoplasma pneumoniae in children] Iwańczak F, et al. **Kinderarztl Prax** 1988 Nov;56(11):539–46 (Eng. Abstr.) **(Ger)**

[The first isolation of Mycoplasma pneumoniae in Panama] de Moreno NO, et al. **Rev Med Panama** 1989 May; 14(2):99–103 (Eng. Abstr.) **(Spa)**

DRUG THERAPY

Longitudinal study on the therapy of Mycoplasma pneumoniae infections with ciprofloxacin on Syrian hamsters. Furneri P, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):181

[Treatment of atypical pneumonia with josamycin] Mensa J, et al. **Med Clin (Barc)** 1989 Mar 4;92(8):285–7 (Eng. Abstr.) **(Spa)**

ENZYMOLOGY

Serum adenosine deaminase activity with Mycoplasma pneumoniae [letter] Nishikawa H, et al. **Chest** 1988 Dec; 94(6):1315

EPIDEMIOLOGY

Laboratory evidence of human viral and selected non-viral infections in Canada–1987. Parker C, et al. **Can Dis Wkly Rep** 1988 Sep 17;14(37):165–8 **(Eng, Fre)**

Changes in the epidemiological pattern of Mycoplasma pneumoniae infections in Denmark. A 30 years survey. Lind K, et al. **Epidemiol Infect** 1988 Oct;101(2):377–86

Mycoplasmal pneumonia—review of 202 hospitalized cases in Tokai University Hospital from 1975 to 1987. Takakura I. **Tokai J Exp Clin Med** 1988 Aug;13(3):129–35 (4 ref.)

[Survey of the antibody level of Mycoplasma pneumonia in healthy population in Yunnan Province] Dou HF. **Chung Hua Liu Hsing Ping Hsueh Tsa Chih** 1988 Aug; 9(4):206–9 (Eng. Abstr.) **(Chi)**

[Incidence of Mycoplasma pneumoniae infections (letter)] Barzó P, et al. **Orv Hetil** 1989 Jun 25;130(26):1405 **(Hun)**

[Epidemiology of pneumonia caused by Mycoplasma pneumoniae in children] Iwańczak F, et al. **Pol Tyg Lek** 1988 Jun 27;43(26):846–9 (Eng. Abstr.) **(Pol)**

[Mycoplasma pneumoniae cultured from a healthy population aged 8 to 16] Usluer G, et al. **Mikrobiyol Bul** 1987 Jul; 21(3):206–11 (Eng. Abstr.) **(Tur)**

ETIOLOGY

Short-term exposure to nitrogen dioxide enhances susceptibility to murine respiratory mycoplasmosis and decreases intrapulmonary killing of Mycoplasma pulmonis. Parker RF, et al. **Am Rev Respir Dis** 1989 Aug; 140(2):502–12

IMMUNOLOGY

Comparative studies of three serologic methods for the measurement of Mycoplasma pneumoniae antibodies. Lee SH, et al. **Am J Clin Pathol** 1989 Sep;92(3):342–7

Preparative electroelution of specific protein antigens from Mycoplasma pneumoniae: use in an enzyme-linked immunosorbent assay (ELISA). Papierok G, et al. **Ann Inst Pasteur Microbiol** 1988 Sep-Oct;139(5):589–603

Binding sites of attachment-inhibiting monoclonal antibodies and antibodies from patients on peptide fragments of the Mycoplasma pneumoniae adhesin. Jacobs E, et al. **Infect Immun** 1989 Mar;57(3):685–8

Total and specific IgE responses in the acute and recovery phases of respiratory infections in children. Nagayama Y, et al. **J Asthma** 1987;24(3):159–66

Immunological reaction of guinea-pigs following intranasal Mycoplasma pneumoniae infection and immunization with the 168 kDa adherence protein. Jacobs E, et al. **J Gen Microbiol** 1988 Feb;134 (Pt 2):473–9

Incidence of antibodies to Mycoplasma pneumoniae at a Veterans Administration Medical Center. Reiber DT, et al. **J Okla State Med Assoc** 1989 May;82(5):213–5

Host reactions to Mycoplasma pneumoniae infections in guinea-pigs preimmunized systemically with the adhesin of this pathogen. Jacobs E, et al. **Microb Pathog** 1988 Oct; 5(4):259–65

Coexisting anti-I and anti-F1/Gd cold agglutinins in infections by Mycoplasma pneumoniae. König AL, et al. **Vox Sang** 1988;55(3):176–80

[Simultaneous occurrence of anti-I and anti-F1/Gd cold agglutinins in Mycoplasma pneumoniae infections] König AL, et al. **Beitr Infusionther** 1988;21:247–50 **(Ger)**

[Anti-mycoplasma immune response and associated pathologies in childhood] Riva C, et al. **Minerva Pediatr** 1988 Sep;40(9):545–9 (Eng. Abstr.) **(Ita)**

[Serology in lower respiratory tract infections. Virus, mycoplasma and ornithosis serology] Sundsfjord A, et al. **Tidsskr Nor Laegeforen** 1988 Oct 30;108(30):2719–20 (Eng. Abstr.) **(Nor)**

MICROBIOLOGY

Serological evidence of viral or Mycoplasma pneumoniae infection in acute maxillary sinusitis. Savolainen S, et al. **Eur J Clin Microbiol Infect Dis** 1989 Feb;8(2):131–5

Pneumonia caused by Mycoplasma pneumoniae and the TWAR agent. Atmar RL, et al. **Semin Respir Infect** 1989 Mar;4(1):19–31 (73 ref.)

[Studies on the infection with Mycoplasma pneumoniae. (I)—Isolation of M. pneumoniae and clinicopathological analysis] Baba M, et al. **Rinsho Byori** 1988 Sep; 36(9):1095–100 **(Jpn)**

PATHOLOGY

[Morphofunctional characteristics of the lungs in experimental mycoplasmal and pneumococcal infection] Tomson VV, et al. **Probl Tuberk** 1988;(8):41–5 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Viral and Mycoplasma pneumoniae pneumonias in school-age children: three-year follow-up of respiratory function. Todisco T, et al. **Pediatr Pulmonol** 1989; 6(4):232–6

VETERINARY

Mycoplasma capricolum in an outbreak of polyarthritis and pneumonia in goats. Bölske G, et al. **Acta Vet Scand** 1988; 29(3–4):331–8

Protection against enzootic pneumonia of pigs: intraperitoneal inoculation with live LKR strain of Mycoplasma hyopneumoniae. Lloyd LC, et al. **Aust Vet J** 1989 Jan;66(1):9–12

Evaluation of tiamulin for treatment of mycoplasmal pneumonia in swine. Ross RF, et al. **J Am Vet Med Assoc** 1988 Aug 15;193(4):441–6

An epizootic of Mycoplasma ovipneumoniae infection in captive Dall's sheep (Ovis dalli dalli). Black SR, et al. **J Wildl Dis** 1988 Oct;24(4):627–35

Effect of a new macrolide antibiotic (tilmicosin) on pneumonia experimentally induced in calves by Mycoplasma bovis and Pasteurella haemolytica. Gourlay RN, et al. **Res Vet Sci** 1989 Jul;47(1):84–9

Immunoblotting analysis of antibody response in swine experimentally inoculated with Mycoplasma hyopneumoniae. Mori Y, et al. **Vet Immunol Immunopathol** 1988 Oct;19(3–4):239–50

Increased severity of calf pneumonia associated with the appearance of Mycoplasma bovis in a rearing herd. Gourlay RN, et al. **Vet Rec** 1989 Apr 22;124(16):420–2

Isolation of M. pneumoniae from monkeys (Presbitus cristata). Stipkovits L, et al. **Zentralbl Veterinarmed [B]** 1989 Mar;36(2):134–8

[Fluorescence serological and cul..re detection of Mycoplasma hyopneumoniae and Mycoplasma hyorhinis in swine lungs] Binder A, et al. **Berl Munch Tierarztl Wochenschr** 1989 Jan 1;102(1):11–3 (Eng. Abstr.) **(Ger)**

PNEUMONIA, PNEUMOCOCCAL see **PNEUMONIA, LOBAR**

PNEUMONIA, PNEUMOCYSTIS CARINII

A clinical, histopathologic, and electron microscopic study of Pneumocystis carinii choroiditis. Rao NA, et al. **Am J Ophthalmol** 1989 Mar 15;107(3):218–28

The Society of Protozoologists and the National Institute of Allergy and Infectious Diseases. Workshop on Pneumocystis carinii. Bristol, England, U.K., July 19–22, 1988. **J Protozool** 1989 Jan-Feb;36(1):1S–80S

Animal models for Pneumocystis carinii pneumonia. Hughes WT. **J Protozool** 1989 Jan-Feb;36(1):41–5 (39 ref.)

Pneumocystis carinii pneumonia in patients with the acquired immunodeficiency syndrome: pathophysiology, therapy, and prevention. Montgomery AB. **Semin Respir Infect** 1989 Jun;4(2):102–10 (44 ref.)

[Current status of research on pneumocystis carinii pneumonia] Yuan JY. **Chung Hua I Hsueh Tsa Chih** 1988 Sep;68(9):537–40 (27 ref.) **(Chi)**

[Pneumocystosis] Libanore M, et al. **Minerva Med** 1988 Sep; 79(9):737–52 (234 ref.) (Eng. Abstr.) **(Ita)**

BLOOD

[Autoimmunity and AIDS. I. Correlation between anti-cardiolipin antibodies and Pneumocystis carinii pneumonia] Di Prima MA, et al. **Medicina (Firenze)** 1988 Oct-Dec;8(4):423–5 (Eng. Abstr.) **(Ita)**

COMPLICATIONS

Absence of pneumocystosis in Ugandan AIDS patients [letter] [published erratum appears in Aids 1989 Mar;3(3):preceding back cover] Serwadda D, et al. **Aids** 1989 Jan;3(1):47–8

Prognostic factors and life expectancy in children with acquired immunodeficiency syndrome and Pneumocystis carinii pneumonia. Bernstein LJ, et al. **Am J Dis Child** 1989 Jul;143(7):775–8

Pneumocystis carinii otitis media. Smith MA, et al. **Am J Med** 1988 Nov;85(5):745–6

Controversies in pulmonary medicine. Presumed Pneumocystis carinii pneumonia should be treated empirically in patients with the acquired immunodeficiency syndrome. Luce JM, et al. **Am Rev Respir Dis** 1988 Oct; 138(4):1076–7

Necrotizing Pneumocystis carinii vasculitis associated with lung necrosis and cavitation in a patient with acquired immunodeficiency syndrome. Liu YC, et al. **Arch Pathol Lab Med** 1989 May;113(5):494–7

Occult AIDS: pneumocystis carinii pneumonia in elderly people. Hargreaves MR, et al. **BMJ** 1988 Sep 17; 297(6650):721–2

Occult AIDS [letter] Vinti H, et al. **BMJ** 1988 Nov 5; 297(6657):1196–7

Bronchoalveolar lavage eosinophilia associated with Pneumocystis carinii pneumonitis in AIDS patients. Comparative study with non-AIDS patients. Fleury-Feith J, et al. **Chest** 1989 Jun;95(6):1198–201

Acute respiratory failure secondary to Pneumocystis carinii pneumonia in the acquired immunodeficiency syndrome. A potential role for systemic corticosteroids. Montaner JS, et al. **Chest** 1989 Apr;95(4):881–4

Eosinophilic alveolitis [letter] Smith RL, et al. **Chest** 1989 Aug;96(2):445

Miliary PCP in AIDS. Wasser LS, et al. **Chest** 1989 Sep; 96(3):693–5

An acute exacerbation of P. carinii pneumonia. Epstein L, et al. **Hosp Pract [Off]** 1989 Feb 15;24(2):163–4

Severe exercise hypoxaemia with normal or near normal X-rays: a feature of Pneumocystis carinii infection. Smith DE, et al. **Lancet** 1988 Nov 5;2(8619):1049–51

Humoral and cellular responses to Pneumocystis carinii, CMV, and herpes simplex in patients with AIDS and in controls. Hofmann B, et al. **Scand J Infect Dis** 1988; 20(4):389–94

Bronchoscopy of symptom free patients infected with human immunodeficiency virus for detection of pneumocystosis. Lundgren JD, et al. **Thorax** 1989 Jan;44(1):68–9

Disseminated infection of Pneumocystis carinii in a patient with the acquired immunodeficiency syndrome. Matsuda S, et al. **Virchows Arch [A]** 1989;414(6):523–7

[The association of pneumocystosis and pulmonary toxoplasmosis in a female patient with HIV infection (letter)] Roux P, et al. **Rev Pneumol Clin** 1989;45(1):42 **(Fre)**

[Aspecific and lymphocytic interstitial pneumonia in HIV infections] Speich R, et al. **Schweiz Med Wochenschr** 1989 May 13;119(19):601–12 (Eng. Abstr.) **(Ger)**

[A case from practice (124). Patient: Mr. B. S., born 1949, buyer] Suter D. **Schweiz Rundsch Med Prax** 1988 Dec 20; 77(51):1413–5 **(Ger)**

[Pneumocystis carinii pneumonia in a HTLV-I carrier terminating with acute type of adult T-cell leukemia] Kuwazuru Y, et al. **Rinsho Ketsueki** 1988 Nov; 29(11):2132–5 (Eng. Abstr.) **(Jpn)**

[AIDS and its manifestations in the form of tuberculosis and other pathology of the lungs] Erokhin VV, et al. **Probl Tuberk** 1989;(1):67–71 (49 ref.) **(Rus)**

[Adult respiratory distress in a patient with acquired immunodeficiency syndrome] Verdejo J, et al. **Rev Esp Anestesiol Reanim** 1988 Nov-Dec;35(6):333–6 (Eng. Abstr.) **(Spa)**

[Visceral leishmaniasis and acquired immunodeficiency syndrome [published erratum appears in Sangre (Barc) 1989 Aug;34(4):320)] Vallespí T, et al. **Sangre (Barc)** 1989 Jun; 34(3):241–3 **(Spa)**

DIAGNOSIS

Pneumocystis carinii: rapid diagnosis with the microwave oven [letter] Loughman NT. **Acta Cytol** 1989 May-Jun; 33(3):416–7

Fluorescence microscopy of Papanicolaou-stained bronchoalveolar lavage specimens in the diagnosis of

Pneumocystis carinii [letter] Pfitzer P, et al. **Acta Cytol** 1989 Jul–Aug;33(4):557–9

Atypical presentation of Pneumocystis carinii pneumonia in a patient receiving inhalational pentamidine. Scannell KA. **Am J Med** 1988 Dec;85(6):881–4

In search of shortcuts: definitive and indirect tests in the diagnosis of Pneumocystis carinii pneumonia in AIDS. O'Brien RF. **Am Rev Respir Dis** 1989 Jun;139(6):1324–7

The use of a simple exercise test for the diagnosis of Pneumocystis carinii pneumonia in patients with AIDS. Stover DE, et al. **Am Rev Respir Dis** 1989 Jun; 139(6):1343–6

The use of an indirect fluorescent antibody test for detecting Pneumocystis carinii. Baughman RP, et al. **Arch Pathol Lab Med** 1989 Sep;113(9):1062–5

Use of a monoclonal antibody to detect Pneumocystis carinii in induced sputum and bronchoalveolar lavage fluid by immunoperoxidase staining. Blumenfeld W, et al. **Arch Pathol Lab Med** 1988 Dec;112(12):1233–6

Sputum examination in the diagnosis of Pneumocystis carinii pneumonia in the acquired immunodeficiency syndrome. del Rio C, et al. **Arch Pathol Lab Med** 1988 Dec; 112(12):1229–32

Pneumocystis carinii pneumonia [letter] Ho–Len DO, et al. **BMJ** 1988 Oct 1;297(6652):855

Diagnosis of Pneumocystis carinii pneumonia by induced sputum in a city with moderate incidence of AIDS. O'Brien RF, et al. **Chest** 1989 Jan;95(1):136–8

Use of a rapid differential stain for identifying Pneumocystis carinii in bronchoalveolar lavage fluid. Diagnostic efficacy in patients with AIDS. Tollerud DJ, et al. **Chest** 1989 Mar; 95(3):494–7

Diagnosis of Pneumocystis carinii pneumonia by cytologic evaluation of Papanicolaou–stained bronchial specimens. Dugan JM, et al. **Diagn Cytopathol** 1988;4(2):106–12

Foamy alveolar casts: diagnostic specificity for Pneumocystis carinii pneumonia in bronchoalveolar lavage fluid cytology. Stanley MW, et al. **Diagn Cytopathol** 1988; 4(2):113–5, 112

Diagnosis of Pneumocystis carinii pneumonia. Hopewell PC. **Infect Dis Clin North Am** 1988 Jun;2(2):409–18 (36 ref.)

Diffuse lung infiltration in a homosexual man without AIDS. Pohil R, et al. **J Am Osteopath Assoc** 1988 Sep;88(9):1115–7

Optimal use of the cytocentrifuge for recovery and diagnosis of Pneumocystis carinii in bronchoalveolar lavage and sputum specimens. Gill VJ, et al. **J Clin Microbiol** 1988 Sep;26(9):1641–4

Pneumocystis carinii antigen detection in rat serum and lung lavage. McNabb SJ, et al. **J Clin Microbiol** 1988 Sep; 26(9):1763–71

Rapid separation of Pneumocystis carinii from lung lavage fluids. Pesanti EL, et al. **J Clin Microbiol** 1988 Aug; 26(8):1598–9

Pneumocystis carinii antibody testing. Chatterton JM, et al. **J Clin Pathol** 1989 Aug;42(8):865–8 (18 ref.)

Anticardiolipin antibody in the acquired immunodeficiency syndrome: a marker of Pneumocystis carinii infection? [letter] Di Prima MA, et al. **J Infect** 1989 Jan;18(1):100–1

Diagnosis, treatment and outcome of pneumonia in the acquired immune deficiency syndrome. Gardner TD, et al. **J Infect** 1989 Mar;18(2):111–7

Noninvasive diagnosis of Pneumocystis carinii in the rat using radiolabeled, nonspecific, human polyclonal immunoglobulin. Fishman JA, et al. **J Protozool** 1989 Jan–Feb;36(1):46S–47S

Pneumocystis carinii pneumonia mimicking idiopathic pulmonary fibrosis in a patient with AIDS. Williams J, et al. **J Tenn Med Assoc** 1989 Feb;82(2):74–6

Diagnosis of Pneumocystis carinii pneumonia by non–experts [letter] Dournon E, et al. **Lancet** 1989 Jan 14;1(8629):107–8

Exercise oximetry for early diagnosis of Pneumocystis carinii pneumonia [letter] Faetkenheuer G, et al. **Lancet** 1989 Jan 28;1(8631):222

Early diagnosis of Pneumocystis carinii infection [letter] Thomas SH, et al. **Lancet** 1989 Jan 7;1(8628):43

Case 9–1989: AIDS and a cavitary pulmonary lesion [letter] **N Engl J Med** 1989 Aug 10;321(6):395

67Ga citrate scanning, X–ray computed tomography and chest X–ray in the study of interstitial pneumonia in patients with AIDS. Sabbatani S, et al. **Nucl Med Commun** 1988 Jul;9(7):513–6

Cresyl violet: a rapid, simple, easily interpretable stain for detecting Pneumocystis carinii in sputum. Moas CM, et al. **South Med J** 1989 Aug;82(8):957–9

Rapid and simple metachromatic stain for Pneumocystis carinii. Woosley JT. **South Med J** 1989 Feb;82(2):245–6

Pneumocystis carinii pneumonia in the acquired immunodeficiency syndrome: diagnosis using minilavage samples. Yoo OH, et al. **South Med J** 1989 Jul;82(7):829–32

Novel diagnostic tests for Pneumocystis carinii pneumonia (PCP). Farram E, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2100–2

[Bronchoscopic examination in immuno–compromised host with hypoxemia due to Pneumocystis carinii pneumonia—case report] Chen YM, et al. **Chung Hua I Hsueh Tsa Chih** 1989 Jan;43(1):67–70 (Eng. Abstr.) **(Chi)**

[Pneumocystis carinii pneumonia; diagnostic and therapeutic difficulties] Sliwiński P, et al. **Pneumonol Pol** 1988 Sep; 56(9):422–9 (Eng. Abstr.) **(Pol)**

DRUG THERAPY

Treatment and prophylaxis of Pneumocystis carinii pneumonia. Fischl MA. **Aids** 1988;2 Suppl 1:S143–50 (42 ref.)

Pentamidine for the prevention and treatment of P. carinii pneumonia. Molavi A. **Am Fam Physician** 1989 Jul; 40(1):195–200 (24 ref.)

Fatal acute pancreatitis associated with pentamidine therapy [letter] Kumar S, et al. **Am J Gastroenterol** 1989 Apr; 84(4):451–3

Hypoglycemia and pentamidine [news] Katzin L. **Am J Nurs** 1989 Jan;89(1):14

Efficacy of trimetrexate, a potent lipid–soluble antifolate, in the treatment of rodent Pneumocystis carinii pneumonia. Kovacs JA, et al. **Am J Trop Med Hyg** 1988 Nov; 39(5):491–6

Desensitization to trimethoprim sulfamethoxazole in patients with acquired immune deficiency syndrome and Pneumocystis carinii pneumonia. White MV, et al. **Ann Allergy** 1989 Mar;62(3):177–9

Dapsone, trimethoprim, and sulfamethoxazole plasma levels during treatment of Pneumocystis pneumonia in patients with the acquired immunodeficiency syndrome (AIDS). Evidence of drug interactions. Lee BL, et al. **Ann Intern Med** 1989 Apr 15;110(8):606–11

Aerosolized pentamidine and Pneumocystis carinii pneumonia [letter] Montgomery AB, et al. **Ann Intern Med** 1989 Apr 15;110(8):669

Aerosolized pentamidine [letter] Picca SM. **Ann Intern Med** 1989 Apr 1;110(7):574

Efficacy of DL–alpha–difluoromethylornithine in a rat model of Pneumocystis carinii pneumonia. Clarkson AB Jr, et al. **Antimicrob Agents Chemother** 1988 Aug;32(8):1158–63

Dapsone treatment of Pneumocystis carinii pneumonia in the acquired immunodeficiency syndrome. Mills J, et al. **Antimicrob Agents Chemother** 1988 Jul;32(7):1057–60

Megaloblastic pancytopenia associated with dapsone and trimethoprim treatment of Pneumocystis carinii pneumonia in the acquired immunodeficiency syndrome [letter] McKinsey DS, et al. **Arch Intern Med** 1989 Apr;149(4):965

Mineralocorticoid deficiency in HIV infection [letter; comment] Murphy CE, et al. **BMJ** 1989 Apr 29; 298(6681):1181. **Comment on:** BMJ 1989 Feb 25;298(6672):496–7

AIDS–related Pneumocystis carinii pneumonia successfully treated with dapsone–trimethoprim [letter] Green ST, et al. **Br J Clin Pharmacol** 1988 Oct;26(4):487–8

Torsades de pointes during intravenous pentamidine isethionate therapy. Mitchell P, et al. **Can Med Assoc J** 1989 Jan 15;140(2):173–4

Recurrent ventricular tachycardia due to pentamidine–induced cardiotoxicity. Bibler MR, et al. **Chest** 1988 Dec;94(6):1303–6

Spontaneous pneumothoraces in AIDS patients receiving aerosolized pentamidine [letter] Martinez CM, et al. **Chest** 1988 Dec;94(6):1317–8

Aerosolized pentamidine as second line therapy in patients with AIDS and Pneumocystis carinii pneumonia. Montgomery AB, et al. **Chest** 1989 Apr;95(4):747–50

Reaction after re–exposure to trimethoprim–sulfamethoxazole [letter] Ulstad DR, et al. **Chest** 1989 Apr;95(4):937–8

Pyrimethamine–sulfadiazine for treating Pneumocystis carinii pneumonia and toxoplasmosis in AIDS. Gilman TM, et al. **Clin Pharm** 1989 Feb;8(2):84, 87 (14 ref.)

Treatment of acute Pneumocystis carinii pneumonia with corticosteroids in a patient with acquired immunodeficiency syndrome. Gallacher BP, et al. **Crit Care Med** 1989 Jan;17(1):104–5

Aerosol pentamidine for Pneumocystis carinii pneumonia [letter] Stoner CP. **Drug Intell Clin Pharm** 1988 Nov; 22(11):916–7

Steroids in Pneumocystis carinii pneumonia in HIV seropositive infants [letter] Plebani A, et al. **Eur J Pediatr** 1989 Apr;148(6):579–80

Diamidine use in treatment of Pneumocystis carinii [letter] Miller JM. **Infect Control Hosp Epidemiol** 1989 Aug; 10(8):344

Treatment and prophylaxis of Pneumocystis carinii pneumonia. Masur H, et al. **Infect Dis Clin North Am** 1988 Jun;2(2):419–28 (36 ref.)

The possible role of corticosteroid therapy for pneumocystis pneumonia in the acquired immune deficiency syndrome (AIDS). Walmsley S, et al. **J Acquir Immune Defic Syndr** 1988;1(4):354–60

Pneumocystis carinii pneumonia and its treatment in patients with AIDS. Gazzard BG. **J Antimicrob Chemother** 1989 Jan;23 Suppl A:67–75 (26 ref.)

An improved rat model to study efficacy of drugs for treatment or prophylaxis of Pneumocystis carinii pneumonia. Barlett MS, et al. **J Protozool** 1989 Jan–Feb; 36(1):77S–78S

Treatment of experimental Pneumocystis carinii pneumonia with analogs of pentamidine. Tidwell RR, et al. **J Protozool** 1989 Jan–Feb;36(1):74S–76S

Survival experience among patients with AIDS receiving zidovudine. Follow–up of patients in a compassionate plea program. Creagh–Kirk T, et al. **JAMA** 1988 Nov 25; 260(20):3009–15

Two cases of Pneumocystis carinii pneumonia occurred in human immunodeficiency virus infected patients: supplemental treatment with aerosolised pentamidine isethionate. Goto H, et al. **Jpn J Med** 1989 Jan–Feb; 28(1):105–9

Pneumocystis Carinii pneumonia in an AIDS patient with dramatic response to inadvertent steroid therapy—a case report. Tsai MS, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1989 Jun; 5(6):345–9

Therapy of pneumocystis carinii pneumonia after trimethoprim–sulfamethoxazole desensitization. Papakonstantinou G, et al. **Klin Wochenschr** 1989 Mar 1; 67(5):316

Pentamidine and hypoglycaemia [letter] Lingenfelser T, et al. **Lancet** 1989 Aug 19;2(8660):458

Pentamidine salts [letter] Mongiardo N, et al. **Lancet** 1989 Jul 8;2(8654):108

Inhaled pentamidine in Pneumocystis carinii pneumonia [letter] Pierone G, et al. **Lancet** 1989 Sep 2;2(8662):559

Clindamycin/primaquine for Pneumocystis carinii pneumonia [letter] Ruf B, et al. **Lancet** 1989 Sep 9;2(8663):626–7

Clindamycin with primaquine for Pneumocystis carinii pneumonia. Toma E, et al. **Lancet** 1989 May 13; 1(8646):1046–8

Trimetrexate for Pneumocystis carinii pneumonia. **Med Lett Drugs Ther** 1989 Jan 27;31(784):5–6

Intravenous saline as adjunctive therapy for patients with AIDS given pentamidine [letter] Goldfarb J. **N Engl J Med** 1989 May 11;320(19):1281

Unproved AIDS drug is made available for limited use [news] Shulman S. **Nature** 1989 Feb 9;337(6207):493

Management of Pneumocystis carinii pneumonia in patients with AIDS and other conditions: experience in a Philadelphia University Teaching Hospital. Furio MM, et al. **Pharmacotherapy** 1988;8(4):221–3

Eflornithine for the treatment of Pneumocystis carinii pneumonia in patients with the acquired immunodeficiency syndrome: a preliminary review. Sahai J, et al. **Pharmacotherapy** 1989;9(1):29–33 (57 ref.)

Aerosolized pentamidine in HIV. Promising new treatment for Pneumocystis carinii pneumonia. Sarti GM. **Postgrad Med** 1989 Aug;86(2):54–6, 59–60, 63, passim (45 ref.)

Does cyclosporin A adversely affect Pneumocystis carinii infection? McGonigle RJ, et al. **Postgrad Med J** 1988 Sep; 64(755):659–62

FDA approves treatment IND status for pentamidine. **Public Health Rep** 1989 Jul–Aug;104(4):408

Effect of folic and folinic acid on cytopenia occurring during co–trimoxazole treatment of Pneumocystis carinii pneumonia. Bygbjerg IC, et al. **Scand J Infect Dis** 1988; 20(6):685–5

High–dose corticosteroid therapy for Pneumocystis carinii pneumonia in patients with acquired immunodeficiency syndrome. Amundson DE, et al. **South Med J** 1989 Jun; 82(6):711–4, 718 (21 ref.)

Empirical treatment without bronchoscopy for Pneumocystis carinii pneumonia in the acquired immunodeficiency syndrome. Miller RF, et al. **Thorax** 1989 Jul;44(7):559–64

Nebulised pentamidine as treatment for Pneumocystis carinii pneumonia in the acquired immunodeficiency syndrome. Miller RF, et al. **Thorax** 1989 Jul;44(7):565–9

Diabetic ketoacidosis following pentamidine therapy in a patient with the acquired immunodeficiency syndrome. Lambertus MW, et al. **West J Med** 1988 Nov;149(5):602–4

[Problems in adjuvant therapy with corticosteroids in AIDS–associated Pneumocystis carinii pneumonia] Wassermann K, et al. **Prax Klin Pneumol** 1988 Dec; 42(12):867–71 (Eng. Abstr.) **(Ger)**

[Pentamidine inhalation for Pneumocystis carinii pneumonia in AIDS] Pines A, et al. **Harefuah** 1989 Mar 15;116(6):311–2 (Eng. Abstr.) **(Heb)**

[Treatment of Pneumocystis carinii pneumonia with pentamidine aerosols (letter)] Micó Giner L, et al. **Med Clin (Barc)** 1989 Feb 4;92(4):159 **(Spa)**

[Use of corticosteroids in pneumonia caused by Pneumocystis carinii–AIDS with lack of response to conventional therapy (letter)] Martínez Vázquez C, et al. **Rev Clin Esp** 1989 Jun; 185(2):108–9 **(Spa)**

[Adverse effects of cotrimoxazole and Pneumocystis carinii pneumonia (letter)] Soler–Bel J, et al. **Rev Clin Esp** 1989 Feb;184(2):115–6 **(Spa)**

ENZYMOLOGY

Serum lactate dehydrogenase activity in patients with AIDS and Pneumocystis carinii pneumonia. An adjunct to diagnosis. Kagawa FT, et al. **Chest** 1988 Nov;94(5):1031–3

Elevated levels of angiotensin–converting enzyme in Pneumocystis carinii pneumonia. Singer F, et al. **Chest** 1989 Apr;95(4):803–6

EPIDEMIOLOGY

Outbreaks of Pneumocystis carinii pneumonia in colonies of immunodeficient mice. Walzer PD, et al. **Infect Immun** 1989 Jan;57(1):62–70

The present status of Pneumocystis carinii pneumonia in Japan with special reference to AIDS. Yoshida Y, et al. **J Protozool** 1989 Jan–Feb;36(1):78S–80S

Has the incidence of Pneumocystis carinii pneumonia in cancer patients increased with the AIDS epidemic? [letter] Haron E, et al. **Lancet** 1988 Oct 15;2(8616):904–5

ETIOLOGY

Pneumomediastinum complicating Pneumocystis carinii pneumonia in a patient with AIDS. Villalona-Calero MA, et al. **Am J Med Sci** 1989 May;297(5):328-30

Unexpectedly high incidence of Pneumocystis carinii infection after lung-heart transplantation. Implications for lung defense and allograft survival. Gryzan S, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1268-74

Pneumocystis carinii pneumonia complicating low dose methotrexate treatment for psoriatic arthropathy. Wallis PJ, et al. **Ann Rheum Dis** 1989 Mar;48(3):247-9

Pneumocystis carinii pneumonia complicated by lymphadenopathy and pneumothorax. Afessa B, et al. **Arch Intern Med** 1988 Dec;148(12):2651-4 (18 ref.)

AIDS patient survival better at more experienced hospitals? [news] **Bol Asoc Med P R** 1989 Jul;81(7):290

Pneumocystis carinii pneumonia as a complication of desferrioxamine therapy. Kouides PA, et al. **Br J Haematol** 1988 Nov;70(3):383-4

Chronic cavitary Pneumocystis carinii pneumonia in a patient with AIDS. Chechani V, et al. **Chest** 1989 Jun;95(6):1347-8

Sudden high fever, dry cough, shortness of breath, and respiratory exhaustion during complete remission of acute lymphocytic leukemia [clinical conference] **Chin Med J [Engl]** 1988 May;101(5):365-70

Common variable hypogammaglobulinemia, recurrent Pneumocystis carinii pneumonia on intravenous gamma-globulin therapy, and natural killer deficiency. Bonagura VR, et al. **Clin Immunol Immunopathol** 1989 May; 51(2):216-31

Cunninghamella bertholletiae and Pneumocystis carinii pneumonia as a fatal complication of chronic lymphocytic leukemia. Reed AE, et al. **Hum Pathol** 1988 Dec; 19(12):1470-2

Effect of dexamethasone on the development of pneumocystosis in rats. Azab ME, et al. **J Egypt Soc Parasitol** 1989 Jun;19(1):107-13

Clinical studies of Pneumocystis carinii and relationships to AIDS. Masur H. **J Protozool** 1989 Jan-Feb;36(1):70-4 (37 ref.)

Dynamics of Pneumocystis carinii-specific immune complexes in AIDS patients with P. carinii pneumonia. Pifer LL. **J Protozool** 1989 Jan-Feb;36(1):44S-46S

[Pulmonary changes in AIDS] Blum U, et al. **ROFO** 1989 Mar;150(3):255-9 (Eng. Abstr.) **(Ger)**

[Pulmonary pathology in HIV seropositive children. 4 clinical cases] Fiocchi A, et al. **Pediatr Med Chir** 1988 Jul-Aug;10(4):353-7 (Eng. Abstr.) **(Ita)**

[Pneumocystis carinii pneumonia in renal transplant recipients treated with cyclosporin] Kim CJ, et al. **Hinyokika Kiyo** 1989 Apr;35(4):653-9 (Eng. Abstr.) **(Jpn)**

[A case report of chronic lymphocytic leukemia complicated by Pneumocystis carinii pneumonia] Yamaguchi M, et al. **Kansenshogaku Zasshi** 1988 Dec;62(12):1202-6 (Eng. Abstr.) **(Jpn)**

[An autopsy case of acquired immuno-deficiency syndrome associated with P. carinii pneumonia with a rapid clinical course resembling ARDS] Mikami M, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Apr; 26(4):415-20 (Eng. Abstr.) **(Jpn)**

[Increased incidence of Pneumocystis carinii pneumonia in infants with congenital adrenal hyperplasia] Blaim A, et al. **Pediatr Pol** 1988 Jun;63(6):352-7 (Eng. Abstr.) **(Pol)**

[Pneumocystis carinii pneumonia in children with tuberculosis of the respiratory organs] Borisova NK, et al. **Probl Tuberk** 1989;(2):20-3 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

The level of IgG and IgM in Pneumocystis carinii infection. el-Sibae MM, et al. **J Egypt Soc Parasitol** 1989 Dec; 19(2):635-9

Purification and initial characterization of a ferret Pneumocystis carinii surface antigen. Gigliotti F, et al. **J Infect Dis** 1988 Oct;158(4):848-54

The young rabbit: a nonimmunosuppressed model for Pneumocystis carinii pneumonia [letter] Soulez B, et al. **J Infect Dis** 1989 Aug;160(2):355-6

Effects of steroid-induced Pneumocystis carinii on alveolar macrophages in the rat. Shear HL, et al. **J Protozool** 1989 Jan-Feb;36(1):49S-50S

Effect of recombinant human granulocyte colony-stimulating factor on Pneumocystis carinii infection in nude mice. Ieki R, et al. **Jpn J Exp Med** 1989 Apr;59(2):51-8

Co-infection with Legionella pneumophila and Pneumocystis carinii in a patient with chronic lymphocytic leukemia. Dworzack DL, et al. **Nebr Med J** 1989 Apr;74(4):73-5

Recent developments in the immunobiology of Pneumocystis. Beckers PJ. **Parassitologia** 1986 Aug-Dec;28(2-3):117-21 (25 ref.)

Hypogammaglobulinemia and depressed natural killer cell cytotoxicity in a patient with Pneumocystis carinii infection. Staugas RE, et al. **Pediatr Infect Dis J** 1988 Oct; 7(10):724-8

MICROBIOLOGY

Induced sputum to diagnose Pneumocystis carinii pneumonia in immunosuppressed pediatric patients. Ognibene FP, et al. **J Pediatr** 1989 Sep;115(3):430-3

Sputum induction for diagnosis of Pneumocystis carinii pneumonia. Leigh TR, et al. **Lancet** 1989 Jul 22; 2(8656):205-6

MORTALITY

Survival periods in male and female Wistar rats with steroid-induced Pneumocystis carinii pneumonia. Settnes OP, et al. **APMIS** 1989 Jun;97(6):556-8

Prognostic indicators in the initial presentation of Pneumocystis carinii pneumonia. Garay SM, et al. **Chest** 1989 Apr;95(4):769-72

Evaluating institutional performance in AIDS-associated Pneumocystis carinii pneumonia: a risk adjustment approach. Mathews WC, et al. **J Clin Epidemiol** 1989; 42(5):421-5

The relation between hospital experience and in-hospital mortality for patients with AIDS-related PCP. Bennett CL, et al. **JAMA** 1989 May 26;261(20):2975-9

Serum lactic dehydrogenase predicts mortality in patients with AIDS and Pneumocystis pneumonia. Lipman ML, et al. **West J Med** 1988 Oct;149(4):486-7

PARASITOLOGY

Diagnosis of Pneumocystis pneumonia by induced sputum technique in patients without the acquired immunodeficiency syndrome. Masur H, et al. **Ann Intern Med** 1988 Nov 1;109(9):755-6

In vitro differentiation of human-derived Pneumocystis carinii. Blumenfeld W, et al. **J Clin Microbiol** 1989 Mar; 27(3):480-5

Giemsa staining for cysts and trophozoites of Pneumocystis carinii. Walker J, et al. **J Clin Pathol** 1989 Apr;42(4):432-4

Silver staining of Pneumocystis carinii in the rat's lung. Schraufnagel DE, et al. **J Infect** 1989 Jan;18(1):39-44

Monoclonal antibodies to Pneumocystis carinii: identification of specific antigens and characterization of antigenic differences between rat and human isolates. Kovacs JA, et al. **J Infect Dis** 1989 Jan;159(1):60-70

PATHOLOGY

Cavitating and noncavitating granulomas in AIDS patients with Pneumocystis pneumonitis. Klein JS, et al. **AJR** 1989 Apr;152(4):753-4

Prognostic implications of bronchoalveolar lavage neutrophilia in patients with Pneumocystis carinii pneumonia and AIDS [editorial] Kaner RJ, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1322-4

Prognostic implications of bronchoalveolar lavage neutrophilia in patients with Pneumocystis carinii pneumonia and AIDS. Mason GR, et al. **Am Rev Respir Dis** 1989 Jun;139(6):1336-42

Biopsy pathology of HIV infection: experience at St Stephen's Hospital, London. Schofield JB, et al. **Histopathology** 1989 Mar;14(3):277-88

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 9-1989. A 32-year-old man with AIDS and a cavitary pulmonary lesion. **N Engl J Med** 1989 Mar 2;320(9):582-7

[Acquired immunodeficiency syndrome (AIDS) with cytomegalovirus adrenalitis and Pneumocystis carinii pneumonia] Shimizu E, et al. **Rinsho Ketsueki** 1988 May; 29(5):711-7 (Eng. Abstr.) **(Jpn)**

[Pneumocystis carinii pneumonia. Clinicopathologic study of the first 2 cases diagnosed in Mexico] Bessudo L. **Rev Invest Clin** 1967 Jul-Sep;19(3):265-74 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

Spontaneous subcutaneous and mediastinal emphysema--a complication of lung function tests in Pneumocystis carinii pneumonia. Ramakrishnan S, et al. **Postgrad Med J** 1988 Dec;64(758):960-2

PREVENTION & CONTROL

Apical Pneumocystis carinii pneumonia after inhaled pentamidine prophylaxis. Conces DJ Jr, et al. **AJR Am J Roentgenol** 1989 Jun;152(6):1193-4

AIDS file. Aerosol pentamidine approved for patients at high PCP risk [news] Katzin L. **Am J Nurs** 1989 Apr;89(4):463

Aerosol pentamidine. Armstrong D, et al. **Ann Intern Med** 1988 Dec 1;109(11):852-4 (18 ref.)

Pentamidine helps prevent AIDS-related pneumonia [news] **AORN J** 1988 Oct;48(4):644

Fatal toxic epidermal necrolysis during prophylaxis with pyrimethamine and sulfadoxine in a human immunodeficiency virus-infected person. Raviglione MC, et al. **Arch Intern Med** 1988 Dec;148(12):2683-5

Successful prophylaxis of Pneumocystis carinii pneumonia with trimethoprim-sulfamethoxazole in AIDS patients with previous allergic reactions. Shafer RW, et al. **J Acquir Immune Defic Syndr** 1989;2(4):389-93

Prophylaxis against Pneumocystis carinii pneumonia. Goldschmidt RH. **J Am Board Fam Pract** 1989 Jul-Sep; 2(3):153-4

Leads from the MMWR. Fansidar-associated fatal reaction in an HIV-infected man. **JAMA** 1988 Oct 21;260(15):2193

From the Centers for Disease Control. Guidelines for prophylaxis against Pneumocystis carinii pneumonia for persons infected with human immunodeficiency virus. **JAMA** 1989 Jul 21;262(3):335-9

From the Food and Drug Administration. Nightingale SL. **JAMA** 1989 Jul 14;262(2):184

Failure of pyrimethamine-clindamycin combination for prophylaxis of Pneumocystis carinii pneumonia [letter] Girard PM, et al. **Lancet** 1989 Jun 24;1(8652):1459

Prevention of Pneumocystis carinii pneumonia relapse by pentamidine aerosol in zidovudine-treated AIDS patients. Girard PM, et al. **Lancet** 1989 Jun 17;1(8651):1348-53

Prevention of Pneumocystis carinii pneumonia by inhaled pentamidine. Golden JA, et al. **Lancet** 1989 Mar 25; 1(8639):654-7

Differences in relative efficiency of nebulisers for pentamidine administration. O'Doherty MJ, et al. **Lancet** 1988 Dec 3;2(8623):1283-6

Primary dapsone chemoprophylaxis for Pneumocystis carinii pneumonia in immunocompromised patients infected with the human immunodeficiency virus. Lucas CR, et al. **Med J Aust** 1989 Jul 3;151(1):30-3

Pentamidine aerosol to prevent Pneumocystis carinii pneumonia. **Med Lett Drugs Ther** 1989 Oct 6;31(802):91-2

Prevention of Pneumocystis carinii pneumonia. **Med Lett Drugs Ther** 1988 Oct 7;30(776):94-5 (11 ref.)

Guidelines for prophylaxis against Pneumocystis carinii pneumonia for persons infected with human immunodeficiency virus. **MMWR** 1989 Jun 16;38 Suppl 5:1-9

Antibiotics may prevent PCP infections [news] **Ohio Med** 1988 Jun;84(6):427

Relapse of Pneumocystis carinii pneumonia in the upper lobes during aerosol pentamidine prophylaxis. Bradburne RM, et al. **Thorax** 1989 Jul;44(7):591-3

The risks and benefits of low-dose cotrimoxazole prophylaxis for Pneumocystis pneumonia in renal transplantation. Higgins RM, et al. **Transplantation** 1989 Mar;47(3):558-60

[AIDS. Pneumocystis pneumonia: prevention is in sight] **Fortschr Med** 1989 Mar 30;107(10):14-5 **(Ger)**

RADIOGRAPHY

Relevance of computed tomography to diagnose Pneumocystis carinii pneumonia [letter] O'Mahony C, et al. **Genitourin Med** 1989 Jun;65(3):196-7

Cavitation as an unusual roentgenographic manifestation of Pneumocystis carinii pneumonia in a patient with acquired immunodeficiency syndrome [published erratum appears in N Y State J Med 1989 Feb;89(2):96] Conetta R, et al. **N Y State J Med** 1988 Dec;88(12):652-3

Pulmonary cystic disease: comparison of Pneumocystis carinii pneumatoceles and bullous emphysema due to intravenous drug abuse. Gurney JW, et al. **Radiology** 1989 Oct; 173(1):27-31

Pulmonary cysts associated with Pneumocystis carinii pneumonia in patients with AIDS. Sandhu JS, et al. **Radiology** 1989 Oct;173(1):33-5

[Pneumocystis carinii pneumonia radiologically simulating tuberculosis] Melloni B, et al. **Rev Pneumol Clin** 1988; 44(6):300-3 (Eng. Abstr.) **(Fre)**

RADIONUCLIDE IMAGING

Negative gallium 67 uptake with Pneumocystis carinii pneumonia. Meduri GU, et al. **Conn Med** 1988 Aug; 52(8):451-3

Focal lung uptake of gallium-67 in patients with acquired immunodeficiency syndrome secondary to pneumocystis carinii pneumonia. Charron M, et al. **Eur J Nucl Med** 1988; 14(7-8):424-6

Reversible pulmonary uptake and hypertrophic pulmonary osteoarthropathic distribution of technetium-99m methylene diphosphonate in a case of Pneumocystis carinii pneumonia. Vaquer RA, et al. **J Nucl Med** 1989 Sep; 30(9):1563-7

Detection of abnormalities in febrile AIDS patients with In-111-labeled leukocyte and Ga-67 scintigraphy. Fineman DS, et al. **Radiology** 1989 Mar;170(3 Pt 1):677-80

Diagnostic implications of Ga-67 chest-scan patterns in human immunodeficiency virus-seropositive patients. Kramer EL, et al. **Radiology** 1989 Mar;170(3 Pt 1):671-6

THERAPY

Survival and prognostic factors in severe Pneumocystis carinii pneumonia requiring mechanical ventilation. el-Sadr W, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1264-7

Continuous positives airway pressure in AIDS [letter] Gilston A. **Lancet** 1989 Jan 21;1(8630):169

Nasal continuous positive airway pressure in Pneumocystis carinii pneumonia. Kesten S, et al. **Lancet** 1988 Dec 17; 2(8625):1414-5

[Pneumonias in AIDS are in the foreground. Clinical symptoms are rarely typical--by no means waive therapy (news)] Hartung HD. **Fortschr Med** 1988 Jul 20;106(21):18 **(Ger)**

VETERINARY

Infection of a three-toed sloth (Bradypus variegatus) by a Pneumocystis-like organism in Panama. Yonushonis WP, et al. **J Wildl Dis** 1986 Oct;22(4):572-5

Identification of Pneumocystis carinii in immunodeficient mice. Sundberg JP, et al. **Lab Anim Sci** 1989 May; 39(3):213-8

Prevalence of Pneumocystis carinii in slaughtered pigs. Fujita M, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):200-2

PNEUMONIA, PROGRESSIVE INTERSTITIAL, OF SHEEP

[Maedi-visna (review)] Tabbaa D, et al.
Arch Exp Veterinarmed 1988 Sep;42(5):669-82 (106 ref.) (Eng. Abstr.) **(Ger)**

[Lentiviruses in sheep and goats: a review of the literature] Peterhans E, et al. **Schweiz Arch Tierheilkd** 1988 Dec; 130(12):681-700 (119 ref.) (Eng. Abstr.) **(Ger)**

EPIDEMIOLOGY

Importance of ewe/lamb relationship and breed in the epidemiology of maedi-visna virus infections. Houwers DJ, et al. **Res Vet Sci** 1989 Jan;46(1):5-8

ETIOLOGY

Lentiviruses of animals are biological models of the human immunodeficiency viruses. Narayan O, et al.
Microb Pathog 1988 Sep;5(3):149-57 (47 ref.)

IMMUNOLOGY

Expression of viral antigens in the central nervous system of visna-infected sheep: an immunohistochemical study on experimental visna induced by virus strains of increased neurovirulence. Georgsson G, et al.
Acta Neuropathol (Berl) 1989;77(3):299-306

Role of macrophages in lentivirus infections. Narayan O, et al. **Adv Vet Sci Comp Med** 1988;32:129-48 (64 ref.)

Immunoblot analysis of the antibody response to ovine lentivirus infections. Houwers DJ, et al. **Vet Microbiol** 1989 Feb;19(2):127-39

[Detection of visna-maedi virus antibodies and antigens by immunoblotting] Bosgiraud C, et al. **Ann Rech Vet** 1989; 20(2):187-93 (Eng. Abstr.) **(Fre)**

MICROBIOLOGY

Maedi-visna in sheep: host-virus interactions and utilization as a model. Pétursson G, et al. **Intervirology** 1989;30 Suppl 1:36-44 (57 ref.)

Ovine progressive pneumonia (maedi-visna) in sheep. Cutlip RC, et al. **Vet Microbiol** 1988 Jul;17(3):237-50 (62 ref.)

PATHOLOGY

Retrovirus-associated ovine pulmonary carcinoma (sheep pulmonary adenomatosis) and lymphoid interstitial pneumonia. I. Lesion development and age susceptibility. Rosadio RH, et al. **Vet Pathol** 1988 Nov;25(6):475-83

PNEUMONIA, RICKETTSIAL

DIAGNOSIS

Scrub typhus pneumonitis: an entity which is frequently missed. Chayakul P, et al. **Q J Med** 1988 Aug; 68(256):595-602

ETIOLOGY

Scrub typhus pneumonia [editorial] **Lancet** 1988 Nov 5; 2(8619):1062

PNEUMONIA, STAPHYLOCOCCAL

COMPLICATIONS

Delayed tension pneumothorax complicating staphylococcal pneumonia. Yates SP, et al. **Postgrad Med J** 1988 Oct; 64(756):796-8

[Infection with involvement of the central nervous system] Vengerov IuIa, et al. **Klin Med (Mosk)** 1989 Feb; 67(2):28-33 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

LY146032 in a hamster model of Staphylococcus aureus pneumonia—effect on in vivo clearance and mortality and in vitro opsonophagocytic killing. Verghese A, et al.
Chemotherapy 1988;34(6):497-503

[Pharmacokinetics and clinical studies of ceftizoxime in newborn and premature infants] Toyonaga Y, et al.
Jpn J Antibiot 1988 Aug;41(8):1065-86 (Eng. Abstr.) **(Jpn)**

[Clinico-immunologic effectiveness of chlorophyllypt in the treatment of acute destructive pneumonia] Simvolokov SI, et al. **Klin Med (Mosk)** 1989 Feb;67(2):108-12 (Eng. Abstr.) **(Rus)**

ETIOLOGY

[Pleuropulmonary staphylococci in adults] Ispas LT.
Rev Ig [Pneumoftiziol] 1988 Apr-Jun;37(2):145-52 (Eng. Abstr.) **(Rum)**

[Pathogenesis and treatment of suppurative lung diseases] Muromskil IuA, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):12-8 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Endotracheal aspiration for the bacteriological diagnosis of nosocomial- and measles-associated pneumonia. Berkowitz FE, et al. **Ann Trop Paediatr** 1988 Dec;8(4):217-21

The role of percutaneous lung aspiration in the bacteriological diagnosis of pneumonia in adults. Barnes DJ, et al. **Aust N Z J Med** 1988 Oct;18(6):754-7

MORTALITY

[The incidence of lung infection in patients with mucoviscidosis and the disease course with various pathogen spectra] Dietzsch HJ, et al. **Kinderarztl Prax** 1989 Feb;57(2):81-7 (Eng. Abstr.) **(Ger)**

SURGERY

[Possibilities of bronchoscopy in the treatment of acute destructive pneumonia and in the prevention of its complications] Manerov FK, et al. **Pediatriia** 1988;(4):36-40 (Eng. Abstr.) **(Rus)**

THERAPY

[Destructive pneumonia in children] Gilevich IuS, et al.
Khirurgiia (Mosk) 1988 Jul;(7):21-5 (Eng. Abstr.) **(Rus)**

[Long-term results of the treatment of destructive pneumonia in children] Prutovykh NN, et al. **Khirurgiia (Mosk)** 1988 Jul;(7):17-20 (Eng. Abstr.) **(Rus)**

[Staphylococcal pneumonia] Liashchenko VI. **Sov Med** 1988; (9):80-3 **(Rus)**

[Septic metastatic staphylococcal destruction of the lungs in adults] Liashchenko VI. **Vestn Khir** 1989 Feb;142(2):8-11 (Eng. Abstr.) **(Rus)**

PNEUMONIA, VIRAL

COMPLICATIONS

Concomitant Mycoplasma pneumoniae and virus infection in children with acute lower respiratory infections. Komatsu S, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Jun; 30(3):276-81 (10 ref.)

The clinical observation of M. pneumoniae infections among children in Asahi General Hospital with special reference to mixed viral infections. Sakurai N, et al.
Acta Paediatr Jpn Overseas Ed 1988 Jun;30(3):267-75

Varicella in children with cancer: Seventy-seven cases. Feldman S, et al. **Pediatrics** 1975 Sep;56(3):388-97

[Gastrointestinal hemorrhage in children against a background of viral and bacterial infections] Kireev SS, et al. **Klin Khir** 1989;(6):27-9 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Rapid detection of cytomegalovirus pneumonia from lung lavage cells. Paradis IL, et al. **Am Rev Respir Dis** 1988 Sep;138(3):697-702

Approaches to the diagnosis of viral pneumonias in the immunocompromised host: the importance of assaying cytopathogenic viral effects in bronchoalveolar lavage cells. Chanez P, et al. **Eur Respir J** 1988 Jun;1(6):553-7

Diagnosis, treatment and outcome of pneumonia in the acquired immune deficiency syndrome. Gardner TD, et al. **J Infect** 1989 Mar;18(2):111-7

Is the measurement of virus-specific antibody in the lungs of transplant recipients with cytomegalovirus pneumonitis of diagnostic or prognostic value? Milburn HJ, et al.
J Med Virol 1988 Oct;26(2):197-206

Adult respiratory distress syndrome secondary to varicella infection in a young adult. Hepburn NC, et al.
J R Army Med Corps 1989 Jun;135(2):81-3

Differentiating bacterial from viral pneumonias in children. Bettenay FA, et al. **Pediatr Radiol** 1988;18(6):453-4

[Adenocarcinoma of the lung in a 25-year-old woman] Khallenko VA, et al. **Klin Med (Mosk)** 1988 Dec;66(12):103 **(Rus)**

DRUG THERAPY

Fatal respiratory syncytial virus pneumonitis in a previously healthy child [letter] Cameron D, et al.
Am Rev Respir Dis 1989 Feb;139(2):569-70

Nebulised ribavirin for influenza B viral pneumonia in a ventilated immunocompromised adult [letter] Bell M, et al. **Lancet** 1988 Nov 5;2(8619):1084-5

Acyclovir therapy during pregnancy. Brown ZA, et al.
Obstet Gynecol 1989 Mar;73(3 Pt 2):526-31 (44 ref.)

Treatment of cytomegalovirus pneumonia. Crumpacker C, et al. **Rev Infect Dis** 1988 Jul-Aug;10 Suppl 3:S538-46

Chickenpox pneumonia: experience with antiviral treatment. Davidson RN, et al. **Thorax** 1988 Aug;43(8):627-30

Treatment of cytomegalovirus pneumonitis with ganciclovir in renal transplantation. Stoffel M, et al. **Transpl Int** 1988 Dec;1(4):181-5

DHPG (Gancyclovir) improves survival in CMV pneumonia. Mai M, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2263-5

[Protease inhibitors in the combined therapy of acute pneumonia] Telkov SV, et al. **Sov Med** 1988;(6):92-5 **(Rus)**

ETIOLOGY

Sendai virus infection of mice with protein malnutrition. Pena-Cruz V, et al. **J Virol** 1989 Aug;63(8):3541-4

Respiratory syncytial virus pneumonia in a human immunodeficiency virus-infected man [letter] Murphy D, et al. **JAMA** 1989 Feb 24;261(8):1147

Varicella pneumonia in the adult. Conti JA, et al.
N J Med 1989 Jun;86(6):475-8

Tracheobronchitis and pneumonia due to herpes simplex virus (HSV) infection. Chakraborty A, et al.
Nebr Med J 1988 Dec;73(12):347-50

Association of parainfluenza virus type 3 infection with allograft rejection in a liver transplant recipient. Herzog KD, et al. **Pediatr Infect Dis J** 1989 Aug;8(8):534-6

Pulmonary infection in human immunodeficiency disease: viral pulmonary infections. Wallace JM.
Semin Respir Infect 1989 Jun;4(2):147-54 (40 ref.)

[A case of measles in adolescents with myocarditis and pneumonia] Tokuyama T, et al. **Kansenshogaku Zasshi** 1989 May;63(5):530-3 (Eng. Abstr.) **(Jpn)**

[Etiology of pneumonia in children] Mizerski J, et al.
Pediatr Pol 1988 Apr;63(4):216-23 (Eng. Abstr.) **(Pol)**

[The role of viral-bacterial associations in the etiology of acute lung inflammation in an influenza interepidemic period] Kondratenko GP, et al. **Mikrobiol Zh** 1988 Mar-Apr;50(2):59-63 (Eng. Abstr.) **(Rus)**

[Acute pneumonia complicating influenza] Chepik EB, et al.
Sov Med 1988;(7):88-90 **(Rus)**

[The influenza virus—an important agent in the development of the pneumonia syndrome] Bukumirović K.
Srp Arh Celok Lek 1988 Jun;116(6):523-9 (Eng. Abstr.) **(Scc)**

IMMUNOLOGY

Increased cytotoxicity against cytomegalovirus-infected target cells by bronchoalveolar lavage cells from bone marrow transplant recipients with cytomegalovirus pneumonia. Bowden RA, et al. **J Infect Dis** 1988 Oct; 158(4):773-9

Kinetics and specificity at the clonal level of the cytotoxic T lymphocyte response to influenza pneumonia. Jaffe PA, et al. **Viral Immunol** 1987-88;1(4):259-66

[Use of circulating immune complex in the study of respiratory syncytial virus pneumonia] Zhang ZX.
Chung Hua I Hsueh Tsa Chih 1988 Aug;68(8):450-2 **(Chi)**

[Serology in lower respiratory tract infections. Virus, mycoplasma and ornithosis serology] Sundsfjord A, et al.
Tidsskr Nor Laegeforen 1988 Oct 30;108(30):2719-20 (Eng. Abstr.) **(Nor)**

[Antiviral cellular resistance in acute suppurative-destructive diseases of the lungs] Filev LV, et al.
Klin Med (Mosk) 1989 Feb;67(2):105-8 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Routine viral culture for pediatric respiratory specimens submitted for direct immunofluorescence testing. Blanding JG, et al. **J Clin Microbiol** 1989 Jul;27(7):1438-40

Laboratory characterization of a swine influenza virus isolated from a fatal case of human influenza. Rota PA, et al. **J Clin Microbiol** 1989 Jun;27(6):1413-6

Role of early region 3 (E3) in pathogenesis of adenovirus disease. Ginsberg HS, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3823-7

Fatal pneumonia caused by parainfluenza type 3 virus. Ross LA, et al. **West J Med** 1988 Aug;149(2):223

MORTALITY

Application of multiple time series analysis to the estimation of pneumonia and influenza mortality by age 1962-1983. Stroup DF, et al. **Stat Med** 1988 Oct;7(10):1045-59

PATHOLOGY

Neonatal adenovirus pneumonia. Green WR, et al.
Arch Pathol Lab Med 1989 Feb;113(2):190-1

Giant cell pneumonia caused by varicella zoster virus in a neonate. Saito F, et al. **Arch Pathol Lab Med** 1989 Feb; 113(2):201-3

Open lung biopsy diagnosis of diffuse pulmonary infiltrates after marrow transplantation. Crawford SW, et al.
Chest 1988 Nov;94(5):949-53

Acute inflammatory lung injury retards pulmonary particle clearance. Slauson DO, et al. **Inflammation** 1989 Apr; 13(2):185-99

Measles pneumonia in a newborn. Drut R, et al.
Pediatr Pathol 1988;8(5):553-7

Case 5. Adenovirus pneumonia in a newborn. Shikes RH, et al. **Pediatr Pathol** 1989;9(2):199-202

PHYSIOPATHOLOGY

Viral and Mycoplasma pneumoniae pneumonias in school-age children: three-year follow-up of respiratory function. Todisco T, et al. **Pediatr Pulmonol** 1989; 6(4):232-6

[Clinical significance of conjunctival biomicroscopy in influenza and acute respiratory viral infections] Deviatkin AV, et al. **Klin Med (Mosk)** 1989 Apr;67(4):41-5 **(Rus)**

PREVENTION & CONTROL

CMV immunoglobulin for prevention of pneumonitis after BMT [letter] Klingemann HG, et al.
Bone Marrow Transplant 1988 May;3(3):235-6

[Cytomegaloviral pneumonia in bone marrow transplantation] Kato S. **Nippon Rinsho** 1989 Feb; 47(2):446-51 **(Jpn)**

RADIOGRAPHY

Imaging case of the month: neonatal herpes simplex virus pneumonia. Rawlings JS, et al. **Am J Perinatol** 1989 Jul; 6(3):304–6

[A case of primary influenzal pneumonia] Suzuki A. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jul;26(7):778–81 (Eng. Abstr.) **(Jpn)**

THERAPY

Cytomegalovirus pneumonia after bone marrow transplantation successfully treated with the combination of ganciclovir and high-dose intravenous immune globulin. Emanuel D, et al. **Ann Intern Med** 1988 Nov 15; 109(10):777–82

Progress in the treatment of cytomegalovirus pneumonia. Frank I, et al. **Ann Intern Med** 1988 Nov 15;109(10):769–71 (19 ref.)

Ganciclovir and immune globulin in cytomegalovirus pneumonia [letter] Morris DJ. **Ann Intern Med** 1989 Apr 1;110(7):575

Treatment of cytomegalovirus pneumonia with ganciclovir and intravenous cytomegalovirus immunoglobulin in patients with bone marrow transplants. Reed EC, et al. **Ann Intern Med** 1988 Nov 15;109(10):783–8

Treatment of cytomegalovirus pneumonia after bone marrow transplantation with cytomegalovirus immunoglobulin combined with ganciclovir. Verdonck LF, et al. **Bone Marrow Transplant** 1989 Mar;4(2):187–9

[Viral infections in medicine. Antiviral agents] Matsumoto K. **Nippon Naika Gakkai Zasshi** 1988 Sep;77(9):1358–61 **(Jpn)**

[Experience using dimephosphon in the complex treatment of pneumonia in newborn infants] Pikuza OI, et al. **Pediatriia** 1989;(3):39–41 **(Rus)**

VETERINARY

Studies on the pathogenesis and interspecies transmission of respiratory syncytial virus isolated from sheep. Bryson DG, et al. **Am J Vet Res** 1988 Aug;49(8):1424–30

Conjunctivitis, tracheitis, and pneumonia associated with herpesvirus infection in green sea turtles. Jacobson ER, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1020–3

Pathogenicity of experimental infection with 'pneumotropic' porcine coronavirus. O'Toole D, et al. **Res Vet Sci** 1989 Jul;47(1):23–9

Isolation of a TGE virus-related respiratory coronavirus causing fatal pneumonia in pigs. van Nieuwstadt AP, et al. **Vet Rec** 1989 Jan 14;124(2):43–4

[Short original report. Adenovirus pneumonia in guinea pigs] Junker U, et al. **Schweiz Arch Tierheilkd** 1988 Nov; 130(11):629–33 (Eng. Abstr.) **(Ger)**

PNEUMONITIS, INTERSTITIAL see **PULMONARY FIBROSIS**

PNEUMONOLOGY see **PULMONARY DISEASE (SPECIALTY)**

PNEUMOPERICARDIUM

CHEMICALLY INDUCED

Fatal pneumopericardium caused by SF6 gas infusion into the pleural space after pneumonectomy and pericardial resection. Shirakusa T. **Chest** 1989 Jun;95(6):1350–1

COMPLICATIONS

[Post-traumatic idiopathic pneumopericardium and pneumoperitoneum] Marouby D, et al. **J Chir (Paris)** 1989 Jan;126(1):24–7 (11 ref.) (Eng. Abstr.) **(Fre)**

DIAGNOSIS

Symptoms and signs of syndromes associated with mill wheel murmurs. Tucker WS Jr. **N C Med J** 1988 Nov; 49(11):569–72 (21 ref.)

ETIOLOGY

Neonatal pneumopericardium with high-frequency ventilation. Neal RC, et al. **Ann Thorac Surg** 1989 Feb; 47(2):274–7

Perforation of a gastrojejunal ulcer into the pericardium. Yazicioglu N, et al. **N Y State J Med** 1989 Jun;89(6):358–9

[A spontaneous fluid pneumopericardium as a complication of a gastric ulcer] Buchberger W, et al. **ROFO** 1989 Apr; 150(4):490–1 **(Ger)**

RADIOGRAPHY

Spontaneous tension pyopneumopericardium—a case with recovery after surgery. Bilbao-Garay J, et al. **Postgrad Med J** 1988 Dec;64(758):963–4

PNEUMOPERITONEUM

CHEMICALLY INDUCED

Pneumatosis intestinalis and pneumoperitoneum after sclerotherapy. DeMarino GB, et al. **AJR** 1988 Nov; 151(5):953–4

COMPLICATIONS

Referred shoulder pain in a sexually active woman. Smally AJ. **Hosp Pract [Off]** 1989 Jul 15;24(7):62, 64

[Post-traumatic idiopathic pneumopericardium and pneumoperitoneum] Marouby D, et al. **J Chir (Paris)** 1989 Jan;126(1):24–7 (11 ref.) (Eng. Abstr.) **(Fre)**

[Association of pneumothorax and massive pneumoperitoneum. Considerations on an unusual clinical case] Rubini F, et al. **Minerva Anestesiol** 1988 May; 54(5):227–30 (Eng. Abstr.) **(Ita)**

[An autopsy case of bronchial asthma complicated with severe pneumomediastinum, extensive subcutaneous emphysema pneumothorax and pneumoperitoneum] Aoyama S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 May;26(5):554–8 (Eng. Abstr.) **(Jpn)**

[Pneumatosis cystoides intestinalis and pneumoperitoneum complicated with progressive systemic sclerosis: a case report] Yonemitsu K, et al. **Nippon Naika Gakkai Zasshi** 1988 May;77(5):734–5 **(Jpn)**

DIAGNOSIS

Sonographic demonstration of free air in perforated peptic ulcers: comparison of sonography with radiography. Chang-Chien CS, et al. **JCU** 1989 Feb;17(2):95–100

Pneumoperitoneum without peritonitis. Fick TE, et al. **Neth J Surg** 1988 Dec;40(6):152–4

ETIOLOGY

Simple test to distinguish between surgical and non-surgical pneumoperitoneum in ventilated neonates. Vanhaesebrouck P, et al. **Arch Dis Child** 1989 Jan;64(1 Spec No):48–9

Tension pneumoperitoneum: an unusual urological cause. Yip A, et al. **Br J Urol** 1989 Aug;64(2):199–200

An unusual cause of subcutaneous emphysema, pneumomediastinum and pneumoperitoneum. Boersma WG, et al. **Eur Respir J** 1988 Dec;1(10):969–71

Infectious pneumoperitoneum as an uncommon presentation of endometrial carcinoma: report of two cases. Douvier S, et al. **Gynecol Oncol** 1989 Jun;33(3):392–4 (22 ref.)

Spontaneous neonatal gastric perforation causing hemo-pneumo-peritoneum. Basu AK, et al. **Indian Pediatr** 1988 Jul;25(7):690–2

Pneumoperitoneum due to peritoneovaginal fistula following hysterectomy. Massad LS, et al. **Int J Gynaecol Obstet** 1989 Jul;29(3):257–61 (16 ref.)

Benign pneumoperitoneum in a patient with celiac sprue. Khouri MR, et al. **J Clin Gastroenterol** 1989 Feb;11(1):70–2

Appendiceal perforation, pneumoperitoneum, and Hirschsprung's disease. Newman B, et al. **J Pediatr Surg** 1988 Sep;23(9):854–6

Vaginal evisceration with pneumoperitoneum. A case report. Cullins V, et al. **J Reprod Med** 1989 Jun;34(6):426–8 (14 ref.)

Pneumatosis cystoides intestinalis and benign pneumoperitoneum in a patient with antinuclear antibody negative systemic lupus erythematosus. Pruitt RE, et al. **J Rheumatol** 1988 Oct;15(10):1575–7

Advanced scleroderma bowel: complications and management. Stafford-Brady FJ, et al. **J Rheumatol** 1988; 15(5):869–74

An unusual cause of massive non-surgical pneumoperitoneum: case report. Andreone P, et al. **J Trauma** 1989 Sep;29(9):1286–8

Colonic perforation: complication of automatic implantable cardioverter defibrillator placement. Krebs TL, et al. **Radiology** 1989 Sep;172(3):708

Pneumoperitoneum and an acute abdominal condition caused by spontaneous perforation of a pyometra in an elderly woman: a case report. Sussman AM, et al. **Surgery** 1989 Feb;105(2 Pt 1):230–1

[Sudden development of extensive pneumoperitoneum after interloop abscess] Bickel A, et al. **Harefuah** 1988 Dec 15; 115(12):371–2 (Eng. Abstr.) **(Heb)**

[A case of recurrent pneumoperitoneum and paralytic ileus with progressive systemic sclerosis] Ishikawa A, et al. **Nippon Naika Gakkai Zasshi** 1989 Jan;78(1):79–80 **(Jpn)**

[Pneumatosis cystoides intestinalis] Wójcik A, et al. **Pol Tyg Lek** 1988 Sep 19;43(38):1233–4 (Eng. Abstr.) **(Pol)**

[Pneumoperitoneum caused by perforated acute appendicitis] Loizate Totorikagüena A, et al. **Rev Esp Enferm Apar Dig** 1988 Nov;74(5):556–8 (Eng. Abstr.) **(Spa)**

[Pneumoperitoneum caused by acute appendicitis (letter)] Millán J. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 1):629 **(Spa)**

PATHOLOGY

Bloody diarrhea and pneumoperitoneum in a 10-month-old girl [clinical conference] Sotelo-Avila C, et al. **J Pediatr** 1988 Dec;113(6):1098–104

RADIOGRAPHY

Pneumoperitoneum resembling air in the biliary tree: CT features. Sanders LM, et al. **J Comput Assist Tomogr** 1989 Sep-Oct;13(5):817–20

[Tension pneumoperitoneum] Andersen J, et al. **Ugeskr Laeger** 1989 Jan 2;151(1):34–5 (Eng. Abstr.) **(Dan)**

SURGERY

Tension pneumoperitoneum: a simple solution [letter] Millar DM. **Br J Hosp Med** 1988 Aug;40(2):149

Surgery for neonatal necrotising enterocolitis in Ireland 1980–1985. Dykes EH, et al. **Intensive Care Med** 1989;15 Suppl 1:S24–6

THERAPY

Pneumoperitoneum complicating coronary bypass surgery: management without laparotomy. Shulman AG, et al. **Surg Endosc** 1987;1(1):63–4

PNEUMOPERITONEUM, ARTIFICIAL

Diagnostic pneumoperitoneum in the pediatric patient with a unilateral inguinal hernia. Timberlake GA, et al. **Arch Surg** 1989 Jun;124(6):721–3

The effect of pneumoperitoneum gases on fertilization, cleavage and pregnancy in human in-vitro fertilization and gamete intra-fallopian transfer. Khan I, et al. **Hum Reprod** 1989 Apr;4(3):323–6

Treatment of large ventral and scrotal hernias using preoperative pneumoperitoneum. Coopwood RW, et al. **J Natl Med Assoc** 1989 Apr;81(4):402–4

INSTRUMENTATION

Experience with a 1.2-mm pneumoperitoneum needle for laparoscopy. Piccigallo E, et al. **Gastrointest Endosc** 1988 Nov-Dec;34(6):471–3

METHODS

Positioning the Verres needle. Gupta SP. **Br J Surg** 1989 Apr;76(4):381

PNEUMORADIOGRAPHY

Air CT cisternography in the diagnosis of vascular loop causing vestibular nerve dysfunction. Esfahani F, et al. **AJNR** 1989 Sep-Oct;10(5):1045–9

Diagnostic accuracy of double contrast barium meal in the diseases of stomach and duodenum using locally prepared negative contrast agent. Sharif ME, et al. **Bangladesh Med Res Counc Bull** 1988 Jun;14(1):21–8

Visualization of the mucosal villi on double-contrast barium studies of the small intestine by using a high molecular fraction of guaran. Desaga JF. **Gastrointest Radiol** 1989 Winter;14(1):25–30

Comparison between air CT and MRI in the detection of small acoustic neurinomas. Kamei T, et al. **Radiat Med** 1989 Jan-Feb;7(1):16–22

METHODS

Trumpet maneuver for visual and CT examination of the pyriform sinus and retrocricoid area. Hillel AD, et al. **Head Neck** 1989 May-Jun;11(3):231–6

[A double-contrast method in current roentgenologic examination of the large intestine] Bryc S. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:75–82 (Eng. Abstr.) **(Pol)**

PNEUMORETROPERITONEUM see **RETROPNEUMOPERITONEUM**

PNEUMOTHORAX

CHEMICALLY INDUCED

[Pulmonary eosinophilic infiltration with pneumothorax during trimipramine treatment] Eigenmann AK, et al. **Dtsch Med Wochenschr** 1989 Sep 1;114(35):1320–3 (Eng. Abstr.) **(Ger)**

COMPLICATIONS

Clinical significance of traumatic pneumorrhachis [letter] Place JN, et al. **AJR Am J Roentgenol** 1989 Sep;153(3):655

Cerebral arterial air embolism in experimental neonatal pneumothorax [letter] Temesvari P, et al. **Arch Dis Child** 1989 Jan;64(1):179

Progressive systemic sclerosis presenting with spontaneous pneumothorax. Lang B, et al. **J Rheumatol** 1989 Feb; 16(2):254–6

Delayed tension pneumothorax complicating staphylococcal pneumonia. Yates SP, et al. **Postgrad Med J** 1988 Oct; 64(756):796–8

[Pneumothorax in pregnancy. Apropos of 3 cases] Guerin JM, et al. **Rev Pneumol Clin** 1988;44(6):297–9 (15 ref.) (Eng. Abstr.) **(Fre)**

[Association of pneumothorax and massive pneumoperitoneum. Considerations on an unusual clinical case] Rubini F, et al. **Minerva Anestesiol** 1988 May; 54(5):227–30 (Eng. Abstr.) **(Ita)**

[An autopsy case of bronchial asthma complicated with severe pneumomediastinum, extensive subcutaneous emphysema pneumothorax and pneumoperitoneum] Aoyama S, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 May;26(5):554–8 (Eng. Abstr.) **(Jpn)**

[Atrioventricular block associated with left spontaneous pneumothorax (letter)] Muñoz J, et al. **Rev Clin Esp** 1989 Mar;184(5):265–7 **(Spa)**

DIAGNOSIS

Colopleural fistula presenting as tension pneumothorax in strangulated diaphragmatic hernia. Report of a case. Reddy SA, et al. **Dis Colon Rectum** 1989 Feb;32(2):165–7

Spontaneous pneumothorax complicating pregnancy—case report and review of the literature. Terndrup TE, et al. **J Emerg Med** 1989 May–Jun;7(3):245–8 (23 ref.)

[Thoracoscopic diagnosis and therapy of spontaneous pneumothorax] Schulz V. **Langenbecks Arch Chir** 1988; Suppl 2:493–7 (19 ref.) (Eng. Abstr.) **(Ger)**

[Sonographic diagnosis of pneumothorax] Wernecke K, et al. **ROFO** 1989 Jan;150(1):84–5 (Eng. Abstr.) **(Ger)**

[The use of a mathematical method in evaluating the severity of the condition of patients with pyopneumothorax] Akzhigitov GN, et al. **Grudn Khir** 1989 Mar–Apr;(2):63–5 (Eng. Abstr.) **(Rus)**

[Spontaneous pneumothorax simulating myocardial infarct] Eshchenko KH, et al. **Klin Med (Mosk)** 1988 Jun; 66(6):105–6 **(Rus)**

EPIDEMIOLOGY

Clinical profile of thoracic trauma in children—a study from Aligarh, N. India. Beg MH, et al. **Ann Trop Paediatr** 1988 Dec;8(4):238–40

Spontaneous pneumothorax in adult Nigerians. Awotedu AA, et al. **East Afr Med J** 1989 Apr;66(4):259–63

ETIOLOGY

Pneumothorax: a rare complication of fine needle aspiration of the breast [letter] Catania S, et al. **Acta Cytol** 1989 Jan–Feb;33(1):140

Spontaneous pneumothorax caused by metastatic hemangioendothelioma. Radiographic appearance and pathologic correlation. Takashima S, et al. **Acta Radiol** 1989 Mar–Apr;30(2):181–2

Phenobarbital and respiratory complications in neonates receiving mechanical ventilatory support [letter] Regev M, et al. **Am J Dis Child** 1989 Feb;143(2):138

Distant injury pneumothorax. McNeil P, et al. **Am J Emerg Med** 1989 Jan;7(1):122–4

Pneumothorax in pleuropulmonary Kaposi's sarcoma related to acquired immunodeficiency syndrome. Floris C, et al. **Am J Med** 1989 Jul;87(1):123–4

The role of atmospheric pressure variation in the development of spontaneous pneumothoraces. Scott GC, et al. **Am Rev Respir Dis** 1989 Mar;139(3):659–62

Bilateral pneumothoraces after removal of a thyroglossal cyst [letter] McLuckie A, et al. **Anaesthesia** 1989 Jan;44(1):72–3

Pneumothorax caused by minitracheotomy. Silk JM, et al. **Anaesthesia** 1989 Aug;44(8):663–4

Tension pneumothorax during dental anesthesia. Samuel J, et al. **Anesth Analg** 1988 Dec;67(12):1187–8

Intravascular and pleural involvement by Pneumocystis carinii in a patient with the acquired immunodeficiency syndrome (AIDS) [letter] Dyner TS, et al. **Ann Intern Med** 1989 Jul 1;111(1):94–5

Mechanisms of pneumothorax following tracheal intubation. Berg LF, et al. **Ann Otol Rhinol Laryngol** 1988 Sep–Oct; 97(5 Pt 1):500–5

Pneumothorax as a complication of tracheoesophageal voice prosthesis use. Odland R, et al. **Ann Otol Rhinol Laryngol** 1988 Sep–Oct;97(5 Pt 1):537–41

Tension pneumothorax during extracorporeal membrane oxygenation. Zwischenberger JB, et al. **Ann Thorac Surg** 1989 Jun;47(6):868–71

Pneumocystis carinii pneumonia complicated by lymphadenopathy and pneumothorax. Afessa B, et al. **Arch Intern Med** 1988 Dec;148(12):2651–4 (18 ref.)

Pneumothorax due to nasogastric feeding tubes. Report of four cases, review of the literature, and recommendations for prevention. Roubenoff R, et al. **Arch Intern Med** 1989 Jan;149(1):184–8 (42 ref.)

Bilateral pneumothorax following tracheal intubation. Biswas C, et al. **Br J Anaesth** 1989 Mar;62(3):338–9

Submarine escape training, lung cysts and tension pneumothorax. Saywell WR. **Br J Radiol** 1989 Mar; 62(735):276–8

Pulmonary function testing in predicting complications from percutaneous lung biopsy. Quon D, et al. **Can Assoc Radiol J** 1988 Dec;39(4):267–9

A unique case of catamenial pneumothorax [letter] Brown RC. **Chest** 1989 Jun;95(6):1368

Spontaneous pneumothoraces in AIDS patients receiving aerosolized pentamidine [letter] Martinez CM, et al. **Chest** 1988 Dec;94(6):1317–8

Diseases of the pleural space. Vukich DJ. **Emerg Med Clin North Am** 1989 May;7(2):309–24 (50 ref.)

An acute exacerbation of P. carinii pneumonia. Epstein L, et al. **Hosp Pract [Off]** 1989 Feb 15;24(2):163–4

Bilateral spontaneous pneumothorax due to metastatic synovial sarcoma. Kapoor R, et al. **Indian J Chest Dis Allied Sci** 1988 Oct–Dec;30(4):273–5

A case of traumatic diaphragmatic hernia presenting as acute tension pneumothorax. Brun RC, et al. **Injury** 1987 Sep; 18(5):355–6

Adhesions as a cause of persistent spontaneous pneumothorax. Hoover EL, et al. **J Natl Med Assoc** 1989 Apr;81(4):464–6

Low inspired gas temperature and respiratory complications in very low birth weight infants. Tarnow-Mordi WO, et al. **J Pediatr** 1989 Mar;114(3):438–42

Life-threatening intrathoracic complications during treatment with extracorporeal membrane oxygenation. Zwischenberger JB, et al. **J Pediatr Surg** 1988 Jul; 23(7):599–604

Faeco-pneumothorax as the presenting feature of a traumatic diaphragmatic hernia. Phipps RF, et al. **J R Soc Med** 1988 Sep;81(9):549–50

Inadvertent tracheobronchial placement of feeding tubes [letter] Zeiss J, et al. **Radiology** 1988 Dec;169(3):874–5

Transthoracic fine-needle aspiration guided by fluoroscopy: validity and complications with 19 operators. Mørkve O, et al. **Respiration** 1988;53(4):239–45

Hydatid cyst causing tension pneumothorax in childhood. al-Qudah A. **Thorac Cardiovasc Surg** 1988 Oct;36(5):287–9

Primary cardiac angiosarcoma causing rupture of the heart and spontaneous bilateral pneumothorax. Lobo AJ, et al. **Thorax** 1989 Jan;44(1):78–9

Spontaneous pneumothorax due to metastatic carcinoma of the rectum [letter] Sharma S, et al. **Thorax** 1989 Jan;44(1):80

Recurrent pneumothoraces in miliary tuberculosis. Chandra KS, et al. **Trop Geogr Med** 1988 Oct;40(4):347–9

Midcycle pneumothorax in a patient with catamenial pneumothoraces. Ghio AJ, et al. **West J Med** 1988 Oct; 149(4):462–3

[Pneumothorax following radiotherapy of Hodgkin's disease (letter)] Desablens B, et al. **Ann Med Interne (Paris)** 1989; 140(1):52–3 (12 ref.) **(Fre)**

[Pyopneumothorax disclosing perforation of gastric ulcer without associated peritonitis. Apropos of 2 cases (letter)] Naouri A, et al. **Gastroenterol Clin Biol** 1989;13(2):227–8 **(Fre)**

[Spontaneous pneumothorax in cystic fibrosis (letter)] Küster P, et al. **Monatsschr Kinderheilkd** 1989 May;137(5):303 **(Ger)**

[Bilateral pneumothorax following mammoplasty] Häggi J, et al. **Schweiz Rundsch Med Prax** 1988 Oct 18;77(42):1127–8 (Eng. Abstr.) **(Ger)**

[Recurrent symptomatic spontaneous tension pneumothorax in sarcoidosis with honeycomb lung] Schamaun M, et al. **Schweiz Rundsch Med Prax** 1988 Oct 18;77(42):1138–41 (Eng. Abstr.) **(Ger)**

[1st reported case of pneumothorax caused by sternal puncture] Polverino M, et al. **Minerva Med** 1989 Jun; 80(6):611–3 (Eng. Abstr.) **(Ita)**

[A case of bilateral pneumothoraces due to intrathoracic communication through a defect in the mediastinal pleura] Nomori H, et al. **Kyobu Geka** 1988 Aug;41(9):761–3 (Eng. Abstr.) **(Jpn)**

[A case of spontaneous pneumothorax due to metastasis of urinary bladder carcinoma to the lung] Hamamoto Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Feb; 27(2):225–9 (Eng. Abstr.) **(Jpn)**

[A case of spontaneous pneumothorax caused by a metastatic giant tumor] Kurihara Y, et al. **Rinsho Hoshasen** 1988 Sep; 33(9):1011–4 (12 ref.) (Eng. Abstr.) **(Jpn)**

[A case of cardiac tamponade and pneumothorax during electric cardiac stimulation] Stirbis PP, et al. **Kardiologiia** 1989 May;29(5):105–7 **(Rus)**

[Pneumothorax following the migration of a Kirschner pin] Pudovikov SS, et al. **Ortop Travmatol Protez** 1988 Jul; (7):41–2 (Eng. Abstr.) **(Rus)**

[Iatrogenic bilateral pneumothorax after tracheostomy in childhood] Kharitonov VA, et al. **Pediatriia** 1988;(7):88 **(Rus)**

[Spontaneous pneumothorax as a complication of lung cyst] Tikhoniuk PI, et al. **Probl Tuberk** 1988;(7):76 **(Rus)**

[Solitary contusion hematoma of the lungs with air cysts] Kharitonov VA, et al. **Vrach Delo** 1989 Jan;(1):67–9 **(Rus)**

[Pneumothorax developing as a result of acupuncture in the treatment of bronchial asthma] Marchuk IK. **Vrach Delo** 1989 May;(5):101–2 **(Rus)**

[Lymphangioleiomyomatosis of the lungs as a cause of spontaneous bilateral pneumothorax (case report)] Tatlić B, et al. **Acta Chir Iugosl** 1988;35(2):215–23 (Eng. Abstr.) **(Scr)**

[Pneumothorax associated with pulmonary metastasis of germinal neoplasms] Menor F, et al. **Arch Esp Urol** 1988 Jul–Aug;41(6):427–30 (Eng. Abstr.) **(Spa)**

[Mechanical and infectious complications associated with central venous catheterization as a vascular access for hemodialysis] Rello J, et al. **Rev Clin Esp** 1988 Dec; 183(9):455–8 (Eng. Abstr.) **(Spa)**

GENETICS

[Familial spontaneous pneumothorax] Vishnevskiĭ AA, et al. **Sov Med** 1988;(12):112–3 **(Rus)**

PATHOLOGY

Reactive eosinophilic pleuritis. A sequela of pneumothorax in pulmonary eosinophilic granuloma. McDonnell TJ, et al. **Am J Clin Pathol** 1989 Jan;91(1):107–11

Laterality of breast cancer associated with repeated chest fluoroscopies [letter] Tekkel M, et al. **Lancet** 1989 Mar 25; 1(8639):677–8

[Causes of spontaneous pneumothorax from the pathologic-anatomic viewpoint] Lawerenz JU, et al. **Langenbecks Arch Chir** 1988;Suppl 2:475–81 (25 ref.) (Eng. Abstr.) **(Ger)**

[Pleural porosity in idiopathic spontaneous pneumothorax] Radomsky J, et al. **Pneumologie** 1989 May;43(5):250–3 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Selective opening of the blood-brain barrier in newborn piglets with experimental pneumothorax. Temesvári P, et al. **Neurosci Lett** 1988 Oct 31;93(1):38–43

Lung function 22–35 years after treatment of idiopathic spontaneous pneumothorax with talc poudrage or simple drainage. Lange P, et al. **Thorax** 1988 Jul;43(7):559–61

[The plasma kallikrein-kinin system in patients with spontaneous pneumothorax during rapid reexpansion] Tochikubo Y, et al. **Nippon Kyobu Shikkan Gakkai Zasshi** 1988 Jul;26(7):720–6 (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

Systemic absorption of tetracycline and lidocaine following intrapleural instillation. Wooten SA, et al. **Chest** 1988 Nov; 94(5):960–3

Prevention of pneumothorax during mechanical ventilation using chest tubes in patients with blunt thoracic trauma. van Niekerk JL, et al. **Neth J Surg** 1988 Jun;40(4):114

RADIOGRAPHY

Detection of pneumothorax: comparison of digital and conventional chest imaging. Fajardo LL, et al. **AJR** 1989 Mar;152(3):475–80

Immediate chest roentgenography following fiberoptic bronchoscopy. Milam MG, et al. **Chest** 1989 Sep; 96(3):477–9

Spontaneous pneumothorax and pneumomediastinum in metastatic lung disease. Sharma S, et al. **Indian J Chest Dis Allied Sci** 1988 Apr–Jun;30(2):125–32 (15 ref.)

Pulmonary metastases from Ewing's sarcoma—presenting as spontaneous pneumothorax in a young child. Singla R, et al. **Indian J Chest Dis Allied Sci** 1988 Apr–Jun;30(2):148–53

Bulla versus pneumothorax: a diagnostic dilemma. Williams J, et al. **J Tenn Med Assoc** 1988 Nov;81(11):686–7

Pneumothorax and an azygos lobe [letter] Weissman JL, et al. **J Thorac Imaging** 1989 Jan;4(1):vi–ix

[Interlobar pneumothorax] Bildstein F, et al. **Rev Mal Respir** 1988;5(4):407–8 **(Fre)**

[Radiologic diagnosis of spontaneous pneumothorax] Tuengerthal JS. **Langenbecks Arch Chir** 1988;Suppl 2:483–91 (0 ref.) (Eng. Abstr.) **(Ger)**

[Clinical study of findings of pneumothoraces on the plain chest film] Saeki M. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Nov 25; 48(11):1371–80 (Eng. Abstr.) **(Jpn)**

[Roentgenokymography in the diagnosis of disorders of heart and lung function in spontaneous pneumothorax] Gusev NM, et al. **Grudn Khir** 1988 May–Jun;(3):68–72 (Eng. Abstr.) **(Rus)**

[Giant bullous emphysema simulating a spontaneous pneumothorax] Vishnevskiĭ AA, et al. **Grudn Khir** 1988 Jul–Aug;(4):91–4 **(Rus)**

[Computed tomography of the lungs in patients with spontaneous pneumothorax] Kishkovskiĭ AN, et al. **Vestn Rentgenol Radiol** 1988 May–Jun;(3):10–5 (Eng. Abstr.) **(Rus)**

SURGERY

Nd:YAG laser pleurodesis through thoracoscopy: new curative therapy in spontaneous pneumothorax. Torre M, et al. **Ann Thorac Surg** 1989 Jun;47(6):887–9

Spontaneous pneumothorax: an analysis of pleurectomy vs. conservative therapy in United States Air Force fliers. Everett WD. **Aviat Space Environ Med** 1988 Nov;59(11 Pt 1):1089–93

Median sternotomy with bilateral bullous resection for unilateral spontaneous pneumothorax, with special reference to operative indications. Ikeda M, et al. **J Thorac Cardiovasc Surg** 1988 Oct;96(4):615–20

Chest tube insertion: a simplified technique. Mehrabani D, et al. **Pediatrics** 1989 May;83(5):784–5

The laser in thoracoscopy. Boutin C. **Pneumologie** 1989 Feb; 43(2):96–7

Surgical management of pneumothorax in cystic fibrosis. Seddon DJ, et al. **Thorax** 1988 Sep;43(9):739–40

[Results of surgical therapy of spontaneous pneumothorax] Branscheid D, et al. **Langenbecks Arch Chir** 1988;Suppl 2:505–9 (Eng. Abstr.) **(Ger)**

[Treatment of spontaneous pneumothorax] Gebhardt C, et al. **Langenbecks Arch Chir** 1989;374(3):156–63 (Eng. Abstr.) **(Ger)**

[Therapy of spontaneous pneumothorax—surgical therapy] Krumhaar D, et al. **Langenbecks Arch Chir** 1988;Suppl 2:501–3 (Eng. Abstr.) **(Ger)**

[Fibrin gluing in spontaneous pneumothorax] Kaiser D. **Pneumologie** 1989 Feb;43(2):101–4 (Eng. Abstr.) **(Ger)**

[Indications for thoracoscopy in secondary spontaneous pneumothorax] Wieser O, et al. **Pneumologie** 1989 Feb; 43(2):92–5 (Eng. Abstr.) **(Ger)**

[Indications and results of surgical treatment of spontaneous pneumothorax] Nicolai K, et al. **Z Erkr Atmungsorgane** 1988;171(3):230–4 (Eng. Abstr.) **(Ger)**

[Surgical treatment of spontaneous pneumothorax] Plate H, et al. **Zentralbl Chir** 1989;114(5):297–300 (Eng. Abstr.) **(Ger)**

[Spontaneous pneumothorax: surgical aspects] Sabbatini A, et al. **Chir Ital** 1988 Apr;40(2):126–33 (14 ref.) (Eng. Abstr.) **(Ita)**

[Surgical treatment of bilateral spontaneous pneumothorax] Kitamura K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jan;37(1):117–22 (Eng. Abstr.) **(Jpn)**

[Treatment of spontaneous pneumothorax in bullous emphysema of the lungs (review of the literature)] Vishnevskiĭ AA, et al. **Khirurgiia (Mosk)** 1988 Oct;(10):140–5 (99 ref.) **(Rus)**

[Drainage in pneumothorax] Dernevik L, et al. **Lakartidningen** 1989 Feb 1;86(5):332–6 **(Swe)**

THERAPY

Treatment of pleural effusions and pneumothorax with catheters placed percutaneously under imaging guidance. Reinhold C, et al. **AJR Am J Roentgenol** 1989 Jun; 152(6):1189–91

Chemical pleurodesis in the presence of persistent air leak. Almassi GH, et al. **Ann Thorac Surg** 1989 May;47(5):786–7

A simplified method for pleural abrasion [letter] Bognolo DA, et al. **Ann Thorac Surg** 1989 Feb;47(2):332

Pneumothorax in cystic fibrosis: a 26–year experience. Spector ML, et al. **Ann Thorac Surg** 1989 Feb;47(2):204–7

Catheter aspiration for simple pneumothorax. Experience with 114 patients. Delius RE, et al. **Arch Surg** 1989 Jul; 124(7):833–6

Reexpansion pulmonary edema localized to a lobe [letter] Vuong TK, et al. **Chest** 1989 May;95(5):1170

New pigtail catheter for pleural drainage in pediatric patients. Lawless S, et al. **Crit Care Med** 1989 Feb;17(2):173–5

Intercostal tube thoracostomy in pneumothorax—factors influencing re-expansion of lung. Sharma TN, et al. **Indian J Chest Dis Allied Sci** 1988 Jan–Mar;30(1):32–5

Management of sucking chest wounds [letter] Lawrence BA. **J R Army Med Corps** 1989 Jun;135(2):94

Long term sequelae after talc pleurodesis for spontaneous pneumothorax. Viskum K, et al. **Pneumologie** 1989 Feb; 43(2):105–6

Chest drainage tubes. Symbas PN. **Surg Clin North Am** 1989 Feb;69(1):41–6 (11 ref.)

Chemical pleurodesis in primary spontaneous pneumothorax. van den Brande P, et al. **Thorac Cardiovasc Surg** 1989 Jun; 37(3):180–2

Horner's syndrome caused by an intercostal chest drain. Campbell P, et al. **Thorax** 1989 Apr;44(4):305–6

[Current therapeutic attitudes on pneumothorax in adults] Coetmeur D, et al. **Rev Pneumol Clin** 1988;44(3):156–60 (22 ref.) (Eng. Abstr.) **(Fre)**

[Pleurodesis with tetracycline hydrochloride in spontaneous pneumothorax] Grosser H, et al. **Pneumologie** 1989 Feb; 43(2):98–100 (Eng. Abstr.) **(Ger)**

[Pneumothorax: indications for thoracoscopic talc insufflation] Grossenbacher M, et al. **Schweiz Rundsch Med Prax** 1989 Mar 28;78(13):359–61 (40 ref.) (Eng. Abstr.) **(Ger)**

[Treatment of spontaneous pneumothorax] Zeri G. **Minerva Chir** 1989 Feb 28;44(4):687–91 (56 ref.) **(Ita)**

[The treatment of spontaneous pneumothorax. A report on 160 cases] Salatino A, et al. **Minerva Med** 1989 Feb; 80(2):169–71 (Eng. Abstr.) **(Ita)**

[Temporary endobronchial occlusion in surgical diseases of the lungs] Dotsenko AP, et al. **Grudn Khir** 1988 Nov–Dec; (6):59–62 (Eng. Abstr.) **(Rus)**

[Immediate and late results of the treatment of pyopneumothorax using temporary occlusion of the bronchi] Levashev IuN, et al. **Grudn Khir** 1988 May–Jun; (3):51–5 (Eng. Abstr.) **(Rus)**

[Treatment of pneumo- and hemothorax in multiple rib fractures and combined trauma] Sokolov VA, et al. **Grudn Khir** 1988 May–Jun;(3):55–8 **(Rus)**

[Temporary occlusion of the bronchi in the combined treatment of pyopneumothorax] Grishakov SV, et al. **Voen Med Zh** 1988 Sep;(9):59–60 **(Rus)**

VETERINARY

Cardiopulmonary changes in conscious dogs with induced progressive pneumothorax. Bennett RA, et al. **Am J Vet Res** 1989 Feb;50(2):280–4

PNEUMOTHORAX, ARTIFICIAL

[Use of therapeutic pneumothorax in patients with progressive destructive tuberculosis of the lungs] Repnitskaia ZD, et al. **Probl Tuberk** 1989;(5):59–61 **(Rus)**

ADVERSE EFFECTS

Sputum wax-worms after plombage. Wood JB, et al. **Br J Dis Chest** 1988 Jul;82(3):321–3

[Malignant lymphoma in a patient with chronic empyema] Yamazaki S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Dec;36(12):2662–6 (15 ref.) (Eng. Abstr.) **(Jpn)**

INSTRUMENTATION

Malignant pleural effusions: pleurodesis using a small-bore percutaneous catheter. Walsh FW, et al. **South Med J** 1989 Aug;82(8):963–5, 972

PODANGIUM see **MYXOBACTERALES**

PODIATRY

see related
FOOT DISEASES

Neutral position casting techniques. Results of a survey. Basque MG, et al. **J Am Podiatr Med Assoc** 1989 Jul; 79(7):330–5

Why publish? [letter] DeLauro TM. **J Am Podiatr Med Assoc** 1989 May;79(5):253

Infection control guidelines for podiatric practice. Lusby GI. **J Am Podiatr Med Assoc** 1988 Mar;78(3):147–52 (12 ref.)

Forensic methods and the podiatric physician. Nirenberg MS. **J Am Podiatr Med Assoc** 1989 May;79(5):247–52 (21 ref.)

The abused child. A primer for podiatric physicians. Weiner I, et al. **J Am Podiatr Med Assoc** 1988 Sep;78(9):452–4

Variation in practitioner-measured x-ray angles in hallux abducto valgus evaluation. Fox HR, et al. **J Foot Surg** 1989 Jan–Feb;28(1):33–7

Biomaterials: selection and complications. Vitale TD, et al. **J Foot Surg** 1988 Nov–Dec;27(6):533–40 (54 ref.)

[The diabetic foot: importance of a center for specialized care] Edmonds ME, et al. **Journ Annu Diabetol Hotel Dieu** 1988;:291–301 **(Fre)**

EDUCATION

The teaching of legal medicine. A void in the podiatric medical education. Restaino JM Jr. **J Am Podiatr Med Assoc** 1988 Sep;78(9):478–81

Survey of continuing education relicensure requirements in podiatric medicine. Udris E. **J Am Podiatr Med Assoc** 1988 Sep;78(9):476–8

The role of the podiatrist in a wartime scenario. Weaver TD, et al. **Milit Med** 1988 Aug;153(8):391–3

LEGISLATION & JURISPRUDENCE

Texas informed consent experience. A model for the nation. Arlen D, et al. **J Am Podiatr Med Assoc** 1989 Jul; 79(7):348–54

The teaching of legal medicine. A void in the podiatric medical education. Restaino JM Jr. **J Am Podiatr Med Assoc** 1988 Sep;78(9):478–81

METHODS

Application of transcutaneous oxygen measurement in podiatric surgery. Niehaus LP, et al. **J Foot Surg** 1989 Mar–Apr;28(2):124–6

TRENDS

Chiropody in China. Widdicombe M. **J R Soc Health** 1989 Jun;109(3):88

PODOPHYLLIN

ADMINISTRATION & DOSAGE

Podophyllotoxin 0.5% v podophyllin 20% to treat penile warts. Edwards A, et al. **Genitourin Med** 1988 Aug; 64(4):263–5

Is self application of podophyllin an acceptable treatment of genital warts in men? [letter] O'Mahony C, et al. **Genitourin Med** 1989 Jan;65(1):61

ADVERSE EFFECTS

Is podophyllin a safe drug to use and can it be used during pregnancy? [letter] [see comments] Bargman H. **Arch Dermatol** 1988 Nov;124(11):1718–20. **Comment in:** Arch Dermatol 1989 Jul;125(7):1000–1

Is podophyllin safe for use in pregnancy? [letter; comment] Sundharam JA. **Arch Dermatol** 1989 Jul;125(7):1000–1. **Comment on:** Arch Dermatol 1988 Nov;124(11):1718–20

Mystery of the holey prepuce: delayed podophyllin skin damage? [letter] Maiti H, et al. **Genitourin Med** 1989 Jun; 65(3):201

ANALOGS & DERIVATIVES

Proresid in the long-term treatment of rheumatoid arthritis. Lysholm J, et al. **Scand J Rheumatol** 1988;17(6):465–8

Trophoblast-specific beta 1-glycoprotein: its spatial structure and localization of antigenic determinants. Pavlenko AF, et al. **Tumour Biol** 1988;9(5):249–62

[HCG and SP-1 as markers in trophoblast tumors. The HCG/SP-1 ratio] Than GN, et al. **Gynakol Rundsch** 1988; 28(3):157–65 (Eng. Abstr.) **(Ger)**

PODOPHYLLOTOXIN

ADMINISTRATION & DOSAGE

Podophyllotoxin 0.5% v podophyllin 20% to treat penile warts. Edwards A, et al. **Genitourin Med** 1988 Aug; 64(4):263–5

ANALOGS & DERIVATIVES

Inhibitors of topoisomerase II: structure-activity relationships and mechanism of action of podophyllin congeners. Long BH, et al. **Adv Enzyme Regul** 1988; 27:223–56

VM-26 (teniposide)-induced hypersensitivity and degranulation of basophils in children. Nolte H, et al. **Am J Pediatr Hematol Oncol** 1988 Winter;10(4):308–12

Topoisomerase II: a potential target for novel antifungal agents. Figgitt DP, et al. **Biochem Biophys Res Commun** 1989 Apr 14;160(1):257–62

DNA minor groove binding agents interfere with topoisomerase II mediated lesions induced by epipodophyllotoxin derivative VM-26 and acridine derivative m-AMSA in nuclei from L1210 cells. Woynarowski JM, et al. **Biochemistry** 1989 May 2; 28(9):3850–5

Effects of the anticancer agent VM-26 on hexose uptake in Ehrlich cells. Wright SE, et al. **Cancer Biochem Biophys** 1989 May;10(3):185–96

Reduced formation of lesions in the DNA of a multidrug-resistant L1210 subline selected for teniposide resistance. Roberts DW, et al. **Cancer Chemother Pharmacol** 1989;23(3):161–8

Studies of topoisomerase-specific antitumor drugs in human lymphocytes using rabbit antisera against recombinant human topoisomerase II polypeptide. Hwang JL, et al. **Cancer Res** 1989 Feb 15;49(4):958–62

Genetic characterization of the multidrug-resistant phenotype of VM-26-resistant human leukemic cells. Wolverton JS, et al. **Cancer Res** 1989 May 1;49(9):2422–6

Study on conformations—biological activities relationships for podophyllotoxin analogues based on crystal structure of deoxypodophyllotoxin (anthricin). Yamamoto D, et al. **Chem Pharm Bull (Tokyo)** 1988 Sep;36(9):3239–47

Phase I/pharmacokinetic study of intraperitoneal teniposide (VM 26). Canal P, et al. **Eur J Cancer Clin Oncol** 1989 May;25(5):815–20

Unexpected high toxicity in a phase II study of teniposide (VM-26) in elderly patients with untreated small cell lung cancer (SCLC). Cerny T, et al. **Eur J Cancer Clin Oncol** 1988 Nov;24(11):1791–4

The epipodophyllotoxin derivatives VM26 and VP16: experimental and clinical aspects. Dombernowsky P, et al. **Eur J Haematol Suppl** 1988;48:49–57 (54 ref.)

Synthesis of 18F-labelled VP 16-213 and podophyllotoxin using acetyl hypofluorite. Visser GW, et al. **Int J Rad Appl Instrum [A]** 1989;40(1):47–51

A study of drug-induced topoisomerase II-mediated DNA lesions on episomal chromatin. Cullinan EB, et al. **J Biol Chem** 1989 Sep 25;264(27):16268–75

Evidence for the reversibility of cellular DNA lesion induced by mammalian topoisomerase II poisons. Hsiang YH, et al. **J Biol Chem** 1989 Jun 15;264(17):9713–5

A phase II study with teniposide (VM26) in patients with progressed or relapsed small cell lung cancer (SCLC). Tummarello D, et al. **J Chemother** 1989 Feb;1(1):64–7 (14 ref.)

Antitumor agents. 100. Inhibition of human DNA topoisomerase II by cytotoxic ether and ester derivatives of podophyllotoxin and alpha-peltatin. Thurston LS, et al. **J Med Chem** 1989 Mar;32(3):604–8

Antitumor agents, 99. Synthetic ring C aromatized podophyllotoxin analogues as potential inhibitors of human DNA topoisomerase II. Beers SA, et al. **J Nat Prod** 1988 Sep–Oct;51(5):901–5

Antitumor agents, 107. New cytotoxic 4-alkylamino analogues of 4'-demethyl-epipodophyllotoxin as inhibitors of human DNA topoisomerase II. Lee KH, et al. **J Nat Prod** 1989 May–Jun;52(3):606–13

Podophyllotoxins for brain metastases of small cell lung cancer. Haaxma-Reiche H, et al. **J Neurooncol** 1988 Nov; 6(3):231–2

A pharmacokinetic model for intraperitoneal administration of drugs: application to teniposide in humans. Canal P, et al. **J Pharm Sci** 1989 May;78(5):389–92

Teniposide-induced hypersensitivity reactions in children [letter] Carstensen H, et al. **Lancet** 1989 Jul 1;2(8653):55

Anaphylactic reactions to teniposide [letter] Siddall SJ, et al. **Lancet** 1989 Feb 18;1(8634):394

DNA binding by epipodophyllotoxins and N-acyl anthracyclines: implications for mechanism of topoisomerase II inhibition. Chow KC, et al. **Mol Pharmacol** 1988 Oct;34(4):467–73

Effects of VM26, a specific inhibitor of type II DNA topoisomerase, on SV40 chromatin replication in vitro. Richter A, et al. **Nucleic Acids Res** 1988 Nov 11; 16(21):10119–29

[Cytosine arabinoside and VM-26 in induction treatment, failures and recurrences of childhood acute lymphoblastic leukemias] Navajas Gutiérrez A, et al. **An Esp Pediatr** 1988 Oct;29 Suppl 34:91–3 **(Spa)**

ANALYSIS

[Determination of podophyllotoxin content in the root and rhizoma of Podophyllum emodi Wall. by HPLC] Bai YM. **Chung Yao Tung Pao** 1988 May;13(5):39–41, 63 (Eng. Abstr.) **(Chi)**

BIOSYNTHESIS

On the podophyllotoxins of root cultures of Linum flavum. Berlin J, et al. **Planta Med** 1988 Jun;54(3):204–6

METABOLISM

Structure-bioactivation relationship of a series of podophyllotoxin derivatives. Van Maanen JM, et al. **Eur J Cancer Clin Oncol** 1988 Sep;24(9):1415–9

PHARMACOLOGY

Study on conformations--biological activities relationships for podophyllotoxin analogues based on crystal structure of deoxypodophyllotoxin (anthricin). Yamamoto D, et al. **Chem Pharm Bull (Tokyo)** 1988 Sep;36(9):3239–47

Inhibition of ConA-induced proliferative response in human lymphocytes by podophyllotoxin and a detergent, Tween80. Månsson B, et al. **Clin Exp Rheumatol** 1988 Oct–Dec;6(4):405–7

The effect of podophyllotoxin on microtubule dynamics. Schilstra MJ, et al. **J Biol Chem** 1989 May 25; 264(15):8827–34

Podophyllotoxin analogs: effects on DNA topoisomerase II, tubulin polymerization, human tumor KB cells, and their VP-16-resistant variants. Liu SY, et al. **Mol Pharmacol** 1989 Jul;36(1):78–82

POISONING

Dorsal radiculopathy resulting from podophyllin toxicity. Gorin F, et al. **Neurology** 1989 Apr;39(4):607–8

THERAPEUTIC USE

Patient-applied podofilox for treatment of genital warts. Beutner KR, et al. **Lancet** 1989 Apr 15;1(8642):831–4

[Experiences with podophyllotoxin in the treatment of condylomata acuminata] Huwyler T, et al. **Schweiz Rundsch Med Prax** 1989 Feb 21;78(8):186–90 (Eng. Abstr.) **(Ger)**

PODOPHYLLUM see under **PLANTS, TOXIC**

POECILIA see under **CYPRINODONTIFORMES**

POETRY

The lunatic, the lover, and the poet: a study of Shakespeare's conception of creativity. Frattaroli EJ. **Adolesc Psychiatry** 1988;15:221–46

Poetry and consciousness. Williams CK. **Adolesc Psychiatry** 1988;15:121–33

Tales of the ampulla of Vater, II [letter] Sobin LH. **Am J Gastroenterol** 1988 Dec;83(12):1437

Ann Sexton and the daemonic lover. Kavaler SA. **Am J Psychoanal** 1989 Jun;49(2):105–14

Vessels. part one: Retina. Cheston-Winterbotham C. **Arch Ophthalmol** 1989 Apr;107(4):505

Poetry: the doctor and the tubercle bacilli. Askar AO. **Bull Int Union Tuberc Lung Dis** 1988 Jun;63(2):12

Lady in a nursing home [letter] Beal LF. **Geriatr Nurs (New York)** 1989 May-Jun;10(3):115

A non-coronary prone man [letter] Mittal SR. **J Assoc Physicians India** 1988 Feb;36(2):179–80

A piece of my mind. The Benjamin birds. Schiedermayer DL. **JAMA** 1989 Jan 20;261(3):440

A piece of my mind. On taking up the caduceus. Sen HA. **JAMA** 1989 Jan 20;261(3):440

A book by its cover: sonnet on an otolaryngological text. Hayes CF. **Lit Med** 1987;6:92–3

Poems and patients: the balance of interpretation. Terry JS, et al. **Lit Med** 1987;6:43–53

Joë Bousquet: paraplegia as a poet's plight and challenge. Ohry A, et al. **Paraplegia** 1988 Aug;26(4):273–7

The old English rune poem: elements of mnemonics and psychoneurologic beliefs. Bradley DJ. **Percept Mot Skills** 1989 Aug;69(1):3–8

Application of Piotrowski's dark shading hypothesis to Sylvia Plath's poems written before her suicide. Lester D. **Percept Mot Skills** 1989 Feb;68(1):122

Humour. **Perception** 1988;17(3):337–8

The confrontation with death. Vavra JD. **Pharos** 1988 Summer;51(3):16–25

The monster in the bone-house: Beowulf. Faber MD. **Psychoanal Rev** 1989 Summer;76(2):263–80

Seeing the absent father in a visual style. Lourdeaux L. **Psychoanal Rev** 1989 Spring;76(1):83–105

"Here only weak": sexuality and the structure of trauma in Paradise Lost. Rudnytsky PL. **Psychoanal Rev** 1988 Spring; 75(1):153–76

On death and dying [letter] Elovitz S. **South Med J** 1988 Oct;81(10):1334

[Clinical aspects and singularity. Essay on the poetic dimension in the psychoanalysis of psychoses] Ansermet F, et al. **Rev Med Suisse Romande** 1988 Oct;108(10):859–63 **(Fre)**

[Poison--subject and parable. Facts and fables on flora] Giebelmann R. **Z Gesamte Hyg** 1988 Dec;34(12):739–42 (Eng. Abstr.) **(Ger)**

["Spute dich, Kronos, fort den rasselnden Trott..." Reflections on time perception in the psychoanalytic process and at the end of life] Meerwein F. **Z Psychosom Med Psychoanal** 1989;35(2):156–74 (28 ref.) (Eng. Abstr.) **(Ger)**

HISTORY

Rediscovered poem after 53 years. Hamrick LC. **Ala Med** 1989 Apr;58(10):17

Professor Lord Lister, William Ernest Henley, and Oscar Wilde. Baron JH. **BMJ** 1988 Dec 24–31;297(6664):1651–3

The illnesses of Elizabeth Barrett Browning [letter] Dally P. **BMJ** 1989 Apr 8;298(6678):963

The illnesses of Elizabeth Barrett Browning [letter] Milnes JN. **BMJ** 1989 Apr 22;298(6680):1102

The illnesses of Elizabeth Barrett Browning [letter] Weir JG. **BMJ** 1989 Mar 18;298(6675):749

The illnesses of Elizabeth Barrett Browning. Young DA. **BMJ** 1989 Feb 18;298(6671):439–43

An unrepentant confusion of Art and Science: William Carlos Williams and Julian Tudor Hart. Frey JJ. **Fam Med** 1985 Sep–Oct;17(5):209–14

Old men created by young artists: time-transcendence in Tennyson and Picasso. Kastenbaum R. **Int J Aging Hum Dev** 1989;28(2):81–104

Williams's force. Morris DB. **Lit Med** 1986;5:122–40

Tennyson, the weird seizures in The Princess, and epilepsy. Wright BH. **Lit Med** 1987;6:61–76

On Milton's blindness. Hertzberg R. **Med J Aust** 1988 Dec 5–19;149(11–12):643–4

Dante and medicine: the circle of malpractice. Accardo P. **South Med J** 1989 May;82(5):624–8

[Gerhart Hauptmann and psychiatry at that time reflected in his works] Dieckhöfer K. **Gesnerus** 1989;46(1–2):81–92 (Eng. Abstr.) **(Ger)**

[Dr. Charlot Strasser (1884–1950). A Swiss psychiatrist as author, cultural and social politician] Heinrich D. **Gesnerus** 1988;45 Pt 3–4:483–99 (Eng. Abstr.) **(Ger)**

[The creative potential of Goethe. Approaches to a contradictory personality profile] Gamm HJ. **Psyche (Stuttg)** 1989 Jul;43(7):632–41 (Eng. Abstr.) **(Ger)**

[Hofmannsthal and the gliding out of this world] Tellenbach H. **Z Klin Psychol Psychopathol Psychother** 1988; 36(3):268–74 (Eng. Abstr.) **(Ger)**

[The history of the illness of M.V. Lomonosov] Evdokimov PP. **Klin Med (Mosk)** 1989 Feb;67(2):143–6 **(Rus)**

[The study of the history of the disease of Lesia Ukrainka] Ermolaeva IV, et al. **Vrach Delo** 1988 Aug;(8):116–9 **(Rus)**

POIKILODERMA CONGENITALE see under **SKIN DISEASES**

POISON CONTROL CENTERS

Occupational illness: case detection by poison control surveillance. Blanc PD, et al. **Ann Intern Med** 1989 Aug 1;111(3):238–44

Clinical toxicology--past, present and future. Proudfoot AT. **Hum Toxicol** 1988 Sep;7(5):481–7 (36 ref.)

Report of the survey of poison control centres and related toxicological services 1984–1986. Haines JA, et al. **J Toxicol Clin Exp** 1988 Sep–Oct;8(5):305–81

Ecosystem health. IV. The National Animal Poison Information Network database as a tool for ecological risk assessment. Beasley VR, et al. **Regul Toxicol Pharmacol** 1989 Aug;10(1):63–73

American Association of Poison Control Centers. Certified Regional Poison Control Centers. **Vet Hum Toxicol** 1989 Feb;31(1):79–82

Poison centers: a resource for occupational health services. Bonfiglio JF, et al. **Vet Hum Toxicol** 1988 Dec;30(6):569–71

Poison center utilization in nosocomial toxicologic exposures: a prospective study. Scalise J, et al. **Vet Hum Toxicol** 1989 Apr;31(2):158–61

Occupational/environmental protocols designed for use by poison information specialists. Sublet V, et al. **Vet Hum Toxicol** 1988 Oct;30(5):455–8

ECONOMICS

The challenge of privately-financed community health programs in an era of cost containment: a case study of poison control centers. Lerner WM, et al. **J Public Health Policy** 1988 Autumn;9(3):411–28

Financial support for poison control centers: a unique partnership with a chain drug store corporation. Wanke LA, et al. **Vet Hum Toxicol** 1988 Oct;30(5):475–9

MANPOWER

An occupational/environmental services training program for poison information specialists. Sigell LT, et al. **Vet Hum Toxicol** 1988 Oct;30(5):474–5

TRENDS

State of the art: poison centers in Minnesota. Morris C, et al. **Minn Med** 1988 Nov;71(11):698–9, 706

UTILIZATION

Experiences of the Southern Poison Center during 1986 and 1987. Chyka PA, et al. **J Tenn Med Assoc** 1989 May; 82(5):245–9

POISON IVY see **RHUS**

POISON IVY DERMATITIS

EPIDEMIOLOGY

This and that: on transport and translation. Max B. **Trends Pharmacol Sci** 1988 Feb;9(2):48–51

ETIOLOGY

Poison ivy, mangoes, cashews, and dermatitis [letter] Geller M. **Ann Intern Med** 1989 Jun 15;110(12):1036–7

IMMUNOLOGY

Hyposensitization to poison ivy after working in a cashew nut shell oil processing factory. Reginella RF, et al. **Contact Dermatitis** 1989 Apr;20(4):274–9

PREVENTION & CONTROL

Topical prevention of poison ivy/oak dermatitis. Epstein WL. **Arch Dermatol** 1989 Apr;125(4):499–501

POISONING

see related
ANTIDOTES

Toxicology: an annotated bibliography of the recent literature. Litovitz TL. **Am J Emerg Med** 1989 Jan; 7(1):104–9

Accidental ingestions of oral prescription drugs: a multicenter survey. Jacobson BJ, et al. **Am J Public Health** 1989 Jul; 79(7):853–6

A study of adverse effects on the progeny after intoxication during pregnancy. Czeizel A, et al. **Arch Toxicol** 1988 Aug; 62(1):1–7

Poisoning. Steinhart CM, et al. **Crit Care Clin** 1988 Oct; 4(4):845–72 (207 ref.)

Clinical toxicology--past, present and future. Proudfoot AT. **Hum Toxicol** 1988 Sep;7(5):481–7 (36 ref.)

Dangerous information: product tampering and poisoning advice in revenge and murder manuals. Dietz PE. **J Forensic Sci** 1988 Sep;33(5):1206–17 (46 ref.)

Temperature regulation in laboratory mammals following acute toxic insult. Gordon CJ, et al. **Toxicology** 1988 Dec 30;53(2–3):161–78 (67 ref.)

Adolescent poisoning: a comparison of accidental and intentional exposures. Dean B, et al. **Vet Hum Toxicol** 1988 Dec;30(6):579–81

[Management of an inquiry on a collective endemic poisoning] Gervais P, et al. **J Toxicol Clin Exp** 1985 Mar–Apr;5(2):79–103 (52 ref.) (Eng. Abstr.) **(Fre)**

[Contradictions in the interpretation of the term "toxicosis"] Bogadel'nikov IV, et al. **Pediatriia** 1988;(6):92–4 **(Rus)**

BLOOD

Haematological changes induced by Amberlite XAD4 hemoperfusion. Mathieu D, et al. **Life Support Syst** 1983; 1 Suppl 1:61–4

COMPLICATIONS

Computerized tomography findings among workers with chronic intoxication of the brain. Greve E. **Scand J Soc Med** 1989;17(2):147–50

[Assessment of hemorrhagic syndrome of the digestive tract in acute poisoning evaluation] Sternik SG, et al. **Sud Med Ekspert** 1989 Apr–Jun;32(2):24–6 (Eng. Abstr.) **(Rus)**

[Pathogenetic characteristics of poisoning diseases of the nerve trunks] Golovchenko IuI. **Vrach Delo** 1988 Aug; (8):82–4 (Eng. Abstr.) **(Rus)**

[Oxygen balance of the brain in exogenous neurotoxicoses (review of the literature)] Kvitnitskiĭ-Ryzhov IuN, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):132–42 (160 ref.) **(Rus)**

[Comatose states due to poisoning. A 12-year study] Sarapa N, et al. **Arh Hig Rada Toksikol** 1988 Jun;39(2):241–54 (Eng. Abstr.) **(Scr)**

[Early diagnosis of drug-induced coma] Raičević B. **God Vojnomed Akad** 1987;29:39–44 (Eng. Abstr.) **(Scr)**

DIAGNOSIS

ABC of child abuse. Poisoning. Meadow R. **BMJ** 1989 May 27;298(6685):1445–6 (0 ref.)

HPLC measurement of chlorophenoxy herbicides, bromoxynil, and ioxynil, in biological specimens to aid diagnosis of acute poisoning. Flanagan RJ, et al. **Clin Chem** 1989 Jul;35(7):1342–7

Serendipitous diagnosis of iodide intoxication [letter] Soldin SJ, et al. **Clin Chem** 1988 Nov;34(11):2391–2

Wide-bore capillary column gas chromatography in toxicological analysis of biological samples from multidrug overdoses fatalities. Kłys M, et al. **Forensic Sci Int** 1988 Sep;38(3–4):185–92

Radiation does from medical in-vivo prompt gamma-ray activation using a mobile nuclear reactor. Chung C, et al. **Health Phys** 1988 Oct;55(4):671–83

Evaluation of a multiple-variable thin-layer and reversed-phase thin-layer chromatographic scheme for identification of basic and neutral drugs in an emergency toxicology setting. Harper JD, et al. **J Anal Toxicol** 1989 Jan–Feb;13(1):31–6

Microcomputer-assisted liquid chromatographic separation system: application to toxic compounds identification in poisoned human fluids. Jinno K, et al. **J Chromatogr Sci** 1989 Feb;27(2):57–62

ACP broadsheet 119: September 1988. Simple tests to detect poisoning. Widdop B. **J Clin Pathol** 1988 Sep; 41(9):996–1004

Parental administration of chemical agents: a cause of apparent life-threatening events. Hickson GB, et al. **Pediatrics** 1989 May;83(5):772–6

DRUG THERAPY

Superiority of activated charcoal alone compared with ipecac and activated charcoal in the treatment of acute toxic ingestions. Albertson TE, et al. **Ann Emerg Med** 1989 Jan; 18(1):56–9

Clinical experiences with Ro 15–1788 (anexate) in benzodiazepine and mixed-drug overdoses. Fantozzi R, et al. **Resuscitation** 1988;16 Suppl:S79–82

The use of anexate (Ro 15–1788) in acute self-poisoning with benzodiazepines alone or combined with other drugs—preliminary results. Rouzioux JM, et al. **Resuscitation** 1988;16 Suppl:S91–8

[The therapeutic value of forced diuresis] Kelbel C, et al. **Med Klin** 1989 Feb 15;84(2):98–102 (32 ref.) **(Ger)**

[Intermediator relation of the CNS and the improvement in the agents for therapy of drug poisoning] Kutsenko SA, et al. **Farmakol Toksikol** 1989 Jan–Feb;52(1):118–23 (87 ref.) (Eng. Abstr.) **(Rus)**

EPIDEMIOLOGY

1988 annual report of the American Association of Poison Control Centers National Data Collection System. Litovitz TL, et al. **Am J Emerg Med** 1989 Sep;7(5):495–545

Attempted suicide and pregnancy [letter] Czeizel A, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):497

Suicidal attempts by ingestion of various substances in 2050 children and adolescents in Greece. Papathomopoulos E, et al. **Can J Psychiatry** 1989 Apr;34(3):205–10

Admission to a pediatric intensive care unit for poisoning: a review of 105 cases. Lacroix J, et al. **Crit Care Med** 1989 Aug;17(8):748–50

Accidental poisoning. Singhal PK, et al. **Indian Pediatr** 1988 Apr;25(4):350–3

Pattern of poisoning in rural Sri Lanka. Hettiarachchi J, et al. **Int J Epidemiol** 1989 Jun;18(2):418–22

Survey of products most frequently named in ingestion accidents in 1965. Verhulst HL, et al. **J Clin Pharmacol J New Drugs** 1967 Jan–Feb;7(1):9–16

Trends in the reported rates of suicide by self-poisoning in the elderly. Nowers M, et al. **J R Coll Gen Pract** 1988 Feb;38(307):67–9

Experiences of the Southern Poison Center during 1986 and 1987. Chyka PA, et al. **J Tenn Med Assoc** 1989 May; 82(5):245–9

Acute poisoning in adults in Multan [letter] Noor NA, et al. **JPMA** 1988 Nov;38(11):305–6

A survey of deliberate self-poisoning. McGrath J. **Med J Aust** 1989 Mar 20;150(6):317–8, 320–1, 324

Despite appearances, no clean bill of health for semiconductor trade. Polakoff PL. **Occup Health Saf** 1989 Jan;58(1):14

Self-poisoning with drugs. Kerr HD. **Wis Med J** 1989 Feb; 88(2):15–8

[Injuries and poisoning caused by various types of activities. Epidemiologic survey on death and hospitalization in Aquitaine] Nicaud V, et al. **Rev Epidemiol Sante Publique** 1989;37(2):127–36 (Eng. Abstr.) **(Fre)**

[Epidemiology of ingestion accidents in children] Kleinteich B, et al. **Padiatr Grenzgeb** 1988;27(5):393–9 (Eng. Abstr.) **(Ger)**

[Domestic poisoning in childhood. Responsibility of the nuclear family and juridical implications] Rosati U, et al. **Minerva Pediatr** 1988 Apr;40(4):207–10 (Eng. Abstr.) **(Ita)**

[Self-poisoning in Northwest Norway in 1975–1984] Rostrup M, et al. **Tidsskr Nor Laegeforen** 1989 Jan 20;109(2):173–6 (Eng. Abstr.) **(Nor)**

[Self-poisoning in Northwest Norway in 1984. A follow-up after 6 months. A prospective study] Rostrup M, et al. **Tidsskr Nor Laegeforen** 1989 Jan 20;109(2):177–9 (Eng. Abstr.) **(Nor)**

[Analysis of acute poisoning among children hospitalized in the pediatric department of the Chalubinski Municipal Hospital in Częstochowa 1979–1984] Grabowski K, et al. **Pediatr Pol** 1988 Apr;63(4):224–30 (Eng. Abstr.) **(Pol)**

[Accidental poisoning among children in Wrocław] Prandota J, et al. **Pediatr Pol** 1988 Apr;63(4):231–5 (Eng. Abstr.) **(Pol)**

[The impact of occupational effects on workers' health. I. Morbidity] Mendes R. **Rev Saude Publica** 1988 Aug; 22(4):311–26 (148 ref.) (Eng. Abstr.) **(Por)**

ETHNOLOGY

Parasuicide in young Asian women [letter] Glover G, et al. **Br J Psychiatry** 1989 Feb;154:271–2

ETIOLOGY

Acute pulmonary intoxications. Overview and practical guidelines [published erratum appears in Neth J Med 1989 Apr;34(3–4):169] Sangster B, et al. **Neth J Med** 1988 Aug; 33(1–2):91–100 (16 ref.)

Accidental childhood poisoning: influence of the type of caretaker on etiology and risk. Wezorek C, et al. **Vet Hum Toxicol** 1988 Dec;30(6):574–6

[Possibilities and limits of toxicologic analysis in the concept of treatment] Müller RK, et al. **Z Arztl Fortbild (Jena)** 1989; 83(13):686–8 **(Ger)**

[Differential diagnosis of exogenous poisoning] Thiele R. **Z Arztl Fortbild (Jena)** 1989;83(13):692–6 (3 ref.) **(Ger)**

[Acute drug poisoning: our experience 1966–1985] Pach J, et al. **Pol Tyg Lek** 1989 Jan 2;44(1):7–10 **(Pol)**

[The questions of the combined action on the body of industrial chemical compounds and ionizing radiations] Kustov VV. **Gig Tr Prof Zabol** 1989;(2):35–9 (43 ref.) (Eng. Abstr.) **(Rus)**

METABOLISM

Analysis of glyphosate and (aminomethyl) phosphonic acid in a suspected poisoning case. Kageuka M, et al. **Nippon Hoigaku Zasshi** 1988 Apr;42(2):128–32

[Basic principles and objectives of using chemobiokinetics in toxicology] Filov VA. **Vestn Akad Med Nauk SSSR** 1988;(6):82–9 (32 ref.) **(Rus)**

MORTALITY

Deaths from asphyxiation and poisoning at work in the United States 1984–6. Suruda A, et al. **Br J Ind Med** 1989 Aug;46(8):541–6

Poisoning in Sri Lanka [editorial] Fernando R. **Ceylon Med J** 1988 Jun;33(2):39–41

A comparison of drug-related deaths in Oslo, Norway and Aarhus, Denmark. Teige B, et al. **J Forensic Sci Soc** 1988 Sep–Dec;28(5–6):311–9

Leads from the MMWR. Unintentional poisoning mortality—United States, 1980–1986. **JAMA** 1989 Apr 7; 261(13):1870, 1875–6

Trends in fatal poisonings in Leeds, 1977 to 1987. Crowe MT. **Med Sci Law** 1989 Apr;29(2):124–9

Unintentional poisoning mortality—United States, 1980–1986. **MMWR** 1989 Mar 17;38(10):153–7

Accidental death rates as a measure of the availability of a method for suicide. Lester D, et al. **Percept Mot Skills** 1989 Feb;68(1):66

[Study of mortality rate in acute poisoning and its characteristics in a region with developed agriculture] Tashev TS, et al. **Vutr Boles** 1988;27(3):84–8 (Eng. Abstr.) **(Bul)**

[Acute alcohol and drug poisoning in forensic material from Arhus and Oslo] Kaa E, et al. **Nord Med** 1988; 103(11):329–31 (Eng. Abstr.) **(Dan)**

[Fatal self-poisoning in Western Norway in 1978–1987] Morild I. **Tidsskr Nor Laegeforen** 1989 Jan 20;109(2):180–2 (Eng. Abstr.) **(Nor)**

[A method of evaluating reliable limits of lethal doses of harmful substances] Manenko AK, et al. **Gig Sanit** 1989 May;(5):47–9 **(Rus)**

[Fatal poisoning in Scandinavia—narcotic addicts are a high-risk group] Ceder G, et al. **Nord Med** 1989; 104(8–9):224–7 (Eng. Abstr.) **(Swe)**

PATHOLOGY

[Toxic organic damage] Schäfer H. **Versicherungsmedizin** 1989 Mar 1;41(2):29–39 (49 ref.) (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

Amphetamine toxicity: experience with 127 cases. Derlet RW, et al. **J Emerg Med** 1989 Mar–Apr;7(2):157–61 (31 ref.)

Conditioned taste aversion to injected flavor: differential effect of anesthesia on the formation of the gustatory trace and on its association with poisoning in rats. Bures J, et al. **Neurosci Lett** 1989 Apr 10;98(3):305–9

[A method of cardiointervalography in pediatric toxicology] Fediaev VA, et al. **Pediatriia** 1988;(7):37–9 **(Rus)**

PREVENTION & CONTROL

Cooperative regional program for distribution of poison prevention information and syrup of ipecac. Frank RJ Jr, et al. **Am J Hosp Pharm** 1989 Apr;46(4):719–23

Mandate safety caps on all drug samples [letter] Prymowicz S. **Am Pharm** 1989 Jul;NS29(7):4

Accidental poisoning [letter] Gill DG. **Arch Dis Child** 1989 Jan;64(1):178

Toxicology begins at home [editorial] Shenfield GM. **Med J Aust** 1989 Jul 3;151(1):2–3

Accidental poisoning in childhood. **Practitioner** 1987 Oct 8; 231(1436):1258, 1261

PSYCHOLOGY

Deliberate self poisoning in adolescents [letter] Lazaro C. **Arch Dis Child** 1989 Jun;64(6):889

Use of abbreviated mental status examination in the initial assessment of overdose patients. Merigian KS, et al. **Arch Emerg Med** 1988 Sep;5(3):139–45

Unsubstantiated complaints of being poisoned. Psychopathology of patients referred to the national poisons unit. Hutchesson EA, et al. **Br J Psychiatry** 1989 Jan;154:34–40

Self poisoning in Sri Lanka: motivational aspects. Hettiarachchi J, et al. **Int J Soc Psychiatry** 1989 Summer; 35(2):204–8

SURGERY

[Gastrotomy in drug poisoning with suicidal intent—a case report] Wündrich B, et al. **Zentralbl Chir** 1988; 113(13):869–71 **(Ger)**

THERAPY

Poisoning: is the role of the nephrologist diminishing? Winchester JF. **Am J Kidney Dis** 1989 Mar;13(3):171–83 (141 ref.)

Drug overdose. Cooper K. **Am J Nurs** 1989 Sep;89(9):1146–8

The accident and emergency department management of deliberate self-poisoning. Owens DW, et al. **Br J Psychiatry** 1988 Jun;152:830–3

Efficacy of syrup of ipecac-induced emesis for emptying gastric contents. Vasquez TE, et al. **Clin Nucl Med** 1988 Sep;13(9):638–9

Selection of a gastric decontamination method for poisoning emergencies [editorial] Krenzelok EP. **Clin Pharm** 1989 Apr;8(4):294–5

Acute poisoning treated in the intensive care unit: a case series. Leykin Y, et al. **Isr J Med Sci** 1989 Feb;25(2):98–102

Gastrointestinal transit times of a charcoal/sorbitol slurry in overdose patients. Harchelroad F, et al. **J Toxicol Clin Toxicol** 1989;27(1–2):91–9

Immunotoxicotherapy: present status and future trends. Scherrmann JM, et al. **J Toxicol Clin Toxicol** 1989; 27(1–2):1–35 (37 ref.)

Continuous spontaneous artero-venous hemofiltration (CAVHF) in patients on intensive therapy. Mastrangelo F, et al. **Life Support Syst** 1983;1 Suppl 1:289–92

Use of charcoal haemoperfusion in 55 acute poisonings. Mydlík M, et al. **Life Support Syst** 1983;1 Suppl 1:53–6

Drug removal by continuous arteriovenous haemofiltration. A review of the evidence in poisoned patients. Golper TA, et al. **Med Toxicol Adverse Drug Exp** 1988 Sep–Oct; 3(5):341–9 (57 ref.)

State of the art: poison centers in Minnesota. Morris C, et al. **Minn Med** 1988 Nov;71(11):698–9, 706

Poison treatment formulary. **Vet Hum Toxicol** 1989 Feb; 31(1):67–70

[Use and efficacy of extracorporeal detoxication procedures in poisoning in children] Stolpe HJ, et al. **Kinderarztl Prax** 1989 Apr;57(4):163–70 (30 ref.) (Eng. Abstr.) **(Ger)**

[First aid measures in accidental poisoning in childhood from the ambulatory care viewpoint] Gudowski G, et al. **Z Arztl Fortbild (Jena)** 1988;82(16):755–8 (10 ref.) **(Ger)**

[Basic value of psychological treatment in the management of poisoning "accidents" in suicidal patients (letter)] Tekeres M. **Orv Hetil** 1988 Jul 3;129(27):1451 **(Hun)**

[Forced alkalic diuresis. Still a current therapy in poisoning] Os I, et al. **Tidsskr Nor Laegeforen** 1989 Aug 10; 109(22):2154–5 **(Nor)**

[Experience with extracorporeal detoxification of acute exo- and endotoxicoses] Akhunbaeva NI, et al. **Klin Khir** 1989; (3):67–8 **(Rus)**

[The role of hemodialysis and hemosorption in the complex therapy of acute poisoning] Kurashov OV, et al. **Vrach Delo** 1989 May;(5):102–4 (Eng. Abstr.) **(Rus)**

[Bases of the treatment of acute poisoning (clinical conference)] Nogué Xarau S. **Med Clin (Barc)** 1989 Jun 10;93(2):68–75 **(Spa)**

[Emetics to induce vomiting in children] Jägervall M, et al. **Lakartidningen** 1989 Feb 8;86(6):432–3 **(Swe)**

VETERINARY

Noninfectious diseases, metabolic diseases, toxicities, and neoplastic diseases of South American camelids. Smith JA. **Vet Clin North Am [Food Anim Pract]** 1989 Mar;5(1):101–43 (78 ref.)

[Poisoning in cattle caused by blue-green algae] Odriozola E, et al. **Rev Argent Microbiol** 1984;16(4):219–24 (Eng. Abstr.) **(Spa)**

POISONS

see related
TOXICOLOGY

ADVERSE EFFECTS

[Usefulness of determination of porphyrins and their precursors for the evaluation of disorders of heme synthesis in the liver after exposure to xenobiotics] Stankiewicz A, et al. **Postepy Hig Med Dosw** 1988 Sep–Oct;42(5):574–88 (43 ref.) (Eng. Abstr.) **(Pol)**

CLASSIFICATION

[Elaboration of the classification of atmospheric pollution based on the degree of its harmfulness using basic toxicometric parameters] Avaliani SL, et al. **Gig Sanit** 1988 Jun;(6):4–7 (Eng. Abstr.) **(Rus)**

HISTORY

Arrow and dart poisons. Bisset NG. **J Ethnopharmacol** 1989 Feb;25(1):1–41 (165 ref.)

PHARMACOKINETICS

[Does the cytochrome P-450-dependent system of microsomal monooxygenases protect the body from the toxic effect of xenobiotics?] Lutz W, et al. **Pol Tyg Lek** 1988 Jun 20;43(25):795–8 **(Pol)**

STANDARDS

[Current aspects of WHO activities in the field of safety of

chemical substances] Vashkova VV, et al. **Gig Sanit** 1989 Apr;(4):25–9 **(Rus)**

TOXICITY

[Basic level of DNA damage in human cells] Jendryczko A, et al. **Przegl Lek** 1989;46(5):470–3 (24 ref.) **(Pol)**

[Toxic environmental pollution as a fetal risk factor] Zdziennicki A. **Wiad Lek** 1988 Apr 15;41(8):514–7 (33 ref.) (Eng. Abstr.) **(Pol)**

[A method of evaluating reliable limits of lethal doses of harmful substances] Manenko AK, et al. **Gig Sanit** 1989 May;(5):47–9 **(Rus)**

[Immunotoxicology—the most important field of research in environmental health] Sidorenko GI, et al. **Gig Sanit** 1989 Mar;(3):7–11 **(Rus)**

[Fundamental studies as the basis of scientific potential of research on environmental health] Sidorenko GI. **Gig Sanit** 1989 Mar;(3):4–7 **(Rus)**

[Criteria of the evaluation of selective effects of xenobiotics in toxicologic experiments] Trakhtenberg IM, et al. **Gig Sanit** 1988 Sep;(9):53–6 (23 ref.) **(Rus)**

[Necessity of a unified concept of adaptation] Shepelin OP. **Gig Tr Prof Zabol** 1988 Dec;(12):34–7 (Eng. Abstr.) **(Rus)**

POISSON DISTRIBUTION see **PROBABILITY**

POKEWEED LECTINS see **POKEWEED MITOGENS**

POKEWEED MITOGENS

In vitro IgM and IgM rheumatoid factor production in response to Staphylococcus aureus Cowan I and pokeweed mitogen: the contribution of CD5+ (Leu 1) B cells. Karsh J, et al. **Clin Exp Immunol** 1989 Aug;77(2):179–83

Influence of donor characteristics on responsiveness of mononuclear cells to pokeweed mitogen. Uiterdijk HG, et al. **Clin Exp Immunol** 1989 Jul;77(1):83–8

HIV-induced immunodeficiency. Relatively preserved phytohemagglutinin as opposed to decreased pokeweed mitogen responses may be due to possibly preserved responses via CD2/phytohemagglutinin pathway. Hofmann B, et al. **J Immunol** 1989 Mar 15;142(6):1874–80

ANTAGONISTS & INHIBITORS

Antagonism by D-penicillamine of the suppression of PWM-stimulated mononuclear cells by chloroquine. de Vries E, et al. **Agents Actions** 1989 Jan;26(1–2):243–5

Anti-pokeweed mitogen antiserum inhibits and enhances blastogenesis of mononuclear cells induced by pokeweed mitogen. Uiterdijk HG, et al. **Agents Actions** 1988 Aug; 25(1–2):106–14

IMMUNOLOGY

Mitogen-induced human IgG subclass expression. II. IgG1 and IgG3 subclasses are preferentially stimulated by a combination of Staphylococcus aureus Cowan I and pokeweed mitogen. Butch AW, et al. **Hum Immunol** 1989 Mar;24(3):207–18

PHARMACOLOGY

Estradiol potentiates poke-weed mitogen-induced B cell stimulation in multiple sclerosis and healthy subjects. Kalman B, et al. **Acta Neurol Scand** 1989 Apr;79(4):340–6

Regulation of in vitro PWM-induced IgG secretion in humans. O'Gorman MR, et al. **Cell Immunol** 1989 Feb; 118(2):435–47

Pokeweed mitogen stimulates DNA synthesis in cultured amoebocytes of Carcinoscorpius rotundicauda. Ding JL, et al. **Cytobios** 1988;55(222–223):147–54

Mitogen activation of human lymphocytes from normal and acute lymphocytic leukemia (ALL) subjects. Russo SA, et al. **Enzyme** 1989;41(4):217–26

Frequencies of micronuclei in human peripheral blood lymphocytes stimulated in vitro by phytohemagglutinin and pokeweed mitogen. Högstedt B, et al. **Hereditas** 1988; 109(1):53–5

Frequency and size distribution of micronuclei in lymphocytes stimulated with phytohemagglutinin and pokeweed mitogen in workers exposed to piperazine. Högstedt B, et al. **Hereditas** 1988;109(1):139–42

Mitotic cells in different lymphocyte subsets in unfractionated cultures stimulated by phytohaemagglutinin or pokeweed mitogen. Kovanen PE, et al. **Hereditas** 1989;110(1):69–74

Suppressive role of NK cells in pokeweed mitogen-induced immunoglobulin synthesis: effect of depletion/enrichment of Leu 11b+ cells. Mason PD, et al. **Immunology** 1988 Sep;65(1):113–8

Potentiation of the stimulatory capacity of pokeweed mitogen via its binding to autologous erythrocytes. Uiterdijk HG, et al. **Int Arch Allergy Appl Immunol** 1989;88(4):447–53

Immunomodulatory effect of bovine PTH extract on lymphocyte response to plant mitogens. Elias AN, et al. **J Med** 1988;19(2):109–17

Systemic lipopolysaccharide and pokeweed mitogen increase quinolinic acid content of mouse cerebral cortex. Heyes MP, et al. **J Neurochem** 1988 Dec;51(6):1946–8

The influence of C3-coated homologous erythrocytes on pokeweed-mitogen-induced polyclonal differentiation of human B cells. Rasmussen JM, et al. **Scand J Immunol** 1989 Aug;30(2):209–17

T-cell phenotypes after stimulation of human mononuclear cells by pokeweed mitogen or pokeweed mitogen bound to erythrocytes. Uiterdijk HG, et al. **Scand J Immunol** 1989 May;29(5):563–71

[The surface phenotype and enzymatic cytochemical markers of B cells during pokeweed mitogen activation] Evsev'eva AI, et al. **Tsitologiia** 1989 May;31(5):569–75 (Eng. Abstr.) **(Rus)**

POL GENES see **GENES, VIRAL**

POL I see **DNA POLYMERASE I**

POL II see **DNA POLYMERASE II**

POLAND SYNDROME see under **SYNDACTYLIA**

POLAR RECOMBINATION see **GENE CONVERSION**

POLAR REGIONS see **COLD CLIMATE**

POLARCARDIOGRAPHY see under **VECTORCARDIOGRAPHY**

POLARITY OF TRANSLATION see under **TRANSLATION, GENETIC**

POLARIZATION FLUOROIMMUNOASSAY see **FLUOROIMMUNOASSAY**

POLAROGRAPHY

Analytical applications of polarimetry, optical rotatory dispersion, and circular dichroism. Purdie N, et al. **Anal Chem** 1989 Jan 15;61(2):77A–89A

METHODS

[Polarographic evaluation of extra-intracranial microvascular anastomoses in the early postoperative period] Spektor SM, et al. **Zh Vopr Neirokhir** 1988 Sep–Oct;(5):34–7 (Eng. Abstr.) **(Rus)**

POLARON see **GENE CONVERSION**

POLICY MAKING

see related
HEALTH POLICY
PUBLIC POLICY

The importance of policy. McKee SP. **Am Pharm** 1988 Jun; NS28(6):43–5

Toxic pollutants, science, and corporate influence [editorial] Castleman BI, et al. **Arch Environ Health** 1989 Mar–Apr; 44(2):68, 127

Developing a preservation policy and procedure statement for a health sciences library. Paulson BA. **Bull Med Libr Assoc** 1989 Jul;77(3):293–8

Social costs of alcohol. Adrian M. **Can J Public Health** 1988 Sep–Oct;79(5):316–22

Health policy analysis and magnetic resonance imaging. The case of the New York State Demonstration Project. Milliren JW. **Clin Imaging** 1989 Mar;13(1):16–28

Elder abuse: some questions for policymakers. Callahan JJ Jr. **Gerontologist** 1988 Aug;28(4):453–8 (28 ref.)

Medical education reform and departmental chairs. Bulger RJ. **Health Aff (Millwood)** 1988 Fall;7(4):185–7

Rigid policies can help a plaintiff's case. Holthaus D. **Hospitals** 1989 Mar 20;63(6):98

Systematic information within the European community's action programme on disabled people. Daunt P. **Int J Rehabil Res** 1987;10(4 Suppl 5):318–21

Policy process framework: a systems approach to policy development. Burian B. **J Allied Health** 1989 Jan;18(1):95–9

Summary of the policy goals and strategies. Gillespie PW. **J Allied Health** 1989 Jan;18(1):101–7

Implementing food policy: Calorie Conscious Consumer Project. Haughton B, et al. **J Am Diet Assoc** 1989 Mar; 89(3):351–3

Women and smoking. How to operate on your own hospital. Addison R. **J Am Med Wom Assoc** 1989 Mar–Apr; 44(2):45–6

Preparing an AIDS policy for colleges of osteopathic medicine. Duerfeldt WF. **J Am Osteopath Assoc** 1989 Jan; 89(1):95–103

Developing Do Not Resuscitate policies. Sharp JQ, et al. **J Nurs Adm** 1989 Apr;19(4):25–9

A patient voice at the General Medical Council [letter] Pratten B. **Lancet** 1989 Jan 21;1(8630):163

Governing the health sector: power and policy making in the English and Swedish health services. Ham C. **Milbank Q** 1988;66(2):389–414

Animal research and government policy [letter] Langer GA. **Science** 1989 Mar 3;243(4895):1126

Bangladesh National Drug Policy: an assessment. Islam N. **Trop Doct** 1989 Jan;19(1):18–20

POLIOMYELITIS

A case of paralytic poliomyelitis—Ontario. Tischler M. **Can Dis Wkly Rep** 1988 Dec 24;14(51):229–30 **(Eng, Fre)**

[Poliomyelitis in Israel—clinico-epidemiological aspects and future outlook (editorial)] Rotem Y. **Harefuah** 1988 Nov 15;115(10):301–4 **(Heb)**

BLOOD

Serum creatine kinase in the post-polio population. Waring WP, et al. **Am J Phys Med Rehabil** 1989 Apr;68(2):86–90

CLASSIFICATION

A new epidemiologic and laboratory classification system for paralytic poliomyelitis cases. Sutter RW, et al. **Am J Public Health** 1989 Apr;79(4):495–8

COMPLICATIONS

Postpolio muscular atrophy. Diagnostic utility of macroelectromyography. Lange DJ, et al. **Arch Neurol** 1989 May;46(5):502–6

Symptoms and clinical impressions of patients seen in a postpolio clinic. Agre JC, et al. **Arch Phys Med Rehabil** 1989 May;70(5):367–70

Ventilator management in Duchenne muscular dystrophy and postpoliomyelitis syndrome: twelve years' experience. Curran FJ, et al. **Arch Phys Med Rehabil** 1989 Mar; 70(3):180–5

Risk factors for median mononeuropathy of the wrist in postpoliomyelitis patients. Werner R, et al. **Arch Phys Med Rehabil** 1989 Jun;70(6):464–7

The use of EMG in the differential diagnosis of muscle weakness in post-polio syndrome. Feldman RM. **Electromyogr Clin Neurophysiol** 1988 Jun–Jul;28(5):269–72

Prevalence of post-polio residual paralysis in under-five children in a PHC in Haryana [letter] Kumar S, et al. **Indian Pediatr** 1988 Nov;25(11):1128

Post-poliomyelitis sequelae in the elderly. Ciocon JO, et al. **J Am Geriatr Soc** 1989 Mar;37(3):256–8

Respiratory failure associated with the post-polio syndrome. Mendieta JM, et al. **J Ky Med Assoc** 1989 Feb;87(2):63–4

Cardiorespiratory responses to aerobic training by patients with postpoliomyelitis sequelae. Jones DR, et al. **JAMA** 1989 Jun 9;261(22):3255–8

Poliomyelitis: the battle continues [editorial] Yarnell SK. **JAMA** 1989 Jun 9;261(22):3294–5

Relation between motoneuron disease and past poliomyelitis [letter] Clements GB, et al. **Lancet** 1988 Oct 29; 2(8618):1024–5

Neuromuscular symptoms in patients with previous poliomyelitis: a New Zealand study. Baker PC. **N Z Med J** 1989 Mar 22;102(864):132–4

Modified posterior soft tissue release for management of severe knee flexion contracture. Bhan S, et al. **Orthopedics** 1989 May;12(5):703–8

The late sequelae of poliomyelitis. Howard RS, et al. **Q J Med** 1988 Mar;66(251):219–32

[Radiologic investigation on the deformed foot after poliomyelitis] Pan GF. **Chung Hua Fang She Hsueh Tsa Chih** 1988 Dec;22(6):362–4 (Eng. Abstr.) **(Chi)**

[Operative care for abdominal muscle to replace quadriceps femoris musculus without fixation with gypsum] Lu ZC. **Chung Hua Hu Li Tsa Chih** 1988 May;23(5):274, 296 **(Chi)**

[Relation between pathology and strength of post-poliomyelitic muscle] Gu JN. **Chung Hua Wai Ko Tsa Chih** 1988 Apr;26(4):235–6, 256 (Eng. Abstr.) **(Chi)**

[Sleep apnea syndrome: late sequela of poliomyelitis] Piperno D, et al. **Rev Mal Respir** 1988;5(5):525–7 (Eng. Abstr.) **(Fre)**

[Progressive neuromuscular syndrome in survivors of poliomyelitis] Streifler J, et al. **Harefuah** 1988 Dec 1; 115(11):313–5 (Eng. Abstr.) **(Heb)**

[Post-polio respiratory failure. New manifestations of a forgotten disease] Bergholtz B, et al. **Tidsskr Nor Laegeforen** 1988 Oct 20;108(29):2474–5 (Eng. Abstr.) **(Nor)**

DIAGNOSIS

Computerized electromyographic assessment of anterior tibial muscles for late sequelae of poliomyelitis. Chang CW, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Nov;87(11):1093–7

DRUG THERAPY

Clearance of a persistent human enterovirus infection of the mouse central nervous system by the antiviral agent disoxaril. Jubelt B, et al. **J Infect Dis** 1989 May; 159(5):866–71

ENZYMOLOGY

[Studies on changes in cholinesterase activities in blood under acupuncture treatment of sequelae of poliomyelitis] Zhu SL, et al. **Chen Tzu Yen Chiu** 1988;13(2):94–7 (Eng. Abstr.) **(Chi)**

EPIDEMIOLOGY

Paralytic poliomyelitis in Addis Ababa: follow-up survey of registered children. Green-Abate C, et al. **Ann Trop Paediatr** 1989 Jun;9(2):102–6

Risk factors for the presistence of wild poliovirus transmission in Sinaloa, Mexico, 1984–1986. Cárdenas-Ayala VM, et al. **Bull Pan Am Health Organ**

1988;22(3):227–39
Poliomyelitis outbreak in Israel. **Can Dis Wkly Rep** 1988 Nov 12;14(45):208 **(Eng, Fre)**
Magnitude of poliomyelitis in a rural area of Allahabad. Joshi PL, et al. **Indian Pediatr** 1988 Jul;25(7):673–5
Outbreak of poliomyelitis in South Africa investigated by oligonucleotide mapping. Tsilimigras CW, et al. **J Med Virol** 1989 May;28(1):52–6
Leads from the MMWR. Poliomyelitis—Israel. **JAMA** 1988 Nov 11;260(18):2640
Poliomyelitis—Israel. **MMWR** 1988 Oct 14;37(40):624–5
Polio outbreak in Algeria: epidemiological, virological and vaccinational aspects [published erratum appears in Trans R Soc Trop Med Hyg 1988;82(3):357] Kadi Z, et al. **Trans R Soc Trop Med Hyg** 1988;82(2):305–10
Monitoring polio trends from physiotherapy records. Independent sentinel surveillance in Pakistan. Miles M. **Trop Doct** 1989 Jan;19(1):3–5
Another encounter with an old foe: outbreak of poliomyelitis in Israel—1988. Rotem Y, et al. **Viral Immunol** 1989; 2(2):57–60
Serosurvey for polio antibodies. Biberi-Moroeanu S, et al. **Virologie** 1988 Oct-Dec;39(4):241–5

ETIOLOGY

Age-dependent poliomyelitis of mice: expression of endogenous retrovirus correlates with cytocidal replication of lactate dehydrogenase-elevating virus in motor neurons. Contag CH, et al. **J Virol** 1989 Oct;63(10):4362–9
Dual virus etiology of age-dependent poliomyelitis of mice. A potential model for human motor neuron diseases. Contag CH, et al. **Microb Pathog** 1989 Jun;6(6):391–401 (58 ref.)
Poliomyelitis-like syndrome following asthmatic attack (Hopkins syndrome). Nihei K, et al. **Pediatr Neurol** 1987 May-Jun;3(3):166–8
Vaccine-induced polioencephalomyelitis in Scotland. Asindi AA, et al. **Scott Med J** 1988 Aug;33(4):306–7
[Acute anterior poliomyelitis in the mother of a vaccinated child (letter)] Derenne F, et al. **Presse Med** 1989 Jan 28; 18(3):129–30 **(Fre)**
[Poliomyelitis associated with a vaccine: 2 clinical cases] González E, et al. **Rev Med Chil** 1988 May;116(5):461–4 (Eng. Abstr.) **(Spa)**

GENETICS

The poliovirus sensitivity (PVS) gene is on chromosome 19q12----q13.2. Siddique T, et al. **Genomics** 1988 Aug; 3(2):156–60

HISTORY

The summer nightmare: poliomyelitis in Florida. Arsenault KH. **J Fla Med Assoc** 1988 Aug;75(8):526–31

IMMUNOLOGY

T-cell alterations in late postpoliomyelitis. Ginsberg AH, et al. **Arch Neurol** 1989 May;46(5):497–501
Sero-conversion of infants to three doses of oral poliomyelitis vaccine. Tswana SA, et al. **Cent Afr J Med** 1988 Dec; 34(12):290–4
[Changes of the immunologic status of the population as a result of preventive vaccination] Gałązka A. **Przegl Epidemiol** 1988;42(3):211–24 (Eng. Abstr.) **(Pol)**

MICROBIOLOGY

Wild poliovirus isolation in the Americas, 1988. Pan American Health Organization. **Can Dis Wkly Rep** 1989 May 27;15(21):111 **(Eng, Fre)**
Characterisation of two different types of poliovirus isolated from a patient. Tsilimigras CW, et al. **J Infect** 1988 Sep; 17(2):159–61
Detection of viral-specific nucleic acid and intracellular virions in ventral horn neurons of lactate dehydrogenase-elevating virus infected C58 mice. Brinton MA, et al. **Microb Pathog** 1986 Dec;1(6):595–602
Preliminary studies on the neurovirulence of poliomyelitis vaccine (oral) prepared in vero cells. Guo R, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(2):104–7

PATHOLOGY

Inclusion body myositis in post-poliomyelitis muscular atrophy. Abarbanel JM, et al. **Acta Neurol Scand** 1988 Aug; 78(2):81–4

PHYSIOPATHOLOGY

Post polio syndrome: a common condition in need of recognition. Streib EW. **Iowa Med** 1989 Mar;79(3):115–9 (0 ref.)
Effects of excessive use of remaining muscle fibers in prior polio and LV lesion. Borg K, et al. **Muscle Nerve** 1988 Dec;11(12):1219–30
Exercise programs for patients with post-polio syndrome: a case report [published erratum appears in Phys Ther 1989 Apr;69(4):301] Gross MT, et al. **Phys Ther** 1989 Jan; 69(1):72–6
Muscle adaptive changes in post-polio subjects. Grimby G, et al. **Scand J Rehabil Med** 1989;21(1):19–26
[Cardiopulmonary function during maximal exercise by upper extremities in subjects with longstanding paralysis of lower limbs after poliomyelitis] Chung PC, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Dec;87(12):1214–8 (Eng. Abstr.) **(Chi)**

PREVENTION & CONTROL

Potential usefulness of the chimaeric type 1/type 2 poliovirus, V510 in universal reduction of poliomyelitis morbidity. Arya SC. **Ann Inst Pasteur Virol** 1988 Oct-Dec; 139(4):461–2
Safety of oral poliomyelitis vaccine: results of a WHO enquiry. Esteves K. **Bull WHO** 1988;66(6):739–46
Global eradication of poliomyelitis by the year 2000. **Can Dis Wkly Rep** 1988 Dec 3;14(48):219–20 **(Eng, Fre)**
From the Centers for Disease Control. Progress toward eradicating poliomyelitis from the Americas. **JAMA** 1989 Sep 15;262(11):1443, 1446, 1453
Handwashing and horizontal spread of viruses [letter] Eggers HJ. **Lancet** 1989 Jun 24;1(8652):1452
Congenital malformations and oral poliovirus vaccination during pregnancy. Harjulehto T, et al. **Lancet** 1989 Apr 8;1(8641):771–2
Progress toward eradicating poliomyelitis from the Americas. **MMWR** 1989 Aug 11;38(31):532–5
Polio in Israel [letter] Slater PE, et al. **Nature** 1989 Mar 9; 338(6211):110
The eradication of poliomyelitis. Risi Júnior JB. **Rev Soc Bras Med Trop** 1987 Apr-Jun;20(2):61–6 **(Eng, Por)**
[Open season on poliovirus] Kapsenberg JG. **Ned Tijdschr Geneeskd** 1989 Apr 29;133(17):864–6 **(Dut)**
[The national program to eliminate poliomyelitis (NPEP)] **Rev Ig [Bacteriol]** 1988 Oct-Dec;33(4):372–80 **(Rum)**

PSYCHOLOGY

Psychologic characteristics of polio survivors: a preliminary report. Conrady LJ, et al. **Arch Phys Med Rehabil** 1989 Jun;70(6):458–63

REHABILITATION

Occupational therapy and the postpolio syndrome. Young GR. **Am J Occup Ther** 1989 Feb;43(2):97–103
Modified aerobic walking program: effect on patients with postpolio syndrome symptoms. Dean E, et al. **Arch Phys Med Rehabil** 1988 Dec;69(12):1033–8
Influence of appropriate lower extremity orthotic management on ambulation, pain, and fatigue in a postpolio population. Waring WP, et al. **Arch Phys Med Rehabil** 1989 May;70(5):371–5
A rejoinder to "Exercise Programs for Patients with Post-Polio Syndrome: a case report"—a short communication. Dean E, et al. **Phys Ther** 1989 Aug; 69(8):695–8; discussion 698–9

SURGERY

[Lung resection in the principle disease of mucoviscidosis and status following poliomyelitis—2 case reports] Usener U, et al. **Klin Padiatr** 1988 Jul-Aug;200(4):339–43 (Eng. Abstr.) **(Ger)**

POLIOVIRUS

Denaturation of poliovirus procapsids. Rombaut B, et al. **Arch Virol** 1989;106(3-4):213–20
Cellular receptor for poliovirus: molecular cloning, nucleotide sequence, and expression of a new member of the immunoglobulin superfamily. Mendelsohn CL, et al. **Cell** 1989 Mar 10;56(5):855–65

ANALYSIS

Preparative separation of poliovirus structural polypeptides by sodium dodecyl sulfate-polyacrylamide gel electrophoresis, copper staining and electroelution, and induction of monospecific antisera. Tessmer U, et al. **Electrophoresis** 1989 Apr;10(4):277–9

DRUG EFFECTS

Lack of evidence for strand-specific inhibition of poliovirus RNA synthesis by 3-methylquercetin. Lopez Pila JM, et al. **Antiviral Res** 1989 Feb;11(1):47–53
Potentiation of the virucidal effectiveness of free chlorine by substances in drinking water. Berg G, et al. **Appl Environ Microbiol** 1989 Feb;55(2):390–3
An in vitro study of the antiviral properties of an alginate impression material impregnated with disinfectant. Tyler R, et al. **J Dent** 1989 Jun;17(3):137–9
Potentiation of the poliocidal effectiveness of free chlorine by a buffer. Berg G, et al. **J Virol Methods** 1989 Feb; 23(2):179–86
[Effectiveness of the methods of purification and disinfection of virus-contaminated water] Rusanova NA, et al. **Gig Sanit** 1988 Aug;(8):13–5 (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

Poliovirus protease 2A is required for interference with vesicular stomatitis virus-specified protein synthesis. Garry RF. **Arch Virol** 1988;103(1-2):133–7
Cleavage of synthetic peptides by purified poliovirus 3C proteinase. Pallai PV, et al. **J Biol Chem** 1989 Jun 15; 264(17):9738–41
Poliovirus proteinase 3C: large-scale expression, purification, and specific cleavage activity on natural and synthetic substrates in vitro. Nicklin MJ, et al. **J Virol** 1988 Dec; 62(12):4586–93
Purification and properties of poliovirus RNA polymerase expressed in Escherichia coli. Plotch SJ, et al. **J Virol** 1989 Jan;63(1):216–25
Measurement of poliovirus RNA polymerase binding to poliovirion and nonviral RNAs using a filter-binding assay. Oberste MS, et al. **Nucleic Acids Res** 1988 Nov 11; 16(21):10339–52

GENETICS

Construction of a chimaeric type 1/type 2 poliovirus by genetic recombination. Martin A, et al. **Ann Inst Pasteur Virol** 1988 Jan-Mar;139(1):79–88
Viral infectious complementary-DNA studies may identify nonviral genes critical to central nervous system disease. Ohara Y, et al. **Ann Neurol** 1989 Mar;25(3):305–9 (35 ref.)
Post-translational modifications of poliovirus proteins. Urzainqui A, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):263–71
A cellular protein that binds to the 5'-noncoding region of poliovirus RNA: implications for internal translation initiation. Meerovitch K, et al. **Genes Dev** 1989 Jul; 3(7):1026–34
Poliovirus-induced modification of host cell RNA polymerase IIO is prevented by cycloheximide and zinc. Rangel LM, et al. **J Biol Chem** 1988 Dec 25; 263(36):19267–9
Structural domains of the poliovirus polyprotein are major determinants for proteolytic cleavage at Gln-Gly pairs. Ypma-Wong MF, et al. **J Biol Chem** 1988 Nov 25; 263(33):17846–56
A cassette vector for the construction of antigen chimaeras of poliovirus. Burke KL, et al. **J Gen Virol** 1989 Sep;70 (Pt 9):2475–9
Strong inclination toward transition mutation in nucleotide substitutions by poliovirus replicase. Kuge S, et al. **J Mol Biol** 1989 May 5;207(1):175–82
New model for the secondary structure of the 5' non-coding RNA of poliovirus is supported by biochemical and genetic data that also show that RNA secondary structure is important in neurovirulence. Skinner MA, et al. **J Mol Biol** 1989 May 20;207(2):379–92
Guanidine-resistant mutants of poliovirus have distinct mutations in peptide 2C. Baltera RF Jr, et al. **J Virol** 1989 Oct;63(10):4441–4
The cellular 68,000-Mr protein kinase is highly autophosphorylated and activated yet significantly degraded during poliovirus infection: implications for translational regulation. Black TL, et al. **J Virol** 1989 May; 63(5):2244–51
The deletion of 41 proximal nucleotides reverts a poliovirus mutant containing a temperature-sensitive lesion in the 5' noncoding region of genomic RNA. Dildine SL, et al. **J Virol** 1989 Feb;63(2):847–62
Determinants in the 5' noncoding region of poliovirus Sabin 1 RNA that influence the attenuation phenotype. Kawamura N, et al. **J Virol** 1989 Mar;63(3):1302–9
Genetic variation occurring on the genome of an in vitro insertion mutant of poliovirus type 1. Kuge S, et al. **J Virol** 1989 Mar;63(3):1069–75
Mutational analysis of the genome-linked protein VPg of poliovirus. Kuhn RJ, et al. **J Virol** 1988 Nov;62(11):4207–15
Mapping of attenuating sequences of an avirulent poliovirus type 2 strain. Moss EG, et al. **J Virol** 1989 May; 63(5):1884–90
Mutational analysis of upstream AUG codons of poliovirus RNA. Pelletier J, et al. **J Virol** 1988 Dec;62(12):4486–92
Internal binding of eucaryotic ribosomes on poliovirus RNA: translation in HeLa cell extracts. Pelletier J, et al. **J Virol** 1989 Jan;63(1):441–4
Role of 3'-end sequences in infectivity of poliovirus transcripts made in vitro. Sarnow P. **J Virol** 1989 Jan; 63(1):467–70
Genetic basis of attenuation of the Sabin type 3 oral poliovirus vaccine. Westrop GD, et al. **J Virol** 1989 Mar; 63(3):1338–44
An RNA polymerase II transcription factor inactivated in poliovirus-infected cells copurifies with transcription factor TFIID. Kliewer S, et al. **Mol Cell Biol** 1988 Aug; 8(8):3175–82
An engineered poliovirus chimaera elicits broadly reactive HIV-1 neutralizing antibodies. Evans DJ, et al. **Nature** 1989 Jun 1;339(6223):385–8, 340
Preferred sites of recombination in poliovirus RNA: an analysis of 40 intertypic cross-over sequences. King AM. **Nucleic Acids Res** 1988 Dec 23;16(24):11705–23
Addition of a foreign oligopeptide to the major capsid protein of poliovirus. Colbère-Garapin F, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8668–72
Translation of glucose-regulated protein 78/immunoglobulin heavy-chain binding protein mRNA is increased in poliovirus-infected cells at a time when cap-dependent translation of cellular mRNAs is inhibited. Sarnow P. **Proc Natl Acad Sci U S A** 1989 Aug;86(15):5795–9
Human immunodeficiency virus tat-activated expression of poliovirus protein 2A inhibits mRNA translation. Sun XH, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2143–6
Preliminary characterization of cis interactions between

mutations of poliovirus genome. Agut H, et al. **Res Virol** 1989 Jul-Aug;140(4):303-12

A point mutation in the poliovirus polymerase gene determines a complementable temperature-sensitive defect of RNA replication. Agut H, et al. **Virology** 1989 Feb; 168(2):302-11

Intertypic genomic rearrangements of poliovirus strains in vaccinees. Cammack N, et al. **Virology** 1988 Dec; 167(2):507-14

Partial RNA sequencing of eight supposed derivatives of type 3 poliovirus/USA/Saukett/50 reveals remarkable differences between three apparent substrains. Kinnunen L, et al. **Virology** 1989 May;170(1):316-20

Point mutations modify the response of poliovirus RNA to a translation initiation factor: a comparison of neurovirulent and attenuated strains. Svitkin YV, et al. **Virology** 1988 Oct;166(2):394-404

Substitution in the poliovirus replicase gene determines actinomycin D sensitivity of viral replication at elevated temperature. Kean KM, et al. **Virus Res** 1989 Jan; 12(1):19-32

[Functional analysis of 5'-nontranslatable region of poliovirus RNA] Pestova TV, et al. **Dokl Akad Nauk SSSR** 1989; 305(6):1503-5 **(Rus)**

[Possible role of translation initiation factors in the regulation of expression of attenuated mutations of poliovirus] Svitkin IuV, et al. **Mol Gen Mikrobiol Virusol** 1989 Apr;(4):3-6 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Long-term survival of hepatitis A virus and poliovirus type 1 in mineral water. Biziagos E, et al. **Appl Environ Microbiol** 1988 Nov;54(11):2705-10

Influence of aerobic microorganisms upon virus survival in soil. Hurst CJ. **Can J Microbiol** 1988 May;34(5):696-9

Attachment, uncoating and blockage of cell protein synthesis by Sabin derivatives of poliovirus in HeLa and Vero cells. Tershak DR, et al. **Intervirology** 1988;29(5):292-300

The temperature sensitivity of the Sabin type 3 vaccine strain of poliovirus: molecular and structural effects of a mutation in the capsid protein VP3. Minor PD, et al. **J Gen Virol** 1989 May;70 (Pt 5):1117-23

Restricted growth of attenuated poliovirus strains in cultured cells of a human neuroblastoma. Agol VI, et al. **J Virol** 1989 Sep;63(9):4034-8

Isolation and characterization of HeLa cell lines blocked at different steps in the poliovirus life cycle. Kaplan G, et al. **J Virol** 1989 Jan;63(1):43-51

Differences in replication of attenuated and neurovirulent polioviruses in human neuroblastoma cell line SH-SY5Y. La Monica N, et al. **J Virol** 1989 May;63(5):2357-60

Eclipse products of poliovirus after cold-synchronized infection of HeLa cells. Everaert L, et al. **Virology** 1989 Jul;171(1):76-82

[Problems related to the presence of enterovirus in edible lamellibranch molluscs] Toti L, et al. **Nuovi Ann Ig Microbiol** 1988 May-Jun;39(3):183-9 (Eng. Abstr.) **(Ita)**

IMMUNOLOGY

Poliovirus: three-dimensional structure of a viral antigen. Hogle JM, et al. **Adv Vet Sci Comp Med** 1989;33:65-91 (47 ref.)

Construction and characterization of hybrid hepatitis B antigen particles carrying a poliovirus immunogen. Delpeyroux F, et al. **Biochimie** 1988 Aug;70(8):1065-73

Structural and antigenic variation of the structural protein VP3 in serotype 1 poliovirus isolated from vaccinees. Cash P. **Can J Microbiol** 1988 Jun;34(6):802-6

Production and characterization of neutralizing monoclonal antibodies against poliovirus type 1, 2, and 3. Payment P, et al. **Can J Microbiol** 1989 May;35(5):550-3

Cell-mediated immune responses to poliovirus. I. Conditions for induction, characterization of effector cells, and cross-reactivity between serotypes for delayed hypersensitivity and T cell proliferative responses. Wang KG, et al. **Cell Immunol** 1989 Apr 1;119(2):252-62

Studies on antigenic variation of types I and III poliovirus using neutralizing monoclonal antibody. Guo R, et al. **Chin Med J [Engl]** 1988 Jan;101(1):32-6

Engineering a poliovirus type 2 antigenic site on a type 1 capsid results in a chimaeric virus which is neurovirulent for mice. Martin A, et al. **EMBO J** 1988 Sep;7(9):2839-47

Persistence of poliovirus-neutralizing antibodies 2-16 years after immunization with live attenuated vaccine. A seroepidemiologic survey in the mainland of Venice. Trivello R, et al. **Epidemiol Infect** 1988 Dec;101(3):605-9

Poliovirus antibody titre in cord blood and its correlation with antenatal and natal factors. Ananthakrishnan S, et al. **Indian Pediatr** 1988 Nov;25(11):1033-9

Enteroviral-related antigen in circulating immune complexes of amyotrophic lateral sclerosis patients. Bartfeld H, et al. **Intervirology** 1989;30(4):202-12

Quantitation of poliovirus antigens in inactivated viral vaccines by enzyme-linked immunosorbent assay using animal sera and monoclonal antibodies. Singer C, et al. **J Biol Stand** 1989 Apr;17(2):137-50

Radiometric cytolysis inhibition assay, a new rapid test for neutralizing antibodies to intact and trypsin-cleaved poliovirus. Hovi T, et al. **J Clin Microbiol** 1989 Apr; 27(4):709-15

Synthesis of immunogenic, but non-infectious, poliovirus particles in insect cells by a baculovirus expression vector. Urakawa T, et al. **J Gen Virol** 1989 Jun;70 (Pt 6):1453-63

Antibodies to poliomyelitis virus in cord blood of neonates born to from mothers in contact or not in contact with the wild virus. Lago PM, et al. **J Hyg Epidemiol Microbiol Immunol** 1988;32(3):315-9

Nasopharyngeal secretory antibody response to poliovirus type 3 virion proteins exhibit different specificities after immunization with live or inactivated poliovirus vaccines. Zhaori G, et al. **J Infect Dis** 1989 Jun;159(6):1018-24

Intestinal immunity to poliovirus develops only after repeated infections in monkeys. Selvakumar R, et al. **J Med Virol** 1989 Feb;27(2):112-6

Anti-thymocyte serum delays clearance of poliovirus from the mouse central nervous system. Jubelt B, et al. **J Neuroimmunol** 1989 May;22(3):223-32

Sabin inactivated trivalent poliovirus vaccine: first clinical trial and seroimmunity survey. Murph JR, et al. **Pediatr Infect Dis J** 1988 Nov;7(11):760-5

Antigen-driven immunoglobulin production by human colostral lymphocytes. Slade HB, et al. **Pediatr Res** 1989 Mar;25(3):295-9

Analysis of neutralizing antibody responses against poliovirus types 1, 2 and 3 in the Tripoli area of the Socialist People's Libyan Arab Jamahiriya. el Nageh M, et al. **Trans R Soc Trop Med Hyg** 1988;82(5):758-60

Expression of a poliovirus type 1 neutralization epitope on a diphtheria toxin fusion protein. Phalipon A, et al. **Vaccine** 1989 Apr;7(2):132-6

Serosurvey for polio antibodies. Biberi-Moroeanu S, et al. **Virologie** 1988 Oct-Dec;39(4):241-5

N-AgIB of poliovirus type 1: a discontinuous epitope formed by two loops of VP1 comprising residues 96-104 and 141-152. Wiegers K, et al. **Virology** 1989 Jun;170(2):583-6

[Changes in poliovirus antigenicity and their practical effects on vaccination] Hovi T. **Duodecim** 1988; 104(23-24):1936-46 (27 ref.) **(Fin)**

[Current concepts of the antigenic structure and attenuation mechanisms of the poliomyelitis virus] Gendon IuZ. **Vopr Virusol** 1988 Jul-Aug;33(4):389-92 (31 ref.) **(Rus)**

ISOLATION & PURIFICATION

Polyethylene glycol precipitation for recovery of pathogenic viruses, including hepatitis A virus and human rotavirus, from oyster, water, and sediment samples. Lewis GD, et al. **Appl Environ Microbiol** 1988 Aug;54(8):1983-8

Wild poliovirus isolation in the Americas, 1988. Pan American Health Organization. **Can Dis Wkly Rep** 1989 May 27;15(21):111 **(Eng, Fre)**

A highly efficient second-step concentration technique for bacteriophages and enteric viruses using ammonium sulfate and Tween 80. Armon R, et al. **Can J Microbiol** 1988 May; 34(5):651-5

Comparison of cell cultures for rapid isolation of enteroviruses. Chonmaitree T, et al. **J Clin Microbiol** 1988 Dec;26(12):2576-80

Characterisation of two different types of poliovirus isolated from a patient. Tsilimigras CW, et al. **J Infect** 1988 Sep; 17(2):159-61

Outbreak of poliomyelitis in South Africa investigated by oligonucleotide mapping. Tsilimigras CW, et al. **J Med Virol** 1989 May;28(1):52-6

Ultrafiltration: an efficient second step for hepatitis A virus and poliovirus concentration. Divizia M, et al. **J Virol Methods** 1989 Jan;23(1):55-62

Studies on type 1 poliovirus isolated in Brazil by electrophoresis and monoclonal analysis. Da Silva EE, et al. **Mem Inst Oswaldo Cruz** 1987 Jan-Mar;82(1):133-5

[Continuous detection of poliovirus in public water supplies] Vilagines P, et al. **C R Acad Sci [III]** 1988;307(4):171-6 (Eng. Abstr.) **(Fre)**

[Data from multiyear observations on the circulation of the poliomyelitis virus] Antsupova AS, et al. **Vopr Virusol** 1988 May-Jun;33(3):356-60 **(Rus)**

METABOLISM

Modification of an adenovirus major late promoter-binding factor during poliovirus infection. Lazard D, et al. **J Virol** 1989 Sep;63(9):3858-64

Isolation of poliovirus 2C mutants defective in viral RNA synthesis. Li JP, et al. **J Virol** 1988 Nov;62(11):4016-21

Poliovirus-associated protein kinase: destabilization of the virus capsid and stimulation of the phosphorylation reaction by Zn2+. Ratka M, et al. **J Virol** 1989 Sep; 63(9):3954-60

Monoclonal antibody identification of a 100-kDa membrane protein in HeLa cells and human spinal cord involved in poliovirus attachment. Shepley MP, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7743-7

Proteolytic processing of poliovirus polyprotein: elimination of 2Apro-mediated, alternative cleavage of polypeptide 3CD by in vitro mutagenesis. Lee CK, et al. **Virology** 1988 Oct;166(2):405-14

Recovery of structurally intact and infectious poliovirus type 1 from HeLa cells during receptor-mediated endocytosis. Willingmann P, et al. **Virology** 1989 Feb;168(2):417-20

Alteration of intracellular monovalent cation concentrations by a poliovirus mutant which encodes a defective 2A protease. Garry RF. **Virus Res** 1989 Jun;13(2):129-41

PATHOGENICITY

Experience in Canada with the new revised monkey neurovirulence test for oral poliovirus vaccine. Contreras G, et al. **J Biol Stand** 1988 Jul;16(3):195-205

Differences in replication of attenuated and neurovirulent polioviruses in human neuroblastoma cell line SH-SY5Y. La Monica N, et al. **J Virol** 1989 May;63(5):2357-60

Mapping of attenuating sequences of an avirulent poliovirus type 2 strain. Moss EG, et al. **J Virol** 1989 May; 63(5):1884-90

Preliminary studies on the neurovirulence of poliomyelitis vaccine (oral) prepared in vero cells. Guo R, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(2):104-7

Non-neurovirulent, genetically stable clone of poliovirus (Sabin type III vaccine strain). Ubertini TR, et al. **Vaccine** 1988 Dec;6(6):481-2

[Interferon-forming activity of genetic variants of the Sabin type-II poliovirus differing in affinity for bentonite] Frolova IA. **Mikrobiol Zh** 1988 Jul-Aug;50(4):91-2 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Stabilization of poliovirus against heat inactivation. Dorval BL, et al. **Biochem Biophys Res Commun** 1989 Mar 31; 159(3):1177-83

Replication of poliovirus in human mononuclear phagocyte cell lines is dependent on the stage of cell differentiation. Roivainen M, et al. **J Med Virol** 1989 Feb;27(2):91-4

Relationship of p220 cleavage during picornavirus infection to 2A proteinase sequencing. Lloyd RE, et al. **J Virol** 1988 Nov;62(11):4216-23

[Selective resistance of human neuroblastoma cells to a vaccine strain of poliomyelitis virus] Tol'skaia EA, et al. **Dokl Akad Nauk SSSR** 1989;305(4):987-9 **(Rus)**

[Survival of the poliomyelitis virus in environmental objects] Spynu KI, et al. **Vopr Virusol** 1988 May-Jun;33(3):327-31 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Structural factors that control conformational transitions and serotype specificity in type 3 poliovirus. Filman DJ, et al. **EMBO J** 1989 May;8(5):1567-79

The antigenic structure of poliovirus. Hogle JM, et al. **Philos Trans R Soc Lond [Biol]** 1989 Jun 12; 323(1217):467-78 (35 ref.)

POLIOVIRUS VACCINE

Polio and rabies vaccines produced in continuous cell lines: a reality for Vero cell line. Montagnon BJ. **Dev Biol Stand** 1989;70:27-47

[Vaccination coverage in a school population of Guipúzcoa: DTP, polio and measles] Basterretxea Irurzun M, et al. **Gac Sanit** 1988 Jan-Feb;2(4):26-9 (Eng. Abstr.) **(Spa)**

ADMINISTRATION & DOSAGE

Immunologic memory induced at birth by immunization with inactivated polio vaccine in a reduced schedule. Swartz TA, et al. **Eur J Epidemiol** 1989 Jun;5(2):143-5

Updated guidelines for vaccinations in HIV-infected children [letter] Lindquist CM. **J Am Osteopath Assoc** 1988 Sep; 88(9):1064

Leads from the MMWR. Poliomyelitis--Israel. **JAMA** 1988 Nov 11;260(18):2640

Comparison of immunogenicity of combined DPT--inactivated injectable polio vaccine (DPT - IPV) and association of DPT and attenuated oral polio vaccine (DPT + OPV) in Pakistani children. Qureshi AW, et al. **JPMA** 1989 Feb;39(2):31-5

Is inactivated poliovaccine more expensive? [letter] Moulia-Pelat JP, et al. **Lancet** 1988 Dec 17;2(8625):1424

Poliomyelitis--Israel. **MMWR** 1988 Oct 14;37(40):624-5

Polio in Israel [letter] Arya SC. **Nature** 1988 Dec 22-29; 336(6201):708

[Changes of the immunologic status of the population as a result of preventive vaccination] Gałązka A. **Przegl Epidemiol** 1988;42(3):211-24 (Eng. Abstr.) **(Pol)**

[Evaluation of a school vaccination program in Cádiz] Cruz Rojo C, et al. **Gac Sanit** 1989 Mar-Apr;3(11):366-70 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Sudden infant death and immunization: an extensive epidemiological approach to the problem in France--winter 1986. Bouvier-Colle MH, et al. **Int J Epidemiol** 1989 Mar;18(1):121-6

Neurologic tumors in offspring after inoculation of mothers with killed-poliovirus vaccine [letter] Melnick JL, et al. **N Engl J Med** 1988 Nov 3;319(18):1226

Adverse reactions to diphtheria, tetanus, pertussis-polio vaccination at 18 months of age: effect of injection site and needle length. Ipp MM, et al. **Pediatrics** 1989 May; 83(5):679-82

Local reactions of Zwittergent-containing meningococcal vaccine after intramuscular injection in rats: comparison with the effect of diphtheria-pertussis-tetanus-polio vaccine. Speijers GJ, et al. **Vaccine** 1988 Oct;6(5):419-22

IMMUNOLOGY

Quantitation of poliovirus antigens in inactivated viral vaccines by enzyme-linked immunosorbent assay using animal sera and monoclonal antibodies. Singer C, et al. **J Biol Stand** 1989 Apr;17(2):137–50

Systemic immune response to oral polio immunization in patients with IgA nephropathy. Waldo FB, et al. **J Clin Lab Immunol** 1989 Mar;28(3):109–14

Nasopharyngeal secretory antibody response to poliovirus type 3 virion proteins exhibit different specificities after immunization with live or inactivated poliovirus vaccines. Zhaori G, et al. **J Infect Dis** 1989 Jun;159(6):1018–24

STANDARDS

Qualification of working cell banks for the Vero cell line to produce licensed human vaccines. Vincent-Falquet JC, et al. **Dev Biol Stand** 1989;70:153–6

[Test of the potency of trivalent oral polio vaccines: comparison of 2 methods of reading] Chocarro LB, et al. **Rev Argent Microbiol** 1987 Apr-Jun;19(2):65–9 (Eng. Abstr.) **(Spa)**

THERAPEUTIC USE

Potential usefulness of the chimaeric type 1/type 2 poliovirus, V510 in universal reduction of poliomyelitis morbidity. Arya SC. **Ann Inst Pasteur Virol** 1988 Oct-Dec; 139(4):461–2

From the Centers for Disease Control. Progress toward eradicating poliomyelitis from the Americas. **JAMA** 1989 Sep 15;262(11):1443, 1446, 1453

[Open season on poliovirus] Kapsenberg JG. **Ned Tijdschr Geneeskd** 1989 Apr 29;133(17):864–6 **(Dut)**

POLIOVIRUS VACCINE, ORAL

Stabilization of the attenuated poliovirus type 3 vaccine strain by sucrose. Srivastava AK. **Acta Virol (Praha)** 1989 Mar; 33(2):188–90

Attachment, uncoating and blockage of cell protein synthesis by Sabin derivatives of poliovirus in HeLa and Vero cells. Tershak DR, et al. **Intervirology** 1988;29(5):292–300

Contraindications to live-viral immunization [letter] Legler JD. **J Fam Pract** 1989 Mar;28(3):333–4

The temperature sensitivity of the Sabin type 3 vaccine strain of poliovirus: molecular and structural effects of a mutation in the capsid protein VP3. Minor PD, et al. **J Gen Virol** 1989 May;70 (Pt 5):1117–23

Preliminary studies on the neurovirulence of poliomyelitis vaccine (oral) prepared in vero cells. Guo R, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(2):104–7

Stability of oral polio vaccine at different temperatures [letter] Arya SC. **Vaccine** 1988 Aug;6(4):298

[Acute anterior poliomyelitis in the mother of a vaccinated child (letter)] Derenne F, et al. **Presse Med** 1989 Jan 28; 18(3):129–30 **(Fre)**

ADMINISTRATION & DOSAGE

Poliovirus vaccine policy. Another perspective [editorial] Katz SL. **Am J Dis Child** 1989 Sep;143(9):1007–9

Why wait for DTP-E-IPV? [editorial] Marcuse EK. **Am J Dis Child** 1989 Sep;143(9):1006–7

Safety of oral poliomyelitis vaccine: results of a WHO enquiry. Esteves K. **Bull WHO** 1988;66(6):739–46

Antibody response of infants in tropics to five doses of oral polio vaccine. Chopra K, et al. **J Trop Pediatr** 1989 Feb; 35(1):19–23

Comparison of immunogenicity of combined DPT—inactivated injectable polio vaccine (DPT - IPV) and association of DPT and attenuated oral polio vaccine (DPT + OPV) in Pakistani children. Qureshi AW, et al. **JPMA** 1989 Feb;39(2):31–5

Is inactivated poliovaccine more expensive? [letter] Moulia-Pelat JP, et al. **Lancet** 1988 Dec 17;2(8625):1424

Oral poliovirus vaccine [letter] Hill CE. **Postgrad Med** 1989 May 1;85(6):48

ADVERSE EFFECTS

Experience in Canada with the new revised monkey neurovirulence test for oral poliovirus vaccine. Contreras G, et al. **J Biol Stand** 1988 Jul;16(3):195–205

Congenital malformations and oral poliovirus vaccination during pregnancy. Harjulehto T, et al. **Lancet** 1989 Apr 8;1(8641):771–2

Cluster of childhood Guillain-Barré cases after an oral poliovaccine campaign [letter] Uhari M, et al. **Lancet** 1989 Aug 19;2(8660):440–1

Incidence of Guillain-Barré syndrome during a nationwide oral poliovirus vaccine campaign. Kinnunen E, et al. **Neurology** 1989 Aug;39(8):1034–6

Vaccine-induced polioencephalomyelitis in Scotland. Asindi AA, et al. **Scott Med J** 1988 Aug;33(4):306–7

[Poliomyelitis associated with a vaccine: 2 clinical cases] González E, et al. **Rev Med Chil** 1988 May;116(5):461–4 (Eng. Abstr.) **(Spa)**

GENETICS

Determinants in the 5' noncoding region of poliovirus Sabin 1 RNA that influence the attenuation phenotype. Kawamura N, et al. **J Virol** 1989 Mar;63(3):1302–9

Genetic basis of attenuation of the Sabin type 3 oral poliovirus vaccine. Westrop GD, et al. **J Virol** 1989 Mar; 63(3):1338–44

Non-neurovirulent, genetically stable clone of poliovirus (Sabin type III vaccine strain). Ubertini TR, et al. **Vaccine** 1988 Dec;6(6):481–2

Intertypic genomic rearrangements of poliovirus strains in vaccinees. Cammack N, et al. **Virology** 1988 Dec; 167(2):507–14

IMMUNOLOGY

Sero-conversion of infants to three doses of oral poliomyelitis vaccine. Tswana SA, et al. **Cent Afr J Med** 1988 Dec; 34(12):290–4

Persistence of poliovirus-neutralizing antibodies 2–16 years after immunization with live attenuated vaccine. A seroepidemiologic survey in the mainland of Venice. Trivello R, et al. **Epidemiol Infect** 1988 Dec;101(3):605–9

Soy formula feeding and immunological response in babies of atopic families [letter] Businco L, et al. **Lancet** 1989 Sep 9;2(8663):625–6

Sabin inactivated trivalent poliovirus vaccine: first clinical trial and seroimmunity survey. Murph JR, et al. **Pediatr Infect Dis J** 1988 Nov;7(11):760–5

Polio immunization and serological status in children and adolescents in Jamaica (1985). Ashley D, et al. **West Indian Med J** 1989 Mar;38(1):23–9

[Changes in poliovirus antigenicity and their practical effects on vaccination] Hovi T. **Duodecim** 1988; 104(23–24):1936–46 (27 ref.) **(Fin)**

[Selective resistance of human neuroblastoma cells to a vaccine strain of poliomyelitis virus] Tol'skaia EA, et al. **Dokl Akad Nauk SSSR** 1989;305(4):987–9 **(Rus)**

ISOLATION & PURIFICATION

Studies on the genetic basis of attenuation of the Sabin type 3 poliovirus vaccine. Almond JW, et al. **Biochem Soc Symp** 1987;53:85–90 (16 ref.)

STANDARDS

No evidence for the contamination of live oral poliomyelitis vaccines with simian immunodeficiency virus [letter] Ohta Y, et al. **Aids** 1989 Mar;3(3):183–5

Safe testing of live oral poliovirus vaccine [editorial] [published erratum appears in S Afr Med J 1988 Nov 19;74(10):536] Lyons SF, et al. **S Afr Med J** 1988 Oct 15; 74(8):381

THERAPEUTIC USE

Effect of the administration of oral poliovirus vaccine on infantile diarrhoea mortality. Contreras G. **Vaccine** 1989 Jun;7(3):211–2

[Open season on poliovirus] Kapsenberg JG. **Ned Tijdschr Geneeskd** 1989 Apr 29;133(17):864–6 **(Dut)**

POLISHES see **INDUSTRIAL OILS**

POLISHES, DENTAL see **DENTIFRICES**

POLITEF see **POLYTETRAFLUOROETHYLENE**

POLITICAL ACTIVITY see **POLITICS**

POLITICAL SYSTEMS

Random springtime thoughts on Lysenko, HCFA, Pavlov and other fantasies. Conner SL. **Ala Med** 1989 May; 58(11):3–4, 6

Blue-ribbon commissions and political ethics in the Federal Republic of Germany. Sass HM. **J Med Philos** 1989 Aug; 14(4):465–72

Rorschach records of Nazi war criminals: a reanalysis using current scoring and interpretation practices. Zillmer EA, et al. **J Pers Assess** 1989 Spring;53(1):85–99

The impact of South African destabilization on maternal and child health in Mozambique. Cliff JL, et al. **J Trop Pediatr** 1988 Dec;34(6):329–30

Socialist health/capitalist health: is there a difference? **Med Anthropol** 1989 Jun;11(2):97–219

Capitalism, socialism and the physical quality of life. Cereseto S, et al. **Med Anthropol** 1989 Jun;11(2):151–66

Rural health efforts in the urban-dominated political economy: three Third World examples. Donahue JM. **Med Anthropol** 1989 Jun;11(2):109–25

Toward an understanding of capitalist and socialist health. Singer M, et al. **Med Anthropol** 1989 Jun;11(2):97–107 (50 ref.)

Suicide and homicide rates in Hungary and Czechoslovakia during the suppression of dissent. Lester D. **Psychol Rep** 1989 Apr;64(2):666

Apartheid and medical care [editorial] Benatar SR. **S Afr Med J** 1989 Jun 17;75(12):559

The state, class and the allocation of health resources in southern Africa. Andersson N, et al. **Soc Sci Med** 1989; 28(5):515–30 (110 ref.)

Marxist perspectives in social medicine. Waitzkin H. **Soc Sci Med** 1989;28(11):1099–101

Commodity relations and nutrition under apartheid: a note on South Africa. Wisner B. **Soc Sci Med** 1989;28(5):441–6 (69 ref.)

[The state, social class and health] Belmartino S, et al. **Soc Sci Med** 1989;28(5):497–514 (Eng. Abstr.) **(Spa)**

HISTORY

Murderous Science [letter] Mitchell P. **Aust N Z J Psychiatry** 1989 Mar;23(1):15–6

Court authority and chemical medicine: Moritz of Hessen, Johannes Hartmann, and the origin of academic Chemiatria. Moran BT. **Bull Hist Med** 1989 Summer; 63(2):225–46

The Holocaust of Hungary's psychoanalysts. Harmat P. **J Am Acad Psychoanal** 1989 Summer;17(2):313–9

Mengele medicus: medicine's Nazi heritage. Seidelman WE. **Milbank Q** 1988;66(2):221–39

Brain sections to be buried? [news] Dickman S. **Nature** 1989 Jun 15;339(6225):498

The fate of the mentally ill in Germany during the Third Reich. Meyer JE. **Psychol Med** 1988 Aug;18(3):575–81

The politics of choice: roles of the medical profession under Nazi rule. Lekisch K, et al. **Tex Med** 1989 Jun;85(6):32–9

[Aspects of staff and occupational politics in the pediatric field in the Soviet Zone of Germany 1945–1949 and in East Germany up to the 3d university reform. 1. Problems and motivations of professorship appointments] Radke M. **Kinderarztl Prax** 1988 Sep;56(9):453–5 (Eng. Abstr.) **(Ger)**

[Hitler's Parkinson syndrome. A posthumous motility analysis of film records of the German Weekly News 1940–1945] Gibbels E. **Nervenarzt** 1988 Sep;59(9):521–8 **(Ger)**

[Public health service in the Weimar Republic and in the early history of West Germany] Eckart WU. **Off Gesundheitswes** 1989 May;51(5):213–21 (Eng. Abstr.) **(Ger)**

[Psychoanalysis, romantic nature philosophy and German idealistic thinking] Bohleber W. **Psyche (Stuttg)** 1989 Jun; 43(6):506–21 (Eng. Abstr.) **(Ger)**

[René Laforgue and Matthias Heinrich Göring] Roudinesco E. **Psyche (Stuttg)** 1988 Dec;42(12):1041–80 (Eng. Abstr.) **(Ger)**

[Social psychiatric traditions between the empire period and national socialism] Gast U. **Psychiatr Prax** 1989 Mar; 16(2):78–85 (Eng. Abstr.) **(Ger)**

[Results and problems of research on the development of medicine in Poland 1939 to 1945] Brzeziński T. **Z Arztl Fortbild (Jena)** 1989;83(7):351–4 **(Ger)**

[The effects of fascist occupation on Poland's public health and the health status of Polish citizens] Decker N. **Z Arztl Fortbild (Jena)** 1989;83(7):371–4 **(Ger)**

[Fascist ideology and health care in Germany 1933 to 1945] Hahn S. **Z Arztl Fortbild (Jena)** 1989;83(7):359–61 **(Ger)**

[1933 medical education in Germany—the position of anti-fascists] Meyer B. **Z Arztl Fortbild (Jena)** 1989; 83(7):375–9 **(Ger)**

[Organizational problems in medical education—Warsaw 1945] Podgórska-Klawe Z. **Z Arztl Fortbild (Jena)** 1989; 83(7):367–9 **(Ger)**

[Racial health in medical education in fascist Germany (1933 to 1945)] Schneck P. **Z Arztl Fortbild (Jena)** 1989; 83(7):355–7 **(Ger)**

[Results and problems of medical history research on the effects of the fascist dictatorship in Germany on medicine and public health] Thom A. **Z Arztl Fortbild (Jena)** 1989; 83(7):344–9 **(Ger)**

[Secret medical and pharmacy education in Poland 1939 to 1945] Zabłotniak R. **Z Arztl Fortbild (Jena)** 1989; 83(7):363–6 **(Ger)**

[Shadows of the past. On the publication of the diary of the anatomist Hermann Voss from the years 1932 to 1942] Fanghänel J, et al. **Z Gesamte Hyg** 1988 Dec;34(12):715–7 **(Ger)**

[Julius Moses (1868–1942)—Jew—physician—social democrat. In memory of a victim of fascist antisemitism] Hahn S. **Z Gesamte Hyg** 1988 Dec;34(12):712–5 (Eng. Abstr.) **(Ger)**

[Reflections on the aftereffects of the Nürnberg trial of physicians] Mausbach H. **Z Gesamte Hyg** 1988 Dec; 34(12):717–21 **(Ger)**

[Social politics and health—Germany and Austria at the time of the Weimar Republic] Sablik K. **Z Gesamte Hyg** 1989 Apr;35(4):225–7 (Eng. Abstr.) **(Ger)**

[Antisemitism in science and the health politics of the Weimar Republic—with special remembrance of Julius Moses (1868–1942)] Hahn S. **Z Gesamte Inn Med** 1989 May 15; 44(10):313–5 (Eng. Abstr.) **(Ger)**

[History of the Halle Ars Medica Judaica. I. Dedication of the Gröbzig Synagogue Museum] Kaiser W, et al. **Z Gesamte Inn Med** 1988 Oct 15;43(20):583–9 (Eng. Abstr.) **(Ger)**

[History of the Halle Ars medica Judaica. IV. Development from the middle of the 19th century to the end of the Weimar Republic] Kaiser W, et al. **Z Gesamte Inn Med** 1989 Apr 15;44(8):241–6 (Eng. Abstr.) **(Ger)**

[Ivan Petrovich Pavlov and Nikolaĭ Ivanovich Bukharin] Samoĭlov VO, et al. **Voen Med Zh** 1989 Feb;(2):62–9 **(Rus)**

POLITICS

Science and public policy. Carey WD. **Acad Med** 1989 May; 64(5):229–30

Political dimensions of AIDS. Blewett N. **Aids** 1988;2 Suppl 1:S235–8

Standard setting, science, and politics. Frumkin H.

Am J Ind Med 1989;15(3):347–50
Lobbying: everyone's responsibility. Harkavy LM. **Am J Infect Control** 1989 Jun;17(3):154–8
Political strength: nursing's next frontier. **Am J Nurs** 1989 Aug;89(8):1089
A capitol day. Power and politics 101. Reinhard SC. **Am J Nurs** 1989 Feb;89(2):263–4
People without land. Smith S. **Am J Nurs** 1989 Feb; 89(2):208–9
Murder and assault arrests of White House cases: clinical and demographic correlates of violence subsequent to civil commitment. Shore D, et al. **Am J Psychiatry** 1989 May; 146(5):645–51
The dynamics of posttraumatic stress disorder in South African political ex-detainees. Solomons K. **Am J Psychother** 1989 Apr;43(2):208–17 (13 ref.)
Assassination of Indira Gandhi: impact on psychiatric patients. Varma VK, et al. **Am J Psychother** 1989 Jan; 43(1):77–86
Fluoridation referendum in La Crosse, Wisconsin: contributing factors to success. Jones RB, et al. **Am J Public Health** 1989 Oct;79(10):1405–8
Nutrition policy: building the bridge between science and politics. Austin J, et al. **Annu Rev Nutr** 1988;8:1–20 (49 ref.)
Representation and role separation in the disability movement: should researchers be advocates? Batavia AI. **Arch Phys Med Rehabil** 1989 Apr;70(4):345–8
The psychiatry of leadership [letter] Schioldann-Nielsen J. **Aust N Z J Psychiatry** 1988 Dec;22(4):344, 346, 348
Stepping carefully through trade union legislation [editorial] Dyer C. **BMJ** 1989 Jun 17;298(6688):1598
Parasuicide and general elections. Masterton G, et al. **BMJ** 1989 Mar 25;298(6676):803–4
Politics and the royal colleges [editorial] Shore E. **BMJ** 1988 Oct 29;297(6656):1068–9
Perception of violence as a function of observer's ideology and actor's group membership. Vala J, et al. **Br J Soc Psychol** 1988 Sep;27 (Pt 3):231–7
Political and social issues surrounding AIDS. Joseph SC. **Bull N Y Acad Med** 1988 Jul–Aug;64(6):506–12
The long rise and fast fall of health care competition. Morone JA. **Bull N Y Acad Med** 1988 Jan–Feb;64(1):101–16
Psychiatry: the philosophical link between medical sciences and the sociopolitical human condition. Kapkin IA. **Can J Psychiatry** 1988 Nov;33(8):681–5
There are fewer doctors sitting in new Parliament [correction] [letter] **Can Med Assoc J** 1989 Mar 1;140(5):498
IPPNW: forum for Soviet anti-American propaganda? [letter] **Can Med Assoc J** 1988 Oct 15;139(8):698–700
Political awareness of psychiatric patients [letter] Bhopal JS, et al. **Can Med Assoc J** 1988 Dec 1;139(11):1033
The CMA wants doctors to play an active role in federal election. Gray C. **Can Med Assoc J** 1988 Oct 15; 139(8):781–2
There are fewer doctors sitting in new Parliament. Gray C. **Can Med Assoc J** 1989 Jan 15;140(2):190–1
Expect a hot abortion debate during the cool days of autumn. Gray C. **Can Med Assoc J** 1989 Sep 15;141(6):592–3
The tobacco industry provides a lesson in effective lobbying. Gray C. **Can Med Assoc J** 1989 Aug 15;141(4):321–2
Should Canadians support NAMDA or MASA? [letter; comment] Neser CP. **Can Med Assoc J** 1989 Jan 15; 140(2):115–6. **Comment on:** Can Med Assoc J 1988 Sep 1;139(5):373–4
Political awareness of psychiatric patients [letter] Valentine MB, et al. **Can Med Assoc J** 1989 Mar 1;140(5):498
Chauvinism in the medico-political arena [letter] Werker D. **Can Med Assoc J** 1988 Oct 15;139(8):702
Science, politics, and morality [letter] **Cleft Palate J** 1989 Jul;26(3):259–62
The politics of participation. Dwyer J. **Community Health Stud** 1989;13(1):59–65
Community participation or community manipulation? A case study of the Illawarra Cancer Appeal-a-thon. Short SD. **Community Health Stud** 1989;13(1):34–8
Persuading parliamentarians: advocacy and lobbying on alcohol-related issues. Stewart L, et al. **Community Health Stud** 1988;12(3):273–81
Call to arms [letter] Weinberg AD. **Conn Med** 1989 Jan; 53(1):55
Interpretations of schizophrenia. Barrett RJ. **Cult Med Psychiatry** 1988 Sep;12(3):357–95 (30 ref.)
Plague politics. Wiggin WE. **Del Med J** 1988 Aug;60(8):41–2
Government statistics: the conflict between research and privacy. Choldin HM. **Demography** 1988 Feb;25(1):145–54
The politics of birth control. Rosoff JI. **Fam Plann Perspect** 1988 Nov–Dec;20(6):312–20, 297
FASEB advocates more influential presidential science adviser. Johnson RS. **FASEB J** 1988 Oct;2(13):2839–40
Generational equity: an unexpected opportunity to broaden the politics of aging. Kingson ER. **Gerontologist** 1988 Dec; 28(6):765–72 (30 ref.)
Is there a gray peril? Retirement politics in Florida. Rosenbaum WA, et al. **Gerontologist** 1989 Jun;29(3):300–6
Protecting the president [letter; comment] **Hosp Community Psychiatry** 1989 Jun;40(6):647–50. **Comment on:** Hosp Community Psychiatry 1988 Nov;39(11):1166–71
Programs and politics: toward new coalitions. Bachrach LL. **Hosp Community Psychiatry** 1988 Sep;39(9):927–8
Institutional response to inpatients' threats against the President [see comments] Griffith EE, et al. **Hosp Community Psychiatry** 1988 Nov;39(11):1166–71. **Comment in:** Hosp Community Psychiatry 1989 Jun;40(6):647–50
Training local leaders to implement community care. Santos A, et al. **Hosp Community Psychiatry** 1988 Nov;39(11):1135
Hard choices for Bush, hard times for hospitals. Robinson ML. **Hospitals** 1989 Jan 5;63(1):18
Power politics decides who writes Medicare policy. Robinson ML. **Hospitals** 1989 Aug 5;63(15):18, 21, 23
Bush/Democratic Congress: an uneasy alliance. Robinson ML. **Hospitals** 1988 Nov 20;62(22):22, 24
The budget debate will overshadow new legislation. Robinson ML. **Hospitals** 1989 Jan 5;63(1):20–1
Why are candidates silent on health care issues? Wilensky GR. **Hospitals** 1988 Nov 5;62(21):17
A guide to peddling your influences. Newland JM. **Indiana Med** 1988 Dec;81(12):1035
The rediscovery of the National Health Program by the Democratic Party of the United States: a chronicle of the Jesse Jackson 1988 campaign. Navarro V. **Int J Health Serv** 1989;19(1):1–18
The Jackson National Health Program. Navarro V, et al. **Int J Health Serv** 1989;19(1):19–44
The politics of employment-based insurance in the United States. Staples CL. **Int J Health Serv** 1989;19(3):415–31 (29 ref.)
The politics of welfare privatization: the British experience. Taylor-Gooby P. **Int J Health Serv** 1989;19(2):209–20
The politics of reform: origins and enactment of the Italian 'experience'. Mangen S. **Int J Soc Psychiatry** 1989 Spring; 35(1):7–20
Lawmaking and lobbying: two viewpoints. Arnould R, et al. **Iowa Med** 1989 Jan;79(1):11–3
British optometry [letter] Edgar DF, et al. **J Am Optom Assoc** 1989 Feb;60(2):87
Psychoanalytic enlightenment and the greening of diplomacy. Montville JV. **J Am Psychoanal Assoc** 1989; 37(2):297–318 (23 ref.)
The 1988 elections. A view from the perch of a Florida physician. Caldwell JR. **J Fla Med Assoc** 1988 Oct; 75(10):683–5
Poverty, politics, and health: the Farm Security Administration Medical Care Program, 1935–1945. Grey MR. **J Hist Med Allied Sci** 1989 Jul;44(3):320–50
"In the house of Madam Vander Tasse, on the long bridge": a homosocial university club in early modern Europe. Rousseau GS. **J Homosex** 1988;16(1–2):311–47
Sexuality and Augustan England: sodomy, politics, elite circles and society. Rubini D. **J Homosex** 1988; 16(1–2):349–81
The personal, the political, and the aesthetic: Johann Joachim Winckelmann's German enlightenment life. Sweet DM. **J Homosex** 1988;16(1–2):147–62
Political involvement: the key to doctor-friendly legislation. Shanor P. **J Med Assoc Ga** 1989 Jan;78(1):25–6
American Medical Association presidential candidate questionnaire. Questionnaire on health and related topics. Ward JC Jr. **J Med Assoc Ga** 1988 Jul;77(7):573–5
A fairy tale. Cook DE. **J Miss State Med Assoc** 1988 Jul; 29(7):201–4
Political power for neuroscience nurses. Hinkle J, et al. **J Neurosci Nurs** 1989 Feb;21(1):9–13
Legislative activity is a nurse's job—let's wake up [editorial] McQuide PA. **J Neurosci Nurs** 1989 Feb;21(1):3–4
Research agendas on international trade in alcohol. Jernigan DH, et al. **J Public Health Policy** 1988 Winter;9(4):503–18
Mr Ridley's sewers [editorial] **Lancet** 1988 Dec 24–31; 2(8626–8627):1463–4
Boycotting journals [letter] **Lancet** 1989 Jul 22;2(8656):221–2
UK medical research handbagged again [editorial] **Lancet** 1989 Sep 23;2(8665):722
World Medical Association [letter] **Lancet** 1989 Sep 9; 2(8653):621–2
Igor and Inna Uspensky [letter] Cuckle H. **Lancet** 1988 Dec 10;2(8624):1372
Surgical insurrection [letter; comment] Robb J. **Lancet** 1989 Jan 14;1(8629):104. **Comment on:** Lancet 1988 Oct 15;2(8616):884–5
Medicolegal investigation of political killings in El Salvador. Thomsen JL, et al. **Lancet** 1989 Jun 17;1(8651):1377–9
WHO and PLO [letter] Yoshida T. **Lancet** 1989 Jul 22; 2(8656):222
AIDS, gays and the ballot box: the politics of disease in Houston, Texas. Lang NG. **Med Anthropol** 1989 Mar; 10(2–3):203–9
Words of fear, words of power: nerves and the awakening of political consciousness. Lock M. **Med Anthropol** 1989 May;11(1):79–90
Wastage among the tall poppies. Best J. **Med J Aust** 1989 Sep 4;151(5):294–7
The politics of general practice. Best J. **Med J Aust** 1989 Jun 5;150(11):659–61
Physician contact with legislators important. Farhat DR. **Mich Med** 1989 May;88(5):20
MDPAC: a potent force in Michigan. McNerney BJ. **Mich Med** 1989 Feb;88(2):24, 26
Rep. Paul Hillegonds—a strong leader in Michigan. Munger CB. **Mich Med** 1988 Dec;87(12):776–7
Five steps to unity. Paxton RE. **Mich Med** 1989 Jul;88(7):56
Special House Committee to examine licensing and discipline procedures. Scullion MK. **Mich Med** 1989 May;88(5):21
Doctors, partitocrazia, and the Italian state. Krause EA. **Milbank Q** 1988;66 Suppl 2:148–66
Medical politics and Canadian Medicare: professional response to the Canada Health Act. Stevenson HM, et al. **Milbank Q** 1988;66(1):65–104
Social security—Ecuadorian style [editorial] Germann DR. **Mo Med** 1988 Oct;85(10):641
A doctor interviews the candidates for Governor [interview by Edward C. Halperin] Jordan RB 3d, et al. **N C Med J** 1988 Sep;49(9):423–8
Health care issues in presidential campaigns. Blumenthal D, et al. **N Engl J Med** 1989 Sep 28;321(13):908–12
German cabinet promises gene law but problems remain [news] Dickman S. **Nature** 1988 Dec 15;336(6200):611
New light on the Lysenko era [published erratum appears in Nature 1989 Aug 31;340(6236):732] Soyfer VN. **Nature** 1989 Jun 8;339(6224):415–20
Donkeys and elephants [editorial] Gelber BR. **Nebr Med J** 1988 Nov;73(11):321
Wall Street takes on doctors [editorial] Gelber BR. **Nebr Med J** 1989 Apr;74(4):71–2
Bush, Dukakis presidential race: all quiet on health and safety front. Read HP 3d. **Occup Health Saf** 1988 Oct;57(11):21, 23–6
A day in the life of Robin Cook [interview by Isabel Collins] Cook R. **Practitioner** 1988 Jul;232(1452):832
Politics and the public health. The 1987 Duncan lecture. Player D. **Public Health** 1989 Jul;103(4):263–79
Population groups, politics and medical science. West ME, et al. **S Afr Med J** 1989 Sep 2;76(5):185–6
Violent crime arrests and paranoid schizophrenia: the White House case studies. Shore D, et al. **Schizophr Bull** 1988; 14(2):279–81
AIDS and the election. Beardsley T. **Sci Am** 1988 Oct; 259(4):14, 16
Ignorance in action. Horgan J. **Sci Am** 1988 Nov;259(5):17
U.S. probe meets resistance [news] Booth W. **Science** 1989 Apr 28;244(4903):419
Science policy. Bush G, et al. **Science** 1988 Oct 14; 242(4876):173–8
Pork barreling [letter] Hess CE. **Science** 1988 Nov 11; 242(4880):846–7
Harvard's blumenthal advises Dukakis [news] Pool R. **Science** 1988 Oct 14;242(4876):187
Why AAAS doesn't lobby. Much [news] Powledge TM. **Science** 1988 Oct 7;242(4875):108–9
The political economy of health and disease in Africa and Latin America. Papers from a research planning workshop. Toluca, Mexico, January 1985. **Soc Sci Med** 1989; 28(5):405–530
The effects of torture and political repression in a sample of Chilean families. **Soc Sci Med** 1989;28(7):735–40
Apartheid and health in the 1980s. Andersson N, et al. **Soc Sci Med** 1988;27(7):667–81 (72 ref.)
Coping with political violence in Northern Ireland. Cairns E, et al. **Soc Sci Med** 1989;28(6):621–4
Health as a target: South Africa's destabilization of Mozambique. Cliff J, et al. **Soc Sci Med** 1988;27(7):717–22
Differences in the approaches of the doctor, manager, politician and social scientist in health care controversies—hospital case-mix management methods: an illustration of the manager's approach in health care controversies. de Pouvourville G. **Soc Sci Med** 1989; 29(3):341–9
The political economy of workers' health and safety. Elling RH. **Soc Sci Med** 1989;28(11):1171–82 (39 ref.)
Children in political violence. Gibson K. **Soc Sci Med** 1989; 28(7):659–67 (70 ref.)
Psychoanalysis confronts the politics of repression: the case of Argentina. Hollander NC. **Soc Sci Med** 1989;28(7):751–8
The politics of immunization in public health. McCombie SC. **Soc Sci Med** 1989;28(8):843–9
Political violence and Eritrean health care. Sabo LE, et al. **Soc Sci Med** 1989;28(7):677–84
The economy, the health sector and child health in Zimbabwe since independence. Sanders D, et al. **Soc Sci Med** 1988;27(7):723–31 (22 ref.)
Towards an epidemiology of political violence in the Third World. Zwi A, et al. **Soc Sci Med** 1989;28(7):633–42 (59 ref.)
Health, apartheid and the Frontline States. Zwi A, et al. **Soc Sci Med** 1988;27(7):661–5 (20 ref.)
Down to the wire [editorial] Thomison JB. **South Med J** 1988 Oct;81(10):1209–10
Physicians and the future of health care [letter] Amble F. **Tex Med** 1988 Sep;84(9):7
Lobbyists on guard in midst of chaos. Ortolon K. **Tex Med** 1989 Jun;85(6):25–9
The role of the Texas judiciary in the political process. Phillips TR. **Tex Med** 1988 Oct;84(10):9–10
Annual oration on medical politics—the myths and realities. Marks J. **Trans Med Soc Lond** 1986–87;103:82–90
Wise words for physicians [editorial] Scholten MG. **W V Med J** 1989 Feb;85(2):61
More on dismemberment [letter] Alexander E Jr. **West J Med** 1989 Aug;151(2):208–9
A view from Canada [editorial] Banks PJ. **West J Med** 1989 Aug;151(2):196–7
President Bush and priorities [editorial] Mullooly JP. **Wis Med J** 1989 Apr;88(4):7–8
Technology, power and the state. Mazzeo JA. **Women Health** 1987;13(1–2):211–5

Health, economics, politics and publicity. Got C. **World Health Forum** 1988;9(4):491–4; discussion 495–508
[Public health officials and politics] Kirschnick G. **Off Gesundheitswes** 1988 Nov;50(11):657 **(Ger)**
[HIV infection—psychological coping and political reality] Becker S, et al. **Psyche (Stuttg)** 1989 Aug;43(8):698–709 (Eng. Abstr.) **(Ger)**
[Anti-Semitism of the left?] Keilson H. **Psyche (Stuttg)** 1988 Sep;42(9):769–94 (Eng. Abstr.) **(Ger)**
[Politics and psychoanalysis in Vienna before 1938] Pappenheim E. **Psyche (Stuttg)** 1989 Feb;43(2):120–41 (Eng. Abstr.) **(Ger)**
[Psychoanalysis and politics in Brazil] Vianna HC. **Psyche (Stuttg)** 1988 Nov;42(11):997–1015 (Eng. Abstr.) **(Ger)**
[Freedom for research in Germany?] Deneke JF. **Versicherungsmedizin** 1989 Jan 1;41(1):1–2 **(Ger)**
[Philosophy and medicine] Stange W, et al. **Z Arztl Fortbild (Jena)** 1989;83(7):387–90 (14 ref.) **(Ger)**
[Cultural management of citizens of retirement age in the South Magdeburg city district and initial results of implementing the 21 December 1987 ministerial decision for federal promotion of clubs and meetings of public solidarity] Ramthor I. **ZFA** 1989 Mar–Apr;44(2):113–20 (Eng. Abstr.) **(Ger)**
[Professional orientation in the teaching of social and political disciplines at the military medicine department] Arenko VA, et al. **Voen Med Zh** 1988 Aug;(8):16–9 **(Rus)**
[Patriotic and international instruction during the training of the military physician] Pakhomov NV. **Voen Med Zh** 1988 Nov;(11):16–8 **(Rus)**
[On the 200th anniversary of the Great French Revolution. Jean Paul Marat (1743–1793)—a physician of the period of the Enlightenment and Revolution] Morozov VM, et al. **Zh Nevropatol Psikhiatr** 1989;89(5):121–4 **(Rus)**
[Family planning—a thorn in Chinese politics] Oldinger E, et al. **Nord Med** 1989;104(4):98–9 **(Swe)**

HISTORY

The U.S. constitution in perspective. Ward JC Jr. **J Med Assoc Ga** 1988 Jul;77(7):569–72
The health of Thomas Jefferson (1743–1826). Thould AK. **J R Coll Physicians Lond** 1989 Jan;23(1):50–2
[Literary creation and political involvement] Szafran AW. **Acta Psychiatr Belg** 1988 May–Jun;88(3):242–54 (Eng. Abstr.) **(Fre)**
[Dr. Charlot Strasser (1884–1950). A Swiss psychiatrist as author, cultural and social politician] Heinrich D. **Gesnerus** 1988;45 Pt 3–4:483–99 (Eng. Abstr.) **(Ger)**

POLLEN

The role of cernitins in cadmium effect on the absorption processes in rat small intestine. Howaniec M, et al. **Acta Physiol Pol** 1988 May–Jun;39(3):188–94
Variations of airborne winter pollen in southern Spain. Ruiz de Clavijo E, et al. **Allergol Immunopathol (Madr)** 1988 May–Jun;16(3):175–9
Objective monitoring of the allergic inflammatory response of the nasal mucosa in patients with hay fever during natural allergen exposure. Andersson M, et al. **Am Rev Respir Dis** 1989 Apr;139(4):911–4
Nasal mucosal response to repeated challenges with pollen allergen. Pipkorn U, et al. **Am Rev Respir Dis** 1989 Sep; 140(3):729–36
Food allergy in pollen-sensitive patients. Dreborg S. **Ann Allergy** 1988 Dec;61(6 Pt 2):41–6 (49 ref.)
Double-blind, placebo-controlled immunotherapy with mixed grass-pollen allergoids. II. Comparison between parameters assessing the efficacy of immunotherapy. Bousquet J, et al. **J Allergy Clin Immunol** 1988 Sep;82(3 Pt 1):439–46
Allergenic pollens in the southern Mediterranean area. D'Amato G, et al. **J Allergy Clin Immunol** 1989 Jan; 83(1):116–22
Fluctuation of the number of CD-1(T6)-positive dendritic cells, presumably Langerhans cells, in the nasal mucosa of patients with an isolated grass-pollen allergy before, during, and after the grass-pollen season. Fokkens WJ, et al. **J Allergy Clin Immunol** 1989 Jul;84(1):39–43
Safety and immunogenicity of immunotherapy with accelerated dosage schedules of polymerized grass and ragweed in patients with dual inhalant sensitivity. Grammer LC, et al. **J Allergy Clin Immunol** 1989 Apr;83(4):750–6
Correlation between symptoms and the threshold for release of mediators in nasal secretions during nasal challenge with grass-pollen grains. Lebel B, et al. **J Allergy Clin Immunol** 1988 Nov;82(5 Pt 1):869–77
Hypereosinophilia, neurologic, and gastrointestinal symptoms after bee-pollen ingestion. Lin FL, et al. **J Allergy Clin Immunol** 1989 Apr;83(4):793–6
A reverse-sandwich ELISA for IgG antibody to a pollen allergen. Miyazawa H, et al. **J Allergy Clin Immunol** 1988 Sep;82(3 Pt 1):407–13
Complete amino acid sequence of a Lolium perenne (perennial rye grass) pollen allergen, Lol p II. Ansari AA, et al. **J Biol Chem** 1989 Jul 5;264(19):11181–5
Cetirizine in pollen-associated asthma [letter] Kurzeja A, et al. **Lancet** 1989 Mar 11;1(8637):556
Natural allergen exposure does not influence the density of goblet cells in the nasal mucosa of patients with seasonal allergic rhinitis. Karlsson G, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(3):171–4
Seasonal variation of nasal surface basophilic cells and eosinophils in Japanese cedar pollinosis. Liu CM. **Rhinology** 1988 Sep;26(3):167–73
Parietaria. A newly identified cause of pollen allergy in California. Kaufman HS. **West J Med** 1989 Mar; 150(3):364–5
Progressive development of bronchial asthma from allergic rhinitis in a patient sensitized to Artemisia spp. pollen; a case report. Park HS, et al. **Yonsei Med J** 1988;29(2):193–8
[Progress of research on the nutritional pharmacology of pollen] Qian BC. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Feb;9(2):125–8, 87 (53 ref.) **(Chi)**
[Protective effects of the pollen of Codonopsis pilosula (Franch.) Nannf. on liver lesions at the ultrastructural level] Xiao JC, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Mar; 14(3):42–4, 64 (Eng. Abstr.) **(Chi)**
[Pharmacologic effects of Zea pollinium] Yu ST, et al. **Chung Yao Tung Pao** 1988 Dec;13(12):44–7, 60 (Eng. Abstr.) **(Chi)**
[With rye pollen micturition is assured. Urologic workshop-discussion "Pollen and the Prostate". 5–7 February 1988, Vendig] **Fortschr Med** 1988;106 Suppl 50:1–18 **(Ger)**
[Pollinosis] Wortmann F. **Wien Med Wochenschr** 1989 Apr 15;139(6–7):116–20 (22 ref.) (Eng. Abstr.) **(Ger)**
[Gamma globulin administration in pollinosis?] Kirsten D, et al. **Z Erkr Atmungsorgane** 1989;172(2):155–8 (Eng. Abstr.) **(Ger)**
[Immunotherapy with Alergim PG in pollinosis] Rodica RJ, et al. **Rev Ig [Bacteriol]** 1988 Jan–Mar;33(1):29–34 **(Rum)**

ADMINISTRATION & DOSAGE

Association of class II DNA restriction fragments with responsiveness to Ambrosia artemisiifolia (short ragweed)-pollen allergen Amb a V in ragweed-allergic patients. Zwollo P, et al. **J Allergy Clin Immunol** 1989 Jan; 83(1):45–54

ANALYSIS

A one year survey of airborne pollen and spores in the neotropical city of Bogota (Colombia). Hurtado I, et al. **Allergol Immunopathol (Madr)** 1989 Mar–Apr;17(2):95–104
In vitro studies of degradation of birch and timothy pollen allergen preparations by human duodenal juice. Einarsson R, et al. **Allergy** 1988 Aug;43(6):469–72
Comparative studies on tree pollen allergens. XIV. Characterization of the birch (Betula verrucosa) and hazel (Corylus avellana) pollen extracts by horizontal 2-D SDS-PAGE combined with electrophoretic transfer and IgE immunoautoradiography. Florvaag E, et al. **Ann Allergy** 1988 Nov;61(5):392–400
Reestimations of the protein concentrations of birch pollen allergen extracts selected as candidates for the international standard (IS) preparation. Vik H, et al. **Ann Allergy** 1989 Feb;62(2):87–90
Allergenic potency of grass pollen extracts estimated with intradermal tests and with Rast-inhibition. Hoek GT, et al. **Arb Paul Ehrlich Inst Bundesamt Sera Impfstoffe Frankf A M** 1988;(82):85–93 (7 ref.)
Isolation of allergenically active glycoprotein from Prosopis juliflora pollen. Thakur IS. **Biochem Int** 1989 Mar; 18(3):605–13
Isolation and characterization of messenger RNA from male inflorescences and pollen of the white birch (Betula verrucosa). Breiteneder H, et al. **Int Arch Allergy Appl Immunol** 1988;87(1):19–24
Isolation and characterization of Poa p I allergens of Kentucky bluegrass pollen with a murine monoclonal anti-Lol p I antibody. Lin ZW, et al. **Int Arch Allergy Appl Immunol** 1988;87(3):294–300
The international collaborative study on the first international standard of birch (Betula verrucosa)-pollen extract. Arntzen FC, et al. **J Allergy Clin Immunol** 1989 Jan; 83(1):66–82
Identification of two distinct allergenic sites on ryegrass-pollen allergen, Lol p IV. Jaggi KS, et al. **J Allergy Clin Immunol** 1989 Apr;83(4):845–52
Immunoblotting of pollen proteins: Tween 20 mediates nonspecific binding of gammaglobulins to immunoblots of oak-pollen proteins. Loria RC, et al. **J Allergy Clin Immunol** 1988 Nov;82(5 Pt 1):834–41
An immunoelectrophoretic analysis of the allergens of Cynodon dactylon (Bermuda grass) pollen. Matthiesen F, et al. **J Allergy Clin Immunol** 1989 Jun;83(6):1124–34
Analysis of allergenic components of a Parietaria judaica pollen extract by chromatographic methods for the evaluation of purification procedures. Bassoli A, et al. **J Chromatogr** 1988 Jul 1;444:209–18
Micropreparative-scale enrichment of some allergenic components of Parietaria pollen extract. Bassoli A, et al. **J Chromatogr** 1988 Jul 27;446:179–85
Bees, ginseng and MAOIs revisited [editorial] Shader RI, et al. **J Clin Psychopharmacol** 1988 Aug;8(4):235
Identification and localization of allergenic determinants on grass group I antigens using monoclonal antibodies. Esch RE, et al. **J Immunol** 1989 Jan 1;142(1):179–84
[The honeybee (Apis mellifera) as an indicator of lead and cadmium levels in two locations] Müller S, et al. **DTW** 1988 Sep;95(8):328–9 (Eng. Abstr.) **(Ger)**
[The annual variations in airborne Cryptomeria japonica and Cupressaceae pollen counts and meteorological conditions in Fukuoka City—prediction of Cryptomeria j. and Cupressaceae pollen counts] Kishikawa R, et al. **Arerugi** 1988 Jun;37(6):355–63 (Eng. Abstr.) **(Jpn)**
[Identification of orchard grass (Dactylis glomerata) pollen allergens by immunoblotting] Urisu A, et al. **Arerugi** 1988 Apr;37(4):197–203 (Eng. Abstr.) **(Jpn)**
[The influence of meteorological factors upon the pollen counts of Cryptomeria japonica] Inamura N, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jun;91(6):907–14 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

Antigens of Timothy and other grass pollen extracts identified by monoclonal antibodies. Müller WD, et al. **Allergol Immunopathol (Madr)** 1988 Sep–Oct;16(5):315–20
T cell responses to a Parietaria judaica pollen extract: comparison between Parietaria-sensitive patients, other atopics and healthy controls. Di Felice G, et al. **Allergy** 1989 Jul;44(5):322–9
Immunological changes associated with a successful outcome of pollen immunotherapy. Fennerty AG, et al. **Allergy** 1988 Aug;43(6):415–9
Combination of parenteral and oral immunotherapy in grass pollen-allergic children. A double-blind controlled study of clinical and immunological efficacy. Trede NS, et al. **Allergy** 1989 May;44(4):272–80
Duration of response following cessation of pollen immunotherapy. Randolph C, et al. **Allergy Proc** 1988 Sep–Oct;9(5):567–9
Pollen immunotherapy during pregnancy: long-term follow-up of offsprings. Settipane RA, et al. **Allergy Proc** 1988 Sep–Oct;9(5):555–61
Rush immunotherapy with a standardized Bermuda grass pollen extract. Armentia-Medina A, et al. **Ann Allergy** 1989 Aug;63(2):127–35
Multi-center study comparing skin testing and specific IgE (FAST) testing in evaluating ragweed-sensitive patients. Berman BA, et al. **Ann Allergy** 1988 Oct;61(4):300–3
Effect of pollen immunotherapy on food hypersensitivity in children with birch pollinosis. Möller C. **Ann Allergy** 1989 Apr;62(4):343–5
Urticaria successfully treated by desensitization with grass pollen extract. August PJ, et al. **Br J Dermatol** 1989 Mar; 120(3):409–10
Sensitivity to Parietaria pollen in the Southampton area as determined by skin-prick and RAST tests. Holgate ST, et al. **Clin Allergy** 1988 Nov;18(6):549–56
A study of allergens in celery with cross-sensitivity to mugwort and birch pollens. Vallier P, et al. **Clin Allergy** 1988 Sep;18(5):491–500
Allergy to sunflower honey associated with allergy to celery. Birnbaum J, et al. **Clin Exp Allergy** 1989 Mar;19(2):229–30
Seasonal variability of exercise-induced asthma especially outdoors. Effect of birch pollen allergy. Karjalainen J, et al. **Clin Exp Allergy** 1989 May;19(3):273–8
The relative risks of sensitivity to grass pollen, house dust mite and cat dander in the development of childhood asthma. Sears MR, et al. **Clin Exp Allergy** 1989 Jul; 19(4):419–24
Biological and cellular responses to grass pollen in sensitive patients. Dubertret L, et al. **Dermatologica** 1989;179 Suppl 1:41–4
Desensitization of human basophils with suboptimal concentrations of agonist. Evidence for reversible and irreversible desensitization. Pruzansky JJ, et al. **Immunology** 1988 Nov;65(3):443–7
Characterization of grass pollen-specific IgE, IgA, IgM classes and IgG subclasses in allergic patients. Desvaux FX, et al. **Int Arch Allergy Appl Immunol** 1989; 89(2–3):281–7
Allergic response to birch and alder pollen allergens influenced by geographical location of allergic subjects. Hemmens VJ, et al. **Int Arch Allergy Appl Immunol** 1988; 87(3):321–8
Specificities of IgE and IgG antibodies in patients with birch pollen allergy. Jarolim E, et al. **Int Arch Allergy Appl Immunol** 1989;88(1–2):180–2
Induction of T-helper cell activity by fragments of rye grass pollen extract produced by digestion with chymotrypsin. Standring R, et al. **Int Arch Allergy Appl Immunol** 1988; 87(4):337–41
Responses to ragweed-pollen nasal challenge before and after immunotherapy. Creticos PS, et al. **J Allergy Clin Immunol** 1989 Aug;84(2):197–205
The formation of eosinophil and neutrophil chemotactic activity during a pollen season and after allergen challenge. Håkansson L, et al. **J Allergy Clin Immunol** 1989 May; 83(5):933–9
Attenuation of allergen sensitivity early in the course of ragweed immunotherapy. Hedlin G, et al. **J Allergy Clin Immunol** 1989 Sep;84(3):390–9
Immunochemical characterization of cocos nucifera pollen. Jaggi KS, et al. **J Allergy Clin Immunol** 1989 Sep; 84(3):378–85
Estimation of IgE antibody with a nonisotopic technique with no interference of isotypic antibodies. Lee TM, et al. **J Allergy Clin Immunol** 1988 Nov;82(5 Pt 1):812–7
Identification of potential allergens in white oak (Quercus alba) pollen by immunoblotting. Loria RC, et al.

J Allergy Clin Immunol 1989 Jul;84(1):9–18

The effect of immunotherapy on bronchial hyperresponsiveness and eosinophil cationic protein in pollen-allergic patients. Rak S, et al. J Allergy Clin Immunol 1988 Sep;82(3 Pt 1):470–80

Recognition of pollen and other particulate aeroantigens by immunoblot microscopy. Schumacher MJ, et al. J Allergy Clin Immunol 1988 Oct;82(4):608–16

Seasonal variation in specific IgE antibodies of grass-pollen hypersensitive patients depends on the steady state IgE concentration and is not related to clinical symptoms. Somville MA, et al. J Allergy Clin Immunol 1989 Feb;83(2 Pt 1):486–94

Anaphylactic reaction after the ingestion of chamomile tea: a study of cross-reactivity with other composite pollens. Subiza J, et al. J Allergy Clin Immunol 1989 Sep;84(3):353–8

Leukotriene C4 release in upper respiratory mucosa during natural exposure to ragweed in ragweed-sensitive children. Volovitz B, et al. J Allergy Clin Immunol 1988 Sep;82(3 Pt 1):414–8

Allergic reactivity to Parthenium hysterophorus pollen: an ELISA study of 582 sera from the United States Gulf Coast. Wedner HJ, et al. J Allergy Clin Immunol 1989 Aug; 84(2):263–71

Anti-idiotypic antibodies as probes for the determination of idiotopes shared by human and monoclonal murine antibodies. Mourad W, et al. Mol Immunol 1988 Sep; 25(9):899–906

[Detection of specific antibodies to all classes, including IgE, against pollen allergens using the ELISA test] Poláčková A, et al. Cas Lek Cesk 1989 Feb 17;128(8):232–7 (Eng. Abstr.) (Cze)

[Immunoprint technic: a new method for planned production of allergen-specific monoclonal antibodies] Jelke H, et al. Immun Infekt 1989 Apr;17(2):55–7 (Eng. Abstr.) (Ger)

[Allergen immunotherapy with an immunochemically characterized grass pollen extract: change in follow-up sensitization parameters] Collet M, et al. Klin Padiatr 1989 May-Jun;201(3):183–8 (Eng. Abstr.) (Ger)

[IgE and IgG antibody response in patients with type I allergy to birch pollen] Rumpold H, et al. Wien Klin Wochenschr 1989 Feb 3;101(3):107–10 (Eng. Abstr.) (Ger)

[Hyposensitization with cross-reacting pollen allergens] Karl S, et al. Z Hautkr 1988;63 Suppl 4:55–7 (Eng. Abstr.) (Ger)

[Incidence of the so-called minor pollens in the Naples area] Granata A, et al. Boll Ist Sieroter Milan 1988;67(3):207–9 (Eng. Abstr.) (Ita)

[Sensitization against Parietaria pollen in a group of 1143 patients in the Brescian area] Tosoni C, et al. Boll Ist Sieroter Milan 1988;67(3):202–6 (Eng. Abstr.) (Ita)

[Inhibitory effect of AA-673 eye drops on ocular provocation for Japanese cedar pollinosis] Sakuma Y, et al. Arerugi 1989 Feb;38(2):93–7 (Eng. Abstr.) (Jpn)

[Inhibitory effect of Intal (disodium cromoglycate) eye drops on ocular provocation for Japanese cedar pollinosis] Sukuma Y, et al. Arerugi 1988 Dec;37(12):1178–82 (Eng. Abstr.) (Jpn)

[Environmental and immunological survey of sensitization with Japanese cedar (Cryptomeria japonica) pollen in children. Part 1. Environmental factors influencing sensitization with Japanese cedar (Cryptomeria japonica) pollen among asthmatic children] Takagi M. Arerugi 1988 Nov;37(11):1065–71 (Eng. Abstr.) (Jpn)

[Immunogenetic analysis of Cryptomeria pollinosis. Evidence for the HLA-linked immune suppression gene to Cryptomeria japonica pollen antigen] Honda K. Fukuoka Igaku Zasshi 1989 Jan;80(1):28–37 (Eng. Abstr.) (Jpn)

[Japanese cedar pollen-specific antibodies of IgE and IgG subclasses in patients with allergic conjunctivitis] Sato H, et al. Nippon Ganka Gakkai Zasshi 1988 Oct;92(10):1605–9 (Eng. Abstr.) (Jpn)

[Tree pollens and nasal allergy (XI). Relationship of age to the total IgE level, Japanese cedar RAST score, Japanese cedar-specific IgG antibodies and IgG subclass] Enomoto T, et al. Nippon Jibiinkoka Gakkai Kaiho 1989 Apr; 92(4):597–601 (Eng. Abstr.) (Jpn)

[Pollen-induced allergy. Programming and monitoring of specific immunotherapy] Obtułowicz K. Folia Med Cracov 1988;29(1–2):21–48 (Eng. Abstr.) (Pol)

[Effect of intravenous aminophylline on bronchial spasm caused by grass allergen in patients with pollen-induced asthma] Wrońska J, et al. Pol Tyg Lek 1988 May 23; 43(21):681–4 (Eng. Abstr.) (Pol)

[Incidence of allergies to individual pollens in children with pollenosis in the area of Zagreb] Raos M, et al. Lijec Vjesn 1988 Dec;110(12):417–9 (Eng. Abstr.) (Ser)

ISOLATION & PURIFICATION

Characterization with monoclonal and polyclonal antibodies of a new major allergen from grass pollen in the group I molecular weight range. van Ree R, et al. J Allergy Clin Immunol 1989 Jan;83(1):144–51

Study of the epitope structure of purified Dac G I and Lol p I, the major allergens of Dactylis glomerata and Lolium perenne pollens, using monoclonal antibodies. Mourad W, et al. J Immunol 1988 Nov 15;141(10):3486–91

PHARMACOKINETICS

Topical peptides: percutaneous absorption of a vasopressin derivate, grass pollen, and other allergens by iontophoresis in men [letter] Remy W, et al. J Invest Dermatol 1988 Dec; 91(6):606

THERAPEUTIC USE

[Immunotherapy with Alergim PG in pollinosis] Rodica RJ, et al. Rev Ig [Bacteriol] 1988 Jan-Mar;33(1):29–34 (Rum)

ULTRASTRUCTURE

On the pollen morphology and frequency of allergic sensitization in Sicily of the genus Salsola L. (Chenopodiaceae). Crimi N, et al. Allergol Immunopathol (Madr) 1988 Jul-Aug;16(4):259–62

Immuno-electronmicroscopic identification and localization of the antigenic proteins of tree pollen grains. Grote M, et al. Allergy 1988 Nov;43(8):603–13

Fluorescence microscopic localization of actin in pollen tubes: comparison of actin antibody and phalloidin staining. Tang XJ, et al. Cell Motil Cytoskeleton 1989;12(4):216–24

Techniques to preserve soluble surface components in birch pollen wall: a scanning and transmission electron microscopic study. Grote M. J Histochem Cytochem 1989 Jul;37(7):981–7

Coccidioidomycosis versus pollen [letter] Berman JJ, et al. South Med J 1989 Feb;82(2):277

POLONIUM

Comment on 'A histologic study of the influence of cigarette smoking in suppressing Rn daughter carcinogenesis in dogs' [letter] Archer VE. Health Phys 1989 Feb;56(2):255–6

The half-life of 218Po. Martz DE, et al. Health Phys 1989 Jul;57(1):121–30 (25 ref.)

Radon progeny exposure and lung cancer risk in New Mexico U miners: a case-control study. Samet JM, et al. Health Phys 1989 Apr;56(4):415–21

[Background of low-level gamma-ray spectrometer due to the atmospheric 220Rn and 222Rn] Takahashi H, et al. Radioisotopes 1989 Mar;38(3):144–7 (Eng. Abstr.) (Jpn)

ADVERSE EFFECTS

Local energy deposited for alpha particles emitted from inhaled radon daughters. al-affan IA, et al. Phys Med Biol 1989 Jan;34(1):97–105

Radon: is it a problem? Hart BL, et al. Radiology 1989 Sep; 172(3):593–9 (39 ref.)

[Medical consequences of polonium in snuff] Samuelsson C. Lakartidningen 1989 Jun 14;86(24):2290–1 (Swe)

ANALYSIS

Measuring the skin dose from radioactively contaminated gold rings using LiF thermoluminescent powder. Eheman CR, et al. Health Phys 1989 Apr;56(4):547–50

Use of electrostatic collection of 218Po for measuring Rn. Hopke PK. Health Phys 1989 Jul;57(1):39–42 (25 ref.)

Concentrations of U and Po in animal feed supplements, in poultry meat and in eggs. Izak-Biran T, et al. Health Phys 1989 Mar;56(3):315–9

Determining the charged fractions of 218Po and 214Pb using an environmental gamma-ray and Rn detector. Maiello ML, et al. Health Phys 1989 Jul;57(1):51–9

Radon progeny as sources of gross-alpha radioactivity anomalies in ground water. Oural CR, et al. Health Phys 1988 Dec;55(6):889–94

On improving the validity of wire screen "unattached" fraction Rn daughter measurements. Ramamurthi M, et al. Health Phys 1989 Feb;56(2):189–94

A comparison of the variability of different techniques and sampling periods for measuring 222Rn and its decay products. Ronca-Battista M, et al. Health Phys 1988 Nov; 55(5):801–7

Radon versus Rn daughters. Vanmarcke H, et al. Health Phys 1989 Feb;56(2):229–31

METABOLISM

Uptake of 210Pb and 210Po by Brazilian Bunodosoma caissarum Corrêa, 1964 (cnidaria, actinidae). Gouvea RC, et al. Sci Total Environ 1989 Jul 1;83(1-2):181–3

TOXICITY

In-vivo radiotoxicity of DNA-incorporated 125I compared with that of densely ionising alpha-particles. Rao DV, et al. Lancet 1989 Sep 16;2(8664):650–3

[Studies of induction of chromosome aberrations in rat spermatogonia after exposure to radon-222 and its degradation products] Rudnicki T, et al. Pol Przegl Radiol (Warszawa) 1988 Jul-Oct;52(4-5):237–41 (Eng. Abstr.) (Pol)

POLOXALENE see under POLYETHYLENE GLYCOLS

POLY A

Raman spectroscopic measurement of base stacking in solutions of adenosine, AMP, ATP, and oligoadenylates. Weaver JL, et al. Biochemistry 1988 Dec 13; 27(25):8899–903

Phosphorescence of adenosine and poly(riboadenylic acid). Evidence for dual emissions and n pi states. Daniels M, et al. Biophys Chem 1988 Jul 15;30(3):225–36

Alterations in the pre-mRNA topology of the bovine growth hormone polyadenylation region decrease poly(A) site efficiency. Gimmi ER, et al. Nucleic Acids Res 1989 Sep 12;17(17):6983–98

Adenine-adenine interaction in adenylyladenosine and polyadenylic acid measured with emission spectroscopy. Kobayashi S, et al. Nucleic Acids Symp Ser 1988; (19):199–202

Proton magnetic resonance studies of the binding of oligopeptides containing tryptophan to polyribonucleotides poly A, poly U and poly C. Barthwal R, et al. Physiol Chem Phys Med NMR 1988;20(2):145–57

Stable DNA unwinding, not "breathing," accounts for single-strand-specific nuclease hypersensitivity of specific A+T-rich sequences. Kowalski D, et al. Proc Natl Acad Sci U S A 1988 Dec;85(24):9464–8

ANALYSIS

Visualization and quantitation of poly A+-mRNA by using in situ hybridization with biotinylated oligonucleotides. Wehner K, et al. Acta Histochem Suppl (Jena) 1989;37:83–8

Fluorescence study on the binding of epinephrine, norepinephrine, isoproterenol and dopamine to polyadenylic acid. Borazan HN, et al. Acta Pharm Suec 1988;25(3):163–72

Changes in the polyadenylation of specific stable RNA during the early development of Xenopus laevis. Paris J, et al. Gene 1988 Dec 10;72(1–2):169–76

Analysis of the multiple 5' and 3' termini of poly(A)+ and poly(A)-deficient thymidylate synthase mRNA in growth-stimulated mouse fibroblasts. DeWille JW, et al. J Cell Physiol 1989 Feb;138(2):358–66

In situ hybridization demonstration of poly-adenylated RNA sequences in formalin-fixed paraffin sections using a biotinylated oligonucleotide poly d(T) probe. Pringle JH, et al. J Pathol 1989 Aug;158(4):279–86

Functional activity of intestinal epithelium demonstrated by mRNA in situ hybridization. Talbot IC, et al. J Pathol 1989 Aug;158(4):287–91

Capped poly(A) leaders of variable lengths at the 5' ends of vaccinia virus late mRNAs. Ahn BY, et al. J Virol 1989 Jan;63(1):226–32

Identification of the latency-associated transcript promoter by expression of rabbit beta-globin mRNA in mouse sensory nerve ganglia latently infected with a recombinant herpes simplex virus. Dobson AT, et al. J Virol 1989 Sep; 63(9):3844–51

The interleukin 2 gene is expressed in the syncytiotrophoblast of the human placenta. Boehm KD, et al. Proc Natl Acad Sci U S A 1989 Jan;86(2):656–60

BIOSYNTHESIS

Poly(A) elongation during Xenopus oocyte maturation is required for translational recruitment and is mediated by a short sequence element. McGrew LL, et al. Genes Dev 1989 Jun;3(6):803–15

Effect of analogues of S-adenosylmethionine on in vitro polyadenylation by vesicular stomatitis virus. Hunt DM. J Gen Virol 1989 Mar;70 (Pt 3):535–42

Measles virus synthesizes both leaderless and leader-containing polyadenylated RNAs in vivo. Castaneda SJ, et al. J Virol 1989 Jul;63(7):2977–86

[Synthesis by RNA polymerase III of high-molecular weight of polyadenylated RNA in Ehrlich carcinoma cells] Kramerov DA, et al. Dokl Akad Nauk SSSR 1988; 301(3):750–3 (Rus)

BLOOD

Circulating human blood platelets retain appreciable amounts of poly (A)+ RNA. Roth GJ, et al. Biochem Biophys Res Commun 1989 Apr 28;160(2):705–10

Serum ribonucleo''de binding activity in osteoarthritis. Tangnijkul Y, et al. Clin Exp Rheumatol 1988 Jul-Sep; 6(3):233–7

GENETICS

Xenopus oocyte poly(A) RNAs that hybridize to a cloned interspersed repeat sequence are not translatable. McGrew LL, et al. Dev Biol 1989 Jul;134(1):267–70

Regulation of mRNA stability and the poly(A) problem in Dictyostelium discoideum. Manrow RE, et al. Dev Genet 1988;9(4–5):403–19 (44 ref.)

Two proteins crosslinked to RNA containing the adenovirus L3 poly(A) site require the AAUAAA sequence for binding. Moore CL , et al. EMBO J 1988 Oct;7(10):3159–69

The poly(A)-binding protein facilitates in vitro translation of poly(A)-rich mRNA. Grossi de Sa MF, et al. Eur J Biochem 1988 Oct 1;176(3):521–6

Expression of K channels in Xenopus laevis oocytes injected with poly(A+) mRNA from the insulin-secreting beta-cell line, HIT T15. Ashcroft FM, et al. FEBS Lett 1988 Nov 7;239(2):185–9

Expression and electrophysiological identification of the receptor for bombesin and gastrin-releasing peptide in Xenopus laevis oocytes injected with polyA+ RNA from rat brain. Meyerhof W, et al. FEBS Lett 1988 Oct 24;

239(1):109–12
Polyadenylation of histone H3 and H4 mRNAs in dicotyledonous plants. Chaboute ME, et al. **Gene** 1988 Nov 15;71(1):217–23
Structure and expression of a family of Ultrabithorax mRNAs generated by alternative splicing and polyadenylation in Drosophila. Kornfeld K, et al. **Genes Dev** 1989 Feb; 3(2):243–58
Definition of an efficient synthetic poly(A) site. Levitt N, et al. **Genes Dev** 1989 Jul;3(7):1019–25
Independent regulation of neuropeptide mRNA level and poly(A) tail length. Carter DA, et al. **J Biol Chem** 1989 Apr 25;264(12):6601–3
Alternative use of a polyadenylation signal and of a downstream 3' splice site. Effect of 5,6-dichloro-1-beta-D-ribofuranosylbenzimidazole. Gallinaro H, et al. **J Mol Biol** 1988 Dec 20;204(4):1031–40
Competition between splicing and polyadenylation reactions determines which adenovirus region E3 mRNAs are synthesized. Brady HA, et al. **Mol Cell Biol** 1988 Aug; 8(8):3291–7
Rapid induction of polyadenylated H1 histone mRNAs in mouse erythroleukemia cells is regulated by c-myc. Cheng GH, et al. **Mol Cell Biol** 1989 Jun;9(6):2332–40
Mitochondrial large ribosomal RNA: an abundant polyadenylated sequence in Drosophila. Benkel BF, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9880
Deletions in the SV40 late polyadenylation region downstream of the AATAAA mediate similar effects on expression in various mammalian cell lines. Gimmi ER, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):8977–97
Analysis of polyadenylation site usage of the c-myc oncogene. Laird-Offringa IA, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6499–514
A simple subtractive hybridization technique employing photoactivatable biotin and phenol extraction. Sive HL, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10937
A rapid method for determining the orientation of poly (A) containing cDNAs. Skipper J, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1782
Functional analysis of point mutations in the AAUAAA motif of the SV40 late polyadenylation signal. Wilusz J, et al. **Nucleic Acids Res** 1989 May 25;17(10):3899–908
Polyadenylated H3 histone transcripts and H3 histone variants in alfalfa. Wu SC, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3057–63
In vitro 3' end processing and poly(A) tailing of RNA in Trypanosoma cruzi. Zwierzynski TA, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4647–60
RNA processing generates the mature 3' end of yeast CYC1 messenger RNA in vitro. Butler JS, et al. **Science** 1988 Dec 2;242(4883):1270–4
[Site-specific cleavage of RNA 3 from brome mosaic virus in the intercistron region and restoration of the internal poly(A)-track in a progeny of religated RNA] Tiul'kina LG, et al. **Dokl Akad Nauk SSSR** 1988;300(6):1489–90 **(Rus)**
[Template activity of poly(A+) and poly(A-) messenger RNA of pathogenic arenaviruses] Scheslenok EP, et al. **Mol Gen Mikrobiol Virusol** 1988 Jul;(7):29–31 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

A high capacity, reusable oligodeoxythymidine affinity column. Chow T, et al. **Anal Biochem** 1988 Nov 15; 175(1):63–6
Mating type response in Neurospora crassa. Early and transient changes in the patterns of protein synthesis in sexually stimulated mycelia. Terenzi HF. **Braz J Med Biol Res** 1988;21(4):747–57
Poly(A+)RNA levels of growth-, differentiation- and transformation-associated genes in the progressive development of hepatocellular carcinoma in the rat. Huber BE, et al. **Hepatology** 1989 May;9(5):756–62
Detection of pseudorabies virus transcripts in trigeminal ganglia of latently infected swine. Cheung AK. **J Virol** 1989 Jul;63(7):2908–13
A rapid and efficient purification of poly(A)-mRNA by oligo(dT)30-Latex. Kuribayashi K, et al. **Nucleic Acids Symp Ser** 1988;(19):61–4
[Isolation of poly(A)+ RNA from mouse 615 hepatomas and estimation of its activity in vitro] Zou CH, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Jun;19(2):116–9 (Eng. Abstr.) **(Chi)**
[Isolation and study of polyadenylated RNA from Bacillus intermedius] Romakhina ER, et al. **Mikrobiologiia** 1988 May-Jun;57(3):421–5 (Eng. Abstr.) **(Rus)**
[Isolation and partial characterization of poly-(a)+mRNA of soybean grown in the presence of gibberellic acid] Dzhokhadze DI, et al. **Ukr Biokhim Zh** 1989 May-Jun; 61(3):107–11 (Eng. Abstr.) **(Rus)**

METABOLISM

The Ff gene 5 protein-d(pA)40–60 complex: 1H NMR supports a localized base-binding model. King GC, et al. **Biochemistry** 1988 Sep 6;27(18):6947–53
The poly(A) binding protein is required for poly(A) shortening and 60S ribosomal subunit-dependent translation initiation. Sachs AB, et al. **Cell** 1989 Sep 8; 58(5):857–67
Cartilage-derived ribonucleotide binding activity. Tangnijkul Y, et al. **Clin Exp Rheumatol** 1989 Jan-Feb;7(1):19–25
Characterization of A units released from the poly(A) tract of rabbit globin mRNA during protein synthesis: possible role of the released ATP in synthesizing protein. Rubin HN, et al. **Comp Biochem Physiol [B]** 1988;91(3):585–91
Energy requirement and kinetics of transport of poly(A)-free histone mRNA compared to poly(A)-rich mRNA from isolated L-cell nuclei. Schröder HC, et al. **Eur J Biochem** 1989 Apr 15;181(1):149–58
Growth-related expression of a 72,000 molecular weight poly(A)+ mRNA binding protein. Ullrich SJ, et al. **Exp Cell Res** 1988 Oct;178(2):273–86
Small cytoplasmic RNA associated with polyadenylated RNA is involved in the hormonal regulation of gene expression. Konstantinova IM, et al. **FEBS Lett** 1988 Oct 10;238(2):320–4
Alternative usage of different poly(A) addition signals for two major species of mRNA encoding human aromatase P-450. Toda K, et al. **FEBS Lett** 1989 Apr 24;247(2):371–6
Interaction between bacteriophage T4 coded gene 32 protein and poly(rA). Watanabe F. **FEBS Lett** 1989 Jan 2; 242(2):444–6
Poly(A) elongation during Xenopus oocyte maturation is required for translational recruitment and is mediated by a short sequence element. McGrew LL, et al. **Genes Dev** 1989 Jun;3(6):803–15
Deadenylation of alpha 1-acid glycoprotein mRNA in cultured hepatic cells during stimulation by dexamethasone. Carter KC, et al. **J Biol Chem** 1989 Mar 5;264(7):4112–9
Transformed cells overexpress a cytosolic nucleic acid binding protein. Stoler DL, et al. **J Cell Physiol** 1989 Oct; 141(1):111–8
mRNAs and a cloned histone gene are differentially expressed during anther and pollen development in rice (Oryza sativa L.). Raghavan V. **J Cell Sci** 1989 Feb;92 (Pt 2):217–29
Accelerated poly(A) loss on alpha-tubulin mRNAs during protein synthesis inhibition in Chlamydomonas. Baker EJ, et al. **J Mol Biol** 1989 Jun 20;207(4):771–81
Non-enzymatic template-directed synthesis on RNA random copolymers. Poly(C,A) templates. Joyce GF, et al. **J Mol Biol** 1988 Aug 5;202(3):677–81
Linear dichroism of the complex between the gene 32 protein of bacteriophage T4 and poly(1,N6-ethenoadenylic acid). van Amerongen H, et al. **J Mol Biol** 1988 Nov 20; 204(2):397–405
Identification of a U5-specific sequence required for efficient polyadenylation within the human immunodeficiency virus long terminal repeat. Böhnlein S, et al. **J Virol** 1989 Jan; 63(1):421–4
Regulation of poly(A) site selection in adenovirus. Falck-Pedersen E, et al. **J Virol** 1989 Feb;63(2):532–41
Polyadenylation at correct sites in genome RNA is not required for retrovirus replication or genome encapsidation. Swain A, et al. **J Virol** 1989 Aug; 63(8):3301–6
Sequence of a cDNA for the ND1 gene from Leishmania major: potential uridine addition in the polyadenosine tail. Campbell DA, et al. **Mol Biochem Parasitol** 1989 Sep; 36(2):197–9
The poly(A)-poly(A)-binding protein complex is a major determinant of mRNA stability in vitro. Bernstein P, et al. **Mol Cell Biol** 1989 Feb;9(2):659–70
Patterns of polyadenylation site selection in gene constructs containing multiple polyadenylation signals. Denome RM, et al. **Mol Cell Biol** 1988 Nov;8(11):4829–39
c-myc RNA degradation in growing and differentiating cells: possible alternate pathways. Swartwout SG, et al. **Mol Cell Biol** 1989 Jan;9(1):288–95
The C proteins of heterogeneous nuclear ribonucleoprotein complexes interact with RNA sequences downstream of polyadenylation cleavage sites. Wilusz J, et al. **Mol Cell Biol** 1988 Oct;8(10):4477–83
Oxytocin mRNA: increase of polyadenylate tail size during pregnancy and lactation. Zingg HH, et al. **Mol Cell Endocrinol** 1989 Aug;65(1-2):59–62
Removal of poly(A) and consequent degradation of c-fos mRNA facilitated by 3' AU-rich sequences. Wilson T, et al. **Nature** 1988 Nov 24;336(6197):396–9
Human dopamine beta-hydroxylase gene: two mRNA types having different 3'-terminal regions are produced through alternative polyadenylation. Kobayashi K, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1089–102
Rat mammary gland fatty acid synthase: localization of the constituent domains and two functional polyadenylation/termination signals in the cDNA. Schweizer M, et al. **Nucleic Acids Res** 1989 Jan 25; 17(2):567–86
The mRNA for alpha 1-acid glycoprotein is deadenylated during stimulation by dexamethasone. Carter KC, et al. **Prog Clin Biol Res** 1989;300:127–30

PHARMACOLOGY

[Transmembrane currents in Xenopus oocytes after an injection of brain mRNA] Fedulova SA, et al. **Neirofiziologiia** 1988;20(6):829–32 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

The poly(A)-binding protein facilitates in vitro translation of poly(A)-rich mRNA. Grossi de Sa MF, et al. **Eur J Biochem** 1988 Oct 1;176(3):521–6

RADIATION EFFECTS

Extent of formation of a dimeric adenine photoproduct in polynucleotides and DNA. Sharma ND, et al. **J Photochem Photobiol [B]** 1989 Apr;3(2):247–58

POLY A POLYMERASE see under **NUCLEOTIDYLTRANSFERASES**

POLY A-U

31P NMR spectra of ethidium, quinacrine, and daunomycin complexes with poly(adenylic acid).poly(uridylic acid) RNA duplex and calf thymus DNA. Gorenstein DG, et al. **Biochemistry** 1989 Apr 4;28(7):2804–12
Acoustical investigation of poly(dA).poly(dT), poly[d(A-T)], poly(A).poly(U) and DNA hydration in dilute aqueous solutions. Buckin VA, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4189–203
[Possibility of spectrophotometric registration of conformation changes of polynucleotides in the system poly(A:U)-pyronine G] Kruglova EB, et al. **Biofizika** 1988 Sep-Oct;33(5):763–6 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Enhanced antitumor effect of combination therapy with interleukin-2 and polyribonucleotides against adenocarcinoma 755. Iigo M, et al. **J Biol Response Mod** 1989 Apr;8(2):147–54

ANALYSIS

Analysis of double-stranded poly(A).poly(U) molecules by reversed-phase high-performance liquid chromatography. Liautard J, et al. **J Chromatogr** 1988 Nov 11;454:195–203

PHARMACOLOGY

Potentiation of the antiviral activity of poly r(A-U) by riboflavin, FAD and FMN. Jamison JM, et al. **Cell Biol Int Rep** 1989 Feb;13(2):215–22
Efficiency of poly(A).poly(U) as an adjuvant [letter] Hovanessian AG, et al. **Immunol Today** 1988 Jun;9(6):161–2

THERAPEUTIC USE

[Therapeutic trial of Poly(A).Poly(U) adjuvant immunotherapy in operable cancer of the breast. Long-term results] Lacour J, et al. **Chirurgie** 1988; 114(6):516–23 (19 ref.) (Eng. Abstr.) **(Fre)**

TOXICITY

Synergic action between tumor necrosis factor and endotoxins or poly(A.U) on cultured bovine endothelial cells. van de Wiel PA, et al. **Cancer Immunol Immunother** 1989;29(1):23–8

POLY ADENOSINE DIPHOSPHATE RIBOSE see under **NUCLEOSIDE DIPHOSPHATE SUGARS**

POLY ADP RIBOSE POLYMERASE

ANALYSIS

Therapeutic strategies for cancer chemotherapy based on metabolic consequences of DNA damage. Berger NA, et al. **Ann N Y Acad Sci** 1988;551:415–8; discussion 419–20
Immunoelectron microscopical distribution of poly(ADP-ribose)polymerase in the mammalian cell nucleus. Fakan S, et al. **Exp Cell Res** 1988 Dec; 179(2):517–26
[Study of nuclear poly(ADP-ribose)polymerase and DNA-topoisomerase II of brain cells during postnatal development of rats] Zaalishvili TM, et al. **Biokhimiia** 1989 Apr;54(4):537–41 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Effect of ADP-ribosyl transferase inhibitors on the survival of human lymphocytes after exposure to different DNA-damaging agents. Franceschi C, et al. **Ann N Y Acad Sci** 1988;551:446–7
Induction of histidine decarboxylase in rat basophilic leukemia cells by interferon and prevention of its effect in coincubation with ADP-ribosyltransferase inhibitors. Kito T, et al. **Biochem Biophys Res Commun** 1989 Jan 16; 158(1):94–8
Potentiation of N-methyl-N'-nitro-N-nitrosoguanidine-induced O6-methylguanine-DNA-methyltransferase activity in a rat hepatoma cell line by poly (ADP-ribose) synthesis inhibitors. Lefebvre P, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):599–604
Synergistic enhancement of 6-thioguanine cytotoxicity by ADP-ribosyltransferase inhibitors. Moses K, et al. **Cancer Res** 1988 Oct 15;48(20):5650–4
Benzamides can stimulate as well as inhibit the activity of nuclear ADP-ribosyltransferase. Jones J, et al. **Carcinogenesis** 1988 Nov;9(11):2023–6
Inhibitors of ADP-ribosyl transferase suppress the mitogenic actions exerted by tumour promoters, but not those evoked by peptide mitogens, in primary neonatal rat hepatocytes. Romano F, et al. **Carcinogenesis** 1988 Dec;9(12):2147–54
The cytotoxicity of chrysotile asbestos fibers to pulmonary

alveolar macrophages. I. Effects of inhibitors of ADP-ribosyl transferase. Nadeau D, et al. **Cell Biol Toxicol** 1988 Mar;4(1):13-30

Differentiation of 3T3-L1 pre-adipocytes induced by inhibitors of poly(ADP-ribose) polymerase and by related noninhibitory acids. Janssen OE, et al. **Eur J Biochem** 1989 Apr 1;180(3):595-602

Inhibition of poly(ADP-ribosyl)ation does not prevent lymphocyte entry into the cell cycle. Marini M, et al. **FEBS Lett** 1989 Aug 14;253(1-2):146-50

Benadrostin, new inhibitor of poly(ADP-ribose) synthetase, produced by actinomycetes. I. Taxonomy, production, isolation, physico-chemical properties and biological activities. Aoyagi T, et al. **J Antibiot (Tokyo)** 1988 Aug; 41(8):1009-14

Benadrostin, new inhibitor of poly(ADP-ribose) synthetase, produced by actinomycetes. II. Structure determination. Yoshida S, et al. **J Antibiot (Tokyo)** 1988 Aug;41(8):1015-8

Quantitative studies of inhibitors of ADP-ribosylation in vitro and in vivo. Rankin PW, et al. **J Biol Chem** 1989 Mar 15;264(8):4312-7

Analogues of benzamide as poly(ADP-ribose)transferase inhibitors: a study on structure activity relationships. Sestili P, et al. **Pharmacol Res Commun** 1988 Jul;20(7):613-4

Deletion of transfected oncogenes from NIH 3T3 transformants by inhibitors of poly(ADP-ribose) polymerase. Nakayasu M, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9066-70

Effect of inhibitors of poly(ADP-ribose)polymerase on the radiation response of HeLa S3 cells. Burgman P, et al. **Radiat Res** 1989 Aug;119(2):380-6

Effect of inhibitors of poly(ADP-ribose) polymerase on the heat response of HeLa S3 cells. Burgman P, et al. **Radiat Res** 1988 Dec;116(3):406-15

Poly(ADP-ribose) synthetase inhibitors increase radiation and thermal sensitivity but do not affect thermotolerance. Raaphorst GP, et al. **Radiat Res** 1988 Dec;116(3):442-52

BIOSYNTHESIS

High induction of poly(ADP-ribose) polymerase activity in bleomycin-resistant HeLa cells. Urade M, et al. **Jpn J Cancer Res** 1989 May;80(5):464-8

Expression of functional zinc finger domain of human poly(ADP-ribose)polymerase in E. coli. Gradwohl G, et al. **Nucleic Acids Res** 1989 Sep 12;17(17):7112

BLOOD

Endogenous ADP-ribosylation in human platelets. Molina y Vedia L, et al. **Biochem Biophys Res Commun** 1988 Dec 30;157(3):1323-8

Adenosine diphosphate ribosyl transferase responses to a standardized dose of hydrogen peroxide in the mononuclear leukocytes of patients with a diagnosis of cancer. Pero RW, et al. **Carcinogenesis** 1989 Sep;10(9):1657-64

Hydrogen peroxide induced adenosine diphosphate ribosyl transferase (ADPRT) response in patients with inflammatory bowel disease. Markowitz MM, et al. **Gut** 1988 Dec;29(12):1680-6

GENETICS

Expression of human poly(ADP-ribose) polymerase with DNA-dependent enzymatic activity in Escherichia coli. Ikejima M, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):739-45

Induction of poly(ADP-ribose) polymerase gene expression in lectin-stimulated human T lymphocytes is dependent on protein synthesis [published erratum appears in Biochem Biophys Res Commun 1988 Dec 30;157(3):1444] Menegazzi M, et al. **Biochem Biophys Res Commun** 1988 Oct 31; 156(2):995-9

Kinetics of toxA and regA mRNA accumulation in Pseudomonas aeruginosa. Frank DW, et al. **J Bacteriol** 1988 Oct;170(10):4477-83

Sequence and organization of the mouse poly (ADP-ribose) polymerase gene. Huppi K, et al. **Nucleic Acids Res** 1989 May 11;17(9):3387-401

Human nuclear NAD+ ADP-ribosyltransferase: localization of the gene on chromosome 1q41-q42 and expression of an active human enzyme in Escherichia coli. Herzog H, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3514-8

IMMUNOLOGY

Human autoantibodies to poly(adenosine diphosphate-ribose) polymerase recognize cross-reactive epitopes associated with the catalytic site of the enzyme. Yamanaka H, et al. **J Clin Invest** 1989 Jan;83(1):180-6

ISOLATION & PURIFICATION

Polypeptide domains of ADP-ribosyltransferase obtained by digestion with plasmin. Buki KG, et al. **Biochemistry** 1988 Aug 9;27(16):5990-5

Poly(ADP-ribose)polymerase: a novel finger protein. Mazen A, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4689-98

METABOLISM

Different types of ADP-ribose protein bonds formed by botulinum C2 toxin, botulinum ADP-ribosyltransferase C3 and pertussis toxin. Aktories K, et al. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):361-7

Poly(ADP-ribose) polymerase inhibits DNA synthesis initiation in the absence of NAD. Nobori T, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):1113-8

cDNA cloning of Gb, the substrate for botulinum ADP-ribosyltransferase from bovine adrenal gland and its identification as a rho gene product. Ogorochi T, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):1175-81

Possible relationship between poly(ADP-ribose)synthetase and formation of antibody against acetylcholine receptors in patients with myasthenia gravis. Aoyagi T, et al. **Biochem Int** 1989 Feb;18(2):391-8

ADP-ribosylation of ADPR-transferase and topoisomerase I in intact mouse epidermal cells JB6. Krupitza G, et al. **Biochemistry** 1989 Mar 7;28(5):2034-40

Effect of nucleotides on the activity of dinitrogenase reductase ADP-ribosyltransferase from Rhodospirillum rubrum. Lowery RG, et al. **Biochemistry** 1989 Jun 13; 28(12):4956-61

Binding of adenosine diphosphoribosyltransferase to the termini and internal regions of linear DNAs. Sastry SS, et al. **Biochemistry** 1989 Jun 27;28(13):5670-80

Poly(ADP-ribosylation) of nuclear proteins in rat testis correlates with active spermatogenesis. Quesada P, et al. **Biochim Biophys Acta** 1989 Mar 1;1007(2):167-75

The role of steroid hormones and decidual induction in the regulation of adenosine diphosphoribosyl transferase activity in rat endometrium. Cummings AM. **Endocrinology** 1989 Mar;124(3):1408-16

Intracellular distribution of poly(ADP-ribose) synthetase in rat spermatogenic cells. Concha II, et al. **Exp Cell Res** 1989 Feb;180(2):353-66

Unexpected stimulation of mitochondrial ADP-ribosylation by cyanide. Masmoudi A, et al. **FEBS Lett** 1988 Sep 12; 237(1-2):150-4

Exoenzyme S of Pseudomonas aeruginosa ADP-ribosylates the intermediate filament protein vimentin. Coburn J, et al. **Infect Immun** 1989 Mar;57(3):996-8

Is the NAD-poly (ADP-ribose) polymerase system the trigger in radiation-induced death of mouse thymocytes? Denisenko MF, et al. **Int J Radiat Biol** 1989 Sep; 56(3):277-85

3'-Deoxy-NAD+ as a substrate for poly(ADP-ribose)polymerase and the reaction mechanism of poly(ADP-ribose) elongation. Alvarez-Gonzalez R. **J Biol Chem** 1988 Nov 25;263(33):17690-6

Activation of a cytosolic ADP-ribosyltransferase by nitric oxide-generating agents. Brüne B, et al. **J Biol Chem** 1989 May 25;264(15):8455-8

Several GTP-binding proteins, including p21c-H-ras, are preferred substrates of Pseudomonas aeruginosa exoenzyme S. Coburn J, et al. **J Biol Chem** 1989 May 25;264(15):9004-8

Poly ADP-ribosylation of proteins. Processivity of a post-translational modification. Naegeli H, et al. **J Biol Chem** 1989 Aug 25;264(24):14382-5

Substrate for botulinum ADP-ribosyltransferase, Gb, has an amino acid sequence homologous to a putative rho gene product. Narumiya S, et al. **J Biol Chem** 1988 Nov 25; 263(33):17255-7

Activator protein supporting the botulinum ADP-ribosyltransferase reaction. Ohtsuka T, et al. **J Biol Chem** 1989 Sep 5;264(25):15000-5

Insulin inhibits pertussis toxin-catalyzed ADP-ribosylation of G-proteins. Evidence for a novel interaction between insulin receptors and G-proteins. Rothenberg PL, et al. **J Biol Chem** 1988 Oct 25;263(30):15546-52

Asparagine residue in the rho gene product is the modification site for botulinum ADP-ribosyltransferase. Sekine A, et al. **J Biol Chem** 1989 May 25;264(15):8602-5

Differential effects of hyperoxia and hydrogen peroxide on DNA damage, polyadenosine diphosphate-ribose polymerase activity, and nicotinamide adenine dinucleotide and adenosine triphosphate contents in cultured endothelial cells and fibroblasts. Junod AF, et al. **J Cell Physiol** 1989 Jul;140(1):177-85

Effect of 3-aminobenzamide on chromosome damage in human blood lymphocytes adapted to bleomycin. Vijayalaxmi, et al. **Mutagenesis** 1989 May;4(3):187-9

Acetaldehyde activation of poly(ADP-ribose)polymerase in hepatocytes of mice treated in vivo. Clerici L, et al. **Mutat Res** 1989 Sep;227(1):47-51

The basal and the mutagen-induced levels of ADP-ribosyl transferase activity are not modified in Fanconi's anemia cells. Scovassi AI, et al. **Mutat Res** 1989 Jan-Feb; 225(1-2):65-9

Developmental pattern of poly (ADP-ribose) synthetase and NAD glycohydrolase in the brain of the fetal and neonatal rat. Shambaugh GE 3d, et al. **Neurochem Res** 1988 Oct; 13(10):973-81

Regulation of protein adenosine diphosphate ribosylation in bovine lens during aging. Bizec JC, et al. **Ophthalmic Res** 1989;21(3):175-83

Subunit S1 of pertussis toxin: mapping of the regions essential for ADP-ribosyltransferase activity. Pizza M, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7521-5

The ADP-ribosylation systems of eukaryotes [letter] Althaus FR. **Trends Biochem Sci** 1988 May;13(5):168

[Changes in poly (ADP-ribose) polymerase activity in post-hepatectomized rat liver nuclei with glucagon and insulin] Fujii Y. **Nippon Geka Gakkai Zasshi** 1989 Mar; 90(3):385-95 (Eng. Abstr.) **(Jpn)**

[Reaction of poly(ADP)-ribosylation of histone H1 in the presence of P1,P4-bis(5'-adenosyl)tetraphosphate and its phosphonate analogs] Karabashian LV, et al. **Mol Biol (Mosk)** 1988 Sep-Oct;22(5):1211-6 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Modulation of chromatin structure by poly(ADP-ribosyl)ation. de Murcia G, et al. **Biochem Cell Biol** 1988 Jun;66(6):626-35 (88 ref.)

ADP-ribosylation is involved in the integration of foreign DNA into the mammalian cell genome. Farzaneh F, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11319-26

TOXICITY

Biochemical analysis of CRM 66. A nonfunctional Pseudomonas aeruginosa exotoxin A. Galloway DR, et al. **J Biol Chem** 1989 Sep 5;264(25):14869-73

POLY ADP RIBOSE SYNTHETASE see **POLY ADP RIBOSE POLYMERASE**

POLY C see under **POLYRIBONUCLEOTIDES**

POLY DA-DT see under **POLYDEOXYRIBONUCLEOTIDES**

POLY G see under **POLYRIBONUCLEOTIDES**

POLY I see under **POLYRIBONUCLEOTIDES**

POLY I-C

ADMINISTRATION & DOSAGE

Enhanced antitumor effect of combination therapy with interleukin-2 and polyribonucleotides against adenocarcinoma 755. Iigo M, et al. **J Biol Response Mod** 1989 Apr;8(2):147-54

The effects of polyinosinic:polycytidylic acid on the graft-versus-host reaction. III: Increased severity of the reaction with delayed pI:C treatment. Peres A, et al. **Transplantation** 1989 Jul;48(1):80-4

METABOLISM

The binding of double-stranded RNA and adenovirus VAI RNA to the interferon-induced protein kinase. Galabru J, et al. **Eur J Biochem** 1989 Jan 2;178(3):581-9

PHARMACOLOGY

Polyriboinosinic:polyribocytidylic acid enhances rabbit slow-wave sleep. Krueger JM, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):R748-55

Penetrating keratoplasty in rabbits with herpetic keratitis treated with poly I:C. Prialnick M, et al. **Ann Ophthalmol** 1988 Nov;20(11):439-43

Effect of interferon inducers on superoxide anion generation from rat liver microsomes detected by lucigenin chemiluminescence. Ischiropoulos H, et al. **Biochem Biophys Res Commun** 1989 Jun 30;161(3):1042-8

Depression of cytochrome P450-dependent drug biotransformation by poly(rI.rC) and aspirin. Jagota SK. **Biochem Med Metab Biol** 1989 Jun;41(3):212-6

Modulation of benzene toxicity by polyinosinic-polycytidilic acid, an interferon inducer. Pandya KP, et al. **Biochim Biophys Acta** 1989 Jul 21;992(1):23-9

Conditioned tolerance to drug-induced (poly I:C) natural killer cell activation: effects of drug-dosage and context-specificity parameters. Dyck DG, et al. **Brain Behav Immun** 1987 Sep;1(3):251-66

Alternative mechanisms for gene activation induced by poly(rI).poly(rC) and Newcastle disease virus. Lammers R, et al. **Eur J Biochem** 1988 Dec 1;178(1):93-9

Production of interferon-beta upon induction with polyinosinic acid:polycytidylic acid during the cell cycle of human fibroblasts. Tang KF, et al. **Exp Cell Res** 1989 Apr;181(2):432-41

Effects of bone marrow transplantation and polyinosinic-polycytidylic acid (poly I:C) on the rescue of animals from busulfan-induced NK suppression. Bhoopalam N, et al. **Exp Hematol** 1989 May;17(4):357-63

Interleukin 1 and poly(rI).poly(rC) induce production of granulocyte CSF, macrophage CSF, and granulocyte-macrophage CSF by human endothelial cells. Fibbe WE, et al. **Exp Hematol** 1989 Mar;17(3):229-34

Depletion of hypothalamic norepinephrine reduces the fever induced by polyriboinosinic acid: polyribocytidylic acid (Poly I:Poly C) in rats. Liu HJ, et al. **Experientia** 1989 Aug 15;45(8):720-2

The roles of protein kinase C and cyclic nucleotide dependent kinase in signal transduction in human interferon gamma induction by poly I:poly C. Tamura-Nishimura M, et al. **FEBS Lett** 1989 May 8;248(1-2):73-7

Tumor response to interferon inducer and radiation effect of serum interferon levels. Lvovsky EA, et al. **J Biol Regul Homeost Agents** 1988 Jan-Mar;2(1):1-6

The kinetics of interferon induction by poly ICLC in humans. Bever CT Jr, et al. **J Interferon Res** 1988 Aug;8(4):419-25

Evidence for a novel signal transduction pathway activated by platelet-derived growth factor and by double-stranded RNA. Hall DJ, et al. **Mol Cell Biol** 1989 Apr;9(4):1705-13

Treatment of mice with anti-asialo-GM1 antibody or poly-I:C: effects on metastasis dissociable from modulation of macrophage antitumor activity. Riser BL, et al.

Nat Immun Cell Growth Regul 1988;7(5–6):305–15

Cold stress or a pyrogenic substance elevates thyrotropin-releasing hormone levels in the rat hypothalamus and induces thermogenic reactions. Lin MT, et al. **Neuroendocrinology** 1989 Aug;50(2):177–81

Differential influence of poly I:C on class II and CD4-like markers on interstitial dendritic cells in the heart. Romaniuk A, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):453–4

Comparative observations of fever and associated clinical, haematological and blood biochemical changes after parenteral administration of poly I: poly C, interferon-alpha 2a and Escherichia coli endotoxin in goats. Koot M, et al. **Vet Q** 1989 Jan;11(1):41–50

THERAPEUTIC USE

Ameliorating effect of an interferon inducer polyinosinic-polycytidylic acid on bleomycin-induced lung fibrosis in hamsters. Morphologic and biochemical evidence. Giri SN, et al. **Am J Pathol** 1988 Dec; 133(3):525–36

The anti-inflammatory effect of LS 2616 and poly I:C in coxsackievirus B3 induced murine myocarditis. Ilbäck NG, et al. **Antiviral Res** 1988 Nov;10(1–3):129–40

Effect of interferons and poly(I):poly(C) on the pathogenesis of the diabetogenic variant of encephalomyocarditis virus in different mouse strains. Giron DJ, et al. **J Interferon Res** 1988 Dec;8(6):745–53

POLY T see under **POLYDEOXYRIBONUCLEOTIDES**

POLY U

Use of EDTA derivatization to characterize interactions between oligodeoxyribonucleoside methylphosphonates and nucleic acids. Lin SB, et al. **Biochemistry** 1989 Feb 7;28(3):1054–61

E.s.r. studies on the mechanism of hydroxyl radical-induced strand breakage of polyuridylic acid. Hildenbrand K, et al. **Int J Radiat Biol** 1989 May;55(5):725–38

The biogeochemical cycle of the adsorbed template. II: Selective adsorption of mononucleotides on adsorbed polynucleotide templates. Lazard D, et al. **Orig Life Evol Biosph** 1988;18(4):347–57

Proton magnetic resonance studies of the binding of oligopeptides containing tryptophan to polyribonucleotides poly A, poly U and poly C. Barthwal R, et al. **Physiol Chem Phys Med NMR** 1988;20(2):145–57

ANALYSIS

ESR studies on the mechanism of .OH-induced strand breakage of poly(U). Hildenbrand K, et al. **Free Radic Res Commun** 1989;6(2–3):137–8

BLOOD

Increased protective activity against acid precipitation of poly(U) in the serum of tumor-bearing mice. Kouretas D, et al. **Anticancer Res** 1988 Nov-Dec;8(6):1307–11

GENETICS

The role of a template sugar-phosphate backbone in the ribosomal decoding mechanism. Comparative study of poly(U) and poly(dT) template activity. Potapov AP, et al. **J Mol Biol** 1988 Oct 20;203(4):885–93

The poly(U) translational capacity of Fischer 344 rat liver does not deteriorate with age and is not affected by dietary regime. Laughrea M, et al. **Mech Ageing Dev** 1988 Nov 14;45(2):137–43

METABOLISM

Nucleotide residues of tRNA, directly interacting with proteins within the complex of the 30 S subunit of E. coli ribosome with poly(U) and NAcPhe-tRNA(Phe). Abdurashidova GG, et al. **FEBS Lett** 1989 Jan 30; 243(2):299–302

Mg2+/NH4+/polyamine system for polyuridine-dependent polyphenylalanine synthesis with near in vivo characteristics. Bartetzko A, et al. **Methods Enzymol** 1988; 164:650–8

RADIATION EFFECTS

Radiation-induced release of undamaged uracil from polyuridylic acid and the formation of phosphomonoester end groups in irradiated polynucleotides. Deeble DJ, et al. **Free Radic Res Commun** 1989;6(2–3):133–5

POLYACRYLAMIDE GEL ELECTROPHORESIS, TWO-DIMENSIONAL see **ELECTROPHORESIS, GEL, TWO-DIMENSIONAL**

POLYADENYLIC ACIDS see **POLY A**

POLYAMIDES see **NYLONS**

POLYAMINES

Molecular design of materials for cell separation. Kataoka K. **Artif Organs** 1988 Dec;12(6):511–3

Quantitative evaluation of rat lymphocyte adsorption on microdomain structured surfaces of poly(2-hydroxyethyl methacrylate)/polyamine. Maruyama A, et al. **Biomaterials** 1988 Nov;9(6):471–81

Abstracts: meeting on "Polyamines in Biology and Medicine". June 4–5, 1987, Milan. **Ital J Biochem** 1988 May-Jun;37(3):165A–211A

[Identification of proteins which are preferentially synthesized in the presence of polyamines] Igarashi K. **Seikagaku** 1989 Apr;61(4):285–9 **(Jpn)**

ADMINISTRATION & DOSAGE

Effects of combined therapy with lovastatin and colestipol in heterozygous familial hypercholesterolemia. Effects on kinetics of apolipoprotein B. Vega GL, et al. **Arteriosclerosis** 1989 Jan-Feb;9(1 Suppl):I135–44

Low-dose colestipol plus fenofibrate: effects on plasma lipoproteins, lecithin:cholesterol acyltransferase, and postheparin lipases in familial hypercholesterolemia. Weisweiler P. **Metabolism** 1989 Mar;38(3):271–4

ADVERSE EFFECTS

[Premorbid conditions in workers in the manufacture of polyethylene polyamine] Shpak BIu. **Vrach Delo** 1988 Oct; (10):109–10 (Eng. Abstr.) **(Rus)**

ANALYSIS

Covalent polyamine-protein conjugates: analysis and distribution. Beninati S, et al. **Adv Exp Med Biol** 1988; 250:411–22 (30 ref.)

Theoretical and experimental characterization of polyamine/DNA interactions. Feuerstein BG, et al. **Adv Exp Med Biol** 1988;250:517–23 (22 ref.)

Interaction of polyamines with phospholipids: spermine and Ca2+ competition for phosphatidylserine containing liposomes. Tadolini B, et al. **Adv Exp Med Biol** 1988; 250:481–90

Prostatic secretory products as markers of prostatic neoplasms. Purvis K, et al. **APMIS Suppl** 1988;2:224–37

HPLC analysis of polyamines and their acetylated derivatives in the picomole range using benzoyl chloride and 3,5-dinitrobenzoyl chloride as derivatizing agent. Wongyai S, et al. **Biomed Chromatogr** 1988 Nov;2(6):254–7

HPLC determination of polyamines in the femtomole range. Yun Z, et al. **Biomed Chromatogr** 1987;2(4):173–6

Regional changes in ornithine decarboxylase activity and polyamine levels during thyroxine-induced cardiac hypertrophy. Tipnis UR, et al. **Cytobios** 1989;57(229):101–8

Polyamine profiles in rat testis, germ cells and Sertoli cells during testicular maturation. Shubhada S, et al. **J Androl** 1989 Mar-Apr;10(2):145–51

Reversed-phase liquid chromatographic separation and simultaneous fluorimetric detection of polyamines and their monoacetyl derivatives in human and animal urine, serum and tissue samples: an improved, rapid and sensitive method for routine application. Löser C, et al. **J Chromatogr** 1988 Sep 9;430(2):249–62

New polymeric benzotriazole reagents for off-line derivatizations of amines and polyamines in HPLC. Gao CX, et al. **J Chromatogr Sci** 1988 Sep;26(9):449–57

Polyamines in cerebral ischemia. Paschen W, et al. **Neurochem Pathol** 1988 Jul-Dec;9:1–20

Polyamine content in pulmonary arteries from rats with monocrotaline-induced pulmonary hypertension. Orlinska U, et al. **Res Commun Chem Pathol Pharmacol** 1988 Nov; 62(2):187–94

[Polyamines in tumors of the oral cavity] Colombatto S, et al. **Minerva Stomatol** 1989 Jan;38(1):11–4 (Eng. Abstr.) **(Ita)**

[The study of polyamine levels and enzyme activities in metabolic pathway of polyamine in spleen of mice inoculated tumor cells] Yokoyama I, et al. **Yakugaku Zasshi** 1989 Jan;109(1):52–8 (Eng. Abstr.) **(Jpn)**

[Polyamine levels in cadaveric bone marrow] Kriazhev LN, et al. **Gematol Transfuziol** 1989 Mar;34(3):37–40 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Polyamine depletion is associated with altered chromatin structure in HeLa cells. Snyder RD. **Biochem J** 1989 Jun 15;260(3):697–704

Phase I study of methylacetylenic putrescine, an inhibitor of polyamine biosynthesis. Cornbleet MA, et al. **Cancer Chemother Pharmacol** 1989;23(6):348–52

Polyamine inhibitors in antimicrobial chemotherapy. Tyms AS, et al. **J Antimicrob Chemother** 1988 Oct;22(4):403–27 (118 ref.)

Urinary polyamine levels in cancer patients treated with D,L-alpha-difluoromethylornithine, an inhibitor of polyamine biosynthesis. Horn Y, et al. **J Surg Oncol** 1989 Jul;41(3):177–82

BIOSYNTHESIS

Effect of dietary ornithine on renal and hepatic polyamine synthesis. Bedford MR, et al. **Ann Nutr Metab** 1988; 32(5–6):265–70

Inhibition of polyamine synthesis in human B lymphocytes during primary infection with Epstein-Barr virus (EBV) blocks cellular DNA synthesis but not the expression of EBV-encoded nuclear antigens (EBNA). Aman P, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):945–52

Regulation of polyamine biosynthesis in rat hepatoma (HTC) cells by a bisbenzyl polyamine analogue. Bitonti AJ, et al. **Biochem J** 1989 Feb 1;257(3):769–74

Swelling of the Golgi apparatus and decrease of galactosyltransferase in polyamine-deficient bovine lymphocytes and epithelium of mouse small intestine. Sakamaki Y, et al. **Biochem Pharmacol** 1989 Apr 1; 38(7):1083–9

Photoprotective effect of vitamins A and E on polyamine and oxygenated free radical metabolism in hairless mouse epidermis. Khettab N, et al. **Biochimie** 1988 Dec; 70(12):1709–13

Calmodulin antagonist trifluoperazine inhibits polyamine biosynthesis and liver regeneration. Alexander RW, et al. **Br J Surg** 1988 Dec;75(12):1160–2

Is polyamine synthesis involved in the proliferative response of the intestinal epithelium to urogastrone-epidermal growth factor? Goodlad RA, et al. **Clin Sci** 1989 Jun; 76(6):595–8

Involvement of antizyme in stabilization of ornithine decarboxylase caused by inhibitors of polyamine synthesis. Murakami Y, et al. **Eur J Biochem** 1989 Mar 1;180(1):181–4

Inhibition of X-ray-induced DNA strand break repair in polyamine-depleted HeLa cells. Snyder RD. **Int J Radiat Biol** 1989 May;55(5):773–82

Epidermal growth factor: modulator of murine embryonic palate mesenchymal cell proliferation, polyamine biosynthesis, and polyamine transport. Gawel-Thompson KJ, et al. **J Cell Physiol** 1989 Aug;140(2):359–70

Blood-brain barrier breakdown in cold-injured brain is linked to a biphasic stimulation of ornithine decarboxylase activity and polyamine synthesis: both are coordinately inhibited by verapamil, dexamethasone, and aspirin. Koenig H, et al. **J Neurochem** 1989 Jan;52(1):101–9

Influence of total parenteral nutrition on tumor growth and polyamine biosynthesis of fibrosarcoma-bearing rats after induced cachexia. Grossie VB Jr, et al. **JPEN J Parenter Enteral Nutr** 1988 Sep-Oct;12(5):441–4

Effect of DL-alpha-difluoromethylornithine on polyamine synthesis and interconversion in Trichomonas vaginalis grown in a semi-defined medium. Yarlett N, et al. **Mol Biochem Parasitol** 1988 Oct;31(1):1–9

Polyamine synthesis in rat lungs injured with alpha-naphthylthiourea. Olson JW, et al. **Toxicology** 1989 May 15;55(3):317–26

Polyamines, macromolecular synthesis and ribosomes in Saccharomyces cerevisiae. Miret JJ, et al. **Yeast** 1989 Apr; 5 Spec No:S333–7

BLOOD

The importance of polyamine determination in monitoring malignant gynaecological tumours. Szarka G, et al. **Acta Chir Hung** 1988;29(4):365–72

Red blood cell polyamines in brain tumour patients. von Essen C, et al. **Acta Neurochir (Wien)** 1989;98(1–2):70–6

Erythrocyte polyamines: their diagnostic and therapeutic importance in human neuro-oncology. Moulinoux JP, et al. **Adv Exp Med Biol** 1988;250:353–63 (15 ref.)

Effect of GnRH administration on blood polyamines and LH levels in normal and obese children. Bernasconi S, et al. **Horm Metab Res** 1988 Oct;20(10):648–51

Polyamine-directed preferential nutritional repletion of normal tissues in tumor-bearing hosts. Nishioka K, et al. **Int J Cancer** 1988 Nov 15;42(5):744–7

Polyamine levels as biomarkers of injury response in polytrauma victims. Jeevanandam M, et al. **Metabolism** 1989 Jul;38(7):625–30

Variations in red blood cell polyamines in brain tumour patients treated with stereotactic radiosurgery. von Essen C, et al. **Neurol Res** 1989 Jun;11(2):76–8

[Changes in polyamine levels in erythrocytes during regeneration of rat liver] Ichiba K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jun;85(6):1318 **(Jpn)**

[Changes in the level of extracellular DNA and free polyamines in the blood of patients with chronic myeloleukemia] Pan'kov VN, et al. **Gematol Transfuziol** 1988 Aug;33(8):45–8 (Eng. Abstr.) **(Rus)**

CHEMICAL SYNTHESIS

Fluorine-containing polyamines: biochemistry and potential applications. Mamont PS, et al. **Adv Exp Med Biol** 1988; 250:691–706 (30 ref.)

Synthesis and physicochemical characterization of a new material (PUPA) based on polyurethane and poly(amido-amine) components capable of strongly adsorbing quantities of heparin. Barbucci R, et al. **Biomaterials** 1989 Jul;10(5):299–308

Structure-activity relationships among methoctramine-related polymethylene tetraamines. Chain-length and substituent effects on M-2 muscarinic receptor blocking activity. Melchiorre C, et al. **J Med Chem** 1989 Jan;32(1):79–84

DIAGNOSTIC USE

[Evaluation of a new method for identification of anti-erythrocyte antibodies] Salvetti E. **Ann Osp Maria Vittoria Torino** 1987–88;30(1):63–6 (Eng. Abstr.) **(Ita)**

[Manual technic using hexadimethrine bromide (polybrene) for the determination of cryoagglutinins (letter)] Biondi C, et al. **Sangre (Barc)** 1988 Aug;33(4):320 **(Spa)**

IMMUNOLOGY

Production and application of monoclonal antibodies to polyamine--spermidine McAb. Wang DB, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1989; 4(1):60

ISOLATION & PURIFICATION

Isolation and structure analysis of components from venom of the spider Argiope lobata. Grishin EV, et al. **Toxicon** 1989;27(5):541-9

[Glutamate receptor antagonists from the spider Argiope lobata venom] Grishin EV, et al. **Bioorg Khim** 1988 Jul; 14(7):883-92 (Eng. Abstr.) **(Rus)**

METABOLISM

Substance P and vasoactive intestinal peptide influence polyamine metabolism in salivary glands of the rat. Ekström J, et al. **Acta Physiol Scand** 1989 Jul;136(3):427-33

Enzyme regulation as an approach to interference with polyamine biosynthesis--an alternative to enzyme inhibition. Porter CW, et al. **Adv Enzyme Regul** 1988; 27:57-79

Transglutaminases and their regulation: implications for polyamine metabolism. Davies PJ, et al. **Adv Exp Med Biol** 1988;250:391-401 (35 ref.)

Polyamine pools and the control of ornithine decarboxylase activity. Davis RH, et al. **Adv Exp Med Biol** 1988; 250:627-32 (12 ref.)

Uptake of polyamines by human lymphocytes and their effect on lactate formation from glucose. Fasulo L, et al. **Adv Exp Med Biol** 1988;250:509-16

Control of phytopathogens by inhibitors of polyamine biosynthesis. Galston AW, et al. **Adv Exp Med Biol** 1988; 250:589-99

The role of polyamines in the growth and transformation of the African trypanosome. Giffin BF. **Adv Exp Med Biol** 1988;250:651-65

Polyamines, DNA methylation and cell differentiation. Heby O, et al. **Adv Exp Med Biol** 1988;250:291-9 (27 ref.)

Regulation of protein synthesis by polyamines. Igarashi K, et al. **Adv Exp Med Biol** 1988;250:315-30 (52 ref.)

Ornithine decarboxylase and polyamine biosynthesis in pancreatic adaptation. Löser C, et al. **Adv Exp Med Biol** 1988;250:379-88

Relationship between polyamine and ethylene biosynthesis in plants and its significance for morphogenesis in cell cultures. Minocha SC. **Adv Exp Med Biol** 1988;250:601-16 (111 ref.)

The polyamine metabolism of filarial worms as chemotherapeutic target. Müller S, et al. **Adv Exp Med Biol** 1988;250:737-43 (26 ref.)

Biochemical properties of unusual polyamines found in an extreme thermophile, Thermus thermophilus. Oshima T, et al. **Adv Exp Med Biol** 1988;250:633-42 (25 ref.)

Regulation of polyamine biosynthesis in Escherichia coli by the acidic antizyme and the ribosomal proteins S20 and L34. Panagiotidis CA, et al. **Adv Exp Med Biol** 1988; 250:13-24 (18 ref.)

Regulation of polyamine synthesis in mammalian cells. Persson L, et al. **Adv Exp Med Biol** 1988;250:261-71 (76 ref.)

Abnormalities of polyamine biosynthesis in spinal cord of totally gastrectomized rats. Scalabrino G, et al. **Adv Exp Med Biol** 1988;250:365-78

Potential roles of polyamine interconversion in the mammalian organism. Seiler N. **Adv Exp Med Biol** 1988; 250:127-45 (47 ref.)

Polyamine recycling enzymes in human cancer cells. Wallace HM, et al. **Adv Exp Med Biol** 1988;250:331-44 (29 ref.)

Polyamines in rat liver during experimental inflammation. Colombatto S, et al. **Agents Actions** 1988 Jul;24(3-4):326-30

Microflora-derived polyamines modulate obstruction-induced colonic mucosal hypertrophy. Osborne DL, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):G1049-57

Pentagastrin induction of spermine/spermidine N1-acetyltransferase and mucosal polyamines. Seidel ER, et al. **Am J Physiol** 1989 Jan;256(1 Pt 1):G16-21

Polyamines, DNA synthesis, and tolerance to hyperoxia of mice and rats. Tierney DF, et al. **Am Rev Respir Dis** 1989 Feb;139(2):387-92

Uptake, intracellular binding, and excretion of polyamines during growth of Neurospora crassa. Davis RH, et al. **Arch Biochem Biophys** 1989 Jun;271(2):315-22

Polyamine transport in Neurospora crassa. Davis RH, et al. **Arch Biochem Biophys** 1988 Dec;267(2):479-89

Modulation of polyamine biosynthesis and transport by oncogene transfection. Chang BK, et al. **Biochem Biophys Res Commun** 1988 Nov 30;157(1):264-70

Effects of diethyldithiocarbamate and endogenous polyamine content on cellular responses to hydrogen peroxide cytotoxicity. Harari PM, et al. **Biochem J** 1989 Jun 1; 260(2):487-90

Effects of S-adenosyl-1,8-diamino-3-thio-octane and S-methyl-5'-methylthioadenosine on polyamine synthesis in Ehrlich ascites-tumour cells. Holm I, et al. **Biochem J** 1989 Jul 1;261(1):205-10

Feedback control of ornithine decarboxylase expression by polyamines. Analysis of ornithine decarboxylase mRNA distribution in polysome profiles and of translation of this mRNA in vitro. Holm I, et al. **Biochem J** 1989 Mar 1; 258(2):343-50

Cellular characterization of a new irreversible inhibitor of S-adenosylmethionine decarboxylase and its use in determining the relative abilities of individual polyamines to sustain growth and viability of L1210 cells. Kramer DL, et al. **Biochem J** 1989 Apr 15;259(2):325-31

Changes in polyamine content in primary cultures of adult rat hepatocytes. Wallace HM. **Biochem Pharmacol** 1989 Jan 15;38(2):379-81

Changes in polyamine-oxidizing capacity of peroxisomes under various physiological conditions in rats. Hayashi H, et al. **Biochim Biophys Acta** 1989 May 31;991(2):310-6

Feedback regulation of polyamine synthesis in Ehrlich ascites tumor cells. Analysis using nonmetabolizable derivatives of putrescine and spermine. Holm I, et al. **Biochim Biophys Acta** 1988 Dec 9;972(3):239-48

Individual and combined effects of alpha-difluoromethylornithine and ovariectomy on the growth and polyamine milieu of experimental breast cancer in rats. Manni A, et al. **Cancer Res** 1989 Jul 1; 49(13):3529-34

The effects of chronic ethanol administration on polyamine content during dimethylhydrazine-induced colorectal carcinogenesis in the rat. McGarrity TJ, et al. **Carcinogenesis** 1988 Nov;9(11):2093-8

Alpha-difluoromethylornithine, an inhibitor of polyamine biosynthesis, augments cyclosporin A inhibition of cytolytic T lymphocyte induction. Bowlin TL, et al. **Clin Exp Immunol** 1989 Jul;77(1):151-6

Polyamines and cell proliferation in the sea star Pycnopodia helianthoides. Asotra S, et al. **Comp Biochem Physiol [B]** 1988;90(4):885-90

Polyamines, molecules necessary for cell division, colocalize with peptide growth factors. Hougaard DM, et al. **Eur J Cell Biol** 1989 Feb;48(1):14-8

Changes in the polyamine and nucleotide metabolism of P388 leukemia cells treated with DL-alpha-difluoromethylornithine in culture. Kremmer T, et al. **Exp Cell Biol** 1988;56(3):131-7

Correlation between transglutaminase activity and polyamine levels in human neuroblastoma cells. Effect of retinoic acid and alpha-difluoromethylornithine. Melino G, et al. **Exp Cell Res** 1988 Dec;179(2):429-45

Chain-fluorinated polyamines as tumor markers--IV. Comparison of 2-fluoroputrescine and 2,2-difluoroputrescine as substrates of spermidine synthase in vitro and in vivo. Dezeure F, et al. **Int J Biochem** 1988; 20(11):1299-312

Ornithine aminotransferase activity, tissue ornithine concentrations and polyamine metabolism. Seiler N, et al. **Int J Biochem** 1989;21(4):425-32

Polyamine metabolism in Ancylostoma ceylanicum and Nippostrongylus brasiliensis. Sharma V, et al. **Int J Parasitol** 1989 Apr;19(2):191-8

Polyamines in the small intestine of rats after whole-body irradiation. Becciolini A, et al. **Int J Radiat Biol** 1989 Jul; 56(1):67-73

Heat shock stimulates polyamine oxidation by two distinct mechanisms in mammalian cell cultures. Harari PM, et al. **Int J Radiat Oncol Biol Phys** 1989 Feb;16(2):451-7

Effect of N1,N12-bis(ethyl)spermine and related compounds on growth and polyamine acetylation, content, and excretion in human colon tumor cells. Pegg AE, et al. **J Biol Chem** 1989 Jul 15;264(20):11744-9

Resumption of cell cycle in BALB/c-3T3 fibroblasts arrested by polyamine depletion: relation with "competence" gene expression. Charollais RH, et al. **J Cell Physiol** 1988 Dec; 137(3):559-64

Levels of polyamines, glutathione and glutathione-spermidine conjugates during growth of the insect trypanosomatid Crithidia fasciculata. Shim H, et al. **J Gen Microbiol** 1988 Mar;134 (Pt 3):807-17

Changes in polyamine concentrations in amygdaloid-kindled rats. Hayashi Y, et al. **J Neurochem** 1989 Sep;53(3):986-8

Relationship of jejunostomy and urine polyamine content to refeeding and intestinal structure and function. Thompson JS, et al. **JPEN J Parenter Enteral Nutr** 1989 Jan-Feb; 13(1):13-7

Paraquat is not accumulated in B16 tumor cells by the polyamine transport system. Minchin RF, et al. **Life Sci** 1989;45(1):63-9

The influence of polyamine-nucleic acid complexes on Fe2+ autoxidation. Tadolini B. **Mol Cell Biochem** 1988 Oct; 83(2):179-85

Polyamine inhibition preserves somatosensory evoked potential activity after transient cerebral ischaemia. Dempsey RJ, et al. **Neurol Res** 1988 Sep;10(3):141-4

Polyamine metabolism in Setaria cervi, the bovine filarial worm. Singh RP, et al. **Parasitol Res** 1989;75(4):311-5

PHARMACOKINETICS

Properties and physiological function of the polyamine transport system. Byers TL, et al. **Am J Physiol** 1989 Sep; 257(3 Pt 1):C545-53

Role of protein kinase C activators and inhibitors, calmodulin antagonists and membrane sialic acids in polyamine transport in murine leukemia cells. Khan NA, et al. **Cell Mol Biol** 1989;35(2):215-24

Competition for polyamine uptake into rat lung slices by WR2721 and analogues. Wyatt I, et al. **Int J Radiat Biol** 1989 Mar;55(3):463-72

The role of polyamines in beta-adrenergic stimulation of calcium influx and membrane transport in rat heart. Fan CC, et al. **J Mol Cell Cardiol** 1988 Sep;20(9):789-99

PHARMACOLOGY

Polyamines in growth and differentiation of plant cell cultures: the effect of nitrogen nutrition, salt stress and embryogenic media. Altman A, et al. **Adv Exp Med Biol** 1988;250:559-72 (33 ref.)

Polyamines in the cell cycle of the malarial parasite Plasmodium falciparum. Bachrach U, et al. **Adv Exp Med Biol** 1988;250:643-50

Polyamines as growth substances in higher plants. Bagni N, et al. **Adv Exp Med Biol** 1988;250:547-58 (20 ref.)

The effects of polyamine analogues on malaria parasites in vitro and in vivo. Bitonti AJ, et al. **Adv Exp Med Biol** 1988;250:717-26

Polyamines stimulate the "in vitro" transport of the precursor of ornithine carbamoyltransferase into rat liver mitochondria. Hernández-Yago J, et al. **Adv Exp Med Biol** 1988;250:497-508

Effect of polyamines on protein kinase C activation process. Moruzzi MS, et al. **Adv Exp Med Biol** 1988;250:469-80

Regulation of polyamine biosynthetic activity by spermidine and spermine analogs--a novel antiproliferative strategy. Porter CW, et al. **Adv Exp Med Biol** 1988;250:677-90 (57 ref.)

Casein kinase II activity and polyamine-stimulated protein phosphorylation of cytosolic and plasma membrane proteins in bovine sperm. Chaudhry PS, et al. **Arch Biochem Biophys** 1989 May 15;271(1):98-106

Polyamines stimulate the activity of glycogen synthase (casein) kinase-1 from bovine kidney and different rat tissues. Singh TJ. **Arch Biochem Biophys** 1988 Nov 15; 267(1):167-75

Polyamine-mediated control of mammalian S-adenosyl-L-methionine decarboxylase expression: effects on the content and translational efficiency of the mRNA. Persson L, et al. **Biochem Biophys Res Commun** 1989 May 15; 160(3):1196-202

Polylysine and polyamine stimulation of the phosphatidylinositol kinases of amphibian oocyte membranes. Carrasco D, et al. **Biochem Int** 1988 Aug; 17(2):319-27

Regulation of polyamine biosynthesis in rat hepatoma (HTC) cells by a bisbenzyl polyamine analogue. Bitonti AJ, et al. **Biochem J** 1989 Feb 1;257(3):769-74

Characterization of antilipolytic action of polyamines in isolated rat adipocytes. Richelsen B, et al. **Biochem J** 1989 Jul 15;261(2):661-5

Influence of polyamines on membrane functions. Schuber F. **Biochem J** 1989 May 15;260(1):1-10 (174 ref.)

Modulation of inositol phospholipid metabolism by polyamines. Smith CD, et al. **Biochem J** 1988 Nov 15; 256(1):125-30

Polyamines inhibit phospholipase C-catalysed polyphosphoinositide hydrolysis. Studies with permeabilized GH3 cells. Wojcikiewicz RJ, et al. **Biochem J** 1988 Nov 1;255(3):1015-21

Structure-function correlations of polyamine analog-induced increases in spermidine/spermine acetyltransferase activity. Libby PR, et al. **Biochem Pharmacol** 1989 May 1; 38(9):1435-42

Inhibition of deoxyhypusine hydroxylase by polyamines and by a deoxyhypusine peptide. Abbruzzese A, et al. **Biochim Biophys Acta** 1989 Aug 31;997(3):248-55

Role of polyamines and intracellular pH change in the hypertrophy of the denervated rat hemidiaphragm. Marais A, et al. **Biochim Biophys Acta** 1988 Nov 17;967(2):314-7

Argiotoxin-636 blocks excitatory synaptic transmission in rat hippocampal CA1 pyramidal neurons. Ashe JH, et al. **Brain Res** 1989 Feb 20;480(1-2):234-41

Single channel studies of non-competitive antagonism of a quisqualate-sensitive glutamate receptor by argiotoxin636--a fraction isolated from orb-web spider venom. Kerry CJ, et al. **Brain Res** 1988 Sep 6;459(2):312-27

Polyamines mediate androgenic stimulation of calcium fluxes and membrane transport in rat heart myocytes. Koenig H, et al. **Circ Res** 1989 Mar;64(3):415-26

A new heparin-inhibited and polyamine-activated protein kinase from bovine kidney. Singh TJ. **FEBS Lett** 1989 Jan 30;243(2):289-92

Polyamines inhibit the ATP-dependent proteolytic pathway in rabbit reticulocyte lysates. Wajnberg EF, et al. **FEBS Lett** 1989 Jan 30;243(2):141-4

Effects of transglutaminase substrates and inhibitors on the motility of demembranated reactivated spermatozoa. de Lamirande E, et al. **Gamete Res** 1989 Feb;22(2):179-92

Effect of polyamines on globin synthesis in a rabbit reticulocyte polyamine-free protein synthetic system. Ogasawara T, et al. **J Biochem (Tokyo)** 1989 Feb; 105(2):164-7

Polyamines are involved in the 1-alpha,25-dihydroxyvitamin D3-induced fusion of mouse alveolar macrophages. Hayashi T, et al. **J Bone Miner Res** 1986 Apr;1(2):235-42

Role of polyamines in the stimulation of synthesis and secretion of plasminogen activator from bovine aortic endothelial cells. Kuo BS, et al. **J Cell Physiol** 1988 Oct; 137(1):192-8

Impaired absorption of tetracycline by colestipol is not reversed by orange juice. Friedman H, et al. **J Clin Pharmacol** 1989 Aug;29(8):748-51

Colestipol-induced changes in LDL composition and metabolism. II. Studies in humans. Young SG, et al. **J Lipid Res** 1989 Feb;30(2):225–38

Treatment with polyamines can prevent monosodium glutamate neurotoxicity in the rat retina. Gilad GM, et al. **Life Sci** 1989;44(25):1963–9

Mg2+/NH4+/polyamine system for polyuridine-dependent polyphenylalanine synthesis with near in vivo characteristics. Bartetzko A, et al. **Methods Enzymol** 1988; 164:650–8

Effects of a synthetic cationic polymer on sodium and potassium currents of frog nerve fibres. Rack M, et al. **Pflugers Arch** 1989 Apr;413(6):610–5

Bis(benzyl)polyamine analogs inhibit the growth of chloroquine-resistant human malaria parasites (Plasmodium falciparum) in vitro and in combination with alpha-difluoromethylornithine cure murine malaria. Bitonti AJ, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):651–5

Effect of polyamine related tetraamines on anti-ulcerogenic activity and anti-H+,K+-ATPase activity. Kakegawa T, et al. **Res Commun Chem Pathol Pharmacol** 1989 Jun; 64(3):395–406

Polyamine lowered the hepatic lipid peroxide level in rats. Ohmori S, et al. **Res Commun Chem Pathol Pharmacol** 1988 Nov;62(2):235–49

The stimulation of a casein kinase II from yeast by polyamines occurs with endogenous substrates at cytosolic salt levels. Nuutinen M, et al. **Second Messengers Phosphoproteins** 1988;12(4):197–205

Prevention of thrombin/antithrombin III reaction in the presence of protamine or polybrene. Oshima G. **Thromb Res** 1988 Sep 15;51(6):565–74

Neutralization of dermatan sulfate in vitro and in vivo by protamine sulfate and polybrene. Sié P, et al. **Thromb Res** 1989 Apr 1;54(1):63–74

Polymethylene tetramines: a new generation of selective muscarinic antagonists. Melchiorre C. **Trends Pharmacol Sci** 1988 Jun;9(6):216–20 (34 ref.)

[Effect of inhibitors of polyamine biosynthesis and of exogenous polyamines on the mitogenic effect of epidermal growth factor in a hepatocyte culture] Osipova LA, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):339–42 (Eng. Abstr.) **(Rus)**

[Effect of polyamines on the thermal resistance of Escherichia coli cells in heat shock] Amosov FG, et al. **Mikrobiologiia** 1988 May–Jun;57(3):499–502 (Eng. Abstr.) **(Rus)**

[Effect of polyamines on the cellular radiation reaction] Dalheim H, et al. **Radiobiologiia** 1989 May–Jun; 29(3):338–42 (Eng. Abstr.) **(Rus)**

[A decrease in the level of unscheduled DNA synthesis in preparations of irradiated rat hepatocyte nuclei under the effect of polyamines] Bezlepkin VG, et al. **Tsitologiia** 1989 Apr;31(4):469–75 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Cyclic nucleotides and polyamines in prolactin stimulation of lactose biosynthesis. Oppat CA, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):E318–22

Polyamine levels during Xenopus laevis oogenesis: a role in oocyte competence to meiotic resumption. Osborne HB, et al. **Biochem Biophys Res Commun** 1989 Jan 31; 158(2):520–6

Polyamines mediate the reversible opening of the blood–brain barrier by the intracarotid infusion of hyperosmolal mannitol. Koenig H, et al. **Brain Res** 1989 Mar 27; 483(1):110–6

The influence of seminal plasma and polyaminic substances on the motility of isolated human sperm. Singer R, et al. **Int J Fertil** 1989 May–Jun;34(3):224–30

DNA methylation and polyamines in regulation of development of the fungus Mucor rouxii. Cano C, et al. **J Bacteriol** 1988 Dec;170(12):5946–8

Polyamines and regulation of ornithine biosynthesis in Escherichia coli. Cataldi AA, et al. **J Bacteriol** 1989 Apr; 171(4):1998–2002

Polyamines and Ca2+ mediate hyperosmolal opening of the blood–brain barrier: in vitro studies in isolated rat cerebral capillaries. Koenig H, et al. **J Neurochem** 1989 Apr; 52(4):1135–42

Do polyamines play a role in the pathogenesis of the anemia of end-stage renal disease? Kushner DS, et al. **Kidney Int** 1989 Aug;36(2):171–4 (48 ref.)

ODC-polyamine system is involved in morphine analgesia. Genedani S, et al. **Life Sci** 1989;44(8):525–31

THERAPEUTIC USE

Review of clinical studies of bile acid sequestrants for lowering plasma lipid levels. LaRosa J. **Cardiology** 1989; 76 Suppl 1:55–61; discussion 61–4 (11 ref.)

Intensive combination drug therapy of familial hypercholesterolemia with lovastatin, probucol, and colestipol hydrochloride. Witztum JL, et al. **Circulation** 1989 Jan;79(1):16–28

Hydroxycholesterols in serum from hypercholesterolaemic patients with and without bile acid sequestrant therapy. van Doormaal JJ, et al. **Clin Chim Acta** 1989 May 31; 181(3):273–9

The effect of encapsulated, low-dose colestipol in patients with hyperlipidemia. Linet OI, et al. **J Clin Pharmacol** 1988 Sep;28(9):804–6

URINE

Clinical usefulness of an enzymatic determination of total urinary polyamines, excluding cadaverine. Mashige F, et al. **Clin Chem** 1988 Nov;34(11):2271–4

Microbial influences on urinary polyamine excretion. Satink HP, et al. **Clin Chim Acta** 1989 Feb 22;179(3):305–14

Diamine and polyamine levels in the urine of healthy adults. Yodfat Y, et al. **Clin Chim Acta** 1988 Aug 15;176(1):107–13

Urinary polyamines as markers of cardiac allograft rejection. A clinical evaluation. Carrier M, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):806–10

Urinary polyamines in malignancies. Umeki S, et al. **Med Lab Sci** 1988 Jul;45(3):250–4

[Urinary polyamines measured by HPLC in lung cancer] Zen XL. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1988 Feb; 11(1):22–4, 62–3 (Eng. Abstr.) **(Chi)**

[The clinical value of urinary polyamine analysis in urological disease] Matsuda M, et al. **Hinyokika Kiyo** 1988 Oct; 34(10):1703–10 (Eng. Abstr.) **(Jpn)**

[Urinary total polyamines levels in estrous cycle and during pregnancy in female rats] Torii R, et al. **Jikken Dobutsu** 1988 Oct;37(4):473–7 (Eng. Abstr.) **(Jpn)**

[Clinical means of measurement of urinary polyamines in chronic renal failure by method of enzymatic assay] Nagoshi H, et al. **Rinsho Byori** 1988 Nov;36(11):1309–12 **(Jpn)**

[Effect of cyclophosphane on polyamine excretion in rats with Guérin's carcinoma and Pliss' lymphosarcoma] Berdinskikh NK, et al. **Eksp Onkol** 1989;11(3):69–72 (Eng. Abstr.) **(Rus)**

[Polyamines as a prognostic criterion of the duration of clinico-hematologic remission in acute leukemia in children] Kovtunova ME, et al. **Ter Arkh** 1988;60(9):77–9 (Eng. Abstr.) **(Rus)**

POLYAMINES, BIOGENIC see **BIOGENIC POLYAMINES**

POLYANETHOL SULFONATE see under **BENZENESULFONATES**

POLYANGIACEAE see **MYXOBACTERALES**

POLYANGIUM see **MYXOBACTERALES**

POLYARTERITIS NODOSA see **PERIARTERITIS NODOSA**

POLYBROMOBIPHENYL COMPOUNDS

ADVERSE EFFECTS

[Effect of polychlorinated, polybrominated biphenyls and polychlorinated quaterphenyls on human health] Klisenko MA. **Gig Sanit** 1988 Jul;(7):56–60 (34 ref.) **(Rus)**

ANALYSIS

Plasma concentration and placental transfer of bromofenofos in rats. Yoshimura H, et al. **Toxicology** 1989 May 15; 55(3):299–306

BLOOD

Determinants of polychlorinated biphenyls (PCBs), polybrominated biphenyls (PBBs), and dichlorodiphenyl trichloroethane (DDT) levels in the sera of young children. Jacobson JL, et al. **Am J Public Health** 1989 Oct; 79(10):1401–4

METABOLISM

Human lipoprotein influence on the partition of 2,2',4,4',5,5'-hexabromobiphenyl between 3T3L1 adipocytes and culture medium. Kraus AL, et al. **J Toxicol Environ Health** 1989;26(2):157–74

PHARMACOKINETICS

Plasma concentration and placental transfer of bromofenofos in rats. Yoshimura H, et al. **Toxicology** 1989 May 15; 55(3):299–306

PHARMACOLOGY

Increased retinoic acid metabolism following 3,3',4,4',5,5'-hexabromobiphenyl injection. Spear PA, et al. **Can J Physiol Pharmacol** 1988 Sep;66(9):1181–6

Concentration/response effect of 2,2', 4,4', 5,5'-hexabromobiphenyl on cell-cell communication in vitro: assessment by fluorescence redistribution after photobleaching ("FRAP"). Evans MG, et al. **Cell Biol Toxicol** 1988 Jun;4(2):163–71

TOXICITY

Acute toxicity of malathion, tetrabromobisphenol-A, and tributyltin chloride to mysids (Mysidopsis bahia) of three ages. Goodman LR, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):746–53

Teratogenic evaluation of a polybromodiphenyl oxide mixture in New Zealand white rabbits following oral exposure. Breslin WJ, et al. **Fundam Appl Toxicol** 1989 Jan; 12(1):151–7

Promoting effect of polybrominated biphenyls on tracheal papillomas in Syrian golden hamsters. Wasito, et al. **J Toxicol Environ Health** 1989;27(2):173–87

POLYCARBOXYLATE CEMENT see under **DENTAL CEMENTS**

POLYCHAETA

ANALYSIS

Purity of Glycera dibranchiata monomer hemoglobin components III and IV determined by isoelectric focusing. Constantinidis I, et al. **Comp Biochem Physiol [B]** 1989; 92(4):619–22

Serotoninlike immunoreactivity in the central and peripheral nervous system of the scale worm Harmothoe imbricata (Polychaeta). Miron MJ, et al. **J Comp Neurol** 1988 Sep 15;275(3):429–40

ANATOMY & HISTOLOGY

[Various morphofunctional characteristics of the digestive system of Polychaeta] Kaganovskaia EA. **Arkh Anat Gistol Embriol** 1989 Apr;96(4):84–92 (90 ref.) **(Rus)**

IMMUNOLOGY

Dermato-respiratory allergy induced by a marine worm (Marphysa sanguinea) used as fishing bait. Valero A, et al. **Ann Allergy** 1989 Jun;62(6):514–7

METABOLISM

Haem-binding-site heterogeneity and haem Cotton effects of Glycera dibranchiata monomeric haemoglobins. DiFeo TJ, et al. **Biochem J** 1989 Jun 15;260(3):863–71

Kinetic study of the slow cyanide binding to Glycera dibranchiata monomer hemoglobin components III and IV. Mintorovitch J, et al. **Biochemistry** 1989 Jul 11; 28(14):6099–104

Inhibition of sodium-dependent taurine transport in red blood cells from the marine polychaete, Glycera dibranchiata, after exposure to mercury. Preston RL, et al. **Bull Environ Contam Toxicol** 1989 Apr;42(4):620–7

Changes in the protein components of vitelline envelope during oogenesis of a tubiculous polychaete, Schizobranchia insignis. Lee YR. **Cell Differ Dev** 1988 Sep; 25(1):23–35

Novel S–S loops in the giant hemoglobin of Tylorrhynchus heterochaetus. Suzuki T, et al. **J Biol Chem** 1988 Dec 5; 263(34):18524–9

Anomalous influence of reduced internal ATP levels on sodium efflux in Myxicola giant axons. Sjodin RA, et al. **J Membr Biol** 1989 Apr;108(1):61–71

PHYSIOLOGY

[Changes in the behavioral reactions of nereids to vibration following the action of unconditioned stimuli] Inozemtsev AN. **Zh Vyssh Nerv Deiat** 1989 Mar–Apr;39(2):376–8 **(Rus)**

POLYCHEMOTHERAPY see **DRUG THERAPY, COMBINATION**

POLYCHEMOTHERAPY, NEOPLASM see **ANTINEOPLASTIC AGENTS, COMBINED**

POLYCHLOROBIPHENYL COMPOUNDS

Risk assessment of dermal exposure to polychlorinated biphenyls permeating a polyvinyl chloride glove. Perkins JL, et al. **Am Ind Hyg Assoc J** 1989 Mar;50(3):A171–2

For your information [news] **Anal Chem** 1989 Aug 1; 61(15):887A

Thermally induced formation of polychlorinated dibenzofurans from Aroclor 1254-contaminated mineral oil. Narang RS, et al. **Environ Health Perspect** 1989 Feb; 79:273–82

Polychlorinated biphenyls: where do we stand now? Jones GR. **Lancet** 1989 Sep 30;2(8666):791–4 (37 ref.)

Polychlorinated biphenyl pollution caused by resuspension of surface sediments in the lagoon of Venice. Raccanelli S, et al. **Sci Total Environ** 1989 Mar;79(2):111–23

ADMINISTRATION & DOSAGE

[Evaluation of intake of polychlorobiphenyl cpds with fish products in Poland] Falandysz J. **Rocz Panstw Zakl Hig** 1988;39(6):450–3 (Eng. Abstr.) **(Pol)**

ADVERSE EFFECTS

Health effects three years after potential exposure to the toxic contaminants of an electrical transformer fire. Fitzgerald EF, et al. **Arch Environ Health** 1989 Jul–Aug;44(4):214–21

Development after exposure to polychlorinated biphenyls and dichlorodiphenyl dichloroethene transplacentally and through human milk. Gladen BC, et al. **J Pediatr** 1988 Dec; 113(6):991–5

From the National Institutes of Health. Wyngaarden JB. **JAMA** 1989 Jun 9;261(22):3214

[Potential risk of polychlorinated biphenyls for infants] Hrubá D. **Cesk Pediatr** 1989 Jun;44(6):345–8 **(Cze)**

[Effect of polychlorinated, polybrominated biphenyls and polychlorinated quaterphenyls on human health] Klisenko MA. **Gig Sanit** 1988 Jul;(7):56–60 (34 ref.) **(Rus)**

[The effect of polychlorinated biphenyls on the eye] Orenčáková M. **Cesk Oftalmol** 1989 May;45(3):232–5 (Eng. Abstr.) **(Slo)**

ANALYSIS

Display of the composition of polychlorinated biphenyls. Zitko V. **Anal Chem** 1988 Sep 15;60(18):1998–2000

Analysis of polychlorobiphenyl congeners in Wisconsin fish. Maack L, et al. **Arch Environ Contam Toxicol** 1988 Nov; 17(6):711–9

Polychlorinated biphenyl congeners in sediments, plankton, molluscs, crustaceans, and eel in a freshwater lake: implications of using reference chemicals and indicator organisms in bioaccumulation studies. van der Oost R, et al. **Arch Environ Contam Toxicol** 1988 Nov;17(6):721–9

Human exposure to polychlorinated biphenyls at toxic waste sites: investigations in the United States. Stehr-Green PA, et al. **Arch Environ Health** 1988 Nov–Dec;43(6):420–4

PCB and DDE residues in milk supplies of Ontario, Canada 1985–1986. Frank R, et al. **Bull Environ Contam Toxicol** 1989 May;42(5):666–9

Polychlorinated biphenyls in residents around the River Krupa, Slovenia, Yugoslavia. Jan J, et al. **Bull Environ Contam Toxicol** 1988 Dec;41(6):809–14

Polychlorinated biphenyls in human amniotic fluid. Rao CV, et al. **Bull Environ Contam Toxicol** 1988 Dec;41(6):798–801

Environmental occurrence, abundance, and potential toxicity of polychlorinated biphenyl congeners: considerations for a congener-specific analysis. McFarland VA, et al. **Environ Health Perspect** 1989 May;81:225–39 (83 ref.)

Determination of some specific isomers of polychlorinated biphenyl congeners in fatty foods of the Canadian diet. Mes J, et al. **Food Addit Contam** 1989 Jul–Sep;6(3):365–75

Regional differences of PCB and PCQ concentrations in the blood and subcutaneous fat tissue of residents of Nagasaki. Ohgami T, et al. **Fukuoka Igaku Zasshi** 1989 May; 80(5):313–7

Levels of polychlorinated biphenyls and pesticides in bluefish before and after cooking. Trotter WJ, et al. **J Assoc Off Anal Chem** 1989 May–Jun;72(3):501–3

Selective enrichment procedures for the determination of polychlorinated biphenyls and polycyclic aromatic hydrocarbons in environmental samples by gel permeation chromatography. Fernández P, et al. **J Chromatogr** 1988 Dec 2;456(1):155–64

The simultaneous use of solute vapor pressure and geometry in multidimensional capillary gas chromatographic separations of polychlorinated biphenyls. Issaq HJ, et al. **J Chromatogr Sci** 1989 Apr;27(4):172–5

Residues of polychlorinated biphenyls in breast milk of women non-occupationally exposed to PCBs. Hrubá D, et al. **J Hyg Epidemiol Microbiol Immunol** 1988;32(3):273–8

An assessment of pollutants in eggs of Audouin's gull (Larus audouinii), a rare species of the Mediterranean sea. Leonzio C, et al. **Sci Total Environ** 1989 Jan;78:13–22

Effects of chemical pollution on the activities of hepatic xenobiotic metabolizing enzymes in fish from the River Rhône. Monod G, et al. **Sci Total Environ** 1988 Jul 15; 73(3):189–201

[Chlorinated pesticide residues and polychlorinated biphenyls in fish from various locations in Czechoslovakia] Kredl F, et al. **Vet Med (Praha)** 1989 Apr;34(4):239–50 (Eng. Abstr.) **(Cze)**

[Polychlorobiphenyl compounds as leading pollutants in infants with environmentally relevant chemicals] Lenz J, et al. **Beitr Gerichtl Med** 1988;46:357–62 (Eng. Abstr.) **(Ger)**

[Foxes as bioindicators of the occurrence of polychlorinated biphenyls (PCB) in the environment—studies of section material from the years 1983 and 1987] Brunn H, et al. **DTW** 1988 Nov–Dec;95(10):465–8 (Eng. Abstr.) **(Ger)**

[Polychlorinated biphenyls: determination of individual components in raw milk and contaminated fodder] Kypke-Hutter K, et al. **Z Lebensm Unters Forsch** 1989 Feb;188(2):127–34 (Eng. Abstr.) **(Ger)**

[Polychlorobiphenyl content in adipose tissue of subjects not exposed professionally] Flore C, et al. **Med Lav** 1989 Mar–Apr;80(2):132–5 (Eng. Abstr.) **(Ita)**

[Results and evaluation of levels of p,p'-DDE, p,p'-DDT and polychlorobiphenyls (PCB) in samples of human milk taken from the Rome area] Dommarco R, et al. **Nuovi Ann Ig Microbiol** 1986 Jan–Dec;37(1–6):219–32 (Eng. Abstr.) **(Ita)**

[Identification of polychlorinated phenyldibenzofurans (PCPDFs) in the casual rice oil associated with Yusho] Kuroki H, et al. **Fukuoka Igaku Zasshi** 1989 May; 80(5):189–95 (Eng. Abstr.) **(Jpn)**

BLOOD

Determinants of polychlorinated biphenyls (PCBs), polybrominated biphenyls (PBBs), and dichlorodiphenyl trichloroethane (DDT) levels in the sera of young children. Jacobson JL, et al. **Am J Public Health** 1989 Oct; 79(10):1401–4

PCB and other organochlorine compounds in blood of women with or without miscarriage: a hypothesis of correlation. Leoni V, et al. **Ecotoxicol Environ Safety** 1989 Feb;17(1):1–11

Gas chromatographic determination of polychlorinated biphenyls (as Aroclor 1254) in serum: collaborative study. Burse VW, et al. **J Assoc Off Anal Chem** 1989 Jul–Aug; 72(4):649–59

Comparison of two techniques for quantifying environmental contaminants in human serum. Donahue JF, et al. **Life Sci** 1988;43(26):2257–64

[Analysis of PCB- and PCT-methylsulfones in the blood in Yusho patients] Haraguchi K, et al. **Fukuoka Igaku Zasshi** 1989 May;80(5):291–5 (Eng. Abstr.) **(Jpn)**

[Statistical analysis of subjects with type A, BC and C pattern of blood PCB on GC] Nakagawa R, et al. **Fukuoka Igaku Zasshi** 1989 May;80(5):287–90 (Eng. Abstr.) **(Jpn)**

[Increase in body weight and levels of organochlorine insecticide and polychlorinated biphenyl residues in the blood during pregnancy] Rončević N, et al. **Med Pregl** 1989;42(1–2):12–5 (Eng. Abstr.) **(Scr)**

ISOLATION & PURIFICATION

Fractionation of polychlorinated biphenyls, polychlorinated dibenzo-p-dioxins, and polychlorinated dibenzofurans on porous graphitic carbon. Creaser CS, et al. **Anal Chem** 1989 Jun 1;61(11):1300–2

METABOLISM

Bacterial dehalogenation of chlorobenzoates and coculture biodegradation of 4,4'-dichlorobiphenyl. Adriaens P, et al. **Appl Environ Microbiol** 1989 Apr;55(4):887–92

Cometabolism of polychlorinated biphenyls: enhanced transformation of Aroclor 1254 by growing bacterial cells. Kohler HP, et al. **Appl Environ Microbiol** 1988 Aug; 54(8):1940–5

The metabolism of xenobiotics and endogenous compounds by the constitutive dog liver cytochrome P450 PBD-2. Duignan DB, et al. **Arch Biochem Biophys** 1988 Nov 15; 267(1):294–304

Biological approaches for polychlorinated biphenyl degradation. Unterman R, et al. **Basic Life Sci** 1988; 45:253–69

Photo-induced formation of DNA adducts of 2,2',4,4',5,5'-hexachlorobiphenyl in cultured human cells. Buff K, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2773–9

Distribution pattern and reduction of polychlorinated biphenyls (PCB) in bluefish Pomatomus saltatrix (Linnaeus) fillets through adipose tissue removal. Sanders M, et al. **Bull Environ Contam Toxicol** 1988 Nov;41(5):670–7

Cellular and subcellular localization of a binding protein for polychlorinated biphenyls in rat lung. Lund J, et al. **Drug Metab Dispos** 1988 Jul–Aug;16(4):590–9

Anaerobic biodegradation of polychlorinated biphenyls by bacteria from Hudson River sediments. Chen M, et al. **Ecotoxicol Environ Safety** 1988 Oct;16(2):95–105

Cloning and expression in Escherichia coli of Pseudomonas strain LB400 genes encoding polychlorinated biphenyl degradation. Mondello FJ. **J Bacteriol** 1989 Mar; 171(3):1725–32

Sequence similarities in the genes encoding polychlorinated biphenyl degradation by Pseudomonas strain LB400 and Alcaligenes eutrophus H850. Yates JR, et al. **J Bacteriol** 1989 Mar;171(3):1733–5

Enhanced withdrawal of polychlorinated biphenyls: a comparison of colestipol, mineral oil, propylene glycol, and petroleum jelly with or without restricted feeding. Polin D, et al. **Poult Sci** 1989 Jul;68(7):885–90

PHARMACOKINETICS

Relative concentrations of 14C-DDT and of two polychlorinated biphenyls in the lipids of cod tissues after a single oral dose. Mitchell AI, et al. **Arch Environ Contam Toxicol** 1977;6(4):525–32

Tissue distribution metabolism and excretion of 2,2',4,4',5-pentachlorodiphenyl ether in the rat. Komsta E, et al. **Arch Toxicol** 1988;62(4):258–62

Glucuronidation in 4-chlorobiphenyl metabolism by rat and human liver microsomes. Volp RP. **Drug Metab Dispos** 1988 Jul–Aug;16(4):650–2

Accumulation of polychlorobiphenyl congeners and p,p'-DDE at environmental concentrations by corn and beans. Shane LA, et al. **Ecotoxicol Environ Safety** 1989 Feb;17(1):38–46

Autoradiographic study of the localization of 2,2', 4,4', 5,5'-hexachlorobiphenyl in liver and skin tissue after in vitro uptake. Di Francesco C, et al. **Eur J Drug Metab Pharmacokinet** 1988 Oct–Dec; 13(4):241–5

The pharmacokinetics of 2,2',5,5'-tetrachlorobiphenyl and 3,3',4,4'-tetrachlorobiphenyl and its relationship to toxicity. Clevenger MA, et al. **Toxicol Appl Pharmacol** 1989 Sep 1;100(2):315–27

Transfer of 2,4,5,2',4',5'-hexachlorobiphenyl across the in situ perfused guinea pig placenta. Ring BJ, et al. **Toxicol Appl Pharmacol** 1988 Oct;96(1):7–13

PHARMACOLOGY

The relation of polychlorinated biphenyls to birth weight and gestational age in the offspring of occupationally exposed mothers. Taylor PR, et al. **Am J Epidemiol** 1989 Feb;129(2):395–406

Suppression of male-specific cytochrome P450 2c and its mRNA by 3,4,5,3',4',5'-hexachlorobiphenyl in rat liver is not causally related to changes in serum testosterone. Yeowell HN, et al. **Arch Biochem Biophys** 1989 Jun; 271(2):508–14

Inhibition of thyroid hormone transport in plasma of rats by polychlorinated biphenyls. Brouwer A. **Arch Toxicol Suppl** 1989;13:440–5

Chiral effects in the induction of drug-metabolizing enzymes using synthetic atropisomers of polychlorinated biphenyls (PCBs). Püttmann M, et al. **Biochem Pharmacol** 1989 Apr 15;38(8):1345–52

Study on the mechanism of interference of 3,4,3',4'-tetrachlorobiphenyl with the plasma retinol-binding proteins in rodents. Brouwer A, et al. **Chem Biol Interact** 1988;68(3–4):203–17

Constitutive and Aroclor 1254-induced hepatic glutathione S-transferase, peroxidase and reductase activities in genetically inbred mice. Makary M, et al. **Comp Biochem Physiol [C]** 1988;91(2):425–9

Regulatory detoxication responses in Gobiidae experimentally exposed to PCBs. Fossi C, et al. **Ecotoxicol Environ Safety** 1989 Aug;18(1):11–4

Evidence for the induction of cytochrome P-452 in rat liver by Aroclor 1254, a commercial mixture of polychlorinated biphenyls. Borlakoglu JT, et al. **FEBS Lett** 1989 Apr 24; 247(2):327–9

Purification and characterization of two forms of chicken liver cytochrome P-450 induced by 3,4,5,3',4'-pentachlorobiphenyl. Hokama Y, et al. **J Biochem (Tokyo)** 1988 Sep;104(3):355–61

Effect of dietary ascorbic acid, cholesterol and PCB on cholesterol and bile acid metabolism in a rat mutant unable to synthesize ascorbic acid. Horio F, et al. **J Nutr** 1989 Mar;119(3):409–15

Effect of polychlorinated biphenyls on lipids and ascorbic acid metabolism in streptozotocin-induced diabetic rats. Kawai-Kobayashi K, et al. **J Nutr Sci Vitaminol (Tokyo)** 1988 Jun;34(3):281–91

Aroclor-1254-induced rat-liver S9 causes chromosomal aberrations in CHO cells but not human lymphocytes: a role for active oxygen? Kirkland DJ, et al. **Mutat Res** 1989 Sep;214(1):115–22

Aroclor 1254 treatment and fasting influences on rat liver mitochondrial carbamoyl phosphate synthesis with ADP and ATP. Ebner K, et al. **Toxicol Appl Pharmacol** 1988 Oct;96(1):75–84

Modulation of diethylnitrosamine-induced hepatocarcinogenesis and O6-ethylguanine formation in rainbow trout by indole-3-carbinol, beta-naphthoflavone, and Aroclor 1254. Fong AT, et al. **Toxicol Appl Pharmacol** 1988 Oct;96(1):93–100

Effects of ortho- and non-ortho-substituted polychlorinated biphenyl congeners on the hepatic monooxygenase system in scup (Stenotomus chrysops). Gooch JW, et al. **Toxicol Appl Pharmacol** 1989 May;98(3):422–33

The degree of PCB chlorination determines whether the rise in urinary homovanillic acid production in rats is peripheral or central in origin. Seegal RF, et al. **Toxicol Appl Pharmacol** 1988 Dec;96(3):560–4

Induction of rat liver microsomal cytochrome P-450 isozymes and epoxide hydrolase by a series of 4'-substituted-2,3,4,5-tetrachlorobiphenyls. Parkinson A, et al. **Toxicology** 1988 Dec 30;53(2–3):289–300

[Effects of 3-methylsulphonyl-4,5,3',4-tetrachlorobiphenyl and 7,8-benzoflavone on aryl hydrocarbon hydroxylase activity] Nagayama J, et al. **Fukuoka Igaku Zasshi** 1989 May;80(5):201–9 (Eng. Abstr.) **(Jpn)**

[Imprinting effect of aroclor 1254 in the metabolic activation of benz[a]pyrene by rat liver tissue] Mizgirev IV, et al. **Eksp Onkol** 1989;11(1):21–4 (Eng. Abstr.) **(Rus)**

POISONING

Growth and development of permanent teeth germ of transplacental Yu-Cheng babies in Taiwan. Lan SJ, et al. **Bull Environ Contam Toxicol** 1989 Jun;42(6):931–4

Polychlorinated biphenyls and polychlorinated dibenzofurans in the tissues of patients with yusho or yu-chen: total toxicity. Olafsson PG, et al. **Bull Environ Contam Toxicol** 1988 Jul;41(1):63–70

Growth of school children with polychlorinated biphenyl poisoning or Yusho. Yoshimura T, et al. **Environ Res** 1978 Dec;17(3):416–25

A comparative study on polychlorinated biphenyls (PCB) and polychlorinated quaterphenyls (PCQ) concentrations in subcutaneous fat tissue, blood and hair of patients with Yusho and normal control in Nagasaki prefecture. Ohgami T, et al. **Fukuoka Igaku Zasshi** 1989 May;80(5):307–12

[Twelfth reports of the study on yusho and PCB] **Fukuoka Igaku Zasshi** 1989 May;80(5):179–341 **(Jpn)**

[Histological study on the gingiva in PenCB poisoned beagle dogs] Hashiguchi I, et al. **Fukuoka Igaku Zasshi** 1989 May; 80(5):263–8 (Eng. Abstr.) **(Jpn)**

[Dermatological findings in the annual examination of the patients with Yusho in 1987–1988—with special reference to the alteration of the skin symptoms in the patients

followed up for 20 years] Honbo S, et al. **Fukuoka Igaku Zasshi** 1989 May;80(5):324–30 (Eng. Abstr.) **(Jpn)**

[Polychlorinated dibenzofurans (PCDFs) in the subcutaneous adipose tissue of Yusho patients and normal controls] Iida T, et al. **Fukuoka Igaku Zasshi** 1989 May;80(5):296–301 (Eng. Abstr.) **(Jpn)**

[Polychlorinated dibenzo-p-dioxins in the subcutaneous adipose tissue of Yusho patients] Iida T, et al. **Fukuoka Igaku Zasshi** 1989 May;80(5):302–6 (Eng. Abstr.) **(Jpn)**

[Introduction of the information processing system of medical examinations of Yusho patients and some results obtained by the 1986 survey] Kataoka K, et al. **Fukuoka Igaku Zasshi** 1989 May;80(5):331–41 (Eng. Abstr.) **(Jpn)**

[Histopathology of meibomian gland abnormalities in experimental PenCB intoxicated beagle treated with squalane] Kohno T, et al. **Fukuoka Igaku Zasshi** 1989 May; 80(5):258–62 (Eng. Abstr.) **(Jpn)**

[Renal function in patients with Yusho] Murai K, et al. **Fukuoka Igaku Zasshi** 1989 May;80(5):318–23 (Eng. Abstr.) **(Jpn)**

[Concentration changes in PCB isomers in the blood in patients with PCB poisoning] Ohma M, et al. **Fukuoka Igaku Zasshi** 1989 May;80(5):281–6 (Eng. Abstr.) **(Jpn)**

[Accidental Dertil poisoning in children] Lutskiĭ IM, et al. **Pediatriia** 1989;(5):94–6 **(Rus)**

TOXICITY

Toxicity and 7-ethoxyresorufin O-deethylase-inducing potency of coplanar polychlorinated biphenyls (PCBs) in chick embryos. Brunström B, et al. **Arch Toxicol** 1988; 62(4):263–6

Delayed spatial alternation deficits resulting from perinatal PCB exposure in monkeys. Levin ED, et al. **Arch Toxicol** 1988;62(4):267–73

Serum screening for oncogene proteins in workers exposed to PCBs. Brandt-Rauf PW, et al. **Br J Ind Med** 1988 Oct; 45(10):689–93

Seasonal variations in aldrin epoxidase (MFO) activity of yellow-legged herring gulls: the relationship to breeding and PCB residues. Fossi C, et al. **Bull Environ Contam Toxicol** 1988 Sep;41(3):365–70

Effects of polychlorinated biphenyls (PCBs) on in vitro biosynthesis of testosterone and cell viability in mouse Leydig cells. Johansson B. **Bull Environ Contam Toxicol** 1989 Jan;42(1):9–14

Toxic potential of non-ortho and mono-ortho coplanar PCBs in commercial PCB preparations: "2,3,7,8-T4 CDD toxicity equivalence factors approach. Kannan N, et al. **Bull Environ Contam Toxicol** 1988 Aug;41(2):267–76

Effect of dam's accumulated tissue PCBs on mouse filial T-cell population and T-cell subpopulations. Takagi Y, et al. **Bull Environ Contam Toxicol** 1989 Mar;42(3):443–50

Differences between chick and turkey embryos in sensitivity to 3,3',4,4'-tetrachloro-biphenyl and in concentration/affinity of the hepatic receptor for 2,3,7,8-tetrachlorodibenzo-p-dioxin. Brunström B, et al. **Comp Biochem Physiol [C]** 1988;91(2):507–12

Polychlorinated biphenyl congeners in adipose tissue lipid and serum of past and present transformer repair workers and a comparison group. Fait A, et al. **Fundam Appl Toxicol** 1989 Jan;12(1):42–55

Effects of maternal exposure to polychlorobiphenyls (PCBs) on F1 generation behavior in the rat. Pantaleoni GC, et al. **Fundam Appl Toxicol** 1988 Oct;11(3):440–9

Chemiluminescence in human whole blood: modulation by the cocarcinogens phorbol diester and polychlorobiphenyls. Gyorkos JW, et al. **Immunopharmacol Immunotoxicol** 1988;10(3):417–35

Suppression of allograft immunity by 3,4,5,3',4',5'-hexachlorobiphenyl. I. Effects of exposure on tumor rejection and cytotoxic T cell activity in vivo. Kerkvliet NI, et al. **Immunopharmacology** 1988 Jul–Aug; 16(1):1–12

Suppression of allograft immunity by 3,4,5,3',4',5'-hexachlorobiphenyl. II. Effects of exposure on mixed lymphocyte reactivity and induction of suppressor cell activity in vitro. Kerkvliet NI, et al. **Immunopharmacology** 1988 Jul–Aug;16(1):13–23

Immunotoxicity studies of PCB (Aroclor 1254) in the adult rhesus (Macaca mulatta) monkey--preliminary report. Tryphonas H, et al. **Int J Immunopharmacol** 1989; 11(2):199–206

Tumor-promoting activity and cytotoxicity of 3,4,3',4'-tetrachlorobiphenyl on N-nitrosomorpholine-induced murine liver foci. Kobusch AB, et al. **J Cancer Res Clin Oncol** 1989;115(3):247–52

Triglyceride accumulation in long-term cultures of adult rat hepatocytes by chronic exposure to Aroclor 1254. Mendoza-Figueroa T, et al. **J Toxicol Environ Health** 1989; 26(3):293–308

Polychlorinated biphenyls (PCBs): mutagenicity and carcinogenicity. Safe S. **Mutat Res** 1989 Jan;220(1):31–47 (139 ref.)

In vitro chromosome damage due to PCB interactions. Sargent L, et al. **Mutat Res** 1989 Sep;224(1):79–88

Effects of perinatal PCB exposure on discrimination-reversal learning in monkeys. Schantz SL, et al. **Neurotoxicol Teratol** 1989 May–Jun;11(3):243–50

Uroporphyrin accumulation in cultured chick embryo hepatocytes: comparison of 2,3,7,8-tetrachlorodibenzo-p-dioxin and 3,4,3',4'-tetrachlorobiphenyl. Lambrecht RW, et al. **Toxicol Appl Pharmacol** 1988 Dec;96(3):507–16

Dose-response immunotoxicities of commercial polychlorinated biphenyls (PCBs) and their interaction with 2,3,7,8-tetrachlorodibenzo-p-dioxin. Davis D, et al. **Toxicol Lett** 1989 Jul;48(1):35–43

Polychlorinated biphenyl (Aroclor 1254) induced changes in femur morphometry calcium metabolism and nephrotoxicity. Andrews JE. **Toxicology** 1989 Jul 3; 57(1):83–96

Toxicity of fenclor 42 in mice: effects on immunocompetent cells. Franco P, et al. **Toxicology** 1989 Feb;54(2):207–18

Evaluation of the immunotoxicity of low level PCB exposure in the rat. Smialowicz RJ, et al. **Toxicology** 1989 Jun 1; 56(2):197–211

[The effect of polychlorinated biphenyls on the vitamin A, vitamin E, and ascorbic acid status in young pigs] Dvořák M. **Arch Exp Veterinarmed** 1989 Jan;43(1):51–60 (Eng. Abstr.) **(Ger)**

[Evaluation of toxic effects on Yusho causal substances by chick embryo hepatic microsomal enzymes activities] Kashimoto T, et al. **Fukuoka Igaku Zasshi** 1989 May; 80(5):210–20 (Eng. Abstr.) **(Jpn)**

[Morphology of 3,4,5,3',4'-pentachlorinated biphenyl-induced change in canine lung] Nagata N, et al. **Fukuoka Igaku Zasshi** 1989 May;80(5):255–7 (Eng. Abstr.) **(Jpn)**

[Evaluation of the dietary intake of polychlorobiphenyls in Poland] Falandysz J. **Rocz Panstw Zakl Hig** 1988; 39(5):366–73 (Eng. Abstr.) **(Pol)**

[Effects of long-range atmospheric transfer of organochlorine pesticides and polychlorobiphenyl compounds] Bobovnikova TsI, et al. **Gig Sanit** 1988 Jul; (7):4–8 (Eng. Abstr.) **(Rus)**

[Effect of aroclor 1254 on morphochemical parameters of various organs in experimental studies] Seffner V, et al. **Gig Sanit** 1989 Mar;(3):71–4 **(Rus)**

[The effect of a lipid food component on enzymatic activity of rat liver endoplasmic reticulum upon the action of polychlorinated biphenyls] Lashneva NV, et al. **Vopr Pitan** 1989 Mar–Apr;(2):24–30 (Eng. Abstr.) **(Rus)**

POLYCHLOROPINENE see under **INSECTICIDES, ORGANOCHLORINE**

POLYCHLOROTERPHENYL COMPOUNDS see under **TERPHENYL COMPOUNDS**

POLYCHONDRITIS, RELAPSING

Relapsing Polychondritis Support Group [letter] Ashworth C. **Br J Dermatol** 1988 Sep;119(3):410–1

Relapsing polychondritis [editorial] Duke OL. **Br J Rheumatol** 1988 Dec;27(6):423–5

Relapsing polychondritis [letter] Needham G, et al. **Clin Radiol** 1989 Jan;40(1):108–9

[Relapsing polychondritis. Apropos of 4 cases] Jourdain O, et al. **Rev Laryngol Otol Rhinol (Bord)** 1989;110(2):161–4 (20 ref.) (Eng. Abstr.) **(Fre)**

CEREBROSPINAL FLUID

[A case of relapsing polychondritis with neurological symptoms and abnormal CSF findings] Hashimoto K, et al. **Rinsho Shinkeigaku** 1988 Sep;28(9):1004–7 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Auricular chondritis and diffuse proliferative glomerulonephritis in primary Sjögren's syndrome. Rodriguez MA, et al. **Ann Rheum Dis** 1989 Aug;48(8):683–5

Relapsing polychondritis. Stiles MC, et al. **Arch Ophthalmol** 1989 Feb;107(2):277

Relapsing polychondritis: an unusual cause of PUO in an Asian lady. Samanta A, et al. **Br J Rheumatol** 1988 Dec; 27(6):483–5

Dermatitis herpetiformis associated with relapsing polychondritis. Laurent R, et al. **Dermatologica** 1988; 177(5):309–12

Relapsing polychondritis associated with psoriasis vulgaris. Borbujo J, et al. **J Am Acad Dermatol** 1989 Jan;20(1):130–2

A case of insulin dependent diabetes mellitus associated with relapsing polychondritis, Hashimoto's thyroiditis and pituitary adrenocortical insufficiency in succession. Takamatsu K, et al. **Jpn J Med** 1989 Mar–Apr;28(2):232–6

[Relapsing polychondritis beginning like Cogan's syndrome] Zagnoli A, et al. **Ann Dermatol Venereol** 1988; 115(6–7):725–7 **(Fre)**

[Chronic atrophic polychondritis and exophthalmos (letter)] Dupond JL, et al. **Ann Med Interne (Paris)** 1989;140(1):64–5 (22 ref.) **(Fre)**

[Chronic relapsing polychondritis. Clinical characteristics] Arlet P, et al. **Presse Med** 1989 Feb 4;18(4):157–60 (Eng. Abstr.) **(Fre)**

[Chronic atrophic polychondritis associated with cancer (letter)] Jouanique C, et al. **Presse Med** 1989 May 27; 18(21):1080 **(Fre)**

[Relapsing polychondritis with focal and segmental glomerulosclerosis (letter)] Aragón A, et al. **Med Clin (Barc)** 1989 Mar 25;92(11):437 **(Spa)**

[Extracapillary proliferative glomerulonephritis in relapsing polychondritis] Falguera M, et al. **Med Clin (Barc)** 1988 Oct 22;91(13):502–4 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Relapsing polychondritis in pregnancy: a case report and review. Gimovsky ML, et al. **Am J Obstet Gynecol** 1989 Aug;161(2):332–4 (3 ref.)

Relapsing polychondritis. Batsakis JG, et al. **Ann Otol Rhinol Laryngol** 1989 Jan;98(1 Pt 1):83–4 (6 ref.)

Relapsing polychondritis mimicking rheumatoid arthritis. Schlapbach P, et al. **Ann Rheum Dis** 1988 Dec; 47(12):1021–6

Inherited nasal and laryngeal degenerative chondropathy. Kurien M, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jun;115(6):746–8

[Relapsing polychondritis] Lamberts R, et al. **Dtsch Med Wochenschr** 1989 Jun 16;114(24):945–50 (Eng. Abstr.) **(Ger)**

[Relapsing polychondritis] Ophir D. **Harefuah** 1988 Oct; 115(7–8):182–3 (Eng. Abstr.) **(Heb)**

[Systemic polychondritis (Meyenburg-Altherr-Uehlinger syndrome] Khadartsev AA, et al. **Ter Arkh** 1989; 61(4):130–2 **(Rus)**

DRUG THERAPY

[Relapsing polychondritis. An infrequent cartilage disease] Bernat Gili A, et al. **An Otorrinolaringol Ibero Am** 1989; 16(1):57–68 (18 ref.) (Eng. Abstr.) **(Spa)**

ETIOLOGY

Relapsing polychondritis and Weber-Christian disease. Smith CR, et al. **Br J Rheumatol** 1988 Dec;27(6):486–9

PHYSIOPATHOLOGY

[Deafness in juvenile relapsing polychondritis. A case report] Morin C, et al. **J Otolaryngol** 1989 Aug;18(5):222–5 (Eng. Abstr.) **(Fre)**

RADIOGRAPHY

The radiological manifestations of relapsing polychondritis. Booth A, et al. **Clin Radiol** 1989 Mar;40(2):147–9

Relapsing polychondritis. Crockford MP, et al. **Clin Radiol** 1988 Jul;39(4):386–90

CT manifestations of tracheobronchial involvement in relapsing polychondritis. Im JG, et al. **J Comput Assist Tomogr** 1988 Sep–Oct;12(5):792–3

[2 case reports of atrophic polychondritis with destructive arthropathy] Le Goff P, et al. **Rev Rhum Mal Osteoartic** 1988 Dec;55(12):1011–3 **(Fre)**

RADIONUCLIDE IMAGING

Increased cartilagenous uptake on bone scintigraphy in a patient with relapsing polychondritis. ter Borg EJ, et al. **Eur J Nucl Med** 1988;14(7–8):427–8

POLYCYCLIC COMPOUNDS

ISOLATION & PURIFICATION

UCN-1028A, a novel and specific inhibitor of protein kinase C, from Cladosporium. Kobayashi E, et al. **J Antibiot (Tokyo)** 1989 Jan;42(1):153–5

METABOLISM

Bacterial oxidation of chemical carcinogens: formation of polycyclic aromatic acids from benz[a]anthracene. Mahaffey WR, et al. **Appl Environ Microbiol** 1988 Oct; 54(10):2415–23

PHARMACOLOGY

Calphostin C (UCN-1028C), a novel microbial compound, is a highly potent and specific inhibitor of protein kinase C. Kobayashi E, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):548–53

POLYCYCLIC HYDROCARBONS

Porphinatoiron-mediated oxidation of polycyclic aromatic hydrocarbons. Gold A, et al. **Chem Biol Interact** 1988; 68(1–2):39–55

Adsorption of polycyclic aromatic hydrocarbons on to asbestos and man-made mineral fibres in the gas phase. Gerde P, et al. **IARC Sci Publ** 1989;(90):140–8

Formation of chlorinated PAH--a possible health hazard from water chlorination. Johnsen S, et al. **Sci Total Environ** 1989 Jun;81–82:231–8

ADVERSE EFFECTS

Case-control study of hydrocarbon exposures in patients with renal cell carcinoma. Sharpe CR, et al. **Can Med Assoc J** 1989 Jun 1;140(11):1309–18

The risk of lung cancer from polycyclic aromatic hydrocarbons in Sydney air. Freeman DJ, et al. **Med J Aust** 1988 Dec 5–19;149(11–12):612–5

[New knowledge on the cancer causing effect of diesel motor exhaust] Pott F, et al. **Z Gesamte Hyg** 1988 Dec; 34(12):686–9 (Eng. Abstr.) **(Ger)**

[Ecologic aspects of the circulation of carcinogenic PAH and heavy metals in the geochemical landscapes of the Ural River basin] Beliakova TM, et al. **Eksp Onkol** 1988; 10(6):62–6 (Eng. Abstr.) **(Rus)**

[Theoretical bases and possible ways of predicting individual sensitivity to the carcinogenic action of polycyclic aromatic hydrocarbons] Savochkina IV, et al. **Vopr Onkol** 1989; 35(4):407–15 (38 ref.) **(Rus)**

ANALYSIS

Airborne concentrations, skin contamination, and urinary metabolite excretion of polycyclic aromatic hydrocarbons among paving workers exposed to coal tar derived road tars. Jongeneelen FJ, et al. **Am Ind Hyg Assoc J** 1988 Dec; 49(12):600–7

Fluorescence line narrowing spectrometry of nucleoside–polycyclic aromatic hydrocarbon adducts on thin-layer chromatographic plates. Cooper RS, et al. **Anal Chem** 1988 Dec 15;60(24):2692–4

Detection of polycyclic aromatic hydrocarbons by low-temperature phosphorimetry with a moving sample cooling device. Jones BT, et al. **Anal Chem** 1989 May 15; 61(10):1182–4

Polycyclic aromatic hydrocarbon solute probes. Part II. Effect of solvent polarity on the fluorescence emission fine structures of coronene derivatives. Waris R, et al. **Analyst** 1989 Feb;114(2):195–9

Polycyclic aromatic hydrocarbon (PAH) residues on skin in relation to air levels among roofers. Wolff MS, et al. **Arch Environ Health** 1989 May–Jun;44(3):157–63

The effect of processing on the content of polycyclic aromatic hydrocarbons and volatile N-nitrosamines in cured and smoked lamb meat. Thorkelsson G. **Bibl Nutr Dieta** 1989;(43):188–98 (45 ref.)

Characterization of polar substituted polycyclic aromatic compounds using high-resolution gas chromatography/mass spectrometry negative ion chemical ionization and positive and negative ion thermospray liquid chromatography/mass spectrometry. Bayona JM, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):461–7

Determination of polynuclear aromatic compounds in composted municipal refuse and compost-amended soils by a simple clean-up procedure. Gonzalez-Vila FJ, et al. **Biomed Environ Mass Spectrom** 1988 Oct;16(1–12):423–5

Comparison of DNA adducts and sister chromatid exchange in lung cancer cases and controls. Perera F, et al. **Cancer Res** 1989 Aug 15;49(16):4446–51

Mass transfer rates of polycyclic aromatic hydrocarbons between micron-size particles and their environment—theoretical estimates. Gerde P, et al. **Environ Health Perspect** 1989 Feb;79:249–58

Determination of polycyclic aromatic compounds in fish tissue. Birkholz DA, et al. **J Chromatogr** 1988 Sep 30; 449(1):251–60

Selective enrichment procedures for the determination of polychlorinated biphenyls and polycyclic aromatic hydrocarbons in environmental samples by gel permeation chromatography. Fernández P, et al. **J Chromatogr** 1988 Dec 2;456(1):155–64

Chemical changes of organic compounds in chlorinated water. XVI. Gas chromatographic–mass spectrometric studies of reactions of tricyclic aromatic hydrocarbons with hypochlorite in dilute aqueous solution. Onodera S, et al. **J Chromatogr** 1989 Apr 19;466:233–49

Retention mechanisms in reversed-phase chromatography. Stationary phase bonding density and solute selectivity. Sentell KB, et al. **J Chromatogr** 1989 Jan 6;461:193–207

High-performance liquid chromatographic separation of ring-oxidized metabolites of nitro-polycyclic aromatic hydrocarbons. von Tungeln LS, et al. **J Chromatogr** 1989 Jan 6;461:315–26

Improved enantiomeric separation of dihydrodiols of polycyclic aromatic hydrocarbons on chiral stationary phases by derivatization to O-methyl ethers. Yang SK, et al. **J Chromatogr** 1989 Jan 6;461:377–95

WHO issues report on heavy metal and PAH compounds from municipal incinerators [news] **JAPCA** 1989 Jun; 39(6):792–4

Mutagenicity and polycyclic aromatic hydrocarbons analysis of airborne particulate matters from Taipei City. Chang SC, et al. **Proc Natl Sci Counc Repub China [B]** 1988 Jul; 12(3):129–39

Accumulation of polycyclic aromatic hydrocarbons (PAHs) in an urban snowpack. Boom A, et al. **Sci Total Environ** 1988 Aug 1;74:133–48

Polynuclear aromatic hydrocarbon content of particulate matter suspended in the atmosphere of La Plata, Argentina. Catoggio JA, et al. **Sci Total Environ** 1989 Feb;79(1):43–58

Changes in the polynuclear aromatic hydrocarbon content of wheat grain and pasture grassland over the last century from one site in the U.K. Jones KC, et al. **Sci Total Environ** 1989 Jan;78:117–30

Pah determination in samples of environmental interest. Morselli L, et al. **Sci Total Environ** 1988 Jul 15;73(3):257–66

[Sampling, separation, identification and determination of polynuclear aromatic hydrocarbons in the air] Xian YL. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 May; 22(3):157–60 (Eng. Abstr.) **(Chi)**

[Nitrated polycyclic aromatic hydrocarbons (nitro–PAH) in suspended particles in the atmosphere. 1. Fractionation and analytic detection] Schleibinger H, et al. **Zentralbl Bakteriol Mikrobiol Hyg [B]** 1988 Nov; 187(1):44–55 (Eng. Abstr.) **(Ger)**

[Studies on the distribution and polycyclic aromatic hydrocarbons of particulate substances in the vicinity of an expressway. Rep. 2. Properties of diffusion of particulate substances] Kita Y. **Nippon Eiseigaku Zasshi** 1988 Dec; 43(5):1042–52 (Eng. Abstr.) **(Jpn)**

[Polycyclic aromatic hydrocarbons in atmospheric dust particles] Lipniak M, et al. **Rocz Panstw Zakl Hig** 1988; 39(2):156–60 (Eng. Abstr.) **(Pol)**

[Distribution, formation, carcinogenic and mutagenic activities of nitro derivatives of polycyclic aromatic hydrocarbons] Khesina ALa, et al. **Eksp Onkol** 1989; 11(2):3–8 (50 ref.) (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

[L-arabinose control of the formation of heliomycin complex synthesized by Streptomyces olivocinereus] Kirillova NP, et al. **Antibiot Khimioter** 1989 Feb;34(2):89–94 (Eng. Abstr.) **(Rus)**

[Elaboration of the method of "quiescent cells" for the study of heliomycin-synthesizing system of Streptomyces olivocinereus] Vinogradova KA, et al. **Antibiot Khimioter** 1988 Dec;33(12):910–3 (Eng. Abstr.) **(Rus)**

BLOOD

Aromatic DNA adducts in white blood cells of foundry workers. Hemminki K, et al. **IARC Sci Publ** 1988;(89):190–5

CHEMICAL SYNTHESIS

Computer-assisted design and synthesis of novel aldose reductase inhibitors. Butera J, et al. **J Med Chem** 1989 Apr; 32(4):757–65

ISOLATION & PURIFICATION

Atmospheric concentrations of polycyclic aromatic hydrocarbons during chimney sweeping. Knecht U, et al. **Br J Ind Med** 1989 Jul;46(7):479–82

Separation of amino- and acetylamino-polycyclic aromatic hydrocarbons by reversed- and normal-phase high-performance liquid chromatography. Lai JS, et al. **J Chromatogr** 1989 Jan 6;461:327–36

Class separation of mutagenic polycyclic organic material in grilled and smoked foods. Larsson BK, et al. **Z Lebensm Unters Forsch** 1988 Dec;187(6):546–51

METABOLISM

Anaerobic degradation of aromatic compounds. Evans WC, et al. **Annu Rev Microbiol** 1988;42:289–317 (118 ref.)

Biodegradation of polycyclic hydrocarbons by Phanerochaete chrysosporium. Bumpus JA. **Appl Environ Microbiol** 1989 Jan;55(1):154–8

Polycyclic aromatic hydrocarbon degradation by a Mycobacterium sp. in microcosms containing sediment and water from a pristine ecosystem. Heitkamp MA, et al. **Appl Environ Microbiol** 1989 Aug;55(8):1968–73

Microbial metabolism of polycyclic aromatic hydrocarbons: isolation and characterization of a pyrene-degrading bacterium. Heitkamp MA, et al. **Appl Environ Microbiol** 1988 Oct;54(10):2549–55

Interaction of unfused tricyclic aromatic cations with DNA: a new class of intercalators. Wilson WD, et al. **Biochemistry** 1989 Mar 7;28(5):1984–92

Degradation of polycyclic aromatic hydrocarbons and aromatic heterocycles by a Pseudomonas species. Foght JM, et al. **Can J Microbiol** 1988 Oct;34(10):1135–41

32P-postlabeling analysis of DNA adducts in liver of wild English sole (Parophrys vetulus) and winter flounder (Pseudopleuronectes americanus). Varanasi U, et al. **Cancer Res** 1989 Mar 1;49(5):1171–7

Studies on the metabolism of gomisin A (TJN-101). I. Oxidative products of gomisin A formed by rat liver S9 mix. Ikeya Y, et al. **Chem Pharm Bull (Tokyo)** 1988 Jun; 36(6):2061–9

Application of biological markers to the study of lung cancer causation and prevention. Perera FP, et al. **IARC Sci Publ** 1988;(89):451–9

Dosimeters of human exposure to carcinogens: polycyclic aromatic hydrocarbon–macromolecular adducts. Weston A, et al. **IARC Sci Publ** 1988;(89):181–9

Metabolic activation of polycyclic aromatic hydrocarbons to mutagens in the Ames test by various animal species including man. Phillipson CE, et al. **Mutat Res** 1989 Mar; 211(1):147–51

Metabolism of polycyclic aromatic hydrocarbons and phorbol esters by mouse skin: relevance to mechanism of action and trans-species/strain carcinogenesis. DiGiovanni J. **Prog Clin Biol Res** 1989;298:167–99 (174 ref.)

Comparison of effective toxicant biotransformation by autochthonous microorganisms and commercially available cultures in the in situ reclamation of abandoned industrial sites. Portier R, et al. **Schriftenr Ver Wasser Boden Lufthyg** 1989;80:273–92 (13 ref.)

PHARMACOKINETICS

Bioaccumulation of polynuclear aromatic hydrocarbons by the clam, Rangia cuneata, in the vicinity of a creosote spill. DeLeon IR, et al. **Bull Environ Contam Toxicol** 1988 Dec; 41(6):872–9

Complex mixture effects on the dermal absorption of benzo[a]pyrene and other polycyclic aromatic hydrocarbons from mouse skin. Dankovic DA, et al. **J Appl Toxicol** 1989 Aug;9(4):239–44

PHARMACOLOGY

Monitoring the interactions of environmental agents by cell-dependent chemiluminescence: studies with polycyclic aromatic hydrocarbons. Twerdok LE, et al. **Basic Life Sci** 1988;49:255–9

Induction of drug-metabolizing enzymes in Gunn rat liver. Effect of polycyclic aromatic hydrocarbons on cytochrome P-450 regulation. Celier C, et al. **Biochem Pharmacol** 1989 Sep 1;38(17):2825–32

The effect of polycyclic aromatic hydrocarbons on choline kinase activity in mouse hepatoma cells. Paulson BK, et al. **Biochim Biophys Acta** 1989 Aug 8;1004(2):274–7

Acute cytotoxicities of polynuclear aromatic hydrocarbons determined in vitro with the human liver tumor cell line, HepG2. Babich H, et al. **Cell Biol Toxicol** 1988 Sep; 4(3):295–309

Transient superinducibility of cytochrome P450c (CYP1A1) mRNA and transcription. Teifeld RM, et al. **DNA** 1989 Jun;8(5):329–38

Induction of monooxygenase activity in the intestine of spot (Leiostomus xanthurus), a marine teleost, by dietary polycyclic aromatic hydrocarbons. van Veld PA, et al. **Drug Metab Dispos** 1988 Sep–Oct;16(5):659–65

An experimental study of the penetration of polycyclic aromatic hydrocarbons through a model of the bronchial lining layer. Gerde P, et al. **Environ Res** 1989 Apr; 48(2):287–95

Hepatic mixed-function oxidase activity in rainbow trout exposed to several polycyclic aromatic compounds. Gerhart EH, et al. **Environ Res** 1978 Oct;17(2):284–95

Polycyclic aromatic compounds as phototoxic mosquito larvicides. Borovsky D, et al. **J Am Mosq Control Assoc** 1987 Jun;3(2):246–50

Ability of structurally related polycyclic aromatic carcinogens to induce homologous recombination between duplicated chromosomal sequences in mouse L cells. Bhattacharyya NP, et al. **Mutat Res** 1989 Apr; 211(2):205–14

Role of the aromatic group in the inhibition of phencyclidine binding and dopamine uptake by PCP analogs. Chaudieu I, et al. **Pharmacol Biochem Behav** 1989 Mar;32(3):699–705

The effect of gomisin A on immunologic liver injury in mice. Nagai H, et al. **Planta Med** 1989 Feb;55(1):13–7

V79 Chinese hamster cells express cytochrome P-450 activity after simultaneous exposure to polycyclic aromatic hydrocarbons and aminophylline. Kiefer F, et al. **Toxicol Lett** 1989 Sep;48(3):265–73

STANDARDS

A pragmatic approach to standard setting—the example of coal tar products and asphalt. Chong JP, et al. **Ann Occup Hyg** 1989;33(2):197–208 (30 ref.)

TOXICITY

Selective oxidation of mitochondrial glutathione in cultured rat adrenal cells and its relation to polycyclic aromatic hydrocarbon-induced cytotoxicity. Hallberg E, et al. **Arch Biochem Biophys** 1989 May 1;270(2):662–71

Toxicity to chicken embryos of organic extracts from airborne particulates separated into five sizes. Matsumoto H. **Bull Environ Contam Toxicol** 1988 Jul;41(1):44–9

Acute toxicity of PAH contaminated sediments to the estuarine fish, Leiostomus xanthurus. Roberts MH Jr, et al. **Bull Environ Contam Toxicol** 1989 Jan;42(1):142–9

Contribution of polycyclic aromatic compounds to the carcinogenicity of sidestream smoke of cigarettes evaluated by implantation into the lungs of rats. Grimmer G, et al. **Cancer Lett** 1988 Dec 15;43(3):173–7

Arteriosclerotic plaque development is 'promoted' by polynuclear aromatic hydrocarbons. Penn A, et al. **Carcinogenesis** 1988 Dec;9(12):2185–9

Bacterial mutagenicity of new cyclopenta-fused cata-annelated polycyclic aromatic hydrocarbons, and identification of the major metabolites of benz[j]acephenanthrylene formed by Aroclor-treated rat liver microsomes. Ball LM, et al. **Mutat Res** 1989 Sep; 224(1):115–25

Effects of prototypic PCBs on benzo[a]pyrene mutagenic activity related to vitamin A intake. Grolier P, et al. **Mutat Res** 1989 Mar;211(1):139–45

Relationships between structure of nitrated arenes and their mutagenicity in Salmonella typhimurium; 2- and 2,7-nitro substituted fluorene, phenanthrene and pyrene. Hirayama T, et al. **Mutat Res** 1988 Sep–Oct;209(1–2):67–74

Skin carcinogenicity bioassays of petroleum refinery streams: issues of interpretation. Craig PH. **Prog Clin Biol Res** 1989; 298:381–91

Comparative carcinogenicity of the PAHs as a basis for acceptable exposure levels (AELs) in drinking water. Rugen PJ, et al. **Regul Toxicol Pharmacol** 1989 Jun; 9(3):273–83

Comparative lung tumorigenicity of parent and mononitro-polynuclear aromatic hydrocarbons in the BLU:Ha newborn mouse assay. Busby WF Jr, et al. **Toxicol Appl Pharmacol** 1989 Jul;99(3):555–63

[Nitrated polycyclic aromatic hydrocarbons (nitro–PAH) in

the suspended substances of the atmosphere. 2. Comparison of the mutagenicity of nitro-PAH and dust extracts of the air in the Ames, SOS repair induction and SCE test] Schleibinger H, et al. **Zentralbl Hyg Umweltmed** 1989 Aug; 188(5):421–38 (Eng. Abstr.) **(Ger)**

[Evaluation of various indicators of cellular immunity in persons exposed to work environment in the Masovian Refinery and Petrochemical Plants in Plock] Tchórzewski H, et al. **Med Pr** 1988;39(2):100–7 (Eng. Abstr.) **(Pol)**

[Changes in the larynx of rats induced by chemical carcinogens] Diagilev VV, et al. **Eksp Onkol** 1988; 10(4):20–3 (Eng. Abstr.) **(Rus)**

URINE

Chromosomal alterations in peripheral blood lymphocytes, urinary mutagenicity and excretion of polycyclic aromatic hydrocarbons in six psoriatic patients undergoing coal tar therapy. Sarto F, et al. **Carcinogenesis** 1989 Feb; 10(2):329–34

Biological monitoring of human exposure to coal tar. Urinary excretion of total polycyclic aromatic hydrocarbons, 1-hydroxypyrene and mutagens in psoriatic patients. Clonfero E, et al. **Int Arch Occup Environ Health** 1989; 61(6):363–8

POLYCYSTIC OVARY SYNDROME

Polycystic ovarian disease: etiology, diagnosis, and treatment. Futterweit W, et al. **Compr Ther** 1988 Nov;14(11):12–20 (30 ref.)

Polycystic ovarian disease.
Endocrinol Metab Clin North Am 1988 Dec;17(4):621–813

Evaluation and therapy of polycystic ovarian syndrome. Loy R, et al. **Endocrinol Metab Clin North Am** 1988 Dec; 17(4):785–813 (199 ref.)

Polycystic ovarian disease: animal models. Mahajan DK.
Endocrinol Metab Clin North Am 1988 Dec;17(4):705–32 (129 ref.)

Clinical manifestations of polycystic ovarian disease. Young RL, et al. **Endocrinol Metab Clin North Am** 1988 Dec; 17(4):621–35 (80 ref.)

BLOOD

Serum testosterone response to low dose dexamethasone and combined contraceptive pill in subgroups of patients with polycystic ovary syndrome. Prelević G, et al.
Acta Med Iugosl 1989;43(2):113–20

Influence of serum luteinising hormone concentrations on ovulation, conception, and early pregnancy loss in polycystic ovary syndrome. Homburg R, et al. **BMJ** 1988 Oct 22;297(6655):1024–6

Luteinising hormone in polycystic ovary syndrome [letter] Turner E, et al. **BMJ** 1989 Jan 14;298(6666):117

Acute pituitary-ovarian response during chronic luteinizing hormone-releasing hormone agonist administration in polycystic ovarian syndrome. Faure N, et al.
Clin Endocrinol (Oxf) 1988 Oct;29(4):403–10

Bioactive LH in women with polycystic ovaries and the effect of gonadotrophin suppression. Mavroudis K, et al.
Clin Endocrinol (Oxf) 1988 Dec;29(6):633–41

Episodic pulsatile secretion of FSH, LH, prolactin, oestradiol, oestrone, and LH circadian variations in polycystic ovary syndrome. Venturoli S, et al.
Clin Endocrinol (Oxf) 1988 Jan;28(1):93–107

Profound peripheral insulin resistance, independent of obesity, in polycystic ovary syndrome. Dunaif A, et al.
Diabetes 1989 Sep;38(9):1165–74

Plasma beta-endorphin levels in obese and non-obese patients with polycystic ovarian disease. Nappi C, et al.
Eur J Obstet Gynecol Reprod Biol 1989 Feb;30(2):151–6

Serum luteinizing hormone profile during the menstrual cycle in polycystic ovarian syndrome. Minakami H, et al.
Fertil Steril 1988 Dec;50(6):990–2

Decreased 34K insulin-like growth factor binding protein in polycystic ovarian disease. Pekonen F, et al.
Fertil Steril 1989 Jun;51(6):972–5

Adrenal cortex and type II polycystic ovary syndrome. Devesa J, et al. **Gynecol Endocrinol** 1987 Sep;1(3):269–77

Prolactin secretion in polycystic ovary syndrome: circadian rhythmicity and dynamic aspects. Ferrari E, et al.
Gynecol Endocrinol 1988 Jun;2(2):101–11

Polycystic ovaries and polycystic ovary syndrome. Jacobs HS. **Gynecol Endocrinol** 1987 Mar;1(1):113–31 (54 ref.)

Increased prolactin response to TRH in polycystic ovary syndrome with low basal prolactin values. Szilágyi A, et al. **Gynecol Endocrinol** 1988 Dec;2(4):313–7

Low levels of low molecular weight insulin-like growth factor-binding protein in patients with polycystic ovarian disease. Suikkari AM, et al. **Hum Reprod** 1989 Feb; 4(2):136–9

Serum lipids and lipoproteins in women with polycystic ovarian disease with different body mass index. Rojanasakul A, et al. **Int J Gynaecol Obstet** 1988 Dec;27(3):401–6

Recovery of hormone secretion after chronic gonadotropin-releasing hormone agonist administration in women with polycystic ovarian disease. de Ziegler D, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1111–7

Androgen levels during sequential insulin euglycemic clamp studies in patients with polycystic ovary disease. Micic D, et al. **J Steroid Biochem** 1988 Dec;31(6):995–9

[Growth factors, carbohydrate and lipid metabolism in females with polycystic ovary syndrome] Urdl W, et al. **Gynakol Rundsch** 1988;28 Suppl 2:211–3 **(Ger)**

[Changes in plasma levels of androgens and SHBG in patients with polycystic ovary syndrome (PCOs) treated with oral contraceptives containing desogestrel] Negri P, et al.
Minerva Ginecol 1988 Dec;40(12):699–707 (Eng. Abstr.) **(Ita)**

[Hormonal parameters in the polycystic ovary syndrome] Alieva ZA, et al. **Acta Univ Palacki Olomuc Fac Med** 1988; 119:549–56 (Eng. Abstr.) **(Rus)**

[The content of sex steroids in the blood flowing from the ovaries of patients suffering from a neuroendocrine syndrome and polycystic ovaries] Rubchenko TI, et al.
Akush Ginekol (Mosk) 1988 Aug;(8):54–7 (Eng. Abstr.) **(Rus)**

CLASSIFICATION

"Etiological characterization of hirsutism by means of a chemometric technique: the linear discriminant analysis". Sobbrio GA, et al. **Acta Eur Fertil** 1988 Nov-Dec; 19(6):321–4

COMPLICATIONS

Recurrent early miscarriage and polycystic ovaries. Sagle M, et al. **BMJ** 1988 Oct 22;297(6655):1027–8

Is the polycystic ovary a cause of infertility in the ovulatory woman? Eden JA, et al. **Clin Endocrinol (Oxf)** 1989 Jan; 30(1):77–82

Polycystic ovarian disease and congenital and late-onset adrenal hyperplasia. New MI.
Endocrinol Metab Clin North Am 1988 Dec;17(4):637–48 (75 ref.)

IVF-ET in women with refractory polycystic ovarian disease. Ashkenazi J, et al.
Eur J Obstet Gynecol Reprod Biol 1989 Feb;30(2):157–61

Suppression of serum insulin by diazoxide reduces serum testosterone levels in obese women with polycystic ovary syndrome. Nestler JE, et al. **J Clin Endocrinol Metab** 1989 Jun;68(6):1027–32

Polycystic ovary disease, manic-depressive illness and mental retardation. Ghaziuddin M. **J Ment Defic Res** 1989 Aug; 33 (Pt 4):335–8

Detection of an alteration in the insulin-receptor gene in a patient with insulin resistance, acanthosis nigricans, and the polycystic ovary syndrome (type A insulin resistance). Moller DE, et al. **N Engl J Med** 1988 Dec 8;319(23):1526–9

[The incidence of polycystic ovaries as a cause of sterility] Rosen A, et al. **Gynakol Rundsch** 1988;28 Suppl 2:207–8 **(Ger)**

[A case from practice (113). Patient: Mrs. R. M., born 1950, animal caregiver] Battegay E.
Schweiz Rundsch Med Prax 1988 Aug 23;77(34):889–90 **(Ger)**

[Which methods are relevant today in the diagnosis of hirsutism and which normal values can be omitted?] Carol W. **Zentralbl Gynakol** 1989;111(8):540–6 **(Ger)**

DIAGNOSIS

Elevated free androgen index as an indicator of polycystic ovaries in oligomenorrhoea without obesity or hirsuties. Eden JA, et al. **Ann Clin Biochem** 1988 Jul;25 (Pt 4):346–9

Clinical presentation, hormonal profiles and ultrasonic ovarian morphology in women with suspected polycystic ovarian disease. Rojanasakul A, et al.
Asia Oceania J Obstet Gynaecol 1989 Mar;15(1):59–65

Which is the best test to detect the polycystic ovary? Eden JA. **Aust N Z J Obstet Gynaecol** 1988 Aug;28(3):221–4

The diagnosis of polycystic ovaries in subfertile women. Eden JA, et al. **Br J Obstet Gynaecol** 1989 Jul;96(7):809–15

[Relations between polycystic ovary and idiopathic hirsutism] Montesanti F, et al. **G Clin Med** 1988 Mar;69(3):183–5 (Eng. Abstr.) **(Ita)**

DRUG THERAPY

Short-term treatment of hirsutism related to micropolycystic ovary syndrome with a combination type oral contraceptive containing desogestrel. Sobbrio GA, et al.
Acta Eur Fertil 1989 Jan-Feb;20(1):35–7

Administration of pure follicle-stimulating hormone during gonadotropin-releasing hormone agonist therapy in patients with clomiphene-resistant polycystic ovarian disease: hormonal evaluations and clinical perspectives. Remorgida V, et al. **Am J Obstet Gynecol** 1989 Jan; 160(1):108–13

LHRH analogues for ovulation induction, with particular reference to polycystic ovary syndrome. Fleming R, et al.
Baillieres Clin Obstet Gynaecol 1988 Sep;2(3):677–87

Treatment of polycystic ovarian disease by inducing ovulation with pulsatile subcutaneous administration of human menopausal gonadotrophin associated with luteinizing hormone-releasing hormone analogue.
Nakamura Y, et al. **Clin Endocrinol (Oxf)** 1988 Oct; 29(4):395–402

Aggravation of inappropriate luteinizing hormone secretion by bromocriptine in polycystic ovary syndrome with elevated serum dehydroepiandrosterone sulfate. Takakura K, et al. **Endocrinol Jpn** 1989 Apr;36(2):261–8

Induction of ovulation in the patient with polycystic ovarian disease. Blankstein J, et al.
Endocrinol Metab Clin North Am 1988 Dec;17(4):733–49 (40 ref.)

Pituitary response during pulsatile luteinizing hormone-releasing hormone ovulation--induction in patients with clomiphene citrate-resistant polycystic ovary-like disease. Burger CW, et al.
Gynecol Endocrinol 1988 Mar;2(1):19–33

Androstenedione concentrations following dexamethasone suppression: correlation with clomiphene responsiveness in women with polycystic ovary syndrome. Polson DW, et al. **Gynecol Endocrinol** 1988 Sep;2(3):257–64

Use of combined exogenous gonadotropins and pulsatile gonadotropin-releasing hormone in patients with polycystic ovarian disease: a new approach to induction of ovulation. Venturini PL, et al. **Gynecol Endocrinol** 1988 Sep;2(3):205–13

Resistant cases of polycystic ovarian disease successfully treated with a combination of corticosteroids, clomiphene, and bromocriptine. Homburg R, et al. **Int J Fertil** 1988 Nov-Dec;33(6):393–7

Daily or alternate-day FSH therapy in patients with polycystic ovarian disease resistant to clomiphene citrate treatment. McFaul PB, et al. **Int J Fertil** 1989 May-Jun; 34(3):194–8

Ovarian stimulation during gonadotropin treatment after hCG administration monitored by ultrasound and serum estradiol and progesterone. Ylöstalo P, et al.
Int J Fertil 1988 Jul-Aug;33(4):259–64

Pituitary and adrenal response to ovine corticotropin-releasing hormone in women with polycystic ovarian syndrome. Mongioì A, et al.
J Endocrinol Invest 1988 Oct;11(9):637–40

The polycystic ovary syndrome. Marut EL.
J Reprod Med 1989 Jan;34(1 Suppl):104–7

[Treatment of the gynecologic consequences of hyperandrogenism] Buvat J, et al.
Rev Fr Gynecol Obstet 1989 Jun;84(6):513–22 (92 ref.) (Eng. Abstr.) **(Fre)**

[The use of pulsatile gonadotropins and gonadotropin releasing hormone analogues for ovulation induction in chronic anovulatory patients] Bacchi Modena A, et al.
Minerva Ginecol 1988 Aug;40(8):457–60 (Eng. Abstr.) **(Ita)**

[Gonadotropin treatment of anovulation in polycystic ovary. Clinical results] Struzziero E, et al. **Minerva Ginecol** 1988 Apr;40(4):241–3 (Eng. Abstr.) **(Ita)**

ENZYMOLOGY

The activity of calcium dependent and calcium independent phospholipase A2 in normal endometrium and in endometrium from women suffering from menorrhagia and polycystic ovary syndrome. Bonney RC, et al.
Gynecol Endocrinol 1988 Jun;2(2):131–8

EPIDEMIOLOGY

The prevalence of polycystic ovaries in thin oligomenorrhoeic, anovulatory women. Eden JA, et al.
Aust N Z J Obstet Gynaecol 1989 Feb;29(1):70–1

Epidemiology of infertility and polycystic ovarian disease: endocrinological and demographic studies. Hull MG.
Gynecol Endocrinol 1987 Sep;1(3):235–45

ETIOLOGY

Spontaneous ovarian hyperstimulation syndrome associated with hypothyroidism. Rotmensch S, et al.
Am J Obstet Gynecol 1989 May;160(5 Pt 1):1220–2

The polycystic ovary syndrome: pathogenesis and treatment. Barnes R, et al. **Ann Intern Med** 1989 Mar 1;110(5):386–99 (169 ref.)

Insulin administration alters gonadal steroid metabolism independent of changes in gonadotropin secretion in insulin-resistant women with the polycystic ovary syndrome. Dunaif A, et al. **J Clin Invest** 1989 Jan;83(1):23–9

[Hyperandrogenic states in girls and young women] Kalvachová B, et al. **Cesk Pediatr** 1989 Mar;44(3):147–51 (Eng. Abstr.) **(Cze)**

[Polycystic ovary syndrome in a patient undergoing maintenance hemodialysis] Tanaka Y, et al.
Nippon Naika Gakkai Zasshi 1989 May;78(5):690–1 **(Jpn)**

[Pathophysiology of the polycystic ovary syndrome] Alieva EA, et al. **Akush Ginekol (Mosk)** 1989 Apr;(4):3–6 (69 ref.) **(Rus)**

[Neuroendocrine syndrome with disorders of the reproductive functions: their clinical problems and pathogenesis] Serov VN, et al. **Akush Ginekol (Mosk)** 1989 Feb;(2):10–4 (57 ref.) **(Rus)**

GENETICS

45 X Turner's syndrome in association with polycystic ovaries. Case report. Hague WM, et al.
Br J Obstet Gynaecol 1989 May;96(5):613–8

Familial polycystic ovaries: a genetic disease? Hague WM, et al. **Clin Endocrinol (Oxf)** 1988 Dec;29(6):593–605

Familial polycystic ovarian disease. Givens JR.
Endocrinol Metab Clin North Am 1988 Dec;17(4):771–83 (28 ref.)

Familial clustering in the polycystic ovarian syndrome. Lunde O, et al. **Gynecol Obstet Invest** 1989;28(1):23–30

HISTORY

[The history of Stein-Leventhal syndrome and its treatment] Kubaty A, et al. **Ginekol Pol** 1988 Sep;59(9):567-70 (14 ref.) (Eng. Abstr.) **(Pol)**

IMMUNOLOGY

Lymphocytes subset in hyperandrogenic women with polycystic ovarian disease. Turi A, et al. **Acta Eur Fertil** 1988 May-Jun;19(3):155-7

METABOLISM

Pattern of human chorionic gonadotropin binding in the polycystic ovary. **Brawer J, et al. Am J Obstet Gynecol** 1989 Aug;161(2):474-80

A comparison of follicular fluid levels of insulin-like growth factor-1 in normal dominant and cohort follicles, polycystic and multicystic ovaries [published erratum appears in Clin Endocrinol (Oxf) 1988 Dec;29(6):694] Eden JA, et al. **Clin Endocrinol (Oxf)** 1988 Sep;29(3):327-36

Evidence for a hypothalamic alteration of catecholamine metabolism in polycystic ovary syndrome. Paradisi R, et al. **Clin Endocrinol (Oxf)** 1988 Sep;29(3):317-26

Prolactin release in polycystic ovarian syndrome. Minakami H, et al. **Endocrinol Jpn** 1988 Apr;35(2):303-10

Steroidogenesis in human polycystic ovary. Mahajan DK. **Endocrinol Metab Clin North Am** 1988 Dec;17(4):751-69 (91 ref.)

Effects of a pure antiandrogen on gonadotropin secretion in normal women and in polycystic ovarian disease. Couzinet B, et al. **Fertil Steril** 1989 Jul;52(1):42-50

Theca function in polycystic ovaries of a patient with virilizing congenital adrenal hyperplasia. Erickson GF, et al. **Fertil Steril** 1989 Jan;51(1):173-6

Adrenal steroid responses to naloxone in polycystic ovarian disease. D'Ambrogio G, et al. **Gynecol Endocrinol** 1987 Dec;1(4):355-61

Anthropometric variables and metabolism in polycystic ovarian disease. Rebuffé-Scrive M, et al. **Horm Metab Res** 1989 Jul;21(7):391-7

LH in polycystic ovary syndrome: reproducibility and pulsatile secretion. Murdoch AP, et al. **J Endocrinol** 1989 Apr;121(1):185-91

PATHOLOGY

Morphological changes of the ovarian surface epithelium in women with ovarian polycystic disease or endometrial carcinoma and a control group. Resta L, et al. **Eur J Gynaecol Oncol** 1989;10(1):39-41

Assessment of ovaries by magnetic resonance imaging in patients presenting with polycystic ovarian syndrome. Faure N, et al. **Hum Reprod** 1989 May;4(4):468-72

PHYSIOPATHOLOGY

Abnormal electromyographic activity of the urethral sphincter, voiding dysfunction, and polycystic ovaries: a new syndrome? Fowler CJ, et al. **BMJ** 1988 Dec 3; 297(6661):1436-8

Hypothalamic-pituitary dysfunction in polycystic ovarian disease. Adashi EY. **Endocrinol Metab Clin North Am** 1988 Dec;17(4):649-66 (49 ref.)

The role of neurotransmitters and opioids in polycystic ovarian syndrome. Lobo RA. **Endocrinol Metab Clin North Am** 1988 Dec;17(4):667-83 (39 ref.)

Etiology of miscarriage in polycystic ovary syndrome [letter] Homburg R, et al. **Fertil Steril** 1989 Jan;51(1):196-7

Induction of ovulation with D-Trp6-LHRH combined with purified FSH in patients with polycystic ovarian disease. Ayalon D, et al. **Gynecol Endocrinol** 1988 Dec;2(4):319-30

Endocrine dynamics during pulsatile GnRH administration in patients with hypothalamic amenorrhea and polycystic ovarian disease. Rossmanith WG, et al. **Gynecol Endocrinol** 1989;3(1):21-34

Impairment of dopaminergic and opioidergic activity in patients with polycystic ovarian disease is restored by treatment for the induction of ovulation. Nappi C, et al. **Gynecol Obstet Invest** 1989;27(1):38-41

Paradoxical growth hormone response following thyroid-stimulating hormone administration in the polycystic ovary syndrome. Anapliotou ML, et al. **Horm Res** 1989;31(3):119-24

Ovulation induction in polycystic ovarian disease by pure FSH (Metrodin). A comparison between chronic low-dose pulsatile administration and i.m. injections. Quartero HW, et al. **Hum Reprod** 1989 Apr;4(3):247-9

Neonatally androgenized rats with polycystic ovaries induced to ovulate by hCG mate but fail to conceive. Shanbhag AB, et al. **Indian J Exp Biol** 1988 Jun; 26(6):418-25

Importance of echographic and endocrine monitoring for the assessment of ovulation by follicle stimulating hormone in polycystic ovarian disease. Caruso A, et al. **Int J Gynaecol Obstet** 1989 Feb;28(2):163-9

The abnormal response of polycystic ovarian disease patients to exogenous pulsatile gonadotropin-releasing hormone: characterization and management. Filicori M, et al. **J Clin Endocrinol Metab** 1989 Oct;69(4):825-31

Inhibition of gonadotropic and ovarian function by intranasal administration of D-Ser (TBU)6-EA10-LHRH in normo-ovulatory women and patients with polycystic ovary disease. Smitz J, et al. **J Endocrinol Invest** 1988 Oct; 11(9):647-52

PMSG-induced persistent estrus in rats as a model for polycystic ovary disease: characteristics and restoration to the normal cycle. Furudate S, et al. **Jikken Dobutsu** 1989 Apr;38(2):121-6

Pituitary-ovarian responses to nafarelin testing in the polycystic ovary syndrome. Barnes RB, et al. **N Engl J Med** 1989 Mar 2;320(9):559-65

[Inhibition of pancreatic beta-cell secretion during "glucose clamp" in patients with polycystic ovary syndrome] Randazzo C, et al. **Minerva Endocrinol** 1989 Apr-Jun; 14(2):109-13 (Eng. Abstr.) **(Ita)**

[Endocrinological environment in polycystic ovarian disease (PCOD)] Fujimoto S, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Sep; 40(9):1465-70 **(Jpn)**

[Reproductive function following the surgical treatment of polycystic ovary syndrome] Kachalina TS, et al. **Akush Ginekol (Mosk)** 1988 May;(5):62-3 **(Rus)**

SURGERY

Endocrine effects of laparoscopic ovarian electrocautery in patients with polycystic ovarian disease, resistant to clomiphene citrate. van der Weiden RM, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Aug;32(2):157-62

Laser laparoscopy for polycystic ovaries [letter; comment] Cohen BM. **Fertil Steril** 1989 Jul;52(1):167-8. **Comment on:** Fertil Steril 1989 Feb;51(2):232-6

Polycystic ovaries treated by laparoscopic laser vaporization [see comments] Daniell JF, et al. **Fertil Steril** 1989 Feb; 51(2):232-6. **Comment in:** Fertil Steril 1989 Jul;52(1):167-8

The effect of laparoscopic multiple punch resection of the ovary on hypothalamo-pituitary axis in polycystic ovary syndrome. Sumioki H, et al. **Fertil Steril** 1988 Oct; 50(4):567-72

Ovarian wedge resection with contact Nd:YAG laser irradiation used laparoscopically. Kojima E, et al. **J Reprod Med** 1989 Jul;34(7):444-6

[Endoscopic laser incision of the polycystic ovary] Huber J, et al. **Geburtshilfe Frauenheilkd** 1989 Jan;49(1):37-40 (Eng. Abstr.) **(Ger)**

[When is coagulation therapy of the ovary in polycystic ovary syndrome indicated and which technical procedure is the most optimal?] Schneider HP. **Zentralbl Gynakol** 1989;111(9):621-4 **(Ger)**

[The clinical and hormonal effects of laparoscopic multiple punch resection (MPR) of the ovary in polycystic ovary syndrome] Utsunomiya T, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1988 Dec; 40(12):1800-4 (Eng. Abstr.) **(Jpn)**

THERAPY

The polycystic ovary syndrome: pathogenesis and treatment. Barnes R, et al. **Ann Intern Med** 1989 Mar 1;110(5):386-99 (169 ref.)

Ovulation induction with pulsatile luteinizing hormone-releasing hormone in women with clomiphene citrate-resistant polycystic ovary-like disease: endocrine results. Burger CW, et al. **Fertil Steril** 1989 Jan;51(1):20-9

Induction of ovulation with clomiphene citrate in women with polycystic ovary syndrome: the difference between responders and nonresponders. Polson DW, et al. **Fertil Steril** 1989 Jan;51(1):30-4

Abolishment of the positive feedback mechanism: a criterion for temporary medical hypophysectomy by LH-RH agonist. Shadmi AL, et al. **Gynecol Endocrinol** 1987 Mar; 1(1):1-11

[Changes in serum FSH, LH and ovarian follicular growth during electroacupuncture for induction of ovulation] Yu J, et al. **Chung Hsi I Chieh Ho Tsa Chih** 1989 Apr; 9(4):199-202, 195 (Eng. Abstr.) **(Chi)**

[Current methods of the treatment of patients with sclerocystic ovary syndrome] Pamfamirov IuK, et al. **Akush Ginekol (Mosk)** 1989 Feb;(2):14-7 (48 ref.) **(Rus)**

[Treatment of the sclerocystic ovary syndrome] Makeeva SA, et al. **Sov Med** 1988;(8):114-7 **(Rus)**

URINE

A pharmacodynamic comparison of human urinary follicle-stimulating hormone and human menopausal gonadotropin in normal women and polycystic ovary syndrome. Anderson RE, et al. **Fertil Steril** 1989 Aug; 52(2):216-20

POLYCYTHEMIA

[Polycythemia and hyperviscosity in the newborn infant] Cásares-Castellanos R, et al. **Bol Med Hosp Infant Mex** 1988 Oct;45(10):692-9 (29 ref.) (Eng. Abstr.) **(Spa)**

BLOOD

Erythropoietin production in exhypoxic polycythemic mice. Seferynska I, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):C925-9

Correlation between erythropoietic activity and body growth rate in hypertransfused polycythemic growing rats as the result of an erythropoietin-dependent operating mechanism. Bozzini CE, et al. **Exp Hematol** 1989 Feb; 17(2):77-80

Erythrocytosis in spontaneously hypertensive rats. Pavlović-Kentera V, et al. **Exp Hematol** 1988 Dec; 16(11):950-3

Glycosylated hemoglobin A1, acidosis and secondary erythrocytosis in chronic respiratory failure. De Marchi S, et al. **Haematologica (Pavia)** 1988 Sep-Oct;73(5):347-53

Lipid profile in polycythaemia of high altitude. Bhalla IP, et al. **J Assoc Physicians India** 1988 Jun;36(6):374-5

Postnatal alteration in hematocrit and viscosity in normal infants and in those with polycythemia [letter] Merlob P. **J Pediatr** 1989 Jan;114(1):169-70

Oxygen affinity of blood in rats during cobalt-induced erythrocytic polycythemia and after its correction. Rakušan K, et al. **Life Sci** 1974 Jul 1;15(1):23-8

[Pyruvate kinase, 2,3 bisphosphoglycerate and fibrin-fibrinogen degradation products in patients with polycythemia, before and after erythrapheresis therapy] Buchtová L, et al. **Vnitr Lek** 1988 Nov;34(11):1122-4 (Eng. Abstr.) **(Cze)**

[Serum erythropoietin levels: a new diagnostic tool?] Egli F, et al. **Schweiz Rundsch Med Prax** 1989 May 9; 78(19):551-6 (Eng. Abstr.) **(Ger)**

[Thromboembolism risk factors in kidney transplant patients with secondary erythrocytosis in relation to hemorheologic aspects] Koall W, et al. **Z Gesamte Inn Med** 1988 Sep 1; 43(17):474-7 (Eng. Abstr.) **(Ger)**

[Blood hyperviscosity syndrome in a newborn infant caused by polycythemia] Maszkiewicz W. **Wiad Lek** 1989 Dec 1;41(23):1589-98 (47 ref.) (Eng. Abstr.) **(Pol)**

CHEMICALLY INDUCED

Posttransplant polycythemia, azathioprine and ciclosporin [letter] Gruber SA, et al. **Am J Nephrol** 1988;8(6):508-9

Is there any relationship between azathioprine dosage and erythrocytosis after renal transplantation? [letter] Teruel JL, et al. **Am J Nephrol** 1988;8(3):258

Erythrocytosis in renal graft recipients due to a direct effect of cyclosporine. Stockenhuber F, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1560-2

COMPLICATIONS

Development of polycythaemia vera in a patient with myelofibrosis. Dokal I, et al. **Eur J Haematol** 1989 Jan; 42(1):96-8

[Association of primary hyperparathyroidism and secondary polycythemia (letter)] Volle L, et al. **Presse Med** 1988 Oct 22;17(36):1861-2 **(Fre)**

[Neurologic follow-up of polycythemic newborn infants] Fernández-Carrocera LA, et al. **Bol Med Hosp Infant Mex** 1989 Apr;46(4):259-64 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Polycythemia: evaluation and management. Hocking WG, et al. **Blood Rev** 1989 Mar;3(1):59-65 (65 ref.)

Spontaneous erythroid colony formation in the differential diagnosis of erythrocytosis. Partanen S, et al. **Eur J Haematol** 1989 Apr;42(4):327-30

Diagnostic errors in neonatal polycythemia based on method of hematocrit determination. Villalta IA, et al. **J Pediatr** 1989 Sep;115(3):460-2

The differential diagnosis of polycythaemia--a bone marrow study (the bone marrow in polycythaemia). Sharp RA, et al. **Scott Med J** 1989 Jun;34(3):455-9

[Use of histologic examination of the bone marrow in the differential diagnosis of polycythemia] Lacheta L, et al. **Wiad Lek** 1988 Jul 1;41(13):894-8 (Eng. Abstr.) **(Pol)**

[Neonatal polycythemia. Review of 110 cases] Rivera W, et al. **Rev Chil Pediatr** 1988 Jul-Aug;59(4):257-60 (Eng. Abstr.) **(Spa)**

EPIDEMIOLOGY

The adverse effects of utilizing altitude-inappropriate fetal growth curves. Lugo EJ, et al. **J Perinatol** 1989 Jun; 9(2):147-9

ETIOLOGY

Reversal of bone marrow fibrosis and subsequent development of polycythemia in patients with myeloproliferative disorders. Talarico L, et al. **Am J Hematol** 1989 Apr;30(4):248-53

Secondary erythrocytosis and sarcoidosis. Bowen DT, et al. **Br J Haematol** 1989 Jun;72(2):286-7

Erythrocytosis after renal transplantation [letter] Obermiller LE, et al. **Clin Nephrol** 1988 Nov;30(5):287

Comment on letter of Obermiller and Tzamaloukas [1988 Clin Nephrol 30: 287] [letter] Pollak R, et al. **Clin Nephrol** 1989 Feb;31(2):118

Multiple functioning paraganglioma associated with polycythemia. Imai T, et al. **J Surg Oncol** 1988 Dec; 39(4):279-82

Polycythaemia due to hypoxaemia: advantage or disadvantage? **Lancet** 1989 Jul 1;2(8653):20-2 (224 ref.)

Apparent Epo-independence of erythroid cells infected with the polycythemia-inducing strain of Friend spleen focus-forming virus is not due to Epo production or change in number or affinity of Epo receptors. Ruscetti SK, et al. **Leukemia** 1989 Oct;3(10):703-7

No association between post-transplant erythrocytosis, thromboembolic events, and cyclosporine therapy. Glicklich D, et al. **Transplant Proc** 1989 Feb;21(1 Pt

2):2141–2
[Secondary paraneoplastic polycythemia of testicular cancer] Sachot JL, et al. **Ann Urol (Paris)** 1989;23(2):153–5 (Eng. Abstr.) **(Fre)**
[Hemichorea, polycythemia and cyanogenic congenital cardiopathy. A case (letter)] Hallali P, et al. **Presse Med** 1988 Sep 10;17(30):1544 **(Fre)**
[Sleep apnea, polycythemia and hypothyroidism (letter)] Arlet P, et al. **Rev Med Interne** 1988 Sep–Oct;9(4):436 **(Fre)**
[Primary hyperparathyroidism and secondary polycythemia] Glowinski J, et al. **Rev Rhum Mal Osteoartic** 1988 May; 55(7):529–32 **(Fre)**
[A case of renal tumor with erythrocytosis] Tanaka S, et al. **Hinyokika Kiyo** 1989 Mar;35(3):469–74 (20 ref.) (Eng. Abstr.) **(Jpn)**
[The mechanisms of the development of erythrocytosis during adaptation to dynamic muscle loads] Nazarov SB, et al. **Fiziol Zh SSSR** 1988 Oct;74(10):1399–403 (Eng. Abstr.) **(Rus)**
[Axonal polyneuritis and macrocytosis: initial signs of vitamin B12 deficiency presenting as intermittent paresthetic claudication] Roquer J, et al. **Med Clin (Barc)** 1988 May 7;90(18):745–7 (Eng. Abstr.) **(Spa)**

GENETICS

Polycythemia in transgenic mice expressing the human erythropoietin gene. Semenza GL, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(7):2301–5

MICROBIOLOGY

Glycosylation of glycoproteins 52 and 65 encoded by the polycythemia-inducing strain of Friend spleen focus-forming virus. Isolation of glycopeptides containing individual glycosylation sites. Strube KH, et al. **Eur J Biochem** 1989 Sep 1;184(1):119–24

PATHOLOGY

Polycythemic mice—an appropriate model for investigation of granulopoiesis. Stojanović N, et al. **Haematologica (Pavia)** 1989 Jan–Feb;74(1):19–24
The echobright kidney in primary polycythaemia. Wagner U, et al. **Pediatr Radiol** 1989;19(6–7):440

PHYSIOPATHOLOGY

The splenomegaly of myeloproliferative disorders: effects on blood volume and red blood count. Zhang B, et al. **Eur J Haematol** 1989 Mar;42(3):250–3
Ventilation–perfusion relationships during induced normovolemic polycythemia in dogs. Balgos AA, et al. **J Appl Physiol** 1988 Oct;65(4):1686–92
Pulmonary gas exchange in Andean natives with excessive polycythemia—effect of hemodilution. Manier G, et al. **J Appl Physiol** 1988 Nov;65(5):2107–17
Regional hemodynamic responses to hypoxia and hypermetabolism in polycythemic dogs. Stork RL, et al. **J Appl Physiol** 1989 Jul;67(1):96–102
Regional hemodynamic responses to hypoxia in polycythemic dogs. Stork RL, et al. **J Appl Physiol** 1988 Nov;65(5):2069–74
Erythrocytosis: a key to understanding the hemodynamic changes in hypertension. Gaar KA Jr. **Med Hypotheses** 1988 Oct;27(2):107–13

PSYCHOLOGY

Neonatal hyperviscosity association with lower achievement and IQ scores at school age. Delaney-Black V, et al. **Pediatrics** 1989 May;83(5):662–7

RADIONUCLIDE IMAGING

Unusual uptake of In-111 labeled platelets in a patient with polycythemia. Shulkin BL. **Clin Nucl Med** 1988 Dec; 13(12):917–8

THERAPY

[Neonatal polycythemia and erythrophoresis] Gutiérrez C, et al. **Rev Chil Pediatr** 1988 Jan–Feb;59(1):16–20 (Eng. Abstr.) **(Spa)**

VETERINARY

Tumor-associated erythrocytosis in a dog with nasal fibrosarcoma. Couto CG, et al. **J Vet Intern Med** 1989 Jul–Sep;3(3):183–5

POLYCYTHEMIA VERA

Polycythemia vera in an oral surgical patient. A case report. Carlson ER, et al. **Oral Surg Oral Med Oral Pathol** 1989 Jun;67(6):673–5

BLOOD

Artefactual low lymphocyte activity caused by platelet contamination in the mononuclear cell preparations. Rueda F, et al. **Am J Hematol** 1989 Jun;31(2):126–7
Comparison of erythroid progenitor cell growth in vitro in polycythemia vera and chronic myelogenous leukemia: only polycythemia vera has endogenous colonies. Weinberg RS, et al. **Leuk Res** 1989;13(4):331–8
Low intracellular calcium concentration in the platelets after stimulation in patients with myeloproliferative disorders. Fujimoto T, et al. **Nippon Ketsueki Gakkai Zasshi** 1989 Feb;52(1):118–25
[Serum erythropoietin levels: a new diagnostic tool?] Egli F, et al. **Schweiz Rundsch Med Prax** 1989 May 9; 78(19):551–6 (Eng. Abstr.) **(Ger)**
[Erythroblastic islets of bone marrow and peripheral blood monocytes in patients with hematopoietic hypoplasia and erythremia] Korobkin AV, et al. **Gematol Transfuziol** 1988 Jun;33(6):52–5 **(Rus)**
[Volume of circulating erythrocytes in patients with polycythemia vera as a function of the stage of the disease] Velik LV. **Gematol Transfuziol** 1988 Sep;33(9):28–31 (Eng. Abstr.) **(Rus)**

COMPLICATIONS

Visceral leishmaniasis complicating polycythemia vera. Hellgren U, et al. **Acta Med Scand** 1988;224(5):501–3
Plasma cell dyscrasia with polyneuropathy, organomegaly, endocrinopathy, M protein, and skin changes: the POEMS syndrome, associated with preceding polycythemia vera. A case report and review of the literature. Tsujimura T, et al. **Acta Pathol Jpn** 1988 Oct;38(10):1337–44 (17 ref.)
Acute lymphoblastic leukemia in a patient with longstanding polycythemia vera: cytogenetic analysis reveals two distinct abnormal clones. Anastasi J, et al. **Am J Hematol** 1988 Sep;29(1):33–7
Chronic neutrophilic leukemia associated with polycythemia vera [letter] Lugassy G, et al. **Am J Hematol** 1989 Aug; 31(4):300–1
Recurrent spontaneous bacterial peritonitis in a patient with polycythemia vera. Nagler A, et al. **Am J Hematol** 1988 Sep;29(1):54–5
Myelodysplastic syndrome with trisomy 11 associated with polycythemia vera. Ohyashiki K, et al. **Am J Hematol** 1989 Jun;31(2):122–5
Chorea in polycythemia vera: a rare presentation of hyperviscosity. Cohen AM, et al. **Blut** 1989 Jan;58(1):47–8
Meningeal hematopoiesis causing exophthalmus and hemiparesis in myelofibrosis: effect of radiotherapy. A case report. Landolfi R, et al. **Cancer** 1988 Dec 1;62(11):2346–9
Pseudo-complications of cardiac catheterization [letter] Cheng TO. **Cathet Cardiovasc Diagn** 1988;15(2):135
Polycythaemia vera with Sweet's syndrome. Furukawa T, et al. **Clin Lab Haematol** 1989;11(1):67–70
The coexistence of chronic lymphocytic leukaemia and polycythaemia vera terminating in acute myeloid leukaemia. Polkowska-Kulesza E, et al. **Folia Haematol (Leipz)** 1988;115(5):647–52
Hemorrhagic and thrombotic complications in polycythemia vera. A clinical study. Orlandi E, et al. **Haematologica (Pavia)** 1989 Jan–Feb;74(1):45–9
Segmental portal hypertension and polycythemia vera. Baniel J, et al. **Isr J Med Sci** 1989 Apr;25(4):202–4
Secondary polycythemia associated with multiple myeloma. Inase N, et al. **Jpn J Med** 1989 May–Jun;28(3):396–8
[Recurrent gastrointestinal hemorrhage in portal vein thrombosis and antibiotic-resistant pneumonia in a 38-year-old patient] Klaubert W, et al. **Internist (Berlin)** 1988 Oct;29(10):705–9 **(Ger)**
[Polycythemia vera: clinical aspects and course in 86 patients] Egli F, et al. **Schweiz Med Wochenschr** 1988 Dec 31; 118(52):1969–75 (Eng. Abstr.) **(Ger)**
[A case of associated autoimmune hemolytic anemia and polycythemia vera] Venzano C. **Recenti Prog Med** 1988 Oct;79(10):413–4 (Eng. Abstr.) **(Ita)**
[Polycythemia vera associated with erythromelalgia] Kudo I, et al. **Rinsho Ketsueki** 1988 Jul;29(7):1055–9 (Eng. Abstr.) **(Jpn)**
[Clinical evaluation of the control of antiplatelet therapy through platelet aggregation rate on polycythemia vera associated with thrombocytosis and erythromelalgia] Kurihara A, et al. **Rinsho Ketsueki** 1989 Jan;30(1):99–104 (Eng. Abstr.) **(Jpn)**
[Disorders of the major blood flow due to polycythemia vera] Gribenko VV, et al. **Vrach Delo** 1988 Oct;(10):28–31 (Eng. Abstr.) **(Rus)**

DIAGNOSIS

Validity of rapid estimation of erythrocyte volume in the diagnosis of polycytemia vera. Nielsen S, et al. **Eur J Nucl Med** 1989;15(1):32–7
[Use of histologic examination of the bone marrow in the differential diagnosis of polycythemia] Lacheta L, et al. **Wiad Lek** 1988 Jul 1;41(13):894–8 (Eng. Abstr.) **(Pol)**

DRUG THERAPY

Management of polycythaemia vera, essential thrombocythaemia and myelofibrosis with hydroxyurea. Löfvenberg E, et al. **Eur J Haematol** 1988 Oct;41(4):375–81
[Evaluation of chemotherapy of hematological malignancies] Masaoka T. **Gan To Kagaku Ryoho** 1989 Mar;16(3 Pt 1):316–22 (Eng. Abstr.) **(Jpn)**
[Therapeutic effect of ranimustine (MCNU) on essential thrombocythemia and polycythemia vera] Nagai M, et al. **Gan To Kagaku Ryoho** 1988 Dec;15(12):3267–70 (Eng. Abstr.) **(Jpn)**

ENZYMOLOGY

Serum thymidine kinase in polycythaemia vera [letter] Pedersen C. **Eur J Haematol** 1989 Apr;42(4):409
Detection of retrovirus in patients with myeloproliferative disease. Boyd MT, et al. **Lancet** 1989 Apr 15;1(8642):814–7

ETIOLOGY

Sequential development of polycythemia vera and chronic myelocytic leukemia in a patient following radiation exposure from nuclear weapons tests. Weinberg JB. **Am J Med** 1989 Jul;87(1):121–3
POEMS syndrome associated with polycythemia vera. Schulz W, et al. **Cancer** 1989 Mar 15;63(6):1175–8
Coexistence of sarcoidosis and myeloproliferative disease: a case of sarcoidosis preceding polycythaemia vera with a literature review. Brincker H. **J Intern Med** 1989 May; 225(5):355–7

GENETICS

Cytogenetic findings in 54 patients with polycythemia vera and their prognostic value. Jarošová M, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;120:255–66
der(1)t(1;9): a specific chromosome abnormality in polycythemia vera? Cytogenetic and in situ hybridization studies. den Nijs van Weert JI, et al. **Cancer Genet Cytogenet** 1989 Jul 1;40(1):121–7

IMMUNOLOGY

Antigenic characteristics of erythropoietin dependent and independent erythroid progenitors (BFU-E and CFU-E) in polycythaemia vera and idiopathic myelofibrosis defined by monoclonal antibodies. Robak T. **Arch Immunol Ther Exp (Warsz)** 1988;36(6):733–47
[Nontraditional approaches to the study of HLA association with diseases] Zotikov EA, et al. **Gematol Transfuziol** 1988 Oct;33(10):7–10 (Eng. Abstr.) **(Rus)**

METABOLISM

Impaired interleukin-2 production by T-lymphocytes in polycythemia vera. Paul CC, et al. **J Clin Lab Anal** 1989; 3(2):84–7

PATHOLOGY

Primary (essential) thrombocythemia versus polycythemia vera rubra. A histomorphometric analysis of bone marrow features in trephine biopsies. Thiele J, et al. **Anal Quant Cytol Histol** 1988 Oct;10(5):375–82
A 55-year-old woman with abdominal pain, mucous stools, shock and polycythemia vera [clinical conference] **Chin Med J [Engl]** 1989 Jan;102(1):72–8
Stimulus-specific defect in oxidative metabolism of polymorphonuclear granulocytes in polycythemia vera. Samuelsson J, et al. **Eur J Haematol** 1988 Nov;41(5):454–8
The bone marrow in myeloproliferative and dysmyelopoietic syndromes. Wolf BC, et al. **Hematol Oncol Clin North Am** 1988 Dec;2(4):669–94 (126 ref.)
[Megaloblastic anemia followed by polycythemia vera after vitamin B12 therapy] Murate T, et al. **Rinsho Ketsueki** 1988 Jul;29(7):1073–7 (Eng. Abstr.) **(Jpn)**
[Polycythemia vera and blast transformation (clinical conference)] **Medicina (B Aires)** 1988;48(1):65–72 **(Spa)**

PHYSIOPATHOLOGY

Thyroid function in "nonthyroidal-illness". Longitudinal study in patients with hematological diseases. Földes J, et al. **Acta Med Austriaca** 1988;15 Suppl 1:45–7
In polycythemia vera human interleukin 3 and granulocyte-macrophage colony-stimulating factor enhance erythroid colony growth in the absence of erythropoietin. de Wolf JT, et al. **Exp Hematol** 1989 Oct; 17(9):981–3
Pruritus preceding the development of polycythaemia vera [letter] Reid CD. **Lancet** 1988 Oct 22;2(8617):964

RADIONUCLIDE IMAGING

[Use of 111In-citrin in bone marrow scintigraphy] Prichodko AG, et al. **Radiol Diagn (Berl)** 1988;29(5):767–73 (Eng. Abstr.) **(Ger)**

SURGERY

Splenectomy in agnogenic myeloid metaplasia and postpolycythemic myeloid metaplasia. A study of 34 cases. Brenner B, et al. **Arch Intern Med** 1988 Nov;148(11):2501–5

VETERINARY

Radiophosphorus (32P) treatment of bone marrow disorders in dogs: 11 cases (1970–1987). Smith M, et al. **J Am Vet Med Assoc** 1989 Jan 1;194(1):98–102

POLYDEOXYRIBONUCLEOTIDE SYNTHETASES see under **POLYNUCLEOTIDE SYNTHETASES**

POLYDEOXYRIBONUCLEOTIDES

Labeling of DNA probes with a photoactivatable hapten. Keller GH, et al. **Anal Biochem** 1989 Mar;177(2):392–5
Conformation and dynamics of a left-handed Z-DNA

hairpin: studies of d(CGCGCGTTTTCGCGCG) in solution. Benight AS, et al. **Biochemistry** 1989 Apr 18; 28(8):3323–32

Anthracycline–DNA interactions studied with linear dichroism and fluorescence spectroscopy. Eriksson M, et al. **Biochemistry** 1988 Oct 18;27(21):8144–51

Ultraviolet resonance Raman spectroscopy of distamycin complexes with poly(dA)–poly(dT) and poly(dA–dT): role of H–bonding. Grygon CA, et al. **Biochemistry** 1989 May 16;28(10):4397–402

On the question of DNA bending: two–dimensional NMR studies on d(GTTTTAAAAC)2 in solution. Gupta G, et al. **Biochemistry** 1988 Oct 4;27(20):7909–19

Nucleosome reconstitution of core–length poly(dG).poly(dC) and poly(rG–dC).poly(rG–dC). Jayasena SD, et al. **Biochemistry** 1989 Feb 7;28(3):975–80

Conformational transitions in cytidine bulge–containing deoxytridecanucleotide duplexes: extra cytidine equilibrates between looped out (low temperature) and stacked (elevated temperature) conformations in solution. Kalnik MW, et al. **Biochemistry** 1989 Jan 10;28(1):294–303

Dynamics of bases in hydrated [d(CGCGAATTCGCG)]2. Kintanar A, et al. **Biochemistry** 1989 Jan 10;28(1):282–93

Use of EDTA derivatization to characterize interactions between oligodeoxyribonucleoside methylphosphonates and nucleic acids. Lin SB, et al. **Biochemistry** 1989 Feb 7;28(3):1054–61

Equilibrium binding of benzo[a]pyrene tetrol to synthetic polynucleotides: sequence selectivity, thermodynamic properties, and ionic strength dependence. Shimer GH Jr, et al. **Biochemistry** 1988 Oct 4;27(20):7960–6

Porphyrin and metalloporphyrin binding to DNA polymers: rate and equilibrium binding studies. Strickland JA, et al. **Biochemistry** 1988 Nov 29;27(24):8870–8

Comparison of the B– and Z–form hairpin loop structures formed by d(CG)5T4(CG)5. Wolk SK, et al. **Biochemistry** 1988 Sep 6;27(18):6960–7

Perturbations to the intersystem crossing of proflavin upon binding to DNA and poly d(A–IU) from triplet–delayed emission spectroscopy. Lee WE, et al. **Biophys J** 1988 Oct; 54(4):627–35

Helix–coil dynamics of a Z–helix hairpin. Antosiewicz J, et al. **Biopolymers** 1988 Aug;27(8):1319–27

Unusual condensation behavior of poly(dA)–poly(dT). Chaires JB. **Biopolymers** 1989 Sep;28(9):1645–50

Thermodynamics of the B to Z transition in poly(dGdC). Chaires JB, et al. **Biopolymers** 1988 Sep;27(9):1375–87

Terbium(III) induced Z to A transition in poly(dG–m5dC). Chatterji D. **Biopolymers** 1988 Jul;27(7):1183–6

Spectrophotometric and NMR analysis of the interaction of fluorinated mono– and bifunctional intercalators with DNA, poly(dA–dT), and poly(dG–dC). Delbarre A, et al. **Biopolymers** 1988 Dec;27(12):1953–75

Hydration of B–DNA: comparison between the water network around poly(dG).poly(dC) and poly(dG–dC).poly(dG–dC) on the basis of Monte Carlo computations. Eisenhaber F, et al. **Biopolymers** 1989 Mar; 28(3):741–61

The interaction of multiply charged intercalating heterocycles with DNA. Fairley T, et al. **Biopolymers** 1988 Sep;27(9):1433–47

CD studies of double–stranded polydeoxynucleotides composed of repeating units of contiguous homopurine residues. Gudibande SR, et al. **Biopolymers** 1988 Dec; 27(12):1905–15

Reversal of the Mg++–induced B–to–Z transition of poly[d(G–C)] with hydrostatic pressure. Macgregor RB Jr. **Biopolymers** 1988 Oct;27(10):1687–90

Study of furanose ring flexibility in polynucleotide chains using Raman spectra analysis. Pechenaya VI, et al. **Biopolymers** 1988 Nov;27(11):1817–29

Metal–induced sequential transitions among DNA conformations. Shin YA, et al. **Biopolymers** 1988 Sep; 27(9):1415–32

On the interaction of daunomycin with synthetic alternating DNAs: sequence specificity and polyelectrolyte effects on the intercalation equilibrium. Xodo LE, et al. **Biopolymers** 1988 Nov;27(11):1839–57

A 19F–NMR study of 2–fluoro–4–demethoxydaunomycin intercalation complexes with the decanucleotides d(G–C)5 and d(A–T)5. Hammer BC, et al. **Eur J Biochem** 1989 Jan 2;178(3):683–8

The G.C base–pair preference of 2–N–methyl 9–hydroxyellipticinium. Schwaller MA, et al. **Eur J Biochem** 1989 Apr 15;181(1):129–34

In situ hybridization demonstration of poly–adenylated RNA sequences in formalin–fixed paraffin sections using a biotinylated oligonucleotide poly d(T) probe. Pringle JH, et al. **J Pathol** 1989 Aug;158(4):279–86

Scanning tunnelling microscopy of Z–DNA. Arscott PG, et al. **Nature** 1989 Jun 8;339(6224):484–6

Measurement of anomalously high hydration of (dA)n.(dT)n double helices in dilute solution. Buckin VA, et al. **Nature** 1989 Jul 27;340(6231):321–2

The propeller DNA conformation of poly(dA).poly(dT). Aymami J, et al. **Nucleic Acids Res** 1989 Apr 25; 17(8):3229–45

Acoustical investigation of poly(dA).poly(dT), poly[d(A–T)], poly(A).poly(U) and DNA hydration in dilute aqueous solutions. Buckin VA, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4189–203

Solvent interactions stabilising nucleic acid conformers. Elliott RJ, et al. **Nucleic Acids Res** 1989 Jan 11; 17(1):389–404

(dT–dC)n and (dG–dA)n tracts arrest single stranded DNA replication in vitro. Lapidot A, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):883–900

Sequence criteria for Z–DNA formation: studies on poly d(ACGT). Majumder K, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):450

Interactions of water–soluble metalloporphyrins with nucleic acids studied by resonance Raman spectroscopy. Schneider JH, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10323–38

Alternating d(G–C)3 and d(C–G)3 hexanucleotides containing 7–deaza–2'–deoxyguanosine or 8–aza–7–deaza–2'–deoxyguanosine in place of dG. Seela F, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):901–10

Direct evidence for the presence of left–handed conformation in a supramolecular assembly of polynucleotides. Thomas TJ, et al. **Nucleic Acids Res** 1989 May 25;17(10):3795–810

Immunochemical approach for the characterization of DNA damages induced by chemical carcinogens. Tada M, et al. **Nucleic Acids Symp Ser** 1988;(19):73–6

Laser flash spectroscopy of methylene blue with nucleic acids. Effects of ionic strength and pH. van der Putten WJ, et al. **Photochem Photobiol** 1989 Feb;49(2):145–51

Characterization of the minor groove environment in a drug–DNA complex: bisbenzimide bound to the poly[d(AT)].poly[d(AT)]duplex. Jin R, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):8939–42

Stable DNA unwinding, not "breathing," accounts for single–strand–specific nuclease hypersensitivity of specific A+T–rich sequences. Kowalski D, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9464–8

ESR characteristics of one–electron reduced thymine in monomer, oligomer, and polymer derivatives. Bernhard WA, et al. **Radiat Res** 1989 Mar;117(3):379–94

[Defibrotide] Gava R. **G Clin Med** 1988 Mar;69(3):229–31 **(Ita)**

[Structure of the hydration envelope of the B–form of polydeoxyribonucleotides poly(dA–dC).poly(dG–dT) and poly(dA–dG).poly(dTs–dT) from the data of Monte–Carlo simulation] Eisenhaber F, et al. **Biofizika** 1988 May–Jun; 33(3):422–9 (Eng. Abstr.) **(Rus)**

[Fixation of poly(dG–dC).poly(dG–dC) in the Z–conformation] Ulanov BP, et al. **Dokl Akad Nauk SSSR** 1988 Jul–Aug;301(1):230–3 **(Rus)**

[Effect of poly(dA).poly(dT) sequence inserted into EcoR1 site of pBr322 plasmid on the expression of tet and bla genes] Andreeva IS, et al. **Mol Biol (Mosk)** 1989 Jan–Feb; 23(1):101–6 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Inhibition of tissue plasminogen activator inhibitor by defibrotide in atherosclerotic patients. Violi F, et al. **Semin Thromb Hemost** 1989 Apr;15(2):226–9

[Clinical and anatomo–pathological aspects of cicatrization following diathermo–coagulation. Effects of topical administration of a placental polydeoxynucleotide] Minorchio E, et al. **Ann Ostet Ginecol Med Perinat** 1988 May–Jun;109(3):132–8 (Eng. Abstr.) **(Ita)**

ANALYSIS

Supercoil–stabilized left–handed DNA in the plasmid (dA–dT)16 insert formed in the presence of Ni2+. Nejedlý K, et al. **FEBS Lett** 1989 Jan 30;243(2):313–7

ANTAGONISTS & INHIBITORS

Effect of Sarkosyl and heparin on single–step addition reactions catalysed by wheat–germ RNA polymerase II–poly[d(A–T)]transcription complexes. De Mercoyrol L, et al. **Biochem J** 1989 Jun 15;260(3):795–801

BIOSYNTHESIS

[Display of 8–hydroxy–GTP substrate properties of UTP in the reaction of polynucleotide synthesis catalyzed by RNA–polymerase from Escherichia coli in the presence of poly[d(AT).d(AT)] template] Bruskov VI, et al. **Mol Biol (Mosk)** 1988 May–Jun;22(3):726–30 (Eng. Abstr.) **(Rus)**

CHEMICAL SYNTHESIS

Synthetic repeating sequence DNAs containing phosphorothioates: nuclease sensitivity and triplex formation. Latimer LJ, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1549–61

CLASSIFICATION

[Sulodexide and defibrotide are not low molecular weight heparins (letter)] Serneri GG. **Cardiologia** 1989 Jan; 34(1):97–8 **(Ita)**

GENETICS

A rapidly evolving region in the immunoglobulin heavy chain loci of rat and mouse: postulated role of (dC–dA)n.(dG–dT)n sequences. Hellman L, et al. **Gene** 1988 Aug 15;68(1):93–100

The role of a template sugar–phosphate backbone in the ribosomal decoding mechanism. Comparative study of poly(U) and poly(dT) template activity. Potapov AP, et al. **J Mol Biol** 1988 Oct 20;203(4):885–93

A unique deletion in pBR322 DNA caused by insertion of poly(dA).poly(dT). Ikpeazu EV, et al. **Plasmid** 1989 May; 21(3):247–50

[Nuclear proteins from Drosophila melanogaster specifically binding to simple homopolymeric sequences of poly[d(T–G)].poly[d(C–A)] type] Vashakidze RP, et al. **Mol Biol (Mosk)** 1988 May–Jun;22(3):700–5 (Eng. Abstr.) **(Rus)**

IMMUNOLOGY

Specific binding to methylated polynucleotides in monoclonal anti–poly(dT) antibodies from autoimmune mice. Muso E, et al. **Clin Immunol Immunopathol** 1989 Mar; 50(3):298–306

ISOLATION & PURIFICATION

Pulsed field gel electrophoresis techniques for separating 1– to 50–kilobase DNA fragments. Birren BW, et al. **Anal Biochem** 1989 Mar;177(2):282–6

Measurement of electrophoretic mobility of dye–labeled large DNA fragments in agarose gels by movement of fluorescence pattern after photobleaching. Chu B, et al. **Biopolymers** 1989 Aug;28(8):1491–4

METABOLISM

The amino acid sequence of the chromosomal protein HMG–Y, its relation to HMG–I and possible domains for the preferential binding of the proteins to stretches of A–T base pairs. Karlson JR, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):646–51

A premelting conformational transition in poly(dA)–Poly(dT) coupled to daunomycin binding. Herrera JE, et al. **Biochemistry** 1989 Mar 7;28(5):1993–2000

Mechanism of inhibition of DNA gyrase by quinolone antibacterials: specificity and cooperativity of drug binding to DNA. Shen LL, et al. **Biochemistry** 1989 May 2; 28(9):3879–85

Spectroscopic analysis of DNA base–pair opening by Escherichia coli RNA polymerase. Temperature and ionic strength effects. Shimer GH Jr, et al. **Biochim Biophys Acta** 1988 Sep 7;950(3):354–65

High affinity binding of estrogen receptor to recombinant plasmids containing (dA–dC)n.(dG–dT)n sequences. Thomas T, et al. **Cancer Res** 1989 Sep 1;49(17):4734–9

A DNA binding protein that recognizes oligo(dA).oligo(dT) tracts. Winter E, et al. **EMBO J** 1989 Jun;8(6):1867–77

Modulation of the affinity of the single–stranded DNA–binding protein of Escherichia coli (E. coli SSB) to poly(dT) by site–directed mutagenesis. Bayer I, et al. **Eur J Biochem** 1989 Feb 1;179(2):399–404

DNA–binding properties of gene–5 protein encoded by bacteriophage M 13. 1. The kinetics of the dissociation of gene–5–protein.polynucleotide complexes upon addition of salt. Bulsink H, et al. **Eur J Biochem** 1988 Oct 1; 176(3):589–96

Effects of solute conditions on the relative affinities of the oligonucleotides d(G–C)5 and d(A–T)5 for the anthracycline drug 2–fluoro–4–demethoxydaunomycin. Hammer BC, et al. **FEBS Lett** 1989 Feb 13;244(1):227–30

Hydroxyl radical–induced crosslinking between double–stranded poly(dA–dT) and tripeptides containing an aromatic residue. Favaudon V. **Free Radic Res Commun** 1989;6(2–3):157–9

Evidence for oligolysine binding to the minor groove of poly(dA–dT).poly(dA–dT). Atreyi M, et al. **Indian J Biochem Biophys** 1988 Oct;25(5):385–8

Interaction of antitumour agent mitoxantrone with poly[d(G–C)]—a circular dichroic study. Rao MV, et al. **Indian J Biochem Biophys** 1989 Feb;26(1):5–8

Recognition of (dG)n.(dC)n sequences by endonuclease G. Characterization of the calf thymus nuclease. Côté J, et al. **J Biol Chem** 1989 Feb 25;264(6):3301–10

Binding of recA protein to Z–form DNA studied with circular and linear dichroism spectroscopy. Takahashi M, et al. **J Biol Chem** 1989 May 25;264(15):8568–74

Equilibrium binding of spermine and histamine to salmon sperm DNA and poly(dGdC). Winkle SA, et al. **J Pharm Pharmacol** 1988 Nov;40(11):809–11

[Display of 8–hydroxy–GTP substrate properties of UTP in the reaction of polynucleotide synthesis catalyzed by RNA–polymerase from Escherichia coli in the presence of poly[d(AT).d(AT)] template] Bruskov VI, et al. **Mol Biol (Mosk)** 1988 May–Jun;22(3):726–30 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Defibrotide reduces infarct size in a rabbit model of experimental myocardial ischaemia and reperfusion. Thiemermann C, et al. **Br J Pharmacol** 1989 Jun; 97(2):401–8

Acute effects of defibrotide, an experimental antithrombotic agent, on fibrinolysis and blood prostanoids in man. Coccheri S, et al. **Eur J Clin Pharmacol** 1988;35(2):151–6

Clinical pharmacology and mode of action of a new antithrombotic compound: Defibrotide. Ulutin ON, et al. **Folia Haematol (Leipz)** 1988;115(1–2):177–80 (20 ref.)

Effects of a defibrotide–heparin combination on some measures of haemostasis in healthy volunteers. Pogliani EM, et al. **J Int Med Res** 1989 Jan–Feb;17(1):36–40

Defibrotide decreases cholesterol amount in

hypercholesterolemic rabbit aorta, with no modification of plasma or lipoprotein cholesterol. Pescador R, et al. **Life Sci** 1989;44(12):789–97

Thrombolytic activity of defibrotide: a morphometric evaluation in experimental venous thrombosis. Fumagalli G, et al. **Pharmacol Res** 1989 May–Jun;21(3):293–8

Beneficial mechanisms of action of a prostacyclin enhancing agent in splanchnic artery occlusion shock. Aoki N, et al. **Res Commun Chem Pathol Pharmacol** 1988 Jun; 60(3):275–89

Cardiovascular pharmacology of defibrotide. Berti F, et al. **Semin Thromb Hemost** 1988;14 Suppl:38–42 (18 ref.)

Defibrotide: an overview of clinical pharmacology and early clinical studies. Cornelli U, et al. **Semin Thromb Hemost** 1988;14 Suppl:64–70 (48 ref.)

Effect of defibrotide on polymorphonuclear leukocytes: modulation of calcium entry and availability. Di Perri T, et al. **Semin Thromb Hemost** 1988;14 Suppl:23–6

Pharmacologic profiling of defibrotide in experimental models. Fareed J, et al. **Semin Thromb Hemost** 1988;14 Suppl:27–37

Role of defibrotide in immunoregulation of sheep red cell sensitization in a rat model. Silberman S, et al. **Semin Thromb Hemost** 1988;14 Suppl:43–6 (102 ref.)

RADIATION EFFECTS

Radiation-induced crosslinking between poly(deoxyadenylic-deoxythymidylic acid) and tripeptides containing aromatic residues. Favaudon V. **Int J Radiat Biol** 1989 Mar;55(3):353–64

Intramolecular H atom abstraction from the sugar moiety by thymine radicals in oligo- and polydeoxynucleotides. Karam LR, et al. **Radiat Res** 1988 Nov;116(2):210–6

THERAPEUTIC USE

Protection of the ischaemic myocardium from reperfusion injury by defibrotide and its possible mechanism of action. Thiemermann C, et al. **Biomed Biochim Acta** 1988; 47(10–11):S19–22

Effects of oral and intravenous defibrotide on blood viscosity in patients with peripheral obliterative arterial disease. Belfiglio A, et al. **Clin Ther** 1989 Jul–Aug;11(4):479–84

Novel mechanism of action of a prostacyclin enhancing agent in haemorrhagic shock. Bitterman H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Jun; 337(6):679–86

Clinical evaluation of defibrotide in the treatment of arterial and venous vascular disease. A preliminary report. Belcaro G, et al. **Panminerva Med** 1989 Jan–Mar;31(1):34–41

Defibrotide protects rabbit myocardium from ischemia: relationship with the eicosanoid system. Berti F, et al. **Pol J Pharmacol Pharm** 1987 Sep–Oct;39(5):657–65

Modulation of endothelium and control of vascular and thrombotic disorders. **Semin Thromb Hemost** 1988;14 Suppl:1–114

A pilot evaluation of the effects of defibrotide in patients affected by acute myocardial infarction. Carelli M, et al. **Semin Thromb Hemost** 1988;14 Suppl:71–6

Clinical effectiveness of defibrotide in vaso-occlusive disorders and its mode of actions. Ulutin ON. **Semin Thromb Hemost** 1988;14 Suppl:58–63

[Topical therapy with placental polydeoxyribonucleotide in cervical ectopy and ectropion] de Luca Brunori I, et al. **Ann Ostet Ginecol Med Perinat** 1989 Jan–Feb;110(1):35–41 (Eng. Abstr.) (Ita)

[Evaluation of the efficacy of profibrinolytic treatment with defibrotide in the therapy of thrombophlebitis] Murgiano GA. **Clin Ter** 1988 Dec 15;127(5):355–61 (Eng. Abstr.) (Ita)

[Use of defibrotide in the treatment of Raynaud's phenomenon associated with progressive systemic sclerosis or essential mixed cryoglobulinemia] Ranieri G, et al. **Clin Ter** 1988 Sep 15;126(5):335–43 (Eng. Abstr.) (Ita)

[A multicenter study of defibrotide in the prevention of deep venous thrombosis. Final results] Gerosa C, et al. **Minerva Chir** 1989 May 31;44(10):1507–16 (Eng. Abstr.) (Ita)

[Prevention of deep venous thrombosis. A prospective study of defibrotide] Mensa G, et al. **Minerva Chir** 1988 Aug 31;43(15–16):1275–8 (Eng. Abstr.) (Ita)

[Use of defibrotide in the treatment of acute superficial thrombophlebitis of the legs] Seccia M, et al. **Minerva Chir** 1989 May 15;44(9):1379–84 (Eng. Abstr.) (Ita)

[Prevention of deep venous thrombosis in obstetrico-gynecologic surgery. Our experience with defibrotide] Bracciani M, et al. **Minerva Ginecol** 1989 May; 41(5):225–9 (Eng. Abstr.) (Ita)

[Comparative study of defibrotide and calcium heparin in the prevention of postoperative deep venous thrombosis. A randomized multicenter study] Battistel V, et al. **Minerva Med** 1988 Sep;79(9):783–90 (Eng. Abstr.) (Ita)

[Defibrotide versus heparin in antithrombotic prophylaxis in gynecological surgery] Lippi G, et al. **Minerva Med** 1989 May;80(5):455–9 (Eng. Abstr.) (Ita)

POLYENES

Preoperative embolization of arteriovenous malformations with polylene threads: techniques with wing microcatheter and pathologic results. Benati A, et al. **AJNR** 1989 May–Jun;10(3):579–86

Physiological responses to the wearing of fire fighter's turnout gear with neoprene and GORE-TEX barrier liners. White MK, et al. **Am Ind Hyg Assoc J** 1988 Oct; 49(10):523–30

Altered properties of platelet membrane in childhood obesity. Tangorra A, et al. **Biochem Int** 1988 Nov;17(5):837–46

The membrane fluidity concept revisited by polarized fluorescence spectroscopy on different model membranes containing unsaturated lipids and sterols. van Ginkel G, et al. **Biochimie** 1989 Jan;71(1):23–32

The fidelity of response by 1-[4-(trimethylammonio)phenyl]-6-phenyl-1,3,5-hexatriene in time-resolved fluorescence anisotropy measurements on lipid vesicles. Effects of unsaturation, headgroup and cholesterol on orientational order and reorientational dynamics. van Langen H, et al. **Eur Biophys J** 1989;17(1):37–48

Development of compliance chamber diaphragms with reduced permeability. McMillin CR, et al. **J Biomed Mater Res** 1989 Apr;23(A1 Suppl):117–28

A novel second-generation polyolefin container for storage of single-donor apheresis platelets. Shimizu T, et al. **Vox Sang** 1989;56(3):174–80

Pancreatoduodenectomy with occlusion of the residual stump by Neoprene injection. Di Carlo V, et al. **World J Surg** 1989 Jan–Feb;13(1):105–10; discussion 110–1

ANALYSIS

Quantitative determination of impurities in polyene antibiotics: Fourier transform Raman spectra of nystatin, amphotericin A, and amphotericin B. Lewis EN, et al. **Anal Chem** 1988 Oct 15;60(20):2306–9

Stabilization and quantitative analysis of fecapentaenes in human feces, using synthetic fecapentaene-12. Kleinjans JC, et al. **Cancer Lett** 1989 Jan;44(1):33–7

Case-control study of colorectal cancer and fecapentaene excretion. Schiffman MH, et al. **Cancer Res** 1989 Mar 1; 49(5):1322–6

Filipin-labelled complexes are polarized in their distribution in the cytoplasm of meiotically mature mouse eggs. Allworth A, et al. **Gamete Res** 1988 Aug;20(4):475–89

Direct liquid introduction LC-MS of polyene macrolide antibiotics: comment on the structure of filipin II. Edwards DM. **J Antibiot (Tokyo)** 1989 Feb;42(2):322–4

Characterization of Hexsyn, a polyolefin rubber. McMillin CR. **J Biomater Appl** 1987 Jul;2(1):3–100

Combined chromatographic-isotopic dilution analysis of fecapentaenes in human feces. Peters JH, et al. **J Chromatogr** 1989 Mar 24;488(2):301–13

Fecapentaene concentration and mutagenicity in 718 North American stool samples. Schiffman MH, et al. **Mutat Res** 1989 Apr;222(4):351–7

DIAGNOSTIC USE

TMA-DPH a fluorescent probe of membrane dynamics in living cells. How to use it in phagocytosis. Illinger D, et al. **Cell Biophys** 1989 Feb;14(1):17–26

Localization of lipoprotein unesterified cholesterol in nondenaturing gradient gels with filipin. Lefevre M. **J Lipid Res** 1988 Jun;29(6):815–8

METABOLISM

Investigations on the spectral interactions of fusarin C with rat liver microsomal cytochrome P-450. Gelderblom WC, et al. **Xenobiotica** 1988 Sep;18(9):1005–14

PHARMACOLOGY

Polyene--sterol interaction and selective toxicity. Gary-Bobo CM. **Biochimie** 1989 Jan;71(1):37–47

Influence of coacervation-inducing agents and cooling rates on the preparation and in vitro release of bleomycin hydrochloride microcapsules. Lin SY. **J Microencapsul** 1985 Apr–Jun;2(2):91–101

In vitro release behaviour of theophylline from PIB-induced ethylcellulose microcapsules interpreted by simple mathematical functions. Lin SY. **J Microencapsul** 1987 Jul–Sep;4(3):213–6

[Clinical pharmacologic aspects of mepartricin. Possible pharmacologic interference with digitaloids and anticoagulants] Costa FV. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2 Suppl):5–6 (Ita)

[Effect of treatment with mepartricin on the concentrations of androgen receptors in adenomatous human prostatic tissue. Preliminary data] Longo A, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2 Suppl):13–5 (Ita)

[Effect of treatment with mepartricin on the plasma androgen and gonadotropin concentrations in subjects with benign prostatic hypertrophy] Sciarra F, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2 Suppl):10–2 (Ita)

[Chemo-sensitivity of a human salivary adenocarcinoma cell line to several anti-cancer drugs and enhancement of the antitumor effects by combination with filipin or verapamil] Sugiyama M, et al. **Gan To Kagaku Ryoho** 1989 Jan; 16(1):89–94 (Eng. Abstr.) (Jpn)

STANDARDS

Changes in insulation of wetsuits during repetitive exposure to pressure. Monji K, et al. **Undersea Biomed Res** 1989 Jul;16(4):313–9

THERAPEUTIC USE

Changes in the plasma pattern of sex steroids in patients with liver cirrhosis treated with mepartricin. Tavanti A, et al. **J Int Med Res** 1989 May–Jun;17(3):212–7

[Clinical and echographic evaluation of a group of 40 patients suffering from benign prostatic hypertrophy treated with mepartricin] Alei G. **Minerva Urol Nefrol** 1988 Apr–Jun; 40(2 Suppl):59–61 (Ita)

[Clinical experience with mepartricin in the treatment of prostatic hypertrophy. Preliminary results] Bassi P, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2 Suppl):40–3 (Ita)

[Evaluation of the results and tolerance of prolonged treatment with mepartricin] Bianchi G, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2 Suppl):33–4 (Ita)

[Mepartricin in the treatment of chronic prostatitis] Borghi M, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2 Suppl):62–4 (Ita)

[Mepartricin in the treatment of benign prostatic hyperplasia] Cirillo Marucco E, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2):101–4 (Eng. Abstr.) (Ita)

[Evaluation of the objective efficacy of mepartricin in benign prostatic hypertrophy] Cirillo Marucco E, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2 Suppl):23–4 (Ita)

[Latest contribution concerning the use of mepartricin in adenoma of the prostate] Comar OB, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2 Suppl):30–2 (Ita)

[Clinical evaluation of the use of mepartricin in the therapy of prostatic hypertrophy. Double-blind study] Cortecchia V, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2 Suppl):44–6 (Ita)

[Mepartricin versus placebo in the therapy of prostatic hypertrophy] Fini M, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2 Suppl):53–4 (Ita)

[Use of mepartricin in the patient suffering from so-called benign prostatic hypertrophy. Study of 142 cases] Fiorilla C. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2 Suppl):35–7 (Ita)

[Clinical evaluation of mepartricin in benign prostatic hypertrophy] Giannotti P, et al. **Minerva Urol Nefrol** 1988 Jul–Sep;40(3):175–80 (Eng. Abstr.) (Ita)

[Treatment of benign prostatic hypertrophy using mepartricin at high dosage] Giurioli A, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2 Suppl):38–9 (Ita)

[Randomized double-blind study using mepartricin and a placebo in the therapy of benign prostatic hypertrophy] Miano L, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2 Suppl):50–2 (Ita)

[Therapeutic usefulness of mepartricin in benign prostatic hypertrophy: 2 years' experience. Preliminary note on the effect of mepartricin on certain possible etiopathogenic factors in benign prostatic hypertrophy] Mirone V, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2 Suppl):16–7 (Ita)

[Use of mepartricin in the treatment of benign prostatic hypertrophy. Open study of 39 patients] Montanari E, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2 Suppl):25–9 (Ita)

[Use of mepartricin in the treatment of benign prostatic hypertrophy. Evaluation of clinical and functional parameters] Petrone U, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2):89–91 (Eng. Abstr.) (Ita)

[Double-blind study on the effects of mepartricin (SPA-S-160) versus placebo in the treatment of obstruction caused by adenoma of the prostate] Rizzo M, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2 Suppl):21–2 (Ita)

[Mepartricin in the symptomatic therapy of prostatitis] Rocco F, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2 Suppl):67–9 (Ita)

[Urination disorders, endocrine features and sexual activity in patients with benign prostatic hypertrophy under treatment with mepartricin] Scarpa RM, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2 Suppl):18–20 (Ita)

[Prolonged medical therapy using mepartricin in prostatic hypertrophy. Results in 81 patients] Serretta V, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2 Suppl):55–8 (Ita)

[Clinical use of mepartricin: effects on obstruction due to chronic inflammation of the prostate] Tosto A, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2 Suppl):65–6 (Ita)

[Medical treatment of benign prostatic hypertrophy. Echographic evaluation] Traficante A, et al. **Minerva Urol Nefrol** 1988 Apr–Jun;40(2 Suppl):47–9 (Ita)

TOXICITY

Inactivity of fecapentaene-12 as a rodent carcinogen or tumor initiator. Ward JM, et al. **Cancer Lett** 1988 Sep–Oct; 42(1–2):49–59

Fecapentaene causes sister-chromatid exchanges in human lymphocytes. Bauchinger M, et al. **Mutat Res** 1988 Sep–Oct;209(1–2):29–31

Formation of 8-hydroxydeoxyguanosine in DNA treated with fecapentaene-12 and -14. Shioya M, et al. **Mutat Res** 1989 Mar;225(3):91-4

URINE

[The role of tests for polyenuria in mass screening of the population] Gritsman Iula, et al. **Sov Med** 1988;(5):49-51 **(Rus)**

POLYESTERS

Sutures for inguinal herniorrhaphy--a comparison of monofilaments with PTFE. Cahill J, et al. **Ann R Coll Surg Engl** 1989 Mar;71(2):128-30

Short-term in vivo stability of endothelial-lined polyester elastomer and polytetrafluoroethylene grafts. Kesler KA, et al. **Ann Vasc Surg** 1986 May;1(1):60-5

Mechanical evaluation of resorbable copolymers for end use as vascular grafts. Hanson SJ, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):789-93

Experimental evaluation of a gelatin-coated polyester graft used as an arterial substitute. Bordenave L, et al. **Biomaterials** 1989 May;10(4):235-42

Bending piezoelectricity in a microbially produced poly-beta-hydroxybutyrate. Fukada E, et al. **Biorheology** 1988;25(1-2):297-302

Polyhydroxybutyrate: an intriguing biopolymer. Dawes EA. **Biosci Rep** 1988 Dec;8(6):537-47

The effect of a penetrating biodegradable implant on the growth plate. An experimental study on growing rabbits with special reference to polydioxanone. Mäkelä EA, et al. **Clin Orthop** 1989 Apr;(241):300-8

Absorbable polydioxanone suture for venous anastomoses: experimental studies using venography and transluminal angioscopy. Torsello G, et al. **Eur J Vasc Surg** 1987 Oct; 1(5):319-25

The surface composition of commercial polyester arterial prostheses--an XPS study. Paynter RW, et al. **Int J Artif Organs** 1989 Mar;12(3):189-94

A new spacing material for interstitial implantation of radioactive seeds. Hammer J, et al. **Int J Radiat Oncol Biol Phys** 1989 Jan;16(1):259-60

Aliphatic polyesters and cellulose-based polymers for controlled release applications. Chang RK, et al. **J Biomater Appl** 1988 Jul;3(1):80-101 (60 ref.)

An arterial prosthesis from Argentina: the Barone Microvelour arterial graft. Torché D, et al. **J Biomater Appl** 1989 Jan;3(3):427-53

Compressed poly(vinyl alcohol)-polycaprolactone admixture as a model to evaluate erodible implants for sustained drug delivery. Wang PY. **J Biomed Mater Res** 1989 Jan; 23(1):91-104

Comparison of suture materials for closure of the scleral pocket incision. Masket S. **J Cataract Refract Surg** 1988 Sep;14(5):548-51

Transfer of protons from bulk solution to the surface of poly(L-lactide) microcapsules. Makino K, et al. **J Microencapsul** 1986 Jul-Sep;3(3):195-202

Electrophoretic study of the degradation properties of poly(L-lactide) microcapsules. Makino K, et al. **J Microencapsul** 1987 Jan-Mar;4(1):47-56

Clip appendectomy. Bellina JH, et al. **J Reprod Med** 1989 Jul;34(7):475-8

Polydioxanone and polypropylene suture material in free internal mammary artery graft anastomoses. Aarnio P, et al. **J Thorac Cardiovasc Surg** 1988 Nov;96(5):741-5

Small-caliber biodegradable vascular grafts from Groningen. Gogolewski S, et al. **Life Support Syst** 1983;1 Suppl 1:382-5

Nonabsorbable suture material in corneoscleral sections--a comparison of novafil and nylon. McClellan KA, et al. **Ophthalmic Surg** 1989 Jul;20(7):480-5

Experimental and clinical investigations on the suitability of polydioxanone threads for cerclage of the eyeball. Biardzka B, et al. **Ophthalmologica** 1988;197(1):47-50

The preparation and evaluation of drug-containing poly(dl-lactide) microspheres formed by the solvent evaporation method. Bodmeier R, et al. **Pharm Res** 1987 Dec;4(6):465-71

[Use of a cup-shaped implant of polydioxanone in orbital-malar fractures] Cantaloube D, et al. **Rev Stomatol Chir Maxillofac** 1989;90(1):48-51 (Eng. Abstr.) **(Fre)**

[Bassini operation with polyglycolic acid or polyester. A prospective randomized study of 300 cases] Fuchsjäger N, et al. **Chirurg** 1989 Apr;60(4):273-6 (Eng. Abstr.) **(Ger)**

[Experimental studies of stabilization of refixation following median sternotomy] Schade K, et al. **Langenbecks Arch Chir** 1989;374(1):20-4 (Eng. Abstr.) **(Ger)**

[Refixation in osteochondrosis dissecans with resorbable material using magnetic resonance tomography in follow-up monitoring] Lütten C, et al. **Sportverletz Sportschaden** 1988 Jun;2(2):61-8 (Eng. Abstr.) **(Ger)**

[Postoperative continuous passive motion following augmentation of anterior cruciate ligament ruptures with polydioxanone ligaments. Early results of a prospective study] Oberbillig C, et al. **Unfallchirurgie** 1989 Jun; 15(3):145-51 (Eng. Abstr.) **(Ger)**

[Initial results following implantation of resorbable micro-patches of polydioxanone in the rat aorta] Schumann U. **Z Exp Chir Transplant Kunstliche Organe** 1989; 22(3):153-8 (Eng. Abstr.) **(Ger)**

[Resorbable augmentationplasty and functional after care in fresh rupture of the anterior cruciate ligament. An improved treatment concept] Lobenhoffer P, et al. **Z Orthop** 1988 May-Jun;126(3):296-9 (Eng. Abstr.) **(Ger)**

[Polydioxanone and polyglactin 910 in gynecological microsurgery. Experimental study] Formelli G, et al. **Boll Soc Ital Biol Sper** 1988 Nov;64(11):1007-11 (Eng. Abstr.) **(Ita)**

[Jejunocutaneous fistula following the use of a polyester net for treating eventration] Duca S, et al. **Rev Chir [Chir]** 1988 Sep-Oct;37(5):387-91 (Eng. Abstr.) **(Rum)**

ADVERSE EFFECTS

Calcinosis circumscripta associated with polydioxanone suture in two young dogs. Kirby BM, et al. **Vet Surg** 1989 May-Jun;18(3):216-20

ANALYSIS

The poly-beta-hydroxybutyrate granule in vivo. A new insight based on NMR spectroscopy of whole cells. Barnard GN, et al. **J Biol Chem** 1989 Feb 25;264(6):3286-91

Preparation of biodegradable poly(+/-)lactide microparticles using a spray-drying technique. Bodmeier R, et al. **J Pharm Pharmacol** 1988 Nov;40(11):754-7

BIOSYNTHESIS

Cloning of the Alcaligenes eutrophus genes for synthesis of poly-beta-hydroxybutyric acid (PHB) and synthesis of PHB in Escherichia coli. Schubert P, et al. **J Bacteriol** 1988 Dec;170(12):5837-47

Cloning and expression in Escherichia coli of the Alcaligenes eutrophus H16 poly-beta-hydroxybutyrate biosynthetic pathway. Slater SC, et al. **J Bacteriol** 1988 Oct; 170(10):4431-6

METABOLISM

Poly-beta-hydroxybutyrate biosynthesis in Alcaligenes eutrophus H16. Characterization of the genes encoding beta-ketothiolase and acetoacetyl-CoA reductase. Peoples OP, et al. **J Biol Chem** 1989 Sep 15;264(26):15293-7

Poly-beta-hydroxybutyrate (PHB) biosynthesis in Alcaligenes eutrophus H16. Identification and characterization of the PHB polymerase gene (phbC). Peoples OP, et al. **J Biol Chem** 1989 Sep 15; 264(26):15298-303

Effects of plasma proteins on degradation properties of poly(L-lactide) microcapsules. Makino K, et al. **Pharm Res** 1987 Feb;4(1):62-5

Poly-beta-hydroxybutyrate/calcium polyphosphate complexes in eukaryotic membranes. Reusch RN. **Proc Soc Exp Biol Med** 1989 Sep;191(4):377-81

PHARMACOKINETICS

Mechanism of hydrolytic degradation of poly(L-lactide) microcapsules: effects of pH, ionic strength and buffer concentration. Makino K, et al. **J Microencapsul** 1986 Jul-Sep;3(3):203-12

PHARMACOLOGY

A preliminary study of the osteogenic potential of a biodegradable alloplastic-osteoinductive alloimplant. Schmitz JP, et al. **Clin Orthop** 1988 Dec;(237):245-55

Protein precoating of polylactide microspheres containing a lipophilic immunopotentiator for enhancement of macrophage phagocytosis and activation. Tabata Y, et al. **Pharm Res** 1989 Apr;6(4):296-301

TOXICITY

[Effect of relative air humidity on the results of sanitaro-chemical studies of polymer materials] Antonenkov AG, et al. **Gig Sanit** 1989 May;(5):90 **(Rus)**

POLYETHYLENE GLYCOLS

Hardness of restorative resins: effect of camphorquinone, amine, and inhibitor. Peutzfeldt A, et al. **Acta Odontol Scand** 1989 Aug;47(4):229-31

Bioactivity of some chemotherapeutic agents in selected polyethylene glycol ointment bases. Farouk A, et al. **Acta Pharm Hung** 1989 Mar;59(2):87-94

Formulation of polyethylene glycol ointment bases suitable for tropical and subtropical climates. I. Hadi IA, et al. **Acta Pharm Hung** 1989 May;59(3):137-42

Formulation of Polyethylene Glycol ointment bases suitable for tropical and subtropical climates. II. Ugriné Hunyadvári E, et al. **Acta Pharm Hung** 1989 Jul;59(4):157-65

Effects of pH and ionic strength on precipitation of phytopathogenic viruses by polyethylene glycol. Pastorek J, et al. **Acta Virol (Praha)** 1989 Jan;33(1):68-74

Comparison of a new colon lavage solution (Golytely-RSS) with a standard preparation for air-contrast barium enema. Tomlinson TL, et al. **AJR** 1988 Nov;151(5):947-50

Colon cleansing for diagnostic and surgical procedures: polyethylene glycol-electrolyte lavage solution. DiPalma JA, et al. **Am J Gastroenterol** 1989 Sep;84(9):1008-16 (74 ref.)

Corneal ulcers associated with disposable hydrogel contact lenses. Dunn JP Jr, et al. **Am J Ophthalmol** 1989 Aug 15; 108(2):113-7

What proteins are present in polyethylene glycol precipitates from rheumatic sera? Robinson MW, et al. **Ann Rheum Dis** 1989 Jun;48(6):496-501

Refractive results of hyperopic hydrogel intracorneal lenses in primate eyes. McCarey BE, et al. **Arch Ophthalmol** 1989 May;107(5):724-30

Forty-eight hour liver preservation using an artificial blood substitute. Nakajima I, et al. **ASAIO Trans** 1988 Jul-Sep; 34(3):277-9

Polymorphic phase behavior of lysopalmitoylphosphatidylcholine in poly(ethylene glycol)-water mixtures. King MD, et al. **Biochemistry** 1989 Jun 27;28(13):5643-7

Effect of poly(ethylene glycol) on the Ca2+-induced fusion of didodecyl phosphate vesicles. Rupert LA, et al. **Biochemistry** 1988 Oct 18;27(21):8232-9

Preparation of hemoglobin-containing liposomes using octyl glucoside and octyltetraoxyethylene. Jopski B, et al. **Biochim Biophys Acta** 1989 Jan 16;978(1):79-84

(Pyridoxylated hemoglobin)-(polyoxyethylene) conjugate solution as blood substitute for normothermic whole body rinse-out. Agishi T, et al. **Biomater Artif Cells Artif Organs** 1988;16(1-3):261-70

A new resuscitation fluid "stabilized hemoglobin" preparation and characteristics. Iwashita Y, et al. **Biomater Artif Cells Artif Organs** 1988;16(1-3):271-80

In vivo evaluation of a pyridoxylated-hemoglobin-polyoxyethylene conjugate. Matsushita M, et al. **Biomater Artif Cells Artif Organs** 1988; 16(1-3):247-60

Long term liver preservation using artificial blood substitutes. Nakajima I, et al. **Biomater Artif Cells Artif Organs** 1988; 16(1-3):347-54

Properties of poly(2-hydroxyethyl acrylate) networks. Andreopoulos AG. **Biomaterials** 1989 Mar;10(2):101-4

Synthetic hydrogels. VI. Hydrogel composites as wound dressings and implant materials. Corkhill PH, et al. **Biomaterials** 1989 Jan;10(1):3-10 (77 ref.)

Diffusion of rat atrial natriuretic factor in thermoreversible poloxamer gels. Juhasz J, et al. **Biomaterials** 1989 May; 10(4):265-8

Activity toward thrombin-antithrombin of heparin immobilized on two hydrogels. Tay SW, et al. **Biomaterials** 1989 Jan;10(1):11-5

In vivo release of cisplatin from a needle-type copolymer formulation implanted in rat kidney. Yoshida M, et al. **Biomaterials** 1989 Jan;10(1):16-22

The Mersilene mesh sling--a new concept in ptosis surgery. Downes RN, et al. **Br J Ophthalmol** 1989 Jul;73(7):498-501

Microvascular anastomosis using polyethylene glycol 4000 and fibrin glue. Kamiji T, et al. **Br J Plast Surg** 1989 Jan; 42(1):54-8

Introduction of macromolecules into primary cultured neuronal cells by fusion with erythrocyte ghosts. Hikawa N, et al. **Brain Res** 1989 Feb 27;481(1):162-4

Detergent enhances interference of urate in determinations of fructosamine [letter] Kallner A. **Clin Chem** 1989 Aug; 35(8):1803-4

Effect of Triton X-100 on precipitation of biliary phosphatase by wheat-germ lectin [letter] Rosalki SB, et al. **Clin Chem** 1989 Mar;35(3):513

Comparative trial between two soft jelly capsules containing nonoxynol as spermicidal contraceptives. Bassol S, et al. **Contraception** 1989 Apr;39(4):409-18

Transparency of nitrocellulose membranes with Triton X-114. Vachereau A. **Electrophoresis** 1989 Jul;10(7):524-7

Preparation and kinetic properties of 5-ethylphenazine-poly(ethylene glycol)-NAD+ conjugate, a unique catalyst having an intramolecular reaction step. Yomo T, et al. **Eur J Biochem** 1989 Feb 1;179(2):299-305

Complications following vasectomy. A comparison between Mersilene and autosuture surgiclips. Zeegers AG, et al. **Eur Urol** 1988;14(4):294-7

Hydrogel intraocular lens experience with endocapsular implantation. Rich WJ, et al. **Eye** 1988;2 (Pt 5):523-8

Synthetic hydrogel microspheres as substrata for cell adhesion and growth. Shivakumar K, et al. **In Vitro Cell Dev Biol** 1989 Apr;25(4):353-7

Characterization of integral membrane proteins of Leishmania major by Triton X-114 fractionation and analysis of vaccination effects in mice. Murray PJ, et al. **Infect Immun** 1989 Jul;57(7):2203-9

Surface modification of copolyether-urethane catheters with poly(ethylene oxide). Brinkman E, et al. **Int J Artif Organs** 1989 Jun;12(6):390-4

A new method for applying Arosurf MSF (monomolecular surface film formulations). Burgess JH, et al. **J Am Mosq Control Assoc** 1985 Jun;1(2):245-7

Laboratory evaluations of formulations of Arosurf MSF and Bacillus sphaericus against larvae and pupae of Culex quinquefasciatus. Levy R, et al. **J Am Mosq Control Assoc** 1986 Jun;2(2):233-6

Effect of water quality on the efficacy of water-base suspensions of Arosurf MSF against larvae of Aedes taeniorhynchus: bioassay evaluations. Levy R, et al. **J Am Mosq Control Assoc** 1987 Dec;3(4):638-41

Comparative efficacy of technical and water-base formulations of Arosurf MSF against Aedes taeniorhynchus. Levy R, et al.

J Am Mosq Control Assoc 1986 Dec;2(4):560–2
Mupirocin in polyethylene glycol base is not suitable for application to burns [letter] Kaczmarski EB. **J Antimicrob Chemother** 1988 Nov;22(5):771
Hemocompatibility of hydrogel with polyethyleneoxide chains. Nakao A, et al. **J Biomater Appl** 1987 Oct; 2(2):219–34
Biodegradable PEO/PLA block copolymers. Cohn D, et al. **J Biomed Mater Res** 1988 Nov;22(11):993–1009
Preparation and surface characterization of PEO–grafted and heparin–immobilized polyurethanes. Han DK, et al. **J Biomed Mater Res** 1989 Apr;23(A1 Suppl):87–104
Protein–resistant surfaces prepared by PEO–containing block copolymer surfactants. Lee JH, et al. **J Biomed Mater Res** 1989 Mar;23(3):351–68
Heparin immobilization onto segmented polyurethane–urea surfaces—effect of hydrophilic spacers. Park KD, et al. **J Biomed Mater Res** 1988 Nov;22(11):977–92
Fractionation of Tetrahymena ciliary membranes with triton X–114 and the identification of a ciliary membrane ATPase. Dentler WL. **J Cell Biol** 1988 Dec;107(6 Pt 2):2679–88
Modified hydroxyethylmethacrylate hydrogels as a modelling tool for the study of cell–substratum interactions. Bergethon PR, et al. **J Cell Sci** 1989 Jan;92 (Pt 1):111–21
In situ hybridization using PEG–embedded tissue and riboprobes: increased cellular detail coupled with high sensitivity. Clayton DF, et al. **J Histochem Cytochem** 1989 Mar;37(3):389–93
Rapid low molecular weight polyethylene glycol embedding protocol for immunocytochemistry. Mowery J, et al. **J Histochem Cytochem** 1989 Oct;37(10):1549–52
Radiopaque hydrogel microspheres. Thanoo BC, et al. **J Microencapsul** 1989 Apr–Jun;6(2):233–44
Development and evaluation of a new polymeric material for small caliber vascular prostheses. Chaikof EL, et al. **J Surg Res** 1989 Sep;47(3):193–9
Gel artificial cells as enzyme carrier. Arca E, et al. **Life Support Syst** 1983;1 Suppl 1:262–5
NMR relaxation of water in hydrogel polymers: a model for tissue. Gore JC, et al. **Magn Reson Med** 1989 Mar; 9(3):325–32
An analysis of magnetic cross–relaxation between water and methylene protons in a model system. Gore JC, et al. **Magn Reson Med** 1989 Mar;9(3):333–42
Polyethylene glycol in the production of blood grouping reagents: some further advantages. Green C, et al. **Med Lab Sci** 1989 Jan;46(1):81–2
Patient acceptance and cleansing effectiveness of Golytely for colon surgery. Herbst CA Jr, et al. **N C Med J** 1989 Feb;50(2):63–6
Evaluation of polyvinyl alcohol hydrogel as a sustained–release vehicle for rectal administration of indomethacin. Morimoto K, et al. **Pharm Res** 1989 Apr; 6(4):338–41
Differences in crystal properties and ligand affinities of an antifluorescyl Fab (4–4–20) in two solvent systems. Gibson AL, et al. **Proteins** 1988;3(3):155–60
Polyethylene glycol improves the indirect antiglobulin test. Wenz B, et al. **Transfusion** 1989 Mar–Apr;29(3):218–20
[Polyethylene glycol as a promotor of germination of some medicinal plant seeds] Chen Y, et al. **Chung Yao Tung Pao** 1988 Jun;13(6):14–5, 62 (Eng. Abstr.) **(Chi)**
[Experimental implantation of hydrogel into bone] Korbelář P, et al. **Acta Chir Orthop Traumatol Cech** 1989 Feb; 56(1):45–65 (Eng. Abstr.) **(Cze)**
[Removal of human immunodeficiency virus by filtration with microporous regenerated cellulose membrane and by fractionation with polyethylene glycol] Hamamoto Y, et al. **Nippon Rinsho** 1989 Jan;47(1):161–7 **(Jpn)**
[Frontier of chemical modification of protein: application of polyethyleneglycol–modified enzymes in biotechnological processes] Kodera Y, et al. **Seikagaku** 1988 Sep; 60(9):1005–18 (65 ref.) **(Jpn)**
[Rechanneling of the nasal fossae with alloplastic material in ozena] Călărașu R, et al. **Rev Chir [Otorinolaringol]** 1988 Oct–Dec;33(4):303–6 (Eng. Abstr.) **(Rum)**
[Dissociation of hexamers of cytochrome P–450 LM2 in the presence of the non–ionic detergent emulgin 913] Berndt P, et al. **Biokhimiia** 1989 Feb;54(2):338–41 (Eng. Abstr.) **(Rus)**
[Use of the method of discriminant analysis for the prognosis of early thrombosis of Lavsan vascular prostheses following surgery of occlusions of the iliac arteries] El'kov AN, et al. **Klin Khir** 1988;(7):23–5 (Eng. Abstr.) **(Rus)**
[Treatment of rupture of the supraspinous muscle] Anisimov VN. **Ortop Travmatol Protez** 1988 Aug;(8):30–2 (Eng. Abstr.) **(Rus)**
[Study of samples of commercial contraceptive films] Sekulović D, et al. **Srp Arh Celok Lek** 1988 Nov–Dec; 116(11–12):1019–27 (Eng. Abstr.) **(Scc)**

ADMINISTRATION & DOSAGE

Superoxide dismutase conjugated to polyethylene glycol provides sustained protection against myocardial ischemia/reperfusion injury in canine heart. Tamura Y, et al. **Circ Res** 1988 Nov;63(5):944–59
Bowel preparation prior to colonoscopy using a limited intake of electrolyte solution for cleansing. A comparison between peroral and rectal intestinal lavage evaluated through degree of cleansing, acceptability by the patient and nursing time involved. Jensen VJ, et al. **Dan Med Bull** 1988 Jun;35(3):295–7
Effect of low dosage of polidocanol in treatment of esophageal varices in cirrhotic patients. Bhargava DK, et al. **Indian J Med Res** 1988 Dec;88:515–21
Hemoglobin solutions coupled with polyethylene glycol 1900: preparation, purification, quality control and pharmacological trials by hemorrhagic shock. Labrude P, et al. **Int J Artif Organs** 1988 Sep;11(5):393–402
Sclerotherapy—translucidation of the skin prior to injection. Scarborough DA, et al. **J Dermatol Surg Oncol** 1989 May; 15(5):498–9
Results of a multicenter outpatient burn study on the safety and efficacy of Dimac–SSD, a new delivery system for silver sulfadiazine. Deitch EA, et al. **J Trauma** 1989 Apr; 29(4):430–4
Anti–HIV substances for rape victims [letter] Foster IM, et al. **JAMA** 1989 Jun 16;261(23):3407
Comparison of colon cleansing methods for canine colon surgery. Ehler WJ, et al. **Lab Anim Sci** 1988 Aug; 38(4):483–4
Oral bowel lavage preparation for colonoscopy. Burke DA, et al. **Postgrad Med J** 1988 Oct;64(756):772–4
Minor burns: treatment using a new drug delivery system with silver sulfadiazine. Cruse CW, et al. **South Med J** 1989 Sep;82(9):1135–7
Sclerotherapy of esophageal varices by consecutive injection of anhydrous ethanol: 1% polydocanol and thrombin. Kumagai Y, et al. **Surg Endosc** 1987;1(1):29–32
[The value of nonoxynol is questionable (letter)] Warming B. **Ugeskr Laeger** 1989 Feb 13;151(7):456 **(Dan)**
[Vaginal suppositories for the prevention of AIDS? (editorial)] Marcus U. **Fortschr Med** 1988 Oct 10; 106(29):16–7 **(Ger)**
[Postoperative interferon hydrogel treatment. A method for the successful therapy of chronic persistent giant condylomas in an immunologically deficient patient with Hodgkin's disease] Gross G, et al. **Hautarzt** 1988 Oct; 39(10):684–7 (Eng. Abstr.) **(Ger)**
[Use of multicomponent ointments on a hydrophilic base in the prevention and treatment of postpartum endometritis] Isaeva AD, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):58–61 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Rigid gas–permeable vs. hydrogel contact lenses for extended wear. Fonn D, et al. **Am J Optom Physiol Opt** 1988 Jul; 65(7):536–44
Complications reported with hydrogel extended wear contact lenses. Soni PS, et al. **Am J Optom Physiol Opt** 1988 Jul; 65(7):545–51
Deleterious effect of Brij 35 on alkyl 2–pyrones and other hydrophobic inhibitors of human sputum and leucocyte elastase. Cook L, et al. **Biochem Int** 1988 Oct;17(4):637–46
[Contact allergy caused by polidocanol (thesit)] Frosch PJ, et al. **Hautarzt** 1989 Mar;40(3):146–9 (Eng. Abstr.) **(Ger)**
[Lavsan ligatures as the cause of choledocholithiasis following resection of the stomach] Egorov VP, et al. **Khirurgiia (Mosk)** 1989 Jan;(1):96–7 **(Rus)**

ANALYSIS

Comparison of polyethylene glycol and chromium–51 chloride as nonabsorbable stool markers in calcium balance studies. Eastell R, et al. **Bone Miner** 1989 Apr;6(1):95–105
Analysis of polyethylene glycol modified superoxide dismutase by chromatographic, electrophoretic, light scattering, chemical and enzymatic methods. McGoff P, et al. **Chem Pharm Bull (Tokyo)** 1988 Aug;36(8):3079–91
Disinfection associated spoilage of high water content ionic matrix hydrogels. Sack RA, et al. **CLAO J** 1989 Apr–Jun; 15(2):138–45
Solubility and polarity parameters of polyoxyethylene glycol dialkyl ethers. Szymanowski J, et al. **J Pharm Sci** 1988 Oct;77(10):893–7

BLOOD

Degradation of plasma bilirubin by a bilirubin oxidase derivative which has a relatively long half–life in the circulation. Sugi K, et al. **Biochim Biophys Acta** 1989 Jun 27;991(3):405–9
Evaluation of blood compatibility of PEO grafted and heparin immobilized polyurethanes. Han DK, et al. **J Biomed Mater Res** 1989 Aug;23(A2 Suppl):211–28

DIAGNOSTIC USE

Should we let sleeping PEGs lie? [letter] Tobi M, et al. **Gastroenterology** 1988 Dec;95(6):1693–4
Markers for faecal fat estimation in monitoring steatorrhoea in cystic fibrosis. Gilbert J, et al. **Gut** 1988 Sep;29(9):1286–8
The urinary excretion of polyethylene glycol as a test for mucosal integrity in children with celiac disease: comparison with other noninvasive tests. Lifschitz CH, et al. **J Pediatr Gastroenterol Nutr** 1989 Jul;9(1):49–57
Comparison of the D–xylose and polyethylene glycol absorption tests as indicators of mucosal damage in infants with chronic diarrhea. Lifschitz CH, et al. **J Pediatr Gastroenterol Nutr** 1989 Jan;8(1):47–50
Circulating immune complexes in patients with advanced pulmonary tuberculosis detected by a polyethylene glycol precipitation–complement consuming test (PEG–CC test). Rojas–Espinosa O, et al. **Rev Latinoam Microbiol** 1988 Jan–Mar;30(1):25–9
Intestinal permeability assessed with different–sized polyethylene glycols in children undergoing small–intestinal biopsy for suspected celiac disease. Fälth–Magnusson K, et al. **Scand J Gastroenterol** 1989 Jan; 24(1):40–6

IMMUNOLOGY

Allergic contact dermatitis from the surfactant in Hibitane. Kabasawa Y, et al. **Contact Dermatitis** 1989 May; 20(5):378–9
Tolerogenic conjugates of xenogeneic monoclonal antibodies with monomethoxypolyethylene glycol. I. Induction of long–lasting tolerance to xenogeneic monoclonal antibodies. Maiti PK, et al. **Int J Cancer Suppl** 1988;3:17–22

METABOLISM

Passive diffusion of non–electrolytes across the lysosome membrane. Iveson GP, et al. **Biochem J** 1989 Jul 15; 261(2):451–6
Oxidation of polyethylene glycols by alcohol dehydrogenase. Herold DA, et al. **Biochem Pharmacol** 1989 Jan 1;38(1):73–6
Biodegradable PELA block copolymers: in vitro degradation and tissue reaction. Younes H, et al. **Biomater Artif Cells Artif Organs** 1988;16(4):705–19
Mechanisms of mucoadhesion of poly(acrylic acid) hydrogels. Park H, et al. **Pharm Res** 1987 Dec;4(6):457–64
The inhibition by chlorate of the sulphation of polyethyleneglycol in the isolated perfused guinea pig liver. Roy AB, et al. **Xenobiotica** 1988 Sep;18(9):1049–55
[Microbial breakdown of stearox–6 and a study of the genetic determination of the nature of the degradative activity] Udod VM, et al. **Mikrobiol Zh** 1987 May–Jun;49(3):30–3 **(Rus)**

PHARMACOKINETICS

Hepatic clearance of polyethylene glycol 900 and mannitol in the pig. Friman S, et al. **Digestion** 1988;39(3):172–80
Gastrointestinal permeability to polyethylene glycol: an evaluation of urinary recovery of an oral load of polyethylene glycol as a parameter of intestinal permeability in man [letter] Ma T, et al. **Eur J Clin Invest** 1989 Aug;19(4):412
Decrease in intestinal permeability to polyethylene glycol 1000 during development in the pig. Weström BR, et al. **J Dev Physiol** 1989 Feb;11(2):83–7
Polyethylene glycol 900 permeability of rat intestinal and colonic segments in vivo and brush border membrane vesicles in vitro. Hollander D, et al. **J Lab Clin Med** 1989 Apr;113(4):505–15
Differential changes in the urinary excretion of two orally administered polyethylene glycol markers (PEG 900 and PEG 4000) in rats after feeding various carbohydrate gelling agents. Elsenhans B, et al. **J Nutr** 1989 Mar; 119(3):380–7
Abnormal intestinal permeability pattern in colonic Crohn's disease. Absorption of low molecular weight polyethylene glycols after oral or colonic load. Olaison G, et al. **Scand J Gastroenterol** 1989 Jun;24(5):571–6
Disposition of [14C]nonoxynol–9 after intravenous or vaginal administration to female Sprague–Dawley rats. Walter BA, et al. **Toxicol Appl Pharmacol** 1988 Nov;96(2):258–68
[Properties of a bacterial enzyme preparation hydrolyzing hydropol–200] Gvozdiak PI, et al. **Mikrobiol Zh** 1987 Jan–Feb;49(1):58–61 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Chemical sclerosis of the gallbladder. An experimental study in pigs of the effect of absolute ethanol and polidocanol on gallbladder epithelium. Uchiyama N, et al. **Acta Radiol** 1989 Jul–Aug;30(4):427–31
Application of nonionic polyoxyethylene detergents in studies of phosphatidylinositol kinase. Ganong BR, et al. **Anal Biochem** 1989 May 15;179(1):66–71
Effect of polyethylene glycol–electrolyte lavage solution on intestinal microflora. Morotomi M, et al. **Appl Environ Microbiol** 1989 Apr;55(4):1026–8
Effects of polidocanol as a constituent of a venous sclerosing agent on cardiac electrical activity. Studies on the isolated perfused heart and papillary muscle of the guinea pig and on the isolated sinus node of the rabbit. Oexle B, et al. **Arzneimittelforschung** 1988 Nov;38(11):1578–82
Renal effects of a pyridoxalated–hemoglobin–polyoxyethylene conjugate solution as a blood substitute in exchange transfusions. Matsushita M, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):280–3
Calcium–dependent activation of human neutrophils by a synthetic ionophore. Atkinson P, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):209–14
Fusion of phosphatidylcholine liposomes induced by polyethylene glycol. Mishra RK, et al. **Biochem Int** 1988 Jun;16(6):1137–44
The detergent Solulan C–24 reveals properties of the olfactory adenylate cyclase system. Robinson CJ, et al. **Biochem J** 1989 Jun 15:260(3):683–7
The effects of Triton X–100 and chlorpromazine on the Mg2+–dependent and Mg2+–independent phosphatidate phosphohydrolase activities of rat lung. Walton PA, et al. **Biochem J** 1989 Jul 15;261(2):673–8
Further studies on the mechanism of inhibition of intestinal

chylomicron transport by Pluronic L-81. Nutting D, et al. **Biochim Biophys Acta** 1989 Aug 22;1004(3):357-62

The influence of poly(ethylene glycol) on the molecular dynamics within the glycocalyx. Pratsch L, et al. **Biochim Biophys Acta** 1989 Apr 14;980(2):146-54

Stabilization of detergent-solubilized Ca2+-ATPase by poly(ethylene glycol). Welte W, et al. **Biochim Biophys Acta** 1989 Sep 4;984(2):193-9

N-methyl-D-aspartate-sensitive [3H]glutamate binding sites in brain synaptic membranes treated with Triton X-100. Yoneda Y, et al. **Biochim Biophys Acta** 1989 Jun 15; 1012(1):74-80

Aggregation of human plasma low density lipoproteins by means of poly(ethylene glycol). Arnold K, et al. **Biomed Biochim Acta** 1988;47(12):949-54

Enhancement of the effectiveness of Lyt-2+ T-cells for adoptive chemoimmunotherapy by short-term exposure of tumor-bearer spleen cells to polyethylene glycol and/or melphalan. Wise JA, et al. **Cancer Res** 1989 Jul 1; 49(13):3613-9

Mechanisms of successive modes of erythrocyte stability and instability in the presence of various polymers. van Oss CJ, et al. **Cell Biophys** 1988 Oct;13(2):141-50

Immune complexes in solid tumours precipitable by 3.5% polyethylene glycol: analysis of some nonspecific components. Guidi L, et al. **Diagn Clin Immunol** 1988; 5(6):284-8

Inactivation of human immunodeficiency virus in serum specimens as a safety measure for diagnostic immunoassays. Ukkonen P, et al. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):518-23

Identification of S-100 proteins and S-100-binding proteins in a detergent-resistant EDTA/KCl-extractable fraction from bovine brain membranes. Donato R, et al. **FEBS Lett** 1989 Apr 10;247(1):31-5

F-actin is involved in the polyethylene glycol-induced fusion of chick embryo fibroblasts. Kajstura J. **Folia Histochem Cytobiol** 1989;27(1):19-24

The improvement of polyethylene glycol-induced cell fusion by incubation of cells in a medium with increased NaCl concentration. Kajstura J, et al. **Folia Histochem Cytobiol** 1988;26(2):77-82

Induction of cross-fertilization between sea urchin eggs and starfish sperm by polyethylene glycol treatment. Kyozuka K, et al. **Gamete Res** 1989 Feb;22(2):123-9

Fusion between human and Drosophila melanogaster cells induced by polyethylene glycol. Halfer C, et al. **Genetics** 1987 Dec 15;75(3):173-87

Hypolipidemic effect of intravenous pluronic L-81 in fasted rats treated with Triton WR-1339: possible inhibition of hepatic lipoprotein secretion. Nutting DF, et al. **Horm Metab Res** 1989 Mar;21(3):113-5

Direct comparison of electric field-mediated and PEG-mediated cell fusion for the generation of antibody producing hybridomas. Karsten U, et al. **Hybridoma** 1988 Dec;7(6):627-33

Enhancement of the Arthus reaction and suppression of delayed type hypersensitivity (DTH) by pluronic F-68, a detergent frequently used to prepare perfluorocarbon emulsions. Triolo AJ, et al. **Int J Immunopharmacol** 1989; 11(3):241-8

Field evaluations of the phytotoxic effects of Arosurf MSF on selected species of aquatic vegetation. Hester PG, et al. **J Am Mosq Control Assoc** 1989 Jun;5(2):272-4

Efficacy of Arosurf MSF and formulations of Bacillus thuringiensis var. israelensis against Anopheles albimanus: laboratory bioassay. Perich MJ, et al. **J Am Mosq Control Assoc** 1987 Sep;3(3):485-8

Plasma volume expansion in rats: effects on thermoregulation and exercise. Francesconi RP, et al. **J Appl Physiol** 1989 Apr;66(4):1749-55

Selective release of the Treponema pallidum outer membrane and associated polypeptides with Triton X-114. Cunningham TM, et al. **J Bacteriol** 1988 Dec; 170(12):5789-96

Mechanism of fusion of Sendai virus: role of hydrophobic interactions and mobility constraints of viral membrane proteins. Effects of polyethylene glycol. Hoekstra D, et al. **J Biol Chem** 1989 Apr 25;264(12):6786-92

Hemodynamic effects of a poly(ethylene oxide) drag-reducing polymer, Polyox WSR N-60K, in the open-chest rat. Polimeni PI, et al. **J Cardiovasc Pharmacol** 1989 Sep;14(3):374-80

1H and 13C NMR studies of the interaction of eugenol, phenol, and triethyleneglycol dimethacrylate with phospholipid liposomes as a model system for odontoblast membranes. Fujisawa S, et al. **J Dent Res** 1988 Nov; 67(11):1438-41

The influence of a block copolymer on the efficiency of interfacial microencapsulation. Speaker TJ, et al. **J Microencapsul** 1987 Apr-Jun;4(2):121-4

Effects of polyoxyethylene-modified superoxide dismutase on reperfusion induced arrhythmias in isolated rat and guinea-pig hearts. Yamakawa T, et al. **J Mol Cell Cardiol** 1989 May;21(5):441-52

Effect of sodium glycocholate and polyoxyethylene-9-lauryl ether on the hydrolysis of varying concentrations of insulin in the nasal homogenates of the albino rabbit. Hayakawa E, et al. **Life Sci** 1989;45(2):167-74

The effect of Triton X-100 on bovine brain synaptic membranes. O'Neill C, et al. **Neurochem Res** 1988 Sep; 13(9):871-7

Piretanide-dextran and piretanide-polyethylene glycol interact with high affinity with the Na+ 2 Cl- K+ cotransporter in the thick ascending limb of the loop of Henle. Nitschke R, et al. **Pflugers Arch** 1989 Mar; 413(5):559-61

Activity of nonoxynol-9 against Chlamydia trachomatis. Ehret JM, et al. **Sex Transm Dis** 1988 Jul-Sep;15(3):156-7

In vitro evaluations of condoms with and without nonoxynol 9 as physical and chemical barriers against Chlamydia trachomatis, herpes simplex virus type 2, and human immunodeficiency virus. Judson FN, et al. **Sex Transm Dis** 1989 Apr-Jun;16(2):51-6

Value of polyethylene glycol (PEG) and horseradish peroxidase (HRP) for hypothermic rabbit heart perfusion. Wicomb WN, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1366-8

Polyethylene glycol effect on the oxygenated and hypoxic isolated perfused rat kidney. Kopolovic J, et al. **Virchows Arch [A]** 1989;414(5):429-37

The 24-hour posttransfusion survival and lifespan of autologous baboon red cells treated with inositol hexaphosphate-polyethylene glycol or inositol hexaphosphate-adenosine triphosphate-polyethylene glycol to decrease oxygen affinity. Franco RS, et al. **Vox Sang** 1988;55(2):90-6

[Biological effects of golytely in children] Bichet-Sicard A, et al. **Chir Pediatr** 1988;29(4):181-3 (Eng. Abstr.) **(Fre)**

[In vitro effect of nonoxynol-9 on herpes virus 1 and 2 and on other sexually transmitted micro-organisms] Del Piano M, et al. **Minerva Ginecol** 1988 Dec;40(12):709-14 (Eng. Abstr.) **(Ita)**

[Effectiveness of formation of murine B-hybridomas by using various polyethylene glycols] Paniutich AV. **Gematol Transfuziol** 1988 Dec;33(12):47-51 **(Rus)**

THERAPEUTIC USE

Polyethylene glycol-conjugated superoxide dismutase and catalase reduce ischemic brain injury. Liu TH, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):H589-93

Failure of antioxidant therapy (polyethylene glycol-conjugated catalase) in acute pancreatitis. Guice KS, et al. **Am J Surg** 1989 Jan;157(1):145-9

In vitro evaluation of a pyridoxalated hemoglobin polyoxyethylene conjugate in reversing cell sickling. Yabuki A, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):773-7

Nonoxynol 9 in herpes. Zehnder R, et al. **DICP** 1989 Jul-Aug;23(7-8):602

Endoscopic hemostasis by local injection of epinephrine and polidocanol in bleeding ulcer. A prospective randomized trial. Balanzó J, et al. **Endoscopy** 1988 Nov;20(6):289-91

Successful treatment of chronically infected wounds with sugar paste. Tanner AG, et al. **Eur J Clin Microbiol Infect Dis** 1988 Aug;7(4):524-5

Absolute alcohol in esophageal vein sclerosis. Paoluzi P, et al. **Gastrointest Endosc** 1988 Sep-Oct;34(5):400-2

Treatment of essential telangiectasia: effects of increasing concentrations of polidocanol. Norris MJ, et al. **J Am Acad Dermatol** 1989 Apr;20(4):643-9

Polidocanol (aethoxysklerol) for sclerotherapy of superficial venules and telangiectasias. Goldman PM. **J Dermatol Surg Oncol** 1989 Feb;15(2):204-9 (26 ref.)

Effect of D, alpha-tocopheryl succinate and polyethylene glycol on performance tests after fluid percussion brain injury. Clifton GL, et al. **J Neurotrauma** 1989;6(2):71-81

Whole-gut lavage in children using an iso-osmolar solution containing polyethelene glycol (Golytely). Millar AJ, et al. **J Pediatr Surg** 1988 Sep;23(9):822-4

Copolymer, undergoing trials, could improve fibrinolytics' effectiveness [news] Raymond C. **JAMA** 1989 May 5; 261(17):2475, 2479-80

Comparison of endoscopic polidocanol injection and YAG laser therapy for bleeding peptic ulcers. Rutgeerts P, et al. **Lancet** 1989 May 27;1(8648):1164-7

Treatment of experimental sub-acute cryptococcosis in the Wistar rat. Finquelievich JL, et al. **Medicina (B Aires)** 1988; 48(5):506-10

Antimicrobial and antiplaque effects of a chlorhexidine and Triton X-100 combination. Giertsen E, et al. **Scand J Dent Res** 1989 Jun;97(3):233-41

Modification of acute focal ischemia in rabbits by poloxamer 188. Colbassani HJ, et al. **Stroke** 1989 Sep;20(9):1241-6

[Nonoxynol and sexually transmitted diseases] Petersen CS, et al. **Ugeskr Laeger** 1988 Nov 7;150(45):2753 **(Dan)**

[Comparative efficacy of endoscopic sclerosis of esophageal varices by intravariceal injection of polidocanol and perivariceal injection of quinine-urea] Bourbon P, et al. **Gastroenterol Clin Biol** 1988 Dec;12(12):894-8 (27 ref.) (Eng. Abstr.) **(Fre)**

[Esophageal function in portal hypertension before and after sclerotherapy] Schmehl V, et al. **Dtsch Z Verdau Stoffwechselkr** 1988;48(6):299-305 (Eng. Abstr.) **(Ger)**

[Clinical experiences with polyethylene glycol-bound E. coli L-asparaginase in patients with multiple recurrences of acute lymphoblastic leukemia] Jürgens H, et al. **Klin Padiatr** 1988 May-Jun;200(3):184-9 (Eng. Abstr.) **(Ger)**

[Occlusion of vessels using Hydrogel emboli] Dan VN, et al. **Sov Med** 1988;(9):22-6 **(Rus)**

TOXICITY

Two-week aerosol inhalation study on polyethylene glycol (PEG) 3350 in F-344 rats. Klonne DR, et al. **Drug Chem Toxicol** 1989 Mar;12(1):39-48

URINE

Leakage of intraluminal low molecular weight polyethylene glycol as a marker of small bowel transplant rejection. Teitelbaum DH, et al. **J Pediatr Surg** 1989 Jan;24(1):64-8; discussion 68-9

POLYETHYLENE TEREPHTHALATE

A clinical survey of aortobifemoral bypass using two inherently different graft types. Cintora I, et al. **Ann Surg** 1988 Nov;208(5):625-30

Composite valve-graft replacement of aortic root using separate Dacron tube for coronary artery reattachment. Coselli JS, et al. **Ann Thorac Surg** 1989 Apr;47(4):558-65

Aseptic periprosthetic fluid collection: a late complication of Dacron arterial bypass. Bellenot F, et al. **Ann Vasc Surg** 1988 Jul;2(3):220-4

Intraoperative evaluation of PTFE, Dacron and autogenous vein as carotid patch materials. Carney WI Jr, et al. **Ann Vasc Surg** 1987 Dec;1(5):583-6

An experimental collagen-impregnated Dacron graft: potential for endothelial seeding. Dalsing MC, et al. **Ann Vasc Surg** 1989 Apr;3(2):127-33

Experimental and clinical experience with a gelatin impregnated Dacron prosthesis. Drury JK, et al. **Ann Vasc Surg** 1987 Dec;1(5):542-7

Anastomotic false aneurysms with aortic Dacron graft after twenty-five years. Guidoin R, et al. **Ann Vasc Surg** 1986 Nov;1(3):369-73

Prospective randomized trial of polytetrafluoroethylene and Dacron aortic prosthesis. I. Perioperative results. Lord RS, et al. **Ann Vasc Surg** 1988 Jul;2(3):248-54

A five- to seven-year experience with externally-supported Dacron prostheses in axillofemoral and femoropopliteal bypass. Schultz GA, et al. **Ann Vasc Surg** 1986 Sep; 1(2):214-24

Effect of healing on compliance of porous Dacron grafts. Usui Y, et al. **Ann Vasc Surg** 1988 Apr;2(2):120-6

Sealed versus unsealed knitted Dacron prostheses: a comparison of the acute phase protein response. Vohra R, et al. **Ann Vasc Surg** 1987 Dec;1(5):548-51

Ruptured aortic aneurysms: postoperative complications and their management. Vohra R, et al. **Ann Vasc Surg** 1988 Apr;2(2):114-9

Plasma polymerized tetrafluoroethylene/polyethylene terephthalate vascular prostheses. Greisler HP, et al. **Arch Surg** 1989 Aug;124(8):967-72

Late rupture of knitted velour Dacron arterial prostheses. Magee HR, et al. **Aust N Z J Surg** 1988 Jul;58(7):549-53 (19 ref.)

Effect of albumin coating on the in vitro blood compatibility of Dacron arterial prostheses. Kottke-Marchant K, et al. **Biomaterials** 1989 Apr;10(3):147-55

Multiple gamma radiation sterilization of polyester fibres. Nair PD, et al. **Biomaterials** 1988 Jul;9(4):335-8

Effect of preclotting on the porosity and thrombogenicity of knitted Dacron grafts. Sheehan SJ, et al. **Biomaterials** 1989 Mar;10(2):75-9

The use of a latissimus dorsi myocutaneous flap to cover an axillobifemoral vascular prosthetic graft. Brooks SG, et al. **Eur J Vasc Surg** 1989 Aug;3(4):367-8

The effect of indobufen on the thrombogenic potential of a Dacron prosthesis in an artificial circulation. Sheehan SJ, et al. **Eur J Vasc Surg** 1988 Aug;2(4):223-7

Primary abdominal aortic dissection. Weimann S, et al. **Eur J Vasc Surg** 1989 Aug;3(4):369-71

The preoperative recognition of aorto-caval syndrome. Wu AV. **Eur J Vasc Surg** 1989 Aug;3(4):375-6

Biomaterials and immune system: cellular reactivity towards PTFE and Dacron vascular substitutes pointed out by the leukocyte adherence inhibition (LAI) test. Lodi M, et al. **Int Angiol** 1988 Oct-Dec;7(4):344-8

Aorto-Y-bifurcation graft: Dacron versus PTFE. Preliminary results of a randomized prospective study. Karner J, et al. **Int Surg** 1988 Oct-Dec;73(4):218-20

Titanium-coated Dacron velour: a study of interfacial connective tissue formation. Yan JY, et al. **J Biomed Mater Res** 1989 Feb;23(2):171-89

Polyurethane-coated Dacron mesh tray for temporary mandibular reconstruction following resection of oral cancer: clinical results of 27 cases. Eckardt A, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):21-4

Effects of in vitro aging on human endothelial cell adherence to dacron vascular graft material. Radomski JS, et al. **J Surg Res** 1989 Aug;47(2):173-7

Intraaortic balloon pump placement through Dacron aortofemoral grafts [letter] Burns RJ, et al. **J Vasc Surg** 1989 Feb;9(2):401

Thromboembolic potential of synthetic vascular grafts in baboons. Schneider PA, et al. **J Vasc Surg** 1989 Jul; 10(1):75-82

Carotid artery Dacron patch graft angioplasty: a ten-year experience. Schultz GA, et al. **J Vasc Surg** 1987 Mar; 5(3):475-8

Prevention of vascular prosthetic infection with an antibiotic-bonded Dacron graft. Shue WB, et al.

J Vasc Surg 1988 Nov;8(5):600–5
Platelet reactivity in human aortic grafts: a prospective, randomized midterm study of platelet adherence and release products in Dacron and polytetrafluoroethylene conduits. Wakefield TW, et al. **J Vasc Surg** 1989 Feb; 9(2):234–43
The biologic fate of Dacron double velour vascular prostheses—a clinicopathological study. Sato O, et al. **Jpn J Surg** 1989 May;19(3):301–11
Biological response to a musculo-tendinous prosthesis in the rabbit. Vesce G, et al. **Life Support Syst** 1983;1 Suppl 1:424–7
Preclinical evaluation of knitted radiation graft copolymer elastomeric vascular prostheses. Whamond JS, et al. **Life Support Syst** 1983;1 Suppl 1:443–6
Vascular grafting in the management of thrombotic disorders. Greisler HP, et al. **Semin Thromb Hemost** 1989 Apr; 15(2):206–14 (30 ref.)
Endothelial cell seeding in the management of vascular thrombosis. Herring MB, et al. **Semin Thromb Hemost** 1989 Apr;15(2):200–5
The influence of early surface thromboreactivity on long-term arterial graft patency. Rumisek JD, et al. **Surgery** 1989 May;105(5):654–61
Left ventricular aneurysm: a new surgical approach. Dor V, et al. **Thorac Cardiovasc Surg** 1989 Feb;37(1):11–9
[Ideal indications for the use of a textile ligament of high strength Trevira in alloplastic replacement of the anterior cruciate ligament in chronic isolated rupture] Mockwitz J, et al. **Unfallchirurgie** 1988 Oct;14(5):276–82 (Eng. Abstr.) **(Ger)**
[Duplex sonographic follow-up after carotid thrombendarterectomy and patch-plasty] Zwicker C, et al. **Vasa Suppl** 1988;26:15–7 **(Ger)**
[A case of adenoid cystic carcinoma of the trachea reconstructed with woven Cooley graft patch] Nakamura H, et al. **Kyobu Geka** 1988 Nov;41(12):1020–3 (Eng. Abstr.) **(Jpn)**
[Healing of an external velour warp-knit Dacron vascular prosthesis] Usui Y, et al. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1716–21 (Eng. Abstr.) **(Jpn)**
[Fixation of screws in spongy bones using plastic pins] Kramer V, et al. **Ortop Travmatol Protez** 1988 Aug;(8):32–5 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Stress fracture of the clavicle leading to nonunion secondary to coracoclavicular reconstruction with Dacron. Dust WN, et al. **Am J Sports Med** 1989 Jan–Feb;17(1):128–9
Malignant fibrous histiocytoma associated with a Dacron vascular prosthesis. Paterson HS, et al. **Ann Thorac Surg** 1989 May;47(5):772–4
Spinal cord compression: a complication of silicone-coated Dacron dural grafts. Report of two cases. Gomez H, et al. **Neurosurgery** 1989 Jan;24(1):115–8
Perigraft reaction: incompatibility of synthetic vascular grafts? New aspects on clinical manifestation, pathogenesis, and therapy. Paes E, et al. **World J Surg** 1988 Dec; 12(6):750–5

CHEMICAL SYNTHESIS

Interference of therephthalic groups present in Dacron with spectrophotometric azide determination. Oliveira EA, et al. **Braz J Med Biol Res** 1989;22(1):29–30
[Use of low-temperature plasma in the preparation of synthetic polymers for modification by collagen] Pietrucha K, et al. **Polim Med** 1988;18(1–2):51–65 (Eng. Abstr.) **(Pol)**

THERAPEUTIC USE

Porcine-valved Dacron conduits in Fontan procedures. Prenger KB, et al. **Ann Thorac Surg** 1988 Nov;46(5):526–30
Evaluation of Dacron-covered and plain bovine xenografts as replacements for the anterior cruciate ligament. Berry JL, et al. **Clin Orthop** 1988 Nov;(236):270–8

POLYETHYLENEIMINE see under **POLYETHYLENES**

POLYETHYLENES

One-year results with the Fincoid IUD—a Hungarian experience with the short model. Batár I. **Adv Contracept** 1988 Jun;4(2):137–42
Hemilaryngeal reconstruction using an axial island cheek flap supported by Marlex and stainless steel wire mesh. Winek TG, et al. **Am J Surg** 1988 Oct;156(4):235–7
Polypropylene mesh closure of infected abdominal wounds. Jones JW, et al. **Am Surg** 1989 Jan;55(1):73–6
Heparin-like tubings. III. Kinetics and mechanism of thrombin, antithrombin III and thrombin-antithrombin complex adsorption under controlled-flow conditions. Migonney V, et al. **Biomaterials** 1988 Sep;9(5):413–8
Wear of ion-implanted pure titanium against UHMWPE. Röstlund T, et al. **Biomaterials** 1989 Apr;10(3):176–81
Use of high-performance polyethylene fibres as a reinforcing phase in poly(methylmethacrylate) bone cement. Wagner HD, et al. **Biomaterials** 1989 Mar;10(2):139–41
Comparison of Marlex and Gore-tex to repair abdominal wall defects in the rat. Murphy JL, et al. **Can J Surg** 1989 Jul; 32(4):244–7
Reduction of stress shielding beneath a bone plate by use of a polymeric underplate. An experimental study in dogs. Jasmine MS, et al. **Clin Orthop** 1989 Sep;(246):293–9
Objective evaluation of insert material for diabetic and athletic footwear. Brodsky JW, et al. **Foot Ankle** 1988 Dec; 9(3):111–6
Comparative evaluation of Jones pyrex tubes and polyethylene tubes in conjunctivo-dacryocystorhinostomy. Betharia SM, et al. **Indian J Ophthalmol** 1988 Oct–Dec; 36(4):162–4
Dissociation of a metal-backed polyethylene acetabular component. A case report. Bueche MJ, et al. **J Arthroplasty** 1989;4(1):39–41
An evaluation of retrieved UHMWPE hip joint cups. Kurth M, et al. **J Biomater Appl** 1988 Jul;3(1):33–51
Elastic and ultimate properties of acrylic bone cement reinforced with ultra-high-molecular-weight polyethylene fibers. Pourdeyhimi B, et al. **J Biomed Mater Res** 1989 Jan;23(1):63–80
Analysis of surface damage in retrieved carbon fiber-reinforced and plain polyethylene tibial components from posterior stabilized total knee replacements. Wright TM, et al. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1312–9
Ion-exchange chromatography of proteins on a polyethyleneimine-grafted hydrophilic polymer for high-performance liquid chromatography. Kitagawa N. **J Chromatogr** 1988 Jun 29;443:133–41
Aolar film in biological electron microscopy. Masurovsky EB, et al. **J Electron Microsc Tech** 1989 Jun;12(2):172–3
Repair of orbital floor fractures with Marlex mesh. Scapini DA, et al. **Laryngoscope** 1989 Jul;99(7 Pt 1):697–701
Haemocompatibility of polyethylene-polystyrene modified tubings. Migonney V, et al. **Life Support Syst** 1983;1 Suppl 1:227–30
Adsorption of human and porcine insulins to intravenous administration sets. Tol A, et al. **Pharm Weekbl [Sci]** 1988 Oct 14;10(5):213–6
The McKenzie reservoir. Alexander E Jr. **Surg Neurol** 1989 Jun;31(6):476
[Is high-density polyethylene suitable as an implant material in cement-free anchoring of hip endoprostheses? A histomorphologic study of an explanted polyethylene screw-in acetabula] Lintner F, et al. **Z Orthop** 1988 Dec; 126(6):688–92 (Eng. Abstr.) **(Ger)**
[Open treatment of postoperative peritonitis] Bytka PF, et al. **Vestn Khir** 1988 Oct;141(10):109–11 **(Rus)**
[The use of polyethylene catheters in sialography] Mingazov GG, et al. **Vestn Rentgenol Radiol** 1989 Mar–Apr;(2):67 **(Rus)**

ADVERSE EFFECTS

Marlex mesh erosion: a complication of horizontal banded gastroplasty. Fardy J, et al. **Gastrointest Endosc** 1988 Nov–Dec;34(6):461–2
Occupational asthma due to a repair process for polyethylene-coated electrical cables. Stenton SC, et al. **J Soc Occup Med** 1989 Spring;39(1):33–4
Jejunal carcinoma associated with non-absorbable suture material. Leinhardt DJ, et al. **Postgrad Med J** 1988 Sep; 64(755):716–7
[Premorbid conditions in workers in the manufacture of polyethylene polyamine] Shpak BIu. **Vrach Delo** 1988 Oct; (10):109–10 (Eng. Abstr.) **(Rus)**

ANALYSIS

Gel content determination in cross-linked polyethylene. Kampouris EM, et al. **Biomaterials** 1989 Apr;10(3):206–8
Gas chromatographic determination of calcium stearate in polyethylene food packaging sheets. Tan S, et al. **J Chromatogr** 1988 Aug 5;447(1):198–201

CHEMICAL SYNTHESIS

[Use of low-temperature plasma in the preparation of synthetic polymers for modification by collagen] Pietrucha K, et al. **Polim Med** 1988;18(1–2):51–65 (Eng. Abstr.) **(Pol)**

METABOLISM

Detection of anionic sites and immunoglobulin A deposits in the glomerular capillary walls from patients with IgA nephropathy. Tomino Y, et al. **J Clin Lab Anal** 1989; 3(2):101–7
Membrane formation and characterization of semi-permeable magnetic polyhexamethyleneterephthalamide microcapsules containing polyethyleneimine (PEI) for trapping carcinogens. Povey AC, et al. **J Microencapsul** 1987 Oct–Dec;4(4):299–314

PHARMACOKINETICS

An anionic charge barrier in the guinea pig cochlea. Tomoda K, et al. **Arch Otorhinolaryngol** 1988;245(5):307–10

PHARMACOLOGY

In vitro and ex vivo platelet interactions with hydrophilic-hydrophobic poly(ethylene oxide)-polystyrene multiblock copolymers. Grainger DW, et al. **J Biomed Mater Res** 1989 Sep;23(9):979–1005
Comparison of multinucleated cells elicited in rats by particulate bone, polyethylene, or polymethylmethacrylate. Glowacki J, et al. **J Bone Miner Res** 1986 Aug;1(4):327–31

STANDARDS

Wear of ultra-high-molecular-weight polyethylene components of 90 retrieved knee prostheses. Landy MM, et al. **J Arthroplasty** 1988;3 Suppl:S73–85

THERAPEUTIC USE

Objective evaluation of insert material for diabetic and athletic footwear. Brodsky JW, et al. **Foot Ankle** 1988 Dec; 9(3):111–6

TOXICITY

The effects of bulk versus particulate ultra-high-molecular-weight polyethylene on bone. Goodman SB, et al. **J Arthroplasty** 1988;3 Suppl:S41–6

POLYGALACTOSES see **GALACTANS**

POLYGALACTURONASE see under **GLYCOSIDE HYDROLASES**

POLYGELINE see under **POLYMERS**

POLYGLACTIN 910 see under **POLYMERS**

POLYGLUCOSES see **GLUCANS**

POLYGLUTAMIC ACID see under **PEPTIDES**

POLYGLYCOLIC ACID

Natural history of vertical abdominal parietal closure: Prolene versus Dexon. Lewis RT, et al. **Can J Surg** 1989 May;32(3):196–200
The study of thermal and gross morphologic properties of polyglycolic acid upon annealing and degradation treatments. Chu CC, et al. **J Biomed Mater Res** 1988 Aug; 22(8):699–712
Experimental study of hollow, absorbable polyglycolic acid tube as stent for vasovasostomy. Flam TA, et al. **Urology** 1989 Jun;33(6):490–4
[Use of Biofix C for stabilizing medial ankle fractures] Leixnering M, et al. **Aktuel Traumatol** 1989 Jun;19(3):113–5 (Eng. Abstr.) **(Ger)**
[Bassini operation with polyglycolic acid or polyester. A prospective randomized study of 300 cases] Fuchsjäger N, et al. **Chirurg** 1989 Apr;60(4):273–6 (Eng. Abstr.) **(Ger)**

ADMINISTRATION & DOSAGE

Polyglycolic acid (Dexon) mesh graft for abdominal wound support in healing-compromised patients. Brismar B, et al. **Acta Chir Scand** 1988 Sep;154(9):509–10

PHARMACOLOGY

A preliminary study of the osteogenic potential of a biodegradable alloplastic-osteoinductive alloimplant. Schmitz JP, et al. **Clin Orthop** 1988 Dec;(237):245–55

POLYGONUM see **PLANTS, MEDICINAL**

POLYHEDROSIS VIRUSES

Industrial production of viral pesticides. Shieh TR. **Adv Virus Res** 1989;36:315–43 (37 ref.)

ANALYSIS

Location of a synergistic factor in the capsule of a granulosis virus of the armyworm, Pseudaletia unipuncta. Zhu Y, et al. **J Invertebr Pathol** 1989 Jul;54(1):49–56
Association of Autographa californica nuclear polyhedrosis virus (AcMNPV) with the nuclear matrix. Wilson ME, et al. **Virology** 1988 Nov;167(1):233–41

CLASSIFICATION

Cytoplasmic polyhedrosis virus classification by electropherotype; validation by serological analyses and agarose gel electrophoresis. Mertens PP, et al. **J Gen Virol** 1989 Jan;70 (Pt 1):173–85

DRUG EFFECTS

Effect of cytochalasin D on cell morphology and AcMNPV replication in a Spodoptera frugiperda cell line. Hess RT, et al. **J Invertebr Pathol** 1989 Mar;53(2):169–82

ENZYMOLOGY

A baculovirus blocks insect molting by producing ecdysteroid UDP-glucosyl transferase. O'Reilly DR, et al. **Science** 1989 Sep 8;245(4922):1110–2

GENETICS

Baculovirus vectors for expression of foreign genes. Kang CY. **Adv Virus Res** 1988;35:177–92 (38 ref.)
Baculoviruses as gene expression vectors. Miller LK. **Annu Rev Microbiol** 1988;42:177–99 (75 ref.)
Expression of human plasminogen cDNA in a baculovirus vector-infected insect cell system. Whitefleet-Smith J, et al. **Arch Biochem Biophys** 1989 Jun;271(2):390–9
A physical map of Spodoptera littoralis B-type nuclear polyhedrosis virus genome. Croizier G, et al.

Arch Virol 1989;104(1-2):145-51
High-efficiency expression of mammalian beta-adrenergic receptors in baculovirus-infected insect cells. George ST, et al. Biochem Biophys Res Commun 1989 Sep 29; 163(3):1265-9
Expression of Yb1 glutathione S-transferase using a baculovirus expression system. Hsieh JC, et al. Biochem Biophys Res Commun 1989 Aug 15;162(3):1147-54
Active human tissue plasminogen activator secreted from insect cells using a baculovirus vector. Furlong AM, et al. Biotechnol Appl Biochem 1988 Oct;10(5):454-64
A simplified method for the characterization of nuclear polyhedrosis virus genomes. Hamelin C, et al. FEMS Microbiol Lett 1989 Jul 15;51(1):233-7
Bombyx mori nuclear polyhedrosis virus-based vectors for expressing passenger genes in silkmoth cells under viral or cellular promoter control. Iatrou K, et al. Gene 1989 Jan 30;75(1):59-71
Eight base pairs encompassing the transcriptional start point are the major determinant for baculovirus polyhedrin gene expression. Rankin C, et al. Gene 1988 Oct 15;70(1):39-49
Physical map and polyhedrin gene sequence of Lymantria dispar nuclear polyhedrosis virus. Smith IR, et al. Gene 1988 Nov 15;71(1):97-105
Screening recombinant baculovirus plaques in situ with antibody probes. Capone J. Gene Anal Tech 1989 May-Jun; 6(3):62-6
Expression of eukaryotic genes in insect cultures. Fraser MJ. In Vitro Cell Dev Biol 1989 Mar;25(3 Pt 1):225-35 (102 ref.)
Engineering of an Oryctes baculovirus recombinant: insertion of the polyhedrin gene from the Autographa californica nuclear polyhedrosis virus. Crawford AM. J Gen Virol 1989 Apr;70 (Pt 4):1017-24
Characterization of the genetic organization of the HindIII M region of the multicapsid nuclear polyhedrosis virus of Orgyia pseudotsugata reveals major differences among baculoviruses. Gombart AF, et al. J Gen Virol 1989 Jul; 70 (Pt 7):1815-28
Expression of glycoprotein D of herpes simplex virus type 1 in a recombinant baculovirus: protective responses and T cell recognition of the recombinant-infected cell extracts. Krishna S, et al. J Gen Virol 1989 Jul;70 (Pt 7):1805-14
Nucleotide sequence of the polyhedrin gene of Bombyx mori cytoplasmic polyhedrosis virus A strain with nuclear localization of polyhedra. Mori H, et al. J Gen Virol 1989 Jul;70 (Pt 7):1885-8
Analysis of transcription initiation in the Panolis flammea nuclear polyhedrosis virus polyhedrin gene. Oakey R, et al. J Gen Virol 1989 Mar;70 (Pt 3):769-75
Studies on the control region of the p10 gene of the Autographa californica nuclear polyhedrosis virus. Qin JC, et al. J Gen Virol 1989 May;70 (Pt 5):1273-9
Co-expression of the hepatitis B surface and core antigens using baculovirus multiple expression vectors. Takehara K, et al. J Gen Virol 1988 Nov;69 (Pt 11):2763-77
Synthesis of immunogenic, but non-infectious, poliovirus particles in insect cells by a baculovirus expression vector. Urakawa T, et al. J Gen Virol 1989 Jun;70 (Pt 6):1453-63
Analysis of the promoter of the Autographa californica nuclear polyhedrosis virus p10 gene. Weyer U, et al. J Gen Virol 1989 Jan;70 (Pt 1):203-8
A cytopathological investigation of Autographa californica nuclear polyhedrosis virus p10 gene function using insertion/deletion mutants. Williams GV, et al. J Gen Virol 1989 Jan;70 (Pt 1):187-202
Sequence, transcription and translation of a late gene of the Autographa californica nuclear polyhedrosis virus encoding a 34.8K polypeptide. Wu JG, et al. J Gen Virol 1989 Sep;70 (Pt 9):2449-59
Nucleotide sequence of Lymantria dispar nuclear polyhedrosis virus polyhedrin gene. Chang MT, et al. J Invertebr Pathol 1989 Mar;53(2):241-6
Expression and purification of biologically active v-sis/platelet-derived growth factor B protein by using a baculovirus vector system. Giese N, et al. J Virol 1989 Jul;63(7):3080-6
Synthesis of biologically active influenza virus hemagglutinin in insect larvae. Kuroda K, et al. J Virol 1989 Apr; 63(4):1677-85
Expression and characterization of hepatitis B virus surface antigen polypeptides in insect cells with a baculovirus expression system. Lanford RE, et al. J Virol 1989 Apr; 63(4):1549-57
Molecular analysis of the transcriptional regulatory region of an early baculovirus gene. Nissen MS, et al. J Virol 1989 Feb;63(2):493-503
Expression of Sindbis virus 26S cDNA in Spodoptera frugiperda (Sf9) cells, using a baculovirus expression vector. Oker-Blom C, et al. J Virol 1989 Mar;63(3):1256-64
Identification, sequence, and transcriptional mapping of the major capsid protein gene of the baculovirus Autographa californica nuclear polyhedrosis virus. Thiem SM, et al. J Virol 1989 May;63(5):2008-18
Identification and sequence analysis of a gene encoding gp67, an abundant envelope glycoprotein of the baculovirus Autographa californica nuclear polyhedrosis virus. Whitford M, et al. J Virol 1989 Mar;63(3):1393-9
Synthesis of functional bovine opsin in insect cells under control of the baculovirus polyhedrin promoter. Janssen JJ, et al. Mol Biol Rep 1988;13(2):65-71
Glycosylation and secretion of human tissue plasminogen activator in recombinant baculovirus-infected insect cells. Jarvis DL, et al. Mol Cell Biol 1989 Jan;9(1):214-23
Viral proliferating cell nuclear antigen [letter] O'Reilly DR, et al. Nature 1989 Feb 16;337(6208):606
Expression of biologically active middle T antigen of polyoma virus from recombinant baculoviruses. Forstová J, et al. Nucleic Acids Res 1989 Feb 25;17(4):1427-43
Baculovirus expression of functional P210 BCR-ABL oncogene product. Pendergast AM, et al. Oncogene 1989 Jun;4(6):759-66
Complementation of recombinant baculoviruses by coinfection with wild-type virus facilitates production in insect larvae of antigenic proteins of hepatitis B virus and influenza virus. Price PM, et al. Proc Natl Acad Sci U S A 1989 Mar;86(5):1453-6
The development of multiple expression vectors for high level synthesis of eukaryotic proteins: expression of LCMV-N and AcNPV polyhedrin protein by a recombinant baculovirus. Emery VC, et al. Protein Eng 1987 Aug-Sep;1(4):359-66
Experiences with the first field release of genetically engineered viruses. Possee RD, et al. Schriftenr Ver Wasser Boden Lufthyg 1988;78:165-86
Location and nucleotide sequence of the 25K protein missing from baculovirus few polyhedra (FP) mutants. Beames B, et al. Virology 1989 Feb;168(2):344-53
Location, sequence, transcriptional mapping, and temporal expression of the gp64 envelope glycoprotein gene of the Orgyia pseudotsugata multicapsid nuclear polyhedrosis virus. Blissard GW, et al. Virology 1989 Jun;170(2):537-55
Nucleotide sequence, transcriptional mapping, and temporal expression of the gene encoding p39, a major structural protein of the multicapsid nuclear polyhedrosis virus of Orgyia pseudotsugata. Blissard GW, et al. Virology 1989 Feb;168(2):354-62
Transposon mutagenesis of baculoviruses: analysis of Trichoplusia ni transposon IFP2 insertions within the FP-locus of nuclear polyhedrosis viruses. Cary LC, et al. Virology 1989 Sep;172(1):156-69
Nucleotide sequence of the polyhedrin gene of Euxoa scandens cytoplasmic polyhedrosis virus (EsCPV). Fossiez F, et al. Virology 1989 Apr;169(2):462-5
A baculovirus polyhedral envelope-associated protein: genetic location, nucleotide sequence, and immunocytochemical characterization. Gombart AF, et al. Virology 1989 Mar;169(1):182-93
Insertion of the SfMNPV polyhedrin gene into an AcMNPV polyhedrin deletion mutant during viral infection. Gonzalez MA, et al. Virology 1989 May;170(1):160-75
Expression of simian virus 40 T antigen in insect cells using a baculovirus expression vector. Lanford RE. Virology 1988 Nov;167(1):72-81
High level expression of nonfused foreign genes with Autographa californica nuclear polyhedrosis virus expression vectors. Luckow VA, et al. Virology 1989 May; 170(1):31-9
Signals important for high-level expression of foreign genes in Autographa californica nuclear polyhedrosis virus expression vectors. Luckow VA, et al. Virology 1988 Nov; 167(1):56-71
Baculovirus polyhedrin promoter-directed expression of rubella virus envelope glycoproteins, E1 and E2, in Spodoptera frugiperda cells. Oker-Blom C, et al. Virology 1989 Sep;172(1):82-91
Regulation of host RNA levels during baculovirus infection. Ooi BG, et al. Virology 1988 Oct;166(2):515-23
The location, sequence, transcription, and regulation of a baculovirus DNA polymerase gene. Tomalski MD, et al. Virology 1988 Dec;167(2):591-600
Conservation of polyhedrin gene promoter function between Autographa californica and Mamestra brassicae nuclear polyhedrosis viruses. Cameron IR, et al. Virus Res 1989 Mar;12(3):183-99
[The Autographa californica nuclear polyhedrosis virus as a eukaryotic vector system] Doerfler W. Schriftenr Ver Wasser Boden Lufthyg 1988;78:187-92 (18 ref.) (Ger)
[Circular replicating baculovirus genome] Kok IP, et al. Tsitol Genet 1988 Sep-Oct;22(5):39-43 (Eng. Abstr.) (Rus)

GROWTH & DEVELOPMENT

Mass production and purification of Euproctis chrysorrhoea (L.) nuclear polyhedrosis virus. Kelly PM, et al. J Virol Methods 1989 Jul;25(1):93-9

IMMUNOLOGY

p39, a major baculovirus structural protein: immunocytochemical characterization and genetic location. Pearson MN, et al. Virology 1988 Dec;167(2):407-13

ISOLATION & PURIFICATION

[Identification of natural isolates of nuclear polyhedrosis virus from the black arches moth (Lymantria monacha L.)] Il'inykh AV, et al. Vopr Virusol 1989 Jan-Feb;34(1):84-9 (Eng. Abstr.) (Rus)

METABOLISM

Fatty acid acylation of the 67K envelope glycoprotein of a baculovirus: Autographa californica nuclear polyhedrosis virus. Roberts TE, et al. Virology 1989 Sep;172(1):377-81

PATHOGENICITY

Joint action of nuclear polyhedrosis virus and chemical insecticides against the black cutworm, Agrotis ipsilon (Hufn.). Salama HS, et al. Acta Biol Hung 1988; 39(1):99-107

PHYSIOLOGY

Insect virus: assays for toxic effects and transformation potential in mammalian cells. Hartig PC, et al. Appl Environ Microbiol 1989 Aug;55(8):1916-20
The pathway of infection of Autographa californica nuclear polyhedrosis virus in an insect host. Keddie BA, et al. Science 1989 Mar 31;243(4899):1728-30
Alteration of a lepidopteran peritrophic membrane by baculoviruses and enhancement of viral infectivity. Derksen AC, et al. Virology 1988 Nov;167(1):242-50

POLYHYDROXYETHYL METHACRYLATE see under **POLYMETHACRYLIC ACIDS**

POLYISOCYANATES see **POLYURETHANES**

POLYISOPRENYL PHOSPHATE MONOSACCHARIDES see under **POLYISOPRENYL PHOSPHATE SUGARS**

POLYISOPRENYL PHOSPHATE OLIGOSACCHARIDES see under **POLYISOPRENYL PHOSPHATE SUGARS**

POLYISOPRENYL PHOSPHATE SUGARS

ANALYSIS

Oligosaccharyl diphosphodolichols in the ceroid-lipofuscinoses. Pullarkat RK, et al. Am J Med Genet Suppl 1988;5:243-51

BIOSYNTHESIS

Control of dolichyl phosphoglucose formation in human liver microsomes. Kinetic and inhibition studies of nucleosides, nucleotides and analogues of UDPglucose. Matern H, et al. Biochim Biophys Acta 1989 Jul 17;1004(1):67-72
Glucosyltransferase activity in mitochondria. Biosynthesis of glucosyl-phosphoryl-dolichol in inner mitochondrial membranes. Ardail D, et al. Int J Biochem 1989;21(5):541-8
Amphomycin inhibits mannosylphosphoryldolichol synthesis by forming a complex with dolichylmonophosphate. Banerjee DK. J Biol Chem 1989 Feb 5;264(4):2024-8
Two mutants of Dictyostelium discoideum that lack a sulfated carbohydrate antigenic determinant synthesize a truncated lipid-linked precursor of N-linked oligosaccharides. Freeze HH, et al. J Biol Chem 1989 Apr 5;264(10):5653-9

METABOLISM

Accumulation of dolichol-linked oligosaccharides in ceroid-lipofuscinosis (Batten disease). Hall NA, et al. Am J Med Genet Suppl 1988;5:221-32
Biosynthesis, in calf pancreas microsomes, of three lipid-linked oligosaccharide diphosphates from a synthetic dolichyl diphosphate tetrasaccharide. Goussault Y, et al. Carbohydr Res 1988 Aug 15;179:381-92
Biosynthesis of linkage units for teichoic acids in gram-positive bacteria: distribution of related enzymes and their specificities for UDP-sugars and lipid-linked intermediates. Yokoyama K, et al. J Bacteriol 1989 Feb; 171(2):940-6

PHYSIOLOGY

The function of beta-N-acetyl-D-glucosaminyl monophosphorylundecaprenol in biosynthesis of lipoteichoic acids in a group of Bacillus strains. Shimada A, et al. Eur J Biochem 1988 Oct 1;176(3):559-65

POLYISOPRENYL PHOSPHATES

Effect of dolichyl monophosphate on the permeability properties of lipid membranes [published erratum appears in Biochim Biophys Acta 1989 Jan 30;978(2):349] Alonso-Romanowski S, et al. Biochim Biophys Acta 1988 Dec 22;946(2):389-96
Permeability studies of lipid vesicles from alkalophilic Bacillus firmus showing opposing effects of membrane isoprenoid and diacylglycerol fractions and suggesting a possible basis for obligate alkalophily. Clejan S, et al. Biochim Biophys Acta 1988 Dec 8;946(1):40-8

ANALYSIS

Oligosaccharyl diphosphodolichols in the ceroid-lipofuscinoses. Pullarkat RK, et al. Am J Med Genet Suppl 1988;5:243-51
Dolichol and dolichyl phosphate in the neuronal ceroid-lipofuscinoses and other diseases. Wolfe LS, et al. Am J Med Genet Suppl 1988;5:233-42
Determination of isopentenyl diphosphate and farnesyl diphosphate in tissue samples with a comment on secondary

regulation of polyisoprenoid biosynthesis. Bruenger E, et al. **Anal Biochem** 1988 Sep;173(2):321–7
Conditions for quantitation of dolichyl phosphate, dolichol, ubiquinone and cholesterol by HPLC. Elmberger PG, et al. **Biomed Chromatogr** 1989 Jan;3(1):20–8

BIOSYNTHESIS

Differential effect of inflammation and dexamethasone on dolichol and dolichol phosphate synthesis. Sarkar M, et al. **Biochem Cell Biol** 1988 Dec;66(12):1265–9
The biosynthesis of dehydrodolichyl phosphates by rat liver microsomes. Sagami H, et al. **Biochim Biophys Acta** 1989 Apr 3;1002(2):218–24

METABOLISM

Monoterpene biosynthesis: mechanism and stereochemistry of the enzymatic cyclization of geranyl pyrophosphate to (+)-cis- and (+)-trans-sabinene hydrate. Hallahan TW, et al. **Arch Biochem Biophys** 1989 Feb 15;269(1):313–26
Age-associated changes in dolichol and dolichyl phosphate metabolism in the kidneys and liver of mice. Crick DC, et al. **Biochim Biophys Acta** 1989 Aug 8;1004(2):180–6
Cellular distribution of cholesterogenesis-linked, phosphoisoprenylated proteins in proliferating cells. Sepp-Lorenzino L, et al. **FEBS Lett** 1989 Mar 13; 245(1–2):110–6
Function of alpha-D-glucosyl monophosphorylpolyprenol in biosynthesis of cell wall teichoic acids in Bacillus coagulans. Shimada A, et al. **J Bacteriol** 1989 May; 171(5):2835–41
Amphomycin inhibits mannosylphosphoryldolichol synthesis by forming a complex with dolichylmonophosphate. Banerjee DK. **J Biol Chem** 1989 Feb 5;264(4):2024–8
Biosynthesis of monoterpenes. Stereochemistry of the enzymatic cyclization of geranyl pyrophosphate to (-)-endo-fenchol. Croteau R, et al. **J Biol Chem** 1988 Oct 25;263(30):15449–53
Biosynthesis of monoterpenes. Stereochemistry of the enzymatic cyclizations of geranyl pyrophosphate to (+)-alpha-pinene and (-)-beta-pinene. Croteau R, et al. **J Biol Chem** 1989 Feb 5;264(4):2075–80

PHARMACOLOGY

Isoprenoid (phosphinylmethyl)phosphonates as inhibitors of squalene synthetase. Biller SA, et al. **J Med Chem** 1988 Oct;31(10):1869–71

POLYLYSINE

Study of the effect of poly(L-lysine) on phosphatidic acid and phosphatidylcholine/phosphatidic acid bilayers by raman spectroscopy. Laroche G, et al. **Biochemistry** 1988 Aug 23;27(17):6220–8
The induced circular dichroism of bilirubin complexed with the alpha-helix form of poly(L-lysine). Bouvier M, et al. **Biochim Biophys Acta** 1989 May 31;991(2):303–9
Reassessment of the electronic circular dichroism criteria for random coil conformations of poly(L-lysine) and the implications for protein folding and denaturation studies. Drake AF, et al. **Biophys Chem** 1988 Aug;31(1–2):143–6
Conformational change of poly(L-lysine) induced by lipid vesicles of dilauroylphosphatidic acid. Fukushima K, et al. **Biophys Chem** 1988 Jul 15;30(3):237–44
Effects of random copolymers of lysine on the thermotropic behaviour of dipalmitoylphosphatidylglycerol vesicles. A fluorescence anisotropy study. Houbre D, et al. **Biophys Chem** 1988 Jul 15;30(3):245–55
Immunocytochemical identification of meningeal leukemia and lymphoma: poly-L-lysine-coated slides permit multimarker analysis even with minute cerebrospinal fluid cell specimens. Kranz BR, et al. **Blood** 1989 May 15; 73(7):1942–50
The construction and characterization of a biologically active recombinant IL-2 containing a lysine-rich C-terminal extension [published erratum appears in J Immunol 1989 Mar 1;142(5):1781] Lin Y, et al. **J Immunol** 1988 Dec 1; 141(11):3847–51
Highly basic 30- and 32-kilodalton proteins associated with synapse formation on polylysine-coated beads in enriched neuronal cell cultures. Burry RW, et al. **J Neurochem** 1989 Feb;52(2):551–60
Improvement of in vivo stability of alginate-polylysine capsules. Sato T, et al. **Tohoku J Exp Med** 1988 Jul; 155(3):271–4

ANALOGS & DERIVATIVES

Formation and stability of helical poly(N epsilon,N epsilon,N epsilon-trimethyl-L-lysine) in sodium perchlorate solution. Bello J. **Biopolymers** 1988 Oct;27(10):1627–40
In vitro pH-dependent drug release from N4-(4-carboxybutyryl)-1-beta-D-arabinofuranosylcytosine and its conjugate with poly-L-lysine or decylenediamine-dextran T70. Pithayanukul P, et al. **Chem Pharm Bull (Tokyo)** 1989 Jun; 37(6):1587–90
Influence of a soluble anionic polymer on the electrophoresis of proteins. Shimura K, et al. **Electrophoresis** 1989 Apr; 10(4):238–42
Receptor-mediated gene delivery and expression in vivo. Wu GY, et al. **J Biol Chem** 1988 Oct 15;263(29):14621–4
Synthesis of taurine- and/or acetyl group-conjugated poly(D-Glu, D-Lys) derivatives and their effects on fibrinolysis. Soeda S, et al. **Thromb Res** 1988 Oct 15; 52(2):101–10

ANALYSIS

In vitro pH-dependent drug release from N4-(4-carboxybutyryl)-1-beta-D-arabinofuranosylcytosine and its conjugate with poly-L-lysine or decylenediamine-dextran T70. Pithayanukul P, et al. **Chem Pharm Bull (Tokyo)** 1989 Jun; 37(6):1587–90

BIOSYNTHESIS

Two-dimensional crystalline sheets of Bacillus stearothermophilus 50S ribosomal subunits containing a nascent polypeptide chain. Gewitz HS, et al. **Biochimie** 1988 May;70(5):645–8

CHEMICAL SYNTHESIS

Immobilization of prostaglandin PGF2 alpha on poly(vinyl alcohol). Llanos G, et al. **Biomaterials** 1988 Sep;9(5):429–34

PHARMACOLOGY

Polylysine induces a rapid Ca2+ release from sarcoplasmic reticulum vesicles by mediation of its binding to the foot protein. Cifuentes ME, et al. **Arch Biochem Biophys** 1989 Sep;273(2):554–61
Phase separation in bimolecular mixed lipid membranes induced by polylysine. Mittler-Neher S, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):124–9
Effect of poly-basic amino acids on the phosphorylation of various substrate proteins by cytosolic protein-tyrosine kinase from porcine spleen. Sakai K, et al. **Biochem Biophys Res Commun** 1989 Feb 15;158(3):1043–9
Polylysine and polyamine stimulation of the phosphatidylinositol kinases of amphibian oocyte membranes. Carrasco D, et al. **Biochem Int** 1988 Aug; 17(2):319–27
Enhancement of colloid uptake by tumor cell surface electrical charge modification. Anghileri LJ, et al. **Biochim Biophys Acta** 1989 Jul 10;982(2):307–8
Spatially periodic discrete contact regions in polylysine-induced erythrocyte-yeast adhesion. Hewison LA, et al. **Cell Biophys** 1988 Oct;13(2):151–7
Mechanisms of successive modes of erythrocyte stability and instability in the presence of various polymers. van Oss CJ, et al. **Cell Biophys** 1988 Oct;13(2):141–50
Insulin-stimulated phosphorylation of a 195K protein from muscle and liver in the presence of poly-L-lysine. Komori K, et al. **Endocrinology** 1989 Sep;125(3):1438–50
Antiviral activity of conjugates between poly(L-lysine) and synthetic oligodeoxyribonucleotides. Leonetti JP, et al. **Gene** 1988 Dec 10;72(1–2):323–32
Polylysine specifically activates the insulin-dependent insulin receptor protein kinase. Morrison BD, et al. **J Biol Chem** 1989 Jun 15;264(17):9994–10001
Tumor response to interferon inducer and radiation effect of serum interferon levels. Lvovsky EA, et al. **J Biol Regul Homeost Agents** 1988 Jan-Mar;2(1):1–6
The kinetics of interferon induction by poly ICLC in humans. Bever CT Jr, et al. **J Interferon Res** 1988 Aug;8(4):419–25
Neutralization of the anionic sites of cultured rat mesangial cells by poly-L-lysine. Pugliese F, et al. **Kidney Int** 1989 Mar;35(3):817–23
Endothelial functional responses and increased vascular permeability induced by polycations. Needham L, et al. **Lab Invest** 1988 Oct;59(4):538–48
Stimulation of enzymatic activity in filament preparations of casein kinase II by polylysine, melittin, and spermine. Mamrack MD. **Mol Cell Biochem** 1989 Feb 21;85(2):147–57
Stimulation of phosphorylation of lipocortin at threonine residues by epidermal growth factor (EGF) and the EGF receptor: addition of protein kinase P with polylysine inhibits this effect. Abdel-Ghany M, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6072–6

POLYMENORRHEA see MENSTRUATION DISORDERS

POLYMERS

see related
MACROMOLECULAR SYSTEMS

Conformations of hydrophobic polyelectrolytes. Sugai S, et al. **Adv Colloid Interface Sci** 1986 May;24(4):247–82 (133 ref.)
Biocompatible copolymer ureteral stent: maintenance of patency beyond 6 months. Rackson ME, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):783–4
Gelling of urea-linked gelatin with fresh frozen plasma. Murray F, et al. **Anaesthesia** 1989 May;44(5):392–3
Permselectivity and ion-exchange properties of Eastman-AQ polymers on glassy carbon electrodes. Wang J, et al. **Anal Chem** 1989 Jul 1;61(13):1397–400
Hemoglobin S polymerization. Fiber lengths, rheology, and pathogenesis. Briehl RW, et al. **Ann N Y Acad Sci** 1989; 565:295–307 (65 ref.)
Polyglactin 910 mesh for support of the donor defect of the double-pedicled rectus abdominis musculocutaneous flap. Hallock GG, et al. **Ann Plast Surg** 1989 Apr;22(4):358–64
Sugar alcohols as bulk sweeteners. Dills WL Jr. **Annu Rev Nutr** 1989;9:161–86 (180 ref.)
Chain molecules at high densities at interfaces. Dill KA, et al. **Annu Rev Phys Chem** 1988;39:425–61 (124 ref.)
The effect of new monofilament absorbable sutures on the healing of musculoaponeurotic incisions, gastrotomies, and colonic anastomoses. Foresman PA, et al. **Arch Surg** 1989 Jun;124(6):708–10
Selective removal of low-density lipoproteins from plasma by polyacrylate-coated Fractogel in vitro and in experimental extracorporeal perfusion. Thies K, et al. **Artif Organs** 1988 Aug;12(4):320–4
Permeability decay in CAVH hemofilters. Jenkins RD, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):590–3
Development of an anaphylatoxin scavenging device. Principle, surface molecular design, and selective adsorption. Matsuda T, et al. **ASAIO Trans** 1988 Jul-Sep; 34(3):556–8
Enhanced bacterial adhesion on surfaces pretreated with fibrinogen and fibronectin. Mohammad SF, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):573–7
Suppression mechanisms for thrombus formation on heparin-immobilized segmented polyurethane-ureas. Nojiri C, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):386–98
Response of complement and neutrophils to hydrophilized synthetic membranes. Ward RA, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):334–7
Substoichiometric concentrations of ATP-G-actin are required to anneal actin polymerized by calcium ions. Grazi E, et al. **Biochem Biophys Res Commun** 1989 Feb 28; 159(1):7–13
Minor lamin polypeptides from rat liver nuclei can be cross-linked into heteropolymers by disulfide bridges. Raymond Y, et al. **Biochem Cell Biol** 1988 Dec; 66(12):1295–302
Preparation and polymerization properties of monomeric ADP-actin. Gershman LC, et al. **Biochim Biophys Acta** 1989 Apr 6;995(2):109–15
Random tyrosine and glutamic acid-containing polymers are very powerful inhibitors of casein kinase-2. Meggio F, et al. **Biochim Biophys Acta** 1989 Jan 17;1010(1):128–30
Aqueous two-phase polymer partitioning of lipid vesicles of defined size and composition. Tilcock C, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):208–14
Ligninase-mediated phenoxy radical formation and polymerization unaffected by cellobiose:quinone oxidoreductase [published erratum appears in Biochimie 1988 Aug;70(8):1126] Odier E, et al. **Biochimie** 1988 Jun; 70(6):847–52
Hydrophilic polyphosphazenes as hydrogels: radiation cross-linking and hydrogel characteristics of poly[bis(methoxyethoxyethoxy)phosphazene] Allcock HR, et al. **Biomaterials** 1988 Nov;9(6):509–13
Modified Arrhenius equation for the frequency dependence of the transition temperatures of polymers. Clarke RL, et al. **Biomaterials** 1989 Jul;10(5):349–52
Biomembranes as models for polymer surfaces. V. Thrombelastographic studies of polymeric lipids and polyesters. Hall B, et al. **Biomaterials** 1989 May; 10(4):219–24
Flory interaction parameter chi for hydrophilic copolymers with water [published erratum appears in Biomaterials 1989 Mar;10(2):95] Mikos AG, et al. **Biomaterials** 1988 Sep; 9(5):419–23
Characterization of biomedical polymer-adherent macrophages: interleukin 1 generation and scanning electron microscopy studies. Miller KM, et al. **Biomaterials** 1989 Apr;10(3):187–96
Cross-linking and ring opening during polymerization of heterocyclic methacrylates and acrylates. Patel MP, et al. **Biomaterials** 1989 May;10(4):277–80
Torsional moment to failure for carbon fibre polysulphone expandable rivets as compared with stainless steel screws for carbon fibre-reinforced epoxy fracture plate fixation. Sell PJ, et al. **Biomaterials** 1989 Apr;10(3):182–4
The theory and design of piezoelectric/pyroelectric polymer film sensors for biomedical engineering applications. Brown LF. **Biomed Sci Instrum** 1989;25:119–26
Mechanisms of successive modes of erythrocyte stability and instability in the presence of various polymers. van Oss CJ, et al. **Cell Biophys** 1988 Oct;13(2):141–50
Actin polymerization and pseudopod extension during amoeboid chemotaxis. Condeelis J, et al. **Cell Motil Cytoskeleton** 1988;10(1–2):77–90
Opti-Free chemical disinfectant: a safety study with various soft contact lenses. Gibbs DE, et al. **CLAO J** 1989 Jan-Mar; 15(1):57–60
Strength retention of chromic gut and monofilament synthetic absorbable suture materials in joint tissues. Walton M. **Clin Orthop** 1989 May;(242):303–10
The migration of bacteria through gels in the presence of IUCD monofilament tails. Wilkins KM, et al. **Contraception** 1989 Feb;39(2):205–16
A simple method for preparation of molecular weight marker proteins for sodium dodecyl sulfate-polyacrylamide gel electrophoresis by photopolymerizations of hemoglobin subunits. Sato H, et al. **Electrophoresis** 1988 Jul;9(7):352–3
Periodic electric field as a biopolymer conformation switch: a possible mechanism. Vidybida AK. **Eur Biophys J** 1989; 16(6):357–61
Controlled release of dopamine from a polymeric brain implant: in vitro characterization. Freese A, et al. **Exp Neurol** 1989 Mar;103(3):234–8

Spontaneous polymerization of the antibiotic peptide magainin 2. Urrutia R, et al. **FEBS Lett** 1989 Apr 10; 247(1):17–21

Formation of radicals by mechanical processes. Symons MC. **Free Radic Res Commun** 1988;5(3):131–9 (50 ref.)

Role of actin polymerization in monocyte phagocytosis of yeast cells effect of cytochalasin B. Athlin L, et al. **Haematologia (Budap)** 1988;21(3):151–8

The use of antibodies and polymers as carriers of cytotoxic drugs in the treatment of cancer. Arnon R, et al. **Horiz Biochem Biophys** 1989;9:33–56 (68 ref.)

An evaluation of the Semmes–Weinstein 6.10 monofilament as compared with 6 nylon in leprosy patients. Dorairaj A, et al. **Indian J Lepr** 1988 Jul;60(3):413–7

Technical and clinical evaluation of a new synthetic low flux polysulphon membrane for hemodialysis. Ronco C, et al. **Int J Artif Organs** 1989 Jul;12(7):450–60

Use of fast absorption material for skin closure in young children. Canarelli JP, et al. **Int Surg** 1988 Jul–Sep; 73(3):151–2

Present uses of polymers in dentistry—an introduction. Baratz RS. **J Biomater Appl** 1987 Jan;1(3):316–26 (13 ref.)

Aliphatic polyesters and cellulose-based polymers for controlled release applications. Chang RK, et al. **J Biomater Appl** 1988 Jul;3(1):80–101 (60 ref.)

UDEL polysulfone for medical applications. Dickinson BL. **J Biomater Appl** 1989 Apr;3(4):605–34

Mechanisms and clinical relevance of bacterial adhesion to polymers. Jansen B, et al. **J Biomater Appl** 1988 Apr; 2(4):520–43 (114 ref.)

In vitro release characteristics of hard shell capsule products coated with aqueous- and organic-based enteric polymers. Murthy KS, et al. **J Biomater Appl** 1988 Jul;3(1):52–79

New haemocompatible polymers assessed by thrombelastography. Bird RL, et al. **J Biomed Eng** 1989 May;11(3):231–4

Biodegradable PEO/PLA block copolymers. Cohn D, et al. **J Biomed Mater Res** 1988 Nov;22(11):993–1009

Hydrogels for buccal drug delivery: properties relevant for muco-adhesion. de Vries ME, et al. **J Biomed Mater Res** 1988 Nov;22(11):1023–32

Ultrathin coating of plasma polymer of methane applied on the surface of silicone contact lenses. Ho CP, et al. **J Biomed Mater Res** 1988 Oct;22(10):919–37

Bioerodible polyanhydrides as drug-carrier matrices. I: Characterization, degradation, and release characteristics. Leong KW, et al. **J Biomed Mater Res** 1985 Oct; 19(8):941–55

Enhancement of the kinetics of the aeration of ethylene oxide sterilized polymers using microwave radiation. Matthews IP, et al. **J Biomed Mater Res** 1989 Feb;23(2):143–56

Generation of IL-1-like activity in response to biomedical polymer implants: a comparison of in vitro and in vivo models. Miller KM, et al. **J Biomed Mater Res** 1989 Sep; 23(9):1007–26

Macrophage phagocytosis of biodegradable microspheres composed of L-lactic acid/glycolic acid homo- and copolymers. Tabata Y, et al. **J Biomed Mater Res** 1988 Oct;22(10):837–58

Brain biocompatibility of a biodegradable, controlled-release polymer in rats. Tamargo RJ, et al. **J Biomed Mater Res** 1989 Feb;23(2):253–66

Compressive properties of polymer coated synthetic hydroxyapatite for bone grafting. Tencer AF, et al. **J Biomed Mater Res** 1985 Oct;19(8):957–69

Effect of particle size on the in vitro and in vivo degradation rates of poly(DL-lactide-co-glycolide) microcapsules. Visscher GE, et al. **J Biomed Mater Res** 1988 Aug; 22(8):733–46

Tendon cell outgrowth rates and morphology associated with kevlar-49. Zimmerman M, et al. **J Biomed Mater Res** 1988 Dec;22(3 Suppl):339–50

Polymer support synthesis. XV. Behaviour of non-porous surface-coated silica gel microbeads in oligonucleotide synthesis. Seliger H, et al. **J Chromatogr** 1989 Aug 4; 476:49–57

Electron diffraction of synthetic polymers: the model compound approach to polymer structure. Brisse F. **J Electron Microsc Tech** 1989 Apr;11(4):272–9

The use of a biocompatible orthopaedic polymer in the treatment of loose total hip prostheses. Schmitt-Fournier JA, et al. **J Int Med Res** 1989 May–Jun;17(3):254–61

Polylactic acid microspheres containing quinidine base and quinidine sulphate prepared by the solvent evaporation method. III. Morphology of the microspheres during dissolution studies. Bodmeier R, et al. **J Microencapsul** 1988 Oct–Dec;5(4):325–30

Eudragit RS and RL (acrylic resins) microcapsules as pH insensitive and sustained release preparations of ketoprofen. Goto S, et al. **J Microencapsul** 1986 Oct–Dec;3(4):293–304

A method for the preparation of polylactic acid microcapsules of controlled particle size and drug loading. Leelarasamee N, et al. **J Microencapsul** 1988 Apr–Jun; 5(2):147–57

Effect of surface active agents on drug release from polylactic acid–hydrocortisone microcapsules. Leelarasamee N, et al. **J Microencapsul** 1988 Jan–Mar;5(1):37–46

Preparation and release kinetics of hydrochlorothiazide from butyl half-ester of PVM/MA microcapsules. Mortada SA, et al. **J Microencapsul** 1988 Jul–Sep;5(3):203–17

A new method of preparing monocored water-loaded microcapsules using interfacial polymer deposition process. Uno K, et al. **J Microencapsul** 1984 Jan–Mar;1(1):3–8

Control release of prostaglandin E2 from polylactic acid microcapsules, microparticles and modified microparticles. Zhou MX, et al. **J Microencapsul** 1988 Jan–Mar;5(1):27–36

Vicryl (polyglactin 910) mesh as a dural substitute in the presence of pia arachnoid injury. Nussbaum CE, et al. **J Neurosurg** 1989 Jul;71(1):124–7

The use of human fibrin glue and of the suture in polyglactin 910 in extraintracranial by-pass. Caneschi S, et al. **J Neurosurg Sci** 1988 Apr–Jun;32(2):65–8

Solute adsorption and concentration-dependent permeability in certain polymer films. Okor RS. **J Pharm Pharmacol** 1989 Jul;41(7):483–4

Adverse effects of anesthetic agents on polycarbonate plastic oxygenators [letter] Walls JT, et al. **J Thorac Cardiovasc Surg** 1988 Oct;96(4):667–8

Conservative treatment of renal allograft rupture with polyglactin 910 mesh and gelatin resorcin formaldehyde glue. Chopin DK, et al. **J Urol** 1989 Aug;142(2):363–5

Markedly increased clearance of vancomycin during hemodialysis using polysulfone dialyzers. Lanese DM, et al. **Kidney Int** 1989 Jun;35(6):1409–12

Rapid removal of DFO-chelated aluminum during hemodialysis using polysulfone dialyzers. Molitoris BA, et al. **Kidney Int** 1988 Jul;34(1):98–101

Gel artificial cells as enzyme carrier. Arca E, et al. **Life Support Syst** 1983;1 Suppl 1:262–5

Preparation and properties of surface grafted materials with heparin complexing polymers. Tempesti F, et al. **Life Support Syst** 1983;1 Suppl 1:239–42

Nuclear magnetic relaxation studies of the compartmentalized water in crosslinked polymer gels. Murase N, et al. **Magn Reson Med** 1989 Jan;9(1):1–7

Materials science. Less thick than a brick [news] Calvert P. **Nature** 1989 Jul 13;340(6229):100

Histopathology and clinical behavior of polysulfone intracorneal implants in the baboon model. Polysulfone lens implants. Deg JK, et al. **Ophthalmology** 1988 Apr; 95(4):506–15

The polymerization of amino acid adenylates on sodium–montmorillonite with preadsorbed polypeptides. Paecht-Horowitz M, et al. **Orig Life Evol Biosph** 1988; 18(4):359–87

Comparison of disposable diapers with fluff absorbent and fluff plus absorbent polymers: effects on skin hydration, skin pH, and diaper dermatitis. Davis JA, et al. **Pediatr Dermatol** 1989 Jun;6(2):102–8

International conference: Polymers in Medicine '88. Warsaw, October 3–7, 1988. Abstracts. **Polim Med** 1988;18(3):93–193

In vitro considerations in the production of dimensionally accurate earmoulds. I. The ear impression. Nolan M, et al. **Scand Audiol** 1989;18(1):35–41

Imaging crystals, polymers, and processes in water with the atomic force microscope. Drake B, et al. **Science** 1989 Mar 24;243(4898):1586–9

Polymer synthesis and organotransition metal chemistry. Grubbs RH, et al. **Science** 1989 Feb 17;243(4893):907–15 (61 ref.)

Oxygen radicals in influenza-induced pathogenesis and treatment with pyran polymer-conjugated SOD. Oda T, et al. **Science** 1989 May 26;244(4907):974–6

Technique and complications of reconstruction of the pelvic floor with polyglactin mesh. Sener SF, et al. **Surg Gynecol Obstet** 1989 Jun;168(6):475–80

The in-vitro assessment of a collagen/vicryl (polyglactin) composite film together with candidate suture materials for potential use in urinary tract surgery. III. Adherence of bacteria to the material surface. Gemmell CG, et al. **Urol Res** 1988;16(5):381–4

A novel method for removal of human immunodeficiency virus: filtration with porous polymeric membranes. Hamamoto Y, et al. **Vox Sang** 1989;56(4):230–6

[Cystopiasty using a resorbable polyglactin prosthesis covered by a free peritoneal flap] Youssef M, et al. **Ann Urol (Paris)** 1988;22(4):263–7 (Eng. Abstr.) **(Fre)**

[The use of BOP (Biocompatible Orthopedic Polymer) as an interface in total hip prosthesis] Schmitt-Fournier JA, et al. **Rev Chir Orthop** 1988;74 Suppl 2:218–20 **(Fre)**

[Polyglactin 910 implants in muscle revision surgery for the reconstruction of physiologic limits in Tenon's capsule] Schmidt T, et al. **Klin Monatsbl Augenheilkd** 1988 Sep; 193(3):271–4 (Eng. Abstr.) **(Ger)**

[Electron microscopy of extracellular polymeric substances in activated sludge] Bleich U, et al. **Zentralbl Hyg Umweltmed** 1989 May;188(1–2):66–83 (Eng. Abstr.) **(Ger)**

[Polydioxanone and polyglactin 910 in gynecological microsurgery. Experimental study] Formelli G, et al. **Boll Soc Ital Biol Sper** 1988 Nov;64(11):1007–11 (Eng. Abstr.) **(Ita)**

[Clinical evaluation of biliary endoprostheses. A comparison of endoprostheses made of teflon and percuflex] Rossi P, et al. **Radiol Med (Torino)** 1988 Oct;76(4):303–7 (Eng. Abstr.) **(Ita)**

[Synthesis of (2-acrylamidoethyl)-3-O-(3,6-dideoxy-alpha-D-xylo-hexopyranosyl)-alpha and beta-rhamnopyranosides for preparation of polyacrylamide copolymers with the specificity of O:8 factor of Salmonella] Cherniak AIa, et al. **Bioorg Khim** 1989 Jan;15(1):111–22 (Eng. Abstr.) **(Rus)**

[Clinical immunosorbents on a basis of polymeric matrices] Chuchalin AG, et al. **Bioorg Khim** 1988 Nov;14(11):1524–9 (Eng. Abstr.) **(Rus)**

[New types of polymerizable phosphatidylcholines, synthesis and properties] Molotkovskiĭ IuG, et al. **Bioorg Khim** 1988 Nov;14(11):1557–64 (Eng. Abstr.) **(Rus)**

[Construction of conjugates of natural and synthetic macromolecules using inversed micelles as microreactors] Kabanov AV, et al. **Dokl Akad Nauk SSSR** 1988; 302(3):735–8 **(Rus)**

[Molecular organization of copolymers of fibrinogen–fibrin fragment] Rozenfel'd MA, et al. **Mol Biol (Mosk)** 1988 Jul–Aug;22(4):923–33 (Eng. Abstr.) **(Rus)**

[Comparative evaluation of the regeneration of intra-articular fractures in experimental osteosynthesis with polymer screws] Dudko GE. **Ortop Travmatol Protez** 1988 Oct; (10):51–2 **(Rus)**

[Polymer coating of intraosseous fixation devices (experimental research)] Kliuchevskiĭ VV, et al. **Ortop Travmatol Protez** 1988 May;(5):31–4 (Eng. Abstr.) **(Rus)**

[Arthroplasty of the hip joint using biocompatible self-dissolving polymers (an experimental study)] Kuliev AM, et al. **Ortop Travmatol Protez** 1989 Mar;(3):35–8 (Eng. Abstr.) **(Rus)**

[Polymer fibers in surgery. III] Privalova LG, et al. **Polim Med** 1988;18(1–2):67–89 (Eng. Abstr.) **(Rus)**

[A study of native streptokinase and its polymeric derivative by means of small angle x-ray scattering] Illarionova VE, et al. **Prikl Biokhim Mikrobiol** 1989 Jan–Feb;25(1):22–8 (Eng. Abstr.) **(Rus)**

[Effect of the structure of polymeric materials on the properties of immobilized enzymes] Kil'deeva NR, et al. **Prikl Biokhim Mikrobiol** 1988 May–Jun;24(3):375–9 (Eng. Abstr.) **(Rus)**

[Implanted devices for the treatment of urinary incontinence] Erokhin AP, et al. **Urol Nefrol (Mosk)** 1988 May–Jun; (3):66–71 (71 ref.) **(Rus)**

[Use of polymer-based drugs in the treatment of acute and chronic maxillary sinusitis] Piskunov SZ, et al. **Vestn Otorinolaringol** 1989 May–Jun;(3):33–5 (Eng. Abstr.) **(Rus)**

[A method of fluorescence immunoassay with temporal resolution and the use of europium label and polymeric complexon] Krylova SM, et al. **Vopr Med Khim** 1988 Sep–Oct;34(5):116–21 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Transcatheter arterial chemoembolization therapy for hepatocellular carcinoma using polylactic acid microspheres containing aclarubicin hydrochloride. Ichihara T, et al. **Cancer Res** 1989 Aug 1;49(15):4357–62

Materials and biological aspects of synthetic polymers in controlled drug release systems: problems and challenges. Bruck SD, et al. **Crit Rev Ther Drug Carrier Syst** 1988; 5(3):171–87 (70 ref.)

Oviposition pattern of Japanese quail following hypothalamic lesioning with super-absorbent polymer. Ohta M, et al. **Gen Comp Endocrinol** 1988 Dec;72(3):424–30

Effects of polycations on pulmonary vascular permeability in conscious sheep. Toyofuku T, et al. **J Clin Invest** 1989 Jun;83(6):2063–9

[Functional exclusion of the exocrine pancreas in pancreatic transplants: use of polymers in animal experiments] Dominici C, et al. **Minerva Chir** 1988 Jun 30;43(12):1013–8 (Eng. Abstr.) **(Ita)**

[Remote results of sclera-fortifying injections in progressive myopia] Avetisov ES, et al. **Vestn Oftalmol** 1988 Jul–Aug; 104(4):59–61 (Eng. Abstr.) **(Rus)**

[Our experience with the use of sclera-strengthening injections in the prevention of progressive myopia] Golychev VN, et al. **Vestn Oftalmol** 1989 May–Jun; 105(3):26–7 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Acute effect upon pulmonary function of low level exposure to phenol-formaldehyde-resin-coated wood [letter] Herrick RF. **Am Ind Hyg Assoc J** 1988 Dec;49(12):A780

Acute effect upon pulmonary function of low level exposure to phenol-formaldehyde-resin-coated wood. Imbus HR, et al. **Am Ind Hyg Assoc J** 1988 Sep;49(9):434–7

Granulocyte-related bioincompatibility of hemodialysis: inhibition of oxidative metabolism, degranulation reaction, enzyme release and leukocyte sequestration in the lung. Kolb G, et al. **Int J Artif Organs** 1989 May;12(5):294–8

Suture toxicity [letter; comment] Salamon SM. **Ophthalmology** 1989 Jun;96(6):927–8. **Comment on:** Ophthalmology 1988 Nov;95(11):1509–14

[Polyols as sweetening agents; swallowing everything?] van Gelderen CE, et al. **Ned Tijdschr Geneeskd** 1989 Jul 1; 133(26):1300–2 **(Dut)**

[Effect of polymer materials on the reproductive function of men] Bokov AN, et al. **Gig Sanit** 1988 Oct;(10):22–4 (Eng. Abstr.) **(Rus)**

ANALYSIS

Application of tryptamine as a derivatizing agent for airborne isocyanate determination. Part 2. Dual function of tryptamine for calibration and derivatisation of poly[methylene(polyphenyl isocyanate)] for quantification by high-performance liquid chromatography. Wu WS, et al. **Analyst** 1988 Aug;113(8):1209–12

Fast atom bombardment mass spectrometric strategies for

characterizing carbohydrate-containing biopolymers. Dell A, et al. **Biomed Environ Mass Spectrom** 1988 Oct; 16(1-12):19-24

Application of gel permeation chromatograph-low angle laser light scattering system to kinetic study on degradation of bioerodible polymers. Yoshioka S, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec;36(12):4951-7

Field-flow fractionation of macromolecules. Giddings JC. **J Chromatogr** 1989 May 26;470(2):327-35

Distribution of drugs in polymers loaded by swelling. Forni F, et al. **J Pharm Sci** 1989 Jan;78(1):25-7

Quantitative Chemical Characterization of Polymer Surfaces using E.S.C.A.—methodological aspects. Lautier A, et al. **Life Support Syst** 1983;1 Suppl 1:266-70

Drug/polymer matrix swelling and dissolution. Harland RS, et al. **Pharm Res** 1988 Aug;5(8):488-94

[Preparation of oral sustained-action preparations with a base of biologically degradable polymers. 2. Preparation of matrix tablets with a base of polylactic acid] Mank R, et al. **Pharmazie** 1989 May;44(5):328-30 (Eng. Abstr.) **(Ger)**

[Quantitative analysis of phenol in water, model media simulating food products and in the air during sanitary and chemical examination of polymer materials] Kataeva SE, et al. **Gig Sanit** 1988 Sep;(9):37-8 **(Rus)**

[A method of predicting air pollution in coal mines using new synthetic materials] Sukhanov VV, et al. **Gig Tr Prof Zabol** 1988 Aug;(8):16-9 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Synthesis of poly-3-hydroxyalkanoates is a common feature of fluorescent pseudomonads. Huisman GW, et al. **Appl Environ Microbiol** 1989 Aug;55(8):1949-54

BLOOD

Interaction of microspheres with blood constituents. III. Macrophage phagocytosis of various types of polymeric drug carriers. Kanke M, et al. **J Parenter Sci Technol** 1988 Sep-Oct;42(5):157-65

CEREBROSPINAL FLUID

Polyol content of cerebrospinal fluid in brain-tumor patients. Watanabe S, et al. **J Neurosurg** 1989 Feb;70(2):183-9

CHEMICAL SYNTHESIS

Soluble copolymers of yellow jacket, yellow hornet and white faced hornet with human albumin for venom immunotherapy. Boxer MB, et al. **Allergy Proc** 1989 Mar-Apr;10(2):127-31

Molecular imprinting of amino acid derivatives at low temperature (0 degrees C) using photolytic homolysis of azobisnitriles. O'Shannessy DJ, et al. **Anal Biochem** 1989 Feb 15;177(1):144-9

Preparation of polylactic acid-polylipoic acid nanospheres as drug targeting carriers. Arai K, et al. **Drug Des Deliv** 1987 Dec;2(2):109-20

Biologically active polymer supports based on cellulosic derivatives: synthesis and kinetic study. Reddy BS. **Indian J Biochem Biophys** 1989 Apr;26(2):80-3

Cross-linked DTPA polysaccharides for magnetic resonance imaging. Synthesis and relaxation properties. Gibby WA, et al. **Invest Radiol** 1989 Apr;24(4):302-9

Synthesis and chemiluminescence of copolymers of 5-amino-8-vinyl-phthalazine-1,4(2H,3H)-dione with methyl methacrylate or styrene, and of alpha, omega-bis[5-amino-phthalazine-1,4(2H,3H)-dion-]8-yl alkanes [= alpha, omega-bis(6-luminyl) alkanes]: investigations on an intramolecular 'distance effect'. Gundermann KD, et al. **J Biolumin Chemilumin** 1987 Sep; 1(4):201-13

Oligomers with pendant isocyanate groups as tissue adhesives. I. Synthesis and characterization. Brauer GM, et al. **J Biomed Mater Res** 1989 Mar;23(3):295-309

Heparinizable segmented polyurethanes containing poly-amidoamine blocks. Tanzi MC, et al. **J Biomed Mater Res** 1989 Aug;23(8):863-81

Microencapsulation of emulsified oil droplets by in-situ vinyl polymerization. Berg J, et al. **J Microencapsul** 1989 Jul-Sep;6(3):327-37

Preparation and characterization of lactic/glycolic acid polymers and copolymers. Deasy PB, et al. **J Microencapsul** 1989 Jul-Sep;6(3):369-78

[Preparation of peroral sustained release drug forms on a base of biodegradable polymers. 1. Preparation and characterization of polylactic acid] Mank R, et al. **Pharmazie** 1989 Apr;44(4):276-9 (Eng. Abstr.) **(Ger)**

DIAGNOSTIC USE

Technetium-99m haemaccel: a new lymphoscintigraphic agent. Sadek S, et al. **Am J Physiol Imaging** 1989;4(2):46-9

Staphylococcus aureus phagocytosis. A new cytofluorometric method using FITC and paraformaldehyde. Cantinieaux B, et al. **J Immunol Methods** 1989 Jul 26;121(2):203-8

IMMUNOLOGY

Patch testing with a mixture of 2 phenol-formaldehyde resins. Bruze M. **Contact Dermatitis** 1988 Aug;19(2):116-9

ISOLATION & PURIFICATION

Chromatographic analysis of polyphenols of some Iberian Thymus. Adzet T, et al. **J Ethnopharmacol** 1988 Dec; 24(2-3):147-54

METABOLISM

Thrombin anion-binding exosite interactions with heparin and various polyanions. Fenton JW 2d, et al. **Ann N Y Acad Sci** 1989;556:158-65 (44 ref.)

The glucose polymer of PC12 cells is susceptible to trypsinization. Rasilo ML, et al. **Biochem Biophys Res Commun** 1989 Feb 28;159(1):1-6

Biodegradable PELA block copolymers: in vitro degradation and tissue reaction. Younes H, et al. **Biomater Artif Cells Artif Organs** 1988;16(4):705-19

Alterations in rat bone composition related to polyol supplementation of the diet. Knuuttila M, et al. **Bone Miner** 1989 Apr;6(1):25-31

The influence of substoichiometric concentrations of myosin subfragment 1 on the state of aggregation of actin under depolymerizing conditions. Grazi E, et al. **Eur J Biochem** 1989 Jun 15;182(2):277-82

Polyol pathway activity in streptozotocin-diabetic rat lens. Cheng HM, et al. **Exp Eye Res** 1989 Jul;49(1):87-92

Polyol and vacuole formation in cultured canine lens epithelial cells. Nagata M, et al. **Exp Eye Res** 1989 May; 48(5):667-77

Stable and metastable cytoskeletal polymers carried by slow axonal transport. Filliatreau G, et al. **J Neurosci** 1988 Jul; 8(7):2227-33

Traditional herbal medicines—the role of polyphenols. Haslam E, et al. **Planta Med** 1989 Feb;55(1):1-8 (10 ref.)

Biocompatibility of a biodegradable, controlled-release polymer in the rabbit brain. Brem H, et al. **Sel Cancer Ther** 1989;5(2):55-65

The regulation of protein polymerization. Frieden C. **Trends Biochem Sci** 1989 Jul;14(7):283-6 (28 ref.)

[Interaction of amino acyl-tRNA-synthetases from the rabbit liver with RNA and polyanions] Volfson AD, et al. **Biokhimiia** 1988 May;53(5):799-805 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Preparation of polymer nano- and microspheres by vinyl polymerization techniques. Arshady R. **J Microencapsul** 1988 Apr-Jun;5(2):101-14 (49 ref.)

Cellular aspects of retention and transport of inhaled soluble and insoluble actinide compounds in the rat lung. Müller HL, et al. **Sci Total Environ** 1989 Jul 15;83(3):239-51

[In vitro analysis of diffusion through radicular tissue of paraformaldehyde contained in a paste commonly used in endodontics] Giuliana G. **Minerva Stomatol** 1989 May; 38(5):497-9 (Eng. Abstr.) **(Ita)**

[Heparin and its antagonist—a quaternary ammonium salt of oligomer-25-conidine: distribution in subcellular organelles, effect on DNA synthesis in the regenerating rat liver] Khatsernova BIa, et al. **Vopr Med Khim** 1989 May-Jun;35(3):83-7 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Supramolecular surfactants: amphiphilic polymers designed to disrupt lipid membranes. Regen SL, et al. **Biochem Biophys Res Commun** 1989 Mar 15;159(2):566-71

Inhibitory effect of polycations on phosphorylation of glycogen synthase by glycogen synthase kinase 3. Hegazy MG, et al. **Biochim Biophys Acta** 1989 May 10; 1011(2-3):198-204

Mineral induction by immobilized polyanionic proteins. Linde A, et al. **Calcif Tissue Int** 1989 Apr;44(4):286-95

Inhibition of the skin tumorigenicity of (+/-)-7 beta,8 alpha-dihydroxy-9 alpha,10 alpha-epoxy-7,8,9,10-tetrahydrobenzo[a]pyrene by tannic acid, green tea polyphenols and quercetin in Sencar mice. Khan WA, et al. **Cancer Lett** 1988 Sep-Oct;42(1-2):7-12

Protection against polycyclic aromatic hydrocarbon-induced skin tumor initiation in mice by green tea polyphenols. Wang ZY, et al. **Carcinogenesis** 1989 Feb;10(2):411-5

Studies on the release of cell-associated interleukin 1 by paraformaldehyde-treated murine macrophages. Streck H, et al. **Eur J Immunol** 1988 Oct;18(10):1609-13

Regulation of human tyrosine hydroxylase activity. Effects of cyclic AMP-dependent protein kinase, calmodulin-dependent protein kinase II and polyanion. Okuno S, et al. **FEBS Lett** 1989 Aug 14;253(1-2):52-4

Polyanions inhibit murine macrophage Fc receptor mediated ADCC and binding. Mocharla R, et al. **Immunol Invest** 1989 Jun;18(5):689-96

Comparison of the activity of polyanions and polycations on the classical and alternative pathways of complement. Weiler JM, et al. **Immunopharmacology** 1989 Mar-Apr; 17(2):65-72

Modulation of invasiveness and catalytic activity of Bordetella pertussis adenylate cyclase by polycations. Raptis A, et al. **Infect Immun** 1989 Apr;57(4):1066-71

Nonionic block polymer surfactants modulate the humoral immune response against Streptococcus pneumoniae-derived hexasaccharide-protein conjugates. Zigterman GJ, et al. **Infect Immun** 1989 Sep;57(9):2712-8

Inhibition of the beta-adrenergic receptor kinase by polyanions. Benovic JL, et al. **J Biol Chem** 1989 Apr 25; 264(12):6707-10

Evaluation of antithrombogenic thermodilution catheter. Nagaoka S, et al. **J Biomater Appl** 1989 Jul;4(1):22-32

Development of Anthron, an antithrombogenic coating for angiographic catheters. Nagaoka S, et al. **J Biomater Appl** 1989 Jul;4(1):3-21

Influence of coacervation-inducing agents and cooling rates on the preparation and in vitro release of bleomycin hydrochloride microcapsules. Lin SY. **J Microencapsul** 1985 Apr-Jun;2(2):91-101

In vitro release behaviour of theophylline from PIB-induced ethylcellulose microcapsules interpreted by simple mathematical functions. Lin SY. **J Microencapsul** 1987 Jul-Sep;4(3):213-6

Effects of pyran copolymer on host resistance of mice to Plasmodium yoelii. Krishna VR, et al. **J Parasitol** 1989 Jun;75(3):405-10

Utility of polycation-treated filters for the assay of receptors for VIP. Huang M, et al. **J Recept Res** 1988;8(6):831-8

Species-related differences of blood coagulation on polymer surfaces, evaluated by means of thrombelastography. Schulze T, et al. **Life Support Syst** 1983;1 Suppl 1:231-4

A new in-vitro thrombogenicity test: resonance-thrombography in comparison with material-thrombelastography. Sprengel H, et al. **Life Support Syst** 1983;1 Suppl 1:235-8

Antimutagenic activity of green tea polyphenols. Wang ZY, et al. **Mutat Res** 1989 Jul;223(3):273-85

Studies of the cation binding properties of an oligomeric derivative of prostaglandin B1. Kometani T, et al. **Prostaglandins Leukot Essent Fatty Acids** 1989 Jul; 37(1):37-43

Effect of diltiazem and a prostaglandin derivative (PGBx) on platelet function during long-term storage. Smith DJ, et al. **Transfusion** 1989 Feb;29(2):153-8

[The antiviral action of a polyphenol complex isolated from the medicinal plant Geranium sanguineum L. VI. Reproduction of the influenza virus pretreated with the polyphenol complex] Serkedzhieva Iu, et al. **Acta Microbiol Bulg** 1988;22:16-21 (Eng. Abstr.) **(Bul)**

[The effect of subtherapeutic quantities of native gelatin and Haemaccel 35 (polygeline) on the fibronectin level and wound healing. An experimental animal study in rats with burn wounds] Nagelschmidt M, et al. **Anaesthesist** 1989 Aug;38(8):413-7 (Eng. Abstr.) **(Ger)**

[A theoretical model of the mechanism of DNA compactization by polycations] Sivolob AV, et al. **Biofizika** 1989 Jan-Feb;34(1):28-33 (Eng. Abstr.) **(Rus)**

[Effect on the systemic hemodynamics of polymers that decrease hydrodynamic resistance] Gannushkina IV, et al. **Biull Eksp Biol Med** 1988 Nov;106(11):533-6 (Eng. Abstr.) **(Rus)**

[Rheological properties of preserved blood stored in polymer containers and glass vials] Likhovetskaia ZM, et al. **Gematol Transfuziol** 1989 Mar;34(3):48-51 **(Rus)**

[Interferonogenic activity of low-molecular compounds of plant origin] Ershov FI, et al. **Vopr Virusol** 1988 Nov-Dec; 33(6):750-2 **(Rus)**

[Effects of treatment with polyvinylpyrrolidone on nutritional quality of sorghum] de Mucciarelli SI, et al. **Arch Latinoam Nutr** 1987 Sep;37(3):547-50 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Carbohydrate-controlled precipitation of apatite with coprecipitation of organic molecules in human saliva: stabilizing role of polyols. Mäkinen KK, et al. **Calcif Tissue Int** 1989 Apr;44(4):258-68

POISONING

Acute resin phenol-formaldehyde intoxication. A life threatening occupational hazard. Cohen N, et al. **Hum Toxicol** 1989 May;8(3):247-50

RADIATION EFFECTS

Amphiphilic polyphosphazenes as membrane materials: influence of side group on radiation cross-linking. Allcock HR, et al. **Biomaterials** 1988 Nov;9(6):500-8

THERAPEUTIC USE

Ankle fractures treated using biodegradable internal fixation. Böstman O, et al. **Clin Orthop** 1989 Jan;(238):195-203

Phase I clinical trial with carbetimer. Dodion P, et al. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):279-86

Phase I trial of the polyelectrolyte carbetimer administered i.v. once every four weeks. Fromm M, et al. **Invest New Drugs** 1988 Sep;6(3):189-94

Prostaglandin derivative PGBx improves neurologic recovery after ischemic spinal injury. Jacobs TP, et al. **Pharm Res** 1987 Apr;4(2):130-2

[The use of Ampoxen in treating a large hemangioma of the liver] Avramov T, et al. **Khirurgiia (Sofiia)** 1989;42(2):83-4 **(Bul)**

[A case of a giant postoperative hernia successfully treated with Bulgarian antimicrobial polyamide mesh] Totev T. **Khirurgiia (Sofiia)** 1988;41(6):77-9 **(Bul)**

[Spleen-preserving surgery using a polyglactin (Vicryl) perisplenic prosthesis] Noterdaeme PM, et al. **Acta Chir Belg** 1987 Sep-Oct;87(5):282-6 (Eng. Abstr.) **(Fre)**

[Comparative effects of fluid gelatins on bleeding during

heart surgery in the adult] Zerr C, et al. **Cah Anesthesiol** 1988 Nov;36(7):527–32 **(Fre)**

[Prevention of radiation injuries of the small intestine with pelvic exclusion by polyglactin 910 mesh. Contribution to gynecologic and digestive cancer surgery] Rodier JF, et al. **J Chir (Paris)** 1989 Feb;126(2):73–80 (38 ref.) (Eng. Abstr.) **(Fre)**

[Injuries of the spleen. Value of an absorbable perisplenic mesh. 15 cases] Feneyrou B, et al. **Presse Med** 1988 Sep 17;17(31):1570–2 (Eng. Abstr.) **(Fre)**

[The value of polyglactin 910 in preventing peridural fibrosis and epiduro–arachnoiditis following laminectomy. Experimental study in rats] Guigui P, et al. **Rev Chir Orthop** 1988;74 Suppl 2:88–90 **(Fre)**

[The late results of treating abscesses of the lungs by filling them with a foaming polymeric compound] Lukomskiĭ GI, et al. **Grudn Khir** 1988 Sep–Oct;(5):47–50 (Eng. Abstr.) **(Rus)**

TOXICITY

Lung response to ultrafine Kevlar aramid synthetic fibrils following 2–year inhalation exposure in rats. Lee KP, et al. **Fundam Appl Toxicol** 1988 Jul;11(1):1–20

Toxicity and association of polycyanoacrylate nanoparticles with hepatocytes. Kreuter J, et al. **J Microencapsul** 1984 Jul–Sep;1(3):253–7

[Methodologic bases for the mathematical planning of experiments in sanitary chemical research on polymeric building materials] Popivanova I, et al. **Probl Khig** 1988; 13:36–48 (Eng. Abstr.) **(Bul)**

[Evaluation of quality standards of products made from synthetic polymers which are used in medicine] Kunzlová M, et al. **Cesk Farm** 1988 Sep;37(7):315–8 (Eng. Abstr.) **(Cze)**

[A radioisotope method for assessing the anaphylactogenicity of polymer drugs] Kulakov VN, et al. **Farmakol Toksikol** 1989 Jan–Feb;52(1):111–4 (Eng. Abstr.) **(Rus)**

[Hygienic aspects of using polymers as construction materials and household articles at a new stage] Bokov AN. **Gig Sanit** 1989 Feb;(2):61–4 (36 ref.) **(Rus)**

[Study of the mutagenic effect of various chemical substances on Drosophila] Komissarova LA, et al. **Gig Sanit** 1989 Mar; (3):81–2 **(Rus)**

[Functional state of animals after inhalation of electrolysis oxygen obtained from distilled water] Koziarin IP. **Gig Sanit** 1989 Jan;(1):74–5 **(Rus)**

[Criteria for the comparative evaluation of the toxicity of combustion products of synthetic materials used in ship construction] Voronin VA, et al. **Voen Med Zh** 1989 Jan; (1):57–9 **(Rus)**

POLYMETHACRYLIC ACIDS

Hardness of restorative resins: effect of camphorquinone, amine, and inhibitor. Peutzfeldt A, et al. **Acta Odontol Scand** 1989 Aug;47(4):229–31

Retentive strength of dental composite to metal surfaces. Wictorin L, et al. **Acta Odontol Scand** 1989 Jun; 47(3):185–91

Molecular design of materials for cell separation. Kataoka K. **Artif Organs** 1988 Dec;12(6):511–3

Microencapsulation of mammalian cells in a hydroxyethyl methacrylate–methyl methacrylate copolymer: preliminary development. Stevenson WT, et al. **Biomater Artif Cells Artif Organs** 1988;16(4):747–69

Subcutaneous polymeric matrix system p(HEMA–BGA) for controlled release of an anticancer drug (5–fluorouracil). II: Release kinetics. Denizli A, et al. **Biomaterials** 1988 Jul; 9(4):363–6

Nuclear magnetic resonance spectroscopic studies of interaction of bis–GMA analogues with phosphatidylcholine liposomes as a model for biomembranes. Fujisawa S, et al. **Biomaterials** 1989 May; 10(4):269–72

Quantitative evaluation of rat lymphocyte adsorption on microdomain structured surfaces of poly(2–hydroxyethyl methacrylate)/polyamine. Maruyama A, et al. **Biomaterials** 1988 Nov;9(6):471–81

Biocompatibility of N–(2–hydroxypropyl) methacrylamide copolymers containing adriamycin. Immunogenicity, and effect on haematopoietic stem cells in bone marrow in vivo and mouse splenocytes and human peripheral blood lymphocytes in vitro. Rihova B, et al. **Biomaterials** 1989 Jul;10(5):335–42

In vivo release of cisplatin from a needle–type copolymer formulation implanted in rat kidney. Yoshida M, et al. **Biomaterials** 1989 Jan;10(1):16–22

Comparing like with like: a prospective study of hydrogel and polymethylmethacrylate lenses. Percival SP. **Dev Ophthalmol** 1989;18:111–3

HEMA–particles phagocytosis of rat neutrophils. Berger J. **Folia Haematol (Leipz)** 1988;115(6):833–6

Stop–smoking program using nicotine reduction therapy and behavior modification for heavy smokers [published erratum appears in J Am Dent Assoc 1989 Mar;118(3):274] Cooper TM, et al. **J Am Dent Assoc** 1989 Jan;118(1):47–51

Tobacco use and oral health [letter] Herod EL. **J Am Dent Assoc** 1989 Mar;118(3):274

Correlations between mouse 3T3 cell spreading and serum fibronectin adsorption on glass and hydroxyethylmethacrylate–ethylmethacrylate copolymers. Horbett TA, et al. **J Biomed Mater Res** 1988 Sep; 22(9):763–93

Experimental implantation of hydrogel into the bone. Korbelář P, et al. **J Biomed Mater Res** 1988 Sep; 22(9):751–62

Polymerization of multifunctional methacrylates and acrylates. Miyazaki K, et al. **J Biomed Mater Res** 1988 Nov;22(11):1011–22

Biological response to a musculo–tendinous prosthesis in the rabbit. Vesce G, et al. **Life Support Syst** 1983;1 Suppl 1:424–7

Structure and permeability of composite films of two analogous acrylate methacrylate copolymers. Okor RS. **Pharm Res** 1988 Sep;5(9):604–6

Adhesion to dentin by means of Gluma resin. Asmussen E, et al. **Scand J Dent Res** 1988 Dec;96(6):584–9

[Interactions of drugs with PHEMA hydrogel] Zatloukal Z, et al. **Cesk Farm** 1989 Mar;38(2):53–5 (Eng. Abstr.) **(Cze)**

[Experimental evaluation of the possibility of fixing uterine sutures after cesarean section using polymer materials] Makarov IO, et al. **Akush Ginekol (Mosk)** 1989 Mar; (3):33–6 (Eng. Abstr.) **(Rus)**

[Preventing incompetence of uterine sutures after cesarean section] Sidorova IS, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):30–3 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Thrombogenicity of Teflon versus copolymer–coated guidewires: evaluation with scanning electron microscopy. Pinto RS, et al. **AJNR** 1989 Mar–Apr;10(2):407–10

Gingival response to nicotine polacrilex. Silver KJ, et al. **J Am Dent Assoc** 1989 Jan;118(1):53–6

ANALYSIS

Sudan black B as a histological stain for polymeric biomaterials embedded in glycol methacrylate. Hoeksma EA, et al. **Biomaterials** 1988 Sep;9(5):463–5

Thermal analysis of water in p(HEMA) hydrogels. Roorda WE, et al. **Biomaterials** 1988 Nov;9(6):494–9

pH–dependent swelling and solute diffusion characteristics of poly(hydroxyethyl methacrylate–co–methacrylic acid) hydrogels. Kou JH, et al. **Pharm Res** 1988 Sep;5(9):592–7

Thermal behavior of poly hydroxy ethyl methacrylate (pHEMA) hydrogels. Roorda WE, et al. **Pharm Res** 1988 Nov;5(11):722–5

PHARMACOKINETICS

Blood clearance and organ distribution of intravenously administered polymethacrylic nanoparticles in mice. Rolland A, et al. **J Pharm Sci** 1989 Jun;78(6):481–4

[Distribution in the body and interaction with blood proteins of buthyl esther of acrylic and methacrylic acids in rats] Svetlakov AV, et al. **Gig Tr Prof Zabol** 1989;(3):51–2 **(Rus)**

PHARMACOLOGY

Physiologic effects of nicotine polacrilex. Nemeth–Coslett R. **Biomed Pharmacother** 1989;43(1):5–10 (28 ref.)

Drug uptake and release by a hydrogel intraocular lens and the human crystalline lens. Heyrman TP, et al. **J Cataract Refract Surg** 1989 Mar;15(2):169–75

1H and 13C NMR studies of the interaction of eugenol, phenol, and triethyleneglycol dimethacrylate with phospholipid liposomes as a model system for odontoblast membranes. Fujisawa S, et al. **J Dent Res** 1988 Nov; 67(11):1438–41

[Tulux cement. A new double–timed light–hardening composite cement for adhesive–retained restorations] Krejci I, et al. **Schweiz Monatsschr Zahnmed** 1989; 99(4):454–61 **(Ger, Fre)**

THERAPEUTIC USE

Controlled trial of nicotine polacrilex gum with supportive measures. Blöndal T. **Arch Intern Med** 1989 Aug; 149(8):1818–21

Activity of N–(2–hydroxypropyl)methacrylamide copolymers containing daunomycin against a rat tumour model. Cassidy J, et al. **Biochem Pharmacol** 1989 Mar 15; 38(6):875–9

Nicotine gum use with nicotine addiction [letter] Resnick MP, et al. **J Clin Psychiatry** 1989 Aug;50(8):310

Inhibition of bacterial growth under composite restorations following GLUMA pretreatment. Felton D, et al. **J Dent Res** 1989 Mar;68(3):491–5

Nicotine polacrilex: clinic–based strategies with chronically ill smokers. Carmody TP, et al. **J Psychoactive Drugs** 1988 Jul–Sep;20(3):269–74

[How to improve the efficacy of nicotine chewing gum (letter)] Becoña Iglesias E, et al. **Med Clin (Barc)** 1988 Sep 10;91(7):277–8 **(Spa)**

TOXICITY

Irritation effects of residual products derived from p(HEMA) gels. II. Compounds extracted from hydrogels. Cífková I, et al. **Biomaterials** 1988 Jul;9(4):372–5

Hydrogels in endovascular embolization. IV. Effect of radiopaque spherical particles on the living tissue. Horák D, et al. **Biomaterials** 1988 Jul;9(4):367–71

[Irritants extracted from poly(HEMA) gel] Cífková I, et al. **Cesk Farm** 1988 Oct;37(8):368–71 (Eng. Abstr.) **(Cze)**

[Morphological validation of the use of polyhydroxyethyl methacrylate–based x–ray contrast emboli for vascular occlusion] Skuba ND, et al. **Biull Eksp Biol Med** 1989 Mar; 107(3):379–82 (Eng. Abstr.) **(Rus)**

[Hygienic standardization of new acrylic copolymers in reservoir water] Kudrin LV, et al. **Gig Sanit** 1988 Sep; (9):10–4 (Eng. Abstr.) **(Rus)**

POLYMETHYLMETHACRYLATE see **METHYLMETHACRYLATES**

POLYMORPHISM (GENETICS)

Sex ratio polymorphism: the impact of mutation and drift on evolution. Poethke HJ. **Acta Biotheor (Leiden)** 1988; 37(2):121–47

Linkage of HLA–DR beta specific restriction fragment length polymorphisms with Graves' disease. Boehm BO, et al. **Acta Endocrinol (Copenh)** 1988 Oct;119(2):251–6

RFLPs of 21–hydroxylase and C4 genes: application to pedigree analysis on 21–hydroxylase deficiency. Matsumoto T, et al. **Acta Paediatr Jpn Overseas Ed** 1988; 30 Suppl:111–6

Clinical forms of congenital adrenal hyperplasia: restriction length polypmorphism patterns in the CYP21 gene. Ritzén EM, et al. **Acta Paediatr Jpn Overseas Ed** 1988;30 Suppl:99–104

A human major histocompatibility complex (MHC) DNA probe recognizes goat genes. Nesse LL, et al. **Acta Vet Scand** 1988;29(2):193–8

Molecular genetics of human salivary proteins and their polymorphisms. Azen EA, et al. **Adv Hum Genet** 1988; 17:141–99 (141 ref.)

DNA rearrangement and restriction fragment length polymorphism within the first BCR intron in Philadelphia–positive acute leukemia. Nakamura Y, et al. **Am J Hematol** 1989 Sep;32(1):24–9

Association of genetic variation of the transforming growth factor–alpha gene with cleft lip and palate. Ardinger HH, et al. **Am J Hum Genet** 1989 Sep;45(3):348–53

Human population genetic studies of five hypervariable DNA loci. Balazs I, et al. **Am J Hum Genet** 1989 Feb;44(2):182–90

Fine–structure genetic mapping of human chromosomes using the polymerase chain reaction on single sperm: experimental design considerations. Boehnke M, et al. **Am J Hum Genet** 1989 Jul;45(1):21–32

Identification and characterization of 23 RFLP loci by screening random cosmid genomic clones. Bowden DW, et al. **Am J Hum Genet** 1989 May;44(5):671–8

Androgen receptor locus on the human X chromosome: regional localization to Xq11–12 and description of a DNA polymorphism. Brown CJ, et al. **Am J Hum Genet** 1989 Feb;44(2):264–9

Linkage heterogeneity between X–linked retinitis pigmentosa and a map of 10 RFLP loci. Chen JD, et al. **Am J Hum Genet** 1989 Sep;45(3):401–11

HLA–DR typing "at the DNA level": RFLPs and subtypes detected with a DR beta cDNA probe. Cox NJ, et al. **Am J Hum Genet** 1988 Dec;43(6):954–63

Analysis of DNA polymorphism haplotypes linked to the cystic fibrosis locus in North American black and Caucasian families supports the existence of multiple mutations of the cystic fibrosis gene. Cutting GR, et al. **Am J Hum Genet** 1989 Mar;44(3):307–18

Linkage analysis of families with fragile–X mental retardation, using a novel RFLP marker (DXS 304). Dahl N, et al. **Am J Hum Genet** 1989 Aug;45(2):304–9

Polymorphic DNA haplotypes at the phenylalanine hydroxylase (PAH) locus in European families with phenylketonuria (PKU). Daiger SP, et al. **Am J Hum Genet** 1989 Aug;45(2):310–8

Polymorphic DNA haplotypes at the phenylalanine hydroxylase (PAH) locus in Asian families with phenylketonuria (PKU). Daiger SP, et al. **Am J Hum Genet** 1989 Aug;45(2):319–24

Normal human genomic restriction–fragment patterns and polymorphisms revealed by hybridization with the entire dystrophin cDNA. Darras BT, et al. **Am J Hum Genet** 1988 Nov;43(5):612–9

Two point mutations are responsible for G6PD polymorphism in Sardinia. De Vita G, et al. **Am J Hum Genet** 1989 Feb;44(2):233–40

A genetic linkage map of 27 loci from PND to FY on the short arm of human chromosome I. Dracopoli NC, et al. **Am J Hum Genet** 1988 Oct;43(4):462–70

The gene encoding the hydrophobic surfactant protein SP–C is located on 8p and identifies an EcoRI RFLP. Fisher JH, et al. **Am J Hum Genet** 1988 Oct;43(4):436–41

Genealogical analysis of cystic fibrosis families and chromosome 7q RFLP haplotypes in the Hutterite Brethren. Fujiwara TM, et al. **Am J Hum Genet** 1989 Mar; 44(3):327–37

Lack of linkage disequilibrium between two common restriction sites associated with the COLIA2 gene [letter] Halloran–Blanton S, et al. **Am J Hum Genet** 1989 Jan; 44(1):154–5

Isolation of additional polymorphic clones from the cystic fibrosis region, using chromosome jumping from D7S8 [published erratum appears in Am J Hum Genet 1989 Aug;45(2):342] Iannuzzi MC, et al. **Am J Hum Genet** 1989 May;44(5):695–703

Genetic studies of human apolipoproteins. IX. Apolipoprotein D polymorphism and its relation to serum lipoprotein lipid levels. Kamboh MI, et al. **Am J Hum Genet** 1989 Jul;45(1):147–54

Genetic studies of low-abundance human plasma proteins. XIII. Population genetics of C1R complement subcomponent and description of new variants. Kamboh MI, et al. **Am J Hum Genet** 1989 Jan;44(1):148–53

Functionally important regions of the factor IX gene have a low rate of polymorphism and a high rate of mutation in the dinucleotide CpG. Koeberl DD, et al. **Am J Hum Genet** 1989 Sep;45(3):448–57

Polymorphic DNA haplotypes at the LDL receptor locus. Leitersdorf E, et al. **Am J Hum Genet** 1989 Mar; 44(3):409–21

Y chromosome DNA polymorphisms in two African populations. Lucotte G, et al. **Am J Hum Genet** 1989 Jul; 45(1):16–20

New approach for isolation of VNTR markers. Nakamura Y, et al. **Am J Hum Genet** 1988 Dec;43(6):854–9

Protein variants in Hiroshima and Nagasaki: tales of two cities. Neel JV, et al. **Am J Hum Genet** 1988 Dec; 43(6):870–93

An intronic region within the human factor VIII gene is duplicated within Xq28 and is homologous to the polymorphic locus DXS115 (767). Patterson M, et al. **Am J Hum Genet** 1989 May;44(5):679–85

Genetic linkage of Beckwith–Wiedemann syndrome to 11p15. Ping AJ, et al. **Am J Hum Genet** 1989 May; 44(5):720–3

Clinical and molecular heterogeneity of phenylalanine hydroxylase deficiencies in France. Rey F, et al. **Am J Hum Genet** 1988 Dec;43(6):914–21

New polymorphisms at the DXS98 locus and confirmation of its location proximal to FRAXA by in situ hybridization. Schnur RE, et al. **Am J Hum Genet** 1989 Feb;44(2):248–54

Genetic studies on the Senegal population. I. Mitochondrial DNA polymorphisms. Scozzari R, et al. **Am J Hum Genet** 1988 Oct;43(4):534–44

Genetic studies of human apolipoproteins. VII. Population distribution of polymorphisms of apolipoproteins A–I, A–II, A–IV, C–II, E, and H in Nigeria. Sepehrnia B, et al. **Am J Hum Genet** 1988 Dec;43(6):847–53

Identification of two cosmids derived from within chromosomal band 3p21.1 that contain clusters of rare restriction sites and evolutionarily conserved sequences. Smith DI, et al. **Am J Hum Genet** 1989 Sep;45(3):443–7

Haplotype distribution of the human phenylalanine hydroxylase locus in Scotland and Switzerland. Sullivan SE, et al. **Am J Hum Genet** 1989 May;44(5):652–9

Gaucher disease: molecular heterogeneity and phenotype–genotype correlations. Theophilus B, et al. **Am J Hum Genet** 1989 Aug;45(2):212–25

Identification and characterization of nine RFLPs at the adenosine deaminase (ADA) locus. Tzall S, et al. **Am J Hum Genet** 1989 Jun;44(6):864–75

Genetic heterogeneity in Leber hereditary optic neuroretinopathy revealed by mitochondrial DNA polymorphism. Vilkki J, et al. **Am J Hum Genet** 1989 Aug; 45(2):206–11

Abundant class of human DNA polymorphisms which can be typed using the polymerase chain reaction. Weber JL, et al. **Am J Hum Genet** 1989 Mar;44(3):388–96

Collation of RFLP haplotypes at the human phenylalanine hydroxylase (PAH) locus [letter] Woo SL. **Am J Hum Genet** 1988 Nov;43(5):781–3

Genetic susceptibility to rheumatoid arthritis and human leukocyte antigen class II polymorphism. The role of shared conformational determinants. Gregersen PK, et al. **Am J Med** 1988 Dec 23;85(6A):17–9 (30 ref.)

Juvenile rheumatoid arthritis, human leukocyte antigen, and other immunoglobulin supergene family polymorphisms. Maksymowych WP, et al. **Am J Med** 1988 Dec 23; 85(6A):26–8 (15 ref.)

Function and polymorphism of human leukocyte antigen–A,B,C molecules. Parham P. **Am J Med** 1988 Dec 23;85(6A):2–5 (16 ref.)

Restriction fragment length polymorphism analysis in ankylosing spondylitis. Reveille JD, et al. **Am J Med** 1988 Dec 23;85(6A):48–50

Congenital adrenal hypoplasia and selective absence of pituitary luteinizing hormone: a new autosomal recessive syndrome. Burke BA, et al. **Am J Med Genet** 1988 Sep; 31(1):75–97 (90 ref.)

Identification of carriers of Duchenne muscular dystrophy: value of molecular analysis. LeRoy BS, et al. **Am J Med Genet** 1988 Nov;31(3):709–21

Restriction fragment length polymorphisms within proximal 15q and their use in molecular cytogenetics and the Prader–Willi syndrome. Nicholls RD, et al. **Am J Med Genet** 1989 May;33(1):66–77

Anthropological survey on red cell glutathione peroxidase (GPX1) polymorphism in central western Africa: a tentative hypothesis on the interaction between GPX1*2 and Hb beta *S allelic products. Destro–Bisol G, et al. **Am J Phys Anthropol** 1989 Jun;79(2):217–24

Study of five haemogenetic markers (Gc, C3, Bf, Ag, and GALT) in six Indonesian populations and in 12 subgroups of Balinese. Scherz R, et al. **Am J Phys Anthropol** 1988 Aug;76(4):489–96

DNA polymorphism analysis of hereditary multiple exostoses in horses. Li JK, et al. **Am J Vet Res** 1989 Jun;50(6):978–83

Restriction fragment length polymorphisms associated with growth hormone and prolactin genes in Holstein bulls: evidence for a novel growth hormone allele. Cowan CM, et al. **Anim Genet** 1989;20(2):157–65

Restriction fragment length polymorphisms of horse class II MHC genes observed using various human alpha- and beta-chain cDNA probes. Hänni K, et al. **Anim Genet** 1988; 19(4):395–408

Polymorphic plasma postalbumin (Po) of llamas and alpacas identified as Gc protein. Penedo MC, et al. **Anim Genet** 1989;20(2):221–3

Restriction fragment length polymorphism analysis of major histocompatibility complex class II genes from inbred chicken lines. Warner C, et al. **Anim Genet** 1989; 20(2):225–31

The anonymous PAS45 probe detects RFLPs in 13q31. Gross MS, et al. **Ann Genet** 1989;32(2):73–7

RFLPs tightly linked with cystic fibrosis: value of probes at the D7S23 locus in prenatal diagnosis. Vasseur F, et al. **Ann Genet** 1989;32(2):78–81

Klinefelter's syndrome: an analysis of the origin of the additional sex chromosome using molecular probes. Jacobs PA, et al. **Ann Hum Genet** 1988 May;52 (Pt 2):93–109

N-ras-like sequences on chromosomes 9, 6 and 22 with a polymorphism at the chromosome 9 locus. Middleton-Price H, et al. **Ann Hum Genet** 1988 Jul;52 (Pt 3):189–95

New variants of Ps salivary polymorphic proteins. Minaguchi K, et al. **Ann Hum Genet** 1988 Jan;52 (Pt 1):11–6

Genetic polymorphisms of the Pmo1 and Pmo2 salivary proteins detected by the modified protein staining method. Minaguchi K, et al. **Ann Hum Genet** 1988 Jul;52 (Pt 3):177–87

Mitochondrial DNA polymorphisms in Italy. II. Molecular analysis of new and rare morphs from Sardinia and Rome. Santachiara Benerecetti AS, et al. **Ann Hum Genet** 1988 Jan;52 (Pt 1):39–56

Restriction fragment length polymorphisms of the complement component C4 loci on chromosome 6: studies with emphasis on the determination of gene number. Teisberg P, et al. **Ann Hum Genet** 1988 May;52 (Pt 2):77–84

Polymorphism of HLA class II genes in various diseases. Möller E, et al. **Ann N Y Acad Sci** 1988;546:143–50 (27 ref.)

Polymorphisms of immunologically relevant loci in human disease. Autoimmunity and human heavy chain variable regions. Sanz I, et al. **Ann N Y Acad Sci** 1988;546:133–42 (40 ref.)

HLA class II DR, DQ, and DP restriction fragment length polymorphisms in rheumatoid arthritis. Howell WM, et al. **Ann Rheum Dis** 1989 Apr;48(4):295–301

Gene polymorphisms and variability of human apolipoproteins. Fisher EA, et al. **Annu Rev Nutr** 1989; 9:139–60 (105 ref.)

Protein subtype polymorphisms (Gc and Tf) in a Catalan population from Gerona (northeastern Spain). Moreno P, et al. **Anthropol Anz** 1988 Sep;46(3):201–5

Genetic studies in a Hungarian isolate: Ivád. Walter H, et al. **Anthropol Anz** 1989 Jun;47(2):145–54

Restriction fragment length polymorphism and activation of c-Ha-ras gene in urothelial cancer. Ishikawa J, et al. **Anticancer Res** 1988 Sep–Oct;8(5A):915–24 (123 ref.)

Comparison of DNA restriction fragment length polymorphisms of Nostoc strains in and from cycads. Lindblad P, et al. **Arch Microbiol** 1989;152(1):20–4

Genome type analysis of adenoviruses: isolates from one year from the Hannover area. Adrian T, et al. **Arch Virol** 1989; 105(1–2):89–101

Physical mapping of the genomic heterogeneity of isolates of equine herpesvirus 2 (equine cytomegalovirus). Browning GF, et al. **Arch Virol** 1989;104(1–2):87–94

Pvu II polymorphism of low density lipoprotein receptor gene and familial hypercholesterolemia. Study of Italians. Daga A, et al. **Arterioscler** 1988 Nov–Dec;8(6):845–50

Apolipoprotein B gene haplotypes. Association between Ag and DNA polymorphisms. Ma YH, et al. **Arteriosclerosis** 1988 Sep–Oct;8(5):521–4

Bsp 12861 restriction fragment length polymorphism detects Ag(c/g) locus of human apolipoprotein B in all 17 persons studied. Ma YH, et al. **Arteriosclerosis** 1989 Mar–Apr; 9(2):242–6

Characterization of the class I HLA 9.2-kb PVU II restriction fragment length polymorphism. Linkage to HLA-A and lack of disease association. Ahearn JM Jr, et al. **Arthritis Rheum** 1989 Jul;32(7):870–6

XbaI and c/g polymorphisms of the apolipoprotein B gene locus are associated with serum cholesterol and LDL-cholesterol levels in Finland. Aalto-Setälä K, et al. **Atherosclerosis** 1988 Nov;74(1–2):47–54

A study of DNA polymorphism in the apolipoprotein B gene in a Japanese population [see comments] Aburatani H, et al. **Atherosclerosis** 1988 Jul;72(1):71–6. **Comment in:** Atherosclerosis 1989 Feb;75(2–3):249–50

Restriction fragment length polymorphisms associated with abnormal lipid levels in an adolescent population. Anderson RA, et al. **Atherosclerosis** 1989 Jun;77(2–3):227–37

Lack of correlation between the apolipoprotein B XbaI polymorphism and blood lipid levels in a Swedish population. Darnfors C, et al. **Atherosclerosis** 1989 Feb; 75(2–3):183–8

RFLP studies in different ethnic groups [letter; comment] Humphries S, et al. **Atherosclerosis** 1989 Feb; 75(2–3):249–50. **Comment on:** Atherosclerosis 1988 Jul;72(1):71–6

DNA polymorphisms of the apolipoprotein genes—their use in the investigation of the genetic component of hyperlipidaemia and atherosclerosis. Humphries SE. **Atherosclerosis** 1988 Aug;72(2–3):89–108 (97 ref.)

Restriction fragment length polymorphisms in the apo B gene in relation to coronary artery disease. Myant NB, et al. **Atherosclerosis** 1989 Jun;77(2–3):193–201

Plasma lipoprotein lipids in relation to the MspI polymorphism of the apolipoprotein AII gene in Caucasian men. Lack of association with plasma triglyceride concentration. Rajput-Williams J, et al. **Atherosclerosis** 1989 May;77(1):31–6

Apolipoprotein A–I gene polymorphisms: frequency in patients with coronary artery disease and healthy controls and association with serum apo A–I and HDL-cholesterol concentration. Wile DB, et al. **Atherosclerosis** 1989 Jul; 78(1):9–18

Apolipoprotein E polymorphism and lipoproteins in insulin-treated diabetes mellitus. Winocour PH, et al. **Atherosclerosis** 1989 Feb;75(2–3):167–73

Partitioned twin analysis: a power study. Nance WE, et al. **Behav Genet** 1989 Jan;19(1):143–50

P-glycoprotein gene (MDR1) cDNA from human adrenal: normal P-glycoprotein carries Gly185 with an altered pattern of multidrug resistance. Kioka N, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):224–31

DNA polymorphisms defined by the Tu108 probe map to the Tla region of mouse chromosome 17. Gasser DL, et al. **Biochem Genet** 1988 Aug;26(7–8):475–80

Genetic polymorphism of tear proteins in the rat. Kondo Y, et al. **Biochem Genet** 1988 Dec;26(11–12):683–91

Polymorphism and inheritance of gliadin components controlled by chromosome 6A of spring durum wheat. Kudryavtsev AM, et al. **Biochem Genet** 1988 Dec; 26(11–12):693–703

Evolutionary relationships between laboratory mice and subspecies of Mus musculus based on the restriction fragment length variants of the chymotrypsin gene at the Prt-2 locus. Watanabe T, et al. **Biochem Genet** 1989 Feb; 27(1–2):119–30

Restriction fragment length polymorphism and chromosome mapping of a mouse homeo box gene, Hox-2.1. Watanabe T, et al. **Biochem Genet** 1988 Dec;26(11–12):805–13

Polymorphism of rat gastric mucosal histidine decarboxylase: effects of the coenzyme and sulfhydryl groups. Savany A, et al. **Biochem Int** 1988 Aug;17(2):345–57

Xenobiotic and endobiotic inhibitors of cytochrome P-450dbl function, the target of the debrisoquine/sparteine type polymorphism. Fonne-Pfister R, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3829–35

Restriction fragment length polymorphism caused by a deletion involving Alu sequences within the human alpha 2-plasmin inhibitor gene. Miura O, et al. **Biochemistry** 1989 Jun 13;28(12):4934–8

Probing molecular polymorphism of fibronectins with antibodies directed to the alternatively spliced peptide segments. Sekiguchi K, et al. **Biochemistry** 1989 Apr 18; 28(8):3293–8

Immunohistochemical localization of human liver glutathione S-transferase (GST) isozymes with special reference to polymorphic GST1. Abei M, et al. **Biochim Biophys Acta** 1989 May 1;995(3):279–84

Genetic polymorphism and cancer susceptibility: evidence concerning acetyltransferases and cancer of the urinary bladder. Hein DW. **Bioessays** 1988 Dec;9(6):200–4 (25 ref.)

Population frequencies of tyrosine hydroxylase restriction fragment length polymorphisms in bipolar affective disorder. Todd RD, et al. **Biol Psychiatry** 1989 Mar 1; 25(5):626–30

Genetic variants of the insulin receptor in type II (non-insulin dependent) diabetes mellitus. Galton DJ, et al. **Biomed Biochim Acta** 1988;47(4–5):323–7

Polymorphism of insulin gene area in Japanese: relationship with insulin-dependent and non-insulin dependent diabetes. Kanazawa Y, et al. **Biomed Biochim Acta** 1988; 47(4–5):317–21

Restriction-fragment-length-polymorphisms close to the human insulin gene on chromosome 11 and their possible relation to diabetes mellitus in a GDR population. Neumer C, et al. **Biomed Biochim Acta** 1988;47(4–5):311–5

Molecular mechanics studies on poly(purine).poly(pyrimidine) sequences in DNA: polymorphism and local variability. Bansal M, et al. **Biopolymers** 1989 Feb;28(2):531–48

A novel beta-thalassemia frameshift mutation (codon 14/15), detectable by direct visualization of abnormal restriction fragment in amplified genomic DNA. Chan V, et al. **Blood** 1988 Oct;72(4):1420–3

The Malmö polymorphism of factor IX: establishing the genotypes by rapid analysis of DNA. Graham JB, et al. **Blood** 1989 Jun;73(8):2104–7

A PvuII polymorphism of the bcr region in patients with hematopoietic disorders and their families. Opalka B, et al. **Blood** 1989 Feb 15;73(3):814–7

Origin of leukemic relapse after bone marrow transplantation: comparison of cytogenetic and molecular analyses. Stein J, et al. **Blood** 1989 May 15;73(7):2033–40

Polymorphism of vitronectin [letter] Sun WH, et al. **Blood** 1989 Jan;73(1):353–4

DNA-RFLP typing in the selection of related bone marrow

donors [letter] Bidwell JL, et al.
Bone Marrow Transplant 1987 Apr;1(4):413–4
Genetic polymorphism of the alcohol metabolising enzymes as a basis for alcoholic liver disease. Grant DA.
Br J Addict 1988 Nov;83(11):1255–9 (19 ref.)
Genetically homozygous choriocarcinoma following pregnancy with hydatidiform mole. Fisher RA, et al.
Br J Cancer 1988 Dec;58(6):788–92
Polymorphism of debrisoquine hydroxylation among Finns and Lapps. Arvela P, et al. **Br J Clin Pharmacol** 1988 Nov; 26(5):601–3
Mephenytoin and sparteine oxidation: genetic polymorphisms in Denmark. Drøhse A, et al. **Br J Clin Pharmacol** 1989 May;27(5):620–5
Carrier detection in 50 haemophilia A kindred by means of three intragenic and two extragenic restriction fragment length polymorphisms. Moodie P, et al. **Br J Haematol** 1988 Sep;70(1):77–84
Inherited C3 deficiency of the complement system. Grumach AS, et al. **Braz J Med Biol Res** 1988;21(2):247–57
The maintenance of polymorphism owing to differences in developmental time and competition. Williams SM.
Can J Genet Cytol 1985 Jun;27(3):328–33
Heterochromatic polymorphisms of chromosome 16 evidenced by Alu I endonuclease digestion in chronic myelogenous leukemia [letter] Stuppia L, et al.
Cancer Genet Cytogenet 1989 May;39(1):139–40
Estrogen receptor expression in human breast cancer associated with an estrogen receptor gene restriction fragment length polymorphism. Hill SM, et al.
Cancer Res 1989 Jan 1;49(1):145–8
Polymorphic expression of acetyl coenzyme A–dependent arylamine N–acetyltransferase and acetyl coenzyme A–dependent O–acetyltransferase–mediated activation of N–hydroxyarylamines by human bladder cytosol. Kirlin WG, et al. **Cancer Res** 1989 May 1;49(9):2448–54
Loss of constitutional heterozygosity in colorectal tumors from patients with familial polyposis coli and those with nonpolyposis colorectal carcinoma. Sasaki M, et al.
Cancer Res 1989 Aug 15;49(16):4402–6
Genetic polymorphism of self–incompatibility in flowering plants. Ebert PR, et al. **Cell** 1989 Jan 27;56(2):255–62 (52 ref.)
Classification of Y chromosome polymorphisms by DNA content and C–banding. Wall WJ, et al. **Chromosoma** 1989 Jan;97(4):296–300
Construction of a linkage map of the human genome, and its application to mapping genetic diseases. Green P, et al. **Clin Chem** 1989 Jul;35(7 Suppl):B33–7 (27 ref.)
Use of the polymerase chain reaction for simultaneous analysis of two Pst I polymorphisms linked to cystic fibrosis. Highsmith WE Jr, et al. **Clin Chem** 1989 Jun; 35(6):1260–1
DNA polymorphism at the locus for human cholesteryl ester transfer protein (CETP) is associated with high density lipoprotein cholesterol and apolipoprotein levels. Kondo I, et al. **Clin Genet** 1989 Jan;35(1):49–56
Further evidence for an association between the XbaI polymorphism at the apolipoprotein B locus and lipoprotein level. Leren TP, et al. **Clin Genet** 1988 Dec;34(6):347–51
Normal DNA polymorphism at the low density lipoprotein receptor (LDLR) locus associated with serum cholesterol level. Pedersen JC, et al. **Clin Genet** 1988 Nov;34(5):306–12
Are the traits for drug acetylation and oxidation co–inherited? [letter] Sardaş S, et al. **Clin Genet** 1988 Aug; 34(2):143–4
No evidence of a genetic polymorphism in the oxidative metabolism of midazolam. Kassai A, et al.
Clin Pharmacokinet 1988 Nov;15(5):319–25
Metoprolol and mephenytoin oxidation polymorphisms in Far Eastern Oriental subjects: Japanese versus mainland Chinese. Horai Y, et al. **Clin Pharmacol Ther** 1989 Aug; 46(2):198–207
Pharmacogenetics of acute azathioprine toxicity: relationship to thiopurine methyltransferase genetic polymorphism. Lennard L, et al. **Clin Pharmacol Ther** 1989 Aug; 46(2):149–54
Polymorphic debrisoquin hydroxylation in 757 Swedish subjects. Steiner E, et al. **Clin Pharmacol Ther** 1988 Oct; 44(4):431–5
Study of DNA polymorphisms of the apolipoprotein AI–CIII–AIV gene cluster in patients with peripheral arterial disease. Monsalve MV, et al. **Clin Sci** 1989 Feb; 76(2):221–8
Esterase and malate dehydrogenase isozyme polymorphisms in 15 Artemia populations. Bowen ST, et al.
Comp Biochem Physiol [B] 1978;61(4):593–5
Plasminogen polymorphism in swine. Rapacz J Jr, et al.
Comp Biochem Physiol [B] 1989;93(2):325–31
Hemoglobin polymorphism in Equus przewalskii and E. caballus analyzed by isoelectric focusing. Ryder OA, et al. **Comp Biochem Physiol [B]** 1979;62(4):305–8
Size polymorphism of the erythrocyte complement receptor type 1 (CR1) in systemic lupus erythematosus induced by hydralazine. Mitchell JA, et al. **Complement Inflamm** 1989; 6(2):88–93
Role of sequence amplification in the generation of nematode mitochondrial DNA polymorphism. Beck JL, et al.
Curr Genet 1988 Dec;14(6):627–36
Inheritance of chromosome length polymorphisms in Saccharomyces cerevisiae. Ono B, et al. **Curr Genet** 1988 Nov;14(5):413–8
Chromosomal assignment of 14 genomic probes for highly polymorphic loci. Cohen–Haguenauer O, et al.
Cytogenet Cell Genet 1989;50(2–3):78–83
The polymorphic human alpha 2–macroglobulin gene (A2M) is located in chromosome region 12p12.3——p13.3. Fukushima Y, et al. **Cytogenet Cell Genet** 1988;48(1):58–9
Report of the committee on human gene mapping by recombinant DNA techniques. Kidd KK, et al.
Cytogenet Cell Genet 1988;49(1–3):132–218
Restriction fragment length polymorphisms of the angiotensinogen gene in inbred rat strains and mapping of the gene on chromosome 19q. Mori M, et al.
Cytogenet Cell Genet 1989;50(1):42–5
A polymorphic DNA marker on chromosome 10 linked to RBP3 on the MEN2A side. Wu J, et al.
Cytogenet Cell Genet 1988;48(4):246–7
The relationship between imipramine metabolism and the sparteine oxidation polymorphism. Brøsen K.
Dan Med Bull 1988 Oct;35(5):460–8 (66 ref.)
Acetylator phenotype in psoriasis. Jiménez–Nieto LC, et al.
Dermatologica 1989;178(3):136–7
Molecular and clinical characterization of an insertional polymorphism of the insulin–receptor gene. Elbein SC.
Diabetes 1989 Jun;38(6):737–43
Association of HLA–DR phenotypes and T–lymphocyte–receptor beta–chain–region RFLP with IDDM in Japanese. Ito M, et al. **Diabetes** 1988 Dec; 37(12):1633–6
Type II diabetes mellitus and polymorphism of insulin–receptor gene in Mexican Americans. Raboudi SH, et al. **Diabetes** 1989 Aug;38(8):975–80
DNA polymorphisms of the human insulin and receptor genes in type 2 diabetes mellitus. Galton DJ.
Diabetes Metab Rev 1989 Aug;5(5):443–53 (40 ref.)
HLA–D region RFLP and type 1 diabetes [letter] Fletcher J, et al. **Diabetic Med** 1988 Sep;5(6):596–7
Coronary artery disease, HDL cholesterol, and insulin–gene flanking sequences. Johansen K, et al. **Diabetic Med** 1989 Jul;6(5):429–33
Immunoglobulin heavy chain switch region polymorphisms are not associated with type 1 diabetes. Millward BA, et al. **Diabetic Med** 1988 Sep;5(6):543–6
Restriction fragment length polymorphism analysis of major histocompatibility complex genes in the non–obese diabetic mouse strain and its non–diabetic sister strains. Fujishima Y, et al. **Diabetologia** 1989 Feb;32(2):118–25
Insulin autoantibody polymorphisms with greater discrimination for diabetes in humans. Wilkin T, et al.
Diabetologia 1988 Sep;31(9):670–4
The human chorionic gonadotrophin alpha subunit gene in gestational trophoblastic disease. 1. Restriction fragment length polymorphisms in hydatidiform moles. Fisher RA, et al. **Dis Markers** 1987 Dec;5(4):237–45
Rapid DNA extraction and sensitive alkaline blotting protocol: application for detection of gene rearrangement and amplification for clinical molecular diagnosis. Fourney RM, et al. **Dis Markers** 1989 Jan–Mar;7(1):15–26
The breast tumour–associated epithelial mucins and the peanut lectin binding urinary mucins are coded by a single highly polymorphic gene locus 'PUM'. Griffiths B, et al.
Dis Markers 1988 Jul–Sep;6(3):185–94
DR beta Taq I restriction fragment length polymorphism (RFLP) associated with insulin dependent diabetes mellitus (IDDM). Hodge TW, et al. **Dis Markers** 1987 Jun; 5(2):109–17
Genetic studies of human apolipoproteins. VI. Common polymorphism of apolipoprotein E in blacks. Kamboh MI, et al. **Dis Markers** 1989 Jan–Mar;7(1):49–55
Polymorphism of human immunoglobulin VH genes: a possible marker of autoimmune disease. Rechavi G, et al.
Dis Markers 1987 Sep;5(3):171–6
Partial deletions of factor VIII gene as molecular diagnostic markers in haemophilia A. Wehnert M, et al.
Dis Markers 1989 Apr–Jun;7(2):113–7
Restriction fragment length polymorphism of HLA and non–HLA genes in DR3/4 heterozygous Danish insulin–dependent diabetic patients and healthy individuals: reassessment of the influence of alpha DX and insulin–linked polymorphic loci, and new splits of DQw3 haplotypes. Zerbib A, et al. **Dis Markers** 1989 Jan–Mar; 7(1):27–41
The use of denaturing gradient gel electrophoresis to screen for DNA sequence polymorphisms in the human factor VIII gene. Collins M, et al. **Electrophoresis** 1989 May–Jun; 10(5–6):390–6
Low voltage isoelectric focusing for the study of red cell acid phosphatase polymorphism: improved phenotyping and better agreement with the Hardy Weinberg distribution. Destro–Bisol G, et al. **Electrophoresis** 1988 Feb;9(2):106–8
Analysis of the genetic polymorphism of coagulation factor XIIIB (FXIIIB) by isoelectric focusing. Leifheit HJ, et al.
Electrophoresis 1988 Aug;9(8):426–9
The genetic haptoglobin polymorphism: relevance of paternity assessment. Patzelt D, et al. **Electrophoresis** 1988 Aug;9(8):393–7
A simple, sensitive method of analyzing bacterial ribosomal DNA polymorphism. Picard–Pasquier N, et al.
Electrophoresis 1989 Mar;10(3):186–9
Optimized oligonucleotide probes for DNA fingerprinting. Schäfer R, et al. **Electrophoresis** 1988 Aug;9(8):369–74
Application of plasminogen polymorphism to forensic hemogenetics. Skoda U, et al. **Electrophoresis** 1988 Aug; 9(8):422–6
Subtyping of orosomucoid 1 (ORM1) by isoelectric focusing in agarose and polyacrylamide gels. Thymann M, et al.
Electrophoresis 1988 Aug;9(8):380–3
Orosomucoid 1 and orosomucoid 2 types in the Taiwanese and Japanese: evidence for five new orosomucoid variants. Umetsu K, et al. **Electrophoresis** 1988 May;9(5):224–6
Two–dimensional electrophoresis of human lymphocyte proteins: two–dimensional polymorphisms and paternity testing. Waldinger D, et al. **Electrophoresis** 1988 Aug; 9(8):375–9
Genetic polymorphism of human alpha 2HS–glycoprotein: characterization and application to forensic hemogenetics. Yuasa I, et al. **Electrophoresis** 1988 Aug;9(8):404–10
Polymorphism at the 5' end flanking region of the insulin gene is associated with reduced insulin secretion in healthy individuals. Cocozza S, et al. **Eur J Clin Invest** 1988 Dec; 18(6):582–6
Polymorphism of apolipoprotein E influences levels of serum apolipoproteins E and B in the human neonate. Steinmetz A, et al. **Eur J Clin Invest** 1989 Aug;19(4):390–4
Relevance of genetic polymorphism in drug metabolism in the development of new drugs. Balant LP, et al.
Eur J Clin Pharmacol 1989;36(6):551–4
Clinical significance of the sparteine/debrisoquine oxidation polymorphism. Brøsen K, et al. **Eur J Clin Pharmacol** 1989; 36(6):537–47
Phenotyping polymorphic drug metabolism in the French Caucasian population. Jacqz E, et al.
Eur J Clin Pharmacol 1988;35(2):167–71
Sparteine oxidation polymorphism: phenotyping by measurement of sparteine and its dehydrometabolites in plasma. Paar WD, et al. **Eur J Clin Pharmacol** 1989; 36(6):555–60
Antibody 12–15 cross–reacts with mouse Fc gamma receptors and CD2: study of thymus expression, genetic polymorphism and biosynthesis of the CD2 protein. Altevogt P, et al. **Eur J Immunol** 1989 Feb;19(2):341–6
Restriction fragment analysis of V preB and lambda 5 within the genus Mus. D'Hoostelaere LA, et al.
Eur J Immunol 1989 Jan;19(1):37–42
Plasmodium berghei: gametocyte production, DNA content, and chromosome–size polymorphisms during asexual multiplication in vivo. Janse CJ, et al. **Exp Parasitol** 1989 Apr;68(3):274–82
Plasmodium vivax: karyotype polymorphism of field isolates. Langsley G, et al. **Exp Parasitol** 1988 Dec;67(2):301–6
Chromosomal polymorphisms and gene expression in Plasmodium falciparum. Ravetch JV. **Exp Parasitol** 1989 Jan;68(1):121–5 (16 ref.)
Plasmodium falciparum: dimorphism of the p190 alleles. Tanabe K, et al. **Exp Parasitol** 1989 May;68(4):470–3
Restriction fragment length polymorphisms in the ETS–1 proto–oncogene. Comparison of Saudi and Western populations. Parkar MH, et al. **Experientia** 1988 Dec 1; 44(11–12):1019–20
Structural analyses of the polymorphic area in type II collagen gene. Vikkula M, et al. **FEBS Lett** 1989 Jul 3; 250(2):171–4
First experiences in application of RFLP analysis for carrier detection in preparation of prenatal diagnosis of hemophilia A in the GDR. Herrmann FH, et al.
Folia Haematol (Leipz) 1988;115(4):489–93
A population–genetic study of crab–eating macaques (Macaca fascicularis) on the island of Angaur, Palau, Micronesia. Kawamoto Y, et al. **Folia Primatol (Basel)** 1988;51(4):169–81
Postmortem stability of DNA. Bär W, et al.
Forensic Sci Int 1988 Oct;39(1):59–70
Genetic polymorphism of human C1R subcomponent of the first complement component in the Japanese population. Nakamura S, et al. **Forensic Sci Int** 1988 Oct;39(1):71–6
The baboon gene for apolipoprotein A–I: characterization of a cDNA clone and identification of DNA polymorphisms for genetic studies of cholesterol metabolism. Hixson JE, et al. **Gene** 1988 Dec 30; 74(2):483–90
Isolation and expression of cDNA clones coding for two sequence variants of Xenopus laevis histone H5. Rutledge RG, et al. **Gene** 1988 Oct 15;70(1):117–26
Rapid DNA purification for restriction fragment length polymorphism analysis. Lindblom B, et al.
Gene Anal Tech 1988 Sep–Oct;5(5):97–101
Genetic analyses of restriction fragment length polymorphisms using high molecular weight DNA from sperm or lymphocytes embedded in agarose. Mage RG, et al. **Gene Anal Tech** 1988 Sep–Oct;5(5):94–6
Adaptive significance of amylase polymorphism in Drosophila. I. The geographical pattern of allozyme polymorphism at the amylase locus in Drosophila subobscura. Andjelković M, et al. **Genetica** 1987 Oct 30; 74(3):161–71
Mdg–1 mobile element polymorphism in selected Drosophila melanogaster populations. Biémont C, et al. **Genetica** 1988 Feb 29;76(1):7–14
Chromosomal polymorphism in Drosophila subobscura at different elevations in central Chile. Brncic D, et al.
Genetica 1987 Dec 15;75(3):161–6
Patterns of puffing activity and chromosomal polymorphism in Drosophila subobscura. IV. Position effect at the boundaries of the E12 inversion. De Frutos R, et al.

Genetica 1987 Nov 16;75(1):11–22

Isozymes as bioprobes for genetic analysis of nonhuman primates. Khan PM. **Genetica** 1987 Aug 31;73(1–2):25–36 (62 ref.)

Stable poiymorphism for mutant eye colour genes in populations of Drosophila melanogaster in two different media. Nájera C, et al. **Genetica** 1988 Sep 30;77(2):123–31

Differential response to environmental alcohol among second–chromosome arrangements in experimental populations of Drosophila buzzatii. Ruiz A, et al. **Genetica** 1987 Dec 15;75(3):219–29

The founder effect theory: quantitative variation and mdg–1 mobile element polymorphism in experimental populations of Drosophila melanogaster. Terzian C, et al. **Genetica** 1988 Feb 29;76(1):53–63

The alcohol dehydrogenase polymorphism in Drosophila melanogaster: fitness measurements and predictions under conditions with no alcohol stress. Bijlsma–Meeles E, et al. **Genetics** 1988 Nov;120(3):743–53

Pleiotropic stabilizing selection limits the number of polymorphic loci to at most the number of characters. Hastings A, et al. **Genetics** 1989 Jun;122(2):459–63

Genetic analysis of the fungus, Bremia lactucae, using restriction fragment length polymorphisms. Hulbert SH, et al. **Genetics** 1988 Dec;120(4):947–58

Mapping mendelian factors underlying quantitative traits using RFLP linkage maps. Lander ES, et al. **Genetics** 1989 Jan;121(1):185–99

Length polymorphisms in human proline–rich protein genes generated by intragenic unequal crossing over. Lyons KM, et al. **Genetics** 1988 Sep;120(1):267–78

Recombination within a subclass of restriction fragment length polymorphisms may help link classical and molecular genetics. Meagher RB, et al. **Genetics** 1988 Nov; 120(3):809–18 (55 ref.)

Chloroplast DNA diversity in populations of wild and cultivated barley. Neale DB, et al. **Genetics** 1988 Dec; 120(4):1105–10

Genetic polymorphism for human platelet thermostable phenol sulfotransferase (TS PST) activity. Price RA, et al. **Genetics** 1989 Aug;122(4):905–14

Molecular population genetics of mtDNA size variation in crickets. Rand DM, et al. **Genetics** 1989 Mar;121(3):551–69

Mapping flagellar genes in Chlamydomonas using restriction fragment length polymorphisms. Ranum LP, et al. **Genetics** 1988 Sep;120(1):109–22

Linkage disequilibrium in natural and experimental populations of Drosophila melanogaster. Smit–McBride Z, et al. **Genetics** 1988 Dec;120(4):1043–51

Glycoproteins that exhibit extensive size polymorphisms in Dictyostelium discoideum. Smith E, et al. **Genetics** 1989 May;122(1):59–64

The maintenance of single–locus polymorphism. I. Numerical studies of a viability selection model. Spencer HG, et al. **Genetics** 1988 Oct;120(2):605–13

Molecular genetic variation in the centromeric region of the X chromosome in three Drosophila ananassae populations. I. Contrasts between the vermilion and forked loci. Stephan W, et al. **Genetics** 1989 Jan;121(1):89–99

Mapping RFLP loci in maize using B–A translocations. Weber D, et al. **Genetics** 1989 Mar;121(3):583–90

Isolation and mapping of DNA probes within the linkage group I gene cluster of Caenorhabditis elegans. Starr T, et al. **Genome** 1989 Jun;32(3):365–72

The human "interferon–beta 2/hepatocyte stimulating factor/interleukin–6" gene: DNA polymorphism studies and localization to chromosome 7p21. Bowcock AM, et al. **Genomics** 1988 Jul;3(1):8–16

Construction of a chromosome 15–specific linking library and identification of potential gene sequences. Buiting K, et al. **Genomics** 1988 Aug;3(2):143–9

Tight linkage between type III Gaucher's disease (Norrbottnian type) and a MspI polymorphism within the gene for human glucocerebrosidase. Dahl N, et al. **Genomics** 1988 Nov;3(4):296–8

Chromosome–specific alpha satellite DNA: isolation and mapping of a polymorphic alphoid repeat from human chromosome 10. Devilee P, et al. **Genomics** 1988 Jul; 3(1):1–7

Localization of the FGR protooncogene on the genetic linkage map of human chromosome 1p. Dracopoli NC, et al. **Genomics** 1988 Aug;3(2):124–8

Genetic linkage between lipoprotein(a) phenotype and a DNA polymorphism in the plasminogen gene. Drayna DT, et al. **Genomics** 1988 Oct;3(3):230–6

Genotyping and sequence analysis of apolipoprotein E isoforms. Emi M, et al. **Genomics** 1988 Nov;3(4):373–9

A linkage group of five DNA markers on human chromosome 10. Farrer LA, et al. **Genomics** 1988 Jul; 3(1):72–7

Localization of a human Na+,K+–ATPase alpha subunit gene to chromosome 19q12——q13.2 and linkage to the myotonic dystrophy locus. Harley HG, et al. **Genomics** 1988 Nov;3(4):380–4

Genetic mapping of the Wiskott–Aldrich syndrome with two highly–linked polymorphic DNA markers. Kwan SP, et al. **Genomics** 1988 Jul;3(1):39–43

A primary genetic map of the pericentromeric region of the human X chromosome. Mahtani MM, et al. **Genomics** 1988 May;2(4):294–301

D10S20, a previously unmapped RFLP (OS–3), is located on 10q near D10S4. Miki T, et al. **Genomics** 1988 Jul; 3(1):78–81

Multilocus molecular mapping of the mouse X chromosome. Mullins LJ, et al. **Genomics** 1988 Oct;3(3):187–94

Norrie disease: linkage analysis using a 4.2–kb RFLP detected by a human ornithine aminotransferase cDNA probe. Ngo JT, et al. **Genomics** 1989 May;4(4):539–45

RFLPs and linkage relationships of the human laminin B2 gene. Nishimura D, et al. **Genomics** 1988 Nov;3(4):393–5

Partial digestion with restriction enzymes of ultraviolet–irradiated human genomic DNA: a method for identifying restriction site polymorphisms. Nobile C, et al. **Genomics** 1988 Oct;3(3):272–4

Human monoamine oxidase gene (MAOA): chromosome position (Xp21–p11) and DNA polymorphism. Ozelius L, et al. **Genomics** 1988 Jul;3(1):53–8

A long–range restriction map encompassing the cystic fibrosis locus and its closely linked genetic markers. Poustka AM, et al. **Genomics** 1988 May;2(4):337–45

Simultaneous analysis of multiple polymorphic loci using amplified sequence polymorphisms (ASPs). Skolnick MH, et al. **Genomics** 1988 May;2(4):273–9 (37 ref.)

Regional localization of mouse Abl and Mos proto–oncogenes by in situ hybridization. Threadgill DW, et al. **Genomics** 1988 Jul;3(1):82–6

International recommendations (as of March, 1988) on the application of methods involving DNA–polymorphisms in forensic haematology [letter] Rossi U. **Haematologica (Pavia)** 1989 Mar–Apr;74(2):219–21

The use of restriction fragment length polymorphisms for prenatal diagnosis: the estimation of diagnosable rate of multiple genetic markers and its use in detecting beta–thalassemia in a Chinese population. Jin L, et al. **Hemoglobin** 1988;12(5–6):773–86

Polymorphism of a serum protease inhibitor system in Alaskan wolves. Braend M. **Hereditas** 1988;108(2):269–70

Familial occurrence of cancer and heteromorphism of the heterochromatic segment of chromosome 1. Köpf I, et al. **Hereditas** 1989;110(1):79–83

No abnormal C–band polymorphism in lung cancer patients. Kristoffersson U, et al. **Hereditas** 1989;110(3):201–2

Inversion polymorphisms in Trimerotropis pallidipennis (Orthoptera): clinical variation along an altitudinal gradient. Confalonieri VA, et al. **Heredity (Edinburgh)** 1989 Feb;62 (Pt 1):107–12

Geographical polymorphism of amylase in Drosophila ananassae and its relatives. Da Lage JL, et al. **Heredity (Edinburgh)** 1989 Aug;63 (Pt 1):67–72

Genetic differentiation in populations of Drosophila melanogaster from the Peoples' Republic of China: comparison with patterns on other continents. Jiang CS, et al. **Heredity (Edinburgh)** 1989 Apr;62 (Pt 2):193–8

B chromosome polymorphism in Korean rye populations. Romera F, et al. **Heredity (Edinburgh)** 1989 Feb;62 (Pt 1):117–21

Genetic polymorphism of the apolipoprotein B gene locus influences serum LDL cholesterol level in familial hypercholesterolemia. Aalto–Setälä K, et al. **Hum Genet** 1989 Jul;82(4):305–7

Localization of polymorphic DNA probes frequently deleted in lung carcinoma. Albertson DG, et al. **Hum Genet** 1989 Sep;83(2):127–32

DNA polymorphism haplotypes of the human apolipoprotein APOA1–APOC3–APOA4 gene cluster. Antonarakis SE, et al. **Hum Genet** 1988 Nov;80(3):265–73

Restriction analysis of chromosomal sequences homologous to single–copy fragments cloned from small polydisperse circular DNA (spcDNA). Assum G, et al. **Hum Genet** 1989 Jun;82(3):249–54

A highly conserved sequence on the short arm of chromosome 7 detects multiple polymorphisms. Bardoni B, et al. **Hum Genet** 1988 Dec;81(1):23–5

Physical mapping of DXS134 close to the DXS52 locus. Bell MV, et al. **Hum Genet** 1989 Apr;82(1):27–30

Eco RI RFLP in the human thyroid peroxidase (TPO) gene on chromosome 2. Bikker H, et al. **Hum Genet** 1989 Apr; 82(1):95

Renin locus restriction fragment length polymorphism. Chen LZ, et al. **Hum Genet** 1989 Jun;82(3):302

Study of restriction fragment length polymorphisms at the human phenylalanine hydroxylase locus and evaluation of its potential application in prenatal diagnosis of phenylketonuria in Chinese. Chen SH, et al. **Hum Genet** 1989 Feb;81(3):226–30

Presymptomatic testing for Huntington's disease. A case complicated by recombination within the D4S10 locus. Curtis A, et al. **Hum Genet** 1989 Jan;81(2):188–90

Ferritin H gene polymorphism in idiopathic hemochromatosis. David V, et al. **Hum Genet** 1989 Jan; 81(2):123–6

DNA restriction fragment length polymorphisms in differential diagnosis of genetic disease: application in neuromuscular diseases. Defesche JC, et al. **Hum Genet** 1989 Apr;82(1):55–8

Glucose–6–phosphate dehydrogenase variants and their frequency in Guangdong, China. Du CS, et al. **Hum Genet** 1988 Dec;80(4):385–8

Variability of human rRNA genes: inheritance and nonrandom chromosomal distribution of structural variants of nontranscribed spacer sequences. Garkavtsev IV, et al. **Hum Genet** 1988 Dec;81(1):31–7

BamHI and SacI RFLPs of the human immunoglobulin IGHG genes with reference to the Gm polymorphism in African people. Evidence for a major polymorphism. Ghanem N, et al. **Hum Genet** 1989 Aug;83(1):37–44

Interaction at clinical level between erythrocyte acid phosphatase and adenosine deaminase genetic polymorphisms. Gloria–Bottini F, et al. **Hum Genet** 1989 Jun;82(3):213–5

Population cytogenetics of folate–sensitive fragile sites. I. Common fragile sites. Kähkönen M. **Hum Genet** 1988 Dec; 80(4):344–8

Genetic polymorphism of human urine deoxyribonuclease I. Kishi K, et al. **Hum Genet** 1989 Feb;81(3):295–7

Genetic polymorphism of human peptidase C, PEPC (E.C.3.4.1.1): formal genetic and population data. Kömpf J, et al. **Hum Genet** 1989 Sep;83(2):197–8

Erythrocyte acid phosphatase (ACP1) activity. In vitro modulation by adenosine and inosine and effects of adenosine deaminase (ADA) polymorphism. Lucarini N, et al. **Hum Genet** 1989 Jan;81(2):185–7

NsiI and ScaI restriction fragment length polymorphisms at the atrial natriuretic peptides (ANP) gene locus. Masharani U, et al. **Hum Genet** 1988 Nov;80(3):307

MspI and HindIII restriction fragment length polymorphisms at the human Na,K–ATPase beta–subunit (ATP1B) gene locus. Masharani U, et al. **Hum Genet** 1988 Nov;80(3):308

Use of restriction fragment length polymorphic probes in the analysis of Down's syndrome trisomy. Millington–Ward AM, et al. **Hum Genet** 1988 Dec; 80(4):362–70

No predictive value of GC phenotypes for HIV infection and progression to AIDS. Pronk JC, et al. **Hum Genet** 1988 Oct;80(2):181–2

A new RFLP with StuI and probe cX55.7 (DXS105) and its usefulness in carrier analysis of fragile X syndrome. Rekilä AM, et al. **Hum Genet** 1988 Oct;80(2):193

RFLP–discordance within the human phenylalanine hydroxylase locus. Riess O, et al. **Hum Genet** 1989 Sep; 83(2):199–201

Four DNA polymorphisms in the LDL–receptor gene and their use in diagnosis of familial hypercholesterolemia. Schuster H, et al. **Hum Genet** 1989 Apr;82(1):69–72

Long–range restriction map of a region of human chromosome 19 containing the apolipoprotein genes, a CLL–associated translocation breakpoint, and two polymorphic MluI sites. Shaw DJ, et al. **Hum Genet** 1989 Aug;83(1):71–4

Mapping the mutation causing the X–linked lymphoproliferative syndrome in relation to restriction fragment length polymorphisms on Xq. Skare JC, et al. **Hum Genet** 1989 Jul;82(4):349–53

Apolipoprotein E polymorphism in The Netherlands and its effect on plasma lipid and apolipoprotein levels. Smit M, et al. **Hum Genet** 1988 Nov;80(3):287–92

Detection of a rare–cutter RFLP in a CpG–rich island near the cystic fibrosis locus. Stanier P, et al. **Hum Genet** 1988 Nov;80(3):309–10

Mitochondrial DNA polymorphism in Finnish families with Leber's hereditary optic neuroretinopathy. Vilkki J, et al. **Hum Genet** 1989 Jun;82(3):208–12

Human mitochondrial DNA types in Finland. Vilkki J, et al. **Hum Genet** 1988 Dec;80(4):317–21

A new polymorphic marker very closely linked to DXS52 in the q28 region of the human X chromosome. Vincent A, et al. **Hum Genet** 1989 Apr;82(1):85–6

Localization of the coagulation factor XIII B subunit gene (F13B) to chromosome bands 1q31–32.1 and restriction fragment length polymorphism at the locus. Webb GC, et al. **Hum Genet** 1989 Jan;81(2):157–60

Cystic fibrosis: typing 89 German families with linked DNA probes. Weber J, et al. **Hum Genet** 1988 Dec;81(1):54–6

Apolipoprotein B amino acid 3611 substitution from arginine to glutamine creates the Ag (h/i) epitope: the polymorphism is not associated with differences in serum cholesterol and apolipoprotein B levels. Xu CF, et al. **Hum Genet** 1989 Jul;82(4):322–6

Restriction fragment length polymorphism of human aldehyde dehydrogenase 1 and aldehyde dehydrogenase 2 loci. Yoshida A, et al. **Hum Genet** 1989 Sep;83(2):204

The factor IX BamHI polymorphism: T–to–G transversion at the nucleotide sequence –561. The BamHI/MSPI haplotypes in blacks and Caucasians. Zhang M, et al. **Hum Genet** 1989 Jun;82(3):283–4

A new polymorphic variant of human complement factor I. Zhou M, et al. **Hum Genet** 1989 Jul;82(4):393

Correlation between RsaI restriction fragment length polymorphism and electrophoretic types of human placental alkaline phosphatase. Beckman G, et al. **Hum Hered** 1989;39(1):41–5

Polymorphism of serum proteins (C3, BF, HP and TF) of six populations in Colombia. Bernal JE, et al. **Hum Hered** 1989;39(2):94–8

Erythrocyte enzyme polymorphisms in the Kamboh caste of Patiala, Punjab. Chahal SM, et al. **Hum Hered** 1989; 39(1):37–40

Xmn I polymorphism in the gamma–globin gene region among Saudis. el–Hazmi MA. **Hum Hered** 1989;39(1):12–9

Evidence for a new allele at the esterase D (E.C.3.1.1.1) locus. Huckenbeck W, et al. **Hum Hered** 1988;38(6):378–80

Further studies of the plasma alpha 1 B–glycoprotein polymorphism: two new alleles and allele frequencies in Caucasians and in American blacks. Juneja RK, et al. **Hum Hered** 1988;38(5):267–72

Placental glucose dehydrogenase polymorphism in Japanese.

Kido A, et al. **Hum Hered** 1989;39(2):116–7
Alpha–2–HS–glycoprotein polymorphism detected in human urine by isoelectric focusing and immunoblotting. Kishi K, et al. **Hum Hered** 1988;38(4):207–10
C7 polymorphism in Japanese: new allele C7*8. Komatsu N, et al. **Hum Hered** 1989;39(1):49–51
Apolipoprotein A–IV polymorphism in the Finnish population: gene frequencies and description of a rare allele. Lukka M, et al. **Hum Hered** 1988;38(6):359–62
Restriction fragment length polymorphism of the D1S1 locus in Italy. Palmarino R, et al. **Hum Hered** 1988;38(5):323–5
Red cell polymorphisms in Sardinia. Rickards O, et al. **Hum Hered** 1988;38(6):332–6
C8A and C8B polymorphisms in Norwegians and Norwegian lapps. Rogde S, et al. **Hum Hered** 1989;39(2):81–8
Glutamate–pyruvate transaminase subtypes in Singapore ethnic groups. Saha N, et al. **Hum Hered** 1989;39(2):110–2
Human malic enzyme–2 polymorphism in the GDR. Stöhlmacher P, et al. **Hum Hered** 1989;39(1):58–60
Further studies of salivary polymorphisms in the Japanese population. Tsuchida S, et al. **Hum Hered** 1989;39(2):61–6
Genetic polymorphisms of orosomucoid and alpha–2–HS–glycoprotein in a Philippine population. Umetsu K, et al. **Hum Hered** 1988;38(5):287–90
RFLP–defined HLA–DP polymorphism in four ethnic groups. Easteal S, et al. **Hum Immunol** 1989 Jul; 25(3):169–79
DNA polymorphism in the human Thy–1 gene. Gatti RA, et al. **Hum Immunol** 1988 Jul;22(3):145–50
The polymorphism of HLA–DR3 in South African populations. Oudshoorn M, et al. **Hum Immunol** 1989 Apr; 24(4):265–76
RFrAP: a computer program for analysis of complex HLA RFLPs. Assignment of restriction fragments to haplotypes by segregation analysis. Rothman WC, et al. **Hum Immunol** 1989 May;25(1):13–26
Correlations between polymorphisms at the DNA and at the protein level of DRw52 haplotypes, revealed with a variety of techniques. Termijtelen A, et al. **Hum Immunol** 1988 Jul;22(3):171–8
DNA restriction fragment length polymorphism analysis of human bronchogenic carcinoma. Willey JC, et al. **IARC Sci Publ** 1988;(89):439–50
Attempt to detect recombination between B–F and B–L genes within the chicken B complex by serological typing, in vitro MLR, and RFLP analyses. Hála K, et al. **Immunogenetics** 1988;28(6):433–8
The 33,000 protein precipitated by Ly–6A.2–specific antibodies is not associated with the Ly–6 polymorphism. Houlden BA, et al. **Immunogenetics** 1988;28(6):399–405
Restriction fragment length polymorphisms of the mouse T–cell receptor gene families. Klotz JL, et al. **Immunogenetics** 1989;29(3):191–201
Sequence polymorphism of HLA–DP beta chains. Lee JS, et al. **Immunogenetics** 1989;29(5):346–9
Restriction fragment length polymorphism in canine narcolepsy. Motoyama M, et al. **Immunogenetics** 1989; 29(2):124–6
Definition of HLA class I–associated DNA polymorphisms using an HLA–B locus–derived cDNA probe. Nössner E, et al. **Immunogenetics** 1989;30(1):60–2
Limited MHC polymorphism in whales. Trowsdale J, et al. **Immunogenetics** 1989;29(1):19–24
Structural variation among major histocompatibility complex class–II genes which predispose to autoimmunity. Nepom GT. **Immunol Res** 1989;8(1):16–38 (86 ref.)
Detection and mapping of polymorphic KpnI alleles in the human T–cell receptor constant beta–2 locus. Perl A, et al. **Immunology** 1989 May;67(1):135–8
Gene probes to detect cross–culture contamination in hormone producing cell lines. Matsuba I, et al. **In Vitro Cell Dev Biol** 1988 Nov;24(11):1071–6
Clonal polymorphisms of outer membrane protein OspB of Borrelia burgdorferi. Bundoc VG, et al. **Infect Immun** 1989 Sep;57(9):2733–41
Use of mitochondrial and ribosomal DNA polymorphisms to classify clinical and soil isolates of Histoplasma capsulatum. Spitzer ED, et al. **Infect Immun** 1989 May; 57(5):1409–12
Polymorphism of the c–Ha–ras–1 proto–oncogene in sporadic and familial breast cancer. Barkardóttir RB, et al. **Int J Cancer** 1989 Aug 15;44(2):251–5
The EcoRI RFLP of c–mos in patients with non–Hodgkin's lymphoma and acute lymphoblastic leukemia, compared to geriatric and non–geriatric controls. Chenevix–Trench G, et al. **Int J Cancer** 1989 Jun 15;43(6):1034–6
A Taqi RFLP of the human TGF alpha gene is significantly associated with cutaneous malignant melanoma. Hayward N, et al. **Int J Cancer** 1988 Oct 15;42(4):558–61
Restriction fragment length polymorphism of the L–myc gene and susceptibility to metastasis in renal cancer patients. Kakehi Y, et al. **Int J Cancer** 1989 Mar 15; 43(3):391–4
Association of class II DNA restriction fragments with responsiveness to Ambrosia artemisiifolia (short ragweed)–pollen allergen Amb a V in ragweed–allergic patients. Zwollo P, et al. **J Allergy Clin Immunol** 1989 Jan; 83(1):45–54
Hypervariable DNA fingerprinting in Escherichia coli: minisatellite probe from bacteriophage M13. Huey B, et al. **J Bacteriol** 1989 May;171(5):2528–32
Heterogeneity of the gamma–globin gene sequences in Japanese individuals: implication of gene conversion in generation of polymorphisms. Shiokawa S, et al. **J Biochem (Tokyo)** 1989 Feb;105(2):184–9
Genomic organization and polymorphisms of the human C3d/Epstein–Barr virus receptor. Fujisaku A, et al. **J Biol Chem** 1989 Feb 5;264(4):2118–25
Size–exclusion chromatography of DNA restriction fragments. Fragment length determinations and a comparison with the behaviour of proteins in size–exclusion chromatography. Ellegren H, et al. **J Chromatogr** 1989 Apr 21;467(1):217–26
A new Apa LI restriction fragment length polymorphism in the low density lipoprotein receptor gene. Geisel J, et al. **J Clin Chem Clin Biochem** 1988 Jul;26(7):429–33
Clonal loss of one chromosome 11 in a parathyroid adenoma. Arnold A, et al. **J Clin Endocrinol Metab** 1989 Sep; 69(3):496–9
Association of HLA antigen and restriction fragment length polymorphism of T cell receptor beta–chain gene with Graves' disease and Hashimoto's thyroiditis. Ito M, et al. **J Clin Endocrinol Metab** 1989 Jul;69(1):100–4
HLA gene amplification and hybridization analysis of polymorphism. HLA matching for bone marrow transplantation of a patient with HLA–deficient severe combined immunodeficiency syndrome. Baxter–Lowe LA, et al. **J Clin Invest** 1989 Aug;84(2):613–8
A highly informative probe for two polymorphic Vh gene regions that contain one or more autoantibody–associated Vh genes. Chen PP, et al. **J Clin Invest** 1989 Aug; 84(2):706–10
The human platelet alloantigens, PlA1 and PlA2, are associated with a leucine33/proline33 amino acid polymorphism in membrane glycoprotein IIIa, and are distinguishable by DNA typing. Newman PJ, et al. **J Clin Invest** 1989 May;83(5):1778–81
Characterization of polymorphic forms of Fc receptor III on human neutrophils. Ory PA, et al. **J Clin Invest** 1989 May;83(5):1676–81
Antigenic polymorphism of human very late activation protein–2 (platelet glycoprotein Ia–IIa). Platelet alloantigen Hca. Woods VL Jr, et al. **J Clin Invest** 1989 Mar; 83(3):978–85
Nucleic acid analysis by sandwich hybridization. Nicholls PJ, et al. **J Clin Lab Anal** 1989;3(2):122–35 (108 ref.)
Enzyme polymorphism, prodigiosin production, and plasmid fingerprints in clinical and naturally occurring isolates of Serratia marcescens. Gargallo–Viola D. **J Clin Microbiol** 1989 May;27(5):860–8
Characterization of Borrelia burgdorferi isolates by restriction endonuclease analysis and DNA hybridization. LeFebvre RB, et al. **J Clin Microbiol** 1989 Apr;27(4):636–9
Restriction fragment length polymorphisms of the DNA of selected Naegleria and Acanthamoeba amebae. McLaughlin GL, et al. **J Clin Microbiol** 1988 Sep; 26(9):1655–8
Campylobacter species identification based on polymorphism of DNA encoding rRNA. Moureau P, et al. **J Clin Microbiol** 1989 Jul;27(7):1514–7
Detection of genomic variation in Providencia stuartii clinical isolates by analysis of DNA restriction fragment length polymorphisms containing rRNA cistrons. Owen RJ, et al. **J Clin Microbiol** 1988 Oct;26(10):2161–6
Molecular epidemiology of Vibrio cholerae in Hong Kong. Yam WC, et al. **J Clin Microbiol** 1989 Aug;27(8):1900–2
Screening of Israeli Holstein–Friesian cattle for restriction fragment length polymorphisms using homologous and heterologous deoxyribonucleic acid probes. Hallerman EM, et al. **J Dairy Sci** 1988 Dec;71(12):3378–89
The BamHI restriction fragment length polymorphism detected in the c–Ha–ras locus of human skin tumors. Murayama M, et al. **J Dermatol (Tokyo)** 1988 Apr; 15(2):141–8
A beta polymorphic residues responsible for class II molecule recognition by alloreactive T cells. Buerstedde JM, et al. **J Exp Med** 1989 May 1;169(5):1645–54
The role of polymorphic I–Ak beta chain residues in presentation of a peptide from myelin basic protein. Davis CB, et al. **J Exp Med** 1989 Jun 1;169(6):2239–44
The V gamma locus of the human T cell receptor gamma gene. Repertoire polymorphism of the first variable gene segment subgroup. Font MP, et al. **J Exp Med** 1988 Oct 1;168(4):1383–94
Chromosomal organization of the human major histocompatibility complex class I gene family [published erratum appears in J Exp Med 1989 Apr 1;169(4):1517] Koller BH, et al. **J Exp Med** 1989 Feb 1;169(2):469–80
The tumor–rejection antigens of the 1591 ultraviolet fibrosarcoma. Potential origin and evolutionary implications. Linsk R, et al. **J Exp Med** 1989 Mar 1; 169(3):1043–58
I–A alpha polymorphic residues that determine alloreactive T cell recognition. Pierres M, et al. **J Exp Med** 1989 May 1;169(5):1655–68
Structure of the human CR1 gene. Molecular basis of the structural and quantitative polymorphisms and identification of a new CR1–like allele. Wong WW, et al. **J Exp Med** 1989 Mar 1;169(3):847–63
Individual identification from semen by the deoxyribonucleic acid (DNA) fingerprint technique. Honma M, et al. **J Forensic Sci** 1989 Jan;34(1):222–7
Genetically determined oxidation polymorphism and drug hepatotoxicity. Study of 51 patients. Larrey D, et al. **J Hepatol** 1989 Mar;8(2):158–64
HK/LK polymorphism and its genetic determination in Speke's gazelle. Georgiadis N, et al. **J Hered** 1988 Sep–Oct; 79(5):325–31
Isozyme polymorphisms maintained by lethal loci in inbred strains of Aedes triseriatus. Matthews TC, et al. **J Hered** 1989 Jan–Feb;80(1):53–7
Restriction fragment length polymorphisms for the renin gene in Dahl rats. Dene H, et al. **J Hypertens** 1989 Feb; 7(2):121–6
Interstrain restriction fragment length polymorphism of c–fos and c–src oncogene loci in spontaneously hypertensive and normotensive rats [published erratum appears in J Hypertens 1988 Nov;6(11):iii] Kotelevtsev YV, et al. **J Hypertens** 1988 Oct;6(10):779–81
Rabbit major histocompatibility complex. III. Multiple class II DR beta genes and restriction fragment length polymorphism of the class II alpha and beta genes. Sittisombut N, et al. **J Immunogenet** 1989 Feb;16(1):63–75
Multiple regions of HLA–DR beta 1 chains determine polymorphic epitopes recognized by monoclonal antibodies. Alber CA, et al. **J Immunol** 1989 Oct 1; 143(7):2248–55
Analysis of HLA–DP allelic sequence polymorphism using the in vitro enzymatic DNA amplification of DP–alpha and DP–beta loci. Bugawan TL, et al. **J Immunol** 1988 Dec 1;141(11):4024–30
Molecular basis for a polymorphism involving Fc receptor II on human monocytes. Clark MR, et al. **J Immunol** 1989 Sep 1;143(5):1731–4
Polymorphic residues on the I–A beta chain modulate the stimulation of T cell clones specific for the N–terminal peptide of the autoantigen myelin basic protein. Davis CB, et al. **J Immunol** 1989 Oct 1;143(7):2083–93
HLA–DR beta–chain polymorphism. Second domain polymorphism reflects evolutionary relatedness of alleles and may explain public serologic epitopes. Gorski J. **J Immunol** 1989 Jul 1;143(1):329–33
The HLA–DRw8 lineage was generated by a deletion in the DR B region followed by first domain diversification. Gorski J. **J Immunol** 1989 Jun 1;142(11):4041–5
Structural polymorphism of the human platelet Fc gamma receptor. Looney RJ, et al. **J Immunol** 1988 Oct 15; 141(8):2680–3
An H–2Ld hybrid molecule with a Qa–2 alpha–3 domain and phosphatidyl–inositol anchor is not recognized by H–2Ld–specific cytotoxic T lymphocytes. Mann DW, et al. **J Immunol** 1989 Jan 1;142(1):318–22
Diversity and diversification of HLA–A,B,C alleles. Parham P, et al. **J Immunol** 1989 Jun 1;142(11):3937–50
The difference between human C3F and C3S results from a single amino acid change from an asparagine to an aspartate residue at position 1216 on the alpha–chain of the complement component, C3. Poznansky MC, et al. **J Immunol** 1989 Aug 15;143(4):1254–8
The functional significance of two amino acid polymorphisms in the antigen–presenting domain of class I MHC molecules. Molecular dissection of Kbm3. Pullen JK, et al. **J Immunol** 1989 Sep 1;143(5):1674–9
Functional sites on the A alpha–chain. Polymorphic residues involved in antigen presentation to insulin–specific, Ab alpha:Ak beta–restricted T cells. Reske–Kunz AB, et al. **J Immunol** 1989 Sep 1;143(5):1472–81
I–Ak polymorphisms define a functionally dominant region for the presentation of hen egg lysozyme peptides. Rosloniec EF, et al. **J Immunol** 1989 Jul 1;143(1):50–8
Involvement of class II MHC molecules in the LPS–induction of IL–1/TNF secretions by human monocytes. Quantitative differences at the polymorphic level. Santamaria P, et al. **J Immunol** 1989 Aug 1; 143(3):913–22
Polymorphisms in human H chain V region genes from the VHIII gene family. Souroujon MC, et al. **J Immunol** 1989 Jul 15;143(2):706–11
Simultaneous detection of allotypes in native and activated human C2 by isoelectric focusing and silver staining. Segurado OG, et al. **J Immunol Methods** 1989 Feb 8; 117(1):9–15
Polymorphism of human herpesvirus 6 DNA from five Japanese patients with exanthem subitum [letter] Kikuta H, et al. **J Infect Dis** 1989 Sep;160(3):550–1
RFLPs of the phenylalanine hydroxylase gene in the Italian population. Dianzani I, et al. **J Inherited Metab Dis** 1989; 12(2):162–5
Apolipoprotein polymorphism and multifactorial hyperlipidaemia. Utermann G. **J Inherited Metab Dis** 1988; 11 Suppl 1:74–86 (43 ref.)
Loss of heterozygosity at polymorphic chromosomal loci in patients with malignant melanoma. Orita M, et al. **J Invest Dermatol** 1989 May;92(5 Suppl):280S–283S
Genetic studies of human apolipoproteins. V. A novel rapid procedure to screen apolipoprotein E polymorphism. Kamboh MI, et al. **J Lipid Res** 1988 Nov;29(11):1535–43
Identification of apolipoprotein E polymorphism by using synthetic oligonucleotides. Smeets HJ, et al. **J Lipid Res** 1988 Sep;29(9):1231–7
An ApaLI restriction site polymorphism is associated with the MB19 polymorphism in apolipoprotein B. Young SG, et al. **J Lipid Res** 1989 Mar;30(3):443–9
Carrier detection and early diagnosis of Wilson's disease by restriction fragment length polymorphism analysis. Figus A, et al. **J Med Genet** 1989 Feb;26(2):78–82

A new centromeric heteromorphism in the short arm of chromosome 20. Fryns JP, et al. **J Med Genet** 1988 Sep; 25(9):636–7

Haplotypes identified by 10 DNA restriction fragment length polymorphisms at the human low density lipoprotein receptor gene locus. Kotze MJ, et al. **J Med Genet** 1989 Apr;26(4):255–9

T cell receptor beta chain polymorphisms are associated with cystic fibrosis. McMillan SA, et al. **J Med Genet** 1989 Jul; 26(7):431–3

A study of familial hypercholesterolaemia in Iceland using RFLPs. Taylor R, et al. **J Med Genet** 1989 Aug;26(8):494–8

Four DNA polymorphisms in the LDL receptor gene: their genetic relationship and use in the study of variation at the LDL receptor locus. Taylor R, et al. **J Med Genet** 1988 Oct;25(10):653–9

Alpha thalassaemia: a potential source of error in DNA linkage studies for adult polycystic kidney disease. Trent RJ, et al. **J Med Genet** 1989 Jan;26(1):6–9

Cross-homologies and structural differences between human cholinesterases revealed by antibodies against cDNA-produced human butyrylcholinesterase peptides. Dreyfus P, et al. **J Neurochem** 1988 Dec;51(6):1858–67

Restriction endonuclease analysis of leukocyte mitochondrial DNA in Leber's optic atrophy. Holt IJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug;51(8):1075–7

Protein synthesis in mitochondria isolated from human skeletal muscle. Detection of polymorphism in mitochondrial translation products. Marzuki S, et al. **J Neurol Sci** 1988 Nov;87(2–3):211–9

HLA-DR beta, -DQ alpha, and -DQ beta restriction fragment length polymorphisms in multiple sclerosis. Haegert DG, et al. **J Neurosci Res** 1989 May;23(1):46–54

Improved definition of carrier status in X-linked hypohidrotic ectodermal dysplasia by use of restriction fragment length polymorphism-based linkage analysis. Zonana J, et al. **J Pediatr** 1989 Mar;114(3):392–9

Genetic characterization and use of a restriction fragment length variant in the hypotrichous ciliate Euplotes crassus. Baird SE, et al. **J Protozool** 1988 Nov;35(4):459–65

Association between ankylosing spondylitis and a 9.2 kb Pvu II class I HLA DNA restriction fragment: a reassessment. Durand JP, et al. **J Rheumatol** 1988 Jul;15(7):1119–22

Restriction fragment length polymorphism of T cell receptor alpha and beta chain genes in patients with ankylosing spondylitis. Durand JP, et al. **J Rheumatol** 1988 Jul; 15(7):1115–8

AS and a 9.2 kb Pvu II class I HLA DNA restriction fragment [letter] McDaniel DO, et al. **J Rheumatol** 1989 Jan;16(1):141–2

Genetic polymorphisms of orosomucoid ORM1 and ORM2 in Libyans: occurrence of ORM1*2.1 and three new ORM2 alleles. Sebetan IM, et al. **Jinrui Idengaku Zasshi** 1988 Dec; 33(4):439–43

Restriction fragment length polymorphisms on the short arm of X chromosome among the Japanese population. Shimmoto M, et al. **Jinrui Idengaku Zasshi** 1988 Sep; 33(3):333–8

Restriction fragment length polymorphisms on the q24–q28 region of X chromosome among Japanese population. Taga T, et al. **Jinrui Idengaku Zasshi** 1989 Jun;34(2):123–8

HLA polymorphism information content (PIC) [letter] Yasuda N. **Jinrui Idengaku Zasshi** 1988 Sep;33(3):385–7

First trimester prenatal diagnosis of haemophilia A using factor VIII gene probe. Yoshioka A, et al. **Jinrui Idengaku Zasshi** 1989 Jun;34(2):135–41

HLA class II polymorphism: implications for genetic susceptibility to autoimmune disease. Gregersen PK. **Lab Invest** 1989 Jul;61(1):5–19 (97 ref.)

Debrisoquine hydroxylation polymorphism and personality [letter] [see comments] Bertilsson L, et al. **Lancet** 1989 Mar 11;1(8637):555. **Comment in:** Lancet 1989 Jun 17;1(8651):1398

Polymorphic O-demethylation of codeine [letter] Chen ZR, et al. **Lancet** 1988 Oct 15;2(8616):914–5

CpG polymorphisms and haemophilia B [letter] Gray MW. **Lancet** 1989 Aug 26;2(8661):502–3

DNA restriction fragment length polymorphisms as markers of familial coronary heart disease. Price WH, et al. **Lancet** 1989 Jun 24;1(8652):1407–11

Variation of apolipoprotein-B gene is associated with obesity, high blood cholesterol levels, and increased risk of coronary heart disease. Rajput-Williams J, et al. **Lancet** 1988 Dec 24–31;2(8626–8627):1442–6

Complement system protein C4 and susceptibility to hydralazine-induced systemic lupus erythematosus. Speirs C, et al. **Lancet** 1989 Apr 29;1(8644):922–4

Detection of polymorphisms at cytosine phosphoguanadine dinucleotides and diagnosis of haemophilia B carriers. Winship PR, et al. **Lancet** 1989 Mar 25;1(8639):631–4

A rare restriction enzyme site polymorphism in the breakpoint cluster region (bcr) of chromosome 22. Benn P, et al. **Leukemia** 1988 Nov;2(11):760–2

bcr rearrangement: potential false positive secondary to an Eco RI restriction fragment length polymorphism. Fishleder AJ, et al. **Leukemia** 1989 Oct;3(10):746–8

Restriction fragment length polymorphism of bcr in Japanese patients with hematological malignancies. Kato Y, et al. **Leukemia** 1988 Oct;2(10):701–3

Cystic fibrosis: prenatal diagnosis and carrier detection by DNA analysis. Nelson PV, et al. **Med J Aust** 1989 Aug 7;151(3):126–7, 130–1

Genetic polymorphism of enzymes of alcohol metabolism and susceptibility to alcoholic liver disease. Bosron WF, et al. **Mol Aspects Med** 1988;10(2):147–58 (53 ref.)

Polymorphism of a 35–48 kDa Plasmodium falciparum merozoite surface antigen. Fenton B, et al. **Mol Biochem Parasitol** 1989 Apr;34(1):79–86

Chromosome size and number polymorphisms in Leishmania infantum suggest amplification/deletion and possible genetic exchange. Pagès M, et al. **Mol Biochem Parasitol** 1989 Sep;36(2):161–8

The rabbit alpha-like globin gene cluster is polymorphic both in the sizes of BamHI fragments and in the numbers of duplicated sets of genes. Cheng JF, et al. **Mol Biol Evol** 1988 Sep;5(5):486–98

Interleukin-1 alpha gene intron containing variable repeat region coding for the SP1 transcription factor recognition sequence is polymorphic. Haugen A, et al. **Mol Carcinog** 1989;2(2):68–71

Genetics and polymorphism of the mouse prion gene complex: control of scrapie incubation time. Carlson GA, et al. **Mol Cell Biol** 1988 Dec;8(12):5528–40

An Eco RI polymorphic site in the human complement C4 gene distinguishes juvenile rheumatoid arthritis (JRA) susceptibility-bearing haplotypes. Arnaiz-Villena A, et al. **Mol Immunol** 1989 Apr;26(4):427–30

Detection of base mutations in genomic DNA using denaturing gradient gel electrophoresis (DGGE) followed by transfer and hybridization with gene-specific probes. Børresen AL, et al. **Mutat Res** 1988 Nov;202(1):77–83

Resolution of quantitative traits into Mendelian factors by using a complete linkage map of restriction fragment length polymorphisms. Paterson AH, et al. **Nature** 1988 Oct 20; 335(6192):721–6

The T-cell repertoire is heavily influenced by tolerance to polymorphic self-antigens. Pullen AM, et al. **Nature** 1988 Oct 27;335(6193):796–801

Polymorphism in the alpha 3 domain of HLA-A molecules affects binding to CD8. Salter RD, et al. **Nature** 1989 Mar 23;338(6213):345–7

Linkage of X-linked nephrogenic diabetes insipidus with DXS52, a polymorphic DNA marker. Knoers N, et al. **Nephron** 1988;50(3):187–90

Gene analysis in haemophilia A—restriction fragment length polymorphism and molecular defects in the factor VIII gene. Mikami S. **Nippon Ketsueki Gakkai Zasshi** 1988 Dec; 51(8):1680–8

A new EcoRI polymorphism for the insulin receptor gene. Accili D, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):821

Nucleotide sequence of an element detecting highly polymorphic regions in insect genomes. Amichot M, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5863

Previously unreported NcoI RFLP for human CSF1R. Angert E, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2153

Taq I RFLP linked to the human ets-1 gene. Aparicio JM, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4913

RFLP for the human pepsinogen C gene (PGC). Azuma T, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9372

New TaqI RFLPs at the DXS52 (St14) locus in the black population. Barjon P, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2149

A rare PvuII RFLP at the CRYB1 locus (17q11.2----17q12). Barker DF, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):826

MspI RFLP at CRYB1 locus (17q11.2----17q12). Barker DF, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):827

An AvaII polymorphism in the haptoglobin alpha gene (HPA). Bashir A, et al. **Nucleic Acids Res** 1989 Jun 26; 17(12):4906

A BamHI RFLP at MT2A on human chromosome 16. Bates LJ, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9071

Nsi I RFLP at the X-linked chronic granulomatous disease locus (CYBB). Battat L, et al. **Nucleic Acids Res** 1989 May 11;17(9):3619

A common SacI polymorphism in the gene for the M1 subunit of ribonucleotide reductase (RRM1). Battat L, et al. **Nucleic Acids Res** 1989 May 25;17(10):4005

TaqI RFLP in human adenylate kinase-1 (AK1) gene region on chromosome 9. Bech-Hansen NT, et al. **Nucleic Acids Res** 1989 May 25;17(10):4004

Two linked RFLPs at chromosomal band 1p32. Bernard O, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6427

Detection of highly polymorphic regions in insect genomes. Blanchetot A. **Nucleic Acids Res** 1989 Apr 25;17(8):3313

A three codon insertion/deletion polymorphism in the signal peptide region of the human apolipoprotein B (APOB) gene directly typed by the polymerase chain reaction. Boerwinkle E, et al. **Nucleic Acids Res** 1989 May 25; 17(10):4003

The anonymous DNA probe p7-26 identifying the locus [D7S17], reveals an XmnI polymorphism. Bowcock AM, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1787

Isolation and mapping of a polymorphic DNA sequence (cTB14.36) on chromosome 10 [D10S35] Bragg T, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11390

Isolation and mapping of a polymorphic DNA sequence (pTBQ16) on chromosome 10 [D10S30]. Bragg T, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10406

Isolation and mapping of a polymorphic DNA sequence (cTB14.16) on chromosome 10 [D10S33] Bragg T, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11391

Isolation and mapping of a polymorphic DNA sequence (cTB14.15) on chromosome 10 [D10S32] Bragg T, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11392

Isolation and mapping of a polymorphic DNA sequence (cTBQ20) on chromosome 10 [D10S31] Bragg T, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11393

Isolation and mapping of a polymorphic DNA sequence (cTBQ12) on chromosome 10 [D10S29] Bragg T, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11394

Isolation and mapping of a polymorphic DNA sequence (cTBQ7) on chromosome 10 [D10S28] Bragg T, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11395

RFLP for an anonymous single copy clone at 16pter-16p13.1 [D16S127] Breuning MH, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5872

A highly polymorphic locus on chromosome 11 which has homology to a collagen triple-helix coding sequence. Brookes AJ, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1792

An NcoI RFLP associated with the gene encoding the alpha-3 chain of human type VI collagen (COL6A3). Brotherton D, et al. **Nucleic Acids Res** 1989 Feb 11; 17(3):1274

Isolation and mapping of a polymorphic DNA sequence (pMCT32.1) on chromosome 3 [D3S31] Carlson M, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9358

Isolation and mapping of a polymorphic DNA sequence for human muscle glycogen phosphorylase (pMCMP1) on chromosome II [PYGM]. Carlson M, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10403

Isolation and mapping of a polymorphic DNA sequence (pMCT149.2) on chromosome 15. Carlson M, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10941

Human T-cell receptor CD3-gamma (CD3G)/MspI DNA polymorphism. Charmley P, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2372

Human T-cell receptor CD3-epsilon (CD3E)/TaqI DNA polymorphism. Charmley P, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2374

BamH I restriction fragment alleles of the human T-cell receptor delta (TRD) variable region V2. Chuchana P, et al. **Nucleic Acids Res** 1989 May 11;17(9):3622

Two KpnI restriction fragment alleles of the human T-cell receptor delta (TRD) joining segment J2. Chuchana P, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1275

Three different insertion polymorphisms 3' to the human apolipoprotein A-IV gene. Civeira F, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6428

An allelic polymorphism of the angiotensinogen gene in mice. Clouston WM, et al. **Nucleic Acids Res** 1989 Jan 25; 17(2):822

A frequent HindIII RFLP of the human fibronectin gene (FN1). Colombi M, et al. **Nucleic Acids Res** 1988 Sep 26; 16(18):9074

Ava I RFLP at the gas-1 locus on mouse chromosome 12. Colombo MP, et al. **Nucleic Acids Res** 1989 Jul 11; 17(13):5415

Four RFLPs of the human insulin receptor gene: PstI, KpnI, RsaI (2 RFLPs). Cox NJ, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):820

The 5S rRNA-histone repeat in the crustacean Artemia: structure, polymorphism and variation of the 5S rRNA segment in different populations. Cruces J, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6283–97

A polymorphic locus at Xq27-28 detected by the probe U6.2 [DXS304]. Dahl N, et al. **Nucleic Acids Res** 1989 Apr 11; 17(7):2884

Two TaqI dimorphic sites at the human beta-hydroxylase locus. D'Amato T, et al. **Nucleic Acids Res** 1989 Jul 25; 17(14):5871

RFLP identified by the anonymous DNA segment OLVIID1 on chromosome 6 [HGM9 no.D6S47] Delattre O, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1789

RFLP identified by the anonymous DNA segment OLVIIF5 at 21q22.1-22.3 [HGM9 no.D21S143] Delattre O, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1790

BclI RFLP at the DXS16 locus. de Martinville B, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10949

An SstI polymorphism for the human muscarinic acetylcholine receptor gene, m4 (CHRM 4). Detera-Wadleigh SD, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6431

A frequent DHFR polymorphism detected by an intron fragment. Detera-Wadleigh SD, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6432

An EcoRV RFLP detected by probe pX59 [DXS77] Diergaarde PJ, et al. **Nucleic Acids Res** 1989 Aug 25; 17(16):6755

A rare c-mos RFLP in normal (noncancerous) fibroblasts from two related cancer patients. Dietrich KD, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1273

An Eco RI restriction length polymorphism at the murine L-myc locus. Dolcetti R, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11853

RFLP and mapping of human MOX-1 gene on chromosome 3. Douglas J, et al. **Nucleic Acids Res** 1988 Sep 26; 16(18):9067

An EcoRI polymorphism in the human von Willebrand factor (vWF) gene. Ewerhardt B, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5416

ApaI dimorphism at the human vitamin D receptor gene locus. Faraco JH, et al. **Nucleic Acids Res** 1989 Mar 11; 17(5):2150

A probe from an X-Y homology region detects RFLPs in Xq13-q22. Feil RP, et al. **Nucleic Acids Res** 1989 Feb 11; 17(3):1279

RsaI and TaqI RFLPs for pACHF3.5 [D16S10]. Fratini A, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9066

ACHF249 [D22S14] detects a common PstI RFLP and maps at 22cen——22q13.1. Fratini A, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9064

pACHF1.1 [D16S8] detects a common PvuII RFLP and maps at 16p13.3——16p13.11. Fratini A, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9065

An StuI RFLP at the human cholesteryl ester transfer protein (CETP) locus. Freeman D, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2880

MspI polymorphism in the human interleukin 6 (IL 6) gene. Fugger L, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4419

Isolation and mapping of a polymorphic DNA sequence (pEFD145) on chromosome 3 [D3S32] Fujimoto E, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9357

Isolation and mapping of a polymorphic DNA sequence (pEFZ33) on chromosome 15. Fujimoto E, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10946

Isolation and mapping of a polymorphic DNA sequence (pEFD52.1) on chromosome 15. Fujimoto E, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10942

Isolation and mapping of a polymorphic DNA sequence (pEFD49.2) on chromosome 15. Fujimoto E, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10943

Isolation and mapping of a polymorphic DNA sequence (pEFD49.3) on chromosome 15. Fujimoto E, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10944

Msp1 RFLP in the human hexosaminidase beta peptide (Hex B) gene. Gandy S, et al. **Nucleic Acids Res** 1989 Aug 25; 17(16):6761

A TaqI RFLP for the human fibronectin (FN1) gene. Gardella R, et al. **Nucleic Acids Res** 1988 Dec 9; 16(23):11388

XmnI, HincII and BclI RFLPs at D16S79. Gedeon AK, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4905

An MspI RFLP at D16S10. Gedeon AK, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2146

A TaqI RFLP of the human T-cell receptor gamma (TCRG) variable gene V11. Ghanem N, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1270

A unique RFLP in the human T-cell receptor gamma constant region gene TRGC1. Ghanem N, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):471

SacI polymorphism defined by human T-cell receptor gamma (TCRG) variable gene V11. Ghanem N, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1271

Detection of familial LPL deficiency by PvuII RFLP. Gotoda T, et al. **Nucleic Acids Res** 1989 May 11;17(9):3607

An XmnI RFLP detected with a cDNA probe for the CYP2C gene locus on chromosome 10. Gough AC, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4426

Identification of an Apa I polymorphism within the human adenosine deaminase (ADA) gene. Gribbin T, et al. **Nucleic Acids Res** 1989 May 11;17(9):3626

A StuI RFLP upstream of the low density lipoprotein receptor (LDLR) gene. Hegele RA, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1786

Three RFLPs upstream of the low density lipoprotein receptor (LDLR) gene. Hegele RA, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):470

KpnI RFLP for the human CSF-1 gene. Heinzmann C, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6425

A two allele DNA polymorphism of the human phenylethanolamine N-methyltransferase (hPNMT) gene identified by HGIA I. Hoehe MR, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):828

Dra I identifies a two allele DNA polymorphism in the human alpha 2-adrenergic receptor gene (ADRAR), using a 5.5 kb probe (p ADRAR). Hoehe MR, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9070

BANI detects a biallelic DNA polymorphism of the human phenylethanolamine N-methyltransferase [hPNMT] gene. Hoehe MR, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2148

Isolation and mapping of a polymorphic DNA sequence (pMHZ5) on chromosome 1 [D1S78] Hoff M, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9366

Isolation and mapping of a polymorphic DNA sequence (pHHH208) on chromosome 14 [D14S19]. Hoff M, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10400

Isolation and mapping of a polymorphic DNA sequence (pMHZ17) on chromosome 13 [D13S51]. Hoff M, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10401

Isolation and mapping of a polymorphic DNA sequence (pTHH28) on chromosome 7p [D7S371] Holm T, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9887

Isolation and mapping of a polymorphic DNA sequence (pTHH55) on chromosome. Holm T, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10945

Amplification of a highly polymorphic VNTR segment by the polymerase chain reaction. Horn GT, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2140

A TaqI RFLP detected by the probe VK45C6 [D16S131] at 16p13.11. Hyland VJ, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6430

A Hpa I polymorphism in the human laminin B1 chain gene on 7q22. Ikonen J, et al. **Nucleic Acids Res** 1989 Jan 11; 17(1):473

Discovery of a novel multilocus DNA polymorphism [DNF24] Ip NY, et al. **Nucleic Acids Res** 1989 Jun 12; 17(11):4427

A BglII RFLP demonstrated for the Il-3 gene in normal human blood cells and leukemias. Jaquet K, et al. **Nucleic Acids Res** 1989 May 11;17(9):3620

Isolation of a DNA sequence (lambda EMBL 3.93, D9S37) from chromosome 9cen-qter detecting polymorphisms with TaqI and MspI. Jeremiah SJ, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6759

An MspI RFLP in the APOB promoter. Jones T, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):472

A TaqI polymorphism at human homeo box gene locus on chromosome 12. Kamino K, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11387

Identification of the PvuII RFLPs from the switch human immunoglobulin alpha (IGSA) regions. Keyeux G, et al. **Nucleic Acids Res** 1989 May 11;17(9):3623

A specific switch alpha probe of the human immunoglobulin IGHA locus. Keyeux G, et al. **Nucleic Acids Res** 1989 May 11;17(9):3624

Isolation and mapping of a polymorphic DNA sequence (cA476) on chromosome 3 [D3S94] Kiousis S, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5876

An extremely polymorphic locus on the short arm of the human X chromosome with homology to the long arm of the Y chromosome. Knowlton RG, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):423-37

RFLP for Sst I (Sac I) at the human plasminogen activator inhibitor type 1 (PAI-1) gene locus. Kondo I, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2375

A Bsu36I RFLP detected by the chromosome 19q probe p alpha.5B [D19S36] Korneluk RG, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5875

A BanI polymorphism identified by the probe p alpha 1.4P at 19q13.1 [D19S37] Korneluk RG, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5874

Further RFLPs at the human tyrosine hydroxylase locus. Körner J, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9078

Xba I polymorphisms in the 5' region of human erythrocyte alpha spectrin gene (Spna). Kotula L, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10950

Isolation and mapping of a polymorphic DNA sequence (pEFZ38) on chromosome 2 [D2S60] Krapcho K, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9360

The gelsolin (GSN) cDNA clone, from 9q32-34, identifies BclI and StuI RFLPs. Kwiatkowski DJ, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4425

HincII RFLP in the human gene for the heavy neurofilament subunit (NF-H). Lacoste-Royal G, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6434

An X-linked DraI RFLP recognized by cpX23 [DXS132] Lafreniere RG, et al. **Nucleic Acids Res** 1989 Aug 25; 17(16):6754

Human non-histone chromosomal protein HMG-17: identification, characterization, chromosome localization and RFLPs of a functional gene from the large multigene family. Landsman D, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2301-14

PstI RFLP for the anonymous [D13S2] (p9D11) probe. Lee JS, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2147

Two RFLPs associated with the human endogenous retroviral element S71 on chromosome 18q21. Leib-Mösch C, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2367

An anonymous DNA probe (NL32) recognises a MspI polymorphism on human chromosome 1 [D1S84]. Lench NJ, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11854

Two RFLPs in human inter-alpha-trypsin inhibitor heavy chain gene ITIH2 on chromosome 10. Léveillard T, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5418

Eco O 109 reveals two polymorphic sites in the human inter-alpha-trypsin inhibitor light chain gene, ITI L. Léveillard T, et al. **Nucleic Acids Res** 1989 Feb 11; 17(3):1272

Dra I polymorphism in the human inter-alpha-trypsin inhibitor heavy chain gene ITIH1. Léveillard T, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5419

Sst I RFLP in the human inter-alpha-trypsin inhibitor heavy chain gene ITIH1. Léveillard T, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11852

An Apa I polymorphism for the human inter-alpha-trypsin inhibitor heavy chain gene ITIH1 on chromosome 3. Léveillard T, et al. **Nucleic Acids Res** 1989 Apr 11; 17(7):2875

A KpnI polymorphism for the human insulin-responsive glucose transporter gene (GLUT4) on chromosome 17. Leysens N, et al. **Nucleic Acids Res** 1989 May 11;17(9):3621

SacI and XbaI polymorphisms detected by lipocortin 2A (LPC2A). Leysens NJ, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5417

Bst-1 RFLP at the human lipoprotein lipase (LPL) gene locus. Li S, et al. **Nucleic Acids Res** 1988 Dec 23; 16(24):11856

Ava-II RFLP at the human hepatic lipase (HL) gene locus. Li SR, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4908

Xmn-1 and Bg1-II RFLPs at the human hepatic lipase (HL) gene locus. Li SR, et al. **Nucleic Acids Res** 1989 Aug 25; 17(16):6762

Stu I RFLP at the human Hep G2/erythrocyte glucose transporter (GLUT) gene locus. Li SR, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3330

An EcoRI polymorphism of the human von Willebrand factor cDNA (VWF). Lindstedt M, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6435

An EcoRI polymorphism of the human von Willebrand factor cDNA (VWF). Lindstedt M, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2882

Rapid RFLP screening using DNA from complete hydatidiform moles. Litt M, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):464

An anonymous single-copy clone, p55-B1, from chromosome 17 identifies a TaqI RFLP [HGM9 no. D17S86] Litt M, et al. **Nucleic Acids Res** 1989 Mar 25; 17(6):2371

An anonymous single-copy clone, p30-1-60, identifies a frequent RFLP on chromosome 3p [HGM9 no. D3S86]. Litt M, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2883

A new TaqI polymorphism of the complement factor B gene. Lobaccaro JM, et al. **Nucleic Acids Res** 1988 Dec 23; 16(24):11851

An HaeIII RFLP for the human homeo box-containing gene EN1. Logan C, et al. **Nucleic Acids Res** 1989 Apr 11; 17(7):2877

An SstI RFLP for the human homeo box-containing gene EN2. Logan C, et al. **Nucleic Acids Res** 1989 Apr 11; 17(7):2878

PvuII and RsaI RFLPs for the human homeo box-containing gene EN2. Logan C, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2879

KpnI RFLP in the 3' flanking region of the C1 inhibitor gene. McPhaden AR, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4912

Human T-cell receptor CD3-delta (CD3D)/MspI DNA polymorphism. Malhotra U, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2373

Two additional TaqI RFLPs in von Willebrand factor gene (VWF) and pseudogene. Marchetti G, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3329

BclI RFLP for the human vimentin gene. Marcus EM, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9068

Description of an HLA-DQA1 RFLP allele [DQ alpha 4] defining DQw4/DRw8-bearing haplotypes. Martinez-Laso J, et al. **Nucleic Acids Res** 1989 May 25; 17(10):4006

A new HLA-DQA1 RFLP allele [DQ alpha 3b] distinguishes between DQ alpha genes of DQw2-DR3 and DQw3-DR5 haplotypes. Martinez-Laso J, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4911

HinfI RFLP at the human renin (REN) gene locus. Masharani U. **Nucleic Acids Res** 1989 Jan 11;17(1):467

EcoRI and NsiI RFLPs at a human PLA2 gene on chromosome 1. Masharani U, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9073

RFLPs detected at 2 pter-p12 with a thyroid peroxidase cDNA probe, TPO3 (McKusick no. 27450). Massaro G, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2155

An MspI polymorphism for the dystrophin intragenic probe J-47. Meng G, et al. **Nucleic Acids Res** 1989 Aug 25; 17(16):6756

Human beta-casein: partial cDNA sequence and apparent polymorphism. Menon RS, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2869

Isolation and mapping of a polymorphic DNA sequence pH30 on chromosome 4[HGM provisional no. D4S139] Milner EC, et al. **Nucleic Acids Res** 1989 May 25; 17(10):4002

Six RFLPs for human T cell receptor alpha (TCRA) on chromosome 14. Mitchell AL, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2876

A new BglII RFLP at the epidermal growth factor receptor locus (erbB-1) on chromosome 7. Motomura K, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):236?

Isolation and mapping of a polymorphic DNA sequence, DXS312, to Xq27——Xq28 [published erratum appears in Nucleic Acids Res 1989 Aug 25;17(16):6774] Mulligan L, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4421

TaqI and RsaI RFLP's at the prolactin inducible protein (PIP) locus on chromosome 7. Myal Y, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5879

Isolation and mapping of a polymorphic DNA sequence (pRMR6) on chromosome 20 [D20S20] Myers R, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9883

A new TaqI allele at DXS52 frequent in Algeria. Nafa K, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1276

SstI polymorphism revealed by anonymous probe cpl 2.6 [D5S89] which maps to 5q21——5q31. Nagarajan L, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2154

Two 47z [DXYS5] RFLPs on the X and the Y chromosome. Nakahori Y, et al. **Nucleic Acids Res** 1989 Mar 11; 17(5):2152

Isolation and mapping of a polymorphic DNA sequence (pEFD64.2) on chromosome 3 [D3S46] Nakamura Y, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9354

Isolation and mapping of a polymorphic DNA sequence (pYNH20) on chromosome 13 [D13S50]. Nakamura Y, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10402

Isolation and mapping of a polymorphic DNA sequence (pYNZ94) on chromosome 17 [D17S80] Nakamura Y, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9884

Isolation and mapping of a polymorphic DNA sequence (pEFD64.1) on chromosome 3. Nakamura Y, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10947

Isolation and mapping of a polymorphic DNA sequence (pEFD134.7) on chromosome 3 [D3S45] Nakamura Y, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9355

Isolation and mapping of a polymorphic DNA sequence (pHBI59) on chromosome 11 [D11S146]. Nakamura Y, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10404

Isolation and mapping of a polymorphic DNA sequence (pKKA12) on chromosome 7 [D7S398] Nakamura Y, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9886

Isolation and mapping of a polymorphic DNA sequence (pMCT122.2) on chromosome 10 [D10S36]. Nakamura Y, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10405

Isolation and mapping of a polymorphic DNA sequence (pCMM63) on chromosome 2 [D2S51] Nakamura Y, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9361

Isolation and mapping of a polymorphic DNA sequence (pEFD70.2) on chromosome 10 [D10S26]. Nakamura Y, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10407

Isolation and mapping of a polymorphic DNA sequence (pMCT96.1 and pMCT96.2) on chromosome 9q [D9S14] Nakamura Y, et al. **Nucleic Acids Res** 1988 Oct 25; 16(20):9881

Isolation and mapping of a polymorphic DNA sequence (pKKA40) on chromosome 9q [D9S31]. Nakamura Y, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10408

Isolation and mapping of a polymorphic DNA sequence (cYNA4) on chromosome 2 [D2S50] Nakamura Y, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9362

Isolation and mapping of a polymorphic DNA sequence (pMHZ21) on chromosome 9q [D9S30]. Nakamura Y, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10409

Isolation and mapping of a polymorphic DNA sequence (pMCT15) on chromosome 21 [D21S113] Nakamura Y, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9882

Isolation and mapping of a polymorphic DNA sequence (pTHH33) on chromosome 1q [D1S81] Nakamura Y, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9363

Isolation and mapping of a polymorphic DNA sequence (pEFD6) chromosome 6 [D6S41] Nakamura Y, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9888

Isolation and mapping of a polymorphic DNA sequence (pMCT118) on chromosome 1p [D1S80] Nakamura Y, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9364

Isolation and mapping of a polymorphic DNA sequence (pYNZ132) on chromosome 6 [D6S40] Nakamura Y, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9889

Isolation and mapping of a polymorphic DNA sequence (pCMM8) on chromosome 1p [D1S79] Nakamura Y, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9365

Isolation and mapping of a polymorphic DNA sequence (cMCOD13) on chromosome 3 [D3S44] Nakamura Y, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9356

Isolation and mapping of a polymorphic DNA sequence (pMCT106) on chromosome 2 [D2S61] Nakamura Y, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9359

Isolation and mapping of a polymorphic DNA sequence (pMCT58) on chromosome 1p [D1S77] Nakamura Y, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9367

Isolation and mapping of a polymorphic DNA sequence (pCMM12) on chromosome 1p [D1S76] Nakamura Y, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9368

Isolation and mapping of a polymorphic DNA sequence (cYNA13) on chromosome 1 [D1S74] Nakamura Y, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9369

Isolation and mapping of a polymorphic DNA sequence (pCMM8.1) on chromosome 1p [D1S63] Nakamura Y, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9370

The human osteonectin gene (OSN) has TaqI and MspI polymorphisms. Naylor SL, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6753

Additional polymorphism for D7S8 linked to cystic fibrosis including detection by DNA amplification. Northrup H, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1784

Nucleotide sequence of PvuII polymorphic site at the human lipoprotein lipase gene locus. Oka K, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6752

A Pvu II RFLP in the human ADH3 gene. Pandolfo M, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11857

HindIII RFLP on chromosome 8 detected with a calbindin 27 kDa cDNA probe, HBSC21. Parmentier M, et al. **Nucleic Acids Res** 1988 Oct 11;16(19):9373

An RFLP associated with insulinoma amyloid polypeptide locus (IAPP). Patel P, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6758

Nhe I and Hinc II polymorphisms in the human laminin B1 chain gene on 7q22. Pikkarainen T, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4424

PstI polymorphism of the alpha 1-antitrypsin-like gene. Poller W, et al. **Nucleic Acids Res** 1989 Mar 11;17(5):2151

RFLP for HindIII at the Duchenne muscular dystrophy gene. Prior TW, et al. **Nucleic Acids Res** 1989 Mar 25; 17(6):2370

RFLP for TaqI of the human thyroid papillary carcinoma (PTC) oncogene. Radice P, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9062

A polymorphic locus [D1S88] is detected by probe LA01.41 on chromosome 1p. Raeymaekers P, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1278

Probe pJ1 [D7S402] detects a MspI RFLP on chromosome 7q31-32. Ramsay M, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1793

Isolation and mapping of a polymorphic DNA sequence (pB3.811) on chromosome 12 [D12S33] Rimokh R, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):823

A new HincII RFLP for epidermal growth factor (EGF) on chromosome 4. Ritty TM, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5870

Detection of novel genetic markers by mismatch analysis. Roberts RG, et al. **Nucleic Acids Res** 1989 Aug 11; 17(15):5961-71

A new polymorphism for the dystrophin intragenic probe P20 [DXS269] using BstX1. Robertson ME, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3327

A BamH1 RFLP of the C8B gene. Rogde S, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6760

A human minisatellite probe reveals RFLPs among individuals of two angiosperms. Rogstad SH, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11378

The M13 repeat probe detects RFLPs between two strains of the protozoan malaria parasite Plasmodium falciparum. Rogstad SH, et al. **Nucleic Acids Res** 1989 May 11; 17(9):3610

Gamma-glutamyl transferase locus (GGT) displays a PvuII polymorphism. Rouleau GA, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11848

Eco RV RFLP at the insulin-like growth factor I (IGF I) locus on chromosome 12. Schneid H, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9059

Ava II RFLP at the insulin-like growth factor II (IGF II) locus on chromosome 11. Schneid H, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):466

Two RFLPs in the 5' end of the human osteonectin (ON) gene. Schwartz RC, et al. **Nucleic Acids Res** 1988 Sep 26; 16(18):9076

Hinf I polymorphism 3' to the human beta-globin gene detected by the polymerase chain reaction (PCR). Semenza GL, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2376

A restriction fragment length polymorphism at murine Glud locus co-segregates with Rib-1, Es-10, and Tcra on chromosome 14. Shaughnessy J Jr, et al. **Nucleic Acids Res** 1989 Apr 11;17(7):2881

A TaqI RFLP identified at the retinoblastoma locus on chromosome 13. Shiang R, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9069

RFLPs of the gene for the human glycine receptor on the X-chromosome. Siddique T, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1785

L2, a DNA fragment from Xq24-q27, detects an EcoR1 RFLP (HGM9 no. DXS12). Skare J, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4909

MspI RFLP at 19q12-q13.1 identified by the anonymous DNA sequence p30B18 [D19S31] Smeets H, et al. **Nucleic Acids Res** 1989 May 11;17(9):3627

EcoRI RFLP at 19q13.1 identified by the anonymous DNA sequence p58B18 [D19S32] Smeets H, et al. **Nucleic Acids Res** 1989 May 11;17(9):3628

MspI RFLP at 19cen-q12 identified by the anonymous DNA sequence pPM17.4 [D19S29] Smeets H, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3324

TaqI RFLP at 19q13.1 identified by the anonymous DNA sequence p5B18 [D19S28] Smeets H, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3325

MspI RFLP at 19q12-q13.1 identified by the anonymous DNA sequence p20B18 [D19S30] Smeets H, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3323

Isolation and mapping of a polymorphic sequence (3UCI 10) on chromosome 3 [D3S8]. Smith DI, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5877

Isolation and mapping of a polymorphic DNA sequence (lambda 64) on chromosome 3 [D3S95] Smith DI, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5878

A TaqI RFLP in Xq26----qter detected by pX301b [DXS311] Sood R, et al. **Nucleic Acids Res** 1989 Jun 12; 17(11):4422

Frequencies of the human immunoglobulin IGHA2*M1 and IGHA2*M2 alleles corresponding to the A2m(1) and A2m(2) allotypes in the French, Lebanese, Tunisian and black African populations. Soua Z, et al. **Nucleic Acids Res** 1989 May 11;17(9):3625

RFLP for TaqI at the human tyrosinase locus. Spritz R, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9890

Human insulin receptor RFLPs detected by HindIII and DraI. Sten-Linder M, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1277

DraI and PstI RFLPs in the tyrosine hydroxylase (TH) and insulin gene (INS) region of chromosome 11. Sten-Linder M, et al. **Nucleic Acids Res** 1989 Jul 25;17(14):5873

A three allele restriction fragment length polymorphism within the human Col2A1 gene. Strom CM. **Nucleic Acids Res** 1988 Sep 26;16(18):9077

TaqI RFLP identified by probe VK17A (DXS294) at Xq26. Suthers GK, et al. **Nucleic Acids Res** 1988 Dec 9; 16(23):11389

An HinfI polymorphism at the MET locus in inbred mice. Sweet AM, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4907

RFLPs for the human pepsinogen A haplotypes (PGA). Taggart RT, et al. **Nucleic Acids Res** 1988 Oct 11; 16(19):9371

Hypervariability of simple sequences as a general source for polymorphic DNA markers. Tautz D. **Nucleic Acids Res** 1989 Aug 25;17(16):6463-71

A BstXI polymorphism detected by the factor VIII genomic probe p.482.6 (F8C). Taylor SA, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6426

Two RFLPS approximately 7 kb 5' of the human protein C gene. te Lintel Hekkert W, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11849

DraI and ScaI RFLPs at human tyrosine hydroxylase (TH) gene locus. Tinklenberg KJ, et al. **Nucleic Acids Res** 1988 Nov 25;16(22):10948

Isolation and mapping of a polymorphic DNA sequence (lambda MC.34) on chromosome 2 [D2S63]. Torroni A, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9061

An RFLP in mice detected by a CD3-epsilon probe. Tunnacliffe A, et al. **Nucleic Acids Res** 1989 Jun 12; 17(11):4418

A polymorphic locus [D21S144] is detected by probe pVC12 on chromosome 21. Van Camp G, et al. **Nucleic Acids Res** 1989 Jun 12;17(11):4420

BamHI polymorphism at the human embryonic/atrial myosin alkali light chain gene locus. Vanin EF. **Nucleic Acids Res** 1989 Jun 26;17(12):4910

An arbitrary single copy DNA sequence VC85 [D1S85] detects a 500 bp insertion/deletion polymorphism on chromosome 1. Verga V, et al. **Nucleic Acids Res** 1989 May 25;17(10):4007

An arbitrary single copy DNA sequence VC85 [D1S85] detects a 500 bp insertion/deletion polymorphism on chromosome 1. Verga V, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5420

Detection of a 3 allele AvaII RFLP by a single copy anonymous DNA sequence VC75 [D7S404] localized to chromosome 7. Verga V, et al. **Nucleic Acids Res** 1989 May 25;17(10):4008

Detection of a 3 allele AvaII RFLP by a single copy anonymous DNA sequence VC75 [D7S404] localized to chromosome 7. Verga V, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5421

An arbitrary single copy sequence VC64 [D1S86] detects a moderate frequency TaqI RFLP on chromosome 1] Verga V, et al. **Nucleic Acids Res** 1989 May 25;17(10):4009

An arbitrary single copy sequence VC64 [D1S86] detects a moderate frequency TaqI RFLP on chromosome 1. Verga V, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5422

An arbitrary single copy human DNA sequence VC63 [D4S129] detects a TaqI RFLP on chromosome 4] Verga V, et al. **Nucleic Acids Res** 1989 May 25;17(10):4010

An arbitrary single copy human DNA sequence VC63 [D4S129] detects a TaqI RFLP on chromosome 4. Verga V, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5423

A high frequency two allele TaqI RFLP detected by an anonymous sequence VC61 [D2S65] on chromosome 2. Verga V, et al. **Nucleic Acids Res** 1989 May 25;17(10):4011

A high frequency two allele TaqI RFLP detected by an anonymous sequence VC61 [D2S65] on chromosome 2. Verga V, et al. **Nucleic Acids Res** 1989 Jul 11;17(13):5424

A MspI RFLP associated with the human catalase gene. Wadey RB, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3332

A Bgl II polymorphism detected by LDR152 [D19S19]. Walker AP, et al. **Nucleic Acids Res** 1988 Sep 26; 16(18):9063

RFLP for Duchenne muscular dystrophy cDNA clone 30-2. Walker AP, et al. **Nucleic Acids Res** 1988 Sep 26; 16(18):9072

A new accI polymorphism for pMCT112 [D9S15] Wallis J, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4904

An anonymous DNA probe (H38) [D10S37] detects a Msp I polymorphism on chromosome 10. Warnich L, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):474

Anonymous DNA segment H33 [D6S42] on chromosome 6 associated with 2 RFLPs. Warnich L, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):468

Three allele RFLP identified by an anonymous sequence on chromosome 2, E135 [D2S62] Warnich L, et al. **Nucleic Acids Res** 1989 Jan 11;17(1):469

A DNA polymorphism with KpnI of the human liver-type phosphofructokinase (PFKL) gene. Warren AC, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9060

EcoRI polymorphism of the human immunoglobulin C epsilon 1 gene (IGHE1). Washio K, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6757

A PvuII polymorphism near the 5' end of the type II procollagen gene [COL2A1] Weaver EJ, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6429

A BglI polymorphism in the type VI (alpha 3) procollagen gene [COL6A3] Weaver EJ, et al. **Nucleic Acids Res** 1988 Dec 9;16(23):11386

Isolation and mapping of a polymorphic DNA sequence (pEKMDA2-I) on chromosome 16 [D16S83] Wolff E, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9885

A rare TaqI RFLP immediately 3' of the HEXB gene on chromosome 5. Wood S, et al. **Nucleic Acids Res** 1989 Mar 25;17(6):2368

Two polymorphic TaqI sites at the human NGFR locus (17q12----17q22). Wright EC, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):824

A moderately frequent HindIII polymorphism at the human NGFR locus (17q12----17q22). Wright EC, et al. **Nucleic Acids Res** 1989 Jan 25;17(2):825

A HindIII polymorphism identified by the human early growth response gene 2 (EGR2) on chromosome 10. Wu J, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11855

Human antithrombin II (AT3) gene length polymorphism revealed by the polymerase chain reaction. Wu S, et al. **Nucleic Acids Res** 1989 Aug 11;17(15):6433

A BAM HI RFLP at the human tyrosine aminotransferase (TAT) gene locus at 16q. Wullich B, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3331

A polymorphic HindIII site within the human multidrug resistance gene 1 (MDR1). Yoshimoto K, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11850

RFLP identified by the anonymous DNA segment FZ IV

E11 at 1p23 [HGM9 no.D1S87] Zhang FG, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1788
RFLP identified by the anonymous DNA segment FZ V D11 at 22q13 [HGM9 no.D22S80] Zhang FR, et al. **Nucleic Acids Res** 1989 Feb 25;17(4):1781
DNA restriction fragment length polymorphisms at either end of the c-raf-1 locus at 3p25. Graziano SL, et al. **Oncogene Res** 1988;3(1):99-103
Designed diagnostic restriction fragment length polymorphisms for the detection of point mutations in ras oncogenes. Kumar R, et al. **Oncogene Res** 1989;4(3):235-41
Adult behaviour of members of the Anopheles gambiae complex in the Gambia with special reference to An. melas and its chromosomal variants. Bryan JH, et al. **Parasitologia** 1987 May-Dec;29(2-3):221-49
Chromosome abnormalities and heterochromatin polymorphism in 127 couples with a history of spontaneous abortions and/or malformed offspring. Parruti G, et al. **Pathologica** 1988 Mar-Apr;80(1066):179-86
Genetic polymorphism of S-mephenytoin hydroxylation. Wilkinson GR, et al. **Pharmacol Ther** 1989;43(1):53-76 (108 ref.)
Analysis of B-G and immune response genes in the Iowa State University S1 chicken line by hybridization of sperm deoxyribonucleic acid with a major histocompatibility complex class II probe. Pitcovski J, et al. **Poult Sci** 1989 Jan;68(1):94-9
A pitfall in the prenatal diagnosis of beta-thalassaemia by RFLP [letter] Aulehla-Scholz C, et al. **Prenat Diagn** 1989 Feb;9(2):140-1
Does biased gene conversion influence polymorphism in the circumsporozoite protein-encoding gene of Plasmodium vivax? Arnot DE, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8102-6
Alternative splicing of HLA-DQB transcripts and secretion of HLA-DQ beta-chain proteins: allelic polymorphism in splicing and polyadenylylation sites. Briata P, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(3):1003-7
Loss of heterozygosity on chromosome 1q in human breast cancer. Chen LC, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7204-7
Amino acid polymorphisms for esterase-6 in Drosophila melanogaster. Cooke PH, et al. **Proc Natl Acad Sci U S A** 1989 Feb;86(4):1426-30
Macromolecular organization of human centromeric regions reveals high-frequency, polymorphic macro DNA repeats. Jabs EW, et al. **Proc Natl Acad Sci U S A** 1989 Jan; 86(1):202-6
Hemagglutinin polymorphism as the basis for low- and high-yield phenotypes of swine influenza virus. Kilbourne ED, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7782-5
Selective changes in expression of HLA class I polymorphic determinants in human solid tumors. Natali PG, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6719-23
Primarily chronic progressive and relapsing/remitting multiple sclerosis: two immunogenetically distinct disease entities. Olerup O, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7113-7
Detection of polymorphisms of human DNA by gel electrophoresis as single-strand conformation polymorphisms. Orita M, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2766-70
Molecular polymorphism of a cell surface proteoglycan: distinct structures on simple and stratified epithelia. Sanderson RD, et al. **Proc Natl Acad Sci U S A** 1988 Dec; 85(24):9562-6
Polymorphism for the number of tandemly multiplicated glycerol-3-phosphate dehydrogenase genes in Drosophila melanogaster. Takano T, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5000-4
Pst I restriction fragment length polymorphism of human placental alkaline phosphatase gene: Mendelian segregation and localization of mutation site in the gene. Tsavaler L, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7680-4
Two-dimensional DNA fingerprinting of human individuals. Uitterlinden AG, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2742-6
A primate species with limited major histocompatibility complex class I polymorphism. Watkins DI, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7714-8
The genetic polymorphism of human alpha 1-acid glycoprotein. Eap CB, et al. **Prog Clin Biol Res** 1989; 300:111-25 (36 ref.)
Polymorphism of aldehyde dehydrogenase in human saliva. Harada S, et al. **Prog Clin Biol Res** 1989;290:133-9
Human plasma alpha 1-acid glycoprotein—biochemical properties, the amino acid sequence and the structure of the carbohydrate moiety, variants and polymorphism. Schmid K. **Prog Clin Biol Res** 1989;300:7-22 (37 ref.)
RFLP analysis in familial polyposis and Gardner syndrome. Woodward SR. **Prog Clin Biol Res** 1988;279:305-8 (8 ref.)
Polymorphic DNA markers and mental disease. Owen MJ, et al. **Psychol Med** 1988 Aug;18(3):529-33 (19 ref.)
Pharmacogenetics and its clinical implications. Part II. Oxidation polymorphism. Horai Y, et al. **Ration Drug Ther** 1988 Jun;22(6):1-8 (20 ref.)
Growth hormones. 1. Polymorphism (minireview). Charrier J, et al. **Reprod Nutr Dev** 1988;28(4A):857-87 (122 ref.)
Genetic polymorphism of rabbit VHa region: a new allotype, a108. Haouas H, et al. **Res Immunol** 1989 Mar-Apr; 140(3):265-73
Diagnosis of hemophilia A in a female subject by using restriction fragment length polymorphisms linked to the factor VIII gene. Randi AM, et al. **Ric Clin Lab** 1989 Jan-Mar;19(1):75-9
Restriction fragment length polymorphism analysis of T-cell receptor genes in inflammatory bowel disease. Katakura S, et al. **Scand J Gastroenterol** 1989 Apr;24(3):381-4
NcoI restriction fragment length polymorphism (RFLP) of the tumour necrosis factor (TNF alpha) region in primary biliary cirrhosis and in healthy Danes. Fugger L, et al. **Scand J Immunol** 1989 Aug;30(2):185-9
Low degree of DNA polymorphism in the HLA-linked lymphotoxin (tumour necrosis factor beta) gene. Partanen J, et al. **Scand J Immunol** 1988 Sep;28(3):313-6
Mitochondrial DNA polymorphism in Chinese. Yu MS, et al. **Sci Sin [B]** 1988 Jul;31(7):860-72
A study on Chinese phenylalanine hydroxylase gene restriction site polymorphism. Zeng YT, et al. **Sci Sin [B]** 1988 Dec;31(12):1447-53
Duplication, deletion, and polymorphism in the sex-determining region of the mouse Y chromosome. Mardon G, et al. **Science** 1989 Jan 6;243(4887):78-80
A genetic polymorphism in the renin gene of Dahl rats cosegregates with blood pressure. Rapp JP, et al. **Science** 1989 Jan 27;243(4890):542-4
Murine MHC polymorphism and T cell specificities. Roy S, et al. **Science** 1989 May 5;244(4904):572-5
Fingerprinting cell lines: use of human hypervariable DNA probes to characterize mammalian cell cultures. Thacker J, et al. **Somat Cell Mol Genet** 1988 Nov;14(6):519-25
Distribution and chromosomal polymorphism of the malaria vector Anopheles dirus species D. Baimai V, et al. **Southeast Asian J Trop Med Public Health** 1988 Dec; 19(4):661-5
Enzyme polymorphism of the malaria vector, An. balabacensis (Diptera: Culicidae) revisited—why sample natural populations? Hii JL, et al. **Southeast Asian J Trop Med Public Health** 1988 Dec; 19(4):689-701
On the evolution of genetic incompatibility systems. IV. Modification of response to an existing antigen polymorphism under partial selfing. Uyenoyama MK. **Theor Popul Biol** 1988 Dec;34(3):347-77
Carrier detection in severe (type III) von Willebrand disease using two intragenic restriction fragment length polymorphisms. Bahnak BR, et al. **Thromb Haemost** 1988 Oct 31;60(2):178-81
Haemophilia A in a female: study of a family using intragenic and extragenic restriction site polymorphisms. Piétu G, et al. **Thromb Haemost** 1988 Aug 30;60(1):102-6
A polymorphism at B beta 448 of fibrinogen identified during structural studies of fibrinogen Baltimore II. Schmelzer CH, et al. **Thromb Res** 1988 Oct 15;52(2):173-7
HLA class II genes polymorphism in DR4 giant cell arteritis patients. Bignon JD, et al. **Tissue Antigens** 1988 Nov; 32(5):254-8
DQ Wa gives rise to a DQ beta restriction fragment pattern indistinguishable from that of the DQw3.2 sub-type of DQw3. Bushell A, et al. **Tissue Antigens** 1988 Jul;32(1):41-5
Segregation of HLA-DR, -DQ and -DP phenotypes and restriction fragment length polymorphic fragments in two recombinant families. Munck Petersen C, et al. **Tissue Antigens** 1988 Aug;32(2):104-11
Definition of DRw10 specificity by restriction fragment length polymorphism. Semana G, et al. **Tissue Antigens** 1988 Sep;32(3):113-20
Apolipoprotein E polymorphism and atherosclerosis: insight from a study in octogenarians. Davignon J, et al. **Trans Am Clin Climatol Assoc** 1987;99:100-10
Characteristics of a DNA probe (pa3'HVR) when used for paternity testing. Allen RW, et al. **Transfusion** 1989 Jul-Aug;29(6):477-85
Biochemically detected HLA-DQ polymorphism in DR-matched donors and recipients of renal allografts. Carter C, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):639-40
HLA-DR3, DQ heterogeneity in American blacks is associated with susceptibility and resistance to insulin dependent diabetes mellitus. Dunston GM, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):653-5
A polymorphic monocyte antigen recognized by a T-cell clone. Farrell C, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):649-50
RFLP analyses of naturally occurring intra-RT1 recombinant strains. Fujii H, et al. **Transplant Proc** 1989 Apr;21(2):3240-1
Mapping, nucleotide sequence, and polymorphism of a new HLA class II light chain gene. Inoko H, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):621-3
Matching for HLA-D region and T-cell antigen receptor gene restriction: fragment length polymorphisms in renal transplantation. Ludwin D, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 1):668-70
Quantitative variation in immunoglobulin G (Igsr-1) in LEC rats associated with spontaneous hepatitis and hepatoma. Matsumoto K, et al. **Transplant Proc** 1989 Apr;21(2):3259
HLA class II typing by restriction fragment length polymorphism (RFLP) in unrelated bone marrow transplant patients. Noreen HJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2968-70
The reasons for MHC polymorphism in man. Serjeantson SW. **Transplant Proc** 1989 Feb;21(1 Pt 1):598-601 (35 ref.)
Polymorphism of white blood cells in the rat. Stolc V. **Transplant Proc** 1989 Apr;21(2):3260-1
Class II DNA polymorphisms and renal allograft outcome. Sullivan J, et al. **Transplant Proc** 1989 Feb;21(1 Pt 1):667
The molecular genetics of color vision and color blindness. Piantanida T. **Trends Genet** 1988 Nov;4(11):319-23 (23 ref.)
Hpa-I polymorphism and the sickle gene in Nigerians. Falusi AG, et al. **Trop Geogr Med** 1989 Apr;41(2):133-7
The distribution and chromosome polymorphism of Simulium dieguerense (Diptera: Simuliidae). Boakye DA, et al. **Trop Med Parasitol** 1988 Jun;39(2):117-9
Linkage of the gene for the scrapie-associated fibril protein (PrP) to the Sip gene in Cheviot sheep. Hunter N, et al. **Vet Rec** 1989 Apr 8;124(14):364-6
Properdin factor B(Bf) polymorphism in the population of Veneto, Italy. Crestani C, et al. **Z Rechtsmed** 1988; 101(2):81-5
A very slow BF variant (S085) detected in a Japanese population. Kido A, et al. **Z Rechtsmed** 1988;101(1):45-8
Genetic polymorphism of desialyzed alpha 2 HS-glycoprotein by ultrathin isoelectric focusing. Sebetan IM, et al. **Z Rechtsmed** 1988;101(3):205-7
Genetic polymorphisms of orosomucoid ORM1 and ORM2 in a Japanese population: occurrence of new ORM1 alleles. Sebetan IM, et al. **Z Rechtsmed** 1989;102(1):5-9
A human minisatellite sequence reveals DNA polymorphism in the equine species. Troyer D, et al. **Zentralbl Veterinarmed [A]** 1989 Feb;36(2):81-3
[Study on RFLPs of DX13/Bgl II in Chinese and its application on linkage analysis of hemophilia A] Shen Y. **Chung Kuo I Hsueh Ko Hsueh Yuan Hsueh Pao** 1988 Dec; 10(6):389-92 (Eng. Abstr.) (Chi)
[Molecular biology research on ApoA-I] Wang L, et al. **Sheng Li Ko Hsueh Chin Chan** 1989 Jan;20(1):26-31 (35 ref.) (Chi)
[Genes and cholesterol] Kontula K, et al. **Duodecim** 1988; 104(22):1824-37 (65 ref.) (Fin)
[Research in HLA-domain genes and its practical significance] Koskimies S. **Duodecim** 1988;104(22):1817-23 (16 ref.) (Fin)
[Genetic polymorphism of drug oxidation] Heller FR, et al. **Acta Gastroenterol Belg** 1988 Jan-Feb;51(1):91-101 (31 ref.) (Eng. Abstr.) (Fre)
[Blood polymorphism in the study of isolated communities] Fujiki N, et al. **C R Soc Biol (Paris)** 1988;182(4):372-81 (Eng. Abstr.) (Fre)
[Polymorphism of acetylcholinesterase and myosin during development of fast and slow muscles denervated in the newborn rabbit] Bacou F, et al. **Reprod Nutr Dev** 1988; 28(3B):757-68 (Eng. Abstr.) (Fre)
[Techniques of DNA polymorphisms revealed by probes for the Y chromosome applied to questions of father-son line in analyses of paternity] Guérin P, et al. **Rev Fr Transfus Immunohematol** 1988 Oct;31(3):513-20 (Eng. Abstr.) (Fre)
[Gm/Km determination in sperm traces] Bässler G, et al. **Arch Kriminol** 1989 May-Jun;183(5-6):173-9 (Eng. Abstr.) (Ger)
[Possibilities for simultaneous determination of ABO, PGM1 and Gc polymorphisms in typing of blood stains] Berghaus G, et al. **Beitr Gerichtl Med** 1988;46:213-7 (Eng. Abstr.) (Ger)
[Use of polymorphic DNA markers in the assessment of stains] Holtz J, et al. **Beitr Gerichtl Med** 1988;46:193-8 (Eng. Abstr.) (Ger)
[Isolation of high molecular weight DNA from a 14-day-old immersed cadaver] Josephi E, et al. **Beitr Gerichtl Med** 1988;46:203-6 (Eng. Abstr.) (Ger)
[Determination of restriction fragment length polymorphism in microscopically verified sperm findings] Josephi E, et al. **Beitr Gerichtl Med** 1988;46:207-12 (Eng. Abstr.) (Ger)
[Stability of repetitive DNA sequences in cadaver tissues] Teifel-Greding J, et al. **Beitr Gerichtl Med** 1988;46:199-202 (Eng. Abstr.) (Ger)
[DNA fingerprints and hypervariable regions: genetic marker with many application potentials in medicine and biology] Fey MF. **Schweiz Med Wochenschr** 1989 Jun 10; 119(23):815-25 (56 ref.) (Eng. Abstr.) (Ger)
[Molecular genetic aspects of diabetes mellitus] Neumer C, et al. **Z Arztl Fortbild (Jena)** 1988;82(22):1143-7 (Ger)
[Genetic diagnosis in classical phenylketonuria] Wulff K, et al. **Z Arztl Fortbild (Jena)** 1988;82(22):1127-31 (Ger)
[Aspects of genetic technics in diabetes research] Zühlke H, et al. **Z Med Lab Diagn** 1989;30(1):58-60 (Ger)
[Genetic analysis of familial polyposis coli. Linkage analysis and loss of heterozygosity in colorectal tumors of FPC by RFLP analysis] Sasaki M. **Fukuoka Igaku Zasshi** 1989 Jan;80(1):38-48 (Eng. Abstr.) (Jpn)
[Genetic variants of the complement components and HLA-antigens associated in patients with psoriasis vulgaris in Japanese] Nakagawa H, et al. **Nippon Hifuka Gakkai Zasshi** 1989 Jan;99(1):77-81 (Eng. Abstr.) (Jpn)
[Hereditary factors in Takayasu arteritis—III. Polymorphism of human complements] Numano F, et al. **Nippon Naika Gakkai Zasshi** 1989 Apr;78(4):485-92 (Jpn)
[Progress in molecular genetic study of the complement system. Cloning of complement genes and the genetic marker, RFLP] Tobe T. **Nippon Rinsho** 1988 Sep; 46(9):2000-5 (Jpn)
[Restriction fragment length polymorphisms of the antithrombin III gene—examination of the normal

Japanese, abnormal AT III (Toyama) and AT III deficient families] Oguma Y, et al. **Rinsho Byori** 1989 Apr;Spec No 81:64–74 **(Jpn)**

[A new diagnostic method of lung cancer by DNA-RFLP] Kawashima K, et al. **Seikagaku** 1989 Feb;61(2):105–8 **(Jpn)**

[Two polymorphic repetitive sequences: evolution and genetic instability] Kominami R. **Seikagaku** 1989 Apr; 61(4):261–70 (31 ref.) **(Jpn)**

[Use of DNA restriction fragment length polymorphisms in the diagnosis of genetically determined diseases] Ziętkiewicz E, et al. **Pol Arch Med Wewn** 1985 Oct; 74(4):269–78 (40 ref.) **(Pol)**

[Diagnosis of genetic diseases using DNA recombination technics] Jungerman M, et al. **Pol Tyg Lek** 1988 Sep 26; 43(39):1243–6 **(Pol)**

[Use of DNA polymorphism in the diagnosis of human genetic diseases] Cebrat S. **Postepy Hig Med Dosw** 1988 Sep–Oct;42(5):461–82 (33 ref.) (Eng. Abstr.) **(Pol)**

[The structure of genome region containing unstable elements of human DNA] Rogaev EI. **Dokl Akad Nauk SSSR** 1988 Sep–Oct;302(1):234–8 **(Rus)**

[Polymorphic changes in cellular phenotype during hyperexpression of the NEU proto-oncogene] Tarakhovskiĭ AM, et al. **Dokl Akad Nauk SSSR** 1989 May–Jun;306(1):217–21 **(Rus)**

[Polymorphic repetitive DNA sequences in genomes of wild and domesticated sheeps] Turarbekov MZ, et al. **Dokl Akad Nauk SSSR** 1988;302(5):1265–8 **(Rus)**

[Inversion polymorphism of the malaria mosquito Anopheles messeae. VIII. Distribution of larvae in biotopes under conditions of co-habitation with Anopheles beklemishevi] Gordeev MI, et al. **Genetika** 1989 Feb;25(2):283–91 (Eng. Abstr.) **(Rus)**

[Clinical polymorphism in amenorrhea of chromosomal and nonchromosomal etiologies] Kirillova EA, et al. **Genetika** 1988 Aug;24(8):1470–7 (Eng. Abstr.) **(Rus)**

[Correlation of polymorphism of heterochromatin segments with hybridization on chromosome preparations of various cloned repeated human DNA sequences] Kruminia AR, et al. **Genetika** 1989 May;25(5):902–9 (Eng. Abstr.) **(Rus)**

[Complex medico-genetic study of the populations of western Siberia. IV. A multivariate statistical analysis of the interrelation of quantitative and polymorphic monogenic traits] Puzyrev VP, et al. **Genetika** 1988 Aug;24(8):1478–87 (Eng. Abstr.) **(Rus)**

[Genetic polymorphism of alpha 1-antitrypsin in green monkeys studied by isoelectric focusing and family analysis] Samil'chuk EI, et al. **Genetika** 1988 Aug;24(8):1402–10 (Eng. Abstr.) **(Rus)**

[Phosphoglycolate phosphatase (PGP. E. C. 3..3.18) polymorphism in Magadan inhabitants] Solovenchuk LL. **Genetika** 1989 Jan;25(1):150–3 (Eng. Abstr.) **(Rus)**

[Relative role of selective migration and pathology in the formation of genetic structure] Solovenchuk LL. **Genetika** 1988 Nov;24(11):2064–70 (Eng. Abstr.) **(Rus)**

[DNA fingerprinting: hypervariable loci and genetic marking] Ivanov PL. **Mol Biol (Mosk)** 1989 Mar–Apr; 23(2):341–7 (16 ref.) (Eng. Abstr.) **(Rus)**

[Atypical variant of the familial form of chorea in children (characteristics of its intrafamilial polymorphism)] Badalian LO, et al. **Pediatriia** 1988;(11):79–82 **(Rus)**

[Heteromorphism of chromosome 1, 9 and 16 homologs in persons living in regions differing in the level of longevity] Kuznetsova SM, et al. **Tsitol Genet** 1988 Jul–Aug; 22(4):27–32 (Eng. Abstr.) **(Rus)**

[Frequency of phenotypes and genes of the polymorphic blood systems in a population as dependent on the age factor] Mozalevskiĭ AF, et al. **Tsitol Genet** 1989 May–Jun; 23(3):57–62 (Eng. Abstr.) **(Rus)**

[Intraspecific polymorphism of glucose-6-phosphate dehydrogenase in Amoeba proteus] Sopina VA. **Tsitologiia** 1989 Feb;31(2):237–44 (Eng. Abstr.) **(Rus)**

[Polymorphism of human genes, methods of its detection and relation with cardiovascular diseases (review of the literature)] Surguchev AP. **Vopr Med Khim** 1989 Mar–Apr; 35(2):16–23 (55 ref.) (Eng. Abstr.) **(Rus)**

[Autosomal-dominant motor-sensory neuropathy type I: intrafamilial polymorphism in the Roussy-Lévy syndrome] Badalian LO, et al. **Zh Nevropatol Psikhiatr** 1988; 88(11):45–9 (Eng. Abstr.) **(Rus)**

[Clinical polymorphism and genetic heterogeneity in Duchenne's progressive muscular dystrophy in girls (a review)] Zavadenko NN, et al. **Zh Nevropatol Psikhiatr** 1988;88(11):123–6 (47 ref.) **(Rus)**

[Use of DNA analysis in the prevention of progressive muscular dystrophies] Kádasi L, et al. **Bratisl Lek Listy** 1988 Nov;89(11):828–34 (Eng. Abstr.) **(Slo)**

[Use of the recombinant DNA technic in studying cystic fibrosis in 14 Spanish families: detection of carriers and healthy subjects] Fernández García E, et al. **An Esp Pediatr** 1989 Apr;30(4):251–4 (Eng. Abstr.) **(Spa)**

[The concept of "genetic marker" (old wine in new wineskins) (editorial)] Sánchez Cascos A. **An Esp Pediatr** 1988 Oct;29(4):269–70 **(Spa)**

DRUG EFFECTS

Narcotic analgesics and debrisoquine polymorphism [letter] Lavrijsen KL, et al. **Anesthesiology** 1989 Sep;71(3):474–5

Polymorphic human insulin-responsive glucose-transporter gene on chromosome 17p13. Bell GI, et al. **Diabetes** 1989 Aug;38(8):1072–5

POLYMORPHONUCLEAR LEUKOCYTES see **NEUTROPHILS**

POLYMYALGIA RHEUMATICA

[Seven cases of polymyalgia rheumatica—with special reference to clinical features] Matsuo H, et al. **Ryumachi** 1988 Oct;28(5):360–6 (Eng. Abstr.) **(Jpn)**

BLOOD

Selective depletion and activation of CD8+ lymphocytes from peripheral blood of patients with polymyalgia rheumatica and giant cell arteritis. Dasgupta B, et al. **Ann Rheum Dis** 1989 Apr;48(4):307–11

Erythrocyte sedimentation rate and C reactive protein in the assessment of polymyalgia rheumatica/giant cell arteritis on presentation and during follow up. Kyle V, et al. **Ann Rheum Dis** 1989 Aug;48(8):667–71

CHEMICALLY INDUCED

Pseudopolymyalgia rheumatica during treatment with enalapril. Leloët X, et al. **BMJ** 1989 Feb 4;298(6669):325

COMPLICATIONS

Hypothyroidism in polymyalgia rheumatica and giant cell arteritis. Wiseman P, et al. **BMJ** 1989 Mar 11; 298(6674):647–8

Coexistent polymyalgia rheumatica and classic rheumatoid arthritis. White RH, et al. **Br J Rheumatol** 1988 Oct; 27(5):418–20

Effect of hemiparesis on polymyalgia rheumatica. Brelsford WG, et al. **J Rheumatol** 1988 Sep;15(9):1433–4

Chronic EBV infection and PMR [letter; comment] Lasky HP. **J Rheumatol** 1989 Mar;16(3):414–5. **Comment on:** J Rheumatol 1988 Mar;15(3):479–82

Interrelationships between polymyalgia rheumatica and polyarthritis. Robbins DL, et al. **J Rheumatol** 1988 Sep; 15(9):1323–5 (37 ref.)

Primary biliary cirrhosis, temporal arteritis (giant cell arteritis) and polymyalgia rheumatica in a single patient. Gagnerie F, et al. **Scand J Rheumatol** 1988;17(3):231–2

[Rhizomelic pseudo-polyarthritis with distal sensory ischemic neuropathy and arteritis of the lower limbs (letter)] Bisagni-Faure A, et al. **Rev Rhum Mal Osteoartic** 1989 Apr;56(5):426–7 **(Fre)**

[Coexistence of polymyalgia rheumatica/temporal arteritis and chronic polyarthritis] Brückle W, et al. **Z Rheumatol** 1989 Jan–Feb;48(1):1–5 (43 ref.) (Eng. Abstr.) **(Ger)**

[Joint involvement in polymyalgia rheumatica/temporal arteritis] Brückle W, et al. **Z Rheumatol** 1989 Jan–Feb; 48(1):19–25 (74 ref.) (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Polymyalgia rheumatica—mimic supreme. Colquhoun JP. **Aust Fam Physician** 1988 Sep;17(9):809

Late-onset systemic lupus erythematosus presenting as polymyalgia rheumatica. Maragou M, et al. **Clin Rheumatol** 1989 Mar;8(1):91–7

The relation of polymyalgia rheumatica to rheumatoid arthritis. Healey LA, et al. **J Rheumatol** 1988;15(5):750–2

Polymyalgia rheumatica: are we missing them? Ramanathan M, et al. **Med J Malaysia** 1987 Sep;42(3):196–8

[Rhizomelic pseudopolyarthritis: a disease or syndrome? (letter)] Martin A, et al. **Ann Med Interne (Paris)** 1989; 140(3):236 **(Fre)**

[Expert assessment of psychosomatic disorders in rheumatology] Mathies H, et al. **Versicherungsmedizin** 1989 Jul 1;41(4):139–40 (Eng. Abstr.) **(Ger)**

[Inflammatory-rheumatic diseases with special reference to peculiarities in advanced age] Gromnica-Ihle E, et al. **Z Arztl Fortbild (Jena)** 1989;83(11):583–8 (16 ref.) **(Ger)**

[Polymyalgia rheumatica with drug eruption—an important differential diagnosis to dermatomyositis] Wolf P, et al. **Z Hautkr** 1989 Mar 15;64(3):203–7 (Eng. Abstr.) **(Ger)**

[Considerations on the nomenclature of "soft tissue rheumatism"] Mathies H. **Z Rheumatol** 1988 Nov–Dec; 47(6):432–3 **(Ger)**

[Incidence of polymyalgia rheumatica at a department of internal medicine] Tamási L, et al. **Orv Hetil** 1989 May 21;130(21):1095–8 (21 ref.) (Eng. Abstr.) **(Hun)**

DRUG THERAPY

Polymyalgia rheumatica and temporal arteritis: a retrospective analysis of prognostic features and different corticosteroid regimens (11 year survey of 210 patients). Delecoeuillerie G, et al. **Ann Rheum Dis** 1988 Sep; 47(9):733–9

Treatment of polymyalgia rheumatica and giant cell arteritis. I. Steroid regimens in the first two months. Kyle V, et al. **Ann Rheum Dis** 1989 Aug;48(8):658–61

Treatment of polymyalgia rheumatica and giant cell arteritis. II. Relation between steroid dose and steroid associated side effects. Kyle V, et al. **Ann Rheum Dis** 1989 Aug; 48(8):662–6

Methotrexate for corticosteroid-resistant polymyalgia rheumatica and giant cell arteritis. Krall PL, et al. **Cleve Clin J Med** 1989 May;56(3):253–7

Prevention of glucocorticoid-induced osteopenia: effect of oral 25-hydroxyvitamin D and calcium. Di Munno O, et al. **Clin Rheumatol** 1989 Jun;8(2):202–7

Dapsone in temporal arteritis and polymyalgia rheumatica [letter] Boesen P, et al. **J Rheumatol** 1988;15(5):879–80

Low-dose prednisone therapy. Docken WP. **Rheum Dis Clin North Am** 1989 Aug;15(3):569–76 (37 ref.)

[Azathioprine therapy in polymyalgia rheumatica] Reinhardt U. **Z Arztl Fortbild (Jena)** 1989;83(9):489–90 **(Ger)**

ENZYMOLOGY

Influence of non-steroidal anti-inflammatory drugs and disease activity on serum alkaline phosphatase concentrations in rheumatoid arthritis, osteoarthritis, and polymyalgia rheumatica. Doube A, et al. **Ann Rheum Dis** 1989 May;48(5):368–71

GENETICS

Polymyalgia rheumatica in a sibling pair. Two case reports and a brief review of the literature. Moss RR, et al. **Scott Med J** 1988 Oct;33(5):342–3 (18 ref.)

IMMUNOLOGY

Behaviour of von Willebrand factor antigen in follow-up of polymyalgia rheumatica/giant cell arteritis. Ciompi ML, et al. **Scand J Rheumatol** 1988;17(6):491–5

THERAPY

Difficulties in diagnosing and treating polymyalgia rheumatica. Wilke WS. **Cleve Clin J Med** 1989 Mar–Apr; 56(2):115

POLYMYXIN B see under **POLYMYXINS**

POLYMYXIN E see **COLISTIN**

POLYMYXINS

NMR study of the interactions of polymyxin B, gramicidin S, and valinomycin with dimyristoyllecithin bilayers. Zidovetzki R, et al. **Biochemistry** 1988 Jul 26; 27(15):5686–92

Comparison of monoclonal antibodies to the deeper core region of gram-negative lipopolysaccharide by means of polymyxin B inhibition studies. Appelmelk BJ, et al. **Microb Pathog** 1988 Oct;5(4):297–301

ADMINISTRATION & DOSAGE

Topical mupirocin versus topical neosporin in the treatment of cutaneous infections. Wilkinson RD, et al. **Int J Dermatol** 1988 Sep;27(7):514–5

Activation and deactivation of guinea pig peritoneal eosinophils during chronic polymyxin B stimulation. Davis WB, et al. **J Leukoc Biol** 1989 Feb;45(2):147–54

New approach to endotoxic and septic shock by means of polymyxin B immobilized fiber. Hanasawa K, et al. **Surg Gynecol Obstet** 1989 Apr;168(4):323–31

[Clinical effects of intravesical instillation of polymyxin B in patients with acute cystitis] Suzuki Y, et al. **Hinyokika Kiyo** 1989 Apr;35(4):593–6 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Outbreak of nosocomial Flavobacterium meningosepticum respiratory infections associated with use of aerosolized polymyxin B. Brown RB, et al. **Am J Infect Control** 1989 Jun;17(3):121–5

Ototoxicity of ear drops in patients suffering from chronic otitis media. Podoshin L, et al. **J Laryngol Otol** 1989 Jan; 103(1):46–50

ANALYSIS

[Structural and functional investigation of polymyxins. Structure and biological properties of polymyxin M analogs] Trakhanova MN, et al. **Antibiot Khimioter** 1989 Jan;34(1):20–4 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

[Enzyme activity of Bacillus polymyxa 153, the producer of polymyxin B, during sporulation and biosynthesis] Ermakova GN, et al. **Antibiot Khimioter** 1988 Aug; 33(8):563–6 (Eng. Abstr.) **(Rus)**

[Polymyxin biosynthesis by Bacillus polymyxa during growth limitation by the nutritional sources] Lykov VV, et al. **Mikrobiologiia** 1988 May–Jun;57(3):410–4 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Polymyxin B inhibits stimulation of glucose transport in muscle by hypoxia or contractions. Henriksen EJ, et al. **Am J Physiol** 1989 May;256(5 Pt 1):E662–7

Microflora-derived polyamines modulate obstruction-induced colonic mucosal hypertrophy. Osborne DL, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):G1049–57

Polymyxin B diminishes blood flow to brown adipose tissue and lactating mammary gland in the rat. Possible

mechanism of its action to decrease the stimulation of lipogenesis on refeeding. Tedstone AE, et al. **Biochem J** 1989 Jul 15;261(2):445–50

Effect of 4-aminopyridine on the postsynaptic action of polymyxin B. Brazil OV, et al. **Eur J Pharmacol** 1989 Jan 2;159(1):47–51

Increased muscarinic receptor binding in heart membranes by an inhibitor of protein kinase C. Creazzo TL, et al. **FEBS Lett** 1988 Dec 19;242(1):175–7

Carbon tetrachloride hepatotoxicity in endotoxin tolerant and polymyxin B–treated rats. Williams JF. **Int J Immunopharmacol** 1988;10(8):975–80

Trimethoprim–polymyxin B sulphate ophthalmic ointment versus chloramphenicol ophthalmic ointment in the treatment of bacterial conjunctivitis—a review of four clinical studies. The Trimethoprim–Polymyxin B Sulphate Ophthalmic Ointment Study Group. **J Antimicrob Chemother** 1989 Feb;23(2):261–6

Outer membrane proteins of polymyxin resistant Pseudomonas aeruginosa: effect of magnesium depletion. Shand GH, et al. **J Antimicrob Chemother** 1988 Dec; 22(6):811–21

Polymyxin B prevents lipopolysaccharide-induced release of tumor necrosis factor-alpha from alveolar macrophages. Stokes DC, et al. **J Infect Dis** 1989 Jul;160(1):52–7

Effects of low-concentration polymyxin B on insulin secretion induced by 12-O-tetradecanoyl-phorbol-13-acetate (TPA), glucose, or tolbutamide from the isolated perfused rat pancreas. Maki Y, et al. **Metabolism** 1989 Apr;38(4):334–7

Effect of polymyxin B on hemoglobin-mediated hepatotoxicity. Marks DH, et al. **Milit Med** 1989 Apr; 154(4):180–4

Effect of phorbol esters and polymyxin B on modulation of noradrenaline release in mouse atria. Musgrave IF, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan–Feb; 339(1–2):48–53

Adenosine effects upon the spontaneous quantal transmitter release at the frog neuromuscular junction in the presence of protein kinase C–blocking and –activating agents. Brănişteanu DD, et al. **Neurosci Lett** 1989 Mar 13; 98(1):96–100

Failure of polymyxin B to restore sensitivity to quinolones for Pseudomonas aeruginosa [letter] Walterspiel JN. **South Med J** 1989 May;82(5):672

[The action of combinations of the nonapeptide polymyxin B with antibiotics on gram-negative bacteria] Bairamashvili DI, et al. **Antibiot Khimioter** 1988 Aug;33(8):591–4 (Eng. Abstr.) **(Rus)**

[The histamine-liberating action of polymyxin B and its analogs] Bairamashvili DI, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):447–9 (Eng. Abstr.) **(Rus)**

[Polymyxin B suppresses the stimulating action of pertussis vaccine on hematopoiesis in mice] Sanin AV, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Nov;(11):19–23 (Eng. Abstr.) **(Rus)**

POISONING

Neurotoxicity of polymyxins [letter] Kenouch S, et al. **Am J Kidney Dis** 1989 Feb;13(2):169

THERAPEUTIC USE

Acanthamoeba keratitis associated with contact lenses: six consecutive cases of successful management. Moore MB, et al. **Br J Ophthalmol** 1989 Apr;73(4):271–5

Trimethoprim–polymyxin B sulphate ophthalmic ointment in the treatment of bacterial conjunctivitis: a double-blind study versus chloramphenicol ophthalmic ointment. Behrens-Baumann W, et al. **Curr Med Res Opin** 1988; 11(4):227–31

Time of separation of the umbilical cord: a comparative study of treatment with alcohol and Rikospray. Naor N, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Aug;32(2):89–93

Autoantibody formation in burn patients after inhibition of suppressor T cell activity with polymyxin B. Moran KT, et al. **J Burn Care Rehabil** 1989 May–Jun;10(3):213–5

Comparison of three topical antimicrobials for acute bacterial conjunctivitis. Lohr JA, et al. **Pediatr Infect Dis J** 1988 Sep;7(9):626–9

[Clinical efficacy of Auricularum compared with its bacteriologic efficacy in vitro] Frèche C, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(8):635–41 (Eng. Abstr.) **(Fre)**

[Multicenter study of auricularum in chronic otitis] Portmann M, et al. **Rev Laryngol Otol Rhinol (Bord)** 1988; 109(5):489–91 (Eng. Abstr.) **(Fre)**

POLYNEURITIS

BLOOD

Neurological disorders and phytanic acid metabolism. Skjeldal OH, et al. **Acta Neurol Scand** 1988 Oct;78(4):324–8

CHEMICALLY INDUCED

[Arsenical neuropathy. Report of two cases] Nagamatsu K, et al. **Rinsho Shinkeigaku** 1975 Jan;15(1):1–4 (Eng. Abstr.) **(Jpn)**

[Clinico-electroneuromyographic characteristics of occupational polyneuropathies of toxico-allergic origin] Krasheninnikova ON. **Gig Tr Prof Zabol** 1989;(4):54–5 **(Rus)**

COMPLICATIONS

Chronic polyneuropathy and ulcerative colitis. Konagaya Y, et al. **Jpn J Med** 1989 Jan–Feb;28(1):72–4

[Polyneuropathies in HIV infection] Neundörfer B, et al. **Fortschr Neurol Psychiatr** 1989 Apr;57(4):127–31 (45 ref.) (Eng. Abstr.) **(Ger)**

[A case of erythromelalgia with polyneuropathy] Nagamatsu M, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):418–9 **(Jpn)**

[A case of temporal arteritis with polyneuropathy, posterior ischemic optic neuropathy (PION), and enhanced platelet adhesion and aggregation] Kohtoku N, et al. **Ryumachi** 1988 Jun;28(3):156–63 (Eng. Abstr.) **(Jpn)**

DIAGNOSIS

Lyme disease meningopolyneuritis simulating malignant lymphoma. Szyfelbein WM, et al. **Mod Pathol** 1988 Nov; 1(6):464–8

Acquired inflammatory demyelinating polyneuropathies: clinical and electrodiagnostic features. Albers JW, et al. **Muscle Nerve** 1989 Jun;12(6):435–51 (96 ref.)

[A new diagnosis in polyneuropathy syndromes: hyperthermal laser Doppler flowmetry] Költringer P. **Acta Med Austriaca** 1988;15(3):87–91 (Eng. Abstr.) **(Ger)**

[Peripheral neuron damage in periarteritis nodosa: diagnostic problems] Muszyński J, et al. **Pol Tyg Lek** 1988 Jun 13; 43(24):765–7 **(Pol)**

[Rheumatoid arthritis with systemic manifestations: its diagnosis and clinical aspects] Nasonova VA, et al. **Ter Arkh** 1988;60(7):98–103 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

Stabilisation of a severe case of P.O.E.M.S. syndrome after tamoxifen administration [letter] Barrier JH, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):286

ETIOLOGY

Polyneuropathy cranialis following cervical epidural anaesthesia [letter] Hankey GJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Aug;51(8):1106–7

Benign recurrent multiple mononeuropathy in Wegener's granulomatosis [letter] Kirker S, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):918

Inflammatory demyelinating polyneuropathy in a haemophiliac associated with human immunodeficiency virus infection, responding to high dose intravenous immunoglobulin. Panicker R, et al. **Postgrad Med J** 1988 Sep;64(755):699–700

Membranous glomerulonephritis and the nephrotic syndrome in a patient with Landry–Guillain–Barré–Strohl syndrome. Nicholson GD, et al. **West Indian Med J** 1989 Mar; 38(1):51–3

[Polyneuropathy in Churg–Strauss syndrome] Engelhardt A, et al. **Dtsch Med Wochenschr** 1989 Jun 9;114(23):907–10 (Eng. Abstr.) **(Ger)**

[Bing–Neel syndrome. Polyneuropathy within the scope of paraproteinemia] Seitzer B, et al. **Fortschr Med** 1989 Apr 30;107(13):291–3 (Eng. Abstr.) **(Ger)**

[Polyneuritis cranialis? Brain stem encephalitis and myelitis following preventive influenza vaccination] Buchner H, et al. **Nervenarzt** 1988 Nov;59(11):679–82 **(Ger)**

[Paraneoplastic polyneuropathies] Rennert H. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Mar; 41(3):129–33 (12 ref.) (Eng. Abstr.) **(Ger)**

[Polyneuropathies] Darnstaedt U, et al. **Z Arztl Fortbild (Jena)** 1989;83(3):121–4 (7 ref.) **(Ger)**

[A case of IgM paraproteinemia and chronic polyneuropathy with serum antibody reacting with PO protein and myelin-associated glycoprotein] Nomura K, et al. **Rinsho Shinkeigaku** 1988 Apr;28(4):426–32 (Eng. Abstr.) **(Jpn)**

[A case of rheumatoid arthritis associated with polyneuritis] Yoshioka H, et al. **Ryumachi** 1989 Feb;29(1):57–63 (21 ref.) (Eng. Abstr.) **(Jpn)**

[Alcoholic polyneuropathy. A clinical and electromyographic study] Hord ED. **Rev Med Interna Neurol Psihiatr Neurochir Dermatovenerol Neurol Psihiatr Neurochir** 1988 Oct–Dec;33(4):283–93 (Eng. Abstr.) **(Rum)**

[Axonal polyneuritis and macrocytosis: initial signs of vitamin B12 deficiency presenting as intermittent paresthetic claudication] Roquer J, et al. **Med Clin (Barc)** 1988 May 7;90(18):745–7 (Eng. Abstr.) **(Spa)**

GENETICS

Autonomic neuropathy in familial amyloidotic polyneuropathy. A clinical study based on heart rate variability. Niklasson U, et al. **Acta Neurol Scand** 1989 Mar; 79(3):182–7

Treatment by pacemaker in familial amyloid polyneuropathy. Anzai N, et al. **Chest** 1989 Jul;96(1):80–4

Central hypomyelination associated with congenital hypomyelinating polyneuropathy: report of an autopsied case. Johnson MD, et al. **Clin Neuropathol** 1989 Jan–Feb; 8(1):28–34

IMMUNOLOGY

Immune mechanisms in inflammatory polyneuropathy. Hartung HP, et al. **Ann N Y Acad Sci** 1988;540:122–61 (194 ref.)

Immune mechanisms in acute and chronic inflammatory polyneuropathies. Toyka KV, et al. **J Neuroimmunol** 1988 Dec;20(2–3):277–81 (46 ref.)

[A case of chronic polyneuropathy associated with chronic type B hepatitis] Koh CS, et al. **No To Shinkei** 1988 Aug; 40(8):721–5 (Eng. Abstr.) **(Jpn)**

PATHOLOGY

Peripheral neuropathy associated with mycosis fungoides. Comola M, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr; 52(4):536–8

Sensory form of acute polyneuritis. Dawson DM, et al. **Neurology** 1988 Nov;38(11):1728–31

[Crow–Fukase syndrome—the first case report in Bulgaria] Uzunov N, et al. **Vutr Boles** 1989;28(1):100–5 (Eng. Abstr.) **(Bul)**

[Angiofollicular lymphatic hyperplasia with plasmacytoma and polyneuropathy: a case report with immunohistochemical study] Dworák O, et al. **Klin Wochenschr** 1988 Jul 1;66(13):591–5 (Eng. Abstr.) **(Ger)**

[An autopsy case of Crow–Fukase syndrome with massive appearance of amyloid bodies in the central nervous systems] Tomi H, et al. **Rinsho Shinkeigaku** 1988 Aug; 28(8):887–90 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Ehlers–Danlos syndrome: a new oculo–scoliotic type with associated polyneuropathy? Farag TI, et al. **Clin Genet** 1989 Feb;35(2):121–4

[Findings in the peripheral motor system following stimulation of the motor nerve roots: polyradiculitis, amyotrophic lateral sclerosis and polyneuropathy] Ludolph AC, et al. **EEG EMG** 1988 Dec;19(4):255–9 (Eng. Abstr.) **(Ger)**

[Significance of the H-index in the early diagnosis of uremic polyneuropathy] Sperschneider H, et al. **Z Urol Nephrol** 1988 Jun;81(6):387–93 (Eng. Abstr.) **(Ger)**

[Electrophysiologic research on the central and peripheral nervous systems of workers in contact with ultrasound] Ginzburg DA, et al. **Gig Tr Prof Zabol** 1988 Jul;(7):45–6 **(Rus)**

[Disorders of autonomic fibers of the peripheral nerves in polyneuropathies] Gekht BM, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):35–41 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

High-dose intravenous penicillin G does not prevent further progression in early neurological manifestation of Lyme borreliosis. Kohler J, et al. **Infection** 1989 Jul–Aug; 17(4):216–7

THERAPY

HIV-associated CIDP [letter] Chimowitz MI, et al. **Muscle Nerve** 1989 Aug;12(8):695–6

[Therapy of polyneuropathies] Reichel G. **Psychiatr Neurol Med Psychol Beih** 1988;39:83–6 **(Ger)**

POLYNUCLEAR AROMATIC HYDROCARBONS see **POLYCYCLIC HYDROCARBONS**

POLYNUCLEOTIDE HYDROXYLKINASE see under **PHOSPHOTRANSFERASES, ATP**

POLYNUCLEOTIDE LIGASES see **POLYNUCLEOTIDE SYNTHETASES**

POLYNUCLEOTIDE PHOSPHORYLASE

GENETICS

Stabilization of the 3'one-third of Escherichia coli ribosomal protein S20 mRNA in mutants lacking polynucleotide phosphorylase. Mackie GA. **J Bacteriol** 1989 Aug; 171(8):4112–20

HISTORY

Recollections on studies of polynucleotide phosphorylase: a commentary on 'Enzymic Synthesis of Polynucleotides. I. Polynucleotide Phosphorylase of Azobacter vinelandii'. Grunberg-Manago M. **Biochim Biophys Acta** 1989; 1000:59–64

Enzymic synthesis of polynucleotides. I. Polynucleotide phosphorylase of Azotobacter vinelandii. 1956 [classical article] Grunberg-Manago M, et al. **Biochim Biophys Acta** 1989;1000:65–81

ISOLATION & PURIFICATION

[Studies on microbial polynucleotide phosphorylase] Xie BT, et al. **Wei Sheng Wu Hsueh Pao** 1988 Jun;28(2):149–54 (Eng. Abstr.) **(Chi)**

METABOLISM

Mechanism of polynucleotide phosphorylase. Sulewski M, et al. **Biochemistry** 1989 Jul 11;28(14):5855–64

POLYNUCLEOTIDE SYNTHETASES

T4 RNA ligase as a nucleic acid synthesis and modification reagent. Gumport RI, et al. **Gene Amplif Anal** 1981; 2:313–45 (91 ref.)

Treatment of genomic DNA with T4 DNA ligase improves Southern blot analysis. Koch JE, et al. **Nucleic Acids Res** 1988 Nov 11;16(21):10387

ANALYSIS

A possible effect of heme on the fate of DNA ligase activity extracted from differentiating mouse erythroleukemia cells. Scher BM, et al. **Cancer Res** 1988 Nov 15;48(22):6278–84

ANTAGONISTS & INHIBITORS

Segregation of relaxed replicated dimers when DNA ligase and DNA polymerase I are limited during oriC-specific DNA replication. Munson BR, et al. **J Bacteriol** 1989 Jul; 171(7):3803–9

dATP-mediated inhibition of DNA ligase by 2'-deoxycoformycin in T and B cell leukemia. Lamballe F, et al. **Leukemia** 1989 Feb;3(2):97–103

BIOSYNTHESIS

Evidence for a change in expression of DNA ligase genes in the Pleurodeles waltlii germ line during gonadogenesis. Lesimple M, et al. **Dev Biol** 1989 Oct;135(2):241–9

GENETICS

Defective DNA ligase I in Bloom's syndrome cells. Simultaneous analysis using immunoblotting and the ligase-[32P]AMP adduct assay. Chan JY, et al. **J Biol Chem** 1988 Dec 5;263(34):18231–5

Antibody to a human DNA repair protein allows for cloning of a Drosophila cDNA that encodes an apurinic endonuclease. Kelley MR, et al. **Mol Cell Biol** 1989 Mar; 9(3):965–73

Suppression of the thermosensitive DNA ligase mutations in Escherichia coli K12 through modulation of gene expression induced by phage Mu. Ghelardini P, et al. **Mol Gen Genet** 1989 Mar;216(1):31–6

The expression of the DNA ligase gene of Escherichia coli is stimulated by relaxation of chromosomal supercoiling. Liebart JC, et al. **Mol Microbiol** 1989 Mar;3(3):269–73

A 5' exo-ribonuclease and RNA ligase of T. brucei. Huang J, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9737–59

METABOLISM

Inhibited repair of DNA synthesis in UV-irradiated cultured fibroblasts of a boy with Cockayne's syndrome. Wieczorek E, et al. **Acta Med Pol** 1988;29(1–2):77–9

DNA repair enzymes. Sancar A, et al. **Annu Rev Biochem** 1988;57:29–67 (208 ref.)

Binding interactions between yeast tRNA ligase and a precursor transfer ribonucleic acid containing two photoreactive uridine analogues. Tanner NK, et al. **Biochemistry** 1988 Nov 29;27(24):8852–61

Multiple roles of DNA ligase at the replication fork. Montecucco A, et al. **Biochim Biophys Acta** 1988 Dec 20; 951(2–3):330–4

Specificity of the nick-closing activity of bacteriophage T4 DNA ligase. Wu DY, et al. **Gene** 1989;76(2):245–54

Bleomycin-induced DNA repair by Saccharomyces cerevisiae ATP-dependent polydeoxyribonucleotide ligase. Moore CW. **J Bacteriol** 1988 Oct;170(10):4991–4

DNA ligase and the pyridine nucleotide cycle in Salmonella typhimurium. Park UE, et al. **J Bacteriol** 1989 Apr; 171(4):2173–80

Complete enzymatic synthesis of DNA containing the SV40 origin of replication. Ishimi Y, et al. **J Biol Chem** 1988 Dec 25;263(36):19723–33

Evidence for a ligation step in the DNA replication of the autonomous parvovirus minute virus of mice. Cotmore SF, et al. **J Virol** 1989 Feb;63(2):1002–6

DNA ligase activity in human cell lines from normal donors and Bloom's syndrome patients. Mezzina M, et al. **Nucleic Acids Res** 1989 Apr 25;17(8):3091–106

[Substrate specificity of T4 RNA-ligase. The effect of the nucleotide composition of substrates and the size of phosphate donor on the effectiveness of intermolecular ligation] Zhenodarova SM, et al. **Bioorg Khim** 1989 Apr; 15(4):478–83 (Eng. Abstr.) **(Rus)**

[Controlled ligation of oligodeoxyribonucleotides of DNA-ligase of the T4 phage] Koroleva ON, et al. **Mol Biol (Mosk)** 1988 Nov-Dec;22(6):1632–41 (Eng. Abstr.) **(Rus)**

[T4-DNA ligase: substrate properties of synthetic DNA-duplexes with structural anomalies] Tsytovich AV, et al. **Mol Biol (Mosk)** 1988 May-Jun;22(3):690–9 (Eng. Abstr.) **(Rus)**

POLYNUCLEOTIDES

Base-sequence dependence of noncovalent complex formation and reactivity of benzo[a]pyrene diol epoxide with polynucleotides. Geacintov NE, et al. **Biochemistry** 1988 Nov 1;27(22):8380–7

Nucleosome reconstitution of core-length poly(dG).poly(dC) and poly(rG-dC).poly(rG-dC). Jayasena SD, et al. **Biochemistry** 1989 Feb 7;28(3):975–80

Temperature-absorption transition spectroscopy: a technique for estimating the relative charge densities on thiolated phosphate groups in nucleic acid analogues. Das MC. **Indian J Biochem Biophys** 1989 Feb;26(1):9–13

Seventh International Symposium on High-Performance Liquid Chromatography of Proteins, Peptides and Polynucleotides. I. Washington, DC, November 2–4, 1987. Proceedings. **J Chromatogr** 1988 Jun 29;443:1–401

Solid supported hydrolysis of apurinic sites in synthetic oligonucleotides for rapid and efficient purification on reverse-phase cartridges. Horn T, et al. **Nucleic Acids Res** 1988 Dec 23;16(24):11559–71

Influence of abasic and anucleosidic sites on the stability, conformation, and melting behavior of a DNA duplex: correlations of thermodynamic and structural data. Vesnaver G, et al. **Proc Natl Acad Sci U S A** 1989 May; 86(10):3614–8

ANALYSIS

Thiol-mediated incorporation of radiolabel from 1-[14C]-methyl-4-phenyl-5-nitrosoimidazole into DNA. A model for the biological activity of 5-nitroimidazoles. Ehlhardt WJ, et al. **Biochem Pharmacol** 1989 Apr 1; 38(7):1175–80

Eighth International Symposium on High-Performance Liquid Chromatography of Proteins, Peptides and Polynucleotides. Copenhagen (Denmark), October 31–November 2, 1988. Proceedings. **J Chromatogr** 1989 Aug 4;476:1–516

Seventh International Symposium on High-Performance Liquid Chromatography of Proteins, Peptides and Polynucleotides. II. Washington, DC, November 2–4, 1987. Proceedings. **J Chromatogr** 1988 Jul 1;444:1–365

ANTAGONISTS & INHIBITORS

Effects of polynucleotide inhibitors on transcriptional events of influenza virions. Jackson ML, et al. **Drug Des Deliv** 1986 Aug;1(1):39–45

BIOSYNTHESIS

Oxidized apurinic/apyrimidinic sites formed in DNA by oxidative mutagens. Povirk LF, et al. **Mutat Res** 1989 Sep; 214(1):13–22 (50 ref.)

HISTORY

Recollections on studies of polynucleotide phosphorylase: a commentary on 'Enzymic Synthesis of Polynucleotides. I. Polynucleotide Phosphorylase of Azobacter vinelandii'. Grunberg-Manago M. **Biochim Biophys Acta** 1989; 1000:59–64

Enzymic synthesis of polynucleotides. I. Polynucleotide phosphorylase of Azotobacter vinelandii. 1956 [classical article] Grunberg-Manago M, et al. **Biochim Biophys Acta** 1989;1000:65–81

IMMUNOLOGY

Disease activity in systemic lupus erythematosus related to a range of antibodies binding DNA and synthetic polynucleotides. Isenberg DA, et al. **Ann Rheum Dis** 1988 Sep;47(9):717–24

METABOLISM

Oligonucleotide N-alkylphosphoramidates: synthesis and binding to polynucleotides. Jäger A, et al. **Biochemistry** 1988 Sep 20;27(19):7237–46

Triplet state properties of tryptophan residues in complexes of mutated Escherichia coli single-stranded DNA binding proteins with single-stranded polynucleotides. Tsao DH, et al. **Biophys J** 1989 May;55(5):927–36

Investigation of RecA--polynucleotide interactions from the measurement of LexA repressor cleavage kinetics. Presence of different types of complex. Takahashi M, et al. **Eur J Biochem** 1989 Aug 15;183(3):617–22

Rate and yield of OH-induced strand break formation of polynucleotides and DNA. Bothe E, et al. **Free Radic Res Commun** 1989;6(2–3):139

Role of exonuclease III and endonuclease IV in repair of pyrimidine dimers initiated by bacteriophage T4 pyrimidine dimer-DNA glycosylase. Saporito SM, et al. **J Bacteriol** 1989 May;171(5):2542–6

Mechanism of cleavage of apurinic sites by 9-aminoellipticine. Bertrand JR, et al. **J Biol Chem** 1989 Aug 25;264(24):14172–8

Importance of thiols in the repair mechanisms of DNA containing AP (apurinic or apyrimidinic) sites. Bailly V, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9489–96

Selective hydrolysis by exo- and endonucleases of phosphodiester bonds adjacent to an apurinic site. Weinfeld M, et al. **Nucleic Acids Res** 1989 May 25;17(10):3735–45

Physical association of the 2,6-diamino-4-hydroxy-5N-formamidopyrimidine-DNA glycosylase of Escherichia coli and an activity nicking DNA at apurinic/apyrimidinic sites. O'Connor TR, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(14):5222–6

PHARMACOLOGY

Studies on the mechanism of human immunodeficiency virus reverse transcriptase. Steady-state kinetics, processivity, and polynucleotide inhibition. Majumdar C, et al. **J Biol Chem** 1988 Oct 25;263(30):15657–65

[Experimental studies of in vitro IFN induction by different polynucleotides in human cell culture systems] Glück B, et al. **J Basic Microbiol** 1988;28(8):501–7 (Eng. Abstr.) **(Ger)**

RADIATION EFFECTS

Radiation-induced release of undamaged uracil from polyuridylic acid and the formation of phosphomonoester end groups in irradiated polynucleotides. Deeble DJ, et al. **Free Radic Res Commun** 1989;6(2–3):133–5

POLYOMAVIRUS LARGE T ANTIGENS see **ANTIGENS, POLYOMAVIRUS TRANSFORMING**

POLYOMAVIRUS MIDDLE T ANTIGENS see **ANTIGENS, POLYOMAVIRUS TRANSFORMING**

POLYOMAVIRUS SMALL T ANTIGENS see **ANTIGENS, POLYOMAVIRUS TRANSFORMING**

POLYOMAVIRUS T PROTEINS see **ANTIGENS, POLYOMAVIRUS TRANSFORMING**

POLYOMAVIRUS TRANSFORMING ANTIGENS see **ANTIGENS, POLYOMAVIRUS TRANSFORMING**

POLYOMAVIRUS TUMOR ANTIGENS see **ANTIGENS, POLYOMAVIRUS TRANSFORMING**

POLYOMAVIRUSES

[New human papovaviruses: JC and BK] Cataltepe O, et al. **Mikrobiyol Bul** 1988;22(3):260–5 (Eng. Abstr.) **(Tur)**

ANALYSIS

Hydroxyproline in the major capsid protein VP1 of polyomavirus. Ludlow JW, et al. **J Virol** 1989 Jun; 63(6):2881–4

CLASSIFICATION

Serological typing scheme for BK-like isolates of human polyomavirus. Knowles WA, et al. **J Med Virol** 1989 Jun; 28(2):118–23

DRUG EFFECTS

Induction of polyomavirus DNA replication by cyclic AMP and a tumor promoter. Baru M, et al. **Intervirology** 1988; 29(6):328–33

GENETICS

New BK virus episomal vector for complementary DNA expression in human cells. Grossi MP, et al. **Arch Virol** 1988;102(3–4):275–83

Enhancer of human polyoma JC virus contains nuclear factor I-binding sequences; analysis using mouse brain nuclear extracts. Tamura T, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):419–25

Interactions between the middle T antigen of polyomavirus and host cell proteins. Courtneidge SA, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:153–60

A rabbit beta-globin polyadenylation signal directs efficient termination of transcription of polyomavirus DNA. Lanoix J, et al. **EMBO J** 1988 Aug;7(8):2515–22

Interaction of a nuclear factor-1-like protein with the regulatory region of the human polyomavirus JC virus. Amemiya K, et al. **J Biol Chem** 1989 Apr 25; 264(12):7025–32

Repression of polyoma virus DNA replication by 5'-flanking region of mouse DNA polymerase beta gene containing transcriptional silencer elements. Yamaguchi M, et al. **J Biol Chem** 1989 Oct 5;264(28):16887–91

Cooperation in oncogenesis between BK virus early region gene and the activated human c-Harvey ras oncogene. Corallini A, et al. **J Gen Virol** 1988 Oct;69 (Pt 10):2671–9

JC virus genomes in progressive multifocal leukoencephalopathy: detection using a sensitive non-radioisotopic in situ hybridization method. Teo CG, et al. **J Pathol** 1989 Feb;157(2):135–40

Leader-to-leader splicing is required for efficient production and accumulation of polyomavirus late mRNAs. Adami GR, et al. **J Virol** 1989 Jan;63(1):85–93

Hybrid genomes of the polyomaviruses JC virus, BK virus, and simian virus 40: identification of sequences important for efficient transformation. Bollag B, et al. **J Virol** 1989 Feb;63(2):863–72

Control elements situated downstream of the major transcriptional start site are sufficient for highly efficient polyomavirus late transcription. Bourachot B, et al. **J Virol** 1989 Jun;63(6):2567–77

Deletion analysis of the polyomavirus late promoter: evidence for both positive and negative elements in the absence of early proteins. Cahill KB, et al. **J Virol** 1989 Sep;63(9):3634–42

An element of the BK virus enhancer required for DNA replication. Del Vecchio AM, et al. **J Virol** 1989 Apr; 63(4):1514–24

Analysis of origin of DNA replication of human papovavirus BK. Deyerle KL, et al. **J Virol** 1989 Jan;63(1):356–65

Synthesis, posttranslational modifications, and nuclear

transport of polyomavirus major capsid protein VP1. Fattaey AR, et al. **J Virol** 1989 Jul;63(7):3168–75

A nonlethal mutation in large T antigen of polyomavirus which affects viral DNA synthesis. Hacker DL, et al. **J Virol** 1989 Feb;63(2):776–81

JC virus–simian virus 40 genomes containing heterologous regulatory signals and chimeric early regions: identification of regions restricting transformation by JC virus. Haggerty S, et al. **J Virol** 1989 May;63(5):2180–90

Association of p60fyn with middle tumor antigen in murine polyomavirus–transformed rat cells. Horak ID, et al. **J Virol** 1989 May;63(5):2343–7

Translational efficiencies of polyomavirus late mRNA molecules that differ in the sequences of their 5'noncoding late leader exons. Rhee E, et al. **J Virol** 1989 Jan; 63(1):432–5

Polyomavirus DNA is damaged in target cells during cytotoxic T-lymphocyte–mediated killing. Sellins KS, et al. **J Virol** 1989 Feb;63(2):572–8

Growth efficiency of naturally occurring BK virus variants in vivo and in vitro. Sugimoto C, et al. **J Virol** 1989 Jul; 63(7):3195–9

Cell type–specific expression of JC virus early promoter is determined by positive and negative regulation. Tada H, et al. **J Virol** 1989 Jan;63(1):463–6

Asp–286——Asn–286 in polyomavirus large T antigen relaxes the specificity of binding to the polyomavirus origin. Tang WJ, et al. **J Virol** 1989 Jan;63(1):242–9

Nucleotide sequence of the human polyomavirus AS virus, an antigenic variant of BK virus. Tavis JE, et al. **J Virol** 1989 Feb;63(2):901–11

Optimal replication of plasmids carrying polyomavirus origin regions requires two high-affinity binding sites for large T antigen. Weichselbraun I, et al. **J Virol** 1989 Feb; 63(2):961–4

Two overlapping sequence motifs within the polyomavirus enhancer are independently the targets of stimulation by both the tumor promoter 12–O–tetradecanoylphorbol–13–acetate and the Ha–ras oncogene. Yamaguchi Y, et al. **J Virol** 1989 Mar; 63(3):1040–8

Immortalization and malignant transformation of hepatocytes by transforming genes of polyoma virus and of SV40 virus in vitro and in vivo. Paul D, et al. **Klin Wochenschr** 1988; 66 Suppl 11:134–9 (54 ref.)

Frequency of cell transformation by the small DNA tumor viruses: infection of proliferating cells and quiescent cells. Matsuzaki A, et al. **Microbiol Immunol** 1989;33(8):657–67

Effect of silencer on polyomavirus DNA replication. Ariizumi K, et al. **Mol Cell Biol** 1989 Sep;9(9):4026–31

Negative transcriptional regulatory element that functions in embryonal carcinoma cells. Ariizumi K, et al. **Mol Cell Biol** 1989 Sep;9(9):4032–7

Identification of HeLa cell nuclear factors that bind to and activate the early promoter of human polyomavirus BK in vitro. Chakraborty T, et al. **Mol Cell Biol** 1989 Sep; 9(9):3821–8

Negative regulation of the human polyomavirus BK enhancer involves cell–specific interaction with a nuclear repressor. Grinnell BW, et al. **Mol Cell Biol** 1988 Aug;8(8):3448–57

High–level recombination specific to polyomavirus genomes targeted to the integration–transformation pathway. Hacker D, et al. **Mol Cell Biol** 1989 Mar;9(3):995–1004

Multiple subelements within the polyomavirus enhancer function synergistically to activate DNA replication. Muller WJ, et al. **Mol Cell Biol** 1988 Nov;8(11):5000–15

A variant enhancer/regulatory region from a cloned human prototype BK virus genome. Berg DT, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):9057

Foreign transcriptional enhancers in yeast. I. Interactions of papovavirus transcriptional enhancers and a quiescent pseudopromoter on supercoiled plasmids [published erratum appears in Nucleic Acids Res 1988 Dec 9;16(23):11398–9] Ciaramella M, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):8847–68

Foreign transcriptional enhancers in yeast. II. Interplay of the polyomavirus transcriptional enhancer and Saccharomyces cerevisiae promoter elements. Ciaramella M, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):8869–86

Expression and amplification in transgenic mice of a polyoma virus mutant regulatory region. Krippl B, et al. **Nucleic Acids Res** 1988 Sep 26;16(18):8963–76

Extinction of JC virus tumor–antigen expression in glial cell—fibroblast hybrids. Beggs AH, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(20):7632–6

Polyomavirus early–late switch is not regulated at the level of transcription initiation and is associated with changes in RNA processing. Hyde–DeRuyscher R, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):8993–7

Negative and positive factors determine the activity of the polyoma virus enhancer alpha domain in undifferentiated and differentiated cell types. Wasylyk B, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):7952–6

Unidirectional deletion and linker scan analysis of the late promoter of the human papovavirus BK. Cassill JA, et al. **Virology** 1989 Mar;169(1):172–81

A naturally occurring deletion in the enhancer repeats of the human papovavirus BK optimizes early enhancer function at the expense of late promoter activity. Cassill JA, et al. **Virology** 1989 May;170(1):296–8

Human papovavirus BK early gene regulation in nonpermissive cells. Deyerle KL, et al. **Virology** 1989 Apr; 169(2):385–96

Separation of host range from transformation functions of the hr–t gene of polyomavirus. Garcea RL, et al. **Virology** 1989 Feb;168(2):312–9

Regulation of JCVL promoter function: transactivation of JCVL promoter by JCV and SV40 early proteins. Lashgari MS, et al. **Virology** 1989 May;170(1):292–5

Host range bias of the JC virus mutant enhancer with DNA rearrangement. Shinohara T, et al. **Virology** 1989 May; 170(1):261–3

Extension of JC virus host range to monkey cells by insertion of a simian virus 40 enhancer into the JC virus regulatory region. Vacante DA, et al. **Virology** 1989 Jun;170(2):353–61

Inefficient expression in rat cells of transforming gene of BK virus with 68–bp tandem repeats in the viral promoter–enhancer. Watanabe S, et al. **Virology** 1989 Mar; 169(1):204–12

Tissue specific phenotypes of polyomavirus A and B enhancer transpositions and duplications: positional and nonpositional effects on replication in lymphoid cells. Campbell BA, et al. **Virus Genes** 1987 Nov;1(1):23–34

BK virus DNA cloned directly from human urine confirms an archetypal structure for the transcriptional control region. Rubinstein R, et al. **Virus Genes** 1989 Mar; 2(2):157–65

Transformation of human cells by a polyomavirus containing complementing JCV and RFV genomes. O'Neill FJ, et al. **Virus Res** 1988 Sep;11(2):109–25

[In vitro replication of SV40 and polyoma virus DNA] Murakami Y, et al. **Tanpakushitsu Kakusan Koso** 1988 Sep; 33(11):1766–73 **(Jpn)**

[DNA–recognizing structure helix–turn–helix in replication initiators from polyomavirus large T antigens] Shestopalov BV. **Biofizika** 1989 Jan–Feb;34(1):130–2 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Human fetal astrocytes in culture support the growth of the neurotropic human polyomavirus, JCV. Major EO, et al. **J Neuropathol Exp Neurol** 1989 Jul;48(4):425–36

IMMUNOLOGY

Early viral proteins as autoantigens. Evidence from JC virus large T antigen. Stoner GL, et al. **Ann N Y Acad Sci** 1988; 540:665–8

Recombinant polyoma—vaccinia viruses: T antigen expression vectors and anti–tumor immunization agents. Clertant P, et al. **Biochimie** 1988 Aug;70(8):1075–87

The cellular 107K protein that binds to adenovirus E1A also associates with the large T antigens of SV40 and JC virus. Dyson N, et al. **Cell** 1989 Jul 28;58(2):249–55

Stimulation of clones specific for dsDNA or idiotypes of anti–dsDNA as a consequence of BK virus inoculation. Rekvig OP, et al. **Immunol Invest** 1989 Jun;18(5):657–69

Polyoma T–antigen–derived synthetic peptides induce polyoma–virus–specific macrophage migration inhibition. Reinholdsson G, et al. **Int J Cancer** 1989 Jun 15; 43(6):1165–8

Characteristics of different solid–phase immunoassay formats for the measurement of BK virus immunoglobulin M in sera of patients on renal dialysis or with kidney allografts. Mahony J, et al. **J Clin Microbiol** 1989 Jul;27(7):1626–30

Functional role of BK virus tumor antigens in transformation. Nakshatri H, et al. **J Virol** 1988 Dec;62(12):4613–21

Inoculation with BK virus may break immunological tolerance to histone and DNA antigens. Flaegstad T, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8171–5

Prevalence of anti BK virus antibody in Portugal and Norway. Flaegstad T, et al. **Scand J Infect Dis** 1989; 21(2):145–7

A single peptide derived from the sequence common to polyoma small and middle T–antigen induces immunity against polyoma tumors. Ramqvist T, et al. **Virology** 1989 Sep;172(1):359–62

A polyomavirus tumor–specific transplantation antigen (TSTA) epitope is situated within the N–terminal amino acid sequence common to middle and small T–antigens. Reinholdsson G, et al. **Virology** 1988 Oct;166(2):616–9

ISOLATION & PURIFICATION

Characterization of a new polyomavirus (Polyomavirus papionis–2) isolated from baboon kidney cell cultures. Gardner SD, et al. **Arch Virol** 1989;105(3–4):223–33

Detection of BK virus and JC virus in urine and brain tissue by the polymerase chain reaction. Arthur RR, et al. **J Clin Microbiol** 1989 Jun;27(6):1174–9

Direct isolation and characterization of JC virus from urine samples of renal and bone marrow transplant patients. Myers C, et al. **J Virol** 1989 Oct;63(10):4445–9

BK virus (BKV) detection in urine specimens of immunocompromised patients: comparison between the DNA–DNA hybridization assay, the immunofluorescence test and the dot enzyme immunoassay. Marrero M, et al. **Res Virol** 1989 Jul–Aug;140(4):293–301

METABOLISM

Human immunodeficiency virus (HIV) and JC virus in acquired immune deficiency syndrome (AIDS) patients with progressive multifocal leukoencephalopathy. Wiley CA, et al. **Acta Neuropathol (Berl)** 1988;76(4):338–46

Perturbed development of the mouse lens by polyomavirus large T antigen does not lead to tumor formation. Griep AE, et al. **Genes Dev** 1989 Jul;3(7):1075–85

Myristoylation of budgerigar fledgling disease virus capsid protein VP2. Schmidt M, et al. **J Virol** 1989 Jan; 63(1):429–31

Viral DNA synthesis in nonpermissive rat F–111 cells and its role in neoplastic transformation by polyomavirus. Hacker DL, et al. **Mol Cell Biol** 1989 Feb;9(2):648–58

PATHOGENICITY

Human polyomavirus: lack of relationship of viruria to prolonged or severe hemorrhagic cystitis after bone marrow transplant. Cottler–Fox M, et al. **Bone Marrow Transplant** 1989 May;4(3):279–82

The middle T proteins of high and low tumor strains of polyomavirus function equivalently in tumor induction. Freund R, et al. **Virology** 1988 Dec;167(2):657–9

Absence of BK virus sequences in transformed hamster cells transfected by human tumor DNA. Brunner M, et al. **Virus Res** 1989 Apr;12(4):315–30

PHYSIOLOGY

Polyomavirus transforms rat F111 and mouse NIH 3T3 cells by different mechanisms. Raptis L, et al. **J Virol** 1989 Feb; 63(2):753–8

Endogenous ADP–ribosylation of elongation factor 2 in polyoma virus–transformed baby hamster kidney cells. Fendrick JL, et al. **Proc Natl Acad Sci U S A** 1989 Jan; 86(2):554–7

POLYOXYETHYLENES see **POLYETHYLENE GLYCOLS**

POLYPEPTIDES see **PEPTIDES**

POLYPHLORETIN PHOSPHATE see under **PHLORETIN**

POLYPHOSPHATES

Stabilization of stannous pyrophosphate kits with gentisic acid. Ballinger JR, et al. **Int J Rad Appl Instrum [B]** 1988; 15(4):391–3

Condensation of oligoglycines with trimeta– and tetrametaphosphate in aqueous solutions. Yamanaka J, et al. **Orig Life Evol Biosph** 1988;18(3):165–78

ANALYSIS

Liquid chromatographic determination of L–ascorbate 2–polyphosphate in fish feeds by enzymatic release of L–ascorbate. Wang XY, et al. **J Assoc Off Anal Chem** 1988 Nov–Dec;71(6):1158–61

BIOSYNTHESIS

Influence of environmental parameters on polyphosphate accumulation in Acinetobacter sp. van Groenestijn JW, et al. **Antonie Van Leeuwenhoek** 1989;55(1):67–82

Polyphosphate synthesis in yeast. Schuddemat J, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):191–8

METABOLISM

Biological aspects of inorganic polyphosphates. Wood HG, et al. **Annu Rev Biochem** 1988;57:235–60 (120 ref.)

Polyphosphate–degrading enzymes in Acinetobacter spp. and activated sludge. van Groenestijn JW, et al. **Appl Environ Microbiol** 1989 Jan;55(1):219–23

99mTc bone scanning agents—VI. Gel chromatographic analysis of the plasma protein binding of 99mTc(Sn)pyrophosphate, 99mTc(Sn)MDP and 99mTc(Sn)HMDP. Kroesbergen J, et al. **Int J Rad Appl Instrum [B]** 1988;15(5):479–87

Utilization by Escherichia coli of a high–molecular–weight, linear polyphosphate: roles of phosphatases and pore proteins. Rao NN, et al. **J Bacteriol** 1988 Nov; 170(11):5216–23

One single lysine residue is responsible for the special interaction between polyphosphate and the outer membrane porin PhoE of Escherichia coli. Bauer K, et al. **J Biol Chem** 1989 Oct 5;264(28):16393–8

Hyperthermia induced polyphosphate changes in Propionibacterium acnes as studied by 31P NMR. Kjeldstad B, et al. **Z Naturforsch [C]** 1989 Jan–Feb; 44(1–2):45–8

PHARMACOLOGY

Cyclic 3',5'–AMP phosphodiesterase of Saccharomyces carlsbergensis. Inhibition by adenosine 5'–triphosphate, inorganic pyrophosphate and inorganic polyphosphate. Speziali GA, et al. **Biochim Biophys Acta** 1971 Jun 16; 235(3):466–72

ATP– and polyphosphate–mediated stimulation of pp60c–src kinase activity in extracts from vascular smooth muscle. Di Salvo J, et al. **J Biol Chem** 1989 Jun 25;264(18):10773–8

[Stimulating action of polyphosphates on peptide formation from glycine and phenylalanine amides under abiogenic conditions] Chetkauskaĭte AV, et al. **Zh Evol Biokhim Fiziol** 1988 Jul–Aug;24(4):465–70 (Eng. Abstr.) **(Rus)**

POLYPLOIDY

A case of complete trisomy 2p/triploidy mosaicism. Dahl N, et al. **Acta Paediatr Scand** 1988 Nov;77(6):925-9

Determination and comparison of the aortic polyploid smooth muscle content of human hypertensive subjects and normotensive controls. Reilly DF, et al. **Acta Physiol Scand Suppl** 1988;571:181-8

A liveborn infant with tetraploidy. Lafer CZ, et al. **Am J Med Genet** 1988 Oct;31(2):375-8 (5 ref.)

MCA/MR syndrome in a female infant with tetraploidy mosaicism: review of the human polyploid phenotype. Wilson GN, et al. **Am J Med Genet** 1988 Aug;30(4):953-61 (43 ref.)

Porokeratosis as a premalignant condition of the skin. Cytologic demonstration of abnormal DNA ploidy in cells of the epidermis. Otsuka F, et al. **Cancer** 1989 Mar 1; 63(5):891-6

Tetraploidy (92,XXYY) in an acute nonlymphocytic leukemia (M1) patient following autologous bone marrow transplantation. Zelante L, et al. **Cancer Genet Cytogenet** 1988 Nov;36(1):69-75

Polyploidization of transplanted cardiac myocytes. Brodsky VYa, et al. **Cell Differ Dev** 1988 Dec;25(3):177-83

The organization of ribosomal genes in diploid and tetraploid species of the genus Odontophrynus (Amphibia, Anura). Cortadas J, et al. **Chromosoma** 1988;96(6):437-42

A 45,X/69,XXY fetus. Betts DR, et al. **Clin Genet** 1989 Apr; 35(4):285-8

Dermatoglyphic features of a male with diploid/tetraploid mosaicism [letter; comment] Wittwer BB, et al. **Clin Genet** 1989 Apr;35(4):310-1. **Comment on:** Clin Genet 1988 Apr;33(4):299-307

Tetraploidy in cultured dermal fibroblasts from patients with heritable colon cancer. Danes BS, et al. **Dis Markers** 1988 Jul-Sep;6(3):151-61

Chromosomal preparations of human triploid zygotes and embryos fertilized in vitro. Macas E, et al. **Eur J Obstet Gynecol Reprod Biol** 1988 Dec;29(4):299-304

Endocrine profile of follicles containing oocytes with subsequent polyploid fertilization. Webster BW, et al. **Fertil Steril** 1988 Nov;50(5):727-31

Polyploidization of the BTC-32 cell line from Triatoma infestans (Hemiptera, Reduviidae). Mello ML, et al. **Genetica** 1987 Oct 15;74(2):131-6

Gene segregation in induced tetraploid rainbow trout: genetic evidence of preferential pairing of homologous chromosomes. Diter A, et al. **Genome** 1988 Aug; 30(4):547-53

Biochemical data bearing on the relationship between the genome of Triticum urartu and the A and B genomes of the polyploid wheats. Kerby K, et al. **Genome** 1988 Aug; 30(4):576-81

Quadrivalent formation in a tetraploid chicken oocyte. Solari AJ, et al. **Genome** 1988 Dec;30(6):900-2

The use of DNA flow cytometry in the diagnosis of triploidy in human abortions. van Oven MW, et al. **Hum Pathol** 1989 Mar;20(3):238-42

Induction of megakaryocytic characteristics in human leukemic cell line K562: polyploidy, inducers, and secretion of mitogenic activity. Leary JF, et al. **J Biol Regul Homeost Agents** 1987 Apr-Jun;1(2):73-80

Lumbar lateral motor column development in triploid Xenopus laevis. Sperry DG. **J Comp Neurol** 1988 Dec 15; 278(3):446-52

Cytochalasin D-induced triploidy in the mouse. Speirs S, et al. **J Exp Zool** 1989 Jun;250(3):339-45

Increase in digyny explains polyploidy after in-vitro fertilization of frozen-thawed mouse oocytes. Carroll J, et al. **J Reprod Fertil** 1989 Mar;85(2):489-94

Accumulation of abnormally high ploid nuclei in the liver of LEC rats developing spontaneous hepatitis. Fujimoto Y, et al. **Jpn J Cancer Res** 1989 Jan;80(1):45-50

Age related variations of hepatocarcinogenic effect of azo dye (3'-MDAB) as linked to the level of hepatocyte polyploidization. Medvedev ZA, et al. **Mech Ageing Dev** 1988 Dec;46(1-3):159-74

Radiographic findings in liveborn triploidy. Silverthorn KG, et al. **Pediatr Radiol** 1989;19(4):237-41

Prenatal ascertainment of triploidy by maternal serum alpha-fetoprotein screening. Freeman SB, et al. **Prenat Diagn** 1989 May;9(5):339-47

Triploidy: pregnancy complications and clinical findings in seven cases. Graham JM Jr, et al. **Prenat Diagn** 1989 Jun; 9(6):409-19

Triploid fetus: an important consideration in the evaluation of very high maternal serum alpha-fetoprotein. Kazazian LC, et al. **Prenat Diagn** 1989 Jan;9(1):27-30

Prognostic significance of hereditary predisposition on the outcome of colorectal cancer as expressed by increased in vitro tetraploidy. Svendsen LB, et al. **Scand J Gastroenterol** 1988 Dec;23(10):1195-9

[Polyploid breeding of Achyranthes bidentata Bl.] Lu SM, et al. **Chung Yao Tung Pao** 1988 Jul;13(7):11-4, 61 (Eng. Abstr.) **(Chi)**

[Triploidy in the newborn infant; clinical course and cytogenetic aspects] van Lingen RA, et al. **Ned Tijdschr Geneeskd** 1989 Jun 3;133(22):1134-7 (Eng. Abstr.) **(Dut)**

[Hepatic cytopuncture and image analysis: confirmation of the existence of a polyploidy of normal hepatocyte nuclei] Maubon I, et al. **Arch Anat Cytol Pathol** 1988;36(4):156-9 (Eng. Abstr.) **(Fre)**

[A case of diploid/tetraploid mosaicism] Watanabe M, et al. **No To Hattatsu** 1988;20(5):413-7 (Eng. Abstr.) **(Jpn)**

[Prenatal diagnosis of triploidy by transabdominal aspiration of chorionic villi] Zolotukhina TV, et al. **Genetika** 1989 May;25(5):950-2 (Eng. Abstr.) **(Rus)**

[Proliferation and polyploidy of hepatocytes as indicators of liver regeneration after exposure to environmental chemical factors] Beliaeva NN. **Gig Sanit** 1989 Mar;(3):48-52 (Eng. Abstr.) **(Rus)**

[Nucleotide sequences of 5S rRNA genes of polyploid species of wheat and Aegilops species] Vakhitov VA, et al. **Mol Biol (Mosk)** 1989 Mar-Apr;23(2):431-40 (Eng. Abstr.) **(Rus)**

[Endomitosis in pigmented neoplasms of human skin] Savchenko IuIu. **Tsitol Genet** 1988 Nov-Dec;22(6):20-4 (Eng. Abstr.) **(Rus)**

[Complete triploidy in a live newborn infant. Review and contribution of a new case] Gillem Lanuza F, et al. **An Esp Pediatr** 1988 Aug;29(2):143-8 (60 ref.) (Eng. Abstr.) **(Spa)**

POLYPORACEAE see under **BASIDIOMYCETES**

POLYPOSIS COLI, FAMILIAL see **POLYPOSIS SYNDROME, FAMILIAL**

POLYPOSIS SYNDROME, FAMILIAL

Hepatocellular carcinoma in a case of familial polyposis coli [letter] Van Steenbergen W, et al. **Am J Gastroenterol** 1989 Sep;84(9):1120-1

The protean manifestations of familial polyposis coli. Nelson RL, et al. **Dis Colon Rectum** 1988 Sep;31(9):699-703

Solitary Peutz-Jeghers type polyp of the stomach in the absence of familial polyposis coli in a teenage boy. Kuwano H, et al. **Endoscopy** 1989 Jul;21(4):188-90

Familial polyposis coli: genetics, surveillance, and treatment. Lynch HT, et al. **Nebr Med J** 1988 Nov;73(11):329-34 (30 ref.)

Familial Polyposis coli: the clinical spectrum. Jagelman DG. **Prog Clin Biol Res** 1988;279:169-75 (23 ref.)

[Hereditary adenomatosis of the large intestine as an important precancerous condition] Jirásek V, et al. **Sb Lek** 1987 Jun;89(6):173-9 (Eng. Abstr.) **(Cze)**

[The polyposis project] Gedde-Dahl T Jr, et al. **Nord Med** 1989;104(1):12-5 (Eng. Abstr.) **(Nor)**

COMPLICATIONS

Dental abnormalities and bone lesions associated with familial adenomatous polyposis: report of cases. Carl W, et al. **J Am Dent Assoc** 1989 Jul;119(1):137-9

Thyroid carcinoma in two sisters with familial polyposis of the colon. Case reports and review of the literature. Delamarre J, et al. **J Clin Gastroenterol** 1988 Dec; 10(6):659-62 (31 ref.)

Effect of wheat fiber and vitamins C and E on rectal polyps in patients with familial adenomatous polyposis. DeCosse JJ, et al. **J Natl Cancer Inst** 1989 Sep 6;81(17):1290-7

Upper gastrointestinal cancer in patients with familial adenomatous polyposis. Spigelman AD, et al. **Lancet** 1989 Sep 30;2(8666):783-5

Congenital hypertrophy of the retinal pigment epithelium in familial adenomatous polyposis. Romania A, et al. **Ophthalmology** 1989 Jun;96(6):879-84

Pigmented ocular fundus lesions in the inherited gastrointestinal polyposis syndromes and in hereditary nonpolyposis colorectal cancer. Traboulsi EI, et al. **Ophthalmology** 1988 Jul;95(7):964-9

Hepatoblastoma in a patient with familial polyposis coli. LeSher AR, et al. **Surgery** 1989 May;105(5):668-70 (17 ref.)

[Familial thyroid cancer and rectocolic adenomatous polyposis (letter)] Delamarre J, et al. **Gastroenterol Clin Biol** 1989;13(2):229 **(Fre)**

DIAGNOSIS

Gastroduodenal polyps in familial polyposis coli. Gahtan V, et al. **Am Surg** 1989 May;55(5):278-80

Familial adenomatous polyposis [letter] Traboulsi EI. **Dis Colon Rectum** 1989 Jul;32(7):633-4

The adenomatous polyp and the hereditary polyposis syndromes. Burt RW, et al. **Gastroenterol Clin North Am** 1988 Dec;17(4):657-78 (81 ref.)

Hereditary nonpolyposis colon cancer: (Lynch syndrome I and II). A challenge for the clinician. Lynch HT, et al. **Nebr Med J** 1989 Jan;74(1):2-7

[Diffuse familial rectocolonic polyposis. Diagnostic and therapeutic aspects] Rădulescu D, et al. **Rev Chir [Chir]** 1988 Jul-Aug;37(4):263-74 (Eng. Abstr.) **(Rum)**

DIET THERAPY

Familial adenomatous polyposis: a nutritional intervention trial [editorial] Greenwald P, et al. **J Natl Cancer Inst** 1989 Sep 6;81(17):1272-3

GENETICS

On the possibility of pleiotropic monogenic control of hereditary polyposis and primary cancer of the colon. Ginsburg EK, et al. **Am J Hum Genet** 1989 Feb;44(2):191-7

Localization of the genetic defect in familial adenomatous polyposis within a small region of chromosome 5. Nakamura Y, et al. **Am J Hum Genet** 1988 Nov; 43(5):638-44

Increased level of mitochondrial gene expression in polyps of familial polyposis coli patients. Yamamoto A, et al. **Biochem Biophys Res Commun** 1989 Mar 31;159(3):1100-6

Chromosome 5 allele loss in familial and sporadic colorectal adenomas. Rees M, et al. **Br J Cancer** 1989 Mar;59(3):361-5

Cytogenetic characterization of a colon adenocarcinoma from a familial polyposis coli patient. Muleris M, et al. **Cancer Genet Cytogenet** 1989 Apr;38(2):249-53

Loss of constitutional heterozygosity in colorectal tumors from patients with familial polyposis coli and those with nonpolyposis colorectal carcinoma. Sasaki M, et al. **Cancer Res** 1989 Aug 15;49(16):4402-6

Chromosomal and c-K-ras oncogene alterations induced by a chemical carcinogen and phorbol ester in skin fibroblasts of individuals with familial polyposis coli. Marczynska B, et al. **Carcinogenesis** 1988 Oct;9(10):1897-900

Genetics of polyposis and colorectal cancer. **Ciba Found Symp** 1989;142:93-8

Turcot's syndrome. A review. Jarvis L, et al. **Dis Colon Rectum** 1988 Nov;31(11):907-14

Brain tumors in familial adenomatous polyposis. Kropilak M, et al. **Dis Colon Rectum** 1989 Sep;32(9):778-82 (51 ref.)

Possible involvement of chromosome 1 in in vitro immortalization: evidence from progression of a human adenoma-derived cell line in vitro. Paraskeva C, et al. **Int J Cancer** 1989 Apr 15;43(4):743-6

Deletion of chromosome 5q and familial adenomatous polyposis. Hockey KA, et al. **J Med Genet** 1989 Jan; 26(1):61-2

Hepatoblastoma and familial adenomatous polyposis [published erratum appears in J Natl Cancer Inst 1989 Mar 15;81(6):461] Garber JE, et al. **J Natl Cancer Inst** 1988 Dec 21;80(20):1626-8

CHRPE in non-Gardner's familial polyposis coli patients [letter] Lynch HT, et al. **Ophthalmology** 1989 Mar; 96(3):399-400

Skin fibroblasts from individuals hemizygous for the familial adenopolyposis susceptibility gene show delayed crisis in vitro. Chen SZ, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(6):2008-12

Evidence that the familial adenomatous polyposis gene is involved in a subset of colon cancers with a complementable defect in c-myc regulation. Erisman MD, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4264-8

Chromosome studies in polyposis coli. Sandberg AA. **Prog Clin Biol Res** 1988;279:203-13 (37 ref.)

RFLP analysis in familial polyposis and Gardner syndrome. Woodward SR. **Prog Clin Biol Res** 1988;279:305-8 (8 ref.)

[Genetic analysis of familial polyposis coli. Linkage analysis and loss of heterozygosity in colorectal tumors of FPC by RFLP analysis] Sasaki M. **Fukuoka Igaku Zasshi** 1989 Jan;80(1):38-48 (Eng. Abstr.) **(Jpn)**

[Carcinogenesis in familial polyposis coli] Yanagawa Y, et al. **Gan To Kagaku Ryoho** 1989 Sep;16(9):3093-8 (17 ref.) (Eng. Abstr.) **(Jpn)**

[A Norwegian polyposis family. From catastrophe to prevention] Andresen PA, et al. **Tidsskr Nor Laegeforen** 1989 Mar 10;109(7-8):832-5 (Eng. Abstr.) **(Nor)**

[Turcot syndrome. 2 new cases in siblings] Iriarte García-Baquero LM, et al. **An Esp Pediatr** 1989 Mar; 30(3):223-4 **(Spa)**

[Adenomatous degeneration in a prepuberal patient with generalized juvenile polyposis and angiomas of the oral mucosa] Lostal Gracia I, et al. **An Esp Pediatr** 1988 Jul; 29(1):61-4 (Eng. Abstr.) **(Spa)**

METABOLISM

[Fat absorption in patients with inflammatory diseases of the large intestine and diffuse polyposis] Rumiantsev VG, et al. **Vopr Pitan** 1988 Jul-Aug;(4):25-9 (Eng. Abstr.) **(Rus)**

MICROBIOLOGY

Increased formation of unintegrated viral DNA in skin fibroblasts from patients with familial polyposis coli shortly after infection with Kirsten murine sarcoma virus. Miyaki M, et al. **Int J Cancer** 1988 Nov 15;42(5):739-43

PATHOLOGY

Hereditary adenomatosis of the colon and rectum: clinical features of eight families from northern Italy. Ponz de Leon M, et al. **Am J Gastroenterol** 1989 Aug;84(8):906-16

Hyperpigmented lesions of the retinal pigment epithelium in familial adenomatous polyposis. Baker RH, et al. **Am J Med Genet** 1988 Oct;31(2):427-35

Congenital hypertrophy of retinal pigment epithelium: a sign of familial adenomatous polyposis. Chapman PD, et al. **BMJ** 1989 Feb 11;298(6670):353-4

Familial polyposis: colon cancer in the absence of rectal polyps. Perry RE, et al. **Br J Surg** 1989 Jul;76(7):744

Heterogeneity in the response of familial polyposis epithelial cells and adenomas to increasing levels of calcium in vitro. Friedman E, et al. **Cancer** 1989 Jun 15;63(12):2486-91

High prevalence of adenomatous polyps of the duodenal papilla in familial adenomatous polyposis. Alexander JR, et al. **Dig Dis Sci** 1989 Feb;34(2):167-70

The possible presence of a separate disease entity in nonfamilial polyposis of the large intestine. Itoh H, et al.

Dis Colon Rectum 1989 Mar;32(3):240–2
Juvenile polyposis—a precancerous condition. Jass JR, et al. **Histopathology** 1988 Dec;13(6):619–30
Gastric carcinoma and familial adenomatous polyposis (FAP). Goodman AJ, et al. **Int J Color Dis** 1988 Nov; 3(4):201–3
Mesenteric fibromatosis complicating familial adenomatous polyposis: predisposing factors and results of treatment. Lotfi AM, et al. **Int J Color Dis** 1989;4(1):30–6
A patient with a metastasizing jejunal carcinoma 17 years after colectomy for familial polyposis coli. Zuidema MF, et al. **Neth J Med** 1989 Jun;34(5–6):317–21 (10 ref.)
Duodenal adenomas in familial adenomatous polyposis: their structure and cellular composition with particular reference to endocrine hyperplasia. Mogensen AM, et al. **Virchows Arch [A]** 1989;414(4):315–9
Electron microscopic studies of endocrine hyperplasia in duodenal adenomas in familial adenomatous polyposis. Mogensen AM, et al. **Virchows Arch [A]** 1989;414(4):321–4
[Familial gastro-intestinal adenomatosis] Li L. **Chung Hua Chung Liu Tsa Chih** 1988 Nov;10(6):445–8 (Eng. Abstr.) **(Chi)**
[The importance of clinical characteristics in familial adenomatous polyposis] Offerhaus GJ. **Ned Tijdschr Geneeskd** 1988 Sep 17;132(38):1735–7 **(Dut)**
[Cell proliferation of the intestinal mucosa in patients with familial adenomatosis coli. Autoradiography study] Steenbeck L, et al. **Gastroenterol J** 1989;49(1):29–31 (Eng. Abstr.) **(Ger)**
[Studies on microadenoma and the accompanying lesions of familial adenomatosis coli] Morioka S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Aug; 85(8):1490–500 (21 ref.) (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

Familial polyposis coli and the role of the polyposis registry. Hooks VH 3d, et al. **J Med Assoc Ga** 1988 Jul;77(7):580–4

RADIOGRAPHY

Occult radiologic changes in the skull and jaw in familial adenomatous polyposis coli. Woods RJ, et al. **Dis Colon Rectum** 1989 Apr;32(4):304–6

SURGERY

Function and quality of life results after ileal pouch surgery for chronic ulcerative colitis and familial polyposis. Skarsgard ED, et al. **Am J Surg** 1989 May;157(5):467–71
The functional result of pelvic ileal reservoir in 10 patients with familial adenomatous polyposis. Everett WG, et al. **Ann R Coll Surg Engl** 1989 Jan;71(1):28–30
Ileal pouch-anal anastomosis: comparison of results in familial adenomatous polyposis and chronic ulcerative colitis. Dozois RR, et al. **Ann Surg** 1989 Sep;210(3):268–71; discussion 272–3
Juvenile polyp in an ileoanal J pouch following restorative proctocolectomy for juvenile polyposis coli. Sene A, et al. **Br J Surg** 1989 Aug;76(8):801
New approach to surgical treatment of ulcerative colitis and polyposis coli without pelvic pouch. Experimental study in dogs. Chaimoff C, et al. **Dis Colon Rectum** 1989 Jul; 32(7):572–9
Multiple adenomas in terminal ileum 25 years after restorative proctocolectomy for familial adenomatous polyposis. Report of a case. Myrhøj T, et al. **Dis Colon Rectum** 1989 Jul;32(7):618–20
Can the pouch be saved? Schoetz DJ Jr, et al. **Dis Colon Rectum** 1988 Sep;31(9):671–5
Long-term follow-up after colectomy and ileorectal anastomosis in familial adenomatous polyposis coli. Is there still a place for the procedure? Slors JF, et al. **Hepatogastroenterology** 1989 Apr;36(2):109–12
Turcot syndrome: report of a case and review of the literature. Jamjoom ZA, et al. **Int Surg** 1989 Jan–Mar; 74(1):45–50 (38 ref.)
Alternative to permanent ostomy formation. Crocker CH, et al. **J Arkansas Med Soc** 1989 Feb;85(9):379–80
Status of the endorectal ileal pullthrough procedure for ulcerative colitis and polyposis. Fonkalsrud EW. **Jpn J Surg** 1989 Jan;19(1):2–10
Straight ileoanal anastomosis with preserved anal mucosa for ulcerative colitis and familial polyposis. Emblem R, et al. **Scand J Gastroenterol** 1988 Oct;23(8):913–9
Current status of the surgical approach to polyposis and inflammatory bowel disease. Telander RL. **Surg Annu** 1989; 21:373–85
The endorectal ileal pullthrough procedure in patients with ulcerative colitis and familial polyposis with carcinoma. Stelzner M, et al. **Surg Gynecol Obstet** 1989 Sep; 169(3):187–94 (35 ref.)
[Endorectal ileal pull through operation with a J-shaped ileal reservoir in colonic polyposis] Leng XS. **Chung Hua Wai Ko Tsa Chih** 1988 Nov;26(11):690–1, 703 (Eng. Abstr.) **(Chi)**
[J-pouch—the Erlangen experience] Meister R. **Z Gastroenterol [Verh]** 1989 Jul;24:256–8 **(Ger)**
[Retroperitoneal desmoid tumor and familial polyposis coli] Shapira O, et al. **Harefuah** 1989 Jan 15;116(2):98–101 (Eng. Abstr.) **(Heb)**
[Absorptive, metabolic and bacterial nutritional changes after ileoanal anastomosis with creation of a rectal pouch] Enríquez JM, et al. **Rev Esp Enferm Apar Dig** 1988 Jul; 74(1):41–6 (Eng. Abstr.) **(Spa)**

POLYPROPYLENES see under **PLASTICS**

POLYPROTEINS see **PROTEINS**

POLYPS

Gastrointestinal polyposis syndromes. Finan MC, et al. **Dermatol Clin** 1989 Jul;7(3):419–34 (123 ref.)
Prostatic epithelial polyp of the prostatic urethra. Satoh S, et al. **Eur Urol** 1989;16(2):92–6
Antro-choanal polyp: a 10-year retrospective study in the pediatric population with a review of the literature. Chen JM, et al. **J Otolaryngol** 1989 Jun;18(4):168–72 (13 ref.)
So-called hairy polyp resembling an auricle. Kanzaki S, et al. **Otolaryngol Head Neck Surg** 1988 Oct;99(4):424–6
[Report of two cases of long ureteral polyps and review of literature] Takamura S, et al. **Hinyokika Kiyo** 1989 Feb; 35(2):323–8 (9 ref.) (Eng. Abstr.) **(Jpn)**

CHEMICALLY INDUCED

Endometrial polyps in postmenopausal patients receiving tamoxifen. Nuovo MA, et al. **Int J Gynecol Pathol** 1989; 8(2):125–31

COMPLICATIONS

Gastric xanthelasma in hyperplastic gastric polyposis. Lin PY, et al. **Arch Pathol Lab Med** 1989 Apr;113(4):428–30
Skin tags are not a risk factor for colorectal polyps. Brendler SJ, et al. **J Clin Gastroenterol** 1989 Jun;11(3):299–302
Trichobezoar associated with gastric polyposis. Bates CK, et al. **West J Med** 1988 Aug;149(2):220–3
[Trichoblastic fibroma and colonic polyposis] Combemale P, et al. **Ann Dermatol Venereol** 1988;115(12):1271–5 **(Fre)**
[Fibrous epithelial polyps of the pyelo-ureteral junction in children. Presentation of 3 cases and review of the literature (33 cases)] Galifer RB, et al. **Chir Pediatr** 1988;29(6):318–24 (43 ref.) (Eng. Abstr.) **(Fre)**
[Infertility associated with polyps of the interstitial portion of the fallopian tubes. Experience with 26 cases treated by microsurgery] Salat-Baroux J, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(2):235–9 (25 ref.) (Eng. Abstr.) **(Fre)**

CONGENITAL

[Congenital urethral polyps. A rare cause of obstructive uropathy in childhood] Schäfer J, et al. **Urologe [A]** 1989 Mar;28(2):80–3 (Eng. Abstr.) **(Ger)**

DIAGNOSIS

Gastroduodenal polyps in familial polyposis coli. Gahtan V, et al. **Am Surg** 1989 May;55(5):278–80
Adenocarcinoma in Barrett's oesophagus presenting as a polyp. Singal AK, et al. **J Assoc Physicians India** 1988 Sep;36(9):567–8
Case for diagnosis. Fundic gland polyposis. Shekitka KM, et al. **Milit Med** 1988 Dec;153(12):648–9, 653–4
Endoluminal ultrasonic examination of sessile polyps and early carcinomas of the rectum. Heintz A, et al. **Surg Endosc** 1989;3(2):92–5
Juvenile polyps of the colon and rectum. Alhan E, et al. **Turk J Pediatr** 1988 Apr–Jun;30(2):99–103
[The Cronkhite-Canada syndrome] Jacobsen BA. **Ugeskr Laeger** 1988 Oct 17;150(42):2504–6 (Eng. Abstr.) **(Dan)**
[Mesonephric adenocarcinoma of the endometrium. Reflections on a case] Vucusa C, et al. **Minerva Ginecol** 1988 Oct;40(10):609–11 (Eng. Abstr.) **(Ita)**
[Clinical aspects, diagnosis and treatment of endometrial polyps] Zheleznov BI, et al. **Akush Ginekol (Mosk)** 1988 Nov;(11):73–7 **(Rus)**
[Possibilities of laser-endoscopic spectrum analysis in laryngology] Preobrazhenskii NA, et al. **Vestn Otorinolaringol** 1989 Mar–Apr;(2):44–6 (Eng. Abstr.) **(Rus)**

DIET THERAPY

Effect of wheat fiber and vitamins C and E on rectal polyps in patients with familial adenomatous polyposis. DeCosse JJ, et al. **J Natl Cancer Inst** 1989 Sep 6;81(17):1290–7

ENZYMOLOGY

Lactic dehydrogenase levels in patients with duodenal ulcer, gastric ulcer, gastric polys and gastric carcinoma. Teniola D, et al. **Scand J Gastroenterol Suppl** 1986;124:169–78
[Lactate dehydrogenase activity in the serum of patients with polyps and papilloma of the larynx] Gołąbek W. **Ann Univ Mariae Curie Sklodowska [Med]** 1984;39:5–11 (Eng. Abstr.) **(Pol)**

EPIDEMIOLOGY

[Gallbladder polyps in the normal population (letter] Gjøde P, et al. **Ugeskr Laeger** 1989 Jan 9;151(2):104 **(Dan)**
[Gallbladder polyps in the normal population (letter)] Jørgensen T, et al. **Ugeskr Laeger** 1988 Sep 26; 150(39):2354–5 **(Dan)**

ETIOLOGY

Giant cervical polyp due to a foreign body in a 'Virgin'. Aridogan N, et al. **Aust N Z J Obstet Gynaecol** 1988 May; 28(2):146–7
Granulocytic sarcoma presenting as bleeding gastric polyp. Wong KF, et al. **Pathology** 1989 Jan;21(1):63–4
Intracranial complications of sinusitis. Parker GS, et al. **South Med J** 1989 May;82(5):563–9

GENETICS

Malignancies in the families of patients with gastric polyps. Harju E. **Anticancer Res** 1989 May–Jun;9(3):659–61
inv(12)(p11.2q13) in an endometrial polyp. Walter TA, et al. **Cancer Genet Cytogenet** 1989 Aug;41(1):99–103
[Diffuse stomach cancer in the minor form of familial adenomatosis coli. Correlation or coincidence?] Polensky A, et al. **Z Gastroenterol** 1988 Dec;26(12):737–43 (Eng. Abstr.) **(Ger)**

PATHOLOGY

Giant cervical polyp. Duckman S, et al. **Am J Obstet Gynecol** 1988 Oct;159(4):852–4
Prostatic-type polyp in the bladder. A case report. Hansen BJ, et al. **APMIS** 1989 Jul;97(7):664–6
Composite carcinoid-adenocarcinoma of the stomach associated with multiple gastric carcinoids and nonantral gastric atrophy. Caruso ML, et al. **Cancer** 1989 Oct 1; 64(7):1534–9
UCHL1-positive extranodal lymphoma resembling multiple lymphomatous polyposis of the gastrointestinal tract. Nakamine H, et al. **Cancer** 1989 Oct 1;64(7):1500–3
Clinicopathological features and natural history of gastric hamartomatous polyps. Iishi H, et al. **Dig Dis Sci** 1989 Jun; 34(6):890–4
Lymphangioma of the large intestine. Report of a case. Kuramoto S, et al. **Dis Colon Rectum** 1988 Nov; 31(11):900–5 (30 ref.)
Atypical polypoid adenomyoma—clinical histological and immunocytochemical findings. Rollason TP, et al. **Eur J Gynaecol Oncol** 1988;9(6):444–51
"Placental polyp": light microscopic and immunohistochemical observations. Lawrence WD, et al. **Hum Pathol** 1988 Dec;19(12):1467–70
Endobronchial polyp. Vyas MC, et al. **Indian J Chest Dis Allied Sci** 1988 Jul–Sep;30(3):221–4
Fibroepithelial polyps with atypical stromal cells (pseudosarcoma botryoides) of vulva and vagina. A report of 13 cases. Ostör AG, et al. **Int J Gynecol Pathol** 1988; 7(4):351–60
Gastric epithelial polyps. A 10-year study. Deppisch LM, et al. **J Clin Gastroenterol** 1989 Feb;11(1):110–5
Aural polyps as predictors of underlying cholesteatoma. Milroy CM, et al. **J Clin Pathol** 1989 May;42(5):460–5
Gastrointestinal polyps. Listrom MB, et al. **Mod Pathol** 1989 Mar;2(2):161–81
Effects of indwelling catheters on the urethral mucosa (polypoid urethritis). Norlén LJ, et al. **Scand J Urol Nephrol** 1988;22(2):81–6
Gastric glandular cysts—investigations into their genesis and relationship to colorectal epithelial tumors. Eidt S, et al. **Z Gastroenterol** 1989 Apr;27(4):212–7
[Pseudo-sarcoma botyroid. Apropos of 3 cases of vulvar localization with review of the medical literature] Haouet S, et al. **Arch Anat Cytol Pathol** 1988;36(4):171–4 (5 ref.) (Eng. Abstr.) **(Fre)**
[Granular cell tumor of the esophagus. 2 case reports of an endoscopic incidental diagnosis with endoscopic therapy] Wedmann B, et al. **Fortschr Med** 1988 Nov 20; 106(33):657–8, 659, 677 (Eng. Abstr.) **(Ger)**
[So-called nephrogenic adenoma (adenomatous metaplasia). A rare tumorous adenopapillary lesion of the urothelium in the urinary bladder in a 6-year-old boy following injury] Johannes A, et al. **Urologe [A]** 1988 Jul;27(4):204–6 (Eng. Abstr.) **(Ger)**
[A case of malignant transformation of gastric hyperplastic polyp with metaplastic bone formation] Hayashi K, et al. **Gan No Rinsho** 1989 Jun;35(7):851–4 (Eng. Abstr.) **(Jpn)**
[Gastric mucosa in patients with fundic hyperplastic polyps] Haruma K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Apr;86(4):851–7 (Eng. Abstr.) **(Jpn)**
[Malignant transformation of gastric polyps] Belogolovtsev VA, et al. **Klin Med (Mosk)** 1988 Jul;66(7):109–12 (Eng. Abstr.) **(Rus)**
[Endoscopic study of the inflammatory gastric fibroid polyp. Analysis of 15 cases] Zaballa M, et al. **Rev Esp Enferm Apar Dig** 1988 Jun;73(6):687–90 (Eng. Abstr.) **(Spa)**

RADIOGRAPHY

Sphenochoanal polyp: CT findings. Hayes E, et al. **J Comput Assist Tomogr** 1989 Mar–Apr;13(2):365–6
[X-ray computed tomography in the diagnosis and treatment of fibrovascular polyp of the esophagus] Partensky C, et al. **Chirurgie** 1988;114(3):217–22 (28 ref.) (Eng. Abstr.) **(Fre)**

SURGERY

Long-term results of ethmoid surgery. Sogg A. **Ann Otol Rhinol Laryngol** 1989 Sep;98(9):699–701

The surgical treatment of tubal polyps. Gillett WR. **Aust N Z J Obstet Gynaecol** 1989 Feb;29(1):79–81 (11 ref.)
Surgery for the voice? Sataloff RT. **Clin Otolaryngol** 1989 Jun;14(3):185–8
Aural polyps and cholesteatoma. Veitch D, et al. **Clin Otolaryngol** 1988 Oct;13(5):395–7
Endoscopic gastroduodenal polypectomy. Bátovský M, et al. **Czech Med** 1988;11(3):157–67
Endoscopic removal of a pedunculated bronchial lipoma by means of the hot snare. Müller LC, et al. **Endoscopy** 1989 Mar;21(2):97–8
Benign endobronchial tumours treated by neodymium–YAG laser. Eppinga P, et al. **Eur Respir J** 1988 Jun;1(6):568–70
Nd:YAG laser for diminutive polyps [letter] Fraiberg EN, et al. **Gastrointest Endosc** 1989 Mar–Apr;35(2):136
Inflammatory esophagogastric polyps: resolution following antireflux surgery. Zitsman JL, et al. **J Pediatr Surg** 1988 Nov;23(11):1016–7
Resectoscopic removal of symptomatic intrauterine lesions. Brooks PG, et al. **J Reprod Med** 1989 Jul;34(7):435–7
Endoscopic paranasal sinus surgery: indications and considerations. Schaefer SD, et al. **Laryngoscope** 1989 Jan; 99(1):1–5
Fibrovascular polyp of the esophagus. Lewis BS, et al. **Mt Sinai J Med (NY)** 1988 Sep;55(4):324–5
Clinical evaluation of laser endoscopy for the treatment of gastric tumors. Suguro M, et al. **Surg Endosc** 1987; 1(3):131–8
Follow-up after polypectomy of colorectal adenomas. The importance of total colonoscopy. Yashiro K, et al. **Surg Endosc** 1989;3(2):87–91
[A new stage in endoscopic polypectomy] Strekalovskiĭ VP, et al. **Khirurgiia (Sofiia)** 1988;41(5):99–105 (Eng. Abstr.) **(Bul)**
[Gastric polyps: endoscopic and surgical treatment] Spinoglio G, et al. **Minerva Chir** 1989 May 31;44(10):1473–4 (Eng. Abstr.) **(Ita)**
[Polyp with invasive carcinoma. Criteria of treatment based on the experience of 31 cases] Tonelli F, et al. **Minerva Chir** 1989 Feb 28;44(4):603–7 (8 ref.) **(Ita)**
[Endoscopic gastric polypectomy. Evaluation of 5,492 endoscopies of the upper digestive tract] Manildo M, et al. **Minerva Dietol Gastroenterol** 1989 Apr–Jun;35(2):115–8 (Eng. Abstr.) **(Ita)**
[A case of ureteral polyp in a young man with renal autotransplantation] Sugiyama T, et al. **Hinyokika Kiyo** 1989 Jan;35(1):111–4 (9 ref.) (Eng. Abstr.) **(Jpn)**
[2 benign proliferative diseases of the stomach with a major surgical solution: hypertrophic gastropathy with giant folds and diffuse gastric polyposis] Rădulescu D, et al. **Rev Chir [Chir]** 1988 Sep–Oct;37(5):379–86 (Eng. Abstr.) **(Rum)**

ULTRASTRUCTURE

Ultrastructural study of two subtypes of gastric adenoma. Muratani M, et al. **J Clin Pathol** 1989 Apr;42(4):352–9

VETERINARY

Polyp in the urogenital canal of an African elephant. Munson L, et al. **J Am Vet Med Assoc** 1986 Nov 1;189(9):1190–1
Gastric hyperplastic polyp in a horse. Morse CC, et al. **J Comp Pathol** 1988 Oct;99(3):337–42
Hyperplastic endometrial polyps in a two-year-old filly. Hamir AN, et al. **Vet Pathol** 1989 Mar;26(2):185–7

POLYRADICULITIS

COMPLICATIONS

Acute myeloradiculitis due to cytomegalovirus as the initial manifestation of AIDS. Mahieux F, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):270–4
[A case of polyradiculitis with EKG deviations and weakened heart sounds] Salminen K. **Duodecim** 1989; 105(1):71 **(Fin)**

DIAGNOSIS

[Differential diagnosis of polyradiculitis and hypothyroidism (letter)] Dávid K. **Orv Hetil** 1989 Jun 18;130(25):1359 **(Hun)**

ETIOLOGY

Localized CNS brucellosis: report of 7 cases. Pascual J, et al. **Acta Neurol Scand** 1988 Oct;78(4):282–9
Adolescent diabetic amyotrophy. Seddon PC, et al. **Acta Paediatr Scand** 1988 Nov;77(6):937–9
Meningopolyradiculitis (Bannwarth syndrome) as primary manifestation of a centrocytic-centroblastic lymphoma. Wilder-Smith E, et al. **J Neurol** 1989 Mar;236(3):168–9

PHYSIOPATHOLOGY

[Findings in the peripheral motor system following stimulation of the motor nerve roots: polyradiculitis, amyotrophic lateral sclerosis and polyneuropathy] Ludolph AC, et al. **EEG EMG** 1988 Dec;19(4):255–9 (Eng. Abstr.) **(Ger)**

SURGERY

[Indications and results of sensory rhizotomy in cicatricial lumbar radiculitis syndromes] Kocks W, et al. **Zentralbl Neurochir** 1988;49(4):336–9 (Eng. Abstr.) **(Ger)**

VETERINARY

Subclinical lumbar polyradiculopathy in aged domestic, laboratory, and exotic mammalian species—a light and selected electron microscopic study. Anderson WI, et al. **Cornell Vet** 1989 Oct;79(4):339–44

POLYRADICULONEURITIS

Guillain-Barré syndrome in pregnancy. Laufenburg HF, et al. **Am Fam Physician** 1989 May;39(5):147–50
Guillain Barre syndrome. Three case reports. Koh Chan Sing. **Med J Malaysia** 1988 Mar;43(1):84–6
[Guillain-Barré syndrome. Critical review and cases contribution] Naccari Carlizzi M, et al. **Minerva Pediatr** 1988 Sep;40(9):517–26 (71 ref.) (Eng. Abstr.) **(Ita)**

BLOOD

Plasmapheresis associated with a relapsing course in Guillain-Barré syndrome. Shanks DE, et al. **Pediatr Neurol** 1989 May–Jun;5(3):189–90
[Serum demyelinating activity and Guillain-Barre syndrome: favorable effect of plasma exchange] Metral S, et al. **Rev Neurol (Paris)** 1989;145(4):312–9 (Eng. Abstr.) **(Fre)**

CEREBROSPINAL FLUID

Terminal complement complexes (SC5b-9) in cerebrospinal fluid in autoimmune nervous system diseases. Sanders ME, et al. **Ann N Y Acad Sci** 1988;540:387–8
Response of CSF IgG to steroids in an 18-month-old with chronic inflammatory polyradiculoneuropathy. Faleck H, et al. **Cleve Clin J Med** 1989 Jul–Aug;56(5):539–41
[Lymphocytic meningoradiculitis (Bannwarth's syndrome)] Aho K, et al. **Duodecim** 1988;104(19):1550–3 **(Fin)**

CHEMICALLY INDUCED

Guillain Barre syndrome as a sequela of organophosphorus poisoning [letter] Mishra VN, et al. **J Assoc Physicians India** 1988 May;36(5):347
Guillain-Barré syndrome following immunisation with synthetic hepatitis B vaccine [letter] Tuohy PG. **N Z Med J** 1989 Mar 8;102(863):114–5
[Acute polyradiculoneuritis after intravenous injection of heroin, HIV seropositivity disclosed 3 years later] Labauge R, et al. **Rev Neurol (Paris)** 1989;145(1):69–72 (21 ref.) (Eng. Abstr.) **(Fre)**

COMPLICATIONS

Acute autonomic and sensory neuropathy: report of an autopsy case. Tohgi H, et al. **Acta Neuropathol (Berl)** 1989; 77(6):659–63
Postural guarding and hypertension as initial manifestations of Guillain-Barré syndrome. Singer JI, et al. **Am J Emerg Med** 1989 Mar;7(2):177–9
Association of Guillain-Barré syndrome and Henoch-Schönlein purpura: is immunoglobulin a responsible for the neurologic syndrome? Moreau BA, et al. **Am J Med Sci** 1988 Sep;296(3):198–201
Reactive arthritis in association with the Guillain-Barré-Strohl syndrome [letter] Sachdev D, et al. **Br J Rheumatol** 1989 Aug;28(4):359–60
Neuropathic arthropathy associated with chronic inflammatory demyelinating polyradiculoneuropathy. Gardner D, et al. **Can Assoc Radiol J** 1989 Apr;40(2):117–8
Ex novo episodes of acute glomerulonephritis and Guillain-Barré syndrome: a case report. Bettinelli A, et al. **Clin Nephrol** 1989 May;31(5):269–73
Guillain-Barré's syndrome in alcoholics [letter] Worner TM. **Drug Alcohol Depend** 1989 Jan;23(1):93
Simultaneous neuroinfection with cytomegalovirus and herpes simplex virus in an immunocompetent adult. Larsen JK, et al. **J Intern Med** 1989 Jul;226(1):59–61
Guillain-Barré syndrome associated with acute delta hepatitis virus superinfection. Lin SM, et al. **J Med Virol** 1989 Jul; 28(3):144–5
Early predictors of prognosis in Guillain-Barré syndrome [letter] Segurado OG, et al. **Lancet** 1988 Dec 10; 2(8624):1365–6
Guillain-Barré syndrome with involvement of the central and autonomic nervous systems [clinical conference] Panegyres PK, et al. **Med J Aust** 1989 Jun 5;150(11):655–9
Pseudotumor cerebri, spinal and radicular pain, and hyporeflexia: a clinical variant of the Guillain-Barré syndrome? Macaya A, et al. **Pediatr Neurol** 1988 Mar–Apr; 4(2):120–1
Acute inflammatory demyelinating polyradiculoneuropathy presenting as complete heart block and Stoke-Adams attacks. Wani BA, et al. **Postgrad Med J** 1989 Feb; 65(760):103–4
Identification of patients at risk of arrhythmia in the Guillain-Barré syndrome. Winer JB, et al. **Q J Med** 1988 Sep;68(257):735–9
Neuritis cordis due to the acute polyneuritis of the Guillain-Barré syndrome. Feiden W, et al. **Virchows Arch [A]** 1988;413(6):573–80
[Polyneuropathies in HIV infection] Neundörfer B, et al. **Fortschr Neurol Psychiatr** 1989 Apr;57(4):127–31 (45 ref.) (Eng. Abstr.) **(Ger)**
[A 31-year-old asthmatic woman with multisystemic disease (clinical conference)] Weinblatt ME, et al. **Medicina (Firenze)** 1988 Oct–Dec;8(4):465–72 **(Ita)**
[A case of Guillain-Barré syndrome with autonomic prodromes] Hamada R, et al. **Nippon Naika Gakkai Zasshi** 1989 Mar;78(3):422–3 **(Jpn)**
[Chronic inflammatory demyelinating polyradiculoneuropathy (CIDP) associated with acute optic neuritis] Taniwaki T, et al. **Rinsho Shinkeigaku** 1988 Jul;28(7):789–92 (Eng. Abstr.) **(Jpn)**
[Acute polyradiculoneuritis and acquired immunodeficiency virus] Scaff M, et al. **Arq Neuropsiquiatr** 1989 Mar; 47(1):114–7 (Eng. Abstr.) **(Por)**
[Arterial hypertension secondary to Guillain-Barré syndrome. Treatment with a labetalol and chlorpromazine combination. Apropos of a case] Ayuso Gatell A, et al. **Med Clin (Barc)** 1988 Jun 11;91(3):105–7 (Eng. Abstr.) **(Spa)**

DIAGNOSIS

Abdominal pain as a presenting symptom of the Guillain-Barré syndrome. Wong PS, et al. **Arch Emerg Med** 1988 Dec;5(4):242–5
Guillain-Barré syndrome presenting as a paralysis of accommodation. Case report. DeRespinis PA, et al. **Arch Ophthalmol** 1989 Sep;107(9):1282
Ascending paralysis in rabies [letter] Sathasivam A. **Ceylon Med J** 1989 Mar;34(1):37–8
Somatosensory evoked potential studies in acute Guillain-Barré syndrome. Ganji S, et al. **Electromyogr Clin Neurophysiol** 1988 Aug–Oct;28(6):313–7
Relapsing polyneuritis following classic Miller Fisher syndrome [letter] Kaiser-Smith, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):802–3
Guillain-Barré syndrome: prognosis and pathogenesis [letter] Hartung HP, et al. **Lancet** 1988 Nov 19;2(8621):1198
Guillain-Barré syndrome presenting as high-altitude cerebral edema [letter] Shlim DR, et al. **N Engl J Med** 1989 Aug 24;321(8):545
Acute, severe, central and peripheral nervous system combined demyelination. Amit R, et al. **Pediatr Neurol** 1986 Jan-Feb;2(1):47–50
Autonomic neuropathy. Low PA. **Semin Neurol** 1987 Mar; 7(1):49–57 (84 ref.)
[Acute polyneuropathies of the Landry type—differential diagnostic considerations] Reichel G. **Psychiatr Neurol Med Psychol Beih** 1988;40:72–3 **(Ger)**
[Neuroborreliosis (published erratum appears in Wien Med Wochenschr 1989 Jan 31;139(1–2):43)] Riedmann G, et al. **Wien Med Wochenschr** 1988 Dec 31;138(23–24):613–6 (Eng. Abstr.) **(Ger)**
[Chronic Guillain-Barré syndrome (diagnostic and therapeutic possibilities)] Molnár M, et al. **Orv Hetil** 1989 Jan 22;130(4):167–8, 171–2 (18 ref.) (Eng. Abstr.) **(Hun)**
[Guillain-Barre-Strohl syndrome] Kanarelkin HF, et al. **Klin Med (Mosk)** 1988 Sep;66(9):18–25 (56 ref.) **(Rus)**
[Polyradiculoneuritis (Guillain-Barré syndrome)] Odinokova VA, et al. **Sov Med** 1989;(2):91–4 **(Rus)**
[Neurologic manifestations of West Nile fever in the Transcarpathian region] Buletsa BA, et al. **Zh Nevropatol Psikhiatr** 1989;89(2):29–30 (Eng. Abstr.) **(Rus)**

DRUG THERAPY

High-dose steroid therapy in Guillain-Barré syndrome. Haass A, et al. **J Neuroimmunol** 1988 Dec;20(2–3):305–8
[A case of chronic inflammatory demyelinating polyradiculoneuropathy with diurnal fluctuation of clinical symptoms during administration of prednisolone] Nakagawa T, et al. **Rinsho Shinkeigaku** 1988 Jun; 28(6):711–4 (Eng. Abstr.) **(Jpn)**
[Results in the treatment of Guillain-Barre syndrome with corticosteroids] Major-Stević M, et al. **Med Pregl** 1988; 41(11–12):487–90 (Eng. Abstr.) **(Scr)**

ENZYMOLOGY

Guillain-Barré syndrome and serum activities of gamma-glutamyltransferase and glutamic-pyruvic transaminase. Kornhuber J, et al. **Eur Arch Psychiatry Neurol Sci** 1988 Sep;237(6):317–9

EPIDEMIOLOGY

Epidemiologic and clinical features of the Guillain-Barre' syndrome in Sardinia in the 1961–1980 period. Congia S, et al. **Acta Neurol (Napoli)** 1989 Feb;11(1):15–20
Guillain-Barré syndrome and hepatitis A: lack of association during a major epidemic [letter] Xie JG, et al. **Ann Neurol** 1988 Nov;24(5):697–8
Guillain-Barré syndrome in Kenya: a clinical review of 54 patients. Bahemuka M. **J Neurol** 1988 Sep;235(7):418–21 (26 ref.)
Cluster of childhood Guillain-Barré cases after an oral poliovaccine campaign [letter] Uhari M, et al. **Lancet** 1989 Aug 19;2(8660):440–1
Incidence of Guillain-Barré syndrome during a nationwide oral poliovirus vaccine campaign. Kinnunen E, et al. **Neurology** 1989 Aug;39(8):1034–6
Guillain-Barre syndrome. Another immune-mediated disease with a predilection for young women? Riggs JE, et al. **W V Med J** 1989 Sep;85(9):382–3

ETHNOLOGY

Guillain-Barre syndrome in Korean children. Coe CJ. **Yonsei Med J** 1989;30(1):81-7

ETIOLOGY

Guillain-Barré syndrome: diagnostic criteria, epidemiology, clinical course and prognosis. Halls J, et al. **Acta Neurol Scand** 1988 Aug;78(2):118-22

Recurrent Guillain-Barré syndrome after multiple exposures to cytomegalovirus. Donaghy M, et al. **Am J Med** 1989 Sep;87(3):339-41

Acute acquired demyelinating polyneuropathy with respiratory failure following high-dose systemic cytosine arabinoside and marrow transplantation. Johnson NT, et al. **Bone Marrow Transplant** 1987 Aug;2(2):203-7

Guillain-Barré syndrome and tularemia pleuritis with high adenosine deaminase activity in pleural fluid. Syrjälä H, et al. **Infection** 1989 May-Jun;17(3):152-3

Inflammatory demyelinating polyradiculoneuropathy associated with human immunodeficiency virus infection. Przedborski S, et al. **J Neurol** 1988 Jul;235(6):359-61

Seizures as the initial manifestation of paralytic rabies [letter] Hemachudha T, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):808-10

A prospective study of acute idiopathic neuropathy II antecedent events [letter] Mancardi GL, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):424-5

Guillain-Barré syndrome and human diploid cell rabies vaccine [letter] Knittel T, et al. **Lancet** 1989 Jun 10; 1(8650):1334-5

Guillain-Barré syndrome associated with cytomegalovirus infection. Hart IK, et al. **Q J Med** 1988 May;67(253):425-30

Polyradiculoneuropathy in transfusion-associated AIDS and dorsal root pathology. Alpert JN, et al. **Tex Med** 1989 Feb; 85(2):45-8

[Neurologic involvement in campylobacter infections. 5 cases] Clavelou P, et al. **Rev Neurol (Paris)** 1989; 145(3):208-14 (28 ref.) (Eng. Abstr.) **(Fre)**

[Guillain-Barré syndrome secondary to hepatitis B (apropos of a case)] Ghram N, et al. **Tunis Med** 1988 Nov; 66(11):787-90 (Eng. Abstr.) **(Fre)**

[Polyradiculoneuritis disclosing cancer of the lung] M'Raihi L, et al. **Tunis Med** 1988 May;66(5):477-80 (5 ref.) (Eng. Abstr.) **(Fre)**

[Prognosis of peripheral facial paralysis in Lyme borreliosis (Garin-Bujadoux, Bannwarth meningopolyradiculitis)] Laubert A, et al. **HNO** 1989 Apr;37(4):158-61 (Eng. Abstr.) **(Ger)**

[Differential diagnostic aspects of trichinosis in childhood with special reference to neurologic manifestations] Kemmerling S. **Z Arztl Fortbild (Jena)** 1989;83(3):125-8 **(Ger)**

[Idiopathic polyneuropathies] Nicoletti F, et al. **Acta Neurol (Napoli)** 1989 Apr-Jun;11(2-3):92-101 (22 ref.) **(Ita)**

[Chronic demyelinating polyradiculoneuropathy associated with malignant histiocytosis] Watahiki Y, et al. **No To Shinkei** 1989 Apr;41(4):405-10 (Eng. Abstr.) **(Jpn)**

IMMUNOLOGY

IgM binding to sialosyllactosaminylparagloboside in a patient with polyradiculoneuropathy due to Mycoplasma pneumoniae infection. Inuzuka T, et al. **Acta Neurol Scand** 1988 Jul;78(1):53-7

Class and IgG subclass distribution of antibodies against peripheral nerve myelin in sera from patients with inflammatory demyelinating polyradiculoneuropathy. Vedeler CA, et al. **Acta Neurol Scand** 1988 Nov;78(5):401-7

Significance of lymphocytes and blood vessel changes for edema formation in polyradiculoneuritis. Seitz RJ, et al. **Acta Neuropathol (Berl)** 1988;76(6):564-73

Serum antibodies to peripheral nerve antigens in Guillain-Barré syndrome. Negishi T, et al. **Ann N Y Acad Sci** 1988;540:376-7

Clonal restriction of complement-fixing antineural antibodies in the Guillain-Barré syndrome. Ryberg B. **Ann N Y Acad Sci** 1988;540:384-6

High-dose intravenous gammaglobulin in Guillain-Barré syndrome [letter] van der Meché FG, et al. **Ann Neurol** 1988 Oct;24(4):588

Anti-peripheral nerve myelin antibodies in Guillain-Barre syndrome bind a neutral glycolipid of peripheral myelin and cross-react with Forssman antigen. Koski CL, et al. **J Clin Invest** 1989 Jul;84(1):280-7

A study on Guillain Barre' syndrome for evidence of infection with enterovirus 70. Singh Senger AK, et al. **J Commun Dis** 1988 Mar;20(1):58-60

Herpes simplex virus specific antibody determined by immunoblotting in cerebrospinal fluid of a patient with the Guillain-Barré syndrome. Bernsen HJ, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):788-91

Monoclonal antibodies to P2 basic protein and their use in the investigation of some aspects of the Guillain-Barré syndrome. Luijten JA, et al. **J Neurol Sci** 1988 Sep; 86(2-3):265-76

Antibodies to Borrelia burgdorferi in Guillain-Barré syndrome [letter] Bouma PA, et al. **Lancet** 1989 Sep 23; 2(8665):739

Antibody binding to PNS myelin proteins in acute Guillain-Barré syndrome. Shuman S, et al. **Pathol Immunopathol Res** 1988;7(3):162-8

[Cerebrospinal fluid parameters in Guillain-Barré polyradiculitis. Importance of barrier disorder and intrathecal immunoglobulin synthesis] Papen R, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Jun; 41(6):334-43 (Eng. Abstr.) **(Ger)**

MICROBIOLOGY

[Campylobacter--a common cause of Guillain-Barré syndrome?] Qvarfordt I, et al. **Lakartidningen** 1988 Sep 28; 85(39):3190-1 **(Swe)**

PATHOLOGY

Leukocyte types in cerebrospinal fluid and peripheral blood enumerated immunoenzymatically in aseptic meningitis and the Guillain-Barré syndrome. Ernerudh J, et al. **Acta Neurol Scand** 1989 Jan;79(1):68-74

Chronic recurrent Guillain-Barré syndrome: report of 3 cases. De Mello AR, et al. **Arq Neuropsiquiatr** 1989 Mar; 47(1):84-90

Chronic relapsing idiopathic polyneuropathy with primary axonal lesions. Julien J, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):871-5

A fulminant case of Guillain-Barré syndrome: topographic and fibre size related analysis of demyelinating changes. Kanda T, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul; 52(7):857-64

Peripheral neuropathy complicating pancreatitis [letter] Vallat JM, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun; 52(6):810

Sural nerve biopsy in chronic inflammatory demyelinating polyradiculoneuropathy. Krendel DA, et al. **Muscle Nerve** 1989 Apr;12(4):257-64

Guillain-Barré syndrome in children. Evans OB. **Pediatr Rev** 1986 Sep;8(3):69-74 (15 ref.)

[Clinicopathologic findings of hepatic neuropathy: a case report] Chen QT. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Jun; 21(3):160-2, 189 (Eng. Abstr.) **(Chi)**

PHYSIOPATHOLOGY

Immune mechanisms in inflammatory polyneuropathy. Hartung HP, et al. **Ann N Y Acad Sci** 1988;540:122-61 (194 ref.)

Motor conduction studies in Guillain-Barré syndrome [letter] Kern RZ. **Ann Neurol** 1988 Nov;24(5):695

Chronic inflammatory demyelinating polyradiculoneuropathy. Clinical characteristics, course, and recommendations for diagnostic criteria. Barohn RJ, et al. **Arch Neurol** 1989 Aug;46(8):878-84

Evoked potential evidence of cranial nerve and CNS involvement in chronic relapsing polyradiculoneuropathy [letter] Gigli GL, et al. **Can J Neurol Sci** 1988 Aug; 15(3):353

Motor evoked responses recorded epidurally in a patient with Guillain-Barré syndrome. Zentner J, et al. **Eur Arch Psychiatry Neurol Sci** 1988;238(1):31-2

Evoked potentials suggest cranial nerves and CNS involvement in chronic relapsing polyradiculoneuropathy. Gigli GL, et al. **Eur Neurol** 1989;29(3):145-9

Cerebral involvement in children with acute and relapsing inflammatory polyneuropathy. Willis J, et al. **J Child Neurol** 1988 Jul;3(3):200-4

Severe aggravation of blepharospasm in Fisher's syndrome [letter] Garcia-Albea E. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):130

Guillain-Barré syndrome: a model of random conduction block. van der Meché FG, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1158-63

Disease patterns in experimental allergic neuritis (EAN) in the Lewis rat. Is EAN a good model for the Guillain-Barré syndrome? Brosnan JV, et al. **J Neurol Sci** 1988 Dec; 88(1-3):261-76

Reversible proximal conduction block underlies rapid recovery in Guillain-Barré syndrome. Berger AR, et al. **Muscle Nerve** 1988 Oct;11(10):1039-42

SSEP and F-wave studies in acute inflammatory demyelinating polyradiculoneuropathy. Gilmore RL, et al. **Muscle Nerve** 1989 Jul;12(7):538-43

Sensory Guillain-Barré syndrome [letter] Vallat JM. **Neurology** 1989 Jun;39(6):879

Neonatal Guillain-Barré syndrome. al-Qudah AA, et al. **Pediatr Neurol** 1988 Jul-Aug;4(4):255-6

Alcohol consumption, blood-cerebrospinal fluid barrier, and Guillain-Barré syndrome. Kaiserauer CH, et al. **Pharmacopsychiatry** 1988 Nov;21(6):310-1

Acquired demyelinating polyneuropathies. Lisak RP, et al. **Semin Neurol** 1987 Mar;7(1):40-8 (78 ref.)

Neuropathy in childhood. Sladky JT. **Semin Neurol** 1987 Mar;7(1):67-75 (25 ref.)

[Changes in blood pressure in Guillain-Barre syndrome] Wang ML. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Apr; 21(2):95-6, 127 (Eng. Abstr.) **(Chi)**

[Neurologic and urodynamic characteristics of patients with Guillain-Barré syndrome] Grbavac Z, et al. **Lijec Vjesn** 1989 Jan-Feb;111(1-2):17-20 (Eng. Abstr.) **(Scr)**

[The significance of albumino-rachia in the evaluation of the functional status of the hemato-encephalic barrier in patients with inflammatory diseases of the nervous system] Nikolić S, et al. **Med Pregl** 1988;41(7-8):319-22 (Eng. Abstr.) **(Scr)**

[Guillain-Barre syndrome in children. Analysis of 23 cases] Rufo Campos M, et al. **An Esp Pediatr** 1989 May; 30(5):353-7 (33 ref.) (Eng. Abstr.) **(Spa)**

PSYCHOLOGY

Biomedical ethics. Communication and altered perceptions. Burk K. **N J Med** 1989 Jan;86(1):50-1

REHABILITATION

The rehabilitation of patients with severe Guillain-Barré syndrome. Zelig G, et al. **Paraplegia** 1988 Aug;26(4):250-4

THERAPY

Transmission of HIV and AIDS by plasmapheresis for Guillain-Barré syndrome. Boucher CA, et al. **Clin Neurol Neurosurg** 1988;90(3):235-6

Plasmapheresis in the treatment of acute relapsing inflammatory demyelinating polyradiculoneuropathy associated with human immunodeficiency virus infection: a case report. Wuest D, et al. **J Clin Apheresis** 1988; 4(4):149-51

The value of plasmapheresis in the treatment of acute and chronic Guillain-Barré syndrome. Kunze K, et al. **J Neuroimmunol** 1988 Dec;20(2-3):301-3

Role of therapeutic plasmapheresis in the acute Guillain-Barré syndrome. McKhann GM, et al. **J Neuroimmunol** 1988 Dec;20(2-3):297-300

The natural history of the Guillain-Barré syndrome in 18 children and 50 adults. Kleyweg RP, et al. **J Neurol Neurosurg Psychiatry** 1989 Jul;52(7):853-6

Plasma exchange for Guillain-Barré syndrome. Tharakan J, et al. **J R Soc Med** 1989 Aug;82(8):458-61

Plasmapheresis in the treatment of the Guillain-Barré syndrome in childhood. Yoshioka M, et al. **Pediatr Neurol** 1985 Nov-Dec;1(6):329-34

[Functional recovery in Guillain-Barre syndrome: benefits of plasma exchange] Cassuto-Viguier E, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:43-5 (Eng. Abstr.) **(Fre)**

[Clinical use of IM-PH immuno-columns] Maresca MC, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:69-71 (Eng. Abstr.) **(Fre)**

[Plasma exchange in polyradiculoneuritis in AIDS] Sobel A, et al. **Ann Med Interne (Paris)** 1988;139 Suppl 1:46-7 (Eng. Abstr.) **(Fre)**

[Pediatric use of intravenous immunoglobulins in immunomodulation. Apropos of 34 cases. Current data] Rapin F, et al. **Ann Pediatr (Paris)** 1988 Sep;35(7):481-8 (Eng. Abstr.) **(Fre)**

[Meningoradiculitis in the primary phase of HIV infection. Value of plasmapheresis (letter)] Beytout J, et al. **Presse Med** 1989 May 20;18(20):1031-2 **(Fre)**

[Plasmapheresis therapy in Guillain-Barré polyneuroradiculitis] Zwahlen H, et al. **Schweiz Med Wochenschr** 1988 Dec 10;118(49):1854-8 (Eng. Abstr.) **(Ger)**

[Plasmapheresis in neuromuscular diseases. Personal cases] Affuso R, et al. **Acta Neurol (Napoli)** 1989 Apr-Jun; 11(2-3):200-10 (Eng. Abstr.) **(Ita)**

[Characteristics of the treatment of severe forms of neuroinfection in children with altered immunologic response] Evtushenko SK, et al. **Pediatriia** 1989;(7):70-4 **(Rus)**

[Biological sorption in immunoneurologic diseases] Novikova RI, et al. **Vrach Delo** 1989 Jun;(6):87-90 (Eng. Abstr.) **(Rus)**

[Current methods of pathogenetic therapy of infectious-allergic polyradiculoneuritis] Neretin VIa, et al. **Zh Nevropatol Psikhiatr** 1989;89(4):41-4 (Eng. Abstr.) **(Rus)**

[Possibilities of emergency treatment of acute polyradiculoneuropathy using plasma exchange] Dordević D, et al. **Neurologija** 1988;37(3-4):7-16 (Eng. Abstr.) **(Scr)**

VETERINARY

Neuromuscular disease in a dog. Bors M, et al. **Cornell Vet** 1988 Oct;78(4):339-45

Rare condition in a rottweiler [letter] Charteris H. **Vet Rec** 1988 Dec 24-31;123(26-27):679

Rare condition in a rottweiler [letter] Charteris H, et al. **Vet Rec** 1989 Apr 8;124(14):380

POLYRIBONUCLEOTIDE NUCLEOTIDYLTRANSFERASE see **POLYNUCLEOTIDE PHOSPHORYLASE**

POLYRIBONUCLEOTIDE SYNTHETASE see under **POLYNUCLEOTIDE SYNTHETASES**

POLYRIBONUCLEOTIDES

Hydroxyl radical-induced strand break formation in single-stranded polynucleotides and single-stranded DNA in aqueous solution as measured by light scattering and by conductivity. Adinarayana M, et al. **Int J Radiat Biol** 1988 Nov;54(5):723-37

Practical aspects of 2D NMR for assigning the non-exchangeable protons in DNA-RNA fragments. Remaud G. **J Biochem Biophys Methods** 1988 Dec;

17(4):253–76

Binding of Ru(bpy)3(2+) and Ru(phen)3(2+) to polynucleotides and DNA: effect to added salts on the absorption and luminescence properties. Görner H, et al. **J Photochem Photobiol –B–** 1988 Jul;2(1):67–89

The biogeochemical cycle of the adsorbed template. II: Selective adsorption of mononucleotides on adsorbed polynucleotide templates. Lazard D, et al. **Orig Life Evol Biosph** 1988;18(4):347–57

Proton magnetic resonance studies of the binding of oligopeptides containing tryptophan to polyribonucleotides poly A, poly U and poly C. Barthwal R, et al. **Physiol Chem Phys Med NMR** 1988;20(2):145–57

ANALOGS & DERIVATIVES

Template-directed oligomerization catalyzed by a polynucleotide analog. Visscher J, et al. **Science** 1989 Apr 21;244(4902):329–31

BIOSYNTHESIS

Large-scale synthesis of the mRNA analogue C17AUGA4C17. Gnirke A, et al. **Biochem Int** 1989 Mar; 18(3):551–9

BLOOD

An erythrocyte-specific protein that binds to the poly(dG) region of the chicken beta-globin gene promoter. Lewis CD, et al. **Genes Dev** 1988 Jul;2(7):863–73

CHEMICAL SYNTHESIS

Cyclization of nucleotide analogues as an obstacle to polymerization. Hill AR Jr, et al. **J Mol Evol** 1988 Dec–1989 Feb;28(1–2):170–1

GENETICS

Cloning and synthesis of infectious cardiovirus RNAs containing short, discrete poly(C) tracts. Duke GM, et al. **J Virol** 1989 Apr;63(4):1822–6

Cationic metal-specific structures adopted by the poly(dG) region and the direct repeats in the chicken adult beta A globin gene promoter. Kohwi Y. **Nucleic Acids Res** 1989 Jun 26;17(12):4493–502

HISTORY

Studies on the formation of two- and three-stranded polyribonucleotides. 1957 [classical article] Felsenfeld G, et al. **Biochim Biophys Acta** 1989;1000:87–98

On looking back at a Biochimica et Biophysica Acta paper published 32 years ago: a commentary on 'Studies on the Formation of Two- and Three-Stranded Polyribonucleotides'. Rich A. **Biochim Biophys Acta** 1989; 1000:82–6

METABOLISM

Computer simulated model of polycytidylic acid digestion by ribonuclease. Drożdż R, et al. **Folia Histochem Cytobiol** 1988;26(4):275–8

Non-enzymatic template-directed synthesis on RNA random copolymers. Poly(C,A) templates. Joyce GF, et al. **J Mol Biol** 1988 Aug 5;202(3):677–81

[Interaction of ethidium bromide with synthetic double-stranded polyribonucleotides] Babaian IuS, et al. **Mol Biol (Mosk)** 1988 Jul–Aug;22(4):898–910 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Kinetic properties of poly (2'-O-methylcytidylic acid)-directed reverse transcriptase reaction. Aoyama H. **Braz J Med Biol Res** 1988;21(3):445–8

PHARMACOLOGY

Inhibition of human neutrophil elastase by polyguanylic acid and other synthetic polynucleotides. Simon S, et al. **Adv Exp Med Biol** 1988;240:65–74

Inhibition of HIV-1 proviral DNA synthesis and RNA accumulation by mismatched dsRNA. Montefiori DC, et al. **Biochem Biophys Res Commun** 1989 Feb 15; 158(3):943–50

Antithrombin action of phosvitin and other phosphate-containing polyanions is mediated by heparin cofactor II. Church FC, et al. **FEBS Lett** 1988 Sep 12; 237(1–2):26–30

[The mosaic nature of the interferons induced by polyribonucleotides] Nosik NN, et al. **Vopr Virusol** 1988 Nov–Dec;33(6):760–3 **(Rus)**

[Dependence of the antiviral activity of the poly(G).poly(C) complex on the size of the continuous poly(C)segments] Vil'ner LM, et al. **Vopr Virusol** 1988 May–Jun;33(3):331–5 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

Gamma radiolysis of RNA: an ESR and spin-trapping study. Carmichael AJ, et al. **Basic Life Sci** 1988;49:437–9

The formation of phosphate end groups in the radiolysis of polynucleotides in aqueous solution. Murthy CP, et al. **Z Naturforsch [C]** 1988 Jul–Aug;43(7–8):572–6

POLYRIBOSOMES

ANALYSIS

Recovery of active ribosomal complexes from cellulose nitrate membranes. Theocharis DA, et al. **Anal Biochem** 1989 Feb 1;176(2):278–83

Feedback control of ornithine decarboxylase expression by polyamines. Analysis of ornithine decarboxylase mRNA distribution in polysome profiles and of translation of this mRNA in vitro. Holm I, et al. **Biochem J** 1989 Mar 1; 258(2):343–50

Transcripts from the co-transposed segment of variant surface glycoprotein genes are in Trypanosoma brucei polyribosomes. Aline RF Jr, et al. **Mol Biochem Parasitol** 1989 Jan 15;32(2–3):169–78

Immunological and chemical characterization of hamster brain polyribosomes-cytomatrix complexes. Bouhtiauy I, et al. **Neurochem Res** 1989 Jul;14(7):635–40

A new ultracentrifugation technique for analysis and isolation of polysomes. Kelso-Winemiller L, et al. **Nucleic Acids Res** 1989 Jun 26;17(12):4896

[Purification of mRNA by polysome immunoprecipitation] Mori H. **Tanpakushitsu Kakusan Koso** 1987 Jul;(30 Suppl):201–6 (14 ref.) **(Jpn)**

DRUG EFFECTS

Age-dependent stimulation of assembly and of membrane-association of polysomes in rat brain after treatment with xanthine derivatives in vivo. Stefanovich V, et al. **Drugs Exp Clin Res** 1988;14(4):271–5

The influence of tetracyclines on the aggregation of free and membrane-bound polysomes and on the RNA content of the liver of mice. Hopf G, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Oct; 338(4):455–8

[Absence of an effect of cadmium on the distribution of ribosomal particles in the mouse testis] Narancsik P, et al. **Arh Hig Rada Toksikol** 1988 Jun;39(2):223–6 (Eng. Abstr.) **(Scr)**

METABOLISM

Co-translational processing and intracellular transport of rat salivary mucus glycoprotein. Slomiany A, et al. **Arch Oral Biol** 1988;33(11):807–18

Effects of ischaemia, blood loss and reperfusion on rat muscle protein synthesis, metabolite concentrations and polyribosome profiles in vivo. MacLennan PA, et al. **Biochem J** 1989 May 15;260(1):195–200

The polysome as a terminal for the creatine phosphate energy shuttle. Savabi F, et al. **Biochem Med Metab Biol** 1988 Dec;40(3):291–8

Synthesis of frog virus 3 proteins occurs on intermediate filament-bound polyribosomes. Murti K, et al. **Biol Cell** 1989;65(3):205–14

Alzheimer's disease-associated reduction of polysomal mRNA translation. Langstrom NS, et al. **Brain Res Mol Brain Res** 1989 Jun;5(4):259–69

Association of 7 SL RNA and an SRP-like particle with polysomes and endoplasmic reticulum in the developing sea urchin embryo. LeBlanc JM, et al. **Dev Biol** 1989 Mar; 132(1):139–52

The third ribosomal tRNA-binding site, the E site, is occupied in native polysomes. Remme J, et al. **Eur J Biochem** 1989 Aug 1;183(2):281–4

Association of mRNA and eIF-2 alpha with the cytoskeleton in cells lacking vimentin. Heuijerjans JH, et al. **Exp Cell Res** 1989 Apr;181(2):317–30

Synthesis and assembly of native myosin on muscle polyribosomes. Gagnon J, et al. **FEBS Lett** 1989 Jul 3; 250(2):549–55

In vitro translation of cytosolic and peroxisomal epoxide hydrolase and catalase on liver polyribosomes from untreated and clofibrate-treated C57B1/6 mice. Joste V, et al. **FEBS Lett** 1989 May 22;249(1):83–8

Distribution of 5'-triphosphate termini on the mRNA of Escherichia coli. Bieger CD, et al. **J Bacteriol** 1989 Jan; 171(1):141–7

Interleukin-1 receptor-like proteins synthesized by translation, in vitro, of immunopurified polysomal messenger RNA. Rangnekar VM, et al. **J Biol Chem** 1988 Nov 5;263(31):16414–20

Transcortin biosynthesis and intracellular distribution of rat liver polyribosomes synthesizing transcortin. Kraujelis K, et al. **J Steroid Biochem** 1989 Jan;32(1A):121–5

Isolation of hamster brain polyribosomes-cytoskeleton complexes. Lequang H, et al. **Neurochem Res** 1989 Mar; 14(3):239–43

Direct measurement of tubulin and bulk message distributions on polysomes of growing, starved and deciliated Tetrahymena using RNA gel blots of sucrose gradients containing acrylamide. Calzone FJ, et al. **Nucleic Acids Res** 1988 Oct 25;16(20):9597–609

Newly synthesized proteins in a cell-free system supplemented with human and bovine membrane-bound polysomes isolated from lens fiber cells. Ozaki L. **Ophthalmic Res** 1988;20(6):363–7

Thymidine kinase synthesis is repressed in nonreplicating muscle cells by a translational mechanism that does not affect the polysomal distribution of thymidine kinase mRNA. Gross MK, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):4987–91

[Identification of transcortin-synthesizing polyribosomes in the rat liver] Krauialis KI, et al. **Ukr Biokhim Zh** 1988 Nov-Dec;60(6):14–8 (Eng. Abstr.) **(Rus)**

ULTRASTRUCTURE

Visualization of polyribosomes in the postsynaptic area of the squid giant synapse by electron spectroscopic imaging. Martin R, et al. **J Neurocytol** 1989 Feb;18(1):11–8

POLYSACCHARIDE-LYASES

Heparitinases facilitate separation of disaccharides of heparan sulfate isomers in human arteries using high-performance liquid chromatography. Murata K, et al. **Biochem Int** 1989 Jul;19(1):155–62

Preliminary crystallographic analysis of a plant pathogenic factor: pectate lyase. Kim CY, et al. **J Mol Biol** 1989 Jul 20;208(2):365–7

ANALYSIS

An investigation of heparinase immobilization. Bernstein H, et al. **Appl Biochem Biotechnol** 1987 Sep–Dec;16:129–43

Analysis of pectate lyases produced by soft rot bacteria associated with spoilage of vegetables. Liao CH. **Appl Environ Microbiol** 1989 Jul;55(7):1677–83

New approach for early, simple, and rapid detection of acute eye infections. Romano A. **Metab Pediatr Syst Ophthalmol** 1988;11(1–2):53–7

BIOSYNTHESIS

Effect of antibiotics on synthesis of cell wall degrading enzymes by Fusarium oxysporum and Fusarium moniliforme. Mehta A, et al. **Hindustan Antibiot Bull** 1988 Feb–May;30(1–2):27–30

BLOOD

Platelet heparitinase. Rosenberg RD. **Methods Enzymol** 1989; 169:342–51

GENETICS

Molecular cloning and heterologous expression of a Klebsiella pneumoniae gene encoding alginate lyase. Caswell RC, et al. **Gene** 1989 Jan 30;75(1):127–34

IMMUNOLOGY

Characterization of a monoclonal antibody against active pectate lyase from Erwinia carotovora. Ward LJ, et al. **Can J Microbiol** 1989 Jun;35(6):651–5

ISOLATION & PURIFICATION

Large scale preparation and characterization of mucopolysaccharase contamination free heparinase. Yang VC, et al. **Appl Biochem Biotechnol** 1987 Sep–Dec;16:35–50

Isolation and characterization of an alginate lyase from Klebsiella aerogenes. Lange B, et al. **Arch Microbiol** 1989; 152(3):302–8

Endopectate lyase from Erwinia aroideae. Konno H. **Methods Enzymol** 1988;161:381–5

METABOLISM

Heparinase immobilization. Characterization and optimization. Yang VC, et al. **Ann N Y Acad Sci** 1988; 542:515–20

Stability and immunologic activity of immobilized heparinase and bilirubin oxidase. Comfort AR, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):538–42

Retina contains endogenous heparinase activity. Gaal JC, et al. **Biochem Biophys Res Commun** 1989 Jun 15; 161(2):604–14

Basic fibroblast growth factor binds to subendothelial extracellular matrix and is released by heparitinase and heparin-like molecules. Bashkin P, et al. **Biochemistry** 1989 Feb 21;28(4):1737–43

Resistance of heparinase-derived heparin fragments to biotransformation. Larsen AK, et al. **J Biol Chem** 1989 Jan 25;264(3):1570–7

Ex vivo model of an immobilized-enzyme reactor. Bernstein H, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8751–5

SECRETION

Molecular cloning of the outJ gene involved in pectate lyase secretion by Erwinia chrysanthemi. Ji J, et al. **Mol Microbiol** 1989 Mar;3(3):285–93

POLYSACCHARIDES

Heparin and related polysaccharides. Structure and activities. **Ann N Y Acad Sci** 1989;556:1–501

Fast atom bombardment-mass spectrometry strategies for analysing glycoprotein glycans. Thomas-Oates JE, et al. **Biochem Soc Trans** 1989 Feb;17(1):243–5 (16 ref.)

Comparative study of the primary structures of sero-, lacto- and ovotransferrin glycans from different species. Spik G, et al. **Biochimie** 1988 Nov;70(11):1459–69

Computer-assisted structural analysis of polysaccharides with an extended version of CASPER using 1H- and 13C-n.m.r. data. Jansson PE, et al. **Carbohydr Res** 1989 Jun 1; 188:169–91

Structure and anti-complementary activity of pectic polysaccharides isolated from the root of Angelica acutiloba Kitagawa. Kiyohara H, et al. **Carbohydr Res** 1988 Nov 1;182(2):259-75

Evidence for the safety of gum karaya (Sterculia spp.) as a food additive. Anderson DM. **Food Addit Contam** 1989 Apr-Jun;6(2):189-99 (64 ref.)

Digestible energy value of gums in the rat--data on gum arabic. Harley LJ, et al. **Food Addit Contam** 1989 Jan-Mar; 6(1):13-20

The effect of gentamicin on the glycocalyx and the ciliary interconnections in vestibular sensory cells: a high resolution scanning electron microscopic investigation. Takumida M, et al. **Hear Res** 1989 Jan;37(2):163-70

Asparagine-linked oligosaccharides containing poly-N-acetyllactosamine chains are preferentially bound by immobilized calf heart agglutinin. Merkle RK, et al. **J Biol Chem** 1988 Nov 5;263(31):16143-9

Electron crystallography of linear polysaccharides. Pérez S, et al. **J Electron Microsc Tech** 1989 Apr;11(4):280-5

Particle size analysis of gelatin-acacia coacervate and ethylcellulose walled microcapsules. Ismail N, et al. **J Microencapsul** 1984 Jan-Mar;1(1):9-19

Preparation of fluorescently labeled dextrans and ficolls. Luby-Phelps K. **Methods Cell Biol** 1989;29:59-73

A test material for tissue characterisation and system calibration in MRI. Walker PM, et al. **Phys Med Biol** 1989 Jan;34(1):5-22

Taste preferences of squirrel monkeys and bonnet macaques for Polycose, maltose and sucrose. Sunderland G, et al. **Physiol Behav** 1988;43(6):685-90

[Gum acacia, acacia gum. The substituents of a type of gum arabic from Africa] Schöneberg HJ.
Pharm Unserer Zeit 1989 Mar;18(2):33-42 **(Ger)**

[Targetability of cell-specific liposomes coated with polysaccharide-cholesterol derivatives] Sato T.
Nippon Rinsho 1989 Jun;47(6):1402-7 **(Jpn)**

[Carbohydrates and active oxygen: recent developments in the study of reducing sugar autoxidation and depolymerization of polysaccharides by oxygen radicals] Kashimura N. **Tanpakushitsu Kakusan Koso** 1988 Dec; 33(16):3116-26 **(Jpn)**

[Absorption of C14-labeled dye "active red 5CX"++ immobilized on polysaccharides in the rat gastrointestinal tract] Shatrov GN, et al. **Vopr Med Khim** 1989 Jan-Feb; 35(1):95-9 (Eng. Abstr.) **(Rus)**

ADMINISTRATION & DOSAGE

Glucose polymer syrup attenuates prolonged endurance exercise-induced vasopressin release. Viinamäki O, et al. **Acta Physiol Scand** 1989 May;136(1):69-73

Neonatal suppression with anti-Ia antibody. III. In vivo responses to the type 2 antigen TNP-Ficoll. Fultz M, et al. **J Immunol** 1989 Jul 15;143(2):403-6

[NK activity and T cell subsets in percutaneous ethanol injection therapy of liver cancer--effect of lentinan with combined use] Yamamoto S, et al.
Gan To Kagaku Ryoho 1989 Sep;16(9):3291-4 **(Jpn)**

[Intra-arterial infusion therapy with polysaccharide solution as a carrier of anticancer agents--a new method of intra-arterial infusion therapy] Shimizu T, et al.
Nippon Igaku Hoshasen Gakkai Zasshi 1988 Jun 25; 48(6):702-16 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

[Venous thrombosis in the brain and upper limbs associated with thrombopenia induced by pentosan polysulfate] Jacquin V, et al. **Ann Med Interne (Paris)** 1988;139(3):194-7 (Eng. Abstr.) **(Fre)**

[Disseminated coronary thrombosis and thrombopenia induced by pentosan polysulfate] Meyer P, et al.
Arch Mal Coeur 1988 Jul;81(7):913-9 (16 ref.) (Eng. Abstr.) **(Fre)**

[Intracerebral hemorrhage linked to thrombopenia induced by pentosan polysulfate] Merlin G, et al.
Cah Anesthesiol 1988 Oct;36(6):469-70 **(Fre)**

[Thrombopenia under low molecular weight heparin after treatment with pentosan polyphosphate (letter)] Paille F, et al. **Therapie** 1988 Jun-Jul;43(4):322-3 **(Fre)**

ANALYSIS

Polyglucosan bodies in intramuscular motor nerves. Bernsen RA, et al. **Acta Neuropathol (Berl)** 1989;77(6):629-33

Chemical composition of phase I Coxiella burnetii soluble antigen prepared by trichloroacetic acid extraction. Lukáčová M, et al. **Acta Virol (Praha)** 1989 Jan;33(1):75-80

Blastemal cells of nephroblastomatosis complex share an onco-developmental antigen with embryonic kidney and Wilms' tumor. An immunohistochemical study on polysialic acid distribution. Roth J, et al. **Am J Pathol** 1988 Dec;133(3):596-608

Determination of the absolute configuration of the sugar residues of complex polysaccharides by circular dichroism spectroscopy. Kaluarachchi K, et al. **Anal Biochem** 1989 May 15;179(1):209-15

Structural and reaction assignments for some common polysaccharides using laser desorption ionization Fourier transform ion cyclotron resonance spectroscopy. Lam Z, et al. **Anal Chem** 1988 Oct 15;60(20):2304-6

Immunochemistry of highly branched N-glycans. Terminal N-acetyl-D-glucosamine (GlcNAc) cluster antigens contain epitopes composed of terminal GlcNAc residues linked to mannose. Chechik BE, et al.
Biochem Cell Biol 1988 Dec;66(12):1333-41

Analysis of the microheterogeneity of the glycan chain of rat transferrin. Irie S, et al. **Biochem Int** 1988 Dec; 17(6):1079-85

Multiantennary group-specific polysaccharide of group B Streptococcus. Michon F, et al. **Biochemistry** 1988 Jul 12; 27(14):5341-51

The influence of poly(ethylene glycol) on the molecular dynamics within the glycocalyx. Pratsch L, et al.
Biochim Biophys Acta 1989 Apr 14;980(2):146-54

Measurement of the rate of assimilation of oligo- and polysaccharides by 13CO2 breath tests and isotope ratio mass spectrometry. Hiele M, et al.
Biomed Environ Mass Spectrom 1988 Oct;16(1-12):133-5

The Bacteroides glycocalyx as visualized by differential interference contrast microscopy. Lambe DW Jr, et al.
Can J Microbiol 1988 Nov;34(11):1189-95

Presence of bacterial glycocalyx and fimbriae on Pasteurella haemolytica in feedlot cattle with pneumonic pasteurellosis. Morck DW, et al. **Can J Vet Res** 1989 Apr;53(2):167-71

Isolation of galactosaminoglycan moiety (CO-N) from protein-bound polysaccharide of Cordyceps ophioglossoides and its effects against murine tumors. Ohmori T, et al. **Chem Pharm Bull (Tokyo)** 1989 Apr; 37(4):1019-22

Glomerular endothelial glycocalyx. Avasthi PS, et al.
Contrib Nephrol 1988;68:104-13

Isolation and characterization of a novel type of sialoglycoproteins (hyosophorin) from the eggs of medaka, Oryzias latipes: nonapeptide with a large N-linked glycan chain as a tandem repeat unit. Kitajima K, et al.
Dev Biol 1989 Apr;132(2):544-53

Microheterogeneity and structures of neutral glycans present in quail ovomucoid. Alonso JM, et al. **Eur J Biochem** 1988 Oct 15;177(1):187-97

Characterization of the lipid A component of genuine smooth-form lipopolysaccharide. Jiao BH, et al.
Eur J Biochem 1989 Apr 1;180(3):515-8

Murine embryonal carcinoma cell-surface sialyl LeX is present on a novel glycoprotein and on high-molecular-weight lactosaminoglycan. Rosenman SJ, et al. **Exp Cell Res** 1989 Feb;180(2):326-40

Studies on the surface coat (glycocalyx) of the dauer larva of Anguina agrostis. Bird AF, et al. **Int J Parasitol** 1989 May;19(3):235-40

Peptidoglycan-polysaccharide complex in the cell wall of the filamentous prochlorophyte Prochlorothrix hollandica. Jürgens UJ, et al. **J Bacteriol** 1989 Jan;171(1):498-502

Isolation and characterization of human lysosomal membrane glycoproteins, h-lamp-1 and h-lamp-2. Major sialoglycoproteins carrying polylactosaminoglycan.
Carlsson SR, et al. **J Biol Chem** 1988 Dec 15; 263(35):18911-9

Use of a bacteriophage-derived endo-N-acetylneuraminidase and an equine antipolysialyl antibody to characterize the polysialyl residues in salmonid fish egg polysialoglycoproteins. Substrate and immunospecificity studies. Kitajima K, et al. **J Biol Chem** 1988 Dec 5; 263(34):18269-76

Host-range related structural features of the acidic extracellular polysaccharides of Rhizobium trifolii and Rhizobium leguminosarum. Philip-Hollingsworth S, et al.
J Biol Chem 1989 Jan 25;264(3):1461-6

Structure of the phosphosaccharide-inositol core of the Leishmania donovani lipophosphoglycan. Turco SJ, et al.
J Biol Chem 1989 Apr 25;264(12):6711-5

High-performance anion-exchange chromatography of homogeneous D-gluco-oligosaccharides and -polysaccharides (polymerization degree greater than or equal to 50) with pulsed amperometric detection. Koizumi K, et al. **J Chromatogr** 1989 Mar 3;464(2):365-73

Application of an asymmetrical flow field-flow fractionation channel to the separation and characterization of proteins, plasmids, plasmid fragments, polysaccharides and unicellular algae. Wahlund KG, et al. **J Chromatogr** 1989 Jan 6;461:73-87

Quantitative assay of glycocalyx produced by viridans group streptococci that cause endocarditis. Dall L, et al.
J Clin Microbiol 1989 Sep;27(9):2039-41

Poly(N-acetyllactosaminyl) oligosaccharides of chromaffin granule membrane glycoproteins. Margolis RU, et al.
J Neurochem 1988 Dec;51(6):1819-24

Availability of cereal fructans and inulin in the rat intestinal tract. Nilsson U, et al. **J Nutr** 1988 Dec;118(12):1482-6

Detection of cationic and non-cationic markers in the rat glomerulus by electron probe analysis. Rossmann P, et al.
Virchows Arch [B] 1989;57(5):329-37

[Determination of the components and molar ratio of the polysaccharide from a fermentation solution of Polyporus umbellatus (Pers.) Fr] Zhu P. **Chung Yao Tung Pao** 1988 Sep;13(9):32-3, 62-3 (Eng. Abstr.) **(Chi)**

[Studies on the water soluble polysaccharide from Panax ginseng fruit isolation, purification and structural studies on heteroglycan F] Liu CL, et al.
Yao Hsueh Hsueh Pao 1988 Nov;23(11):863-7 (Eng. Abstr.) **(Chi)**

[The structure of extracellular heteroglycans in various Cryptococcus species] Vitovskaia G, et al. **Bioorg Khim** 1988 Oct;14(10):1405-12. (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Control of glycoprotein synthesis. The use of oligosaccharide substrates and HPLC to study the sequential pathway for N-acetylglucosaminyltransferases I, II, III, IV, V, and VI in the biosynthesis of highly branched N-glycans by hen oviduct membranes. Brockhausen I, et al.
Biochem Cell Biol 1988 Oct;66(10):1134-51

The interaction of xylosyltransferase and glucuronyltransferase involved in glucuronoxylan synthesis in pea (Pisum sativum) epicotyls. Baydoun EA, et al.
Biochem J 1989 Feb 1;257(3):853-8

A xylosyltransferase involved in the synthesis of a protein-associated xyloglucan in suspension-cultured dwarf-French-bean (Phaseolus vulgaris) cells and its interaction with a glucosyltransferase. Campbell RE, et al.
Biochem J 1988 Aug 1;253(3):795-800

Protein matrix effects on glycan processing by mannosidase II and sialyl transferase from rat liver. Shao MC, et al.
Biochemistry 1989 May 2;28(9):4077-83

The biosynthesis of highly branched N-glycans: studies on the sequential pathway and functional role of N-acetylglucosaminyltransferases I, II, III, IV, V and VI. Brockhausen I, et al. **Biochimie** 1988 Nov;70(11):1521-33

A novel pathway for glycan assembly: biosynthesis of the glycosyl-phosphatidylinositol anchor of the trypanosome variant surface glycoprotein. Masterson WJ, et al. **Cell** 1989 Mar 10;56(5):793-800

Evidence for an O-glycan sialylation system in brain. Characterization of a beta-galactoside alpha 2,3-sialyltransferase from rat brain regulating the expression of an alpha-N-acetylgalactosaminide alpha 2,6-sialyltransferase activity. Baubichon-Cortay H, et al.
Eur J Biochem 1989 Jun 15;182(2):257-65

In vitro synthesis of colominic acid by membrane-bound sialyltransferase of Escherichia coli K-235. Kinetic properties of this enzyme and inhibition by CMP and other cytidine nucleotides. Ortiz AI, et al. **Eur J Biochem** 1989 Jan 2;178(3):741-9

Expression of yeast invertase in oocytes from Xenopus laevis. Secretion of active enzyme differing in glycosylation. Roitsch T, et al. **Eur J Biochem** 1989 May 15;181(3):733-9

Regulation of colominic acid biosynthesis by temperature: role of cytidine 5'-monophosphate N-acetylneuraminic acid synthetase. González-Clemente C, et al.
FEBS Lett 1989 Jul 3;250(2):429-32

Poly-N-acetyllactosamines synthesized by cultured Ehrlich carcinoma cells: application of endo-beta-galactosidase C for analysis of the terminal structure. Kamada Y, et al.
J Biochem (Tokyo) 1988 Nov;104(5):738-41

Human T-lymphocyte activation is associated with changes in O-glycan biosynthesis. Piller F, et al. **J Biol Chem** 1988 Oct 15;263(29):15146-50

Synthesis of glycocalyx and associated structures in vestibular sensory cells. Takumida M, et al.
ORL J Otorhinolaryngol Relat Spec 1989;51(2):116-23

BLOOD

Physiological significance of the marked increased branching of the glycans of human serotransferrin during pregnancy. Léger D, et al. **Biochem J** 1989 Jan 1;257(1):231-8

Glycan microheterogeneity of alpha 1-acid glycoprotein in sera and dialysates of patients on continuous ambulatory peritoneal dialysis. Fraeyman NH, et al. **Clin Chim Acta** 1989 Apr 28;181(1):47-54

Heterogeneity in copper and glycan content of ceruloplasmin in human serum differs in health and disease. Hansen JE, et al. **Electrophoresis** 1988 Jun;9(6):273-8

Comparison of drug binding capacities of three AAG glycan variants of human origin. Bree F, et al.
Prog Clin Biol Res 1989;300:405-8

Comparison of glycan microheterogeneities of alpha 1-acid glycoprotein between mothers and their newborns. Seta N, et al. **Prog Clin Biol Res** 1989;300:139-42

Quantitative assay of lentinan in human blood with the limulus colorimetric test. Yajima Y, et al.
Tohoku J Exp Med 1989 Feb;157(2):145-51

[Change of blood lentinan level in patients with advanced cancers] Yajima Y, et al. **Gan To Kagaku Ryoho** 1989 Aug; 16(8 Pt 1):2633-8 (Eng. Abstr.) **(Jpn)**

[Low density lipoprotein (LDL) complexes with polyanion polysaccharides] Różkowski R, et al.
Postepy Hig Med Dosw 1988 Nov-Dec;42(6):601-18 (123 ref.) (Eng. Abstr.) **(Pol)**

CHEMICAL SYNTHESIS

Synthesis of branched D-xylofuranan by selective, ring-opening polymerization of silylated 1,5-anhydro-beta-D-xylofuranose, and its conversion into a blood anticoagulant. Yoshida T, et al. **Carbohydr Res** 1988 Jun 15;177:69-80

Cross-linked DTPA polysaccharides for magnetic resonance imaging. Synthesis and relaxation properties. Gibby WA, et al. **Invest Radiol** 1989 Apr;24(4):302-9

Synthesis of an inhibitor of human immunodeficiency virus infection. Hatanaka K, et al. **Jpn J Cancer Res** 1989 Feb; 80(2):95-8

DIAGNOSTIC USE

Improved sensitivity of color Doppler by SH U 454. Becher H, et al. **Am J Cardiol** 1989 Aug 1;64(5):374-7

Transvaginal hysterosalpingo-contrast-sonography (Hy-Co-Sy) compared with conventional tubal diagnostics. Deichert U, et al. **Hum Reprod** 1989 May; 4(4):418-24

Preclinical and clinical results with an ultrasonic contrast agent. Fritzsch T, et al. **Invest Radiol** 1988 Sep;23 Suppl 1:S302-5

Left heart opacification with peripheral venous injection of a new saccharide echo contrast agent in dogs. Smith MD, et al. **J Am Coll Cardiol** 1989 Jun;13(7):1622-8

[Contrast-color Doppler echocardiography. Improved right heart diagnosis following intravenous injection of Echovist] von Bibra H, et al. **Z Kardiol** 1989 Feb;78(2):101-8 (Eng. Abstr.) **(Ger)**

IMMUNOLOGY

Galactose-residues on glycans of metastatic cells positively correlate with the recognition by host non-specific effectors. Timár J, et al. **Acta Paediatr Hung** 1988-89; 29(1-2):59-62

Primary in situ immune response in popliteal lymph nodes and spleen of mice after subcutaneous immunization with thymus-dependent or thymus-independent (type 1 and 2) antigens. Delemarre FG, et al. **Anat Rec** 1989 Feb; 223(2):152-7

Bacteroides fragilis lipopolysaccharide and group B streptococcus serotype II glycocalyx have a common major antigenic determinant. Linko L, et al. **APMIS** 1988 Sep; 96(9):805-12

Immunochemical characterization of mucins. Polypeptide (M1) and polysaccharide (A and Leb) antigens. Bara J, et al. **Biochem J** 1988 Aug 15;254(1):185-93

Hormonal control of the expression of antibody-defined lactosaminoglycans in the mouse uterus. Babiarz BS, et al. **Biol Reprod** 1988 Oct;39(3):699-706

Significant immunological cross-reactivity of plant glycoproteins. Laine AC, et al. **Electrophoresis** 1988 Dec; 9(12):841-4

Schistosoma mansoni: ultrastructural demonstration of a miracidial glycocalyx that cross-reacts with antibodies raised against the cercarial glycocalyx. Chiang CP, et al. **Exp Parasitol** 1988 Oct;67(1):63-72

Genetic control of the humoral response to cryptococcal capsular polysaccharide in mice. Dromer F, et al. **Immunogenetics** 1988;28(6):417-24

Expression of a cross-reactive idiotope on naturally occurring murine antibodies against 3-fucosyllactosamine, levan, and dextran. Kimura H, et al. **J Immunol** 1989 May 15;142(10):3477-81

Immunogenicity of Haemophilus influenzae type b polysaccharide-outer membrane protein conjugate vaccine in patients who acquired Haemophilus disease despite previous vaccination with type b polysaccharide vaccine. Granoff DM, et al. **J Pediatr** 1989 Jun;114(6):925-33

The T-cell independent antigen, NP-ficoll, primes for a high affinity IgM anti-NP response. Maizels N, et al. **Mol Immunol** 1988 Dec;25(12):1277-82

(1——5)-linked beta-D-galactofuranosides are immunodominant in extracellular polysaccharides of Penicillium and Aspergillus species. Notermans S, et al. **Mol Immunol** 1988 Oct;25(10):975-9

Modulation of immune responses by surface polysaccharides of Candida albicans. Domer J, et al. **Rev Infect Dis** 1988 Jul-Aug;10 Suppl 2:S419-22 (19 ref.)

[Enhancement of resistance of mice Toxoplasma gondii by 2 polysaccharides beta 1-3, beta 1-6 (PSAT and Scleroglucan)] Bousquet M, et al. **Ann Parasitol Hum Comp** 1988;63(6):398-409 (Eng. Abstr.) **(Fre)**

[Ability of cell-mediated immune production in systemic immunization of guinea pigs with mucous polysaccharides of human colonic goblet cells (PS antigen)] Kitamura K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Aug; 85(8):1501-7 (Eng. Abstr.) **(Jpn)**

[Antigenic polysaccharides of bacteria. 33. The structure of O-specific polysaccharide chain of lipopolysaccharide from Pseudomonas cepacia serotype 6] Knirel' IuA, et al. **Bioorg Khim** 1988 Oct;14(10):1413-8 (Eng. Abstr.) **(Rus)**

[Protective artificial polysaccharide-protein antigens made from the O-specific polysaccharides of Pseudomonas aeruginosa bacteria of the immunotypes 1, 2 and 7] Kul'shin VA, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Nov; (11):69-71 (Eng. Abstr.) **(Rus)**

ISOLATION & PURIFICATION

Fractionation and antitumor activity of the water-insoluble residue of Agaricus blazei fruiting bodies. Kawagishi H, et al. **Carbohydr Res** 1989 Mar 15;186(2):267-73

Arabinoxylans from rye and wheat seed that interact with ice. Kindel PK, et al. **Carbohydr Res** 1989 Apr 15; 187(2):173-85

Isolation, purification, and characterization of fucose-containing sulfated polysaccharides from the brown seaweed Ecklonia kurome and their blood-anticoagulant activities. Nishino T, et al. **Carbohydr Res** 1989 Feb 15; 186(1):119-29

Structural characterization of an anti-complementary pectic polysaccharide from the roots of Bupleurum falcatum L. Yamada H, et al. **Carbohydr Res** 1989 Jun 15;189:209-26

Isolation of galactosaminoglycan moiety (CO-N) from protein-bound polysaccharide of Cordyceps ophioglossoides and its effects against murine tumors. Ohmori T, et al. **Chem Pharm Bull (Tokyo)** 1989 Apr; 37(4):1019-22

Studies on an antitumor polysaccharide RBS derived from rice bran. II. Preparation and general properties of RON, an active fraction of RBS. Takeo S, et al. **Chem Pharm Bull (Tokyo)** 1988 Sep;36(9):3609-13

Structures of neutral O-linked polylactosaminoglycans on human skim milk mucins. A novel type of linearly extended poly-N-acetyllactosamine backbones with Gal beta(1-4)GlcNAc beta(1-6) repeating units. Hanisch FG, et al. **J Biol Chem** 1989 Jan 15;264(2):872-83

Separation of sulfated, fucose-containing polysaccharides from the brown seaweed Sargassum kjellmanianum and their heterogeneity and antitumor activity. Nagumo T, et al. **Kitasato Arch Exp Med** 1988 Apr;61(1):59-67

[Isolation and identification of polysaccharides from radix Bupleuri] Geng JX, et al. **Chung Kuo Chung Yao Tsa Chih** 1989 Jan;14(1):37-40, 63 (Eng. Abstr.) **(Chi)**

[Studies on the water soluble polysaccharide from Panax ginseng fruit isolation, purification and structural studies on heteroglycan F] Liu CL, et al. **Yao Hsueh Hsueh Pao** 1988 Nov;23(11):863-7 (Eng. Abstr.) **(Chi)**

METABOLISM

Isolation and characterization of xylose- and xylan-utilizing anaerobic bacteria. Murty MV, et al. **Antonie Van Leeuwenhoek** 1989;55(2):153-63

ACTH stimulates turnover of the phosphatidylinositol-glycan. Cozza EN, et al. **Biochem Biophys Res Commun** 1988 Dec 15;157(2):585-9

Epidermal growth factor and insulin-like growth factor I stimulate the hydrolysis of the insulin-sensitive phosphatidylinositol-glycan in BC3H-1 myocytes. Farese RV, et al. **Biochem Biophys Res Commun** 1988 Nov 15; 156(3):1346-52

The Engelbreth-Holm-Swarm mouse tumor produces undersulfated heparan sulfate and oversulfated galactosaminoglycans. Sugahara K, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):189-97

Identification of oversulphated galactosaminoglycans in intestinal-mucosal mast cells of rats infected with the nematode worm Nippostrongylus brasiliensis. Kusche M, et al. **Biochem J** 1988 Aug 1;253(3):885-93

Biosynthesis of heparin. Modulation of polysaccharide chain length in a cell-free system. Lidholt K, et al. **Biochem J** 1988 Sep 1;254(2):571-8

Role of basic amino acids in the interaction of bindin with sulfated fucans. DeAngelis PL, et al. **Biochemistry** 1988 Oct 18;27(21):8189-94

Lysosomal catabolic pathway of N-glycosylprotein glycans. Strecker G, et al. **Biochimie** 1988 Nov;70(11):1505-10

Alteration of the spermatozoal glycocalyx and its effect on duration of fertility in the fowl (Gallus domesticus). Froman DP, et al. **Biol Reprod** 1989 Mar;40(3):615-21

The relation between bacterial degradation of viscous polysaccharides and stool output in human beings. Tomlin J, et al. **Br J Nutr** 1988 Nov;60(3):467-75

Fermentation of wheat bran and gum arabic in rats fed on an elemental diet. Walter DJ, et al. **Br J Nutr** 1988 Sep; 60(2):225-32

Preparation and characterization of antibodies against 6-O-alpha-D-xylopyranosyl-beta-D-glucopyranose (beta-isoprimeverose), the disaccharide unit of xyloglucan in plant cell-walls. Sone Y, et al. **Carbohydr Res** 1989 Aug 1;191(1):79-89

Determination of non-enzymatically glycated apolipoprotein A1. Caines PS, et al. **Clin Biochem** 1989 Aug;22(4):285-7

Fermentation of polysaccharides and absorption of short chain fatty acids in the mammalian hindgut. Rechkemmer G, et al. **Comp Biochem Physiol [A]** 1988;90(4):563-8

Enzymatic degradation of cell wall and related plant polysaccharides. Ward OP, et al. **Crit Rev Biotechnol** 1989; 8(4):237-74 (367 ref.)

Glycoprotein glycans may not be necessary for the differentiation of skeletal myoblasts. Clarke E, et al. **Exp Cell Res** 1989 Jan;180(1):178-88

Early effects of gentamicin on inner ear glycocalyx cytochemistry. de Groot JC, et al. **Hear Res** 1988 Sep 1; 35(1):39-45

Postprandial variations in the activity of polysaccharide-degrading enzymes in microbial populations from the digesta solids and liquor fractions of rumen contents. Williams AG, et al. **J Appl Bacteriol** 1989 Jan;66(1):15-26

Channel architecture in maltoporin: dominance studies with lamB mutations influencing maltodextrin binding provide evidence for independent selectivity filters in each subunit. Ferenci T, et al. **J Bacteriol** 1989 Feb;171(2):855-61

Disappearance of hemicellulosic monosaccharides and alkali-soluble phenolic compounds of normal and brown midrib sorghum x sudangrasses fed to heifers and sheep. Wedig CL, et al. **J Dairy Sci** 1989 Jan;72(1):104-11

Disappearance of hemicellulosic monosaccharides and alkali-soluble phenolic compounds of normal and brown midrib sorghum x sundangrass silages fed to Holstein steers. Wedig CL, et al. **J Dairy Sci** 1989 Jan;72(1):112-22

Analysis of the mechanism of recognition in the complement alternative pathway using C3b-bound low molecular weight polysaccharides. Pangburn MK. **J Immunol** 1989 Apr 15;142(8):2759-65

Analysis of recognition in the alternative pathway of complement. Effect of polysaccharide size. Pangburn MK. **J Immunol** 1989 Apr 15;142(8):2766-70

Is a natural ligand of the T lymphocyte CD2 molecule a sulfated carbohydrate? Parish CR, et al. **J Immunol** 1988 Nov 15;141(10):3498-504

Cereal fructans: in vitro and in vivo studies on availability in rats and humans. Nilsson U, et al. **J Nutr** 1988 Nov; 118(11):1325-30

Evidence that serum amyloid P component binds to mannose-terminated sequences of polysaccharides and glycoproteins. Kubak BM, et al. **Mol Immunol** 1988 Sep; 25(9):851-8

Effect of hypertonic solutes upon the polysaccharide capsule in Cryptococcus neoformans. Jacobson ES, et al. **Mycoses** 1989 Jan;32(1):14-23

Glycan microheterogeneity forms of alpha 1-acid glycoprotein (AGP): their identification in biological fluids and variations in their relative proportions in disease states. Agneray J. **Prog Clin Biol Res** 1989;300:47-65 (41 ref.)

Changes in Con-A affinity of rat alpha 1-acid glycoprotein as detected by crossed affino immunoelectrophoresis do not correlate with biantennary glycan content. Pos O, et al. **Prog Clin Biol Res** 1989;300:279-82

PHARMACOKINETICS

[Polyfructosan and para-aminohippuric acid clearance, comparison of 2 methods for determining glomerular filtration and plasma renal flow] Lobo J, et al. **Arch Ital Urol Nefrol Androl** 1989 Mar;61(1):77-81 (Eng. Abstr.) **(Ita)**

PHARMACOLOGY

Psychological effects of Neurotropin in man under normal conditions and after sleep deprivation: a double-blind placebo study. Genon JC, et al. **Agressologie** 1989 Feb; 30(2):97-9

Inhibition of HIV and virus replication by polysulphated polyxylan: HOE/BAY 946, a new antiviral compound. Biesert L, et al. **Aids** 1988 Dec;2(6):449-57

Sulfated polysaccharides are potent and selective inhibitors of various enveloped viruses, including herpes simplex virus, cytomegalovirus, vesicular stomatitis virus, and human immunodeficiency virus. Baba M, et al. **Antimicrob Agents Chemother** 1988 Nov;32(11):1742-5

Pentosan polysulfate, a sulfated oligosaccharide, is a potent and selective anti-HIV agent in vitro. Baba M, et al. **Antiviral Res** 1988 Sep;9(6):335-43

Sulfated polysaccharides modulate effects of acidic and basic fibroblast growth factors on repair of injured confluent human vascular endothelium. Klein-Soyer C, et al. **Arteriosclerosis** 1989 Mar-Apr;9(2):147-53

In vitro and ex vivo regulation of vascular smooth muscle cell growth and phenotypic modulation by sulphated polysaccharides. Herbert JM, et al. **Artery** 1988;16(1):1-14

Retardation of articular cartilage degradation by glycosaminoglycan polysulfate, pentosan polysulfate, and DH-40J in the rat air pouch model. Francis DJ, et al. **Arthritis Rheum** 1989 May;32(5):608-16

Hoe/Bay 946--a new compound with activity against the AIDS virus. Wagner WH. **Arzneimittelforschung** 1989 Jan; 39(1):112-3

Activation of human protein C by blood coagulation factor Xa in the presence of anionic phospholipids. Enhancement by sulphated polysaccharides. Freyssinet JM, et al. **Biochem J** 1989 Jul 15;261(2):341-8

Activity of pentosan polysulphate and derived compounds on vascular endothelial cell proliferation and migration induced by acidic and basic FGF in vitro. Herbert JM, et al. **Biochem Pharmacol** 1988 Nov 15;37(22):4281-8

Enhancement of lectin-erythrocyte agglutination by gums. Datta PK, et al. **Biochim Biophys Acta** 1988 Nov 2; 957(1):164-7

The inhibition of boar acrosin amidase activity by sulfated polysaccharides. Urch UA, et al. **Biol Chem Hoppe Seyler** 1988 Aug;369(8):727-32

Synergistic induction of lymphokine (IL-2)-activated killer activity by IL-2 and the polysaccharide lentinan, and therapy of spontaneous pulmonary metastases. Yamasaki K, et al. **Cancer Immunol Immunother** 1989;29(2):87-92

The sulfated polysaccharide-peptidoglycan complex potently inhibits embryonic angiogenesis and tumor growth in the presence of cortisone acetate. Inoue K, et al. **Carbohydr Res** 1988 Oct 1;181:135-42

Stimulation by sulfated glycans of proteolysis of lysozyme by chymotrypsin. Oshima G. **Chem Pharm Bull (Tokyo)** 1988 Sep;36(9):3675-7

In vitro activity of mannan sulfate, a novel sulfated polysaccharide, against human immunodeficiency virus type 1 and other enveloped viruses. Ito M, et al. **Eur J Clin Microbiol Infect Dis** 1989 Feb;8(2):171-3

Release of inflammatory mediators by noxious stimuli; effect of neurotropin on the release. Ohara H, et al. **Eur J Pharmacol** 1988 Nov 15;157(1):93-9

Improved sperm concentration, motility, and fertilization rates following Ficoll treatment of sperm in a human in vitro fertilization program. Bongso A, et al. **Fertil Steril** 1989 May;51(5):850-4

Effect of pentosan polysulphate in minipigs with experimental pulmonary emboli. Sedlarik K, et al.

Folia Haematol (Leipz) 1988;115(1–2):126–31

Adjuvant properties of polysaccharides: effect of iota-carrageenan, pectic acid, pectin, dextran and dextran sulphate on the humoral immune response in the rat. Nicklin S, et al. **Food Addit Contam** 1988 Oct–Dec; 5(4):573–80

Effect of lentinan on superoxide dismutase enzyme activity in vitro. Fehér J, et al.
Immunopharmacol Immunotoxicol 1989;11(1):55–61

Effects of lentinan on cytotoxic functions of human lymphocytes. Péter G, et al.
Immunopharmacol Immunotoxicol 1988;10(2):157–63

Effects of divalent cations and saccharides on Vibrio metschnikovii cytolysin-induced hemolysis of rabbit erythrocytes. Miyake M, et al. **Infect Immun** 1989 Jan; 57(1):158–63

Effect of cyclophosphamide and levan treatment on bone marrow and peripheral blood cells in B16–F10 melanoma-bearing mice. Leibovici J, et al.
Int J Immunopharmacol 1989;11(2):133–47

The role of glycocalyx in surface phagocytosis of Bacteroides spp., in the presence and absence of clindamycin. Veringa EM, et al. **J Antimicrob Chemother** 1989 May;23(5):711–20

Antithrombin activity of fucoidan. The interaction of fucoidan with heparin cofactor II, antithrombin III, and thrombin. Church FC, et al. **J Biol Chem** 1989 Feb 25; 264(6):3618–23

Mechanisms of hypoglycemic activity of aconitan A, a glycan from Aconitum carmichaeli roots. Hikino H, et al.
J Ethnopharmacol 1989 May;25(3):295–304

Activity of dextran sulfate and other polyanionic polysaccharides against human immunodeficiency virus. Bagasra O, et al. **J Infect Dis** 1988 Nov;158(5):1084–7

Differential changes in the urinary excretion of two orally administered polyethylene glycol markers (PEG 900 and PEG 4000) in rats after feeding various carbohydrate gelling agents. Elsenhans B, et al. **J Nutr** 1989 Mar; 119(3):380–7

Specific effects of fermentable carbohydrates on blood urea flux and ammonia absorption in the rat cecum. Rémésy C, et al. **J Nutr** 1989 Apr;119(4):560–5

Local induction of a tumor necrosis factor (TNF)-like cytotoxic factor in murine tissues with tumorous and nontumorous inflammation after systemic administration of antitumor polysaccharides. Takahashi K, et al.
J Pharmacobiodyn 1988 Jul;11(7):472–8

Effect of plant polysaccharides on T and B lymphocytes in normal and tumor transplanted mice. Gu YX, et al.
J Tradit Chin Med 1988 Sep;8(3):198–202

Effect of plant polysaccharides on T and B lymphocytes in tumor transplanted mice irradiated by X-ray. Gu YX, et al. **J Tradit Chin Med** 1988 Dec;8(4):277–81

Sulfated homopolysaccharides with immunomodulating activities are more potent anti-HTLV-III agents than sulfated heteropolysaccharides. Mizumoto K, et al.
Jpn J Exp Med 1988 Jun;58(3):145–51

Mechanism of the analgesic effect of neurotropin. Hata T, et al. **Jpn J Pharmacol** 1988 Oct;48(2):165–73

Changes in platelet count and related parameters in SART-stressed mice and the action of administered neurotropin. Hata T, et al. **Jpn J Pharmacol** 1988 Aug; 47(4):349–56

Effects of neurotropin on regional brain noradrenaline metabolism in rats. Tanaka M, et al. **Jpn J Pharmacol** 1989 Feb;49(2):187–96

Immunomodulating effect of neurotropin on delayed type hypersensitivity response in mice. Yoshii H, et al.
Jpn J Pharmacol 1988 Aug;47(4):433–5

Evidence for the involvement of protein-carbohydrate interaction in hematopoietic, multipotential colony-stimulating factor-dependent stem cell proliferation. Vehmeyer K, et al. **Life Sci** 1988; 43(20):1591–8

Inhibition of mitomycin C-induced sister-chromatid exchanges in mouse bone marrow cells by the immunopotentiators Krestin and Lentinan. Hasegawa J, et al. **Mutat Res** 1989 May;226(1):9–12

Augmentation of antitumor effect of recombinant interleukin-2 activated killer cells by the administration of rIL-2 and lentinan. Shimizu H, et al.
Nippon Sanka Fujinka Gakkai Zasshi 1988 Dec; 40(12):1899–900

Augmentative effect of lentinan on immune responses of pelvic lymph node lymphocytes in patients with uterine cervical cancer. Shimizu Y, et al.
Nippon Sanka Fujinka Gakkai Zasshi 1988 Oct; 40(10):1557–8

Radioprotection by polysaccharides. Maisin JR, et al.
Pharmacol Ther 1988;39(1–3):255–9

On the thrombolytic effect of pentosan polysulphate in animals. Klöcking HP, et al. **Pharmazie** 1988 Jun; 43(6):440–1

Children's food intake following drinks sweetened with sucrose or aspartame: time course effects. Birch LL, et al. **Physiol Behav** 1989 Feb;45(2):387–95

Interaction of fucoidan from Pelvetia fastigiata with surface antigens of hepatitis B and woodchuck hepatitis viruses. Venkateswaran PS, et al. **Planta Med** 1989 Jun;55(3):265–70

Induction of fibrinolysis by polyanions in human plasma. Klauser RJ. **Thromb Haemost** 1988 Oct 31;60(2):324–7

Further studies on the mechanisms for the antithrombotic effects of sulfated polysaccharides in rabbits. Ofosu FA, et al. **Thromb Haemost** 1988 Oct 31;60(2):188–92

Effects of sulfated polysaccharides on inhibition of thrombus formation initiated by different stimuli. Van Ryn-McKenna J, et al. **Thromb Haemost** 1989 Feb 28;61(1):7–9

Localization of the inhibitory site(s) of pentosan polysulphate in blood coagulation. Wagenvoord R, et al.
Thromb Haemost 1988 Oct 31;60(2):220–5

Release of lipoprotein lipase and hepatic triglyceride lipase in rats by heparin and other sulphated polysaccharides. Williams SP, et al. **Thromb Res** 1989 Aug 1;55(3):361–8

Inhibition of growth in vitro of Plasmodium falciparum by complex polysaccharides. Butcher GA, et al.
Trans R Soc Trop Med Hyg 1988;82(4):558–9

[Macrophage activation via the polysaccharides of Rhodotorula glutinis] Neichev Kh, et al.
Acta Microbiol Bulg 1988;23:78–83 (Eng. Abstr.) **(Bul)**

[Studies on the anti-virus effect of Glycyrrhiza uralensis Fish. polysaccharide] Chang YP, et al.
Chung Kuo Chung Yao Tsa Chih 1989 Apr;14(4):236–8, 255–6 (Eng. Abstr.) **(Chi)**

[Effects of Angelica sinensis polysaccharides on hemopoietic stem cells in irradiated mice] Mei QB, et al.
Chung Kuo Yao Li Hsueh Pao 1988 May;9(3):279–82 (Eng. Abstr.) **(Chi)**

[Antihypercholesterolemic and antisteatotic effect of Konjac-polysaccharide in rats fed high cholesterol diet] Zhang YZ, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Sep;19(3):324–8 (Eng. Abstr.) **(Chi)**

[Immunopharmacologic study in mice of 2 beta-1, 3, beta-1, 6 polysaccharides (scleroglucan and PSAT) on the activation of macrophages and T lymphocytes] Bousquet M, et al. **Ann Rech Vet** 1989;20(2):165–73 (Eng. Abstr.) **(Fre)**

[Inhibitory effect of sodium pentosan polysulfate on the formation, growth and aggregation of calcium oxalate in vitro] Suzuki K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Apr;80(4):526–31 (Eng. Abstr.) **(Jpn)**

[Effect of yeast polysaccharides on the functional activity of macrophages in white mice] Gurina SV, et al.
Antibiot Khimioter 1988 Nov;33(11):842–5 (Eng. Abstr.) **(Rus)**

[Effect of mytilan, a polysaccharide from Crenomytilus grayanus, on the functional activity of peritoneal macrophages] Krylova NV, et al. **Antibiot Khimioter** 1989 Feb;34(2):133–8 (Eng. Abstr.) **(Rus)**

[The mechanisms of the immunostimulating action of plant heteropolysaccharides] Oakovlev AI, et al.
Farmakol Toksikol 1988 Sep–Oct;51(5):68–72 (Eng. Abstr.) **(Rus)**

[Comparative study of the anticoagulant activity of sulfated polysaccharides from marine brown algae] Rozkin MIa, et al. **Farmakol Toksikol** 1988 Jul–Aug;51(4):63–8 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Sensory hair fusion and glycocalyx changes following gentamicin exposure in the guinea pig vestibular organs. Takumida M, et al. **Acta Otolaryngol (Stockh)** 1989 Jan–Feb;107(1–2):39–47

The glycocalyx of inner ear sensory and supporting cells. Takumida M, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 458:84–9

Sensory hair fusion and glycocalyx changes after gentamicin exposure in the guinea pig. Takumida M, et al.
Acta Otolaryngol Suppl (Stockh) 1989;457:78–82

Role of endothelial cell surface heparin-like polysaccharides. Marcum JA, et al. **Ann N Y Acad Sci** 1989;556:81–94 (48 ref.)

Functional properties of the carbohydrate moiety of human transferrin. de Jong G, et al. **Int J Biochem** 1989; 21(3):253–63 (79 ref.)

Role of N-linked glycans in the interaction between the envelope glycoprotein of human immunodeficiency virus and its CD4 cellular receptor. Structural enzymatic analysis. Fenouillet E, et al. **J Exp Med** 1989 Mar 1; 169(3):807–22

Glycocalyx and ciliary interconnections of the vestibular end organs: an investigation by high-resolution scanning electron microscopy. Takumida M.
ORL J Otorhinolaryngol Relat Spec 1989;51(3):137–43

Glycan variants of human alpha 1-acid glycoprotein modulate the biology of macrophages. Evidence that a concanavalin A-unreactive variant is involved in the production of an interleukin 1 inhibitor. Durand G.
Prog Clin Biol Res 1989;300:247–65

Glycocalyx electrostatic potential profile analysis: ion, pH, steric, and charge effects. Schnitzer JE.
Yale J Biol Med 1988 Sep–Oct;61(5):427–46

RADIATION EFFECTS

[Structural-functional characteristics of the surface of the blood mononucleocytes in children suffering from chronic dermatoses. I. The correction of the glycocalyx structure by UV irradiation of the blood and in the course of treatment with an autotransfusion of UV-irradiated blood] Finkel'shtein BB, et al. **Tsitologiia** 1988 May;30(5):639–43 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Effects of neurotropin in patients with hereditary spino-cerebellar degeneration [letter] Van Mullem J. **Acta Clin Belg** 1989;44(1):64–5

A boy with hemophilia and AIDS-related complex treated with neurotropin, a neuroimmunomodulator. Yoshiyama H, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Jun; 30(3):319–21

Soy-polysaccharide fiber: effect on diarrhea in tube-fed, head-injured patients. Frankenfield DC, et al.
Am J Clin Nutr 1989 Sep;50(3):533–8

Induction of antimicrobial activity by antitumor substances from pine cone extract of Pinus parviflora Sieb. et Zucc. Harada H, et al. **Anticancer Res** 1988 Jul–Aug;8(4):581–7

Acute experimental allergic encephalitis. Treatment with fungal polysaccharides. Ceroni M, et al. **Farmaco [Sci]** 1988 Apr;43(4):381–7

Effects of various doses of SP 54 on fibrinolytic activity in patients with thrombotic diseases. Losonczy H, et al.
Folia Haematol (Leipz) 1988;115(3):388–93

Regression induced by lentinan, of peritoneal carcinomatoses in a model of colon cancer in rat. Jeannin JF, et al.
Int J Immunopharmacol 1988;10(7):855–61

Tannin-rich carob pod for the treatment of acute-onset diarrhea. Loeb H, et al. **J Pediatr Gastroenterol Nutr** 1989 May;8(4):480–5

The effect of lentinan on the resistance of mice to Mesocestoides corti. White TR, et al. **Parasitol Res** 1988; 74(6):563–8

[Antitumor effect of actinidia chinensis polysaccharide on murine tumor] Lin PF.
Chung Hua Chung Liu Tsa Chih 1988 Nov;10(6):441–4 (Eng. Abstr.) **(Chi)**

[Protective effect of Polyporus umbellatus polysaccharide on toxic hepatitis in mice] Lin YF, et al.
Chung Kuo Yao Li Hsueh Pao 1988 Jul;9(4):345–8 (Eng. Abstr.) **(Chi)**

[Study on the inhibition of solid form of S-180 through water soluble polysaccharides from Flammulina velutipes] Zhao CY, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Jun; 19(2):146–9 (Eng. Abstr.) **(Chi)**

[Contribution of pentosan sulfuric polyester in the prevention of complications of percutaneous arterial dilatation (letter)] Pinot JJ. **Presse Med** 1989 Jan 7–14;18(1):32 **(Fre)**

[Polysulfonated polysaccharides. Inhibitors against AIDS in clinical evaluation] **Fortschr Med** 1989 Feb 20;107(5):13 **(Ger)**

[Potentiation of combination effect of cisplatin and radiation—application of biological response modifiers] Egawa S, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Feb; 80(2):249–55 (Eng. Abstr.) **(Jpn)**

TOXICITY

Evidence for the safety of gum tragacanth (Asiatic Astragalus spp.) and modern criteria for the evaluation of food additives. Anderson DM. **Food Addit Contam** 1989 Jan–Mar;6(1):1–12 (63 ref.)

URINE

Effect of a mass treatment with praziquantel on the excretion in urine of a polysaccharide antigen used for diagnosis of schistosomiasis due to S. mansoni in Cameroon. Ripert C, et al. **Trop Med Parasitol** 1989 Jun;40(2):169–71

POLYSACCHARIDES, BACTERIAL

Thermodynamic parameters and shape of the mycobacterial polymethylpolysaccharide-fatty acid complex. Kiho T, et al. **Biochemistry** 1988 Jul 26;27(15):5824–8

Structure of the capsular polymer of Actinobacillus pleuropneumoniae serotype 6. Altman E, et al.
Carbohydr Res 1988 Dec 1;183(2):321–31

Investigation of the structure of the capsular polysaccharide of Escherichia coli K55 using Klebsiella bacteriophage phi 5. Anderson AN, et al. **Carbohydr Res** 1989 Jun 1; 188:157–68

Structure of the capsular polysaccharide (K19 antigen) from uropathogenic Escherichia coli O25:K19:H12. Jann B, et al. **Carbohydr Res** 1988 Jun 15;177:273–7

A 13C-n.m.r. study of some Shigella flexneri O-polysaccharides. Jansson PE, et al. **Carbohydr Res** 1988 Aug 15;179:359–68

The pneumococcal polysaccharide S4: a structural re-assessment. Jones C, et al. **Carbohydr Res** 1988 Dec 31; 184:279–84

The structural repeating-unit of the capsular polysaccharide from Klebsiella serotype K48. Joseleau JP, et al.
Carbohydr Res 1988 Aug 15;179:321–6

The structure of the O-specific polysaccharide chain from Citrobacter O23-lipopolysaccharide. Katzenellenbogen E, et al. **Carbohydr Res** 1988 Aug 15;179:349–57

The structure of the Streptococcus pneumoniae type 29 polysaccharide: a re-examination. Kenne L, et al.
Carbohydr Res 1988 Dec 31;184:288–91

Structure of the capsular polysaccharide of Klebsiella ozaenae serotype K4 containing 3-deoxy-D-glycero-D-galacto-nonulosonic acid. Knirel YA, et al. **Carbohydr Res** 1989 Jun 1;188:145–55

Structure of the O-specific polysaccharide from Enterobacter cloacae strain N.C.T.C. 11579 (serogroup O10). Moule AL, et al. **Carbohydr Res** 1989 Mar 15; 186(2):287–93

Primary structure of Klebsiella serotype K22 capsular polysaccharide: another glycan containing

4-O-[(S)-1-carboxyethyl]-D-glucuronic acid. Parolis LA, et al. **Carbohydr Res** 1988 Aug 15;179:301-14
Structural studies on the amino-acid-linked teichuronic acid of Bacillus subtilis AHU 1219 cell walls. Iwasaki H, et al. **Eur J Biochem** 1989 Jan 2;178(3):643-8
The structure of the O-polysaccharide from Pseudomonas aeruginosa IID 1009 (ATCC 27585). Kaya S, et al. **J Biochem (Tokyo)** 1989 Jan;105(1):35-8
Structure of 6-deoxytalose-containing polysaccharide from the cell wall of Bifidobacterium adolescentis. Nagaoka M, et al. **J Biochem (Tokyo)** 1988 Apr;103(4):618-21
Unique intermolecular bactericidal epitope involving the homosialopolysaccharide capsule on the cell surface of group B Neisseria meningitidis and Escherichia coli K1. Jennings HJ, et al. **J Immunol** 1989 May 15;142(10):3585-91
Structural similarity of the type-specific group B streptococcal polysaccharides and the carbohydrate units of tissue glycoproteins: evaluation of possible cross-reactivity. Häyrinen J, et al. **Vaccine** 1989 Jun; 7(3):217-24
[Synthesis of a tetrasaccharide unit of the capsular polysaccharide of Streptococcus pneumoniae type 9V] Paulsen H, et al. **Carbohydr Res** 1989 Mar 15; 186(2):189-205 (Eng. Abstr.) **(Ger)**
[Synthesis of trisaccharide units from capsular polysaccharides of Streptococcus pneumoniae] Paulsen H, et al. **Carbohydr Res** 1988 Aug 15;179:173-97 (Eng. Abstr.) **(Ger)**

ADMINISTRATION & DOSAGE

Systemic injection of group A streptococcal peptidoglycan-polysaccharide complexes elicits persistent neutrophilia and monocytosis associated with polyarthritis in rats. Wells AF, et al. **Infect Immun** 1989 Feb;57(2):351-8
Protective immunity evoked by locally administered group A streptococcal vaccines in mice. Bronze MS, et al. **J Immunol** 1988 Oct 15;141(8):2767-70
[Value of determining the spectrum of blood serum fatty acids in evaluating increasing the effectiveness of antibiotic therapy of dysentery in children with prodigiozan and ephedrine] Vereshchagin IA, et al. **Antibiot Khimioter** 1989 Mar;34(3):218-23 (Eng. Abstr.) **(Rus)**
[Use of T-activin and prodigiozan in combined treatment of patients with diabetic retinopathy] Sakalo EA, et al. **Oftalmol Zh** 1988;(4):204-7 (Eng. Abstr.) **(Rus)**

ANALYSIS

Phenotypic and genotypic assays for the detection and identification of adhesins from pyelonephritic Escherichia coli. Archambaud M, et al. **Ann Inst Pasteur Microbiol** 1988 Sep-Oct;139(5):557-73
Structure of the specific capsular polysaccharide of Streptococcus pneumoniae type 23F (American type 23). Richards JC, et al. **Biochem Cell Biol** 1988 Jul;66(7):758-71
Structure of the K74 antigen from Escherichia coli O44:K74:H18, a capsular polysaccharide containing furanosidic beta-KDO residues. Ahrens R, et al. **Carbohydr Res** 1988 Aug 15;179:223-31
Proof of the occurrence of 5,6-O-(1-carboxyethylidene)-D-galactofuranose units in the capsular polysaccharide of Klebsiella K12. Beurret M, et al. **Carbohydr Res** 1989 Jun 15;189:247-60
Structural studies of E. coli K26 capsular polysaccharide, using g.l.c.-c.i.-m.s. Beynon LM, et al. **Carbohydr Res** 1988 Aug 15;179:419-23
Type-specific polysaccharides of Cryptococcus neoformans. n.m.r.-spectral study of a glucuronomannan chemically derived from a Tremella mesenterica exopolysaccharide. Cherniak R, et al. **Carbohydr Res** 1988 Nov 1;182(2):227-39
Escherichia coli serotype K44: an acidic capsular polysaccharide containing two 2-acetamido-2-deoxyhexoses. Dutton GG, et al. **Carbohydr Res** 1988 Nov 15;183(1):111-22
Structural studies of the capsular polysaccharide from Streptococcus pneumoniae type 2, a reinvestigation. Jansson PE, et al. **Carbohydr Res** 1988 Oct 15;182(1):111-7
Application of high-resolution n.m.r. spectroscopy to the elucidation of the structure of the specific capsular polysaccharide of Streptococcus pneumoniae type 7F. Moreau M, et al. **Carbohydr Res** 1988 Oct 15;182(1):79-99
Isolation and structural studies of phosphate-containing oligosaccharides from alkaline and acid hydrolysates of Streptococcus pneumoniae type 6B capsular polysaccharide. van Dam JE, et al. **Carbohydr Res** 1989 Apr 15;187(2):267-86
Structure and serological characteristics of the capsular K4 antigen of Escherichia coli O5:K4:H4, a fructose-containing polysaccharide with a chondroitin backbone. Rodriguez ML, et al. **Eur J Biochem** 1988 Oct 15;177(1):117-24
Immunochemical and structural characterization of a serotype-specific polysaccharide antigen from Actinobacillus actinomycetemcomitans Y4 (serotype b). Amano K, et al. **Infect Immun** 1989 Oct;57(10):2942-6
Characterization of the Salmonella paratyphi C Vi polysaccharide. Daniels EM, et al. **Infect Immun** 1989 Oct; 57(10):3159-64
Calcofluor- and lectin-binding exocellular polysaccharides of Azospirillum brasilense and Azospirillum lipoferum. Del Gallo M, et al. **J Bacteriol** 1989 Jun;171(6):3504-10
The structure and serologic distribution of an extracellular neutral polysaccharide from Pseudomonas aeruginosa immunotype 3. Kocharova NA, et al. **J Biol Chem** 1989 Sep 15;264(26):15569-73
Enzyme-linked immunosorbent assay with Brucella native hapten polysaccharide and smooth lipopolysaccharide. Alonso-Urmeneta B, et al. **J Clin Microbiol** 1988 Dec; 26(12):2642-6
Staphylococcus aureus strains which are not identified by rapid agglutination methods are of capsular serotype 5. Fournier JM, et al. **J Clin Microbiol** 1989 Jun;27(6):1372-4
Staphylococcus aureus exopolysaccharide in vivo demonstrated by immunomagnetic separation and electron microscopy. Johne B, et al. **J Clin Microbiol** 1989 Jul; 27(7):1631-5
Evaluation of performance parameters of a membrane-based dot immunoassay for meningococcal polysaccharide. Oprandy JJ, et al. **J Clin Microbiol** 1989 Jan;27(1):74-7
New method for detecting slime production by coagulase negative staphylococci. Freeman DJ, et al. **J Clin Pathol** 1989 Aug;42(8):872-4
Cell surface of Micrococcus luteus: chemical treatment of the cells and teichuronic acids on the surface. Monodane T, et al. **Microbiol Immunol** 1989;33(3):165-74
Immunochemical studies on pneumococcal type 37 capsular polysaccharide. Allen PZ, et al. **Mol Immunol** 1988 Oct; 25(10):1011-7
Immunochemical characterization of the polysaccharide antigens of group B streptococci. Pritchard DG, et al. **Rev Infect Dis** 1988 Jul-Aug;10 Suppl 2:S367-71 (25 ref.)
Demonstration of capsules in Clostridium difficile. Strelau E, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Mar; 270(4):456-61
Cell electrophoresis of group B streptococci: separation of types Ia, Ib/c, II, III and IV before and after neuraminidase treatment. Uhlenbruck G, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1988 Nov; 270(1-2):28-34
[Chemical characterization of Escherichia coli K 1 capsular polysaccharide] Mehl M, et al. **J Basic Microbiol** 1989; 29(4):221-32 (Eng. Abstr.) **(Ger)**
[The structure of capsule polysaccharide of Klebsiella ozaenae K4 containing 3-deoxynonulosonic acid] Knirel' IuA, et al. **Bioorg Khim** 1988 Nov;14(11):1583-5 (Eng. Abstr.) **(Rus)**
[The structure of extracellular polysaccharide of Arthrobacter globiformis] Vinogradov EV, et al. **Bioorg Khim** 1988 Aug;14(8):1040-6 (Eng. Abstr.) **(Rus)**
[IR spectra of polysaccharides in Corynebacterium michiganense] Varbanets LD, et al. **Mikrobiol Zh** 1987 Jan-Feb;49(1):6-9 (Eng. Abstr.) **(Rus)**
[Structuro-functional research on polysaccharides of Corynebacterium michiganense subsp. sepedonicum] Varbanets LD. **Mikrobiol Zh** 1987 Sep-Oct;49(5):22-6 (Eng. Abstr.) **(Rus)**
[Chemical and immunochemical research on the polysaccharide of Corynebacterium michiganense subsp. insidiosum 1589] Varbanets LD. **Mikrobiol Zh** 1987 Nov-Dec;49(6):27-31 (Eng. Abstr.) **(Rus)**

BIOSYNTHESIS

Biosyntheses of galactosyl lipids and polysaccharide in Streptococcus mutans. Chiu TH. **Biochim Biophys Acta** 1988 Nov 25;963(2):359-66
Bacterial extracellular polysaccharides. Whitfield C. **Can J Microbiol** 1988 Apr;34(4):415-20 (46 ref.)
Oxygen-dependent differences in exopolysaccharide production and aminoglycoside inhibitory-bactericidal interactions with Pseudomonas aeruginosa—implications for endocarditis. Bayer AS, et al. **J Antimicrob Chemother** 1989 Jan;23(1):21-35
Activity of CMP-2-keto-3-deoxyoctulosonic acid synthetase in Escherichia coli strains expressing the capsular K5 polysaccharide implication for K5 polysaccharide biosynthesis. Finke A, et al. **J Bacteriol** 1989 Jun; 171(6):3074-9
Common organization of chromosomal loci for production of different capsular polysaccharides in Haemophilus influenzae. Kroll JS, et al. **J Bacteriol** 1989 Jun; 171(6):3343-7
Kinetics of xanthan production when NH3-N limits biomass synthesis and glucose limits polysaccharide synthesis. Schweickart RW, et al. **J Biomech Eng** 1989 May; 111(2):166-72
Analysis of pss genes of Rhizobium leguminosarum required for exopolysaccharide synthesis and nodulation of peas: their primary structure and their interaction with psi and other nodulation genes. Borthakur D, et al. **Mol Gen Genet** 1988 Jul;213(1):155-62
A second exopolysaccharide of Rhizobium meliloti strain SU47 that can function in root nodule invasion. Zhan HJ, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3055-9
[Analysis of extracellular polysaccharides synthesized by cariogenic bacteria in mixed cultures] Zhou XD, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Dec;19(4):396-9 (Eng. Abstr.) **(Chi)**
[Properties of the polysaccharide synthesized by an Acinetobacter sp. culture] Grinberg TA, et al. **Mikrobiol Zh** 1987 Jul-Aug;49(4):24-30 (Eng. Abstr.) **(Rus)**

BLOOD

Direct testing of blood culture for detection of the serotype 5 and 8 capsular polysaccharides of Staphylococcus aureus. Boutonnier A, et al. **J Clin Microbiol** 1989 May; 27(5):989-93

CHEMICAL SYNTHESIS

Synthesis of p-trifluoroacetamidophenyl beta-D-glucopyranoside 4-(D-ribit-5-yl phosphate) corresponding to the Haemophilus influenzae type A capsular antigen. Classon B, et al. **Carbohydr Res** 1988 Aug 15;179:31-5
Synthesis of a di-, tri-, and tetra-saccharide unit of the group B streptococcal common antigen. Pozsgay V, et al. **Carbohydr Res** 1988 Aug 15;179:61-75
[Synthesis of determinant disaccharides of O-antigens of Salmonella of serological groups A, B and D1 in the form of glycosides suitable for conversion into artificial antigens via copolymerization] Cherniak AIa, et al. **Bioorg Khim** 1988 Aug;14(8):1047-58 (Eng. Abstr.) **(Rus)**
[Chemico-enzymatic synthesis of O-specific polysaccharide of Salmonella anatum and its analogs using partially purified polymerase preparation] Druzhinina TN, et al. **Bioorg Khim** 1988 Nov;14(11):1586-8 (Eng. Abstr.) **(Rus)**
[Synthesis of 6-aminohexylglycosides of a polysaccharide from Streptococcus group A and its fragments] Tsvetkov IuE, et al. **Bioorg Khim** 1988 Oct;14(10):1428-36 (Eng. Abstr.) **(Rus)**
[Synthesis of the polysaccharide common antigen of Pseudomonas aeruginosa and its L-analog in the form of 6-aminohexyl glycosides] Tsvetkov IuE, et al. **Bioorg Khim** 1989 Feb;15(2):231-48 (Eng. Abstr.) **(Rus)**

GENETICS

Detection by molecular hybridization of pap, afa, and sfa adherence systems in Escherichia coli strains associated with urinary and enteral infections. Archambaud M, et al. **Ann Inst Pasteur Microbiol** 1988 Sep-Oct;139(5):575-88
Molecular analysis of a region of the group B streptococcus chromosome involved in type III capsule expression. Kuypers JM, et al. **Infect Immun** 1989 Oct;57(10):3058-65
Nucleotide sequence of IS492, a novel insertion sequence causing variation in extracellular polysaccharide production in the marine bacterium Pseudomonas atlantica. Bartlett DH, et al. **J Bacteriol** 1989 Mar;171(3):1763-6
Rhizobium leguminosarum exopolysaccharide mutants: biochemical and genetic analyses and symbiotic behavior on three hosts. Diebold R, et al. **J Bacteriol** 1989 Sep; 171(9):4821-30
Two chromosomal loci involved in production of exopolysaccharide in Agrobacterium tumefaciens. Kamoun S, et al. **J Bacteriol** 1989 Mar;171(3):1755-9
Isolation and characterization of Azospirillum brasilense loci that correct Rhizobium meliloti exoB and exoC mutations. Michiels KW, et al. **J Bacteriol** 1988 Nov;170(11):5401-4
Genetic analysis of chromosomal mutations in the polysialic acid gene cluster of Escherichia coli K1. Vimr ER, et al. **J Bacteriol** 1989 Feb;171(2):1106-17
Properties of Escherichia coli mutants lacking membrane-derived oligosaccharides. Fiedler W, et al. **J Biol Chem** 1988 Oct 15;263(29):14684-9
The effect of interspecies transfer of Rhizobium host-specific nodulation genes on acidic polysaccharide structure and in situ binding by host lectin. Philip-Hollingsworth S, et al. **J Biol Chem** 1989 Apr 5;264(10):5710-4
Molecular cloning and expression of the O4 polysaccharide gene cluster from Escherichia coli. Haraguchi GE, et al. **Microb Pathog** 1989 Feb;6(2):123-32
Molecular characterization and expression in Escherichia coli of the gene complex encoding the polysaccharide capsule of Neisseria meningitidis group B. Frosch M, et al. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1699-73

HISTORY

Journal of the National Cancer Institute, Vol. 29, 1962: Action of bacterial polysaccharide on tumors. II. Damage of sarcoma 37 by serum of mice treated with Serratia marcescens polysaccharide, and induced tolerance [classical article] O'Malley WE, et al. **Nutr Rev** 1988 Nov; 46(11):389-91

IMMUNOLOGY

Chemically modified capsular polysaccharides as vaccines. Jennings HJ. **Adv Exp Med Biol** 1988;228:495-550 (86 ref.)
Vitamin A depletion and repletion: effects on antibody response to the capsular polysaccharide of Streptococcus pneumoniae, type III (SSS-III). Pasatiempo AM, et al. **Am J Clin Nutr** 1989 Mar;49(3):501-10
Production and partial characterization of monoclonal antibodies to Pasteurella haemolytica A1 capsular polysaccharide and lipopolysaccharide. Penaredondo MV, et al. **Am J Vet Res** 1988 Nov;49(11):1962-8
Protection against fatal Klebsiella pneumoniae sepsis in the squirrel monkey Saimiri sciureus after immunization with a capsular polysaccharide vaccine. Postal JM, et al. **Ann Inst Pasteur Immunol** 1988 Jul-Aug;139(4):401-7
Immunoglobulin isotype response to the group-A streptococcal carbohydrate in humans. Araj GF, et al. **APMIS Suppl** 1988;3:8-12

Interaction of the extracellular slime of Pseudomonas aeruginosa with antibody and complement (C). Gancevici G, et al. **Arch Roum Pathol Exp Microbiol** 1983 Jan-Mar; 42(1):15-24

Polyclonal IgG synthesis of mononuclear cells induced by the homopolymer of 4,6-dideoxy-4-formamido-alpha-D-mannopyranosyl units isolated from Brucella melitensis. Montag T, et al. **Biomed Biochim Acta** 1988;47(6):537-42

Monoclonal antibodies against the capsular K antigen of Escherichia coli (O9:K30(A):H12): characterisation and use in analysis of K antigen organisation on the cell surface. Homonylo MK, et al. **Can J Microbiol** 1988 Oct; 34(10):1159-65

Regulation of IgG responses by helper and suppressor T cells activated by pneumococcal capsular polysaccharides. Milligan GN, et al. **Cell Immunol** 1989 Mar;119(1):222-32

Vaccines for prevention of meningococcal disease. Frasch CE. **Clin Microbiol Rev** 1989 Apr;2 Suppl:S134-8 (40 ref.)

Prevention of invasive bacterial diseases by immunization with polysaccharide-protein conjugates. Robbins JB, et al. **Curr Top Microbiol Immunol** 1989;146:169-80 (49 ref.)

Systemic immunization for the induction of IgA responses. Tarkowski A, et al. **Curr Top Microbiol Immunol** 1989; 146:161-8

Enhanced binding of capsular polysaccharides of Cryptococcus neoformans to polystyrene microtitration plates for enzyme-linked immunosorbent assay. Cherniak R, et al. **Diagn Clin Immunol** 1988;5(6):344-8

Human immune response to group A streptococcal carbohydrate (A-CHO). III. Comparison of the efficiencies of anti-idiotopic antibody and of nominal antigen in the induction of IgM anti-A-CHO-producing B cells. Bloem AC, et al. **Eur J Immunol** 1988 Dec;18(12):1959-64

Human IgG and IgA subclass response following immunization with a polyvalent Klebsiella capsular polysaccharide vaccine. Cryz SJ Jr, et al. **Eur J Immunol** 1988 Dec;18(12):2073-5

Cooperative binding of two antibodies to independent antigens by an Fc-dependent mechanism. Greenspan NS, et al. **FASEB J** 1989 Aug;3(10):2203-7

Ability of monophosphoryl lipid A to augment the antibody response of young mice. Baker PJ, et al. **Infect Immun** 1988 Dec;56(12):3064-6

Adjuvant effects of trehalose dimycolate on the antibody response to type III pneumococcal polysaccharide. Baker PJ, et al. **Infect Immun** 1989 Mar;57(3):912-7

Antipneumococcal effects of C-reactive protein and monoclonal antibodies to pneumococcal cell wall and capsular antigens. Briles DE, et al. **Infect Immun** 1989 May; 57(5):1457-64

Immunodominant antigen of Actinobacillus actinomycetemcomitans Y4 in high-responder patients. Califano JV, et al. **Infect Immun** 1989 May;57(5):1582-9

Immune responses in mice to different noncovalent complexes of meningococcal B polysaccharide and outer membrane proteins. Lifely MR, et al. **Infect Immun** 1988 Dec;56(12):3221-7

Antigenic variation within serotypes of Cryptococcus neoformans detected by monoclonal antibodies specific for the capsular polysaccharide. Spiropulu C, et al. **Infect Immun** 1989 Oct;57(10):3240-2

Chemical and structural studies of serotype polysaccharide antigens of Streptococcus sobrinus 6715. Takada K, et al. **Infect Immun** 1988 Nov;56(11):2942-7

T-cell modulation of the antibody response to bacterial polysaccharide antigens. Taylor CE, et al. **Infect Immun** 1989 Jan;57(1):180-5

Modulation of the immune response to pneumococcal type 14 capsular polysaccharide-protein conjugates by the adjuvant Quil A depends on the properties of the conjugates. Verheul AF, et al. **Infect Immun** 1989 Apr; 57(4):1078-83

Effectiveness of natural and synthetic complexes of porin and O polysaccharide as vaccines against Brucella abortus in mice. Winter AJ, et al. **Infect Immun** 1988 Nov; 56(11):2808-17

Nonionic block polymer surfactants modulate the humoral immune response against Streptococcus pneumoniae-derived hexasaccharide-protein conjugates. Zigterman GJ, et al. **Infect Immun** 1989 Sep;57(9):2712-8

Characterization of lipopolysaccharide from Myxococcus xanthus by use of monoclonal antibodies. Fink JM, et al. **J Bacteriol** 1989 Apr;171(4):2028-32

Effect of various adjuvants on the antibody response of mice to pneumococcal polysaccharides. Yin JZ, et al. **J Biol Response Mod** 1989 Apr;8(2):190-205

Development of serum antibodies of the immunoglobulin G class and subclasses against the capsular polysaccharide of Haemophilus influenzae type b in children and adults with invasive infections. Claesson BA, et al. **J Clin Microbiol** 1988 Dec;26(12):2549-53

Enzyme-linked immunosorbent assay to evaluate the immunogenicity of a polyvalent Klebsiella capsular polysaccharide vaccine in humans. Granström M, et al. **J Clin Microbiol** 1988 Nov;26(11):2257-61

Comparison between radioimmunoassay and direct and indirect enzyme-linked immunosorbent assays for determination of antibodies against Haemophilus influenzae type b capsular polysaccharide. Lagergård T, et al. **J Clin Microbiol** 1988 Dec;26(12):2554-7

Human monoclonal antibodies to group B streptococcus. Reactivity and in vivo protection against multiple serotypes. Raff HV, et al. **J Exp Med** 1988 Sep 1; 168(3):905-17

Antibody recognition of the type 14 pneumococcal capsule. Evidence for a conformational epitope in a neutral polysaccharide. Wessels MR, et al. **J Exp Med** 1989 Jun 1;169(6):2121-31

Ig allotype-linked regulation of class and subclass composition of natural antibodies to group A streptococcal carbohydrate. Morell A, et al. **J Immunol** 1989 Apr 1; 142(7):2495-500

8-Mercaptoguanosine overcomes unresponsiveness of human neonatal B cells to polysaccharide antigens. Rijkers GT, et al. **J Immunol** 1988 Oct 1;141(7):2313-6

Murine immune response to the Neisseria meningitidis group C capsular polysaccharide. I. Ontogeny. Rubinstein LJ, et al. **J Immunol** 1988 Dec 15;141(12):4352-6

Murine immune response to the Neisseria meningitidis group C capsular polysaccharide. II. Specificity. Rubinstein LJ, et al. **J Immunol** 1988 Dec 15;141(12):4357-62

Clonal characterization of the human IgG antibody repertoire to Haemophilus influenzae type b polysaccharide. II. IgG antibodies contain VH genes from a single VH family and VL genes from at least four VL families. Scott MG, et al. **J Immunol** 1989 Jul 1;143(1):293-8

Measurement of anti-Haemophilus influenzae type b capsular polysaccharide antibodies by ELISA. Barra A, et al. **J Immunol Methods** 1988 Nov 25;115(1):111-7

Quantitation of IgG antibody to Streptococcus pneumoniae vaccine by ELISA and FAST-ELISA using tyraminated antigen. Boctor FN, et al. **J Immunol Methods** 1989 Jun 21;120(2):167-71

Functional affinity of antibody to the Haemophilus influenzae type b polysaccharide. Griswold WR, et al. **J Infect Dis** 1989 Jun;159(6):1083-7

Protection of mice by a pseudodiffuse strain of Staphylococcus aureus possessing polyvalent capsular type antigen. Chomarat M, et al. **J Med Microbiol** 1989 Feb; 28(2):129-36

Impaired antibody response to polysaccharides in association with functional asplenia. Gaines AD, et al. **J Pediatr** 1989 Jan;114(1):89-91

Protective efficacy of mouse serum to the N-propionyl derivative of meningococcal group B polysaccharide. Ashton FE, et al. **Microb Pathog** 1989 Jun;6(6):455-8

Octavalent Pseudomonas aeruginosa O-polysaccharide-toxin A conjugate vaccine. Cryz SJ Jr, et al. **Microb Pathog** 1989 Jan;6(1):75-80

Antibodies to the capsular polysaccharide of Neisseria meningitidis group B or E. coli K1 bind to the brains of infant rats in vitro but not in vivo. Saukkonen K, et al. **Microb Pathog** 1986 Feb;1(1):101-5

Alternative complement pathway activation by Salmonella O polysaccharide as a virulence determinant in the mouse. Saxén H, et al. **Microb Pathog** 1987 Jan;2(1):15-28

Immunization of guinea pigs with epitope C-rich lipopolysaccharide from Neisseria gonorrhoea; in vivo selection of gonococcal variants. Senior KE, et al. **Microb Pathog** 1989 Apr;6(4):251-64

Local production of IgG to pneumococcal C-polysaccharide in upper airway secretions from children with recurrent acute otitis media. Sørensen CH, et al. **Microb Pathog** 1989 Mar;6(3):183-91

A murine monoclonal antibody against Klebsiella capsular polysaccharide is opsonic in vitro and protects against experimental Klebsiella pneumoniae infection. Trautmann M, et al. **Microb Pathog** 1988 Sep;5(3):177-87

Immunochemical studies on pneumococcal type 37 capsular polysaccharide. Allen PZ, et al. **Mol Immunol** 1988 Oct; 25(10):1011-7

Immunization of pregnant women with a polysaccharide vaccine of group B streptococcus. Baker CJ, et al. **N Engl J Med** 1988 Nov 3;319(18):1180-5

Pneumococcal polysaccharide immunization in patients with active nephrotic syndrome. Garin EH, et al. **Nephron** 1988; 50(4):383-8

Pneumococcal antibodies measured with a rapid enzyme-linked-immunosorbent assay (ELISA), using the whole vaccine as antigen. Suggestions for clinical application. Snijder JA, et al. **Neth J Med** 1988 Aug; 33(1-2):52-9

Human adult immunogenicity of protein-coupled pneumococcal capsular antigens of serotypes prevalent in otitis media. Anderson P, et al. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S50-3

The role of antibodies to pneumococcal C polysaccharide in otitis media. Henrichsen J, et al. **Pediatr Infect Dis J** 1989 Jan;8(1 Suppl):S26-7

Pneumococcal antibody concentrations in young Papua New Guinean Highland children with pneumonia. Witt CS, et al. **Pediatr Infect Dis J** 1989 Aug;8(8):533-4

Avidity of IgA antibody to Escherichia coli polysaccharide and diphtheria toxin in breast milk from Swedish and Pakistani mothers. Roberton DM, et al. **Scand J Immunol** 1988 Dec;28(6):783-9

Human antibody responses to two conjugate vaccines of Haemophilus influenzae type B saccharides and diphtheria toxin. Seppälä I, et al. **Scand J Immunol** 1988 Oct; 28(4):471-9

Antibody production in rats after long-term exposure to formaldehyde. Holmström M, et al. **Toxicol Appl Pharmacol** 1989 Sep 1;100(2):328-33

Passive transfer of meningococcal group B polysaccharide antibodies to the offspring of pregnant rabbits and their protective role against infection with Escherichia coli K1. Lifely MR, et al. **Vaccine** 1989 Feb;7(1):17-21

Persistence of antibody titres three years after vaccination with Vi polysaccharide vaccine against typhoid fever. Tacket CO, et al. **Vaccine** 1988 Aug;6(4):307-8

[Su-polysaccharide skin test and immunotherapy with OK-432 in postoperative gastric cancer--the effect of a splenectomy] Saito H, et al. **Gan No Rinsho** 1988 Nov; 34(14):1965-8 (Eng. Abstr.) **(Jpn)**

[A study on streptococcal prevalence in Chiang Mai, Thailand, with special reference to unusual combination between T and M antigens of group A Streptococcus] Murai T, et al. **Kansenshogaku Zasshi** 1988 Oct; 62(10):869-77 (Eng. Abstr.) **(Jpn)**

[Receptors for polysaccharides of group A streptococci on human thymic lymphocytes. Stimulation of their expression by action of adenosine, theophylline and supernatant of thymocytes] Gnezditskaia EV, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):467-9 (Eng. Abstr.) **(Rus)**

[The secretory and systemic humoral immune response to polysaccharide A in patients with rheumatism] Briko NI, et al. **Vestn Akad Med Nauk SSSR** 1989;(6):37-8 (Eng. Abstr.) **(Rus)**

[Use of immunoenzyme analysis for determining the persistence and biodegradation of antigens in the cell wall of group A streptococci in patients with rheumatism] Shikhman AR, et al. **Vestn Akad Med Nauk SSSR** 1989; (6):46-9 (Eng. Abstr.) **(Rus)**

[Regulation of cell function in the macrophagal phagocytic system with salmozan] Zaĭtseva LG, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Jul;(7):63-8 (Eng. Abstr.) **(Rus)**

[Immunity against Neisseria meningitidis in different population groups] Pauste Ruiz H, et al. **Rev Cubana Med Trop** 1989 Jan-Apr;41(1):135-47 (Eng. Abstr.) **(Spa)**

ISOLATION & PURIFICATION

Chemical composition of phase I Coxiella burnetii soluble antigen prepared by trichloroacetic acid extraction. Lukáčová M, et al. **Acta Virol (Praha)** 1989 Jan;33(1):75-80

Structural analysis of the specific capsular polysaccharide of Streptococcus pneumoniae type 45 (American type 72). Moreau M, et al. **Biochemistry** 1988 Sep 6;27(18):6820-9

Structural studies on the neutral polysaccharide of Bacillus subtilis AHU 1219 cell walls. Iwasaki H, et al. **Eur J Biochem** 1989 Jan 2;178(3):635-41

Isolation, structure, and immunogenicity of Pseudomonas aeruginosa immunotype 4 high-molecular-weight polysaccharide. Pier GB, et al. **Infect Immun** 1989 Feb; 57(2):426-31

Isolation and characterization of type IV group B Streptococcus capsular polysaccharide. Wessels MR, et al. **Infect Immun** 1989 Apr;57(4):1089-94

Isolation of a coaggregation-inhibiting cell wall polysaccharide from Streptococcus sanguis H1. Cassels FJ, et al. **J Bacteriol** 1989 Jul;171(7):4019-25

Structure of an acidic exopolysaccharide of Pseudomonas marginalis HT041B. Osman SF, et al. **J Bacteriol** 1989 Mar; 171(3):1760-2

Polysaccharide antigens of Pseudomonas aeruginosa. Pier GB. **Rev Infect Dis** 1988 Jul-Aug;10 Suppl 2:S337-40

[Isolation of group-specific polysaccharide complexes from group B streptococci by phenol-water extraction] Mehl M, et al. **J Basic Microbiol** 1988;28(7):437-44 (Eng. Abstr.) **(Ger)**

METABOLISM

Effect of Pasteurella haemolytica (A1) capsular polysaccharide on sheep lung in vivo and on pulmonary surfactant in vitro. Brogden KA, et al. **Am J Vet Res** 1989 Apr;50(4):555-9

Bacterial capsules and interactions with complement and phagocytes. Roberts IS, et al. **Biochem Soc Trans** 1989 Jun; 17(3):462-4

Effect of macromolecular composition of microorganisms on the thermodynamic description of their growth. Mulder MM, et al. **Biochim Biophys Acta** 1988 Dec 7;936(3):406-12

Bacteriophage degradation of the capsular polysaccharide of Klebsiella K24 and determination of the position of the O-acetyl group. Annison G, et al. **Carbohydr Res** 1988 Jun 15;177:278-84

Homologous and heterologous reactions of bacteriophages phi 41 and phi 12 on the capsular polysaccharides from Klebsiella K41 and K12. Beurret M, et al. **Carbohydr Res** 1989 Jun 15;189:237-46

Preparation of branched hexasaccharides by the action of a viral lyase on Klebsiella K14 polysaccharide. Parolis H, et al. **Carbohydr Res** 1988 Oct 15;182(1):127-34

Novel change in the carbohydrate portion of Myxococcus xanthus lipopolysaccharide during development. Panasenko SM, et al. **J Bacteriol** 1989 Apr;171(4):1835-40

Physical and biochemical studies of Streptococcus mutans sediments suggest new factors linking the cariogenicity of plaque with its extracellular polysaccharide content. Dibdin GH, et al. **J Dent Res** 1988 Jun;67(6):890-5

[Microcapsule formation in the cells of Neisseria meningitidis group B] Reshilov LN, et al.

Zh Mikrobiol Epidemiol Immunobiol 1989 May;(5):20–6 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Different effects of bacterial lipopolysaccharide on superoxide anion production by macrophages from normal and tumor-bearing rats. Altavilla D, et al. **Immunopharmacology** 1989 Mar–Apr;17(2):99–106

Chromotropic character of bacterial acidic polysaccharides: Part II—Induction of metachromasy in cationic dye pinacyanol chloride by Klebsiella K10 capsular polysaccharide. Chakrabarti A, et al. **Indian J Biochem Biophys** 1989 Apr;26(2):74–9

Non-toxic endotoxin polysaccharide induces soluble mediators which potentiate antibody production by murine retrovirus-suppressed splenocytes. Friedman H, et al. **Int J Immunopharmacol** 1988;10(3):283–92

[The modification of phagocytosis by different K1 capsule preparations of Escherichia coli] Sokolowska-Köhler W, et al. **J Basic Microbiol** 1989;29(1):49–54 (Eng. Abstr.) **(Ger)**

[Inhibitory effect of lipopolysaccharides, natural lipid A and synthetic lipid A on growth of murine B cell lines, CYG 34 and CYG 101] Honda F, et al. **Nippon Saikingaku Zasshi** 1988 Jul;43(4):837–43 (Eng. Abstr.) **(Jpn)**

[Dynamics of healing of purulent wounds under the influence of immunoregulatory drugs] Guseinov AZ. **Arkh Patol** 1988;50(9):28–34 (Eng. Abstr.) **(Rus)**

[Effect of prodigiozan on the glucocorticoid and insulin ratio in the blood serum of white rats] Panin LE, et al. **Biull Eksp Biol Med** 1989 Mar;107(3):259–60 (Eng. Abstr.) **(Rus)**

[Differences in the receptor apparatus of resident and meat-peptone broth-stimulated macrophage populations detectable under the action of salmozan] Zaltseva LG, et al. **Biull Eksp Biol Med** 1989 Feb;107(2):214–7 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

A novel exopolysaccharide can function in place of the calcofluor-binding exopolysaccharide in nodulation of alfalfa by Rhizobium meliloti. Glazebrook J, et al. **Cell** 1989 Feb 24;56(4):661–72

Bacterial surface polysaccharides: structure and function. Sutherland IW. **Int Rev Cytol** 1988;113:187–231 (180 ref.)

Isolation and characterization of Klebsiella pneumoniae unencapsulated mutants. Benedi VJ, et al. **J Clin Microbiol** 1989 Jan;27(1):82–7

Modulation of bovine neutrophil antibacterial activities by Pasteurella haemolytica A1 purified capsular polysaccharide. Czuprynski CJ, et al. **Microb Pathog** 1989 Feb;6(2):133–41

The K1 capsular polysaccharide of Escherichia coli. Silver RP, et al. **Rev Infect Dis** 1988 Jul–Aug;10 Suppl 2:S282–6 (18 ref.)

Why is sucrose so cariogenic? The role of glucosyltransferase and polysaccharides. Rölla G. **Scand J Dent Res** 1989 Apr; 97(2):115–9 (31 ref.)

[The structure and biological role of polysaccharides in Mycobacterium, Corynebacterium and Nocardia] Varbanets LD. **Mikrobiol Zh** 1988 Sep–Oct;50(5):98–107 (48 ref.) **(Rus)**

THERAPEUTIC USE

[BCG-polysaccharides-nucleic acid and its effect in the prophylactic treatment of the common cold] Wang H. **Chung Hua Chieh Ho Ho Hu Hsi Tsa Chih** 1989 Feb; 12(1):20–3, 61 (Eng. Abstr.) **(Chi)**

[Immunomodulating therapy of adjuvant disease in rats using cyclophosphamide in combination with prodigiozan—its effect on anti-infectious resistance] Sibiriak SV, et al. **Antibiot Khimioter** 1988 Jul;33(7):532–5 (Eng. Abstr.) **(Rus)**

[Use of prodigiozan and zymosan in treating children with viral hepatitis A] Lebenzon SS, et al. **Pediatriia** 1988; (6):27–30 (Eng. Abstr.) **(Rus)**

[Content of total immunoglobulin E of the blood serum in patients with acute viral hepatitis A and B undergoing prodigiozan and ibuprofen treatment] Andreichin MA, et al. **Sov Med** 1988;(12):117–8 **(Rus)**

[Effect of prodigiozan on the antibody-dependent cytotoxicity of neutrophils in chronic myeloid leukemia] Guseva SA, et al. **Vopr Onkol** 1989;35(1):30–4 (Eng. Abstr.) **(Rus)**

TOXICITY

Eicosanoid regulation of acute intestinal vascular permeability induced by intravenous peptidoglycan-polysaccharide polymers. Woolverton CJ, et al. **Agents Actions** 1989 Mar;26(3–4):301–9

URINE

Depression of anticapsular antibody after immunization with Haemophilus influenzae type b polysaccharide-diphtheria conjugate vaccine. Marchant CD, et al. **Pediatr Infect Dis J** 1989 Aug;8(8):508–11

POLYSOMES see **POLYRIBOSOMES**

POLYSORBATE 20 see **POLYSORBATES**

POLYSORBATE 80 see **POLYSORBATES**

POLYSORBATES

The use of Tween 20 in a sensitive turbidimetric assay of lipolytic enzymes. von Tigerstrom RG, et al. **Can J Microbiol** 1989 Apr;35(4):511–4

Enhanced immunodetection of blotted house dust mite protein allergens on nitrocellulose following blocking with Tween 20. Tovey ER, et al. **Electrophoresis** 1989 Apr; 10(4):243–9

Interaction of bile salts with a nonionic surfactant and their activation energy for conduction as well as calcium and barium ion tolerance in presence of the nonionic surfactant. Bandyopadhyay A, et al. **Indian J Biochem Biophys** 1988 Jun;25(3):287–91

Enhancement of anti-phospholipid antibody activity by Tween 20 [letter] Gharavi AE, et al. **J Immunol Methods** 1988 Nov 10;114(1–2):277, 279–80

The effect of niosomes and polysorbate 80 on the metabolism and excretion of methotrexate in the mouse. Azmin MN, et al. **J Microencapsul** 1986 Apr–Jun;3(2):95–100

[Colloid coupling and biologic availability of local anesthetics. 6. Mixed-micelle formation of polysorbates] Thoma K, et al. **Pharm Acta Helv** 1988;63(4–5):102–10 (Eng. Abstr.) **(Ger)**

[Edge surface characteristics of emulsifiers. III. Research on Tween 61] Ugriné HE, et al. **Acta Pharm Hung** 1989 May; 59(3):119–26 (Eng. Abstr.) **(Hun)**

[Clinical studies on urinary tissue polypeptide antigen (TPA): problems and improvement in determination] Yoshida M, et al. **Hinyokika Kiyo** 1989 Feb;35(2):217–23 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Toxic susceptibilities in the newborn with special consideration of polysorbate toxicity. Pesce AJ, et al. **Ann Clin Lab Sci** 1989 Jan–Feb;19(1):70–3 (13 ref.)

ANALYSIS

Determination of polysorbates in foods by colorimetry with confirmation by infrared spectrophotometry, thin-layer chromatography, and gas chromatography. Kato H, et al. **J Assoc Off Anal Chem** 1989 Jan–Feb;72(1):27–9

METABOLISM

[Non-pigmented Serratia: utility of hydrolysis of Tween 80 in its identification] Riesco O, et al. **Rev Argent Microbiol** 1988 Apr–Jun;20(2):103–6 (Eng. Abstr.) **(Spa)**

PHARMACOLOGY

Effects of Tween 80 and sodium fluoride on extracellular glucosyltransferase production and membrane lipids of Streptococcus mutans. Sato M, et al. **Int J Biochem** 1989; 21(7):751–4

Influence of Tween 80 on the mycolic acid composition of three cutaneous corynebacteria. Chevalier J, et al. **J Gen Microbiol** 1988 Sep;134 (Pt 9):2457–61

Effects of Tween 80 and liposomes on the corneal permeability of anti-inflammatory steroids. Taniguchi K, et al. **J Pharmacobiodyn** 1988 Oct;11(10):685–93

[Bactericidal effect of Tween 80 on mycobacteria] Tsukamura M. **Kekkaku** 1988 Nov;63(11):695–9 (Eng. Abstr.) **(Jpn)**

THERAPEUTIC USE

Treatment of reticulum cell sarcoma in SJL/J mice with Tween 80. Crispens CG Jr, et al. **Anticancer Res** 1988 Nov–Dec;8(6):1341–3

TOXICITY

Teratology study of Tween 60 in rats. Ema M, et al. **Drug Chem Toxicol** 1988;11(3):249–60

POLYSTYRENES

Evaluating glass, polystyrene, and polypropylene containers for semen collection and sperm washing. Check JH, et al. **Arch Androl** 1988;20(3):251–5

A physico-chemical approach to the study of the binding interaction between S-adenosyl-L-methionine and polyanions: binding constants and nature of the interaction with sodium poly(styrene sulfonate). Barbato G, et al. **Biochim Biophys Acta** 1989 May 31;991(2):324–9

Adsorption of plasma proteins onto anticoagulant polystyrene derivatives: a fluorescence study. Dulos E, et al. **Biomaterials** 1988 Sep;9(5):405–12

The use of Chromosorb 102 to air samples pre-concentration in the determination of low concentrated dibutylphthalate. Wolska L. **Bull Inst Marit Trop Med Gdynia** 1988; 39(1–2):81–9

Latex beads phagocytosis capacity and ecto-NAD+ glycohydrolase activity of rat brain microglia cells in vitro. Bocchini V, et al. **Int J Dev Neurosci** 1988;6(6):525–34

A field trial of expanded polystyrene balls for the control of Culex mosquitoes breeding in pit latrines. Reiter P. **J Am Mosq Control Assoc** 1985 Dec;1(4):519–21

Target cell lysis by cytotoxic T lymphocytes redirected by antibody-coated polystyrene beads. Kolber MA, et al. **J Immunol** 1989 Sep 1;143(5):1461–6

Improved cell depletion in a panning technique using covalent binding of immunoglobulins to surface modified polystyrene dishes. Larsson PH, et al. **J Immunol Methods** 1989 Jan 17;116(2):293–8

Structure of hollow polystyrene microspheres: an SEM study. Ganguly S, et al. **J Microencapsul** 1989 Apr–Jun; 6(2):193–8

Preparation and characterization of poly(styrene) microcapsules containing corrosion inhibitors. Mac A, et al. **J Microencapsul** 1989 Jul–Sep;6(3):361–7

Haemocompatibility of polyethylene-polystyrene modified tubings. Migonney V, et al. **Life Support Syst** 1983;1 Suppl 1:227–30

Effect of polystyrene beads on dissolution behavior of drugs. Canal T, et al. **Pharm Acta Helv** 1988;63(9–10):271–7

[The estimation of the hemocompatibility of synthetic polymers by in vitro determination of thrombocyte adhesion under standardized conditions] Burstein C. et al. **Z Exp Chir Transplant Kunstliche Organe** 1988;21(5):249–54 (Eng. Abstr.) **(Ger)**

ADMINISTRATION & DOSAGE

Magnesium hydroxide as a complementary aluminium-free phosphate binder to moderate doses of oral calcium in uraemic patients on chronic haemodialysis: lack of deleterious effect on bone mineralisation. Morinière P, et al. **Nephrol Dial Transplant** 1988;3(5):651–6

[A case of massive hepatoma which responded to SMANCS/Lipiodol regimen with intra-arterial infusion] Kubo M, et al. **Gan To Kagaku Ryoho** 1989 Aug;16(8 Pt 2):2953–6 (Eng. Abstr.) **(Jpn)**

ADVERSE EFFECTS

Haematological changes induced by Amberlite XAD4 hemoperfusion. Mathieu D, et al. **Life Support Syst** 1983; 1 Suppl 1:61–4

ANALYSIS

Linear Ferguson plots of polystyrene sulfate size standards for the quantitative agarose gel electrophoresis of subcellular particles. Hahn E, et al. **Electrophoresis** 1988 Jun;9(6):243–55

[Comparative characterization of the polystyrene plates used in enzyme immunoassay] Shelepova TM, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Jul;(7):72–5 (Eng. Abstr.) **(Rus)**

ANTAGONISTS & INHIBITORS

Differential neutralizing effect of tiopronin on the toxicity of neocarzinostatin and SMANCS: a new rescue cancer chemotherapy. Oda T, et al. **Jpn J Cancer Res** 1989 Apr; 80(4):394–9

DIAGNOSTIC USE

Gastrointestinal transit of technetium-99m-labeled cellulose fiber and indium-111-labeled plastic particles. Madsen JL, et al. **J Nucl Med** 1989 Mar;30(3):402–6

IMMUNOLOGY

[Phagocytosis in the retinal pigment epithelium of polystyrene particles with different surface characteristics] Ogata N, et al. **Nippon Ganka Gakkai Zasshi** 1988 Aug; 92(8):1406–13 (Eng. Abstr.) **(Jpn)**

METABOLISM

Role of divalent cations, pH, cytoskeleton components and surface charge on the adhesion of Trichomonas vaginalis to a polystyrene substrate. Silva Filho FC, et al. **Mem Inst Oswaldo Cruz** 1987 Jul–Sep;82(3):379–84

Soybean metal-binding proteins: calmodulin purification by hydrophobic interaction with polymer 3520. Wang LC, et al. **Prep Biochem** 1989;19(1):69–87

PHARMACOLOGY

Safety evaluation of a male injectable antifertility agent, styrene maleic anhydride, in rats. Sethi N, et al. **Contraception** 1989 Feb;39(2):217–26

The influence of modified polymeric adsorbents on blood morphologic elements and clotting factors. Kotschy M, et al. **Folia Haematol (Leipz)** 1988;115(1–2):226–9

In vitro and ex vivo platelet interactions with hydrophilic-hydrophobic poly(ethylene oxide)-polystyrene multiblock copolymers. Grainger DW, et al. **J Biomed Mater Res** 1989 Sep;23(9):979–1005

Unusual activation mechanism of plasminogen. Kichenin-Martin V, et al. **Thromb Res** 1988 Dec 1; 52(5):469–78

Role of free radicals in entero-hepatic dysfunction caused by portal circulatory disturbance: effect of SOD derivative. Kawamoto S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1287–9

THERAPEUTIC USE

[Antitumor activities of oily suspended YM881 (SMANCS) against VX2 carcinoma] Kimura M, et al.

Gan To Kagaku Ryoho 1989 Jun;16(6):2183–8 (Eng. Abstr.) (Jpn)

TOXICITY

Cytotoxicity of smancs in comparison with other anticancer agents against various cells in culture. Oda T, et al. Anticancer Res 1989 Mar–Apr;9(2):261–5

POLYTEF see POLYTETRAFLUOROETHYLENE

POLYTETRAFLUOROETHYLENE

Cannula thrombophlebitis: a study in volunteers comparing polytetrafluoroethylene, polyurethane, and polyamide–ether–elastomer cannulae. Larsson N, et al. Acta Anaesthesiol Scand 1989 Apr;33(3):223–31

Physiological responses to the wearing of fire fighter's turnout gear with neoprene and GORE–TEX barrier liners. White MK, et al. Am Ind Hyg Assoc J 1988 Oct; 49(10):523–30

Gore–Tex prosthetic ligament in anterior cruciate deficient knees. Glousman R, et al. Am J Sports Med 1988 Jul–Aug; 16(4):321–6

Early experience with the GORE–TEX polytetrafluoroethylene anterior cruciate ligament prosthesis. Indelicato PA, et al. Am J Sports Med 1989 Jan–Feb;17(1):55–2

Clinical trials of a new polytetrafluoroethylene–silicone graft. Schanzer H, et al. Am J Surg 1989 Aug;158(2):117–20

Prosthetic reconstruction of the trachea. Shaha A, et al. Am J Surg 1988 Oct;156(4):306–9

Infusion thrombophlebitis: a prospective comparison of 645 Vialon and Teflon cannulae in anaesthetic and postoperative use. Gaukroger PB, et al. Anaesth Intensive Care 1988 Aug;16(3):265–71

Sutures for inguinal herniorrhaphy—a comparison of monofilaments with PTFE. Cahill J, et al. Ann R Coll Surg Engl 1989 Mar;71(2):128–30

Distal femoropopliteal bypass using a composite graft of PTFE and non–reversed saphenous vein. Holdsworth PJ, et al. Ann R Coll Surg Engl 1989 Jan;71(1):4–6

Distal femoropopliteal bypass using a composite graft of PTFE and non–reversed saphenous vein [letter] Tyrrell MR, et al. Ann R Coll Surg Engl 1989 Jul;71(4):269

A clinical survey of aortobifemoral bypass using two inherently different graft types. Cintora I, et al. Ann Surg 1988 Nov;208(5):625–30

Central aortopulmonary shunt using Gore–Tex: the modified Davidson shunt? [letter] Hamilton JR, et al. Ann Thorac Surg 1989 Jun;47(6):949

Infrageniculate thin–walled PTFE bypass: preliminary study of 53 cases. Barral X, et al. Ann Vasc Surg 1986 Nov; 1(3):347–50

Intraoperative evaluation of PTFE, Dacron and autogenous vein as carotid patch materials. Carney WI Jr, et al. Ann Vasc Surg 1987 Dec;1(5):583–6

Polytetrafluoroethylene bypass for revascularization of the atherosclerotic internal carotid artery: late results. Cormier JM, et al. Ann Vasc Surg 1987 Dec;1(5):564–71

Aorto–femoral bypass with polytetrafluoroethylene prostheses: preliminary results in 363 cases. Cormier JM, et al. Ann Vasc Surg 1986 May;1(1):43–9

The influence of duplex scanning on early patency rates of in situ bypass to the tibial vessels. Cullen PJ, et al. Ann Vasc Surg 1986 Nov;1(3):340–6

Interposition of a prosthetic patch to prevent aorto–enteric fistula. Deriu GP, et al. Ann Vasc Surg 1987 May; 1(4):509–11

Short–term in vivo stability of endothelial–lined polyester elastomer and polytetrafluoroethylene grafts. Kesler KA, et al. Ann Vasc Surg 1986 May;1(1):60–5

Prospective randomized trial of polytetrafluoroethylene and Dacron aortic prosthesis. I. Perioperative results. Lord RS, et al. Ann Vasc Surg 1988 Jul;2(3):248–54

A comparison between fibronectin and Matrigel pretreated ePTFE vascular grafts. Patterson RB, et al. Ann Vasc Surg 1989 Apr;3(2):160–6

Distal anastomotic intimal hyperplasia: histopathologic character and biogenesis. Sottiurai VS, et al. Ann Vasc Surg 1989 Jan;3(1):26–33

Ruptured aortic aneurysms: postoperative complications and their management. Vohra R, et al. Ann Vasc Surg 1988 Apr;2(2):114–9

Early results of femoropopliteal bypass using a five millimeter "thin wall" polytetrafluoroethylene (Gore–Tex) prosthesis. Williams GT, et al. Ann Vasc Surg 1986 Sep;1(2):208–13

Evaluation of compliant and noncompliant PTFE vascular prostheses. Kenney DA, et al. ASAIO Trans 1988 Jul–Sep; 34(3):661–3

Tensile characteristics of PTFE sutures. Hertweck SP, et al. Biomaterials 1988 Sep;9(5):457–9

Left gastric venous caval shunt with externally reinforced polytetrafluoroethylene graft. Kambayashi J, et al. Br J Surg 1988 Sep;75(9):886–7

Expanded polytetrafluoroethylene patch for the repair of large abdominal wall defects. van der Lei B, et al. Br J Surg 1989 Aug;76(8):803–5

Polymer electret guidance channels enhance peripheral nerve regeneration in mice. Valentini RF, et al. Brain Res 1989 Feb 20;480(1–2):300–4

Above–knee femoropopliteal reconstruction with polytetrafluoroethylene: a good alternative to saphenous vein bypass. Laurendeau F, et al. Can J Surg 1989 Jan; 32(1):48–50

Comparison of Marlex and Gore–tex to repair abdominal wall defects in the rat. Murphy JL, et al. Can J Surg 1989 Jul; 32(4):244–7

Magnetic resonance evaluation of patency of stented polytetrafluoroethylene graft connecting right atrium to pulmonary artery. Nawa S, et al. Chest 1988 Nov; 94(5):1105–7

Proplast as a pharyngeal wall implant to correct velopharyngeal insufficiency. Wolford LM, et al. Cleft Palate J 1989 Apr;26(2):119–26; discussion 126–8

Bleeding through PTFE grafts. Baker JD. Eur J Vasc Surg 1987 Feb;1(1):41–3

Distal embolisation from the surface of PTFE grafts in vivo and the effect of low molecular weight dextran. Christenson JT, et al. Eur J Vasc Surg 1988 Apr;2(2):121–5

Acute ischaemia in the donor limb after occlusion of axillo–femoral grafts. Cuschieri RJ, et al. Eur J Vasc Surg 1989 Jun;3(3):267–9

Great saphenous vein protection in arterial reconstructive surgery. Deriu GP, et al. Eur J Vasc Surg 1989 Jun; 3(3):253–60

An investigation into the causes of failure of PTFE grafts. Taylor RS, et al. Eur J Vasc Surg 1987 Oct;1(5):335–43

The predictive value of blood flow velocity in femoro–distal bypass. Wilson RG, et al. Eur J Vasc Surg 1988 Oct; 2(5):323–7

The effect of low molecular weight dextran on early platelet deposition onto vascular grafts. Al–Huneidi W, et al. Int Angiol 1988 Jul–Sep;7(3):266–9

Biomaterials and immune system: cellular reactivity towards PTFE and Dacron vascular substitutes pointed out by the leukocyte adherence inhibition (LAI) test. Lodi M, et al. Int Angiol 1988 Oct–Dec;7(4):344–8

Endothelial cell seeding on PTFE vascular prostheses using a standardized seeding technique. Gerlach J, et al. Int J Artif Organs 1989 Apr;12(4):270–5

Aorto–Y–bifurcation graft: Dacron versus PTFE. Preliminary results of a randomized prospective study. Karner J, et al. Int Surg 1988 Oct–Dec;73(4):218–20

Application of expanded polytetrafluoroethylene (ePTFE) tubing to the study of human wound healing. Goodson WH 3d. J Biomater Appl 1987 Jul;2(1):101–17 (30 ref.)

Instrumented measurements of laxity in patients who have a Gore–Tex anterior cruciate–ligament substitute. Markolf KL, et al. J Bone Joint Surg [Am] 1989 Jul;71(6):887–93

Forskolin inhibits platelet deposition in small diameter polytetrafluoroethylene grafts. Christenson JT, et al. J Cardiovasc Surg (Torino) 1989 Jan–Feb;30(1):81–4

Surface morphology of circulating platelets: a suggested parameter for the monitoring of endothelial seeded grafts. Fasol R, et al. J Cardiovasc Surg (Torino) 1989 May–Jun; 30(3):398–401

Evaluation of the expanded polytetrafluoroethylene (EPTFE) suture in peripheral vascular surgery using EPTFE prosthetic vascular grafts. Gayle RG, et al. J Cardiovasc Surg (Torino) 1988 Sep–Oct;29(5):556–9

Effect of placement of occlusive membranes on root resorption and bone regeneration during healing of circumferential periodontal defects in dogs. Claffey N, et al. J Clin Periodontol 1989 Jul;16(6):371–9

Placement of a porous membrane underneath the mucoperiosteal flap and its effect on periodontal wound healing in dogs. Claffey N, et al. J Clin Periodontol 1989 Jan;16(1):12–6

Polytetrafluoroethylene interposition grafts in vertebral to carotid artery transposition. A long–term follow–up study. Cavanaugh DA, et al. J Neurosurg 1989 Feb;70(2):212–5

Zygomatic and mandibular augmentation with proplast and porous hydroxyapatite in rhesus monkeys. el Deeb M, et al. J Oral Maxillofac Surg 1989 May;47(5):480–8

Judging the effects of the TMJ disc implants radiographically [letter] James RB. J Oral Maxillofac Surg 1988 Dec; 46(12):1032, 1119

Light and electron microscopic evaluation of Proplast II TMJ disc implants. Valentine JD Jr, et al. J Oral Maxillofac Surg 1989 Jul;47(7):689–96

Dura versus Gore–Tex as an abdominal wall prosthesis in an open and closed infected model. Smith S, et al. J Pediatr Surg 1989 Jun;24(6):519–21

New attachment achieved by guided tissue regeneration in beagle dogs. Caffesse RG, et al. J Periodontol 1988 Sep; 59(9):589–94

Long–term results of the clinical use of an expanded polytetrafluoroethylene surgical membrane as a pericardial substitute. Harada Y, et al. J Thorac Cardiovasc Surg 1988 Nov;96(5):811–5

Generation of chordae tendineae with polytetrafluoroethylene stents. Results of mitral valve chordal replacement in sheep. Revuelta JM, et al. J Thorac Cardiovasc Surg 1989 Jan;97(1):98–103

Pulmonary migration following periurethral polytetrafluoroethylene injection for urinary incontinence. Claes H, et al. J Urol 1989 Sep;142(3):821–2

Total replacement of the suprarenal inferior vena cava with an expanded polytetrafluoroethylene tube graft in 2 patients with tumor thrombi from renal cell carcinoma. Okada Y, et al. J Urol 1989 Jan;141(1):111–4

Prevention of urethral stricture formation after transurethral resection of the prostate: a controlled randomized study of Otis urethrotomy versus urethral dilation and the use of the polytetrafluoroethylene coated versus the uninsulated metal sheath. Schultz A, et al. J Urol 1989 Jan;141(1):73–5

Long–term results of aortoinnominate and aortocarotid polytetrafluoroethylene bypass grafting for atherosclerotic lesions. Cormier F, et al. J Vasc Surg 1989 Aug; 10(2):135–42

Precoating substrate and surface configuration determine adherence and spreading of seeded endothelial cells on polytetrafluoroethylene grafts. Kaehler J, et al. J Vasc Surg 1989 Apr;9(4):535–41

The effect of rigid external support on vein graft adaptation to the arterial circulation. Kohler TR, et al. J Vasc Surg 1989 Feb;9(2):277–85

Fibrin glue sealing of polytetrafluoroethylene vascular graft anastomoses: comparison with oxidized cellulose. Kram HB, et al. J Vasc Surg 1988 Nov;8(5):563–8

Comparison of saphenous vein patch, polytetrafluoroethylene patch, and direct arteriotomy closure after carotid endarterectomy. Part I. Perioperative results. Lord RS, et al. J Vasc Surg 1989 Apr;9(4):521–9

Is the preferential use of polytetrafluoroethylene grafts for femoropopliteal bypass justified? [letter] Michaels JA. J Vasc Surg 1989 Aug;10(2):212–3

Thromboembolic potential of synthetic vascular grafts in baboons. Schneider PA, et al. J Vasc Surg 1989 Jul; 10(1):75–82

Improved in vivo endothelialization of prosthetic grafts by surface modification with fibronectin. Seeger JM, et al. J Vasc Surg 1988 Oct;8(4):476–82

Platelet reactivity in human aortic grafts: a prospective, randomized midterm study of platelet adherence and release products in Dacron and polytetrafluoroethylene conduits. Wakefield TW, et al. J Vasc Surg 1989 Feb; 9(2):234–43

Expanded PTFE–grafts—should they be used for myocardial revascularization? Fraedrich G, et al. Life Support Syst 1983;1 Suppl 1:400–2

Experience with PTFE–prostheses for construction of Blalock–Taussig shunts. Rigler B, et al. Life Support Syst 1983;1 Suppl 1:394–5

PTFE graft for AV fistulas: 3mm vs. 6mm prosthesis. Results and long survival example. Squerzanti R, et al. Life Support Syst 1983;1 Suppl 1:390–3

Neointima formation in expanded polytetrafluoroethylene vascular grafts with different fibril lengths following implantation in the rat aorta. Hess F, et al. Microsurgery 1989;10(1):47–52

Use of small–caliber polytetrafluoroethylene (Gore–Tex) grafts in microsurgical training. Korber KE, et al. Microsurgery 1989;10(2):113–5

Improving microgratt patency. Nichter LS, et al. Microsurgery 1988;9(4):235–41

Posttransplantation complications of lower limb polytetrafluoroethylene grafts in children. O'Regan S, et al. Nephron 1989;52(1):90–2

Brachiocephalic fistulas for vascular access [letter] Polo JR, et al. Nephron 1989;52(1):105–6

Gore–Tex soft tissue bands as scleral explants in rabbits: a preliminary histologic study. Tawakol ME, et al. Ophthalmic Surg 1989 Mar;20(3):199–201

Polytetrafluoroethylene as an interpositional graft material for the correction of lower eyelid retraction. Karesh JW, et al. Ophthalmology 1989 Apr;96(4):419–23

Recurrent perigraft seroma treated by graft replacement with homograft iliac artery. Vince DJ, et al. Pediatr Cardiol 1989 Spring;10(2):113–4

Decreased thrombogenicity of vascular prostheses following gas denucleation by hydrostatic pressure. Demas CP, et al. Plast Reconstr Surg 1988 Dec;82(6):1042–5

Salvage of chronically exposed Gore–Tex vascular access grafts in the hemodialysis patient. McKenna PJ, et al. Plast Reconstr Surg 1988 Dec;82(6):1046–51

Thrombosed polytetrafluoroethylene hemodialysis fistulas: salvage with combined thrombectomy and angioplasty. Smith TP, et al. Radiology 1989 May;171(2):507–8

Negative interference of Teflon sampling devices in the determination of nitric acid and particulate nitrate. De Santis F, et al. Sci Total Environ 1988 Sep 15;76(1):93–9

Vascular grafting in the management of thrombotic disorders. Greisler HP, et al. Semin Thromb Hemost 1989 Apr; 15(2):206–14 (30 ref.)

Endothelial cell seeding in the management of vascular thrombosis. Herring MB, et al. Semin Thromb Hemost 1989 Apr;15(2):200–5

Prelining of polytetrafluoroethylene grafts with cultured human endothelial cells isolated from varicose veins. Leseche G, et al. Surgery 1989 Jan;105(1):36–45

[Tissue colonization of expanded polytetrafluoroethylene in healthy cornea in the view of its use as a support in keratoprosthesis] Legeais JM, et al. J Fr Ophtalmol 1988; 11(11):727–32 (Eng. Abstr.) (Fre)

[Polytetrafluoroethylene in enucleation surgery] Steinkogler FJ. Fortschr Ophthalmol 1988;85(3):321–2 (Eng. Abstr.) (Ger)

[Experimental studies of vascular replacement in microsurgery] Müller GH. Handchir Mikrochir Plast Chir 1988 Jul;20(4):192–4 (Eng. Abstr.) (Ger)

[The femoro–popliteal bypass with Gore–Tex: what are the results after 10 years?] Klein P, et al. Helv Chir Acta 1988 Nov;55(4):433–7 (Eng. Abstr.) (Ger)

[Animal experiment studies of the resistance to wear of a teflon ligament prosthesis] Trepte CT. **Sportverletz Sportschaden** 1987 Jun;1(2):81–5 (Eng. Abstr.) **(Ger)**

[Non-invasive morphologic and functional assessment of arteriovenous fistula in dialysis patients with duplex sonography] Kathrein H, et al. **Ultraschall Med** 1989 Feb; 10(1):33–40 (Eng. Abstr.) **(Ger)**

[Prevention of infection in teflon prostheses for dialysis access. Experiences with a resorbable combined collagen–antibiotic system] Horch R, et al. **Vasa** 1989; 18(1):30–4 (Eng. Abstr.) **(Ger)**

[The 4 mm plasma–tetrafluoroethylene prosthesis as a coronary vessel replacement in the animal experiment] Hötker U, et al. **Vasa** 1989;18(1):24–9 (Eng. Abstr.) **(Ger)**

[Small parietal thromboses in artificial bypass grafts: a rare complication?] Dock W, et al. **Vasa Suppl** 1988;26:65–6 **(Ger)**

[Noninvasive assessment of Cimino–Brescia fistulas and polytetrafluoroethylene shunts with duplex sonography] Kathrein H, et al. **Vasa Suppl** 1988;26:39–41 **(Ger)**

[Complex reconstruction versus simple anastomosis in the crural vascular area] Krisch I, et al. **Vasa Suppl** 1988; 26:71–4 **(Ger)**

[Duplex sonographic follow-up after carotid thrombendarterectomy and patch-plasty] Zwicker C, et al. **Vasa Suppl** 1988;26:15–7 **(Ger)**

[Experimental studies in animals of the regeneration of peripheral nerves] Freund E, et al. **Z Exp Chir Transplant Kunstliche Organe** 1988;21(5):285–96 (Eng. Abstr.) **(Ger)**

[Clinical evaluation of biliary endoprostheses. A comparison of endoprostheses made of teflon and percuflex] Rossi P, et al. **Radiol Med (Torino)** 1988 Oct;76(4):303–7 (Eng. Abstr.) **(Ita)**

[Computer simulation of serum leakage from EPTFE vascular prosthesis] Kobayashi T, et al. **Iyodenshi To Seitai Kogaku** 1988 Mar;26(1):41–6 (Eng. Abstr.) **(Jpn)**

[Experimental study of superior vena caval's reconstruction with ringed E-PTFE grafts] Ninomiya J, et al. **Nippon Geka Gakkai Zasshi** 1989 Jan;90(1):114–9 (Eng. Abstr.) **(Jpn)**

[Experimental study on the mechanism of serum leakage from expanded polytetrafluoroethylene (EPTFE) vascular prosthesis] Tabata R, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Mar;37(3):439–48 (Eng. Abstr.) **(Jpn)**

ADMINISTRATION & DOSAGE

An accurate method of Teflon injection using functional phonosurgery. Alessi DM, et al. **Arch Otolaryngol Head Neck Surg** 1988 Nov; 114(11):1321–3

Endoscopic periurethral Teflon injection. Khalid MA. **JPMA** 1988 Sep;38(9):231–4

Nerve transfer versus Teflon injection for vocal cord paralysis: a comparison. Crumley RL, et al. **Laryngoscope** 1988 Nov;98(11):1200–4

Teflon injection for ureteric reflux [letter] Hughes PD. **Med J Aust** 1989 May 15;150(10):608

Endoscopic injection of polytetrafluoroethylene for treatment of vesicoureteral reflux. Kaplan WE. **Urol Clin North Am** 1988 Nov;15(4):777–83 (9 ref.)

Endoscopic management of vesico–ureteric reflux in children with neuropathic bladder secondary to myelomeningocoele. Quinn FM, et al. **Z Kinderchir** 1988 Dec;43 Suppl 2:43–5

[Modification of secondary urodynamics by endoscopic (Politef) treatment of urinary stress incontinence] Giannotti P, et al. **Minerva Ginecol** 1988 May;40(5):303–5 (Eng. Abstr.) **(Ita)**

[Experience with endourethral submucosal teflon injection] Terakawa T, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Jun;79(6):1070–7 (Eng. Abstr.) **(Jpn)**

[Transperineal polytetrafluoroethylene injection in post-prostatectomy urinary incontinence. A case report] Yamaguchi K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Oct;79(10):1708–11 (Eng. Abstr.) **(Jpn)**

[Teflon injection in unilateral vocal cord paralysis] Liavaag PG, et al. **Tidsskr Nor Laegeforen** 1988 Aug 30; 108(24):1910–1 (Eng. Abstr.) **(Nor)**

ADVERSE EFFECTS

Thrombogenicity of Teflon versus copolymer–coated guidewires: evaluation with scanning electron microscopy. Pinto RS, et al. **AJNR** 1989 Mar–Apr;10(2):407–10

The Proplast/Teflon dilemma [letter] Ryan DE. **J Oral Maxillofac Surg** 1989 Mar;47(3):222, 319–20

Complete urinary obstruction following periurethral polytetrafluoroethylene injection for urinary incontinence. Boykin W, et al. **J Urol** 1989 May;141(5):1199–200

Perigraft reaction: incompatibility of synthetic vascular grafts? New aspects on clinical manifestation, pathogenesis, and therapy. Paes E, et al. **World J Surg** 1988 Dec; 12(6):750–5

[Pulmonary edema and pericarditis after inhalation of Teflon fumes] Haugtomt H, et al. **Tidsskr Nor Laegeforen** 1989 Feb 20;109(5):584–5 (Eng. Abstr.) **(Nor)**

[Results of implantation of teflon paste into the vocal cord according to the data of light and electron microscopy] Bykova VP, et al. **Arkh Patol** 1989;51(1):15–20 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Individual differences in regional deposition of 6-micron particles in humans with induced bronchoconstriction. Svartengren M, et al. **Exp Lung Res** 1989;15(1):139–49

THERAPEUTIC USE

Radiographic evaluation of subureteric injection of teflon to correct vesicoureteral reflux. Gore MD, et al. **AJR** 1989 Jan;152(1):115–9

Effect of vocal fold augmentation on laryngeal vibration in simulated recurrent laryngeal nerve paralysis: a study of Teflon and Phonogel. Trapp TK, et al. **Ann Otol Rhinol Laryngol** 1989 Mar;98(3):220–7

Endoscopic correction of vesico–ureteric reflux by subureteric Teflon injection: follow–up ultrasound and voiding cystography. Blake NS, et al. **Br J Radiol** 1989 May;62(737):443–6

Transvaginal, periurethral injection of polytetrafluoroethylene (polytef) in the treatment of urethral diverticula. Mizrahi S, et al. **Br J Urol** 1988 Sep; 62(3):280

Endoscopic treatment of refluxing ureteric stump following nephrectomy with Tissucol and teflon injection. Carini M, et al. **Eur Urol** 1989;16(4):312–4

Experience with the polytetrafluoroethylene surgical membrane for pericardial closure in operations for congenital cardiac defects. Amato JJ, et al. **J Thorac Cardiovasc Surg** 1989 Jun;97(6):929–34

Open versus endoscopic surgery in the treatment of vesicoureteral reflux. Brown S. **J Urol** 1989 Aug;142(2 Pt 2):499–500; discussion 501

Endoscopic correction of vesicoureteral reflux in the renal transplant candidate. Jackson CL, et al. **J Urol** 1989 Sep; 142(3):710–1

Optimal graft diameter: effect of wall shear stress on vascular healing. Binns RL, et al. **J Vasc Surg** 1989 Sep;10(3):326–37

What is the proper role of polytetrafluoroethylene grafts in infrainguinal reconstruction? Whittemore AD, et al. **J Vasc Surg** 1989 Sep;10(3):299–305

Transcutaneous Teflon injection for paralytic dysphonia. McCaffrey TB, et al. **Laryngoscope** 1989 May;99(5):497–9

Recurrent inguinal hernia repaired with mesh (Teflon). van Ooijen B, et al. **Neth J Surg** 1989 Jun;41(3):61–4

Teflon injections in post–prostatectomy incontinence. Osther PJ, et al. **Scand J Urol Nephrol** 1988;22(3):171–4

[Submucosal urethral injection of teflon in the treatment of urinary incontinence] Chair SC, et al. **Chung Hua I Hsueh Tsa Chih** 1987 Sep;40(3):295–300 (Eng. Abstr.) **(Chi)**

[Gore-Tex: value in craniomaxillofacial surgery] Briche D, et al. **Ann Chir Plast Esthet** 1988;33(3):288–94 (42 ref.) (Eng. Abstr.) **(Fre)**

[Ureterovesical reimplantation after failure of endoscopic treatment of reflux by Teflon injection. Apropos of 4 cases] Lacombe A, et al. **Ann Urol (Paris)** 1989;23(1):83–4 (Eng. Abstr.) **(Fre)**

[Endoscopic treatment of vesico–ureteral reflux using a sub–mucous injection of Teflon paste in children. Apropos of 337 patients (491 ureters)] Valla JS, et al. **Chir Pediatr** 1989;30(1):37–42 (Eng. Abstr.) **(Fre)**

[Vesico–ureteral reflux. Ultrasonographic aspect of endoscopic treatment (excluding follow–up)] Coche G, et al. **J Radiol** 1988 Oct;69(10):577–9 (Eng. Abstr.) **(Fre)**

[Injection of teflon paste in the treatment of dysphonia caused by unilateral vocal cord paralysis] del Cañizo Alvarez C, et al. **An Otorrinolaringol Ibero Am** 1988;15(5):493–502 (Eng. Abstr.) **(Spa)**

[Teflon injection in the treatment of urinary incontinence] Fernández del Busto E, et al. **Arch Esp Urol** 1988 Sep; 41(7):522–5 (Eng. Abstr.) **(Spa)**

POLYURETHANES

Cannula thrombophlebitis: a study in volunteers comparing polytetrafluoroethylene, polyurethane, and polyamide–ether–elastomer cannulae. Larsson N, et al. **Acta Anaesthesiol Scand** 1989 Apr;33(3):223–31

Correction of established capsular contractures with polyurethane implants. Hoffman S. **Aesthetic Plast Surg** 1989 Winter;13(1):33–40

Assessment of isocyanate exposure during the spray application of polyurethane foam. Bilan RA, et al. **Am Ind Hyg Assoc J** 1989 Jun;50(6):303–6

Metabolism of triethylamine in polyurethane foam manufacturing workers. Akesson B, et al. **Am J Ind Med** 1989;16(3):255–65

Infusion thrombophlebitis: a prospective comparison of 645 Vialon and Teflon cannulae in anaesthetic and postoperative use. Gaukroger PB, et al. **Anaesth Intensive Care** 1988 Aug;16(3):265–71

Re: Artz et al: Breast Reconstruction with a Subcutaneous Tissue Expander Followed with a Polyurethane–covered Silicone Breast Implant [letter] Shafir R, et al. **Ann Plast Surg** 1989 Apr;22(4):366

Long–term patency of regenerated neoaortic wall following the implant of a fully biodegradable polyurethane prosthesis: experimental lipid diet model in pigs. Galletti G, et al. **Ann Vasc Surg** 1989 Jul;3(3):236–43

Endothelial cell seeding on different polyurethanes. Gerlach J, et al. **Artif Organs** 1989 Apr;13(2):144–7

Isoelastic polyurethane prosthesis for segmental trachea replacement in beagle dogs. Schauwecker HH, et al. **Artif Organs** 1989 Jun;13(3):216–8

Hemodynamic comparisons of polyurethane trileaflet and bioprosthetic heart valves. Chandran KB, et al. **ASAIO Trans** 1989 Apr–Jun;35(2):132–8

A tricuspid polyurethane heart valve as an alternative to mechanical prostheses or bioprostheses. Lo HB, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):839–44

Suppression mechanisms for thrombus formation on heparin–immobilized segmented polyurethane–ureas. Nojiri C, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):386–98

Improved textured surfaces for implantable prostheses. Whalen RL. **ASAIO Trans** 1988 Jul–Sep;34(3):887–92

Degradation of explanted polyurethane cardiac pacing leads and of polyurethane. Chawla AS, et al. **Biomater Artif Cells Artif Organs** 1988;16(4):785–800

Extraction of polyurethane block copolymers: effects on bulk and surface properties and biocompatibility. Grasel TG, et al. **Biomaterials** 1988 Sep;9(5):383–92

Bulk, surface and blood–contacting properties of polyether polyurethanes modified with polydimethylsiloxane macroglycols. Okkema AZ, et al. **Biomaterials** 1989 Jan; 10(1):23–32

Hydrophilic polyurethane versus autologous femoral vein as substitutes in the femoral arteries of dogs: quantification of platelets and fibrin deposits. Teijeira FJ, et al. **Biomaterials** 1989 Mar;10(2):80–4

Poly(ether urethane) wound covering with high water vapour permeability compared with conventional tulle gras on split–skin donor sites. Jonkman MF, et al. **Burns** 1989 Aug;15(4):211–6

Treatment of donor sites––Duoderm or Omiderm? Leicht P, et al. **Burns Incl Therm Inj** 1989 Feb;15(1):7–10

Foam–covered mammary implants. Brand KG. **Clin Plast Surg** 1988 Oct;15(4):533–9

A 5–year experience with polyurethane–covered mammary prostheses for treatment of capsular contracture, primary augmentation mammoplasty, and breast reconstruction. Hester TR Jr, et al. **Clin Plast Surg** 1988 Oct;15(4):569–85

Efficacy of soft splints in reducing severe knee–flexion contractures. Anderson JP, et al. **Dev Med Child Neurol** 1988 Aug;30(4):502–8

Small bowel obstruction and the Garren–Edwards gastric bubble: an iatrogenic bezoar. Benjamin SB. **Gastrointest Endosc** 1988 Nov–Dec;34(6):463–7

Flammability of modern synthetic bandages. Ritchie IK, et al. **Injury** 1988 Jan;19(1):31–2

Surface modification of copolyether–urethane catheters with poly(ethylene oxide). Brinkman E, et al. **Int J Artif Organs** 1989 Jun;12(6):390–4

Biostability of polyurethanes. Hennig E, et al. **Int J Artif Organs** 1988 Nov;11(6):416–27

Heparinization of medical grade polyurethanes. Eloy R, et al. **J Biomater Appl** 1988 Apr;2(4):475–519 (141 ref.)

Antithrombogenic heparin–bound polyurethanes. Ito Y. **J Biomater Appl** 1987 Oct;2(2):235–65 (158 ref.)

Chemical modification of polyurethanes by radiation–induced grafting. Jansen B. **J Biomater Appl** 1987 Apr;1(4):502–32 (52 ref.)

Permeability of PEUU membranes: their modification towards blood compatibility. Jayasree G, et al. **J Biomater Appl** 1989 Jan;3(3):405–26

Introduction of surface functional groups onto biomaterials by glow discharges. Sharma CP, et al. **J Biomater Appl** 1987 Oct;2(2):205–18

Autooxidative degradation of implanted polyether polyurethane devices. Stokes K, et al. **J Biomater Appl** 1987 Apr;1(4):411–48

Blood compatible polyurethane elastomers. Szycher M, et al. **J Biomater Appl** 1987 Oct;2(2):290–313

Biostability of polyurethane elastomers: a critical review. Szycher M. **J Biomater Appl** 1988 Oct;3(2):297–402 (48 ref.)

Poly(ether) urethane reactivity with metal–ion in calcification and environmental stress cracking. Thoma RJ. **J Biomater Appl** 1987 Apr;1(4):449–86

Softening of thermoplastic polyurethanes: a structure/property study. Zdrahala RJ, et al. **J Biomater Appl** 1988 Apr;2(4):544–61

Properties and biological interactions of polyurethane anionomers: effect of sulfonate incorporation. Grasel TG, et al. **J Biomed Mater Res** 1989 Mar;23(3):311–38

Preparation and surface characterization of PEO–grafted and heparin–immobilized polyurethanes. Han DK, et al. **J Biomed Mater Res** 1989 Apr;23(A1 Suppl):87–104

Elastic properties and strength of a novel small–diameter, compliant polyurethane vascular graft. Hayashi K, et al. **J Biomed Mater Res** 1989 Aug;23(A2 Suppl):229–44

Platelet adhesion onto protein–coated and uncoated polyetherurethaneurea having tertiary amino groups in the substituents and its derivatives. Ito Y, et al. **J Biomed Mater Res** 1989 Feb;23(2):191–206

Heparin immobilization onto segmented polyurethane–urea surfaces––effect of hydrophilic spacers. Park KD, et al. **J Biomed Mater Res** 1988 Nov;22(11):977–92

The hydrolytic stability of Mitrathane (a polyurethane urea)––an x–ray photoelectron spectroscopy study. Paynter RW, et al. **J Biomed Mater Res** 1988 Aug;22(8):687–98

A two year study of the performance of a small diameter

polyurethane (Biomer) arterial prosthesis. de Cossart L, et al. **J Cardiovasc Surg (Torino)** 1989 May–Jun; 30(3):388–94

Behavior of platelets and leukocytes on the luminal surface of small caliber polyurethane grafts. Matsumoto M, et al. **J Cardiovasc Surg (Torino)** 1989 Jul–Aug;30(4):609–13

Lymphocyte entry into inflammatory tissues in vivo. Qualitative differences of high endothelial venule–like vessels in sponge matrix allografts vs isografts. Bishop DK, et al. **J Immunol** 1989 Jun 15;142(12):4219–24

Polyurethane–coated Dacron mesh tray for temporary mandibular reconstruction following resection of oral cancer: clinical results of 27 cases. Eckardt A, et al. **J Oral Maxillofac Surg** 1989 Jan;47(1):21–4

Use of a transparent adhesive dressing in very low birthweight infants. Bustamante SA, et al. **J Perinatol** 1989 Jun;9(2):165–9

A urethane dimethacrylate (UDMA) microfilled composite bonded weakly to BIS–GMA composite, therefore their combined use should be avoided [letter] Rueggerberg FA. **J Prosthet Dent** 1989 Jan;61(1):117

Effect of primers on the bond strength of silicone elastomers and polyurethane. Singer MT, et al. **J Prosthet Dent** 1988 Nov;60(5):602–5

Marginal leakage of composite resin restorations in combination with dentinal and enamel bonding agents. Sparrius O, et al. **J Prosthet Dent** 1989 Jun;61(6):678–84

Small–caliber biodegradable vascular grafts from Groningen. Gogolewski S, et al. **Life Support Syst** 1983;1 Suppl 1:382–5

Preclinical evaluation of knitted radiation graft copolymer elastomeric vascular prostheses. Whamond JS, et al. **Life Support Syst** 1983;1 Suppl 1:443–6

The Clinac 4/80 attenuation and build up characteristics for Scotchcast casting material. Kohn ML, et al. **Med Dosim** 1988 Dec;13(4):183–5

Simultaneous insulation deterioration associated with side–by–side subclavian placement of two polyurethane leads. Fyke FE 3d. **PACE** 1988 Nov;11(11 Pt 1):1571–4

Semipermeable polyurethane membrane as an artificial skin for the premature neonate. Knauth A, et al. **Pediatrics** 1989 Jun;83(6):945–50

Hollow fibers as an oral sustained–release delivery system. Hussain MA, et al. **Pharm Res** 1 89 Jan;6(1):49–52

Experimental tissue molding for sof -tissue reconstruction: a preliminary report. Fisher J, et al. **Plast Reconstr Surg** 1988 Nov;82(5):857–64

Managing the patient with infection around a polyurethane implant [letter] Gruver D. **Plast Reconstr Surg** 1989 May; 83(5):927

Congenital aplasia cutis: nonsurgical treatment with a synthetic skin substitute. Herman O, et al. **Plast Reconstr Surg** 1989 May;83(5):886–8

The use of surgilube for inserting the polyurethane–covered gel–filled mammary implant [letter] Schlesinger SL. **Plast Reconstr Surg** 1989 Oct;84(4):703

Polyurethane implants: reduction in capsular contracture or in capsule formation? [letter] Zandi I. **Plast Reconstr Surg** 1989 Sep;84(3):541

Evaluation of polymer–coated balloon–expandable stents in bile ducts. Alvarado R, et al. **Radiology** 1989 Mar;170(3 Pt 2):975–8

Evaporative water loss and epidermis regeneration in partial–thickness wounds dressed with a fluid–retaining versus a clot–inducing wound covering in guinea pigs. Jonkman MF, et al. **Scand J Plast Reconstr Surg Hand Surg** 1989;23(1):29–34

Biostability of polyurethanes. Hennig E, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(4):204–20

[Polyurethane catheters and antineoplastic chemotherapy. An experimental study] Ranchère JY, et al. **Ann Fr Anesth Reanim** 1988;7(6):517–9 (Eng. Abstr.) **(Fre)**

[Deep freezing of blood cells in a new flexible synthetic bag] Walker WH, et al. **Beitr Infusionther** 1988;21:84–6 **(Ger)**

[The estimation of the hemocompatibility of synthetic polymers by in vitro determination of thrombocyte adhesion under standardized conditions] Burstein C, et al. **Z Exp Chir Transplant Kunstliche Organe** 1988;21(5):249–54 (Eng. Abstr.) **(Ger)**

[The use of polyurethane membranes in the enzymatic–amperometric determination of glucose in urine] Hanke G, et al. **Z Med Lab Diagn** 1988;29(7):390–4 (Eng. Abstr.) **(Ger)**

ADMINISTRATION & DOSAGE

The use of a synthetic skin covering as a protective layer in the daily care of low birth weight infants. Barak M, et al. **Eur J Pediatr** 1989 Jun;148(7):665–6

[Experimental pancreatic duct occlusion with polyurethane] Klinger K, et al. **Helv Chir Acta** 1989 Jun;56(1–2):189–93 (Eng. Abstr.) **(Ger)**

ADVERSE EFFECTS

Mutagenicity assessment of airborne particles from three polyurethane foam manufacturing facilities [letter] Ader AW. **Am J Ind Med** 1988;14(4):489–92

[Toxic lung edema following inhalation of polyurethane vapors—a case report] Walther G. **Prax Klin Pneumol** 1988 Jul;42(7):564–6 (Eng. Abstr.) **(Ger)**

ANALYSIS

Factors and interactions affecting the performance of polyurethane elastomers in medical devices. Coury AJ, et al. **J Biomater Appl** 1988 Oct;3(2):130–79 (85 ref.)

Biomedical applications of polyurethanes: implications of failure mechanisms. Phillips RE, et al. **J Biomater Appl** 1988 Oct;3(2):207–27 (25 ref.)

The use of silicone/polyurethane graft polymers as a means of eliminating surface cracking of polyurethane prostheses. Pinchuk L, et al. **J Biomater Appl** 1988 Oct;3(2):260–96

Polyether polyurethanes: biostable or not? Stokes KB. **J Biomater Appl** 1988 Oct;3(2):228–59

Ionic interactions of polyurethanes. Thoma RJ, et al. **J Biomater Appl** 1988 Oct;3(2):180–206 (33 ref.)

[A method of predicting air pollution in coal mines using new synthetic materials] Sukhanov VV, et al. **Gig Tr Prof Zabol** 1988 Aug;(8):16–9 (Eng. Abstr.) **(Rus)**

BLOOD

Evaluation of blood compatibility of PEO grafted and heparin immobilized polyurethanes. Han DK, et al. **J Biomed Mater Res** 1989 Aug;23(A2 Suppl):211–28

CHEMICAL SYNTHESIS

Synthesis and physicochemical characterization of a new material (PUPA) based on polyurethane and poly(amido–amine) components capable of strongly adsorbing quantities of heparin. Barbucci R, et al. **Biomaterials** 1989 Jul;10(5):299–308

Properties and biological interactions of polyurethane anionomers: effect of sulfonate incorporation. Grasel TG, et al. **J Biomed Mater Res** 1989 Mar;23(3):311–38

Heparinizable segmented polyurethanes containing poly–amidoamine blocks. Tanzi MC, et al. **J Biomed Mater Res** 1989 Aug;23(8):863–81

METABOLISM

[Interaction of block–polyurethane containing lactose linkages and immobilized beta–galactosidase with body tissues] Shevchenko OS, et al. **Ukr Biokhim Zh** 1989 Mar–Apr;61(2):114–8 (Eng. Abstr.) **(Rus)**

PHARMACOLOGY

Platelet shape change and cytoskeletal reorganization on polyurethaneureas. Goodman SL, et al. **J Biomed Mater Res** 1989 Jan;23(1):105–23

THERAPEUTIC USE

Management of the difficult split–thickness donor site. Wood RJ, et al. **Ann Plast Surg** 1989 Jan;22(1):80–1

Clinical evaluation of the use of Op–Site gloves for the treatment of partial thickness burns of the hand. Bache J. **Burns Incl Therm Inj** 1988 Oct;14(5):413–6

Practical uses of Omiderm [letter] Cristofoli C, et al. **Burns Incl Therm Inj** 1988 Jun;14(3):255

Omiderm treatment of scalds in children. Siim E, et al. **Burns Incl Therm Inj** 1989 Feb;15(1):4–6

Use of Omiderm in treatment of low–degree pressure sores in terminally ill cancer patients. Goren D. **Cancer Nurs** 1989 Jun;12(3):165–9

TOXICITY

7–Amino–2,4,6–trimethylquinoline as a mutagenic pyrolysate compound of polyurethane foam. Hirayama T, et al. **Mutat Res** 1989 Jul;226(3):169–74

[Substantiation of exposure limits of combustion products of elastic polyurethane foam in emergency situations] Eltingon AI, et al. **Gig Sanit** 1989 Apr;(4):9–11 (Eng. Abstr.) **(Rus)**

[Study of age–related reactivity of animals for the rapid evaluation of biological properties of water in contact with polymers] Tiuleneva IS, et al. **Gig Sanit** 1988 Dec;(12):42–5 **(Rus)**

POLYURIA

CHEMICALLY INDUCED

Lithium, polyuria and abnormal diurnal weight gain in psychosis. Vieweg WV, et al. **Acta Psychiatr Scand** 1988 Oct;78(4):510–4

Lithium induced polyuria and polydipsia. Passavanti G, et al. **Adv Exp Med Biol** 1989;252:215–31

Neonatal treatment with vasopressin antagonist dP[Tyr(Me)2]AVP, but not with vasopressin antagonist d(CH2)5[Tyr(Me)2]AVP, inhibits body and brain development and induces polyuria in the rat. Snijdewint FG, et al. **Neurotoxicol Teratol** 1988 Jul–Aug;10(4):321–5

Lithium–induced morphological changes in the rat kidney at different levels of urine flow. Ottosen PD, et al. **Pharmacol Toxicol** 1988 Aug;63(2):108–13

[Nephrogenous diabetes insipidus caused by amphotericin B] Bender PP, et al. **Ned Tijdschr Geneeskd** 1989 Mar 25; 133(12):621–2 (Eng. Abstr.) **(Dut)**

[Renal function in treatment with lithium. Apropos of 50 personal cases] Bismuth C, et al. **Therapie** 1988 Aug–Sep; 43(5):419–22 (Eng. Abstr.) **(Fre)**

DIAGNOSIS

[Polyuria] García Fuentes M. **An Esp Pediatr** 1988 Sep;29 Suppl 33:130–2 (10 ref.) **(Spa)**

ETIOLOGY

Diencephalic syndrome following cervical spinal cord trauma. Iob I, et al. **Acta Neurochir (Wien)** 1989; 97(3–4):123–7

[Polyuria and polydipsia in acute fatty liver of pregnancy. Discussion based on a case] Bourlière M, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(1):79–81 (Eng. Abstr.) **(Fre)**

[The mechanism of polyuria associated with paroxysmal supraventricular tachycardia] Fujii T, et al. **Nippon Jinzo Gakkai Shi** 1988 Apr;30(4):347–53 (Eng. Abstr.) **(Jpn)**

[A case of pituitary adenoma with hyponatremia, polydipsia and polyuria produced by low resetting of the osmostat for antidiuretic hormone (ADH) release and potentiated thirst perception] Sato K, et al. **Nippon Naika Gakkai Zasshi** 1988 Aug;77(8):1251–6 **(Jpn)**

PHYSIOPATHOLOGY

Dissociation between activation of the hypothalamo–hypophyseal antidiuretic system and the type of diuresis during acute intracranial hypertension. Experimental observation. Rap ZM, et al. **Acta Neurochir (Wien)** 1989;96(1–2):63–71

Diurnal weight gain as an index of polyuria and hyponatremia among chronically psychotic patients. Vieweg WV, et al. **Psychiatr Med** 1988;6(4):23–8

Nomograms of polyuria for men and women with psychosis, intermittent hyponatremia, and polydipsia (PIP syndrome). Vieweg WV, et al. **Psychiatr Med** 1988;6(4):29–40

PSYCHOLOGY

Prevalence of polyuria among chronically psychotic men. Godleski LS, et al. **Psychiatr Med** 1988;6(3):114–20

URINE

The effect of various saccharin forms on gastro–intestinal tract, urine and bladder of male rats. Anderson RL, et al. **Food Chem Toxicol** 1988 Aug;26(8):665–9

VETERINARY

Diagnostic approach to polydipsia and polyuria. Feldman EC, et al. **Vet Clin North Am [Small Anim Pract]** 1989 Mar;19(2):327–41 (20 ref.)

POLYURIDYLIC ACIDS see **POLY U**

POLYVIDON see **POVIDONE**

POLYVINYL ALCOHOL

Lamicel is more effective in preparing the cervix for midtrimester termination of pregnancy than Laminaria japonicum. Tan SL, et al. **Aust N Z J Obstet Gynaecol** 1988 Feb;28(1):49–52

Patency of heparin–PVA coated tubes at low flow rates. Ip WF, et al. **Biomaterials** 1989 Jul;10(5):313–7

Immobilization of prostaglandin PGF2 alpha on poly(vinyl alcohol). Llanos G, et al. **Biomaterials** 1988 Sep;9(5):429–34

Use of poly(vinylpyrrolidone) and poly(vinyl alcohol) for cryoultramicrotomy. Tokuyasu KT. **Histochem J** 1989 Mar;21(3):163–71

Permeability of a heparin–polyvinyl alcohol hydrogel to thrombin and antithrombin III. Smith BA, et al. **J Biomed Mater Res** 1988 Aug;22(8):673–85

Compressed poly(vinyl alcohol)–polycaprolactone admixture as a model to evaluate erodible implants for sustained drug delivery. Wang PY. **J Biomed Mater Res** 1989 Jan; 23(1):91–104

Polyvinyl alcohol membrane permeability characteristics of 5–fluorouracil. Smith TJ, et al. **J Ocul Pharmacol** 1988 Summer;4(2):147–52

Licensing synthetic intracervical tents [letter] Johnson N. **Lancet** 1988 Dec 17;2(8625):1418–9

Evaluation of polyvinyl alcohol hydrogel as a sustained–release vehicle for rectal administration of indomethacin. Morimoto K, et al. **Pharm Res** 1989 Apr; 6(4):338–41

[Cervical dilatation with Lamicel in gravida I women applying for termination of pregnancy] Jensen NM, et al. **Ugeskr Laeger** 1989 Jun 26;151(26):1672–4 (Eng. Abstr.) **(Dan)**

[Experiments on extracochlear stimulating electrode using polyvinyl alcohol gel for single channel cochlear implant] Matsushima J, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jun;91(6):872–8 (Eng. Abstr.) **(Jpn)**

[Termination of pregnancy in the first and second trimester using natural and synthetic laminaria tents] Gorgidzhanian RS, et al. **Sov Med** 1989;(1):44–7 (17 ref.) **(Rus)**

ADMINISTRATION & DOSAGE

A comparison of gemeprost (Cervagem) pessaries and Lamicel tents for cervical preparation for abortion by dilatation and suction. Helm CW, et al.

Br J Obstet Gynaecol 1988 Sep;95(9):911–5
Lamicel does not promote induction of labour. A randomized controlled study. Lyndrup J, et al.
Eur J Obstet Gynecol Reprod Biol 1989 Mar;30(3):205–8

ADVERSE EFFECTS

Mortalities associated with use of a commercial suspension of polyvinyl alcohol. Repa I, et al. **Radiology** 1989 Feb; 170(2):395–9

ANALYSIS

Thermal characterization of drug/polymer and excipient/polymer interactions in some film coating formulation. Okhamafe AO, et al. **J Pharm Pharmacol** 1989 Jan;41(1):1–6

DIAGNOSTIC USE

A quantitative histochemical study of 5'-nucleotidase activity in rat liver using the lead salt method and polyvinyl alcohol. Frederiks WM, et al. **Histochem J** 1988 Apr; 20(4):207–14

METABOLISM

Immobilization of a primary amine-containing drug, adriamycin. Coupling to crosslinked polyvinyl alcohol and mechanistic comparison of hydrolytic stability. Wingard LB Jr, et al. **Appl Biochem Biotechnol** 1988 Nov; 19(2):117–27
Protein-free culture medium containing polyvinylalcohol, vitamins, and amino acids supports development of eight-cell hamster embryos to hatching blastocysts. Kane MT, et al. **J Exp Zool** 1988 Aug;247(2):183–7

PHARMACOLOGY

Peculiar effects of temperature and polyvinylalcohol on the activity of bovine serum amine oxidase. Befani O, et al. **Biochem Biophys Res Commun** 1989 Sep 15;163(2):1168–74
In vitro platelet interactions with a heparin-polyvinyl alcohol hydrogel. Cholakis CH, et al. **J Biomed Mater Res** 1989 Apr;23(4):399–415
Effect of heparin-PVA hydrogel on platelets in a chronic canine arterio-venous shunt. Cholakis CH, et al. **J Biomed Mater Res** 1989 Apr;23(4):417–41

THERAPEUTIC USE

Local anticoagulation without systemic effect using a polymer heparin delivery system. Okada T, et al. **Stroke** 1988 Dec;19(12):1470–6
[Hepatic hemangiomatosis: therapeutic embolization with polyvinyl alcohol (ivalon)] Jiménez Fernández F, et al. **An Esp Pediatr** 1988 Jun;28(6):588–90 **(Spa)**

TOXICITY

[Study of chronic toxicity and late effects of polyvinyl alcohol of the 18/11 mark] Vyshemirskaia LD, et al. **Gig Sanit** 1988 Sep;(9):83–4 **(Rus)**

POLYVINYL CHLORIDE see under **POLYVINYLS**

POLYVINYLPYRIDINE N-OXIDE see under **POLYVINYLS**

POLYVINYLPYRROLIDONE see **POVIDONE**

POLYVINYLS

Risk assessment of dermal exposure to polychlorinated biphenyls permeating a polyvinyl chloride glove. Perkins JL, et al. **Am Ind Hyg Assoc J** 1989 Mar;50(3):A171–2
Cuff failure of PVC tracheal tubes [letter] Reinders M, et al. **Anaesthesia** 1989 Jun;44(6):524–5
Response properties of ion-selective polymeric membrane electrodes prepared with aminated and carboxylated poly(vinyl chloride). Ma SC, et al. **Anal Chem** 1988 Oct 15;60(20):2293–9
Enhanced albumin affinity of silicone rubber. Tsai CC, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):559–63
A simple in situ cyanogen bromide cleavage method to obtain internal amino acid sequence of proteins electroblotted to polyvinyldifluoride membranes. Scott MG, et al. **Biochem Biophys Res Commun** 1988 Sep 30;155(3):1353–9
Sustained release of a model macromolecule from preparations with erodible core. Hasirci VN, et al. **Biomaterials** 1988 Sep;9(5):424–8
The effect of latex gloves on setting time of vinyl polysiloxane putty impression material. Rosen M, et al. **Br Dent J** 1989 May 20;166(10):374–5
The effect of latex gloves on setting time of vinyl polysiloxane putty impression material' [letter] White N. **Br Dent J** 1989 Jul 22;167(2):51
The use of Chromosorb 102 to air samples pre-concentration in the determination of low concentrated dibutylphthalate. Wolska L. **Bull Inst Marit Trop Med Gdynia** 1988; 39(1–2):81–9
Controlled delivery of 1,3-bis(2-chloroethyl)-1-nitrosourea from ethylene-vinyl acetate copolymer. Yang MB, et al. **Cancer Res** 1989 Sep 15;49(18):5103–7
Precipitation of LDL with sulfated polyanions: three methods compared. Siekmeier R, et al. **Clin Chim Acta** 1988 Oct 31;177(3):221–30
Development of a polymeric releasing device for 2'-carbomethoxyphenyl 4-guanidinobenzoate (a proteinase inhibitor): release rate, in vitro antifibrinolytic activity and in utero contraceptive effect. Burns JW, et al. **Contraception** 1988 Sep;38(3):349–64
Storage of apheresis platelets in ethylene-vinyl acetate copolymer bags: relationship between the bag size and the number of platelets maintaining aerobic metabolism. Kouketsu K, et al. **Cryobiology** 1988 Oct;25(5):440–4
Influence of plasticised poly(vinyl chloride) on platelet adhesion and platelet aggregates. Jones C, et al. **Int J Artif Organs** 1989 Jul;12(7):466–70
Stop-smoking program using nicotine reduction therapy and behavior modification for heavy smokers [published erratum appears in J Am Dent Assoc 1989 Mar;118(3):274] Cooper TM, et al. **J Am Dent Assoc** 1989 Jan;118(1):47–51
Tobacco use and oral health [letter] Herod EL. **J Am Dent Assoc** 1989 Mar;118(3):274
Binding of heparin onto ethylene-vinyl alcohol copolymer membrane. Shiomi T, et al. **J Biomed Mater Res** 1988 Dec; 22(3 Suppl):269–80
Brain tissue reaction to permselective polymer capsules. Winn SR, et al. **J Biomed Mater Res** 1989 Jan;23(1):31–44
A study of section wrinkling on single-hole coated grids using TEM and SEM. Abad A. **J Electron Microsc Tech** 1988 Feb;8(2):217–22
The use of double Formvar film to support paraffin sections for light microscopy and subsequent STEM/X-ray microanalysis. Tvedt KE, et al. **J Electron Microsc Tech** 1988 Feb;8(2):237–8
The use of carbon-coated formvar films as bacterial adhesion substrates for scanning electron microscopy. Wolff AM. **J Electron Microsc Tech** 1988 Nov;10(3):315–6
Protectiveness of Gore-Tex and PVC spray suits in orchard pesticide spraying. Norton MJ, et al. **J Environ Sci Health [B]** 1988 Dec;23(6):623–41
Design and in vitro evaluation of polyvinyl chloride microcapsules containing sulphamethoxazole. Das SK, et al. **J Microencapsul** 1989 Jan–Mar;6(1):53–8
Basic fibroblast growth factor released from synthetic guidance channels facilitates peripheral nerve regeneration across long nerve gaps. Aebischer P, et al. **J Neurosci Res** 1989 Jul;23(3):282–9
Simplified shielding of a metallic restoration during radiation therapy. Eichmiller FC, et al. **J Prosthet Dent** 1989 May; 61(5):640
Polyvinyl siloxane facilitates flasking and deflasking of removable partial dentures with swing-locks. Gardner LK, et al. **J Prosthet Dent** 1989 Aug;62(2):243
Preparation and properties of surface grafted materials with heparin complexing polymers. Tempesti F, et al. **Life Support Syst** 1983;1 Suppl 1:239–42
Integrity of vinyl and latex procedure gloves. Korniewicz DM, et al. **Nurs Res** 1989 May–Jun;38(3):144–6
Occult plastic intraocular foreign body. Duker JS, et al. **Ophthalmic Surg** 1989 Mar;20(3):169–70
Adsorption of human and porcine insulins to intravenous administration sets. Tol A, et al. **Pharm Weekbl [Sci]** 1988 Oct 14;10(5):213–6
Mechanism of diffusion of monosubstituted benzoic acids through ethylene-vinyl acetate copolymers. Maurin MB, et al. **Prog Clin Biol Res** 1989;292:279–82
Evaluation of a new, more oxygen-permeable, polyvinylchloride container. Holme S, et al. **Transfusion** 1989 Feb;29(2):159–64
What price progress? An update on vinyl plastic bags. Rubin RJ, et al. **Transfusion** 1989 May;29(4):358–61 (44 ref.)
A new polyvinylchloride blood bag plasticized with less-leachable phthalate ester analogue, di-n-decyl phthalate, for storage of platelets. Shimizu T, et al. **Transfusion** 1989 May;29(4):292–7
The design and fabrication of high frequency poly(vinylidene fluoride) transducers. Sherar MD, et al. **Ultrason Imaging** 1989 Apr;11(2):75–94
Histologic evaluation of response to implantation of polyvinilidine plates in dogs and rats. Swain CA, et al. **Vet Surg** 1988 Sep–Oct;17(5):278–81
[Thrombocyte storage in plasma. Preparation and storage of thrombocyte concentrates in polyvinyl chloride PL 146 standard bags] Berndsen G. **Folia Haematol (Leipz)** 1989; 116(2):227–34 (Eng. Abstr.) **(Ger)**
[Critical observations on suitability testing of synthetic pool liners] Pacik D. **Off Gesundheitswes** 1988 Jul;50(7):377–81 (Eng. Abstr.) **(Ger)**
[The estimation of the hemocompatibility of synthetic polymers by in vitro determination of thrombocyte adhesion under standardized conditions] Burstein C, et al. **Z Exp Chir Transplant Kunstliche Organe** 1988;21(5):249–54 (Eng. Abstr.) **(Ger)**
[Use of a drain made from polyvinyl formal foam in treating phlegmons and abscesses of the maxillofacial area] Zakson ML, et al. **Stomatologiia (Mosk)** 1988 Nov-Dec;67(6):73 **(Rus)**

ADMINISTRATION & DOSAGE

[Evaluation of the therapeutic and preventive effectiveness of the use of a polymer film in periodontal lesions in workers in the aluminum industry] Karagezian TA, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):40–2 **(Rus)**

ADVERSE EFFECTS

Obstructive and restrictive ventilatory impairment in polyvinylchloride fabrication workers. Ernst P, et al. **Am J Ind Med** 1988;14(3):273–9
Polyvinylchloride endotracheal tubes are hazardous for CO2 laser surgery [letter] Sosis M. **Anesthesiology** 1988 Nov; 69(5):801–2
Self-reported short- and long-term respiratory effects among PVC-exposed firefighters. Markowitz JS. **Arch Environ Health** 1989 Jan–Feb;44(1):30–3
Small airways function in workers processing polyvinylchloride. Nielsen J, et al. **Int Arch Occup Environ Health** 1989;61(7):427–30
Gingival response to nicotine polacrilex. Silver KJ, et al. **J Am Dent Assoc** 1989 Jan;118(1):53–6
Severe gingival damage after polysiloxane impression procedures. A case report. Shapiro N. **J Periodontol** 1988 Nov;59(11):769–70
Mixed connective tissue disease after exposure to polyvinyl chloride. Kahn MF, et al. **J Rheumatol** 1989 Apr; 16(4):533–5
Extraction of diethylhexylphthalate from total nutrient solution-containing polyvinyl chloride bags. Mazur HI, et al. **JPEN J Parenter Enteral Nutr** 1989 Jan–Feb;13(1):59–62
Haematological changes induced by Amberlite XAD4 hemoperfusion. Mathieu D, et al. **Life Support Syst** 1983; 1 Suppl 1:61–4
Histopathologic evaluation of response to implantation of polyvinilidine plates in dogs and rats [letter] Brasmer TH. **Vet Surg** 1989 Mar–Apr;18(2):87
[Effect of vinyl chloride and its polymers on the nervous system] Kurzbauer H. **Neurol Neurochir Pol** 1988 Sep–Oct; 22(5):404–9 (Eng. Abstr.) **(Pol)**

ANALYSIS

Magnetically controlled release systems: effect of polymer composition. Kost J, et al. **J Biomed Mater Res** 1985 Oct; 19(8):935–40
Thermal degradation of weldable poly(vinyl chloride) samples at low temperatures. Andersson B. **J Chromatogr** 1988 Jul 22;445(2):353–61
[Determination of dibutyltin compounds in polyvinyl chloride resin by capillary gas chromatography] Ohhira S, et al. **Nippon Eiseigaku Zasshi** 1989 Feb;43(6):1069–74 (Eng. Abstr.) **(Jpn)**

DIAGNOSTIC USE

The use of polyvinylidenedifluoride membranes as a general blotting matrix. Gültekin H, et al. **Anal Biochem** 1988 Aug 1;172(2):320–9

METABOLISM

Reconstitution of cytochrome c oxidase in phospholipid vesicles containing polyvinylic polymers. Sarti P, et al. **Biochem J** 1989 Feb 1;257(3):783–7
Fungal degradation of polyvinyl acetate. García Trejo A. **Ecotoxicol Environ Safety** 1988 Aug;16(1):25–35
Soybean metal-binding proteins: calmodulin purification by hydrophobic interaction with polymer 3520. Wang LC, et al. **Prep Biochem** 1989;19(1):69–87

PHARMACOLOGY

A polyfunctional molecule produced by the conjugation of a synthetic polyion-immunostimulant with specific antigen and an inhibitor of mast cell activation: effects on histamine release. Gushchin IS, et al. **Agents Actions** 1989 Apr; 27(1–2):75–8
Physiologic effects of nicotine polacrilex. Nemeth-Coslett R. **Biomed Pharmacother** 1989;43(1):5–10 (28 ref.)
The influence of modified polymeric adsorbents on blood morphologic elements and clotting factors. Kotschy M, et al. **Folia Haematol (Leipz)** 1988;115(1–2):226–9
Influence of coacervation-inducing agents and cooling rates on the preparation and in vitro release of bleomycin hydrochloride microcapsules. Lin SY. **J Microencapsul** 1985 Apr–Jun;2(2):91–101
Effect of ethylene-vinyl acetate concentration on ethylcellulose-walled microcapsules: preparation and release kinetics of theophylline microcapsules. Lin SY, et al. **J Microencapsul** 1985 Oct–Dec;2(4):315–25

POISONING

Acute health effects among firefighters exposed to a polyvinyl chloride (PVC) fire. Markowitz JS, et al. **Am J Epidemiol** 1989 May;129(5):1023–31
Long-term psychological distress among chemically exposed firefighters. Markowitz JS. **Behav Med** 1989 Summer; 15(2):75–83

THERAPEUTIC USE

Controlled trial of nicotine polacrilex gum with supportive measures. Blöndal T. **Arch Intern Med** 1989 Aug; 149(8):1818–21
Nicotine gum use with nicotine addiction [letter] Resnick MP, et al. **J Clin Psychiatry** 1989 Aug;50(8):310
An improved radiolabeling technique of ivalon and its use for dynamic monitoring of complications during therapeutic transcatheter embolization. Sirr SA, et al. **J Nucl Med** 1989 Aug;30(8):1399–404

Nicotine polacrilex: clinic-based strategies with chronically ill smokers. Carmody TP, et al. **J Psychoactive Drugs** 1988 Jul-Sep;20(3):269-74

[How to improve the efficacy of nicotine chewing gum (letter)] Becoña Iglesias E, et al. **Med Clin (Barc)** 1988 Sep 10;91(7):277-8 **(Spa)**

TOXICITY

[Hygienic characteristics of polymer foam materials] Vlasiuk MG, et al. **Gig Sanit** 1988 Nov;(11):32-4 (Eng. Abstr.) **(Rus)**

[Informative value of statistical and mathematical indicators of cardiac rhythm after exposure to chemical substances] Danev S, et al. **Gig Tr Prof Zabol** 1988 Nov;(11):31-3 **(Rus)**

POMC see PRO-OPIOMELANOCORTIN

POMPE'S DISEASE see GLYCOGEN STORAGE DISEASE TYPE II

POMPHOLYX

ETIOLOGY

Haemorrhagic pompholyx in bullous pemphigoid. Duhra P, et al. **Clin Exp Dermatol** 1988 Sep;13(5):342-3

PONGIDAE

Two decades of language research with great apes. Romski MA. **ASHA** 1989 May;31(5):81-2

Serological evidence for variation in the incidence of herpesvirus infections in different species of apes. Eberle R, et al. **J Clin Microbiol** 1989 Jun;27(6):1357-66

Orangutan tool use [letter] Galdikas BM. **Science** 1989 Jan 13;243(4888):152

ANATOMY & HISTOLOGY

Comparative anatomical study of arteriographs of the hand of primates. Deep palmar arterial arches and their correlating arteries in cercopithecidae, pongidae and hominidae. Ikeda A, et al. **Acta Anat (Basel)** 1988; 133(1):30-4

Homology of the adductor pollicis and contrahentes muscles: a study of monkey hands. Yamamoto C, et al. **Acta Med Okayama** 1988 Aug;42(4):215-26

Sexual dimorphism in Laccopithecus robustus, a late miocene hominoid from China. Pan YR, et al. **Am J Phys Anthropol** 1989 Jun;79(2):137-58

Sexual dimorphism in the cranium of infant and juvenile organutans. Winkler LA. **Folia Primatol (Basel)** 1987; 49(3-4):117-26

Ligament of the head of the femur in the orangutan and Indian elephant. Crelin ES. **Yale J Biol Med** 1988 Sep-Oct; 61(5):383-8

GENETICS

Chromosome phylogenies of man, great apes, and Old World monkeys. De Grouchy J. **Genetica** 1987 Aug 31; 73(1-2):37-52 (71 ref.)

Nucleotide sequences of immunoglobulin-epsilon pseudogenes in man and apes and their phylogenetic relationships. Ueda S, et al. **J Mol Biol** 1989 Jan 5; 205(1):85-90

DNA clock conflict continues [news] Lewin R. **Science** 1988 Sep 30;241(4874):1756-9

IMMUNOLOGY

Evolution of immunoglobulin allotypes and phylogeny of apes. Dugoujon JM, et al. **Folia Primatol (Basel)** 1987; 49(3-4):187-99

PHYSIOLOGY

Back muscle function during bipedal walking in chimpanzee and gibbon: implications for the evolution of human locomotion. Shapiro LJ, et al. **Am J Phys Anthropol** 1988 Oct;77(2):201-12

PONGO PYGMAEUS see under PONGIDAE

PONS

Central pontine myelinolysis following rapid correction of hyponatremia in an alcoholic. Walker JV, et al. **Am J Kidney Dis** 1988 Dec;12(6):531-3

Danger of central pontine myelinolysis in hypotonic dehydration and recommendation for treatment. Oh MS, et al. **Am J Med Sci** 1989 Jul;298(1):41-3

Lacunar infarct of the tegmentum of the lower lateral pons. Fisher CM. **Arch Neurol** 1989 May;46(5):566-7

Acute comitant esotropia in children with brain tumors. Williams AS, et al. **Arch Ophthalmol** 1989 Mar;107(3):376-8

Acquired focal dystonia following recovery from central pontine myelinolysis [letter] Grafton ST, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1354-5

Magnetic resonance imaging in central pontine myelinolysis. Thompson PD, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):675-7

Hypothetical explanation of selective saccadic palsy caused by pontine lesion. Kaneko CR. **Neurology** 1989 Jul; 39(7):994-5

The value of magnetic resonance imaging in the detection of type II hemorrhagic lacunes. Challa VR, et al. **Stroke** 1989 Jun;20(6):822-5

Pure sensory stroke due to a pontine lacune. Hommel M, et al. **Stroke** 1989 Mar;20(3):406-8

Pure motor hemiplegia due to pontine hemorrhage [letter] Kameyama S, et al. **Stroke** 1989 Sep;20(9):1288

[Central pontine myelinolysis and hyponatremia] Lanotte R, et al. **Ann Fr Anesth Reanim** 1988;7(4):339-42 (Eng. Abstr.) **(Fre)**

[Hypophosphoremia: a possible cause of central pontine myelinolysis (letter)] De Broucker T, et al. **Presse Med** 1989 Jun 10;18(23):1166 **(Fre)**

[Spontaneous pontine hemorrhage. An analysis of 38 cases] Bewermeyer H, et al. **Nervenarzt** 1988 Nov;59(11):640-6 (Eng. Abstr.) **(Ger)**

[Cerebral venous angioma complicated by pontine hemorrhage] Nakajima K, et al. **Nippon Naika Gakkai Zasshi** 1989 May;78(5):688-9 **(Jpn)**

[Cheiro-oral syndrome, pontine hallucination and MLF syndrome in recurrent idiopathic pontine hemorrhage: a case report] Satoh A, et al. **Nippon Naika Gakkai Zasshi** 1989 May;78(5):641-4 **(Jpn)**

[Three-dimensional correlation between auditory brainstem response and auditory tract in hypertensive pontine hematoma] Yabumoto M, et al. **No Shinkei Geka** 1988 Jul; 16(8):945-51 (Eng. Abstr.) **(Jpn)**

[Three cases of involuntary movements following pontine hemorrhage] Iwadate Y, et al. **No To Shinkei** 1988 Sep; 40(9):869-74 (Eng. Abstr.) **(Jpn)**

[CT in pontine hemorrhage--correlation to clinical feature] Iwasaki Y, et al. **Rinsho Hoshasen** 1988 Jul;33(7):757-60 (Eng. Abstr.) **(Jpn)**

[A case of the primary pontine hemorrhage showing alpha-coma with the same EEG finding to the previous normal record] Kashima T, et al. **Rinsho Shinkeigaku** 1988 Sep;28(9):1034-8 (Eng. Abstr.) **(Jpn)**

[Primary hemorrhage into the varolian pons with favorable outcome] Iakhno NN, et al. **Sov Med** 1989;(3):80-3 **(Rus)**

ANATOMY & HISTOLOGY

Topographic organization of the corticonuclear fibers from the tuber vermis and paramedian lobule in the albino rat. Umetani T. **Brain Behav Evol** 1989;33(6):334-41

Subcortical projections to the pontine nuclei in the cat. Aas JE. **J Comp Neurol** 1989 Apr 15;282(3):331-54

Ascending projections from the pedunculopontine tegmental nucleus and the adjacent mesopontine tegmentum in the rat. Hallanger AE, et al. **J Comp Neurol** 1988 Aug 22; 274(4):483-515

Survey of noncortical afferent projections to the basilar pontine nuclei: a retrograde tracing study in the rat. Mihailoff GA, et al. **J Comp Neurol** 1989 Apr 22; 282(4):617-43

Bed nucleus of the stria terminalis: cytoarchitecture, immunohistochemistry, and projection to the parabrachial nucleus in the rat. Moga MM, et al. **J Comp Neurol** 1989 May 15;283(3):315-32

Origin of ascending and spinal pathways from the nucleus tegmenti pedunculopontinus in the rat. Spann BM, et al. **J Comp Neurol** 1989 May 1;283(1):13-27

Autoradiographic analysis of ascending projections from the pontine and mesencephalic reticular formation and the median raphe nucleus in the rat. Vertes RP, et al. **J Comp Neurol** 1988 Sep 22;275(4):511-41

Visual projections to the pontine nuclei in the rabbit: orthograde and retrograde tracing studies with WGA-HRP. Wells GR, et al. **J Comp Neurol** 1989 Jan 22;279(4):629-52

Do the same subdivisions of the nucleus reticularis tegmenti pontis project onto longitudinal zones of the paramedian lobule? An anatomical study in the rabbit with retrograde tracing technique (HRP). Grottel K, et al. **J Hirnforsch** 1989;30(1):107-12

The organization of dorsal medullary projections to the central amygdaloid nucleus and parabrachial nuclei in the rabbit. Kapp BS, et al. **Neuroscience** 1989;30(3):717-32

Noradrenergic neurons with divergent projections to the motor trigeminal nucleus and the spinal cord: a double retrograde neuronal labeling study. Lyons WE, et al. **Neuroscience** 1988 Aug;26(2):681-93

Peptide-containing pathways from the parabrachial complex to the central nucleus of the amygdala. Block CH, et al. **Peptides** 1989 Mar-Apr;10(2):465-71

[Input and output neuronal structures of the pontine micturition center. Part I. Mainly input neuronal structures] Sugaya K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Jul;79(7):1210-8 (Eng. Abstr.) **(Jpn)**

[Input and output neuronal structures of the pontine micturition center. Part II. Mainly output neuronal structures] Sugaya K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Jul;79(7):1219-27 (Eng. Abstr.) **(Jpn)**

BLOOD SUPPLY

Behçets syndrome presenting with multiple cerebral and brainstem infarcts: a case report. Adam AM, et al. **East Afr Med J** 1987 Aug;64(8):558-60

Is the syndrome of pathological laughing and crying a manifestation of pseudobulbar palsy? Asfora WT, et al. **J Neurol Neurosurg Psychiatry** 1989 Apr;52(4):523-5

Pontine hemorrhage [letter] Casas Parera I, et al. **Stroke** 1988 Oct;19(10):1307-8

[Bilateral horizontal gaze palsy due to hemi-tegmental lesion in a case of pontine infarction] Okazawa H, et al. **Rinsho Shinkeigaku** 1988 Jul;28(7):803-7 (Eng. Abstr.) **(Jpn)**

[Morphological indicators of the changes in the central nervous system in cyanotic and non-cyanotic congenital heart defects in the developmental age. I. Morphometric evaluation of cerebral and cerebellar vascularization in congenital cyanotic and non-cyanotic heart defects] Kałuża J, et al. **Neuropatol Pol** 1988;26(1):49-59 (Eng. Abstr.) **(Pol)**

CYTOLOGY

The effect of serotonin on the pontine pause neurons in the cat. Furuya N, et al. **Adv Otorhinolaryngol** 1988;42:224-8

Adrenergic projection from the caudal part of the nucleus of the tractus solitarius to the parabrachial nucleus in the rat: immunocytochemical study combined with a retrograde tracing method. Kawai Y, et al. **Brain Res** 1988 Sep 6;459(2):369-72

Cholinergic projections from the laterodorsal and pedunculopontine tegmental nuclei to the pontine gigantocellular tegmental field in the cat. Mitani A, et al. **Brain Res** 1988 Jun 7;451(1-2):397-402

Spinally projecting noradrenergic neurons of the dorsolateral pontine tegmentum: a combined immunocytochemical and retrograde labeling study. Reddy VK, et al. **Brain Res** 1989 Jul 3;491(1):144-9

Afferent and efferent connections of the cholinoceptive medial pontine reticular formation (region of the ventral tegmental nucleus) in the cat. Leichnetz GR, et al. **Brain Res Bull** 1989 Apr;22(4):665-88

Principal neurons of the basilar pons as the source of a recurrent collateral system. Mihailoff GA. **Brain Res Bull** 1978 Jul-Aug;3(4):319-32

Corticopontine projection in the rat: the distribution of labelled cortical cells after large injections of horseradish peroxidase in the pontine nuclei. Legg CR, et al. **J Comp Neurol** 1989 Aug 22;286(4):427-41

5-HT-mediated synaptic potentials in the dorsal raphe nucleus: interactions with excitatory amino acid and GABA neurotransmission. Pan ZZ, et al. **J Neurophysiol** 1989 Aug;62(2):481-6

Development of cholinergic pedunculopontine neurons in vitro: comparison with cholinergic septal cells and response to nerve growth factor, ciliary neuronotrophic factor, and retinoic acid. Knusel B, et al. **J Neurosci Res** 1988 Oct-Dec; 21(2-4):365-75

A possible spino (trigemino)-ponto-amygdaloid pathway for pain. Bernard JF, et al. **Neurosci Lett** 1989 May 22; 100(1-3):83-8

Axon collaterals of spinocerebellar fibers terminate in the parabrachial nucleus of the rat. Kitamura T, et al. **Neurosci Lett** 1989 Apr 24;99(1-2):24-9

Cholinergic neurons from the dorsolateral pons project to the medial pons: a WGA-HRP and choline acetyltransferase immunohistochemical study. Shiromani PJ, et al. **Neurosci Lett** 1988 Dec 19;95(1-3):19-23

The corticopontine projection from area 20 and surrounding areas in the cat: terminal fields and distribution of cells of origin as compared to other visual cortical areas. Bjaalie JG. **Neuroscience** 1989;29(1):81-93

Visual pathways to the cerebellum: segregation in the pontine nuclei of terminal fields from different visual cortical areas in the cat. Bjaalie JG, et al. **Neuroscience** 1989;29(1):95-107

Collateral branches of cerebellopontine axons reach the thalamus, superior colliculus, or inferior olive: a double-fluorescence and combined fluorescence-horseradish peroxidase study in the rat. Lee HS, et al. **Neuroscience** 1989;28(3):725-34

DRUG EFFECTS

Measuring cholinergic sensitivity: II. Arecoline effects on metabolic activity in pontine regions of rat brain. Soncrant TT, et al. **Biol Psychiatry** 1989 Mar 1;25(5):618-25

GROWTH & DEVELOPMENT

Development of NADPH diaphorase-positive pedunculopontine nucleus neurons. Skinner RD, et al. **Exp Neurol** 1989 Apr;104(1):15-21

[The postnatal development of the pont- and olivocerebellar neurons in the rat] Ikarashi T. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Dec;91(12):2096-109 (Eng. Abstr.) **(Jpn)**

INJURIES

[Post-dislocation lesions of the midbrain and pons in neurosurgical patients] Borshchagovskiĭ ML, et al. **Zh Nevropatol Psikhiatr** 1989;89(5):22-8 (Eng. Abstr.) **(Rus)**

METABOLISM

Delta-sleep-inducing peptide (DSIP) stimulates the release

of immunoreactive Met-enkephalin from rat lower brainstem slices in vitro. Nakamura A, et al. **Brain Res** 1989 Feb 27;481(1):165-8

Postnatal development of protein P-38 ('synaptophysin') immunoreactivity in pontine and medullary gustatory zones of rat. Lasiter PS, et al. **Brain Res Dev Brain Res** 1989 Jul 1;48(1):27-33

Differential colocalization of neuropeptide Y- and methionine-enkephalin-Arg6-Gly7-Leu8-like immunoreactivity in catecholaminergic neurons in the rat brain stem. Murakami S, et al. **J Comp Neurol** 1989 Mar 22;281(4):532-44

Nerve growth factor receptor is associated with cholinergic neurons of the basal forebrain but not the pontomesencephalon. Woolf NJ, et al. **Neuroscience** 1989; 30(1):143-52

PATHOLOGY

The pigmented subpeduncular nucleus: a neuromelanin-containing nucleus in the human pontine tegmentum. Morphology and changes in Alzheimer's disease. Ohm TG, et al. **Acta Neuropathol (Berl)** 1988; 77(1):26-32

Gd-DTPA enhancement in MR imaging of central pontine myelinolysis. Koch KJ, et al. **AJNR** 1989 Sep-Oct;10(5 Suppl):S58

Neurofibrillary tangles in cholinergic pedunculopontine neurons in Alzheimer's disease. Mufson EJ, et al. **Ann Neurol** 1988 Nov;24(5):623-9

Central pontine myelinolysis and the rate of correction of hyponatremia [letter] Gledhill RF, et al. **Arch Neurol** 1989 Apr;46(4):359

Pontine myelinolysis and delayed encephalopathy following the rapid correction of acute hyponatremia. Weissman JD, et al. **Arch Neurol** 1989 Aug;46(8):926-7

Sphenoethmoidal sinusitis complicated by cavernous sinus thrombosis and pontocerebellar infarction. Macdonald RL, et al. **Can J Neurol Sci** 1988 Aug;15(3):310-3

Trigeminal neuropathy in pontine hemorrhage. Berlit P. **Eur Neurol** 1989;29(3):169-70

Central pontine myelinolysis with clinical recovery: MR documentation. Ragland RL, et al. **J Comput Assist Tomogr** 1989 Mar-Apr;13(2):316-8

Bilateral cheiro-oral syndrome following pontine haemorrhage. Yasuda Y, et al. **J Neurol** 1988 Nov; 235(8):489-90

Pontine lesion in opsoclonus-myoclonus syndrome shown by MRI. Hattori T, et al. **J Neurol Neurosurg Psychiatry** 1988 Dec;51(12):1572-5

Cheiro-oral syndrome with bilateral oral involvement: a study of pontine lesions by high-resolution magnetic resonance imaging. Matsumoto S, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):792-4

The nucleus pontis centralis caudalis in Huntington's disease. Koeppen AH. **J Neurol Sci** 1989 Jun;91(1-2):129-41

Stereotaxic suboccipital transcerebellar biopsy of pontine mass lesions. Abernathey CD, et al. **J Neurosurg** 1989 Feb; 70(2):195-200

Stereotactic suboccipital transcerebellar biopsy of pontine lesions [letter] Lobato RD, et al. **J Neurosurg** 1989 Sep; 71(3):466-7

Central pontine myelinolysis after liver transplantation. Estol CJ, et al. **Neurology** 1989 Apr;39(4):493-8

Quantitative evaluation of pontine atrophy using computer tomography. Chida K, et al. **Neuroradiology** 1989; 31(1):13-5

The pontomesencephalotegmental cholinergic system does not degenerate in Alzheimer's disease. Woolf NJ, et al. **Neurosci Lett** 1989 Jan 30;96(3):277-82

Central pontine myelinolysis and pregnancy. Castillo RA, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 2):459-61

The effects on auditory function of damage to the pontine olivo-cochlear bundle in man. Cohen M, et al. **Scand Audiol** 1988;17(3):185-9

[Myelin lesions in the central nervous system caused by disturbances in plasma osmolarity: pontine and extra-pontine myelinolysis] Cambier J, et al. **Bull Acad Natl Med** 1989 Jan;173(1):79-85; discussion 85-6 (Eng. Abstr.) **(Fre)**

[Central pontine myelosis. Morphology and forensic importance] Bratzke H, et al. **Z Rechtsmed** 1989; 102(2-3):79-97 (136 ref.) (Eng. Abstr.) **(Ger)**

[Localization of the corticobulbar tract in pons] Kawai M, et al. **Rinsho Shinkeigaku** 1988 Aug;28(8):897-901 (Eng. Abstr.) **(Jpn)**

[Risk of central pontine myelinolysis in the treatment of severe hyponatremia] Lindén T, et al. **Lakartidningen** 1989 May 17;86(20):1905-7 (Eng. Abstr.) **(Swe)**

PHYSIOLOGY

Respiratory activity of the pons and its influence on breathing in the guinea pig. Głogowksa M, et al. **Acta Neurobiol Exp (Warsz)** 1988;48(4):125-35

Inhibition of vestibulospinal reflexes following cholinergic activation of the dorsal pontine reticular formation. D'Ascanio P, et al. **Arch Ital Biol** 1988 Oct;126(4):291-316

Effects of electrolytic lesions of the superior olivary complex and trapezoid body on brainstem auditory-evoked potentials in the guinea pig. II. Three-channel Lissajous' trajectory analysis. Paquereau J, et al. **Audiology** 1988; 27(5):291-304

Effects of electrolytic lesions of the superior olivary complex and trapezoid body on brainstem auditory-evoked potentials in the guinea pig. I. Vertex-tragus recordings. Simha N, et al. **Audiology** 1988;27(5):279-90

Classical discrimination conditioning of the rabbit's eyelid response using pontine stimulation as a conditioned stimulus. Rosen DJ, et al. **Behav Neural Biol** 1989 Jul; 52(1):51-62

Active avoidance is impaired correlated with changes of spontaneous behaviour after lesions of the lateral parabrachial nucleus of rat. Spangenberg U, et al. **Biomed Biochim Acta** 1988;47(2):173-9

Investigation of the dorsolateral basilar pontine grey of the alert monkey. Thier P, et al. **Brain Behav Evol** 1989; 33(2-3):75-9

REM sleep enhancement induced by sensory stimulation is prevented by kainic acid lesion of the pontine reticular formation. Arankowsky-Sandoval G, et al. **Brain Res** 1989 Aug 14;494(2):396-400

Interhemispheric relationship between lateral hypothalamic self-stimulation and the region of the nucleus tegmenti pedunculo-pontinus. Buscher W, et al. **Brain Res** 1989 May 22;487(2):321-34

Lesion of the PGO pathways in the kitten. II. Impairment of physiological and morphological maturation of the late.al geniculate nucleus. Davenne D, et al. **Brain Res** 1989 Apr 24;485(2):267-77

Differential enhancement of rapid eye movement sleep signs in the cat: a comparison of microinjection of the cholinergic agonist carbachol and the beta-adrenergic antagonist propranolol on pontogeniculo-occipital wave clusters. Denlinger SL, et al. **Brain Res** 1988 Nov 8;473(1):116-26

Intracellular study of nucleus parabrachialis and nucleus tractus solitarii interconnections. Granata AR, et al. **Brain Res** 1989 Jul 17;492(1-2):281-92

The blockage of ponto-geniculo-occipital waves in the cat lateral geniculate nucleus by nicotinic antagonists. Hu B, et al. **Brain Res** 1988 Nov 15;473(2):394-7

Inhibition of spinal nociceptive transmission from the midbrain, pons and medulla in the rat: activation of descending inhibition by morphine, glutamate and electrical stimulation. Jones SL, et al. **Brain Res** 1988 Sep 20; 460(2):281-96

Depression of diaphragmatic and external intercostal muscle activities elicited by stimulation of midpontine dorsal tegmentum in decerebrate cats. Kawahara K, et al. **Brain Res** 1989 Jul 3;491(1):180-4

Inhibitory influences on hypoglossal neural activity by stimulation of midpontine dorsal tegmentum in decerebrate cat. Kawahara K, et al. **Brain Res** 1989 Feb 6;479(1):185-9

Parallel suppression of extensor muscle tone and respiration by stimulation of pontine dorsal tegmentum in decerebrate cat. Kawahara K, et al. **Brain Res** 1988 Nov 8;473(1):81-90

Subpallidal-pedunculopontine projections but not subpallidal-mediodorsal thalamus projections contribute to spontaneous exploratory locomotor activity. Mogenson GJ, et al. **Brain Res** 1989 Apr 24;485(2):396-8

Excitatory and inhibitory influences on bladder activity elicited by electrical stimulation in the pontine micturition center in the rat. Noto H, et al. **Brain Res** 1989 Jul 17; 492(1-2):99-115

Inspiratory-modulated neurons of the rostrolateral pons: effects of pulmonary afferent input. Shaw CF, et al. **Brain Res** 1989 Apr 17;485(1):179-84

Role of pontomedullary reticular formation neurons in horizontal head movements: an ibotenic acid lesion study in the cat. Suzuki SS, et al. **Brain Res** 1989 Apr 10; 484(1-2):78-93

Stimulation of the parabrachial nuclei with monosodium glutamate increases arterial pressure. Ward DG. **Brain Res** 1988 Oct 18;462(2):383-90

Neurotoxic lesions of the dorsolateral pontomesencephalic tegmentum-cholinergic cell area in the cat. II. Effects upon sleep-waking states. Webster HH, et al. **Brain Res** 1988 Aug 23;458(2):285-302

Effects of kainic acid lesions of the nucleus reticularis tegmenti pontis on fast and slow phases of vestibulo-ocular and optokinetic reflexes in the pigmented rat. Hess BJ, et al. **Exp Brain Res** 1989;74(1):63-79

The effects of tones on PGO waves in slow wave sleep and paradoxical sleep. Ball WA, et al. **Exp Neurol** 1989 Jun; 104(3):251-6

Unitary conductance changes at teleost Mauthner cell glycinergic synapses: a voltage-clamp and pharmacologic analysis. Faber DS, et al. **J Neurophysiol** 1988 Dec; 60(6):1982-99

Responses to parallel fiber stimulation in the guinea pig dorsal cochlear nucleus in vitro. Manis PB. **J Neurophysiol** 1989 Jan;61(1):149-61

Response properties of dorsolateral pontine units during smooth pursuit in the rhesus macaque. Mustari MJ, et al. **J Neurophysiol** 1988 Aug;60(2):664-86

Phasic activation of lateral geniculate and perigeniculate thalamic neurons during sleep with ponto-geniculo-occipital waves. Steriade M, et al. **J Neurosci** 1989 Jul;9(7):2215-29

Sparing of the vestibulo-ocular reflex with lesions of the paramedian pontine reticular formation [letter] Johnston JL, et al. **Neurology** 1989 Jun;39(6):876

Pneumotaxic centre and apneustic breathing: interspecies differences between rat and cat. Monteau R, et al. **Neurosci Lett** 1989 May 8;99(3):311-6

The effects of lumbosacral deafferentation on pontine micturition centre-evoked voiding in the decerebrate cat. Shefchyk SJ. **Neurosci Lett** 1989 Apr 24;99(1-2):175-80

The effects of brainstem peribrachial stimulation on perigeniculate neurons: the blockage of spindle waves. Hu B, et al. **Neuroscience** 1989;31(1):1-12

The effects of brainstem peribrachial stimulation on neurons of the lateral geniculate nucleus. Hu B, et al. **Neuroscience** 1989;31(1):13-24

The cellular mechanism of thalamic ponto-geniculo-occipital waves. Hu B, et al. **Neuroscience** 1989;31(1):25-35

Effects of lesions to rat spinal cord lamina I cell projection pathways on reactions to acute and chronic noxious stimuli. Wall PD, et al. **Pain** 1988 Dec;35(3):327-39

PGO waves and insomnia in PCPA-treated rats. Marks GA, et al. **Pharmacol Biochem Behav** 1988 Nov;31(3):509-13

Microinjections of local anesthetic into the pontine nuclei reduce the amplitude of the classically conditioned eyelid response. Knowlton BJ, et al. **Physiol Behav** 1988; 43(6):855-7

Classical conditioning in rabbits using pontine nucleus stimulation as a conditioned stimulus and inferior olive stimulation as an unconditioned stimulus. Steinmetz JE, et al. **Synapse** 1989;3(3):225-33

[Effects of microiontophoretically applied flurazepam on the respiratory units in the region of the nucleus parabrachialis of the rabbit] Yu BJ, et al. **Sheng Li Hsueh Pao** 1989 Feb; 41(1):40-8 (Eng. Abstr.) **(Chi)**

[Convergence of nociceptive information on the parabrachio-amygdala neurons in the rat] Bernard JF, et al. **C R Acad Sci [III]** 1988;307(19):841-7 (Eng. Abstr.) **(Fre)**

[A central respiratory oscillator: phase response analysis--pontine and medullary electrical stimulation] Kitano S, et al. **Kokyu To Junkan** 1988 Sep;36(9):975-80 (Eng. Abstr.) **(Jpn)**

[The effects of optic nerve stimulation on nucleus reticularis tegmenti pontis cells which project to the posterior cerebellar vermis in the cat] Yo T. **Nippon Ganka Gakkai Zasshi** 1988 Dec;92(12):2094-102 (Eng. Abstr.) **(Jpn)**

[The effects of chemical stimulations of the pontine micturition center in decerebrate cats] Sugaya K. **Nippon Hinyokika Gakkai Zasshi** 1988 Aug;79(8):1364-71 (Eng. Abstr.) **(Jpn)**

[Inputs to cerebellar dentate nucleus from the pontine nucleus in the cat] Sugiuchi Y, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1989 Mar;92(3):353-61 (Eng. Abstr.) **(Jpn)**

[Effect of stimulation of the central gray substance on the low- and high-threshold responses of the reticular neurons in the pons and medulla oblongata] Karpukhina MV, et al. **Neirofiziologiia** 1988;20(6):749-57 (Eng. Abstr.) **(Rus)**

[Comparative analysis of the neuronal organization of the corticocerebellar relay formations of the pons] Fanardzhian VV, et al. **Zh Evol Biokhim Fiziol** 1988 May-Jun; 24(3):335-43 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Duplex perception: some initial findings concerning its neural basis. Cranney J, et al. **Brain Cogn** 1989 Jan;9(1):48-56

Coma associated with flaccidity produced by fluid-percussion concussion in the cat. II: Contribution of activity in the pontine inhibitory system. Katayama Y, et al. **Brain Inj** 1988 Jan-Mar;2(1):51-66

Microinjection of carbachol into the pontine area is unable to modify insomnia induced by p-cholorophenylalanine (PCPA). Drucker-Colín R, et al. **Brain Res** 1988 Oct 11; 462(1):163-6

The role of the nigrotegmental GABAergic pathway in the propagation of pentylenetetrazol-induced seizures. Okada R, et al. **Brain Res** 1989 Feb 20;480(1-2):383-7

Neurons in the parabrachial nuclei respond to hemorrhage. Ward DG. **Brain Res** 1989 Jul 3;491(1):80-92

Cerebellar ataxia with recovery related to central pontine myelinolysis. Steller U, et al. **J Neurol** 1988 Jul; 235(6):379-81

Adaptive decreases in amino acids (taurine in particular), creatine, and electrolytes prevent cerebral edema in chronically hyponatremic mice: rapid correction (experimental model of central pontine myelinolysis) causes dehydration and shrinkage of brain. Thurston JH, et al. **Metab Brain Dis** 1987 Dec;2(4):223-41

[Pontine deafness--a new disease picture?] Morgenstern C, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Dec;67(12):621-3 (Eng. Abstr.) **(Ger)**

[Pressure waves induced by electrical stimulation of upper pons and lower midbrain in dogs with experimental subarachnoid hemorrhage] Kogure Y, et al. **No To Shinkei** 1989 Mar;41(3):283-8 (Eng. Abstr.) **(Jpn)**

RADIATION EFFECTS

Thresholds of cat cochlear nucleus neurons to microwave pulses. Seaman RL, et al. **Bioelectromagnetics** 1989; 10(2):147-60

RADIOGRAPHY

A syndrome of REM and non-REM sleep reduction and lateral gaze paresis after medial tegmental pontine stroke. Computed tomographic scans and anatomical correlations in four patients. Autret A, et al. **Arch Neurol** 1988 Nov;

45(11):1236–42
Primary pontine hemorrhage: clinico-computed tomographic correlations. Iwasaki Y, et al.
Comput Med Imaging Graph 1988 Nov–Dec;12(6):365–70
Lateral pontine hemorrhage: atypical clinical manifestations and good outcome. Iwasaki Y, et al.
Comput Med Imaging Graph 1988 Nov–Dec;12(6):371–3
Quantitative evaluation of pontine atrophy using computer tomography. Chida K, et al. **Neuroradiology** 1989; 31(1):13–5
[Primary pontine hemorrhage—clinical and CT analysis (report of 19 cases)] Zhang WS.
Chung Hua Fang She Hsueh Tsa Chih 1988 Oct;22(5):271–2 (Eng. Abstr.) **(Chi)**
[Post-traumatic central pontine myelinolysis] Chiara Y, et al. **Agressologie** 1988 May;29(6):427–30 (Eng. Abstr.) **(Fre)**

SURGERY

Epidermoid tumor of unusual expansion at the skull base. Malorny M, et al. **Neurosurg Rev** 1987;10(4):299–303
Spontaneous lateral pontine hemorrhage with associated trigeminal nerve root hematoma. Veerapen R.
Neurosurgery 1989 Sep;25(3):451–3; discussion 453–4

ULTRASTRUCTURE

Anatomic evidence suggestive of dendrodendritic synapses in the opossum basilar pons. Mihailoff GA.
Brain Res Bull 1978 Jul–Aug;3(4):333–40
A review of recent observations concerning the synaptic organization of the basilar pontine nuclei. Mihailoff GA, et al. **J Electron Microsc Tech** 1988 Nov;10(3):229–46 (59 ref.)
[Ultrastructure of the Mauthner neurons in goldfish fry after their adaptation to vestibular stimulation] Potemkin VV, et al. **Tsitologiia** 1989 Mar;31(3):273–6 (Eng. Abstr.) **(Rus)**

POPLITEAL ARTERY

Balloon occlusion of a pseudoaneurysm in a below-the-knee amputation stump. Selby JB Jr, et al.
AJR Am J Roentgenol 1989 Sep;153(3):625–7
Percutaneous pulsed laser-assisted balloon angioplasty guided by spectroscopy. Geschwind HJ, et al.
Am Heart J 1989 May;117(5):1147–52
Results of low speed rotational angioplasty for chronic peripheral occlusions. Vallbracht C, et al. **Am J Cardiol** 1988 Nov 1;62(13):935–40
New ultrasonic femoropopliteal and tibiofemoral tests in the study of patency of the deep venous system. Barták JV.
Angiology 1989 Aug;40(8):701–4
Catheter atherectomy: functional results in peripheral arterial disease. Langes K, et al. **Angiology** 1989 Sep;40(9):830–4
Arterial manifestations in Behçet's disease: four new cases. Dhobb M, et al. **Ann Vasc Surg** 1986 Sep;1(2):249–52
Surgical approach to the treatment of popliteal aneurysm. Lim RA, et al. **Ann Vasc Surg** 1989 Jan;3(1):1–4
Popliteal aneurysm: a celebration of the bicentennial of John Hunter's operation. Schechter DC, et al.
Ann Vasc Surg 1986 May;1(1):118–26
Tibial osteochondroma and popliteal artery compression. Kirk SJ, et al. **Br J Clin Pract** 1988 Apr;42(4):170–2
Distal sciatic nerve compression by a popliteal artery aneurysm. Beaudry Y, et al. **Can J Neurol Sci** 1989 Aug; 16(3):352–3
Percutaneous transluminal angioplasty of the superficial femoral artery by retrograde catheterization via the popliteal artery. Tønnesen KH, et al.
Cardiovasc Intervent Radiol 1988 Jun;11(3):127–31
Reversible arterial spasm in an adolescent with primary oxalosis. van Damme-Lombaerts R, et al. **Clin Nephrol** 1988 Oct;30(4):235–8 (9 ref.)
Gallium-67 citrate accumulation in a mycotic popliteal artery aneurysm. Leclerc Y, et al. **Clin Nucl Med** 1988 Aug; 13(8):571–3
Recanalisation of femoro-popliteal occlusions: improving success rate by subintimal recanalisation [letter] Bolia A, et al. **Clin Radiol** 1989 May;40(3):325
Popliteal artery occlusion by a popliteal (Baker's) cyst. Clarke JM, et al. **Eur J Vasc Surg** 1988 Feb;2(1):61–3
Popliteal arterial aneurysm. Svendsen F, et al.
Eur J Vasc Surg 1988 Feb;2(1):53–5
Intraoperative balloon angioplasty. Weber G, et al.
Eur J Vasc Surg 1989 Apr;3(2):153–7
Laser-assisted thermal angioplasty in human peripheral artery occlusions: mechanism of recanalization. Tobis J, et al. **J Am Coll Cardiol** 1989 Jun;13(7):1547–54
Long-term results of intraoperative balloon dilatation. Chin AK, et al. **J Cardiovasc Surg (Torino)** 1989 May–Jun; 30(3):454–8
The femoropopliteal segment as a source of peripheral atheroembolism. McFarland RJ, et al.
J Cardiovasc Surg (Torino) 1989 Jul–Aug;30(4):597–603
A confidence profile analysis of the results of femoropopliteal percutaneous transluminal angioplasty in the treatment of lower-extremity ischemia. Adar R, et al. **J Vasc Surg** 1989 Jul;10(1):57–67
Vein compression by arterial aneurysms. Walsh JJ, et al.
J Vasc Surg 1988 Oct;8(4):465–9
Laser angioplasty for limb salvage: observations on early results. Wright JG, et al. **J Vasc Surg** 1989 Jul;10(1):29–37; discussion 37–8
Mycotic aneurysm of the popliteal artery following right hemicolectomy. Narula A, et al. **Postgrad Med J** 1988 Aug; 64(754):638–9
Platelet deposition at angioplasty sites and its relation to restenosis in human iliac and femoropopliteal arteries. Minar E, et al. **Radiology** 1989 Mar;170(3 Pt 1):767–72
Total occlusions of the femoropopliteal artery: high technical success rate of conventional balloon angioplasty. Morgenstern BR, et al. **Radiology** 1989 Sep;172(3 Pt 2):937–40
Treatment of femoropopliteal stenoses by means of self-expandable endoprostheses: midterm results. Rousseau HP, et al. **Radiology** 1989 Sep;172(3 Pt 2):961–4
Infrapopliteal and below-knee popliteal lesions: treatment with sole laser thermal angioplasty. Work in progress. Sanborn TA, et al. **Radiology** 1989 Jul;172(1):89–93
[Aneurysms of the popliteal artery] Sørensen S, et al.
Ugeskr Laeger 1988 Oct 17;150(42):2525–7 (Eng. Abstr.) **(Dan)**
[Polyaneurysmal dystrophy] Lenot B, et al.
Ann Cardiol Angeiol (Paris) 1989 Feb;38(2):67–74 (34 ref.) (Eng. Abstr.) **(Fre)**
[Compression of the popliteal artery by a malignant fibrous histiocytoma simulating an aneurysm of the popliteal fossa] Firouz-Abadi MH, et al. **J Mal Vasc** 1988;13(3):275–9 (Eng. Abstr.) **(Fre)**
[Limb pain due to congenital trapping of the popliteal artery] Buche M, et al. **Phlebologie** 1988 Jul–Oct;41(3):642–8 (Eng. Abstr.) **(Fre)**
[X-ray computed tomography and magnetic resonance imaging in the diagnosis of trapped popliteal arteries (letter)] Fermand M, et al. **Presse Med** 1989 May 13; 18(19):983 **(Fre)**
[Recanalization of a short occlusion of the popliteal artery using the Simpson atherectomy catheter] Lugmayr H.
Acta Med Austriaca 1989;16(2):32–4 (Eng. Abstr.) **(Ger)**
[Popliteal aneurysm. A differential diagnosis of acute ischemia of the leg] Kristen R, et al.
Dtsch Med Wochenschr 1988 Dec 23;113(51–52):2013–6 (19 ref.) **(Ger)**
[Covered ruptured aneurysm of the popliteal artery] Ostertun B, et al. **ROFO** 1989 May;150(5):609–10 **(Ger)**
[Vascular endoprosthesis of femoro-popliteal occlusive disease] Triller J, et al. **ROFO** 1989 Mar;150(3):328–34 (Eng. Abstr.) **(Ger)**
[The type, scope and clinical relevance of early radiologic diagnosis of aneurysms of the popliteal artery] Gross-Fengels W, et al. **Rontgenblatter** 1988 Oct; 41(10):431–6 (Eng. Abstr.) **(Ger)**
[Popliteal artery entrapment syndrome in our experience] Bacciu PP, et al. **Minerva Cardioangiol** 1989 Mar; 37(3):129–32 (Eng. Abstr.) **(Ita)**
[Direct surgery of lesions of the femoropopliteal tract. Indications and limitations] Raso AM, et al.
Minerva Cardioangiol 1988 Jun;36(6):295–9 (Eng. Abstr.) **(Ita)**
[Fibrinolytic treatment in acute ischemia caused by thrombosed popliteal aneurysm. Apropos of 2 cases] Bonelli U, et al. **Minerva Chir** 1989 May 31;44(10):1517–20 (Eng. Abstr.) **(Ita)**
[Aneurysms of the popliteal artery. Implications in acute ischemia of the lower limb] Bortolani E, et al.
Minerva Chir 1988 Nov 15;43(21):1831–5 (Eng. Abstr.) **(Ita)**
[Cystic adventitial disease of the popliteal artery. Report of 2 cases and review of the literature] De Majo A, et al.
Minerva Chir 1989 Apr 30;44(8):1315–22 (Eng. Abstr.) **(Ita)**
[Arterio-venous popliteal fistula: a rare late complication of a civilian trauma. A clinical case and review of the literature] Seccia M, et al. **Minerva Chir** 1989 May 15; 44(9):1419–22 (15 ref.) (Eng. Abstr.) **(Ita)**
[Type III entrapment syndrome of the popliteal artery. Presentation of a clinical case with diagnostic and therapeutic discussion] Spinoglio G, et al. **Minerva Chir** 1989 May 15;44(9):1423–8 (Eng. Abstr.) **(Ita)**
[Percutaneous transluminal angioplasty of the vascular area of the lower limbs. Current indications] Lupattelli L, et al. **Radiol Med (Torino)** 1988 Sep;76(3):179–86 (Eng. Abstr.) **(Ita)**
[Cystic adventitial disease of the popliteal artery] Itoh K, et al. **Rinsho Hoshasen** 1988 Oct;33(10):1159–61 (Eng. Abstr.) **(Jpn)**
[Organizational principles of mass screening and therapeutic tactics in arterial/occlusive diseases of the lower extremities] Shraer TI, et al. **Kardiologiia** 1988 Jun; 28(6):72–6 (Eng. Abstr.) **(Rus)**
[Ultrasonic flowmetry of the arterial arch of the foot] Krakovskiĭ IA, et al. **Vestn Khir** 1988 May;140(5):52–4 **(Rus)**

ANALYSIS

Artery wall calcification: correlation of atherosclerosis with mineralization. Cichocki T, et al. **Pathologica** 1989 Mar–Apr;81(1072):139–49

ANATOMY & HISTOLOGY

[The observation and measurement of the popliteal artery and its branches] Li RX, et al.
Hua Hsi I Ko Ta Hsueh Hsueh Pao 1988 Jun;19(2):142–5 (Eng. Abstr.) **(Chi)**

INJURIES

Popliteal artery trauma: update and recent advances in management. Gnanadev DA, et al. **Ann Vasc Surg** 1988 Oct;2(4):332–5
Popliteal vessel injury caused by a plastic bullet. Best BG, et al. **Injury** 1987 Nov;18(6):428–9
Bilateral open dislocation of the knee joint. A case report. Levitsky KA, et al. **J Bone Joint Surg [Am]** 1988 Oct; 70(9):1407–9
Popliteal artery injury during anterior cruciate ligament reconstruction: brief report. Roth JH, et al.
J Bone Joint Surg [Br] 1988 Nov;70(5):840
Tibial fractures with infrapopliteal arterial injuries. Segal D, et al. **J Orthop Trauma** 1987;1(2):160–9
Penetrating popliteal artery injuries in children. Holcomb GW 3d, et al. **J Pediatr Surg** 1988 Sep;23(9):859–61
Chronic pseudoaneurysm of the popliteal artery after blunt trauma. Rosenbloom MS, et al. **J Vasc Surg** 1989 Aug; 10(2):187–9
[Acute trauma to the popliteal artery] Elbaz C.
Phlebologie 1989 Apr–Jun;42(2):251–8 (Eng. Abstr.) **(Fre)**
[Traumatic lesions of the popliteal artery] Giordanengo F, et al. **Minerva Chir** 1989 Apr 30;44(8):1207–11 (Eng. Abstr.) **(Ita)**

PATHOLOGY

Popliteal aneurysms: an index of generalized vascular disease. Cole CW, et al. **Can J Surg** 1989 Jan;32(1):65–8 (16 ref.)
Leiomyosarcomata of the popliteal vessels: rare primary tumours. Basu SK, et al. **Eur J Vasc Surg** 1988 Dec; 2(6):423–5
Popliteal artery entrapment syndrome with distal embolization. A report of two cases. Fong H, et al.
J Cardiovasc Surg (Torino) 1989 Jan–Feb;30(1):85–8
[A patient with cystic adventitia degeneration and entrapment syndrome of the popliteal artery] Stapff M, et al. **Bildgebung** 1987–89;56(2):77–80 (Eng. Abstr.) **(Ger)**
[Ultrasonic angiography in the diagnosis of occlusive diseases of major arteries of the legs] Lapin MD, et al.
Vestn Khir 1988 Sep;141(9):32–4 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

[Arterial insufficiency of the legs. Effect of controlled ischemia on the walking capacity and the ankle-arm quotient] Acevedo A, et al. **Rev Med Chil** 1988 Jul; 116(7):646–50 (Eng. Abstr.) **(Spa)**

PHYSIOPATHOLOGY

The predictive value of blood flow velocity in femoro-distal bypass. Wilson RG, et al. **Eur J Vasc Surg** 1988 Oct; 2(5):323–7
[Peripheral hemodynamics at various stages of deep vein thrombosis of the legs] Ovcharenko KI, et al.
Kardiologiia 1988 Jun;28(6):80–4 (Eng. Abstr.) **(Rus)**
[Evaluation of the status of the distal arterial bed in occlusive lesions of major arteries of the extremities] Lemen'ev VL, et al. **Vestn Khir** 1989 Mar;142(3):44–6 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Persistent sciatic artery. Case report. Gerner T, et al.
Acta Chir Scand 1988 Nov–Dec;154(11–12):667–8
Unusual causes of lower extremity ischemia. Modrall JG, et al. **Am J Emerg Med** 1989 Jan;7(1):83–7 (31 ref.)
Small vessel leg angiography for distal vessel bypass grafts. Kozak BE, et al. **J Vasc Surg** 1988 Dec;8(6):711–5
[Compression syndrome of the popliteal artery. Angiography detection and morphologic correlations] Küffer G, et al.
Vasa Suppl 1988;23:266–9 **(Ger)**
[Entrapment of the popliteal artery—diagnostic, indicative and therapeutic aspects] Raichle H, et al. **Vasa Suppl** 1988; 23:270–2 **(Ger)**
[Embolization caused by an air-gun missile presented diagnostic problems] Törngren S, et al. **Lakartidningen** 1989 Apr 5;86(14):1278–9 **(Swe)**

SURGERY

Late occlusion of expanded Teflon femoropopliteal graft due to calcification and fracture of implant. Case report. Nordstrand K, et al. **Acta Chir Scand** 1988 Jul–Aug; 154(7–8):473–4
Prospective and retrospective data compared in patients with PTFE femoropopliteal bypass grafts. Goldman M, et al.
Ann R Coll Surg Engl 1989 Jul;71(4):243–4
Distal femoropopliteal bypass using a composite graft of PTFE and non-reversed saphenous vein. Holdsworth PJ, et al. **Ann R Coll Surg Engl** 1989 Jan;71(1):4–6
The effect of postoperative smoking on femoropopliteal bypass grafts. Ameli FM, et al. **Ann Vasc Surg** 1989 Jan; 3(1):20–5
Femoropopliteal in situ saphenous vein bypass: technical aspects and factors determining patency. Becquemin JP, et al. **Ann Vasc Surg** 1987 May;1(4):432–40
Extended medial approach to the popliteal artery without muscular division. Branchereau A, et al. **Ann Vasc Surg** 1989 Jan;3(1):77–80

The in situ bypass above the knee. Buchbinder D, et al. **Ann Vasc Surg** 1989 Jul;3(3):210–3
Combined aortobifemoral and femoropopliteal bypass in the management of patients with extensive atherosclerosis. Eidt J, et al. **Ann Vasc Surg** 1987 May;1(4):453–60
Functional failure of patent femorodistal in situ grafts. Fowl RJ, et al. **Ann Vasc Surg** 1989 Jul;3(3):200–4
Adventitial cysts of the popliteal artery. Nicolau H, et al. **Ann Vasc Surg** 1988 Apr;2(2):196–8
Lateral approach to the popliteal artery. Padberg FT Jr. **Ann Vasc Surg** 1988 Oct;2(4):397–401
Vascular laboratory prediction of pedal pressure following femoropopliteal bypass. Phinney ES Jr, et al. **Ann Vasc Surg** 1988 Jan;2(1):1–5
Baker's cyst connected to popliteal artery cyst. Schroë H, et al. **Ann Vasc Surg** 1988 Oct;2(4):385–9
A five- to seven-year experience with externally-supported Dacron prostheses in axillofemoral and femoropopliteal bypass. Schultz GA, et al. **Ann Vasc Surg** 1986 Sep; 1(2):214–24
Below-knee femoropopliteal bypass using externally supported polytetrafluoroethylene (PTFE) grafts. Tuchmann A, et al. **Ann Vasc Surg** 1989 Apr;3(2):177–80
In situ versus reversed saphenous vein for femoropopliteal bypass: a prospective randomized study of 100 cases. Watelet J, et al. **Ann Vasc Surg** 1987 May;1(4):441–52
Early results of femoropopliteal bypass using a five millimeter "thin wall" polytetrafluoroethylene (Gore-Tex) prosthesis. Williams GT, et al. **Ann Vasc Surg** 1986 Sep;1(2):208–13
Femoropopliteal reconstruction for claudication. The risk to life and limb. Kent KC, et al. **Arch Surg** 1988 Oct; 123(10):1196–8
Runoff resistance and early graft failure in infrainguinal bypass surgery. Peterkin GA, et al. **Arch Surg** 1988 Oct; 123(10):1199–201
Choice of material for above-knee femoropopliteal bypass graft. Michaels JA. **Br J Surg** 1989 Jan;76(1):7–14 (83 ref.)
Above-knee femoropopliteal reconstruction with polytetrafluoroethylene: a good alternative to saphenous vein bypass. Laurendeau F, et al. **Can J Surg** 1989 Jan; 32(1):48–50
Femoro-popliteal versus femoro-distal bypass grafting for limb salvage in patients with an "isolated" popliteal segment. Darke S, et al. **Eur J Vasc Surg** 1989 Jun; 3(3):203–7
Vein bypass surgery for femoro-popliteal arteriosclerosis: influence of different risk factors on patient survival and the importance of anticoagulant treatment. Kretschmer G, et al. **Eur J Vasc Surg** 1988 Apr;2(2):77–81
The success of in situ vein grafting: early results in comparison with the reversed vein technique. Najmaldin A, et al. **Eur J Vasc Surg** 1987 Jun;1(3):165–8
Angioplasty for a failing vein graft. Parvin SD, et al. **Eur J Vasc Surg** 1989 Jun;3(3):283–4
Limitations of percutaneous transluminal angioplasty in the treatment of femoro-distal graft stenoses. Thompson JF, et al. **Eur J Vasc Surg** 1989 Jun;3(3):209–11
Percutaneous atherectomy of the popliteal artery. Overmeyer K, et al. **Indiana Med** 1989 May;82(5):362–5
Long-term results and current indications in femoropopliteal vascular reconstructions. Balas P, et al. **Int Surg** 1988 Oct-Dec;73(4):221–6 (15 ref.)
Axillo-femoral by-pass: technique and long-term results. Pietri P, et al. **Int Surg** 1988 Oct-Dec;73(4):227–31
Influence of knee flexion on femorodistal bypass hemodynamics. Sciacca V, et al. **Ital J Surg Sci** 1988; 18(4):393–5
Effects of cigarette smoking on outcome of femoral popliteal bypass for limb salvage. Ameli FM, et al. **J Cardiovasc Surg (Torino)** 1989 Jul-Aug;30(4):591–6
Study of venous and lymphatic components in the production of edema following femoropopliteal by-pass. A comparative scintigraphy and radiologic study. Herreros J, et al. **J Cardiovasc Surg (Torino)** 1988 Sep-Oct; 29(5):540–6
Exposed synthetic vascular grafts of the groin: graft preservation by means of a tensor fasciae latae flap. Ammar AD, et al. **J Vasc Surg** 1989 Aug;10(2):202–4
Axillopopliteal bypass grafting: indications, late results, and determinants of long-term patency. Ascer E, et al. **J Vasc Surg** 1989 Sep;10(3):285–91
Adventitial cystic disease of the popliteal artery: treatment by cyst removal. Mellière D, et al. **J Vasc Surg** 1988 Nov; 8(5):638–42
Is the preferential use of polytetrafluoroethylene grafts for femoropopliteal bypass justified? [letter] Michaels JA. **J Vasc Surg** 1989 Aug;10(2):212–3
Intraoperative digital real-time fluoroscopic arteriography for distal infrapopliteal arterial reconstruction. Moritz MW. **J Vasc Surg** 1989 Aug;10(2):205–7
Percutaneous laser probe femoropopliteal angioplasty: a preliminary experience. Perler BA, et al. **J Vasc Surg** 1989 Sep;10(3):351–7
Angioscope-assisted occlusion of venous tributaries with prolamine in in situ femoropopliteal bypass: preliminary results of canine experiments. Pigott JP, et al. **J Vasc Surg** 1989 May;9(5):704–8; discussion 708–9
Percutaneous angioscopy as adjunct to laser angioplasty in peripheral arteries [letter] White GH, et al. **Lancet** 1989 Jul 8;2(8654):99
Popliteal aneurysms. Farina C, et al. **Surg Gynecol Obstet** 1989 Jul;169(1):7–13
Saphenous to popliteal arteriovenous fistulas as a suitable alternative in chronic hemodialysis. Ryan JJ, et al. **Surg Gynecol Obstet** 1989 Jun;168(6):550–1
[Long-term results after implantation of the femoro-popliteal vein graft in relation to preoperative values of the ankle pressure index and peroperative flow] Teršip K, et al. **Rozhl Chir** 1989 Feb;68(2):87–93 (Eng. Abstr.) **(Cze)**
[Chronic arterial occlusive disease of the femoral-popliteal artery] Allenberg JR, et al. **Chirurg** 1989 May;60(5):322–9 **(Ger)**
[The place of postoperative angiography after vascular reconstruction] Drugová B, et al. **Radiol Diagn (Berl)** 1989; 30(2):159–63 (Eng. Abstr.) **(Ger)**
[Naftidrofuryl in patients with prosthetic femoral-popliteal bypass] Noppeney T, et al. **Vasa Suppl** 1988;24:60–6 (Eng. Abstr.) **(Ger)**
[Long-term results following femoro-popliteal vascular reconstruction] Wagner W, et al. **Zentralbl Chir** 1989; 114(3):157–68 (Eng. Abstr.) **(Ger)**
[Aneurysm of the popliteal artery. Diagnosis and therapy] Bacciu PP, et al. **Minerva Chir** 1988 Oct 15;43(19):1549–54 (Eng. Abstr.) **(Ita)**
[Role of TEA (trans-embolic anastomosis) in peripheral obstructions] De Antoni E, et al. **Minerva Chir** 1989 Feb 28;44(4):819–23 **(Ita)**
[Effect of progressive arteriosclerosis on late results of the reconstruction of the aorta and peripheral arteries] Martsinkiavichius A, et al. **Kardiologiia** 1988 Jun;28(6):12–6 (Eng. Abstr.) **(Rus)**
[Possibilities of restoring blood flow in extensive arteriosclerotic lesions of the aorta and major arteries of the lower extremities] Tiunder EO, et al. **Kardiologiia** 1989 Mar;29(3):98–9 **(Rus)**
[Reconstructive surgery of the deep femoral artery in the treatment of arteriosclerotic occlusions of the femoropopliteal segment] Karvanen ES, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):32–5 (Eng. Abstr.) **(Rus)**
[Treatment of patients with late thrombosis after reconstructive surgery of the terminal segment of the aorta and its branches] Belichenko IA, et al. **Vestn Khir** 1989 Jan;142(1):35–8 (Eng. Abstr.) **(Rus)**
[Reconstructive surgery of blood vessels of the lower extremities using the great saphenous vein in situ] Stepanov NV, et al. **Vestn Khir** 1989 Mar;142(3):136–40 (50 ref.) **(Rus)**
[Personal experience in the placing of venous grafts in femoro-popliteal bypass] Solaković E. **Acta Chir Iugosl** 1988;35(1):77–86 (Eng. Abstr.) **(Scr)**

POPLITEAL CYST see under **SYNOVIAL CYST**

POPLITEAL VEIN

Regional anatomical differences in the venographic occurrence of deep venous thrombosis and long-term follow-up. Cohen JR, et al. **J Cardiovasc Surg (Torino)** 1988 Sep-Oct;29(5):547–51
Thrombectomy for acute deep vein thrombosis: prevention of postthrombotic syndrome. Shionoya S, et al. **J Cardiovasc Surg (Torino)** 1989 May-Jun;30(3):484–9
A painful, swollen lower extremity. **J Tenn Med Assoc** 1989 Apr;82(4):198
Vein compression by arterial aneurysms. Walsh JJ, et al. **J Vasc Surg** 1988 Oct;8(4):465–9
Aneurysm of the popliteal vein with multiple pulmonary thrombo-emboli: a case report. van Adrichem NP, et al. **Neth J Surg** 1989 Feb;41(1):24–5
[Valvular substitution of the popliteal vein by double tendon transposition] Zhu SQ. **Chung Hua Wai Ko Tsa Chih** 1988 Oct;26(10):620–1, 639 (Eng. Abstr.) **(Chi)**
[Arterio-venous popliteal fistula: a rare late complication of a civilian trauma. A clinical case and review of the literature] Seccia M, et al. **Minerva Chir** 1989 May 15; 44(9):1419–22 (15 ref.) (Eng. Abstr.) **(Ita)**
[Migration of the pin into the popliteal vein after osteosynthesis of the sternoclavicular joint] Todorov TI, et al. **Ortop Travmatol Protez** 1988 May;(5):53–4 **(Rus)**

ANATOMY & HISTOLOGY

[The observation and measurement of the popliteal artery and its branches] Li RX, et al. **Hua Hsi I Ko Ta Hsueh Hsueh Pao** 1988 Jun;19(2):142–5 (Eng. Abstr.) **(Chi)**

INJURIES

Lower limb vein trauma: a long-term clinical and physiological assessment. Aitken RJ, et al. **Br J Surg** 1989 Jun;76(6):585–8
Popliteal vessel injury caused by a plastic bullet. Best BG, et al. **Injury** 1987 Nov;18(6):428–9

PATHOLOGY

Color Doppler ultrasound imaging of lower-extremity venous disease. Foley WD, et al. **AJR** 1989 Feb; 152(2):371–6
Leiomyosarcomata of the popliteal vessels: rare primary tumours. Basu SK, et al. **Eur J Vasc Surg** 1988 Dec; 2(6):423–5
The assessment of primary varicose veins by Doppler ultrasound—the role of sapheno-popliteal incompetence and the short saphenous systems in calf varicosities. Mitchell DC, et al. **Eur J Vasc Surg** 1987 Apr;1(2):113–5
Can pre-operative duplex scanning replace pre-operative short saphenous venography as an aid to localizing the sapheno-popliteal junction? Sugrue M, et al. **Phlebologie** 1988 Nov-Dec;41(4):722–5
Intra-vascular leiomyoma of the popliteal vein. Grimer RJ, et al. **Postgrad Med J** 1988 Mar;64(749):247–8

PHYSIOPATHOLOGY

Noninvasive diagnosis and quantitation of popliteal reflux in the swollen and ulcerated leg. Christopoulos D, et al. **J Cardiovasc Surg (Torino)** 1988 Sep-Oct;29(5):535–9
[Effect of functional disorders of deep veins of the lower extremities on the clinical course of varicose veins] Gladkikh VG, et al. **Vestn Khir** 1987 Dec;139(12):50–3 (Eng. Abstr.) **(Rus)**

RADIOGRAPHY

Case report: transthoracic retrograde venous bullet embolization. Schmelzer V, et al. **J Trauma** 1989 Apr; 29(4):525–7
[Transpopliteal phlebography in the diagnosis of chronic diseases of the veins of the lower extremities] Konstantinova GD, et al. **Khirurgiia (Mosk)** 1989 Mar; (3):47–52 (Eng. Abstr.) **(Rus)**

SURGERY

Vein valve transplantation segmental transposition: a case report. Márk B, et al. **Acta Chir Hung** 1989;30(2):89–96
Popliteal venous aneurysm. Helsted M, et al. **Eur J Vasc Surg** 1988 Aug;2(4):263–5
Dual function of the distal arteriovenous fistula for maintenance of arterial and venous prosthetic graft patency in the lower extremity. Miller N, et al. **J Cardiovasc Surg (Torino)** 1989 Mar-Apr;30(2):225–9
Long term results of vein valve transplants placed in the popliteal vein for intractable post-phlebitic venous ulcers and pre-ulcer skin changes. Nash T. **J Cardiovasc Surg (Torino)** 1988 Nov-Dec;29(6):712–6
A demonstration of vascular proliferation in response to arteriovenous reversal in the ischemic canine hind limb. Graham AM, et al. **J Surg Res** 1989 Oct;47(4):341–7
[Popliteo-femoral venous reconstruction: indications and results] Stockmann U, et al. **Langenbecks Arch Chir** 1988; Suppl 2:177–80 (Eng. Abstr.) **(Ger)**
[Surgery of the saphenous-popliteal junction in the treatment of initial insufficiency of the small saphenous vein] Pampari GC, et al. **Acta Biomed Ateneo Parmense** 1988; 59(3–4):111–5 (Eng. Abstr.) **(Ita)**
[Diagnosis and treatment of thrombosis and thrombophlebitis of deep veins of the lower extremities] Kovalenko PP, et al. **Kardiologiia** 1989 Mar;29(3):99–100 **(Rus)**
[Surgical correction and reconstruction of the valves of the femoro-popliteal segment of deep veins] Driuk NF, et al. **Vestn Khir** 1988 Jun;140(6):134–7 **(Rus)**

POPULATION

Sugar as an emergency populace dosimeter for radiation accidents. Nakajima T. **Health Phys** 1988 Dec;55(6):951–5
A preliminary investigation of the relationship between certain practice characteristics and practice location: chiropractor-population ratio. Leboeuf C, et al. **J Manipulative Physiol Ther** 1989 Aug;12(4):253–8
Convergence to stationary distributions in two-species stochastic competition models. Ellner S. **J Math Biol** 1989; 27(4):451–62
Population ecology of intestinal helminth infections in human communities. Bundy DA. **Philos Trans R Soc Lond [Biol]** 1988 Oct 31; 321(1207):405–20 (69 ref.)
A note on the consistency of life tables for total populations with those for their subpopulations. Das Gupta P. **Soc Biol** 1988 Spring-Summer;35(1–2):158–63
Liberia 1986: results from the Demographic and Health Survey. **Stud Fam Plann** 1988 Jul-Aug;19(4):250–4
[Basic principles in statistics; IV. Target populations and study populations in medical and scientific research] Rümke CL. **Ned Tijdschr Geneeskd** 1988 Aug 13;132(33):1523–4 **(Dut)**
[Principles of statistics; III. Random sampling and random allocation] Rümke CL. **Ned Tijdschr Geneeskd** 1988 Aug 6;132(32):1472–5 **(Dut)**
[Free choice of physician—geographic association—system of lists] Bruusgaard D, et al. **Tidsskr Nor Laegeforen** 1988 Oct 25;108(29B):2620–3 **(Nor)**

POPULATION CONTROL

see related
ABORTION, LEGAL
FAMILY PLANNING
STERILIZATION, SEXUAL

World population problems: an overview. Potts M. **Clin Obstet Gynecol** 1989 Jun;32(2):329–38
Population and family planning: an international perspective. Donaldson PJ, et al. **Fam Plann Perspect** 1988 Nov-Dec; 20(6):307–11, 320
China and population control [letter] **JAMA** 1989 Sep 1; 262(9):1186–7
One child, one family. Ma E. **JAMA** 1989 Mar 24–31;

261(12):1735–6
Technology, power and the state. Mazzeo JA. **Women Health** 1987;13(1–2):211–5

POPULATION DENSITY

see related
CROWDING
SOCIAL ISOLATION

Ethnic density is unrelated to incidence of schizophrenia. Cochrane R, et al. **Br J Psychiatry** 1988 Sep;153:363–6
Cancer, population density and environmental radiation in India [letter] Archer VE. **Health Phys** 1988 Nov; 55(5):824–7
Aggregation and the competitive exclusion principle. Britton NF. **J Theor Biol** 1989 Jan 9;136(1):57–66
Population density estimation. Katz D. **Prog Food Nutr Sci** 1988;12(3):325–38
One selectionist's perspective. Wallace B. **Q Rev Biol** 1989 Jun;64(2):127–45 (66 ref.)
Models of growth with density regulation in more than one life stage. Rodriguez DJ. **Theor Popul Biol** 1988 Oct; 34(2):93–117
[Arctic regions and their populations] Naukkarinen A. **Duodecim** 1989;105(5):399–405 **(Fin)**
[Medico-genetic study of the population of Kostroma Province. VI. The parameters of isolation by distance in the populations of the Bui and Shar'ya Districts of Kostroma Province] El'chinova GI, et al. **Genetika** 1988 Jul;24(7):1276–81 (Eng. Abstr.) **(Rus)**
[A method of calculation of integral health status indicators in the complex hygienic evaluation of territories of different hierarchical levels] Sokhoshko IA, et al. **Gig Sanit** 1988 Jul;(7):63–5 **(Rus)**
[Quality of health care in regions with low population density] Askalonov AA. **Sov Zdravookhr** 1988;(11):13–6 (Eng. Abstr.) **(Rus)**

POPULATION DISTRIBUTION see DEMOGRAPHY

POPULATION DYNAMICS

The discovery of the aged in the Third World. Evans JG. **Acad Med** 1989 Feb;64(2):75–8
Association of birth rates with child health and human welfare. A global view. Greep RO. **Ann N Y Acad Sci** 1988;549:166–79
An aging society. The government's response to meeting health care needs. Weinstein BE, et al. **ASHA** 1989 Apr; 31(4):67–9
Bayesian methods for multiple capture–recapture surveys. Smith PJ. **Biometrics** 1988 Dec;44(4):1177–89
On the incompatibility of Gompertz or Weibull survival dynamics with exponentially distributed individual lifespans. Guess F, et al. **Bull Math Biol** 1988;50(2):187–92
Persistence in discrete age-structured population models. Li J. **Bull Math Biol** 1988;50(4):351–66
Age structure, the life course and "aged heterogeneity": prospects for research and theory. Dannefer D, et al. **Compr Gerontol [B]** 1988 Apr;2(1):1–10
Interregional flows of economically active persons in France, 1975–1982. Dean KG. **Demography** 1988 Feb;25(1):81–98
Monitoring the metropolitanization process. Fuguitt GV, et al. **Demography** 1988 Feb;25(1):115–28
Heterogeneity and the implied dynamics of regional growth rates: was the nonmetropolitan turnaround an artifact of aggregation? Kephart G. **Demography** 1988 Feb; 25(1):99–113
U.S. births and limit cycle models. Wachter KW, et al. **Demography** 1989 Feb;26(1):99–115
Components of change in migration and destination-propensity rates for metropolitan and nonmetropolitan areas: 1935–1980. Wilson FD. **Demography** 1988 Feb;25(1):129–39
The impact of migration on air quality dose–response functions: a case study of Jacksonville, Florida. Erfani G, et al. **JAPCA** 1988 Jul;38(7):917–20
Beyond the thrifty gene: metabolic implications of prehistoric migration into the New World. Ritenbaugh C, et al. **Med Anthropol** 1989 Jun;11(3):227–36
The population dynamics of two vertically transmitted infections. Busenberg S, et al. **Theor Popul Biol** 1988 Apr; 33(2):181–98
Processes of pair formation leading to assortative mating in biological populations: dynamic interaction model. Gimelfarb A. **Theor Popul Biol** 1988 Aug;34(1):1–23
An uncertain life: demography in random environments. Tuljapurkar S. **Theor Popul Biol** 1989 Jun;35(3):227–94
Research for tomorrow's elderly. Myers GC. **Vital Health Stat [4]** 1988 Dec;(25):119–30
[The elderly: ethics and discrimination (editorial)] Munnichs JM. **Tijdschr Gerontol Geriatr** 1988 Dec;19(6):275 **(Dut)**
[The role of population migration in the spread of opisthorchiasis from an Ob'-Irtysh invasion focus] Pustovalova VIa. **Med Parazitol (Mosk)** 1989 Mar–Apr; (2):14–6 (Eng. Abstr.) **(Rus)**
[SIMULAPOP, a computer program that simulates the dynamics of a small human population using the Monte Carlo method] Valdez-Alayón R, et al. **Acta Cient Venez** 1988;39(1):32–40 (Eng. Abstr.) **(Spa)**
[Adult health in Latin America. Present situation and perspectives] Anzola Pérez E. **Educ Med Salud** 1989 Jan–Mar;23(1):75–86 **(Spa)**
[The demographic situation and perspectives in Mexico. November 30, 1973 (historical article)] Cabrera G. **Salud Publica Mex** 1989 Mar–Apr;31(2):227–37 **(Spa)**

STATISTICS & NUMERICAL DATA

Projecting the older population of the United States: lessons from the past and prospects for the future. Guralnik JM, et al. **Milbank Q** 1988;66(2):283–308
Extinction dynamics of age-structured populations in a fluctuating environment. Lande R, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7418–21

TRENDS

Age-specific growth rates: the legacy of past population dynamics. Horiuchi S, et al. **Demography** 1988 Aug; 25(3):429–41
Stability over time in the distribution of population forecast errors. Smith SK, et al. **Demography** 1988 Aug;25(3):461–74

POPULATION EXPLOSION see POPULATION GROWTH

POPULATION GROWTH

Projected increases in the number of dementia cases for 29 developed countries: application of a new method for making projections. Jorm AF, et al. **Acta Psychiatr Scand** 1988 Oct;78(4):493–500
Association of birth rates with child health and human welfare. A global view. Greep RO. **Ann N Y Acad Sci** 1988;549:166–79
Excrement, effluent and exhalations [letter] **Can Med Assoc J** 1988 Nov 15;139(10):933–4
Excrement, effluent and exhalations [letter] Thomson GT, et al. **Can Med Assoc J** 1989 Feb 1;140(3):264
World population problems: an overview. Potts M. **Clin Obstet Gynecol** 1989 Jun;32(2):329–38
Heterogeneity and the implied dynamics of regional growth rates: was the nonmetropolitan turnaround an artifact of aggregation? Kephart G. **Demography** 1988 Feb; 25(1):99–113
The replacement effect and comparisons of per capita income across countries: a short note. Mason A. **Demography** 1988 Feb;25(1):141–4
The challenge of leadership in allied health for the twenty-first century. Adams FG. **J Allied Health** 1989 Summer;18(4):329–33
Medical research and population control in the USA [editorial] Ambrus JL. **J Med** 1988;19(2):65
The disease of overpopulation. Crowley DF. **Pharos** 1989 Winter;52(1):2–6
The elderly mobility transition. Growth, concentration, and tempo. Rogers A. **Res Aging** 1989 Mar;11(1):3–32 (34 ref.)
The growing human population. Keyfitz N. **Sci Am** 1989 Sep;261(3):119–26
Hispanic Americans: an emerging group. Part 1. Magnitude, ethnicity and geographic location. **Stat Bull Metrop Insur Co** 1988 Oct–Dec;69(4):2–7
Population growth of large metropolitan areas. **Stat Bull Metrop Insur Co** 1989 Apr–Jun;70(2):32–5
Hispanic Americans: an emerging group. Part 2. Profile of diverse characteristics. **Stat Bull Metrop Insur Co** 1988 Oct–Dec;69(4):8–12
Models of growth with density regulation in more than one life stage. Rodriguez DJ. **Theor Popul Biol** 1988 Oct; 34(2):93–117
Population pressure and the medical profession. Sadik N. **Trop Geogr Med** 1988 Jul;40(3):S40–5
[Socioeconomic problems of worldwide population growth after the year 2000] Kociánová H. **Cas Lek Cesk** 1989 Mar 17;128(12):353–9 (Eng. Abstr.) **(Cze)**
[Research on elderly populations—the importance of the methods and training of the team: a methodologic contribution] Veras RP, et al. **Rev Saude Publica** 1988 Dec; 22(6):513–8 (Eng. Abstr.) **(Por)**
[Demographic and economic development in contemporary Mexico] Alba F. **Salud Publica Mex** 1989 Mar–Apr; 31(2):163–7 (Eng. Abstr.) **(Spa)**
[Demographic and epidemiologic transition: problems for research] José MV, et al. **Salud Publica Mex** 1989 Mar–Apr; 31(2):196–205 (Eng. Abstr.) **(Spa)**
[The population and the environment] Urquidi VL. **Salud Publica Mex** 1989 Mar–Apr;31(2):212–6 (Eng. Abstr.) **(Spa)**
[Demographic growth and development in Latin America] Urquidi VL. **Salud Publica Mex** 1989 Mar–Apr; 31(2):219–26 **(Spa)**

TRENDS

Age-specific growth rates: the legacy of past population dynamics. Horiuchi S, et al. **Demography** 1988 Aug; 25(3):429–41
Investment for an aging population [editorial] Schwartz RG. **Stat Bull Metrop Insur Co** 1989 Jul–Sep;70(3):2
Projections of the population of states by age. Wetrogan SI. **Stat Bull Metrop Insur Co** 1989 Jul–Sep;70(3):3–10
[The aged in France] Jani-Le Bris H. **ZFA** 1989 May–Jun; 44(3):155–68 **(Ger)**

POPULATION SURVEILLANCE

Lipo- and apolipoproteins in a population survey subset in MONICA-Israel. Brunner D, et al. **Acta Med Scand Suppl** 1988;728:159–64
Comparison of cardiovascular risk factor levels in two French populations: Haute-Garonne (Toulouse) and Bas-Rhin (Strasbourg). Douste-Blazy P, et al. **Acta Med Scand Suppl** 1988;728:137–43
The cardiovascular risk factor profile in the study area Augsburg. Results from the first MONICA survey 1984/85. Keil U, et al. **Acta Med Scand Suppl** 1988;728:119–28
Factors influencing total cholesterol and high-density lipoprotein cholesterol concentrations in a population at high coronary risk. Patterson CC, et al. **Acta Med Scand Suppl** 1988;728:150–8
Pol-MONICA Cracow on-going study: initial findings. Sznajd J, et al. **Acta Med Scand Suppl** 1988;728:106–12
Combining repeated blood pressure measurements to obtain prevalences of high blood pressure. Wietlisbach V, et al. **Acta Med Scand Suppl** 1988;728:165–8
Exercise habits and sleep in a middle-aged Finnish population. Hasan J, et al. **Acta Physiol Scand Suppl** 1988; 574:33–5
Epidemiological aspects of sleep in general public and hospital outpatient samples. Shapiro CM, et al. **Acta Physiol Scand Suppl** 1988;574:41–3
Epidemiology of exercise effects on sleep. Vuori I, et al. **Acta Physiol Scand Suppl** 1988;574:3–7
Relationship of alcohol consumption to diet: a population-based study in Hawaii. Le Marchand L, et al. **Am J Clin Nutr** 1989 Mar;49(3):567–72
Consumer product-related injuries in Athens, Ohio, 1980–85: assessment of emergency room-based surveillance. Hopkins RS. **Am J Prev Med** 1989 Mar–Apr;5(2):104–12
Martial arts injuries. The results of a five year national survey. Birrer RB, et al. **Am J Sports Med** 1988 Jul–Aug; 16(4):408–10
Mortality associated with respiratory function and symptoms in advanced age. The Framingham Study. Sorlie PD, et al. **Am Rev Respir Dis** 1989 Aug;140(2):379–84
Occupational illness: case detection by poison control surveillance. Blanc PD, et al. **Ann Intern Med** 1989 Aug 1;111(3):238–44
Prevalence of hepatitis B antigen among randomized representative urban and rural populations in Gabon. Dupont A, et al. **Ann Soc Belg Med Trop** 1988 Jun; 68(2):157–8
Demography of penetrating cardiac trauma. Naughton MJ, et al. **Ann Surg** 1989 Jun;209(6):676–81; discussion 682–3
Evaluation of serology as a tool for malaria surveillance in East Champaran District of Bihar, India. Ray K, et al. **Ann Trop Med Parasitol** 1988 Jun;82(3):225–8
Report from the British Paediatric Surveillance Unit. Hall SM, et al. **Arch Dis Child** 1988 Sep;63(9):1117–8
Epidemiological surveillance of the resistance to antimicrobial agents in pathogenic or potentially pathogenic germs of medical interest. Dorobăţ O, et al. **Arch Roum Pathol Exp Microbiol** 1988 Jul–Dec; 47(3–4):163–203
Surveillance of Streptococcus pneumoniae infection during 1974–1981. Mihalcu F, et al. **Arch Roum Pathol Exp Microbiol** 1983 Jan–Mar; 42(1):65–74
Changes in surveillance of HIV and AIDS [news] **BMJ** 1989 Jul 22;299(6693):222
Screening: the inadequacy of population registers [editorial] [see comments] Bowling A, et al. **BMJ** 1989 Mar 4; 298(6673):545–6. **Comment in:** BMJ 1989 Apr 8;298(6678):963
Surveillance of AIDS cases: how acceptable are the figures? Duff C, et al. **BMJ** 1988 Oct 15;297(6654):965
Surveillance programme for the control of foodborne infections and intoxications in Europe: the first 6 years' experience in Scotland, 1980–85. Sharp JC, et al. **Bull WHO** 1988;66(4):471–6
AIDS surveillance—worldwide. **Can Dis Wkly Rep** 1988 Jul 16;14(28):128 **(Eng, Fre)**
AIDS surveillance in Canada. **Can Dis Wkly Rep** 1988 Jul 16;14(28):126–8 **(Eng, Fre)**
Morbidity studies: are population-based data a useful benchmark for studying morbidity in special groups? Hertzman C. **Can J Public Health** 1988 Sep–Oct; 79(5):386–7
The use of chewing tobacco and snuff in Canada, 1986. Millar WJ. **Can J Public Health** 1989 Mar–Apr;80(2):131–5
A population-based diabetes register—development & applications. Brown LJ, et al. **Community Health Stud** 1988; 12(4):437–43
Surveillance of influenza A and B viruses in Italy between 1984 and 1987. Mancini G, et al. **Eur J Epidemiol** 1988 Dec;4(4):445–50
The need for national pregnancy mortality surveillance. Atrash HK, et al. **Fam Plann Perspect** 1989 Jan–Feb; 21(1):25–6
Screening and surveillance for colorectal cancer. Kinzie JL, et al. **Gastroenterol Clin North Am** 1988 Dec;17(4):793–809 (99 ref.)
A nationwide evaluation of multiple congenital abnormalities in Hungary. Czeizel A, et al. **Genet Epidemiol** 1988; 5(3):183–202
The Chief Scientist reports ... review of computer mapping

of health data. Nimmo AW. **Health Bull (Edinb)** 1989 Jan; 47(1):40–8

Doses to patients from dental radiology in France. Benedittini M, et al. **Health Phys** 1989 Jun;56(6):903–10

Changes in per capita and collective dose equivalent due to natural radiation in Taiwan (1950–1983). Chu TC, et al. **Health Phys** 1989 Feb;56(2):201–17

Damage criteria for determining microwave exposure. Servantie B. **Health Phys** 1989 May;56(5):781–6 (15 ref.)

Dose levels of medical exposure from diagnostic x-ray procedures in Beijing, China [letter] Zheng JZ. **Health Phys** 1989 Jun;56(6):957–8

The characteristics and mode of detection of the new patients encountered in the leprosy endemic province of Van within the last five years. Saylan T, et al. **Indian J Lepr** 1989 Apr; 61(2):225–8

Case definitions in the surveillance of vaccine preventable diseases. Sokhey J, et al. **Indian Pediatr** 1988 Jul; 25(7):599–604

The computerization of the Cardiff Births Survey. Johns KA. **Int J Biomed Comput** 1988 Oct;23(1–2):43–55

Epidemiological surveillance in Peace Corps Volunteers: a model for monitoring health in temporary residents of developing countries. Bernard KW, et al. **Int J Epidemiol** 1989 Mar;18(1):220–6

Use of surveillance systems for occupational cancer: data from the Danish National system. Lynge E, et al. **Int J Epidemiol** 1988 Sep;17(3):493–500

Fall injuries among the elderly. Community-based surveillance. DeVito CA, et al. **J Am Geriatr Soc** 1988 Nov;36(11):1029–35

Issues in disease surveillance. Kim-Farley RJ, et al. **J Commun Dis** 1988 Mar;20(1):70–8

The science of public health surveillance. Thacker SB, et al. **J Public Health Policy** 1989 Summer;10(2):187–203

From the Centers of Disease Control. Enterovirus surveillance—United States, 1989. **JAMA** 1989 Sep 15; 262(11):1456

Epidemiological surveillance of human immunodeficiency virus infection in southern Taiwan. Ko YC, et al. **Kao Hsiung I Hsueh Ko Hsueh Tsa Chih** 1988 Dec; 4(12):667–76

Close-contact surveys and mass-screening studies for leprosy in Turkey. Aytekin AH, et al. **Lepr Rev** 1988 Sep; 59(3):225–9

Population-based epidemiology of human immunodeficiency virus infection in Western Australia. Western Australian AIDS Advisory Committee. Holman CD, et al. **Med J Aust** 1989 Apr 3;150(7):362–4, 367, 370

Population surveillance of sentinel anomalies. Czeizel A. **Mutat Res** 1989 May;212(1):3–9

Stroke in a French prospective population study. Giroud M, et al. **Neuroepidemiology** 1989;8(2):97–104

Frequency of and risk factors for allergy in primary school children: results of a population survey. Angioni AM, et al. **Paediatr Perinat Epidemiol** 1989 Jul;3(3):248–55

Estimation and assessment of population doses from diagnostic X-ray procedures in Beijing. Zheng JZ, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(1):12–9

The current and potential status of screening for prostatic cancer in asymptomatic populations. Murphy GP. **Prog Clin Biol Res** 1989;303:19–25 (16 ref.)

Prevalence of hypertension in Sri Lanka. A large population study in the central province. Mendis S, et al. **Public Health** 1988 Sep;102(5):455–62

Report of the Second Public Health Service AIDS Prevention and Control Conference. Report of the workgroup on epidemiology and surveillance [published erratum appears in Public Health Rep 1989 Mar-Apr;104(2):208] **Public Health Rep** 1988;103 Suppl 1:10–8

Contrast between epidemiological and clinical concepts of rheumatoid arthritis. Isomäki H, et al. **Scand J Rheumatol Suppl** 1988;74:29–32

Evaluation of a system for injury surveillance in Swedish emergency care. Jansson B, et al. **Scand J Soc Med** 1989; 17(1):7–11

Repeated surveillance of lead poisoning among children. Silvany-Neto AM, et al. **Sci Total Environ** 1989 Jan; 78:179–86

Cornell Medical Index responses and mortality in a Polynesian population. Crews DE, et al. **Soc Sci Med** 1988; 27(12):1433–7

A pilot study of community cholesterol screening. Scheidt-Nave C, et al. **Soz Praventivmed** 1988; 33(4–5):217–22

Analysis of surveillance data: a rationale for statistical tests with comments on confidence intervals and statistical models. Hall DB. **Stat Med** 1989 Mar;8(3):273–8; discussion 279–81

Analysis of surveillance data with Poisson regression: a case study. Parker RA. **Stat Med** 1989 Mar;8(3):285–94; discussion 331–2

An analysis of disease surveillance data that uses the geographic locations of the reporting units. Raubertas RF. **Stat Med** 1989 Mar;8(3):267–71; discussion 279–81

A surveillance system based on a short memory scheme. Shore DL, et al. **Stat Med** 1989 Mar;8(3):311–22; discussion 331–2

Geographical variation in the major risk factors of coronary heart disease in men and women aged 35–64 years. The WHO MONICA Project. **World Health Stat Q** 1988; 41(3–4):115–40

[Epidemiological aspects of Campylobacter infections in Belgium] Walckiers D, et al. **Acta Clin Belg** 1989;44(1):10–6 (Eng. Abstr.) **(Fre)**

[Evaluation of coverage under the national plan for measles and rubella vaccination based on a sample of schools] Goulet V, et al. **Ann Pediatr (Paris)** 1989 Jan;36(1):43–8 (Eng. Abstr.) **(Fre)**

[Epidemiology of blindness in the Bouche-du-Rhône area. Methodological approach] Queguiner P, et al. **Bull Soc Ophtalmol Fr** 1988 Jan;88(1):21–2, 25–6 **(Fre)**

[Royat's epidemiologic survey of stage II obliterative arteriopathy of the lower limbs. 6-year intermediate results (letter)] Fabry R, et al. **J Mal Vasc** 1988;13(3):286–7 **(Fre)**

[Evaluation of the work conducted by the Madagascar Pasteur Institute in the study of human immunodeficiency virus (HIV) seropositivity in that country] Genin C, et al. **Med Trop (Mars)** 1988 Oct-Dec;48(4):397–9 (Eng. Abstr.) **(Fre)**

[Epidemiologic surveillance of the acquired immunodeficiency syndrome in 6 states of Central Africa] Merlin M, et al. **Med Trop (Mars)** 1988 Oct-Dec; 48(4):381–9 (Eng. Abstr.) **(Fre)**

[Exhaustive epidemiological surveys of the general population (letter)] Charpin D, et al. **Rev Epidemiol Sante Publique** 1988;36(6):489–90 **(Fre)**

[Epidemiologic surveillance of congenital abnormalities using the EUROCAT Register] De Wals P, et al. **Rev Epidemiol Sante Publique** 1988;36(4–5):273–82 (Eng. Abstr.) **(Fre)**

[Relationship between the development of the health status and the activity of the health care system in developed countries] Jougla E, et al. **Rev Epidemiol Sante Publique** 1988;36(6):464–84 (144 ref.) (Eng. Abstr.) **(Fre)**

[Injuries and poisoning caused by various types of activities. Epidemiologic survey on death and hospitalization in Aquitaine] Nicaud V, et al. **Rev Epidemiol Sante Publique** 1989;37(2):127–36 (Eng. Abstr.) **(Fre)**

[Epidemiology of smoking in the Wilaya population of Algeria] Skander F, et al. **Rev Epidemiol Sante Publique** 1989;37(2):143–8 (Eng. Abstr.) **(Fre)**

[Protein electrophoresis and the quantitative determination of immunoglobulins: Tunisian standards] Gargouri J, et al. **Tunis Med** 1989 Jan;67(1):47–52 (Eng. Abstr.) **(Fre)**

[Results of epidemiological studies of allergic diseases] Schata M, et al. **Schweiz Rundsch Med Prax** 1988 Aug 23; 77(34):884–8 (Eng. Abstr.) **(Ger)**

[Health status indicators and outpatient services] Dehmel HH. **Z Arztl Fortbild (Jena)** 1988;82(19):961–2 **(Ger)**

[Indicators of population-related health status of children and adolescents] Müller D, et al. **Z Arztl Fortbild (Jena)** 1988;82(19):951–2 **(Ger)**

[Proposal for a protocol for the biological monitoring and health surveillance of workers exposed to inorganic lead] Alessio L, et al. **Med Lav** 1988 Jan-Feb;79(1):78–81 (Eng. Abstr.) **(Ita)**

[Estimation of frequency, population doses and stochastic risks in medical uses of radiopharmaceuticals in Japan, 1982. 2. Determination of organ or tissue doses and effective dose equivalents] Maruyama T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Dec 25; 48(12):1536–43 (Eng. Abstr.) **(Jpn)**

[Estimation of frequency, population doses and stochastic risks in medical uses of radiopharmaceuticals in Japan, 1982. 3. Population doses and risk estimates] Maruyama T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Dec 25;48(12):1544–52 (Eng. Abstr.) **(Jpn)**

[Surveillance and control of occupational contamination by the human immunodeficiency virus. Possible prevention measures] Ciufecu C, et al. **Rev Ig [Bacteriol]** 1989 Apr-Jun; 34(2):97–106 **(Rum)**

[Comparative evaluation of mortality and incidence of ischemic heart disease among participants and non-participants in a population study] Tamoshiunas AA, et al. **Kardiologiia** 1989 Mar;29(3):78–81 (Eng. Abstr.) **(Rus)**

[Evaluation of indices of the immune status in children during ambulatory care of the entire population] Matveeva LA, et al. **Lab Delo** 1989;(3):26–9 (Eng. Abstr.) **(Rus)**

[A land survey of foci as the basis for epidemiologic surveillance of opisthorchiasis] Malev VA, et al. **Med Parazitol (Mosk)** 1988 Sep-Oct;(5):37–40 (Eng. Abstr.) **(Rus)**

[The history of the population census in Russia] Gribanov ED. **Sov Zdravookhr** 1989;(1):71–4 **(Rus)**

[Improving the structure of regional sanitary-epidemiologic stations] Shestopalov NV. **Sov Zdravookhr** 1988;(11):7–8 (Eng. Abstr.) **(Rus)**

[The significance of the level of immunity in organized collectives in performing epidemiologic surveillance for diphtheria, tetanus and measles] Kolkov VF, et al. **Voen Med Zh** 1988 Jul;(7):46–9 **(Rus)**

[Multi-year observations of the humoral immunity status of patients with tick-borne encephalitis in 3 endemic regions] Karavanov AS, et al. **Vopr Virusol** 1988 Jul-Aug; 33(4):452–5 (Eng. Abstr.) **(Rus)**

[Epidemiological surveillance] Anchishkin AI. **Zh Mikrobiol Epidemiol Immunobiol** 1989 Mar;(3):57–8 (Eng. Abstr.) **(Rus)**

[The role and place of serologic research in the system of epidemiologic surveillance of meningococcal infection] Kostiukova NN, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Nov;(11):36–41 (Eng. Abstr.) **(Rus)**

[The epidemic process of diphtheria infection in the RSFSR during the introduction of epidemiological surveillance] Markina SS, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1989 May;(5):38–42 (Eng. Abstr.) **(Rus)**

[Work experience in optimizing epidemiologic health surveillance of intestinal infections at the provincial level] Nikonov BI, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Nov;(11):120–2 **(Rus)**

[The notification of 6 diseases with mandatory reporting in 3 provinces of Catalonia] Ollé Goig JE. **Gac Sanit** 1988 Jul-Aug;2(7):194–6 (Eng. Abstr.) **(Spa)**

[The surveillance system. Recent aspects of its organization and improvement] Menéndez Valonga MC, et al. **Rev Cubana Med Trop** 1988 May-Aug;40(2):109–17 (Eng. Abstr.) **(Spa)**

METHODS

Diagnostic criteria and quality control of the registration of stroke events in the MONICA project. Asplund K, et al. **Acta Med Scand Suppl** 1988;728:26–39

Coronary events in the Hunter region of New South Wales, Australia: 1984–1986. Dobson AJ, et al. **Acta Med Scand Suppl** 1988;728:84–9

Risk factors in the population of the GDR-MONICA Study (1983/84). Heinemann L, et al. **Acta Med Scand Suppl** 1988; 728:144–9

Myocardial Infarction Register in MONICA-Czechoslovakia Centre. Skodová Z, et al. **Acta Med Scand Suppl** 1988; 728:79–83

Problems with criteria and quality control in the registration of coronary events in the MONICA study. Tunstall-Pedoe H. **Acta Med Scand Suppl** 1988;728:17–25

The Sino-MONICA-Beijing Study: report on results between 1984 and 1986. Wu ZS, et al. **Acta Med Scand Suppl** 1988;728:60–6

Use of the hospital postpartum period for population-based research. Stewart PJ, et al. **Can J Public Health** 1989 Jan-Feb;80(1):63–6

STANDARDS

Re: The evaluation of microscopic hematuria: a population-based study [letter] Mohr DN, et al. **J Urol** 1988 Dec;140(6):1557–8

PORCELAIN see **DENTAL PORCELAIN**

PORCINE XENOGRAFT BIOPROSTHESIS see **BIOPROSTHESIS**

PORCUPINES see **RODENTIA**

PORFIROMYCIN see under **MITOMYCINS**

PORGIES see **PERCIFORMES**

PORIFERA

ANALYSIS

Inhibitory effect of a marine-sponge toxin, okadaic acid, on protein phosphatases. Specificity and kinetics. Bialojan C, et al. **Biochem J** 1988 Nov 15;256(1):283–90

The sterol composition of the marine sponge Aplysina (= Verongia) archeri: a comparative study of the Verongidae. Carballeira NM, et al. **Comp Biochem Physiol [B]** 1989; 93(1):175–9

Luffolide, a novel anti-inflammatory terpene from the sponge Luffariella sp.. Kernan MR, et al. **Experientia** 1989 Apr 15;45(4):388–90

The structure of eryloside A, a new antitumor and antifungal 4-methylated steroidal glycoside from the sponge Erylus lendenfeldi. Carmely S, et al. **J Nat Prod** 1989 Jan-Feb; 52(1):167–70

A new bioactive derivative of avarol from the marine sponge Dysidea avara. Crispino A, et al. **J Nat Prod** 1989 May-Jun; 52(3):646–8

Sesterterpenes from a Pacific sponge, Carteriospongia flabellifera [published erratum appears in J Nat Prod 1988 Nov-Dec;51(6):1112] Schmitz FJ, et al. **J Nat Prod** 1988 Jul-Aug;51(4):745–8

On the isolation of the new fatty acid 6,11-eicosadienoic (20:2) and related 6,11-dienoic acids from the sponge Eurypongia rosea. Carballeira NM, et al. **Lipids** 1989 Jul; 24(7):665–8

On the isolation of 2-hydroxydocosanoic and 2-hydroxytricosanoic acids from the marine sponge Amphimedon compressa. Carballeira NM, et al. **Lipids** 1989 Jan;24(1):89–91

Cell membrane localization of long chain C24–C30 fatty acids in two marine demosponges. Lawson MP, et al. **Lipids** 1988 Aug;23(8):741–9

Cell membrane localization of sterols with conventional and unusual side chains in two marine demosponges. Lawson MP, et al. **Lipids** 1988 Aug;23(8):750–4

Three new 7-keto sterols from the Mediterranean sponge Clathrina clathrus. Aiello A, et al. **Steroids** 1988 Nov-Dec; 52(5-6):533-42

[Caroteno-protein complexes in Axinella verrucosa (Porifera: Demospongae)] Santoro P, et al. **Boll Soc Ital Biol Sper** 1989 Feb;65(2):179-6 (Eng. Abstr.) **(Ita)**

GENETICS

Induction of ras gene expression by homologous aggregation factor in cells from the sponge Geodia cydonium. Schröder HC, et al. **J Biol Chem** 1988 Nov 5;263(31):16334-40

METABOLISM

Araguspongines B, C, D, E, F, G, H, and J, new vasodilative bis-1-oxaquinolizidine alkaloids from an okinawan marine sponge, Xestospongia sp. Kobayashi M, et al. **Chem Pharm Bull (Tokyo)** 1989 Jun;37(6):1676-8

Peroxidases produced by the marine sponge Iotrochota birotulata. Baden DG, et al. **Comp Biochem Physiol [B]** 1979;64(3):279-83

Isoprenoid biosynthesis in a marine sponge of the Amphimedon genus: incorporation studies with [1-14C] acetate, [4-14C] cholesterol and [2-14C] mevalonate. Garson MJ, et al. **Comp Biochem Physiol [B]** 1988; 91(2):293-300

Calyculins, potent antitumour metabolites from the marine sponge Discodermia calyx: biological activities. Kato Y, et al. **Drugs Exp Clin Res** 1988;14(12):723-8

Protein kinase C phosphorylates the sponge aggregation receptor after its binding to the homologous aggregation factor. Schröder HC, et al. **Eur J Cell Biol** 1989 Feb; 48(1):142-9

2-Hydroxy fatty acids from marine sponges. 2. The phospholipid fatty acids of the Caribbean sponges Verongula gigantea and Aplysina archeri. Carballeira NM, et al. **Lipids** 1989 Mar;24(3):229-32

Localization of long-chain fatty acids and unconventional sterols in spherulous cells of a marine sponge. Lawson MP, et al. **Lipids** 1988 Nov;23(11):1037-48

The distribution of lipids and sterols in cell types from the marine sponge Pseudaxinyssa sp. Zimmerman MP, et al. **Lipids** 1989 Mar;24(3):210-6

MICROBIOLOGY

A marine Micrococcus produces metabolites ascribed to the sponge Tedania ignis. Stierle AC, et al. **Experientia** 1988 Dec 1;44(11-12):1021

ULTRASTRUCTURE

Ultrastructural study of the mature egg of Tethya citrina Sarà and Melone (Porifera, Demospongiae). Gaino E, et al. **Gamete Res** 1987 Mar;16(3):259-65

PORNOGRAPHY see **EROTICA**

PORP see **OSSICULAR REPLACEMENT PROSTHESIS**

PORPHOBILINOGEN

METABOLISM

Evidence that the pyrromethane cofactor of hydroxymethylbilane synthase (porphobilinogen deaminase) is bound to the protein through the sulphur atom of cysteine-242. Miller AD, et al. **Biochem J** 1988 Sep 15;254(3):915-8

Investigation into the nature of substrate binding to the dipyrromethane cofactor of Escherichia coli porphobilinogen deaminase. Warren MJ, et al. **Biochemistry** 1988 Dec 13;27(25):9020-30

Reconstitution of apo-porphobilinogen deaminase: structural changes induced by cofactor binding. Scott AI, et al. **FEBS Lett** 1989 Jan 2;242(2):319-24

Availability of porphobilinogen controls appearance of porphobilinogen deaminase activity in Escherichia coli K-12. Umanoff H, et al. **J Bacteriol** 1988 Oct; 170(10):4969-71

URINE

Liquid-chromatographic assay of urinary porphobilinogen. Jamani A, et al. **Clin Chem** 1989 Mar;35(3):471-5

PORPHOBILINOGEN DEAMINASE see under **AMMONIA-LYASES**

PORPHOBILINOGEN SYNTHASE see **AMINOLEVULINIC ACID DEHYDRATASE**

PORPHYRIA

Porphyria in a young man [letter] Pierach CA. **Ann Emerg Med** 1989 Aug;18(8):912-3

Porphyria. Festschrift to Professor Lennox Eales. **Clin Dermatol** 1985 Apr-Jun;3(2):1-163

The acute attack of porphyria. Disler PB, et al. **Clin Dermatol** 1985 Apr-Jun;3(2):103-11

The porphyrias. Bloomer JR, et al. **Dis Mon** 1989 Jan; 35(1):1-54 (112 ref.)

Safe use of clonidine, nifedipine and vitamin K in hepatic porphyria [letter] Bhadoria DP, et al. **J Assoc Physicians India** 1988 Nov;36(11):675-6

Ranitidine and porphyria--causal or coincidental? [letter] Tripathi SK. **J Assoc Physicians India** 1988 Nov;36(11):680

Acute porphyria in the emergency department. Karcz A, et al. **J Emerg Med** 1989 May-Jun;7(3):279-85 (39 ref.)

Pregnancy and acute intermittent porphyria. Kanaan C, et al. **Obstet Gynecol Surv** 1989 Apr;44(4):244-9 (50 ref.)

[Modeling of porphyria] Janoušek V. **Cas Lek Cesk** 1988 Dec 16;127(51):1569-73 (Eng. Abstr.) **(Cze)**

[Anesthesia and hepatic porphyria] Blanloeil Y, et al. **Ann Fr Anesth Reanim** 1989;8(2):109-25 (74 ref.) (Eng. Abstr.) **(Fre)**

[Use of propofol in a patient with acute intermittent porphyria (letter)] Malthe R, et al. **Ann Fr Anesth Reanim** 1989;8(3):297 **(Fre)**

[Use of propofol (Diprivan) in a patient with intermittent porphyria (letter)] Richard T, et al. **Ann Fr Anesth Reanim** 1988;7(5):442 **(Fre)**

BLOOD

Delta-aminolevulinic acid in plasma by free amino acid analysis. Hannan CJ Jr, et al. **Clin Chem** 1989 Sep; 35(9):1998

Measurement of plasma uroporphyrin during treatment and long-term follow-up of patients with Porphyria cutanea tarda. Adjarov DG, et al. **Clin Chim Acta** 1989 May 15; 181(2):143-50

Light-induced redistribution and photobleaching of protoporphyrin in erythrocytes from patients with erythropoietic protoporphyria: an explanation of the rapid fading of fluorocytes. Brun A, et al. **J Photochem Photobiol -B-** 1988 Jul;2(1):33-41

Effect of nicotinic acid administration on serum levels of bilirubin and iron in patients with porphyria cutanea tarda. Gentile S, et al. **Scand J Clin Lab Invest** 1988 Nov; 48(7):641-5

[Erythrocyte protoporphyrin studies in hepato-erythropoietic porphyria] Kószó F, et al. **Orv Hetil** 1988 Sep 25;129(39):2095-9 (38 ref.) (Eng. Abstr.) **(Hun)**

CEREBROSPINAL FLUID

Acellular cerebrospinal fluid with elevated protein level in patients with intermittent acute porphyria [letter] Latorre G, et al. **Arch Intern Med** 1989 Jul;149(7):1695

CHEMICALLY INDUCED

Propofol in acute porphyria [letter] McNeill MJ, et al. **Anaesthesia** 1989 Jun;44(6):532

The role of the Ah locus in hexachlorobenzene-induced porphyria. Studies in congenic C57BL/6J mice. Hahn ME, et al. **Biochem J** 1988 Aug 15;254(1):245-54

Uroporphyria produced in mice by 20-methylcholanthrene and 5-aminolaevulinic acid. Urquhart AJ, et al. **Biochem J** 1988 Jul 15;253(2):357-62

The porphyrinogenic effect of simvastatin in experimental systems. Schoenfeld N, et al. **Biomed Pharmacother** 1989; 43(2):135-9

Acute intermittent porphyria in two patients on anticonvulsant therapy and with normal erythrocyte porphobilinogen deaminase activity. Herrick AL, et al. **Br J Clin Pharmacol** 1989 Apr;27(4):491-7

Fosfestrol-induced porphyria cutanea tarda. Coulson IH, et al. **Br J Urol** 1989 Jun;63(6):648-9

Hexachlorobenzene as a promoter of diethylnitrosamine-initiated hepatocarcinogenesis in rats and comparison with induction of porphyria. Stewart FP, et al. **Carcinogenesis** 1989 Jul;10(7):1225-30

Therapy of the acute porphyrias. Moore MR, et al. **Clin Biochem** 1989 Jun;22(3):181-8 (39 ref.)

Naproxen pseudoporphyria in a patient with vitiligo [letter] Diffey BL, et al. **Clin Exp Dermatol** 1988 May;13(3):207

Development of hexachlorobenzene porphyria in rats: time sequence and relationship with lipid peroxidation. Visser O, et al. **Food Chem Toxicol** 1989 May;27(5):317-21

Hepatic mitochondrial oxidative metabolism and lipid peroxidation in experimental hexachlorobenzene-induced porphyria with dietary carbonyl iron overload. Feldman ES, et al. **Hepatology** 1989 May;9(5):686-92

Influence of the strain of rats on the induction of hexachlorobenzene induced porphyria. Wainstok de Calmanovici R, et al. **Int J Biochem** 1989;21(4):377-81

Ranitidine and acute intermittent porphyria [letter] Bhadoria DP, et al. **J Assoc Physicians India** 1988 Apr;36(4):295-6

Can ranitidine induce porphyria [letter] Pratap D, et al. **J Assoc Physicians India** 1988 Mar;36(3):237-8

Investigations on the role of free radical processes in hexachlorobenzene-induced porphyria in mice. Rizzardini M, et al. **J Biochem Toxicol** 1988 Spring;3:33-45

Amiodarone-induced pseudoporphyria. Parodi A, et al. **Photodermatol** 1988 Jun;5(3):146-7

Toxicological aspects of liver heme biosynthesis. De Matteis F. **Semin Hematol** 1988 Oct;25(4):321-9 (59 ref.)

Regulation of porphyrin and heme metabolism in the kidney. Woods JS. **Semin Hematol** 1988 Oct;25(4):336-48 (71 ref.)

The relation between the oxidative biotransformation of hexachlorobenzene and its porphyrinogenic activity. van Ommen B, et al. **Toxicol Appl Pharmacol** 1989 Sep 15; 100(3):517-28

Studies on the etiology of trace metal-induced porphyria: effects of porphyrinogenic metals on coproporphyrinogen oxidase in rat liver and kidney. Woods JS, et al. **Toxicol Appl Pharmacol** 1989 Jan;97(1):183-90

2,3,7,8-Tetrachlorodibenzo-p-dioxin-induced porphyria in genetically inbred mice: partial antagonism and mechanistic studies. Yao C, et al. **Toxicol Appl Pharmacol** 1989 Sep 1;100(2):208-16

[Induction of experimental protoporphyria in hairless mice griseofulvin--strain differences in murine protoporphyria] Yamashita K. **Nippon Hifuka Gakkai Zasshi** 1988 Jun; 98(7):677-81 (Eng. Abstr.) **(Jpn)**

COMPLICATIONS

Porphyria cutanea tarda and chronic myelomonocytic leukemia [letter] Ribera JM, et al. **Am J Hematol** 1989 Aug; 31(4):299

Coexistence of porphyria cutanea tarda and autoimmune hemolytic anemia. Purcell HE, et al. **Am J Med** 1989 Aug; 87(2):243

Porphyria and propofol [letter] **Anaesthesia** 1989 Jul; 44(7):612-3

Epidermolysis bullosa and porphyria [letter] Spargo PM, et al. **Anaesthesia** 1989 Jan;44(1):79-80

Is propofol a safe agent in porphyria? Weir PM, et al. **Anaesthesia** 1988 Dec;43(12):1022-3

Acute intermittent porphyria (AIP)--an unusual cause of acute confusional state. A case report. Tan CH, et al. **Ann Acad Med Singapore** 1988 Jul;17(3):451-3

Hyperpigmentation of the lower extremities associated with porphyria cutanea tarda [letter] Held JL, et al. **Arch Dermatol** 1989 Feb;125(2):297-9

Use of propofol in a patient with porphyria [letter] McLouglin C. **Br J Anaesth** 1989 Jan;62(1):114

Systemic lupus erythematosus and acute intermittent porphyria. Allard SA, et al. **Br J Rheumatol** 1989 Jun; 28(3):254-6

Hepatobiliary implications and complications in protoporphyria, a 20-year study. Doss MO, et al. **Clin Biochem** 1989 Jun;22(3):223-9

Porphyrin-sensitized cutaneous photosensitivity: pathogenesis and treatment. Poh-Fitzpatrick MB. **Clin Dermatol** 1985 Apr-Jun;3(2):41-82 (201 ref.)

Blood exchange and transfusion therapy for acute cholestasis in protoporphyria. van Wijk HJ, et al. **Dig Dis Sci** 1988 Dec;33(12):1621-5

Glucose tolerance in adult Ethiopian patients with liver disease and porphyria cutanea tarda. Mengistu M, et al. **Ethiop Med J** 1989 Jul;27(3):107-14

Chlamydial infection: which antibiotic for patients with acute intermittent porphyria? [letter] Smith JR, et al. **Genitourin Med** 1989 Jun;65(3):199-200

Human immunodeficiency virus infection and porphyria cutanea tarda. Hogan D, et al. **J Am Acad Dermatol** 1989 Jan;20(1):17-20

Porphyria variegata--a problem for the anesthesiologist. Mostert JW. **Perspect Biol Med** 1988 Summer;31(4):567-71

Porphyria cutanea tarda in association with the human immunodeficiency virus infection. Ong EL, et al. **Postgrad Med J** 1988 Dec;64(758):956-7

Acute intermittent porphyria--an underdiagnosed cause of abdominal pain [editorial] Hift RJ, et al. **S Afr Med J** 1989 Jul 15;76(2):44-5

Coexistence of porphyria cutanea tarda and systemic lupus erythematosus. Nicholson GD, et al. **West Indian Med J** 1988 Dec;37(4):232-5

[Coexistence of porphyria cutanea tarda and lupus erythematosus] Morvay M, et al. **Dermatol Monatsschr** 1989;175(1):20-7 (Eng. Abstr.) **(Ger)**

[Determination of blood ferritin in the evaluation of hepatic siderosis in patients with porphyria cutanea tarda] Vozza A, et al. **G Ital Dermatol Venereol** 1988 Jul-Aug; 123(7-8):325-7 (Eng. Abstr.) **(Ita)**

[Porphyria cutanea harda complicated by hemorrhagic capillary toxicosis] Trofimov FA, et al. **Klin Med (Mosk)** 1989 Apr;67(4):103-4 **(Rus)**

CONGENITAL

Congenital erythropoietic porphyria and congenital adrenal hyperplasia with evidence for hepatic delta-5 alpha-reductase deficiency. Miller JA, et al. **J R Soc Med** 1989 Feb;82(2):107-8

DIAGNOSIS

Performance of screening tests for porphyria. Deacon AC. **Ann Clin Biochem** 1988 Jul;25 (Pt 4):392-7

Thin-layer chromatography of free porphyrins for diagnosis of porphyria. Henderson MJ. **Clin Chem** 1989 Jun; 35(6):1043-4

A simplified method for determination of uroporphyrinogen decarboxylase activity in human blood [published erratum appears in Clin Chim Acta 1989 Feb 15;179(2):218] Adjarov DG, et al. **Clin Chim Acta** 1988 Oct 14;177(2):123-30

Biochemical diagnosis of the porphyrias. Moore MR, et al. **Clin Dermatol** 1985 Apr-Jun;3(2):24-40

Acute intermittent porphyria complicated by pregnancy. Olund A. **Clin Exp Obstet Gynecol** 1988;15(4):168-9

Erythropoietic protoporphyria in a child. Piotte M, et al. **Eur J Pediatr** 1989 Apr;148(6):507-9

Acute intermittent porphyria in a children's psychiatric hospital. Boon FF, et al. **J Am Acad Child Adolesc Psychiatry** 1989 Jul;28(4):606-9

Porphyrias and neurological disease [editorial] Nath AR, et al. **J Assoc Physicians India** 1988 Oct;36(10):581–2
Neurological complications in intermittent acute porphyria. Saxena HC, et al. **J Assoc Physicians India** 1988 Oct; 36(10):585–8
A case of erythropoietic protoporphyria. Ch'ng SL, et al. **Med J Malaysia** 1988 Sep;43(3):243–5
Acute intermittent porphyria in pregnancy. Milo R, et al. **Obstet Gynecol** 1989 Mar;73(3 Pt 2):450–2
Determination of erythrocyte hydroxymethylbilane synthase activity and its application for study of acute intermittent porphyria. Lee FY, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Nov;87(11):1029–35
[Diagnosis and traditional Chinese medicine combined with Western medicine in the treatment of hepatic porphyria] Chen MH. **Chung Hsi I Chieh Ho Tsa Chih** 1988 Sep; 8(9):573–5 (17 ref.) **(Chi)**
[Erythropoietic protoporphyria] de Sélys R, et al. **Ann Dermatol Venereol** 1988;115(5):555–60 (Eng. Abstr.) **(Fre)**
[Comment on the contribution by R. Zimmermann and A. Mattheus: "Erythropoietic protoporphyria"] Töppich D. **Dermatol Monatsschr** 1989;175(6):398 **(Ger)**
[Acute hepatic porphyria in combination with configuration anomaly of the liver] Franke U, et al. **Zentralbl Chir** 1988; 113(21):1412–4 **(Ger)**
[Acute intermittent porphyria simulating encephalitis] Makara M, et al. **Orv Hetil** 1989 Jun 18;130(25):1335–8 (29 ref.) (Eng. Abstr.) **(Hun)**
[Porphyria variegata—report of a case and analysis on HPLC of urine, blood and feces] Hirotani Y, et al. **Nippon Hifuka Gakkai Zasshi** 1988 May;98(6):613–8 (Eng. Abstr.) **(Jpn)**
[Analysis of clinical symptoms and various morphologic changes in patients dying of acute intermittent porphyria (AIP)] Kaszewska I, et al. **Pol Arch Med Wewn** 1985 Oct; 74(4):279–87 (Eng. Abstr.) **(Pol)**
[Latent porphyria cutanea tarda] Krivosheev BN. **Vestn Dermatol Venerol** 1989;(4):64–8 (Eng. Abstr.) **(Rus)**
[Acute porphyria simulating "acute abdomen"] Baskakov VA, et al. **Vestn Khir** 1989 Feb;142(2):51–2 **(Rus)**

DRUG THERAPY

Insulin resistance in porphyria cutanea tarda. Calcinaro F, et al. **J Endocrinol Invest** 1989 Jun;12(6):393–9
Premenstrual exacerbations in hepatic porphyria: prevention by intermittent administration of an LH-RH agonist in combination with a gestagen [letter] Bargetzi MJ, et al. **JAMA** 1989 Feb 10;261(6):864
Peripheral benzodiazepine receptors and treatment of porphyria [letter; comment] **Lancet** 1989 Jun 3; 1(8649):1264–5. **Comment on:** Lancet 1989 Apr 29;1(8644):932–3
Controlled trial of haem arginate in acute hepatic porphyria. Herrick AL, et al. **Lancet** 1989 Jun 10;1(8650):1295–7
Ligands specific to peripheral benzodiazepine receptors for treatment of porphyrias [see comments] Katz Y, et al. **Lancet** 1989 Apr 29;1(8644):932–3. **Comment in:** Lancet 1989 Jun 3;1(8649):1264–5
Haem and porphyria attacks [letter] Pierach CA. **Lancet** 1989 Jul 22;2(8656):213–4
PUVA therapy for erythropoietic protoporphyria. Ros AM. **Photodermatol** 1988 Jun;5(3):148–9
LHRH analogues for hormonal manipulation in acute intermittent porphyria. Anderson KE. **Semin Hematol** 1989 Jan;26(1):10–5 (24 ref.)
Agents affecting porphyrin formation and secretion: implications for porphyria cutanea treatment. Kordač V, et al. **Semin Hematol** 1989 Jan;26(1):16–23 (55 ref.)
Heme in the treatment of porphyrias and hematological disorders. Mustajoki P, et al. **Semin Hematol** 1989 Jan; 26(1):1–9 (70 ref.)
[Treatment of acute attacks of hepatic porphyrias with hematin] Devars du Mayne JF. **Ann Med Interne (Paris)** 1989;140(2):83–5 **(Fre)**

ENZYMOLOGY

Zinc chelatase in human lymphocytes: detection of the enzymatic defect in erythropoietic protoporphyria. Nunn AV, et al. **Anal Biochem** 1988 Oct;174(1):146–50
Erythrocyte hydroxymethylbilane synthase activity in a Chinese family with acute intermittent porphyria. Lee FY, et al. **Ann Clin Biochem** 1988 Nov;25 (Pt 6):706–7
Erythrocyte uroporphyrinogen I synthase activity as an indicator of acute porphyria. Forman DT. **Ann Clin Lab Sci** 1989 Mar–Apr;19(2):128–32
delta-aminolevulinic acid synthetase from the particulate fraction of liver of porphyric rats. Kaplan BH. **Biochim Biophys Acta** 1971 May 12;235(2):381–8
A point mutation in the coding region of uroporphyrinogen decarboxylase associated with familial porphyria cutanea tarda. Garey JR, et al. **Blood** 1989 Mar;73(4):892–5
An assay of uroporphyrinogen decarboxylase in erythrocytes. McManus J, et al. **Clin Chem** 1988 Nov;34(11):2355–7
Familial porphyria cutanea tarda with normal erythrocytic urodecarboxylase: an exception to the rule? D'Alessandro Gandolfo L, et al. **Dermatologica** 1989;178(4):206–8
New form of dual porphyria: coexistent acute intermittent porphyria and porphyria cutanea tarda. Doss MO. **Eur J Clin Invest** 1989 Feb;19(1):20–5
Porphyrinostatic effect of isonicotinic acid hydrazide on porphyric chick embryo and yeast. Kotal P, et al. **Int J Biochem** 1988;20(11):1281–3
Liver ferrochelatase from normal and hexachlorobenzene porphyric rats. Studies on their properties. Rios de Molina MC, et al. **Int J Biochem** 1989;21(2):219–25
Decreased leukocyte ferrochelatase activity in erythropoietic protoporphyria. Kondo M, et al. **J Dermatol** 1989 Apr; 16(2):116–21
Erythrocyte uroporphyrinogen decarboxylase activity in porphyria cutanea tarda: a study of 40 consecutive patients. Held JL, et al. **J Invest Dermatol** 1989 Sep;93(3):332–4
Lack of effect of pregnancy or hematin therapy on erythrocyte porphobilinogen deaminase activity in acute intermittent porphyria [letter] Sassa S, et al. **N Engl J Med** 1989 Jul 20;321(3):192–3
Pathophysiology of heme synthesis. Bottomley SS, et al. **Semin Hematol** 1988 Oct;25(4):282–302 (164 ref.)
Enzymes of the heme biosynthesis pathway: recent advances in molecular genetics. Grandchamp B, et al. **Semin Hematol** 1988 Oct;25(4):303–11 (62 ref.)

ETHNOLOGY

Acute intermittent porphyria in a 17-year-old Trinidadian girl. Ali K, et al. **West Indian Med J** 1988 Sep;37(3):185–7

ETIOLOGY

Appearance of an inherited porphyria cutanea tarda in a child after allogeneic bone marrow transplantation for chronic myelogenous leukaemia. Dopfer R, et al. **Bone Marrow Transplant** 1986 May;1(1):95–9
Sunbed-induced pseudoporphyria. Murphy GM, et al. **Br J Dermatol** 1989 Apr;120(4):555–62
Porphyria cutanea tarda resulting from primary hepatocellular carcinoma. O'Reilly K, et al. **Clin Exp Dermatol** 1988 Jan;13(1):44–8 (15 ref.)
Eosinophilic fasciitis with porphyria cutanea tarda and progressive destructive arthritis. Pressly TA, et al. **J Rheumatol** 1989 Mar;16(3):390–3
Haemodialysis photosensitivity. Anderson CD. **Photodermatol** 1989 Jun;6(3):107–9
Solarium pseudoporphyria [editorial] Thomsen K. **Photodermatol** 1989 Apr;6(2):61–2
[Late cutaneous porphyria secondary to a primary cancer of the liver] Pillette M, et al. **Ann Dermatol Venereol** 1988; 115(10):1051–4 **(Fre)**

GENETICS

An unusual case of erythropoietic protoporphyria [letter] Crosby DL, et al. **Arch Dermatol** 1989 Jun;125(6):846–7
Late onset erythropoietic porphyria. Horiguchi Y, et al. **Br J Dermatol** 1989 Aug;121(2):255–62 (5 ref.)
Genetics and pathogenesis of human uroporphyrinogen decarboxylase defects. Elder GH, et al. **Clin Biochem** 1989 Jun;22(3):163–8
Dual porphyria in double heterozygotes with porphobilinogen deaminase and uroporphyrinogen decarboxylase deficiencies. Doss MO. **Clin Genet** 1989 Feb; 35(2):146–51
HLA-linked hemochromatosis alleles in sporadic porphyria cutanea tarda. Edwards CQ, et al. **Gastroenterology** 1989 Oct;97(4):972–81
Familial porphyria cutanea tarda: hybridization analysis of the uroporphyrinogen decarboxylase locus. Hansen JL, et al. **Hum Hered** 1988;38(5):283–6
Heterogeneity of familial porphyria cutanea tarda. Roberts AG, et al. **J Med Genet** 1988 Oct;25(10):669–76
A point mutation G——A in exon 12 of the porphobilinogen deaminase gene results in exon skipping and is responsible for acute intermittent porphyria. Grandchamp B, et al. **Nucleic Acids Res** 1989 Aug 25;17(16):6637–49
Tissue-specific splicing mutation in acute intermittent porphyria. Grandchamp B, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(2):661–4
[Hydroa vacciniforme type eruption disclosing hereditary coproporphyria] Jeanmougin M, et al. **Ann Dermatol Venereol** 1988;115(11):1236–8 **(Fre)**
[Erythrohepatic protoporphyria] Zimmermann R, et al. **Dermatol Monatsschr** 1988;174(10):600–8 (Eng. Abstr.) **(Ger)**
[HLA studies and histochemical detection of liver iron in porphyria cutanea tarda] Köstler E, et al. **Z Hautkr** 1989 Feb 15;64(2):132–4 (Eng. Abstr.) **(Ger)**

HISTORY

Porphyria. Introduction—historical background. Goldberg A. **Clin Dermatol** 1985 Apr–Jun;3(2):3–6
'Poe-phyria,' madness, and The Fall of the House of Usher [letter] Rickman LS, et al. **JAMA** 1989 Feb 10;261(6):863–4

IMMUNOLOGY

Does an association exist between PCT and SLE? Results of a study on autoantibodies in 158 patients affected with PCT. Griso D, et al. **Arch Dermatol Res** 1989;281(4):291–2

METABOLISM

Free radical generation during delta-aminolevulinic acid autoxidation: induction by hemoglobin and connections with porphyrinpathies. Monteiro HP, et al. **Arch Biochem Biophys** 1989 May 15;271(1):206–16
Erythropoietic protoporphyria presenting in adulthood [letter] Fallon JD, et al. **Arch Dermatol** 1989 Sep; 125(9):1286–7
Haem arginate improves hepatic oxidative metabolism in variegate porphyria. Tokola O, et al. **Br J Clin Pharmacol** 1988 Dec;26(6):753–7
Modulation of hepatic heme-binding Z protein in mice by the porphyrogenic carcinogens griseofulvin and hexachlorobenzene. Vincent SH, et al. **Cancer Lett** 1989 May;45(2):109–14
Chemistry and biochemistry of the porphyrins and porphyrias. Moore MR, et al. **Clin Dermatol** 1985 Apr–Jun; 3(2):7–23
Experimental porphyria. Sweeney GD. **Clin Dermatol** 1985 Apr–Jun;3(2):125–43 (86 ref.)
Fecal protoporphyrin in erythropoietic protoporphyria [letter] Stathers GM. **Gastroenterology** 1988 Nov;95(5):1437
Pharmacokinetics of tin-mesoporphyrin in man and the effects of tin-chelated porphyrins on hyperexcretion of heme pathway precursors in patients with acute inducible porphyria. Galbraith RA, et al. **Hepatology** 1989 Jun; 9(6):882–8
[Experimental protoporphyria induced by griseofulvin. II. Effects of cholic acid ingestion in griseofulvin-induced protoporphyria mice] Irifune H. **Nippon Hifuka Gakkai Zasshi** 1988 Nov;98(12):1177–82 (Eng. Abstr.) **(Jpn)**
[Porphyria] Sano S, et al. **Tanpakushitsu Kakusan Koso** 1987 May;32(6):815–21 (25 ref.) **(Jpn)**
[Usefulness of determination of porphyrins and their precursors for the evaluation of disorders of heme synthesis in the liver after exposure to xenobiotics] Stankiewicz A, et al. **Postepy Hig Med Dosw** 1988 Sep–Oct;42(5):574–88 (43 ref.) (Eng. Abstr.) **(Pol)**

PATHOLOGY

Drug therapy in the acute porphyrias. Disler PB, et al. **Clin Dermatol** 1985 Apr–Jun;3(2):112–24
Hematologic and hepatic manifestations of the cutaneous porphyrias. Pimstone NR. **Clin Dermatol** 1985 Apr–Jun; 3(2):83–102 (116 ref.)
Increased mast cell numbers in the sclerotic skin of porphyria cutanea tarda. Torinuki W, et al. **Dermatologica** 1989; 178(2):75–8
Multiple nodular foci in the liver associated with chronic hepatic porphyria after previous treatment of breast cancer. Lelbach WK, et al. **Klin Wochenschr** 1989 Jun 1; 67(11):592–7
[Needle-like inclusions in hepatocytes in porphyria cutanea tarda] Fakan F, et al. **Cesk Patol** 1988 Nov;24(4):211–7 (Eng. Abstr.) **(Cze)**
[Erythropoietic protoporphyria. Ultrastructure of the basal pericapillary complex in the superficial dermis] Marcoux C, et al. **Ann Dermatol Venereol** 1988;115(5):561–4 (Eng. Abstr.) **(Fre)**
[The morphology of skin damage in porphyria cutanea tarda (PCT)] Kemmer C, et al. **Zentralbl Allg Pathol** 1988; 134(3):227–34 (Eng. Abstr.) **(Ger)**
[Pathology of the skin appendages in porphyria cutanea tarda] Pizzino D, et al. **G Ital Dermatol Venereol** 1988 Nov; 123(11):607–8 **(Ita)**

PHYSIOPATHOLOGY

Pathophysiology of cutaneous lesions in porphyrias. Lim HW. **Semin Hematol** 1989 Apr;26(2):114–9 (41 ref.)

PSYCHOLOGY

[Erythropoietic protoporphyria: coping with the disease from the biopsychosocial viewpoint] Rufener EA. **Hautarzt** 1989 May;40(5):271–5 (Eng. Abstr.) **(Ger)**

SURGERY

Liver transplantation in a patient with protoporphyria. Bloomer JR, et al. **Gastroenterology** 1989 Jul;97(1):188–94
Prognosis of liver transplantation in patients with erythropoietic protoporphyria [letter] Johnson JA, et al. **Transplantation** 1989 Jul;48(1):175–6

THERAPY

Plasma ferritin levels as a guide to the treatment of porphyria cutanea tarda by venesection. Ratnaike S, et al. **Australas J Dermatol** 1988 Apr;29(1):3–8

URINE

[Absorption spectra of urine in acute intermittent porphyria] Zakhariia EA, et al. **Lab Delo** 1988;(5):67–9 (Eng. Abstr.) **(Rus)**

VETERINARY

Porphyria in animals. Rimington C, et al. **Clin Dermatol** 1985 Apr–Jun;3(2):144–55

PORPHYRINOGENS

ANALYSIS

Preparation, high-performance liquid chromatographic separation and characterization of hexacarboxylic porphyrinogens. Li FM, et al. **J Chromatogr** 1989 Jan 6;

461:353–9

BLOOD

Spectroscopic evidence for a porphobilinogen deaminase–tetrapyrrole complex that is an intermediate in the biosynthesis of uroporphyrinogen III. Rosé S, et al. **Biochemistry** 1988 Jun 28;27(13):4871–9

METABOLISM

Iron stimulation of free radical–mediated porphyrinogen oxidation by hepatic and renal mitochondria. Woods JS, et al. **Biochem Biophys Res Commun** 1989 Apr 14; 160(1):101–8

Oxidation of uroporphyrinogen by methylcholanthrene–induced cytochrome P–450. Essential role of cytochrome P–450d. Jacobs JM, et al. **Biochem J** 1989 Feb 15;258(1):247–53

Effects of iron–EDTA on uroporphyrinogen oxidation by liver microsomes. Jacobs JM, et al. **FEBS Lett** 1989 Jul 3;250(2):349–52

URINE

Quantification of urinary porphyrins by liquid chromatography after oxidation of porphyrinogens. Abe K, et al. **Clin Chem** 1989 Aug;35(8):1619–22

PORPHYRINS

see related
PORPHOBILINOGEN

Photodissociation of laser–desorbed ions as a structure determination tool. Nuwaysir LM, et al. **Anal Chem** 1989 Apr 1;61(7):689–94

Self–assembly of porphyrins on nucleic acid templates. Gibbs EJ, et al. **Biochem Biophys Res Commun** 1988 Nov 30; 157(1):350–8

Mechanism–based inactivation of horseradish peroxidase by sodium azide. Formation of meso–azidoprotoporphyrin IX. Ortiz de Montellano PR, et al. **Biochemistry** 1988 Jul 26; 27(15):5470–6

Porphyrin and metalloporphyrin binding to DNA polymers: rate and equilibrium binding studies. Strickland JA, et al. **Biochemistry** 1988 Nov 29;27(24):8870–8

Studies of interactions of porphyrins with transfer RNA by high–resolution NMR. Birdsall WJ, et al. **Biochim Biophys Acta** 1989 Mar 1;1007(2):176–83

Resonance Raman studies of hydroporphyrins and chlorophylls. Schick GA, et al. **Biochim Biophys Acta** 1987; 895(2):127–54 (154 ref.)

The distribution of porphyrins with different tumour localising ability among human plasma proteins. Kongshaug M, et al. **Br J Cancer** 1989 Feb;59(2):184–8

Porphinatoiron–mediated oxidation of polycyclic aromatic hydrocarbons. Gold A, et al. **Chem Biol Interact** 1988; 68(1–2):39–55

Stabilized isoporphyrin intermediates in the inactivation of horseradish peroxidase by alkylhydrazines. Ator MA, et al. **J Biol Chem** 1989 Jun 5;264(16):9250–7

Solvent effect on MCD of Fe(III) heme complexes: magnetic circular dichroism spectra of five–coordinated high–spin iron(III) protoporphyrin–IX–dimethylester in the visible region and their environmental effect. A characterization of the visible electronic transitions in Fe(III) high–spin porphyrins. Ookubo S, et al. **J Inorg Biochem** 1989 Apr; 35(4):305–17

Time–resolved fluorescence spectroscopy of hematoporphyrin, mesoporphyrin, pheophorbide a and chlorin e6 in ethanol and aqueous solution. Roeder B, et al. **J Photochem Photobiol [B]** 1987 Sep;1(1):103–13

Porphyrin derivatives having physical and chemical characteristics similar to those of the active components of hematoporphyrin derivative and with very strong photosensitizing effects. Sommer S, et al. **J Photochem Photobiol [B]** 1987 Dec;1(2):241–6

Superoxide dismutase as an amplifier of the chemical reactivity of porphyrin radical–cations. Bazin M, et al. **Photochem Photobiol** 1988 Aug;48(2):177–80

Photophysical properties of meso–tetraphenylporphyrin and some meso–tetra(hydroxyphenyl)porphyrins. Bonnett R, et al. **Photochem Photobiol** 1988 Sep;48(3):271–6

Synthetic porphyrins at interfaces; photosensitization and related reactions of atropisomers of o–substituted tetraphenylporphine derivatives in films, reversed micelles and membranes. Collins–Gold LC, et al. **Photochem Photobiol** 1988 Aug;48(2):165–75

Photosensitizers in organized media: singlet oxygen production and spectral properties. Gottfried V, et al. **Photochem Photobiol** 1988 Aug;48(2):157–63

In vitro photosensitization with a benzoporphyrin derivative. Kessel D. **Photochem Photobiol** 1989 May;49(5):579–82

Photosensitization by diporphyrins joined via methylene bridges. Kessel D, et al. **Photochem Photobiol** 1988 Dec; 48(6):741–4

Photo–CIDNP evidence for charge–transfer interaction between synthetic water–soluble porphyrins and guanine. Le Nouën D, et al. **Photochem Photobiol** 1989 Jan; 49(1):7–18

Resonance Raman spectra of the II–cation radicals of copper, cobalt, and nickel methyloctaethylchlorins: vibrational characteristics of chlorophyll models. Salehi A, et al. **Photochem Photobiol** 1988 Oct;48(4):525–30

Critical importance of the triplet lifetime of photosensitizer in photodynamic therapy of tumor. Takemura T, et al. **Photochem Photobiol** 1989 Sep;50(3):339–44

Application of time–resolved fluorometry to the resolution of porphyrin–photoproduct mixtures. Valat P, et al. **Photochem Photobiol** 1988 Jun;47(6):787–90

Biological efficacy of a boronated porphyrin as measured in cell culture. Laster BH, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):203–5

A new look at porphyrin nomenclature. Houghton JD. **Trends Biochem Sci** 1988 Nov;13(11):458

[Erythropoietic protoporphyria] de Sélys R, et al. **Ann Dermatol Venereol** 1988;115(5):555–60 (Eng. Abstr.) **(Fre)**

[Erythropoietic protoporphyria. Ultrastructure of the basal pericapillary complex in the superficial dermis] Marcoux C, et al. **Ann Dermatol Venereol** 1988;115(5):561–4 (Eng. Abstr.) **(Fre)**

[Picket–fence iron and cobalt porphyrins] Kyuno E, et al. **Tanpakushitsu Kakusan Koso** 1987 May;32(6):785–90 (16 ref.) **(Jpn)**

ADVERSE EFFECTS

[Porphyria variegata—report of a case and analysis on HPLC of urine, blood and feces] Hirotani Y, et al. **Nippon Hifuka Gakkai Zasshi** 1988 May;98(6):613–8 (Eng. Abstr.) **(Jpn)**

ANALYSIS

Serious overestimation of endogenous fecal porphyrin concentrations by solvent–extraction techniques, as demonstrated by HPLC [letter] McCarroll NA. **Clin Chem** 1988 Nov;34(11):2390–1

Simultaneous determination of hemoglobin and coproporphyrin by second derivative differential spectrophotometry: application to the diagnosis of meconium aspiration. Ficheux H, et al. **Clin Chim Acta** 1989 Jun 15;182(1):53–61

Fecal protoporphyrin in erythropoietic protoporphyria [letter] Stathers GM. **Gastroenterology** 1988 Nov;95(5):1437

High–performance liquid chromatography of porphyrins. Lim CK, et al. **J Chromatogr** 1988 Jul 29;429:123–53 (124 ref.)

Uroporphyrinogen decarboxylase and porphyrins in the tissue of human clear–cell renal carcinoma and in its maternal renal cortex. Zawirska B. **Neoplasma** 1989; 36(2):207–13

[Porphyria variegata—report of a case and analysis on HPLC of urine, blood and feces] Hirotani Y, et al. **Nippon Hifuka Gakkai Zasshi** 1988 May;98(6):613–8 (Eng. Abstr.) **(Jpn)**

[Free erythrocytic protoporphyrin and thalassemic trait (letter)] López Rubio M, et al. **Sangre (Barc)** 1989 Jun; 34(3):246–7 **(Spa)**

[Determination of free erythrocyte protoporphyrin in thalassemic trait] Vayá A, et al. **Sangre (Barc)** 1989 Feb; 34(1):47–9 (Eng. Abstr.) **(Spa)**

[Free erythrocytic protoporphyrin and thalassemia minor] Vayá A, et al. **Sangre (Barc)** 1989 Jun;34(3):247–8 **(Spa)**

ANTAGONISTS & INHIBITORS

Ligands specific to peripheral benzodiazepine receptors for treatment of porphyrias [see comments] Katz Y, et al. **Lancet** 1989 Apr 29;1(8644):932–3. **Comment in:** Lancet 1989 Jun 3;1(8649):1264–5

BIOSYNTHESIS

Inhibition of porphyrin biosynthesis by exogenous 5–aminolevulinic acid in an aerobic photosynthetic bacterium, Erythrobacter sp. OCh 114. Shioi Y, et al. **Arch Biochem Biophys** 1988 Nov 1;266(2):478–85

An illustration of the use of isotopes: the biosynthesis of porphyrins. Shemin D. **Bioessays** 1989 Jan;10(1):30–5 (12 ref.)

Interaction of chemicals with cytochrome P–450: implications for the porphyrinogenicity of drugs. Marks GS, et al. **Clin Biochem** 1989 Jun;22(3):169–75

Influence of media supplements on growth and survival of Campylobacter pylori. Hazell SL, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jul;8(7):597–602

Porphyrinostatic effect of isonicotinic acid hydrazide on porphyric chick embryo and yeast. Kotal P, et al. **Int J Biochem** 1988;20(11):1281–3

Urine porphyrin metabolites in wood workers: a pilot study. Pines A, et al. **Med Lav** 1988 Sep–Oct;79(5):386–9

The biosynthesis of porphyrins, chlorophylls, and vitamin B12. Leeper FJ. **Nat Prod Rep** 1989 Apr;6(2):171–203 (308 ref.)

Agents affecting porphyrin formation and secretion: implications for porphyria cutanea treatment. Kordač V, et al. **Semin Hematol** 1989 Jan;26(1):16–23 (55 ref.)

[Experimental study of the action of antimalarial agents with respect to therapy in porphyria. Combined effect of chloroquine and pyrimethamine] Kotal P, et al. **Cas Lek Cesk** 1989 Jan 13;128(3):87–9 (Eng. Abstr.) **(Cze)**

[Inhibition of porphyrin synthesis by isonicotinic acid hydrazide in models simulating porphyria] Kotal P, et al. **Sb Lek** 1989 Jun;91(6):161–8 (Eng. Abstr.) **(Cze)**

[A new model for testing substances affecting the synthesis of heme] Kotal P, et al. **Sb Lek** 1989 Apr;91(4):113–22 (Eng. Abstr.) **(Cze)**

BLOOD

The alternation of free erythrocyte protoporphyrin and its fractions as an indicator of erythropoiesis in various anemias. Onodera N, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Jun;30(3):322–9

Free erythrocyte protoporphyrin and its fractions in anemia occurring in adolescence. Onodera N, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Jun;30(3):330–8

Interference of plasma fluorophores on the red blood cell zinc protoporphyrin: haemoglobin ratio as determined on a haematofluorimeter. Bartels PC, et al. **Ann Clin Biochem** 1989 Jul;26 (Pt 4):368–73

Diagnosis of iron deficiency [letter] Scott G. **Arch Intern Med** 1989 May;149(5):1222

Red cell zinc protoporphyrin and protoporphyrin by HPLC with fluorescence detection. Rossi E, et al. **Biomed Chromatogr** 1986 Aug;1(4):163–8

The lead program at CPRI. Poon HC, et al. **Clin Biochem** 1989 Jun;22(3):213–9

Measurement of plasma uroporphyrin during treatment and long–term follow–up of patients with Porphyria cutanea tarda. Adjarov DG, et al. **Clin Chim Acta** 1989 May 15; 181(2):143–50

Comparison of unitages for total free erythrocyte protoporphyrin (total EP) in anemia screening. Harada K, et al. **Clin Chim Acta** 1989 Mar 15;180(1):87–92

Simultaneous assay of zinc protoporphyrin and protoporphyrin IX in dried blood. Orfanos AP, et al. **Clin Chim Acta** 1989 May 15;181(2):213–7

X–ray fluorescence analysis of lead in teeth of urban children in situ: correlation between the tooth lead level and the concentration of blood lead and free erythroporphyrins. Shapiro IM, et al. **Environ Res** 1978 Aug;17(1):46–52

Relationship between serum ferritin, erythrocyte protoporphyrin and transferrin saturation in Mauritanian free living children. Galan P, et al. **Int J Vitam Nutr Res** 1989;59(2):214–8

Determination of erythrocyte porphyrins by reversed–phase high–performance liquid chromatography using capsule–type silica gels coated with silicone polymer. Sakai T, et al. **J Chromatogr** 1988 Dec 9;433:73–9

Sensitivity and predictive value of serum ferritin and free erythrocyte protoporphyrin for iron deficiency. Zanella A, et al. **J Lab Clin Med** 1989 Jan;113(1):73–8

Light–induced redistribution and photobleaching of protoporphyrin in erythrocytes from patients with erythropoietic protoporphyria: an explanation of the rapid fading of fluorocytes. Brun A, et al. **J Photochem Photobiol –B–** 1988 Jul;2(1):33–41

Increased erythrocyte protoporphyrins and blood lead—a pilot study of childhood growth patterns. Angle CR, et al. **J Toxicol Environ Health** 1989;26(2):149–56

Erythrocyte protoporphyrin screening for lead poisoning in Bedouin children. A study from Kuwait. Shaltout AA, et al. **J Trop Pediatr** 1989 Apr;35(2):87–91

Binding studies of four free base porphyrins and six iron (+3) porphyrins with human serum albumin. Datta–Gupta N, et al. **Res Commun Chem Pathol Pharmacol** 1989 Feb; 63(2):289–92

Porphyrins and hemoglobin. Hirsch RE. **Semin Hematol** 1989 Jan;26(1):47–53 (58 ref.)

Zinc protoporphyrin: a product of iron–deficient erythropoiesis. Labbe RF, et al. **Semin Hematol** 1989 Jan; 26(1):40–6 (81 ref.)

[Determination of erythrocyte protoporphyrin by a spectrofluorometry method] Cais MJ, et al. **Ann Biol Clin (Paris)** 1989;47(5):277–81 (Eng. Abstr.) **(Fre)**

[An attempt at extemporaneous surveillance of blood donors with the aid of zinc–protoporphyrin levels] Kutter D, et al. **Bull Soc Sci Med Grand Duche Luxemb** 1988;125(2):75–7 **(Fre)**

[Comment on the contribution by R. Zimmermann and A. Mattheus: "Erythropoietic protoporphyria"] Töppich D. **Dermatol Monatsschr** 1989;175(6):398 **(Ger)**

[Erythrohepatic protoporphyria] Zimmermann R, et al. **Dermatol Monatsschr** 1988;174(10):600–8 (Eng. Abstr.) **(Ger)**

[Erythropoietic protoporphyria: coping with the disease from the biopsychosocial viewpoint] Rufener EA. **Hautarzt** 1989 May;40(5):271–5 (Eng. Abstr.) **(Ger)**

[Erythrocyte protoporphyrin studies in hepato–erythropoietic porphyria] Kószó F, et al. **Orv Hetil** 1988 Sep 25;129(39):2095–9 (38 ref.) (Eng. Abstr.) **(Hun)**

[Automated HPLC method for determining zinc protoporphyrin IX and protoporphyrin IX in erythrocytes of workers exposed to lead] Sakai T, et al. **Sangyo Igaku** 1988 Nov;30(6):467–74 (Eng. Abstr.) **(Jpn)**

[Quantitative and qualitative composition of porphyrins in erythrocytes of cancer patients] Gurinovich IF, et al. **Vopr Med Khim** 1988 Sep–Oct;34(5):34–7 (Eng. Abstr.) **(Rus)**

[Assessment of erythrocyte pyrimidine 5'–nucleotidase activity in the detection and early diagnosis of lead poisoning. A comparison with zinc–protoporphyrin] Brunet M, et al. **Med Clin (Barc)** 1988 Oct 29;91(14):521–4 (Eng. Abstr.) **(Spa)**

CHEMICAL SYNTHESIS

A carboranyl porphyrin for boron neutron capture therapy of brain tumors. Kahl SB, et al. **Basic Life Sci** 1989; 50:193–203

New sensitizers for photodynamic therapy: controlled synthesis of purpurins and their effect on normal tissue. Morgan AR, et al. **J Med Chem** 1989 Apr;32(4):904–8

Boronated porphyrins in NCT: results with a new potent tumor localizer. Kahl SB, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):134–7

Accumulation of porphyrins in cells and tissue: synthesis of boronated porphyrins. Oenbrink G, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):130–1

DIAGNOSTIC USE

Radiolabeled porphyrin vs gallium–67 citrate for the detection of human melanoma in athymic mice. Maric N, et al. **Int J Rad Appl Instrum [B]** 1988;15(5):543–51

Whole–body autoradiography of tumor–bearing hamsters with a new tumor imaging agent, indium–111–labeled porphyrin. Yamazaki K, et al. **Jpn J Cancer Res** 1988 Jul; 79(7):880–4

Fluorescence spectra in lung with porphyrin injection. Anthony DJ, et al. **Photochem Photobiol** 1989 May; 49(5):583–6

[Specific and non–specific contrast media for MRI of tumors. Experimental study of human breast carcinoma] Revel D, et al. **J Radiol** 1989 Feb;70(2):115–21 (Eng. Abstr.) **(Fre)**

ISOLATION & PURIFICATION

HPLC separation and characterization of chlorin derivatives with intact ring V from acid degradation products of silkworm excrement crude chlorophyll mixture. Hu LQ, et al. **Biomed Chromatogr** 1989 Mar;3(2):72–4

Separation of porphyrin isomers by high–performance liquid chromatography. Kennedy SW, et al. **J Chromatogr** 1989 Aug 25;493(1):53–62

Photodynamic sensitizers from chlorophyll: purpurin–18 and chlorin p6. Hoober JK, et al. **Photochem Photobiol** 1988 Nov;48(5):579–82

METABOLISM

Dehalogenation of lindane by a variety of porphyrins and corrins. Marks TS, et al. **Appl Environ Microbiol** 1989 May; 55(5):1258–61

The one–electron oxidation of porphyrins to porphyrin pi–cation radicals by peroxidases: an electron spin resonance investigation. Morehouse KM, et al. **Arch Biochem Biophys** 1989 Aug 15;273(1):158–64

Erythropoietic protoporphyria presenting in adulthood [letter] Fallon JD, et al. **Arch Dermatol** 1989 Sep; 125(9):1286–7

Effect of lead exposure on some biological indices related to porphyrin metabolism and the activity of erythrocyte pyrimidine 5'–nucleotidase in the mice. Tomokuni K, et al. **Arch Toxicol** 1989;63(1):23–8

Diffusion of small molecules through the structure of myoglobin. Environmental effects. Barboy N, et al. **Biochemistry** 1989 Jun 27;28(13):5450–6

Interaction of zinc protoporphyrin with intact oxyhemoglobin. Hirsch RE, et al. **Biochemistry** 1989 Feb 21;28(4):1851–5

Preferential uptake of cytotoxic porphyrins from hematoporphyrin derivative in murine L929 fibroblasts and Chinese hamster ovary K1 epithelial cells. Boegheim JP, et al. **Biochim Biophys Acta** 1989 Aug 15;1012(3):237–42

Time–resolved fluorescence studies on protoporphyrin IX–apohorseradish peroxidase. Jullian C, et al. **Biochim Biophys Acta** 1989 Aug 31;997(3):206–10

The Harderian gland and the porphyrins. Akagi N, et al. **Bull Osaka Med Sch** 1987 Jul;33(1):97–115 (77 ref.)

Thin–layer chromatography of free porphyrins for diagnosis of porphyria. Henderson MJ. **Clin Chem** 1989 Jun; 35(6):1043–4

Chemistry and biochemistry of the porphyrins and porphyrias. Moore MR, et al. **Clin Dermatol** 1985 Apr–Jun; 3(2):7–23

The effect of chlorinated chemicals on porphyrin metabolism—the synergistic effect with chlorinated chemicals and low concentrations of griseofulvin. Nonaka S, et al. **Fukuoka Igaku Zasshi** 1989 May;80(5):221–6

Mechanism of iron potentiation of hepatic uroporphyria: studies in cultured chick embryo liver cells. Bonkovsky HL. **Hepatology** 1989 Sep;10(3):354–64

Protoporphyrinogen oxidation, a step in heme synthesis in soybean root nodules and free–living rhizobia. Jacobs NJ, et al. **J Bacteriol** 1989 Jan;171(1):573–6

Bromocriptine prevents the castration–induced rise in porphyrin concentration in the harderian glands of the male Syrian hamster, Mesocricetus auratus. Buzzell GR, et al. **J Exp Zool** 1989 Feb;249(2):172–6

Characterization of Cu2+ and Fe3+ –mesoporphyrin complexes with histidine–rich glycoprotein: evidence for Cu2+ –Fe3+ –mesoporphyrin interaction. Burch MK, et al. **J Inorg Biochem** 1988 Oct;34(2):135–48

Effects of oral administration of tin and zinc protoporphyrin on neonatal and adult rat tissue heme oxygenase activity. Vreman HJ, et al. **J Pediatr Gastroenterol Nutr** 1988 Nov–Dec;7(6):902–6

Singlet oxygen formation in monomeric and aggregated porphyrin c. Bennett LE, et al. **J Photochem Photobiol [B]** 1989 Feb;3(1):81–9

The accumulation of porphyrins in atheroma: potential for diagnosis and treatment? Michaels JA. **J Photochem Photobiol –B–** 1988 Jul;2(1):134–7

Intracellular distribution of photosensitizing porphyrins measured by video–enhanced fluorescence microscopy. Schneckenburger H, et al. **J Photochem Photobiol –B–** 1988 Nov;2(3):355–63

A case of erythropoietic protoporphyria. Ch'ng SL, et al. **Med J Malaysia** 1988 Sep;43(3):243–5

Characterization of porphyrin interactions with peripheral type benzodiazepine receptors. Verma A, et al. **Mol Pharmacol** 1988 Dec;34(6):800–5

Accumulation of porphyrins in cells: influence of hydrophobicity aggregation and protein binding. Oenbrink G, et al. **Photochem Photobiol** 1988 Oct;48(4):451–6

Skin photosensitivity and photodestruction of several potential photodynamic sensitizers. Roberts WG, et al. **Photochem Photobiol** 1989 Apr;49(4):431–8

Binding studies of three water–soluble polycationic porphyrins with human serum albumin. Datta–Gupta N, et al. **Res Commun Chem Pathol Pharmacol** 1988 Jun; 60(3):347–60

Interaction of porphyrins and metalloporphyrins with nucleic acids. Gibbs EJ, et al. **Semin Hematol** 1989 Apr;26(2):77–85 (52 ref.)

Oxidative effects of heme and porphyrins on proteins and lipids. Vincent SH. **Semin Hematol** 1989 Apr;26(2):105–13 (71 ref.)

Uroporphyrin accumulation in cultured chick embryo hepatocytes: comparison of 2,3,7,8–tetrachlorodibenzo–p–dioxin and 3,4,3',4'–tetrachlorobiphenyl. Lambrecht RW, et al. **Toxicol Appl Pharmacol** 1988 Dec;96(3):507–16

[Renal and enteral elimination of coproporphyrin isomers in Rotor's syndrome. A family study] Kellner H, et al. **Klin Wochenschr** 1988 Oct 3;66(19):953–6 (Eng. Abstr.) **(Ger)**

[Effect of hypertension on the accumulation of porphyrin on the vascular wall] Scannapieco G, et al. **Cardiologia** 1988 Jun;33(6):619–23 (Eng. Abstr.) **(Ita)**

[Experimental protoporphyria induced by griseofulvin. II. Effects of cholic acid ingestion in griseofulvin–induced protoporphyria mice] Irifune H. **Nippon Hifuka Gakkai Zasshi** 1988 Nov;98(12):1177–82 (Eng. Abstr.) **(Jpn)**

[Porphyrins in Wilms' tumors with different degree of morphological differentiation and in their native renal tissue] Zawirska B. **Patol Pol** 1988 Jul–Sep;39(3):197–203 (Eng. Abstr.) **(Pol)**

[Usefulness of determination of porphyrins and their precursors for the evaluation of disorders of heme synthesis in the liver after exposure to xenobiotics] Stankiewicz A, et al. **Postepy Hig Med Dosw** 1988 Sep–Oct;42(5):574–88 (43 ref.) (Eng. Abstr.) **(Pol)**

[Characteristics of complex–formation of chlorine e6 with human and bovine serum albumins] Kochubeev GA, et al. **Mol Biol (Mosk)** 1988 Jul–Aug;22(4):968–75 (Eng. Abstr.) **(Rus)**

PHARMACOKINETICS

Distribution of a boronated porphyrin in murine tumors. Kahl SB, et al. **Basic Life Sci** 1989;50:205–12

Selective in vivo tumor localization of heptacarboxylic porphyrin isomer I in a bladder tumor model: a novel technique to modulate porphyrin localization. el–Far M, et al. **Biochimie** 1988 Oct;70(10):1379–84

Pharmacokinetic and –dynamic investigations on HL60 cells with a new protoporphyrin dimethyl ester hematoporphyrin dimer. Häberlein H, et al. **Biol Chem Hoppe Seyler** 1989 Apr;370(4):337–41

Tetra–n–propylporphycene as a tumour localizer: pharmacokinetic and phototherapeutic studies in mice. Guardiano M, et al. **Cancer Lett** 1989 Jan;44(1):1–6

In vitro photosensitization I. Cellular uptake and subcellular localization of mono–L–aspartyl chlorin e6, chloro–aluminum sulfonated phthalocyanine, and photofrin II. Roberts WG, et al. **Lasers Surg Med** 1989;9(2):90–101

Uptake and DNA photodamage induced in plant cells in vivo by two cationic porphyrins. Villanueva A, et al. **Mutagenesis** 1989 Mar;4(2):157–9

In vitro and in vivo studies of boron conjugated melanoma affined biochemicals. Allen BJ, et al. **Strahlenther Onkol** 1989 Feb–Mar;165(2–3):163–5

PHARMACOLOGY

Anti–HIV activity of protoporphyrin [letter] Asanaka M, et al. **Aids** 1989 Jun;3(6):403–4

Inhibition of human adult and fetal heme oxygenase by new synthetic heme analogues. Mitrione SM, et al. **Am J Med Sci** 1988 Sep;296(3):180–6

Expression of rat liver heme oxygenase gene during development. Lin JH, et al. **Arch Biochem Biophys** 1989 May 1;270(2):623–9

Survival assays with a boronated porphyrin as measured with hamster V–79 cells in culture. Laster BH, et al. **Basic Life Sci** 1989;50:213–8

PPIX induced photohemolysis of erythrocytes partially–depleted of cholesterol. Di Giulio A, et al. **Biochem Int** 1989 Jul;19(1):19–25

Synergistic induction of delta–aminolevulinic acid synthase activity by N–ethylprotoporphyrin IX and 3,5–diethoxycarbonyl–1,4–dihydro–2,6–dimethyl–4–isobutylpyridine . Mackie JE, et al. **Biochem Pharmacol** 1989 Jul 1;38(13):2169–73

Effect of cobalt protoporphyrin on hepatic drug–metabolizing enzymes. Specificity for cytochrome P–450. Spaethe SM, et al. **Biochem Pharmacol** 1989 Jun 15;38(12):2027–38

DNA strand scission by iron complexes of meso–tetra(N–methylpyridyl)porphines. Byrnes RW, et al. **Chem Biol Interact** 1988;67(3–4):225–41

Effect of protoporphyrin on peroxidative damage of rat liver lysosomes. Imai K, et al. **Chem Pharm Bull (Tokyo)** 1988 Nov;36(11):4608–11

A comparison of the phototoxicity of protoporphyrin, coproporphyrin and uroporphyrin using a cellular system in vitro. Aravind Menon I, et al. **Clin Biochem** 1989 Jun; 22(3):197–200

Effect of protoporphyrin IX on ursodeoxycholate–induced hypercholeresis in the rat. Garcia–Marin JJ, et al. **Clin Sci** 1988 Dec;75(6):593–9

Photodynamic action of bonellin, an integumentary chlorin of Bonellia viridis, Rolando (Echiura, Bonelliidae). Agius L, et al. **Comp Biochem Physiol [B]** 1979;63(1):109–17

Sensitivity of human tissue heme oxygenase to a new synthetic metalloporphyrin. Chernick RJ, et al. **Hepatology** 1989 Sep;10(3):365–9

Pharmacokinetics of tin–mesoporphyrin in man and the effects of tin–chelated porphyrins on hyperexcretion of heme pathway precursors in patients with acute inducible porphyria. Galbraith RA, et al. **Hepatology** 1989 Jun; 9(6):882–8

Cell survival characteristics of a human colon adenocarcinoma cell line after photodynamic treatment: a comparison of Photofrin II and TPPS. West CM, et al. **Int J Radiat Biol** 1988 Oct;54(4):621–34

Mechanism of tumor destruction following photodynamic therapy with hematoporphyrin derivative, chlorin, and phthalocyanine. Nelson JS, et al. **J Natl Cancer Inst** 1988 Dec 21;80(20):1599–605

Zinc protoporphyrin inhibits CO production in rats. Hamori CJ, et al. **J Pediatr Gastroenterol Nutr** 1989 Jan;8(1):110–5

Comparative studies on the inducing effects of cobalt chloride and co–protoporphyrin on hepatic ornithine decarboxylase and heme oxygenase in rats. Numazawa S, et al. **J Pharmacobiodyn** 1989 Jan;12(1):50–9

Cobalt–protoporphyrin, a synthetic heme analogue, feminizes hepatic androgen metabolism in the rat. Galbraith RA, et al. **J Steroid Biochem** 1989 Mar;32(3):421–6

In vitro photosensitization II. An electron microscopy study of cellular destruction with mono–L–aspartyl chlorin e6 and photofrin II. Roberts WG, et al. **Lasers Surg Med** 1989; 9(2):102–8

Cobalt–protoporphyrin suppresses testosterone secretion by multiple interactions within the brain–pituitary–testicular axis. Galbraith RA, et al. **Neuroendocrinology** 1989 Jun; 49(6):641–8

Modification of epsilon–amino group of lysines, cholesterol oxidation and oxidized lipid–apoprotein cross–link formation by porphyrin–photosensitized oxidation of human low density lipoproteins. Candide C, et al. **Photochem Photobiol** 1988 Aug;48(2):137–46

In vitro and in vivo protection against phototoxic side effects of photodynamic therapy by radioprotective agents WR–2721 and WR–77913. Dillon J, et al. **Photochem Photobiol** 1988 Aug;48(2):235–8

Determinants of photosensitization by mono–L–aspartyl chlorin e6. Kessel D. **Photochem Photobiol** 1989 Apr; 49(4):447–52

Singlet oxygen generation of porphyrins, chlorins, and phthalocyanines. Kimel S, et al. **Photochem Photobiol** 1989 Aug;50(2):175–83

The photodynamic effects of photofrin II, hematoporphyrin derivative, hematoporphyrin, and tetrasodium–mesotetra(4–sulfonatophenyl)porphine in vitro: clonogenic cell survival and drug uptake studies. West CM, et al. **Photochem Photobiol** 1989 Feb; 49(2):169–74

Laser–induced selective cytotoxicity using monoclonal antibody–chromophore conjugates. Hasan T, et al. **Prog Clin Biol Res** 1989;288:471–7

Control of heme catabolism by Sn–protoporphyrin. Drummond GS. **Semin Hematol** 1989 Jan;26(1):24–6 (18 ref.)

[Photodynamic effect of chlorine e6 on erythrocyte membranes] Kochubeev GA, et al. **Biofizika** 1988 May–Jun;33(3):471–4 (Eng. Abstr.) **(Rus)**

[Damage photosensitized by chlorine e6 in bacteria with various defects of the DNA repair system] Zorina TE, et al. **Mikrobiologiia** 1988 Nov–Dec;57(6):1007–10 (Eng. Abstr.) **(Rus)**

[Inhibition of cytochrome P–450–dependent enzymes in rat liver microsomes by tetraphenylporphyrin and its metal complexes] Galkin BN, et al. **Vopr Med Khim** 1988 Sep–Oct;34(5):91–3 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Heme–dependent activation of soluble guanylate cyclase by nitric oxide: regulation of enzyme activity by porphyrins and metalloporphyrins. Ignarro LJ. **Semin Hematol** 1989

Jan;26(1):63–76 (41 ref.)
[Putative endogenous ligands for the benzodiazepine receptor] Song LC, et al.
Sheng Li Ko Hsueh Chin Chan 1989 Jan;20(1):70–2 (27 ref.) **(Chi)**

RADIATION EFFECTS

Light-stimulated formation of hydrogen peroxide and hydroxyl radical in the presence of uroporphyrin and ascorbate. Bachowski GJ, et al. **Free Radic Biol Med** 1988; 5(1):3–6
Laser flash photolysis of purpurins: novel potential photosensitizers of interest in photodynamic therapy. Borland CF, et al. **J Photochem Photobiol [B]** 1988 Dec; 2(4):427–34

SECRETION

Exocytosis as a possible mechanism for the secretion of coproporphyrin from a chloroquine-treated yeast. Kotal P, et al. **Eur J Pharmacol** 1988 Oct 18;155(3):301–3

STANDARDS

Investigation of protoporphyrin IX standard materials used in acid–extraction methods, and a proposed correction for the millimolar absorptivity of protoporphyrin IX. Gunter EW, et al. **Clin Chem** 1989 Aug;35(8):1601–8

THERAPEUTIC USE

Hydroporphyrins of the meso-tetra(hydroxyphenyl)porphyrin series as tumour photosensitizers. Bonnett R, et al. **Biochem J** 1989 Jul 1; 261(1):277–80
Tin-protoporphyrin suppression of hyperbilirubinemia in the jaundiced Gunn rat. Davis DR, et al.
Dev Pharmacol Ther 1988;11(5):281–7
Purple versus yellow: preventing neonatal jaundice with tin-porphyrins. McDonagh AF. **J Pediatr** 1988 Oct; 113(4):777–81 (35 ref.)
Tin-protoporphyrin and neonatal jaundice. McDonagh AF. **J Photochem Photobiol [B]** 1987 Sep;1(1):127–9
Tin-protoporphyrin and long wave length ultraviolet light in treatment of psoriasis. Emtestam L, et al. **Lancet** 1989 Jun 3;1(8649):1231–3
Pharmacological and biological effects of tin-protoporphyrin on neonatal hyperbilirubinemic Gunn rats. Nagae H, et al. **Pediatr Res** 1988 Aug;24(2):209–12
Tin-protoporphyrin in the management of children with Crigler-Najjar disease. Rubaltelli FF, et al. **Pediatrics** 1989 Oct;84(4):728–31
Modified porphyrins, chlorins, phthalocyanines, and purpurins: second-generation photosensitizers for photodynamic therapy. Kreimer-Birnbaum M.
Semin Hematol 1989 Apr;26(2):157–73 (114 ref.)

TOXICITY

Quantitative histological changes in murine tail skin following photodynamic therapy. Benstead K, et al. **Br J Cancer** 1989 Apr;59(4):503–9
Uptake and DNA photodamage induced in plant cells in vivo by two cationic porphyrins. Villanueva A, et al.
Mutagenesis 1989 Mar;4(2):157–9

URINE

A regional quality control scheme for urine porphyrins. Stevens JF. **Ann Clin Biochem** 1989 Mar;26 (Pt 2):189–90
Solid phase extraction and isocratic separation of urinary porphyrins by HPLC. Kotal P, et al.
Biomed Chromatogr 1986 Aug;1(4):159–62
Analysis of urine and faecal porphyrins by HPLC coupled to an advanced automated sample processor. Li F, et al. **Biomed Chromatogr** 1986 Apr;1(2):93–4
Relevance of urinary coproporphyrin isomers in hereditary hyperbilirubinemias. Frank M, et al. **Clin Biochem** 1989 Jun;22(3):221–2
Quantification of urinary porphyrins by liquid chromatography after oxidation of porphyrinogens. Abe K, et al. **Clin Chem** 1989 Aug;35(8):1619–22
Loss of porphyrins from solution during analysis: effect of sample pH and matrix on porphyrin quantification in urine by "high-performance" liquid chromatography. Perkins SL, et al. **Clin Chem** 1989 Jul;35(7):1508–12
Comparison between the fluorometric HPLC method and the conventional method for determining urinary delta-aminolevulinic acid and coproporphyrin as indices of lead exposure. Tomokuni K, et al.
Int Arch Occup Environ Health 1988;61(3):153–6
Isocratic ion-pair high-performance liquid chromatographic methods for the determination of uroporphyrin and coproporphyrin type II and IV isomers in human urine. Jacob K, et al. **J Chromatogr** 1989 May 12;468:329–38
Urine porphyrin metabolites in wood workers: a pilot study. Pines A, et al. **Med Lav** 1988 Sep–Oct;79(5):386–9
[Direct spectrophotometric determination of urinary uroporphyrin and coproporphyrin using zerocrossing second derivative spectrophotometry] Ficheux H, et al.
Ann Biol Clin (Paris) 1989;47(4):196–201 (Eng. Abstr.) **(Fre)**
[Rotor syndrome: relevance of the determination of coproporphyrin isomers in the urine in comparison with intrahepatic (alcohol-induced) cholestasis] Both P, et al. **Z Gastroenterol** 1988 Aug;26(8):416–20 (Eng. Abstr.) **(Ger)**
[Excretion of porphyrin and porphyrin precursor during ethylene oxide inhalation] Fujishiro K, et al.
Sangyo Ika Daigaku Zasshi 1989 Mar 1;11(1):23–8 (Eng. Abstr.) **(Jpn)**

PORPOISES see **DOLPHINS**

PORTACAVAL SHUNT, SURGICAL

Simultaneous infusion of nitroglycerin and nitroprusside to offset adverse effects of vasopressin during portosystemic shunting. Sirinek KR, et al. **Am J Surg** 1989 Jan;157(1):33–7
Disorders of the lymphatic homing and MIF production by the lymphocytes of thymus, spleen and lymph nodes after liver injury caused by portocaval shunt in rats. Andrzejewski W, et al.
Arch Immunol Ther Exp (Warsz) 1987;35(6):753–8
Portacaval anastomosis attenuates the impairing effect of cyproheptadine on avoidance learning in rats—an involvement of the serotonergic system. Kubo T, et al. **Behav Brain Res** 1988 Oct;30(3):279–87
Metabolic effects of portacaval shunt surgery and liver transplantation in familial hypercholesterolemia. Bilheimer DW. **Beitr Infusionther** 1988;23:61–73 (48 ref.)
Effect of portacaval surgical anastomosis on systemic and splanchnic hemodynamics in portal hypertensive, cirrhotic rats. Romeo JM, et al. **Can J Physiol Pharmacol** 1988 Dec; 66(12):1493–8
Increased bioavailability of enzymes of eicosanoid synthesis in hepatic and extrahepatic tissues after portacaval shunting. Goerig M, et al. **Hepatology** 1989 Aug; 10(2):154–62
Prognostic value of indocyanine green and lidocaine kinetics for survival and chronic hepatic encephalopathy in cirrhotic patients following elective end-to-side portacaval shunt. Pomier-Layrargues G, et al. **Hepatology** 1988 Nov–Dec;8(6):1506–10
Huge splenic artery aneurysm after portocaval shunt. Tam TN, et al. **J Clin Gastroenterol** 1988 Oct;10(5):565–8
The effect of portal diversion upon function of the reticuloendothelial system and upon plasma fibronectin levels. Hickman R, et al. **J Hepatol** 1989 Jan;8(1):67–72
The effect of portacaval shunt on delayed-hypersensitivity responses following antigen feeding. Callery MP, et al.
J Surg Res 1989 Apr;46(4):391–4
Duplex sonography accurately assesses portacaval shunt patency. Helton WS, et al. **J Vasc Surg** 1988 Dec; 8(6):657–60
Serotonin metabolism in the central nervous system in portacaval shunted rats infused with fat emulsion. Bengtsson F, et al. **JPEN J Parenter Enteral Nutr** 1989 Jan–Feb;13(1):65–70
Postsynaptic gamma-aminobutyric acid receptors in hepatic coma following portacaval shunt and hepatic artery ligation in the rat. Ferenci P, et al. **Metab Brain Dis** 1987 Sep; 2(3):195–200
Regional brain monoamines and their metabolites after portacaval shunting. Mans AM, et al. **Metab Brain Dis** 1987 Sep;2(3):183–93
The effect of end-to-side portacaval shunt on cyclosporine pharmacokinetics in rats. Grevel J, et al. **Pharm Res** 1989 Mar;6(3):255–7
Marked depression of brain cholecystokinin and vasoactive intestinal polypeptide levels in Eck fistula dogs. Sato S, et al. **Regul Pept** 1989 Apr;25(1):111–21
The effect of ammonia infusion on brain monoamine metabolism in portacaval-shunted rats. Bugge M, et al.
Res Exp Med (Berl) 1989;189(2):101–11
Mesenteric venous hypertension: importance after portal systemic shunting? Landreneau RJ, et al. **Surgery** 1989 Jul; 106(1):11–20
Portocaval shunt in preparation for emergency liver transplantation [letter] Husberg B, et al. **Transplantation** 1989 Mar;47(3):574
Intra- and extracellular amino acid concentrations in portacaval-shunted rabbits. Role of hyperammonemia and effects of branched-chain amino acid-enriched parenteral nutrition. Leweling H, et al. **Z Ernahrungswiss** 1989 Jun; 28(2):149–72
[The treatment of esophageal varices: constructing a shunt or sclerotherapy?] Terpstra JL. **Ned Tijdschr Geneeskd** 1988 Dec 31;132(53):2404–8 (23 ref.) **(Dut)**
[Portacaval shunts in the treatment of portal hypertension] Smadja C, et al. **Ann Gastroenterol Hepatol (Paris)** 1988 Dec;24(7):357–61 (65 ref.) **(Fre)**
[Selective distal spleno-renal shunt vs. latero-lateral porta-caval shunt. Subsequent analysis of encephalopathy and survival] Spina GP, et al. **Minerva Chir** 1989 Feb 15; 44(3):471–5 **(Ita)**
[Effect of the type of anesthesia on the blood circulation in the portal vein system of children with portal hypertension during portacaval shunting] Aleksandrov AE, et al. **Klin Khir** 1988;(6):57–8 **(Rus)**
[Suloctidil decreases the serotonin concentration in the brain stem of rats with a portacaval shunt] Valenzuela Miranda C, et al. **Rev Esp Enferm Apar Dig** 1988 May;73(5 Pt 2):547–52 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Hyperparathyroidism and portacaval shunt: a syndrome or a coincidence? Urban E, et al. **Hepatology** 1989 Mar; 9(3):506–7
Amino acid imbalance following portal diversion in the rat. The relevance of nutrition and of hepatic function. Benjamin IS, et al. **J Hepatol** 1988 Oct;7(2):208–14
Effects of portacaval shunt, transposition, and dimethylnitrosamine-induced chronic liver injury on pancreatic hormones and amino acids in dog. Hashimoto N, et al. **J Surg Res** 1989 Jan;46(1):35–40
Episodic confusion and tremor associated with extrahepatic portacaval shunting in cirrhotic liver disease. Russell DM, et al. **Neurology** 1989 Mar;39(3):403–5
Hepatic insufficiency after portacaval shunting is prevented by prior intraportal pancreatic islet autotransplantation. Callery MP, et al. **Surgery** 1989 Aug;106(2):257–65; discussion 265–6
[Percutaneous transluminal angioplasty in stenosis following a surgical portosystemic shunt] Fava C, et al.
Minerva Chir 1988 Sep 15;43(17):1333–41 (Eng. Abstr.) **(Ita)**

INSTRUMENTATION

A new portacaval shunt. Kissinger JT, et al.
J Pharmacol Methods 1988 Dec;20(4):329–33

METHODS

Long-term survival after an end-to-side portacaval shunt. Gitlin N, et al. **Am J Gastroenterol** 1989 Mar;84(3):302–3
Partial portal decompression for variceal hemorrhage. Johansen K. **Am J Surg** 1989 May;157(5):479–82
Mesocaval shunt for bleeding oesophageal varices. Nylamo EI, et al. **Ann Chir Gynaecol** 1988;77(4):142–5
Portacaval shunt and liver transplantation in treatment of familial hypercholesterolemia. Bilheimer DW.
Arteriosclerosis 1989 Jan–Feb;9(1 Suppl):I158–63
Long term results of treatment of Budd-Chiari syndrome by side to side portacaval shunt. Orloff MJ, et al.
Surg Gynecol Obstet 1989 Jan;168(1):33–41
[Current indications and results of elective truncal portacaval shunt. Apropos of 97 cases] Assadourian R, et al.
J Chir (Paris) 1988 Dec;125(12):704–11 (Eng. Abstr.) **(Fre)**
[The portacaval anastomosis in the liver cirrhosis model in the rat—significance of special preoperative preparation for decreasing surgical fatalities] Hanisch E, et al.
Langenbecks Arch Chir 1989;374(2):92–4 (Eng. Abstr.) **(Ger)**
[Liver transplantation in low portal vein flow: separation of portal vein areas with divided portal-venous and arterialized caval-venous liver perfusion. 1. Clinical case report] Pichlmayr R, et al. **Langenbecks Arch Chir** 1989; 374(4):232–9 (Eng. Abstr.) **(Ger)**
[Hyperestrogenemia following various shunt operations: on the role of estrogens in the development of focal nodular hyperplasia of the liver] Grün R, et al. **Z Gastroenterol** 1989 Jul;27(7):378–82 (Eng. Abstr.) **(Ger)**
[Porta-caval derivation] Picchiotti R. **Minerva Chir** 1989 Feb 15;44(3):463–9 (41 ref.) **(Ita)**
[A method of creating a portacaval anastomosis in patients with portal hypertension] Leont'ev AF, et al.
Khirurgiia (Mosk) 1988 Jul;(7):126–8 **(Rus)**
[Hemodynamic and functional changes in the liver of children with extrahepatic portal hypertension in relation to the method of portacaval shunt] Leont'ev AF, et al.
Vestn Khir 1988 Aug;141(8):68–71 (Eng. Abstr.) **(Rus)**

PORTAL SYSTEM

see related

LIVER CIRCULATION

Changes in hepatic blood volume on galactose and indocyanine green uptake by cat liver. Greenway CV, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G524–31
Endotoxins in portal blood. van Deventer SJ, et al.
Hepatogastroenterology 1988 Oct;35(5):223–5
Carcinoembryonic antigen levels of portal blood in gastric cancer patients. Tabuchi Y, et al. **J Surg Res** 1989 Jul; 47(1):81–6
Pathogenesis of pipe-stem fibrosis of the liver (experimental observation on murine schistosomiasis). Andrade ZA.
Mem Inst Oswaldo Cruz 1987 Jul–Sep;82(3):325–34
Chronic liver allograft rejection and obliterative arteriopathy: possible pathogenic mechanisms. Oguma S, et al.
Transplant Proc 1989 Feb;21(1 Pt 2):2203–7
[Correlation of microangiographic findings of colorectal carcinoma with the level of various tumor markers in portal blood] Shimoyama T, et al. **Nippon Geka Gakkai Zasshi** 1988 Oct;89(10):1624–31 (Eng. Abstr.) **(Jpn)**
[Calcifications in the portal venous system] Fernández Hidalgo JM, et al. **Rev Esp Enferm Apar Dig** 1988 Nov; 74(5):569–71 (Eng. Abstr.) **(Spa)**

ABNORMALITIES

A large inferior mesenteric-caval shunt via the internal iliac vein. Horiguchi Y, et al. **Gastroenterol Jpn** 1988 Dec; 23(6):684–7
Successful surgical manipulation of portacaval shunt in a dog. Washizu M, et al. **Nippon Juigaku Zasshi** 1988 Aug; 50(4):939–41

ANALYSIS

Histamine and histamine receptor antagonists in splanchnic compartments in schistosomal portal hypertension. el-Gendi MA, et al. **Clin Pharmacol Ther** 1988 Oct; 44(4):396–9

ANATOMY & HISTOLOGY

Pulsed Doppler sonography of the hepatoduodenal ligament: efficacy and ease of performance. Henley DS, et al. **Am J Physiol Imaging** 1989;4(2):50–4

CYTOLOGY

Peripheral blood and portal tract lymphocyte populations in primary sclerosing cholangitis. Snook JA, et al. **J Hepatol** 1989 Jul;9(1):36–41

DRUG EFFECTS

Ethanol-induced increase in portal blood flow: role of acetate and A1- and A2-adenosine receptors. Carmichael FJ, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):G417–23

Role of free radicals in entero-hepatic dysfunction caused by portal circulatory disturbance: effect of SOD derivative. Kawamoto S, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):1287–9

[The dose-dependent action of naloxone on systemic and portal circulation in acute blood loss in rats] Kovalenko NIa, et al. **Biull Eksp Biol Med** 1989 May;107(5):547–9 (Eng. Abstr.) **(Rus)**

EMBRYOLOGY

Hypothalamo-pituitary portal development in the ovine fetus. Matwijiw I, et al. **Biol Reprod** 1989 May; 40(5):1127–30

METABOLISM

Changes in lipopolysaccharide concentrations in hepatic portal and systemic arterial plasma during intestinal ischemia in monkeys. Gathiram P, et al. **Circ Shock** 1989 Feb;27(2):103–9

Lymphatic and portal absorption of vitamin E in aging rats. Hollander D, et al. **Dig Dis Sci** 1989 May;34(5):768–72

Quantitative analysis of the contribution of hepatic, renal and portal circulation to the clearance of exogenous catecholamines. Sumikawa K, et al. **Res Commun Chem Pathol Pharmacol** 1988 Jun; 60(3):337–46

PATHOLOGY

Immunohistologic pattern of the portal T-lymphocyte infiltration in hepatic allograft rejection. Perkins JD, et al. **Mayo Clin Proc** 1989 May;64(5):565–9

Microvasculature in the small portal tracts in idiopathic portal hypertension. A morphological comparison with other hepatic diseases. Terada T, et al. **Virchows Arch [A]** 1989;415(1):61–7

[Verification of invasion of a hepatoma into the portal circulation using thin-needle aspiration biopsy under ultrasonic control] Hořejšová M, et al. **Cas Lek Cesk** 1986 Oct 31;125(44):1361–2 (Eng. Abstr.) **(Cze)**

[Duplex sonographic findings in the portal system] Seitz K. **Verh Dtsch Ges Inn Med** 1988;94:560–8 **(Ger)**

[A case of Cruveilhier-Baumgarten syndrome. The elucidation of collateral vessels of the portal system by magnetic resonance image] Hashimoto A, et al. **Nippon Naika Gakkai Zasshi** 1988 Sep;77(9):1410–6 **(Jpn)**

[Collagen and fibronectin of the liver in children with congenital fibrosis, an extrahepatic portal circulation block and post-hepatitis cirrhosis (an immunohistochemical study)] Shekhonin BV, et al. **Arkh Patol** 1989;51(4):35–41 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Physiological effects of portal ligation on the longitudinal and circular muscles of the dog portal tree. Fujii K, et al. **Blood Vessels** 1988;25(5):240–9

Pancreatic vagal functional distribution in the secretion of insulin evoked by portal infusion of D-glucose. Yamazaki M, et al. **Brain Res** 1989 Apr 10;484(1-2):357–60

Effects of partial deprivation of portal blood on arterial blood ketone body ratio in rabbits. Yamamoto S, et al. **Eur Surg Res** 1989;21(2):98–104

Relationship between the blood flow volume of splanchnic blood vessels, cardiac output and serum catecholamine levels in healthy humans before and after laying down. Hino K, et al. **Gastroenterol Jpn** 1989 Apr;24(2):224

Effects of thermal stress and level of feed intake on portal plasma flow and net fluxes of metabolites in lactating Holstein cows. McGuire MA, et al. **J Anim Sci** 1989 Apr; 67(4):1050–60

Measurement of human portal blood flow by continuous thermodilution. Kinoshita H, et al. **J Surg Res** 1989 Mar; 46(3):235–40

The effect of decreased portal blood flow on the biliary system. Saji Y. **Jpn J Surg** 1988 Sep;18(5):558–68

Hepatic insufficiency after portacaval shunting is prevented by prior intraportal pancreatic islet autotransplantation. Callery MP, et al. **Surgery** 1989 Aug;106(2):257–65; discussion 265–6

Differential diagnosis of ascitic fluid: evaluation and comparison of various biochemical criteria with a special reference to serum ascites albumin concentration gradient and its relation to portal pressure. Goyal AK, et al. **Trop Gastroenterol** 1989 Jan-Mar;10(1):51–5

[Effects of experimental portal arterialization on remnant liver after extended hepatectomy] Kusano T. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec;85(12):2624–32 (Eng. Abstr.) **(Jpn)**

PHYSIOPATHOLOGY

Differences in portal hemodynamics in cirrhosis and idiopathic portal hypertension. Ohnishi K, et al. **Am J Gastroenterol** 1989 Apr;84(4):409–12

Resistance to reinfection in experimental murine schistosomiasis: role of porto-hepatic hemodynamics. Pons HA, et al. **Am J Trop Med Hyg** 1989 Aug;41(2):189–97

The calcium-channel blocker, verapamil, does not improve portal pressure in patients with alcoholic cirrhosis. Merkel C, et al. **Br J Clin Pharmacol** 1988 Sep;26(3):273–7

The portocardiorenal axis and refractory ascites: the underfilled cup runneth over. Witte CL, et al. **Hepatology** 1989 Jul;10(1):114–6

One week of monitoring of portal and hepatic arterial blood flow after liver transplantation using implantable pulsed Doppler microprobes. Houssin D, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2277–8

[A study of portal blood flow changes in patients with early dumping syndrome and patients with oxyhyperglyccmia] Morita K. **Nippon Geka Gakkai Zasshi** 1988 Dec; 89(12):1957–64 (Eng. Abstr.) **(Jpn)**

[Effect of the type of anesthesia on the blood circulation in the portal vein system of children with portal hypertension during portacaval shunting] Aleksandrov AE, et al. **Klin Khir** 1988;(6):57–8 **(Rus)**

RADIOGRAPHY

Hepatic perfusion in cavernous transformation of the portal vein: evaluation by using CT angiography. Nakao N, et al. **AJR Am J Roentgenol** 1989 May;152(5):985–6

Mesenteric arteriovenous shunt associated with thrombosis of the portal venous system: case report. Matsunaga N, et al. **Cardiovasc Intervent Radiol** 1988 Oct;11(5):281–4

Hepatopetal flow in Budd-Chiari syndrome [letter] Chavla YK, et al. **Indian J Gastroenterol** 1989 Jan;8(1):55

RADIONUCLIDE IMAGING

Portosystemic collaterals in portal hypertension: visualization by using blood-pool SPECT imaging. Kashiwagi T, et al. **AJR Am J Roentgenol** 1989 Aug;153(2):281–5

Changes of portal systemic shunting after sclerotherapy and/or partial splenic embolization observed by thallium-201 per rectal administration. Tonami N, et al. **Am J Physiol Imaging** 1988;3(3):128–32

A measurement of regional portal blood flow with Xe-133 and balloon catheter in man. Yasuhara Y, et al. **Eur J Nucl Med** 1989;15(7):346–50

Calculation of portal contribution to hepatic blood flow with 99mTc-microcolloids. A noninvasive method to diagnose liver graft rejection. Martin-Comin J, et al. **J Nucl Med** 1988 Nov;29(11):1776–80

Per-rectal portal scintigraphy: comparison between technetium-99m, thallium-201, and iodine-123-HIPDM [letter] Urbain D, et al. **J Nucl Med** 1988 Dec;29(12):2020–1

[Radioisotope splenoportography in the evaluation of sclerotherapy of esophageal varices] Hihara T, et al. **Nippon Igaku Hoshasen Gakkai Zasshi** 1988 Jul 25; 48(7):888–93 (Eng. Abstr.) **(Jpn)**

[Analysis of hepatic hemodynamics by a new method of per-rectal portal scintigraphy using 99mTcO4- (direct intramural administration of radioisotope)] Ohe T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1989 Mar;86(3):715–24 (Eng. Abstr.) **(Jpn)**

[A case of Budd-Chiari syndrome with leg pain---venous and portal scintigraphy] Yamaguchi K, et al. **Rinsho Hoshasen** 1989 Jan;34(1):157–8 **(Jpn)**

SURGERY

Healing of the resected liver stump: its process and the significance of portal blood flow. Kuwano H, et al. **Int Surg** 1988 Jul-Sep;73(3):157–60

PORTAL VEIN

In vivo microscopy of the liver after injection of Lipiodol into the hepatic artery and portal vein in the rat. Kan Z, et al. **Acta Radiol** 1989 Jul-Aug;30(4):419–25

Radiological case of the month. Pylephlebitis secondary to unsuspected appendiceal rupture. Giuliano CT, et al. **Am J Dis Child** 1989 Sep;143(9):1099–100

Portal and mesenteric venous thrombosis as a complication of endoscopic sclerotherapy. Ashida H, et al. **Am J Gastroenterol** 1989 Mar;84(3):306–10

Hepatoportal arteriovenous fistula treated with detachable balloon embolotherapy. Ridout DL 3d, et al. **Am J Gastroenterol** 1989 Jan;84(1):63–6

Systemic lupus erythematosus presenting with portal venous thrombosis. Pertuiset E, et al. **Am J Med** 1989 Apr; 86(4):501–2

Hepatic artery versus portal vein and systemic infusion of fluorodeoxyuridine of rabbit VX-2 hepatic implants. Butler JA, et al. **Am J Surg** 1989 Jan;157(1):126–9

Splanchnic venous obstruction. A complication of chronic pancreatitis. Fogartie JA, et al. **Am Surg** 1989 Mar; 55(3):191–7

Iatrogenic arterioportal fistulae: diagnosis and management. Isik FF, et al. **Ann Vasc Surg** 1989 Jan;3(1):52–5

Cavernous transformation of the portal vein. Philips RL. **Australas Radiol** 1988 May;32(2):239–41

Treatment of chronic hepatic encephalopathy by the progressive suppression of a spontaneous portacaval shunt via the umbilical vein. Bismuth H, et al. **Br J Surg** 1989 Apr;76(4):409

Hepatic portal venous gas in adults: importance of ultrasonography in early diagnosis and survival. McFadden S, et al. **Can J Surg** 1989 Jul;32(4):297–8

Cholangitis, hemobilia, and cholangiocarcinoma. Management of a fistula between an obstructed right hepatic duct and the portal vein. Nauta RJ. **Cancer** 1989 Jul 15;64(2):542–6

Embolization of an intrahepatic arterioportal fistula: case report and review of the literature. Redmond PL, et al. **Cardiovasc Intervent Radiol** 1988 Oct;11(5):274–7 (22 ref.)

Absorption of bile acids in dog as determined by portal blood sampling: evidence for colonic absorption of bile acid conjugates. Fujii T, et al. **Digestion** 1988;41(4):207–14

Effect of prolonged exercise on plasma insulin level in portal vein and abdominal aorta in rats. Górska M, et al. **Endocrinol Exp** 1989 Mar;23(1):43–7

Portal hypertension secondary to intrahepatic arterio-portal shunt in primary amyloidosis: a case report. Aramaki T, et al. **Gastroenterol Jpn** 1989 Aug;24(4):410–3

Transient perihilar attenuation difference in the liver on dynamic CT secondary to portal vein thrombosis: report of two cases. Takayasu K, et al. **Gastroenterol Jpn** 1989 Apr;24(2):205–8

Extrahepatic portal venous obstruction of different pathogenesis in pancreatic diseases: reports of 4 autopsy cases with chronic pancreatitis and pancreatic carcinoma. Terada T, et al. **Gastroenterol Jpn** 1989 Aug;24(4):414–20

Suppurative pylethrombosis: a changing clinical picture. Knockaert DC, et al. **Gastroenterology** 1989 Oct; 97(4):1028–30

Pancreatic duct-portal vein fistula. Willis SM, et al. **Gastroenterology** 1989 Oct;97(4):1025–7

Endoscopic sclerotherapy for portal hypertension due to extrahepatic obstruction: long-term follow-up. Bhargava DK, et al. **Gastrointest Endosc** 1989 Jul-Aug;35(4):309–11

Hepatic actinomycosis with portal vein occlusion. Cheng YF, et al. **Gastrointest Radiol** 1989 Summer;14(3):268–70

Portal and mesenteric thrombosis revealing constitutional protein C deficiency [letter] Prat F, et al. **Gut** 1989 Mar; 30(3):416

Myeloproliferative disorders in portal vein thrombosis in adults. Knox TA, et al. **Hepatology** 1989 Sep;10(3):392–3

Thrombosis of the superior mesenteric and portal veins after splenectomy and/or distal splenorenal shunts. Ito K, et al. **Hiroshima J Med Sci** 1988 Jun;37(2):71–6

Peripancreatic vascular occlusions as a complication of pancreatitis. Nordback I, et al. **Int Surg** 1989 Jan-Mar; 74(1):36–9

Obstructed portal venous flow and portal vein thrombus in a dog. Willard MD, et al. **J Am Vet Med Assoc** 1989 May 15;194(10):1449–51

Portal thrombosis complicating appendicitis: ultrasound detection and hepatic computed tomography lobar attenuation alteration. Chan SC, et al. **J Comput Tomogr** 1988 Jul;12(3):208–10

Endoscopic sclerotherapy: a risk factor for splanchnic venous thrombosis. Leach SD, et al. **J Vasc Surg** 1989 Jul; 10(1):9–12; discussion 12–3

Protein C deficiency and portal thrombosis in liver transplantation in children. Harper PL, et al. **Lancet** 1988 Oct 22;2(8617):924–7

Venous thrombosis and acute renal failure in paroxysmal nocturnal haemoglobinuria [letter] Sechi LA, et al. **Nephrol Dial Transplant** 1988;3(5):708–9

Results of preoperative portal vein embolization for hepatocellular carcinoma. Kinoshita H, et al. **Osaka City Med J** 1988 Oct;34(2):115–22

Two cases of venous aneurysm of the intrahepatic portal vein branch: MR demonstration. Minakuchi K, et al. **Osaka City Med J** 1989 Jun;35(1):49–62

Vascular liver calcification in infants. A case report with some pathogenetic considerations. de Filippi G, et al. **Pediatr Radiol** 1988;18(5):413–5

Umbilical and portal vein calcification following umbilical vein catheterization. Schneider K, et al. **Pediatr Radiol** 1989;19(6-7):468–70

Oxygen consumption by portal vein-drained organs and by whole animal in conscious growing swine. Yen JT, et al. **Proc Soc Exp Biol Med** 1989 Apr;190(4):393–8

Ultrasound case of the day. Portal vein thrombosis. Sandler MA, et al. **Radiographics** 1988 Nov;8(6):1216–20

Duplex ultrasonography in portal vein thrombosis. Harkányi Z, et al. **Surg Endosc** 1989;3(2):79–82

Thrombosis of portal vein in absence of hepatic disease. Belli L, et al. **Surg Gynecol Obstet** 1989 Jul;169(1):46–9

Orthotopic liver transplantation: nonoperative management of early, acute portal vein thrombosis. Burke GW 3d, et al. **Surgery** 1988 Nov;104(5):924–8

Lack of intrahepatic recurrence of hepatocellular carcinoma by temporary portal venous embolization with starch

microspheres. Matsumata T, et al. **Surgery** 1989 Feb;105(2 Pt 1):188–91

Portal versus systemic insulin delivery in canine pancreatic islet cell transplantation. Nason RW, et al. **Transplant Proc** 1988 Dec;20(6):1276–8

Prolongation of rat renal allograft survival by portal venous inoculation with donor lymphocytes. Yoshimura N, et al. **Transplant Proc** 1989 Apr;21(2):3268–70

Kupffer cell blockade inhibits induction of tolerance by the portal venous route. Callery MP, et al. **Transplantation** 1989 Jun;47(6):1092–4

[Portal cavernoma and inferior caval thrombosis disclosing Behçet's disease (letter)] Tlili-Graies K, et al. **Ann Med Interne (Paris)** 1988;139(6):444–6 **(Fre)**

[Portal system obstruction of delayed onset following neonatal Staphylococcus aureus infection] Garel D, et al. **Arch Fr Pediatr** 1989 Jan;46(1):41–3 (Eng. Abstr.) **(Fre)**

[Retrospective echographic surveillance of a population of patients splenectomized for hematologic reasons. Thrombosis of the portal vein is rare] Goudet P, et al. **Chirurgie** 1988;114(5):383–6 (Eng. Abstr.) **(Fre)**

[Portal hypertension due to thromboses of the portal, splenic and mesenteric veins in congenital protein c deficiency] Höring E, et al. **Dtsch Med Wochenschr** 1988 Nov 25; 113(47):1847–9 (Eng. Abstr.) **(Ger)**

[Recurrent gastrointestinal hemorrhage in portal vein thrombosis and antibiotic-resistant pneumonia in a 38-year-old patient] Klaubert W, et al. **Internist (Berlin)** 1988 Oct;29(10):705–9 **(Ger)**

[Arterioportal fistula as a result of percutaneous transhepatic catheterization of the portal vein] Borisova NA, et al. **Radiol Diagn (Berl)** 1989;30(2):165–70 (Eng. Abstr.) **(Ger)**

[Studies on the portasystemic shunt in pelvic vein thrombosis and the vena cava inferior syndrome] Zückmantel WR, et al. **Radiol Diagn (Berl)** 1988;29(4):635–40 (Eng. Abstr.) **(Ger)**

[Balloon occlusion of an intrahepatic arterioportal fistula] Gmeinwieser J, et al. **ROFO** 1989 Feb;150(2):216–8 **(Ger)**

[Quantitative evaluation of portal flow/total hepatic flow ratio in hepatic scintigraphy with 99Tc-phytate] Marotta F, et al. **G Clin Med** 1988 Jun-Jul;69(6-7):421, 423–4 (Eng. Abstr.) **(Ita)**

[Paroxysmal nocturnal hemoglobinuria with multiple venous thrombosis and acute renal insufficiency. Description of a case] Tedde R, et al. **Minerva Med** 1989 Jun;80(6):615–8 (Eng. Abstr.) **(Ita)**

[A case of HCC with a tumor thrombus in the main portal vein surviving (Vp4) for over three years and six months] Suyama Y, et al. **Gan No Rinsho** 1988 Oct;34(12):1723–30 (Eng. Abstr.) **(Jpn)**

[A case of fusiform aneurysm of the intrahepatic portal vein with tumor thrombus] Ohta Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Jul;85(7):1409–14 (17 ref.) **(Jpn)**

[A case of gastric cancer forming a tumor embolus in the portal vein] Ozeki Y, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Oct;85(10):2255–60 (16 ref.) **(Jpn)**

[Embolization of intrahepatic arterioportal fistula] Kodama T, et al. **Rinsho Hoshasen** 1988 Oct;33(10):1099–102 (Eng. Abstr.) **(Jpn)**

[A case report of intrahepatic portal vein aneurysm; diagnostic usefulness of MRI] Sato T, et al. **Rinsho Hoshasen** 1989 Feb;34(2):277–80 (18 ref.) (Eng. Abstr.) **(Jpn)**

[Arterial-portal shunting in hepatic cavernous hemangioma; a case report] Shima Y, et al. **Rinsho Hoshasen** 1989 Feb; 34(2):285–8 (Eng. Abstr.) **(Jpn)**

[Imaging diagnosis of portal vein thrombosis following splenectomy in 23 patients with hepatocellular carcinoma] Yamashita K, et al. **Rinsho Hoshasen** 1988 Nov; 33(12):1561–4 (Eng. Abstr.) **(Jpn)**

[Phospholipid transport into the intestinal lymph and portal blood of calves in relation to the physical form of the feed ration] Aliev AA, et al. **Fiziol Zh SSSR** 1988 Jul; 74(7):995–1000 (Eng. Abstr.) **(Rus)**

[Ultrasonic demonstration of gallbladder varices in a patient with hepatocarcinoma and portal thrombosis] Celorio Peinado C, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 2):467–9 (Eng. Abstr.) **(Spa)**

ABNORMALITIES

Congenital absence of the portal vein. Nakasaki H, et al. **Ann Surg** 1989 Aug;210(2):190–3

Balloon embolization of a congenital arterio-venous fistula between the internal mammary artery and a portal vein radicle. Cobby MJ, et al. **Br J Radiol** 1989 Apr; 62(736):371–3

Rare congenital anomaly of the portal vein. Joyce AD, et al. **Br J Surg** 1988 Oct;75(10):1038–9

Patent ductus venosus: problems in assessment and management. Barsky MF, et al. **Can J Surg** 1989 Jul; 32(4):271–5

Extensive portal-hepatic venous shunts accompanied by arterio-portal shunts. Fujita M, et al. **Gastrointest Radiol** 1988 Oct;13(4):351–4

Atypical total anomalous pulmonary venous connection: two channels leading to infracardiac terminations. Kanjuh VI, et al. **Pediatr Cardiol** 1989 Spring;10(2):115–20

ANATOMY & HISTOLOGY

Intrahepatic ramification of the portal vein in the right and caudate lobes of the liver. Yamane T, et al. **Acta Anat (Basel)** 1988;133(2):162–72

Intrahepatic bile duct and portal vein anatomy revisited. Bret PM, et al. **Radiology** 1988 Nov;169(2):405–7

Ultrasonographic measurements of the portal vein, biliary tract and gallbladder in normal Chinese children. Weng CK, et al. **Taiwan I Hsueh Hui Tsa Chih** 1988 Sep; 87(9):885–90

DRUG EFFECTS

Effects of dopamine on the portal circulation after therapeutic hepatic artery ligation. Winsö O, et al. **Acta Anaesthesiol Scand** 1988 Aug;32(6):458–63

Venous complications of sclerotherapy for esophageal varices. Hunter GC, et al. **Am J Surg** 1988 Dec; 156(6):497–501

Endothelium-dependent relaxing factors do not affect the smooth muscle of portal-mesenteric veins. Feletou M, et al. **Blood Vessels** 1989;26(1):21–32

Distinctive characteristics of the splenic vein in the dog. Its morphological and pharmacological discontinuities with the portal vein and splenic capsule. Yoshioka K, et al. **Blood Vessels** 1988;25(6):273–84

Ionic requirements of the endothelin response in aorta and portal vein. Borges R, et al. **Circ Res** 1989 Aug;65(2):265–71

EMBRYOLOGY

The persistent vitelline vein segment. Embryologic and ultrasound features. Shawker TH, et al. **J Ultrasound Med** 1988 Dec;7(12):681–5

IMMUNOLOGY

[Induction of endogenous antitumor activities in the portal vein by using a subcutaneously-imbedded pediculated spleen in the rat; experimental study of adjuvant immunotherapy in liver metastases] Fujii M. **Nippon Geka Gakkai Zasshi** 1988 Nov;89(11):1850–9 (Eng. Abstr.) **(Jpn)**

INJURIES

[Wounds of the portal vein due to silent weapons] Micu N, et al. **Rev Chir [Chir]** 1988 May-Jun;37(3):209–12 (Eng. Abstr.) **(Rum)**

[Vascular injuries of the hepatoduodenal ligament during surgical interventions on the biliary tract] Vasiutkov VIa. **Klin Khir** 1988;(9):42–3 **(Rus)**

INNERVATION

Pronounced facilitation of endogenous noradrenaline release by presynaptic beta 2-adrenoceptors in the vasculature of freely moving rats. Remie R, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Sep; 338(3):215–20

METABOLISM

Contractile and metabolic characteristics of creatine-depleted vascular smooth muscle of the rat portal vein. Ekmehag BL, et al. **Acta Physiol Scand** 1988 Aug;133(4):525–33

Evidence in vivo that most of the intraluminally absorbed glucose is absorbed intact into the portal vein and not metabolized to lactate. Rich-Denson C, et al. **Biochem J** 1988 Sep 15;254(3):931–4

Characterization of presynaptic beta-adrenoceptors facilitating endogenous noradrenaline release in the portal vein of permanently cannulated, freely moving rats. Remie R, et al. **Eur J Pharmacol** 1988 Nov 15;157(1):37–43

[Facilitatory effect of trifluoperazine on adrenergic transmitter release from rat portal vein] Meng XL, et al. **Chung Kuo Yao Li Hsueh Pao** 1988 Sep;9(5):397–401 (Eng. Abstr.) **(Chi)**

PATHOLOGY

Necrosis of portal tumor embolus of hepatocellular carcinoma by lipiodol transcatheter chemo-embolization. A case report. Wakasa K, et al. **Acta Pathol Jpn** 1988 Oct; 38(10):1363–7

Contractile properties during development of hypertrophy of the smooth muscle in the rat portal vein. Malmqvist U, et al. **Acta Physiol Scand** 1988 May;133(1):49–61

Duplex sonography of the portal venous system: pitfalls and limitations. Parvey HR, et al. **AJR** 1989 Apr;152(4):765–70

Effects of posture on normal and hypertensive portal vein: a quantitative ultrasonic assessment and its clinical implications [letter] Goyal AK, et al. **Am J Gastroenterol** 1988 Dec;83(12):1436–7

Assessment of portal vein patency: comparison of arterial portography and ultrasound scanning. Raby N, et al. **Clin Radiol** 1988 Jul;39(4):381–5

Ultrasonography in portal hypertension: a sensitive noninvasive test to demonstrate portal-vascular anatomy. Nagabhusan G, et al. **Gastroenterol Jpn** 1989 Aug; 24(4):442–5

Hepatoportal arteriovenous fistula: morphologic features studied after orthotopic liver transplantation. Hashimoto E, et al. **Hum Pathol** 1989 Jul;20(7):707–9

Ultrasonographic profile of the liver and caliber of portal vein after oral antibilharzial drugs. el-Hawey AM, et al. **J Egypt Soc Parasitol** 1989 Dec;19(2):605–10

Ultrasonographic diagnosis of portal vein cavernous transformation in children. Frider B, et al. **J Ultrasound Med** 1989 Aug;8(8):445–9

Diagnosis of hepatic artery aneurysm with portal vein fistula using image-directed Doppler ultrasound. Endress C, et al. **JCU** 1989 Mar-Apr;17(3):206–8

Development of cavernous vasculatures in livers with hepatocellular carcinoma. An autopsy study. Terada T, et al. **Liver** 1989 Jun;9(3):172–8

Case records of the Massachusetts General Hospital. Weekly clinicopathological exercises. Case 30-1989. A 52-year-old man from India with splenomegaly, esophageal varices, and recurrent gastrointestinal bleeding. **N Engl J Med** 1989 Jul 27;321(4):246–53

Complicated appendiceal inflammatory disease in children: pylephlebitis and liver abscess. Slovis TL, et al. **Radiology** 1989 Jun;171(3):823–5

Sonographic evaluation of the portal venous system after elective endoscopic sclerotherapy of esophageal varices. Caletti GC, et al. **Surg Endosc** 1987;1(3):165–7

Plasma amino acid abnormalities in liver disease: comparative analysis of idiopathic portal hypertension, extrahepatic portal occlusion and liver cirrhosis. Ouchi K, et al. **Tohoku J Exp Med** 1989 Jun;158(2):171–8

Ultrasonic demonstration of portal vein occlusion. Khan O, et al. **West Indian Med J** 1988 Jun;37(2):123–6

[Collateral circulation of the portal vein: evaluation and comparative study using conventional radiography of the esophagus, digestive endoscopy and abdominal echotomography] Salvioni D, et al. **G Clin Med** 1988 Apr; 69(4):265–9 (Eng. Abstr.) **(Ita)**

[Predictability of tumor invasion to the portal vein by pre-operative transarterial portography in biliary tract carcinoma] Miyazaki M, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Aug 20;23(8):1691–5 (Eng. Abstr.) **(Jpn)**

[Findings in the intrahepatic portal vein of patients with hepatocellular carcinoma (HCC) by percutaneous transhepatic portography (PTP) compared to those of the operative specimens] Hirohashi K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec;85(12):2642–50 (Eng. Abstr.) **(Jpn)**

[A new in vitro portal invasion model of hepatocellular carcinoma: co-culture of primary human portal vein endothelial cell and human hepatoma cell lines utilizing permeable collagen membrane] Ichida T, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Oct;85(10):2270 **(Jpn)**

[Ultrasonic examination in the diagnosis of pylephlebitis] Kan VI, et al. **Sov Med** 1989;(4):100–3 **(Rus)**

PHYSIOLOGY

Shortening velocity, myosin light chain phosphorylation and Ca2+ dependence of force during metabolic inhibition in smooth muscle of rat portal vein. Ekmehag BL, et al. **Acta Physiol Scand** 1989 Jul;136(3):367–76

MR angiography and dynamic flow evaluation of the portal venous system. Edelman RR, et al. **AJR Am J Roentgenol** 1989 Oct;153(4):755–60

Intestinal lymphatic flow during portal venous hypertension. Dunbar BS, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):G94–8

Physiological effects of portal ligation on the longitudinal and circular muscles of the dog portal tree. Fujii K, et al. **Blood Vessels** 1988;25(5):240–9

The effect of propranolol on the hyperaemic response of the hepatic artery to portal venous occlusion in the dog. Alexander B, et al. **Br J Pharmacol** 1989 Feb;96(2):356–62

Portal vein blood flow measurements using pulsed Doppler and electromagnetic flowmetry in dogs: a comparative study. Dauzat M, et al. **Gastroenterology** 1989 Mar; 96(3):913–9

Effects of a meal on normal and hypertensive portal venous system: a quantitative ultrasonographic assessment. Goyal AK, et al. **Gastrointest Radiol** 1989 Spring;14(2):164–6

Measurement of normal portal venous blood flow by Doppler ultrasound. Brown HS, et al. **Gut** 1989 Apr;30(4):503–9

Reflex increase in renal nerve activity during acutely altered portal venous pressure. Koyama S, et al. **J Auton Nerv Syst** 1988 Jun;23(1):55–62

Liver blood flow measurement in the rat. The electromagnetic versus the microsphere and the clearance methods. Daemen MJ, et al. **J Pharmacol Methods** 1989 Jul;21(4):287–97

Model for the study of portal-systemic collateral vascular resistance in the conscious rat. Koshy A, et al. **J Pharmacol Methods** 1988 Nov;20(3):265–77

Central vasomotor control of the rabbit portal vein. Takeuchi T, et al. **Pflugers Arch** 1989 Feb;413(4):348–53

[Measurements of portal venous pressure in 100 normal Chinese] Zhou YB, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Mar;26(3):158–9, 191 (Eng. Abstr.) **(Chi)**

[Effects induced hypothermia on hepatic portal circulation] Escalda A, et al. **C R Soc Biol (Paris)** 1988;182(5):509–12 (Eng. Abstr.) **(Fre)**

[Possibilities and limitations of measuring blood flow of deep abdominal vessels using Doppler echography] Barbey F, et al. **Rev Med Suisse Romande** 1988 Sep;108(9):745–52 **(Fre)**

[Evaluation of changes in portal collaterals by single photon emission CT: effects of endoscopic injection sclerotherapy] Azuma M, et al. **Kaku Igaku** 1989 Feb;26(2):171–5 (Eng.

Abstr.) (Jpn)

[The role of osmotic factors in the effect of mineral water Naftusia on smooth muscles of the portal vein] Zagorodniuk VP, et al. **Fiziol Zh** 1989 May-Jun; 35(3):26-32 (Eng. Abstr.) (Rus)

[The portal vein and its contractile function under normal and pathologic conditions] Manukhina EB. **Usp Fiziol Nauk** 1988 Jul-Sep;19(3):45-66 (179 ref.) (Rus)

PHYSIOPATHOLOGY

Portal venous blood flow during and after cholecystectomy. Holm C, et al. **Acta Chir Scand** 1988 Nov-Dec; 154(11-12):653-5

Analysis of hepatofugal flow in portal venous system using ultrasonic Doppler duplex system. Kawasaki T, et al. **Am J Gastroenterol** 1989 Aug;84(8):937-41

Portal venous pressure and portasystemic shunting in experimental portal hypertension. Geraghty JG, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):G52-7

Effect of meal on portal hemodynamics in healthy humans and in patients with chronic liver disease. Gaiani S, et al. **Hepatology** 1989 Jun;9(6):815-9

Discrepancy between portal pressure and systemic hemodynamic changes after incremental doses of propranolol in awake portal hypertensive rats. Koshy A, et al. **Hepatology** 1989 Feb;9(2):269-73

Assessment of portal vein patency: pitfalls and problems in diagnostic comparative studies. Taylor CR. **Hepatology** 1989 Jul;10(1):117-8

Characteristics of contractile response of isolated portal veins from chronic portal hypertensive rats under altered levels of external K+, Ca2+, and norepinephrine concentrations: a comparison with normal Wistar rats. Yoshimura T, et al. **Jpn J Physiol** 1988;38(4):459-78

Portal venous blood flow in cystic fibrosis: assessment by Duplex Doppler sonography. Vergesslich KA, et al. **Pediatr Radiol** 1989;19(6-7):371-4

Blunted responses to vasoconstrictors in mesenteric vasculature but not in portal vein of spontaneously hypertensive rats treated with relaxin. Massicotte G, et al. **Proc Soc Exp Biol Med** 1989 Mar;190(3):254-9

Pseudoportal Doppler signal in the partially obstructed inferior vena cava. Keller MS, et al. **Radiology** 1989 Feb; 170(2):475-7

Mechanical obstruction of the portal vein as a cause of vascular thrombosis after pancreatic transplantation in humans. Soon-Shiong P, et al. **Transplant Proc** 1988 Oct; 20(5):1059-61

Significance of blood flow measurement in clinical liver transplantation. Yanaga K, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 2):2330-1

Portal versus peripheral venous drainage in segmental pancreatic transplantation in diabetic rats. Lugagne PM, et al. **Transplantation** 1989 Mar;47(3):420-3

Portal vein thromboembolism of liver allografts from splenectomized donors. Yanaga K, et al. **Transplantation** 1989 Feb;47(2):399-400

[Serum laminin and portal pressure in alcoholic cirrhosis. A study of 39 patients] Mal F, et al. **Gastroenterol Clin Biol** 1988 Nov;12(11):841-4 (Eng. Abstr.) (Fre)

[Changes in hemodynamics and angioarchitecture of the hepatolienal basin after embolization of the splenic artery in liver cirrhosis] Vakhidov AV, et al. **Vestn Khir** 1989 Feb;142(2):24-7 (Eng. Abstr.) (Rus)

RADIOGRAPHY

Demonstration of splenic and portal veins at routine celiac angiography. A clinical investigation of metrizoate and ioxaglate. Nilsson P, et al. **Acta Radiol** 1989 Jan-Feb; 30(1):49-52

Periportal low-attenuation areas on CT: value as evidence of liver transplant rejection. Kaplan SB, et al. **AJR** 1989 Feb;152(2):285-7

Hepatic perfusion in cavernous transformation of the portal vein: evaluation by using CT angiography. Nakao N, et al. **AJR Am J Roentgenol** 1989 May;152(5):985-6

C.T. demonstration of thrombosis of the portal venous system. Lee WB, et al. **Australas Radiol** 1988 Aug; 32(3):360-4

Tumor thrombus in the branches of the distal portal vein: CT demonstration. Imaeda T, et al. **J Comput Assist Tomogr** 1989 Mar-Apr;13(2):262-8

Septic thrombosis of the portal vein: CT and clinical observations. Lim GM, et al. **J Comput Assist Tomogr** 1989 Jul-Aug;13(4):656-8

Computed tomography of portal vein thrombosis: unusual appearances and pitfalls in diagnosis. Martin K, et al. **J Comput Assist Tomogr** 1989 Sep-Oct;13(5):811-6

Uncomplicated portal venous gas associated with duodenal perforation following ERCP: CT features. Merine D, et al. **J Comput Assist Tomogr** 1989 Jan-Feb;13(1):138-9

Aneurysmal dilatation of the portal vein. Lee HC, et al. **J Pediatr Gastroenterol Nutr** 1989 Apr;8(3):387-9

Comparison of image quality and portal vein visualization in IADSP using iopamidol, 76% urografin, and 38% urografin. Shibata T, et al. **Radiat Med** 1988 May-Jun; 6(3):120-3

[Arterio-portal fistula in CT] Brandt J, et al. **ROFO** 1989 Mar;150(3):354-5 (Ger)

RADIONUCLIDE IMAGING

Assessment of liver circulation by quantitative scintiangiography: evaluation of the relative contribution of the hepatic arterial and portal venous blood flows to liver perfusion. Gianpaolo M, et al. **Eur J Nucl Med** 1989; 15(4):211-6

[An experimental study of liver perfusion using non-diffusible radiotracers: differentiation of the arterial and portal venous components by deconvolution analysis of first-pass time-activity curves] Szabó Z, et al. **Nuklearmedizin** 1988 Oct;27(5):209-18 (Eng. Abstr.) (Ger)

SURGERY

Distal splenorenal shunt for portal vein thrombosis after liver transplantation. Marino IR, et al. **Am J Gastroenterol** 1989 Jan;84(1):67-70

Successful reconstruction of late portal vein stenosis after hepatic transplantation. Scantlebury VP, et al. **Arch Surg** 1989 Apr;124(4):503-5

Downregulation of the male-specific hepatic microsomal steroid 16 alpha-hydroxylase, cytochrome P-450UT-A, in rats with portal bypass. Relevance to estradiol accumulation and impaired drug metabolism in hepatic cirrhosis. Cantrill E, et al. **J Clin Invest** 1989 Apr; 83(4):1211-6

Arterialization of liver transplants in rats: I. Application of the tissue perfusion monitor in hemodynamic studies. Lee S, et al. **Microsurgery** 1989;10(1):15-20

Metabolic effects of systemic versus portal venous drainage of orthotopic small bowel isografts. Shaffer D, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2872-4

Donor portal vein arterialization during liver transplantation. Sheil AG, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2343-4

Partial liver transplantation in dogs: preserving the IVC of the recipient and use of a heparinized catheter (Anthron) for portal vein bypass. Taira N, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2362-3

Venous jump grafts for liver transplantation in patients with portal vein thrombosis. Tzakis A, et al. **Transplantation** 1989 Sep;48(3):530-1

Evaluation of portal vein arterialization as a method of liver graft revascularization by blood ketone body ratio. Yamaguchi M, et al. **Transplantation** 1989 Sep;48(3):514-6

[Liver transplantation in low portal vein flow: separation of portal vein areas with divided portal-venous and arterialized caval-venous liver perfusion. 1. Clinical case report] Pichlmayr R, et al. **Langenbecks Arch Chir** 1989; 374(4):232-9 (Eng. Abstr.) (Ger)

[Changes in immunologic indicators in disorders of portal circulation] Aseev VP, et al. **Klin Khir** 1988;(9):24-5 (Eng. Abstr.) (Rus)

[Surgical evaluation of a liver transplant program. Experiences with the first 45 cases] Cienfuegos JA, et al. **Rev Esp Enferm Apar Dig** 1989 Jun;75(6 Pt 2):635-44 (Eng. Abstr.) (Spa)

[Hemorrhagic recurrence after operations of azygoportal disconnection] Marchena J, et al. **Rev Esp Enferm Apar Dig** 1989 Mar;75(3):246-51 (53 ref.) (Eng. Abstr.) (Spa)

[Selective occlusion of the hepatic artery and portal vein in hepatic rupture due to severe pre-eclampsia] Ibañez Fuentes JR, et al. **Rev Gastroenterol Mex** 1989 Apr-Jun; 54(2):107-10 (Eng. Abstr.) (Spa)

PORTASYSTEMIC SHUNT, SURGICAL

Closure of interposition mesocaval shunt in a case of idiopathic portal hypertension. Morikawa S, et al. **Am J Gastroenterol** 1989 May;84(5):548-51

Effect of delayed operation for bleeding esophageal varices on Child's class and indices of liver function. Grossman MD, et al. **Am J Surg** 1988 Dec;156(6):502-5

Surgery in the treatment of bleeding oesophageal varices—new appraisal? Höckerstedt K. **Ann Chir Gynaecol** 1988;77(4):129-32

Distal splenorenal vs. portal-systemic shunts after hemorrhage from varices: a randomized controlled trial. Grace ND, et al. **Hepatology** 1988 Nov-Dec;8(6):1475-81

Comparison between selective distal splenorenal shunt and small diameter H-graft portosystemic shunt. Shah DM, et al. **J Cardiovasc Surg (Torino)** 1989 May-Jun;30(3):459-61

A quarter of a century of portasystemic shunting for oesophageal varices. Deans GT, et al. **J R Coll Surg Edinb** 1989 Feb;34(1):37-9

Mesenteric venous hypertension: importance after portal systemic shunting? Landreneau RJ, et al. **Surgery** 1989 Jul; 106(1):11-20

Patients of extra hepatic portal venous obstruction should always be treated by portasystemic shunt surgery. **Trop Gastroenterol** 1988 Jul-Aug;9(3):150-5 (33 ref.)

Splenocaval shunt for selective portal decompression. Iliopoulos JI, et al. **World J Surg** 1988 Dec;12(6):852-5

Surgical methods for the prevention of first and recurrent variceal bleeding. Henderson JM. **Z Gastroenterol** 1988 Sep;26 Suppl 2:49-53 (17 ref.)

[Treatment of portal hypertension with portasystemic shunt and porto-azygous block] Xin WF. **Chung Hua Wai Ko Tsa Chih** 1988 Jul;26(7):391-2, 444 (Eng. Abstr.) (Chi)

[Value of magnetic resonance imaging in the follow-up of children operated for portal hypertension] Baunin C, et al. **Chir Pediatr** 1988;29(4):161-4 (Eng. Abstr.) (Fre)

[Results of portal shunts for intractable ascites in patients with cirrhosis. 57 cases] Hannoun L, et al. **Chirurgie** 1988; 114(6):497-501 (16 ref.) (Eng. Abstr.) (Fre)

[Status of the portosystemic shunt in the therapy concept of portal hypertension] Hirner A, et al. **Zentralbl Chir** 1989; 114(3):141-56 (71 ref.) (Eng. Abstr.) (Ger)

[Surgery of portal hypertension. 12 years' experience] Hurtado Andrade H, et al. **Rev Gastroenterol Mex** 1989 Apr-Jun;54(2):91-7 (Eng. Abstr.) (Spa)

ADVERSE EFFECTS

The effect of pancreatic and intestinal venous blood on hepatic atrophy and compensatory hyperplasia in the rat. Rózga J, et al. **Acta Physiol Pol** 1988 Sep-Dec; 39(5-6):460-74

Reversal of hepatic encephalopathy and alteration in amino acid profiles after blocking a surgical splenorenal shunt by interventional radiological techniques. Clarke B, et al. **J Hepatol** 1989 May;8(3):325-9

METHODS

Effect of a prior portasystemic shunt on subsequent liver transplantation. Brems JJ, et al. **Ann Surg** 1989 Jan; 209(1):51-6

[Anatomo-surgical variants of reno-portal anastomoses] Torgunakov AP. **Khirurgiia (Mosk)** 1989 Feb;(2):39-44 (Rus)

[Surgical treatment of portal hypertension syndrome complicated by hemorrhage] Lytkin MI, et al. **Vestn Khir** 1989 Mar;142(3):130-6 (70 ref.) (Rus)

PORTOENTEROSTOMY, HEPATIC

Cholangitis after the Kasai operation for biliary atresia. Rothenberg SS, et al. **J Pediatr Surg** 1989 Aug;24(8):729-32

Percutaneous transjejunal approaches to the biliary system. Martin EC, et al. **Radiology** 1989 Sep;172(3 Pt 2):1031-4

ADVERSE EFFECTS

Intrahepatic biliary cysts after hepatic portoenterostomy in four children with biliary atresia. Ishii K, et al. **Pediatr Radiol** 1989;19(6-7):471-3

HISTORY

A history of the Kasai operation: hepatic portoenterostomy for biliary atresia. Ohi R. **World J Surg** 1988 Dec; 12(6):871-4

METHODS

Granulation at the porta hepatis following hepatic portoenterostomy for biliary atresia: the healing of experimental hepatoenterostomy. Takemoto H, et al. **J Pediatr Surg** 1989 Mar;24(3):271-5

Hepaticoportoappendicostomy. Valla JS. **J Pediatr Surg** 1988 Nov;23(11):1057-8

[Treatment of extrahepatic bile duct atresia: Kasai's operation or hepatic transplantation?] Otte JB, et al. **Acta Chir Belg** 1988 May-Jun;88(3):133-41 (Eng. Abstr.) (Fre)

PORTOGRAPHY

Assessment of portal vein patency: comparison of arterial portography and ultrasound scanning. Raby N, et al. **Clin Radiol** 1988 Jul;39(4):381-5

A case of endoscopic injection sclerotherapy for a bleeding duodenal varix. Tsuji H, et al. **Gastroenterol Jpn** 1989 Feb; 24(1):60-4

Assessment of portal vein patency: pitfalls and problems in diagnostic comparative studies. Taylor CR. **Hepatology** 1989 Jul;10(1):117-8

Thallium per rectum scintigraphy, portal pressure and portal perfusion [letter; comment] Urbain D, et al. **Hepatology** 1989 Aug;10(2):262. **Comment on:** Hepatology 1988 Jul-Aug;8(4):785-7

Can sonography replace splenoportovenography in evaluation of patients with portal hypertension? Goyal AK, et al. **Indian J Gastroenterol** 1989 Jul;8(3):157-9

Hepatic tumors: comparison of CT during arterial portography, delayed CT, and MR imaging for preoperative evaluation. Nelson RC, et al. **Radiology** 1989 Jul;172(1):27-34

Portal and arterial thrombosis in liver transplantation: a frequent event in severe rejection. Samuel D, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2225-7

[CT portography in malignant space-occupying lesions of the liver] Köster O, et al. **ROFO** 1989 Feb;150(2):156-62 (Eng. Abstr.) (Ger)

[Predictability of tumor invasion to the portal vein by pre-operative transarterial portography in biliary tract carcinoma] Miyazaki M, et al. **Nippon Gan Chiryo Gakkai Shi** 1988 Aug 20;23(8):1691-5 (Eng. Abstr.) (Jpn)

[Findings in the intrahepatic portal vein of patients with hepatocellular carcinoma (HCC) by percutaneous transhepatic portography (PTP) compared to those of the operative specimens] Hirohashi K, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Dec;85(12):2642-50 (Eng. Abstr.) (Jpn)

[A case of essential mesocaval shunt] Morita Y, et al. **Rinsho Hoshasen** 1989 May;34(5):633–6 (Eng. Abstr.) **(Jpn)**

METHODS

Pancreatic venous samplings in infants and children with primary hyperinsulinism. Brunelle F, et al. **Pediatr Radiol** 1989;19(2):100–3

New projection for portography. Tamura S, et al. **Radiology** 1989 Oct;173(1):279–81

[Percutaneous transhepatic portography: a modified technique and its uses] Jin JX, et al. **Chung Hua Nei Ko Tsa Chih** 1988 Apr;27(4):214–5, 260 (Eng. Abstr.) **(Chi)**

[Percutaneous transhepatic portography and its application in the embolization of esophageal and gastric varices] Matsutani S, et al. **Rinsho Hoshasen** 1988 Oct;33(11):1473–8 **(Jpn)**

PORTOSYSTEMIC SHUNT, SURGICAL see **PORTASYSTEMIC SHUNT, SURGICAL**

PORTRAITS

Mona Lisa syndrome: solving the enigma of the Gioconda smile. Adour KK. **Ann Otol Rhinol Laryngol** 1989 Mar; 98(3):196–9

"Mon cher Docteur Freud": Charcot's unpublished correspondence to Freud, 1888–1893. Gelfand T. **Bull Hist Med** 1988 Winter;62(4):563–88

POSITIVE PRESSURE RESPIRATION

Hemodynamic changes during laparoscopy with positive end-expiratory pressure ventilation. Ekman LG, et al. **Acta Anaesthesiol Scand** 1988 Aug;32(6):447–53

Pancuronium bromide does not lower airway pressures during intermittent positive pressure ventilation in young cats. Norsted T, et al. **Acta Anaesthesiol Scand** 1989 Jan; 33(1):21–5

Effect of ventilatory frequency on fluid filtration rate in isolated perfused rabbit lungs. Martínez Ruiz R, et al. **Acta Cient Venez** 1988;39(2):151–4

Measurement of ventilation and respiratory mechanics during continuous positive airway pressure (CPAP) treatment in infants. Andréasson B, et al. **Acta Paediatr Scand** 1989 Mar; 78(2):194–204

Effects of hypovolaemia or isoprenaline infusion on the sympathetic reflex response to PEEP ventilation in rats. Selldén H, et al. **Acta Physiol Scand** 1988 Sep;134(1):101–7

Intra-cranial pressure monitoring in severe head injured patients as guideline for the respiratory therapy. Gordini G, et al. **Agressologie** 1988 Apr;29(5):313–5

Measurement of pharyngeal volume by digitized magnetic resonance imaging. Effect of nasal continuous positive airway pressure. Abbey NC, et al. **Am Rev Respir Dis** 1989 Sep;140(3):717–23

Inspiratory work of breathing during spontaneous ventilation using demand valves and continuous flow systems. Beydon L, et al. **Am Rev Respir Dis** 1988 Aug;138(2):300–4

Severe acute respiratory failure managed with continuous positive airway pressure and partial extracorporeal carbon dioxide removal by an artificial membrane lung. A controlled, randomized animal study. Borelli M, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1480–7

Inspiratory pressure support prevents diaphragmatic fatigue during weaning from mechanical ventilation. Brochard L, et al. **Am Rev Respir Dis** 1989 Feb;139(2):513–21

Effect of airway pressure on pericardial pressure. Cabrera MR, et al. **Am Rev Respir Dis** 1989 Sep;140(3):659–67

Nocturnal asthma: role of snoring and obstructive sleep apnea. Chan CS, et al. **Am Rev Respir Dis** 1988 Jun; 137(6):1502–4

The effects of positive expiratory pressure on isovolume flow and dynamic hyperinflation in patients receiving mechanical ventilation. Gay PC, et al. **Am Rev Respir Dis** 1989 Mar;139(3):621–6

Hypothermia with and without end-expiratory pressure in canine oleic acid pulmonary edema. Johnston WE, et al. **Am Rev Respir Dis** 1989 Jul;140(1):110–7

Effect of nasal airway positive pressure on upper airway size and configuration. Kuna ST, et al. **Am Rev Respir Dis** 1988 Oct;138(4):969–75

Should PEEP be used in airflow obstruction? [editorial] Marini JJ. **Am Rev Respir Dis** 1989 Jul;140(1):1–3

Effect of continuous positive airway pressure on respiratory sensation in patients with chronic obstructive pulmonary disease during submaximal exercise. O'Donnell DE, et al. **Am Rev Respir Dis** 1988 Nov;138(5):1185–91

Improvement in exercise endurance in patients with chronic airflow limitation using continuous positive airway pressure. O'Donnell DE, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1510–4

The use, abuse, and mystique of positive end-expiratory pressure. Petty TL. **Am Rev Respir Dis** 1988 Aug; 138(2):475–8

The use of PEEP in patients in the sitting position [letter] Drummond JC. **Anesthesiology** 1988 Nov;69(5):798–800

Relationships between lung computed tomographic density, gas exchange, and PEEP in acute respiratory failure. Gattinoni L, et al. **Anesthesiology** 1988 Dec;69(6):824–32

Atrial natriuretic factor may mediate the renal effects of PEEP ventilation. Kharasch ED, et al. **Anesthesiology** 1988 Dec;69(6):862–9

Changes in muscle sympathetic nerve activity, venous plasma catecholamines, and calf vascular resistance during mechanical ventilation with PEEP in humans. Selldén H, et al. **Anesthesiology** 1989 Feb;70(2):243–50

A comparison of pulmonary artery occlusion pressure and left ventricular end-diastolic pressure during mechanical ventilation with PEEP in patients with severe ARDS. Teboul JL, et al. **Anesthesiology** 1989 Feb;70(2):261–6

Unilateral high-frequency jet ventilation during one-lung ventilation for thoracotomy. Nakatsuka M, et al. **Ann Thorac Surg** 1988 Dec;46(6):654–60

Randomised controlled trial of two methods of weaning from high frequency positive pressure ventilation. Greenough A, et al. **Arch Dis Child** 1989 Jun;64(6):834–8

Cerebral haemodynamic effects of changes in positive end expiratory pressure in preterm infants. Shortland DB, et al. **Arch Dis Child** 1989 Apr;64(4):465–9

Carbon dioxide production in cyanotic children during anaesthesia with controlled ventilation. Fletcher R. **Br J Anaesth** 1988 Dec;61(6):743–7

Nocturnal positive-pressure nasal ventilation for respiratory failure during pregnancy. McKim DA, et al. **Can Med Assoc J** 1988 Dec 1;139(11):1069–71

The effect of positive end-expiratory pressure on the coronary blood flow. Ben-Haim SA, et al. **Cardiology** 1989; 76(3):193–200

Relation between transpulmonary pressure and right ventricular isovolumetric pressure change during respiratory support. Jardin F, et al. **Cathet Cardiovasc Diagn** 1989 Apr;16(4):215–20

Minimal PEEP may be "best PEEP" [letter] Dedhia HV, et al. **Chest** 1989 Jan;95(1):252–3

Noninvasive ventilatory support during sleep improves respiratory failure in kyphoscoliosis. Ellis ER, et al. **Chest** 1988 Oct;94(4):811–5

Periodic leg movements in sleep following treatment of obstructive sleep apnea with nasal continuous positive airway pressure. Fry JM, et al. **Chest** 1989 Jul;96(1):89–91

Determination of auto-PEEP during spontaneous and controlled ventilation by monitoring changes in end-expiratory thoracic gas volume. Hoffman RA, et al. **Chest** 1989 Sep;96(3):613–6

Treatment of obstructive sleep apnea with CPAP and protriptyline [letter] Nino-Murcia G, et al. **Chest** 1988 Dec; 94(6):1314–5

Pressure-supported breathing [letter] Quinn WW. **Chest** 1989 May;95(5):1170–1

PEEP, auto-PEEP, and waterfalls. Tobin MJ, et al. **Chest** 1989 Sep;96(3):449–51

A prospective comparison of IMV and T-piece weaning from mechanical ventilation. Tomlinson JR, et al. **Chest** 1989 Aug;96(2):348–52

A model to decrease hepatic blood flow and cardiac output with pressure breathing. Perkins MW, et al. **Clin Pharmacol Ther** 1989 May;45(5):548–52

Cardiovascular, respiratory, and metabolic changes produced by pressure-supported ventilation in intensive care unit patients. Fassoulaki A, et al. **Crit Care Med** 1989 Jun; 17(6):527–9

Proximal mean airway pressure: a good estimator of mean alveolar pressure during continuous positive-pressure breathing. Fuhrman BP, et al. **Crit Care Med** 1989 Jul; 17(7):666–70

High-frequency percussive ventilation compared with conventional mechanical ventilation. Gallagher TJ, et al. **Crit Care Med** 1989 Apr;17(4):364–6

Myocardial blood flow and oxygen consumption during positive end-expiratory pressure ventilation at different levels of cardiac inotropy and frequency. Hevrøy O, et al. **Crit Care Med** 1989 Jan;17(1):48–52

Sodium nitroprusside and positive end-expiratory pressure are not detrimental in canine asymmetric pulmonary edema. Johnston WE, et al. **Crit Care Med** 1989 Mar;17(3):241–6

Pulmonary management during extracorporeal membrane oxygenation. Keszler M, et al. **Crit Care Med** 1989 Jun; 17(6):495–500

Two-dimensional echocardiographic evaluation of inferior vena cava, right ventricle, and left ventricle during positive-pressure ventilation with varying levels of positive end-expiratory pressure. Mitaka C, et al. **Crit Care Med** 1989 Mar;17(3):205–10

Postpneumonectomy pulmonary edema treated with a continuous positive airway pressure face mask. Nabers J, et al. **Crit Care Med** 1989 Jan;17(1):102–3

Central venous pressure and pulmonary capillary wedge pressure as estimates of left atrial pressure: effects of positive end-expiratory pressure and catheter tip malposition. Rajacich N, et al. **Crit Care Med** 1989 Jan; 17(1):7–11

Noninvasive determination of effective (nonshunted) pulmonary blood flow in normal and injured lungs. Steinhart CM, et al. **Crit Care Med** 1989 Apr;17(4):349–53

Respiratory resistance and intrinsic positive end-expiratory pressure (PEEPi) in patients with the adult respiratory distress syndrome (ARDS). Broseghini C, et al. **Eur Respir J** 1988 Aug;1(8):726–31

Nocturnal asthma: snoring, small pharynx and nasal CPAP. Guilleminault C, et al. **Eur Respir J** 1988 Dec;1(10):902–7

Objective measurement of compliance with nasal CPAP treatment for obstructive sleep apnoea syndrome. Krieger J, et al. **Eur Respir J** 1988 May;1(5):436–8

Adaptation to intermittent positive pressure ventilation applied through the nose during day and night. Rodenstein DO, et al. **Eur Respir J** 1989 May;2(5):473–8

Current perspectives in the management of respiratory distress syndrome. Lindroth M. **Indian Pediatr** 1988 Jul; 25(7):654–65 (53 ref.)

Continuous positive airway pressure with a face-mask in infants with hyaline membrane disease. Murali MV, et al. **Indian Pediatr** 1988 Jul;25(7):627–31

Pressure support ventilation (PSV) reverses hyperinflation induced isorhythmic A-V dissociation. Conti G, et al. **Intensive Care Med** 1989;15(5):319–21

Intrinsic PEEP: a cause of inspiratory muscle ineffectivity. Fernández R, et al. **Intensive Care Med** 1988;15(1):51–2

High-frequency jet ventilation during oleic-acid induced pulmonary oedema. Hachenberg T, et al. **Intensive Care Med** 1989;15(2):105–10

Effects of positive end-expiratory pressure on hyaline membrane formation in a rabbit model of the neonatal respiratory distress syndrome. Sandhar BK, et al. **Intensive Care Med** 1988;14(5):538–46

Extracorporeal lung assist for patient with hypercapnia due to status asthmaticus. Tajimi K, et al. **Intensive Care Med** 1988;14(5):588–9

Differential ventilation with low-flow CPAP and CPPV in the treatment of unilateral chest trauma. Wendt M, et al. **Intensive Care Med** 1989;15(3):209–11 (9 ref.)

Pulmonary clearance of radiotracers after positive end-expiratory pressure or acute lung injury. Barrowcliffe MP, et al. **J Appl Physiol** 1989 Jan;66(1):288–94

Mechanism of reduced LV afterload by systolic and diastolic positive pleural pressure. Fessler HE, et al. **J Appl Physiol** 1988 Sep;65(3):1244–50

Effect of positive-pressure ventilatory frequency on regional pleural pressure. Novak R, et al. **J Appl Physiol** 1988 Sep; 65(3):1314–23

Pressure-flow behavior of a bronchopleural fistula during mechanical ventilation with positive pressure. Pérez Fontán JJ, et al. **J Appl Physiol** 1989 Apr;66(4):1789–99

Effect of positive nasal pressure on upper airway pressure-flow relationships. Schwartz AR, et al. **J Appl Physiol** 1989 Apr;66(4):1626–34

Impact of PEEP on lung mechanics and work of breathing in severe airflow obstruction. Smith TC, et al. **J Appl Physiol** 1988 Oct;65(4):1488–99

Neuroendocrine dysfunction in sleep apnea: reversal by continuous positive airways pressure therapy. Grunstein RR, et al. **J Clin Endocrinol Metab** 1989 Feb;68(2):352–8

Positive end-expiratory pressure: implications for tidal volume changes in anesthesia machine ventilation. Elliott WR, et al. **J Clin Monit** 1989 Apr;5(2):100–4

Ventilation/perfusion mismatch caused by positive pressure ventilatory support. Kim CK, et al. **J Nucl Med** 1989 Jul; 30(7):1268–70

Effect of PEEP on regional ventilation and perfusion in the mechanically ventilated preterm lamb. Schlessel JS, et al. **J Nucl Med** 1989 Aug;30(8):1342–50

Successful extubation of newborn infants without preextubation trial of continuous positive airway pressure. Kim EH. **J Perinatol** 1989 Mar;9(1):72–6

Conventional versus high frequency jet ventilation with a bronchopleural fistula. Spinale FG, et al. **J Surg Res** 1989 Feb;46(2):147–51

Continuous positive airway pressure [letter] Brear SG, et al. **Lancet** 1989 Feb 18;1(8634):384

Continuous positives airway pressure in AIDS [letter] Gilston A. **Lancet** 1989 Jan 21;1(8630):169

Evaluation of microleakage due to cuffs of endotracheal tubes during positive end-expiratory pressure ventilation. Wang YP, et al. **Ma Tsui Hsueh Tsa Chi** 1989 Mar;27(1):39–42

Positive end-expiratory pressure in supine and sitting positions: its effects on intrathoracic and intracranial pressures. Lodrini S, et al. **Neurosurgery** 1989 Jun; 24(6):873–7

Obstructive sleep apnea, continuous positive airway pressure, and surgery. Powell NB, et al. **Otolaryngol Head Neck Surg** 1988 Oct;99(4):362–9

Comparison of conventional and high-frequency ventilation in piglets after lung lavage. Cordero L, et al. **Pediatr Pulmonol** 1989;6(3):158–63

Optimal positive end-expiratory pressure therapy in infants and children with acute respiratory failure. White MK, et al. **Pediatr Res** 1988 Aug;24(2):217–21

Cure of sleep apnea syndrome after long-term nasal continuous positive airway pressure therapy and weight loss. Aubert-Tulkens G, et al. **Sleep** 1989 Jun;12(3):216–22

Hypothermia or continuous ventilation decreases ischemia-reperfusion injury in an ex vivo rat lung model. Badellino MM, et al. **Surgery** 1989 Jun;105(6):752–60

Control of nocturnal hypoventilation by nasal intermittent positive pressure ventilation. Carroll N, et al. **Thorax** 1988 May;43(5):349–53

Non-apnoeic REM sleep induced nocturnal oxygen desaturation treated by nasal continuous positive airway pressure. Sériès F, et al. **Thorax** 1989 Jun;44(6):521–2

Obstructive sleep apnea: therapeutic compliance. Baker JP, et al. **Trans Am Clin Climatol Assoc** 1987;99:224–30

Compliance and side effects in sleep apnea patients treated with nasal continuous positive airway pressure. Nino-Murcia G, et al. **West J Med** 1989 Feb;150(2):165–9

Influence of tidal volume on the compliance of the

respiratory system in mechanically ventilated newborn infants. Popow C, et al. **Wien Klin Wochenschr** 1989 Apr 28;101(9):323–6

[Possible use of positive pressure oxygen inhalation in chronic bronchopulmonary obstruction] Dvořáková V, et al. **Vnitr Lek** 1988 Aug;34(8):807–12 (Eng. Abstr.) **(Cze)**

[Obstructive sleep apnea syndrome successfully treated with continuous positive nasal respiratory pressure during sleep] Launbjerg J, et al. **Ugeskr Laeger** 1988 Oct 31; 150(44):2648–50 (Eng. Abstr.) **(Dan)**

[Effects of positive expiratory pressure on cardiac output and estimated hepatic blood flow during controlled ventilation in man] Ichaï C, et al. **Ann Fr Anesth Reanim** 1988; 7(6):452–8 (Eng. Abstr.) **(Fre)**

[Renal function and sleep apnea syndromes] Krieger J, et al. **Neurophysiol Clin** 1989 Jun;19(3):199–207 (Eng. Abstr.) **(Fre)**

[A comparison between high-frequency jet ventilation (HFJV) and conventional positive end-expiratory pressure ventilation (CPPV)—an experimental study on dogs with acute lung damage] Claussen D, et al. **Anaesthesiol Reanim** 1989;14(1):13–27 (Eng. Abstr.) **(Ger)**

[Optimizing ventilation in anesthesia. 3. Ventilation in anesthesia with PEEP] Hakenbeck H, et al. **Anaesthesiol Reanim** 1988;13(3):157–67 (Eng. Abstr.) **(Ger)**

[Nightly home artificial respiration in juvenile Pompe's disease with pulmonary hypertension and right cardiac insufficiency] Budde-Steffen C, et al. **Dtsch Med Wochenschr** 1989 Jul 14;114(28–29):1114–6 (Eng. Abstr.) **(Ger)**

[Comparison of high-frequency jet ventilation and intermittent positive pressure ventilation in a experimental model of acute respiratory insufficiency] Martins FM, et al. **AMB Rev Assoc Med Bras** 1988 Jul–Aug;34(4):116–22 (Eng. Abstr.) **(Por)**

[Cardiovascular repercussions of high-frequency jet ventilation. Experimental study in normal dogs] Lobato JE, et al. **Rev Hosp Clin Fac Med Sao Paulo** 1988 Mar–Apr; 43(2):110–6 (Eng. Abstr.) **(Por)**

[Effect of artificial ventilation of the lungs with end-positive expiratory pressure on extravascular water levels in the lungs] Bagdat'ev VE, et al. **Anesteziol Reanimatol** 1988 May–Jun;(3):55–7 (Eng. Abstr.) **(Rus)**

[Usefulness of nasal positive pressure in the treatment of central apnea (letter)] Abad J, et al. **Med Clin (Barc)** 1988 Nov 12;91(16):636 **(Spa)**

[Continuous positive airway pressure by the nasal route in sleep apnea syndrome with central predominance (letter)] León Jiménez A, et al. **Med Clin (Barc)** 1989 May 13; 92(18):719 **(Spa)**

[Nasal continuous positive airway pressure in the treatment of sleep apnea syndrome] Morera J, et al. **Med Clin (Barc)** 1988 Nov 12;91(16):627–9 **(Spa)**

[Efficacy of short and long term nasal continuous positive airway pressure in the treatment of obstructive sleep apnea (letter)] Parra O, et al. **Med Clin (Barc)** 1988 Nov 12; 91(16):636 **(Spa)**

[Immediate effect of nasal continuous positive pressure in the treatment of obstructive sleep apnea] Espinar Sierra J. **Rev Clin Esp** 1989 Feb;184(2):69–74 (Eng. Abstr.) **(Spa)**

[Intrapulmonary gas entrapment during intermittent positive pressure ventilation. Experimental study of determining factors] Belda FJ, et al. **Rev Esp Anestesiol Reanim** 1988 Sep–Oct;35(5):255–9 (Eng. Abstr.) **(Spa)**

[Effects of positive end expiratory pressure on oxygen transport] Silla I, et al. **Rev Esp Anestesiol Reanim** 1989 Mar–Apr;36(2):77–9 (Eng. Abstr.) **(Spa)**

ADVERSE EFFECTS

Pathologic features of various ventilatory strategies. Coalson JJ, et al. **Acta Anaesthesiol Scand Suppl** 1989;90:108–16

Detrimental effects of positive end-expiratory pressure during controlled mechanical ventilation of patients with severe airflow obstruction. Tuxen DV. **Am Rev Respir Dis** 1989 Jul;140(1):5–9

Massive epistaxis from nasal CPAP therapy. Strumpf DA, et al. **Chest** 1989 May;95(5):1141

Optimization of oxygen transport in mechanically ventilated newborns using oximetry and pulsed Doppler-derived cardiac output. Trang TT, et al. **Crit Care Med** 1988 Nov; 16(11):1094–7

Involvement of ANF in the acute antidiuresis during PEEP ventilation. Andrivet P, et al. **J Appl Physiol** 1988 Nov; 65(5):1967–74

Pulmonary vascular resistance after cessation of positive end-expiratory pressure. Fuhrman BP, et al. **J Appl Physiol** 1989 Feb;66(2):660–8

Systemic air embolism in the neonate. Bollinger B, et al. **Pediatr Radiol** 1988;19(1):52

HISTORY

[Joseph O'Dwyer—a pioneer in endotracheal intubation and pressure respiration] Goerig M, et al. **Anasth Intensivther Notfallmed** 1988 Oct;23(5):244–51 (Eng. Abstr.) **(Ger)**

INSTRUMENTATION

A continuous high flow intermittent mandatory ventilation system incorporating a Downs venturi device and a modified Nuffield Series 200 ventilator. Breen DP, et al. **Anaesth Intensive Care** 1988 Aug;16(3):351–7

The pressor response and laryngeal mask insertion. A comparison with tracheal intubation. Braude N, et al. **Anaesthesia** 1989 Jul;44(7):551–4

The Downs' adjustable flow generator. Fisher GC. **Anaesthesia** 1988 Sep;43(9):766–9

Evaluation of the Ambu CPAP system. Venn PJ. **Br J Anaesth** 1989 Mar;62(3):340–7

Use of the Brain laryngeal mask airway in anticipation of difficult tracheal intubation. Thomson KD, et al. **Br J Plast Surg** 1989 Jul;42(4):478–80

Jet flow-regulated expiratory resistance to maintain constant CPAP during the entire respiratory phase. Nishimura M, et al. **Chest** 1989 Apr;95(4):876–80

Resistance of expiratory positive pressure valves [letter] Olsson SG. **Chest** 1988 Oct;94(4):893–5

Flow resistance of expiratory positive-pressure systems. Pinsky MR, et al. **Chest** 1988 Oct;94(4):788–91

Instrumentation for estimating pulmonary function in patients on positive end-expiratory pressure. Fouke JM, et al. **Crit Care Med** 1989 Mar;17(3):265–8

A new device for administration of nasal continuous positive airway pressure in the newborn: an experimental study. Moa G, et al. **Crit Care Med** 1988 Dec;16(12):1238–42

Continuous positive airway pressure with a face-mask in infants with hyaline membrane disease. Murali MV, et al. **Indian Pediatr** 1988 Jul;25(7):627–31

Obese hypoventilation syndrome of early childhood requiring ventilatory support. Bourne RA, et al. **Int J Pediatr Otorhinolaryngol** 1988 Oct;16(1):61–8

A high flow turbine CPAP system. Moran JL, et al. **Intensive Care Med** 1988;14(6):658–60

Total inspiratory work with modern demand valve devices compared to continuous flow CPAP. Samodelov LF, et al. **Intensive Care Med** 1988;14(6):632–9

An injector-bag assembly for manual ventilation with PEEP during patient transport. Baraka A, et al. **Middle East J Anesthesiol** 1988 Jun;9(5):467–70

[The anesthesia respirator 423141—results of an experimental and clinical trial] Mügge L, et al. **Anaesthesiol Reanim** 1988; 13(4):205–12 (Eng. Abstr.) **(Ger)**

[Improvement of oxygenation in thoracic surgery with one-lung ventilation using a new intraoperative CPAP device] Hirlinger WK, et al. **Anaesthesist** 1989 Aug; 38(8):437–9 (Eng. Abstr.) **(Ger)**

[A new mobile respiration and monitoring system for transporting critically ill patients] Vandermeersch E, et al. **Anasth Intensivther Notfallmed** 1988 Oct;23(5):276–8 (Eng. Abstr.) **(Ger)**

METHODS

The arterial pressure waveform during acute ventricular failure and synchronized external chest compression. Pizov R, et al. **Anesth Analg** 1989 Feb;68(2):150–6

Limitations of patient triggered ventilation in neonates. Mitchell A, et al. **Arch Dis Child** 1989 Jul;64(7):924–9

Obstructive sleep apnea in amyloidosis treated with nasal continuous positive airway pressure. Lesser BA, et al. **Arch Intern Med** 1988 Oct;148(10):2285–7

Optimisation of positive and expiratory pressure for maximal delivery of oxygen to tissues using oesophageal Doppler ultrasonography. Singer M, et al. **BMJ** 1989 May 20; 298(6684):1350–3

Neuropsychologic symptoms in obstructive sleep apnea improve after treatment with nasal continuous positive airway pressure. Derderian SS, et al. **Chest** 1988 Nov; 94(5):1023–7

The challenge of bilateral bronchopleural fistula [letter] Weksler N, et al. **Chest** 1989 Apr;95(4):938–9

Nasal continuous positive airway pressure in Pneumocystis carinii pneumonia. Kesten S, et al. **Lancet** 1988 Dec 17; 2(8625):1414–5

Reducing inadvertent PEEP by controlling end-tidal pressures in the trachea. Gonzalez F, et al. **Pediatr Pulmonol** 1989;6(1):31–5

[Continuous positive pressure administration via a nose mask in obstructive sleep apnea syndrome (letter)] Folgering H, et al. **Ned Tijdschr Geneeskd** 1989 Jul 1;133(26):1332 **(Dut)**

[Continuous positive pressure respiration via a nasal mask in obstructive apnea syndrome] van der Meché FG. **Ned Tijdschr Geneeskd** 1989 May 13;133(19):991–2 **(Dut)**

[The treatment of sleep apnea syndromes (SAS)] Krieger J, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:396–9 (Eng. Abstr.) **(Fre)**

[Optimizing anesthesia ventilation. 4. Anesthesia ventilation with inspiratory plateau] Hakenbeck H, et al. **Anaesthesiol Reanim** 1988;13(4):213–26 (Eng. Abstr.) **(Ger)**

[The PEEP wave: an automated technic for bedside determination of the volume/pressure ratio in the lungs of ventilated patients] Putensen C, et al. **Anaesthesist** 1989 Apr;38(4):214–9 (Eng. Abstr.) **(Ger)**

[Adult respiratory distress syndrome in legionella pneumonia—successful treatment with extracorporeal CO_2 elimination procedures] Müller E, et al. **Anasth Intensivther Notfallmed** 1989 Jun;24(3):177–80 (Eng. Abstr.) **(Ger)**

[Nasal high pressure ventilation in obstructive sleep apnea syndrome. Theoretical and practical otorhinolaryngologic aspects] Mayer-Brix J, et al. **Laryngorhinootologie** 1989 May;68(5):295–8 (Eng. Abstr.) **(Ger)**

NURSING

Tips on broken PEEP [letter] Carelli R. **Am J Nurs** 1989 Sep;89(9):1131

PSYCHOLOGY

Patient experiences during respirator treatment—reason for intermittent positive-pressure ventilation treatment and patient awareness in the intensive care unit. Bergbom-Engberg I, et al. **Crit Care Med** 1989 Jan; 17(1):22–5

[Objective measurement of compliance during treatment of sleep apnea with continuous positive pressure] Krieger J, et al. **Prax Klin Pneumol** 1988 Jun;42 Suppl 1:394–5 (Eng. Abstr.) **(Fre)**

STANDARDS

Optimum versus clinically established levels of continuous positive airway pressure in respiratory therapy. Räsänen J, et al. **J Clin Monit** 1988 Oct;4(4):235–9

VETERINARY

Effects of frequency and airway pressure on gas exchange during interrupted high-frequency, positive-pressure ventilation in ponies. Wilson DV, et al. **Am J Vet Res** 1988 Aug;49(8):1263–9

Oxygen and ventilatory support for the critical patient. Pascoe PJ. **Semin Vet Med Surg (Small Anim)** 1988 Aug; 3(3):202–9

Capnographic monitoring during anesthesia with controlled ventilation in the horse. Cribb PH. **Vet Surg** 1988 Jan–Feb; 17(1):48–52

POSITIVE REINFORCEMENT see **REINFORCEMENT (PSYCHOLOGY)**

POSITRONS see **ELECTRONS**

POST AND CORE TECHNIC see under **CROWNS**

POST-TRANSCRIPTIONAL RNA MODIFICATION see **RNA PROCESSING, POST-TRANSCRIPTIONAL**

POST-TRANSLATIONAL PROTEIN MODIFICATION see **PROTEIN PROCESSING, POST-TRANSLATIONAL**

POST-TRAUMATIC STRESS DISORDERS see **STRESS DISORDERS, POST-TRAUMATIC**

POSTAGE STAMPS see **PHILATELY**

POSTAL SERVICE

Smoking cessation by mail: a comparison of standard and personalized correspondence course formats. Owen N, et al. **Addict Behav** 1989;14(4):355–63

Behind the AIDS mailer. Dull HB. **Am J Prev Med** 1988 Jul–Aug;4(4):239–40

Direct mail as a prompt for follow-up care among persons at risk for hypertension. Murray DM, et al. **Am J Prev Med** 1988 Nov–Dec;4(6):331–5

The collection of health data from the elderly in primary care using a postal questionnaire. Vetter NJ, et al. **Arch Gerontol Geriatr** 1989 Jul;9(1):53–8

Junk mail [letter] Duffin JM. **Can Med Assoc J** 1989 Jan 15;140(2):112

Physiological responses during and after intermittent sorting of postal parcels. Louhevaara V, et al. **Ergonomics** 1988 Aug;31(8):1165–75

Postcard reminders and influenza vaccination [letter] Barnas GP, et al. **J Am Geriatr Soc** 1989 Feb;37(2):195

Effectiveness of follow-up reminder methods [letter] Cherkin D. **J Fam Pract** 1989 Jan;28(1):20

Patient response to sigmoidoscopy recommendations via mailed reminders. Petravage J, et al. **J Fam Pract** 1988 Oct;27(4):387–9

Cancer charities agree to halt sweepstakes mailings—refunds offered [news] Ruddon K. **J Natl Cancer Inst** 1989 Sep 6;81(17):1274–6

Dimple sign in mail carrier's ulnar neuropathy. Massey EW. **Neurology** 1989 Aug;39(8):1132

The prevalence of pain in a general population. The results of a postal survey in a county of Sweden. Brattberg G, et al. **Pain** 1989 May;37(2):215–22

Evaluation of serum separator tubes as a mail transport device in primary health care. Sandberg S, et al. **Scand J Prim Health Care** 1988 Nov;6(4):251–4

[Preliminary study on non-compliant outpatients and the use of the mail to reschedule them] Marcopito LF, et al. **AMB Rev Assoc Med Bras** 1988 May–Jun;34(3):101–5 (Eng. Abstr.) **(Por)**

POSTCOITAL CONTRACEPTIVES see **CONTRACEPTIVES, POSTCOITAL**

POSTENCEPHALITIC PARKINSONISM see **PARKINSON DISEASE, POSTENCEPHALITIC**

POSTERIOR CERVICAL SYMPATHETIC SYNDROME see **BARRE-LIEOU SYNDROME**

POSTGASTRECTOMY SYNDROMES

Pseudoachalasia after radical gastrectomy. Yeoman LJ, et al. **Br J Surg** 1989 Jan;76(1):97–8

[Anomalies in gastric stump emptying of patients who have undergone resections for duodenal ulcer previously treated with histamine H2 receptor antagonists] Quaranta L, et al. **Minerva Chir** 1989 May 31;44(10):1475–8 (Eng. Abstr.) **(Ita)**

[Alkaline reflux gastritis (editorial)] Rosenberg D. **AMB Rev Assoc Med Bras** 1987 Nov–Dec;33(11–12):213 **(Por)**

[Disorders of the evacuatory function of the stomach after surgery] Belokonev VI, et al. **Khirurgiia (Mosk)** 1989 Apr; (4):127–30 **(Rus)**

[Anastomositis after resection of the stomach and its treatment] Podil'chak MD. **Khirurgiia (Mosk)** 1989 Apr; (4):120–2 **(Rus)**

DIAGNOSIS

Three cases of afferent loop obstruction—the role of ultrasonography in the diagnosis. Matsusue S, et al. **Jpn J Surg** 1988 Nov;18(6):709–13

[Various aspects of endoscopic examination of the operated-on stomach] Umanskii ME. **Vestn Khir** 1988 Sep; 141(9):54–5 **(Rus)**

DIET THERAPY

[Dietetic principles after gastrectomy] Wechsler JG, et al. **Dtsch Med Wochenschr** 1989 Jan 27;114(4):142–4 **(Ger)**

[Diet therapy of patients after operations on the stomach] Gurvich MM. **Vopr Pitan** 1988 Jul–Aug;(4):78–80 **(Rus)**

EPIDEMIOLOGY

[Analysis of postprandial disorders in patients after gastrectomy for peptic ulcer] Piecuch T, et al. **Wiad Lek** 1988 Mar 15;41(6):357–63 (Eng. Abstr.) **(Pol)**

ETIOLOGY

[Post-gastrectomy Wernicke-Korsakoff syndrome: clinical study of 2 cases] La Pia S, et al. **Riv Neurol** 1988 May–Jun; 58(3):121–3 (Eng. Abstr.) **(Ita)**

[Evaluation of the nutritional status of patients after gastrectomy by the Billroth II method for peptic ulcer] Piecuch T, et al. **Wiad Lek** 1988 Apr 1;41(7):437–42 (Eng. Abstr.) **(Pol)**

[Aikaline reflux gastritis: clinical picture and diagnosis] de Mello JB, et al. **AMB Rev Assoc Med Bras** 1987 Nov–Dec; 33(11–12):223–7 (Eng. Abstr.) **(Por)**

[Peptic ulcer. Disadvantages of the surgical treatment. Alkaline gastritis? (editorial)] Rahal F. **AMB Rev Assoc Med Bras** 1987 Nov–Dec;33(11–12):214 **(Por)**

[Lavsan ligatures as the cause of choledocholithiasis following resection of the stomach] Egorov VP, et al. **Khirurgiia (Mosk)** 1989 Jan;(1):96–7 **(Rus)**

[Diverticulum-shaped ectasia of the duodenal stump after gastrectomy by the Haberer-Finley method] Postolov PM, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):120–1 **(Rus)**

[Postgastrectomy disorders] Korzhukova PI. **Klin Med (Mosk)** 1988 Oct;66(10):148–52 **(Rus)**

[Comparative evaluation of late results of the Hoffmeister-Finsterer gastrectomy and the method of valvc anastomoses in peptic ulcer] Vlasov AV. **Klin Med (Mosk)** 1989 May;67(5):84–7 (Eng. Abstr.) **(Rus)**

[Endoscopic evaluation of reflux gastritis in patients operated on for stomach and duodenal ulcers] Gorbashko AI, et al. **Vestn Khir** 1988 Oct;141(10):22–6 (Eng. Abstr.) **(Rus)**

[Causes of post-gastrectomy and post-vagotomy recurrences of peptic ulcer] Zavgorodnil LG, et al. **Vestn Khir** 1988 Aug;141(8):25–9 (Eng. Abstr.) **(Rus)**

METABOLISM

The changes of fat absorption after resection for carcinoma of the gastric cardia—a comparison between total and proximal subtotal gastrectomy. Zhang YT, et al. **Proc Chin Acad Med Sci Peking Union Med Coll** 1988; 3(4):232–5

MORTALITY

Mortality caused by stomach cancer after remote partial gastrectomy for benign conditions: 40 years of follow up of an Amsterdam cohort of 2633 postgastrectomy patients. Offerhaus GJ, et al. **Gut** 1988 Nov;29(11):1588–90

PATHOLOGY

Early carcinoma of the stomach after gastric surgery: comparison with early carcinoma in the non-operated stomach. Iishi H, et al. **Arch Geschwulstforsch** 1988; 58(6):395–401

PHYSIOPATHOLOGY

[Lymphatic flow of the remnant stomach] Noguchi Y, et al. **Nippon Geka Gakkai Zasshi** 1988 Jun;89(6):852–62 (Eng. Abstr.) **(Jpn)**

PREVENTION & CONTROL

Is a gastric replacement reservoir essential with total gastrectomy? Pathophysiologic update. Nadrowski L. **Curr Surg** 1989 Jul–Aug;46(4):276–84 (65 ref.)

Reconstruction of the digestive tract after total gastrectomy. Hubens A, et al. **Hepatogastroenterology** 1989 Feb; 36(1):18–22

[Surgical treatment of stomach ulcers] Chernyshev VN, et al. **Vestn Khir** 1989 Jan;142(1):47–9 **(Rus)**

[A method of treating high ulcers of the posterior gastric wall] Gorbashko AI, et al. **Vestn Khir** 1989 Jan;142(1):7–11 (Eng. Abstr.) **(Rus)**

[Functional results of gastrectomy] Utkin VV, et al. **Vestn Khir** 1988 May;140(5):11–5 (Eng. Abstr.) **(Rus)**

[Prevention of early and late complications after gastrectomy] Zherlov GK, et al. **Vopr Onkol** 1988; 34(12):1489–93 (Eng. Abstr.) **(Rus)**

RADIONUCLIDE IMAGING

The use of isotope bone scanning in suspected post-gastrectomy osteomalacia [letter] Wright GM, et al. **Practitioner** 1988 Apr 8;232(1446):365

[Detection of reflux esophagitis following gastrectomy using cholescintigraphy] Utkin VV, et al. **Med Radiol (Mosk)** 1988 Oct;33(10):5–8 (Eng. Abstr.) **(Rus)**

SURGERY

Problems in the surgical treatment of motility disorders occurring after gastric surgery. Hubens A, et al. **Acta Chir Belg** 1987 Sep–Oct;87(5):334–8

Nutritional effects of postgastrectomy reconstruction: a clinical evaluation. Zelnick R, et al. **J Surg Oncol** 1989 Apr;40(4):219–21

[Surgical treatment of late complications of the gastrectomized stomach] Rozsos I. **Orv Hetil** 1988 Oct 16; 129(42):2239–42, 2245–6 (27 ref.) (Eng. Abstr.) **(Hun)**

[Relaparotomy in the planned surgical treatment of peptic ulcer] Chernyshev VN, et al. **Vestn Khir** 1988 Jul; 141(7):93–6 **(Rus)**

[Treatment of peptic ulcers in the operated stomach] Chernobrovyi NP, et al. **Vrach Delo** 1988 Aug;(8):4–7 (Eng. Abstr.) **(Rus)**

[Alkaline gastritis. Gastric reoperations] Iorio A, et al. **Acta Gastroenterol Latinoam** 1987;17(3):247–62 (Eng. Abstr.) **(Spa)**

THERAPY

[Balloon dilatation in stenosis of esophagojejuno-anastomosis after gastrectomy] Tatochenko KV, et al. **Vestn Khir** 1988 Aug;141(8):120–3 **(Rus)**

POSTIMPLANTATION PHASE

The sex-chromosome constitution and early postimplantation development of diandric triploid mouse embryos. Kaufman MH, et al. **Cytogenet Cell Genet** 1989;50(2–3):98–101

Role of the polar trophectoderm in determining the pattern of early post-implantation morphogenesis in mammals: evidence from development of the short-tailed field vole, Microtus agrestis. Copp AJ, et al. **Placenta** 1988 Nov–Dec; 9(6):643–53

Lipid mediator production by post-implantation rat embryos in vitro. Geissler FT, et al. **Prostaglandins** 1989 Aug; 38(2):145–55

DRUG EFFECTS

The effects of ochratoxin A on postimplantation rat embryos in culture. Mayura K, et al. **Arch Environ Contam Toxicol** 1989 May–Jun;18(3):411–5

POSTMARKETING PRODUCT SURVEILLANCE see **PRODUCT SURVEILLANCE, POSTMARKETING**

POSTMENOPAUSAL BONE LOSS see **OSTEOPOROSIS**

POSTMORTEM CHANGES

Estimation of postmortem interval by arthropod succession. Three case studies from the Hawaiian Islands. Goff ML, et al. **Am J Forensic Med Pathol** 1988 Sep;9(3):220–5

Postmortem cerebrospinal fluid pleocytosis. Platt MS, et al. **Am J Forensic Med Pathol** 1989 Sep;10(3):209–12

Postmortem pink teeth. Histochemical identification of the causative pigment. van Wyk CW. **Am J Forensic Med Pathol** 1989 Jun;10(2):134–9

Are post-mortem biochemical studies of human brain worthwhile? Palmer AM, et al. **Biochem Soc Trans** 1988 Aug;16(4):472–5

The determination of the time interval following death by morphological, physical and chemical observation. Jacoby MR. **Chic Med Sch Q** 1970;29(4):203–9

Fast increase of proteinase inhibitors in necrotic collagenous tissue. Oehmichen M. **Exp Pathol** 1989;36(4):217–20

Postmortem stability of DNA. Bär W, et al. **Forensic Sci Int** 1988 Oct;39(1):59–70

Postmortem stability of some markers of intra-vital wounds. Girela E, et al. **Forensic Sci Int** 1989 Feb;40(2):123–30

Death time estimation in case work. II. Integration of different methods. Henssge C, et al. **Forensic Sci Int** 1988 Oct;39(1):77–87 (30 ref.)

Postmortem changes in the level of calcium pumping adenosine triphosphatase in rat heart sarcoplasmic reticulum. Iwasa Y, et al. **Forensic Sci Int** 1988 Oct; 39(1):13–22

References for determining the time of death by potassium in vitreous humor. Madea B, et al. **Forensic Sci Int** 1989 Mar;40(3):231–43

Estimation of the post mortem period by multiple-site temperature measurements and the use of a new algorithm. Morgan C, et al. **Forensic Sci Int** 1988 Oct;39(1):89–95

Linear rate of change in the product of erythrocyte water content and potassium concentration during the 0–120-hour postmortem period in the rat. Querido D, et al. **Forensic Sci Int** 1988 Jul–Aug;38(1–2):101–12

Postmortem disposition of morphine in rats. Sawyer WR, et al. **Forensic Sci Int** 1988 Sep;38(3–4):259–73

Postmortem changes of blood urea, creatinine, non-protein nitrogen, uric acid & ammonia levels in rabbit. Usmani JA, et al. **Indian J Med Res** 1988 Dec;88:545–9

Localization of paratropomyosin in skeletal muscle myofibrils and its translocation during postmortem storage of muscles. Hattori A, et al. **J Biochem (Tokyo)** 1988 May;103(5):809–14

Decay rates of human remains in an arid environment. Galloway A, et al. **J Forensic Sci** 1989 May;34(3):607–16

Tooth mark artifacts and survival of bones in animal scavenged human skeletons. Haglund WD, et al. **J Forensic Sci** 1988 Jul;33(4):985–97

Canid scavenging/disarticulation sequence of human remains in the Pacific Northwest. Haglund WD, et al. **J Forensic Sci** 1989 May;34(3):587–606

Concealment of the body in drug deaths. Hawley DA, et al. **J Forensic Sci** 1989 Mar;34(2):495–9

A scanning electron microscopy and electron probe X-ray microanalysis (SEM-EPMA) of pink teeth. Ikeda N, et al. **J Forensic Sci** 1988 Nov;33(6):1328–31

Estimation of postmortem interval using kinetic analysis of the third component of complement (C3) cleavage. Kominato Y, et al. **J Forensic Sci** 1989 Jan;34(1):207–17

Stability of plasma total cholesterol, triglycerides, and apolipoproteins B and A-I during the early postmortem period. Särkioja T, et al. **J Forensic Sci** 1988 Nov; 33(6):1432–8

Cardiac blood pH as a possible indicator of postmortem interval. Sawyer WR, et al. **J Forensic Sci** 1988 Nov; 33(6):1439–44

Comparison of chemical methods for determining postmortem interval. Sparks DL, et al. **J Forensic Sci** 1989 Jan;34(1):197–206

Postmortem- and cryostability of the potassium-evoked release of [3H]5-hydroxytryptamine from rat cerebral cortical miniprisms. Fowler CJ, et al. **J Neural Transm** 1989;75(2):135–48

Effect of antemortem and postmortem factors on [3H]MK-801 binding in the human brain: transient elevation during early childhood. Kornhuber J, et al. **Life Sci** 1989;45(8):745–9

Brain contusions: the time sequence of the histological changes. Løberg EM, et al. **Med Sci Law** 1989 Apr; 29(2):109–15

The effect of the post-mortem interval on the level of creatine in vitreous humour. Piette M. **Med Sci Law** 1989 Jan;29(1):47–54

A study of non-isotopic in situ hybridization histochemistry on postmortem changes in vasopressin mRNA in rat brain. Arai H, et al. **Neurosci Lett** 1989 Aug 28;103(2):127–32

Time course of postmortem modifications in synaptosomal [3H]dopamine uptake and [3H]GBR 12783 binding to the dopamine uptake complex in the rat striatum. Thibaut F, et al. **Neurosci Lett** 1989 Jan 30;96(3):335–9

Post-mortem muscular changes studied by nuclear magnetic resonance (NMR) spectroscopy—studies on the 31P-NMR spectrum of the myocardium after sudden death. Akaiwa T, et al. **Nippon Hoigaku Zasshi** 1988 Aug;42(4–5):363–71

Detection of toluene in a putrefied human body. Hara K, et al. **Nippon Hoigaku Zasshi** 1988 Aug;42(4–5):354–7

Early post-mortem metabolism and muscle shortening in the Pectoralis major muscle of broiler chickens. McGinnis JP, et al. **Poult Sci** 1989 Mar;68(3):386–92

Differential postmortem release of noradrenaline and dopamine from rat brain. Rossetti ZL, et al. **Psychopharmacology (Berlin)** 1989;98(4):562–3

Dr. Leidy's soap lady: imaging the past. Conlogue G, et al. **Radiol Technol** 1989 May–Jun;60(5):411–5

Postmortem stability of the rat atrial natriuretic peptide in blood and atrial tissue. Lorente JA, et al. **Rev Esp Fisiol** 1989 Jun;45(2):127–30

Use of human post-mortem cerebral blood vessels to study vasospasm. Schrör K, et al. **Trends Pharmacol Sci** 1988 Feb;9(2):71–4 (21 ref.)

Immunohistological demonstration of lymphocyte surface antigens in postmortem lymphoid tissues. Wintzer HO, et al. **Virchows Arch [A]** 1988;413(6):581–9

The role of intestinal bacterial heat production in confounding postmortem temperature measurements. Hooft P, et al. **Z Rechtsmed** 1989;102(5):331–6

Experimental studies on the mechanism of ethanol formation in corpses. Nanikawa R, et al. **Z Rechtsmed** 1988; 101(1):21–6

Determination of calcium and magnesium in postmortem human vitreous humor as a test to ascertain the cause and

time of death. Nowak R, et al. **Z Rechtsmed** 1989; 102(2–3):179–83

Cytokinetics of epidermic cells in skin from human cadavers. I. Dependency on the postmortal interval. Oehmichen M, et al. **Z Rechtsmed** 1988;101(3):161–71

Cytokinetics of epidermic cells in skin from human cadavers. II. Dependency on sex, age, and site. Oehmichen M, et al. **Z Rechtsmed** 1988;101(3):173–82

[Postmortem formation of inorganic phosphorus in the skeletal muscles of pigs in relation to the detection of PSE in meat] Novotná B, et al. **Vet Med (Praha)** 1988 Oct; 33(10):617–23 **(Cze)**

[Action of muscular proteinases on fast and slow myosins. Relation with post-mortem proteolysis in muscles of variable contractility] Ouali A, et al. **Reprod Nutr Dev** 1988; 28(3B):839–44 (Eng. Abstr.) **(Fre)**

[DNA synthesis in cells of human cadavers] Oehmichen M, et al. **Acta Histochem Suppl (Jena)** 1989;37:241–6 (Eng. Abstr.) **(Ger)**

[Morphologic identification of mummified tissue traces] Fechner G, et al. **Arch Kriminol** 1988 Nov–Dec; 182(5–6):154–8 (Eng. Abstr.) **(Ger)**

[Diagnosis of carbon monoxide poisoning following embalming and exhumation] Iffland R, et al. **Arch Kriminol** 1988 Sep–Oct;182(3–4):100–6 (Eng. Abstr.) **(Ger)**

[Postmortem tissue embolisms. Report of 3 cases] Krämer M, et al. **Arch Kriminol** 1989 Jan–Feb;183(1–2):29–36 (Eng. Abstr.) **(Ger)**

[Isolation of high molecular weight DNA from a 14-day-old immersed cadaver] Josephi E, et al. **Beitr Gerichtl Med** 1988;46:203–6 (Eng. Abstr.) **(Ger)**

[Comparative studies of the visibility of strangulation marks in water and air exposure] Madea B, et al. **Beitr Gerichtl Med** 1988;46:283–7 (Eng. Abstr.) **(Ger)**

[How reliable is determination of the time of death by potassium concentration in cisternal cerebrospinal fluid?] Madea B, et al. **Beitr Gerichtl Med** 1988;46:375–81 (Eng. Abstr.) **(Ger)**

[Stability of selected sperm components in a mixture of sperm and vaginal secretions] Pawlowski R, et al. **Beitr Gerichtl Med** 1988;46:219–26 (Eng. Abstr.) **(Ger)**

[Potassium concentration in the vitreous body—sample collection at different time intervals to determine time of death] Schmidt V, et al. **Beitr Gerichtl Med** 1988;46:423–6 (Eng. Abstr.) **(Ger)**

[Stability of repetitive DNA sequences in cadaver tissues] Teifel-Greding J, et al. **Beitr Gerichtl Med** 1988;46:199–202 (Eng. Abstr.) **(Ger)**

[Myoglobin content of heart muscle following postmortem electrocution] Urban R, et al. **Beitr Gerichtl Med** 1988; 46:345–9 (Eng. Abstr.) **(Ger)**

[Special problems in the histologic age determination of thrombi and emboli] Leu AJ, et al. **Pathologe** 1989 Mar; 10(2):87–92 **(Ger)**

[The significance of collagen in determining the age of a wound] Eisenmenger W, et al. **Z Rechtsmed** 1988; 100(2–3):79–100 (Eng. Abstr.) **(Ger)**

[Immunohistochemical antigen detection in dried tissue samples] Fechner G, et al. **Z Rechtsmed** 1989;102(4):241–6 (Eng. Abstr.) **(Ger)**

[Quantitative polarization microscopy demonstration of collagen type I and type III in histologic paraffin sections] Ogbuihi S, et al. **Z Rechtsmed** 1988;100(2–3):101–11 (Eng. Abstr.) **(Ger)**

[Roentgen identification of unknown cadavers with advanced postmortem changes] Riepert T, et al. **Z Rechtsmed** 1989; 102(2–3):207–16 (Eng. Abstr.) **(Ger)**

[A transition zone phenomenon of the skin in cadavers lying in bath water] Wollenek G, et al. **Z Rechtsmed** 1989; 102(7):473–86 (Eng. Abstr.) **(Ger)**

[Postmortem interval estimation from falling percentage of rectal temperature] Okada K, et al. **Nippon Hoigaku Zasshi** 1988 Aug;42(4–5):381–7 (Eng. Abstr.) **(Jpn)**

[A method of retrospective determination of the onset of the development of insects on the corpse] Marchenko MI. **Sud Med Ekspert** 1989 Jan–Mar;32(1):17–20 (Eng. Abstr.) **(Rus)**

[Realization of an adaptive method of simulating the process of temperature change of a cadaver on a microcomputer] Shved EF, et al. **Sud Med Ekspert** 1989 Apr–Jun;32(2):4–6 (Eng. Abstr.) **(Rus)**

[A diagnostic program for estimating the time of death using microcalculators MK-61 and B3-34] Shved EF, et al. **Sud Med Ekspert** 1989 Jan–Mar;32(1):15–7 (Eng. Abstr.) **(Rus)**

BLOOD

Lipoproteins and apolipoproteins in postmortem serum. Hornick CA, et al. **Mod Pathol** 1988 Nov;1(6):480–4

POSTNATAL CARE

Outcome of very-low-birth-weight infants: are populations of neonates inherently different after antenatal versus neonatal referral? Delaney-Black V, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):545–52

Outcome of very-low-birth-weight infants: does antepartum versus neonatal referral have a better impact on mortality, morbidity, or long-term outcome? Lubchenco LO, et al. **Am J Obstet Gynecol** 1989 Mar;160(3):539–45

Improving the life-course development of socially disadvantaged mothers: a randomized trial of nurse home visitation. Olds DL, et al. **Am J Public Health** 1988 Nov; 78(11):1436–45

Impact of AIDS on neonatal care [letter] Isaacs D. **Arch Dis Child** 1989 Jun;64(6):892

Practical postnatal care. Smibert J. **Aust Fam Physician** 1989 May;18(5):508–9, 511

Counselling in a general practice setting: controlled study of health visitor intervention in treatment of postnatal depression. Holden JM, et al. **BMJ** 1989 Jan 28; 298(6668):223–6

Postnatal care and breast feeding. Davies R. **Practitioner** 1988 Nov 22;232(1459):1271–2, 1275

PSYCHOLOGY

[Comparison of the psychological status of women in the puerperal period given different types of postpartum care in a rooming-in and a traditional department] Zdichyncová J, et al. **Cesk Gynekol** 1988 Nov;53(9):654–9 (Eng. Abstr.) **(Cze)**

TRENDS

Postnatal care in the 20th century. Smibert J. **Aust Fam Physician** 1989 May;18(5):499–503, 506–7

UTILIZATION

Mothers' perceptions and use of community health services during the postpartum. Rovers R, et al. **Public Health Nurs** 1988 Dec;5(4):193–200

POSTNIDATION PHASE see **POSTIMPLANTATION PHASE**

POSTOPERATIVE CARE

Reduced function of neutrophils during routine postoperative glucose infusion. Rasmussen A, et al. **Acta Chir Scand** 1988 Jul–Aug;154(7–8):429–33

Summary of NIH Consensus Development Conference on Perioperative Red Cell Transfusion [letter] **Am J Hematol** 1989 Jun;31(2):144

How and when should I respond to postop fever? Howie JN. **Am J Nurs** 1989 Jul;89(7):984–6

Postoperative instillation of low-dose mitomycin C in the treatment of primary pterygium [letter] Singh G. **Am J Ophthalmol** 1989 May 15;107(5):570–1

Effects of protein intake on pulmonary gas exchange and ventilatory drive in postoperative patients. Delafosse B, et al. **Anesthesiology** 1989 Mar;70(3):404–7

Perioperative management for transplant of autologous adrenal medulla to the brain for parkinsonism. Hyman SA, et al. **Anesthesiology** 1988 Oct;69(4):618–22

A randomized, double-blind comparison of the effects of interpleural bupivacaine and saline on morphine requirements and pulmonary function after cholecystectomy. VadeBoncouer TR, et al. **Anesthesiology** 1989 Sep;71(3):339–43

A randomised comparison of two postoperative fluid regimens. Cook JA, et al. **Ann R Coll Surg Engl** 1989 Jan; 71(1):67–9

Effect of perioperative blood transfusion on outcome in patients with surgically resected lung cancer. Moores DW, et al. **Ann Thorac Surg** 1989 Mar;47(3):346–51

Perioperative nursing research. Part VII: Postoperative care. Noriega L, et al. **AORN J** 1989 Aug;50(2):379–81, 384–5, 387–9 passim (47 ref.)

Perioperative nursing research. Part VI: Postoperative phase. Richards ML. **AORN J** 1989 Jul;50(1):120–3, 125–8, 134–7 (73 ref.)

The role of postoperative alkylating agent therapy in early-stage epithelial ovarian cancer [letter] Finn CB, et al. **Br J Obstet Gynaecol** 1989 Aug;96(8):1007–8

Are post-operative radiographs necessary in the management of simple fractures of the zygomatic complex? Ogden GR, et al. **Br J Oral Maxillofac Surg** 1988 Aug;26(4):292–6

Post-operative neutron irradiation [letter] Courdi A. **Br J Radiol** 1989 Mar;62(735):298–9

Soft-tissue sarcoma: neutrons versus photons for post-operative irradiation. Glaholm J, et al. **Br J Radiol** 1988 Sep;61(729):829–34

Suction drainage of the axilla: a prospective randomized trial. Cameron AE, et al. **Br J Surg** 1988 Dec;75(12):1211

Postoperative adjuvant chemotherapy inhibits early recurrence of early gastric carcinoma. Okamura T, et al. **Cancer Chemother Pharmacol** 1989;23(5):319–22

Effect of perioperative myocardial infarction on survival of postcardiotomy patients supported with ventricular-assist devices. Pennington DG, et al. **Circulation** 1988 Nov;78(5 Pt 2):III110–5

Postoperative care of the gynecology patient. Carlson JA Jr. **Clin Obstet Gynecol** 1988 Sep;31(3):761–70

Pharmacokinetics and clinical tolerance of intravenous and oral cyclosporine in the immediate postoperative period. Morse GD, et al. **Clin Pharmacol Ther** 1988 Dec; 44(6):654–64

The value of yearly chest X-ray in patients with stage I breast cancer. Vestergaard A, et al. **Eur J Cancer Clin Oncol** 1989 Apr;25(4):687–9

Peri-operative blood transfusions in colorectal cancer. Vente JP, et al. **Eur J Surg Oncol** 1989 Aug;15(4):371–4

Raised intraocular pressure with topical steroids after trabeculectomy. Thomas R, et al. **Graefes Arch Clin Exp Ophthalmol** 1988;226(4):337–40

Glucose, fructose, and xylitol in postoperative hypocaloric parenteral nutrition. Behrendt W, et al. **Infusionstherapie** 1988 Aug;15(4):170–5

Risk modification in the postanesthesia care unit. Cullen DJ. **Int Anesthesiol Clin** 1989 Fall;27(3):184–7 (8 ref.)

The management of cardiac surgical patients in a general surgical recovery ward. Hutter JA, et al. **J Cardiovasc Surg (Torino)** 1989 Mar–Apr;30(2):273–6

Use of collagen shields as a surgical adjunct. Aquavella JV, et al. **J Cataract Refract Surg** 1988 Sep;14(5):492–5

Therapeutic and protective properties of the corneal collagen shield. Marmer RH. **J Cataract Refract Surg** 1988 Sep; 14(5):496–9

Management of cataracts in children. Sinskey RM, et al. **J Cataract Refract Surg** 1989 Mar;15(2):196–200

Use of a Foley catheter for short-term drainage in frontal sinus surgery. Iaduola TG. **J Laryngol Otol** 1989 Apr; 103(4):375–8

Nursing and home aspects of the care of a child with tracheostomy. Jennings P. **J Laryngol Otol Suppl** 1988; 17:25–9

Intensive care course following liver transplantation in children. Sommerauer J, et al. **J Pediatr Surg** 1988 Aug; 23(8):705–8

Post-operative analgesia after epidural administration of mixture of buprenorphine and lignocaine. Dasgupta D, et al. **J Postgrad Med** 1988 Oct;34(4):201–4

Post-operative analgesia after subarachnoid administration of mixture of buprenorphine and lignocaine. Dasgupta D, et al. **J Postgrad Med** 1988 Oct;34(4):205–10

Insulin and dextrose in cardiovascular surgery. Gangal HT, et al. **J Postgrad Med** 1988 Jul;34(3):151–7

The effect of transfusion of fresh whole blood versus platelet concentrates after cardiac operations. A scanning electron microscope study of platelet aggregation on extracellular matrix. Lavee J, et al. **J Thorac Cardiovasc Surg** 1989 Feb; 97(2):204–12

Hypertonic saline fluid therapy following surgery: a prospective study. Cross JS, et al. **J Trauma** 1989 Jun; 29(6):817–25; discussion 825–6

Hypertonic saline for postoperative fluid therapy: salient features [editorial] Shackford SR. **J Trauma** 1989 Jun; 29(6):894

Maintenance of visceral protein levels in serum during postoperative parenteral nutrition. Tulikoura I. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec; 12(6):597–601

Maternal death as a result of anesthesia—the Michigan experience. Endler GC, et al. **Mich Med** 1989 Feb; 88(2):28–9

Effects of TPN on wound healing. **Nutr Rev** 1987 Nov; 45(11):331–2 (9 ref.)

Contact lenses for visual rehabilitation after corneal laceration repair. Smiddy WE, et al. **Ophthalmology** 1989 Mar;96(3):293–8

What energy level is required to avoid nutrient depletion after surgery in oropharyngeal cancer? Zurlo F, et al. **ORL J Otorhinolaryngol Relat Spec** 1988;50(4):236–45

Postoperative care of the total knee patient. Ecker ML, et al. **Orthop Clin North Am** 1989 Jan;20(1):55–62

The transdermal administration of fentanyl in the treatment of postoperative pain: pharmacokinetics and pharmacodynamic effects. Gourlay GK, et al. **Pain** 1989 May;37(2):193–202

Postoperative nighttime nasal taping to decrease swelling [letter] Hoefflin SM. **Plast Reconstr Surg** 1989 Aug; 84(2):375

Helping the stoma patient. Harocopos C. **Practitioner** 1988 Mar 22;232(1445):318, 321–2, 326 (6 ref.)

Enteral versus parenteral glucose as the sole nutritional support after colorectal resection. A prospective, randomized comparison. Magnússon J, et al. **Scand J Gastroenterol** 1989 Jun;24(5):539–49

Sonographic findings following conservative surgery and irradiation for breast carcinoma. Leucht WJ, et al. **Ultrasound Med Biol** 1988;14 Suppl 1:27–41

Office management of urinary stomas. Wood DP Jr, et al. **Urol Clin North Am** 1988 Nov;15(4):753–67 (30 ref.)

Urinary prophylaxis and postoperative care of children at home with an indwelling catheter after hypospadias repair. Sugar EC, et al. **Urology** 1988 Nov;32(5):418–20

[Clinical trial of the laksafer preparation on patients following gynecological operations] Doganov N, et al. **Akush Ginekol (Sofiia)** 1989;28(2):47–51 (Eng. Abstr.) **(Bul)**

[Preliminary results of adjuvant chemo- and chemohormonotherapy in breast cancer patients] Marinov D, et al. **Khirurgiia (Sofiia)** 1988;41(4):50–5 (Eng. Abstr.) **(Bul)**

[The nursing care of patients with scoliosis correction] Fu XP. **Chung Hua Hu Li Tsa Chih** 1988 Nov;23(11):652–4 **(Chi)**

[Nursing care of patients with homologous total spleen transplantation] Jin GX, et al. **Chung Hua Hu Li Tsa Chih** 1989 Mar;24(3):135–7 **(Chi)**

[The care of patients with basilar invagination] Li YQ. **Chung Hua Hu Li Tsa Chih** 1988 Dec;23(12):708–9 **(Chi)**

[Preliminary approach to the postoperative wearing of

protective shields in cataracts] Ni GY, et al. **Chung Hua Hu Li Tsa Chih** 1988 May;23(5):280 **(Chi)**

[Care of patients with obstructive sleep apnea syndrome] Wang SQ, et al. **Chung Hua Hu Li Tsa Chih** 1989 Jan; 24(1):3–4 **(Chi)**

[Post-operative care of patients with funnel chest after subvolution of the sternum by vascular pedicle surgery] Yin WL. **Chung Hua Hu Li Tsa Chih** 1989 Feb;24(2):71–2 **(Chi)**

[Analysis of causes leading to dyspnea in patients after tracheotomy] Zhang CF. **Chung Hua Hu Li Tsa Chih** 1988 Jun;23(6):343–4 **(Chi)**

[Effect of glycerol and amino-acid infusion in postoperative patients] Li AH. **Chung Hua Wai Ko Tsa Chih** 1988 Jul; 26(7):416–8, 446 (Eng. Abstr.) **(Chi)**

[Rehabilitation and postoperative care after condylar knee joint prosthetic surgery] Valenta J, et al. **Cas Lek Cesk** 1988 Sep 16;127(37–38):1173–5 (Eng. Abstr.) **(Cze)**

[Nasal tube and drainage following surgery, necessary or not?] de Boer HH. **Ned Tijdschr Geneeskd** 1989 Apr 22; 133(16):808–10 **(Dut)**

[Is surgery of inguinal hernia acceptable in ambulatory care?] de Bruin MJ, et al. **Ned Tijdschr Geneeskd** 1989 Jun 3; 133(22):1131–3 (Eng. Abstr.) **(Dut)**

[Experience at an Internal Medicine service in the postoperative follow-up of 403 patients operated on at a cardiovascular surgery service] Chevalier P, et al. **Ann Med Interne (Paris)** 1989;140(2):114–7 (Eng. Abstr.) **(Fre)**

[Complications of postoperative systematic preventive anticoagulant treatment] Rettori R. **J Mal Vasc** 1989;14 Suppl B:46–8 (Eng. Abstr.) **(Fre)**

[Management and organization of postoperative cardiac intensive care units in Italy. Study Group for Anesthesia and Resuscitation in Cardiosurgery] **Minerva Anestesiol** 1989 Jan–Feb;55(1–2):47–51 (Eng. Abstr.) **(Ita)**

[Artificial nutrition of critical surgical patients] Doldi BS, et al. **Minerva Chir** 1988 Aug 31;43(15–16):1235–41 (Eng. Abstr.) **(Ita)**

[Advanced stages of rectosigmoid cancer. The role of postoperative radiotherapy] Bolzicco G, et al. **Radiol Med (Torino)** 1989 Mar;77(3):239–41 (Eng. Abstr.) **(Ita)**

[Pre- and postoperative radiotherapy of oral carcinoma of a locally advanced stage. An analysis of the results and complications] Zini G, et al. **Radiol Med (Torino)** 1989 Jan–Feb;77(1–2):99–103 (Eng. Abstr.) **(Ita)**

[Postoperative management of diabetes mellitus with A-C bypass] Yokoyama K, et al. **Kyobu Geka** 1988 Jul; 41(8):632–5 (Eng. Abstr.) **(Jpn)**

[Problems and difficulties in adapting period in infants and children after massive intestinal resection] Hasegawa S, et al. **Nippon Geka Gakkai Zasshi** 1988 Sep;89(9):1391–4 (Eng. Abstr.) **(Jpn)**

[Problems and methods of the care of postoperative patients with cancer of the thoracic esophagus] **Nippon Kyobu Geka Gakkai Zasshi** 1987 May;35(5):702–13 **(Jpn)**

[Postoperative peptic ulcer: contribution of the scintigraphic method in diagnosing retained antral mucosa] Szego T, et al. **AMB Rev Assoc Med Bras** 1988 Nov–Dec;34(6):205–8 (Eng. Abstr.) **(Por)**

[Transcranial electrostimulation in the immediate period following lung operations] Avrutskil MIa, et al. **Anesteziol Reanimatol** 1988 Nov–Dec;(6):40–3 (Eng. Abstr.) **(Rus)**

[Programs of infusion and transfusion therapy for obstetric and gynecologic patients in the early postoperative period] Proshina IV, et al. **Anesteziol Reanimatol** 1988 Sep–Oct; (5):50–4 (Eng. Abstr.) **(Rus)**

[Hemodynamic evaluation and intensive therapy following the hemodynamic correction of complex congenital heart defects (Fontan's operation)] Tskhovrebov SV, et al. **Anesteziol Reanimatol** 1988 Sep–Oct;(5):33–8 (Eng. Abstr.) **(Rus)**

[Effects of total lavage of the gastrointestinal tract on the regulatory mechanisms of water-electrolyte metabolism in patients who had undergone colon surgery] Smirnova VI, et al. **Khirurgiia (Mosk)** 1989 Apr;(4):77–9 (Eng. Abstr.) **(Rus)**

[Parenteral feeding of children after nonemergency operations on the abdominal cavity organs] Borova OE, et al. **Klin Khir** 1988;(6):24–7 (Eng. Abstr.) **(Rus)**

[Outpatient care of patients following the laser discussion of secondary cataract] Iuzhakova OI, et al. **Oftalmol Zh** 1988;(6):331–3 (Eng. Abstr.) **(Rus)**

[Outpatient care of children following cataract extraction and intraocular lens implantation] Zubareva LN. **Oftalmol Zh** 1988;(6):327–30 (Eng. Abstr.) **(Rus)**

[The diet therapy of patients after cholecystectomy] Pokrovskaia GR. **Vopr Pitan** 1988 Sep–Oct;(5):73–5 **(Rus)**

[Evaluation of a drug combination in the postoperative course of surgical trauma to the nasal fossa] Vallés Varela H, et al. **An Otorrinolaringol Ibero Am** 1988;15(3):277–89 (Eng. Abstr.) **(Spa)**

[Glutamine in postoperative parenteral nutrition has a positive affect on nitrogen balance] Hammarqvist F, et al. **Lakartidningen** 1989 Jan 25;86(4):229–31 **(Swe)**

ADVERSE EFFECTS

[Hyperchloremic metabolic acidosis during postoperative total parenteral nutrition] Stella G, et al. **Rev Chir [Chir]** 1988 May–Jun;37(3):213–8 (Eng. Abstr.) **(Rum)**

ECONOMICS

[Economic effectiveness of the rehabilitation of patients after operations on the stomach and biliary tract] Vygodner EB, et al. **Sov Zdravookhr** 1988;(8):12–5 (Eng. Abstr.) **(Rus)**

INSTRUMENTATION

[Basic principles of after care following autoplastic reconstruction of the cruciate ligament] Kohn D, et al. **Sportverletz Sportschaden** 1989 Jun;3(2):67–73 (43 ref.) (Eng. Abstr.) **(Ger)**

[Postoperative continuous passive motion following augmentation of anterior cruciate ligament ruptures with polydioxanone ligaments. Early results of a prospective study] Oberbillig C, et al. **Unfallchirurgie** 1989 Jun; 15(3):145–51 (Eng. Abstr.) **(Ger)**

METHODS

How to use intermittent abdominal compressions [letter] Owen PL. **Am J Nurs** 1989 May;89(5):659–60

A comparison of treatment approaches used after carpal tunnel release surgery. Groves EJ, et al. **Am J Occup Ther** 1989 Jun;43(6):398–402

Whistling face syndrome: general anesthesia and early postoperative caudal analgesia. Duggar RG Jr, et al. **Anesthesiology** 1989 Mar;70(3):545–7

Evaluation of effectiveness of a facet wiring technique: an in vitro biomechanical investigation. Goel VK, et al. **Ann Biomed Eng** 1989;17(2):115–26

Physiologic effects of steep positioning in the surgical intensive care unit. Nelson LD, et al. **Arch Surg** 1989 Mar; 124(3):352–5

Tracheostomy—an overview. Management and complications. Quigley RL. **Br J Clin Pract** 1988 Oct; 42(10):430–4 (7 ref.)

Need for surgical wound dressing. Chrintz H, et al. **Br J Surg** 1989 Feb;76(2):204–5

Wounds and wound healing. Eckersley JR, et al. **Br Med Bull** 1988 Apr;44(2):423–36 (51 ref.)

Efficacy of metabolic support with glucose-insulin-potassium for left ventricular pump failure after aortocoronary bypass surgery. Coleman GM, et al. **Circulation** 1989 Sep;80(3 Pt 1):191–6

The perioperative management of the arthroscopic patient. Sherman OH. **Clin Sports Med** 1987 Jul;6(3):491–502 (11 ref.)

Construction and management of ileostomies and colostomies. Reasbeck PG, et al. **Dig Dis** 1989;7(5):265–80 (104 ref.)

Outpatient inguinal herniorrhaphy without [corrected] postoperative domiciliary care in a developing country: a prospective clinical study in adult Nigerians [published erratum appears in Ethiop Med J 1989 Jan;27(1):45] Ofili OP, et al. **Ethiop Med J** 1988 Oct;26(4):167–74

Improving recovery following cardiac surgery: a randomized clinical trial. Gortner SR, et al. **J Adv Nurs** 1988 Sep; 13(5):649–61

Inappropriate fluid response in congenital diaphragmatic hernia: first report of a frequent occurrence. Rowe MI, et al. **J Pediatr Surg** 1988 Dec;23(12):1147–53

Is 5% dextrose in water a proper choice for initial postoperative feeding in infants? Wakayama Y, et al. **J Pediatr Surg** 1988 Jul;23(7):644–6

Benefits of posturethropexy bladder conditioning. Fact or fiction? Harlass FE, et al. **J Reprod Med** 1988 Dec; 33(12):961–3

From the Congressional Office of Technology Assessment. **JAMA** 1989 Aug 18;262(7):883

The effects of an anabolic steroid and peripherally administered intravenous nutrition in the early postoperative period. Hansell DT, et al. **JPEN J Parenter Enteral Nutr** 1989 Jul–Aug;13(4):349–58 (54 ref.)

Microprocessor-based system for measurement of electrical impedances during haemodialysis and in postoperative care. Goovaerts HG, et al. **Med Biol Eng Comput** 1988 Jan; 26(1):75–80

Comparison of intraoperative versus 24 hour antibiotic prophylaxis in total joint replacement. A controlled prospective study. Ritter MA, et al. **Orthop Rev** 1989 Jun; 18(6):694–6 (6 ref.)

[Postoperative treatment of knee joint arthrolyses with position changes or continuous passive movement] Wittenberg HR, et al. **Unfallchirurg** 1988 Dec; 91(12):545–50 (Eng. Abstr.) **(Ger)**

[The effect of postoperative cold therapy in joint surgery using a new cooling device] Münst P, et al. **Unfallchirurgie** 1988 Aug;14(4):224–30 (Eng. Abstr.) **(Ger)**

[Vocal rehabilitation with tracheo-esophageal prosthesis: protocol adopted by the Naples School. II—Post-operative patient assistance: implantation of the tracheo-esophageal prosthesis and tracheostomic valve] Motta G, et al. **Acta Otorhinolaryngol Ital** 1988;8 Suppl 20:91–6 (5 ref.) (Eng. Abstr.) **(Ita)**

[Clinical experience on the use of total parenteral nutrition in patients subjected to radical cystectomy intervention for infiltrating neoplasms of the bladder] Del Boca C, et al. **Arch Ital Urol Nefrol Androl** 1989 Mar;61(1):69–75 (Eng. Abstr.) **(Ita)**

[Postoperative management of Fontan procedure] Fukui S, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep; 36(9):1967–71 (Eng. Abstr.) **(Jpn)**

[Principles of resuscitation and anesthesia in early postoperative obstructions] Mircea N. **Rev Chir [Chir]** 1988 May–Jun;37(3):227–34 (0 ref.) (Eng. Abstr.) **(Rum)**

[Principles of the dispensary care of peptic ulcer patients following organ-preserving operations with vagotomy] Pavlovskiĭ MP, et al. **Klin Khir** 1988;(8):42–4 **(Rus)**

[Indications for surgery and the postoperative treatment of vesico-ureteral reflux in children] Tereshchenko AV, et al. **Klin Khir** 1988;(6):27–9 (Eng. Abstr.) **(Rus)**

[The potentials of early magnetotherapy following gynecologic surgery using cyanoacrylate glue] Arslanian KN, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Nov–Dec;(6):53–4 **(Rus)**

[Clinico-morphologic validation of the therapeutico-prophylactic use of decimeter waves following obstetric surgery] Zheleznova EB, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1989 Mar–Apr; (2):51–3 **(Rus)**

[Effect of peripheral parenteral nutrition on the immediate postoperative period in surgery of the aortic sector] Rimbau V, et al. **Angiologia** 1989 May–Jun;41(3):87–92 (Eng. Abstr.) **(Spa)**

STANDARDS

How much is an injury worth? Murphy EK. **AORN J** 1989 Aug;50(2):222–3, 226

Wide variations in surgical mortality [editorial] Mortensen N. **BMJ** 1989 Feb 11;298(6670):344–5 (15 ref.)

[Practical aspects of surveillance after hepatic transplantation in children] Bernard O, et al. **Arch Fr Pediatr** 1988;45 Suppl 1:749–54 (Eng. Abstr.) **(Fre)**

[Surveillance of renal transplantation in children] Gagnadoux MF, et al. **Arch Fr Pediatr** 1988;45 Suppl 1:745–8 (Eng. Abstr.) **(Fre)**

[Practical aspects in the surveillance of heart and heart-lung grafts in children] Le Bidois J, et al. **Arch Fr Pediatr** 1988; 45 Suppl 1:755–9 (Eng. Abstr.) **(Fre)**

[Extent of postoperative care and protection from spurious accusations] Müller-Osten W. **Chirurg** 1989 Jun;60(6):suppl 98–101 **(Ger)**

VETERINARY

Mitral valve replacement in dogs. Surgical technique and postoperative management. Klement P, et al. **Vet Surg** 1987 May–Jun;16(3):231–7

POSTOPERATIVE COMPLICATIONS

Postoperative cerebrovascular accidents in general surgery. Larsen SF, et al. **Acta Anaesthesiol Scand** 1988 Nov; 32(8):698–701

Prediction of severe postoperative complications in patients admitted to neuroanaesthesia. Pedersen T, et al. **Acta Anaesthesiol Scand** 1988 Nov;32(8):681–5

Postoperative pancreatitis after biliary and gastric operations. Jakab F, et al. **Acta Chir Hung** 1988;29(3):241–9 (45 ref.)

Polyneuropathy following gastric banding for obesity. Case report. Wadström C, et al. **Acta Chir Scand** 1989 Feb; 155(2):131–4

Influence of anesthetic procedures on surgical sequelae. An update. Holland, September 7–9, 1987. **Acta Chir Scand Suppl** 1989;550:1–193

Acute interventions with intraocular lenses implantation. Cupak K. **Acta Med Iugosl** 1989;43(3):189–96

Clinical and neuropsychological results after operative and conservative treatment of arachnoidal cysts of the perisylvian region. Kunz U, et al. **Acta Neurochir Suppl (Wien)** 1988;42:216–20

Italian cooperative study on giant intracranial aneurysms: 4. Results of treatment. Pasqualin A, et al. **Acta Neurochir Suppl (Wien)** 1988;42:65–70

Assessment of reversible cerebral ischaemia in man: intraoperative monitoring of the somatosensory evoked response. Symon L, et al. **Acta Neurochir Suppl (Wien)** 1988;42:3–7

Lumboperitoneal shunt for the treatment of postoperative persistent collection of subcutaneous cerebrospinal fluid (pseudomeningocoele). Aoki N. **Acta Neurochir (Wien)** 1989;98(1–2):32–4

Complications of anterior cervical discectomy without fusion in 450 consecutive patients. Bertalanffy H, et al. **Acta Neurochir (Wien)** 1989;99(1–2):41–50 (85 ref.)

Nasal complication after transsphenoidal surgery for pituitary pathologies. Nabe-Nielsen J. **Acta Neurochir (Wien)** 1989; 96(3–4):122–5

Obstetric behavior and ultrasonic uterine characteristics of oligomenorrheic women. Stampe Sørensen S, et al. **Acta Obstet Gynecol Scand** 1988;67(5):447–53

Our experiences in planned extracapsular cataract extraction in the exfoliation syndrome. Goder GJ. **Acta Ophthalmol Suppl (Copenh)** 1988;184:126–8

Hemarthrosis after femoral neck fracture fixation. Egund N, et al. **Acta Orthop Scand** 1988 Oct;59(5):526–9

The cricothyroid muscle after cricothyroidotomy. A porcine experimental study. Holst M, et al. **Acta Otolaryngol (Stockh)** 1989 Jan–Feb;107(1–2):136–40

Occurrence of mitral valve prolapse in patent ductus arteriosus after surgery—comparison between pre- and post-operative conditions. Watari T, et al. **Acta Paediatr Jpn Overseas Ed** 1988 Jun;30(3):352–8

Technical pitfalls of reoperation. Keon WJ, et al. **Adv Cardiol** 1988;36:127–37 (28 ref.)

Complications of orbital trauma surgery. Mauriello JA Jr. **Adv Ophthalmic Plast Reconstr Surg** 1987;7:99–115

Differentiation between postoperative scar and recurrent disk herniation: prospective comparison of MR, CT, and contrast-enhanced CT. Sotiropoulos S, et al. **AJNR** 1989 May–Jun;10(3):639–43

Diagnosis and management of postoperative junctional ectopic tachycardia [editorial] Gillette PC. **Am Heart J** 1989 Jul;118(1):192–4

Left coronary artery-to-pulmonary artery communication (a late postoperative complication after the Takeuchi procedure for repair of anomalous origin of left coronary artery from the pulmonary artery) detected by color Doppler flow mapping. Moises VA, et al. **Am Heart J** 1989 Aug;118(2):407–10

Angiographic implications of cardiac transplantation. Alderman EL, et al. **Am J Cardiol** 1989 Sep 5; 64(9):16E–21E (6 ref.)

Clinical relevance of L-carnitine-supplemented total parenteral nutrition in postoperative trauma. Metabolic effects of continuous or acute carnitine administration with special reference to fat oxidation and nitrogen utilization. Pichard C, et al. **Am J Clin Nutr** 1989 Feb;49(2):283–9

Cutaneous cytomegalovirus infection in a liver transplant patient. Diagnosis by in situ DNA hybridization. Patterson JW, et al. **Am J Dermatopathol** 1988 Dec;10(6):524–30

Metaplastic synovial cyst after partial excision of nevus sebaceus. Stern DR, et al. **Am J Dermatopathol** 1988 Dec; 10(6):531–5

Treatment of the young child with postoperative central diabetes insipidus. McDonald JA, et al. **Am J Dis Child** 1989 Feb;143(2):201–4

Hypertension after renal transplantation: cyclosporine increases the diagnostic and therapeutic considerations. Curtis JJ. **Am J Kidney Dis** 1989 Jun;13(6 Suppl 1):28–32

Acute abdomen and shock following a hernia repair in a 75-year-old woman [clinical conference] **Am J Med** 1989 Jul;87(1):85–90

Gout in the heart transplant recipient: physiologic puzzle and therapeutic challenge. Kahl LE, et al. **Am J Med** 1989 Sep;87(3):289–94

Unusual case of postoperative adrenal hemorrhage [letter; comment] Khardori R. **Am J Med** 1989 Jul;87(1):4. **Comment on:** Am J Med 1989 Apr;86(4):487–9

Is there any relationship between azathioprine dosage and erythrocytosis after renal transplantation? [letter] Teruel JL, et al. **Am J Nephrol** 1988;8(3):258

Antibody to endotoxin is associated with decreased frequency of postoperative infection. Gould EK, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):317–9

Complications after surgery for congenital and infantile cataracts. Keech RV, et al. **Am J Ophthalmol** 1989 Aug 15;108(2):136–41 (19 ref.)

Bowel obstruction after operation for colorectal carcinoma [letter] Frykberg ER. **Am J Surg** 1989 Feb;157(2):273

Unexpectedly high incidence of Pneumocystis carinii infection after lung–heart transplantation. Implications for lung defense and allograft survival. Gryzan S, et al. **Am Rev Respir Dis** 1988 Jun;137(6):1268–74

Abdominal candidiasis in surgical patients. Alden SM, et al. **Am Surg** 1989 Jan;55(1):45–9

Pancreatitis and duodenal obstruction after aortic surgery. Hans SS. **Am Surg** 1989 Mar;55(3):177–9

Pancreaticoduodenectomy. The importance of preserving hepatic blood flow to prevent biliary fistula. Traverso LW, et al. **Am Surg** 1989 Jul;55(7):421–6

Postoperative hypoxaemia in children [letter] Bach A. **Anaesth Intensive Care** 1989 Aug;17(3):386–7

A patient with Sanfilippo syndrome and pseudocholinesterase deficiency, further complicated by post-tonsillectomy haemorrhage. Myles PS, et al. **Anaesth Intensive Care** 1989 Feb;17(1):86–8

Tracheal occlusion following oesophageal foreign body removal. Woods I, et al. **Anaesth Intensive Care** 1989 Aug; 17(3):356–8

'Locked-in' syndrome. Occurrence after coronary artery bypass graft surgery. Kenny DJ, et al. **Anaesthesia** 1989 Jun;44(6):483–4

Cardiovascular instability following bolus dose of etomidate. McGrady EM, et al. **Anaesthesia** 1989 May;44(5):404–5

Hypotension related to desmopressin administration following cardiopulmonary bypass. D'Alauro FS, et al. **Anesthesiology** 1988 Dec;69(6):962–3

Postoperative apnea in a full-term infant [letter] Noseworthy J, et al. **Anesthesiology** 1989 May;70(5):879–80

Postoperative apnea [letter] Uejima T. **Anesthesiology** 1989 Apr;70(4):721

Obstructive lung disease after allogeneic marrow transplantation. Clinical presentation and course. Clark JG, et al. **Ann Intern Med** 1989 Sep 1;111(5):368–76

Presumed intraocular nocardiosis in a cardiac-transplant patient. Mamalis N, et al. **Ann Ophthalmol** 1988 Jul; 20(7):271–3, 276

Recurrent tears following successful retinal detachment surgery. Seelenfreund MH, et al. **Ann Ophthalmol** 1986 Nov;18(11):319–23

Kirschner wire migration through the jugular foramen. Sanders AD, et al. **Ann Otol Rhinol Laryngol** 1988 Sep–Oct; 97(5 Pt 1):559–60

Bilateral visual loss after blepharoplasty. Anderson RL, et al. **Ann Plast Surg** 1980 Oct;5(4):288–92

The cerebral complications of coronary artery bypass surgery [letter] Woodcock T, et al. **Ann R Coll Surg Engl** 1988 Nov;70(6):399–400

Infection of a prosthetic knee joint with Peptostreptococcus magnus. Davies UM, et al. **Ann Rheum Dis** 1988 Oct; 47(10):866–8

Technical problems in mitral valve repair and replacement. Cooley DA. **Ann Thorac Surg** 1989 Sep;48(3 Suppl):S91–2 (13 ref.)

Exploratory analysis of time-dependent risk for infection, rejection, and death after cardiac transplantation. Greene PS, et al. **Ann Thorac Surg** 1989 May;47(5):650–4

Isolated, contained esophagobronchial fistula complicating esophagogastrectomy. Hendren WG, et al. **Ann Thorac Surg** 1988 Oct;46(4):457–8

Gastrotracheal fistula: a late complication after transhiatal esophagectomy. Kron IL, et al. **Ann Thorac Surg** 1989 May; 47(5):767–8

Reporting the results of heart valve operations [letter] Nashef SA, et al. **Ann Thorac Surg** 1989 Jun;47(6):949–50

Assessment of exercise oxygen consumption [letter] Olsen GN, et al. **Ann Thorac Surg** 1988 Oct;46(4):483–4

Circulatory Support 1988. Other postoperative complications. Pierce WS, et al. **Ann Thorac Surg** 1989 Jan;47(1):96–101

Ectopic ossification after median sternotomy [letter] Vander Salm TJ, et al. **Ann Thorac Surg** 1989 Aug;48(2):315–6 (9 ref.)

Arterial infection following renal transplantation: successful management using transperineal femorofemoral crossover graft. Duchateau J, et al. **Ann Vasc Surg** 1989 Jul;3(3):264–7 (18 ref.)

Spinal cord ischemia following elective aortoiliac reconstruction. Friedman SG, et al. **Ann Vasc Surg** 1988 Jul;2(3):295–7

Inflow failure of grafts originating in the axillary artery. Quiñones-Baldrich WJ, et al. **Ann Vasc Surg** 1988 Jul; 2(3):303–8

Liver abscess following superior mesenteric artery revascularization for acute mesenteric ischemia. Shah PM, et al. **Ann Vasc Surg** 1989 Jul;3(3):261–3

Choreic syndrome after cardiac surgery. Robinson RO, et al. **Arch Dis Child** 1988 Dec;63(12):1466–9

Recent results of treatment of infantile hypertrophic pyloric stenosis. Zeidan B, et al. **Arch Dis Child** 1988 Sep; 63(9):1060–4

Preoperative pulmonary evaluation. Jackson CV. **Arch Intern Med** 1988 Oct;148(10):2120–7 (93 ref.)

Vascular disorders of the proximal femur following treatment of congenital hip dislocation. Bensahel H, et al. **Arch Orthop Trauma Surg** 1988;107(6):372–6

Convulsions secondary to hyponatremia associated with labyrinthectomy. Ketterer T, et al. **Arch Otolaryngol Head Neck Surg** 1989 Mar;115(3):387–8

Are complications in intraoperative radiation therapy more frequent than in conventional treatment? Cromack DT, et al. **Arch Surg** 1989 Feb;124(2):229–34

Arterial mycotic aneurysm and rupture. A potentially fatal complication of pancreas transplantation in diabetes mellitus. Tzakis AG, et al. **Arch Surg** 1989 Jun;124(6):660–1

Complications in arthroscopic surgery performed by experienced arthroscopists. Small NC. **Arthroscopy** 1988; 4(3):215–21

Combined gastrointestinal and abdominal aortic aneurysm operations. Hugh TB, et al. **Aust N Z J Surg** 1988 Oct; 58(10):805–10 (24 ref.)

Report of four cases of aneurysm complicating patch aortoplasty for repair of coarctation of the aorta. John CN, et al. **Aust N Z J Surg** 1989 Sep;59(9):748–50

Abnormal pre-operative creatinine levels and renal failure following abdominal aortic aneurysm repair. Joseph MG, et al. **Aust N Z J Surg** 1989 Jul;59(7):539–41

Acute renal failure following surgery for abdominal aortic aneurysm. O'Donnell D, et al. **Aust N Z J Surg** 1989 May; 59(5):405–8

Acute perirenal lymphocele formation 8 years after renal transplantation. Thompson TJ, et al. **Aust N Z J Surg** 1989 Jul;59(7):583–5

Results of treatment and their assessment. de Vries PA. **Birth Defects** 1988;24(4):481–500 (28 ref.)

Operations to improve continence after previous surgery. Smith ED, et al. **Birth Defects** 1988;24(4):447–79 (51 ref.)

Current recommendations in prevention of thrombosis in surgery. Kakkar VV. **Blood Rev** 1987 Dec;1(4):237–44 (38 ref.)

Postoperative diabetes insipidus. Seckl J, et al. **BMJ** 1989 Jan 7;298(6665):2–3 (16 ref.)

Effect of hysterectomy on bowel function. Taylor T, et al. **BMJ** 1989 Jul 29;299(6694):300–1

Flecainide compared with a combination of digoxin and disopyramide for acute atrial arrhythmias after cardiopulmonary bypass. Gavaghan TP, et al. **Br Heart J** 1988 Dec;60(6):497–501

Retrospective study of early postoperative convulsions after intracranial surgery with isoflurane or enflurane anaesthesia. Christys AR, et al. **Br J Anaesth** 1989 Jun; 62(6):624–7

Effect of ketanserin on sodium nitroprusside requirements, arterial pressure control and heart rate following coronary artery bypass surgery. Hodsman NB, et al. **Br J Anaesth** 1989 May;62(5):527–31

Two post-operative epidermoid cysts following realignment of the hallux nail. Baran R, et al. **Br J Dermatol** 1988 Aug; 119(2):245–7

Pneumonia in hospital. White R, et al. **Br J Dis Chest** 1988 Apr;82(2):121–6

Oxytocin augmentation in dysfunctional labour after previous caesarean section. Arulkumaran S, et al. **Br J Obstet Gynaecol** 1989 Aug;96(8):939–41

Occurrence of malignant glaucoma after laser iridotomy. Brooks AM, et al. **Br J Ophthalmol** 1989 Aug;73(8):617–20

Fibrinous iritis due to oxybuprocaine. Haddad R. **Br J Ophthalmol** 1989 Jan;73(1):76–7

Anterior chamber lens implantation after vitreous loss. Pearson PA, et al. **Br J Ophthalmol** 1989 Aug;73(8):596–9

Penetrating keratoplasty for corneal scarring due to herpes zoster ophthalmicus. Soong HK, et al. **Br J Ophthalmol** 1989 Jan;73(1):19–21

Shrinkage of muscle flaps [letter] Irvine GH. **Br J Oral Maxillofac Surg** 1989 Apr;27(2):173

Experiences in the surgical treatment of cranio-orbital neurofibromatosis. Poole MD. **Br J Plast Surg** 1989 Mar; 42(2):155–62

Incidence of deep vein thrombosis after major abdominal surgery in Brisbane [letter] Chleboun JO, et al. **Br J Surg** 1988 Oct;75(10):1046

Ischaemic strictures in patients treated with a low anterior resection and perioperative radiotherapy for rectal carcinoma. Pählman L, et al. **Br J Surg** 1989 Jun; 76(6):605–6

The risk of radical cystectomy. Montie JE, et al. **Br J Urol** 1989 May;63(5):483–6

An unusual case of rectovesical fistula. Pollard SG, et al. **Br J Urol** 1989 Apr;63(4):440

Uretero-arterial fistula. Shetty SD, et al. **Br J Urol** 1988 Oct;62(4):382–3

Prosopagnosia in a right hemispherectomized patient. Sergent J, et al. **Brain** 1989 Aug;112 (Pt 4):975–95

Ongoing role of pulmonary embolectomy. Masters RG, et al. **Can J Cardiol** 1988 Oct;4(7):347–51

Neuropathology of heart transplantation. Ang LC, et al. **Can J Neurol Sci** 1989 Aug;16(3):291–8

Gastrointestinal bleeding after craniotomy: a retrospective review of 518 patients. Muller P, et al. **Can J Neurol Sci** 1988 Nov;15(4):384–7

Carotid body tumours: the University of Alberta Hospital experience. Daudi FA, et al. **Can J Surg** 1989 May; 32(3):159–61

A study of the late effects of radiotherapy and operation on patients with maxillary cancer. A survey more than 10 years after initial treatment. Sakai S, et al. **Cancer** 1988 Nov 15;62(10):2114–7

Local regional promotion of tumor growth after abdominal surgery is dominant over immunotherapy with interleukin-2 and lymphokine activated killer cells. Eggermont AM, et al. **Cancer Detect Prev** 1988; 12(1–6):421–9

Hypomagnesemia in patients in postoperative intensive care [published erratum appears in Chest 1989 Jun;95(6):1362] Chernow B, et al. **Chest** 1989 Feb;95(2):391–7

Respiratory management after cardiac surgery. Matthay MA, et al. **Chest** 1989 Feb;95(2):424–34

Transient mutism following removal of a cerebellar tumor. A case report and review of the literature. Ammirati M, et al. **Childs Nerv Syst** 1989 Feb;5(1):12–4 (10 ref.)

Neurological and behavioral sequelae in children operated on for brain abscess. Buonaguro A, et al. **Childs Nerv Syst** 1989 Jun;5(3):153–5

Postmastectomy angiosarcoma—a case report. Wu CC, et al. **Chung Hua I Hsueh Tsa Chih** 1988 Apr;41(4):305–8

Effect of perioperative myocardial infarction on survival of postcardiotomy patients supported with ventricular-assist devices. Pennington DG, et al. **Circulation** 1988 Nov;78(5 Pt 2):III110–5

Long-term valvular function after total repair of tetralogy of Fallot. Relation to ventricular arrhythmias. Zahka KG, et al. **Circulation** 1988 Nov;78(5 Pt 2):III14–9

The theoretical effect of trephine tilt on postkeratoplasty astigmatism. Krumeich J, et al. **CLAO J** 1988 Oct–Dec; 14(4):213–9

Postoperative nausea and vomiting. A comparison of sufentanil, nitrous oxide, and isoflurane. Bloomfield E, et al. **Cleve Clin J Med** 1988 Nov–Dec;55(6):549–52

Refractory hypertension after renal transplantation. Steinmuller DR. **Cleve Clin J Med** 1989 Jun;56(4):377–83

Treatment of metastatic transitional cell carcinoma following renal transplantation. Wood DP Jr, et al. **Cleve Clin J Med** 1989 Jan–Feb;56(1):61–3

Intravenous labetalol for the control of hypertension following repair of coarctation of the aorta. Bojar RM, et al. **Clin Cardiol** 1988 Sep;11(9):639–41

Eruptive dysplastic naevi following renal transplantation. Barker JN, et al. **Clin Exp Dermatol** 1988 Mar;13(2):123–5

De novo membranous glomerulonephritis in renal allografts in children. Antignac C, et al. **Clin Nephrol** 1988 Jul; 30(1):1–7

Erythrocytosis after renal transplantation [letter] Obermiller LE, et al. **Clin Nephrol** 1988 Nov;30(5):287

'Salt and pepper on the face' pain followed by cardiac and

respiratory arrests. The stormy postoperative manifestations after the surgery of posterior fossa arteriovenous malformation. Ito M, et al. **Clin Neurol Neurosurg** 1989;91(2):145–51

Myocardial scintigraphy with Tc-99m TBI in a 6-month-old infant with myocardial infarction after Mustard operation. Sandrock D, et al. **Clin Nucl Med** 1989 May;14(5):381

Dehiscence, evisceration, and other complications. Daly JW. **Clin Obstet Gynecol** 1988 Sep;31(3):754–60

Failed anterior acromioplasty. A review of 51 cases. Hawkins RJ, et al. **Clin Orthop** 1989 Jun;(243):106–11

Early and late capsular "deformation" as a cause of unsatisfactory results in the latissimus dorsi breast reconstruction. McCraw JB, et al. **Clin Plast Surg** 1988 Oct;15(4):717–26

Complications associated with suction lipectomy. Teimourian B. **Clin Plast Surg** 1989 Apr;16(2):385–94 (29 ref.)

Ovarian conservation at hysterectomy: a potential diagnostic pitfall. Reed DH, et al. **Clin Radiol** 1989 May;40(3):274–6

Complications of intra-articular anterior cruciate reconstruction. Graf B, et al. **Clin Sports Med** 1988 Oct; 7(4):835–48 (16 ref.)

The origin of bacteria isolated from patients after transurethral prostatectomy. Fujita K. **Clin Ther** 1988;10 Spec No:52–5

Epididymitis after transurethral prostatectomy. Fujita K, et al. **Clin Ther** 1988;10 Spec No:56–9

Passive transfer of contact sensitivity to colophony as a complication of an allogenic bone-marrow transplant. Olaguibel J, et al. **Contact Dermatitis** 1989 Mar;20(3):182–4

The statistical analysis of graft patency data in a clinical trial of antiplatelet agents following coronary artery bypass grafting. Henderson WG, et al. **Controlled Clin Trials** 1988 Sep;9(3):189–205 (16 ref.)

Recurrence of Mooren's ulcer after lamellar keratoplasty. McDonnell PJ. **Cornea** 1989 Sep;8(3):191–4

Aspergillus panophthalmitis complicating treatment of pterygium [published erratum appears in Cornea 1989;8(2):158] Margo CE, et al. **Cornea** 1988;7(4):285–9

Visual loss following suture removal postkeratoplasty. Spigelman AV, et al. **Cornea** 1988;7(3):214–7

Memory dysfunction following unilateral transection of the fornix: a hippocampal disconnection syndrome. Tucker DM, et al. **Cortex** 1988 Sep;24(3):465–72

Sinusitis: hidden source of sepsis in postoperative pediatric intensive care patients. Bos AP, et al. **Crit Care Med** 1989 Sep;17(9):886–8

Efficacy of intensive care for bone marrow transplant patients with respiratory failure. Denardo SJ, et al. **Crit Care Med** 1989 Jan;17(1):4–6

Acute cholecystitis as a complication of unrelated operations: an update review. Eldar S, et al. **Curr Surg** 1988 Jul–Aug; 45(4):279–84 (34 ref.)

Detection of a human papilloma virus type 5 DNA in a renal allograft patient from Scotland. Rüdlinger R, et al. **Dermatologica** 1988;177(5):280–6

Seminal vesicle–rectal fistula. Report of a case. Goldman HS, et al. **Dis Colon Rectum** 1989 Jan;32(1):67–9

Speech defects as an unusual complication of adenotonsillectomy. Obiako MN. **Ear Nose Throat J** 1988 Oct;67(10):752–4

Urological problems and quality of life after treatment in early cervical cancer. Valente S. **Eur J Gynaecol Oncol** 1988;9(5):424–7

Post-surgical pyoderma gangrenosum of the vaginal vault associated with ulcerative colitis and Behçet's disease; a case report. Lilford RJ, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Apr;31(1):93–4

Prosthetic graft thrombosis associated with lupus anticoagulant. Ashley S, et al. **Eur J Vasc Surg** 1988 Feb; 2(1):57–60

Risk factors in carotid artery surgery: an evaluation of 414 operations. Forssell C, et al. **Eur J Vasc Surg** 1988 Feb; 2(1):9–14

Anastomotic aneurysms—an unsolvable problem. Wandschneider W, et al. **Eur J Vasc Surg** 1988 Apr; 2(2):115–9

Combined percutaneous and transurethral approach to stenoses of the ureteral meatus after transurethral resection for bladder tumor. Janetschek G, et al. **Eur Urol** 1989; 16(1):31–5

Candida albicans pelvic abscess associated with the use of 32% Dextran-70 in conservative pelvic surgery. King IR. **Fertil Steril** 1989 Jun;51(6):1050–2

Surgical assessment in the elderly. Johnson JC. **Geriatrics** 1988 Dec;43 Suppl:83–90 (22 ref.)

Dukes A carcinoma after colonic interposition for oesophageal stricture. Houghton AD, et al. **Gut** 1989 Jun; 30(6):880–1

Ultrasonic prediction of stress urinary incontinence development in surgery for severe pelvic relaxation. Bergman A, et al. **Gynecol Obstet Invest** 1988;26(1):66–72

Low rectal resection and anastomosis at the time of pelvic exenteration. Hatch KD, et al. **Gynecol Oncol** 1988 Oct; 31(2):262–7

Management of lymphocysts after radical gynecologic surgery. Mann WJ, et al. **Gynecol Oncol** 1989 May; 32(2):248–50

Ogilvie's syndrome of colonic pseudo-obstruction: a complication of radical hysterectomy with pelvic and paraaortic lymphadenectomy. Singh P, et al. **Gynecol Oncol** 1989 Mar;32(3):390–3

Oral feeding after total laryngectomy. Boyce SE, et al. **Head Neck** 1989 May–Jun;11(3):269–73

Tongue necrosis after radical neck dissection. Gault DT. **Head Neck Surg** 1988 May–Jun;10(5):344–5

Pathology of bone marrow in transplant recipients. Sale GE, et al. **Hematol Oncol Clin North Am** 1988 Dec;2(4):735–56 (45 ref.)

Early postoperative complications after (sub)total pancreatoduodenectomy: the AMC experience. Montagne GJ, et al. **Hepatogastroenterology** 1988 Oct;35(5):226–8

Consequences of gastric surgery for benign conditions: an overview. Tytgat GN, et al. **Hepatogastroenterology** 1988 Dec;35(6):271–8 (50 ref.)

Aplastic anemia after liver transplantation for fulminant viral hepatitis: black box or bag of worms? Zeldis JB. **Hepatology** 1989 Oct;10(4):520–1

Adenocarcinoma of the bladder 29 years after ileocystoplasty. Hasegawa S, et al. **Hinyokika Kiyo** 1989 Apr;35(4):671–4

Novel histopathologic findings in a surviving case of hemolytic uremic syndrome after bone marrow transplantation. Arends MJ, et al. **Hum Pathol** 1989 Jan; 20(1):89–91

Possible infection by Escherichia coli or Shigella sp in a surviving case of hemolytic uremic syndrome after bone marrow transplantation [letter] Burdick CO. **Hum Pathol** 1989 May;20(5):496–7

Posttransplant lymphoproliferative disorders in heart–lung transplant recipients: primary presentation in the allograft. Yousem SA, et al. **Hum Pathol** 1989 Apr;20(4):361–9

Operative fixation of fractures of the thoracic and lumbar vertebrae by Williams plates with reference to late kyphosis. Aho AJ, et al. **Injury** 1988 May;19(3):153–8

False aneurysm of the axillary artery as a complication of the modified Bristow procedure. Clancy MJ. **Injury** 1987 Nov;18(6):427–8

Complications of external fixation of open fractures of the tibia. Clifford RP, et al. **Injury** 1987 May;18(3):174–6

The timing of surgery for intertrochanteric femoral fractures. Davis TR, et al. **Injury** 1988 Jul;19(4):244–6

Through a glass darkly: the psychoanalytic use of hypnosis with post-traumatic stress disorder. Peebles MJ. **Int J Clin Exp Hypn** 1989 Jul;37(3):192–206

Postcoital vesico-vaginal fistula following surgery for cancer cervix. Oumachigui A, et al. **Int J Gynaecol Obstet** 1989 Jan;28(1):77–8

Ogilvie's syndrome in the postcesarean section patient. Rodriguez-Ballesteros R, et al. **Int J Gynaecol Obstet** 1989 Feb;28(2):185–7

Carotid-cavernous sinus fistula following maxillofacial trauma and orthognathic surgery. Hes J, et al. **Int J Oral Maxillofac Surg** 1988 Oct;17(5):295–7

Gastroatrial fistula following esophagectomy with esophagogastrostomy. Coelho JC, et al. **Int Surg** 1989 Apr–Jun;74(2):107–8

Pancreatic remnant abscess after resection for acute necrotising pancreatitis. Teerenhovi O, et al. **Int Surg** 1988 Jul–Sep;73(3):137–9

Pouch ileitis in excluded reservoir: an unusual complication of restorative proctocolectomy for ulcerative colitis. Trabucchi E, et al. **Int Surg** 1988 Jul–Sep;73(3):187–9

Pulmonary disease following allogeneic bone marrow transplantation. Murray M, et al. **Ir J Med Sci** 1989 Feb; 158(2):36–9

Pathophysiology and predictivity of postoperative hypothyroidism. Manfredi A, et al. **Ital J Surg Sci** 1988; 18(2):143–9

Prevalence of parathyroid insufficiency after thyroidectomy: study of 1037 cases. Ronga G, et al. **Ital J Surg Sci** 1988; 18(2):151–4

Primary eruption of psoriasis in a split skin graft [letter] Elberg JJ, et al. **J Am Acad Dermatol** 1988 Sep;19(3):569–70

Aortic aneurysm after patch aortoplasty repair of coarctation: a prospective analysis of prevalence, screening tests and risks. Bromberg BI, et al. **J Am Coll Cardiol** 1989 Sep; 14(3):734–41

A quantitative evaluation of aortic regurgitation after anatomic correction of transposition of the great arteries. Martin RP, et al. **J Am Coll Cardiol** 1988 Nov;12(5):1281–4

Aortic regurgitation: a common complication after surgery for hypertrophic obstructive cardiomyopathy. Sasson Z, et al. **J Am Coll Cardiol** 1989 Jan;13(1):63–7

Cat scratch disease as a postoperative complication. DeUgarte R, et al. **J Am Podiatr Med Assoc** 1989 May; 79(5):242–4

Microrecanalization after vasectomy in man. Freund MJ, et al. **J Androl** 1989 Mar–Apr;10(2):120–32

Stress fractures of the femoral neck following total knee arthroplasty. Fipp G. **J Arthroplasty** 1988;3(4):347–50

Dislocation of the posterior stabilized total knee arthroplasty. A report of two cases. Galinat BJ, et al. **J Arthroplasty** 1988;3(4):363–7

Instrumented Lachman tests for the evaluation of anterior laxity after reconstruction of the anterior cruciate ligament. Harter RA, et al. **J Bone Joint Surg [Am]** 1989 Aug; 71(7):975–83

Closed subarachnoid drainage for management of cerebrospinal fluid leakage after an operation on the spine. Kitchel SH, et al. **J Bone Joint Surg [Am]** 1989 Aug; 71(7):984–7

Cauda equina syndrome after surgical treatment of lumbar spinal stenosis with application of free autogenous fat graft. A report of two cases. Mayer PJ, et al. **J Bone Joint Surg [Am]** 1989 Aug;71(7):1090–3

Complications after total hip replacement. The contralateral limb. Smith JW, et al. **J Bone Joint Surg [Am]** 1989 Apr; 71(4):528–35

Deep vein thrombosis after total hip replacement. A comparison between spinal and general anaesthesia. Davis FM, et al. **J Bone Joint Surg [Br]** 1989 Mar;71(2):181–5

Does sublaminar wiring produce spinal stenosis? Nixon JE. **J Bone Joint Surg [Br]** 1989 Jan;71(1):92–3

Uncomplicated extracapsular cataract extraction. **J Cataract Refract Surg** 1988 Nov;14(6):679–84

Postoperative intraocular pressure rises: a comparison of Healon, Amvisc, and Viscoat. Fry LL. **J Cataract Refract Surg** 1989 Jul;15(4):415–20

Clinical evaluation of the effect of acetylcholine on the corneal endothelium. Menchini U, et al. **J Cataract Refract Surg** 1989 Jul;15(4):421–4

Gastrointestinal bleeding after aortic valve replacement [letter] Dave PB, et al. **J Clin Gastroenterol** 1989 Apr; 11(2):238–9

Jejunogastric intussusception diagnosis and management. Wheatley MJ. **J Clin Gastroenterol** 1989 Aug;11(4):452–4

Recurrent diplopia after vestibular nerve section. Whittaker CK. **J Clin Neuro Ophthalmol** 1988 Dec;8(4):278–80

Caecal perforation in a renal transplant patient with disseminated histoplasmosis. Brett MT, et al. **J Clin Pathol** 1988 Sep;41(9):992–5 (27 ref.)

Clinical, histological, and immunohistological studies of postoperative erythroderma. Hidano A, et al. **J Dermatol (Tokyo)** 1989 Feb;16(1):20–30 (21 ref.)

Discussion of "Embolization of Cotton Pledgets Following Insertion of Porcine Cardiac Valve Bioprostheses" [letter] Crimboli D. **J Forensic Sci** 1988 Nov;33(6):1306–7

Triscaphoid arthrodesis and its complications. Frykman EB, et al. **J Hand Surg [Am]** 1988 Nov;13(6):844–9

Bupivacaine: a safe local anesthetic for wrist blocks. Nyström A, et al. **J Hand Surg [Am]** 1989 May;14(3):495–8

Coronary artery spasm in heart transplant recipients. Boffa GM, et al. **J Heart Transplant** 1989 Mar–Apr;8(2):154–8

Orthotopic total artificial heart bridge to transplantation: preliminary results. Copeland JG, et al. **J Heart Transplant** 1989 Mar–Apr;8(2):124–37; discussion 137–8

Posttransplantation diabetes mellitus in heart transplant recipients. Ladowski JS, et al. **J Heart Transplant** 1989 Mar–Apr;8(2):181–3

Infection as a complication of heart transplantation. Linder J. **J Heart Transplant** 1988 Sep–Oct;7(5):390–4 (30 ref.)

Etiologic factors of jaundice in severely ill patients. A retrospective study in patients admitted to an intensive care unit with severe trauma or with septic intra-abdominal complications following surgery and without evidence of bile duct obstruction. te Boekhorst T, et al. **J Hepatol** 1988 Aug;7(1):111–7

Experience with Nocardia asteroides in renal transplant recipients. Hellyar AG. **J Hosp Infect** 1988 Jul;12(1):13–8

Acute hepatitis B following gynaecological surgery [letter] Lettau LA. **J Hosp Infect** 1988 Aug;12(2):132–3

Actinomyces pyogenes bacteraemia in a patient with carcinoma of the colon. Barnham M. **J Infect** 1988 Nov; 17(3):231–4

Diversity and sources of rapidly growing mycobacteria associated with infections following cardiac surgery. Wallace RJ Jr, et al. **J Infect Dis** 1989 Apr;159(4):708–16

Pancreatitis following aneurysmectomy [letter] Floyd JB Jr. **J Ky Med Assoc** 1989 Feb;87(2):84

Unexplained neurological problems after mastoid surgery. Osammor JY, et al. **J Laryngol Otol** 1989 Mar; 103(3):269–71 (7 ref.)

A prospective randomized trial of suture material in aural wound closure. Willatt DJ, et al. **J Laryngol Otol** 1988 Sep;102(9):788–90

High frequency of hepatitis B virus DNA in anti-HBe positive sera on longitudinal follow-up of patients with renal transplants and chronic hepatitis B. Norder H, et al. **J Med Virol** 1989 Apr;27(4):322–8

Malnutrition: an important determinant of fatal outcome in surgically treated pulmonary suppurative disease. Nwiloh J, et al. **J Natl Med Assoc** 1989 May;81(5):525–9

The significance of thrombocytopenia in the development of postoperative intracranial hematoma. Chan KH, et al. **J Neurosurg** 1989 Jul;71(1):38–41

Differentiation of aseptic and bacterial meningitis in postoperative neurosurgical patients. Ross D, et al. **J Neurosurg** 1988 Nov;69(5):669–74

Postoperative arachnoidal diverticula of the lumbar spine. Ferrante L, et al. **J Neurosurg Sci** 1988 Jul–Sep;32(3):131–4

Cardiovascular and respiratory complications after elective supratentorial craniotomy. Gilsanz F, et al. **J Neurosurg Sci** 1988 Oct–Dec;32(4):147–51

An unusual case infection following spinal surgery. Tsitsopoulos P, et al. **J Neurosurg Sci** 1988 Apr–Jun; 32(2):77–81

Bone SPECT in patients with persistent back pain after lumbar spine surgery. Lusins JO, et al. **J Nucl Med** 1989 Apr;30(4):490–6

Factors contributing to relapse in rigidly fixed mandibular setbacks. Franco JE, et al. **J Oral Maxillofac Surg** 1989 May;47(5):451–6

Ptosis of the chin and lip incompetence: consequences of lost mentalis muscle support. Rubens BC, et al. **J Oral Maxillofac Surg** 1989 Apr;47(4):359–66 (39 ref.)

Recurrent noncardiogenic pulmonary edema secondary to obstruction by hemiepiglottic remnant. Lavertu P, et al. **J Otolaryngol** 1988 Aug;17(5):229–32

Cytomegalovirus gastroenteritis after liver transplantation. Proujansky R, et al. **J Pediatr** 1988 Oct;113(4):700–3

Gastric bezoar after hepatic transplantation. Schwarzenberg SJ, et al. **J Pediatr Gastroenterol Nutr** 1989 Jul;9(1):119–22

Good visual outcome after endophthalmitis in an eye previously treated successfully for amblyopia. Kushner BJ, et al. **J Pediatr Ophthalmol Strabismus** 1989 Mar–Apr; 26(2):69–71

Paraesophageal hernia after Nissen fundoplication: a real complication in pediatric patients. Alrabeeah A, et al. **J Pediatr Surg** 1988 Aug;23(8):766–8

Necrotizing enterocolitis following repair of gastroschisis [letter] Amoury RA. **J Pediatr Surg** 1989 May;24(5):513–4

Stoma–related Variceal Bleeding: An Under–Recognized Complication of Biliary Atresia [letter] Brandt C, et al. **J Pediatr Surg** 1988 Dec;23(12):1228

Omphalocele with pyloroduodenal obstruction by extrinsic hepatic compression: a case report. Bruce J, et al. **J Pediatr Surg** 1988 Nov;23(11):1018–20

Ischemic bowel after primary closure for gastroschisis. Ein SH, et al. **J Pediatr Surg** 1988 Aug;23(8):728–30

Gastroduodenal mucosal intussusception causing gastric outlet obstruction: a complication of gastrostomy tubes. Galea MH, et al. **J Pediatr Surg** 1988 Oct;23(10):980–1

Surgery, sepsis, and nonspecific immune function in neonates. Madden NP, et al. **J Pediatr Surg** 1989 Jun;24(6):562–6

Renal artery spasm: a cause of acute renal failure following abdominal surgery for neuroblastoma. Ogita S, et al. **J Pediatr Surg** 1989 Feb;24(2):215–7

The development of necrotizing enterocolitis following repair of gastroschisis: a surprisingly high incidence. Oldham KT, et al. **J Pediatr Surg** 1988 Oct;23(10):945–9

Fertility following perforated appendicitis in girls. Puri P, et al. **J Pediatr Surg** 1989 Jun;24(6):547–9

Complications of the Martin procedure for total colonic aganglionosis. Ross MN, et al. **J Pediatr Surg** 1988 Aug; 23(8):725–7

Intensive care course following liver transplantation in children. Sommerauer J, et al. **J Pediatr Surg** 1988 Aug; 23(8):705–8

Liver transplantation and the Kasai operation in biliary atresia. Stewart BA, et al. **J Pediatr Surg** 1988 Jul; 23(7):623–6

Hepatic artery thrombosis in pediatric liver transplantation. Tan KC, et al. **J Pediatr Surg** 1988 Oct;23(10):927–30

Survival and complications after radical surgery for carcinoma of the rectum. Cunsolo A, et al. **J Surg Oncol** 1989 May;41(1):27–32 (20 ref.)

Transposition of the great arteries with straddling tricuspid valve. Report of two rare cases with acquired subaortic stenosis after main pulmonary artery banding. de Vivie R, et al. **J Thorac Cardiovasc Surg** 1989 Aug;98(2):205–13

Airway obstruction after autologous reimplantation of the porcine lobe. McGahren ED, et al. **J Thorac Cardiovasc Surg** 1989 Apr;97(4):587–92

Xanthogranulomatous pyelonephritis in a renal allograft. Ribot S, et al. **J Urol** 1988 Dec;140(6):1512–3

Ureteral leak around an aortic bifurcation graft: complication of ureteral stenting. Sacks D, et al. **J Urol** 1988 Dec; 140(6):1526–8

Post–hypospadias repair urethral strictures: a review of 30 cases. Scherz HC, et al. **J Urol** 1988 Nov;140(5 Pt 2):1253–5

Spontaneous bladder rupture following enterocystoplasty. Sheiner JR, et al. **J Urol** 1988 Nov;140(5 Pt 2):1137–8

Urological complications in pediatric renal transplantation: management and prevention. Zaontz MR, et al. **J Urol** 1988 Nov;140(5 Pt 2):1123–8

Urethral strictures after hypospadias repair. Scherz HC, et al. **J Urol (Paris)** 1989;95(1):23–6

Multicenter prospective study of nonruptured abdominal aortic aneurysm. Part II. Variables predicting morbidity and mortality. Johnston KW. **J Vasc Surg** 1989 Mar; 9(3):437–47

Leads from the MMWR. Transmission of HIV through bone transplantation: case report and public health recommendations. **JAMA** 1988 Nov. 4;260(17):2487–8

Cytomegalovirus infection is associated with cardiac allograft rejection and atherosclerosis. Grattan MT, et al. **JAMA** 1989 Jun 23–30;261(24):3561–6

The indirect effects of cytomegalovirus infection on the outcome of organ transplantation. Rubin RH. **JAMA** 1989 Jun 23–30;261(24):3607–9 (34 ref.)

Splanchnic transplantation. An approach to the infant dependent on parenteral nutrition who develops irreversible liver disease [published erratum appears in JAMA 1989 Jul 14;262(2):210] Williams JW, et al. **JAMA** 1989 Mar 10;261(10):1458–62

Effects of L–carnitine supplemented total parenteral nutrition on lipid and energy metabolism in postoperative stress. Pichard C, et al. **JPEN J Parenter Enteral Nutr** 1988 Nov–Dec;12(6):555–62

Acute renal failure after open heart surgery in developing countries. Raffa H, et al. **JPMA** 1988 May;38(5):137–8

Multiple organ failure without sepsis following surgical treatment of advanced gastric carcinoma. Miyashita M, et al. **Jpn J Surg** 1988 Nov;18(6):705–8

Two cases of postoperative erythroderma. Haga Y, et al. **Keio J Med** 1989 Jun;38(2):177–83

Hypertension in renal transplantation. Olmer M, et al. **Kidney Int Suppl** 1988 Sep;25:S129–32

Salmonella infection after ileoanal anastomosis [letter] Kusunoki M, et al. **Lancet** 1989 Jul 8;2(8654):113

Otolaryngologic problems in cardiac transplant patients. Ganzel TM, et al. **Laryngoscope** 1989 Feb;99(2):158–61

Complications in nasal and sinus surgery [letter] Nunez DA. **Laryngoscope** 1989 Aug;99(8 Pt 1):871

Complications in endoscopic intranasal ethmoidectomy: an update. Stankiewicz JA. **Laryngoscope** 1989 Jul;99(7 Pt 1):686–90

Gastric, pancreatic, and colorectal carcinogenesis following remote peptic ulcer surgery. Review of the literature with the emphasis on risk assessment and underlying mechanism. Offerhaus GJ, et al. **Mod Pathol** 1988 Sep;1(5):352–6 (95 ref.)

Aortic graft–enteric fistula and paraprosthetic–enteric fistula: a review. Wagner JR. **Mt Sinai J Med** 1989 Mar; 56(2):150–6 (39 ref.)

Fatal cerebrovascular thrombosis in a young woman: an unusual complication associated with hypochromic anemia and thrombocytosis following surgery. Heller DS, et al. **Mt Sinai J Med (NY)** 1988 Sep;55(4):318–20

Brachial plexopathy complicating thoracic outlet syndrome surgery [letter] **Muscle Nerve** 1988 Oct;11(10):1090–2

Occlusive coronary–artery spasm as a cause of acute myocardial infarction after coronary–artery bypass grafting [letter] Fischell TA, et al. **N Engl J Med** 1989 Feb 9; 320(6):400–1

Secondary cancers after bone marrow transplantation for leukemia or aplastic anemia. Witherspoon RP, et al. **N Engl J Med** 1989 Sep 21;321(12):784–9

Campylobacter fetus as a pulmonary pathogen in man. Case report of post–pneumonectomy empyema. Hoover EL, et al. **N Y State J Med** 1989 Feb;89(2):90–1

Tracheobronchitis and pneumonia due to herpes simplex virus (HSV) infection. Chakraborty A, et al. **Nebr Med J** 1988 Dec;73(12):347–50

Aseptic necrosis of bone following renal transplantation: relation with hyperparathyroidism. Nehme D, et al. **Nephrol Dial Transplant** 1989;4(2):123–8

Membranous nephropathy after bone marrow transplantation in ciclosporin treatment [letter] Müller GA, et al. **Nephron** 1989;51(4):555–6

Spontaneous streptococcal peritonitis in renal transplant recipient [letter] Shaked Y, et al. **Nephron** 1988;50(1):72

Pseudohypoaldosteronism following resection of ileum and colon. Sugawara M, et al. **Nephron** 1989;51(4):567–8

Bile ascites after choledochotomy. Jonkers GJ, et al. **Neth J Med** 1988 Dec;33(5–6):236–42

"Sunken brain syndrome"—case report. Aoki N. **Neurol Med Chir (Tokyo)** 1988 Jun;28(6):601–3

Multiple recurrence and foreign–body granuloma after total removal of falx meningioma—case report. Tanaka A, et al. **Neurol Med Chir (Tokyo)** 1988 Oct;28(10):1001–4

Brachial plexus injury following liver transplantation. Katirji MB. **Neurology** 1989 May;39(5):736–8

Tension pneumocephalus after transsphenoidal surgery: case report. Altinörs N, et al. **Neurosurgery** 1988 Oct;23(4):516–8

Tension pneumocephalus after clipping of a carotid–ophthalmic artery aneurysm via an interhemispheric approach: case report. Asai A, et al. **Neurosurgery** 1988 Nov;23(5):650–4 (26 ref.)

Intracranial arteriovenous malformation: relationship between clinical factors and surgical complications. Batjer HH, et al. **Neurosurgery** 1989 Jan;24(1):75–9

Propionibacterium acnes causes postoperative brain abscesses unassociated with foreign bodies: case reports. Berenson CS, et al. **Neurosurgery** 1989 Jul;25(1):130–4 (22 ref.)

Percutaneous microcompression of the trigeminal ganglion [letter] Brown JA, et al. **Neurosurgery** 1988 Aug;23(2):270

Pyriformis syndrome in a 10–year–old boy as a complication of operation with the patient in the sitting position. Brown JA, et al. **Neurosurgery** 1988 Jul;23(1):117–9

Perioperative lumbar injection of Ringer's lactate solution in chronic subdural hematomas: a series of 100 cases. Grisoli F, et al. **Neurosurgery** 1988 Nov;23(5):616–21 (65 ref.)

Postoperative hemorrhage: a survey of 4992 intracranial procedures. Kalfas IH, et al. **Neurosurgery** 1988 Sep; 23(3):343–7

Using a national health care data base to determine surgical complications in community hospitals: lumbar discectomy as an example. Ramirez LF, et al. **Neurosurgery** 1989 Aug; 25(2):218–25

Intraoperative ventricular puncture [letter] Rengachary SS. **Neurosurgery** 1989 Jan;24(1):140

Postoperative hypophosphatemia: a multifactorial problem. **Nutr Rev** 1989 Apr;47(4):111–6 (14 ref.)

A comparative study of postoperative adhesions following laser surgery by laparoscopy versus laparotomy in the rabbit model. Luciano AA, et al. **Obstet Gynecol** 1989 Aug; 74(2):220–4

Gynecologic surgery and surgical morbidity in mentally handicapped women. McNeeley SG, et al. **Obstet Gynecol** 1989 Aug;74(2):155–8

Results of a graded relaxing incision technique for post keratoplasty astigmatism. Arffa RC. **Ophthalmic Surg** 1988 Sep;19(9):624–8

Postoperative zygomycetes endophthalmitis. Orgel IK, et al. **Ophthalmic Surg** 1989 Aug;20(8):584–7

Transient lenticular water cleft [letter] Sims CN. **Ophthalmic Surg** 1988 Oct;19(10):755

Late bacterial and fungal keratitis after corneal transplantation. Spectrum of pathogens, graft survival, and visual prognosis. Harris DJ Jr, et al. **Ophthalmology** 1988 Oct;95(10):1450–7

Bacterial keratitis after penetrating keratoplasty. Al–Hazzaa SA, et al. **Ophthalmology** 1988 Nov;95(11):1504–8

Tissue plasminogen activator treatment of postoperative intraocular fibrin. Johnson RN, et al. **Ophthalmology** 1988 May;95(5):592–6

Postoperative intraocular pressure rise in open–angle glaucoma patients after cataract or combined cataract–filtration surgery. Krupin T, et al. **Ophthalmology** 1989 May;96(5):579–84

Atonic pupil after cataract surgery. Lam S, et al. **Ophthalmology** 1989 May;96(5):589–90

Perisilicone proliferation after vitrectomy for proliferative vitreoretinopathy. Lewis H, et al. **Ophthalmology** 1988 May;95(5):583–91

Propionibacterium–associated endophthalmitis after extracapsular cataract extraction. Review of reported cases. Meisler DM, et al. **Ophthalmology** 1989 Jan;96(1):54–61

Atrophic creep of the retinal pigment epithelium after focal macular photocoagulation. Morgan CM, et al. **Ophthalmology** 1989 Jan;96(1):96–103

Anterior segment ischemia after three rectus muscle surgery. Saunders RA, et al. **Ophthalmology** 1988 Apr;95(4):533–7

Pneumatic retinopexy. A multicenter randomized controlled clinical trial comparing pneumatic retinopexy with scleral buckling. The Retinal Detachment Study Group. Tornambe PE, et al. **Ophthalmology** 1989 Jun;96(6):772–83; discussion 784

Acute and subacute deep infection after uncemented total hip replacement using antibacterial prophylaxis. Hill GE, et al. **Orthop Rev** 1989 May;18(5):617–23

Cancer of remnant stomach following gastric surgery for benign conditions. Sowa M, et al. **Osaka City Med J** 1989 Jun;35(1):21–7

Swallowing disorders following skull base surgery. Levine TM. **Otolaryngol Clin North Am** 1988 Nov;21(4):751–9

Post–rhinoplastic nasal obstruction. Sachs ME. **Otolaryngol Clin North Am** 1989 Apr;22(2):319–32

Complications of endoscopic sinus surgery. Stankiewicz JA. **Otolaryngol Clin North Am** 1989 Aug;22(4):749–58

Breast cancer within a pectoralis major myocutaneous flap. Maas CS, et al. **Otolaryngol Head Neck Surg** 1988 Dec; 99(6):594–6

Complications of translabyrinthine vs. suboccipital approach for acoustic tumor surgery. Mangham CA. **Otolaryngol Head Neck Surg** 1988 Oct;99(4):396–400

Why do vestibular destructive procedures sometimes fail? Monsell EM, et al. **Otolaryngol Head Neck Surg** 1988 Nov; 99(5):472–9

Concealed atrial parasystole following the Senning operation. Young ML, et al. **PACE** 1988 Nov;11(11 Pt 1):1504–6

Presentation of a new MMPI scale to predict outcome after first lumbar diskectomy. Sørensen LV, et al. **Pain** 1988 Aug;34(2):191–4

Papillary necrosis in experimental renal transplantation in the rat. Henry MA, et al. **Pathology** 1988 Jul;20(3):279–84

Infections in pediatric orthotopic heart transplant recipients. Green M, et al. **Pediatr Infect Dis J** 1989 Feb;8(2):87–93

Selective bronchial intubation for acute post–operative atelectasis in neonates and infants. Rode H, et al. **Pediatr Radiol** 1988;18(6):494–6

Direct in vivo observations of embolic events in the microcirculation distal to a small–vessel anastomosis. Acland RD, et al. **Plast Reconstr Surg** 1989 Aug; 84(2):280–8; discussion 289

Carotid thrombosis following surgical release of temporomandibular ankylosis. Sullivan WG, et al. **Plast Reconstr Surg** 1989 Jan;83(1):153–4

Haematological, neurological and psychiatric complications of chronic hypothermia following surgery for craniopharyngioma. Griffiths AP, et al. **Postgrad Med J** 1988 Aug;64(754):617–20

Mycotic aneurysm of the popliteal artery following right hemicolectomy. Narula A, et al. **Postgrad Med J** 1988 Aug; 64(754):638–9

Left ventriculo–colic fistula—a late complication of colonic interposition for the oesophagus. Pantelides ML, et al. **Postgrad Med J** 1988 Sep;64(755):710–2

Determination of antibodies against bacterial lipopolysaccharides and lipid A by immunoblotting. Fink PC, et al. **Prog Clin Biol Res** 1989;308:1043–51

Thymopentin (TP–5) in the treatment of the postburn and postoperative immunodeficiency syndrome. Hamilton G, et al. **Prog Clin Biol Res** 1989;308:995–9

Efficiency of sepsis score, AT III– and endotoxin evaluation in predicting the prognosis of postoperative sepsis in the intensive care unit. Kipping N, et al. **Prog Clin Biol Res** 1989;308:637–42

The trigger for posttraumatic multiple organ failure: surgical sepsis or inflammation? Nerlich ML. **Prog Clin Biol Res** 1989;308:413–7

Biochemical analysis in posttraumatic and postoperative organ failure. Redl H, et al. **Prog Clin Biol Res** 1989; 308:649–72 (74 ref.)

Tissue oxygen debt as a determinant of postoperative organ failure. Shoemaker WC, et al. **Prog Clin Biol Res** 1989; 308:133–6

Postoperative complications in same day admission surgery. Llewellyn J, et al. **QRB** 1989 Feb;15(2):49–53

IgA lambda monoclonal gammopathy with Bence Jones proteinuria and intestinal plasmacytoma in a renal transplant recipient. Pascali E, et al. **Quad Sclavo Diagn** 1987 Dec;23(4):363–8

Pulmonary embolism after hip or knee replacement: postoperative changes on pulmonary scintigrams in asymptomatic patients. Foley M, et al. **Radiology** 1989 Aug; 172(2):481–5

Complications of uterine cervix carcinoma treatments: the problem of a uniform classification. Sismondi P, et al. **Radiother Oncol** 1989 Jan;14(1):9–17

Kaposi's sarcoma of the bronchial tree in a renal transplant recipient. Chanez P, et al. **Respirat' n** 1988;53(4):259–61

Infectious complications of craniofacial surgery in children. Israele V, et al. **Rev Infect Dis** 1989 Jan–Feb;11(1):9–15

Septorhinoplastic procedures versus submucous resection of the septum, using septum perforation as an indicator. Schønsted-Madsen U, et al. **Rhinology** 1989 Mar;27(1):63–6

Postoperative scars and recurrent disk herniation: clinical, neuroradiological, and surgical findings. Spanu G, et al. **Riv Neurol** 1989 Jan–Feb;59(1):19–21

The partial ileal bypass operation does not cause essential fatty acid deficiency. Koivisto PV. **Scand J Gastroenterol** 1988 Oct;23(8):1009–12

Thromboembolic problems in colorectal cancer surgery. Bergqvist D, et al. **Scand J Gastroenterol Suppl** 1988; 149:74–81 (56 ref.)

Influenza B in transplant patients. Aschan J, et al. **Scand J Infect Dis** 1989;21(3):349–50

Bacterial urinary tract infection in cyclosporine-A immunosuppressed renal transplant recipients. Hansen BL, et al. **Scand J Infect Dis** 1988;20(4):42.–7

Aortic regurgitation after surgical relief of subvalvular membranous stenosis. A long-term follow-up study. Bjørn-Hansen LS, et al. **Scand J Thorac Cardiovasc Surg** 1988;22(3):275–9

Polyarteritis nodosa presenting as recurrent pneumonia following splenectomy for hairy-cell leukemia. Komadina KH, et al. **Semin Arthritis Rheum** 1989 May;18(4):252–7 (27 ref.)

Traditional thought and modern Western surgery. Katz P, et al. **Soc Sci Med** 1988;26(12):1175–81

Aortoesophageal fistula: early postoperative complication at the distal anastomosis of an aortic graft. Borrero E, et al. **South Med J** 1989 Jul;82(7):927–30

Cardiac complications of aneurysm repair. Campbell JB, et al. **South Med J** 1989 Apr;82(4):458–61

Obstruction of the small bowel in the early postoperative period. Frykberg ER, et al. **South Med J** 1989 Feb; 82(2):169–73

Acute gastric necrosis in the postoperative period. Sharlow JW, et al. **South Med J** 1989 Apr;82(4):529–30

Segmental wiring for spinal deformity. A morbidity report. Dove J. **Spine** 1989 Feb;14(2):229–31

The syndrome of inappropriate antidiuretic hormone secretion and its effect on blood indices following spinal fusion. Mason RJ, et al. **Spine** 1989 Jul;14(7):722–6

Cerebral blood flow determination within the first 8 hours of cerebral infarction using stable xenon-enhanced computed tomography. Hughes RL, et al. **Stroke** 1989 Jun; 20(6):754–60

Bronchopulmonary aspiration. LoCicero J 3d. **Surg Clin North Am** 1989 Feb;69(1):71–6 (12 ref.)

Stroke, myocardial infarction, and survival during long-term follow-up after carotid endarterectomy. Lee KS, et al. **Surg Neurol** 1989 Feb;31(2):113–9

Intracranial mycotic aneurysm associated with transsphenoidal surgery to the pituitary adenoma. Onishi H, et al. **Surg Neurol** 1989 Feb;31(2):149–54

Operative venodilation: a previously unsuspected factor in the cause of postoperative deep vein thrombosis. Comerota AJ, et al. **Surgery** 1989 Aug;106(2):301–8: discussion 308–9

Prevention of postoperative intestinal intussusception by prophylactic morphine administration in dogs used for organ transplantation research. McAnulty JF, et al. **Surgery** 1989 Apr;105(4):494–5

Aggressive treatment of chylothorax complicating transhiatal esophagectomy without thoracotomy. Orringer MB, et al. **Surgery** 1988 Oct;104(4):720–6

Postoperative intussusception: experience with 36 cases in children. West KW, et al. **Surgery** 1988 Oct;104(4):781–7

Conversion surgery for morbid obesity: complications and long-term weight control. Yale CE. **Surgery** 1989 Sep; 106(3):474–80

Postoperative status after partial removal of the mandibular third molar. Knutsson K, et al. **Swed Dent J** 1989; 13(1–2):15–22

Candida sp. infection–late complication of a double valve replacement. Szuman JE, et al. **Thorac Cardiovasc Surg** 1988 Aug;36(4):214–6

Post-pneumonectomy pulmonary oedema [letter] Bell MD. **Thorax** 1988 Dec;43(12):1026

Left vocal cord paralysis after mobilisation of the internal mammary artery. Jeffry RR, et al. **Thorax** 1988 Nov; 43(11):941–2

Long ischaemic stricture of the interposed colon. Pye JK, et al. **Thorax** 1988 Oct;43(10):796–7

The value of the enzygnost TAT test in the diagnosis of postoperative deep vein thrombosis after hip surgery. The Venous Thrombosis Group. Borris LC, et al. **Thromb Res** 1989 Jun 1;54(5):505–9

Surgical complications in pediatric renal transplantation. Nelson EW, et al. **Transplant Proc** 1989 Feb;21(1 Pt 2):2006–7

Late complications with gallbladder conduit biliary reconstruction after liver transplantation. Halff G, et al. **Transplantation** 1989 Sep;48(3):537–9

Regression of an adenocarcinoma transmitted by a cadaver kidney graft. Homburg A, et al. **Transplantation** 1988 Nov; 46(5):777–9

Post-surgical outcome of 57 patients with Mycobacterium xenopi pulmonary infection. Parrot RG, et al. **Tubercle** 1988 Mar;69(1):47–55

Infections in genitourinary prostheses. Carson CC. **Urol Clin North Am** 1989 Feb;16(1):139–47

Cardiac transplantation: goals and two-year results. Lefrak EA, et al. **W V Med J** 1989 Aug;85(8):325–8

Fasciitis and abscesses complicating liposuction. Bello EF, et al. **West J Med** 1988 Jun;148(6):703–6

Medical malpractice: a case study in medical and legal decision making [clinical conference] Piccirillo M, et al. **Yale J Biol Med** 1989 Jan–Feb;62(1):23–42

[Complications of facial flaps] Becker FF. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Mar;4(1):9–11 **(Chi)**

[Complications of mandible surgery] Holt GR. **Chung Hua Cheng Hsing Shao Shang Wai Ko Tsa Chih** 1988 Mar;4(1):15–7 **(Chi)**

[Early arrhythmia following open-heart surgery of congenital heart diseases in infants and children: clinical analysis of 501 cases] Zhang HL. **Chung Hua I Hsueh Tsa Chih** 1988 Dec;68(12):672–4, 46 (Eng. Abstr.) **(Chi)**

[Postoperative blindness. A potential consequence of intracranial decompression?] Kala M. **Cas Lek Cesk** 1988 Nov 25;127(48):1494–6 (Eng. Abstr.) **(Cze)**

[Urologic complications after gynecologic and obstetrical operations] Kohoutek M, et al. **Cesk Gynekol** 1988 Jul; 53(6):433–6 **(Cze)**

[Postoperative spondylodiscitis] Kala M, et al. **Cesk Neurol Neurochir** 1989 Jan;52(1):36–8 **(Cze)**

[Postoperative spondylodiscitis] Nekula J, et al. **Cesk Radiol** 1988 Oct;42(5):324–30 (Eng. Abstr.) **(Cze)**

[Sexual disorders after colorectal operations] Antoš F, et al. **Rozhl Chir** 1989 Jan;68(1):55–61 (Eng. Abstr.) **(Cze)**

[Postoperative urinary retention] Skovdal J, et al. **Ugeskr Laeger** 1988 Nov 28;150(48):2976–8 (Eng. Abstr.) **(Dan)**

[Arterial and venous thromboembolic complications in patients with renal transplants. Apropos of 2 cases] Poitrineau O, et al. **Ann Cardiol Angeiol (Paris)** 1989 Jun; 38(6):309–12 (10 ref.) (Eng. Abstr.) **(Fre)**

[Subcardial ulcer and the Nissen technic. Apropos of a case of recovery by partial release of the fundoplication] Houdelette P, et al. **Ann Chir** 1989;43(4):282–4 (17 ref.) (Eng. Abstr.) **(Fre)**

[Perforation of the cervical esophagus and hypopharynx complicating surgery by an anterior approach to the cervical spine] Roche M, et al. **Ann Chir** 1989;43(5):343–7 (Eng. Abstr.) **(Fre)**

[Blindness following orbital reconstruction] Pellerin P, et al. **Ann Chir Plast Esthet** 1989;34(1):86–7 (Eng. Abstr.) **(Fre)**

[The safety navel] Soussaline M. **Ann Chir Plast Esthet** 1989; 34(2):140 (Eng. Abstr.) **(Fre)**

[CK-MB isoenzyme in the diagnosis of myocardial infarction after myocardial revascularization surgery] Lehot JJ, et al. **Ann Fr Anesth Reanim** 1988;7(5):370–6 (Eng. Abstr.) **(Fre)**

[Experience at an Internal Medicine service in the postoperative follow-up of 403 patients operated on at a cardiovascular surgery service] Chevalier P, et al. **Ann Med Interne (Paris)** 1989;140(2):114–7 (Eng. Abstr.) **(Fre)**

[Meleney's postoperative gangrene] Garcin JM, et al. **Ann Med Interne (Paris)** 1989;140(3):182–5 (26 ref.) (Eng. Abstr.) **(Fre)**

[Postoperative iatrogenic lesions of the external branch of the accessory spinal nerve] Autran JM, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(5):339–42 (Eng. Abstr.) **(Fre)**

[Iatrogenic complications of nasal sinuses surgery] Peytral C, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(5):373–6 (Eng. Abstr.) **(Fre)**

[Severe iatrogenic complications of surgery of the middle ear and their medicolegal aspects] Senechaut JP, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(5):377–82 (Eng. Abstr.) **(Fre)**

[Life-threatening complications and severe neurologic sequelae in surgery of acoustic neurinoma] Sterkers JM. **Ann Otolaryngol Chir Cervicofac** 1989;106(4):245–50 (Eng. Abstr.) **(Fre)**

[Urethral fistula following reconstructive surgery of hypospadias. Apropos of 34 cases] Audry G, et al. **Ann Urol (Paris)** 1989;23(3):257–60 (Eng. Abstr.) **(Fre)**

[Sequelae of operated atresias of the esophagus] Algrain Y, et al. **Arch Fr Pediatr** 1988 Oct;45(8):583–6 **(Fre)**

[Hyponatremia and convulsions in the postoperative period in children] Teyssier G, et al. **Arch Fr Pediatr** 1988 Aug–Sep;45(7):489–91 (4 ref.) (Eng. Abstr.) **(Fre)**

[Cardiac transplantation at the University Hospital Center of Nantes. 2 years' experience] Petit T, et al. **Arch Mal Coeur** 1988 Nov;81(11):1369–75 (Eng. Abstr.) **(Fre)**

[Retinal fat embolism after excision of an ameloblastoma of the mandible] Furia M, et al. **Bull Soc Ophtalmol Fr** 1988 Feb;88(2):207–10 (Eng. Abstr.) **(Fre)**

[Residual astigmatism in corneal grafts. Results of a prospective study comparing the overcasting suture and separated suture points] Lagoutte F, et al. **Bull Soc Ophtalmol Fr** 1988 Feb;88(2):269–72 **(Fre)**

[Non-regressive monocular blindness after blepharoplasty. Apropos of a case] Milliet M, et al. **Bull Soc Ophtalmol Fr** 1988 Jun–Jul;88(6–7):807–9 **(Fre)**

[Postoperative agitation. A new cause] Madi S, et al. **Can Anesthesiol** 1988 Nov;36(7):509–12 (Eng. Abstr.) **(Fre)**

[109 orthotopic hepatic transplantations. Evaluation of our experience] Chapuis Y, et al. **Chirurgie** 1988;114(10):775–84 (Eng. Abstr.) **(Fre)**

[Basedow's disease: recurrence after surgical treatment. Study of a series of 88 patients] Ozoux JP, et al. **J Chir (Paris)** 1988 Jun–Jul;125(6–7):408–12 (21 ref.) (Eng. Abstr.) **(Fre)**

[Chronic postoperative rectal fistulae. Treatment by transanal colo-anal anastomosis. Apropos of 4 cases] Sarles JC, et al. **J Chir (Paris)** 1989 Mar;126(3):155–8 (9 ref.) (Eng. Abstr.) **(Fre)**

[Orbital cellulitis following surgery of strabismus] Casu L, et al. **J Fr Ophtalmol** 1988;11(11):771–2 (Eng. Abstr.) **(Fre)**

[Postoperative secondary divergent strabismus. Statistical analysis of 160 consecutive exotropias] Quere MA, et al. **J Fr Ophtalmol** 1989;12(1):3–10 (Eng. Abstr.) **(Fre)**

[Lamellar corneal graft in the treatment of pterygium. A 10-year retrospective study of the recurrence and changes of astigmatism] Simona F, et al. **J Fr Ophtalmol** 1988; 11(11):759–63 (34 ref.) (Eng. Abstr.) **(Fre)**

[What is new about determining thrombo-embolic risk?] Dormandy J. **J Mal Vasc** 1989;14 Suppl B:44–5 (0 ref.) **(Fre)**

[Anuria revealing an obstructive lesion of the superior excretory route in children] Beurton D. **J Urol (Paris)** 1989; 95(1):60 **(Fre)**

[Ureteral stenosis following colpocystopexy of urinary stress incontinence. Apropos of 5 cases] Heritier P, et al. **J Urol (Paris)** 1988;94(7):349–51 (Eng. Abstr.) **(Fre)**

[Ureteral stenosis of a kidney transplant: a rare cause. Percutaneous nephroscopy of the transplant: an uncommon indication] Heritier P, et al. **J Urol (Paris)** 1988; 94(9–10):471–3 (6 ref.) (Eng. Abstr.) **(Fre)**

[Treatment of stenoses of the urethra. 2] Hermanowicz M, et al. **J Urol (Paris)** 1989;95(2):81–7 (Eng. Abstr.) **(Fre)**

[Spondylodiscitis after surgery of lumbar disk hernia. Apropos of 12 cases in 1796 operations] Peruzzi P, et al. **Neurochirurgie** 1988;34(6):394–400 (40 ref.) (Eng. Abstr.) **(Fre)**

[Ocular hypertension after cataract surgery (intra- and extra-capsular)] Redor JY, et al. **Ophtalmologie** 1988 Apr–Jun;2(2):85–7 (Eng. Abstr.) **(Fre)**

[Early bacterial infections after allogenic bone marrow grafts] Guyotat D, et al. **Pathol Biol (Paris)** 1988 Sep;36(7):896–8 (Eng. Abstr.) **(Fre)**

[Early septicemia episodes in 143 bone marrow grafts] Marit G, et al. **Pathol Biol (Paris)** 1988 Sep;36(7):899–901 (Eng. Abstr.) **(Fre)**

[Bacteremias after bone marrow grafts in a protected environment: effects, various aspects and prognosis] Michel G, et al. **Pathol Biol (Paris)** 1988 Sep;36(7):891–5 (Eng. Abstr.) **(Fre)**

[Postoperative complications of surgery of the veins of the lower extremities in the obese] Brünner U, et al. **Phlebologie** 1988 Jul–Oct;41(3):592–5 (Eng. Abstr.) **(Fre)**

[Postoperative pulmonary embolism] Larcan A, et al. **Phlebologie** 1989 Jan–Mar;42(1):69–80; discussion 80–2 (23 ref.) (Eng. Abstr.) **(Fre)**

[Edema of the hand during secondary swelling of the arms: primary etiopathogenic hypotheses] Megret G. **Phlebologie** 1989 Apr–Jun;42(2):187–92; discussion 192–4 (Eng. Abstr.) **(Fre)**

[Infectious complications, delayed wound healing and inflammatory syndromes as late complications of cardiovascular surgery] Chevalier P, et al. **Presse Med** 1988 Oct 29;17(38):2013–6 (Eng. Abstr.) **(Fre)**

[Bilateral hydrocele after treatment of bilateral inguinal hernia by sub-peritoneal prosthesis: a rare occurrence? (letter)] Houdelette P, et al. **Presse Med** 1989 Feb 18; 18(7):362 **(Fre)**

[Atrial tachycardia after anatomic repair of transposition of the great vessels (letter)] Vaksmann G, et al. **Presse Med** 1989 Jan 21;18(2):79–80 **(Fre)**

[Osteonecrosis of the femur head in patients with renal transplant. Apropos of 82 surgically treated hips] Benoit J, et al. **Rev Chir Orthop** 1989;75(4):216–27 (22 ref.) (Eng. Abstr.) **(Fre)**

[Spontaneous bilateral rupture of the extensor system of the knee in a patient with renal transplantation. Apropos of a case] Lauridsen K, et al. **Rev Chir Orthop** 1989;75(1):45–7 (8 ref.) (Eng. Abstr.) **(Fre)**

[The early development of postoperative anterior instability] Moyen B, et al. **Rev Chir Orthop** 1988;74 Suppl 2:190–4 **(Fre)**

[Complications of transurethral resection of prostatic adenoma (apropos of a series of 350 cases)] Abid I, et al. **Tunis Med** 1989 Jan;67(1):37–42 (Eng. Abstr.) **(Fre)**

[Complaints in the postoperative phase related to anesthetics]

Guggenberger H, et al. **Anaesthesist** 1988 Dec; 37(12):746–51 (Eng. Abstr.) (Ger)

[Intra- and postoperative complications in infrarenal abdominal aortic aneurysms] Hartung HJ, et al. **Anaesthesist** 1989 Mar;38(3):128–35 (Eng. Abstr.) (Ger)

[Postoperative malignant hyperthermia in a 7-day-old infant?] Püschel K, et al. **Anaesthesist** 1989 Feb;38(2):81–4 (Eng. Abstr.) (Ger)

[Transfusion hepatitis. Occurrence and comparison of risks of blood transfusion and surgery] Glück D, et al. **Dtsch Med Wochenschr** 1988 Sep 23;113(38):1463–8 (Eng. Abstr.) (Ger)

[Recurrence of a central Cushing's syndrome following transsphenoidal surgery of the pituitary] Merk W, et al. **Internist (Berlin)** 1988 Sep;29(9):636–8 (Ger)

[Hemorrhage of the right adrenal gland following liver transplantation] Rieber A, et al. **ROFO** 1989 Jun;150(6):732 (Ger)

[CT detection of a spinal fistula following tumor resection] Sievers KW, et al. **ROFO** 1989 Mar;150(3):360 (Ger)

[Postoperative acute cholecystitis—review of experience in Israel and abroad] Eldar E, et al. **Harefuah** 1988 Nov 15; 115(10):288–90 (Heb)

[False echocardiographic images of an atrial thrombus in pericarditis] Beccaria E, et al. **Cardiologia** 1988 Dec; 33(12):1177–9 (Eng. Abstr.) (Ita)

[Pseudogout and primary hyperparathyroidism: description of 2 cases after parathyroidectomy] Borghi L, et al. **G Clin Med** 1988 Mar;69(3):193–7 (Eng. Abstr.) (Ita)

[Jaundice after heart surgery interventions in extracorporeal circulation. Retrospective study on 1042 patients] Frezza M, et al. **G Clin Med** 1988 Jun–Jul;69(6–7):425–7, 430–2 (Eng. Abstr.) (Ita)

[Postoperative pseudoaneurysm of the ascending aorta. Report of a case] Cassin M, et al. **G Ital Cardiol** 1989 Jan; 19(1):67–70 (Eng. Abstr.) (Ita)

[Onychopathy in the renal transplantation patient] Bencini PL, et al. **G Ital Dermatol Venereol** 1988 Apr;123(4):157–8 (Eng. Abstr.) (Ita)

[Postoperative constrictive pericarditis] Sparvieri F, et al. **Minerva Cardioangiol** 1989 May;37(5):233–9 (Eng. Abstr.) (Ita)

[Postoperative hypertension and hypotension in carotid surgery] Bortolani EM, et al. **Minerva Chir** 1989 Apr 15; 44(7):1119–21 (Eng. Abstr.) (Ita)

[Urinary and sexual changes after Miles' operation for cancer of the rectum] Cunsolo A, et al. **Minerva Chir** 1988 Jun 30;43(12):1019–25 (Eng. Abstr.) (Ita)

[Postoperative morbidity and mortality in geriatric patients after emergency surgery for abdominal pathology] Sisto G, et al. **Minerva Chir** 1988 Aug 31;43(15–16):1247–51 (Eng. Abstr.) (Ita)

[Cancer of the operated stomach] Zambon M, et al. **Minerva Chir** 1988 Nov 15;43(21):1819–22 (Eng. Abstr.) (Ita)

[The foreign body granuloma after pyeloplasty: report of a case] Ishida A, et al. **Hinyokika Kiyo** 1989 Mar;35(3):485–8 (Eng. Abstr.) (Jpn)

[Four cases of upper urinary tract transitional cell carcinoma after radical cystectomy in bladder cancer] Nishio Y, et al. **Hinyokika Kiyo** 1988 Sep;34(9):1593–9 (Eng. Abstr.) (Jpn)

[Renal artery thrombosis following surgical treatment of chyluria] Takigawa H, et al. **Hinyokika Kiyo** 1988 Sep; 34(9):1631–4 (Eng. Abstr.) (Jpn)

[Benign retroperitoneal cystic teratoma with postoperative chylous ascites—a case report] Yokoyama O, et al. **Hinyokika Kiyo** 1988 Sep;34(9):1639–43 (Eng. Abstr.) (Jpn)

[Pulmonary hypertensive crisis after open heart surgery] Sakamoto K, et al. **Kyobu Geka** 1989 Apr;42(4):281–5 (18 ref.) (Eng. Abstr.) (Jpn)

[A clinical experience of signs of compression in the neighboring organs after operation with Carpentier's method in dissecting aneurysm of the aorta] Tabata R, et al. **Kyobu Geka** 1989 May;42(5):395–9 (Eng. Abstr.) (Jpn)

[Prolonged respiratory depression following general anesthesia in a patient with dystrophia myotonica] Isozaki K, et al. **Masui** 1989 Apr;38(4):552–6 (Eng. Abstr.) (Jpn)

[Contralateral epidural hematoma after aneurysmal clipping. Case report] Matsuda K, et al. **Neurol Med Chir (Tokyo)** 1988 Sep;28(9):898–903 (15 ref.) (Eng. Abstr.) (Jpn)

[Multiple intracerebral hemorrhages immediately after surgical excision of middle fossa arachnoid cysts and evacuation of chronic subdural hygroma. Case report] Mori H, et al. **Neurol Med Chir (Tokyo)** 1989 Feb;29(2):142–5 (Eng. Abstr.) (Jpn)

[Surgical approaches to pineal tumors: complications and outcome] Nagao S, et al. **Neurol Med Chir (Tokyo)** 1988 Aug;28(8):779–85 (Eng. Abstr.) (Jpn)

[Postoperative endotoxemia in patients with esophageal carcinoma: preliminary report] Kitamura M, et al. **Nippon Geka Gakkai Zasshi** 1989 Apr;90(4):626 (Jpn)

[A case of aorto-enteric fistula after reconstruction of an abdominal aortic aneurysm associated with Behçet's disease and special reference to 95 reported cases in Japan] Koike S, et al. **Nippon Geka Gakkai Zasshi** 1988 Jun;89(6):945–51 (30 ref.) (Eng. Abstr.) (Jpn)

[A review of post-operative multiple organ failure in peripheral arterial diseases] Kurihara H, et al. **Nippon Geka Gakkai Zasshi** 1988 Nov;89(11):1908–13 (Eng. Abstr.) (Jpn)

[Effect of nutritional treatment of esophageal cancer patients on pre and post-operative hemodynamic changes and postoperative lung complications] Yoshihara H. **Nippon Geka Gakkai Zasshi** 1988 Jun;89(6):815–21 (Eng. Abstr.) (Jpn)

[A case of spinal arachnoid cyst associated with vascular anomaly and repeated transient paraparesis after surgery] Takeichi Y, et al. **Nippon Geka Hokan** 1988 Jul 1; 57(4):309–15 (Eng. Abstr.) (Jpn)

[The consideration of multiple organ failure following open-heart surgery to valvular disease] Hisatomi K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep;36(9):2106–11 (Eng. Abstr.) (Jpn)

[Endoscopic closure of the postoperative bronchopleural fistula] Ikushima Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov;36(11):2521–4 (Eng. Abstr.) (Jpn)

[Clinical analysis of postoperative recurrent nerve palsy in patients undergoing operation of carcinoma of the thoracic esophagus] Kitamura M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb;37(2):331–6 (Eng. Abstr.) (Jpn)

[Cardiocirculatory disturbances after surgery of carcinoma of the thoracic esophagus] Kitamura M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jan;37(1):17–24 (Eng. Abstr.) (Jpn)

[Late onset of angina pectoris after coronary bypass surgery] Kitou Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jan;37(1):90–4 (Eng. Abstr.) (Jpn)

[Surgical treatment of postinfarction ventricular septal perforation—the difference between a cardiogenic shock group and a congestive heart failure group] Mizuguchi K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jan; 37(1):138–47 (Eng. Abstr.) (Jpn)

[Predisposing factors and prognosis in multiple organ failure after surgery of acquired cardiac disease] Mori A, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov; 36(11):2425–30 (Eng. Abstr.) (Jpn)

[Localized late cardiac tamponade following A-C bypass surgery] Okamura T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug;36(8):1384–9 (Eng. Abstr.) (Jpn)

[Postoperative bronchopleural fistula—diagnostic significance of masked cases and results of early re-operation] Sato M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Jan;37(1):11–6 (Eng. Abstr.) (Jpn)

[Study of postoperative bronchopleural fistulas—analysis of factors related to bronchopleural fistulas] Sato M, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Mar;37(3):498–503 (Eng. Abstr.) (Jpn)

[Effect of immune response during cardiopulmonary bypass on post-operative infections] Tajima K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Apr;37(4):671–5 (Eng. Abstr.) (Jpn)

[A case of tracheal adenoid cystic carcinoma with symptoms of emphysema aggravated after tracheoplasty] Terada Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul; 36(7):1180–4 (Eng. Abstr.) (Jpn)

[A case of systemic lupus erythematosus following thymectomy in myasthenia gravis] Kinoshita I, et al. **Nippon Naika Gakkai Zasshi** 1988 Dec;77(12):1894–5 (6 ref.) (Jpn)

[A rare case of cerebral aspergillus aneurysm at the site of temporary clip application] Asari S, et al. **No Shinkei Geka** 1988 Aug;16(9):1079–82 (Eng. Abstr.) (Jpn)

[Postoperative pulmonary embolism in neurosurgical practice: report of two cases] Ide Y, et al. **No Shinkei Geka** 1988 Oct;16(11):1305–9 (Eng. Abstr.) (Jpn)

[Unusual postoperative hemorrhage in a patient with ruptured aneurysm and hemophilia B] Komatsu Y, et al. **No Shinkei Geka** 1988 Oct;16(11):1281–5 (Eng. Abstr.) (Jpn)

[Studies on postoperative hyperamylasemia] Hayakawa A, et al. **Rinsho Byori** 1988 Sep;36(9):1051–5 (Jpn)

[Problems in the revision of failed total prosthetic replacement in rheumatoid arthritis. 8. Treatment of infected total joints with arthroplasty] Kawai K, et al. **Ryumachi** 1988 Dec;28(6):446–8 (Jpn)

[Problems in the revision of failed total prosthetic replacement in rheumatoid arthritis. 7. Approach to the infected artificial joint] Sakurai M. **Ryumachi** 1988 Dec; 28(6):444–6 (Jpn)

[Regional ischemia/necrosis after surgery of lumbal aortic aneurysm] Mjåset B, et al. **Tidsskr Nor Laegeforen** 1989 Apr 30;109(12):1273–5 (Eng. Abstr.) (Nor)

[Aneurysm after patch graft aortoplasty in aortic coarctation] Rostad H, et al. **Tidsskr Nor Laegeforen** 1989 Apr 20; 109(11):1163–5 (Eng. Abstr.) (Nor)

[Mucormycosis of nasal sinuses in a patient after kidney transplantation] Koziołowa H, et al. **Pol Arch Med Wewn** 1985 May;73(5):321–8 (Eng. Abstr.) (Pol)

[Infection in recipients of kidney transplants] Pestana JO, et al. **AMB Rev Assoc Med Bras** 1987 Sep–Oct; 33(9–10):205–6 (Por)

[Pancarditis with constrictive pericarditis after cardiac surgery. A case report] Pereira SN, et al. **Arq Bras Cardiol** 1988 Apr;50(4):263–7 (Eng. Abstr.) (Por)

[Post-mastectomy lymphangiosarcoma (Stewart-Treves syndrome). Report of a case and review of the literature] Quadros LG, et al. **Rev Paul Med** 1988 Jul–Aug; 106(4):238–40 (7 ref.) (Eng. Abstr.) (Por)

[Early surgical treatment of anterior mediastinitis in heart surgery] Korolev BA, et al. **Grudn Khir** 1988 Nov–Dec; (6):69–72 (Eng. Abstr.) (Rus)

[Several aspects of septic shock in lung surgery] Lebedeva RN, et al. **Grudn Khir** 1989 May–Jun;(3):50–3 (Eng. Abstr.) (Rus)

[Aspiration pneumonia in newborn infants with atresia of the esophagus] Babliak DE, et al. **Khirurgiia (Mosk)** 1988 Jul; (7):12–7 (Eng. Abstr.) (Rus)

[A rare complication of herniotomy] Kolonenko NG. **Khirurgiia (Mosk)** 1989 Apr;(4):135–6 (Rus)

[Prognostication of incompetence of duodenal stump sutures after stomach resection] Kostin AE, et al. **Khirurgiia (Mosk)** 1989 Apr;(4):130–1 (Rus)

[Thromboemboli in the pulmonary artery system in the early postoperative period] Margulis MS, et al. **Khirurgiia (Mosk)** 1988 Oct;(10):112–5 (Rus)

[Femoral hernia following inguinal hernioplasty] Prosianyĭ EV. **Khirurgiia (Mosk)** 1989 Feb;(2):66–8 (Eng. Abstr.) (Rus)

[Complications in the combination treatment of cancer of the proximal portion of the stomach] Volkov ON, et al. **Khirurgiia (Mosk)** 1988 Nov;(11):104–6 (Rus)

[Acute appendicitis in a patient following abdominoperineal extirpation of the rectum] Bialik AIa, et al. **Klin Khir** 1989; (2):64 (Rus)

[Adhesions] Bova LS, et al. **Klin Khir** 1989;(6):57–9 (47 ref.) (Rus)

[Treatment of dynamic intestinal obstruction in children] Gauens IaK, et al. **Klin Khir** 1989;(6):9–10 (Eng. Abstr.) (Rus)

[Strangulation of the vermiform appendix in postoperative abdominal hernia] Sholkhet AE, et al. **Klin Khir** 1989;(2):56 (Rus)

[Ultrasonic scanning in planning radiation therapy of cancer of the uterine cervix stump] Nazarova IS, et al. **Med Radiol (Mosk)** 1989 Jun;34(6):48–51 (Rus)

[Changes in the external respiration function and hemodynamics after surgery of the pancreas] Vishnevskiĭ VA, et al. **Sov Med** 1989;(3):19–22 (Eng. Abstr.) (Rus)

[Fungal infection in surgical patients] Zemskov VS, et al. **Sov Med** 1989;(3):51–3 (41 ref.) (Rus)

[Postoperative edema in brain tumors] Konovalov AN, et al. **Zh Vopr Neirokhir** 1989 Jan–Feb;(1):3–7 (Eng. Abstr.) (Rus)

[[Late functional-anatomic changes after surgical treatment of congenital pes equinovarus] Horvatek I, et al. **Reumatizam** 1987;34(1–6):27–30 (Eng. Abstr.) (Scr)

[Pseudotumor cerebri after surgery of lumbosacral meningocele] Antić B, et al. **Vojnosanit Pregl** 1988 Jul–Aug; 45(4):308–10 (Scr)

[Fistula due to cerclage as a cause of recurrent vulvovaginal candidiasis] Seban J. **Cesk Gynekol** 1988 Sep;53(8):586–8 (Slo)

[Transitory amaurosis after transurethral resection of the prostate. Apropos of a case] Conte Visús A, et al. **Actas Urol Esp** 1989 May–Jun;13(3):225–6 (Eng. Abstr.) (Spa)

[Nuclear medicine in the diagnosis of vascular and urologic complications of kidney transplantation] Requena MJ, et al. **Actas Urol Esp** 1988 May–Jun;12(3):223–31 (56 ref.) (Eng. Abstr.) (Spa)

[Digestive intolerance in newborn infants with extensive intestinal resections. Nutritional problems and long-term sequelae] González Landa G, et al. **An Esp Pediatr** 1988 Jun;28(6):548–52 (Eng. Abstr.) (Spa)

[Ascites of the cerebrospinal fluid as a complication of a ventriculoperitoneal shunt: report of a case and a review of the literature] Madruga Acerete D, et al. **An Esp Pediatr** 1988 Jun;28(6):565–8 (26 ref.) (Eng. Abstr.) (Spa)

[Chylothorax after surgery of Bochdalek's hernia] Mira Navarro J, et al. **An Esp Pediatr** 1988 May;28(5):479–80 (Spa)

[Congenital defects of the intestinal wall: surgical complications] Núñez Núñez R, et al. **An Esp Pediatr** 1988 Oct;29(4):335–6 (Spa)

[Neuroendocrine carcinoma in the cavity of radical mastoidectomy] Monteagudo-Castro JC, et al. **An Otorrinolaringol Ibero Am** 1988;15(6):669–79 (Eng. Abstr.) (Spa)

[Mortality and complications from cystectomy of bladder cancer] Chechile G, et al. **Arch Esp Urol** 1989 May; 42(4):321–4 (Eng. Abstr.) (Spa)

[Risk of complete auriculoventricular block and cardiological complications in patients with bifascicular block undergoing general surgery] García Rubí D, et al. **Arch Inst Cardiol Mex** 1988 May–Jun;58(3):231–5 (Eng. Abstr.) (Spa)

[Intracranial granuloma as a late complication of subdural hematoma] Lainez JM, et al. **Arch Neurobiol (Madr)** 1989 Mar–Apr;52(2):105–7 (Eng. Abstr.) (Spa)

[Acute myoglobinuric renal failure after embolectomy and fasciotomy (letter)] Fraile JR, et al. **Rev Esp Anestesiol Reanim** 1988 Jul–Aug;35(4):224 (Spa)

[Acute postoperative pancreatitis (editorial)] Arias Vallejo E. **Rev Esp Enferm Apar Dig** 1989 May;75(5):484 (Spa)
[Epidermoid carcinoma of the esophagus secondary to achalasia] Camps C, et al. **Rev Esp Enferm Apar Dig** 1989 Apr;75(4):393–5 (12 ref.) (Eng. Abstr.) (Spa)
[Choledocholithiasis over a migrating silk thread (letter)] Caralt Mestres E, et al. **Rev Esp Enferm Apar Dig** 1988 Aug;74(2):189–90 (Spa)
[Carcinoma of the gastric stump after surgery of gastroduodenal ulcer] Docobo Durántez F, et al. **Rev Esp Enferm Apar Dig** 1989 Apr;75(4):353–8 (Eng. Abstr.) (Spa)
[Deep cystic colitis located in a previous surgical anastomosis] Esquius Soriguera J, et al. **Rev Esp Enferm Apar Dig** 1989 May;75(5):511–3 (Eng. Abstr.) (Spa)
[Hemorrhagic recurrence after operations of azygoportal disconnection] Marchena J, et al. **Rev Esp Enferm Apar Dig** 1989 Mar;75(3):246–51 (53 ref.) (Eng. Abstr.) (Spa)
[Evaluation of gastroesophageal reflux by continuous 24-hour pH measurement after surgical treatment of achalasia of the cardia] Ortiz Escandell A, et al. **Rev Esp Enferm Apar Dig** 1988 Aug;74(2):117–21 (Eng. Abstr.) (Spa)
[Granulomatous peritonitis due to starch. Apropos of a case] Urdiales Cabal G, et al. **Rev Esp Enferm Apar Dig** 1989 Apr;75(4):411–3 (Eng. Abstr.) (Spa)
[Jaundice in patients after abdominal surgery] Martínez Navarrete B, et al. **Rev Gastroenterol Mex** 1988 Apr–Jun; 53(2):95–102 (Eng. Abstr.) (Spa)
[Operated mycotic aneurysm of the abdominal aorta: outcome of late aortoduodenal fistula] Valdés F. **Rev Med Chil** 1988 Jan;116(1):71–4 (Spa)

BLOOD

Postoperative and glucose-induced hypophosphatemia in relation to adenosine triphosphate and 2,3-diphosphoglycerate in erythrocytes. Rasmussen A, et al. **Acta Chir Scand** 1989 Feb;155(2):81–7
Severity of postoperative hypophosphatemia in relation to glucose administration and renal handling of phosphate. Rasmussen A, et al. **Acta Chir Scand** 1988 Nov–Dec; 154(11–12):617–21
Pancuronium bromide in the intensive care unit: a case of overdose. Vandenbrom RH, et al. **Anesthesiology** 1988 Dec; 69(6):996–7
Postoperative changes in serum creatinine. When do they occur and how much is important? Charlson ME, et al. **Ann Surg** 1989 Mar;209(3):328–33
Hormone levels in women after hysterectomy. Kaiser R, et al. **Arch Gynecol Obstet** 1989;244(3):169–73
Antibodies to thrombin in postsurgical patients [letter] Flaherty MJ, et al. **Blood** 1989 Apr;73(5):1386
Hyperfibrinolysis: its express diagnosis and role in the development of haemorrhagic syndrome after cardiopulmonary bypass. Sukhanov VA, et al. **Cor Vasa** 1988;30(6):442–6
Symptomless postoperative thrombosis of the deep calf veins—treatment and prognosis. Kneist W, et al. **Folia Haematol (Leipz)** 1988;115(3):401–4
Intensity of thrombin activity and surgical trauma. Lučić A, et al. **Folia Haematol (Leipz)** 1988;115(3):329–32
Platelet aggregability in patients with common carotid artery ligation. Mariak Z, et al. **Folia Haematol (Leipz)** 1988; 115(5):689–93
Incidence of humoral risk factors in silent postoperative thrombosis of deep calf veins. Rödiger H, et al. **Folia Haematol (Leipz)** 1988;115(3):398–400
Body iron status in critically ill patients: significance of serum ferritin. Bobbio-Pallavicini F, et al. **Intensive Care Med** 1989;15(3):171–8
The relationship of preoperative distress to endocrine and subjective responses to surgery: support for Janis' theory. Salmon P, et al. **J Behav Med** 1988 Dec;11(6):599–613
Postoperative pulse oximetry of patients in maxillomandibular fixation. Smith RA, et al. **J Oral Maxillofac Surg** 1989 Jul; 47(7):684–8
Postoperative glucose metabolism as assessed by the hyperglycaemic glucose clamp. Copeland GP, et al. **J R Coll Surg Edinb** 1988 Dec;33(6):330–3
Myosin: a highly sensitive indicator of myocardial necrosis after cardiac operations. Séguin JR, et al. **J Thorac Cardiovasc Surg** 1989 Sep;98(3):397–401
Osteocalcin serum levels in patients following renal transplantation. Schmidt H, et al. **Klin Wochenschr** 1989 Mar 1;67(5):297–303
Changes in the serum proteins in calves surviving several months with the total artificial heart (TAH). Vašku J, et al. **Life Support Syst** 1983;1 Suppl 1:17–20
Endocrine function in patients with large pituitary tumors treated with operative decompression and radiation therapy. Nelson PB, et al. **Neurosurgery** 1989 Mar; 24(3):398–400
Leucocytes, neutrophilia and elastase-a1-proteinase-inhibitor-complex: marker of different validity for monitoring the perioperative infection risk. Fink PC, et al. **Prog Clin Biol Res** 1989;308:695–700
Plasma cross-linked fibrin degradation products fraction D in patients undergoing elective abdominal surgery. Hauch O, et al. **Thromb Res** 1988 Aug 15;51(4):385–9
Influence of food on plasma cholecystokinin and gastrin in patients with partial gastric resections and Roux-en-Y anastomosis. Mössner J, et al. **Z Gastroenterol** 1989 Feb; 27(2):94–8
[Postoperative hypophosphatemia] Lobera A, et al. **Ann Chir** 1988;42(9):671–9 (Eng. Abstr.) (Fre)
[Long-term prognosis of the results of splenectomy in idiopathic thrombocytopenic purpura] Arendt T, et al. **Folia Haematol (Leipz)** 1989;116(2):337–42 (Eng. Abstr.) (Ger)
[Effect of L-carnitine supplemented total parenteral nutrition on postoperative lipid and nitrogen utilization] Rössle C, et al. **Klin Wochenschr** 1988 Dec 15;66(24):1202–11 (Eng. Abstr.) (Ger)
[Insulin reserve and morphology of the tail of the pancreas following resection of the head of the pancreas using various surgical methods] Grossner D, et al. **Langenbecks Arch Chir** 1989;374(1):4–11 (Eng. Abstr.) (Ger)
[Change in blood coagulation in transperitoneal implantation of aortofemoral bifurcation prostheses] von Sommoggy S, et al. **Vasa Suppl** 1988;23:246–9 (Ger)
[Changes in the catecholamine plasma level 3 months after aortocoronary bypass operation] Schwaiger A, et al. **Wien Klin Wochenschr** 1989 Mar 17;101(6):191–4 (Eng. Abstr.) (Ger)
[Thromboembolism risk factors in kidney transplant patients with secondary erythrocytosis in relation to hemorheologic aspects] Koall W, et al. **Z Gesamte Inn Med** 1988 Sep 1; 43(17):474–7 (Eng. Abstr.) (Ger)
[Effect of allotransplantation of the testis on several metabolism parameters in primary hypogonadism] Schioschwili TI, et al. **Z Urol Nephrol** 1989 Jun; 82(6):325–30 (Eng. Abstr.) (Ger)
[Serum proteins and hormones in vaginal and abdominal hysterectomy] Vytiska-Binstorfer E, et al. **Zentralbl Gynakol** 1988;110(20):1303–11 (Eng. Abstr.) (Ger)
[Postoperative hypertension in coarctation of the aorta associated with different plasma renin activities and catecholamine responses in two cases] Sudo K, et al. **Kyobu Geka** 1988 Nov;41(12):988–93 (Eng. Abstr.) (Jpn)
[Significance of serum free form bile acid level in pre-hepatic failure after surgery] Uchiyama K, et al. **Nippon Geka Hokan** 1988 Jul 1;57(4):293–301 (Eng. Abstr.) (Jpn)
[Magnesium levels in the blood of patients during surgery using cardiopulmonary bypass] Smimeliovich IL, et al. **Anesteziol Reanimatol** 1989 Jan–Feb;(1):3–6 (Eng. Abstr.) (Rus)
[Erythrocyte deformability and morphology in children with suppurative peritonitis] Sokolova VA, et al. **Anesteziol Reanimatol** 1988 Nov–Dec;(6):62–4 (Eng. Abstr.) (Rus)
[Prolactin and steroid hormones in the blood in local disorders of the lymph-plasma circulation in breast cancer patients] Berzin SA, et al. **Sov Med** 1988;(12):16–9 (Eng. Abstr.) (Rus)
[Thyroid hormones, thyrotropin, cortisol and corticotropin in postoperative recurrence of diffuse toxic goiter] Karachentsev IuI, et al. **Sov Med** 1988;(8):5–7 (Eng. Abstr.) (Rus)

CLASSIFICATION

[Classification and importance of cystoid macular edema in pseudophakia] Behrens-Baumann W, et al. **Klin Monatsbl Augenheilkd** 1989 Jan;194(1):16–21 (Eng. Abstr.) (Ger)

DIAGNOSIS

Early diagnosis of postoperative pneumonia following upper abdominal surgery. A study in patients without cardiopulmonary disorder at operation. Ejlertsen T, et al. **Acta Chir Scand** 1989 Feb;155(2):93–8
Epilepsy course in cerebral gangliogliomas: a study of 16 cases. Casazza M, et al. **Acta Neurochir Suppl (Wien)** 1989; 46:17–20
Visual analogue scale assessment of postoperative swelling. A study of clinical inflammatory variables subsequent to third-molar surgery. Berge TI. **Acta Odontol Scand** 1988 Aug;46(4):233–40
MR imaging of the ectopic bright signal of posterior pituitary regeneration. el Gammal T, et al. **AJNR** 1989 Mar–Apr; 10(2):323–8
Duplex Doppler sonography of renal transplants: lack of sensitivity and specificity in establishing pathologic diagnosis. Genkins SM, et al. **AJR** 1989 Mar;152(3):535–9
The role of sonography and transhepatic cholangiography in the diagnosis of biliary complications after liver transplantation. Zemel G, et al. **AJR** 1988 Nov;151(5):943–6
Doppler demonstration of in situ vein bypass tributary fistula and its spontaneous closure [letter] Kotval PS, et al. **AJR Am J Roentgenol** 1989 Jul;153(1):192–3
Sonography case of the day. Postbiopsy renal transplant arteriovenous fistula. Middleton WD. **AJR Am J Roentgenol** 1989 Jun;152(6):1323–4
Echocardiographic detection of abnormal attachment of a Björk-Shiley prosthesis to the interatrial septum causing an atrial septal aneurysm. Alfonso F, et al. **Am Heart J** 1989 Mar;117(3):695–7
Long-term follow-up after Carpentier tricuspid valvuloplasty. Lambertz H, et al. **Am Heart J** 1989 Mar; 117(3):615–22
Detection of aortic valve ring abscess by intraoperative epicardial two-dimensional echocardiography. Tanaka M, et al. **Am Heart J** 1989 Mar;117(3):692–5
Transesophageal echocardiography for assessing cause of hypotension after cardiac surgery. Chan KL. **Am J Cardiol** 1988 Nov 15;62(16):1142–3
Rapid identification of viral infections in liver, heart, and kidney allograft biopsies by in situ hybridization [letter] Kemnitz J, et al. **Am J Surg Pathol** 1989 Jan;13(1):80–2
Endoscopy of vertical banded gastroplasty. Deitel M, et al. **Am Surg** 1989 May;55(5):287–90
Argyria or cyanosis. Timmins AC, et al. **Anaesthesia** 1988 Sep;43(9):755–6
Enlarging fundal hemorrhage in Terson's syndrome. Kashihara K, et al. **Ann Ophthalmol** 1989 Feb;21(2):59–60, 64
Audiometric results of TORP and PORP middle ear reconstruction. Mair IW, et al. **Ann Otol Rhinol Laryngol** 1989 Jun;98(6):429–33
Late postoperative cardiac tamponade presenting as dysphagia. Bryan AJ, et al. **Ann Thorac Surg** 1989 Jun; 47(6):922–3
Thrombotic obstruction of disc valves: clinical recognition and surgical management. Kontos GJ Jr, et al. **Ann Thorac Surg** 1989 Jul;48(1):60–5
Staphylococcal scalded skin syndrome mimicking acute graft-vs-host disease in a bone marrow transplant recipient. Goldberg NS, et al. **Arch Dermatol** 1989 Jan;125(1):85–7
Duplex venous scanning for the prospective surveillance of perioperative venous thrombosis. Flinn WR, et al. **Arch Surg** 1989 Aug;124(8):901–5
A heparin test as a predictor of postoperative deep vein thrombosis. Randle PM, et al. **Aust N Z J Surg** 1989 Jul; 59(7):579–81
Postoperative jaundice. Hayes PC, et al. **Baillieres Clin Gastroenterol** 1989 Apr;3(2):485–505 (90 ref.)
Painless post-operative pancreatitis. Leslie MD, et al. **Br J Clin Pract** 1988 Jun;42(6):261–2
Non-contact tonometry in the postoperative eye. Vernon SA. **Br J Ophthalmol** 1989 Apr;73(4):247–9
Kock pouch urinary diversion: follow-up by ultrasound. Kruyt RH, et al. **Br J Radiol** 1988 Sep;61(729):811–6
Intussusception presenting as ileal reservoir ischaemia following restorative proctocolectomy. Kmiot WA, et al. **Br J Surg** 1989 Feb;76(2):148
Grip strength: a measure of the proportion of protein loss in surgical patients. Windsor JA, et al. **Br J Surg** 1988 Sep;75(9):880–2
Left ventricular outflow obstruction by a mitral valve prosthesis: Doppler ultrasound and cardiac catheterization findings. Byrnes TJ, et al. **Cathet Cardiovasc Diagn** 1989 May;17(1):34–8
Preoperative identification of patients likely to have left ventricular dysfunction after aortic valve replacement. Participants in the Veterans Administration Cooperative Study on Valvular Heart Disease. Hwang MH, et al. **Circulation** 1989 Sep;80(3 Pt 1):I65–76
Intrarenal manometry in the diagnosis of acute rejection superimposed on acute tubular necrosis in renal transplantation. García R, et al. **Clin Nephrol** 1989 Jul; 32(1):21–6
Diagnosis of allograft renal vein thrombosis. Delbeke D, et al. **Clin Nucl Med** 1989 Jun;14(6):415–20
Intra-abdominal abscess and peritonitis. Fritze M, et al. **Clin Nucl Med** 1989 Apr;14(4):296–7
The role of ultrasound scanning in management after liver transplantation. Raby N, et al. **Clin Radiol** 1988 Sep; 39(5):507–10
Magnetic resonance imaging of post-surgical pseudomeningocele. Murayama S, et al. **Comput Med Imaging Graph** 1989 Jul–Aug;13(4):335–9
Anticardiolipin syndrome in plastic surgery of the breast. Alušík S, et al. **Cor Vasa** 1989;31(2):139–44
The endoscopic spectrum of colonic mucosal injury following aortic aneurysm resection. Scherpenisse J, et al. **Endoscopy** 1989 Jul;21(4):174–6
Neuropsychological assessment of the transcallosal approach. Oepen G, et al. **Eur Arch Psychiatry Neurol Sci** 1988 Sep; 237(6):365–75
The evaluation by means of ultrasounds of the bladder residue after gynaecological operations. Mangano U, et al. **Eur J Gynaecol Oncol** 1989;10(1):21–6
Functional hyposplenia after allogeneic bone marrow transplantation is detected by epinephrine stimulation test and splenic ultrasonography. Knecht H, et al. **Eur J Haematol** 1988 Oct;41(4):382–7
The incidence of ureteral obstruction secondary to aorto-femoral bypass surgery. A prospective study. Henriksen LO, et al. **Eur J Vasc Surg** 1988 Dec;2(6):417–8
Anastomotic aneurysms—an underdiagnosed complication after aorto-iliac reconstructions. Sieswerda C, et al. **Eur J Vasc Surg** 1989 Jun;3(3):233–8
The value of skin temperature measurements in forecasting the healing of a below-knee amputation for end-stage ischaemia of the leg in peripheral vascular disease. Stoner HB, et al. **Eur J Vasc Surg** 1989 Aug;3(4):355–61
Mechanism of pulmonary function changes after surgical correction for funnel chest. Derveaux L, et al. **Eur Respir J** 1988 Oct;1(9):823–5
Perioperative echocardiographic evaluation. Williams RG. **Int J Card Imaging** 1989;4(1):29–31 (28 ref.)

Postoperative temperature and infection in patients undergoing general surgery. Payman BC, et al. **J Adv Nurs** 1989 Mar;14(3):198–202

Two-dimensional and Doppler echocardiographic assessment of neonatal arterial repair for transposition of the great arteries. Gleason MM, et al. **J Am Coll Cardiol** 1989 May;13(6):1320–8

Ultrasonography in the management of renal transplant recipients. Acharya SJ, et al. **J Assoc Physicians India** 1988 Aug;36(8):497–500

The post-operative electrocardiogram and creatine kinase: implications for diagnosis of myocardial infarction after non-cardiac surgery. Charlson ME, et al. **J Clin Epidemiol** 1989;42(1):25–34

Indirect enzyme-linked immunosorbent assay for immunoglobulin G and four immunoassays for immunoglobulin M to Toxoplasma gondii in a series of heart transplant recipients. Sluiters JF, et al. **J Clin Microbiol** 1989 Mar;27(3):529–35

Quantitative ST-segment recovery following angiographically successful angioplasty: a useful warning of early complications. Renzi RH, et al. **J Electrocardiol** 1988;21 Suppl:S27–9

Exuberant bony proliferation following foot surgery. Shollenberger BS, et al. **J Foot Surg** 1988 Sep–Oct; 27(5):433–9

Serial myocardial T2 relaxation time measurements in normal subjects and heart transplant recipients. Lund G, et al. **J Heart Transplant** 1988 Jul–Aug;7(4):274–9

Use of power spectral analysis of respiratory sinus arrhythmia to detect graft rejection. Zbilut JP, et al. **J Heart Transplant** 1988 Jul–Aug;7(4):280–8

Role of post-operative electroneuronography in predicting facial nerve recovery after acoustic neuroma removal: a pilot study. Croxson GR, et al. **J Laryngol Otol** 1989 Jan; 103(1):60–2

Magnetic resonance imaging in patients with progressive myelopathy following spinal surgery. Avrahami E, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):176–81

A brief neurobehavioral exam useful for early detection of postoperative complications in neurosurgical patients. Cammermeyer M, et al. **J Neurosci Nurs** 1988 Oct; 20(5):314–23

Cholangitis after the Kasai operation for biliary atresia. Rothenberg SS, et al. **J Pediatr Surg** 1989 Aug;24(8):729–32

Angiologic observations following autologous vein grafting and free radial artery flap elevation. Brenner P, et al. **J Reconstr Microsurg** 1988 Jul;4(4):297–301

Predictors of pelvic adhesions. Stovall TG, et al. **J Reprod Med** 1989 May;34(5):345–8

Nutritional consequences of bowel segments in the lower urinary tract. Canning DA, et al. **J Urol** 1989 Aug;142(2 Pt 2):509–11; discussion 520–1

A post-appendectomy fecalith detected by ultrasound. Coughlin WF, et al. **JCU** 1989 Mar–Apr;17(3):197–9

Noninvasive diagnosis of pseudoaneurysm of the ascending aorta. Hoadley SD, et al. **JCU** 1987 Jun;15(5):325–32

Ultrasound assessment of local complications of percutaneous renal stone removal. Ivory CM, et al. **JCU** 1989 Jun; 17(5):345–51

Diagnosis of coronary artery dehiscence and pseudoaneurysm formation in postoperative Marfan patient by color flow Doppler echocardiography. Rice MJ, et al. **JCU** 1989 Jun;17(5):359–65

Hand grip dynamometry as a predictor of postoperative complications reappraisal using age standardized grip strengths. Webb AR, et al. **JPEN J Parenter Enteral Nutr** 1989 Jan–Feb;13(1):30–3

Clinical application of a new in vitro bleeding time device on surgical patients. Tsujinaka T, et al. **Jpn J Surg** 1988 Jul;18(4):430–7

A rapid laser immunonephelometric assay for serum amyloid A (SAA) and its application to the diagnosis of kidney allograft rejection. Hocke G, et al. **Klin Wochenschr** 1989 Apr 17;67(8):447–51

Searching for hyperlipidaemia in patients with coronary artery bypass grafts [letter] Hoad NA. **Lancet** 1989 Apr 29;1(8644):968–9

Evaluation of leg edema using a multifrequency impedance meter in patients with lymphatic obstruction. Watanabe R, et al. **Lymphology** 1989 Jun;22(2):85–92

Post-pneumonectomy evaluation of the chest: a prospective comparative study of MRI with CT. Laissy JP, et al. **Magn Reson Imaging** 1989 Jan–Feb;7(1):55–60

Utility of temporary atrial epicardial electrodes in postoperative pediatric cardiac patients. Humes RA, et al. **Mayo Clin Proc** 1989 May;64(5):516–21

Serial serum C-reactive protein levels as an indicator of infection in cardiac transplant patients. Orriss DE. **Med Lab Sci** 1988 Apr;45(2):116–20

Delayed postoperative pericardial tamponade. Brazil MJ, et al. **Mo Med** 1986 Dec;83(12):789–91

A surgically-induced deformity of the anterior mitral leaflet. Levene JF, et al. **Nebr Med J** 1989 Feb;74(2):26–8

Topographic brain mapping of EEG before and after open-heart surgery. Zeitlhofer J, et al. **Neuropsychobiology** 1988;20(1):51–6

Comparison of extensive brain calcification in postoperative hypoparathyroidism on CT and NMR scan. Lang C, et al. **Neuroradiology** 1989;31(1):29–32

Partial section of the corpus callosum: focal signs and their recovery. Castro-Caldas A, et al. **Neurosurgery** 1989 Sep; 25(3):442–7

Titanium wire internal fixation for stabilization of injury of the cervical spine: clinical results and postoperative magnetic resonance imaging of the spinal cord. Geisler FH, et al. **Neurosurgery** 1989 Sep;25(3):356–62

Late magnetic resonance imaging related to neurobehavioral functioning after aneurysmal subarachnoid hemorrhage. Romner B, et al. **Neurosurgery** 1989 Sep;25(3):390–6; discussion 396–7

Ovarian vein thrombosis with atypical presentation: role of sonography and duplex Doppler. Baka JJ, et al. **Obstet Gynecol** 1989 May;73(5 Pt 2):887–9

Postoperative refractive changes in children with congenital esotropia: a preliminary study. Snir M, et al. **Ophthalmic Surg** 1989 Jan;20(1):57–62

Use of pulse oximetry for monitoring tracheostomy tube obstruction. Rao AJ, et al. **ORL J Otorhinolaryngol Relat Spec** 1988;50(5):345–8

Acute pseudogout mimicking septic arthritis following urologic manipulation. Esposito PW, et al. **Orthop Rev** 1988 Mar;17(3):295–9

Outcome of shunted posthemorrhagic hydrocephalus in premature infants. Etches PC, et al. **Pediatr Neurol** 1987 May–Jun;3(3):136–40

MRI in the evaluation of spina bifida patients in the remote period after meningomyelocele repair. Williamson MR, et al. **Pediatr Radiol** 1989;19(6–7):442–3

Diagnosis and therapy of acute adrenal insufficiency [letter] Michael KA, et al. **Pharmacotherapy** 1989;9(4):269

Validity of the elastase assay in intensive care medicine. Lang H, et al. **Prog Clin Biol Res** 1989;308:701–6

Incorporation versus infection of retroperitoneal aortic grafts: MR imaging features. Auffermann W, et al. **Radiology** 1989 Aug;172(2):359–62

MR imaging of facial nerve enhancement in Bell palsy or after temporal bone surgery. Daniels DL, et al. **Radiology** 1989 Jun;171(3):807–9

Duplex Doppler US of renal allografts: causes of elevated resistive index. Don S, et al. **Radiology** 1989 Jun; 171(3):709–12

Complications of automatic implantable cardioverter defibrillators: radiographic, CT, and echocardiographic evaluation. Goodman LR, et al. **Radiology** 1989 Feb; 170(2):447–52

Pulsatile masses surrounding vascular prostheses: real-time US color flow imaging. Polak JF, et al. **Radiology** 1989 Feb;170(2):363–6

Transplant renal artery stenosis: evaluation with duplex sonography. Snider JF, et al. **Radiology** 1989 Sep;172(3 Pt 2):1027–30

Intraabdominal adhesions: intraoperative US. Suslavich FJ, et al. **Radiology** 1989 Aug;172(2):387–8

Spirometric forced volume measurements in the assessment of nasal patency after septoplasty. A prospective clinical study. Larsen K, et al. **Rhinology** 1988 Sep;26(3):203–8

Ultrasonographic appearance of a simple ureterocele following surgical treatment. Teisen H, et al. **Rontgenblatter** 1988 Sep;41(9):380–1

Necrotizing fasciitis in a renal transplant patient. Majeski JA, et al. **South Med J** 1988 Oct;81(10):1315–6

Endoscopy in the immediate postoperative period [letter] Rückauer KD. **Surg Endosc** 1989;3(2):115–6

Surveillance for postoperative myocardial infarction after noncardiac operations. Charlson ME, et al. **Surg Gynecol Obstet** 1988 Nov;167(5):407–14

Use of bedside laparoscopy to identify intestinal ischemia in postoperative cases of aortic reconstruction. Iberti TJ, et al. **Surgery** 1989 May;105(5):686–9

Renal cadaveric transplantation in diabetics using total lymphoid irradiation or cyclosporin A. A controlled randomized study. Leuven Collaborative Transplantation Group. Waer M, et al. **Transpl Int** 1988 Jul;1(2):64–8

Postoperative intussusception in children. Kiesling VJ Jr, et al. **Urology** 1989 May;33(5):387–9

Spurious impotence after hypospadias repair. Zeidman EJ, et al. **Urology** 1989 Apr;33(4):300–1

Determination of prognosis after femoropopliteal bypass. Skin temperature, ankle systolic pressure index and other determinants. Thomsen MB, et al. **Vasa** 1988;17(3):193–8

[Our experience in treating peritonitis following cesarean section] Zheliazkova E, et al. **Akush Ginekol (Sofiia)** 1989; 28(2):27–30 (Eng. Abstr.) **(Bul)**

[Early adhesive ileus] Mishev G. **Khirurgiia (Sofiia)** 1989; 42(1):29–33 (Eng. Abstr.) **(Bul)**

[Postoperative sclerosis of the bladder neck in men] Nelkov K, et al. **Khirurgiia (Sofiia)** 1989;42(1):47–54 (Eng. Abstr.) **(Bul)**

[The importance of percutaneous transhepatic cholangiography and sonography in the diagnosis of postoperative complications involving the bile ducts] Hledík E, et al. **Cesk Radiol** 1988 Aug;42(4):259–68 (Eng. Abstr.) **(Cze)**

[The imaging of organ transplants in children] Brunelle F, et al. **Arch Fr Pediatr** 1988;45 Suppl 1:761–4 (Eng. Abstr.) **(Fre)**

[Postoperative arterial oxygen saturation in children] Bach A, et al. **Anasth Intensivther Notfallmed** 1989 Feb; 24(1):37–42 (Eng. Abstr.) **(Ger)**

[The use of pulse oximetry in detecting disorders of the arterial oxygen status in the immediate postoperative phase exemplified by combination anesthesia with isoflurane] Mertzlufft FO, et al. **Anasth Intensivther Notfallmed** 1989 Feb;24(1):27–36 (Eng. Abstr.) **(Ger)**

[Skin temperature measurements of lower leg amputation stumps in chronic arterial occlusive disease] Martin M. **Beitr Orthop Traumatol** 1988 Aug;35(8):401–6 (Eng. Abstr.) **(Ger)**

[The value of magnetic resonance tomography using gadolinium-DTPA in the diagnosis of the post-lumbar disk surgery syndrome] Beyer HK, et al. **Digitale Bilddiagn** 1989 Mar;9(1):22–30 (Eng. Abstr.) **(Ger)**

[Para-aortic pseudoaneurysm following aortic valve replacement. Its diagnosis by magnetic resonance tomography] Deider S, et al. **Dtsch Med Wochenschr** 1989 Jan 13;114(2):54–7 (Eng. Abstr.) **(Ger)**

[Sonographic findings in silicone-induced granulomas and lymphadenopathy following mammaplastic surgery] Herzog P, et al. **Dtsch Med Wochenschr** 1989 Jul 28; 114(30):1157–60 (Eng. Abstr.) **(Ger)**

[Diagnosis of kidney transplant rejection. The value of scintigraphy, sonography and NMR tomography] Kaiser WA, et al. **Dtsch Med Wochenschr** 1988 Nov 25; 113(47):1830–6 (Eng. Abstr.) **(Ger)**

[Immunologic-cytologic monitoring following heart transplantation] Lersch C, et al. **Fortschr Med** 1988 Sep 20;106(27):541–3 (Eng. Abstr.) **(Ger)**

[Arterial oxygen saturation—a new principle in intensive care monitoring? Many patients are hypoxic in the postoperative period—a simple assessment procedure in clinical use] Schwing C. **Fortschr Med** 1989 Feb 28;107(6):69–70 **(Ger)**

[Extrauterine pregnancies following "abortion" in cases with no indication of intrauterine pregnancy] Jaluvka V, et al. **Geburtshilfe Frauenheilkd** 1989 Feb;49(2):183–5 (Eng. Abstr.) **(Ger)**

[Liquid crystal contact thermography—a new screening procedure in the diagnosis of deep venous thrombosis] Hoffmann R, et al. **Helv Chir Acta** 1989 Jun;56(1–2):45–8 (Eng. Abstr.) **(Ger)**

[Breast saving therapy: diagnostic problems in after care] Walther E, et al. **Helv Chir Acta** 1989 Apr;55(6):909–15 (Eng. Abstr.) **(Ger)**

[Function-saving microsurgery in suboccipital removal of large acoustic neuromas] Strauss C, et al. **HNO** 1989 Jul; 37(7):281–6 (Eng. Abstr.) **(Ger)**

[Reactive acalculous cholecystitis: a bland and asymptomatic course—incidence of a classical stress disease] Meissner K, et al. **Langenbecks Arch Chir** 1989;374(1):46–54 (Eng. Abstr.) **(Ger)**

[Ultrasound diagnosis of the phoniatric performance of laryngectomized patients] Böhme G. **Laryngol Rhinol Otol (Stuttg)** 1988 Dec;67(12):651–6 (Eng. Abstr.) **(Ger)**

[Postoperative monitoring of a free jejunum transplant] Bootz F, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Nov;67(11):606 (Eng. Abstr.) **(Ger)**

[Body plethysmography studies in patients with obstructed nasal respiration before and following corrective surgery of the nasal septum] Kautzky M, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Nov;67(11):593–8 (Eng. Abstr.) **(Ger)**

[Is measuring impedance following ear operations an aid in the analysis of postoperative sequelae?] Thoma J, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Dec;67(12):624–8 (Eng. Abstr.) **(Ger)**

[Systemic salmonella infections in chemotherapy in 2 children with acute lymphoblastic leukemia] Mühlbauer B, et al. **Monatsschr Kinderheilkd** 1989 Jun;137(6):337–40 (Eng. Abstr.) **(Ger)**

[Evoked potentials before and following decompression craniotomy in space-occupying cerebellar infarct] Krieger D, et al. **Nervenarzt** 1989 Jan;60(1):36–9 **(Ger)**

[Misdiagnosis of non-convulsive epileptic states as post-traumatic exogenous psychosis] Mewe R, et al. **Nervenarzt** 1989 Jul;60(7):433–6 **(Ger)**

[Follow-up EEG analysis as a diagnostic instrument in the after-care of patients with astrocytoma] Szuwart U, et al. **Nervenarzt** 1989 Jan;60(1):55–60 **(Ger)**

[Syringomyelia from the neurosurgical viewpoint] Wiedemayer H, et al. **Nervenarzt** 1989 Jan;60(1):17–25 (Eng. Abstr.) **(Ger)**

[Spondylodiscitis following lumbar intervertebral disk surgery. Clinical aspects—diagnosis—therapy] Frank AM, et al. **Neurochirurgia (Stuttg)** 1988 Nov;31(6):205–9 (Eng. Abstr.) **(Ger)**

[The value of evoked potentials in the neurosurgical intensive care unit] Nau HE, et al. **Neurochirurgia (Stuttg)** 1988 Sep; 31 Suppl 1:170–4 (Eng. Abstr.) **(Ger)**

[Magnetic resonance tomography studies with contrast media in post-discotomy syndrome] Oppel U, et al. **Orthopade** 1989 Feb;18(1):41–52 (Eng. Abstr.) **(Ger)**

[DSA and duplex sonography of aortic prostheses] Gritzmann N, et al. **Radiologe** 1989 Jul;29(7):343–8 (Eng. Abstr.) **(Ger)**

[Radiologic diagnosis of early complications following kidney transplantation] Looser CM, et al. **Radiologe** 1988 Dec;28(12):549–59 (46 ref.) (Eng. Abstr.) **(Ger)**

[Radiologic diagnosis following pancreas transplantation] Marincek B, et al. **Radiologe** 1988 Dec;28(12):560–5 (17 ref.) (Eng. Abstr.) **(Ger)**

[CT and MRT following liver transplantation] Marincek B, et al. **Radiologe** 1988 Dec;28(12):544–8 (17 ref.) (Eng. Abstr.) **(Ger)**

[Detection of superior mesenteric vein thrombosis following

splenectomy using real-time and Doppler sonography] Mildenberger P, et al. **Radiologe** 1988 Aug;28(8):395–8 (Eng. Abstr.) (Ger)

[Diagnostic imaging in the evaluation of heart transplant recipients] von Schulthess GK, et al. **Radiologe** 1988 Dec; 28(12):566–71 (37 ref.) (Eng. Abstr.) (Ger)

[Ultrasonic diagnosis following liver transplantation] Barton P, et al. **ROFO** 1989 Aug;151(2):145–53 (Eng. Abstr.) (Ger)

[MR tomography following lumbar disk surgery: differential diagnostic potentials using Gd-DTPA] Steiner H. **ROFO** 1989 Aug;151(2):179–85 (Eng. Abstr.) (Ger)

[Typical sonographic findings in hemihepatectomized or partially hepatectomized patients] Helzel MV. **Rontgenblatter** 1988 Sep;41(9):374–9 (Eng. Abstr.) (Ger)

[A case from practice (107). Patient: L.E., 74-year-old female, retired] Meyer JL. **Schweiz Rundsch Med Prax** 1988 May 3;77(18):499–500 (Ger)

[Refixation in osteochondrosis dissecans with resorbable material using magnetic resonance tomography in follow-up monitoring] Lütten C, et al. **Sportverletz Sportschaden** 1988 Jun;2(2):61–8 (Eng. Abstr.) (Ger)

[The effect of diagnostic and therapeutic bronchoscopy in surgical intensive care medicine] Glaser F, et al. **Unfallchirurg** 1988 Dec;91(12):529–35 (Eng. Abstr.) (Ger)

[Comparison of the value of magnetic resonance tomography and computerized tomography in the follow-up of augmentation-plasties with carbon fiber ligaments of the anterior cruciate ligament] Sim E, et al. **Unfallchirurgie** 1989 Jun;15(3):152–61 (Eng. Abstr.) (Ger)

[Clinical and nuclear magnetic resonance tomography findings in adults following surgical correction of aortic isthmus stenoses (CoA)] Kaemmerer H, et al. **Vasa Suppl** 1988;26:197–200 (Ger)

[Pre- and postoperative quantitative flow measurements (electromagnetic and sonographic) in the assessment of surgical results in carotid stenoses] Walter P, et al. **Vasa Suppl** 1988;23:238–40 (Ger)

[Echocardiographic diagnosis of acute graft rejection in heart transplant patients under cyclosporin therapy] Angermann CE, et al. **Z Kardiol** 1989 Apr;78(4):243–52 (Eng. Abstr.) (Ger)

[The significance of heart rate for stress hemodynamics following heart transplantation] Permanetter B, et al. **Z Kardiol** 1989 Apr;78(4):236–42 (Eng. Abstr.) (Ger)

[Diagnostic validity of clinico-biochemical parameters in postoperative monitoring of heart transplant patients] Hölzel W, et al. **Z Med Lab Diagn** 1989;30(1):13–4 (Ger)

[Noninvasive parameter combination (including monitoring of marker proteins) in risk assessment of different forms of coronary heart diseases and heart surgery interventions] Kothe K, et al. **Z Med Lab Diagn** 1989;30(1):18–20 (Ger)

[Laboratory diagnosis in heart transplant patients] Müller MM. **Z Med Lab Diagn** 1989;30(1):11–2 (Ger)

[Magnetic resonance tomography of kidney transplants—status of diagnostic possibilities] Dewey C, et al. **Z Urol Nephrol** 1988 Nov;81(11):665–70 (Eng. Abstr.) (Ger)

[The behavior of serum "liver enzyme" activity in children with chronic renal failure, hemodialysis and kidney transplantation] Otting U, et al. **Z Urol Nephrol** 1989 Jun; 82(6):331–8 (Eng. Abstr.) (Ger)

[Assessment of specific indicators for determining postoperative infectious complications] Abri O, et al. **Zentralbl Chir** 1988;113(21):1393–405 (Eng. Abstr.) (Ger)

[Urodynamic results following surgery of incontinence] Ralph G, et al. **Zentralbl Gynakol** 1989;111(4):235–42 (Eng. Abstr.) (Ger)

[The role of real-time sonography in the differential diagnosis of acute appendicitis and in the detection of post-appendectomy complications] Regöly-Mérei J, et al. **Orv Hetil** 1989 Apr 16;130(16):827–31 (25 ref.) (Eng. Abstr.) (Hun)

[Neoplasm on cholecysto-jejunal anastomosis: an endoscopic diagnosis] Spisni R, et al. **Minerva Chir** 1989 Jun 30; 44(12):1699–700 (Eng. Abstr.) (Ita)

[Endoscopic control of anastomoses in patients with resection of the colon] Morini S, et al. **Minerva Dietol Gastroenterol** 1988 Jul–Sep;34(3):167–70 (Eng. Abstr.) (Ita)

[Subhepatic infected bile collection: scintigraphic diagnosis and the the echotomographic contribution in a clinical case] Palagi B, et al. **Radiol Med (Torino)** 1989 Jul–Aug; 78(1–2):123–5 (Ita)

[Usefulness of ultrasonography in follow-up of postoperative pelviureteric dilatation in children] Kotoh S, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Mar;80(3):387–95 (Eng. Abstr.) (Jpn)

[MRI findings of postoperative maxillary cyst] Yamashita T, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Dec; 91(12):1996–2002 (Eng. Abstr.) (Jpn)

[Noninvasive and quantitative evaluation of pulmonary regurgitation by pulsed Doppler echocardiography—a study in patients with tetralogy of Fallot after corrective surgery] Matsuda Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb;37(2):255–64 (Eng. Abstr.) (Jpn)

[Post-transfusion graft-versus-host disease as the etiology of post-operative erythroderma following open heart surgery—a report of 2 cases confirmed by HLA typing and skin biopsy] Sakakibara T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Aug;36(8):1390–7 (28 ref.) (Eng. Abstr.) (Jpn)

[Postoperative acute acalculous cholecystitis] Samdal F, et al. **Tidsskr Nor Laegeforen** 1988 Nov 30;108(33):3097 (Eng. Abstr.) (Nor)

[Value of echography in the diagnosis of postoperative complications] Stygar AM, et al. **Akush Ginekol (Mosk)** 1989 Apr;(4):39–43 (Eng. Abstr.) (Rus)

[Determination of an intrapulmonary shunt in the immediate postoperative period] Zimon IN, et al. **Anesteziol Reanimatol** 1988 Nov–Dec;(6):19–21 (Eng. Abstr.) (Rus)

[Registration of a diagnosis in complications of surgical treatment of diseases of the lungs and heart] Kovalenko LV, et al. **Arkh Patol** 1988;50(6):57–61 (Eng. Abstr.) (Rus)

[Retrograde pancreaticocholangiography in the diagnosis of residual choledocholithiasis] Kushnirenko OIu, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):64–6 (Eng. Abstr.) (Rus)

[Postoperative dynamic laparoscopy in children] Gubov IuP, et al. **Klin Khir** 1989;(6):47–8 (Eng. Abstr.) (Rus)

[Diagnostic and therapeutic laparoscopy in complications after surgical operations on the abdominal organs] Tiukarkin Miu, et al. **Klin Khir** 1989;(1):58 (Rus)

[The potentials of modern methods for the diagnosis and treatment of postoperative intra-abdominal abscesses (a review of the foreign literature since 1981)] Bachev II. **Klin Med (Mosk)** 1988 Sep;66(9):32–6 (43 ref.) (Rus)

[Reasons for a decrease in the work capacity of patients after the radical treatment of breast cancer] Gerasimenko VN, et al. **Sov Med** 1988;(6):61–3 (Rus)

[Prognosis of the acute hypertensive syndrome following resection of aortic coarctation] Selivanenko VT, et al. **Vestn Akad Med Nauk SSSR** 1988;(5):68–72 (Eng. Abstr.) (Rus)

[Detection of arteriovenous anastomoses using thermography] Nagovitsyn ES, et al. **Vestn Khir** 1988 May; 140(5):46–8 (Rus)

[Chronic pancreatitis in patients with the postcholecystectomy syndrome] Gredzhev AF, et al. **Vrach Delo** 1989 Apr;(4):18–20 (Eng. Abstr.) (Rus)

[Early diagnosis of postoperative intestinal obstruction] Kuleshov EV, et al. **Vrach Delo** 1989 Feb;(2):32–5 (Eng. Abstr.) (Rus)

[Neurologic functions of patients after open-heart surgery under perfusion-less deep (26–25 degrees C) hypothermic protection] Postnov VG, et al. **Zh Nevropatol Psikhiatr** 1988;88(11):30–3 (Eng. Abstr.) (Rus)

[Ureterorenoscopy in renal transplantation. Presentation of a case] González Cabrera LA, et al. **Arch Esp Urol** 1988 Oct;41(8):599–600 (Eng. Abstr.) (Spa)

[Usefulness of visual evaluation studies with 99mTc-DTPA in the follow-up of kidney transplants] Llamas Elvira JM, et al. **Arch Esp Urol** 1988 Nov–Dec;41(9):819–26 (Eng. Abstr.) (Spa)

[The efficacy of diagnostic tests (I)] Pozo Rodríguez F. **Med Clin (Barc)** 1988 May 14;90(19):779–85 (Spa)

DIET THERAPY

[A method of using fasting-diet therapy in patients with acute surgical diseases of the abdominal organs] Dergachev SV, et al. **Vestn Khir** 1988 May;140(5):28–31 (Eng. Abstr.) (Rus)

[A method for treating reflux gastritis after vagotomy] Vdovichenko VI, et al. **Vrach Delo** 1989 Jun;(6):8–9 (Eng. Abstr.) (Rus)

DRUG THERAPY

Angina pectoris with encainide in dilated cardiomyopathy. Barron JT, et al. **Am Heart J** 1989 Mar;117(3):701–2

Lovastatin therapy for hypercholesterolemia in cardiac transplant recipients. Kuo PC, et al. **Am J Cardiol** 1989 Sep 15;64(10):631–5

A comparison of monobactam antibiotics in surgical infections. DiPiro JT, et al. **Am J Surg** 1989 Jun; 157(6):607–14 (49 ref.)

An assessment of postoperative oxygen therapy in patients with fractured neck of femur. Dyson A, et al. **Anaesth Intensive Care** 1988 Nov;16(4):405–10

The combined use of noradrenaline, amrinone and nitroglycerin in the management of severe low cardiac output after coronary artery surgery. Nakatsuka M, et al. **Anaesth Intensive Care** 1988 Nov;16(4):485–7

Automatic control of arterial pressure after cardiac surgery. Evaluation of a microcomputer-based control system using glyceryl trinitrate and sodium nitroprusside. Colvin JR, et al. **Anaesthesia** 1989 Jan;44(1):37–41

DDAVP and open heart surgery [letter; comment] Spargo PM, et al. **Anaesthesia** 1989 Apr;44(4):363–4. **Comment on:** Anaesthesia 1988 Oct;43(10):898

Re: The use of superoxide dismutase in the syndrome of ischemic injury following abdominoplasty [letter] Goddio AS. **Ann Plast Surg** 1989 Sep;23(3):274

Medical treatment of stomal ulcers. Hjortrup A, et al. **Ann R Coll Surg Engl** 1988 Nov;70(6):343–4

Treatment of 27 postoperative enterocutaneous fistulas with the long half-life somatostatin analogue SMS 201-995. Nubiola P, et al. **Ann Surg** 1989 Jul;210(1):56–8

Postoperative diabetes insipidus [letter] **BMJ** 1989 Feb 18; 298(6671):459

Sedation following cardiac surgery: evaluation of alfentanil and morphine in the presence of a computerized closed loop arterial pressure controller. McMenemin IM, et al. **Br J Anaesth** 1988 Dec;61(6):669–74

The dissolution of urinary mucus after cystoplasty. Gillon G, et al. **Br J Urol** 1989 Apr;63(4):372–4

Lack of effect of cholinergic blocking and alpha-adrenergic stimulation on nocturnal incontinence after ileocaecal bladder replacement. A controlled randomised study. Jakobsen H, et al. **Br J Urol** 1989 Apr;63(4):379–83

Cefotetan in the treatment of post-operative infections following obstetric and gynecological surgery. Cianci A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):537–8

Critical dose of digoxin for treating supraventricular tachycardias after heart surgery. Krohn BG, et al. **Chest** 1989 Apr;95(4):729–34

The safety of cumulative doses of labetalol in perioperative hypertension. Cosentino F, et al. **Cleve Clin J Med** 1989 Jun;56(4):371–6

The hemodynamic effects of intravenous labetalol for postoperative hypertension. Orlowski JP, et al. **Cleve Clin J Med** 1989 Jan–Feb;56(1):29–34

Treatment of an enteric fistula with somatostatin in a premature. Julia MV, et al. **Clin Pediatr (Phila)** 1989 Mar; 28(3):149–50

Patient controlled anxiolysis with midazolam [letter] Loper KA, et al. **Crit Care Med** 1989 Feb;17(2):200–1

Hemorrhagic stress ulcer management [letter] Granda AM. **Dig Dis Sci** 1988 Oct;33(10):1340–1

Antibacterial chemotherapy for treatment of infections in outpatient surgery. Flesch R. **Eur Surg Res** 1989;21 Suppl 1:52–4

Treatment of postoperative infections with a single daily dose of ceftriaxone: analysis of international issues. Germiniani R. **Eur Surg Res** 1989;21 Suppl 1:43–51 (25 ref.)

Peripheral blood lymphocyte changes after benign gastrointestinal surgery. Role of thymostimulin in reversing the postoperative immunodepression seen in humans. Garcia-Valdecasas JC, et al. **Hepatogastroenterology** 1988 Oct;35(5):219–22

The role of beta blocker in the post operative low output state following adequate valvotomy in cases of pure valvar pulmonary stenosis (clinical experience). Subbarao KS, et al. **Indian Heart J** 1989 Mar–Apr;41(2):137–8

Thrombolytic therapy for a thromobosed Bjork-Shiley mitral valve prosthesis. Tyagi S, et al. **Indian Heart J** 1988 Nov–Dec;40(6):507–9

Failure in glaucoma surgery and its management. Mithal S, et al. **Indian J Ophthalmol** 1988 Apr–Jun;36(2):67–70

Failure of somatostatin or an analog to promote closure of end pancreatic fistulae. Miller BM, et al. **Int J Pancreatol** 1989 Feb;4(1):65–72

Effect of heparin on unidentified fever after hepatectomy. Matsumata T, et al. **Int Surg** 1988 Jul–Sep;73(3):161–2

Measurement of post-operative pain and narcotic administration in infants using a new clinical scoring system. Barrier G, et al. **Intensive Care Med** 1989;15 Suppl 1:S37–9

The physiological effects of vasopressin when used to control intra-abdominal bleeding. Shelly MP, et al. **Intensive Care Med** 1988;14(5):526–31

Treatment of junctional rhythm after heart transplantation with terbutaline. Cook LS, et al. **J Heart Transplant** 1989 Jul–Aug;8(4):342–4

Tranquilizer use before and after coronary bypass operation. Young LD, et al. **J Psychosom Res** 1988;32(4–5):475–81

Microvascular thrombolysis to salvage a free flap using human recombinant tissue plasminogen activator. Fudem GM, et al. **J Reconstr Microsurg** 1989 Jul;5(3):231–4

Early results of single lung transplantation in patients with end-stage pulmonary fibrosis. McGregor CG, et al. **J Thorac Cardiovasc Surg** 1989 Sep;98(3):350–4

Treatment of acute postoperative anemia with recombinant human erythropoietin. Levine EA, et al. **J Trauma** 1989 Aug;29(8):1134–8; discussion 1138–9

Dysarthria after large doses of intravenous diazepam. Ishikawa T, et al. **Jpn J Psychiatry Neurol** 1988 Dec; 42(4):759–61

Influence of L-thyroxine on cardiac function in athyreotic thyroid cancer patients—an echophonocardiographic study. Punzengruber C, et al. **Klin Wochenschr** 1988 Aug 15;66(16):729–35

Local recombinant tissue plasminogen activator to clear cerebral artery thrombosis developing soon after surgery [letter] Buteux G, et al. **Lancet** 1988 Nov 12;2(8620):1143–4

Treatment of enteric hyperoxaluria with calcium-containing organic marine hydrocolloid. Lindsjö M, et al. **Lancet** 1989 Sep 23;2(8665):701–4

Assessment of desmopressin-enhanced cognitive function in a neurosurgical patient. Dons RF, et al. **Milit Med** 1989 Feb;154(2):83–5

Treatment of diversion colitis with short-chain-fatty acid irrigation. Harig JM, et al. **N Engl J Med** 1989 Jan 5; 320(1):23–8

Topical administration of 5-aminosalicylic acid: a therapeutic proposal for the treatment of pouchitis [letter] Miglioli M, et al. **N Engl J Med** 1989 Jan 26;320(4):257

Successful treatment with ciprofloxacin of multiresistant salmonella arthritis in a renal transplant recipient. Díaz-Tejeiro R, et al. **Nephrol Dial Transplant** 1989;

4(5):390–2
Low-dose vs high-dose intravenous methylprednisolone therapy for acute renal allograft rejection in patients receiving cyclosporin therapy. Lui SF, et al. **Nephrol Dial Transplant** 1989;4(5):387–9
The calcium entry blocker nimodipine improves the quality of life of patients operated on for cerebral aneurysms. A 5-year follow-up analysis. Kostron H, et al. **Neurochirurgia (Stuttg)** 1988 Sep;31(5):150–3
Diagnosis and treatment of chronic postoperative bacterial endophthalmitis. Brady SE, et al. **Ophthalmic Surg** 1988 Aug;19(8):580–4 (20 ref.)
Treatment of cutaneous neoplasia with etretinate in renal transplant recipients. Shuttleworth D, et al. **Q J Med** 1988 Sep;68(257):717–25
Herpes simplex virus hepatitis in a renal transplant recipient: successful treatment with acyclovir. Gäbel H, et al. **Scand J Infect Dis** 1988;20(4):435–8
Correction of malnutrition and maldigestion with enzyme supplementation in patients with surgical suppression of exocrine pancreatic function. Braga M, et al. **Surg Gynecol Obstet** 1988 Dec;167(6):485–92
Clinical experience in the management of pulmonary opportunist infection and rejection in recipients of heart-lung transplants. Penketh AR, et al. **Thorax** 1988 Oct; 43(10):762–9
Bacterial infections in liver transplant patients under selective decontamination with norfloxacin. Cuervas-Mons V, et al. **Transplant Proc** 1989 Jun;21(3):3558
Prostaglandin E1 for primary nonfunction following liver transplantation. Greig PD, et al. **Transplant Proc** 1989 Apr; 21(2):3360–1
[Indications and possibilities of thrombosis prevention and antithrombotic therapy in cardiology] Dolchinov A, et al. **Vutr Boles** 1988;27(3):22–9 (0 ref.) **(Bul)**
[The effect of systemic N-acetylcysteine on postoperative expectoration. A prospective, randomized double-blind study] Jepsen S, et al. **Ugeskr Laeger** 1989 Apr 24; 151(17):1055–7 (Eng. Abstr.) **(Dan)**
[Postoperative infection in cesarean section. Comparative study according to the antibiotic used at 2 maternity hospitals in the Central African Republic] Kamuma M, et al. **Rev Fr Gynecol Obstet** 1989 May;84(5):401–3 (Eng. Abstr.) **(Fre)**
[Treatment of postoperative synovitis following meniscus operations with ibuprofen] Darsow F, et al. **Beitr Orthop Traumatol** 1988 Dec;35(12):616–20 (Eng. Abstr.) **(Ger)**
[Reduction of postoperative swelling. Objective measurement of swelling of the upper ankle joint in treatment with serrapeptase— a prospective study] Esch PM, et al. **Fortschr Med** 1989 Feb 10;107(4):67–8, 71–2 (Eng. Abstr.) **(Ger)**
[Postoperative behavior of the intraocular pressure in risk patients following phacoemulsification and extracapsular cataract extraction—a double-blind study of the effect of acetazolamide] Noske W, et al. **Fortschr Ophthalmol** 1988; 85(5):492–4 (Eng. Abstr.) **(Ger)**
[Therapy of aneurysm-induced subarachnoid hemorrhage] Mehdorn HM, et al. **Neurochirurgia (Stuttg)** 1988 Sep;31 Suppl 1:175–8 (Eng. Abstr.) **(Ger)**
[Infections of the cerebrospinal fluid shunt] Menardi G. **Padiatr Padol** 1989;24(1):43–8 (Eng. Abstr.) **(Ger)**
[Circadian behavior of blood pressure and heart rate following orthotopic heart transplantation. Studies before and during antihypertensive therapy] Angermann CE, et al. **Z Kardiol** 1989 Apr;78(4):228–35 (Eng. Abstr.) **(Ger)**
[Flecainide-induced hepatitis] Kühlkamp V, et al. **Z Kardiol** 1988 Oct;77(10):678–80 (Eng. Abstr.) **(Ger)**
[The possibility of stimulating the ureters with hexoprenaline following radical abdominal surgery of cervix cancer] Gitsch G, et al. **Zentralbl Gynakol** 1988;110(16):1030–3 (Eng. Abstr.) **(Ger)**
[The activity and tolerability of ferroproteinsuccinylate in the treatment of iron deficiency in surgery] Ambrosini A. **Boll Chim Farm** 1988 Mar;127(3):40S–43S (Eng. Abstr.) **(Ita)**
[Treatment of postoperative urinary infections in obstetrics and gynecology with cinoxacin] Bardi M, et al. **Clin Ter** 1988 Nov 15;127(3):185–8 (Eng. Abstr.) **(Ita)**
[Fluconazole in the treatment of deep-seated candidiasis in surgical patients] Viviani MA, et al. **G Ital Chemioter** 1988 Jan–Dec;35(1–3):57–60 (Eng. Abstr.) **(Ita)**
[A multicenter study in the evaluation of the efficacy and tolerability of cefoperazone in the therapy of postoperative infections of the abdominal region] Paradisi F, et al. **Minerva Chir** 1988 Dec 31;43(23–24):2091–8 (Eng. Abstr.) **(Ita)**
[Hymecromone in the treatment of symptoms following surgery of the bile ducts] Camarri E, et al. **Recenti Prog Med** 1988 May;79(5):198–202 (Eng. Abstr.) **(Ita)**
[Malignant pericardial effusion after esophageal cancer surgery successfully treated by intrapericardial instillation of CDDP] Murata K, et al. **Gan To Kagaku Ryoho** 1989 Jul;16(7):2433–6 (9 ref.) (Eng. Abstr.) **(Jpn)**
[Vasodilator therapy utilizing nitroprusside and nitroglycerin after coronary artery surgery] Hayase S, et al. **Kyobu Geka** 1989 Mar;42(3):189–94 (Eng. Abstr.) **(Jpn)**
[Renal protection in acute neurosurgical diseases—effect of a low dose dopamine with reference to acute renal failure and hypernatremia in patients with dehydration] Shimoda M, et al. **No Shinkei Geka** 1988 Jun;16(7):851–6 (Eng. Abstr.) **(Jpn)**
[Acute failure of transplanted kidney after administration of captopril. Report on 2 cases] Grzeszczak W, et al. **Pol Tyg Lek** 1988 Aug 1–8;43(31–32):1023–4 **(Pol)**
[Treatment of decompensated metabolic alkalosis by intravenous administration of sorbamine after thoracic and abdominal operations] Novikov GA, et al. **Anesteziol Reanimatol** 1988 Jul–Aug;(4):63–6 (Eng. Abstr.) **(Rus)**
[Use of sodium nitroprusside in the prevention and treatment of postoperative hypertension and the correction of the indicators of primary hemostasis in patients with vasorenal hypertension] Seleznev MN, et al. **Anesteziol Reanimatol** 1988 May–Jun;(3):31–4 (Eng. Abstr.) **(Rus)**
[Role of microbiological control in the choice of antibacterial therapy of respiratory infection in surgical patients during the postoperative period] Bekbergenov BM, et al. **Antibiot Khimioter** 1989 Jan;34(1):60–4 (Eng. Abstr.) **(Rus)**
[Thrombolytic treatment of patients with thromboses of artificial heart valves (successful avelizin treatment of a female patient with thrombosis of a mitral prosthesis)] Martsinkiavichus A, et al. **Grudn Khir** 1988 May–Jun; (3):27–9 **(Rus)**
[Treatment with indirect anticoagulants] Kirichenko LL. **Kardiologiia** 1988 Oct;28(10):109–13 **(Rus)**
[Prevention and treatment of postoperative intestinal paresis with serotonin-adipinate] Stupin VA, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):113–5 **(Rus)**
[Problems of ambulatory treatment of patients with a transplanted kidney] Filiptsev PIa, et al. **Sov Med** 1988; (7):61–3 **(Rus)**
[Treatment of pulmonary hypertension in the immediate period after general anesthesia and surgical correction of patent ductus arteriosus and heart septal defects] Gimmel'farb GN, et al. **Vestn Khir** 1988 Jun;140(6):123–6 (Eng. Abstr.) **(Rus)**
[Immediate complications of radical cystectomy. Intestinal fistula: our experience in the treatment with somatostatin] Arrizabalaga M, et al. **Actas Urol Esp** 1989 Jan–Feb; 13(1):49–52 (Eng. Abstr.) **(Spa)**
[Antithrombotic therapy in cardiac disease: approach for the selection of pharmacologic agents] Fuster V. **Rev Esp Cardiol** 1988 Dec;41(10):579–85 (36 ref.) **(Spa)**
[Esophagojejunal fistula. Treatment with intravenous somatostatin. Apropos of a case] Calvo Benedi M, et al. **Rev Esp Enferm Apar Dig** 1988 May;73(5 Pt 2):615–8 (Eng. Abstr.) **(Spa)**
[Conservative treatment of high-loss intestinal fistulas occurring postoperatively] Hebrero San Martín J, et al. **Rev Esp Enferm Apar Dig** 1988 May;73(5 Pt 2):567–73 (Eng. Abstr.) **(Spa)**

ECONOMICS

Priorities for surveillance and cost-effective control of postoperative infection. Penin GB, et al. **Arch Surg** 1988 Nov;123(11):1305–8

ENZYMOLOGY

[Biochemical studies of the assessment of transplant function following clinical heart transplantation—initial experiences] Lohse W, et al. **Zentralbl Chir** 1988;113(20):1343–50 (Eng. Abstr.) **(Ger)**

EPIDEMIOLOGY

Peptic ulcer surgery: immediate complications. Balslev I, et al. **Acta Chir Scand Suppl** 1988;547:71–4 (39 ref.)
Incidence of thromboembolism in association with surgical and medical diseases. Bergentz SE. **Acta Chir Scand Suppl** 1988;543:10–4 (33 ref.)
Perioperative cardiac problems. Lowenstein E. **Acta Chir Scand Suppl** 1989;550:36–42 (12 ref.)
Acute renal failure following bone marrow transplantation: a retrospective study of 272 patients. Zager RA, et al. **Am J Kidney Dis** 1989 Mar;13(3):210–6
Postcardiotomy delirium: conclusions after 25 years? Smith LW, et al. **Am J Psychiatry** 1989 Apr;146(4):452–8
Postoperative conduction disturbances: a comparison of blood and crystalloid cardioplegia. Gundry SR, et al. **Ann Thorac Surg** 1989 Mar;47(3):384–90
Primary hyperparathyroidism. A review of the long-term surgical and nonsurgical morbidities as a basis for a rational approach to treatment. Lafferty FW, et al. **Arch Intern Med** 1989 Apr;149(4):789–96
Fracture of the lower extremity after total hip replacement. Löwenhielm G, et al. **Arch Orthop Trauma Surg** 1989; 108(3):141–3
Human papillomavirus infection and cervical intraepithelial neoplasia in women with renal allografts. Alloub MI, et al. **BMJ** 1989 Jan 21;298(6667):153–6
Preoperative and operative predictive variables of late clinical events following saphenous vein coronary artery bypass graft surgery. Lambert M, et al. **Can J Cardiol** 1989 Mar;5(2):87–92
Epidemic of nosocomial Legionnaires' disease in renal transplant recipients: a case-control and environmental study. Le Saux NM, et al. **Can Med Assoc J** 1989 May 1;140(9):1047–53
The decreasing incidence of postoperative infection rates. Gilmore OJ. **Chemioterapia** 1987 Jun;6(2 Suppl):558–60
The increasing incidence of post-operative infection rates. Percival A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):561–2
Determinants of prolonged length of hospital stay after coronary bypass surgery. Weintraub WS, et al. **Circulation** 1989 Aug;80(2):276–84
Carcinoma of the tonsillar region: surgical complications relative to the type of reconstruction. Suarez Nieto C, et al. **Clin Otolaryngol** 1989 Apr;14(2):141–5
Urinary tract infections in patients undergoing transurethral prostatectomy. Fujita K, et al. **Clin Ther** 1988;10 Spec No:22–6
Incidence of post-operative endophthalmitis in India. Reddy PR. **Indian J Ophthalmol** 1987;35(5–6):60–2
Ventral incisional hernias: incidence, date of recurrence, localization and risk factors. Regnard JF, et al. **Ital J Surg Sci** 1988;18(3):259–65
Toxoplasmosis in heart and heart and lung transplant recipients. Wreghitt TG, et al. **J Clin Pathol** 1989 Feb; 42(2):194–9
The incidence of bacteremia after skin surgery [letter] Zack L, et al. **J Infect Dis** 1989 Jan;159(1):148–50
Surgical limitation for biliary atresia: indication for liver transplantation. Kasai M, et al. **J Pediatr Surg** 1989 Sep; 24(9):851–4
Caesarean section morbidity at district level in Zimbabwe. De Muylder X. **J Trop Med Hyg** 1989 Apr;92(2):89–92
Incidence, distribution, and outcome of episodes of infection in 100 orthotopic liver transplantations. Paya CV, et al. **Mayo Clin Proc** 1989 May;64(5):555–64
Intraoperative brainstem auditory evoked potentials: significant decrease in postoperative morbidity. Radtke RA, et al. **Neurology** 1989 Feb;39(2 Pt 1):187–91
AICD: standardized reporting and appropriate categorization of complications. Nisam S, et al. **PACE** 1988 Nov;11(11 Pt 2):2045–52
Postoperative complication rate of oral surgery outpatients: a study of cases treated during 1983–1984. Heliövaara A, et al. **Proc Finn Dent Soc** 1988;84(5–6):291–6
Salmonella bacteremia in renal transplant recipients. Ejlertsen T, et al. **Scand J Infect Dis** 1989;21(3):241–4 (18 ref.)
Intra- and postoperative complications in lumbar disc surgery. Stolke D, et al. **Spine** 1989 Jan;14(1):56–9
A high incidence of early acute rejection does not correlate with the number of late rejections following heart transplantation. Wahlers T, et al. **Transplant Proc** 1989 Feb; 21(1 Pt 3):2531–2
A multivariate analysis of risk factors for pneumonia following cardiac transplantation. Corensek MJ, et al. **Transplantation** 1988 Dec;46(6):860–5
Hepatitis in living-donor renal allograft recipients [letter] Dakshinamurty KV, et al. **Transplantation** 1988 Dec; 46(6):926–7
[Postoperative peritonitis in operations on the large intestine] Viiachki I, et al. **Khirurgiia (Sofiia)** 1988;41(4):100–3 (Eng. Abstr.) **(Bul)**
[Registration of orthopedic surgery complications (letter)] Noer HH, et al. **Ugeskr Laeger** 1989 May 15;151(20):1255–6 **(Dan)**
[Infections following heart transplantation; experiences in 40 patients] Balk AH, et al. **Ned Tijdschr Geneeskd** 1988 Dec 3;132(49):2237–41 (Eng. Abstr.) **(Dut)**
[Complications in the anesthesia recovery period: a retrospective stud of 4910 patients admitted during a year (letter)] Bancalari G, et al. **Ann Fr Anesth Reanim** 1989; 8(3):299 **(Fre)**
[Data from the Bavarian perinatal survey on the problem of the incidence of cesarean section] Zander J, et al. **Geburtshilfe Frauenheilkd** 1989 Apr;49(4):328–36 (Eng. Abstr.) **(Ger)**
[Infectious diseases in kidney transplant recipients treated with cyclosporin] Takahashi K, et al. **Nippon Hinyokika Gakkai Zasshi** 1989 Feb;80(2):175–84 (Eng. Abstr.) **(Jpn)**
[Complications of sinus surgeries—the status quo and backgrounds] Takahashi M, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Jun;91(6):901–6 (Eng. Abstr.) **(Jpn)**
[Occurrence of postoperative nausea and vomiting] Gelett S, et al. **Tidsskr Nor Laegeforen** 1988 Oct 30;108(30):2731–2 (Eng. Abstr.) **(Nor)**
[Chronic intravascular hemolysis and anemia in patients with acquired heart defects after the prosthesis of 2 and 3 valves] Baranov IN, et al. **Gematol Transfuziol** 1988 Jul;33(7):9–12 (Eng. Abstr.) **(Rus)**
[Diagnostic and procedural errors in acute appendicitis in children] Komarov NV, et al. **Klin Khir** 1988;(6):62 **(Rus)**
[An analysis of complications following operations in gastric and duodenal peptic ulcer] Papazov FK, et al. **Klin Khir** 1988;(8):55–6 **(Rus)**
[Complications following appendectomy in children] Sleptsov VP, et al. **Klin Khir** 1988;(6):19–22 (Eng. Abstr.) **(Rus)**
[Complications of surgical treatment of breast cancer] Slonim AA, et al. **Sov Med** 1988;(8):103–5 **(Rus)**
[Postoperative infections are continuously registered at more and more clinics] Burman LG, et al. **Lakartidningen** 1989 Jun 28;86(26–27):2463–4 **(Swe)**
[A warning against non-competent cosmetic surgery. More and more complications and bad therapeutic results] Lennholm B. **Lakartidningen** 1989 Apr 12;86(15):1398–9

(Swe)

ETHNOLOGY

Ethnic variation in cholecystectomy rates and outcomes, Manitoba, Canada, 1972–84. Cohen MM, et al. **Am J Public Health** 1989 Jun;79(6):751–5

ETIOLOGY

Anesthetic technique and surgical convalescence. Kehlet H. **Acta Chir Scand Suppl** 1989;550:182–8; discussion 188–91 (37 ref.)

Anesthesia and gastrointestinal surgery. Tweedle D, et al. **Acta Chir Scand Suppl** 1989;550:131–9 (89 ref.)

The management of pituitary tumours and post-operative visual deterioration. Adams CB. **Acta Neurochir (Wien)** 1988;94(3–4):103–16

Diagnostic approach in instability and irritative state of a "lumbar motion segment" following disc surgery—failed back surgery syndrome. Markwalder TM, et al. **Acta Neurochir (Wien)** 1989;99(1–2):51–7

Changes in cerebral blood flow pattern after carotid endarterectomy. Mosmans PC, et al. **Acta Neurol Scand** 1988 Aug;78(2):104–9

Risk and benefit in the surgery of epilepsy: complications and positive results on seizures tendency and intellectual function. Olivier A. **Acta Neurol Scand Suppl** 1988; 117:114–21

Epidural analgesia vs. general anesthesia for cesarean section. Juul J, et al. **Acta Obstet Gynecol Scand** 1988;67(3):203–6

Necrosis of the femoral head after renal transplantation. Lausten GS, et al. **Acta Orthop Scand** 1988 Dec;59(6):650–4

Caldwell-Luc operation: long-term results and sequelaes. Stefánsson P, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 449:97–100

Increased complications and prolonged hospital stay in elderly cardiac surgical patients with low serum albumin. Rich MW, et al. **Am J Cardiol** 1989 Mar 15;63(11):714–8

Report of an unusual case of postoperative adrenal hemorrhage in a young woman [see comments] Fitzpatrick PM, et al. **Am J Med** 1989 Apr;86(4):487–9. **Comment in:** Am J Med 1989 Jul;87(1):4

Primary Hodgkin's lymphoma: an unusual cause of graft dysfunction after kidney transplantation. Oldhafer KJ, et al. **Am J Med** 1989 Aug;87(2):218–20

Ectopic pregnancy subsequent to laparoscopic sterilization. Kjer JJ, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1202–4

Nerve entrapment after Pfannenstiel incision [letter] Piura B. **Am J Obstet Gynecol** 1989 Aug;161(2):499–500

Success and complications of pneumatic retinopexy. Algvere P, et al. **Am J Ophthalmol** 1988 Oct 15;106(4):400–4

Streptococcus salivarius endophthalmitis from contaminated donor cornea after keratoplasty. Heidemann DG, et al. **Am J Ophthalmol** 1989 Apr 15;107(4):429–30

Retinal detachment after neodymium:YAG laser posterior capsulotomy. Rickman-Barger L, et al. **Am J Ophthalmol** 1989 May 15;107(5):531–6

Acinetobacter corneal ulcer after penetrating keratoplasty. Zabel RW, et al. **Am J Ophthalmol** 1989 Jun 15; 107(6):677–8

Visual field area in phakic, aphakic, and pseudophakic individuals. Lazarus L, et al. **Am J Optom Physiol Opt** 1988 Jul;65(7):593–7

Large bowel cancer after cholecystectomy. Kune GA, et al. **Am J Surg** 1988 Nov;156(5):359–62

Gastrointestinal complications after human transplantation and mechanical heart replacement. Villar HV, et al. **Am J Surg** 1989 Jan;157(1):168–74

Postoperative bleeding in cardiovascular surgery. Does heparin rebound really exist? Gundry SR, et al. **Am Surg** 1989 Mar;55(3):162–5

Femoral nerve block after inguinal hernia repair [letter] Collier CB. **Anaesthesia** 1989 Feb;44(2):169

Headache after general anaesthesia [letter] Cosh PH. **Anaesthesia** 1988 Oct;43(10):889

Recurrent opisthotonus associated with anaesthesia [letter] Hopkins CS. **Anaesthesia** 1988 Oct;43(10):904

Delayed recovery from general anaesthesia. Johnston KR, et al. **Anaesthesia** 1988 Dec;43(12):1024–5

Propofol, opisthotonus and epilepsy [letter] Jones GW, et al. **Anaesthesia** 1988 Oct;43(10):905

Hypoxaemia during recovery from anaesthesia—an audit of children after general anaesthesia for routine elective surgery. Laycock GJ, et al. **Anaesthesia** 1988 Nov; 43(11):985–7

Ischaemic lesions related to pressure from the bindings of a wrist splint and cardiopulmonary bypass [letter] Luscombe F, et al. **Anaesthesia** 1989 Jul;44(7):610–1

Bilateral pneumothoraces after removal of a thyroglossal cyst [letter] McLuckie A, et al. **Anaesthesia** 1989 Jan;44(1):72–3

An unexpected functional cause of upper airway obstruction. Michelsen LG, et al. **Anaesthesia** 1988 Dec;43(12):1028–30

Recovery and morbidity after daycase anaesthesia. A comparison of propofol with thiopentone–enflurane with and without alfentanil. Millar JM, et al. **Anaesthesia** 1988 Sep;43(9):738–43

Postoperative mediastinal emphysema: blame the anaesthetist? [letter] Myles PS. **Anaesthesia** 1989 Jul; 44(7):615

Postspinal headache in young and elderly patients. Two randomised, double-blind studies that compare 20- and 25-gauge needles. Rasmussen BS, et al. **Anaesthesia** 1989 Jul;44(7):571–3

The oculo-emetic reflex. A rationalisation of postophthalmic anaesthesia vomiting. van den Berg AA, et al. **Anaesthesia** 1989 Feb;44(2):110–7

A case of convulsion after propofol anaesthesia [letter] Victory RA, et al. **Anaesthesia** 1988 Oct;43(10):904

The increase in number of orchidopexies: rather cause than prevention of male infertility. Steeno O, et al. **Andrologia** 1988 Nov-Dec;20(6):502–6 (13 ref.)

Transient right-left interatrial shunt during emergence from anesthesia: demonstration by color flow Doppler mapping. Moorthy SS, et al. **Anesth Analg** 1989 Jun;68(6):820–2

Osteogenesis imperfecta and hyperthermia. Ryan CA, et al. **Anesth Analg** 1989 Jun;68(6):811–4

Hyperkalemic cardiac arrest after cardiac surgery following high-dose glucose-insulin-potassium infusion for inotropic support. Böhrer H, et al. **Anesthesiology** 1988 Dec; 69(6):949–53 (52 ref.)

Acute airway obstruction after uvulopalatopharyngoplasty for obstructive sleep apnea syndrome. Gabrielczyk MR. **Anesthesiology** 1988 Dec;69(6):941–3

A study of the results of speech language and hearing assessment of three groups of repaired cleft palate children and adults. Abdullah S. **Ann Acad Med Singapore** 1988 Jul; 17(3):388–91

Craniofacial surgery for craniosynostosis: functional and morphological results. Renier D, et al. **Ann Acad Med Singapore** 1988 Jul;17(3):415–26 (16 ref.)

Tuberculosis in living related donor renal transplant recipients. Suleiman AB, et al. **Ann Acad Med Singapore** 1988 Jul;17(3):454–6

Urinary and sexual dysfunction after rectosigmoid surgery. Hellström P. **Ann Chir Gynaecol** 1988;77(2):51–6

Postoperative fever after major abdominal surgery. Jørgensen FS, et al. **Ann Chir Gynaecol** 1988;77(2):47–50

Complications following rhinotomy. Review of 148 patients. Bernard PJ, et al. **Ann Otol Rhinol Laryngol** 1989 Sep; 98(9):684–92

Complications of reduction mammaplasty: comparison of nipple-areolar graft and pedicle. Hawtof DB, et al. **Ann Plast Surg** 1989 Jul;23(1):3–10

Anisocoria following reduction of bilateral orbital floor fractures. Stromberg BV, et al. **Ann Plast Surg** 1988 Nov; 21(5):486–8

Pressure resistance of breast implants as a function of implantation time. van Rappard JH, et al. **Ann Plast Surg** 1988 Dec;21(6):566–9

Thyroidectomy for Graves' disease: is hypothyroidism inevitable? Davenport M, et al. **Ann R Coll Surg Engl** 1989 Mar;71(2):87–91

Risk factors in selected patients undergoing femoral embolectomy. Scott DJ, et al. **Ann R Coll Surg Engl** 1989 Jul;71(4):229–32

Does oedema following lower limb revascularisation cause compartment syndromes? Scott DJ, et al. **Ann R Coll Surg Engl** 1988 Nov;70(6):372–6

Extrahepatic portal hypertension: long-term results of surgical treatment. Szczepanik AB, et al. **Ann R Coll Surg Engl** 1989 Jul;71(4):222–5

Small intestinal obstruction complicating ileal pouch-anal anastomosis. Francois Y, et al. **Ann Surg** 1989 Jan; 209(1):46–50 (28 ref.)

The influence of injury severity on complication rates after primary closure or colostomy for penetrating colon trauma. Nelken N, et al. **Ann Surg** 1989 Apr;209(4):439–47

Noncardiogenic pulmonary edema after abdominal aortic aneurysm surgery. Paterson IS, et al. **Ann Surg** 1989 Feb; 209(2):231–6

Apparent coagulopathy caused by infusion of shed mediastinal blood and its prevention by washing of the infusate. Griffith LD, et al. **Ann Thorac Surg** 1989 Mar; 47(3):400–6

Björk-Shiley strut fracture and disc escape: literature review and a method of disc retrieval. Hendel PN. **Ann Thorac Surg** 1989 Mar;47(3):436–40 (26 ref.)

Incidence of Cell-Saver contamination during cardiopulmonary bypass. Schwieger IM, et al. **Ann Thorac Surg** 1989 Jul;48(1):51–3

Deleterious effects of shock in internal mammary artery anastomoses. von Segesser LK, et al. **Ann Thorac Surg** 1989 Apr;47(4):575–9

The relationship of early hypertension following carotid endarterectomy to intraoperative cerebral ischemia. Archie JP Jr. **Ann Vasc Surg** 1988 Apr;2(2):108–13

Basic data related to venous thromboembolism. Clagett GP. **Ann Vasc Surg** 1988 Oct;2(4):402–5

Blood pressure aberrations associated with carotid endarterectomy. Englund R, et al. **Ann Vasc Surg** 1986 Nov;1(3):304–9

Esophageal stethoscope. Another possible cause of vocal cord paralysis. Friedman M, et al. **Arch Otolaryngol Head Neck Surg** 1989 Jan;115(1):95–8

Facial nerve palsy following tympanmastoid surgery [letter] Madden G. **Arch Otolaryngol Head Neck Surg** 1989 May; 115(5):635

Recent trends in the management of incisional herniation. Read RC, et al. **Arch Surg** 1989 Apr;124(4):485–8

Methotrexate-associated bone marrow suppression following surgery [letter] [see comments] Howland WL. **Arthritis Rheum** 1988 Dec;31(12):1586–7. **Comment in:** Arthritis Rheum 1989 Jun;32(6):813–4

Peroneal nerve dysfunction as a complication of lateral meniscus repair: a case report and anatomic dissection. Jurist KA, et al. **Arthroscopy** 1989;5(2):141–7

The urodynamic effect of colposuspension immediately after surgery for genuine stress incontinence. Wang AC, et al. **Asia Oceania J Obstet Gynaecol** 1988 Sep;14(3):335–8

Selective use of heparin in aortic surgery. Burnett J, et al. **Aust N Z J Surg** 1988 Oct;58(10):811–5

Protein depletion and surgical risk. Windsor JA, et al. **Aust N Z J Surg** 1988 Sep;58(9):711–5

Prolonged retention of a swallowed foreign body in the stomach following pyloromyotomy. Suita S, et al. **Aust Paediatr J** 1988 Dec;24(6):373–4

Increased rates of previous hysterectomy and gynaecological operations in women with osteoarthritis. Spector TD, et al. **BMJ** 1988 Oct 8;297(6653):899–900

Physical and psychosocial functioning of adult survivors of allogeneic bone marrow transplantation. Andrykowski MA, et al. **Bone Marrow Transplant** 1989 Jan;4(1):75–81

Intestinal obstruction caused by bezoar: a rare complication after bone marrow transplantation. Ben-Yehuda A, et al. **Bone Marrow Transplant** 1989 Jan;4(1):137–8

Oral surgery: problems. Caplin RL. **Br Dent J** 1989 Mar 11;166(5):171–7

Wolff-Parkinson-White syndrome after transplantation of the heart. Goy JJ, et al. **Br Heart J** 1989 Apr;61(4):368–71

Abnormal cardiac signs after Fontan type of operation: indicators of residua and sequelae. Leung MP, et al. **Br Heart J** 1989 Jan;61(1):52–8

Injury to a saphenous vein graft during removal of a temporary epicardial pacing wire electrode. Price C, et al. **Br Heart J** 1989 Jun;61(6):546–7

Air embolism during total hip replacement: comparison of two surgical techniques. Evans RD, et al. **Br J Anaesth** 1989 Mar;62(3):243–7

Acute gastric dilatation in an incarcerated hiatus hernia. Hopkins CS, et al. **Br J Anaesth** 1989 Jan;62(1):108–11

Early postoperative hypoxia during transport. Smith DC, et al. **Br J Anaesth** 1988 Nov;61(5):625–7

Complications related to anaesthesia in infants and children. A prospective survey of 40240 anaesthetics. Tiret L, et al. **Br J Anaesth** 1988 Sep;61(3):263–9

Total hip replacement infected by septic abortion. Sibly TF. **Br J Clin Pract** 1988 Jun;42(6):253–4

The effect of fresh versus stored blood on post-operative bleeding after coronary bypass surgery: a prospective randomized study. Wasser MN, et al. **Br J Haematol** 1989 May;72(1):81–4

Prolonged parvovirus B19 infection with severe anaemia in a bone marrow transplant patient [letter] Weiland HT, et al. **Br J Haematol** 1989 Feb;71(2):300

Risk factors for interstitial pneumonia following bone marrow transplantation for severe aplastic anaemia. Weiner RS, et al. **Br J Haematol** 1989 Apr;71(4):535–43

Classical versus low-segment transverse incision for preterm caesarean section: maternal complications and outcome of subsequent pregnancies. Halperin ME, et al. **Br J Obstet Gynaecol** 1988 Oct;95(10):990–6

Ptosis following cataract and trabeculectomy surgery. Deady JP, et al. **Br J Ophthalmol** 1989 Apr;73(4):283–5

Effect of intraocular lens implantation on combined extracapsular cataract extraction with trabeculectomy: a comparative study. Neumann R, et al. **Br J Ophthalmol** 1988 Oct;72(10):741–5

Endophthalmitis following cataract extraction [editorial] Smith RJ. **Br J Ophthalmol** 1989 Jun;73(6):401

Tongue resection with the CO2 laser: the effects of past radiotherapy on postoperative complications. Frame JW, et al. **Br J Oral Maxillofac Surg** 1988 Dec;26(6):464–71

Complications in craniofacial surgery. Poole MD. **Br J Plast Surg** 1988 Nov;41(6):608–13

Accidental reinnervation as a complication of latissimus dorsi free flap to the face and scalp. Stranc MF, et al. **Br J Plast Surg** 1989 May;42(3):341–3

T tubes: a comparison of virgin, slit, guttered and sculpted design. Crnojevic L, et al. **Br J Surg** 1989 Apr;76(4):342–3

Effect of nutritional status on acute phase protein response to elective surgery. Cruickshank AM, et al. **Br J Surg** 1989 Feb;76(2):165–8

Effect of shoulder immobilization on wound seroma and shoulder dysfunction following modified radical mastectomy: a randomized prospective clinical trial. Dawson I, et al. **Br J Surg** 1989 Mar;76(3):311–2

Prospective randomized trial to compare the stapled double lumen pouch and the sutured quadruple pouch for restorative proctocolectomy. Keighley MR, et al. **Br J Surg** 1988 Oct;75(10):1008–11

Gastroplasty for morbid obesity: technique, complications and results in 60 cases. Owen ER, et al. **Br J Surg** 1989 Feb;76(2):131–5

Anastomotic leakage: an avoidable complication of Lewis-Tanner oesophagectomy. Paterson IM, et al. **Br J Surg** 1989 Feb;76(2):127–9

Pulmonary microembolization in experimental aortic surgery. Poskitt KR, et al. **Br J Surg** 1988 Dec;75(12):1207–11

Postoperative gastric ischaemia. Schein M, et al. **Br J Surg** 1989 Aug;76(8):844–8 (90 ref.)

Postoperative urinary retention in general surgical patients. Stallard S, et al. **Br J Surg** 1988 Nov;75(11):1141–3

Blood transfusion and infectious complications following colorectal cancer surgery. Tartter PI. **Br J Surg** 1988 Aug; 75(8):789–92

Ureteroscopic removal of a retained "T" tube fragment. Anderson JH, et al. **Br J Urol** 1989 Jul;64(1):105
Urethral stricture following aortic graft surgery. Ferrie BG, et al. **Br J Urol** 1989 Aug;64(2):162–4
Quality of life after cystectomy. Comparison between patients with conduit and those with continent caecal reservoir urinary diversion. Månsson A, et al. **Br J Urol** 1988 Sep; 62(3):240–5
Allograft nephrectomy—a 16-year experience. Sharma DK, et al. **Br J Urol** 1989 Aug;64(2):122–4
Primary endoscopic surgery for ureteric stones. Tolley DA. **Br J Urol** 1989 Aug;64(2):130–3
Haemorrhagic and thrombo-embolic complications associated with surgery. Grant PJ, et al. **Br Med Bull** 1988 Apr;44(2):453–74 (51 ref.)
Changing patterns of bacterial and viral infections in surgery. Sleigh JD, et al. **Br Med Bull** 1988 Apr;44(2):403–22 (99 ref.)
Vitreous wick syndrome. Neetens A, et al. **Bull Soc Belge Ophtalmol** 1987;223 Pt 2:41–5
Patent ductus venosus: problems in assessment and management. Barsky MF, et al. **Can J Surg** 1989 Jul; 32(4):271–5
Current operative morbidity associated with elective surgical resection for lung cancer. Deslauriers J, et al. **Can J Surg** 1989 Sep;32(5):335–9
Perforated diverticulitis after surgery. Voitk AJ, et al. **Can J Surg** 1989 Sep;32(5):370–2
Do all patients with aortic stenosis and left ventricular dysfunction benefit from aortic valve replacement? [editorial] Carabello BA. **Cathet Cardiovasc Diagn** 1989 Jul; 17(3):131–2
Large air embolus complicating coronary angioplasty. Haraphongse M, et al. **Cathet Cardiovasc Diagn** 1989 Jul; 17(3):168–71
The importance of cytomegalovirus in heart–lung transplant recipients. Hutter JA, et al. **Chest** 1989 Mar;95(3):627–31
Pleuroperitoneal shunt for pneumonectomy cavity malignant effusion. Pope AR, et al. **Chest** 1989 Sep;96(3):686–8
Change in nasal resonance over time: a clinical study. Fox DR, et al. **Cleft Palate J** 1988 Jul;25(3):245–7
Basicranial changes in shunt-treated hydrocephalic children—a two-year report. Huggare JA, et al. **Cleft Palate J** 1988 Jul;25(3):308–12
Comment on letter of Obermiller and Tzamaloukas [1988 Clin Nephrol 30: 287] [letter] Pollak R, et al. **Clin Nephrol** 1989 Feb;31(2):118
Coagulopathies associated with major spinal surgery. Mayer PJ, et al. **Clin Orthop** 1989 Aug;(245):83–8
Periarticular heterotopic ossification after total hip arthroplasty for primary coxarthrosis. Sodemann B, et al. **Clin Orthop** 1988 Dec;(237):150–7
Late ureteric stenosis after kidney transplantation: a possible consequence of rejection. Faenza A, et al. **Contrib Nephrol** 1989;70:75–80
Natural killer cells and cytomegalovirus and Epstein–Barr virus infection in cardiac graft recipients. Korčáková L, et al. **Cor Vasa** 1988;30(6):435–41
Nystagmus after medulloblastoma. Elliott AJ, et al. **Dev Med Child Neurol** 1989 Feb;31(1):43–6
Outcome of infants shunted for post-haemorrhagic ventricular dilatation. Hislop JE, et al. **Dev Med Child Neurol** 1988 Aug;30(4):451–6
Short-term effects of bile diversion on postgastrectomy gastric histology. Bechi P, et al. **Dig Dis Sci** 1988 Oct; 33(10):1288–96
Risk factors for developing voiding dysfunction after abdominoperineal resection for adenocarcinoma of the rectum. Burgos FJ, et al. **Dis Colon Rectum** 1988 Sep; 31(9):682–5
Determinant factors in uterine rupture following previous caesarean section. Ojo VA, et al. **East Afr Med J** 1988 May;65(5):307–13
Bacterial infections after liver transplantation. Paya CV, et al. **Eur J Clin Microbiol Infect Dis** 1989 Jun;8(6):499–504 (20 ref.)
Carotid endarterectomy in patients with occlusion of the contralateral carotid artery. Perioperative risk and late results. Sillesen H, et al. **Eur J Vasc Surg** 1987 Apr; 1(2):85–9
Long-term follow-up of children with surgically treated vesicorenal reflux: postoperative incidence of urinary tract infections, renal scars and arterial hypertension. Beetz R, et al. **Eur Urol** 1989;16(5):366–71
Electrical resistance of appliances as a cause of urethral stricture following transurethral resection of prostate. Morishita H, et al. **Eur Urol** 1989;16(5):340–2
Single-stage salvage cystectomy: results and complications in 20 patients. Nurmi M, et al. **Eur Urol** 1989;16(2):89–91
Corneo-scleral rim cultures: donor contamination a case of fungal endophthalmitis transmitted by K-Sol stored cornea. Fong LP, et al. **Eye** 1988;2 (Pt 6):670–6
Post-keratoplasty glaucoma. Kirkness CM, et al. **Eye** 1988; 2 Suppl:S19–26 (37 ref.)
Secondary lens implantation: incidence, indications and complications. Leatherbarrow B, et al. **Eye** 1988;2 (Pt 4):370–5
Rectal hyperplasia after jejunoileal bypass for morbid obesity. Appleton GV, et al. **Gut** 1988 Nov;29(11):1544–8
Late results of endoscopic sphincterotomy for bile duct stones in elderly patients with gall bladders in situ. Ingoldby CJ, et al. **Gut** 1989 Aug;30(8):1129–31
An overlooked factor in duodenal ulceration and postoperative recurrence? Kirk RM. **Gut** 1988 Dec; 29(12):1625–7 (25 ref.)
Is duodenal diverticulum a risk factor for sphincterotomy? Vaira D, et al. **Gut** 1989 Jul;30(7):939–42
Neuropathies associated with radical pelvic surgery for gynecologic cancer. Hoffman MS, et al. **Gynecol Oncol** 1988 Nov;31(3):462–6
Preoperative evaluation for partial laryngectomy. Chow JM, et al. **Head Neck Surg** 1988 May–Jun;10(5):319–23
Cyclosporin associated demyelination following allogeneic bone marrow transplantation. Lind MJ, et al. **Hematol Oncol** 1989 Jan–Feb;7(1):49–52
Mesangiolytic glomerulopathy in a bone marrow allograft recipient. Iskandar SS, et al. **Hum Pathol** 1989 Mar; 20(3):290–2
Aortoesophageal fistula arising as a complication of prolonged nasogastric tube placement. Lewandrowski KB, et al. **Hum Pathol** 1989 Jul;20(7):709–11
Conjunctival cyst after retinal detachment surgery. Garg SP, et al. **Indian J Ophthalmol** 1988 Oct–Dec;36(4):182–3
Toxic shock syndrome following repair of a ligament of the knee. Dreghorn CR, et al. **Injury** 1987 Sep;18(5):356–7
Second arthroplasty of the knee combined with medullary nailing for non-union of fracture of the femur: a case report. Rehnberg L, et al. **Injury** 1987 May;18(3):211–2
Late results after meniscectomy in children. Søballe K, et al. **Injury** 1987 May;18(3):182–4
Cardiovascular surgery and heparin induced thrombocytopenia. Glock Y, et al. **Int Angiol** 1988 Jul–Sep; 7(3):238–45
Acute postoperative diverticulitis. Badia-Pèrez JM, et al. **Int J Color Dis** 1989 Aug;4(3):141–3 (24 ref.)
Pouchitis. Tytgat GN, et al. **Int J Color Dis** 1988 Nov; 3(4):226–8 (23 ref.)
Reproductive outcome after multiple ectopic pregnancies. Uotila J, et al. **Int J Fertil** 1989 Mar–Apr;34(2):102–5
Pneumoperitoneum due to peritoneovaginal fistula following hysterectomy. Massad LS, et al. **Int J Gynaecol Obstet** 1989 Jul;29(3):257–61 (16 ref.)
Risk factors for fever, endometritis and wound infection after abdominal delivery. Suonio S, et al. **Int J Gynaecol Obstet** 1989 Jun;29(2):135–42 (19 ref.)
Peritonitis and empyema following the use of dextran in tubal operations. Zamir O, et al. **Int J Gynaecol Obstet** 1989 Jun;29(2):181–3 (11 ref.)
The anterior cricoid split: the Children's Hospital of Philadelphia experience. Anderson GJ, et al. **Int J Pediatr Otorhinolaryngol** 1988 Oct;16(1):31–8
Pulmonary edema due to partial upper airway obstruction in a child. Scherer R, et al. **Intensive Care Med** 1988; 14(6):661–2
Urinary sodium levels related to jaundice duration in the assessment of postoperative risk of hepatorenal syndrome in elderly patients undergoing surgery for biliary obstruction. Farinon AM, et al. **Ital J Surg Sci** 1989; 19(1):11–7
Minimal complications in a surgical population with severe asthma receiving prophylactic corticosteroids. Pien LC, et al. **J Allergy Clin Immunol** 1988 Oct;82(4):696–700
Ventricular entrapment of a Swan-Ganz catheter: a technique for nonsurgical removal. Lazzam C, et al. **J Am Coll Cardiol** 1989 May;13(6):1422–4
Pacemaker-implantation complication rates: an analysis of some contributing factors. Parsonnet V, et al. **J Am Coll Cardiol** 1989 Mar 15;13(4):917–21
Surgical success rates in infantile esotropia. Scheiman M, et al. **J Am Optom Assoc** 1989 Jan;60(1):22–31 (79 ref.)
Endometriosis arising in abdominal incisions. Niezgoda JA, et al. **J Am Osteopath Assoc** 1989 Jul;89(7):937–40
Post-transplant diabetes in Indian renal allograft recipients. Suratkal LH, et al. **J Assoc Physicians India** 1988 Mar; 36(3):201–3
Late radial tunnel syndrome after excision of the radial head. A report of two cases. Crawford GP. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1416–8
Low incidence of deep-vein thrombosis after cementless total hip replacement [letter] Hoaglund FT. **J Bone Joint Surg [Am]** 1989 Jan;71(1):151
Intraoperative and postoperative subtrochanteric fracture of the femur associated with removal of the Zickel nail [letter] Zickel RE. **J Bone Joint Surg [Am]** 1988 Oct;70(9):1428
Hypoxemia and pulmonary hyperperfusion due to systemic collateral arteries after total repair of transposition of the great arteries. Aghaji MA, et al. **J Cardiovasc Surg (Torino)** 1989 May–Jun;30(3):338–41
Isolated coarctation of the aorta: surgical treatment and late results. Eighteen years' experience. Behl PR, et al. **J Cardiovasc Surg (Torino)** 1988 Sep–Oct;29(5):509–17
Arteriovenous fistula of internal mammary artery after median sternotomy. Bentivegna PE, et al. **J Cardiovasc Surg (Torino)** 1989 May–Jun;30(3):375–7
Study of venous and lymphatic components in the production of edema following femoropopliteal by-pass. A comparative scintigraphy and radiologic study. Herreros J, et al. **J Cardiovasc Surg (Torino)** 1988 Sep–Oct; 29(5):540–6
Post-transfusion graft-versus-host disease following open heart surgery. Report of six cases. Sakakibara T, et al. **J Cardiovasc Surg (Torino)** 1989 Jul–Aug;30(4):687–91
Multiple tumor emboli after lung resection. Schneiderman J, et al. **J Cardiovasc Surg (Torino)** 1989 May–Jun; 30(3):496–8
Barrett's esophagus after total gastrectomy [letter] Sandvik AK, et al. **J Clin Gastroenterol** 1988 Oct;10(5):587–8
Huge splenic artery aneurysm after portocaval shunt. Tam TN, et al. **J Clin Gastroenterol** 1988 Oct;10(5):565–8
Pseudolymphoma of the earlobes due to ear piercing. Zilinsky I, et al. **J Dermatol Surg Oncol** 1989 Jun;15(6):666–8
Acute rotavirus gastroenteritis in an adult renal transplant recipient [letter] Peigue-Lafeuille H, et al. **J Infect Dis** 1988 Dec;158(6):1400
Head and neck surgery in the elderly: a maturing problem. Harries M, et al. **J Laryngol Otol** 1989 Mar;103(3):306–9
Persisting nystagmus following vestibular nerve section for Menière's disease. Shotton JC, et al. **J Laryngol Otol** 1989 Mar;103(3):263–8
Evolution and current status of surgery for morbid obesity: Part I. Results of over 1400 surgical procedures spanning 22 years. Headley WM, et al. **J Med Assoc Ga** 1989 Feb; 78(2):75–83 (55 ref.)
Perioperative myocardial infarction in Thai patients; mortality and morbidity following anesthesia and surgery. Tritrakarn T, et al. **J Med Assoc Thai** 1988 Nov; 71(11):593–601
Brief report: primary human herpesvirus 6 infection in a patient following liver transplantation from a seropositive donor. Ward KN, et al. **J Med Virol** 1989 Jun;28(2):69–72
Subdural and intraventricular tension pneumocephalus after transsphenoidal operation [letter] Candrina R, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):1005–6
Doctors' versus patients' evaluation of results after neurosurgery. Carlson H, et al. **J Neurol Neurosurg Psychiatry** 1989 Feb;52(2):153–5
Peripheral neuropathy complicating pancreatitis and major pancreatic surgery. Gross ML, et al. **J Neurol Neurosurg Psychiatry** 1988 Oct;51(10):1341–4
Dissecting aneurysm of middle cerebral artery following resection of meningioma [letter] Heye N, et al. **J Neurol Neurosurg Psychiatry** 1989 May;52(5):683
Musical hallucinations following removal of a right frontal meningioma [letter] Keshavan MS, et al. **J Neurol Neurosurg Psychiatry** 1988 Sep;51(9):1235–6
Cyclosporin neurotoxicity in cardiac transplant recipients. Lane RJ, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov; 51(11):1434–7
Cerebral palsy and stereotactic neurosurgery: long term results. Speelman D, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):23–30
Iatrogenic lumbar meningocoel after excision of a neurofibroma [letter] Ward PJ. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):410–1
The effect of transportation between the recovery room and intensive care unit on postoperative acoustic tumor patients. Hamm CW, et al. **J Neurosci Nurs** 1988 Oct;20(5):303–8
Factors influencing the stability of the sagittal split osteotomy for mandibular advancement. Will LA, et al. **J Oral Maxillofac Surg** 1989 Aug;47(8):813–8
Osteopenia after plated and nailed femoral shaft fractures. Finsen V, et al. **J Orthop Trauma** 1988;2(1):13–7
Postoperative dystonia in a female patient with homocystinuria. Arbour L, et al. **J Pediatr** 1988 Nov; 113(5):863–4
Hypoglycemia in pediatric renal allograft recipients. Wells TG, et al. **J Pediatr** 1988 Dec;113(6):1002–7
Chest wall deformity in patients with repaired esophageal atresia. Chetcuti P, et al. **J Pediatr Surg** 1989 Mar; 24(3):244–7
Bilateral hydrothorax complicating central venous catheterization in a child: case report. Ross P Jr, et al. **J Pediatr Surg** 1989 Mar;24(3):263–4
The mandibular subperiosteal implant denture: a fourteen-year study. Bailey JH, et al. **J Prosthet Dent** 1988 Sep;60(3):358–61
Postoperative opisthotonus following the use of propofol. Strowbridge NF. **J R Army Med Corps** 1989 Jun; 135(2):79–80
Long-term follow-up of Austin Moore hemiarthroplasty for femoral neck fractures. Pun WK, et al. **J R Coll Surg Edinb** 1988 Dec;33(6):299–302
Cholecystectomy: safe or not safe to drain? Mellor SG, et al. **J R Soc Med** 1988 Oct;81(10):566–8
Morbidity and mortality associated with intraoperative radiotherapy. Avizonis VN, et al. **J Surg Oncol** 1989 Aug; 41(4):240–5
Arrhythmia and late mortality after Mustard and Senning operation for transposition of the great arteries. An eight-year prospective study. Deanfield J, et al. **J Thorac Cardiovasc Surg** 1988 Oct;96(4):569–76
Inclusion (aneurysm wrap) technique for composite graft replacement of the ascending aorta and aortic valve [letter] Kouchoukos NT. **J Thorac Cardiovasc Surg** 1988 Dec; 96(6):967
Current operative management of urinary calculi after renal transplantation. Caldwell TC, et al. **J Urol** 1988 Dec; 140(6):1360–3
Sonographic evaluation and conservative management of newborns with myelomeningocele and hydronephrosis. Erickson D, et al. **J Urol** 1989 Aug;142(2 Pt 2):592–4; discussion 603–5
Strictures in the ileal portion of ileocecal conduits in children and young adults. Horton CE Jr, et al. **J Urol** 1989 Jan; 141(1):120–2
Seizures following subclavian-carotid bypass. Ammar AD.

J Vasc Surg 1987 Mar;5(3):483–5
Perioperative and late outcome in patients with left ventricular ejection fraction of 35% or less who require major vascular surgery [letter] Bunt TJ. J Vasc Surg 1989 Apr;9(4):619–20
Wound complications after in situ bypass [letter] Lassonde J. J Vasc Surg 1989 Apr;9(4):620–1
Comparison of saphenous vein patch, polytetrafluoroethylene patch, and direct arteriotomy closure after carotid endarterectomy. Part I. Perioperative results. Lord RS, et al. J Vasc Surg 1989 Apr;9(4):521–9
Silent myocardial ischemia in patients undergoing peripheral vascular surgery: incidence and association with perioperative cardiac morbidity and mortality. McCann RL, et al. J Vasc Surg 1989 Apr;9(4):583–7
Preoperative nutritional assessment to predict postoperative complication in gastric cancer patients. Yamanaka H, et al. JPEN J Parenter Enteral Nutr 1989 May–Jun; 13(3):286–91
Incidence and severity of ventricular arrhythmia in patients after repair of tetralogy of Fallot. Fukushige J, et al. Jpn Heart J 1988 Nov;29(6):795–800
Postoperative metabolic alkalosis following general surgery: its incidence and possible etiology. Okusawa S, et al. Jpn J Surg 1989 May;19(3):312–8 (34 ref.)
A case of a postoperative aneurysm of the common hepatic artery which ruptured into the remnant stomach after a radical gastrectomy. Satoh H, et al. Jpn J Surg 1989 Mar; 19(2):241–5
Postoperative metabolic alkalosis following general surgery: etiologic role of exogenous bicarbonate load. Okusawa S. Keio J Med 1988 Dec;37(4):365–78
Human papilloma virus infection and skin cancer in renal allograft recipients. Barr BB, et al. Lancet 1989 Jan 21; 1(8630):124–9
Cytomegalovirus infection and renal transplantation [letter] Plotkin SA. Lancet 1988 Nov 12;2(8620):1136
Early thrombosis in kidney grafted into patient treated with erythropoietin [letter] Zaoui P, et al. Lancet 1988 Oct 22; 2(8617):956
Sink-trap effect as a cause of failure in mastoidectomy. Goldenberg RA. Laryngoscope 1988 Oct;98(10):1143–4
Speech restoration and complications of primary versus secondary tracheoesophageal puncture following total laryngectomy. Maniglia AJ, et al. Laryngoscope 1989 May; 99(5):489–91
Maintaining the circulation with only the left pump after total artificial heart replacement. Hennig E, et al. Life Support Syst 1983;1 Suppl 1:1–4
Hepatitis and renal tubular acidosis after anesthesia with methoxyflurane. Zeana CD, et al. Med Interne 1982 Oct–Dec;20(4):295–7
Postoperative toxic shock syndrome: a case report and review of the literature. Molloy M, et al. Milit Med 1989 Feb; 154(2):74–6 (9 ref.)
Stroke following coronary-artery bypass surgery. A case-control estimate of the risk from carotid bruits. Reed GL 3d, et al. N Engl J Med 1988 Nov 10;319(19):1246–50
Chest wall deformity following expansion of irradiated soft tissue for breast reconstruction. Fodor PB, et al. N Y State J Med 1989 Jul;89(7):419–20
Peptic ulcer disease presenting as life-threatening diarrhea following subtotal colectomy. Rodgers JB. N Y State J Med 1989 Apr;89(4):231–2
Three cases of nodular regenerative hyperplasia of the liver following renal transplantation. Buffet C, et al. Nephrol Dial Transplant 1988;3(3):327–30
Is noduiar regenerative hyperplasia of the liver associated with azathioprine therapy after renal transplantation? Jones MC, et al. Nephrol Dial Transplant 1988;3(3):331–3
Intracerebral hematoma as the complication of the surgical removal of chronic subdural hematoma. Case report. Kotwica Z, et al. Neurol Psychiatr (Bucur) 1989 Apr–Jun; 27(2):167–9
Outcome of laminectomy for civilian gunshot injuries of the terminal spinal cord and cauda equina: review of 88 cases. Cybulski GR, et al. Neurosurgery 1989 Mar;24(3):392–7
Upward transtentorial herniation: a complication of postoperative edema at the cervicomedullary junction. Spiegelmann R, et al. Neurosurgery 1989 Feb;24(2):284–8
Evaluation of prognostic factors in cerebral arteriovenous malformations. Steinmeier R, et al. Neurosurgery 1989 Feb; 24(2):193–200
Morbidity following prolonged postoperative hypotony after trabeculectomy. Migdal C, et al. Ophthalmic Surg 1988 Dec;19(12):865–7
Epithelial abnormalities and sterile ulceration of epikeratoplasty grafts. Frangieh GT, et al. Ophthalmology 1988 Feb;95(2):213–27
Encapsulated blebs after glaucoma filtering surgery. Can the cause be the cure? [editorial] Lichter PR. Ophthalmology 1988 Sep;95(9):1159–60
Complications of endodrainage retinotomies created during vitreous surgery for complicated retinal detachment. McDonald HR, et al. Ophthalmology 1989 Mar; 96(3):358–63
The development of encapsulated filtering blebs. Richter CU, et al. Ophthalmology 1988 Sep;95(9):1163–8
Effect of recipient-donor trephine size disparity on refractive error in keratoconus. Wilson SE, et al. Ophthalmology 1989 Mar;96(3):299–305
The biomechanics and biology of internal fixation using plates and nails [letter] Simmons RL. Orthopedics 1989 Jul; 12(7):933
Diverticulopexy and cricopharyngeal myotomy: treatment for the high-risk patient with a pharyngoesophageal (Zenker's) diverticulum. Konowitz PM, et al. Otolaryngol Head Neck Surg 1989 Feb;100(2):146–53
Dysrhythmias after the modified Fontan procedure. Chen SC, et al. Pediatr Cardiol 1988;9(4):215–9
Association of parainfluenza virus type 3 infection with allograft rejection in a liver transplant recipient. Herzog KD, et al. Pediatr Infect Dis J 1989 Aug;8(8):534–6
Use of aminoglycosides during cyclosporine A immunosuppression after liver transplantation in children. Leach CT, et al. Pediatr Infect Dis J 1989 Jun;8(6):354–7
Reversible parkinsonism from shunt failure. Brazin ME, et al. Pediatr Neurol 1985 Sep–Oct;1(5):306–7
Cyclic vomiting and the slit ventricle syndrome. Coker SB. Pediatr Neurol 1987 Sep–Oct;3(5):297–9
Prognosis of occlusive disease of the circle of Willis (moyamoya disease) in children. Kurokawa T, et al. Pediatr Neurol 1985 Sep–Oct;1(5):274–7
Femoral nerve injury following inguinal hernia repair. van Hoff J, et al. Pediatr Neurol 1985 May–Jun;1(3):195–6
Complications of cardiac surgery in children. Engle MA, et al. Pediatr Rev 1987 Nov;9(5):147–54 (6 ref.)
Occluded fourth ventricle after multiple shunt revisions for hydrocephalus. Coker SB, et al. Pediatrics 1989 Jun; 83(6):981–5
Varicella in pediatric orthotopic liver transplant recipients. McGregor RS, et al. Pediatrics 1989 Feb;83(2):256–61
Motor and cognitive testing of bone marrow transplant patients after chemoradiotherapy. Partii P, et al. Percept Mot Skills 1989 Jun;68(3 Pt 2):1227–41
Jejunal free autograft: analysis of complications and their resolution. Coleman JJ 3d, et al. Plast Reconstr Surg 1989 Oct;84(4):589–95; discussion 596–8
The "sponge deformity" after tangential excision and grafting of burns. Engrav LH, et al. Plast Reconstr Surg 1989 Mar; 83(3):468–70
Effect of the timing of tourniquet release on postoperative hematoma formation: an experimental animal study. Himel HN, et al. Plast Reconstr Surg 1989 Apr;83(4):692–700
Finding the cause of postoperative fever. Howard RJ. Postgrad Med 1989 Apr;85(5):223–6, 233–8
Spontaneous pneumoretroperitoneum in a renal transplant recipient. Gleeson MJ, et al. Postgrad Med J 1988 Nov; 64(757):897–8
Duodenal obstruction after repair of abdominal aortic aneurysm. Budorick NE, et al. Radiology 1988 Nov; 169(2):421–2
Infected bilomas and hepatic artery thrombosis in infant recipients of liver transplants. Interventional radiology and medical therapy as an alternative to retransplantation. Hoffer FA, et al. Radiology 1988 Nov;169(2):435–8
Urethral strictures after transurethral bladder tumor resection. Nielsen KT, et al. Scand J Urol Nephrol 1989; 23(2):81–3
Influence of alcoholism on morbidity after transurethral prostatectomy. Tønnesen H, et al. Scand J Urol Nephrol 1988;22(3):175–7
Postoperative jaundice. Becker SD, et al. Semin Liver Dis 1988 May;8(2):183–90 (55 ref.)
Neuro-ophthalmologic complications of hydrocephalus and shunting procedures. Corbett JJ. Semin Neurol 1986 Jun; 6(2):111–23 (61 ref.)
Unicameral bone cyst of the tibia complicated by genu valgum. Nasca RJ. South Med J 1988 Oct;81(10):1301–4
Acute bilateral diffuse pulmonary shadowing after evacuation of hydatid mole. Pope TL Jr, et al. South Med J 1989 Mar;82(3):377–9
Secondary adrenal insufficiency manifested as an acute febrile illness. Soto-Hernandez JL, et al. South Med J 1989 Mar; 82(3):384–5
Pulmonary thromboembolism after head and neck surgery. Spires JR, et al. South Med J 1989 Sep;82(9):1111–5
Acute massive dural compression secondary to methyl methacrylate replacement of a tumorous lumbar vertebral body. Dolin MG. Spine 1989 Jan;14(1):108–10
Tethered cord syndrome in the adult postoperative myelomeningocele patient. A case report. Logan SR, et al. Spine 1989 Aug;14(8):895–7
Spinal stenosis following anterior spinal fusion. A case report. Louw JA, et al. Spine 1988 Aug;13(8):952–3
Paresis of proximal lumbar roots after reduction of L5-S1 spondylolisthesis. Transfeldt EE, et al. Spine 1989 Aug; 14(8):884–7
Complications with the variable spinal plating system. Whitecloud TS 3d, et al. Spine 1989 Apr;14(4):472–6
Postoperative renal dysfunction can be predicted. Charlson ME, et al. Surg Gynecol Obstet 1989 Oct;169(4):303–9
Technique and complications of reconstruction of the pelvic floor with polyglactin mesh. Sener SF, et al. Surg Gynecol Obstet 1989 Jun;168(6):475–80
Postoperative pancreatitis. Thompson JS, et al. Surg Gynecol Obstet 1988 Nov;167(5):377–80
Sclerosing cholangitis and oxalate urolithiasis in ulcerative colitis. Mann NS, et al. Tex Med 1989 Mar;85(3):39–41
Refractory supra-ventricular tachyarrhythmias due to early posterior pericardial effusion following open-heart surgery. Angelini GD, et al. Thorac Cardiovasc Surg 1988 Jun; 36(3):162–3
Chylopericardium as a complication of mitral valve replacement. Bar-El Y, et al. Thorax 1989 Jan;44(1):74–5
Attitudes and physical condition of unrelated bone marrow donors immediately after donation. Stroncek D, et al. Transfusion 1989 May;29(4):317–22
Blood transfusion and postoperative infections. Tartter PI. Transfusion 1989 Jun;29(5):456–9 (49 ref.)
Systemic arterial hypertension in the immediate postoperative period of liver transplantation. Diaz MA, et al. Transplant Proc 1989 Jun;21(3):3547–8
Perioperative infection in liver transplant recipients under a quadruple immunosuppressive protocol. Pirsch JD, et al. Transplant Proc 1989 Jun;21(3):3559
Is hepatic artery thrombosis after liver transplantation really a surgical complication? Yanaga K, et al. Transplant Proc 1989 Jun;21(3):3511–3
Anti-glomerular basement membrane antibody-mediated nephritis complicating transplantation in a patient with Alport's syndrome. Fleming SJ, et al. Transplantation 1988 Dec;46(6):857–9
Serial decrease in glomerular filtration rate in long-term pediatric liver transplantation survivors treated with cyclosporine. McDiarmid SV, et al. Transplantation 1989 Feb;47(2):314–8
Membranous nephropathy in cyclosporine-treated renal transplant recipients. Montagnino G, et al. Transplantation 1989 Apr;47(4):725–7
Epidural lipomatosis after renal transplantation—complete recovery without surgery. Vazquez L, et al. Transplantation 1988 Nov;46(5):773–4
Cyclosporine and adult respiratory distress syndrome. Walsh RF, et al. Transplantation 1988 Nov;46(5):776–7
Increased frequency of posttransplant lymphomas in patients treated with cyclosporine, azathioprine, and prednisone. Wilkinson AH, et al. Transplantation 1989 Feb;47(2):293–6
Splenectomy in massive tropical splenomegaly: two-to six-year follow-up in 14 patients. Vriend WH, et al. Trop Geogr Med 1988 Oct;40(4):298–303
Post-traumatic localization of HIV-related Kaposi's sarcoma: a case report. Rotoli M, et al. Tumori 1989 Feb 28;75(1):12–3
Hip fractures—treatment and early complications. Dolk T. Ups J Med Sci 1989;94(2):195–207
Parietal cell vagotomy and truncal vagotomy in elective duodenal ulcer surgery—results after six to twelve years. Elfberg BA, et al. Ups J Med Sci 1989;94(2):129–36
Cancer of the stomach after operation for benign ulcer disease. Lundegårdh G. Ups J Med Sci 1988;93(2):169–72
Perioperative complications of adrenal surgery. Angermeier KW, et al. Urol Clin North Am 1989 Aug;16(3):597–606 (76 ref.)
Perirenal urinary extravasation complicating Burch colposuspension. Delaere KP, et al. Urol Int 1989; 44(2):119–20
Lumbar ureteral shunt—an unusual cause of ureteral obstruction. Kelly JH, et al. Urology 1989 Apr;33(4):309–10
Vasectomy complications at a family practice center. Beavers CH. W V Med J 1989 Sep;85(9):379–80
Taste disorder from zinc deficiency after tonsillectomy. Bicknell JM, et al. West J Med 1988 Oct;149(4):457–60
Idiopathic postoperative intussusception. Olcay I, et al. Z Kinderchir 1989 Apr;44(2):86–7
[Cesarean section—its current status. III. Infectious complications. Its use] Katsulov A. Akush Ginekol (Sofiia) 1988;27(4):8–14 (Bul)
[Changes in respiratory function during the postoperative period] Iordanov I, et al. Khirurgiia (Sofiia) 1988;41(5):1–7 (10 ref.) (Bul)
[Ureterovaginal fistulae after obstetrical-gynecological operations] Kumanov Kh, et al. Khirurgiia (Sofiia) 1988; 41(4):1–5 (Bul)
[Obstetrical-gynecological vesicovaginal fistulae—etiological factors, diagnosis and treatment] Kumanov Kh, et al. Khirurgiia (Sofiia) 1988;41(4):5–8 (Bul)
[Neurogenic urination disorders following radical surgical interventions in rectal carcinoma] Patrashkov T, et al. Khirurgiia (Sofiia) 1989;42(2):34–8 (Eng. Abstr.) (Bul)
[Cytomegalovirus pneumonitis in renal transplantation—a case report] Kuo HP, et al. Chang Keng I Hsueh 1989 Mar 20;12(1):57–61 (Eng. Abstr.) (Chi)
[Analysis of overwhelming postsplenectomy infection and septicemia in China] Liu LX, et al. Chung Hua I Hsueh Tsa Chih 1988 Nov;68(11):619–21, 42 (Eng. Abstr.) (Chi)
[Clinical investigation of causes of failed back surgery syndrome] Wann SL, et al. Chung Hua I Hsueh Tsa Chih 1987 Dec;40(6):543–50 (Eng. Abstr.) (Chi)
[Distant epidural hematomas after removal of acoustic neurinomas] Luan WZ. Chung Hua Wai Ko Tsa Chih 1988 May;26(5):297–8, 319 (Eng. Abstr.) (Chi)
[Surgical treatment of constrictive pericarditis and postoperative jaundice] Qiu NY. Chung Hua Wai Ko Tsa Chih 1988 Jun;26(6):349–50, 383 (Eng. Abstr.) (Chi)
[Corneal refractive error after penetrating keratoplasty] Huang JT. Chung Hua Yen Ko Tsa Chih 1988 Mar; 24(2):65–8 (Eng. Abstr.) (Chi)
[Hypertension and anesthesia (letter)] Høilund-Carlsen PF, et al. Ugeskr Laeger 1989 Feb 20;151(8):512–3 (Dan)
[Torticollis—an unusual origin] Jensen JH, et al. Ugeskr Laeger 1989 Apr 10;151(15):950–1 (Eng. Abstr.) (Dan)

[Postoperative urine retention (letter)] Lose G, et al. **Ugeskr Laeger** 1989 Mar 6;151(10):643–4 **(Dan)**

[Congenital atresia of the small intestine: a problem in adults? (published erratum appears in Ned Tijdschr Geneeskd 1989 Apr 22;133(16):856)] Jansen W. **Ned Tijdschr Geneeskd** 1989 Apr 1;133(13):649–51 **(Dut)**

[Cardiac risk in non-cardiac surgery] Muts-Homsma SJ, et al. **Ned Tijdschr Geneeskd** 1988 Aug 27;132(35):1616–9 (Eng. Abstr.) **(Dut)**

[Streptococcus bovis septicemia and colonic cancer] Devis A, et al. **Acta Chir Belg** 1989 Jan-Feb;89(1):58–60 (Eng. Abstr.) **(Fre)**

[Complications of surgery of hypospadias] Collier F, et al. **Acta Urol Belg** 1989;57(2):609–14 **(Fre)**

[Surgical solutions to iatrogenic impotence following total cysto-prostatectomy] Etcheverry M. **Acta Urol Belg** 1989; 57(1):217–21 (Eng. Abstr.) **(Fre)**

[Early thoracic surgery of the esophagus (excluding anastomotic complications] Baulieux J, et al. **Ann Chir** 1988; 42(10):717–24 (24 ref.) (Eng. Abstr.) **(Fre)**

[Acute intracranial subdural hematoma of arterial origin after spinal anesthesia] Béal JL, et al. **Ann Fr Anesth Reanim** 1989;8(2):143–5 (Eng. Abstr.) **(Fre)**

[Severe hemorrhagic syndrome in a high responder patient with hemophilia A. Value of porcine factor VIII] Boullet M, et al. **Ann Fr Anesth Reanim** 1989;8(3):280–3 (Eng. Abstr.) **(Fre)**

[The unexpected occurrence of a psychotic state after kidney transplantation] Gardes JP, et al. **Ann Med Psychol (Paris)** 1988 May;146(5):463–6 **(Fre)**

[18 and one-half years' survival after cardiac graft. Clinical course and anatomical findings] Montiès JR, et al. **Arch Mal Coeur** 1988 Oct;81(10):1161–5 (Eng. Abstr.) **(Fre)**

[Arrhythmia disorders after repair of ventricular septal defects. Comparison of atrial and ventricular approaches] Vaksmann G, et al. **Arch Mal Coeur** 1989 May;82(5):731–5 (Eng. Abstr.) **(Fre)**

[Postoperative cervicofacial subcutaneous emphysema] Menguy E, et al. **Cah Anesthesiol** 1988 Jun-Jul;36(4):323–6 (Eng. Abstr.) **(Fre)**

[Long term results of 68 cases of breast reduction performed at a university surgical service] Meredith P, et al. **Helv Chir Acta** 1989 Apr;55(6):887–94 (Eng. Abstr.) **(Fre)**

[Rupture of the anterior cruciate ligament at a peripheral hospital. Apropos of 70 cases] Rosso R, et al. **Helv Chir Acta** 1989 Jun;56(1-2):63–6 (Eng. Abstr.) **(Fre)**

[Suppuration after obstruction of Wirsung's duct with a solution of prolaminecid (Ethibloc) (letter)] Gossot D, et al. **J Chir (Paris)** 1988 Nov;125(11):674–5 **(Fre)**

[Ulcer of the gastric fundus after abdominal fundoplication. A peculiar entity?] Tissot E, et al. **J Chir (Paris)** 1989 Jun-Jul;126(6-7):379–81 (10 ref.) (Eng. Abstr.) **(Fre)**

[Oculomotor paresis after surgical treatment for retinal detachment] Denis D, et al. **Ophtalmologie** 1988 Jul-Sep; 2(3):243–5 (Eng. Abstr.) **(Fre)**

[Complications and sequelae of thyroid surgery] Peix JL, et al. **Presse Med** 1988 Oct 8;17(34):1749–53 (Eng. Abstr.) **(Fre)**

[Cauda equina syndrome caused by migration of a fat graft after laminoarthrectomy] Deburge A, et al. **Rev Chir Orthop** 1988;74(7):677–8 (Eng. Abstr.) **(Fre)**

[Major surgery of the sacrum. Preliminary results] Missenard G, et al. **Rev Chir Orthop** 1988;74 Suppl 2:345–7 **(Fre)**

[Functional disorders of the diaphragm in the sequelae of abdominal surgery] Garzaniti N. **Rev Med Liege** 1989 Mar 1;44(5):183–6 **(Fre)**

[Salvage of infected knee prosthesis] Pellaton M. **Rev Med Suisse Romande** 1988 Dec;108(12):1035–9 **(Fre)**

[Secondary sclerosis of the bile ducts. An unusual complication of the surgical treatment of an hydatid cyst of the liver] Letaief R, et al. **Tunis Med** 1987 Aug-Sep; 65(8-9):543–6 (Eng. Abstr.) **(Fre)**

[Percutaneous Goetze cerclage in torsion fractures of the tibia. A computer-assisted follow-up of 186 cases] Habernek H, et al. **Aktuel Traumatol** 1989 Apr;19(2):73–6 (Eng. Abstr.) **(Ger)**

[3 years experiences with the dynamic hip compression screw] Kroczek H, et al. **Aktuel Traumatol** 1988 Oct; 18(5):187–91 (Eng. Abstr.) **(Ger)**

[Sudeck's dystrophy following arthroscopy of the knee joint--a case report] Loew M. **Aktuel Traumatol** 1988 Aug; 18(4):157–9 (Eng. Abstr.) **(Ger)**

[Stability of the spine following osteosynthesis with internal fixation. Case report] Schwarz N, et al. **Aktuel Traumatol** 1989 Apr;19(2):61–2 (Eng. Abstr.) **(Ger)**

[Talus necrosis and its treatment] Trauth J, et al. **Aktuel Traumatol** 1988 Aug;18(4):152–6 (Eng. Abstr.) **(Ger)**

[An unusual cause of postoperative pharyngeal obstruction] Abel M. **Anaesthesist** 1988 Sep;37(9):606–7 (Eng. Abstr.) **(Ger)**

[TUR syndrome as a late postoperative complication. Case report] Bach A, et al. **Anasth Intensivther Notfallmed** 1988 Aug;23(4):214–6 (Eng. Abstr.) **(Ger)**

[Postoperative, opiate-induced respiratory depression is not dependent on arousal] Tolksdorf W, et al. **Anasth Intensivther Notfallmed** 1989 Apr;24(2):94–9 (Eng. Abstr.) **(Ger)**

[Personal experiences with arthroscopic meniscus surgery in high performance athletes--results of clinical follow-up] Ahrendt E, et al. **Beitr Orthop Traumatol** 1989 Jan-Feb; 36(1-2):19–23 **(Ger)**

[Results of surgical treatment of syndactylia of the hand] Bastian H, et al. **Beitr Orthop Traumatol** 1989 Jun; 36(6):267–74 (Eng. Abstr.) **(Ger)**

[Occupational disability following arthroscopic meniscectomy] Heinrich A, et al. **Beitr Orthop Traumatol** 1989 Jan-Feb;36(1-2):14–6 **(Ger)**

[Results of follow-up of arthroscopic meniscus operations 1983–1987] Mildner K, et al. **Beitr Orthop Traumatol** 1989 Jan-Feb;36(1-2):16–9 **(Ger)**

[Intrathoracic struma] Röher HD, et al. **Chirurg** 1989 Jun; 60(6):384–90 (20 ref.) **(Ger)**

[Comment on the contribution by H. V. Zühlke et al.: Endotoxinemia and bacteremia in manual oral decompression in ileus] Ruf W. **Chirurg** 1989 Mar; 60(3):180–1 **(Ger)**

[Kaposi's sarcoma after kidney transplantation] Heering P, et al. **Dtsch Med Wochenschr** 1989 Sep 15;114(37):1407–10 (Eng. Abstr.) **(Ger)**

[Possibilities for plastic surgery correction of chronic facial paralyses and follow-up results] Bonorden SW, et al. **Fortschr Kiefer Gesichtschir** 1989;34:66–71 **(Ger)**

[Evaluating the success of corrective rhinoplasty] Hyckel P, et al. **Fortschr Kiefer Gesichtschir** 1989;34:63–6 **(Ger)**

[Complications and dangers in face and neck lifting] Voy ED, et al. **Fortschr Kiefer Gesichtschir** 1989;34:14–6 **(Ger)**

[Postoperative gastrointestinal motility disorders. 1: Sequelae following general abdominal surgery and ulcer surgery] Stockbrügger R. **Fortschr Med** 1988 Oct 10;106(29):590–2 (9 ref.) (Eng. Abstr.) **(Ger)**

[Postoperative disorders of gastrointestinal motility. 2: Status following total gastrectomy and ileum resection] Stockbrügger R. **Fortschr Med** 1988 Nov 20;106(33):660, 661–662 (5 ref.) (Eng. Abstr.) **(Ger)**

[Pericardial valves--excellent hemodynamics, poor long-term results] Weinhold C, et al. **Fortschr Med** 1988 Dec 10;106(35):707–10 (Eng. Abstr.) **(Ger)**

[Incidence of cystoid macular edema following cataract extraction] Behrens-Baumann W, et al. **Fortschr Ophthalmol** 1989;86(3):195–6 (Eng. Abstr.) **(Ger)**

[Functional results of epikeratophakia] Bleckmann H. **Fortschr Ophthalmol** 1988;85(3):248–50 (Eng. Abstr.) **(Ger)**

[Postoperative cataract following intraocular lenses with and without laser ridge] Hütz W, et al. **Fortschr Ophthalmol** 1989;86(3):206–9 (Eng. Abstr.) **(Ger)**

[Chronic glaucoma following silicone oil implantation: a comparison of 2 oils of differing viscosity] Petersen J, et al. **Fortschr Ophthalmol** 1988;85(6):632–4 (Eng. Abstr.) **(Ger)**

[Posterior chamber lens implantation in glaucoma--course of postoperative intraocular pressure and long-term follow-up] Weickert C. **Fortschr Ophthalmol** 1988; 85(3):270–2 (Eng. Abstr.) **(Ger)**

[Pregnancies following kidney transplantation and in immunosuppression with cyclosporin A] Günter H, et al. **Geburtshilfe Frauenheilkd** 1989 Feb;49(2):155–9 (Eng. Abstr.) **(Ger)**

[Pregnancy and birth rate following conservative or radical surgery of extrauterine pregnancy] von Rechenberg KN. **Geburtshilfe Frauenheilkd** 1989 May;49(5):452–6 (Eng. Abstr.) **(Ger)**

[Urodynamic and clinical results 1 year following Stamey endoscopic bladder neck suspension] Tamussino K, et al. **Gynakol Rundsch** 1988;28 Suppl 2:41–2 **(Ger)**

[Intestinal complications following gynecologic and radiologic primary therapy] Becker H, et al. **Gynakologe** 1989 Feb;22(1):46–54 (15 ref.) **(Ger)**

[The motion stable intraosseous wire suture--a prospective study] Brüser P, et al. **Handchir Mikrochir Plast Chir** 1989 Jan;21(1):10–7 (Eng. Abstr.) **(Ger)**

[Clinical research in hand surgery: the problem and value of retrospective studies] Brüser P, et al. **Handchir Mikrochir Plast Chir** 1989 Mar;21(2):62–5 (Eng. Abstr.) **(Ger)**

[Autologous injection of fatty tissue following liposuction--not a method for breast augmentation] Hörl HW, et al. **Handchir Mikrochir Plast Chir** 1989 Mar; 21(2):59–61 (Eng. Abstr.) **(Ger)**

[The fate of the polytraumatized patient with a "minor injury" of the hand] Mark G. **Handchir Mikrochir Plast Chir** 1989 Jan;21(1):51–4 (Eng. Abstr.) **(Ger)**

[Spontaneous rupture of the extensor pollicis longus] Nigst H, et al. **Handchir Mikrochir Plast Chir** 1989 Jul; 21(4):172–7 (Eng. Abstr.) **(Ger)**

[Surgery of inguinal hernia] Herzog U. **Helv Chir Acta** 1989 Jun;56(1-2):7–10 (Eng. Abstr.) **(Ger)**

[Long-term results following conservative and surgical treatment of infantile hypertrophic pyloric stenosis] Lüdtke FE, et al. **Helv Chir Acta** 1989 Jun;56(1-2):15–7 (Eng. Abstr.) **(Ger)**

[Surgery of aneurysm of the descending thoracic aorta and paraplegia] von Segesser LK, et al. **Helv Chir Acta** 1988 Nov;55(4):503–8 (Eng. Abstr.) **(Ger)**

[10 years results following augmentation-plasty] Wintsch K, et al. **Helv Chir Acta** 1989 Apr;55(6):879–86 (Eng. Abstr.) **(Ger)**

[Early and long-term results following tracheal segment resection] von Glass W, et al. **HNO** 1989 Jun;37(6):259–63 (Eng. Abstr.) **(Ger)**

[Therapeutic success following endolymphatic sac surgery--postoperative course of vestibular compensation] Westhofen M, et al. **HNO** 1988 Aug;36(8):315–7 (Eng. Abstr.) **(Ger)**

[Anaphylactic shock following administration of an infusion solution containing fructose?] Baumgartl P, et al. **Infusionstherapie** 1989 Feb;16(1):45–8 (Eng. Abstr.) **(Ger)**

[Heparin-induced thrombocytopenia and thrombosis] Langecker P, et al. **Internist (Berlin)** 1988 Jul;29(7):515–8 **(Ger)**

[Artificial heart valves and intravascular hemolysis] Mezger J, et al. **Internist (Berlin)** 1988 Nov;29(11):781–3 **(Ger)**

[A 21-year-old male with progressive body position-dependent cyanosis following 3 corrective operations in tricuspid valve atresia] von Scheidt W, et al. **Internist (Berlin)** 1989 May;30(5):338–40 **(Ger)**

[Hemolytic anemia in a 32-year-old patient with metastatic breast cancer] Zurborn KH, et al. **Internist (Berlin)** 1989 May;30(5):341–3 **(Ger)**

[Iatrogenic hydrothorax in a child with ventriculoperitoneal shunt for hydrocephalus internus] Trappe BO, et al. **Kinderarztl Prax** 1988 Jul;56(7):337–40 (Eng. Abstr.) **(Ger)**

[Bone marrow transplantation in childhood. II] Zintl F. **Kinderarztl Prax** 1988 Jul;56(7):321–7 (0 ref.) (Eng. Abstr.) **(Ger)**

[The effect of posterior chamber lenses or YAG lens capsulotomy on sensitivity to glare and twilight vision in comparison to phakic control groups] Behrendt S, et al. **Klin Monatsbl Augenheilkd** 1988 Sep;193(3):249–56 (Eng. Abstr.) **(Ger)**

[Long-term results following argon laser trabeculoplasty] Lund OE, et al. **Klin Monatsbl Augenheilkd** 1988 Dec; 193(6):572–8 (Eng. Abstr.) **(Ger)**

[Endophthalmitis and toxic lens syndrome. Differential diagnosis and therapy] Pham-Duy T, et al. **Klin Monatsbl Augenheilkd** 1988 Sep;193(3):243–8 (Eng. Abstr.) **(Ger)**

[Capsular lesions in extracapsular cataract operation and implantation of posterior chamber lenses] Pham Duy T, et al. **Klin Monatsbl Augenheilkd** 1988 Jul;193(1):25–8 (Eng. Abstr.) **(Ger)**

[Incidence and development of decentration of posterior chamber lenses implanted in the capsule sac] Rochels R, et al. **Klin Monatsbl Augenheilkd** 1988 Dec;193(6):585–8 (Eng. Abstr.) **(Ger)**

[Laser trabeculoplasty in glaucoma chronicum simplex. Results of a prospective, clinical study] Vogel M, et al. **Klin Monatsbl Augenheilkd** 1988 Jul;193(1):8–15 (Eng. Abstr.) **(Ger)**

[Postoperative course in children with malignant tumors following preoperative chemotherapy] Angerpointner TA, et al. **Klin Padiatr** 1989 May-Jun;201(3):209–12 (Eng. Abstr.) **(Ger)**

[Quality of life and symptoms of residual damage in cerebellar tumors in children and adolescents] Zarbock G, et al. **Klin Padiatr** 1989 Jul-Aug;201(4):337–45 (Eng. Abstr.) **(Ger)**

[Results of surgical therapy of spontaneous pneumothorax] Branscheid D, et al. **Langenbecks Arch Chir** 1988;Suppl 2:505–9 (Eng. Abstr.) **(Ger)**

[Effect of time of operation and clinic organization on postoperative complications] Grundmann R, et al. **Langenbecks Arch Chir** 1989;374(2):84–91 (Eng. Abstr.) **(Ger)**

[Surgery of varicose veins. Surgical errors and complications] Horsch S. **Langenbecks Arch Chir** 1988;Suppl 2:153–6 (Eng. Abstr.) **(Ger)**

[Pancreatic duct occlusion from the clinical viewpoint: exocrine and endocrine consequences] Schneider MU. **Langenbecks Arch Chir** 1989;374(1):1–3 **(Ger)**

[Insufficiency of the cervical lymph vessel system; lymphostatic encephalopathy and retinopathy following cervical block dissection] Földi M. **Laryngol Rhinol Otol (Stuttg)** 1988 Sep;67(9):435–7 (6 ref.) (Eng. Abstr.) **(Ger)**

[Pharyngeal complications following ventral fusion operations of the cervical spine] Bernemann D, et al. **Laryngorhinootologie** 1989 Feb;68(2):128–9 (Eng. Abstr.) **(Ger)**

[Aneurysms of the lingual artery as a cause of recurrent late hemorrhage following tonsillectomy] Maurer J, et al. **Laryngorhinootologie** 1989 May;68(5):301–3 (Eng. Abstr.) **(Ger)**

[Chronic pancreatitis with inflammatory enlargement of the head of the pancreas. Early and late results following duodenum saving resection of the head of the pancreas] Beger HG, et al. **Med Klin** 1988 Sep 2;83(17):548–53, 576 (Eng. Abstr.) **(Ger)**

[Cholera following Billroth II stomach resection] Eggeling T, et al. **Med Klin** 1988 Jul 15;83(15):480–1 **(Ger)**

[Phrenic nerve paralysis with consecutive eventration of the diaphragm as a complication of thoracic drainage] Deindl C. **Monatsschr Kinderheilkd** 1989 Feb;137(2):111–3 **(Ger)**

[Thromboembolism as a complication of Pudenz-Heyer drainage with cardiac shunt] Galal O, et al. **Monatsschr Kinderheilkd** 1989 Feb;137(2):98–100 (Eng.

Abstr.) (Ger)
[Asplenism and hyposplenism as an immune deficiency syndrome] Strasser-Vogel B, et al. **Monatsschr Kinderheilkd** 1988 Dec;136(12):795–807 (144 ref.) (Eng. Abstr.) (Ger)
[Etiology of the recurrence of lumbar intervertebral disk displacement] Reith C, et al. **Neurochirurgia (Stuttg)** 1989 Jan;32(1):5–9 (Eng. Abstr.) (Ger)
[Complications in lumbar intervertebral disk operations] Schüwer U, et al. **Neurochirurgia (Stuttg)** 1988 Sep;31 Suppl 1:192–5 (23 ref.) (Eng. Abstr.) (Ger)
[Pneumonia as a postoperative complication in neurosurgery] Friedrich P. **Psychiatr Neurol Med Psychol Beih** 1988; 40:109–11 (Ger)
[Clinico-neurologic long-term results following surgery of intervertebral disk displacement] Herrmann L, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 Feb;41(2):75–83 (Eng. Abstr.) (Ger)
[Thrombocytosis following pancreas transplantation—a retrospective clinical study] Hunziker D. **Schweiz Rundsch Med Prax** 1989 Feb 21;78(8):191–6 (Eng. Abstr.) (Ger)
[Recurrent shoulder dislocation. On the sports capacity following surgical therapy] Lippert MJ, et al. **Sportverletz Sportschaden** 1988 Sep;2(3):100–5 (Eng. Abstr.) (Ger)
[Early results following suture and augmentation of the ruptured anterior cruciate ligament. Arthrotomy versus arthroscopic surgical technic] Boszotta H, et al. **Unfallchirurg** 1988 Oct;91(10):459–64 (Eng. Abstr.) (Ger)
[Maxillofacial injuries in polytrauma. Results of a follow-up study] Fischer-Brandies E, et al. **Unfallchirurg** 1989 May; 92(5):209–15 (Eng. Abstr.) (Ger)
[Late results in the management of pertrochanteric femoral fractures in the elderly with the dynamic hip screw] Müller-Färber J, et al. **Unfallchirurg** 1988 Aug;91(8):341–50 (Eng. Abstr.) (Ger)
[Late results following tibial fractures in childhood] Schmittenbecher PP, et al. **Unfallchirurg** 1989 Feb; 92(2):79–84 (Eng. Abstr.) (Ger)
[Pathogenesis of pulmonary complications following intramedullary nailing osteosyntheses] Wenda K, et al. **Unfallchirurg** 1988 Sep;91(9):432–5 (Eng. Abstr.) (Ger)
[Experiences with the self-supporting type SCL hip screw prosthesis] Bär G. **Unfallchirurgie** 1988 Dec;14(6):324–8 (Eng. Abstr.) (Ger)
[Comparative study of arthroscopic and open meniscus surgery] Genelin F, et al. **Unfallchirurgie** 1989 Jun; 15(3):133–5 (Eng. Abstr.) (Ger)
[Complications of Redon drainage following hip joint replacement operations—an analysis of the causes] Kirschner P, et al. **Unfallchirurgie** 1989 Feb;15(1):24–31 (Eng. Abstr.) (Ger)
[Causes, prevention and therapy of complications of lymphadenectomy following tumor nephrectomy] Fabricius PG, et al. **Urologe [A]** 1988 Jul;27(4):221–4 (Eng. Abstr.) (Ger)
[Ileocystoplasty and enteropathies] Roth S, et al. **Urologe [A]** 1989 Jul;28(4):193–8 (Eng. Abstr.) (Ger)
[Transperitoneal and extraperitoneal replacement of the aortic bifurcation—comparison of intra- and postoperative complications] Bierhoff E, et al. **Vasa Suppl** 1988;23:153–6 (Ger)
[Modern possibilities of prosthetic management of the skeletal and locomotor system and its effect in assessing disability] Linden U. **Versicherungsmedizin** 1989 Jan 1;41(1):19–21 (Eng. Abstr.) (Ger)
[The ileostomy—its peculiarities and problems] Nowak W, et al. **Z Arztl Fortbild (Jena)** 1989;83(5):235–9 (12 ref.) (Ger)
[Adaptive and regenerative processes following pancreas transplantation] Hopt UT. **Z Gastroenterol [Verh]** 1989 Jul; 24:241–3 (10 ref.) (Ger)
[Risk of hip endoprostheses in the aged—incidence of complications in patients over 70 years of age in a comparative study] Müller RT. **Z Gerontol** 1988 Sep-Oct; 21(5):277–81 (Eng. Abstr.) (Ger)
[Cardiac arrhythmia following total correction of tetralogy of Fallot] Janoušek J, et al. **Z Gesamte Inn Med** 1989 Jun 1;44(11):323–6 (Eng. Abstr.) (Ger)
[Priapism—erectile potency following conservative and surgical treatment] Rassler J, et al. **Z Gesamte Inn Med** 1988 Oct 1;43(19):547–50 (Eng. Abstr.) (Ger)
[Late results following surgical correction of syndactyly and symbrachydactyly] Deutinger M, et al. **Z Kinderchir** 1989 Feb;44(1):50–4 (Eng. Abstr.) (Ger)
[4-year results following Insall anterior cruciate ligament-plasty] Imhoff A, et al. **Z Orthop** 1989 Mar-Apr; 127(2):152–62 (Eng. Abstr.) (Ger)
[Postoperative lumbar intervertebral discitis. A review of a 15-year period and 7,493 operations] Stolke D, et al. **Z Orthop** 1988 Dec;126(6):666–70 (Eng. Abstr.) (Ger)
[Shoulder stiffness and metal allergy—a possible link? A single case report] Theermann R, et al. **Z Orthop** 1989 Jan-Feb;127(1):65–7 (Eng. Abstr.) (Ger)
[Spontaneous ruptures of the extensor system of the knee following joint replacement in patients with rheumatoid arthritis] Trepte CT, et al. **Z Orthop** 1988 Sep-Oct; 126(5):519–25 (Eng. Abstr.) (Ger)
[Comments on the contribution: initial results of surgical treatment of scoliosis with the Cotrel and Dubousset CD instruments by Ch. Hopf, H. H. Matthiass and J. Heine. Z. Orthop. 125 (1987) 347] Zielke K, et al. **Z Orthop** 1988 Dec;126(6):709–18 (Eng. Abstr.) (Ger)
[Experiences with 160 operated rotator cuff ruptures] Reichelt A. **Z Unfallchir Versicherungsmed Berufskr** 1988; 81(3):165–8 (Ger)
[The syndrome of retrograde venous arterialization following arteriovenous vascular anastomoses for hemodialysis] Scholz H, et al. **Z Urol Nephrol** 1988 Nov;81(11):675–9 (Eng. Abstr.) (Ger)
[Late results following ankle joint osteosyntheses] Fleischer GM, et al. **Zentralbl Chir** 1989;114(6):381–7 (Eng. Abstr.) (Ger)
[A simple point score for definition of the risk of postoperative complications] Grundmann R, et al. **Zentralbl Chir** 1989;114(11):730–9 (Eng. Abstr.) (Ger)
[Complications and late results of treatment of pediatric supra- condylar humerus fractures] Guther R, et al. **Zentralbl Chir** 1988;113(14):893–8 (Eng. Abstr.) (Ger)
[Anastomotic aneurysm] Harnoss BM, et al. **Zentralbl Chir** 1989;114(3):169–74 (Eng. Abstr.) (Ger)
[Selective proximal vagotomy with and without pyloroplasty—results of a randomized clinical study of duodenal ulcer 5 and 8 years after surgery] Hildebrandt J, et al. **Zentralbl Chir** 1988;113(13):827–36 (Eng. Abstr.) (Ger)
[The incidence of recurrent laryngeal nerve paralysis following thyroid surgery] Horch R, et al. **Zentralbl Chir** 1989;114(9):577–82 (Eng. Abstr.) (Ger)
[Medical documentation on the accident unit at the Wels Hospital—13 years' experience] Povacz F. **Zentralbl Chir** 1989;114(12):771–6 (Eng. Abstr.) (Ger)
[The epidural hematoma—diagnostic peculiarities, clinical courses and therapeutic results in a 12-year-study] Schulz W, et al. **Zentralbl Chir** 1988;113(19):1280–8 (Eng. Abstr.) (Ger)
[Results of surgical treatment of chronic pancreatitis] Sons HU, et al. **Zentralbl Chir** 1989;114(2):121–8 (Eng. Abstr.) (Ger)
[Complications in bland struma surgery. A retrospective study based on 2,035 personal cases] Vara-Thorbeck R, et al. **Zentralbl Chir** 1989;114(9):571–6 (Eng. Abstr.) (Ger)
[Conservative management versus osteosynthesis in the treatment of tibial shaft fractures] Vara-Thorbeck R, et al. **Zentralbl Chir** 1989;114(12):757–65 (Eng. Abstr.) (Ger)
[Temporary and permanent recurrent laryngeal nerve paralysis following thyroid surger /. Modifying factors: the educational status of the surgeon] Weitensfelder W, et al. **Zentralbl Chir** 1989;114(9):583–9 (Eng. Abstr.) (Ger)
[Postoperative complications following alloplastic aortic valve replacement in bacterial endocarditis of the aortic valve in established aortic coarctation—a case report] Wollert HG, et al. **Zentralbl Chir** 1989;114(3):175–80 (Ger)
[Efficacy of interlocking nailing in fractures of the leg] Zeumer B, et al. **Zentralbl Chir** 1989;114(6):357–70 (Eng. Abstr.) (Ger)
[Hematohydrometra 11 years after cervix conization: a cause of acute massive lung thromboembolism] Arendt T, et al. **Zentralbl Gynakol** 1989;111(2):119–22 (Eng. Abstr.) (Ger)
[Assessment of urination before and following operations for stress incontinence] Fischer W, et al. **Zentralbl Gynakol** 1988;110(18):1153–60 (Eng. Abstr.) (Ger)
[Urogynecologic findings in patients following abdominal radical operation for cervix cancer] Halaška M, et al. **Zentralbl Gynakol** 1988;110(18):1117–23 (Eng. Abstr.) (Ger)
[Fertility following function-preserving operations in ectopic pregnancies—results and experiences] Lober R, et al. **Zentralbl Gynakol** 1989;111(5):294–300 (Eng. Abstr.) (Ger)
[Disorders of bladder emptying following abdominal radical operation of cervix cancer] Ralph G, et al. **Zentralbl Gynakol** 1988;110(18):1124–31 (Eng. Abstr.) (Ger)
[Acute intestinal obstruction caused by congenital intestinal abnormalities] Schüssling G, et al. **Zentralbl Gynakol** 1989; 111(4):243–9 (Eng. Abstr.) (Ger)
[Complications of shunt drainage in pediatric hydrocephalus] Dammann N, et al. **Zentralbl Neurochir** 1988;49(3):238–46 (Eng. Abstr.) (Ger)
[Aneurysm of the superficial temporal artery following extra-intracranial arterial bypass. A case report] Schön R, et al. **Zentralbl Neurochir** 1988;49(3):220–3 (Eng. Abstr.) (Ger)
[Rhabdomyolysis following ligation of the internal spermatic vein in varicocele] Piccardo M. **Arch Ital Urol Nefrol Androl** 1988 Mar;60(1):87–90 (Eng. Abstr.) (Ita)
[Incidence and significance of ventricular arrhythmia after surgical correction of Fallot's tetralogy] Conte MR, et al. **Cardiologia** 1989 Mar;34(3):265–9 (Eng. Abstr.) (Ita)
[Seroma: a complication of systemic-pulmonary shunt with a tubular prosthesis] Marianeschi SM, et al. **Cardiologia** 1989 Mar;34(3):271–4 (Eng. Abstr.) (Ita)
[Fever and changes in renal function after kidney and pancreas transplant in a 22-year-old diabetic woman (clinical conference)] Strom TB, et al. **Medicina (Firenze)** 1989 Jan-Mar;9(1):83–92 (Ita)
[Thromboembolic risk] Campisi M, et al. **Minerva Anestesiol** 1988 Oct;54(10):405–12 (Eng. Abstr.) (Ita)
[A post-operative prognostic index: final form and validation] Verde G, et al. **Minerva Anestesiol** 1988 Dec; 54(12):499–508 (Eng. Abstr.) (Ita)
[Incidence of conduction disorders in patients who underwent surgery for hypertrophic obstructive cardiomyopathy] Martini B, et al. **Minerva Cardioangiol** 1989 Mar;37(3):87–90 (Eng. Abstr.) (Ita)
[Ischemic complications after surgery of the left colon in patients with arteriopathy] Armenio S. **Minerva Chir** 1989 Feb 15;44(3):525–33 (0 ref.) (Ita)
[Esophageal alkaline reflux] Bresadola F, et al. **Minerva Chir** 1989 Jan 31;44(1-2):101–6 (Ita)
[Sequelae after total fundoplication for gastro-esophageal reflux] Cavallaro V, et al. **Minerva Chir** 1989 Jan 31; 44(1-2):113–6 (29 ref.) (Ita)
[Sequelae of radiosurgical treatment in patients having undergone Wertheim radical hysterectomy] Basso Ricci S, et al. **Minerva Ginecol** 1989 Jan;41(1):17–21 (Eng. Abstr.) (Ita)
[Spontaneous esophagogastric perforation after fundoplication: an unusual complication of antireflux surgery] Bonaldi U, et al. **Minerva Med** 1989 Jul; 80(7):729–32 (Ita)
[Complications from the use of mechanical suturing devices in digestive system surgery. Our experience] Pramaggiore P, et al. **Minerva Med** 1989 Jul;80(7):809–10 (Ita)
[An analysis of the problems correlated with the use of mechanical suturing devices in surgery of the gastrointestinal tract] Turra G, et al. **Minerva Med** 1989 Jul;80(7):811–4 (Ita)
[Hypertrophic gingivitis caused by cyclosporin A. 30 months' clinical experience in the use of cyclosporin A in patients undergoing cadaver kidney transplantation, with special attention to the proven side effects at the gingival level] Turco G, et al. **Minerva Stomatol** 1988 Dec;37(12):1043–50 (Eng. Abstr.) (Ita)
[A case of Chilaiditi's syndrome appeared in drug-resistant pulmonary tuberculosis following lobectomy] Umeki S, et al. **Kekkaku** 1988 Aug;63(8):587–91 (Eng. Abstr.) (Jpn)
[A case report of hypoxia in a child after renal transplantation] Oguchi T, et al. **Masui** 1989 Feb; 38(2):241–5 (Eng. Abstr.) (Jpn)
[A case of retrograde amnesia of 22 years, continued for 4 days following a general anesthesia accompanied by a permanent amnesia of these 4 days after the complete recovery from the retrograde amnesia] Yamaji A, et al. **Masui** 1989 Feb;38(2):236–40 (Eng. Abstr.) (Jpn)
[Liver failure after hepatic resection] Shimada H, et al. **Nippon Geka Gakkai Zasshi** 1989 Apr;90(4):566–72 (Eng. Abstr.) (Jpn)
[Etiology of erythrodermia after open heart surgery: Y chromatin analysis of lymphocytes] Fuse K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Dec; 36(12):2646–50 (Eng. Abstr.) (Jpn)
[Acute liver dysfunction following modified Fontan operation in complex cardiac lesions—analysis of the contributing hemodynamic factors] Matsuda H, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul;36(7):1135–41 (Eng. Abstr.) (Jpn)
[Progressive pulmonary hypertension following repair of pseudotruncus arteriosus with major aorto-pulmonary collateral arteries in a 20-year-old patient] Miura T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Mar; 37(3):546–50 (Eng. Abstr.) (Jpn)
[A case of recurrent internal carotid stenosis, after carotid endarterectomy, due to strangulation by scarring] Niikawa S, et al. **No Shinkei Geka** 1989 Mar;17(3):263–6 (Eng. Abstr.) (Jpn)
[Essential thrombocythemia associated with subdural hematoma and postoperative intracerebral hemorrhage—a case report] Ogasawara K, et al. **No To Shinkei** 1989 Jan; 41(1):91–5 (Eng. Abstr.) (Jpn)
[Ureteral stenosis associated with late-onset hemorrhagic cystitis due to adenovirus type 11 after bone marrow transplantation: report of two cases] Hanada R, et al. **Rinsho Ketsueki** 1988 Dec;29(12):2379–83 (Eng. Abstr.) (Jpn)
[Late results of the surgical treatment of congenital hip dysplasia by pelvic osteotomy using the Chiari method] Rejholec M, et al. **Chir Narzadow Ruchu Ortop Pol** 1988; 53(3):209–11 (Eng. Abstr.) (Pol)
[Results of the surgical treatment of congenital dislocation of the hip joint by open reduction and transiliac and corrective osteotomies of the proximal end of the femur] Senger A, et al. **Chir Narzadow Ruchu Ortop Pol** 1988; 53(3):190–4 (Eng. Abstr.) (Pol)
[Evaluation of the results of the treatment of congenital hip dislocation by open reposition and torsion-valgus corrective osteotomy] Vizkelety T, et al. **Chir Narzadow Ruchu Ortop Pol** 1988;53(2):157–9 (Eng. Abstr.) (Pol)
[Analysis of intra- and postoperative complications of hysterectomy based on the data from the Department of Gynecology of the District Hospital in Toruń 1982–1985] Chojnacki A, et al. **Ginekol Pol** 1988 Aug;59(8):476–80 (Eng. Abstr.) (Pol)
[Ocular symptoms in cytomegalovirus infection] Dyszyńska-Rościszewska B, et al. **Klin Oczna** 1988 Nov; 90(11):391–2 (Eng. Abstr.) (Pol)
[Effect of classical exclusion of aneurysm of the internal

carotid artery on late structural and functional changes at the site of the operation] Slósarek J, et al. **Neurol Neurochir Pol** 1988 Jul–Aug;22(4):330–4 (Eng. Abstr.) **(Pol)**

[Closed or open tympanoplasty in cholesteatoma of the ear] Gołąbek W. **Otolaryngol Pol** 1988;42(1–2):74–9 (Eng. Abstr.) **(Pol)**

[A case of postoperative tetanus in a 58–year–old woman] Postawa B. **Przegl Epidemiol** 1988;42(3):299–300 (Eng. Abstr.) **(Pol)**

[Obstruction of strangulated intestine as a complication of autotransplantation of the spleen after its injury] Klęba T, et al. **Wiad Lek** 1988 Aug 15;41(16):1112–5 (Eng. Abstr.) **(Pol)**

[A case of rapid formation of calculi in the bile ducts of a patient after cholecystectomy] Milewski J. **Wiad Lek** 1988 Oct 15;41(20):1376–9 (Eng. Abstr.) **(Pol)**

[Bleeding from the upper segment of the digestive tract as a complication of external biliary drainage] Sowier J, et al. **Wiad Lek** 1988 Dec 15;41(24):1668–71 (Eng. Abstr.) **(Pol)**

[A special case of obstruction of a biliojejunal anastomosis: compression of the anastomotic loop by a pancreatic pseudocyst] Dragomirescu C, et al. **Rev Chir [Chir]** 1989 Mar–Apr;38(2):147–50 (Eng. Abstr.) **(Rum)**

[Jejunocutaneous fistula following the use of a polyester net for treating eventration] Duca S, et al. **Rev Chir [Chir]** 1988 Sep–Oct;37(5):387–91 (Eng. Abstr.) **(Rum)**

[Hemorrhagic accidents in palatal tonsil surgery] Roşca G, et al. **Rev Chir [Otorinolaringol]** 1989 Jan–Mar;34(1):33–8 (Eng. Abstr.) **(Rum)**

[The pathogenesis of myocardial infarct after aortocoronary shunting] Lebedeva RN, et al. **Anesteziol Reanimatol** 1988 Nov–Dec;(6):12–6 (Eng. Abstr.) **(Rus)**

[Changes in the pulmonary surfactant system after heart surgery with artificial circulation and hypothermia] Leĭnov VIa, et al. **Anesteziol Reanimatol** 1988 May–Jun;(3):17–9 (Eng. Abstr.) **(Rus)**

[Effect of hypercalcemia on the electrocardiogram in the early period after operations with artificial circulation] Levina GA, et al. **Anesteziol Reanimatol** 1988 Jul–Aug; (4):19–23 (Eng. Abstr.) **(Rus)**

[The hemostatic system during and after surgery in lung cancer patients and its role in the development of postoperative complications] Madzhuga AV. **Anesteziol Reanimatol** 1988 Sep–Oct;(5):69–71 (Eng. Abstr.) **(Rus)**

[Preoperative status of the function of external respiration and postoperative complications in patients with lung cancer] Shekhonina DA, et al. **Anesteziol Reanimatol** 1988 Jul–Aug;(4):54–6 (Eng. Abstr.) **(Rus)**

[Late thrombo–embolic complications after heart valve prosthesis] Chernov VA, et al. **Kardiologiia** 1988 Sep; 28(9):21–7 (Eng. Abstr.) **(Rus)**

[Factors affecting the immediate results of aortocoronary shunting] Martsinkiavichius AM, et al. **Kardiologiia** 1989 Feb;29(2):10–2 **(Rus)**

[Surgical treatment of congenital heart defects in infants up to 3 months of age] Sharykin AS, et al. **Kardiologiia** 1989 Mar;29(3):101–3 **(Rus)**

[Comparative results of the surgical treatment of echinococcosis in patients hospitalized after applying for medical services and in those identified by an active method] Akmatov BA. **Khirurgiia (Mosk)** 1989 Jun;(6):90–5 (Eng. Abstr.) **(Rus)**

[Retroperitoneal phlegmon of the iliac fossa] Forafonova LN, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):81–6 (Eng. Abstr.) **(Rus)**

[Evaluation of the postoperative condition of patients with chronic suppurative diseases of the lungs] Kol'tsun SS, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):108–12 **(Rus)**

[Hazards and complications of the surgical treatment of patients with extreme forms of obesity] Lebedev LV, et al. **Khirurgiia (Mosk)** 1988 Aug;(8):111–5 **(Rus)**

[Causes of the development of external intestinal fistulas and their treatment] Mamedov IM, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):80–4 (Eng. Abstr.) **(Rus)**

[Surgical treatment of cholelithiasis in patients with heart valve prostheses] Milonov OB, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):103–7 (Eng. Abstr.) **(Rus)**

[Results of the surgical treatment of primary chronic pancreatitis] Nesterenko IuA, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):79–83 (Eng. Abstr.) **(Rus)**

[The place of duodenogastric reflux in the genesis of diseases of the unoperated and operated stomach] Dimitrova V, et al. **Khirurgiia (Sofiia)** 1988;41(3):43–9 (35 ref.) **(Rus)**

[A case of forgotten foreign body in the abdominal cavity perforating the intestinal wall and entering the intestinal tract] Enchev K, et al. **Khirurgiia (Sofiia)** 1988;41(3):53–4 **(Rus)**

[Pleural complications in patients with focal lesions of the liver] Al'perovich BI, et al. **Klin Khir** 1988;(9):60 **(Rus)**

[Disorders of duodenal motility as a cause of unsatisfactory results in the surgical treatment of cholelithiasis] Dotsenko SA, et al. **Klin Khir** 1988;(9):5–7 (Eng. Abstr.) **(Rus)**

[A case of a severe course of complicated duodenal peptic ulcer] Kolibaba SS, et al. **Klin Khir** 1988;(8):64–5 **(Rus)**

[Rare complication of cholecystectomy] Marzhan NN, et al. **Klin Khir** 1988;(9):43–4 **(Rus)**

[A rare complication of gastric resection] Nartsissov TV. **Klin Khir** 1988;(8):56 **(Rus)**

[The development of myocardial failure after subtotal pericardectomy] Selivanenko VT, et al. **Klin Khir** 1988; (10):21–3 (Eng. Abstr.) **(Rus)**

[Profuse intraintestinal hemorrhage from the stump of the vermiform appendix] Takuev KS, et al. **Klin Khir** 1988; (6):70 **(Rus)**

[Errors in the diagnosis and treatment of pancreatic cysts] Nikhinson RA, et al. **Klin Med (Mosk)** 1989 May; 67(5):104–7 (Eng. Abstr.) **(Rus)**

[Status of the acid and pepsin–producing functions of the stomach in patients after abdominal surgery] Skriabin ON, et al. **Klin Med (Mosk)** 1989 May;67(5):80–4 (Eng. Abstr.) **(Rus)**

[Complications of laser microsurgery on the eye, their prevention and treatment. II. The posterior eye segment] Saprykin PI, et al. **Oftalmol Zh** 1988;(3):187–9 (27 ref.) **(Rus)**

[Pathology of respiration and blood circulation in patients with tuberculous spondylitis after surgical treatment] Ivanova TN. **Probl Tuberk** 1988;(7):32–6 (Eng. Abstr.) **(Rus)**

[Thromboses following surgery of "complex" forms of abdominal hernias in geriatric patients] Komilov SO, et al. **Sov Med** 1988;(8):80–3 **(Rus)**

[Prognosis of recurrent hemorrhage and the outcome of early surgery after rupture of an intracranial arterial aneurysm] Lebedev VV, et al. **Sov Med** 1989;(2):58–61 **(Rus)**

[Microcirculatory disorders of the arm in post–mastectomy edema] Mogilevskiĭ IL, et al. **Sov Med** 1989;(4):15–20 (Eng. Abstr.) **(Rus)**

[Immediate and late results of the treatment of acute intestinal obstruction] Sapozhkov AIu, et al. **Sov Med** 1989;(2):82–4 **(Rus)**

[Forensic medical evaluation in cases of foreign bodies left in the abdominal cavity] Sidorov IuS, et al. **Sud Med Ekspert** 1989 Jan–Mar;32(1):27–30 (Eng. Abstr.) **(Rus)**

[Infectious complications after kidney transplantation] Filiptsev PIa, et al. **Urol Nefrol (Mosk)** 1988 Sep–Oct; (5):65–70 (86 ref.) **(Rus)**

[Causes of varicocele recurrence after Ivanissevich's operation] Kim VV. **Urol Nefrol (Mosk)** 1989 May–Jun; (3):66–9 (Eng. Abstr.) **(Rus)**

[Intestinal fistula after appendectomy] Astaf'ev VI, et al. **Vestn Khir** 1988 Jul;141(7):122–5 **(Rus)**

[Remote results of the surgical treatment of dystopia of the kidneys in children] Bairov GA, et al. **Vestn Khir** 1988 Oct;141(10):77–80 (Eng. Abstr.) **(Rus)**

[Secondary stomach ulcers after organ–sparing operations in duodenal ulcer] Borisov VF, et al. **Vestn Khir** 1988 Jun; 140(6):25–8 (Eng. Abstr.) **(Rus)**

[Early complications of vagotomy] Chemodurov NT. **Vestn Khir** 1988 May;140(5):103–6 **(Rus)**

[Characteristics of stomach–draining operations in organ–sparing interventions in duodenal ulcer] Chernyshev VN, et al. **Vestn Khir** 1988 Sep;141(9):18–22 (Eng. Abstr.) **(Rus)**

[Profuse hemorrhage from stomach ulcer after correction of the blood flow through the celiac trunk in its stenosis and in Leriche's syndrome] Gadzhiev MM, et al. **Vestn Khir** 1988 Aug;141(8):55 **(Rus)**

[Postoperative cancer of the gallbladder] Gorin BIa. **Vestn Khir** 1988 May;140(5):63 **(Rus)**

[Remote results of the surgical treatment of chronic acalculous cholecystitis] Gribkov IuI, et al. **Vestn Khir** 1987 Dec;139(12):27–31 (Eng. Abstr.) **(Rus)**

[Significance of the initial immunologic status of patients in restorative operations on the large intestine] Ianovoĭ VV, et al. **Vestn Khir** 1988 Jul;141(7):107–9 **(Rus)**

[Sacciform dilatation of the long stump of the cystic duct containing calculi as a cause of postcholecystectomy syndrome] Kariuk AS, et al. **Vestn Khir** 1989 Jan;142(1):53 **(Rus)**

[Post–vagotomy syndromes and their surgical treatment] Khachiev LG, et al. **Vestn Khir** 1988 Aug;141(8):143–8 (51 ref.) **(Rus)**

[Operation in postvagotomy peptic ulcer of the gastro–duodeno–anastomosis] Khachiev LG, et al. **Vestn Khir** 1988 May;140(5):110–1 **(Rus)**

[Prevention of acute erosions and ulcers of the esophagus, stomach and duodenum after surgery] Khokholia VP, et al. **Vestn Khir** 1988 Dec;141(12):10–7 (Eng. Abstr.) **(Rus)**

[External biliary fistula of surgical origin] Klimov VN, et al. **Vestn Khir** 1988 Jul;141(7):126–8 **(Rus)**

[Contraindications regarding total prosthesis of the hip joint] Kulish NI, et al. **Vestn Khir** 1988 Oct;141(10):95–6 (Eng. Abstr.) **(Rus)**

[Acute gastroduodenal ulcers in the early postoperative period] Kurygin AA, et al. **Vestn Khir** 1989 Jan;142(1):11–3 (Eng. Abstr.) **(Rus)**

[Reflux esophagitis at remote periods after vagotomy for duodenal ulcer] Maĭstrenko NA. **Vestn Khir** 1988 Sep; 141(9):11–3 (Eng. Abstr.) **(Rus)**

[Causes of postoperative intra–abdominal complications in emergency surgery and ways of their prevention] Myshkin KI, et al. **Vestn Khir** 1989 Mar;142(3):108–11 **(Rus)**

[Sequelae of colectomy in coloproctectomy] Nikitin AM, et al. **Vestn Khir** 1988 May;140(5):135–9 (50 ref.) **(Rus)**

[Possibilities of predicting postoperative complications in patients with cholelithiasis] Ozerov VF, et al. **Vestn Khir** 1988 Dec;141(12):59–62 **(Rus)**

[The role of microcirculatory disorders in the development of postoperative complications in thoracic and abdominal injuries] Riabova SS, et al. **Vestn Khir** 1988 Oct; 141(10):60–4 (Eng. Abstr.) **(Rus)**

[The role of reinnervation of the stomach in the development of recurrent ulcers] Savinskiĭ GA, et al. **Vestn Khir** 1989 Mar;142(3):38–40 (Eng. Abstr.) **(Rus)**

[Liver abscess after surgery of hemorrhoids] Timerbulatov VM, et al. **Vestn Khir** 1988 Sep;141(9):135–6 **(Rus)**

[Endometriosis of the postoperative scar] Turdibaev MA, et al. **Vestn Khir** 1988 Aug;141(8):54 **(Rus)**

[Causes, prevention and treatment of postoperative hypothyroidism] Volokh IuA, et al. **Vestn Khir** 1988 Aug; 141(8):134–6 (Eng. Abstr.) **(Rus)**

[Healing of the anastomoses in restorative–reconstructive surgery of the large intestine] Vorob'ev GI, et al. **Vestn Khir** 1989 Jan;142(1):77–81 (Eng. Abstr.) **(Rus)**

[Cerebellar abscess in the late period after an extensive cavitary operation on the ear] Nesterov DV, et al. **Vestn Otorinolaringol** 1988 May–Jun;(3):69–70 **(Rus)**

[The role of an immunologic mechanism in the occurrence of postoperative metastases in mice] Iunker VM, et al. **Vopr Onkol** 1988;34(12):1471–7 (Eng. Abstr.) **(Rus)**

[Acute cholecystitis in cancer patients in the postoperative period] Lebedev AM, et al. **Vopr Onkol** 1989;35(6):734–5 **(Rus)**

[Postoperative anus stricture and leukoplakin lesions] del Río M, et al. **Acta Gastroenterol Latinoam** 1987;17(4):337–42 (Eng. Abstr.) **(Spa)**

[Post–sectional antral peptic ulcer and antrofundic re–anastomosis in rats (manifestation of a probable antrofundic neuroendocrine center)] Tiscornia OM, et al **Acta Gastroenterol Latinoam** 1988;18(1):3–21 (Eng. Abstr.) **(Spa)**

[Cystectomy and ileal diversion: mortality and complications] Chéchile G, et al. **Actas Urol Esp** 1988 Nov–Dec; 12(6):535–9 (Eng. Abstr.) **(Spa)**

[Causes of ureteral obstruction immediately after surgery for retroperitoneal fibrosis] Fernández Fernández A, et al. **Actas Urol Esp** 1988 Nov–Dec;12(6):529–34 (Eng. Abstr.) **(Spa)**

[Urologic complications in 280 renal transplants] Franco Esteve A, et al. **Actas Urol Esp** 1988 May–Jun;12(3):217–22 (Eng. Abstr.) **(Spa)**

[Calcification of the intrarenal excretory tract in a transplanted kidney] Gómez Gómez GA, et al. **Actas Urol Esp** 1989 Mar–Apr;13(2):122–4 (Eng. Abstr.) **(Spa)**

[Should systematic correction of vesicoureteral reflux be performed before renal transplantation?] Morales JM, et al. **Actas Urol Esp** 1988 May–Jun;12(3):259–62 (Eng. Abstr.) **(Spa)**

[Upper urinary tract fistulas in renal transplantation] Rodríguez Luna JM, et al. **Actas Urol Esp** 1989 May–Jun; 13(3):193–4 (Eng. Abstr.) **(Spa)**

[Conduction disorders after cardiac surgery with extracorporeal circulation] Silva Orrego P, et al. **Arch Inst Cardiol Mex** 1988 Nov–Dec;58(6):569–74 (Eng. Abstr.) **(Spa)**

[Post–transplant oligoanuria lasting for 93 days caused by cyclosporin (letter)] Anaya F, et al. **Rev Clin Esp** 1988 Dec;183(9):505–6 **(Spa)**

[The Kehr T tube and biliary peritonitis caused by its removal. Prevention] Díez Cascón A, et al. **Rev Esp Enferm Apar Dig** 1988 Oct;74(4 Pt 2):455–9 (Eng. Abstr.) **(Spa)**

[Moderate deficiency of Factor XII associated with postoperative deep venous thrombosis] Cornudella R, et al. **Sangre (Barc)** 1989 Apr;34(2):144–6 (Eng. Abstr.) **(Spa)**

METABOLISM

The alkaline shift in gastric pH after cholecystectomy. Brown TH, et al. **Am J Surg** 1989 Jan;157(1):58–65

Leucine kinetics in surgical patients, I: A study of the effect of surgical 'stress'. Harrison RA, et al. **Br J Surg** 1989 May; 76(5):505–8

Energy expenditure in postoperative multiple organ failure with acute renal failure. Soop M, et al. **Clin Nephrol** 1989 Mar;31(3):139–45

Wound amylase estimation and the prediction of pharyngocutaneous fistulae. Fielder CP, et al. **Clin Otolaryngol** 1989 Apr;14(2):101–5

Tissue oxygen debt as a determinant of lethal and nonlethal postoperative organ failure. Shoemaker WC, et al. **Crit Care Med** 1988 Nov;16(11):1117–20

[Studies of solutions with various branched–chain amino acid contents on protein metabolism in the postoperative period. 1. A 15N tracer kinetic animal model for evaluating the effect of parenteral amino acid administration on nitrogen metabolism] Matkowitz R, et al. **Infusionstherapie** 1989 Jun; 16(3):125–31 (Eng. Abstr.) **(Ger)**

[Postoperative small intestine absorption—principles for enteral nutrition] Weiner R, et al. **Infusionstherapie** 1988 Oct;15(5):208–16 (Eng. Abstr.) **(Ger)**

[Postoperative energy requirements following large abdominal surgery interventions: comparison of measuring by indirect calorimetry with estimated values] Brandmair W, et al. **Langenbecks Arch Chir** 1989;374(3):138–45 (Eng. Abstr.) **(Ger)**

[A case of postoperative craniopharyngioma with hypernatremia. The mechanisms of ADH and atrial natriuretic peptide (ANP) releases] Ota M, et al.

Nippon Naika Gakkai Zasshi 1988 Aug;77(8):1262–7 (Jpn)

MICROBIOLOGY

The upper gastrointestinal microflora in relation to gastric diseases and gastric surgery. Sjöstedt S. **Acta Chir Scand Suppl** 1989;551:1–57

Branhamella catarrhalis meningitis following otolaryngologic surgery. Naqvi SH, et al. **APMIS Suppl** 1988;3:74–5

Chlamydial salpingitis and perihepatitis after tubal occlusion. Heinonen PK, et al. **Arch Gynecol Obstet** 1989; 244(3):179–81

Hemophilus parainfluenzae complicating total knee arthroplasty. A case report. Pravda J, et al. **Clin Orthop** 1989 Jun;(243):169–71

Complications associated with genital colonization in pregnancies with and without cerclage. Kessler I, et al. **Int J Gynaecol Obstet** 1988 Dec;27(3):359–63

Retrospective study of Campylobacter-like organisms in patients undergoing partial gastrectomy. Loffeld RJ, et al. **J Clin Pathol** 1988 Dec;41(12):1313–5

Antibiotic resistance of coagulase-negative staphylococci in an orthopaedic department. Sanzén L, et al. **J Hosp Infect** 1988 Aug;12(2):103–8

Early diagnosis of cytomegalovirus infection in renal transplant and dialysis patients by DNA–DNA hybridisation assay. Agha SA, et al. **J Med Virol** 1989 Mar; 27(3):252–7

Papillomavirus infection and skin cancer in renal allograft recipients [letter] Rüdlinger R, et al. **Lancet** 1989 May 20; 1(8647):1132–3

Cytomegalovirus the predominant cause of pneumonia in renal transplant patients. A two-year study of pneumonia in renal transplant recipients with evaluation of fiberoptic bronchoscopy. Heurlin N, et al. **Scand J Infect Dis** 1989; 21(3):245–53

[Pseudo- "toxic lens" syndrome over the course of 4 years caused by staphylococcus epidermidis endophthalmitis] Bialasiewicz AA, et al. **Klin Monatsbl Augenheilkd** 1988 Aug;193(2):142–5 (Eng. Abstr.) (Ger)

[Urinary tract infection following kidney allotransplantation: differentiation between bacterial colonization and bacterial infection] Matter C, et al. **Klin Wochenschr** 1989 Jun 15; 67(12):627–31 (Eng. Abstr.) (Ger)

[Peritoneovenous shunt complicating a glomerulonephritis associated with bacteremia. Description of a clinical case] Rocca F, et al. **Recenti Prog Med** 1989 Apr;80(4):186–7 (Eng. Abstr.) (Ita)

[Cytomegalovirus infection in renal transplant recipients] Shindo K, et al. **Nippon Hinyokika Gakkai Zasshi** 1988 Jul;79(7):1242–7 (Eng. Abstr.) (Jpn)

[Development of a data bank for control of antibiotic resistant caus tive agents of purulent-inflammatory diseases and complications] Bekbergenov BM, et al. **Antibiot Khimioter** 1988 Oct;33(10):782–5 (Eng. Abstr.) (Rus)

MORTALITY

Morbidity and mortality after early aneurysm surgery—a prospective study with nimodipine prevention. Gilsbach JM, et al. **Acta Neurochir (Wien)** 1989;96(1–2):1–7

Risk factors for death and related events after cardiac transplantation. Kirklin JK, et al. **Adv Cardiol** 1988; 36:278–92

Factors affecting survival in allogeneic bone marrow transplantation. Vogler WR, et al. **Am J Med Sci** 1989 May;297(5):300–8

Complications of abdominal operations for malignant disease. Meguid MM, et al. **Am J Surg** 1988 Nov;156(5):341–5

Estimating mortality risk in preoperative patients using immunologic, nutritional, and acute-phase response variables. Christou NV, et al. **Ann Surg** 1989 Jul; 210(1):69–77

Ten years' experience with the St. Jude Medical valve prosthesis. Arom KV, et al. **Ann Thorac Surg** 1989 Jun; 47(6):831–7

Transposition of the great arteries: a comparison of results of the mustard procedure versus the arterial switch. Backer CL, et al. **Ann Thorac Surg** 1989 Jul;48(1):10–4

The arterial switch procedure for the neonate: coming of age [editorial] Laks H. **Ann Thorac Surg** 1989 Jul;48(1):3–4

Effect of prior cardiac surgery on survival after heart transplantation. Lammermeier DE, et al. **Ann Thorac Surg** 1989 Aug;48(2):168–72

Evaluation of factors influencing survival in ruptured aortic aneurysms. Vohra R, et al. **Ann Vasc Surg** 1988 Oct; 2(4):340–4

Amniotic fluid embolism—2 case reports and a review of maternal deaths from this cause in Australia. Ratten GJ. **Aust N Z J Obstet Gynaecol** 1988 Feb;28(1):33–5 (13 ref.)

Cardiac predictors of death after non-cardiac surgery evaluated by intention to treat [see comments] Dirksen A, et al. **BMJ** 1988 Oct 22;297(6655):1011–3. **Comment in:** BMJ 1989 Jan 21;298(6667):184–5

Cardiac predictors of death after non-cardiac surgery [letter; comment] Herrema I, et al. **BMJ** 1989 Jan 21; 298(6667):184–5. **Comment on:** BMJ 1988 Oct 22;297(6655):1011–3

Wide variations in surgical mortality [editorial] Mortensen N. **BMJ** 1989 Feb 11;298(6670):344–5 (15 ref.)

Preoperative left ventricular wall stress, ejection fraction, and aortic valve gradient as prognostic indicators in aortic valve stenosis. Smucker ML, et al. **Cathet Cardiovasc Diagn** 1989 Jul;17(3):133–43

Hydrocephalus in premature infants. Characteristics and therapeutic problems. Oi S, et al. **Childs Nerv Syst** 1989 Apr;5(2):76–82

Long-term follow-up after surgical treatment of cerebellar astrocytomas in 100 children. Undjian S, et al. **Childs Nerv Syst** 1989 Apr;5(2):99–101

Prognostic value of gastric intramural pH in surgical intensive care patients. Gys T, et al. **Crit Care Med** 1988 Dec;16(12):1222–4

Morbidity and mortality in acute lower limb ischaemia: a 5-year review. Clason AE, et al. **Eur J Vasc Surg** 1989 Aug;3(4):339–43

Hospital quality in California [letter] Steinbrook R. **Health Aff (Millwood)** 1988 Summer;7(3):235–6

Analysis of survival in patients with pulmonary atresia and intact ventricular septum treated surgically. Lightfoot NE, et al. **Int J Cardiol** 1989 Aug;24(2):159–64

Aortocoronary bypass surgery in septuagenarians and octogenarians. Tsai TP, et al. **J Cardiovasc Surg (Torino)** 1989 May-Jun;30(3):364–8

Heart transplantation in patients over age fifty-five years. Miller LW, et al. **J Heart Transplant** 1988 Jul-Aug; 7(4):254–7

Heart transplantation in elderly patients. Olivari MT, et al. **J Heart Transplant** 1988 Jul-Aug;7(4):258–64

Long term survival with early childhood intracerebral tumours. Hankey GJ, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun;52(6):778–81

Personality and survival time after bone marrow transplantation. Neuser J. **J Psychosom Res** 1988; 32(4–5):451–5

Factors contributing to the perioperative death rate [editorial] **J R Army Med Corps** 1989 Jun;135(2):41–2

Fatal and major complications secondary to nasal and sinus surgery. Maniglia AJ. **Laryngoscope** 1989 Mar;99(3):276–83

Long term clinical assessment of heart valve substitutes. Black MM, et al. **Life Support Syst** 1983;1 Suppl 1:301–4

Conservative or substitutive treatment in tricuspid valve disease? Marinelli G, et al. **Life Support Syst** 1983;1 Suppl 1:320–3

Anaesthesia—the report on peri-operative deaths. Lunn JN. **Med Leg J** 1988;56 (Pt 4):204–18

Factors contributing to mortality in lung transplant recipients: an autopsy study. Cagle PT, et al. **Mod Pathol** 1989 Mar;2(2):85–9

Anatomic correction for transposition of the great arteries: first follow-up (38 patients). Klautz RJ, et al. **Pediatr Cardiol** 1989 Winter;10(1):1–9

Prognostic significance of nutritional status in cancer surgery. Schlag P, et al. **Recent Results Cancer Res** 1988;108:154–9

Reader cites further programs in transplantation [letter; comment] Gonwa TA, et al. **Tex Med** 1989 May;85(5):8–9 . **Comment on:** Tex Med 1988 Dec;84(12):68–72

Long-term patient and renal allograft survival in HBsAg infection: a recent update. Sengar DP, et al. **Transplant Proc** 1989 Apr;21(2):3358–9

Duodenal carcinoma—a curable disease. Jacobson G, et al. **Ups J Med Sci** 1988;93(2):173–8

Cardiac transplantation in 1988 [editorial] Hess ML. **Va Med** 1988 Aug;115(8):393–4

Early results of a new heart transplant program in Virginia. Lefrak EA. **Va Med** 1988 Aug;115(8):385–8

Cardiac surgery at Yonsei University Medical Center—a 30-year review. Hong PW, et al. **Yonsei Med J** 1988; 29(4):301–15

The frequency distribution of various pelviscopic (laparoscopic) operations, including complications rates—statistics of the Federal Republic of Germany in the years 1983–1985. Riedel HH, et al. **Zentralbl Gynakol** 1989;111(2):78–91

[Risk factors in fatal pulmonary embolism in patients who died in the surgical department] Hoffmann P, et al. **Rozhl Chir** 1988 Jul;67(7):448–54 (Eng. Abstr.) (Cze)

[Results of surgery of tumors of the large intestine in the aged] Mašek J, et al. **Rozhl Chir** 1988 Jul;67(7):488–92 (Eng. Abstr.) (Cze)

[Liver diseases in patients with renal transplant] Buffet C. **Ann Gastroenterol Hepatol (Paris)** 1989 May;25(3):113–6 (31 ref.) (Fre)

[Esophageal perforation: prognostic factors] Cuttat JF, et al. **Helv Chir Acta** 1989 Jan;55(5):689–93 (Eng. Abstr.) (Fre)

[The effect of primary nailing on the immediate fate of patients with femoral neck fractures] Fekete G, et al. **Aktuel Traumatol** 1988 Oct;18(5):192–5 (Eng. Abstr.) (Ger)

[Effect of tumor size and lymph node status on the prognosis of pancreatic cancer] Bittner R, et al. **Chirurg** 1989 Apr; 60(4):240–5 (Eng. Abstr.) (Ger)

[Comparison of the results of liver transplantation in children and adults] Bumgardner GL, et al. **Chirurg** 1988 Aug; 59(8):526–35 (Ger)

[Primary extranodal non-Hodgkin lymphoma of the stomach. Value of surgery within the scope of a multimodality treatment concept] Roder JD, et al. **Chirurg** 1989 Mar; 60(3):157–62 (Eng. Abstr.) (Ger)

[Choice of surgical procedure in esophageal cancer] Röher HD, et al. **Chirurg** 1988 Sep;59(9):582–6 (Eng. Abstr.) (Ger)

[Carotid endarterectomy. Risks and benefits of treatment] van Berge Henegouwen DP, et al. **Chirurg** 1989 Feb; 60(2):104–9 (Eng. Abstr.) (Ger)

[Effect of blood transfusion on tumor recurrence and rate of survival in colorectal cancer] Wirsching RP, et al. **Chirurg** 1988 Oct;59(10):647–53 (Eng. Abstr.) (Ger)

[The current risk of gallbladder and bile duct surgery] Mättig H, et al. **Gastroenterol J** 1989;49(1):3–7 (Eng. Abstr.) (Ger)

[Rate of local recurrence and survival in patients with breast reconstruction following mastectomy] Kaufmann M, et al. **Geburtshilfe Frauenheilkd** 1988 Jul;48(7):524–7 (Eng. Abstr.) (Ger)

[4 decades of surgery of cervix cancer] Ober KG. **Geburtshilfe Frauenheilkd** 1989 May;49(5):432–6 (33 ref.) (Eng. Abstr.) (Ger)

[Distribution of the incidence of various pelviscopic (laparoscopic) surgical procedures and their complication rates. A statistical analysis in West Germany 1983 up to and including 1985] Riedel HH, et al. **Geburtshilfe Frauenheilkd** 1988 Nov;48(11):791–9 (Eng. Abstr.) (Ger)

[Acute mesenterial infarcts—results of surgical therapy] Käch K, et al. **Helv Chir Acta** 1989 Jun;56(1–2):23–7 (Eng. Abstr.) (Ger)

[Reoperations in patients with coronary disease. Hospital mortality and principle perioperative risk factors] Schmuziger M, et al. **Helv Chir Acta** 1988 Nov;55(4):523–7 (Eng. Abstr.) (Ger)

[Myocardial revascularization in the patient over 70 years of age. Surgical risks and results] Stumpe F, et al. **Helv Chir Acta** 1988 Nov;55(4):515–21 (Eng. Abstr.) (Ger)

[Prospective assessment study of 586 consecutive continuous, single layer, extra-mucosal colon anastomoses] Vogelbach P, et al. **Helv Chir Acta** 1989 Jan;55(5):655–8 (Eng. Abstr.) (Ger)

[Treatment of neuroblastoma. Results of therapy at the Zurich University Pediatric Clinic, 1967–1987] Belvedere M, et al. **Helv Paediatr Acta** 1989 Jun;43(5–6):423–31 (Eng. Abstr.) (Ger)

[Results following total laryngectomy at the Budapest Clinic of Head-Neck surgery] Trizna Z, et al. **HNO** 1989 Jan; 37(1):11–3 (Eng. Abstr.) (Ger)

[Nutritional status in esophageal cancer: assessment and significance for preoperative risk assessment] Brandmair W, et al. **Langenbecks Arch Chir** 1989;374(1):25–31 (Eng. Abstr.) (Ger)

[Accomplishments of tumor surgery in tumors of bone] Burri C, et al. **Langenbecks Arch Chir** 1988;Suppl 2:297–302 (9 ref.) (Eng. Abstr.) (Ger)

[The effect of preoperative parenteral nutrition on the perioperative course in patients with esophageal cancer] Ebener C, et al. **Langenbecks Arch Chir** 1989;374(4):208–13 (Eng. Abstr.) (Ger)

[Accomplishments of tumor surgery in tumors of the lymphatic system] Funovics J, et al. **Langenbecks Arch Chir** 1988;Suppl 2:315–9 (Eng. Abstr.) (Ger)

[Accomplishments of tumor surgery in tumors of the stomach] Häring R, et al. **Langenbecks Arch Chir** 1988; Suppl 2:275–81 (18 ref.) (Eng. Abstr.) (Ger)

[Accomplishments of tumor surgery in pediatric nephroblastoma] Helmig FJ, et al. **Langenbecks Arch Chir** 1988;Suppl 2:515–8 (6 ref.) (Eng. Abstr.) (Ger)

[Accomplishments of tumor surgery in tumors of the large intestine] Herfarth C. **Langenbecks Arch Chir** 1988;Suppl 2:289–95 (Eng. Abstr.) (Ger)

[Effect of the transfusion of blood and hemoderivatives on the prognosis of colorectal cancer] Hermanek P Jr, et al. **Langenbecks Arch Chir** 1989;374(2):118–24 (Eng. Abstr.) (Ger)

[Accomplishments of tumor surgery in bone sarcoma in childhood] Joppich I, et al. **Langenbecks Arch Chir** 1988; Suppl 2:519–23 (16 ref.) (Eng. Abstr.) (Ger)

[Accomplishments of tumor surgery in tumors of the skin] Kraas E, et al. **Langenbecks Arch Chir** 1988;Suppl 2:309–13 (Eng. Abstr.) (Ger)

[Accomplishments of tumor surgery in neuroblastoma in childhood] Mildenberger H. **Langenbecks Arch Chir** 1988; Suppl 2:511–4 (7 ref.) (Eng. Abstr.) (Ger)

[Achievements of tumor surgery in tumors of the liver and bile ducts] Pichlmayr R. **Langenbecks Arch Chir** 1988;Suppl 2:127–32 (4 ref.) (Eng. Abstr.) (Ger)

[Achievements of tumor surgery in tumors of the breast] Schafmayer A, et al. **Langenbecks Arch Chir** 1988;Suppl 2:103–8 (7 ref.) (Eng. Abstr.) (Ger)

[Accomplishments of tumor surgery in tumors of soft tissues] Schlag P. **Langenbecks Arch Chir** 1988;Suppl 2:303–8 (22 ref.) (Eng. Abstr.) (Ger)

[Accomplishments of tumor surgery in soft tissue sarcoma in childhood] Schweizer P, et al. **Langenbecks Arch Chir** 1988;Suppl 2:525–9 (Eng. Abstr.) (Ger)

[Achievements of tumor surgery in tumors of the esophagus] Siewert JR. **Langenbecks Arch Chir** 1988;Suppl 2:119–26 (21 ref.) (Eng. Abstr.) (Ger)

[Accomplishments of tumor surgery in tumors of the small intestine] Tonak J, et al. **Langenbecks Arch Chir** 1988;Suppl 2:283–7 (Eng. Abstr.) (Ger)

[Surgical therapy of bronchial cancer] Vogt-Moykopf I, et

al. **Langenbecks Arch Chir** 1988;Suppl 2:109–17 (Eng. Abstr.) **(Ger)**

[Gallstone ileus—is it possible to reduce the still high mortality rate? An analysis of personal cases and review of the literature] Kozianka J, et al. **Leber Magen Darm** 1988 Dec;18(6):308–19 (53 ref.) (Eng. Abstr.) **(Ger)**

[Asymptomatic carotid stenosis: is surgical prevention of infarct still justified?] Diener HC, et al. **Med Klin** 1989 Mar 15;84(3):128–32 (Eng. Abstr.) **(Ger)**

[Surgery of asymptomatic carotid artery stenoses?] Eckel L. **Med Klin** 1989 Mar 15;84(3):165, 172 **(Ger)**

[Survival rate following operation for bronchial cancer—relation to tumor stage and histology] Eckersberger F, et al. **Prax Klin Pneumol** 1988 Jul; 42(7):583–4 (Eng. Abstr.) **(Ger)**

[Long-term survival following pneumonectomy, chemotherapy and radiotherapy in central small cell bronchial cancer] Lexer G, et al. **Prax Klin Pneumol** 1988 Jul;42(7):588–9 (Eng. Abstr.) **(Ger)**

[The value of mediastinal lymphadenectomy in centrally located non-oat cell carcinoma] Weitensfelder W, et al. **Prax Klin Pneumol** 1988 Jul;42(7):590–1 (Eng. Abstr.) **(Ger)**

[The significance of thoracic trauma as single or concomitant injuries in polytrauma] Roscheck H, et al. **Unfallchirurg** 1988 Sep;91(9):422–7 (Eng. Abstr.) **(Ger)**

[Total endoprosthesis in femoral neck fracture in the elderly. An analysis of 284 cases] Siebler G, et al. **Unfallchirurg** 1988 Jul;91(7):291–8 (Eng. Abstr.) **(Ger)**

[Effect of aggregation inhibitors on patient survival following thrombendarterectomy of the internal carotid artery] Pratschner T, et al. **Vasa Suppl** 1988;26:165–7 **(Ger)**

[Results and disease course following kidney transplantation] Fassbinder W. **Versicherungsmedizin** 1988 Sep 1; 40(5):129–31 (Eng. Abstr.) **(Ger)**

[Surgical stabilization of pathologic fractures. Effect on longevity and quality of life] Friedl W, et al. **Versicherungsmedizin** 1988 Jul 1;40(4):104–7 (Eng. Abstr.) **(Ger)**

[Incidence of malignant neoplasms and mortality risk following kidney transplantation] Grundmann R. **Versicherungsmedizin** 1988 Sep 1;40(5):119–24 (Eng. Abstr.) **(Ger)**

[Measurable prognosis following kidney transplantation] Hillebrand G. **Versicherungsmedizin** 1988 Sep 1;40(5):124–8 (37 ref.) (Eng. Abstr.) **(Ger)**

[Retrospective analysis of results and complications following kidney transplantation in diabetic nephropathy—a challenge for the future] Watschinger B, et al. **Wien Klin Wochenschr** 1988 Sep 9;100(17):581–4 (Eng. Abstr.) **(Ger)**

[Heart transplantation in childhood] Schüler S, et al. **Z Kardiol** 1989 Apr;78(4):220–7 (Eng. Abstr.) **(Ger)**

[Partial kidney resection in kidney tumors—indications and results] Ecke M, et al. **Z Urol Nephrol** 1989 Apr;82(4):173–9 (Eng. Abstr.) **(Ger)**

[The effect of early urologic complications on the prognosis of kidney transplantation] Konert J, et al. **Z Urol Nephrol** 1989 Jul;82(7):355–60 (Eng. Abstr.) **(Ger)**

[Perforation of gastroduodenal ulcer. Risk factors and choice of procedure] de Heer K, et al. **Zentralbl Chir** 1989; 114(11):714–21 (Eng. Abstr.) **(Ger)**

[Treatment of thoracic trauma at an emergency hospital] Gastinger I, et al. **Zentralbl Chir** 1989;114(5):301–5 (Eng. Abstr.) **(Ger)**

[Results of early operation of acute cholecystitis] Härtisch A, et al. **Zentralbl Chir** 1988;113(15):952–8 (Eng. Abstr.) **(Ger)**

[Results of geriatric surgery in primary care] Jacob H. **Zentralbl Chir** 1988;113(21):1406–11 (Eng. Abstr.) **(Ger)**

[Surgical risk in the elderly] Krenzien J, et al. **Zentralbl Chir** 1988;113(23):1530–9 (Eng. Abstr.) **(Ger)**

[Experiences and results in primary management of patients with traumatic paraplegia] Pätzug P. **Zentralbl Chir** 1989; 114(8):514–20 (Eng. Abstr.) **(Ger)**

[Data on surgical indications in necrotizing pancreatitis—results of a validation study] Roscher R, et al. **Zentralbl Chir** 1989;114(2):77–83 (Eng. Abstr.) **(Ger)**

[Classification and evaluation of oncologic prognosis and risk factors] Seifart W. **Zentralbl Chir** 1989;114(10):629–38 (Eng. Abstr.) **(Ger)**

[Treatment of invasive vulvar cancer (results of therapy 1970–1981)] Lahousen M, et al. **Zentralbl Gynakol** 1988; 110(16):1001–5 (Eng. Abstr.) **(Ger)**

[Mortality after cesarean section] Starostina TA, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):22–4 **(Rus)**

[Postoperative mortality in incarcerated abdominal hernia] Ukhanov AP. **Khirurgiia (Mosk)** 1988 Dec;(12):77–8 (Eng. Abstr.) **(Rus)**

[Analysis of the causes of postoperative mortality in tumor-related large-intestinal oostruction] Dotsenko AP, et al. **Klin Khir** 1989;(4):19–22 (Eng. Abstr.) **(Rus)**

[Causes of insufficient reduction of mortality rate after operations for incarcerated external ventral hernia] Napalkov PN. **Vestn Khir** 1988 Sep;141(9):111–6 **(Rus)**

[Postoperative mortality in acute cholecystitis and various ways of its reduction] Ukhanov AP. **Vestn Khir** 1988 Jul; 141(7):42–5 (Eng. Abstr.) **(Rus)**

[Risk factors in perforated gastroduodenal ulcer] Zaĭtsev VT, et al. **Vestn Khir** 1988 Oct;141(10):124–7 **(Rus)**

[Intestinal perforation caused by typhoid fever in children] Escarcega-Fujigaki P, et al. **Bol Med Hosp Infant Mex** 1988 Aug;45(8):523–8 (41 ref.) (Eng. Abstr.) **(Spa)**

NURSING

Management of multiple enterocutaneous fistulas. Lange MP, et al. **Heart Lung** 1989 Jul;18(4):386–90 (13 ref.)

[Etiology of hypertension after heart surgery and its nursing care. Analysis of 26 cases] Yang J. **Chung Hua Hu Li Tsa Chih** 1988 May;23(5):271–3 **(Chi)**

[Postoperative care of mycotic endophthalmitis] Zhang HM. **Chung Hua Hu Li Tsa Chih** 1989 Apr;24(4):205–6 **(Chi)**

[Prevention, treatment and nursing care of atelectasis after cardiac surgery in children (report of 15 cases)] Zhang YQ. **Chung Hua Hu Li Tsa Chih** 1988 Aug;23(8):467–8 **(Chi)**

PATHOLOGY

The management of retained testis based on our investigations. Gervain M, et al. **Acta Chir Hung** 1988; 29(2):117–29

The risk of ischaemic brain damage during the use of self-retaining brain retractors. Rosengrn J. **Acta Neurol Scand Suppl** 1989;120:1–30

Postoperative starch granuloma revealed as femoral herniation. A case report. Ohtsuki Y, et al. **Acta Pathol Jpn** 1988 Sep;38(9):1235–40

Gadolinium-DTPA-enhanced MR imaging of the postoperative lumbar spine: time course and mechanism of enhancement. Ross JS, et al. **AJR** 1989 Apr; 152(4):825–34

Porokeratosis of mibelli in transplant recipients. Komorowski RA, et al. **Am J Clin Pathol** 1989 Jan;91(1):71–4

The clinical spectrum, pathology, and clonal analysis of Epstein-Barr virus-associated lymphoproliferative disorders in heart-lung transplant recipients. Randhawa PS, et al. **Am J Clin Pathol** 1989 Aug;92(2):177–85

Spontaneous uterine rupture during pregnancy after treatment of Asherman's syndrome. Deaton JL, et al. **Am J Obstet Gynecol** 1989 May;160(5 Pt 1):1053–4

The pathology of posttransplant lymphoproliferative disorders occurring in the setting of cyclosporine A-prednisone immunosuppression. Nalesnik MA, et al. **Am J Pathol** 1988 Oct;133(1):173–92

Histological changes in the gastric stump mucosa and late clinical results after Billroth I, Billroth II and Roux-en-Y operations for peptic ulcer disease. Ovaska JT, et al. **Ann Chir Gynaecol** 1988;77(1):1–5

Posterior synechiae after laser iridectomy. Lederer CM Jr, et al. **Ann Ophthalmol** 1989 Feb;21(2):61–4

Necrotizing sialometaplasia masquerading as residual cancer of the lip. Granick MS, et al. **Ann Plast Surg** 1988 Aug; 21(2):152–4

Fibrous capsules around static and dynamic implants [letter] Zimman OH, et al. **Ann Plast Surg** 1988 Sep;21(3):292–3

Deterioration of in-situ vein bypasses: anatomic study of 11 cases. Sassoust G, et al. **Ann Vasc Surg** 1988 Oct;2(4):345–8

T-lymphocyte subsets in the lesional skin of allogeneic and autologous bone marrow transplant patients. Paller AS, et al. **Arch Dermatol** 1988 Dec;124(12):1795–801

The management of the patient with abnormal vaginal cytology following hysterectomy. Ireland D, et al. **Br J Obstet Gynaecol** 1988 Oct;95(10):973–5

Epithelial downgrowth: a 30-year clinicopathological review. Weiner MJ, et al. **Br J Ophthalmol** 1989 Jan; 73(1):6–11

Elevation of serum interleukin 6 prior to acute phase proteins on the inflammation by surgical operation. Nishimoto N, et al. **Clin Immunol Immunopathol** 1989 Mar;50(3):399–401

Coronary sinus thrombosis in patients after heart transplantation. Urbanová D. **Cor Vasa** 1989;31(3):231–7

Ligneous conjunctivitis after pingueculae removal in an adult. Girard LJ, et al. **Cornea** 1989;8(1):7–14

Intracerebral haemorrhage after carotid endarterectomy. Schroeder T, et al. **Eur J Vasc Surg** 1987 Feb;1(1):51–60

The post-operative maxillary cyst. Experience with 23 cases. Basu MK, et al. **Int J Oral Maxillofac Surg** 1988 Oct; 17(5):282–4 (18 ref.)

Experimental study of morphological changes after gastroplasty. Kuwano H, et al. **Int Surg** 1988 Oct–Dec; 73(4):250–3

Use of histological examination to assess ultrastructure of liver in patients with long standing jejuno-ileal bypass for morbid obesity. Boon AP, et al. **J Clin Pathol** 1988 Dec; 41(12):1281–7

Massive haemorrhagic necrosis of the liver after liver transplantation. Hübscher SG, et al. **J Clin Pathol** 1989 Apr;42(4):360–70

Lack of association between cytomegalovirus infection of heart and rejection-like inflammation. Stovin PG, et al. **J Clin Pathol** 1989 Jan;42(1):81–3

Chronic rejection in human heart transplantation. Chomette G, et al. **J Heart Transplant** 1988 Jul-Aug;7(4):292–7

Myocardial calcification after orthotopic heart transplantation [see comments] Cohnert TR, et al. **J Heart Transplant** 1988 Jul–Aug;7(4):304–8. **Comment in:** J Heart Transplant 1989 May–Jun;8(3):268

What happens in the leucotomised brain? A postmortem morphological study of brains from schizophrenic patients. Pakkenberg B. **J Neurol Neurosurg Psychiatry** 1989 Feb; 52(2):156–61

Peripheral neuropathy complicating pancreatitis [letter] Vallat JM, et al. **J Neurol Neurosurg Psychiatry** 1989 Jun; 52(6):810

Experience with endomyocardial biopsy in 23 patients with heart transplants. Zuhdi N, et al. **J Okla State Med Assoc** 1989 Mar;82(3):109–11

Regional alterations in long bone 85Sr clearance produced by internal fixation devices. Part II. Histomorphometry. Simmons DJ, et al. **J Orthop Trauma** 1988;2(3):245–9

Granulation at the porta hepatis following hepatic portoenterostomy for biliary atresia: the healing of experimental hepatoenterostomy. Takemoto H, et al. **J Pediatr Surg** 1989 Mar;24(3):271–5

Multiple nodular foci in the liver associated with chronic hepatic porphyria after previous treatment of breast cancer. Lelbach WK, et al. **Klin Wochenschr** 1989 Jun 1; 67(11):592–7

Potential various appearances of hyperacute rejection in human liver transplantation. Gubernatis G, et al. **Langenbecks Arch Chir** 1989;374(4):240–4

Endotheliitis in hepatic allografts. Ludwig J, et al. **Mayo Clin Proc** 1989 May;64(5):545–54

Normal perfusion pressure breakthrough complicating surgery for the vein of Galen malformation: report of three cases. Morgan MK, et al. **Neurosurgery** 1989 Mar; 24(3):406–10

Cesarean scar endometriosis: a review. Wolf GC, et al. **Obstet Gynecol Surv** 1989 Feb;44(2):89–95

Focal scleral thinning after transscleral Nd:YAG cyclophotocoagulation. Fiore PM, et al. **Ophthalmic Surg** 1989 Mar;20(3):215–6

Massive pseudophakic pigment dispersion associated with an iris nevus. Kremer I, et al. **Ophthalmic Surg** 1989 Mar; 20(3):182–5

Postoperative erythrodermia (POED), a type of graft-versus-host reaction (GVHR)? Mori S, et al. **Pathol Res Pract** 1988 Dec;184(1):53–9

Cross-sectional echocardiographic measurement of right atrial and right ventricular size in children with atrial septal defect before and after surgery. Hanséus K, et al. **Pediatr Cardiol** 1988;9(4):231–6

Postoperative necrotizing fasciitis in children. Farrell LD, et al. **Pediatrics** 1988 Dec;82(6):874–9 (21 ref.)

Clinical and cytomorphological alterations of nasal mucosa in laryngectomized patients. Cvetnić V, et al. **Rhinology** 1988 Sep;26(3):183–9

Intraluminal thrombosis of coronary arteries in fatal myocardial infarctions and in failed aortocoronary saphenous vein grafts. Kern WH. **West J Med** 1988 Oct; 149(4):426–8

[In situ hybridization in detecting virus infections in biopsies following orthotopic liver transplantation] Wittekind C, et al. **Acta Histochem Suppl (Jena)** 1989;37:113–6 (Eng. Abstr.) **(Ger)**

[Arthrotomy—a prearthrotic factor?] Lukoschek M, et al. **Aktuel Traumatol** 1988 Aug;18(4):163–7 (Eng. Abstr.) **(Ger)**

[Tongue necrosis following subtotal struma resection caused by Horton giant cell arteritis] Fabian W. **Chirurg** 1989 Apr; 60(4):305–6 **(Ger)**

[Bone structure changes in hip joint endoprosthesis implantation over the course of many years. A quantitative study] Hahn M, et al. **Chirurg** 1988 Nov;59(11):782–7 (Eng. Abstr.) **(Ger)**

[Morbidity of Z-plasty in the treatment of pilonidal sinus] Tschudi J, et al. **Chirurg** 1988 Jul;59(7):486–90 (Eng. Abstr.) **(Ger)**

[Sequelae of experimental Nd:YAG laser iridotomies on the human corneal endothelium] Daus W. **Fortschr Ophthalmol** 1988;85(3):239–42 (Eng. Abstr.) **(Ger)**

[Follow-up after enucleation in choroid melanoma] Gliem H, et al. **Fortschr Ophthalmol** 1989;86(3):242–4 (Eng. Abstr.) **(Ger)**

[Late orbital complications following subcutaneous silicone injection] Hennekes R, et al. **Fortschr Ophthalmol** 1989; 86(3):249–50 (Eng. Abstr.) **(Ger)**

[Protective effect of the anterior lens capsule: corneal endothelial cell loss following intercapsular phacoemulsification compared with phacoemulsification with large open capsulotomy] Imkamp E, et al. **Fortschr Ophthalmol** 1989;86(1):15–8 (Eng. Abstr.) **(Ger)**

[Corneal decompensation following Dannheim anterior chamber lens implantation—clinical aspects, scanning electron microscopy and transmission electron microscopy] Langmann G, et al. **Fortschr Ophthalmol** 1988;85(6):665–8 (Eng. Abstr.) **(Ger)**

[Scanning electron microscopy findings in explanted posterior chamber lenses] Pham-Duy T, et al. **Fortschr Ophthalmol** 1989;86(3):200–2 (Eng. Abstr.) **(Ger)**

[Experimental study of posterior capsule opacification and optic decentering of various posterior chamber lenses following intercapsular implantation] Tetz M, et al. **Fortschr Ophthalmol** 1988;85(6):682–8 (Eng. Abstr.) **(Ger)**

[Membranes on intraocular lenses—tissue differentiation in vivo] Wenzel M, et al. **Fortschr Ophthalmol** 1988; 85(3):277–9 (Eng. Abstr.) **(Ger)**

[Trophic disorders following primary nerve sutures of the upper extremity] Mailänder P, et al. **Handchir Mikrochir Plast Chir** 1989 Mar;21(2):72–3 (Eng. Abstr.) **(Ger)**

[Synovitis of the wrist joint following silicone replacement

of the carpal bones] Martini AK, et al. **Handchir Mikrochir Plast Chir** 1988 Nov;20(6):295–300 (Eng. Abstr.) **(Ger)**

[Hypervascularization syndrome of the penis following arterialization of the dorsal penile vein for erectile impotence] Fritsch P, et al. **Hautarzt** 1989 Jul;40(7):434–6 (Eng. Abstr.) **(Ger)**

[Eruptive capillary hemangioma following argon laser therapy of naevus flammeus] Wollina U, et al. **Hautarzt** 1989 Apr;40(4):212–4 (Eng. Abstr.) **(Ger)**

[Endomyocardial biopsy following heart transplantation: results and complications] Furrer M, et al. **Helv Chir Acta** 1989 Jan;55(5):629–32 (Eng. Abstr.) **(Ger)**

[Indications-related and technical errors and their consequences in breast saving treatment] Laffer U, et al. **Helv Chir Acta** 1989 Apr;55(6):849–60 (Eng. Abstr.) **(Ger)**

[Submicroscopic changes in the jejunum in ectopic sites. A scanning and transmission electron microscopy study following free, microvascular jejunum transfer] Vollrath M, et al. **HNO** 1989 Apr;37(4):133–9 (Eng. Abstr.) **(Ger)**

[Secondary pigmented macular pucker] Bopp S, et al. **Klin Monatsbl Augenheilkd** 1988 Sep;193(3):289–94 (Eng. Abstr.) **(Ger)**

[Necrotizing sclerokeratitis following cataract extraction] Gregersen E, et al. **Klin Monatsbl Augenheilkd** 1988 Dec; 193(6):642–4 (Eng. Abstr.) **(Ger)**

[Secondary glaucomas caused by intraocular epithelial invasion. A clinico-pathologic study of 30 patients] Zagorski Z, et al. **Klin Monatsbl Augenheilkd** 1988 Jul; 193(1):16–20 (Eng. Abstr.) **(Ger)**

[Manifestation of Gilbert syndrome (Meulengracht disease) following orthotopic liver transplantation: a rare cause of postoperative hyperbilirubinemia] Henne-Bruns D, et al. **Klin Wochenschr** 1988 Jul 1;66(13):596–8 (Eng. Abstr.) **(Ger)**

[Surgery of varicose veins. Late results in relation to vessel morphology] Lindner F, et al. **Langenbecks Arch Chir** 1988; Suppl 2:161–3 (Eng. Abstr.) **(Ger)**

[Early phase of healing of anastomoses with special reference to peritonitis and ischemia] Wilker D, et al. **Langenbecks Arch Chir** 1988;373(4):217–21 (Eng. Abstr.) **(Ger)**

[Morphologic changes in the epithelium of myocutaneous pectoralis major islands flaps. A light and electron optic study] Beigel A, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Nov;67(11):586–9 (Eng. Abstr.) **(Ger)**

[Recurrence after surgery of breast cancer or a secondary disease?] Wöhlke G, et al. **Pathologe** 1989 Mar;10(2):93–6 **(Ger)**

[Structure and function of the "neosynovial membrane." Light and transmission electron microscopy studies of regenerated synovial membranes following surgical synovectomy] Rohe K, et al. **Unfallchirurgie** 1989 Feb; 15(1):1–8 (Eng. Abstr.) **(Ger)**

[Long-term results of radical prostatectomy] Grups JW. **Urologe [A]** 1988 Nov;27(6):348–51 (19 ref.) (Eng. Abstr.) **(Ger)**

[Pheochromocytoma and adrenal gland hyperplasia in a remaining atrophic kidney] Winter P, et al. **Urologe [A]** 1989 Jan;28(1):54–7 (Eng. Abstr.) **(Ger)**

[Gangliocytic paraganglioma of the duodenum] Born P, et al. **Z Gastroenterol** 1989 Jun;27(6):339–40 (Eng. Abstr.) **(Ger)**

[Hyperestrogenemia following various shunt operations: on the role of estrogens in the development of focal nodular hyperplasia of the liver] Grün R, et al. **Z Gastroenterol** 1989 Jul;27(7):378–82 (Eng. Abstr.) **(Ger)**

[Diversion colitis in Crohn disease. A case report and review of the literature] Löhr HF, et al. **Z Gastroenterol** 1989 Apr; 27(4):221–4 (17 ref.) (Eng. Abstr.) **(Ger)**

[Functional and structural adaptation following transplantation of the small intestine] Deltz E, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:225–9 **(Ger)**

[Liver transplantation: morphologic and functional adaptation of the transplant] Lauchart W, et al. **Z Gastroenterol [Verh]** 1989 Jul;24:239–40 (26 ref.) **(Ger)**

[Stewart-Treves syndrome of the edematous arm following breast cancer operation] Gregl A, et al. **Z Lymphol** 1988 Dec;12(2):66–83 (186 ref.) (Eng. Abstr.) **(Ger)**

[Is high-density polyethylene suitable as an implant material in cement-free anchoring of hip endoprostheses? A histomorphologic study of an explanted polyethylene screw-in acetabula] Lintner F, et al. **Z Orthop** 1988 Dec; 126(6):688–92 (Eng. Abstr.) **(Ger)**

[The effect of various surgical technics on neuroma development using the neodymium laser] Mewe R, et al. **Z Orthop** 1989 Jan-Feb;127(1):130–4 (Eng. Abstr.) **(Ger)**

[Detection of cytomegaloviruses using monoclonal antibodies in aspiration biopsy material of kidney transplants] Eichler C, et al. **Z Urol Nephrol** 1989 Jan;82(1):13–20 (Eng. Abstr.) **(Ger)**

[Kidney function in the course of compensatory hypertrophy following unilateral nephrectomy in the Wistar rat] Hagemann J, et al. **Z Urol Nephrol** 1989 Mar;82(3):143–50 (Eng. Abstr.) **(Ger)**

[Pathology of the transplanted kidney and basic renal disease of the recipient] Nizze H, et al. **Z Urol Nephrol** 1989 Jan; 82(1):27–33 (Eng. Abstr.) **(Ger)**

[Pathogenesis of cancer of the operated stomach] Dittrich S, et al. **Zentralbl Chir** 1988;113(22):1476–87 (Eng. Abstr.) **(Ger)**

[Cervical cancer after subtotal hysterectomy (so called "stump cancer")—clinical studies on 226 cases] Nakayama K, et al. **Nippon Sanka Fujinka Gakkai Zasshi** 1989 Jun; 41(6):702–6 (Eng. Abstr.) **(Jpn)**

[Intestinal involvement of chronic graft-versus host disease after allogeneic bone marrow transplantation] Ooi S, et al. **Nippon Shokakibyo Gakkai Zasshi** 1988 Aug; 85(8):1546–50 **(Jpn)**

[Necrosis of a postoperative uterine wound after cesarean section] Latoszkiewicz K, et al. **Przegl Lek** 1988; 45(8):656–8 **(Pol)**

[Acute postoperative necrotizing enteritis] Acalovschi I, et al. **Rev Chir [Chir]** 1988 May-Jun;37(3):219–25 (Eng. Abstr.) **(Rum)**

[Fine-needle aspiration biopsy in diagnosing the status of renal transplant with delayed function] Rozenta'l RL, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):18–21 (Eng. Abstr.) **(Rus)**

[Clinical anatomy of the upper part of the abdominal cavity in reoperations on the stomach after organ-sparing surgery] Gusak VK, et al. **Vestn Khir** 1988 Oct;141(10):16–8 (Eng. Abstr.) **(Rus)**

PHYSIOPATHOLOGY

Mechanisms of postoperative pulmonary dysfunction. Hedenstierna G. **Acta Chir Scand Suppl** 1989;550:152–8 (27 ref.)

Pathophysiological mechanisms of thromboembolism. Risberg B. **Acta Chir Scand Suppl** 1989;550:104–14 (124 ref.)

The influence of anesthesia and postoperative analgesic management of lung function. Sydow FW. **Acta Chir Scand Suppl** 1989;550:159–65; discussion 165–8 (20 ref.)

Clinical use of nociceptive flexion reflex recording in the evaluation of functional neurosurgical procedures. García-Larrea L, et al. **Acta Neurochir Suppl (Wien)** 1989; 46:53–7

Design of an intracranial electrode for monitoring. Garcia Marin VM, et al. **Acta Neurochir Suppl (Wien)** 1989;46:25–7

Subdural fluid collections following transcortical approach to intra- or paraventricular tumours. Tanaka Y, et al. **Acta Neurochir (Wien)** 1989;99(1–2):20–5

The mechanics of the middle-ear at static air pressures: the role of the ossicular joints, the function of the middle-ear muscles and the behaviour of stapedial prostheses. Hüttenbrink KB. **Acta Otolaryngol Suppl (Stockh)** 1988; 451:1–35

Continuous aortic regurgitation in severely dysfunctional native hearts after heterotopic cardiac transplantation. Akasaka T, et al. **Am J Cardiol** 1989 Jun 15;63(20):1483–8

Pulmonary and peripheral lymph protein clearance during bacteremia after surgery. Charash WE, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):H1421–8

Postoperative gastric atony after vagotomy for obstructing peptic ulcer. Hom S, et al. **Am J Surg** 1989 Mar; 157(3):282–6

Wolff-Parkinson-White syndrome and ECG after operation [letter] Janes EF, et al. **Anaesthesia** 1989 Apr;44(4):355–6

The sensory potential of free flap donor sites. Brown CJ, et al. **Ann Plast Surg** 1989 Aug;23(2):135–40

Incidence of residual defects determining the clinical outcome after correction of tetralogy of Fallot: postoperative late follow-up. Calza G, et al. **Ann Thorac Surg** 1989 Mar;47(3):428–35

Neurologic complications following carotid artery surgery: pathophysiology and predictive factors. Branchereau A, et al. **Ann Vasc Surg** 1986 May;1(1):79–85

Hemodynamics of in situ vein bypass: the role of side branch fistulae. Skudder PA Jr, et al. **Ann Vasc Surg** 1986 Nov; 1(3):335–9

Recovery of pupillomotor function after cataract surgery. Peters DR, et al. **Aviat Space Environ Med** 1989 Jun; 60(6):586–8

Sex differences in brain and personality correlates of the ability to identify popular word associations. Lansdell H. **Behav Neurosci** 1989 Aug;103(4):893–7

Function of the sphincters in anorectal malformations and postoperative evaluation. Holschneider AM. **Birth Defects** 1988;24(4):425–45 (48 ref.)

Delayed recovery of hand grip strength predicts postoperative morbidity following major vascular surgery. Griffith CD, et al. **Br J Surg** 1989 Jul;76(7):704–5

Oesophageal transit of marshmallow after the Angelchik procedure. Robertson CS, et al. **Br J Surg** 1989 Mar; 76(3):245–7

Neutrophil degranulation and increased pulmonary capillary permeability following oesophagectomy: a model of early lung injury in man. Rocker GM, et al. **Br J Surg** 1988 Sep;75(9):883–6

Gallbladder non-filling: an indication for cholecystectomy after endoscopic sphincterotomy [see comments] Worthley CS, et al. **Br J Surg** 1988 Aug;75(8):796–8. **Comment in:** Br J Surg 1989 Jan;76(1):101

Anorectal function after abdominal rectopexy: parameters of predictive value in identifying return of continence. Yoshioka K, et al. **Br J Surg** 1989 Jan;76(1):64–8

Memory deficits before and after temporal lobectomy: effect of laterality and age of onset. Saykin AJ, et al. **Brain Cogn** 1989 Mar;9(2):191–200

The role of callosal connections in speech prosody. Klouda GV, et al. **Brain Lang** 1988 Sep;35(1):154–71

Rest and exercise left ventricular ejection and filling characteristics following orthotopic cardiac transplantation. Pflugfelder PW, et al. **Can J Cardiol** 1989 Apr;5(3):161–7

Clinical assessment of ventricular function after surgical treatment of congenital heart defects. Moreau GA, et al. **Cardiol Clin** 1989 May;7(2):439–52 (89 ref.)

Analysis of aortic valve gradients by transseptal technique: implications for noninvasive evaluation. Gordon JB, et al. **Cathet Cardiovasc Diagn** 1989 Jul;17(3):144–51

Maxillary dental arch dimensions following pharyngeal-flap surgery. Keller BG, et al. **Cleft Palate J** 1988 Jul; 25(3):248–57

Unoperated adult cleft lip and palate: changes in form and function after operation. Sakuda M, et al. **Cleft Palate J** 1988 Jul;25(3):301–7

Quantifying postoperative deficits of physical function following spinal surgery. Mayer TG, et al. **Clin Orthop** 1989 Jul;(244):147–57

Postoperative multiple organ failure. Waxman K. **Crit Care Clin** 1987 Apr;3(2):429–40 (40 ref.)

Motor evoked responses recorded epidurally in a patient with Guillain-Barré syndrome. Zentner J, et al. **Eur Arch Psychiatry Neurol Sci** 1988;238(1):31–2

Supraventricular tachycardia after heterotopic heart transplantation. Alexopoulos D, et al. **Eur Heart J** 1988 Nov;9(11):1266–8

Value of post-operative programmed ventricular stimulation after map-guided surgery for ventricular tachyarrhythmias—epicardial versus endocardial stimulation. Borggrefe M, et al. **Eur Heart J** 1988 Sep; 9(9):969–78

A far-reaching interpolation. Macaulay W, et al. **Heart Lung** 1989 Jul;18(4):415–7

Left ventricular characteristics during exercise in patients after Fontan's operation for tricuspid atresia. Kondoh C, et al. **Heart Vessels** 1988;4(1):34–9

Intensive care for children after orthotopic liver transplantation. Moulin D, et al. **Intensive Care Med** 1989; 15 Suppl 1:S71–2

Dual mental functioning in a split-brain patient. Joseph R. **J Clin Psychol** 1988 Sep;44(5):770–9

An anatomic and mechanical study of the interosseous membrane of the forearm: pathomechanics of proximal migration of the radius. Hotchkiss RN, et al. **J Hand Surg [Am]** 1989 Mar;14(2 Pt 1):256–61

Systolic anterior motion of the mitral valve as a manifestation of heart transplant rejection. Johnson DE, et al. **J Heart Transplant** 1988 Jul-Aug;7(4):289–91

Old elbow dislocation: joint mobility after open reduction. Laupattarakasem W, et al. **J Med Assoc Thai** 1988 Jun; 71(6):289–93

Effects of frontal or temporal lobectomy on the use of advance information in a choice reaction time task. Alivisatos B, et al. **Neuropsychologia** 1989;27(4):495–503

Sequence ability in parkinsonians, patients with frontal lobe lesions and patients who have undergone unilateral temporal lobectomies. Canavan AG, et al. **Neuropsychologia** 1989;27(6):787–98

The effect of categorization on verbal memory after temporal lobectomy. Channon S, et al. **Neuropsychologia** 1989; 27(6):777–85

Mental rotation in a commissurotomized subject. Corballis MC, et al. **Neuropsychologia** 1989;27(5):585–97

Cognitive mapping after unilateral temporal lobectomy. Goldstein LH, et al. **Neuropsychologia** 1989;27(2):167–77

Differential-handed response to verbal and visual spatial stimuli: evidence of specialized hemispheric processing following callosotomy. Loring DW, et al. **Neuropsychologia** 1989;27(6):811–27

Detection of moving and stationary gratings in the absence of striate cortex. Magnussen S, et al. **Neuropsychologia** 1989;27(5):725–8

Language and memory functions after long recovery periods in left-hemispherectomized subjects. Ogden JA. **Neuropsychologia** 1988;26(5):645–59

Visuospatial and other "right-hemispheric" functions after long recovery periods in left-hemispherectomized subjects. Ogden JA. **Neuropsychologia** 1989;27(6):765–76

Right hippocampal impairment in the recall of spatial location: encoding deficit or rapid forgetting? Smith ML, et al. **Neuropsychologia** 1989;27(1):71–81

Validation of the lateral limits technique with a callosotomy patient. Trope I, et al. **Neuropsychologia** 1988;26(5):673–84

Deficient programming in spatial learning after frontal lobe damage. Vilkki J, et al. **Neuropsychologia** 1989;27(7):971–6

Use of stimulation mapping and corticography in the excision of arteriovenous malformations in sensorimotor and language-related neocortex. Burchiel KJ, et al. **Neurosurgery** 1989 Mar;24(3):322–7

Cataract surgery and intraocular lens implantation in patients with uveitis. Foster CS, et al. **Ophthalmology** 1989 Mar; 96(3):281–8

Intraocular lenses in uveitis patients [editorial] Lichter PR. **Ophthalmology** 1989 Mar;96(3):279–80

Obstructive hydrocephalus-induced parkinsonism. I: Decreased basal ganglia regional blood flow. Shahar E, et al. **Pediatr Neurol** 1988 Mar-Apr;4(2):117–9

Long-term follow-up of right ventricular function after Mustard operation for transposition of the great arteries.

Buch J, et al. **Scand J Thorac Cardiovasc Surg** 1988; 22(3):197–202

Urodynamics in radical retropubic prostatectomy. Hellström P, et al. **Scand J Urol Nephrol** 1989;23(1):21–4

Cerebral function analysis during deep hypothermia and total circulatory arrest in infant lambs. Azariades M, et al. **Thorac Cardiovasc Surg** 1988 Jun;36(3):133–6

Postoperative evolution of extrahepatic organ function. Snyder JV. **Transplant Proc** 1989 Jun;21(3):3508–10

A study of ankle and toe pressure prediction following aortofemoral bypass. Kawai M, et al. **Vasa** 1988;17(3):162–7

[Functional disorders of Oddi's sphincter following cholecystectomy. Endoscopic manometric study] Warzée P, et al. **Acta Gastroenterol Belg** 1988 May–Jun; 51(3):276–83 (Eng. Abstr.) **(Fre)**

[Long-term laryngoscopic follow-up in vocal cord paralysis following struma surgery] Weitensfelder W, et al. **Chirurg** 1989 Jan;60(1):29–32 (Eng. Abstr.) **(Ger)**

[Long-term EEG follow-up of 30 patients with large resections in severe extra-temporal epilepsy] Hajek M, et al. **EEG EMG** 1989 Mar;20(1):19–27 (Eng. Abstr.) **(Ger)**

[Long-term electroencephalography follow-up of patients with selective amygdaloid-hippocampectomy] Siegel AM, et al. **EEG EMG** 1989 Mar;20(1):10–8 (Eng. Abstr.) **(Ger)**

[Postoperative disorder of bladder emptying in gynecology: pathophysiology and possibilities for treatment] Schüssler B. **Geburtshilfe Frauenheilkd** 1988 Aug;48(8):551–8 (60 ref.) (Eng. Abstr.) **(Ger)**

[Comparison of clinical and urodynamic parameters before and following a sling operation for recurrent incontinence] Enzelsberger H, et al. **Gynakol Rundsch** 1988;28 Suppl 2:26–8 **(Ger)**

[Urodynamic and viscerographic results following short-arm slingplasty] Fabsits M, et al. **Gynakol Rundsch** 1988;28 Suppl 2:30–2 **(Ger)**

[Recurrent incontinence following diaphragm-plasty: the value of urodynamic studies] Kölbl H, et al. **Gynakol Rundsch** 1988;28 Suppl 2:28–30 **(Ger)**

[A rare cause of spontaneous rupture of the tendon of the extensor pollicis longus muscle] Ahmadi A. **Handchir Mikrochir Plast Chir** 1988 Jul;20(4):223–4 (Eng. Abstr.) **(Ger)**

[Paralyses of the recurrent laryngeal nerve following strumectomy in late follow-up] Kull C, et al. **Helv Chir Acta** 1989 Jan;55(5):545–8 (Eng. Abstr.) **(Ger)**

[Cardiac function following orthotopic heart transplantation-- hemodynamics at rest and in stress] Permanetter B, et al. **Helv Chir Acta** 1988 Nov;55(4):471–6 (Eng. Abstr.) **(Ger)**

[The effect of lens haptics on postoperative anterior chamber depth in PMMA posterior chamber lenses] Thill-Schwaninger M, et al. **Klin Monatsbl Augenheilkd** 1989 Jun;194(6):427–32 (Eng. Abstr.) **(Ger)**

[Loss of renal functional reserve following kidney transplantation and in patients with advanced disorders of liver function] Eisenhauer T, et al. **Klin Wochenschr** 1988 Sep 15;66(18):946–52 (Eng. Abstr.) **(Ger)**

[EEG findings in patients with a kidney transplant] Wendland KL, et al. **Klin Wochenschr** 1988 Nov 15;66(22):1121–5 (Eng. Abstr.) **(Ger)**

[Pre- and postoperative hearing thresholds and brain stem potential in acoustic neuroma. Is neuroma-induced hearing loss reversible?] Höhmann D. **Laryngol Rhinol Otol (Stuttg)** 1988 Dec;67(12):629–33 (Eng. Abstr.) **(Ger)**

[The mechanical behavior of bone in severe osteoporosis with special reference to the hip endoprosthesis] Münzenberg KJ, et al. **Orthopade** 1988 Sep;17(5):420–4 (Eng. Abstr.) **(Ger)**

[Torsion forces of the proximal femur following implantation of a hip prostheses] Bettermann A, et al. **Unfallchirurgie** 1988 Oct;14(5):233–7 (Eng. Abstr.) **(Ger)**

[Para-articular surgical interventions of the hip--a mechanical problem] Schmid F. **Unfallchirurgie** 1989 Feb; 15(1):32–8 (Eng. Abstr.) **(Ger)**

[The urethral pressure profile at rest and in stress following diaphragmplasty] Kölbl H, et al. **Wien Klin Wochenschr** 1988 Sep 9;100(17):592–7 (Eng. Abstr.) **(Ger)**

[Spontaneous variability and reproducibility of Doppler echocardiography determination of heart minute volumes in infancy] Stern H, et al. **Wien Klin Wochenschr** 1988 Oct 7;100(19):648–52 (Eng. Abstr.) **(Ger)**

[Motility disorder in the postoperative phase] Bittner R, et al. **Z Gastroenterol** 1988 Nov;26 Suppl 4:27–32 (29 ref.) **(Ger)**

[The Angelchik prosthesis—intermediate term evaluation and results] Siewert JR, et al. **Z Gastroenterol** 1988 Aug; 26(8):421–9 (21 ref.) (Eng. Abstr.) **(Ger)**

[Adaptive processes of the small intestine following proctocolectomy] Menge H. **Z Gastroenterol [Verh]** 1989 Jul;24:230–2 (17 ref.) **(Ger)**

[Adaptation of the upper gastrointestinal tract following vagotomy] Starlinger M. **Z Gastroenterol [Verh]** 1989 Jul; 24:223–4 (36 ref.) **(Ger)**

[Coronary spasm immediately following coronary revascularization] Leitz KH, et al. **Z Kardiol** 1988 Oct; 77(10):668–73 (Eng. Abstr.) **(Ger)**

[Decrease in left ventricular stroke performance following bypass of a significant main coronary artery stenoses] Mühlberger V, et al. **Z Kardiol** 1988 Oct;77(10):625–31 (Eng. Abstr.) **(Ger)**

[Disorders of fascicular conduction following coronary surgery: etiology and clinical relevance] Westhof FB, et al. **Z Kardiol** 1989 May;78(5):300–5 (Eng. Abstr.) **(Ger)**

[Pathophysiology following biliary reconstruction procedures, with special reference to gastric acid secretion, peptic ulcer, metabolism of carbohydrate and fat, and gastrointestinal hormone release] Imamura M, et al. **Nippon Geka Gakkai Zasshi** 1988 Aug;89(8):1167–74 (Eng. Abstr.) **(Jpn)**

[Risk scores for ventricular premature contraction and exercise—performance after repair of tetralogy of Fallot] Kori Y, et al. **Nippon Geka Gakkai Zasshi** 1988 Aug; 89(8):1273–8 (Eng. Abstr.) **(Jpn)**

[Phrenic nerve conduction disorder after open heart surgery—electrophysiological study] Kido T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Apr;37(4):606–11 (Eng. Abstr.) **(Jpn)**

[Time course of blood velocity changes and clinical symptoms related to cerebral vasospasm and prognosis after aneurysmal surgery] Kyoi K, et al. **No Shinkei Geka** 1989 Jan;17(1):21–30 (Eng. Abstr.) **(Jpn)**

[Pulmonary ventilation before surgery and the prognosis of pulmonary complications after cholecystectomy in elderly patients with concomitant cardiovascular pathology] Kozlova II. **Klin Khir** 1988;(10):13–4 (Eng. Abstr.) **(Rus)**

[Hemodynamic changes during captopril inhibition of the renin-angiotensin-aldosterone system in patients with circulatory failure following heart valve prosthesis] Anokhin VN, et al. **Revmatologiia (Moskva)** 1988 Apr–Jun; (2):43–8 (Eng. Abstr.) **(Rus)**

[Membrane digestion and carbohydrate absorption in post-vagotomy syndromes] Khachiev LG, et al. **Sov Med** 1989;(2):80–1 **(Rus)**

PREVENTION & CONTROL

Alizapride in the prevention of postoperative vomiting. A double-blind comparison. Vanacker B, et al. **Acta Anaesthesiol Belg** 1988;39(4):247–50

Double-blind comparison of transdermal scopolamine, droperidol and placebo against postoperative nausea and vomiting. Tigerstedt I, et al. **Acta Anaesthesiol Scand** 1988 Aug;32(6):454–7

Randomized trial of fibrin adhesive for reduction of drained secretion after elective cholecystectomy. Dimo B, et al. **Acta Chir Scand** 1989 Mar;155(3):177–8

Oral anticoagulants for prophylaxis against postoperative thromboembolism. Bergqvist D. **Acta Chir Scand Suppl** 1988;543:43–7 (44 ref.)

Concluding remarks and remaining problems on thromboprophylaxis. Bergqvist D. **Acta Chir Scand Suppl** 1988;543:48–51 (27 ref.)

Prophylaxis of postoperative deep vein thrombosis in general surgery: experiences with Fragmin. Bergqvist D. **Acta Chir Scand Suppl** 1988;543:87–9 (17 ref.)

Low molecular weight heparin (Logiparin) as thromboprophylaxis in elective abdominal surgery. A dose finding study. Hauch O, et al. **Acta Chir Scand Suppl** 1988; 543:90–5

Prophylaxis of postoperative thromboembolism with low dose heparin alone or in combination with dihydroergotamine. A review. Lindblad B. **Acta Chir Scand Suppl** 1988;543:31–42 (132 ref.)

Safety and efficacy of a low molecular weight heparin (Logiparin) versus dextran as prophylaxis against thrombosis after total hip replacement. Mätzsch T, et al. **Acta Chir Scand Suppl** 1988;543:80–4

Influence of regional anesthesia, local anesthetics, and sympathicomimetics on the pathophysiology of deep vein thrombosis. Modig J. **Acta Chir Scand Suppl** 1989; 550:119–24; discussion 124–7 (35 ref.)

Prophylactic methods against thromboembolism. Reilly DT. **Acta Chir Scand Suppl** 1989;550:115–8 (10 ref.)

Low molecular weight heparins: deep vein thrombosis prophylaxis in elective hip surgery and thrombotic stroke. Turpie AG. **Acta Chir Scand Suppl** 1988;543:85–6

Mycobacterial infections in recipients of kidney allografts. A seventeen-year experience. Costa JM, et al. **Acta Med Port** 1988 Jan–Feb;1(1):51–7

Comparison of low molecular weight heparin vs. unfractionated heparin in gynecological surgery. Borstad E, et al. **Acta Obstet Gynecol Scand** 1988;67(2):99–103

Reduced incidence of postoperative endometritis by the use of Laminaria tents in connection with first trimester abortion. Bryman I, et al. **Acta Obstet Gynecol Scand** 1988; 67(4):323–5

Thrombosis prophylaxis in hip arthroplasty [letter] Borris LC, et al. **Acta Orthop Scand** 1988 Dec;59(6):731

Indomethacin inhibits the recurrence of excised ectopic ossification after hip arthroplasty. A 3–4 year follow-up of 8 cases. Schmidt SA, et al. **Acta Orthop Scand** 1988 Oct;59(5):593

Hearing preservation in acoustic neuroma surgery and postoperative audiological findings. Kanzaki J, et al. **Acta Otolaryngol (Stockh)** 1989 May–Jun;107(5–6):474–8

Prevention of cerebrospinal fluid rhinorrhea in translabyrinthine surgery. Ekvall L, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:15–6

Is preservation of hearing in acoustic neuroma worthwhile? Tos M, et al. **Acta Otolaryngol Suppl (Stockh)** 1988; 452:57–68

Middle fossa operation and suboccipital operation for removal of acoustic neuromas. Tos M, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:21–2

The effect of suture removal on postkeratoplasty astigmatism [letter] Binder PS. **Am J Ophthalmol** 1988 Oct 15;106(4):507

Fixed combinations of low-molecular weight or unfractionated heparin plus dihydroergotamine in the prevention of postoperative deep vein thrombosis. Kakkar VV, et al. **Am J Surg** 1989 Apr;157(4):413–8

Seroma prevention using fibrin glue during modified radical neck dissection in a rat model. Lindsey WH, et al. **Am J Surg** 1988 Oct;156(4):310–3

Ranitidine for prevention of postoperative suppression of delayed hypersensitivity. Nielsen HJ, et al. **Am J Surg** 1989 Mar;157(3):291–4

Preoperative transdermal hyoscine for the prevention of postoperative nausea and vomiting. Wilkinson AR, et al. **Anaesth Intensive Care** 1989 Aug;17(3):285–9

Comparison of the effects of famotidine and ranitidine on gastric secretion in patients undergoing elective surgery. Escolano F, et al. **Anaesthesia** 1989 Mar;44(3):212–5

Serious morbidity attributable to anaesthesia. Considerations for prevention. Pedersen T, et al. **Anaesthesia** 1989 Jun; 44(6):504–8

Prevention of postdural puncture headache after spinal anaesthesia for extracorporeal shockwave lithotripsy. An assessment of prophylactic epidural blood patching. Sengupta P, et al. **Anaesthesia** 1989 Jan;44(1):54–6

Angiotensin II in the management of excision of phaeochromocytoma. Sommerville KJ, et al. **Anaesthesia** 1989 Feb;44(2):128–9

Intravenous fluids in minor gynaecological surgery. Their effect on postoperative morbidity. Spencer EM. **Anaesthesia** 1988 Dec;43(12):1050–1

Dose-response study of droperidol and metoclopramide as antiemetics for outpatient anesthesia. Pandit SK, et al. **Anesth Analg** 1989 Jun;68(6):798–802

Epidural analgesia with bupivacaine reduces postoperative paralytic ileus after hysterectomy. Wattwil M, et al. **Anesth Analg** 1989 Mar;68(3):353–8

High-dose caffeine suppresses postoperative apnea in former preterm infants. Welborn LG, et al. **Anesthesiology** 1989 Sep;71(3):347–9

Thromboembolism and problems of anti-coagulation after prosthetic valve replacement. Sivathasan C, et al. **Ann Acad Med Singapore** 1988 Jul;17(3):434–7

Combining clinical and thallium data optimizes preoperative assessment of cardiac risk before major vascular surgery. Eagle KA, et al. **Ann Intern Med** 1989 Jun 1;110(11):859–66

Intraoperative testing of the integrity of left-sided colorectal anastomoses: a technique of value to the surgeon in training [letter] Carr ND. **Ann R Coll Surg Engl** 1988 Nov;70(6):397

Intra-operative air testing: an audit on rectal anastomosis. Davies AH, et al. **Ann R Coll Surg Engl** 1988 Nov; 70(6):345–7

Abdominal aortic aneurysm surgery: the basic evaluation of cardiac risk. Perry MO, et al. **Ann Surg** 1988 Dec; 208(6):738–42

Effect of sodium nitroprusside on spinal cord perfusion and paraplegia during aortic cross-clamping. Marini CP, et al. **Ann Thorac Surg** 1989 Mar;47(3):379–83

Localized pericardial flap to prevent tension on left internal mammary artery grafts. Starr DS, et al. **Ann Thorac Surg** 1989 Apr;47(4):623–4

The value of protective isolation procedures in cardiac allograft recipients. Walsh TR, et al. **Ann Thorac Surg** 1989 Apr;47(4):539–44; discussion 544–5

A prospective randomized trial of low molecular weight heparin-DHE and conventional heparin-DHE (with acenocoumarol) in patients undergoing gynaecological surgery. Steiner RA, et al. **Arch Gynecol Obstet** 1989; 244(3):141–50

Preoperative spirometry before abdominal operations. A critical appraisal of its predictive value. Lawrence VA, et al. **Arch Intern Med** 1989 Feb;149(2):280–5 (142 ref.)

A randomized trial of less intense postoperative warfarin or aspirin therapy in the prevention of venous thromboembolism after surgery for fractured hip. Powers PJ, et al. **Arch Intern Med** 1989 Apr;149(4):771–4

Prevention of deep vein thrombosis in potential neurosurgical patients. A randomized trial comparing graduated compression stockings alone or graduated compression stockings plus intermittent pneumatic compression with control. Turpie AG, et al. **Arch Intern Med** 1989 Mar; 149(3):679–81

Prevention of thromboembolism in hip-fracture patients. Comparison of low-dose heparin and low-molecular-weight heparin combined with dihydroergotamine. Lassen MR, et al. **Arch Orthop Trauma Surg** 1989;108(1):10–3

Toxic shock syndrome [letter] Kennedy KS. **Arch Otolaryngol Head Neck Surg** 1988 Dec;114(12):1477–8

Improved survival of acute skin flaps with amino acids as free radical scavengers. Paniello RC, et al. **Arch Otolaryngol Head Neck Surg** 1988 Dec;114(12):1400–3

Evaluation of single-dose cefazolin prophylaxis for toxic shock syndrome [letter] Poole MD. **Arch Otolaryngol Head Neck Surg** 1989 Feb;115(2):248

Management of hemophilia in otolaryngologic surgery. A contemporary protocol. Scott TA, et al. **Arch Otolaryngol Head Neck Surg** 1988 Dec;114(12):1445–8

The effects of pentoxifylline on random skin flap survival. Yessenow RS, et al. **Arch Otolaryngol Head Neck Surg**

1989 Feb;115(2):179–81
Prophylactic antibiotherapy in abdominal surgery. First- vs third-generation cephalosporins. Rotman N, et al. **Arch Surg** 1989 Mar;124(3):323–7
Clean vs sterile technique for pediatric dental patients in the operating room. Helpin ML, et al. **ASDC J Dent Child** 1988 Nov–Dec;55(6):449–51
Management of prosthetic anticoagulation. Bjork VO. **Aust N Z J Surg** 1988 Aug;58(8):661–3
Failure of cimetidine prophylaxis in neurosurgery. Chan KH, et al. **Aust N Z J Surg** 1989 Feb;59(2):133–6
Pharmacological manipulation of postoperative intestinal adhesions. Sparnon AL, et al. **Aust N Z J Surg** 1989 Sep; 59(9):725–9
In situ saphenous vein bypass: prevention and management of early complications. White GH, et al. **Aust N Z J Surg** 1988 Nov;58(11):865–71
Anaesthetic complications of a weight reducing regimen. Field JM. **BMJ** 1988 Nov 26;297(6660):1383
Influence of neostigmine on postoperative vomiting. King MJ, et al. **Br J Anaesth** 1988 Oct;61(4):403–6
Thrombosis prevention. **Br J Hosp Med** 1988 Aug;40(2):146
Single stage insertion of the Molteno tube for glaucoma and modifications to reduce postoperative hypotony. Hoare Nairne JE, et al. **Br J Ophthalmol** 1988 Nov;72(11):846–51
Prevention of the immediate intraocular pressure rise following argon laser trabeculoplasty. Metcalfe TW, et al. **Br J Ophthalmol** 1989 Aug;73(8):612–6
Analysis of the factors involved in cosmetic failure following excision of the eye. Smerdon DL, et al. **Br J Ophthalmol** 1988 Oct;72(10):768–73
Comparison of a low molecular weight heparin and unfractionated heparin for the prevention of deep vein thrombosis in patients undergoing abdominal surgery. The European Fraxiparin Study (EFS) Group. **Br J Surg** 1988 Nov;75(11):1058–63
Low molecular weight heparin given the evening before surgery compared with conventional low-dose heparin in prevention of thrombosis [published erratum appears in Br J Surg 1988 Nov;75(11):1077] Bergqvist D, et al. **Br J Surg** 1988 Sep;75(9):888–91
Low molecular weight heparins and prevention of postoperative thrombosis [letter] Bounameaux H. **Br J Surg** 1989 May;76(5):524
Prevention of postoperative deep vein thrombosis. Browse NL. **Br J Surg** 1988 Sep;75(9):835–6 (8 ref.)
Use of a bioprosthesis to relieve tension in oesophageal anastomosis: an experimental study. Carachi R, et al. **Br J Surg** 1989 May;76(5):496–8
Thrombosis prophylaxis with low molecular weight heparin in total hip replacement. Eriksson BI, et al. **Br J Surg** 1988 Nov;75(11):1053–7
Risk of aortic aneurysm surgery as assessed by preoperative gated heart pool scan. Fletcher JP, et al. **Br J Surg** 1989 Jan;76(1):26–8
Thigh length versus knee length stockings in the prevention of deep vein thrombosis. Porteous MJ, et al. **Br J Surg** 1989 Mar;76(3):296–7
Abdominoperineal and anterior resection of the rectum with retrocolic omentoplasty and no drainage. Smith SR, et al. **Br J Surg** 1988 Oct;75(10):1012–5
The use of noxythiolin (Noxyflex S) as an antiseptic irrigant in upper urinary tract drainage following percutaneous nephrolithotomy. Buck AC. **Br J Urol** 1988 Oct; 62(4):306–10
The failed MAGPI: management and prevention. Issa MM, et al. **Br J Urol** 1989 Aug;64(2):169–71
Controlled trial of intravesical noxythiolin in the prevention of infection following outflow tract surgery. Jones MA, et al. **Br J Urol** 1988 Oct;62(4):311–4
Study of appropriate antibiotic therapy in transurethral prostatectomy. Kiely EA, et al. **Br J Urol** 1989 Jul; 64(1):61–5
A simple device for improving patient comfort [letter] Douglas MJ, et al. **Can J Anaesth** 1989 Jan;36(1):101
Nicardipine HCl: clinical experience in patients undergoing anaesthesia for intracranial aneurysm clipping. Warner DS, et al. **Can J Anaesth** 1989 Mar;36(2):219–23
Digital subtraction spinal cord angiography in patients undergoing thoracic aneurysm surgery. Fereshetian A, et al. **Cardiovasc Intervent Radiol** 1989 Jan–Feb;12(1):7–9
Mezlocillin and prophylaxis of postoperative infections in biliary surgery. Balbo G, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):592–3
Critical evaluation of common clinical parameters of postoperative pneumonia after thoracic surgery with perioperative prophylaxis. Bardua R, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):580–2
Preventive preoperative chemotherapy with ceftriaxone or cefotaxime in abdominal surgery. Blatzas G, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):591
Evaluation of mezlocillin versus placebo as a prophylactic agent in cesarean section. Conturso R, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):611–3
Antibiotic prophylaxis in neurosurgery. A clinical study. Conzen M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):566
Intraoperative microbiological sampling is unhelpful after prophylactic antibiotic. Cooper M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):563
Comparative clinical and pharmacokinetic aspects of cefotetan versus cefoxitin plus metronidazole in vaginal hysterectomy. Engel K, et al. **Chemioterapia** 1988 Aug; 7(4):256–60
One versus three doses of metronidazole/mezlocillin for antibiotic prophylaxis in colon surgery. Grundmann R, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):604–5
Surgery prophylaxis with mezlocillin versus other beta-lactams. Isabella V, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):588–9
Perioperative prophylaxis and postoperative treatment of pneumonia with oxacillin and acylureidopenicillin in thoracic surgery. Koch A, et al. **Chemioterapia** 1987 Jun; 6(2 Suppl):583
Influence of perioperative prophylaxis with mezlocillin on cellular immune response. Koenig UD. **Chemioterapia** 1987 Jun;6(2 Suppl):216–7
Single-shot antibiotic prophylaxis in colon surgery. Mendel V, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):597–600
Perioperative cefotetan one-shot prophylaxis in gynecologic/vaginal and abdominal surgery. Michel RT. **Chemioterapia** 1987 Jun;6(2 Suppl):627–8
Antibiotic prophylaxis in surgery ranked by patients' risk rates. Mozzillo N, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):564–5
Systemic versus systemic plus oral chemoprophylaxis in elective colorectal surgery. Peruzzo L, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):601–3
Single-dose prophylaxis with ceftriaxone and ornidazole in elective colon surgery. Reers B. **Chemioterapia** 1987 Jun; 6(2 Suppl):606–7
Antibiotic prophylaxis of infection after gynecologic surgery: a prospective randomized trial between cefotetan and piperacillin. Regallo M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):624–6
Perioperative prophylaxis in neurosurgery with ceftriaxone. Rehn H, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):566–8
Cefotetan vs. cefoxitin in short-term antibacterial prophylaxis in urological surgery. Rizzo M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):609–11
Piperacillin in prophylaxis and therapy of gynecologic cancer patients. Scalambrino S, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):535–7
Short-term prophylaxis in thoracic surgery: what regimen? Serrano S, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):579–80
Cesarean section: antibiotic prophylaxis with ceftezole. Spreafico P, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):613–6
Antimicrobial chemoprophylaxis in colorectal surgery. Tonelli F. **Chemioterapia** 1988 Aug;7(4):223–8
Abdominal hysterectomy prophylaxis with mezlocillin. Valsecchi A, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):620–1
Pharmacokinetic studies in gynecological surgery using preoperative azlocillin. von Kobyletzki D. **Chemioterapia** 1987 Jun;6(2 Suppl):257–8
Open study of different perioperative prophylactic regimens with mezlocillin/metronidazole in proctectomy. Wenzel M, et al. **Chemioterapia** 1987 Jun;6(2 Suppl):569
Prophylactic treatment of postperfusion bleeding using EACA. DelRossi AJ, et al. **Chest** 1989 Jul;96(1):27–30
Pedicled jejunal loop interposition with an artificial nipple to prevent intestinal reflux. Experimental observations and clinical application. Xie CX, et al. **Chin Med J [Engl]** 1988 Nov;101(11):833–6
Venous thromboembolic disease after hip surgery. Risk factors, prophylaxis, and diagnosis. Haake DA, et al. **Clin Orthop** 1989 May;(242):212–31 (135 ref.)
Prevention of heterotopic ossification by nonsteroid antiinflammatory drugs after total hip arthroplasty. Sodemann B, et al. **Clin Orthop** 1988 Dec;(237):158–63
Overview of studies shows benefit of perioperative heparin use [news] **Clin Pharm** 1988 Aug;7(8):562
A four-day course of cephalosporins in transurethral prostatectomy. Fujita K. **Clin Ther** 1988;10 Spec No:36–42
Cefotaxime in transurethral prostatectomy. Fujita K, et al. **Clin Ther** 1988;10 Spec No:43–6
Prevention of acute renal failure after aortic surgery. Graziani G, et al. **Contrib Nephrol** 1989;70:148–52
Infectious problems in elective colorectal surgery: a multi-centre study. The Norwegian Gastro-Intestinal Group (NORGAS). **Curr Med Res Opin** 1988;11(3):149–58
Infectious problems in elective non-colorectal abdominal surgery. The Norwegian Gastro-Intestinal Group (NORGAS). **Curr Med Res Opin** 1988;11(3):159–70
Infectious problems in elective surgery of the alimentary tract: the influence of pre-operative factors. The Norwegian Gastro-Intestinal Group (NORGAS). **Curr Med Res Opin** 1988;11(3):171–8
Infectious problems after elective surgery of the alimentary tract: the influence of peri-operative factors. The Norwegian Gastro-Intestinal Group (NORGAS). **Curr Med Res Opin** 1988;11(3):179–95
Controlled clinical study of the efficacy of a new low molecular weight heparin administered subcutaneously to prevent post-operative deep venous thrombosis. Valle I, et al. **Curr Med Res Opin** 1988;11(2):80–6
Cefoxitin for one day vs. ampicillin and metronidazole for three days in elective colorectal surgery. A prospective, randomized, multicenter study. Rørbaek-Madsen M, et al. **Dis Colon Rectum** 1988 Oct;31(10):774–7
Efficacy of pelvic packing in maintaining hemostasis after rectal excision for cancer. Zama N, et al. **Dis Colon Rectum** 1988 Dec;31(12):923–8
Clinical implications of metronidazole antianaerobic prophylaxis in major head and neck surgical procedures. Sawyer R. **Ear Nose Throat J** 1988 Sep;67(9):655–6, 658, 660–2
Post-operative sore throat: effect of lignocaine jelly and spray with endotracheal intubation. Klemola UM, et al. **Eur J Anaesthesiol** 1988 Nov;5(6):391–9
Removal of tumour cells from bone marrow: overview. Bron D, et al. **Eur J Cancer Clin Oncol** 1989 Feb;25(2):163–6
Low dose heparin versus low molecular weight heparin (Kabi 2165, Fragmin) in the prophylaxis of thromboembolic complications of abdominal oncological surgery. Fricker JP, et al. **Eur J Clin Invest** 1988 Dec;18(6):561–7
Piperacillin for prophylaxis in gynecological surgery. Trimbos JB, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 Feb;30(2):141–9
Use of a long-acting cephalosporin (ceftriaxone) for antimicrobial prophylaxis in abdominal and biliary surgery. Hell K. **Eur Surg Res** 1989;21 Suppl 1:6–13 (31 ref.)
A long-acting cephalosporin in short-term prophylaxis in obstetric and gynecologic surgery. Mancuso S, et al. **Eur Surg Res** 1989;21 Suppl 1:19–24
Short-term antimicrobial prophylaxis in surgery. The state of the art. Rodolico G, et al. **Eur Surg Res** 1989;21 Suppl 1:1–5
Prevention of postsurgical adhesions by INTERCEED(TC7), an absorbable adhesion barrier: a prospective randomized multicenter clinical study. INTERCEED(TC7) Adhesion Barrier Study Group. **Fertil Steril** 1989 Jun;51(6):933–8
Recombinant tissue plasminogen activator reduces adhesion formation in a rabbit uterine horn model. Doody KJ, et al. **Fertil Steril** 1989 Mar;51(3):509–12
Gore-Tex surgical membrane [letter] Shoham Z, et al. **Fertil Steril** 1989 Jun;51(6):1071–2
The use of calcium channel blockade for the prevention of postoperative adhesion formation. Steinleitner A, et al. **Fertil Steril** 1988 Nov;50(5):818–21
Efficacy of a modified oxidized cellulose fabric in the prevention of adhesion formation. Maxson WS, et al. **Gynecol Obstet Invest** 1988;26(2):160–5
Use of cefuroxime in preventing postcesarean infection in high-risk patients. Moberg PJ, et al. **Gynecol Obstet Invest** 1989;28(1):19–22
Randomized trial of a low-molecular-weight heparin (Kabi 2165) versus adjusted-dose subcutaneous standard heparin in the prophylaxis of deep-vein thrombosis after elective hip surgery. Dechavanne M, et al. **Haemostasis** 1989; 19(1):5–12
Prevention of deep venous thrombosis in vascular surgical procedures by LMW-heparin. Gossetti B, et al. **Int Angiol** 1988 Jul–Sep;7(3 Suppl):25–7
A multicentre study on LMW-heparin effectiveness in preventing postsurgical thrombosis. Verardi S, et al. **Int Angiol** 1988 Jul–Sep;7(3 Suppl):19–24
Comparative study of single layer and conventional closure of uterine incision in cesarean section. Lal K, et al. **Int J Gynaecol Obstet** 1988 Dec;27(3):349–52
Prevention of pulmonary complications by 6-methylprednisolone in major abdominal surgery. Zotti GC, et al. **Ital J Surg Sci** 1988;18(4):369–75
Prophylactic automatic implantable cardioverter-defibrillator patches in patients at high risk for postoperative ventricular tachyarrhythmias. Manolis AS, et al. **J Am Coll Cardiol** 1989 May;13(6):1367–73
A single prophylactic dose of ceftriaxone as total antibiotic therapy in transurethral surgery. Finkelstein LH. **J Am Osteopath Assoc** 1989 Feb;89(2):169–70
The continuing problem of pneumococcal infection [letter] Chattopadhyay B. **J Antimicrob Chemother** 1988 Oct; 22(4):569–70
Prevention of late haematogenous infection in major prosthetic joints. Ching DW, et al. **J Antimicrob Chemother** 1989 May;23(5):676–80 (36 ref.)
Indomethacin for the prevention of heterotopic ossification following total hip arthroplasty. Effectiveness, contraindications, and adverse effects. Cella JP, et al. **J Arthroplasty** 1988;3(3):229–34
Warfarin prophylaxis to prevent mortality from pulmonary embolism after total hip replacement. Amstutz HC, et al. **J Bone Joint Surg [Am]** 1989 Mar;71(3):321–6
Prevention of venous thrombosis after total hip arthroplasty. Antithrombin III and low-dose heparin compared with dextran 40. Francis CW, et al. **J Bone Joint Surg [Am]** 1989 Mar;71(3):327–35
Prevention of spinal cord ischemia by monitoring spinal cord perfusion pressure and somatosensory evoked potentials. Maeda S, et al. **J Cardiovasc Surg (Torino)** 1989 Jul–Aug; 30(4):565–71
The effect of pulsatile human corticotropin-releasing hormone administration on the adrenal insufficiency that follows cure of Cushing's disease. Avgerinos PC, et al. **J Clin Endocrinol Metab** 1989 May;68(5):912–6
Seronegative blood products prevent primary cytomegalovirus infection after bone marrow transplantation. Mackinnon S, et al. **J Clin Pathol** 1988 Sep; 41(9):948–50
Simple perioperative antimicrobial chemoprophylaxis in elective neurosurgical operations. Ingham HR, et al. **J Hosp Infect** 1988 Oct;12(3):225–33
Single dose mezlocillin versus three dose cefuroxime plus metronidazole for prophylaxis in large bowel surgery [letter] Rowe-Jones DC, et al. **J Hosp Infect** 1988 Aug; 12(2):131–2
Hyperimmuneglobulin for cytomegalovirus prophylaxis

following heart transplantation. Schäfers HJ, et al. **J Hosp Infect** 1988 Aug;12 Suppl D:61–5

The use of low molecular weight heparins for postsurgical deep vein thrombosis prevention in orthopaedic patients. Chiapuzzo E, et al. **J Int Med Res** 1988 Sep–Oct; 16(5):359–66

Prevention of post-operative intra-nasal adhesions (a new material). Eliopoulos PN, et al. **J Laryngol Otol** 1989 Jul; 103(7):664–6

Prospective, randomized trial of oral piroxicam in the prophylaxis of postoperative cystoid macular edema. Abelson MB, et al. **J Ocul Pharmacol** 1989 Summer; 5(2):147–53

Hearing preservation after resection of acoustic neuroma: a review. Rabb CH. **J Okla State Med Assoc** 1989 Apr; 82(4):155–8 (22 ref.)

Aspiration of middle ear effusions prior to grommet insertion an etiological factor in tympanosclerosis. McRae D, et al. **J Otolaryngol** 1989 Aug;18(5):229–31

Anticoagulation with sodium warfarin in children: effect of a loading regimen. Doyle JJ, et al. **J Pediatr** 1988 Dec; 113(6):1095–7

The prevention of post-operative adhesions using a gastrointestinal prokinetic agent. Springall RG, et al. **J Pediatr Surg** 1989 Jun;24(6):530–3

The 'hitch-stitch' and drain technique for the prevention of inguinoscrotal haematoma following complicated inguinoscrotal surgery. Joseph MG, et al. **J R Coll Surg Edinb** 1989 Apr;34(2):104–5

Single-dose antimicrobial prophylaxis at abdominal hysterectomy. Cefamandole vs. cefotaxime. Hemsell DL, et al. **J Reprod Med** 1988 Dec;33(12):939–44

Value of intrauterine device insertion and estrogen administration after hysteroscopic metroplasty. Vercellini P, et al. **J Reprod Med** 1989 Jul;34(7):447–50

Sensitivity of the recently infarcted heart to cardioplegic arrest. Beneficial effect of pretreatment with orotic acid. Newman MA, et al. **J Thorac Cardiovasc Surg** 1989 Apr; 97(4):593–604

Delayed sternal closure: a lifesaving maneuver after early operation for complex congenital heart disease in the neonate. Odim JN, et al. **J Thorac Cardiovasc Surg** 1989 Sep;98(3):413–6

Inhibition of accelerated cardiac allograft arteriosclerosis by fish oil. Sarris GE, et al. **J Thorac Cardiovasc Surg** 1989 Jun;97(6):841–54; discussion 854–5

Intrathecal papaverine for the prevention of paraplegia after operation on the thoracic or thoracoabdominal aorta. Svensson LG, et al. **J Thorac Cardiovasc Surg** 1988 Nov; 96(5):823–9

The potency-sparing radical cystectomy: does it compromise the completeness of the cancer resection? Pritchett TR, et al. **J Urol** 1988 Dec;140(6):1400–3

Influence of sequential pneumatic compression on postoperative venous function. Blackshear WM Jr, et al. **J Vasc Surg** 1987 Mar;5(3):432–6

Prophylactic closed suction drainage of femoral wounds in patients undergoing vascular reconstruction. Healy DA, et al. **J Vasc Surg** 1989 Aug;10(2):166–8

A comparison of dipyridamole-thallium imaging and exercise testing in the prediction of postoperative cardiac complications in patients requiring arterial reconstruction. McPhail NV, et al. **J Vasc Surg** 1989 Jul;10(1):51–5; discussion 55–6

Pathophysiology and prevention of acute renal failure associated with thoracoabdominal or abdominal aortic surgery. Miller DC, et al. **J Vasc Surg** 1987 Mar;5(3):518–23 (27 ref.)

Epidural morphine decreases postoperative hypertension by attenuating sympathetic nervous system hyperactivity. Breslow MJ, et al. **JAMA** 1989 Jun 23–30;261(24):3577–81

The role of regional anesthesia in decreasing thromboembolism [letter] Larsen KD. **JAMA** 1989 Jun 23–30;261(24):3552

Microbial contamination of donor eyes. Panda A, et al. **Jpn J Ophthalmol** 1988;32(3):264–7

Postoperative infection prophylaxis for upper gastrointestinal tract surgery—a prospective and comparative randomized study of cefoxitin and ceftizoxime. Fukui T, et al. **Jpn J Surg** 1989 May;19(3):255–61

Technical modification of aortic valve replacement in aortitis syndrome—report of a case. Kotsuka Y, et al. **Jpn J Surg** 1989 Mar;19(2):232–6

Epidural morphine, hypertension, and aortic surgery [editorial] **Lancet** 1989 Sep 9;2(8663):598–9

Fish oil and coronary angioplasty [letter] **Lancet** 1989 Aug 19;2(8660):443

Ganciclovir for cytomegalovirus infection in renal transplant recipients [letter; comment] **Lancet** 1989 Jan 28; 1(8631):216–7, **Comment on:** Lancet 1988 Nov 12;2(8620):1137–8

Abdominal incision: decision or indecision? Cahalane MJ, et al. **Lancet** 1989 Jan 21;1(8630):146–8 (25 ref.)

Therapeutic suggestions during general anaesthesia [letter] Mackie DS. **Lancet** 1988 Oct 22;2(8617):955–6

Trial of low-dose aspirin plus dipyridamole versus anticoagulants for prevention of aortocoronary vein graft occlusion. Pfisterer M, et al. **Lancet** 1989 Jul 1;2(8653):1–7

Protein C deficiency and thrombotic complications after liver transplantation in children [letter] Stringer MD, et al. **Lancet** 1989 Jan 14;1(8629):102–3

Recurrent hepatitis B infection in hepatic allograft [letter] Rakela J. **Mayo Clin Proc** 1989 May;64(5):597

Cytomegalovirus immune globulin. **Med Lett Drugs Ther** 1988 Oct 21;30(777):100

Preoperative pulmonary assessment of the surgical patient. Bonekat HW, et al. **Mo Med** 1988 Nov;85(11):729–36 (35 ref.)

The prevention of oral complications in bone-marrow transplantations by means of oral hygiene and dental intervention. Raber-Durlacher JE, et al. **Neth J Med** 1989 Feb;34(1–2):98–108 (26 ref.)

Intrathecal infusion test and decrease in shunt revisions and infections. Costabile G, et al. **Neurochirurgia (Stuttg)** 1988 Jul;31(4):134–5

Aneurysmal subarachnoid hemorrhage: prevention of delayed ischemic dysfunction with intravenous nimodipine. Ljunggren B, et al. **Neurosurg Rev** 1987;10(4):255–63 (64 ref.)

Critical analysis of extensive cervical laminectomy. Ishida Y, et al. **Neurosurgery** 1989 Feb;24(2):215–22

Failure of autologous fat grafts to prevent postoperative epidural fibrosis in surgery of the lumbar spine. Martin-Ferrer S. **Neurosurgery** 1989 May;24(5):718–21

Does intraoperative monitoring of auditory evoked potentials reduce incidence of hearing loss as a complication of microvascular decompression of cranial nerves? Møller AR, et al. **Neurosurgery** 1989 Feb;24(2):257–63

The effect of selective suture removal on astigmatism following penetrating keratoplasty. Burk LL, et al. **Ophthalmic Surg** 1988 Dec;19(12):849–54

ALO 2145 reduces the intraocular pressure elevation after anterior segment laser surgery. Brown RH, et al. **Ophthalmology** 1988 Mar;95(3):378–84

The effect of ketorolac tromethamine solution 0.5% in reducing postoperative inflammation after cataract extraction and intraocular lens implantation. Flach AJ, et al. **Ophthalmology** 1988 Sep;95(9):1279–84

A prospective, randomized, clinical trial of heparin therapy for postoperative intraocular fibrin. Johnson RN, et al. **Ophthalmology** 1988 Mar;95(3):312–7

The Heffington frame [letter] Lange DR. **Orthop Rev** 1989 Feb;18(2):266–7

Low molecular weight heparin prevention of post-operative deep vein thrombosis in vascular surgery. Speziale F, et al. **Pharmatherapeutica** 1988;5(4):261–8

The value of tear film breakup and Schirmer's tests in preoperative blepharoplasty evaluation. McKinney P, et al. **Plast Reconstr Surg** 1989 Oct;84(4):572–6; discussion 577

Perioperative risk assessment. Common misconceptions. Mishriki YY. **Postgrad Med** 1989 Apr;85(5):52–5, 59–61 (19 ref.)

Etiology and treatment of periarticular heterotopic ossification after total hip replacement. Sodemann B, et al. **Rev Chir Orthop** 1988;74 Suppl 2:329–30

Toxic shock syndrome after nasal surgery: is prevention possible? A case report and review of the literature. de Vries N, et al. **Rhinology** 1989 Jun;27(2):125–8 (19 ref.)

Pre-operative prophylactic transvenous cardiac pacing for bifascicular heart block. Boezaart AP, et al. **S Afr J Surg** 1989 Jul;27(3):103–5

Preliminary results and rationale for the use of intrathecal papaverine for the prevention of paraplegia after aortic surgery. Svensson LG, et al. **S Afr J Surg** 1988 Dec; 26(4):153–60 (60 ref.)

Prediction of postoperative complications. Gierckskiy KE, et al. **Scand J Gastroenterol Suppl** 1988;149:69–73

Infections in renal transplant patients treated with cyclosporine or azathioprine. van Dorp WT, et al. **Scand J Infect Dis** 1989;21(1):75–80

Use of ciprofloxacin in patients undergoing transurethral prostatic surgery. Hellsten S, et al. **Scand J Infect Dis Suppl** 1989;60:104–7

Postoperative infections in the upper respiratory tract. Lundberg C. **Scand J Infect Dis Suppl** 1988;57:35–40 (18 ref.)

Peroral N-acetylcysteine as prophylaxis against bronchopulmonary complications of pulmonary surgery. Jepsen S, et al. **Scand J Thorac Cardiovasc Surg** 1989; 23(2):185–8

Antithrombotic drugs in pelvic surgery. Fareed J, et al. **Semin Thromb Hemost** 1989 Apr;15(2):230–2 (17 ref.)

Single-dose piperacillin versus triple-dose cefoxitin prophylaxis at vaginal and abdominal hysterectomy. Hemsell DL, et al. **South Med J** 1989 Apr;82(4):438–42

Wound hematoma: prophylaxis with topical thrombin. Roberts WS, et al. **South Med J** 1989 May;82(5):607–9

Nasobiliary drainage following endoscopic sphincterotomy. A useful method of preventing and treating early complications. Ricci E, et al. **Surg Endosc** 1987;1(3):147–50

Stable formation of the nipple valve in Kock pouch for diversion of the urinary tract. Okada Y, et al. **Surg Gynecol Obstet** 1989 Oct;169(4):315–8 (11 ref.)

A multidisciplinary approach to reducing morbidity and operative blood loss during resection of carotid body tumor. Robison JG, et al. **Surg Gynecol Obstet** 1989 Feb; 168(2):166–70

Mechanisms and prevention of arterial injuries caused by balloon embolectomy. Dobrin PB. **Surgery** 1989 Sep; 106(3):457–66 (48 ref.)

A randomized, controlled trial to determine the effectiveness of fascial infiltration of bupivacaine in preventing respiratory complications after elective abdominal surgery. Egan TM, et al. **Surgery** 1988 Oct;104(4):734–40

Ranitidine prevents postoperative transfusion-induced depression of delayed hypersensitivity. Nielsen HJ, et al. **Surgery** 1989 Jun;105(6):711–7

Effect of domperidone on postoperative vomiting and dyspepsia aggravated by operation. Takács G. **Ther Hung** 1988;36(3):119–22

Prevention of postoperative venous thrombosis: a randomized trial comparing unfractionated heparin with low molecular weight heparin in patients undergoing total hip replacement. Planes A, et al. **Thromb Haemost** 1988 Dec 22;60(3):407–10

Role of bone marrow in the development of thrombosis. A study of the curative and prophylactic action of heparin and heparin fragment (CY 222). Doutremepuich C, et al. **Thromb Res** 1989 May 15;54(4):369–75

Can morbidity and mortality of matched allogeneic marrow grafts be reduced? Biggs JC, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):3058–9

The impact of cyclosporine on the practice of renal transplantation. Kahan BD. **Transplant Proc** 1989 Jun;21(3 Suppl 1):63–9 (17 ref.)

Case presentations in renal transplantation. Kahan BD. **Transplant Proc** 1989 Jun;21(3 Suppl 1):70–96

Current strategy for donor-specific blood transfusions including a pre- and post transplant role for azathioprine. Salvatierra O Jr. **Transplant Proc** 1988 Dec;20(6 Suppl 8):37–41

Infection prophylaxis after successful organ transplantation. Simmons RL, et al. **Transplant Proc** 1988 Dec;20(6 Suppl 8):7–11 (34 ref.)

Human pancreatic graft fistula exocrine suppression by oral pancreatic enzymes. Burton FR, et al. **Transplantation** 1989 May;47(5):888–91

Improved immunosuppression for heart transplant patients using intravenous doses of cyclosporine. Macris MP, et al. **Transplantation** 1989 Feb;47(2):311–4

Experience with potency preservation during radical prostatectomy. Significance of learning curve. Surya BV, et al. **Urology** 1988 Dec;32(6):498–501

Prevention of postoperative deep vein thrombosis by one daily injection of low molecular weight heparin and dihydroergotamine. Baumgartner A, et al. **Vasa** 1989; 18(2):152–6

Pancreatoduodenectomy with occlusion of the residual stump by Neoprene injection. Di Carlo V, et al. **World J Surg** 1989 Jan–Feb;13(1):105–10; discussion 110–1

Surgery of glaucoma prevention and management of complications. Barraquer J. **Yen Ko Hsueh Pao** 1986 Sep; 2(3):161–3 **(Eng, Chi)**

Experimental devascularization (devitalization) of the rectum and sigmoideum. Fortyn K, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(3):173–9

Intraperitonealisation of pancreas and multiple coeliostomy—a possible approach to reduce mortality of acute necrotizing pancreatitis. Nicola T, et al. **Zentralbl Chir** 1989;114(2):84–92

[Prevention of pancreatic and biliary fistula after pancreatoduodenectomy] Wang Y. **Chung Hua Wai Ko Tsa Chih** 1988 Dec;26(12):729–30, 781 (Eng. Abstr.) **(Chi)**

[Transdermal scopolamine to prevent postoperative nausea and vomiting after uterine curettage and termination of pregnancy. A double-blind clinically controlled study with placebo] Jespersen TW, et al. **Ugeskr Laeger** 1989 May 15;151(20):1246–8 (Eng. Abstr.) **(Dan)**

[The effect of metoclopramide on postoperative nausea and vomiting] Vollmer-Larsen B, et al. **Ugeskr Laeger** 1988 Jan 18;150(3):154–5 (Eng. Abstr.) **(Dut)**

[Antibiotherapy in biliary surgery. Current status] Guyot L, et al. **Agressologie** 1989 Apr;30(4):177–82 (41 ref.) (Eng. Abstr.) **(Fre)**

[Monitoring of thyroid function in patients treated for cancer of the upper respiratory and digestive tract] Baril P, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(5):292–6 (Eng. Abstr.) **(Fre)**

[Sound injuries after surgery of otosclerosis] Causse JB, et al. **Ann Otolaryngol Chir Cervicofac** 1988;105(6):459–63 (19 ref.) (Eng. Abstr.) **(Fre)**

[Problem of the preservation of hearing in acoustic neuroma. Value of the mixed supra petrous and retrosigmoid approach] Vaneecloo FM, et al. **Ann Otolaryngol Chir Cervicofac** 1989;106(1):5–11 (Eng. Abstr.) **(Fre)**

[Infections and bone marrow autograft carried out for leukemias in children. Apropos of 47 cases] Amsallem D, et al. **Arch Fr Pediatr** 1988 Jun–Jul;45(6):393–7 (Eng. Abstr.) **(Fre)**

[Immunosuppressive treatment after organ transplantation] Niaudet P. **Arch Fr Pediatr** 1988;45 Suppl 1:741–4 (Eng. Abstr.) **(Fre)**

[Limitations of the feasibility of right catheterization in the evaluation for cardiac transplantation] Dreyfus G, et al. **Arch Mal Coeur** 1989 Jun;82(6):903–9 (Eng. Abstr.) **(Fre)**

[Inefficacy of theophylline in preventing hypoxemia in abdominal surgery] Crenesse D, et al. **Cah Anesthesiol** 1988 Dec;36(8):619–25 (Eng. Abstr.) **(Fre)**

[Comparative effects of fluid gelatins on bleeding during heart surgery in the adult] Zerr C, et al. **Cah Anesthesiol** 1988 Nov;36(7):527–32 **(Fre)**

[Technical complications at midterm of Mason gastroplasty]

Merlini M, et al. **Helv Chir Acta** 1988 Jun;55(1-2):15-7 (Eng. Abstr.) **(Fre)**

[Preliminary study on the effect of 1% indomethacin eyedrops in surgery of glaucoma] Romdane K, et al. **J Fr Ophtalmol** 1988;11(6-7):513-6 (Eng. Abstr.) **(Fre)**

[Prevention of infectious complications after cesarean section by the use of cefotetan] Cormier P, et al. **J Gynecol Obstet Biol Reprod (Paris)** 1989;18(3):388-92 (Eng. Abstr.) **(Fre)**

[Effects of indomethacin in ocular hypertension after cataract operation. A double-blind study] Noske W, et al. **Ophtalmologie** 1988 Nov-Dec;2(5):399-402 (Eng. Abstr.) **(Fre)**

[Prevention of bacterial infections after bone marrow graft by broad-spectrum oral antibiotics, absorbable (pefloxacin, penicillin) and non absorbable (cephalosporin, gentamycin, bacitracin)] Gluckman E, et al. **Pathol Biol (Paris)** 1988 Sep;36(7):902-6 (Eng. Abstr.) **(Fre)**

[Prophylaxis of Gram-positive infections after bone marrow graft. Controlled study of the 6-day administration of vancomycin. Intermediate analysis of 60 patients] Maraninchi D, et al. **Pathol Biol (Paris)** 1988 Sep; 36(7):915-9 (Eng. Abstr.) **(Fre)**

[Initial antibacterial prophylaxis after bone marrow allograft. Pilot study with systemic vancomycin] Rubie H, et al. **Pathol Biol (Paris)** 1988 Sep;36(7):912-4 (Eng. Abstr.) **(Fre)**

[The role of hemodilution in the prevention of thromboembolic disease] Duruble M. **Phlebologie** 1988 Nov-Dec;41(4):825-9 **(Fre)**

[The prevention of thromboembolic disease by physical means. Use of an external electric stimulator. Initial results obtained during hip surgery] Prevot JP, et al. **Phlebologie** 1988 Nov-Dec;41(4):815-7 (Eng. Abstr.) **(Fre)**

[Ceftazidime after bone marrow graft. Current aspects] Blaise D, et al. **Presse Med** 1988 Oct 26;17(37):1971-3 (12 ref.) (Eng. Abstr.) **(Fre)**

[The use of enoxaparine in preventing deep venous thrombosis following total hip prosthesis. Randomized multicenter prospective trial] Planes A, et al. **Rev Chir Orthop** 1988;74 Suppl 2:215-8 **(Fre)**

[Prevention using cefotetan of post-partum and post-abortion infectious complications in intra-uterine procedures] Cormier P, et al. **Rev Fr Gynecol Obstet** 1988 Dec; 83(12):829-32 (Eng. Abstr.) **(Fre)**

[Initial clinical experiences with low molecular weight heparin in the prevention of thrombosis in orthopedic surgery] Schwarz B, et al. **Aktuel Traumatol** 1988 Oct; 18(5):226-32 (Eng. Abstr.) **(Ger)**

[The advantages and disadvantages of surgical prevention of thrombosis] Straub H. **Aktuel Traumatol** 1989 Feb; 19(1):1-5 (11 ref.) (Eng. Abstr.) **(Ger)**

[Postoperative respiratory therapy using incentive spirometry] Mang H, et al. **Anaesthesist** 1989 Apr; 38(4):200-5 (34 ref.) (Eng. Abstr.) **(Ger)**

[Alarms of medical-technical equipment in the surgical intensive care unit. A prospective study] Deller A, et al. **Anasth Intensivther Notfallmed** 1988 Oct;23(5):238-43 (Eng. Abstr.) **(Ger)**

[Anesthesia and the geriatric patient] Lauven PM, et al. **Anasth Intensivther Notfallmed** 1989 Apr;24(2):75-6 **(Ger)**

[Evaluation of the prevention of perioperative thromboembolism with low molecular weight heparin and dihydroergotamine. A study of the incidence of lethal pulmonary embolisms and undesired symptoms, especially the risk of vasospasm and myocardial infarction] Wolf H, et al. **Arzneimittelforschung** 1988 Oct;38(10):1516-9 (Eng. Abstr.) **(Ger)**

[Symposium: Thrombosis and embolism. The value of fraxiparin in the prevention of postoperative thromboembolism. 28-29 October 1988, Cologne. Abstracts] **Chirurg** 1989 Feb;60(2 Suppl):1-19 **(Ger)**

[Systematic assessment of postoperative complications. A form of personal quality control] Rohde H, et al. **Chirurg** 1989 Jan;60(1):49-54 (Eng. Abstr.) **(Ger)**

[Theory and practice of continuous laparotomy suture (abdominal wound dehiscence and incisional hernia)] Stelzner F. **Chirurg** 1988 Oct;59(10):654-60 (Eng. Abstr.) **(Ger)**

[The surgical anatomy of the genital nerves of the male and their preservation in excision of the rectum] Stelzner F, et al. **Chirurg** 1989 Apr;60(4):228-34 (Eng. Abstr.) **(Ger)**

[Identification of the recurrent laryngeal nerve in thyroid gland surgery--a status determination] Zornig C, et al. **Chirurg** 1989 Jan;60(1):44-8 (Eng. Abstr.) **(Ger)**

[Thromboembolism prophylaxis with low molecular weight heparin in abdominal surgery] Adolf J, et al. **Dtsch Med Wochenschr** 1989 Jan 13;114(2):48-53 (Eng. Abstr.) **(Ger)**

[Preventive neodymium YAG iridectomy for controlling secondary angle closure glaucoma following pars plana vitrectomy and silicone in phacic eyes] Koniszewski G, et al. **Fortschr Ophthalmol** 1988;85(5):462-3 (Eng. Abstr.) **(Ger)**

[Possibilities for preserving function in extensive gynecologic tumor operations] Friedberg V. **Gynakologe** 1988 Dec; 21(4):315-8 (18 ref.) **(Ger)**

[Preserving fertility in malignant ovarian tumors] Pfleiderer A. **Gynakologe** 1988 Dec;21(4):308-14 (25 ref.) **(Ger)**

[Can recurrent reflux disease following fundoplication be prevented by adding a vagotomy?] Ackermann C, et al. **Helv Chir Acta** 1989 Jan;55(5):565-9 (Eng. Abstr.) **(Ger)**

[Has transjejunal splinting of the small intestine replaced the duplication procedure in the prevention of ileus?] Streuli HK, et al. **Helv Chir Acta** 1988 Jun;55(1-2):35-9 (Eng. Abstr.) **(Ger)**

[Examination strategies in the preparative phase for cataract operations and artificial lens implantation] Artaria LG. **Klin Monatsbl Augenheilkd** 1989 May;194(5):373-5 (Eng. Abstr.) **(Ger)**

[Anticoagulation with phenprocoumon in early childhood: dosage, complications, effectiveness] Engelhardt W, et al. **Klin Padiatr** 1989 Jan-Feb;201(1):21-7 (Eng. Abstr.) **(Ger)**

[Observation of acenocoumarol-induced granulocytosis] Herrmann KS, et al. **Klin Wochenschr** 1988 Jul 15; 66(14):639-42 (Eng. Abstr.) **(Ger)**

[The portacaval anastomosis in the liver cirrhosis model in the rat--significance of special preoperative preparation for decreasing surgical fatalities] Hanisch E, et al. **Langenbecks Arch Chir** 1989;374(2):92-4 (Eng. Abstr.) **(Ger)**

[Postoperative, intra-abdominal adhesions--a new standardized and objective animal model and testing of substances for the prevention of adhesions] Treutner KH, et al. **Langenbecks Arch Chir** 1989;374(2):99-104 (Eng. Abstr.) **(Ger)**

[Hemostasis screening before ENT operations] Deitmer T. **Laryngorhinootologie** 1989 Mar;68(3):188 **(Ger)**

[How do I prevent severe hemorrhage in adenotomy?] Wustrow TP. **Laryngorhinootologie** 1989 May;68(5):304-5 **(Ger)**

[Prevention of stress-induced hemorrhage of the upper gastrointestinal tract in neurosurgical intensive care patients. A controlled, randomized double-blind study with ranitidine alone and in combination with pirenzepine] Krakamp B, et al. **Med Klin** 1989 Mar 15;84(3):133-4, 172 (Eng. Abstr.) **(Ger)**

[Continent urinary diversion and total bladder replacement] Schilling A, et al. **Med Klin** 1988 Jun 17;83(13-14):444-8 **(Ger)**

[Optimal dosage of acetylsalicylic acid. I: Use in primary and secondary prevention of myocardial infarct and following aortocoronary bypass operation] Zichner R, et al. **Med Klin** 1989 Jan 15;84(1):43-51 (37 ref.) **(Ger)**

[Preoperative studies for determining hemispheric dominance] Haas W, et al. **Psychiatr Neurol Med Psychol Beih** 1988;40:94-6 **(Ger)**

[Decrease of postoperative edema following arterial reconstruction of the thigh by aprotinin] Greve H, et al. **Vasa Suppl** 1988;23:276-9 **(Ger)**

[Change in the surgical technic in carotid artery reconstruction by registration of somatosensory evoked potentials (SEP)] Schweiger H, et al. **Vasa Suppl** 1988; 23:229-31 **(Ger)**

[Perioperative treatment of patients with varicose veins using calcium dobesilate] Mühleder J, et al. **Wien Med Wochenschr** 1988 Nov 30;138(22):569-73 (Eng. Abstr.) **(Ger)**

[Chemoprevention of secondary abdominal echinococcosis--experimental study and clinical observation] Stojanow G, et al. **Z Exp Chir Transplant Kunstliche Organe** 1989;22(3):180-3 (Eng. Abstr.) **(Ger)**

[Continence preserving operations in ulcerative colitis and adenomatosis coli--status of experiences and results of a survey] Stern J, et al. **Z Gastroenterol [Verh]** 1989 Jul; 24:247-8 **(Ger)**

[Drug prevention of thromboembolism in elective hip surgery with reference to thrombophilic conditions] Liedloff H, et al. **Z Gesamte Inn Med** 1989 Jun 1;44(11):320-3 (Eng. Abstr.) **(Ger)**

[Analysis of the protective effect of shock-absorbing shoes for patients treated with hip and knee endoprostheses] Gebauer D, et al. **Z Orthop** 1988 Sep-Oct;126(5):582-8 (Eng. Abstr.) **(Ger)**

[Current aspects of prevention of struma recurrence] Pimpl W, et al. **Zentralbl Chir** 1989;114(9):593-6 (Eng. Abstr.) **(Ger)**

[Can the rate of recurrent laryngeal nerve paralysis be reduced by a modified surgical technic in struma surgery?] Rieger R, et al. **Zentralbl Chir** 1989;114(9):590-2 (Eng. Abstr.) **(Ger)**

[Preoperative hemodilution for the prevention of postoperative deep venous thrombosis and early infectious complications in colorectal resections] Vara-Thorbeck R, et al. **Zentralbl Chir** 1988;113(18):1204-9 (Eng. Abstr.) **(Ger)**

[Is it really necessary to discontinue hormonal contraceptives before carrying out a planned operation?] **Zentralbl Gynakol** 1989;111(11):771-80 **(Ger)**

[Experimental studies of the prevention of postoperative adhesions] Schwarz J, et al. **Zentralbl Gynakol** 1989; 111(2):110-8 (Eng. Abstr.) **(Ger)**

[Surgical problems and complications in rehabilitation with tracheo-esophageal prosthesis] Motta G, et al. **Acta Otorhinolaryngol Ital** 1988;8 Suppl 20:107-15 (27 ref.) (Eng. Abstr.) **(Ita)**

[Heparin prophylaxis of deep venous thrombosis and pulmonary embolism in medical patients] Pirone F, et al. **Clin Ter** 1988 Aug 31;126(4):267-71 (Eng. Abstr.) **(Ita)**

[Use of calcium heparin in the prevention of thrombosis after arterial revascularization surgery] Zucchelli A. **Clin Ter** 1988 Feb 29;124(4):287-9 (Eng. Abstr.) **(Ita)**

[Antibiotic prevention in vascular surgery. Analysis of the case material of 83 interventions] Rispoli P, et al. **Minerva Cardioangiol** 1988 May;36(5):221-5 (Eng. Abstr.) **(Ita)**

[Prevention of thromboses in vascular microanastomoses. Experimental study on the role of anti-aggregant drugs. Preliminary remarks] Cerillo A, et al. **Minerva Chir** 1988 Oct 15;43(19):1593-5 (Eng. Abstr.) **(Ita)**

[A multicenter study of defibrotide in the prevention of deep venous thrombosis. Final results] Gerosa C, et al. **Minerva Chir** 1989 May 31;44(10):1507-16 (Eng. Abstr.) **(Ita)**

[Prevention of deep venous thrombosis. A prospective study of defibrotide] Mensa G, et al. **Minerva Chir** 1988 Aug 31;43(15-16):1275-8 (Eng. Abstr.) **(Ita)**

[Infectious complications in colo-rectal surgery: how to prevent them?] Talpacci A, et al. **Minerva Chir** 1988 Oct 15;43(19):1565-70 (Eng. Abstr.) **(Ita)**

[Short-term antibiotic prophylaxis in cesarean section] Battarino O, et al. **Minerva Ginecol** 1988 Sep;40(9):563-7 (Eng. Abstr.) **(Ita)**

[Prevention of deep venous thrombosis in obstetrico-gynecologic surgery. Our experience with defibrotide] Bracciani M, et al. **Minerva Ginecol** 1989 May; 41(5):225-9 (Eng. Abstr.) **(Ita)**

[Comparative study of defibrotide and calcium heparin in the prevention of postoperative deep venous thrombosis. A randomized multicenter study] Battistel V, et al. **Minerva Med** 1988 Sep;79(9):783-90 (Eng. Abstr.) **(Ita)**

[Defibrotide versus heparin in antithrombotic prophylaxis in gynecological surgery] Lippi G, et al. **Minerva Med** 1989 May;80(5):455-9 (Eng. Abstr.) **(Ita)**

[Pharmacologic prevention of deep postoperative venous thrombosis in general surgery] Lippi G, et al. **Minerva Med** 1989 Mar;80(3):275-80 (28 ref.) (Eng. Abstr.) **(Ita)**

[A randomized controlled study to compare bladder instillation therapy of anticancer agents and combination therapy with OK-432 injection in prevention of post-TUR recurrence of bladder cancer] Nishio S, et al. **Hinyokika Kiyo** 1988 Nov;34(11):2053-7 (Eng. Abstr.) **(Jpn)**

[Effects of cefotetan administration on acute phase reactants in patients in the field of obstetrics and gynecology] Chimura T. **Jpn J Antibiot** 1988 Aug;41(8):965-9 (Eng. Abstr.) **(Jpn)**

[Effects of prophylactically used latamoxef with tobramycin against postoperative infections on therapeutic drug monitoring and renal function in the field of obstetrics and gynecology] Chimura T, et al. **Jpn J Antibiot** 1989 Jan; 42(1):189-92 (Eng. Abstr.) **(Jpn)**

[Clinical study of postoperative infection of gastrointestinal cancer. Randomized study of preventive efficacy of cefmetazole versus cephalothin in postoperative infection of gastric and colorectal cancer] Kikuchi K, et al. **Jpn J Antibiot** 1988 Oct;41(10):1480-92 (Eng. Abstr.) **(Jpn)**

[Pharmacokinetics and clinical evaluation of imipenem/cilastatin sodium in pediatric surgery] Yura J, et al. **Jpn J Antibiot** 1988 Nov;41(11):1721-30 (Eng. Abstr.) **(Jpn)**

[Current topics of anticoagulant therapy and antiplatelet therapy after cardiac valve replacement] Kudo T, et al. **Kyobu Geka** 1988 Jul;41(8):644-8 (Eng. Abstr.) **(Jpn)**

[Retrospective evaluation of multiple organ failure while using assisted circulation] Orime Y, et al. **Kyobu Geka** 1988 Jul;41(8):619-26 (Eng. Abstr.) **(Jpn)**

[A study of the effects of fresh frozen plasma to improve host defense against bacterial infection and levels of coagulation factors after hepatectomy] Ichikura T. **Nippon Geka Gakkai Zasshi** 1988 Nov;89(11):1796-809 (Eng. Abstr.) **(Jpn)**

[A study of erythrocyte deformability and its prevention during cardiopulmonary bypass] Akemoto K, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov; 36(11):2353-62 (Eng. Abstr.) **(Jpn)**

[Complication of thoracic surgery in the aged and their prevention] Nishimura Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct;36(10):2182-7 (Eng. Abstr.) **(Jpn)**

[Antithrombogenic therapy by use of antiplatelet agents with warfarin--its efficiency for the outpatients with prosthetic valve] Saitoh H. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Nov;36(11):2396-407 (Eng. Abstr.) **(Jpn)**

[Surgical cases of obesity and postoperative complications] Onishi K, et al. **Nippon Rinsho** 1988 Nov;46(11):2508-11 **(Jpn)**

[A clinical study on intra-operative spinal cord monitoring with spinal evoked potentials for scoliosis] Imai K. **Nippon Seikeigeka Gakkai Zasshi** 1988 May;62(5):511-21 (Eng. Abstr.) **(Jpn)**

[Abdominoplasty. How to avoid complications? (letter)] Gundersen J. **Tidsskr Nor Laegeforen** 1989 Jun 30; 109(19-21):2050-1 **(Nor)**

[Surgical treatment of women over 60 years of age] Basta A, et al. **Ginekol Pol** 1988 May;59(5):296-303 (Eng. Abstr.) **(Pol)**

[Surgical treatment of epiglottic cancer with voice preservation. Success factors] Kuźniarz J, et al. **Otolaryngol Pol** 1988;42(1-2):23-32 (Eng. Abstr.) **(Pol)**

[Use of a hypertonic solution of 7.5% NaCl in preventing post-declamping hypotension of the abdominal aorta] Younes RN, et al. **AMB Rev Assoc Med Bras** 1988 Sep-Oct; 34(5):150-4 (Eng. Abstr.) **(Por)**

[Differential approach to cesarean section in current obstetrics] Strizhova NV, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):27-30 (Eng. Abstr.) **(Rus)**

[Inderal as a means of preventing damage to vitally important organs in the case of mechanical asphyxiation, accompanied by clinical death] Dolgikh VT, et al. **Anesteziol Reanimatol** 1989 Jan-Feb;(1):10-4 (Eng. Abstr.) **(Rus)**

[Hyperbaric oxygenation in the prevention and treatment of suppurative complications after operations on the lungs and pleura] Biriukov IuV, et al. **Grudn Khir** 1988 May-Jun; (3):49-51 (Eng. Abstr.) **(Rus)**

[Prevention of bronchopleural complications in children by the use of Scalpel-1 laser] Mavliutova MG, et al. **Grudn Khir** 1989 May-Jun;(3):56-8 (Eng. Abstr.) **(Rus)**

[Successful reimplantation of a patch on a ventricular septal defect in a complex of measures for preventing early postoperative sepsis] Podzolkov VP, et al. **Grudn Khir** 1988 Nov-Dec;(6):86-8 **(Rus)**

[Role of extracorporeal hemosorption in the prevention of disorders of gas exchange and hemodynamics following pneumonectomy] Shulutko ML, et al. **Grudn Khir** 1988 Jul-Aug;(4):51-4 (Eng. Abstr.) **(Rus)**

[Volume load in the evaluation of functional reserves of the heart in reconstructive surgery of the abdominal aorta and its branches] Pokrovskiĭ AV, et al. **Kardiologiia** 1988 Jun; 28(6):18-22 (Eng. Abstr.) **(Rus)**

[Experience with the prevention of venous thrombosis] Rzaev NM, et al. **Kardiologiia** 1989 Mar;29(3):56-9 (Eng. Abstr.) **(Rus)**

[Possibilities of using implanted elastic magnetic elements in reconstructive operations on the abdominal aorta and its branches] Volkolakov IaV, et al. **Kardiologiia** 1988 Jun; 28(6):85-9 (Eng. Abstr.) **(Rus)**

[Endothelization of vascular prostheses using human cultured endothelial cells] Abzianidze GA, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):124-8 **(Rus)**

[Hemodilution in the prevention of complications after surgery of the major arteries] Kuznetsov NA, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):100-4 **(Rus)**

[Outcome of choledochotomy in relation to the method of its completion in mechanical jaundice] Mazurik MF, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):134-7 **(Rus)**

[Prevention of venous thrombosis and embolism of the pulmonary artery in the postoperative period (review of the literature)] Pavlovskiĭ DP. **Khirurgiia (Mosk)** 1988 Dec; (12):148-51 (42 ref.) **(Rus)**

[Immunoreactivity in cholelithiasis and its correction in the prevention of postoperative complications] Riabtsev VG, et al. **Khirurgiia (Mosk)** 1989 Jan;(1):94-6 **(Rus)**

[The role of epidural anesthesia in preventing the development of acute postoperative erosion and ulcers of the stomach and duodenum] Chepkiĭ LP, et al. **Klin Khir** 1988;(12):27-9 (Eng. Abstr.) **(Rus)**

[Endoscopic laser therapy in preoperative preparation and the prevention of postoperative complications] Khasanov AG, et al. **Klin Khir** 1988;(8):39-40 (Eng. Abstr.) **(Rus)**

[Complex methods of preventing and treating surgical complications of diabetic angiopathy of the lower extremities] Khurshudian AG. **Klin Khir** 1988;(7):55-6 (Eng. Abstr.) **(Rus)**

[Prevention of postoperative intestinal paresis in abdominal injuries] Korabel'nikov AI. **Klin Khir** 1989;(4):76 **(Rus)**

[Acute appendicitis in patients with diabetes mellitus] Krivitskiĭ DI, et al. **Klin Khir** 1989;(4):14-6 (Eng. Abstr.) **(Rus)**

[Use of a combination of rheopolyglucin, complamin and trental in the complex treatment of acute postoperative pancreatitis] Lupal'tsev VI. **Klin Khir** 1988;(11):27-9 (Eng. Abstr.) **(Rus)**

[Prevention of postoperative pancreatitis in the surgical treatment of pyloroduodenal ulcers complicated by hemorrhage] Zaĭtsev VT, et al. **Klin Khir** 1988;(11):8-11 (Eng. Abstr.) **(Rus)**

[Endoscopic control following the suturing of perforated gastric and duodenal ulcers] Sakhautdinov VG, et al. **Klin Med (Mosk)** 1988 Nov;66(11):75-7 (Eng. Abstr.) **(Rus)**

[The importance of outpatient care and job orientation in preventing late complications of corneal prosthesis] Iakimenko SA. **Oftalmol Zh** 1988;(6):321-5 (Eng. Abstr.) **(Rus)**

[The role of outpatient care in preventing complications in persons operated on for eye wounds] Machekhin VA, et al. **Oftalmol Zh** 1988;(6):325-7 (Eng. Abstr.) **(Rus)**

[A method for prevention of postoperative astigmatism] Pen'kov MA, et al. **Oftalmol Zh** 1988;(4):230-3 (Eng. Abstr.) **(Rus)**

[Prevention of osteoporosis of bone fragments in distraction osteosynthesis] Pustovoĭt MI, et al. **Ortop Travmatol Protez** 1988 Dec;(12):14-6 (Eng. Abstr.) **(Rus)**

[Resonance stimulation of regional ventilation of the lungs by sound vibration in the prevention of acute respiratory insufficiency] Bentsianov AD, et al. **Probl Tuberk** 1989; (2):61-5 **(Rus)**

[Surgical interventions in diffuse pulmonary tuberculosis in undisciplined patients] Cherkasov VA, et al. **Probl Tuberk** 1989;(2):34-6 (Eng. Abstr.) **(Rus)**

[Lymphovenous anastomoses in the prevention of post-mastectomy edema of the arm] Pronin VI, et al. **Sov Med** 1989;(4):32-5 (Eng. Abstr.) **(Rus)**

[Vitamins for the prevention of blood coagulation disorders during transvesical adenomectomies] Shafer VM, et al. **Sov Med** 1988;(12):100-3 **(Rus)**

[The use of hyperbaric oxygenation for the prevention of complications in local plastic operations on the face and neck] Rud'ko VF, et al. **Stomatologiia (Mosk)** 1989 Mar-Apr;68(2):33-4 (Eng. Abstr.) **(Rus)**

[Prevention of infectious-inflammatory complications of percutaneous treatment of nephroureterolithiasis] Martov AG, et al. **Urol Nefrol (Mosk)** 1988 Jul-Aug;(4):21-5 (Eng. Abstr.) **(Rus)**

[Prevention of postoperative phlebothrombosis of the legs using low-dose heparin in urologic patients] Savchenko NE, et al. **Urol Nefrol (Mosk)** 1989 May-Jun;(3):62-6 (Eng. Abstr.) **(Rus)**

[Surgery of the thyroid] Breĭdo NS. **Vestn Khir** 1989 Mar; 142(3):140-4 (20 ref.) **(Rus)**

[Prevention and treatment of early complications of surgical treatment of peptic ulcer] Gorbashko AI, et al. **Vestn Khir** 1989 Feb;142(2):79-82 (Eng. Abstr.) **(Rus)**

[Use of plasmapheresis in surgery] Gromov MI. **Vestn Khir** 1989 Jan;142(1):134-8 (31 ref.) **(Rus)**

[Immediate results of the use of CO2 laser in surgery of the stomach] Kalish IuI, et al. **Vestn Khir** 1988 Aug; 141(8):123-5 **(Rus)**

[Resection of the lung in tuberculosis with predominant involvement of the lower lobe] Kariev TM, et al. **Vestn Khir** 1988 May;140(5):56-7 **(Rus)**

[Electric stimulation of the duodenal stump in the early postoperative period after gastrectomy by the Billroth II method] Kostin AE. **Vestn Khir** 1989 Feb;142(2):101 **(Rus)**

[Effect of controlled normovolemic hemodilution on the microcirculatory bed and the incidence of postoperative complications in abdominal surgery] Kuznetsov NA, et al. **Vestn Khir** 1987 Dec;139(12):78-82 (Eng. Abstr.) **(Rus)**

[Prevention of intracranial hemorrhage in the postoperative period in severe cranio-cerebral trauma] Pedachenko EG, et al. **Vestn Khir** 1989 Feb;142(2):60-2 (Eng. Abstr.) **(Rus)**

[Oblique-transverse approach to the extrahepatic bile ducts] Torgunakov AP, et al. **Vestn Khir** 1989 Mar;142(3):98-100 (Eng. Abstr.) **(Rus)**

[Regulation of reparative processes in glaucoma surgery by collalysin] Lebedev OI. **Vestn Oftalmol** 1989 May-Jun; 105(3):4-6 (Eng. Abstr.) **(Rus)**

[A method for the prevention of the formation of salivary fistulae in gunshot wounds of the parotid gland] Zakharov VI. **Voen Med Zh** 1989 Apr;(4):43-4 **(Rus)**

[Prevention and treatment of postoperative complications of acute traumatic intracranial hematoma] Pedachenko EG, et al. **Zh Vopr Neirokhir** 1989 Jan-Feb;(1):8-9 (Eng. Abstr.) **(Rus)**

[Comparative study of the value of a single dose of mezlocillin versus continuous therapy with cefuroxime-garamycin in the prevention of infection in cardiovascular surgery] Popović M, et al. **Acta Chir Iugosl** 1988;35(1):5-20 (Eng. Abstr.) **(Scc)**

[Determination of the necessary time for prevention of thromboembolism using heparin/dihydroergotamine during implantation of partial hip joint endoprostheses] Maldini B, et al. **Acta Chir Iugosl** 1989;36(1):169-78 (Eng. Abstr.) **(Scr)**

[Prevention of perioperative thromboembolism and antithrombin III levels in patients who are to undergo major gynecologic operations] Viceić M, et al. **Lijec Vjesn** 1988 Nov;110(11):359-60 (Eng. Abstr.) **(Scr)**

[Preoperative psychoprophylaxis in childhood. Results of a hospital program] Admetlla i Admetlla IA, et al. **An Esp Pediatr** 1988 May;28(5):433-6 (Eng. Abstr.) **(Spa)**

[The combination of ranitidine and metoclopramide using the intravenous route for prevention of the acid aspiration syndrome in elective surgery. Evaluation of the effective period of protection] D'Este JP, et al. **Rev Esp Anestesiol Reanim** 1988 Nov-Dec;35(6):301-7 (Eng. Abstr.) **(Spa)**

[Inhalation anesthesia in myasthenic patients undergoing elective thymectomy] Rubio Pascual P, et al. **Rev Esp Anestesiol Reanim** 1988 Nov-Dec;35(6):308-10 (Eng. Abstr.) **(Spa)**

[Dextran versus subcutaneous heparin in the prevention of deep venous thrombosis (D.V.T.) after biliary surgery] Rosell Pradas J, et al. **Rev Esp Enferm Apar Dig** 1988 Nov; 74(5):521-4 (Eng. Abstr.) **(Spa)**

[Restenosis after coronary angioplasty is prevented by fish oil] Olsson AG. **Lakartidningen** 1989 Mar 22;86(12):1051-2 **(Swe)**

PSYCHOLOGY

Psychiatric and neuropsychological findings after stereotactic hypothalamotomy, in cases of extreme sexual aggressivity. Dieckmann G, et al. **Acta Neurochir Suppl (Wien)** 1988; 44:163-6

Two cases of painters operated more than ten years ago for intracranial lesions. Evolution of their artistic production. Foroglou G, et al. **Acta Neurochir Suppl (Wien)** 1988; 44:84-92

Surgical treatment of epilepsy. Restoration of personality? Gillingham FJ. **Acta Neurochir Suppl (Wien)** 1988;44:102-5

Aspects of personality in patients with anxiety disorders undergoing capsulotomy. Mindus P, et al. **Acta Neurochir Suppl (Wien)** 1988;44:138-44

Acute postoperative confusion and hallucinations in Parkinson disease. Golden WE, et al. **Ann Intern Med** 1989 Aug 1;111(3):218-22

Rate of forgetting in H.M.: 6-month recognition. Freed DM, et al. **Behav Neurosci** 1988 Dec;102(6):823-7

Psychological well-being and psychiatric disturbance in dialysis and renal transplant patients. Petrie K. **Br J Med Psychol** 1989 Mar;62 (Pt 1):91-6

Performance in free recall following rupture and repair of intracranial aneurysm. Richardson JT. **Brain Cogn** 1989 Mar;9(2):210-26

Dissociation of inflectional and derivational morphology. Miceli G, et al. **Brain Lang** 1988 Sep;35(1):24-65

Selective crossed aphasia in a trilingual aphasic patient followed by reciprocal antagonism. Paradis M, et al. **Brain Lang** 1989 Jan;36(1):62-75

Prediction of regrets in postoperative transsexuals. Blanchard R, et al. **Can J Psychiatry** 1989 Feb;34(1):43-5

Life after.... Kendrick PR. **Conn Med** 1988 Dec;52(12):711-3

Quality of life and mechanical heart valve sound. Thulin LI. **Cor Vasa** 1989;31(2):134-8

Social support and recovery from surgery. Kulik JA, et al. **Health Psychol** 1989;8(2):221-38

Neuropsychological improvement versus practice effect following unilateral carotid endarterectomy in patients without stroke. Casey JE, et al. **J Clin Exp Neuropsychol** 1989 Aug;11(4):461-70

Neuropsychological consequences of circulatory arrest with hypothermia--a case report. Newman S, et al. **J Clin Exp Neuropsychol** 1989 Aug;11(4):529-38

Hemi-inattention in visual search for parallel lines after focal cerebral lesions. Vilkki J. **J Clin Exp Neuropsychol** 1989 Mar;11(2):319-31

Preparation for cesarean delivery: a multicomponent analysis of treatment outcome. Greene PG, et al. **J Consult Clin Psychol** 1989 Aug;57(4):484-7

Effects of sex and lesion locus on measures of intelligence. Whelan TB, et al. **J Consult Clin Psychol** 1988 Aug; 56(4):633-5

Quality of life after transplantation [letter] Craven JL, et al. **J Heart Transplant** 1988 Jul-Aug;7(4):314-5

Psychosocial consequences of mastectomy: levels of morbidity and associated factors. Hughson AV, et al. **J Psychosom Res** 1988;32(4-5):383-91

A prospective evaluation of the psychosocial effects of coronary artery bypass surgery. Langeluddecke P, et al. **J Psychosom Res** 1989;33(1):37-45

Coping and the outcome of stoma surgery. Thomas C, et al. **J Psychosom Res** 1988;32(4-5):457-67

Success and failure in penile prosthesis surgery: two cases highlighting the importance of psychosocial factors. Meisler AW, et al. **J Sex Marital Ther** 1988 Summer; 14(2):108-19

Acute episode of schizophrenia as a reaction to colostomy. Baldwin SA, et al. **Nebr Med J** 1989 Feb;74(2):29-31

Pre- and postoperative memory of dichotically presented words in patients with complex partial seizures. Christianson SA, et al. **Neuropsychologia** 1989;27(4):427-36

A psychiatric study of 247 liver transplantation candidates. Trzepacz PT, et al. **Psychosomatics** 1989 Spring; 30(2):147-53

Psychosomatic aspects of liver transplantation. Surman OS, et al. **Psychother Psychosom** 1987;48(1-4):26-31

'Head and heart'--neurological and psychological reactions to open heart surgery. Rodewald G, et al. **Thorac Cardiovasc Surg** 1988 Oct;36(5):254-61 (29 ref.)

The relationship of affect to physical symptoms in renal transplant recipients. Barrett BJ, et al. **Transplant Proc** 1989 Apr;21(2):3353-4

[Phantom-related phenomena following mastectomy] Krøner K, et al. **Ugeskr Laeger** 1988 Sep 19;150(38):2233-5 (Eng. Abstr.) **(Dan)**

[What is the cause of postoperative malaise? (letter)] Jelicic M. **Ned Tijdschr Geneeskd** 1989 Jan 14;133(2):84-5 **(Dut)**

[Neuropsychological and psychosocial aspects of surgical therapy of epilepsy] Durwen HF, et al. **Nervenarzt** 1989 Jan;60(1):10-6 (50 ref.) (Eng. Abstr.) **(Ger)**

[Manifestation of schizophrenic psychosis in a transsexual patient following surgical sex change] Kampik E, et al. **Nervenarzt** 1989 Jun;60(6):361-3 **(Ger)**

[Unpleasant awakening--surgical intervention from the postoperative viewpoint] Böhm A. **Psychother Psychosom Med Psychol** 1988 Sep-Oct; 38(9-10):342-6 (Eng. Abstr.) **(Ger)**

[Coping with disease from the psychosomatic-psychotherapeutic viewpoint exemplified by pancreatectomized patients] Lang H, et al. **Psychother Psychosom Med Psychol** 1989 Jul;39(7):239-47 (Eng. Abstr.) **(Ger)**

[Psychiatric disorders following hysterectomy--an analysis of the literature] Wittich A, et al. **Psychother Psychosom Med Psychol** 1988 Jun;38(6):191-8 (87 ref.) (Eng. Abstr.) **(Ger)**

[Life after urostomy. A retrospective study] Klussmann R, et al. **Urologe [A]** 1989 Jul;28(4):209-12 (Eng. Abstr.) **(Ger)**

[Surgical therapy of impotence with implantation of a penile prosthesis. The psychological status of the impotent male] Hubálek S, et al. **Z Urol Nephrol** 1989 Jan;82(1):45–9 (Eng. Abstr.) **(Ger)**

[The effect of plastic corrective measures in penile hypospadias on sex behavior in the fertile age] Schubert J, et al. **Z Urol Nephrol** 1989 Mar;82(3):121–5 (Eng. Abstr.) **(Ger)**

[Attitude and sex behavior following hysterectomy] Seidenschnur G, et al. **Zentralbl Gynakol** 1989;111(1):53–9 (Eng. Abstr.) **(Ger)**

[Sexuality following radical operations] Walcher W, et al. **Zentralbl Gynakol** 1988;110(18):1109–16 (Eng. Abstr.) **(Ger)**

[Effect of the position and size of the postoperative brain defect on psychological outcome] Pittasch D, et al. **Zentralbl Neurochir** 1988;49(4):298–309 (Eng. Abstr.) **(Ger)**

[Neuropsychiatric-psychological findings in patients with hypophyseal adenoma following trans-sphenoidal surgery] Pittasch D, et al. **Zentralbl Neurochir** 1988;49(3):202–5 (Eng. Abstr.) **(Ger)**

RADIOGRAPHY

Radiological findings in postoperative discitis. Holibková D, et al. **Acta Univ Palacki Olomuc Fac Med** 1988;119:399–413

Brain abscess as a complication of halo traction: role of CT in diagnosing penetration of the skull. Hann J, et al. **AJNR** 1989 Mar–Apr;10(2):446

Thal patch gastroesophagoplasty: chest radiographic findings simulating leak or abscess. Goodman P, et al. **AJR** 1988 Dec;151(6):1121–2

Frequency of angiographic detection and quantitative assessment of coronary arterial disease one and three years after cardiac transplantation. O'Neill BJ, et al. **Am J Cardiol** 1989 May 15;63(17):1221–6

The radiographic appearances of infection and acute rejection of the lung after heart–lung transplantation. Millet B, et al. **Am Rev Respir Dis** 1989 Jul;140(1):62–7

The value of postoperative chest radiology after major abdominal surgery. Cooper MH, et al. **Anaesthesia** 1989 Apr;44(4):306–9

An unusual foreign body in the left main bronchus after open heart surgery. Nimmagadda UR, et al. **Anesth Analg** 1989 Jun;68(6):803–5

Anatomical results after distal forearm fractures. Kaukonen JP, et al. **Ann Chir Gynaecol** 1988;77(1):21–6

Functional recovery after fractures of the distal forearm. Analysis of radiographic and other factors affecting the outcome. Kaukonen JP, et al. **Ann Chir Gynaecol** 1988; 77(1):27–31

The impact of completion arteriography on results and technique of carotid surgery. Chino ES, et al. **Ann Vasc Surg** 1988 Oct;2(4):326–31

The role of lymphography in chylothorax following thoracic surgery. Ngan H, et al. **Br J Radiol** 1988 Nov; 61(731):1032–6

Clinically unsuspected complications of arterial surgery shown by post-operative digital subtraction angiography. Teeuwen C, et al. **Br J Radiol** 1989 Jan;62(733):13–9

The aortic pole. Wright JF, et al. **Br J Radiol** 1988 Dec; 61(732):1185–6

Restenosis and accelerated left main coronary artery disease presenting six months after successful percutaneous transluminal coronary angioplasty. Mishkel GJ, et al. **Can J Cardiol** 1989 May;5(4):187–90

Further observations on metal-backed patellar component failure. Bayley JC, et al. **Clin Orthop** 1988 Nov;(236):82–7

Patellar fracture type and prognosis in condylar total knee arthroplasty. Goldberg VM, et al. **Clin Orthop** 1988 Nov; (236):115–22

The small bowel enema in the patient with an ileostomy. Kay VJ, et al. **Clin Radiol** 1988 Jul;39(4):418–22

Sequelae of stomach surgery. Burrell M, et al. **CRC Crit Rev Diagn Imaging** 1977;10(1):17–97 (147 ref.)

Iatrogenic left main coronary artery stenosis following aortic valve replacement. Prachar H, et al. **Eur Heart J** 1988 Oct; 9(10):1151–4

Computerised tomography after abdominal aortic aneurysm repair. Schlosser V, et al. **Eur J Vasc Surg** 1987 Apr; 1(2):117–20

Computed tomography of retained abdominal sponges and towels. Buy JN, et al. **Gastrointest Radiol** 1989 Winter; 14(1):41–5

Enteroclysis in the diagnosis of intestinal obstruction in the early postoperative period. Dehn TC, et al. **Gastrointest Radiol** 1989 Winter;14(1):15–21

Late displacement of Colles' fractures. Abbaszadegan H, et al. **Int Orthop** 1988;12(3):197–9

Abnormal leakage of serous fluid through the wall of vascular prosthetic material causing a tumor-like mass in the posterior part of the mediastinum. Verhaaren HA, et al. **J Belge Radiol** 1988;71(6):687–9

The post-cardiac surgery chest radiograph: a clinically integrated approach. Henry DA, et al. **J Thorac Imaging** 1989 Jul;4(3):20–41 (51 ref.)

Urethral diverticuli in women: an update with a case presentation. Steinberg JB, et al. **Milit Med** 1988 Aug; 153(8):424–6

Intracerebral hematoma after evacuation of chronic subdural hematoma. Ovül I, et al. **Neurochirurgia (Stuttg)** 1988 Sep; 31(5):160–1

Computed tomography of epidural fibrosis after discectomy: a comparison between symptomatic and asymptomatic patients. Cervellini P, et al. **Neurosurgery** 1988 Dec; 23(6):710–3

Heterotopic ossification after direct lateral approach and transtrochanteric approach to the hip. Testa NN, et al. **Orthop Rev** 1988 Oct;17(10):965–71

Pulmonary venous collaterals secondary to superior vena cava stenosis: a rare cause of right-to-left shunting following repair of a sinus venosus atrial septal defect. Weber HS, et al. **Pediatr Cardiol** 1989 Winter;10(1):49–51

Intrauterine chronic subdural hematoma with postoperative tension pneumocephalus. Atluru VL, et al. **Pediatr Neurol** 1987 Sep–Oct;3(5):306–9

Outcome of brain abscess treatment in children: reduced morbidity with neuroimaging. Ferriero DM, et al. **Pediatr Neurol** 1987 May–Jun;3(3):148–52

CT of anorectal malformation—a postoperative evaluation. Taccone A, et al. **Pediatr Radiol** 1989;19(6–7):375–8

CT diagnosis of postoperative abdominal complications. Ghahremani GG, et al. **Radiol Clin North Am** 1989 Jul; 27(4):787–804 (55 ref.)

Diagnostic imaging evaluation of the postoperative patient following musculoskeletal trauma. Weissman BN, et al. **Radiol Clin North Am** 1989 Sep;27(5):1035–52 (45 ref.)

New bone formation in nasal polyps. de Vries N. **Rhinology** 1988 Sep;26(3):217–9

Radiological signs of loosening of the femoral stem in cementless total hip arthroplasty. Jakim I, et al. **S Afr J Surg** 1989 Jul;27(3):78–83

Puzzling angiographic findings in pancreatic transplantation. Illner WD, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2803

[The x-ray characteristics of the changes in the fallopian tubes of women with primary sterility who have had an appendectomy] Cherveniashki S, et al. **Akush Ginekol (Sofiia)** 1989;28(2):62–4 (Eng. Abstr.) **(Bul)**

[Long-term evolution of esophago-gastric junctions surgically treated to correct gastro-esophageal reflux. 111 cases] Vaysse P, et al. **Chir Pediatr** 1989;30(2):65–9 (Eng. Abstr.) **(Fre)**

[Computerized tomography of a postoperative rhabdomyolysis] Jaucot J, et al. **J Belge Radiol** 1988; 71(6):697–9 (Eng. Abstr.) **(Fre)**

[Value of X-ray computed tomography of the brain in controlled carotid surgery] Bouttier S, et al. **Presse Med** 1989 Mar 25;18(12):617–20 (Eng. Abstr.) **(Fre)**

[Postoperative computed tomography control of allogeneic vascular prostheses] Zwicker C, et al. **Digitale Bilddiagn** 1989 Mar;9(1):42–7 (Eng. Abstr.) **(Ger)**

[Digital subtraction dacryocystography following surgical interventions] Mohr A, et al. **Fortschr Ophthalmol** 1989; 86(3):251–2 (Eng. Abstr.) **(Ger)**

[Clinical and radiologic findings before and following sling operation for recurrent incontinence] Enzelsberger H, et al. **Geburtshilfe Frauenheilkd** 1989 Jan;49(1):45–8 (Eng. Abstr.) **(Ger)**

[Surgical therapy of malacia of the semilunar bone with a modified Graner method] Ehall R, et al. **Handchir Mikrochir Plast Chir** 1989 Jan;21(1):41–7 (Eng. Abstr.) **(Ger)**

[Roentgenologic evaluation of postoperative carpal collapse and ulnar translocation in patients with chronic polyarthritis] Schmidt A, et al. **Handchir Mikrochir Plast Chir** 1989 May;21(3):134–7 (Eng. Abstr.) **(Ger)**

[The importance of subclavian vein stenosis for the treatment of Dupuytren's contracture] Wilhelm A, et al. **Handchir Mikrochir Plast Chir** 1989 Mar;21(2):66–71 (Eng. Abstr.) **(Ger)**

[Determining the position of the prosthesis using arthrography of the wrist joint] Wuttge R, et al. **Handchir Mikrochir Plast Chir** 1989 Mar;21(2):85–8 (Eng. Abstr.) **(Ger)**

[A combined surgical and interventional-radiologic procedure in bile duct obstructions] Schweizer W, et al. **Helv Chir Acta** 1989 Jan;55(5):583–91 (Eng. Abstr.) **(Ger)**

[Excluding a recurrence of cholesteatoma using high resolution computerized tomography. Can one dispense with the second-look operation?] Oberascher G, et al. **HNO** 1988 May;36(5):181–7 (Eng. Abstr.) **(Ger)**

[Space-occupying cyst formation following surgery of malignant gliomas] Braunsdorf WE, et al. **Neurochirurgia (Stuttg)** 1989 Mar;32(2):44–6 (Eng. Abstr.) **(Ger)**

[The place of postoperative angiography after vascular reconstruction] Drugová B, et al. **Radiol Diagn (Berl)** 1989; 30(2):159–63 (Eng. Abstr.) **(Ger)**

[Small parietal thrombi in artificial bypass grafts] Dock W, et al. **ROFO** 1989 Feb;150(2):202–4 (16 ref.) (Eng. Abstr.) **(Ger)**

[DSA in the postoperative diagnosis of patients with kidney transplants] Gross-Fengels W, et al. **ROFO** 1988 Dec; 149(6):565–70 (Eng. Abstr.) **(Ger)**

[CT before and after liver transplantation] Schurawitzki H, et al. **ROFO** 1988 Oct;149(4):349–53 (Eng. Abstr.) **(Ger)**

[Computerized tomography analysis of cement-free total hip endoprostheses] Frühwald F, et al. **Rontgenblatter** 1988 Aug;41(8):313–9 (Eng. Abstr.) **(Ger)**

[Acute renal failure in a prominent aneurysm of the iliac artery] Kersjes W, et al. **Rontgenblatter** 1988 Sep; 41(9):389–91 (Eng. Abstr.) **(Ger)**

[Bilateral pneumothorax following mammoplasty] Häggi J, et al. **Schweiz Rundsch Med Prax** 1988 Oct 18;77(42):1127–8 (Eng. Abstr.) **(Ger)**

[Results of 5–7 year follow-up of implantation of RM isoelastic hip endoprosthesis] Träger D. **Unfallchirurg** 1989 Jun;92(6):301–4 (Eng. Abstr.) **(Ger)**

[Fatigue fracture of the femoral neck following femoral intramedullary nailing] Kreusch-Brinker R. **Unfallchirurgie** 1988 Oct;14(5):295–8 (Eng. Abstr.) **(Ger)**

[Malunion and growth disorders following fractures of the condylus radialis humeri in children] Kröpfl A, et al. **Unfallchirurgie** 1989 Jun;15(3):113–21 (Eng. Abstr.) **(Ger)**

[Segment changes in the cervical spine following cervical spondylodeses of unstable injuries] Mähring M. **Unfallchirurgie** 1988 Oct;14(5):247–58 (Eng. Abstr.) **(Ger)**

[Surgical treatment of forearm shaft fracture] Zirknitzer J, et al. **Unfallchirurgie** 1989 Jun;15(3):122–8 (Eng. Abstr.) **(Ger)**

[The endoprosthesis of the Kotz Modular Femur and Tibia Reconstruction System (KMFTR) and radiologic changes in the prosthesis anchorage] Höppel R. **Wien Klin Wochenschr** 1989 May 26;101(11):394 **(Ger)**

[Long-term results following hepatico-jejunostomy with antireflux valve construction in congenital bile duct dilatation caused by abnormal junction of the choledochus] Gharib M, et al. **Z Kinderchir** 1989 Apr;44(2):72–7 (Eng. Abstr.) **(Ger)**

[Experiences with cement-free implantation of the Zweymüller/Endler and Zweymüller total hip joint endoprosthesis. Indications, results, complications and modification of periarticular ossification by diphosphonate (ethylidene-1-hydroxy-1,1-diphosphonate)] Dustmann HO, et al. **Z Orthop** 1988 May–Jun;126(3):314–25 (Eng. Abstr.) **(Ger)**

[Silicone implants of the basal joint of the big toe. A critical 10-year study] Ferdini R, et al. **Z Orthop** 1988 Dec; 126(6):606–8 (Eng. Abstr.) **(Ger)**

[Periarticular ossification following cement-free and cement fixed total endoprosthesis implantation in the hip joint] Hartwig CH, et al. **Z Orthop** 1989 May–Jun;127(3):296–301 (Eng. Abstr.) **(Ger)**

[Progression of Paget's disease of the spine 10 years following posterolateral spondylodesis] Hopf C, et al. **Z Orthop** 1989 Jan–Feb;127(1):47–50 (Eng. Abstr.) **(Ger)**

[Follow-up studies of transosseous capsule-ligament sutures of the basal joint of the thumb using a standardized holder] Lütten C, et al. **Z Orthop** 1989 Jan–Feb;127(1):82–8 (Eng. Abstr.) **(Ger)**

[Long-term results using a Swanson silastic endoprosthesis of the metatarsophalangeal joint of the great toe. Discrepancy between clinical and radiologic findings] Ris HB, et al. **Z Orthop** 1988 Sep–Oct;126(5):526–9 (Eng. Abstr.) **(Ger)**

[Save the joint? Replace the joint? Long-term results and considerations in the treatment of femur head necroses in adults] Schneider E, et al. **Z Orthop** 1989 Mar–Apr; 127(2):163–8 (Eng. Abstr.) **(Ger)**

[Vascular pedicled iliac bone graft in therapy of femur head necrosis in the adult. Clinical and angiographic results] Schwetlick G, et al. **Z Orthop** 1988 Sep–Oct;126(5):500–7 (Eng. Abstr.) **(Ger)**

[Epiphysiodesis as a means of controlling growth (calculation of angle function for planning the correction of axis errors)] Wanivenhaus A, et al. **Z Orthop** 1989 Jan–Feb;127(1):125–9 (Eng. Abstr.) **(Ger)**

[Mammographic findings following reduction mammaplasty] Buhtz C, et al. **Zentralbl Chir** 1989;114(1):36–9 (Eng. Abstr.) **(Ger)**

[Postoperative radiologic follow-up of rectocolonic anastomoses. The visualization of fistulous passages after evacuation] Cozzi G, et al. **Radiol Med (Torino)** 1989 Mar; 77(3):211–3 (Eng. Abstr.) **(Ita)**

[Radiologic evaluation of an adverse evolution in total hip prosthesis] Raspa V, et al. **Radiol Med (Torino)** 1988 Oct; 76(4):255–8 (16 ref.) (Eng. Abstr.) **(Ita)**

[Distribution of the postoperative cyst of the maxilla] Fukuta M, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Sep; 91(9):1395–9 (Eng. Abstr.) **(Jpn)**

[The diagnostic value of computed tomography during lymphangiography on the postoperative chylothorax in lung cancer] Fujisawa T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1989 Feb;37(2):379–82 (Eng. Abstr.) **(Jpn)**

[Evaluation of the cardiovascular system in children after total surgical correction of tetralogy of Fallot based on roentgenograms of the chest] Tarnowska A. **Pol Przegl Radiol (Warszawa)** 1987 Sep–Oct;51(5):234–40 (Eng. Abstr.) **(Pol)**

[Computerized tomography in the evaluation of early complications after operations on the pancreas] Todua FI, et al. **Khirurgiia (Mosk)** 1988 Sep;(9):125–30 **(Rus)**

[A new method of x-ray diagnosis of palatopharyngeal functional disorders following uranoplasty] Ananian SG. **Stomatologiia (Mosk)** 1988 Jul–Aug;67(4):46–8 (Eng. Abstr.) **(Rus)**

[Clinico-roentgenologic characteristics of calcinosis and ossification of postoperative scars of the white line of the abdominal wall] Skotnikov VI, et al. **Vestn Khir** 1988 Sep;

141(9):64–5 (Rus)

RADIONUCLIDE IMAGING

Correlation of postoperative bone scintigraphy with healing of vascularized fibula transfer: a clinical study. Greenberg BM, et al. **Ann Plast Surg** 1989 Aug;23(2):147–54

Value of the gamma camera renogram in the differential diagnosis of acute tubular necrosis and rejection in the early post-transplant period. Comparison with biopsy findings. Notghi A, et al. **Br J Urol** 1989 Jun;63(6):594–9

Imaging necrotic myocardium: detection with 99mTc-pyrophosphate and radiolabeled antimyosin. Khaw BA, et al. **Cardiol Clin** 1989 Aug;7(3):577–88 (52 ref.)

Testicular ischemia and infarction following herniorrhaphy or varicocelectomy: evaluation by radionuclide imaging. Nagle C, et al. **Clin Nucl Med** 1989 Apr;14(4):243–8

Postcholecystectomy bile leak. Serial hepatobiliary imaging and percutaneous drainage. Patel M, et al. **Clin Nucl Med** 1988 Nov;13(11):805–7

Visualization of a pseudomeningocele on isotope cisternography. Tuvia J, et al. **Clin Nucl Med** 1988 Dec; 13(12):889–91

Quantitative 99mTc-DISIDA scanning and endoscopic biliary manometry in sphincter of Oddi dysfunction. Fullarton GM, et al. **Gut** 1988 Oct;29(10):1397–401

Indium-111-labeled platelets in monitoring human pancreatic transplants. Catafau AM, et al. **J Nucl Med** 1989 Sep; 30(9):1470–5

Role of technetium-99m phosphonate bone and indium-111 leukocyte scanning for detecting the infected hip prosthesis [letter] Mountford PJ, et al. **J Nucl Med** 1989 Apr; 30(4):562–3

Regional alterations in long bone produced by internal fixation devices. Part I. 85Sr clearance. Daum WJ, et al. **J Orthop Trauma** 1988;2(3):241–4

Distinguishing avascular necrosis from segmental impaction of the femoral head following an acetabular fracture: preliminary report. Gruen GS, et al. **J Orthop Trauma** 1988; 2(1):5–9

Tc-99m DTPA dynamic renal scintigraphy in the evaluation of renal transplants: the importance of perfusion index in the diagnosis of renal allograft rejection. Siraj QH, et al. **JPMA** 1988 May;38(5):139–48

Single-vessel forearm arterial repairs. Patency rates using nuclear angiography. Stricker SJ, et al. **Orthopedics** 1989 Jul;12(7):963–5

Radionuclide evaluation of right ventricular wall motion after surgery in tetralogy of Fallot. Ratib O, et al. **Pediatr Cardiol** 1989 Winter;10(1):25–31

The use of technetium diethylenetriaminepentaacetate for detecting posttransplantation urinary extravasation. Petronis J, et al. **Transplantation** 1988 Dec;46(6):910–2

Evaluation of toupet antireflux operation, by means of gastroesophageal scintiscan. Vara-Thorbeck R, et al. **Zentralbl Chir** 1989;114(11):722–9

[The value of combined computer-aided perfusion scintigraphy and renography in renal transplant patients with oliguria/anuria] Miserez A. **Nuklearmedizin** 1989 Apr; 28(2):100–12 (Eng. Abstr.) (Ger)

[Scintigraphic studies of the lymph nodes in patients with melanoma following lymph node excision] Török L, et al. **Z Hautkr** 1988 Oct 15;63(10):822–7 (Eng. Abstr.) (Ger)

[Assessment of duodenogastric reflux with hepatobiliary functional scintigraphy] Brückner B, et al. **Zentralbl Chir** 1989;114(7):453–61 (Eng. Abstr.) (Ger)

[Results of functional scintigraphic studies of the hepatobiliary system following reconstruction of bile duct injuries with ring drainage splinting] Lauschke G, et al. **Zentralbl Chir** 1988;113(18):1175–84 (Eng. Abstr.) (Ger)

[Hepato-cholescintigraphy using technetium Tc 99m diethyl IDA in the follow-up of biliodigestive anastomoses] Spisni R, et al. **Minerva Chir** 1989 Jun 15;44(11):1553–6 (Eng. Abstr.) (Ita)

RADIOTHERAPY

Radiotherapy in the management of vaginal intraepithelial neoplasia after hysterectomy. Woodman CB, et al. **Br J Obstet Gynaecol** 1988 Oct;95(10):976–9

The role of post-operative radiation in the prevention of heterotopic ossification in patients with post-traumatic acetabular fracture. Slawson RG, et al. **Int J Radiat Oncol Biol Phys** 1989 Sep;17(3):669–72

[X-ray therapy of inflammatory complications in patients following surgery of the abdominal organs] Podil'chak MD, et al. **Khirurgiia (Mosk)** 1989 Feb;(2):74–7 (Rus)

[Use of anti-inflammatory x-ray therapy in the combined treatment of anastomositis following gastric resection] Podil'chak MD, et al. **Klin Khir** 1988;(8):66–7 (Rus)

[Immunocorrection using low-intensity laser radiation in the surgical treatment of patients with obstructive jaundice] Zemskoi VS, et al. **Klin Khir** 1988;(9):32–5 (Eng. Abstr.) (Rus)

REHABILITATION

Early controlled motion following flexor tendon graft. Dovelle S, et al. **Am J Occup Ther** 1988 Jul;42(7):457–63

The benefits of physical exercise training after coronary artery bypass grafting. Nakai Y, et al. **Compr Ther** 1988 Aug;14(8):45–51

Micturitional dysfunction after anterior resection for rectal cancer. Rehabilitative treatment. Zanolla R, et al. **Dis Colon Rectum** 1988 Sep;31(9):707–9

STRETCH: a rehabilitative program for patients with breast cancer. Gaskin TA, et al. **South Med J** 1989 Apr; 82(4):467–9

[Effect of active rehabilitation measures on the blood pressure, heart rate, ejection fraction and peripheral microcirculation in patients with ischemic heart disease and hypertension following coronary bypass surgery] Winterfeld HJ, et al. **Radiol Diagn (Berl)** 1988;29(3):488–92 (Ger)

[The effectiveness of electromyostimulation following operations of the capsule-ligament system of the knee joint in athletes] Franke J, et al. **Sportverletz Sportschaden** 1989 Jun;3(2):62–6 (Eng. Abstr.) (Ger)

[Basic principles of after care following autoplastic reconstruction of the cruciate ligament] Kohn D, et al. **Sportverletz Sportschaden** 1989 Jun;3(2):67–73 (43 ref.) (Eng. Abstr.) (Ger)

[Postoperative continuous passive motion following augmentation of anterior cruciate ligament ruptures with polydioxanone ligaments. Early results of a prospective study] Oberbillig C, et al. **Unfallchirurgie** 1989 Jun; 15(3):145–51 (Eng. Abstr.) (Ger)

[Long-term course following amputation of the lower extremity for arterial occlusive disease from the viewpoint of rehabilitation] Hepp W, et al. **Vasa** 1988;17(3):186–92 (Eng. Abstr.) (Ger)

[Unilateral secondary postmastectomy lymphedema of the arm. Study of inpatient physical therapy (II)] Pfaff A. **Z Lymphol** 1988 Dec;12(2):54–65 (Ger)

[Unilateral secondary postmastectomy arm lymphedema. Study of inpatient physical therapy] Pfaff A. **Z Lymphol** 1988 Jul;12(1):19–23 (Ger)

[Occupational and social integration of patients following cerebral cortex tumor operations] Pittasch D. **Zentralbl Neurochir** 1988;49(4):326–35 (Eng. Abstr.) (Ger)

SURGERY

Transvesical and transabdominal closure of vesicovaginal fistulas. Pintér J, et al. **Acta Chir Hung** 1988;29(2):143–9

Bilateral renal tumours with reference to the reoperation of a solitary kidney resected for tumour. Zana J, et al. **Acta Chir Hung** 1988;29(2):187–95

Treatment of biliary fistula by percutaneous transhepatic drainage. Case report. Søndenaa K, et al. **Acta Chir Scand** 1989 Feb;155(2):141–3

Intracerebral malignant fibrous histiocytoma at site of a previously excised low grade glioma. Paulus W, et al. **Acta Neurochir (Wien)** 1989;99(3–4):161–5

The incidence and management of the slit ventricle syndrome. Serlo W, et al. **Acta Neurochir (Wien)** 1989; 99(3–4):113–6

Reconstruction of the anophthalmic socket: state of the art. Bosniak SL. **Adv Ophthalmic Plast Reconstr Surg** 1987; 7:313–48 (51 ref.)

Distal splenorenal shunt for portal vein thrombosis after liver transplantation. Marino IR, et al. **Am J Gastroenterol** 1989 Jan;84(1):67–70

Complications requiring operative intervention after orthotopic liver transplantation. Wood RP, et al. **Am J Surg** 1988 Dec;156(6):513–8

Open cardiac compression in the postoperative cardiac intensive care unit. Raman J, et al. **Anaesth Intensive Care** 1989 May;17(2):129–35

Management of maxillary hypoplasia by Le Fort I osteotomy of the maxilla. Bromige MR. **Ann Acad Med Singapore** 1988 Jul;17(3):407–14

The result of breast reconstruction after mastectomy for breast cancer in 109 patients. Houpt P, et al. **Ann Plast Surg** 1988 Dec;21(6):516–25

Hematoma in a latissimus dorsi donor site 21 months after surgery. Lineaweaver WC, et al. **Ann Plast Surg** 1988 Aug; 21(2):143–4

The use of wall suction as a lipoaspirator. Nichter LS, et al. **Ann Plast Surg** 1988 Sep;21(3):261–3

Eye socket reconstruction with free radial forearm flap. Tahara S, et al. **Ann Plast Surg** 1989 Aug;23(2):112–6

Correction of penile curvatures caused by unsuccessful hypospadias repair using the scrotal septum pedicled skin tube principle combined with corporoplasty and a modified meatoglanuloplasty. Yachia D. **Ann Plast Surg** 1989 Sep; 23(3):269–73

Early postoperative endoscopic sphincterotomy for retained biliary stones. Bickerstaff KI, et al. **Ann R Coll Surg Engl** 1988 Nov;70(6):350–1

Aneurysms after patch graft aortoplasty for coarctation of the aorta: long-term results of surgical management. Ala-Kulju K, et al. **Ann Thorac Surg** 1989 Jun;47(6):853–6

Survival of a recipient of renal transplantation after pulmonary phycomycosis. Hsu J, et al. **Ann Thorac Surg** 1989 Apr;47(4):617–9

Late reoperation for systemic atrioventricular valve regurgitation after repair of congenital heart defects. Lamberti JJ, et al. **Ann Thorac Surg** 1989 Apr;47(4):517–22; discussion 522–3

Perigraft seroma following axillofemoral bypass: report of three cases. Buche M, et al. **Ann Vasc Surg** 1986 Nov; 1(3):374–7

Renal artery stenosis after renal transplantation. Lacombe M. **Ann Vasc Surg** 1988 Apr;2(2):155–60

Successful repair of a ruptured abdominal aortic aneurysm in a renal transplant recipient. Schwartz RA, et al. **Ann Vasc Surg** 1988 Apr;2(2):189–92

Cleft palate fistula repair. Improved results by the addition of bone. Schultz RC. **Arch Otolaryngol Head Neck Surg** 1989 Jan;115(1):65–7

Posterior sagittal anorectoplasty for reoperation in children with anorectal malformations. Brain AJ, et al. **Br J Surg** 1989 Jan;76(1):57–9

Diagnosis and management of graft-enteric fistulae [letter] Eastcott HH. **Br J Surg** 1989 Jan;76(1):102

Ischaemic atrophy of the cervical portion of a substernal colic transplant: successful reconstruction using a synthetic resorbable tube. Gossot D, et al. **Br J Surg** 1988 Aug; 75(8):801–2

An operation for incisional hernia [letter] Hallan RI, et al. **Br J Surg** 1988 Nov;75(11):1149

Relaparotomy for postoperative intra-abdominal sepsis in jaundiced patients. Mäkelä J, et al. **Br J Surg** 1988 Dec; 75(12):1157–9

Treatment of a postoperative cholecystocutaneous fistula by an endoscopic stent. Sedgwick ML, et al. **Br J Surg** 1989 Feb;76(2):159–60

Diagnosis and management of graft-enteric fistulae. Tilanus HW, et al. **Br J Surg** 1988 Sep;75(9):915–6

Rectus abdominis muscle flap for persistent perineal sinus. Young MR, et al. **Br J Surg** 1988 Dec;75(12):1228

Percutaneous surgery of the transplanted kidney. Bailey IS, et al. **Br J Urol** 1989 Mar;63(3):327–8

Repair of a false aneurysm of the aortic arch. Pascoe E, et al. **Can J Cardiol** 1989 Apr;5(3):136–8

Omental pedicle grafting in the treatment of poststernotomy mediastinitis. Bédard JP, et al. **Can J Surg** 1989 Sep; 32(5):328–30

Reliability of esthetic ratings of cleft impairment. Tobiasen JM, et al. **Cleft Palate J** 1988 Jul;25(3):313–7

Dermoid tumours occurring at the site of previous meningocele repair. Pansey BK, et al. **Clin Neurol Neurosurg** 1988;90(2):137–40

A new osteotomy for cubitus varus. DeRosa GP, et al. **Clin Orthop** 1988 Nov;(236):160–5 (16 ref.)

The adult with congenital heart disease. McNamara DG. **Curr Probl Cardiol** 1989 Feb;14(2):57–114 (130 ref.)

Topographical analysis of the effects of corneal relaxing incisions on high postkeratoplasty astigmatism. Maguire LJ, et al. **Dev Ophthalmol** 1989;18:197–202

A new approach to rectal anastomotic stricture. Ovnat A, et al. **Dis Colon Rectum** 1989 Apr;32(4):351–3

Endoscopic therapy of the sump syndrome. Polydorou A, et al. **Endoscopy** 1989 May;21(3):126–30

Secondary aortoenteric fistulas—an analysis of 42 cases. Bergqvist D, et al. **Eur J Vasc Surg** 1987 Feb;1(1):11–8

The use of a latissimus dorsi myocutaneous flap to cover an axillobifemoral vascular prosthetic graft. Brooks SG, et al. **Eur J Vasc Surg** 1989 Aug;3(4):367–8

Management of early neurologic deficits after carotid thrombendarterectomy. Takolander R, et al. **Eur J Vasc Surg** 1987 Feb;1(1):67–71

The use of silicone drainage tubing to control post-keratoplasty glaucoma. Kirkness CM, et al. **Eye** 1988; 2 (Pt 5):583–90

Sequential rupture of the left ventricular free wall and of the interventricular septum after myocardial infarction. Surgical implications. Zingone B, et al. **Int J Cardiol** 1988 Nov;21(2):105–10

Improved results following use of an advancement technique in the treatment of ileoanal anastomotic complications. Fleshman JW, et al. **Int J Color Dis** 1988 Aug;3(3):161–5

Persisting ectopic pregnancy after segmental resection. Rose BI, et al. **Int J Fertil** 1988 Jul–Aug;33(4):257–8

Treatment of biliary fistulas and cholelithiasis: is endoscopic sphincterotomy acceptable in the paediatric age group? Gökçora IH, et al. **Int Surg** 1989 Jan–Mar;74(1):51–4

Squamous cell carcinoma in a chronically draining chest empyema. Gleeson MJ, et al. **Ir J Med Sci** 1988 Jul; 157(7):242

Urological complications in 454 renal transplants. Hickey DP, et al. **Ir J Med Sci** 1988 Jul;157(7):222–5

Arthroscopic management of the patellar clunk syndrome following posterior stabilized total knee arthroplasty. Vernace JV, et al. **J Arthroplasty** 1989;4(2):179–82

Re-attachment of the un-united trochanter in Charnley low friction arthroplasty. Hodgkinson JP, et al. **J Bone Joint Surg [Br]** 1989 May;71(3):523–5

Chylous ascites foliowing abdominal aortic aneurysmectomy: surgical management with a peritoneovenous shunt. Boyd WD, et al. **J Cardiovasc Surg (Torino)** 1989 Jul–Aug; 30(4):627–9

Surgically induced astigmatism in human cadaver eyes. Flaharty PM, et al. **J Cataract Refract Surg** 1989 Jan; 15(1):19–24

Results of flexor tendon tenolysis after replantation in the hand. Jupiter JB, et al. **J Hand Surg [Am]** 1989 Jan; 14(1):35–44

Sural nerve grafts for delayed repair of divided posterior interosseos nerves. Zook EG, et al. **J Hand Surg [Am]** 1989 Jan;14(1):114–20

Orthotopic heart transplantation eleven years after left pneumonectomy. Goenen M, et al. **J Heart Transplant** 1988 Jul–Aug;7(4):309–11

Repair of post-laryngectomy pharyngeal fistulae. Rubin JS. **J Laryngol Otol** 1989 Mar;103(3):302–5

Endaural extracranial repair for cerebrospinal otorrhoea with

human fibrin glue: technical note. Ferrante L, et al. **J Neurol Neurosurg Psychiatry** 1988 Nov;51(11):1438–40

Nonporous hydroxylapatite in the repair of alveolar clefts in a primate model: clinical and histologic findings. Horswell BB, et al. **J Oral Maxillofac Surg** 1989 Sep; 47(9):946–52

A technique for removing a fractured interlocking tibial nail. Dugdale TW, et al. **J Orthop Trauma** 1988;2(1):39–42

Esophageal adenocarcinoma 20 years after esophageal atresia repair. Adzick NS, et al. **J Pediatr Surg** 1989 Aug; 24(8):741–4

Association of previous abdominal surgery and significant adhesions in laparoscopic sterilization patients. Szigetvari I, et al. **J Reprod Med** 1989 Jul;34(7):465–6

Pulmonic valve replacement for pulmonic insufficiency one year after mitral valve replacement. Gindea AJ, et al. **N Y State J Med** 1989 Jul;89(7):422–3

Long-term results after surgical correction of incisional hernia. van der Linden FT, et al. **Neth J Surg** 1988 Oct; 40(5):127–9

Factors influencing the development of gastrointestinal complications after neurosurgery: results of multivariate analysis. Chan KH, et al. **Neurosurgery** 1989 Sep; 25(3):378–82

Median neuralgia caused by brachial pseudoaneurysm. Ergungor MF, et al. **Neurosurgery** 1989 Jun;24(6):924–5

The case against staged operative resection of cerebral arteriovenous malformations. Morgan MK, et al. **Neurosurgery** 1989 Sep;25(3):429–35; discussion 435–6

Distal unishunt obstruction [letter] Savitz MH. **Neurosurgery** 1989 Jun;24(6):960–1

Management of pseudophakic bullous keratopathy. Morrison LK, et al. **Ophthalmic Surg** 1989 Mar;20(3):205–10 (33 ref.)

Laser iris retraction for angle-closure glaucoma after retinal detachment surgery. Burton TC, et al. **Ophthalmology** 1988 Jun;95(6):742–8

Reapproximation of femoral anatomy in a young hip arthroplasty patient. A case report. Christensen CM, et al. **Orthop Rev** 1989 Feb;18(2):200–2

Correction of late glottic insufficiency. Sacks S, et al. **Otolaryngol Clin North Am** 1988 Nov;21(4):761–9

Recurrent perigraft seroma treated by graft replacement with homograft iliac artery. Vince DJ, et al. **Pediatr Cardiol** 1989 Spring;10(2):113–4

Salvage of jeopardized total-knee prosthesis: the role of the gastrocnemius muscle flap. Greenberg B, et al. **Plast Reconstr Surg** 1989 Jan;83(1):85–9, 97–9

Complications and vascular salvage of free-tissue transfers to the extremities. Tsai TM, et al. **Plast Reconstr Surg** 1988 Dec;82(6):1022–6

Haemorrhage from an adhesion-related mesenteric varix in a patient with portal hypertension. Crawford DJ, et al. **Scott Med J** 1988 Jun;33(3):271–3

A simple collecting system for leakage of ascitic fluid. Cohen SR, et al. **Surg Gynecol Obstet** 1988 Dec;167(6):515–6

Gastroduodenal hemorrhage and perforation in the postoperative period. Matthews JB, et al. **Surg Gynecol Obstet** 1988 Nov;167(5):389–92

Natural history of recurrent carotid artery disease. Sterpetti AV, et al. **Surg Gynecol Obstet** 1989 Mar;169(3):217–23

Intraaortic balloon pumping in the treatment of low cardiac output following open heart surgery—immediate results and long-term prognosis. Lund O, et al. **Thorac Cardiovasc Surg** 1988 Dec;36(6):332–7

Postinfarction ventricular septal defect—surgical strategies and results. von Segesser LK, et al. **Thorac Cardiovasc Surg** 1989 Apr;37(2):72–5

The benefit patients derive from aortocoronary reoperation. Weinhold C, et al. **Thorac Cardiovasc Surg** 1988 Oct; 36(5):266–8

Successful management of catastrophic intraabdominal complications following cardiac transplantation. DiSesa VJ, et al. **Transplant Proc** 1989 Feb;21(1 Pt 3):2579–80

Pediatric office procedures. Clair DL, et al. **Urol Clin North Am** 1988 Nov;15(4):715–23 (38 ref.)

Successful use of transureteroureterostomy to salvage ureterosigmoidostomy after anastomotic failure. Boyd SD, et al. **Urology** 1989 Apr;33(4):271–3

Surgical correction of anterior urethral diverticula after hypospadias repair in children. Zaontz MR, et al. **Urology** 1989 Jan;33(1):40–2

Experience with antisyphon devices: successes and complications. Jaskolska E, et al. **Z Kinderchir** 1988 Dec; 43 Suppl 2:22–3

Extrauterine pregnancy four weeks after successful tubal sterilization. Pschera H, et al. **Zentralbl Gynakol** 1988; 110(21):1392–3

[Treatment of postoperative ventral hernia] Atanasov A, et al. **Khirurgiia (Sofiia)** 1988;41(6):41–3 (Eng. Abstr.) **(Bul)**

[A case of a giant postoperative hernia successfully treated with Bulgarian antimicrobial polyamide mesh] Totev T. **Khirurgiia (Sofiia)** 1988;41(6):77–9 **(Bul)**

[Surgical treatment of postoperative insufficiency of Vater's papilla] Vitebskiĭ IaD, et al. **Khirurgiia (Sofiia)** 1988; 41(5):92–9 **(Bul)**

[Microsurgical reconstruction of inferior alveolar nerve defects during resection of the mandible and evaluation of sensory function after surgery] Dong YJ. **Chung Hua Kou Chiang Hsueh Tsa Chih** 1988 Jul; 23(4):231–3, 255 (Eng. Abstr.) **(Chi)**

[Post-operative massive hemorrhage in acute necrotizing pancreatitis] Duan ZQ, et al. **Chung Hua Wai Ko Tsa Chih** 1988 Jan;26(1):16–7, 59–60 (Eng. Abstr.) **(Chi)**

[Block of the cervical plexus for the unipolar exclusion of a gastroplasty after bronchial fistula] Sardin B, et al. **Ann Fr Anesth Reanim** 1988;7(4):343–5 (Eng. Abstr.) **(Fre)**

[Extra-anatomical pyelocystotomy and treatment of ureteral fistula after palliative colonic surgery. Apropos of an original observation] Notari F, et al. **Ann Radiol (Paris)** 1988;31(6):375–8 (Eng. Abstr.) **(Fre)**

[The in situ hidden cutaneous flap in the treatment of postoperative eventration] Stoppa R, et al. **Chirurgie** 1988; 114(7–8):651–4 **(Fre)**

[Lymphocele following kidney transplantation] Mosimann F, et al. **Helv Chir Acta** 1989 Jun;56(1–2):107–10 (Eng. Abstr.) **(Fre)**

[Long-term results following breast reconstruction] Petit JY, et al. **Helv Chir Acta** 1989 Apr;55(6):869–77 (Eng. Abstr.) **(Fre)**

[Results of surgical treatment of alphabetical syndromes in esotropia. Apropos of 98 cases] Julou J, et al. **J Fr Opatalmol** 1988;11(12):825–9 (Eng. Abstr.) **(Fre)**

[An exposed knee prosthesis—treatment] Bengtson S, et al. **Rev Chir Orthop** 1988;74 Suppl 2:322–3 **(Fre)**

[Preservation of the femoral cement cover in reoperations on hip prostheses] Vidal J, et al. **Rev Chir Orthop** 1988; 74 Suppl 2:272–5 **(Fre)**

[Surgical complications following implantation of femur head prostheses in a traumatology patient sample. Prevention and therapy] Kwasny O, et al. **Aktuel Traumatol** 1989 Jun; 19(3):121–7 (Eng. Abstr.) **(Ger)**

[Treatment of femur shaft fractures in children with Ender nails] Träger D, et al. **Aktuel Traumatol** 1988 Aug; 18(4):173–6 (Eng. Abstr.) **(Ger)**

[Surgical stabilization of femoral fracture following implantation of straight shaft prostheses] Wruhs O, et al. **Aktuel Traumatol** 1989 Jun;19(3):128–30 (Eng. Abstr.) **(Ger)**

[Reoperations in aseptic loosening of endoprostheses of the hip joint] Mach J, et al. **Beitr Orthop Traumatol** 1988 Oct; 35(10):487–95 (Eng. Abstr.) **(Ger)**

[Validation study of the Mannheim Peritonitis Index] Függer R, et al. **Chirurg** 1988 Sep;59(9):598–601 (Eng. Abstr.) **(Ger)**

[Ileostomy versus colostomy as temporary deviation stoma in relation to stoma closure] Göhring U, et al. **Chirurg** 1988 Dec;59(12):842–4 (Eng. Abstr.) **(Ger)**

[Technical modification of surgical therapy of esophageal perforation] Hausmaninger C, et al. **Chirurg** 1989 Jan; 60(1):55–7 **(Ger)**

[Primary management and secondary reconstructive surgery of severe combined hand injuries] Steinau HU, et al. **Chirurg** 1988 Nov;59(11):740–8 (Eng. Abstr.) **(Ger)**

[A rare complication following vagotomy with circular myotomy of the esophagus and hemifundoplication. A case report] Zornig C, et al. **Chirurg** 1989 Feb;60(2):119–20 **(Ger)**

[Correction of the whistling defect] Fleiner B, et al. **Fortschr Kiefer Gesichtschir** 1989;34:117–20 **(Ger)**

[Secondary correction following esthetic rhinoplasties] Gubisch W, et al. **Fortschr Kiefer Gesichtschir** 1989;34:52–6 **(Ger)**

[Postoperative dynamics of the tip of the nose following rhinoplasty] Hochban W, et al. **Fortschr Kiefer Gesichtschir** 1989;34:56–8 **(Ger)**

[Surgical lengthening of the short upper lip] Krüger E. **Fortschr Kiefer Gesichtschir** 1989;34:111–4 **(Ger)**

[Esthetic management of the empty orbit] Mohr C, et al. **Fortschr Kiefer Gesichtschir** 1989;34:174–7 **(Ger)**

[Correction of esthetic disorders following cleft lip–plasties] Scheunemann H, et al. **Fortschr Kiefer Gesichtschir** 1989; 34:109–11 **(Ger)**

[Removal of artificial lens implants in cataract surgery] Kohl M, et al. **Fortschr Ophthalmol** 1988;85(5):495–6 (Eng. Abstr.) **(Ger)**

[Re-keratoplasty in a case of Sjögren syndrome] Lerchner H, et al. **Fortschr Ophthalmol** 1988;85(6):679–81 (Eng. Abstr.) **(Ger)**

[Cataract operation with posterior chamber lens implantation following filtering glaucoma operation] Schelenz J, et al. **Fortschr Ophthalmol** 1988;85(4):381–4 (Eng. Abstr.) **(Ger)**

[Spontaneous cecum perforation following cesarean section] Strecker JR, et al. **Geburtshilfe Frauenheilkd** 1988 Jul; 48(7):489–93 (Eng. Abstr.) **(Ger)**

[The dorsum of the nose as a problem in secondary rhinoplasties] Gubisch W. **Handchir Mikrochir Plast Chir** 1989 Jul;21(4):213–8 (Eng. Abstr.) **(Ger)**

[Incidence of recurrence following surgery of perforating and non-perforating complications in Crohn disease] Köveker GB, et al. **Helv Chir Acta** 1989 Jun;56(1–2):19–22 (Eng. Abstr.) **(Ger)**

[Results of surgery of recurrent isthmus stenoses] Leupi F, et al. **Helv Chir Acta** 1988 Nov;55(4):495–8 (Eng. Abstr.) **(Ger)**

[Local late sequelae following breast saving therapy of breast cancer: problem cases and possibilities for their correction] Lüscher NJ, et al. **Helv Chir Acta** 1989 Apr;55(6):861–8 (Eng. Abstr.) **(Ger)**

[Surgical therapy in tracheal stenoses] Swoboda L, et al. **Helv Chir Acta** 1988 Nov;55(4):459–63 (Eng. Abstr.) **(Ger)**

[Eye position and function following late surgical correction of consecutive strabismus following primary tenotomy] Aust W. **Klin Monatsbl Augenheilkd** 1988 Aug;193(2):165–8 (Eng. Abstr.) **(Ger)**

[Epikeratophakia—a new procedure in refractive surgery of the cornea] Bleckmann H. **Klin Monatsbl Augenheilkd** 1988 Oct;193(4):345–9 (27 ref.) (Eng. Abstr.) **(Ger)**

[Etiology and morphology of retrocorneal membranes following microsurgical operations of the anterior eye segment] Grüngreiff J, et al. **Klin Monatsbl Augenheilkd** 1988 Aug;193(2):138–41 (Eng. Abstr.) **(Ger)**

[Perforating keratoplasty in pseudophakia] Küchle M, et al. **Klin Monatsbl Augenheilkd** 1988 Jun;192(6):637–43 (Eng. Abstr.) **(Ger)**

[Retinal detachment following neodymium YAG laser capsulotomy in aphakic and pseudo-aphakic eyes] Oldendoerp J. **Klin Monatsbl Augenheilkd** 1989 Apr; 194(4):234–40 (Eng. Abstr.) **(Ger)**

[Polyglactin 910 impl in muscle revision surgery for the reconstruction of pnysiologic limits in Tenon's capsule] Schmidt T, et al. **Klin Monatsbl Augenheilkd** 1988 Sep; 193(3):271–4 (Eng. Abstr.) **(Ger)**

[Achievements of tumor surgery in tumors of the pancreas] Bodner E. **Langenbecks Arch Chir** 1988;Suppl 2:133–8 (Eng. Abstr.) **(Ger)**

[Iatrogenic damage of the bile ducts caused by cholecystectomy. Treatment and results] Raute M, et al. **Langenbecks Arch Chir** 1988;373(6):345–54 (Eng. Abstr.) **(Ger)**

[A severe late tonsillar hemorrhage 2 months postoperatively] Swoboda H, et al. **Laryngol Rhinol Otol (Stuttg)** 1988 Aug; 67(8):431–3 (Eng. Abstr.) **(Ger)**

[High-frequency jet ventilation in emergency tracheal puncture] Hartwein J, et al. **Laryngorhinootologie** 1989 Mar; 68(3):186–7 (Eng. Abstr.) **(Ger)**

[Recurrent ulcers following stomach resection in Billroth II and Billroth I stomachs. Different patterns of distribution] Rahn A, et al. **Med Klin** 1988 Aug 12;83(16):503–6 (Eng. Abstr.) **(Ger)**

[Critical intracranial pressure crises in drained hydrocephalus with minimally enlarged or normal ventricles] Kölfen W, et al. **Monatsschr Kinderheilkd** 1989 May;137(5):297–301 (Eng. Abstr.) **(Ger)**

[Osteotomy to lengthen the femur neck with distal adjustment of the trochanter major in coxa vara after hip dislocation] Buess P, et al. **Orthopade** 1988 Nov;17(6):485–90 (Eng. Abstr.) **(Ger)**

[Simultaneous resection of echinococcus cysts from the liver and lung] Jakob H, et al. **Prax Klin Pneumol** 1988 Jun; 42(6):435–7 (Eng. Abstr.) **(Ger)**

[Fatal hemorrhage in total endoprosthesis reimplantation. A case report and legal viewpoints] Bullrich A, et al. **Unfallchirurg** 1989 Apr;92(4):187–90 (Eng. Abstr.) **(Ger)**

[Reosteosyntheses of the tibial shaft. Status of indications—choice of procedure—results of treatment] Dittel KK, et al. **Unfallchirurg** 1988 Sep;91(9):395–401 (Eng. Abstr.) **(Ger)**

[Corrective interventions following osseous injuries of the shoulder girdle] Meeder PJ, et al. **Unfallchirurg** 1988 Sep; 91(9):408–15 (16 ref.) (Eng. Abstr.) **(Ger)**

[Femoral shaft fractures in ipsilateral total hip endoprostheses. Osteosynthesis without the exchange operation?] Zilkens K, et al. **Unfallchirurg** 1988 Aug; 91(8):351–7 (Eng. Abstr.) **(Ger)**

[Reconstructive foot surgery following complex trauma of the foot] Zwipp H, et al. **Unfallchirurg** 1989 Mar; 92(3):140–54 (Eng. Abstr.) **(Ger)**

[Reconstruction of large femoral defects in exchange operations following artificial hip replacement] Roesgen M, et al. **Unfallchirurgie** 1989 Feb;15(1):14–23 (Eng. Abstr.) **(Ger)**

[Persistent postoperative hyperthyroidism—a surgical problem] Frilling A, et al. **Wien Med Wochenschr** 1988 Sep 30;138(18):450–1 (Eng. Abstr.) **(Ger)**

[Cancer of the transposed ovary following Wertheimer operation] Leitsmann H, et al. **Z Arztl Fortbild (Jena)** 1988; 82(11):501–3 **(Ger)**

[Quo vadis endoscopic sphincterotomy?] Seifert E, et al. **Z Gastroenterol** 1989 Feb;27(2):77–82 (Eng. Abstr.) **(Ger)**

[Physiology of the continence organ before and following pouch-anal anastomosis] Braun J. **Z Gastroenterol [Verh]** 1989 Jul;24:244–6 **(Ger)**

[Late results following Rastelli corrective operations in transposition of great vessels] Kececioglu D, et al. **Z Kardiol** 1988 Jul;77(7):432–5 (Eng. Abstr.) **(Ger)**

[Heart valve surgery: an analysis of the causes and peri- and postoperative course] Schön HR, et al. **Z Kardiol** 1989 Jun; 78(6):372–9 (Eng. Abstr.) **(Ger)**

[Long-term experiences with lyophilized soft dura (Lyodura S) as a connective tissue substitute in pediatric surgery] Heiming E, et al. **Z Kinderchir** 1989 Apr;44(2):67–71 (Eng. Abstr.) **(Ger)**

[Possibilities of therapy of femur fractures following placement a of total hip endoprosthesis] Bernd L, et al. **Z Orthop** 1989 May-Jun;127(3):291–5 (Eng. Abstr.) **(Ger)**

[Replacement of the hip joint in young patients under 40 years of age. Clinico-statistical report of experiences] Mittelmeier H, et al. **Z Orthop** 1988 May-Jun;126(3):304–13 (Eng. Abstr.) **(Ger)**

[Indications and results of knee endoprostheses without an

axis] Puhl W, et al. **Z Orthop** 1988 May–Jun;126(3):361–8 (Eng. Abstr.) **(Ger)**

[Growth disorders of the para-articular end of the femur following surgical treatment of pediatric femoral fractures] Rettig H. **Z Orthop** 1988 May–Jun;126(3):255–9 (Eng. Abstr.) **(Ger)**

[Surgical technic in femur shaft fenestration within the scope of revision operations following hip joint total endoprostheses] Savvidis E, et al. **Z Orthop** 1989 Mar–Apr; 127(2):228–36 (Eng. Abstr.) **(Ger)**

[Revision interventions in aseptic and infected loose knee endoprostheses] Trepte CT, et al. **Z Orthop** 1989 May–Jun; 127(3):315–21 (Eng. Abstr.) **(Ger)**

[Post-traumatic late damage following epiphyseal injuries of the distal end of the femur] Schepp HJ, et al. **Z Unfallchir Versicherungsmed Berufskr** 1988;81(3):174–80 **(Ger)**

[Change in the procedure following external fixation--osteosynthesis in closed and 1st to 2d degree open tibial fractures] Weise K, et al. **Z Unfallchir Versicherungsmed Berufskr** 1988;81(2):93–104 **(Ger)**

[Surgical aspects of venous puncture] Dahl HD. **Zentralbl Chir** 1988;113(16):1061–71 **(Ger)**

[Stomach cancer following gastroenterostomy] Demirkol K, et al. **Zentralbl Chir** 1988;113(22):1472–5 (Eng. Abstr.) **(Ger)**

[Perforation of sigmoid diverticula. A complication following allogenic kidney transplantation] Goeters C, et al. **Zentralbl Chir** 1988;113(23):1525–9 (Eng. Abstr.) **(Ger)**

[Wound healing, scar formation and the timing of the correction] Härtel P. **Zentralbl Chir** 1988;113(12):745–50 (7 ref.) (Eng. Abstr.) **(Ger)**

[Valgus osteotomies preceding total endoprosthesis] Reichel F. **Zentralbl Chir** 1989;114(12):777–87 (Eng. Abstr.) **(Ger)**

[The role of peritoneal lavage in the surgical treatment of acute necrotizing pancreatitis] Sápy P, et al. **Zentralbl Chir** 1989;114(2):99–106 (Eng. Abstr.) **(Ger)**

[A case of two staged operation of pericardial abscess after left-ventricular aneurysmectomy] Miyata Y, et al. **Kyobu Geka** 1989 Apr;42(4):307–10 (Eng. Abstr.) **(Jpn)**

[Power staple fixation of the sternum after refractory mediastinitis following A-C bypass; key points of sternal fixation] Okada M, et al. **Kyobu Geka** 1988 Jul;41(8):641–3 (Eng. Abstr.) **(Jpn)**

[Surgical experience with a case of subaortic stenosis previously treated by patch closure of ventricular septal defect] Seo K, et al. **Kyobu Geka** 1989 Feb;42(2):145–9 (Eng. Abstr.) **(Jpn)**

[A case report of clinical application of left ventricular assist device for a profound left ventricular heart failure after open heart surgery] Nishiwaki N, et al. **Nippon Geka Hokan** 1988 Sep 1;57(5):413–20 (Eng. Abstr.) **(Jpn)**

[Treatment of bronchopleural fistula and empyema after pulmonary resection] Saitoh Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Sep;36(9):1972–7 (Eng. Abstr.) **(Jpn)**

[The treatment of chylothorax following pulmonary resection in lung cancer] Sasai T, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Jul;36(7):1044–8 (Eng. Abstr.) **(Jpn)**

[Use of a subclavian-femoral prosthesis in treating a complication after implantation of a bifurcated aortic prosthesis in a patient with hypertension] Grajek S, et al. **Kardiol Pol** 1988;31(12):780–5 (Eng. Abstr.) **(Pol)**

[Bilateral ligation of the external carotid in a case of post-tonsillectomy hemorrhage] Obreja S, et al. **Rev Chir [Otorinolaringol]** 1988 Apr–Jun;33(2):145–7 (Eng. Abstr.) **(Rum)**

[Treatment of postoperative peritonitis] Bytka PF, et al. **Akush Ginekol (Mosk)** 1988 May;(5):63–5 **(Rus)**

[Reoperations on the aorta and its branches] Kulik IaP, et al. **Kardiologiia** 1988 Dec;28(12):113–5 **(Rus)**

[Selection of the method of plastic surgery of postoperative ventral hernia] Amrenov MT, et al. **Khirurgiia (Mosk)** 1988 Dec;(12):79–80 **(Rus)**

[A modification of Henrich's method in the treatment of postoperative hernia of the right ileal region] Baimyshev ES, et al. **Khirurgiia (Mosk)** 1989 Feb;(2):118–20 **(Rus)**

[Treatment of postoperative recurrences of habitual shoulder dislocation] Cherkes-Zade DI, et al. **Khirurgiia (Mosk)** 1988 Aug;(8):53–7 (Eng. Abstr.) **(Rus)**

[Plastic repair of the anterior abdominal wall in postoperative and recurrent hernia] Iupatov SI, et al. **Khirurgiia (Mosk)** 1988 Aug;(8):115–8 **(Rus)**

[Reoperation in vascular complications after transplantation of thoracodorsal flaps] Milanov NO, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):104–7 **(Rus)**

[Closed active drainage of postoperative and postinjection suppurative complications] Pushkarev NI, et al. **Khirurgiia (Mosk)** 1989 Feb;(2):78 **(Rus)**

[Characteristics of surgical technics in repeat operations on the lungs in children] Avilova OM, et al. **Klin Khir** 1988; (6):14–6 (Eng. Abstr.) **(Rus)**

[Relaparotomy in emergency surgery] Bondarenko NM, et al. **Klin Khir** 1989;(1):59 **(Rus)**

[The effect of complex preoperative preparation on the respiratory function in patients with large and giant postoperative abdominal hernias] Iatsentiuk MN, et al. **Klin Khir** 1989;(2):6–9 (Eng. Abstr.) **(Rus)**

[Surgical treatment of secondary deformities of the anorectal area in children] Kaplan VM. **Klin Khir** 1988;(6):6–9 (Eng. Abstr.) **(Rus)**

[The treatment of postoperative abdominal hernia] Shevchenko PV. **Klin Khir** 1989;(2):4–6 (Eng. Abstr.) **(Rus)**

[Residual subluxations after the surgical treatment of congenital hip dislocation] Kuliev AM. **Ortop Travmatol Protez** 1988 Oct;(10):15–8 (Eng. Abstr.) **(Rus)**

[Treatment of residual pleural cavity and clotted hemothorax in patients operated on in pulmonary tuberculosis] Kabanov AN, et al. **Probl Tuberk** 1988;(11):34–5 (Eng. Abstr.) **(Rus)**

[Cavernotomy in patients with solitary lung] Krasnov VA, et al. **Probl Tuberk** 1989;(2):32–4 (Eng. Abstr.) **(Rus)**

[Removal of the intervascular anastomoses in the radical correction of tetralogy of Fallot] Selivanenko VT, et al. **Sov Med** 1988;(6):28–33 (Eng. Abstr.) **(Rus)**

[Autodermoplasty of recurrent large and gigantic hernias] Zharinov EI, et al. **Sov Med** 1988;(8):121–2 **(Rus)**

[Functioning of the artificial bladder after fistuloplasty by the transvaginal approach] Tiurin RB, et al. **Urol Nefrol (Mosk)** 1989 Jan–Feb;(1):67–9 **(Rus)**

[Open treatment of postoperative peritonitis] Bytka PF, et al. **Vestn Khir** 1988 Oct;141(10):109–11 **(Rus)**

[A method of plastic surgery in postoperative sacro-perineal hernia] Chernyĭ VA, et al. **Vestn Khir** 1988 May;140(5):88–9 **(Rus)**

[Double resection of the intestines] Magomedov AD, et al. **Vestn Khir** 1988 Jun;140(6):94–5 **(Rus)**

[Relaparotomy (problems of diagnosis and surgical tactics)] Nikhinson RA, et al. **Vestn Khir** 1988 Jul;141(7):88–93 **(Rus)**

[Repeat surgery in children with hydronephrosis] Osipov IB, et al. **Vestn Khir** 1989 Jan;142(1):70–1 **(Rus)**

[Postoperative aneurysms of the thoracic aorta] Pokrovskiĭ AV, et al. **Vestn Khir** 1989 Jan;142(1):26–34 (Eng. Abstr.) **(Rus)**

[Surgical procedures in erosive hemorrhage of the common carotid artery] Revskoĭ IuK, et al. **Voen Med Zh** 1988 Sep; (9):18–20 **(Rus)**

[Reoperation due to ileus] Batinica J. **Acta Chir Iugosl** 1987; 34(1):27–34 (Eng. Abstr.) **(Scr)**

THERAPY

Use of tetracycline for sclerosis of a biliary-cutaneous fistula. Shaw DW, et al. **AJR Am J Roentgenol** 1989 Jul; 153(1):65–6

Management of postoperative chylopericardium in childhood. Denfield SW, et al. **Am J Cardiol** 1989 Jun 1; 63(18):1416–8

Serratia marcescens infected silk suture rejected by combined acupuncture, moxibustion and low-power laser therapy from the abdominal fascia. Sternfeld M, et al. **Am J Chin Med** 1988;16(1–2):81–2

An alternative treatment for anastomotic leakage after oesophageal resection. Damm P, et al. **Ann Chir Gynaecol** 1988;77(4):164–5

Cytomegalovirus pneumonia after bone marrow transplantation successfully treated with the combination of ganciclovir and high-dose intravenous immune globulin. Emanuel D, et al. **Ann Intern Med** 1988 Nov 15; 109(10):777–82

Treatment of cytomegalovirus pneumonia with ganciclovir and intravenous cytomegalovirus immunoglobulin in patients with bone marrow transplants. Reed EC, et al. **Ann Intern Med** 1988 Nov 15;109(10):783–8

The management of patients with suspected early postoperative small bowel obstruction. Pickleman J, et al. **Ann Surg** 1989 Aug;210(2):216–9

Treatment of postoperative chylothorax with intrapleural fibrin glue. Akaogi E, et al. **Ann Thorac Surg** 1989 Jul; 48(1):116–8

Extracorporeal pulsatile biventricular support after cardiac transplantation. Icenogle TB, et al. **Ann Thorac Surg** 1989 Apr;47(4):614–6

Venovenous extracorporeal membrane oxygenation for noncardiogenic pulmonary edema after coronary bypass surgery. Katz NM, et al. **Ann Thorac Surg** 1988 Oct; 46(4):462–4

Extracorporeal membrane oxygenation for postcardiotomy cardiogenic shock in children. Rogers AJ, et al. **Ann Thorac Surg** 1989 Jun;47(6):903–6

Ruptured aortic aneurysms: postoperative complications and their management. Vohra R, et al. **Ann Vasc Surg** 1988 Apr;2(2):114–9

Management of general surgical complications following cardiac transplantation. DiSesa VJ, et al. **Arch Surg** 1989 May;124(5):539–41

Unsuccessful arthroscopic treatment of pyarthrosis following anterior cruciate ligament reconstruction. Kohn D. **Arthroscopy** 1988;4(4):287–9

Use of a paracorporeal pneumatic ventricular assist device for postoperative cardiogenic shock in two children with complex cardiac lesions. Matsuda H, et al. **Artif Organs** 1988 Oct;12(5):423–30

Clinical experience with centrifugal pump ventricular support at UCLA Medical Center. Drinkwater DC, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):505–8

Temporary metabolic support by extracorporeal blood therapy for liver failure after surgery. Matsubara S, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):266–9

Determinants of survival in patients with ventricular assist devices. Parascandola SA, et al. **ASAIO Trans** 1988 Jul–Sep;34(3):222–8

Postural drainage in the management of postoperative hyphaema. Thomas R, et al. **Aust N Z J Ophthalmol** 1989 Feb;17(1):79–80

Percutaneous drainage of subphrenic biliary collections using a Ring-McLean sump catheter. Brough WA, et al. **Aust N Z J Surg** 1988 Jul;58(7):579–81

Perioperative nutritional support. McMahon MJ. **Baillieres Clin Gastroenterol** 1988 Oct;2(4):751–63 (50 ref.)

Bilirubin removal by anion exchange resin in post-operative liver failure. Miyazaki M, et al. **Biomater Artif Cells Artif Organs** 1988–89;16(5):977–83

Current problems and future goals in clinical bone marrow transplantation. Slavin S, et al. **Blood Rev** 1988 Dec; 2(4):259–69 (63 ref.)

Post-transfusion purpura following open heart surgery: management by high dose intravenous immunoglobulin infusion. Walker WS, et al. **Blut** 1988 Nov;57(5):323–5

Balloon dilatation of stenosed Blalock-Taussig shunts. Qureshi SA, et al. **Br Heart J** 1989 May;61(5):432–4

The treatment of vaginal intraepithelial neoplasia after hysterectomy. Soutter WP. **Br J Obstet Gynaecol** 1988 Oct; 95(10):961–2 (9 ref.)

Endoscopic balloon dilatation of colonic anastomotic strictures. Aston NO, et al. **Br J Surg** 1989 Aug;76(8):780–2

Postoperative abdominal sepsis [editorial] Krukowski ZH. **Br J Surg** 1988 Dec;75(12):1153–4

Endoscopic removal of retained stones after biliary surgery. Lambert ME, et al. **Br J Surg** 1988 Sep;75(9):896–8

Prolonged ventricular support using a centrifugal pump. Hoy FB, et al. **Can J Surg** 1989 Sep;32(5):342–4

Perioperative care of the infant with congenital heart disease. Talner NS, et al. **Cardiol Clin** 1989 May;7(2):419–38 (76 ref.)

Transluminal balloon embolization of an inadvertent aorto-to-coronary venous bypass to the anterior cardiac vein. Jost S, et al. **Cathet Cardiovasc Diagn** 1989 May; 17(1):28–30

Transcatheter occlusion of ventricular septal defect. O'Laughlin MP, et al. **Cathet Cardiovasc Diagn** 1989 Jul; 17(3):175–9

Efficacy of metabolic support with glucose-insulin-potassium for left ventricular pump failure after aortocoronary bypass surgery. Coleman GM, et al. **Circulation** 1989 Sep;80(3 Pt 1):I91–6

Applications of percutaneous transluminal coronary angioplasty in cardiac transplantation. Preliminary results in five patients. Vetrovec GW, et al. **Circulation** 1988 Nov; 78(5 Pt 2):III83–6

Treatment of infected knee arthroplasty. Bengston S, et al. **Clin Orthop** 1989 Aug;(245):173–8

The treatment of patellar fractures after total knee arthroplasty. Hozack WJ, et al. **Clin Orthop** 1988 Nov; (236):123–7

Percutaneous stone and stent removal from renal transplants. Gedroyc WM, et al. **Clin Radiol** 1989 Mar;40(2):174–7

Enteral nutrition in hypermetabolic surgical patients. Cerra FB, et al. **Crit Care Med** 1989 Jul;17(7):619–22

Can the pouch be saved? Schoetz DJ Jr, et al. **Dis Colon Rectum** 1988 Sep;31(9):671–5

Pseudogout associated with primary hyperparathyroidism: management in the immediate postoperative period for prevention of acute pseudogout attack. Yashiro T, et al. **Endocrinol Jpn** 1988 Aug;35(4):617–24

Successful treatment of gastric stasis following proximal gastric vagotomy using endoscopic balloon dilatation. Steele RJ, et al. **Endoscopy** 1989 May;21(3):120

Termination of re-entrant ventricular tachycardia by subthreshold stimulus applied to the zone of slow conduction. Podczeck A, et al. **Eur Heart J** 1988 Oct; 9(10):1146–50

Endoscopic treatment of refluxing ureteric stump following nephrectomy with Tissucol and teflon injection. Carini M, et al. **Eur Urol** 1989;16(4):312–4

Endoscopic biliary prostheses as treatment for benign postoperative bile duct strictures. Berkelhammer C, et al. **Gastrointest Endosc** 1989 Mar–Apr;35(2):95–101

Colonoscopic decompression for acute colonic pseudo-obstruction (Ogilvie's syndrome) in transplant recipients. Love R, et al. **Gastrointest Endosc** 1988 Sep–Oct; 34(5):426–9

Arterial embolization in the management of abdominal and retroperitoneal hemorrhage. O'Hanlan KA, et al. **Gynecol Oncol** 1989 Aug;34(2):131–5

Therapy of venous hypertension in calves with total artificial heart (TAH). Vašku J, et al. **Int J Artif Organs** 1989 Apr; 12(4):242–51

Percutaneous balloon aortoplasty of recoarctation: an alternative approach using the axillary artery. Martin RP, et al. **Int J Cardiol** 1989 Jan;22(1):119–21

Postoperative cardiopulmonary failure in tetralogy of Fallot with absent pulmonary valve syndrome treated by extracorporeal membrane oxygenation. Pahl E, et al. **Int J Cardiol** 1988 Aug;20(2):276–8

Embolization therapy in patients with severe arterial bleeding after hysterectomy. Teichmann AT, et al. **Int J Gynaecol Obstet** 1989 Mar;28(3):289–93

Balloon dilation of pulmonary venous pathway obstruction after Mustard repair for transposition of the great arteries.

Cooper SG, et al. **J Am Coll Cardiol** 1989 Jul;14(1):194–8
Nonoperative treatment of a postoperative fracture around an uncemented porous-coated femoral component. Dysart SH, et al. **J Arthroplasty** 1989;4(2):187–90
Pneumatic dilatation for achalasia after fundoplication. Marshall JB. **J Clin Gastroenterol** 1989 Apr;11(2):154–7
Colonoscopic removal of a postoperative foreign body [letter] Yolen SR, et al. **J Clin Gastroenterol** 1989 Aug; 11(4):483
Activitrax AAIR pacing for sinus node dysfunction after orthotopic heart transplantation: an initial report. Loria K, et al. **J Heart Transplant** 1988 Sep–Oct;7(5):380–4
Fibrin glue for the treatment of persistent lymphatic drainage. Giberson WG, et al. **J Pediatr Surg** 1988 Dec;23(12):1188–9
Balloon dilatation of postoperative tracheal stenosis. Philippart AI, et al. **J Pediatr Surg** 1988 Dec;23(12):1178–9
Neonatal nutrition casebook: nutritional management of the newborn with a postoperative chylothorax. Felber S. **J Perinatol** 1987 Winter;7(1):64–6
Complication of ureteric pigtail stents. MacDermott JP, et al. **J R Coll Surg Edinb** 1988 Dec;33(6):338–9
Bleeding stomal varices treated by sclerotherapy. Mosquera DA, et al. **J R Coll Surg Edinb** 1988 Dec;33(6):337
Extracorporeal membrane oxygenation in children. New trends. Trento A, et al. **J Thorac Cardiovasc Surg** 1988 Oct;96(4):542–7
Electroimpulse acupuncture treatment of 110 cases of abdominal pain as a sequela of abdominal surgery. Wang XM. **J Tradit Chin Med** 1988 Dec;8(4):269–70
Relative importance of amino acid infusion as a means of sparing protein in surgical patients. Humberstone DA, et al. **JPEN J Parenter Enteral Nutr** 1989 May–Jun; 13(3):223–7
Self washout method for defecational complaints following low anterior rectal resection. Iwama T, et al. **Jpn J Surg** 1989 Mar;19(2):251–3
Management of neurovascular complications in extended skull base surgery. Leonetti JP, et al. **Laryngoscope** 1989 May;99(5):492–6
Acute vascular rejection treated by plasma exchange. Fassbinder W, et al. **Life Support Syst** 1983;1 Suppl 1:115–7
Iatrogenic chylous ascites: operative or conservative approach. Heyl A, et al. **Neth J Surg** 1989 Feb;41(1):5–7
Transluminal angioplasty of intracerebral vessels for cerebral arterial spasm: reversal of neurological deficits after delayed treatment. Barnwell SL, et al. **Neurosurgery** 1989 Sep;25(3):424–9
Balloon catheter dilatation in lacrimal surgery. Becker BB, et al. **Ophthalmic Surg** 1989 Mar;20(3):193–8
Medical management of a high bleb phase after trabeculectomies. Scott DR, et al. **Ophthalmology** 1988 Sep; 95(9):1169–73
Fracture of the femur after total hip arthroplasty. Roffman M, et al. **Orthopedics** 1989 Aug;12(8):1067–70
Problems with permanent atrial pacing in the Fontan patient. Case CL, et al. **PACE** 1989 Jan;12(1 Pt 1):92–6
ECT following craniotomy. Roccaforte WH, et al. **Psychosomatics** 1989 Winter;30(1):99–101
Postoperative abscesses with enteric communication: percutaneous treatment. Lambiase RE, et al. **Radiology** 1989 May;171(2):497–500
Biliary complications after liver transplantation in children. Letourneau JG, et al. **Radiology** 1989 Mar;170(3 Pt 2):1095–9
Stomal varices: percutaneous transhepatic embolization. Samaraweera RN, et al. **Radiology** 1989 Mar;170(3 Pt 1):779–82
Obstruction to hepatic venous drainage after liver transplantation: treatment with balloon angioplasty. Zajko AB, et al. **Radiology** 1989 Mar;170(3 Pt 1):763–5
Pneumoperitoneum complicating coronary bypass surgery: management without laparotomy. Shulman AG, et al. **Surg Endosc** 1987;1(1):63–4
Therapeutic effect of corticosteroid, mannitol and silicon sponge on retraction induced brain edema. Lin SM. **Taiwan I Hsueh Hui Tsa Chih** 1988 Jun;87(6):602–10
Value of antegrade ureteral dilation for late ureter obstruction in renal transplants. Benoit G, et al. **Transpl Int** 1989 Apr;2(1):33–5
Percutaneous access for the correction of ureteral strictures after renal transplantation. Dreikorn K. **Transpl Int** 1989 Apr;2(1):40
Antegrade percutaneous dilation of ureteral strictures after kidney transplantation. Oosterhof GO, et al. **Transpl Int** 1989 Apr;2(1):36–9
Postope. ive thrombocytopenia in liver transplant recipients: prognostic implications and treatment with high dose of gamma-globulin. Munoz SJ, et al. **Transplant Proc** 1989 Jun;21(3):3545–6
Ganciclovir/immunoglobulin combination therapy for the treatment of human cytomegalovirus-associated interstitial pneumonia in bone marrow allograft recipients. Schmidt GM, et al. **Transplantation** 1988 Dec;46(6):905–7
[Treatment of severe postoperative infections in head surgery. 20 cases] Rousseaux M, et al. **Ann Med Interne (Paris)** 1989;140(3):176–81 (16 ref.) (Eng. Abstr.) **(Fre)**
[Retrograde ejaculation following a Y-V plasty of the bladder neck carried out during childhood. Treatment using the Abrahams procedure] Bruezière J, et al. **Ann Urol (Paris)** 1989;23(3):255–6 (Eng. Abstr.) **(Fre)**
[Percutaneous arthrolysis under arthroscopic control and manipulation under anesthesia in the treatment of postoperative stiffness of the knee] Christel P, et al. **Rev Chir Orthop** 1988;74(6):517–25 (Eng. Abstr.) **(Fre)**
[A successful prolonged resuscitation following mitral valve replacement—a case report] Lange VE, et al. **Anaesthesiol Reanim** 1989;14(2):119–22 (Eng. Abstr.) **(Ger)**
[Recovery of heart muscle. Weaning from the heart-/lung machine is often a problem—new pump systems for temporary cardiovascular assistance] Schwing C. **Fortschr Med** 1989 Apr 30;107(13):92–3 **(Ger)**
[Urologic complications. Diagnosis and treatment of therapy complications] Petri E. **Gynakologe** 1989 Feb;22(1):39–45 (22 ref.) **(Ger)**
[Follow-up treatment and after care following operations to improve hearing] Kley W. **HNO** 1988 May;36(5):175–80 (20 ref.) (Eng. Abstr.) **(Ger)**
[Protein oriented peripheral venous nutrition following surgical trauma] Mertes N, et al. **Infusionstherapie** 1989 Apr;16(2):60–6 (Eng. Abstr.) **(Ger)**
[Hypocaloric nutrition in the early postoperative phase in patients following colorectal surgery] Mory M, et al. **Infusionstherapie** 1989 Feb;16(1):41–3 (Eng. Abstr.) **(Ger)**
[Stress adapted parenteral amino acid substitution in operated premature and newborn infants] Schober PH, et al. **Infusionstherapie** 1989 Apr;16(2):68–74 (Eng. Abstr.) **(Ger)**
[Intra- and postoperative autotransfusion—a quality analysis] Paravicini D. **Klin Wochenschr** 1988;66 Suppl 15:29–32 (18 ref.) (Eng. Abstr.) **(Ger)**
[Drainage in bile duct surgery—yes or no?] Alexander-Williams J, et al. **Langenbecks Arch Chir** 1988; 373(4):256–62 **(Ger)**
[Early postoperative enteral feeding following esophageal resection] Brandmair W, et al. **Langenbecks Arch Chir** 1988; 373(4):248–55 (Eng. Abstr.) **(Ger)**
[How do I facilitate postoperative breathing in nasal septum operated patients?] Wustrow TP, et al. **Laryngorhinootologie** 1989 Jun;68(6):363–4 **(Ger)**
[Therapeutic occlusion of an erroneously implanted aortocoronary venous bypass using transluminal balloon embolization] Jost S, et al. **Z Kardiol** 1988 Nov;77(11):746–8 (Eng. Abstr.) **(Ger)**
[Supravalvular pulmonary stenosis following anatomic correction of transposition of great vessels: report of a successful balloon dilatation] Schranz D, et al. **Z Kardiol** 1988 Nov;77(11):743–5 (Eng. Abstr.) **(Ger)**
[Peritoneal dialysis in hemolytic-uremic syndrome following ileocecal resection for invagination in postoperative peritonitis] Deindl C, et al. **Z Kinderchir** 1989 Jun; 44(3):169–71 (Eng. Abstr.) **(Ger)**
[Percutaneous transluminal coronary angioplasty after coronary artery bypass] Rodeanu M, et al. **Harefuah** 1989 Jan 1;116(1):29–32 (Eng. Abstr.) **(Heb)**
[Percutaneous endoureteral manipulation in the resolution of ureteral fistula complications following Bricker's urinary diversion: clinical case] Martina G, et al. **Arch Ital Urol Nefrol Androl** 1988 Mar;60(1):81–5 (Eng. Abstr.) **(Ita)**
[Endoscopic closure of broncho-pleural fistula after pneumonectomy] Nomoto S, et al. **Kyobu Geka** 1988 May; 41(6):521–4 (Eng. Abstr.) **(Jpn)**
[A case of tracheobronchial stenosis after esophageal resection and tracheoplasty managed by a silicon T-tube] Tanimura S, et al. **Kyobu Geka** 1988 Jul;41(8):660–3 (Eng. Abstr.) **(Jpn)**
[A successfully-treated case of graft-versus-host disease after mitral value replacement] Kainuma Y, et al. **Nippon Kyobu Geka Gakkai Zasshi** 1988 Oct;36(10):2290–5 (Eng. Abstr.) **(Jpn)**
[Treatment of various early complications after the surgical treatment of retinal detachment] Starzycka M, et al. **Klin Oczna** 1988 Mar;90(3):101–3 (Eng. Abstr.) **(Pol)**
[Principles of resuscitation and anesthesia in early postoperative obstructions] Mircea N. **Rev Chir [Chir]** 1988 May–Jun;37(3):227–34 (0 ref.) (Eng. Abstr.) **(Rum)**
[Effect of hyperbaric oxygenation on kidney functions and blood acid-base equilibrium of patients with diffuse peritonitis] Borukhov SA, et al. **Anesteziol Reanimatol** 1988 Nov–Dec;(6):68–70 (Eng. Abstr.) **(Rus)**
[The choice of regimen for high-frequency jet ventilation of the lungs during fiber bronchoscopy via intubation tube in patients with postoperative respiratory failure] Timerbaev VKh, et al. **Anesteziol Reanimatol** 1988 Sep–Oct;(5):58–60 (Eng. Abstr.) **(Rus)**
[Evaluation of the blood supply to the bronchial stump following resection of the lungs using a mechanical suture in the diagnosis and treatment of pulmonary hemorrhage] Volynskiĭ IuD, et al. **Grudn Khir** 1989 Jan–Feb;(1):52–5 (Eng. Abstr.) **(Rus)**
[Immediate hemodynamic effect of sequential atrioventricular pacing in cardiosurgical patients] Zorin VS, et al. **Kardiologiia** 1988 Jun;28(6):69–72 (Eng. Abstr.) **(Rus)**
[Bougienage in the treatment of cicatricial stricture of the rectum] Andrianov AV. **Khirurgiia (Mosk)** 1988 Dec; (12):129–30 **(Rus)**
[Prevention and treatment of pulmonary complications after surgery of the abdominal organs] Chepkiĭ LP, et al. **Khirurgiia (Mosk)** 1989 Jun;(6):107–10 **(Rus)**
[Correction of disorders of hemostasis, blood rheology and microcirculation in the postoperative period] Pavlovskiĭ DP. **Khirurgiia (Mosk)** 1989 Apr;(4):123–6 **(Rus)**
[A method of treating postoperative paralysis of the gastrointestinal tract] Zarkeshev SR. **Khirurgiia (Mosk)** 1989 Feb;(2):113–4 **(Rus)**
[Heliox correction of the changes in hemodynamics and gas exchange in the early period after lung resection] Kogosov IuA, et al. **Klin Khir** 1988;(10):3–4 (Eng. Abstr.) **(Rus)**
[The use of polymethylsiloxane adsorbents in the treating early intoxication in patients following surgery of gastrointestinal hemorrhage] Kuz'menko VF, et al. **Klin Khir** 1989;(3):61–3 (Eng. Abstr.) **(Rus)**
[Successful conservative treatment of an external gastric fistula] Opekunov SM, et al. **Klin Khir** 1988;(8):68 **(Rus)**
[Hirudotherapy of postoperative infiltrates in children] Solov'ev AE, et al. **Klin Khir** 1989;(6):76–7 **(Rus)**
[Characteristics of the arrest of hemorrhages occurring after tooth extraction in patients with congenital coagulopathies] Soboleva OI, et al. **Stomatologiia (Mosk)** 1989 May–Jun; 68(3):30–2 (Eng. Abstr.) **(Rus)**
[Plasmapheresis in the intensive therapy of renal insufficiency] Starikov AV. **Vestn Khir** 1989 Mar; 142(3):16–20 (Eng. Abstr.) **(Rus)**
[Ultrasonic correction of glaucoma surgery] Dolzhin GI. **Vestn Oftalmol** 1988 Nov–Dec;104(6):13–6 (Eng. Abstr.) **(Rus)**
[Choice of the optimal regimen for pneumatic compression in treating patients with postmastectomy edema of the upper extremity] Gerasimenko VN, et al. **Vopr Kurortol Fizioter Lech Fiz Kult** 1988 Nov–Dec; (6):54–5 **(Rus)**
[Treatment of patients who have had a cholecystectomy] Grebel'naia SL. **Vrach Delo** 1988 Jul;(7):53–6 **(Rus)**
[Percutaneous treatment of renal transplant complications] Calahorra Fernández FJ, et al. **Actas Urol Esp** 1989 May–Jun;13(3):161–6 (50 ref.) (Eng. Abstr.) **(Spa)**
[Endo-urologic procedures and renal transplantation] Chicharro Molero JA, et al. **Arch Esp Urol** 1988 Nov–Dec; 41(9):865–71 (Eng. Abstr.) **(Spa)**
[Treatment using an epidural blood patch for cerebrospinal fluid fistulas] Barbera Alacreu M, et al. **Rev Esp Anestesiol Reanim** 1988 May–Jun;35(3):161–4 (Eng. Abstr.) **(Spa)**

TRANSMISSION

Transplanted infections: donor-to-host transmission with the allograft. Gottesdiener KM. **Ann Intern Med** 1989 Jun 15; 110(12):1001–16 (208 ref.)
Transfer of infection via corneal transplantation. Pepose JS. **Transplant Proc** 1989 Feb;21(1 Pt 3):3130–2 (31 ref.)
[AIDS—current significance in surgery] Gürtler L, et al. **Langenbecks Arch Chir** 1989;374(1):60–4 **(Ger)**

VETERINARY

Fracture of the patella as a possible complication of medial patellar desmotomy. Wright JD, et al. **Aust Vet J** 1989 Jun;66(6):189–90
Post-caesarean ventral hernia in two camels. Purohit NR, et al. **Br Vet J** 1989 May–Jun;145(3):294
Attempts to prevent equine post neurectomy neuroma formation through retrograde transport of two neurotoxins, doxorubicin and ricin. Cummings JF, et al. **Equine Vet J** 1988 Nov;20(6):451–6
Femoral nerve paralysis after general anaesthesia. Dyson S, et al. **Equine Vet J** 1988 Sep;20(5):376–80
Pulmonary micro-embolism following orthopaedic surgery in a Thoroughbred gelding. Jones RS, et al. **Equine Vet J** 1988 Sep;20(5):382–4
Pyloric obstruction after toggle-pin fixation of left displaced abomasum in a cow. Kelton DF, et al. **J Am Vet Med Assoc** 1989 Mar 1;194(5):677–82
Factors affecting incisional complication rates associated with colic surgery in horses: 78 cases (1983–1985). Kobluk CN, et al. **J Am Vet Med Assoc** 1989 Sep 1;195(5):639–42
Silicone ocular prosthesis in horses: 11 cases (1983–1987). Provost PJ, et al. **J Am Vet Med Assoc** 1989 Jun 15; 194(12):1764–6
Surgical repair of urethral transection in a horse. Todhunter RJ, et al. **J Am Vet Med Assoc** 1988 Nov 1;193(9):1085–6
Complications of castration and ovariectomy. Nickels FA. **Vet Clin North Am [Equine Pract]** 1988 Dec;4(3):515–23 (35 ref.)
Perineal hernia repair in the dog by transposition of the internal obturator muscle. II. Complications and results in 100 patients. Sjollema BE, et al. **Vet Q** 1989 Jan;11(1):18–23
Rectal resection in the dog. A new surgical approach and the evaluation of its effect on fecal continence. Anderson GI, et al. **Vet Surg** 1987 Mar–Apr;16(2):119–25
Feline thyroidectomy. A comparison of postoperative hypocalcemia associated with three different surgical techniques. Flanders JA, et al. **Vet Surg** 1987 Sep–Oct; 16(5):362–6
Metoclopramide reversal of decreased gastrointestinal myoelectric and contractile activity in a model of canine postoperative ileus. Graves GM, et al. **Vet Surg** 1989 Jan–Feb;18(1):27–33
A potential technique error in stapled side-to-side anastomosis of the small intestine of the horse. Mackey VS, et al. **Vet Surg** 1987 May–Jun;16(3):189–92
Surgical treatment of priapism in a stallion. Schumacher J, et al. **Vet Surg** 1987 May–Jun;16(3):193–6
[Towards a veterinary-professional standard concerning

castration in stallions] Rutgers LJ, et al. **Tijdschr Diergeneeskd** 1989 May 1;114(9):493–8 (Eng. Abstr.) (Dut)
[An unusual complication after the partial resection of the ascending duodenum of a cow] Steiner A, et al. **Tierarztl Prax** 1989;17(1):17–20 (Eng. Abstr.) (Ger)

POSTOPERATIVE PERIOD

Sedation and reversal of sedation in intensive care. Bursztein S. **Acta Anaesthesiol Belg** 1989;40(1):11–6
Effects of the benzodiazepine antagonist flumazenil on postoperative performance following total intravenous anaesthesia with midazolam and alfentanil. Nilsson A, et al. **Acta Anaesthesiol Scand** 1988 Aug;32(6):441–6
Postoperative recovery after general anaesthesia with and without retrobulbar block in retinal detachment surgery. Chung F, et al. **Anaesthesia** 1988 Nov;43(11):943–6
Delayed recovery from general anaesthesia. Johnston KR, et al. **Anaesthesia** 1988 Dec;43(12):1024–5
Does labetalol affect neuromuscular recovery? [letter] Kumar CM. **Anaesthesia** 1989 Mar;44(3):265–6
Hypoxaemia during recovery from anaesthesia--an audit of children after general anaesthesia for routine elective surgery. Laycock GJ, et al. **Anaesthesia** 1988 Nov; 43(11):985–7
Recovery and morbidity after daycase anaesthesia. A comparison of propofol with thiopentone–enflurane with and without alfentanil. Millar JM, et al. **Anaesthesia** 1988 Sep;43(9):738–43
Early postoperative arterial oxygen desaturation. Determining factors and response to oxygen therapy. Canet J, et al. **Anesth Analg** 1989 Aug;69(2):207–12
A comparison of EEG determinants of near–awakening from isoflurane and fentanyl anesthesia. Spectral edge, median power frequency, and delta ratio. Long CW, et al. **Anesth Analg** 1989 Aug;69(2):169–73
Pharmacodynamics of vecuronium and atracurium in the obese surgical patient. Weinstein JA, et al. **Anesth Analg** 1988 Dec;67(12):1149–53
Seizures during emergence from anesthesia. Modica PA, et al. **Anesthesiology** 1989 Aug;71(2):296–300
Accelerated recovery from combined atracurium–vecuronium neuromuscular block. Stirt JA. **Br J Anaesth** 1989 Jun;62(6):697–9
The use of pulse oximetry in the immediate recovery phase following dental extractions under general anesthesia in children. Young ER, et al. **Can Dent Assoc J** 1989 Apr; 55(4):305–8
Decreases in arterial oxygen saturation in paediatric outpatients during transfer to the postanaesthetic recovery room. Chripko D, et al. **Can J Anaesth** 1989 Mar; 36(2):128–32
Pulmonary physiology in the postoperative period. Fairshter RD, et al. **Crit Care Clin** 1987 Apr;3(2):287–306 (104 ref.)
The use of pulse oximetry in post–operative hypoxaemia in patients after propofol induction of anaesthesia. Thomson KD, et al. **Int J Clin Monit Comput** 1989 Jan;6(1):7–10
Pulse oximetry for monitoring during ward analgesia: epidural morphine versus parenteral narcotics. Choi HJ, et al. **J Clin Monit** 1989 Apr;5(2):87–9
Production of protease inhibitors by postsurgical macrophages. Fukasawa M, et al. **J Surg Res** 1989 Mar; 46(3):256–61
Transfer from recovery room to ward [letter] Salim M. **Postgrad Med J** 1988 Apr;64(750):337
Effects of recovery from anesthesia and surgery on renal sodium handling in conscious rats. Thomsen K, et al. **Renal Physiol Biochem** 1988 Nov–Dec;11(6):316–24
Catecholamine binding and concentrations in acute phase plasma after surgery. Sager G, et al. **Scand J Clin Lab Invest** 1988 Sep;48(5):419–24
Reaction to propofol [letter] Thompson RA. **Vet Rec** 1989 Jul 29;125(5):116
[Recovery rooms; targeting the status in hospitals of southwestern France in 1987 (excluding university hospital centers)] Peyre D, et al. **Agressologie** 1988 Mar; 29(3):139–43 (Eng. Abstr.) (Fre)
[Complications in the anesthesia recovery period: a retrospective stud of 4910 patients admitted during a year (letter)] Bancalari G, et al. **Ann Fr Anesth Reanim** 1989; 8(3):299 (Fre)
[Correlation of age–recovery time and the length of procedure–recovery time with propofol (letter)] Gindre B, et al. **Ann Fr Anesth Reanim** 1989;8(1):78 (Fre)
[Hemodynamic and gasometric modifications during the anesthesia recovery period in patients undergoing ventilation after surgery of the abdominal aorta] Janvier G, et al. **Cah Anesthesiol** 1989 Jan–Feb;37(1):3–9 (Eng. Abstr.) (Fre)
[The washout behavior of isoflurane following balanced anesthesia and its effect on postoperative oxygen supply] Mertzlufft F, et al. **Anaesthesist** 1989 Aug;38(8):401–7 (Eng. Abstr.) (Ger)
[Cumulative pharmacokinetics and clinical effects of nalbuphine in patients in the postoperative phase. An open multicenter study] **Arzneimittelforschung** 1989 Jun; 39(6):724–7 (Eng. Abstr.) (Ger)
[Management and organization of postoperative cardiac intensive care units in Italy. Study Group for Anesthesia and Resuscitation in Cardiosurgery] **Minerva Anestesiol** 1989 Jan–Feb;55(1–2):47–51 (Eng. Abstr.) (Ita)
[Recovery from halogen anesthesia in elderly patients] Torri G, et al. **Minerva Anestesiol** 1988 Mar;54(3):85–8 (Eng. Abstr.) (Ita)
[Prevalence of HIV antibody carriers in patients assisted in the recovery room] Bataller A, et al. **Rev Esp Anestesiol Reanim** 1989 May–Jun;36(3):137–9 (Eng. Abstr.) (Spa)

POSTOPERATIVE WOUND INFECTION see **SURGICAL WOUND INFECTION**

POSTOVULATORY PHASE see **LUTEAL PHASE**

POSTPARTUM PERIOD see **PUERPERIUM**

POSTPERICARDIOTOMY SYNDROME see under **HEART DISEASES**

POSTPHLEBITIC DISEASE see **POSTPHLEBITIC SYNDROME**

POSTPHLEBITIC SYNDROME

BLOOD

Transcutaneous oxygen tension in patients with post–thrombotic leg ulcers: treatment with intermittent pneumatic compression. Kolari PJ, et al. **Cardiovasc Res** 1988 Feb;22(2):138–41

COMPLICATIONS

Antithrombotic treatment during acute inflammatory complications of patients affected by postphlebitic syndrome: LMW–heparin versus standard heparin. Verardi S, et al. **Int Angiol** 1988 Jul–Sep;7(3 Suppl):33–40
[A 35–year–old patient with stress dyspnea, cyanosis, right heart failure and post–thrombotic syndrome] König G, et al. **Internist (Berlin)** 1989 Jan;30(1):61–3 (Ger)
[A new surgical method for the management of a herniated muscle caused by venous leg ulcer] Hrabovszky T. **Magy Traumatol Orthop Helyreallito Sebesz** 1988; 31(3):225–8 (Eng. Abstr.) (Hun)

DIAGNOSIS

Combined evaluation of postphlebitic limbs by laser doppler flowmetry and transcutaneous PO2/PCO2 measurements. Belcaro G, et al. **Vasa** 1988;17(4):259–61
[Phlebologic indications for duplex sonography] Marshall M. **Fortschr Med** 1989 May 20;107(15):325–9 (Eng. Abstr.) (Ger)
[Results of new diagnostic applications in the phlebologic field with reflected–light rheography] Tumino G, et al. **Ann Ital Chir** 1987;59(1–6):391–401 (Ita)
[Clinical evaluation of phlebopathies of the lower limbs using Doppler ultrasonography] Scagno C, et al. **Minerva Med** 1988 Dec;79(12):1079–83 (Eng. Abstr.) (Ita)
[Photoplethysmography in the diagnosis of post–thrombotic syndrome] Mlačak B. **Lijec Vjesn** 1989 Jan–Feb; 111(1–2):31–2 (Eng. Abstr.) (Scr)

DRUG THERAPY

Evaluation of capillary permeability and microcirculation in patients with chronic venous hypertension treated with venoruton by the vacuum suction chamber (VSC) device and laser–Doppler flowmetry. Belcaro G, et al. **Phlebologie** 1988 Nov–Dec;41(4):847–56
Evaluation of the microcirculatory effects of Venoruton in patients with chronic venous hypertension by laserdoppler flowmetry, transcutaneous PO2 and PCO2 measurements, leg volumetry and ambulatory venous pressure measurements. Belcaro G, et al. **Vasa** 1989;18(2):146–51

ETIOLOGY

Causalgic form of postphlebitic syndrome. A variety of reflex sympathetic dystrophy caused by acute deep thrombophlebitis. Massell TB. **West J Med** 1988 Sep; 149(3):294–5
[The postphlebitic syndrome in the obese] Stemmer R. **Phlebologie** 1988 Jul–Oct;41(3):527–31 (Eng. Abstr.) (Fre)
[The role of changes in venous capacity in the lower extremities in the pathogenesis of post–thrombotic disease] Vasilenko IuV, et al. **Khirurgiia (Mosk)** 1989 Mar;(3):52–6 (Eng. Abstr.) (Rus)

GENETICS

[Venous ulcus cruris in Klinefelter syndrome] Feier V, et al. **Dermatol Monatsschr** 1988;174(8):472–5 (Eng. Abstr.) (Ger)

PATHOLOGY

Longitudinal and vertical ultrastructural lesion of crural muscle in post–thrombotic syndrome. Szmolenszky T, et al. **Acta Chir Hung** 1989;30(2):145–55

PHYSIOPATHOLOGY

Blood flow in the perimalleolar skin in relation to posture in patients with venous hypertension. Belcaro G, et al. **Ann Vasc Surg** 1989 Jan;3(1):5–7
Skin flow and swelling in post–phlebitic limbs. Belcaro G, et al. **Vasa** 1989;18(2):136–9
[Peripheral hemodynamics at various stages of deep vein thrombosis of the legs] Ovcharenko KI, et al. **Kardiologiia** 1988 Jun;28(6):80–4 (Eng. Abstr.) (Rus)
[Efficacy of noninvasive study methods in assessing the state of the magistral veins in postthrombotic disease] Ignat'ev IM, et al. **Klin Khir** 1988;(7):6–8 (Eng. Abstr.) (Rus)

PREVENTION & CONTROL

Thrombectomy for acute deep vein thrombosis: prevention of postthrombotic syndrome. Shionoya S, et al. **J Cardiovasc Surg (Torino)** 1989 May–Jun;30(3):484–9

RADIOGRAPHY

[Transpopliteal phlebography in the diagnosis of chronic diseases of the veins of the lower extremities] Konstantinova GD, et al. **Khirurgiia (Mosk)** 1989 Mar; (3):47–52 (Eng. Abstr.) (Rus)

SURGERY

Long term results of vein valve transplants placed in the popliteal vein for intractable post–phlebitic venous ulcers and pre–ulcer skin changes. Nash T. **J Cardiovasc Surg (Torino)** 1988 Nov–Dec;29(6):712–6
Endoscopic subfascial discission of perforating veins. Hauer G, et al. **Surg Endosc** 1988;2(1):5–12
[Practical reflections on Linton's operation. Apropos of 110 operations] Tournigand P, et al. **Phlebologie** 1988 Nov–Dec;41(4):877–83 (Eng. Abstr.) (Fre)
[Popliteo–femoral venous reconstruction: indications and results] Stockmann U, et al. **Langenbecks Arch Chir** 1988; Suppl 2:177–80 (Eng. Abstr.) (Ger)
[Evaluation of the therapeutic results of various surgical methods in the treatment of post–phlebitic syndrome of the lower extremities 1976–1987] Andreevska T, et al. **Acta Chir Iugosl** 1987;34 Suppl 2:81–5 (Eng. Abstr.) (Mac)
[Dopplerographic control of the efficacy of the surgical treatment of the postthrombotic syndrome of the lower extremities] Bogachev VIu, et al. **Khirurgiia (Mosk)** 1988 Oct;(10):93–6 (Eng. Abstr.) (Rus)
[Formation of an arteriovenous anastomosis in patients with the postthrombophlebitic syndrome] Pokrovskiĭ AV, et al. **Khirurgiia (Mosk)** 1988 Oct;(10):77–81 (Eng. Abstr.) (Rus)
[Surgical treatment of the postthrombotic syndrome at the stage of decompensation of regional blood circulation] Sukharev II, et al. **Klin Khir** 1988;(7):8–11 (Eng. Abstr.) (Rus)
[Surgical treatment of diseases of the leg veins in elderly patients] Kamalov SK. **Sov Med** 1989;(5):102–6 (Rus)
[Prevention of complications of endoscopic correction of the crural venous blood flow] Nagovitsyn ES, et al. **Vestn Khir** 1989 Mar;142(3):113–5 (Rus)

THERAPY

Intermittent compression units for the postphlebitic syndrome. A pilot study. Ginsberg JS, et al. **Arch Intern Med** 1989 Jul;149(7):1651–2
Evaluation of the effects of elastic compression in patients with postphlebitic limbs by laser–Doppler flowmetry. Belcaro G, et al. **Phlebologie** 1988 Nov–Dec;41(4):797–802
[Indications–related use of stockings--measuring venous pump function] Stöberl C, et al. **Vasa** 1989;18(1):35–9 (Eng. Abstr.) (Ger)
[Comparative evaluation of the methods of treating postphlebitic syndrome in the light of remote results] Vasiutkov VIa, et al. **Kardiologiia** 1988 Jun;28(6):111–2 (Rus)

POSTPHLEBITIC ULCER see **POSTPHLEBITIC SYNDROME**

POSTURE

see related **KINESICS**

Cardiorespiratory effects of the sitting position in neurosurgery. Smelt WL, et al. **Acta Anaesthesiol Belg** 1988;39(4):223–31
The influence of position on ventilation–perfusion distribution after abdominal surgery. Bonnet F, et al. **Acta Anaesthesiol Scand** 1988 Oct;32(7):585–9
Subarachnoid analgesia with hyperbaric 0.5% bupivacaine: effect of a 60–min period of sitting. Povey HM, et al. **Acta Anaesthesiol Scand** 1989 May;33(4):295–7
Orthostatic tremor: report of two cases and an electrophysiological study. Uncini A, et al. **Acta Neurol Scand** 1989 Feb;79(2):119–22
Effect of patient positioning on beam modifying devices [letter] Leong J. **Acta Oncol** 1988;27(6b):859–61
Indicators of the influence a peripheral vestibular deficit has on vestibulo–spinal reflex responses controlling postural stability. Allum JH, et al. **Acta Otolaryngol (Stockh)** 1988 Sep–Oct;106(3–4):252–63
Body position and caloric nystagmus response. Clarke AH, et al. **Acta Otolaryngol (Stockh)** 1988 Nov–Dec; 106(5–6):339–47

The contribution of vestibulo-spinal mechanisms to the maintenance of human upright posture. Dichgans J, et al. **Acta Otolaryngol (Stockh)** 1989 May-Jun;107(5-6):338-45
Nasal resistance and nasal blood flow in postural changes. Kurita N, et al. **Acta Otolaryngol (Stockh)** 1988 Nov-Dec; 106(5-6):448-52
Posturography findings in workers exposed to industrial solvents. Ledin T, et al. **Acta Otolaryngol (Stockh)** 1989 May-Jun;107(5-6):357-61
Modulation by head and trunk positions of the vestibulo-spinal reflexes evoked by galvanic stimulation of the labyrinth. Observations by labyrinthine evoked EMG. Tokita T, et al. **Acta Otolaryngol (Stockh)** 1989 May-Jun; 107(5-6):327-32
Computerized posturography, a development of the measuring system. Aalto H, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;449:71-5
Presentation of a posturographic test with loading of the proprioceptive system. Enbom H, et al. **Acta Otolaryngol Suppl (Stockh)** 1988;455:58-61
Positional nystagmus. Rosenhall U. **Acta Otolaryngol Suppl (Stockh)** 1988;455:17-20 (15 ref.)
Differential diagnosis of vertigo—combined galvanic test and MRI. Sekitani T. **Acta Otolaryngol Suppl (Stockh)** 1988; 458:113-9
Changes in renal excretions of electrolytes upon an orthostatic postural change in chronic glomerulonephritis. Asami T, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Apr; 29(2):261-8
Co-ordination of a simple voluntary multi-joint movement with postural demands: trunk extension in standing man. Oddsson L. **Acta Physiol Scand** 1988 Sep;134(1):109-18
Motor patterns of a fast voluntary postural task in man: trunk extension in standing. Oddsson L. **Acta Physiol Scand** 1989 May;136(1):47-58
Peristalsis in pharyngeal constrictor musculature in relation to positioning and gravity. Borgström PS, et al. **Acta Radiol** 1989 Mar-Apr;30(2):183-5
Median filtering of stabilometric data. Aalto H, et al. **Adv Otorhinolaryngol** 1988;42:50-4
Statistical identification of the extent of a peripheral vestibular deficit using vestibulo-spinal reflex responses. Allum JH, et al. **Adv Otorhinolaryngol** 1988;42:65-71
Pre- and postflight (D-1) postural control in tilting environments. Bles W, et al. **Adv Otorhinolaryngol** 1988; 42:13-7
Otolithic Tullio phenomenon typically presents as paroxysmal ocular tilt reaction. Brandt T, et al. **Adv Otorhinolaryngol** 1988;42:153-6
Otolithic control of posture: vestibulo-spinal reflexes in a patient with a Tullio phenomenon. Fries W, et al. **Adv Otorhinolaryngol** 1988;41:162-5
Primary position upbeat nystagmus in man and cats. Harada K, et al. **Adv Otorhinolaryngol** 1988;42:190-4
The examination of body sway in normal subjects and patients with Ménière's disease or cerebellar dysfunction. Ishizaki H, et al. **Adv Otorhinolaryngol** 1988;41:166-72
Development of righting reflexes, gross motor functions and balance in infants with labyrinth hypoactivity with or without mental retardation. Kaga K, et al. **Adv Otorhinolaryngol** 1988;41:152-61
The role of cervical inputs in compensation of unilateral labyrinthectomized patients. Kobayashi Y, et al. **Adv Otorhinolaryngol** 1988;42:185-9
Influence of the vestibular stimulation on the activity of muscles of the lower limb in man. Electromyographic evidence. Marcellini S, et al. **Adv Otorhinolaryngol** 1988; 41:184-9
Determinants of space perception in space flight. Mittelstaedt H. **Adv Otorhinolaryngol** 1988;42:18-23
Comparative study of two types of exercise treatment for paroxysmal positioning vertigo. Norré ME, et al. **Adv Otorhinolaryngol** 1988;42:287-9
Postural control in the oldest olds. Pyykkö I, et al. **Adv Otorhinolaryngol** 1988;41:146-51
Curing the BPPV with a liberatory maneuver. Semont A, et al. **Adv Otorhinolaryngol** 1988;42:290-3
Gain regulation of the vestibulospinal reflex following microinjection of a beta-adrenergic agonist or antagonist into the locus coeruleus and the dorsal pontine reticular formation. Stampacchia G, et al. **Adv Otorhinolaryngol** 1988;41:134-41
A new method for evaluating autonomic nervous function in patients with equilibrium disorders. Taguchi K, et al. **Adv Otorhinolaryngol** 1988;42:90-4
Influence of pressure loading to the external auditory canal on standing posture in normal and pathological subjects. Watanabe I, et al. **Adv Otorhinolaryngol** 1988;42:72-6
Hypothesis: posture is one of the determinants of the circadian rhythm of urine flow and electrolyte excretion in elderly female patients. Guite HF, et al. **Age Ageing** 1988 Jul;17(4):241-8
Hysterosalpingography: prone and supine [letter] Hugh AE, et al. **AJR** 1989 Apr;152(4):897
Effect of body position on the diagnostic accuracy of the electrocardiogram. Bergman KS, et al. **Am Heart J** 1989 Jan;117(1):204-6
Influence of left ventricular diastolic function on vascular and humoral responses to head-up posture in hypertension. Madkour MA, et al. **Am Heart J** 1989 Sep;118(3):531-8
Responses of left and right ventricular ejection fractions to aerobic and anaerobic phases of upright and supine exercise in normal subjects. Rodrigues EA, et al. **Am Heart J** 1989 Aug;118(2):319-24
The knee-chest position does not improve the efficacy of ipecac-induced emesis. Tandberg D, et al. **Am J Emerg Med** 1989 May;7(3):267-70
Effects of posture on normal and hypertensive portal vein: a quantitative ultrasonic assessment and its clinical implications [letter] Goyal AK, et al. **Am J Gastroenterol** 1988 Dec;83(12):1436-7
Distortion of pancreatic anatomy during ERCP: effects of patient position and endoscopic manipulation [letter] Lough LR, et al. **Am J Gastroenterol** 1989 Sep;84(9):1122-3
The effect of maternal position on uterine artery flow during antepartum fetal heart rate testing. Witter FR, et al. **Am J Obstet Gynecol** 1989 Feb;160(2):379-80
Current concepts of the vestibular system reviewed: 1. The role of the vestibulospinal system in postural control. Keshner EA, et al. **Am J Occup Ther** 1989 May; 43(5):320-30 (80 ref.)
A standing belt. King TI 2d. **Am J Occup Ther** 1989 Jul; 43(7):471-3
The effect of positioning on the hand function of boys with cerebral palsy. Noronha J, et al. **Am J Occup Ther** 1989 Aug;43(8):507-12
Low intraocular pressure and postural changes in intraocular pressure in patients with Hansen's disease. Hussein N, et al. **Am J Ophthalmol** 1989 Jul 15;108(1):80-3
Head posture and hyo-mandibular function in man. A synchronized electromyographic and videofluorographic study of the open-close-clench cycle. Winnberg A, et al. **Am J Orthod Dentofacial Orthop** 1988 Nov;94(5):393-404 (49 ref.)
Effect of posture and locomotion on energy expenditure. Abitbol MM. **Am J Phys Anthropol** 1988 Oct;77(2):191-9
Intersex differences in craniocervical morphology and posture in southern Chinese and British Caucasians. Cooke MS, et al. **Am J Phys Anthropol** 1988 Sep;77(1):43-51
Gluteus maximus muscle function and the origin of hominid bipedality. Marzke MW, et al. **Am J Phys Anthropol** 1988 Dec;77(4):519-28
Cardiopulmonary effects of restraint in dorsal recumbency on awake cattle. Klein L, et al. **Am J Vet Res** 1988 Sep; 49(9):1605-8
Bracing arms increases the capacity for sustained hyperpnea. Banzett RB, et al. **Am Rev Respir Dis** 1988 Jul;138(1):106-9
Effect of posture, hydralazine, and nifedipine on hemodynamics, ventilation, and gas exchange in patients with chronic obstructive pulmonary disease. Corriveau ML, et al. **Am Rev Respir Dis** 1988 Dec;138(6):1494-8
Effects of posture on stimulated ventilation in quadriplegia. McCool FD, et al. **Am Rev Respir Dis** 1988 Jul;138(1):101-5
Orthodeoxia as a sign of pulmonary fibrosis [letter] Midgren B. **Am Rev Respir Dis** 1989 Mar;139(3):852
High-pressure uterine displacement [letter] Dorsey MJ, et al. **Anesthesiology** 1989 Jan;70(1):165-6
The use of PEEP in patients in the sitting position [letter] Drummond JC. **Anesthesiology** 1988 Nov;69(5):798-800
Pulse oximetry and patient positioning: a report of eight cases. Hovagim AR, et al. **Anesthesiology** 1989 Sep;71(3):454-6
The patient's position influences the incidence of dysrhythmias during pulmonary artery catheterization. Keusch DJ, et al. **Anesthesiology** 1989 Apr;70(4):582-4
Lingual and buccal nerve neuropathy in a patient in the prone position: a case report. Winter R, et al. **Anesthesiology** 1989 Sep;71(3):452-4
Sonography of vertebral arteries in De Kleyn's position in subjects and in patients with vertebrobasilar transient ischemic attacks. Arnetoli G, et al. **Angiology** 1989 Aug; 40(8):716-20
Body habitus + height = accurate weight estimate [letter] Losek JD, et al. **Ann Emerg Med** 1989 Jun;18(6):709
Posture in Parkinson's disease: impairment of reflexes and programming. Dietz V, et al. **Ann Neurol** 1988 Nov; 24(5):660-9
Vestibulospinal findings in two syndromes with spontaneous vertigo attacks. Norré ME, et al. **Ann Otol Rhinol Laryngol** 1989 Mar;98(3):191-5
Blood flow in the perimalleolar skin in relation to posture in patients with venous hypertension. Belcaro G, et al. **Ann Vasc Surg** 1989 Jan;3(1):5-7
Inhibition of vestibulospinal reflexes following cholinergic activation of the dorsal pontine reticular formation. D'Ascanio P, et al. **Arch Ital Biol** 1988 Oct;126(4):291-316
Distribution of beta-adrenergic receptors in different brainstem regions controlling posture in the cat. Pompeiano M, et al. **Arch Ital Biol** 1989 Feb;127(1):13-23
Falling and postural deficits due to acute unilateral basal ganglia lesions. Labadie EL, et al. **Arch Neurol** 1989 May; 46(5):492-6
Cortical somatosensory evoked potentials: effects of positional changes. Alonso JA, et al. **Arch Phys Med Rehabil** 1989 Mar;70(3):194-8
Quantitative assessment of head and shoulder posture. Braun BL, et al. **Arch Phys Med Rehabil** 1989 Apr;70(4):322-9
Force platform measures for evaluating postural control: reliability and validity. Goldie PA, et al. **Arch Phys Med Rehabil** 1989 Jul;70(7):510-7
Effects of posture on upper and lower limb peripheral resistance following submaximal cycling. Swan PD, et al. **Arch Phys Med Rehabil** 1989 Sep;70(9):678-80
Exercise during gravity inversion: acute and chronic effects. Vehrs PR, et al. **Arch Phys Med Rehabil** 1988 Nov; 69(11):950-4
Carbon dioxide cystometry and postural changes in patients with multiple sclerosis. Weinstein MS, et al. **Arch Phys Med Rehabil** 1988 Nov;69(11):923-7
Shoulder arthroscopy with the patient in the beach-chair position. Skyhar MJ, et al. **Arthroscopy** 1988;4(4):256-9
Limitations of postural equilibrium tests for examining simulator sickness. Hamilton KM, et al. **Aviat Space Environ Med** 1989 Mar;60(3):246-51
Ocular refraction with body orientation. Lovasik JV, et al. **Aviat Space Environ Med** 1989 Apr;60(4):321-8
Influence of body tilt within the sagittal plane on odor identification performance. Mester AF, et al. **Aviat Space Environ Med** 1988 Aug;59(8):734-7
Performance and well-being under tilting conditions: the effects of visual reference and artificial horizon. Rolnick A, et al. **Aviat Space Environ Med** 1989 Aug;60(8):779-85
Effect of different body postures on the pressures generated during an L-1 maneuver. Williams CA, et al. **Aviat Space Environ Med** 1988 Oct;59(10):920-7
The catalepsy test: its ups and downs. Sanberg PR, et al. **Behav Neurosci** 1988 Oct;102(5):748-59 (68 ref.)
Evaluation of a generalized model of human postural dynamics and control in the sagittal plane. Barin K. **Biol Cybern** 1989;61(1):37-50
Activation of human arm muscles during flexion/extension and supination/pronation tasks: a theory on muscle coordination. Jongen HA, et al. **Biol Cybern** 1989;61(1):1-9
Bi-lateral reactive force patterns in postural sway activity of normal subjects. Mizrahi J, et al. **Biol Cybern** 1989; 60(4):297-305
Head position in low-risk premature infants. Impact of nursing routines. Vles JS, et al. **Biol Neonate** 1988; 54(6):307-13
Left lower lobe ventilation and its relation to cardiomegaly and posture. Alexander MS, et al. **BMJ** 1989 Jul 8; 299(6691):94
The prone position, scoliosis, and cot death [letter] Conner AN. **BMJ** 1989 Apr 29;298(6681):1178
Causes of venous ulceration [letter] Gaylarde PM, et al. **BMJ** 1988 Aug 13;297(6646):485-6
Surgeons' posture and kungfu. Yip YL. **BMJ** 1988 Dec 24-31;297(6664):1690-1
'Dental sedation' [letter] Bourne JG. **Br Dent J** 1988 Nov 19;165(10):355
Relativity theory for dentists [letter] Eccles JD. **Br Dent J** 1989 Jan 7;166(1):7
Lung function in the supine and lateral decubitus positions in anaesthetized infants and children. Larsson A, et al. **Br J Anaesth** 1989 Apr;62(4):378-84
Threshold shifts associated with changes in body posture [letter] Marchbanks RJ. **Br J Audiol** 1988 Nov;22(4):317
Is posture clinically important when monitoring theophylline therapy? Horn CR, et al. **Br J Clin Pharmacol** 1988 Jun; 25(6):778-9
The effect of enalapril on the renal response to tilting in humans. Lewis NP, et al. **Br J Clin Pharmacol** 1989 Feb; 27(2):191-7
Do postural changes affect gas exchange in acute hemiplegia? Pang JA, et al. **Br J Clin Pract** 1988 Dec;42(12):501-2
Transitory postural vasomotor dysfunction in the finger after short term hand vibration. Olsen N, et al. **Br J Ind Med** 1989 Aug;46(8):575-81
The action of squatting in the early postnatal period marginally increases pelvic dimensions. Lilford RJ, et al. **Br J Obstet Gynaecol** 1989 Aug;96(8):964-6
A randomized study of the sitting position for delivery using a newly designed obstetric chair. Stewart P, et al. **Br J Obstet Gynaecol** 1989 Mar;96(3):327-33
Head orientation in pigeons: postural, locomotor and visual determinants. Erichsen JT, et al. **Brain Behav Evol** 1989; 33(5):268-78
Syncope associated with hair-grooming. Igarashi M, et al. **Brain Dev** 1988;10(4):249-51
Opioids induce postural asymmetry in spinal rat: the side of the flexed limb depends upon the type of opioid agonist. Bakalkin GYa, et al. **Brain Res** 1989 Feb 20;480(1-2):277-89
Hemiparkinsonism in monkeys after unilateral caudate nucleus infusion of 1-methyl-4-phenyl-1,2,3,6-tetrahydropyridine (MPTP): behavior and histology. Imai H, et al. **Brain Res** 1988 Dec 6;474(2):327-32
Neuronal origin of parallel suppression of postural tone and respiration elicited by stimulation of midpontine dorsal tegmentum in the decerebrate cat. Kawahara K, et al. **Brain Res** 1988 Dec 6;474(2):403-6
Development of progesterone-facilitated lordosis in female guinea pigs: relationship to neural estrogen and progestin receptors. Olster DH, et al. **Brain Res** 1989 Apr 10; 484(1-2):168-76
Compensatory eye movements during head and body rotation in infants. Reisman JE, et al. **Brain Res** 1989 Apr 10; 484(1-2):119-29
Anticipatory changes of soleus H-reflex amplitude during execution process for heel raise from standing position. Yamashita N, et al. **Brain Res** 1989 Jun 19;490(1):148-51
The writing performance of inverted and noninverted right- and left-handers. Peters M, et al. **Can J Psychol** 1987 Mar; 41(1):20-32
Influence of age and physical training on postural adaptation. Petrella RJ, et al. **Can J Sport Sci** 1989 Mar;14(1):4-9 (70 ref.)

Postural effect on gas exchange in patients with unilateral pleural effusions. Chang SC, et al. **Chest** 1989 Jul;96(1):60–3
Postural management of bronchopleural fistula [letter] Lau KY. **Chest** 1988 Nov;94(5):1122
Malignant vasovagal syncope: prolonged asystole provoked by head–up tilt. Case report and review of diagnosis, pathophysiology, and therapy. Maloney JD, et al. **Cleve Clin J Med** 1988 Nov–Dec;55(6):542–8 (32 ref.)
Effect of posture on the plasma levels of atrial natriuretic factor. Franco–Saenz R, et al. **Clin Exp Hypertens [A]** 1989; 11(2):337–47
Incidence and clinical signs of the upper calyx syndrome and its relation to orthostatic proteinuria—a retrospective study [letter] Zibolen M, et al. **Clin Nephrol** 1989 Jul; 32(1):49
Falls and Parkinson's disease. Koller WC, et al. **Clin Neuropharmacol** 1989 Apr;12(2):98–105
Anatomic and position–induced increased radiopharmaceutical uptake in the cervical spine on bone imaging. Black RR, et al. **Clin Nucl Med** 1988 Jul; 13(7):483–5
Improved specificity of prone versus supine thallium SPECT imaging. Segall GM, et al. **Clin Nucl Med** 1988 Dec; 13(12):915–6
Effect of patient position on interpretation of lung images complicated by chest radiograph opacities. Solomon RW, et al. **Clin Nucl Med** 1989 Apr;14(4):261–3
Standing posture of craniocerebral injured patients: bi–lateral reactive force patterns. Mizrahi J, et al. **Clin Phys Physiol Meas** 1989 Feb;10(1):25–37
Determination of blood pressure level and changes in physiological situations: comparison of the standard cuff method with direct intra–arterial recording. Turjanmaa V. **Clin Physiol** 1989 Aug;9(4):373–87
Effect of postural change and thermoregulatory stress on the capillary microcirculation of the human toe. Flynn MD, et al. **Clin Sci** 1989 Mar;76(3):231–6
Mechanism of the postural vasoconstrictor response in the human foot. Hassan AA, et al. **Clin Sci** 1988 Oct; 75(4):379–87
The effects of increasing pulmonary stretch and posture on sinus arrhythmia. Adeoshun IO, et al. **Comp Biochem Physiol [A]** 1989;93(1):281–3
Trendelenburg position and passive leg raising do not significantly improve cardiopulmonary performance in the anesthetized patient with coronary artery disease. Reich DL, et al. **Crit Care Med** 1989 Apr;17(4):313–7
Neural effects of body inversion: photopic oscillatory potentials. Kothe AC, et al. **Curr Eye Res** 1988 Dec; 7(12):1221–9
Postural stability by foot–to–ground force measurement. Jansen EC. **Dan Med Bull** 1988 Oct;35(5):479–93 (36 ref.)
Posture of low–risk preterm infants between 32 and 36 weeks postmenstrual age. Vles JS, et al. **Dev Med Child Neurol** 1989 Apr;31(2):191–5
Anti–sympathetic nervous system autoantibodies. Diminished catecholamines with orthostasis. Brown FM, et al. **Diabetes** 1989 Jul;38(7):938–41
Exercise and posture–related changes of atrial natriuretic factor and cardiac function in diabetes. Donckier JE, et al. **Diabetes Care** 1989 Jul–Aug;12(7):475–80
Effect of body posture on radionuclide measurements of gastric emptying. Moore JG, et al. **Dig Dis Sci** 1988 Dec; 33(12):1592–5
Effects of sodium depletion and orthostasis on plasma and urinary vasopressin in normal subjects. Tsuchihashi T, et al. **Endocrinol Jpn** 1989 Apr;36(2):237–43
Instantaneous secretion rate of growth hormone in lambs: relationships with sleep, food intake, and posture. Laurentie MP, et al. **Endocrinology** 1989 Aug;125(2):642–51
Camptocormia, a new side effect of sodium valproate. Kiuru S, et al. **Epilepsy Res** 1987 Jul;1(4):254–7
Postural angles as an indicator of postural load and muscular injury in occupational work situations. Aarås A, et al. **Ergonomics** 1988 Jun;31(6):915–33
Measurement of postural angles during work. Aarås A, et al. **Ergonomics** 1988 Jun;31(6):935–44
The effect of posture on the responses to cycle ergometer exercise. Begemann–Meijer MJ, et al. **Ergonomics** 1989 Jun; 32(6):639–43
The effects of gravity inversion on exercise–induced spinal loading. Boocock MG, et al. **Ergonomics** 1988 Nov; 31(11):1631–7
Symmetric and asymmetric manual materials handling, Part 2: Biomechanics. Drury CG, et al. **Ergonomics** 1989 Jun; 32(6):565–83
Relation between intra–abdominal pressure and lumbar stress: effect of trunk posture. Mairiaux P, et al. **Ergonomics** 1988 Sep;31(9):1331–42
The effects of different pause types on neck and shoulder EMG activity during VDU work. Sundelin G, et al. **Ergonomics** 1989 May;32(5):527–37
Shoulder posture and localized muscle fatigue and discomfort. Wiker SF, et al. **Ergonomics** 1989 Feb; 32(2):211–37
The effect of carotid sinus massage is independent of posture in patients with heart disease. Mickley H, et al. **Eur Heart J** 1989 May;10(5):459–63
The influence of initial posture on the sit–to–stand movement. Stevens C, et al. **Eur J Appl Physiol** 1989;58(7):687–92
The importance of lumbar lordosis measurement device' application during pregnancy, and post–partum isometric exercise. Otman AS, et al. **Eur J Obstet Gynecol Reprod Biol** 1989 May;31(2):155–62
The effect of breath size and posture on calibration of the respiratory inductive plethysmograph by multiple linear regression. Verschakelen JA, et al. **Eur Respir J** 1989 Jan; 2(1):71–7
Influence of hip flexion on the course of the ureter. Ureteroscopic implications. Angus DG, et al. **Eur Urol** 1988;14(4):287–90
Extracorporeal shock wave lithotripsy in the prone position for stones situated anteriorly. Puppo P, et al. **Eur Urol** 1988; 15(1–2):113–7
Adaptive modifications of postural attitude in conditions of weightlessness. Clément G, et al. **Exp Brain Res** 1988; 72(2):381–9
Contribution of eye positioning to control of the upside–down standing posture. Clément G, et al. **Exp Brain Res** 1988;73(3):569–76
Fast head tilt has only a minor effect on quick compensatory reactions during the regulation of stance and gait. Dietz V, et al. **Exp Brain Res** 1988;73(3):470–6
Postural responses to changing task conditions. Hansen PD, et al. **Exp Brain Res** 1988;73(3):627–36
Human automatic postural responses: responses to horizontal perturbations of stance in multiple directions. Moore SP, et al. **Exp Brain Res** 1988;73(3):648–58
Postural synergies in axial movements: short and long–term adaptation. Pedotti A, et al. **Exp Brain Res** 1989;74(1):3–10
Postural adjustments induced by simulated motion of differently structured environments. van Asten WN, et al. **Exp Brain Res** 1988;73(2):371–83
Relation between muscle response onset and body segmental movements during postural perturbations in humans. Woollacott MH, et al. **Exp Brain Res** 1988;72(3):593–604
Curvature of the lumbar spine as a consequence of mechanical necessities in Japanese macaques trained for bipedalism. Preuschoft H, et al. **Folia Primatol (Basel)** 1988; 50(1–2):42–58
Mental and physical stress as moderators of the postural response in insulin–dependent diabetic patients. Naliboff BD, et al. **Health Psychol** 1988;7(6):499–514
The effects of preview and task symmetry on trunk muscle response to sudden loading. Lavender SA, et al. **Hum Factors** 1989 Feb;31(1):101–15
Identification of human postural dynamics. Johansson R, et al. **IEEE Trans Biomed Eng** 1988 Oct;35(10):858–69
Changes in the impedance cardiogram occurring with change in posture in patients with heart disease. Richards NT, et al. **Int J Cardiol** 1988 Sep;20(3):365–72
Enhancing postural stability in hemiplegics using externally applied forces. Godall RM, et al. **Int J Rehabil Res** 1987; 10(4 Suppl 5):132–40
Humoral regulation of the orthostatic reaction. Huber KH, et al. **Int J Sports Med** 1988 Aug;9 Suppl 2:S103–12
Effects of clinostatism and orthostatism on blood viscosity. Vandewalle H, et al. **Int J Sports Med** 1989 Apr;10(2):135–8
Effect of positional change on ventilation–perfusion distribution in unilateral pleural effusion. Gillespie DJ, et al. **Intensive Care Med** 1989;15(4):266–8
Altering body position affects intraocular pressure and visual function. Linder BJ, et al. **Invest Ophthalmol Vis Sci** 1988 Oct;29(10):1492–7
Accuracy of cardiac output measured by continuous wave Doppler echocardiography during dynamic exercise testing in the supine position in patients with coronary artery disease. Maeda M, et al. **J Am Coll Cardiol** 1989 Jan; 13(1):76–83
The influence of age and blood pressure on the hemodynamic and humoral response to head–up tilt. Jansen RW, et al. **J Am Geriatr Soc** 1989 Jun;37(6):528–32
The effect of visual deprivation and proprioceptive change on postural sway in healthy adults. Ring C, et al. **J Am Geriatr Soc** 1989 Aug;37(8):745–9
Arterial hemodynamics during head–up tilt in conscious dogs. Bedford TG, et al. **J Appl Physiol** 1988 Oct; 65(4):1556–62
Postural changes in spontaneous and evoked regional diaphragmatic activity in dogs. Brancatisano A, et al. **J Appl Physiol** 1989 Apr;66(4):1699–705
Scintigraphic regional lung dimensions in upright and head–down men. Demedts M, et al. **J Appl Physiol** 1989 Apr;66(4):1927–34
Diaphragm length adjustments with body position changes in the awake dog. Fitting JW, et al. **J Appl Physiol** 1989 Feb;66(2):870–5
Effects of posture on the venodilatory response to nitroglycerin. Gascho JA, et al. **J Appl Physiol** 1989 Jun; 66(6):2585–8
A photographic method to measure abnormal head posture. Cowper G. **J Audiov Media Med** 1988 Jul;11(3):84–6
Postural kinematics of trumpet playing. Bejjani FJ, et al. **J Biomech** 1989;22(5):439–46
Current concepts review. The definitions of terms for motion and position of the knee and injuries of the ligaments. Noyes FR, et al. **J Bone Joint Surg [Am]** 1989 Mar;71(3):465–72 (58 ref.)
Medical decompression of toxic megacolon by "rolling". A new technique of decompression with favorable long–term follow–up. Present DH, et al. **J Clin Gastroenterol** 1988 Oct;10(5):485–90
Posturally related variations in the hand preferences of the ruffed lemur (Varecia variegata variegata). Forsythe C, et al. **J Comp Psychol** 1988 Sep;102(3):248–50
Signs of ectopic pregnancy [letter] Blue BA. **J Fam Pract** 1989 Jan;28(1):14
Age, functional postural reflexes, and voluntary sway. Stelmach GE, et al. **J Gerontol** 1989 Jul;44(4):B100–6
Effects of sudden and prolonged standing from supine posture on heart rate, ECG–pattern and blood pressure. Chatterjee S, et al. **J Hum Ergol (Tokyo)** 1988 Sep;17(1):3–12
Cardiovascular reactions to physiological stimuli in the elderly and the relationship with the autonomic nervous system. de Biase L, et al. **J Hypertens Suppl** 1988 Nov; 6(1):S63–7
Blood pressure level changes caused by posture change and physical exercise: can they be determined accurately using a standard cuff method? Turjanmaa VM, et al. **J Hypertens Suppl** 1988 Dec;6(4):S79–81
Methylmercury–induced movement and postural disorders in developing rat: high–affinity uptake of choline, glutamate, and gamma–aminobutyric acid in the cerebral cortex and caudate–putamen. O'Kusky JR, et al. **J Neurochem** 1989 Oct;53(4):999–1006
Orthostatic tremor: diagnostic entity or variant of essential tremor? [letter] Cleeves L, et al. **J Neurol Neurosurg Psychiatry** 1989 Jan;52(1):130–1
Postural sway during retinal image stabilisation. Rushton DN, et al. **J Neurol Neurosurg Psychiatry** 1989 Mar;52(3):376–81
Visual and mechanical control of postural and kinetic tremor in cerebellar system disorders. Sanes JN, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul;51(7):934–43
Posturo–kinetic organisation during the early phase of voluntary upper limb movement. 1. Normal subjects. Zattara M, et al. **J Neurol Neurosurg Psychiatry** 1988 Jul; 51(7):956–65
Interlimb coordination of leg–muscle activation during perturbation of stance in humans. Dietz V, et al. **J Neurophysiol** 1989 Sep;62(3):680–93
Prone decubitus: a solution to inferior wall attenuation in thallium–201 myocardial tomography. Esquerré JP, et al. **J Nucl Med** 1989 Mar;30(3):398–401
The effects of birth chair delivery on maternal perceptions. Shannahan MK, et al. **J Obstet Gynecol Neonatal Nurs** 1989 Jul–Aug;18(4):323–6
Postural movements induced by rotations of visual scenes. van Asten WN, et al. **J Opt Soc Am [A]** 1988 Oct; 5(10):1781–9
The influence of chair height on lower limb mechanics during rising. Rodosky MW, et al. **J Orthop Res** 1989;7(2):266–71
Postural control in single–limb stance. Tropp H, et al. **J Orthop Res** 1988;6(6):833–9
The effect of body position on the respiratory rate of infants with tachypnea. Sconyers SM, et al. **J Perinatol** 1987 Spring;7(2):118–21
Ventilatory management casebook. Resolution of pulmonary interstitial emphysema using position therapy. Sharp MJ, et al. **J Perinatol** 1988 Spring;8(2):163–5
Orthostatic hypertension due to coexistence of renal fibromuscular dysplasia and nephroptosis. Tsukamoto Y, et al. **Jpn Circ J** 1988 Dec;52(12):1408–14
Continuous observations of daytime EEG patterns in normal subjects under restrained conditions while sitting in armchair or on stool. Part 1. Sleep state. Nakagawa Y. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):231–45
Continuous observations of daytime EEG patterns in normal subjects under restrained conditions while sitting in armchair or on stool. Part 2. Awake state. Nakagawa Y. **Jpn J Psychiatry Neurol** 1988 Jun;42(2):247–64
Posture and central venous pressure measurement in circulatory volume depletion [letter] **Lancet** 1989 Sep 2; 2(8662):555–6
Squatting in second stage of labour [letter] **Lancet** 1989 Sep 23;2(8665):750
Microalbuminuria and posture [letter] Baba T, et al. **Lancet** 1988 Oct 22;2(8617):970
Sleeping position and cot death [letter] Engelberts AC, et al. **Lancet** 1988 Oct 15;2(8616):899–900
Tilting towards a diagnosis in recurrent unexplained syncope. Fitzpatrick A, et al. **Lancet** 1989 Mar 25;1(8639):658–60
Randomised, controlled trial of squatting in the second stage of labour. Gardosi J, et al. **Lancet** 1989 Jul 8;2(8654):74–7
Squatting in second stage of labour [letter] Gupta JK, et al. **Lancet** 1989 Sep 2;2(8662):561–2
Is the nasal cycle an artifact? The role of asymmetrical postures. Haight JS, et al. **Laryngoscope** 1989 May; 99(5):538–41
Specific binding of atrial natriuretic factor to renal glomeruli during day or night antiorthostatic suspension in the rat. Gauquelin G, et al. **Life Sci** 1988;43(23):1905–12
Small, triaxial force plate. Lywood DW, et al. **Med Biol Eng Comput** 1987 Nov;25(6):698–701
Robotic force platform for the study of posture and stance in the quadruped. van Eyken A, et al. **Med Biol Eng Comput** 1987 Nov;25(6):693–7
Proposed mechanisms for cerebellar coordination, stabilization and monitoring of movements and posture. Sieb RA. **Med Hypotheses** 1989 Apr;28(4):225–32
Primary constipation: an underlying mechanism. Sikirov BA. **Med Hypotheses** 1989 Feb;28(2):71–3
Focal asterixis caused by a small putaminal hemorrhage. Trejo JM, et al. **Mov Disord** 1986;1(4):271–4
Long–term follow–up after stereotaxic basal ganglia surgery in parkinsonism. A neuroanatomical study of a case showing unusual postural disorders. Viallet F, et al.

Mov Disord 1988;3(2):140–51
Sitting posture and peroneal neuropathy [letter] Cranberg LD, et al. **Muscle Nerve** 1989 May;12(5):424–5
Provocation of bradycardia and hypotension by isoproterenol and upright posture in patients with unexplained syncope [see comments] Almquist A, et al. **N Engl J Med** 1989 Feb 9;320(6):346–51. **Comment in:** N Engl J Med 1989 Aug 3;321(5):331
Tilt-induced syncope [letter; comment] Fitzpatrick AP, et al. **N Engl J Med** 1989 Aug 3;321(5):331. **Comment on:** N Engl J Med 1989 Feb 9;320(6):346–51
Is empathy unhealthy? [letter] Thomson A. **N Z Med J** 1989 Sep 13;102(875):479
Dystonic posturing in temporal lobe seizures [letter] Bennett DA, et al. **Neurology** 1989 Sep;39(9):1270–2
Carpal tunnel syndrome associated with prolonged decorticate posturing. Difini JA, et al. **Neurology** 1989 Jun; 39(6):871
Dystonic posturing in complex partial seizures of temporal lobe onset: a new lateralizing sign. Kotagal P, et al. **Neurology** 1989 Feb;39(2 Pt 1):196–201
Posture during head turning in pre-term infants: a longitudinal study of 15 low-risk infants of 32–36 weeks of conceptional age. Vles JS, et al. **Neuropediatrics** 1989 Feb;20(1):25–9
Self-assessed and examiner-assessed writing hand posture in Swedish left-handers. Levander M, et al. **Neuropsychologia** 1988;26(5):777–81
The effect of patient positioning on MR imaging of the internal auditory canal. Daniels DL, et al. **Neuroradiology** 1988;30(5):395–8
Changes in the lateral ventricle with the head position: ultrasonographic observation. Koeda T, et al. **Neuroradiology** 1988;30(4):315–8
Involvement of different receptors in the regulation of human posture. Dietz V, et al. **Neurosci Lett** 1988 Nov 22; 94(1–2):82–7
The contribution of vestibular input to the stabilization of human posture: a new experimental approach. Horstmann GA, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):179–84
The effects of movements on caudate sensory responses. Manetto C, et al. **Neurosci Lett** 1989 Jan 30;96(3):295–9
Modified skull clamp procedure [letter] Aoki N. **Neurosurgery** 1989 Feb;24(2):299
Pyriformis syndrome in a 10-year-old boy as a complication of operation with the patient in the sitting position. Brown JA, et al. **Neurosurgery** 1988 Jul;23(1):117–9
Postural disequilibrium quantification in children with chronic lead exposure: a pilot study. Bhattacharya A, et al. **Neurotoxicology** 1988 Fall;9(3):327–40
Benign paroxysmal vertigo of the horizontal canal. Pagnini P, et al. **ORL J Otorhinolaryngol Relat Spec** 1989; 51(3):161–70
The Heffington frame [letter] Lange DR. **Orthop Rev** 1989 Feb;18(2):266–7
Tips of the trade #5. Shoulder arthroscopy in the seated position. Skyhar MJ, et al. **Orthop Rev** 1988 Oct; 17(10):1033–4
Dynamic posturography and caloric test results in patients with and without vertigo. Goebel JA, et al. **Otolaryngol Head Neck Surg** 1989 Jun;100(6):553–8
The usefulness of head-up tilt testing and hemodynamic investigations in the workup of syncope of unknown origin. Abi-Samra F, et al. **PACE** 1988 Aug;11(8):1202–14
A new mechanical sensor for detecting body activity and posture, suitable for rate responsive pacing. Alt E, et al. **PACE** 1988 Nov;11(11 Pt 2):1875–81
Upright body tilt for evaluation of patients with recurrent, unexplained syncope. Milstein S, et al. **PACE** 1989 Jan;12(1 Pt 1):117–24 (57 ref.)
Electromyographic recordings of 5 types of low back pain subjects and non-pain controls in different positions. Arena JG, et al. **Pain** 1989 Apr;37(1):57–65
Postural aspects of the human fetal spine. Morphometric and functional study. Panattoni GL, et al. **Panminerva Med** 1988 Oct-Dec;30(4):250–3
Haemodynamic, hormonal and urinary responses to postural change in tetraplegic and paraplegic man. Kooner JS, et al. **Paraplegia** 1988 Aug;26(4):233–7
Pneumatosis in the descending colon: preliminary observations on the value of prone positioning. Johnson JF. **Pediatr Radiol** 1988;19(1):25–7
Neck and body position effects on pulmonary mechanics in infants. Carlo WA, et al. **Pediatrics** 1989 Oct;84(4):670–4
Heart-rate response to water-immersion isolation as a function of spatial orientation. Forgays DG, et al. **Percept Mot Skills** 1988 Aug;67(1):163–7
Effect of educational kinesiology on static balance of learning disabled students. Morris GS, et al. **Percept Mot Skills** 1988 Aug;67(1):51–4
The perception of an optical flow projected on the ground surface. Flückiger M, et al. **Perception** 1988;17(5):633–45
Effect of acetylsalicylic acid on postural stability. Brynskov J, et al. **Pharmacol Toxicol** 1988 Sep;63(3):205–6
Effect of therapeutic horseback riding on posture in children with cerebral palsy. Bertoti DB. **Phys Ther** 1988 Oct; 68(10):1505–12
Description of adult rolling movements and hypothesis of developmental sequences. Richter RR, et al. **Phys Ther** 1989 Jan;69(1):63–71
Effect of seat angle and lumbar support on seated buttock pressure. Shields RK, et al. **Phys Ther** 1988 Nov; 68(11):1682–6
Regional aortic pressure apparent phase velocity in the baboon during passive 70 degree tilt. Butler BP, et al. **Physiologist** 1989 Feb;32(1 Suppl):S84–5
Effect of increased acceleration on lung expansion in dogs: prone vs. supine body positions. Lai-Fook SJ, et al. **Physiologist** 1989 Feb;32(1 Suppl):S63–4
Gravitational influence on systemic arterial dynamics using a 3-element Windkessel model. Latham RD, et al. **Physiologist** 1989 Feb;32(1 Suppl):S82–3
Effects of transition from supine to upright positions on central hemodynamics in patients with chest pain syndrome. Rubal BJ, et al. **Physiologist** 1989 Feb;32(1 Suppl):S33–4
Difference in cardiovascular responses to blood pooling patterns between LBNP and head up tilting stimulated after supine cycling in woman. Torikoshi S, et al. **Physiologist** 1989 Feb;32(1 Suppl):S88–9
Increasing central blood volume with head-down tilting would inhibit water intake during mild pedaling at 25 degrees C and 35 degrees C room temperatures in woman. Yokozawa K, et al. **Physiologist** 1989 Feb;32(1 Suppl):S90–1
Vestibulospinal control of posture and locomotion. **Prog Brain Res** 1988;76:1–442
Organization of leg-trunk-head equilibrium movements in normals and patients with peripheral vestibular deficits. Allum JH, et al. **Prog Brain Res** 1988;76:277–90
Abnormal postural control associated with peripheral vestibular disorders. Black FO, et al. **Prog Brain Res** 1988; 76:263–75
Postural compensation in the guinea pig following unilateral labyrinthectomy. Curthoys IS, et al. **Prog Brain Res** 1988; 76:375–84 (31 ref.)
On the role of vestibular, visual and somatosensory information for dynamic postural control in humans. Diener HC, et al. **Prog Brain Res** 1988;76:253–62 (28 ref.)
Phasic modulation of postural activation patterns during human walking. Forssberg H, et al. **Prog Brain Res** 1988; 76:221–7 (26 ref.)
Neck influences on posturokinetic responses to cortical stimulation. Gahery Y, et al. **Prog Brain Res** 1988;76:181–92 (67 ref.)
Integration of vestibular and neck afferent signals in the central cervical nucleus. Hongo T, et al. **Prog Brain Res** 1988;76:155–62 (35 ref.)
Physical exercise and balance compensation after total ablation of vestibular organs. Igarashi M, et al. **Prog Brain Res** 1988;76:395–401
Motor control strategies underlying head stabilization and voluntary head movements in humans and cats. Keshner EA, et al. **Prog Brain Res** 1988;76:329–39 (30 ref.)
Posture as an organizational structure based on a dual process: a formal basis to interpret changes of posture in weightlessness. Lestienne FG, et al. **Prog Brain Res** 1988; 76:307–13 (14 ref.)
Effects of melanocortins on vestibular compensation. Lüneburg U, et al. **Prog Brain Res** 1988;76:421–9
Mechanisms of vestibular compensation in the unilateral labyrinthectomized cat. Macda M. **Prog Brain Res** 1988; 76:385–94
A system identification approach to balance testing. Maki BE, et al. **Prog Brain Res** 1988;76:297–306 (26 ref.)
Head-trunk movement coordination in the standing posture. Nashner LM, et al. **Prog Brain Res** 1988;76:243–51
Tensorial aspects of the multidimensional massively parallel sensorimotor function of neuronal networks. Pellionisz A. **Prog Brain Res** 1988;76:341–54 (85 ref.)
The role of Renshaw cells in the dynamic control of posture during vestibulospinal reflexes. Pompeiano O. **Prog Brain Res** 1988;76:83–95 (65 ref.)
Effects of proprioceptive inputs on vestibulo-ocular and vestibulospinal mechanisms. Thoden U, et al. **Prog Brain Res** 1988;76:109–20 (63 ref.)
Labyrinthine control of upright standing posture in humans. Tokita T, et al. **Prog Brain Res** 1988;76:291–5
Synergistic interactions and functional working range of the visual and vestibular systems in postural control: neuronal correlates. Xerri C, et al. **Prog Brain Res** 1988;76:193–203 (51 ref.)
Evidence for the involvement of central 5-HT1A receptors in the mediation of lordosis behavior in the female rat. Ahlenius S, et al. **Psychopharmacology (Berlin)** 1989; 98(4):440–4
Camptocormia and perceived pain [letter] Fishbain DA, et al. **Psychosomatics** 1989 Summer;30(3):357–8
An alternative to the standard radiographic position for the sternum. Moore TF. **Radiol Technol** 1988 Nov-Dec; 60(2):133–4
Sagittal tomography in the supine patient. Nakanishi T, et al. **Radiology** 1989 May;171(2):574–6
A comparison of fetal outcome in birth chair and delivery table births. Cottrell BH, et al. **Res Nurs Health** 1987 Aug; 10(4):239–43
Triangularis sterni muscle use during eupnea in humans: effect of posture. Estenne M, et al. **Respir Physiol** 1988 Nov;74(2):151–62
The influence of body posture on lithium clearance. Kamper AL, et al. **Scand J Clin Lab Invest** 1988 Oct;48(6):509–12
Standing balance in rheumatoid arthritis. A comparative study with healthy subjects. Ekdahl C, et al. **Scand J Rheumatol** 1989;18(1):33–42
Evolution of human walking. Lovejoy CO. **Sci Am** 1988 Nov; 259(5):118–25
Transient insomnia and rapidly eliminated hypnotics. Nicholson AN. **Sleep** 1986 Jun;9(2):317–23
Body position does not affect apnea frequency [letter] Schmidt-Nowara WW. **Sleep** 1988 Aug;11(4):402
The lumbar spine in backward bending. Adams MA, et al. **Spine** 1988 Sep;13(9):1019–26
Bone mineral content, gender, body posture, and build in relation to back pain in middle age. Bergenudd H, et al. **Spine** 1989 Jun;14(6):577–9
Functional radiographic diagnosis of the cervical spine: flexion/extension. Dvorak J, et al. **Spine** 1988 Jul; 13(7):748–55
The importance of pelvic tilt in reducing compressive stress in the spine during flexion-extension exercises. Gracovetsky S, et al. **Spine** 1989 Apr;14(4):412–6
Sway of the center of gravity in patients with spinal canal stenosis. Hanai K, et al. **Spine** 1988 Nov;13(11):1303–7
Cross leg pain and trunk list. Khuffash B, et al. **Spine** 1989 Jun;14(6):602–3
Postural control in siblings to scoliosis patients and scoliosis patients. Lidström J, et al. **Spine** 1988 Sep;13(9):1070–4
Measurement of spinal sagittal configuration and mobility with Debrunner's kyphometer. Ohlén G, et al. **Spine** 1989 Jun;14(6):580–3
Postural alignment in barefoot and high-heeled stance. Opila KA, et al. **Spine** 1988 May;13(5):542–7
How does posture affect coupling in the lumbar spine? Panjabi M, et al. **Spine** 1989 Sep;14(9):1002–11
Volume therapy in orthostatic transient ischemic attacks. Pascual-Leone A, et al. **Stroke** 1989 Sep;20(9):1267–70
Axillary compression syndrome with neurapraxia due to operative positioning. Nambisan RN, et al. **Surgery** 1989 Mar;105(3):449–54
Effects of posture on the distribution of pulmonary ventilation and perfusion in children and adults. Bhuyan U, et al. **Thorax** 1989 Jun;44(6):480–4
Postural control in weightlessness: a dual process underlying adaptation to an unusual environment. Lestienne FG, et al. **Trends Neurosci** 1988 Aug;11(8):359–63 (22 ref.)
Reverse lithotomy: modified prone position for simultaneous nephroscopic and ureteroscopic procedures in women. Lehman T, et al. **Urology** 1988 Dec;32(6):529–31
The use of getting up and lying down movements in the evaluation of cattle environments. Lidfors L. **Vet Res Commun** 1989;13(4):307–24 (38 ref.)
Postural influence on systemic blood pressure in large full-term pregnant bitches during general anesthesia. Probst CW, et al. **Vet Surg** 1987 Nov-Dec;16(6):471–3
Position-induced internal jugular vein thrombosis. Weber RR, et al. **W V Med J** 1988 Nov;84(11):509–11 (19 ref.)
[Effect of body position on substrates, enzymes and electrolytes in the serum of healthy subjects] Dukova-Peneva P, et al. **Vutr Boles** 1988;27(4):81–5 (Eng. Abstr.) **(Bul)**
[Effect of body position on laboratory hematological indices] Penev M, et al. **Vutr Boles** 1988;27(4):69–72 (Eng. Abstr.) **(Bul)**
[Nursing care of 296 patients undergoing neurosurgery in a sitting position] Zhang GX. **Chung Hua Hu Li Tsa Chih** 1989 Mar;24(3):138–40 **(Chi)**
[Reaction of the cerebral vertebrae in imagined changes in the shape of the cervical spine] Jirout J. **Cesk Neurol Neurochir** 1989 Mar;52(2):75–7 (Eng. Abstr.) **(Cze)**
[Vision and posture. Fundamental aspects. Paris, 26–27 February 1988. Proceedings] **Agressologie** 1988 Oct; 29(9):621–67 **(Fre)**
[Vision and posture. Clinical aspects. Paris, 26–27 February 1988. Proceedings] **Agressologie** 1988 Oct;29(10):679–703 **(Fre)**
[The postural system] Gagey P. **Agressologie** 1988 Oct; 29(9):621–5 (26 ref.) (Eng. Abstr.) **(Fre)**
[Influence of posture (horizontal, proclivous, sloping) on the intra-cranial pressure and pressure of cerebral perfusion in coma] Grau A, et al. **Agressologie** 1988 Apr;29(5):309–11 (Eng. Abstr.) **(Fre)**
[Posturography and otoneurology] Guidetti G. **Agressologie** 1988 Oct;29(9):653–6 (17 ref.) (Eng. Abstr.) **(Fre)**
[The clinical postural examination] Guillaume P. **Agressologie** 1988 Oct;29(10):687–90 (Eng. Abstr.) **(Fre)**
[Ophthalmologic determinants of prismatic correction of posture. A retrospective analysis of 39 prescriptions] Marucchi C, et al. **Agressologie** 1988 Oct;29(10):693–5 (Eng. Abstr.) **(Fre)**
[Visuo-postural behavior of the newborn infant] Peyresblanques J. **Agressologie** 1988 Oct;29(9):657–60 (17 ref.) (Eng. Abstr.) **(Fre)**
[Motor control of a handstand] Pozzo T, et al. **Agressologie** 1988 Oct;29(9):649–51 (Eng. Abstr.) **(Fre)**
[Eyeglasses and prismatic effects] Prevost G. **Agressologie** 1988 Oct;29(10):697–8 (Eng. Abstr.) **(Fre)**
[Visuo-vestibular cooperation in postural control: information complementarity and sensory substitution] Xerri C. **Agressologie** 1988 Oct;29(9):627–9 (27 ref.) (Eng. Abstr.) **(Fre)**
[Thorburn's posture. A sign of lesion of the cervical cord] Renault F, et al. **Arch Fr Pediatr** 1989 Apr;46(4):273–5 (Eng. Abstr.) **(Fre)**

[Position at work and ophthalmic lenses] Catros A, et al. **Bull Soc Ophtalmol Fr** 1988 Jan;88(1):103–5 (Eng. Abstr.) (Fre)

[The eye and posture] Peyresblanques J. **Bull Soc Ophtalmol Fr** 1988 Jan;88(1):95–102 (Fre)

[The supplementary motor area is implicated in the coordination between posture and movement in man] Massion J, et al. **C R Acad Sci [III]** 1989;308(15):417–23 (Eng. Abstr.) (Fre)

[Ischemic postural intraoperative rhabdomyolysis] Cohendy R, et al. **Can Anesthesiol** 1988 Sep;36(5):375–7 (12 ref.) (Fre)

[Stability in shooting: the effect of expertise in the biathlon and in rifle shooting] Larue J, et al. **Can J Sport Sci** 1989 Mar;14(1):38–45 (Eng. Abstr.) (Fre)

[Treatment in a ventral position of vesicovaginal fistula by ordinary suture or autoplasty of the labia majora] Zerbib M, et al. **J Chir (Paris)** 1988 Nov;125(11):657–60 (Eng. Abstr.) (Fre)

[Problems caused by safety shoes, diabetes, standing upright] Acker D. **Phlebologie** 1989 Apr–Jun;42(2):271–81 (Fre)

[Ultrasonic analysis of the influence of position on dimensions of the bend of the external saphenous veins] Guex JJ. **Phlebologie** 1989 Apr–Jun;42(2):181–3; discussion 184–5 (Fre)

[Persistence of a conjugate eye and head deviation of hemispheric origin] de Smet Y, et al. **Rev Neurol (Paris)** 1988;144(10):603–5 (Eng. Abstr.) (Fre)

[Disorders of posture in childhood] Bülow B, et al. **Arztl Jugendkd** 1988;79(4):189–94 (12 ref.) (Eng. Abstr.) (Ger)

[The degree of morbidity of pathologic conditions of the musculoskeletal system detected by child and adolescent preventive health services and requiring follow-up monitoring] Nitzschmann L, et al. **Arztl Jugendkd** 1988; 79(4):195–8 (Eng. Abstr.) (Ger)

[Model studies of muscle postural control in children with spastic hemiparesis: pathophysiologic and clinical relevance] Scholle HC, et al. **EEG EMG** 1989 Mar; 20(1):34–8 (Eng. Abstr.) (Ger)

[Large tonsils and their effect on head and tongue posture] Behlfelt K, et al. **Fortschr Kieferorthop** 1988 Oct; 49(5):476–83 (Eng. Abstr.) (Ger)

[Development and prevention of headache in school] Gutmann G, et al. **Fortschr Med** 1988 Aug 20;106(24):485–8 (11 ref.) (Eng. Abstr.) (Ger)

[Applications and uses of static and dynamic measurement of posture (posturography)] Diener HC, et al. **Fortschr Neurol Psychiatr** 1988 Aug;56(8):249–58 (86 ref.) (Eng. Abstr.) (Ger)

[Posturographic biofeedback training in equilibrium disorders] Jobst U. **Fortschr Neurol Psychiatr** 1989 Feb; 57(2):74–80 (Eng. Abstr.) (Ger)

[Acupuncture and the prone position—reflections on letters from readers] Plenert W. **Kinderarztl Prax** 1988 Nov; 56(11):523–4 (Ger)

[Surgical and physical therapy treatment of benign paroxysmal positional vertigo] Häusler R, et al. **Laryngorhinootologie** 1989 Jun;68(6):349–54 (Eng. Abstr.) (Ger)

[Treatment of unilateral space-occupying pulmonary interstitial emphysema with positioning measures and high-frequency ventilation] Gortner L, et al. **Monatsschr Kinderheilkd** 1988 Aug;136(8):432–5 (Eng. Abstr.) (Ger)

[Behavior of heart rate following active change in posture with pharmacologic block of the autonomic nervous system] Weise F, et al. **Psychiatr Neurol Med Psychol (Leipz)** 1989 May; 41(5):306–9 (Ger)

[Localization technic and positioning methodology in afterloading therapy] Schmidt KP, et al. **Radiobiol Radiother (Berl)** 1989;30(1):69–76 (Eng. Abstr.) (Ger)

[Posture-related arrest of contrast medium in the myelogram] Glathe S, et al. **Rontgenblatter** 1989 Jun;42(6):274–6 (Eng. Abstr.) (Ger)

[Lung embolism during and following long-distance flights ("economy class syndrome")] Bürki U. **Schweiz Med Wochenschr** 1989 Mar 4;119(9):287–9 (Eng. Abstr.) (Ger)

[Dynamic measurement of pressure distribution with flexible measuring mats—an innovative measuring procedure in sports orthopedics and traumatology. Development—use—value] Schaff P, et al. **Sportverletz Sportschaden** 1987 Dec;1(4):185–222 (Eng. Abstr.) (Ger)

[The effect of body position on uterine blood flow in the 3d trimester of pregnancy] Sohn C, et al. **Ultraschall Med** 1989 Feb;10(1):10–4 (Eng. Abstr.) (Ger)

[The dynamics of orthostatic cardiovascular immediate and late regulation in healthy adolescents in relation to changed position] Rossberg F, et al. **Z Gesamte Inn Med** 1988 Jul 1;43(13):352–6 (Eng. Abstr.) (Ger)

[Cardiotocography practice. Case 16] Heinrich J. **Zentralbl Gynakol** 1988;110(24):1604–5 (Ger)

[Computerized stabilometry: a complete study in the examination of patients with vertigo] Guidetti G, et al. **Acta Otorhinolaryngol Ital** 1986 Sep–Oct;6(5):487–504 (Eng. Abstr.) (Ita)

[Role of Semont's maneuver in the diagnosis and treatment of paroxysmal positional vertigo. Critical review of 310 cases] Guidetti G, et al. **Acta Otorhinolaryngol Ital** 1988 Sep–Oct;8(5):493–502 (Eng. Abstr.) (Ita)

[Influence of posture on exercise-induced electrocardiographic and hemodynamic changes in patients with stable effort angina pectoris] Spinelli L, et al. **G Ital Cardiol** 1988 Oct;18(10):828–34 (Eng. Abstr.) (Ita)

[Evaluation of working conditions at the work place with video terminals: a survey conducted in 6 business offices] Berardi BM, et al. **G Ital Med Lav** 1988 Mar;10(2):57–63 (Eng. Abstr.) (Ita)

[Work posture and spinal changes in porphyry miners] Colombini D, et al. **Med Lav** 1988 May–Jun;79(3):223–33 (Eng. Abstr.) (Ita)

[Work posture and changes in the spine of coffin-carriers] Occhipinti E, et al. **Med Lav** 1988 Nov–Dec;79(6):452–9 (Eng. Abstr.) (Ita)

[Sensitivity, specificity and predictive value of the exercise test in a supine position in diagnosing coronary insufficiency] Cinquegrana G, et al. **Minerva Cardioangiol** 1988 Sep;36(9):407–10 (Eng. Abstr.) (Ita)

[Arterial pressure and heart rate: postural variations in the elderly] Palagi L, et al. **Minerva Cardioangiol** 1989 Apr; 37(4):149–53 (Eng. Abstr.) (Ita)

[The incidence of postural headache in in- and outpatients following lumbar myelography (needles of different gauges and headache)] Urso S, et al. **Radiol Med (Torino)** 1989 Mar;77(3):165–70 (Eng. Abstr.) (Ita)

[Semidecubitus position scanning method for thallium-201 cardiac single photon emission computed tomography] Suzuki A, et al. **Kaku Igaku** 1988 Nov;25(11):1255–62 (Eng. Abstr.) (Jpn)

[A central mechanism augments ventilation of the dependent lung in the lateral decubitus position] Fukuda M, et al. **Masui** 1988 Jun;37(6):646–54 (Eng. Abstr.) (Jpn)

[Cardiovascular response to cerebral circulatory regulation during shifts in head position] Moriyama K. **Nippon Ika Daigaku Zasshi** 1989 Jun;56(3):258–66 (Eng. Abstr.) (Jpn)

[Nasal respiratory resistance of nasal allergic patients in postural change] Takagi Y, et al. **Nippon Jibiinkoka Gakkai Kaiho** 1988 Nov;91(11):1825–30 (Eng. Abstr.) (Jpn)

[A study on senile postural deformity] Nakada K. **Nippon Seikeigeka Gakkai Zasshi** 1988 Dec;62(12):1149–61 (Eng. Abstr.) (Jpn)

[Analysis of CSF flow through L-P shunt during changes in posture] Ishiwata Y. **No Shinkei Geka** 1989 Apr; 17(4):351–8 (Eng. Abstr.) (Jpn)

[Plasma vasopressin responses to orthostasis and hypertonic saline infusion in progressive autonomic failure] Senda Y, et al. **Rinsho Shinkeigaku** 1988 Nov;28(11):1282–9 (Eng. Abstr.) (Jpn)

[Intraoperative complications in neurosurgical patients operated on in a seated position (personal observations)] Kopliński A, et al. **Neurol Neurochir Pol** 1988 Jul–Aug; 22(4):352–5 (Eng. Abstr.) (Pol)

[Toposomatic sign] Białowąs M. **Wiad Lek** 1988 Jul 1; 41(13):903 (Pol)

[Gastric emptying in children. VII. Influence of body posture, using an oral hydration solution as the test meal] da Silva PE, et al. **Arq Gastroenterol** 1988 Apr–Jun; 25(2):104–9 (Eng. Abstr.) (Por)

[Orthostatic reactions of cerebral and systemic circulation in patients with tumors of the posterior cranial fossa operated on in a sitting position] Sokolovskaia IE, et al. **Anesteziol Reanimatol** 1988 Sep–Oct;(5):23–7 (Eng. Abstr.) (Rus)

[The activity of postural asymmetry factors in symmetrical sections of the rat spinal cord] Vartanian GA, et al. **Biull Eksp Biol Med** 1989 Apr;107(4):404–7 (Eng. Abstr.) (Rus)

[Postural automatisms revealed by enhancement of the tonic background] Gurfinkel' VS, et al. **Dokl Akad Nauk SSSR** 1989;305(5):1266–9 (Rus)

[Neurochemical induction of the factor of postural asymmetry in the pituitary] Vartanian GA, et al. **Dokl Akad Nauk SSSR** 1988;300(2):501–3 (Rus)

[The action of obzidan and oktadin on muscle blood flow during head-down tilt hypokinesia] Makoeva LD, et al. **Farmakol Toksikol** 1988 Sep–Oct;51(5):44–6 (Eng. Abstr.) (Rus)

[Control of vertical posture during emotional stress] Efremov VS. **Fiziol Cheloveka** 1988 Sep–Oct;14(5):818–22 (Rus)

[Characteristics of biorhythm of the indicators of external respiration in humans after completing passive orthostatic test] Galicnal VA. **Fiziol Cheloveka** 1988 Jul–Aug; 14(4):577–85 (Rus)

[Effect of body position on circulation during a functional test with nitroglycerin] Silenko OV. **Fiziol Cheloveka** 1989 Mar–Apr;15(2):66–71 (Rus)

[Relation of the cardiac rhythm response to a test of active orthostasis with characteristics of central hemodynamics] Zhemaitite DI. **Fiziol Cheloveka** 1989 Mar–Apr;15(2):30–47 (Rus)

[The mechanism of lymphodynamics in orthostatic dogs during postnatal ontogenesis] Bulekbaeva LE, et al. **Fiziol Zh SSSR** 1989 Jan;75(1):66–71 (Eng. Abstr.) (Rus)

[Achieving the optimal functional state in younger schoolchildren by alternating their posture in the classroom] Agarkov VI. **Gig Sanit** 1988 Nov;(11):75–6 (Rus)

[The role of the occupational environment in the development of diseases of the knee joints in miners working in the mining of thin coal layers] Deinega VG, et al. **Gig Tr Prof Zabol** 1988 Oct;(10):28–30 (Eng. Abstr.) (Rus)

[Effect of space flight antiorthostatic hypokinesia of various durations on blood insulin level] Afonin BV. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):77–9 (Rus)

[Functional status of the hepatobiliary system during anti-orthostatic hypodynamia] Andriako LIa, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):48–50 (Eng. Abstr.) (Rus)

[Effect of a 30-day period of hypokinesia on various physiologic and biochemical indicators during maximal physical load] Buzulina VP, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):40–4 (Eng. Abstr.) (Rus)

[Histomorphologic study of the bones of monkeys after 14-day anti-orthostatic hypokinesia] Durnova GN, et al. **Kosm Biol Aviakosm Med** 1989 Jan–Feb;23(1):22–6 (Eng. Abstr.) (Rus)

[Immunologic mechanisms of regulating calcium metabolism in human bone tissue (production of osteoclast-activating factor) during long-term anti-orthostatic hypokinesia] Konstantinova IV, et al. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):38–42 (Eng. Abstr.) (Rus)

[Problem of modeling the physiologic effects of weightlessness by the method of "antiorthostatic suspension" of small laboratory animals] Kuznetsov SL, et al. **Kosm Biol Aviakosm Med** 1989 Jan–Feb;23(1):74–6 (Rus)

[Measurement of the temperature of deep-seated tissues in healthy men during hypokinesia] Panferova NE, et al. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):42–6 (Eng. Abstr.) (Rus)

[Reaction of the cardiovascular system to static load after changes in body position] Silenko OV. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):34–8 (Eng. Abstr.) (Rus)

[Hemodynamic reactions to modified orthostatic test in persons with different +Gz tolerance] Suvorov PM, et al. **Kosm Biol Aviakosm Med** 1988 Jul–Aug;22(4):27–30 (Eng. Abstr.) (Rus)

[Effect of clinostatic and anti-orthostatic hypokinesia on serum enzyme activity] Vetrova EG, et al. **Kosm Biol Aviakosm Med** 1988 Jul–Aug;22(4):70–3 (Eng. Abstr.) (Rus)

[Effect of physical exertion on the changes in arterial blood pressure, heart rate and electrocardiogram in orthostatic position] Vilkov VG, et al. **Kosm Biol Aviakosm Med** 1988 Jul–Aug;22(4):43–7 (Eng. Abstr.) (Rus)

[Effect of long-term anti-orthostatic hypokinesia on tissue sensitivity to glucocorticoids] Vorob'ev DV, et al. **Kosm Biol Aviakosm Med** 1989 May–Jun;23(3):85–6 (Rus)

[Changes in regional pulmonary hemodynamics and levels of vasoactive substances in man in a state of antiorthostatic hypokinesia] Vorob'ev VE, et al. **Kosm Biol Aviakosm Med** 1988 Sep–Oct;22(5):42–6 (Eng. Abstr.) (Rus)

[Lipid peroxidation in the human blood during a 120-day period of anti-orthostatic hypokinesia] Zezerov AE, et al. **Kosm Biol Aviakosm Med** 1989 Mar–Apr;23(2):28–33 (Eng. Abstr.) (Rus)

[Effect of a brain extract containing the postural asymmetry factor on the frog neuromuscular synapse] Drabkina TM, et al. **Neirofiziologiia** 1988;20(4):554–7 (Eng. Abstr.) (Rus)

[The effect of anti-orthostatic action on the resorption of cerebrospinal fluid and various hemodynamic indicators in increased intracranial pressure] Atchabarov BA, et al. **Patol Fiziol Eksp Ter** 1989 Jan–Feb;(1):23–6 (Eng. Abstr.) (Rus)

[Pulmonary hypertension and hemodynamics in myocarditis during a head-down tilt test] Paleev NR, et al. **Sov Med** 1988;(12):19–21 (Eng. Abstr.) (Rus)

[Posture nystagmus and other otoneurologic symptoms in cranio-cerebral trauma] Tanchev KS. **Vestn Otorinolaringol** 1988 Nov–Dec;(6):76 (Rus)

[The orthostatic test with arterial hypertension patients] Vilkov VG, et al. **Vrach Delo** 1989 Mar;(3):26–8 (Eng. Abstr.) (Rus)

[Maturation of the activity of cerebellar Purkinje cells and the lift reaction] Grigor'ian RA, et al. **Zh Evol Biokhim Fiziol** 1988 May–Jun;24(3):344–9 (Eng. Abstr.) (Rus)

[Detection of deviations from normal sitting and standing working posture in oral medicine workers] Catović E. **Arh Hig Rada Toksikol** 1988 Sep;39(3):329–33 (Eng. Abstr.) (Scr)

[The effect of the position of the body on the values obtained for transfer-factor and the coefficient of pulmonary diffusion in healthy persons] Vukčević M, et al. **Plucne Bolesti** 1988 Jul–Dec;40(3–4):160–2 (Eng. Abstr.) (Scr)

[A program for evaluation of stabilographic recordings using a microcomputer] Kundrát J, et al. **Cesk Fysiol** 1989; 38(2):123–9 (Slo)

[Orthostatic proteinuria—new findings] Zibolen M, et al. **Cesk Pediatr** 1989 May;44(5):283–5 **(Slo)**

[Pulmonary atelectasis in bent lateral decubital position (nephrectomy). Apropos of a case] Jimeno Fernández MC, et al. **Rev Esp Anestesiol Reanim** 1989 Mar–Apr;36(2):114–6 (Eng. Abstr.) **(Spa)**

POTASSIUM

see related
HYPERKALEMIA
HYPOKALEMIA

Safety and efficacy of low-potassium dialysate. Hou S, et al. **Am J Kidney Dis** 1989 Feb;13(2):137–43

Evaluation of prostacyclin analogue OP-41483 as an adjunct to crystalloid cardioplegia in infants and children. Matsuda H, et al. **Ann Thorac Surg** 1989 Aug;48(2):242–6

Preservation of dog liver, kidney, and pancreas using the Belzer-UW solution with a high-sodium and low-potassium content. Moen J, et al. **Transplantation** 1989 Jun;47(6):940–5

[Manufacturing of K+-potassium microelectrodes for electroretinographic studies] Vitanova L. **Eksp Med Morfol** 1989;28(2):25–9 (Eng. Abstr.) **(Bul)**

ADMINISTRATION & DOSAGE

Proper instruction for preparing and ingesting suspensions of K-Dur tablets in water [letter] Martz MD, et al. **Am J Hosp Pharm** 1989 Jul;46(7):1341–2

Efficacy of metabolic support with glucose-insulin-potassium for left ventricular pump failure after aortocoronary bypass surgery. Coleman GM, et al. **Circulation** 1989 Sep;80(3 Pt 1):191–6

Comparative use of cold blood potassium cardioplegia in coronary bypass patients necessitating long (2.5–6 h) versus short (less than 1.5 h) aortic cross-clamp times. Sommerhaug RG, et al. **Clin Cardiol** 1988 Oct;11(10):690–5

Assessment of sodium and potassium intakes. Shortt C, et al. **Eur J Clin Nutr** 1988 Jul;42(7):605–9

Potassium: weighing the evidence for supplementation. Linas SL. **Hosp Pract [Off]** 1988 Dec 15;23(12):73–9, 83–4, 86 (10 ref.)

Relationship of dietary sodium, potassium, calcium, and magnesium with blood pressure. Belgian Interuniversity Research on Nutrition and Health. Kesteloot H, et al. **Hypertension** 1988 Dec;12(6):594–9

High potassium diet augments endothelium-dependent relaxations in the Dahl rat. Raij L, et al. **Hypertension** 1988 Dec;12(6):562–7

Effects of a low-sodium high-potassium salt in hypertensive patients treated with metoprolol: a multicentre study. Suppa G, et al. **J Hypertens** 1988 Oct;6(10):787–90

Comparison of single dose versus multiple dose crystalloid cardioplegia in neonate. Experimental study with neonatal rabbits from birth to 2 days of age. Sawa Y, et al. **J Thorac Cardiovasc Surg** 1989 Feb;97(2):229–34

Comparison of potassium alone and potassium-magnesium supplementation in patients with heart failure using hydrochlorothiazide. Kohvakka A, et al. **Magnesium** 1989; 8(2):71–6

Effect of oral potassium supplements on urinary kallikrein excretion in Sheehan's syndrome. López JM, et al. **Medicina (B Aires)** 1988;48(4):351–4

Changes in renal prostanoid synthesis induced by potassium loading in rats. Bernheim J, et al. **Nephron** 1989;51(4):540–3

Tissue electrolytes in the rabbit following chronic dietary potassium depletion. Ward JP. **Q J Exp Physiol** 1988 Nov; 73(6):1005–8

Hemorrhagic stroke development in spontaneously hypertensive rats fed a North American, Japanese-style diet. Smeda JS. **Stroke** 1989 Sep;20(9):1212–8

[Prevention and treatment of cardiac rhythm disorders during hemodialysis] Krivoshiev S, et al. **Vutr Boles** 1988; 27(3):57–61 (Eng. Abstr.) **(Bul)**

[Cardioplegia with cooled blood and the addition of potassium ions during the correction of acquired heart defects under artificial circulation] Tsyganiĭ AA, et al. **Klin Khir** 1988;(10):34–6 (Eng. Abstr.) **(Rus)**

[The need of potassium loss compensation in treatment with diuretics] Glezer GA, et al. **Klin Med (Mosk)** 1989 Jun; 67(6):21–7 (29 ref.) **(Rus)**

ADVERSE EFFECTS

Dietary alcohol, calcium, and potassium. Independent and combined effects on blood pressure. Criqui MH, et al. **Circulation** 1989 Sep;80(3):609–14

[Multiple squamous cell cancer as a late effect following arsenic treatment of psoriasis] Scholz S, et al. **Z Arztl Fortbild (Jena)** 1988;82(23):1201–3 **(Ger)**

ANALYSIS

Magnesium, potassium and zinc deficiency in subjects with type II diabetes mellitus. Sjögren A, et al. **Acta Med Scand** 1988;224(5):461–6

Extractive spectrophotometric analysis of potassium in pharmaceutical formulations using 18-crown-6 and picrate. Raggi MA, et al. **Acta Pharm Suec** 1988;25(3):133–40

Determination of sodium and potassium in nanoliter volumes of biological fluids by furnace atomic absorption spectrometry. Nash LA, et al. **Anal Chem** 1988 Nov 1; 60(21):2413–8

Predicting mortality based on body composition analysis. Tellado JM, et al. **Ann Surg** 1989 Jan;209(1):81–7

Extracellular potassium concentrations in human dental plaque fluid recovered from single sites. Carey CM, et al. **Arch Oral Biol** 1988;33(7):493–8

Free concentrations of sodium, potassium and calcium in chromaffin granules. Haigh JR, et al. **Biochem J** 1989 Apr 15;259(2):485–91

Epidermal growth factor in breast cyst fluid: relationship with intracystic cation and androgen conjugate content. Boccardo F, et al. **Cancer Res** 1988 Oct 15;48(20):5860–3

Body composition measurement by dual photon absorptiometry: comparison with body density and total body potassium measurements. Hassager C, et al. **Clin Physiol** 1989 Aug;9(4):353–60

The effects of starvation on the sodium, potassium, water and free amino acid content of parietal muscle from Agonus cataphractus. Soutter AM, et al. **Comp Biochem Physiol [B]** 1977;58(1):57–61

Airway secretion electrolytes: reflection of water and salt states of the body. Cavaliere F, et al. **Crit Care Med** 1989 Sep;17(9):891–4

References for determining the time of death by potassium in vitreous humor. Madea B, et al. **Forensic Sci Int** 1989 Mar;40(3):231–43

Total body water and total body potassium in ileostomy patients before and after conversion to the continent ileostomy. Ojerskog B, et al. **Gut** 1988 Sep;29(9):1198–201

An application of high-resolution transmission electron microscopy to the study of the fine structure of dislocations in potassium feldspars. Zheng YL, et al. **J Electron Microsc Tech** 1989 Mar;11(3):234–7

Changes in potassium content and membrane potassium channels in circulating cells from normal volunteers treated with cromakalim. Lijnen P, et al. **J Hypertens** 1989 May; 7(5):403–7

Use of a predictor for total body potassium content: application to nutrition and hypertension. Goldenberg K, et al. **J Med** 1988;19(3-4):215–27

Quick sampling and perpendicular cryosectioning of cell monolayers for the X-ray microanalysis of diffusible elements. Tvedt KE, et al. **J Microsc** 1988 Jul;151 (Pt 1):49–59

Red cell sodium and potassium in hypertension among blacks. Cooper R, et al. **J Natl Med Assoc** 1989 Apr;81(4):365–70

Do brain fluid ion concentrations change in hydrocephalus? A study on potassium and calcium in rats with congenital hydrocephalus. Keep RF, et al. **J Neurol Sci** 1989 Jun; 91(1-2):119–28

Spinal cord sodium, potassium, calcium, and water concentration changes in rats after graded contusion injury. Kwo S, et al. **J Neurotrauma** 1989 Summer;6(1):13–24

Distribution of diffusible ions in the aging rat lens. An X-ray microanalytical investigation. Versura P, et al. **J Submicrosc Cytol Pathol** 1989 Apr;21(2):391–6

Measurement of element content in isolated papillary collecting duct cells by electron probe microanalysis. Pavenstädt-Grupp I, et al. **Pflugers Arch** 1989 Feb; 413(4):378–84

Effects of carbon dioxide on extracellular potassium accumulation and volume in isolated frog spinal cord. Syková E, et al. **Pflugers Arch** 1988 Jul;412(1-2):183–7

Determination of potassium in pharmaceutical preparations by ionoselective electrode. Nobile L, et al. **Pharmazie** 1989 Jan;44(1):66

A simple calibration of a shadow shield counter for the measurement of total body potassium in critically ill patients. Mitra S, et al. **Phys Med Biol** 1989 Jan;34(1):61–8

Effect of cooling on the intracellular concentrations of Na+, K+ and Cl- in cultured human endothelial cells. Larsen T, et al. **Scand J Clin Lab Invest** 1988 Oct;48(6):565–71

Effect of applications of sewage sludge on N, P, K, Ca, Mg and trace element contents of plant tissues. Couillard D, et al. **Sci Total Environ** 1989 May 15;80(2-3):113–25

Changes in cation composition of aortic endothelial cells in culture. Adragna NC. **Tissue Cell** 1988;20(3):313–29

The effects of thermally-induced activity in vivo upon the ultrastructure and Na, K and Cl composition of the epithelial cells of sweat glands from patients with cystic fibrosis. Wilson SM, et al. **Tissue Cell** 1988;20(5):691–700

Potassium levels in irradiated blood [letter] Rivet C, et al. **Transfusion** 1989 Feb;29(2):185

Alteration of intracellular monovalent cation concentrations by a poliovirus mutant which encodes a defective 2A protease. Garry RF. **Virus Res** 1989 Jun;13(2):129–41

[Study of K, Na, Ca, Mn, Cu, Fe, Zn and Mg in the human lens] Hu YZ, et al. **Yen Ko Hsueh Pao** 1985 Sep;1(1):29–33 (Eng. Abstr.) **(Chi)**

[Methods of quick-freezing and cryosubstitution of biological tissues in analytical ion microscopy] Mony MC, et al. **C R Soc Biol (Paris)** 1988;182(5):458–65 (Eng. Abstr.) **(Fre)**

[Potassium concentration in the vitreous body—sample collection at different time intervals to determine time of death] Schmidt V, et al. **Beitr Gerichtl Med** 1988;46:423–6 (Eng. Abstr.) **(Ger)**

[Empirical modeling of interference effects with flame photometric potassium and sodium determination in water analysis] Einax J, et al. **Z Gesamte Hyg** 1989 Apr; 35(4):211–4 (Eng. Abstr.) **(Ger)**

ANTAGONISTS & INHIBITORS

Methylflavonolamine hydrochloride inhibits contractions induced by noradrenaline, calcium and potassium in rabbit isolated aortic strips. Zhang MS, et al. **Br J Pharmacol** 1988 Aug;94(4):1184–8

Blockade of K+ contractures in skeletal muscle by opioid drugs: a nonstereospecific effect. Kokate TG, et al. **Can J Physiol Pharmacol** 1989 May;67(5):435–41

BLOOD

Lymphocytic sodium and potassium pump function in Bartter's syndrome. Jest P, et al. **Acta Endocrinol (Copenh)** 1989 Jul;121(1):61–6

Erythrocyte electrolytes in psychiatric illness. Esche I, et al. **Acta Psychiatr Scand** 1988 Dec;78(6):695–7

Effects of canrenone on Na+,K+ ATPase activity, arterial pressure and plasma potassium concentration in uremic hemodialyzed patients. Quarello F, et al. **Adv Exp Med Biol** 1989;252:371–6

Effect of emopamil on cerebrocortical microcirculation during hypoxia and reactive hyperemia and on [K+]e, pH, pO2 changes during and after N2 anoxia. Urbanics R, et al. **Adv Exp Med Biol** 1989;248:479–87

Exercise-related changes in serum catecholamines and potassium: effect of sustained exercise above and below lactate threshold. Coplan NL, et al. **Am Heart J** 1989 May; 117(5):1070–5

Effect of dobutamine on plasma potassium in congestive heart failure secondary to idiopathic or ischemic cardiomyopathy. Goldenberg IF, et al. **Am J Cardiol** 1989 Apr 1;63(12):843–6

Exercise stress-induced changes in systemic arterial potassium in angina pectoris. Thomson A, et al. **Am J Cardiol** 1989 Jun 15;63(20):1435–40

Humoral Na+-K+ pump inhibitory activity in essential hypertension and in normotensive subjects after acute volume expansion. Pamnani MB, et al. **Am J Hypertens** 1989 Jul;2(7):524–31

Kinetics of volume-sensitive K transport in human erythrocytes: evidence for asymmetry. Kaji DM. **Am J Physiol** 1989 Jun;256(6 Pt 1):C1214–23

Activation of a Cl-dependent K flux by cAMP in pig red cells. Kim HD, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):C772–8

Volume-sensitive, Cl-dependent K transport in resealed human erythrocyte ghosts. O'Neill WC. **Am J Physiol** 1989 Jan;256(1 Pt 1):C81–8

Cl-dependent K transport in a pure population of volume-regulating human erythrocytes. O'Neill WC. **Am J Physiol** 1989 Apr;256(4 Pt 1):C858–64

Volume-dependent K+ transport in rabbit red blood cells comparison with oxygenated human SS cells. al-Rohil N, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):C114–21

Kinetics of Na-Li exchange in high and low K sheep red blood cells. Ryu KH, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):C58–64

Studies on bis(crown ether)-based ion-selective electrodes for the potentiometric determination of sodium and potassium in serum. Moody GJ, et al. **Analyst** 1989 Jan; 114(1):15–20

The lack of effect of succinylcholine on serum potassium in patients with Parkinson's disease [letter] Muzzi DA, et al. **Anesthesiology** 1989 Aug;71(2):322

Comparison of potassium ISFETs with the Radiometer KNA1 and the Corning 902 ion selective electrode analysers for whole blood potassium ion estimation. Thompson JM, et al. **Ann Clin Biochem** 1989 May;26 (Pt 3):274–80

Ion content and transport and the regulation of volume in sickle cells. Brugnara C, et al. **Ann N Y Acad Sci** 1989; 565:96–103 (53 ref.)

Serum potassium responses to nebulized salbutamol administered during an acute asthmatic attack. DaCruz D, et al. **Arch Emerg Med** 1989 Mar;6(1):22–6

The accumulation of malonyldialdehyde, an end product of membrane lipid peroxidation, can cause potassium leak in normal and sickle red blood cells. Jain SK, et al. **Biochem Med Metab Biol** 1989 Aug;42(1):60–5

Cation transport in oxidant-stressed human erythrocytes: heightened N-ethylmaleimide activation of passive K+ influx after mild peroxidation. Sheerin HE, et al. **Biochim Biophys Acta** 1989 Jul 24;983(1):65–76

Effect of CGP 17/582, a selective beta-adrenoceptor antagonist, on the haemodynamic and hypokalaemic response to adrenaline. Whyte KF, et al. **Br J Clin Pharmacol** 1989 May;27(5):553–61

Plasma potassium in phaeochromocytoma [letter] Thomas DJ. **Br J Hosp Med** 1989 Mar;41(3):299

Trends in blood pressure, osmolality and electrolytes after subarachnoid hemorrhage from aneurysms. Disney L, et al. **Can J Neurol Sci** 1989 Aug;16(3):299–304

Lymphocyte potassium and magnesium concentrations as prognostic factors after acute myocardial infarction [letter] Elin RJ, et al. **Cardiology** 1989;76(3):243–7

Enzymatic determination of potassium in serum. Berry MN, et al. **Clin Chem** 1989 May;35(5):817–20

Statistical interpretation of concentrations of magnesium, zinc, calcium, potassium, cholesterols, and creatine kinase isoenzymes in men at different stages of ischemic heart disease. Speich M, et al. **Clin Chem** 1989 May;35(5):833–5

Correlation between concentrations of magnesium, zinc, and

potassium in plasma, erythrocytes and muscles. Ladefoged K, et al. **Clin Chim Acta** 1988 Oct 14;177(2):157–66

Altered erythrocyte cation permeability in familial pseudohyperkalaemia. Dagher G, et al. **Clin Sci** 1989 Aug; 77(2):213–6

Problems in measuring human leucocyte cation content: effects of cell preparation and handling. Main J, et al. **Clin Sci** 1989 Aug;77(2):157–60

Changes in serum potassium concentration with exercise in Hereford calves: effects of adrenalectomy. Fosha–Dolezal SR, et al. **Comp Biochem Physiol [A]** 1988;91(1):135–9

Tall T waves during metabolic acidosis without hyperkalemia: a prospective study. Dreyfuss D, et al. **Crit Care Med** 1989 May;17(5):404–8

Serum potassium values in relation to the use of diuretics in patients with unstable angina pectoris. van Gilst WH, et al. **Eur Heart J** 1988 Jul;9(7):795–9

Anaesthesia for combined pancreatic and renal transplantation and potassium homeostasis. Sealey MM. **Eur J Anaesthesiol** 1988 May;5(3):193–206

Active and passive transport of sodium and potassium ions in erythrocytes of severely malnourished Jamaican children. Willis JS, et al. **Eur J Clin Nutr** 1988 Aug; 42(8):635–45

Relationship of serum sodium, potassium, calcium, and phosphorus with blood pressure. Belgian Interuniversity Research on Nutrition and Health. Kesteloot H, et al. **Hypertension** 1988 Dec;12(6):589–93

Early use of metoprolol and serum potassium in suspected acute myocardial infarction. Herlitz J, et al. **Int J Cardiol** 1989 Feb;22(2):169–75

Serum potassium during exercise in Hereford calves: influence of physical conditioning. Fosha–Dolezal SR, et al. **J Appl Physiol** 1988 Sep;65(3):1360–6

Skeletal muscle beta 2–adrenoreceptors and the effect of adrenergic drugs on plasma potassium in perinephritis hypertension in rabbits. Elfellah MS, et al. **J Auton Pharmacol** 1989 Apr;9(2):113–8

Dangerous hyperkalaemia after analysis of arterial blood sample [letter] Neithercut WD, et al. **J Clin Pathol** 1988 Dec;41(12):1339

Serum potassium levels in panic disorder patients [letter] Kim CL, et al. **J Clin Psychiatry** 1989 Jul;50(7):269–70

HK/LK polymorphism and its genetic determination in Speke's gazelle. Georgiadis N, et al. **J Hered** 1988 Sep–Oct; 79(5):325–31

Pressor response to stress and exercise in the young: intracellular ion content relationships and prognostic implications. Ambrosioni E, et al. **J Hum Hypertens** 1987 Dec;1(3):229–35

Homeostatic regulation of potassium excretion. Rabinowitz L. **J Hypertens** 1989 Jun;7(6):433–42 (162 ref.)

Serum electrolytes and parathyroid hormone in patients in a coronary care unit. Joborn H, et al. **J Intern Med** 1989 Jan;225(1):9–14

Effects of pH, potential, chloride and furosemide on passive Na+ and K+ effluxes from human red blood cells. Zade–Oppen AM, et al. **J Membr Biol** 1988 Aug; 103(3):217–25

A nonsteady–state agonist antagonist interaction model using plasma potassium concentrations to quantify the beta–2 selectivity of beta blockers. Jonkers R, et al. **J Pharmacol Exp Ther** 1989 Apr;249(1):297–302

Decapitation increases plasma sodium and potassium in the rat. Schriefer JA, et al. **J Pharmacol Methods** 1989 Apr; 21(2):155–9

Na+–K+ pump activities of high– and low–potassium sheep red cells with internal magnesium and calcium altered by A23187. Fujise H, et al. **J Physiol (Lond)** 1988 Nov; 405:605–14

Co–ordinated variations in chloride–dependent potassium transport and cell water in normal human erythrocytes. Stewart GW. **J Physiol (Lond)** 1988 Jul;401:1–16

Factitious hyperkalemia in dogs with thrombocytosis. The effect of platelets on serum potassium concentration. Reimann KA, et al. **J Vet Intern Med** 1989 Jan–Mar; 3(1):47–52

Intracellular sodium and potassium concentrations in erythrocytes of patients with primary aldosteronism. Oshima T, et al. **Jpn J Med** 1988 Aug;27(3):281–5

Control of serum potassium during fasting in patients with end–stage renal disease. Gifford JD, et al. **Kidney Int** 1989 Jan;35(1):90–4

Potassium and fatigue [letter] Friedland J, et al. **Lancet** 1988 Oct 22;2(8617):961–2

Fenoterol and serum potassium [letter] Martelli A, et al. **Lancet** 1989 May 27;1(8648):1197

Flame photometry: a simple method and reference range for erythrocyte sodium and potassium. Siebers RW, et al. **Med Lab Sci** 1988 Jul;45(3):270–2

86Rb(K) influx and [3H]ouabain binding by human platelets: evidence for beta–adrenergic stimulation of Na–K ATPase activity. Turaihi K, et al. **Metabolism** 1989 Aug;38(8):773–6

Cation fluxes in the red blood cell: Na+,K+ pump. Sachs JR. **Methods Enzymol** 1989;173:80–93

In vitro effect of xipamide on sodium–potassium transport systems in human erythrocytes. Lijnen P, et al. **Methods Find Exp Clin Pharmacol** 1988 Aug;10(8):527–30

Kinetic comparison of ouabain–resistant K:Cl fluxes (K:Cl [Co]–transport) stimulated in sheep erythrocytes by membrane thiol oxidation and alkylation. Lauf PK. **Mol Cell Biochem** 1988 Jul–Aug;82(1–2):97–106

Parathyroid hormone interferes with extrarenal disposition of potassium in chronic renal failure. Soliman AR, et al. **Nephron** 1989;52(3):262–7

The effect of locus ceruleus lesion on water, sodium and potassium content of the rat cerebral cortex. Moufarrij NA, et al. **Neurol Res** 1989 Jun;11(2):97–100

Intracellular sodium and potassium concentrations in erythrocytes of healthy male subjects. Oshima T, et al. **Nippon Jinzo Gakkai Shi** 1988 Sep;30(9):1095–101

The effects of two different dental local anesthetic solutions on plasma potassium levels during third molar surgery. Meechan JG, et al. **Oral Surg Oral Med Oral Pathol** 1988 Dec;66(6):650–3

Inhibition of K+ efflux and dehydration of sickle cells by [(dihydroindenyl)oxy]alkanoic acid: an inhibitor of the K+ Cl– cotransport system. Vitoux D, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(11):4273–6

Disorders characterized by spontaneous attacks of weakness connected with changes of serum potassium. Gamstorp I. **Prog Clin Biol Res** 1989;306:175–95 (65 ref.)

The effect of hypoxia on plasma potassium concentration and the excitation of arterial chemoreceptors in the cat. Paterson DJ, et al. **Q J Exp Physiol** 1988 Jul;73(4):623–5

The ventilatory response to lowering potassium with dextrose and insulin in subjects with hyperkalaemia. Paterson DJ, et al. **Respir Physiol** 1989 Jun;76(3):393–8

Serum electrolyte disturbances in the post–resuscitation period. The Cerebral Resuscitation Study Group. Buylaert WA, et al. **Resuscitation** 1989;17 Suppl:S189–96; discussion S199–206

The effect of epinephrine on hemodynamics, acid–base status and potassium during spontaneous circulation and cardiopulmonary resuscitation. Lindner KH, et al. **Resuscitation** 1988 Oct;16(4):251–61

Comparison of an inductively coupled plasma–atomic emission spectrometry method for the determination of calcium, magnesium, sodium, potassium, copper and zinc with atomic absorption spectroscopy and flame photometry methods. Dipietro ES, et al. **Sci Total Environ** 1988 Aug 1;74:249–62

Cardiovascular and hypokalaemic effects of inhaled salbutamol, fenoterol, and isoprenaline. Crane J, et al. **Thorax** 1989 Feb;44(2):136–40

Changes in serum potassium concentration in asthmatic and normal subjects during exercise. Gugger M. **Thorax** 1989 Jul;44(7):605–6

Palytoxin promotes potassium outflow from erythrocytes, HeLa and bovine adrenomedullary cells through its interaction with Na+, K+ –ATPase. Habermann E, et al. **Toxicon** 1989;27(4):419–30

Disorders of potassium homeostasis. Willard MD. **Vet Clin North Am [Small Anim Pract]** 1989 Mar; 19(2):241–63 (124 ref.)

The effect of serum potassium on theophylline–induced seizures. Borok Z, et al. **Vet Hum Toxicol** 1988 Oct; 30(5):417–9

Addison's disease in the dog [letter] Little C, et al. **Vet Rec** 1989 Apr 29;124(17):469–70

Digoxin, magnesium, and potassium levels in a forensic autopsy material of sudden death from ischemic heart disease. Ottosson A, et al. **Z Rechtsmed** 1988;101(1):27–36

[Intracellular content of sodium and potassium in patients with hypertension] Nakova E, et al. **Vutr Boles** 1988; 27(5):39–42 (Eng. Abstr.) **(Bul)**

[Effect of thioridazine and chlorpromazine on the ECG and serum potassium level—ECG of the glucose load in 40 cases] Kuang RY. **Chung Hua Shen Ching Ching Shen Ko Tsa Chih** 1988 Oct; 21(5):297–9, 319 (Eng. Abstr.) **(Chi)**

[Relationship between eating cotton–seed oil and blood potassium levels] Han ZY. **Chung Hua Yu Fang I Hsueh Tsa Chih** 1988 Jul;22(4):230–2 (Eng. Abstr.) **(Chi)**

[The effect of beta blockers combined with thiazides on serum electrolytes] Djurhuus MS, et al. **Ugeskr Laeger** 1989 Aug 14;151(33):2076–8 (Eng. Abstr.) **(Dan)**

[The rate of injection of succinylcholine and onset of neuromuscular action, serum potassium or myoglobin levels. Studies in men during halothane anesthesia] Plötz J, et al. **Anaesthesist** 1989 Aug;38(8):408–12 (Eng. Abstr.) **(Ger)**

[The equilibrium of nitrogen, potassium and phosphate and renal excretion of creatinine and creatinine over the course of 3 weeks following severe trauma] Finsterer U, et al. **Anasth Intensivther Notfallmed** 1988 Dec;23(6):316–24 (Eng. Abstr.) **(Ger)**

[Turbidimetric rapid test for potassium in serum.] Dehmlow R, et al. **Z Med Lab Diagn** 1988;29(7):411 **(Ger)**

[Erythrocyte membrane permeability for univalent cations (Na+, K+) and their transformation in patients with hypertension and symptomatic (renal) hypertension] Kavtaradze VG, et al. **Biull Eksp Biol Med** 1989 May; 107(5):554–7 (Eng. Abstr.) **(Rus)**

[External sodium and potassium cotransport in erythrocytes under irradiation of a helium–neon laser] Panasiuk EN, et al. **Gematol Transfuziol** 1988 Sep;33(9):31–5 (Eng. Abstr.) **(Rus)**

[Activity of the sympathetic nervous system and the levels of prostaglandins and intracellular electrolytes in patients with arterial hypertension and low plasma renin activity] Votsial' B, et al. **Kardiologiia** 1988 Dec;28(12):34–7 (Eng. Abstr.) **(Rus)**

[Changes in the content of potassium, sodium and potassium influx in human peripheral blood lymphocytes during long–term cultivation with phytohemagglutinin] Ezhevskii SA, et al. **Tsitologiia** 1988 May;30(5):573–81 (Eng. Abstr.) **(Rus)**

[Relation between energy metabolism, Na+ and K+ levels, and Na,K–ATPase activity in erythrocytes and their volume and shape during overheating] Bondarev DP, et al. **Vopr Med Khim** 1988 Sep–Oct;34(5):87–91 (Eng. Abstr.) **(Rus)**

[The effect of metipamide on levels of sodium and potassium in erythrocytes] Molitorisová M, et al. **Bratisl Lek Listy** 1989 Apr;90(4):294–9 (Eng. Abstr.) **(Slo)**

[Physical exercise and serum potassium in renal insufficiency] Lens XM, et al. **Rev Clin Esp** 1989 Apr;184(6):285–8 (Eng. Abstr.) **(Spa)**

[Effect of succinylcholine on serum levels of potassium in patients treated for intracranial aneurysm] Pernia Morán J, et al. **Rev Esp Anestesiol Reanim** 1989 Mar–Apr; 36(2):85–7 (Eng. Abstr.) **(Spa)**

[Effects of hypoxia on plasma concentrations and daily elimination of sodium, potassium and chlorine ions] Pié J, et al. **Rev Esp Fisiol** 1988 Dec;44(4):369–74 (Eng. Abstr.) **(Spa)**

[Analyses of serum potassium in outpatients can be done at comparatively long intervals] Jansson A, et al. **Lakartidningen** 1989 Mar 1;86(9):707–8 **(Swe)**

CEREBROSPINAL FLUID

Electrolytes and glucose in cerebrospinal fluid of premature infants with intraventricular haemorrhage: role of potassium in cerebral infarction. Stutchfield PR, et al. **Arch Dis Child** 1989 Apr;64(4):470–5

Effects of intracerebroventricular infusion of aldosterone on blood pressure and sodium and potassium concentrations in cerebral spinal fluid in rats. Atarashi K, et al. **Clin Exp Hypertens [A]** 1988;10 Suppl 1:317–22

[How reliable is determination of the time of death by potassium concentration in cisternal cerebrospinal fluid?] Madea B, et al. **Beitr Gerichtl Med** 1988;46:375–81 (Eng. Abstr.) **(Ger)**

DIAGNOSTIC USE

Use of touch preparation for rapid diagnosis of disseminated candidiasis. Held JL, et al. **J Am Acad Dermatol** 1988 Dec; 19(6):1063–6

Evaluation of the KOH test and the antibiotic disk test in routine clinical anaerobic bacteriology. Bourgault AM, et al. **J Clin Microbiol** 1988 Oct;26(10):2144–6

METABOLISM

Skeletal muscle potassium increases after diet and weight reduction in obese subjects with normal and impaired glucose tolerance. Landin K, et al. **Acta Endocrinol (Copenh)** 1989 Jul;121(1):21–6

Sodium and potassium in normal and pathological seminal plasma. Gusani PH, et al. **Acta Eur Fertil** 1988 Nov–Dec; 19(6):333–6

Inward K–current in human malignant glioma cells: possible mechanism for K–homeostasis in the brain. Brismar T, et al. **Acta Physiol Scand** 1988 Feb;132(2):259–60

In–vivo quantification of myocardial Na–K pump rate during beta–adrenergic stimulation of intact pig hearts. Ellingsen O, et al. **Acta Physiol Scand** 1989 Apr;135(4):493–503

Temporal relationship of contractility and myocardial potassium balance following beta–adrenergic stimulation of the in situ pig heart. Ellingsen O, et al. **Acta Physiol Scand** 1988 Feb;132(2):241–50

Studies on terminal differentiation of rat renal proximal tubular cells in culture: ouabain–sensitive K and Na transport. Larsson SH, et al. **Acta Physiol Scand** 1988 Feb; 132(2):129–34

Monovalent cation antiport reactions in isolated mitochondria. Brierley GP, et al. **Adv Exp Med Biol** 1988; 232:47–57 (78 ref.)

Atropine and hexamethonium–sensitive, Ca/K–modulated, reversible swelling of mast cells in rat mesentery, due to feeding or exposure to carbachol. Rothschild AM, et al. **Agents Actions** 1988 Aug;25(1–2):4–10

Erythrocyte sodium concentration and 86Rb uptake in weanling Dahl rats. McCormick CP, et al. **Am J Hypertens** 1989 Aug;2(8):604–9

Quiz of the month. Pseudohyperkalemia and excessive K intake. Dyck RF, et al. **Am J Nephrol** 1988;8(4):305, 347–8

A renal mechanism limiting the degree of potassium loss in severely hyperglycemic patients. West ML, et al. **Am J Nephrol** 1988;8(5):373–8

Role of chloride in potassium transport through a K–Cl cotransport system in human red blood cells. Brugnara C, et al. **Am J Physiol** 1989 May;256(5 Pt 1):C994–1003

Muscarinic suppression of Ca2+–dependent K current in colonic smooth muscle. Cole WC, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):C481–7

G proteins mediate suppression of Ca2+–activated K current by acetylcholine in smooth muscle cells. Cole WC, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):C596–600

Propionate induces cell swelling and K+ accumulation in shark rectal gland. Feldman GM, et al. **Am J Physiol** 1989 Aug;257(2 Pt 1):C377–84

Potassium transport by pancreatic and parotid zymogen

granule membranes. Gasser KW, et al. **Am J Physiol** 1988 Dec;255(6 Pt 1):C705–11

Succinate alters respiration, membrane potential, and intracellular K+ in proximal tubule. Gullans SR, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):F1170–7

Effect of hypertonic stress on liver cell volume, bile flow, and volume-regulatory K+ fluxes. Haddad P, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):G563–9

Volume-regulatory K+ fluxes in the isolated perfused rat liver: characterization by ion transport inhibitors. Haddad P, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):G357–63

Whole-cell potassium currents in single early distal tubule cells. Hunter M, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):F699–703

Cellular pathways of potassium transport in renal inner medullary collecting duct. Kone BC, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):C823–30

K+ transport and membrane potentials in isolated rat parotid acini. Nauntofte B, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):C508–18

Regulation of Na-K-Cl cotransport in endothelial cells by atrial natriuretic factor. O'Donnell ME. **Am J Physiol** 1989 Jul;257(1 Pt 1):C36–44

Development of potassium transport capability by choroid plexus of infant rats. Parmelee JT, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):R786–91

K activity of CCD principal cells from normal and DOCA-treated rabbits. Sansom SC, et al. **Am J Physiol** 1989 Jan;256(1 Pt 2):F136–42

Regulation of Na+ and K+ contents in rat thymocytes. Senn N, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):C12–8

Adaptation of distal tubule and collecting duct to increased Na delivery. II. Na+ and K+ transport. Stanton BA, et al. **Am J Physiol** 1988 Dec;255(6 Pt 2):F1269–75

Ouabain-sensitive H+-K+ exchange mechanism in the apical membrane of guinea pig colon. Suzuki Y, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):G979–88

K+ and Rb+ transport by the rabbit CCD: Rb+ reduces K+ conductance and Na+ transport. Warden DH, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):F43–52

Cellular K+ loss and anion efflux during myocardial ischemia and metabolic inhibition. Weiss JN, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):H1165–75

Potassium secretion by the cortical collecting tubule: effect of Cl gradients and ouabain. Wingo CS. **Am J Physiol** 1989 Feb;256(2 Pt 2):F306–13

Reversible chloride-dependent potassium flux across the rabbit cortical collecting tubule. Wingo CS. **Am J Physiol** 1989 Apr;256(4 Pt 2):F697–704

Quantitative analysis of aldosterone's role in potassium regulation. Young DB. **Am J Physiol** 1988 Nov;255(5 Pt 2):F811–22 (51 ref.)

Alterations in sodium–potassium regulation in mononuclear leucocytes from young borderline hypertensive and offspring of hypertensive patients. Nielsen JR, et al. **Ann Clin Res** 1988;20 Suppl 48:58–60

Effects of free and liposomal amphotericin B and gramicidin S alone and in combination on potassium leakage from human erythrocytes and Candida albicans. Midez JA, et al. **Antimicrob Agents Chemother** 1989 Feb;33(2):152–5

Replacement of potassium ions by ammonium ions in different micro-organisms grown in potassium-limited chemostat culture. Buurman ET, et al. **Arch Microbiol** 1989; 152(1):58–63

Transient accumulation of potassium glutamate and its replacement by trehalose during adaptation of growing cells of Escherichia coli K-12 to elevated sodium chloride concentrations. Dinnbier U, et al. **Arch Microbiol** 1988; 150(4):348–57

An examination of functional linkage between K efflux and 36Cl efflux in rat submandibular salivary gland acini in vitro. Martinez JR, et al. **Arch Oral Biol** 1987;32(12):891–5

Effects of acetylcholine and transport inhibitors on K content in dispersed submandibular salivary cells of newborn and adult rats. Martinez JR, et al. **Arch Oral Biol** 1988; 33(3):203–7

Vasopressin-stimulated Ca2+ influx in rat hepatocytes is inhibited in high-K+ medium. Savage AL, et al. **Biochem J** 1989 Jun 15;260(3):821–7

Ethanol effects on active Na+ and K+ transport in cultured fetal rat hepatocytes. McCall D, et al. **Biochem Pharmacol** 1989 Aug 15;38(16):2593–600

Principles of selectivity of sodium and potassium binding sites of the Na+/K+-ATPase. A corollary hypothesis. Breier A, et al. **Biochim Biophys Acta** 1988 Dec 8;946(1):129–34

Pump current and Na+/K+ coupling ratio of Na+/K+-ATPase in reconstituted lipid vesicles. Clarke RJ, et al. **Biochim Biophys Acta** 1989 Jun 6;981(2):326–36

Mitochondrial transport of K+ and Mg2+. Diwan JJ. **Biochim Biophys Acta** 1987;895(3):155–65 (134 ref.)

The effects of homologous series of anaesthetics on a resting potassium conductance of the squid giant axon. Elliott AA, et al. **Biochim Biophys Acta** 1989 Jan 30;978(2):337–40

Effects of anisosmotic buffers on K+ transport in isolated chicken enterocytes. Montero MC, et al. **Biochim Biophys Acta** 1989 Feb 27;979(2):269–71

Protein kinase C and membrane transport: divergent responses of Na+/K+/Cl- cotransport and sugar transport to exogenous diacylglycerol. O'Brien TG, et al. **Biochim Biophys Acta** 1988 Nov 3;945(1):41–50

Characteristics of the Na+/K+-ATPase from Torpedo californica expressed in Xenopus oocytes: a combination of tracer flux measurements with electrophysiological measurements. Schwarz W, et al. **Biochim Biophys Acta** 1988 Nov 22;945(2):167–74

Quinine inhibits multiple Na+ and K+ transport mechanisms in Ehrlich ascites tumor cells. Smith TC, et al. **Biochim Biophys Acta** 1989 Jan 16;978(1):169–75

Membrane potential measurements in isolated rat liver plasma membrane vesicles: effect of transmembrane ion concentration gradients. Thalhammer T, et al. **Biochim Biophys Acta** 1989 Mar 13;979(3):371–4

Characterisation of a Na+/K+/Cl- cotransporter in alkylating agent-sensitive L1210 murine leukemia cells. Wilcock C, et al. **Biochim Biophys Acta** 1988 Dec 22; 946(2):359–67

Selective inhibition by bis(2-chloroethyl)methylamine (nitrogen mustard) of the Na+/K+/Cl- cotransporter of murine L1210 leukemia cells. Wilcock C, et al. **Biochim Biophys Acta** 1988 Dec 22;946(2):368–78

Effects of short-term hypoxic hypoxia on the sodium and potassium homoeostasis in humans. Dannenberg R, et al. **Biomed Biochim Acta** 1989;48(2–3):S274–8

K transfer in ureter ligated dogs loaded with KCl. Hiatt N, et al. **Biomed Biochim Acta** 1988;47(4–5):395–400

Structural aspects of the sarcoplasmic reticulum K+ channel revealed by gallamine block. Gray MA, et al. **Biophys J** 1988 Aug;54(2):233–9

Gibbs-Donnan ratio and channel conductance of Tetrahymena cilia in mixed solution of K+ and Ca2+. Oosawa Y, et al. **Biophys J** 1988 Sep;54(3):407–10

Catecholamines and plasma potassium. Smith M. **Br J Hosp Med** 1988 Oct;40(4):294, 296–9

Na+ -K+ pump activity in rat peritoneal mast cells: inhibition by extracellular calcium. Knudsen T, et al. **Br J Pharmacol** 1989 Apr;96(4):773–8

Ryanodine inhibits the Ca-dependent K current after depletion of Ca stored in smooth muscle cells of the rabbit ileal longitudinal muscle. Sakai T, et al. **Br J Pharmacol** 1988 Dec;95(4):1089–100

MPP+-induced increases in extracellular potassium ion activity in rat striatal slices suggest that consequences of MPP+ neurotoxicity are spread beyond dopaminergic terminals. Hollinden GE, et al. **Brain Res** 1988 Dec 20; 475(2):283–90

Studies on the ionic mechanism for the neuromodulatory actions of adenosine in the brain. Michaelis ML, et al. **Brain Res** 1988 Nov 15;473(2):249–60

Increase in extracellular potassium level in rat spinal dorsal horn induced by noxious stimulation and peripheral injury. Svoboda J, et al. **Brain Res** 1988 Aug 16;458(1):97–105

Is Ca2+ -activated potassium efflux involved in the formation of ischemic brain edema? Tominaga T, et al. **Brain Res** 1988 Sep 20;460(2):376–8

Alterations in the microenvironment during spreading depression associated with epileptiform activity in the immature neocortex. Hablitz JJ, et al. **Brain Res Dev Brain Res** 1989 Apr 1;46(2):243–52

Potassium concentration influences the gating of K+ channels from sarcoplasmic reticulum. Campos-de-Carvalho AC. **Braz J Med Biol Res** 1989; 22(1):107–9

The effect of diphenylhydantoin on spreading depression. Chebabo SR, et al. **Braz J Med Biol Res** 1988;21(3):603–5

Characterization of ion movements and their relationship to muscarinic receptor binding and excitation-contraction coupling in guinea pig ileal longitudinal smooth muscle. Bolger GT, et al. **Can J Physiol Pharmacol** 1989 Apr; 67(4):331–43

Potassium, sodium, water, and Donnan potential changes in the myofibrils of intact muscle fibres after exposure to ouabain and K-free Ringer. Fong CN, et al. **Can J Physiol Pharmacol** 1988 Aug;66(8):1057–65

Transmembrane action potentials and intracellular potassium activity of baboon cardiac tissues. Dangman KH, et al. **Cardiovasc Res** 1988 Mar;22(3):204–12

Fluctuation in the intracellular concentration of Na+ and Cl- but not of K+ or Mg2+ at mitosis of the first cell cycle in fertilized sea urchin eggs. Cameron IL, et al. **Cell Biol Int Rep** 1988 Nov;12(11):951–8

L-929 cells under hyperosmotic conditions. Water, Na+, and K+. Clegg JS. **Cell Biophys** 1988 Oct;13(2):119–32

A cooperative transition theory applied to the kinetics of ionic exchanges in cells. Negendank W. **Cell Biophys** 1988 Oct;13(2):93–117

Inhibition of Na-K pump current in guinea pig ventricular myocytes by dihydrouabain occurs at high- and low-affinity sites. Mogul DJ, et al. **Circ Res** 1989 Jun; 64(6):1063–9

Distribution of extracellular potassium and electrophysiologic changes during two-stage coronary ligation in the isolated, perfused canine heart. Coronel R, et al. **Circulation** 1989 Jul;80(1):165–77

Effects of verapamil and propranolol on changes in extracellular K+, pH, and local activation during graded coronary flow in the pig. Watanabe I, et al. **Circulation** 1989 Apr;79(4):939–47

Lack of effect of aldosterone on intracellular sodium and potassium in mononuclear leucocytes from patients with pseudohypoaldosteronism. Wehling M, et al. **Clin Endocrinol (Oxf)** 1988 Jan;28(1):67–74

Genetic and epidemiological studies on electrolyte transport systems in hypertension. Williams RR, et al. **Clin Physiol Biochem** 1988;6(3–4):136–49 (73 ref.)

Effects of chronic hypokalaemia and adrenalectomy on potassium transport by the medullary collecting duct of the rat. Halperin ML, et al. **Clin Sci** 1989 Feb;76(2):189–94

Urinary kallikrein excretion during potassium chloride infusion in potassium-adapted rats: effect of amiloride. Obika LF. **Clin Sci** 1989 Jul;77(1):21–7

Different cation transport inhibitor in malignant renal hypertension and in uraemia. Simon G. **Clin Sci** 1989 Mar; 76(3):329–33

Extrarenal potassium adaptation: the role of aldosterone. Spital A, et al. **Clin Sci** 1989 Feb;76(2):213–9

Measurement of cation transport in vivo in healthy volunteers after the oral administration of lithium carbonate. Wood AJ, et al. **Clin Sci** 1989 Apr;76(4):397–402

Sodium and potassium concentrations in the intestinal fluids of the fowl, Gallus domesticus. Bentley PJ, et al. **Comp Biochem Physiol [A]** 1989;92(4):577–9

The ratio of extracellular Ca2+ to K+ ions affects the photoresponses in Stentor coeruleus. Iwatsuki K, et al. **Comp Biochem Physiol [A]** 1989;92(1):101–6

Calcium modulates transepithelial potassium secretion across isolated frog skin. Nielsen R. **Comp Biochem Physiol [A]** 1988;90(4):673–7 (22 ref.)

Effects of short-term changes in electrolyte intake on the adrenal steroidogenic responses of juvenile mallard ducks (Anas platyrhynchos). Redondo JL, et al. **Comp Biochem Physiol [A]** 1988;91(3):513–8

Amylase activity, glycoprotein and electrolyte concentration in rat's submaxillary salivary gland during heat acclimation. Horowitz M, et al. **Comp Biochem Physiol [B]** 1978; 60(4):351–4

Excitotoxicity, reflex responses, and evoked changes in extracellular potassium in the frog spinal cord. Zhang DX, et al. **Comp Biochem Physiol [C]** 1989;92(2):205–10

Myocardial potassium uptake during experimental cardiopulmonary resuscitation. von Planta M, et al. **Crit Care Med** 1989 Sep;17(9):895–9

Muscle cell potassium, RNA and hydration in pregnancy and pre-eclampsia. Cheek DB, et al. **Early Hum Dev** 1989 Jun; 19(3):191–8

Effects of gallopamil, diltiazem and nifedipine on the loss of K+ from ischaemic pig hearts. Kirchengast M, et al. **Eur J Pharmacol** 1989 Feb 7;160(3):349–58

Potassium transport in rabbit erythrocytes. Stewart GW, et al. **Exp Biol** 1989;48(3):161–5

Potassium transport in monkey erythrocytes. Stewart GW, et al. **Exp Biol** 1989;48(3):167–72

Cationic control of gene transcription in tumour cells. Kaznin SD, et al. **Folia Biol (Praha)** 1989;35(3):143–51

Linear rate of change in the product of erythrocyte water content and potassium concentration during the 0–120-hour postmortem period in the rat. Querido D, et al. **Forensic Sci Int** 1988 Jul–Aug;38(1–2):101–12

Early and delayed changes in potassium transport during the initiation of cell proliferation in CHO culture. Marakhova II, et al. **Gen Physiol Biophys** 1989 Jun;8(3):273–82

Release of taurine from astrocytes during potassium-evoked swelling. Pasantes-Morales H, et al. **GLIA** 1989;2(1):45–50

Electrochemical profiles for monovalent ions in the stria vascularis: cellular model of ion transport mechanisms. Ikeda K, et al. **Hear Res** 1989 Jun 1;39(3):279–86

Na+-K+-2Cl- cotransport in the thick ascending limb of Henle. Culpepper RM. **Hosp Pract [Off]** 1989 Jun 15; 24(6):217–21, 225–6, 231–3 passim

Characterization of bicarbonate-dependent potassium uptake in cultured corneal endothelial cells. Savion N, et al. **Invest Ophthalmol Vis Sci** 1989 Apr;30(4):690–7

Salivary changes associated with seasickness. Gordon CR, et al. **J Auton Nerv Syst** 1989 Feb;26(1):37–42

Specific cesium transport via the Escherichia coli Kup (TrkD) K+ uptake system. Bossemeyer D, et al. **J Bacteriol** 1989 Apr;171(4):2219–21

K+-transport protein TrkA of Escherichia coli is a peripheral membrane protein that requires other trk gene products for attachment to the cytoplasmic membrane. Bossemeyer D, et al. **J Biol Chem** 1989 Oct 5; 264(28):16403–10

Regulation of Na+/K+/Cl- cotransport and [3H]bumetanide binding site density by phorbol esters in HT29 cells. Franklin CC, et al. **J Biol Chem** 1989 Apr 25;264(12):6667–73

Reconstitution of the mitochondrial non-selective Na+/H+ (K+/H+) antiporter into proteoliposomes. Kakar SS, et al. **J Biol Chem** 1989 Apr 5;264(10):5846–51

Active potassium extrusion regulated by intracellular pH in Streptococcus faecalis. Kakinuma Y, et al. **J Biol Chem** 1988 Oct 5;263(28):14166–70

The binding of a K+ competitive ligand, 2-methyl,8-(phenylmethoxy)imidazo(1,2-a)pyridine 3-acetonitrile, to the gastric (H+ + K+)-ATPase. Keeling DJ, et al. **J Biol Chem** 1989 Apr 5;264(10):5545–51

Photoaffinity labeling of the lumenal K+ site of the gastric (H+ + K+)-ATPase. Keeling DJ, et al. **J Biol Chem** 1989 Apr 5;264(10):5552–8

Protons as substitutes for sodium and potassium in the sodium pump reaction. Polvani C, et al. **J Biol Chem** 1988 Nov 15;263(32):16757–63

A vacuolar-type ATPase, partially purified from potassium transporting plasma membranes of tobacco hornworm midgut. Schweikl H, et al. **J Biol Chem** 1989 Jul 5; 264(19):11136–42

A vacuolar-type proton pump in a vesicle fraction enriched

with potassium transporting plasma membranes from tobacco hornworm midgut. Wieczorek H, et al. **J Biol Chem** 1989 Jul 5;264(19):11143–8

Effects of selective and nonselective beta-adrenoceptor antagonism on isoproterenol-stimulated myocardial potassium uptake in the intact dog. Elsner D, et al. **J Cardiovasc Pharmacol** 1989 Mar;13(3):376–81

Stimulation of the Na+, K+ pump and the (Na+, K+, Cl–) cotransport system by endothelin-1 in cultured vascular smooth muscle cells: involvement of cyclo-oxygenase products. Garay R, et al. **J Cardiovasc Pharmacol** 1989;13 Suppl 5:S213–5

Effect of propranolol on early postischemia arrhythmias and noradrenaline and potassium release of ischemic myocardium in anesthetized pigs. Knopf H, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 1:S41–7

The effect of desipramine on ischemia-induced changes in extracellular K+, Na+, and H+ concentrations and noradrenaline release in the isolated rat heart during global ischemia. Knopf H, et al. **J Cardiovasc Pharmacol** 1988;12 Suppl 1:S8–14

Metabolic effects of calcium antagonists in humans, with emphasis on carbohydrate, lipid, potassium, and uric acid homeostases. Trost BN, et al. **J Cardiovasc Pharmacol** 1988; 12 Suppl 6:S86–92 (73 ref.)

Dual effect of dihydropyridines on 45Ca uptake induced by the K+ –channel blocker, 4-aminopyridin on mast cells. Eleno N, et al. **J Cell Physiol** 1988 Nov;137(2):378–83

The Na+,K+,2Cl– –cotransport system in HeLa cells and HeLa cell mutants exhibiting an altered efflux pathway. Kort JJ, et al. **J Cell Physiol** 1989 Oct;141(1):181–90

Effect of enzymic (collagenase) harvesting on the intracellular Na+/K+ ratio of Swiss/3T3 cells as revealed by X-ray microanalysis. Szállási Z, et al. **J Cell Sci** 1988 May;90 (Pt 1):99–104

Inhibition of glycolysis alters potassium ion transport and mitochondrial redox activity in rat brain. Raffin CN, et al. **J Cereb Blood Flow Metab** 1988 Dec;8(6):857–65

Active proton secretion and potassium absorption in the rabbit outer medullary collecting duct. Functional evidence for proton-potassium-activated adenosine triphosphatase. Wingo CS. **J Clin Invest** 1989 Jul;84(1):361–5

Interactions of dietary cation-anion balance and phosphorus: effects on growth and serum inorganic phosphorus in dairy calves. Beighle DE, et al. **J Dairy Sci** 1988 Dec; 71(12):3362–8

Effects of hyposmotic shock on ion fluxes in isolated trout hepatocytes. Bianchini L, et al. **J Exp Biol** 1988 Jul; 137:303–18

Barium and calcium block Bacillus thuringiensis subspecies Kurstaki delta-endotoxin inhibition of potassium current across isolated midgut of larval Manduca sexta. Crawford DN, et al. **J Exp Biol** 1988 Jul;137:277–86

Continued growth of Escherichia coli after stopping medium addition to a K+-limited chemostat culture. Mulder MM, et al. **J Gen Microbiol** 1988 Mar;134 (Pt 3):777–83

Intracellular Na+ and K+ activities and membrane conductances in the collecting tubule of Amphiuma. Horisberger JD, et al. **J Gen Physiol** 1988 Nov;92(5):643–65

Potassium blocks barium permeation through a calcium-activated potassium channel. Neyton J, et al. **J Gen Physiol** 1988 Nov;92(5):549–67

Potassium current activated by depolarization of dissociated neurons from adult guinea pig hippocampus. Sah P, et al. **J Gen Physiol** 1988 Aug;92(2):263–78

Erythrocyte and leucocyte sodium and potassium transport systems during long-term diuretic administration in men. Lijnen P, et al. **J Hypertens** 1988 Aug;6(8):639–45

Increased skeletal muscle Na/K-ratio in obese men, but not in women, with glucose intolerance. Landin K, et al. **J Intern Med** 1989 Feb;225(2):89–94

Na+ and K+ fluxes stimulated by Na+-coupled glucose transport: evidence for a Ba2+-insensitive K+ efflux pathway in rabbit proximal tubules. Avison MJ, et al. **J Membr Biol** 1988 Nov;105(3):197–205

Ca2+-activated K+ conductance causes membrane hyperpolarizations in a monkey kidney cell line (JTC-12). Chang H, et al. **J Membr Biol** 1988 Aug;103(3):263–71

Isomeric yohimbine alkaloids block calcium-activated K+ channels in medullary thick ascending limb cells of rabbit kidney. Cornejo M, et al. **J Membr Biol** 1989 Jan; 107(1):25–33

Sodium and potassium fluxes across the dialyzed giant axon of Myxicola. Forbush B 3d. **J Membr Biol** 1979; 46(3):185–212

Ca2+-activated K+ currents in Necturus choroid plexus. Loo DD, et al. **J Membr Biol** 1988 Nov;105(3):221–31

Voltage dependence of Na/K pump current in Xenopus oocytes. Rakowski RF, et al. **J Membr Biol** 1988 Dec; 106(2):173–82

Catecholamine release and potassium accumulation in the isolated globally ischemic rabbit heart. Wilde AA, et al. **J Mol Cell Cardiol** 1988 Oct;20(10):887–96

Current-evoked transcellular K+ flux in frog retina. Karwoski CJ, et al. **J Neurophysiol** 1989 May;61(5):939–52

Myocardial potassium balance during adrenergic stimulation. Ellingsen O. **J Oslo City Hosp** 1989 Apr–May; 39(4–5):39–51

Effects of two levels of intake of chloride, potassium, and calcium on mineral and acid–base metabolism in premature infants. Mosca F, et al. **J Pediatr Gastroenterol Nutr** 1989 May;8(4):500–6

K+ efflux from the monkey eccrine secretory coil during the transient of stimulation with agonists. Saga K, et al. **J Physiol (Lond)** 1988 Nov;405:205–17

Potassium homeostasis in the nervous system of cephalopods and crustacea. Pichon Y, et al. **J Physiol (Paris)** 1987; 82(4):346–56

Elevated sweat potassium, hyperaldosteronism and pseudo-Bartter's syndrome: a spectrum of disorders associated with cystic fibrosis. Devlin J, et al. **J R Soc Med** 1989;82 Suppl 16:38–43

Passive transepithelial cationic fluxes across the frog skin under short-circuit conditions. Tanaka H, et al. **Jpn J Physiol** 1989;39(1):43–50

Renal excretion of rubidium and potassium: an electron microprobe and clearance study. Beck FX, et al. **Kidney Int** 1988 Oct;34(4):455–62

Mineralocorticoid activity and the excretion of an oral potassium load in normal man. Hené RJ, et al. **Kidney Int** 1988 Nov;34(5):697–703

The role of aldosterone in potassium tolerance: studies in anephric humans. Sugarman A, et al. **Kidney Int** 1988 Sep; 34(3):397–403

Potassium release in labial glands from controls and patients with cystic fibrosis. Izutsu KT, et al. **Lab Invest** 1989 Jan; 60(1):158–60

Vanadate sensitivity of Na+, K+-ATPase from Schistosoma mansoni and its modulation by Na+, K+ and Mg2+. Noel F, et al. **Life Sci** 1989;44(22):1677–83

NMR characteristics of "visible" intracellular myocardial potassium in perfused rat hearts. Burstein D, et al. **Magn Reson Med** 1989 Jan;9(1):66–78

Oral administration of magnesium hydroxide to subjects with insulin-dependent diabetes mellitus: effects on magnesium and potassium levels and on insulin requirements. Sjögren A, et al. **Magnesium** 1988;7(3):117–22

Biomembranes. Part Q. ATP-driven pumps and related transport: calcium, proton, and potassium pumps. **Methods Enzymol** 1988;157:1–731

Measurement of Na+-K+ pump in muscle. Sjodin RA. **Methods Enzymol** 1989;173:695–714

The high-affinity K+-translocating ATPase complex from Bacillus acidocaldarius consists of three subunits. Hafer J, et al. **Mol Microbiol** 1989 Apr;3(4):487–95

Temporal integration by a slowly inactivating K+ current in hippocampal neurons. Storm JF. **Nature** 1988 Nov 24; 336(6197):379–81

Comparison of the effluxes of 42K+ and 86Rb+ elicited by cromakalim (BRL 34915) in tonic and phasic vascular tissue. Quast U, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Sep; 338(3):319–26

The effects of transmitters on the affinity of the insoluble fraction of ox brain for Na+ and K+. Ahmed N, et al. **Neurochem Res** 1989 Feb;14(2):179–84

Potassium uptake in muscle during paramyotonic weakness. Moxley RT 3d, et al. **Neurology** 1989 Jul;39(7):952–5

Renal regulation of potassium metabolism. Giebisch G. **Nippon Jinzo Gakkai Shi** 1987 Jul;29(7):739–48 (46 ref.)

Potassium and hypertension. Tobian L. **Nutr Rev** 1988 Aug; 46(8):273–83 (43 ref.)

Change in K+ activity of the scala media produced by vasopressin. Shugyo A, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(3):156–60

Bilirubin toxicity in a neuroblastoma cell line N-115: I. Effects on Na+K+ ATPase, [3H]-thymidine uptake, L-[35S]-methionine incorporation, and mitochondrial function. Amit Y, et al. **Pediatr Res** 1989 Apr;25(4):364–8

Effect of acute metabolic acidosis on transmembrane electrolyte gradients in individual renal tubule cells. Beck FX, et al. **Pflugers Arch** 1988 Sep;412(4):427–33

Potassium currents in dissociated cells of the rat pineal gland. Castellano A, et al. **Pflugers Arch** 1989 Apr;413(6):644–50

Ion permeation through hyperpolarization-activated membrane channels (Q-channels) in the lobster stretch receptor neurone. Edman A, et al. **Pflugers Arch** 1989 Jan; 413(3):249–55

Ionic and osmotic dependence of secretion from permeabilised acini of the rat pancreas. Fuller CM, et al. **Pflugers Arch** 1989 Feb;413(4):385–94

Water, K+, H+, lactate and glucose fluxes during cell volume regulation in perfused rat liver. Lang F, et al. **Pflugers Arch** 1989 Jan;413(3):209–16

Effects of a synthetic cationic polymer on sodium and potassium currents of frog nerve fibres. Rack M, et al. **Pflugers Arch** 1989 Apr;413(6):610–5

Effect of high NaCl intake on Na+ and K+ transport in the rabbit distal convoluted tubule. Shimizu T, et al. **Pflugers Arch** 1989 Sep;414(5):500–8

Glibenclamide inhibition of ATP-sensitive K+ channels and ischemia-induced K+ accumulation in the mammalian heart. Wilde AA, et al. **Pflugers Arch** 1989;414 Suppl 1:S176

Stimulation-evoked changes in extracellular pH, calcium and potassium activity in the frog spinal cord. Chvátal A, et al. **Physiol Bohemoslov** 1988;37(3):203–12

Glutamate-induced K+ flux in the photoreceptor layer of isolated retina of cyprinid fish: possible consequences for second-order neurones. Djamgoz MB. **Physiol Bohemoslov** 1988;37(3):235–9

The time course of the light-induced extracellular potassium change around receptors and at the vitreal surface compared with the time course of slow PIII wave in the isolated rabbit retina. Hanitzsch R. **Physiol Bohemoslov** 1988;37(3):227–33

Changes in [K+]0 induced by transretinal currents in frog retina. Karwoski CJ. **Physiol Bohemoslov** 1988;37(3):217–25

The effects of cetrimide and potassium bromate on the potassium ion concentration in the inner ear fluid of the guinea-pig. Morizono T, et al. **Physiol Bohemoslov** 1988; 37(3):241–7

Effects of phenytoin and flunarizine on the rise in extracellular potassium induced by repetitive stimulation of rat cerebral cortex. Reid KH, et al. **Physiol Bohemoslov** 1988;37(3):193–202

Unusual calcium-activated potassium channels of bovine parathyroid cells. Jia M, et al. **Proc Natl Acad Sci U S A** 1988 Oct;85(19):7236–9

Coordinated regulation of intracellular K+ in the proximal tubule: Ba2+ blockade down-regulates the Na+,K+-ATPase and up-regulates two K+ permeability pathways. Kone BC, et al. **Proc Natl Acad Sci U S A** 1989 Aug;86(16):6431–5

Cytoplasmic pH determines K+ conductance in fused renal epithelial cells. Oberleithner H, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8345–9

Aldosterone stimulates K secretion across mammalian colon independent of Na absorption. Rechkemmer G, et al. **Proc Natl Acad Sci U S A** 1989 Jan;86(1):397–401

BRL 34915 (cromakalim) activates ATP-sensitive K+ current in cardiac muscle. Sanguinetti MC, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(21):8360–4

Effects of carbamylcholine and isoproterenol on electrolyte fluxes in perfused main duct of submandibular gland of reserpinized rat. Jirakulsomchok D, et al. **Proc Soc Exp Biol Med** 1989 Apr;190(4):375–8

Comparison of the maximum capacity for active sodium-potassium transport in the left and right ventricle of mammalian heart. Bányász T, et al. **Prog Clin Biol Res** 1988;268B:233–8

Time course of changes in Na,K-pump concentration and passive Na,K-fluxes in skeletal muscle after administration of thyroid hormone. Everts ME, et al. **Prog Clin Biol Res** 1988;268B:171–6

Physiological role of the Na–K pump. Lechene C. **Prog Clin Biol Res** 1988;268B:171–94 (52 ref.)

Maintenance of Na,K-homeostasis by Na,K-pumps in striated muscle. Sejersted OM. **Prog Clin Biol Res** 1988; 268B:195–206 (34 ref.)

Effect of Apamin on the Na,K pump and Na,K-ATPase. Zemková H, et al. **Prog Clin Biol Res** 1988;268B:477–84

Adaptation and bursting in neocortical neurones may be controlled by a single fast potassium conductance. Berman NJ, et al. **Q J Exp Physiol** 1989 Mar;74(2):223–6

Acetylcholine-evoked potassium and sodium transport in rat lacrimal segments: evidence for a sodium–chloride co-transport system. Singh J. **Q J Exp Physiol** 1988 Sep; 73(5):767–75

K:Cl cotransport: emerging molecular aspects of a ouabain-resistant, volume-responsive transport system in red blood cells. Lauf PK. **Renal Physiol Biochem** 1988 May–Oct;11(3–5):248–59 (60 ref.)

Effects of impermeant medium ions on the composition of rabbit renal cortical slices. Macknight AD, et al. **Renal Physiol Biochem** 1989 Mar–Apr;12(2):118–36

Spatial buffering of light-evoked potassium increases by retinal Müller (glial) cells. Karwoski CJ, et al. **Science** 1989 May 5;244(4904):578–80

Clinical use of the potassium-sparing diuretics. Krishna GG, et al. **Semin Nephrol** 1988 Dec;8(4):354–64 (110 ref.)

Effect of diuretics on specific transport systems: potassium. Velázquez H, et al. **Semin Nephrol** 1988 Sep;8(3):295–304 (82 ref.)

Effect of GM1 ganglioside after focal cerebral ischemia in halothane-anesthetized cats. Urbanics R, et al. **Stroke** 1989 Jun;20(6):795–802

Contrasting properties of K+ conductances induced by baclofen and gamma-aminobutyric acid in slices of the guinea pig hippocampus. Ogata N, et al. **Synapse** 1987; 1(1):62–9

Intracellular pH, Na+- and K+-activities at the onset of St. Thomas' cardioplegia: a study with ionselective microelectrodes. Stinner B, et al. **Thorac Cardiovasc Surg** 1988 Oct;36(5):247–53

Liposome mediated dissipation of valinomycin-imposed potassium potential across erythrocytes membrane. Matsudaira R, et al. **Tokai J Exp Clin Med** 1987 Nov; 12(4):253–61

Palytoxin induces a relatively non-selective cation permeability in frog sciatic nerve which can be inhibited by cardiac glycosides. Castle NA, et al. **Toxicon** 1988; 26(10):941–51

[Potassium supplementation in diuretics] Doorenbos CJ, et al. **Ned Tijdschr Geneeskd** 1988 Aug 6;132(32):1480–3 (49 ref.) **(Dut)**

[The regulation of potassium metabolism] Haalboom JR, et al. **Ned Tijdschr Geneeskd** 1988 Aug 6;132(32):1475–9 (38 ref.) **(Dut)**

[Demonstration of a neuronotoxic activity in the cerebrospinal fluid of severe head injured patients] Lefebvre PP, et al. **Agressologie** 1988 Apr;29(4):241–2 (Eng. Abstr.) **(Fre)**

[Blocking calcium-dependent potassium in permeability of skeletal muscle fibers in the frog by a sodium-free medium] Nasri-Sebdani M, et al. **C R Acad Sci [III]** 1988; 307(6):357–62 (Eng. Abstr.) **(Fre)**

[Functional relation of dopamine receptor stimulation and ionic fluxes in lactotroph cells] Valerio A, et al. **Ann Ist Super Sanita** 1988;24(4):543–5 (Eng. Abstr.) **(Ita)**

[Role of prostanoids in the control of renal function in normal potassium balance and in acute experimental potassium depletion. 4. Relation of extrarenal parameters, renal function parameters and urinary excretion of prostanoids] Agnoli GC, et al. **Boll Soc Ital Biol Sper** 1989 Apr; 65(4):329–35 (Eng. Abstr.) **(Ita)**

[Antihypertensive efficacy and effects on intra and extracellular electrolytes of a canrenoate potassium–butizide combination] Costa FV, et al. **Minerva Cardioangiol** 1988 Oct;36(10):503–7 (Eng. Abstr.) **(Ita)**

[Drug sensitivity and cellular potassium release of cancer cells] Iwagaki H, et al. **Gan To Kagaku Ryoho** 1988 Oct; 15(10):2889–93 (Eng. Abstr.) **(Jpn)**

[Mechanisms of the membrane transport of sodium and potassium in arterial hypertension (the pathogenetic and clinical considerations)] Manasia M, et al. **Rev Med Interna [Med Interna]** 1988 Mar–Apr;40(2):177–82 (Eng. Abstr.) **(Rum)**

[Potassium transport in ischemia and anoxia of the perfused liver] Kabakov AIu, et al. **Biofizika** 1989 Mar–Apr; 34(2):295–6 (Eng. Abstr.) **(Rus)**

[Cumene hydroperoxide changes the type of conductivity of the mitochondrial membrane for K+] Novgorodov SA, et al. **Biokhimiia** 1989 Feb;54(2):206–12 (Eng. Abstr.) **(Rus)**

[Effects on anthracycline antibiotics on ionic currents and contraction of frog atrial fibrils associated with Na+/Ca2+ exchange] Bukel TI, et al. **Biull Eksp Biol Med** 1988 Oct;106(10):456–8 (Eng. Abstr.) **(Rus)**

[Effects of K+–depolarization on the physical state of membrane lipids in brain synaptosomes of the rat] Timofeev AA, et al. **Biull Eksp Biol Med** 1989 Jan;107(1):24–7 (Eng. Abstr.) **(Rus)**

[Early and late changes in potassium transport during the start of proliferation in CHO cell cultures. The action of serum, isoproterenol, propranolol and theophylline] Marakhova II, et al. **Tsitologiia** 1988 Oct;30(10):1208–17 (Eng. Abstr.) **(Rus)**

[Dynamic changes in the pH and potassium concentration in a suspension of ascitic tumor cells under glucose load] Obrokov AF, et al. **Tsitologiia** 1988 May;30(5):635–9 (Eng. Abstr.) **(Rus)**

[Effect of energy metabolism on the ionic selectivity of the K+ center of the Na+/K+ pump in the skin of the frog] Skul'skil IA, et al. **Tsitologiia** 1988 Jul;30(7):894–8 (Eng. Abstr.) **(Rus)**

[Effect of inhibitors of energy metabolism on potassium accumulation in the neurons of the mollusk Planorbarius corneus] Skul'skil IA, et al. **Zh Evol Biokhim Fiziol** 1988 Nov–Dec;24(6):817–21 (Eng. Abstr.) **(Rus)**

[Water–electrolyte and acid–base changes. I. Potassium metabolism] Velásquez-Jones L. **Bol Med Hosp Infant Mex** 1988 Jun;45(6):403–6 (12 ref.) (Eng. Abstr.) **(Spa)**

[Effect of cyclic nucleotides on calcium dependent K+ channels, in human erythrocytes] Esparza N, et al. **Rev Esp Fisiol** 1988 Mar;44(1):57–62 (Eng. Abstr.) **(Spa)**

PHARMACOKINETICS

The monensin–mediated transport of Na+ and K+ through phospholipid bilayers studied by 23Na– and 39K–NMR. Riddell FG, et al. **Biochim Biophys Acta** 1988 Oct 6; 944(2):279–84

Potassium permeability in pancreatic beta–cell. The effect of thiopental. Gonçalves AA, et al. **Braz J Med Biol Res** 1988;21(2):365–8

Potassium ion conductance of the cochlear partition: differences between the chinchilla and guinea pig. Ikeda K, et al. **Hear Res** 1988 Jul 15;34(2):193–6

Bioavailability of potassium from three dosage forms: suspension, capsule, and solution. Melikian AP, et al. **J Clin Pharmacol** 1988 Nov;28(11):1046–50

Corticosteroid regulation of Na+ and K+ transport in the rat distal colon during postnatal development. Pácha J, et al. **J Dev Physiol** 1988 Dec;10(6):531–40

Volume–sensitive K influx in human red cell ghosts. Sachs JR. **J Gen Physiol** 1988 Nov;92(5):685–711

K+ transport properties of K+ channels in the plasma membrane of Vicia faba guard cells. Schroeder JI. **J Gen Physiol** 1988 Nov;92(5):667–83

Amiloride and its analogs as tools in the study of ion transport. Kleyman TR, et al. **J Membr Biol** 1988 Oct; 105(1):1–21 (86 ref.)

Role of the sodium pump and the background K+ channel in passive K+(Rb+) uptake by isolated cardiac sarcolemmal vesicles. Otero AS, et al. **J Membr Biol** 1988 Sep;104(3):253–63

Effect of taurine on the isolated retinal pigment epithelium of the frog: electrophysiologic evidence for stimulation of an apical, electrogenic Na+–K+ pump. Scharschmidt BF, et al. **J Membr Biol** 1988 Nov;106(1):71–81

The effect of cAMP on ion transport in the proximal tubular cells in bullfrog kidney. Fujimoto M, et al. **Jpn J Physiol** 1988;38(5):619–41

A bumetanide–sensitive, potassium carrier–mediated transport system in excitable tissues. Babila T, et al. **Life Sci** 1989;44(22):1665–75

The potassium impermeable apical membrane of insect epithelia: a target for development of safe pesticides. Harvey WR, et al. **Mem Inst Oswaldo Cruz** 1987;82 Suppl 3:29–34

Sodium and potassium uptake in primary cultures of proliferating rat astroglial cells induced by short–term exposure to an astroglial growth factor. Latzkovits L, et al. **Neurochem Res** 1988 Sep;13(9):837–48

Existence of inward potassium currents in adult human oligodendrocytes. McLarnon JG, et al. **Neurosci Lett** 1989 Jun 5;101(1):107–12

Characterization of potassium channels in respiratory cells. II. Inhibitors and regulation. Kunzelmann K, et al. **Pflugers Arch** 1989 Jul;414(3):297–303

Characterization of potassium channels in respiratory cells. I. General properties. Kunzelmann K, et al. **Pflugers Arch** 1989 Jul;414(3):291–6

Permeability to Ca2+ of the acetylcholine receptor channel of denervated mouse muscles in the presence of Na+ and of some other cations. Lorković H. **Pflugers Arch** 1988 Jul;412(1–2):211–5

Cellular effects of beta–adrenergic and of cAMP stimulation on potassium transport in rat alveolar epithelium. Saumon G, et al. **Pflugers Arch** 1989 Jul;414(3):340–5

Expression of voltage–dependent sodium and transient potassium currents in an identified sub–population of dorsal root ganglion cells acutely isolated from 12–day–old mouse embryos. Valmier J, et al. **Pflugers Arch** 1989 Jul; 414(3):360–8

Selective blockage of cell membrane K conductance by an antisecretory agent in guinea–pig gallbladder epithelium. Wehner F, et al. **Pflugers Arch** 1989 Jul;414(3):331–9

Kinetics of potassium excretion following oral supplements: evidence of induced natriuresis. Rakhit A, et al. **Pharm Res** 1987 Dec;4(6):531–5

Modulation of K:CL cotransport by diethylpyrocarbonate. Lauf PK. **Prog Clin Biol Res** 1989;292:339–47

The control of potassium (86Rb+) efflux in the isolated human sweat gland. Bovell DL, et al. **Q J Exp Physiol** 1989 May;74(3):267–76

PHARMACOLOGY

Effects of sodium nitroprusside on potassium induced contracture in isolated vascular smooth muscle. Rubiales de Barioglio S, et al. **Acta Physiol Pharmacol Latinoam** 1988;38(1):69–75

Regional and species differences in vascular reactivity to extracellular potassium. Ryman T, et al. **Acta Physiol Scand** 1989 Jun;136(2):151–9

Ethanol exposure alters K+– but not bradykinin–induced dopamine release in PC12 cells. Oldham SB, et al. **Alcohol Alcohol** 1989;24(1):43–54 (44 ref.)

Calcium intake and the relationship of dietary sodium and potassium to blood pressure. Gruchow HW, et al. **Am J Clin Nutr** 1988 Dec;48(6):1463–70

Effects of oral calcium, potassium, digoxin, and nifedipine on natriuresis in normal humans. Luft FC, et al. **Am J Hypertens** 1989 Jan;2(1):14–9

Renal potassium adaptation: role of the Na+–K+ pump in rat cortical collecting tubules. Fujii Y, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):F279–84

Reentrant and focal arrhythmias in low potassium in isolated rabbit atrium. Lammers WJ, et al. **Am J Physiol** 1988 Dec; 255(6 Pt 2):H1359–69

Potassium–induced aldosterone biosynthesis in cultured rat zona glomerulosa cells. Müller J, et al. **Am J Physiol** 1989 Apr;256(4 Pt 1):E475–82

Calcium dependence of osmolality–, potassium–, and angiotensin II–induced aldosterone secretion. Radke KJ, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):E760–4

Potassium–induced relaxation of arteries in hypertension: modulation by extracellular calcium. Rinaldi G, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H707–12

Na+–Ca2+ exchange in bovine rod outer segments requires and transports K+. Schnetkamp PP, et al. **Am J Physiol** 1989 Jul;257(1 Pt 1):C153–7

Depolarization–induced alkalinization in proximal tubules. I. Characteristics and dependence on Na+. Siebens AW, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):F342–53

Basal metabolic energy requirements of polarized and depolarized arrest in rat heart. Sternbergh WC, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):H846–51

Effect of galanin on glucose–, arginine–, or potassium–stimulated insulin release. Yoshimura T, et al. **Am J Physiol** 1989 May;256(5 Pt 1):E619–23

Effect of dietary K+ and 75% nephrectomy on the morphology of principal cells in CCDs. Zalups RK. **Am J Physiol** 1989 Mar;256(3 Pt 2):F387–96

Effects of somatostatin and oral potassium administration on terbutaline–induced hypokalemia. Schnack C, et al. **Am Rev Respir Dis** 1989 Jan;139(1):176–80

Stellate ganglion block with bupivacaine. Minimum effective concentration of bupivacaine and the effect of added potassium. Hardy PA. **Anaesthesia** 1989 May;44(5):398–9

H+–K+–ATPase activity in the rat incisor enamel organ during enamel formation. Sasaki T, et al. **Anat Rec** 1988 Aug;221(4):823–33

Lasalocid–catalyzed proton conductance in Streptococcus bovis as affected by extracellular potassium. Schwingel WR, et al. **Appl Environ Microbiol** 1989 Jan;55(1):259–60

Potassium ion dependent proton efflux and depolarization from spleen lysosomes. Moriyama Y. **Biochem Biophys Res Commun** 1988 Oct 14;156(1):211–6

Anomalous increase of Ca2+ current by high concentration K+ stimulation in whole cell clamped GH3 cells [published erratum appears in Biochem Biophys Res Commun 1989 Apr 14;160(1):416] Suzuki N, et al. **Biochem Biophys Res Commun** 1989 Jan 31;158(2):534–40

Inhibition of protein kinase C phosphorylation by mono– and divalent cations. Trudell JR, et al. **Biochem Biophys Res Commun** 1989 Jul 14;162(1):45–50

Effect of secretagogues on chromogranin A synthesis in bovine cultured chromaffin cells. Possible regulation by protein kinase C. Simon JP, et al. **Biochem J** 1989 Jun 15; 260(3):915–22

Sodium and potassium regulation of guanine nucleotide–stimulated adenylate cyclase in brain. Duman RS, et al. **Biochem Pharmacol** 1989 Jun 15;38(12):1909–14

Role of ions and membrane potential in uptake of serotonin into plasma membrane vesicles from mouse brain. Reith ME, et al. **Biochem Pharmacol** 1989 Jul 1;38(13):2091–7

The plasma membrane potential of human neutrophils. Role of ion channels and the sodium/potassium pump. Majander A, et al. **Biochim Biophys Acta** 1989 Apr 14;980(2):139–45

'Slow' K+–stimulated Ca2+ influx is mediated by Na+–Ca2+ exchange: a pharmacological study. Nachshen DA, et al. **Biochim Biophys Acta** 1989 Mar 13;979(3):305–10

A K+–activated, ethacrynic acid–sensitive p–nitrophenylphosphatase from normal human white cells. Rao GJ, et al. **Biochim Biophys Acta** 1971 Jun 16; 235(3):454–7

Dependence of the conductance of the alpha–latrotoxin channel on applied potential and potassium concentration. Robello M. **Biochim Biophys Acta** 1989 Jan 30; 978(2):179–84

Potential difference responses to nutrient K+, Na+ and Cl– changes with varying nutrient HCO3– in resting frog stomach. Schwartz M, et al. **Biochim Biophys Acta** 1989 Mar 13;979(3):299–304

Effect of external K on the block of the inward rectifier during hyperpolarization in guinea–pig ventricular myocytes by external Na. Biermans G, et al. **Biomed Biochim Acta** 1989;48(5–6):S358–63

Changes of the conduction velocity of isolated muscles induced by altered external potassium concentration. Kössler F, et al. **Biomed Biochim Acta** 1989;48(5–6):S465–70

Influence of hypoxia on the age dependent stimulus–effect–relation of K+–induced dopamine release from rat brain structures. Mühl K, et al. **Biomed Biochim Acta** 1989;48(2–3):S174–7

Release of 5–hydroxytryptamine, dopamine and noradrenaline in the rat vas deferens in the presence of compound 48/80, veratridine or K+. Celuch SM, et al. **Br J Pharmacol** 1989 Jan;96(1):77–82

Contractile responses to calcium chloride in rat aortic rings bathed in K+–free solution are resistant to organic calcium antagonists. Lawson K, et al. **Br J Pharmacol** 1989 Jan; 96(1):17–22

Potassium–induced release of endogenous glutamate and two as yet unidentified substances from the lateral line of Xenopus laevis. Bledsoe SC Jr, et al. **Brain Res** 1989 Jul 24;493(1):113–22

Stimulation of endogenous dopamine release and metabolism in amphibian retina by light– and K+–evoked depolarization. Boatright JH, et al. **Brain Res** 1989 Mar 13;482(1):164–8

Depolarization and insulin–like growth factor–I (IGF–I) differentially regulate the mitotic cycle in cultured rat sympathetic neuroblasts. DiCicco–Bloom E, et al. **Brain Res** 1989 Jul 10;491(2):403–6

The effect of K+ and glutamate receptor agonists on the membrane potential of suspensions of primary cultures of rat astrocytes as measured with a cyanine dye, DiS–C2–(5). Enkvist MO, et al. **Brain Res** 1988 Oct 11;462(1):67–75

Evoked release of endogenous adenosine from rat cortical slices by K+ and glutamate. Hoehn K, et al. **Brain Res** 1989 Jan 23;478(1):149–51

Prolonged exposure to high potassium concentration results in irreversible loss of synaptic transmission in hippocampal tissue slices. Kawasaki K, et al. **Brain Res** 1988 Aug 9; 457(2):322–9

Potassium advances circadian activity rhythms: interactions with lithium. Klemfuss H, et al. **Brain Res** 1989 Jul 17; 492(1–2):300–4

Potassium–induced increases in oxygen consumption are diminished by age in rat hippocampal slices. Martin FR, et al. **Brain Res** 1989 Jul 17;492(1–2):392–6

The effects of delta 9–tetrahydrocannabinol on potassium–evoked release of dopamine in the rat caudate nucleus: an in vivo electrochemical and in vivo microdialysis study. Ng Cheong Ton JM, et al. **Brain Res** 1988 Jun 7;451(1–2):59–68

Dopaminergic inhibition of alpha–melanocyte–stimulating hormone release from superfused slices of the rat hypothalamus. Tiligada E, et al. **Brain Res** 1988 Aug 9; 457(2):379–82

Age–dependent supersensitivity to the glycogenolytic effect of K+ in the cerebral cortex of the spontaneously epileptic quaking mouse mutant. Hof PR, et al. **Brain Res Dev Brain Res** 1989 Mar 1;46(1):107–13

Effect of potassium depolarization on phosphate–activated glutaminase activity in primary cultures of cerebellar granule neurons and astroglial cells during development.

Moran J, et al. **Brain Res Dev Brain Res** 1989 Mar 1; 46(1):97–105

Nitrendipine blocks high potassium contractures but not twitches in rat skeletal muscle. Frank GB, et al. **Can J Physiol Pharmacol** 1988 Sep;66(9):1210–3

Depression of potassium-evoked striatal acetylcholine release by delta-receptor activation: inhibition by cholinoactive agents. Ruzicka BB, et al. **Can J Physiol Pharmacol** 1988 Dec;66(12):1487–92

Enhancement of potassium-sensitive current in heart cells by pinacidil. Evidence for modulation of the ATP-sensitive potassium channel. Arena JP, et al. **Circ Res** 1989 Aug; 65(2):436–45

Quinidine-induced action potential prolongation, early afterdepolarizations, and triggered activity in canine Purkinje fibers. Effects of stimulation rate, potassium, and magnesium. Davidenko JM, et al. **Circulation** 1989 Mar; 79(3):674–86

Modulation of the Purkinje-ventricular muscle junctional conduction by elevated potassium and hypoxia. Tan RC, et al. **Circulation** 1989 May;79(5):1100–5

Caffeine- and potassium-induced contractures of mouse isolated soleus muscle: effects of verapamil, manganese, EGTA and calcium withdrawal. Savage AO, et al. **Clin Exp Pharmacol Physiol** 1988 Dec;15(12):901–11

Presynaptic inhibition of sympathetic fibers participating in vasodilatation in response to K+-induced contraction of frog skeletal muscle. Fuglsang A, et al. **Clin Invest Med** 1988 Oct;11(5):357–65

Effect of potassium supplementation on blood pressure and vasodilator mechanisms in spontaneously hypertensive rats. Barden A, et al. **Clin Sci** 1988 Nov;75(5):527–34

Comparative studies on muscle AMP-deaminase—II. Regulation by monovalent cations, ATP and orthophosphate of the enzyme from hen, frog and pikeperch muscle. Stankiewicz A, et al. **Comp Biochem Physiol [B]** 1979;62(4):371–4

Production of renin, angiotensin II, and aldosterone by adrenal explant cultures: response to potassium and converting enzyme inhibition. Shier DN, et al. **Endocrinology** 1989 Jul;125(1):486–91

Reduced uptake and release of 5-hydroxytryptamine and taurine in the cerebral cortex of epileptic El mice. Hiramatsu M, et al. **Epilepsy Res** 1987 Jan;1(1):40–5

K+ potentiation of non-NGF mediated neurite outgrowth in sensory ganglia. Spoerri PE, et al. **Eur J Cell Biol** 1989 Feb;48(1):154–8

Effects of pentazocine and other opioids on the potassium-evoked release of [3H]noradrenaline from guinea pig cortical slices. Kinouchi K, et al. **Eur J Pharmacol** 1989 May 2;164(1):63–8

Different effects of R 56865 and calcium entry blockers on K+- and noradrenaline-induced contractions and 45Ca uptake in rat aorta. Koch P, et al. **Eur J Pharmacol** 1988 Dec 13;158(3):183–90

The electrogenic Na-K pump does not contribute to endothelium-dependent hyperpolarization in the rabbit ear artery. Suzuki H. **Eur J Pharmacol** 1988 Nov 1;156(2):295–7

Electrotonic properties of neostriatal neurons are modulated by extracellular potassium. Bargas J, et al. **Exp Brain Res** 1988;72(2):390–8

Na+, K+-specific inhibition of protein and peptide hydrolyses by proteasomes from human hepatoma tissues. Seol JH, et al. **FEBS Lett** 1989 Apr 24;247(2):197–200

Potassium-evoked efflux of [3H]purines from the rat submaxillary gland. Filinger EJ, et al. **Gen Pharmacol** 1989; 20(3):285–8

Cytotopographical specialization of enzymatically isolated rabbit retinal Müller (glial) cells: K+ conductivity of the cell membrane. Reichenbach A, et al. **GLIA** 1988; 1(3):191–7

Stimulation of inositol phospholipid breakdown in pig brain miniprisms by carbachol and monoamines: effect of K+. Tiger G, et al. **Int J Biochem** 1989;21(2):157–63

Enhanced vasoconstrictor responses to potassium, 5-hydroxytryptamine, and prostaglandin F2 alpha of isolated coronary arteries from magnesium-deficient rats. Comparison with vasomotor activity of aorta. Sjögren A, et al. **J Am Coll Nutr** 1988 Dec;7(6):461–9

Calcium-dependent potassium conductance in neurons of rabbit vesical pelvic ganglia. Nishimura T, et al. **J Auton Nerv Syst** 1988 Sep;24(1–2):133–45

Effects of potassium ions on proton motive force in Rhodobacter sphaeroides. Abee T, et al. **J Bacteriol** 1988 Dec;170(12):5647–53

Effects of Na+ and K+ on Artemia salina (Na,K)-ATPase solubilized with a zwitterionic detergent, CHAPS. Morohashi M, et al. **J Biochem (Tokyo)** 1988 Jun; 103(6):1073–7

In an Escherichia coli coupled transcription-translation system, expression of the osmoregulated gene proU is stimulated at elevated potassium concentrations and by an extract from cells grown at high osmolality. Jovanovich SB, et al. **J Biol Chem** 1989 May 15;264(14):7821–5

Age influences responses of rat isolated aorta and pulmonary artery to the calcium channel agonist, Bay K 8664, and to potassium and calcium. Wanstall JC, et al. **J Cardiovasc Pharmacol** 1989 May;13(5):709–14

The effect of potassium phosphate, magnesium chloride and T6 as blocking reagents on tissue valve calcification. Neethling WM, et al. **J Cardiovasc Surg (Torino)** 1989 May-Jun;30(3):317–21

Force frequency relation in the myocardium of rainbow trout. Effects of K+ and adrenaline. Hove-Madsen L, et al. **J Comp Physiol [B]** 1989;159(1):61–9

Effect of chemical drying agents on alfalfa hay and milk production response when fed to dairy cows in early lactation. Oellermann SO, et al. **J Dairy Sci** 1989 Feb; 72(2):501–4

Angiotensin II and potassium activate different calcium entry mechanisms in rat adrenal glomerulosa cells. Spät A, et al. **J Endocrinol** 1989 Jul;122(1):361–70

Ion permeation and rectification in ATP-sensitive channels from insulin-secreting cells (RINm5F): effects of K+, Na+ and Mg2+. Ciani S, et al. **J Membr Biol** 1988 Jul; 103(2):171–80

Ischaemia-induced and reperfusion-induced arrhythmias differ in their sensitivity to potassium: implications for mechanisms of initiation and maintenance of ventricular fibrillation. Curtis MJ, et al. **J Mol Cell Cardiol** 1989 Jan; 21(1):21–40

Myocardial performance and free energy of ATP-hydrolysis in isolated rat hearts during graded hypoxia, reoxygenation and high Ke+-perfusion. Griese M, et al. **J Mol Cell Cardiol** 1988 Dec;20(12):1189–201

Effect of secretagogues on cytosolic free Ca2+ and insulin release in the hamster clonal beta-cell line HIT-T15. Hughes SJ, et al. **J Mol Endocrinol** 1988 Jul;1(1):13–7

Effect of K+, and other ligands on the thiol reactivity and tryptic cleavage pattern of scallop sarcoplasmic reticulum. Hardwicke PM, et al. **J Muscle Res Cell Motil** 1989 Jun; 10(3):229–44

Postmortem- and cryostability of the potassium-evoked release of [3H]5-hydroxytryptamine from rat cerebral cortical miniprisms. Fowler CJ, et al. **J Neural Transm** 1989;75(2):135–48

Dual effects of K+ depolarisation on inositol polyphosphate production in rat cerebral cortex. Baird JG, et al. **J Neurochem** 1989 Sep;53(3):681–5

Effects of extracellular potassium on glycogen stores of astrocytes in vitro. Cambray-Deakin M, et al. **J Neurochem** 1988 Dec;51(6):1846–51

Protein kinase C activation enhances K+-stimulated endogenous dopamine release from rat striatal synaptosomes in the absence of an increase in cytosolic Ca2+. Chandler LJ, et al. **J Neurochem** 1989 Jun; 52(6):1905–12

Effect of age on K+-induced cytosolic Ca2+ changes in rat cortical synaptosomes. Giovannelli L, et al. **J Neurochem** 1989 Aug;53(2):392–8

Reduction of K+-stimulated 45Ca2+ influx in synaptosomes with age involves inactivating and noninactivating calcium channels and is correlated with temporal modifications in protein dephosphorylation. Martínez-Serrano A, et al. **J Neurochem** 1989 Feb;52(2):576–84

Is the augmentation of K+-evoked intrasynaptosomal Ca2+ concentration due to the influx of Ca2+ in rat brain synaptosomes? Okada M, et al. **J Neurochem** 1989 Jun; 52(6):1837–42

Role of glial cells for the basal and Ca2+-dependent K+-evoked release of transmitter amino acids investigated by microdialysis. Paulsen RE, et al. **J Neurochem** 1989 Jun; 52(6):1823–9

Effects of increased extracellular K on the elemental composition and water content of neuron and glial cells in leech CNS. Saubermann AJ, et al. **J Neurochem** 1988 Dec;51(6):1797–807

Potassium-stimulated release of [3H]taurine from cultured GABAergic and glutamatergic neurons. Schousboe A, et al. **J Neurochem** 1989 Oct;53(4):1309–15

Enhancement by potassium of carbachol-stimulated inositol phospholipid breakdown in rat cerebral cortical miniprisms: comparison with other depolarising agents. Tiger G, et al. **J Neurochem** 1989 Jun;52(6):1843–53

Activity-dependent disinhibition. II. Effects of extracellular potassium, furosemide, and membrane potential on ECl- in hippocampal CA3 neurons. Thompson SM, et al. **J Neurophysiol** 1989 Mar;61(3):512–23

Role of extracellular space in hyperosmotic suppression of potassium-induced electrographic seizures. Traynelis SF, et al. **J Neurophysiol** 1989 May;61(5):927–38

Potassium-stimulated calcium uptake in astrocytes and its potent inhibition by nimodipine. Hertz L, et al. **J Neurosci Res** 1989 Feb;22(2):209–15

Age related changes in the inhibitory effect of clonidine on high K+-evoked noradrenaline release from brain slices of rats. Qi SB, et al. **J Pharmacobiodyn** 1988 Jul;11(7):483–5

Morphine, capsaicin and K+ release purines from capsaicin-sensitive primary afferent nerve terminals in the spinal cord. Sweeney MI, et al. **J Pharmacol Exp Ther** 1989 Jan;248(1):447–54

Effects of potassium, oxygen and carbon dioxide on the steady-state discharge of cat carotid body chemoreceptors. Burger RE, et al. **J Physiol (Lond)** 1988 Jul;401:519–31

The effect of potassium on exocytosis of transmitter at the frog neuromuscular junction. Ceccarelli B, et al. **J Physiol (Lond)** 1988 Jul;401:163–83

p-chloro-mercuriphenyl sulphonate activates a quinine-sensitive potassium conductance in frog lens. Duncan G, et al. **J Physiol (Lond)** 1988 Oct;404:637–48

Inward rectification in rat cerebral arterioles; involvement of potassium ions in autoregulation. Edwards FR, et al. **J Physiol (Lond)** 1988 Oct;404:455–66

Effects of high potassium and high calcium on the action potential of the ventricular cells of the tortoise heart. Qin WN, et al. **J Tongji Med Univ** 1988;8(2):106–9

A comparative study on the contraction induced by high K+/Na+ deficient solution in rat uterus or urinary bladder. Kamizaki J, et al. **Jpn J Pharmacol** 1988 Jun; 47(2):179–88

Relaxation of airway smooth muscle induced by potassium in the presence of Ca-antagonists. Koga Y, et al. **Jpn J Pharmacol** 1989 Aug;50(4):387–96

Tetrodotoxin sensitivity of high K+-induced 86Rb efflux in the duodenal circular muscle of pigs. Kondoh T, et al. **Jpn J Pharmacol** 1988 Oct;48(2):294–8

Prostaglandin F2 alpha-induced contraction in isolated dog cerebral, coronary and mesenteric arteries soaked in excess potassium. Toda N, et al. **Jpn J Pharmacol** 1988 Jun; 47(2):204–7

The effect of lithium and nitrate on potassium contractures in a glycerol-treated slow-twitch muscle of the rat. Bruton JD. **Jpn J Physiol** 1988;38(5):735–9

Characteristics of contractile response of isolated portal veins from chronic portal hypertensive rats under altered levels of external K+, Ca2+, and norepinephrine concentrations: a comparison with normal Wistar rats. Yoshimura T, et al. **Jpn J Physiol** 1988;38(4):459–78

Dependence on extracellular potassium of the positive inotropic response to St 587, a selective alpha-1 adrenoceptor agonist, in Zucker rat heart ventricle. Auclair MC, et al. **Life Sci** 1989;44(20):1475–82

Potassium administration and calcitonin mRNA level in the rat. Jousset V, et al. **Mol Cell Endocrinol** 1988 Oct; 59(3):165–9

The K+-induced increases in noradrenaline and dopamine release are accompanied by reductions in the release of their intraneuronal metabolites from the rat anterior hypothalamus. An in vivo brain microdialysis study. Badoer E, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb;339(1–2):54–9

Differential effects of 4-aminopyridine on acetylcholine release triggered by K+ depolarization, veratridine, or A23187 in rat cerebral cortical synaptosomes. Meyer EM, et al. **Neurochem Res** 1989 Feb;14(2):157–60

K+-evoked taurine efflux from cerebellar astrocytes: on the roles of Ca2+ and Na+. Philibert RA, et al. **Neurochem Res** 1989 Jan;14(1):43–8

Uptake and K+-stimulated release of [14C]glycine from frog retinal synaptosomal fractions. Salceda R. **Neurochem Res** 1989 Jan;14(1):49–54

The effects of GABAB receptor agonists and antagonists on potassium-stimulated [Ca2+]i in rat brain synaptosomes. Stirling JM, et al. **Neuropharmacology** 1989 Jul; 28(7):699–704

K+ differentially affects the excitatory amino acids- and carbachol-elicited inositol phosphate formation in rat brain synaptoneurosomes. Guiramand J, et al. **Neurosci Lett** 1989 Mar 27;98(2):222–8

Excitatory transmitters, ventral root potentials and [K+]o in the isolated frog leg-spinal cord preparation. Holohean AM, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):173–8

Dihydropyridines modulate K+-evoked amino acid and adenosine release from cerebellar neuronal cultures. Philibert RA, et al. **Neurosci Lett** 1989 Jul 17;102(1):97–102

High perilymphatic potassium and rubidium levels modulate the sensory resting discharge in the isolated frog labyrinth. Rossi ML, et al. **Neurosci Lett** 1988 Oct 31;93(1):44–8

Modification of potassium-induced interictal bursts and electrographic seizures by divalent cations. Traynelis SF, et al. **Neurosci Lett** 1989 Mar 27;98(2):194–9

Pharmacological studies of voltage-sensitive Ca2+-channels involved in the release of vasoactive intestinal peptide evoked by K+ in mouse cerebral cortical slices. Martin JL, et al. **Neuroscience** 1989;30(2):423–31

Effects of elevated potassium on neuronal death and network formation in neocortical cultures. Baker RE, et al. **Pflugers Arch** 1989;414 Suppl 1:S126

Activation of the Na pump current by external K and Cs ions in cardioballs from sheep Purkinje fibres. Glitsch HG, et al. **Pflugers Arch** 1989 May;414(1):99–101

Paradox response of frog muscle membrane to changes in external potassium. Nánási PP, et al. **Pflugers Arch** 1989 Jun;414(2):157–61

Effect of external K+ on the delayed K+ current in single rabbit Purkinje cells. Scamps F, et al. **Pflugers Arch** 1989; 414 Suppl 1:S169–70

The effect of D600 on potassium contractures of slow muscle fibres of Rana temporaria. Schmidt H, et al. **Pflugers Arch** 1988 Sep;412(4):390–6

The effects of inorganic lead on the spontaneous and potassium-evoked release of 3H-5-HT from rat cortical synaptosome interaction with calcium. Oudar P, et al. **Pharmacol Toxicol** 1989 May;64(5):459–63

Different sensitivities for four calcium entry blockers of serotonin-, but not K+-induced contractions of isolated jugular vein and aorta of the rat. Gouw MA, et al. **Pharmacology** 1989;38(5):289–97

Differences between Ca2+- and Sr2+-activated gK+ in bullfrog sympathetic neurons. Riker WK, et al. **Proc West Pharmacol Soc** 1988;31:1–3

Potassium dependent relaxation of isolated pulmonary artery segments following ingestion of monocrotaline. Shubat PJ, et al. **Proc West Pharmacol Soc** 1988;31:313–5

The effect of growth in monensin or low potassium on internal sodium, alpha sub-unit mRNA and sodium pump

density in human cultured cells. Unkles S, et al. **Prog Clin Biol Res** 1988;268B:157–62

The effect of potassium and venous CO2 loading on chemoreceptor firing in anaesthetized cats. Band DM, et al. **Respir Physiol** 1989 May;76(2):173–8

Changes in miniature end-plate currents due to high potassium and calcium at the frog neuromuscular junction. Glavinović MI. **Synapse** 1988;2(6):636–43

Evidence for release of copper in the brain: depolarization-induced release of newly taken-up 67copper. Hartter DE, et al. **Synapse** 1988;2(4):412–5

The effects of elevated potassium on sympathetic ganglion cells in culture. Watanabe SY, et al. **Tohoku J Exp Med** 1989 Jan;157(1):45–54

Stimulation of calcium uptake by norepinephrine or high external potassium in human calyces and renal pelvis. Hertle L, et al. **Urol Res** 1989;17(1):63–7

[The effect of some ions on the plasma activity of angiotensin converting enzyme] Tschankova P, et al. **Z Med Lab Diagn** 1988;29(6):338–42 (Eng. Abstr.) **(Ger)**

[N,N'-dicyclohexylcarbodiimide-sensitive K+-dependent H+ secretion from anaerobically grown E. coli cells] Trchunian AA, et al. **Biofizika** 1989 Mar-Apr;34(2):322–3 (Eng. Abstr.) **(Rus)**

[The action of sodium and potassium ions on the H+-ATPase activity of Escherichia coli K12 (lambda) membranes] Nerkararian AV. **Biol Nauki** 1988;(8):89–93 (Eng. Abstr.) **(Rus)**

[The role of calcium and potassium conductance in electrogenesis of smooth-muscle cells of the basilar artery] Gurkovskaia AV, et al. **Fiziol Zh** 1989 May-Jun; 35(3):17–21 (Eng. Abstr.) **(Rus)**

[Effect of potassium ions on action potentials of the Ranvier nodes of the sensory and motor fibers] Kubasov IV. **Fiziol Zh SSSR** 1989 Mar;75(3):400–3 **(Rus)**

[Pharmacotherapeutic effectiveness of kvadevit] Zapadniuk VI, et al. **Vrach Delo** 1988 Jul;(7):72–5 (Eng. Abstr.) **(Rus)**

[Isolated effect of potassium on zona glomerulosa of the human adrenal gland] López JM, et al. **Rev Med Chil** 1988 Jan;116(1):3–6 (Eng. Abstr.) **(Spa)**

PHYSIOLOGY

Does clonidine- or neuropeptide Y-mediated inhibition of ATP secretion from sympathetic nerves operate primarily by increasing a potassium conductance? Stjärne L, et al. **Acta Physiol Scand** 1989 May;136(1):137–8

Intracellular ion exchange between cytoplasmic potassium and granule histamine, an integrated link in the histamine release machinery of mast cells. Uvnäs B, et al. **Acta Physiol Scand** 1989 Jul;136(3):309–20

Autonomic regulation of delayed rectifier K+ current in mammalian heart involves G proteins. Harvey RD, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):H818–23

Na-dependent L-glutamate transport by eel intestinal BBMV: role of K+ and Cl-. Romano PM, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):R180–8

Sarcoplasmic reticulum, potassium, and cardiac force in rainbow trout and plaice. el-Sayed MF, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):R599–604

E-series prostaglandins activate cAMP-mediated potassium currents in follicle-enclosed Xenopus oocyte. Mori K, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1535–40

Effects of L-alanine on membrane potential, potassium (86Rb) permeability and cell volume in hepatocytes from Raja erinacea. Ballatori N, et al. **Biochim Biophys Acta** 1988 Dec 22;946(2):261–9

Microelectrode studies of amphotericin B on Na+ and K+ conductance in bullfrog cornea. Carrasquer G, et al. **Biochim Biophys Acta** 1989 Jun 26;982(1):73–8

Single potential-dependent K+ channels and their oligomers in molluscan glial cells. Geletyuk VI, et al. **Biochim Biophys Acta** 1989 Jun 6;981(2):343–50

Characterization of Na+/K+/Cl- cotransport in cultured HT29 human colonic adenocarcinoma cells [published erratum appears in Biochim Biophys Acta 1989 Jan 30;978(2):349] Kim HD, et al. **Biochim Biophys Acta** 1988 Dec 22;946(2):397–404

Ca2+-activated K+ channel in rat pancreatic islet B cells. permeation, gating and blockade by cations. Tabcharani JA, et al. **Biochim Biophys Acta** 1989 Jun 26;982(1):62–72

The effect of cell K+ on the volume regulation in rat kidney cortex cells. Marin R, et al. **Biomed Biochim Acta** 1989; 48(4):303–15

Internal and external K+ help gate the inward rectifier. Cohen IS, et al. **Biophys J** 1989 Jan;55(1):197–202

Muscarinic agonists and potassium currents in guinea-pig myenteric neurones. Galligan JJ, et al. **Br J Pharmacol** 1989 Jan;96(1):193–203

Inward rectifying potassium channels in human malignant glioma cells. Brismar T, et al. **Brain Res** 1989 Feb 20; 480(1-2):249–58

Potassium and sodium channels in human malignant glioma cells. Brismar T, et al. **Brain Res** 1989 Feb 20; 480(1-2):259–67

The transient potassium current, the A-current, is involved in spike frequency adaptation in rat amygdala neurons. Gean PW, et al. **Brain Res** 1989 Feb 20;480(1-2):160–9

Ionic currents on type-I cells of the rabbit carotid body measured by voltage-clamp experiments and the effect of hypoxia. Hescheler J, et al. **Brain Res** 1989 May 1; 486(1):79–88

Electrical stimulation of primary olfactory nerve induces two types of variations in the extracellular potassium activity within the glomerulus of the rat olfactory bulb in vivo. Khayari A, et al. **Brain Res** 1988 Aug 2;457(1):188–91

A study of ionic conductances involved in plateau potential activity in putative vasopressinergic neurons in primary cell culture. Legendre P, et al. **Brain Res** 1988 Aug 9; 457(2):386–91

Influence of GABA, baclofen and bicuculline on the extracellular K+ activity in the olfactory bulb of the developing rat. Math F, et al. **Brain Res** 1988 Oct 4; 461(2):384–7

Potassium ions play a role in the glycine-induced inhibition of rat substantia nigra zona compacta neurones. Mercuri NB, et al. **Brain Res** 1988 Oct 11;462(1):199–203

Behavior of extracellular K+ and pH in skate (Raja erinacea) cerebellum. Rice ME, et al. **Brain Res** 1988 Oct 4; 461(2):328–34

Desensitization kinetics of a K+ acetylcholine response in Aplysia. Salánki J, et al. **Brain Res** 1989 Aug 28; 495(2):298–308

Potassium currents of acutely isolated adult rat superior cervical ganglion neurons. Schofield GG, et al. **Brain Res** 1989 Apr 24;485(2):205–14

Voltage-clamp analysis of a transient potassium current in rat neostriatal neurons. Surmeier DJ, et al. **Brain Res** 1988 Nov 8;473(1):187–92

Bethanidine increases one type of potassium current and relaxes aortic muscle. Bkaily G, et al. **Can J Physiol Pharmacol** 1988 Jun;66(6):731–6

Dependence of etoposide-induced cytotoxicity and topoisomerase II-mediated DNA strand breakage on the intracellular ionic environment. Lawrence TS, et al. **Cancer Res** 1989 Sep 1;49(17):4775–9

Mechanism of action of EDRF on pressurized arteries: effect on K+ conductance. Kauser K, et al. **Circ Res** 1989 Jul; 65(1):199–204

K+ activity and regulation of intracellular pH in the sea urchin egg during fertilization. Shen SS, et al. **Exp Cell Res** 1989 Aug;183(2):343–52

87Rb NMR studies of the perfused rat heart. Allis JL, et al. **FEBS Lett** 1989 Jan 2;242(2):215–7

The role of ionic signals in early gene induction during T cell activation. Kelly K, et al. **Gene Amplif Anal** 1986; 4:197–206

Direct effects of carbachol on membrane potential and ion activities in leech glial cells. Ballanyi K, et al. **GLIA** 1988; 1(2):165–7

Increase in glial intracellular K+ in drone retina caused by photostimulation but not mediated by an increase in extracellular K+. Coles JA, et al. **GLIA** 1989;2(4):213–22

Relations between slow extracellular potential changes, glial potassium buffering, and electrolyte and cellular volume changes during neuronal hyperactivity in cat brain. Dietzel I, et al. **GLIA** 1989;2(1):25–44

Model of potassium dynamics in the central nervous system. Odette LL, et al. **GLIA** 1988;1(3):198–210

Potassium-induced endothelium-dependent rhythmic activity in the canine basilar artery. Katusic ZS, et al. **J Cardiovasc Pharmacol** 1988 Jul;12(1):37–41

Sympathetic stimulation of ischemic myocardium: role of plasma free fatty acids and potassium. Opie LH. **J Cardiovasc Pharmacol** 1988;12 Suppl 1:S31–8 (33 ref.)

Potassium depletion and hypertonic medium reduce "non-coated" and clathrin-coated pit formation, as well as endocytosis through these two gates. Carpentier JL, et al. **J Cell Physiol** 1989 Mar;138(3):519–26

Acrosome-reacted guinea pig spermatozoa become fusion competent in the presence of extracellular potassium ions. Yanagimachi R, et al. **J Exp Zool** 1988 Dec;248(3):354–60

Intracellular pH controls cell membrane Na+ and K+ conductances and transport in frog skin epithelium. Harvey BJ, et al. **J Gen Physiol** 1988 Dec;92(6):767–91

Role of Na+/H+ exchange in the control of intracellular pH and cell membrane conductances in frog skin epithelium. Harvey BJ, et al. **J Gen Physiol** 1988 Dec; 92(6):793–810

Receptor Ca current and Ca-gated K current in tonic electroreceptors of the marine catfish Plotosus. Sugawara Y, et al. **J Gen Physiol** 1989 Feb;93(2):343–64

Beta-adrenergic modulation of cardiac ion channels. Differential temperature sensitivity of potassium and calcium currents. Walsh KB, et al. **J Gen Physiol** 1989 May;93(5):841–54

Potassium conductance and oscillatory contractions in tail arteries from genetically hypertensive rats. Lamb FS, et al. **J Hypertens** 1989 Jun;7(6):457–63

The Volhard lecture. Potassium and sodium in hypertension. Tobian L. **J Hypertens Suppl** 1988 Dec;6(4):S12–24

C1q induces chemotaxis and K+ conductance activation coupled to increased cytosolic Ca2+ in mouse fibroblasts. Oiki S, et al. **J Immunol** 1988 Nov 1;141(9):3177–85

Forskolin and phorbol esters decrease the same K+ conductance in cultured oligodendrocytes. Soliven B, et al. **J Membr Biol** 1988 Oct;105(2):177–86

Microelectrode characterization of the basolateral membrane of rabbit S3 proximal tubule. Vance BA, et al. **J Membr Biol** 1989 Apr;108(1):53–60

Lidocaine blocks Na, Ca and K currents of chick ventricular myocytes. Josephson IR. **J Mol Cell Cardiol** 1988 Jul; 20(7):593–604

Stimulation of D-2 dopamine receptors decreases the evoked in vitro release of [3H]acetylcholine from rat neostriatum: role of K+ and Ca2+. Drukarch B, et al. **J Neurochem** 1989 Jun;52(6):1680–5

Serotonergic modulation of two potassium currents in the pleural sensory neurons of Aplysia. Baxter DA, et al. **J Neurophysiol** 1989 Sep;62(3):665–79

Norepinephrine selectively reduces slow Ca2+- and Na+-mediated K+ currents in cat neocortical neurons. Foehring RC, et al. **J Neurophysiol** 1989 Feb;61(2):245–56

Light-evoked increases in [K+]o in proximal portion of the dark-adapted cat retina. Frishman LJ, et al. **J Neurophysiol** 1989 Jun;61(6):1233–43

Local superfusion modifies the inward rectifying potassium conductance of isolated retinal horizontal cells. Perlman I, et al. **J Neurophysiol** 1988 Oct;60(4):1322–32

Long-lasting reduction of excitability by a sodium-dependent potassium current in cat neocortical neurons. Schwindt PC, et al. **J Neurophysiol** 1989 Feb;61(2):233–44

Modulation of a steady-state Ca2+-activated, K+ current in tail sensory neurons of Aplysia: role of serotonin and cAMP. Walsh JP, et al. **J Neurophysiol** 1989 Jan; 61(1):32–44

A slowly inactivating potassium current truncates spike activity in ganglion cells of the tiger salamander retina. Lukasiewicz P, et al. **J Neurosci** 1988 Dec;8(12):4470–81

Inward rectification in response to FMRFamide in Aplysia neuron L2: summation with transient K current. Thompson S, et al. **J Neurosci** 1988 Sep;8(9):3200–7

Inward rectification of resting and opiate-activated potassium currents in rat locus coeruleus neurons. Williams JT, et al. **J Neurosci** 1988 Nov;8(11):4299–306

Guanosine 5'-triphosphate analogue activates potassium current modulated by neurotransmitters in Aplysia neurones. Březina V. **J Physiol (Lond)** 1988 Dec;407:15–40

Repolarization current in embryonic chick atrial heart cells. Clay JR, et al. **J Physiol (Lond)** 1988 Sep;403:525–37

Stimulus-related potassium changes in the organ of Corti of guinea-pig. Johnstone BM, et al. **J Physiol (Lond)** 1989; 408:77–92

On the potassium conductance increase activated by GABAB and dopamine D2 receptors in rat substantia nigra neurones. Lacey MG, et al. **J Physiol (Lond)** 1988 Jul;401:437–53

Potassium depletion and regulation of angiotensin II receptors in vascular smooth muscle cells. Paller MS. **J Recept Res** 1989;9(1):95–106

Macroscopic Ca2+ -Na+ and K+ currents in single heart and aortic cells. Bkaily G, et al. **Mol Cell Biochem** 1988 Mar-Apr;80(1-2):59–72

A whole-cell patch clamp technique which minimizes cell dialysis. Hume JR, et al. **Mol Cell Biochem** 1988 Mar-Apr; 80(1-2):49–57

Properties of inwardly rectifying K+ channels in ventricular myocytes. Josephson IR. **Mol Cell Biochem** 1988 Mar-Apr; 80(1-2):21–6

Bay K 8644 induce enhancement of K+ current in both single heart cell and smooth muscle cell. Renaud JF, et al. **Mol Cell Biochem** 1988 Mar-Apr;80(1-2):73–8

Patch clamp analysis of chemically activated and modulated ionic channels in isolated mammalian cardiomyocytes. Vogel SM. **Mol Cell Biochem** 1988 Mar-Apr;80(1-2):37–47

Use of the cell-attached patch clamp technique to examine regulation of single cardiac K channels by cyclic GMP. Wahler GM, et al. **Mol Cell Biochem** 1988 Mar-Apr; 80(1-2):27–35

Aminopyridines enhance opening of calcium-activated potassium channels in GH3 anterior pituitary cells. Rogawski MA. **Mol Pharmacol** 1989 Apr;35(4):458–68

Taurine and beta-alanine uptake in primary astrocytes differentiating in culture: effects of ions. Holopainen I. **Neurochem Res** 1988 Sep;13(9):853–8

Activators of protein kinase C and phenylephrine depolarize the astrocyte membrane by reducing the K+ permeability. Akerman KE, et al. **Neurosci Lett** 1988 Oct 17;92(3):265–9

The A-type potassium current: methoxybenzenes increase the rate of inactivation in snail neurons. Erdélyi L, et al. **Neurosci Lett** 1989 Jul 17;102(1):44–9

The A-type potassium current: catechol-induced blockage in snail neurons. Erdélyi L, et al. **Neurosci Lett** 1988 Sep 23;92(1):46–51

Evidence for an absence of K+ spread in the glomerular layer of the rat olfactory bulb. Khayari A, et al. **Neurosci Lett** 1988 Oct 31;93(1):56–60

Delayed and fast transient potassium currents in rat neocortical neurons in cell culture. Zona C, et al. **Neurosci Lett** 1988 Dec 5;94(3):285–90

Electrophysiological properties of hypoglossal motoneurons of guinea-pigs studied in vitro. Mosfeldt Laursen A, et al. **Neuroscience** 1989;30(3):619–37

Estimation of high K- and noradrenaline-induced 45Ca uptakes in isolated rat aorta: effects of washing in icecold solutions. Aaronson PI. **Pflugers Arch** 1989 Sep; 414(5):579–83

Angiotensin II increases Isi and blocks IK in single aortic cell of rabbit. Bkaily G, et al. **Pflugers Arch** 1988 Sep; 412(4):448–50

Membrane ionic conductances in normal and denervated skeletal muscle of the rat during development. Conte Camerino D, et al. **Pflugers Arch** 1989 Mar;413(5):568–70

Intracellular Na+, K+ and Cl- activity in tonic and phasic muscle fibers of the crab Eriphia. Hammelsbeck M, et al. **Pflugers Arch** 1989 Mar;413(5):487–92

Effect of intracellular pH on potassium conductance in liver. Henderson RM, et al. **Pflugers Arch** 1988 Aug;412(3):334–5
Forskolin effects on the voltage-gated K+ conductance of human T cells. Krause D, et al. **Pflugers Arch** 1988 Jul; 412(1–2):133–40
Potassium and calcium currents and action potentials in mouse Balb/c 3T3 fibroblasts. Lovisolo D, et al. **Pflugers Arch** 1988 Oct;412(5):530–4
Relationship between cell volume and cation content in thick ascending limb of rat kidney. Rajerison RM, et al. **Pflugers Arch** 1988 Oct;412(5):497–502
Protein kinase C is not necessary for peptide-induced suppression of M current or for desensitization of the peptide receptors. Bosma MM, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2943–7
Release of calcitonin gene-related peptide from rat enteric nerves is Ca2+-dependent but is not induced by K+ depolarization. Belai A, et al. **Regul Pept** 1988 Nov; 23(2):227–35
M-currents: an update. Brown D. **Trends Neurosci** 1988 Jul; 11(7):294–9 (58 ref.)
[High extracellular concentrations of potassium and rubidium modulate the synaptic transmission in the frog labyrinth] Rossi ML, et al. **Boll Soc Ital Biol Sper** 1989 Jan;65(1):23–7 (Eng. Abstr.) **(Ita)**
[On the role of potassium as a limiting factor for exercise hyperpnea] Honda Y. **Nippon Kyobu Shikkan Gakkai Zasshi** 1989 Feb;27(2):163–5 (Eng. Abstr.) **(Jpn)**
[Role of cAMP in the regulation of adrenal mineralocorticoid function by potassium ions] Pushkarev VM, et al. **Biokhimiia** 1989 Feb;54(2):323–7 (Eng. Abstr.) **(Rus)**
[Ca-activated potassium conductance in the membrane of peptone-induced peritoneal macrophages in the mouse] Maliaev AA, et al. **Fiziol Zh** 1988 Sep-Oct;34(5):79–84 (Eng. Abstr.) **(Rus)**
[Pharmacologic and metabolic dependence of the delayed inactivated potassium outward current in the somatic membrane of snail neurons] Martyniuk AE. **Neirofiziologiia** 1989;21(1):52–9 (Eng. Abstr.) **(Rus)**
[Biochemical mechanisms of the regulation of mineralocorticoid function of the adrenal glands by potassium ions] Pushkarev VM, et al. **Probl Endokrinol (Mosk)** 1988 Sep-Oct;34(5):78–83 (66 ref.) **(Rus)**

POISONING

Poisoning with sustained release potassium. Steedman DJ. **Arch Emerg Med** 1988 Dec;5(4):206–11
Survival after massive overdose of slow-release potassium. Colledge NR, et al. **Scott Med J** 1988 Jun;33(3):279

RADIATION EFFECTS

[The action of ionizing radiation on neuronal function in the edible snail. Phospholipase A2 and the Na+ and K+ transport systems] Dvoretskiĭ AI, et al. **Radiobiologiia** 1989 May-Jun;29(3):413–5 (Eng. Abstr.) **(Rus)**

SECRETION

Release of K+ from muscle during prolonged dynamic exercise. Sahlin K, et al. **Acta Physiol Scand** 1989 Jun; 136(2):293–4
Flow dependence of K+ secretion in cortical distal tubules of the rat. Malnic G, et al. **Am J Physiol** 1989 May;256(5 Pt 2):F932–41
Voltage dependence and barium sensitivity of colonic K secretion in renal failure. Siga EL, et al. **Am J Physiol** 1989 Mar;256(3 Pt 2):F490–6
Autonomic regulation of potassium release from human labial salivary glands in vitro. Izutsu K, et al. **Arch Oral Biol** 1988;33(7):519–23
Nipple aspirate fluids in adult nonlactating women—lactose content, cationic Na+, K+, Na+/K+ ratio, and coloration. Petrakis NL, et al. **Breast Cancer Res Treat** 1989 Jan;13(1):71–8
Pinacidil inhibits insulin release by increasing K+ outflow from pancreatic B-cells. Lebrun P, et al. **Eur J Pharmacol** 1988 Nov 1;156(2):283–6
Gonadotropin stimulation of K+ secretion and Na+ absorption by brook trout (Salvelinus fontinalis) sperm duct epithelium. Marshall WS, et al. **Gen Comp Endocrinol** 1989 Jul;75(1):118–28
Characterization of aldosterone-induced potassium secretion in rat distal colon. Sweiry JH, et al. **J Clin Invest** 1989 Mar;83(3):844–51
BRL 34915 (Cromakalim) stimulation of 42K efflux from rabbit arteries is modulated by calcium. Post JM, et al. **J Pharmacol Exp Ther** 1989 Aug;250(2):591–7
Potassium secretion by rat distal colon during acute potassium loading: effect of sodium, potassium intake and aldosterone. Edmonds CJ, et al. **J Physiol (Lond)** 1988 Jul; 401:39–51

STANDARDS

Quality control slide for potassium hydroxide and cellufluor fungal preparations. Perry JL, et al. **J Clin Microbiol** 1989 Jun;27(6):1411–2

THERAPEUTIC USE

Lipomas and potassium intake [letter] Wilson JE. **Ann Intern Med** 1989 May 1;110(9):750–1
Bromides were effective in intractable epilepsy with generalized tonic-clonic seizures and onset in early childhood. Ernst JP, et al. **Brain Dev** 1988;10(6):385–8
Placebo-controlled trial of potassium supplements in black patients with mild essential hypertension. Obel AO. **J Cardiovasc Pharmacol** 1989 Aug;14(2):294–6
Effect of potassium supplementation combined with dietary sodium reduction on blood pressure in men taking antihypertensive medication. Grimm RH, et al. **J Hypertens Suppl** 1988 Dec;6(4):S591–3
Bartter's syndrome—treatment with potassium, spironolactone and ACE-inhibitor. Clementsen P, et al. **J Intern Med** 1989 Feb;225(2):107–10
Potassium bicarbonate, but not sodium bicarbonate, reduces urinary calcium excretion and improves calcium balance in healthy men. Lemann J Jr, et al. **Kidney Int** 1989 Feb; 35(2):688–95
Dietary potassium and blood pressure. Suki WN. **Kidney Int Suppl** 1988 Sep;25:S175–6 (19 ref.)
Potassium supplementation in essential hypertension. **Nutr Rev** 1988 Aug;46(8):291–4
Changes in red cell sodium content and blood pressure levels with potassium supplementation in black hypertensive patients. Forrester TE, et al. **West Indian Med J** 1988 Jun; 37(2):92–6
[Water-electrolyte and acid-base changes. II. Hypokalemia] Velásquez-Jones L. **Bol Med Hosp Infant Mex** 1988 Jul; 45(7):476–81 (Eng. Abstr.) **(Spa)**

TOXICITY

Toxicity of potash brines to early developmental stages of Atlantic salmon (Salmo salar). Peterson RH, et al. **Bull Environ Contam Toxicol** 1988 Sep;41(3):391–7
Various sodium salts, potassium salts, a calcium salt and an ammonium salt induced ornithine decarboxylase and stimulated DNA synthesis in rat stomach mucosa. Furihata C, et al. **Jpn J Cancer Res** 1989 May;80(5):424–9
[Subchronic oral toxicity study of potassium pyrophosphate as a preliminary to long-term carcinogenicity studies in F344 rats] Shimoji N, et al. **Eisei Shikenjo Hokoku** 1988; (106):66–72 (Eng. Abstr.) **(Jpn)**
[Toxicologic characteristics and hygienic standardization of the levels of sodium hydrocarbonate and potassium carbonate in the air of the work area] Babaian EA, et al. **Gig Tr Prof Zabol** 1989;(5):30–2 (Eng. Abstr.) **(Rus)**

URINE

A monthly cycle during third trimester pregnancy in the serum concentrations of progesterone and aldosterone and the urinary excretion rate of potassium. Paaby P, et al. **Acta Endocrinol (Copenh)** 1989 May;120(5):636–43
Changes in renal excretions of electrolytes upon an orthostatic postural change in chronic glomerulonephritis. Asami T, et al. **Acta Paediatr Jpn Overseas Ed** 1987 Apr; 29(2):261–8
Amiloride effect on diurnal cyclic Na and K excretion in rats. Dalton PL, et al. **Am J Physiol** 1989 Feb;256(2 Pt 2):R510–7
Role of renal nerves in control of sodium excretion in chronic congestive heart failure. Mizelle HL, et al. **Am J Physiol** 1989 Jun;256(6 Pt 2):F1084–93
Effect of various 6-dehydro-corticosteroids, 9, 11-dehydro-DOCA and 9 alpha-fluoro-DOCA on the fluxes of sodium and potassium. Genard P, et al. **Arch Int Physiol Biochim** 1989 Apr;97(2):175–83
Role of opiates in the regulation of water and salt metabolism: effects of the FK 33-824 injection into the subfornical organ of both normal and hypophysectomized rats. Fregoneze JB, et al. **Braz J Med Biol Res** 1988;21(3):641–4
Effects of urinary potassium and sodium ion concentrations and pH on N-butyl-N-(4-hydroxybutyl)nitrosamine-induced urinary bladder carcinogenesis in rats. Lina BA, et al. **Carcinogenesis** 1989 Sep;10(9):1733–6
The antinatriuretic and kaliuretic effects of the glucocorticoids corticosterone and cortisol following pretreatment with carbenoxolone sodium (a liquorice derivative) in the adrenalectomized rat. Souness GW, et al. **Endocrinology** 1989 Mar;124(3):1588–90
Blood pressure and excretion of sodium, potassium, calcium and magnesium in 8- and 9-year old boys from 19 European centres. Knuiman JT, et al. **Eur J Clin Nutr** 1988 Oct;42(10):847–55
Effect of sodium saccharin and calcium saccharin on urinary parameters in rats fed Prolab 3200 or AIN-76 diet. Fisher MJ, et al. **Food Chem Toxicol** 1989 Jan;27(1):1–9
Circadian variation in renal sodium and potassium handling in cirrhosis. The role of aldosterone, cortisol, sympathoadrenergic tone, and intratubular factors. Trevisani F, et al. **Gastroenterology** 1989 Apr;96(4):1187–98
Comparison of variability of urinary sodium, potassium, and calcium in free-living men. Siani A, et al. **Hypertension** 1989 Jan;13(1):38–42
Sodium, potassium, body mass, alcohol and blood pressure: the INTERSALT Study. The INTERSALT Co-operative Research Group. **J Hypertens Suppl** 1988 Dec;6(4):S584–6
Pharmacokinetic and pharmacodynamic studies of piretanide in rabbits. III. Sodium and potassium excretion under different hydrated conditions. Lu W, et al. **J Pharmacobiodyn** 1988 May;11(5):314–23
Changes in drinking activity, urine volume and urinary electrolyte excretion after intracerebroventricular administration of diisopropylfluorophosphate. Dulaney MD Jr, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):202–9
Studies on the mechanism of rubidium-induced kaliuresis. Beck FX, et al. **Kidney Int** 1989 Aug;36(2):175–82
Contribution of the distal tubule to potassium excretion in experimental glomerulonephritis. Simon EE, et al. **Kidney Int** 1988 Jul;34(1):53–9
Dissociation of the natriuretic and antikaliuretic properties of triamterene derivatives by dose-response experiments. Priewer H, et al. **Pharm Res** 1987 Feb;4(1):66–9
The effects of infusions of ring-A-reduced derivatives of aldosterone on the antinatriuretic and kaliuretic actions of aldosterone. Morris DJ, et al. **Steroids** 1989 Jan-Feb; 53(1–2):21–36
Blood pressure and renal responses to synthetic rat atrial natriuretic factor in deoxycorticosterone acetate-salt hypertension. Kohzuki M, et al. **Tohoku J Exp Med** 1989 Apr;157(4):301–11
Twenty four-hour urinary excretion of sodium, potassium and urea in Japanese children. Moriyama M, et al. **Tohoku J Exp Med** 1988 Apr;154(4):381–8
[An experimental observation on the diuretic effect of an extract of luobuma (Apocynum venetum) leaves] Qian ZN, et al. **Chung Yao Tung Pao** 1988 Oct;13(10):44–6, 64 (Eng. Abstr.) **(Chi)**
[Urinary electrolytes and arterial pressure: results of a crossed study] Palombi L, et al. **Nuovi Ann Ig Microbiol** 1988 Nov-Dec;39(6):637–50 (Eng. Abstr.) **(Ita)**
[A simple method for measuring 24-hour urinary excretions of salt and potassium] Takemori K, et al. **Nippon Eiseigaku Zasshi** 1988 Dec;43(5):1036–41 (Eng. Abstr.) **(Jpn)**
[Several biochemical indicators of the kidney tubular function in patients with diabetes mellitus during the 3d trimester of pregnancy] Kushinʹska-Sitsinʹska Ia, et al. **Akush Ginekol (Mosk)** 1989 Jun;(6):69–70 **(Rus)**
[The effect of short-term fasting on the renal excretion of electrolytes in sheep] Szanyiová M, et al. **Vet Med (Praha)** 1988 Sep;33(9):545–50 (Eng. Abstr.) **(Slo)**

POTASSIUM CHANNELS

Isolation of a cDNA clone coding for a putative second potassium channel indicates the existence of a gene family. McKinnon D. **J Biol Chem** 1989 May 15;264(14):8230–6

ANALYSIS

Stretch activated ion channels in ventricular myocytes. Craelius W, et al. **Biosci Rep** 1988 Oct;8(5):407–14
Structure of the voltage-dependent potassium channel is highly conserved from Drosophila to vertebrate central nervous systems. Baumann A, et al. **EMBO J** 1988 Aug; 7(8):2457–63

CLASSIFICATION

Single-channel analysis of four distinct classes of potassium channels in Drosophila muscle. Zagotta WN, et al. **J Neurosci** 1988 Dec;8(12):4765–79

DRUG EFFECTS

Effects of adrenaline on excitation-induced stimulation of the sodium-potassium pump in rat skeletal muscle. Everts ME, et al. **Acta Physiol Scand** 1988 Oct;134(2):189–98
The effect of beta 2-adrenoceptor activation on ion-shifts and fatigue in mouse soleus muscles stimulated in vitro. Juel C. **Acta Physiol Scand** 1988 Oct;134(2):209–16
Potassium channel blocking agents induce occasional spontaneous action potentials and multiquantal ATP release in sympathetic nerve terminals. Msghina M, et al. **Acta Physiol Scand** 1989 Apr;135(4):593–4
Nicorandil as a hybrid between nitrates and potassium channel activators. Taira N. **Am J Cardiol** 1989 Jun 20; 63(21):18J–24J (38 ref.)
Ca2+-activated K channels of canine colonic myocytes. Carl A, et al. **Am J Physiol** 1989 Sep;257(3 Pt 1):C470–80
Trypsin activation of atrial muscarinic K+ channels. Kirsch GE, et al. **Am J Physiol** 1989 Jul;257(1 Pt 2):H334–8
Pharmacological modulation of calcium and potassium channels in isolated vascular smooth muscle cells. Klöckner U, et al. **Arzneimittelforschung** 1989 Jan;39(1A):120–6
Potassium efflux enhancement by cromakalim (BRL 34915) in rabbit mesenteric artery: an indirect effect independent of calcium? Coldwell MC, et al. **Biochem Pharmacol** 1988 Nov 1;37(21):4105–10
Inhibition of red cell Ca2+-dependent K+ channels by snake venoms. Alvarez J, et al. **Biochim Biophys Acta** 1989 Apr 14;980(2):134–8
Microelectrode studies of amphotericin B on Na+ and K+ conductance in bullfrog cornea. Carrasquer G, et al. **Biochim Biophys Acta** 1989 Jun 26;982(1):73–8
The effects of homologous series of anaesthetics on a resting potassium conductance of the squid giant axon. Elliott AA, et al. **Biochim Biophys Acta** 1989 [illegible] 30;978(2):337–40
The actions of neutral anaesthetics on ion conductances of nerve membranes. Elliott JR, et al. **Biochim Biophys Acta** 1989 May 9;988(2):257–86 (118 ref.)
The plasma membrane potential of human neutrophils. Role of ion channels and the sodium/potassium pump. Majander

A, et al. **Biochim Biophys Acta** 1989 Apr 14;980(2):139–45
Volatile anesthetics inhibit the ion flux through Ca2+–activated K+ channels of rat glioma C6 cells. Tas PW, et al. **Biochim Biophys Acta** 1989 Aug 7;983(2):264–8
Activations of the Ca dependent K channel by Ca released from the sarcoplasmic reticulum of mammalian smooth muscles. Kitamura K, et al. **Biomed Biochim Acta** 1989; 48(5–6):S364–9 (51 ref.)
The potassium channel opening drug cromakalim produces arterioselective vasodilation in the upper limbs of healthy volunteers. Webb DJ, et al. **Br J Clin Pharmacol** 1989 Jun; 27(6):757–61
Effects of charybdotoxin, a blocker of Ca2+–activated K+ channels, on motor nerve terminals. Anderson AJ, et al. **Br J Pharmacol** 1988 Dec;95(4):1329–35
Agonists at mu–opioid, M2–muscarinic and GABAB–receptors increase the same potassium conductance in rat lateral parabrachial neurones. Christie MJ, et al. **Br J Pharmacol** 1988 Nov;95(3):896–902
Potassium channel blockers differentially affect carbachol and (–)–N6–phenylisopropyladenosine on guinea–pig atria. De Biasi M, et al. **Br J Pharmacol** 1989 Jul;97(3):866–72
The dihydropyridine niguldipine modulates calcium and potassium currents in vascular smooth muscle cells. Klöckner U, et al. **Br J Pharmacol** 1989 Jul;97(3):957–67
Phentolamine and structurally related compounds selectively antagonize the vascular actions of the K+ channel opener, cromromakalim. McPherson GA, et al. **Br J Pharmacol** 1989 Jul;97(3):941–9
Potassium channel blocking actions of beta–bungarotoxin and related toxins on mouse and frog motor nerve terminals. Rowan EG, et al. **Br J Pharmacol** 1988 Jul;94(3):839–47
Pinacidil opens K+–selective channels causing hyperpolarization and relaxation of noradrenaline contractions in rat mesenteric resistance vessels. Videbaek LM, et al. **Br J Pharmacol** 1988 Sep;95(1):103–8
Interaction of potassium channel openers and blockers in canine atrial muscle. Yanagisawa T, et al. **Br J Pharmacol** 1989 Jul;97(3):753–62
The effects of cromakalim on the detrusor muscle of human and pig urinary bladder. Foster CD, et al. **Br J Urol** 1989 Mar;63(3):284–94
Effects of K–channel blockers, calcium, and verapamil suggest different pacemaker mechanisms in cultured neonatal rat and embryonic chick ventricle cells. Schanne OF, et al. **Can J Physiol Pharmacol** 1989 Jul;67(7):795–800
Maintenance of cation gradients in cold–stored erythrocytes of guinea pig and ground squirrel: improvement by amiloride. Zhao ZH, et al. **Cryobiology** 1989 Apr; 26(2):132–7
Double–blind comparator trials with pinacidil, a potassium channel opener. Callaghan JT, et al. **Drugs** 1988;36 Suppl 7:77–82
Galanin activates nucleotide–dependent K+ channels in insulin–secreting cells via a pertussis toxin–sensitive G–protein. Dunne MJ, et al. **EMBO J** 1989 Feb;8(2):413–20
Stimulation of renin secretion by potassium–channel activation with cromakalim. Ferrier CP, et al. **Eur J Clin Pharmacol** 1989;36(5):443–7
Intracellular bretylium blocks Na+ and K+ currents in heart cells. Bkaily G, et al. **Eur J Pharmacol** 1988 Jul 14; 151(3):389–97
Blockade of a cardiac K+ channel by tacrine: interactions with muscarinic and adenosine receptors. Freeman SE, et al. **Eur J Pharmacol** 1988 Sep 1;154(1):59–65
K+ channels openers prevent epilepsy induced by the bee venom peptide MCD. Gandolfo G, et al. **Eur J Pharmacol** 1989 Jan 17;159(3):329–30
Ca2+ channel blockers prevent seizures induced by a class of K+ channel inhibitors. Gandolfo G, et al. **Eur J Pharmacol** 1989 Jan 24;160(1):173–7
9–Amino–1,2,3,4–tetrahydroacridine (THA) blocks agonist–induced potassium conductance in rat hippocampal neurones. Halliwell JV, et al. **Eur J Pharmacol** 1989 Apr 25;163(2–3):369–72
Inhibitors of 1,2–diacylglycerol kinase potentiate the TRH–induced stimulation of Ca2+–activated K+ current. Mollard P, et al. **Eur J Pharmacol** 1989 Mar 7;172(1):71–9
Halothane inhibits hyperpolarization and potassium channels in human red blood cells. Scharff O, et al. **Eur J Pharmacol** 1989 Jan 10;159(2):165–73
Comparative effects of K+ channel blockade on the vasorelaxant activity of cromakalim, pinacidil and nicorandil. Wilson C, et al. **Eur J Pharmacol** 1988 Aug 2;152(3):331–9
Diamide alters membrane Na+ and K+ conductances and increases internal resistance in the isolated rat lens. Duncan G, et al. **Exp Eye Res** 1988 Dec;47(6):807–18
Protein phosphorylation is required for diazoxide to open ATP–sensitive potassium channels in insulin (RINm5F) secreting cells. Dunne MJ. **FEBS Lett** 1989 Jul 3; 250(2):262–6
Ba2+–sensitive K+ channels in luminal–membrane vesicles from pars convoluta of rabbit proximal tubule. Jacobsen C, et al. **FEBS Lett** 1989 Jan 30;243(2):173–6
Charybdotoxin blocks both Ca–activated K channels and Ca–independent voltage–gated K channels in rat brain synaptosomes. Schneider MJ, et al. **FEBS Lett** 1989 Jul 3;250(2):433–6
Charybdotoxin blocks dendrotoxin–sensitive voltage–activated K+ channels. Schweitz H, et al. **FEBS Lett** 1989 Jul 3;250(2):519–22
Cromakalim, nicorandil and pinacidil: novel drugs which open potassium channels in smooth muscle. Hamilton TC, et al. **Gen Pharmacol** 1989;20(1):1–9 (96 ref.)
Glutamate opens Na+/K+ channels in cultured astrocytes. Sontheimer H, et al. **GLIA** 1988;1(5):328–36
Acetylcholine modulated potassium channel in the hair cell of the toadfish saccule. Steinacker A, et al. **Hear Res** 1988 Sep 15;35(2–3):265–9
Inhibition of the generation of cytotoxic lymphocytes by potassium ion channel blockers. Sharma B. **Immunology** 1988 Sep;65(1):101–5
Stage–specific distinctions in potassium channel blocker control of T–lymphocyte activation. Dos Reis GA, et al. **Int J Immunopharmacol** 1988;10(3):217–26
The role of potassium channels in vascular relaxation. Proceedings of a symposium on pinacidil. Indianapolis, Indiana, June 25, 1987. **J Cardiovasc Pharmacol** 1988;12 Suppl 2:S1–47
Effect of some potassium channel blockers on contractile responses of the rabbit aorta. Cook NS. **J Cardiovasc Pharmacol** 1989 Feb;13(2):299–306
Clinical pharmacology of pinacidil, a prototype for drugs that affect potassium channels. Goldberg MR. **J Cardiovasc Pharmacol** 1988;12 Suppl 2:S41–7 (19 ref.)
Is the cardiovascular profile of BRL 34915 characteristic of potassium channel activators? Gotanda K, et al. **J Cardiovasc Pharmacol** 1988 Aug;12(2):239–46
Cromakalim, a potassium channel activator: a comparison of its cardiovascular haemodynamic profile and tissue specificity with those of pinacidil and nicorandil. Longman SD, et al. **J Cardiovasc Pharmacol** 1988;12(5):535–42
Possible increases in potassium conductance by apamin in mammalian ventricular papillary muscles: a comparison with the effects on enzymatically isolated ventricular cells. Nakagawa A, et al. **J Cardiovasc Pharmacol** 1989 Jul; 14(1):38–45
Relationship between calcium loading and impaired energy metabolism during Na+, K+ pump inhibition and metabolic inhibition in cultured neonatal rat cardiac myocytes. Morris AC, et al. **J Clin Invest** 1989 Jun; 83(6):1876–87
Effect of K+ channel blockers on anti–immunoglobulin–induced murine B cell proliferation. Gollapudi SV, et al. **J Clin Lab Immunol** 1988 Nov; 27(3):121–5
Clinical pharmacokinetics of pinacidil, a potassium channel opener, in hypertension. Goldberg MR, et al. **J Clin Pharmacol** 1989 Jan;29(1):33–40
Charybdotoxin blocks voltage–gated K+ channels in human and murine T lymphocytes. Sands SB, et al. **J Gen Physiol** 1989 Jun;93(6):1061–74
Changes in potassium content and membrane potassium channels in circulating cells from normal volunteers treated with cromakalim. Lijnen P, et al. **J Hypertens** 1989 May; 7(5):403–7
All or none cell responses of Ca2+–dependent K channels elicited by calcium or lead in human red cells can be explained by heterogeneity of agonist distribution. Alvarez J, et al. **J Membr Biol** 1988 Sep;104(2):129–38
Ion permeation and rectification in ATP–sensitive channels from insulin–secreting cells (RINm5F): effects of K+, Na+ and Mg2+. Ciani S, et al. **J Membr Biol** 1988 Jul; 103(2):171–80
Isomeric yohimbine alkaloids block calcium–activated K+ channels in medullary thick ascending limb cells of rabbit kidney. Cornejo M, et al. **J Membr Biol** 1989 Jan; 107(1):25–33
Effects of pyridine nucleotides on the gating of ATP–sensitive potassium channels in insulin–secreting cells. Dunne MJ, et al. **J Membr Biol** 1988 Jun; 102(3):205–16
An emerging pharmacology of peptide toxins targeted against potassium channels. Moczydlowski E, et al. **J Membr Biol** 1988 Oct;105(2):95–111 (131 ref.)
Kinetics of voltage– and Ca2+ activation and Ba2+ blockade of a large–conductance K+ channel from Necturus enterocytes. Sheppard DN, et al. **J Membr Biol** 1988 Oct;105(1):65–75
Charybdotoxin blocks with high affinity the Ca–activated K+ channel of Hb A and Hb S red cells: individual differences in the number of channels. Wolff D, et al. **J Membr Biol** 1988 Dec;106(3):243–52
Effects of the Ca–antagonist nicardipine on K+ currents and Na+–Ca2+ exchange in frog atrial fibres. Richard S, et al. **J Mol Cell Cardiol** 1988 Dec;20(12):1133–40
Synthetic peptides corresponding to the sequence of noxiustoxin indicate that the active site of this K+ channel blocker is located on its amino–terminal portion. Gurrola GB, et al. **J Neural Transm** 1989;77(1):11–20
K+–channel blockade in trigeminal root ganglion neurons: effects on membrane outward currents. Spigelman I, et al. **J Neurophysiol** 1989 Sep;62(3):802–9
Inhibition of voltage–gated K channels in synaptosomes by sn–1,2–dioctanoylglycerol, an activator of protein kinase C. Colby KA, et al. **J Neurosci** 1988 Dec;8(12):4685–92
Protein kinase C activators block specific calcium and potassium current components in isolated hippocampal neurons. Doerner D, et al. **J Neurosci** 1988 Nov; 8(11):4069–78
Vasorelaxant effects of cromakalim in rats are mediated by glibenclamide–sensitive potassium channels. Cavero I, et al. **J Pharmacol Exp Ther** 1989 Mar;248(3):1261–8
Effects of tetraethylammonium on the depolarizing after–potential and passive properties of lizard myelinated axons. Barrett EF, et al. **J Physiol (Lond)** 1988 Aug; 402:65–78
Psychotomimetic sigma–ligands, dexoxadrol and phencyclidine block the same presynaptic potassium channel in rat brain. Bartschat DK, et al. **J Physiol (Lond)** 1988 Sep;403:341–53
Kinetic states and modes of single large–conductance calcium–activated potassium channels in cultured rat skeletal muscle. McManus OB, et al. **J Physiol (Lond)** 1988 Aug;402:79–120
The voltage–dependent block of ATP–sensitive potassium channels of frog skeletal muscle by caesium and barium ions. Quayle JM, et al. **J Physiol (Lond)** 1988 Nov; 405:677–97
The action of pinacidil in the isolated human bladder. Fovaeus M, et al. **J Urol** 1989 Mar;141(3):637–40
Aminopyridines enhance opening of calcium–activated potassium channels in GH3 anterior pituitary cells. Rogawski MA. **Mol Pharmacol** 1989 Apr;35(4):458–68
The G protein–gated atrial K+ channel is stimulated by three distinct Gi alpha–subunits. Yatani A, et al. **Nature** 1988 Dec 15;336(6200):680–2
Anti–cholinergic effect of verapamil on the muscarinic acetylcholine receptor–gated K+ channel in isolated guinea–pig atrial myocytes. Ito H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan–Feb; 339(1–2):244–6
Differential effects of potassium channel blockers on neurohypophysial release of oxytocin and vasopressin. Evidence for frequency–dependent interaction with the endogenous opioid inhibition of oxytocin release. Racké K, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Nov; 338(5):560–6
Effect of calcium on synaptic facilitation by potassium channel blockers in superior cervical ganglion of rat. Alkadhi KA, et al. **Neuropharmacology** 1989 Jan; 28(1):75–81
Efflux of rubidium in rat cortical synaptosomes is blocked by sigma and dextromethorphan binding site ligands. Fletcher EJ, et al. **Neuropharmacology** 1989 Jul;28(7):661–6
Change in K+ activity of the scala media produced by vasopressin. Shugyo A, et al. **ORL J Otorhinolaryngol Relat Spec** 1989;51(3):156–60
Cromakalim (BRL 34915) acts on an inwardly rectifying neuronal K+ conductance, which is similar to that activated by adenosine. Alzheimer C, et al. **Pflugers Arch** 1989;414 Suppl 1:S121–2
Effect of glibenclamide, a selective blocker of an ATP–K+ channel, on the anoxic response of hippocampal neurones. Ben Ari Y. **Pflugers Arch** 1989;414 Suppl 1:S111–4
A comparison of the effects and interactions of cromakalim and glibenclamide in cardiac and vascular tissues. BoSmith RE, et al. **Pflugers Arch** 1989;414 Suppl 1:S190
Comparison of the effects of RP 49356, cromakalim and nifedipine on guinea–pig trachea in vitro. Brown TJ, et al. **Pflugers Arch** 1989;414 Suppl 1:S188–9
Natural bile acids mimic hormonal action on K+ conductance in guinea–pig liver cells. Capiod T, et al. **Pflugers Arch** 1989;414 Suppl 1:S162–3
Effect of diacetyl monoxime on transient outward current in rat ventricular myocytes. Coulombe A, et al. **Pflugers Arch** 1989;414 Suppl 1:S173–4
Calcium–activated potassium channels from rat parotid acinar cells. Dehaye JP. **Pflugers Arch** 1989;414 Suppl 1:S158–9
Characterization of a novel K+ channel activator, EMD 52962, in electrophysiological and pharmacological experiments. De Peyer JE, et al. **Pflugers Arch** 1989;414 Suppl 1:S191
Pharmacology and regulation of ATP–sensitive K+ channels. de Weille JR, et al. **Pflugers Arch** 1989;414 Suppl 1:S80–7 (63 ref.)
Current–voltage relations of Cs+–inhibited K+ currents through the apical membrane of frog skin. De Wolf I, et al. **Pflugers Arch** 1988 Dec;413(2):111–7
Cromakalim (BRL 34915) and diazoxide activate ATP–regulated potassium channels in insulin–secreting cells. Dunne MJ, et al. **Pflugers Arch** 1989;414 Suppl 1:S154–5
The pharmacology of ATP–sensitive K+ channels in the heart. Escande D. **Pflugers Arch** 1989;414 Suppl 1:S93–8 (58 ref.)
ATP4– and ATP.Mg inhibit the ATP–sensitive K+ channel of rat ventricular myocytes. Findlay I. **Pflugers Arch** 1988 Jul;412(1–2):37–41
Low Ca2+–sensitive maxi–K+ channels in human cultured fibroblasts. Galietta LJ, et al. **Pflugers Arch** 1988 Nov; 413(1):99–101
Potassium channel blockers and neuronal function. Harvey AL, et al. **Pflugers Arch** 1989;414 Suppl 1:S106–10 (34 ref.)
Pulmonary vascular and renal effects of cromakalim in anaesthetized dogs. Hicks PE, et al. **Pflugers Arch** 1989;414 Suppl 1:S192–3
Alpha–adrenergic activation of the muscarinic K+ channel is mediated by arachidonic acid metabolites. Kurachi Y, et al. **Pflugers Arch** 1989 May;414(1):102–4
Dopamine affects two voltage–dependent K+ currents of identified rat lactotroph cells. Lledo PM, et al. **Pflugers Arch** 1989;414 Suppl 1:S160–1
Modulation of the spontaneous transient outward currents

by histamine in single vascular smooth muscle cells. Neliat G, et al. **Pflugers Arch** 1989;414 Suppl 1:S186–7

Blockers and inhibitors of ATP-sensitive K+ channels in adult mouse skeletal muscle. Neumcke B, et al. **Pflugers Arch** 1989;414 Suppl 1:S181–2

Structure-activity relationships of aminopyridines and derivates on axonal K+ conductance. Pelhate M, et al. **Pflugers Arch** 1989;414 Suppl 1:S140–1

Activation of an ATP-sensitive K+ current is promoted by internal GDP in frog atrial myocytes. Pilsudski R, et al. **Pflugers Arch** 1989;414 Suppl 1:S177

Comparison of the effects of putative activators of K+ channels on pancreatic B-cell function. Plant TD, et al. **Pflugers Arch** 1989;414 Suppl 1:S152–3

Cromakalim, pinacidil and RP 49356 activate a tolbutamide-sensitive K+ conductance in human skeletal muscle fibres. Quasthoff S, et al. **Pflugers Arch** 1989;414 Suppl 1:S179–80

Chloramine-T-induced modifications of K+ channel inactivation in neuroblastoma cells. Rouzaire-Dubois B, et al. **Pflugers Arch** 1989;414 Suppl 1:S127–8

External ATP triggers a biphasic activation process of a calcium-dependent K+ channel in cultured bovine aortic endothelial cells. Sauve R, et al. **Pflugers Arch** 1988 Oct; 412(5):469–81

Palytoxin increases an outward K+ current in frog heart fibres. Sauviat MP. **Pflugers Arch** 1989;414 Suppl 1:S178

Effect of external K+ on the delayed K+ current in single rabbit Purkinje cells. Scamps F, et al. **Pflugers Arch** 1989; 414 Suppl 1:S169–70

Effects of quinine and of calmodulin inhibitors on calcium-dependent potassium channels of human aorta. Serebryakov VN, et al. **Pflugers Arch** 1989;414 Suppl 1:S185

The potassium channel opener RP 49356 modifies the ATP-sensitivity of K+-ATP channels in cardiac myocytes. Thuringer D, et al. **Pflugers Arch** 1989;414 Suppl 1:S175

Ca2+-activated K+ channels contribute to the resting potential of vascular myocytes. Ca2+-sensitivity is increased by intracellular Mg2+-ions. Trieschmann U, et al. **Pflugers Arch** 1989;414 Suppl 1:S183–4

Hypotonic shock evokes opening of Ca2+-activated K channels in opossum kidney cells. Ubl J, et al. **Pflugers Arch** 1988 Oct;412(5):551–3

Effects of potassium channel blockers on differentiation of Dictyostelium discoideum. Van Duijn B, et al. **Pflugers Arch** 1989;414 Suppl 1:S148–9

Probing a Ca2+-activated K+ channel with quaternary ammonium ions. Villarroel A, et al. **Pflugers Arch** 1988 Dec;413(2):118–26

The effect of 4-aminopyridine on action potential shape and firing pattern of rat dorsal root ganglion neurones. Waddell PJ, et al. **Pflugers Arch** 1989;414 Suppl 1:S131–2

Smooth muscle K+ channel openers; their pharmacology and clinical potential. Weston AH. **Pflugers Arch** 1989;414 Suppl 1:S99–105 (79 ref.)

Glibenclamide inhibition of ATP-sensitive K+ channels and ischemia-induced K+ accumulation in the mammalian heart. Wilde AA, et al. **Pflugers Arch** 1989;414 Suppl 1:S176

Effects of alaproclate, potassium channel blockers, and lidocaine on the release of 3H-acetylcholine from the guinea-pig ileum myenteric plexus. Alberts P, et al. **Pharmacol Toxicol** 1989 Jul;65(1):25–32

A comparative study of the antiarrhythmic properties of eicosanoid inhibitors, free radical scavengers and potassium channel blockers on reperfusion induced arrhythmias in the rat. Beatch GN, et al. **Proc West Pharmacol Soc** 1989; 32:285–9

Further studies into the ECG effects of tedisamil (KC 8857) in rats. Howard PG, et al. **Proc West Pharmacol Soc** 1989; 32:183

Hyperpolarizing vasodilators activate ATP-sensitive K+ channels in arterial smooth muscle. Standen NB, et al. **Science** 1989 Jul 14;245(4914):177–80

G protein activation mechanisms of the cardiac K+ channel, iK.ACh. Clapham DE, et al. **Soc Gen Physiol Ser** 1989; 44:55–68 (19 ref.)

Modulation of potassium channels by dopamine in rat pituitary lactotrophs: a role in the regulation of prolactin secretion? Gregerson KA, et al. **Soc Gen Physiol Ser** 1989; 44:123–41

Block of potassium channels and facilitation of acetylcholine release at the neuromuscular junction by the venom of the scorpion, Pandinus imperator. Marshall DL, et al. **Toxicon** 1989;27(4):493–8

The role of divalent cations in potassium channels. Begenisich T. **Trends Neurosci** 1988 Jun;11(6):270–3 (20 ref.)

The pharmacology of potassium channels and their therapeutic potential. Cook NS. **Trends Pharmacol Sci** 1988 Jan;9(1):21–8 (37 ref.)

[Apamin—a highly specific and effective blockader of calcium-dependent potassium conductance] Baidan LV, et al. **Neirofiziologiia** 1988;20(6):833–46 (56 ref.) (Eng. Abstr.) **(Rus)**

ENZYMOLOGY

G-protein beta gamma-subunits activate the cardiac muscarinic K+-channel via phospholipase A2. Kim D, et al. **Nature** 1989 Feb 9;337(6207):557–60

IMMUNOLOGY

Antibodies against Drosophila potassium channels identify membrane proteins across species. Barbas JA, et al. **Brain Res Mol Brain Res** 1989 Mar;5(2):171–6

METABOLISM

K+-channel opening as a mechanism for relaxing airways smooth muscle. Small RC, et al. **Agents Actions Suppl** 1988; 23:89–94

Erythrocyte sodium concentration and 86Rb uptake in weanling Dahl rats. McCormick CP, et al. **Am J Hypertens** 1989 Aug;2(8):604–9

Effects of thyroid hormone on Na+-K+ transport in resting and stimulated rat skeletal muscle. Everts ME, et al. **Am J Physiol** 1988 Nov;255(5 Pt 1):E604–12

Interactions between dendrotoxin, a blocker of voltage-dependent potassium channels, and charybdotoxin, a blocker of calcium-activated potassium channels, at binding sites on neuronal membranes. Harvey AL, et al. **Biochem Biophys Res Commun** 1989 Aug 30;163(1):394–7

Dendrotoxin acceptor from bovine synaptic plasma membranes. Binding properties, purification and subunit composition of a putative constituent of certain voltage-activated K+ channels. Parcej DN, et al. **Biochem J** 1989 Feb 1;257(3):899–903

Modulation of the Ca2+- or Pb2+-activated K+-selective channels in human red cells. II. Parallelisms to modulation of the activity of a membrane-bound oxidoreductase. Fehlau R, et al. **Biochim Biophys Acta** 1989 Jan 16; 978(1):37–42

Inhibition of the in vitro formation of dense cells and of irreversibly sickled cells by charybdotoxin, a specific inhibitor of calcium-activated potassium efflux. Ohnishi ST, et al. **Biochim Biophys Acta** 1989 Feb 9;1010(2):199–203

Modulation of the Ca2+- or Pb2+-activated K+-selective channels in human red cells. I. Effects of propranolol. Schwarz W, et al. **Biochim Biophys Acta** 1989 Jan 16; 978(1):32–6

Cation sidedness in the phosphorylation step of Na+/K+-ATPase. van der Hijden HT, et al. **Biochim Biophys Acta** 1989 Aug 7;983(2):142–52

Membrane fluidity and kinetics of Ca2+-dependent potassium channels. Bregestovski PD, et al. **Biomed Biochim Acta** 1989;48(5–6):S382–7

Activation and blocking effects of divalent cations on the calcium-dependent potassium channel of high conductance. Zamoyski VL, et al. **Biomed Biochim Acta** 1989;48(5–6):S388–92

Effects of sulphonylureas and diazoxide on insulin secretion and nucleotide-sensitive channels in an insulin-secreting cell line. Sturgess NC, et al. **Br J Pharmacol** 1988 Sep; 95(1):83–94

Potassium concentration influences the gating of K+ channels from sarcoplasmic reticulum. Campos-de-Carvalho AC. **Braz J Med Biol Res** 1989; 22(1):107–9

Role of Ca2+-activated K+ channel in regulation of NaCl reabsorption in thick ascending limb of Henle's loop. Klaerke DA, et al. **Comp Biochem Physiol [A]** 1988; 90(4):757–65 (72 ref.)

Effect of galactose and glucose levels and sorbinil treatment on myo-inositol metabolism and Na+-K+ pump activity in cultured neuroblastoma cells. Yorek MA, et al. **Diabetes** 1989 Aug;38(8):996–1004

Introductory remarks: symposium on pinacidil: potassium channel openers in the treatment of hypertension. Weston AH. **Drugs** 1988;36 Suppl 7:1–3

Activators of protein kinase C depolarize insulin-secreting cells by closing K+ channels. Wollheim CB, et al. **EMBO J** 1988 Aug;7(8):2443–9

Interactions between discrete neuronal membrane binding sites for the putative K+-channel ligands beta-bungarotoxin, dendrotoxin and mast-cell-degranulating peptide. Breeze AL, et al. **Eur J Biochem** 1989 Jan 2;178(3):771–8

Quinine potently blocks single K+ channels activated by dopamine D-2 receptors in rat corpus striatum neurons. Freedman JE, et al. **Eur J Pharmacol** 1989 May 19; 164(2):341–6

K+ channel openers decrease seizures in genetically epileptic rats. Gandolfo G, et al. **Eur J Pharmacol** 1989 Aug 11; 167(1):181–3

AN-132, a new class I anti-arrhythmic agent, depresses the acetylcholine-induced K+ current in atrial myocytes. Kurachi Y, et al. **Eur J Pharmacol** 1989 Jun 20; 165(2–3):319–22

Evidence for a PO2-sensitive K+ channel in the type-I cell of the rabbit carotid body. Delpiano MA, et al. **FEBS Lett** 1989 Jun 5;249(2):195–8

Somatostatin activates glibenclamide-sensitive and ATP-regulated K+ channels in insulinoma cells via a G-protein. Fosset M, et al. **FEBS Lett** 1988 Dec 19; 242(1):94–6

Purification and reconstitution of potassium channel proteins from squid axon membranes. Prestipino G, et al. **FEBS Lett** 1989 Jul 3;250(2):570–4

Immunological evidence for a relationship between the dendrotoxin-binding protein and the mammalian homologue of the Drosophila Shaker K+ channel. Rehm H, et al. **FEBS Lett** 1989 Jun 5;249(2):224–8

The beta-bungarotoxin-binding protein from chick brain: binding sites for different neuronal K+ channel ligands co-fractionate upon partial purification. Schmidt RR, et al. **FEBS Lett** 1988 Nov 21;240(1–2):65–70

Energy efficiency of different mechanistic models for potassium ion uptake in lower eukaryotic cells. Villalobo A. **Folia Microbiol (Praha)** 1988;33(5):407–24 (88 ref.)

Heterogeneity of potassium currents in cultured oligodendrocytes. Sontheimer H, et al. **GLIA** 1988; 1(6):415–20

Extracellular potassium ion dynamics and ventricular arrhythmias in the canine heart. Pelleg A, et al. **J Am Coll Cardiol** 1989 Mar 15;13(4):941–50

Excitation-secretion coupling: involvement of potassium channels in ACTH-stimulated rat adrenocortical cells. Gallo-Payet N, et al. **J Endocrinol** 1989 Mar;120(3):409–21

Physiological role and selectivity of the in situ potassium channel of the sarcoplasmic reticulum in skinned frog skeletal muscle fibers. Abramcheck CW, et al. **J Gen Physiol** 1989 Jan;93(1):1–21

Divalent ion trapping inside potassium channels of human T lymphocytes. Grissmer S, et al. **J Gen Physiol** 1989 Apr; 93(4):609–30

Potassium conductance of the squid giant axon. Single-channel studies. Llano I, et al. **J Gen Physiol** 1988 Aug;92(2):179–96

Modulation of K channels in dialyzed squid axons. ATP-mediated phosphorylation. Perozo E, et al. **J Gen Physiol** 1989 Jun;93(6):1195–218

Metabolic regulation of the K(ATP) and a maxi-K(V) channel in the insulin-secreting RINm5F cell. Ribalet B, et al. **J Gen Physiol** 1988 Aug;92(2):219–37

Ca2+-activated K+ channels in the apical membrane of Necturus choroid plexus. Brown PD, et al. **J Membr Biol** 1988 Nov;105(3):207–19

The gating of nucleotide-sensitive K+ channels in insulin-secreting cells can be modulated by changes in the ratio ATP4-/ADP3- and by nonhydrolyzable derivatives of both ATP and ADP. Dunne MJ, et al. **J Membr Biol** 1988 Sep;104(2):165–77

Inward rectifier K channels in renal epithelioid cells (MDCK) activated by serotonin. Friedrich F, et al. **J Membr Biol** 1988 Dec;106(2):149–55

Activation of K+ channels in renal medullary vesicles by cAMP-dependent protein kinase. Reeves WB, et al. **J Membr Biol** 1989 Jul;109(1):65–72

Quantitative analysis of outward rectifying K+ channel currents in guard cell protoplasts from Vicia faba. Schroeder JI. **J Membr Biol** 1989 Mar;107(3):229–35

Hemodialysis and red cell cation transport in uremia: role of membrane free fatty acids. Kelly RA, et al. **Kidney Int** 1989 Feb;35(2):595–603

Extrusion of calcium from rod outer segments is driven by both sodium and potassium gradients. Cervetto L, et al. **Nature** 1989 Feb 23;337(6209):740–3

Arachidonic acid metabolites as intracellular modulators of the G protein-gated cardiac K+ channel [published erratum appears in Nature 1989 Mar 23;338(6213):360] Kurachi Y, et al. **Nature** 1989 Feb 9;337(6207):555–7

The potassium channel opening action of pinacidil; studies using biochemical, ion flux and microelectrode techniques. Southerton JS, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1988 Sep; 338(3):310–8

Adenosine, 'pertussis-sensitive' G-proteins, and K+ conductance in central mammalian neurones under energy deprivation. Spuler A, et al. **Neurosci Lett** 1989 Apr 10; 98(3):280–4

Presence of a charybdotoxin sensitive Ca2+-activated K+ channel in rat glioma C6 cells. Tas PW, et al. **Neurosci Lett** 1988 Dec 5;94(3):279–84

Distribution in the rat central nervous system of acceptor sub-types for dendrotoxin, a K+ channel probe. Pelchen-Matthews A, et al. **Neuroscience** 1989;29(2):347–61

Comparison of Ca2+-dependent K+ channels in the membrane of smooth muscle cells isolated from adult and foetal human aorta. Bregestovski PD, et al. **Pflugers Arch** 1988 Nov;413(1):8–13

Activation of atrial muscarinic K+ channels by low concentrations of beta gamma subunits of rat brain G protein. Kurachi Y, et al. **Pflugers Arch** 1989 Jan; 413(3):325–7

Properties of single potassium channels in hypothalamic neurons. McLarnon JG. **Pflugers Arch** 1989 Apr; 413(6):604–9

Intracellular Ca modulates K-inward rectification in cardiac myocytes [published erratum appears in Pflugers Arch 1989 Apr;413(6):688] Mazzanti M, et al. **Pflugers Arch** 1989 Jan; 413(3):322–4

Reciprocal effects of Ca2+ and Mg-ATP on the 'run-down' of the K+ channels in opossum kidney cells. Ohno-Shosaku T, et al. **Pflugers Arch** 1989 Mar; 413(5):562–4

Characterization, purification, and affinity labeling of the brain [3H]glibenclamide-binding protein, a putative neuronal ATP-regulated K+ channel. Bernardi H, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9816–20

Identification of genes from pattern formation, tyrosine kinase, and potassium channel families by DNA amplification. Kamb A, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4372–6

Role of two different guanine nucleotide-binding proteins in the antagonistic modulation of the S-type K+ channel

by cAMP and arachidonic acid metabolites in Aplysia sensory neurons. Volterra A, et al.
Proc Natl Acad Sci U S A 1988 Oct;85(20):7810–4
Humoral sodium–potassium pump inhibitor in reduced renal mass–saline hypertensive rats. Pamnani MB, et al.
Prog Biochem Pharmacol 1988;23:35–45 (46 ref.)
Properties of the propranolol activated potassium channels of the human erythrocyte. Hobey WD, et al.
Prog Clin Biol Res 1989;292:359–68
Expression of a cloned rat brain potassium channel in Xenopus oocytes. Christie MJ, et al. **Science** 1989 Apr 14; 244(4901):221–4
Mutant potassium channels with altered binding of charybdotoxin, a pore-blocking peptide inhibitor. MacKinnon R, et al. **Science** 1989 Sep 22;245(4924):1382–5
Toxins in the characterization of potassium channels. Castle NA, et al. **Trends Neurosci** 1989 Feb;12(2):59–65 (61 ref.)
Potassium channels—what can the protein chemistry contribute? Dolly JO. **Trends Neurosci** 1988 May; 11(5):186–8
[Identification, function mechanisms and regulation of potassium channels sensitive to ATP which are targets of sulfonylureas used in the treatment of type II diabetes mellitus] Fosset M, et al.
Journ Annu Diabetol Hotel Dieu 1989;:7–11 (13 ref.) **(Fre)**
[Inhibitor of the calmodulin-dependent reactions (R24571) blocks the calcium activation of potassium channels and does not affect the activity of Ca2+-pump in human erythrocytes] Orlov SN, et al. **Dokl Akad Nauk SSSR** 1989 Jan–Feb;304(1):213–6 **(Rus)**
[Changes in the content of potassium, sodium and potassium influx in human peripheral blood lymphocytes during long-term cultivation with phytohemagglutinin] Ezhevskii SA, et al. **Tsitologiia** 1988 May;30(5):573–81 (Eng. Abstr.) **(Rus)**
[Effect of energy metabolism on the ionic selectivity of the K+ center of the Na+/K+ pump in the skin of the frog] Skul'skii IA, et al. **Tsitologiia** 1988 Jul;30(7):894–8 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Characterization of outward currents in a neurosecretory cell acutely isolated from the adult rat. Aguayo LG.
Adv Alcohol Subst Abuse 1988;7(3–4):87–90
The regulation of neuronal calcium and potassium channels by protein phosphorylation. Kaczmarek LK.
Adv Second Messenger Phosphoprotein Res 1988;22:113–38 (140 ref.)
ATP-sensitive K+ channels are altered in hypertrophied ventricular myocytes. Cameron JS, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1254–8
Activation of potassium channels in renal epithelioid cells (MDCK) by extracellular ATP. Friedrich F, et al.
Am J Physiol 1989 May;256(5 Pt 1):C1016–21
Low-conductance K channels in apical membrane of rat cortical collecting tubule. Frindt G, et al.
Am J Physiol 1989 Jan;256(1 Pt 2):F143–51
Evidence for a Ca-activated inwardly rectifying K channel in human macrophages. Gallin EK. **Am J Physiol** 1989 Jul;257(1 Pt 1):C77–85
Apical membrane potassium conductance in guinea pig gallbladder epithelial cells. Gunter-Smith PJ.
Am J Physiol 1988 Dec;255(6 Pt 1):C808–15
Inward-rectifying potassium channels in rat hepatocytes. Henderson RM, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):G1028–35
K+ transport and membrane potentials in isolated rat parotid acini. Nauntofte B, et al. **Am J Physiol** 1988 Oct;255(4 Pt 1):C508–18
Tension and electrolyte changes with Na+-K+ pump inhibition in rat papillary muscle. Parsons D, et al.
Am J Physiol 1989 Sep;257(3 Pt 2):H942–53
A new oil-gate concentration jump technique applied to inside-out patch-clamp recording. Qin DY, et al.
Am J Physiol 1988 Oct;255(4 Pt 2):H980–4
Cyclic AMP modulates Ca-activated K channel in cultured smooth muscle cells of rat aortas. Sadoshima J, et al.
Am J Physiol 1988 Oct;255(4 Pt 2):H754–9
Inwardly rectifying K+ current in osteoclasts. Sims SM, et al. **Am J Physiol** 1989 Jun;256(6 Pt 1):C1277–82
Single potassium channels recorded from vascular smooth muscle cells. Stuenkel EL. **Am J Physiol** 1989 Sep;257(3 Pt 2):H760–9
K+ channel currents in basolateral membrane of distal convoluted tubule of rabbit kidney. Taniguchi J, et al.
Am J Physiol 1989 Feb;256(2 Pt 2):F246–54
Membrane stretch: a physiological stimulator of Ca2+-activated K+ channels in thick ascending limb. Taniguchi J, et al. **Am J Physiol** 1989 Sep;257(3 Pt 2):F347–52
Two distinct mechanisms are responsible for single K channel block by internal tetraethylammonium ions. Yamamoto D, et al. **Am J Physiol** 1989 Mar;256(3 Pt 1):C683–7
Opioid receptors on murine splenocytes. Possible coupling to K+ channels. Carr DJ, et al. **Ann N Y Acad Sci** 1988; 540:694–7
Antagonistic modulation of S-K+ channel activity by cyclic AMP and arachidonic acid metabolites. Role for two G proteins. Volterra A, et al. **Ann N Y Acad Sci** 1989; 559:219–36
Varieties of calcium-activated potassium channels. Latorre R, et al. **Annu Rev Physiol** 1989;51:385–99 (80 ref.)
Molecular properties of potassium channels. Bernardi H, et al. **Arzneimittelforschung** 1989 Jan;39(1A):159–63 (42 ref.)
ATP-sensitive K+ channels may control glucose-induced electrical activity in pancreatic B-cells. Henquin JC.
Biochem Biophys Res Commun 1988 Oct 31;156(2):769–75
E-series prostaglandins activate cAMP-mediated potassium currents in follicle-enclosed Xenopus oocyte. Mori K, et al. **Biochem Biophys Res Commun** 1989 Aug 15; 162(3):1535–40
Molecular cloning and sequence analysis of human genomic DNA encoding a novel membrane protein which exhibits a slowly activating potassium channel activity. Murai T, et al. **Biochem Biophys Res Commun** 1989 May 30; 161(1):176–81
Modulation of voltage-dependent potassium channels in B lymphocytes. Choquet D, et al. **Biochem Pharmacol** 1988 Oct 15;37(20):3797–802 (55 ref.)
The biochemical regulation of potassium channels. Duty S, et al. **Biochem Soc Trans** 1988 Aug;16(4):532–4 (36 ref.)
Single potential-dependent K+ channels and their oligomers in molluscan glial cells. Geletyuk VI, et al.
Biochim Biophys Acta 1989 Jun 6;981(2):343–50
Potassium channels in synaptosomal membrane examined using patch-clamp techniques and reconstituted giant proteoliposomes. Hirashima N, et al.
Biochim Biophys Acta 1988 Dec 22;946(2):209–14
Two types of K+ channels in the apical membrane of rabbit proximal tubule in primary culture. Merot J, et al.
Biochim Biophys Acta 1989 Jan 16;978(1):134–44
Depolarization of macrophage polykaryons in the absence of external sodium induces a cyclic stimulation of a calcium-activated potassium conductance. Soldati L, et al.
Biochim Biophys Acta 1988 Dec 9;972(3):283–92
Ca2+-activated K+ channel in rat pancreatic islet B cells: permeation, gating and blockade by cations. Tabcharani JA, et al. **Biochim Biophys Acta** 1989 Jun 26;982(1):62–72
Acid secretagogues induce Ca2+ mobilization coupled to K+ conductance activation in rat parietal cells in tissue culture. Ueda S, et al. **Biochim Biophys Acta** 1989 Aug 15;1012(3):254–60
Low-conductance states of K+ channels in adult mouse skeletal muscle. Weik R, et al. **Biochim Biophys Acta** 1989 Aug 7;983(2):127–34
Three types of single K channels contribute to the transient outward current in myocardial mouse cells. Benndorf K.
Biomed Biochim Acta 1988;47(4–5):401–16
Selectivity for cations in potassium and gramicidin channels of the muscle fibre membrane. Shvinka NE, et al.
Biomed Biochim Acta 1988;47(6):481–7
Streaming potential measurements in Ca2+-activated K+ channels from skeletal and smooth muscle. Coupling of ion and water fluxes. Alcayaga C, et al. **Biophys J** 1989 Feb;55(2):367–71
Nonstationary fluctuation analysis of the delayed rectifier K channel in cardiac Purkinje fibers. Actions of norepinephrine on single-channel current [published erratum appears in Biophys J 1989 Jun;55(6):1273–5] Bennett PB, et al. **Biophys J** 1989 Apr;55(4):731–8
Role of single-channel stochastic noise on bursting clusters of pancreatic beta-cells. Chay TR, et al. **Biophys J** 1988 Sep;54(3):427–35
Slow inactivation and reactivation of the K+ channel in squid axons. A tail current analysis. Clay JR.
Biophys J 1989 Mar;55(3):407–14
Internal and external K+ help gate the inward rectifier. Cohen IS, et al. **Biophys J** 1989 Jan;55(1):197–202
Sequential modification of membrane currents with classical conditioning. Collin C, et al. **Biophys J** 1988 Nov; 54(5):955–60
Incorporation of ionic channels from yeast plasma membranes into black lipid membranes. Gómez-Lagunas F, et al. **Biophys J** 1989 Jul;56(1):115–9
TEA prevents inactivation while blocking open K+ channels in human T lymphocytes. Grissmer S, et al. **Biophys J** 1989 Jan;55(1):203–6
Direct measurement of translingual epithelial NaCl and KCl currents during the chorda tympani taste response. Heck GL, et al. **Biophys J** 1989 May;55(5):843–57
Potassium channel of cardiac sarcoplasmic reticulum is a multi-ion channel. Hill JA Jr, et al. **Biophys J** 1989 Jan; 55(1):35–45
Delayed activation of large-conductance Ca2+-activated K channels in hippocampal neurons of the rat. Ikemoto Y, et al. **Biophys J** 1989 Jul;56(1):207–12
ATP-sensitive potassium channel and bursting in the pancreatic beta cell. A theoretical study. Keizer J, et al.
Biophys J 1989 Aug;56(2):229–42
Statistical discrimination of fractal and Markov models of single-channel gating. Korn SJ, et al. **Biophys J** 1988 Nov; 54(5):871–7
K channel kinetics during the spontaneous heart beat in embryonic chick ventricle cells. Mazzanti M, et al.
Biophys J 1988 Dec;54(6):1139–48
Emergence of organized bursting in clusters of pancreatic beta-cells by channel sharing. Sherman A, et al.
Biophys J 1988 Sep;54(3):411–25
Effects of potassium channel blockade on endogenous glutamate release from cerebellar slices. Barnes S, et al.
Brain Res 1989 May 1;486(1):89–94
Analogies and differences in the mode of action and properties of binding sites (localization and mutual interactions) of two K+ channel toxins, MCD peptide and dendrotoxin I. Bidard JN, et al. **Brain Res** 1989 Aug 21; 495(1):45–57
Evidence for two types of potassium channel in human motor axons in vivo. Bostock H, et al. **Brain Res** 1988 Oct 18; 462(2):354–8
Voltage-dependent opening of single calcium-activated potassium channels in Helix neurons. Chagneux H, et al.
Brain Res 1989 May 29;488(1–2):336–40
Galanin inhibits dopamine secretion and activates a potassium channel in pheochromocytoma cells. de Weille JR, et al.
Brain Res 1989 Apr 17;485(1):199–203
Subtypes of K+ channels differentiated by the effect of K+ channel openers upon K+ channel blocker-induced seizures. Gandolfo G, et al. **Brain Res** 1989 Aug 21; 495(1):189–92
Forskolin reduces a transient potassium current in lobster neurons by a cAMP-independent mechanism.
Harris-Warrick RM. **Brain Res** 1989 Jun 5;489(1):59–66
Properties of single potassium channels in cultured primary astrocytes. Jalonen T, et al. **Brain Res** 1989 Apr 10; 484(1–2):177–83
Cerebral glucose utilization after administration of apamin, a toxin active on Ca2+-dependent K+ channels. Mourre C, et al. **Brain Res** 1988 Jun 7;451(1–2):274–84
Cyclic AMP-dependent protein phosphorylation is involved in activation of the potassium current associated with endogenous cellular calcium in Euhadra neurons. Onozuka M, et al. **Brain Res** 1988 Nov 15;473(2):401–5
Two types of K+ channels in excised patches of somatic membrane of the leech AP neuron. Pellegrini M, et al.
Brain Res 1989 Apr 3;483(2):294–300
Effects of apamin on the discharge properties of putative dopamine-containing neurons in vitro. Shepard PD, et al.
Brain Res 1988 Nov 1;463(2):380–4
Intracellular injection of apamin reduces a slow potassium current mediating afterhyperpolarizations and IPSPs in neocortical neurons of cats. Szente MB, et al.
Brain Res 1988 Sep 27;461(1):64–74
A role for potassium channels in the regulation of cortical muscarinic acetylcholine receptors in an in vitro slice preparation. Shaw C, et al. **Brain Res Mol Brain Res** 1989 Jan;5(1):71–83
Calcium-activated potassium channels of large unitary conductance. Behrens MI, et al. **Braz J Med Biol Res** 1988; 21(6):1101–17 (84 ref.)
Aldosterone-controlled linkage between Na+/H+ exchange and K+ channels in fused renal epithelial cells. Oberleithner H, et al. **Ciba Found Symp** 1988;139:201–19
Enhancement of potassium-sensitive current in heart cells by pinacidil. Evidence for modulation of the ATP-sensitive potassium channel. Arena JP, et al. **Circ Res** 1989 Aug; 65(2):436–45
Current fluctuations and oscillations in smooth muscle cells from hog carotid artery. Role of the sarcoplasmic reticulum. Désilets M, et al. **Circ Res** 1989 Sep;65(3):708–22
Direct coupling of G proteins to ionic channels. Brown AM, et al. **Cold Spring Harb Symp Quant Biol** 1988;53 Pt 1:365–73
Signalling in taste receptor cells: cAMP-dependent protein kinase causes depolarization by closure of 44 pS K-channels. Avenet P, et al.
Comp Biochem Physiol [A] 1988;90(4):681–5
Characterization of a purified co-transporting protein. Zeuthen T, et al. **Comp Biochem Physiol [A]** 1988; 90(4):687–91
Expression and modulation of K+ currents in oligodendrocytes: possible role in myelinogenesis. Soliven B, et al. **Dev Neurosci** 1989;11(2):118–31 (51 ref.)
Tolbutamide as mimic of glucose on beta-cell electrical activity. ATP-sensitive K+ channels as common pathway for both stimuli. Cook DL, et al. **Diabetes** 1989 Apr; 38(4):416–21
Metabolite-regulated ATP-sensitive K+ channel in human pancreatic islet cells. Misler S, et al. **Diabetes** 1989 Apr; 38(4):422–7
The ATP- and tolbutamide-sensitivity of the ATP-sensitive K-channel from human pancreatic B cells. Ashcroft FM, et al. **Diabetologia** 1989 Aug;32(8):591–8
Sodium and potassium currents recorded during an action potential. de Haas V, et al. **Eur Biophys J** 1989;17(1):49–51
Expression of K channels in Xenopus laevis oocytes injected with poly(A+) mRNA from the insulin-secreting beta-cell line, HIT T15. Ashcroft FM, et al. **FEBS Lett** 1988 Nov 7;239(2):185–9
Potassium channels expressed from rat brain cDNA have delayed rectifier properties. Stühmer W, et al.
FEBS Lett 1988 Dec 19;242(1):199–206
Cytosolic ADP enhances the sensitivity to tolbutamide of ATP-dependent K+ channels from pancreatic B-cells. Zünkler BJ, et al. **FEBS Lett** 1988 Nov 7;239(2):241–4
Cation transport in lymphoblastoid cell lines established from bipolar manic-depressive patients. Banks RE, et al.
J Affective Disord 1989 Mar–Jun;16(2–3):259–67
Effects of potassium channel-blocking agents on neurons in the inferior mesenteric ganglion in guinea-pig. King BF, et al. **J Auton Nerv Syst** 1988 Sep;23(3):241–52
Recombinant alpha i-3 subunit of G protein activates Gk-gated K+ channels. Mattera R, et al. **J Biol Chem** 1989 Jan 5;264(1):465–71
Thyrotropin-releasing hormone-induced rise in cytosolic calcium and activation of outward K+ current monitored

simultaneously in individual GH3B6 pituitary cells. Mollard P, et al. **J Biol Chem** 1988 Dec 25;263(36):19570–6

Mutual contact of murine erythroleukemia cells activates depolarizing cation channels, whereas contact with extracellular substrata activates hyperpolarizing Ca2+–dependent K+ channels. Arcangeli A, et al. **J Cell Physiol** 1989 Apr;139(1):1–8

Ca2+–activated K+ efflux limits complement–mediated lysis of human erythrocytes. Halperin JA, et al. **J Clin Invest** 1989 May;83(5):1466–71

Na+, K+ and Ca2+ currents in identified leech neurones in culture. Stewart RR, et al. **J Exp Biol** 1989 Jan;141:1–20

Heterogeneity of lymphocyte calcium metabolism is caused by T cell–specific calcium–sensitive potassium channel and sensitivity of the calcium ATPase pump to membrane potential. Ishida Y, et al. **J Exp Med** 1988 Sep 1; 168(3):839–52

Digitonin–permeabilized colonic cell layers. Demonstration of calcium–activated basolateral K+ and Cl– conductances. Chang D, et al. **J Gen Physiol** 1988 Sep; 92(3):281–306

"Caged calcium" in Aplysia pacemaker neurons. Characterization of calcium–activated potassium and nonspecific cation currents. Landò L, et al. **J Gen Physiol** 1989 Jun;93(6):1017–60

Low pO2 selectively inhibits K channel activity in chemoreceptor cells of the mammalian carotid body. López–López J, et al. **J Gen Physiol** 1989 May; 93(5):1001–15

Voltage–gated potassium channels in brown fat cells. Lucero MT, et al. **J Gen Physiol** 1989 Mar;93(3):451–72

Potassium blocks barium permeation through a calcium–activated potassium channel. Neyton J, et al. **J Gen Physiol** 1988 Nov;92(5):549–67

Discrete Ba2+ block as a probe of ion occupancy and pore structure in the high–conductance Ca2+ –activated K+ channel. Neyton J, et al. **J Gen Physiol** 1988 Nov; 92(5):569–86

Activation by divalent cations of a Ca2+–activated K+ channel from skeletal muscle membrane. Oberhauser A, et al. **J Gen Physiol** 1988 Jul;92(1):67–86

Two K+ channel types, muscarinic agonist–activated and inwardly rectifying, in a Cl– secretory epithelium: the avian salt gland. Richards NW, et al. **J Gen Physiol** 1989 Jun; 93(6):1171–94

K+ transport properties of K+ channels in the plasma membrane of Vicia faba guard cells. Schroeder JI. **J Gen Physiol** 1988 Nov;92(5):667–83

Pharmacological and kinetic analysis of K channel gating currents. Spires S, et al. **J Gen Physiol** 1989 Feb; 93(2):263–83

Properties of calcium and potassium currents of clonal adrenocortical cells. Tabares L, et al. **J Gen Physiol** 1989 Mar;93(3):495–519

Inositol 1,3,4,5–tetrakisphosphate is essential for sustained activation of the Ca2+–dependent K+ current in single internally perfused mouse lacrimal acinar cells. Changya L, et al. **J Membr Biol** 1989 Jul;109(1):85–93

Comparative study of K channel behavior in beta cell lines with different secretory responses to glucose. Eddlestone GT, et al. **J Membr Biol** 1989 Jul;109(2):123–34

Patch–clamp studies in human macrophages: single–channel and whole–cell characterization of two K+ conductances. Gallin EK, et al. **J Membr Biol** 1988 Jul;103(1):55–66

Ca2+–activated K+ currents in Necturus choroid plexus. Loo DD, et al. **J Membr Biol** 1988 Nov;105(3):221–31

Inwardly rectifying whole–cell and single–channel K currents in the murine macrophage cell line J774.1. McKinney LC, et al. **J Membr Biol** 1988 Jul;103(1):41–53

Modulation of gating of a metabolically regulated, ATP–dependent K+ channel by intracellular pH in B cells of the pancreatic islet. Misler S, et al. **J Membr Biol** 1989 Jul;109(2):135–43

Role of the sodium pump and the background K+ channel in passive K+(Rb+) uptake by isolated cardiac sarcolemmal vesicles. Otero AS, et al. **J Membr Biol** 1988 Sep;104(3):253–63

Ion concentration–dependent regulation of Na,K–pump abundance. Pressley TA. **J Membr Biol** 1988 Nov; 105(3):187–95 (51 ref.)

Influence of ATP–sensitive potassium channel modulators on ischemia–induced fibrillation in isolated rat hearts. Wolleben CD, et al. **J Mol Cell Cardiol** 1989 Aug; 21(8):783–8

Voltage–gated potassium channels in larval CNS neurons of Drosophila. Solc CK, et al. **J Neurosci** 1988 Jul; 8(7):2556–70

Protein kinase C activators reduce the inositol trisphosphate–induced outward current and the Ca2+–activated outward current in identified neurons of Aplysia. Sawada M, et al. **J Neurosci Res** 1989 Feb; 22(2):158–66

K+ channel and adenylate cyclase involvement in regulation of Ca2+–evoked release of [3H]dopamine from synaptosomes. Bowyer JF, et al. **J Pharmacol Exp Ther** 1989 Feb;248(2):514–20

Activation of ATP–sensitive outward K+ current by nicorandil (2–nicotinamidoethyl nitrate) in isolated ventricular myocytes. Hiraoka M, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):278–85

In vitro and in vivo comparison of two K+ channel openers, diazoxide and cromakalim, and their inhibition by glibenclamide. Quast U, et al. **J Pharmacol Exp Ther** 1989 Jul;250(1):261–71

Characterization of membrane currents in dissociated adult rat pineal cells. Aguayo LG, et al. **J Physiol (Lond)** 1988 Nov;405:397–419

Rubidium and sodium permeability of the ATP–sensitive K+ channel in single rat pancreatic beta–cells. Ashcroft FM, et al. **J Physiol (Lond)** 1989;408:413–29

The role of potassium channels in Schwann cell proliferation in Wallerian degeneration of explant rabbit sciatic nerves. Chiu SY, et al. **J Physiol (Lond)** 1989;408:199–222

Repolarization current in embryonic chick atrial heart cells. Clay JR, et al. **J Physiol (Lond)** 1988 Sep;403:525–37

On the mechanism of a pH–induced rise in membrane potassium conductance in hamster eggs. Georgiou P, et al. **J Physiol (Lond)** 1988 Aug;402:121–38

Comparison of potassium currents in rabbit atrial and ventricular cells. Giles WR, et al. **J Physiol (Lond)** 1988 Nov;405:123–45

The potassium conductance of the resting squid axon and its blockage by clinical concentrations of general anaesthetics. Haydon DA, et al. **J Physiol (Lond)** 1988 Aug; 402:363–74

Ca2+ sensitivity of volume–regulatory K+ and Cl– channels in cultured human epithelial cells. Hazama A, et al. **J Physiol (Lond)** 1988 Aug;402:687–702

Dual effects of intracellular magnesium on muscarinic potassium channel current in single guinea–pig atrial cells. Horie M, et al. **J Physiol (Lond)** 1989;408:313–32

An acetylcholine–induced potassium current in tail sensory neurons in the pleural ganglion of Aplysia. Ichinose M, et al. **Jpn J Physiol** 1988;38(4):563–8

Regulation of the Na,K–pump in skeletal muscle. Clausen T, et al. **Kidney Int** 1989 Jan;35(1):1–13 (170 ref.)

GABAB receptor activation inhibits Ca2+–activated potassium channels in synaptosomes: involvement of G–proteins. Ticku MK, et al. **Life Sci** 1989;44(18):1271–6

Age–related changes in the function of somatic membrane potassium channels of neurons in the mollusc Lymnaea stagnalis. Frolkis VV, et al. **Mech Ageing Dev** 1989 Jan; 47(1):47–54

A novel potassium channel with delayed rectifier properties isolated from rat brain by expression cloning. Frech GC, et al. **Nature** 1989 Aug 24;340(6235):642–5

Regulation of Ca2+–dependent K+–channel activity in tracheal myocytes by phosphorylation. Kume H, et al. **Nature** 1989 Sep 14;341(6238):152–4

Different actions of a short–acting barbiturate on sodium and potassium conductances in invertebrate and vertebrate neurons. Johansen J, et al. **Neuropharmacology** 1989 Feb; 28(2):153–60

Multiple voltage–sensitive K+ channels regulate dendritic excitability in cerebellar Purkinje neurons [published erratum appears in Neurosci Lett 1989 Jun 5;101(1):following 118] Gruol DL, et al. **Neurosci Lett** 1989 Feb 13;97(1–2):97–102

Dendrotoxin–sensitive K+ channels in dorsal root ganglion cells. Stansfeld C, et al. **Neurosci Lett** 1988 Oct 31; 93(1):49–55

Ion and ion channel involvement in alpha–melanocyte–stimulating hormone secretion from superfused slices of rat hypothalamus. Tiligada E, et al. **Neurosci Lett** 1988 Dec 19;95(1–3):318–22

Calcium influx through N–methyl–D–aspartate channels activates a potassium current in postnatal rat hippocampal neurons. Zorumski CF, et al. **Neurosci Lett** 1989 May 8; 99(3):293–9

Does galanin inhibit insulin secretion by opening of the ATP–regulated K+ channel in the beta–cell? Ahrén B, et al. **Peptides** 1989 Mar–Apr;10(2):453–7

Potassium channels: function, regulation and pharmacology in neuronal, muscular, secretory and immune systems. Proceedings of the Rhône–Polenc Santé Foundation, 6th international round table. Paris, 23rd January 1989. **Pflugers Arch** 1989;414 Suppl 1:S71–193

Potassium current kinetics and single–channel currents in embryonic cultured insect neurones. Amar M, et al. **Pflugers Arch** 1989;414 Suppl 1:S145–6

A Ca2+–activated K+ current in guinea–pig atrial myocytes. Baró I, et al. **Pflugers Arch** 1989;414 Suppl 1:S168

Potassium channels in lizard nodes of Ranvier and motor endings. Benoit E, et al. **Pflugers Arch** 1989;414 Suppl 1:S133–4

KNa. A sodium–activated potassium current. Bertrand D, et al. **Pflugers Arch** 1989;414 Suppl 1:S76–9

The distribution of potassium and leakage channels in rat myelinated axons. Bostock H. **Pflugers Arch** 1989;414 Suppl 1:S139

Potassium channels in human glioma cells. Brismar T, et al. **Pflugers Arch** 1989;414 Suppl 1:S137–8

K+ channels in cardiac cells: mechanisms of activation, inactivation, rectification and K+e sensitivity. Carmeliet E. **Pflugers Arch** 1989;414 Suppl 1:S88–92 (41 ref.)

K+ currents in developing hippocampal cells. Ficker E, et al. **Pflugers Arch** 1989;414 Suppl 1:S125

Single calcium–activated potassium channel in cultured mammary epithelial cells. Furuya K, et al. **Pflugers Arch** 1989 Jun;414(2):118–24

Electrophysiological function of the delayed rectifier (IK) in bullfrog sympathetic ganglion neurones. Goh JW, et al. **Pflugers Arch** 1989 Mar;413(5):482–6

Involvement of calcium–activated K+ channels in the firing characteristics of molluscan neurones. Gola M, et al. **Pflugers Arch** 1989;414 Suppl 1:S142–3

Different K+ channels in human atrial cells. Heidbüchel H, et al. **Pflugers Arch** 1989;414 Suppl 1:S171–2

Kinetics and distribution of voltage–gated Ca, Na and K channels on the somata of rat cerebellar Purkinje cells. Hirano T, et al. **Pflugers Arch** 1989 Mar;413(5):463–9

Calcium–activated K–channels of Amphiuma early distal tubule: inhibition by ATP. Hunter M, et al. **Pflugers Arch** 1988 Aug;412(3):331–3

Ca2+–activated K+ current generating the after–hyperpolarization in mammalian nonmyelinated nerve fibres. Jirounek P, et al. **Pflugers Arch** 1989;414 Suppl 1:S135–6

Characterization of potassium channels in respiratory cells. I. General properties. Kunzelmann K, et al. **Pflugers Arch** 1989 Jul;414(3):291–6

Characterization of potassium channels in respiratory cells. II. Inhibitors and regulation. Kunzelmann K, et al. **Pflugers Arch** 1989 Jul;414(3):297–303

Multiplicity of unitary potassium channels recorded in the somata of cultured neurones from cockroach embryos. Larmet Y, et al. **Pflugers Arch** 1989;414 Suppl 1:S147

A delayed all–or–none hyperpolarisation induced by a single Ca action potential in hamster eggs. McNiven AI, et al. **Pflugers Arch** 1988 Sep;412(4):451–3

Ca2+–activated K+ channels in lymphocytes. Mahaut–Smith MP, et al. **Pflugers Arch** 1989;414 Suppl 1:S164–5

Direct evidence for control by cytosolic Ca2+ of K+ currents in pituitary cells. Mollard P, et al. **Pflugers Arch** 1989;414 Suppl 1:S156–7

Regulation of K+ channels plays a crucial role in the control of insulin secretion. Petersen OH, et al. **Pflugers Arch** 1989; 414 Suppl 1:S115–20 (38 ref.)

Molecular basis of potassium channel diversity. Pongs O. **Pflugers Arch** 1989;414 Suppl 1:S71–5 (23 ref.)

Three voltage–activated K+ conductances and an ATP–activated conductance in freshly isolated embryonic chick osteoclasts. Ravesloot JH, et al. **Pflugers Arch** 1989; 414 Suppl 1:S166–7

Demonstration of A–currents in pancreatic islet cells. Smith PA, et al. **Pflugers Arch** 1989 Feb;413(4):441–3

Voltage–activated, delayed rectifier K+ current from pulvinar protoplasts of Mimosa pudica. Stoeckel H, et al. **Pflugers Arch** 1989;414 Suppl 1:S150–1

Three potassium currents in mouse motor nerve terminals. Tabti N, et al. **Pflugers Arch** 1989 Feb;413(4):395–400

K+ conductance of mechanically dissociated rat sensory neurones in long term cultures in a defined medium. Ypey DL, et al. **Pflugers Arch** 1989;414 Suppl 1:S129–30

A novel cardiac potassium channel that is active and conductive at depolarized potentials. Yue DT, et al. **Pflugers Arch** 1988 Dec;413(2):127–33

Alpha 1–adrenergic agonists selectively suppress voltage–dependent K+ current in rat ventricular myocytes. Apkon M, et al. **Proc Natl Acad Sci U S A** 1988 Nov;85(22):8756–60

Reconstitution of an inwardly rectifying potassium channel from the basolateral membranes of Necturus enterocytes into planar lipid bilayers. Costantin J, et al. **Proc Natl Acad Sci U S A** 1989 Jul;86(13):5212–6

Regulation of ATP–sensitive K+ channels in insulinoma cells: activation by somatostatin and protein kinase C and the role of cAMP. de Weille JR, et al. **Proc Natl Acad Sci U S A** 1989 Apr;86(8):2971–5

Single–channel recording in myelinated nerve fibers reveals one type of Na channel but different K channels. Jonas P, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7238–42

Angiotensin II induces oscillations of intracellular calcium and blocks anomalous inward rectifying potassium current in mouse renal juxtaglomerular cells. Kurtz A, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3423–7

Single potassium channels opened by opioids in rat locus ceruleus neurons. Miyake M, et al. **Proc Natl Acad Sci U S A** 1989 May;86(9):3419–22

Voltage–activated K+ conductances in freshly isolated embryonic chicken osteoclasts. Ravesloot JH, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(17):6821–5

Failure of glucose to elicit a normal secretory response in fetal pancreatic beta cells results from glucose insensitivity of the ATP–regulated K+ channels. Rorsman P, et al. **Proc Natl Acad Sci U S A** 1989 Jun;86(12):4505–9

A stretch–activated K+ channel sensitive to cell volume. Sackin H. **Proc Natl Acad Sci U S A** 1989 Mar;86(5):1731–5

Guanosine 5'–monophosphate modulates gating of high–conductance Ca2+–activated K+ channels in vascular smooth muscle cells. Williams DL Jr, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(23):9360–4

Gating of single Shaker potassium channels in Drosophila muscle and in Xenopus oocytes injected with Shaker mRNA. Zagotta WN, et al. **Proc Natl Acad Sci U S A** 1989 Sep;86(18):7243–7

Fatty acid modifies Ca2+–dependent potassium channel activity in smooth muscle cells from the human aorta. Bregestovski PD, et al. **Proc R Soc Lond [Biol]** 1989 Aug 22;237(1288):259–66

Stretch–activated ion channels modulate the resting membrane potential during early embryogenesis. Medina IR, et al. **Proc R Soc Lond [Biol]** 1988 Oct 22; 235(1278):95–102

The sodium/potassium pump in mononuclear leucocytes from 8- to 10-year old children having increased risk of developing hypertension. Johansen T, et al. **Scand J Clin Lab Invest Suppl** 1989;192:37-41

A family of putative potassium channel genes in Drosophila. Butler A, et al. **Science** 1989 Feb 17;243(4893):943-7

Potassium channels in cardiac cells activated by arachidonic acid and phospholipids. Kim D, et al. **Science** 1989 Jun 9;244(4909):1174-6

Stretch-inactivated ion channels coexist with stretch-activated ion channels. Morris CE, et al. **Science** 1989 Feb 10;243(4892):807-9

Activation of muscarinic potassium currents by ATP gamma S in atrial cells. Otero AS, et al. **Science** 1988 Oct 21; 242(4877):443-5

Cloning of a membrane protein that induces a slow voltage-gated potassium current. Takumi T, et al. **Science** 1988 Nov 18;242(4881):1042-5

Newly identified brain potassium channels gated by the guanine nucleotide binding protein Go. VanDongen AM, et al. **Science** 1988 Dec 9;242(4884):1433-7

Regulation of a heart potassium channel by protein kinase A and C. Walsh KB, et al. **Science** 1988 Oct 7; 242(4875):67-9

Regulation and function of ATP-dependent K+ channels in pancreatic B cells. Trube G, et al. **Soc Gen Physiol Ser** 1989;44:83-95 (31 ref.)

Spontaneous activity in afferent and efferent fibers after chronic axotomy: response to potassium channel blockade. Russell LC, et al. **Somatosens Mot Res** 1988;6(2):163-77

Up- and down-modulation of single K+ channel function by distinct second messengers. Belardetti F, et al. **Trends Neurosci** 1988 May;11(5):232-8 (44 ref.)

Shaker shakes out potassium channels. Miller C. **Trends Neurosci** 1988 May;11(5):185-6

[The pacemaker current of cardiac Purkinje cells--from ik2 to if] Xu YQ. **Sheng Li Ko Hsueh Chin Chan** 1988 Jul; 19(3):252-5 (14 ref.) **(Chi)**

[Regulation of potassium channels in insulin secreting cells] Petersen OH. **Arzneimittelforschung** 1989 Jan;39(1A):181-5 (31 ref.) (Eng. Abstr.) **(Ger)**

[Stretch-activated potassium channels in the plasma membrane of cleaving loach embryos] Brezhestovskii PD, et al. **Dokl Akad Nauk SSSR** 1988;302(4):969-72 **(Rus)**

[Monohydration mechanism of the selection of alkali metal cations by the potassium channels of excitable biomembranes] Kariev AM, et al. **Dokl Akad Nauk SSSR** 1988;302(4):973-5 **(Rus)**

[Effect of Mg2+ on fast Ka+-channels in molluskan neurons] Kazachenko VN, et al. **Dokl Akad Nauk SSSR** 1988;301(4):997-1002 **(Rus)**

[Effect of protein-modifying factors on sodium and potassium leakage currents of the secretory cell membranes] Klevets MIu. **Fiziol Zh** 1989 Mar-Apr;35(2):3-6 (Eng. Abstr.) **(Rus)**

[Possible role of the potential-dependent potassium channels in the generation of responses of the pacinian corpuscles] Akoev GN, et al. **Neirofiziologiia** 1988;20(5):623-30 (Eng. Abstr.) **(Rus)**

[A single calcium channel with anomalous rectification in mollusk neurons] Kachman AN, et al. **Neirofiziologiia** 1989; 21(1):31-8 (Eng. Abstr.) **(Rus)**

[Participation of calcium-dependent potassium conductance in the processes of membrane hyperpolarization of the pyramidal neurons in the sensorimotor cortex in the cat] Kokaia ZG, et al. **Neirofiziologiia** 1988;20(3):383-9 (Eng. Abstr.) **(Rus)**

[Inactivation of potassium outward current depending on the extracellular calcium ions] Martynok AE, et al. **Neirofiziologiia** 1988;20(5):602-10 (Eng. Abstr.) **(Rus)**

[The cation specificity of the potassium and gramicidin channels of muscle fiber membrane] Shvinka NE, et al. **Tsitologiia** 1988 Sep;30(9):1101-7 (Eng. Abstr.) **(Rus)**

RADIATION EFFECTS

[Postradiation changes of active ion transport systems of the CNS. The effect of superlethal doses of ionizing radiation on the Na,K pump in surviving brain slices] Dvoretskii AI, et al. **Radiobiologiia** 1989 Jul-Aug;29(4):477-80 (Eng. Abstr.) **(Rus)**

POTASSIUM CHLORIDE

Selective fetocide by direct intracardiac injection of isotonic potassium chloride. Westendorp AK, et al. **Arch Gynecol Obstet** 1988;244(1):59-62

ADMINISTRATION & DOSAGE

Moderate potassium supplementation: ineffective in black normotensives. Poulter NR, et al. **East Afr Med J** 1986 Dec;63(12):798-802

Effect of dietary potassium chloride on feeder pig performance, market shrink, carcass traits and selected blood parameters. Brumm MC, et al. **Anim Sci** 1989 Jun; 67(6):1411-7

Comparison of efficacy of a glucose/glycine/glycylglycine electrolyte solution versus the standard WHO/ORS in diarrheic dehydrated children. Pizarro D, et al. **J Pediatr Gastroenterol Nutr** 1988 Nov-Dec;7(6):882-8

A comparison of wax matrix and microencapsulated potassium chloride in relation to upper gastrointestinal illness requiring hospitalization. Jick H, et al. **Pharmacotherapy** 1989;9(4):204-6

[Treatment of acute diarrhea in infants and young children with a new formulated oral rehydration solution] Guggenbichler JP, et al. **Wien Med Wochenschr** 1989 Jun 30;139(12):285-7 (Eng. Abstr.) **(Ger)**

[Evaluation of the need for potassium supplementation in patients subjected to furosemide therapy] Jardim PC, et al. **Arq Bras Cardiol** 1988 Aug;51(2):153-6 (Eng. Abstr.) **(Por)**

ADVERSE EFFECTS

Inadvertent epidural administration of potassium chloride. A case report. Tessler MJ, et al. **Can J Anaesth** 1988 Nov; 35(6):631-3

Severe metabolic acidosis induced in a patient during fasting by KCl administration. Leiter LA, et al. **Clin Invest Med** 1988 Aug;11(4):266-70

Patient tolerance to intravenous potassium chloride with and without lidocaine. Pucino F, et al. **Drug Intell Clin Pharm** 1988 Sep;22(9):676-9

ANTAGONISTS & INHIBITORS

Barbiturate anesthetics inhibit thromboxane-, potassium-, but not angiotensin-induced pulmonary vasoconstriction. McShane AJ, et al. **Anesthesiology** 1989 May;70(5):775-9

BLOOD

Stimulation of K-Cl cotransport in rat red cells by a hemolytic anemia-producing metabolite of dapsone. Haas M, et al. **Am J Physiol** 1989 Feb;256(2 Pt 1):C265-72

METABOLISM

Amiloride prevents the metabolic acidosis of a KCl load in nephrectomized rats. Altenberg GA, et al. **Clin Sci** 1989 Jun;76(6):649-52

PHARMACOKINETICS

Carrier-mediated Cl- transport in cultured mouse oligodendrocytes. Hoppe D, et al. **J Neurosci Res** 1989 Aug;23(4):467-75

Bioavailability and pharmacokinetics of a new sustained-release potassium chloride tablet. Betlach CJ, et al. **Pharm Res** 1987 Oct;4(5):409-11

PHARMACOLOGY

Prolonged exposure to a K-rich medium makes the rat mast cell membrane permeable to external calcium ions. Sorimachi M, et al. **Agents Actions** 1989 Aug;28(1-2):22-33

Abnormal contractile response of aortas from spontaneously hypertensive rats to Ca2+ after depletion of Ca2+ in Ca2+-free medium. Guan YY, et al. **Am J Hypertens** 1989 Aug;2(8):643-6

No significant increase in O2 consumption of KCl-arrested dog heart with filling and dobutamine. Nozawa T, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):H807-12

Effect of potassium ion on the phosphorus-31 nuclear magnetic resonance spectrum of the pyridoxal 5'-phosphate cofactor of Escherichia coli D-serine dehydratase. Kojiro CL, et al. **Arch Biochem Biophys** 1989 Jan;268(1):67-73

Volume and length changes in outer hair cells of the guinea pig after potassium-induced shortening. Ulfendahl M. **Arch Otorhinolaryngol** 1988;245(4):237-43

TPA- and agonist-induced force development in myometrium from pregnant and non-pregnant rats. Missiaen L, et al. **Biochem Biophys Res Commun** 1989 Jan 16;158(1):302-6

Spreading depression induced by 100 mM KCl in caudate is blocked by local anesthesia of the substantia nigra. Kasser RJ, et al. **Brain Res** 1988 Dec 20;475(2):333-44

Treatment of mouse brain cytosol with dextran-coated charcoal and high salt does not reveal a new glucocorticoid binder. Luttge WG, et al. **Brain Res** 1989 Jul 24; 493(1):190-3

Release of endogenous opioid peptides displaces [3H]diprenorphine binding in rat hippocampal slices. Neumaier JF, et al. **Brain Res** 1989 Jul 31;493(2):292-302

Evidence for regionally selective changes in response to potassium chloride but not vasopressin or methoxamine in vasculature from diabetic rats. Hebden RA, et al. **Can J Physiol Pharmacol** 1988 Nov;66(11):1464-7

Differential decondensation of mitotic chromosomes during hypotonic treatment of living cells as a possible cause of G-banding: an ultrastructura study. Zatsepina OV, et al. **Chromosoma** 1989 Aug;98(2):109-116

Urinary kallikrein excretion during potassium chloride infusion in potassium-adapted rats: effect of amiloride. Obika LF. **Clin Sci** 1989 Jul;77(1):21-7

Comparative properties of mammalian and insect carbonic anhydrases: effects of potassium and chloride on the rate of carbon dioxide hydration. Johnston JW, et al. **Comp Biochem Physiol [B]** 1979;62(4):465-9

Enhancement by veratridine and 60 mM KCl of vasopressin-induced 3',5'-cyclic adenosine monophosphate production and cellular free calcium concentration in rat renal papillary collecting tubule cells in culture. Ishikawa S, et al. **Endocrinology** 1989 Jan;124(1):265-71

Different effects of norepinephrine and KCl on the cytosolic Ca2+-tension relationship in vascular smooth muscle of rat aorta. Karaki H, et al. **Eur J Pharmacol** 1988 Jul 7; 151(2):325-8

Identification of S-100 proteins and S-100-binding proteins in a detergent-resistant EDTA/KCl-extractable fraction from bovine brain membranes. Donato R, et al. **FEBS Lett** 1989 Apr 10;247(1):31-5

Growth factors and membrane depolarization activate distinct programs of early response gene expression: dissociation of fos and jun induction. Bartel DP, et al. **Genes Dev** 1989 Mar;3(3):304-13

Effect of elevated potassium concentration in the perilymph on the nonlinearity of cochlear microphonics in the guinea-pig cochlea. Avan P, et al. **Hear Res** 1988 Sep 15; 35(2-3):159-64

Increased food intake in children treated with puffed rice based ORS. Bhan MK, et al. **Indian Pediatr** 1988 Feb; 25(2):193-5

Beta-adrenergic relaxation of dog trachealis: contractile agonist-specific interaction. Koenig SM, et al. **J Appl Physiol** 1989 Jul;67(1):181-5

Protective role of epithelium in the guinea pig airway. Munakata M, et al. **J Appl Physiol** 1989 Apr;66(4):1547-52

Functional comparison of villin and gelsolin. Effects of Ca2+, KCl, and polyphosphoinositides. Janmey PA, et al. **J Biol Chem** 1988 Nov 15;263(32):16738-43

Effects of salts in promoting the adhesion of amphibian gastrula cells. Komazaki S. **J Exp Zool** 1989 Apr; 250(1):40-8

Acute choline supplementation in vivo enhances acetylcholine synthesis in vitro when neurotransmitter release is increased by potassium. Wecker L, et al. **J Neurochem** 1989 Feb;52(2):568-75

A volume-dependent, chloride-sensitive component of taurine release stimulated by potassium from retina. Dominguez L, et al. **J Neurosci Res** 1989 Mar;22(3):356-61

Norepinephrine and adenosine triphosphate release in different ratio from guinea pig vas deferens by high potassium chloride, ouabain and monensin. Katsuragi T, et al. **J Pharmacol Exp Ther** 1988 Oct;247(1):302-8

Desensitization of alpha-1 adrenergic receptor mediated smooth muscle contraction in aorta from endotoxic rats. Wakabayashi I, et al. **Life Sci** 1989;45(6):509-15

CGS 9343B and W7 (calmodulin antagonists) inhibit KCl-induced increase in cytosolic free calcium and insulin secretion of RINm5F cells. Safayhi H, et al. **Naunyn Schmiedebergs Arch Pharmacol** 1989 Jan-Feb; 339(1-2):8-13

Assessment and validation of animal models to evaluate topical effects of substances on gastrointestinal mucosa. Fara JW, et al. **Pharm Res** 1988 Mar;5(3):165-71

Effect of nimodipine on canine cerebrovascular responses to 5-hydroxytryptamine and potassium chloride after exposure to blood. Tsuji T, et al. **Stroke** 1989 Jan; 20(1):105-11

[Differential decondensation of mitotic chromosomes during the hypotonic treatment of cells as a possible cause of G-banding] Zatsepina OV, et al. **Tsitologiia** 1988 Oct; 30(10):1172-9 (Eng. Abstr.) **(Rus)**

[The effect of NaCl and KCl administration on median blood pressure, body weight, the ionogram of saliva, serum and urine and plasma renin activity in healthy persons and stage I hypertensive patients] Fekete Z, et al. **Vnitr Lek** 1988 Dec;34(12):1161-8 (Eng. Abstr.) **(Slo)**

THERAPEUTIC USE

Furosemide and sodium bicarbonate-induced alkalosis in the horse and response to oral KCl or NaCl therapy. Freestone JF, et al. **Am J Vet Res** 1989 Aug;50(8):1334-9

Anaesthetic complications of a weight reducing regimen. Field JM. **BMJ** 1988 Nov 26;297(6660):1383

Oral rehydration formula containing alanine and glucose for treatment of diarrhoea: a controlled trial. Patra FC, et al. **BMJ** 1989 May 20;298(6684):1353-6

Brazilian popular healers as effective promoters of oral rehydration therapy (ORT) and related child survival strategies. Nations MK, et al. **Bull Pan Am Health Organ** 1988;22(4):335-54

Hyperkalemia-like ECG changes simulating acute myocardial infarction in a patient with hypokalemia undergoing potassium replacement [published erratum appears in J Electrocardiol 1989 Jul;22(3):following 276] Madias JE, et al. **J Electrocardiol** 1989 Jan;22(1):93-7

Oral rehydration therapy in a rural area, northern Thailand. Varavithya W, et al. **J Med Assoc Thai** 1989 Jan;72 Suppl 1:159-63

Oral rehydration therapy in young infants less than 3 months with acute diarrhoea and moderate dehydration. Sunoto, et al. **Paediatr Indones** 1988 Mar-Apr;28(3-4):67-78

POTASSIUM CYANIDE see under **CYANIDES**

POTASSIUM DEFICIENCY

CHEMICALLY INDUCED

[The need of potassium loss compensation in treatment with diuretics] Glezer GA, et al. **Klin Med (Mosk)** 1989 Jun; 67(6):21-7 (29 ref.) **(Rus)**

COMPLICATIONS

Effect of potassium depletion on ischemic renal failure. Seguro AC, et al. **Nephron** 1989;51(3):350-4

ENZYMOLOGY

Protease effects on adenylate cyclase in potassium-depleted rabbit kidney. Raymond KH, et al. **Am J Physiol** 1988 Nov; 255(5 Pt 2):F1033-9

METABOLISM

Effect of magnesium depletion and potassium depletion and chlorothiazide on intracellular pH in the rat, studied by 31P NMR. Adam WR, et al. **Clin Exp Pharmacol Physiol** 1989 Jan;16(1):33-40

Potassium depletion inhibits the intracellular transport of secretory proteins between the endoplasmic reticulum and the Golgi complex. Judah JD, et al. **J Cell Sci** 1989 Feb; 92 (Pt 2):173-85

Consequences of chronic K+ depletion for the ionic composition of brain, heart, skeletal muscle and cerebrospinal fluid. Schröck H, et al. **Miner Electrolyte Metab** 1989;15(3):171-7

[Further research on the role of prostanoids in controlling renal function in humans in normal potassium balance and acute experimental potassium depletion. III: Effects of indomethacin in potassium depletion] Agnoli GC, et al. **Boll Soc Ital Biol Sper** 1989 Feb;65(2):163-9 (Eng. Abstr.) **(Ita)**

[Further research on the role of prostanoids in controlling renal function in humans in normal potassium balance and acute experimental potassium depletion. I: Studies of normal potassium balance. Effects of indomethacin] Agnoli GC, et al. **Boll Soc Ital Biol Sper** 1989 Feb;65(2):147-53 (Eng. Abstr.) **(Ita)**

[Further research on the role of prostanoids in controlling renal function in humans in normal potassium balance and acute experimental potassium depletion. II: Studies of potassium depletion] Agnoli GC, et al. **Boll Soc Ital Biol Sper** 1989 Feb;65(2):155-61 (Eng. Abstr.) **(Ita)**

PHYSIOPATHOLOGY

Potassium-depletion alkalosis in the rat. Kaufman AM, et al. **Am J Physiol** 1988 Oct;255(4 Pt 2):F763-70

Mechanism of antihypertensive effect of potassium depletion in renovascular hypertension. Nolan CR, et al. **Am J Physiol** 1988 Nov;255(5 Pt 2):H1181-7

Effect of potassium depletion on renal tubular function in the rat. Walter SJ, et al. **Clin Sci** 1988 Dec;75(6):621-8

Mechanism of the antihypertensive effect of K depletion in the spontaneously hypertensive rat. Linas SL, et al. **Kidney Int** 1988 Jul;34(1):18-25

Increased blood pressure during potassium depletion in normotensive men. Krishna GG, et al. **N Engl J Med** 1989 May 4;320(18):1177-82

PREVENTION & CONTROL

Comparison of potassium alone and potassium-magnesium supplementation in patients with heart failure using hydrochlorothiazide. Kohvakka A, et al. **Magnesium** 1989; 8(2):71-6

URINE

Studies on the mechanism of rubidium-induced kaliuresis. Beck FX, et al. **Kidney Int** 1989 Aug;36(2):175-82

POTASSIUM DICHROMATE see under **CHROMATES**

POTASSIUM IODIDE

ADMINISTRATION & DOSAGE

Towards the eradication of iodine-deficiency disorders in Brazil through a salt iodination programme. Medeiros-Neto GA. **Bull WHO** 1988;66(5):637-42

ADVERSE EFFECTS

Iodic eruptions. O'Brien TJ. **Australas J Dermatol** 1987 Dec; 28(3):119-22

PHARMACOLOGY

[New biochemical models for cataract research] Kröner R, et al. **Fortschr Ophthalmol** 1989;86(1):26-31 (Eng. Abstr.) **(Ger)**

[Sensitivity of Pseudomonas bacteria to iodopiron and dimexide determined by electron microscopy] Litovchenko PP, et al. **Klin Khir** 1989;(3):48-9 (Eng. Abstr.) **(Rus)**

THERAPEUTIC USE

Comparison of methimazole, methimazole and sodium ipodate, and methimazole and saturated solution of potassium iodide in the early treatment of hyperthyroid Graves' disease. Roti E, et al. **Clin Endocrinol (Oxf)** 1988 Mar;28(3):305-14

Potassium iodide as a thyroid blocker--Three Mile Island to today. Halperin JA. **DICP** 1989 May;23(5):422-7

[Treatment of erythema nodosum (letter)] Rantanen T. **Duodecim** 1988;104(16):1279-80 **(Fin)**

POTASSIUM MAGNESIUM ASPARTATE see under **ASPARTIC ACID**

POTASSIUM PERMANGANATE

The vesicle content of catecholamine-containing axons in the rectum of the domestic fowl: effect of permanganate and chromaffin fixations. Young HM. **J Auton Nerv Syst** 1989 Feb;26(1):17-25

KMnO4 as a probe for lac promoter DNA melting and mechanism in vivo. Sasse-Dwight S, et al. **J Biol Chem** 1989 May 15;264(14):8074-81

DIAGNOSTIC USE

[Methods for verifying forms of amyloidosis by a pathologist] Zykova LD. **Arkh Patol** 1989;51(1):63-4 (Eng. Abstr.) **(Rus)**

POISONING

[Intravascular hemolysis as a consequence of the resorptive action of potassium permanganate] Ol'mezov VV, et al. **Pediatriia** 1988;(8):93 **(Rus)**

POTASSIUM RADIOISOTOPES

ANALYSIS

Environmental radioactivity levels in marine species from Malaysia and Fiji. Dougherty G. **Health Phys** 1989 Jul; 57(1):187-90

Radionuclide contents in building materials used in Hong Kong. Man CK, et al. **Health Phys** 1989 Sep;57(3):397-401

METABOLISM

Biodistributions of radioactive alkaline metals in tumor bearing animals: comparison with 201Tl. Ando A, et al. **Eur J Nucl Med** 1988;14(7-8):352-7

POTATOES

Metabolic effects of instant bean and potato over 6 hours. Würsch P, et al. **Am J Clin Nutr** 1988 Dec;48(6):1418-23

Combined effect of water activity and pH on inhibition of toxin production by Clostridium botulinum in cooked, vacuum-packed potatoes [published erratum appears in Appl Environ Microbiol 1989 Jul;55(7):1855] Dodds KL. **Appl Environ Microbiol** 1989 Mar;55(3):656-60

Effect of selected antioxidants on the stability of dehydrated mashed potatoes. Baardseth P. **Food Addit Contam** 1989 Apr-Jun;6(2):201-7

An electron spin resonance investigation of internal rust spot, a physiological disorder of the potato tuber. Monk LS, et al. **Free Radic Res Commun** 1988;5(6):345-50

Nucleotide cDNA sequence coding for the PVXc coat protein. Mandel AM, et al. **Nucleic Acids Res** 1989 Feb 11;17(3):1265

High temperature storage of potato (Solanum tuberosum L.) for processing--a feasibility study. Mehta A, et al. **Plant Foods Hum Nutr** 1988;38(3):263-8

Mechanism of death in Syrian hamsters gavaged potato sprout material. Baker DC, et al. **Toxicol Pathol** 1988; 16(3):333-9

ANALYSIS

Determination of residues of a range of fungicides, anti-sprouting agents and (organochlorine and organophosphorus) insecticides in potatoes by gas-liquid and high-performance liquid chromatography. Martindale RW. **Analyst** 1988 Aug;113(8):1229-33

Determination of fentin residues in potatoes and celery. van den Broek HH, et al. **Analyst** 1988 Aug;113(8):1237-9

Occurrence of pharmacologically active benzodiazepines in trace amounts in wheat and potato. Wildmann J, et al. **Biochem Pharmacol** 1988 Oct 1;37(19):3549-59

Inhibitors of cysteine proteinases from potato. Brzin J, et al. **Biol Chem Hoppe Seyler** 1988 May;369 Suppl:233-8

Persistence of pirimiphos-methyl in stored potatoes. Hadjidemetriou DG. **Bull Environ Contam Toxicol** 1988 Aug;41(2):299-303

Varietal and environmental effect on the glycoalkaloid content of potato (Solanum tuberosum L.). Uppal DS. **Plant Foods Hum Nutr** 1987;37(4):333-40

The developmental toxicity of an isolate from the plant Solanum dimidiatum (potato-weed) in Syrian golden hamsters. Casteel SW, et al. **Toxicon** 1989;27(7):757-62

[Analysis of selected pesticides, nitrates, nitrites, ammonium ions and urea in surface and underground waters and in various agricultural products. V] Galamon T, et al. **Rocz Panstw Zakl Hig** 1988;39(2):145-50 (Eng. Abstr.) **(Pol)**

DRUG EFFECTS

Nematicides induced changes in the chemical constituents of potato tubers. Marwaha RS. **Plant Foods Hum Nutr** 1988;38(2):95-103

ENZYMOLOGY

Molecular characterization of four forms of phosphofructokinase purified from potato tuber. Kruger NJ, et al. **Arch Biochem Biophys** 1988 Dec;267(2):690-700

Primary structure of cathepsin D inhibitor from potatoes and its structure relationship to soybean trypsin inhibitor family. Mareš M, et al. **FEBS Lett** 1989 Jul 17;251(1-2):94-8

Isolation of aldehyde oxidase (EC 1.2.3.1) from potato extracts by preparative page. De Pooter HL, et al. **Prep Biochem** 1989;19(1):61-7

[Potato 5-lipoxygenase. Kinetics of linoleic acid oxidation] Butovich IA, et al. **Ukr Biokhim Zh** 1989 Mar-Apr; 61(2):106-8 (Eng. Abstr.) **(Rus)**

GENETICS

Partial nucleotide sequence of potato virus M RNA shows similarities to potexviruses in gene arrangement and the encoded amino acid sequences. Rupasov VV, et al. **J Gen Virol** 1989 Jul;70 (Pt 7):1861-9

The maize En-1/Spm element transposes in potato. Frey M, et al. **Mol Gen Genet** 1989 May;217(1):172-7

Molecular cloning and sequencing of a cDNA for plant calmodulin: signal-induced changes in the expression of calmodulin. Jena PK, et al. **Proc Natl Acad Sci U S A** 1989 May;86(10):3644-8

IMMUNOLOGY

Allergic contact dermatitis from potato flesh. Carmichael AJ, et al. **Contact Dermatitis** 1989 Jan;20(1):64-5

MICROBIOLOGY

Identification and characterization of the potato leafroll virus putative coat protein gene. Kawchuk LM, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):783-8

Molecular cloning of a potato virus Y genome: nucleotide sequence homology in non-coding regions of potyviruses. Turpen T. **J Gen Virol** 1989 Aug;70 (Pt 8):1951-60

Characterisation of synthetic DNA probe detecting potato spindle tuber viroid. Welnicki M, et al. **J Virol Methods** 1989 Apr-May;24(1-2):141-52

TOXICITY

[Toxicological and hygienic evaluation of potatoes grown with the use of a pesticide croneton] Gritsevskaia IL. **Vopr Pitan** 1988 May-Jun;(3):58-61 (Eng. Abstr.) **(Rus)**

POTENTIOMETRY

Potentiometric (bioselective electrodes) assay systems: utility and limitations. Monroe D. **CRC Crit Rev Clin Lab Sci** 1989;27(2):109-58 (189 ref.)

Two magnetic methods for articulatory measurements. Panagos G, et al. **Phonetica** 1987;44(4):197-209

[Potentiometry applied to the characterization and analysis of polysaccharides for pharmaceutical use] Mascellani G, et al. **Farmaco [Prat]** 1988 May;43(5):165-75 (Eng. Abstr.) **(Ita)**

INSTRUMENTATION

Potentiometric monitoring of proteins. Part IV. Application to electrophoresis gels. Hitchman ML, et al. **Analyst** 1988 Jun;113(6):875-9

POTTOS see **LORISIDAE**

POTT'S DISEASE see **TUBERCULOSIS, SPINAL**

POULTRY

Exposures to carbon dioxide in the poultry processing industry. Jacobs DE, et al. **Am Ind Hyg Assoc J** 1988 Dec; 49(12):624-9

Cytological effects of fungal metabolites produced by fungi isolated from Egyptian poultry feedstuffs. Abdou RF, et al. **J Basic Microbiol** 1989;29(3):131-9

Materno-fetal listeriosis from cook-chill and refrigerated food [letter] Kerr KG, et al. **Lancet** 1988 Nov 12; 2(8620):1133

Evaluation of feeds for ration formulation. Cooke BC. **Proc Nutr Soc** 1988 Jul;47(2):135-41 (10 ref.)

Veterinary services to smaller poultry flocks [letter] Pennycott T. **Vet Rec** 1989 Jul 1;125(1):26

Methods for measuring atmospheric dust, micro-organisms and ammonia in poultry houses: review and approved practices. Hauser RH, et al. **Zentralbl Veterinarmed [B]** 1988 Oct;35(8):579-93 (46 ref.)

[Animal welfare and workers' protection during electric stunning of poultry for slaughter] Wormuth HJ, et al. **DTW** 1989 Mar;96(3):104-7 (Eng. Abstr.) **(Ger)**

[Lung function and symptoms in employees of poultry farms] Danuser B, et al. **Soz Praventivmed** 1988;33(6):286-91 (Eng. Abstr.) **(Ger)**

[Effect of the composition of dust and dust exposure on the sensitizing effect of poultry dust] Breternitz H. **Z Gesamte Hyg** 1988 Aug;34(8):483-5 (Eng. Abstr.) **(Ger)**

[Immunological monitoring and correction of the immune disorders in allergic diseases in poultry growers] Eglite ME, et al. **Gig Tr Prof Zabol** 1989;(2):3-6 (Eng. Abstr.) **(Rus)**

ANATOMY & HISTOLOGY

The hypothalamic magnocellular system in the domestic fowl. Study on semithin sections. Tolivia J, et al. **Acta Anat (Basel)** 1987;130(2):143-50

Anatomical features of cloacal region of male guinea fowl with special reference to the ejection of lymph-like fluid.

Fujihara N, et al. **Anat Anz** 1988;167(5):341–7
Ontogeny of the syndesmosis tibiofibularis and the evolution of the bird hindlimb: a caenogenetic feature triggers phenotypic novelty. Müller GB, et al.
Anat Embryol (Berl) 1989;179(4):327–39
Relationship between the saccus endolymphaticus and the fourth ventricle of the brain of the domestic fowl (Gallus gallus f. domestica). Klika E, et al.
Folia Morphol (Praha) 1989;37(1):71–7
Ultrastructure of the saccus endolymphaticus and leptomeninges of the domestic fowl Gallus gallus f. domestica. Klika E, et al. **Folia Morphol (Praha)** 1988; 36(4):423–30
Ultrastructural morphometric observations on the extramural aortico–pulmonary bodies of the domestic fowl. Taha AA, et al. **J Anat** 1988 Apr;157:169–73
[Histologic and histometric studies of the epiphysis cerebri of the fattening guinea fowl (Meleagris gallopavo) after the use of different light regimens] Gutte G, et al.
Arch Exp Veterinarmed 1989 May;43(3):471–80 (Eng. Abstr.) **(Ger)**

BLOOD

Osmotic fragility of erythrocytes of two breeds of domestic fowl in the warm humid tropics. Oyewale JO, et al.
Lab Anim 1988 Jul;22(3):250–4
Techniques for blood sampling in avian species. Krista LM, et al. **Vet Hum Toxicol** 1988;30 Suppl 1:14–6

EMBRYOLOGY

On the origin of cells determined to form skeletal muscle in avian embryos. Krenn V, et al. **Anat Embryol (Berl)** 1988; 179(1):49–54

GENETICS

[Features of hybridization of domestic hen and guinea fowl and structuro–functional organization of hybrid chromosomes in comparison with original species] Steklenev EP, et al. **Tsitol Genet** 1989 Mar–Apr;23(2):20–6 (Eng. Abstr.) **(Rus)**

GROWTH & DEVELOPMENT

Studies on the response of guinea fowls (Numida meleagris) to antibiotics. Oguntona T. **Br Poult Sci** 1988 Sep; 29(3):683–7
Neuronal degeneration in the pineal ganglion during the post–hatching development of the domestic fowl. Sato T, et al. **Cell Tissue Res** 1988 Oct;254(1):25–30
The importance of invertebrate food to chicks of gallinaceous species. Savory CJ. **Proc Nutr Soc** 1989 Jan;48(1):113–33 (76 ref.)

METABOLISM

Presence of androgen receptors in the hen hypothalamus and pituitary. Kawashima M, et al.
Acta Endocrinol (Copenh) 1989 Feb;120(2):217–24
Biotechnology aids to improve feed and feed digestion: enzymes and fermentation. Dierick NA. **Arch Tierernahr** 1989 Mar;39(3):241–61 (149 ref.)
Lactate dehydrogenase isozymes in the spermatozoa of the domestic fowl, Gallus domesticus and turkey, Meleagris gallopavo. McIndoe WM, et al.
Comp Biochem Physiol [B] 1978;61(3):433–7
Inhibitory sites of androgens and estradiol in progesterone biosynthesis in granulosa cells of the domestic hen. Lee HT, et al. **Endocrinology** 1989 Aug;125(2):760–5

MICROBIOLOGY

Unidentified viral particles could be associated with enteritis of various commercial bird species. Fleury HJ, et al.
Ann Inst Pasteur Virol 1988 Oct–Dec;139(4):449–53
Unusual virus–like particles in pheasant small intestine [letter] Collins MS, et al. **Vet Rec** 1988 Aug 13;123(7):186
[Mortality in cattle due to infected poultry manure] Roumen MP. **Tijdschr Diergeneeskd** 1989 Jun 1;114(11):618–9 (Eng. Abstr.) **(Dut)**
[Epidemiological significance of poultry in the transmission of Salmonella, Yersinia enterocolitica and Listeria monocytogenes: investigation of unchecked specimens for sale in the marketplace] Curcio ML, et al.
Nuovi Ann Ig Microbiol 1986 Jan–Dec;37(1–6):85–94 (Eng. Abstr.) **(Ita)**
[Characteristics of Salmonella strains isolated from poultry containers designated for retail trade] Kałuzewski S, et al.
Med Dosw Mikrobiol 1988;40(1):1–11 (Eng. Abstr.) **(Pol)**
[Lactic bacteria in the digestive tract of poultry] Kovalenko NK, et al. **Mikrobiologiia** 1989 Jan–Feb;58(1):137–43 (Eng. Abstr.) **(Rus)**

PHYSIOLOGY

Reproductive behaviour in poultry: implications for artificial insemination technology. Ottinger MA, et al.
Br Poult Sci 1989 Jun;30(2):431–42 (81 ref.)
Physiological changes in fowl and turkey spermatozoa during in vitro storage. Wishart GJ. **Br Poult Sci** 1989 Jun; 30(2):443–54 (63 ref.)
Circulating levels of biotin in the fowl (Gallus domesticus): modulation by oestrogen. Bryden WL.
Comp Biochem Physiol [A] 1988;91(4):773–7
Spermiogenesis in the red–ear turtle (Pseudemys scripta) and the domestic fowl (Gallus domesticus): a study of cytoplasmic events including cell volume changes and cytoplasmic elimination. Sprando RL, et al. **J Morphol** 1988 Oct;198(1):95–118
Abstracts of papers, 78th annual meeting of the Poultry Science Association, Inc. **Poult Sci** 1989;68 Suppl 1:1–164
Symposium: The control of food intake in poultry.
Poult Sci 1989 Jul;68(7):925–69
Abstracts of papers, tenth annual meeting of the Southern Poultry Science Society. **Poult Sci** 1989;68 Suppl 1:165–212
Ovarian follicular growth and maturation in the domestic pigeon and guinea fowl (Numida meleagris). Birrenkott GP, et al. **Poult Sci** 1988 Dec;67(12):1783–6
Peripheral and central control of food intake. Denbow DM. **Poult Sci** 1989 Jul;68(7):938–47 (102 ref.)

POULTRY DISEASES

1988 spring meeting of the WPSA (UK branch). World's Poultry Science Association. London, 24th and 25th March 1988. Abstracts. **Br Poult Sci** 1988 Dec;29(4):869–87
Infected poultry [letter] Nichols JL. **J R Soc Health** 1988 Aug;108(4):152
Abstracts of papers, 78th annual meeting of the Poultry Science Association, Inc. **Poult Sci** 1989;68 Suppl 1:1–164
Abstracts of papers, tenth annual meeting of the Southern Poultry Science Society. **Poult Sci** 1989;68 Suppl 1:165–212
Carrageenan–induced acute inflammatory response in chicks. Ito NM, et al. **Res Vet Sci** 1989 Mar;46(2):192–5
Salmonella inquiry report attacks on all fronts [news]
Vet Rec 1989 Mar 11;124(10):230–1
Hydropericarditis syndrome in broiler chickens in Pakistan. Anjum AD, et al. **Vet Rec** 1989 Mar 11;124(10):247–8
'Swollen head syndrome' in broiler breeders in Israel. Perelman B, et al. **Vet Rec** 1988 Oct 22;123(17):444
[Penile inflammation in ganders] Behr KP, et al. **DTW** 1989 Mar;96(3):140–3 (Eng. Abstr.) **(Ger)**

BLOOD

Concentration of steroid sex hormones in the plasma of hens in relation to oviduct tumours. Anjum AD, et al.
Br Poult Sci 1988 Dec;29(4):729–34
Experimental aspergillosis in Japanese quails (Coturnix coturnix japonica). Clinical signs and haematological changes. Chaudhary SK, et al. **Mycopathologia** 1988 Jun; 102(3):179–84
The absence of sex and age effects on the corticosterone response of turkey poults to adrenocorticotropic hormone and temperature stressors. Davis GS, et al. **Poult Sci** 1989 Jun;68(6):846–9
Multiple concurrent stressors in chicks. 3. Effects on plasma corticosterone and the heterophil:lymphocyte ratio. McFarlane JM, et al. **Poult Sci** 1989 Apr;68(4):522–7
Erythrophagocytosis in phenylhydrazine induced acute anaemia in chickens. Datta K, et al. **Res Vet Sci** 1989 Jul; 47(1):136–7
The effect of Eimeria acervulina infection on plasma lipids and lipoproteins in young broiler chicks. Allen PC.
Vet Parasitol 1988 Nov;30(1):17–30

CHEMICALLY INDUCED

Narasin poisoning in turkeys. Sályi G, et al.
Acta Vet Hung 1988;36(1–2):107–15
Lethality and bone alterations in chicken embryos and newly hatched chickens given bone–active agents. Smith RE, et al. **Am J Vet Res** 1988 Aug;49(8):1376–81
Furazolidone toxicity in neomycin–treated turkey poults. Czarnecki CM. **Avian Dis** 1989 Jul–Sep;33(3):466–72
Experimental and field sulfaquinoxaline toxicosis in Leghorn chickens. Daft BM, et al. **Avian Dis** 1989 Jan–Mar; 33(1):30–4
Monensin toxicity in turkey breeder hens. Ficken MD, et al. **Avian Dis** 1989 Jan–Mar;33(1):186–90
Skeletal muscle lesions in turkeys associated with the feeding of monensin. Wages DP, et al. **Avian Dis** 1988 Jul–Sep; 32(3):583–6
Toxicity of excess dicalcium phosphate in the diet of turkey poults. Wallner–Pendleton EA, et al. **Avian Dis** 1989 Apr–Jun;33(2):375–8
An improperly labeled container with chloropicrin: a farmer's nightmare. Selala MI, et al.
Bull Environ Contam Toxicol 1989 Feb;42(2):202–8
Amelioration of selenium toxicity by arsenicals and cysteine. Lowry KR, et al. **J Anim Sci** 1989 Apr;67(4):959–65
Gizzard ulceration in chicks fed cysteamine alone or in combination with a histamine H2–receptor antagonist. Zavy MT, et al. **J Vet Pharmacol Ther** 1988 Dec; 11(4):362–73
Toxicity of 1,2–diethylhydrazine fed to turkey poults. Czarnecki CM. **Res Commun Chem Pathol Pharmacol** 1989 Feb;63(2):293–6
Spontaneous occurrence and experimental induction of leiomyoma of the ventral ligament of the oviduct of the hen. Anjum AD, et al. **Res Vet Sci** 1988 Nov;45(3):341–8
Effects of various levels of dietary vitamin E on broiler chicks. Ayed IA, et al. **Vet Hum Toxicol** 1989 Feb; 31(1):50–3
Lathyrism in laying hens and increases in egg weight. Chowdhury SD, et al. **Vet Rec** 1988 Sep 3;123(10):272–5
[A case of nitrite poisoning in hens of medium weight laying parent stock] van der Rijt TJ. **Tijdschr Diergeneeskd** 1989 Apr 15;114(8):437–42 (Eng. Abstr.) **(Dut)**
[Physiological effects of gizzerosine, a natural inducer of gizzard erosion in chicks] Ito Y, et al. **Seikagaku** 1988 Oct; 60(10):1168–72 **(Jpn)**

CONGENITAL

Genetic cellular resistance to subgroup E avian leukosis virus in slow–feathering dams reduces congenital transmission of an endogenous retrovirus encoded at locus ev21. Smith EJ, et al. **Poult Sci** 1988 Dec;67(12):1668–73
Influence of congenital transmission of endogenous virus–21 on the immune response to avian leukosis virus infection and the incidence of tumors in chickens. Smith EJ, et al. **Poult Sci** 1988 Dec;67(12):1674–9
True hermaphroditism in the domestic fowl. Katiyar AK, et al. **Vet Rec** 1988 Nov 12;123(20):520

DIAGNOSIS

Development of a quantitative method for the evaluation of varus–angular bone deformity in chickens.
Harter–Dennis JM, et al. **Poult Sci** 1988 Nov; 67(11):1647–50
[The use of embryonic chicken liver cell culture for the diagnosis of virus infections in hens] Pfirschke CD.
Arch Exp Veterinarmed 1989 May;43(3):345–50 (Eng. Abstr.) **(Ger)**

DRUG THERAPY

The ultrastructural effect of amprolium medication on development of Eimeria adenoeides in turkeys. Danforth HD, et al. **Avian Dis** 1989 Apr–Jun;33(2):303–9
In vivo studies with dimethyldithiocarbamate, a possible new antimicrobial for use against Aspergillus fumigatus in poultry. Delap SK, et al. **Avian Dis** 1989 Jul–Sep; 33(3):497–501
Response of 21 Canadian field isolates of chicken coccidia to commercial anticoccidial drugs. Rotibi A, et al.
Avian Dis 1989 Apr–Jun;33(2):365–7
Efficacy of diclazuril against turkey coccidiosis in a floor–pen experiment. Vanparijs O, et al. **Avian Dis** 1989 Jul–Sep; 33(3):479–81
Efficacy of diclazuril against turkey coccidiosis in dose–titration studies. Vanparijs O, et al. **Avian Dis** 1989 Jul–Sep;33(3):422–4
Effect of narasin and roxarsone combinations on Eimeria tenella infections in floor pen–raised broilers. Bafundo KW, et al. **Poult Sci** 1989 Jul;68(7):1011–4
Field experience trials comparing narasin and monensin. Jeffers TK, et al. **Poult Sci** 1988 Jul;67(7):1058–61
Anticoccidial efficacy of narasin in battery cage trials. Jeffers TK, et al. **Poult Sci** 1988 Jul;67(7):1043–9
Anticoccidial efficacy of narasin in floor pen trials. Jeffers TK, et al. **Poult Sci** 1988 Jul;67(7):1050–7
Diclazuril, a new broad spectrum anticoccidial drug in chickens. 1. Dose titration studies and pilot floor pen trials. Vanparijs O, et al. **Poult Sci** 1989 Apr;68(4):489–95
Diclazuril, a new broad spectrum anticoccidial drug in chickens. 2. Battery trials. Vanparijs O, et al. **Poult Sci** 1989 Apr;68(4):496–500
Chemotherapy of caecal coccidiosis: efficacy of toltrazuril, sulphaquinoxaline/pyrimethamine and amprolium/ethopabate, given in drinking water, against field isolates of Eimeria tenella. Chapman HD.
Res Vet Sci 1989 May;46(3):419–20
Sensitivity of field isolates of Eimeria species to monensin and lasalocid in the chicken. Chapman HD, et al.
Res Vet Sci 1989 Jan;46(1):114–7
Therapeutic efficacy of medicating drinking water with spectinomycin and lincomycin–spectinomycin in experimental Escherichia coli infection in poultry. Goren E, et al. **Vet Q** 1988 Jul;10(3):191–7
[The antibacterial in vitro and in vivo effectiveness of enrofloxacin against Haemophilus paragallinarum] Hinz KH, et al. **Berl Munch Tierarztl Wochenschr** 1988 Dec 1; 101(12):409–12 (Eng. Abstr.) **(Ger)**
[Therapy trials with enrofloxacin (Baytril) in a laying hen flock with Salmonella pullorum infections] Redmann T, et al. **DTW** 1989 Mar;96(3):137–8 (Eng. Abstr.) **(Ger)**
[Therapeutic use of enilconazole in broiler chicks with aspergillosis] Redmann T, et al. **DTW** 1989 Jan;96(1):15–7 (Eng. Abstr.) **(Ger)**

ECONOMICS

Dynamic programming approach to evaluating the economic impact of disease on production. Carpenter TE, et al.
Acta Vet Scand Suppl 1988;84:356–9
Estimate of economic impact of fowl cholera in turkeys in Georgia in 1986. Morris MP, et al. **Avian Dis** 1988 Oct–Dec;32(4):718–21
Salmonella in poultry [letter] Fussell MH. **Vet Rec** 1988 Dec 24–31;123(26–27):678
[Analysis of losses due to subclinical small intestinal coccidiosis caused by Eimeria acervulina and Eimeria maxima under field conditions] Voeten AC, et al.
Tijdschr Diergeneeskd 1988 Sep 15;113(18):989–98 (Eng. Abstr.) **(Dut)**

EPIDEMIOLOGY

The California Turkey Project. Hird DW, et al. **Acta Vet Scand Suppl** 1988;84:218–20

Disease monitoring using a computerised information retrieval system for broiler production data: the effects of sub-clinical infectious bursal disease. McIlroy SG, et al. **Acta Vet Scand Suppl** 1988;84:249–52

Diagnosis of a field outbreak of avian encephalomyelitis by enzyme-linked immunosorbent assay. Shafren DR, et al. **Aust Vet J** 1989 Jul;66(7):224–5

Pasteurella multocida recovered from live turkeys: prevalence and virulence in turkeys. Carpenter TE, et al. **Avian Dis** 1989 Jan–Mar;33(1):12–7

An encephalitic form of listeriosis in broiler chickens. Cooper GL. **Avian Dis** 1989 Jan–Mar;33(1):182–5

A geographic locus for respiratory cryptosporidiosis in Georgia broilers. Goodwin MA, et al. **Avian Dis** 1989 Apr–Jun;33(2):368–9

Diagnostic summary of 1986 turkey, broiler breeder, and layer necropsy cases at the University of Georgia. Morris MP, et al. **Avian Dis** 1988 Jul–Sep;32(3):391–403

Characteristics of fowl cholera outbreaks in turkeys in Georgia in 1986. Morris MP, et al. **Avian Dis** 1989 Apr–Jun; 33(2):213–8

Disease prevalence in Georgia turkey flocks in 1986. Morris MP, et al. **Avian Dis** 1988 Jul–Sep;32(3):404–6

Natural cryptosporidiosis in domestic geese, Anser anser L., in Czechoslovakia. Palkovič L, et al. **Folia Parasitol (Praha)** 1989;36(2):126

Prevalence and pathology of helminth parasites in domestic ducks of Bangladesh. Islam MR, et al. **Vet Parasitol** 1988 Jul;29(1):73–7

Salmonella enteritidis in poultry. **Vet Rec** 1988 Oct 15; 123(16):405

Salmonella in poultry [letter] Brander G. **Vet Rec** 1989 Jan 14;124(2):46

An outbreak of disease due to chicken anaemia agent in broiler chickens in England. Chettle NJ, et al. **Vet Rec** 1989 Mar 4;124(9):211–5

Prevalence of avain nephritis virus in England. Nicholas RA, et al. **Vet Rec** 1988 Oct 8;123(15):398

Ectoparasites of guinea fowl (Numida meleagris galeata Pallas) and local domestic chicken (Gallus gallus) in southern Guinea Savanna, Nigeria. Okaeme AN. **Vet Res Commun** 1988;12(4–5):277–80

The status of guinea fowls (Numida meleagris) in the epidemiology of infectious bursal disease (IBD) of poultry in Nigeria. Adewuyi OA, et al. **Zentralbl Veterinarmed [B]** 1989 Feb;36(1):43–8

An outbreak of Mycoplasma anatis infection associated with nervous symptoms in large-scale duck flocks. Ivanics E, et al. **Zentralbl Veterinarmed [B]** 1988 Jun;35(5):368–78

ETIOLOGY

Effect of broiler chicken age on susceptibility to experimentally induced Cryptosporidium baileyi infection. Lindsay DS, et al. **Am J Vet Res** 1988 Aug;49(8):1412–4

Relationship of two-week body weight to the incidence of ascites in broilers. Dale N, et al. **Avian Dis** 1988 Jul–Sep; 32(3):556–60

Toxicity of Fusarium moniliforme var. subglutinans for chicks, ducklings, and turkey poults. Engelhardt JA, et al. **Avian Dis** 1989 Apr–Jun;33(2):357–60

Experimental cryptosporidiosis and infectious bursal disease virus infection of specific-pathogen-free chickens. Levy MG, et al. **Avian Dis** 1988 Oct–Dec;32(4):803–11

Cecal and hepatic granulomas in chickens associated with Heterakis gallinarum infection. Riddell C, et al. **Avian Dis** 1988 Oct–Dec;32(4):836–8

Physiological evaluation of diuresis in commercial broiler breeders. Wideman RF, et al. **Br Poult Sci** 1989 Jun; 30(2):313–26

Aetiology of fatty liver syndrome in laying hens. Squires EJ, et al. **Br Vet J** 1988 Nov–Dec;144(6):602–9 (60 ref.)

Heritable susceptibility to environmentally induced glaucoma in several mutants of Japanese quail. Lauber JK, et al. **J Hered** 1989 Jul–Aug;80(4):268–71

Cytocidal effect caused by the envelope glycoprotein of a newly isolated avian hemangioma-inducing retrovirus. Resnick-Roguel N, et al. **J Virol** 1989 Oct;63(10):4325–30

Implication of coprophagy in pathogenesis of chicken botulism. Hyun SH, et al. **Nippon Juigaku Zasshi** 1989 Jun; 51(3):582–6

Effect of dietary calcium, phosphorus, chloride, and zeolite on the development of tibial dyschondroplasia. Edwards HM Jr. **Poult Sci** 1988 Oct;67(10):1436–46

Effect of age and growth rate on myocardial irritability in broiler chickens. Greenlees KJ, et al. **Proc Soc Exp Biol Med** 1989 Mar;190(3):282–5

Immune complex-mediated glomerulopathy in Marek's disease. Pradhan HK, et al. **Vet Immunol Immunopathol** 1988 Sep;19(2):165–71

The effect of halofuginone on the excretion of Salmonella typhimurium by experimentally infected chickens. Barrow PA, et al. **Vet Microbiol** 1988 May;17(1):59–64

Head swelling of traumatic aetiology in broiler breeding fowl. Duff SR, et al. **Vet Rec** 1989 Aug 5;125(6):133–4

Experimental Salmonella enteritidis infection in chicks. Hinton M, et al. **Vet Rec** 1989 Mar 4;124(9):223

[Episodes of amyloidosis in young hens after repeated use of antibacterial oil emulsion vaccines] Rampin T, et al. **DTW** 1989 Apr;96(4):168, 170, 172 (Eng. Abstr.) **(Ger)**

[The significance of mycotoxin assimilation for the productivity and health of animals] Schuh M. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul–Aug; 96(7):353–5 (Eng. Abstr.) **(Ger)**

[The role of Mycobacterium avium-intracellulare in the development of infection in humans and animals] Zórawski C. **Przegl Epidemiol** 1988;42(4):354–9 (Eng. Abstr.) **(Pol)**

GENETICS

Anorexia and sexual maturity in female white rock chickens. I. Increasing the feed intake. Zelenka DJ, et al. **Behav Genet** 1988 May;18(3):383–7

Genetics of resistance to Salmonella typhimurium in newly hatched chicks. Bumstead N, et al. **Br Poult Sci** 1988 Sep; 29(3):521–9

The chicken major histocompatibility complex in disease resistance and poultry breeding. Lamont SJ. **J Dairy Sci** 1989 May;72(5):1328–33 (48 ref.)

Response of major histocompatibility (B) complex haplotypes B22, B26, and B30 to Rous sarcomas. Lukacs NW, et al. **Poult Sci** 1989 Feb;68(2):233–7

Virus dilution affects the anti-Rous sarcoma response of progressor but not regressor major histocompatibility (B) complex genotypes. Vincent SC, et al. **Poult Sci** 1988 Nov; 67(11):1491–6

Transforming genes in duck hepatic carcinoma--mht(raf) and Ha-ras. Tan H, et al. **Sci Sin [B]** 1988 Nov;31(11):1325–32

HISTORY

The history of avian medicine in the United States. IX. Events in the history of avian mycoplasmosis 1905–70. Lancaster JE, et al. **Avian Dis** 1988 Oct–Dec;32(4):607–23

IMMUNOLOGY

Evaluation of relationship among three purified antigens from Pasteurella multocida strain P-1059 and of their protective capacities in turkeys. Tsuji M, et al. **Am J Vet Res** 1988 Sep;49(9):1516–21

Fowl cholera immunity induced by various vaccines in broiler minibreeder chickens determined by enzyme-linked immunosorbent assay. Avakian AP, et al. **Avian Dis** 1989 Jan–Mar;33(1):97–102

New biotin-conjugated antisera for quantitation of Mycoplasma gallisepticum-specific immunoglobulin A in chicken. Barbour EK, et al. **Avian Dis** 1988 Jul–Sep; 32(3):416–20

Reduced in vivo nonspecific resistance to Listeria monocytogenes infection during avian retrovirus-induced immunosuppression. Cummins TJ, et al. **Avian Dis** 1988 Oct–Dec;32(4):663–7

Laryngotracheitis in chickens: infection studies and the efficacy of a tissue-culture vaccine in chicks less than four weeks old. Davison S, et al. **Avian Dis** 1989 Jan–Mar; 33(1):24–9

Eimeria mitis: immunogenicity and cross immunity of two isolates. Fitz-Coy SH, et al. **Avian Dis** 1989 Apr–Jun; 33(2):236–7

An enzyme-linked immunosorbent assay for coccidiosis in chickens: correlation of antibody levels with prior exposure to coccidia in the laboratory and in the field. Gilbert JM, et al. **Avian Dis** 1988 Oct–Dec;32(4):688–94

Effect of ascorbic acid on antibody response of stressed and unstressed chickens. Gross WB. **Avian Dis** 1988 Jul–Sep; 32(3):483–5

Effects of cyclosporine A on reovirus-infected broilers. Hill JE, et al. **Avian Dis** 1989 Jan–Mar;33(1):86–92

Evaluation of Pasteurella multocida mutant of low virulence. I. Development and pathogenicity. Mofacre CL, et al. **Avian Dis** 1989 Apr–Jun;33(2):270–4

Leukocyte changes associated with acute inflammation in chickens. Latimer KS, et al. **Avian Dis** 1988 Oct–Dec; 32(4):760–72

Influence of inoculation dose, inoculation schedule, chicken age, and host genetics on disease susceptibility and development of resistance to Eimeria tenella infection. Lillehoj HS. **Avian Dis** 1988 Jul–Sep;32(3):437–44

Development of immunoglobulin class-specific enzyme-linked immunosorbent assays for measuring antibodies against avian rotavirus. Myers TJ, et al. **Avian Dis** 1989 Jan–Mar;33(1):53–9

Solubilization of membrane-associated cross-protection factor(s) of Pasteurella multocida. Rimler RB, et al. **Avian Dis** 1989 Apr–Jun;33(2):258–63

Relationship between anti-Pasteurella multocida antibody titers after CU vaccination and survival after challenge. Schlink GT, et al. **Avian Dis** 1989 Jul–Sep;33(3):506–10

Comparative pathogenesis of serotype 1 and variant serotype 1 isolates of infectious bursal disease virus and their effect on humoral and cellular immune competence of specific-pathogen-free chickens. Sharma JM, et al. **Avian Dis** 1989 Jan–Mar;33(1):112–24

Genetic differences in susceptibility to a mixture of avian infectious bronchitis virus and Escherichia coli. Bumstead N, et al. **Br Poult Sci** 1989 Mar;30(1):39–48

Failure of maternally derived infectious bursal disease antibodies to serotypes 1 and 2 to protect against heterologous virus. Chettle NJ, et al. **Br Vet J** 1989 Mar-Apr;145(2):165–9

Eimeria acervulina: evaluation of the cellular and antibody responses to the recombinant coccidial antigens in B-congenic chickens. Lillehoj HS, et al. **Exp Parasitol** 1988 Dec;67(2):148–58

Intestinal intraepithelial and splenic natural killer cell responses to eimerian infections in inbred chickens. Lillehoj HS. **Infect Immun** 1989 Jul;57(7):1879–84

Eimeria tenella: local antibodies and interactions with the sporozoite surface. Trees AJ, et al. **J Protozool** 1989 Jul–Aug;36(4):326–33

Immune response of chicks inoculated with chicken anemia agent alone or in combination with Marek's disease virus or turkey herpesvirus. Otaki Y, et al. **Nippon Juigaku Zasshi** 1988 Oct;50(5):1040–7

An adhesion-hemadsorption inhibition test for the detection of serum antibody to Mycoplasma gallisepticum. Shimizu T, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):491–5

Some aspects of Leucocytozoon caulleryi reinfection in chickens. Morii T, et al. **Parasitol Res** 1989;75(3):194–8

Comparative analysis of precipitating antibodies in White Rock and Fayoumi hens injected with bovine serum albumin or crude mite extract with resulting effects on northern fowl mite, Ornithonyssus sylviarum (Acari: Macronyssidae) population densities. Burg JG, et al. **Poult Sci** 1988 Jul;67(7):1015–9

Monocyte function in chickens with hereditary muscular dystrophy. Chu Y, et al. **Poult Sci** 1989 Feb;68(2):226–32

Characterization of resistance and immunity to Eimeria tenella among major histocompatibility complex B-F/B-G recombinant hosts. Clare RA, et al. **Poult Sci** 1989 May; 68(5):639–45

Development of precipitating antibody in chickens experimentally infested with northern fowl mite, Ornithonyssus sylviarum (Acari: Macronyssidae). Murano T, et al. **Poult Sci** 1989 Jun;68(6):842–5

Eimeria acervulina and Eimeria tenella in 15.B-congenic White Leghorns. Ruff MD, et al. **Poult Sci** 1989 Mar; 68(3):380–5

Development and application of an ELISA technique for the detection of antibody to avian encephalomyelitis viruses. Shafren DR, et al. **Res Vet Sci** 1989 Jan;46(1):95–9

Genetic control of immunity to Eimeria tenella. Interaction of MHC genes and non-MHC linked genes influences levels of disease susceptibility in chickens. Lillehoj HS, et al. **Vet Immunol Immunopathol** 1989 Jan;20(2):135–48

Monocyte-macrophages increase in the bursal follicular medulla following bacterial intracloacal inoculation of Bordetella pertussis in chicks. Betti F, et al. **Zentralbl Veterinarmed [B]** 1988 Nov;35(9):704–8

Unsatisfactory sensitivity and specificity of indirect immunofluorescence tests for the presence or absence of antibodies to chicken anaemia agent (CAA) in sera of SPF and broiler breeder chickens. von Bülow V. **Zentralbl Veterinarmed [B]** 1988 Oct;35(8):594–600

[Serology of Newcastle disease and salmonellosis (S. gallinarum-pullorum) in poultry from small country units in Togo] Grundler G, et al. **Rev Elev Med Vet Pays Trop** 1988;41(4):327–8 (Eng. Abstr.) **(Fre)**

[Ornithosis in domestic and imported bird species] Sixl W, et al. **Geogr Med** 1989;Suppl 2:101–4 (Eng. Abstr.) **(Ger)**

METABOLISM

Histomorphometry and vitamin D metabolism of valgus-varus deformity in broiler chickens. Newbrey JW, et al. **Avian Dis** 1988 Oct–Dec;32(4):704–12

Rapid decrease of the peripheral deiodination of thyroxine in malabsorption syndrome in artificially inoculated broilers. Rudas P, et al. **Avian Dis** 1989 Apr–Jun; 33(2):279–84

In vitro and in vivo characterization of avian reoviruses. II. Clinical evaluation of chickens infected with two avian reovirus pathotypes. Sterner FJ, et al. **Avian Dis** 1989 Jul–Sep;33(3):545–54

Effects of Escherichia coli on iron, copper, and zinc metabolism in chicks. Tufft LS, et al. **Avian Dis** 1988 Oct–Dec;32(4):779–86

Effects of cholecalciferol or calcium deficiency on ostrogen metabolism in the laying hen. Tsang CP, et al. **Br Poult Sci** 1988 Dec;29(4):753–9

Reduced lipid peroxidation in dilated hearts of cardiomyopathic turkeys. Lax D, et al. **Cardiovasc Res** 1988 Nov;22(11):826–32

Cartilage response to thyroid hormones in the sex-linked dwarf chicken. Hoshino S, et al. **Comp Biochem Physiol [A]** 1989;93(3):583–5

Biochemical studies of the chicken vitreous in light-induced avian glaucoma. Kinnear A, et al. **Comp Biochem Physiol [B]** 1978;61(1):107–10

Energy metabolism in genetically fat and lean chickens: diet- and cold-induced thermogenesis. Geraert PA, et al. **J Nutr** 1988 Oct;118(10):1232–9

Effect of Salmonella gallinarum infection on zinc metabolism in chicks. Hill CH. **Poult Sci** 1989 Feb;68(2):297–305

Depletion of oxycarotenoid pigments in chickens and the failure of aflatoxin to alter it. Schaeffer JL, et al. **Poult Sci** 1988 Jul;67(7):1080–8

MICROBIOLOGY

Isolation and characterization of reticuloendotheliosis virus from turkeys. Drén CN, et al. **Acta Vet Hung** 1988; 36(3–4):265–82

Avian lymphoid leukosis: mechanisms of lymphomagenesis. Ewert DL, et al. **Adv Vet Sci Comp Med** 1988;32:37-55 (58 ref.)

An outbreak of psittacosis in Minnesota turkey industry workers: implications for modes of transmission and control. Hedberg K, et al. **Am J Epidemiol** 1989 Sep; 130(3):569-77

Characterization of outer membrane protein-enriched extracts from Pasteurella multocida isolated from turkeys. Choi KH, et al. **Am J Vet Res** 1989 May;50(5):676-83

Isolation and trypsin-enhanced propagation of turkey enteric (bluecomb) coronaviruses in a continuous human rectal adenocarcinoma cell line. Dea S, et al. **Am J Vet Res** 1989 Aug;50(8):1310-8

Unidentified viral particles could be associated with enteritis of various commercial bird species. Fleury HJ, et al. **Ann Inst Pasteur Virol** 1988 Oct-Dec;139(4):449-53

Colonization of gastrointestinal tracts of chicks by Campylobacter jejuni. Beery JT, et al. **Appl Environ Microbiol** 1988 Oct;54(10):2365-70

Serological classification of Australian and South African isolates of Haemophilus paragallinarum. Blackall PJ, et al. **Aust Vet J** 1988 Nov;65(11):362-3

Serotyping of isolates of Pasteurella multocida from chickens. Ireland LA, et al. **Aust Vet J** 1989 Apr;66(4):119-20

Virulence and transmissibility of Mycoplasma gallisepticum. Soeripto, et al. **Aust Vet J** 1989 Mar;66(3):65-72

The effect of biological isolation and a molt-inducing regimen on the recovery of Mycoplasma gallisepticum from commercial Leghorn hens. Branton SL, et al. **Avian Dis** 1989 Jul-Sep;33(3):574-7

Comparative infectivity for axenic and specific-pathogen-free chickens of O2 Escherichia coli strains with or without virulence factors. Brée A, et al. **Avian Dis** 1989 Jan-Mar;33(1):134-9

The effect of infectious bursal disease virus infection on local and systemic antibody responses following infection of 3-week-old broiler chickens. Dohms JE, et al. **Avian Dis** 1988 Oct-Dec;32(4):632-40

Experimental reproduction of airsacculitis and septicemia by aerosol exposure of 1-day-old chicks using Congo red-positive Escherichia coli. Gjessing KM, et al. **Avian Dis** 1989 Jul-Sep;33(3):473-8

Infectious anemia caused by a parvovirus-like virus in Georgia broilers. Goodwin MA, et al. **Avian Dis** 1989 Jul-Sep;33(3):438-45

Factors influencing the severity of Escherichia coli and avian adenovirus group II infections in chickens. Gross WB, et al. **Avian Dis** 1988 Oct-Dec;32(4):793-7

Restriction endonuclease analysis of infectious laryngotracheitis viruses: comparison of modified-live vaccine viruses and North Carolina field isolates. Guy JS, et al. **Avian Dis** 1989 Apr-Jun;33(2):316-23

Interaction of reovirus and Cryptosporidium baileyi in experimentally infected chickens. Guy JS, et al. **Avian Dis** 1988 Jul-Sep;32(3):381-90

Inclusion-body hepatitis in day-old turkeys. Guy JS, et al. **Avian Dis** 1988 Jul-Sep;32(3):587-90

Comparison of Pasteurella multocida serotype 3,4 isolates from turkeys with fowl cholera. Lee MD, et al. **Avian Dis** 1988 Jul-Sep;32(3):501-8

In vitro comparison of the activity of various antifungal drugs against new yeast isolates causing thrush in poultry. Lin MY, et al. **Avian Dis** 1989 Jul-Sep;33(3):416-21

Colonization of the intestine of turkey embryos exposed to Mycoplasma iowae. Mirsalimi SM, et al. **Avian Dis** 1989 Apr-Jun;33(2):310-5

In vitro and in vivo characterization of avian reoviruses. III. Host factors affecting virulence and persistence. Roessler DE, et al. **Avian Dis** 1989 Jul-Sep;33(3):555-65

Isolation, identification, and pathogenicity of two field strains of infectious bursal disease virus. Rosales AG, et al. **Avian Dis** 1989 Jan-Mar;33(1):35-41

In vitro and in vivo characterization of avian reoviruses. I. Pathogenicity and antigenic relatedness of several avian reovirus isolates. Rosenberger JK, et al. **Avian Dis** 1989 Jul-Sep;33(3):535-44

Fecal streptococcal infection of commercial white pekin ducklings. Sandhu TS. **Avian Dis** 1988 Jul-Sep;32(3):570-3

Enhancement of Campylobacter jejuni virulence by serial passage in chicks. Sang FC, et al. **Avian Dis** 1989 Jul-Sep; 33(3):425-30

Pathogenesis of fowl cholera: influence of encapsulation on the fate of Pasteurella multocida after intravenous inoculation into turkeys. Tsuji M, et al. **Avian Dis** 1989 Apr-Jun;33(2):238-47

Adenoviral pancreatitis in guinea fowl (Numida meleagris). Zellen GK, et al. **Avian Dis** 1989 Jul-Sep;33(3):586-9

Semen traits and fertility of White Leghorn males shown to be positive or negative for lymphoid leukosis virus in semen and feather pulp. Segura JC, et al. **Br Poult Sci** 1988 Sep;29(3):545-53

The colonization of the alimentary tract and visceral organs of chicks with salmonellas following challenge via the feed: bacteriological findings. Xu YM, et al. **Br Vet J** 1988 Jul-Aug;144(4):403-10

Effect of adrenal blocking chemicals on viral and respiratory infections of chickens. Gross WB. **Can J Vet Res** 1989 Jan; 53(1):48-51

Antibiotic resistance of Escherichia coli strains isolated from chickens with colisepticaemia in Morocco. Filali E, et al. **Comp Immunol Microbiol Infect Dis** 1988;11(2):121-4

Use of an rRNA probe and restriction endonuclease analysis to fingerprint Pasteurella multocida isolated from turkeys and wildlife. Snipes KP, et al. **J Clin Microbiol** 1989 Aug; 27(8):1847-53

Molecular cloning of an oncogenic replication-competent virus that causes lymphoproliferative disease in turkeys. Gak E, et al. **J Virol** 1989 Jun;63(6):2877-80

Salmonella enteritidis phage type 4 infection of broiler chickens: a hazard to public health. Rampling A, et al. **Lancet** 1989 Aug 19;2(8660):436-8

Functional and structural alterations of the nervous system induced by avian retrovirus RAV-7. Whalen LR, et al. **Microb Pathog** 1988 Jun;4(6):401-16

Association between the cell-wall peptidoglycan and the progenitor toxin of Clostridium botulinum type C. Hyun SH, et al. **Nippon Juigaku Zasshi** 1989 Feb;51(1):169-76

Loss of virulence associated with plasmid curing of chicken pathogenic Escherichia coli. Sekizaki T, et al. **Nippon Juigaku Zasshi** 1989 Jun;51(3):659-61

A chicken model of systemic infection with Chlamydia psittaci: comparison of the virulence among avian and mammalian strains. Takahashi T, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):622-31

Influence of maternal antibodies on susceptibility of embryonating eggs to avian reovirus. Takase K, et al. **Nippon Juigaku Zasshi** 1988 Aug;50(4):949-50

The isolation and attenuation of a virus causing rhinotracheitis in turkeys in South Africa. Buys SB, et al. **Onderstepoort J Vet Res** 1989 Jun;56(2):87-98

Ulcerative enteritis in broiler chickens caused by Clostridium colinum and in vitro activity of 19 antimicrobial agents in tests on isolates. Kondo F, et al. **Poult Sci** 1988 Oct; 67(10):1424-30

Response of two lines of turkeys to challenge with Pasteurella multocida. Sharaf MM, et al. **Poult Sci** 1988 Dec; 67(12):1807-9

Effects of certain stress factors on the re-excretion of infectious laryngotracheitis virus from latently infected carrier birds. Hughes CS, et al. **Res Vet Sci** 1989 Mar; 46(2):274-6

In vitro lecithinase activity and sensitivity to 22 antimicrobial agents of Clostridium perfringens isolated from necrotic enteritis of broiler chickens. Kondo F. **Res Vet Sci** 1988 Nov;45(3):337-40

An outbreak of type-C botulism in broiler chickens in Nigeria. Okoye JO. **Rev Elev Med Vet Pays Trop** 1988; 41(1):51-2

Reduction of salmonella infection of broilers by spray application of intestinal microflora: a longitudinal study. Goren E, et al. **Vet Q** 1988 Oct;10(4):249-55

Multiple drug-resistant S typhimurium [letter] **Vet Rec** 1989 Jun 10;124(23):619

Virus-like particles associated with a 'wet litter' problem in chickens [letter] Collins MS, et al. **Vet Rec** 1989 Jun 17; 124(24):641

Isolation of Acinetobacter calcoaceticus from septicaemic hens. Erganis O, et al. **Vet Rec** 1988 Oct 1;123(14):374

Herpes-like virus isolated in fatal guinea poult disease [letter] Kles V, et al. **Vet Rec** 1988 Oct 1;123(14):378

Multiple drug-resistant strains of Salmonella typhimurium in poultry. Threlfall EJ, et al. **Vet Rec** 1989 May 20; 124(20):538

What is the potential of avirulent influenza viruses to complement a cleavable hemagglutinin and generate virulent strains? Webster RG, et al. **Virology** 1989 Aug; 171(2):484-92

Expression of pre-S1, pre-S2, and C proteins in duck hepatitis B virus infection. Yokosuka O, et al. **Virology** 1988 Nov;167(1):82-6

Duck hepatitis B virus: cloning and subcloning of the viral genome. Oexle K, et al. **Zentralbl Bakteriol Mikrobiol Hyg [A]** 1989 Jan; 270(3):424-33

Isolation of Acinetobacter lwoffi from hens with septicemia. Kaya O, et al. **Zentralbl Veterinarmed [B]** 1989 Mar; 36(2):157-8

[Salmonella gallinarum field isolates of the biovars pullorum and gallinarum] Hinz KH, et al. **Berl Munch Tierarztl Wochenschr** 1989 Jun 1;102(6):205-8 (Eng. Abstr.) **(Ger)**

[The occurrence of a reovirus variant in a German broiler flock] Vielitz E, et al. **DTW Dtsch Tierarztl Wochenschr** 1989 Jul-Aug; 96(7):380-2 (Eng. Abstr.) **(Ger)**

[Occurrence of viral particles of avian sarcoma viruses in sarcoma tissue] Levkut M, et al. **Vet Med (Praha)** 1989 May;34(5):317-20 (Eng. Abstr.) **(Slo)**

MORTALITY

Causes of death found in an epidemiological study of native chickens in Thai villages. Thitisak W, et al. **Acta Vet Scand Suppl** 1988;84:200-2

Effect of ascorbic acid on the mortality of Leghorn-type chickens due to overheating. Gross WB. **Avian Dis** 1988 Jul-Sep;32(3):561-2

Relationships between age, body weight, and season of the year and the incidence of sudden death syndrome in male broiler chickens. Gardiner EE, et al. **Poult Sci** 1988 Sep; 67(9):1243-9

PARASITOLOGY

Effect of anaerobic digestion on oocysts of the protozoan Eimeria tenella. Lee MR, et al. **Appl Environ Microbiol** 1988 Oct;54(10):2335-41

Eimeria adenoeides and E. meleagrimitis: effect of poult age on susceptibility to infection and development of immunity. Augustine PC. **Avian Dis** 1988 Oct-Dec;32(4):798-802

Intestinal and bursal cryptosporidiosis in turkeys following inoculation with Cryptosporidium sp. isolated from commercial poults. Bermudez AJ, et al. **Avian Dis** 1988 Jul-Sep;32(3):445-50

Small-intestinal cryptosporidiosis in a chicken. Goodwin MA. **Avian Dis** 1988 Oct-Dec;32(4):844-8

Rapid cytologic diagnosis of respiratory cryptosporidiosis in chickens. Latimer KS, et al. **Avian Dis** 1988 Oct-Dec; 32(4):826-30

Experimental infections in domestic ducks with Cryptosporidium baileyi isolated from chickens. Lindsay DS, et al. **Avian Dis** 1989 Jan-Mar;33(1):69-73

Cryptosporidial infection in broiler chickens in Greece. Papadopoulou C, et al. **Avian Dis** 1988 Oct-Dec; 32(4):842-3

Pseudoparasitism of broiler chicks by mites of the family Uropodidae, genus Fuscuropoda. Rives DV, et al. **Avian Dis** 1988 Jul-Sep;32(3):567-9

In vivo action of the anticoccidial diclazuril (Clinacox) on the developmental stages of Eimeria tenella: an ultrastructural evaluation. Verheyen A, et al. **J Parasitol** 1988 Dec;74(6):939-49

Analysis of coccidian oocyst populations by means of flow cytometry. Fuller AL, et al. **J Protozool** 1989 Mar-Apr; 36(2):143-6

Cryopreservation of Leucocytozoon caulleryi sporozoites. Moril T, et al. **J Protozool** 1988 Aug;35(3):356-9

Anthelmintic activity of praziquantel on Raillietina tetragona in chickens. Nurelhuda IE, et al. **Parasitol Res** 1989; 75(8):655-6

Primary and secondary infection of the domestic chicken with Trichostrongylus tenuis (Nematoda), a parasite of red grouse, with observations on the effect on the caecal mucosa. Watson H, et al. **Parasitology** 1988 Aug;97 (Pt 1):89-99

Respiratory cryptosporidiosis in chickens. Goodwin MA, et al. **Poult Sci** 1988 Dec;67(12):1684-93

Effect of Eimeria tenella infection on the caecal population of lincomycin-resistant Clostridium perfringens introduced into chickens. Baba E, et al. **Res Vet Sci** 1988 Sep; 45(2):219-21

The response of the Nigerian indigenous chicken (Gallus domesticus) to trypanosomes. Dina OA, et al. **Rev Elev Med Vet Pays Trop** 1988;41(4):365-6

Influence of coccidiosis on growth rate and feed conversion in broilers after experimental infections with Eimeria acervulina and Eimeria maxima. Voeten AC, et al. **Vet Q** 1988 Oct;10(4):256-64

PATHOLOGY

Marek's disease virus-induced transient paralysis in chickens: alterations in brain density. Swayne DE, et al. **Acta Neuropathol (Berl)** 1988;76(3):287-91

Electron microscopy of bursa of Fabricius of chicks infected with a field strain of infectious bursal disease virus. Panisup AS, et al. **Acta Vet Scand** 1988;29(1):125-7

Ultrastructure of hepatic and renal lesions in chickens fed aflatoxin. Mollenhauer HH, et al. **Am J Vet Res** 1989 May; 50(5):771-7

Experimental studies on infectious laryngotracheitis in chicken. el-Mahdi MM, et al. **Arch Exp Veterinarmed** 1988 Nov;42(6):840-7

Cataracts and optic nerve hypoplasia in turkey poults. Barr BC, et al. **Avian Dis** 1988 Jul-Sep;32(3):469-77

Plasma cell quantitation in the gland of Harder during infectious bursal disease virus infection of 3-week-old broiler chickens. Dohms JE, et al. **Avian Dis** 1988 Oct-Dec; 32(4):624-31

An outbreak of urolithiasis in single-comb white Leghorn pullets. Fitz-Coy SH, et al. **Avian Dis** 1988 Jul-Sep; 32(3):563-6

Poliomyelomalacia, pancreatic necrosis, and cerebellar malacia in turkey poults. Frank RK, et al. **Avian Dis** 1988 Jul-Sep;32(3):574-82

Light-microscopic lesions associated with naturally occurring bursal cryptosporidiosis in chickens. Goodwin MA, et al. **Avian Dis** 1989 Jan-Mar;33(1):74-8

Effect of environmental-genetic interactions on Mycobacterium avium challenge infection. Gross WB, et al. **Avian Dis** 1989 Jul-Sep;33(3):411-5

An egg drop associated with splenomegaly in broiler breeders. Handlinger JH, et al. **Avian Dis** 1988 Oct-Dec; 32(4):773-8

Ultrastructure of the gastrocnemius tendon and sheath from broilers infected with reovirus. Hill JE, et al. **Avian Dis** 1989 Jan-Mar;33(1):79-85

Skeletal and tendon lesions of male broiler-breeders reared on elevated slats. Hill JE, et al. **Avian Dis** 1988 Jul-Sep; 32(3):540-3

Cryptosporidiosis and turkey viral hepatitis in turkeys. Wages DP, et al. **Avian Dis** 1989 Jan-Mar;33(1):191-4

Incidence of microscopically detectable degenerative characteristics in skeletal muscle of turkey. Sosnicki A, et al. **Br Poult Sci** 1989 Mar;30(1):69-80

Oestrogen and progesterone receptors and their relationship to histological grades of epithelial tumours of the magnum region of the oviduct of the domestic fowl. Anjum AD, et al. **J Comp Pathol** 1989 Apr;100(3):275–86

A technique for liver biopsy in Pekin ducks. Bacher J, et al. **Lab Anim Sci** 1989 Jan;39(1):67–8

Establishment and in vitro differentiation of a chicken monocytic leukemia cell line. Inoue M, et al. **Nippon Juigaku Zasshi** 1988 Jun;50(3):648–53

Ocular pathology in the minimally depigmented subline of the vitiliginous Smyth chicken. Boissy RE, et al. **Pigment Cell Res** 1988;1(5):303–14

Multiple concurrent stressors in chicks. 2. Effects on hematologic, body composition, and pathologic traits. McFarlane JM, et al. **Poult Sci** 1989 Apr;68(4):510–21

Acute fibrinopurulent blepharitis and conjunctivitis associated with Staphylococcus hyicus, Escherichia coli, and Streptococcus sp. in chickens and turkeys. Cheville NF, et al. **Vet Pathol** 1988 Sep;25(5):369–75

A sequential histologic and immunohistochemical study of duck hepatitis B virus infection in Pekin ducks. Cullen JM, et al. **Vet Pathol** 1989 Mar;26(2):164–72

Acute airsacculitis in turkeys inoculated with Pasteurella multocida. Ficken MD, et al. **Vet Pathol** 1989 May; 26(3):231–7

Conjunctiva-associated lymphoid tissue (CALT) in normal and Bordetella avium-infected turkeys. Fix AS, et al. **Vet Pathol** 1989 May;26(3):222–30

Salmonella enteritidis in a commercial layer flock. Hopper SA, et al. **Vet Rec** 1988 Sep 24;123(13):351

Salmonella enteritidis infection in broilers and broiler breeders. Lister SA. **Vet Rec** 1988 Sep 24;123(13):350

Histological data associated with muscovy duck reovirus infection. Marius-Jestin V, et al. **Vet Rec** 1988 Jul 2; 123(1):32–3

Avulsion of the patellar ligament in osteopenic laying fowl [published erratum appears in Vet Rec 1988 Nov 5;123(19):496] Randall CJ, et al. **Vet Rec** 1988 Oct 22; 123(17):439–41

Visceral urate deposits in chicks inoculated with avian nephritis virus. Shirai J, et al. **Vet Rec** 1989 Jun 24; 124(25):658–61

Gangrenous dermatitis in a pheasant [letter] Swarbrick O. **Vet Rec** 1988 Oct 1;123(14):378–9

[Histopathologic findings and changes in levels of aflatoxins and lipids in the liver of laying hens in experimental acute aflatoxicosis] Fukal L, et al. **Vet Med (Praha)** 1988 Aug; 33(8):495–502 (Eng. Abstr.) **(Cze)**

[Scanning electron microscopic studies of changes in the respiratory tract of chicks caused by an infection with the agent of infectious bronchitis] Malo A, et al. **DTW** 1988 Jul-Aug;95(7):296–300 (Eng. Abstr.) **(Ger)**

[The effect of hypervitaminosis D3 on the bones of the chicken. 2. Electron microscopic studies] Bacowsky H, et al. **Tierarztl Prax** 1988;16(3):281–93 (Eng. Abstr.) **(Ger)**

PHYSIOPATHOLOGY

The occurrence of nephrogenic diabetes insipidus in domestic fowl. Braun EJ, et al. **Am J Physiol** 1989 Apr;256(4 Pt 2):F639–45

Experimental studies on Yersinia enterocolitica infection in chickens exposed at 1-day old. Nwosuh EN, et al. **Br Poult Sci** 1989 Mar;30(1):91–9

Vitamin D deficiency in the chick embryo: effects on prehatching motility and on the growth and differentiation of bones, muscles, and parathyroid glands. Narbaitz R, et al. **Calcif Tissue Int** 1989 May;44(5):348–55

Relationships between renal hemodynamics and plasma levels of arginine vasotocin and mesotocin during hemorrhage in the domestic fowl (Gallus domesticus). Bottje WG, et al. **Comp Biochem Physiol [A]** 1989;92(3):423–7

The effect of dietary cholecalciferol, 25-hydroxycholecalciferol and 1,25-dihydroxycholecalciferol on the development of tibial dyschondroplasia in broiler chickens in the absence and presence of disulfiram. Edwards HM Jr. **J Nutr** 1989 Apr; 119(4):647–52

Decreased sperm survivability in subfertile Delaware roosters as indicated by comparative and competitive fertilization. Kirby JD, et al. **J Reprod Fertil** 1989 Jul;86(2):671–7

Effect of Gray strain infectious bronchitis virus and high dietary calcium on renal function of Single Comb White Leghorn pullets at 6, 10, and 18 weeks of age. Glahn RP, et al. **Poult Sci** 1988 Sep;67(9):1250–63

Multiple concurrent stressors in chicks. 1. Effect on weight gain, feed intake, and behavior [published erratum appears in Poult Sci 1989 Jun;68(6):865–6] McFarlane JM, et al. **Poult Sci** 1989 Apr;68(4):501–9

Effect of dyschondroplasia on the rate of bone growth in the fowl. Thorp BH. **Res Vet Sci** 1988 Jul;45(1):78–82

Physiological and behavioural responses of the domestic hen to hypoxia. Woolley SC, et al. **Res Vet Sci** 1988 Nov; 45(3):377–82

Oviduct magnum tumours in the domestic fowl and their association with laying. Anjum AD, et al. **Vet Rec** 1989 Jul 8;125(2):42–3

Quantitative estimation of increased vascular permeability in acute inflammatory reaction in the chicken skin. Pillai AG, et al. **Vet Res Commun** 1988;12(2–3):155–9

[Sudden "laying halt" as an adaptation reaction to heat stress] Petersen J, et al. **DTW** 1988 Sep;95(8):317–22 (Eng. Abstr.) **(Ger)**

PREVENTION & CONTROL

Modern methods of public health practice; exclusion of food-borne pathogens. Nurmi E. **Acta Vet Scand Suppl** 1988;84:49–56

Epidemiological evaluation of the Salmonella-controlling effect of a nationwide use of a competitive exclusion culture in poultry. Wierup M, et al. **Acta Vet Scand Suppl** 1988; 84:309–11

Protection of turkey poults from Bordetella avium infection and disease by pili and bacterins. Akeila MA, et al. **Avian Dis** 1988 Oct-Dec;32(4):641–9

Further comparison of adjuvants for an inactivated infectious coryza vaccine. Blackall PJ. **Avian Dis** 1988 Oct-Dec; 32(4):831–5

Use of a live oral vaccine to immunize turkeys against erysipelas. Bricker JM, et al. **Avian Dis** 1988 Oct-Dec; 32(4):668–73

Effect of environmental stress on the responses of ascorbic-acid-treated chickens to Escherichia coli challenge infection. Gross WB. **Avian Dis** 1988 Jul-Sep; 32(3):432–6

Effect of ascorbic acid on the disease caused by Escherichia coli challenge infection. Gross WB, et al. **Avian Dis** 1988 Jul-Sep;32(3):407–9

Evaluation of Pasteurella multocida mutants of low virulence. II. Immunologic response of turkeys. Hofacre CL, et al. **Avian Dis** 1989 Apr-Jun;33(2):275–8

Studies on feasibility of producing Salmonella-free turkeys. Pomeroy BS, et al. **Avian Dis** 1989 Jan-Mar;33(1):1–7

Cellular defense of the avian respiratory system: protection against Escherichia coli airsacculitis by Pasteurella multocida-activated respiratory phagocytes. Toth TE, et al. **Avian Dis** 1988 Oct-Dec;32(4):681–7

Whither disease control in poultry? Stuart JC. **Br Vet J** 1988 Jul-Aug;144(4):313–5

Salmonella colonization in young chickens given feed supplemented with the growth promoting antibiotic avilamycin. Hinton M. **J Vet Pharmacol Ther** 1988 Sep; 11(3):269–75

Influence of live virus vaccination against infectious bursal disease on coccidial infection in chickens. Onaga H, et al. **Nippon Juigaku Zasshi** 1989 Apr;51(2):463–5

Development of a live attenuated vaccine against coccidiosis of poultry. Shirley MW. **Parasite Immunol** 1989 Mar; 11(2):117–24

Effect of dietary acidification and alkalinization on urolith formation and renal function in Single Comb White Leghorn laying hens. Glahn RP, et al. **Poult Sci** 1988 Dec; 67(12):1694–701

Riboflavin requirement of turkey poults fed a corn-soybean meal diet from 1 to 21 days of age. Ruiz N, et al. **Poult Sci** 1989 May;68(5):715–8

Biocidal activity of ozone versus formaldehyde against poultry pathogens inoculated in a prototype setter. Whistler PE, et al. **Poult Sci** 1989 Aug;68(8):1068–73

Epidemiological evaluation of the salmonella-controlling effect of a nationwide use of a competitive exclusion culture in poultry. Wierup M, et al. **Poult Sci** 1988 Jul; 67(7):1026–33

Efficacy of infectious bronchitis virus vaccines against heterologous challenge. Muneer MA, et al. **Res Vet Sci** 1988 Jul;45(1):22–7

Control of salmonella infections in broiler chickens by the acid treatment of their feed. Hinton M, et al. **Vet Rec** 1988 Oct 15;123(16):416–21

Vaccine for the control of egg drop syndrome '76. Holmes HC, et al. **Vet Rec** 1989 Mar 25;124(12):309–10

Veterinary service to smaller poultry flocks [letter] Swarbrick O, et al. **Vet Rec** 1989 May 20;124(20):546

Salmonella in poultry [letter] Treadwell MA. **Vet Rec** 1989 Jan 7;124(1):22

Protection of chickens from lethal influenza infection by vaccinia-expressed hemagglutinin. Chambers TM, et al. **Virology** 1988 Dec;167(2):414–21

[Isolation of the pathogenic virus of Marek's disease from a flock of chickens vaccinated with the turkey herpes vaccine] Jurajda V, et al. **Vet Med (Praha)** 1988 Dec; 33(12):741–6 (Eng. Abstr.) **(Cze)**

[Gumboro disease in broiler chicks] **Tijdschr Diergeneeskd** 1988 Nov 15;113(22):1254–6 **(Dut)**

[Immunoprophylactic possibilities for the control of fowl coccidiosis] Jungmann R, et al. **Angew Parasitol** 1989 May; 30(2):79–85 (57 ref.) (Eng. Abstr.) **(Ger)**

[Prevention and control of coccidiosis in animals] Ramisz A. **Wiad Parazytol** 1988;34(4–6):551–5 **(Pol)**

RADIOGRAPHY

Radiographic diagnosis of tibial dyschondroplasia in broilers: a field selection technique. Bartels JE, et al. **Avian Dis** 1989 Apr-Jun;33(2):254–7

TRANSMISSION

Laryngotracheitis in chickens: the length of the preinfectious and infectious periods. Davison S, et al. **Avian Dis** 1989 Jan-Mar;33(1):18–23

Shedding and transmission of Chlamydia psittaci in experimentally infected chickens. Takahashi T, et al. **Avian Dis** 1988 Oct-Dec;32(4):650–8

Vertical transmission of reticuloendotheliosis virus in breeder turkeys. Witter RL, et al. **Avian Dis** 1989 Apr-Jun; 33(2):226–35

Salmonella enteritidis in poultry [letter] Druce C. **Vet Rec** 1988 Oct 29;123(18):476

[Campylobacter jejuni in food originating from poultry] Mancinelli S, et al. **Nuovi Ann Ig Microbiol** 1987 Sep-Dec; 38(5–6):385–93 (Eng. Abstr.) **(Ita)**

POULTRY PRODUCTS

see related

EGGS

Changing pesticide technology in meat and poultry products. Ellis RL. **J Assoc Off Anal Chem** 1989 May-Jun; 72(3):521–4

[Campylobacter jejuni in food originating from poultry] Mancinelli S, et al. **Nuovi Ann Ig Microbiol** 1987 Sep-Dec; 38(5–6):385–93 (Eng. Abstr.) **(Ita)**

ADVERSE EFFECTS

Reactive arthritis: a further consequence of the increase in salmonella infections [letter] Taggart AJ, et al. **BMJ** 1989 Mar 11;298(6674):674

ANALYSIS

Concentrations of U and Po in animal feed supplements, in poultry meat and in eggs. Izak-Biran T, et al. **Health Phys** 1989 Mar;56(3):315–9

Effect of product form on the microbiological growth support characteristics of turkey meat products. Denton JH, et al. **Poult Sci** 1988 Sep;67(9):1269–73

POUR PLATE COUNT see **COLONY COUNT, MICROBIAL**

POVERTY

The perception of poverty and wealth among teenage university students. Stacey BG, et al. **Adolescence** 1989 Spring;24(93):193–207

Poor and pregnant: perinatal ganja use in rural Jamaica. Dreher MC. **Adv Alcohol Subst Abuse** 1989;8(1):45–54

Morbidity pattern among Nigerian children from a poor urban community. Osinusi K, et al. **Afr J Med Med Sci** 1989 Mar;18(1):43–7

Evaluation of risk scoring in a preterm birth prevention study of indigent patients. Mueller-Heubach E, et al. **Am J Obstet Gynecol** 1989 Apr;160(4):829–35; discussion 835–7

Treatment of the severely mentally ill poor [letter] Levenson AJ. **Am J Psychiatry** 1989 Sep;146(9):1232–3

Health practices of the elderly poor. Lubben JE, et al. **Am J Public Health** 1989 Jun;79(6):731–4

Use of clinic versus private family planning care by low-income women: access, cost, and patient satisfaction. Radecki SE, et al. **Am J Public Health** 1989 Jun;79(6):692–7

The impact of Medicaid on physician use by low-income children. Rosenbach ML. **Am J Public Health** 1989 Sep; 79(9):1220–6

Kids and Medicaid: progress but continuing problems [editorial] Waxman HA. **Am J Public Health** 1989 Sep; 79(9):1217–8

The deadliest plague [editorial] Yankauer A. **Am J Public Health** 1989 Jul;79(7):821–2

Cryptosporidiosis in children with diarrhoea from slum areas in San Salvador. Reinthaler FF, et al. **Ann Trop Med Parasitol** 1988 Apr;82(2):209–10

Osmolalities of bottle- and breast-milk fed to poor urban Brazilian infants. Dorea JG, et al. **Ann Trop Paediatr** 1988 Sep;8(3):181–3

Once again—and what of the children? An editorial commentary[editorial] Waldman HB. **ASDC J Dent Child** 1988 Nov-Dec;55(6):422

Children in Third World slums [letter] Dobbing J. **BMJ** 1988 Aug 20-27;297(6647):556–7

Uptake of immunization [letter] [published erratum appears in Br Med J [Clin Res] 1988 Sep 3;297(6648):626] Reid JA. **BMJ** 1988 Aug 13;297(6646):484–5

Ethnic indicators of dental health for young Asian schoolchildren resident in areas of multiple deprivation. Bedi R. **Br Dent J** 1989 May 6;166(9):331–4

Alcohol taxes: do the poor pay more than the rich? Ashton T, et al. **Br J Addict** 1989 Jul;84(7):759–66

Cancer in the economically disadvantaged. Freeman HP. **Cancer** 1989 Jul 1;64(1 Suppl):324–34; discussion 342–5

Type of day-care and preschool intellectual development in disadvantaged children. Burchinal M, et al. **Child Dev** 1989 Feb;60(1):128–37

Economic hardship, parenting, and distress in adolescence. Lempers JD, et al. **Child Dev** 1989 Feb;60(1):25–39

Low-income blacks in community mental health: forming a treatment relationship. Snowden LR, et al. **Community Ment Health J** 1989 Spring;25(1):51–9

Child mortality caused by poverty [editorial] Richmond JB. **Cult Med Psychiatry** 1988 Dec;12(4):425–7

American Indian household structure and income. Sandefur GD, et al. **Demography** 1988 Feb;25(1):71–80

Children among the poor. Smith JP. **Demography** 1989 May; 26(2):235–48

The challenge of caring for the underserved. Schmidt DD. **Fam Med** 1989 Jul-Aug;21(4):257–60

Beliefs about contraceptive sterilization among low-income urban women. Cushman LF, et al. **Fam Plann Perspect**

1988 Sep-Oct;20(5):218-21, 233
Impoverishing the elderly: a case study of the financial risk of spend-down among Massachusetts elderly people. Branch LG, et al. **Gerontologist** 1988 Oct;28(5):648-52
A longitudinal examination of poverty in the elderly years. Coe RD. **Gerontologist** 1988 Aug;28(4):540-4
Correlates of education, income, and poverty among aged blacks. Taylor RJ, et al. **Gerontologist** 1988 Aug; 28(4):435-41
Love, medicine, and money: issues of access, use, and advocacy [letter] Reynolds JJ. **Health Soc Work** 1989 Feb; 14(1):6-7
The latchkey solution in Indiana. Becker PG. **Indiana Med** 1988 Oct;81(10):855-7
The effect of Medicaid policy on mental health and poverty. Frank RG, et al. **Inquiry** 1989 Summer;26(2):283-90
The use of solvents and other drugs among children and adolescents from a low socioeconomic background: a study in São Paulo, Brazil. Carlini-Cotrim B, et al. **Int J Addict** 1988 Nov;23(11):1145-56
Four hours a month. Realini JP, et al. **J Am Board Fam Pract** 1989 Jul-Sep;2(3):150-1; discussion 151-2
Factors influencing duration of breast feeding among low-income women. Barron SP, et al. **J Am Diet Assoc** 1988 Dec;88(12):1557-61
Social networks and the functional health status of the poor: a secondary analysis of data from the National Survey of Personal Health Practices and Consequences. Auslander GK. **J Community Health** 1988 Winter;13(4):197-209
Factors associated with maternal rating of infant health in central Harlem. McCormick MC, et al. **J Dev Behav Pediatr** 1989 Jun;10(3):139-44
Perceptions of family practice residents regarding health care and poor patients. Price JH, et al. **J Fam Pract** 1988 Dec; 27(6):615-21
Poverty, politics, and health: the Farm Security Administration Medical Care Program, 1935-1945. Grey MR. **J Hist Med Allied Sci** 1989 Jul;44(3):320-50
On poverty [editorial] Underwood CR. **J Med Assoc Ga** 1988 Sep;77(9):689
ACS reports on cancer and the poor [news] Corliss J. **J Natl Cancer Inst** 1989 Aug 16;81(16):1206-7
"We need help"--testimony at hearing on cancer and the poor [news] Wittenberg CK. **J Natl Cancer Inst** 1989 Aug 16;81(16):1207-9
The need for victimization screening in a poor outpatient medical population. Bell CC, et al. **J Natl Med Assoc** 1988 Aug;80(8):853-60
The present socioeconomic/cultural climate and minority medical participation. Cobb WM. **J Natl Med Assoc** 1989 Apr;81(4):434-5
A systems view of health care for the poor. Prasad N. **J Natl Med Assoc** 1989 Feb;81(2):169-78 (93 ref.)
How the poor fared in a competitive model: assessing the Illinois selective contracting approach. Christoffel T, et al. **J Public Health Policy** 1988 Winter;9(4):519-36
The effect of perceived wealth and poverty on adolescents' character judgments. Skafte D. **J Soc Psychol** 1989 Feb; 129(1):93-9
Nutritional anaemia in the urban poor: a community-based study of under fives in an Indian slum. Malin AS, et al. **J Trop Pediatr** 1988 Oct;34(5):257-9
Hearings focus on cancer prevention among poor [news] Gunby P. **JAMA** 1989 Apr 28;261(16):2306
Preventing iron deficiency in at-risk communities [letter] James J, et al. **Lancet** 1989 Jan 7;1(8628):40
Kidneys for sale [letter] Phillips M. **Lancet** 1989 Mar 11; 1(8637):559
Third World and European community [letter] Unwin N, et al. **Lancet** 1989 Jun 3;1(8649):1275
Leprosy control in a Bombay slum--a general assessment. Goyder EC. **Lepr Rev** 1988 Sep;59(3):245-53
Poverty, health services, and health status in rural America. Patrick DL, et al. **Milbank Q** 1988;66(1):105-36
To knock on poverty's door. The story of Evylyn D. Yount WV. **N C Med J** 1989 Jul;50(7):400-1
Anything for Thanksgiving? Imperato PJ. **N Y State J Med** 1988 Nov;88(11):589-90
Eliminate poverty first... [letter] Antia NH. **Nature** 1988 Oct 13;335(6191):584
Black children and poverty: a developmental perspective. **New Dir Child Dev** 1988 Winter;(42):1-123
Double jeopardy: the impact of poverty on early child development. Parker S, et al. **Pediatr Clin North Am** 1988 Dec;35(6):1227-40 (99 ref.)
Poverty and child health. Wise PH, et al. **Pediatr Clin North Am** 1988 Dec;35(6):1169-86 (129 ref.)
The time machine. Guinter RH. **Pediatr Rev** 1987 Dec; 9(6):171-2
Comparison of the 1979 and the 1986 norms on the Standard Progressive Matrices for economically disadvantaged students: implications for identification of gifted children. Whorton JE, et al. **Percept Mot Skills** 1988 Dec; 67(3):749-50
Intervention with disadvantaged parents of sick preterm infants. Beckwith L. **Psychiatry** 1988 Aug;51(3):242-7
Cultural relativity and poverty. Martin ME, et al. **Public Health Nurs** 1989 Mar;6(1):28-34
Poverty and disease: need for structural change. Zaidi SA. **Soc Sci Med** 1988;27(2):119-27 (36 ref.)
Commentary: the poverty measure. Orshansky M. **Soc Secur Bull** 1988 Oct;51(10):22-4
Medical services for our financially needy elderly patients. Selby JH. **Tex Med** 1989 Feb;85(2):74-5
Women without health insurance. Links between access, poverty, ethnicity, and health. Braveman P, et al. **West J Med** 1988 Dec;149(6):708-11 (24 ref.)
Uncompensated care [editorial] Johnson RL. **West J Med** 1988 Jun;148(6):697-8
Uncompensated care--the threat and the challenge. Kitzhaber J. **West J Med** 1988 Jun;148(6):711-6
Gender differences in the relationship of widowhood and psychological well-being among low income elderly. Lubben JE. **Women Health** 1988;14(3-4):161-89
Medicaid: the lower tier of health care for women. Muller C. **Women Health** 1988;14(2):81-103
Low-cost sanitation for a squatter community. Hasan A. **World Health Forum** 1988;9(3):361-4
[Evaluation of a survey of extreme poverty: discussion and perceptions of midwives of an obstetrical clinic] Baumann M, et al. **Cah Sociol Demogr Med** 1988 Jan-Mar;28(1):3-19 **(Fre)**
[Prevalence of disability in 2 different social groups in Salvador, Brazil] Santos Júnior AC, et al. **Bol Of Sanit Panam** 1989 Apr;106(4):304-13 (Eng. Abstr.) **(Por)**
[Description of a methodology to identify and quantify groups of poor and malnourished families in the Republic of Panama] Parillón C, et al. **Arch Latinoam Nutr** 1988 Mar;38(1):31-41 (Eng. Abstr.) **(Spa)**

HISTORY

Old age dependency in historical perspective. Evans L, et al. **Int J Aging Hum Dev** 1988;27(2):75-80
Counting the poor: another look at the poverty profile. 1965 [classical article] Orshansky M. **Soc Secur Bull** 1988 Oct; 51(10):25-51

LEGISLATION & JURISPRUDENCE

Call to action on the global poverty reduction act [letter] Phillips J. **J Am Diet Assoc** 1989 Mar;89(3):336

STATISTICS & NUMERICAL DATA

The feminization of poverty: myth or reality? Gimenez ME. **Int J Health Serv** 1989;19(1):45-61

TRENDS

The timing of falls into poverty after retirement and widowhood. Holden KC, et al. **Demography** 1988 Aug; 25(3):405-14
The low income preschools in Benin City: some health aspects of the children. Goyea HS. **Trop Geogr Med** 1988 Oct;40(4):369-72

POVERTY AREAS see under **POVERTY**

POVIDONE

EDTA-polyvinylpyrrolidone as a preservation medium for immunohistochemistry. Stosiek P, et al. **Acta Histochem (Jena)** 1989;86(1):39-43
Comparative antibacterial efficacy of a 2-minute surgical scrub with chlorhexidine gluconate, povidone-iodine, and chloroxylenol sponge-brushes. Aly R, et al. **Am J Infect Control** 1988 Aug;16(4):173-7
Response of complement and neutrophils to hydrophilized synthetic membranes. Ward RA, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):334-7
Are human spermatozoa separated on a Percoll density gradient safe for therapeutic use? Pickering SJ, et al. **Fertil Steril** 1989 Jun;51(6):1024-9
Use of poly(vinylpyrrolidone) and poly(vinyl alcohol) for cryoultramicrotomy. Tokuyasu KT. **Histochem J** 1989 Mar;21(3):163-71
Purification of mammalian cochlear hair cells using small volume Percoll density gradients. Holley MC. **J Neurosci Methods** 1989 Apr;27(3):219-24
Isolation of metabolically distinct synaptosomes on Percoll gradients. Sherman AD. **Neurochem Res** 1989 Jan; 14(1):97-101
[Results of conjugal artificial insemination using Percoll] Barri PN, et al. **Rev Fr Gynecol Obstet** 1988 Oct; 83(10):587-91 (Eng. Abstr.) **(Fre)**
[Colloid coupling and biologic availability of local anesthetics. 5. Local anesthetic action and improvement of biologic availability in the lower-lip mucosa in man] Thoma K, et al. **Pharm Acta Helv** 1988;63(4-5):98-101 (Eng. Abstr.) **(Ger)**
[Activity of benzalkonium chloride, polyvinyl povidone and chlorhexidine on families of microorganisms isolated in a hospital environment] Mazara M, et al. **Nuovi Ann Ig Microbiol** 1986 Jan-Dec;37(1-6):267-78 (Eng. Abstr.) **(Ita)**

ADMINISTRATION & DOSAGE

[Rate reduction of wall abscesses in daily abdominal surgery by repeated lavage with solutions of polyvidone iodine. 4006 cases] Lesur A, et al. **Chirurgie** 1988;114(2):160-5 (Eng. Abstr.) **(Fre)**
[Stimulation of pathologically weak kininogenesis with andekalin microdoses as a method of increasing the effectiveness of the treatment of chronic cotton dust-induced bronchitis] Surovikina MS, et al. **Gig Tr Prof Zabol** 1988 Dec;(12):41-4 (Eng. Abstr.) **(Rus)**
[Treatment of patients with gonarthrosis by intra-articular administration of drugs] Popov VV, et al. **Klin Med (Mosk)** 1989 Apr;67(4):104-8 (Eng. Abstr.) **(Rus)**

ADVERSE EFFECTS

Use of povidone-iodine in umbilical cord care [letter] Newman NM. **Clin Pediatr (Phila)** 1989 Jan;28(1):37
[Polyvinylpyrrolidone dermatoses. Clinical aspects and ultrastructural morphology] Fartasch M, et al. **Hautarzt** 1988 Sep;39(9):569-75 (Eng. Abstr.) **(Ger)**

ANALOGS & DERIVATIVES

Povidone-iodine solutions in traumatic wound preparation [letter] Rothwell KG. **Am J Emerg Med** 1988 Nov;6(6):681
Skin preparation and spinal headache [letter] Gurmarnik S. **Anaesthesia** 1988 Dec;43(12):1057-8
A complication of povidone-iodine [letter] Joshi P. **Anaesthesia** 1989 Aug;44(8):692
Ceftriaxone versus povidone iodine in preventing wound infections following biliary surgery. Kiff RS, et al. **Ann R Coll Surg Engl** 1988 Sep;70(5):313-6
The Wolff-Chaikoff effect: hypothyroidism due to iodine application [letter] Clemens PC, et al. **Arch Dermatol** 1989 May;125(5):705
Increas 1 recall rate at screening for congenital hypothyroidism in breast fed infants born to iodine overloaded mothers. Chanoine JP, et al. **Arch Dis Child** 1988 Oct;63(10):1207-10
Withdrawal of iodinated disinfectants at delivery decreases the recall rate at neonatal screening for congenital hypothyroidism [letter] Chanoine JP, et al. **Arch Dis Child** 1988 Oct;63(10):1297-8
Polyvinilpyrrolidone-iodine (P.V.P.-I) bladder irrigation for prevention of catheter-associated urinary infections in patients treated by T.U.R. Giannoni R, et al. **Arch Ital Urol Nefrol Androl** 1989 Mar;61(1):63-7
Reduction in amputation stump infection by antiseptic pre-operative preparation. Payne JE, et al. **Aust N Z J Surg** 1989 Aug;59(8):637-40
Local antiseptic treatment of infected prosthetic vascular grafts in the groin. Moran KT, et al. **Br J Surg** 1988 Oct; 75(10):1037-8
Induction of hyperthyroidism in burn patients treated topically with povidone-iodine. Rath T, et al. **Burns Incl Therm Inj** 1988 Aug;14(4):320-2
Interaction between drugs and water-soluble polymers. I. Binding of warfarin and 4-hydroxycoumarin with polyvinylpyrrolidone and acrylamide-vinylpyrrolidone copolymer. Tanaka M, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec;36(12):4645-51
Intraoperative colonic irrigation with povidone iodine. An effective method of wound sepsis prevention. Banich FE, et al. **Dis Colon Rectum** 1989 Mar;32(3):219-22
Povidone-iodine enema as a preoperative bowel preparation for colorectal surgery. A bacteriologic study. Hay JM, et al. **Dis Colon Rectum** 1989 Jan;32(1):9-13
The application of PVP-iodine in developing countries. Sixl W, et al. **Geogr Med** 1988;Suppl 1:107-14
Application of betadine (povidone iodine) to infected corneal ulcer. Kadam SP. **Indian J Ophthalmol** 1987;35(5-6):135-6
Management of chronic osteomyelitis using an irrigation suction technique. Bansal VP, et al. **Int Orthop** 1988; 12(4):265-8
Inactivation of human immunodeficiency virus by Betadine products and chlorhexidine. Harbison MA, et al. **J Acquir Immune Defic Syndr** 1989;2(1):16-20
Comparison of preoperative skin preparations for the face. Dzubow LM, et al. **J Am Acad Dermatol** 1988 Oct; 19(4):737-41
Irritant contact dermatitis caused by povidone-iodine [letter] Okano M. **J Am Acad Dermatol** 1989 May;20(5 Pt 1):860
A model for testing antiseptic efficacy: a preliminary study on Betadine and Germidine. Thamlikitkul V, et al. **J Med Assoc Thai** 1989 Jul;72 Suppl 2:29-32
Polyvinylpyrrolidone iodine: corneal toxicology and epithelial healing in a rabbit model. York KK, et al. **J Ocul Pharmacol** 1988 Winter;4(4):351-8
Intraperitoneal povidone-iodine [letter] Goldenheim PD. **JAMA** 1989 Apr 7;261(13):1881-2
Contaminated povidone-iodine solution--Texas. **MMWR** 1989 Mar 3;38(8):133-4
Outpatient topical use of povidone-iodine in preparing the eye for surgery. Apt L, et al. **Ophthalmology** 1989 Mar; 96(3):289-92
Povidone-iodine cord care [letter] Ramsey KP, et al. **Pediatrics** 1988 Dec;82(6):951
Lymphoceles: percutaneous treatment with povidone-iodine sclerosis. Gilliland JD, et al. **Radiology** 1989 Apr; 171(1):227-9
Povidone-iodine sclerosis of pelvic lymphoceles: a prospective study. Cohan RH, et al. **Urol Radiol** 1988; 10(4):203-6
New apparatus to reduce urinary drainage associated with urinary tract infections. al-Juburi AZ, et al. **Urology** 1989 Feb;33(2):97-101
Haematology and serum biochemistry in the racing

greyhound following intraperitoneal povidone-iodine. Ndikuwera J, et al. **Vet Res Commun** 1988;12(1):77-86
Effects of chlorhexidine diacetate and povidone-iodine on wound healing in dogs. Sanchez IR, et al. **Vet Surg** 1988 Nov-Dec;17(6):291-5
Chlorhexidine diacetate and povidone-iodine cytotoxicity to canine embryonic fibroblasts and Staphylococcus aureus. Sanchez IR, et al. **Vet Surg** 1988 Jul-Aug;17(4):182-5
Suitability of a propanolic PVP-iodophor preparation as preoperative skin disinfectant: germicidal activity and chemical stability. Grünig HM, et al.
Zentralbl Bakteriol Mikrobiol Hyg [B] 1988 Jul; 186(4):360-7
[Antibiotic and antiseptic prophylaxis in thoracic surgery. Controlled study] Regnard JF, et al. **Pathol Biol (Paris)** 1989 May;37(5):477-80 (Eng. Abstr.) (Fre)
[Quantitative studies of the interaction of polyvinylpyrrolidone iodine and spermatozoa] Pfannschmidt N, et al. **Z Hautkr** 1988 Nov 15;63(11):891-6 (Eng. Abstr.) (Ger)
[Polyvinylpyrrolidone iodine--its significance in dermatology] Pohl-Markl H, et al. **Z Hautkr** 1988 Dec 15;63(12):1009-15 (Eng. Abstr.) (Ger)
[Acute necrotic-hemorrhagic pancreatitis. Proposal of a therapeutic plan using an antiseptic agent in infectious complications] Trompetto M, et al. **Minerva Chir** 1988 Apr 15;43(7):605-9 (Eng. Abstr.) (Ita)
[Ultrasound-guided puncture for renal cyst and instillation of povidone iodine] Shinoda I, et al. **Hinyokika Kiyo** 1988 Oct;34(10):1741-5 (Eng. Abstr.) (Jpn)
[Effect of subgingival plaque control by a direct irrigation technic. I. The clinical and microbiological changes after the irrigation with distilled water or 1/30 diluted iodine complex solution] Hagiwara S, et al.
Kokubyo Gakkai Zasshi 1988 Sep;55(3):492-501 (Eng. Abstr.) (Jpn)
[Experimental evaluation of the possibility of fixing uterine sutures after cesarean section using polymer materials] Makarov IO, et al. **Akush Ginekol (Mosk)** 1989 Mar; (3):33-6 (Eng. Abstr.) (Rus)
[Preventing incompetence of uterine sutures after cesarean section] Sidorova IS, et al. **Akush Ginekol (Mosk)** 1989 Mar;(3):30-3 (Eng. Abstr.) (Rus)
[Sensitivity of Pseudomonas bacteria to iodopiron and dimexide determined by electron microscopy] Litovchenko PP, et al. **Klin Khir** 1989;(3):48-9 (Eng. Abstr.) (Rus)
[Iodine overload in newborn infants caused by the use of PVP-iodine for perineal preparation of the mother in vaginal delivery] Arena Ansotegui J, et al.
An Esp Pediatr 1989 Jan;30(1):23-6 (23 ref.) (Eng. Abstr.) (Spa)

ANALYSIS

Interaction between drugs and water-soluble polymers. I. Binding of warfarin and 4-hydroxycoumarin with polyvinylpyrrolidone and acrylamide-vinylpyrrolidone copolymer. Tanaka M, et al. **Chem Pharm Bull (Tokyo)** 1988 Dec;36(12):4645-51
[Preparation and testing of polymer drugs. 4. Water-soluble polymer drugs with a base of vinylpyrrolidone-maleic acid anhydride-copolymers] Mank R, et al. **Pharmazie** 1988 Nov;43(11):774-6 (Eng. Abstr.) (Ger)

DIAGNOSTIC USE

On the use of Percoll as a marker for liposomes in electron microscopy of mouse spleen tissue. Cudd A, et al.
J Microencapsul 1986 Oct-Dec;3(4):275-82
Rapid preparation of a distinct lysosomal population from myelinating mouse brain using Percoll gradients. Caimi L, et al. **J Neurochem** 1989 Jun;52(6):1722-8

IMMUNOLOGY

[Probable allergy to polyvidon, responsible for a reaction to iodinated contrast medium: a case of asthma after hysterosalpingography] Moneret-Vautrin DA, et al.
Allerg Immunol (Paris) 1989 May;21(5):196, 198-9 (Eng. Abstr.) (Fre)

PHARMACOKINETICS

Macrophage clearance of 125I-labelled polyvinyl pyrrolidone in the horse: effect of ovarian steroids and persistent endometritis. Watson ED, et al. **Equine Vet J** 1988 Nov;20(6):421-3

PHARMACOLOGY

[Effects of treatment with polyvinylpyrrolidone on nutritional quality of sorghum] de Mucciarelli SI, et al. **Arch Latinoam Nutr** 1987 Sep;37(3):547-50 (Eng. Abstr.) (Spa)

THERAPEUTIC USE

[Prevention of infection at the operative site: irrigation with iodine derivatives, or NaCl. A prospective and randomized study in general surgery] Oestreicher M, et al.
Helv Chir Acta 1989 Jun;56(1-2):133-7 (Eng. Abstr.) (Fre)
[Use of enterodesis in the complex treatment of patients with pronounced chronic renal failure] Del'machinskiĭ BV, et al. **Ter Arkh** 1988;60(8):89-91 (Rus)
[Efficacy of polyvinylpyrrolidone solutions of various concentrations in patients with rheumatic diseases of the joints] Matulis AA, et al. **Ter Arkh** 1989;61(5):108-12 (Eng. Abstr.) (Rus)

POVIDONE-IODINE see under **POVIDONE**

POWASSAN VIRUS see under **ENCEPHALITIS VIRUSES, TICK-BORNE**

POWDERS

Dust inhalation exposures from the handling of small volumes of powders. Cowherd C Jr, et al. **Am Ind Hyg Assoc J** 1989 Mar;50(3):131-8
Ordered powder mixtures: reality or fiction? [letter] Egermann H. **J Pharm Pharmacol** 1989 Feb;41(2):141-3
Comments to 'order out of chaos' [letter] Egermann H, et al. **J Pharm Pharmacol** 1989 Feb;41(2):142-3
Preparation of drug-diluent hybrid powders by dry processing. Ishizaka T, et al. **J Pharm Pharmacol** 1989 Jun; 41(6):361-8
Determination of the critical stress intensity factor (KIC) of compacted pharmaceutical powders by the double torsion method. Mashadi AB, et al. **J Pharm Pharmacol** 1988 Sep;40(9):597-600
The effect of the shape of fine particles on the formation of ordered mixtures. Wong LW, et al.
J Pharm Pharmacol 1988 Aug;40(8):567-8
Application of fractal dimension to the study of the surface ruggedness of granular solids and excipients. Thibert R, et al. **J Pharm Sci** 1988 Aug;77(8):724-6
Glove powder and HIV ELISA tests [letter] Fawcett PT, et al. **Lancet** 1989 May 13;1(8646):1082-3
A novel approach to the oral delivery of micro- or nanoparticles. Bodmeier R, et al. **Pharm Res** 1989 May; 6(5):413-7
[The effect of incorporation technics of water soluble macromolecular binders on the properties of fluidized-bed dried granules] Richter M, et al. **Pharmazie** 1989 Jan; 44(1):43-6 (Eng. Abstr.) (Ger)

ADMINISTRATION & DOSAGE

Turbuhaler: a new powder inhaler for administration of drugs to the airways. Wetterlin K. **Pharm Res** 1988 Aug; 5(8):506-8

ADVERSE EFFECTS

Contact urticaria and anaphylactoid reaction from cornstarch surgical glove powder. Assalve D, et al.
Contact Dermatitis 1988 Jul;19(1):61

ANALYSIS

Effects of Abana, an Ayurvedic preparation, on rabbit atrium and intestine. Pasnani JS, et al. **J Ethnopharmacol** 1988 Dec; 24(2-3):287-302

POWER, PERSONAL see **POWER (PSYCHOLOGY)**

POWER PLANTS

Radiation accidents and nuclear energy: medical consequences and therapy [clinical conference] Champlin RE, et al. **Ann Intern Med** 1988 Nov 1;109(9):730-44 (112 ref.)
ELF electromagnetic environment in power substations. Hayashi N, et al. **Bioelectromagnetics** 1989;10(1):51-64
Determination of trace organic compounds in effluents from a coal-fired power plant. Bonfanti L, et al.
Biomed Environ Mass Spectrom 1988 Oct;16(1-12):175-8
A retrospective cohort mortality study on workers of two thermoelectric power plants: fourteen-year follow-up results. Petrelli G, et al. **Eur J Epidemiol** 1989 Mar; 5(1):87-9
Medical experience and preparedness for handling radiation injuries. Linnemann RE. **J Med Assoc Ga** 1989 Feb; 78(2):95-100
Swedish thyroid cancer risk from Chernobyl? [letter] Holm LE, et al. **J Nucl Med** 1989 May;30(5):721-2
Psychological symptoms of residents in the aftermath of the Three Mile Island nuclear accident and restart. Prince-Embury S, et al. **J Soc Psychol** 1988 Dec; 128(6):779-90
An air emission risk assessment for benzo(a)pyrene and arsenic from the Mt. Tom power plant. Kowalczyk GS, et al. **JAPCA** 1987 Apr;37(4):361-9
Longitudinal study of appraisal at Three Mile Island: implications for life event research. Goldsteen R, et al.
Soc Sci Med 1989;28(4):389-98
[Exposure to radioactivity in the perinatal period following the reactor accident in Chernobyl] Dadak C, et al.
Geburtshilfe Frauenheilkd 1989 Feb;49(2):169-71 (Eng. Abstr.) (Ger)
[Exposure of the fetoplacental unit, breast milk and cow's milk to radionuclides 1 year after Chernobyl] Schlotter CM, et al. **Geburtshilfe Frauenheilkd** 1989 Jun;49(6):557-60 (Eng. Abstr.) (Ger)
[Radioactive burden in the perinatal period following the reactor accident at Chernobyl] Dadak C, et al.
Gynakol Rundsch 1988;28 Suppl 2:256-8 (Ger)
[The radiation accident] Stögmann W.
Wien Klin Wochenschr 1988 Aug 26;100(16):542-6 (Eng. Abstr.) (Ger)
[Fly ash and its biological effects. I. Production, utilization and physico-chemical properties of fly ash] Woźniak H, et al. **Med Pr** 1988;39(5):338-46 (Eng. Abstr.) (Pol)
[Volatile ashes and their biological effect. 2. Fibrogenic effect of volatile ashes] Woźniak H, et al. **Med Pr** 1989;40(1):1-11 (Eng. Abstr.) (Pol)
[Effect of thermal water pollution on invertebrates in the light of studies on parasitic fauna of fish] Pojmańska T.
Wiad Parazytol 1988;34(4-6):563-71 (Pol)
[Possibility of using an electrostatic method of dust hydrosuppression during coal stripping at the Kansk-Achinsk Fuel Energy Complex] Pogozhev SV.
Gig Tr Prof Zabol 1988 Aug;(8):46-8 (Rus)
[Scientific conference on the "Medical Aspects of the Accident at the Chernobyl Atomic Electric Power Station"] Burtsev VI, et al. **Klin Med (Mosk)** 1988 Aug; 66(8):155-7 (Rus)
[The development of an all-Union registry of persons exposed to radiation resulting from the accident at the Chernobyl atomic power station] Tsyb AF, et al.
Med Radiol (Mosk) 1989 Jul;34(7):3-6 (Rus)
[Diagnosis, clinical picture and therapy of acute radiation disease in victims of the accident at the Chernobyl nuclear power station. I. Conditions of irradiation, dose levels, bone marrow syndrome and its therapy] Gus'kova AK, et al.
Ter Arkh 1989;61(1):95-103 (Eng. Abstr.) (Rus)
[Mental disadaptation in emergency situations (accident at the Chernobyl nuclear power station)] Aleksandrovskiĭ IuA, et al. **Zh Nevropatol Psikhiatr** 1989;89(5):111-7 (Eng. Abstr.) (Rus)

STANDARDS

[Whole blood and plasma viscosity and erythrocyte aggregation in power plant repairmen] Kossmann S, et al.
Med Pr 1988;39(5):329-37 (Eng. Abstr.) (Pol)
[Possibility of the development of the means of protecting individuals from gamma radiation of fission products] Gol'dshtein DS, et al. **Gig Sanit** 1989 Apr;(4):61-2 (4 ref.) (Rus)
[Radiation-hygienic principles of optimal radiation monitoring in the surveillance areas of atomic power stations] Piskunov LI, et al. **Gig Sanit** 1988 Jul;(7):44-8 (Rus)

POWER, PROFESSIONAL see **POWER (PSYCHOLOGY)**

POWER (PSYCHOLOGY)

see related
SOCIAL CONTROL, INFORMAL

Acute effects of alcohol on power distribution between man and woman. Gustafson R. **Alcohol Alcohol** 1988;23(4):323-9
A capitol day. Power and politics 101. Reinhard SC.
Am J Nurs 1989 Feb;89(2):263-4
Speaking out. More power to you. Smith GR.
Am J Nurs 1989 Mar;89(3):357-8
Power in college students' contraceptive decisions. McCormick NB, et al. **Arch Sex Behav** 1989 Feb; 18(1):35-48
Feminist scholarship, relational and instrumental control, and a power-control theory of gender and delinquency. Hagan J, et al. **Br J Sociol** 1988 Sep;39(3):301-36
The relationship between alcohol intoxication and power in real-life non-alcoholic couples. Gustafson R.
Drug Alcohol Depend 1988 Oct;22(1-2):55-62
Spatiality of the family's inner structure: choice of seat in family therapy. Blinnikka LM, et al. **Fam Process** 1989 Jun; 28(2):183-90
Violence and the systemic view: the problem of power. Dell PF. **Fam Process** 1989 Mar;28(1):1-14
Medical empowerment of the elderly. Kanp MB.
Hastings Cent Rep 1989 Jul-Aug;19(4):5-7
Alcohol and social power between man and woman: the function of sex-role competence. Gustafson R.
Int J Addict 1988 Sep;23(9):941-52
Structural barriers to change in the workplace. Johnson JV.
Int J Health Serv 1989;19(1):117-9
Power, gender, and money. Klebanow S.
J Am Acad Psychoanal 1989 Summer;17(2):321-8
Powerlessness, work, and community: a longitudinal study of alienation and alcohol use. Seeman M, et al.
J Health Soc Behav 1988 Sep;29(3):185-98
Can you see me? Carter MA. **J Prof Nurs** 1989 Jan-Feb;5(1):3
That which empowers [editorial] Copp LA. **J Prof Nurs** 1989 Jul-Aug;5(4):169-70
Nurses' and physicians' perceptions of nursing authority. Katzman EM. **J Prof Nurs** 1989 Jul-Aug;5(4):208-14
Autonomy: where are we going? Scearse P. **J Prof Nurs** 1989 Jul-Aug;5(4):176, 237
Governing the health sector: power and policy making in the English and Swedish health services. Ham C.
Milbank Q 1988;66(2):389-414
Power in client and nurse-therapist relationships. Hardin SB, et al. **Perspect Psychiatr Care** 1985;23(3):91-8
The nursing shortage: two sides of the equation [editorial] Evans B. **Public Health Nurs** 1989 Jun;6(2):49-50
Autonomy, job satisfaction and professional self-image among nurses in the context of a physicians' strike. Shoham-Yakubovich I, et al. **Soc Sci Med** 1989; 28(12):1315-20
Job satisfaction, powerlessness, and locus of control. Bush

JP. **West J Nurs Res** 1988 Dec;10(6):718-31
Power perceptions of nurse managerial personnel. Heineken J, et al. **West J Nurs Res** 1988 Oct;10(5):591-9
The power over medical research. Gradin A. **Women Health** 1988;13(3-4):175-80
Health for all: the dream and the reality [letter] Shoemaker B, et al. **World Health Forum** 1989;10(1):95-7
[Power in the team—intimate aspects] Buchholz MB. **Prax Kinderpsychol Kinderpsychiatr** 1988 Oct;37(8):281-90 (Eng. Abstr.) **(Ger)**
[Prestige in the roentgenologists' profession] Rabkin Ikh. **Sov Med** 1989;(5):51-4 **(Rus)**

POWER, SOCIAL see **POWER (PSYCHOLOGY)**

POWER SOURCES

Immobilized photosynthetic membranes and cells for the production of fuels and chemicals. Hall DO, et al. **Adv Exp Med Biol** 1988;238:225-45 (49 ref.)
Cure for the AA battery blues. Six-volt battery pack from previously discarded Polaroid batteries. Cumberland GD, et al. **Am J Forensic Med Pathol** 1988 Sep;9(3):265-6
Systemic and local effects of heat dissipation in the thermally powered LVAS. Emoto H, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):361-6
An electromagnetic pneumatic blood pump driver. Whalen RL, et al. **ASAIO Trans** 1988 Jul-Sep;34(3):721-5
Medical equipment susceptibility to power line problems. Bowman GA, et al. **Biomed Instrum Technol** 1989 May-Jun;23(3):234-8
Burn to toddler's penis from an electrochemical battery. Mecrow IK. **BMJ** 1988 Nov 19;297(6659):1315
A wide-band efficient inductive transdermal power and data link with coupling insensitive gain. Galbraith DC, et al. **IEEE Trans Biomed Eng** 1987 Apr;34(4):265-75
A simple remote-controlled power switch for internalized bioelectronic instrumentation. Varosi SM, et al. **IEEE Trans Biomed Eng** 1989 Aug;36(8):858-60
Heat dissipation through the blood contacting surface of a thermally driven LVAS. Navarro RR, et al. **Int J Artif Organs** 1988 Sep;11(5):381-6
Hybrid-powered wheelchair: a combination of arm force and electrical power for propelling a wheelchair. Cremers GB. **J Med Eng Technol** 1989 Jan-Apr;13(1-2):142-8
Body-powered hand prosthesis with low operating power for children. Kruit J, et al. **J Med Eng Technol** 1989 Jan-Apr;13(1-2):129-33
Automatic test equipment for rechargeable batteries. Marshall I. **J Med Eng Technol** 1989 May-Jun;13(3):181-4
Cordless drills [letter] Mellish RG. **J Med Eng Technol** 1988 Nov-Dec;12(6):289
Electric versus pneumatic power in hand prostheses for children. Plettenburg DH. **J Med Eng Technol** 1989 Jan-Apr;13(1-2):124-8
Homogeneous light application and monitoring of the applied power density during PDT. Sroka R, et al. **J Photochem Photobiol [B]** 1989 Jun;3(3):456-8
Cylindrical battery ingestion: a case of endoscopic retrieval. Young TL, et al. **J Tenn Med Assoc** 1989 Aug;82(8):415-6
Carbon monoxide toxicity in a man working outdoors with a gasoline-powered hydraulic machine [letter] Huff JS, et al. **N Engl J Med** 1989 Jun 8;320(23):1564
Pacemaker elective replacement indicators: latched or unlatched? Barold SS, et al. **PACE** 1989 Jun;12(6):990-5
Impedance to transesophageal atrial pacing: significance regarding power sources. Kerr CR, et al. **PACE** 1989 Jun;12(6):930-5
Lithium/silver vanadium oxide batteries for implantable defibrillators. Takeuchi ES, et al. **PACE** 1988 Nov;11(11 Pt 2):2035-9

ADVERSE EFFECTS

Effect of electromagnetic interference by neonatal transport equipment on aircraft operation. Nish WA, et al. **Aviat Space Environ Med** 1989 Jun;60(6):599-600
Muscle response to pneumatic hand tool torque reaction forces. Radwin RG, et al. **Ergonomics** 1989 Jun;32(6):655-74

POWER SOURCES, BIOELECTRIC see **BIOELECTRIC ENERGY SOURCES**

POXVIRIDAE

ANALYSIS

Structural proteins of two different plaque-size phenotypes of fowlpox virus. Nazerian K, et al. **Avian Dis** 1989 Jul-Sep;33(3):458-65
Studies on Tanapox virus. Knight JC, et al. **Virology** 1989 Sep;172(1):116-24
Association of mitochondria DNA with viral DNA in purified preparations of poxviruses. Obom KM, et al. **Virus Res** 1988 Sep;11(2):165-74

CLASSIFICATION

Genetic and antigenic differences between fowlpox and quailpox viruses. Ghildyal N, et al. **Arch Virol** 1989;106(1-2):85-92
The characterization of African strains of capripoxvirus. Kitching RP, et al. **Epidemiol Infect** 1989 Apr;102(2):335-43
Evolution of herpes and pox viruses and their hosts: a problem with the molecular clock. Gentry GA, et al. **Intervirology** 1988;29(5):277-80 (27 ref.)

GENETICS

Infectious recombinant vectored virus vaccines. Esposito JJ, et al. **Adv Vet Sci Comp Med** 1989;33:195-247 (242 ref.)
Synthesis of a biological active tumor growth factor from the predicted DNA sequence of Shope fibroma virus. Lin YZ, et al. **Biochemistry** 1988 Jul 26;27(15):5640-5
Tandem repeated sequences within the terminal region of the fowlpox virus genome. Campbell JI, et al. **J Gen Virol** 1989 Jan;70 (Pt 1):145-54
The nucleotide sequence around the capripoxvirus thymidine kinase gene reveals a gene shared specifically with leporipoxvirus. Gershon PD, et al. **J Gen Virol** 1989 Mar;70 (Pt 3):525-33
Poxvirus genetic recombination during natural virus transmission. Gershon PD, et al. **J Gen Virol** 1989 Feb;70 (Pt 2):485-9
Antibodies directed against a synthetic peptide enable detection of a protein encoded by a vaccinia virus host range gene that is conserved within the Orthopoxvirus genus. Gillard S, et al. **J Virol** 1989 Apr;63(4):1814-7
A rapid method for identifying the thymidine kinase genes of avipoxviruses. Schnitzlein WM, et al. **J Virol Methods** 1988 Aug;20(4):341-52
A poxvirus-derived vector that directs high levels of expression of cloned genes in mammalian cells. Patel DD, et al. **Proc Natl Acad Sci U S A** 1988 Dec;85(24):9431-5
Protective immunity against avian influenza induced by a fowlpox virus recombinant. Taylor J, et al. **Vaccine** 1988 Dec;6(6):504-8
Fowlpox virus as a vector in non-avian species. Taylor J, et al. **Vaccine** 1988 Dec;6(6):466-8
Recombinant fowlpox virus inducing protective immunity in non-avian species. Taylor J, et al. **Vaccine** 1988 Dec;6(6):497-503
Analysis of the fowlpoxvirus gene encoding the 4b core polypeptide and demonstration that it possesses efficient promoter sequences. Binns MM, et al. **Virology** 1989 May;170(1):288-91
Recruitment to the cytoplasm of a cellular lamin-like protein from the nucleus during a poxvirus infection. Bloom DC, et al. **Virology** 1989 Mar;169(1):115-26
A capripoxvirus pseudogene whose only intact homologs are in other poxvirus genomes. Gershon PD, et al. **Virology** 1989 Sep;172(1):350-4
Tumorigenic poxviruses: characterization of an early promoter from Shope fibroma virus. Macaulay C, et al. **Virology** 1989 Sep;172(1):237-46

GROWTH & DEVELOPMENT

In vivo and in vitro characteristics of contagious ecthyma virus isolates: host response mechanism. Hussain KA, et al. **Vet Microbiol** 1989 Jan;19(1):23-36

IMMUNOLOGY

Serologic survey of wild rodents in Georgia for antibodies to orthopoxviruses [letter] Tsanava SA, et al. **Acta Virol (Praha)** 1989 Jan;33(1):91
Orf virus and vaccinia virus do not cross-protect sheep. Robinson AJ, et al. **Arch Virol** 1988;101(3-4):255-9
A new freeze-dried living virus vaccine against sheep-pox. Précausta P, et al. **Comp Immunol Microbiol Infect Dis** 1979;1(4):305-19
Modified micro complement fixation test for detection of fowl pox virus antibodies. Sarma DK, et al. **Indian J Exp Biol** 1988 Apr;26(4):293-6
Poxvirus deletion mutants: virulence and immunogenicity. Edwards KM, et al. **Microb Pathog** 1988 May;4(5):325-33
Immune response of chicks vaccinated with fowl pox virus vaccines by the feather follicle method. Sarma DK, et al. **Trop Anim Health Prod** 1989 May;21(2):107-8
[The effectiveness of immunomodulators from microorganisms and of animal pox preparations against tumor cell lines in vitro] Marsig E, et al. **Zentralbl Veterinarmed [B]** 1988 Oct;35(8):601-9 (Eng. Abstr.) **(Ger)**
[Experimental detection of the paraspecific effects of purified and inactivated poxviruses] Mayr A, et al. **Zentralbl Veterinarmed [B]** 1989 Mar;36(2):81-99 (Eng. Abstr.) **(Ger)**

ISOLATION & PURIFICATION

Monkey pox in humans: current results. Marennikova SS, et al. **Acta Virol (Praha)** 1989 May;33(3):246-53
Detection of swine pox and buffalo pox viruses in cell culture using a protein A-horseradish peroxidase conjugate. Mohanty PK, et al. **Acta Virol (Praha)** 1989 May;33(3):290-6
Prevalence of poxvirus in a population of California quail from Oregon, 1975-1987. Crawford JA, et al. **J Wildl Dis** 1988 Oct;24(4):718-9
Capripox virus in sheep and goats in Sudan. Hajer I, et al. **Rev Elev Med Vet Pays Trop** 1988;41(2):125-8
[The detection and identification of poxvirus in domestic cats] Mahnel H, et al. **Zentralbl Veterinarmed [B]** 1989 May;36(3):231-6 (Eng. Abstr.) **(Ger)**
[Isolation of cowpox virus from the red-tailed jird] Tsanava ShA, et al. **Vopr Virusol** 1989 Jan-Feb;34(1):95-7 **(Rus)**

PATHOGENICITY

Pathologic changes in chickens caused by intravenous inoculation with fowlpox virus. Tanizaki E, et al. **Avian Dis** 1989 Apr-Jun;33(2):333-9
Pathogenicity and immunogenicity of mynah pox virus in chickens and bobwhite quail. Reed WM, et al. **Poult Sci** 1989 May;68(5):631-8
[What is your diagnosis? Orf of pyogenic granuloma type] Bernard P, et al. **Ann Dermatol Venereol** 1988;115(10):1057-9 **(Fre)**

POXVIRUS INFECTIONS

DIAGNOSIS

Human monkeypox: confusion with chickenpox. Jezek Z, et al. **Acta Trop (Basel)** 1988 Dec;45(4):297-307

EPIDEMIOLOGY

[Human monkey pox: its clinico-epidemiological characteristics] Ježek Z, et al. **Zh Mikrobiol Epidemiol Immunobiol** 1988 Jun;(6):23-30 (Eng. Abstr.) **(Rus)**

PREVENTION & CONTROL

Poxvirus deletion mutants: virulence and immunogenicity. Edwards KM, et al. **Microb Pathog** 1988 May;4(5):325-33

TRANSMISSION

Clinico-epidemiological features of monkeypox patients with an animal or human source of infection. Ježek Z, et al. **Bull WHO** 1988;66(4):459-64
Human monkeypox: secondary attack rates. Ježek Z, et al. **Bull WHO** 1988;66(4):465-70
Monkeypox virus: ecology and public health significance. Khodakevich L, et al. **Bull WHO** 1988;66(6):747-52
The transmission potential of monkeypox virus in human populations. Fine PE, et al. **Int J Epidemiol** 1988 Sep;17(3):643-50

VETERINARY

Poxvirus genetic recombination during natural virus transmission. Gershon PD, et al. **J Gen Virol** 1989 Feb;70 (Pt 2):485-9
Pathogenicity and immunogenicity of mynah pox virus in chickens and bobwhite quail. Reed WM, et al. **Poult Sci** 1989 May;68(5):631-8
Capripox virus in sheep and goats in Sudan. Hajer I, et al. **Rev Elev Med Vet Pays Trop** 1988;41(2):125-8
Fatal poxvirus infection in association with FIV infection. Brown A, et al. **Vet Rec** 1989 Jan 7;124(1):19-20
[The detection and identification of poxvirus in domestic cats] Mahnel H, et al. **Zentralbl Veterinarmed [B]** 1989 May;36(3):231-6 (Eng. Abstr.) **(Ger)**

POXVIRUS MYXOMATIS see **MYXOMA VIRUS**

POXVIRUS OFFICINALE see **VACCINIA VIRUS**

POXVIRUS VARIOLAE see **SMALLPOX VIRUS**

PPLO see **MYCOPLASMA**

PRACTICE (PSYCHOLOGY)

The time to identify disoriented letters: effects of practice and font. Jolicoeur P, et al. **Can J Psychol** 1987 Sep;41(3):303-16
Amount of training and retention by infants. Ohr PS, et al. **Dev Psychobiol** 1989 Jan;22(1):69-80
Examination of the role of "higher-order" consistency in skill development. Fisk AD, et al. **Hum Factors** 1988 Oct;30(5):567-81
Automaticity, resources, and memory: theoretical controversies and practical implications. Logan GD. **Hum Factors** 1988 Oct;30(5):583-98 (67 ref.)
The role of practice in dual-task performance: toward workload modeling in a connectionist/control architecture. Schneider W, et al. **Hum Factors** 1988 Oct;30(5):539-66
The development of skill in producing word-final English stops: kinematic parameters [published erratum appears in J Acoust Soc Am 1989 Jul;86(1):431] Flege JE. **J Acoust Soc Am** 1988 Nov;84(5):1639-52
Neuropsychological improvement versus practice effect following unilateral carotid endarterectomy in patients without stroke. Casey JE, et al. **J Clin Exp Neuropsychol** 1989 Aug;11(4):461-70
Esophageal intelligibility training: back consonants and clusters. Mase-Goldman D, et al. **J Commun Disord** 1988 Dec;21(6):437-45
Repetition, semantic priming, and stimulus quality: implications for the interactive-compensatory reading model. Durgunoglu AY. **J Exp Psychol [Learn Mem Cogn]** 1988 Oct;14(4):590-603
Effect of imaging vs silently rehearsing sentences on concurrent unimanual tapping: a follow-up. Lempert H. **Neuropsychologia** 1989;27(4):575-9

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